OU1 Soil Sampling Technical Memorandum – Residential Criteria Area Delineation

Kerr-McGee Chemical Corp – Navassa Superfund Site

Navassa, North Carolina

EPA ID #NCD980557805

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Acronyms and Abbreviations

BaP	benzo(a)pyrene
bgs	below ground surface
EPA	United States Environmental Protection Agency
HHRA	Human Health Risk Assessment
mg/kg	milligram per kilogram
NC DEQ	North Carolina Department of Environmental Quality
MDL	method detection limit
ND	non-detect
OU1	Operable Unit 1
OU2	Operable Unit 2
PAH	polynuclear aromatic hydrocarbon
PCP	pentachlorophenol
pg/g	picogram per gram
ppt	parts per trillion
QA/QC	Quality Assurance/Quality Control
RPF	relative potency factor
RSL	regional screening level
SESD	Science and Ecosystem Support Division
SRI	Supplemental Remedial Investigation
TCDD	2,3,7,8-tetrachlorodibenzo-*p*-dioxin
TEF	toxic equivalency (or equivalence) factor
TEQ	toxic equivalent concentration
WHO	World Health Organization

1.0 INTRODUCTION

This Technical Memorandum provides sampling results for about 19 acres of the Kerr-McGee Chemical Corp – Navassa Superfund Site, located in Navassa, North Carolina [U.S. Environmental Protection Agency (EPA) ID# NCD980557805], referred to herein as the Site, that meet EPA and North Carolina Department of Environmental Quality (NC DEQ) criteria for unrestricted use with no institutional controls. The site investigation was conducted at the Site in August 2020. This Technical Memorandum is being submitted by EarthCon Consultants of North Carolina, P.C. on behalf of Greenfield Environmental Multistate Trust LLC, not individually but solely in its representative capacity as Trustee of the Multistate Environmental Response Trust (the Multistate Trust).

The Site operated as a creosote-based wood treating facility from 1936 to 1974. The Site location is shown on Figure 1. A Site plan showing the property boundary, Process Area, Wood Storage Areas, and other prominent Site features is provided as Figure 2. Previous investigations have indicated that soil, groundwater, and sediment at the Site were impacted by historical operations at the facility. The objective of the 2020 soil investigation was to collect additional data to refine the remedial/risk management decisions for Operable Unit 1 (OU1).

In an October 2019 Proposed Plan, the EPA designated OU1 as 21.6-acres (EPA, 2019), which includes the approximate 19-acre area discussed in this memorandum and 2.9-acre boundary area to the east. In 2020, the EPA and NC DEQ decided to evaluate OU1 for residential land use based on input from the Town of Navassa. The Multistate Trust conducted an evaluation of residential risk in May 2020. In this evaluation, the historical sampling results were compared to the benzo(a)pyrene toxic equivalent (BaP TEQ) concentration that serves as the threshold for unacceptable risk to human health under residential land use assumptions. Based on this evaluation, the EPA, NC DEQ and Multistate Trust developed the OU1/OU2 Revised Soil Sampling Work Plan (Work Plan), which was approved on August 3, 2020 (EarthCon, 2020).

The sampling strategy divided the 19-acre area into parcels with a maximum size of 1/4-acre and required surface soil samples from the parcels where there was no data. In July 2020, the EPA, NC DEQ and the Multistate Trust agreed to include analysis of the soil samples for pentachlorophenol (PCP) and for dioxins/furans (a common impurity associated with PCP) out of an abundance of caution and to ensure adequate characterization of these constituents. The EPA and NC DEQ provided PCP and dioxin TEQ concentration thresholds because these constituents were not identified as chemicals of concern for Site soils in either the April 2019 Human Health Risk Assessment (HHRA) or the August 2019 HHRA Addendum (EarthCon, 2019a and 2019b).

The EPA and NC DEQ developed the thresholds provided below to determine which parcels meet both the EPA no action criteria and the NC DEQ unrestricted use criteria under North Carolina General Statute § 143B-279.9(b)(1):

- BaP TEQ at 11 milligrams per kilogram (mg/kg) which corresponds to the residential Regional Screening Level (RSL) calculated at a target cancer risk level of 1E-04 or one in 10,000 (EPA, 2020a).

- PCP at 100 mg/kg which corresponds to the residential RSL calculated at a target cancer risk level of 1E-04.

- Dioxin TEQ at 50 picogram per gram (pg/g) or parts per trillion (ppt), which corresponds to a non-cancer target hazard index of 1 for a potential future resident.

2.0 SITE OVERVIEW

The 19-acre OU1 area was divided into 91 parcels with a maximum size of 1/4-acre using Thiessen polygon methodology and the historical soil sample locations (Figure 3). There were 57 parcels with an existing surface soil sample and 34 parcels without a surface soil sample. The following sampling strategy was implemented for the 91 parcels:

- **Parcels with BaP TEQ less than 5.5 mg/kg** – Per EPA and NC DEQ guidance, no further evaluation was required for the 48 parcels with BaP TEQ concentrations less than 5.5 mg/kg (which is 1/2 of the 11 mg/kg threshold described above).

- **Parcels without a surface soil sample** –5-point composite surface soil samples were collected from these 34 parcels.

- **Parcels with BaP TEQ Greater than 5.5 but less than 11 mg/kg** – 5-point composite surface soil samples were collected from these 7 parcels.

- **Parcels with BaP TEQ Greater than 11 mg/kg** – There are two parcels with historical data that exceed the threshold for unacceptable risk for residential use. These two parcels (TB-05 and SS-108) are designated as part of OU2. A separate technical memo will transmit the 2020 sampling results for OU2.

3.0 DATA COLLECTION ACTIVITIES

This section provides a summary of the data collection activities conducted during August 2020. The activities included collection of composite surface soil samples from 41 parcels in OU1. The field and laboratory activities were performed in accordance with the EPA and NC DEQ approved Work Plan (EarthCon, 2020) and the most recent EPA Region 4 Laboratory Services and Applied Science Division (LSASD) operating procedures (EPA, 2020b).

3.1 Field Activities

Soil sampling was conducted from August 5 to 8, 2020. The field forms and a photographic log are provided in Appendices A and B, respectively.

A total of 41 composite surface soil samples were collected from OU1 at locations shown on Figure 3. The composite samples included one aliquot from the center of the parcel, along with four aliquots collected in each of the four compass directions (N, S, E, W). The aliquots are labeled as follows: center is “A”, north is “B”, east is “C”, south is “D”, and west is “E”. Distance between aliquots is dependent upon parcel size. Soil could not be collected from aliquot location CS-53-A (due to the presence of gravel) or aliquot location CS-TB07-E (due to the presence of concrete). Therefore, surface soil samples CS-53 and CS-TB07 were 4-point composites.

The composite surface soil samples were collected at a depth of 0 to 1-foot below ground surface (bgs).

3.2 Laboratory Analysis

The composite surface soil samples were analyzed for polynuclear aromatic hydrocarbons (PAHs) by SW-846 Method 8270D, PCP by SW-846 Method 8270D selective ion monitoring (SIM), and dioxins/furans by SW-846 Method 8290A. The laboratory reports are provided in Appendix C.

The laboratory data packages were submitted to EcoChem for data validation. A Level III (EPA Stage 2A) validation of 90 percent of the data and a Level IV validation (EPA Stage 4) of 10 percent of the laboratory data were performed as described in the 2015 Supplemental Remedial Investigation (SRI) Quality Assurance Plan (CH2M Hill, 2015). The validation reports are provided in Appendix D.

3.3 Data Quality Evaluation

The following field quality assurance/quality control (QA/QC) samples were collected during the field events:

- Field duplicates were collected at a rate of 1 per 10 samples.
- Matrix spike/matrix spike duplicates were collected at a rate of 1 per 20 samples.
- Field blanks were collected at a rate of one per week.
- Equipment blanks were collected at a rate of one blank per reusable equipment. (stainless steel trowels, hand augers, etc.) per media, per 20 samples collected; or one per week, whichever was more frequent.

Results of the QA/QC samples are provided in Appendix E. The results of the field QA/QC samples indicate that the quality of the analytical data is acceptable.

3.4 Toxicity Equivalent Calculations – BaP

Surface soil data for carcinogenic PAHs were converted to BaP TEQ using BaP as the index PAH (EPA, 1993). This conversion was conducted because these carcinogenic PAHs all act by the same mechanism as BaP. BaP TEQ values were calculated by computing the sum across congeners of the product of congener-specific concentration and its Relative Potency Factor (RPF) (EPA, 2010):

$$\text{BaP TEQ} = \sum (C_i \times RPF_i)$$

RPFs are available and were used for the following carcinogenic PAHs: BaP, benz(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenz(a,h)anthracene, and indeno(1,2,3-cd)pyrene. The RPFs[1] and resultant BaP TEQ concentrations are presented in Table 1.

3.5 Toxicity Equivalent Calculations – Dioxin/Furan

The concentration of dioxins/furans were evaluated on a TEQ basis using the 2005 World Health Organization (WHO) mammalian toxic equivalency factors (TEFs) for the 17 congeners present in dioxin/furan mixtures (7 dioxins and 10 furans) (Van den Berg et al., 2006 and EPA, 2010). The TEFs are based on the toxicity of individual congeners relative to 2,3,7,8-tetrachlorodibenzo-*p*-dioxin (TCDD). For each dioxin and furan congener, the detected concentration, or the MDL if the congener was ND, was multiplied by its corresponding TEF to calculate a toxicity-weighted concentration. The sample concentration of dioxin TEQ was then calculated by summing the toxicity-weighted concentrations. Dioxin (TCDD) TEQ values were calculated by computing the sum across congeners of the product of a congener-specific concentration and its TEF as shown below.

$$\text{TCDD TEQ} = \sum (C_i \times TEF_i)$$

TCDD TEQ values were compared to EPA's target dioxin TEQ of 50 pg/g or ppt[2]. The TEFs and resultant TCDD TEQ concentrations are presented in Table 2.

4.0 ANALYTICAL RESULTS

Analytical results from the August 2020 soil sampling event are provided in Tables 1 and 2 and described in the following sections. None of the composite soil samples have a BaP TEQ, PCP, or dioxin (TCDD) TEQ concentration that exceeds the threshold for either EPA's unacceptable

[1] The TEFs shown on Table 1 are the EPA 2010 RPFs.

[2] Calculated based on default residential exposure parameters and a target noncancer hazard index of 1 in accordance with EPA guidance for the development of site-specific risk-based cleanup levels at Superfund sites (https://www.epa.gov/superfund/risk-assessment-dioxin-superfund-sites).

risk to human health under residential land use assumptions or the NC DEQ unrestricted use criteria under North Carolina General Statute § 143B-279.9(b)(1).

4.1 PAH Results

The PAH results and BaP TEQ calculations are provided in Table 1. The BaP TEQ values, which ranged from 0.08 to 8.32 mg/kg, were compared to EPA's residential RSL at a target cancer risk level of 1E-04 of 11 mg/kg for BaP.

4.2 Pentachlorophenol Results

The PCP results are provided in Table 1. PCP was detected in only one sample at an estimated concentration of 0.0679 mg/kg. The PCP results were compared to EPA's residential RSL established at a 1E-04 target cancer risk level of 100 mg/kg.

4.3 Dioxin/Furan Results

The dioxin/furan results and TCDD TEQ calculations are provided in Table 2. The TCDD TEQ values ranged from 0.75 to 34.02 pg/g or ppt. These values were compared to EPA's screening criteria for TCDD TEQ concentration of 50 ppt protective of human health based on a residential land use.

5.0 EXTENT OF OU1 MEETING CRITERIA FOR NO ACTION AND NO INSTITUTIONAL CONTROLS

The results of the 2020 soil sampling investigation combined with sampling results from previous Site investigations identified 89 parcels in which surface soils do not pose an unacceptable risk to future residential receptors. As noted in Section 2.0, two of the 91 parcels evaluated (TB-05 and SS-108) had BaP TEQ concentrations greater than 11 mg/kg. These parcels do not meet the OU1 criteria and will be designated as part of OU2. To achieve contiguous areas for OU1 and OU2, parcel TB-07 along with portions of parcels CS-51, CS-53, CS-52[3], CS-55, SB-127, SB-148, SS-109, TB-04, TB-27 and TWSB24 will also be included in OU2. The resulting contiguous area for OU1, including the boundary area to the east, is shown in Figure 4.

6.0 REFERENCES

CH2M Hill, 2015. Supplemental Remedial Investigation Work Plan, Kerr-McGee Chemical Corporation Site – Navassa, NC, CH2M Hill, September 2015.

[3] Composite aliquot locations CS-52-A, CS-52-B, and CS-52-E will be included in OU2

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Van den Berg, et al., 2006. The 2005 World Health Organization reevaluation of Human and Mammalian Toxic Equivalency Factors for Dioxins and Dioxin-like Compounds. Toxicological Sciences 2(93):223-241.

TABLES

Table 1: Summary of PCP, PAH and BaP TEQ Results
Kerr-McGee Chemical Corp - Navassa Superfund Site
Navassa, NC

Compound	CAS Number	CS-22 8/5/20	CS-23 8/5/20	CS-24 8/5/20	CS-25 8/5/20	CS-26 8/5/20	CS-27 8/6/20	CS-28 8/6/20	CS-29 8/6/20	CS-30 8/6/20	CS-31 8/6/20	CS-32 8/6/20	CS-33 8/6/20
Pentachlorophenol (mg/kg)	87-86-5	<0.018	<0.017	<0.019	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.019	<0.018
PAH Results (mg/kg)													
1-Methylnaphthalene	90-12-0	<0.018	<0.018	<0.019	<0.019	<0.018	<0.018	<0.180	<0.018	<0.019	<0.018	<0.019	<0.018
2-Methylnaphthalene	91-57-6	0.0247 J	<0.018	0.0216 J	<0.019	<0.018	<0.018	<0.180	<0.018	<0.019	<0.018	<0.019	<0.018
Acenaphthene	83-32-9	0.0737 J	0.0288 J	0.0751 J	<0.020	<0.019	0.0384 J	0.0602 J	<0.019	<0.020	0.0361 J	0.0696 J	0.0385 J
Acenaphthylene	208-96-8	1.05	0.283	0.872	0.300	0.161 J	0.61	0.734	0.0417 J	0.0564 J	0.445	0.628	0.544
Anthracene	120-12-7	2.80	0.500	1.60	0.596	0.352	1.06	1.35	0.0622 J	0.102 J	1.24	1.83	1.22
Benzo(a)anthracene	56-55-3	1.96	0.278	2.06 J	0.832	0.545	1.81	1.45	0.0518 J	0.134 J	0.909	0.739	1.34
Benzo(a)pyrene	50-32-8	1.84	0.375	1.97	1.18	0.453	1.54	1.47	0.0430 J	0.156 J	1.11	0.777	1.09
Benzo(b)fluoranthene	205-99-2	5.62	1.16	4.53	2.84	1.67	4.15	4.34	0.137 J	0.439	2.57	2.38	3.46
Benzo(g,h,i)perylene	191-24-2	1.39	0.357	1.18	0.724	0.342	1.01	0.898	0.0306 J	0.105 J	0.758	0.599	0.846
Benzo(k)fluoranthene	207-08-9	1.31	0.304	1.23	0.955	0.549	1.28	1.26	0.0512 J	0.144 J	0.852	0.637	0.962
Chrysene	218-01-9	2.86	0.536	2.38 J	1.49	1.14	2.90	2.92	0.0886 J	0.237	1.52	1.27	2.20
Dibenzo(a,h)anthracene	53-70-3	0.561	0.125 J	0.454	0.211	0.0849 J	0.37	0.355	<0.022	0.0289 J	0.197	0.219	0.334
Fluoranthene	206-44-0	4.88	0.572	3.00 J	1.45	1.79	5.47	6.25	0.0915 J	0.228	2.06	1.39	3.33
Fluorene	86-73-7	0.157 J	0.0479 J	0.149 J	0.0344 J	0.0281 J	0.0909 J	0.121 J	<0.019	<0.020	0.061 J	0.109 J	0.0814 J
Indeno(1,2,3-cd)pyrene	193-39-5	2.28	0.642	1.88	1.04	0.488	1.68	1.54	0.0485 J	0.139 J	0.957	1.09	1.49
Naphthalene	91-20-3	0.0276 J	<0.018	0.0251 J	<0.019	<0.018	<0.018	<0.018	<0.018	<0.019	<0.018	<0.019	<0.018
Phenanthrene	85-01-8	0.653	0.0530 J	0.176 J	0.0614 J	0.106 J	0.491	0.918	<0.018	<0.019	0.118 J	0.169 J	0.284
Pyrene	129-00-0	4.19	0.656	3.12 J	2.23	2.12	5.02	5.64	0.152 J	0.311	3.49	1.60	3.08
BaP TEQ calculations	**TEF[2]**												
Benzo(a)pyrene	1	1.84	0.375	1.97	1.18	0.453	1.54	1.47	0.043	0.156	1.11	0.777	1.09
Benzo(a)anthracene	0.1	0.196	0.0278	0.206	0.0832	0.0545	0.181	0.145	0.00518	0.0134	0.0909	0.0739	0.134
Benzo(b)fluoranthene	0.1	0.562	0.116	0.453	0.284	0.167	0.415	0.434	0.0137	0.0439	0.257	0.238	0.346
Benzo(k)fluoranthene	0.01	0.0131	0.00304	0.0123	0.00955	0.00549	0.0128	0.0126	0.000512	0.00144	0.00852	0.00637	0.00962
Chrysene	0.001	0.00286	0.000536	0.00238	0.00149	0.00114	0.0029	0.00292	0.0000886	0.000237	0.00152	0.00127	0.0022
Dibenzo(a,h)anthracene	1	0.561	0.125	0.454	0.211	0.0849	0.37	0.355	0.011	0.0289	0.197	0.219	0.334
Indeno(1,2,3-cd)pyrene	0.1	0.228	0.0642	0.188	0.104	0.0488	0.168	0.154	0.00485	0.0139	0.0957	0.109	0.149
BaP TEQ[1] (mg/kg)		3.40	0.71	3.29	1.87	0.81	2.69	2.57	0.08	0.26	1.76	1.42	2.06

Notes:
BaP - benzo(a)pyrene
MDL - method detection limit
PAH - polynuclear aromatic hydrocarbon
PCP - pentachlorophenol
mg/kg - milligram per kilogram
J - estimated concentration
RPF - relative potency factor
TEF - toxic equivalency factor
TEQ - toxic equivalent concentration
1) For non-detects, 1/2 the MDL is used to calculate the TEQ
2) The TEFs are EPA 2010 relative potency factors (RPFs)

Table 1: Summary of PCP, PAH and BaP TEQ Results
Kerr-McGee Chemical Corp - Navassa Superfund Site
Navassa, NC

Compound	CAS Number	CS-34 8/6/20	CS-35 8/6/20	CS-36 8/6/20	CS-37 8/6/20	CS-38 8/6/20	CS-39 8/6/20	CS-40 8/7/20	CS-41 8/7/20	CS-42 8/7/20	CS-43 8/7/20	CS-44 8/7/20
Pentachlorophenol (mg/kg)	87-86-5	<0.017	<0.018	<0.021	<0.020	<0.019	<0.018	<0.018	<0.019	<0.020	<0.018	<0.019
PAH Results (mg/kg)												
1-Methylnaphthalene	90-12-0	<0.018	0.0181 J	0.0269 J	<0.021	<0.019	<0.018	<0.018	0.0214 J	<0.020	<0.019	<0.019
2-Methylnaphthalene	91-57-6	<0.018	0.0262 J	0.0295 J	<0.021	<0.019	<0.018	<0.018	0.0293 J	0.0242 J	<0.019	<0.019
Acenaphthene	83-32-9	0.0514 J	0.0949 J	0.182 J	0.0585 J	<0.020	0.0252 J	0.0293 J	<0.020	<0.021	<0.020	<0.020
Acenaphthylene	208-96-8	0.389	1.17	1.46	0.598 J	0.172 J	0.195	0.361	0.247	0.200	0.266	0.276
Anthracene	120-12-7	0.621	2.94	3.13	1.3	0.185 J	0.220	0.653	0.472	0.333	0.472	0.501
Benzo(a)anthracene	56-55-3	0.734	2.73	5.33	3.62	0.151 J	0.151 J	0.986	0.379	0.382	0.708	0.679
Benzo(a)pyrene	50-32-8	0.696	2.58	3.17	4.1	0.152 J	0.169 J	1.57	0.351	0.377	0.725	0.604
Benzo(b)fluoranthene	205-99-2	2.24	8.12	12.3	9.81	0.519	0.522	3.67	0.946	0.968	1.88	1.53
Benzo(g,h,i)perylene	191-24-2	0.511	1.70	1.92	1.89	0.102 J	0.151 J	0.894	0.293	0.251	0.488	0.356
Benzo(k)fluoranthene	207-08-9	0.546	2.06	2.52	3.31	0.133 J	0.131 J	1.23	0.276	0.316	0.601	0.518
Chrysene	218-01-9	1.39	4.16	8.12	4.44	0.263	0.249	1.68	0.538	0.588	1.10	1.07
Dibenzo(a,h)anthracene	53-70-3	0.194	0.689	0.816	0.313	0.0365 J	0.0512 J	0.285	0.072 J	0.0698 J	0.133 J	0.0936 J
Fluoranthene	206-44-0	2.70	6.24	15.1	5.1	0.272	0.258	1.41	0.539	0.720	0.836	1.33
Fluorene	86-73-7	0.0890 J	0.185	0.317	0.113 J	0.0358 J	0.0466 J	0.0502 J	0.0421 J	0.0382 J	0.0412 J	0.0431 J
Indeno(1,2,3-cd)pyrene	193-39-5	0.923	2.79	3.12	2.89	0.200	0.276	1.33	0.379	0.347	0.650	0.474
Naphthalene	91-20-3	<0.018	0.0316 J	0.0313 J	<0.021	<0.019	<0.018	<0.018	0.0257 J	0.0204 J	<0.019	<0.019
Phenanthrene	85-01-8	0.774	0.808	1.53	0.355 J	<0.019	0.0233 J	0.0819 J	0.0951 J	0.103 J	0.0708 J	0.082 J
Pyrene	129-00-0	2.13	6.48	12.9	7.07	0.461	0.313	2.27	0.672	0.830	1.14	1.65
BaP TEQ calculations	**TEF[2]**											
Benzo(a)pyrene	1	0.696	2.58	3.17	4.1	0.152	0.169	1.57	0.351	0.377	0.725	0.604
Benzo(a)anthracene	0.1	0.0734	0.273	0.533	0.362	0.0151	0.0151	0.0986	0.0379	0.0382	0.0708	0.0679
Benzo(b)fluoranthene	0.1	0.224	0.812	1.23	0.981	0.0519	0.0522	0.367	0.0946	0.0968	0.188	0.153
Benzo(k)fluoranthene	0.01	0.00546	0.0206	0.0252	0.0331	0.00133	0.00131	0.0123	0.00276	0.00316	0.00601	0.00518
Chrysene	0.001	0.00139	0.00416	0.00812	0.00444	0.000263	0.000249	0.00168	0.000538	0.000588	0.0011	0.00107
Dibenzo(a,h)anthracene	1	0.194	0.689	0.816	0.313	0.0365	0.0512	0.285	0.072	0.0698	0.133	0.0936
Indeno(1,2,3-cd)pyrene	0.1	0.0923	0.279	0.312	0.289	0.02	0.0276	0.133	0.0379	0.0347	0.065	0.0474
BaP TEQ[1] (mg/kg)		1.29	4.66	6.09	6.08	0.28	0.32	2.47	0.60	0.62	1.19	0.97

Notes:
BaP - benzo(a)pyrene
MDL - method detection limit
PAH - polynuclear aromatic hydrocarbon
PCP - pentachlorophenol
mg/kg - milligram per kilogram
J - estimated concentration
RPF - relative potency factor
TEF - toxic equivalency factor
TEQ - toxic equivalent concentration
1) For non-detects, 1/2 the MDL is used to calculate the TEQ
2) The TEFs are EPA 2010 relative potency factors (RPFs)

Table 1: Summary of PCP, PAH and BaP TEQ Results
Kerr-McGee Chemical Corp - Navassa Superfund Site
Navassa, NC

Compound	CAS Number	CS-45 8/7/20	CS-46 8/7/20	CS-47 8/7/20	CS-48 8/8/20	CS-49 8/8/20	CS-50 8/7/20	CS-51 8/7/20	CS-52 8/8/20	CS-53 8/25/20	CS-54 8/7/20	CS-55 8/7/20	CS-RISB02 8/5/20
Pentachlorophenol (mg/kg)	87-86-5	<0.018	0.0679 J	<0.019	<0.013	<0.012	<0.0096	<0.011	<0.010	<0.0098	<0.019	<0.0096	<0.018
PAH Results (mg/kg)													
1-Methylnaphthalene	90-12-0	0.0524 J	<0.020	<0.019	<0.025	<0.024	0.0296 J	0.0307 J	<0.020	<0.020	<0.019	0.0388 J	<0.018
2-Methylnaphthalene	91-57-6	0.0549 J	<0.020	<0.019	<0.025	<0.024	0.0396 J	0.0387 J	<0.020	<0.020	<0.019	0.0339 J	<0.018
Acenaphthene	83-32-9	0.159 J	0.0821 J	0.024 J	0.0271 J	<0.026	<0.020	<0.023	0.0224 J	<0.021	<0.020	0.244	0.0476 J
Acenaphthylene	208-96-8	1.86	0.946	0.242	0.217 J	0.0876 J	0.167 J	0.210 J	0.306	0.0681 J	0.112 J	0.284	0.576
Anthracene	120-12-7	3.18	2.52	0.756	0.346	0.0940 J	0.346	0.311	0.499	0.160 J	0.219	0.867	1.04
Benzo(a)anthracene	56-55-3	4.73	3.73	0.420	0.644	0.0561 J	0.558	0.452	0.596	0.158 J	0.0690 J	1.07	1.11
Benzo(a)pyrene	50-32-8	5.03	2.61	0.547	0.470	0.0505 J	0.357	0.372	0.800	0.122 J	0.0850 J	0.640	1.18
Benzo(b)fluoranthene	205-99-2	12.9	7.08	1.69	1.28	0.138 J	0.861	0.795	1.19	0.294	0.335	0.846	3.30
Benzo(g,h,i)perylene	191-24-2	3.02	1.42	0.450	0.265	0.0406 J	0.272	0.264	0.394	0.0920 J	0.0946 J	0.255	0.834
Benzo(k)fluoranthene	207-08-9	2.64	2.12	0.577	0.397	0.0434 J	0.276	0.263	0.396	0.0795 J	0.0842 J	0.263	0.917
Chrysene	218-01-9	8.34	4.33	0.761	1.06	0.0937 J	0.668	0.555	0.796	0.192 J	0.133 J	1.21	2.20
Dibenzo(a,h)anthracene	53-70-3	0.919	0.457	0.131 J	0.0811 J	<0.030	0.0742 J	0.0694 J	0.099 J	<0.025	<0.023	0.071 J	0.324
Fluoranthene	206-44-0	14.9	5.98	0.501	1.95 J	0.0914 J	0.845	0.691	0.625	0.255	0.107 J	3.31	2.84
Fluorene	86-73-7	0.303	0.163 J	0.0362 J	0.0563 J	<0.026	0.0361 J	0.0583 J	0.0659 J	<0.021	0.0288 J	0.380	0.0955 J
Indeno(1,2,3-cd)pyrene	193-39-5	5.69	2.13	0.687	0.363	0.0524 J	0.323	0.318	0.470	0.123 J	0.0918 J	0.291	1.43
Naphthalene	91-20-3	0.0614 J	<0.020	<0.019	<0.025	<0.024	0.0454 J	0.0406 J	<0.020	<0.020	<0.019	0.0261 J	<0.018
Phenanthrene	85-01-8	2.60	0.537	0.0884 J	0.157 J	<0.024	0.180 J	0.188 J	0.0652 J	0.0516 J	0.0273 J	3.11	0.229
Pyrene	129-00-0	13.7	9.60	1.21	2.19	0.123 J	0.952	0.788	1.05	0.260	0.132 J	3.37	2.50
BaP TEQ calculations	**TEF[2]**												
Benzo(a)pyrene	1	5.03	2.61	0.547	0.47	0.0505	0.357	0.372	0.8	0.122	0.085	0.64	1.18
Benzo(a)anthracene	0.1	0.473	0.373	0.042	0.0644	0.00561	0.0558	0.0452	0.0596	0.0158	0.0069	0.107	0.111
Benzo(b)fluoranthene	0.1	1.29	0.708	0.169	0.128	0.0138	0.0861	0.0795	0.119	0.0294	0.0335	0.0846	0.33
Benzo(k)fluoranthene	0.01	0.0264	0.0212	0.00577	0.00397	0.000434	0.00276	0.00263	0.00396	0.000795	0.000842	0.00263	0.00917
Chrysene	0.001	0.00834	0.00433	0.000761	0.00106	0.0000937	0.000668	0.000555	0.000796	0.000192	0.000133	0.00121	0.0022
Dibenzo(a,h)anthracene	1	0.919	0.457	0.131	0.0811	0.015	0.0742	0.0694	0.099	0.125	0.0115	0.071	0.324
Indeno(1,2,3-cd)pyrene	0.1	0.569	0.213	0.0687	0.0363	0.00524	0.0323	0.0318	0.047	0.0123	0.00918	0.0291	0.143
BaP TEQ[1] (mg/kg)		8.32	4.39	0.96	0.78	0.09	0.61	0.60	1.13	0.31	0.15	0.94	2.10

Notes:
BaP - benzo(a)pyrene
MDL - method detection limit
PAH - polynuclear aromatic hydrocarbon
PCP - pentachlorophenol
mg/kg - milligram per kilogram
J - estimated concentration
RPF - relative potency factor
TEF - toxic equivalency factor
TEQ - toxic equivalent concentration
1) For non-detects, 1/2 the MDL is used to calculate the TEQ
2) The TEFs are EPA 2010 relative potency factors (RPFs)

Table 1: Summary of PCP, PAH and BaP TEQ Results
Kerr-McGee Chemical Corp - Navassa Superfund Site
Navassa, NC

Compound	CAS Number	CS-SB-125 8/5/20	CS-SS-101 8/5/20	CS-SS-104 8/5/20	CS-SS-106 8/6/20	CS-SS-109 8/6/20	CS-TB07 8/6/20
Pentachlorophenol (mg/kg)	87-86-5	<0.018	<0.018	<0.019	<0.020	<0.021	<0.020
PAH Results (mg/kg)							
1-Methylnaphthalene	90-12-0	<0.018	<0.018	<0.019	<0.020	<0.022	0.11 J
2-Methylnaphthalene	91-57-6	<0.018	0.0216 J	0.0269 J	<0.020	<0.022	0.169 J
Acenaphthene	83-32-9	<0.019	0.0657 J	0.0455 J	0.0352 J	0.0487 J	0.223
Acenaphthylene	208-96-8	0.172 J	0.772	0.599	0.454	0.561	2.06
Anthracene	120-12-7	0.310	1.91	1.16	0.716	1.25	3.64
Benzo(a)anthracene	56-55-3	0.546	2.23	1.78	1.27	1.75	3.82
Benzo(a)pyrene	50-32-8	0.497	1.51	1.77	0.936	1.32	4.58
Benzo(b)fluoranthene	205-99-2	1.61	6.45	4.10	2.87	3.84	9.89
Benzo(g,h,i)perylene	191-24-2	0.322	0.969	1.04	0.606	0.912	2.72
Benzo(k)fluoranthene	207-08-9	0.504	1.23	1.17	0.865	1.05	2.24
Chrysene	218-01-9	1.05	3.10	2.45	1.78	2.09	4.35
Dibenzo(a,h)anthracene	53-70-3	0.0809 J	0.405	0.455	0.224	0.372	0.969
Fluoranthene	206-44-0	1.57	7.47	2.78	3.14	3.07	5.13
Fluorene	86-73-7	0.0223 J	0.127 J	0.0924 J	0.0798 J	0.100 J	0.312
Indeno(1,2,3-cd)pyrene	193-39-5	0.444	1.70	1.78	1.10	1.62	3.86
Naphthalene	91-20-3	<0.018	0.0283 J	0.0293 J	<0.020	0.0262 J	0.159 J
Phenanthrene	85-01-8	0.199	0.825	0.288	0.291	0.274	0.607
Pyrene	129-00-0	1.61	6.12	3.23	3.09	3.50	5.59
BaP TEQ calculations	**TEF[2]**						
Benzo(a)pyrene	1	0.497	1.51	1.77	0.936	1.32	4.58
Benzo(a)anthracene	0.1	0.0546	0.223	0.178	0.127	0.175	0.382
Benzo(b)fluoranthene	0.1	0.161	0.645	0.41	0.287	0.384	0.989
Benzo(k)fluoranthene	0.01	0.00504	0.0123	0.0117	0.00865	0.0105	0.0224
Chrysene	0.001	0.00105	0.0031	0.00245	0.00178	0.00209	0.00435
Dibenzo(a,h)anthracene	1	0.0809	0.405	0.455	0.224	0.372	0.969
Indeno(1,2,3-cd)pyrene	0.1	0.0444	0.17	0.178	0.11	0.162	0.386
BaP TEQ[1] (mg/kg)		0.84	2.97	3.01	1.69	2.43	7.33

Notes:
BaP - benzo(a)pyrene
MDL - method detection limit
PAH - polynuclear aromatic hydrocarbon
PCP - pentachlorophenol
mg/kg - milligram per kilogram
J - estimated concentration
RPF - relative potency factor
TEF - toxic equivalency factor
TEQ - toxic equivalent concentration
1) For non-detects, 1/2 the MDL is used to calculate the TEQ
2) The TEFs are EPA 2010 relative potency factors (RPFs)

Prepared by: MAB 09/17/20
Checked by: CDN 09/17/20

Table 2: Summary of Dioxin/Furan and TCDD TEQ Results
Kerr-McGee Chemical Corp - Navassa Superfund Site
Navassa, North Carolina

Compound	CAS Number	CS-22 8/5/20	CS-23 8/5/20	CS-24 8/5/20	CS-25 8/5/20	CS-26 8/5/20	CS-27 8/6/20	CS-28 8/6/20	CS-29 8/6/20	CS-30 8/6/20	CS-31 8/6/20	CS-32 8/6/20
Dioxins/Furans Results (pg/g)												
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	1746-01-6	<0.105	<0.116	<0.109	<0.13	<0.1	<0.187	<0.171	<0.191	<0.196	<0.327	<0.151
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	40321-76-4	1.18 J	0.779 J	0.433 J	<0.345	<0.175	<0.17	<0.272	<0.167	<0.4	<0.217	0.18 J
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	39227-28-6	3.5	2.63 J	1.04 J	<0.802	<0.65	0.647 J	1.33 J	<0.401	<0.55	<0.654	<0.439
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	57653-85-7	8.52	5.67	2.6 J	1.57 J	1.18 J	1.36 J	2.22 J	<0.419	0.854 J	0.94 J	<0.849
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	19408-74-3	5.45	4.36	1.61 J	<1.25	0.864 J	0.913 J	1.49 J	<0.437	<0.762	1.19 J	0.824 J
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	35822-46-9	282	197	91.2	55.6	66	45.5	108	5.78	21.1	32.8	35.1
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	3268-87-9	2320	1580	928	525	346	335	935	292	318	521	326
2,3,7,8-Tetrachlorodibenzofuran (TCDF)	51207-31-9	<0.523	0.382 J	<0.204	<0.19	<0.0762	<0.129	0.228 J	<0.105	<0.144	<0.241	<0.109
1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	57117-41-6	<0.621	<0.416	<0.225	0.398 J	<0.128	<0.165	<0.142	<0.121	<0.218	<0.107	<0.187
2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	57117-31-4	2.5 J	2.13 J	1.12 J	<0.528	<0.399	0.537 J	<0.469	<0.122	<0.208	<0.368	<0.308
1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	70648-26-9	3.84	3.32	1.42 J	0.793 J	<0.371	<0.696	1.03 J	<0.14	<0.324	0.48 J	0.494 J
1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	57117-44-9	2.32 J	2.25 J	0.854 J	0.565 J	0.413 J	0.473 J	<0.429	<0.145	0.307 J	<0.362	0.306 J
2,3,4,6,7,8-Hexchlorodibenzofuran (HxCDF)	60851-34-5	3.56	3.62	1.41 J	<0.76	0.596 J	<0.641	<0.719	<0.162	<0.416	<0.371	<0.43
1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	72918-21-9	<0.303	<0.343	<0.195	<0.188	<0.148	<0.157	<0.214	<0.171	<0.172	<0.193	<0.15
1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	67562-39-4	58.8	48.3	19.9	8.45	6.04	10.3	14.6	<0.421	3.33	4.33	6.58
1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	55673-89-7	4.7	4.62	1.14 J	<0.729	0.602 J	<0.555	0.935 J	<0.154	<0.247	<0.187	0.446 J
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	39001-02-0	160	115	46.5	19.1	16.1	21.5	44.8	<0.661	4.78 J	6.24	16.3
Dioxin/Furans TCDD Calculations	**TEF[1]**											
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	1	0.105	0.116	0.109	0.13	0.1	0.187	0.171	0.191	0.196	0.327	0.151
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	1	1.18	0.779	0.433	0.345	0.175	0.17	0.272	0.167	0.4	0.217	0.18
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	0.1	0.35	0.263	0.104	0.0802	0.065	0.0647	0.133	0.0401	0.055	0.0654	0.0439
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	0.1	0.852	0.567	0.26	0.157	0.118	0.136	0.222	0.0419	0.0854	0.094	0.0849
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	0.1	0.545	0.436	0.161	0.125	0.0864	0.0913	0.149	0.0437	0.0762	0.119	0.0824
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	0.01	2.82	1.97	0.912	0.556	0.66	0.455	1.08	0.0578	0.211	0.328	0.351
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	0.0003	0.696	0.474	0.2784	0.1575	0.1038	0.1005	0.2805	0.0876	0.0954	0.1563	0.0978
2,3,7,8-Tetrachlorodibenzofuran (TCDF)	0.1	0.0523	0.0382	0.0204	0.019	0.00762	0.0129	0.0228	0.0105	0.0144	0.0241	0.0109
1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	0.03	0.01863	0.01248	0.00675	0.01194	0.00384	0.00495	0.00426	0.00363	0.00654	0.00321	0.00561
2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	0.3	0.75	0.639	0.336	0.1584	0.1197	0.1611	0.1407	0.0366	0.0624	0.1104	0.0924
1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	0.1	0.384	0.332	0.142	0.0793	0.0371	0.0696	0.103	0.014	0.0324	0.048	0.0494
1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	0.1	0.232	0.225	0.0854	0.0565	0.0413	0.0473	0.0429	0.0145	0.0307	0.0362	0.0306
2,3,4,6,7,8-Hexchlorodibenzofuran (HxCDF)	0.1	0.356	0.362	0.141	0.076	0.0596	0.0641	0.0719	0.0162	0.0416	0.0371	0.043
1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	0.1	0.0303	0.0343	0.0195	0.0188	0.0148	0.0157	0.0214	0.0171	0.0172	0.0193	0.015
1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	0.01	0.588	0.483	0.199	0.0845	0.0604	0.103	0.146	0.00421	0.0333	0.0433	0.0658
1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	0.01	0.047	0.0462	0.0114	0.00729	0.00602	0.00555	0.00935	0.00154	0.00247	0.00187	0.00446
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	0.0003	0.048	0.0345	0.01395	0.00573	0.00483	0.00645	0.01344	0.0001983	0.001434	0.001872	0.00489
TCDD TEQ (pg/g)		9.05	6.81	3.23	2.07	1.66	1.70	2.88	0.75	1.36	1.63	1.31

Notes:
pg/g - picogram per gram [or part per trillion (ppt)]
mg/kg - milligrams per kilogram
Non-detects are reported to the method detection limit (MDL)
(1) WHO (2005) TEFs
TEF - toxic equivalency factor
TEQ - toxic equivalent concentration
WHO - World Health Organization
J - estimated concentration
TCDD - 2,3,7,8-Tetrachlorodibenzo-p-dioxin

Table 2: Summary of Dioxin/Furan and TCDD TEQ Results
Kerr-McGee Chemical Corp - Navassa Superfund Site
Navassa, North Carolina

Compound	CAS Number	CS-33 8/6/20	CS-34 8/6/20	CS-35 8/6/20	CS-36 8/6/20	CS-37 8/6/20	CS-38 8/6/20	CS-39 8/6/20	CS-40 8/7/20	CS-41 8/7/20	CS-42 8/7/20	CS-43 8/7/20
Dioxins/Furans Results (pg/g)												
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	1746-01-6	<0.184	<0.172	0.115 J	<0.131	<0.147	<0.211	<0.166	<0.175	<0.259	<0.314	<0.471
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	40321-76-4	0.312 J	<0.3	<0.407	0.577 J	<0.502	<0.197	0.235 J	<0.192	0.709 J	1.06 J	<0.815
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	39227-28-6	1.02 J	<1.1	1.8 J	3.18	18.3	<0.257	<0.329	<0.409	<1.12	1.75 J	<0.539
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	57653-85-7	2.26 J	2.54 J	4.21	7.94	24.9	0.579 J	0.717 J	<0.419	2.15 J	3.06	1.25 J
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	19408-74-3	1.82 J	<1.58	3.11	5.77	11.4	0.683 J	0.727 J	<0.447	<1.45	2.5 J	1.08 J
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	35822-46-9	85.6	100	158	320	2280	<6.8	17.3	11.9	59.7	73.8	29.5
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	3268-87-9	653	750	1360	2280	10300	52.3	304	116	590	1070	313
2,3,7,8-Tetrachlorodibenzofuran (TCDF)	51207-31-9	<0.125	<0.205	<0.254	<0.0626	0.241 J	<0.0903	0.171 J	<0.0929	0.559	0.781	0.513 J
1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	57117-41-6	<0.134	0.24 J	0.407 J	<0.151	0.275 J	<0.149	0.228 J	<0.171	<0.708	1.16 J	0.523 J
2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	57117-31-4	<0.495	0.455 J	0.987 J	<0.635	<0.549	0.247 J	<0.285	<0.334	0.874 J	1.37 J	1.38 J
1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	70648-26-9	1.46 J	1.3 J	2.73	4.07	3.59	0.241 J	<0.276	0.386 J	1.24 J	1.55 J	0.923 J
1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	57117-44-9	0.681 J	0.577 J	1.25 J	1.68 J	1.45 J	<0.181	<0.358	<0.221	0.809 J	<1.2	0.814 J
2,3,4,6,7,8-Hexchlorodibenzofuran (HxCDF)	60851-34-5	<1.05	<0.837	2.03 J	3.16	2.41 J	<0.397	0.342 J	<0.273	0.967 J	1.49 J	1.07 J
1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	72918-21-9	<0.116	<0.238	<0.3	<0.381	<0.483	<0.0994	<0.136	<0.177	<0.25	1.2 J	<0.311
1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	67562-39-4	18.6	17.4	34.7	62	84.4	1.85 J	1.87 J	3.24	8.14	10.8	19.4
1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	55673-89-7	1.62 J	1.74 J	3.46	6.82	7.63	0.195 J	<0.303	<0.155	<0.729	<1.22	<0.428
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	39001-02-0	47.3	49.4	109	193	369	2.37 J	<3.09	3.84 J	16.6	23.9	19.6

Dioxin/Furans TCDD Calculations	**TEF[1]**											
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	1	0.184	0.172	0.115	0.131	0.147	0.211	0.166	0.175	0.259	0.314	0.471
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	1	0.312	0.3	0.407	0.577	0.502	0.197	0.235	0.192	0.709	1.06	0.815
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	0.1	0.102	0.11	0.18	0.318	1.83	0.0257	0.0329	0.0409	0.112	0.175	0.0539
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	0.1	0.226	0.254	0.421	0.794	2.49	0.0579	0.0717	0.0419	0.215	0.306	0.125
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	0.1	0.182	0.158	0.311	0.577	1.14	0.0683	0.0727	0.0447	0.145	0.25	0.108
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	0.01	0.856	1	1.58	3.2	22.8	0.068	0.173	0.119	0.597	0.738	0.295
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	0.0003	0.1959	0.225	0.408	0.684	3.09	0.01569	0.0912	0.0348	0.177	0.321	0.0939
2,3,7,8-Tetrachlorodibenzofuran (TCDF)	0.1	0.0125	0.0205	0.0254	0.00626	0.0241	0.00903	0.0171	0.00929	0.0559	0.0781	0.0513
1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	0.03	0.00402	0.0072	0.01221	0.00453	0.00825	0.00447	0.00684	0.00513	0.02124	0.0348	0.01569
2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	0.3	0.1485	0.1365	0.2961	0.1905	0.1647	0.0741	0.0855	0.1002	0.2622	0.411	0.414
1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	0.1	0.146	0.13	0.273	0.407	0.359	0.0241	0.0276	0.0386	0.124	0.155	0.0923
1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	0.1	0.0681	0.0577	0.125	0.168	0.145	0.0181	0.0358	0.0221	0.0809	0.12	0.0814
2,3,4,6,7,8-Hexchlorodibenzofuran (HxCDF)	0.1	0.105	0.0837	0.203	0.316	0.241	0.0397	0.0342	0.0273	0.0967	0.149	0.107
1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	0.1	0.0116	0.0238	0.03	0.0381	0.0483	0.00994	0.0136	0.0177	0.025	0.12	0.0311
1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	0.01	0.186	0.174	0.347	0.62	0.844	0.0185	0.0187	0.0324	0.0814	0.108	0.194
1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	0.01	0.0162	0.0174	0.0346	0.0682	0.0763	0.00195	0.00303	0.00155	0.00729	0.0122	0.00428
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	0.0003	0.01419	0.01482	0.0327	0.0579	0.1107	0.000711	0.000927	0.001152	0.00498	0.00717	0.00588
TCDD TEQ (pg/g)		2.77	2.88	4.80	8.16	34.02	0.84	1.09	0.90	2.97	4.36	2.96

Notes:
pg/g - picogram per gram [or part per trillion (ppt)]
mg/kg - milligrams per kilogram
Non-detects are reported to the method detection limit (MDL)
(1) WHO (2005) TEFs
TEF - toxic equivalency factor
TEQ - toxic equivalent concentration
WHO - World Health Organization
J - estimated concentration
TCDD - 2,3,7,8-Tetrachlorodibenzo-p-dioxin

Table 2: Summary of Dioxin/Furan and TCDD TEQ Results
Kerr-McGee Chemical Corp - Navassa Superfund Site
Navassa, North Carolina

Compound	CAS Number	CS-44 8/7/20	CS-45 8/7/20	CS-46 8/7/20	CS-47 8/7/20	CS-48 8/8/20	CS-49 8/8/20	CS-50 8/7/20	CS-51 8/7/20	CS-52 8/8/20	CS-53 8/25/20	CS-54 8/7/20
Dioxins/Furans Results (pg/g)												
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	1746-01-6	<0.184	<0.16	<0.171	<0.206	<0.222	<0.146	<0.232	<0.432	<0.155	<0.137	<0.143
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	40321-76-4	<0.326	<1.8	1.6 J	0.361 J	<0.276	<0.193	0.367 J	<0.487	0.875 J	0.281 J	<0.233
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	39227-28-6	0.574 J	9.54	6.86	0.532 J	<0.501	<0.259	<0.492	0.738 J	5.66	0.748 J	<0.395
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	57653-85-7	<0.897	21.6	15	1.18 J	<0.849	<0.344	0.808 J	<1.47	14.2	1.39 J	0.521 J
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	19408-74-3	1.14 J	17	12.9	0.981 J	<0.825	0.509 J	<0.739	<0.783	9.59	1.1 J	0.654 J
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	35822-46-9	28.4	741	510	28.1	42.8 J	12.7	20.7	32.4	787	37.3	13.1
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	3268-87-9	598	5320	3690	245	280 J	150	274	270	8650	352	132
2,3,7,8-Tetrachlorodibenzofuran (TCDF)	51207-31-9	0.288 J	0.466 J	<0.399	<0.34	<0.252	<0.182	<0.439	<0.307	<0.296	<0.669	<0.342
1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	57117-41-6	0.375 J	0.729 J	<0.644	0.404 J	<0.293	<0.132	0.427 J	0.646 J	0.285 J	0.587 J	<0.218
2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	57117-31-4	0.899 J	2.33 J	<1.4	0.741 J	<0.285	<0.137	0.677 J	<0.721	1.71 J	0.738 J	<0.319
1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	70648-26-9	<0.412	12.7	9.24	<0.568	0.292 J	<0.364	0.627 J	1.02 J	3.91	0.79 J	0.344 J
1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	57117-44-9	<0.424	6.03	4.41	0.592 J	0.246 J	<0.201	0.502 J	0.85 J	1.87 J	0.59 J	0.19 J
2,3,4,6,7,8-Hexchlorodibenzofuran (HxCDF)	60851-34-5	0.759 J	9.54	6.65	0.797 J	0.501 J	0.267 J	0.482 J	<0.502	4.31	<0.461	<0.274
1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	72918-21-9	<0.172	<0.222	<0.224	<0.198	<0.247	<0.106	<0.132	<0.177	<0.62	<0.198	0.505 J
1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	67562-39-4	5.26	170	118	8.56	5.58	1.56 J	4.98	7.61	104	4.28	4.54
1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	55673-89-7	<0.141	18	13.3	<0.267	0.543 J	<0.0714	0.338 J	0.595 J	10.4	0.388 J	<0.229
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	39001-02-0	<5.31	480	354	11.7	18	2.46 J	6.08	11.1	498	9.01	6.14
Dioxin/Furans TCDD Calculations	**TEF[1]**											
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	1	0.184	0.16	0.171	0.206	0.222	0.146	0.232	0.432	0.155	0.137	0.143
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	1	0.326	1.8	1.6	0.361	0.276	0.193	0.367	0.487	0.875	0.281	0.233
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	0.1	0.0574	0.954	0.686	0.0532	0.0501	0.0259	0.0492	0.0738	0.566	0.0748	0.0395
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	0.1	0.0897	2.16	1.5	0.118	0.0849	0.0344	0.0808	0.147	1.42	0.139	0.0521
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	0.1	0.114	1.7	1.29	0.0981	0.0825	0.0509	0.0739	0.0783	0.959	0.11	0.0654
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	0.01	0.284	7.41	5.1	0.281	0.428	0.127	0.207	0.324	7.87	0.373	0.131
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	0.0003	0.1794	1.596	1.107	0.0735	0.084	0.045	0.0822	0.081	2.595	0.1056	0.0396
2,3,7,8-Tetrachlorodibenzofuran (TCDF)	0.1	0.0288	0.0466	0.0399	0.034	0.0252	0.0182	0.0439	0.0307	0.0296	0.0669	0.0342
1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	0.03	0.01125	0.02187	0.01932	0.01212	0.00879	0.00396	0.01281	0.01938	0.00855	0.01761	0.00654
2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	0.3	0.2697	0.699	0.42	0.2223	0.0855	0.0411	0.2031	0.2163	0.513	0.2214	0.0957
1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	0.1	0.0412	1.27	0.924	0.0568	0.0292	0.0364	0.0627	0.102	0.391	0.079	0.0344
1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	0.1	0.0424	0.603	0.441	0.0592	0.0246	0.0201	0.0502	0.085	0.187	0.059	0.019
2,3,4,6,7,8-Hexchlorodibenzofuran (HxCDF)	0.1	0.0759	0.954	0.665	0.0797	0.0501	0.0267	0.0482	0.0502	0.431	0.0461	0.0274
1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	0.1	0.0172	0.0222	0.0224	0.0198	0.0247	0.0106	0.0132	0.0177	0.062	0.0198	0.0505
1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	0.01	0.0526	1.7	1.18	0.0856	0.0558	0.0156	0.0498	0.0761	1.04	0.0428	0.0454
1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	0.01	0.00141	0.18	0.133	0.00267	0.00543	0.000714	0.00338	0.00595	0.104	0.00388	0.00229
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	0.0003	0.001593	0.144	0.1062	0.00351	0.0054	0.000738	0.001824	0.00333	0.1494	0.002703	0.001842
TCDD TEQ (pg/g)		1.78	21.42	15.40	1.77	1.54	0.80	1.58	2.23	17.36	1.78	1.02

Notes:
pg/g - picogram per gram [or part per trillion (ppt)]
mg/kg - milligrams per kilogram
Non-detects are reported to the method detection limit (MDL)
(1) WHO (2005) TEFs
TEF - toxic equivalency factor
TEQ - toxic equivalent concentration
WHO - World Health Organization
J - estimated concentration
TCDD - 2,3,7,8-Tetrachlorodibenzo-p-dioxin

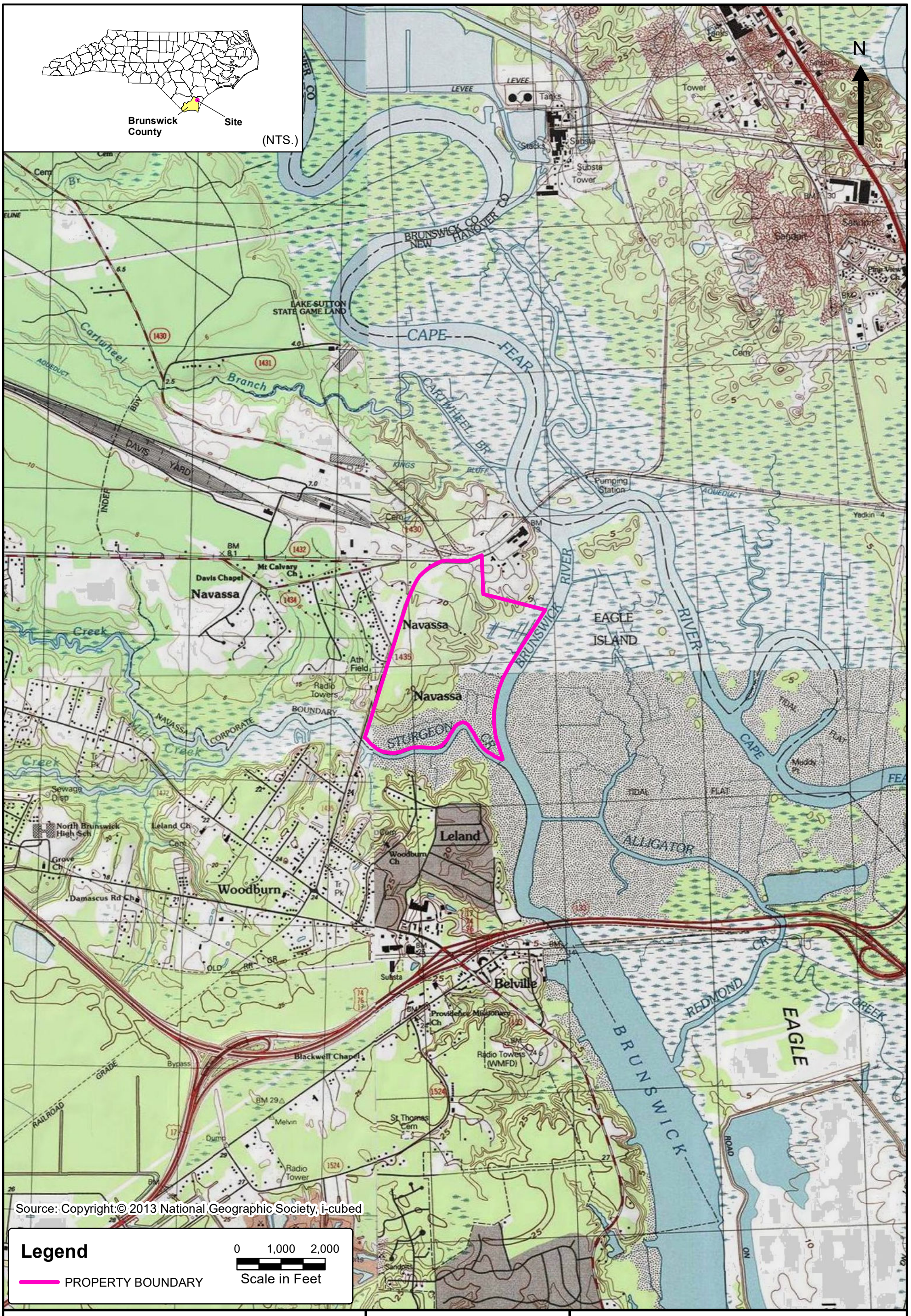
Table 2: Summary of Dioxin/Furan and TCDD TEQ Results
Kerr-McGee Chemical Corp - Navassa Superfund Site
Navassa, North Carolina

Compound	CAS Number	CS-55 8/7/20	CS-RISB02 8/5/20	CS-SB-125 8/5/20	CS-SS-101 8/5/20	CS-SS-104 8/5/20	CS-SS-106 8/6/20	CS-SS-109 8/6/20	CS-TB07 8/6/20
Dioxins/Furans Results (pg/g)									
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	1746-01-6	<0.35	<0.112	<0.129	<0.165	<0.124	<0.225	<0.162	0.257 J
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	40321-76-4	<0.173	<0.135	<0.187	0.379 J	0.764 J	<0.165	0.291 J	1.33 J
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	39227-28-6	0.453 J	0.35 J	<0.562	1.61 J	3.37	<0.544	1.44 J	2.72 J
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	57653-85-7	<0.616	1.2 J	1.67 J	3.95	10	1.19 J	<2.37	5.47
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	19408-74-3	0.831 J	0.72 J	1.07 J	2.33 J	6.84	<0.814	2.02 J	4.25
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	35822-46-9	18.3	36.3	66.1	161	416	59.7	133	314
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	3268-87-9	162	304	515	1610	3190	389	806	3030
2,3,7,8-Tetrachlorodibenzofuran (TCDF)	51207-31-9	0.304 J	<0.0788	<0.0761	0.313 J	<0.144	<0.174	<0.174	1.12
1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	57117-41-6	0.404 J	<0.104	<0.109	<0.32	0.307 J	0.186 J	<0.573	<1.13
2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	57117-31-4	0.618 J	0.301 J	<0.189	<0.686	0.766 J	<0.186	0.642 J	<1.61
1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	70648-26-9	0.537 J	0.863 J	0.862 J	2.77	4.62	<0.366	1.82 J	2.23 J
1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	57117-44-9	<0.351	<0.347	0.498 J	1.17 J	2.59 J	0.276 J	0.786 J	1.69 J
2,3,4,6,7,8-Hexchlorodibenzofuran (HxCDF)	60851-34-5	<0.578	<0.517	0.763 J	<1.56	4.69	<0.37	0.787 J	1.61 J
1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	72918-21-9	<0.184	<0.117	<0.166	<0.219	<0.386	<0.157	<0.176	<0.234
1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	67562-39-4	8.73	9.95	17.3	30.8	132	5.17	17.2	24.9
1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	55673-89-7	<0.218	0.96 J	1.49 J	3.64	12.9	0.463 J	1.49 J	1.72 J
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	39001-02-0	<7.75	27	65.1	100	636	18	46.8	81.5
Dioxin/Furans TCDD Calculations	**TEF[1]**								
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	1	0.35	0.112	0.129	0.165	0.124	0.225	0.162	0.257
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	1	0.173	0.135	0.187	0.379	0.764	0.165	0.291	1.33
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	0.1	0.0453	0.035	0.0562	0.161	0.337	0.0544	0.144	0.272
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	0.1	0.0616	0.12	0.167	0.395	1	0.119	0.237	0.547
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	0.1	0.0831	0.072	0.107	0.233	0.684	0.0814	0.202	0.425
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	0.01	0.183	0.363	0.661	1.61	4.16	0.597	1.33	3.14
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	0.0003	0.0486	0.0912	0.1545	0.483	0.957	0.1167	0.2418	0.909
2,3,7,8-Tetrachlorodibenzofuran (TCDF)	0.1	0.0304	0.00788	0.00761	0.0313	0.0144	0.0174	0.0174	0.112
1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	0.03	0.01212	0.00312	0.00327	0.0096	0.00921	0.00558	0.01719	0.0339
2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	0.3	0.1854	0.0903	0.0567	0.2058	0.2298	0.0558	0.1926	0.483
1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	0.1	0.0537	0.0863	0.0862	0.277	0.462	0.0366	0.182	0.223
1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	0.1	0.0351	0.0347	0.0498	0.117	0.259	0.0276	0.0786	0.169
2,3,4,6,7,8-Hexchlorodibenzofuran (HxCDF)	0.1	0.0578	0.0517	0.0763	0.156	0.469	0.037	0.0787	0.161
1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	0.1	0.0184	0.0117	0.0166	0.0219	0.0386	0.0157	0.0176	0.0234
1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	0.01	0.0873	0.0995	0.173	0.308	1.32	0.0517	0.172	0.249
1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	0.01	0.00218	0.0096	0.0149	0.0364	0.129	0.00463	0.0149	0.0172
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	0.0003	0.002325	0.0081	0.01953	0.03	0.1908	0.0054	0.01404	0.02445
TCDD TEQ (pg/g)		1.43	1.33	1.97	4.62	11.15	1.62	3.39	8.38

Notes:
pg/g - picogram per gram [or part per trillion (ppt)]
mg/kg - milligrams per kilogram
Non-detects are reported to the method detection limit (MDL)
(1) WHO (2005) TEFs
TEF - toxic equivalency factor
TEQ - toxic equivalent concentration
WHO - World Health Organization
J - estimated concentration
TCDD - 2,3,7,8-Tetrachlorodibenzo-p-dioxin

Prepared by: MAB 09/17/20
Checked by: CDN 09/17/20

FIGURES



S:\Premier\Projects\Greenfield Environmental Multistate Trust\KMCC Navassa NC Superfund Site\CAD GIS Data\EARTHCON_GIS\MXDs\OU1_OU2 Soil Sampling Work Plan\Fig 1 Navassa Site Location.mxd

Greenfield Environmental Multistate Trust, LLC
Trustee of the Multistate Environmental Response Trust

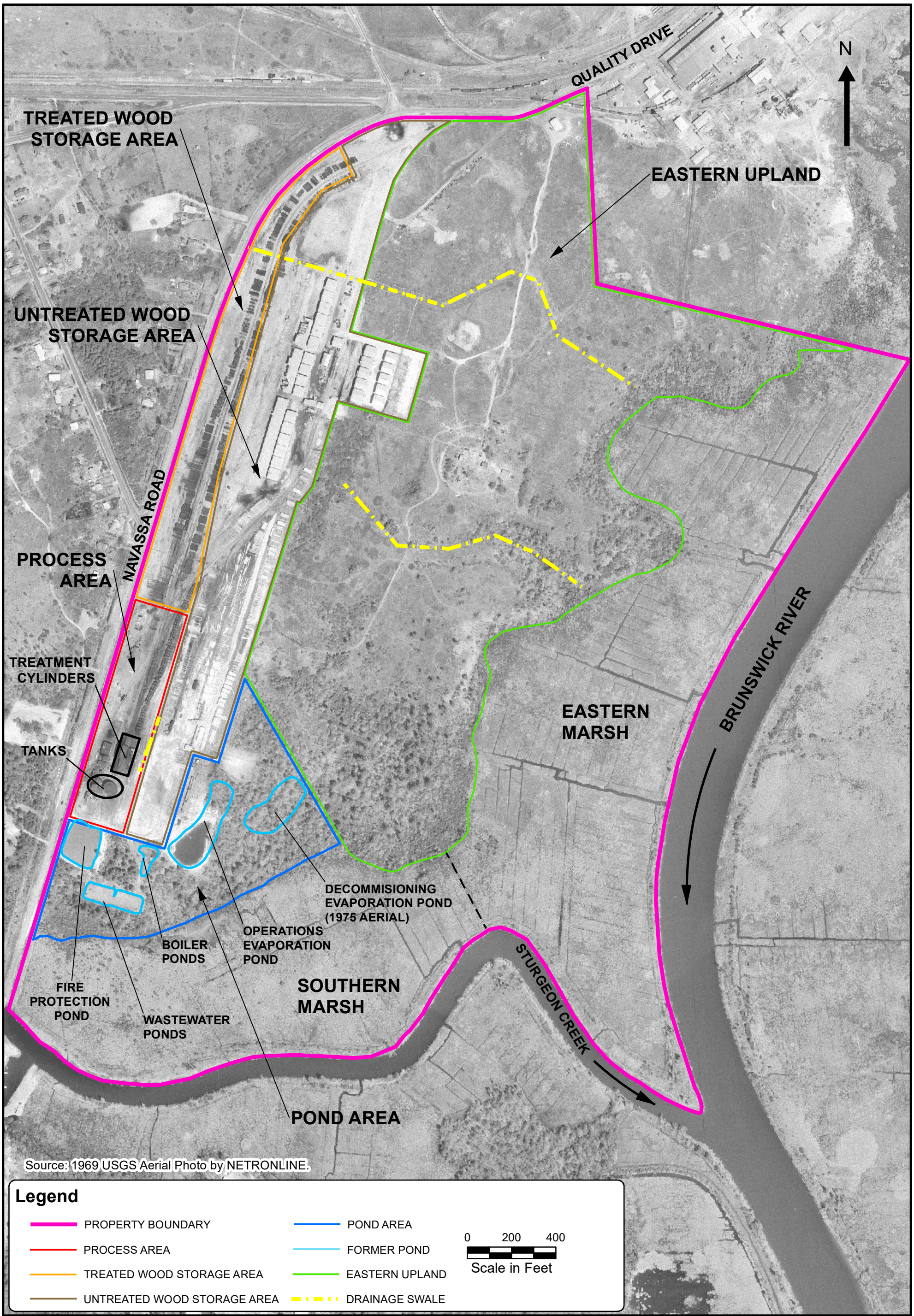
PREPARED BY:

EARTHCON®

EARTHCON CONSULTANTS OF NORTH CAROLINA, P.C.

SITE LOCATION
OU1 Soil Sampling Technical Memorandum - Residential Criteria Area Delineation
Kerr-McGee Chemical Corp - Navassa Superfund Site Navassa, North Carolina

DRAWN	CHECKED	DATE	FIGURE
HVP	CDN	SEPT 2020	1



S:\Premier\Projects\Greenfield Environmental Multistate Trust\KMCC Navassa NC Superfund Site\CAD GIS Data\EARTHCON_GIS\MXDs\OU1_OU2 Soil Sampling Work Plan\Fig 2 Navassa Site Plan.mxd

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Trustee of the Multistate Environmental Response Trust

PREPARED BY:

EARTHCON®

EARTHCON CONSULTANTS OF NORTH CAROLINA, P.C.

HISTORICAL SITE PLAN

OU1 Soil Sampling Technical Memorandum - Residential Criteria Area Delineation

Kerr-McGee Chemical Corp - Navassa Superfund Site Navassa, North Carolina

DRAWN	CHECKED	DATE	FIGURE
HVP	CDN	SEPT 2020	2

PARCELS SAMPLED IN OPERABLE UNIT 1

PARCELS SAMPLED IN OPERABLE UNIT 2

N

CS-30
A
B
C
D
E

INSET (NTS)

Aerial Source: 1969 USGS Aerial Photo by NETRONLINE.

Legend

- 5.5 < BaP TEQ < 11 mg/Kg
- BaP TEQ < 5.5 mg/Kg
- POLYGON WITHOUT SAMPLE
- UNTREATED WOOD STORAGE AREA
- SAMPLE AREA BOUNDARY
- PROPERTY BOUNDARY
- TREATED WOOD STORAGE AREA
- BaP TEQ > RESIDENTIAL RSL
- SOIL ALIQUOT LOCATION
- SOIL BORING
- TERRESTRIAL SEDIMENT
- 2019 VERIFICATION SAMPLING LOCATION
- 2019 SURFACE SAMPLING LOCATION
- 2019 BOUNDARY SOIL BORING
- 2019 TRENCH SOIL BORING

BaP TEQ - Benzo(a)pyrene Toxic Equivalent (mg/kg)

BaP Residential RSL 10^{-4} = 11 mg/kg

mg/kg - MILLIGRAMS PER KILOGRAM

0 80 160
Scale in Feet

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EARTHCON CONSULTANTS OF NORTH CAROLINA, P.C.

COMPOSITE SAMPLE LOCATIONS
OU1 Soil Sampling Technical Memorandum - Residential Criteria Area Delineation
Kerr-McGee Chemical Corp - Navassa Superfund Site Navassa, North Carolina

DRAWN	CHECKED	DATE	FIGURE
HVP	CDN	SEPT 2020	3

S:\Premier\Projects\Greenfield Environmental Multistate Trust\KMCC Navassa NC Superfund Site\CAD GIS Data\EARTHCON_GIS\MXDs\OU1_Tech_Memo\Fig 3 Composite Sample Locations.mxd 9/15/2020 1:18:14 PM

OPERABLE UNIT 1 BOUNDARY

OPERABLE UNIT 2 BOUNDARY

BOUNDARY AREA

N

SB-119R/ SB-119 CS-23 CS-22 BRSB01 CS-24 CS-26 SB-120 CS-01 CS-19 CS-25 RISB01 CS-27 CS-28 CS-33 SB-144 CS-34 CS-29 CS-32 CS-20 CS-02 SB-121 SS-101 CS-30 CS-36 CS-35 CS-31 SB-122 RISB02 SB-145 CS-38 SB-123 CS-37 CS-18 CS-03 SS12 TB-01 SB-124 CS-39 CS-40 SB-125 CS-45 TB-02 SB-125R/ CS-SB-125 CS-41 SS-102 RISB03 SB-146 SS-103 CS-42 CS-46 CS-44 CS-21 CS-04 SS-104 CS-47 CS-43 RISB04 CS-48 SS-105 SB-147 SO033 TWSB25 SO034 CS-54 CS-50 TB-03 SS-106 SO040 SO035 SO036 SB-126 TB-04 CS-49 TB-05 SO039 SS-107 TB-06 SO038 CS-55 CS-51 TB-07 SO041 SS-109 SS-108 SO037 SO042 TWSB24 SB-127 CS-52 SO043 SS08 CS-53 SO048 CS-56 SO047 SO044 SB-128 SS-110 SB-148 BKSB04 SO046 TB-08 CS-57 SO045 TB-09 TB-10 CS-58 CS-05 SB-129 TB-11 SB-130 RISB05 CS-61 RISB07 CS-59 TB-12 TB-13 RISB06 SB-149 TWSB23 CS-60 CS-06 SS-111 TB-14 CS-62 RISB08 TB-16E SB-131 TB-15 SB-150 TB-16A TB-16 TB-16F TB-16B SS-112 TB-16H TB-16D SB-132 CS-63 TB-20 TB-17 CS-07 TB-19 TB-18 TB-16C SS-125 TB-21 TB-16G SD021R/ CS-SD021 TB-22 SD021 TWSB27 CS-65 SS-126 SS-113 CS-64 SS-114 TB-23 SB-151 RISB10 TB-24 RISB09 SB-133 SS-116 CS-66 SS-115 SS-117 SS-118 SB-136 CS-08 SB-134 CS-67 SS-119 SS-120 SB-135 SS-121 SS-122 CS-68 SB-152 TB-26 TB-25 SS-123 SS-124 CS-09 SB-153

Aerial Source: 1969 USGS Aerial Photo by NETRONLINE.

Legend

- EXCEEDS RESIDENTIAL CRITERIA
- MEETS RESIDENTIAL CRITERIA
- UNTREATED WOOD STORAGE AREA
- OPERABLE UNIT 1 AND 2 BOUNDARY
- PROPERTY BOUNDARY
- TREATED WOOD STORAGE AREA

BaP TEQ - Benzo(a)pyrene Toxic Equivalent (mg/kg)

BaP Residential RSL 10^{-4} = 11 mg/kg

mg/kg - MILLIGRAMS PER KILOGRAM

0 80 160
Scale in Feet

- SOIL ALIQUOT LOCATION
- 2019 COMPOSITE SAMPLE
- SOIL BORING
- TERRESTRIAL SEDIMENT
- 2019 VERIFICATION SAMPLING LOCATION
- 2019 SURFACE SAMPLING LOCATION
- 2019 BOUNDARY SOIL BORING
- 2019 TRENCH SOIL BORING

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PREPARED BY:
EARTHCON®
EARTHCON CONSULTANTS OF NORTH CAROLINA, P.C.

OU1 BOUNDARY
OU1 Soil Sampling Technical Memorandum - Residential Criteria Area Delineation
Kerr-McGee Chemical Corp - Navassa Superfund Site
Navassa, North Carolina

DRAWN	CHECKED	DATE	FIGURE
HVP	CDN	SEPT 2020	4

S:\Premier\Projects\Greenfield Environmental Multistate Trust\KMCC Navassa NC Superfund Site\CAD GIS Data\EARTHCON_GIS\MXDs\OU1_Tech_Memo\Fig-4a OU1 Boundary.mxd 9/18/2020 3:28:56 PM

APPENDICES

APPENDIX A

FIELD FORMS

Field Sample Form

Site Name:	Kerr-McGee Chemical Corporation Site
Project Name:	OU1 / OU2 Soil Sampling

EARTHCON
Environmental Challenges
BUSINESS SOLUTIONS

Sample Type:	Grab / (Composite)
Sample ID:	CS-22
Date:	08-05-20
Sample Time:	16:55
Sampler Name:	ST

Grab/Aliquot Location ID:	Depth (ft)	Color	Soil Type	Chemical Odor	Moisture	Misc. Debris	Photograph
CS-22	0-1'	(Brown) / (Gray) / (Black) / Orange / Yellow	Clay / Sandy Clay / Clayey Sand / Slity Sand / Sandy Silt / (Sand)	Yes / (No)	(Dry) / Moist / Wet	(Organic) / Wood / Trash	Yes / (No)

Field Duplicate	Yes / (No)	Duplicate No.:
MS/MSD	Yes / (No)	

Comments:

Field Sample Form

Site Name: Kerr-McGee Chemical Corporation Site	EARTHCON® Environmental Challenges BUSINESS SOLUTIONS®
Project Name: OU1 / OU2 Soil Sampling	
Sample Type: Grab / (Composite)	**Sample ID:** CS-23
	Date: 08-05-20
	Sample Time: 17:00
	Sampler Name: DJANS

Grab/Aliquot Location ID:	Depth (ft)	Color	Soil Type	Chemical Odor	Moisture	Misc. Debris	Photograph
CS-23	0-1'	Brown (Gray) (Black) Orange Yellow	Clay Sandy Clay Clayey Sand Slity Sand Sandy Silt (Sand)	Yes (No)	(Dry) Moist Wet	Organic Wood Trash	(Yes) No

Field Duplicate	Yes / (No)	**Duplicate No.:**
MS/MSD	Yes / (No)	

Comments:

Field Sample Form

Site Name: Kerr-McGee Chemical Corporation Site	EARTHCON® Environmental Challenges BUSINESS SOLUTIONS®
Project Name: OU1 / OU2 Soil Sampling	
Sample Type: Grab / (Composite)	**Sample ID:** CS-24 Composite
	Date: ~~17:35~~ 08-05-20
	Sample Time: 17:~~40~~
	Sampler Name: ST

Grab/Aliquot Location ID:	Depth (ft)	Color	Soil Type	Chemical Odor	Moisture	Misc. Debris	Photograph
CS-24	0-1'	(Brown) / (Gray) / Black / Orange / Yellow	Clay / Sandy Clay / Clayey Sand / Slity Sand / Sandy Silt / (Sand)	Yes / (No)	(Dry) / Moist / Wet	(Organic) / Wood / Trash	(Yes) / No

Field Duplicate	Yes / (No)	**Duplicate No.:**
MS/MSD	(Yes) / No	

Comments:

Field Sample Form

Site Name:	Kerr-McGee Chemical Corporation Site
Project Name:	OU1 / OU2 Soil Sampling

EARTHCON® Environmental Challenges BUSINESS SOLUTIONS®

Sample Type:	~~Grab~~ / Composite
Sample ID:	CS-25 - Composite
Date:	08-05-25
Sample Time:	~~18:10~~ 18:10
Sampler Name:	ST

Grab/Aliquot Location ID:	Depth (ft)	Color	Soil Type	Chemical Odor	Moisture	Misc. Debris	Photograph
CS-25	0-1'	Brown, Gray, Black, Orange, Yellow	Clay, Sandy Clay, Clayey Sand, Slity Sand, Sandy Silt, Sand	Yes, No	Dry, Moist, Wet	Organic, Wood, Trash	Yes, No

Field Duplicate	Yes / No	**Duplicate No.:**
MS/MSD	Yes / No	

Comments:

Field Sample Form

Site Name:	Kerr-McGee Chemical Corporation Site
Project Name:	OU1 / OU2 Soil Sampling

EARTHCON® Environmental Challenges BUSINESS SOLUTIONS®

Sample Type:	Grab / (Composite)
Sample ID:	CS-26
Date:	05-05-20
Sample Time:	17:55
Sampler Name:	DUAL

Grab/Aliquot Location ID:	Depth (ft)	Color	Soil Type	Chemical Odor	Moisture	Misc. Debris	Photograph
CS-26	0-1'	(Brown) / Gray / Black / Orange / Yellow	Clay / Sandy Clay / Clayey Sand / Slity Sand / Sandy Silt / (Sand)	Yes / (No)	Dry / (Moist) / Wet	Organic / Wood / Trash	(Yes) / No

Field Duplicate	Yes / (No)	**Duplicate No.:**
MS/MSD	Yes / (No)	

Comments:

Field Sample Form

Site Name:	Kerr-McGee Chemical Corporation Site
Project Name:	OU1 / OU2 Soil Sampling

EARTHCON® Environmental Challenges BUSINESS SOLUTIONS®

Sample Type:	Grab / (Composite)
Sample ID:	~~08-06~~ CS-27- composite
Date:	08-06-2020
Sample Time:	1020
Sampler Name:	ST

Grab/Aliquot Location ID:	Depth (ft)	Color	Soil Type	Chemical Odor	Moisture	Misc. Debris	Photograph
CS-27	0-1'	(Brown) / Gray / Black / (Orange) / Yellow	Clay / Sandy Clay / Clayey Sand / Slity Sand / Sandy Silt / (Sand)	Yes / (No)	(Dry) / Moist / Wet	(Organic) / Wood / Trash	(Yes) / No

Field Duplicate	Yes / (No)	**Duplicate No.:**
MS/MSD	Yes / (No)	

Comments:

Field Sample Form

Site Name:	Kerr-McGee Chemical Corporation Site
Project Name:	OU1 / OU2 Soil Sampling

EARTHCON® Environmental Challenges BUSINESS SOLUTIONS ©

Sample Type:	Grab / (Composite)
Sample ID:	CS-28 Composite
Date:	08-06-20
Sample Time:	10:30
Sampler Name:	ST

Grab/Aliquot Location ID:	Depth (ft)	Color	Soil Type	Chemical Odor	Moisture	Misc. Debris	Photograph
CS-28	0-1'	(Brown) / Gray / (Black) / Orange / Yellow	Clay / Sandy Clay / Clayey Sand / Slity Sand / Sandy Silt / (Sand)	Yes / (No)	(Dry) / Moist / Wet	(Organic) / Wood / Trash	(Yes) / No

Field Duplicate	Yes / (No)	**Duplicate No.:**
MS/MSD	Yes / (No)	

Comments:

Field Sample Form

Site Name:	Kerr-McGee Chemical Corporation Site
Project Name:	OU1 / OU2 Soil Sampling

EARTHCON® Environmental Challenges BUSINESS SOLUTIONS®

Sample Type:	Grab / (Composite)
Sample ID:	CS-29 Composite
Date:	08-06-20
Sample Time:	14:45
Sampler Name:	ST

Grab/Aliquot Location ID:	Depth (ft)	Color	Soil Type	Chemical Odor	Moisture	Misc. Debris	Photograph
CS-29	0-1'	(Brown) / Gray / Black / (Orange) / Yellow	Clay / Sandy Clay / Clayey Sand / Slity Sand / Sandy Silt / (Sand)	Yes / (No)	(Dry) / Moist / Wet	(Organic) / (Wood) / Trash	(Yes) / No

Field Duplicate	(Yes) / No	**Duplicate No.:** Dup-01
MS/MSD	Yes / (No)	

Comments:

Field Sample Form

Site Name: Kerr-McGee Chemical Corporation Site

Project Name: OU1 / OU2 Soil Sampling

EARTHCON® Environmental Challenges BUSINESS SOLUTIONS®

Sample Type: Grab / (Composite)

Sample ID: CS-30 Composite

Date: 08-06-20

Sample Time: 14:20

Sampler Name: ST

Grab/Aliquot Location ID:	Depth (ft)	Color	Soil Type	Chemical Odor	Moisture	Misc. Debris	Photograph
CS-30	0-1'	(Brown) / (Gray) / (Black) / (Orange) / Yellow	Clay / Sandy Clay / Clayey Sand / Slity Sand / Sandy Silt / (Sand)	Yes / (No)	(Dry) / Moist / Wet	(Organic) / (Wood) / Trash	(Yes) / No

Field Duplicate: Yes / (No) Duplicate No.:

MS/MSD: Yes / (No)

Comments:

Field Sample Form

Site Name: Kerr-McGee Chemical Corporation Site	EARTHCON® Environmental Challenges BUSINESS SOLUTIONS®
Project Name: OU1 / OU2 Soil Sampling	
Sample Type: Grab / (Composite)	**Sample ID:** CS-31-Composite
	Date: 08-06-20
	Sample Time: 15:10
	Sampler Name: ST

Grab/Aliquot Location ID:	Depth (ft)	Color	Soil Type	Chemical Odor	Moisture	Misc. Debris	Photograph
CS-31	0-1'	(Brown) / (Gray) / (Black) / (Orange) / Yellow	Clay / Sandy Clay / Clayey Sand / Slity Sand / Sandy Silt / (Sand)	Yes / (No)	(Dry) / Moist / Wet	(Organic) / (Wood) / Trash	(Yes) / No

Field Duplicate	Yes / (No)	**Duplicate No.:**
MS/MSD	Yes / (No)	

Comments:

Field Sample Form

Site Name:	Kerr-McGee Chemical Corporation Site
Project Name:	OU1 / OU2 Soil Sampling

EARTHCON
Environmental Challenges
BUSINESS SOLUTIONS

Sample Type:	Grab / (Composite)
Sample ID:	CS-32-Composite
Date:	08-06-20
Sample Time:	11:00
Sampler Name:	ST

Grab/Aliquot Location ID:	Depth (ft)	Color	Soil Type	Chemical Odor	Moisture	Misc. Debris	Photograph
CS-32	0-1'	(Brown) / Gray / (Black) / Orange / Yellow	Clay / Sandy Clay / Clayey Sand / (Silty Sand) / Sandy Silt / (Sand)	Yes / (No)	(Dry) / Moist / Wet	(Organic) / (Wood) / Trash	(Yes) / No

Field Duplicate	Yes / (No)	**Duplicate No.:**
MS/MSD	Yes / (No)	

Comments:

Field Sample Form

Site Name:	Kerr-McGee Chemical Corporation Site
Project Name:	OU1 / OU2 Soil Sampling

EARTHCON
Environmental Challenges
BUSINESS SOLUTIONS

Sample Type:	Grab / (Composite)
Sample ID:	CS-33-Composite
Date:	08-06-20
Sample Time:	09:05
Sampler Name:	ST

Grab/Aliquot Location ID:	Depth (ft)	Color	Soil Type	Chemical Odor	Moisture	Misc. Debris	Photograph
CS-33	0-1'	(Brown) / Gray / Black / Orange / (Yellow)	Clay / Sandy Clay / Clayey Sand / Slity Sand / Sandy Silt / (Sand)	(Yes) / No	(Dry) / Moist / Wet	(Organic) / Wood / Trash	(Yes) / No

Field Duplicate	Yes / (No)	**Duplicate No.:**
MS/MSD	Yes / (No)	

Comments:

Field Sample Form

Site Name: Kerr-McGee Chemical Corporation Site	EARTHCON® Environmental Challenges BUSINESS SOLUTIONS®
Project Name: OU1 / OU2 Soil Sampling	
Sample Type: Grab / (Composite)	**Sample ID:** CS-34-Composite
	Date: 08-06-20
	Sample Time: 09:30
	Sampler Name: ST

Grab/Aliquot Location ID:	Depth (ft)	Color	Soil Type	Chemical Odor	Moisture	Misc. Debris	Photograph
CS-34	0-1'	(Brown) / (Gray) / (Black) / Orange / (Yellow)	Clay / Sandy Clay / Clayey Sand / Slity Sand / Sandy Silt / (Sand)	Yes / (No)	(Dry) / Moist / Wet	(Organic) / Wood / Trash	(Yes) / No

Field Duplicate	Yes / (No)	**Duplicate No.:**
MS/MSD	Yes / (No)	

Comments:

Field Sample Form

Site Name:	Kerr-McGee Chemical Corporation Site
Project Name:	OU1 / OU2 Soil Sampling

EARTHCON® Environmental Challenges BUSINESS SOLUTIONS®

Sample Type:	Grab / (Composite)
Sample ID:	CS-35
Date:	08-6-20
Sample Time:	13:05
Sampler Name:	ST

Grab/Aliquot Location ID:	Depth (ft)	Color	Soil Type	Chemical Odor	Moisture	Misc. Debris	Photograph
CS-35	0-1'	(Brown) / Gray / (Black) / (Orange) / Yellow	Clay / Sandy Clay / Clayey Sand / Slity Sand / Sandy Silt / Sand	Yes / (No)	(Dry) / Moist / Wet	(Organic) / (Wood) / Trash	(Yes) / No

Field Duplicate: (Yes) / No — **Duplicate No.:** Dup-02

MS/MSD: Yes / (No)

Comments:

Field Sample Form

Site Name:	Kerr-McGee Chemical Corporation Site
Project Name:	OU1 / OU2 Soil Sampling

EARTHCON® Environmental Challenges BUSINESS SOLUTIONS®

Sample Type:	Grab / (Composite)
Sample ID:	CS-36-Composite
Date:	08-6-20
Sample Time:	13:25
Sampler Name:	ST

Grab/Aliquot Location ID:	Depth (ft)	Color	Soil Type	Chemical Odor	Moisture	Misc. Debris	Photograph
CS-36	0-1'	(Brown) / (Gray) / (Black) / Orange / Yellow	Clay / Sandy Clay / Clayey Sand / Slity Sand / Sandy Silt / (Sand)	Yes / (No)	(Dry) / Moist / Wet	(Organic) / (Wood) / Trash	(Yes) / No

Field Duplicate	Yes / (No)	**Duplicate No.:**
MS/MSD	Yes / (No)	

Comments:

Field Sample Form

Site Name:	Kerr-McGee Chemical Corporation Site
Project Name:	OU1 / OU2 Soil Sampling

EARTHCON
Environmental Challenges
BUSINESS SOLUTIONS

Sample Type:	Grab / (Composite)
Sample ID:	CS-37 Composite
Date:	08-06-20
Sample Time:	13:50
Sampler Name:	CV

Grab/Aliquot Location ID:	Depth (ft)	Color	Soil Type	Chemical Odor	Moisture	Misc. Debris	Photograph
CS-37	0-1'	(Brown) / Gray / Black / Orange / Yellow	Clay / Sandy Clay / Clayey Sand / Slity Sand / Sandy Silt / (Sand)	Yes / (No)	(Dry) / Moist / Wet	(Organic) / (Wood) / Trash	(Yes) / No

Field Duplicate	Yes / (No)	**Duplicate No.:**
MS/MSD	Yes / (No)	

Comments:

Field Sample Form

Site Name:	Kerr-McGee Chemical Corporation Site
Project Name:	OU1 / OU2 Soil Sampling

EARTHCON
Environmental Challenges
BUSINESS SOLUTIONS

Sample Type:	Grab / (Composite)
Sample ID:	CS-38 Composite
Date:	08-06-20
Sample Time:	11:35
Sampler Name:	ST

Grab/Aliquot Location ID:	Depth (ft)	Color	Soil Type	Chemical Odor	Moisture	Misc. Debris	Photograph
CS-38	0-1'	(Brown) / (Gray) / (Black) / Orange / Yellow	Clay / Sandy Clay / Clayey Sand / Slity Sand / Sandy Silt / (Sand)	Yes / (No)	(Dry) / Moist / Wet	(Organic) / (Wood) / Trash	(Yes) / No

Field Duplicate: Yes / (No) — **Duplicate No.:**

MS/MSD: Yes / (No)

Comments:

Field Sample Form

Site Name:	Kerr-McGee Chemical Corporation Site
Project Name:	OU1 / OU2 Soil Sampling

EARTHCON
Environmental Challenges
BUSINESS SOLUTIONS

Sample Type:	Grab / (Composite)
Sample ID:	CS-@39 Composite
Date:	08-06-20
Sample Time:	11:55
Sampler Name:	ST

Grab/Aliquot Location ID:	Depth (ft)	Color	Soil Type	Chemical Odor	Moisture	Misc. Debris	Photograph
CS-39	0-1'	Brown / (Gray) / Black / (Orange) / (Yellow)	Clay / Sandy Clay / Clayey Sand / Slity Sand / Sandy Silt / (Sand)	Yes / (No)	(Dry) / Moist / Wet	(Organic) / (Wood) / Trash	(Yes) / No

Field Duplicate: Yes / (No) — Duplicate No.:

MS/MSD: Yes / (No)

Comments:

Field Sample Form

Site Name:	Kerr-McGee Chemical Corporation Site
Project Name:	OU1 / OU2 Soil Sampling

EARTHCON® Environmental Challenges BUSINESS SOLUTIONS

Sample Type:	Grab / (Composite)
Sample ID:	CS-40 - Composite
Date:	08-7-20
Sample Time:	08:40
Sampler Name:	ST

Grab/Aliquot Location ID:	Depth (ft)	Color	Soil Type	Chemical Odor	Moisture	Misc. Debris	Photograph
CS-40	0-1'	(Brown) / (Gray) / (Black) / Orange / Yellow	Clay / Sandy Clay / Clayey Sand / Slity Sand / Sandy Silt / (Sand)	Yes / (No)	(Dry) / Moist / Wet	(Organic) / (Wood) / Trash	(Yes) / No

Field Duplicate	Yes / (No)	Duplicate No.:
MS/MSD	Yes / (No)	

Comments:

Field Sample Form

Site Name: Kerr-McGee Chemical Corporation Site	EARTHCON® Environmental Challenges BUSINESS SOLUTIONS
Project Name: OU1 / OU2 Soil Sampling	
Sample Type: Grab / (Composite)	**Sample ID:** CS 41 -Composite
	Date: 8-7-20
	Sample Time: 9:11
	Sampler Name: ST

Grab/Aliquot Location ID:	Depth (ft)	Color	Soil Type	Chemical Odor	Moisture	Misc. Debris	Photograph
CS-41	0-1'	(Brown) / (Gray) / (Black) / Orange / Yellow	Clay / Sandy Clay / Clayey Sand / Slity Sand / Sandy Silt / (Sand)	Yes / (No)	(Dry) / Moist / Wet	(Organic) / (Wood) / Trash	(Yes) / No

Field Duplicate	Yes / (No)	**Duplicate No.:**
MS/MSD	(Yes) / No	

Comments:

Field Sample Form

Site Name: Kerr-McGee Chemical Corporation Site	EARTHCON® Environmental Challenges BUSINESS SOLUTIONS
Project Name: OU1 / OU2 Soil Sampling	
Sample Type: Grab / (Composite)	**Sample ID:** CS-42 Composite
	Date: 08-07-20
	Sample Time: 09:45
	Sampler Name: ST

Grab/Aliquot Location ID:	Depth (ft)	Color	Soil Type	Chemical Odor	Moisture	Misc. Debris	Photograph
CS-42	0-1'	(Brown) / Gray / Black / Orange / Yellow	Clay / Sandy Clay / Clayey Sand / (Silty Sand) / Sandy Silt / Sand	Yes / (No)	(Dry) / Moist / Wet	(Organic) / (Wood) / Trash	(Yes) / No

Field Duplicate	Yes / (No)	**Duplicate No.:**
MS/MSD	Yes / (No)	

Comments:

Field Sample Form

Site Name: Kerr-McGee Chemical Corporation Site	EARTHCON® Environmental Challenges BUSINESS SOLUTIONS
Project Name: OU1 / OU2 Soil Sampling	
Sample Type: Grab / (Composite)	Sample ID: CS-43 Composite
	Date: 08-07-20
	Sample Time: 10:10
	Sampler Name: ST

Grab/Aliquot Location ID:	Depth (ft)	Color	Soil Type	Chemical Odor	Moisture	Misc. Debris	Photograph
CS-43	0-1'	(Brown) / Gray / (Black) / (Orange) / Yellow	Clay / Sandy Clay / Clayey Sand / Slity Sand / Sandy Silt / (Sand)	Yes / (No)	(Dry) / Moist / Wet	(Organic) / (Wood) / Trash	(Yes) / No

Field Duplicate: Yes / (No) Duplicate No.:

MS/MSD: Yes / (No)

Comments:

Field Sample Form

Site Name: Kerr-McGee Chemical Corporation Site

Project Name: OU1 / OU2 Soil Sampling

EARTHCON
Environmental Challenges
BUSINESS SOLUTIONS

Sample Type: Grab / (Composite)

Sample ID: CS-44 - Composite

Date: 08-07-20

Sample Time: 10:45

Sampler Name: ST/CT

Grab/Aliquot Location ID:	Depth (ft)	Color	Soil Type	Chemical Odor	Moisture	Misc. Debris	Photograph
CS-44	0-1'	(Brown) / (Gray) / (Black) / Orange / Yellow	Clay / Sandy Clay / Clayey Sand / Slity Sand / Sandy Silt / (Sand)	Yes / (No)	(Dry) / Moist / Wet	(Organic) / (Wood) / Trash	(Yes) / No

Field Duplicate: Yes / (No) Duplicate No.:

MS/MSD: Yes / (No)

Comments:

Field Sample Form

Site Name: Kerr-McGee Chemical Corporation Site	EARTHCON® Environmental Challenges BUSINESS SOLUTIONS
Project Name: OU1 / OU2 Soil Sampling	

Sample Type: ~~Grab~~ Composite

Sample ID: ~~08 07-20~~ CS45Composite

Date: 08-07-20

Sample Time: 11:30

Sampler Name: SC

Grab/Aliquot Location ID:	Depth (ft)	Color	Soil Type	Chemical Odor	Moisture	Misc. Debris	Photograph
CS-45	0-1'	Brown, Gray, Black, Orange, Yellow	Clay, Sandy Clay, Clayey Sand, Slity Sand, Sandy Silt, Sand	Yes, No	Dry, Moist, Wet	Organic, Wood, Trash	Yes, No

Field Duplicate: Yes / No (No) Duplicate No.:

MS/MSD: Yes / No (No)

Comments:

Field Sample Form

Site Name: Kerr-McGee Chemical Corporation Site	EARTHCON Environmental Challenges BUSINESS SOLUTIONS
Project Name: OU1 / OU2 Soil Sampling	
Sample Type: Grab / Composite	Sample ID: CS-46-Composite
	Date: 08-07-20
	Sample Time: 12:12
	Sampler Name: ST

Grab/Aliquot Location ID:	Depth (ft)	Color	Soil Type	Chemical Odor	Moisture	Misc. Debris	Photograph
CS-46	0-1'	Brown (Gray) (Black) Orange Yellow	Clay Sandy Clay Clayey Sand Slity Sand Sandy Silt (Sand)	Yes (No)	(Dry) Moist Wet	(Organic) Wood Trash	(Yes) No

Field Duplicate	Yes	Duplicate No.:
	(No)	
MS/MSD	Yes	
	(No)	

Comments:

Field Sample Form

Site Name:	Kerr-McGee Chemical Corporation Site
Project Name:	OU1 / OU2 Soil Sampling

EARTHCON
Environmental Challenges
BUSINESS SOLUTIONS

Sample Type:	Grab / (Composite)
Sample ID:	CS-47-Composite
Date:	08-07-20
Sample Time:	12:42
Sampler Name:	ST

Grab/Aliquot Location ID:	Depth (ft)	Color	Soil Type	Chemical Odor	Moisture	Misc. Debris	Photograph
CS-47	0-1'	(Brown) / (Gray) / (Black) / Orange / Yellow	Clay / Sandy Clay / Clayey Sand / Slity Sand / Sandy Silt / (Sand)	(Yes) / (No)	(Dry) / Moist / Wet	(Organic) / (Wood) / Trash	(Yes) / No

Field Duplicate	Yes / (No)	Duplicate No.:
MS/MSD	Yes / (No)	

Comments:

Field Sample Form

Site Name: Kerr-McGee Chemical Corporation Site

Project Name: OU1 / OU2 Soil Sampling

EARTHCON
Environmental Challenges
BUSINESS SOLUTIONS

Sample Type: Grab / (Composite)

Sample ID: CS-48-Composite

Date: 08-28-20

Sample Time: 09:00

Sampler Name: ST

Grab/Aliquot Location ID:	Depth (ft)	Color	Soil Type	Chemical Odor	Moisture	Misc. Debris	Photograph
CS-48	0-1'	(Brown) / (Gray) / (Black) / Orange / Yellow	Clay / Sandy Clay / Clayey Sand / (Slity Sand) / Sandy Silt / (Sand)	Yes / (No)	Dry / (Moist) / Wet	(Organic) / (Wood) / Trash	(Yes) / No

Field Duplicate: (Yes) / No Duplicate No.: DUP-3

MS/MSD: Yes / (No)

Comments:

Field Sample Form

Site Name:	Kerr-McGee Chemical Corporation Site
Project Name:	OU1 / OU2 Soil Sampling

EARTHCON
Environmental Challenges
BUSINESS SOLUTIONS

Sample Type:	Grab / (Composite)
Sample ID:	CS-49-Composite
Date:	08-09-23
Sample Time:	08:45
Sampler Name:	ST

Grab/Aliquot Location ID:	Depth (ft)	Color	Soil Type	Chemical Odor	Moisture	Misc. Debris	Photograph
CS-49	0-1'	(Brown) / (Gray) / (Black) / Orange / Yellow	Clay / Sandy Clay / (Clayey Sand) / Silty Sand / Sandy Silt / (Sand)	Yes / (No)	Dry / (Moist) / (Wet)	(Organic) / Wood / Trash	(Yes) / No

Field Duplicate	Yes / (No)	Duplicate No.:
MS/MSD	Yes / (No)	

Comments: Very moist to wet sand with some clay

Field Sample Form

Site Name:	Kerr-McGee Chemical Corporation Site
Project Name:	OU1 / OU2 Soil Sampling

EARTHCON
Environmental Challenges
BUSINESS SOLUTIONS

Sample Type:	Grab / (Composite)
Sample ID:	CS-50-Composite
Date:	08-07-20
Sample Time:	17:15
Sampler Name:	CT

Grab/Aliquot Location ID:	Depth (ft)	Color	Soil Type	Chemical Odor	Moisture	Misc. Debris	Photograph
CS-50	0-1'	Brown Gray Black Orange Yellow	Clay Sandy Clay Clayey Sand Slity Sand Sandy Silt Sand	Yes No	Dry Moist Wet	Organic Wood Trash	Yes No

Field Duplicate: Yes / (No) — **Duplicate No.:**

MS/MSD: Yes / (No)

Comments:

Field Sample Form

Site Name:	Kerr-McGee Chemical Corporation Site
Project Name:	OU1 / OU2 Soil Sampling

EARTHCON® Environmental Challenges BUSINESS SOLUTIONS®

Sample Type:	Grab / (Composite)
Sample ID:	CS-51 (composite)
Date:	8-7-20
Sample Time:	1705
Sampler Name:	DF/BH

Grab/Aliquot Location ID:	Depth (ft)	Color	Soil Type	Chemical Odor	Moisture	Misc. Debris	Photograph
CS-51	0-1'	Brown / (Gray) / Black / Orange / Yellow	Clay / Sandy Clay / Clayey Sand / Slity Sand / Sandy Silt / (Sand)	Yes / (No)	Dry / (Moist) / Wet	(Organic) / Wood / Trash	(Yes) / No

Field Duplicate	Yes / (No)	**Duplicate No.:**
MS/MSD	Yes / (No)	

Comments: Shoveled down to 1 foot for each increment. Took samples from each side wall.

Field Sample Form

Site Name:	Kerr-McGee Chemical Corporation Site
Project Name:	OU1 / OU2 Soil Sampling

EARTHCON® Environmental Challenges BUSINESS SOLUTIONS®

Sample Type:	Grab / (Composite)
Sample ID:	CS-52 (composite)
Date:	8-8-20
Sample Time:	0930
Sampler Name:	DF / BH

Grab/Aliquot Location ID:	Depth (ft)	Color	Soil Type	Chemical Odor	Moisture	Misc. Debris	Photograph
CS-52	0-1'	(Brown) / Gray / Black / Orange / Yellow / (Light Brown)	Clay / Sandy Clay / Clayey Sand / (Slity Sand) / Sandy Silt / (Sand)	Yes / (No)	Dry / (Moist) / Wet	(Organic) / Wood / Trash	(Yes) / No

Field Duplicate	Yes / (No)	**Duplicate No.:**
MS/MSD	Yes / (No)	

Comments:

CS-52-A: Lignite/coal fragments.
CS-52-B: Location on power line easement.
CS-52-C: Location on power line easement. Shell fragments.
CS-52-E: Found adjacent to miscellaneous household trash including plastic bottles and miscellaneous plastic.

Field Sample Form

Site Name: Kerr-McGee Chemical Corporation Site	EARTHCON® Environmental Challenges BUSINESS SOLUTIONS®
Project Name: OU1 / OU2 Soil Sampling	
Sample Type: Grab / (Composite)	Sample ID: CS-53
	Date: 8.25.20
	Sample Time: 16:30
	Sampler Name: ST, TM

Grab/Aliquot Location ID:	Depth (ft)	Color	Soil Type	Chemical Odor	Moisture	Misc. Debris	Photograph
CS-53	0-1'	(Brown) / Gray / (Black) / Orange / Yellow	Clay / Sandy Clay / Clayey Sand / Silty Sand / (Sandy Silt) / Sand	Yes / (No)	Dry / (Moist) / Wet	(Organic) / (Wood) / Trash	(Yes) / No

Field Duplicate	Yes / (No)	Duplicate No.:
MS/MSD	Yes / (No)	

Comments: CS-53-A: middle of the road. 1' of gravel. No sample collected.

CS-53-C: plastic

CS-53-E: plastic trash

Field Sample Form

Site Name:	Kerr-McGee Chemical Corporation Site
Project Name:	OU1 / OU2 Soil Sampling

EARTHCON
Environmental Challenges
BUSINESS SOLUTIONS

Sample Type:	Grab / Composite (Composite)
Sample ID:	CS-54 - B Composite
Date:	8/7/20
Sample Time:	11:50
Sampler Name:	ST

Grab/Aliquot Location ID:	Depth (ft)	Color	Soil Type	Chemical Odor	Moisture	Misc. Debris	Photograph
CS-54	0-1'	Brown, Gray, Black, Orange, Yellow	Clay, Sandy Clay, Clayey Sand, Slity Sand, Sandy Silt, Sand	Yes / No	Dry / Moist / Wet	Organic / Wood / Trash	Yes / No

Field Duplicate	Yes / No	Duplicate No.:
MS/MSD	Yes / No	

Comments:

Field Sample Form

Site Name: Kerr-McGee Chemical Corporation Site

Project Name: OU1 / OU2 Soil Sampling

EARTHCON
Environmental Challenges
BUSINESS SOLUTIONS

Sample Type: Grab / (Composite)

Sample ID: CS-55-Composite

Date: 08-07-20

Sample Time: 15:02

Sampler Name: ST

Grab/Aliquot Location ID:	Depth (ft)	Color	Soil Type	Chemical Odor	Moisture	Misc. Debris	Photograph
CS-55	0-1'	Brown / (Gray) / (Black) / Orange / Yellow	Clay / Sandy Clay / Clayey Sand / Slity Sand / Sandy Silt / (Sand)	Yes / (No)	(Dry) / Moist / Wet	(Organic) / Wood / Trash	(Yes) / No

Field Duplicate: Yes / (No) Duplicate No.:

MS/MSD: Yes / (No)

Comments:

Field Sample Form

Site Name:	Kerr-McGee Chemical Corporation Site
Project Name:	OU1 / OU2 Soil Sampling

EARTHCON® Environmental Challenges BUSINESS SOLUTIONS®

CS-

Sample Type:	Grab / (Composite)
Sample ID:	RISB02
Date:	8-5-20
Sample Time:	1330
Sampler Name:	TM / CA

Grab/Aliquot Location ID:	Depth (ft)	Color	Soil Type	Chemical Odor	Moisture	Misc. Debris	Photograph
CS-RISB02	0-1'	(Brown) / Gray / Black / Orange / Yellow	Clay / (Sandy Clay) / Clayey Sand / Slity Sand / Sandy Silt / Sand	Yes / (No)	(Dry) / Moist / Wet	Organic / Wood / Trash	(Yes) / No

Field Duplicate	Yes / (No)	**Duplicate No.:**
MS/MSD	Yes / (No)	

Comments:
Old asphalt near RISB02-A.

Field Sample Form

Site Name:	Kerr-McGee Chemical Corporation Site
Project Name:	OU1 / OU2 Soil Sampling

EARTHCON® Environmental Challenges BUSINESS SOLUTIONS®

Sample Type:	Grab / (Composite)
Sample ID:	CS-SB-125
Date:	8.5.20
Sample Time:	1648
Sampler Name:	~~TM~~, ~~BH~~, DA

Grab/Aliquot Location ID:	Depth (ft)	Color	Soil Type	Chemical Odor	Moisture	Misc. Debris	Photograph
CS-SB-125	0-1'	(Brown) / Gray / Black / Orange / Yellow	Clay / (Sandy Clay) / Clayey Sand / Slity Sand / Sandy Silt / Sand	Yes / (No)	(Dry) / Moist / Wet	Organic / Wood / Trash	(Yes) / No

Field Duplicate	Yes / (No)	**Duplicate No.:**
MS/MSD	Yes / (No)	

Comments:

Field Sample Form

Site Name:	Kerr-McGee Chemical Corporation Site
Project Name:	OU1 / OU2 Soil Sampling

EARTHCON® Environmental Challenges BUSINESS SOLUTIONS®

Sample Type:	Grab / (Composite)
Sample ID:	CSSS-101
Date:	8
Sample Time:	8/5/20 17:27
Sampler Name:	TM

Grab/Aliquot Location ID:	Depth (ft)	Color	Soil Type	Chemical Odor	Moisture	Misc. Debris	Photograph
CS-SS-101	0-1'	(Brown) / Gray / Black / Orange / Yellow	Clay / (Sandy Clay) / Clayey Sand / Slity Sand / Sandy Silt / Sand	Yes / (No)	(Dry) / Moist / Wet	Organic / Wood / Trash	(Yes) / No

Field Duplicate	Yes / (No)	**Duplicate No.:**
MS/MSD	Yes / (No)	

Comments:

Field Sample Form

Site Name:	Kerr-McGee Chemical Corporation Site
Project Name:	OU1 / OU2 Soil Sampling

EARTHCON® Environmental Challenges BUSINESS SOLUTIONS®

Sample Type:	Grab / (Composite)
Sample ID:	CSSS-104
Date:	8/5/20
Sample Time:	1816
Sampler Name:	JM, TH, CA

Grab/Aliquot Location ID:	Depth (ft)	Color	Soil Type	Chemical Odor	Moisture	Misc. Debris	Photograph
CS-SS-104	0-1'	(Brown) / Gray / Black / Orange / Yellow	Clay / (Sandy Clay) / Clayey Sand / Slity Sand / Sandy Silt / Sand	Yes / (No)	(Dry) / Moist / Wet	Organic / Wood / Trash	(Yes) / No

Field Duplicate	Yes / (No)	**Duplicate No.:**
MS/MSD	Yes / (No)	

Comments:

Field Sample Form

Site Name:	Kerr-McGee Chemical Corporation Site
Project Name:	OU1 / OU2 Soil Sampling

EARTHCON® Environmental Challenges BUSINESS SOLUTIONS®

Sample Type:	Grab / Composite
Sample ID:	OS-SS-106
Date:	5-6-2010
Sample Time:	11:35
Sampler Name:	JW IBH

Grab/Aliquot Location ID:	Depth (ft)	Color	Soil Type	Chemical Odor	Moisture	Misc. Debris	Photograph
OS-SS-106	0-1'	Brown Gray Black Orange Yellow	Clay Sandy Clay Clayey Sand Slity Sand Sandy Silt Sand	Yes No	Dry Moist Wet	Organic Wood Trash	Yes No

Field Duplicate: Yes / No — Duplicate No.:

MS/MSD: Yes / No

Comments:

Field Sample Form

Site Name: Kerr-McGee Chemical Corporation Site	EARTHCON® Environmental Challenges BUSINESS SOLUTIONS®
Project Name: OU1 / OU2 Soil Sampling	
Sample Type: Grab / (Composite)	**Sample ID:** CS-SS-109
	Date: 08/06/20
	Sample Time: 12:05PM
	Sampler Name: DF/CA

Grab/Aliquot Location ID:	Depth (ft)	Color	Soil Type	Chemical Odor	Moisture	Misc. Debris	Photograph
CS-SS-109	0-1'	(Brown) / Gray / Black / Orange / Yellow	Clay / Sandy Clay / Clayey Sand / (Slity Sand) / ~~Sandy~~ Silt / Sand	Yes / (No)	Dry / (Moist) / Wet	Organic / Wood / Trash	(Yes) / No

Field Duplicate	Yes / (No)	**Duplicate No.:**
MS/MSD	Yes / No	

Comments:

Field Sample Form

Site Name:	Kerr-McGee Chemical Corporation Site
Project Name:	OU1 / OU2 Soil Sampling

EARTHCON® Environmental Challenges BUSINESS SOLUTIONS®

Sample Type:	Grab / **Composite**
Sample ID:	CS-TB07
Date:	09/06/20
Sample Time:	13:40
Sampler Name:	DF

Grab/Aliquot Location ID:	Depth (ft)	Color	Soil Type	Chemical Odor	Moisture	Misc. Debris	Photograph
CS-TB07	0-1'	Brown, Gray, **Black**, Orange, Yellow	Clay, Sandy Clay, Clayey Sand, **Slity Sand**, Sandy Silt, Sand	Yes, **No**	Dry, **Moist**, Wet	**Organic**, Wood, Trash, gravel	Yes, **No**

Field Duplicate	Yes / **No**	**Duplicate No.:**
MS/MSD	Yes / **No**	

Comments:

TB-07-A: Slight chemical odor

TB-07-B: Slight chemical odor; 3' from railroad tie

TB-07-C: 3' offset from stake; trace gravel; wood debris present; at 8" bgs - concrete slab

TB-07-D: Adjacent to railroad tie

TB-07-E: at 2" bgs concrete; no sample collected

APPENDIX B

PHOTOGRAPHIC LOG

Sample Location: CS-22	**Date: 08/05/20**













Note: No composite soil photo taken. Aliquot location CS-22-B is a representative sample.

Sample Location: CS-23	**Date: 08/05/20**













Note: No composite soil photo taken. Aliquot location CS-23-A is a representative sample.

Sample Location: CS-24	**Date:08/05/20**













Sample Location: CS-25	**Date:08/05/20**













Note: No composite soil photo taken. Aliquot location CS-25-C is a representative sample.

Sample Location: CS-26	**Date: 08/05/20**













Sample Location: CS-27	**Date:08/06/20**













Sample Location: CS-28	**Date: 08/06/20**













Sample Location: CS-29	**Date: 08/06/20**

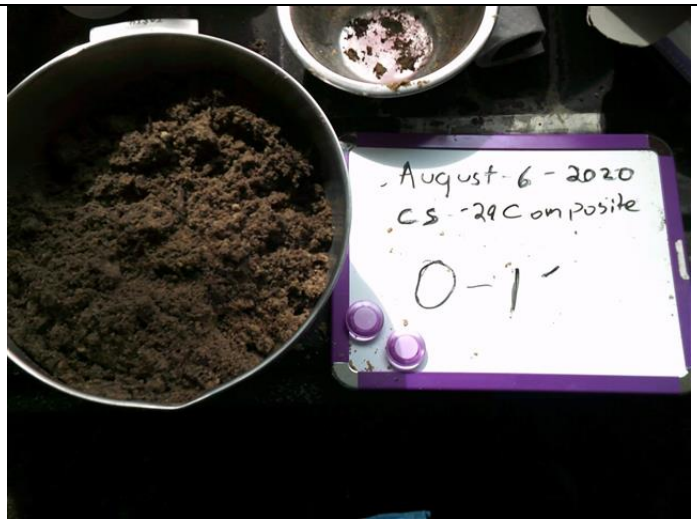












Sample Location: CS-30	**Date: 08/06/20**













Sample Location: CS-31	**Date: 08/06/20**













Sample Location: CS-32	**Date: 08/06/20**













Sample Location: CS-33	**Date: 08/06/20**













Sample Location: CS-34	**Date: 08/06/20**













Sample Location: CS-35	**Date: 08/06/20**











Note: Whiteboard label is incorrect; should be CS-35-E



Sample Location: CS-36	**Date: 08/06/20**













Sample Location: CS-37	**Date: 08/06/20**













Sample Location: CS-38	**Date: 08/06/20**





Note: Whiteboard label is incorrect; should be CS-38-B









Sample Location: CS-39	**Date: 08/06/20**













Sample Location: CS-40	**Date: 08/07/20**













Sample Location: CS-41	**Date: 08/07/20**











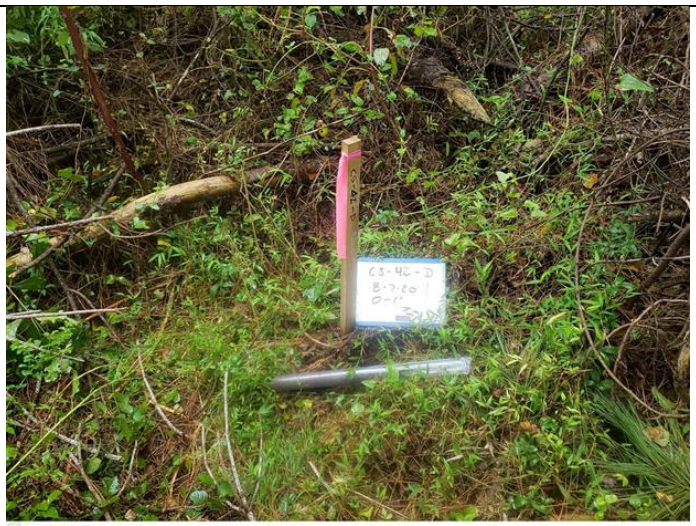


Sample Location: CS-42	**Date: 08/07/20**













Sample Location: CS-43	**Date: 08/07/20**

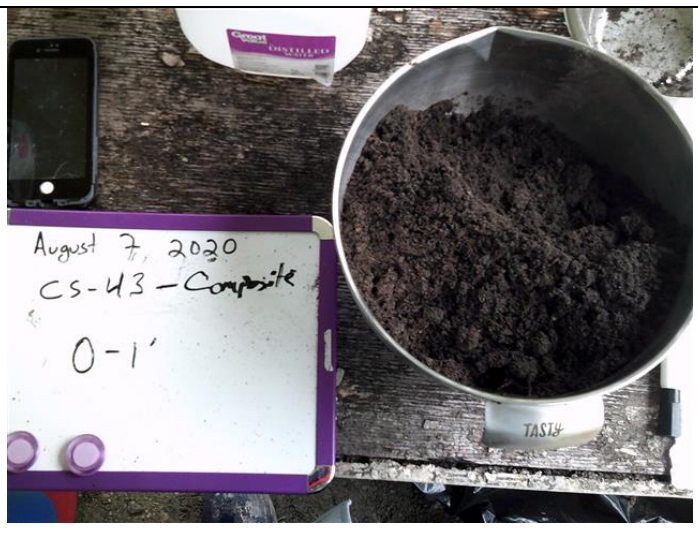












Sample Location: CS-44	**Date: 08/07/20**

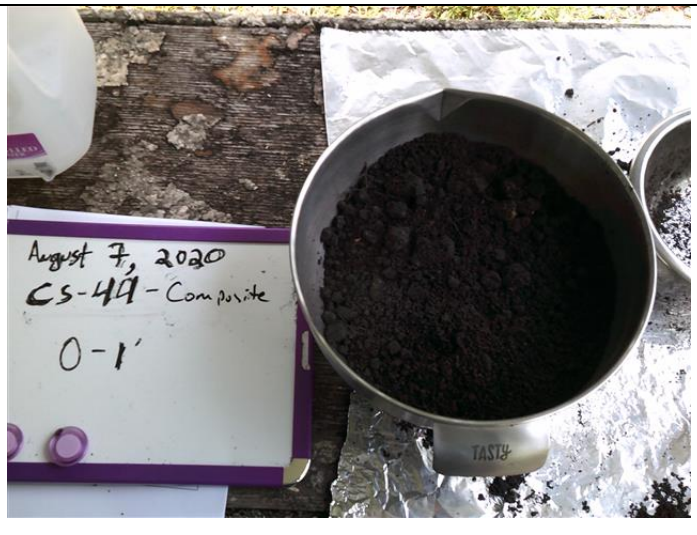












Sample Location: CS-45	**Date: 08/07/20**

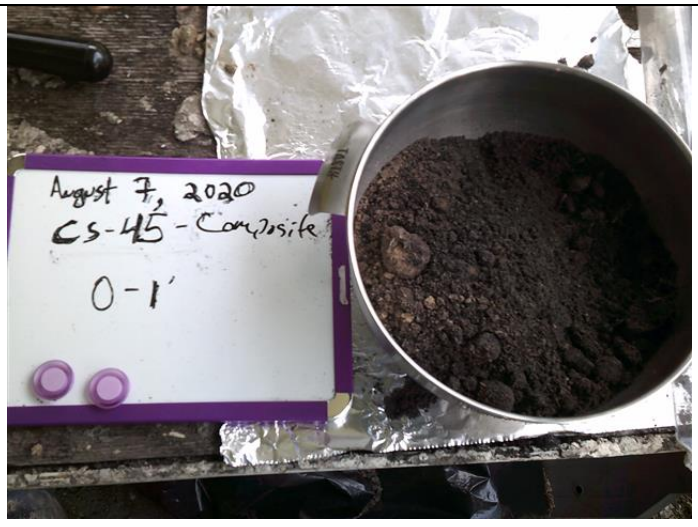












Sample Location: CS-46	**Date: 08/07/20**













Sample Location: CS-47	**Date: 08/07/20**













Sample Location: CS-48	**Date: 08/08/20**













Sample Location: CS-49	**Date: 08/08/20**













Sample Location: CS-50	**08/07/20**













Sample Location: CS-51	**08/07/20**













Sample Location: CS-52	**08/08/20**

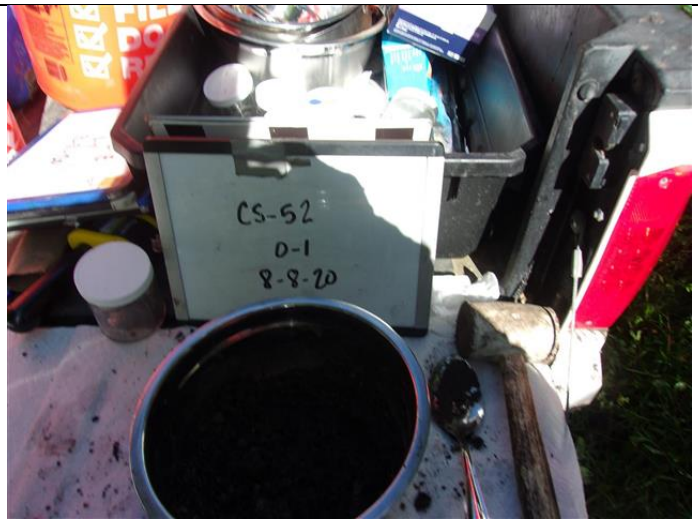












Sample Location: CS-53	**08/25/20**













Sample Location: CS-54	**08/07/20**













Sample Location: CS-55	**08/07/20**













Sample Location: CS-RISB02	**Date: 08/05/20**













Note: No composite soil photo taken. Aliquot location RISB02-D is a representative sample.

Sample Location: CS-SB-125	**Date: 08/05/20**













Sample Location: CS-SS-101	Date: 08/05/20

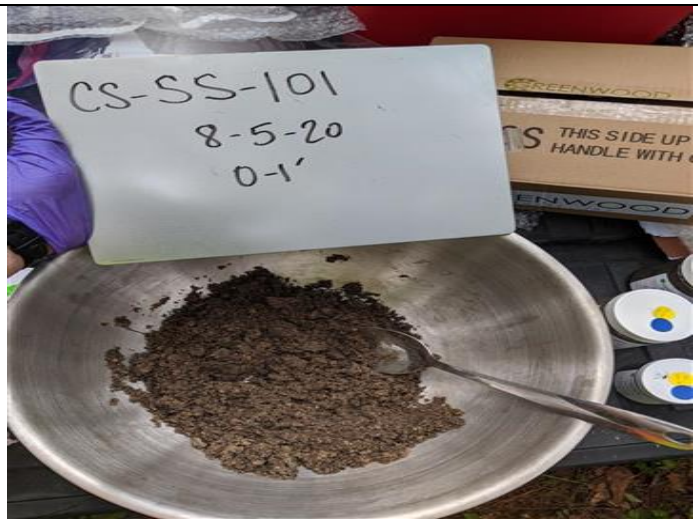












Sample Location: CS-SS-104	**Date: 08/05/20**

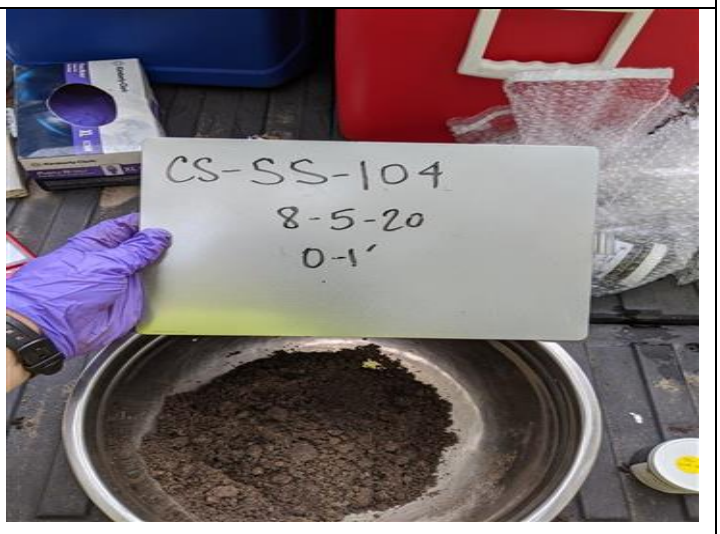












Sample Location: CS-SS-106	Date: 08/06/20

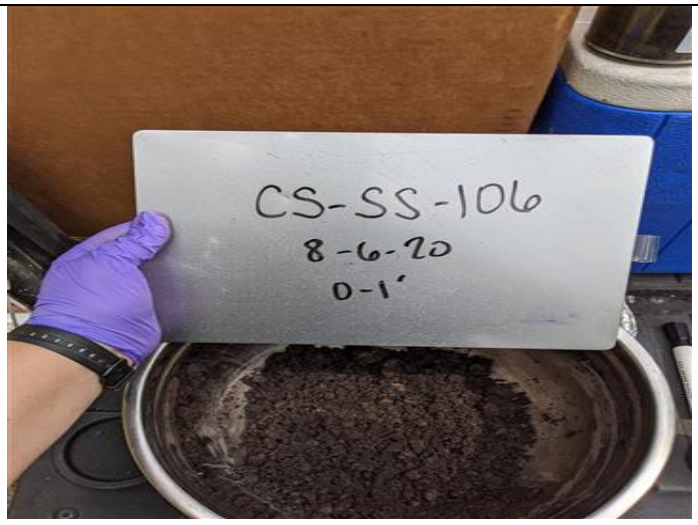












Sample Location: CS-SS-109	**Date: 08/06/20**













Note: No composite soil photo taken. Aliquot location SS-109-A is a representative sample.

Sample Location: CS-TB-07	**Date: 08/06/20**











Note: No aliquot sample collected from this location due to the presence of concrete.



Note: No composite soil photo taken. Aliquot location TB-07-C is a representative sample.

APPENDIX C

LABORATORY ANALYTICAL REPORTS

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report



Technical Report for

EarthCon Consultants, Inc

KMCC Navassa Site; 120 Quality Dr, Navassa, NC

02.20200007.00

SGS Job Number: FA77576

Sampling Date: 08/06/20

Report to:

EarthCon Consultants, Inc
1880 W Oak Pkwy Bldg 100, Suite 106
Marietta, GA 30062
mbrookshire@earthcon.com; bhatfield@earthcon.com

ATTN: Mary Ann Brookshire

Total number of pages in report: **1103**

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Caitlin Brice, M.S.
General Manager

Client Service contact: Muna Mohammed 407-425-6700

Certifications: FL(E83510), LA(03051), KS(E-10327), IL(200063), NC(573), NJ(FL002), NY(12022), SC(96038001) DoD ELAP(ANAB L2229), AZ(AZ0806), CA(2937), TX(T104704404), PA(68-03573), VA(460177), AK, AR, IA, KY, MA, MS, ND, NH, NV, OK, OR, UT, WA, WV

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EHS.US.CustomerCare@sgs.com

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SGS North America Inc.

Sample Summary

EarthCon Consultants, Inc

Job No: FA77576

KMCC Navassa Site; 120 Quality Dr, Navassa, NC
Project No: 02.20200007.00

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA77576-1	08/06/20	13:40	DFBH	08/07/20	SO	Soil	CS-TB-07
FA77576-2	08/06/20	11:25	DFBH	08/07/20	SO	Soil	CS-SS-106
FA77576-3	08/06/20	10:10	DFBH	08/07/20	SO	Soil	CS-27
FA77576-4	08/06/20	13:05	DFBH	08/07/20	SO	Soil	CS-35
FA77576-5	08/06/20	13:50	DFBH	08/07/20	SO	Soil	CS-37
FA77576-6	08/06/20	12:05	DFBH	08/07/20	SO	Soil	CS-SS-109
FA77576-7	08/06/20	00:00	DFBH	08/07/20	SO	Soil	DUP-02
FA77576-8	08/06/20	13:25	DFBH	08/07/20	SO	Soil	CS-36
FA77576-9	08/06/20	11:55	DFBH	08/07/20	SO	Soil	CS-39
FA77576-10	08/06/20	11:00	DFBH	08/07/20	SO	Soil	CS-32
FA77576-11	08/06/20	10:30	DFBH	08/07/20	SO	Soil	CS-28
FA77576-12	08/06/20	09:30	DFBH	08/07/20	SO	Soil	CS-34

This report contains results reported as ND = Not detected. The following applies:
Organics ND = Not detected above the MDL

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Sample Summary
(continued)

EarthCon Consultants, Inc

Job No: FA77576

KMCC Navassa Site; 120 Quality Dr, Navassa, NC
Project No: 02.20200007.00

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA77576-13	08/06/20	11:35	DFBH	08/07/20	SO	Soil	CS-38
FA77576-14	08/06/20	09:05	DFBH	08/07/20	SO	Soil	CS-33

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: EarthCon Consultants, Inc **Job No:** FA77576

Site: KMCC Navassa Site; 120 Quality Dr, Navassa, NC **Report Date** 8/13/2020 11:33:41

14 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were collected on 08/06/2020 and were received at SGS North America Inc - Orlando on 08/07/2020 properly preserved, at 2 Deg. C and intact. These Samples received an SGS Orlando job number of FA77576. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section. Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

MS Semi-volatiles By Method SW846 8270E

Matrix: SO **Batch ID:** OP81482

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

Sample(s) FA77581-5MS, FA77581-5MSD were used as the QC samples indicated.

All method blanks for this batch meet method specific criteria.

Matrix Spike Recovery(s) for Benzo(a)anthracene, Chrysene, Fluoranthene, Pyrene are outside control limits. Probable cause is due to matrix interference.

Matrix Spike Duplicate Recovery(s) for Benzo(a)anthracene, Chrysene, Fluoranthene, Pyrene are outside control limits. Probable cause is due to matrix interference.

FA77576-5: Dilution required due to matrix interference.

MS Semi-volatiles By Method SW846 8270E BY SIM

Matrix: SO **Batch ID:** OP81483

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

Sample(s) FA77581-5MS, FA77581-5MSD were used as the QC samples indicated.

All method blanks for this batch meet method specific criteria.

General Chemistry By Method SM19 2540G

Matrix: SO **Batch ID:** GN85880

Sample(s) FA77576-1DUP were used as the QC samples for Solids, Percent.

SGS Orlando certifies that this report meets the project requirements for analytical data produced for the samples as received at SGS Orlando and as stated on the COC. SGS Orlando certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the SGS Orlando Quality Manual except as noted above. This report is to be used in its entirety. SGS Orlando is not responsible for any assumptions of data quality if partial data packages are used.

Narrative prepared by:

_____

Ariel Hartney, Client Services *(Signature on file)*

Summary of Hits

Job Number: FA77576
Account: EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC
Collected: 08/06/20

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FA77576-1	**CS-TB-07**					
Acenaphthene		223	200	21	ug/kg	SW846 8270E
Acenaphthylene		2060	200	20	ug/kg	SW846 8270E
Anthracene		3640	200	22	ug/kg	SW846 8270E
Benzo(a)anthracene		3820	200	20	ug/kg	SW846 8270E
Benzo(a)pyrene		4580	980	120	ug/kg	SW846 8270E
Benzo(b)fluoranthene		9890	980	110	ug/kg	SW846 8270E
Benzo(g,h,i)perylene		2720	200	20	ug/kg	SW846 8270E
Benzo(k)fluoranthene		2240	200	26	ug/kg	SW846 8270E
Chrysene		4350	980	100	ug/kg	SW846 8270E
Dibenzo(a,h)anthracene		969	200	25	ug/kg	SW846 8270E
Fluoranthene		5130	980	98	ug/kg	SW846 8270E
Fluorene		312	200	21	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene		3860	200	24	ug/kg	SW846 8270E
1-Methylnaphthalene		110 J	200	20	ug/kg	SW846 8270E
2-Methylnaphthalene		169 J	200	20	ug/kg	SW846 8270E
Naphthalene		159 J	200	20	ug/kg	SW846 8270E
Phenanthrene		607	200	20	ug/kg	SW846 8270E
Pyrene		5590	980	110	ug/kg	SW846 8270E
FA77576-2	**CS-SS-106**					
Acenaphthene		35.2 J	200	21	ug/kg	SW846 8270E
Acenaphthylene		454	200	20	ug/kg	SW846 8270E
Anthracene		716	200	22	ug/kg	SW846 8270E
Benzo(a)anthracene		1270	200	20	ug/kg	SW846 8270E
Benzo(a)pyrene		936	200	24	ug/kg	SW846 8270E
Benzo(b)fluoranthene		2870	200	22	ug/kg	SW846 8270E
Benzo(g,h,i)perylene		606	200	21	ug/kg	SW846 8270E
Benzo(k)fluoranthene		865	200	26	ug/kg	SW846 8270E
Chrysene		1780	200	20	ug/kg	SW846 8270E
Dibenzo(a,h)anthracene		224	200	25	ug/kg	SW846 8270E
Fluoranthene		3140	200	20	ug/kg	SW846 8270E
Fluorene		79.8 J	200	22	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene		1100	200	24	ug/kg	SW846 8270E
Phenanthrene		291	200	20	ug/kg	SW846 8270E
Pyrene		3090	200	23	ug/kg	SW846 8270E
FA77576-3	**CS-27**					
Acenaphthene		38.4 J	180	19	ug/kg	SW846 8270E
Acenaphthylene		610	180	18	ug/kg	SW846 8270E
Anthracene		1060	180	20	ug/kg	SW846 8270E
Benzo(a)anthracene		1810	180	18	ug/kg	SW846 8270E

Summary of Hits

Job Number: FA77576
Account: EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC
Collected: 08/06/20

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Benzo(a)pyrene		1540	180	21	ug/kg	SW846 8270E
Benzo(b)fluoranthene		4150	360	40	ug/kg	SW846 8270E
Benzo(g,h,i)perylene		1010	180	19	ug/kg	SW846 8270E
Benzo(k)fluoranthene		1280	180	24	ug/kg	SW846 8270E
Chrysene		2900	180	18	ug/kg	SW846 8270E
Dibenzo(a,h)anthracene		370	180	23	ug/kg	SW846 8270E
Fluoranthene		5470	360	36	ug/kg	SW846 8270E
Fluorene		90.9 J	180	19	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene		1680	180	22	ug/kg	SW846 8270E
Phenanthrene		491	180	18	ug/kg	SW846 8270E
Pyrene		5020	360	42	ug/kg	SW846 8270E
FA77576-4	**CS-35**					
Acenaphthene		94.9 J	180	19	ug/kg	SW846 8270E
Acenaphthylene		1170	180	18	ug/kg	SW846 8270E
Anthracene		2940	180	20	ug/kg	SW846 8270E
Benzo(a)anthracene		2730	180	18	ug/kg	SW846 8270E
Benzo(a)pyrene		2580	180	21	ug/kg	SW846 8270E
Benzo(b)fluoranthene		8120	910	100	ug/kg	SW846 8270E
Benzo(g,h,i)perylene		1700	180	19	ug/kg	SW846 8270E
Benzo(k)fluoranthene		2060	180	24	ug/kg	SW846 8270E
Chrysene		4160	910	93	ug/kg	SW846 8270E
Dibenzo(a,h)anthracene		689	180	23	ug/kg	SW846 8270E
Fluoranthene		6240	910	91	ug/kg	SW846 8270E
Fluorene		185	180	20	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene		2790	180	22	ug/kg	SW846 8270E
1-Methylnaphthalene		18.1 J	180	18	ug/kg	SW846 8270E
2-Methylnaphthalene		26.2 J	180	18	ug/kg	SW846 8270E
Naphthalene		31.6 J	180	18	ug/kg	SW846 8270E
Phenanthrene		808	180	18	ug/kg	SW846 8270E
Pyrene		6480	910	100	ug/kg	SW846 8270E
FA77576-5	**CS-37**					
Acenaphthene		58.5 J	210	22	ug/kg	SW846 8270E
Acenaphthylene [a]		598 J	1000	100	ug/kg	SW846 8270E
Anthracene [a]		1300	1000	120	ug/kg	SW846 8270E
Benzo(a)anthracene [a]		3620	1000	100	ug/kg	SW846 8270E
Benzo(a)pyrene [a]		4100	1000	120	ug/kg	SW846 8270E
Benzo(b)fluoranthene [a]		9810	1000	110	ug/kg	SW846 8270E
Benzo(g,h,i)perylene [a]		1890	1000	110	ug/kg	SW846 8270E
Benzo(k)fluoranthene [a]		3310	1000	140	ug/kg	SW846 8270E
Chrysene [a]		4440	1000	110	ug/kg	SW846 8270E
Dibenzo(a,h)anthracene		313	210	26	ug/kg	SW846 8270E

Summary of Hits

Job Number: FA77576
Account: EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC
Collected: 08/06/20

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Fluoranthene [a]		5100	1000	100	ug/kg	SW846 8270E
Fluorene [a]		113 J	1000	110	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene		2890	210	25	ug/kg	SW846 8270E
Phenanthrene [a]		355 J	1000	100	ug/kg	SW846 8270E
Pyrene [a]		7070	1000	120	ug/kg	SW846 8270E
FA77576-6	**CS-SS-109**					
Acenaphthene		48.7 J	220	23	ug/kg	SW846 8270E
Acenaphthylene		561	220	22	ug/kg	SW846 8270E
Anthracene		1250	220	24	ug/kg	SW846 8270E
Benzo(a)anthracene		1750	220	22	ug/kg	SW846 8270E
Benzo(a)pyrene		1320	220	25	ug/kg	SW846 8270E
Benzo(b)fluoranthene		3840	220	24	ug/kg	SW846 8270E
Benzo(g,h,i)perylene		912	220	22	ug/kg	SW846 8270E
Benzo(k)fluoranthene		1050	220	28	ug/kg	SW846 8270E
Chrysene		2090	220	22	ug/kg	SW846 8270E
Dibenzo(a,h)anthracene		372	220	27	ug/kg	SW846 8270E
Fluoranthene		3070	220	22	ug/kg	SW846 8270E
Fluorene		100 J	220	23	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene		1620	220	26	ug/kg	SW846 8270E
Naphthalene		26.2 J	220	22	ug/kg	SW846 8270E
Phenanthrene		274	220	22	ug/kg	SW846 8270E
Pyrene		3500	220	25	ug/kg	SW846 8270E
FA77576-7	**DUP-02**					
Acenaphthene		139 J	200	21	ug/kg	SW846 8270E
Acenaphthylene		1800	200	20	ug/kg	SW846 8270E
Anthracene		2740	1000	110	ug/kg	SW846 8270E
Benzo(a)anthracene		3940	200	20	ug/kg	SW846 8270E
Benzo(a)pyrene		3430	200	24	ug/kg	SW846 8270E
Benzo(b)fluoranthene		8920	1000	110	ug/kg	SW846 8270E
Benzo(g,h,i)perylene		2150	200	21	ug/kg	SW846 8270E
Benzo(k)fluoranthene		2460	200	26	ug/kg	SW846 8270E
Chrysene		4750	1000	100	ug/kg	SW846 8270E
Dibenzo(a,h)anthracene		939	200	25	ug/kg	SW846 8270E
Fluoranthene		7130	1000	100	ug/kg	SW846 8270E
Fluorene		269	200	21	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene		3450	200	24	ug/kg	SW846 8270E
1-Methylnaphthalene		27.0 J	200	20	ug/kg	SW846 8270E
2-Methylnaphthalene		37.3 J	200	20	ug/kg	SW846 8270E
Naphthalene		49.0 J	200	20	ug/kg	SW846 8270E
Phenanthrene		1040	200	20	ug/kg	SW846 8270E
Pyrene		7620	1000	110	ug/kg	SW846 8270E

Summary of Hits

Job Number: FA77576
Account: EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC
Collected: 08/06/20

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FA77576-8	**CS-36**					
Acenaphthene		182 J	210	22	ug/kg	SW846 8270E
Acenaphthylene		1460	210	21	ug/kg	SW846 8270E
Anthracene		3130	210	24	ug/kg	SW846 8270E
Benzo(a)anthracene		5330	1100	110	ug/kg	SW846 8270E
Benzo(a)pyrene		3170	210	25	ug/kg	SW846 8270E
Benzo(b)fluoranthene		12300	1100	120	ug/kg	SW846 8270E
Benzo(g,h,i)perylene		1920	210	22	ug/kg	SW846 8270E
Benzo(k)fluoranthene		2520	210	28	ug/kg	SW846 8270E
Chrysene		8120	1100	110	ug/kg	SW846 8270E
Dibenzo(a,h)anthracene		816	210	26	ug/kg	SW846 8270E
Fluoranthene		15100	1100	110	ug/kg	SW846 8270E
Fluorene		317	210	23	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene		3120	210	26	ug/kg	SW846 8270E
1-Methylnaphthalene		26.9 J	210	21	ug/kg	SW846 8270E
2-Methylnaphthalene		29.5 J	210	21	ug/kg	SW846 8270E
Naphthalene		31.3 J	210	21	ug/kg	SW846 8270E
Phenanthrene		1530	210	21	ug/kg	SW846 8270E
Pyrene		12900	1100	120	ug/kg	SW846 8270E
FA77576-9	**CS-39**					
Acenaphthene		25.2 J	180	19	ug/kg	SW846 8270E
Acenaphthylene		195	180	18	ug/kg	SW846 8270E
Anthracene		220	180	20	ug/kg	SW846 8270E
Benzo(a)anthracene		151 J	180	18	ug/kg	SW846 8270E
Benzo(a)pyrene		169 J	180	21	ug/kg	SW846 8270E
Benzo(b)fluoranthene		522	180	20	ug/kg	SW846 8270E
Benzo(g,h,i)perylene		151 J	180	19	ug/kg	SW846 8270E
Benzo(k)fluoranthene		131 J	180	24	ug/kg	SW846 8270E
Chrysene		249	180	18	ug/kg	SW846 8270E
Dibenzo(a,h)anthracene		51.2 J	180	23	ug/kg	SW846 8270E
Fluoranthene		258	180	18	ug/kg	SW846 8270E
Fluorene		46.6 J	180	19	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene		276	180	22	ug/kg	SW846 8270E
Phenanthrene		23.3 J	180	18	ug/kg	SW846 8270E
Pyrene		313	180	21	ug/kg	SW846 8270E
FA77576-10	**CS-32**					
Acenaphthene		69.6 J	190	20	ug/kg	SW846 8270E
Acenaphthylene		628	190	19	ug/kg	SW846 8270E
Anthracene		1830	190	21	ug/kg	SW846 8270E

Summary of Hits

Job Number: FA77576
Account: EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC
Collected: 08/06/20

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Benzo(a)anthracene		739	190	19	ug/kg	SW846 8270E
Benzo(a)pyrene		777	190	22	ug/kg	SW846 8270E
Benzo(b)fluoranthene		2380	190	21	ug/kg	SW846 8270E
Benzo(g,h,i)perylene		599	190	20	ug/kg	SW846 8270E
Benzo(k)fluoranthene		637	190	25	ug/kg	SW846 8270E
Chrysene		1270	190	19	ug/kg	SW846 8270E
Dibenzo(a,h)anthracene		219	190	24	ug/kg	SW846 8270E
Fluoranthene		1390	190	19	ug/kg	SW846 8270E
Fluorene		109 J	190	20	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene		1090	190	23	ug/kg	SW846 8270E
Phenanthrene		169 J	190	19	ug/kg	SW846 8270E
Pyrene		1600	190	22	ug/kg	SW846 8270E
FA77576-11	**CS-28**					
Acenaphthene		60.2 J	180	19	ug/kg	SW846 8270E
Acenaphthylene		734	180	18	ug/kg	SW846 8270E
Anthracene		1350	180	20	ug/kg	SW846 8270E
Benzo(a)anthracene		1450	180	18	ug/kg	SW846 8270E
Benzo(a)pyrene		1470	180	21	ug/kg	SW846 8270E
Benzo(b)fluoranthene		4340	900	99	ug/kg	SW846 8270E
Benzo(g,h,i)perylene		898	180	19	ug/kg	SW846 8270E
Benzo(k)fluoranthene		1260	180	24	ug/kg	SW846 8270E
Chrysene		2920	180	18	ug/kg	SW846 8270E
Dibenzo(a,h)anthracene		355	180	23	ug/kg	SW846 8270E
Fluoranthene		6250	900	90	ug/kg	SW846 8270E
Fluorene		121 J	180	19	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene		1540	180	22	ug/kg	SW846 8270E
Phenanthrene		918	180	18	ug/kg	SW846 8270E
Pyrene		5640	900	100	ug/kg	SW846 8270E
FA77576-12	**CS-34**					
Acenaphthene		51.4 J	180	19	ug/kg	SW846 8270E
Acenaphthylene		389	180	18	ug/kg	SW846 8270E
Anthracene		621	180	20	ug/kg	SW846 8270E
Benzo(a)anthracene		734	180	18	ug/kg	SW846 8270E
Benzo(a)pyrene		696	180	21	ug/kg	SW846 8270E
Benzo(b)fluoranthene		2240	180	20	ug/kg	SW846 8270E
Benzo(g,h,i)perylene		511	180	18	ug/kg	SW846 8270E
Benzo(k)fluoranthene		546	180	23	ug/kg	SW846 8270E
Chrysene		1390	180	18	ug/kg	SW846 8270E
Dibenzo(a,h)anthracene		194	180	22	ug/kg	SW846 8270E
Fluoranthene		2700	180	18	ug/kg	SW846 8270E
Fluorene		89.0 J	180	19	ug/kg	SW846 8270E

Summary of Hits

Job Number: FA77576
Account: EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC
Collected: 08/06/20

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Indeno(1,2,3-cd)pyrene		923	180	22	ug/kg	SW846 8270E
Phenanthrene		774	180	18	ug/kg	SW846 8270E
Pyrene		2130	180	21	ug/kg	SW846 8270E
FA77576-13	**CS-38**					
Acenaphthylene		172 J	190	19	ug/kg	SW846 8270E
Anthracene		185 J	190	21	ug/kg	SW846 8270E
Benzo(a)anthracene		151 J	190	19	ug/kg	SW846 8270E
Benzo(a)pyrene		152 J	190	22	ug/kg	SW846 8270E
Benzo(b)fluoranthene		519	190	21	ug/kg	SW846 8270E
Benzo(g,h,i)perylene		102 J	190	20	ug/kg	SW846 8270E
Benzo(k)fluoranthene		133 J	190	25	ug/kg	SW846 8270E
Chrysene		263	190	19	ug/kg	SW846 8270E
Dibenzo(a,h)anthracene		36.5 J	190	24	ug/kg	SW846 8270E
Fluoranthene		272	190	19	ug/kg	SW846 8270E
Fluorene		35.8 J	190	20	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene		200	190	23	ug/kg	SW846 8270E
Pyrene		461	190	22	ug/kg	SW846 8270E
FA77576-14	**CS-33**					
Acenaphthene		38.5 J	180	19	ug/kg	SW846 8270E
Acenaphthylene		544	180	18	ug/kg	SW846 8270E
Anthracene		1220	180	20	ug/kg	SW846 8270E
Benzo(a)anthracene		1340	180	18	ug/kg	SW846 8270E
Benzo(a)pyrene		1090	180	21	ug/kg	SW846 8270E
Benzo(b)fluoranthene		3460	180	20	ug/kg	SW846 8270E
Benzo(g,h,i)perylene		846	180	18	ug/kg	SW846 8270E
Benzo(k)fluoranthene		962	180	23	ug/kg	SW846 8270E
Chrysene		2200	180	18	ug/kg	SW846 8270E
Dibenzo(a,h)anthracene		334	180	22	ug/kg	SW846 8270E
Fluoranthene		3330	180	18	ug/kg	SW846 8270E
Fluorene		81.4 J	180	19	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene		1490	180	22	ug/kg	SW846 8270E
Phenanthrene		284	180	18	ug/kg	SW846 8270E
Pyrene		3080	180	21	ug/kg	SW846 8270E

(a) Dilution required due to matrix interference.

Sample Results

Report of Analysis

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-TB-07		
Lab Sample ID:	FA77576-1	**Date Sampled:**	08/06/20
Matrix:	SO - Soil	**Date Received:**	08/07/20
Method:	SW846 8270E SW846 3550C	**Percent Solids:**	83.9
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X072333.D	1	08/11/20 14:31	MV	08/10/20 08:30	OP81482	SX2950
Run #2	X072359.D	5	08/12/20 11:16	MV	08/10/20 08:30	OP81482	SX2951

	Initial Weight	Final Volume
Run #1	30.3 g	1.0 ml
Run #2	30.3 g	1.0 ml

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	223	200	21	ug/kg	
208-96-8	Acenaphthylene	2060	200	20	ug/kg	
120-12-7	Anthracene	3640	200	22	ug/kg	
56-55-3	Benzo(a)anthracene	3820	200	20	ug/kg	
50-32-8	Benzo(a)pyrene	4580 [a]	980	120	ug/kg	
205-99-2	Benzo(b)fluoranthene	9890 [a]	980	110	ug/kg	
191-24-2	Benzo(g,h,i)perylene	2720	200	20	ug/kg	
207-08-9	Benzo(k)fluoranthene	2240	200	26	ug/kg	
218-01-9	Chrysene	4350 [a]	980	100	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	969	200	25	ug/kg	
206-44-0	Fluoranthene	5130 [a]	980	98	ug/kg	
86-73-7	Fluorene	312	200	21	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	3860	200	24	ug/kg	
90-12-0	1-Methylnaphthalene	110	200	20	ug/kg	J
91-57-6	2-Methylnaphthalene	169	200	20	ug/kg	J
91-20-3	Naphthalene	159	200	20	ug/kg	J
85-01-8	Phenanthrene	607	200	20	ug/kg	
129-00-0	Pyrene	5590 [a]	980	110	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	78%	70%	40-105%
321-60-8	2-Fluorobiphenyl	78%	74%	43-107%
1718-51-0	Terphenyl-d14	84%	70%	45-119%

(a) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-TB-07		
Lab Sample ID:	FA77576-1	**Date Sampled:**	08/06/20
Matrix:	SO - Soil	**Date Received:**	08/07/20
Method:	SW846 8270E BY SIM SW846 3546	**Percent Solids:**	83.9
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7G11155.D	1	08/11/20 18:30	FS	08/10/20 10:22	OP81483	S7G483
Run #2							

	Initial Weight	Final Volume
Run #1	15.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	160	20	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
7297-45-2	2-Methylnaphthalene-d10	105%		50-150%
93951-69-0	Fluoranthene-d10	105%		50-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-SS-106		
Lab Sample ID:	FA77576-2	**Date Sampled:**	08/06/20
Matrix:	SO - Soil	**Date Received:**	08/07/20
Method:	SW846 8270E SW846 3550C	**Percent Solids:**	83.1
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X072334.D	1	08/11/20 14:57	MV	08/10/20 08:30	OP81482	SX2950
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	35.2	200	21	ug/kg	J
208-96-8	Acenaphthylene	454	200	20	ug/kg	
120-12-7	Anthracene	716	200	22	ug/kg	
56-55-3	Benzo(a)anthracene	1270	200	20	ug/kg	
50-32-8	Benzo(a)pyrene	936	200	24	ug/kg	
205-99-2	Benzo(b)fluoranthene	2870	200	22	ug/kg	
191-24-2	Benzo(g,h,i)perylene	606	200	21	ug/kg	
207-08-9	Benzo(k)fluoranthene	865	200	26	ug/kg	
218-01-9	Chrysene	1780	200	20	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	224	200	25	ug/kg	
206-44-0	Fluoranthene	3140	200	20	ug/kg	
86-73-7	Fluorene	79.8	200	22	ug/kg	J
193-39-5	Indeno(1,2,3-cd)pyrene	1100	200	24	ug/kg	
90-12-0	1-Methylnaphthalene	ND	200	20	ug/kg	
91-57-6	2-Methylnaphthalene	ND	200	20	ug/kg	
91-20-3	Naphthalene	ND	200	20	ug/kg	
85-01-8	Phenanthrene	291	200	20	ug/kg	
129-00-0	Pyrene	3090	200	23	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	66%		40-105%
321-60-8	2-Fluorobiphenyl	71%		43-107%
1718-51-0	Terphenyl-d14	72%		45-119%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID: CS-SS-106
Lab Sample ID: FA77576-2
Matrix: SO - Soil
Method: SW846 8270E BY SIM SW846 3546
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Date Sampled: 08/06/20
Date Received: 08/07/20
Percent Solids: 83.1

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7G11104.D	1	08/10/20 16:10	FS	08/10/20 10:22	OP81483	S7G482
Run #2							

	Initial Weight	Final Volume
Run #1	15.4 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	160	20	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
7297-45-2	2-Methylnaphthalene-d10	92%		50-150%
93951-69-0	Fluoranthene-d10	100%		50-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-27		
Lab Sample ID:	FA77576-3	**Date Sampled:**	08/06/20
Matrix:	SO - Soil	**Date Received:**	08/07/20
Method:	SW846 8270E SW846 3550C	**Percent Solids:**	91.8
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X072335.D	1	08/11/20 15:23	MV	08/10/20 08:30	OP81482	SX2950
Run #2	X072360.D	2	08/12/20 11:42	MV	08/10/20 08:30	OP81482	SX2951

	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2	30.2 g	1.0 ml

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	38.4	180	19	ug/kg	J
208-96-8	Acenaphthylene	610	180	18	ug/kg	
120-12-7	Anthracene	1060	180	20	ug/kg	
56-55-3	Benzo(a)anthracene	1810	180	18	ug/kg	
50-32-8	Benzo(a)pyrene	1540	180	21	ug/kg	
205-99-2	Benzo(b)fluoranthene	4150 [a]	360	40	ug/kg	
191-24-2	Benzo(g,h,i)perylene	1010	180	19	ug/kg	
207-08-9	Benzo(k)fluoranthene	1280	180	24	ug/kg	
218-01-9	Chrysene	2900	180	18	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	370	180	23	ug/kg	
206-44-0	Fluoranthene	5470 [a]	360	36	ug/kg	
86-73-7	Fluorene	90.9	180	19	ug/kg	J
193-39-5	Indeno(1,2,3-cd)pyrene	1680	180	22	ug/kg	
90-12-0	1-Methylnaphthalene	ND	180	18	ug/kg	
91-57-6	2-Methylnaphthalene	ND	180	18	ug/kg	
91-20-3	Naphthalene	ND	180	18	ug/kg	
85-01-8	Phenanthrene	491	180	18	ug/kg	
129-00-0	Pyrene	5020 [a]	360	42	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	74%	67%	40-105%
321-60-8	2-Fluorobiphenyl	76%	70%	43-107%
1718-51-0	Terphenyl-d14	76%	67%	45-119%

(a) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-27		
Lab Sample ID:	FA77576-3	**Date Sampled:**	08/06/20
Matrix:	SO - Soil	**Date Received:**	08/07/20
Method:	SW846 8270E BY SIM SW846 3546	**Percent Solids:**	91.8
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7G11105.D	1	08/10/20 16:34	FS	08/10/20 10:22	OP81483	S7G482
Run #2							

	Initial Weight	Final Volume
Run #1	15.2 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	140	18	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
7297-45-2	2-Methylnaphthalene-d10	93%		50-150%
93951-69-0	Fluoranthene-d10	105%		50-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-35		
Lab Sample ID:	FA77576-4	**Date Sampled:**	08/06/20
Matrix:	SO - Soil	**Date Received:**	08/07/20
Method:	SW846 8270E SW846 3550C	**Percent Solids:**	90.7
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X072336.D	1	08/11/20 15:50	MV	08/10/20 08:30	OP81482	SX2950
Run #2	X072361.D	5	08/12/20 12:07	MV	08/10/20 08:30	OP81482	SX2951

	Initial Weight	Final Volume
Run #1	30.3 g	1.0 ml
Run #2	30.3 g	1.0 ml

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	94.9	180	19	ug/kg	J
208-96-8	Acenaphthylene	1170	180	18	ug/kg	
120-12-7	Anthracene	2940	180	20	ug/kg	
56-55-3	Benzo(a)anthracene	2730	180	18	ug/kg	
50-32-8	Benzo(a)pyrene	2580	180	21	ug/kg	
205-99-2	Benzo(b)fluoranthene	8120 [a]	910	100	ug/kg	
191-24-2	Benzo(g,h,i)perylene	1700	180	19	ug/kg	
207-08-9	Benzo(k)fluoranthene	2060	180	24	ug/kg	
218-01-9	Chrysene	4160 [a]	910	93	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	689	180	23	ug/kg	
206-44-0	Fluoranthene	6240 [a]	910	91	ug/kg	
86-73-7	Fluorene	185	180	20	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	2790	180	22	ug/kg	
90-12-0	1-Methylnaphthalene	18.1	180	18	ug/kg	J
91-57-6	2-Methylnaphthalene	26.2	180	18	ug/kg	J
91-20-3	Naphthalene	31.6	180	18	ug/kg	J
85-01-8	Phenanthrene	808	180	18	ug/kg	
129-00-0	Pyrene	6480 [a]	910	100	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	75%	68%	40-105%
321-60-8	2-Fluorobiphenyl	76%	72%	43-107%
1718-51-0	Terphenyl-d14	80%	69%	45-119%

(a) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-35		
Lab Sample ID:	FA77576-4	**Date Sampled:**	08/06/20
Matrix:	SO - Soil	**Date Received:**	08/07/20
Method:	SW846 8270E BY SIM SW846 3546	**Percent Solids:**	90.7
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7G11106.D	1	08/10/20 16:58	FS	08/10/20 10:22	OP81483	S7G482
Run #2							

	Initial Weight	Final Volume
Run #1	15.5 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	140	18	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
7297-45-2	2-Methylnaphthalene-d10	90%		50-150%
93951-69-0	Fluoranthene-d10	104%		50-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-37		
Lab Sample ID:	FA77576-5	**Date Sampled:**	08/06/20
Matrix:	SO - Soil	**Date Received:**	08/07/20
Method:	SW846 8270E SW846 3550C	**Percent Solids:**	80.5
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X072337.D	1	08/11/20 16:16	MV	08/10/20 08:30	OP81482	SX2950
Run #2 [a]	X072362.D	5	08/12/20 12:33	MV	08/10/20 08:30	OP81482	SX2951

	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2	30.1 g	1.0 ml

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	58.5	210	22	ug/kg	J
208-96-8	Acenaphthylene	598 [b]	1000	100	ug/kg	J
120-12-7	Anthracene	1300 [b]	1000	120	ug/kg	
56-55-3	Benzo(a)anthracene	3620 [b]	1000	100	ug/kg	
50-32-8	Benzo(a)pyrene	4100 [b]	1000	120	ug/kg	
205-99-2	Benzo(b)fluoranthene	9810 [b]	1000	110	ug/kg	
191-24-2	Benzo(g,h,i)perylene	1890 [b]	1000	110	ug/kg	
207-08-9	Benzo(k)fluoranthene	3310 [b]	1000	140	ug/kg	
218-01-9	Chrysene	4440 [b]	1000	110	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	313	210	26	ug/kg	
206-44-0	Fluoranthene	5100 [b]	1000	100	ug/kg	
86-73-7	Fluorene	113 [b]	1000	110	ug/kg	J
193-39-5	Indeno(1,2,3-cd)pyrene	2890	210	25	ug/kg	
90-12-0	1-Methylnaphthalene	ND	210	21	ug/kg	
91-57-6	2-Methylnaphthalene	ND	210	21	ug/kg	
91-20-3	Naphthalene	ND	210	21	ug/kg	
85-01-8	Phenanthrene	355 [b]	1000	100	ug/kg	J
129-00-0	Pyrene	7070 [b]	1000	120	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	72%	68%	40-105%
321-60-8	2-Fluorobiphenyl	82%	74%	43-107%
1718-51-0	Terphenyl-d14	101%	73%	45-119%

(a) Dilution required due to matrix interference.
(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-37		
Lab Sample ID:	FA77576-5	**Date Sampled:**	08/06/20
Matrix:	SO - Soil	**Date Received:**	08/07/20
Method:	SW846 8270E BY SIM SW846 3546	**Percent Solids:**	80.5
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7G11156.D	1	08/11/20 18:54	FS	08/10/20 10:22	OP81483	S7G483
Run #2							

	Initial Weight	Final Volume
Run #1	15.3 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	160	20	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
7297-45-2	2-Methylnaphthalene-d10	117%		50-150%
93951-69-0	Fluoranthene-d10	117%		50-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-SS-109		
Lab Sample ID:	FA77576-6	**Date Sampled:**	08/06/20
Matrix:	SO - Soil	**Date Received:**	08/07/20
Method:	SW846 8270E SW846 3550C	**Percent Solids:**	76.8
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X072338.D	1	08/11/20 16:42	MV	08/10/20 08:30	OP81482	SX2950
Run #2							

	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	48.7	220	23	ug/kg	J
208-96-8	Acenaphthylene	561	220	22	ug/kg	
120-12-7	Anthracene	1250	220	24	ug/kg	
56-55-3	Benzo(a)anthracene	1750	220	22	ug/kg	
50-32-8	Benzo(a)pyrene	1320	220	25	ug/kg	
205-99-2	Benzo(b)fluoranthene	3840	220	24	ug/kg	
191-24-2	Benzo(g,h,i)perylene	912	220	22	ug/kg	
207-08-9	Benzo(k)fluoranthene	1050	220	28	ug/kg	
218-01-9	Chrysene	2090	220	22	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	372	220	27	ug/kg	
206-44-0	Fluoranthene	3070	220	22	ug/kg	
86-73-7	Fluorene	100	220	23	ug/kg	J
193-39-5	Indeno(1,2,3-cd)pyrene	1620	220	26	ug/kg	
90-12-0	1-Methylnaphthalene	ND	220	22	ug/kg	
91-57-6	2-Methylnaphthalene	ND	220	22	ug/kg	
91-20-3	Naphthalene	26.2	220	22	ug/kg	J
85-01-8	Phenanthrene	274	220	22	ug/kg	
129-00-0	Pyrene	3500	220	25	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	68%		40-105%
321-60-8	2-Fluorobiphenyl	71%		43-107%
1718-51-0	Terphenyl-d14	73%		45-119%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-SS-109		
Lab Sample ID:	FA77576-6	**Date Sampled:**	08/06/20
Matrix:	SO - Soil	**Date Received:**	08/07/20
Method:	SW846 8270E BY SIM SW846 3546	**Percent Solids:**	76.8
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7G11108.D	1	08/10/20 17:47	FS	08/10/20 10:22	OP81483	S7G482
Run #2							

	Initial Weight	Final Volume
Run #1	15.5 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	170	21	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
7297-45-2	2-Methylnaphthalene-d10	84%		50-150%
93951-69-0	Fluoranthene-d10	90%		50-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	DUP-02		
Lab Sample ID:	FA77576-7	**Date Sampled:**	08/06/20
Matrix:	SO - Soil	**Date Received:**	08/07/20
Method:	SW846 8270E SW846 3550C	**Percent Solids:**	82.7
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X072339.D	1	08/11/20 17:08	MV	08/10/20 08:30	OP81482	SX2950
Run #2	X072368.D	5	08/12/20 15:08	MV	08/10/20 08:30	OP81482	SX2951

	Initial Weight	Final Volume
Run #1	30.3 g	1.0 ml
Run #2	30.3 g	1.0 ml

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	139	200	21	ug/kg	J
208-96-8	Acenaphthylene	1800	200	20	ug/kg	
120-12-7	Anthracene	2740 [a]	1000	110	ug/kg	
56-55-3	Benzo(a)anthracene	3940	200	20	ug/kg	
50-32-8	Benzo(a)pyrene	3430	200	24	ug/kg	
205-99-2	Benzo(b)fluoranthene	8920 [a]	1000	110	ug/kg	
191-24-2	Benzo(g,h,i)perylene	2150	200	21	ug/kg	
207-08-9	Benzo(k)fluoranthene	2460	200	26	ug/kg	
218-01-9	Chrysene	4750 [a]	1000	100	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	939	200	25	ug/kg	
206-44-0	Fluoranthene	7130 [a]	1000	100	ug/kg	
86-73-7	Fluorene	269	200	21	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	3450	200	24	ug/kg	
90-12-0	1-Methylnaphthalene	27.0	200	20	ug/kg	J
91-57-6	2-Methylnaphthalene	37.3	200	20	ug/kg	J
91-20-3	Naphthalene	49.0	200	20	ug/kg	J
85-01-8	Phenanthrene	1040	200	20	ug/kg	
129-00-0	Pyrene	7620 [a]	1000	110	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	76%	52%	40-105%
321-60-8	2-Fluorobiphenyl	76%	55%	43-107%
1718-51-0	Terphenyl-d14	82%	52%	45-119%

(a) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID: DUP-02
Lab Sample ID: FA77576-7
Matrix: SO - Soil
Method: SW846 8270E BY SIM SW846 3546
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Date Sampled: 08/06/20
Date Received: 08/07/20
Percent Solids: 82.7

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7G11109.D	1	08/10/20 18:12	FS	08/10/20 10:22	OP81483	S7G482
Run #2							

	Initial Weight	Final Volume
Run #1	15.5 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	160	20	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
7297-45-2	2-Methylnaphthalene-d10	91%		50-150%
93951-69-0	Fluoranthene-d10	104%		50-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-36		
Lab Sample ID:	FA77576-8	**Date Sampled:**	08/06/20
Matrix:	SO - Soil	**Date Received:**	08/07/20
Method:	SW846 8270E SW846 3550C	**Percent Solids:**	79.1
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X072340.D	1	08/11/20 17:34	MV	08/10/20 08:30	OP81482	SX2950
Run #2	X072369.D	5	08/12/20 15:33	MV	08/10/20 08:30	OP81482	SX2951

	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2	30.0 g	1.0 ml

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	182	210	22	ug/kg	J
208-96-8	Acenaphthylene	1460	210	21	ug/kg	
120-12-7	Anthracene	3130	210	24	ug/kg	
56-55-3	Benzo(a)anthracene	5330 [a]	1100	110	ug/kg	
50-32-8	Benzo(a)pyrene	3170	210	25	ug/kg	
205-99-2	Benzo(b)fluoranthene	12300 [a]	1100	120	ug/kg	
191-24-2	Benzo(g,h,i)perylene	1920	210	22	ug/kg	
207-08-9	Benzo(k)fluoranthene	2520	210	28	ug/kg	
218-01-9	Chrysene	8120 [a]	1100	110	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	816	210	26	ug/kg	
206-44-0	Fluoranthene	15100 [a]	1100	110	ug/kg	
86-73-7	Fluorene	317	210	23	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	3120	210	26	ug/kg	
90-12-0	1-Methylnaphthalene	26.9	210	21	ug/kg	J
91-57-6	2-Methylnaphthalene	29.5	210	21	ug/kg	J
91-20-3	Naphthalene	31.3	210	21	ug/kg	J
85-01-8	Phenanthrene	1530	210	21	ug/kg	
129-00-0	Pyrene	12900 [a]	1100	120	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	73%	77%	40-105%
321-60-8	2-Fluorobiphenyl	75%	83%	43-107%
1718-51-0	Terphenyl-d14	78%	80%	45-119%

(a) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-36		
Lab Sample ID:	FA77576-8	**Date Sampled:**	08/06/20
Matrix:	SO - Soil	**Date Received:**	08/07/20
Method:	SW846 8270E BY SIM SW846 3546	**Percent Solids:**	79.1
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7G11157.D	1	08/11/20 19:18	FS	08/10/20 10:22	OP81483	S7G483
Run #2							

	Initial Weight	Final Volume
Run #1	15.3 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	170	21	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
7297-45-2	2-Methylnaphthalene-d10	110%		50-150%
93951-69-0	Fluoranthene-d10	119%		50-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-39		
Lab Sample ID:	FA77576-9	**Date Sampled:**	08/06/20
Matrix:	SO - Soil	**Date Received:**	08/07/20
Method:	SW846 8270E SW846 3550C	**Percent Solids:**	92.1
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X072341.D	1	08/11/20 18:00	MV	08/10/20 08:30	OP81482	SX2950
Run #2							

	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	25.2	180	19	ug/kg	J
208-96-8	Acenaphthylene	195	180	18	ug/kg	
120-12-7	Anthracene	220	180	20	ug/kg	
56-55-3	Benzo(a)anthracene	151	180	18	ug/kg	J
50-32-8	Benzo(a)pyrene	169	180	21	ug/kg	J
205-99-2	Benzo(b)fluoranthene	522	180	20	ug/kg	
191-24-2	Benzo(g,h,i)perylene	151	180	19	ug/kg	J
207-08-9	Benzo(k)fluoranthene	131	180	24	ug/kg	J
218-01-9	Chrysene	249	180	18	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	51.2	180	23	ug/kg	J
206-44-0	Fluoranthene	258	180	18	ug/kg	
86-73-7	Fluorene	46.6	180	19	ug/kg	J
193-39-5	Indeno(1,2,3-cd)pyrene	276	180	22	ug/kg	
90-12-0	1-Methylnaphthalene	ND	180	18	ug/kg	
91-57-6	2-Methylnaphthalene	ND	180	18	ug/kg	
91-20-3	Naphthalene	ND	180	18	ug/kg	
85-01-8	Phenanthrene	23.3	180	18	ug/kg	J
129-00-0	Pyrene	313	180	21	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	72%		40-105%
321-60-8	2-Fluorobiphenyl	74%		43-107%
1718-51-0	Terphenyl-d14	72%		45-119%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-39		
Lab Sample ID:	FA77576-9	**Date Sampled:**	08/06/20
Matrix:	SO - Soil	**Date Received:**	08/07/20
Method:	SW846 8270E BY SIM SW846 3546	**Percent Solids:**	92.1
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7G11111.D	1	08/10/20 19:01	FS	08/10/20 10:22	OP81483	S7G482
Run #2							

	Initial Weight	Final Volume
Run #1	15.2 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	140	18	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
7297-45-2	2-Methylnaphthalene-d10	88%		50-150%
93951-69-0	Fluoranthene-d10	89%		50-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-32		
Lab Sample ID:	FA77576-10	**Date Sampled:**	08/06/20
Matrix:	SO - Soil	**Date Received:**	08/07/20
Method:	SW846 8270E SW846 3550C	**Percent Solids:**	88.1
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X072342.D	1	08/11/20 18:26	MV	08/10/20 08:30	OP81482	SX2950
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	69.6	190	20	ug/kg	J
208-96-8	Acenaphthylene	628	190	19	ug/kg	
120-12-7	Anthracene	1830	190	21	ug/kg	
56-55-3	Benzo(a)anthracene	739	190	19	ug/kg	
50-32-8	Benzo(a)pyrene	777	190	22	ug/kg	
205-99-2	Benzo(b)fluoranthene	2380	190	21	ug/kg	
191-24-2	Benzo(g,h,i)perylene	599	190	20	ug/kg	
207-08-9	Benzo(k)fluoranthene	637	190	25	ug/kg	
218-01-9	Chrysene	1270	190	19	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	219	190	24	ug/kg	
206-44-0	Fluoranthene	1390	190	19	ug/kg	
86-73-7	Fluorene	109	190	20	ug/kg	J
193-39-5	Indeno(1,2,3-cd)pyrene	1090	190	23	ug/kg	
90-12-0	1-Methylnaphthalene	ND	190	19	ug/kg	
91-57-6	2-Methylnaphthalene	ND	190	19	ug/kg	
91-20-3	Naphthalene	ND	190	19	ug/kg	
85-01-8	Phenanthrene	169	190	19	ug/kg	J
129-00-0	Pyrene	1600	190	22	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	72%		40-105%
321-60-8	2-Fluorobiphenyl	74%		43-107%
1718-51-0	Terphenyl-d14	73%		45-119%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-32		
Lab Sample ID:	FA77576-10	**Date Sampled:**	08/06/20
Matrix:	SO - Soil	**Date Received:**	08/07/20
Method:	SW846 8270E BY SIM SW846 3546	**Percent Solids:**	88.1
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7G11112.D	1	08/10/20 19:25	FS	08/10/20 10:22	OP81483	S7G482
Run #2							

	Initial Weight	Final Volume
Run #1	15.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	150	19	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
7297-45-2	2-Methylnaphthalene-d10	83%		50-150%
93951-69-0	Fluoranthene-d10	82%		50-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-28		
Lab Sample ID:	FA77576-11	**Date Sampled:**	08/06/20
Matrix:	SO - Soil	**Date Received:**	08/07/20
Method:	SW846 8270E SW846 3550C	**Percent Solids:**	92.5
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X072343.D	1	08/11/20 18:52	MV	08/10/20 08:30	OP81482	SX2950
Run #2	X072375.D	5	08/12/20 18:09	MV	08/10/20 08:30	OP81482	SX2951

	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2	30.0 g	1.0 ml

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	60.2	180	19	ug/kg	J
208-96-8	Acenaphthylene	734	180	18	ug/kg	
120-12-7	Anthracene	1350	180	20	ug/kg	
56-55-3	Benzo(a)anthracene	1450	180	18	ug/kg	
50-32-8	Benzo(a)pyrene	1470	180	21	ug/kg	
205-99-2	Benzo(b)fluoranthene	4340 [a]	900	99	ug/kg	
191-24-2	Benzo(g,h,i)perylene	898	180	19	ug/kg	
207-08-9	Benzo(k)fluoranthene	1260	180	24	ug/kg	
218-01-9	Chrysene	2920	180	18	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	355	180	23	ug/kg	
206-44-0	Fluoranthene	6250 [a]	900	90	ug/kg	
86-73-7	Fluorene	121	180	19	ug/kg	J
193-39-5	Indeno(1,2,3-cd)pyrene	1540	180	22	ug/kg	
90-12-0	1-Methylnaphthalene	ND	180	18	ug/kg	
91-57-6	2-Methylnaphthalene	ND	180	18	ug/kg	
91-20-3	Naphthalene	ND	180	18	ug/kg	
85-01-8	Phenanthrene	918	180	18	ug/kg	
129-00-0	Pyrene	5640 [a]	900	100	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	70%	61%	40-105%
321-60-8	2-Fluorobiphenyl	73%	68%	43-107%
1718-51-0	Terphenyl-d14	74%	67%	45-119%

(a) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-28		
Lab Sample ID:	FA77576-11	**Date Sampled:**	08/06/20
Matrix:	SO - Soil	**Date Received:**	08/07/20
Method:	SW846 8270E BY SIM SW846 3546	**Percent Solids:**	92.5
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7G11113.D	1	08/10/20 19:50	FS	08/10/20 10:22	OP81483	S7G482
Run #2							

	Initial Weight	Final Volume
Run #1	14.9 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	150	18	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
7297-45-2	2-Methylnaphthalene-d10	95%		50-150%
93951-69-0	Fluoranthene-d10	103%		50-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-34		
Lab Sample ID:	FA77576-12	**Date Sampled:**	08/06/20
Matrix:	SO - Soil	**Date Received:**	08/07/20
Method:	SW846 8270E SW846 3550C	**Percent Solids:**	92.9
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X072344.D	1	08/11/20 19:18	MV	08/10/20 08:30	OP81482	SX2950
Run #2							

	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	51.4	180	19	ug/kg	J
208-96-8	Acenaphthylene	389	180	18	ug/kg	
120-12-7	Anthracene	621	180	20	ug/kg	
56-55-3	Benzo(a)anthracene	734	180	18	ug/kg	
50-32-8	Benzo(a)pyrene	696	180	21	ug/kg	
205-99-2	Benzo(b)fluoranthene	2240	180	20	ug/kg	
191-24-2	Benzo(g,h,i)perylene	511	180	18	ug/kg	
207-08-9	Benzo(k)fluoranthene	546	180	23	ug/kg	
218-01-9	Chrysene	1390	180	18	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	194	180	22	ug/kg	
206-44-0	Fluoranthene	2700	180	18	ug/kg	
86-73-7	Fluorene	89.0	180	19	ug/kg	J
193-39-5	Indeno(1,2,3-cd)pyrene	923	180	22	ug/kg	
90-12-0	1-Methylnaphthalene	ND	180	18	ug/kg	
91-57-6	2-Methylnaphthalene	ND	180	18	ug/kg	
91-20-3	Naphthalene	ND	180	18	ug/kg	
85-01-8	Phenanthrene	774	180	18	ug/kg	
129-00-0	Pyrene	2130	180	21	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	73%		40-105%
321-60-8	2-Fluorobiphenyl	76%		43-107%
1718-51-0	Terphenyl-d14	74%		45-119%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-34		
Lab Sample ID:	FA77576-12	**Date Sampled:**	08/06/20
Matrix:	SO - Soil	**Date Received:**	08/07/20
Method:	SW846 8270E BY SIM SW846 3546	**Percent Solids:**	92.9
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7G11114.D	1	08/10/20 20:14	FS	08/10/20 10:22	OP81483	S7G482
Run #2							

	Initial Weight	Final Volume
Run #1	15.5 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	140	17	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
7297-45-2	2-Methylnaphthalene-d10	84%		50-150%
93951-69-0	Fluoranthene-d10	90%		50-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-38		
Lab Sample ID:	FA77576-13	**Date Sampled:**	08/06/20
Matrix:	SO - Soil	**Date Received:**	08/07/20
Method:	SW846 8270E SW846 3550C	**Percent Solids:**	88.3
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X072345.D	1	08/11/20 19:44	MV	08/10/20 08:30	OP81482	SX2950
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	190	20	ug/kg	
208-96-8	Acenaphthylene	172	190	19	ug/kg	J
120-12-7	Anthracene	185	190	21	ug/kg	J
56-55-3	Benzo(a)anthracene	151	190	19	ug/kg	J
50-32-8	Benzo(a)pyrene	152	190	22	ug/kg	J
205-99-2	Benzo(b)fluoranthene	519	190	21	ug/kg	
191-24-2	Benzo(g,h,i)perylene	102	190	20	ug/kg	J
207-08-9	Benzo(k)fluoranthene	133	190	25	ug/kg	J
218-01-9	Chrysene	263	190	19	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	36.5	190	24	ug/kg	J
206-44-0	Fluoranthene	272	190	19	ug/kg	
86-73-7	Fluorene	35.8	190	20	ug/kg	J
193-39-5	Indeno(1,2,3-cd)pyrene	200	190	23	ug/kg	
90-12-0	1-Methylnaphthalene	ND	190	19	ug/kg	
91-57-6	2-Methylnaphthalene	ND	190	19	ug/kg	
91-20-3	Naphthalene	ND	190	19	ug/kg	
85-01-8	Phenanthrene	ND	190	19	ug/kg	
129-00-0	Pyrene	461	190	22	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	75%		40-105%
321-60-8	2-Fluorobiphenyl	77%		43-107%
1718-51-0	Terphenyl-d14	74%		45-119%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-38		
Lab Sample ID:	FA77576-13	**Date Sampled:**	08/06/20
Matrix:	SO - Soil	**Date Received:**	08/07/20
Method:	SW846 8270E BY SIM SW846 3546	**Percent Solids:**	88.3
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7G11115.D	1	08/10/20 20:38	FS	08/10/20 10:22	OP81483	S7G482
Run #2							

	Initial Weight	Final Volume
Run #1	15.3 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	150	19	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
7297-45-2	2-Methylnaphthalene-d10	96%		50-150%
93951-69-0	Fluoranthene-d10	90%		50-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-33		
Lab Sample ID:	FA77576-14	**Date Sampled:**	08/06/20
Matrix:	SO - Soil	**Date Received:**	08/07/20
Method:	SW846 8270E SW846 3550C	**Percent Solids:**	92.7
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X072346.D	1	08/11/20 20:10	MV	08/10/20 08:30	OP81482	SX2950
Run #2	X072366.D	1	08/12/20 14:16	MV	08/10/20 08:30	OP81482	SX2951

	Initial Weight	Final Volume
Run #1	30.3 g	1.0 ml
Run #2	30.3 g	1.0 ml

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	38.5	180	19	ug/kg	J
208-96-8	Acenaphthylene	544	180	18	ug/kg	
120-12-7	Anthracene	1220	180	20	ug/kg	
56-55-3	Benzo(a)anthracene	1340	180	18	ug/kg	
50-32-8	Benzo(a)pyrene	1090	180	21	ug/kg	
205-99-2	Benzo(b)fluoranthene	3460	180	20	ug/kg	
191-24-2	Benzo(g,h,i)perylene	846	180	18	ug/kg	
207-08-9	Benzo(k)fluoranthene	962	180	23	ug/kg	
218-01-9	Chrysene	2200	180	18	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	334	180	22	ug/kg	
206-44-0	Fluoranthene	3330 [a]	180	18	ug/kg	
86-73-7	Fluorene	81.4	180	19	ug/kg	J
193-39-5	Indeno(1,2,3-cd)pyrene	1490	180	22	ug/kg	
90-12-0	1-Methylnaphthalene	ND	180	18	ug/kg	
91-57-6	2-Methylnaphthalene	ND	180	18	ug/kg	
91-20-3	Naphthalene	ND	180	18	ug/kg	
85-01-8	Phenanthrene	284	180	18	ug/kg	
129-00-0	Pyrene	3080	180	21	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	71%	67%	40-105%
321-60-8	2-Fluorobiphenyl	74%	70%	43-107%
1718-51-0	Terphenyl-d14	74%	68%	45-119%

(a) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-33		
Lab Sample ID:	FA77576-14	**Date Sampled:**	08/06/20
Matrix:	SO - Soil	**Date Received:**	08/07/20
Method:	SW846 8270E BY SIM SW846 3546	**Percent Solids:**	92.7
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7G11116.D	1	08/10/20 21:02	FS	08/10/20 10:22	OP81483	S7G482
Run #2							

	Initial Weight	Final Volume
Run #1	14.9 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	140	18	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
7297-45-2	2-Methylnaphthalene-d10	97%		50-150%
93951-69-0	Fluoranthene-d10	101%		50-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

Rush - 3 day TAT

SGS North America Inc - Orlando

Chain of Custody

SGS FA77576

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 FAX: 407-425-0707
www.sgs.com

SGS - ORLANDO JOB # : PAGE 1 OF 2

SGS - ORLANDO Quote # | SKIFF #

Client / Reporting Information

Company Name: EarthCon
Address: 1880 West Oak Pkwy
City: Marietta State: GA Zip: 30062
Project Contact: M. Brookshire Email: mbrookshire@earthcon.com
Phone #: 404-317-7748
Sampler(s) Name(s) (Printed) Sampler 1: D.Fulton Sampler 2: B.Hatfield

Project Information

Project Name: KMCC Navassa
Street: 120 Quality Drive
City: Navassa State: NC
Project #: 02.20200007.00
Fax #:
Client Purchase Order #:

Analytical Information

PAHs (8270) PCP (8270 SIM)

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid

SGS Orlando Sample #	Field ID / Point of Collection	COLLECTION DATE	TIME	SAMPLED BY:	CONTAINER INFORMATION MATRIX	TOTAL # OF BOTTLES	OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NAOH+ZNA	DI WATER	MEOH	PAHs (8270)	PCP (8270 SIM)	LAB USE ONLY
1	CS-TB-07	8/6/20	1340	DF	SO	1		1								1		
2	CS-SS-106	8.6.20	1125	BH	SO	1		1								1		
3	CS-27	8.6.20	1010	CT	SO	1		1								1		
4	CS-35	8.6.20	1305	CT	SO	1		1								1		
5	CS-37	8.6.20	1350	CT	SO	1		1								1		
6	CS-SS-109	8.6.20	1205	CA	SO	1		1								1		
7	DUP-02	8.6.20	—	CT	SO	1		1								1		
8	~~CS-26~~ CS-36	8.6.20	1325	ST	SO	1		1								1		
9	CS-39	8.6.20	1155	ST	SO	1		1								1		
10	CS-32	8.6.20	1100	CT	SO	1		1								1		
11	CS-28	8.6.20	1030	CT	SO	1		1								1		
12	CS-29	8.6.20	0930	ST	SO	1		1								1		

VERIFICATION AD
LABEL VERIFICATION DD

Turnaround Time (Business days)

10 Day (Business) Approved By: / Date:
7 Day
5 Day
3 Day *RUSH*
2 Day *RUSH*
1 Day *RUSH*
Other
Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- [ ] COMMERCIAL "A" (RESULTS ONLY)
- [ ] COMMERCIAL "B" (RESULTS PLUS QC)
- [ ] REDT1 (EPA LEVEL 3)
- [x] FULLT1 (EPA LEVEL 4)
- [ ] EDD'S

Comments / Remarks

3-day TAT
Rush samples on separate SDG

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
1		8/6/20 1600	2 Ashley Owens SGS-ILM 18°10.3°	3 Ashley Owens	8/6/20 1630	4 Fedex
5	Relinquished by/Affiliation: Fedex	8/7/20	6	7		8

Lab Use Only : Cooler Temperature (s) Celsius (corrected): 1.4 ; 2.0

http://www.sgs.com/en/terms-and-conditions

Rush - 3 day TAT

SGS North America Inc - Orlando

Chain of Custody

SGS FA77576

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 FAX: 407-425-0707
www.sgs.com

SGS - ORLANDO JOB # : PAGE 2 OF 2

SGS - ORLANDO Quote # | SKIFF #

Client / Reporting Information

Company Name: EarthCon
Address: 1880 West Oak Pkwy
City: Marietta State: GA Zip: 30062
Project Contact: M. Brookshire Email: mbrookshire@earthcon.com
Phone #: 404-317-7748
Sampler(s) Name(s) (Printed) Sampler 1: S. Tyler Sampler 2:

Project Information

Project Name: KMCC Navassa
Street: 120 Quality Drive
City: Navassa State: NC
Project #: 02.20200007.00
Fax #:
Client Purchase Order #:

Analytical Information

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid

SGS Orlando Sample #	Field ID / Point of Collection	COLLECTION DATE	TIME	SAMPLED BY:	CONTAINER INFORMATION MATRIX	TOTAL # OF BOTTLES	OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NAOH+ZNA	DI WATER	MEOH	PAHs (8270) PCP (8270 SIM)	LAB USE ONLY
13	CS-38	8.6.20	1135	ST	SO	1		1								-	
14	CS-33	8.6.20	0905	ST	SO	1		1								-	

Turnaround Time (Business days)

10 Day (Business)
7 Day
5 Day
3 Day RUSH
2 Day RUSH
1 Day RUSH
Other
Approved By: / Date:
Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- [ ] COMMERCIAL "A" (RESULTS ONLY)
- [ ] COMMERCIAL "B" (RESULTS PLUS QC)
- [ ] REDT1 (EPA LEVEL 3)
- [x] FULLT1 (EPA LEVEL 4)
- [ ] EDD'S

Comments / Remarks

3 day TAT
Rush samples on separate SDG

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
1		8/6/20 1600	2	3	8/6/20 16:30	4
	Relinquished by/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
5			6	7		8

SGS-ILM 18°/0.3°

Lab Use Only : Cooler Temperature (s) Celsius (corrected):

http://www.sgs.com/en/terms-and-conditions

ORLD-SMT-0001-03-FORM-COC (4).xls Rev 031318

SGS Sample Receipt Summary

Job Number: FA77576 **Client:** EARTHCON **Project:** KMCC NAVASSA

Date / Time Received: 8/7/2020 9:45:00 AM **Delivery Method:** FEDEX **Airbill #'s:** 900433723420

Therm ID: IR 1; **Therm CF:** -0.2; **# of Coolers:** 2

Cooler Temps (Raw Measured) °C: Cooler 1: (1.6); Cooler 2: (2.2);

Cooler Temps (Corrected) °C: Cooler 1: (1.4); Cooler 2: (2.0);

Cooler Information	Y	N
1. Custody Seals Present	☑	☐
2. Custody Seals Intact	☑	☐
3. Temp criteria achieved	☑	☐
4. Cooler temp verification	IR Gun	
5. Cooler media	Ice (Bag)	

Trip Blank Information	Y	N	N/A
1. Trip Blank present / cooler	☐	☐	☑
2. Trip Blank listed on COC	☐	☐	☑
	W	**S**	**N/A**
3. Type Of TB Received	☐	☐	☑

Sample Information	Y	N	N/A
1. Sample labels present on bottles	☑	☐	
2. Samples preserved properly	☑	☐	
3. Sufficient volume/containers recvd for analysis:	☑	☐	
4. Condition of sample	Intact		
5. Sample recvd within HT	☑	☐	
6. Dates/Times/IDs on COC match Sample Label	☑	☐	
7. VOCs have headspace	☐	☐	☑
8. Bottles received for unspecified tests	☐	☑	
9. Compositing instructions clear	☐	☐	☑
10. Voa Soil Kits/Jars received past 48hrs?	☐	☐	☑
11. % Solids Jar received?	☐	☐	☑
12. Residual Chlorine Present?	☐	☐	☑

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____ Number of 5035 Field Kits: _____ Number of Lab Filtered Metals: _____

Test Strip Lot #s: pH 0-3 230315 pH 10-12 219813A Other: (Specify) _____ _____

Residual Chlorine Test Strip Lot #: _____

Comments SAMPLE CS-24 RECEIVED AS CS-34

Technician: PhilipD Date: 8/7/2020 9:45:00 AM Reviewer: _____ Date: _____

SM001
Rev. Date 05/24/17

CSR: Muna Mohammed **Response Date:** 8/7/20

Response: Per client sample ID should be CS-34. Collection time and date listed on the COC is correct.

SM001
Rev. Date 05/24/17

FA77576: Chain of Custody
Page 4 of 4

MS Semi-volatiles

6

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (DFTPP)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries
- Run Sequence Reports

Method Blank Summary

Job Number: FA77576
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP81482-MB	X072332.D	1	08/11/20	MV	08/10/20	OP81482	SX2950

The QC reported here applies to the following samples: **Method:** SW846 8270E

FA77576-1, FA77576-2, FA77576-3, FA77576-4, FA77576-5, FA77576-6, FA77576-7, FA77576-8, FA77576-9, FA77576-10, FA77576-11, FA77576-12, FA77576-13, FA77576-14

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	170	18	ug/kg	
208-96-8	Acenaphthylene	ND	170	17	ug/kg	
120-12-7	Anthracene	ND	170	19	ug/kg	
56-55-3	Benzo(a)anthracene	ND	170	17	ug/kg	
50-32-8	Benzo(a)pyrene	ND	170	20	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	170	18	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	170	17	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	170	22	ug/kg	
218-01-9	Chrysene	ND	170	17	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	170	21	ug/kg	
206-44-0	Fluoranthene	ND	170	17	ug/kg	
86-73-7	Fluorene	ND	170	18	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	170	20	ug/kg	
90-12-0	1-Methylnaphthalene	ND	170	17	ug/kg	
91-57-6	2-Methylnaphthalene	ND	170	17	ug/kg	
91-20-3	Naphthalene	ND	170	17	ug/kg	
85-01-8	Phenanthrene	ND	170	17	ug/kg	
129-00-0	Pyrene	ND	170	19	ug/kg	

CAS No.	Surrogate Recoveries		Limits
4165-60-0	Nitrobenzene-d5	69%	40-105%
321-60-8	2-Fluorobiphenyl	72%	43-107%
1718-51-0	Terphenyl-d14	75%	45-119%

Method Blank Summary

Job Number: FA77576
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP81483-MB	7G11101.D	1	08/10/20	FS	08/10/20	OP81483	S7G482

The QC reported here applies to the following samples: **Method:** SW846 8270E BY SIM

FA77576-1, FA77576-2, FA77576-3, FA77576-4, FA77576-5, FA77576-6, FA77576-7, FA77576-8, FA77576-9, FA77576-10, FA77576-11, FA77576-12, FA77576-13, FA77576-14

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	130	17	ug/kg	

CAS No.	Surrogate Recoveries		Limits
7297-45-2	2-Methylnaphthalene-d10	82%	50-150%
93951-69-0	Fluoranthene-d10	83%	50-150%

Blank Spike Summary

Job Number: FA77576
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP81482-BS	X072331.D	1	08/11/20	MV	08/10/20	OP81482	SX2950

The QC reported here applies to the following samples: **Method:** SW846 8270E

FA77576-1, FA77576-2, FA77576-3, FA77576-4, FA77576-5, FA77576-6, FA77576-7, FA77576-8, FA77576-9, FA77576-10, FA77576-11, FA77576-12, FA77576-13, FA77576-14

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
83-32-9	Acenaphthene	1670	1260	76	56-109
208-96-8	Acenaphthylene	1670	1350	81	56-106
120-12-7	Anthracene	1670	1300	78	61-110
56-55-3	Benzo(a)anthracene	1670	1380	83	66-111
50-32-8	Benzo(a)pyrene	1670	1440	86	59-104
205-99-2	Benzo(b)fluoranthene	1670	1560	94	67-113
191-24-2	Benzo(g,h,i)perylene	1670	1510	91	67-113
207-08-9	Benzo(k)fluoranthene	1670	1390	83	67-114
218-01-9	Chrysene	1670	1460	88	65-112
53-70-3	Dibenzo(a,h)anthracene	1670	1670	100	68-115
206-44-0	Fluoranthene	1670	1410	85	60-108
86-73-7	Fluorene	1670	1360	82	58-109
193-39-5	Indeno(1,2,3-cd)pyrene	1670	1730	104	66-116
90-12-0	1-Methylnaphthalene	1670	1100	66	49-106
91-57-6	2-Methylnaphthalene	1670	1130	68	47-106
91-20-3	Naphthalene	1670	1150	69	44-104
85-01-8	Phenanthrene	1670	1360	82	63-111
129-00-0	Pyrene	1670	1270	76	65-115

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	67%	40-105%
321-60-8	2-Fluorobiphenyl	72%	43-107%
1718-51-0	Terphenyl-d14	73%	45-119%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA77576
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP81483-BS	7G11102.D	1	08/10/20	FS	08/10/20	OP81483	S7G482

The QC reported here applies to the following samples: **Method:** SW846 8270E BY SIM

FA77576-1, FA77576-2, FA77576-3, FA77576-4, FA77576-5, FA77576-6, FA77576-7, FA77576-8, FA77576-9, FA77576-10, FA77576-11, FA77576-12, FA77576-13, FA77576-14

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
87-86-5	Pentachlorophenol	1330	938	70	46-135

CAS No.	Surrogate Recoveries	BSP	Limits
7297-45-2	2-Methylnaphthalene-d10	82%	50-150%
93951-69-0	Fluoranthene-d10	85%	50-150%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA77576
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP81482-MS	X072352.D	1	08/11/20	MV	08/10/20	OP81482	SX2950
OP81482-MSD	X072353.D	1	08/11/20	MV	08/10/20	OP81482	SX2950
FA77581-5	X072351.D	1	08/11/20	MV	08/10/20	OP81482	SX2950
FA77581-5	X072374.D	2	08/12/20	MV	08/10/20	OP81482	SX2951

The QC reported here applies to the following samples: **Method:** SW846 8270E

FA77576-1, FA77576-2, FA77576-3, FA77576-4, FA77576-5, FA77576-6, FA77576-7, FA77576-8, FA77576-9, FA77576-10, FA77576-11, FA77576-12, FA77576-13, FA77576-14

CAS No.	Compound	FA77581-5 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	75.1	J	1890	1610	81	1890	1630	82	1	56-109/23
208-96-8	Acenaphthylene	872		1890	2540	88	1890	2690	96	6	56-106/23
120-12-7	Anthracene	1600		1890	3060	77	1890	3340	92	9	61-110/21
56-55-3	Benzo(a)anthracene	2060		1890	4430	126*	1890	4550	132*	3	66-111/23
50-32-8	Benzo(a)pyrene	1970		1890	3550	84	1890	3680	91	4	59-104/23
205-99-2	Benzo(b)fluoranthene	4530 [a]		1890	5960	76	1890	6430	101	8	67-113/24
191-24-2	Benzo(g,h,i)perylene	1180		1890	2640	77	1890	2740	83	4	67-113/21
207-08-9	Benzo(k)fluoranthene	1230		1890	2870	87	1890	2760	81	4	67-114/22
218-01-9	Chrysene	2380		1890	4930	135*	1890	4530	114*	8	65-112/25
53-70-3	Dibenzo(a,h)anthracene	454		1890	2270	96	1890	2340	100	3	68-115/23
206-44-0	Fluoranthene	3000		1890	6220	171*	1890	5930	155*	5	60-108/25
86-73-7	Fluorene	149	J	1890	1770	86	1890	1850	90	4	58-109/21
193-39-5	Indeno(1,2,3-cd)pyrene	1880		1890	3470	84	1890	3560	89	3	66-116/22
90-12-0	1-Methylnaphthalene	ND		1890	1390	74	1890	1390	74	0	49-106/26
91-57-6	2-Methylnaphthalene	21.6	J	1890	1430	75	1890	1420	74	1	47-106/27
91-20-3	Naphthalene	25.1	J	1890	1430	74	1890	1400	73	2	44-104/27
85-01-8	Phenanthrene	176	J	1890	1750	83	1890	1840	88	5	63-111/22
129-00-0	Pyrene	3120		1890	6130	159*	1890	6000	153*	2	65-115/25

CAS No.	Surrogate Recoveries	MS	MSD	FA77581-5	FA77581-5	Limits
4165-60-0	Nitrobenzene-d5	76%	73%	79%	77%	40-105%
321-60-8	2-Fluorobiphenyl	82%	81%	81%	83%	43-107%
1718-51-0	Terphenyl-d14	83%	86%	80%	79%	45-119%

(a) Result is from Run #2.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA77576
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP81483-MS [a]	7G11122.D	5	08/10/20	FS	08/10/20	OP81483	S7G482
OP81483-MSD [a]	7G11123.D	5	08/10/20	FS	08/10/20	OP81483	S7G482
FA77581-5	7G11158.D	1	08/11/20	FS	08/10/20	OP81483	S7G483

The QC reported here applies to the following samples: **Method:** SW846 8270E BY SIM

FA77576-1, FA77576-2, FA77576-3, FA77576-4, FA77576-5, FA77576-6, FA77576-7, FA77576-8, FA77576-9, FA77576-10, FA77576-11, FA77576-12, FA77576-13, FA77576-14

CAS No.	Compound	FA77581-5 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
87-86-5	Pentachlorophenol	ND		1470	1390	95	1480	1440	97	4	46-135/30

CAS No.	Surrogate Recoveries	MS	MSD	FA77581-5	Limits
7297-45-2	2-Methylnaphthalene-d10	101%	99%	99%	50-150%
93951-69-0	Fluoranthene-d10	101%	110%	98%	50-150%

(a) Dilution required due to matrix interference; extract was viscous.

* = Outside of Control Limits.

Instrument Performance Check (DFTPP)

Job Number: FA77576
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: S7G472-DFTPP
Lab File ID: 7G10822.D
Instrument ID: GCMS7G
Injection Date: 07/21/20
Injection Time: 08:44

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	4908	32.6		Pass
68	Less than 2.0% of mass 69	91	0.60	(1.60) [a]	Pass
69	Mass 69 relative abundance	5683	37.7		Pass
70	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
127	40.0 - 60.0% of mass 198	6380	42.3		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	15078	100.0		Pass
199	5.0 - 9.0% of mass 198	953	6.32		Pass
275	10.0 - 30.0% of mass 198	3550	23.5		Pass
365	1.0 - 100.0% of mass 198	473	3.14		Pass
441	Present, but less than mass 443	1808	12.0	(84.1) [b]	Pass
442	40.0 - 100.0% of mass 198	11474	76.1		Pass
443	17.0 - 23.0% of mass 442	2149	14.3	(18.7) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
S7G472-IC472	7G10833.D	07/21/20	13:31	04:47	Initial cal 1
S7G472-IC472	7G10834.D	07/21/20	13:55	05:11	Initial cal 2
S7G472-IC472	7G10835.D	07/21/20	14:19	05:35	Initial cal 3
S7G472-ICC472	7G10836.D	07/21/20	14:43	05:59	Initial cal 4
S7G472-IC472	7G10837.D	07/21/20	15:07	06:23	Initial cal 5
S7G472-IC472	7G10838.D	07/21/20	15:31	06:47	Initial cal 6
S7G472-IC472	7G10839.D	07/21/20	15:55	07:11	Initial cal 7
S7G472-ICV472	7G10840.D	07/21/20	16:19	07:35	Initial cal verification 4

Instrument Performance Check (DFTPP)

Job Number: FA77576
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: S7G482-DFTPP
Lab File ID: 7G11099.D
Instrument ID: GCMS7G
Injection Date: 08/10/20
Injection Time: 14:10

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	2163	33.6		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	2561	39.7		Pass
70	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
127	40.0 - 60.0% of mass 198	2830	43.9		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	6444	100.0		Pass
199	5.0 - 9.0% of mass 198	412	6.39		Pass
275	10.0 - 30.0% of mass 198	1585	24.6		Pass
365	1.0 - 100.0% of mass 198	182	2.82		Pass
441	Present, but less than mass 443	698	10.8	(87.4) [b]	Pass
442	40.0 - 100.0% of mass 198	4451	69.1		Pass
443	17.0 - 23.0% of mass 442	799	12.4	(18.0) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
S7G482-CC472	7G11100.D	08/10/20	14:28	00:18	Continuing cal 4
OP81483-MB	7G11101.D	08/10/20	14:57	00:47	Method Blank
OP81483-BS	7G11102.D	08/10/20	15:21	01:11	Blank Spike
FA77576-2	7G11104.D	08/10/20	16:10	02:00	CS-SS-106
FA77576-3	7G11105.D	08/10/20	16:34	02:24	CS-27
FA77576-4	7G11106.D	08/10/20	16:58	02:48	CS-35
FA77576-6	7G11108.D	08/10/20	17:47	03:37	CS-SS-109
FA77576-7	7G11109.D	08/10/20	18:12	04:02	DUP-02
FA77576-9	7G11111.D	08/10/20	19:01	04:51	CS-39
FA77576-10	7G11112.D	08/10/20	19:25	05:15	CS-32
FA77576-11	7G11113.D	08/10/20	19:50	05:40	CS-28
FA77576-12	7G11114.D	08/10/20	20:14	06:04	CS-34
FA77576-13	7G11115.D	08/10/20	20:38	06:28	CS-38
FA77576-14	7G11116.D	08/10/20	21:02	06:52	CS-33
ZZZZZZ	7G11117.D	08/10/20	21:26	07:16	(unrelated sample)
ZZZZZZ	7G11118.D	08/10/20	21:50	07:40	(unrelated sample)
ZZZZZZ	7G11119.D	08/10/20	22:14	08:04	(unrelated sample)
ZZZZZZ	7G11120.D	08/10/20	22:38	08:28	(unrelated sample)
OP81483-MS	7G11122.D	08/10/20	23:25	09:15	Matrix Spike

Instrument Performance Check (DFTPP)

Job Number: FA77576
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample:	S7G482-DFTPP	**Injection Date:**	08/10/20
Lab File ID:	7G11099.D	**Injection Time:**	14:10
Instrument ID:	GCMS7G		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
OP81483-MSD	7G11123.D	08/10/20	23:49	09:39	Matrix Spike Duplicate
ZZZZZZ	7G11124.D	08/11/20	00:12	10:02	(unrelated sample)
S7G482-ECC472	7G11126.D	08/11/20	01:00	10:50	Ending cal 4

Instrument Performance Check (DFTPP)

Job Number: FA77576
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: S7G483-DFTPP
Lab File ID: 7G11129.D
Instrument ID: GCMS7G
Injection Date: 08/11/20
Injection Time: 08:11

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	3303	35.6		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	3872	41.8		Pass
70	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
127	40.0 - 60.0% of mass 198	4068	43.9		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	9270	100.0		Pass
199	5.0 - 9.0% of mass 198	583	6.29		Pass
275	10.0 - 30.0% of mass 198	2141	23.1		Pass
365	1.0 - 100.0% of mass 198	327	3.53		Pass
441	Present, but less than mass 443	938	10.1	(86.0) [b]	Pass
442	40.0 - 100.0% of mass 198	6121	66.0		Pass
443	17.0 - 23.0% of mass 442	1091	11.8	(17.8) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
S7G483-CC472	7G11130.D	08/11/20	08:29	00:18	Continuing cal 4
OP81485-MB	7G11131.D	08/11/20	08:52	00:41	Method Blank
OP81485-BS	7G11132.D	08/11/20	09:16	01:05	Blank Spike
ZZZZZZ	7G11133.D	08/11/20	09:39	01:28	(unrelated sample)
ZZZZZZ	7G11134.D	08/11/20	10:03	01:52	(unrelated sample)
ZZZZZZ	7G11135.D	08/11/20	10:27	02:16	(unrelated sample)
ZZZZZZ	7G11136.D	08/11/20	10:50	02:39	(unrelated sample)
ZZZZZZ	7G11137.D	08/11/20	11:14	03:03	(unrelated sample)
ZZZZZZ	7G11138.D	08/11/20	11:38	03:27	(unrelated sample)
ZZZZZZ	7G11139.D	08/11/20	12:02	03:51	(unrelated sample)
ZZZZZZ	7G11140.D	08/11/20	12:26	04:15	(unrelated sample)
ZZZZZZ	7G11141.D	08/11/20	12:50	04:39	(unrelated sample)
FA77615-6	7G11142.D	08/11/20	13:14	05:03	(used for QC only; not part of job FA77576)
OP81485-MS	7G11143.D	08/11/20	13:38	05:27	Matrix Spike
OP81485-MSD	7G11144.D	08/11/20	14:02	05:51	Matrix Spike Duplicate
ZZZZZZ	7G11145.D	08/11/20	14:26	06:15	(unrelated sample)
ZZZZZZ	7G11146.D	08/11/20	14:51	06:40	(unrelated sample)
ZZZZZZ	7G11147.D	08/11/20	15:15	07:04	(unrelated sample)
ZZZZZZ	7G11148.D	08/11/20	15:39	07:28	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: FA77576
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample:	S7G483-DFTPP	**Injection Date:**	08/11/20
Lab File ID:	7G11129.D	**Injection Time:**	08:11
Instrument ID:	GCMS7G		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	7G11149.D	08/11/20	16:04	07:53	(unrelated sample)
ZZZZZZ	7G11150.D	08/11/20	16:28	08:17	(unrelated sample)
ZZZZZZ	7G11151.D	08/11/20	16:53	08:42	(unrelated sample)
ZZZZZZ	7G11152.D	08/11/20	17:17	09:06	(unrelated sample)
ZZZZZZ	7G11153.D	08/11/20	17:41	09:30	(unrelated sample)
ZZZZZZ	7G11154.D	08/11/20	18:05	09:54	(unrelated sample)
FA77576-1	7G11155.D	08/11/20	18:30	10:19	CS-TB-07
FA77576-5	7G11156.D	08/11/20	18:54	10:43	CS-37
FA77576-8	7G11157.D	08/11/20	19:18	11:07	CS-36
FA77581-5	7G11158.D	08/11/20	19:42	11:31	(used for QC only; not part of job FA77576)

Instrument Performance Check (DFTPP)

Job Number: FA77576
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-DFTPP
Lab File ID: X071355.D
Instrument ID: GCMSX
Injection Date: 06/23/20
Injection Time: 09:47

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	48227	49.7		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	42739	44.1		Pass
70	Less than 2.0% of mass 69	206	0.21	(0.48) [a]	Pass
127	40.0 - 60.0% of mass 198	50221	51.8		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	96957	100.0		Pass
199	5.0 - 9.0% of mass 198	6460	6.66		Pass
275	10.0 - 30.0% of mass 198	22665	23.4		Pass
365	1.0 - 100.0% of mass 198	1798	1.85		Pass
441	Present, but less than mass 443	12438	12.8	(74.3) [b]	Pass
442	40.0 - 100.0% of mass 198	83123	85.7		Pass
443	17.0 - 23.0% of mass 442	16733	17.3	(20.1) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
SX2918-IC2918	X071356.D	06/23/20	10:04	00:17	Initial cal 1
SX2918-IC2918	X071357.D	06/23/20	10:30	00:43	Initial cal 5
SX2918-IC2918	X071358.D	06/23/20	10:55	01:08	Initial cal 10
SX2918-IC2918	X071359.D	06/23/20	11:21	01:34	Initial cal 25
SX2918-IC2918	X071360.D	06/23/20	11:46	01:59	Initial cal 50
SX2918-IC2918	X071361.D	06/23/20	12:12	02:25	Initial cal 60
SX2918-IC2918	X071362.D	06/23/20	12:37	02:50	Initial cal 75
SX2918-IC2918	X071363.D	06/23/20	13:03	03:16	Initial cal 100
SX2918-IC2918	X071364.D	06/23/20	13:29	03:42	Initial cal 1
SX2918-IC2918	X071365.D	06/23/20	13:54	04:07	Initial cal 5
SX2918-IC2918	X071366.D	06/23/20	14:20	04:33	Initial cal 10
SX2918-IC2918	X071367.D	06/23/20	14:46	04:59	Initial cal 25
SX2918-ICC2918	X071368.D	06/23/20	15:12	05:25	Initial cal 50
SX2918-IC2918	X071369.D	06/23/20	15:39	05:52	Initial cal 60
SX2918-IC2918	X071370.D	06/23/20	16:05	06:18	Initial cal 75
SX2918-IC2918	X071371.D	06/23/20	16:31	06:44	Initial cal 100
SX2918-ICV2918	X071372.D	06/23/20	16:58	07:11	Initial cal verification 50
SX2918-ICV2918	X071373.D	06/23/20	17:25	07:38	Initial cal verification 50
SX2918-ICV2918	X071374.D	06/23/20	17:51	08:04	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: FA77576
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample:	SX2918-DFTPP	**Injection Date:**	06/23/20
Lab File ID:	X071355.D	**Injection Time:**	09:47
Instrument ID:	GCMSX		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
SX2918-ICV2918	X071375.D	06/23/20	18:17	08:30	Initial cal verification 50
SX2918-ICV2918	X071376.D	06/23/20	18:43	08:56	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: FA77576
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2919-DFTPP
Lab File ID: X071415.D
Instrument ID: GCMSX
Injection Date: 06/24/20
Injection Time: 15:04

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	34387	50.4		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	32027	47.0		Pass
70	Less than 2.0% of mass 69	101	0.15	(0.32) [a]	Pass
127	40.0 - 60.0% of mass 198	36939	54.2		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	68165	100.0		Pass
199	5.0 - 9.0% of mass 198	4563	6.69		Pass
275	10.0 - 30.0% of mass 198	16125	23.7		Pass
365	1.0 - 100.0% of mass 198	1684	2.47		Pass
441	Present, but less than mass 443	9013	13.2	(75.9) [b]	Pass
442	40.0 - 100.0% of mass 198	59211	86.9		Pass
443	17.0 - 23.0% of mass 442	11869	17.4	(20.0) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
SX2918-ICV2918	X071416.D	06/24/20	15:22	00:18	Initial cal verification 50
SX2919-CC2918	X071417.D	06/24/20	15:48	00:44	Continuing cal 50
SX2919-CC2918	X071418.D	06/24/20	16:15	01:11	Continuing cal 50
OP80770-BS	X071419.D	06/24/20	16:41	01:37	Blank Spike
OP80770-MB	X071420.D	06/24/20	17:08	02:04	Method Blank
OP80804-BS1	X071421.D	06/24/20	17:34	02:30	Blank Spike
OP80804-BS2	X071422.D	06/24/20	18:00	02:56	Blank Spike
ZZZZZZ	X071424.D	06/24/20	18:53	03:49	(unrelated sample)
FA75495-3	X071425.D	06/24/20	19:19	04:15	(used for QC only; not part of job FA77576)
FA75495-4	X071426.D	06/24/20	19:45	04:41	(used for QC only; not part of job FA77576)
FA76058-1	X071427.D	06/24/20	20:11	05:07	(used for QC only; not part of job FA77576)
ZZZZZZ	X071428.D	06/24/20	20:37	05:33	(unrelated sample)
ZZZZZZ	X071429.D	06/24/20	21:02	05:58	(unrelated sample)
ZZZZZZ	X071430.D	06/24/20	21:28	06:24	(unrelated sample)
OP80770-MS	X071432.D	06/24/20	22:19	07:15	Matrix Spike
OP80770-MSD	X071433.D	06/24/20	22:45	07:41	Matrix Spike Duplicate
ZZZZZZ	X071434.D	06/24/20	23:10	08:06	(unrelated sample)
ZZZZZZ	X071435.D	06/24/20	23:36	08:32	(unrelated sample)
ZZZZZZ	X071436.D	06/25/20	00:01	08:57	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: FA77576
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample:	SX2919-DFTPP	**Injection Date:**	06/24/20
Lab File ID:	X071415.D	**Injection Time:**	15:04
Instrument ID:	GCMSX		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	X071437.D	06/25/20	00:26	09:22	(unrelated sample)
ZZZZZZ	X071438.D	06/25/20	00:52	09:48	(unrelated sample)
SX2919-ECC2918	X071440.D	06/25/20	01:43	10:39	Ending cal 50
SX2919-ECC2918	X071441.D	06/25/20	02:08	11:04	Ending cal 50

Instrument Performance Check (DFTPP)

Job Number: FA77576
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2950-DFTPP
Lab File ID: X072328.D
Instrument ID: GCMSX
Injection Date: 08/11/20
Injection Time: 12:30

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	22485	49.1		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	20622	45.0		Pass
70	Less than 2.0% of mass 69	80	0.17	(0.39) [a]	Pass
127	40.0 - 60.0% of mass 198	23723	51.8		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	45800	100.0		Pass
199	5.0 - 9.0% of mass 198	3103	6.78		Pass
275	10.0 - 30.0% of mass 198	10316	22.5		Pass
365	1.0 - 100.0% of mass 198	1067	2.33		Pass
441	Present, but less than mass 443	6664	14.6	(84.6) [b]	Pass
442	40.0 - 100.0% of mass 198	40365	88.1		Pass
443	17.0 - 23.0% of mass 442	7879	17.2	(19.5) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
SX2950-CC2918	X072329.D	08/11/20	12:47	00:17	Continuing cal 50
SX2950-CC2918	X072330.D	08/11/20	13:13	00:43	Continuing cal 5
OP81482-BS	X072331.D	08/11/20	13:39	01:09	Blank Spike
OP81482-MB	X072332.D	08/11/20	14:05	01:35	Method Blank
FA77576-1	X072333.D	08/11/20	14:31	02:01	CS-TB-07
FA77576-2	X072334.D	08/11/20	14:57	02:27	CS-SS-106
FA77576-3	X072335.D	08/11/20	15:23	02:53	CS-27
FA77576-4	X072336.D	08/11/20	15:50	03:20	CS-35
FA77576-5	X072337.D	08/11/20	16:16	03:46	CS-37
FA77576-6	X072338.D	08/11/20	16:42	04:12	CS-SS-109
FA77576-7	X072339.D	08/11/20	17:08	04:38	DUP-02
FA77576-8	X072340.D	08/11/20	17:34	05:04	CS-36
FA77576-9	X072341.D	08/11/20	18:00	05:30	CS-39
FA77576-10	X072342.D	08/11/20	18:26	05:56	CS-32
FA77576-11	X072343.D	08/11/20	18:52	06:22	CS-28
FA77576-12	X072344.D	08/11/20	19:18	06:48	CS-34
FA77576-13	X072345.D	08/11/20	19:44	07:14	CS-38
FA77576-14	X072346.D	08/11/20	20:10	07:40	CS-33
ZZZZZZ	X072347.D	08/11/20	20:35	08:05	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: FA77576
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample:	SX2950-DFTPP	**Injection Date:**	08/11/20
Lab File ID:	X072328.D	**Injection Time:**	12:30
Instrument ID:	GCMSX		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	X072348.D	08/11/20	21:01	08:31	(unrelated sample)
ZZZZZZ	X072349.D	08/11/20	21:27	08:57	(unrelated sample)
ZZZZZZ	X072350.D	08/11/20	21:52	09:22	(unrelated sample)
FA77581-5	X072351.D	08/11/20	22:18	09:48	(used for QC only; not part of job FA77576)
OP81482-MS	X072352.D	08/11/20	22:44	10:14	Matrix Spike
OP81482-MSD	X072353.D	08/11/20	23:09	10:39	Matrix Spike Duplicate
ZZZZZZ	X072354.D	08/11/20	23:34	11:04	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: FA77576
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2951-DFTPP
Lab File ID: X072356.D
Instrument ID: GCMSX
Injection Date: 08/12/20
Injection Time: 10:07

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	29610	51.2		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	26838	46.4		Pass
70	Less than 2.0% of mass 69	95	0.16	(0.35) [a]	Pass
127	40.0 - 60.0% of mass 198	29425	50.9		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	57845	100.0		Pass
199	5.0 - 9.0% of mass 198	3631	6.28		Pass
275	10.0 - 30.0% of mass 198	13046	22.6		Pass
365	1.0 - 100.0% of mass 198	1226	2.12		Pass
441	Present, but less than mass 443	7696	13.3	(85.3) [b]	Pass
442	40.0 - 100.0% of mass 198	47624	82.3		Pass
443	17.0 - 23.0% of mass 442	9017	15.6	(18.9) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
SX2951-CC2918	X072357.D	08/12/20	10:24	00:17	Continuing cal 50
SX2951-CC2918	X072358.D	08/12/20	10:49	00:42	Continuing cal 5
FA77576-1	X072359.D	08/12/20	11:16	01:09	CS-TB-07
FA77576-3	X072360.D	08/12/20	11:42	01:35	CS-27
FA77576-4	X072361.D	08/12/20	12:07	02:00	CS-35
FA77576-5	X072362.D	08/12/20	12:33	02:26	CS-37
FA77576-14	X072366.D	08/12/20	14:16	04:09	CS-33
FA77576-7	X072368.D	08/12/20	15:08	05:01	DUP-02
FA77576-8	X072369.D	08/12/20	15:33	05:26	CS-36
ZZZZZZ	X072371.D	08/12/20	16:25	06:18	(unrelated sample)
ZZZZZZ	X072373.D	08/12/20	17:17	07:10	(unrelated sample)
FA77581-5	X072374.D	08/12/20	17:43	07:36	(used for QC only; not part of job FA77576)
FA77576-11	X072375.D	08/12/20	18:09	08:02	CS-28
ZZZZZZ	X072376.D	08/12/20	18:34	08:27	(unrelated sample)
ZZZZZZ	X072377.D	08/12/20	19:00	08:53	(unrelated sample)
ZZZZZZ	X072378.D	08/12/20	19:26	09:19	(unrelated sample)
ZZZZZZ	X072379.D	08/12/20	19:51	09:44	(unrelated sample)
ZZZZZZ	X072380.D	08/12/20	20:17	10:10	(unrelated sample)
ZZZZZZ	X072381.D	08/12/20	20:42	10:35	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: FA77576
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample:	SX2951-DFTPP	**Injection Date:**	08/12/20
Lab File ID:	X072356.D	**Injection Time:**	10:07
Instrument ID:	GCMSX		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	X072382.D	08/12/20	21:08	11:01	(unrelated sample)
ZZZZZZ	X072383.D	08/12/20	21:34	11:27	(unrelated sample)
ZZZZZZ	X072384.D	08/12/20	21:59	11:52	(unrelated sample)

Internal Standard Area Summary

Job Number: FA77576
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Check Std:	S7G482-CC472	**Injection Date:**	08/10/20
Lab File ID:	7G11100.D	**Injection Time:**	14:28
Instrument ID:	GCMS7G	**Method:**	SW846 8270E BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Initial Cal [a]	25300	4.75	14609	6.24	26093	7.53	42851	9.87	37551	11.64
Check Std [b]	22910	4.63	14625	6.11	27961	7.40	44464	9.72	38799	11.48
Upper Limit [c]	45820	4.80	29250	6.28	55922	7.57	88928	9.89	77598	11.65
Lower Limit [d]	11455	4.46	7313	5.94	13981	7.23	22232	9.55	19400	11.31

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
OP81483-MB	24312	4.63	16384	6.12	31665	7.40	48325	9.73	44401	11.48
OP81483-BS	25347	4.64	16910	6.13	32726	7.41	51832	9.74	48241	11.49
FA77576-2	25518	4.63	17323	6.12	33094	7.40	62623	9.74	62681	11.49
FA77576-3	25113	4.63	17665	6.11	34389	7.40	70970	9.75	67856	11.51
FA77576-4	26281	4.63	18976	6.11	36901	7.40	80387	9.76	62069	11.53
FA77576-6	25295	4.63	17856	6.12	34979	7.40	67215	9.74	61009	11.49
FA77576-7	25434	4.63	18768	6.12	36665	7.40	78381	9.75	64840	11.52
FA77576-9	26585	4.63	19395	6.12	37305	7.40	66203	9.73	59245	11.48
FA77576-10	27962	4.66	20151	6.14	38334	7.42	76169	9.77	66878	11.52
FA77576-11	26538	4.63	19824	6.12	38236	7.40	80910	9.75	66469	11.51
FA77576-12	26888	4.63	20464	6.11	39282	7.40	75929	9.73	66526	11.49
FA77576-13	24374	4.63	18480	6.12	35638	7.40	62003	9.73	54949	11.49
FA77576-14	25172	4.63	19675	6.11	38015	7.40	81424	9.74	67018	11.51
ZZZZZZ	25146	4.64	19369	6.12	37579	7.40	78019	9.75	63658	11.51
ZZZZZZ	23601	4.63	18367	6.11	35759	7.40	66452	9.73	55322	11.49
ZZZZZZ	25511	4.63	20171	6.11	39891	7.40	84208	9.75	63567	11.51
ZZZZZZ	24455	4.65	19847	6.13	38256	7.41	79537	9.76	59109	11.53
OP81483-MS [e]	20120	4.65	16826	6.13	32850	7.41	58735	9.75	41508	11.50
OP81483-MSD [e]	20877	4.63	17525	6.12	34643	7.40	69789	9.74	49534	11.50
ZZZZZZ	21788	4.63	17966	6.11	35112	7.40	69684	9.73	52409	11.49
S7G482-ECC472	20422	4.65	15731	6.13	30214	7.42	47844	9.75	26167	11.50

IS 1 = Naphthalene-d8
IS 2 = Acenaphthene-d10
IS 3 = Phenanthrene-d10
IS 4 = Chrysene-d12
IS 5 = Perylene-d12

(a) Initial Cal is: S7G472-ICC472 7G10836.D 07/21/20 14:43
(b) Check Std Limit = -50 to + 100% of initial cal area.
(c) Upper Limit = + 100% of check standard area; Retention time + 0.167 minutes.
(d) Lower Limit = -50% of check standard area; Retention time -0.167 minutes.
(e) Dilution required due to matrix interference; extract was viscous.

Internal Standard Area Summary

Job Number: FA77576
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Check Std:	S7G483-CC472	**Injection Date:**	08/11/20
Lab File ID:	7G11130.D	**Injection Time:**	08:29
Instrument ID:	GCMS7G	**Method:**	SW846 8270E BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Initial Cal [a]	25300	4.75	14609	6.24	26093	7.53	42851	9.87	37551	11.64
Check Std [b]	23021	4.63	17904	6.11	34538	7.40	58481	9.73	51783	11.48
Upper Limit [c]	46042	4.80	35808	6.28	69076	7.57	116962	9.90	103566	11.65
Lower Limit [d]	11511	4.46	8952	5.94	17269	7.23	29241	9.56	25892	11.31

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
OP81485-MB	21667	4.63	17417	6.11	34159	7.40	60313	9.73	54929	11.47
OP81485-BS	22419	4.63	17721	6.12	35054	7.40	60725	9.73	55339	11.48
ZZZZZZ	21993	4.65	17751	6.13	34300	7.41	61199	9.74	56905	11.49
ZZZZZZ	20168	4.63	16497	6.11	32146	7.40	62432	9.73	59100	11.49
ZZZZZZ	20710	4.63	17089	6.12	33007	7.40	63976	9.74	62255	11.50
ZZZZZZ	19541	4.65	16538	6.13	32234	7.41	61692	9.74	57995	11.50
ZZZZZZ	19176	4.65	16041	6.13	31644	7.41	55090	9.74	53000	11.49
ZZZZZZ	20337	4.65	17240	6.13	33719	7.41	60041	9.74	58801	11.49
ZZZZZZ	20371	4.64	16941	6.12	32802	7.40	65875	9.75	62002	11.51
ZZZZZZ	19156	4.63	15860	6.11	31122	7.40	54619	9.73	52212	11.47
ZZZZZZ	20891	4.64	17140	6.12	33466	7.41	65680	9.74	63725	11.51
FA77615-6	20762	4.63	16997	6.11	32867	7.40	62212	9.73	58980	11.49
OP81485-MS	21679	4.64	17776	6.12	35130	7.41	63709	9.74	59713	11.50
OP81485-MSD	22295	4.65	18278	6.13	36401	7.41	66697	9.74	61462	11.50
ZZZZZZ	20600	4.63	17101	6.11	33516	7.40	60935	9.73	57729	11.49
ZZZZZZ	21624	4.64	17811	6.12	34710	7.40	65043	9.74	61378	11.50
ZZZZZZ	20528	4.64	17614	6.12	34676	7.40	64840	9.74	59121	11.49
ZZZZZZ	22511	4.64	18710	6.12	37890	7.41	95046	9.78	52199	11.55
ZZZZZZ	20947	4.63	18088	6.11	35722	7.40	62374	9.73	56624	11.48
ZZZZZZ	20517	4.65	18471	6.13	36375	7.41	75424	9.76	62403	11.53
ZZZZZZ	20299	4.63	18312	6.11	35117	7.40	65101	9.73	57852	11.49
ZZZZZZ	19792	4.63	18162	6.11	36276	7.40	67435	9.73	58097	11.49
ZZZZZZ	20730	4.63	18630	6.11	36508	7.40	80223	9.75	63857	11.52
ZZZZZZ	19006	4.64	17600	6.12	34496	7.40	64777	9.74	56828	11.50
FA77576-1	23412	4.63	21177	6.11	41713	7.40	87234	9.76	60316	11.54
FA77576-5	19939	4.65	18574	6.13	36812	7.41	95748	9.79	51358	11.56
FA77576-8	19555	4.65	18327	6.13	36349	7.41	85919	9.78	55818	11.55
FA77581-5	18661	4.65	17313	6.13	34578	7.41	71591	9.76	56542	11.52

IS 1 = Naphthalene-d8
IS 2 = Acenaphthene-d10
IS 3 = Phenanthrene-d10
IS 4 = Chrysene-d12

Internal Standard Area Summary

Job Number: FA77576
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Check Std:	S7G483-CC472	**Injection Date:**	08/11/20
Lab File ID:	7G11130.D	**Injection Time:**	08:29
Instrument ID:	GCMS7G	**Method:**	SW846 8270E BY SIM

Lab	IS 1		IS 2		IS 3		IS 4		IS 5	
Sample ID	**AREA**	**RT**	**AREA**	**RT**	**AREA**	**RT**	**AREA**	**RT**	**AREA**	**RT**

IS 5 = Perylene-d12

(a) Initial Cal is: S7G472-ICC472 7G10836.D 07/21/20 14:43
(b) Check Std Limit = -50 to + 100% of initial cal area.
(c) Upper Limit = + 100% of check standard area; Retention time + 0.167 minutes.
(d) Lower Limit = -50% of check standard area; Retention time -0.167 minutes.

Internal Standard Area Summary

Job Number: FA77576
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Check Std:	SX2950-CC2918	**Injection Date:**	08/11/20
Lab File ID:	X072329.D	**Injection Time:**	12:47
Instrument ID:	GCMSX	**Method:**	SW846 8270E

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Initial Cal [a]	170190	6.01	730199	7.43	379384	9.48	636433	11.22	474373	14.50	348798	16.81
Check Std [b]	166366	5.66	662768	7.08	340989	9.12	587050	10.86	485410	14.07	371635	16.26
Upper Limit [c]	332732	5.83	1325536	7.25	681978	9.29	1174100	11.03	970820	14.24	743270	16.43
Lower Limit [d]	83183	5.49	331384	6.91	170495	8.95	293525	10.69	242705	13.90	185818	16.09

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP81482-BS	148110	5.66	595100	7.08	297901	9.12	501986	10.86	391828	14.07	303605	16.26
OP81482-MB	129549	5.66	480676	7.08	235184	9.12	406815	10.86	312428	14.06	255107	16.24
FA77576-1	178516	5.66	672615	7.08	353859	9.12	606812	10.86	474809	14.09	387366	16.30
FA77576-2	154000	5.66	582044	7.08	287902	9.12	503510	10.86	430460	14.07	327513	16.27
FA77576-3	155156	5.66	583505	7.08	289534	9.12	502484	10.86	418698	14.08	329587	16.28
FA77576-4	158036	5.66	596326	7.08	303497	9.12	529075	10.86	426380	14.09	346489	16.30
FA77576-5	178728	5.67	708905	7.08	327075	9.13	548591	10.87	347437	14.12	342422	16.36
FA77576-6	166126	5.67	627119	7.09	312912	9.13	546006	10.87	436102	14.09	346747	16.29
FA77576-7	163700	5.66	621390	7.09	321115	9.13	550417	10.87	432468	14.10	356470	16.32
FA77576-8	167208	5.67	621905	7.09	313510	9.13	546236	10.87	437821	14.10	364432	16.31
FA77576-9	164828	5.67	608415	7.09	297163	9.13	508088	10.87	407717	14.08	326292	16.28
FA77576-10	165990	5.67	622894	7.09	308442	9.13	528417	10.87	428216	14.08	342052	16.29
FA77576-11	165681	5.66	617067	7.09	311960	9.13	549008	10.87	475656	14.09	371515	16.30
FA77576-12	163360	5.67	611409	7.09	297748	9.13	510859	10.87	424050	14.08	339724	16.29
FA77576-13	166234	5.67	621926	7.09	300813	9.13	516250	10.87	407517	14.08	319861	16.28
FA77576-14	171443	5.67	646034	7.09	320314	9.13	553392	10.87	444089	14.09	351993	16.30
ZZZZZZ	166797	5.67	619193	7.09	307423	9.13	531106	10.87	430408	14.09	354939	16.30
ZZZZZZ	178161	5.67	662446	7.09	325937	9.13	552834	10.87	429188	14.08	341429	16.29
ZZZZZZ	177668	5.67	666706	7.09	331405	9.13	578753	10.87	472125	14.10	383289	16.31
ZZZZZZ	180366	5.67	667720	7.09	337538	9.13	577435	10.87	452483	14.10	368909	16.32
FA77581-5	147608	5.67	546571	7.09	270607	9.13	460128	10.87	376298	14.09	311161	16.30
OP81482-MS	177475	5.67	686382	7.09	329211	9.13	543265	10.88	406529	14.11	336362	16.31
OP81482-MSD	176300	5.67	694985	7.09	336531	9.13	565950	10.88	430062	14.11	345207	16.32
ZZZZZZ	161575	5.67	592845	7.09	287769	9.13	486909	10.87	401327	14.09	325605	16.30

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Initial Cal is: SX2918-ICC2918 X071368.D 06/23/20 15:12

Internal Standard Area Summary

Job Number: FA77576
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Check Std:	SX2950-CC2918	**Injection Date:**	08/11/20
Lab File ID:	X072329.D	**Injection Time:**	12:47
Instrument ID:	GCMSX	**Method:**	SW846 8270E

Lab Sample ID	IS 1 AREA	IS 1 RT	IS 2 AREA	IS 2 RT	IS 3 AREA	IS 3 RT	IS 4 AREA	IS 4 RT	IS 5 AREA	IS 5 RT	IS 6 AREA	IS 6 RT

(b) Check Std Limit = -50 to + 100% of initial cal area.
(c) Upper Limit = + 100% of check standard area; Retention time + 0.167 minutes.
(d) Lower Limit = -50% of check standard area; Retention time -0.167 minutes.

Internal Standard Area Summary

Job Number: FA77576
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Check Std:	SX2951-CC2918	**Injection Date:**	08/12/20
Lab File ID:	X072357.D	**Injection Time:**	10:24
Instrument ID:	GCMSX	**Method:**	SW846 8270E

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Initial Cal [a]	170190	6.01	730199	7.43	379384	9.48	636433	11.22	474373	14.50	348798	16.81
Check Std [b]	163781	5.65	635873	7.08	311303	9.12	516972	10.86	400284	14.07	293676	16.27
Upper Limit [c]	327562	5.82	1271746	7.25	622606	9.29	1033944	11.03	800568	14.24	587352	16.44
Lower Limit [d]	81891	5.48	317937	6.91	155652	8.95	258486	10.69	200142	13.90	146838	16.10

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
FA77576-1	218136	5.65	810959	7.07	391709	9.11	662062	10.86	535598	14.07	417625	16.27
FA77576-3	176303	5.65	649197	7.08	305905	9.11	500197	10.86	394851	14.07	314921	16.27
FA77576-4	161302	5.65	614464	7.07	296208	9.12	511357	10.86	430440	14.07	327737	16.27
FA77576-5 [e]	182933	5.65	657427	7.08	310084	9.11	524672	10.86	428249	14.07	343608	16.28
FA77576-14	181771	5.65	641174	7.08	304582	9.12	513802	10.86	409295	14.07	349024	16.28
FA77576-7	196243	5.65	758444	7.08	369807	9.11	653011	10.86	554493	14.07	423056	16.28
FA77576-8	137435	5.65	499201	7.08	241962	9.11	418598	10.86	357671	14.07	282742	16.27
ZZZZZZ	161487	5.65	577827	7.08	278663	9.11	470342	10.86	403060	14.07	331354	16.27
ZZZZZZ	134513	5.65	483488	7.08	230817	9.12	396866	10.86	339628	14.07	273941	16.28
FA77581-5	141777	5.65	504392	7.08	237075	9.11	395558	10.86	332612	14.07	276558	16.28
FA77576-11	168839	5.65	622102	7.08	300831	9.12	515565	10.86	420124	14.07	329022	16.27
ZZZZZZ	126149	5.65	463289	7.08	221908	9.11	382867	10.86	316510	14.07	243526	16.27
ZZZZZZ	162640	5.65	591331	7.08	282884	9.11	479581	10.86	392317	14.07	316082	16.28
ZZZZZZ	165100	5.65	617668	7.08	310547	9.11	541734	10.86	447419	14.08	344386	16.28
ZZZZZZ	172906	5.65	647699	7.08	316920	9.11	541722	10.86	452184	14.07	350415	16.27
ZZZZZZ	175228	5.65	650470	7.08	317396	9.11	542565	10.86	452555	14.07	351596	16.28
ZZZZZZ	178537	5.65	655727	7.08	321143	9.11	552823	10.86	467385	14.07	367333	16.28
ZZZZZZ	188109	5.65	679562	7.08	331283	9.11	559907	10.86	465953	14.08	378757	16.28
ZZZZZZ	161914	5.65	574279	7.08	278406	9.12	458553	10.86	362449	14.07	291793	16.27
ZZZZZZ	161048	5.65	614812	7.08	304170	9.12	518000	10.86	382263	14.07	308707	16.27

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Initial Cal is: SX2918-ICC2918 X071368.D 06/23/20 15:12
(b) Check Std Limit = -50 to + 100% of initial cal area.
(c) Upper Limit = + 100% of check standard area; Retention time + 0.167 minutes.
(d) Lower Limit = -50% of check standard area; Retention time -0.167 minutes.
(e) Dilution required due to matrix interference.

Surrogate Recovery Summary

Job Number: FA77576
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Method: SW846 8270E **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
FA77576-1	X072359.D	70	74	70
FA77576-1	X072333.D	78	78	84
FA77576-2	X072334.D	66	71	72
FA77576-3	X072360.D	67	70	67
FA77576-3	X072335.D	74	76	76
FA77576-4	X072361.D	68	72	69
FA77576-4	X072336.D	75	76	80
FA77576-5	X072362.D	68	74	73
FA77576-5	X072337.D	72	82	101
FA77576-6	X072338.D	68	71	73
FA77576-7	X072368.D	52	55	52
FA77576-7	X072339.D	76	76	82
FA77576-8	X072369.D	77	83	80
FA77576-8	X072340.D	73	75	78
FA77576-9	X072341.D	72	74	72
FA77576-10	X072342.D	72	74	73
FA77576-11	X072375.D	61	68	67
FA77576-11	X072343.D	70	73	74
FA77576-12	X072344.D	73	76	74
FA77576-13	X072345.D	75	77	74
FA77576-14	X072366.D	67	70	68
FA77576-14	X072346.D	71	74	74
OP81482-BS	X072331.D	67	72	73
OP81482-MB	X072332.D	69	72	75
OP81482-MS	X072352.D	76	82	83
OP81482-MSD	X072353.D	73	81	86

Surrogate Compounds	Recovery Limits
S1 = Nitrobenzene-d5	40-105%
S2 = 2-Fluorobiphenyl	43-107%
S3 = Terphenyl-d14	45-119%

Surrogate Recovery Summary

Job Number: FA77576
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Method: SW846 8270E BY SIM **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2
FA77576-1	7G11155.D	105	105
FA77576-2	7G11104.D	92	100
FA77576-3	7G11105.D	93	105
FA77576-4	7G11106.D	90	104
FA77576-5	7G11156.D	117	117
FA77576-6	7G11108.D	84	90
FA77576-7	7G11109.D	91	104
FA77576-8	7G11157.D	110	119
FA77576-9	7G11111.D	88	89
FA77576-10	7G11112.D	83	82
FA77576-11	7G11113.D	95	103
FA77576-12	7G11114.D	84	90
FA77576-13	7G11115.D	96	90
FA77576-14	7G11116.D	97	101
OP81483-BS	7G11102.D	82	85
OP81483-MB	7G11101.D	82	83
OP81483-MS	7G11122.D	101	101
OP81483-MSD	7G11123.D	99	110

Surrogate Compounds	Recovery Limits
S1 = 2-Methylnaphthalene-d10	50-150%
S2 = Fluoranthene-d10	50-150%

Initial Calibration Summary

Job Number: FA77576
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: S7G472-ICC472
Lab FileID: 7G10836.D

Response Factor Report MSBNA8

Method : C:\msdchem\1\met...pahf7gD0072120.m (RTE Integrator)
Title : PAH's by 8270 SIM
Last Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

Calibration Files
L1 =7G10833.D L2 =7G10834.D L3 =7G10835.D L4 =7G10836.D
L5 =7G10837.D L6 =7G10838.D L7 =7G10839.D

Compound	L1	L2	L3	L4	L5	L6	L7	Avg	%RSD
1) I Naphthalene-d8	ISTD								
2)P Naphthalene	1.788	1.149	1.123	1.177	1.176	1.182	1.252	1.264	18.55
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9999									
Response Ratio = 0.00000 + 1.12694 *A + 0.01247 *A^2									
3)P 2-Methylnaphthale	1.042	0.771	0.794	0.867	0.873	0.908	0.973	0.890	10.71
4)s 2-Methylnaphthale	0.874	0.545	0.557	0.602	0.614	0.624	0.669	0.641	17.36
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9999									
Response Ratio = 0.00000 + 0.57628 *A + 0.00934 *A^2									
5)P 1-Methylnaphthale	1.294	0.799	0.779	0.829	0.824	0.846	0.913	0.898	20.03
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9999									
Response Ratio = 0.00000 + 0.78065 *A + 0.01318 *A^2									
6) I Acenaphthene-d10	ISTD								
7)P Acenaphthylene	3.327	2.218	2.216	2.419	2.341	2.384	2.491	2.485	15.48
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9998									
Response Ratio = 0.00000 + 2.28588 *A + 0.02049 *A^2									
8)P Acenaphthene	2.268	1.471	1.460	1.575	1.548	1.557	1.652	1.647	17.08
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9999									
Response Ratio = 0.00000 + 1.48716 *A + 0.01640 *A^2									
9)P Dibenzofuran	1.560	1.051	1.032	1.113	1.089	1.076	1.140	1.152	15.96
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9998									
Response Ratio = 0.00000 + 1.04854 *A + 0.00901 *A^2									
10)P Fluorene	2.436	1.605	1.570	1.689	1.676	1.701	1.778	1.779	16.71
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9999									
Response Ratio = 0.00000 + 1.62233 *A + 0.01563 *A^2									
11) I Phenanthrene-d10	ISTD								
12)P Pentachlorophenol	0.084	0.080	0.117	0.151	0.178	0.197	0.233	0.149	39.03
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9987									
Response Ratio = 0.00000 + 0.14189 *A + 0.00368 *A^2									
13)P Phenanthrene	2.007	1.282	1.303	1.371	1.336	1.382	1.439	1.446	17.50
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9999									
Response Ratio = 0.00000 + 1.30979 *A + 0.01292 *A^2									
14)P Anthracene	2.174	1.335	1.305	1.353	1.340	1.365	1.396	1.467	21.35
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9999									
Response Ratio = 0.00000 + 1.32278 *A + 0.01470 *A^2									

Initial Calibration Summary

Job Number: FA77576 **Sample:** S7G472-ICC472
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** 7G10836.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

```
15)P Carbazole          3.180 2.159 2.195 2.326 2.267 2.295 2.316 2.391  14.77
16)P Fluoranthene       3.786 2.408 2.453 2.600 2.542 2.608 2.743 2.734  17.43
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9999
              Response Ratio = 0.00000 + 2.46832 *A + 0.02745 *A^2

17)s Fluoranthene-d10  3.033 1.977 2.025 2.147 2.071 2.136 2.194 2.226  16.33
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9998
              Response Ratio = 0.00000 + 2.05640 *A + 0.01374 *A^2


18) I   Chrysene-d12           ----------------ISTD---------------------
19)P Pyrene             2.490 1.553 1.540 1.619 1.610 1.629 1.672 1.730  19.54
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9999
              Response Ratio = 0.00000 + 1.57982 *A + 0.00925 *A^2

20)P Benzo[a]anthracen 1.818 1.195 1.210 1.275 1.268 1.268 1.312 1.335  16.22
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9999
              Response Ratio = 0.00000 + 1.23579 *A + 0.01515 *A^2

21)P Chrysene           2.438 1.458 1.376 1.447 1.376 1.368 1.385 1.550  25.39
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9997
              Response Ratio = 0.00000 + 1.38698 *A + -0.00072 *A^2


22) I   Perylene-d12           ----------------ISTD---------------------
23)P Benzo[b]fluoranth 1.677 1.174 1.240 1.363 1.337 1.329 1.383 1.358  11.71
24)P Benzo[k]fluoranth 2.395 1.507 1.422 1.504 1.430 1.470 1.515 1.606  21.78
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9998
              Response Ratio = 0.00000 + 1.42711 *A + 0.01741 *A^2

25)P Benzo[a]pyrene     1.657 1.212 1.202 1.293 1.268 1.287 1.342 1.323  11.71
26)P Indeno[1,2,3-cd]p 0.889 0.670 0.773 0.892 0.895 0.905 1.021 0.863  12.93
27)P Dibenz[a,h]anthra 1.091 0.768 0.828 0.940 0.961 1.000 1.118 0.958  13.38
28)P Benzo[g,h,i]peryl 1.292 0.877 0.912 1.008 1.013 1.042 1.143 1.041  13.53
----------------------------------------------------------------------------
(#) = Out of Range

          simpahf7gD0072120.m       Wed Jul 22 13:15:14 2020
```

Initial Calibration Verification

Job Number: FA77576
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: S7G472-ICV472
Lab FileID: 7G10840.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\072120_7G472\7G10840.D Vial: 10
Acq On : 21 Jul 2020 4:19 pm Operator: fouads
Sample : icv472-4 Inst : MSBNA8
Misc : op80679,S7G472,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\met...pahf7gD0072120.m (RTE Integrator)
Title : PAH's by 8270 SIM
Last Update : Tue Jul 21 16:46:17 2020
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	R.T.
1	I	Naphthalene-d8	4.000	4.000	0.0	98	0.00	4.73
		Amount	Calc.	%Drift				
2	P	Naphthalene	10.000	9.543	4.6	92	0.00	4.75
		Amount	Calc.	%Drift				
3	P	2-Methylnaphthalene	10.000	8.171	18.3	82	0.00	5.34
		Amount	Calc.	%Drift				
4	s	2-Methylnaphthalene-d10		NA				
5	P	1-Methylnaphthalene	10.000	9.875	1.3	95	0.00	5.42
		Amount	Calc.	%Drift				
6	I	Acenaphthene-d10	4.000	4.000	0.0	99	0.00	6.22
		Amount	Calc.	%Drift				
7	P	Acenaphthylene	10.000	9.065	9.4	87	0.00	6.10
8	P	Acenaphthene	10.000	9.628	3.7	93	0.00	6.25
9	P	Dibenzofuran	10.000	18.813	-88.1#	183	0.00	6.41
10	P	Fluorene	10.000	9.705	2.9	95	0.00	6.70
		Amount	Calc.	%Drift				
11	I	Phenanthrene-d10	4.000	4.000	0.0	100	0.00	7.51
		Amount	Calc.	%Drift				
12	P	Pentachlorophenol	20.000	14.755	26.2#	61	0.00	7.38
13	P	Phenanthrene	10.000	9.479	5.2	93	0.00	7.53
14	P	Anthracene	5.000	4.255	14.9	84	0.00	7.58
		Amount	Calc.	%Drift				
15	P	Carbazole	5.000	2.375	52.5#	49	0.00	7.75
		Amount	Calc.	%Drift				
16	P	Fluoranthene	10.000	8.721	12.8	85	-0.01	8.56
17	s	Fluoranthene-d10		NA				
		Amount	Calc.	%Drift				
18	I	Chrysene-d12	4.000	4.000	0.0	97	0.00	9.85

Initial Calibration Verification

Job Number: FA77576
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: S7G472-ICV472
Lab FileID: 7G10840.D

			Amount	Calc.	%Drift			
19	P	Pyrene	10.000	9.176	8.2	88	0.00	8.75
20	P	Benzo[a]anthracene	5.000	4.494	10.1	86	0.00	9.84
21	P	Chrysene	5.000	5.042	-0.8	94	0.00	9.88

			Amount	Calc.	%Drift			
22	I	Perylene-d12	4.000	4.000	0.0	97	0.00	11.62
23	P	Benzo[b]fluoranthene	5.000	4.666	6.7	90	0.00	11.10

			Amount	Calc.	%Drift			
24	P	Benzo[k]fluoranthene	5.000	4.742	5.2	88	0.00	11.13

			Amount	Calc.	%Drift			
25	P	Benzo[a]pyrene	5.000	4.510	9.8	89	0.00	11.54
26	P	Indeno[1,2,3-cd]pyrene	5.000	4.449	11.0	83	-0.01	13.38
27	P	Dibenz[a,h]anthracene	5.000	4.399	12.0	87	0.00	13.44
28	P	Benzo[g,h,i]perylene	5.000	4.244	15.1	85	0.00	13.85

(#) = Out of Range SPCC's out = 0 CCC's out = 0
7G10836.D simpahf7gD0072120.m Wed Jul 22 13:16:09 2020

Continuing Calibration Summary

Job Number: FA77576 **Sample:** S7G482-CC472
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** 7G11100.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\081020_7G482\7G11100.D Vial: 2
Acq On : 10 Aug 2020 2:28 pm Operator: FOUADS
Sample : CC472-4 Inst : MSBNA8
Misc : op81342,S7G482,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\met...pahf7gD0072120.m (RTE Integrator)
Title : PAH's by 8270 SIM
Last Update : Tue Jul 21 16:46:17 2020
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Naphthalene-d8	1.000	1.000	0.0	91	0.00	4.63
			Amount	Calc.	%Drift			
2	P	Naphthalene	10.000	9.380	6.2	83	0.00	4.65
			AvgRF	CCRF	%Dev			
3	P	2-Methylnaphthalene	0.890	0.867	2.6	91	0.00	5.23
			Amount	Calc.	%Drift			
4	s	2-Methylnaphthalene-d10	10.000	10.471	-4.7	95	0.00	5.21
5	P	1-Methylnaphthalene	10.000	10.094	-0.9	90	0.00	5.31
			AvgRF	CCRF	%Dev			
6	I	Acenaphthene-d10	1.000	1.000	0.0	100	0.00	6.11
			Amount	Calc.	%Drift			
7	P	Acenaphthylene	10.000	9.379	6.2	91	0.00	5.99
8	P	Acenaphthene	10.000	9.241	7.6	90	0.00	6.14
9	P	Dibenzofuran	10.000	9.900	1.0	95	0.00	6.30
10	P	Fluorene	10.000	9.126	8.7	90	0.00	6.59
			AvgRF	CCRF	%Dev			
11	I	Phenanthrene-d10	1.000	1.000	0.0	107	0.00	7.40
			Amount	Calc.	%Drift			
12	P	Pentachlorophenol	25.000	25.528	-2.1	120	-0.02	7.26
13	P	Phenanthrene	10.000	8.837	11.6	92	0.00	7.42
14	P	Anthracene	5.000	4.680	6.4	99	0.00	7.47
			AvgRF	CCRF	%Dev			
15	P	Carbazole	2.391	2.078	13.1	96	0.00	7.63
			Amount	Calc.	%Drift			
16	P	Fluoranthene	10.000	9.105	8.9	95	0.00	8.45
17	s	Fluoranthene-d10	10.000	9.749	2.5	102	0.00	8.43
			AvgRF	CCRF	%Dev			
18	I	Chrysene-d12	1.000	1.000	0.0	104	0.00	9.72

Continuing Calibration Summary

Job Number: FA77576 **Sample:** S7G482-CC472
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** 7G11100.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

			Amount	Calc.	%Drift			
19	P	Pyrene	10.000	9.258	7.4	95	-0.01	8.64
20	P	Benzo[a]anthracene	5.000	4.800	4.0	98	0.00	9.71
21	P	Chrysene	5.000	4.781	4.4	95	0.00	9.75

			AvgRF	CCRF	%Dev			
22	I	Perylene-d12	1.000	1.000	0.0	103	0.00	11.48
23	P	Benzo[b]fluoranthene	1.358	1.294	4.7	98	-0.01	10.96

			Amount	Calc.	%Drift			
24	P	Benzo[k]fluoranthene	5.000	4.905	1.9	98	-0.01	10.99

			AvgRF	CCRF	%Dev			
25	P	Benzo[a]pyrene	1.323	1.215	8.2	97	-0.01	11.39
26	P	Indeno[1,2,3-cd]pyrene	0.863	0.986	-14.3	114	-0.01	13.21
27	P	Dibenz[a,h]anthracene	0.958	0.993	-3.7	109	-0.01	13.26
28	P	Benzo[g,h,i]perylene	1.041	1.103	-6.0	113	0.00	13.67

(#) = Out of Range SPCC's out = 0 CCC's out = 0
7G10836.D simpahf7gD0072120.m Tue Aug 11 11:04:33 2020

Continuing Calibration Summary

Job Number: FA77576 **Sample:** S7G482-ECC472
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** 7G11126.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\081020_7G482\7G11126.D Vial: 2
Acq On : 11 Aug 2020 1:00 am Operator: FOUADS
Sample : ecc472-4 Inst : MSBNA8
Misc : op81483,S7G482,15.0,,,1,1,soil Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\met...pahf7gD0072120.m (RTE Integrator)
Title : PAH's by 8270 SIM
Last Update : Tue Jul 21 16:46:17 2020
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 50% Max. Rel. Area : 200%

		Compound	AvgRF / Amount	CCRF / Calc.	%Dev / %Drift	Area%	Dev(min)	R.T.
1	I	Naphthalene-d8	1.000	1.000	0.0	81	0.01	4.65
		Amount / Calc. / %Drift						
2	P	Naphthalene	10.000	9.504	5.0	75	0.01	4.66
		AvgRF / CCRF / %Dev						
3	P	2-Methylnaphthalene	0.890	0.975	-9.6	91	0.02	5.25
		Amount / Calc. / %Drift						
4	s	2-Methylnaphthalene-d10	10.000	11.307	-13.1	91	0.02	5.22
5	P	1-Methylnaphthalene	10.000	11.790	-17.9	94	0.02	5.33
		AvgRF / CCRF / %Dev						
6	I	Acenaphthene-d10	1.000	1.000	0.0	108	0.01	6.13
		Amount / Calc. / %Drift						
7	P	Acenaphthylene	10.000	9.374	6.3	97	0.00	6.01
8	P	Acenaphthene	10.000	9.413	5.9	98	0.01	6.16
9	P	Dibenzofuran	10.000	10.012	-0.1	104	0.02	6.32
10	P	Fluorene	10.000	9.464	5.4	100	0.02	6.61
		AvgRF / CCRF / %Dev						
11	I	Phenanthrene-d10	1.000	1.000	0.0	116	0.01	7.42
		Amount / Calc. / %Drift						
12	P	Pentachlorophenol	25.000	29.279	-17.1	151	0.00	7.28
13	P	Phenanthrene	10.000	9.146	8.5	103	0.00	7.43
14	P	Anthracene	5.000	4.773	4.5	110	0.00	7.48
		AvgRF / CCRF / %Dev						
15	P	Carbazole	2.391	2.173	9.1	108	0.02	7.65
		Amount / Calc. / %Drift						
16	P	Fluoranthene	10.000	9.444	5.6	107	0.02	8.47
17	s	Fluoranthene-d10	10.000	9.775	2.2	110	0.02	8.45
		AvgRF / CCRF / %Dev						
18	I	Chrysene-d12	1.000	1.000	0.0	112	0.01	9.75

Continuing Calibration Summary

Job Number: FA77576 **Sample:** S7G482-ECC472
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** 7G11126.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

			Amount	Calc.	%Drift			
19	P	Pyrene	10.000	9.558	4.4	106	0.00	8.66
20	P	Benzo[a]anthracene	5.000	4.627	7.5	102	0.01	9.73
21	P	Chrysene	5.000	4.959	0.8	106	0.01	9.77

			AvgRF	CCRF	%Dev			
22	I	Perylene-d12	1.000	1.000	0.0	70	0.01	11.50
23	P	Benzo[b]fluoranthene	1.358	1.389	-2.3	71	0.00	10.98

			Amount	Calc.	%Drift			
24	P	Benzo[k]fluoranthene	5.000	6.397	-27.9	86	0.00	11.01

			AvgRF	CCRF	%Dev			
25	P	Benzo[a]pyrene	1.323	1.240	6.3	67	0.01	11.41
26	P	Indeno[1,2,3-cd]pyrene	0.863	0.477#	44.7	37#	0.02	13.24
27	P	Dibenz[a,h]anthracene	0.958	0.576	39.9	43#	0.02	13.30
28	P	Benzo[g,h,i]perylene	1.041	0.507	51.3#	35#	0.03	13.70

(#) = Out of Range SPCC's out = 1 CCC's out = 0
7G10836.D simpahf7gD0072120.m Tue Aug 11 11:04:54 2020

Continuing Calibration Summary

Job Number: FA77576 **Sample:** S7G483-CC472
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** 7G11130.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\Je...2020\S7G483\7G11130.d Vial: 2
Acq On : 11 Aug 2020 8:29 am Operator: FOUADS
Sample : CC472-4 Inst : MSBNA8
Misc : op81342,S7G483,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\met...pahf7gD0072120.m (RTE Integrator)
Title : PAH's by 8270 SIM
Last Update : Tue Jul 21 16:46:17 2020
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Naphthalene-d8	1.000	1.000	0.0	91	0.00	4.63
		True	Calc.	% Drift				
2	P	Naphthalene	10.000	9.557	4.4	85	0.00	4.65
		AvgRF	CCRF	% Dev				
3	P	2-Methylnaphthalene	0.890	1.002	-12.6	105	0.00	5.23
		True	Calc.	% Drift				
4	s	2-Methylnaphthalene-d10	10.000	11.587	-15.9	106	0.00	5.21
5	P	1-Methylnaphthalene	10.000	12.037	-20.4#	108	0.00	5.31
		AvgRF	CCRF	% Dev				
6	I	Acenaphthene-d10	1.000	1.000	0.0	123	0.00	6.11
		True	Calc.	% Drift				
7	P	Acenaphthylene	10.000	9.605	3.9	114	0.00	5.99
8	P	Acenaphthene	10.000	9.684	3.2	115	0.00	6.14
9	P	Dibenzofuran	10.000	10.295	-2.9	122	0.00	6.30
10	P	Fluorene	10.000	9.853	1.5	119	0.00	6.59
		AvgRF	CCRF	% Dev				
11	I	Phenanthrene-d10	1.000	1.000	0.0	132	0.00	7.40
		True	Calc.	% Drift				
12	P	Pentachlorophenol	25.000	25.159	-0.6	145	0.00	7.26
13	P	Phenanthrene	10.000	9.373	6.3	121	0.00	7.42
14	P	Anthracene	5.000	4.863	2.7	128	0.00	7.46
		AvgRF	CCRF	% Dev				
15	P	Carbazole	2.391	2.268	5.1	129	0.00	7.63
		True	Calc.	% Drift				
16	P	Fluoranthene	10.000	9.863	1.4	127	0.00	8.45
17	s	Fluoranthene-d10	10.000	10.113	-1.1	130	0.00	8.44
		AvgRF	CCRF	% Dev				
18	I	Chrysene-d12	1.000	1.000	0.0	136	0.00	9.73

Continuing Calibration Summary

Job Number: FA77576 **Sample:** S7G483-CC472
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** 7G11130.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

			True	Calc.	% Drift			
19	P	Pyrene	10.000	9.429	5.7	127	0.00	8.64
20	P	Benzo[a]anthracene	5.000	4.884	2.3	131	0.00	9.72
21	P	Chrysene	5.000	4.874	2.5	127	0.00	9.75

			AvgRF	CCRF	% Dev			
22	I	Perylene-d12	1.000	1.000	0.0	138	0.00	11.48
23	P	Benzo[b]fluoranthene	1.358	1.268	6.6	128	0.00	10.96

			True	Calc.	% Drift			
24	P	Benzo[k]fluoranthene	5.000	4.815	3.7	128	0.00	10.99

			AvgRF	CCRF	% Dev			
25	P	Benzo[a]pyrene	1.323	1.215	8.2	130	0.00	11.39
26	P	Indeno[1,2,3-cd]pyrene	0.863	0.914	-5.9	141	0.00	13.21
27	P	Dibenz[a,h]anthracene	0.958	1.076	-12.3	158	0.00	13.27
28	P	Benzo[g,h,i]perylene	1.041	1.057	-1.5	145	0.00	13.67

(#) = Out of Range SPCC's out = 0 CCC's out = 0
7G10836.D simpahf7gD0072120.m Wed Aug 12 07:25:19 2020

Initial Calibration Summary

Job Number: FA77576
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICC2918
Lab FileID: X071368.D

Response Factor Report MSBNA05

Method : C:\msdchem\1\MET...DApp9SX-062320.m (RTE Integrator)
Title : SW846 8270D OR EPA 625
Last Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration

Calibration Files
5 =x071365.D 10 =x071366.D 25 =x071367.D 50 =x071368.D
60 =x071369.D 75 =x071370.D 100 =x071363.D 1 =x071364.D

Compound	5	10	25	50	60	75	100	1	Avg	%RSD
1) I 1,4-Dichlorobenzene-d	ISTD									
2) 1,4-Dioxane	0.711	0.724	0.687	0.636	0.644	0.662	0.662	0.758	0.686	6.21
3) N-nitrosodim	1.190	1.266	1.222	1.164	1.205	1.200	1.225	1.265	1.217	2.92
4) Pyridine	1.577	1.700	1.694	1.633	1.650	1.727	1.789	1.572	1.668	4.46
5) Benzaldehyde	1.252	1.271	1.203	1.150	1.174	1.195	1.199	1.094	1.192	4.67
6) Aniline	2.189	2.279	2.301	2.433	2.498	2.578	2.594	2.152	2.378	7.23
7) 2-Fluorophen	1.423	1.476	1.418	1.367	1.408	1.439	1.473	1.470	1.434	2.66
8) bis(2-Chloro	1.365	1.441	1.440	1.458	1.497	1.530	1.541	1.467	1.468	3.85
9) Phenol-d5	1.626	1.725	1.686	1.650	1.700	1.780	1.834	1.649	1.706	4.17
10) Phenol	1.750	1.907	1.935	2.105	2.182	2.263	2.234	1.815	2.024	9.76
11) 2-Chlorophen	1.355	1.482	1.495	1.556	1.601	1.673	1.694	1.387	1.530	8.10
12) 1,3-Dichloro	1.509	1.572	1.555	1.562	1.604	1.641	1.662	1.614	1.590	3.14
13) 1,4-Dichloro	1.614	1.663	1.648	1.669	1.695	1.732	1.741	1.698	1.682	2.52
14) 1,2-Dichloro	1.497	1.568	1.560	1.591	1.631	1.678	1.694	1.566	1.598	4.11
15) Benzyl alcoh	0.940	1.027	1.049	1.061	1.086	1.118	1.131		1.059	6.06
16) 2,2'-Oxybis(	3.082	3.186	3.158	3.042	3.023	3.037	2.907	3.238	3.084	3.44
17) 2-Methylphen	1.363	1.447	1.467	1.488	1.503	1.535	1.564	1.281	1.456	6.39
18) Acetophenone	2.226	2.265	2.217	2.156	2.165	2.173	2.176	1.858	2.154	5.83
19) Hexachloroet	0.595	0.626	0.633	0.627	0.636	0.652	0.669	0.615	0.632	3.50
20) N-Nitroso-di	1.126	1.161	1.180	1.155	1.147	1.135	1.123	1.075	1.138	2.78
21) 3&4-Methylph	1.434	1.542	1.573	1.532	1.553	1.549	1.523	1.334	1.505	5.35
22) I Naphthalene-d8	ISTD									
23) Nitrobenzene	0.388	0.409	0.411	0.407	0.423	0.424	0.433	0.410	0.413	3.30
24) Nitrobenzene	0.390	0.405	0.412	0.406	0.419	0.417	0.422	0.400	0.409	2.64
25) Isophorone	0.713	0.751	0.733	0.710	0.733	0.729	0.741	0.729	0.730	1.84
26) 2-Nitropheno	0.166	0.185	0.197	0.196	0.207	0.211	0.220	0.173	0.194	9.64
27) 2,4-Dimethyl	0.344	0.367	0.359	0.360	0.376	0.375	0.379	0.326	0.361	5.02
28) O,O,O-Trieth	0.150	0.156	0.152	0.151	0.157	0.157	0.162	0.139	0.153	4.56
29) bis(2-Chloro	0.404	0.424	0.433	0.421	0.436	0.436	0.427	0.434	0.427	2.52
30) Benzoic Acid	0.149	0.220	0.274	0.309	0.333	0.341	0.351		0.282	26.36
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9977										
Response Ratio = 0.00000 + 0.24212 *A + 0.04845 *A^2										
31) 2,4-Dichloro	0.264	0.288	0.288	0.295	0.309	0.310	0.318	0.255	0.291	7.58
32) 1,2,4-Trichl	0.280	0.292	0.291	0.289	0.302	0.303	0.312	0.309	0.297	3.74
33) alpha-Terpin									0.000	-1.00
34) Naphthalene	1.046	1.101	1.085	1.072	1.094	1.085	1.086	1.109	1.085	1.77
35) 4-Chloroanil	0.442	0.466	0.467	0.458	0.468	0.461	0.452	0.450	0.458	2.04
36) 2,6-Dichloro	0.279	0.302	0.300	0.296	0.304	0.301	0.304	0.287	0.297	3.08
37) Hexachlorobu	0.136	0.145	0.142	0.143	0.150	0.152	0.156	0.148	0.147	4.34
38) Caprolactam	0.124	0.131	0.123	0.119	0.125	0.124	0.127	0.093	0.121	9.60
39) 4-Chloro-3-m	0.292	0.322	0.312	0.308	0.321	0.321	0.328	0.277	0.310	5.59
40) 2-Methylnaph	0.702	0.739	0.705	0.699	0.717	0.722	0.728	0.726	0.717	1.96
41) 1-Methylnaph	0.667	0.702	0.671	0.671	0.698	0.692	0.695	0.697	0.687	2.09
42) 1,2,4,5-Tetr	0.281	0.291	0.290	0.296	0.306	0.312	0.312	0.300	0.298	3.73

Initial Calibration Summary

Job Number: FA77576 **Sample:** SX2918-ICC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X071368.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

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43) I   Acenaphthene-d10      ----------------ISTD--------------------
44) Hexachlorocy 0.229 0.260 0.295 0.325 0.338 0.355 0.370 0.218 0.299  19.32
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9995
              Response Ratio = 0.00000 + 0.26566 *A + 0.04434 *A^2

45) 2,4,6-Trichl 0.331 0.351 0.366 0.380 0.389 0.395 0.401 0.324 0.367   7.92
46) 2,4,5-Trichl 0.355 0.395 0.402 0.413 0.431 0.437 0.446 0.345 0.403   9.19
47) 2-Fluorobiph 1.375 1.424 1.416 1.450 1.485 1.499 1.490 1.444 1.448   2.94
48) 1,1'-Bipheny 1.712 1.692 1.626 1.633 1.671 1.655 1.625 1.452 1.633   4.88
49) 2-Chloronaph 1.160 1.220 1.228 1.239 1.265 1.265 1.239 1.190 1.226   2.93
50) 2-Nitroanili 0.423 0.458 0.466 0.458 0.471 0.471 0.467 0.396 0.451   6.00
51) p-Dinitroben 0.215 0.247 0.263 0.266 0.278 0.276 0.282 0.196 0.253  12.42
52) Acenaphthyle 1.886 2.017 2.013 2.031 2.066 2.065 2.012 1.893 1.998   3.51
53) Dimethylphth 1.378 1.419 1.388 1.374 1.427 1.420 1.416 1.467 1.411   2.18
54) m-Dinitroben 0.211 0.229 0.244 0.248 0.255 0.262 0.263 0.169 0.235  13.54
55) 2,6-Dinitrot 0.314 0.327 0.330 0.342 0.349 0.355 0.355 0.293 0.333   6.50
56) o-Dinitroben 0.323 0.343 0.328 0.311 0.312 0.300 0.290 0.344 0.319   6.08
57) Acenaphthene 1.292 1.345 1.321 1.312 1.346 1.333 1.310 1.370 1.329   1.88
58) 3-Nitroanili 0.345 0.363 0.377 0.380 0.390 0.393 0.392 0.292 0.366   9.34
59) 2,4-Dinitrop 0.073 0.109 0.151 0.176 0.193 0.200 0.209       0.159  32.16
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9971
              Response Ratio = 0.00000 + 0.12676 *A + 0.03612 *A^2

60) Dibenzofuran 1.728 1.800 1.775 1.734 1.783 1.753 1.720 1.894 1.773   3.18
61) 2,4-Dinitrot 0.411 0.429 0.434 0.433 0.446 0.443 0.444 0.357 0.425   6.98
62) 4-Nitropheno 0.168 0.192 0.209 0.209 0.219 0.218 0.218       0.205   9.05
63) 2,3,5,6-Tetr 0.254 0.285 0.304 0.314 0.329 0.335 0.339 0.217 0.297  14.44
64) 2,3,4,6-Tetr 0.278 0.302 0.311 0.317 0.331 0.334 0.341 0.274 0.311   8.06
65) Fluorene     1.351 1.431 1.384 1.362 1.389 1.397 1.352 1.402 1.384   2.00
66) 4-Chlorophen 0.642 0.669 0.666 0.667 0.692 0.680 0.665 0.662 0.668   2.12
67) Diethylphtha 1.341 1.431 1.411 1.398 1.451 1.446 1.441 1.357 1.409   2.94
68) Thionazin    0.310 0.327 0.310 0.301 0.310 0.290 0.280 0.267 0.299   6.43
69) 4-Nitroanili 0.377 0.407 0.426 0.414 0.433 0.430 0.426 0.349 0.408   7.33

70) I   Phenanthrene-d10      ----------------ISTD--------------------
71) 4,6-Dinitro- 0.081 0.110 0.135 0.149 0.159 0.166 0.173 0.043 0.127  36.13
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9986
              Response Ratio = 0.00000 + 0.11526 *A + 0.02503 *A^2

72) n-Nitrosodip 0.565 0.595 0.614 0.612 0.634 0.639 0.654 0.659 0.622   5.05
73) Diphenylamin 0.678 0.714 0.737 0.734 0.761 0.767 0.785 0.659 0.729   5.99
74) 1,2-Diphenyl 0.851 0.900 0.909 0.903 0.925 0.925 0.923 0.836 0.896   3.85
75) 2,4,6-Tribro 0.068 0.075 0.083 0.089 0.094 0.098 0.106 0.063 0.084  17.77
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9999
              Response Ratio = 0.00000 + 0.07262 *A + 0.00671 *A^2

76) Sulfotep     0.130 0.137 0.136 0.138 0.142 0.140 0.139 0.091 0.132  12.72
77) Phorate      0.447 0.480 0.486 0.484 0.501 0.496 0.501 0.299 0.462  14.76
78) 4-Bromopheny 0.174 0.183 0.189 0.192 0.203 0.211 0.220 0.164 0.192   9.84
79) Hexachlorobe 0.168 0.176 0.178 0.190 0.198 0.205 0.217 0.202 0.192   8.83
80) Dimethoate   0.288 0.310 0.321 0.319 0.333 0.327 0.329 0.195 0.303  15.11
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9997
              Response Ratio = 0.00000 + 0.31064 *A + 0.00877 *A^2

81) Simazine     0.128 0.137 0.139 0.139 0.145 0.148 0.152       0.141   5.71
82) Atrazine     0.225 0.230 0.233 0.234 0.248 0.249 0.281 0.169 0.234  13.47
83) Pentachlorop 0.074 0.098 0.114 0.129 0.137 0.141 0.146       0.120  21.87
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9987
              Response Ratio = 0.00000 + 0.10286 *A + 0.01886 *A^2
```

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 84) Phenanthrene 1.182 1.201 1.201 1.202 1.220 1.221 1.207 1.237 1.209   1.39
 85) Anthracene   1.186 1.242 1.266 1.279 1.313 1.323 1.308 1.162 1.260   4.73
 86) Disulfoton   0.478 0.505 0.514 0.505 0.518 0.504 0.481 0.360 0.483  10.69
 87) Carbazole    1.042 1.108 1.122 1.110 1.156 1.160 1.177 1.018 1.112   5.07
 88) Methyl Parat 0.237 0.267 0.277 0.275 0.285 0.281 0.281 0.129 0.254  20.77
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9996
               Response Ratio = 0.00000 + 0.26658 *A + 0.00720 *A^2

 89) Di-n-butylph 1.126 1.246 1.291 1.303 1.346 1.354 1.364 0.897 1.241  12.82
 90) Ethyl Parath 0.128 0.145 0.156 0.159 0.170 0.169 0.174 0.066 0.146  24.35
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9995
               Response Ratio = 0.00000 + 0.14462 *A + 0.01269 *A^2

 91) Fluoranthene 1.039 1.104 1.114 1.125 1.183 1.198 1.226 0.984 1.121   7.27

 92) I   Chrysene-d12          ----------------ISTD---------------------
 93) Benzidine    0.479 0.644 0.768 0.799 0.838 0.837 0.830 0.311 0.688  28.62
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9980
               Response Ratio = 0.00000 + 0.70508 *A + 0.06135 *A^2

 94) Pyrene       1.601 1.685 1.664 1.632 1.720 1.729 1.778 1.477 1.661   5.61
 95) Terphenyl-d1 0.982 1.041 1.070 1.066 1.107 1.134 1.181 0.922 1.063   7.78
 96) Famphur      0.386 0.427 0.374 0.288 0.273 0.248 0.213 0.212 0.303  27.31
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9960
               Response Ratio = 0.00000 + 0.39855 *A + -0.07727 *A^2

 97) Butylbenzylp 0.558 0.646 0.694 0.682 0.720 0.721 0.741 0.383 0.643  18.60
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9995
               Response Ratio = 0.00000 + 0.63866 *A + 0.04308 *A^2

 98) 3,3'-Dichlor 0.308 0.359 0.405 0.426 0.444 0.453 0.462 0.236 0.387  20.72
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9994
               Response Ratio = 0.00000 + 0.37193 *A + 0.03988 *A^2

 99) Benzo[a]anth 1.168 1.236 1.242 1.247 1.293 1.316 1.337 1.218 1.257   4.38
100) Chrysene     1.241 1.323 1.327 1.320 1.380 1.376 1.405 1.340 1.339   3.75
101) bis(2-Ethylh 0.646 0.797 0.924 0.958 1.001 0.999 1.031 0.365 0.840  27.50
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9991
               Response Ratio = 0.00000 + 0.83541 *A + 0.08609 *A^2


102) I   Perylene-d12          ----------------ISTD---------------------
103) Di-n-octylph 1.335 0.994 1.396 1.627 1.765 1.831 1.930 1.181 1.507  22.09
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9981
               Response Ratio = 0.00000 + 1.23657 *A + 0.29737 *A^2

104) Benzo[b]fluo 0.973 0.917 1.098 1.164 1.243 1.263 1.304 0.787 1.094  16.94
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9995
               Response Ratio = 0.00000 + 1.06371 *A + 0.09950 *A^2

105) Benzo[k]fluo 1.269 1.317 1.401 1.411 1.503 1.538 1.590 1.331 1.420   8.05
106) Benzo[a]pyre 0.862 0.904 1.078 1.121 1.189 1.207 1.262 0.677 1.037  19.61
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9997
               Response Ratio = 0.00000 + 1.01363 *A + 0.10108 *A^2

107) Indeno[1,2,3 0.504 0.549 0.711 0.768 0.844 0.911 0.995 0.311 0.699  32.88
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9994
               Response Ratio = 0.00000 + 0.55750 *A + 0.18016 *A^2
```

Initial Calibration Summary

Job Number: FA77576 **Sample:** SX2918-ICC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X071368.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

```
108) Dibenz[a,h]a 0.532 0.713 0.820 0.873 0.961 1.008 1.191 0.492 0.824  28.93
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9991
               Response Ratio = 0.00000 + 0.61590 *A + 0.22433 *A^2

109) Benzo[g,h,i] 0.833 0.963 1.038 1.080 1.165 1.209 1.315 0.793 1.049  17.29
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9998
               Response Ratio = 0.00000 + 0.90101 *A + 0.16537 *A^2


110)     1,4-Dichlorobenzene-d ----------------ISTD---------------------
111) 2-Picoline   1.874 1.896 1.870 1.997 1.959 1.901 1.883 1.882 1.908   2.40
112) N-Nitrosomet 1.223 1.268 1.258 1.375 1.364 1.326 1.315 1.483 1.327   6.20
113) Methyl metha 0.891 0.907 0.907 0.990 0.966 0.949 0.928 0.904 0.930   3.77
114) N-Nitrosodie 0.726 0.747 0.754 0.837 0.817 0.812 0.794 0.712 0.775   5.97
115) Ethyl methan 1.208 1.246 1.243 1.371 1.341 1.317 1.293 1.234 1.281   4.51
116) Pentachloroe 0.516 0.519 0.526 0.579 0.572 0.565 0.555 0.533 0.546   4.58
117) N-Nitrosopyr 0.645 0.686 0.695 0.778 0.754 0.749 0.733 0.566 0.701   9.89
118) N-Nitrosomor 1.209 1.237 1.269 1.404 1.350 1.339 1.260 1.160 1.279   6.29
119) O-Toluidine  2.430 2.487 2.531 2.899 2.822 2.786 2.681 2.313 2.619   7.99

120)     Naphthalene-d8A       ----------------ISTD---------------------
121) N-Nitrosopip 0.362 0.370 0.369 0.387 0.374 0.365 0.351 0.367 0.368   2.74
122) A,A-Dimethyl 1.434 1.467 1.501 1.579 1.541 1.522 1.516 1.177 1.467   8.53
123) Hexachloropr 0.139 0.153 0.167 0.190 0.190 0.187 0.186 0.132 0.168  14.23
124) N-Nitrosodi- 0.247 0.249 0.249 0.344 0.339 0.327 0.315 0.229 0.287  16.73
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9932
               Response Ratio = 0.00000 + 0.28665 *A + 0.01834 *A^2

125) p-Phenylened 0.414 0.416 0.424 0.419 0.389 0.357 0.305 0.313 0.380  12.80
126) Isosafrole   0.259 0.267 0.270 0.290 0.289 0.281 0.272 0.253 0.273   4.87

127)     Acenaphthene-d10A     ----------------ISTD---------------------
128) Safrole      0.477 0.499 0.505 0.563 0.562 0.563 0.555 0.484 0.526   7.26
129) 1-Chloronaph 1.146 1.193 1.214 1.345 1.339 1.316 1.263 1.207 1.253   5.94
130) Diphenyl Eth 0.793 0.848 0.861 0.935 0.927 0.914 0.878 0.846 0.875   5.54
131) 1,4-Naphthoq 0.431 0.487 0.535 0.559 0.555 0.508       0.354 0.490  15.24
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9972
               Response Ratio = 0.00000 + 0.52072 *A + 0.00793 *A^2

132) Pentachlorob 0.412 0.426 0.425 0.454 0.447 0.454 0.446 0.462 0.441   3.99
133) 1-Naphthylam 1.327 1.368 1.363 1.451 1.453 1.431 1.415 1.307 1.389   4.05
134) 2-Naphthylam 1.401 1.479 1.475 1.570 1.540 1.549 1.492 1.373 1.485   4.70
135) 5-Nitro-o-to 0.339 0.381 0.414 0.462 0.461 0.463 0.463 0.285 0.409  16.64
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9989
               Response Ratio = 0.00000 + 0.40695 *A + 0.02715 *A^2


136)     Phenanthrene-d10A     ----------------ISTD---------------------
137) 1,3,5-Trinit 0.094 0.134 0.169 0.209 0.214 0.215 0.216 0.067 0.165  36.38
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9954
               Response Ratio = 0.00000 + 0.15899 *A + 0.02711 *A^2

138) Diallate     0.624 0.636 0.633 0.651 0.634 0.612 0.593 0.631 0.627   2.76
139) Phenacetin   0.339 0.366 0.388 0.430 0.427 0.423 0.423 0.284 0.385  13.64
140) 4-Aminobiphe 0.808 0.842 0.858 0.877 0.820 0.786 0.730 0.769 0.811   6.01
141) Pronamide    0.281 0.309 0.322 0.352 0.347 0.339 0.332 0.232 0.314  12.86
142) Pentachloron 0.074 0.075 0.079 0.085 0.082 0.082 0.080 0.063 0.078   9.11
143) 4-Nitroquino 0.018 0.030 0.053 0.075 0.076 0.073 0.068 0.012 0.051  53.03
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9905
               Response Ratio = 0.00000 + 0.07354 *A + -0.00135 *A^2
```

Initial Calibration Summary

Job Number: FA77576 **Sample:** SX2918-ICC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X071368.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

```
144) Methapyrilen 0.181 0.214 0.234 0.232 0.224 0.213 0.202 0.142 0.205  14.93
145) Isodrin      0.111 0.115 0.110 0.117 0.114 0.112 0.111 0.117 0.113   2.55

146) I   Chrysene-d12A         ----------------ISTD--------------------
147) Aramite      0.104 0.124 0.149 0.178 0.181 0.184 0.182 0.063 0.146  30.73
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9970
               Response Ratio = 0.00000 + 0.14341 *A + 0.01870 *A^2

148) p-(Dimethyla 0.363 0.426 0.456 0.517 0.518 0.515 0.504 0.277 0.447  19.70
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9989
               Response Ratio = 0.00000 + 0.50583 *A + 0.00152 *A^2

149) Chlorobenzil 0.445 0.483 0.521 0.594 0.600 0.596 0.580 0.356 0.522  16.99
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9981
               Response Ratio = 0.00000 + 0.53019 *A + 0.02834 *A^2

150) Kepone                                              0.018       0.018   0.00
151) 3,3'-Dimethy 0.603 0.685 0.699 0.742 0.708 0.658 0.599 0.475 0.646  13.16
152) 2-Acetylamin 0.341 0.437 0.533 0.619 0.627 0.632 0.632 0.223 0.506  30.99
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9971
               Response Ratio = 0.00000 + 0.50255 *A + 0.06226 *A^2


153) I   Perylene-d12A         ----------------ISTD--------------------
154) 7,12-Dimethy 0.478 0.510 0.548 0.614 0.612 0.611 0.607 0.461 0.555  11.68
155) Hexachloroph 0.018 0.046 0.084 0.113 0.115 0.121 0.123       0.089  46.87
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9919
               Response Ratio = 0.00000 + 0.07118 *A + 0.00238 *A^2

156) 3-Methylchol 0.397 0.451 0.491 0.557 0.565 0.575 0.588 0.378 0.500  16.70
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9995
               Response Ratio = 0.00000 + 0.50722 *A + 0.03377 *A^2

157) Dibenz(a,j)a 0.559 0.566 0.633 0.755 0.777 0.804 0.865 0.307 0.658  27.54
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9995
               Response Ratio = 0.00000 + 0.57753 *A + 0.12012 *A^2

 ------------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

           8270DApp9SX-062320.m        Wed Jun 24 13:09:08 2020
```

Initial Calibration Verification

Job Number: FA77576
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071372.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\0623_sx2918\x071372.D Vial: 18
Acq On : 23 Jun 2020 4:58 pm Operator: marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\MET...DApp9SX-062320.m (RTE Integrator)
Title : SW846 8270D OR EPA 625
Last Update : Wed Jun 24 12:54:05 2020
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	108	0.00	6.01
2		1,4-Dioxane	50.000	47.566	4.9	111	0.01	2.85
3		N-nitrosodimethylamine	50.000	46.264	7.5	104	0.00	3.18
4		Pyridine		----------NA----------				
5	P	Benzaldehyde	50.000	37.510	25.0#	84	0.00	5.53
6		Aniline		----------NA----------				
7	S	2-Fluorophenol		----------NA----------				
8	P	bis(2-Chloroethyl)ether	50.000	42.881	14.2	93	0.00	5.73
9	S	Phenol-d5		----------NA----------				
10	P	Phenol	50.000	40.785	18.4	84	0.00	5.62
11	P	2-Chlorophenol	50.000	45.244	9.5	96	0.00	5.77
12		1,3-Dichlorobenzene	50.000	47.671	4.7	105	0.00	5.95
13		1,4-Dichlorobenzene	50.000	47.894	4.2	104	0.00	6.03
14		1,2-Dichlorobenzene	50.000	46.632	6.7	101	0.00	6.19
15		Benzyl alcohol		----------NA----------				
16	P	2,2'-Oxybis(1-chloropropa	50.000	46.757	6.5	102	0.00	6.33
17	P	2-Methylphenol	50.000	44.371	11.3	94	0.00	6.29
18	P	Acetophenone	50.000	45.454	9.1	98	0.00	6.45
19	P	Hexachloroethane	50.000	49.837	0.3	108	0.00	6.57
20	P	N-Nitroso-di-n-propylamin	50.000	45.372	9.3	96	0.00	6.46
21	P	3&4-Methylphenol	100.000	92.840	7.2	86	0.00	6.46
22	I	Naphthalene-d8	40.000	40.000	0.0	104	0.00	7.43
23	S	Nitrobenzene-d5		----------NA----------				
24	P	Nitrobenzene	50.000	46.237	7.5	97	0.00	6.64
25	P	Isophorone	50.000	42.340	15.3	91	0.00	6.92
26	P	2-Nitrophenol	50.000	48.035	3.9	99	0.00	7.00
27	P	2,4-Dimethylphenol	50.000	43.260	13.5	91	0.00	7.06
28		O,O,O-Triethylphosphoroth		----------NA----------				
29	P	bis(2-Chloroethoxy)methan	50.000	46.392	7.2	98	0.00	7.18
		----------	Amount	Calc.	%Drift	----------		
30		Benzoic Acid	100.000	85.627	14.4	75	0.05	7.23
		----------	Amount	Calc.	%Drift	----------		
31	P	2,4-Dichlorophenol	50.000	48.603	2.8	100	0.00	7.28
32		1,2,4-Trichlorobenzene	50.000	48.057	3.9	103	0.00	7.37
33		alpha-Terpineol		----------NA----------				
34	P	Naphthalene	50.000	46.476	7.0	98	0.00	7.46
35	P	4-Chloroaniline		----------NA----------				
36		2,6-Dichlorophenol	50.000	46.579	6.8	97	0.00	7.53
37	P	Hexachlorobutadiene	50.000	49.106	1.8	105	0.00	7.61

Initial Calibration Verification

Job Number: FA77576 **Sample:** SX2918-ICV2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X071372.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

38	P	Caprolactam	50.000	41.944	16.1	89	-0.01	7.95
39	P	4-Chloro-3-methylphenol	50.000	43.610	12.8	92	0.00	8.10
40	P	2-Methylnaphthalene		----------NA----------				
41		1-Methylnaphthalene	50.000	41.547	16.9	89	0.00	8.37
42	P	1,2,4,5-Tetrachlorobenzen	50.000	43.915	12.2	92	0.00	8.45
43	I	Acenaphthene-d10	40.000	40.000	0.0	97	0.00	9.48
		----------	Amount	Calc.	%Drift		----------	
44	P	Hexachlorocyclopentadiene	50.000	48.130	3.7	91	0.00	8.45
		----------	Amount	Calc.	%Drift		----------	
45	P	2,4,6-Trichlorophenol	50.000	51.185	-2.4	95	0.00	8.59
46	P	2,4,5-Trichlorophenol	50.000	52.484	-5.0	99	0.00	8.63
47	S	2-Fluorobiphenyl		----------NA----------				
48	P	1,1'-Biphenyl	50.000	47.048	5.9	91	0.00	8.81
49	P	2-Chloronaphthalene	50.000	50.632	-1.3	97	0.00	8.83
50	P	2-Nitroaniline		----------NA----------				
51		p-Dinitrobenzene		----------NA----------				
52	P	Acenaphthylene	50.000	51.239	-2.5	97	0.00	9.31
53	P	Dimethylphthalate	50.000	47.010	6.0	93	0.00	9.19
54		m-Dinitrobenzene		----------NA----------				
55	P	2,6-Dinitrotoluene	50.000	45.174	9.7	85	0.00	9.25
56		o-Dinitrobenzene		----------NA----------				
57	P	Acenaphthene	50.000	47.244	5.5	92	0.00	9.51
58	P	3-Nitroaniline		----------NA----------				
		----------	Amount	Calc.	%Drift		----------	
59	P	2,4-Dinitrophenol	100.000	93.332	6.7	78	0.00	9.56
		----------	Amount	Calc.	%Drift		----------	
60	P	Dibenzofuran		----------NA----------				
61	P	2,4-Dinitrotoluene	50.000	49.367	1.3	93	0.00	9.72
62	P	4-Nitrophenol	100.000	96.190	3.8	74	0.00	9.65
63		2,3,5,6-Tetrachlorophenol		----------NA----------				
64	P	2,3,4,6-Tetrachlorophenol	50.000	45.098	9.8	85	0.00	9.87
65	P	Fluorene	50.000	48.561	2.9	95	0.00	10.12
66	P	4-Chlorophenyl-phenylethe	50.000	49.551	0.9	96	0.00	10.14
67	P	Diethylphthalate	50.000	47.789	4.4	93	0.00	10.03
68		Thionazin		----------NA----------				
69	P	4-Nitroaniline		----------NA----------				
70	I	Phenanthrene-d10	40.000	40.000	0.0	93	0.00	11.22
		----------	Amount	Calc.	%Drift		----------	
71	P	4,6-Dinitro-2-methylpheno	100.000	94.066	5.9	77	0.00	10.19
		----------	Amount	Calc.	%Drift		----------	
72	P	n-Nitrosodiphenylamine		----------NA----------				
73		Diphenylamine		----------NA----------				
74		1,2-Diphenylhydrazine	50.000	47.822	4.4	88	0.00	10.33
		----------	Amount	Calc.	%Drift		----------	
75	S	2,4,6-Tribromophenol		----------NA----------				
		----------	Amount	Calc.	%Drift		----------	
76		Sulfotep		----------NA----------				
77		Phorate		----------NA----------				
78	P	4-Bromophenyl-phenylether	50.000	49.458	1.1	92	0.00	10.72
79	P	Hexachlorobenzene	50.000	45.838	8.3	86	0.00	10.77

Initial Calibration Verification

Job Number: FA77576
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071372.D

			Amount	Calc.	%Drift			
80		Dimethoate		NA				
81		Simazine		NA				
82	P	Atrazine	50.000	43.244	13.5	80	0.00	10.94
83	P	Pentachlorophenol	100.000	89.053	10.9	72	0.00	11.01
84	P	Phenanthrene	50.000	47.649	4.7	89	0.00	11.25
85	P	Anthracene	50.000	46.781	6.4	86	0.00	11.32
86		Disulfoton		NA				
87	P	Carbazole		NA				
88		Methyl Parathion		NA				
89	P	Di-n-butylphthalate	50.000	49.309	1.4	87	0.00	11.97
90		Ethyl Parathion		NA				
91	P	Fluoranthene	50.000	45.798	8.4	85	0.00	12.66
92	I	Chrysene-d12	40.000	40.000	0.0	80	0.00	14.49
93		Benzidine		NA				
94	P	Pyrene	50.000	49.982	0.0	82	0.00	12.92
95	S	Terphenyl-d14		NA				
96		Famphur		NA				
97	P	Butylbenzylphthalate	50.000	50.948	-1.9	83	0.00	13.79
98	P	3,3'-Dichlorobenzidine		NA				
99	P	Benzo[a]anthracene	50.000	47.538	4.9	77	0.00	14.48
100	P	Chrysene	50.000	49.114	1.8	80	0.00	14.53
101	P	bis(2-Ethylhexyl)phthalat	50.000	50.757	-1.5	80	0.00	14.64
102	I	Perylene-d12	40.000	40.000	0.0	89	0.00	16.81
103	P	Di-n-octylphthalate	50.000	46.197	7.6	79	0.00	15.68
104	P	Benzo[b]fluoranthene	50.000	47.853	4.3	86	0.00	16.17
105	P	Benzo[k]fluoranthene	50.000	47.749	4.5	85	0.00	16.22

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Sample: SX2918-ICV2918
Lab FileID: X071372.D

			Amount	Calc.	%Drift			
106	P	Benzo[a]pyrene	50.000	48.306	3.4	87	0.00	16.71
107	P	Indeno[1,2,3-cd]pyrene	50.000	51.104	-2.2	93	0.00	18.45
108	P	Dibenz[a,h]anthracene	50.000	50.722	-1.4	93	0.00	18.50
109	P	Benzo[g,h,i]perylene	50.000	51.848	-3.7	95	0.00	18.80

		Amount	Calc.	%Drift			
110	1,4-Dichlorobenzene-d4A	40.000	40.000	0.0	121	0.00	6.01
111	2-Picoline		NA				
112	N-Nitrosomethylethylamine		NA				
113	Methyl methanesulfonate		NA				
114	N-Nitrosodiethylamine		NA				
115	Ethyl methanesulfonate		NA				
116	Pentachloroethane		NA				
117	N-Nitrosopyrrolidine		NA				
118	N-Nitrosomorpholine		NA				
119	O-Toluidine		NA				
120	Naphthalene-d8A	40.000	40.000	0.0	116	0.00	7.43
121	N-Nitrosopiperidine		NA				
122	A,A-Dimethylphenethylamin		NA				
123	Hexachloropropene		NA				

		Amount	Calc.	%Drift
124	N-Nitrosodi-n-butylamine		NA	

		Amount	Calc.	%Drift
125	p-Phenylenediamine		NA	
126	Isosafrole		NA	
127	Acenaphthene-d10A	40.000	40.000	0.0
128	Safrole		NA	
129	1-Chloronaphthalene		NA	
130	Diphenyl Ether		NA	

		Amount	Calc.	%Drift
131	1,4-Naphthoquinone		NA	

		Amount	Calc.	%Drift
132	Pentachlorobenzene		NA	
133	1-Naphthylamine		NA	
134	2-Naphthylamine		NA	

		Amount	Calc.	%Drift
135	5-Nitro-o-toluidine		NA	

		Amount	Calc.	%Drift			
136	Phenanthrene-d10A	40.000	40.000	0.0	93	0.00	11.22

		Amount	Calc.	%Drift
137	1,3,5-Trinitrobenzene		NA	

		Amount	Calc.	%Drift
138	Diallate		NA	
139	Phenacetin		NA	
140	4-Aminobiphenyl		NA	
141	Pronamide		NA	

Initial Calibration Verification

Job Number: FA77576 **Sample:** SX2918-ICV2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X071372.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

142		Pentachloronitrobenzene		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
143		4-Nitroquinoline 1-Oxide		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
144		Methapyrilene		----------NA----------				
145		Isodrin		----------NA----------				
146	I	Chrysene-d12A	40.000	40.000	0.0	94	0.00	14.49
		---------- Amount	Calc.	%Drift	----------			
147		Aramite		----------NA----------				
148		p-(Dimethylamine)azobenze		----------NA----------				
149		Chlorobenzilate		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
150		Kepone		----------NA----------				
151		3,3'-Dimethylbenzidine		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
152		2-Acetylaminofluorene		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
153	I	Perylene-d12A	40.000	40.000	0.0	91	-0.02	16.81
154		7,12-Dimethylbenz(a)anthr		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
155		Hexachlorophene		----------NA----------				
156		3-Methylcholanthrene		----------NA----------				
157		Dibenz(a,j)acridine		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
x071368.D 8270DApp9SX-062320.m Wed Jun 24 13:03:01 2020

Initial Calibration Verification

Job Number: FA77576
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071373.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\0623_sx2918\x071373.D Vial: 19
Acq On : 23 Jun 2020 5:25 pm Operator: marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\MET...DApp9SX-062320.m (RTE Integrator)
Title : SW846 8270D OR EPA 625
Last Update : Tue Jun 23 17:15:34 2020
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	88	0.00	6.00
2		1,4-Dioxane		----------NA----------				
3		N-nitrosodimethylamine		----------NA----------				
4		Pyridine	50.000	62.306	-24.6#	112	0.00	3.20
5	P	Benzaldehyde		----------NA----------				
6		Aniline	50.000	48.306	3.4	83	0.00	5.65
7	S	2-Fluorophenol		----------NA----------				
8	P	bis(2-Chloroethyl)ether		----------NA----------				
9	S	Phenol-d5		----------NA----------				
10	P	Phenol		----------NA----------				
11	P	2-Chlorophenol		----------NA----------				
12		1,3-Dichlorobenzene		----------NA----------				
13		1,4-Dichlorobenzene		----------NA----------				
14		1,2-Dichlorobenzene		----------NA----------				
15		Benzyl alcohol	50.000	52.065	-4.1	92	0.00	6.16
16	P	2,2'-Oxybis(1-chloropropa		----------NA----------				
17	P	2-Methylphenol		----------NA----------				
18	P	Acetophenone		----------NA----------				
19	P	Hexachloroethane		----------NA----------				
20	P	N-Nitroso-di-n-propylamin		----------NA----------				
21	P	3&4-Methylphenol		----------NA----------				
22	I	Naphthalene-d8	40.000	40.000	0.0	84	0.00	7.43
23	S	Nitrobenzene-d5		----------NA----------				
24	P	Nitrobenzene		----------NA----------				
25	P	Isophorone		----------NA----------				
26	P	2-Nitrophenol		----------NA----------				
27	P	2,4-Dimethylphenol		----------NA----------				
28		O,O,O-Triethylphosphoroth		----------NA----------				
29	P	bis(2-Chloroethoxy)methan		----------NA----------				

		----------	Amount	Calc.	%Drift	----------		
30		Benzoic Acid		----------NA----------				

		----------	Amount	Calc.	%Drift	----------		
31	P	2,4-Dichlorophenol		----------NA----------				
32		1,2,4-Trichlorobenzene		----------NA----------				
33		alpha-Terpineol		----------NA----------				
34	P	Naphthalene		----------NA----------				
35	P	4-Chloroaniline	50.000	57.182	-14.4	96	0.00	7.53
36		2,6-Dichlorophenol		----------NA----------				
37	P	Hexachlorobutadiene		----------NA----------				

Initial Calibration Verification

Job Number: FA77576
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071373.D

38	P	Caprolactam		----------NA----------				
39	P	4-Chloro-3-methylphenol		----------NA----------				
40	P	2-Methylnaphthalene	50.000	54.134	-8.3	94	0.00	8.26
41		1-Methylnaphthalene		----------NA----------				
42	P	1,2,4,5-Tetrachlorobenzen		----------NA----------				
43	I	Acenaphthene-d10	40.000	40.000	0.0	96	0.00	9.48
		---------- Amount		Calc.	%Drift	----------		
44	P	Hexachlorocyclopentadiene		----------NA----------				
		---------- Amount		Calc.	%Drift	----------		
45	P	2,4,6-Trichlorophenol		----------NA----------				
46	P	2,4,5-Trichlorophenol		----------NA----------				
47	S	2-Fluorobiphenyl		----------NA----------				
48	P	1,1'-Biphenyl		----------NA----------				
49	P	2-Chloronaphthalene		----------NA----------				
50	P	2-Nitroaniline	50.000	62.603	-25.2#	119	0.00	8.96
51		p-Dinitrobenzene		----------NA----------				
52	P	Acenaphthylene		----------NA----------				
53	P	Dimethylphthalate		----------NA----------				
54		m-Dinitrobenzene	50.000	52.160	-4.3	95	0.00	9.21
55	P	2,6-Dinitrotoluene		----------NA----------				
56		o-Dinitrobenzene		----------NA----------				
57	P	Acenaphthene		----------NA----------				
58	P	3-Nitroaniline	50.000	56.804	-13.6	106	0.00	9.44
		---------- Amount		Calc.	%Drift	----------		
59	P	2,4-Dinitrophenol		----------NA----------				
		---------- Amount		Calc.	%Drift	----------		
60	P	Dibenzofuran	50.000	51.041	-2.1	100	0.00	9.72
61	P	2,4-Dinitrotoluene		----------NA----------				
62	P	4-Nitrophenol		----------NA----------				
63		2,3,5,6-Tetrachlorophenol		----------NA----------				
64	P	2,3,4,6-Tetrachlorophenol		----------NA----------				
65	P	Fluorene		----------NA----------				
66	P	4-Chlorophenyl-phenylethe		----------NA----------				
67	P	Diethylphthalate		----------NA----------				
68		Thionazin		----------NA----------				
69	P	4-Nitroaniline	50.000	49.051	1.9	93	-0.01	10.16
70	I	Phenanthrene-d10	40.000	40.000	0.0	94	0.00	11.22
		---------- Amount		Calc.	%Drift	----------		
71	P	4,6-Dinitro-2-methylpheno		----------NA----------				
		---------- Amount		Calc.	%Drift	----------		
72	P	n-Nitrosodiphenylamine	60.000	55.026	8.3	88	0.00	10.28
73		Diphenylamine	50.000	46.890	6.2	88	0.00	10.28
74		1,2-Diphenylhydrazine		----------NA----------				
		---------- Amount		Calc.	%Drift	----------		
75	S	2,4,6-Tribromophenol		----------NA----------				
		---------- Amount		Calc.	%Drift	----------		
76		Sulfotep		----------NA----------				
77		Phorate		----------NA----------				
78	P	4-Bromophenyl-phenylether		----------NA----------				
79	P	Hexachlorobenzene		----------NA----------				

			Amount	Calc.	%Drift			
80		Dimethoate		NA				
			Amount	Calc.	%Drift			
81		Simazine		NA				
82	P	Atrazine		NA				
			Amount	Calc.	%Drift			
83	P	Pentachlorophenol		NA				
			Amount	Calc.	%Drift			
84	P	Phenanthrene		NA				
85	P	Anthracene		NA				
86		Disulfoton		NA				
87	P	Carbazole	50.000	52.855	-5.7	100	0.00	11.51
			Amount	Calc.	%Drift			
88		Methyl Parathion		NA				
			Amount	Calc.	%Drift			
89	P	Di-n-butylphthalate		NA				
			Amount	Calc.	%Drift			
90		Ethyl Parathion		NA				
			Amount	Calc.	%Drift			
91	P	Fluoranthene		NA				
92	I	Chrysene-d12	40.000	40.000	0.0	90	0.00	14.49
			Amount	Calc.	%Drift			
93		Benzidine	50.000	57.661	-15.3	103	0.00	12.84
			Amount	Calc.	%Drift			
94	P	Pyrene		NA				
95	S	Terphenyl-d14		NA				
			Amount	Calc.	%Drift			
96		Famphur		NA				
97	P	Butylbenzylphthalate		NA				
98	P	3,3'-Dichlorobenzidine	50.000	46.383	7.2	82	0.00	14.48
			Amount	Calc.	%Drift			
99	P	Benzo[a]anthracene		NA				
100	P	Chrysene		NA				
			Amount	Calc.	%Drift			
101	P	bis(2-Ethylhexyl)phthalat		NA				
			Amount	Calc.	%Drift			
102	I	Perylene-d12	40.000	40.000	0.0	92	0.00	16.81
			Amount	Calc.	%Drift			
103	P	Di-n-octylphthalate		NA				
104	P	Benzo[b]fluoranthene		NA				
			Amount	Calc.	%Drift			
105	P	Benzo[k]fluoranthene		NA				

Initial Calibration Verification

Job Number: FA77576
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071373.D

			Amount	Calc.	%Drift			
106	P	Benzo[a]pyrene		----------NA----------				
107	P	Indeno[1,2,3-cd]pyrene		----------NA----------				
108	P	Dibenz[a,h]anthracene		----------NA----------				
109	P	Benzo[g,h,i]perylene		----------NA----------				

		Amount	Calc.	%Drift			
110	1,4-Dichlorobenzene-d4A	40.000	40.000	0.0	99	0.00	6.00
111	2-Picoline		----------NA----------				
112	N-Nitrosomethylethylamine		----------NA----------				
113	Methyl methanesulfonate		----------NA----------				
114	N-Nitrosodiethylamine		----------NA----------				
115	Ethyl methanesulfonate		----------NA----------				
116	Pentachloroethane		----------NA----------				
117	N-Nitrosopyrrolidine		----------NA----------				
118	N-Nitrosomorpholine		----------NA----------				
119	O-Toluidine		----------NA----------				
120	Naphthalene-d8A	40.000	40.000	0.0	94	0.00	7.43
121	N-Nitrosopiperidine		----------NA----------				
122	A,A-Dimethylphenethylamin		----------NA----------				
123	Hexachloropropene		----------NA----------				

		Amount	Calc.	%Drift
124	N-Nitrosodi-n-butylamine		----------NA----------	

		Amount	Calc.	%Drift
125	p-Phenylenediamine		----------NA----------	
126	Isosafrole		----------NA----------	
127	Acenaphthene-d10A	40.000	40.000	0.0 104 0.00 9.48
128	Safrole		----------NA----------	
129	1-Chloronaphthalene		----------NA----------	
130	Diphenyl Ether		----------NA----------	

		Amount	Calc.	%Drift
131	1,4-Naphthoquinone		----------NA----------	

		Amount	Calc.	%Drift
132	Pentachlorobenzene		----------NA----------	
133	1-Naphthylamine		----------NA----------	
134	2-Naphthylamine		----------NA----------	

		Amount	Calc.	%Drift
135	5-Nitro-o-toluidine		----------NA----------	

		Amount	Calc.	%Drift			
136	Phenanthrene-d10A	40.000	40.000	0.0	94	0.00	11.22

		Amount	Calc.	%Drift
137	1,3,5-Trinitrobenzene		----------NA----------	

		Amount	Calc.	%Drift
138	Diallate		----------NA----------	
139	Phenacetin		----------NA----------	
140	4-Aminobiphenyl		----------NA----------	
141	Pronamide		----------NA----------	

Initial Calibration Verification

Job Number: FA77576 **Sample:** SX2918-ICV2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X071373.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

142		Pentachloronitrobenzene		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
143		4-Nitroquinoline 1-Oxide		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
144		Methapyrilene		----------NA----------				
145		Isodrin		----------NA----------				
146	I	Chrysene-d12A	40.000	40.000	0.0	104	0.00	14.49
		---------- Amount	Calc.	%Drift	----------			
147		Aramite		----------NA----------				
148		p-(Dimethylamine)azobenze		----------NA----------				
149		Chlorobenzilate		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
150		Kepone		----------NA----------				
151		3,3'-Dimethylbenzidine		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
152		2-Acetylaminofluorene		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
153	I	Perylene-d12A	40.000	40.000	0.0	94	-0.02	16.81
154		7,12-Dimethylbenz(a)anthr		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
155		Hexachlorophene		----------NA----------				
156		3-Methylcholanthrene		----------NA----------				
157		Dibenz(a,j)acridine		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
x071368.D 8270DApp9SX-062320.m Tue Jun 23 19:08:22 2020

Initial Calibration Verification

Job Number: FA77576
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071374.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\0623_sx2918\x071374.D Vial: 20
Acq On : 23 Jun 2020 5:51 pm Operator: marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\MET...DApp9SX-062320.m (RTE Integrator)
Title : SW846 8270D OR EPA 625
Last Update : Wed Jun 24 09:47:58 2020
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	87	0.00	6.00
2		1,4-Dioxane		----------	NA	----------		
3		N-nitrosodimethylamine		----------	NA	----------		
4		Pyridine		----------	NA	----------		
5	P	Benzaldehyde		----------	NA	----------		
6		Aniline		----------	NA	----------		
7	S	2-Fluorophenol		----------	NA	----------		
8	P	bis(2-Chloroethyl)ether		----------	NA	----------		
9	S	Phenol-d5		----------	NA	----------		
10	P	Phenol		----------	NA	----------		
11	P	2-Chlorophenol		----------	NA	----------		
12		1,3-Dichlorobenzene		----------	NA	----------		
13		1,4-Dichlorobenzene		----------	NA	----------		
14		1,2-Dichlorobenzene		----------	NA	----------		
15		Benzyl alcohol		----------	NA	----------		
16	P	2,2'-Oxybis(1-chloropropa		----------	NA	----------		
17	P	2-Methylphenol		----------	NA	----------		
18	P	Acetophenone		----------	NA	----------		
19	P	Hexachloroethane		----------	NA	----------		
20	P	N-Nitroso-di-n-propylamin		----------	NA	----------		
21	P	3&4-Methylphenol		----------	NA	----------		
22	I	Naphthalene-d8	40.000	40.000	0.0	85	0.00	7.43
23	S	Nitrobenzene-d5		----------	NA	----------		
24	P	Nitrobenzene		----------	NA	----------		
25	P	Isophorone		----------	NA	----------		
26	P	2-Nitrophenol		----------	NA	----------		
27	P	2,4-Dimethylphenol		----------	NA	----------		
28		O,O,O-Triethylphosphoroth	50.000	44.450	11.1	77	-0.01	7.14
29	P	bis(2-Chloroethoxy)methan		----------	NA	----------		
		----------	Amount	Calc.	%Drift	----------		
30		Benzoic Acid		----------	NA	----------		
		----------	Amount	Calc.	%Drift	----------		
31	P	2,4-Dichlorophenol		----------	NA	----------		
32		1,2,4-Trichlorobenzene		----------	NA	----------		
33		alpha-Terpineol		----------	NA	----------		
34	P	Naphthalene		----------	NA	----------		
35	P	4-Chloroaniline		----------	NA	----------		
36		2,6-Dichlorophenol		----------	NA	----------		
37	P	Hexachlorobutadiene		----------	NA	----------		

Initial Calibration Verification

Job Number: FA77576
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071374.D

38	P	Caprolactam		----------NA----------				
39	P	4-Chloro-3-methylphenol		----------NA----------				
40	P	2-Methylnaphthalene		----------NA----------				
41		1-Methylnaphthalene		----------NA----------				
42	P	1,2,4,5-Tetrachlorobenzen		----------NA----------				
43	I	Acenaphthene-d10	40.000	40.000	0.0	84	0.00	9.48
		---------- Amount	Calc.	%Drift	----------			
44	P	Hexachlorocyclopentadiene		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
45	P	2,4,6-Trichlorophenol		----------NA----------				
46	P	2,4,5-Trichlorophenol		----------NA----------				
47	S	2-Fluorobiphenyl		----------NA----------				
48	P	1,1'-Biphenyl		----------NA----------				
49	P	2-Chloronaphthalene		----------NA----------				
50	P	2-Nitroaniline		----------NA----------				
51		p-Dinitrobenzene		----------NA----------				
52	P	Acenaphthylene		----------NA----------				
53	P	Dimethylphthalate		----------NA----------				
54		m-Dinitrobenzene		----------NA----------				
55	P	2,6-Dinitrotoluene		----------NA----------				
56		o-Dinitrobenzene		----------NA----------				
57	P	Acenaphthene		----------NA----------				
58	P	3-Nitroaniline		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
59	P	2,4-Dinitrophenol		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
60	P	Dibenzofuran		----------NA----------				
61	P	2,4-Dinitrotoluene		----------NA----------				
62	P	4-Nitrophenol		----------NA----------				
63		2,3,5,6-Tetrachlorophenol		----------NA----------				
64	P	2,3,4,6-Tetrachlorophenol		----------NA----------				
65	P	Fluorene		----------NA----------				
66	P	4-Chlorophenyl-phenylethe		----------NA----------				
67	P	Diethylphthalate		----------NA----------				
68		Thionazin	50.000	50.655	-1.3	85	-0.01	10.12
69	P	4-Nitroaniline		----------NA----------				
70	I	Phenanthrene-d10	40.000	40.000	0.0	96	0.00	11.22
		---------- Amount	Calc.	%Drift	----------			
71	P	4,6-Dinitro-2-methylpheno		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
72	P	n-Nitrosodiphenylamine		----------NA----------				
73		Diphenylamine		----------NA----------				
74		1,2-Diphenylhydrazine		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
75	S	2,4,6-Tribromophenol		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
76		Sulfotep	50.000	43.006	14.0	79	0.00	10.50
77		Phorate	50.000	45.279	9.4	83	0.00	10.64
78	P	4-Bromophenyl-phenylether		----------NA----------				
79	P	Hexachlorobenzene		----------NA----------				

Initial Calibration Verification

Job Number: FA77576
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071374.D

			Amount	Calc.	%Drift			
80		Dimethoate	50.000	43.900	12.2	85	0.00	10.83
81		Simazine		NA				
82	P	Atrazine		NA				
83	P	Pentachlorophenol		NA				
84	P	Phenanthrene		NA				
85	P	Anthracene		NA				
86		Disulfoton	50.000	37.153	25.7#	68	0.00	11.26
87	P	Carbazole		NA				
88		Methyl Parathion	50.000	45.131	9.7	87	0.00	11.70
89	P	Di-n-butylphthalate		NA				
90		Ethyl Parathion	50.000	45.602	8.8	88	0.00	12.17
91	P	Fluoranthene		NA				
92	I	Chrysene-d12	40.000	40.000	0.0	87	0.00	14.49
93		Benzidine		NA				
94	P	Pyrene		NA				
95	S	Terphenyl-d14		NA				
96		Famphur	50.000	81.906	-63.8#	149	0.00	13.70
97	P	Butylbenzylphthalate		NA				
98	P	3,3'-Dichlorobenzidine		NA				
99	P	Benzo[a]anthracene		NA				
100	P	Chrysene		NA				
101	P	bis(2-Ethylhexyl)phthalat		NA				
102	I	Perylene-d12	40.000	40.000	0.0	93	0.00	16.81
103	P	Di-n-octylphthalate		NA				
104	P	Benzo[b]fluoranthene		NA				
105	P	Benzo[k]fluoranthene		NA				

Initial Calibration Verification

Job Number: FA77576
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071374.D

			Amount	Calc.	%Drift			
106	P	Benzo[a]pyrene		NA				
107	P	Indeno[1,2,3-cd]pyrene		NA				
108	P	Dibenz[a,h]anthracene		NA				
109	P	Benzo[g,h,i]perylene		NA				

		Amount	Calc.	%Drift			
110	1,4-Dichlorobenzene-d4A	40.000	40.000	0.0	98	0.00	6.00
111	2-Picoline		NA				
112	N-Nitrosomethylethylamine		NA				
113	Methyl methanesulfonate		NA				
114	N-Nitrosodiethylamine		NA				
115	Ethyl methanesulfonate		NA				
116	Pentachloroethane		NA				
117	N-Nitrosopyrrolidine		NA				
118	N-Nitrosomorpholine		NA				
119	O-Toluidine		NA				
120	Naphthalene-d8A	40.000	40.000	0.0	95	0.00	7.43
121	N-Nitrosopiperidine		NA				
122	A,A-Dimethylphenethylamin		NA				
123	Hexachloropropene		NA				

		Amount	Calc.	%Drift
124	N-Nitrosodi-n-butylamine		NA	

		Amount	Calc.	%Drift
125	p-Phenylenediamine		NA	
126	Isosafrole		NA	
127	Acenaphthene-d10A	40.000	40.000	0.0
128	Safrole		NA	
129	1-Chloronaphthalene		NA	
130	Diphenyl Ether		NA	

		Amount	Calc.	%Drift
131	1,4-Naphthoquinone		NA	

		Amount	Calc.	%Drift
132	Pentachlorobenzene		NA	
133	1-Naphthylamine		NA	
134	2-Naphthylamine		NA	

		Amount	Calc.	%Drift
135	5-Nitro-o-toluidine		NA	

		Amount	Calc.	%Drift			
136	Phenanthrene-d10A	40.000	40.000	0.0	96	0.00	11.22

		Amount	Calc.	%Drift
137	1,3,5-Trinitrobenzene		NA	

		Amount	Calc.	%Drift
138	Diallate		NA	
139	Phenacetin		NA	
140	4-Aminobiphenyl		NA	
141	Pronamide		NA	

Initial Calibration Verification

Job Number: FA77576 **Sample:** SX2918-ICV2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X071374.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

142		Pentachloronitrobenzene		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
143		4-Nitroquinoline 1-Oxide		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
144		Methapyrilene		----------NA----------				
145		Isodrin		----------NA----------				
146	I	Chrysene-d12A	40.000	40.000	0.0	101	0.00	14.49
		---------- Amount	Calc.	%Drift	----------			
147		Aramite		----------NA----------				
148		p-(Dimethylamine)azobenze		----------NA----------				
149		Chlorobenzilate		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
150		Kepone		----------NA----------				
151		3,3'-Dimethylbenzidine		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
152		2-Acetylaminofluorene		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
153	I	Perylene-d12A	40.000	40.000	0.0	96	-0.02	16.81
154		7,12-Dimethylbenz(a)anthr		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
155		Hexachlorophene		----------NA----------				
156		3-Methylcholanthrene		----------NA----------				
157		Dibenz(a,j)acridine		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
x071368.D 8270DApp9SX-062320.m Wed Jun 24 09:48:26 2020

Initial Calibration Verification

Job Number: FA77576
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071375.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\0623_sx2918\x071375.D Vial: 21
Acq On : 23 Jun 2020 6:17 pm Operator: marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\MET...DApp9SX-062320.m (RTE Integrator)
Title : SW846 8270D OR EPA 625
Last Update : Tue Jun 23 17:15:34 2020
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	101	0.00	6.00
2		1,4-Dioxane		----------	NA	----------		
3		N-nitrosodimethylamine		----------	NA	----------		
4		Pyridine		----------	NA	----------		
5	P	Benzaldehyde		----------	NA	----------		
6		Aniline		----------	NA	----------		
7	S	2-Fluorophenol		----------	NA	----------		
8	P	bis(2-Chloroethyl)ether		----------	NA	----------		
9	S	Phenol-d5		----------	NA	----------		
10	P	Phenol		----------	NA	----------		
11	P	2-Chlorophenol		----------	NA	----------		
12		1,3-Dichlorobenzene		----------	NA	----------		
13		1,4-Dichlorobenzene		----------	NA	----------		
14		1,2-Dichlorobenzene		----------	NA	----------		
15		Benzyl alcohol		----------	NA	----------		
16	P	2,2'-Oxybis(1-chloropropa		----------	NA	----------		
17	P	2-Methylphenol		----------	NA	----------		
18	P	Acetophenone		----------	NA	----------		
19	P	Hexachloroethane		----------	NA	----------		
20	P	N-Nitroso-di-n-propylamin		----------	NA	----------		
21	P	3&4-Methylphenol		----------	NA	----------		
22	I	Naphthalene-d8	40.000	40.000	0.0	109	0.00	7.43
23	S	Nitrobenzene-d5		----------	NA	----------		
24	P	Nitrobenzene		----------	NA	----------		
25	P	Isophorone		----------	NA	----------		
26	P	2-Nitrophenol		----------	NA	----------		
27	P	2,4-Dimethylphenol		----------	NA	----------		
28		O,O,O-Triethylphosphoroth		----------	NA	----------		
29	P	bis(2-Chloroethoxy)methan		----------	NA	----------		
		----------	Amount	Calc.	%Drift	----------		
30		Benzoic Acid		----------	NA	----------		
		----------	Amount	Calc.	%Drift	----------		
31	P	2,4-Dichlorophenol		----------	NA	----------		
32		1,2,4-Trichlorobenzene		----------	NA	----------		
33		alpha-Terpineol		----------	NA	----------		
34	P	Naphthalene		----------	NA	----------		
35	P	4-Chloroaniline		----------	NA	----------		
36		2,6-Dichlorophenol		----------	NA	----------		
37	P	Hexachlorobutadiene		----------	NA	----------		

Initial Calibration Verification

Job Number: FA77576
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071375.D

38	P	Caprolactam			NA				
39	P	4-Chloro-3-methylphenol			NA				
40	P	2-Methylnaphthalene			NA				
41		1-Methylnaphthalene			NA				
42	P	1,2,4,5-Tetrachlorobenzen			NA				
43	I	Acenaphthene-d10	40.000	40.000	0.0	104	0.00	9.48	
			Amount	Calc.	%Drift				
44	P	Hexachlorocyclopentadiene			NA				
			Amount	Calc.	%Drift				
45	P	2,4,6-Trichlorophenol			NA				
46	P	2,4,5-Trichlorophenol			NA				
47	S	2-Fluorobiphenyl			NA				
48	P	1,1'-Biphenyl			NA				
49	P	2-Chloronaphthalene			NA				
50	P	2-Nitroaniline			NA				
51		p-Dinitrobenzene			NA				
52	P	Acenaphthylene			NA				
53	P	Dimethylphthalate			NA				
54		m-Dinitrobenzene			NA				
55	P	2,6-Dinitrotoluene			NA				
56		o-Dinitrobenzene			NA				
57	P	Acenaphthene			NA				
58	P	3-Nitroaniline			NA				
			Amount	Calc.	%Drift				
59	P	2,4-Dinitrophenol			NA				
			Amount	Calc.	%Drift				
60	P	Dibenzofuran			NA				
61	P	2,4-Dinitrotoluene			NA				
62	P	4-Nitrophenol			NA				
63		2,3,5,6-Tetrachlorophenol			NA				
64	P	2,3,4,6-Tetrachlorophenol			NA				
65	P	Fluorene			NA				
66	P	4-Chlorophenyl-phenylethe			NA				
67	P	Diethylphthalate			NA				
68		Thionazin			NA				
69	P	4-Nitroaniline			NA				
70	I	Phenanthrene-d10	40.000	40.000	0.0	115	0.00	11.22	
			Amount	Calc.	%Drift				
71	P	4,6-Dinitro-2-methylpheno			NA				
			Amount	Calc.	%Drift				
72	P	n-Nitrosodiphenylamine			NA				
73		Diphenylamine			NA				
74		1,2-Diphenylhydrazine			NA				
			Amount	Calc.	%Drift				
75	S	2,4,6-Tribromophenol			NA				
			Amount	Calc.	%Drift				
76		Sulfotep			NA				
77		Phorate			NA				
78	P	4-Bromophenyl-phenylether			NA				
79	P	Hexachlorobenzene			NA				

Initial Calibration Verification

Job Number: FA77576
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071375.D

			Amount	Calc.	%Drift			
80		Dimethoate		NA				
81		Simazine		NA				
82	P	Atrazine		NA				
83	P	Pentachlorophenol		NA				
84	P	Phenanthrene		NA				
85	P	Anthracene		NA				
86		Disulfoton		NA				
87	P	Carbazole		NA				
88		Methyl Parathion		NA				
89	P	Di-n-butylphthalate		NA				
90		Ethyl Parathion		NA				
91	P	Fluoranthene		NA				
92	I	Chrysene-d12	40.000	40.000	0.0	98	0.00	14.49
93		Benzidine		NA				
94	P	Pyrene		NA				
95	S	Terphenyl-d14		NA				
96		Famphur		NA				
97	P	Butylbenzylphthalate		NA				
98	P	3,3'-Dichlorobenzidine		NA				
99	P	Benzo[a]anthracene		NA				
100	P	Chrysene		NA				
101	P	bis(2-Ethylhexyl)phthalat		NA				
102	I	Perylene-d12	40.000	40.000	0.0	113	0.01	16.82
103	P	Di-n-octylphthalate		NA				
104	P	Benzo[b]fluoranthene		NA				
105	P	Benzo[k]fluoranthene		NA				

Initial Calibration Verification

Job Number: FA77576 **Sample:** SX2918-ICV2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X071375.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

			Amount	Calc.	%Drift			
106	P	Benzo[a]pyrene		NA				
107	P	Indeno[1,2,3-cd]pyrene		NA				
108	P	Dibenz[a,h]anthracene		NA				
109	P	Benzo[g,h,i]perylene		NA				

		Amount	Calc.	%Drift			
110	1,4-Dichlorobenzene-d4A	40.000	40.000	0.0	113	0.00	6.00
111	2-Picoline	50.000	41.736	16.5	90	0.00	3.98
112	N-Nitrosomethylethylamine	50.000	39.497	21.0#	86	0.00	4.11
113	Methyl methanesulfonate	50.000	42.243	15.5	90	0.00	4.44
114	N-Nitrosodiethylamine	50.000	41.727	16.5	88	0.00	4.85
115	Ethyl methanesulfonate	50.000	39.975	20.0#	85	0.00	5.18
116	Pentachloroethane	50.000	39.110	21.8#	84	0.00	5.70
117	N-Nitrosopyrrolidine	50.000	43.888	12.2	90	-0.01	6.43
118	N-Nitrosomorpholine	50.000	41.815	16.4	86	0.00	6.48
119	O-Toluidine	50.000	43.117	13.8	88	0.00	6.50
120	Naphthalene-d8A	40.000	40.000	0.0	121	0.00	7.43
121	N-Nitrosopiperidine	50.000	36.632	26.7#	85	0.00	6.81
122	A,A-Dimethylphenethylamin	50.000	38.452	23.1#	87	-0.06	7.35
123	Hexachloropropene	50.000	47.157	5.7	101	0.00	7.56

		Amount	Calc.	%Drift			
124	N-Nitrosodi-n-butylamine	50.000	32.169	35.7#	68	0.00	7.94

		Amount	Calc.	%Drift			
125	p-Phenylenediamine	50.000	41.295	17.4	91	0.00	7.93
126	Isosafrole	50.000	37.985	24.0#	87	0.00	8.18
127	Acenaphthene-d10A	40.000	40.000	0.0	112	0.00	9.48
128	Safrole	50.000	46.801	6.4	98	0.00	8.78
129	1-Chloronaphthalene	50.000	45.691	8.6	96	0.00	8.85
130	Diphenyl Ether		NA				

		Amount	Calc.	%Drift			
131	1,4-Naphthoquinone	50.000	29.961	40.1#	63	0.00	9.04

		Amount	Calc.	%Drift			
132	Pentachlorobenzene	50.000	42.419	15.2	93	0.00	9.67
133	1-Naphthylamine	50.000	41.445	17.1	89	0.00	9.81
134	2-Naphthylamine	50.000	42.556	14.9	91	0.00	9.91

		Amount	Calc.	%Drift			
135	5-Nitro-o-toluidine	50.000	40.969	18.1	87	0.00	10.14

		Amount	Calc.	%Drift			
136	Phenanthrene-d10A	40.000	40.000	0.0	115	0.00	11.22

		Amount	Calc.	%Drift			
137	1,3,5-Trinitrobenzene	50.000	44.216	11.6	92	0.00	10.59

		Amount	Calc.	%Drift			
138	Diallate	50.000	38.309	23.4#	85	0.00	10.64
139	Phenacetin	50.000	43.996	12.0	90	0.00	10.67
140	4-Aminobiphenyl	50.000	40.445	19.1	86	0.00	11.02
141	Pronamide	50.000	44.783	10.4	92	0.00	11.12

Initial Calibration Verification

Job Number: FA77576 **Sample:** SX2918-ICV2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X071375.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

			Amount	Calc.	%Drift			
142		Pentachloronitrobenzene	50.000	41.791	16.4	87	0.00	11.02
			Amount	Calc.	%Drift			
143		4-Nitroquinoline 1-Oxide	50.000	36.493	27.0#	80	0.00	12.18
			Amount	Calc.	%Drift			
144		Methapyrilene			NA			
145		Isodrin	50.000	41.381	17.2	92	0.00	12.48
146	I	Chrysene-d12A	40.000	40.000	0.0	114	0.00	14.49
			Amount	Calc.	%Drift			
147		Aramite	50.000	41.761	16.5	87	0.00	13.25
148		p-(Dimethylamine)azobenze	50.000	40.070	19.9	89	0.00	13.32
149		Chlorobenzilate	50.000	41.307	17.4	88	0.00	13.39
			Amount	Calc.	%Drift			
150		Kepone	50.000	23.045	53.9#	0	0.00	13.78
151		3,3'-Dimethylbenzidine	50.000	60.240	-20.5#	119	0.00	13.75
			Amount	Calc.	%Drift			
152		2-Acetylaminofluorene	50.000	41.969	16.1	88	0.00	14.08
			Amount	Calc.	%Drift			
153	I	Perylene-d12A	40.000	40.000	0.0	116	0.00	16.82
154		7,12-Dimethylbenz(a)anthr	50.000	46.532	6.9	98	0.00	16.18
			Amount	Calc.	%Drift			
155		Hexachlorophene	500.000	469.073	6.2	95	0.00	16.59
156		3-Methylcholanthrene	50.000	39.832	20.3#	90	0.00	17.33
157		Dibenz(a,j)acridine	50.000	40.348	19.3	87	0.00	18.23

(#) = Out of Range SPCC's out = 0 CCC's out = 0
x071368.D 8270DApp9SX-062320.m Tue Jun 23 19:09:56 2020

Initial Calibration Verification

Job Number: FA77576
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071376.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\0623_sx2918\x071376.D Vial: 22
Acq On : 23 Jun 2020 6:43 pm Operator: marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\MET...DApp9SX-062320.m (RTE Integrator)
Title : SW846 8270D OR EPA 625
Last Update : Tue Jun 23 17:15:34 2020
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	96	0.00	6.00
2		1,4-Dioxane		----------	NA	----------		
3		N-nitrosodimethylamine		----------	NA	----------		
4		Pyridine		----------	NA	----------		
5	P	Benzaldehyde		----------	NA	----------		
6		Aniline		----------	NA	----------		
7	S	2-Fluorophenol		----------	NA	----------		
8	P	bis(2-Chloroethyl)ether		----------	NA	----------		
9	S	Phenol-d5		----------	NA	----------		
10	P	Phenol		----------	NA	----------		
11	P	2-Chlorophenol		----------	NA	----------		
12		1,3-Dichlorobenzene		----------	NA	----------		
13		1,4-Dichlorobenzene		----------	NA	----------		
14		1,2-Dichlorobenzene		----------	NA	----------		
15		Benzyl alcohol		----------	NA	----------		
16	P	2,2'-Oxybis(1-chloropropa		----------	NA	----------		
17	P	2-Methylphenol		----------	NA	----------		
18	P	Acetophenone		----------	NA	----------		
19	P	Hexachloroethane		----------	NA	----------		
20	P	N-Nitroso-di-n-propylamin		----------	NA	----------		
21	P	3&4-Methylphenol		----------	NA	----------		
22	I	Naphthalene-d8	40.000	40.000	0.0	94	0.00	7.43
23	S	Nitrobenzene-d5		----------	NA	----------		
24	P	Nitrobenzene		----------	NA	----------		
25	P	Isophorone		----------	NA	----------		
26	P	2-Nitrophenol		----------	NA	----------		
27	P	2,4-Dimethylphenol		----------	NA	----------		
28		O,O,O-Triethylphosphoroth		----------	NA	----------		
29	P	bis(2-Chloroethoxy)methan		----------	NA	----------		
		----------	Amount	Calc.	%Drift	----------		
30		Benzoic Acid		----------	NA	----------		
		----------	Amount	Calc.	%Drift	----------		
31	P	2,4-Dichlorophenol		----------	NA	----------		
32		1,2,4-Trichlorobenzene		----------	NA	----------		
33		alpha-Terpineol		----------	NA	----------		
34	P	Naphthalene		----------	NA	----------		
35	P	4-Chloroaniline		----------	NA	----------		
36		2,6-Dichlorophenol		----------	NA	----------		
37	P	Hexachlorobutadiene		----------	NA	----------		

Initial Calibration Verification

Job Number: FA77576
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071376.D

38	P	Caprolactam			NA				
39	P	4-Chloro-3-methylphenol			NA				
40	P	2-Methylnaphthalene			NA				
41		1-Methylnaphthalene			NA				
42	P	1,2,4,5-Tetrachlorobenzen			NA				
43	I	Acenaphthene-d10	40.000	40.000	0.0	109	0.00	9.48	
			Amount	Calc.	%Drift				
44	P	Hexachlorocyclopentadiene			NA				
			Amount	Calc.	%Drift				
45	P	2,4,6-Trichlorophenol			NA				
46	P	2,4,5-Trichlorophenol			NA				
47	S	2-Fluorobiphenyl			NA				
48	P	1,1'-Biphenyl			NA				
49	P	2-Chloronaphthalene			NA				
50	P	2-Nitroaniline			NA				
51		p-Dinitrobenzene			NA				
52	P	Acenaphthylene			NA				
53	P	Dimethylphthalate			NA				
54		m-Dinitrobenzene			NA				
55	P	2,6-Dinitrotoluene			NA				
56		o-Dinitrobenzene			NA				
57	P	Acenaphthene			NA				
58	P	3-Nitroaniline			NA				
			Amount	Calc.	%Drift				
59	P	2,4-Dinitrophenol			NA				
			Amount	Calc.	%Drift				
60	P	Dibenzofuran			NA				
61	P	2,4-Dinitrotoluene			NA				
62	P	4-Nitrophenol			NA				
63		2,3,5,6-Tetrachlorophenol			NA				
64	P	2,3,4,6-Tetrachlorophenol			NA				
65	P	Fluorene			NA				
66	P	4-Chlorophenyl-phenylethe			NA				
67	P	Diethylphthalate			NA				
68		Thionazin			NA				
69	P	4-Nitroaniline			NA				
70	I	Phenanthrene-d10	40.000	40.000	0.0	105	0.00	11.22	
			Amount	Calc.	%Drift				
71	P	4,6-Dinitro-2-methylpheno			NA				
			Amount	Calc.	%Drift				
72	P	n-Nitrosodiphenylamine			NA				
73		Diphenylamine			NA				
74		1,2-Diphenylhydrazine			NA				
			Amount	Calc.	%Drift				
75	S	2,4,6-Tribromophenol			NA				
			Amount	Calc.	%Drift				
76		Sulfotep			NA				
77		Phorate			NA				
78	P	4-Bromophenyl-phenylether			NA				
79	P	Hexachlorobenzene			NA				

Initial Calibration Verification

Job Number: FA77576
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071376.D

			Amount	Calc.	%Drift			
80		Dimethoate		NA				
81		Simazine		NA				
82	P	Atrazine		NA				
83	P	Pentachlorophenol		NA				
84	P	Phenanthrene		NA				
85	P	Anthracene		NA				
86		Disulfoton		NA				
87	P	Carbazole		NA				
88		Methyl Parathion		NA				
89	P	Di-n-butylphthalate		NA				
90		Ethyl Parathion		NA				
91	P	Fluoranthene		NA				
92	I	Chrysene-d12	40.000	40.000	0.0	93	0.00	14.49
93		Benzidine		NA				
94	P	Pyrene		NA				
95	S	Terphenyl-d14		NA				
96		Famphur		NA				
97	P	Butylbenzylphthalate		NA				
98	P	3,3'-Dichlorobenzidine		NA				
99	P	Benzo[a]anthracene		NA				
100	P	Chrysene		NA				
101	P	bis(2-Ethylhexyl)phthalat		NA				
102	I	Perylene-d12	40.000	40.000	0.0	103	0.00	16.81
103	P	Di-n-octylphthalate		NA				
104	P	Benzo[b]fluoranthene		NA				
105	P	Benzo[k]fluoranthene		NA				

Initial Calibration Verification

Job Number: FA77576 **Sample:** SX2918-ICV2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X071376.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

			Amount	Calc.	%Drift			
106	P	Benzo[a]pyrene		NA				
107	P	Indeno[1,2,3-cd]pyrene		NA				
108	P	Dibenz[a,h]anthracene		NA				
109	P	Benzo[g,h,i]perylene		NA				

		Amount	Calc.	%Drift			
110	1,4-Dichlorobenzene-d4A	40.000	40.000	0.0	108	0.00	6.00
111	2-Picoline		NA				
112	N-Nitrosomethylethylamine		NA				
113	Methyl methanesulfonate		NA				
114	N-Nitrosodiethylamine		NA				
115	Ethyl methanesulfonate		NA				
116	Pentachloroethane		NA				
117	N-Nitrosopyrrolidine		NA				
118	N-Nitrosomorpholine		NA				
119	O-Toluidine		NA				
120	Naphthalene-d8A	40.000	40.000	0.0	105	0.00	7.43
121	N-Nitrosopiperidine		NA				
122	A,A-Dimethylphenethylamin		NA				
123	Hexachloropropene		NA				

		Amount	Calc.	%Drift			
124	N-Nitrosodi-n-butylamine		NA				

		Amount	Calc.	%Drift			
125	p-Phenylenediamine		NA				
126	Isosafrole		NA				
127	Acenaphthene-d10A	40.000	40.000	0.0	118	0.00	9.48
128	Safrole		NA				
129	1-Chloronaphthalene		NA				
130	Diphenyl Ether	50.000	41.376	17.2	92	0.00	8.95

		Amount	Calc.	%Drift			
131	1,4-Naphthoquinone		NA				

		Amount	Calc.	%Drift			
132	Pentachlorobenzene		NA				
133	1-Naphthylamine		NA				
134	2-Naphthylamine		NA				

		Amount	Calc.	%Drift			
135	5-Nitro-o-toluidine		NA				

		Amount	Calc.	%Drift			
136	Phenanthrene-d10A	40.000	40.000	0.0	105	0.00	11.22

		Amount	Calc.	%Drift			
137	1,3,5-Trinitrobenzene	50.000	44.822	10.4	85	0.00	10.59

		Amount	Calc.	%Drift			
138	Diallate		NA				
139	Phenacetin		NA				
140	4-Aminobiphenyl		NA				
141	Pronamide		NA				

Initial Calibration Verification

Job Number: FA77576 **Sample:** SX2918-ICV2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X071376.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

142		Pentachloronitrobenzene			----------NA----------				
		----------	Amount	Calc.	%Drift	----------			
143		4-Nitroquinoline 1-Oxide			----------NA----------				
		----------	Amount	Calc.	%Drift	----------			
144		Methapyrilene	50.000	128.026	-156.1#	237	0.00	12.29	
145		Isodrin			----------NA----------				
146	I	Chrysene-d12A	40.000	40.000	0.0	109	0.00	14.49	
		----------	Amount	Calc.	%Drift	----------			
147		Aramite			----------NA----------				
148		p-(Dimethylamine)azobenze			----------NA----------				
149		Chlorobenzilate			----------NA----------				
		----------	Amount	Calc.	%Drift	----------			
150		Kepone			----------NA----------				
151		3,3'-Dimethylbenzidine			----------NA----------				
		----------	Amount	Calc.	%Drift	----------			
152		2-Acetylaminofluorene			----------NA----------				
		----------	Amount	Calc.	%Drift	----------			
153	I	Perylene-d12A	40.000	40.000	0.0	106	-0.01	16.81	
154		7,12-Dimethylbenz(a)anthr			----------NA----------				
		----------	Amount	Calc.	%Drift	----------			
155		Hexachlorophene			----------NA----------				
156		3-Methylcholanthrene			----------NA----------				
157		Dibenz(a,j)acridine			----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
x071368.D 8270DApp9SX-062320.m Tue Jun 23 19:08:29 2020

Initial Calibration Verification

Job Number: FA77576
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071416.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\jo...2020\sx2919\x071416.d Vial: 2
Acq On : 24 Jun 2020 3:22 pm Operator: marthav
Sample : icv2918-50 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\met...DApp9SX-062320.m (RTE Integrator)
Title : SW846 8270D OR EPA 625
Last Update : Tue Jun 23 17:15:34 2020
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	94	0.00	5.99
2		1,4-Dioxane		----------	NA	----------		
3		N-nitrosodimethylamine		----------	NA	----------		
4		Pyridine		----------	NA	----------		
5	P	Benzaldehyde		----------	NA	----------		
6		Aniline		----------	NA	----------		
7	S	2-Fluorophenol		----------	NA	----------		
8	P	bis(2-Chloroethyl)ether		----------	NA	----------		
9	S	Phenol-d5		----------	NA	----------		
10	P	Phenol		----------	NA	----------		
11	P	2-Chlorophenol		----------	NA	----------		
12		1,3-Dichlorobenzene		----------	NA	----------		
13		1,4-Dichlorobenzene		----------	NA	----------		
14		1,2-Dichlorobenzene		----------	NA	----------		
15		Benzyl alcohol		----------	NA	----------		
16	P	2,2'-Oxybis(1-chloropropa		----------	NA	----------		
17	P	2-Methylphenol		----------	NA	----------		
18	P	Acetophenone		----------	NA	----------		
19	P	Hexachloroethane		----------	NA	----------		
20	P	N-Nitroso-di-n-propylamin		----------	NA	----------		
21	P	3&4-Methylphenol		----------	NA	----------		
22	I	Naphthalene-d8	1.000	1.000	0.0	92	0.00	7.42
23	S	Nitrobenzene-d5		----------	NA	----------		
24	P	Nitrobenzene		----------	NA	----------		
25	P	Isophorone		----------	NA	----------		
26	P	2-Nitrophenol		----------	NA	----------		
27	P	2,4-Dimethylphenol		----------	NA	----------		
28		O,O,O-Triethylphosphoroth		----------	NA	----------		
29	P	bis(2-Chloroethoxy)methan		----------	NA	----------		
		----------	True	Calc.	% Drift	----------		
30		Benzoic Acid		----------	NA	----------		
		----------	AvgRF	CCRF	% Dev	----------		
31	P	2,4-Dichlorophenol		----------	NA	----------		
32		1,2,4-Trichlorobenzene		----------	NA	----------		
33		alpha-Terpineol		----------	NA	----------		
34	P	Naphthalene		----------	NA	----------		
35	P	4-Chloroaniline		----------	NA	----------		
36		2,6-Dichlorophenol		----------	NA	----------		
37	P	Hexachlorobutadiene		----------	NA	----------		

Initial Calibration Verification

Job Number: FA77576
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071416.D

38	P	Caprolactam			----------NA----------				
39	P	4-Chloro-3-methylphenol			----------NA----------				
40	P	2-Methylnaphthalene			----------NA----------				
41		1-Methylnaphthalene			----------NA----------				
42	P	1,2,4,5-Tetrachlorobenzen			----------NA----------				
43	I	Acenaphthene-d10	1.000	1.000	0.0	84	0.00	9.47	
		----------	True	Calc.	% Drift	----------			
44	P	Hexachlorocyclopentadiene			----------NA----------				
		----------	AvgRF	CCRF	% Dev	----------			
45	P	2,4,6-Trichlorophenol			----------NA----------				
46	P	2,4,5-Trichlorophenol			----------NA----------				
47	S	2-Fluorobiphenyl			----------NA----------				
48	P	1,1'-Biphenyl			----------NA----------				
49	P	2-Chloronaphthalene			----------NA----------				
50	P	2-Nitroaniline			----------NA----------				
51		p-Dinitrobenzene			----------NA----------				
52	P	Acenaphthylene			----------NA----------				
53	P	Dimethylphthalate			----------NA----------				
54		m-Dinitrobenzene			----------NA----------				
55	P	2,6-Dinitrotoluene			----------NA----------				
56		o-Dinitrobenzene			----------NA----------				
57	P	Acenaphthene			----------NA----------				
58	P	3-Nitroaniline			----------NA----------				
		----------	True	Calc.	% Drift	----------			
59	P	2,4-Dinitrophenol			----------NA----------				
		----------	AvgRF	CCRF	% Dev	----------			
60	P	Dibenzofuran			----------NA----------				
61	P	2,4-Dinitrotoluene			----------NA----------				
62	P	4-Nitrophenol			----------NA----------				
63		2,3,5,6-Tetrachlorophenol			----------NA----------				
64	P	2,3,4,6-Tetrachlorophenol			----------NA----------				
65	P	Fluorene			----------NA----------				
66	P	4-Chlorophenyl-phenylethe			----------NA----------				
67	P	Diethylphthalate			----------NA----------				
68		Thionazin			----------NA----------				
69	P	4-Nitroaniline			----------NA----------				
70	I	Phenanthrene-d10	1.000	1.000	0.0	90	0.00	11.21	
		----------	True	Calc.	% Drift	----------			
71	P	4,6-Dinitro-2-methylpheno			----------NA----------				
		----------	AvgRF	CCRF	% Dev	----------			
72	P	n-Nitrosodiphenylamine			----------NA----------				
73		Diphenylamine			----------NA----------				
74		1,2-Diphenylhydrazine			----------NA----------				
		----------	True	Calc.	% Drift	----------			
75	S	2,4,6-Tribromophenol			----------NA----------				
		----------	AvgRF	CCRF	% Dev	----------			
76		Sulfotep			----------NA----------				
77		Phorate			----------NA----------				
78	P	4-Bromophenyl-phenylether			----------NA----------				
79	P	Hexachlorobenzene			----------NA----------				

		----------	True	Calc.	% Drift	----------			
80		Dimethoate		----------NA----------					
		----------	AvgRF	CCRF	% Dev	----------			
81		Simazine		----------NA----------					
82	P	Atrazine		----------NA----------					
		----------	True	Calc.	% Drift	----------			
83	P	Pentachlorophenol		----------NA----------					
		----------	AvgRF	CCRF	% Dev	----------			
84	P	Phenanthrene		----------NA----------					
85	P	Anthracene		----------NA----------					
86		Disulfoton		----------NA----------					
87	P	Carbazole		----------NA----------					
		----------	True	Calc.	% Drift	----------			
88		Methyl Parathion		----------NA----------					
		----------	AvgRF	CCRF	% Dev	----------			
89	P	Di-n-butylphthalate		----------NA----------					
		----------	True	Calc.	% Drift	----------			
90		Ethyl Parathion		----------NA----------					
		----------	AvgRF	CCRF	% Dev	----------			
91	P	Fluoranthene		----------NA----------					
92	I	Chrysene-d12	1.000	1.000	0.0	85	0.00	14.48	
		----------	True	Calc.	% Drift	----------			
93		Benzidine		----------NA----------					
		----------	AvgRF	CCRF	% Dev	----------			
94	P	Pyrene		----------NA----------					
95	S	Terphenyl-d14		----------NA----------					
		----------	True	Calc.	% Drift	----------			
96		Famphur		----------NA----------					
97	P	Butylbenzylphthalate		----------NA----------					
98	P	3,3'-Dichlorobenzidine		----------NA----------					
		----------	AvgRF	CCRF	% Dev	----------			
99	P	Benzo[a]anthracene		----------NA----------					
100	P	Chrysene		----------NA----------					
		----------	True	Calc.	% Drift	----------			
101	P	bis(2-Ethylhexyl)phthalat		----------NA----------					
		----------	AvgRF	CCRF	% Dev	----------			
102	I	Perylene-d12	1.000	1.000	0.0	110	0.00	16.80	
		----------	True	Calc.	% Drift	----------			
103	P	Di-n-octylphthalate		----------NA----------					
104	P	Benzo[b]fluoranthene		----------NA----------					
		----------	AvgRF	CCRF	% Dev	----------			
105	P	Benzo[k]fluoranthene		----------NA----------					

Initial Calibration Verification

Job Number: FA77576
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071416.D

			True	Calc.	% Drift			
106	P	Benzo[a]pyrene		NA				
107	P	Indeno[1,2,3-cd]pyrene		NA				
108	P	Dibenz[a,h]anthracene		NA				
109	P	Benzo[g,h,i]perylene		NA				

		AvgRF	CCRF	% Dev			
110	1,4-Dichlorobenzene-d4A	1.000	1.000	0.0	105	0.00	5.99
111	2-Picoline	1.908	1.986	-4.1	105	0.00	3.97
112	N-Nitrosomethylethylamine	1.327	1.308	1.4	100	0.00	4.10
113	Methyl methanesulfonate	0.930	0.887	4.6	94	0.00	4.42
114	N-Nitrosodiethylamine	0.775	0.796	-2.7	100	0.00	4.84
115	Ethyl methanesulfonate	1.281	1.128	11.9	87	0.00	5.17
116	Pentachloroethane	0.546	0.509	6.8	92	0.00	5.68
117	N-Nitrosopyrrolidine	0.701	0.718	-2.4	97	0.00	6.42
118	N-Nitrosomorpholine	1.279	1.230	3.8	92	0.00	6.46
119	O-Toluidine	2.619	2.702	-3.2	98	0.00	6.48
120	Naphthalene-d8A	1.000	1.000	0.0	103	0.00	7.42
121	N-Nitrosopiperidine	0.368	0.334	9.2	89	0.00	6.80
122	A,A-Dimethylphenethylamin	1.467	1.128	23.1#	74	-0.01	7.31
123	Hexachloropropene	0.168	0.199	-18.5	108	0.00	7.55

		True	Calc.	% Drift			
124	N-Nitrosodi-n-butylamine	50.000	39.533	20.9#	72	0.00	7.92

		AvgRF	CCRF	% Dev			
125	p-Phenylenediamine	0.380	0.398	-4.7	98	0.00	7.92
126	Isosafrole	0.273	0.238	12.8	84	0.00	8.16
127	Acenaphthene-d10A	1.000	1.000	0.0	91	0.00	9.47
128	Safrole	0.526	0.586	-11.4	94	0.00	8.77
129	1-Chloronaphthalene	1.253	1.375	-9.7	93	0.00	8.84
130	Diphenyl Ether		NA				

		True	Calc.	% Drift			
131	1,4-Naphthoquinone	50.000	30.427	39.1#	52	0.00	9.03

		AvgRF	CCRF	% Dev			
132	Pentachlorobenzene	0.441	0.441	0.0	88	0.00	9.66
133	1-Naphthylamine	1.389	1.483	-6.8	93	0.00	9.80
134	2-Naphthylamine	1.485	1.563	-5.3	90	0.00	9.90

		True	Calc.	% Drift			
135	5-Nitro-o-toluidine	50.000	51.687	-3.4	90	0.00	10.13

		AvgRF	CCRF	% Dev			
136	Phenanthrene-d10A	1.000	1.000	0.0	90	0.00	11.21

		True	Calc.	% Drift			
137	1,3,5-Trinitrobenzene	50.000	52.543	-5.1	88	0.00	10.59

		AvgRF	CCRF	% Dev			
138	Diallate	0.627	0.580	7.5	80	0.00	10.62
139	Phenacetin	0.385	0.425	-10.4	89	0.00	10.66
140	4-Aminobiphenyl	0.811	0.863	-6.4	89	0.00	11.01
141	Pronamide	0.314	0.347	-10.5	89	0.00	11.11

Initial Calibration Verification

Job Number: FA77576 **Sample:** SX2918-ICV2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X071416.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

142	Pentachloronitrobenzene	0.078	0.078	0.0	82	0.00	11.01
	----------	True	Calc.	% Drift	----------		
143	4-Nitroquinoline 1-Oxide	50.000	50.367	-0.7	87	0.00	12.17
	----------	AvgRF	CCRF	% Dev	----------		
144	Methapyrilene		----------NA----------				
145	Isodrin	0.113	0.114	-0.9	88	0.00	12.47
146 I	Chrysene-d12A	1.000	1.000	0.0	99	0.00	14.48
	----------	True	Calc.	% Drift	----------		
147	Aramite	50.000	49.694	0.6	92	0.00	13.24
148	p-(Dimethylamine)azobenze	50.000	49.472	1.1	96	0.00	13.31
149	Chlorobenzilate	50.000	46.515	7.0	87	0.00	13.38
	----------	AvgRF	CCRF	% Dev	----------		
150	Kepone	0.018	0.029	-61.1#	0#	0.00	13.76
151	3,3'-Dimethylbenzidine	0.646	1.071	-65.8#	143	0.00	13.74
	----------	True	Calc.	% Drift	----------		
152	2-Acetylaminofluorene	50.000	58.747	-17.5	112	0.00	14.07
	----------	AvgRF	CCRF	% Dev	----------		
153 I	Perylene-d12A	1.000	1.000	0.0	114	0.00	16.80
154	7,12-Dimethylbenz(a)anthr	0.555	0.596	-7.4	111	0.00	16.16
	----------	True	Calc.	% Drift	----------		
155	Hexachlorophene	500.000	520.124	-4.0	107	0.00	16.57
156	3-Methylcholanthrene	50.000	50.150	-0.3	113	0.00	17.31
157	Dibenz(a,j)acridine	50.000	56.312	-12.6	127	0.00	18.21

(#) = Out of Range SPCC's out = 54 CCC's out = 0
x071368.D 8270DApp9SX-062320.m Thu Jun 25 03:53:12 2020

Continuing Calibration Summary

Job Number: FA77576
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2950-CC2918
Lab FileID: X072329.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\jo...2020\sx2950\x072329.d Vial: 2
Acq On : 11 Aug 2020 12:47 pm Operator: marthav
Sample : cc2918-50 8270 Inst : MSBNA05
Misc : op81484,sx2950,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\met...DApp9SX-062320.m (RTE Integrator)
Title : SW846 8270D OR EPA 625
Last Update : Tue Jun 23 17:15:34 2020
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	98	0.00	5.66
2		1,4-Dioxane	0.686	0.618	9.9	95	0.00	2.48
3		N-nitrosodimethylamine	1.217	1.004	17.5	84	0.00	2.81
4		Pyridine	1.668	1.770	-6.1	106	0.00	2.85
5	P	Benzaldehyde	1.192	1.030	13.6	88	0.00	5.19
6		Aniline	2.378	2.052	13.7	82	0.00	5.31
7	S	2-Fluorophenol	1.434	1.385	3.4	99	0.00	4.31
8	P	bis(2-Chloroethyl)ether	1.468	1.421	3.2	95	0.00	5.39
9	S	Phenol-d5	1.706	1.677	1.7	99	0.00	5.33
10	P	Phenol	2.024	1.925	4.9	89	0.00	5.34
11	P	2-Chlorophenol	1.530	1.533	-0.2	96	0.00	5.45
12		1,3-Dichlorobenzene	1.590	1.564	1.6	98	0.00	5.60
13		1,4-Dichlorobenzene	1.682	1.653	1.7	97	0.00	5.68
14		1,2-Dichlorobenzene	1.598	1.495	6.4	92	0.00	5.84
15		Benzyl alcohol	1.059	0.968	8.6	89	0.00	5.84
16	P	2,2'-Oxybis(1-chloropropa	3.084	2.353	23.7#	76	0.00	5.99
17	P	2-Methylphenol	1.456	1.389	4.6	91	0.00	5.99
18	P	Acetophenone	2.154	1.996	7.3	90	0.00	6.11
19	P	Hexachloroethane	0.632	0.616	2.5	96	0.00	6.21
20	P	N-Nitroso-di-n-propylamin	1.138	1.088	4.4	92	0.00	6.14
21	P	3&4-Methylphenol	1.505	1.510	-0.3	96	0.00	6.17
22	I	Naphthalene-d8	1.000	1.000	0.0	91	0.00	7.08
23	S	Nitrobenzene-d5	0.413	0.413	0.0	92	0.00	6.28
24	P	Nitrobenzene	0.409	0.408	0.2	91	0.00	6.30
25	P	Isophorone	0.730	0.674	7.7	86	0.00	6.58
26	P	2-Nitrophenol	0.194	0.202	-4.1	93	0.00	6.66
27	P	2,4-Dimethylphenol	0.361	0.332	8.0	84	0.00	6.75
28		O,O,O-Triethylphosphoroth	0.153	0.146	4.6	88	0.00	6.82
29	P	bis(2-Chloroethoxy)methan	0.427	0.414	3.0	89	0.00	6.85
		----------	True	Calc.	% Drift		----------	
30		Benzoic Acid	50.000	48.459	3.1	86	0.00	6.92
		----------	AvgRF	CCRF	% Dev		----------	
31	P	2,4-Dichlorophenol	0.291	0.298	-2.4	92	0.00	6.95
32		1,2,4-Trichlorobenzene	0.297	0.297	0.0	93	0.00	7.02
33		alpha-Terpineol		----------NA----------				
34	P	Naphthalene	1.085	1.061	2.2	90	0.00	7.11
35	P	4-Chloroaniline	0.458	0.446	2.6	88	0.00	7.19
36		2,6-Dichlorophenol	0.297	0.288	3.0	88	0.00	7.20
37	P	Hexachlorobutadiene	0.147	0.148	-0.7	94	0.00	7.26

Continuing Calibration Summary

Job Number: FA77576 **Sample:** SX2950-CC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072329.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

38	P	Caprolactam	0.121	0.115	5.0	88	0.00	7.64
39	P	4-Chloro-3-methylphenol	0.310	0.299	3.5	88	0.00	7.80
40	P	2-Methylnaphthalene	0.717	0.681	5.0	88	0.00	7.91
41		1-Methylnaphthalene	0.687	0.652	5.1	88	0.00	8.02
42	P	1,2,4,5-Tetrachlorobenzen	0.298	0.289	3.0	89	0.00	8.11
43	I	Acenaphthene-d10	1.000	1.000	0.0	90	0.00	9.12
		----------	True	Calc.	% Drift	----------		
44	P	Hexachlorocyclopentadiene	50.000	36.394	27.2#	62	0.00	8.10
		----------	AvgRF	CCRF	% Dev	----------		
45	P	2,4,6-Trichlorophenol	0.367	0.369	-0.5	87	0.00	8.26
46	P	2,4,5-Trichlorophenol	0.402	0.409	-1.7	89	0.00	8.32
47	S	2-Fluorobiphenyl	1.448	1.453	-0.3	90	0.00	8.36
48	P	1,1'-Biphenyl	1.633	1.564	4.2	86	0.00	8.46
49	P	2-Chloronaphthalene	1.226	1.198	2.3	87	0.00	8.47
50	P	2-Nitroaniline	0.451	0.451	0.0	88	0.00	8.62
51		p-Dinitrobenzene	0.253	0.260	-2.8	88	0.00	8.79
52	P	Acenaphthylene	1.998	1.969	1.5	87	0.00	8.95
53	P	Dimethylphthalate	1.411	1.353	4.1	88	0.00	8.86
54		m-Dinitrobenzene	0.235	0.250	-6.4	91	0.00	8.88
55	P	2,6-Dinitrotoluene	0.333	0.336	-0.9	88	0.00	8.92
56		o-Dinitrobenzene	0.319	0.317	0.6	92	0.00	8.97
57	P	Acenaphthene	1.329	1.291	2.9	88	0.00	9.16
58	P	3-Nitroaniline	0.366	0.391	-6.8	93	0.00	9.11
		----------	True	Calc.	% Drift	----------		
59	P	2,4-Dinitrophenol	50.000	53.053	-6.1	95	0.00	9.23
		----------	AvgRF	CCRF	% Dev	----------		
60	P	Dibenzofuran	1.773	1.677	5.4	87	0.00	9.37
61	P	2,4-Dinitrotoluene	0.425	0.450	-5.9	93	0.00	9.39
62	P	4-Nitrophenol	0.205	0.188	8.3	81	0.00	9.38
63		2,3,5,6-Tetrachlorophenol	0.297	0.298	-0.3	85	0.00	9.48
64	P	2,3,4,6-Tetrachlorophenol	0.308	0.323	-4.9	92	0.00	9.53
65	P	Fluorene	1.384	1.377	0.5	91	0.00	9.77
66	P	4-Chlorophenyl-phenylethe	0.668	0.656	1.8	88	0.00	9.79
67	P	Diethylphthalate	1.409	1.329	5.7	85	0.00	9.69
68		Thionazin	0.299	0.307	-2.7	92	0.00	9.78
69	P	4-Nitroaniline	0.408	0.417	-2.2	91	0.00	9.84
70	I	Phenanthrene-d10	1.000	1.000	0.0	92	0.00	10.86
		----------	True	Calc.	% Drift	----------		
71	P	4,6-Dinitro-2-methylpheno	50.000	53.230	-6.5	98	0.00	9.87
		----------	AvgRF	CCRF	% Dev	----------		
72	P	n-Nitrosodiphenylamine	0.622	0.597	4.0	90	0.00	9.94
73		Diphenylamine	0.729	0.716	1.8	90	0.00	9.94
74		1,2-Diphenylhydrazine	0.896	0.856	4.5	87	0.00	9.98
		----------	True	Calc.	% Drift	----------		
75	S	2,4,6-Tribromophenol	100.000	97.997	2.0	91	0.00	10.06
		----------	AvgRF	CCRF	% Dev	----------		
76		Sulfotep	0.132	0.126	4.5	84	0.00	10.16
77		Phorate	0.462	0.459	0.6	87	0.00	10.29
78	P	4-Bromophenyl-phenylether	0.192	0.189	1.6	91	0.00	10.36
79	P	Hexachlorobenzene	0.192	0.190	1.0	93	0.00	10.41

Continuing Calibration Summary

Job Number: FA77576 **Sample:** SX2950-CC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072329.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

			True	Calc.	% Drift			
80		Dimethoate	50.000	50.924	-1.8	95	0.00	10.49
			AvgRF	CCRF	% Dev			
81		Simazine	0.141	0.129	8.5	86	0.00	10.57
82	P	Atrazine	0.234	0.227	3.0	90	0.00	10.61
			True	Calc.	% Drift			
83	P	Pentachlorophenol	50.000	40.920	18.2	72	0.00	10.67
			AvgRF	CCRF	% Dev			
84	P	Phenanthrene	1.209	1.169	3.3	90	0.00	10.89
85	P	Anthracene	1.260	1.236	1.9	89	0.00	10.95
86		Disulfoton	0.483	0.505	-4.6	92	0.00	10.91
87	P	Carbazole	1.112	1.090	2.0	91	0.00	11.17
			True	Calc.	% Drift			
88		Methyl Parathion	50.000	49.139	1.7	91	0.00	11.35
			AvgRF	CCRF	% Dev			
89	P	Di-n-butylphthalate	1.241	1.256	-1.2	89	0.00	11.63
			True	Calc.	% Drift			
90		Ethyl Parathion	50.000	49.529	0.9	92	0.00	11.82
			AvgRF	CCRF	% Dev			
91	P	Fluoranthene	1.121	1.135	-1.2	93	0.00	12.29
92	I	Chrysene-d12	1.000	1.000	0.0	102	0.00	14.07
			True	Calc.	% Drift			
93		Benzidine	50.000	46.778	6.4	93	0.00	12.49
			AvgRF	CCRF	% Dev			
94	P	Pyrene	1.661	1.474	11.3	92	0.00	12.55
95	S	Terphenyl-d14	1.063	1.020	4.0	98	0.00	12.78
			True	Calc.	% Drift			
96		Famphur	50.000	63.105	-26.2#	124	0.00	13.32
97	P	Butylbenzylphthalate	50.000	46.111	7.8	95	0.00	13.41
98	P	3,3'-Dichlorobenzidine	50.000	50.363	-0.7	102	0.00	14.06
			AvgRF	CCRF	% Dev			
99	P	Benzo[a]anthracene	1.257	1.173	6.7	96	0.00	14.05
100	P	Chrysene	1.339	1.288	3.8	100	0.00	14.11
			True	Calc.	% Drift			
101	P	bis(2-Ethylhexyl)phthalat	50.000	48.255	3.5	97	0.00	14.22
			AvgRF	CCRF	% Dev			
102	I	Perylene-d12	1.000	1.000	0.0	107	0.00	16.26
			True	Calc.	% Drift			
103	P	Di-n-octylphthalate	50.000	52.137	-4.3	111	0.00	15.18
104	P	Benzo[b]fluoranthene	50.000	51.528	-3.1	112	0.00	15.61
			AvgRF	CCRF	% Dev			
105	P	Benzo[k]fluoranthene	1.420	1.336	5.9	101	0.00	15.66

Continuing Calibration Summary

Job Number: FA77576 **Sample:** SX2950-CC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072329.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

			True	Calc.	% Drift			
106	P	Benzo[a]pyrene	50.000	48.533	2.9	105	0.00	16.15
107	P	Indeno[1,2,3-cd]pyrene	50.000	55.196	-10.4	124	0.00	17.92
108	P	Dibenz[a,h]anthracene	50.000	55.543	-11.1	126	0.00	17.97
109	P	Benzo[g,h,i]perylene	50.000	47.161	5.7	102	0.00	18.28

		AvgRF	CCRF	% Dev			
110	1,4-Dichlorobenzene-d4A	1.000	1.000	0.0	110	0.00	5.66
111	2-Picoline		NA				
112	N-Nitrosomethylethylamine		NA				
113	Methyl methanesulfonate		NA				
114	N-Nitrosodiethylamine		NA				
115	Ethyl methanesulfonate		NA				
116	Pentachloroethane		NA				
117	N-Nitrosopyrrolidine		NA				
118	N-Nitrosomorpholine		NA				
119	O-Toluidine		NA				
120	Naphthalene-d8A	1.000	1.000	0.0	101	0.00	7.08
121	N-Nitrosopiperidine		NA				
122	A,A-Dimethylphenethylamin		NA				
123	Hexachloropropene		NA				

		True	Calc.	% Drift
124	N-Nitrosodi-n-butylamine		NA	

		AvgRF	CCRF	% Dev			
125	p-Phenylenediamine		NA				
126	Isosafrole		NA				
127	Acenaphthene-d10A	1.000	1.000	0.0	97	0.00	9.12
128	Safrole		NA				
129	1-Chloronaphthalene		NA				
130	Diphenyl Ether		NA				

		True	Calc.	% Drift
131	1,4-Naphthoquinone		NA	

		AvgRF	CCRF	% Dev			
132	Pentachlorobenzene		NA				
133	1-Naphthylamine		NA				
134	2-Naphthylamine		NA				

		True	Calc.	% Drift
135	5-Nitro-o-toluidine		NA	

		AvgRF	CCRF	% Dev			
136	Phenanthrene-d10A	1.000	1.000	0.0	92	0.00	10.86

		True	Calc.	% Drift
137	1,3,5-Trinitrobenzene		NA	

		AvgRF	CCRF	% Dev			
138	Diallate		NA				
139	Phenacetin		NA				
140	4-Aminobiphenyl		NA				
141	Pronamide		NA				

Continuing Calibration Summary

Job Number: FA77576 **Sample:** SX2950-CC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072329.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

142		Pentachloronitrobenzene			NA				
		----------	True	Calc.	% Drift	----------			
143		4-Nitroquinoline 1-Oxide			NA				
		----------	AvgRF	CCRF	% Dev	----------			
144		Methapyrilene			NA				
145		Isodrin			NA				
146	I	Chrysene-d12A	1.000	1.000	0.0	119	0.00	14.07	
		----------	True	Calc.	% Drift	----------			
147		Aramite			NA				
148		p-(Dimethylamine)azobenze			NA				
149		Chlorobenzilate			NA				
		----------	AvgRF	CCRF	% Dev	----------			
150		Kepone			NA				
151		3,3'-Dimethylbenzidine			NA				
		----------	True	Calc.	% Drift	----------			
152		2-Acetylaminofluorene			NA				
		----------	AvgRF	CCRF	% Dev	----------			
153	I	Perylene-d12A	1.000	1.000	0.0	110	0.00	16.26	
154		7,12-Dimethylbenz(a)anthr			NA				
		----------	True	Calc.	% Drift	----------			
155		Hexachlorophene			NA				
156		3-Methylcholanthrene			NA				
157		Dibenz(a,j)acridine			NA				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
x071368.D 8270DApp9SX-062320.m Wed Aug 12 03:33:40 2020

Continuing Calibration Summary

Job Number: FA77576 **Sample:** SX2950-CC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072330.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\jo...2020\sx2950\x072330.d Vial: 3
Acq On : 11 Aug 2020 1:13 pm Operator: marthav
Sample : cc2918-5 8270 Inst : MSBNA05
Misc : op81484,sx2950,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\met...DApp9SX-062320.m (RTE Integrator)
Title : SW846 8270D OR EPA 625
Last Update : Tue Jun 23 17:15:34 2020
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	81	0.00	5.66
2		1,4-Dioxane	0.686	0.738	-7.6	84	0.00	2.49
3		N-nitrosodimethylamine	1.217	1.132	7.0	77	0.00	2.82
4		Pyridine	1.668	1.740	-4.3	89	0.02	2.86
5	P	Benzaldehyde	1.192	1.241	-4.1	80	0.00	5.18
6		Aniline	2.378	2.165	9.0	80	0.00	5.31
7	S	2-Fluorophenol	1.434	1.464	-2.1	83	0.00	4.31
8	P	bis(2-Chloroethyl)ether	1.468	1.375	6.3	81	0.00	5.39
9	S	Phenol-d5	1.706	1.673	1.9	83	0.00	5.33
10	P	Phenol	2.024	1.807	10.7	83	0.00	5.34
11	P	2-Chlorophenol	1.530	1.450	5.2	86	0.00	5.45
12		1,3-Dichlorobenzene	1.590	1.575	0.9	84	0.00	5.59
13		1,4-Dichlorobenzene	1.682	1.655	1.6	83	0.00	5.68
14		1,2-Dichlorobenzene	1.598	1.521	4.8	82	0.00	5.84
15		Benzyl alcohol	1.059	0.915	13.6	79	0.00	5.83
16	P	2,2'-Oxybis(1-chloropropa	3.084	2.551	17.3	67	0.00	5.98
17	P	2-Methylphenol	1.456	1.333	8.4	79	0.00	5.99
18	P	Acetophenone	2.154	2.059	4.4	75	0.00	6.11
19	P	Hexachloroethane	0.632	0.613	3.0	83	0.00	6.21
20	P	N-Nitroso-di-n-propylamin	1.138	1.071	5.9	77	-0.02	6.12
21	P	3&4-Methylphenol	1.505	1.387	7.8	78	0.00	6.16
22	I	Naphthalene-d8	1.000	1.000	0.0	76	0.00	7.08
23	S	Nitrobenzene-d5	0.413	0.407	1.5	80	-0.01	6.27
24	P	Nitrobenzene	0.409	0.419	-2.4	82	-0.01	6.29
25	P	Isophorone	0.730	0.696	4.7	74	-0.01	6.57
26	P	2-Nitrophenol	0.194	0.193	0.5	89	0.00	6.65
27	P	2,4-Dimethylphenol	0.361	0.328	9.1	73	0.00	6.75
28		O,O,O-Triethylphosphoroth	0.153	0.153	0.0	78	-0.01	6.81
29	P	bis(2-Chloroethoxy)methan	0.427	0.413	3.3	78	-0.01	6.84
		----------	True	Calc.	% Drift	----------		
30		Benzoic Acid	5.000	3.907	21.9#	99	-0.06	6.86
		----------	AvgRF	CCRF	% Dev	----------		
31	P	2,4-Dichlorophenol	0.291	0.277	4.8	80	0.00	6.95
32		1,2,4-Trichlorobenzene	0.297	0.289	2.7	79	0.00	7.02
33		alpha-Terpineol		----------NA----------				
34	P	Naphthalene	1.085	1.084	0.1	79	0.00	7.10
35	P	4-Chloroaniline	0.458	0.439	4.1	76	0.00	7.19
36		2,6-Dichlorophenol	0.297	0.276	7.1	76	0.00	7.19
37	P	Hexachlorobutadiene	0.147	0.150	-2.0	84	0.00	7.26

Continuing Calibration Summary

Job Number: FA77576 **Sample:** SX2950-CC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072330.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

38	P	Caprolactam	0.121	0.120	0.8	74	-0.07	7.56
39	P	4-Chloro-3-methylphenol	0.310	0.299	3.5	78	0.00	7.80
40	P	2-Methylnaphthalene	0.717	0.714	0.4	78	0.00	7.91
41		1-Methylnaphthalene	0.687	0.663	3.5	76	0.00	8.02
42	P	1,2,4,5-Tetrachlorobenzen	0.298	0.278	6.7	75	0.00	8.10
43	I	Acenaphthene-d10	1.000	1.000	0.0	73	0.00	9.12
		----------	True	Calc.	% Drift	----------		
44	P	Hexachlorocyclopentadiene	5.000	1.436	71.3#	24	0.00	8.09
		----------	AvgRF	CCRF	% Dev	----------		
45	P	2,4,6-Trichlorophenol	0.367	0.350	4.6	77	0.00	8.26
46	P	2,4,5-Trichlorophenol	0.402	0.378	6.0	79	0.00	8.32
47	S	2-Fluorobiphenyl	1.448	1.457	-0.6	77	0.00	8.35
48	P	1,1'-Biphenyl	1.633	1.653	-1.2	70	0.00	8.46
49	P	2-Chloronaphthalene	1.226	1.193	2.7	75	0.00	8.47
50	P	2-Nitroaniline	0.451	0.432	4.2	74	-0.01	8.61
51		p-Dinitrobenzene	0.253	0.234	7.5	79	0.00	8.79
52	P	Acenaphthylene	1.998	1.876	6.1	72	0.00	8.95
53	P	Dimethylphthalate	1.411	1.374	2.6	72	-0.02	8.84
54		m-Dinitrobenzene	0.235	0.221	6.0	76	-0.01	8.87
55	P	2,6-Dinitrotoluene	0.333	0.324	2.7	75	-0.01	8.91
56		o-Dinitrobenzene	0.319	0.312	2.2	70	-0.02	8.95
57	P	Acenaphthene	1.329	1.322	0.5	74	-0.01	9.15
58	P	3-Nitroaniline	0.366	0.375	-2.5	79	-0.02	9.09
		----------	True	Calc.	% Drift	----------		
59	P	2,4-Dinitrophenol	5.000	1.427	71.5#	36	0.00	9.23
		----------	AvgRF	CCRF	% Dev	----------		
60	P	Dibenzofuran	1.773	1.730	2.4	73	0.00	9.36
61	P	2,4-Dinitrotoluene	0.425	0.420	1.2	74	-0.01	9.38
62	P	4-Nitrophenol	0.205	0.158	22.9#	68	0.00	9.38
63		2,3,5,6-Tetrachlorophenol	0.297	0.241	18.9	69	0.00	9.47
64	P	2,3,4,6-Tetrachlorophenol	0.308	0.284	7.8	81	0.00	9.53
65	P	Fluorene	1.384	1.383	0.1	74	0.00	9.76
66	P	4-Chlorophenyl-phenylethe	0.668	0.641	4.0	72	0.00	9.78
67	P	Diethylphthalate	1.409	1.387	1.6	75	-0.01	9.68
68		Thionazin	0.299	0.314	-5.0	74	-0.02	9.77
69	P	4-Nitroaniline	0.408	0.381	6.6	73	-0.03	9.81
70	I	Phenanthrene-d10	1.000	1.000	0.0	73	0.00	10.86
		----------	True	Calc.	% Drift	----------		
71	P	4,6-Dinitro-2-methylpheno	5.000	3.540	29.2#	75	-0.02	9.85
		----------	AvgRF	CCRF	% Dev	----------		
72	P	n-Nitrosodiphenylamine	0.622	0.566	9.0	73	-0.01	9.93
73		Diphenylamine	0.729	0.679	6.9	73	-0.01	9.93
74		1,2-Diphenylhydrazine	0.896	0.831	7.3	72	-0.01	9.97
		----------	True	Calc.	% Drift	----------		
75	S	2,4,6-Tribromophenol	10.000	9.514	4.9	77	0.00	10.05
		----------	AvgRF	CCRF	% Dev	----------		
76		Sulfotep	0.132	0.129	2.3	73	0.00	10.15
77		Phorate	0.462	0.459	0.6	75	0.00	10.29
78	P	4-Bromophenyl-phenylether	0.192	0.175	8.9	74	0.00	10.36
79	P	Hexachlorobenzene	0.192	0.179	6.8	79	-0.01	10.40

Continuing Calibration Summary

Job Number: FA77576 **Sample:** SX2950-CC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072330.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

			True	Calc.	% Drift			
80		Dimethoate	5.000	4.948	1.0	79	-0.02	10.48
			AvgRF	CCRF	% Dev			
81		Simazine	0.141	0.121	14.2	69	-0.02	10.55
82	P	Atrazine	0.234	0.224	4.3	73	-0.02	10.59
			True	Calc.	% Drift			
83	P	Pentachlorophenol	5.000	1.716	65.7#	35	0.00	10.66
			AvgRF	CCRF	% Dev			
84	P	Phenanthrene	1.209	1.175	2.8	73	0.00	10.89
85	P	Anthracene	1.260	1.192	5.4	74	-0.01	10.94
86		Disulfoton	0.483	0.385	20.3#	59	0.00	10.91
87	P	Carbazole	1.112	1.080	2.9	76	-0.01	11.16
			True	Calc.	% Drift			
88		Methyl Parathion	5.000	4.555	8.9	75	0.00	11.35
			AvgRF	CCRF	% Dev			
89	P	Di-n-butylphthalate	1.241	1.222	1.5	80	0.00	11.63
			True	Calc.	% Drift			
90		Ethyl Parathion	5.000	5.005	-0.1	84	0.00	11.82
			AvgRF	CCRF	% Dev			
91	P	Fluoranthene	1.121	1.150	-2.6	81	0.00	12.29
92	I	Chrysene-d12	1.000	1.000	0.0	84	0.00	14.06
			True	Calc.	% Drift			
93		Benzidine	5.000	4.989	0.2	125	0.00	12.48
			AvgRF	CCRF	% Dev			
94	P	Pyrene	1.661	1.498	9.8	79	-0.01	12.54
95	S	Terphenyl-d14	1.063	1.006	5.4	86	0.00	12.77
			True	Calc.	% Drift			
96		Famphur	5.000	5.741	-14.8	97	0.00	13.31
97	P	Butylbenzylphthalate	5.000	4.823	3.5	94	0.00	13.40
98	P	3,3'-Dichlorobenzidine	5.000	5.253	-5.1	108	-0.01	14.05
			AvgRF	CCRF	% Dev			
99	P	Benzo[a]anthracene	1.257	1.205	4.1	87	0.00	14.05
100	P	Chrysene	1.339	1.311	2.1	89	-0.01	14.09
			True	Calc.	% Drift			
101	P	bis(2-Ethylhexyl)phthalat	5.000	4.661	6.8	103	0.00	14.22
			AvgRF	CCRF	% Dev			
102	I	Perylene-d12	1.000	1.000	0.0	81	0.00	16.25
			True	Calc.	% Drift			
103	P	Di-n-octylphthalate	5.000	5.191	-3.8	81	0.00	15.18
104	P	Benzo[b]fluoranthene	5.000	5.163	-3.3	93	-0.02	15.60
			AvgRF	CCRF	% Dev			
105	P	Benzo[k]fluoranthene	1.420	1.291	9.1	83	-0.02	15.64

Continuing Calibration Summary

Job Number: FA77576 **Sample:** SX2950-CC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072330.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

			True	Calc.	% Drift			
106	P	Benzo[a]pyrene	5.000	4.906	1.9	95	-0.02	16.14
107	P	Indeno[1,2,3-cd]pyrene	5.000	6.867	-37.3#	131	-0.02	17.90
108	P	Dibenz[a,h]anthracene	5.000	6.914	-38.3#	139	-0.02	17.96
109	P	Benzo[g,h,i]perylene	5.000	5.850	-17.0	106	-0.02	18.26

		AvgRF	CCRF	% Dev			
110	1,4-Dichlorobenzene-d4A	1.000	1.000	0.0	83	0.00	5.66
111	2-Picoline		NA				
112	N-Nitrosomethylethylamine		NA				
113	Methyl methanesulfonate		NA				
114	N-Nitrosodiethylamine		NA				
115	Ethyl methanesulfonate		NA				
116	Pentachloroethane		NA				
117	N-Nitrosopyrrolidine		NA				
118	N-Nitrosomorpholine		NA				
119	O-Toluidine		NA				
120	Naphthalene-d8A	1.000	1.000	0.0	80	0.00	7.08
121	N-Nitrosopiperidine		NA				
122	A,A-Dimethylphenethylamin		NA				
123	Hexachloropropene		NA				

		True	Calc.	% Drift
124	N-Nitrosodi-n-butylamine		NA	

		AvgRF	CCRF	% Dev			
125	p-Phenylenediamine		NA				
126	Isosafrole		NA				
127	Acenaphthene-d10A	1.000	1.000	0.0	76	0.00	9.12
128	Safrole		NA				
129	1-Chloronaphthalene		NA				
130	Diphenyl Ether		NA				

		True	Calc.	% Drift
131	1,4-Naphthoquinone		NA	

		AvgRF	CCRF	% Dev			
132	Pentachlorobenzene		NA				
133	1-Naphthylamine		NA				
134	2-Naphthylamine		NA				

		True	Calc.	% Drift
135	5-Nitro-o-toluidine		NA	

		AvgRF	CCRF	% Dev			
136	Phenanthrene-d10A	1.000	1.000	0.0	75	0.00	10.86

		True	Calc.	% Drift
137	1,3,5-Trinitrobenzene		NA	

		AvgRF	CCRF	% Dev
138	Diallate		NA	
139	Phenacetin		NA	
140	4-Aminobiphenyl		NA	
141	Pronamide		NA	

Continuing Calibration Summary

Job Number: FA77576 **Sample:** SX2950-CC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072330.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

142		Pentachloronitrobenzene		----------NA----------				
		---------- True	Calc.	% Drift	----------			
143		4-Nitroquinoline 1-Oxide		----------NA----------				
		---------- AvgRF	CCRF	% Dev	----------			
144		Methapyrilene		----------NA----------				
145		Isodrin		----------NA----------				
146	I	Chrysene-d12A	1.000	1.000	0.0	86	0.00	14.06
		---------- True	Calc.	% Drift	----------			
147		Aramite		----------NA----------				
148		p-(Dimethylamine)azobenze		----------NA----------				
149		Chlorobenzilate		----------NA----------				
		---------- AvgRF	CCRF	% Dev	----------			
150		Kepone		----------NA----------				
151		3,3'-Dimethylbenzidine		----------NA----------				
		---------- True	Calc.	% Drift	----------			
152		2-Acetylaminofluorene		----------NA----------				
		---------- AvgRF	CCRF	% Dev	----------			
153	I	Perylene-d12A	1.000	1.000	0.0	81	0.00	16.25
154		7,12-Dimethylbenz(a)anthr		----------NA----------				
		---------- True	Calc.	% Drift	----------			
155		Hexachlorophene		----------NA----------				
156		3-Methylcholanthrene		----------NA----------				
157		Dibenz(a,j)acridine		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
x071365.D 8270DApp9SX-062320.m Wed Aug 12 03:37:14 2020

Continuing Calibration Summary

Job Number: FA77576 **Sample:** SX2951-CC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072357.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\0812_sx2951\x072357.D Vial: 2
Acq On : 12 Aug 2020 10:24 am Operator: marthav
Sample : cc2918-50 8270 Inst : MSBNA05
Misc : op81484,sx2951,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\MET...DApp9SX-062320.m (RTE Integrator)
Title : SW846 8270D OR EPA 625
Last Update : Wed Jun 24 12:54:05 2020
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	96	0.00	5.65
2		1,4-Dioxane	0.686	0.630	8.2	95	0.00	2.47
3		N-nitrosodimethylamine	1.217	1.054	13.4	87	0.00	2.81
4		Pyridine	1.668	1.799	-7.9	106	0.00	2.84
5	P	Benzaldehyde	1.192	1.143	4.1	96	0.00	5.18
6		Aniline	2.378	2.106	11.4	83	0.00	5.31
7	S	2-Fluorophenol	1.434	1.448	-1.0	102	0.00	4.31
8	P	bis(2-Chloroethyl)ether	1.468	1.503	-2.4	99	0.00	5.39
9	S	Phenol-d5	1.706	1.744	-2.2	102	0.00	5.33
10	P	Phenol	2.024	1.975	2.4	90	0.00	5.35
11	P	2-Chlorophenol	1.530	1.604	-4.8	99	0.00	5.44
12		1,3-Dichlorobenzene	1.590	1.647	-3.6	102	0.00	5.58
13		1,4-Dichlorobenzene	1.682	1.726	-2.6	100	0.00	5.67
14		1,2-Dichlorobenzene	1.598	1.547	3.2	94	0.00	5.83
15		Benzyl alcohol	1.059	1.014	4.2	92	0.00	5.84
16	P	2,2'-Oxybis(1-chloropropa	3.084	2.664	13.6	84	0.00	5.98
17	P	2-Methylphenol	1.456	1.436	1.4	93	0.00	5.99
18	P	Acetophenone	2.154	2.053	4.7	92	0.00	6.11
19	P	Hexachloroethane	0.632	0.666	-5.4	102	0.00	6.20
20	P	N-Nitroso-di-n-propylamin	1.138	1.111	2.4	93	0.00	6.13
21	P	3&4-Methylphenol	1.505	1.537	-2.1	96	0.00	6.17
22	I	Naphthalene-d8	1.000	1.000	0.0	87	0.00	7.08
23	S	Nitrobenzene-d5	0.413	0.442	-7.0	95	0.00	6.27
24	P	Nitrobenzene	0.409	0.431	-5.4	93	0.00	6.30
25	P	Isophorone	0.730	0.707	3.2	87	0.00	6.57
26	P	2-Nitrophenol	0.194	0.216	-11.3	96	0.00	6.65
27	P	2,4-Dimethylphenol	0.361	0.343	5.0	83	0.00	6.75
28		O,O,O-Triethylphosphoroth	0.153	0.156	-2.0	90	0.00	6.81
29	P	bis(2-Chloroethoxy)methan	0.427	0.435	-1.9	90	0.00	6.84
		----------	Amount	Calc.	%Drift	----------		
30		Benzoic Acid	50.000	44.773	10.5	75	0.00	6.92
		----------	AvgRF	CCRF	%Dev	----------		
31	P	2,4-Dichlorophenol	0.291	0.305	-4.8	90	0.00	6.95
32		1,2,4-Trichlorobenzene	0.297	0.317	-6.7	96	0.00	7.02
33		alpha-Terpineol		----------NA----------				
34	P	Naphthalene	1.085	1.116	-2.9	91	0.00	7.10
35	P	4-Chloroaniline	0.458	0.451	1.5	86	0.00	7.19
36		2,6-Dichlorophenol	0.297	0.298	-0.3	88	0.00	7.20
37	P	Hexachlorobutadiene	0.147	0.160	-8.8	98	0.00	7.25

Continuing Calibration Summary

Job Number: FA77576 **Sample:** SX2951-CC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072357.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

38	P	Caprolactam	0.121	0.116	4.1	85	0.00	7.64
39	P	4-Chloro-3-methylphenol	0.310	0.305	1.6	86	0.00	7.81
40	P	2-Methylnaphthalene	0.717	0.714	0.4	89	0.00	7.91
41		1-Methylnaphthalene	0.687	0.685	0.3	89	0.00	8.02
42	P	1,2,4,5-Tetrachlorobenzen	0.298	0.301	-1.0	88	0.00	8.10
43	I	Acenaphthene-d10	1.000	1.000	0.0	82	0.00	9.12
		----------	Amount	Calc.	%Drift	----------		
44	P	Hexachlorocyclopentadiene	50.000	36.476	27.0#	56	0.00	8.09
		----------	AvgRF	CCRF	%Dev	----------		
45	P	2,4,6-Trichlorophenol	0.367	0.405	-10.4	87	0.00	8.26
46	P	2,4,5-Trichlorophenol	0.403	0.444	-10.2	88	0.00	8.32
47	S	2-Fluorobiphenyl	1.448	1.607	-11.0	91	0.00	8.35
48	P	1,1'-Biphenyl	1.633	1.714	-5.0	86	0.00	8.46
49	P	2-Chloronaphthalene	1.226	1.323	-7.9	88	0.00	8.47
50	P	2-Nitroaniline	0.451	0.490	-8.6	88	0.00	8.62
51		p-Dinitrobenzene	0.253	0.280	-10.7	86	0.00	8.80
52	P	Acenaphthylene	1.998	2.131	-6.7	86	0.00	8.95
53	P	Dimethylphthalate	1.411	1.447	-2.6	86	0.00	8.86
54		m-Dinitrobenzene	0.235	0.264	-12.3	87	0.00	8.89
55	P	2,6-Dinitrotoluene	0.333	0.357	-7.2	86	0.00	8.92
56		o-Dinitrobenzene	0.319	0.344	-7.8	91	0.00	8.97
57	P	Acenaphthene	1.329	1.384	-4.1	87	0.00	9.16
58	P	3-Nitroaniline	0.366	0.409	-11.7	88	0.00	9.11
		----------	Amount	Calc.	%Drift	----------		
59	P	2,4-Dinitrophenol	50.000	50.712	-1.4	82	0.00	9.24
		----------	AvgRF	CCRF	%Dev	----------		
60	P	Dibenzofuran	1.773	1.800	-1.5	85	0.00	9.36
61	P	2,4-Dinitrotoluene	0.425	0.474	-11.5	90	0.00	9.39
62	P	4-Nitrophenol	0.205	0.173	15.6	68	0.00	9.39
63		2,3,5,6-Tetrachlorophenol	0.297	0.304	-2.4	79	0.00	9.48
64	P	2,3,4,6-Tetrachlorophenol	0.311	0.324	-4.2	84	0.00	9.53
65	P	Fluorene	1.384	1.472	-6.4	89	0.00	9.76
66	P	4-Chlorophenyl-phenylethe	0.668	0.705	-5.5	87	0.00	9.78
67	P	Diethylphthalate	1.409	1.430	-1.5	84	0.00	9.69
68		Thionazin	0.299	0.328	-9.7	89	0.00	9.78
69	P	4-Nitroaniline	0.408	0.431	-5.6	85	0.00	9.84
70	I	Phenanthrene-d10	1.000	1.000	0.0	81	0.00	10.86
		----------	Amount	Calc.	%Drift	----------		
71	P	4,6-Dinitro-2-methylpheno	50.000	54.294	-8.6	89	0.00	9.87
		----------	AvgRF	CCRF	%Dev	----------		
72	P	n-Nitrosodiphenylamine	0.622	0.651	-4.7	86	0.00	9.94
73		Diphenylamine	0.729	0.782	-7.3	86	0.00	9.94
74		1,2-Diphenylhydrazine	0.896	0.948	-5.8	85	0.00	9.97
		----------	Amount	Calc.	%Drift	----------		
75	S	2,4,6-Tribromophenol	100.000	104.165	-4.2	86	0.00	10.06
		----------	AvgRF	CCRF	%Dev	----------		
76		Sulfotep	0.132	0.142	-7.6	84	0.00	10.15
77		Phorate	0.462	0.518	-12.1	87	0.00	10.29
78	P	4-Bromophenyl-phenylether	0.192	0.202	-5.2	85	0.00	10.36
79	P	Hexachlorobenzene	0.192	0.206	-7.3	88	0.00	10.40

Continuing Calibration Summary

Job Number: FA77576 **Sample:** SX2951-CC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072357.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

			Amount	Calc.	%Drift			
80		Dimethoate	50.000	55.577	-11.2	91	0.00	10.49
			AvgRF	CCRF	%Dev			
81		Simazine	0.141	0.137	2.8	80	0.00	10.57
82	P	Atrazine	0.234	0.244	-4.3	85	0.00	10.61
			Amount	Calc.	%Drift			
83	P	Pentachlorophenol	50.000	37.705	24.6#	57	0.00	10.67
			AvgRF	CCRF	%Dev			
84	P	Phenanthrene	1.209	1.257	-4.0	85	0.00	10.89
85	P	Anthracene	1.260	1.337	-6.1	85	0.00	10.95
86		Disulfoton	0.483	0.428	11.4	69	0.00	10.91
87	P	Carbazole	1.112	1.174	-5.6	86	0.00	11.17
			Amount	Calc.	%Drift			
88		Methyl Parathion	50.000	53.793	-7.6	88	0.00	11.35
			AvgRF	CCRF	%Dev			
89	P	Di-n-butylphthalate	1.241	1.355	-9.2	84	0.00	11.63
			Amount	Calc.	%Drift			
90		Ethyl Parathion	50.000	53.984	-8.0	89	0.00	11.82
			AvgRF	CCRF	%Dev			
91	P	Fluoranthene	1.121	1.205	-7.5	87	0.00	12.29
92	I	Chrysene-d12	1.000	1.000	0.0	84	0.00	14.07
			Amount	Calc.	%Drift			
93		Benzidine	50.000	51.400	-2.8	85	0.00	12.49
			AvgRF	CCRF	%Dev			
94	P	Pyrene	1.661	1.659	0.1	86	0.00	12.55
95	S	Terphenyl-d14	1.063	1.146	-7.8	91	0.00	12.78
			Amount	Calc.	%Drift			
96		Famphur		----------NA----------				
97	P	Butylbenzylphthalate	50.000	51.962	-3.9	89	0.00	13.41
98	P	3,3'-Dichlorobenzidine	50.000	54.718	-9.4	93	0.00	14.06
			AvgRF	CCRF	%Dev			
99	P	Benzo[a]anthracene	1.257	1.305	-3.8	88	0.00	14.06
100	P	Chrysene	1.339	1.396	-4.3	89	0.00	14.11
			Amount	Calc.	%Drift			
101	P	bis(2-Ethylhexyl)phthalat	50.000	53.893	-7.8	90	0.00	14.22
			AvgRF	CCRF	%Dev			
102	I	Perylene-d12	1.000	1.000	0.0	84	0.00	16.27
			Amount	Calc.	%Drift			
103	P	Di-n-octylphthalate	50.000	61.312	-22.6#	107	0.00	15.18
104	P	Benzo[b]fluoranthene	50.000	57.609	-15.2	101	0.00	15.62
			AvgRF	CCRF	%Dev			
105	P	Benzo[k]fluoranthene	1.420	1.514	-6.6	90	0.00	15.67

Continuing Calibration Summary

Job Number: FA77576 **Sample:** SX2951-CC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072357.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

			Amount	Calc.	%Drift			
106	P	Benzo[a]pyrene	50.000	54.625	-9.3	95	0.00	16.17
107	P	Indeno[1,2,3-cd]pyrene	50.000	66.545	-33.1#	125	0.00	17.93
108	P	Dibenz[a,h]anthracene	50.000	64.702	-29.4#	122	0.00	17.99
109	P	Benzo[g,h,i]perylene	50.000	54.625	-9.3	96	0.00	18.30

		AvgRF	CCRF	%Dev			
110	1,4-Dichlorobenzene-d4A	1.000	1.000	0.0	108	0.00	5.65
111	2-Picoline		----------NA----------				
112	N-Nitrosomethylethylamine		----------NA----------				
113	Methyl methanesulfonate		----------NA----------				
114	N-Nitrosodiethylamine		----------NA----------				
115	Ethyl methanesulfonate		----------NA----------				
116	Pentachloroethane		----------NA----------				
117	N-Nitrosopyrrolidine		----------NA----------				
118	N-Nitrosomorpholine		----------NA----------				
119	O-Toluidine		----------NA----------				
120	Naphthalene-d8A	1.000	1.000	0.0	97	0.00	7.08
121	N-Nitrosopiperidine		----------NA----------				
122	A,A-Dimethylphenethylamin		----------NA----------				
123	Hexachloropropene		----------NA----------				

		Amount	Calc.	%Drift
124	N-Nitrosodi-n-butylamine		----------NA----------	

		AvgRF	CCRF	%Dev			
125	p-Phenylenediamine		----------NA----------				
126	Isosafrole		----------NA----------				
127	Acenaphthene-d10A	1.000	1.000	0.0	89	0.00	9.12
128	Safrole		----------NA----------				
129	1-Chloronaphthalene		----------NA----------				
130	Diphenyl Ether		----------NA----------				

		Amount	Calc.	%Drift
131	1,4-Naphthoquinone		----------NA----------	

		AvgRF	CCRF	%Dev			
132	Pentachlorobenzene		----------NA----------				
133	1-Naphthylamine		----------NA----------				
134	2-Naphthylamine		----------NA----------				

		Amount	Calc.	%Drift
135	5-Nitro-o-toluidine		----------NA----------	

		AvgRF	CCRF	%Dev			
136	Phenanthrene-d10A	1.000	1.000	0.0	81	0.00	10.86

		Amount	Calc.	%Drift
137	1,3,5-Trinitrobenzene		----------NA----------	

		AvgRF	CCRF	%Dev			
138	Diallate		----------NA----------				
139	Phenacetin		----------NA----------				
140	4-Aminobiphenyl		----------NA----------				
141	Pronamide		----------NA----------				

6.7.15

6

Continuing Calibration Summary

Job Number: FA77576 **Sample:** SX2951-CC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072357.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

142		Pentachloronitrobenzene		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
143		4-Nitroquinoline 1-Oxide		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
144		Methapyrilene		----------NA----------				
145		Isodrin		----------NA----------				
146	I	Chrysene-d12A	1.000	1.000	0.0	98	0.00	14.07
		----------	Amount	Calc.	%Drift	----------		
147		Aramite		----------NA----------				
148		p-(Dimethylamine)azobenze		----------NA----------				
149		Chlorobenzilate		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
150		Kepone		----------NA----------				
151		3,3'-Dimethylbenzidine		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
152		2-Acetylaminofluorene		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
153	I	Perylene-d12A	1.000	1.000	0.0	87	0.00	16.27
154		7,12-Dimethylbenz(a)anthr		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
155		Hexachlorophene		----------NA----------				
156		3-Methylcholanthrene		----------NA----------				
157		Dibenz(a,j)acridine		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
x071368.D 8270DApp9SX-062320.m Wed Aug 12 15:21:44 2020

Continuing Calibration Summary

Job Number: FA77576 **Sample:** SX2951-CC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072358.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\0812_sx2951\x072358.D Vial: 3
Acq On : 12 Aug 2020 10:49 am Operator: marthav
Sample : cc2918-5 8270 Inst : MSBNA05
Misc : op81484,sx2951,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\MET...DApp9SX-062320.m (RTE Integrator)
Title : SW846 8270D OR EPA 625
Last Update : Wed Jun 24 12:54:05 2020
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	109	0.00	5.65
2		1,4-Dioxane	0.686	0.652	5.0	100	0.01	2.48
3		N-nitrosodimethylamine	1.217	1.063	12.7	98	0.00	2.81
4		Pyridine	1.668	1.790	-7.3	124	0.02	2.86
5	P	Benzaldehyde	1.192	1.182	0.8	103	0.00	5.18
6		Aniline	2.378	2.074	12.8	104	0.00	5.30
7	S	2-Fluorophenol	1.434	1.494	-4.2	115	0.00	4.31
8	P	bis(2-Chloroethyl)ether	1.468	1.359	7.4	109	0.00	5.38
9	S	Phenol-d5	1.706	1.659	2.8	112	0.00	5.33
10	P	Phenol	2.024	1.778	12.2	111	0.00	5.34
11	P	2-Chlorophenol	1.530	1.433	6.3	116	0.00	5.44
12		1,3-Dichlorobenzene	1.590	1.544	2.9	112	0.00	5.58
13		1,4-Dichlorobenzene	1.682	1.623	3.5	110	0.00	5.67
14		1,2-Dichlorobenzene	1.598	1.523	4.7	111	0.00	5.83
15		Benzyl alcohol	1.059	0.912	13.9	106	-0.01	5.83
16	P	2,2'-Oxybis(1-chloropropa	3.084	2.674	13.3	95	0.00	5.97
17	P	2-Methylphenol	1.456	1.316	9.6	106	-0.01	5.98
18	P	Acetophenone	2.154	1.939	10.0	95	0.00	6.10
19	P	Hexachloroethane	0.632	0.608	3.8	112	0.00	6.20
20	P	N-Nitroso-di-n-propylamin	1.138	1.006	11.6	98	-0.02	6.11
21	P	3&4-Methylphenol	1.505	1.364	9.4	104	0.00	6.16
22	I	Naphthalene-d8	1.000	1.000	0.0	101	0.00	7.08
23	S	Nitrobenzene-d5	0.413	0.419	-1.5	109	0.00	6.27
24	P	Nitrobenzene	0.409	0.417	-2.0	108	-0.01	6.29
25	P	Isophorone	0.730	0.679	7.0	96	-0.01	6.56
26	P	2-Nitrophenol	0.194	0.194	0.0	118	0.00	6.65
27	P	2,4-Dimethylphenol	0.361	0.330	8.6	97	0.00	6.75
28		O,O,O-Triethylphosphoroth	0.153	0.144	5.9	97	0.00	6.80
29	P	bis(2-Chloroethoxy)methan	0.427	0.402	5.9	100	0.00	6.83
		----------	Amount	Calc.	%Drift	----------		
30		Benzoic Acid	5.000	3.543	29.1#	119	-0.06	6.86
		----------	AvgRF	CCRF	%Dev	----------		
31	P	2,4-Dichlorophenol	0.291	0.281	3.4	107	0.00	6.95
32		1,2,4-Trichlorobenzene	0.297	0.294	1.0	106	0.00	7.01
33		alpha-Terpineol		----------NA----------				
34	P	Naphthalene	1.085	1.079	0.6	104	0.00	7.10
35	P	4-Chloroaniline	0.458	0.435	5.0	99	0.00	7.18
36		2,6-Dichlorophenol	0.297	0.287	3.4	104	-0.01	7.19
37	P	Hexachlorobutadiene	0.147	0.155	-5.4	115	0.00	7.25

Continuing Calibration Summary

Job Number: FA77576 **Sample:** SX2951-CC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072358.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

38	P	Caprolactam	0.121	0.111	8.3	90	-0.07	7.57
39	P	4-Chloro-3-methylphenol	0.310	0.290	6.5	100	-0.01	7.80
40	P	2-Methylnaphthalene	0.717	0.692	3.5	99	0.00	7.90
41		1-Methylnaphthalene	0.687	0.650	5.4	98	0.00	8.01
42	P	1,2,4,5-Tetrachlorobenzen	0.298	0.279	6.4	100	0.00	8.10
43	I	Acenaphthene-d10	1.000	1.000	0.0	94	0.00	9.11
		----------	Amount	Calc.	%Drift	----------		
44	P	Hexachlorocyclopentadiene	5.000	1.354	72.9#	30	0.00	8.08
		----------	AvgRF	CCRF	%Dev	----------		
45	P	2,4,6-Trichlorophenol	0.367	0.355	3.3	101	0.00	8.25
46	P	2,4,5-Trichlorophenol	0.403	0.370	8.2	98	-0.01	8.31
47	S	2-Fluorobiphenyl	1.448	1.410	2.6	97	0.00	8.34
48	P	1,1'-Biphenyl	1.633	1.576	3.5	87	0.00	8.45
49	P	2-Chloronaphthalene	1.226	1.178	3.9	96	-0.01	8.46
50	P	2-Nitroaniline	0.451	0.438	2.9	98	-0.01	8.61
51		p-Dinitrobenzene	0.253	0.227	10.3	99	-0.01	8.79
52	P	Acenaphthylene	1.998	1.817	9.1	91	0.00	8.94
53	P	Dimethylphthalate	1.411	1.292	8.4	88	-0.02	8.84
54		m-Dinitrobenzene	0.235	0.214	8.9	96	-0.01	8.87
55	P	2,6-Dinitrotoluene	0.333	0.306	8.1	92	-0.01	8.91
56		o-Dinitrobenzene	0.319	0.311	2.5	91	-0.02	8.95
57	P	Acenaphthene	1.329	1.273	4.2	93	-0.01	9.15
58	P	3-Nitroaniline	0.366	0.354	3.3	97	-0.02	9.09
		----------	Amount	Calc.	%Drift	----------		
59	P	2,4-Dinitrophenol	5.000	1.450	71.0#	48	0.00	9.24
		----------	AvgRF	CCRF	%Dev	----------		
60	P	Dibenzofuran	1.773	1.653	6.8	90	0.00	9.36
61	P	2,4-Dinitrotoluene	0.425	0.398	6.4	91	-0.01	9.38
62	P	4-Nitrophenol	0.205	0.133	35.1#	74	0.00	9.39
63		2,3,5,6-Tetrachlorophenol	0.297	0.230	22.6#	85	0.00	9.47
64	P	2,3,4,6-Tetrachlorophenol	0.311	0.265	14.8	90	0.00	9.53
65	P	Fluorene	1.384	1.311	5.3	91	0.00	9.76
66	P	4-Chlorophenyl-phenylethe	0.668	0.602	9.9	88	0.00	9.78
67	P	Diethylphthalate	1.409	1.269	9.9	89	-0.01	9.68
68		Thionazin	0.299	0.295	1.3	90	-0.01	9.77
69	P	4-Nitroaniline	0.408	0.354	13.2	89	-0.03	9.81
70	I	Phenanthrene-d10	1.000	1.000	0.0	91	0.00	10.86
		----------	Amount	Calc.	%Drift	----------		
71	P	4,6-Dinitro-2-methylpheno	5.000	3.317	33.7#	87	-0.02	9.86
		----------	AvgRF	CCRF	%Dev	----------		
72	P	n-Nitrosodiphenylamine	0.622	0.558	10.3	89	-0.01	9.93
73		Diphenylamine	0.729	0.669	8.2	89	-0.01	9.93
74		1,2-Diphenylhydrazine	0.896	0.799	10.8	85	0.00	9.97
		----------	Amount	Calc.	%Drift	----------		
75	S	2,4,6-Tribromophenol	10.000	9.792	2.1	98	-0.01	10.05
		----------	AvgRF	CCRF	%Dev	----------		
76		Sulfotep	0.132	0.122	7.6	85	0.00	10.15
77		Phorate	0.462	0.446	3.5	91	0.00	10.28
78	P	4-Bromophenyl-phenylether	0.192	0.174	9.4	91	0.00	10.35
79	P	Hexachlorobenzene	0.192	0.173	9.9	94	0.00	10.40

Continuing Calibration Summary

Job Number: FA77576 **Sample:** SX2951-CC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072358.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

			Amount	Calc.	%Drift			
80		Dimethoate	5.000	4.765	4.7	94	-0.02	10.48
			AvgRF	CCRF	%Dev			
81		Simazine	0.141	0.117	17.0	83	-0.02	10.55
82	P	Atrazine	0.234	0.198	15.4	80	-0.02	10.59
			Amount	Calc.	%Drift			
83	P	Pentachlorophenol	5.000	1.486	70.3#	38	0.00	10.66
			AvgRF	CCRF	%Dev			
84	P	Phenanthrene	1.209	1.119	7.4	86	0.00	10.89
85	P	Anthracene	1.260	1.157	8.2	89	0.00	10.94
86		Disulfoton	0.483	0.473	2.1	90	0.00	10.90
87	P	Carbazole	1.112	1.026	7.7	89	-0.01	11.16
			Amount	Calc.	%Drift			
88		Methyl Parathion	5.000	4.579	8.4	94	-0.01	11.34
			AvgRF	CCRF	%Dev			
89	P	Di-n-butylphthalate	1.241	1.178	5.1	95	0.00	11.62
			Amount	Calc.	%Drift			
90		Ethyl Parathion	5.000	4.745	5.1	99	-0.01	11.81
			AvgRF	CCRF	%Dev			
91	P	Fluoranthene	1.121	1.060	5.4	93	0.00	12.29
92	I	Chrysene-d12	1.000	1.000	0.0	98	-0.01	14.06
			Amount	Calc.	%Drift			
93		Benzidine	5.000	5.382	-7.6	157	0.00	12.48
			AvgRF	CCRF	%Dev			
94	P	Pyrene	1.661	1.447	12.9	89	-0.01	12.54
95	S	Terphenyl-d14	1.063	0.986	7.2	99	0.00	12.77
			Amount	Calc.	%Drift			
96		Famphur		----------	NA ----------			
97	P	Butylbenzylphthalate	5.000	5.033	-0.7	114	0.00	13.40
98	P	3,3'-Dichlorobenzidine	5.000	5.378	-7.6	129	-0.01	14.05
			AvgRF	CCRF	%Dev			
99	P	Benzo[a]anthracene	1.257	1.165	7.3	98	0.00	14.05
100	P	Chrysene	1.339	1.218	9.0	96	-0.02	14.09
			Amount	Calc.	%Drift			
101	P	bis(2-Ethylhexyl)phthalat	5.000	5.002	-0.0	129	0.00	14.21
			AvgRF	CCRF	%Dev			
102	I	Perylene-d12	1.000	1.000	0.0	98	0.00	16.26
			Amount	Calc.	%Drift			
103	P	Di-n-octylphthalate	5.000	6.080	-21.6#	115	-0.01	15.17
104	P	Benzo[b]fluoranthene	5.000	5.172	-3.4	112	-0.02	15.60
			AvgRF	CCRF	%Dev			
105	P	Benzo[k]fluoranthene	1.420	1.169	17.7	90	-0.03	15.65

Continuing Calibration Summary

Job Number: FA77576 **Sample:** SX2951-CC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072358.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

			Amount	Calc.	%Drift			
106	P	Benzo[a]pyrene	5.000	4.981	0.4	116	-0.02	16.15
107	P	Indeno[1,2,3-cd]pyrene	5.000	8.429	-68.6#	196	-0.02	17.91
108	P	Dibenz[a,h]anthracene	5.000	7.832	-56.6#	191	-0.02	17.97
109	P	Benzo[g,h,i]perylene	5.000	6.057	-21.1#	132	-0.03	18.27

		AvgRF	CCRF	%Dev			
110	1,4-Dichlorobenzene-d4A	1.000	1.000	0.0	112	0.00	5.65
111	2-Picoline		NA				
112	N-Nitrosomethylethylamine		NA				
113	Methyl methanesulfonate		NA				
114	N-Nitrosodiethylamine		NA				
115	Ethyl methanesulfonate		NA				
116	Pentachloroethane		NA				
117	N-Nitrosopyrrolidine		NA				
118	N-Nitrosomorpholine		NA				
119	O-Toluidine		NA				
120	Naphthalene-d8A	1.000	1.000	0.0	106	0.00	7.08
121	N-Nitrosopiperidine		NA				
122	A,A-Dimethylphenethylamin		NA				
123	Hexachloropropene		NA				

		Amount	Calc.	%Drift
124	N-Nitrosodi-n-butylamine		NA	

		AvgRF	CCRF	%Dev			
125	p-Phenylenediamine		NA				
126	Isosafrole		NA				
127	Acenaphthene-d10A	1.000	1.000	0.0	98	0.00	9.11
128	Safrole		NA				
129	1-Chloronaphthalene		NA				
130	Diphenyl Ether		NA				

		Amount	Calc.	%Drift
131	1,4-Naphthoquinone		NA	

		AvgRF	CCRF	%Dev			
132	Pentachlorobenzene		NA				
133	1-Naphthylamine		NA				
134	2-Naphthylamine		NA				

		Amount	Calc.	%Drift
135	5-Nitro-o-toluidine		NA	

		AvgRF	CCRF	%Dev			
136	Phenanthrene-d10A	1.000	1.000	0.0	93	0.00	10.86

		Amount	Calc.	%Drift
137	1,3,5-Trinitrobenzene		NA	

		AvgRF	CCRF	%Dev
138	Diallate		NA	
139	Phenacetin		NA	
140	4-Aminobiphenyl		NA	
141	Pronamide		NA	

Continuing Calibration Summary

Job Number: FA77576 **Sample:** SX2951-CC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072358.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

142		Pentachloronitrobenzene		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
143		4-Nitroquinoline 1-Oxide		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
144		Methapyrilene		----------NA----------				
145		Isodrin		----------NA----------				
146	I	Chrysene-d12A	1.000	1.000	0.0	100	-0.01	14.06
		----------	Amount	Calc.	%Drift	----------		
147		Aramite		----------NA----------				
148		p-(Dimethylamine)azobenze		----------NA----------				
149		Chlorobenzilate		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
150		Kepone		----------NA----------				
151		3,3'-Dimethylbenzidine		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
152		2-Acetylaminofluorene		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
153	I	Perylene-d12A	1.000	1.000	0.0	98	0.00	16.26
154		7,12-Dimethylbenz(a)anthr		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
155		Hexachlorophene		----------NA----------				
156		3-Methylcholanthrene		----------NA----------				
157		Dibenz(a,j)acridine		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
x071365.D 8270DApp9SX-062320.m Wed Aug 12 15:45:20 2020

Run Sequence Report

Job Number: FA77576
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Run ID: S7G472 **Method:** SW846 8270D BY SIM **Instrument ID:** GCMS7G

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
S7G472-DFTPP	7G10822.D	07/21/20 08:44	n/a	DFTPP Tune
S7G472-IC472	7G10833.D	07/21/20 13:31	n/a	Initial cal 1
S7G472-IC472	7G10834.D	07/21/20 13:55	n/a	Initial cal 2
S7G472-IC472	7G10835.D	07/21/20 14:19	n/a	Initial cal 3
S7G472-ICC472	7G10836.D	07/21/20 14:43	n/a	Initial cal 4
S7G472-IC472	7G10837.D	07/21/20 15:07	n/a	Initial cal 5
S7G472-IC472	7G10838.D	07/21/20 15:31	n/a	Initial cal 6
S7G472-IC472	7G10839.D	07/21/20 15:55	n/a	Initial cal 7
S7G472-ICV472	7G10840.D	07/21/20 16:19	n/a	Initial cal verification 4
S7G472-DFTPP	7G10841.D	07/21/20 16:43	n/a	DFTPP Tune
S7G472-CC472	7G10842.D	07/21/20 17:01	n/a	Continuing cal 4
OP81120-MB	7G10843.D	07/21/20 17:25	OP81120	Method Blank
OP81126-MB	7G10845.D	07/21/20 18:13	OP81126	Method Blank
OP81126-BS	7G10846.D	07/21/20 18:38	OP81126	Blank Spike
ZZZZZZ	7G10847.D	07/21/20 19:02	OP81120	(unrelated sample)
ZZZZZZ	7G10848.D	07/21/20 19:26	OP81120	(unrelated sample)
ZZZZZZ	7G10849.D	07/21/20 19:50	OP81120	(unrelated sample)
ZZZZZZ	7G10850.D	07/21/20 20:14	OP81120	(unrelated sample)
ZZZZZZ	7G10851.D	07/21/20 20:37	OP81120	(unrelated sample)
FA76888-6	7G10852.D	07/21/20 21:01	OP81120	(used for QC only; not part of job FA77576)
OP81120-MS	7G10853.D	07/21/20 21:25	OP81120	Matrix Spike
OP81120-MSD	7G10854.D	07/21/20 21:48	OP81120	Matrix Spike Duplicate
ZZZZZZ	7G10855.D	07/21/20 22:12	OP81126	(unrelated sample)
ZZZZZZ	7G10856.D	07/21/20 22:35	OP81126	(unrelated sample)
ZZZZZZ	7G10857.D	07/21/20 22:59	OP81126	(unrelated sample)
FA76878-1	7G10858.D	07/21/20 23:23	OP81126	(used for QC only; not part of job FA77576)
OP81126-MS	7G10859.D	07/21/20 23:47	OP81126	Matrix Spike
OP81126-MSD	7G10860.D	07/22/20 00:10	OP81126	Matrix Spike Duplicate
ZZZZZZ	7G10861.D	07/22/20 00:34	OP81126	(unrelated sample)
ZZZZZZ	7G10862.D	07/22/20 00:58	OP81126	(unrelated sample)
ZZZZZZ	7G10863.D	07/22/20 01:22	OP81126	(unrelated sample)
ZZZZZZ	7G10864.D	07/22/20 01:45	OP81126	(unrelated sample)
ZZZZZZ	7G10865.D	07/22/20 02:09	OP81126	(unrelated sample)
ZZZZZZ	7G10867.D	07/22/20 02:56	OP81126	(unrelated sample)
ZZZZZZ	7G10868.D	07/22/20 03:20	OP81126	(unrelated sample)

Run Sequence Report

Job Number: FA77576
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Run ID: S7G482 **Method:** SW846 8270E BY SIM **Instrument ID:** GCMS7G

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
S7G482-DFTPP	7G11099.D	08/10/20 14:10	n/a	DFTPP Tune
S7G482-CC472	7G11100.D	08/10/20 14:28	n/a	Continuing cal 4
OP81483-MB	7G11101.D	08/10/20 14:57	OP81483	Method Blank
OP81483-BS	7G11102.D	08/10/20 15:21	OP81483	Blank Spike
FA77576-2	7G11104.D	08/10/20 16:10	OP81483	CS-SS-106
FA77576-3	7G11105.D	08/10/20 16:34	OP81483	CS-27
FA77576-4	7G11106.D	08/10/20 16:58	OP81483	CS-35
FA77576-6	7G11108.D	08/10/20 17:47	OP81483	CS-SS-109
FA77576-7	7G11109.D	08/10/20 18:12	OP81483	DUP-02
FA77576-9	7G11111.D	08/10/20 19:01	OP81483	CS-39
FA77576-10	7G11112.D	08/10/20 19:25	OP81483	CS-32
FA77576-11	7G11113.D	08/10/20 19:50	OP81483	CS-28
FA77576-12	7G11114.D	08/10/20 20:14	OP81483	CS-34
FA77576-13	7G11115.D	08/10/20 20:38	OP81483	CS-38
FA77576-14	7G11116.D	08/10/20 21:02	OP81483	CS-33
ZZZZZZ	7G11117.D	08/10/20 21:26	OP81483	(unrelated sample)
ZZZZZZ	7G11118.D	08/10/20 21:50	OP81483	(unrelated sample)
ZZZZZZ	7G11119.D	08/10/20 22:14	OP81483	(unrelated sample)
ZZZZZZ	7G11120.D	08/10/20 22:38	OP81483	(unrelated sample)
OP81483-MS	7G11122.D	08/10/20 23:25	OP81483	Matrix Spike
OP81483-MSD	7G11123.D	08/10/20 23:49	OP81483	Matrix Spike Duplicate
ZZZZZZ	7G11124.D	08/11/20 00:12	OP81483	(unrelated sample)
S7G482-ECC472	7G11126.D	08/11/20 01:00	n/a	Ending cal 4

Run Sequence Report

Job Number: FA77576
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Run ID: S7G483 **Method:** SW846 8270E BY SIM **Instrument ID:** GCMS7G

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
S7G483-DFTPP	7G11129.D	08/11/20 08:11	n/a	DFTPP Tune
S7G483-CC472	7G11130.D	08/11/20 08:29	n/a	Continuing cal 4
OP81485-MB	7G11131.D	08/11/20 08:52	OP81485	Method Blank
OP81485-BS	7G11132.D	08/11/20 09:16	OP81485	Blank Spike
ZZZZZZ	7G11133.D	08/11/20 09:39	OP81485	(unrelated sample)
ZZZZZZ	7G11134.D	08/11/20 10:03	OP81485	(unrelated sample)
ZZZZZZ	7G11135.D	08/11/20 10:27	OP81485	(unrelated sample)
ZZZZZZ	7G11136.D	08/11/20 10:50	OP81485	(unrelated sample)
ZZZZZZ	7G11137.D	08/11/20 11:14	OP81485	(unrelated sample)
ZZZZZZ	7G11138.D	08/11/20 11:38	OP81485	(unrelated sample)
ZZZZZZ	7G11139.D	08/11/20 12:02	OP81485	(unrelated sample)
ZZZZZZ	7G11140.D	08/11/20 12:26	OP81485	(unrelated sample)
ZZZZZZ	7G11141.D	08/11/20 12:50	OP81485	(unrelated sample)
FA77615-6	7G11142.D	08/11/20 13:14	OP81485	(used for QC only; not part of job FA77576)
OP81485-MS	7G11143.D	08/11/20 13:38	OP81485	Matrix Spike
OP81485-MSD	7G11144.D	08/11/20 14:02	OP81485	Matrix Spike Duplicate
ZZZZZZ	7G11145.D	08/11/20 14:26	OP81485	(unrelated sample)
ZZZZZZ	7G11146.D	08/11/20 14:51	OP81485	(unrelated sample)
ZZZZZZ	7G11147.D	08/11/20 15:15	OP81485	(unrelated sample)
ZZZZZZ	7G11148.D	08/11/20 15:39	OP81485	(unrelated sample)
ZZZZZZ	7G11149.D	08/11/20 16:04	OP81485	(unrelated sample)
ZZZZZZ	7G11150.D	08/11/20 16:28	OP81485	(unrelated sample)
ZZZZZZ	7G11151.D	08/11/20 16:53	OP81485	(unrelated sample)
ZZZZZZ	7G11152.D	08/11/20 17:17	OP81485	(unrelated sample)
ZZZZZZ	7G11153.D	08/11/20 17:41	OP81485	(unrelated sample)
ZZZZZZ	7G11154.D	08/11/20 18:05	OP81485	(unrelated sample)
FA77576-1	7G11155.D	08/11/20 18:30	OP81483	CS-TB-07
FA77576-5	7G11156.D	08/11/20 18:54	OP81483	CS-37
FA77576-8	7G11157.D	08/11/20 19:18	OP81483	CS-36
FA77581-5	7G11158.D	08/11/20 19:42	OP81483	(used for QC only; not part of job FA77576)

Run Sequence Report

Job Number: FA77576
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Run ID: SX2918 **Method:** EPA 625.1 **Instrument ID:** GCMSX

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
SX2918-DFTPP	X071355.D	06/23/20 09:47	n/a	DFTPP Tune
SX2918-IC2918	X071356.D	06/23/20 10:04	n/a	Initial cal 1
SX2918-IC2918	X071357.D	06/23/20 10:30	n/a	Initial cal 5
SX2918-IC2918	X071358.D	06/23/20 10:55	n/a	Initial cal 10
SX2918-IC2918	X071359.D	06/23/20 11:21	n/a	Initial cal 25
SX2918-IC2918	X071360.D	06/23/20 11:46	n/a	Initial cal 50
SX2918-IC2918	X071361.D	06/23/20 12:12	n/a	Initial cal 60
SX2918-IC2918	X071362.D	06/23/20 12:37	n/a	Initial cal 75
SX2918-IC2918	X071363.D	06/23/20 13:03	n/a	Initial cal 100
SX2918-IC2918	X071364.D	06/23/20 13:29	n/a	Initial cal 1
SX2918-IC2918	X071365.D	06/23/20 13:54	n/a	Initial cal 5
SX2918-IC2918	X071366.D	06/23/20 14:20	n/a	Initial cal 10
SX2918-IC2918	X071367.D	06/23/20 14:46	n/a	Initial cal 25
SX2918-ICC2918	X071368.D	06/23/20 15:12	n/a	Initial cal 50
SX2918-IC2918	X071369.D	06/23/20 15:39	n/a	Initial cal 60
SX2918-IC2918	X071370.D	06/23/20 16:05	n/a	Initial cal 75
SX2918-IC2918	X071371.D	06/23/20 16:31	n/a	Initial cal 100
SX2918-ICV2918	X071372.D	06/23/20 16:58	n/a	Initial cal verification 50
SX2918-ICV2918	X071373.D	06/23/20 17:25	n/a	Initial cal verification 50
SX2918-ICV2918	X071374.D	06/23/20 17:51	n/a	Initial cal verification 50
SX2918-ICV2918	X071375.D	06/23/20 18:17	n/a	Initial cal verification 50
SX2918-ICV2918	X071376.D	06/23/20 18:43	n/a	Initial cal verification 50
SX2918-DFTPP	X071377.D	06/23/20 19:06	n/a	DFTPP Tune
SX2918-CC2918	X071378.D	06/23/20 19:24	n/a	Continuing cal 50
SX2918-CC2918	X071379.D	06/23/20 19:50	n/a	Continuing cal 50
OP80558-BS	X071380.D	06/23/20 20:15	OP80558	Blank Spike
OP80558-BS2	X071381.D	06/23/20 20:41	OP80558	Blank Spike
OP80558-MB	X071382.D	06/23/20 21:07	OP80558	Method Blank
ZZZZZZ	X071383.D	06/23/20 21:32	OP80558	(unrelated sample)
ZZZZZZ	X071384.D	06/23/20 21:58	OP80558	(unrelated sample)
ZZZZZZ	X071385.D	06/23/20 22:24	OP80558	(unrelated sample)
ZZZZZZ	X071386.D	06/23/20 22:49	OP80558	(unrelated sample)
OP80508-BS	X071387.D	06/23/20 23:15	OP80508	Blank Spike
OP80508-BS2	X071388.D	06/23/20 23:40	OP80508	Blank Spike
OP80508-MB	X071389.D	06/24/20 00:06	OP80508	Method Blank
ZZZZZZ	X071391.D	06/24/20 00:56	OP80508	(unrelated sample)
OP80508-MS	X071393.D	06/24/20 01:47	OP80508	Matrix Spike
OP80508-MSD	X071394.D	06/24/20 02:12	OP80508	Matrix Spike Duplicate
OP80508-MS2	X071396.D	06/24/20 03:03	OP80508	Matrix Spike
OP80508-MSD2	X071397.D	06/24/20 03:28	OP80508	Matrix Spike Duplicate
ZZZZZZ	X071398.D	06/24/20 03:54	OP80508	(unrelated sample)
ZZZZZZ	X071399.D	06/24/20 04:19	OP80508	(unrelated sample)
SX2918-ICV2918	X071416.D	06/24/20 15:22	n/a	Initial cal verification 50

Run Sequence Report

Job Number: FA77576
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Run ID: SX2950	**Method:** SW846 8270E	**Instrument ID:** GCMSX

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
SX2950-DFTPP	X072328.D	08/11/20 12:30	n/a	DFTPP Tune
SX2950-CC2918	X072329.D	08/11/20 12:47	n/a	Continuing cal 50
SX2950-CC2918	X072330.D	08/11/20 13:13	n/a	Continuing cal 5
OP81482-BS	X072331.D	08/11/20 13:39	OP81482	Blank Spike
OP81482-MB	X072332.D	08/11/20 14:05	OP81482	Method Blank
FA77576-1	X072333.D	08/11/20 14:31	OP81482	CS-TB-07
FA77576-2	X072334.D	08/11/20 14:57	OP81482	CS-SS-106
FA77576-3	X072335.D	08/11/20 15:23	OP81482	CS-27
FA77576-4	X072336.D	08/11/20 15:50	OP81482	CS-35
FA77576-5	X072337.D	08/11/20 16:16	OP81482	CS-37
FA77576-6	X072338.D	08/11/20 16:42	OP81482	CS-SS-109
FA77576-7	X072339.D	08/11/20 17:08	OP81482	DUP-02
FA77576-8	X072340.D	08/11/20 17:34	OP81482	CS-36
FA77576-9	X072341.D	08/11/20 18:00	OP81482	CS-39
FA77576-10	X072342.D	08/11/20 18:26	OP81482	CS-32
FA77576-11	X072343.D	08/11/20 18:52	OP81482	CS-28
FA77576-12	X072344.D	08/11/20 19:18	OP81482	CS-34
FA77576-13	X072345.D	08/11/20 19:44	OP81482	CS-38
FA77576-14	X072346.D	08/11/20 20:10	OP81482	CS-33
ZZZZZZ	X072347.D	08/11/20 20:35	OP81482	(unrelated sample)
ZZZZZZ	X072348.D	08/11/20 21:01	OP81482	(unrelated sample)
ZZZZZZ	X072349.D	08/11/20 21:27	OP81482	(unrelated sample)
ZZZZZZ	X072350.D	08/11/20 21:52	OP81482	(unrelated sample)
FA77581-5	X072351.D	08/11/20 22:18	OP81482	(used for QC only; not part of job FA77576)
OP81482-MS	X072352.D	08/11/20 22:44	OP81482	Matrix Spike
OP81482-MSD	X072353.D	08/11/20 23:09	OP81482	Matrix Spike Duplicate
ZZZZZZ	X072354.D	08/11/20 23:34	OP81482	(unrelated sample)

Run Sequence Report

Job Number: FA77576
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Run ID: SX2951	**Method:** SW846 8270E	**Instrument ID:** GCMSX

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
SX2951-DFTPP	X072356.D	08/12/20 10:07	n/a	DFTPP Tune
SX2951-CC2918	X072357.D	08/12/20 10:24	n/a	Continuing cal 50
SX2951-CC2918	X072358.D	08/12/20 10:49	n/a	Continuing cal 5
FA77576-1	X072359.D	08/12/20 11:16	OP81482	CS-TB-07
FA77576-3	X072360.D	08/12/20 11:42	OP81482	CS-27
FA77576-4	X072361.D	08/12/20 12:07	OP81482	CS-35
FA77576-5	X072362.D	08/12/20 12:33	OP81482	CS-37
FA77576-14	X072366.D	08/12/20 14:16	OP81482	CS-33
FA77576-7	X072368.D	08/12/20 15:08	OP81482	DUP-02
FA77576-8	X072369.D	08/12/20 15:33	OP81482	CS-36
ZZZZZZ	X072371.D	08/12/20 16:25	OP81482	(unrelated sample)
ZZZZZZ	X072373.D	08/12/20 17:17	OP81482	(unrelated sample)
FA77581-5	X072374.D	08/12/20 17:43	OP81482	(used for QC only; not part of job FA77576)
FA77576-11	X072375.D	08/12/20 18:09	OP81482	CS-28
ZZZZZZ	X072376.D	08/12/20 18:34	OP81482	(unrelated sample)
ZZZZZZ	X072377.D	08/12/20 19:00	OP81484	(unrelated sample)
ZZZZZZ	X072378.D	08/12/20 19:26	OP81484	(unrelated sample)
ZZZZZZ	X072379.D	08/12/20 19:51	OP81484	(unrelated sample)
ZZZZZZ	X072380.D	08/12/20 20:17	OP81484	(unrelated sample)
ZZZZZZ	X072381.D	08/12/20 20:42	OP81484	(unrelated sample)
ZZZZZZ	X072382.D	08/12/20 21:08	OP81484	(unrelated sample)
ZZZZZZ	X072383.D	08/12/20 21:34	OP81484	(unrelated sample)
ZZZZZZ	X072384.D	08/12/20 21:59	OP81455	(unrelated sample)

MS Semi-volatiles

Raw Data

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan
08/12/20 16:38

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072333.d
Acq On : 11 Aug 2020 2:31 pm
Operator : marthav
Sample : fa77576-1 E
Misc : op81482,sx2950,30.3,,,1,1,soil
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 12 02:11:35 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	5.660	152	178516	40.00	ppm		0.00
22) Naphthalene-d8	7.082	136	672615	40.00	ppm		0.00
43) Acenaphthene-d10	9.120	164	353859	40.00	ppm		0.00
70) Phenanthrene-d10	10.864	188	606812	40.00	ppm		0.00
92) Chrysene-d12	14.089	240	474809	40.00	ppm		0.02
102) Perylene-d12	16.303	264	387366	40.00	ppm		0.05
110) 1,4-Dichlorobenzene-d4A	5.660	152	178516	40.00	ppm		0.00
120) Naphthalene-d8A	7.082	136	672615	40.00	ppm		0.00
127) Acenaphthene-d10A	9.120	164	353859	40.00	ppm		0.00
136) Phenanthrene-d10A	10.864	188	606812	40.00	ppm		0.00
146) Chrysene-d12A	14.089	240	474809	40.00	ppm		0.02
153) Perylene-d12A	16.303	264	387366	40.00	ppm		0.05
System Monitoring Compounds							
7) 2-Fluorophenol	4.323	112	505196	78.93	ppm		0.02
Spiked Amount 100.000	Range 40 - 102		Recovery = 78.93%				
9) Phenol-d5	5.339	99	624879	82.06	ppm		0.00
Spiked Amount 100.000	Range 41 - 100		Recovery = 82.06%				
23) Nitrobenzene-d5	6.275	82	269248	38.76	ppm		0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 77.52%				
47) 2-Fluorobiphenyl	8.350	172	498211	38.89	ppm		0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 77.78%				
75) 2,4,6-Tribromophenol	10.056	330	103905	79.66	ppm		0.00
Spiked Amount 100.000	Range 42 - 108		Recovery = 79.66%				
95) Terphenyl-d14	12.789	244	526876	41.76	ppm		0.01
Spiked Amount 50.000	Range 45 - 119		Recovery = 83.52%				
Target Compounds							Qvalue
5) Benzaldehyde	5.189	106	7615	1.43	ppm		96
18) Acetophenone	6.109	105	19969	2.08	ppm		93
21) 3&4-Methylphenol	6.179	108	8162	1.22	ppm	#	86
27) 2,4-Dimethylphenol	6.751	107	5224	0.86	ppm		95
34) Naphthalene	7.104	128	73757	4.04	ppm		99
40) 2-Methylnaphthalene	7.906	142	51828	4.30	ppm		97
41) 1-Methylnaphthalene	8.018	142	32322	2.80	ppm		95
48) 1,1'-Biphenyl	8.462	154	13713	0.95	ppm		98
52) Acenaphthylene	8.954	152	924870	52.33	ppm		99
57) Acenaphthene	9.152	153	66526	5.66	ppm		99
60) Dibenzofuran	9.361	168	79068	5.04	ppm		94
65) Fluorene	9.762	166	96973	7.92	ppm		99
84) Phenanthrene	10.891	178	283176	15.44	ppm		99
85) Anthracene	10.960	178	1767576	92.49	ppm		98
87) Carbazole	11.163	167	351091	20.82	ppm		98
89) Di-n-butylphthalate	11.629	149	14518	0.77	ppm		99
91) Fluoranthene	12.308	202	2401496	141.15	ppm		97
94) Pyrene	12.575	202	3038639	154.13	ppm		93
97) Butylbenzylphthalate	13.421	149	77742	10.08	ppm		92
99) Benzo[a]anthracene	14.078	228	1450569	97.20	ppm		98
100) Chrysene	14.132	228	1934113	121.70	ppm		97
104) Benzo[b]fluoranthene	15.683	252	3672004	231.33	ppm		98
105) Benzo[k]fluoranthene	15.720	252	782080m	56.87	ppm		
106) Benzo[a]pyrene	16.223	252	1383028	110.47	ppm		97
107) Indeno[1,2,3-cd]pyrene	17.978	276	948117	98.01	ppm		89
108) Dibenz[a,h]anthracene	18.004	278	179834	24.63	ppm		89
109) Benzo[g,h,i]perylene	18.336	276	794359	69.12	ppm		90

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072333.d
Acq On : 11 Aug 2020 2:31 pm
Operator : marthav
Sample : fa77576-1 E
Misc : op81482,sx2950,30.3,,,1,1,soil
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 12 02:11:35 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

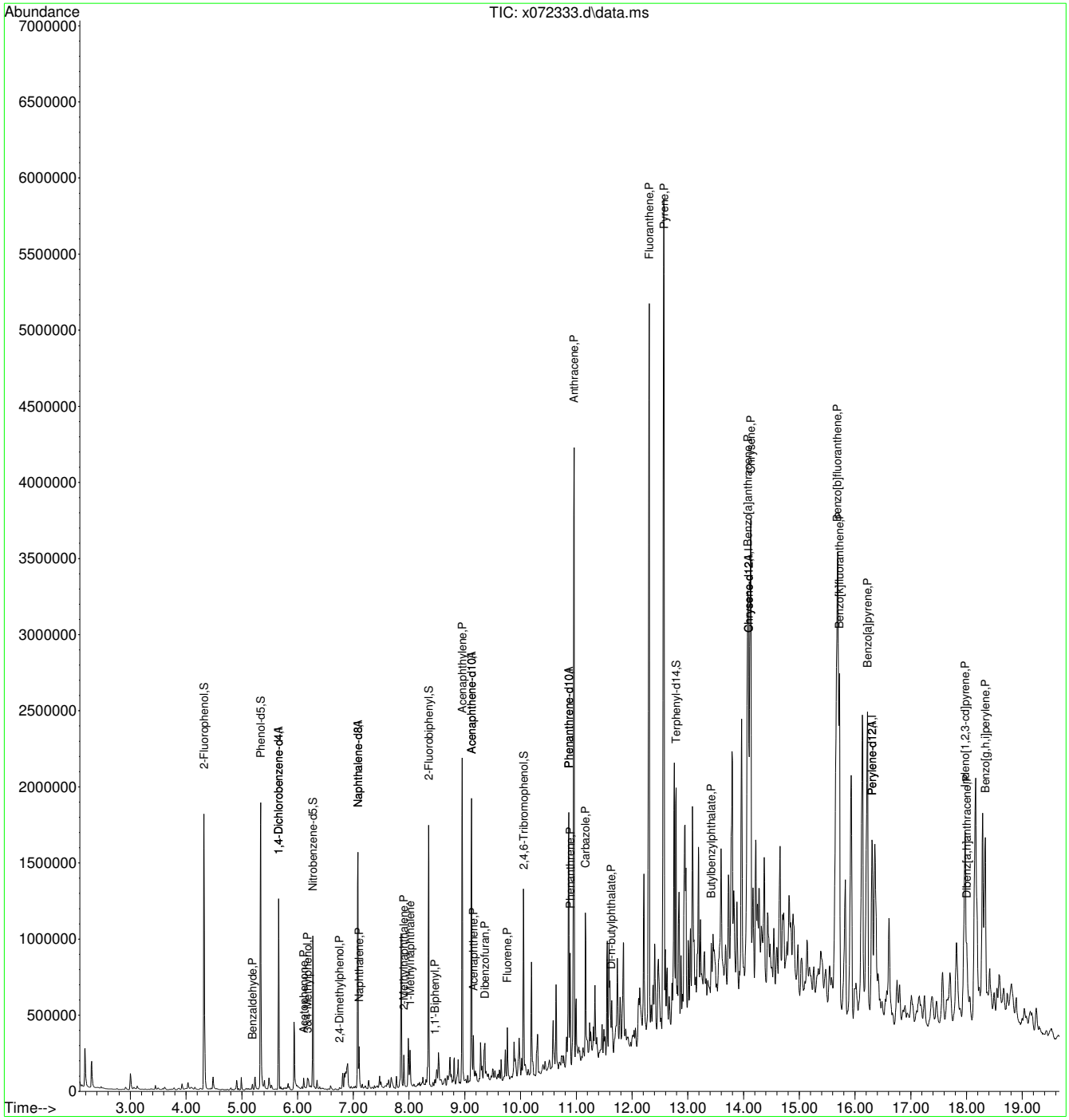
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

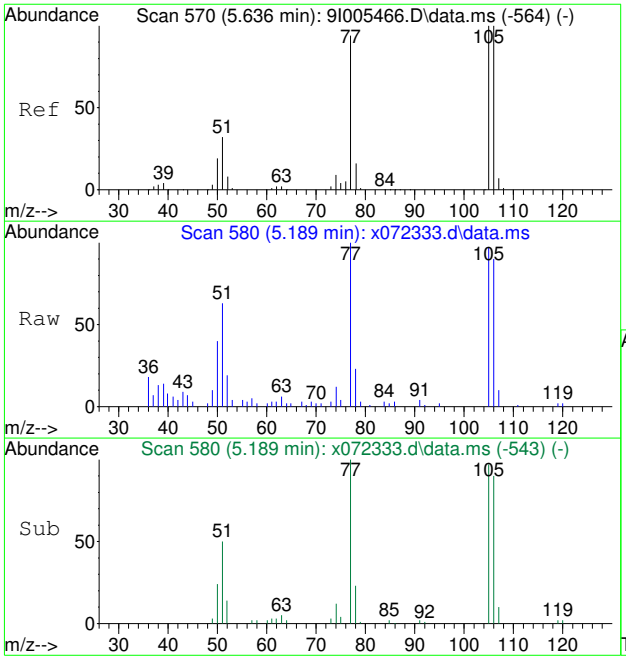
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072333.d
Acq On : 11 Aug 2020 2:31 pm
Operator : marthav
Sample : fa77576-1 E
Misc : op81482,sx2950,30.3,,,1,1,soil
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 12 02:11:35 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

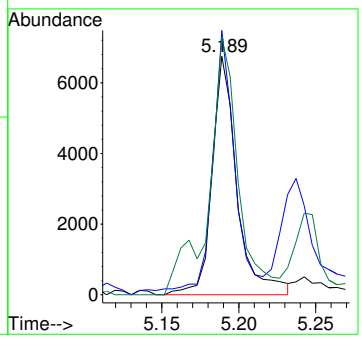


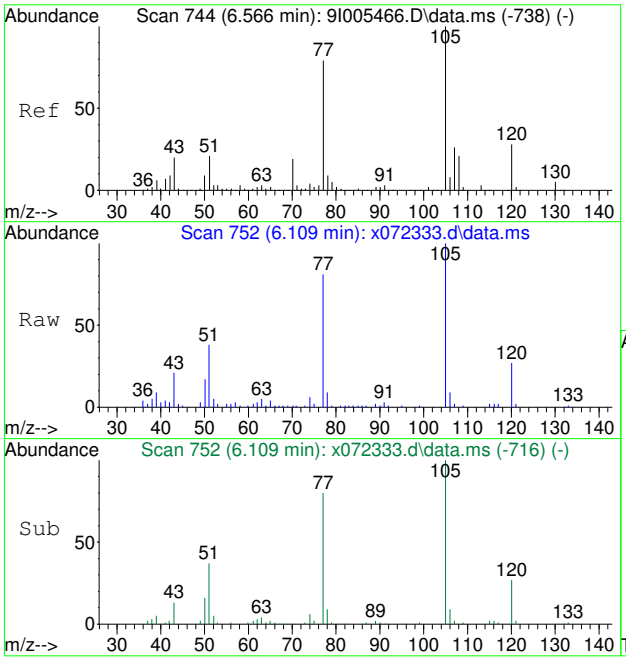


#5
Benzaldehyde
Concen: 1.43 ppm
RT: 5.189 min Scan# 580
Delta R.T. -0.000 min
Lab File: x072333.d
Acq: 11 Aug 2020 2:31 pm

Tgt Ion:106 Resp: 7615

Ion	Ratio	Lower	Upper
106	100		
77	90.7	63.9	123.9
105	104.8	70.0	130.0

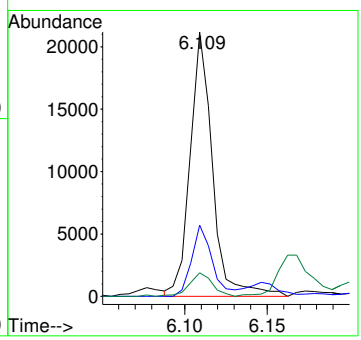


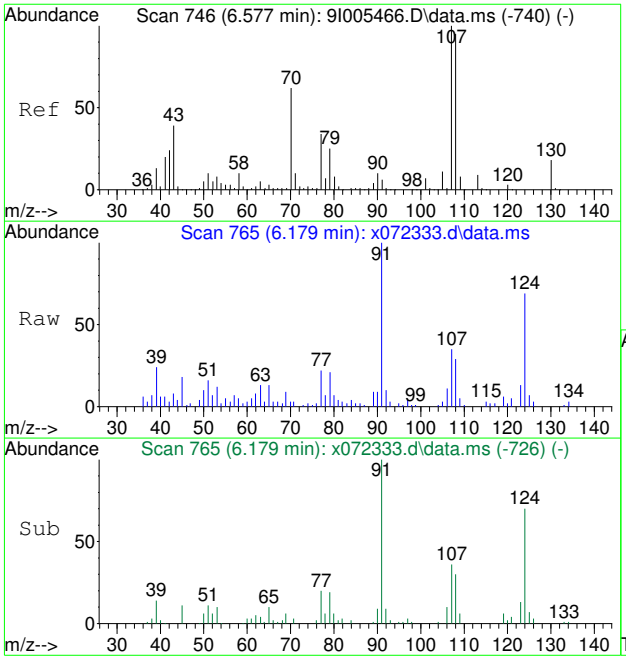


#18
Acetophenone
Concen: 2.08 ppm
RT: 6.109 min Scan# 752
Delta R.T. -0.005 min
Lab File: x072333.d
Acq: 11 Aug 2020 2:31 pm

Tgt Ion:105 Resp: 19969

Ion	Ratio	Lower	Upper
105	100		
120	26.4	0.0	58.3
106	0.9	0.0	38.0

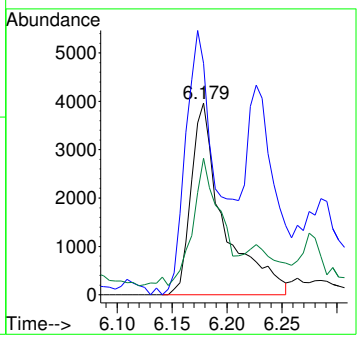


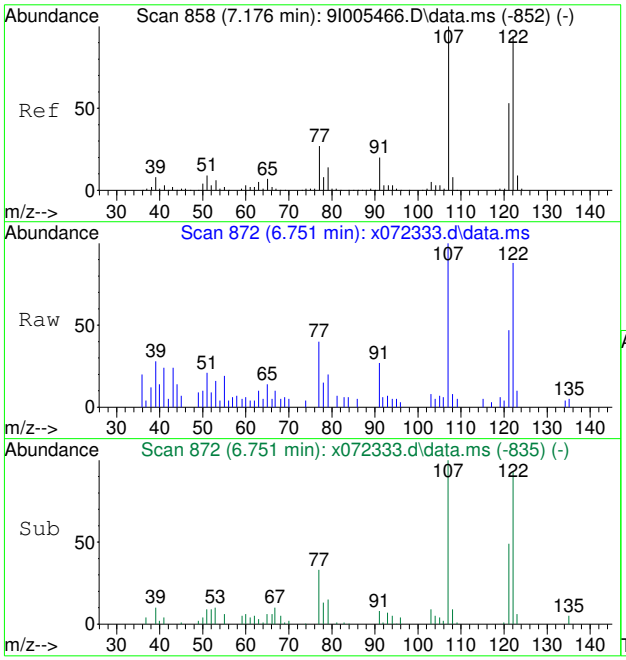


#21
3&4-Methylphenol
Concen: 1.22 ppm
RT: 6.179 min Scan# 765
Delta R.T. 0.011 min
Lab File: x072333.d
Acq: 11 Aug 2020 2:31 pm

Tgt Ion:108 Resp: 8162

Ion	Ratio	Lower	Upper
108	100		
107	106.0	75.4	135.4
79	60.1	0.0	56.3#

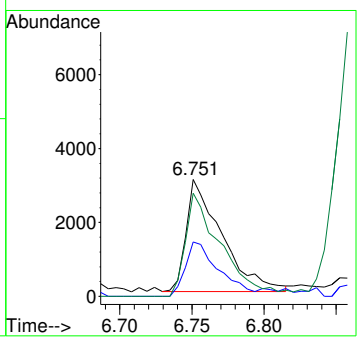


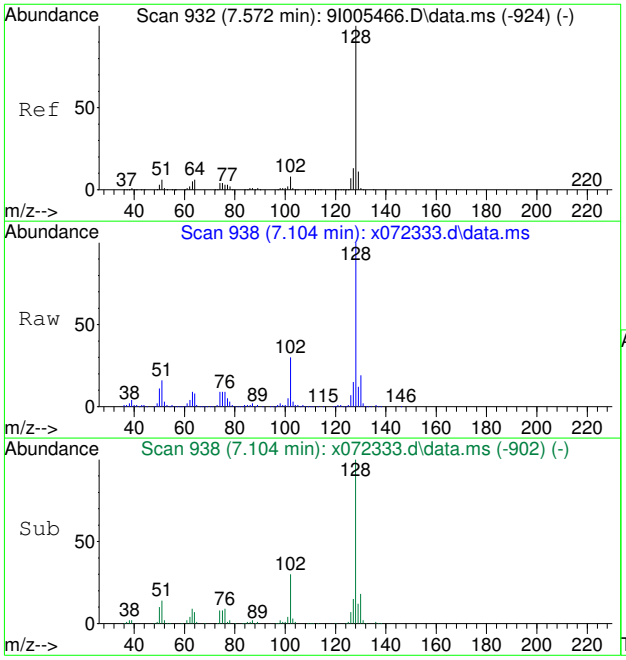


#27
2,4-Dimethylphenol
Concen: 0.86 ppm
RT: 6.751 min Scan# 872
Delta R.T. -0.000 min
Lab File: x072333.d
Acq: 11 Aug 2020 2:31 pm

Tgt Ion:107 Resp: 5224

Ion	Ratio	Lower	Upper
107	100		
121	46.2	23.4	83.4
122	91.5	64.3	124.3

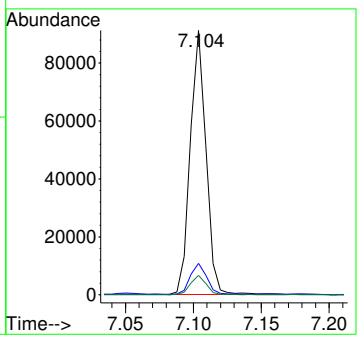


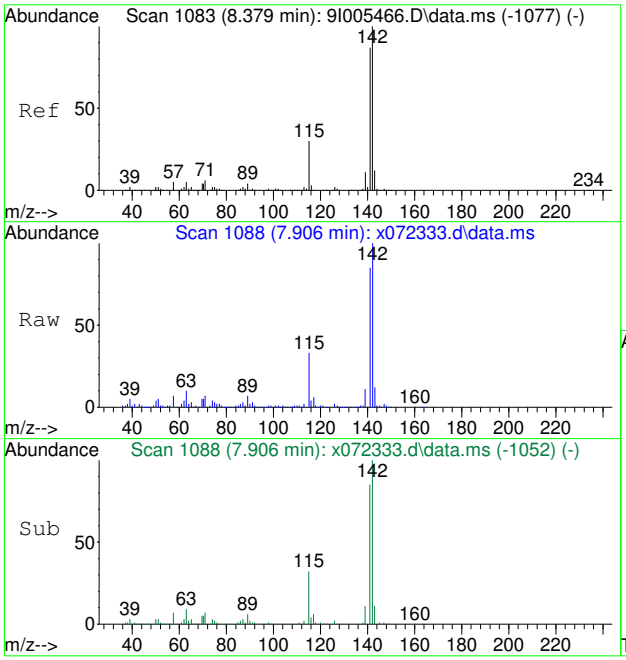


#34
Naphthalene
Concen: 4.04 ppm
RT: 7.104 min Scan# 938
Delta R.T. -0.005 min
Lab File: x072333.d
Acq: 11 Aug 2020 2:31 pm

Tgt Ion:128 Resp: 73757

Ion	Ratio	Lower	Upper
128	100		
129	11.7	0.0	41.4
126	7.3	0.0	37.4

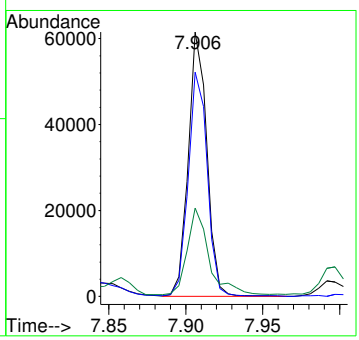


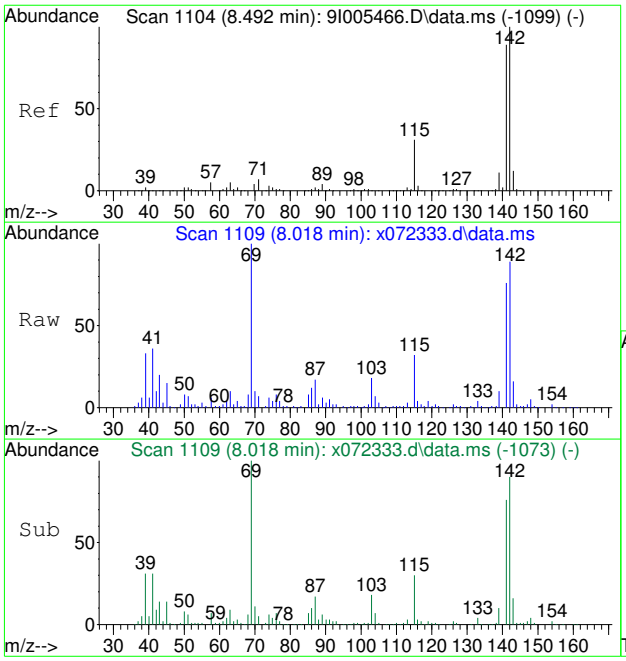


#40
2-Methylnaphthalene
Concen: 4.30 ppm
RT: 7.906 min Scan# 1088
Delta R.T. -0.005 min
Lab File: x072333.d
Acq: 11 Aug 2020 2:31 pm

Tgt Ion:142 Resp: 51828

Ion	Ratio	Lower	Upper
142	100		
141	84.8	56.8	116.8
115	32.7	0.0	60.0

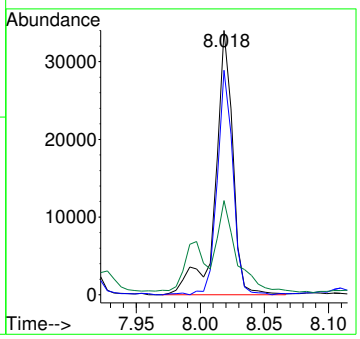


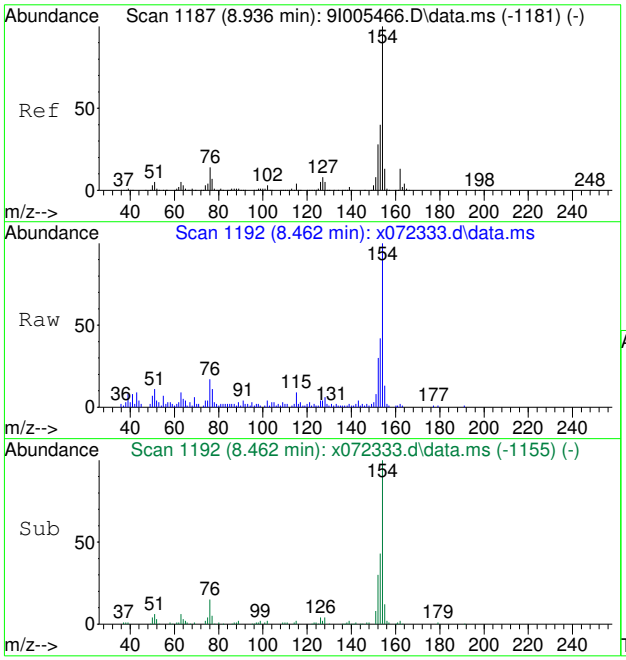


#41
1-Methylnaphthalene
Concen: 2.80 ppm
RT: 8.018 min Scan# 1109
Delta R.T. -0.005 min
Lab File: x072333.d
Acq: 11 Aug 2020 2:31 pm

Tgt Ion:142 Resp: 32322

Ion	Ratio	Lower	Upper
142	100		
141	84.8	59.0	119.0
115	33.9	1.1	61.1

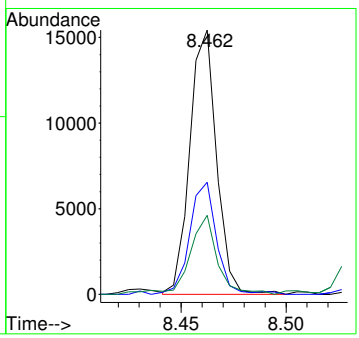


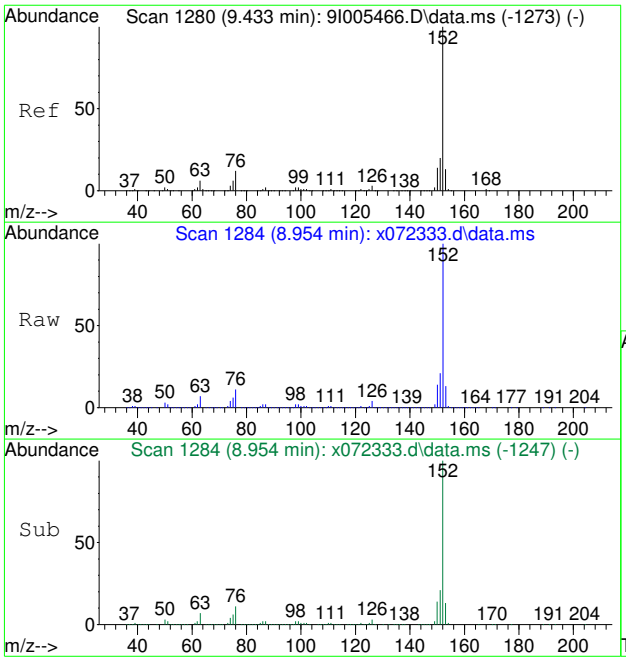


#48
1,1'-Biphenyl
Concen: 0.95 ppm
RT: 8.462 min Scan# 1192
Delta R.T. -0.000 min
Lab File: x072333.d
Acq: 11 Aug 2020 2:31 pm

Tgt Ion:154 Resp: 13713

Ion	Ratio	Lower	Upper
154	100		
153	42.2	10.3	70.3
152	28.8	0.0	58.2

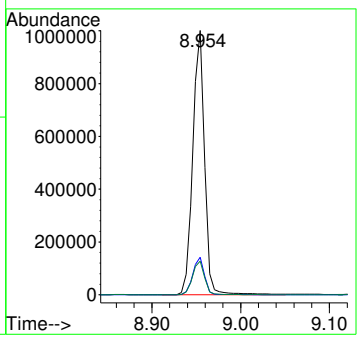


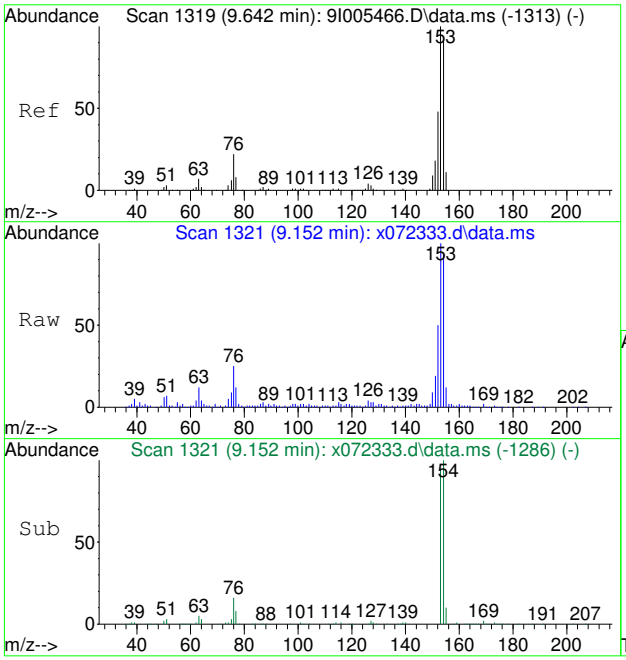


#52
Acenaphthylene
Concen: 52.33 ppm
RT: 8.954 min Scan# 1284
Delta R.T. -0.000 min
Lab File: x072333.d
Acq: 11 Aug 2020 2:31 pm

Tgt Ion:152 Resp: 924870

Ion	Ratio	Lower	Upper
152	100		
150	14.2	0.0	44.3
153	12.8	0.0	43.3

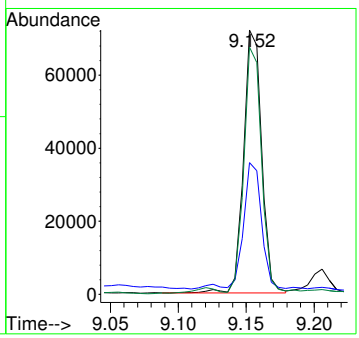


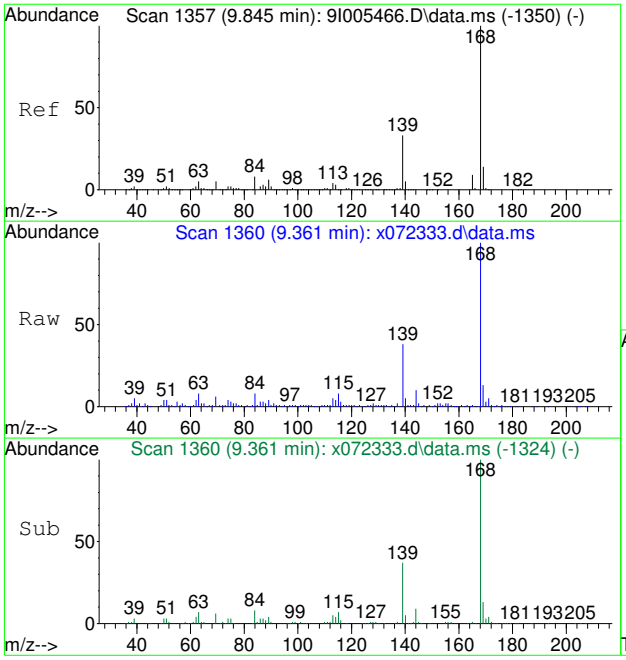


#57
Acenaphthene
Concen: 5.66 ppm
RT: 9.152 min Scan# 1321
Delta R.T. -0.011 min
Lab File: x072333.d
Acq: 11 Aug 2020 2:31 pm

Tgt Ion:153 Resp: 66526

Ion	Ratio	Lower	Upper
153	100		
152	47.8	18.4	78.4
154	93.4	62.4	122.4

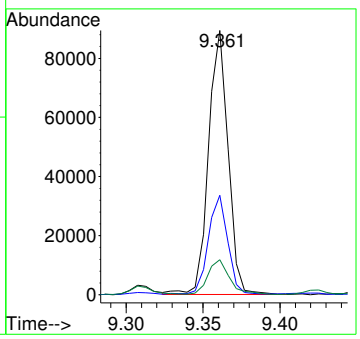


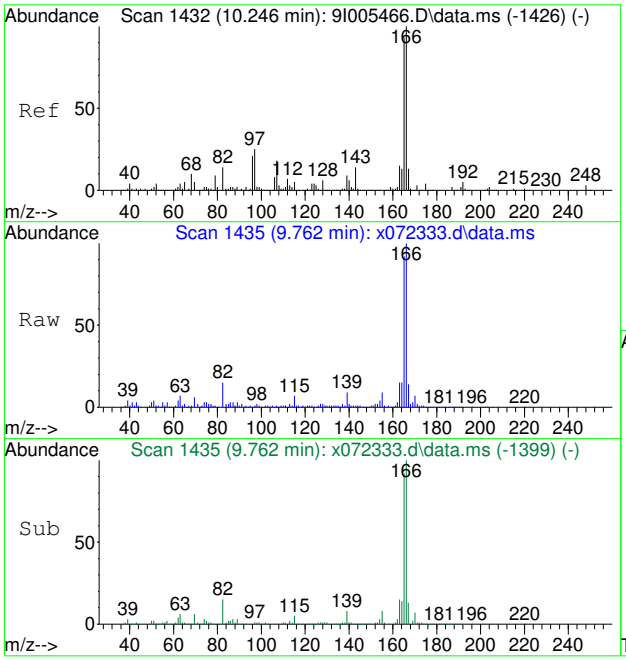


#60
Dibenzofuran
Concen: 5.04 ppm
RT: 9.361 min Scan# 1360
Delta R.T. -0.005 min
Lab File: x072333.d
Acq: 11 Aug 2020 2:31 pm

Tgt Ion:168 Resp: 79068

Ion	Ratio	Lower	Upper
168	100		
139	37.5	3.0	63.0
169	12.9	0.0	43.5

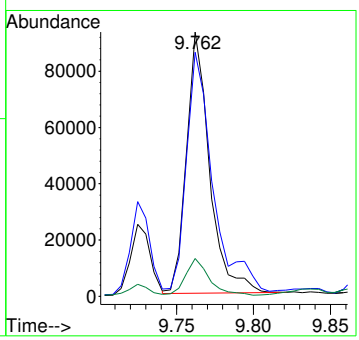


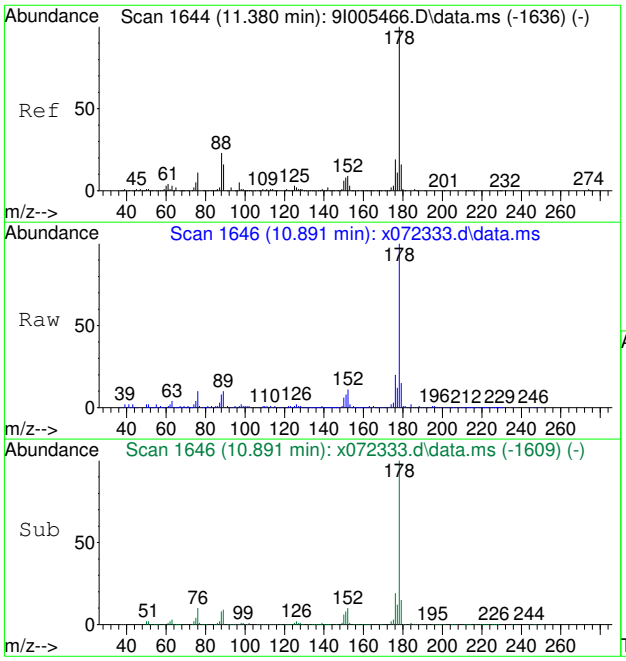


#65
Fluorene
Concen: 7.92 ppm
RT: 9.762 min Scan# 1435
Delta R.T. -0.005 min
Lab File: x072333.d
Acq: 11 Aug 2020 2:31 pm

Tgt Ion:166 Resp: 96973

Ion	Ratio	Lower	Upper
166	100		
165	91.4	62.7	122.7
167	13.3	0.0	43.5

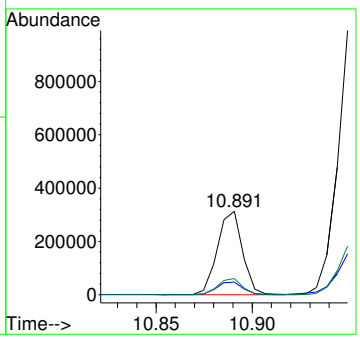


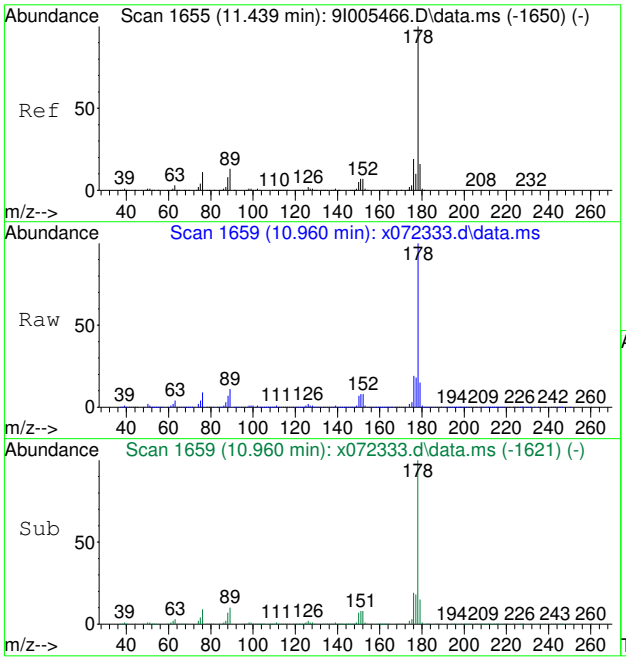


#84
Phenanthrene
Concen: 15.44 ppm
RT: 10.891 min Scan# 1646
Delta R.T. -0.000 min
Lab File: x072333.d
Acq: 11 Aug 2020 2:31 pm

Tgt Ion:178 Resp: 283176

Ion	Ratio	Lower	Upper
178	100		
179	14.7	0.0	45.8
176	19.5	0.0	49.3

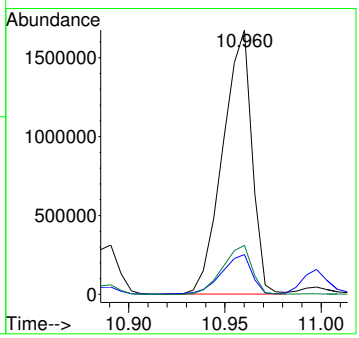


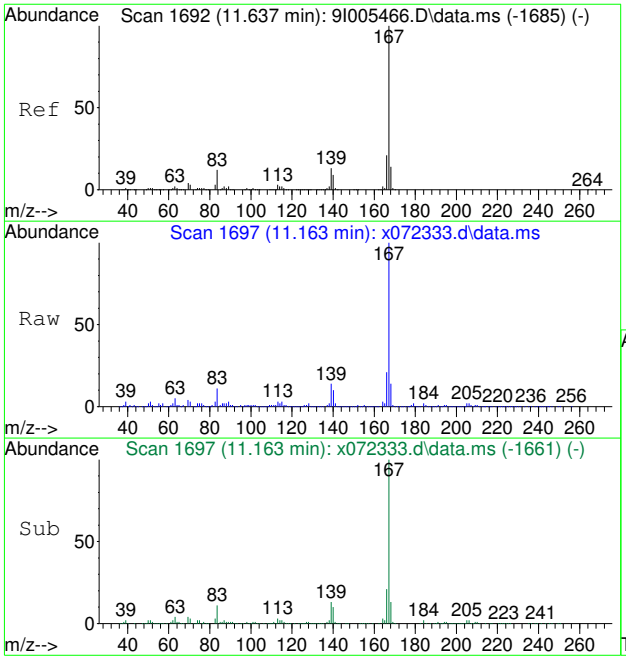


#85
Anthracene
Concen: 92.49 ppm
RT: 10.960 min Scan# 1659
Delta R.T. 0.005 min
Lab File: x072333.d
Acq: 11 Aug 2020 2:31 pm

Tgt Ion:178 Resp: 1767576

Ion	Ratio	Lower	Upper
178	100		
179	14.8	0.0	46.0
176	18.6	0.0	49.3

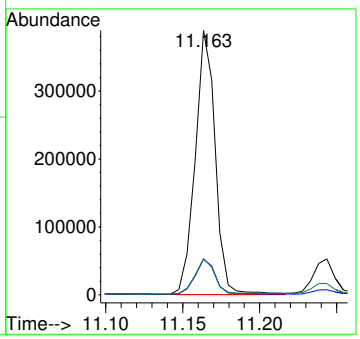


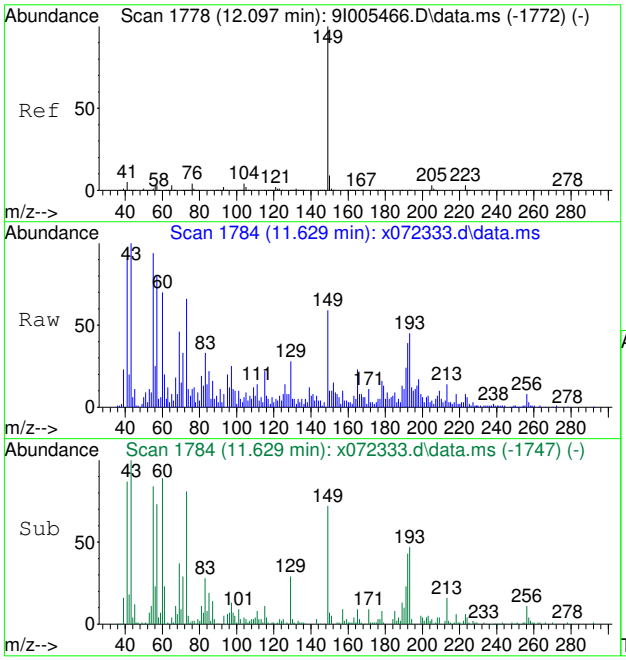


#87
Carbazole
Concen: 20.82 ppm
RT: 11.163 min Scan# 1697
Delta R.T. -0.005 min
Lab File: x072333.d
Acq: 11 Aug 2020 2:31 pm

Tgt Ion:167 Resp: 351091

Ion	Ratio	Lower	Upper
167	100		
168	13.3	0.0	43.9
139	13.3	0.0	42.7

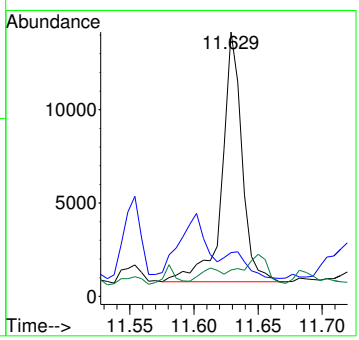


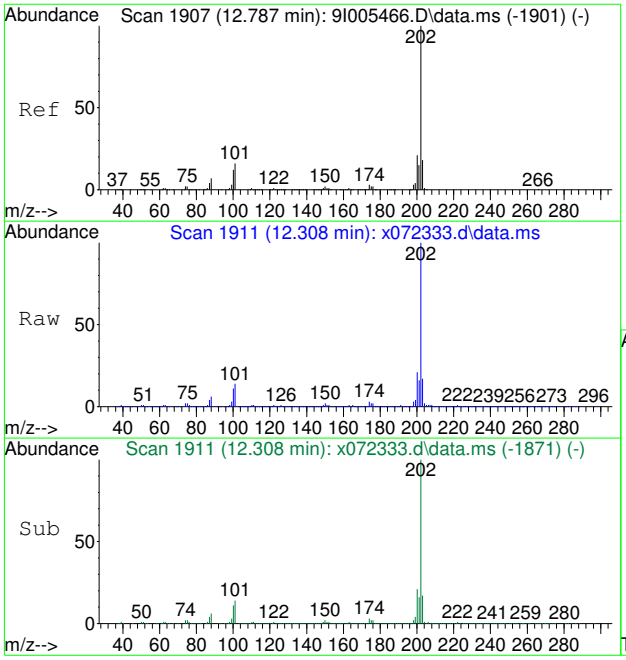


#89
Di-n-butylphthalate
Concen: 0.77 ppm
RT: 11.629 min Scan# 1784
Delta R.T. -0.000 min
Lab File: x072333.d
Acq: 11 Aug 2020 2:31 pm

Tgt Ion:149 Resp: 14518

Ion	Ratio	Lower	Upper
149	100		
150	9.1	0.0	39.5
104	4.5	0.0	34.2

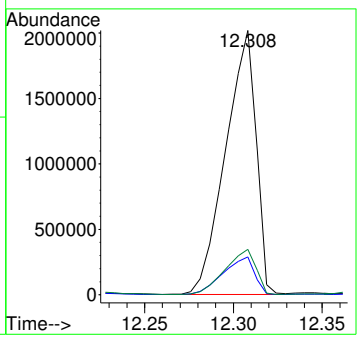


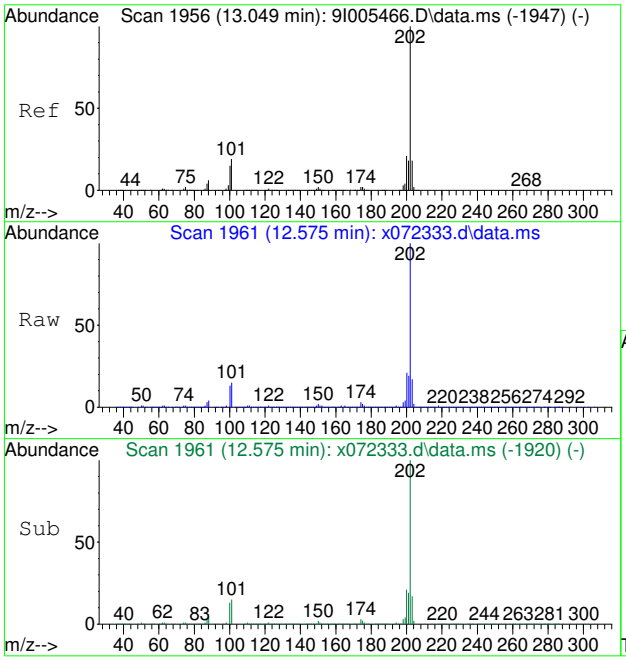


#91
Fluoranthene
Concen: 141.15 ppm
RT: 12.308 min Scan# 1911
Delta R.T. 0.016 min
Lab File: x072333.d
Acq: 11 Aug 2020 2:31 pm

Tgt Ion:202 Resp: 2401496

Ion	Ratio	Lower	Upper
202	100		
101	14.2	0.0	45.8
203	17.1	0.0	48.1

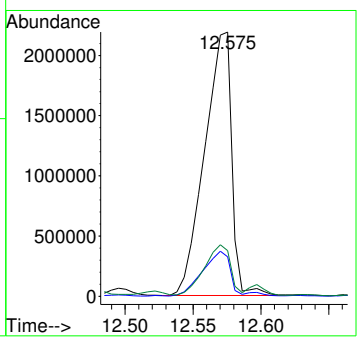


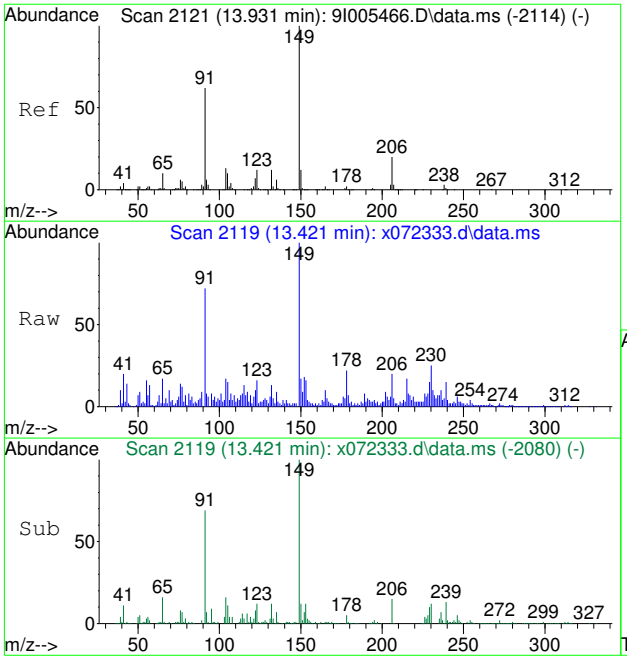


#94
Pyrene
Concen: 154.13 ppm
RT: 12.575 min Scan# 1961
Delta R.T. 0.021 min
Lab File: x072333.d
Acq: 11 Aug 2020 2:31 pm

Tgt Ion:202 Resp: 3038639

Ion	Ratio	Lower	Upper
202	100		
101	14.8	0.0	48.7
203	16.4	0.0	48.4

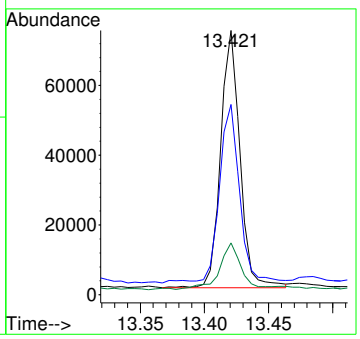


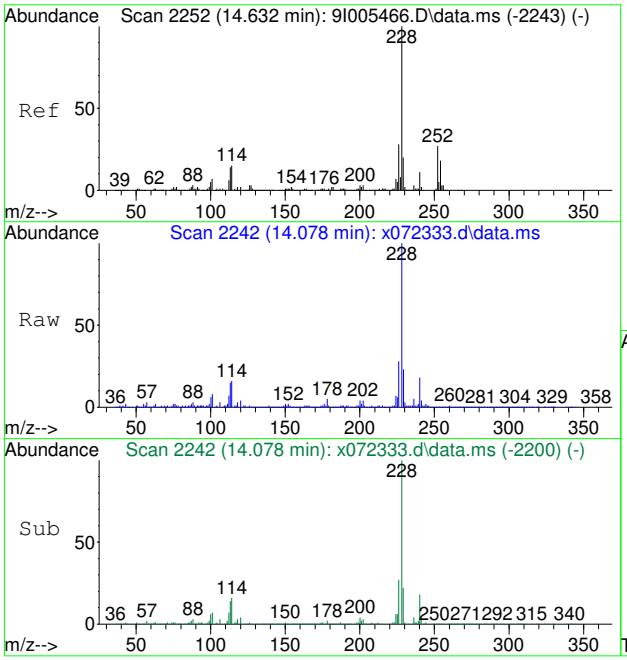


#97
Butylbenzylphthalate
Concen: 10.08 ppm
RT: 13.421 min Scan# 2119
Delta R.T. 0.011 min
Lab File: x072333.d
Acq: 11 Aug 2020 2:31 pm

Tgt Ion:149 Resp: 77742

Ion	Ratio	Lower	Upper
149	100		
91	69.3	32.1	92.1
206	17.4	0.0	49.7

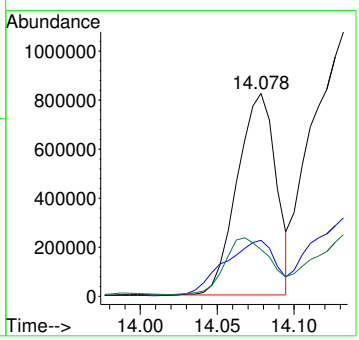


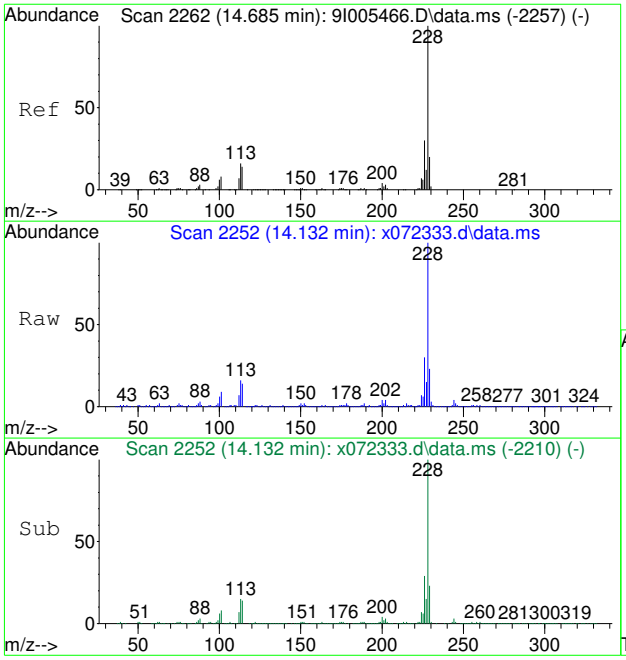


#99
Benzo[a]anthracene
Concen: 97.20 ppm
RT: 14.078 min Scan# 2242
Delta R.T. 0.027 min
Lab File: x072333.d
Acq: 11 Aug 2020 2:31 pm

Tgt Ion:228 Resp: 1450569

Ion	Ratio	Lower	Upper
228	100		
226	27.0	0.0	57.5
229	21.2	0.0	49.9

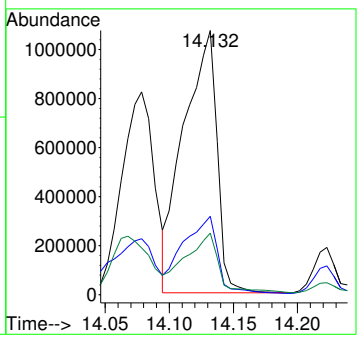


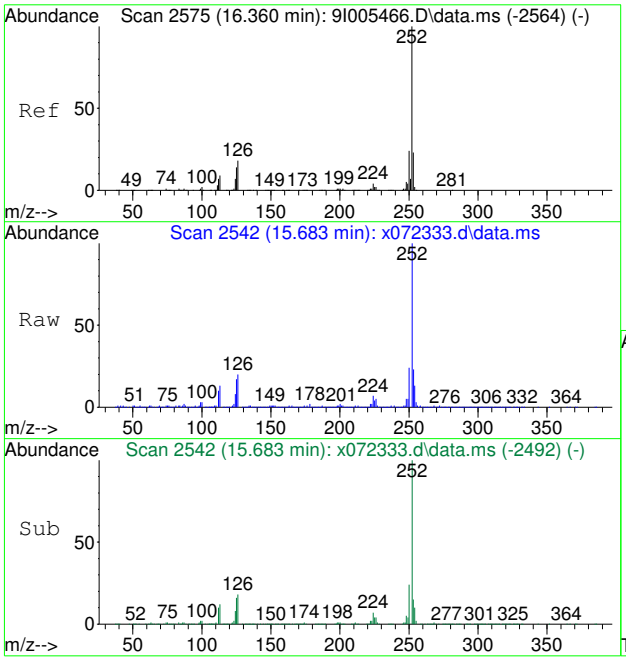


#100
Chrysene
Concen: 121.70 ppm
RT: 14.132 min Scan# 2252
Delta R.T. 0.027 min
Lab File: x072333.d
Acq: 11 Aug 2020 2:31 pm

Tgt Ion:228 Resp: 1934113

Ion	Ratio	Lower	Upper
228	100		
226	29.5	0.4	60.4
229	21.9	0.0	50.1

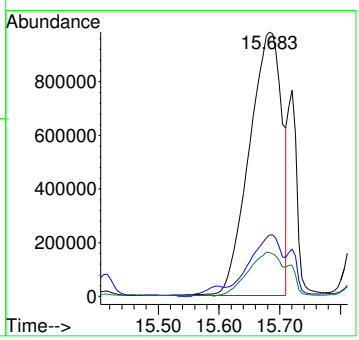


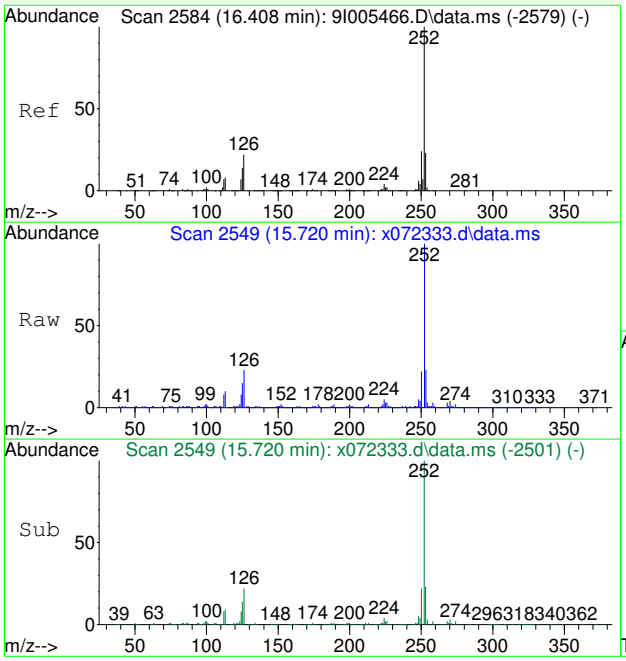


#104
Benzo[b]fluoranthene
Concen: 231.33 ppm
RT: 15.683 min Scan# 2542
Delta R.T. 0.069 min
Lab File: x072333.d
Acq: 11 Aug 2020 2:31 pm

Tgt Ion:252 Resp: 3672004

Ion	Ratio	Lower	Upper
252	100		
253	23.0	0.0	52.5
125	15.8	0.0	44.0

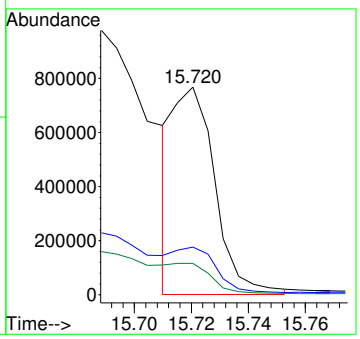


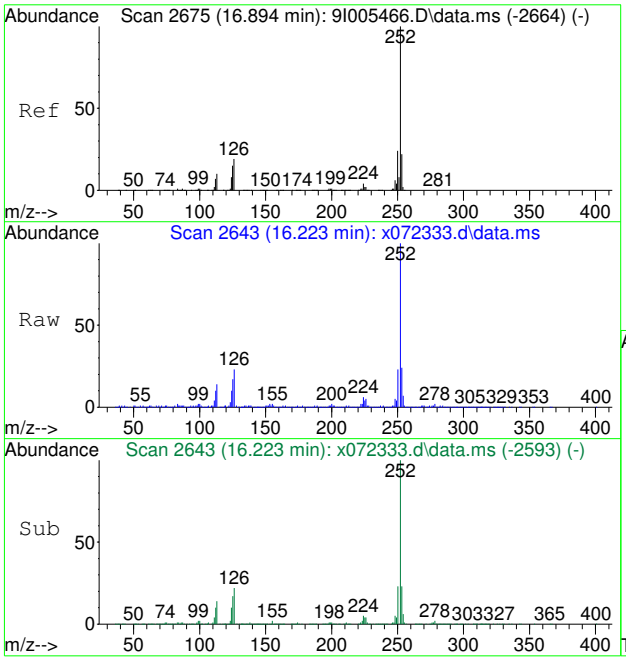


#105
Benzo[k]fluoranthene
Concen: 56.87 ppm m
RT: 15.720 min Scan# 2549
Delta R.T. 0.059 min
Lab File: x072333.d
Acq: 11 Aug 2020 2:31 pm

Tgt Ion:252 Resp: 782080

Ion	Ratio	Lower	Upper
252	100		
253	22.9	0.0	52.5
125	15.1	0.0	44.4

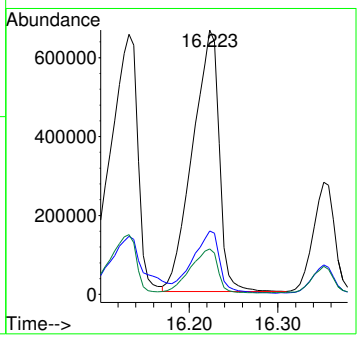


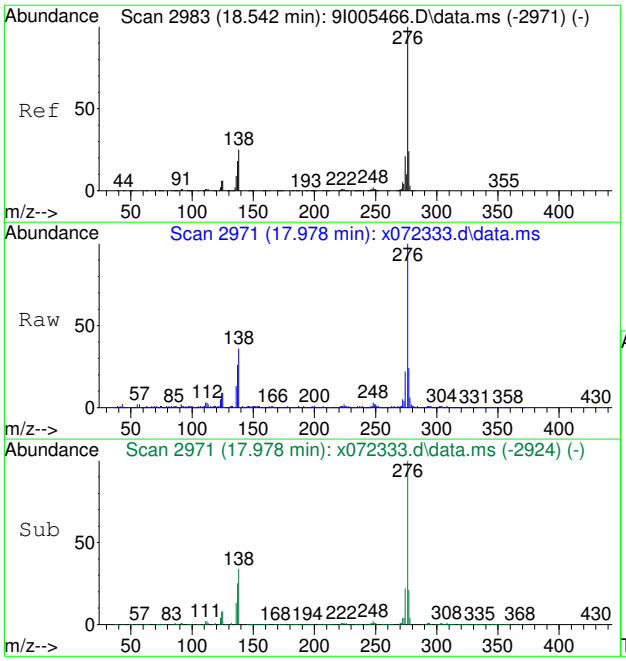


#106
Benzo[a]pyrene
Concen: 110.47 ppm
RT: 16.223 min Scan# 2643
Delta R.T. 0.069 min
Lab File: x072333.d
Acq: 11 Aug 2020 2:31 pm

Tgt Ion:252 Resp: 1383028

Ion	Ratio	Lower	Upper
252	100		
253	21.7	0.0	52.3
125	16.6	0.0	44.7

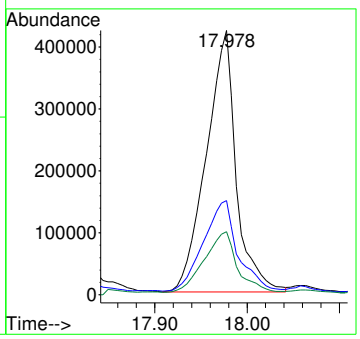


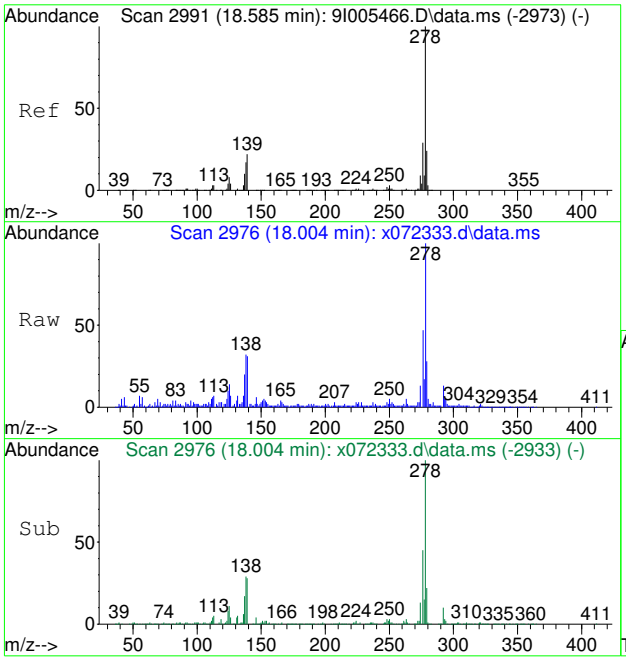


#107
Indeno[1,2,3-cd]pyrene
Concen: 98.01 ppm
RT: 17.978 min Scan# 2971
Delta R.T. 0.053 min
Lab File: x072333.d
Acq: 11 Aug 2020 2:31 pm

Tgt Ion:276 Resp: 948117

Ion	Ratio	Lower	Upper
276	100		
138	34.6	0.0	54.7
277	23.1	0.0	53.8

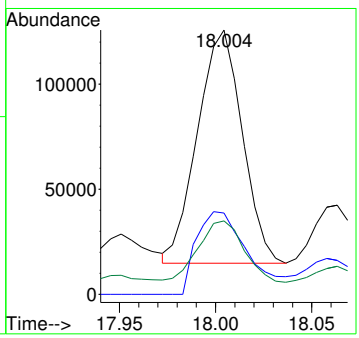


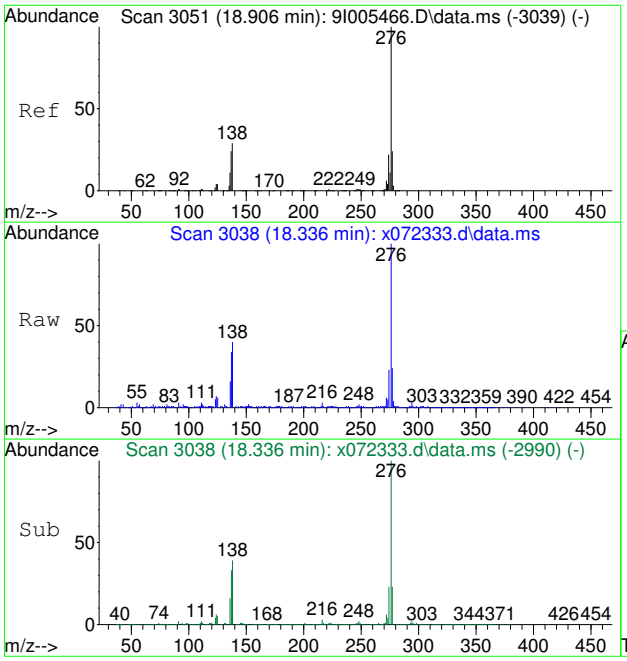


#108
Dibenz[a,h]anthracene
Concen: 24.63 ppm
RT: 18.004 min Scan# 2976
Delta R.T. 0.032 min
Lab File: x072333.d
Acq: 11 Aug 2020 2:31 pm

Tgt Ion:278 Resp: 179834

Ion	Ratio	Lower	Upper
278	100		
139	31.7	0.0	52.4
279	26.4	0.0	54.4

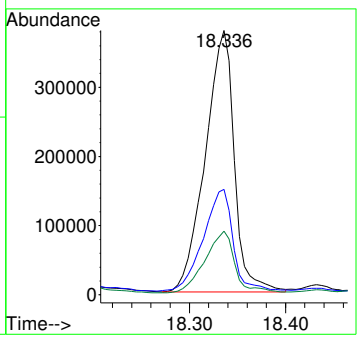




#109
Benzo[g,h,i]perylene
Concen: 69.12 ppm
RT: 18.336 min Scan# 3038
Delta R.T. 0.059 min
Lab File: x072333.d
Acq: 11 Aug 2020 2:31 pm

Tgt Ion:276 Resp: 794359

Ion	Ratio	Lower	Upper
276	100		
138	38.7	0.0	59.4
277	23.5	0.0	54.1



Manual Integration Approval Summary

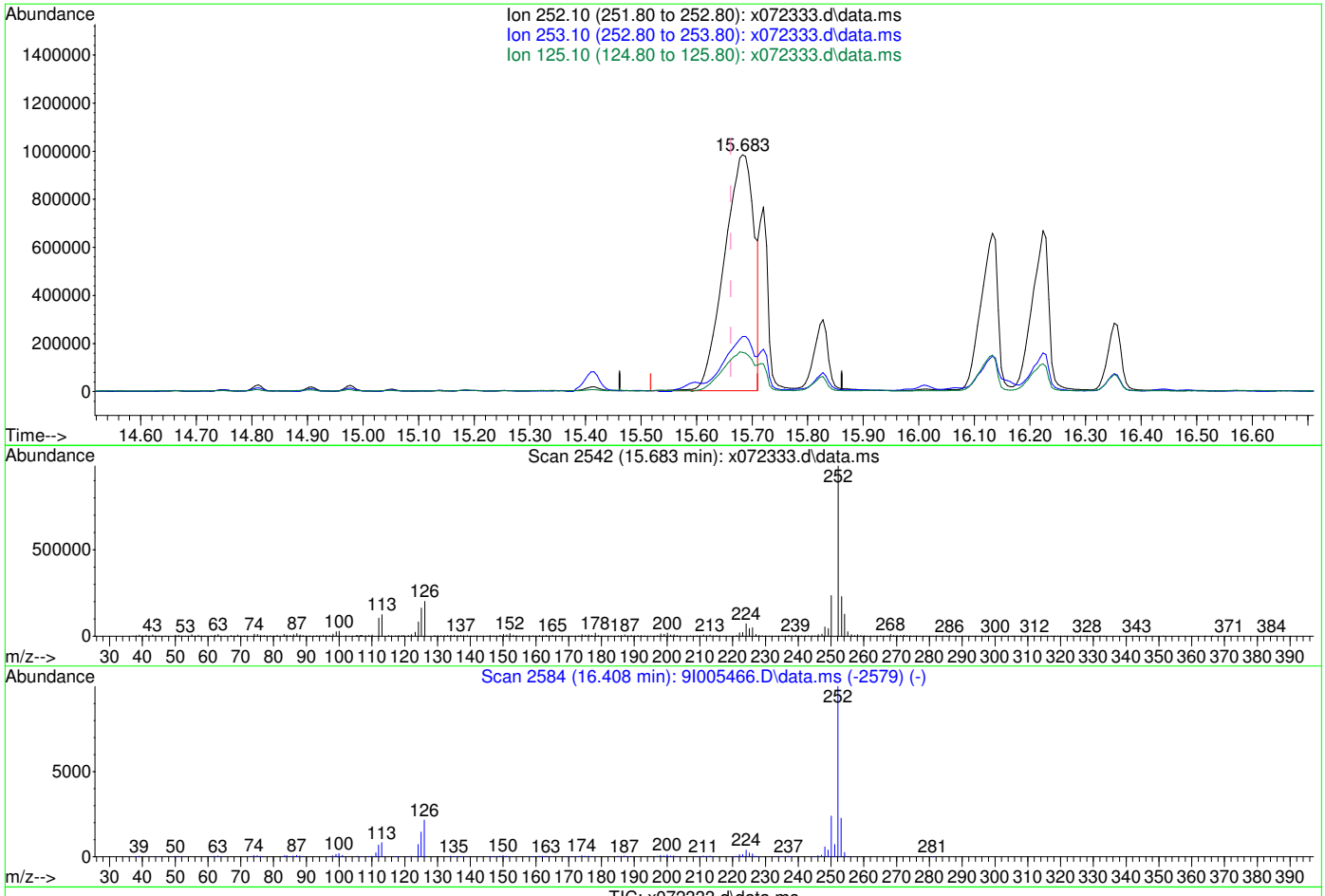
Sample Number:	FA77576-1	**Method:**	SW846 8270E
Lab FileID:	X072333.D	**Analyst approved:**	08/12/20 15:56 Martha Valls
Injection Time:	08/11/20 14:31	**Supervisor approved:**	08/12/20 16:38 Naresh Jiawan

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(k)fluoranthene	207-08-9		15.72	Missed peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072333.d
Acq On : 11 Aug 2020 2:31 pm
Operator : marthav
Sample : fa77576-1 E
Misc : op81482,sx2950,30.3,,,1,1,soil
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 12 01:47:10 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration



TIC: x072333.d\data.ms

(105) Benzo[k]fluoranthene (P)

15.683min (+0.021) 266.64ppm

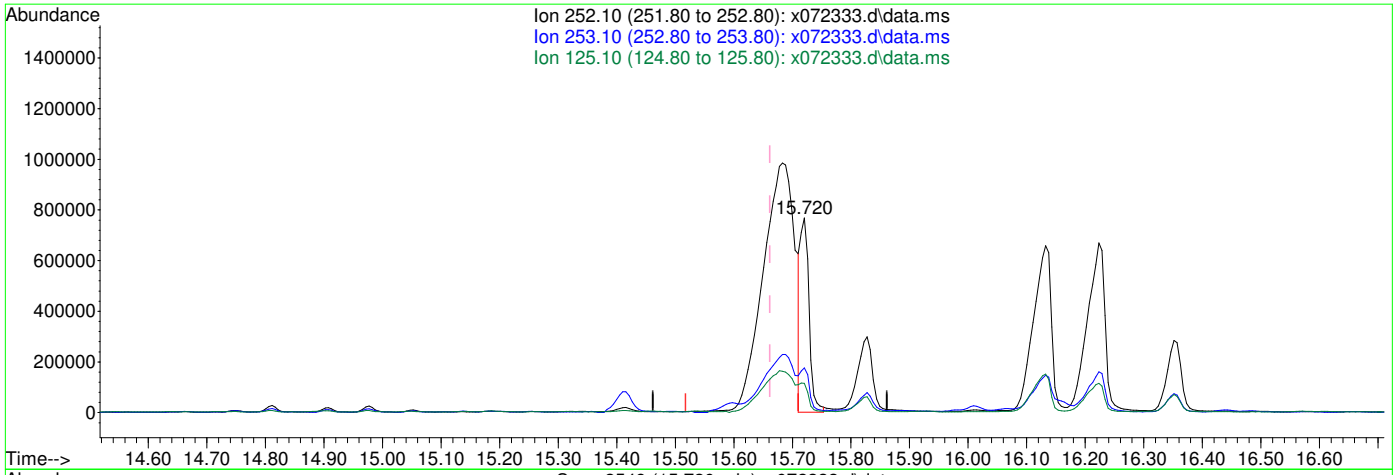
response 3666901

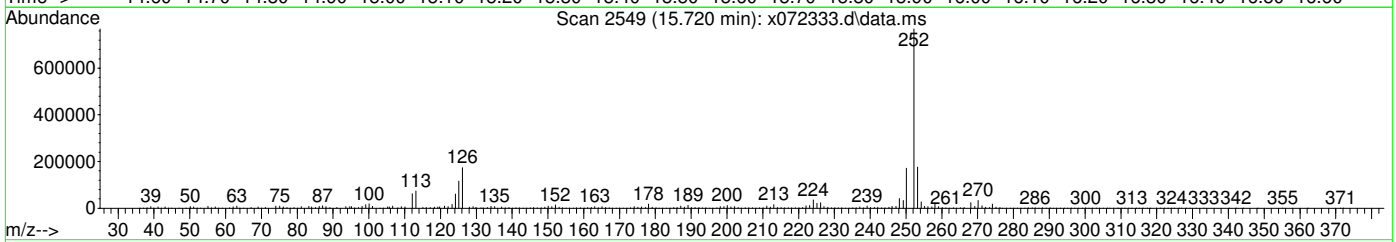
Ion	Exp%	Act%
252.10	100	100
253.10	22.50	23.03
125.10	14.40	15.83
0.00	0.00	0.00

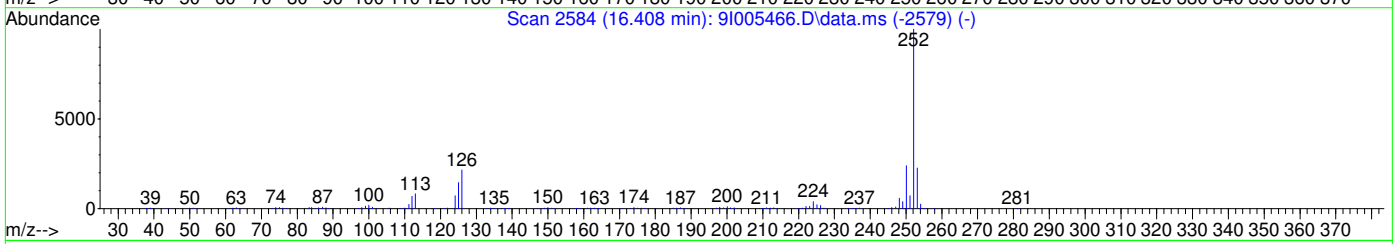
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072333.d
Acq On : 11 Aug 2020 2:31 pm
Operator : marthav
Sample : fa77576-1 E
Misc : op81482,sx2950,30.3,,,1,1,soil
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 12 01:47:10 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration







TIC: x072333.d\data.ms

(105) Benzo[k]fluoranthene (P)

15.720min (+0.059) 56.87ppm m

response 782080

Ion	Exp%	Act%
252.10	100	100
253.10	22.50	22.94
125.10	14.40	15.10
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072359.D
Acq On : 12 Aug 2020 11:16 am
Operator : marthav
Sample : fa77576-1 E,5 Inst : MSBNA05
Misc : op81482,sx2950,30.3,,,1,5,soil
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 12 14:07:51 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.654	152	218136	40.00	ppm	0.00
22) Naphthalene-d8	7.072	136	810959	40.00	ppm	0.00
43) Acenaphthene-d10	9.115	164	391709	40.00	ppm	0.00
70) Phenanthrene-d10	10.859	188	662062	40.00	ppm	0.00
92) Chrysene-d12	14.073	240	535598	40.00	ppm	0.00
102) Perylene-d12	16.271	264	417625	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	5.654	152	218136	40.00	ppm	0.00
120) Naphthalene-d8A	7.072	136	810959	40.00	ppm	0.00
127) Acenaphthene-d10A	9.115	164	391709	40.00	ppm	0.00
136) Phenanthrene-d10A	10.859	188	662062	40.00	ppm	0.00
146) Chrysene-d12A	14.073	240	535598	40.00	ppm	0.00
153) Perylene-d12A	16.271	264	417625	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	4.312	112	112154	14.34	ppm	0.00
Spiked Amount 100.000	Range 40 - 102		Recovery = 14.34%#			
9) Phenol-d5	5.328	99	137468	14.77	ppm	0.00
Spiked Amount 100.000	Range 41 - 100		Recovery = 14.77%#			
23) Nitrobenzene-d5	6.264	82	58917	7.03	ppm	-0.01
Spiked Amount 50.000	Range 40 - 105		Recovery = 14.06%#			
47) 2-Fluorobiphenyl	8.345	172	104281	7.35	ppm	0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 14.70%#			
75) 2,4,6-Tribromophenol	10.046	330	18506	14.88	ppm	-0.01
Spiked Amount 100.000	Range 42 - 108		Recovery = 14.88%#			
95) Terphenyl-d14	12.773	244	99646	7.00	ppm	0.00
Spiked Amount 50.000	Range 45 - 119		Recovery = 14.00%#			
Target Compounds						Qvalue
5) Benzaldehyde	5.184	106	1416	0.22	ppm	93
6) Aniline	5.312	93	3604	0.28	ppm	89
18) Acetophenone	6.104	105	4081	0.35	ppm	90
21) 3&4-Methylphenol	6.168	108	1486	0.18	ppm	76
24) Nitrobenzene	6.286	77	1611	0.19	ppm	82
27) 2,4-Dimethylphenol	6.751	107	910	0.12	ppm	80
30) Benzoic Acid	6.853	105	10312	2.08	ppm	87
34) Naphthalene	7.099	128	16366	0.74	ppm	99
40) 2-Methylnaphthalene	7.901	142	10520	0.72	ppm	98
41) 1-Methylnaphthalene	8.013	142	5503	0.40	ppm	95
48) 1,1'-Biphenyl	8.452	154	2838	0.18	ppm	96
52) Acenaphthylene	8.944	152	145976	7.46	ppm	99
57) Acenaphthene	9.147	153	12273	0.94	ppm	95
60) Dibenzofuran	9.356	168	15816	0.91	ppm	95
65) Fluorene	9.757	166	13200	0.97	ppm	96
84) Phenanthrene	10.885	178	53600	2.68	ppm	99
85) Anthracene	10.944	178	260628	12.50	ppm	98
87) Carbazole	11.158	167	55877	3.04	ppm	99
89) Di-n-butylphthalate	11.624	149	2781	0.14	ppm	96
91) Fluoranthene	12.292	202	484448	26.10	ppm	97
94) Pyrene	12.554	202	631663	28.40	ppm	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072359.D
Acq On : 12 Aug 2020 11:16 am
Operator : marthav
Sample : fa77576-1 E,5 Inst : MSBNA05
Misc : op81482,sx2950,30.3,,,1,5,soil
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 12 14:07:51 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration

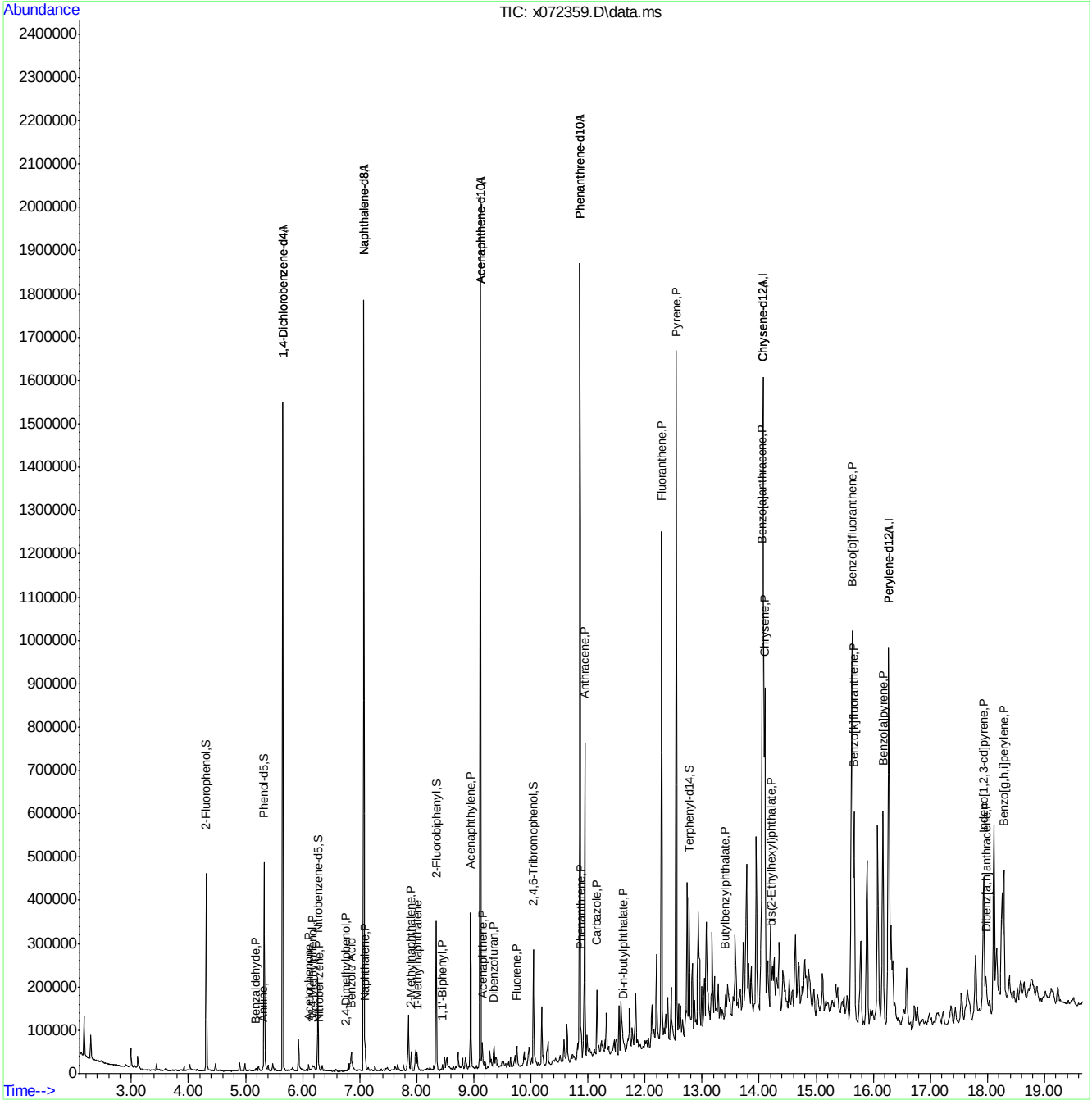
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97) Butylbenzylphthalate	13.410	149	14744	1.72	ppm	98
99) Benzo[a]anthracene	14.057	228	278144	16.52	ppm	97
100) Chrysene	14.105	228	396713	22.13	ppm	99
101) bis(2-Ethylhexyl)phtha...	14.212	149	2905	0.26	ppm	80
104) Benzo[b]fluoranthene	15.630	252	624238	50.29	ppm	96
105) Benzo[k]fluoranthene	15.667	252	179448	12.10	ppm	97
106) Benzo[a]pyrene	16.170	252	260957	23.30	ppm	96
107) Indeno[1,2,3-cd]pyrene	17.935	276	193300	27.22	ppm	87
108) Dibenz[a,h]anthracene	17.972	278	38858	5.74	ppm	85
109) Benzo[g,h,i]perylene	18.288	276	167859	16.58	ppm	85

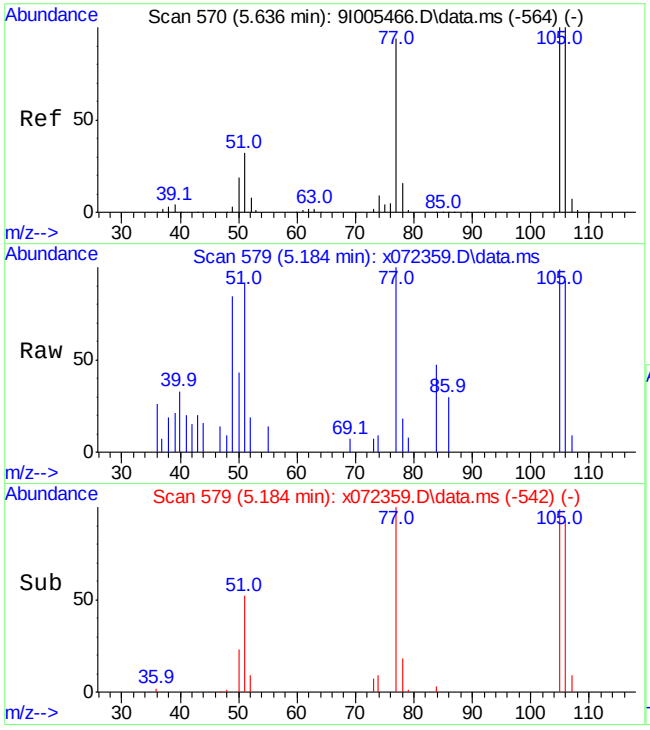
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072359.D
Acq On : 12 Aug 2020 11:16 am
Operator : marthav
Sample : fa77576-1 E,5 Inst : MSBNA05
Misc : op81482,sx2950,30.3,,,1,5,soil
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 12 14:07:51 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration

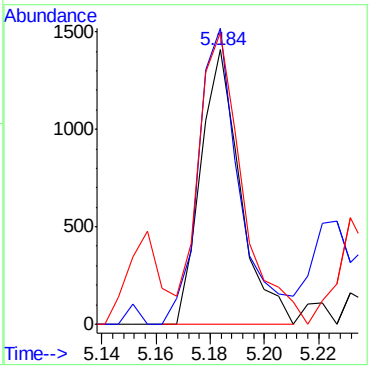


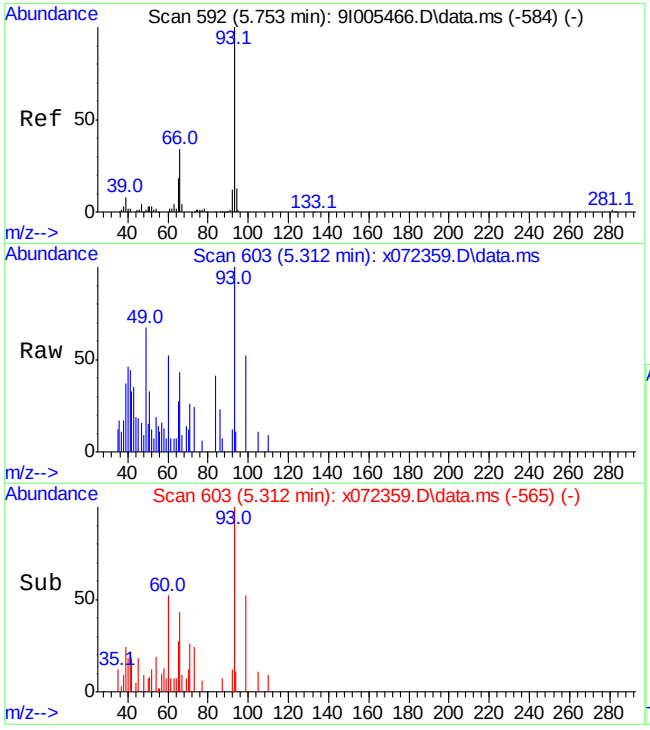


#5
Benzaldehyde
Concen: 0.22 ppm
RT: 5.184 min Scan# 579
Delta R.T. -0.000 min
Lab File: x072359.D
Acq: 12 Aug 2020 11:16 am

Tgt Ion:106 Resp: 1416

Ion	Ratio	Lower	Upper
106	100		
77	102.8	63.9	123.9
105	95.5	70.0	130.0

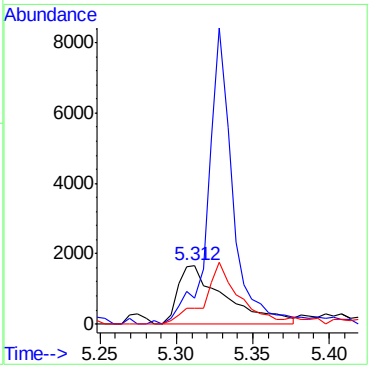


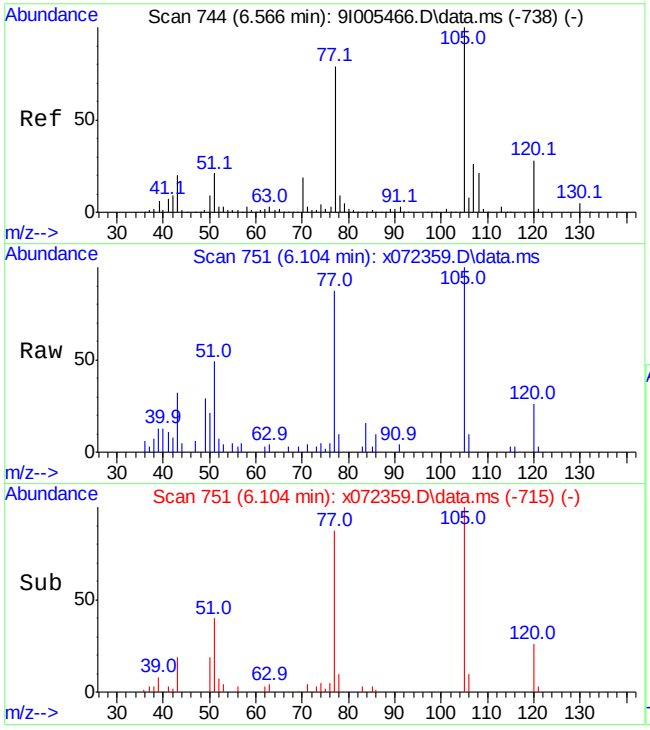


#6
Aniline
Concen: 0.28 ppm
RT: 5.312 min Scan# 603
Delta R.T. 0.005 min
Lab File: x072359.D
Acq: 12 Aug 2020 11:16 am

Tgt Ion: 93 Resp: 3604

Ion	Ratio	Lower	Upper
93	100		
66	39.8	3.5	63.5
65	22.5	0.0	48.0

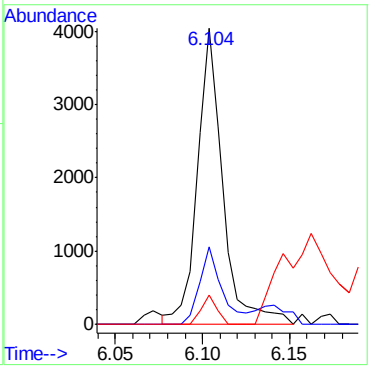


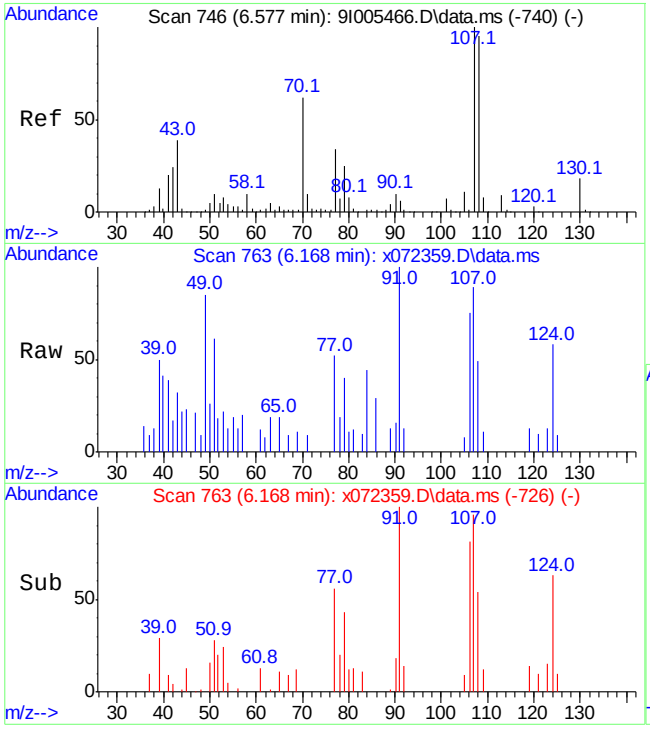


#18
Acetophenone
Concen: 0.35 ppm
RT: 6.104 min Scan# 751
Delta R.T. -0.005 min
Lab File: x072359.D
Acq: 12 Aug 2020 11:16 am

Tgt Ion:105 Resp: 4081

Ion	Ratio	Lower	Upper
105	100		
120	24.5	0.0	58.3
106	0.6	0.0	38.0

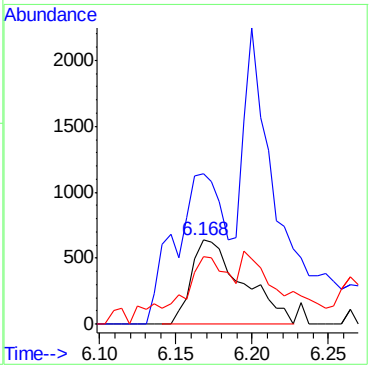


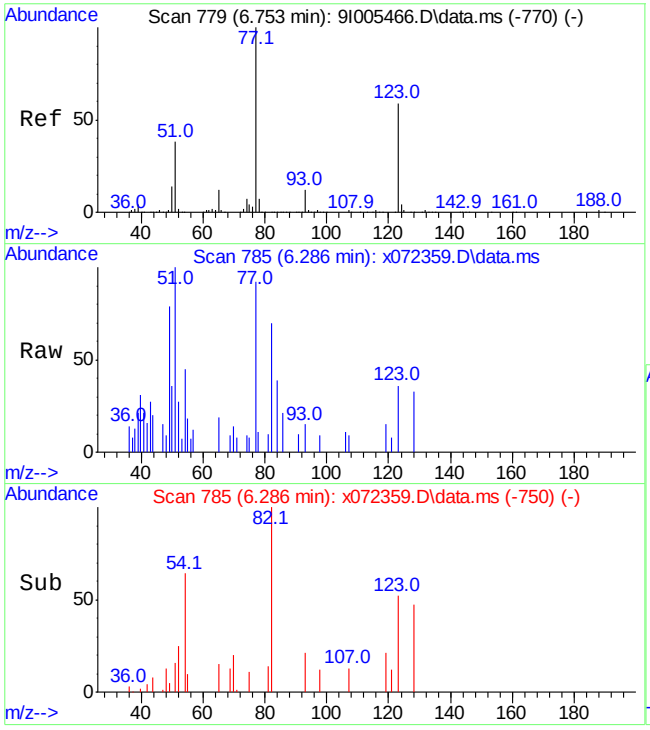


#21
3&4-Methylphenol
Concen: 0.18 ppm
RT: 6.168 min Scan# 763
Delta R.T. -0.000 min
Lab File: x072359.D
Acq: 12 Aug 2020 11:16 am

Tgt Ion:108 Resp: 1486

Ion	Ratio	Lower	Upper
108	100		
107	86.9	75.4	135.4
79	50.9	0.0	56.3

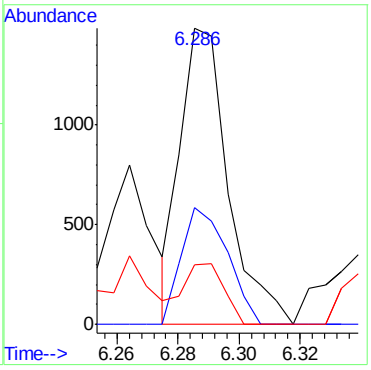


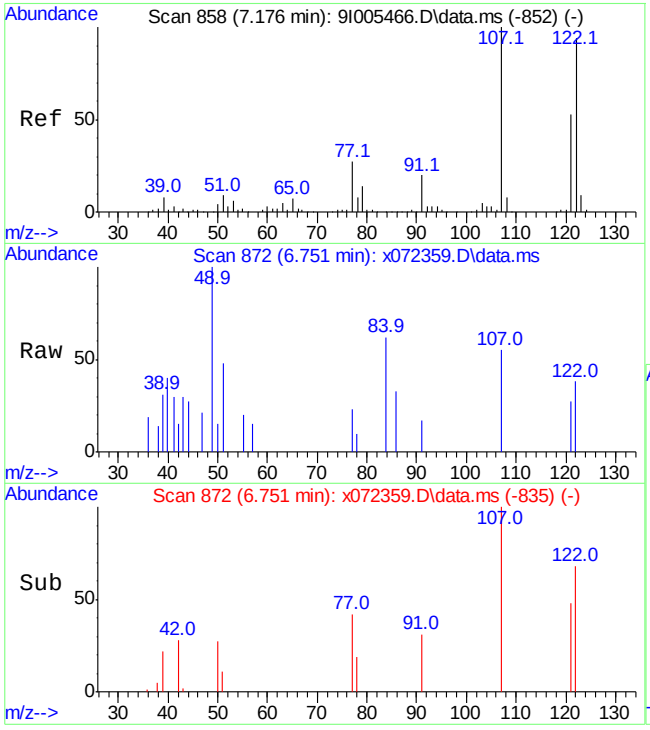


#24
Nitrobenzene
Concen: 0.19 ppm
RT: 6.286 min Scan# 785
Delta R.T. -0.011 min
Lab File: x072359.D
Acq: 12 Aug 2020 11:16 am

Tgt Ion: 77 Resp: 1611

Ion	Ratio	Lower	Upper
77	100		
123	44.4	28.7	88.7
65	18.1	0.0	42.1

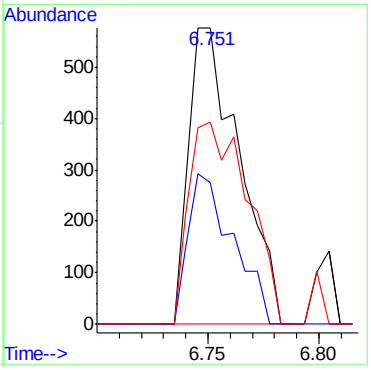


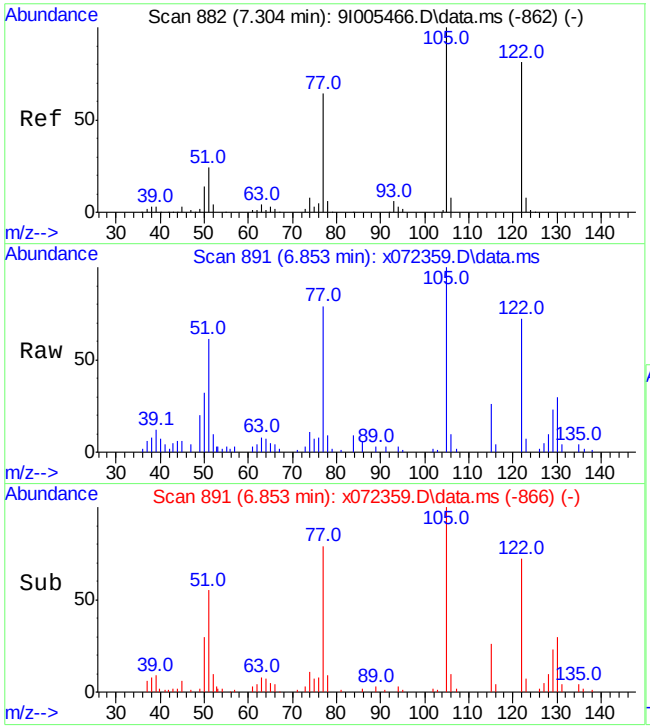


#27
2,4-Dimethylphenol
Concen: 0.12 ppm
RT: 6.751 min Scan# 872
Delta R.T. -0.000 min
Lab File: x072359.D
Acq: 12 Aug 2020 11:16 am

Tgt Ion:107 Resp: 910

Ion	Ratio	Lower	Upper
107	100		
121	47.9	23.4	83.4
122	68.4	64.3	124.3

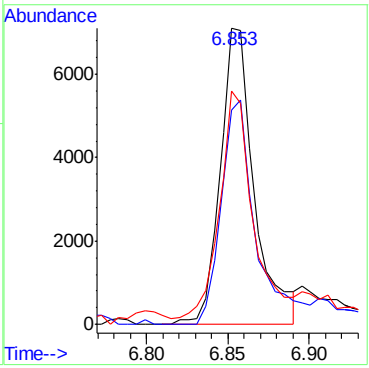


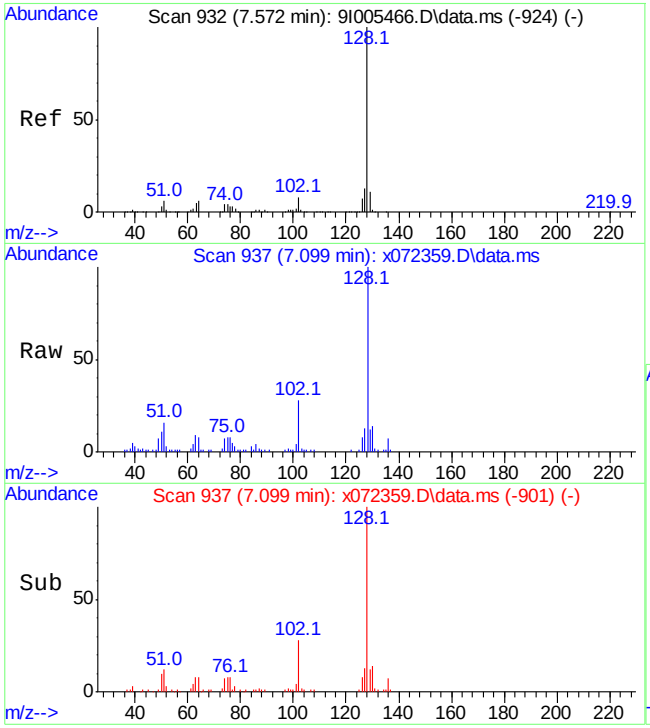


#30
Benzoic Acid
Concen: 2.08 ppm
RT: 6.853 min Scan# 891
Delta R.T. -0.064 min
Lab File: x072359.D
Acq: 12 Aug 2020 11:16 am

Tgt Ion:105 Resp: 10312

Ion	Ratio	Lower	Upper
105	100		
122	72.2	51.2	111.2
77	77.0	34.1	94.1

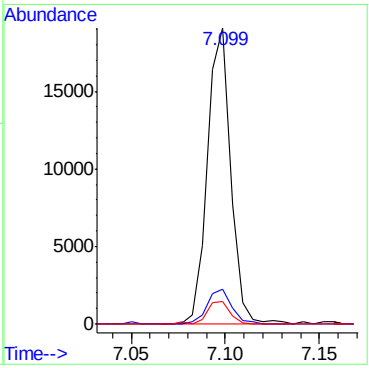


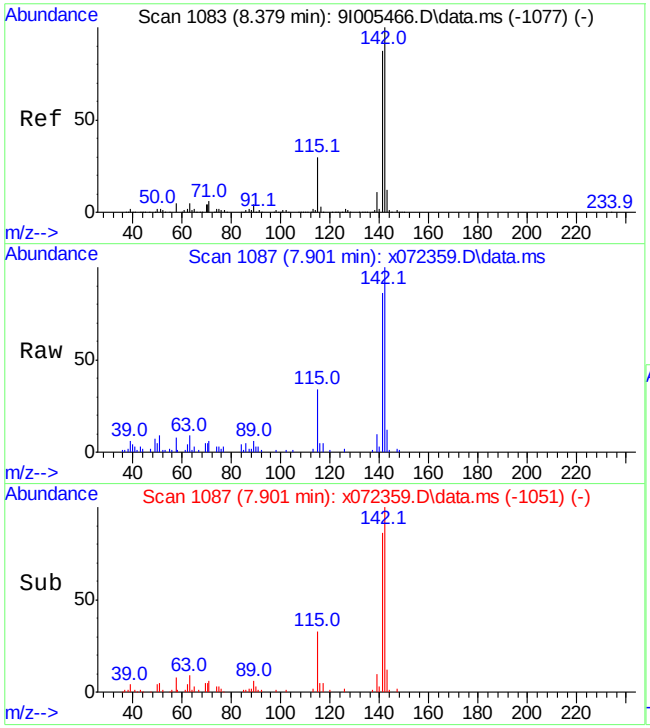


#34
Naphthalene
Concen: 0.74 ppm
RT: 7.099 min Scan# 937
Delta R.T. -0.005 min
Lab File: x072359.D
Acq: 12 Aug 2020 11:16 am

Tgt Ion:128 Resp: 16366

Ion	Ratio	Lower	Upper
128	100		
129	11.9	0.0	41.4
126	7.7	0.0	37.4

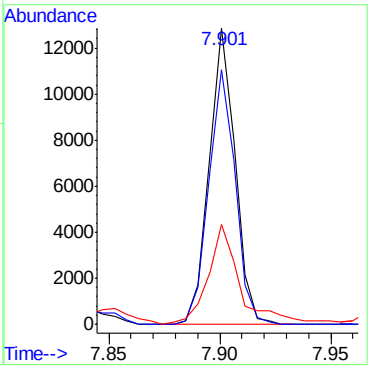


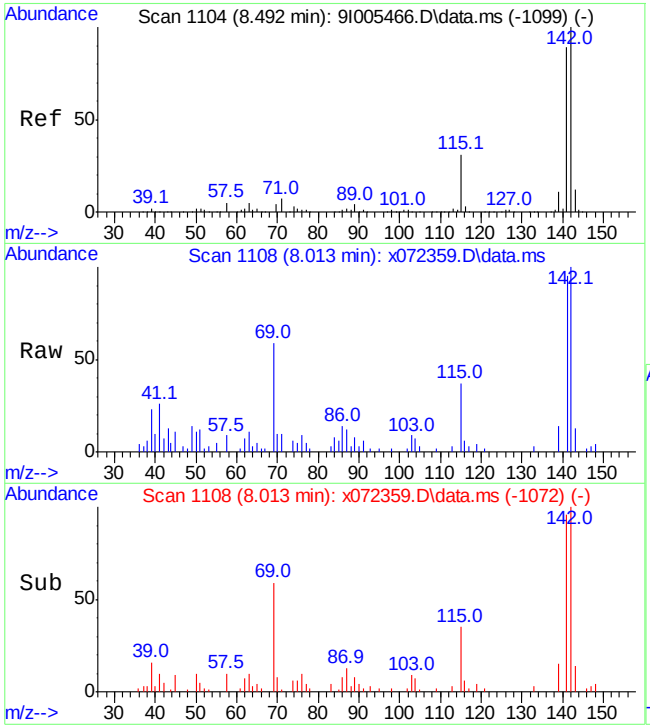


#40
2-Methylnaphthalene
Concen: 0.72 ppm
RT: 7.901 min Scan# 1087
Delta R.T. -0.005 min
Lab File: x072359.D
Acq: 12 Aug 2020 11:16 am

Tgt Ion:142 Resp: 10520

Ion	Ratio	Lower	Upper
142	100		
141	86.0	56.8	116.8
115	33.0	0.0	60.0

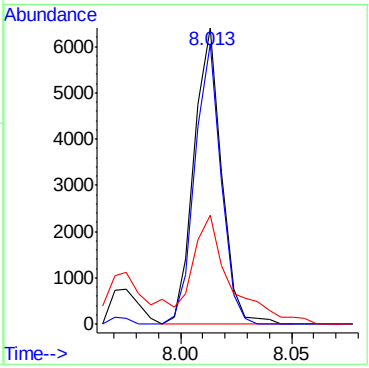


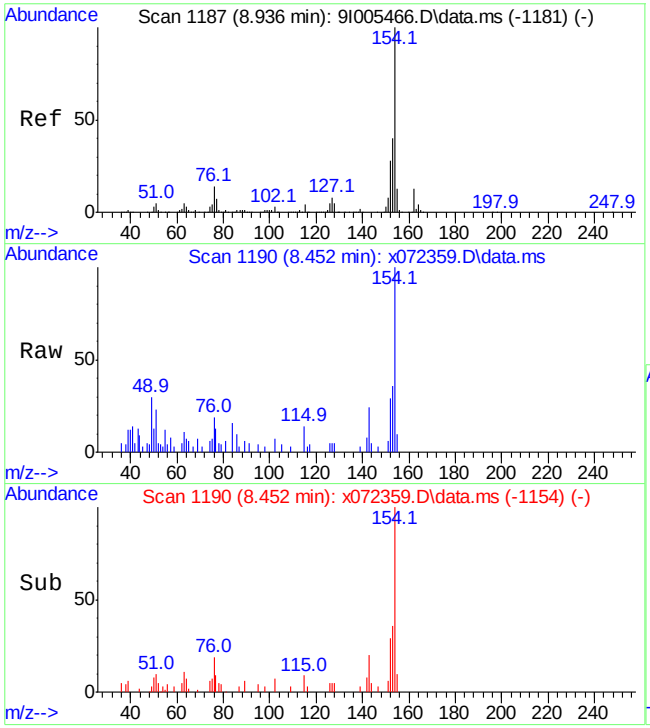


#41
1-Methylnaphthalene
Concen: 0.40 ppm
RT: 8.013 min Scan# 1108
Delta R.T. -0.005 min
Lab File: x072359.D
Acq: 12 Aug 2020 11:16 am

Tgt Ion:142 Resp: 5503

Ion	Ratio	Lower	Upper
142	100		
141	94.7	59.0	119.0
115	31.4	1.1	61.1

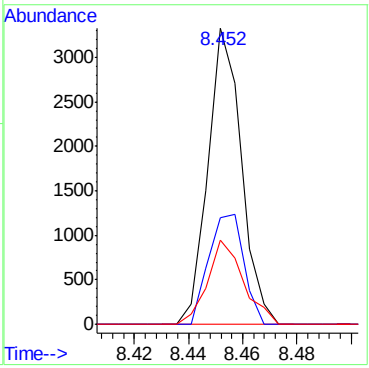


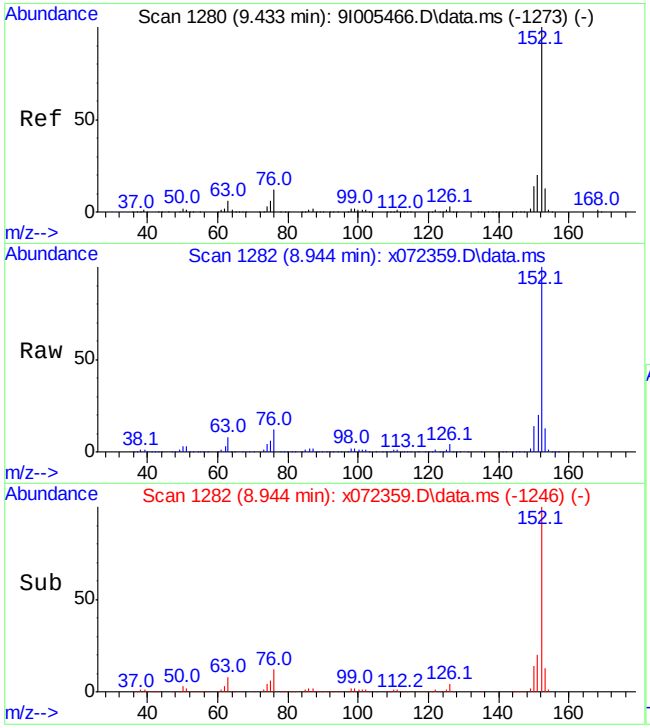


#48
1,1'-Biphenyl
Concen: 0.18 ppm
RT: 8.452 min Scan# 1190
Delta R.T. -0.005 min
Lab File: x072359.D
Acq: 12 Aug 2020 11:16 am

Tgt Ion:154 Resp: 2838

Ion	Ratio	Lower	Upper
154	100		
153	35.9	10.3	70.3
152	28.6	0.0	58.2

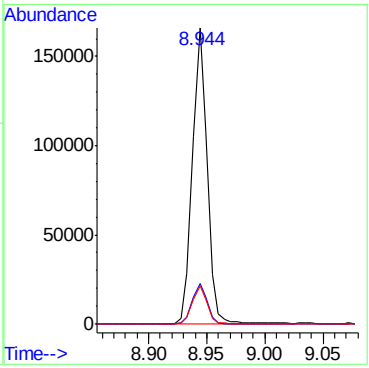


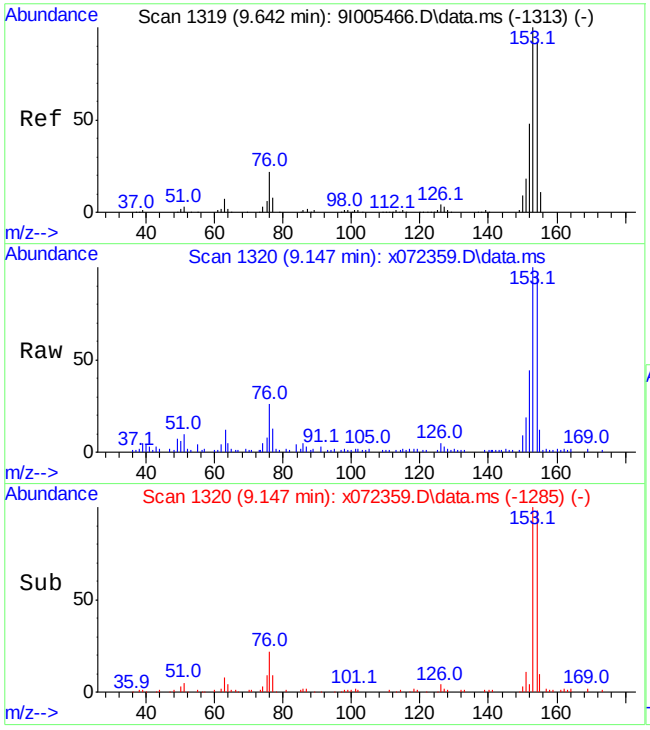


#52
Acenaphthylene
Concen: 7.46 ppm
RT: 8.944 min Scan# 1282
Delta R.T. -0.005 min
Lab File: x072359.D
Acq: 12 Aug 2020 11:16 am

Tgt Ion:152 Resp: 145976

Ion	Ratio	Lower	Upper
152	100		
150	13.9	0.0	44.3
153	13.0	0.0	43.3

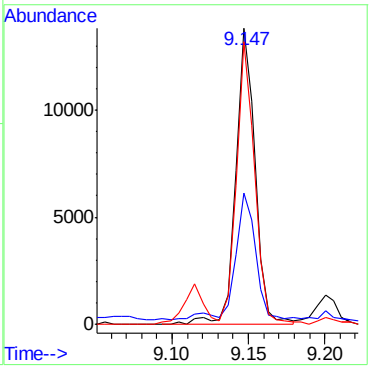


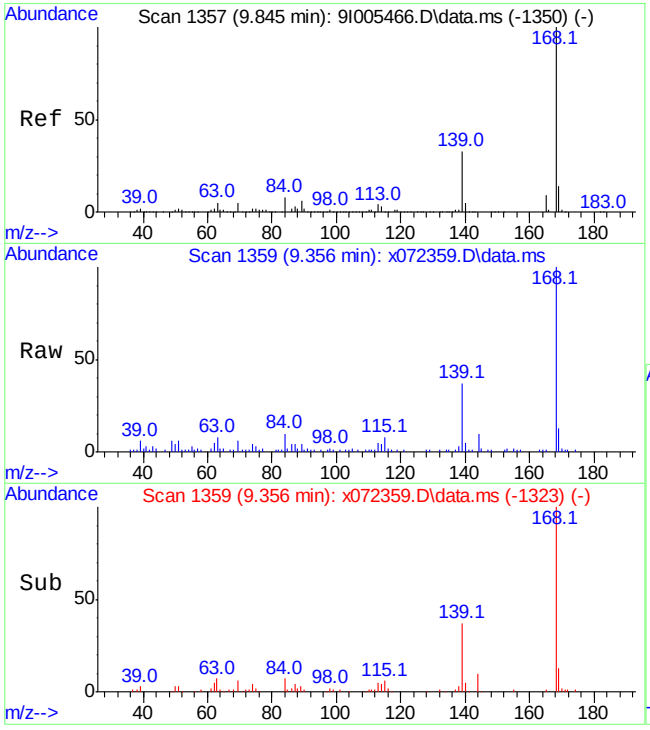


#57
Acenaphthene
Concen: 0.94 ppm
RT: 9.147 min Scan# 1320
Delta R.T. -0.011 min
Lab File: x072359.D
Acq: 12 Aug 2020 11:16 am

Tgt Ion:153 Resp: 12273

Ion	Ratio	Lower	Upper
153	100		
152	42.7	18.4	78.4
154	95.0	62.4	122.4

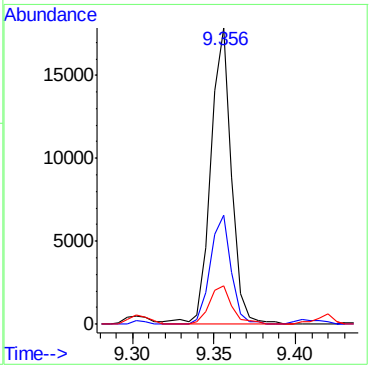


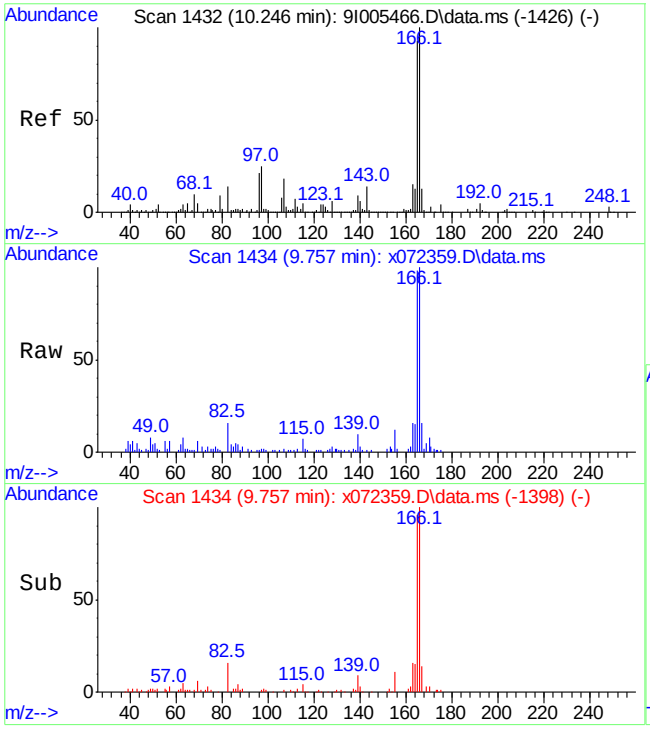


#60
Dibenzofuran
Concen: 0.91 ppm
RT: 9.356 min Scan# 1359
Delta R.T. -0.005 min
Lab File: x072359.D
Acq: 12 Aug 2020 11:16 am

Tgt Ion:168 Resp: 15816

Ion	Ratio	Lower	Upper
168	100		
139	36.3	3.0	63.0
169	12.9	0.0	43.5

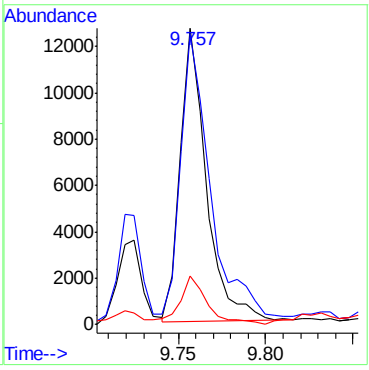


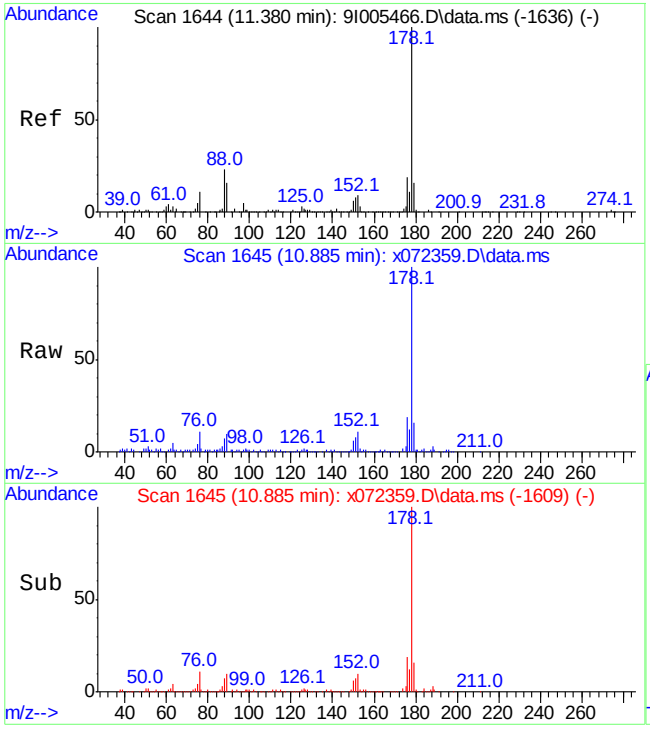


#65
Fluorene
Concen: 0.97 ppm
RT: 9.757 min Scan# 1434
Delta R.T. -0.005 min
Lab File: x072359.D
Acq: 12 Aug 2020 11:16 am

Tgt Ion:166 Resp: 13200

Ion	Ratio	Lower	Upper
166	100		
165	96.7	62.7	122.7
167	14.7	0.0	43.5

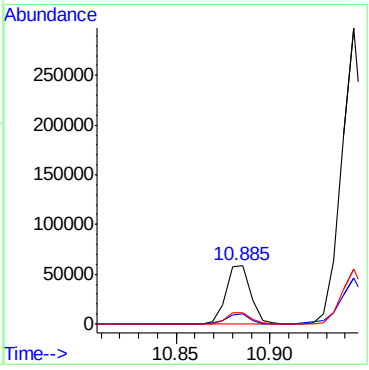


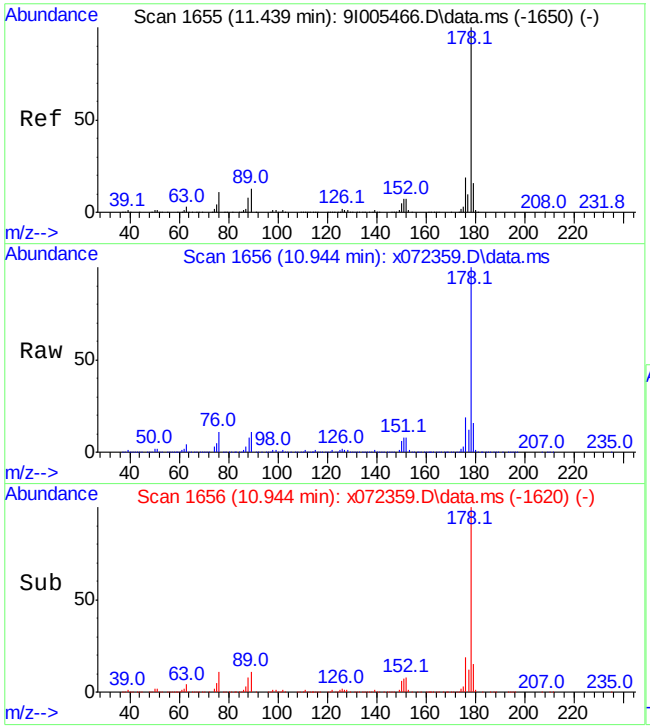


#84
Phenanthrene
Concen: 2.68 ppm
RT: 10.885 min Scan# 1645
Delta R.T. -0.005 min
Lab File: x072359.D
Acq: 12 Aug 2020 11:16 am

Tgt Ion:178 Resp: 53600

Ion	Ratio	Lower	Upper
178	100		
179	16.1	0.0	45.8
176	18.8	0.0	49.3

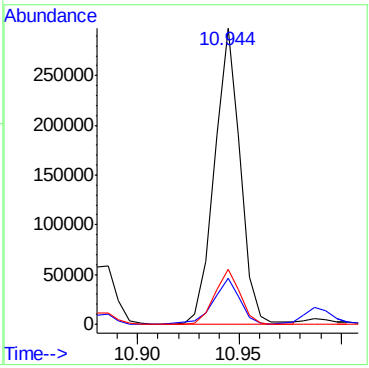


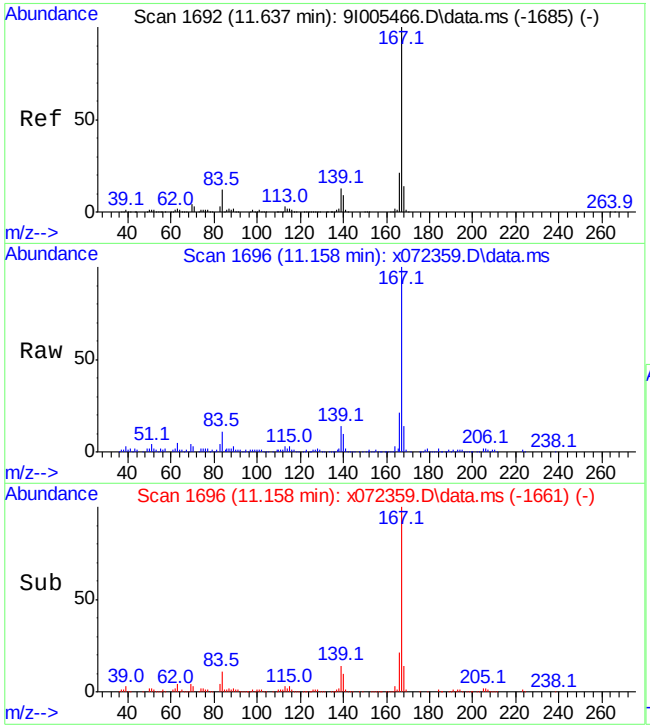


#85
Anthracene
Concen: 12.50 ppm
RT: 10.944 min Scan# 1656
Delta R.T. -0.005 min
Lab File: x072359.D
Acq: 12 Aug 2020 11:16 am

Tgt Ion:178 Resp: 260628

Ion	Ratio	Lower	Upper
178	100		
179	15.2	0.0	46.0
176	18.7	0.0	49.3

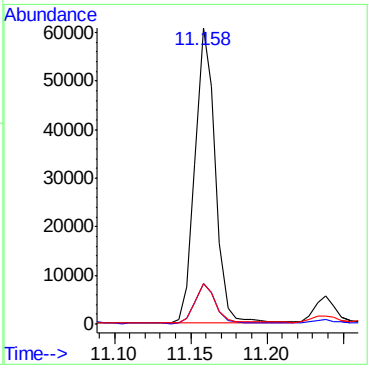


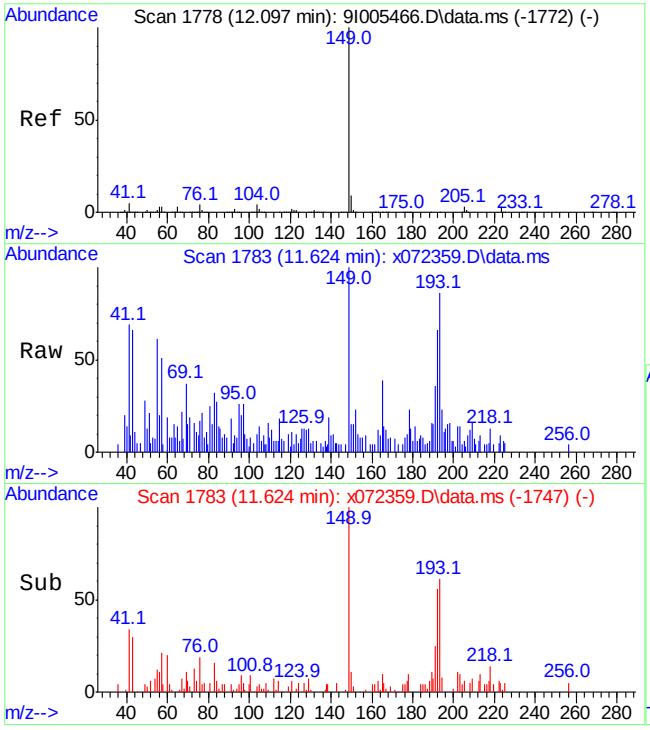


#87
Carbazole
Concen: 3.04 ppm
RT: 11.158 min Scan# 1696
Delta R.T. -0.011 min
Lab File: x072359.D
Acq: 12 Aug 2020 11:16 am

Tgt Ion:167 Resp: 55877

Ion	Ratio	Lower	Upper
167	100		
168	13.7	0.0	43.9
139	13.1	0.0	42.7

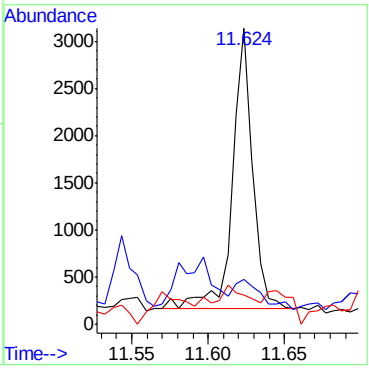


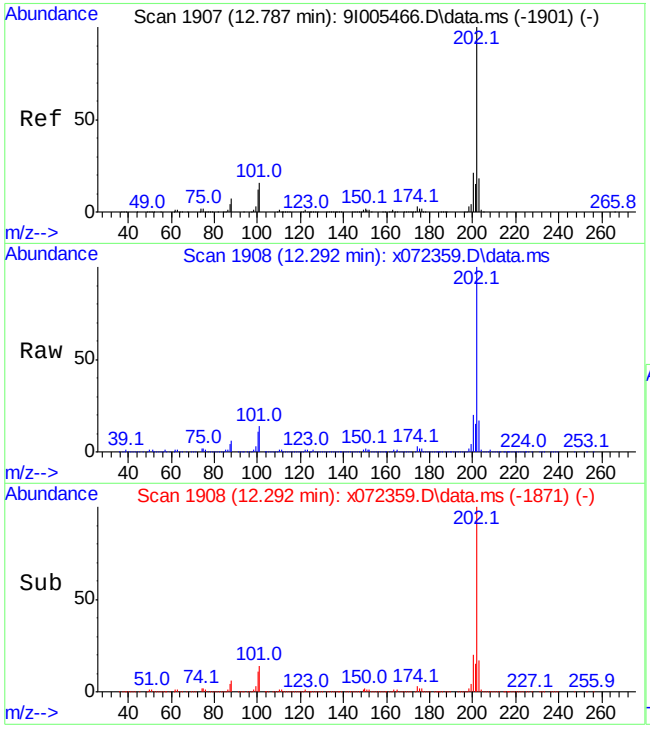


#89
Di-n-butylphthalate
Concen: 0.14 ppm
RT: 11.624 min Scan# 1783
Delta R.T. -0.005 min
Lab File: x072359.D
Acq: 12 Aug 2020 11:16 am

Tgt Ion:149 Resp: 2781

Ion	Ratio	Lower	Upper
149	100		
150	9.7	0.0	39.5
104	0.0	0.0	34.2

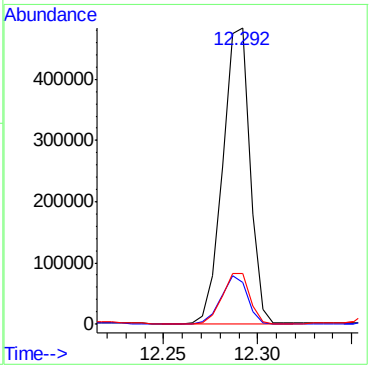


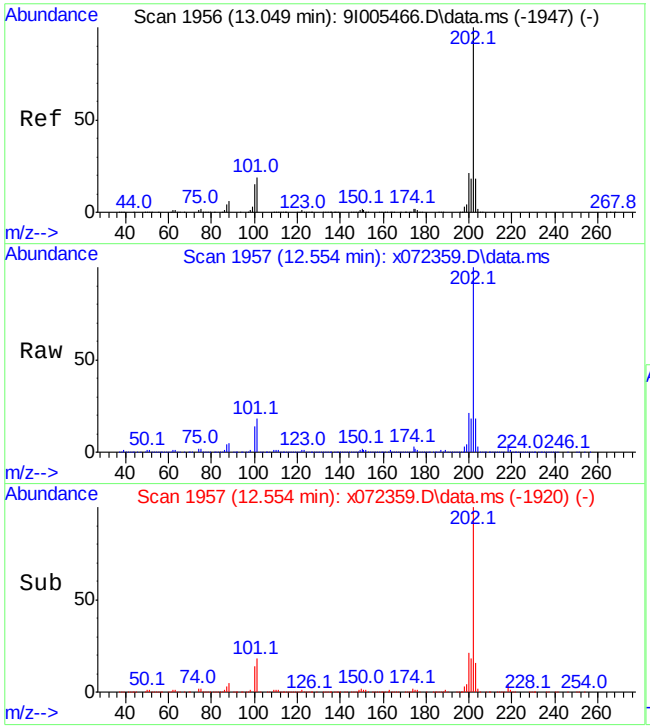


#91
Fluoranthene
Concen: 26.10 ppm
RT: 12.292 min Scan# 1908
Delta R.T. -0.000 min
Lab File: x072359.D
Acq: 12 Aug 2020 11:16 am

Tgt Ion:202 Resp: 484448

Ion	Ratio	Lower	Upper
202	100		
101	14.0	0.0	45.8
203	17.1	0.0	48.1

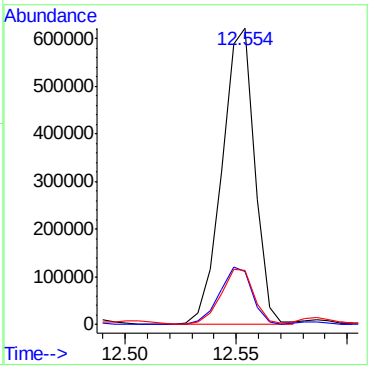


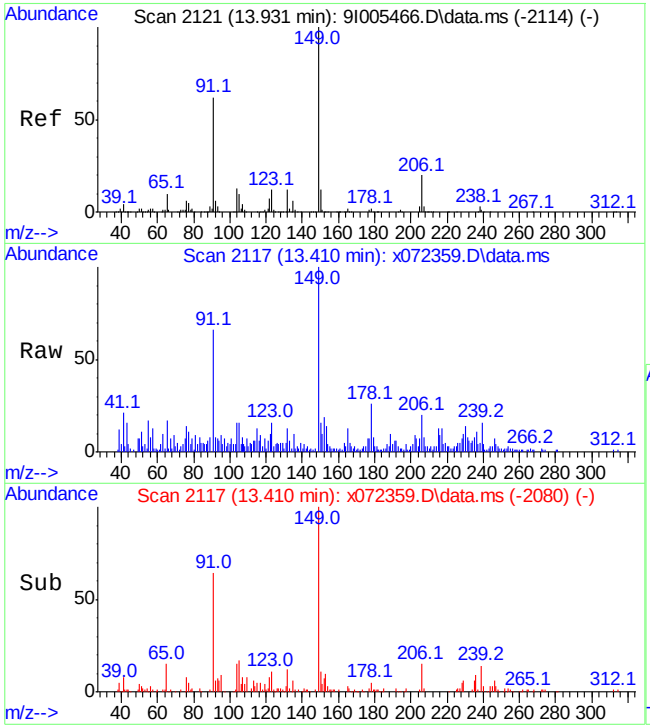


#94
Pyrene
Concen: 28.40 ppm
RT: 12.554 min Scan# 1957
Delta R.T. -0.000 min
Lab File: x072359.D
Acq: 12 Aug 2020 11:16 am

Tgt Ion:202 Resp: 631663

Ion	Ratio	Lower	Upper
202	100		
101	17.6	0.0	48.7
203	17.8	0.0	48.4

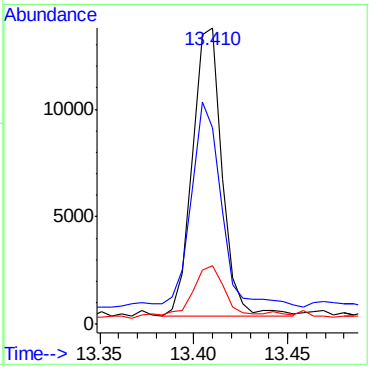


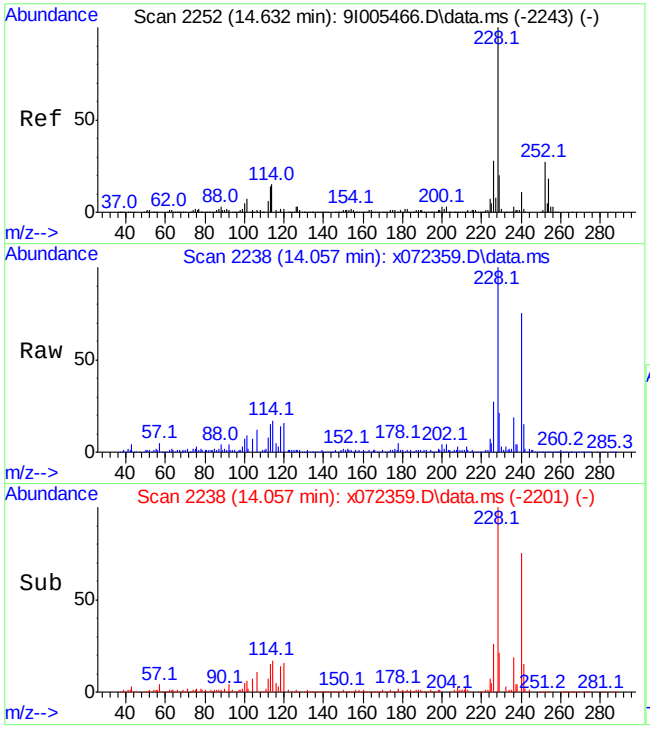


#97
Butylbenzylphthalate
Concen: 1.72 ppm
RT: 13.410 min Scan# 2117
Delta R.T. -0.000 min
Lab File: x072359.D
Acq: 12 Aug 2020 11:16 am

Tgt Ion:149 Resp: 14744

Ion	Ratio	Lower	Upper
149	100		
91	61.5	32.1	92.1
206	17.2	0.0	49.7

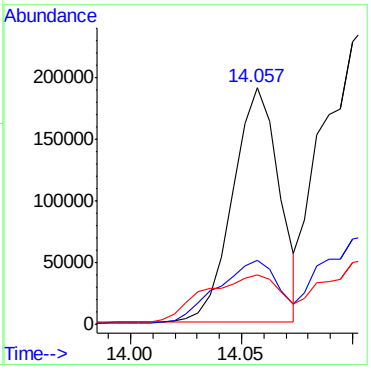


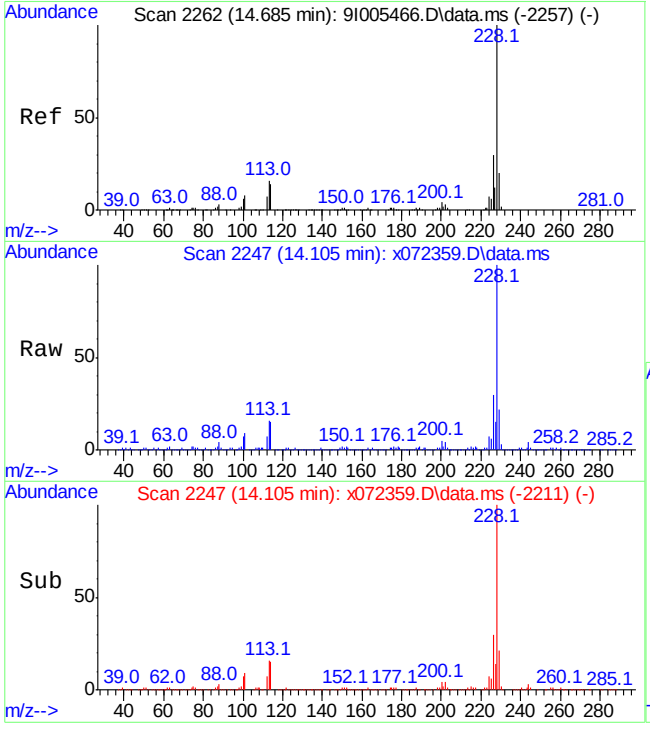


#99
Benzo[a]anthracene
Concen: 16.52 ppm
RT: 14.057 min Scan# 2238
Delta R.T. -0.000 min
Lab File: x072359.D
Acq: 12 Aug 2020 11:16 am

Tgt Ion:228 Resp: 278144

Ion	Ratio	Lower	Upper
228	100		
226	26.4	0.0	57.5
229	18.1	0.0	49.9

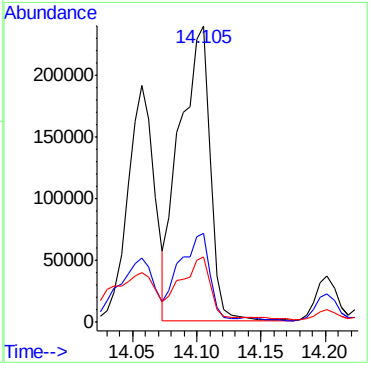


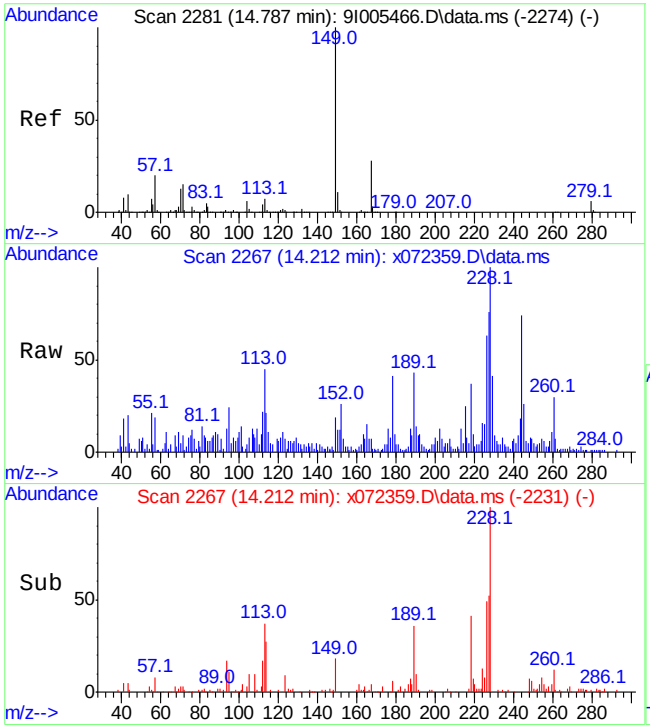


#100
Chrysene
Concen: 22.13 ppm
RT: 14.105 min Scan# 2247
Delta R.T. -0.005 min
Lab File: x072359.D
Acq: 12 Aug 2020 11:16 am

Tgt Ion:228 Resp: 396713

Ion	Ratio	Lower	Upper
228	100		
226	29.9	0.4	60.4
229	20.5	0.0	50.1

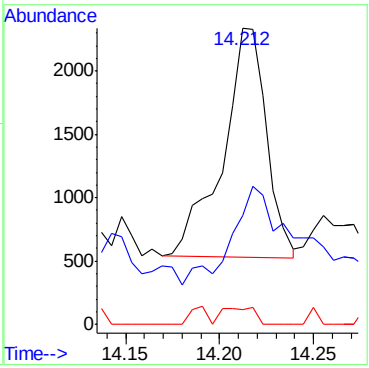


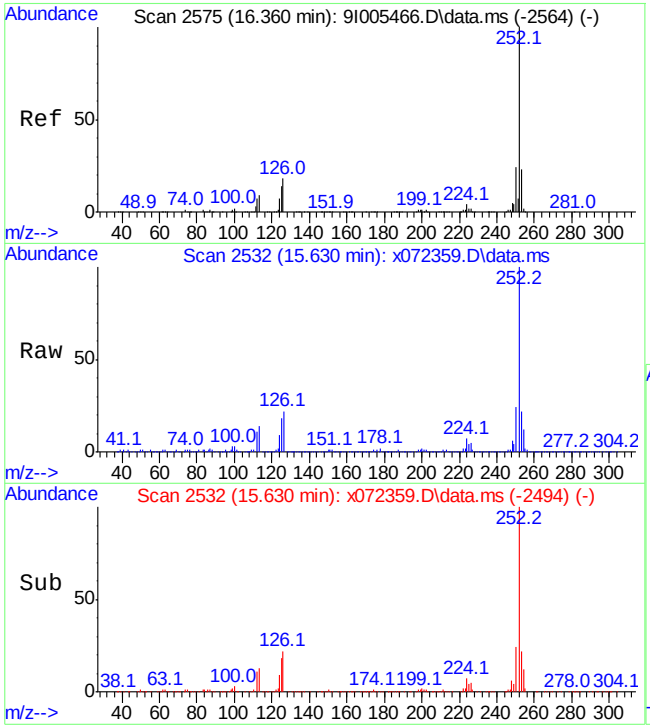


#101
bis(2-Ethylhexyl)phthalate
Concen: 0.26 ppm
RT: 14.212 min Scan# 2267
Delta R.T. -0.005 min
Lab File: x072359.D
Acq: 12 Aug 2020 11:16 am

Tgt Ion:149 Resp: 2905

Ion	Ratio	Lower	Upper
149	100		
167	16.2	0.0	58.5
279	6.8	0.0	35.7

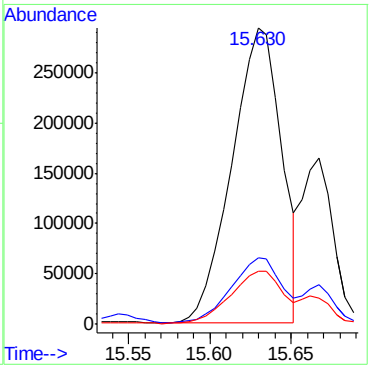


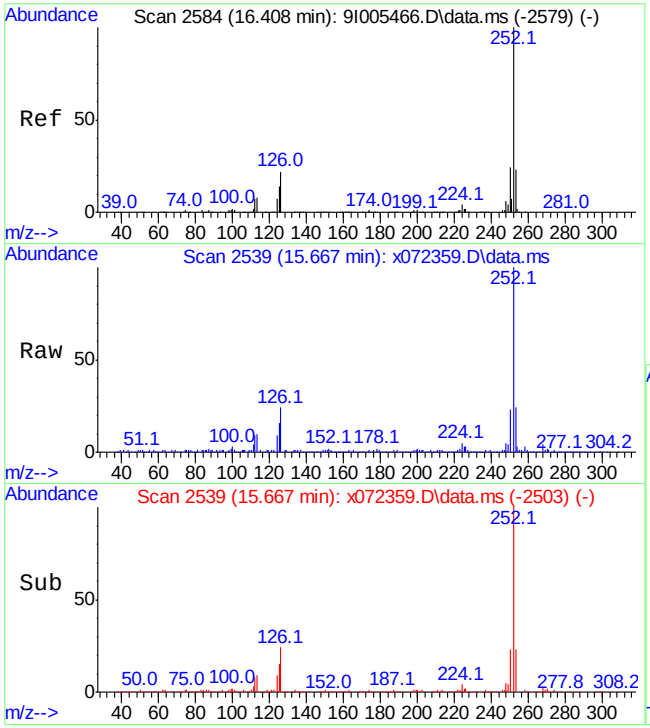


#104
Benzo[b]fluoranthene
Concen: 50.29 ppm
RT: 15.630 min Scan# 2532
Delta R.T. 0.005 min
Lab File: x072359.D
Acq: 12 Aug 2020 11:16 am

Tgt Ion:252 Resp: 624238

Ion	Ratio	Lower	Upper
252	100		
253	21.9	0.0	52.5
125	17.6	0.0	44.0

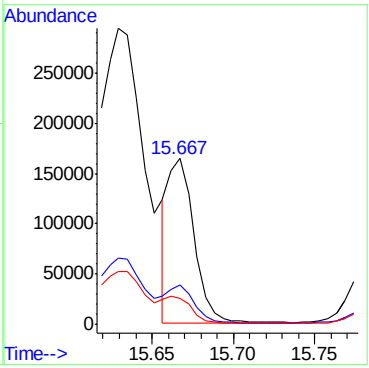


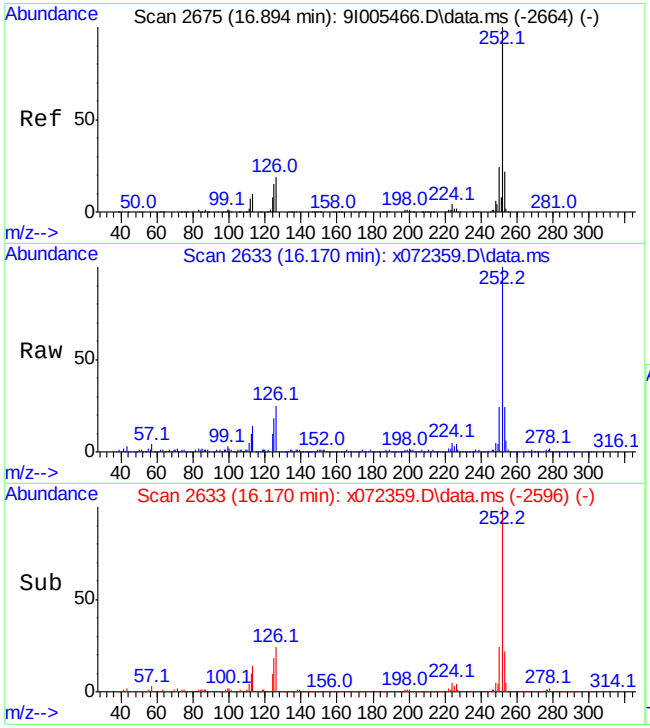


#105
Benzo[k]fluoranthene
Concen: 12.10 ppm
RT: 15.667 min Scan# 2539
Delta R.T. -0.005 min
Lab File: x072359.D
Acq: 12 Aug 2020 11:16 am

Tgt Ion:252 Resp: 179448

Ion	Ratio	Lower	Upper
252	100		
253	23.8	0.0	52.5
125	13.2	0.0	44.4

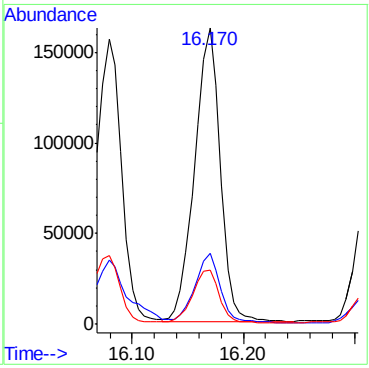


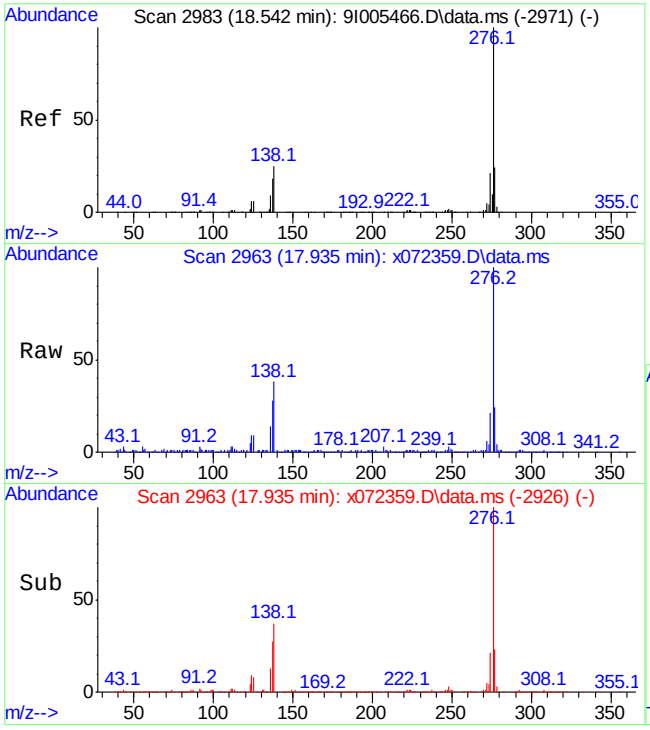


#106
Benzo[a]pyrene
Concen: 23.30 ppm
RT: 16.170 min Scan# 2633
Delta R.T. -0.000 min
Lab File: x072359.D
Acq: 12 Aug 2020 11:16 am

Tgt Ion:252 Resp: 260957

Ion	Ratio	Lower	Upper
252	100		
253	23.1	0.0	52.3
125	17.9	0.0	44.7

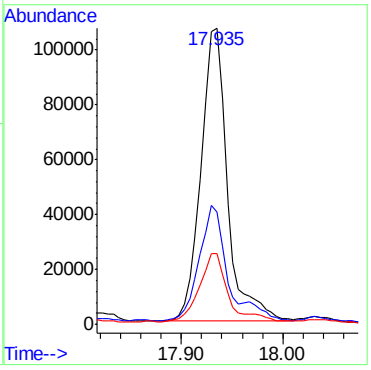


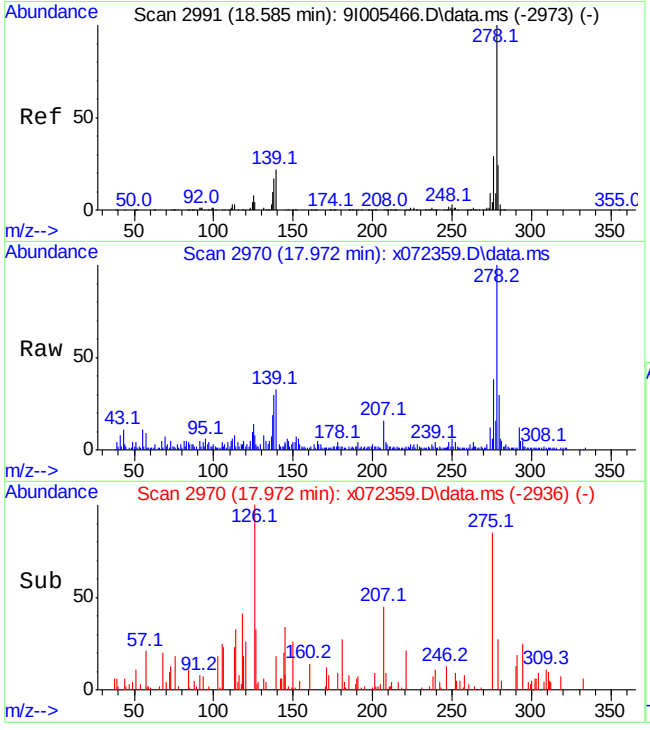


#107
Indeno[1,2,3-cd]pyrene
Concen: 27.22 ppm
RT: 17.935 min Scan# 2963
Delta R.T. -0.000 min
Lab File: x072359.D
Acq: 12 Aug 2020 11:16 am

Tgt Ion:276 Resp: 193300

Ion	Ratio	Lower	Upper
276	100		
138	37.1	0.0	54.7
277	23.3	0.0	53.8

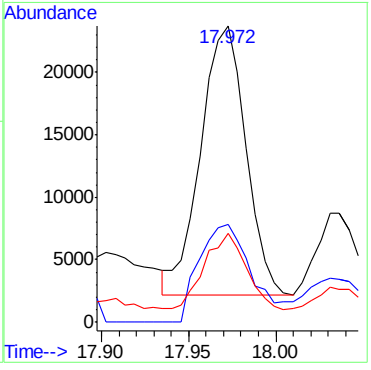


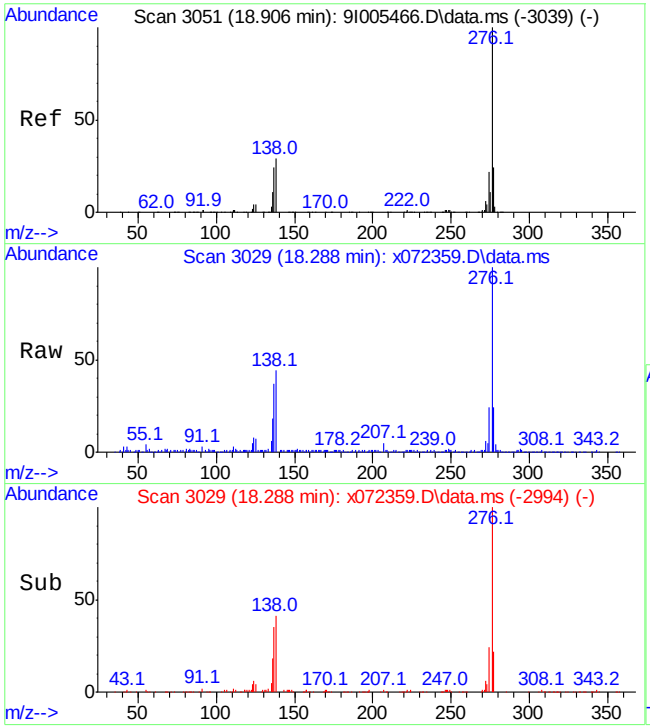


#108
Dibenz[a,h]anthracene
Concen: 5.74 ppm
RT: 17.972 min Scan# 2970
Delta R.T. -0.016 min
Lab File: x072359.D
Acq: 12 Aug 2020 11:16 am

Tgt Ion:278 Resp: 38858

Ion	Ratio	Lower	Upper
278	100		
139	32.2	0.0	52.4
279	29.1	0.0	54.4

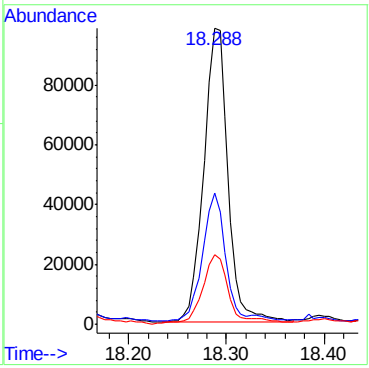




#109
Benzo[g,h,i]perylene
Concen: 16.58 ppm
RT: 18.288 min Scan# 3029
Delta R.T. -0.011 min
Lab File: x072359.D
Acq: 12 Aug 2020 11:16 am

Tgt Ion:276 Resp: 167859

Ion	Ratio	Lower	Upper
276	100		
138	43.5	0.0	59.4
277	23.3	0.0	54.1



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072334.d
Acq On : 11 Aug 2020 2:57 pm
Operator : marthav
Sample : fa77576-2 E
Misc : op81482,sx2950,30.0,,,1,1,soil
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 12 02:15:57 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

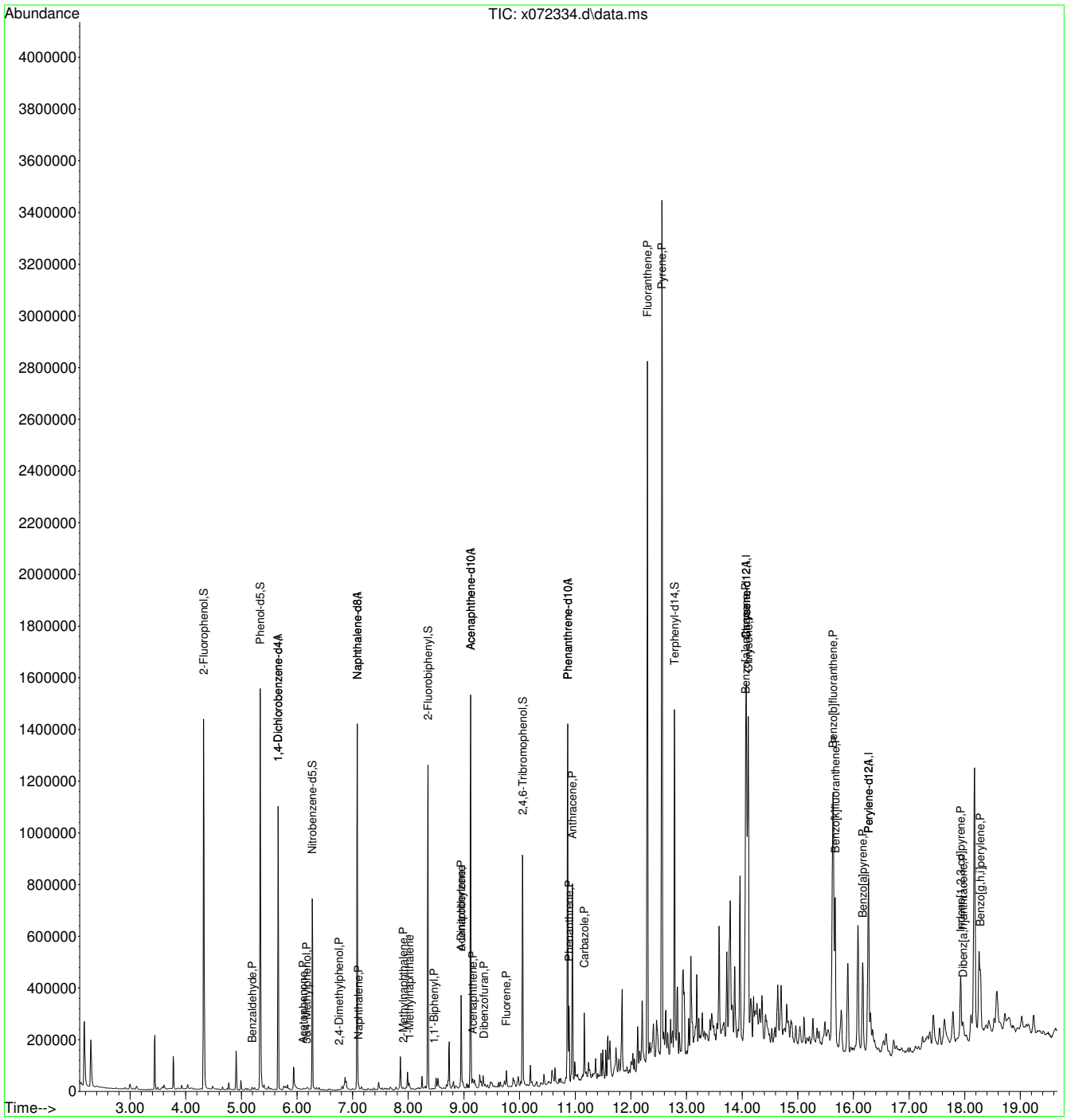
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.660	152	154000	40.00	ppm	0.00
22) Naphthalene-d8	7.082	136	582044	40.00	ppm	0.00
43) Acenaphthene-d10	9.120	164	287902	40.00	ppm	0.00
70) Phenanthrene-d10	10.864	188	503510	40.00	ppm	0.00
92) Chrysene-d12	14.073	240	430460	40.00	ppm	0.00
102) Perylene-d12	16.271	264	327513	40.00	ppm	0.02
110) 1,4-Dichlorobenzene-d4A	5.660	152	154000	40.00	ppm	0.00
120) Naphthalene-d8A	7.082	136	582044	40.00	ppm	0.00
127) Acenaphthene-d10A	9.120	164	287902	40.00	ppm	0.00
136) Phenanthrene-d10A	10.864	188	503510	40.00	ppm	0.00
146) Chrysene-d12A	14.073	240	430460	40.00	ppm	0.00
153) Perylene-d12A	16.271	264	327513	40.00	ppm	0.02
System Monitoring Compounds						
7) 2-Fluorophenol	4.322	112	382078	69.19	ppm	0.02
Spiked Amount 100.000	Range 40 - 102		Recovery = 69.19%			
9) Phenol-d5	5.339	99	485865	73.96	ppm	0.00
Spiked Amount 100.000	Range 41 - 100		Recovery = 73.96%			
23) Nitrobenzene-d5	6.275	82	199476	33.19	ppm	0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 66.38%			
47) 2-Fluorobiphenyl	8.355	172	371787	35.67	ppm	0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 71.34%			
75) 2,4,6-Tribromophenol	10.056	330	79552	74.29	ppm	0.00
Spiked Amount 100.000	Range 42 - 108		Recovery = 74.29%			
95) Terphenyl-d14	12.784	244	412339	36.05	ppm	0.00
Spiked Amount 50.000	Range 45 - 119		Recovery = 72.10%			
Target Compounds						Qvalue
5) Benzaldehyde	5.194	106	2482	0.54	ppm	93
18) Acetophenone	6.114	105	1867	0.23	ppm	92
21) 3&4-Methylphenol	6.173	108	1444	0.25	ppm	92
27) 2,4-Dimethylphenol	6.756	107	1021	0.19	ppm	98
34) Naphthalene	7.104	128	3592	0.23	ppm	96
40) 2-Methylnaphthalene	7.911	142	1935	0.19	ppm	89
41) 1-Methylnaphthalene	8.018	142	1156	0.12	ppm	98
48) 1,1'-Biphenyl	8.462	154	886	0.08	ppm	96
52) Acenaphthylene	8.949	152	162875	11.33	ppm	99
56) o-Dinitrobenzene	8.949	50	4836	2.11	ppm #	1
57) Acenaphthene	9.158	153	8385	0.88	ppm	97
60) Dibenzofuran	9.361	168	4081	0.32	ppm	92
65) Fluorene	9.762	166	19820	1.99	ppm	98
84) Phenanthrene	10.891	178	110510	7.26	ppm	98
85) Anthracene	10.949	178	282884	17.84	ppm	98
87) Carbazole	11.163	167	96426	6.89	ppm	98
91) Fluoranthene	12.297	202	1106483	78.38	ppm	99
94) Pyrene	12.559	202	1375308	76.95	ppm	100
99) Benzo[a]anthracene	14.062	228	427855	31.62	ppm	97
100) Chrysene	14.111	228	638241	44.30	ppm	99
104) Benzo[b]fluoranthene	15.635	252	727301	71.54	ppm	95
105) Benzo[k]fluoranthene	15.672	252	250691	21.56	ppm	99
106) Benzo[a]pyrene	16.170	252	204837	23.32	ppm	97
107) Indeno[1,2,3-cd]pyrene	17.929	276	152171	27.31	ppm	87
108) Dibenz[a,h]anthracene	17.967	278	29606	5.59	ppm	88
109) Benzo[g,h,i]perylene	18.282	276	119216	15.11	ppm	85

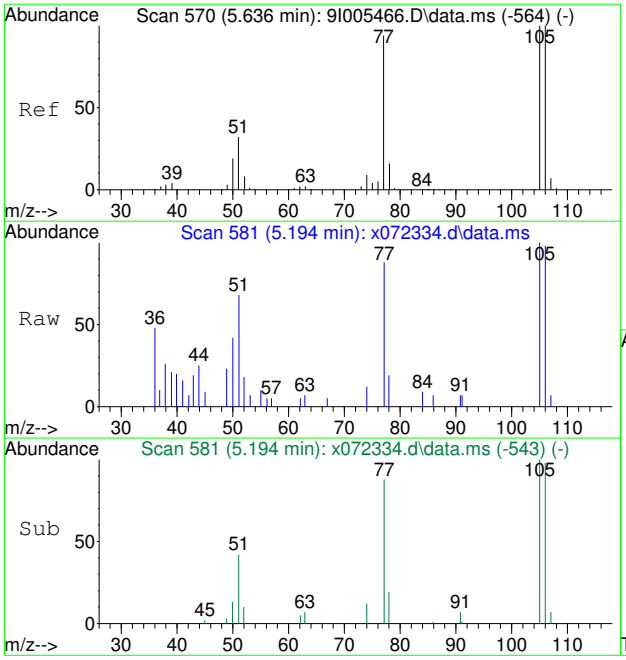
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072334.d
Acq On : 11 Aug 2020 2:57 pm
Operator : marthav
Sample : fa77576-2 E
Misc : op81482,sx2950,30.0,,,1,1,soil
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 12 02:15:57 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

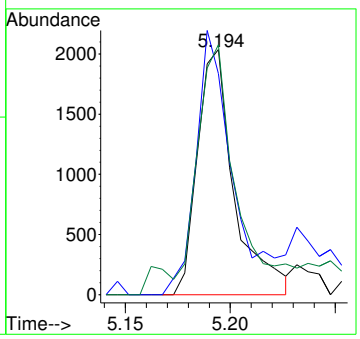


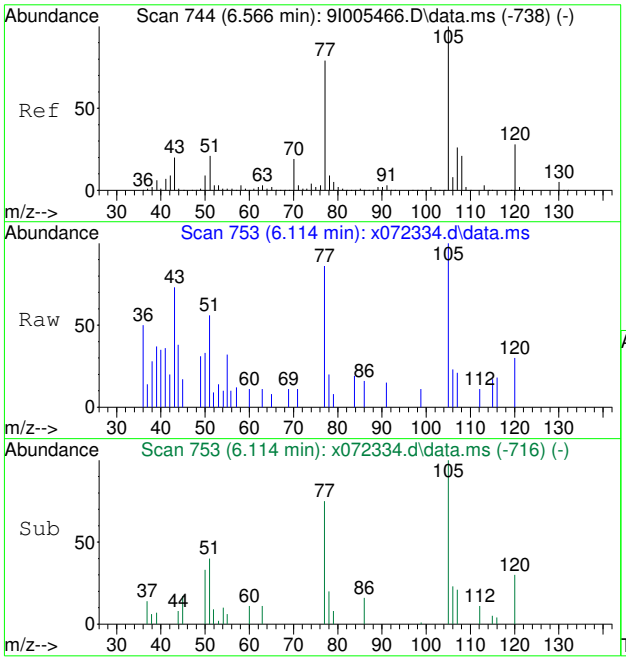


#5
Benzaldehyde
Concen: 0.54 ppm
RT: 5.194 min Scan# 581
Delta R.T. 0.005 min
Lab File: x072334.d
Acq: 11 Aug 2020 2:57 pm

Tgt Ion:106 Resp: 2482

Ion	Ratio	Lower	Upper
106	100		
77	85.3	63.9	123.9
105	94.1	70.0	130.0

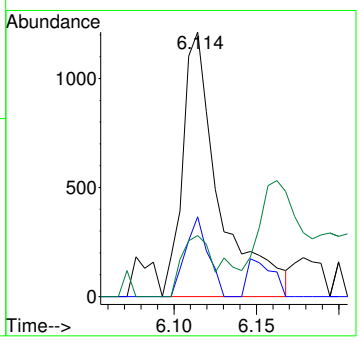


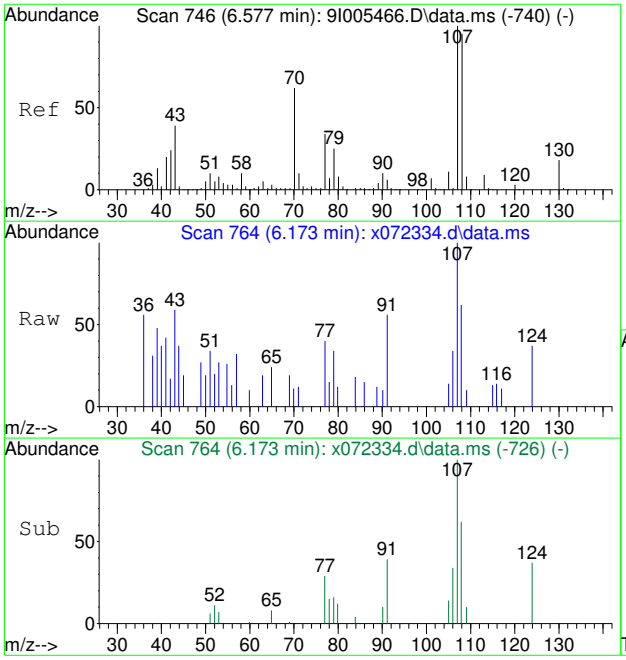


#18
Acetophenone
Concen: 0.23 ppm
RT: 6.114 min Scan# 753
Delta R.T. -0.000 min
Lab File: x072334.d
Acq: 11 Aug 2020 2:57 pm

Tgt Ion:105 Resp: 1867

Ion	Ratio	Lower	Upper
105	100		
120	31.7	0.0	58.3
106	3.4	0.0	38.0

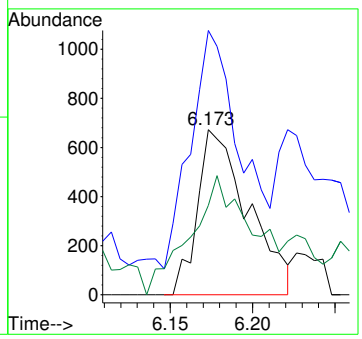


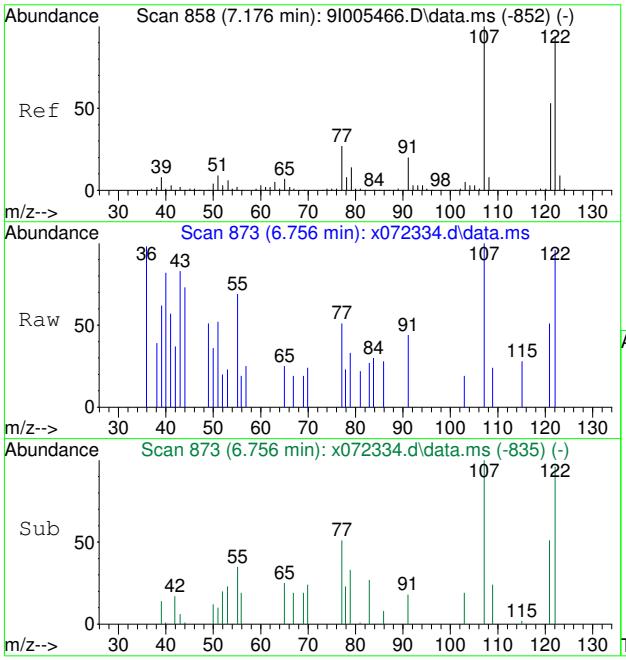


#21
3&4-Methylphenol
Concen: 0.25 ppm
RT: 6.173 min Scan# 764
Delta R.T. 0.005 min
Lab File: x072334.d
Acq: 11 Aug 2020 2:57 pm

Tgt Ion:108 Resp: 1444

Ion	Ratio	Lower	Upper
108	100		
107	112.4	75.4	135.4
79	32.9	0.0	56.3

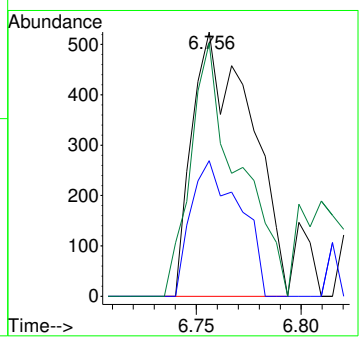


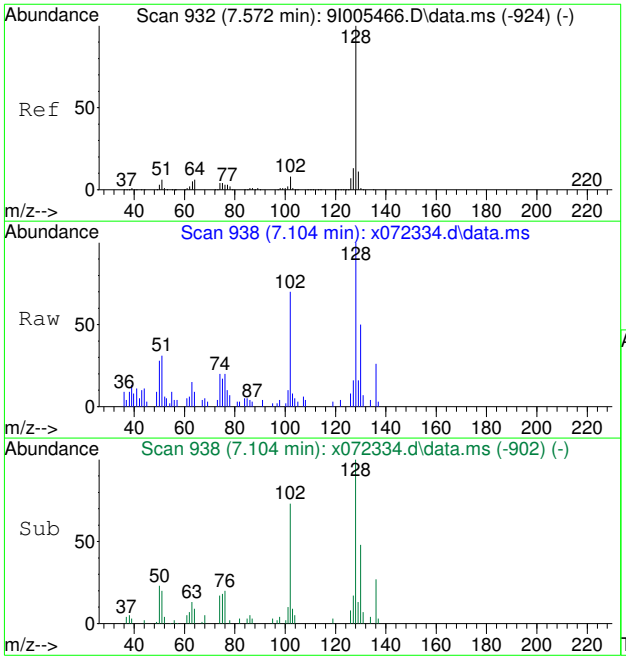


#27
2,4-Dimethylphenol
Concen: 0.19 ppm
RT: 6.756 min Scan# 873
Delta R.T. 0.005 min
Lab File: x072334.d
Acq: 11 Aug 2020 2:57 pm

Tgt Ion:107 Resp: 1021

Ion	Ratio	Lower	Upper
107	100		
121	51.2	23.4	83.4
122	95.8	64.3	124.3

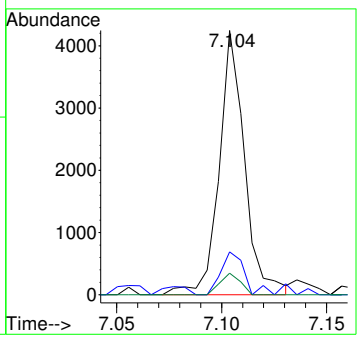


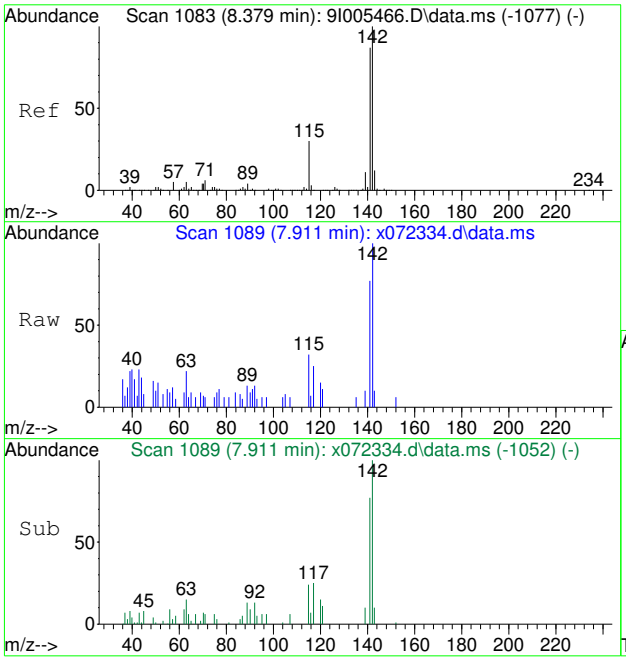


#34
Naphthalene
Concen: 0.23 ppm
RT: 7.104 min Scan# 938
Delta R.T. -0.005 min
Lab File: x072334.d
Acq: 11 Aug 2020 2:57 pm

Tgt Ion:128 Resp: 3592

Ion	Ratio	Lower	Upper
128	100		
129	13.1	0.0	41.4
126	8.3	0.0	37.4

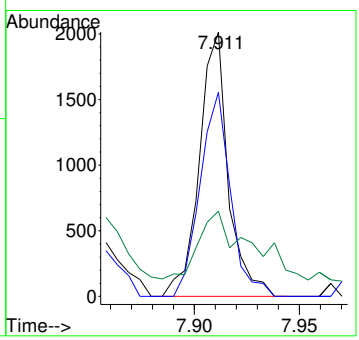


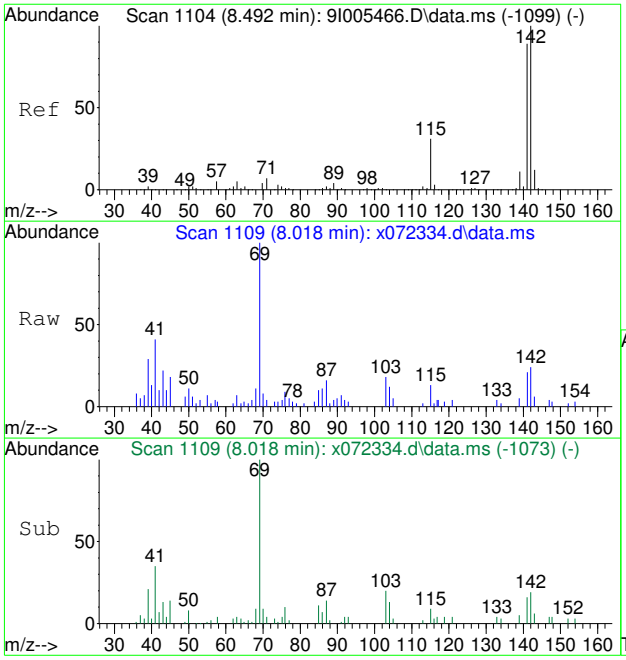


#40
2-Methylnaphthalene
Concen: 0.19 ppm
RT: 7.911 min Scan# 1089
Delta R.T. -0.000 min
Lab File: x072334.d
Acq: 11 Aug 2020 2:57 pm

Tgt Ion:142 Resp: 1935

Ion	Ratio	Lower	Upper
142	100		
141	77.1	56.8	116.8
115	23.9	0.0	60.0

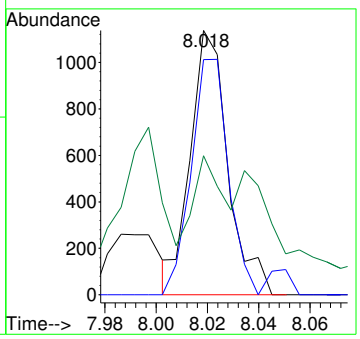


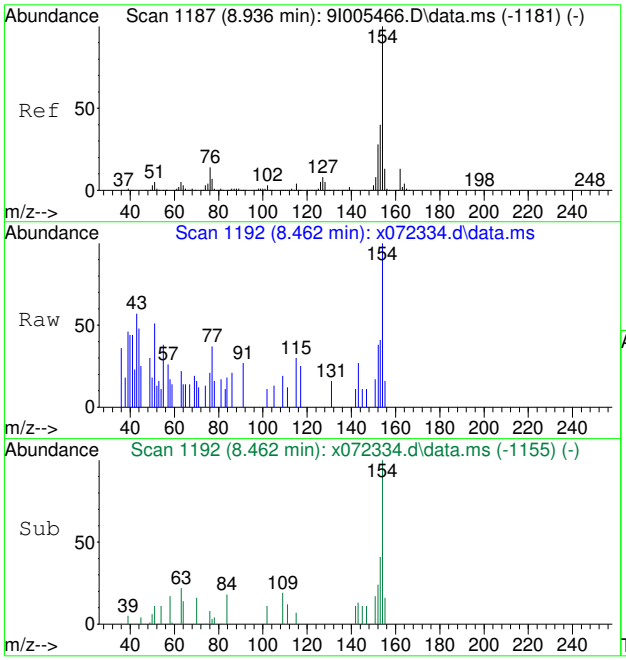


#41
1-Methylnaphthalene
Concen: 0.12 ppm
RT: 8.018 min Scan# 1109
Delta R.T. -0.005 min
Lab File: x072334.d
Acq: 11 Aug 2020 2:57 pm

Tgt Ion:142 Resp: 1156

Ion	Ratio	Lower	Upper
142	100		
141	90.1	59.0	119.0
115	29.3	1.1	61.1

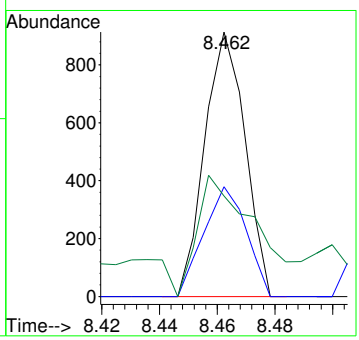


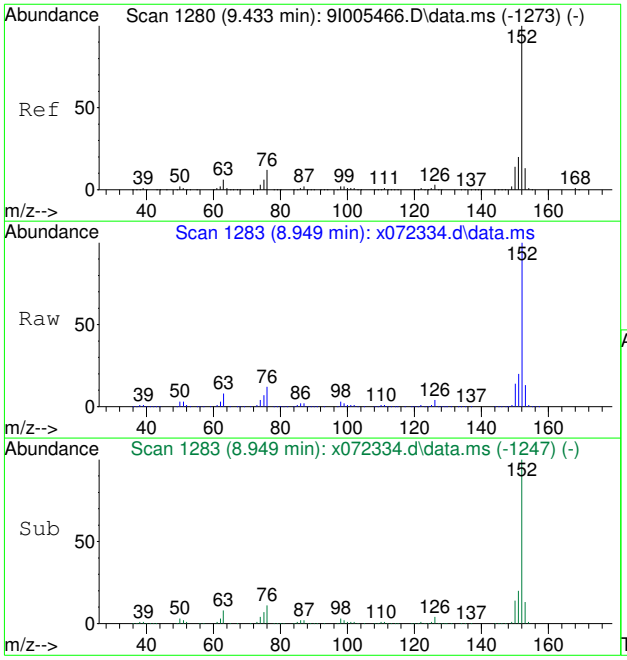


#48
1,1'-Biphenyl
Concen: 0.08 ppm
RT: 8.462 min Scan# 1192
Delta R.T. -0.000 min
Lab File: x072334.d
Acq: 11 Aug 2020 2:57 pm

Tgt Ion:154 Resp: 886

Ion	Ratio	Lower	Upper
154	100		
153	41.5	10.3	70.3
152	24.5	0.0	58.2

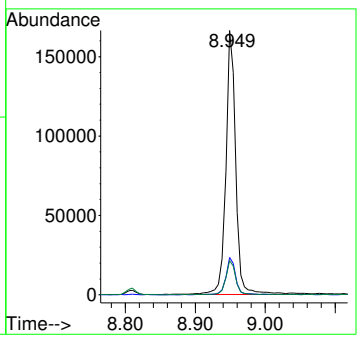


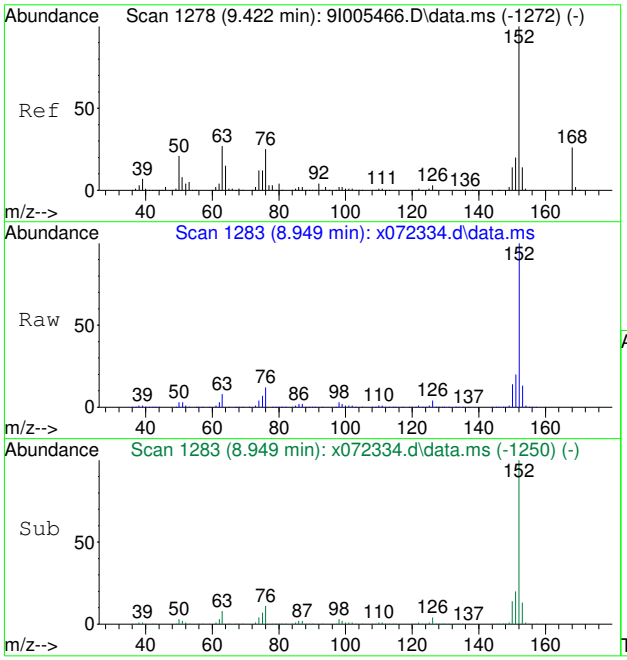


#52
Acenaphthylene
Concen: 11.33 ppm
RT: 8.949 min Scan# 1283
Delta R.T. -0.005 min
Lab File: x072334.d
Acq: 11 Aug 2020 2:57 pm

Tgt Ion:152 Resp: 162875

Ion	Ratio	Lower	Upper
152	100		
150	14.0	0.0	44.3
153	12.9	0.0	43.3

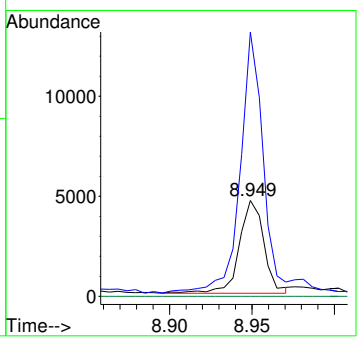


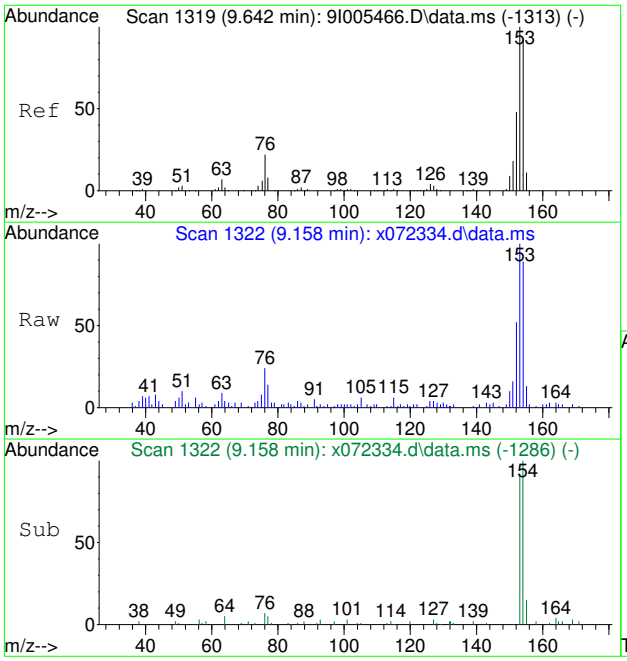


#56
o-Dinitrobenzene
Concen: 2.11 ppm
RT: 8.949 min Scan# 1283
Delta R.T. -0.021 min
Lab File: x072334.d
Acq: 11 Aug 2020 2:57 pm

Tgt Ion: 50 Resp: 4836

Ion	Ratio	Lower	Upper
50	100		
63	284.8	110.3	150.3#
168	0.0	104.0	144.0#

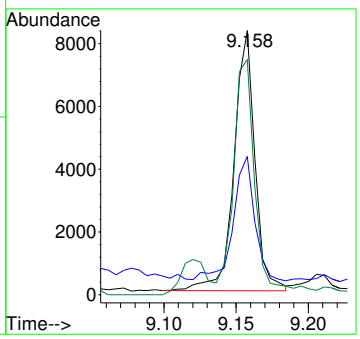


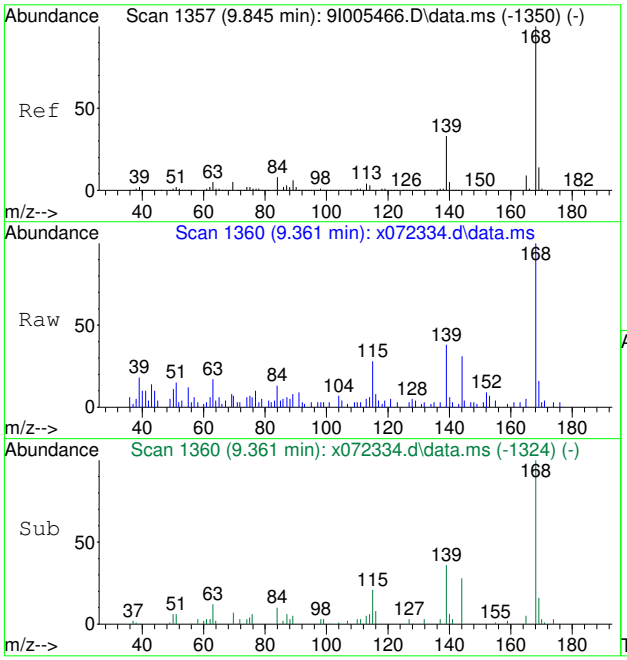


#57
Acenaphthene
Concen: 0.88 ppm
RT: 9.158 min Scan# 1322
Delta R.T. -0.005 min
Lab File: x072334.d
Acq: 11 Aug 2020 2:57 pm

Tgt Ion:153 Resp: 8385

Ion	Ratio	Lower	Upper
153	100		
152	45.6	18.4	78.4
154	89.6	62.4	122.4

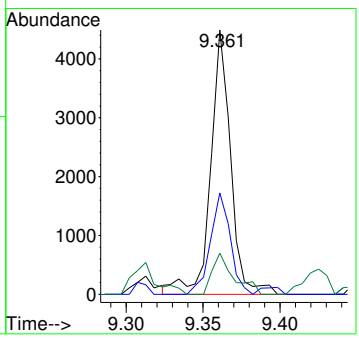


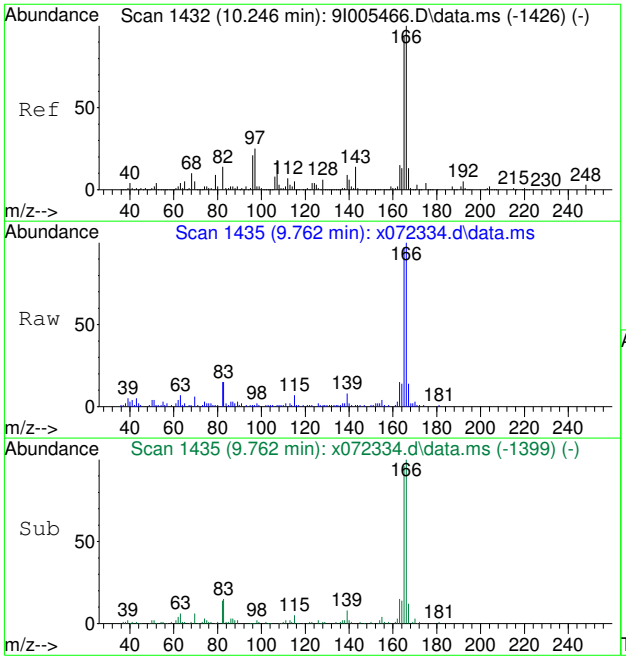


#60
Dibenzofuran
Concen: 0.32 ppm
RT: 9.361 min Scan# 1360
Delta R.T. -0.005 min
Lab File: x072334.d
Acq: 11 Aug 2020 2:57 pm

Tgt Ion:168 Resp: 4081

Ion	Ratio	Lower	Upper
168	100		
139	39.1	3.0	63.0
169	14.4	0.0	43.5

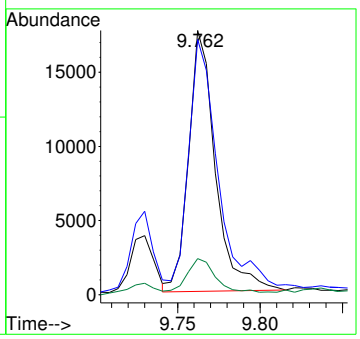


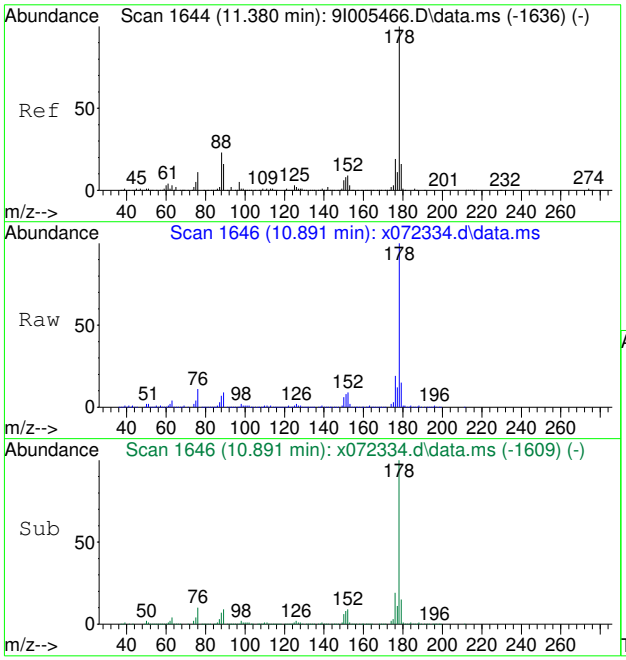


#65
Fluorene
Concen: 1.99 ppm
RT: 9.762 min Scan# 1435
Delta R.T. -0.005 min
Lab File: x072334.d
Acq: 11 Aug 2020 2:57 pm

Tgt Ion:166 Resp: 19820

Ion	Ratio	Lower	Upper
166	100		
165	94.7	62.7	122.7
167	12.5	0.0	43.5

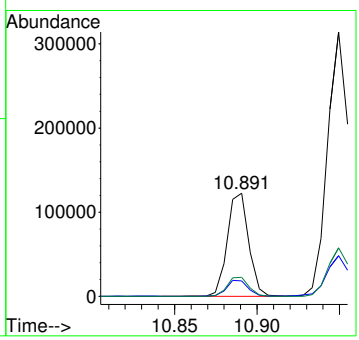


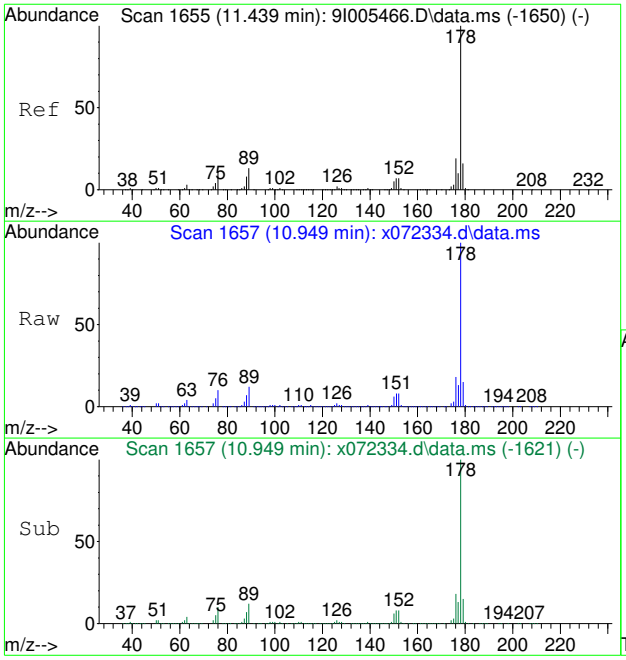


#84
Phenanthrene
Concen: 7.26 ppm
RT: 10.891 min Scan# 1646
Delta R.T. -0.000 min
Lab File: x072334.d
Acq: 11 Aug 2020 2:57 pm

Tgt Ion:178 Resp: 110510

Ion	Ratio	Lower	Upper
178	100		
179	14.9	0.0	45.8
176	18.6	0.0	49.3

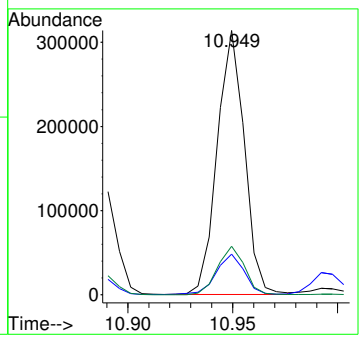


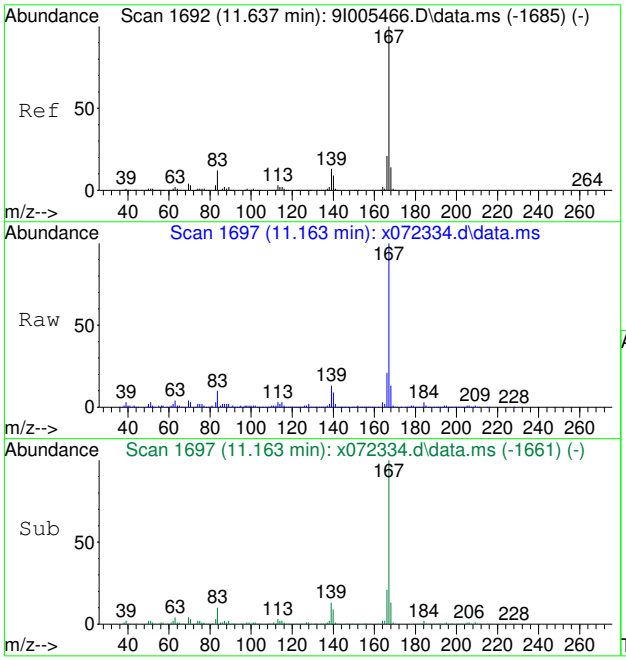


#85
Anthracene
Concen: 17.84 ppm
RT: 10.949 min Scan# 1657
Delta R.T. -0.005 min
Lab File: x072334.d
Acq: 11 Aug 2020 2:57 pm

Tgt Ion:178 Resp: 282884

Ion	Ratio	Lower	Upper
178	100		
179	15.2	0.0	46.0
176	18.3	0.0	49.3

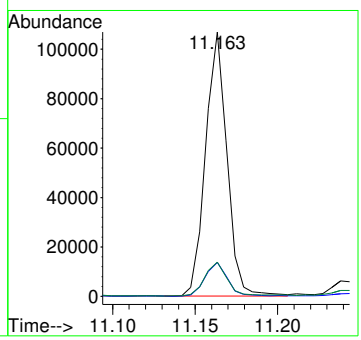


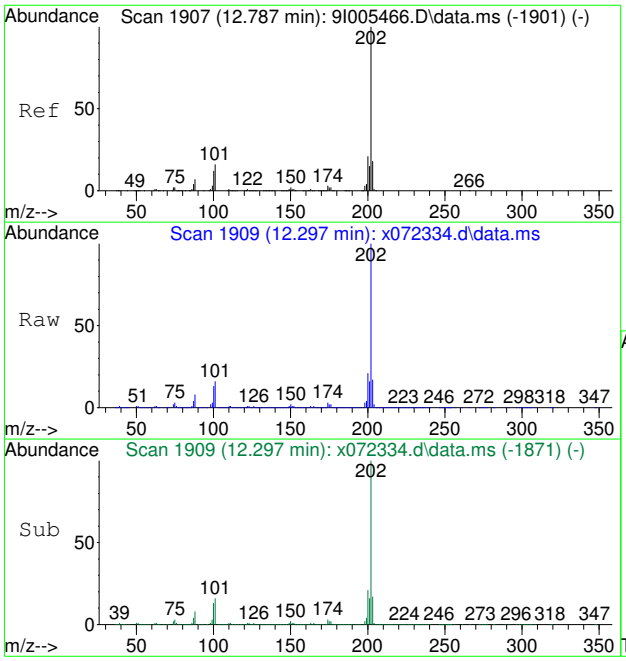


#87
Carbazole
Concen: 6.89 ppm
RT: 11.163 min Scan# 1697
Delta R.T. -0.005 min
Lab File: x072334.d
Acq: 11 Aug 2020 2:57 pm

Tgt Ion:167 Resp: 96426

Ion	Ratio	Lower	Upper
167	100		
168	12.7	0.0	43.9
139	12.7	0.0	42.7

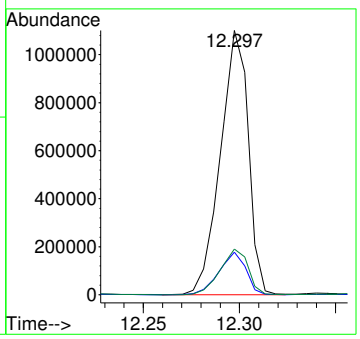


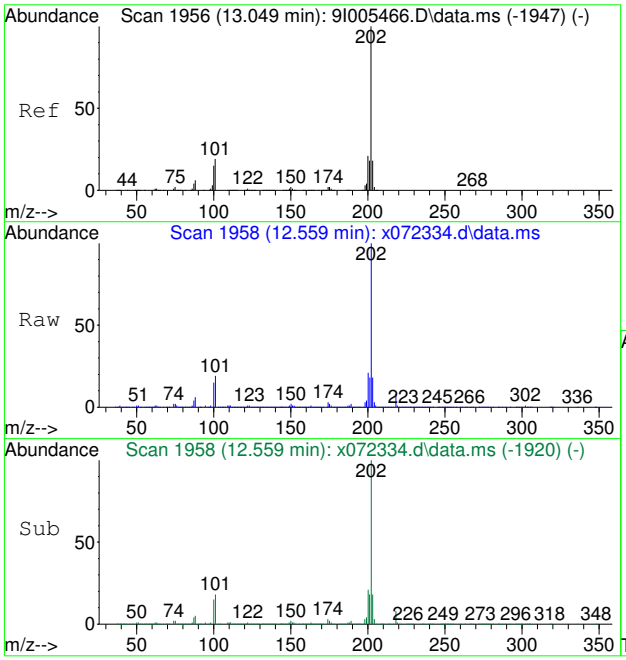


#91
Fluoranthene
Concen: 78.38 ppm
RT: 12.297 min Scan# 1909
Delta R.T. 0.005 min
Lab File: x072334.d
Acq: 11 Aug 2020 2:57 pm

Tgt Ion:202 Resp: 1106483

Ion	Ratio	Lower	Upper
202	100		
101	16.1	0.0	45.8
203	17.2	0.0	48.1

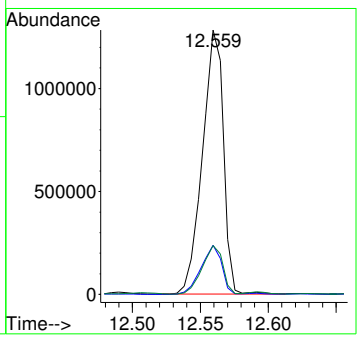


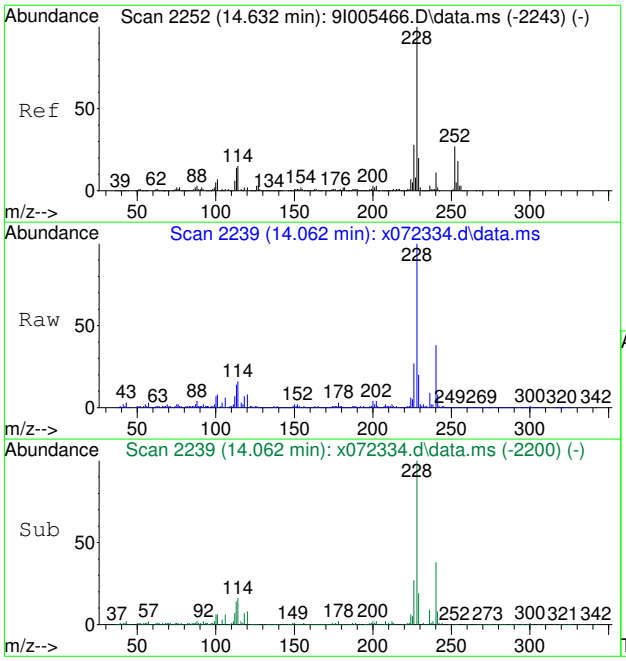


#94
Pyrene
Concen: 76.95 ppm
RT: 12.559 min Scan# 1958
Delta R.T. 0.005 min
Lab File: x072334.d
Acq: 11 Aug 2020 2:57 pm

Tgt Ion:202 Resp: 1375308

Ion	Ratio	Lower	Upper
202	100		
101	18.5	0.0	48.7
203	18.3	0.0	48.4

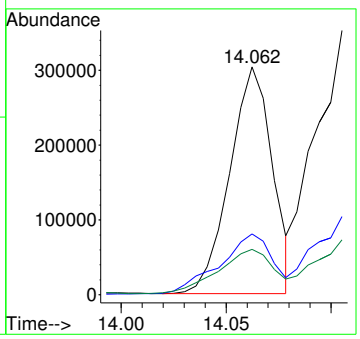


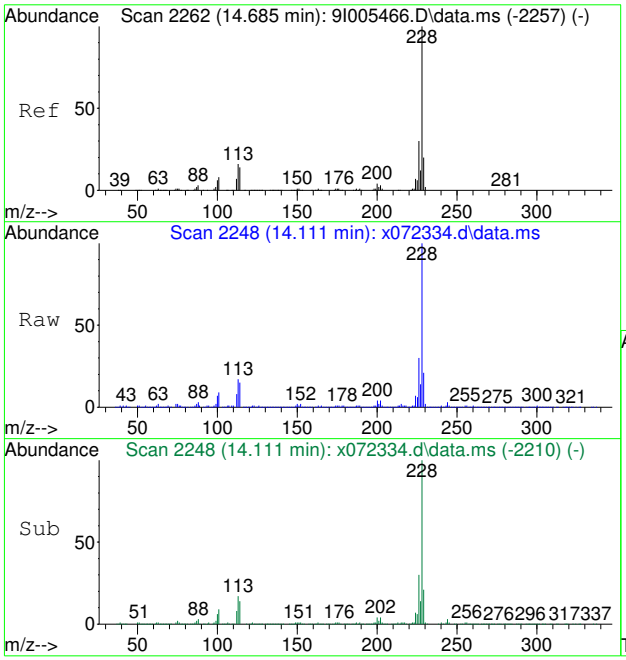


#99
Benzo[a]anthracene
Concen: 31.62 ppm
RT: 14.062 min Scan# 2239
Delta R.T. 0.011 min
Lab File: x072334.d
Acq: 11 Aug 2020 2:57 pm

Tgt Ion:228 Resp: 427855

Ion	Ratio	Lower	Upper
228	100		
226	26.1	0.0	57.5
229	18.4	0.0	49.9

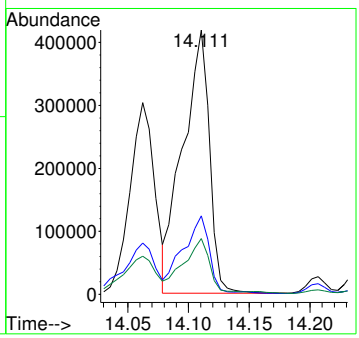


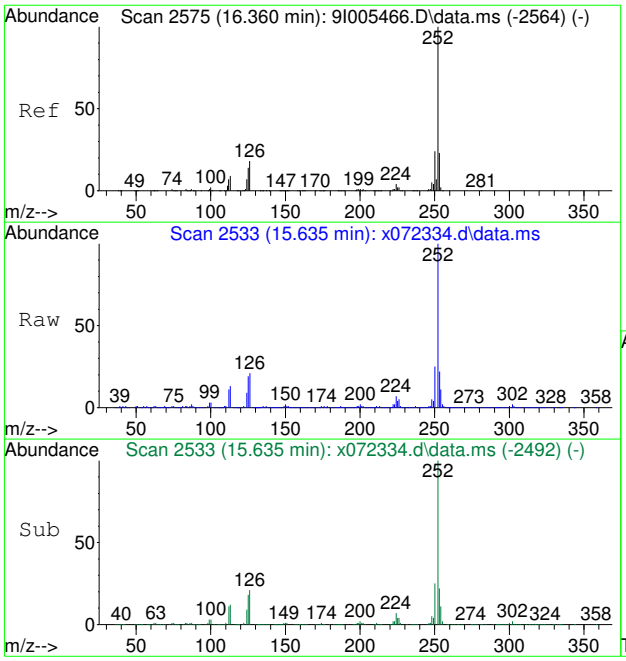


#100
Chrysene
Concen: 44.30 ppm
RT: 14.111 min Scan# 2248
Delta R.T. 0.005 min
Lab File: x072334.d
Acq: 11 Aug 2020 2:57 pm

Tgt Ion:228 Resp: 638241

Ion	Ratio	Lower	Upper
228	100		
226	29.7	0.4	60.4
229	20.3	0.0	50.1

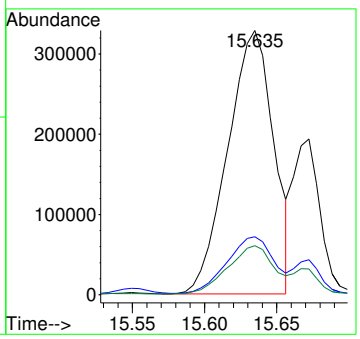


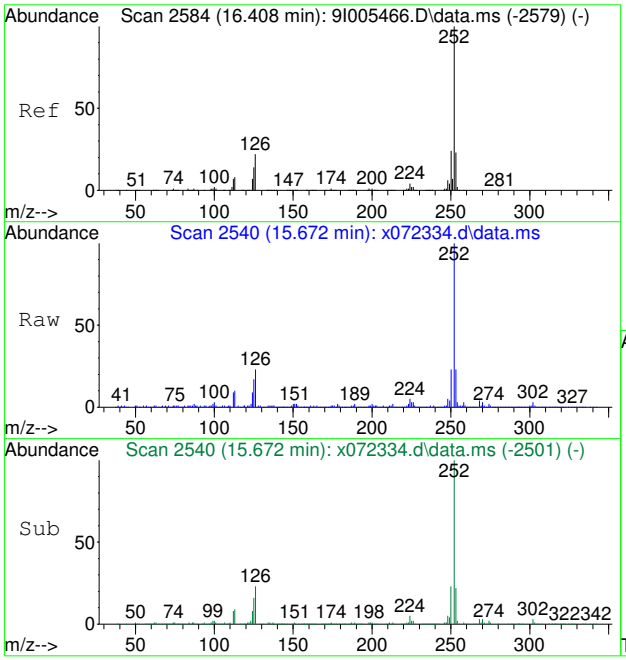


#104
Benzo[b]fluoranthene
Concen: 71.54 ppm
RT: 15.635 min Scan# 2533
Delta R.T. 0.021 min
Lab File: x072334.d
Acq: 11 Aug 2020 2:57 pm

Tgt Ion:252 Resp: 727301

Ion	Ratio	Lower	Upper
252	100		
253	21.3	0.0	52.5
125	18.1	0.0	44.0

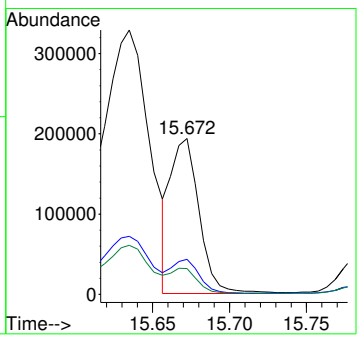


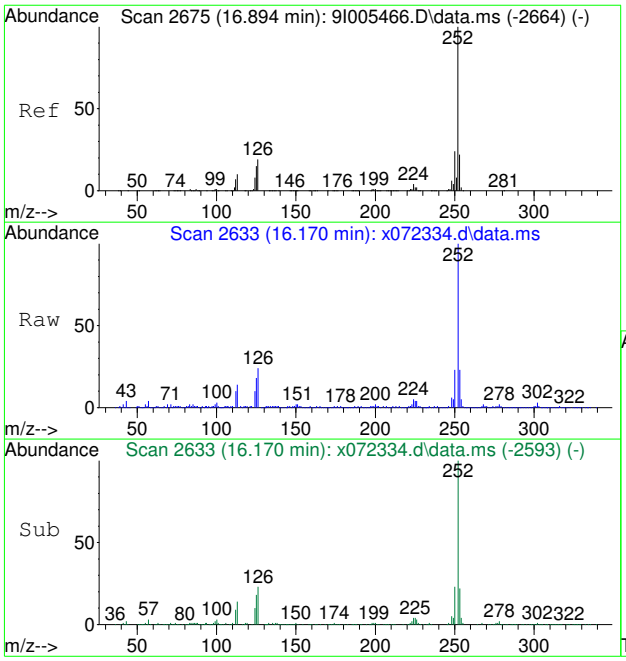


#105
Benzo[k]fluoranthene
Concen: 21.56 ppm
RT: 15.672 min Scan# 2540
Delta R.T. 0.011 min
Lab File: x072334.d
Acq: 11 Aug 2020 2:57 pm

Tgt Ion:252 Resp: 250691

Ion	Ratio	Lower	Upper
252	100		
253	22.2	0.0	52.5
125	14.7	0.0	44.4

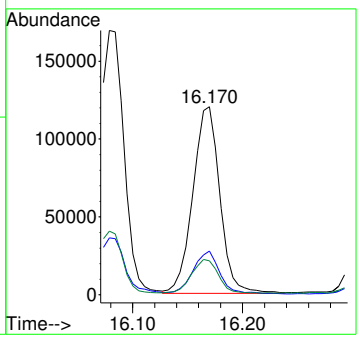


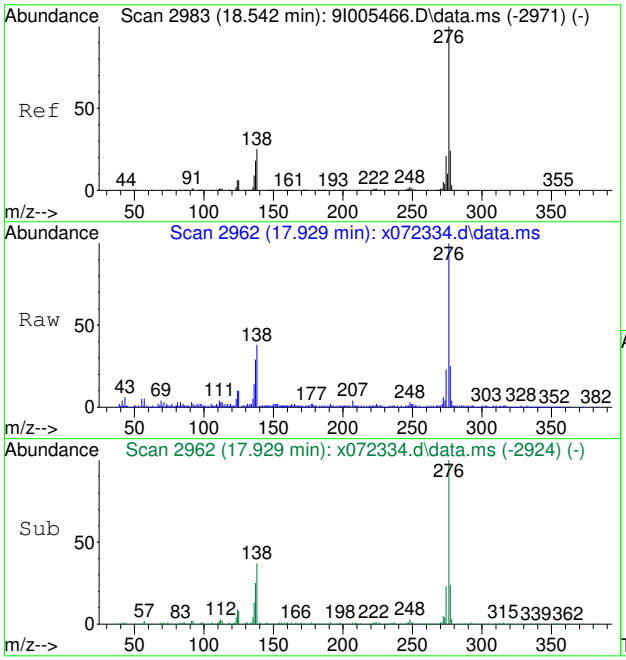


#106
Benzo[a]pyrene
Concen: 23.32 ppm
RT: 16.170 min Scan# 2633
Delta R.T. 0.016 min
Lab File: x072334.d
Acq: 11 Aug 2020 2:57 pm

Tgt Ion:252 Resp: 204837

Ion	Ratio	Lower	Upper
252	100		
253	22.7	0.0	52.3
125	17.3	0.0	44.7

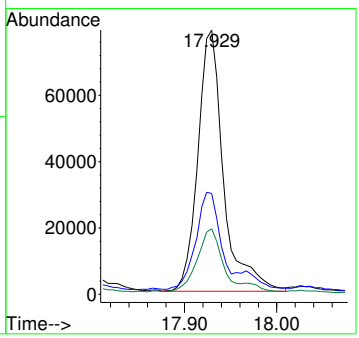


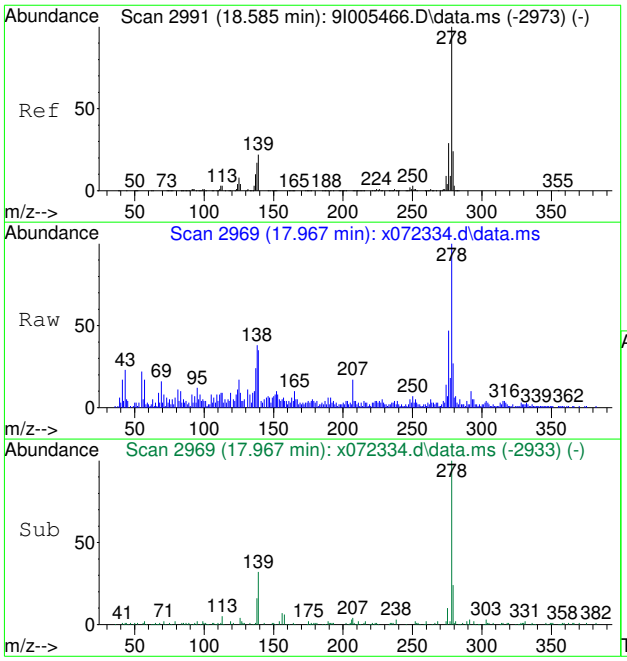


#107
Indeno[1,2,3-cd]pyrene
Concen: 27.31 ppm
RT: 17.929 min Scan# 2962
Delta R.T. 0.005 min
Lab File: x072334.d
Acq: 11 Aug 2020 2:57 pm

Tgt Ion:276 Resp: 152171

Ion	Ratio	Lower	Upper
276	100		
138	36.7	0.0	54.7
277	24.1	0.0	53.8

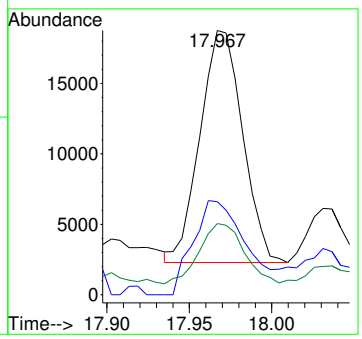


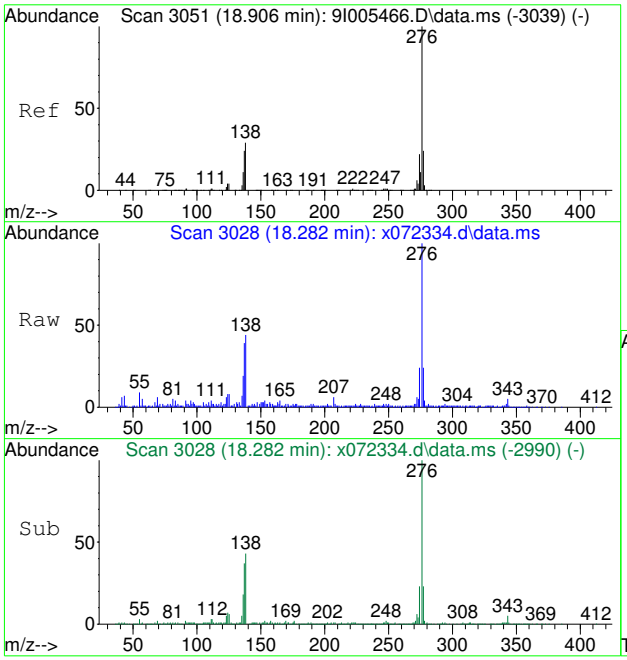


#108
Dibenz[a,h]anthracene
Concen: 5.59 ppm
RT: 17.967 min Scan# 2969
Delta R.T. -0.005 min
Lab File: x072334.d
Acq: 11 Aug 2020 2:57 pm

Tgt Ion:278 Resp: 29606

Ion	Ratio	Lower	Upper
278	100		
139	33.3	0.0	52.4
279	25.8	0.0	54.4

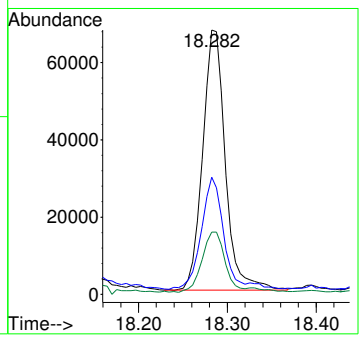




#109
Benzo[g,h,i]perylene
Concen: 15.11 ppm
RT: 18.282 min Scan# 3028
Delta R.T. 0.005 min
Lab File: x072334.d
Acq: 11 Aug 2020 2:57 pm

Tgt Ion:276 Resp: 119216

Ion	Ratio	Lower	Upper
276	100		
138	42.9	0.0	59.4
277	22.9	0.0	54.1



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072335.d
Acq On : 11 Aug 2020 3:23 pm
Operator : marthav
Sample : fa77576-3 E
Misc : op81482,sx2950,30.2,,,1,1,soil
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 12 02:18:36 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

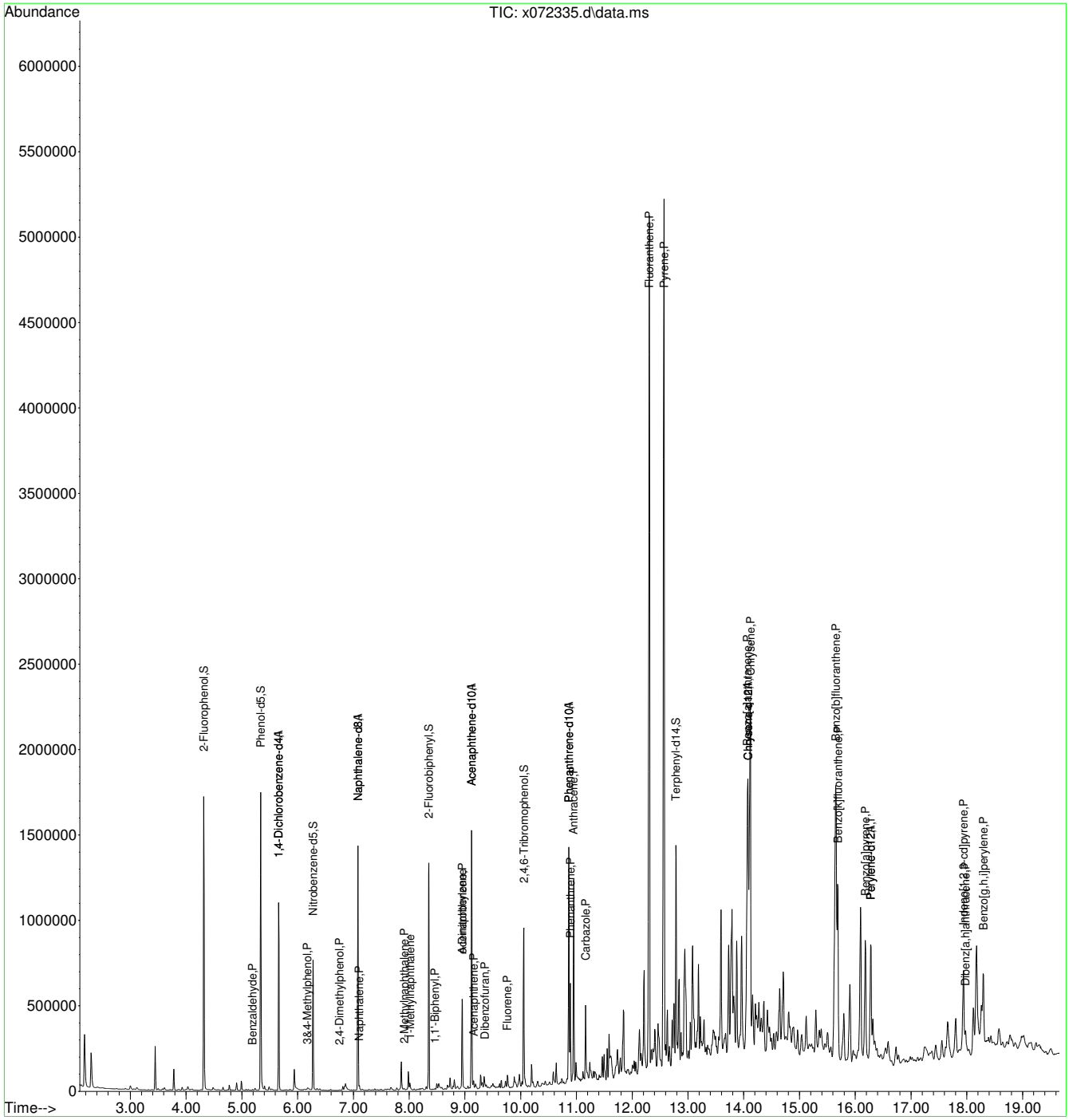
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.660	152	155156	40.00	ppm	0.00
22) Naphthalene-d8	7.083	136	583505	40.00	ppm	0.00
43) Acenaphthene-d10	9.120	164	289534	40.00	ppm	0.00
70) Phenanthrene-d10	10.864	188	502484	40.00	ppm	0.00
92) Chrysene-d12	14.079	240	418698	40.00	ppm	0.01
102) Perylene-d12	16.277	264	329587	40.00	ppm	0.02
110) 1,4-Dichlorobenzene-d4A	5.660	152	155156	40.00	ppm	0.00
120) Naphthalene-d8A	7.083	136	583505	40.00	ppm	0.00
127) Acenaphthene-d10A	9.120	164	289534	40.00	ppm	0.00
136) Phenanthrene-d10A	10.864	188	502484	40.00	ppm	0.00
146) Chrysene-d12A	14.079	240	418698	40.00	ppm	0.01
153) Perylene-d12A	16.277	264	329587	40.00	ppm	0.02
System Monitoring Compounds						
7) 2-Fluorophenol	4.317	112	420348	75.56	ppm	0.01
Spiked Amount 100.000	Range 40 - 102		Recovery = 75.56%			
9) Phenol-d5	5.339	99	528017	79.78	ppm	0.00
Spiked Amount 100.000	Range 41 - 100		Recovery = 79.78%			
23) Nitrobenzene-d5	6.275	82	222540	36.93	ppm	0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 73.86%			
47) 2-Fluorobiphenyl	8.356	172	396271	37.81	ppm	0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 75.62%			
75) 2,4,6-Tribromophenol	10.056	330	81015	75.61	ppm	0.00
Spiked Amount 100.000	Range 42 - 108		Recovery = 75.61%			
95) Terphenyl-d14	12.784	244	420347	37.78	ppm	0.00
Spiked Amount 50.000	Range 45 - 119		Recovery = 75.56%			
Target Compounds						Qvalue
5) Benzaldehyde	5.189	106	1304	0.28	ppm	89
21) 3&4-Methylphenol	6.173	108	1916	0.33	ppm	78
27) 2,4-Dimethylphenol	6.751	107	1332	0.25	ppm	85
34) Naphthalene	7.104	128	4563	0.29	ppm	88
40) 2-Methylnaphthalene	7.912	142	2457	0.23	ppm	95
41) 1-Methylnaphthalene	8.019	142	1822	0.18	ppm	92
48) 1,1'-Biphenyl	8.463	154	988	0.08	ppm	91
52) Acenaphthylene	8.949	152	244649	16.92	ppm	100
56) o-Dinitrobenzene	8.949	50	7190	3.11	ppm	# 1
57) Acenaphthene	9.158	153	10225	1.06	ppm	97
60) Dibenzofuran	9.361	168	5983	0.47	ppm	96
65) Fluorene	9.762	166	25247	2.52	ppm	97
84) Phenanthrene	10.891	178	206679	13.61	ppm	98
85) Anthracene	10.950	178	465360	29.41	ppm	98
87) Carbazole	11.164	167	161350	11.55	ppm	98
91) Fluoranthene	12.308	202	2458591	174.51	ppm	98
94) Pyrene	12.570	202	2577419	148.26	ppm	98
99) Benzo[a]anthracene	14.068	228	659960	50.15	ppm	97
100) Chrysene	14.121	228	1125745	80.33	ppm	98
104) Benzo[b]fluoranthene	15.651	252	1324925	118.39	ppm	96
105) Benzo[k]fluoranthene	15.688	252	414248	35.40	ppm	99
106) Benzo[a]pyrene	16.181	252	393415	42.58	ppm	96
107) Indeno[1,2,3-cd]pyrene	17.940	276	294872	46.63	ppm	87
108) Dibenz[a,h]anthracene	17.978	278	56962	10.26	ppm	87
109) Benzo[g,h,i]perylene	18.299	276	235205	28.07	ppm	88

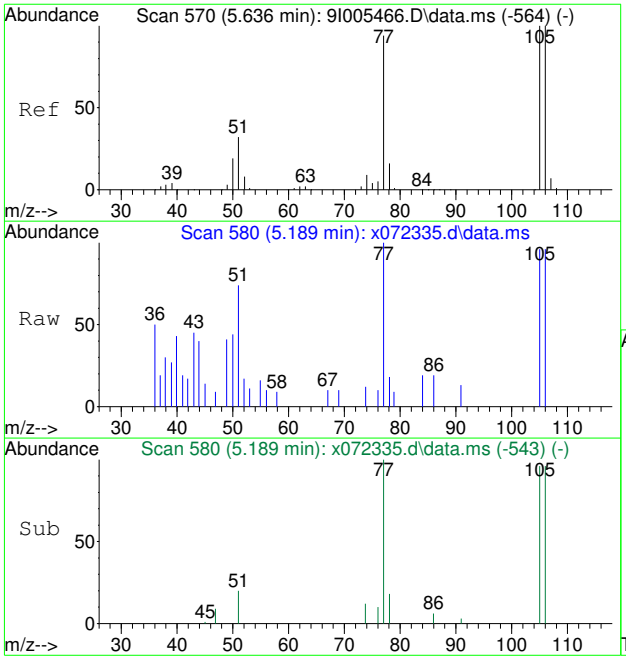
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072335.d
Acq On : 11 Aug 2020 3:23 pm
Operator : marthav
Sample : fa77576-3 E
Misc : op81482,sx2950,30.2,,,1,1,soil
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 12 02:18:36 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

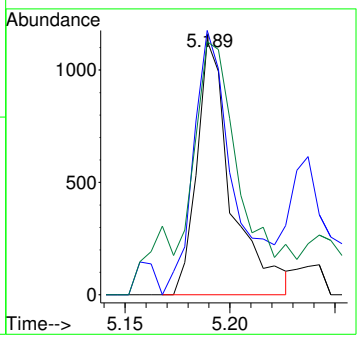


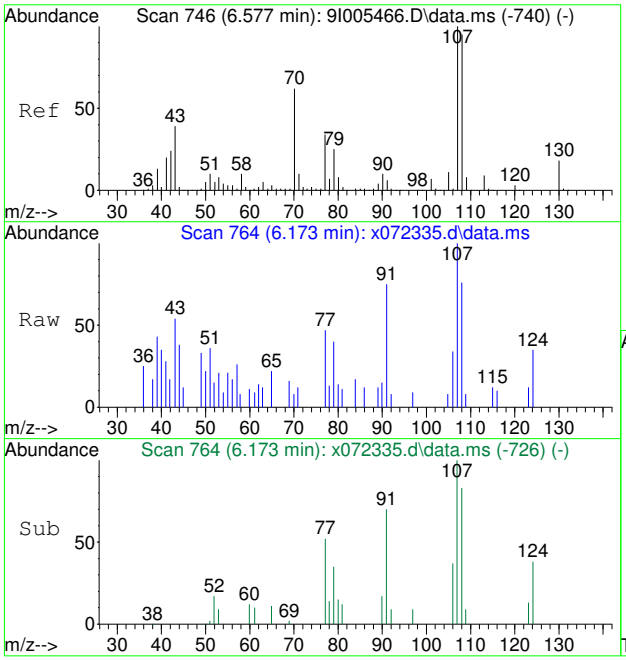


#5
Benzaldehyde
Concen: 0.28 ppm
RT: 5.189 min Scan# 580
Delta R.T. 0.000 min
Lab File: x072335.d
Acq: 11 Aug 2020 3:23 pm

Tgt Ion:106 Resp: 1304

Ion	Ratio	Lower	Upper
106	100		
77	94.8	63.9	123.9
105	79.7	70.0	130.0

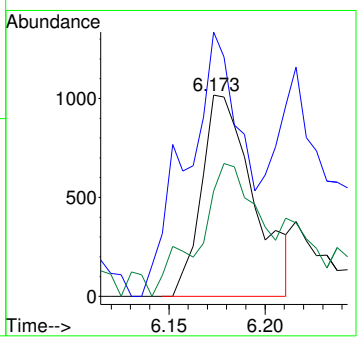


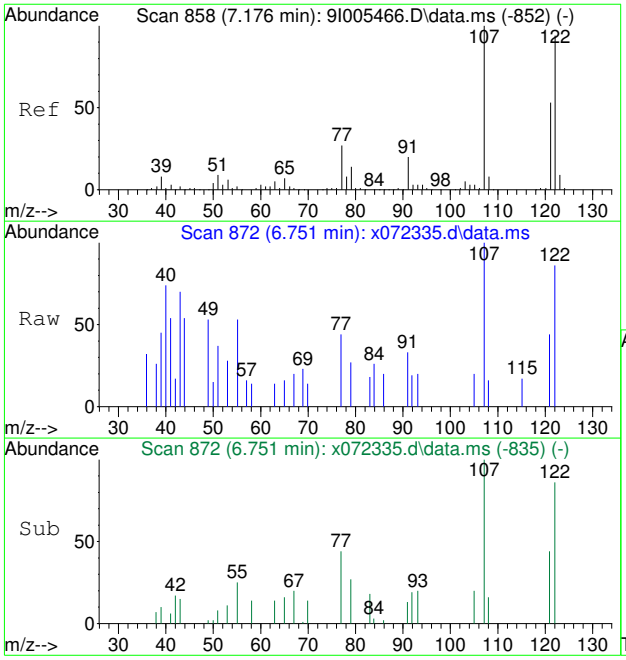


#21
3&4-Methylphenol
Concen: 0.33 ppm
RT: 6.173 min Scan# 764
Delta R.T. 0.005 min
Lab File: x072335.d
Acq: 11 Aug 2020 3:23 pm

Tgt Ion:108 Resp: 1916

Ion	Ratio	Lower	Upper
108	100		
107	80.8	75.4	135.4
79	32.8	0.0	56.3

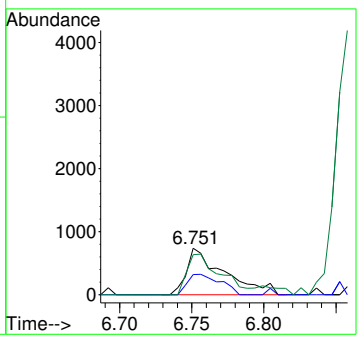


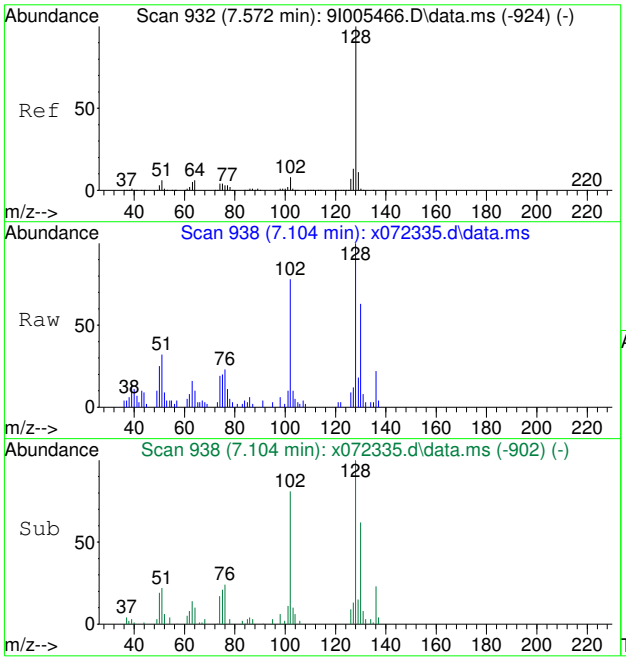


#27
2,4-Dimethylphenol
Concen: 0.25 ppm
RT: 6.751 min Scan# 872
Delta R.T. 0.000 min
Lab File: x072335.d
Acq: 11 Aug 2020 3:23 pm

Tgt Ion:107 Resp: 1332

Ion	Ratio	Lower	Upper
107	100		
121	43.6	23.4	83.4
122	79.2	64.3	124.3

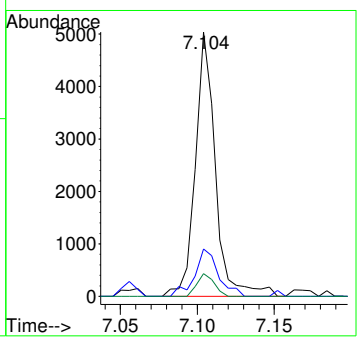


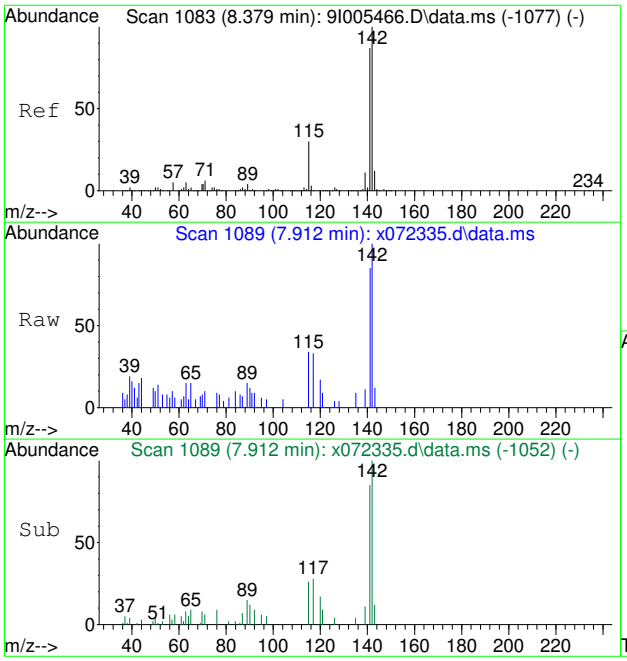


#34
Naphthalene
Concen: 0.29 ppm
RT: 7.104 min Scan# 938
Delta R.T. -0.005 min
Lab File: x072335.d
Acq: 11 Aug 2020 3:23 pm

Tgt Ion:128 Resp: 4563

Ion	Ratio	Lower	Upper
128	100		
129	18.0	0.0	41.4
126	8.6	0.0	37.4

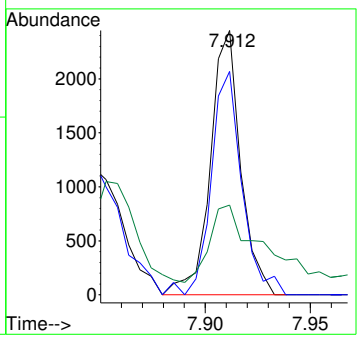


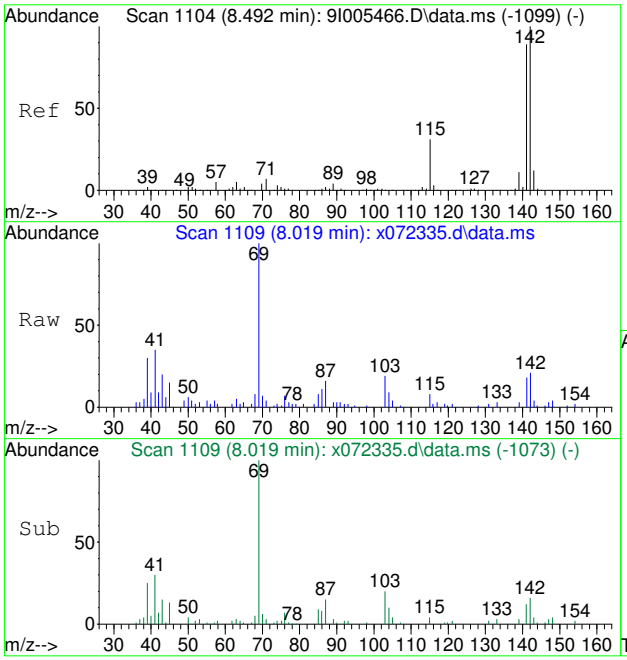


#40
2-Methylnaphthalene
Concen: 0.23 ppm
RT: 7.912 min Scan# 1089
Delta R.T. 0.000 min
Lab File: x072335.d
Acq: 11 Aug 2020 3:23 pm

Tgt Ion:142 Resp: 2457

Ion	Ratio	Lower	Upper
142	100		
141	84.5	56.8	116.8
115	23.5	0.0	60.0

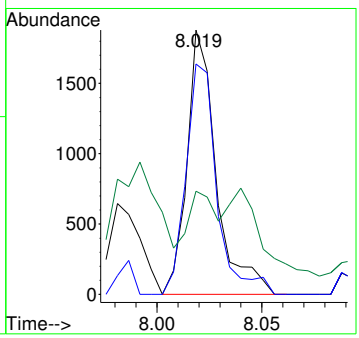


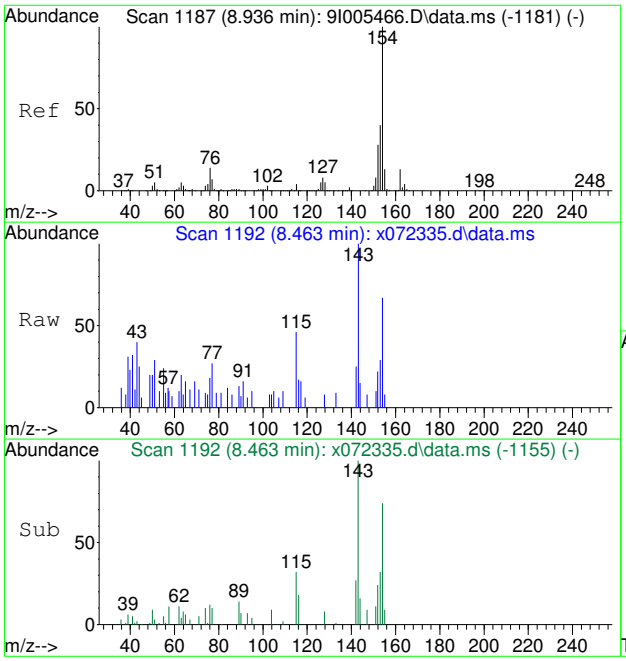


#41
1-Methylnaphthalene
Concen: 0.18 ppm
RT: 8.019 min Scan# 1109
Delta R.T. -0.005 min
Lab File: x072335.d
Acq: 11 Aug 2020 3:23 pm

Tgt Ion:142 Resp: 1822

Ion	Ratio	Lower	Upper
142	100		
141	87.1	59.0	119.0
115	17.7	1.1	61.1

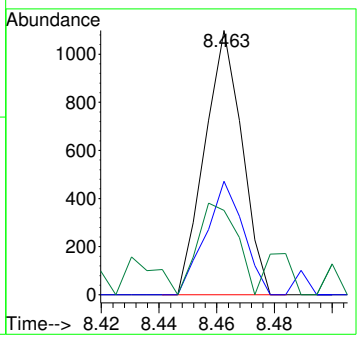


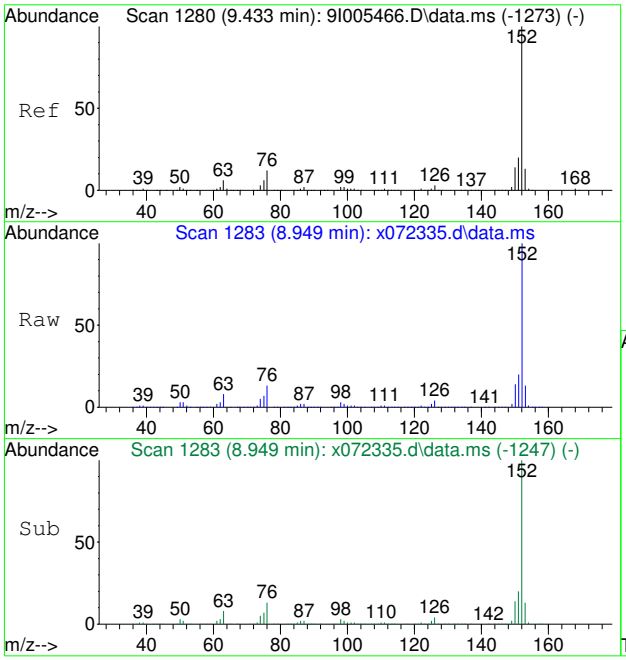


#48
1,1'-Biphenyl
Concen: 0.08 ppm
RT: 8.463 min Scan# 1192
Delta R.T. 0.000 min
Lab File: x072335.d
Acq: 11 Aug 2020 3:23 pm

Tgt Ion:154 Resp: 988

Ion	Ratio	Lower	Upper
154	100		
153	42.9	10.3	70.3
152	19.3	0.0	58.2

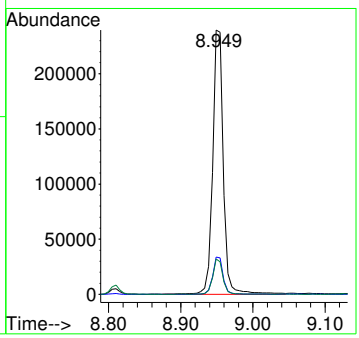


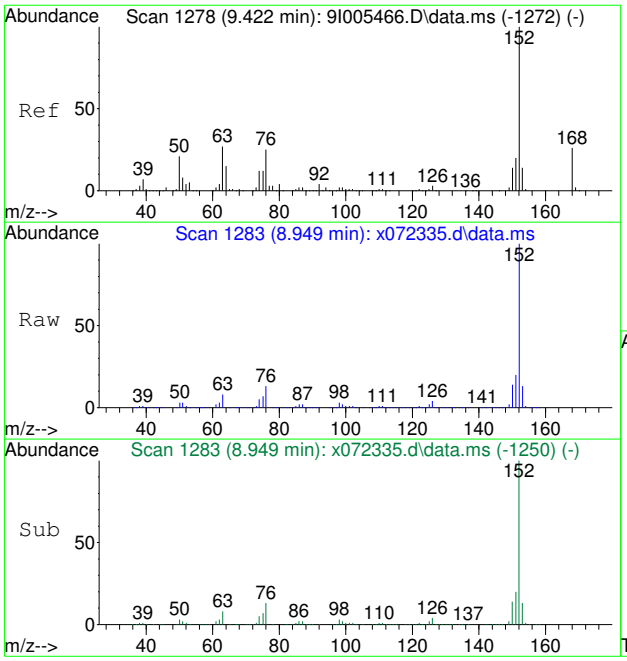


#52
Acenaphthylene
Concen: 16.92 ppm
RT: 8.949 min Scan# 1283
Delta R.T. -0.005 min
Lab File: x072335.d
Acq: 11 Aug 2020 3:23 pm

Tgt Ion:152 Resp: 244649

Ion	Ratio	Lower	Upper
152	100		
150	14.1	0.0	44.3
153	13.4	0.0	43.3

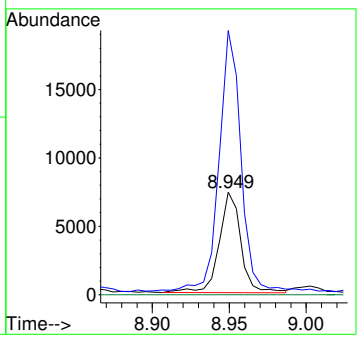


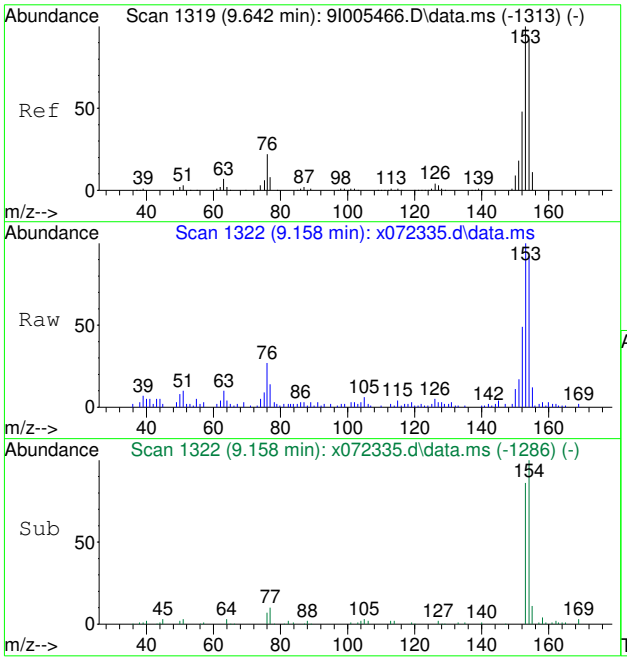


#56
o-Dinitrobenzene
Concen: 3.11 ppm
RT: 8.949 min Scan# 1283
Delta R.T. -0.021 min
Lab File: x072335.d
Acq: 11 Aug 2020 3:23 pm

Tgt Ion: 50 Resp: 7190

Ion	Ratio	Lower	Upper
50	100		
63	261.1	110.3	150.3#
168	0.0	104.0	144.0#

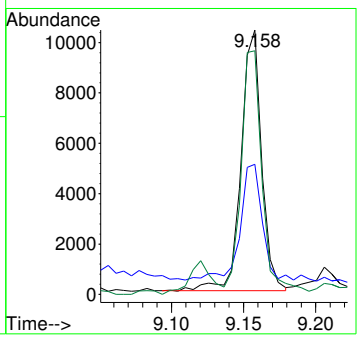


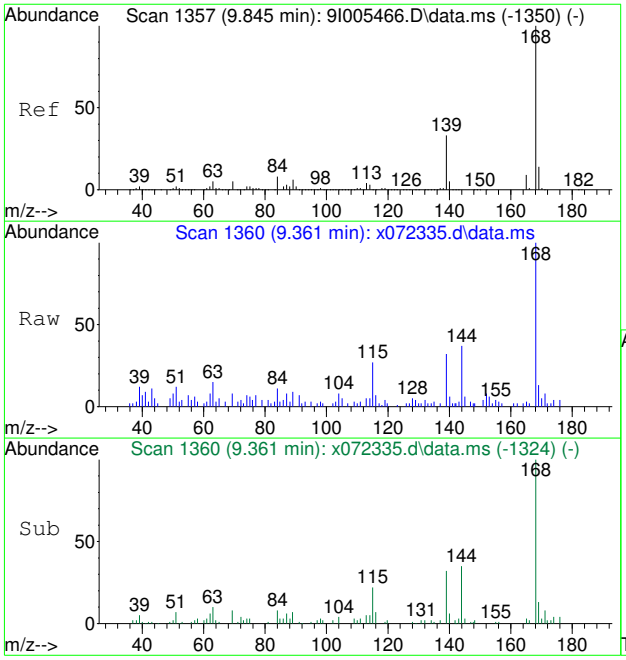


#57
Acenaphthene
Concen: 1.06 ppm
RT: 9.158 min Scan# 1322
Delta R.T. -0.005 min
Lab File: x072335.d
Acq: 11 Aug 2020 3:23 pm

Tgt Ion:153 Resp: 10225

Ion	Ratio	Lower	Upper
153	100		
152	42.8	18.4	78.4
154	91.8	62.4	122.4

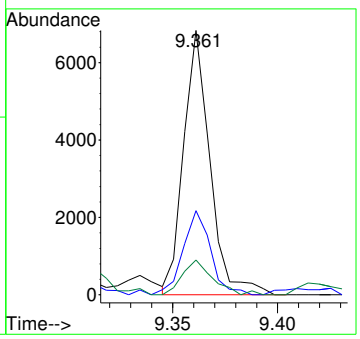


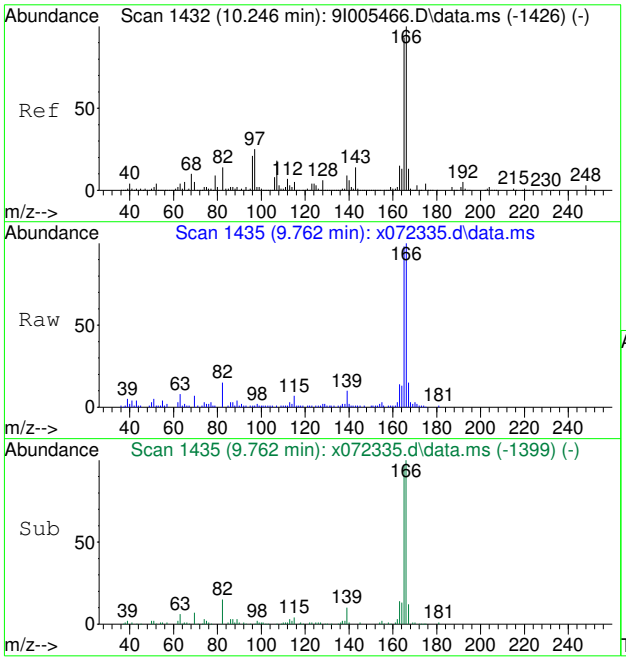


#60
Dibenzofuran
Concen: 0.47 ppm
RT: 9.361 min Scan# 1360
Delta R.T. -0.005 min
Lab File: x072335.d
Acq: 11 Aug 2020 3:23 pm

Tgt Ion:168 Resp: 5983

Ion	Ratio	Lower	Upper
168	100		
139	30.4	3.0	63.0
169	12.7	0.0	43.5

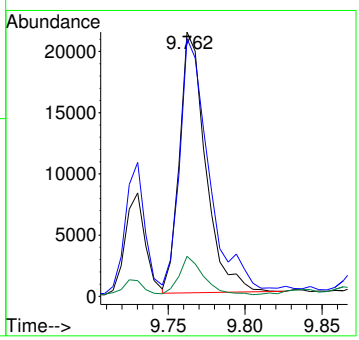


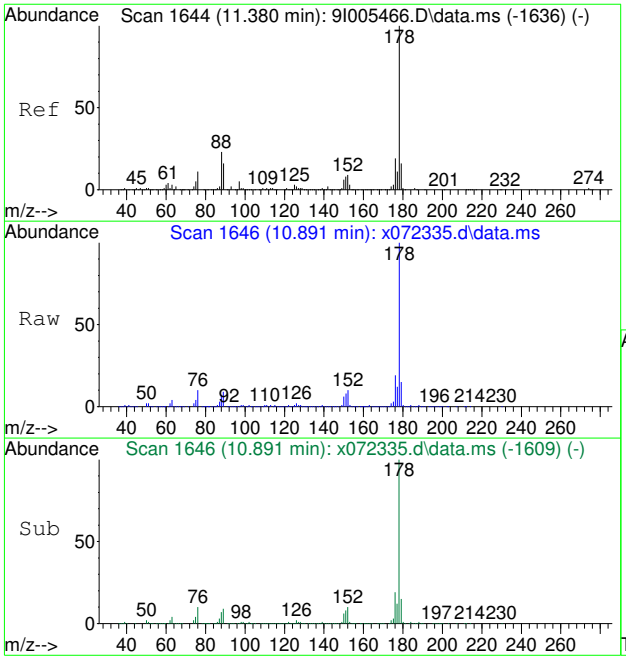


#65
Fluorene
Concen: 2.52 ppm
RT: 9.762 min Scan# 1435
Delta R.T. -0.005 min
Lab File: x072335.d
Acq: 11 Aug 2020 3:23 pm

Tgt Ion:166 Resp: 25247

Ion	Ratio	Lower	Upper
166	100		
165	95.8	62.7	122.7
167	14.0	0.0	43.5

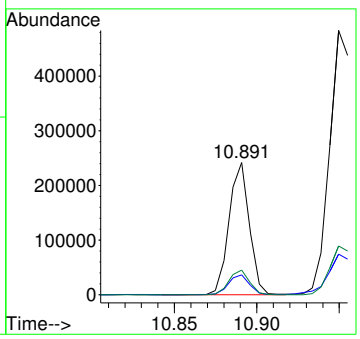


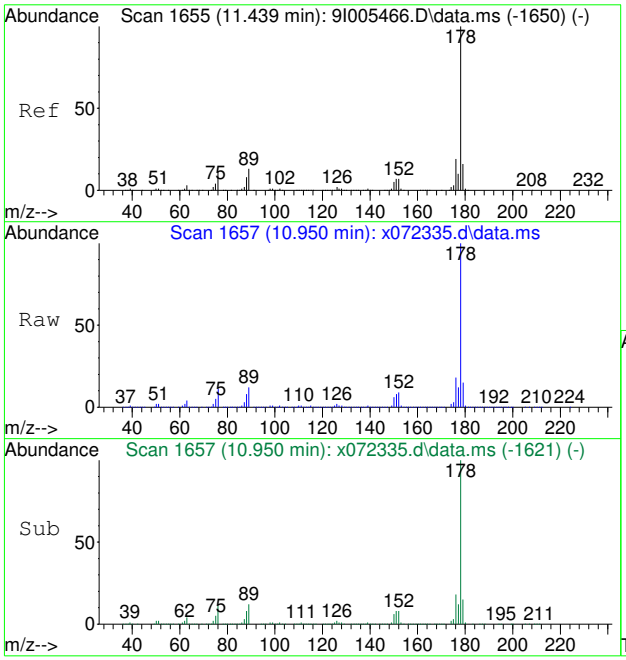


#84
Phenanthrene
Concen: 13.61 ppm
RT: 10.891 min Scan# 1646
Delta R.T. 0.000 min
Lab File: x072335.d
Acq: 11 Aug 2020 3:23 pm

Tgt Ion:178 Resp: 206679

Ion	Ratio	Lower	Upper
178	100		
179	15.0	0.0	45.8
176	18.7	0.0	49.3

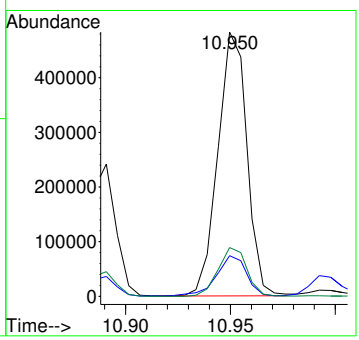


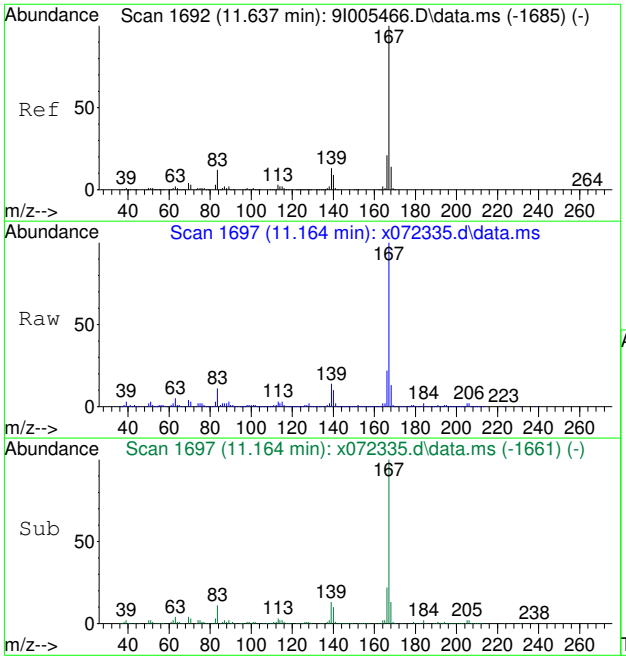


#85
Anthracene
Concen: 29.41 ppm
RT: 10.950 min Scan# 1657
Delta R.T. -0.005 min
Lab File: x072335.d
Acq: 11 Aug 2020 3:23 pm

Tgt Ion:178 Resp: 465360

Ion	Ratio	Lower	Upper
178	100		
179	15.3	0.0	46.0
176	18.4	0.0	49.3

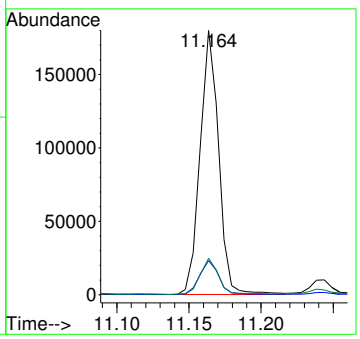


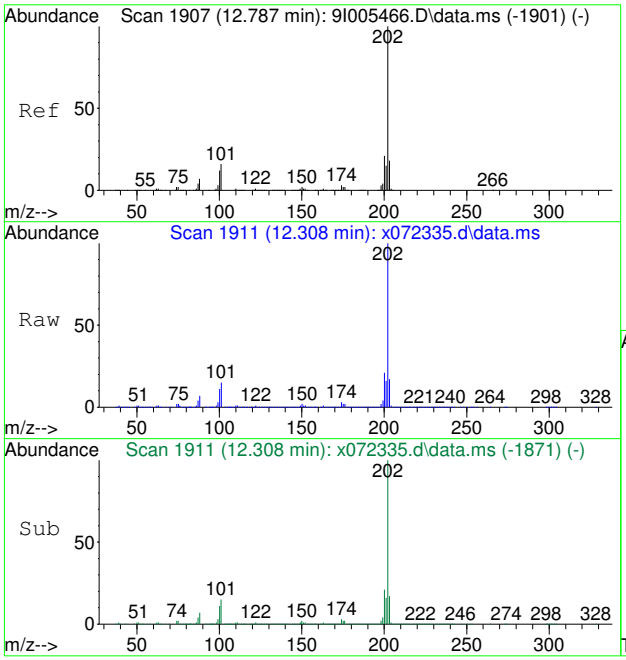


#87
Carbazole
Concen: 11.55 ppm
RT: 11.164 min Scan# 1697
Delta R.T. -0.005 min
Lab File: x072335.d
Acq: 11 Aug 2020 3:23 pm

Tgt Ion:167 Resp: 161350

Ion	Ratio	Lower	Upper
167	100		
168	12.8	0.0	43.9
139	13.5	0.0	42.7

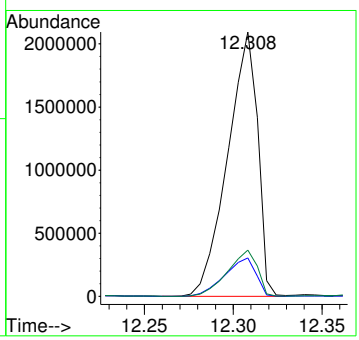


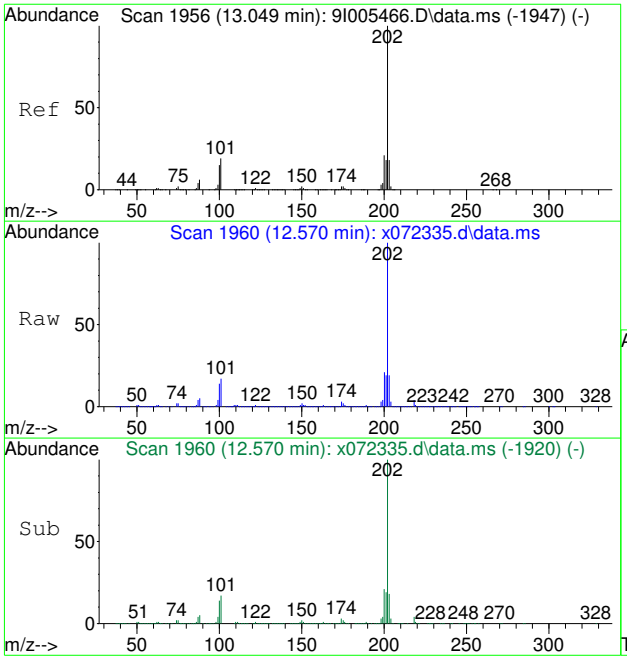


#91
Fluoranthene
Concen: 174.51 ppm
RT: 12.308 min Scan# 1911
Delta R.T. 0.016 min
Lab File: x072335.d
Acq: 11 Aug 2020 3:23 pm

Tgt Ion:202 Resp: 2458591

Ion	Ratio	Lower	Upper
202	100		
101	14.5	0.0	45.8
203	17.5	0.0	48.1

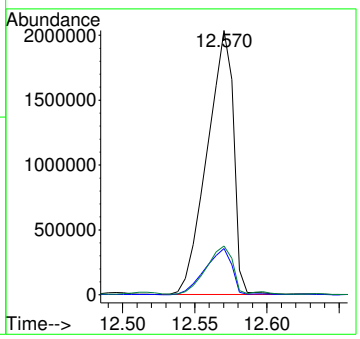


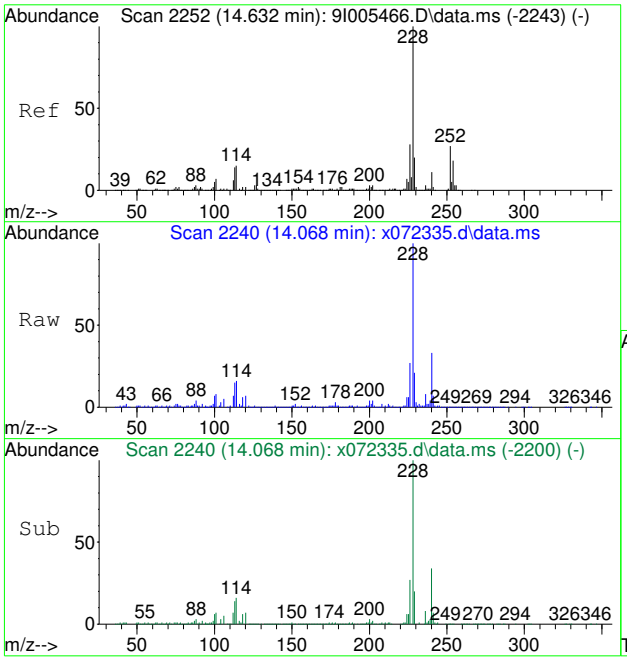


#94
Pyrene
Concen: 148.26 ppm
RT: 12.570 min Scan# 1960
Delta R.T. 0.016 min
Lab File: x072335.d
Acq: 11 Aug 2020 3:23 pm

Tgt Ion:202 Resp: 2577419

Ion	Ratio	Lower	Upper
202	100		
101	17.4	0.0	48.7
203	18.2	0.0	48.4

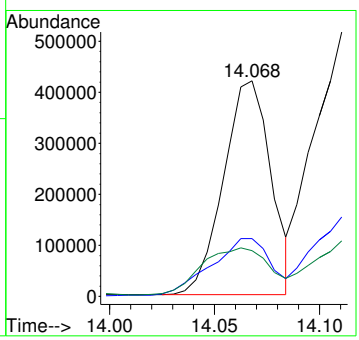


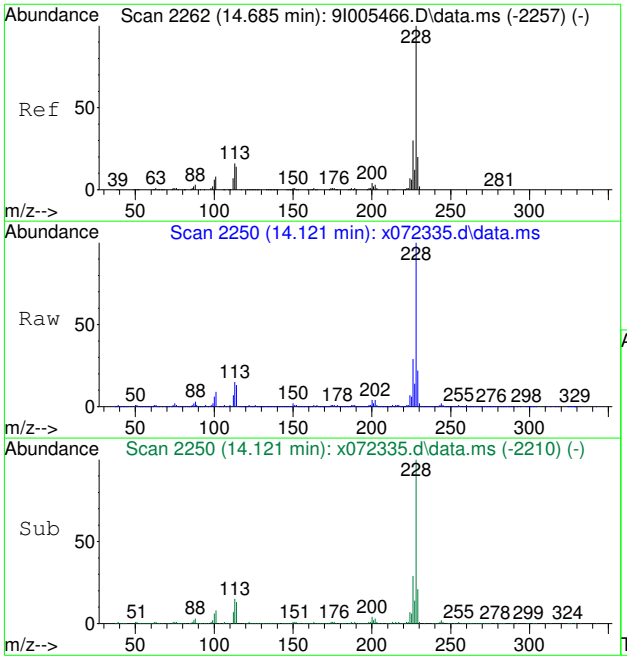


#99
Benzo[a]anthracene
Concen: 50.15 ppm
RT: 14.068 min Scan# 2240
Delta R.T. 0.016 min
Lab File: x072335.d
Acq: 11 Aug 2020 3:23 pm

Tgt Ion:228 Resp: 659960

Ion	Ratio	Lower	Upper
228	100		
226	25.8	0.0	57.5
229	19.0	0.0	49.9

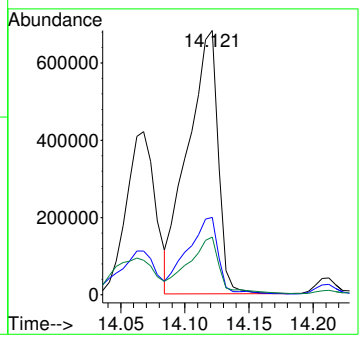


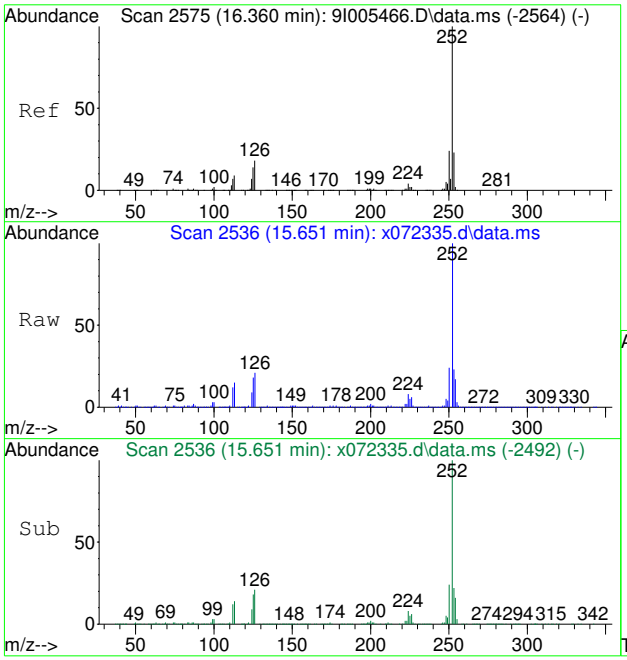


#100
Chrysene
Concen: 80.33 ppm
RT: 14.121 min Scan# 2250
Delta R.T. 0.016 min
Lab File: x072335.d
Acq: 11 Aug 2020 3:23 pm

Tgt Ion:228 Resp: 1125745

Ion	Ratio	Lower	Upper
228	100		
226	29.1	0.4	60.4
229	20.8	0.0	50.1

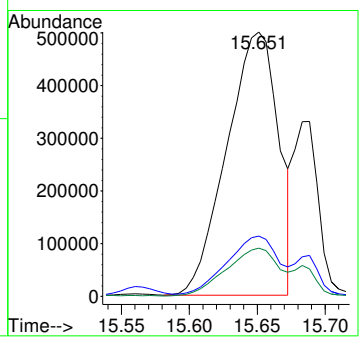


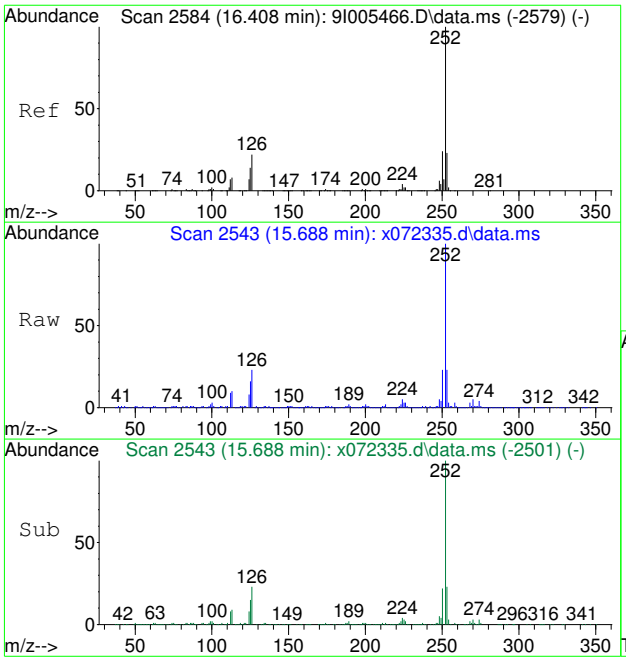


#104
Benzo[b]fluoranthene
Concen: 118.39 ppm
RT: 15.651 min Scan# 2536
Delta R.T. 0.037 min
Lab File: x072335.d
Acq: 11 Aug 2020 3:23 pm

Tgt Ion:252 Resp: 1324925

Ion	Ratio	Lower	Upper
252	100		
253	22.0	0.0	52.5
125	18.0	0.0	44.0

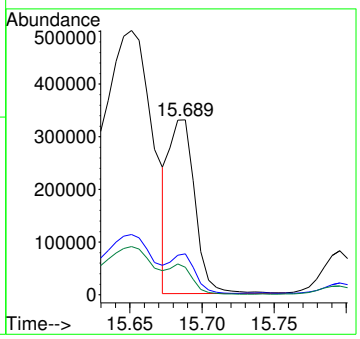


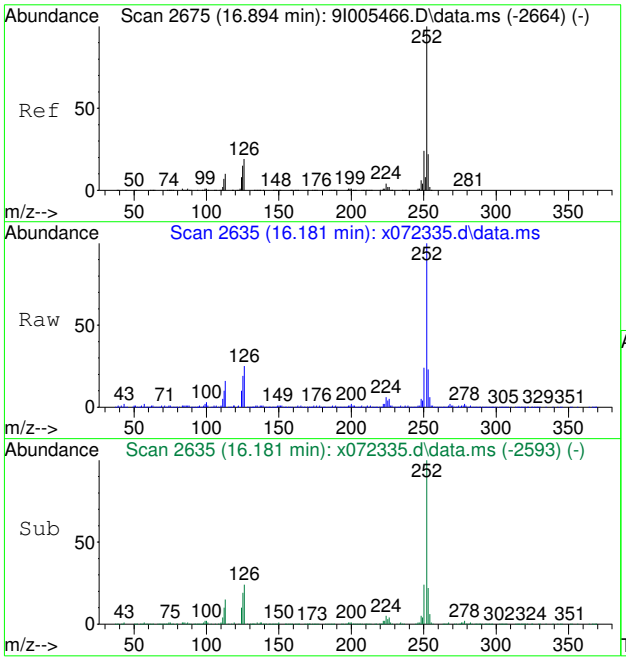


#105
Benzo[k]fluoranthene
Concen: 35.40 ppm
RT: 15.688 min Scan# 2543
Delta R.T. 0.027 min
Lab File: x072335.d
Acq: 11 Aug 2020 3:23 pm

Tgt Ion:252 Resp: 414248

Ion	Ratio	Lower	Upper
252	100		
253	23.2	0.0	52.5
125	13.8	0.0	44.4

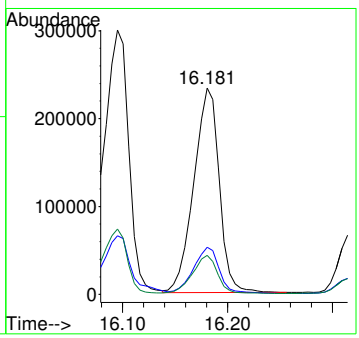


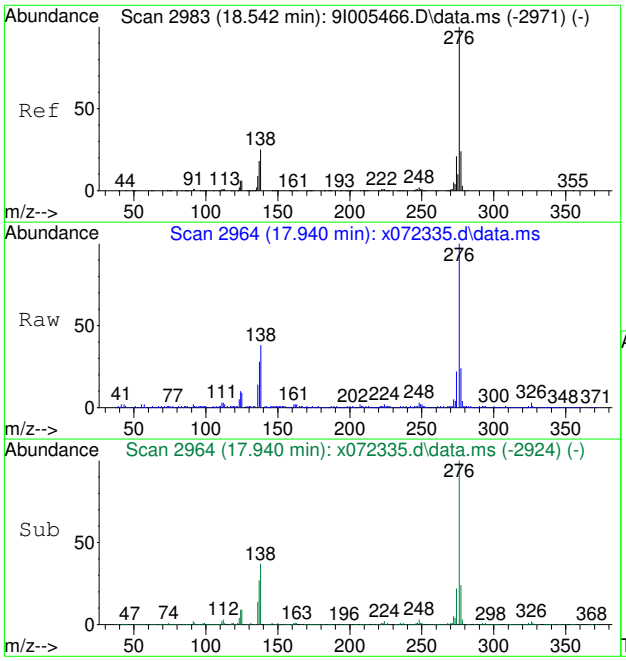


#106
Benzo[a]pyrene
Concen: 42.58 ppm
RT: 16.181 min Scan# 2635
Delta R.T. 0.027 min
Lab File: x072335.d
Acq: 11 Aug 2020 3:23 pm

Tgt Ion:252 Resp: 393415

Ion	Ratio	Lower	Upper
252	100		
253	22.1	0.0	52.3
125	18.5	0.0	44.7

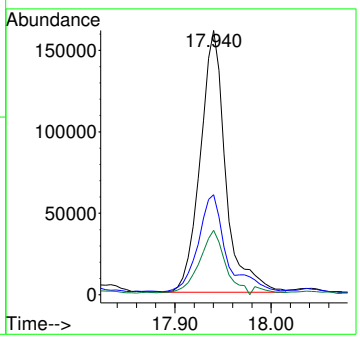


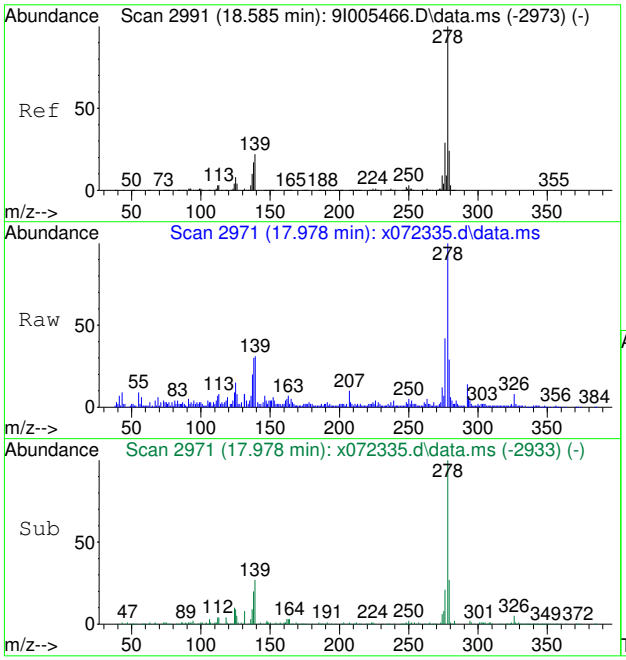


#107
Indeno[1,2,3-cd]pyrene
Concen: 46.63 ppm
RT: 17.940 min Scan# 2964
Delta R.T. 0.016 min
Lab File: x072335.d
Acq: 11 Aug 2020 3:23 pm

Tgt Ion:276 Resp: 294872

Ion	Ratio	Lower	Upper
276	100		
138	36.9	0.0	54.7
277	23.7	0.0	53.8

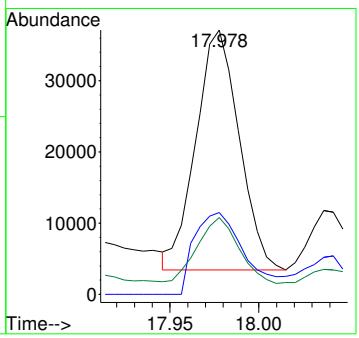


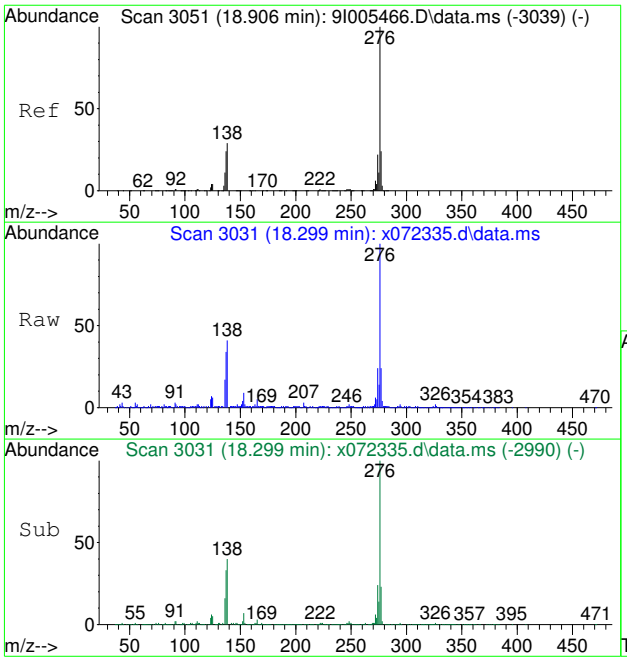


#108
Dibenz[a,h]anthracene
Concen: 10.26 ppm
RT: 17.978 min Scan# 2971
Delta R.T. 0.005 min
Lab File: x072335.d
Acq: 11 Aug 2020 3:23 pm

Tgt Ion:278 Resp: 56962

Ion	Ratio	Lower	Upper
278	100		
139	31.5	0.0	52.4
279	27.9	0.0	54.4

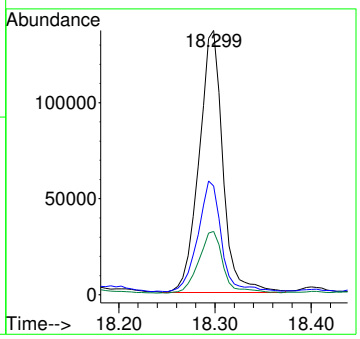




#109
Benzo[g,h,i]perylene
Concen: 28.07 ppm
RT: 18.299 min Scan# 3031
Delta R.T. 0.021 min
Lab File: x072335.d
Acq: 11 Aug 2020 3:23 pm

Tgt Ion:276 Resp: 235205

Ion	Ratio	Lower	Upper
276	100		
138	40.2	0.0	59.4
277	23.4	0.0	54.1



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072360.D
Acq On : 12 Aug 2020 11:42 am
Operator : marthav
Sample : fa77576-3 E,2 Inst : MSBNA05
Misc : op81482,sx2950,30.2,,,1,2,soil
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 12 14:10:08 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.649	152	176303	40.00	ppm	0.00
22) Naphthalene-d8	7.077	136	649197	40.00	ppm	0.00
43) Acenaphthene-d10	9.115	164	305905	40.00	ppm	0.00
70) Phenanthrene-d10	10.858	188	500197	40.00	ppm	0.00
92) Chrysene-d12	14.073	240	394851	40.00	ppm	0.00
102) Perylene-d12	16.271	264	314921	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	5.649	152	176303	40.00	ppm	0.00
120) Naphthalene-d8A	7.077	136	649197	40.00	ppm	0.00
127) Acenaphthene-d10A	9.115	164	305905	40.00	ppm	0.00
136) Phenanthrene-d10A	10.858	188	500197	40.00	ppm	0.00
146) Chrysene-d12A	14.073	240	394851	40.00	ppm	0.00
153) Perylene-d12A	16.271	264	314921	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	4.306	112	217555	34.42	ppm	0.00
Spiked Amount 100.000	Range 40 - 102		Recovery = 34.42%#			
9) Phenol-d5	5.333	99	264892	35.22	ppm	0.00
Spiked Amount 100.000	Range 41 - 100		Recovery = 35.22%#			
23) Nitrobenzene-d5	6.269	82	112303	16.75	ppm	0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 33.50%#			
47) 2-Fluorobiphenyl	8.345	172	194959	17.61	ppm	0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 35.22%#			
75) 2,4,6-Tribromophenol	10.051	330	35192	35.79	ppm	0.00
Spiked Amount 100.000	Range 42 - 108		Recovery = 35.79%#			
95) Terphenyl-d14	12.779	244	175023	16.68	ppm	0.00
Spiked Amount 50.000	Range 45 - 119		Recovery = 33.36%#			
Target Compounds						Qvalue
5) Benzaldehyde	5.178	106	539	0.10	ppm	88
24) Nitrobenzene	6.285	77	1300	0.20	ppm	70
30) Benzoic Acid	6.847	105	3253	0.82	ppm	90
34) Naphthalene	7.098	128	2230	0.13	ppm	94
40) 2-Methylnaphthalene	7.901	142	1046	0.09	ppm	91
41) 1-Methylnaphthalene	8.013	142	750	0.07	ppm	88
52) Acenaphthylene	8.944	152	80807	5.29	ppm	99
57) Acenaphthene	9.147	153	3597	0.35	ppm	94
60) Dibenzofuran	9.356	168	2618	0.19	ppm	89
65) Fluorene	9.757	166	8216	0.78	ppm	99
84) Phenanthrene	10.885	178	91093	6.03	ppm	100
85) Anthracene	10.944	178	147449	9.36	ppm	98
87) Carbazole	11.158	167	62024	4.46	ppm	98
91) Fluoranthene	12.297	202	1063317	75.82	ppm	98
94) Pyrene	12.559	202	1140960	69.59	ppm	96
99) Benzo[a]anthracene	14.057	228	270887	21.83	ppm	99
100) Chrysene	14.105	228	493049	37.31	ppm	99
104) Benzo[b]fluoranthene	15.630	252	546365	57.51	ppm	96
105) Benzo[k]fluoranthene	15.667	252	164189	14.69	ppm	99
106) Benzo[a]pyrene	16.164	252	165472	19.76	ppm	95
107) Indeno[1,2,3-cd]pyrene	17.929	276	128382	24.43	ppm	86

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072360.D
Acq On : 12 Aug 2020 11:42 am
Operator : marthav
Sample : fa77576-3 E,2 Inst : MSBNA05
Misc : op81482,sx2950,30.2,,,1,2,soil
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 12 14:10:08 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration

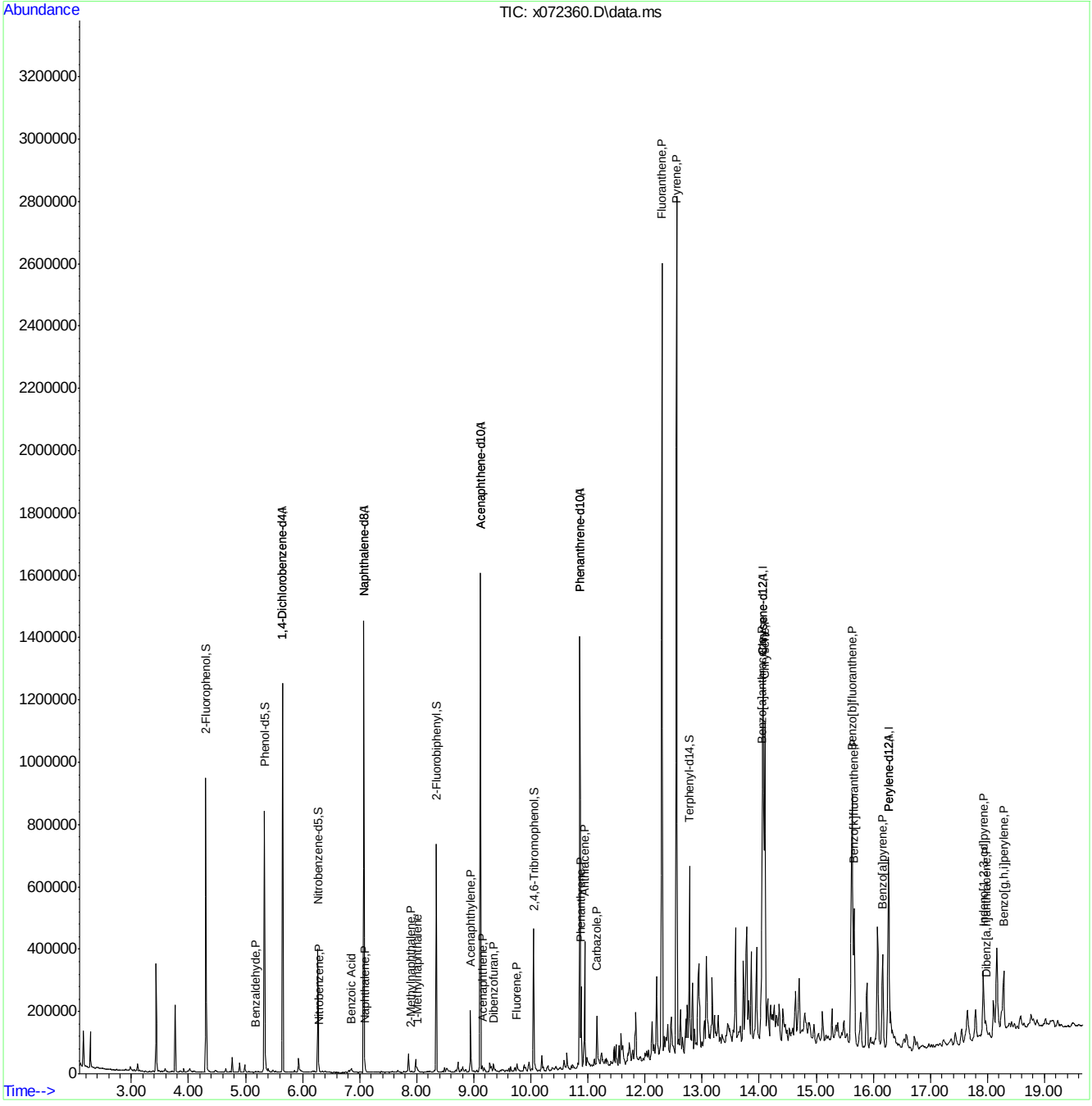
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
108) Dibenz[a,h]anthracene	17.972	278	24608	4.86	ppm	89
109) Benzo[g,h,i]perylene	18.288	276	104550	13.86	ppm	88

(#) = qualifier out of range (m) = manual integration (+) = signals summed

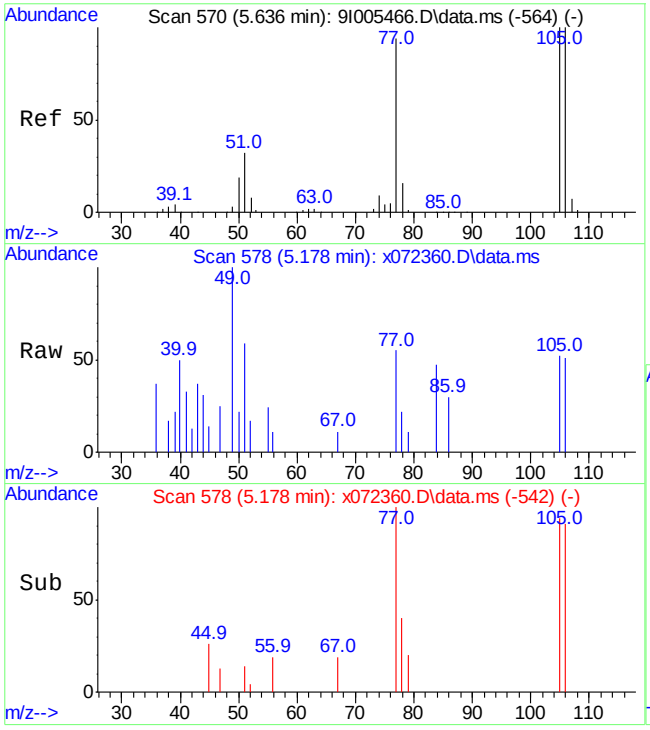
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072360.D
Acq On : 12 Aug 2020 11:42 am
Operator : marthav
Sample : fa77576-3 E,2 Inst : MSBNA05
Misc : op81482,sx2950,30.2,,,1,2,soil
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 12 14:10:08 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration



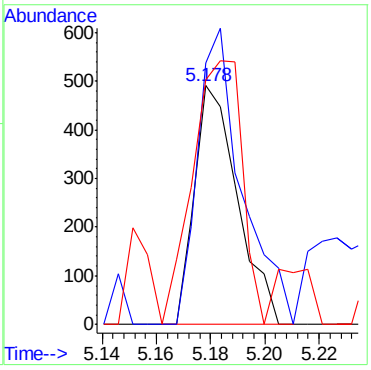
8270DApp9SX-062320.m Wed Aug 12 15:46:22 2020 Page: 3

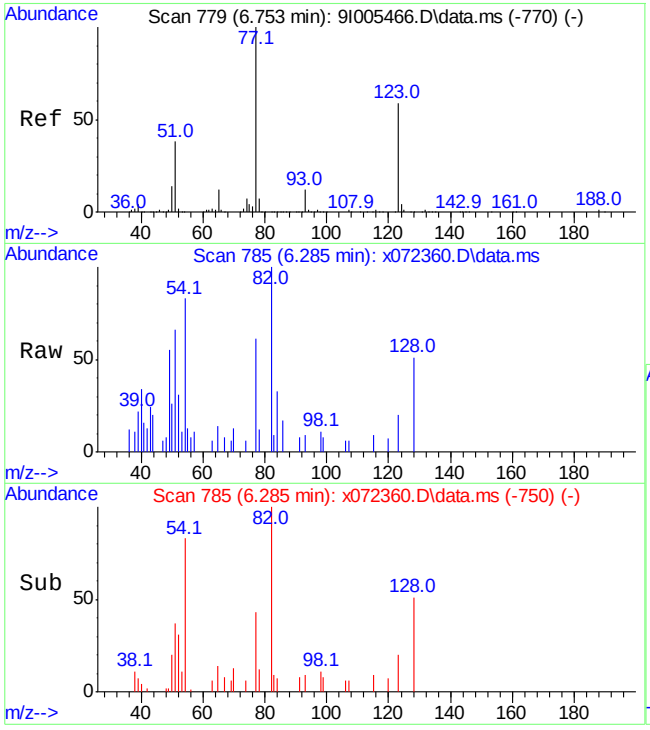


#5
Benzaldehyde
Concen: 0.10 ppm
RT: 5.178 min Scan# 578
Delta R.T. -0.005 min
Lab File: x072360.D
Acq: 12 Aug 2020 11:42 am

Tgt Ion:106 Resp: 539

Ion	Ratio	Lower	Upper
106	100		
77	109.4	63.9	123.9
105	91.8	70.0	130.0

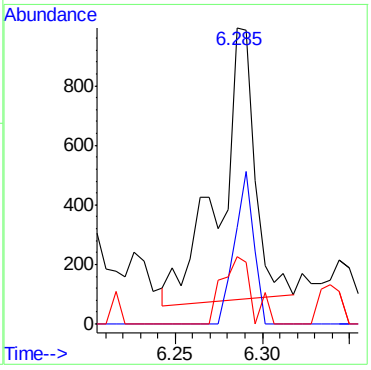


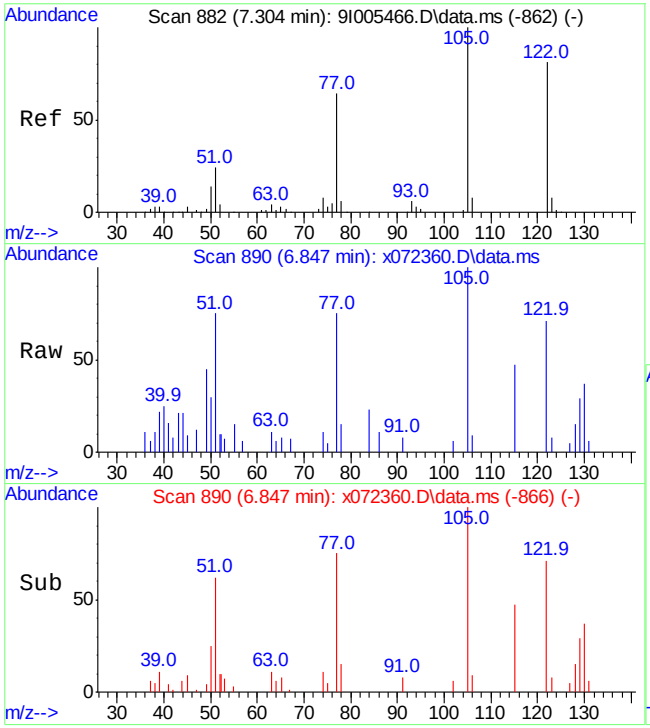


#24
Nitrobenzene
Concen: 0.20 ppm
RT: 6.285 min Scan# 785
Delta R.T. -0.011 min
Lab File: x072360.D
Acq: 12 Aug 2020 11:42 am

Tgt Ion: 77 Resp: 1300

Ion	Ratio	Lower	Upper
77	100		
123	36.7	28.7	88.7
65	25.8	0.0	42.1

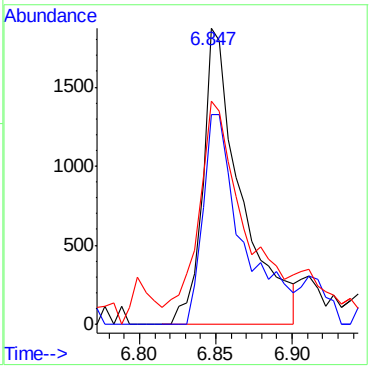


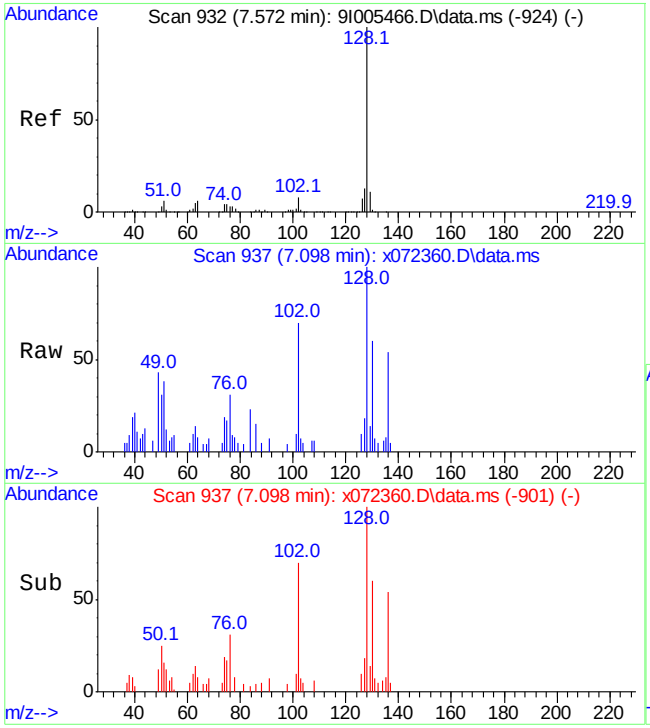


#30
Benzoic Acid
Concen: 0.82 ppm
RT: 6.847 min Scan# 890
Delta R.T. -0.070 min
Lab File: x072360.D
Acq: 12 Aug 2020 11:42 am

Tgt Ion:105 Resp: 3253

Ion	Ratio	Lower	Upper
105	100		
122	70.5	51.2	111.2
77	69.1	34.1	94.1

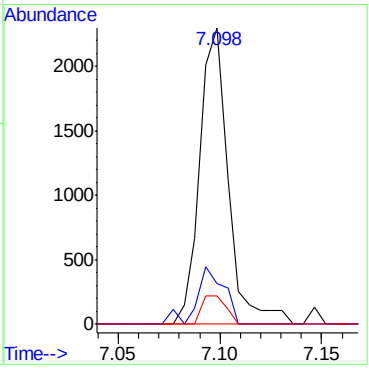


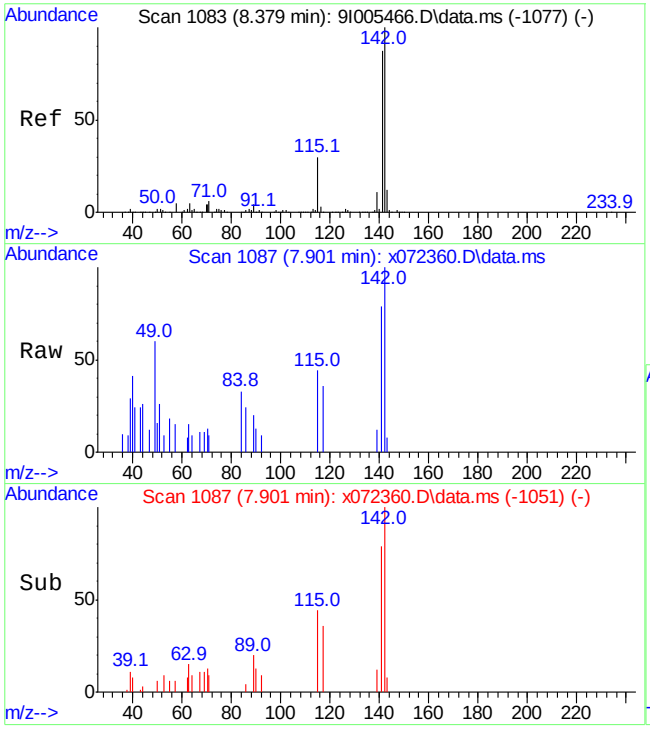


#34
Naphthalene
Concen: 0.13 ppm
RT: 7.098 min Scan# 937
Delta R.T. -0.005 min
Lab File: x072360.D
Acq: 12 Aug 2020 11:42 am

Tgt Ion:128 Resp: 2230

Ion	Ratio	Lower	Upper
128	100		
129	13.8	0.0	41.4
126	9.5	0.0	37.4

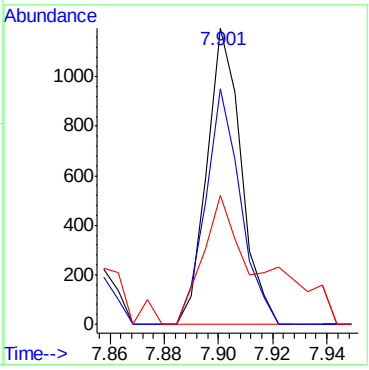


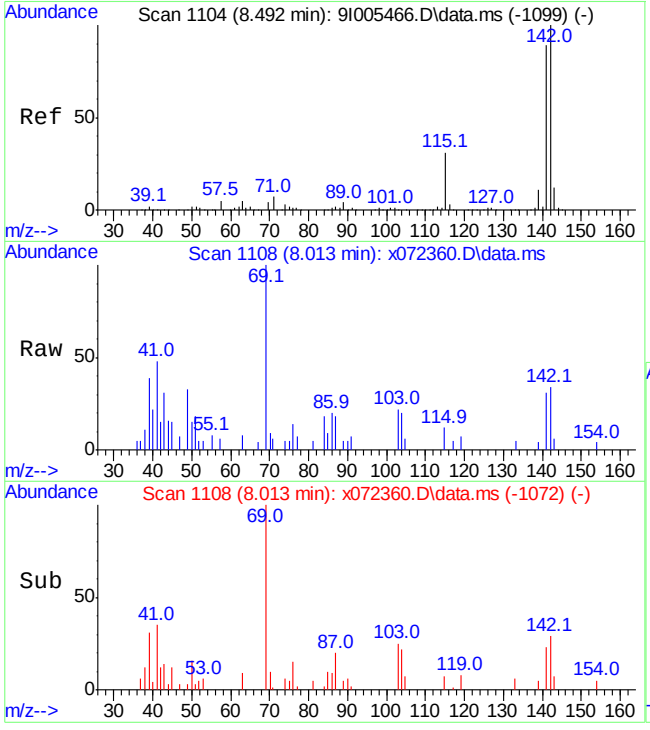


#40
2-Methylnaphthalene
Concen: 0.09 ppm
RT: 7.901 min Scan# 1087
Delta R.T. -0.005 min
Lab File: x072360.D
Acq: 12 Aug 2020 11:42 am

Tgt Ion:142 Resp: 1046

Ion	Ratio	Lower	Upper
142	100		
141	79.4	56.8	116.8
115	36.1	0.0	60.0

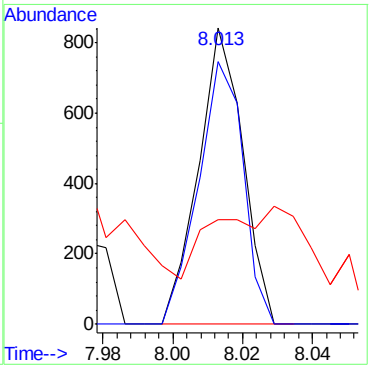


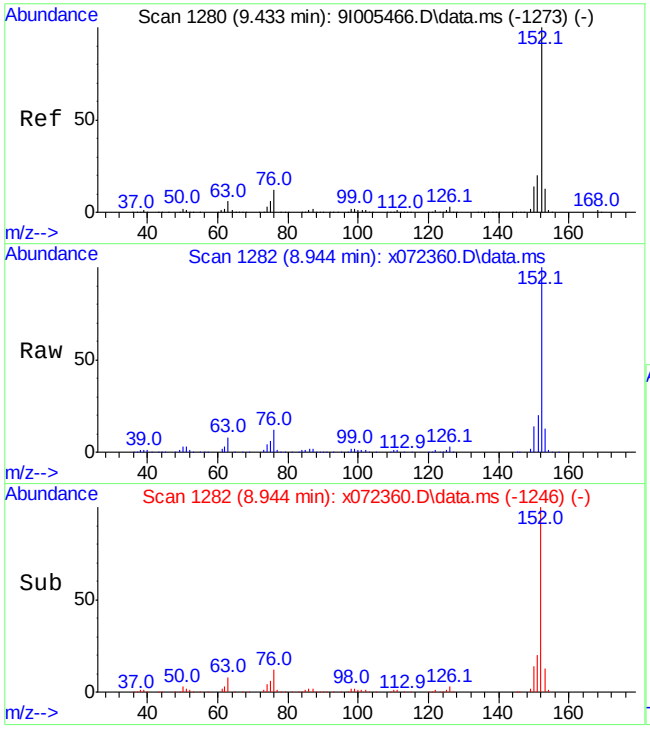


#41
1-Methylnaphthalene
Concen: 0.07 ppm
RT: 8.013 min Scan# 1108
Delta R.T. -0.006 min
Lab File: x072360.D
Acq: 12 Aug 2020 11:42 am

Tgt Ion:142 Resp: 750

Ion	Ratio	Lower	Upper
142	100		
141	88.6	59.0	119.0
115	7.2	1.1	61.1

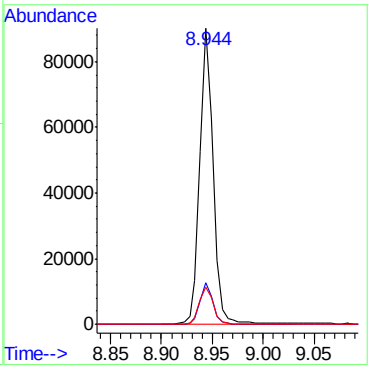


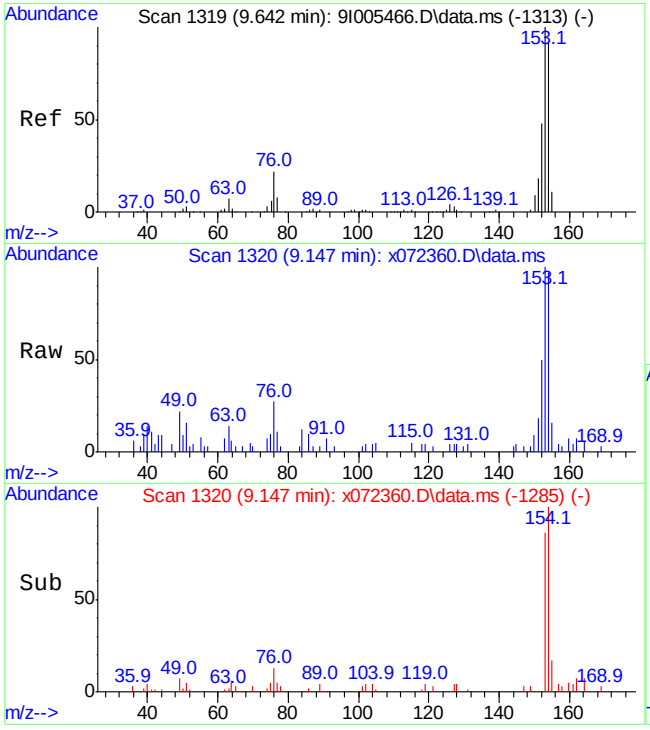


#52
Acenaphthylene
Concen: 5.29 ppm
RT: 8.944 min Scan# 1282
Delta R.T. -0.005 min
Lab File: x072360.D
Acq: 12 Aug 2020 11:42 am

Tgt Ion:152 Resp: 80807

Ion	Ratio	Lower	Upper
152	100		
150	14.1	0.0	44.3
153	12.7	0.0	43.3

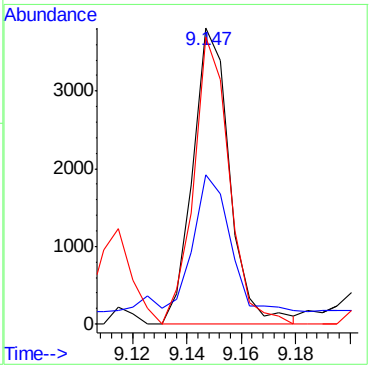


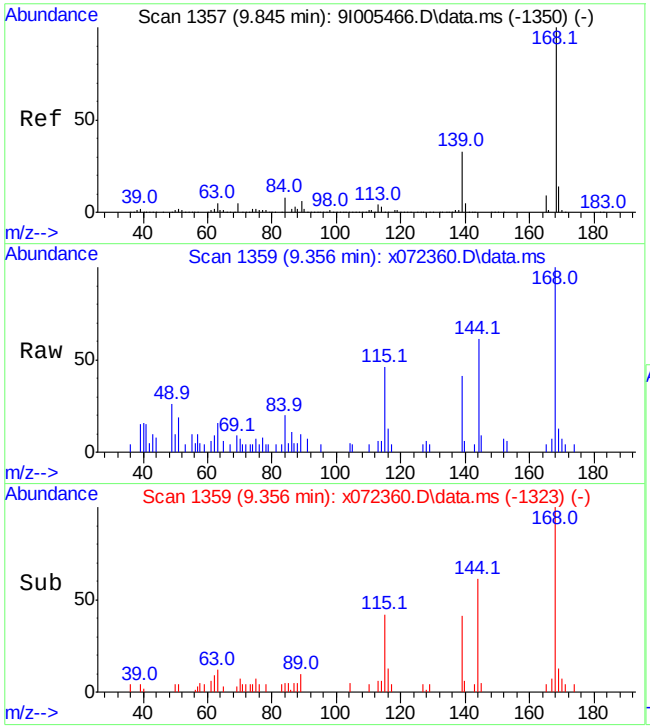


#57
Acenaphthene
Concen: 0.35 ppm
RT: 9.147 min Scan# 1320
Delta R.T. -0.011 min
Lab File: x072360.D
Acq: 12 Aug 2020 11:42 am

Tgt Ion:153 Resp: 3597

Ion	Ratio	Lower	Upper
153	100		
152	44.6	18.4	78.4
154	98.2	62.4	122.4

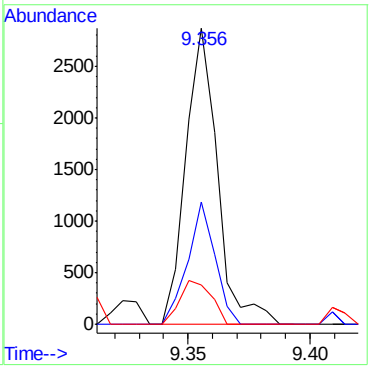


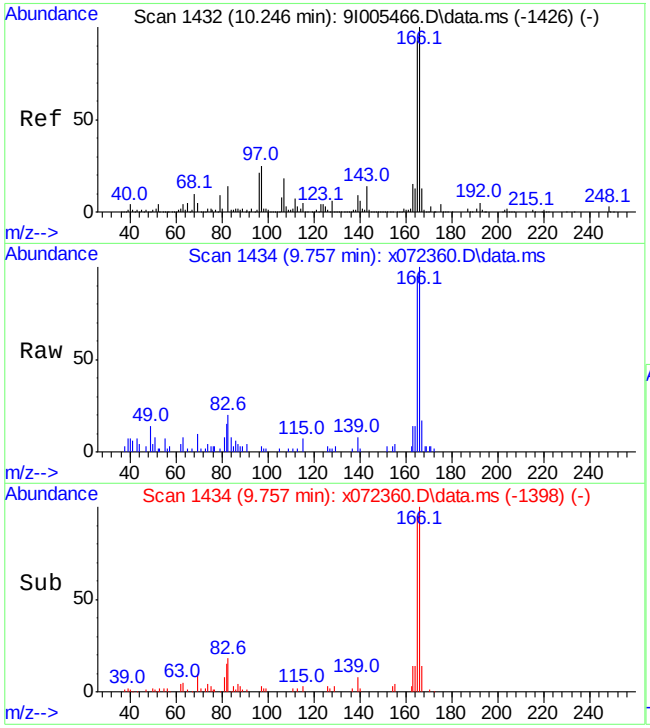


#60
Dibenzofuran
Concen: 0.19 ppm
RT: 9.356 min Scan# 1359
Delta R.T. -0.005 min
Lab File: x072360.D
Acq: 12 Aug 2020 11:42 am

Tgt Ion:168 Resp: 2618

Ion	Ratio	Lower	Upper
168	100		
139	41.5	3.0	63.0
169	13.2	0.0	43.5

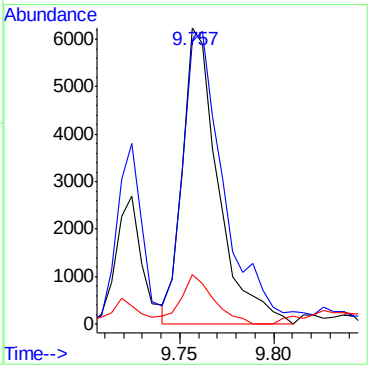


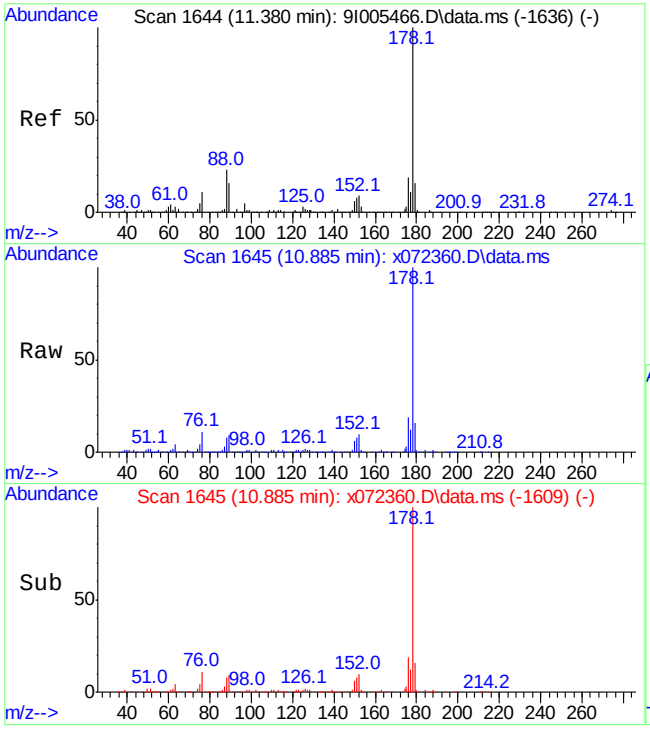


#65
Fluorene
Concen: 0.78 ppm
RT: 9.757 min Scan# 1434
Delta R.T. -0.005 min
Lab File: x072360.D
Acq: 12 Aug 2020 11:42 am

Tgt Ion:166 Resp: 8216

Ion	Ratio	Lower	Upper
166	100		
165	93.3	62.7	122.7
167	14.4	0.0	43.5

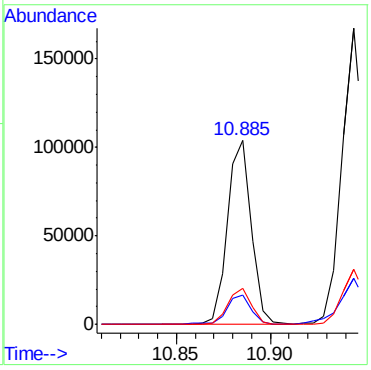


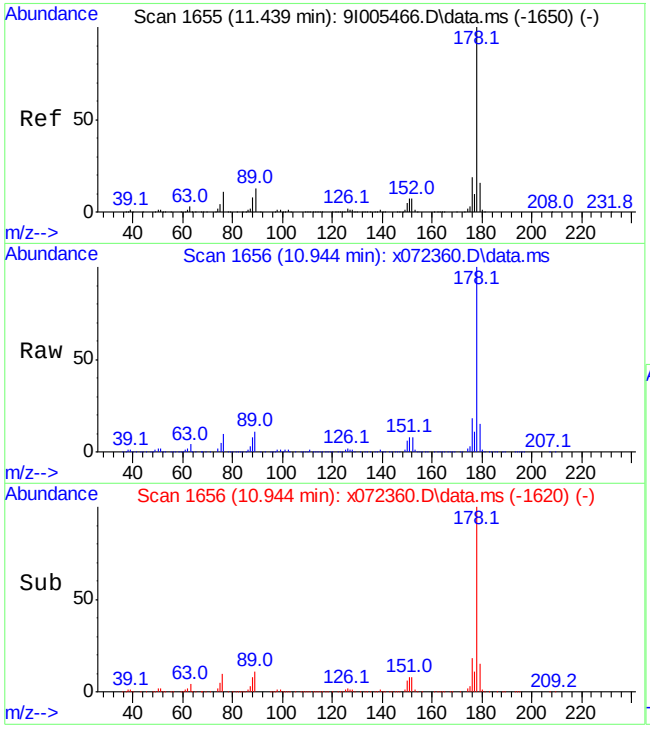


#84
Phenanthrene
Concen: 6.03 ppm
RT: 10.885 min Scan# 1645
Delta R.T. -0.006 min
Lab File: x072360.D
Acq: 12 Aug 2020 11:42 am

Tgt Ion:178 Resp: 91093

Ion	Ratio	Lower	Upper
178	100		
179	15.7	0.0	45.8
176	19.3	0.0	49.3

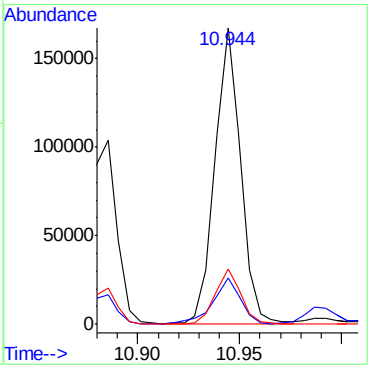


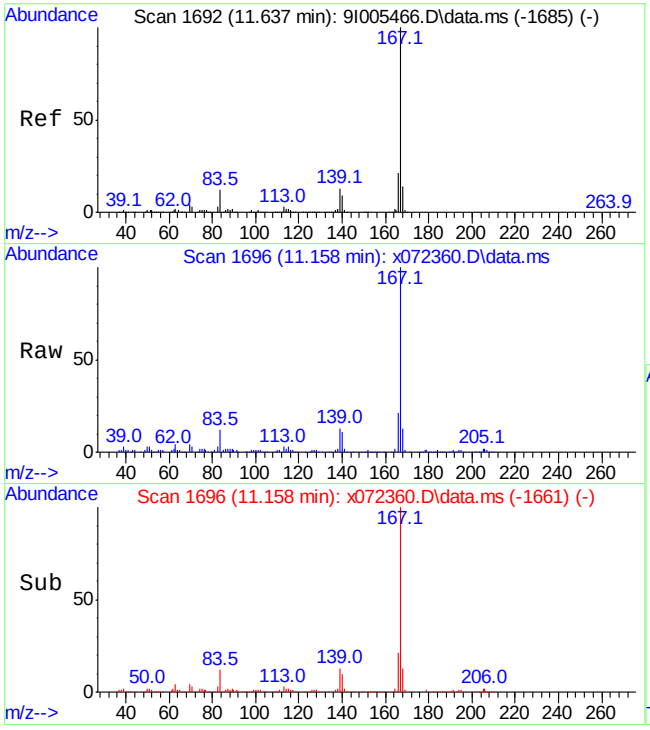


#85
Anthracene
Concen: 9.36 ppm
RT: 10.944 min Scan# 1656
Delta R.T. -0.005 min
Lab File: x072360.D
Acq: 12 Aug 2020 11:42 am

Tgt Ion:178 Resp: 147449

Ion	Ratio	Lower	Upper
178	100		
179	15.0	0.0	46.0
176	18.5	0.0	49.3

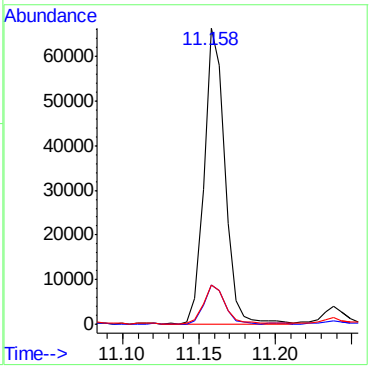


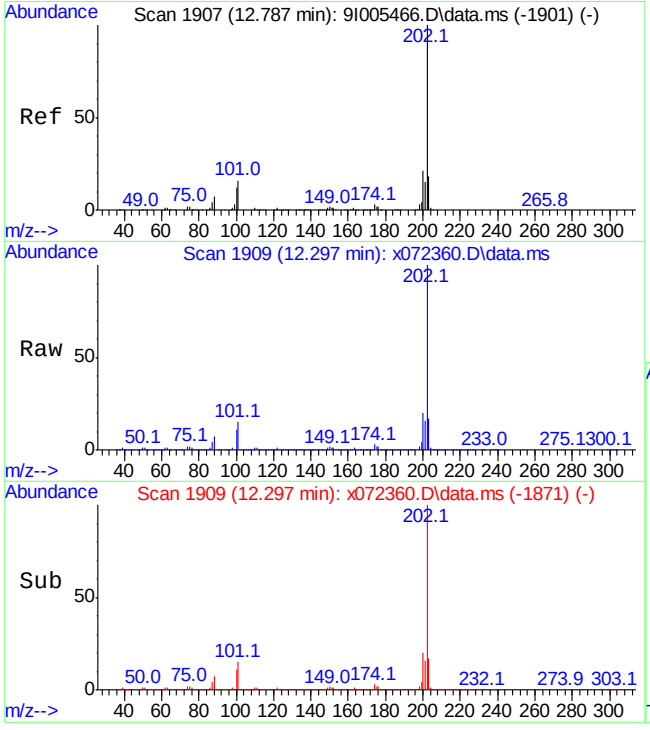


#87
Carbazole
Concen: 4.46 ppm
RT: 11.158 min Scan# 1696
Delta R.T. -0.011 min
Lab File: x072360.D
Acq: 12 Aug 2020 11:42 am

Tgt Ion:167 Resp: 62024

Ion	Ratio	Lower	Upper
167	100		
168	13.1	0.0	43.9
139	13.1	0.0	42.7

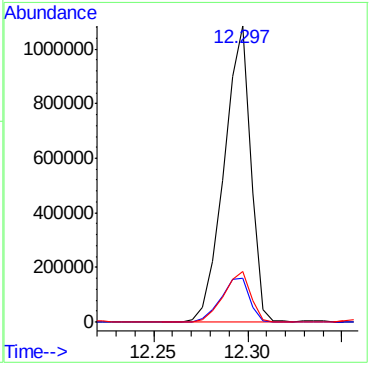


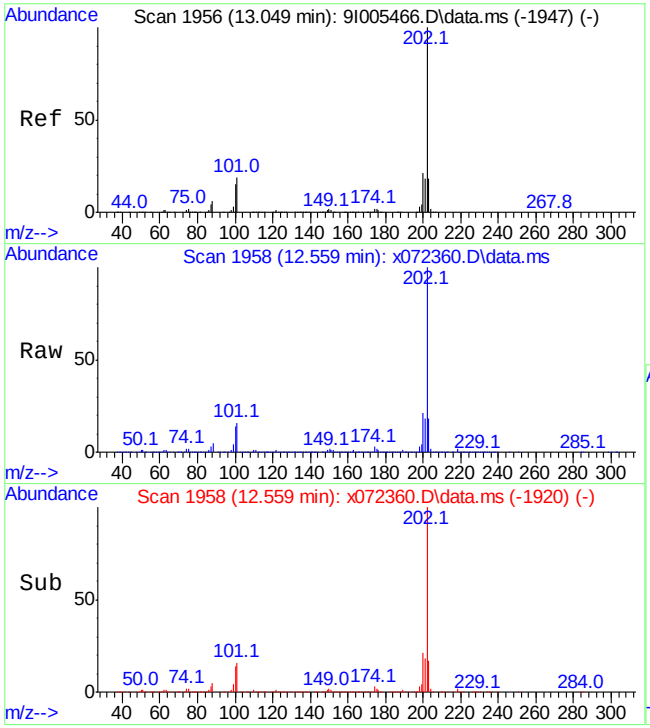


#91
Fluoranthene
Concen: 75.82 ppm
RT: 12.297 min Scan# 1909
Delta R.T. 0.005 min
Lab File: x072360.D
Acq: 12 Aug 2020 11:42 am

Tgt Ion:202 Resp: 1063317

Ion	Ratio	Lower	Upper
202	100		
101	14.9	0.0	45.8
203	17.0	0.0	48.1

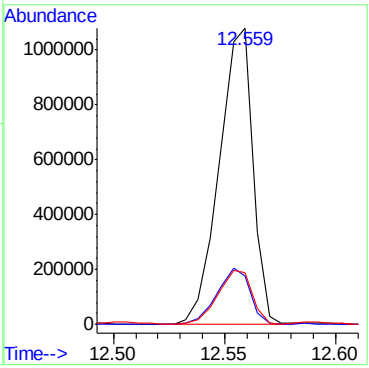


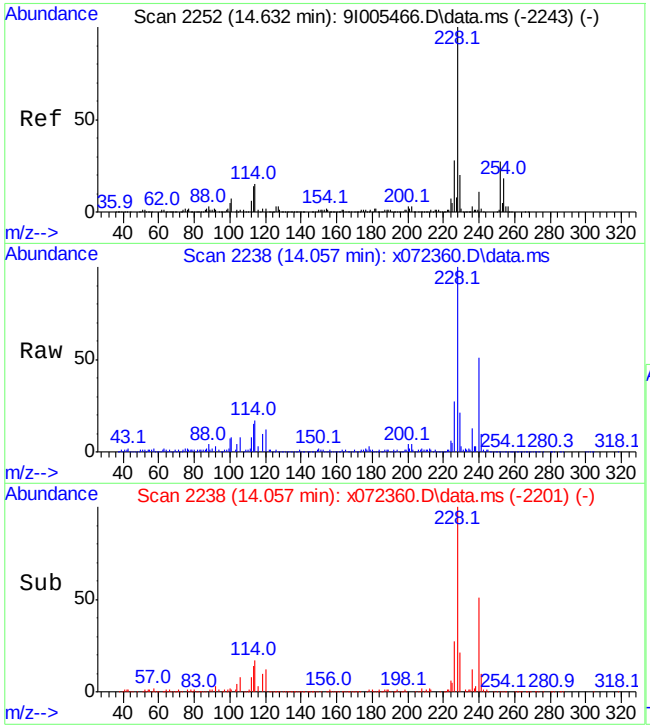


#94
Pyrene
Concen: 69.59 ppm
RT: 12.559 min Scan# 1958
Delta R.T. 0.005 min
Lab File: x072360.D
Acq: 12 Aug 2020 11:42 am

Tgt Ion:202 Resp: 1140960

Ion	Ratio	Lower	Upper
202	100		
101	16.3	0.0	48.7
203	17.3	0.0	48.4

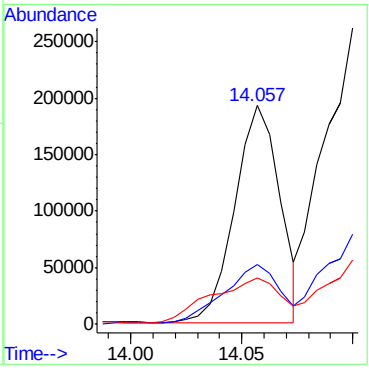


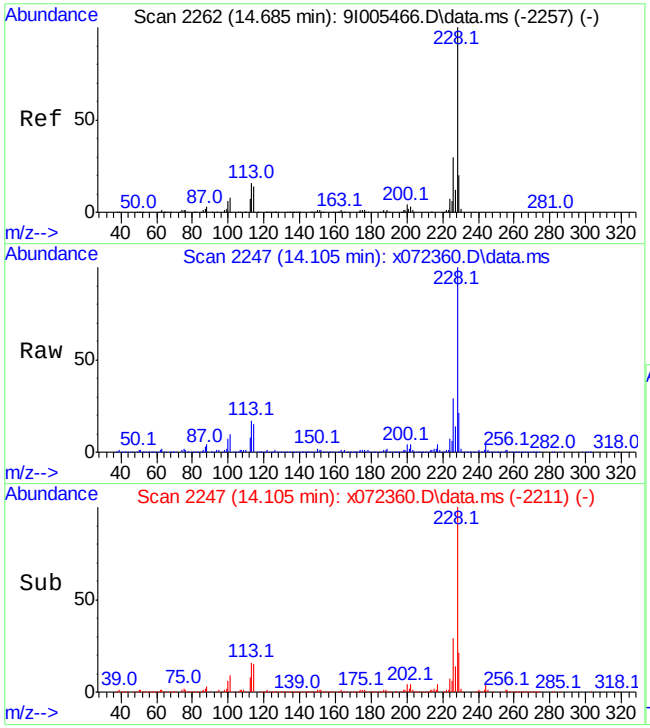


#99
Benzo[a]anthracene
Concen: 21.83 ppm
RT: 14.057 min Scan# 2238
Delta R.T. -0.000 min
Lab File: x072360.D
Acq: 12 Aug 2020 11:42 am

Tgt Ion:228 Resp: 270887

Ion	Ratio	Lower	Upper
228	100		
226	27.0	0.0	57.5
229	19.4	0.0	49.9

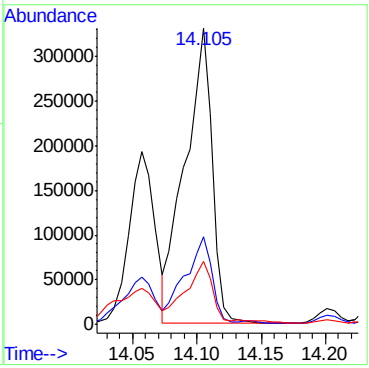


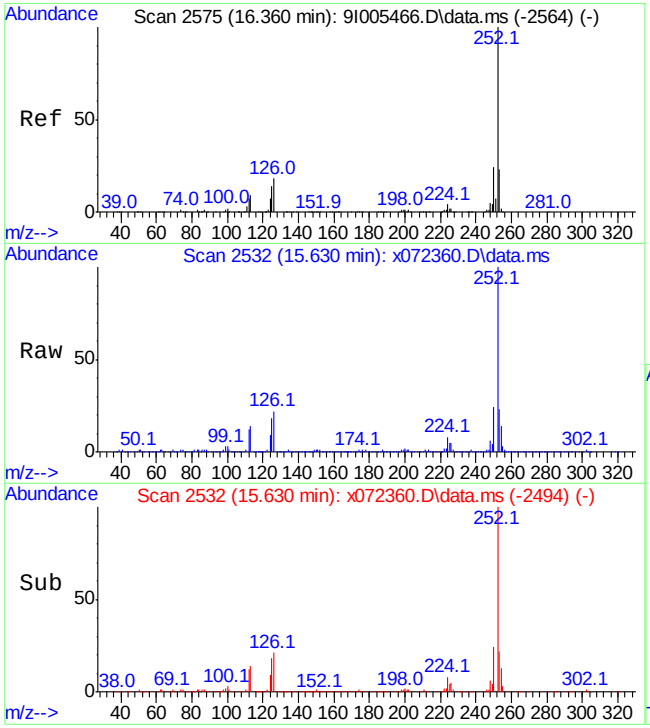


#100
Chrysene
Concen: 37.31 ppm
RT: 14.105 min Scan# 2247
Delta R.T. -0.005 min
Lab File: x072360.D
Acq: 12 Aug 2020 11:42 am

Tgt Ion:228 Resp: 493049

Ion	Ratio	Lower	Upper
228	100		
226	29.4	0.4	60.4
229	20.5	0.0	50.1

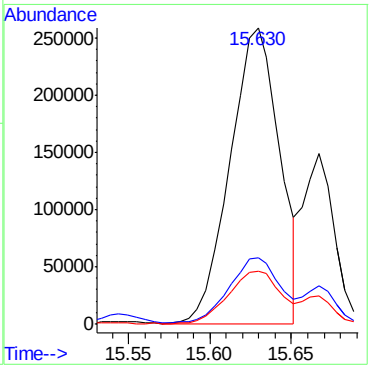


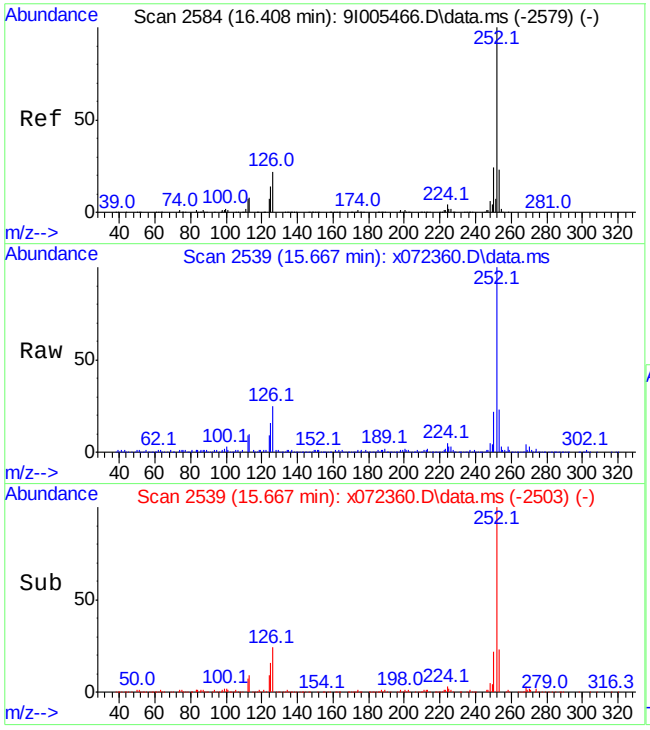


#104
Benzo[b]fluoranthene
Concen: 57.51 ppm
RT: 15.630 min Scan# 2532
Delta R.T. 0.005 min
Lab File: x072360.D
Acq: 12 Aug 2020 11:42 am

Tgt Ion:252 Resp: 546365

Ion	Ratio	Lower	Upper
252	100		
253	22.1	0.0	52.5
125	17.5	0.0	44.0

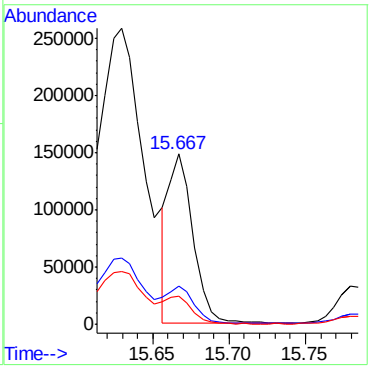


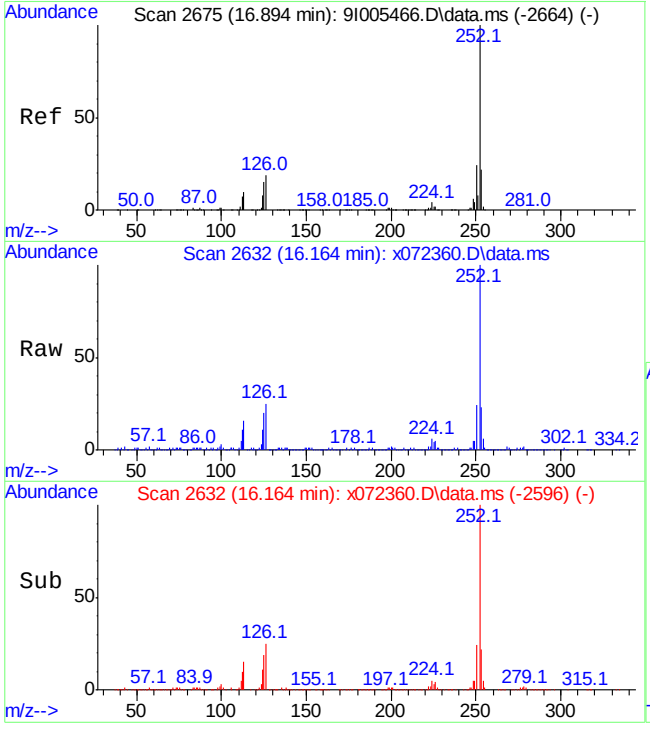


#105
Benzo[k]fluoranthene
Concen: 14.69 ppm
RT: 15.667 min Scan# 2539
Delta R.T. -0.006 min
Lab File: x072360.D
Acq: 12 Aug 2020 11:42 am

Tgt Ion:252 Resp: 164189

Ion	Ratio	Lower	Upper
252	100		
253	22.1	0.0	52.5
125	14.9	0.0	44.4

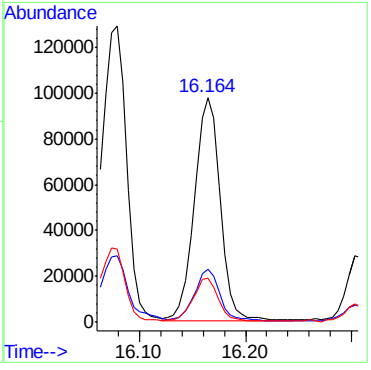


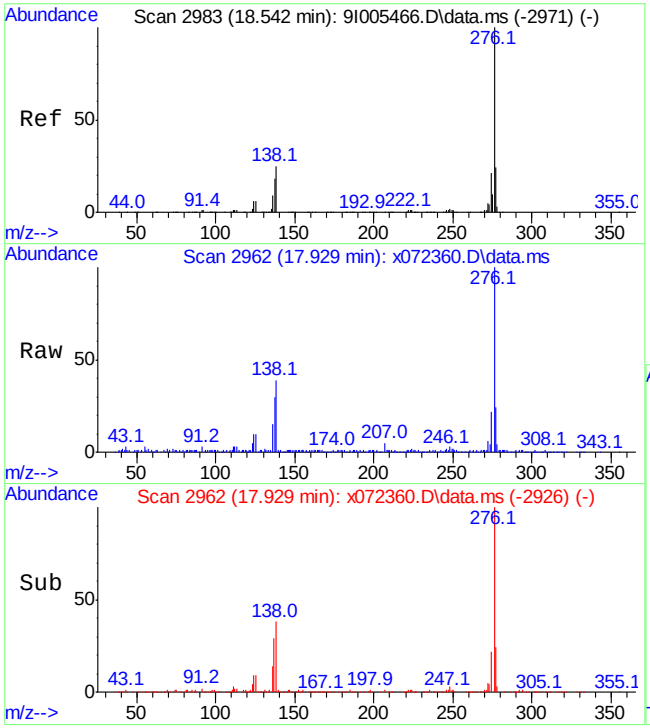


#106
Benzo[a]pyrene
Concen: 19.76 ppm
RT: 16.164 min Scan# 2632
Delta R.T. -0.006 min
Lab File: x072360.D
Acq: 12 Aug 2020 11:42 am

Tgt Ion:252 Resp: 165472

Ion	Ratio	Lower	Upper
252	100		
253	22.7	0.0	52.3
125	19.2	0.0	44.7

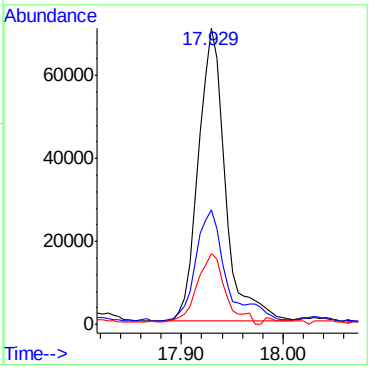


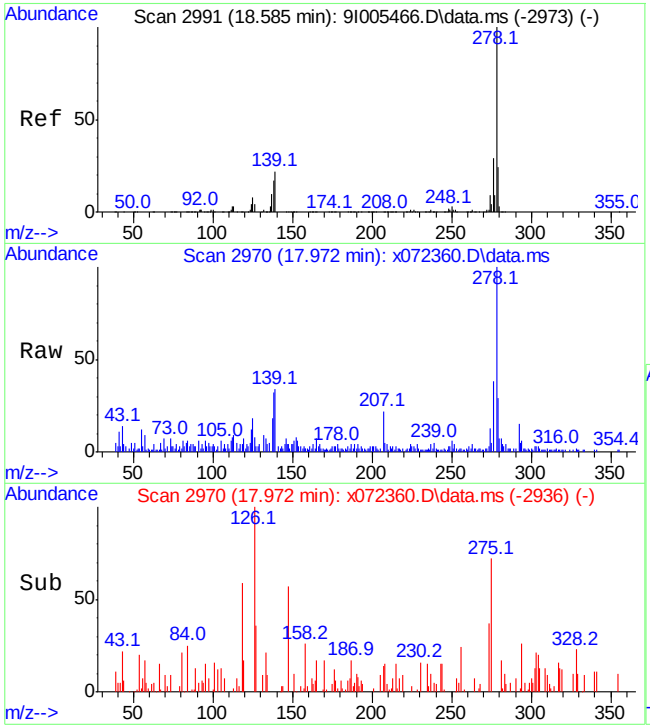


#107
Indeno[1,2,3-cd]pyrene
Concen: 24.43 ppm
RT: 17.929 min Scan# 2962
Delta R.T. -0.005 min
Lab File: x072360.D
Acq: 12 Aug 2020 11:42 am

Tgt Ion:276 Resp: 128382

Ion	Ratio	Lower	Upper
276	100		
138	37.6	0.0	54.7
277	23.3	0.0	53.8

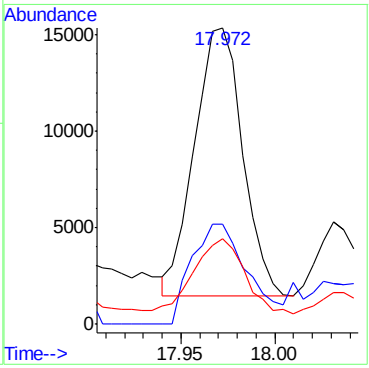


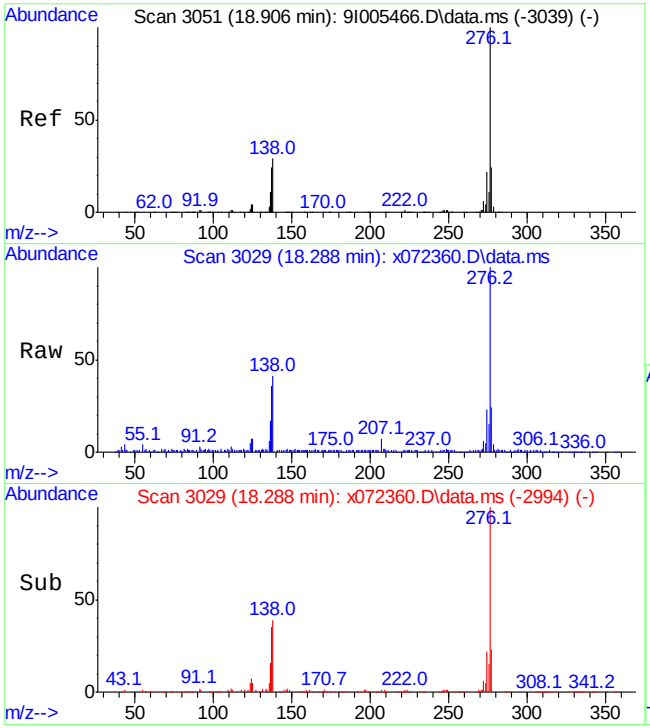


#108
Dibenz[a,h]anthracene
Concen: 4.86 ppm
RT: 17.972 min Scan# 2970
Delta R.T. -0.016 min
Lab File: x072360.D
Acq: 12 Aug 2020 11:42 am

Tgt Ion:278 Resp: 24608

Ion	Ratio	Lower	Upper
278	100		
139	30.4	0.0	52.4
279	27.5	0.0	54.4

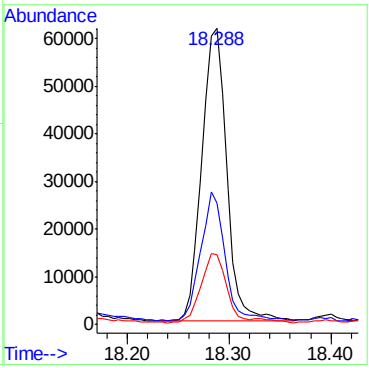




#109
Benzo[g,h,i]perylene
Concen: 13.86 ppm
RT: 18.288 min Scan# 3029
Delta R.T. -0.011 min
Lab File: x072360.D
Acq: 12 Aug 2020 11:42 am

Tgt Ion:276 Resp: 104550

Ion	Ratio	Lower	Upper
276	100		
138	39.9	0.0	59.4
277	23.2	0.0	54.1



7.1.5

7

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan
08/12/20 16:38

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072336.d
Acq On : 11 Aug 2020 3:50 pm
Operator : marthav
Sample : fa77576-4 E
Misc : op81482,sx2950,30.3,,,1,1,soil
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 12 02:26:00 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.660	152	158036	40.00	ppm	0.00
22) Naphthalene-d8	7.082	136	596326	40.00	ppm	0.00
43) Acenaphthene-d10	9.120	164	303497	40.00	ppm	0.00
70) Phenanthrene-d10	10.864	188	529075	40.00	ppm	0.00
92) Chrysene-d12	14.089	240	426380	40.00	ppm	0.02
102) Perylene-d12	16.298	264	346489	40.00	ppm	0.04
110) 1,4-Dichlorobenzene-d4A	5.660	152	158036	40.00	ppm	0.00
120) Naphthalene-d8A	7.082	136	596326	40.00	ppm	0.00
127) Acenaphthene-d10A	9.120	164	303497	40.00	ppm	0.00
136) Phenanthrene-d10A	10.864	188	529075	40.00	ppm	0.00
146) Chrysene-d12A	14.089	240	426380	40.00	ppm	0.02
153) Perylene-d12A	16.298	264	346489	40.00	ppm	0.04
System Monitoring Compounds						
7) 2-Fluorophenol	4.317	112	433717	76.54	ppm	0.01
Spiked Amount 100.000	Range 40 - 102		Recovery = 76.54%			
9) Phenol-d5	5.339	99	542741	80.51	ppm	0.00
Spiked Amount 100.000	Range 41 - 100		Recovery = 80.51%			
23) Nitrobenzene-d5	6.280	82	231237	37.55	ppm	0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 75.10%			
47) 2-Fluorobiphenyl	8.355	172	416687	37.93	ppm	0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 75.86%			
75) 2,4,6-Tribromophenol	10.056	330	87698	77.45	ppm	0.00
Spiked Amount 100.000	Range 42 - 108		Recovery = 77.45%			
95) Terphenyl-d14	12.789	244	452543	39.95	ppm	0.01
Spiked Amount 50.000	Range 45 - 119		Recovery = 79.90%			
Target Compounds						Qvalue
5) Benzaldehyde	5.194	106	2002	0.42	ppm	# 72
17) 2-Methylphenol	5.997	108	1176	0.20	ppm	91
18) Acetophenone	6.114	105	3377	0.40	ppm	79
21) 3&4-Methylphenol	6.179	108	4692	0.79	ppm	93
27) 2,4-Dimethylphenol	6.756	107	2836	0.53	ppm	85
34) Naphthalene	7.104	128	14055	0.87	ppm	93
40) 2-Methylnaphthalene	7.912	142	7710	0.72	ppm	97
41) 1-Methylnaphthalene	8.024	142	5103	0.50	ppm	93
48) 1,1'-Biphenyl	8.462	154	2925	0.24	ppm	92
52) Acenaphthylene	8.954	152	487187	32.14	ppm	99
57) Acenaphthene	9.158	153	26286	2.61	ppm	97
60) Dibenzofuran	9.361	168	17935	1.33	ppm	95
65) Fluorene	9.767	166	53299	5.08	ppm	98
84) Phenanthrene	10.891	178	354986	22.20	ppm	99
85) Anthracene	10.960	178	1346117	80.79	ppm	98
87) Carbazole	11.169	167	329989	22.44	ppm	99
89) Di-n-butylphthalate	11.634	149	1658	0.10	ppm	78
91) Fluoranthene	12.313	202	2662776	179.51	ppm	96
94) Pyrene	12.576	202	3305255	186.70	ppm	98
99) Benzo[a]anthracene	14.078	228	1005156	75.01	ppm	97
100) Chrysene	14.132	228	1658254	116.20	ppm	98
104) Benzo[b]fluoranthene	15.678	252	2591074	193.58	ppm	96
105) Benzo[k]fluoranthene	15.710	252	694948m	56.50	ppm	
106) Benzo[a]pyrene	16.207	252	733765	71.00	ppm	95
107) Indeno[1,2,3-cd]pyrene	17.967	276	598624	76.58	ppm	88
108) Dibenz[a,h]anthracene	17.999	278	118528	18.95	ppm	89
109) Benzo[g,h,i]perylene	18.320	276	441809	46.63	ppm	88

7.1.6
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072336.d
Acq On : 11 Aug 2020 3:50 pm
Operator : marthav
Sample : fa77576-4 E
Misc : op81482,sx2950,30.3,,,1,1,soil
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 12 02:26:00 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

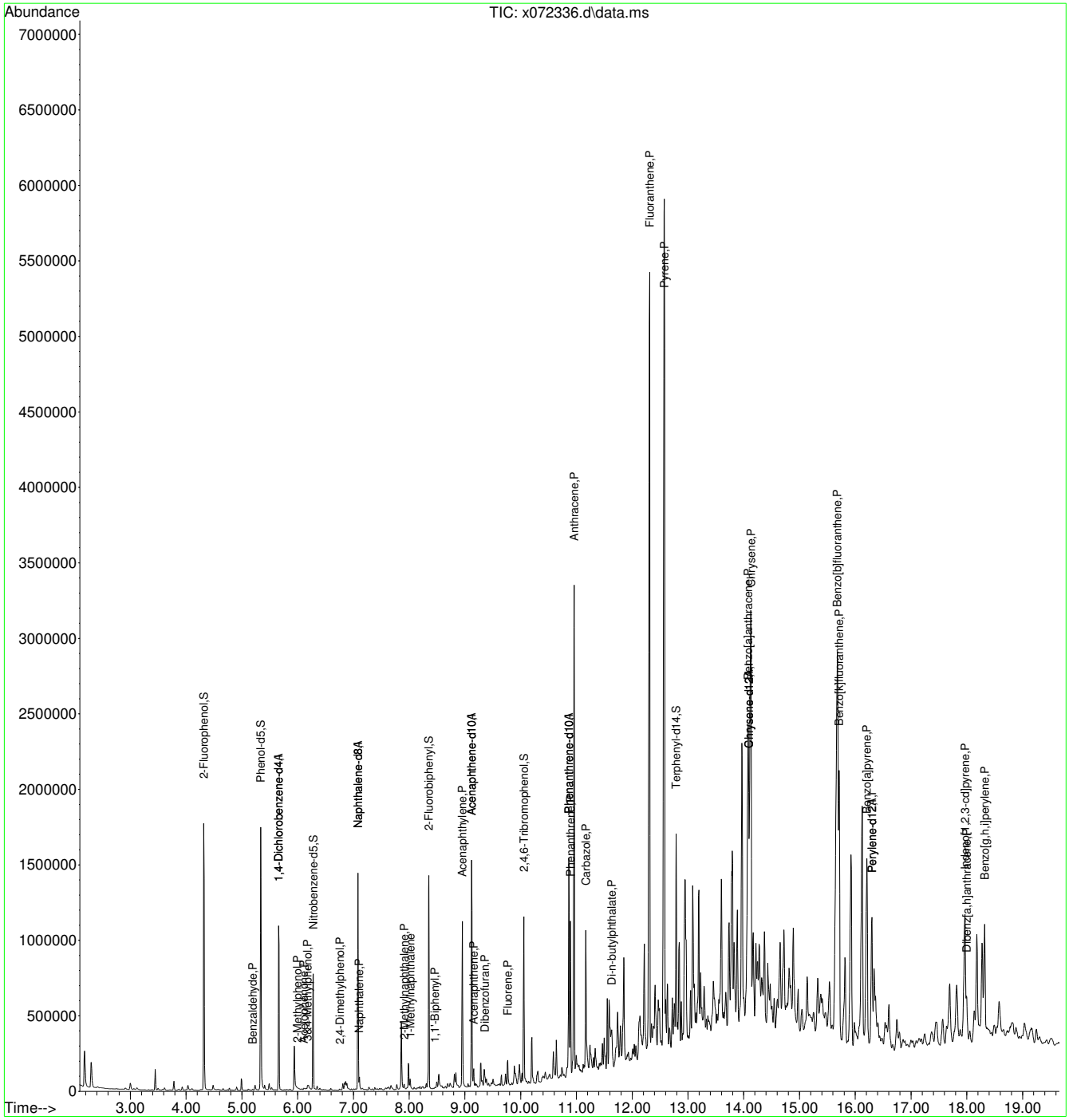
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

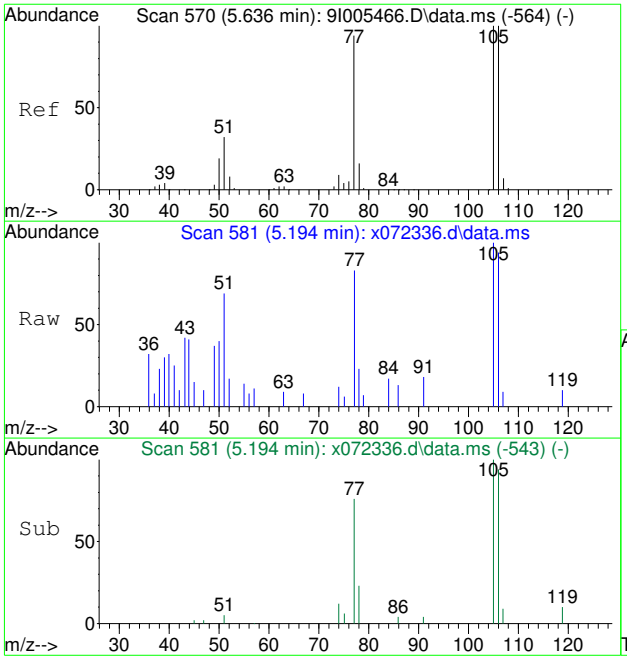
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072336.d
Acq On : 11 Aug 2020 3:50 pm
Operator : marthav
Sample : fa77576-4 E
Misc : op81482,sx2950,30.3,,,1,1,soil
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 12 02:26:00 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

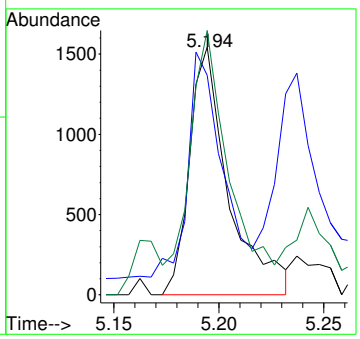


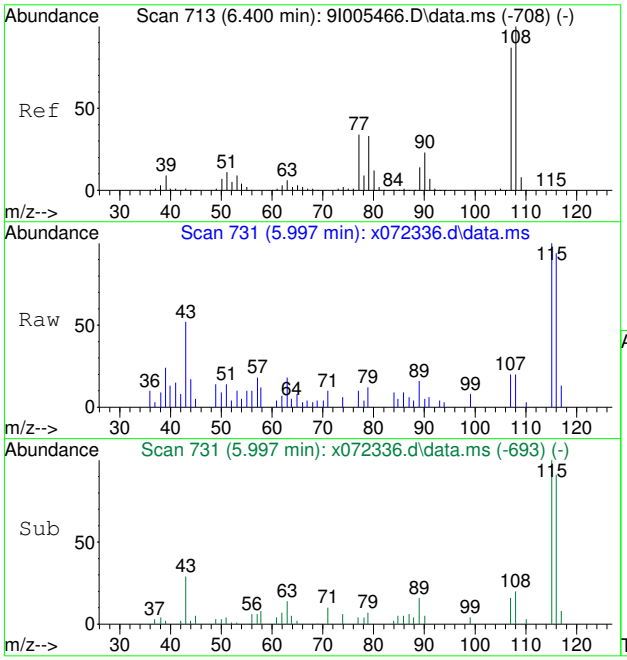


#5
Benzaldehyde
Concen: 0.42 ppm
RT: 5.194 min Scan# 581
Delta R.T. 0.005 min
Lab File: x072336.d
Acq: 11 Aug 2020 3:50 pm

Tgt Ion:106 Resp: 2002

Ion	Ratio	Lower	Upper
106	100		
77	42.7	63.9	123.9#
105	96.0	70.0	130.0

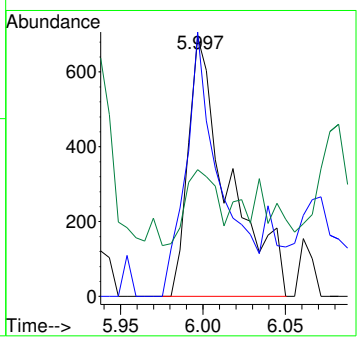


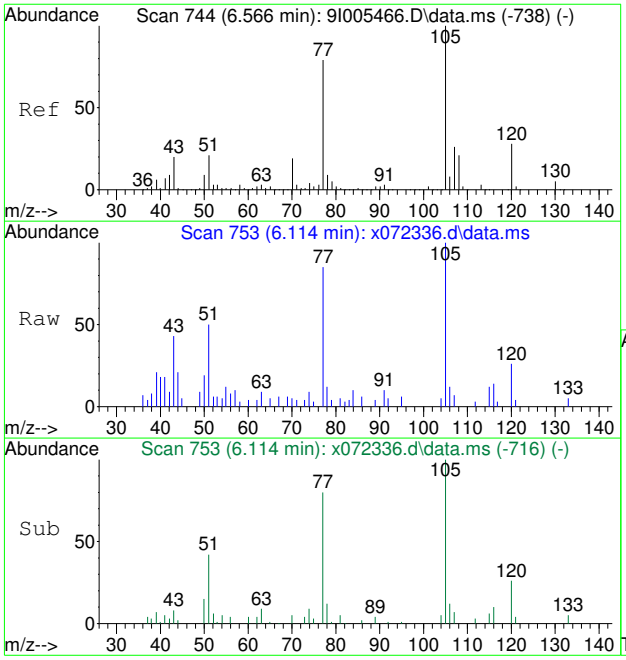


#17
2-Methylphenol
Concen: 0.20 ppm
RT: 5.997 min Scan# 731
Delta R.T. 0.005 min
Lab File: x072336.d
Acq: 11 Aug 2020 3:50 pm

Tgt Ion:108 Resp: 1176

Ion	Ratio	Lower	Upper
108	100		
107	92.5	57.2	117.2
77	24.2	3.8	63.8

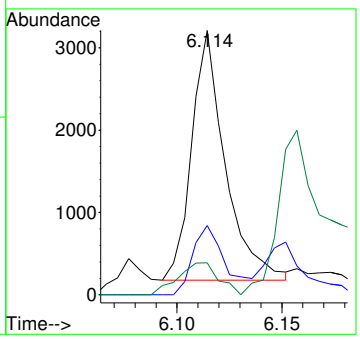


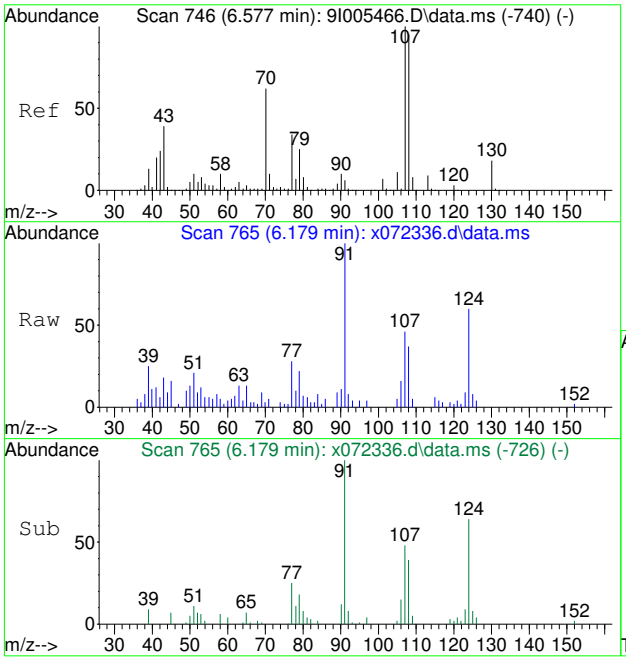


#18
Acetophenone
Concen: 0.40 ppm
RT: 6.114 min Scan# 753
Delta R.T. -0.000 min
Lab File: x072336.d
Acq: 11 Aug 2020 3:50 pm

Tgt Ion:105 Resp: 3377

Ion	Ratio	Lower	Upper
105	100		
120	17.5	0.0	58.3
106	0.0	0.0	38.0

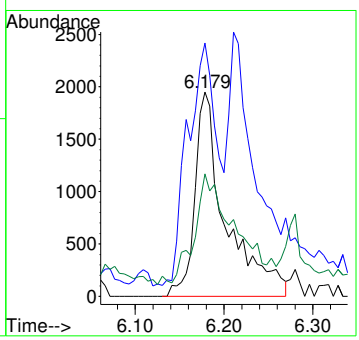


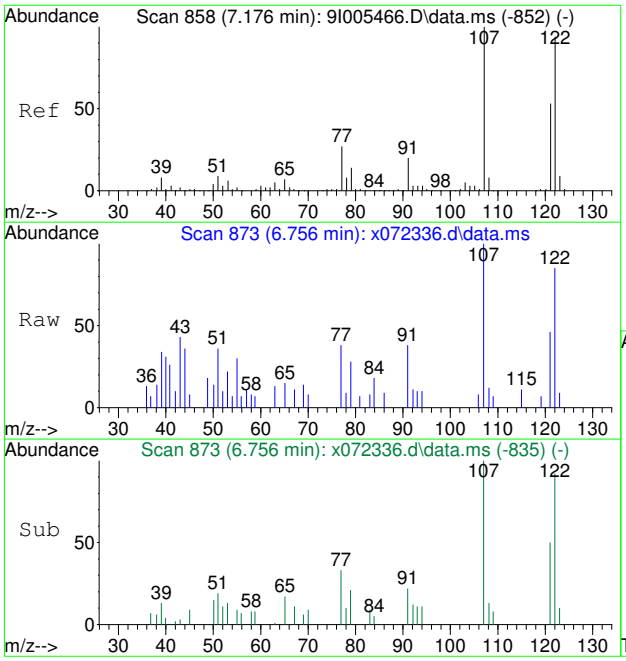


#21
3&4-Methylphenol
Concen: 0.79 ppm
RT: 6.179 min Scan# 765
Delta R.T. 0.011 min
Lab File: x072336.d
Acq: 11 Aug 2020 3:50 pm

Tgt Ion:108 Resp: 4692

Ion	Ratio	Lower	Upper
108	100		
107	106.0	75.4	135.4
79	44.3	0.0	56.3

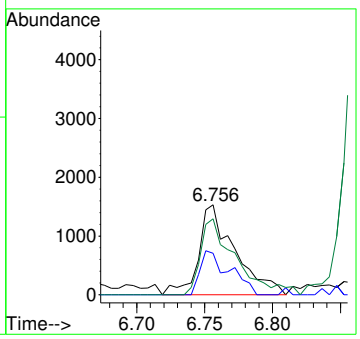


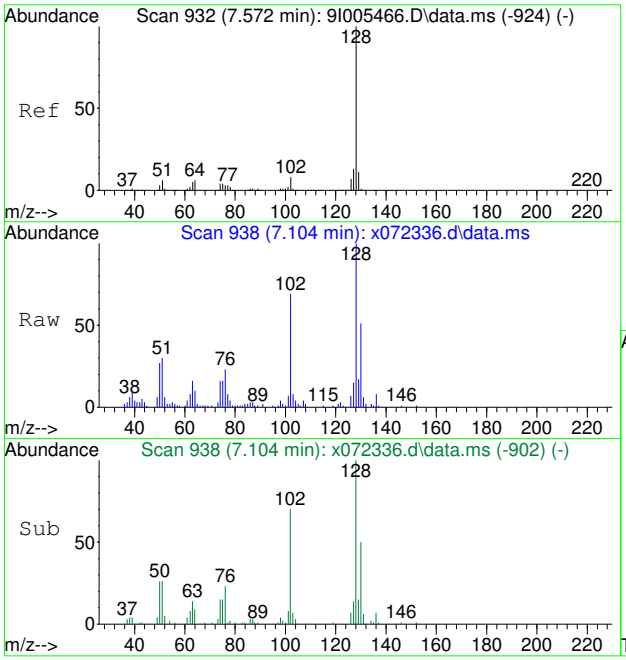


#27
2,4-Dimethylphenol
Concen: 0.53 ppm
RT: 6.756 min Scan# 873
Delta R.T. 0.005 min
Lab File: x072336.d
Acq: 11 Aug 2020 3:50 pm

Tgt Ion:107 Resp: 2836

Ion	Ratio	Lower	Upper
107	100		
121	42.1	23.4	83.4
122	80.5	64.3	124.3

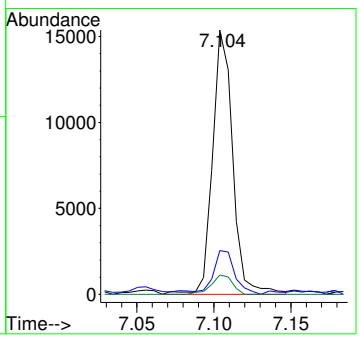


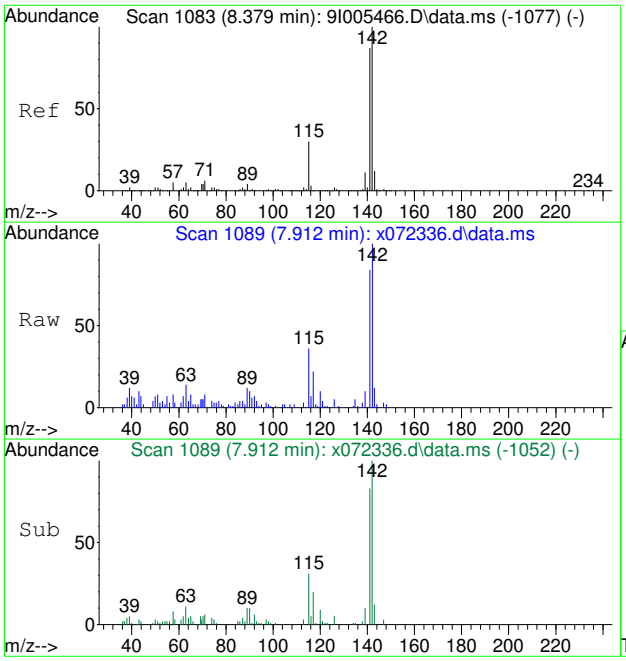


#34
Naphthalene
Concen: 0.87 ppm
RT: 7.104 min Scan# 938
Delta R.T. -0.005 min
Lab File: x072336.d
Acq: 11 Aug 2020 3:50 pm

Tgt Ion:128 Resp: 14055

Ion	Ratio	Lower	Upper
128	100		
129	15.7	0.0	41.4
126	7.3	0.0	37.4

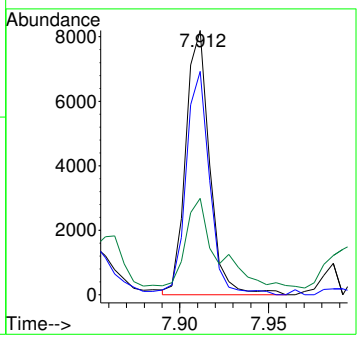


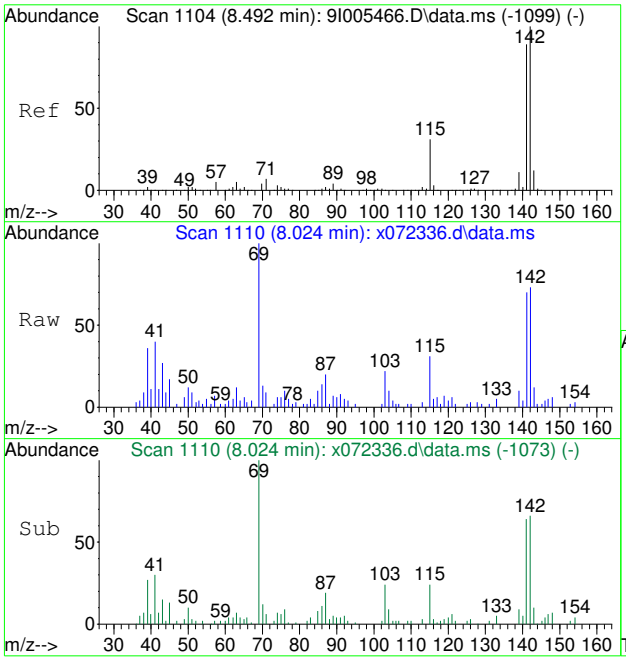


#40
2-Methylnaphthalene
Concen: 0.72 ppm
RT: 7.912 min Scan# 1089
Delta R.T. -0.000 min
Lab File: x072336.d
Acq: 11 Aug 2020 3:50 pm

Tgt Ion:142 Resp: 7710

Ion	Ratio	Lower	Upper
142	100		
141	84.4	56.8	116.8
115	33.2	0.0	60.0

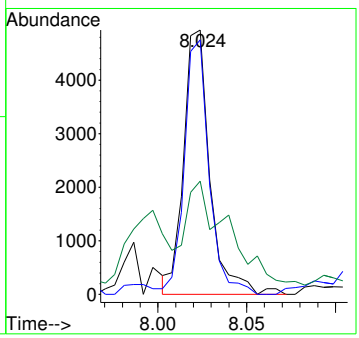


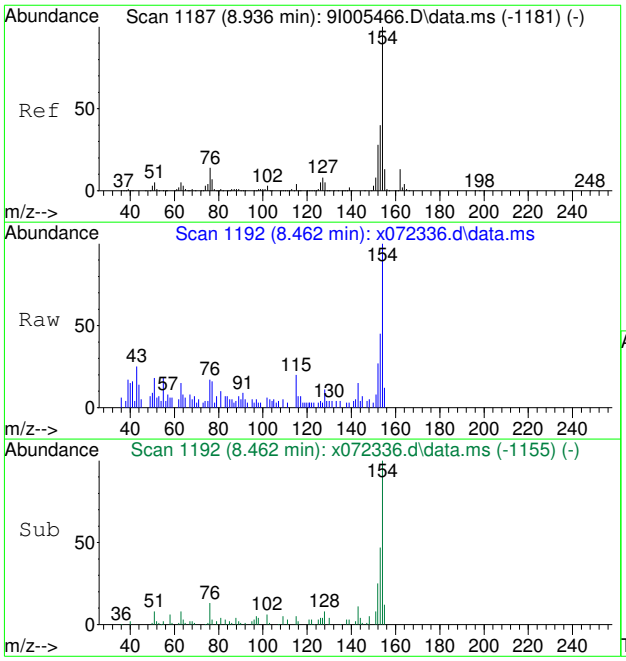


#41
1-Methylnaphthalene
Concen: 0.50 ppm
RT: 8.024 min Scan# 1110
Delta R.T. -0.000 min
Lab File: x072336.d
Acq: 11 Aug 2020 3:50 pm

Tgt Ion:142 Resp: 5103

Ion	Ratio	Lower	Upper
142	100		
141	97.5	59.0	119.0
115	30.2	1.1	61.1

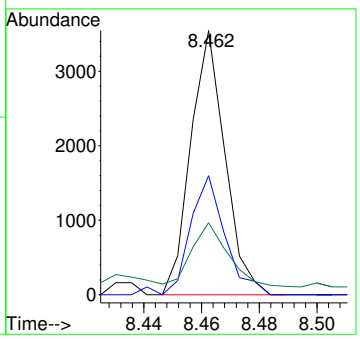


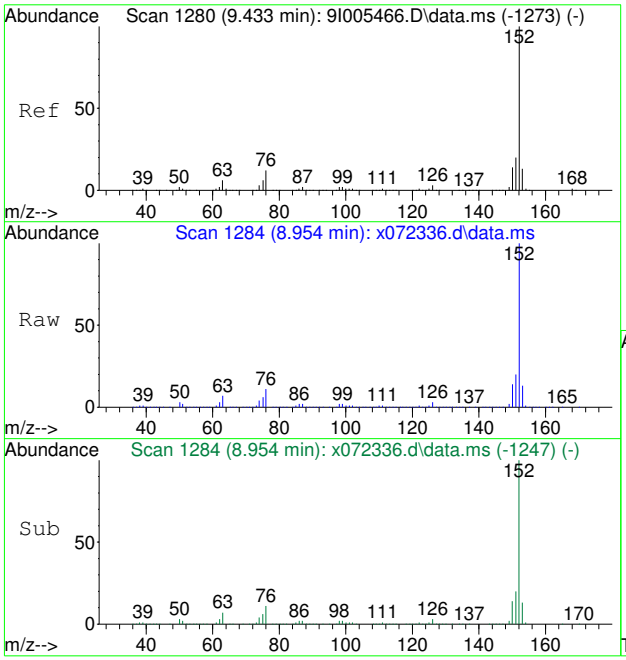


#48
1,1'-Biphenyl
Concen: 0.24 ppm
RT: 8.462 min Scan# 1192
Delta R.T. -0.000 min
Lab File: x072336.d
Acq: 11 Aug 2020 3:50 pm

Tgt Ion:154 Resp: 2925

Ion	Ratio	Lower	Upper
154	100		
153	45.1	10.3	70.3
152	23.6	0.0	58.2

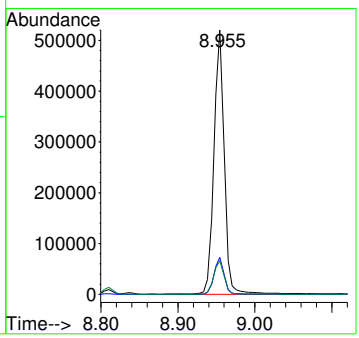


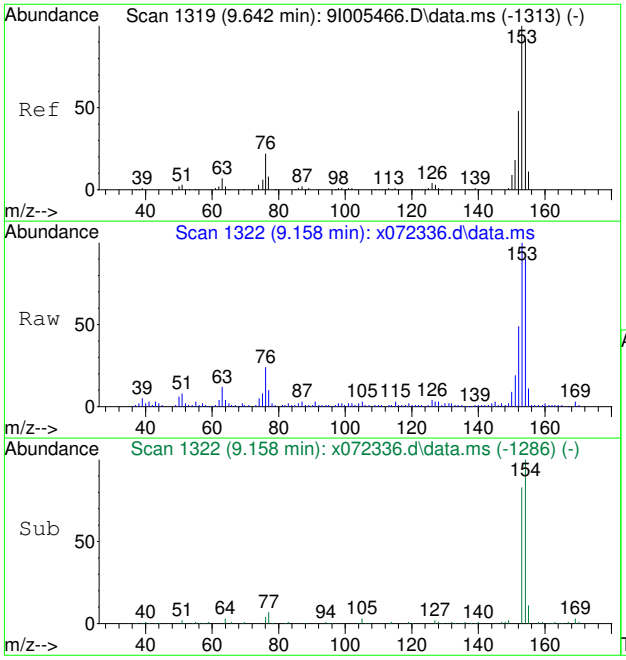


#52
Acenaphthylene
Concen: 32.14 ppm
RT: 8.954 min Scan# 1284
Delta R.T. -0.000 min
Lab File: x072336.d
Acq: 11 Aug 2020 3:50 pm

Tgt Ion:152 Resp: 487187

Ion	Ratio	Lower	Upper
152	100		
150	14.0	0.0	44.3
153	12.7	0.0	43.3

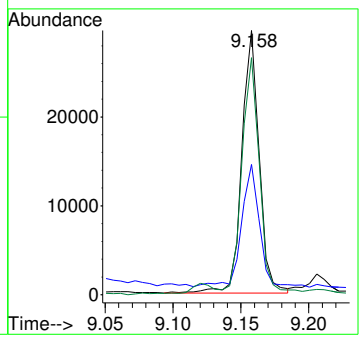


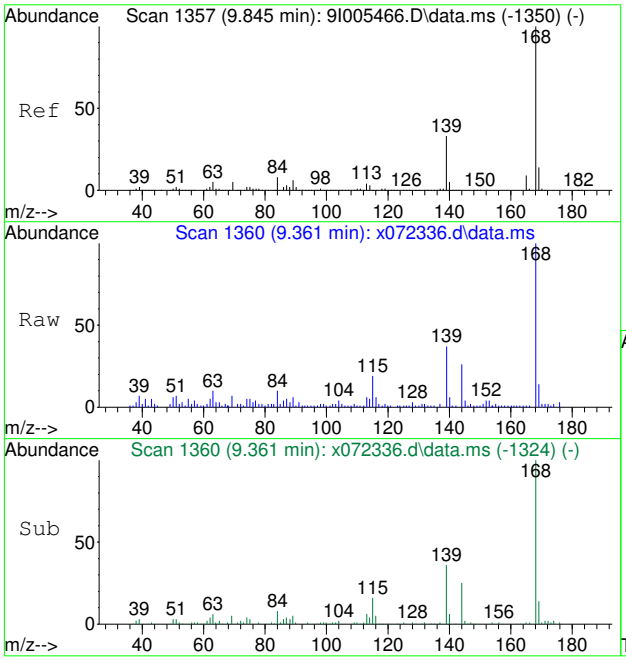


#57
Acenaphthene
Concen: 2.61 ppm
RT: 9.158 min Scan# 1322
Delta R.T. -0.005 min
Lab File: x072336.d
Acq: 11 Aug 2020 3:50 pm

Tgt Ion:153 Resp: 26286

Ion	Ratio	Lower	Upper
153	100		
152	46.1	18.4	78.4
154	89.8	62.4	122.4

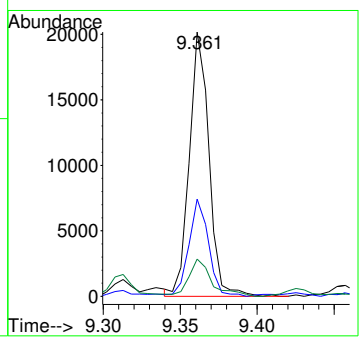


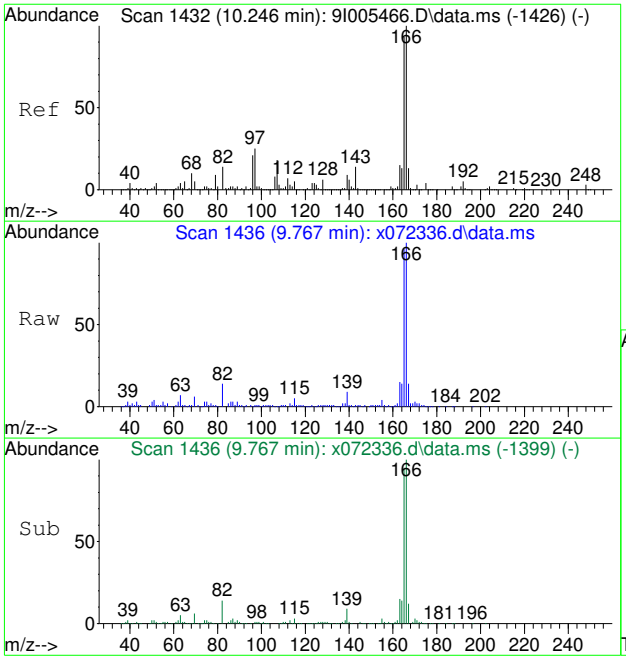


#60
Dibenzofuran
Concen: 1.33 ppm
RT: 9.361 min Scan# 1360
Delta R.T. -0.005 min
Lab File: x072336.d
Acq: 11 Aug 2020 3:50 pm

Tgt Ion:168 Resp: 17935

Ion	Ratio	Lower	Upper
168	100		
139	36.5	3.0	63.0
169	12.9	0.0	43.5

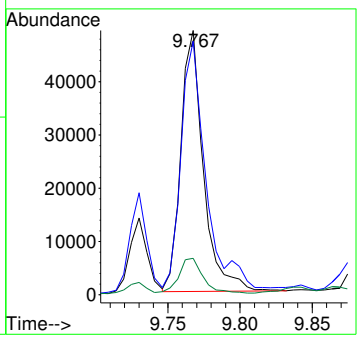


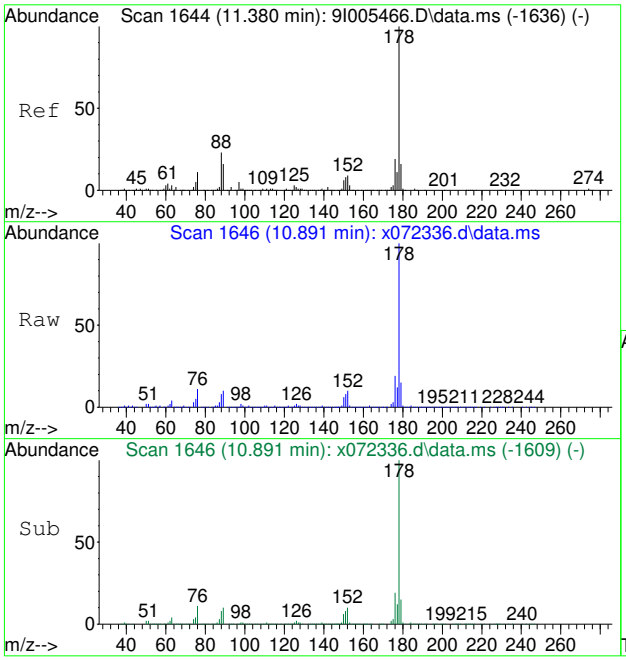


#65
Fluorene
Concen: 5.08 ppm
RT: 9.767 min Scan# 1436
Delta R.T. -0.000 min
Lab File: x072336.d
Acq: 11 Aug 2020 3:50 pm

Tgt Ion:166 Resp: 53299

Ion	Ratio	Lower	Upper
166	100		
165	95.0	62.7	122.7
167	12.2	0.0	43.5

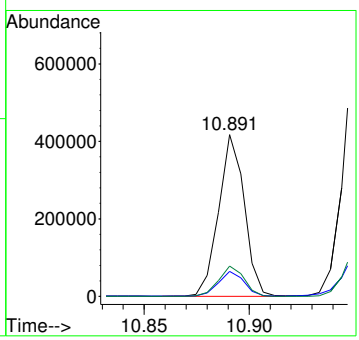


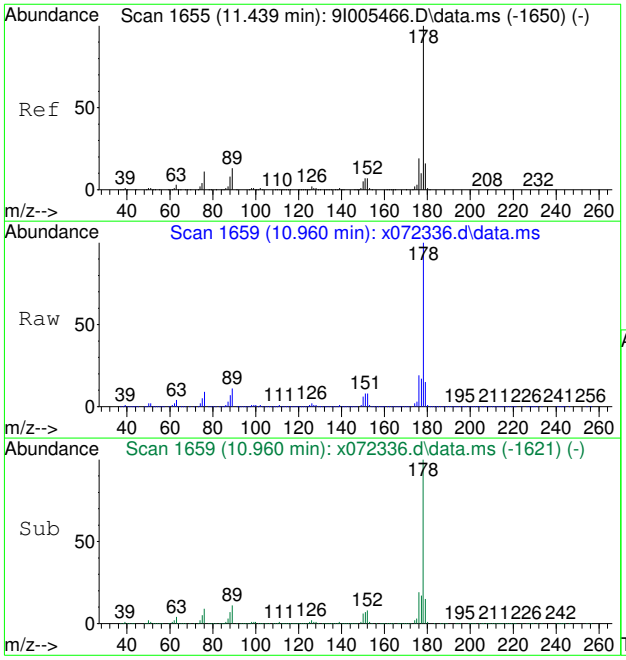


#84
Phenanthrene
Concen: 22.20 ppm
RT: 10.891 min Scan# 1646
Delta R.T. -0.000 min
Lab File: x072336.d
Acq: 11 Aug 2020 3:50 pm

Tgt Ion:178 Resp: 354986

Ion	Ratio	Lower	Upper
178	100		
179	15.3	0.0	45.8
176	18.8	0.0	49.3

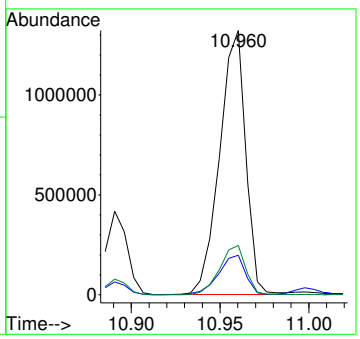


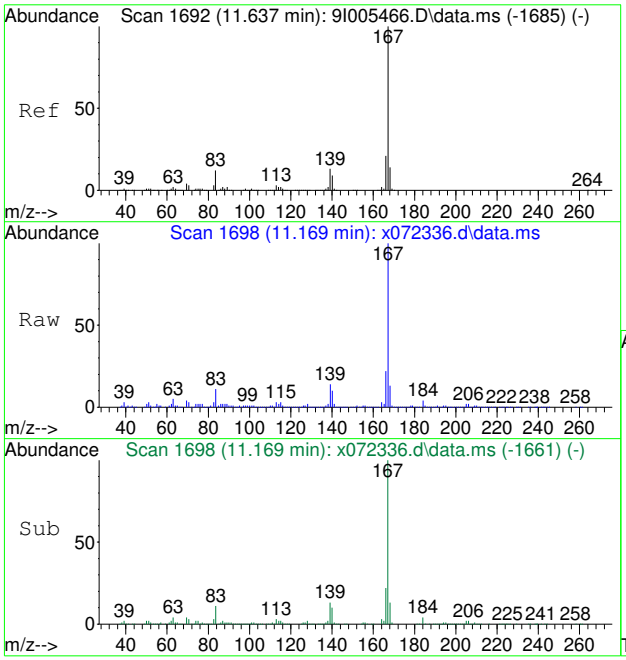


#85
Anthracene
Concen: 80.79 ppm
RT: 10.960 min Scan# 1659
Delta R.T. 0.005 min
Lab File: x072336.d
Acq: 11 Aug 2020 3:50 pm

Tgt Ion:178 Resp: 1346117

Ion	Ratio	Lower	Upper
178	100		
179	14.7	0.0	46.0
176	18.6	0.0	49.3

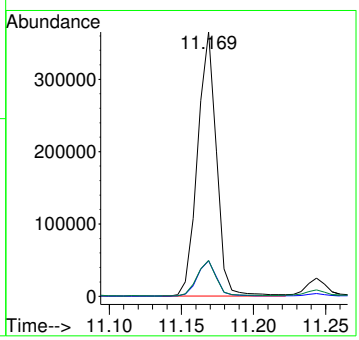


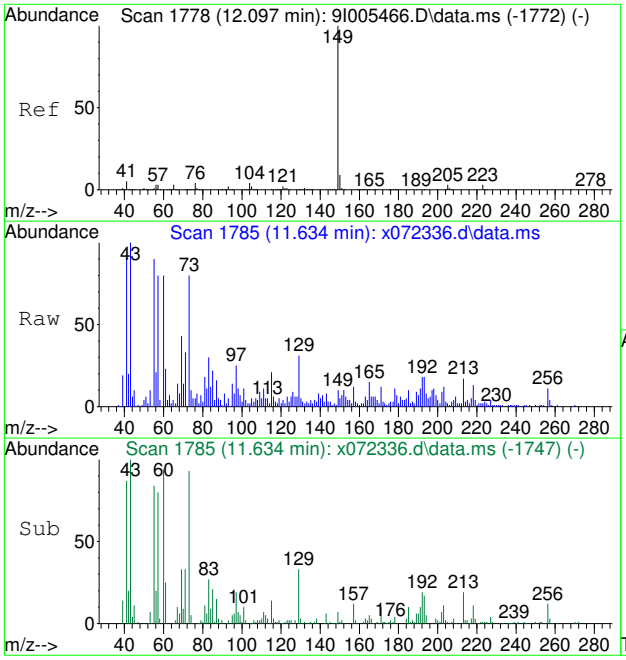


#87
Carbazole
Concen: 22.44 ppm
RT: 11.169 min Scan# 1698
Delta R.T. -0.000 min
Lab File: x072336.d
Acq: 11 Aug 2020 3:50 pm

Tgt Ion:167 Resp: 329989

Ion	Ratio	Lower	Upper
167	100		
168	13.4	0.0	43.9
139	13.4	0.0	42.7

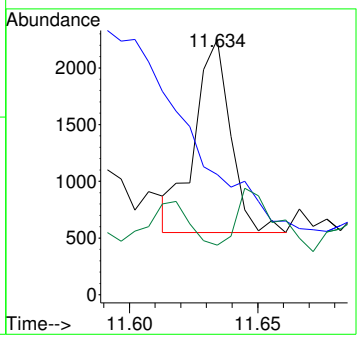


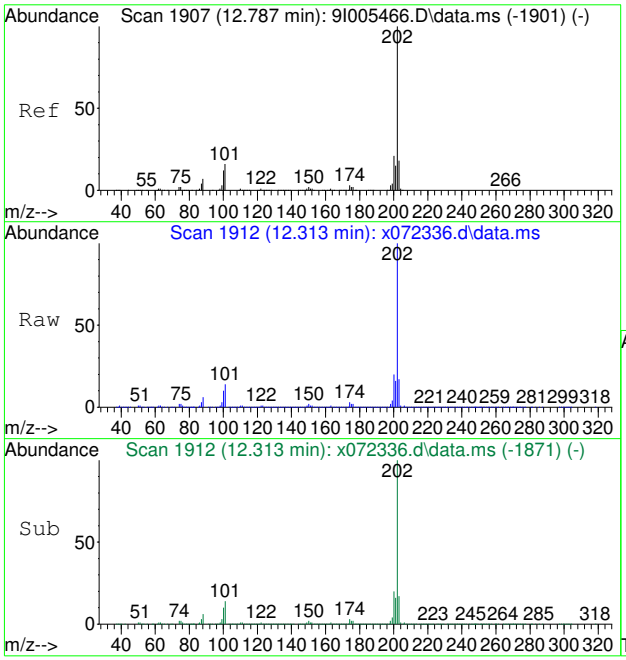


#89
Di-n-butylphthalate
Concen: 0.10 ppm
RT: 11.634 min Scan# 1785
Delta R.T. 0.005 min
Lab File: x072336.d
Acq: 11 Aug 2020 3:50 pm

Tgt Ion:149 Resp: 1658

Ion	Ratio	Lower	Upper
149	100		
150	0.0	0.0	39.5
104	0.0	0.0	34.2

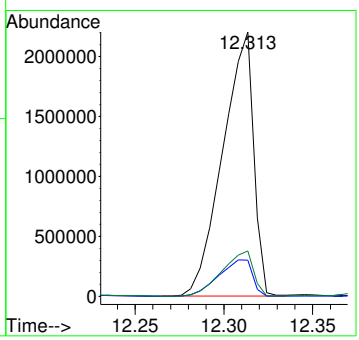


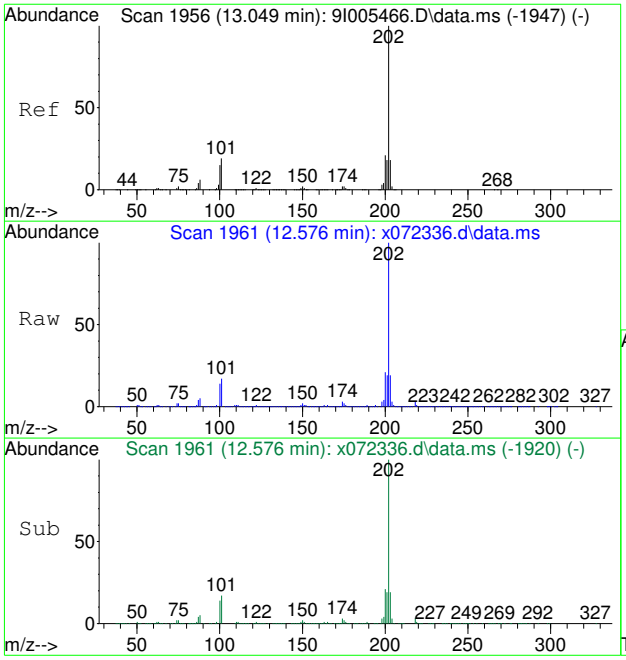


#91
Fluoranthene
Concen: 179.51 ppm
RT: 12.313 min Scan# 1912
Delta R.T. 0.021 min
Lab File: x072336.d
Acq: 11 Aug 2020 3:50 pm

Tgt Ion:202 Resp: 2662776

Ion	Ratio	Lower	Upper
202	100		
101	13.6	0.0	45.8
203	17.1	0.0	48.1

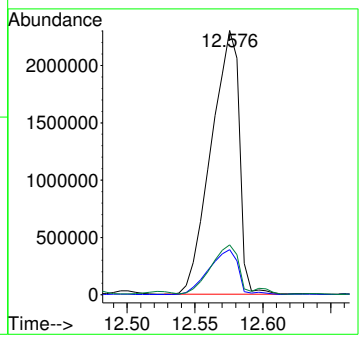


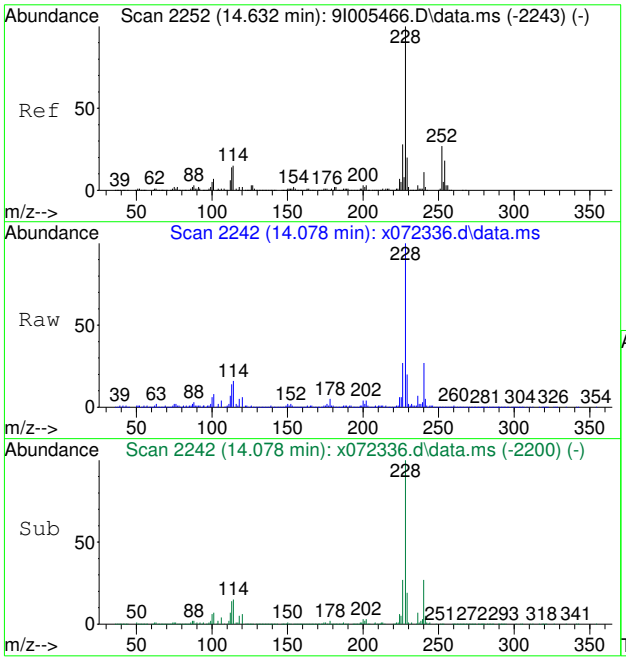


#94
Pyrene
Concen: 186.70 ppm
RT: 12.576 min Scan# 1961
Delta R.T. 0.021 min
Lab File: x072336.d
Acq: 11 Aug 2020 3:50 pm

Tgt Ion:202 Resp: 3305255

Ion	Ratio	Lower	Upper
202	100		
101	16.9	0.0	48.7
203	18.2	0.0	48.4

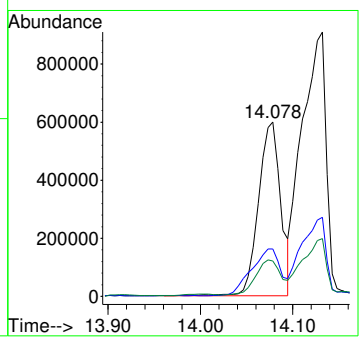


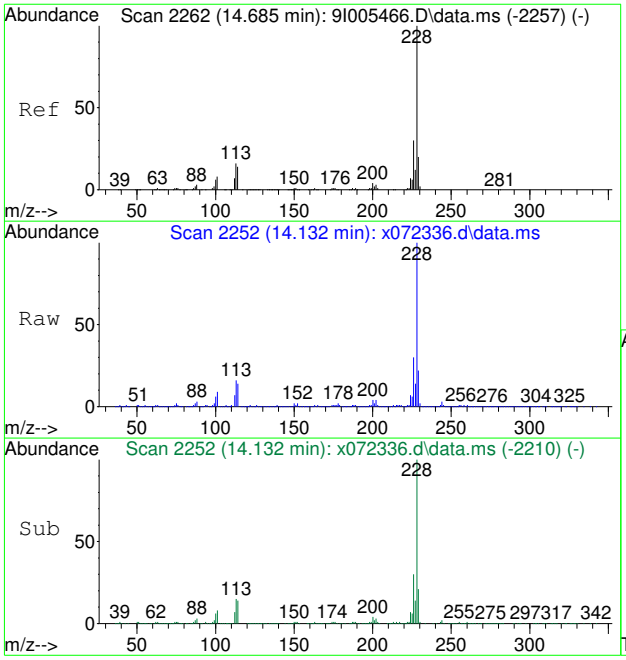


#99
Benzo[a]anthracene
Concen: 75.01 ppm
RT: 14.078 min Scan# 2242
Delta R.T. 0.027 min
Lab File: x072336.d
Acq: 11 Aug 2020 3:50 pm

Tgt Ion:228 Resp: 1005156

Ion	Ratio	Lower	Upper
228	100		
226	26.2	0.0	57.5
229	18.5	0.0	49.9

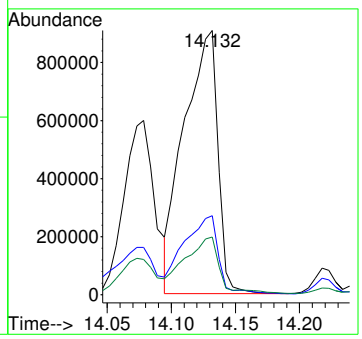


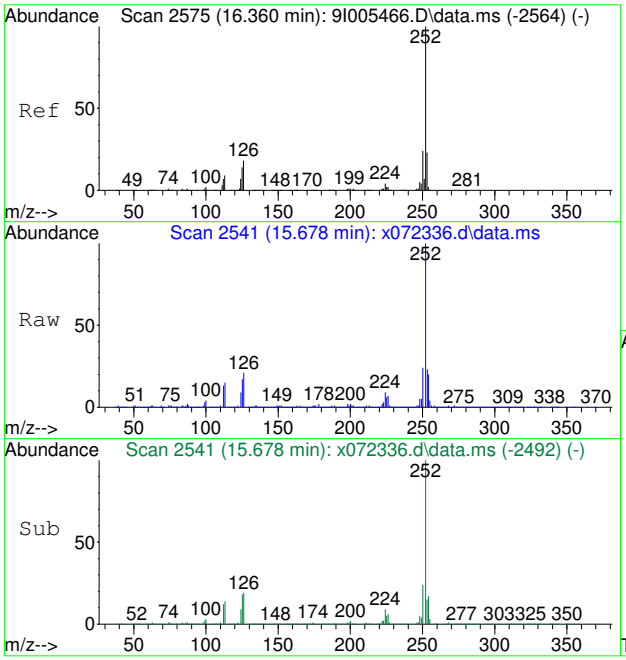


#100
Chrysene
Concen: 116.20 ppm
RT: 14.132 min Scan# 2252
Delta R.T. 0.027 min
Lab File: x072336.d
Acq: 11 Aug 2020 3:50 pm

Tgt Ion:228 Resp: 1658254

Ion	Ratio	Lower	Upper
228	100		
226	29.6	0.4	60.4
229	20.9	0.0	50.1

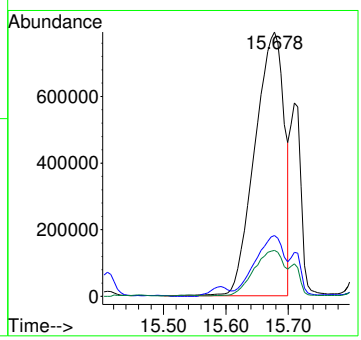


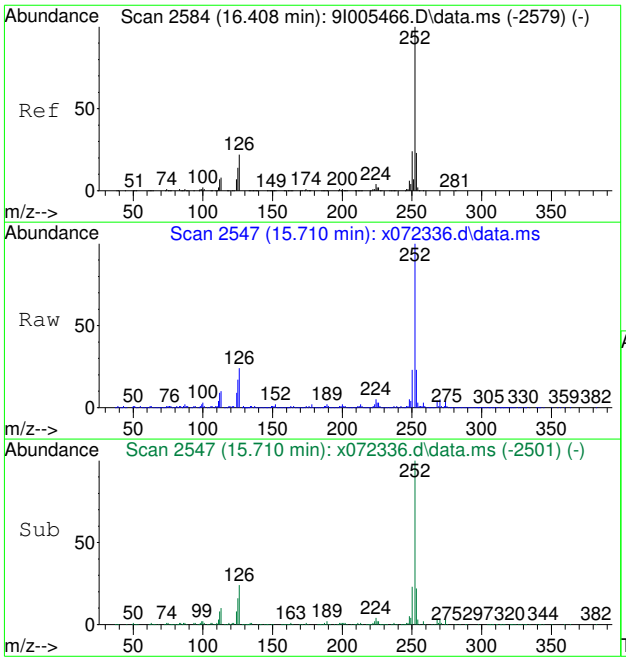


#104
Benzo[b]fluoranthene
Concen: 193.58 ppm
RT: 15.678 min Scan# 2541
Delta R.T. 0.064 min
Lab File: x072336.d
Acq: 11 Aug 2020 3:50 pm

Tgt Ion:252 Resp: 2591074

Ion	Ratio	Lower	Upper
252	100		
253	23.0	0.0	52.5
125	17.1	0.0	44.0

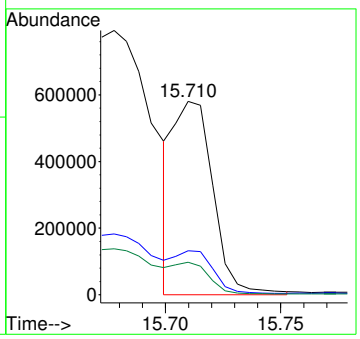


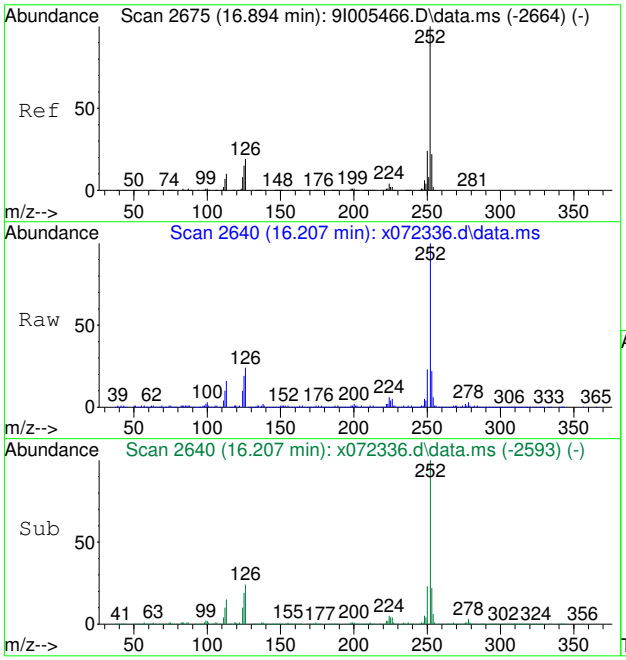


#105
Benzo[k]fluoranthene
Concen: 56.50 ppm m
RT: 15.710 min Scan# 2547
Delta R.T. 0.048 min
Lab File: x072336.d
Acq: 11 Aug 2020 3:50 pm

Tgt Ion:252 Resp: 694948

Ion	Ratio	Lower	Upper
252	100		
253	22.8	0.0	52.5
125	16.8	0.0	44.4

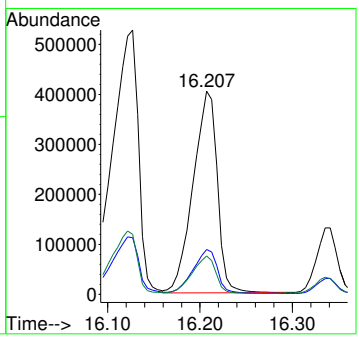


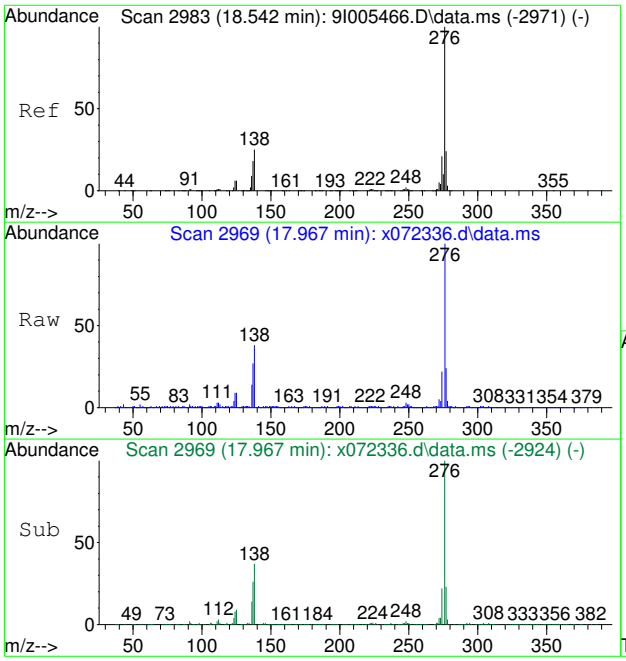


#106
Benzo[a]pyrene
Concen: 71.00 ppm
RT: 16.207 min Scan# 2640
Delta R.T. 0.053 min
Lab File: x072336.d
Acq: 11 Aug 2020 3:50 pm

Tgt Ion:252 Resp: 733765

Ion	Ratio	Lower	Upper
252	100		
253	21.6	0.0	52.3
125	18.4	0.0	44.7

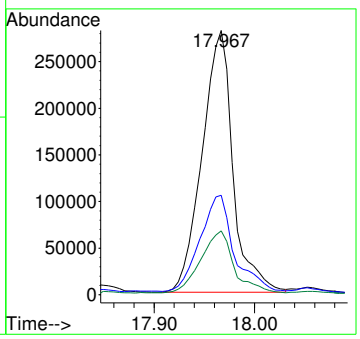


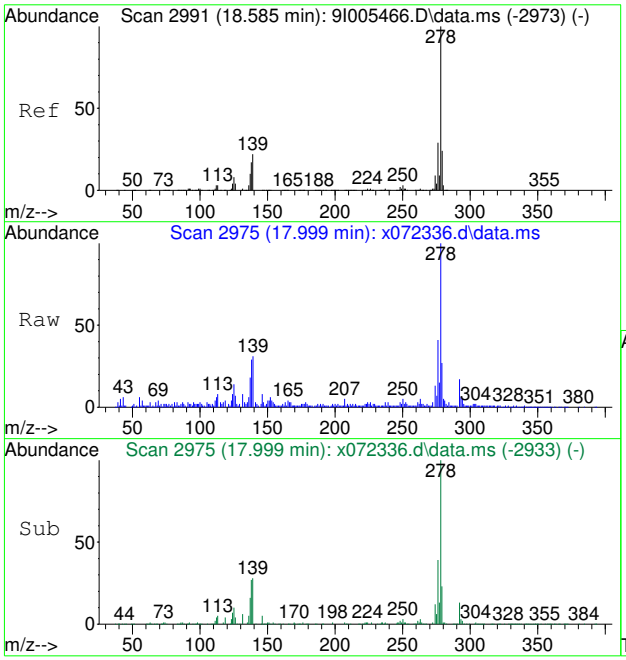


#107
Indeno[1,2,3-cd]pyrene
Concen: 76.58 ppm
RT: 17.967 min Scan# 2969
Delta R.T. 0.043 min
Lab File: x072336.d
Acq: 11 Aug 2020 3:50 pm

Tgt Ion:276 Resp: 598624

Ion	Ratio	Lower	Upper
276	100		
138	36.8	0.0	54.7
277	23.8	0.0	53.8

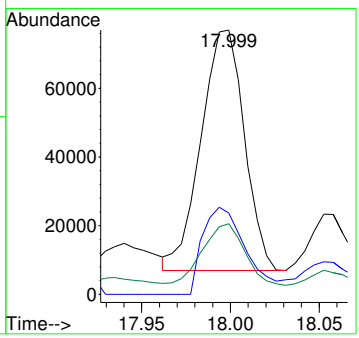


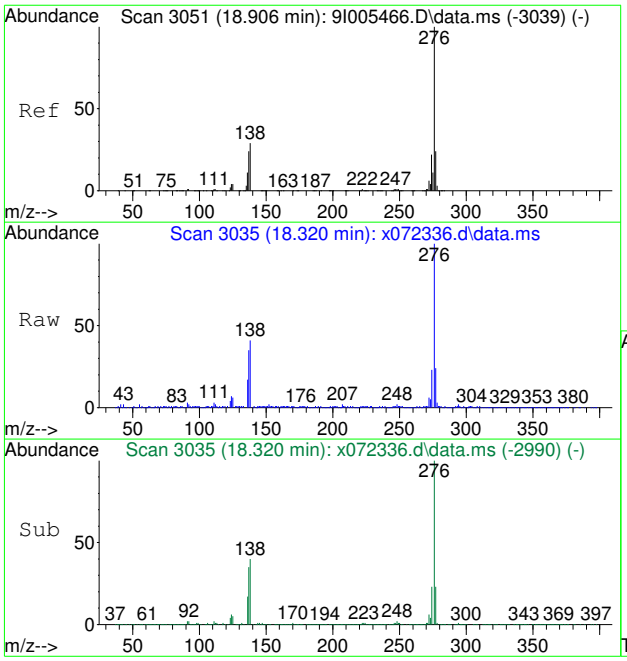


#108
Dibenz[a,h]anthracene
Concen: 18.95 ppm
RT: 17.999 min Scan# 2975
Delta R.T. 0.027 min
Lab File: x072336.d
Acq: 11 Aug 2020 3:50 pm

Tgt Ion:278 Resp: 118528

Ion	Ratio	Lower	Upper
278	100		
139	31.7	0.0	52.4
279	26.0	0.0	54.4

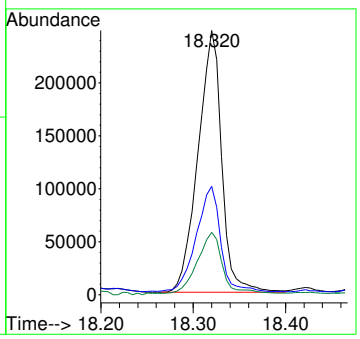




#109
Benzo[g,h,i]perylene
Concen: 46.63 ppm
RT: 18.320 min Scan# 3035
Delta R.T. 0.043 min
Lab File: x072336.d
Acq: 11 Aug 2020 3:50 pm

Tgt Ion:276 Resp: 441809

Ion	Ratio	Lower	Upper
276	100		
138	40.2	0.0	59.4
277	23.3	0.0	54.1



Manual Integration Approval Summary

Sample Number: FA77576-4
Lab FileID: X072336.D
Injection Time: 08/11/20 15:50

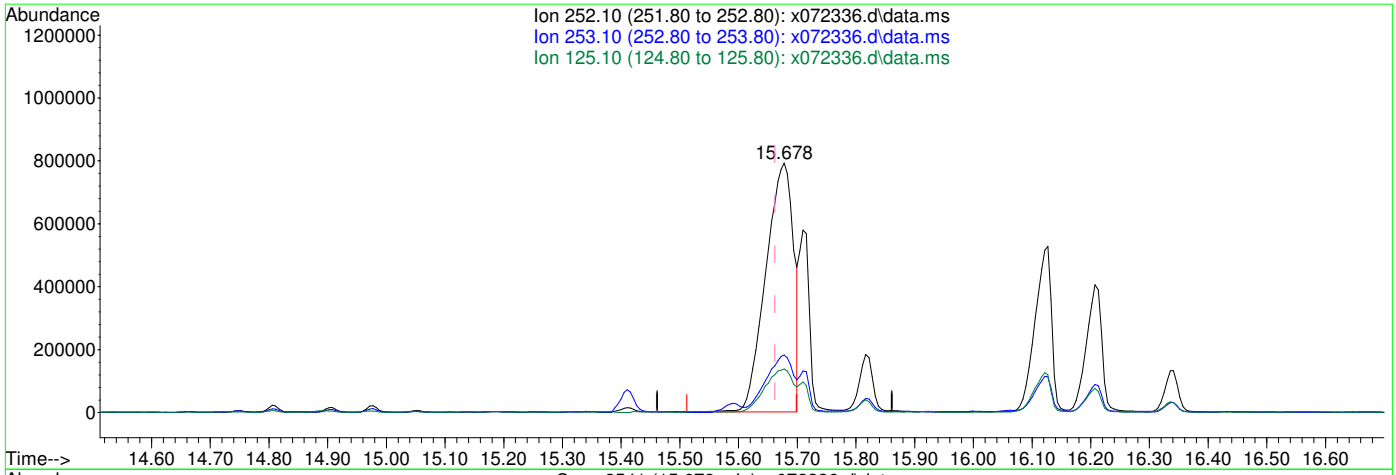
Method: SW846 8270E
Analyst approved: 08/12/20 15:58 Martha Valls
Supervisor approved: 08/12/20 16:38 Naresh Jiawan

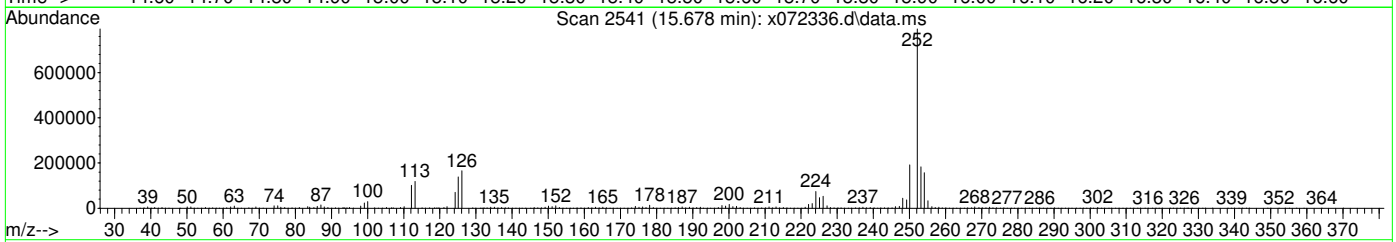
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(k)fluoranthene	207-08-9		15.71	Missed peak

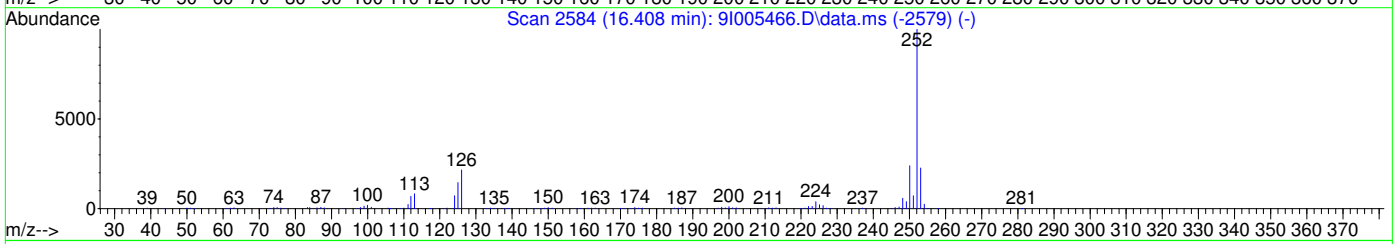
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072336.d
Acq On : 11 Aug 2020 3:50 pm
Operator : marthav
Sample : fa77576-4 E
Misc : op81482,sx2950,30.3,,,1,1,soil
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 12 01:47:21 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration







TIC: x072336.d\data.ms

(105) Benzo[k]fluoranthene (P)

15.678min (+0.016) 210.28ppm

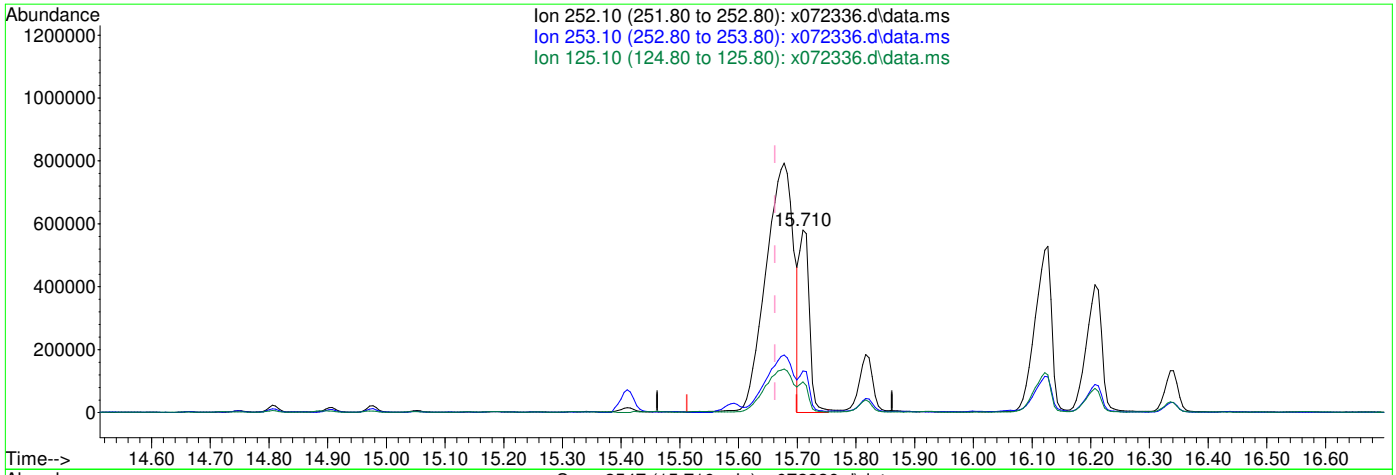
response 2586625

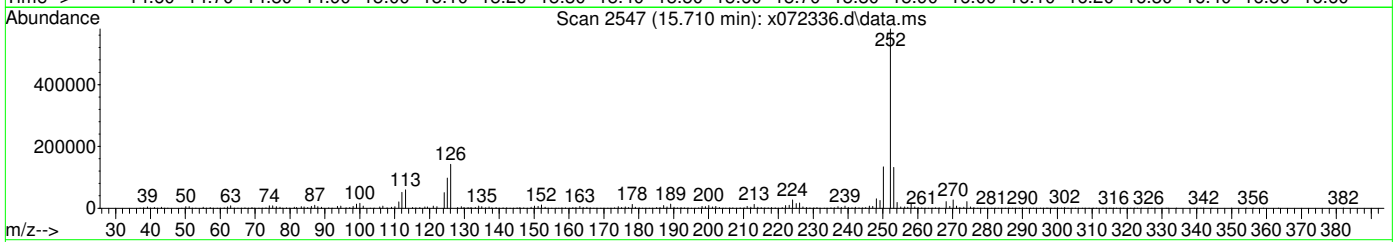
Ion	Exp%	Act%
252.10	100	100
253.10	22.50	23.29
125.10	14.40	17.10
0.00	0.00	0.00

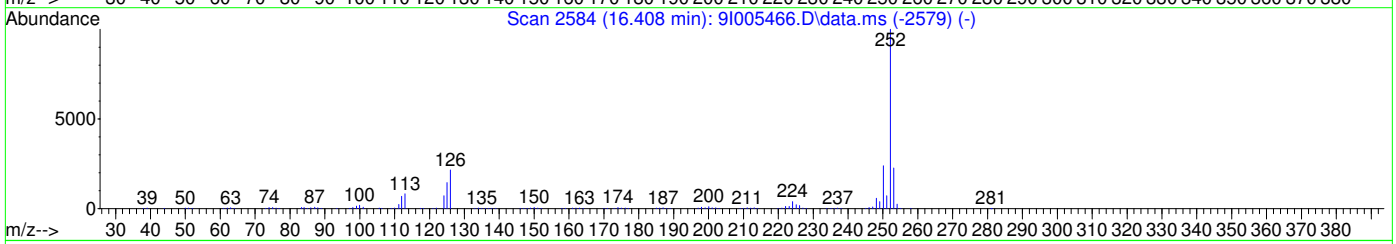
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072336.d
Acq On : 11 Aug 2020 3:50 pm
Operator : marthav
Sample : fa77576-4 E
Misc : op81482,sx2950,30.3,,,1,1,soil
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 12 01:47:21 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration







TIC: x072336.d\data.ms

(105) Benzo[k]fluoranthene (P)

15.710min (+0.048) 56.50ppm m

response 694948

Ion	Exp%	Act%
252.10	100	100
253.10	22.50	22.77
125.10	14.40	16.85
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072361.D
Acq On : 12 Aug 2020 12:07 pm
Operator : marthav
Sample : fa77576-4 E,5 Inst : MSBNA05
Misc : op81482,sx2950,30.3,,,1,5,soil
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 12 14:12:04 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.649	152	161302	40.00	ppm	0.00
22) Naphthalene-d8	7.072	136	614464	40.00	ppm	0.00
43) Acenaphthene-d10	9.115	164	296208	40.00	ppm	0.00
70) Phenanthrene-d10	10.859	188	511357	40.00	ppm	0.00
92) Chrysene-d12	14.068	240	430440	40.00	ppm	0.00
102) Perylene-d12	16.266	264	327737	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	5.649	152	161302	40.00	ppm	0.00
120) Naphthalene-d8A	7.072	136	614464	40.00	ppm	0.00
127) Acenaphthene-d10A	9.115	164	296208	40.00	ppm	0.00
136) Phenanthrene-d10A	10.859	188	511357	40.00	ppm	0.00
146) Chrysene-d12A	14.068	240	430440	40.00	ppm	0.00
153) Perylene-d12A	16.266	264	327737	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	4.307	112	82945	14.34	ppm	0.00
Spiked Amount 100.000	Range 40 - 102		Recovery = 14.34%#			
9) Phenol-d5	5.328	99	100943	14.67	ppm	0.00
Spiked Amount 100.000	Range 41 - 100		Recovery = 14.67%#			
23) Nitrobenzene-d5	6.264	82	43401	6.84	ppm	-0.01
Spiked Amount 50.000	Range 40 - 105		Recovery = 13.68%#			
47) 2-Fluorobiphenyl	8.345	172	77600	7.24	ppm	0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 14.48%#			
75) 2,4,6-Tribromophenol	10.046	330	14369	14.96	ppm	-0.01
Spiked Amount 100.000	Range 42 - 108		Recovery = 14.96%#			
95) Terphenyl-d14	12.773	244	78381	6.85	ppm	0.00
Spiked Amount 50.000	Range 45 - 119		Recovery = 13.70%#			
Target Compounds						Qvalue
24) Nitrobenzene	6.286	77	1059	0.17	ppm	89
30) Benzoic Acid	6.853	105	1498	0.40	ppm	# 78
34) Naphthalene	7.093	128	2732	0.16	ppm	92
40) 2-Methylnaphthalene	7.901	142	1236	0.11	ppm	96
41) 1-Methylnaphthalene	8.013	142	867	0.08	ppm	81
48) 1,1'-Biphenyl	8.452	154	583	0.05	ppm	89
52) Acenaphthylene	8.944	152	67290	4.55	ppm	98
57) Acenaphthene	9.147	153	4107	0.42	ppm	94
60) Dibenzofuran	9.356	168	3288	0.25	ppm	93
65) Fluorene	9.757	166	7412	0.72	ppm	100
84) Phenanthrene	10.885	178	61820	4.00	ppm	98
85) Anthracene	10.944	178	158386	9.83	ppm	98
87) Carbazole	11.158	167	50110	3.53	ppm	99
91) Fluoranthene	12.287	202	491618	34.29	ppm	99
94) Pyrene	12.549	202	636269	35.60	ppm	99
99) Benzo[a]anthracene	14.052	228	165349	12.22	ppm	97
100) Chrysene	14.100	228	329189	22.85	ppm	99
104) Benzo[b]fluoranthene	15.624	252	429564	44.63	ppm	97
105) Benzo[k]fluoranthene	15.656	252	147562	12.68	ppm	97
106) Benzo[a]pyrene	16.159	252	125282	14.56	ppm	96
107) Indeno[1,2,3-cd]pyrene	17.924	276	103839	19.62	ppm	88

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072361.D
Acq On : 12 Aug 2020 12:07 pm
Operator : marthav
Sample : fa77576-4 E,5 Inst : MSBNA05
Misc : op81482,sx2950,30.3,,,1,5,soil
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 12 14:12:04 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration

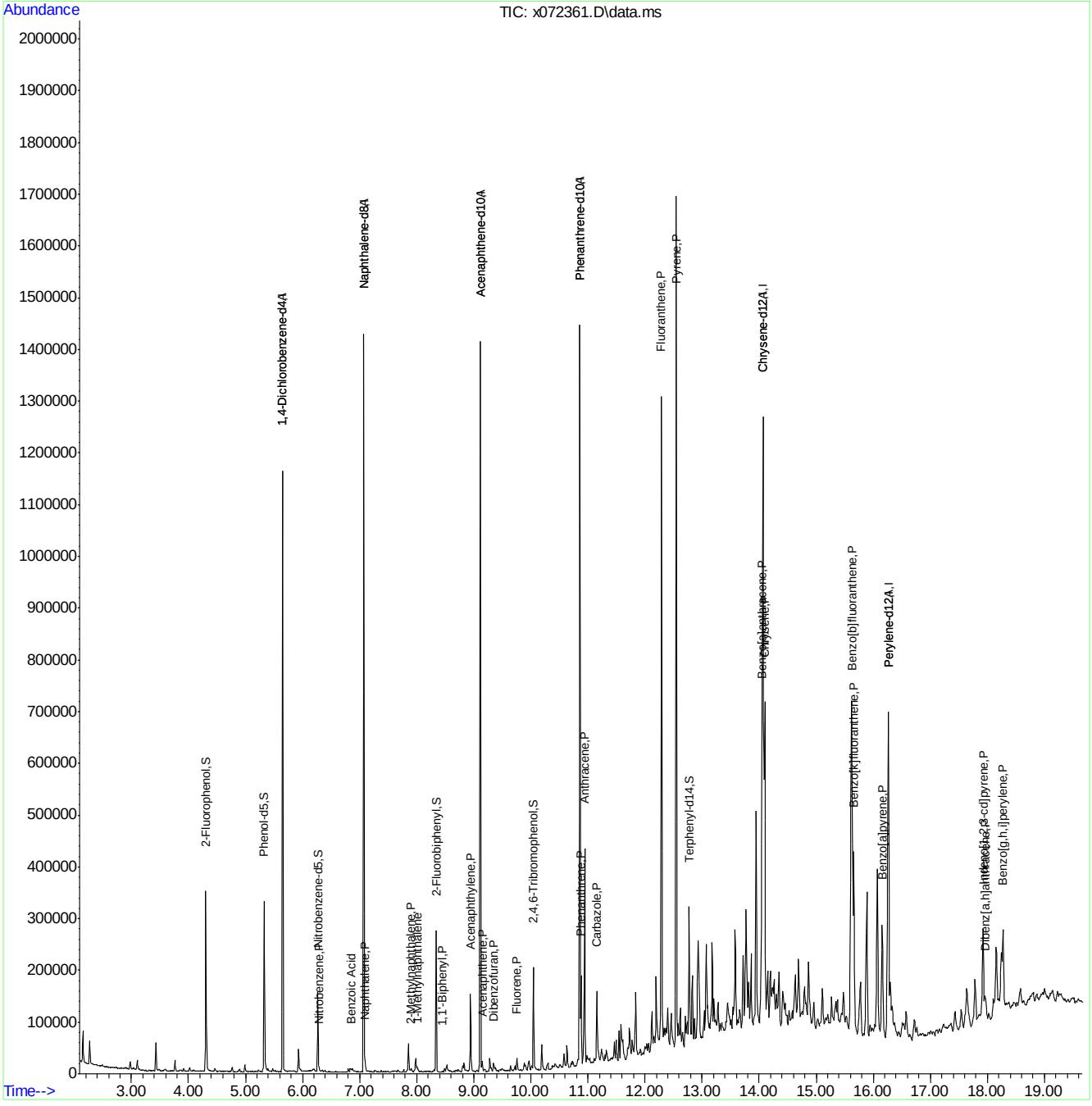
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
108) Dibenz[a,h]anthracene	17.962	278	20664	3.95	ppm	84
109) Benzo[g,h,i]perylene	18.277	276	80934	10.46	ppm	88

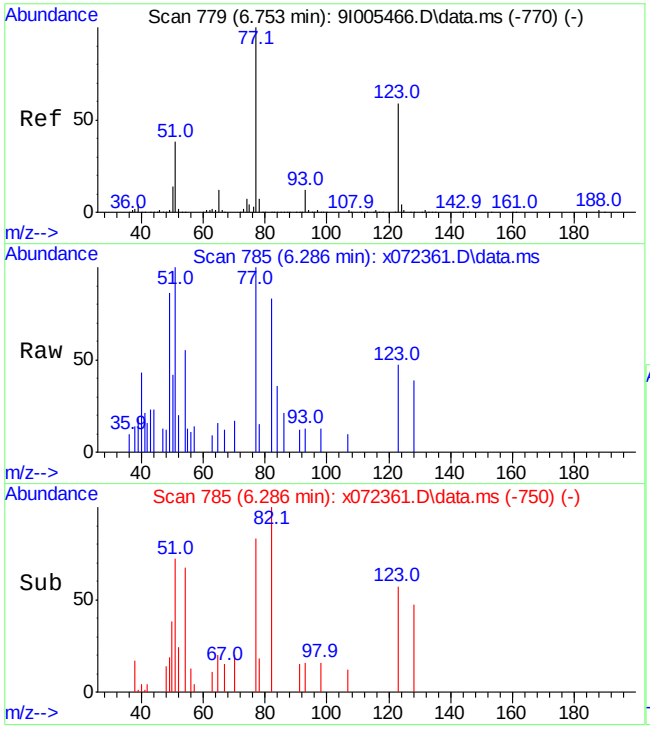
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072361.D
Acq On : 12 Aug 2020 12:07 pm
Operator : marthav
Sample : fa77576-4 E,5 Inst : MSBNA05
Misc : op81482,sx2950,30.3,,,1,5,soil
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 12 14:12:04 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration

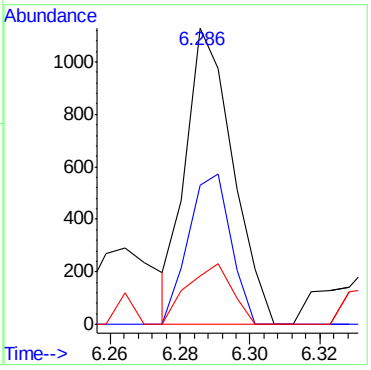


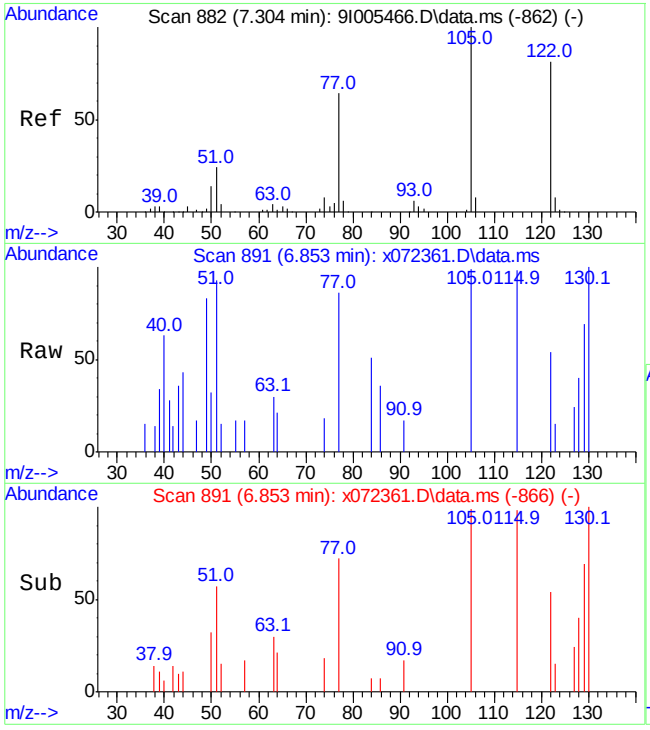


#24
Nitrobenzene
Concen: 0.17 ppm
RT: 6.286 min Scan# 785
Delta R.T. -0.011 min
Lab File: x072361.D
Acq: 12 Aug 2020 12:07 pm

Tgt Ion: 77 Resp: 1059

Ion	Ratio	Lower	Upper
77	100		
123	51.4	28.7	88.7
65	18.1	0.0	42.1

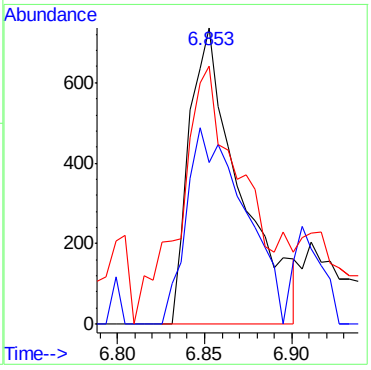


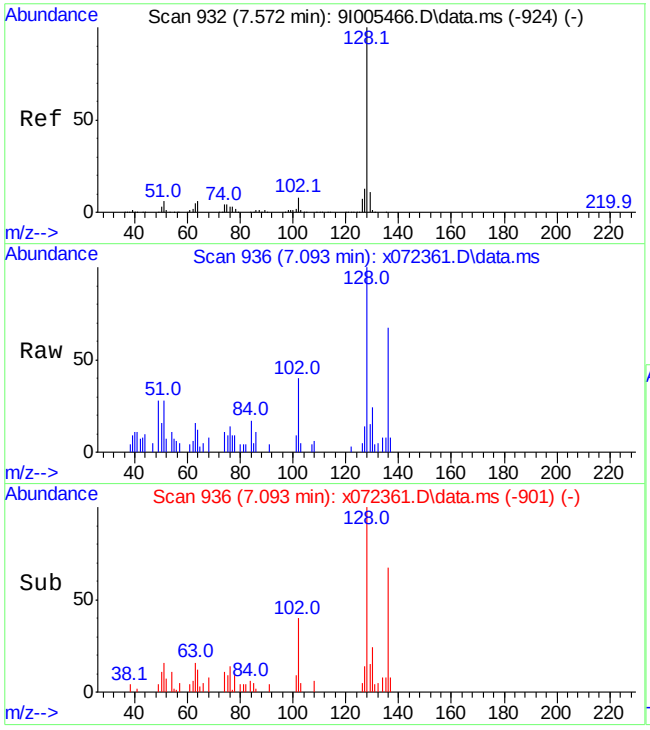


#30
Benzoic Acid
Concen: 0.40 ppm
RT: 6.853 min Scan# 891
Delta R.T. -0.064 min
Lab File: x072361.D
Acq: 12 Aug 2020 12:07 pm

Tgt Ion:105 Resp: 1498

Ion	Ratio	Lower	Upper
105	100		
122	49.8	51.2	111.2#
77	68.4	34.1	94.1

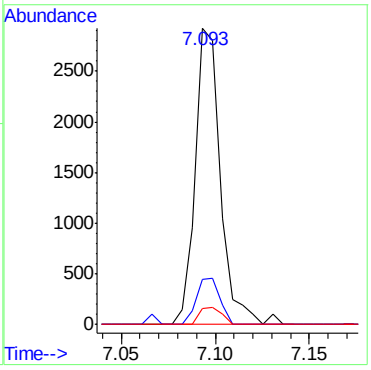


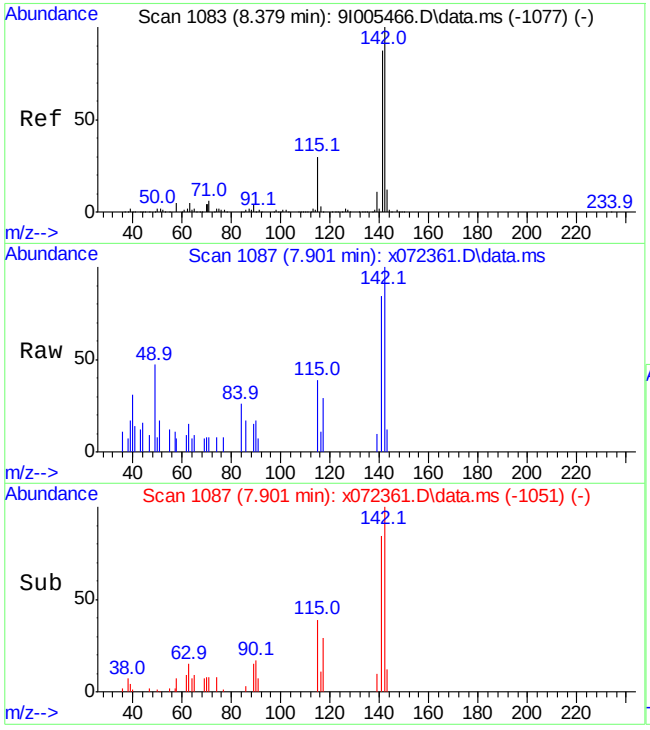


#34
Naphthalene
Concen: 0.16 ppm
RT: 7.093 min Scan# 936
Delta R.T. -0.011 min
Lab File: x072361.D
Acq: 12 Aug 2020 12:07 pm

Tgt Ion:128 Resp: 2732

Ion	Ratio	Lower	Upper
128	100		
129	15.2	0.0	41.4
126	5.3	0.0	37.4

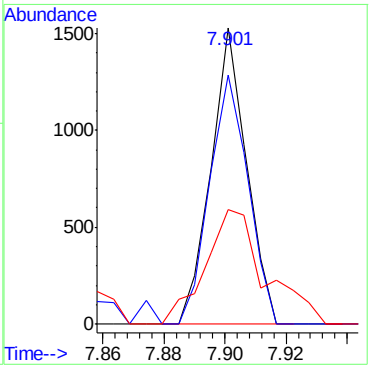


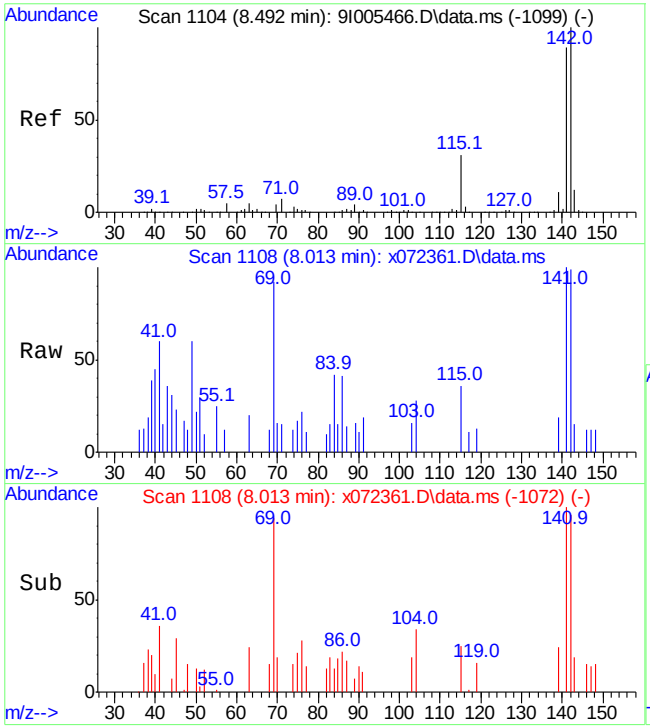


#40
2-Methylnaphthalene
Concen: 0.11 ppm
RT: 7.901 min Scan# 1087
Delta R.T. -0.005 min
Lab File: x072361.D
Acq: 12 Aug 2020 12:07 pm

Tgt Ion:142 Resp: 1236

Ion	Ratio	Lower	Upper
142	100		
141	84.0	56.8	116.8
115	32.9	0.0	60.0

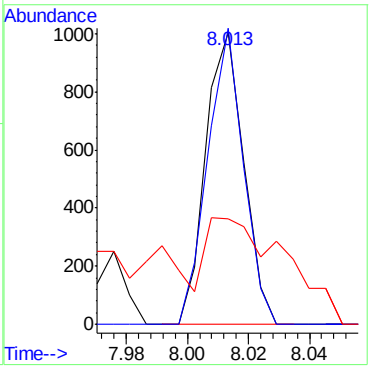


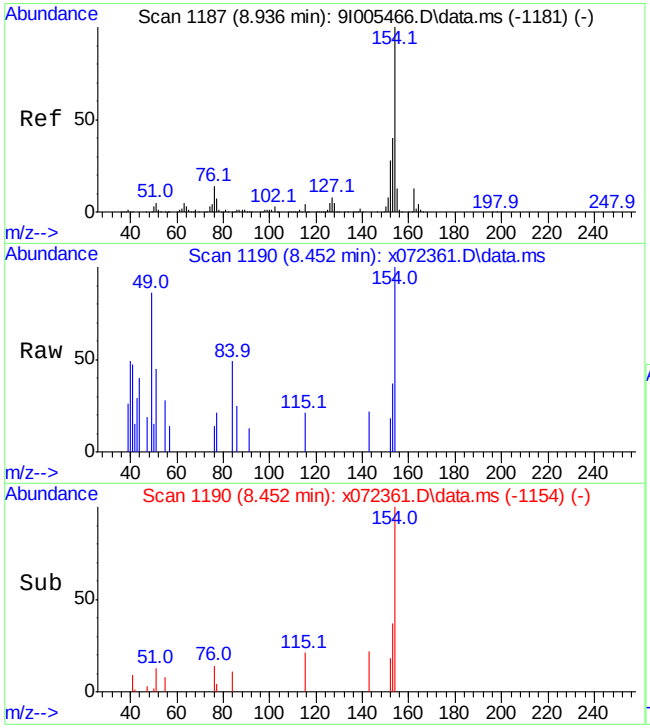


#41
1-Methylnaphthalene
Concen: 0.08 ppm
RT: 8.013 min Scan# 1108
Delta R.T. -0.005 min
Lab File: x072361.D
Acq: 12 Aug 2020 12:07 pm

Tgt Ion:142 Resp: 867

Ion	Ratio	Lower	Upper
142	100		
141	101.5	59.0	119.0
115	11.7	1.1	61.1

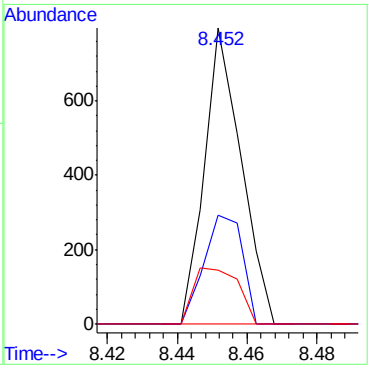


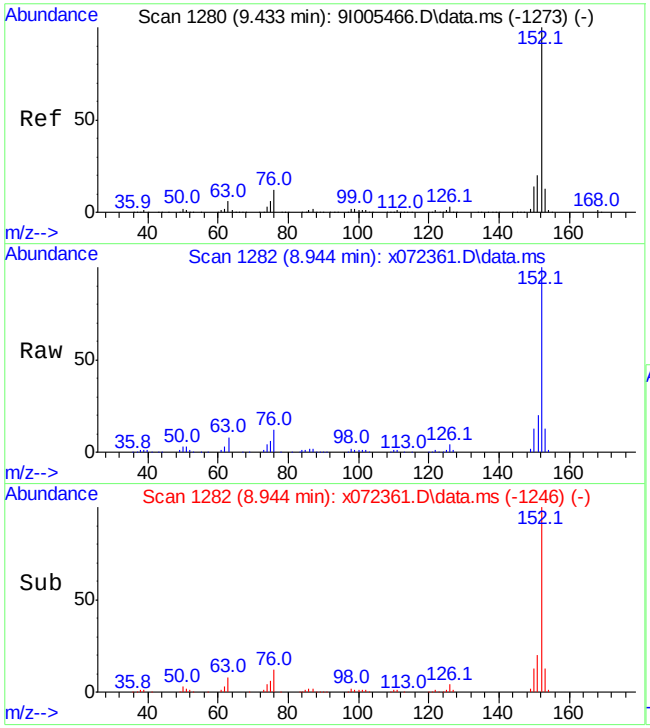


#48
1,1'-Biphenyl
Concen: 0.05 ppm
RT: 8.452 min Scan# 1190
Delta R.T. -0.005 min
Lab File: x072361.D
Acq: 12 Aug 2020 12:07 pm

Tgt Ion:154 Resp: 583

Ion	Ratio	Lower	Upper
154	100		
153	36.8	10.3	70.3
152	18.3	0.0	58.2

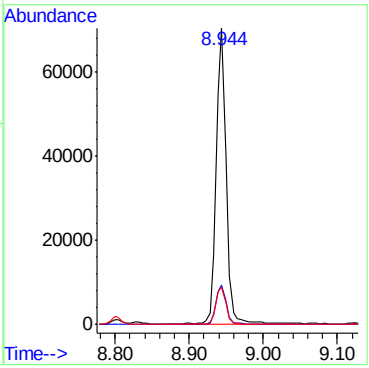


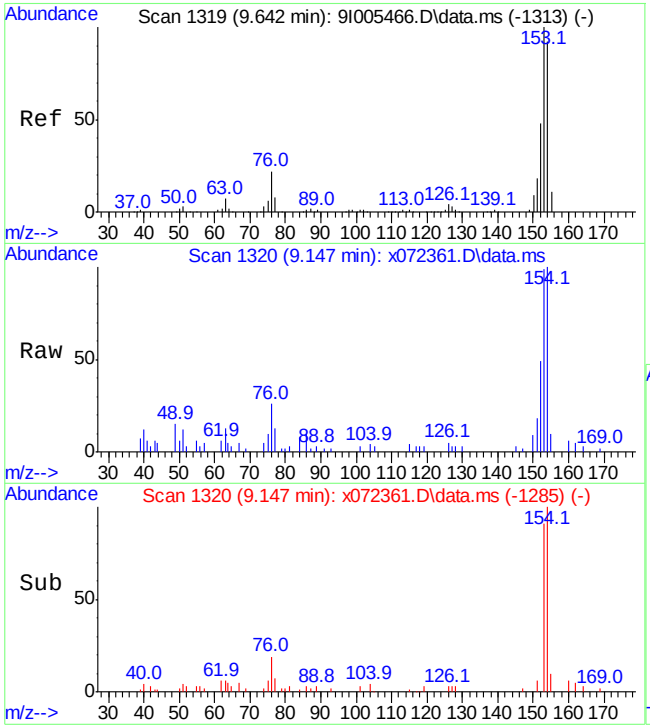


#52
Acenaphthylene
Concen: 4.55 ppm
RT: 8.944 min Scan# 1282
Delta R.T. -0.005 min
Lab File: x072361.D
Acq: 12 Aug 2020 12:07 pm

Tgt Ion:152 Resp: 67290

Ion	Ratio	Lower	Upper
152	100		
150	13.3	0.0	44.3
153	12.5	0.0	43.3

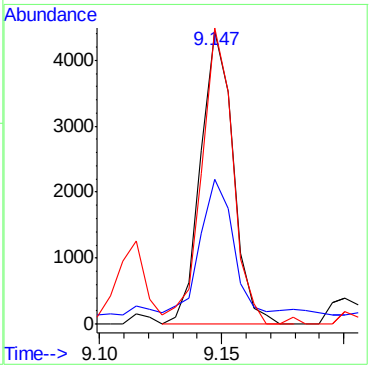


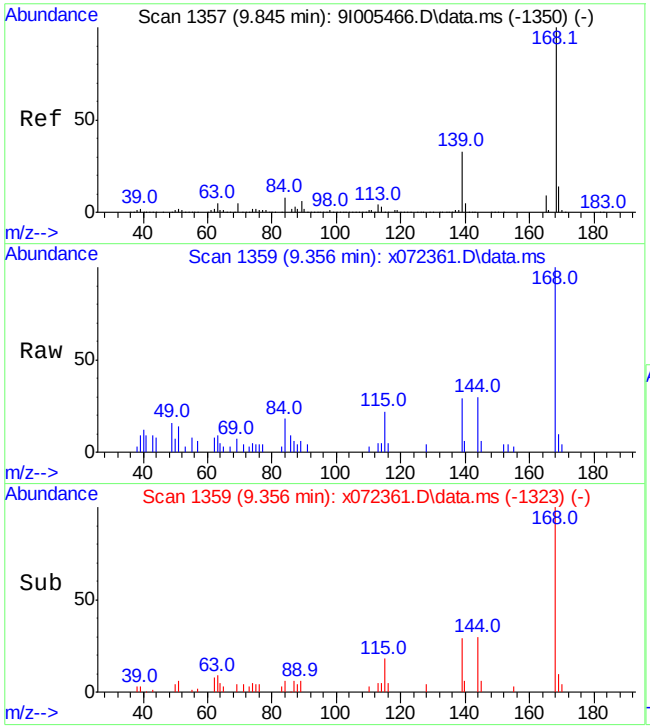


#57
Acenaphthene
Concen: 0.42 ppm
RT: 9.147 min Scan# 1320
Delta R.T. -0.011 min
Lab File: x072361.D
Acq: 12 Aug 2020 12:07 pm

Tgt Ion:153 Resp: 4107

Ion	Ratio	Lower	Upper
153	100		
152	44.8	18.4	78.4
154	98.2	62.4	122.4

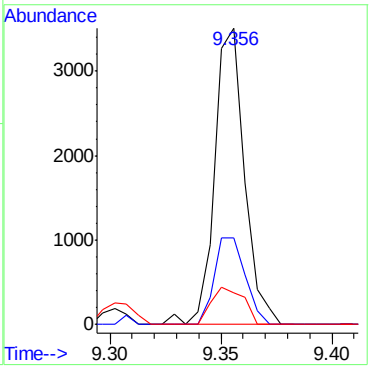


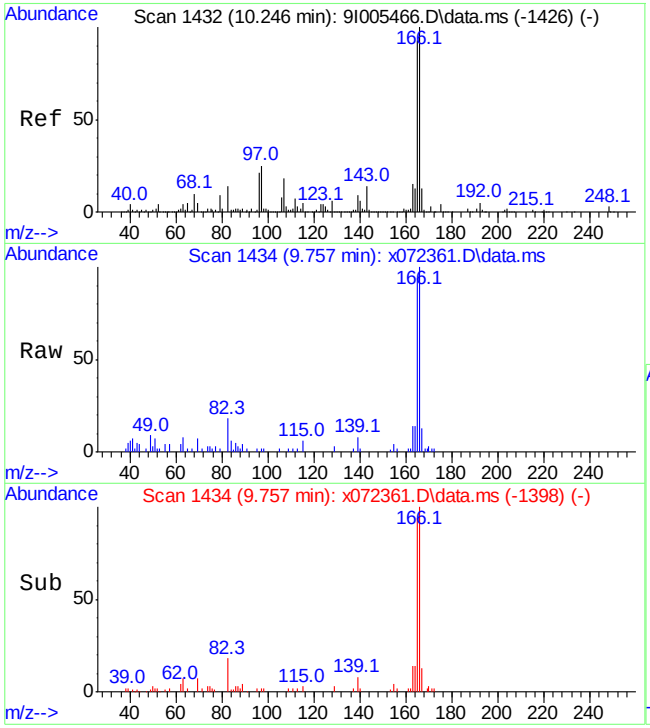


#60
Dibenzofuran
Concen: 0.25 ppm
RT: 9.356 min Scan# 1359
Delta R.T. -0.005 min
Lab File: x072361.D
Acq: 12 Aug 2020 12:07 pm

Tgt Ion:168 Resp: 3288

Ion	Ratio	Lower	Upper
168	100		
139	29.4	3.0	63.0
169	10.5	0.0	43.5

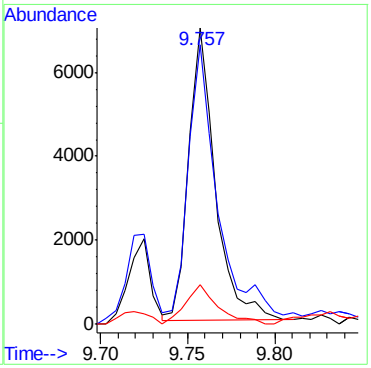


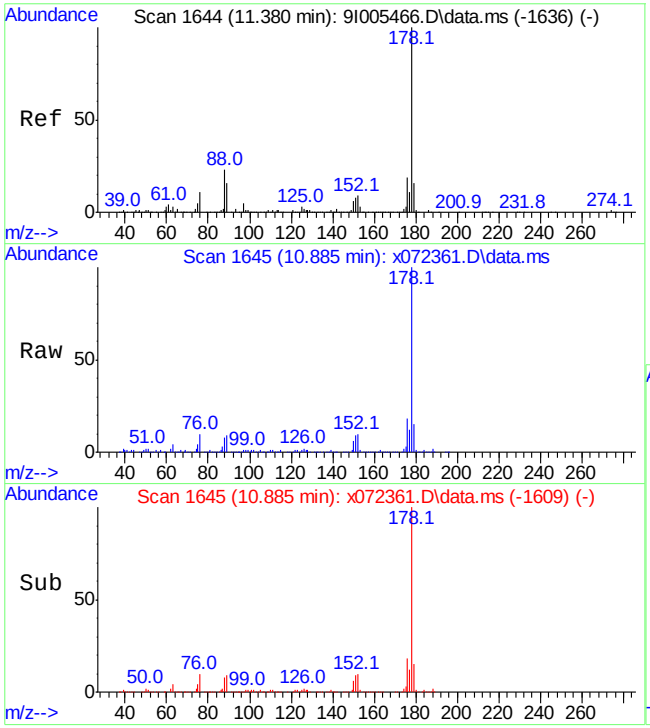


#65
Fluorene
Concen: 0.72 ppm
RT: 9.757 min Scan# 1434
Delta R.T. -0.005 min
Lab File: x072361.D
Acq: 12 Aug 2020 12:07 pm

Tgt Ion:166 Resp: 7412

Ion	Ratio	Lower	Upper
166	100		
165	92.5	62.7	122.7
167	12.5	0.0	43.5

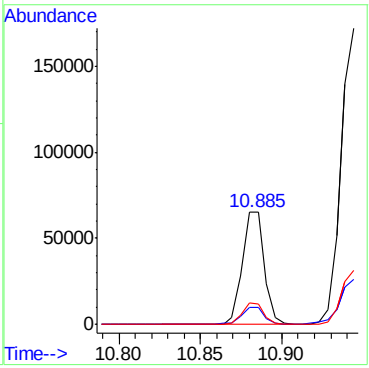


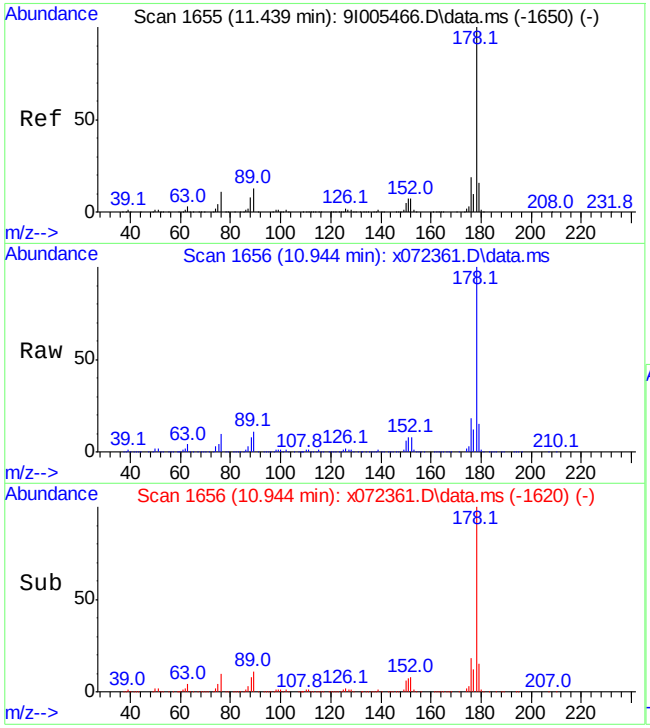


#84
Phenanthrene
Concen: 4.00 ppm
RT: 10.885 min Scan# 1645
Delta R.T. -0.005 min
Lab File: x072361.D
Acq: 12 Aug 2020 12:07 pm

Tgt Ion:178 Resp: 61820

Ion	Ratio	Lower	Upper
178	100		
179	15.0	0.0	45.8
176	18.1	0.0	49.3

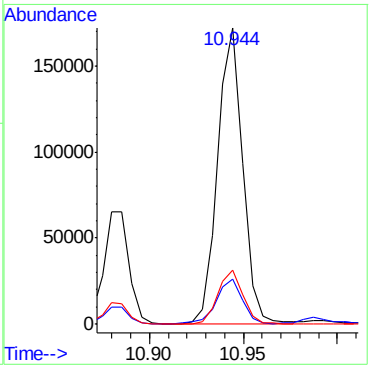


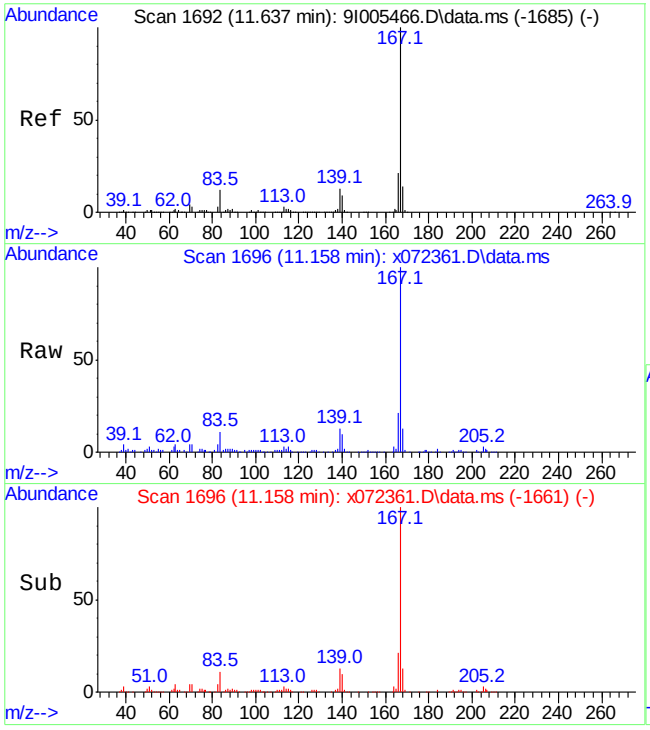


#85
Anthracene
Concen: 9.83 ppm
RT: 10.944 min Scan# 1656
Delta R.T. -0.005 min
Lab File: x072361.D
Acq: 12 Aug 2020 12:07 pm

Tgt Ion:178 Resp: 158386

Ion	Ratio	Lower	Upper
178	100		
179	15.0	0.0	46.0
176	18.3	0.0	49.3

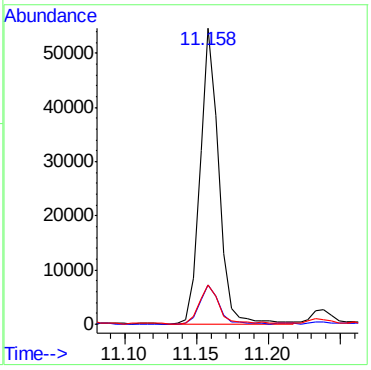


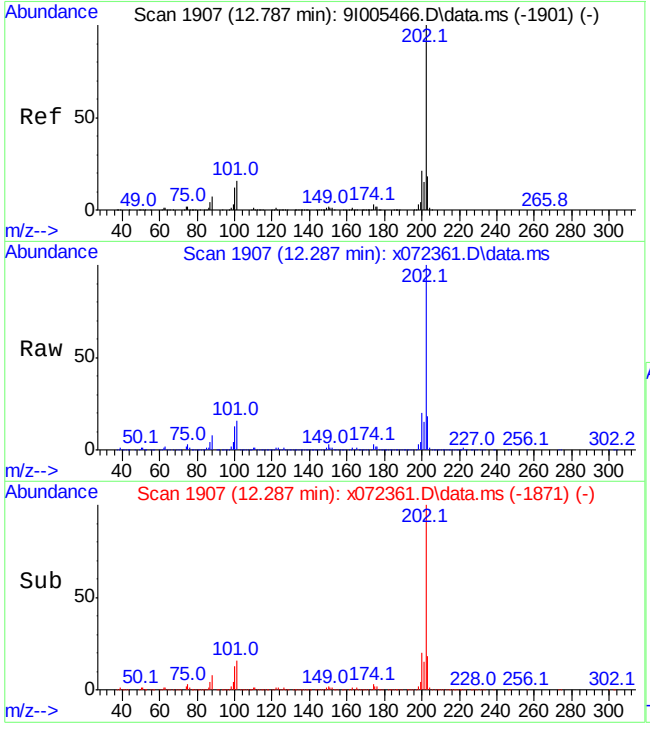


#87
Carbazole
Concen: 3.53 ppm
RT: 11.158 min Scan# 1696
Delta R.T. -0.011 min
Lab File: x072361.D
Acq: 12 Aug 2020 12:07 pm

Tgt Ion:167 Resp: 50110

Ion	Ratio	Lower	Upper
167	100		
168	13.2	0.0	43.9
139	12.8	0.0	42.7

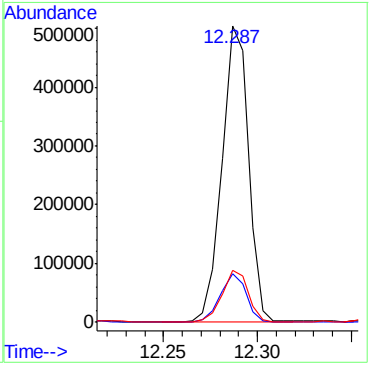


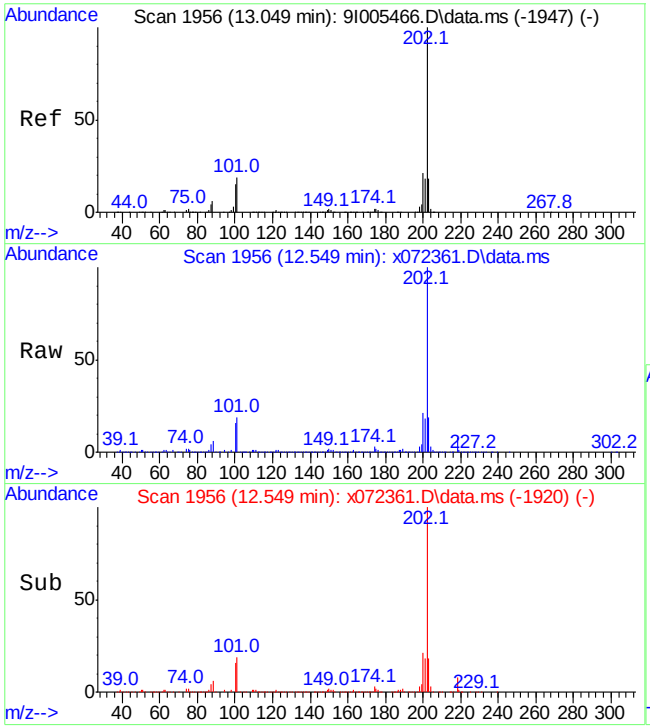


#91
Fluoranthene
Concen: 34.29 ppm
RT: 12.287 min Scan# 1907
Delta R.T. -0.005 min
Lab File: x072361.D
Acq: 12 Aug 2020 12:07 pm

Tgt Ion:202 Resp: 491618

Ion	Ratio	Lower	Upper
202	100		
101	16.2	0.0	45.8
203	17.6	0.0	48.1

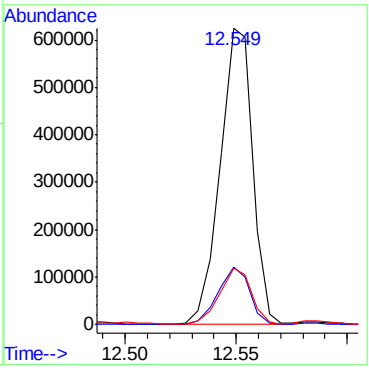


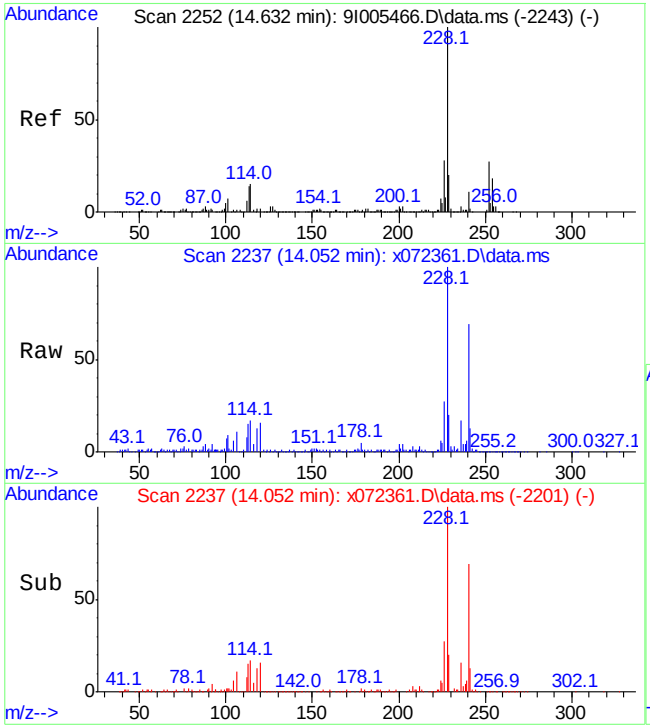


#94
Pyrene
Concen: 35.60 ppm
RT: 12.549 min Scan# 1956
Delta R.T. -0.005 min
Lab File: x072361.D
Acq: 12 Aug 2020 12:07 pm

Tgt Ion:202 Resp: 636269

Ion	Ratio	Lower	Upper
202	100		
101	19.3	0.0	48.7
203	18.6	0.0	48.4

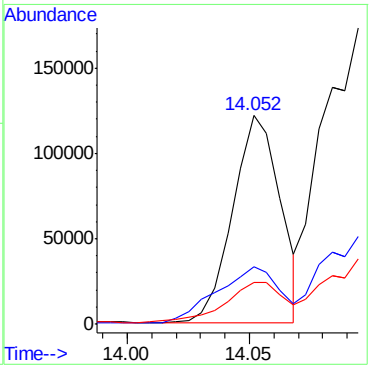


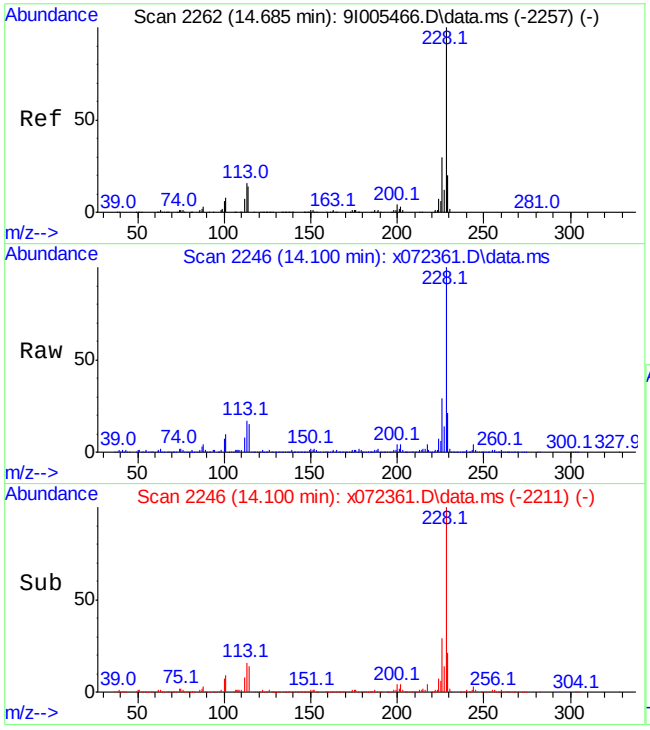


#99
Benzo[a]anthracene
Concen: 12.22 ppm
RT: 14.052 min Scan# 2237
Delta R.T. -0.005 min
Lab File: x072361.D
Acq: 12 Aug 2020 12:07 pm

Tgt Ion:228 Resp: 165349

Ion	Ratio	Lower	Upper
228	100		
226	26.7	0.0	57.5
229	17.3	0.0	49.9

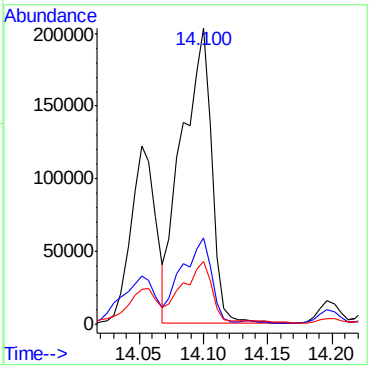


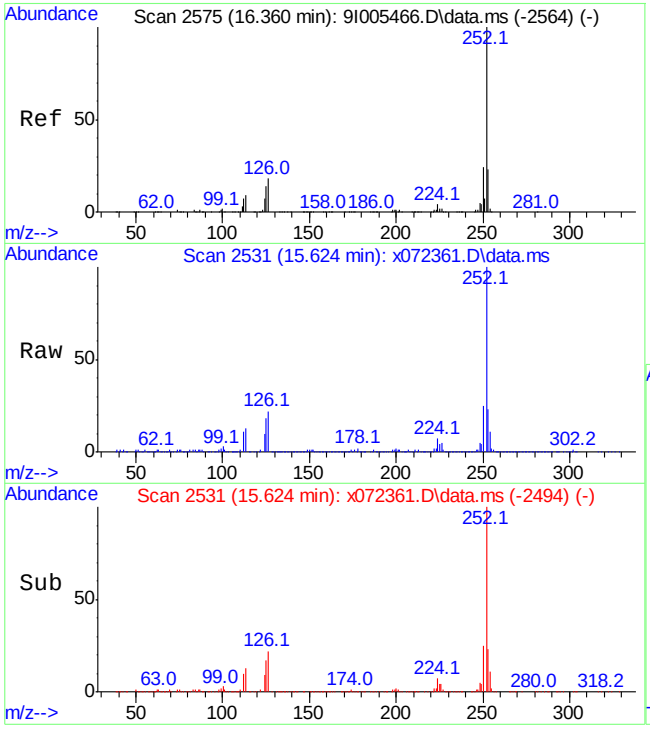


#100
Chrysene
Concen: 22.85 ppm
RT: 14.100 min Scan# 2246
Delta R.T. -0.011 min
Lab File: x072361.D
Acq: 12 Aug 2020 12:07 pm

Tgt Ion:228 Resp: 329189

Ion	Ratio	Lower	Upper
228	100		
226	29.2	0.4	60.4
229	20.2	0.0	50.1

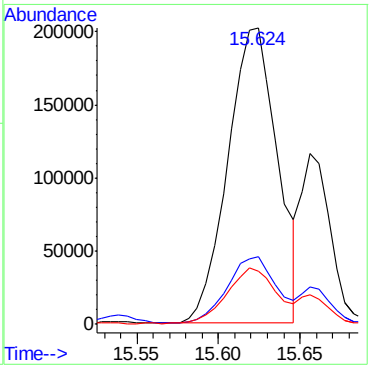


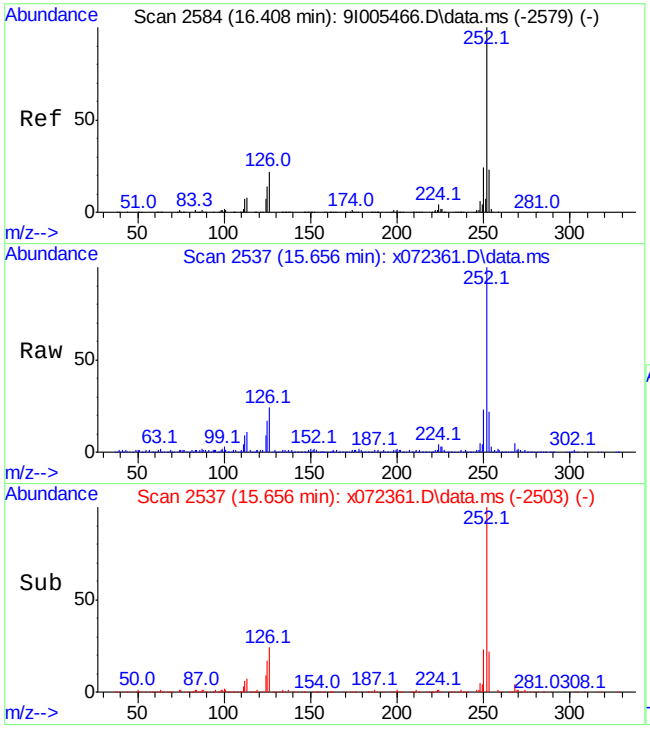


#104
Benzo[b]fluoranthene
Concen: 44.63 ppm
RT: 15.624 min Scan# 2531
Delta R.T. -0.000 min
Lab File: x072361.D
Acq: 12 Aug 2020 12:07 pm

Tgt Ion:252 Resp: 429564

Ion	Ratio	Lower	Upper
252	100		
253	22.6	0.0	52.5
125	17.3	0.0	44.0

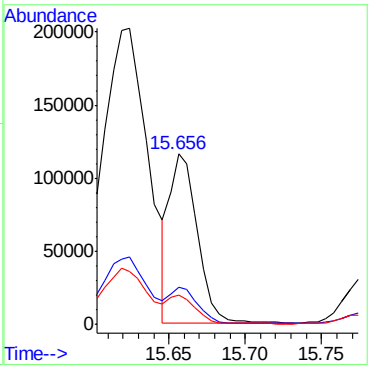


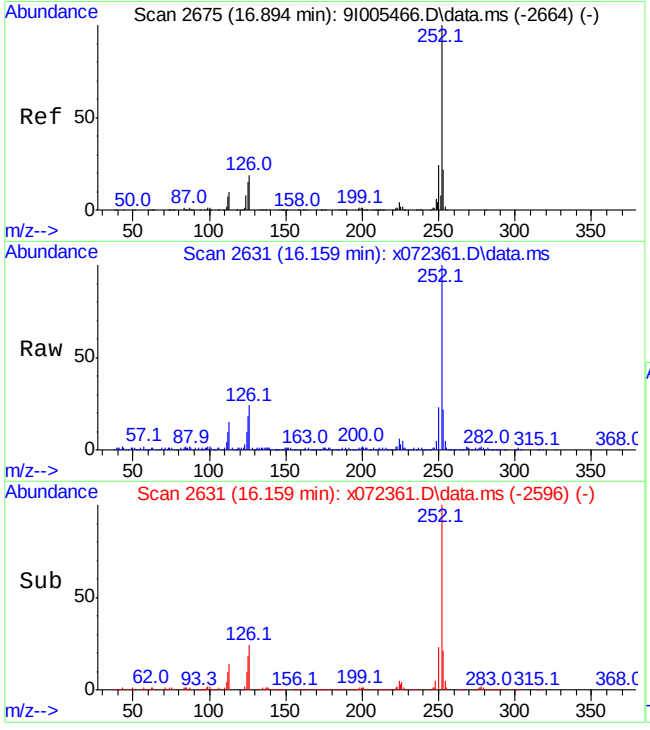


#105
Benzo[k]fluoranthene
Concen: 12.68 ppm
RT: 15.656 min Scan# 2537
Delta R.T. -0.016 min
Lab File: x072361.D
Acq: 12 Aug 2020 12:07 pm

Tgt Ion:252 Resp: 147562

Ion	Ratio	Lower	Upper
252	100		
253	21.0	0.0	52.5
125	16.0	0.0	44.4

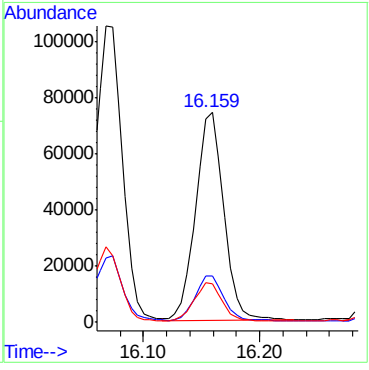


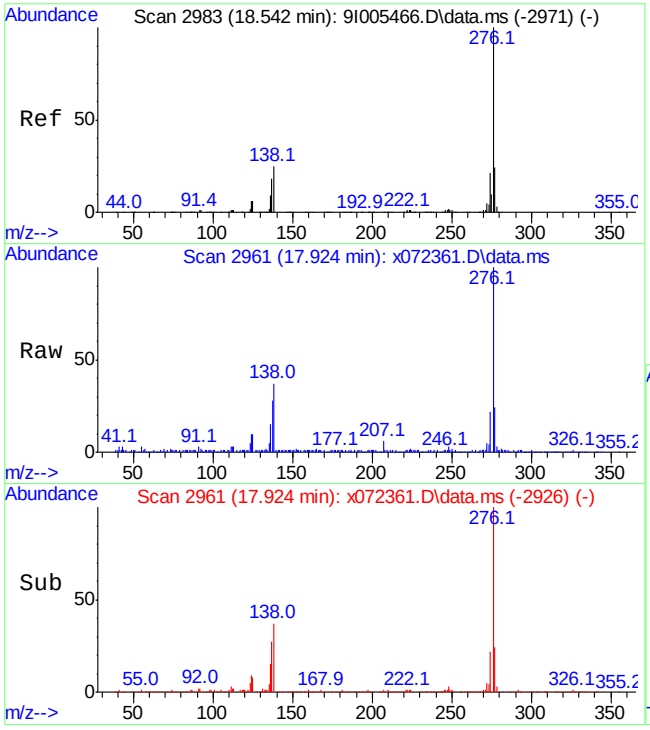


#106
Benzo[a]pyrene
Concen: 14.56 ppm
RT: 16.159 min Scan# 2631
Delta R.T. -0.011 min
Lab File: x072361.D
Acq: 12 Aug 2020 12:07 pm

Tgt Ion:252 Resp: 125282

Ion	Ratio	Lower	Upper
252	100		
253	21.5	0.0	52.3
125	17.9	0.0	44.7

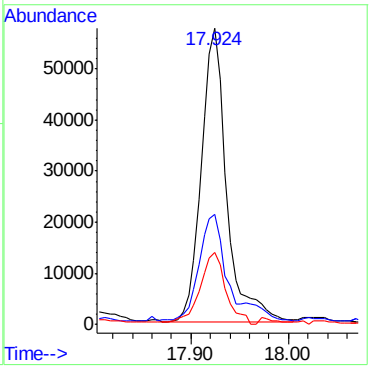


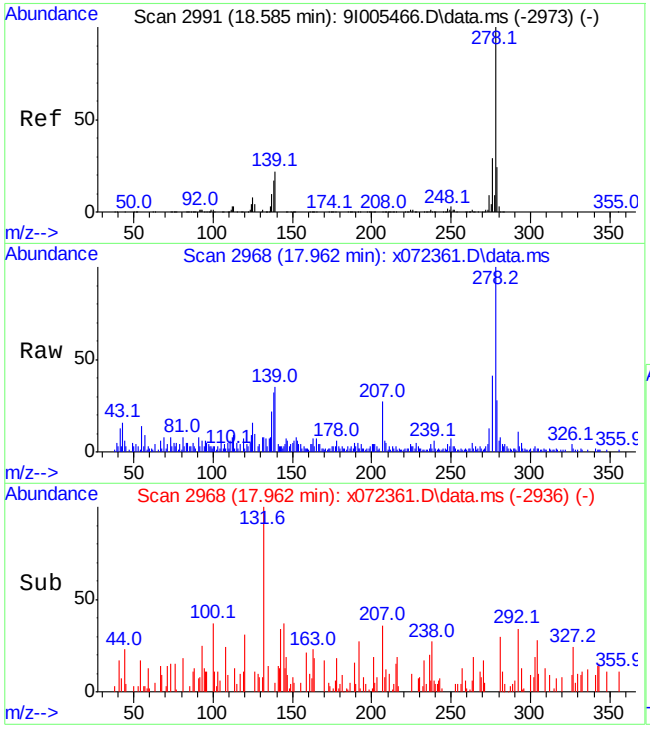


#107
Indeno[1,2,3-cd]pyrene
Concen: 19.62 ppm
RT: 17.924 min Scan# 2961
Delta R.T. -0.011 min
Lab File: x072361.D
Acq: 12 Aug 2020 12:07 pm

Tgt Ion:276 Resp: 103839

Ion	Ratio	Lower	Upper
276	100		
138	36.3	0.0	54.7
277	23.8	0.0	53.8

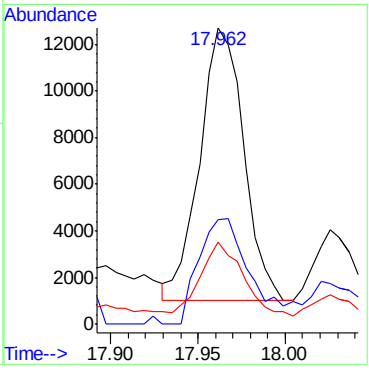


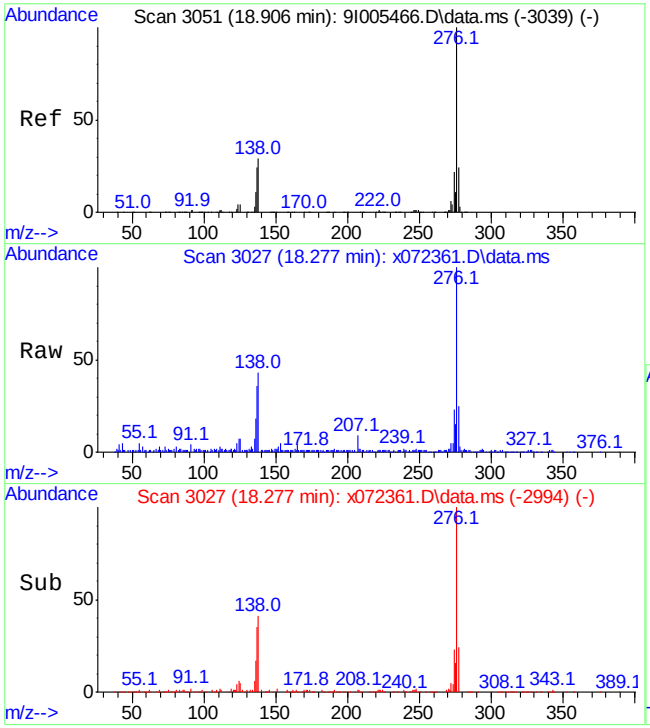


#108
Dibenz[a,h]anthracene
Concen: 3.95 ppm
RT: 17.962 min Scan# 2968
Delta R.T. -0.027 min
Lab File: x072361.D
Acq: 12 Aug 2020 12:07 pm

Tgt Ion:278 Resp: 20664

Ion	Ratio	Lower	Upper
278	100		
139	35.2	0.0	52.4
279	27.1	0.0	54.4

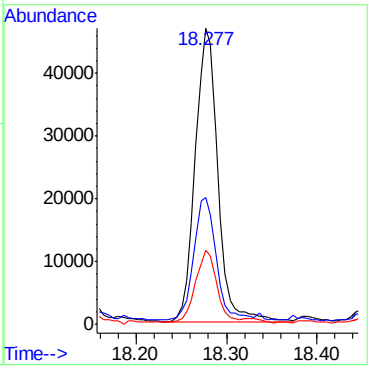




#109
Benzo[g,h,i]perylene
Concen: 10.46 ppm
RT: 18.277 min Scan# 3027
Delta R.T. -0.021 min
Lab File: x072361.D
Acq: 12 Aug 2020 12:07 pm

Tgt Ion:276 Resp: 80934

Ion	Ratio	Lower	Upper
276	100		
138	40.9	0.0	59.4
277	24.6	0.0	54.1



7.1.7

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan
08/12/20 16:57

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0811_sx2950\
Data File : x072337.d
Acq On : 11 Aug 2020 4:16 pm
Operator : marthav
Sample : fa77576-5 E Inst : MSBNA05
Misc : op81482,sx2950,30.1,,,1,1,soil
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 12 16:44:43 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.665	152	178728	40.00	ppm	0.00
22) Naphthalene-d8	7.082	136	708905	40.00	ppm	0.00
43) Acenaphthene-d10	9.126	164	327075	40.00	ppm	0.00
70) Phenanthrene-d10	10.869	188	548591	40.00	ppm	0.00
92) Chrysene-d12	14.116	240	347437m	40.00	ppm	0.05
102) Perylene-d12	16.362	264	342422	40.00	ppm	0.11
110) 1,4-Dichlorobenzene-d4A	5.665	152	178728	40.00	ppm	0.00
120) Naphthalene-d8A	7.082	136	708905	40.00	ppm	0.00
127) Acenaphthene-d10A	9.126	164	327075	40.00	ppm	0.00
136) Phenanthrene-d10A	10.869	188	548591	40.00	ppm	0.00
146) Chrysene-d12A	14.116	240	342725m	40.00	ppm	0.05
153) Perylene-d12A	16.362	264	342422	40.00	ppm	0.11
System Monitoring Compounds						
7) 2-Fluorophenol	4.323	112	444402	69.35	ppm	0.02
Spiked Amount 100.000	Range 40 - 102		Recovery = 69.35%			
9) Phenol-d5	5.344	99	514812	67.52	ppm	0.01
Spiked Amount 100.000	Range 41 - 100		Recovery = 67.52%			
23) Nitrobenzene-d5	6.280	82	265035	36.20	ppm	0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 72.40%			
47) 2-Fluorobiphenyl	8.355	172	484384	40.91	ppm	0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 81.82%			
75) 2,4,6-Tribromophenol	10.056	330	97412	82.21	ppm	0.00
Spiked Amount 100.000	Range 42 - 108		Recovery = 82.21%			
95) Terphenyl-d14	12.795	244	467015	50.59	ppm	0.02
Spiked Amount 50.000	Range 45 - 119		Recovery = 101.18%			
Target Compounds						Qvalue
5) Benzaldehyde	5.194	106	1978	0.37	ppm	90
10) Phenol	5.360	94	461266	51.00	ppm	62
34) Naphthalene	7.109	128	5698	0.30	ppm	88
39) 4-Chloro-3-methylphenol	7.783	107	17203	3.13	ppm #	16
40) 2-Methylnaphthalene	7.911	142	3617	0.28	ppm	86
41) 1-Methylnaphthalene	8.024	142	4690	0.39	ppm	90
52) Acenaphthylene	8.954	152	348038	21.30	ppm	99
57) Acenaphthene	9.158	153	15407	1.42	ppm	99
60) Dibenzofuran	9.366	168	6485	0.45	ppm	96
63) 2,3,5,6-Tetrachlorophenol	9.484	232	586	0.24	ppm	83
65) Fluorene	9.767	166	44341	3.92	ppm	99
84) Phenanthrene	10.891	178	156760	9.46	ppm	100
85) Anthracene	10.960	178	876825	50.75	ppm	98
87) Carbazole	11.169	167	266100	17.45	ppm	99
91) Fluoranthene	12.313	202	2019034	131.27	ppm	97
94) Pyrene	12.581	202	3163545	219.30	ppm	95
99) Benzo[a]anthracene	14.105	228	1058489	96.93	ppm	92
100) Chrysene	14.159	228	1585299	136.32	ppm	98
103) Di-n-octylphthalate	15.314	149	33962	3.15	ppm	62
104) Benzo[b]fluoranthene	15.742	252	3105821m	223.87	ppm	
105) Benzo[k]fluoranthene	15.774	252	588142m	48.38	ppm	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0811_sx2950\
Data File : x072337.d
Acq On : 11 Aug 2020 4:16 pm
Operator : marthav
Sample : fa77576-5 E Inst : MSBNA05
Misc : op81482,sx2950,30.1,,,1,1,soil
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 12 16:44:43 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

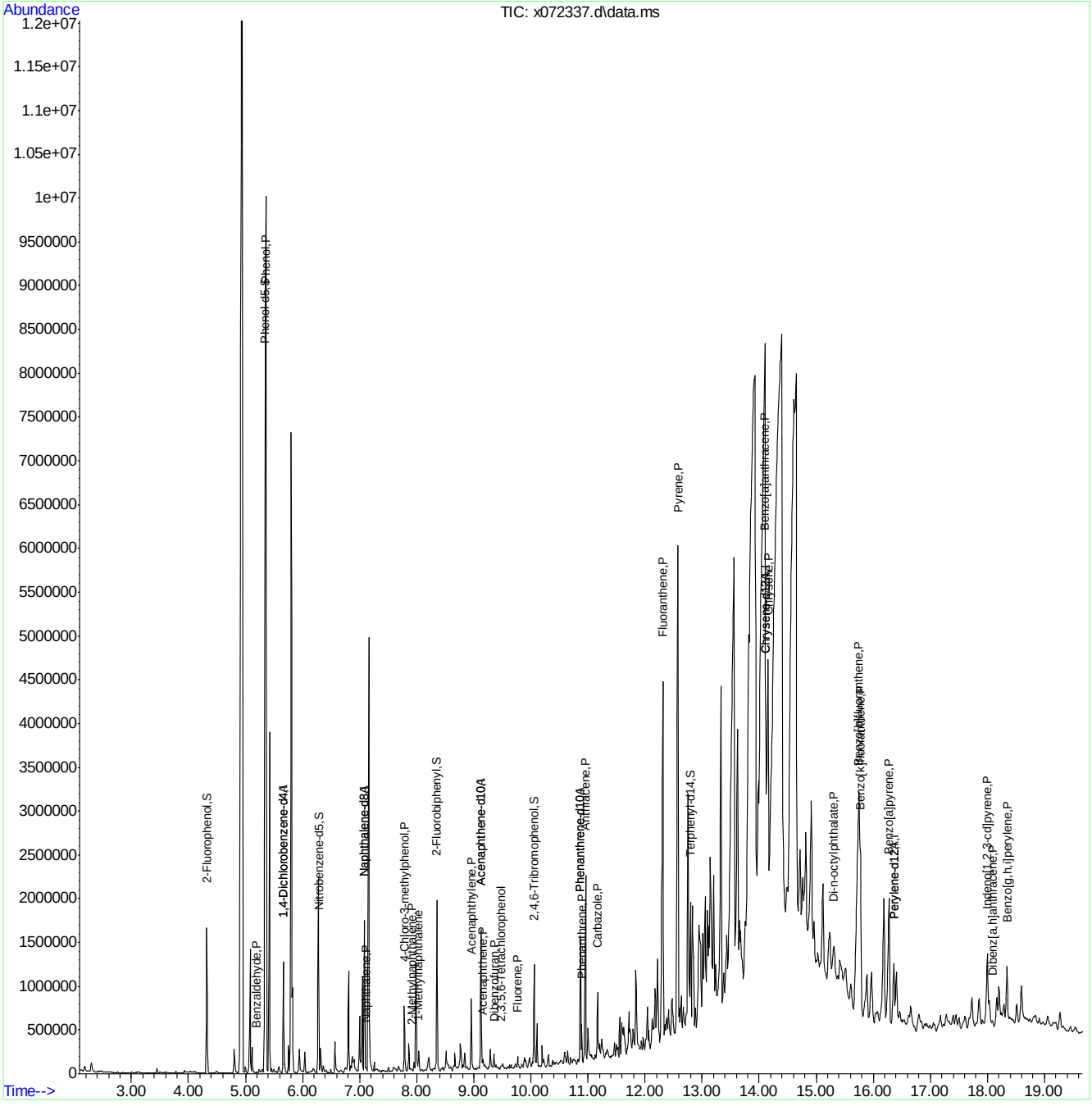
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
106) Benzo[a]pyrene	16.277	252	1000691	93.52	ppm	97
107) Indeno[1,2,3-cd]pyrene	17.999	276	523546	70.05	ppm	89
108) Dibenz[a,h]anthracene	18.090	278	42781	7.59	ppm	89
109) Benzo[g,h,i]perylene	18.347	276	375522	40.98	ppm	89

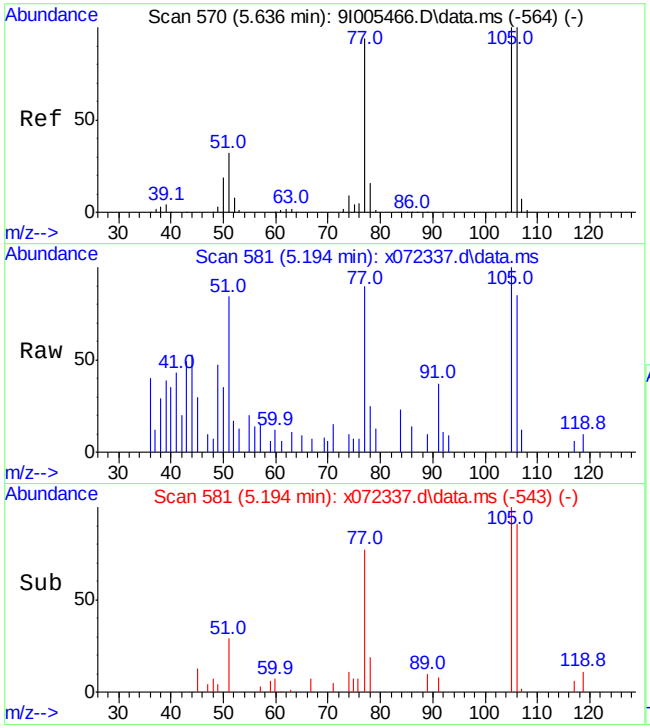
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0811_sx2950\
Data File : x072337.d
Acq On : 11 Aug 2020 4:16 pm
Operator : marthav
Sample : fa77576-5 E Inst : MSBNA05
Misc : op81482,sx2950,30.1,,,1,1,soil
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 12 16:44:43 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

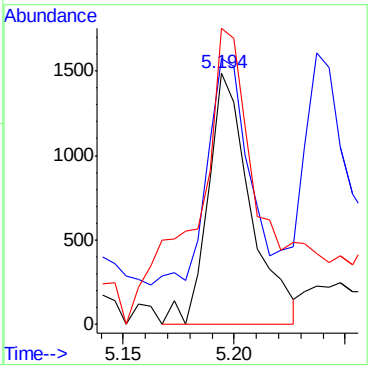


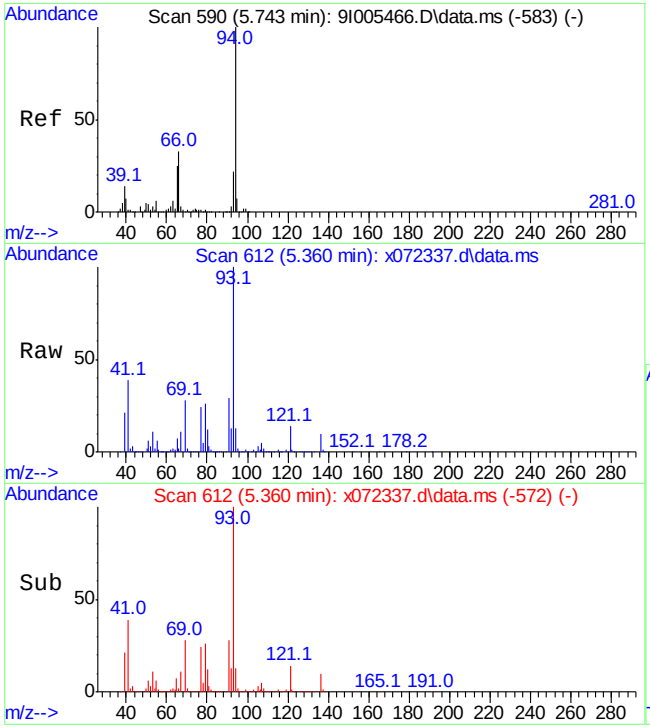


#5
Benzaldehyde
Concen: 0.37 ppm
RT: 5.194 min Scan# 581
Delta R.T. 0.005 min
Lab File: x072337.d
Acq: 11 Aug 2020 4:16 pm

Tgt Ion:106 Resp: 1978

Ion	Ratio	Lower	Upper
106	100		
77	85.0	63.9	123.9
105	89.1	70.0	130.0

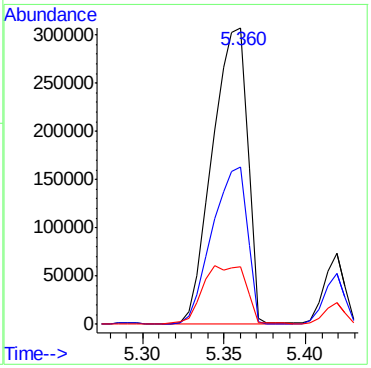


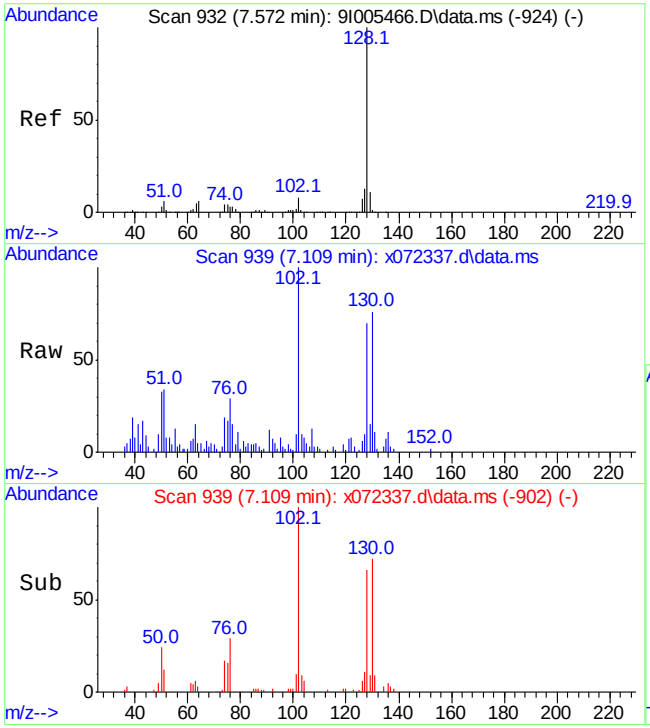


#10
Phenol
Concen: 51.00 ppm
RT: 5.360 min Scan# 612
Delta R.T. 0.016 min
Lab File: x072337.d
Acq: 11 Aug 2020 4:16 pm

Tgt Ion: 94 Resp: 461266

Ion	Ratio	Lower	Upper
94	100		
65	52.9	0.0	54.8
66	19.1	3.0	63.0

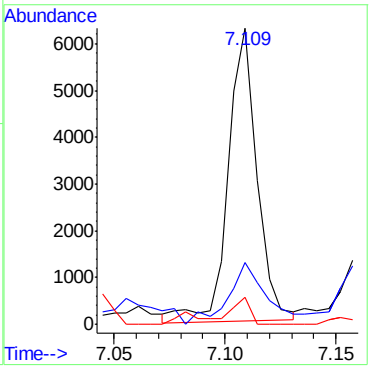


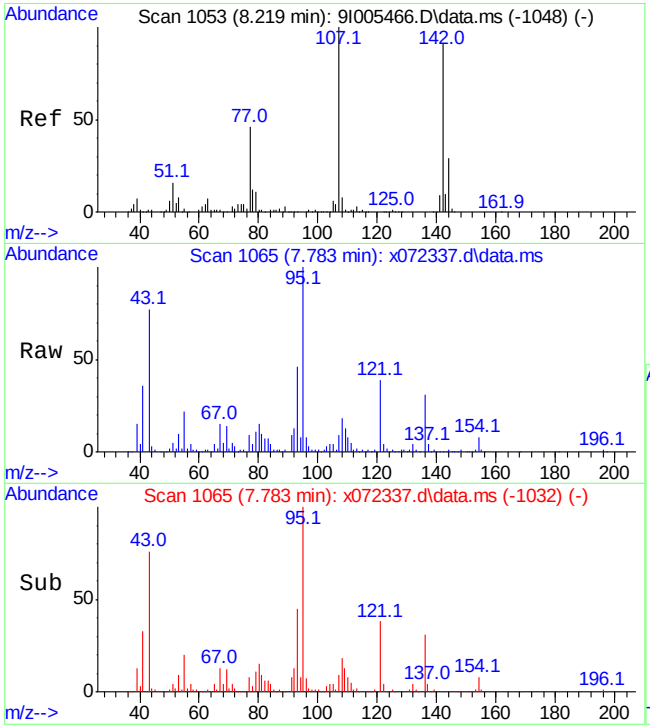


#34
Naphthalene
Concen: 0.30 ppm
RT: 7.109 min Scan# 939
Delta R.T. -0.000 min
Lab File: x072337.d
Acq: 11 Aug 2020 4:16 pm

Tgt Ion:128 Resp: 5698

Ion	Ratio	Lower	Upper
128	100		
129	17.8	0.0	41.4
126	9.4	0.0	37.4

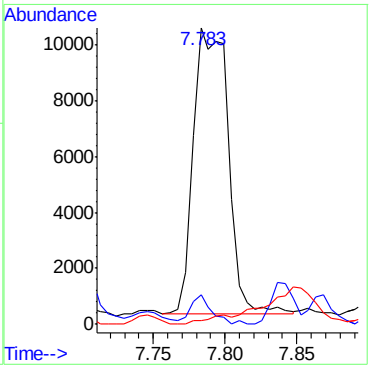


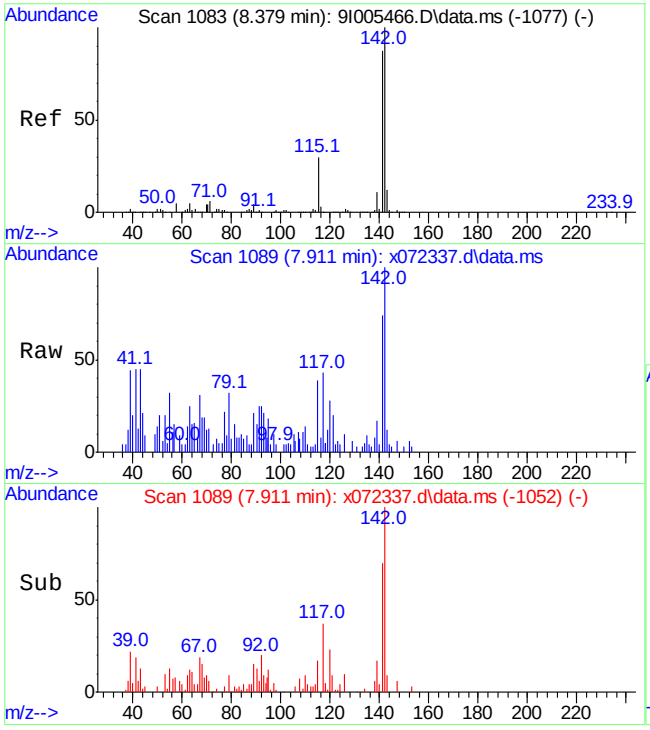


#39
4-Chloro-3-methylphenol
Concen: 3.13 ppm
RT: 7.783 min Scan# 1065
Delta R.T. -0.021 min
Lab File: x072337.d
Acq: 11 Aug 2020 4:16 pm

Tgt Ion:107 Resp: 17203

Ion	Ratio	Lower	Upper
107	100		
144	4.4	0.0	59.1
142	0.0	60.7	120.7#

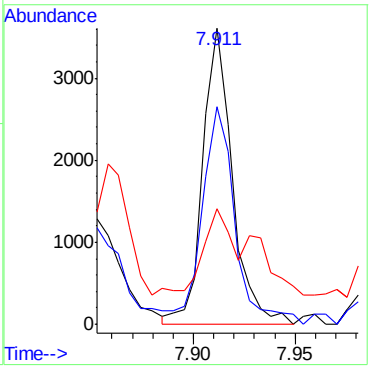


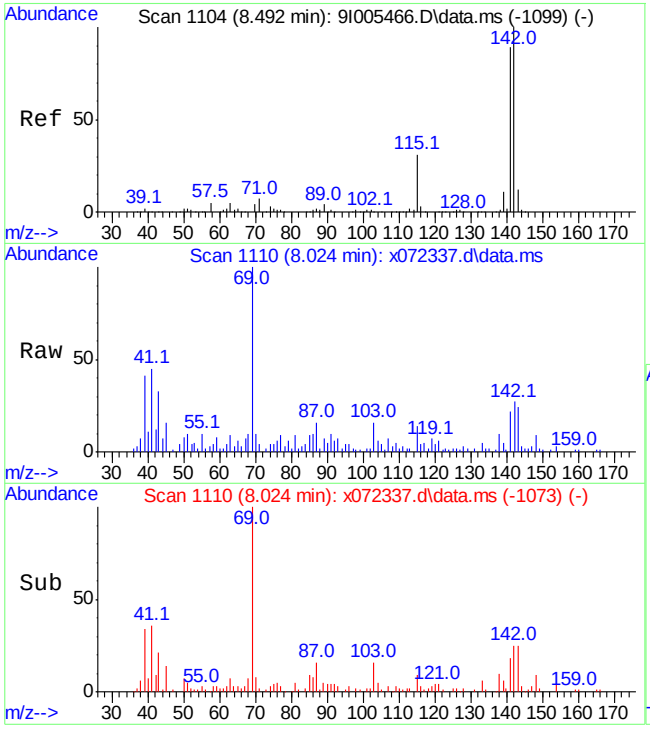


#40
2-Methylnaphthalene
Concen: 0.28 ppm
RT: 7.911 min Scan# 1089
Delta R.T. -0.000 min
Lab File: x072337.d
Acq: 11 Aug 2020 4:16 pm

Tgt Ion:142 Resp: 3617

Ion	Ratio	Lower	Upper
142	100		
141	70.7	56.8	116.8
115	26.8	0.0	60.0

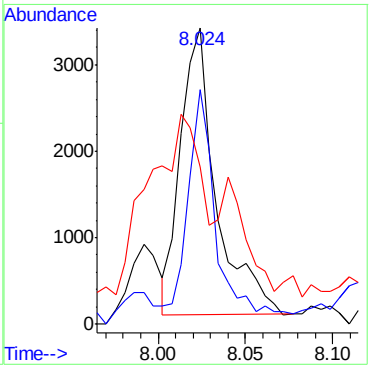


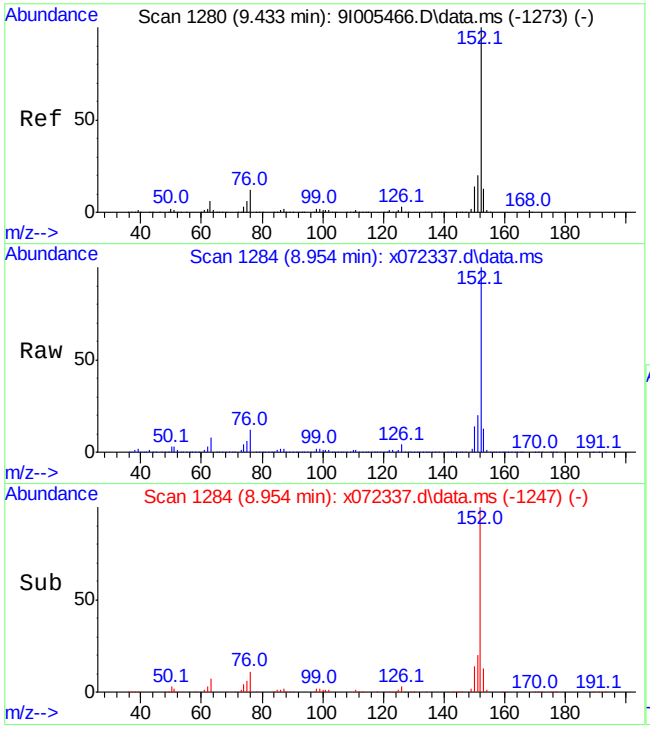


#41
1-Methylnaphthalene
Concen: 0.39 ppm
RT: 8.024 min Scan# 1110
Delta R.T. -0.000 min
Lab File: x072337.d
Acq: 11 Aug 2020 4:16 pm

Tgt Ion:142 Resp: 4690

Ion	Ratio	Lower	Upper
142	100		
141	82.3	59.0	119.0
115	20.1	1.1	61.1

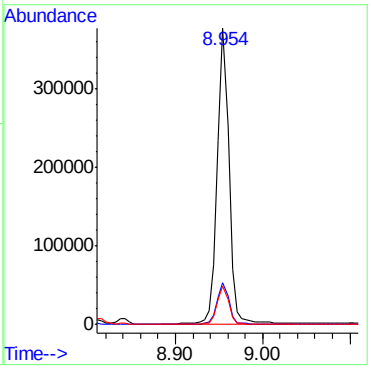


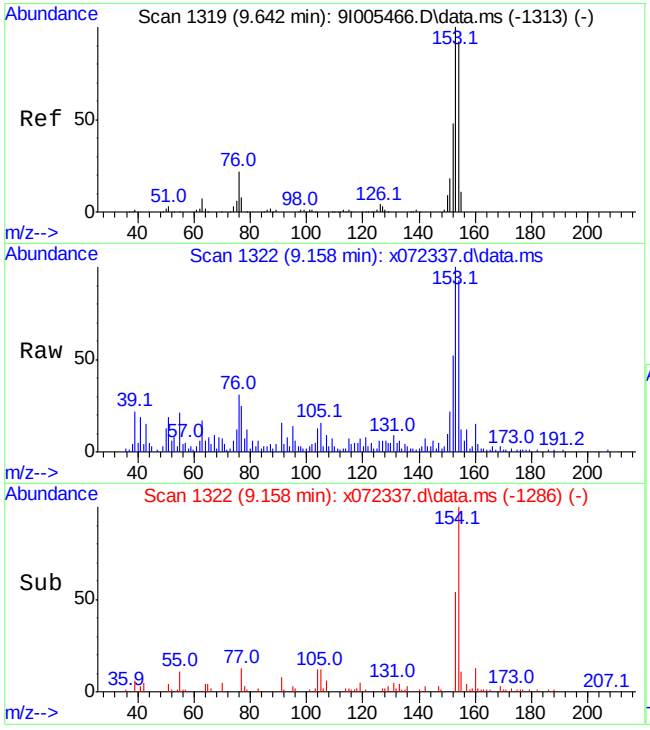


#52
Acenaphthylene
Concen: 21.30 ppm
RT: 8.954 min Scan# 1284
Delta R.T. -0.000 min
Lab File: x072337.d
Acq: 11 Aug 2020 4:16 pm

Tgt Ion:152 Resp: 348038

Ion	Ratio	Lower	Upper
152	100		
150	14.0	0.0	44.3
153	12.9	0.0	43.3

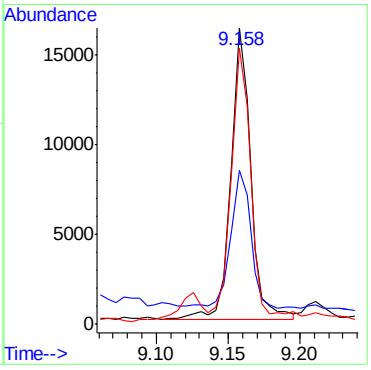


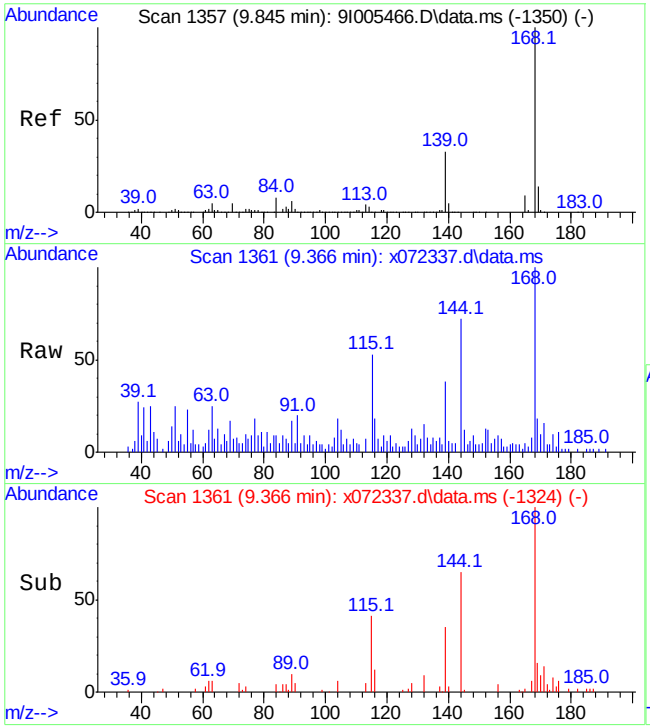


#57
Acenaphthene
Concen: 1.42 ppm
RT: 9.158 min Scan# 1322
Delta R.T. -0.005 min
Lab File: x072337.d
Acq: 11 Aug 2020 4:16 pm

Tgt Ion:153 Resp: 15407

Ion	Ratio	Lower	Upper
153	100		
152	46.7	18.4	78.4
154	92.5	62.4	122.4

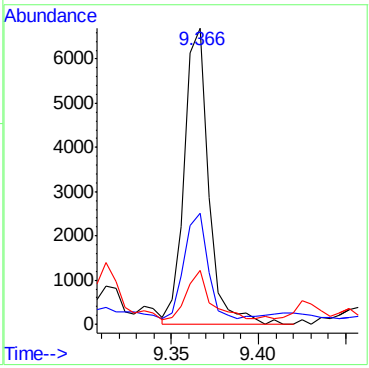


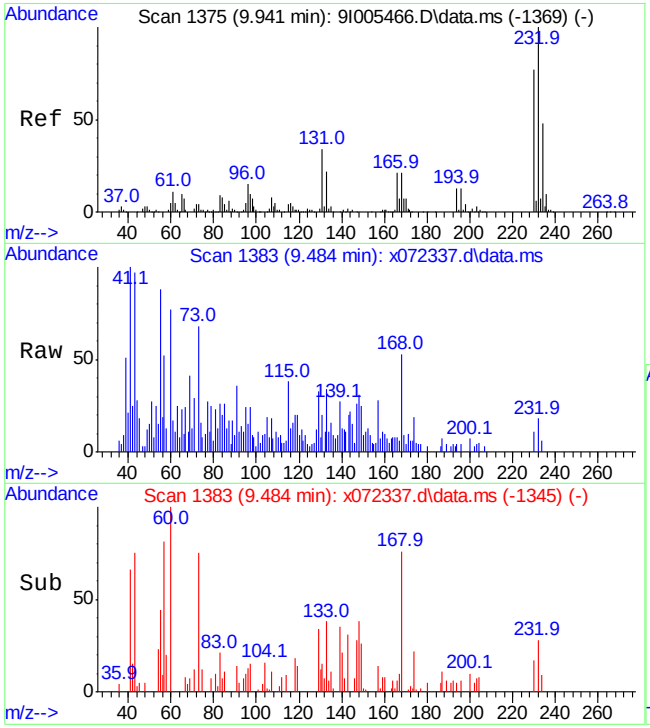


#60
Dibenzofuran
Concen: 0.45 ppm
RT: 9.366 min Scan# 1361
Delta R.T. -0.000 min
Lab File: x072337.d
Acq: 11 Aug 2020 4:16 pm

Tgt Ion:168 Resp: 6485

Ion	Ratio	Lower	Upper
168	100		
139	35.3	3.0	63.0
169	15.7	0.0	43.5

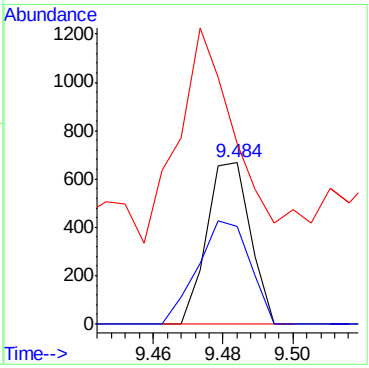


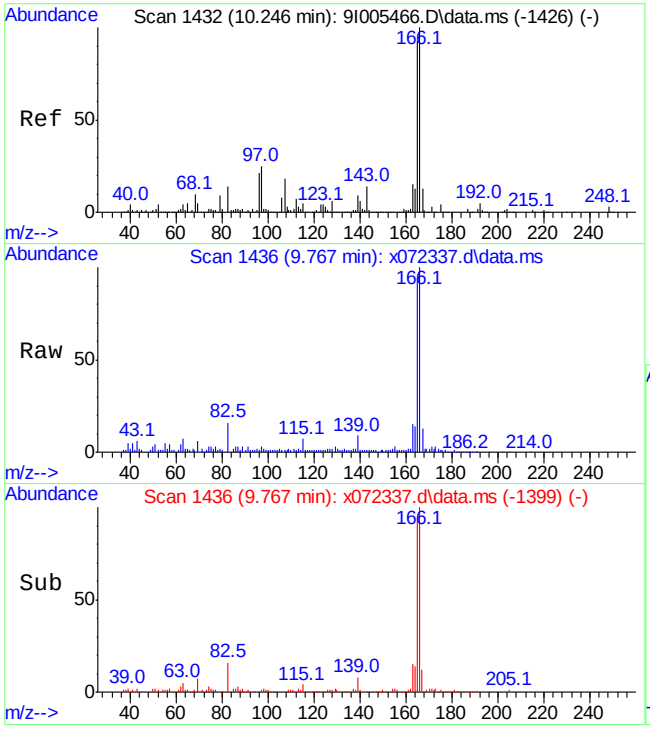


#63
2,3,5,6-Tetrachlorophenol
Concen: 0.24 ppm
RT: 9.484 min Scan# 1383
Delta R.T. 0.005 min
Lab File: x072337.d
Acq: 11 Aug 2020 4:16 pm

Tgt Ion:232 Resp: 586

Ion	Ratio	Lower	Upper
232	100		
230	60.0	57.4	97.4
131	28.8	14.1	54.1

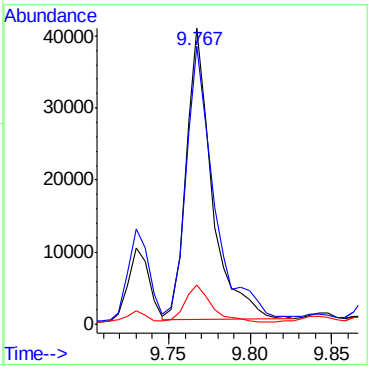


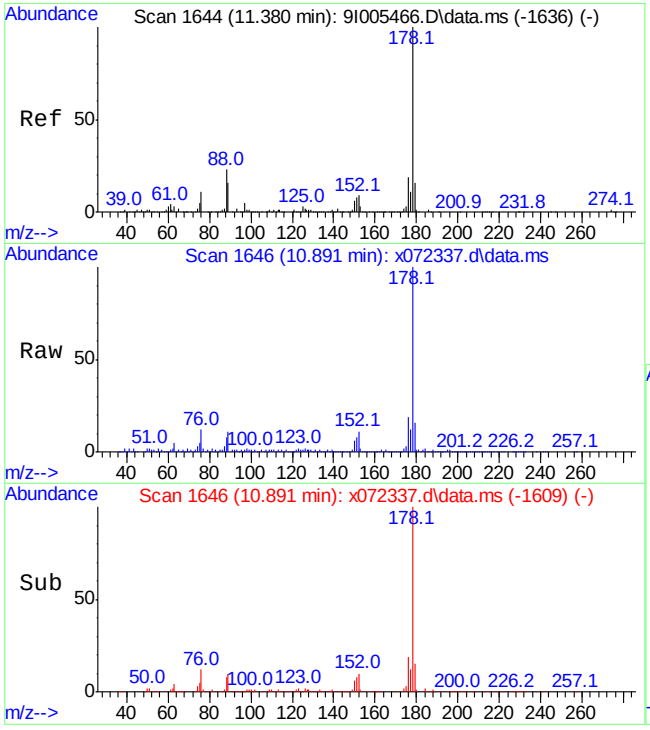


#65
Fluorene
Concen: 3.92 ppm
RT: 9.767 min Scan# 1436
Delta R.T. -0.000 min
Lab File: x072337.d
Acq: 11 Aug 2020 4:16 pm

Tgt Ion:166 Resp: 44341

Ion	Ratio	Lower	Upper
166	100		
165	93.0	62.7	122.7
167	12.6	0.0	43.5

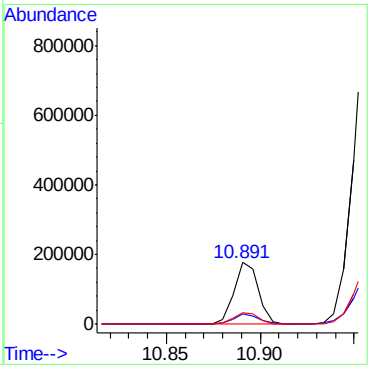


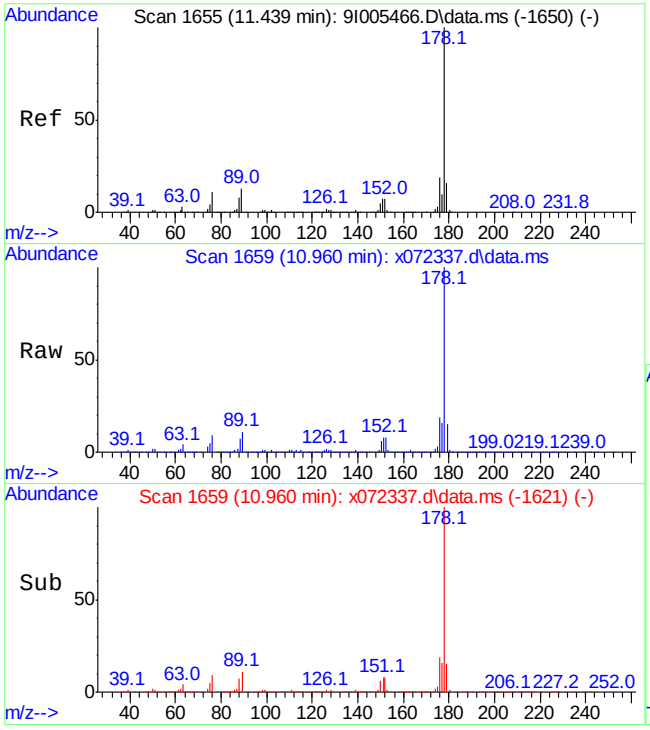


#84
Phenanthrene
Concen: 9.46 ppm
RT: 10.891 min Scan# 1646
Delta R.T. -0.000 min
Lab File: x072337.d
Acq: 11 Aug 2020 4:16 pm

Tgt Ion:178 Resp: 156760

Ion	Ratio	Lower	Upper
178	100		
179	15.6	0.0	45.8
176	19.2	0.0	49.3

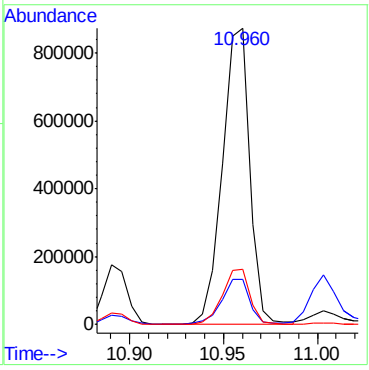


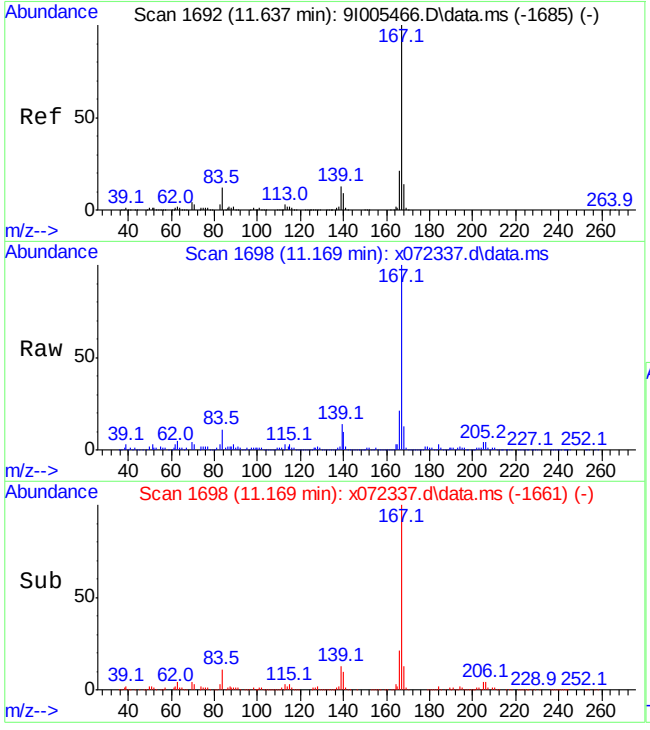


#85
Anthracene
Concen: 50.75 ppm
RT: 10.960 min Scan# 1659
Delta R.T. 0.005 min
Lab File: x072337.d
Acq: 11 Aug 2020 4:16 pm

Tgt Ion:178 Resp: 876825

Ion	Ratio	Lower	Upper
178	100		
179	14.9	0.0	46.0
176	18.8	0.0	49.3

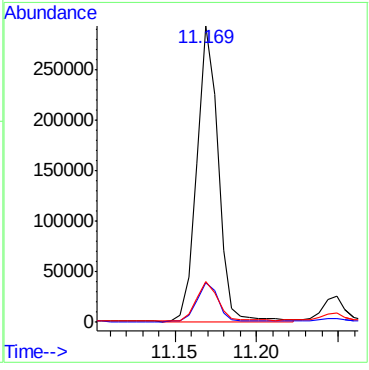


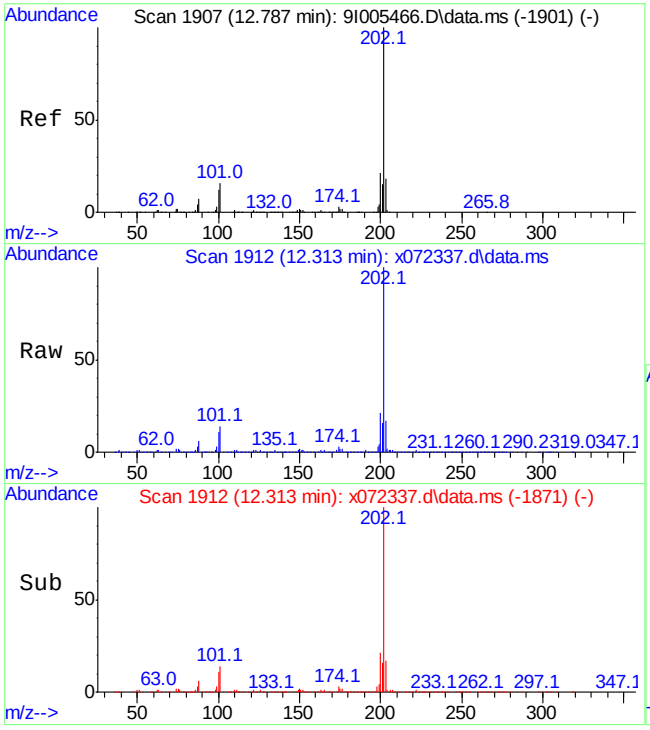


#87
Carbazole
Concen: 17.45 ppm
RT: 11.169 min Scan# 1698
Delta R.T. -0.000 min
Lab File: x072337.d
Acq: 11 Aug 2020 4:16 pm

Tgt Ion:167 Resp: 266100

Ion	Ratio	Lower	Upper
167	100		
168	13.3	0.0	43.9
139	13.3	0.0	42.7

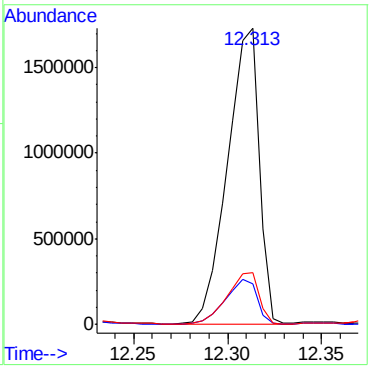


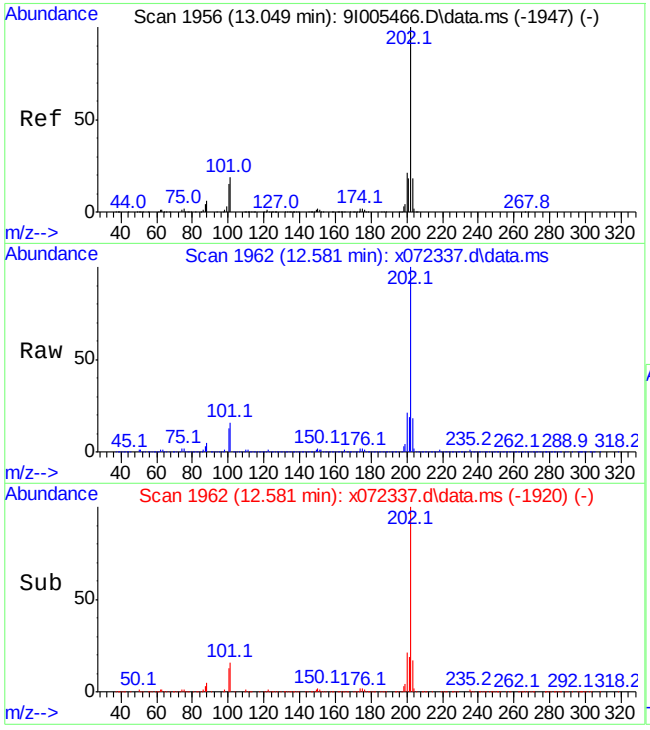


#91
Fluoranthene
Concen: 131.27 ppm
RT: 12.313 min Scan# 1912
Delta R.T. 0.021 min
Lab File: x072337.d
Acq: 11 Aug 2020 4:16 pm

Tgt Ion:202 Resp: 2019034

Ion	Ratio	Lower	Upper
202	100		
101	13.8	0.0	45.8
203	17.3	0.0	48.1

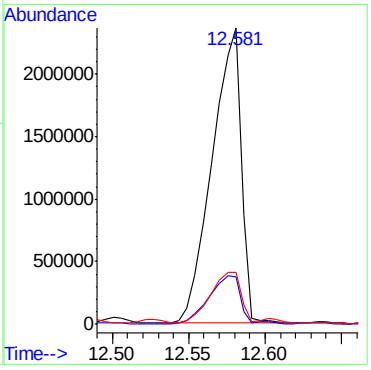


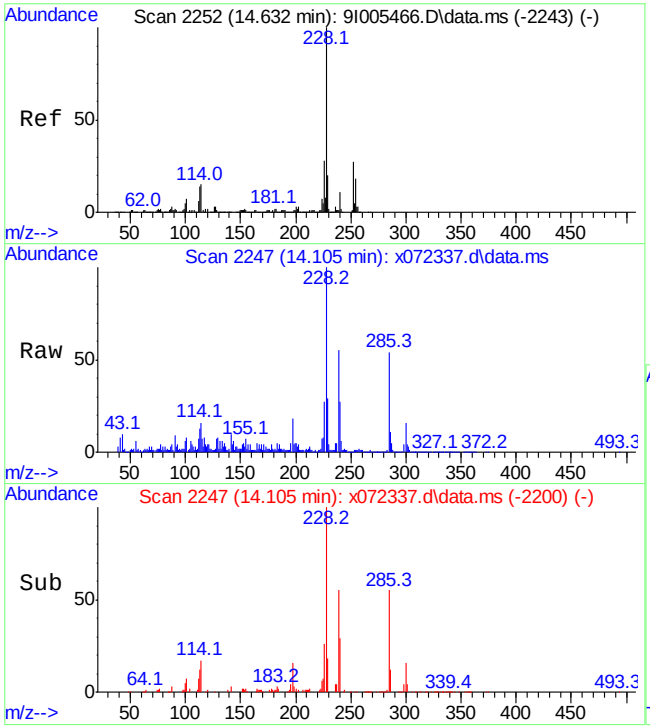


#94
Pyrene
Concen: 219.30 ppm
RT: 12.581 min Scan# 1962
Delta R.T. 0.027 min
Lab File: x072337.d
Acq: 11 Aug 2020 4:16 pm

Tgt Ion:202 Resp: 3163545

Ion	Ratio	Lower	Upper
202	100		
101	15.8	0.0	48.7
203	16.9	0.0	48.4

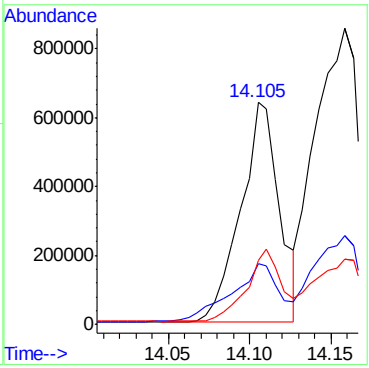


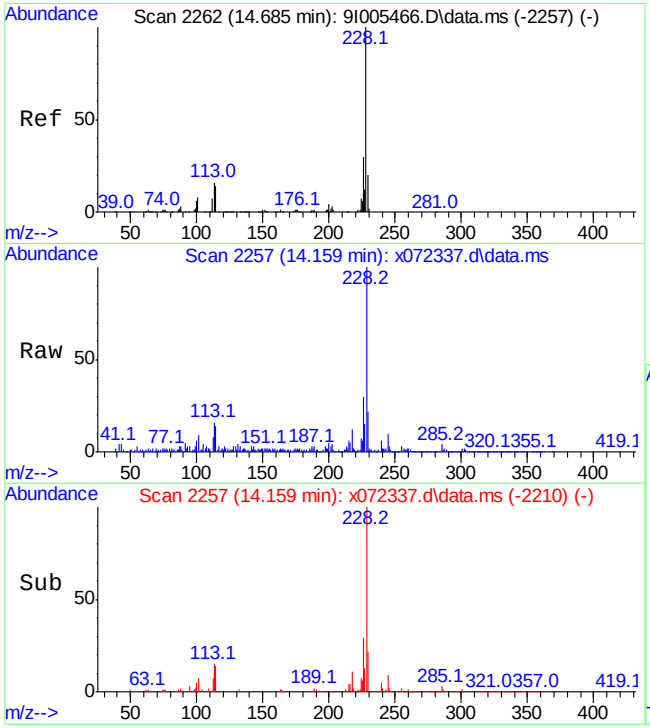


#99
Benzo[a]anthracene
Concen: 96.93 ppm
RT: 14.105 min Scan# 2247
Delta R.T. 0.053 min
Lab File: x072337.d
Acq: 11 Aug 2020 4:16 pm

Tgt Ion:228 Resp: 1058489

Ion	Ratio	Lower	Upper
228	100		
226	26.1	0.0	57.5
229	27.3	0.0	49.9

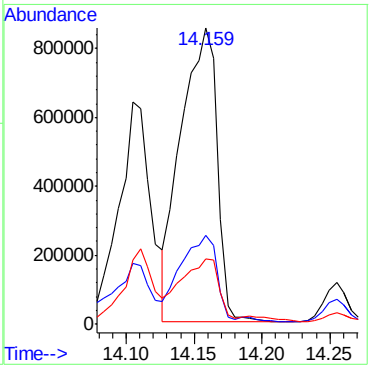


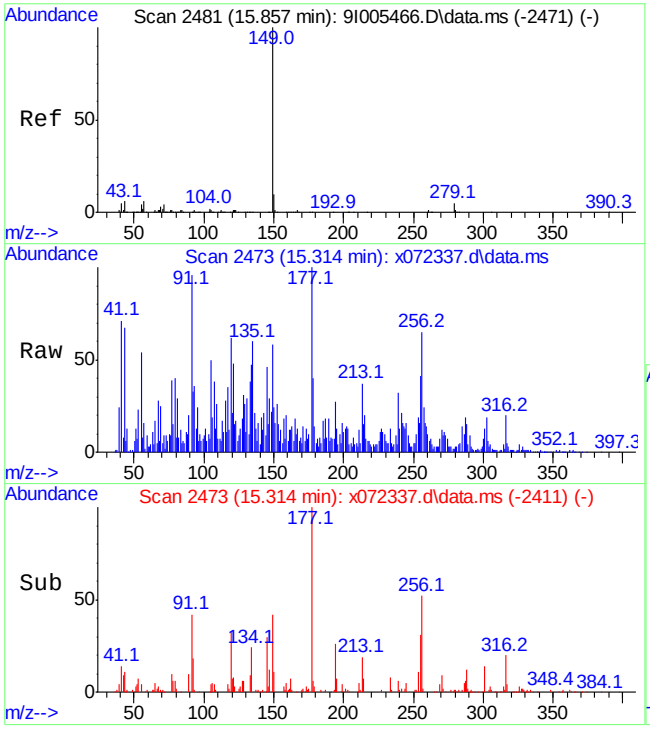


#100
Chrysene
Concen: 136.32 ppm
RT: 14.159 min Scan# 2257
Delta R.T. 0.053 min
Lab File: x072337.d
Acq: 11 Aug 2020 4:16 pm

Tgt Ion:228 Resp: 1585299

Ion	Ratio	Lower	Upper
228	100		
226	29.4	0.4	60.4
229	19.5	0.0	50.1

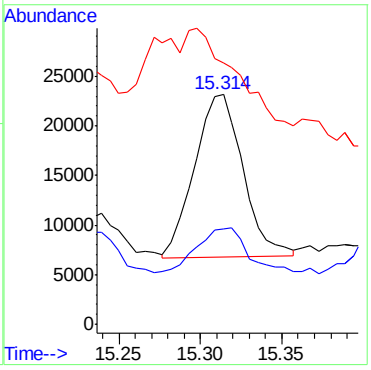


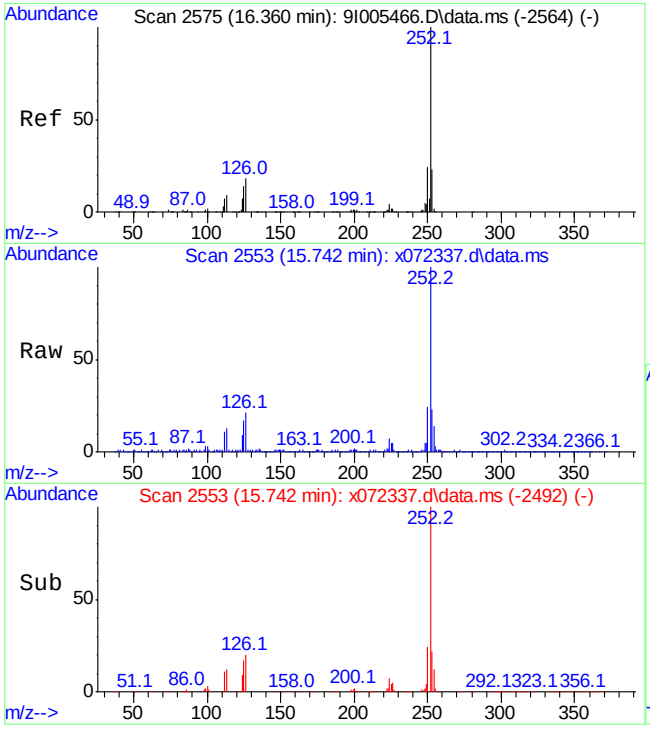


#103
Di-n-octylphthalate
Concen: 3.15 ppm
RT: 15.314 min Scan# 2473
Delta R.T. 0.134 min
Lab File: x072337.d
Acq: 11 Aug 2020 4:16 pm

Tgt Ion:149 Resp: 33962

Ion	Ratio	Lower	Upper
149	100		
150	27.2	0.0	39.9
43	13.7	0.0	36.0

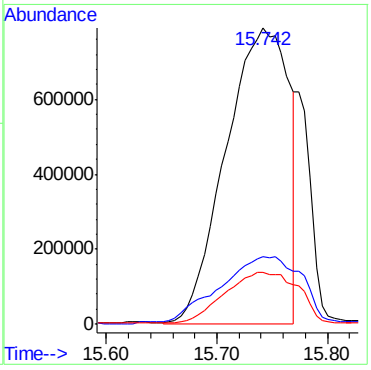


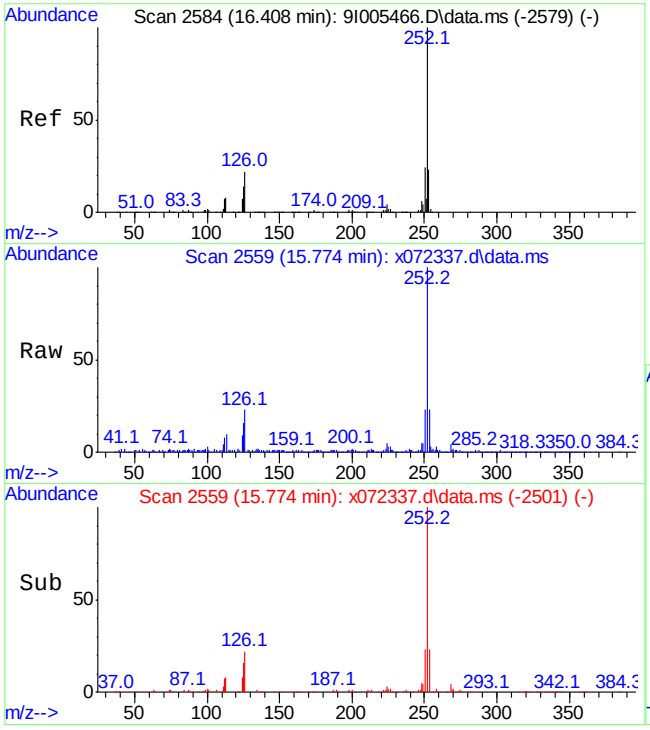


#104
Benzo[b]fluoranthene
Concen: 223.87 ppm m
RT: 15.742 min Scan# 2553
Delta R.T. 0.128 min
Lab File: x072337.d
Acq: 11 Aug 2020 4:16 pm

Tgt Ion:252 Resp: 3105821

Ion	Ratio	Lower	Upper
252	100		
253	22.7	0.0	52.5
125	17.4	0.0	44.0

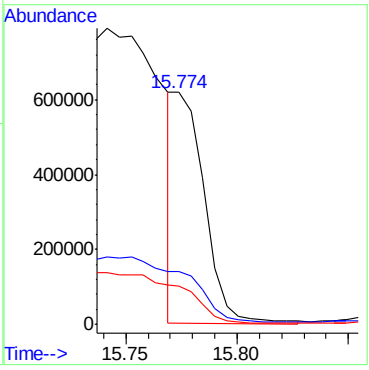


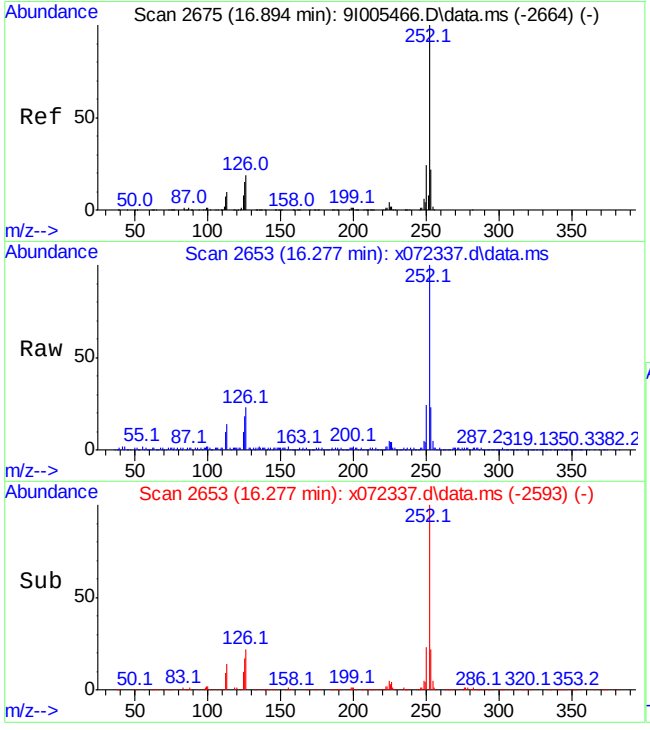


#105
Benzo[k]fluoranthene
Concen: 48.38 ppm m
RT: 15.774 min Scan# 2559
Delta R.T. 0.112 min
Lab File: x072337.d
Acq: 11 Aug 2020 4:16 pm

Tgt Ion:252 Resp: 588142

Ion	Ratio	Lower	Upper
252	100		
253	22.5	0.0	52.5
125	16.4	0.0	44.4

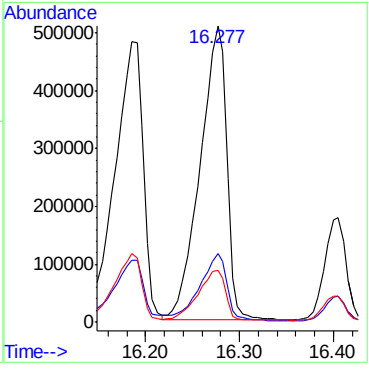


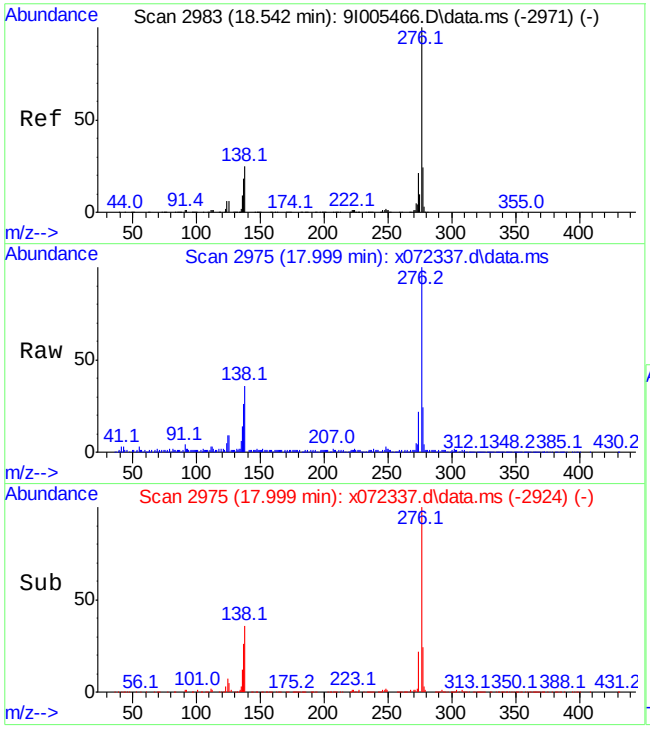


#106
Benzo[a]pyrene
Concen: 93.52 ppm
RT: 16.277 min Scan# 2653
Delta R.T. 0.123 min
Lab File: x072337.d
Acq: 11 Aug 2020 4:16 pm

Tgt Ion:252 Resp: 1000691

Ion	Ratio	Lower	Upper
252	100		
253	22.0	0.0	52.3
125	17.0	0.0	44.7

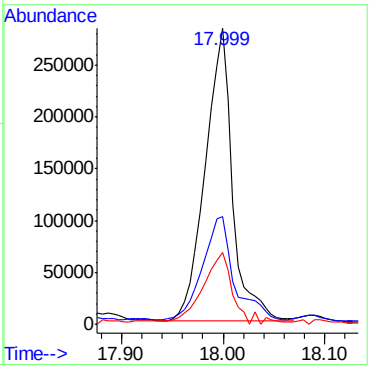


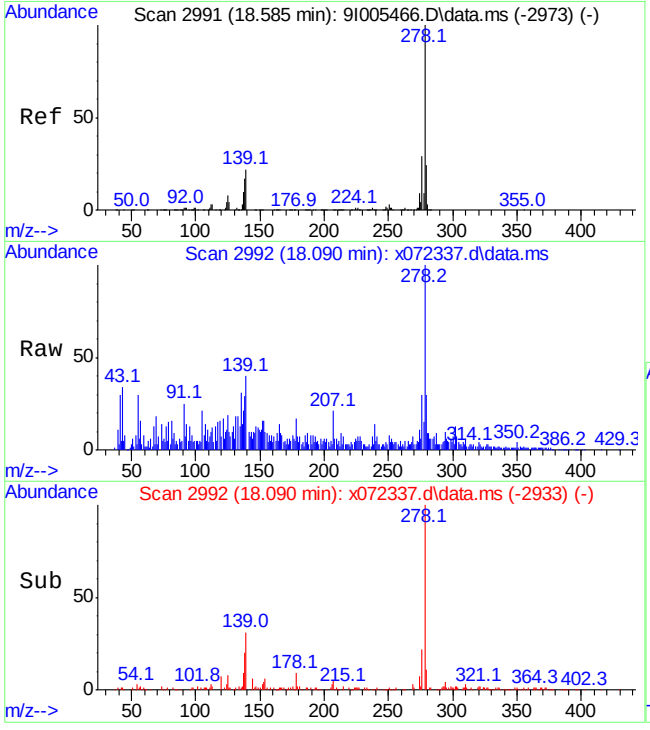


#107
Indeno[1,2,3-cd]pyrene
Concen: 70.05 ppm
RT: 17.999 min Scan# 2975
Delta R.T. 0.075 min
Lab File: x072337.d
Acq: 11 Aug 2020 4:16 pm

Tgt Ion:276 Resp: 523546

Ion	Ratio	Lower	Upper
276	100		
138	35.4	0.0	54.7
277	23.8	0.0	53.8

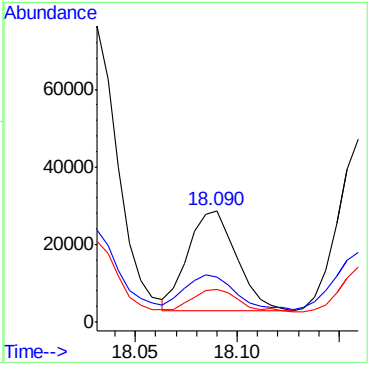


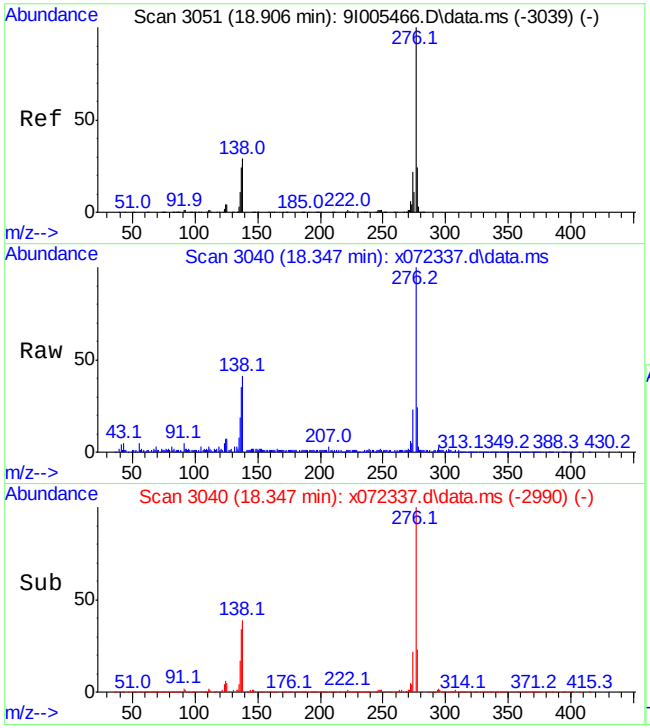


#108
Dibenz[a,h]anthracene
Concen: 7.59 ppm
RT: 18.090 min Scan# 2992
Delta R.T. 0.118 min
Lab File: x072337.d
Acq: 11 Aug 2020 4:16 pm

Tgt Ion:278 Resp: 42781

Ion	Ratio	Lower	Upper
278	100		
139	32.0	0.0	52.4
279	23.0	0.0	54.4

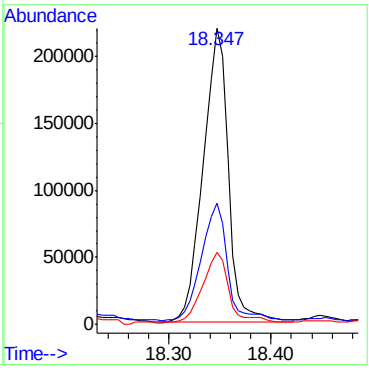




#109
Benzo[g,h,i]perylene
Concen: 40.98 ppm
RT: 18.347 min Scan# 3040
Delta R.T. 0.069 min
Lab File: x072337.d
Acq: 11 Aug 2020 4:16 pm

Tgt Ion:276 Resp: 375522

Ion	Ratio	Lower	Upper
276	100		
138	40.0	0.0	59.4
277	23.9	0.0	54.1



7.1.8

7

Manual Integration Approval Summary

Sample Number: FA77576-5
Lab FileID: X072337.D
Injection Time: 08/11/20 16:16

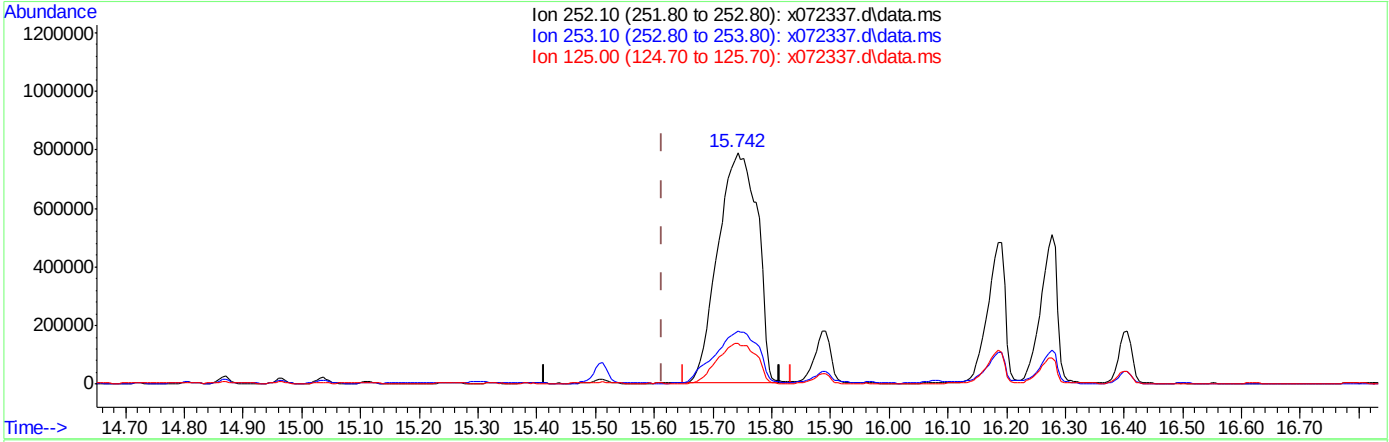
Method: SW846 8270E
Analyst approved: 08/12/20 16:46 Martha Valls
Supervisor approved: 08/12/20 16:57 Naresh Jiawan

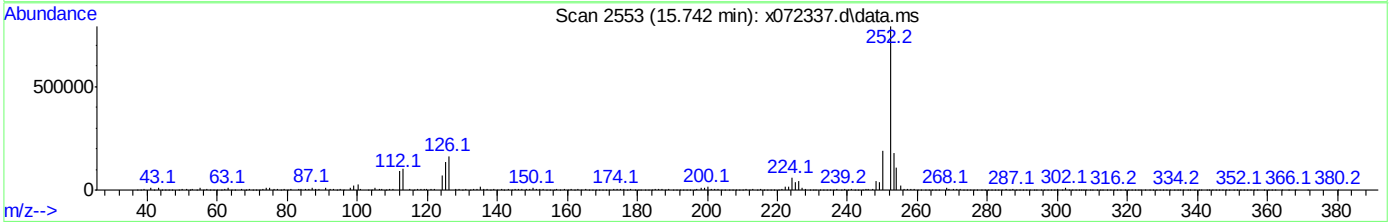
Parameter	CAS	Sig#	R.T. (min.)	Reason
Chrysene-d12	1719-03-5		14.12	Split peak
Benzo(b)fluoranthene	205-99-2		15.74	Split peak
Benzo(k)fluoranthene	207-08-9		15.77	Split peak

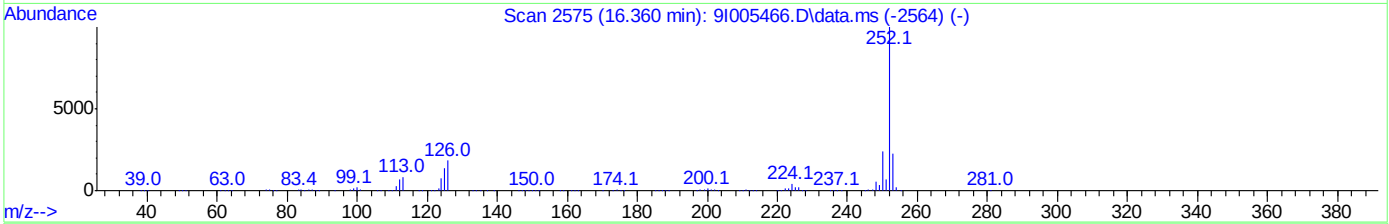
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0811_sx2950\
Data File : x072337.d
Acq On : 11 Aug 2020 4:16 pm
Operator : marthav
Sample : fa77576-5 E Inst : MSBNA05
Misc : op81482,sx2950,30.1,,,1,1,soil
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 12 02:29:19 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration







TIC: x072337.d\data.ms

(104) Benzo[b]fluoranthene (P)

15.742min (+0.128) 253.20ppm

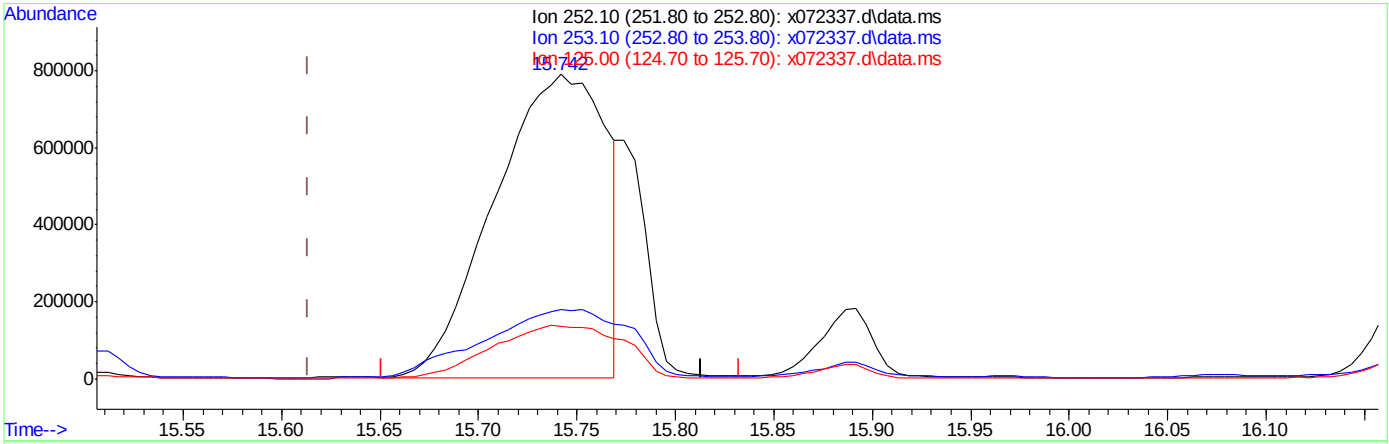
response 3670735

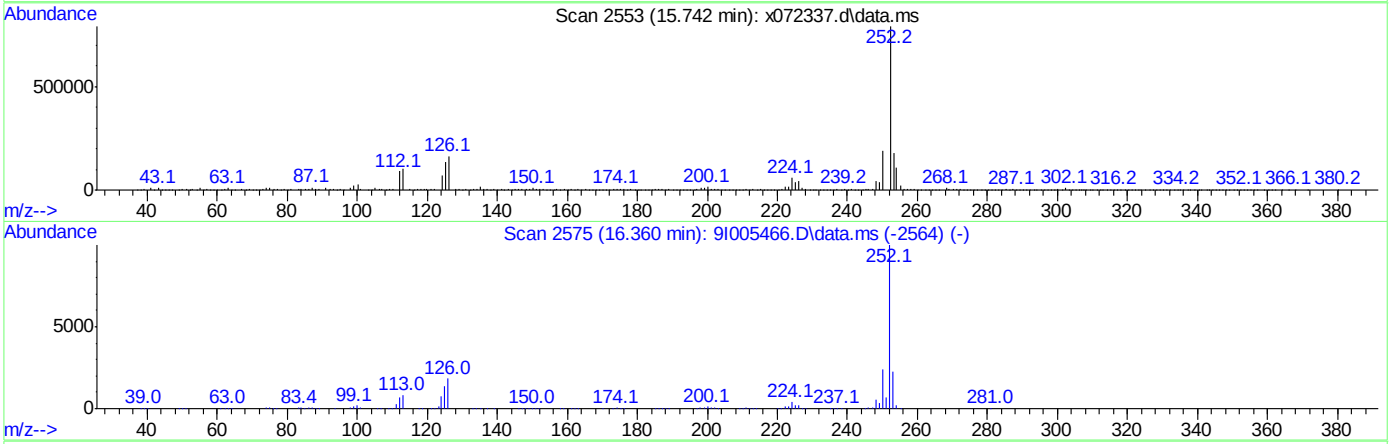
Ion	Exp%	Act%
252.10	100	100
253.10	22.50	22.15
125.00	14.00	17.21
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0811_sx2950\
Data File : x072337.d
Acq On : 11 Aug 2020 4:16 pm
Operator : marthav
Sample : fa77576-5 E Inst : MSBNA05
Misc : op81482,sx2950,30.1,,,1,1,soil
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 12 02:29:19 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration





TIC: x072337.d\data.ms

(104) Benzo[b]fluoranthene (P)

15.742min (+0.128) 223.87ppm m

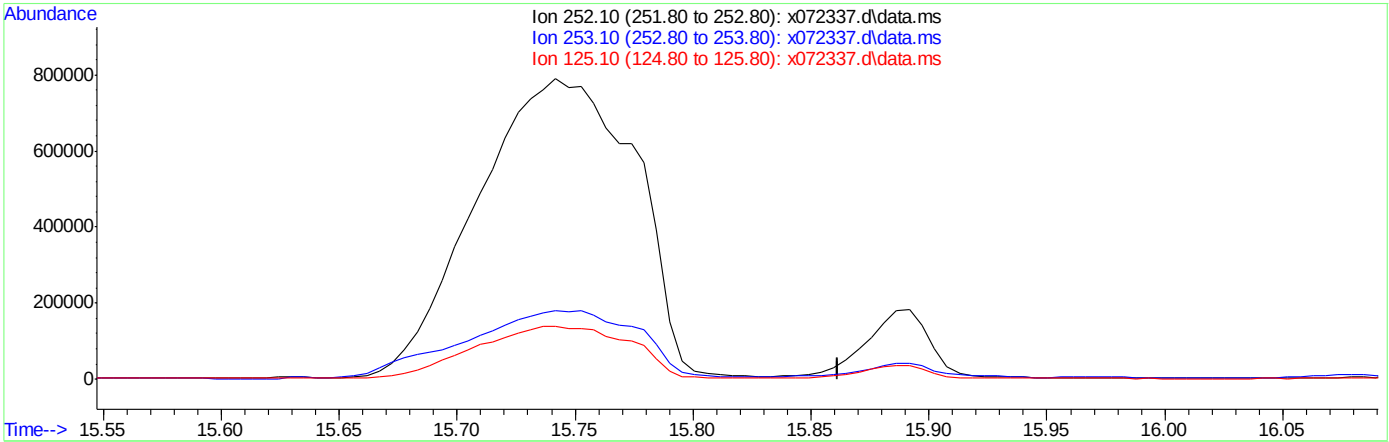
response 3105821

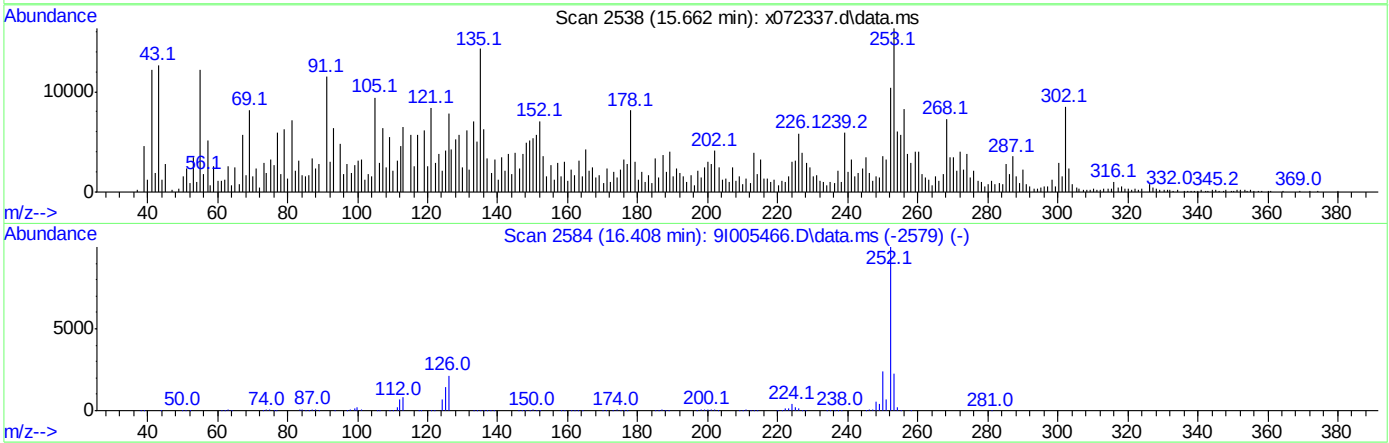
Ion	Exp%	Act%
252.10	100	100
253.10	22.50	22.69
125.00	14.00	17.42
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0811_sx2950\
Data File : x072337.d
Acq On : 11 Aug 2020 4:16 pm
Operator : marthav
Sample : fa77576-5 E Inst : MSBNA05
Misc : op81482,sx2950,30.1,,,1,1,soil
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 12 02:29:19 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration





TIC: x072337.d\data.ms

(105) Benzo[k]fluoranthene (P)

15.662min 0.00ppm d

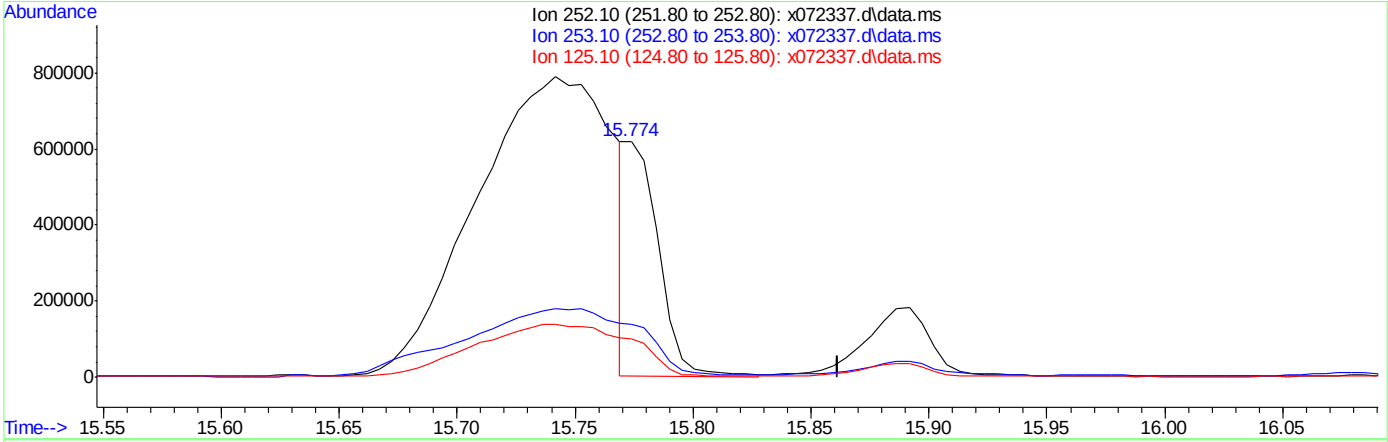
response 0

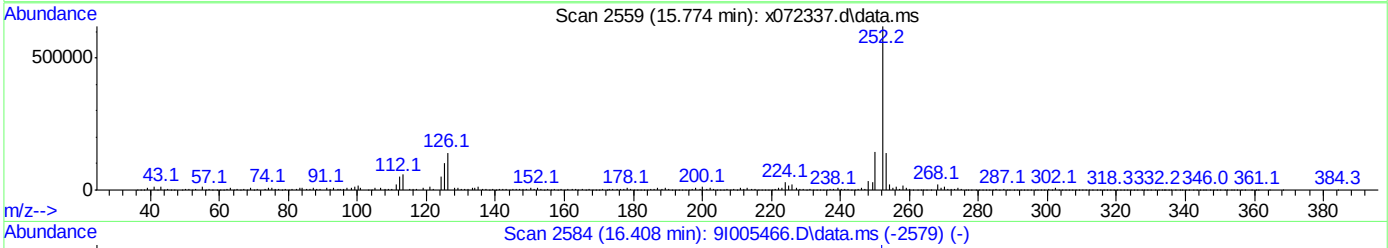
Ion	Exp%	Act%
252.10	100	0.00
253.10	22.50	0.00
125.10	14.40	0.00
0.00	0.00	0.00

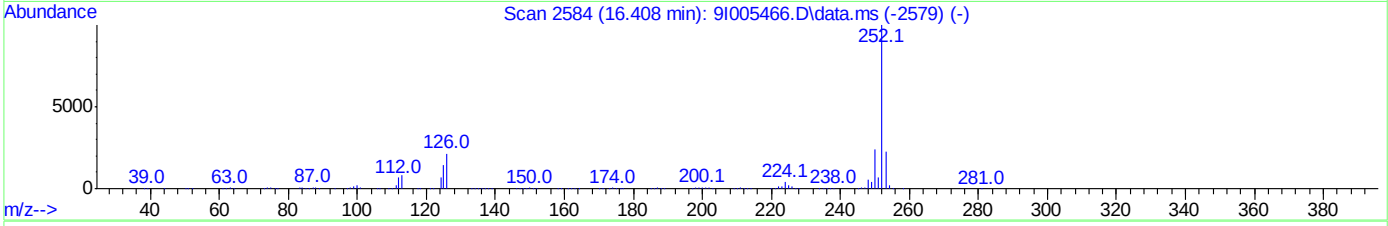
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0811_sx2950\
Data File : x072337.d
Acq On : 11 Aug 2020 4:16 pm
Operator : marthav
Sample : fa77576-5 E Inst : MSBNA05
Misc : op81482,sx2950,30.1,,,1,1,soil
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 12 02:29:19 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration







TIC: x072337.d\data.ms

(105) Benzo[k]fluoranthene (P)

15.774min (+0.112) 48.38ppm m

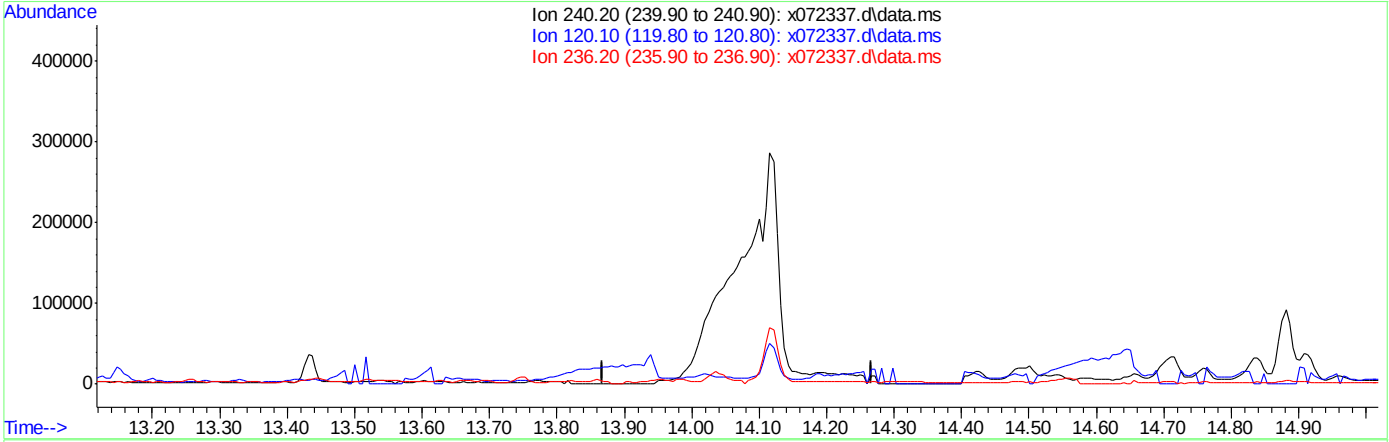
response 588142

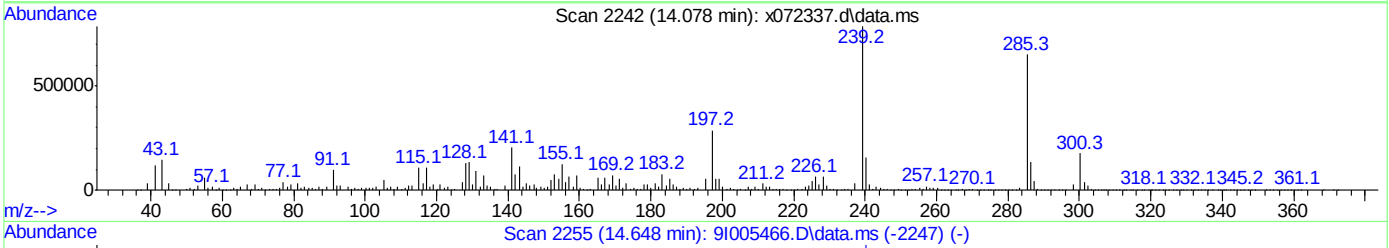
Ion	Exp%	Act%
252.10	100	100
253.10	22.50	22.52
125.10	14.40	16.39
0.00	0.00	0.00

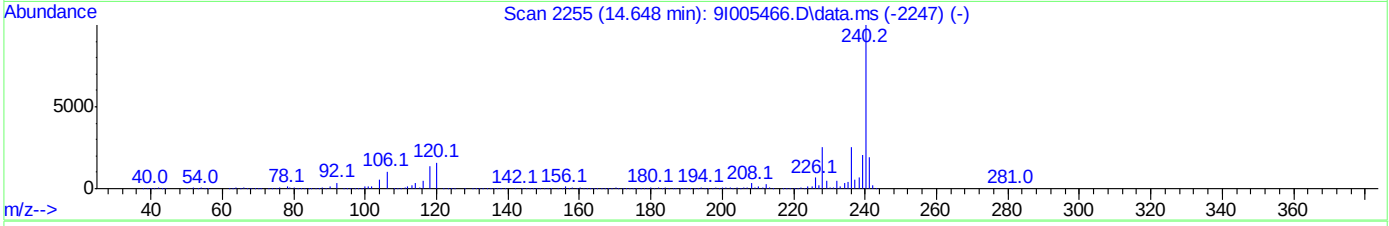
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0811_sx2950\
Data File : x072337.d
Acq On : 11 Aug 2020 4:16 pm
Operator : marthav
Sample : fa77576-5 E Inst : MSBNA05
Misc : op81482,sx2950,30.1,,,1,1,soil
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 12 16:35:56 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration







TIC: x072337.d\data.ms

(92) Chrysene-d12 (I)

14.068min 0.00ppm d

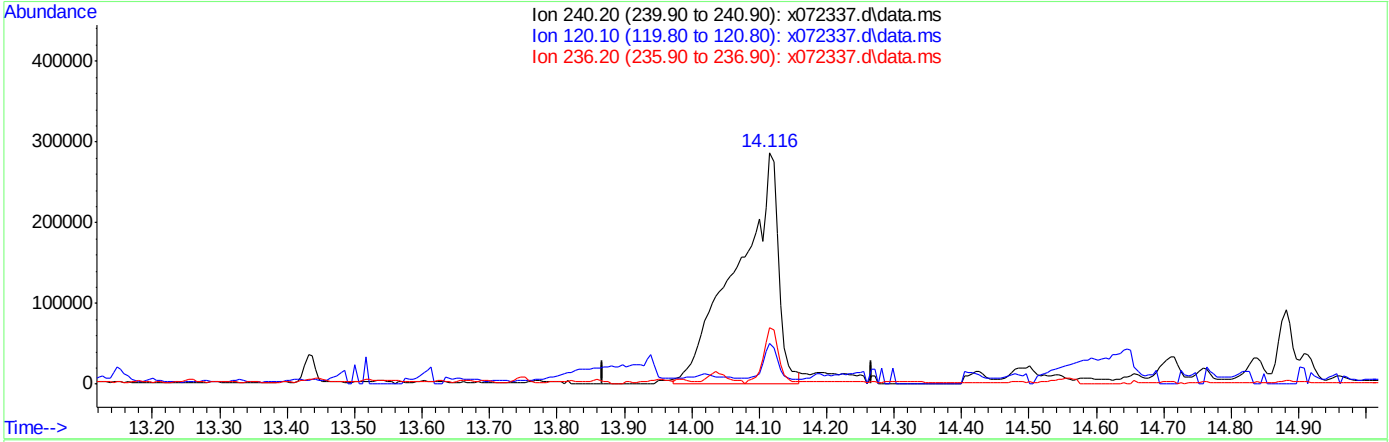
response 0

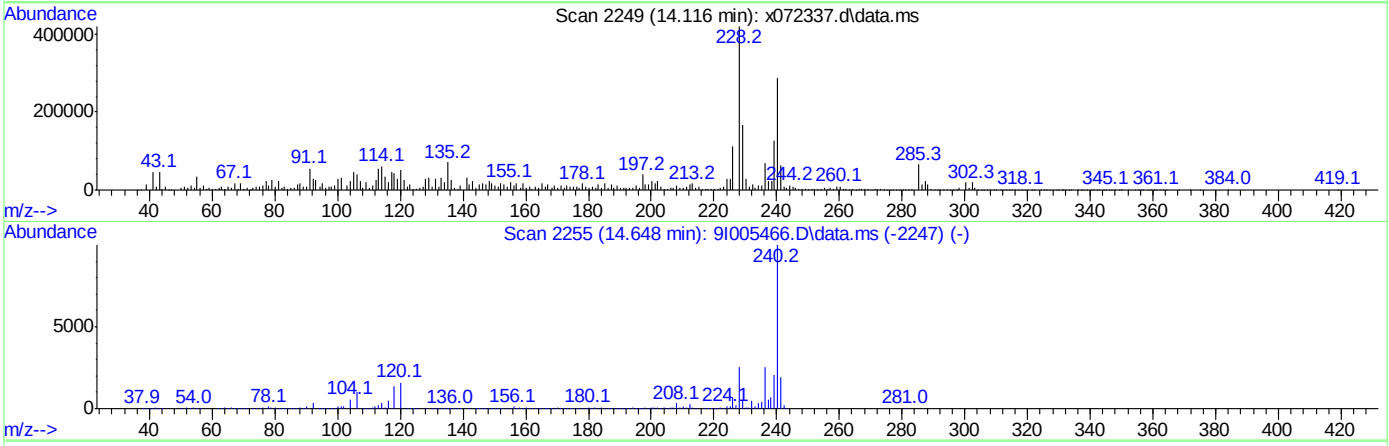
Ion	Exp%	Act%
240.20	100	0.00
120.10	15.80	0.00
236.20	25.70	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0811_sx2950\
Data File : x072337.d
Acq On : 11 Aug 2020 4:16 pm
Operator : marthav
Sample : fa77576-5 E Inst : MSBNA05
Misc : op81482,sx2950,30.1,,,1,1,soil
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 12 16:35:56 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration





TIC: x072337.d\data.ms

(92) Chrysene-d12 (I)

14.116min (+0.048) 40.00ppm m

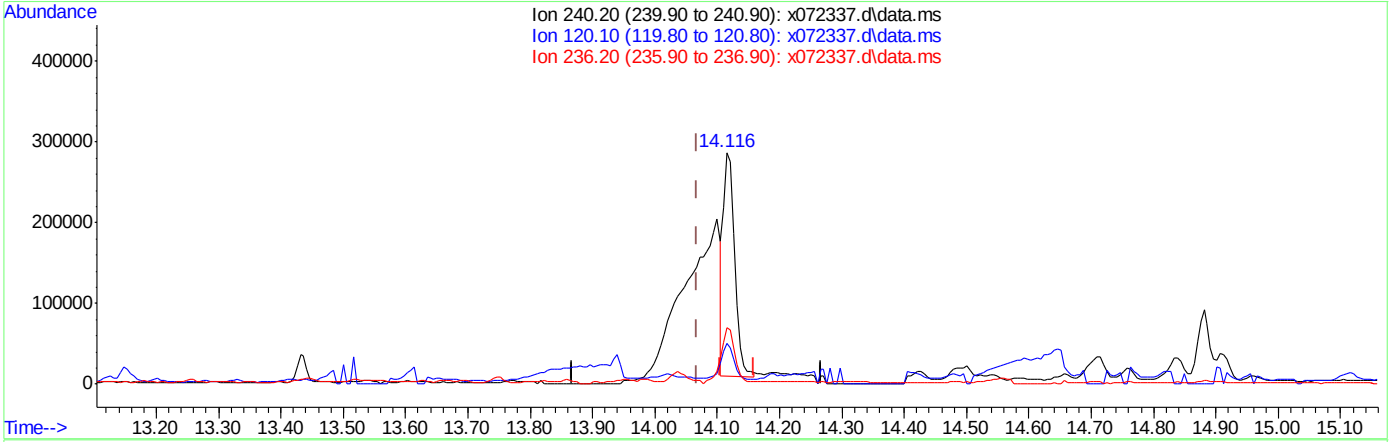
response 1211255

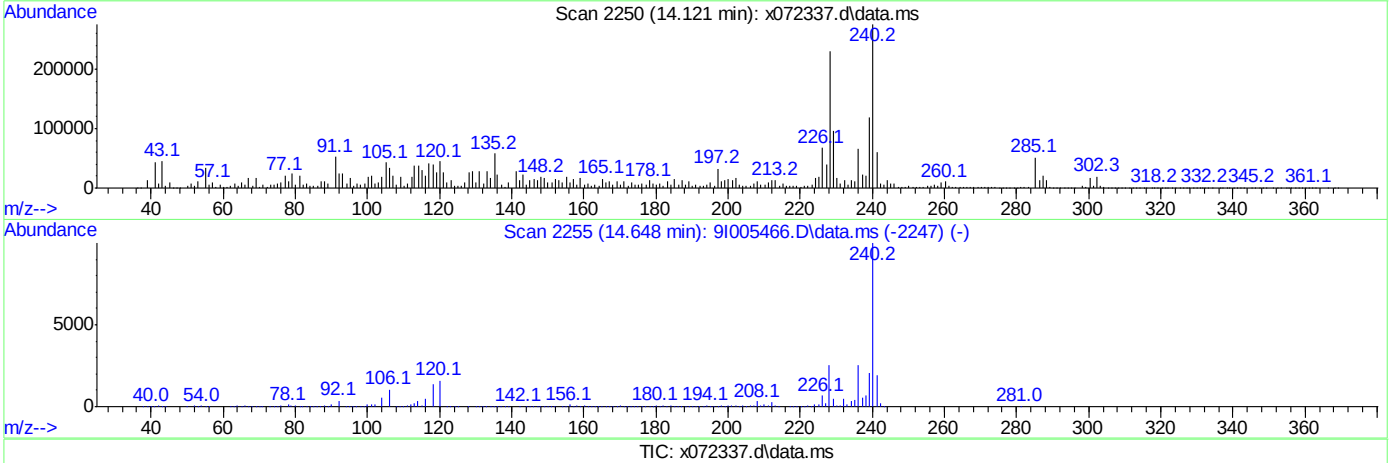
Ion	Exp%	Act%
240.20	100	100
120.10	15.80	17.79
236.20	25.70	24.23
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0811_sx2950\
Data File : x072337.d
Acq On : 11 Aug 2020 4:16 pm
Operator : marthav
Sample : fa77576-5 E Inst : MSBNA05
Misc : op81482,sx2950,30.1,,,1,1,soil
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 12 16:36:35 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration





TIC: x072337.d\data.ms

(92) Chrysene-d12 (I)

14.116min (+0.048) 40.00ppm m

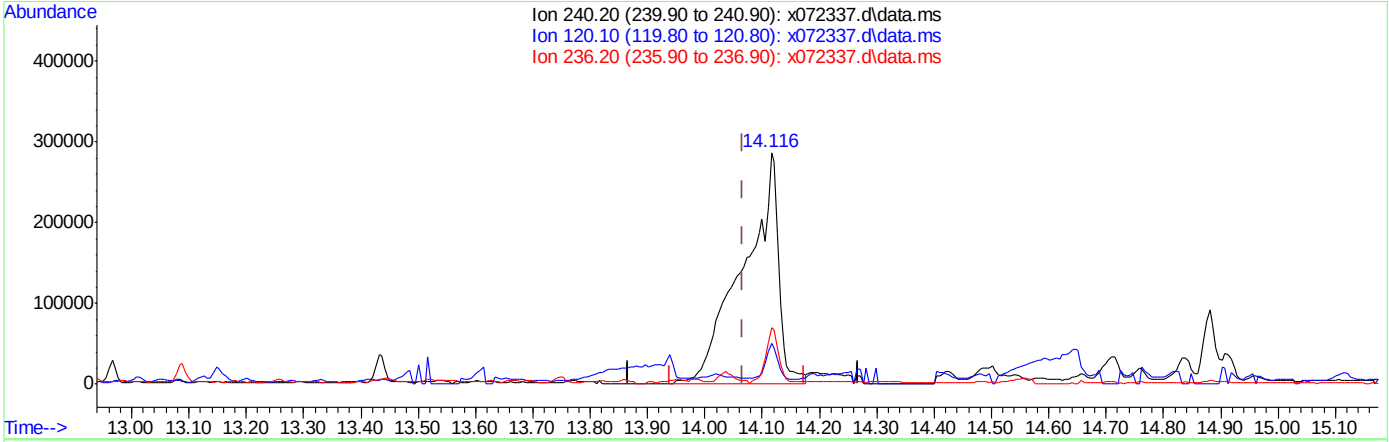
response 347437

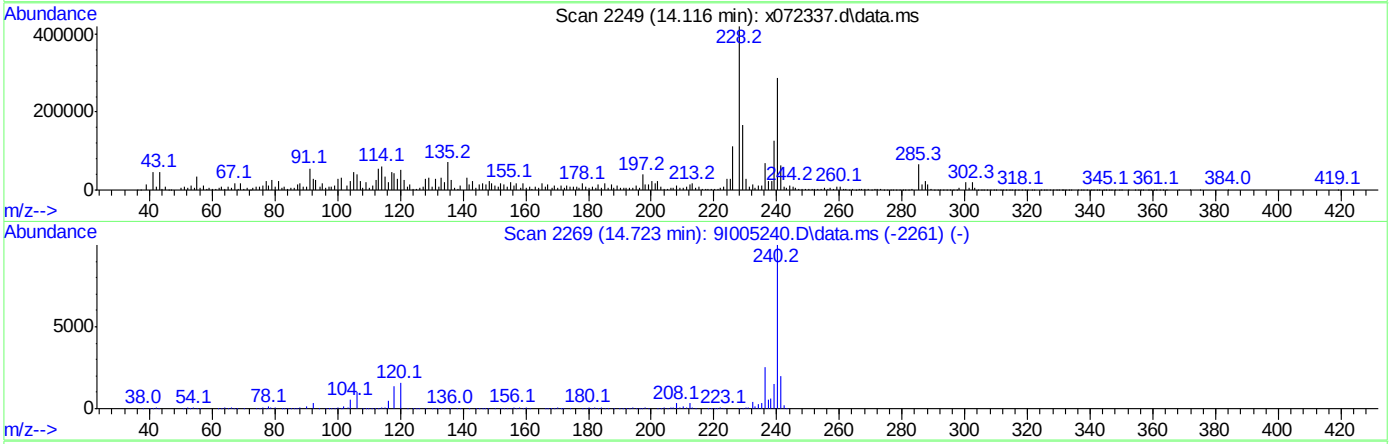
Ion	Exp%	Act%
240.20	100	100
120.10	15.80	17.79
236.20	25.70	24.23
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0811_sx2950\
Data File : x072337.d
Acq On : 11 Aug 2020 4:16 pm
Operator : marthav
Sample : fa77576-5 E Inst : MSBNA05
Misc : op81482,sx2950,30.1,,,1,1,soil
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 12 16:36:35 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration





TIC: x072337.d\data.ms

(146) Chrysene-d12A (I)

14.116min (+0.048) 40.00ppm

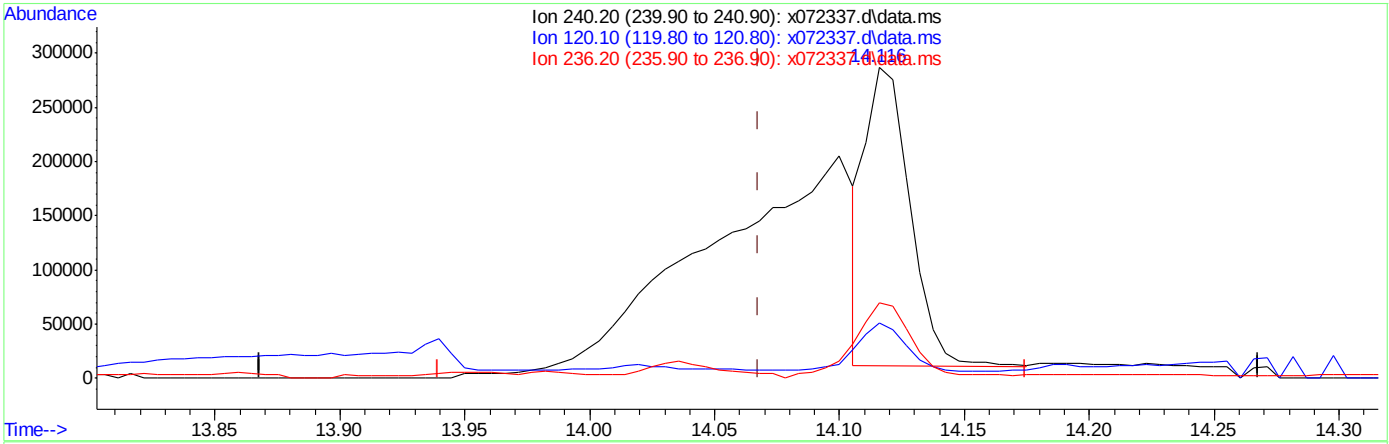
response 1230816

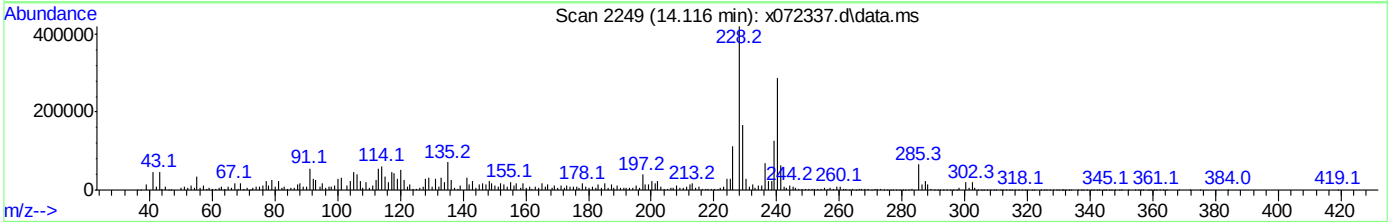
Ion	Exp%	Act%
240.20	100	100
120.10	15.50	10.17
236.20	25.40	23.38
0.00	0.00	0.00

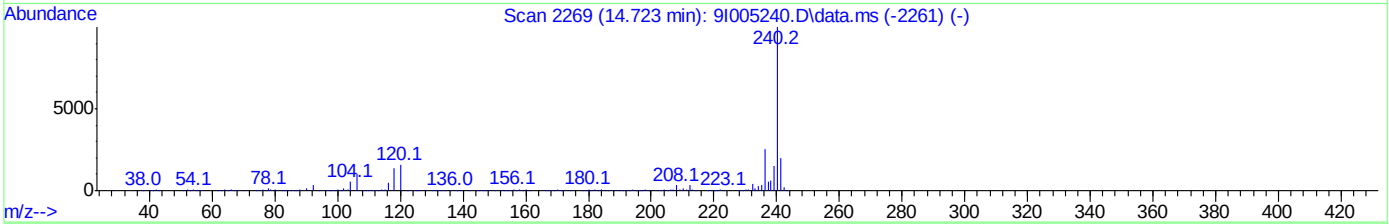
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0811_sx2950\
Data File : x072337.d
Acq On : 11 Aug 2020 4:16 pm
Operator : marthav
Sample : fa77576-5 E Inst : MSBNA05
Misc : op81482,sx2950,30.1,,,1,1,soil
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 12 16:36:35 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration







TIC: x072337.d\data.ms

(146) Chrysene-d12A (I)

14.116min (+0.048) 40.00ppm m

response 342725

Ion	Exp%	Act%
240.20	100	100
120.10	15.50	17.79
236.20	25.40	24.23
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan
08/12/20 16:57

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072362.D
Acq On : 12 Aug 2020 12:33 pm
Operator : marthav
Sample : fa77576-5 E,5 Inst : MSBNA05
Misc : op81482,sx2950,30.1,,,1,5,soil
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 12 15:33:30 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.654	152	182933	40.00	ppm	0.00
22) Naphthalene-d8	7.077	136	657427	40.00	ppm	0.00
43) Acenaphthene-d10	9.115	164	310084	40.00	ppm	0.00
70) Phenanthrene-d10	10.859	188	524672	40.00	ppm	0.00
92) Chrysene-d12	14.073	240	428249	40.00	ppm	0.00
102) Perylene-d12	16.277	264	343608	40.00	ppm	0.01
110) 1,4-Dichlorobenzene-d4A	5.654	152	182933	40.00	ppm	0.00
120) Naphthalene-d8A	7.077	136	657427	40.00	ppm	0.00
127) Acenaphthene-d10A	9.115	164	310084	40.00	ppm	0.00
136) Phenanthrene-d10A	10.859	188	524672	40.00	ppm	0.00
146) Chrysene-d12A	14.073	240	428249	40.00	ppm	0.00
153) Perylene-d12A	16.277	264	343608	40.00	ppm	0.01
System Monitoring Compounds						
7) 2-Fluorophenol	4.307	112	82642	12.60	ppm	0.00
Spiked Amount 100.000	Range 40 - 102		Recovery = 12.60%#			
9) Phenol-d5	5.328	99	110616	14.17	ppm	0.00
Spiked Amount 100.000	Range 41 - 100		Recovery = 14.17%#			
23) Nitrobenzene-d5	6.269	82	46206	6.81	ppm	0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 13.62%#			
47) 2-Fluorobiphenyl	8.345	172	82947	7.39	ppm	0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 14.78%#			
75) 2,4,6-Tribromophenol	10.046	330	15278	15.49	ppm	-0.01
Spiked Amount 100.000	Range 42 - 108		Recovery = 15.49%#			
95) Terphenyl-d14	12.773	244	82869	7.28	ppm	0.00
Spiked Amount 50.000	Range 45 - 119		Recovery = 14.56%#			
Target Compounds						Qvalue
10) Phenol	5.333	94	128856	13.92	ppm	# 63
34) Naphthalene	7.099	128	1130	0.06	ppm	96
40) 2-Methylnaphthalene	7.901	142	545	0.05	ppm	91
52) Acenaphthylene	8.944	152	44854	2.90	ppm	98
57) Acenaphthene	9.147	153	1767	0.17	ppm	92
60) Dibenzofuran	9.356	168	1024	0.07	ppm	96
65) Fluorene	9.757	166	5874	0.55	ppm	94
84) Phenanthrene	10.880	178	27256	1.72	ppm	99
85) Anthracene	10.939	178	104116	6.30	ppm	97
87) Carbazole	11.158	167	36126	2.48	ppm	99
91) Fluoranthene	12.287	202	363782	24.73	ppm	99
94) Pyrene	12.549	202	609468	34.28	ppm	99
99) Benzo[a]anthracene	14.062	228	236231	17.55	ppm	97
100) Chrysene	14.105	228	308532	21.52	ppm	99
104) Benzo[b]fluoranthene	15.635	252	482834	47.55	ppm	97
105) Benzo[k]fluoranthene	15.672	252	195941m	16.06	ppm	
106) Benzo[a]pyrene	16.175	252	181671	19.88	ppm	96
107) Indeno[1,2,3-cd]pyrene	17.930	276	102365	18.58	ppm	89
108) Dibenz[a,h]anthracene	18.031	278	8063	1.50	ppm	91
109) Benzo[g,h,i]perylene	18.283	276	73964	9.17	ppm	85

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072362.D
Acq On : 12 Aug 2020 12:33 pm
Operator : marthav
Sample : fa77576-5 E,5 Inst : MSBNA05
Misc : op81482,sx2950,30.1,,,1,5,soil
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 12 15:33:30 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

(#) = qualifier out of range (m) = manual integration (+) = signals summed

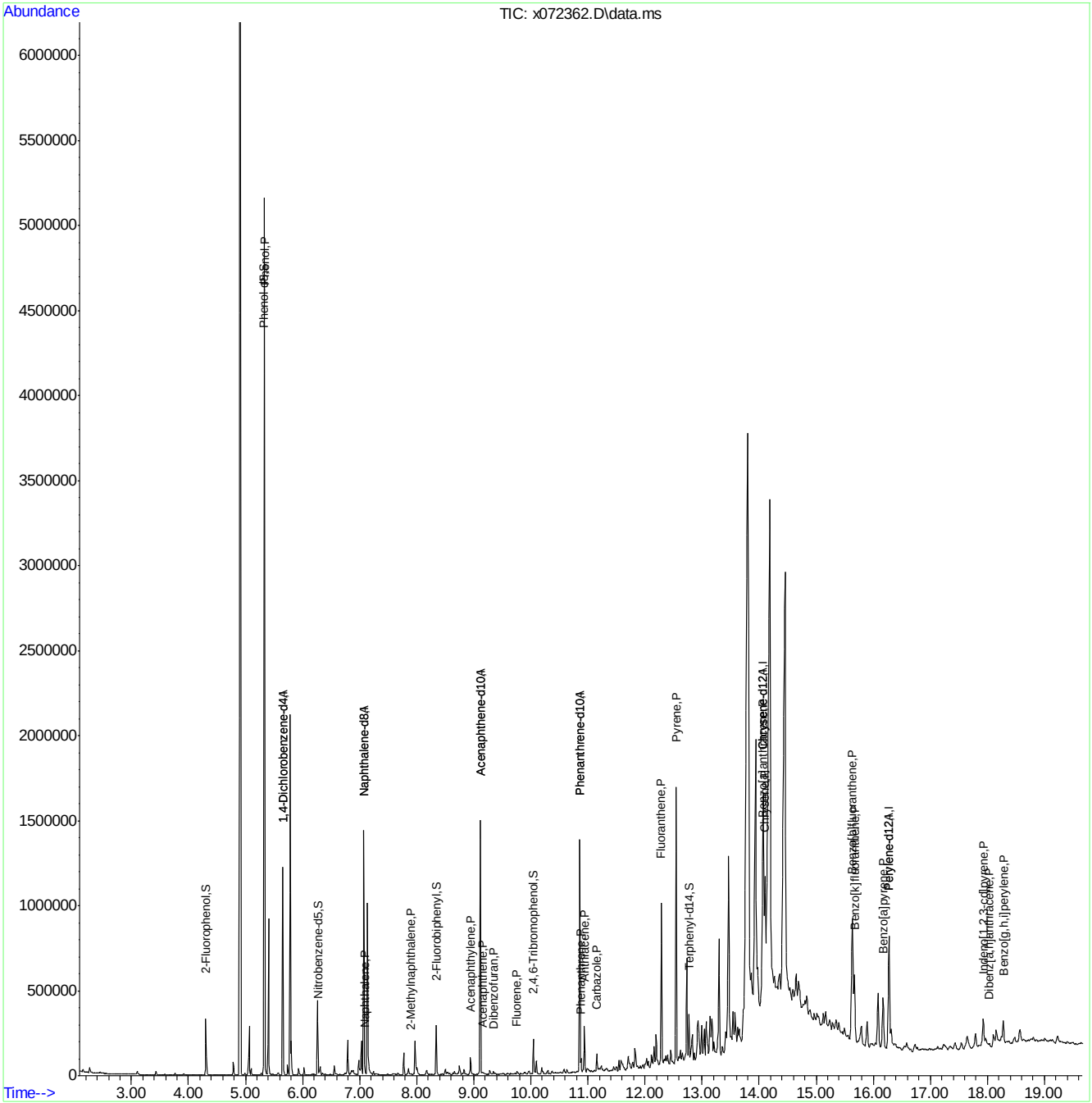
7.1.9

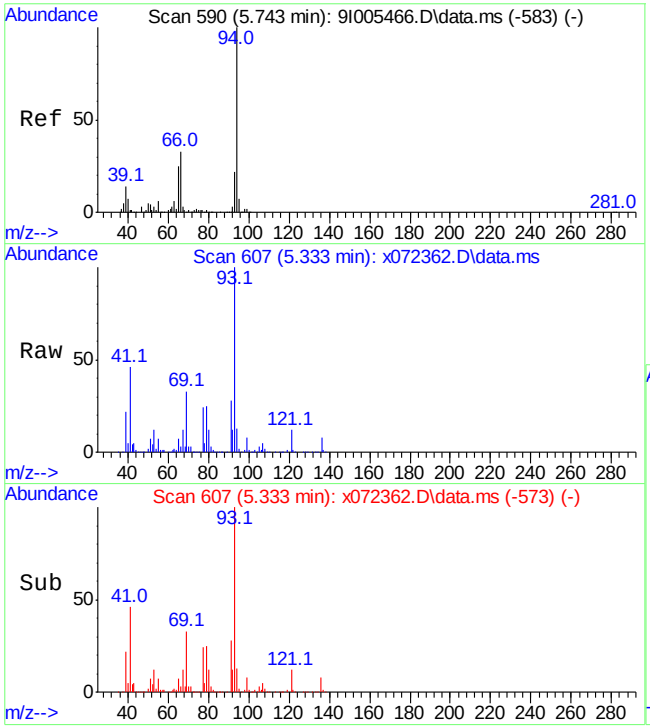
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072362.D
Acq On : 12 Aug 2020 12:33 pm
Operator : marthav
Sample : fa77576-5 E,5 Inst : MSBNA05
Misc : op81482,sx2950,30.1,,,1,5,soil
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 12 15:33:30 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration

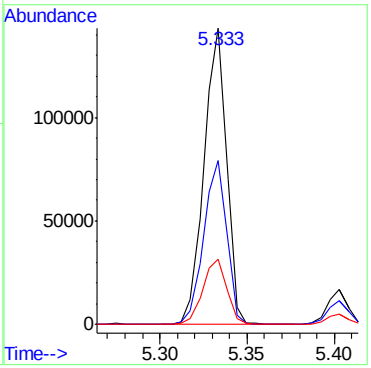


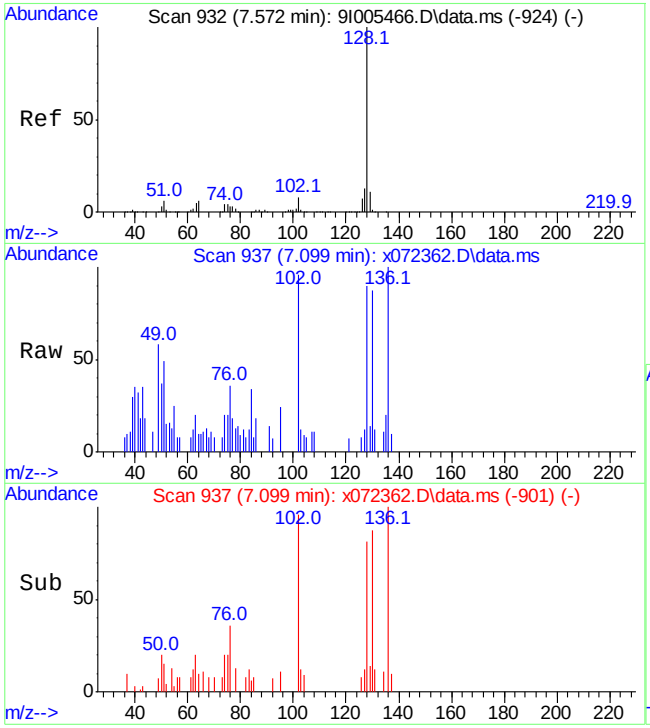


#10
Phenol
Concen: 13.92 ppm
RT: 5.333 min Scan# 607
Delta R.T. -0.016 min
Lab File: x072362.D
Acq: 12 Aug 2020 12:33 pm

Tgt Ion: 94 Resp: 128856

Ion	Ratio	Lower	Upper
94	100		
65	55.2	0.0	54.8#
66	21.9	3.0	63.0

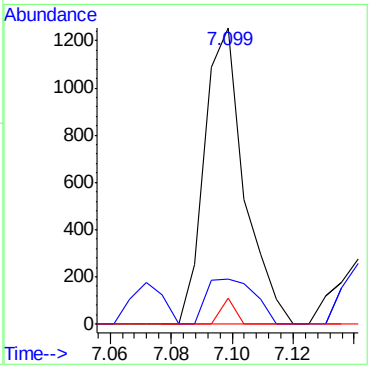


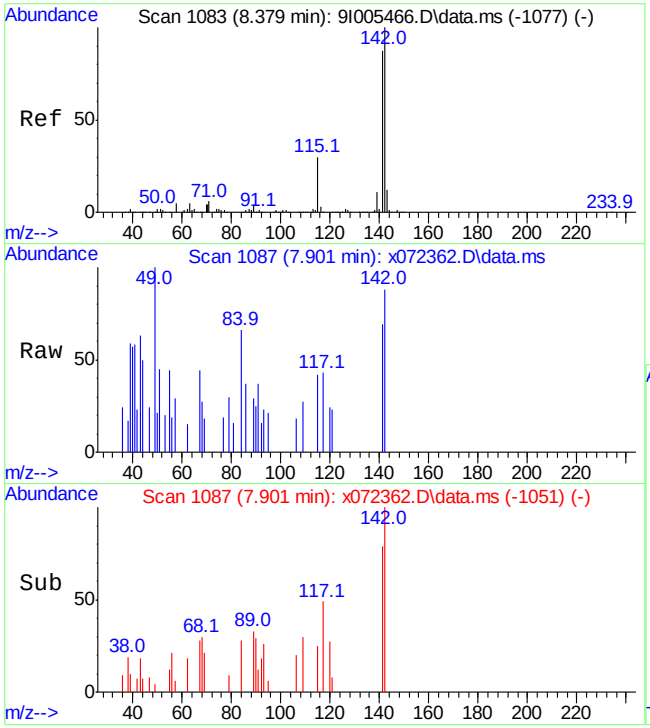


#34
Naphthalene
Concen: 0.06 ppm
RT: 7.099 min Scan# 937
Delta R.T. -0.005 min
Lab File: x072362.D
Acq: 12 Aug 2020 12:33 pm

Tgt Ion:128 Resp: 1130

Ion	Ratio	Lower	Upper
128	100		
129	10.2	0.0	41.4
126	8.9	0.0	37.4

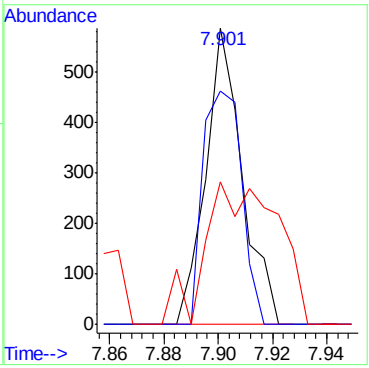


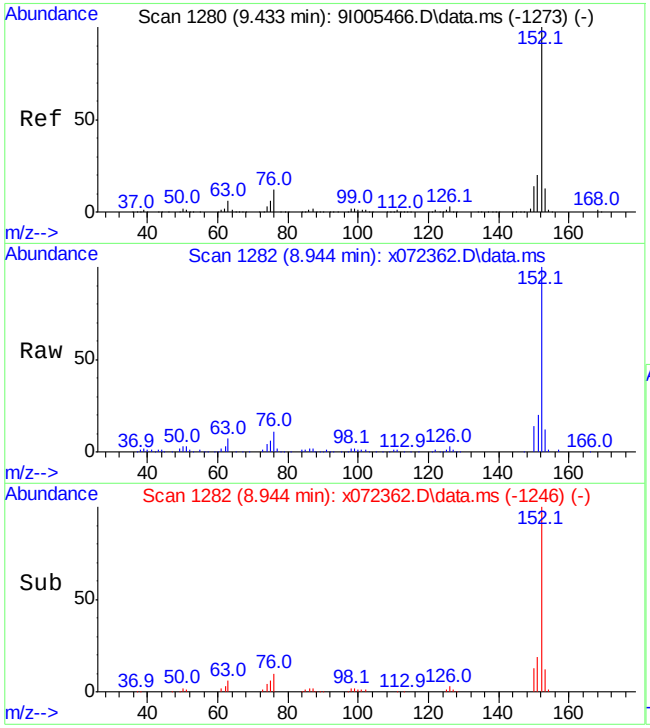


#40
2-Methylnaphthalene
Concen: 0.05 ppm
RT: 7.901 min Scan# 1087
Delta R.T. -0.005 min
Lab File: x072362.D
Acq: 12 Aug 2020 12:33 pm

Tgt Ion:142 Resp: 545

Ion	Ratio	Lower	Upper
142	100		
141	78.7	56.8	116.8
115	35.5	0.0	60.0

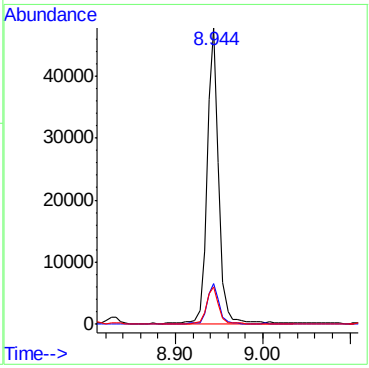


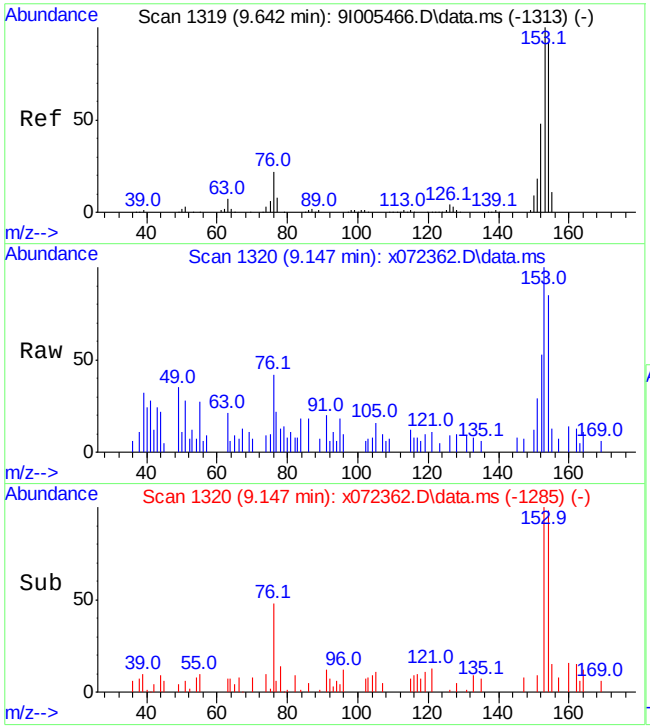


#52
Acenaphthylene
Concen: 2.90 ppm
RT: 8.944 min Scan# 1282
Delta R.T. -0.005 min
Lab File: x072362.D
Acq: 12 Aug 2020 12:33 pm

Tgt Ion:152 Resp: 44854

Ion	Ratio	Lower	Upper
152	100		
150	13.7	0.0	44.3
153	12.5	0.0	43.3

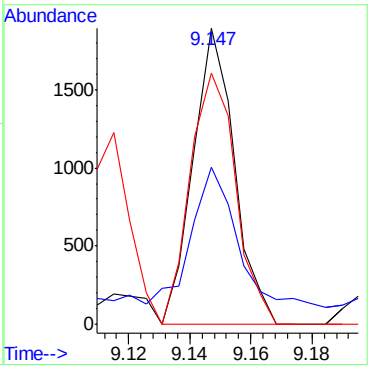


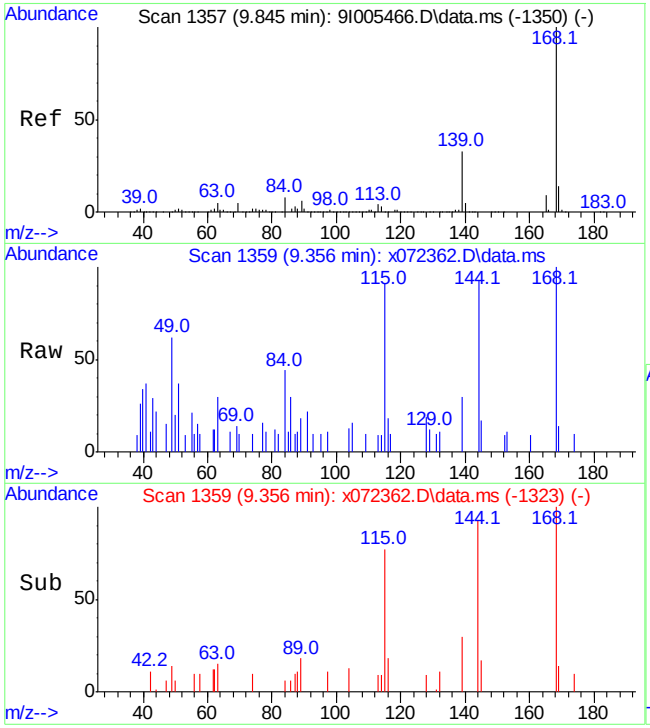


#57
Acenaphthene
Concen: 0.17 ppm
RT: 9.147 min Scan# 1320
Delta R.T. -0.011 min
Lab File: x072362.D
Acq: 12 Aug 2020 12:33 pm

Tgt Ion:153 Resp: 1767

Ion	Ratio	Lower	Upper
153	100		
152	42.8	18.4	78.4
154	84.9	62.4	122.4

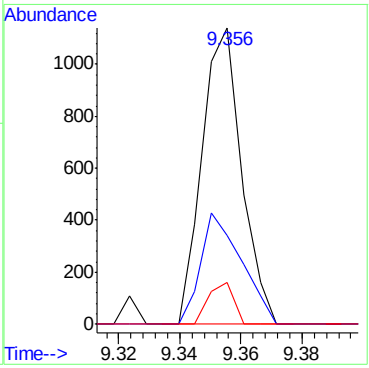


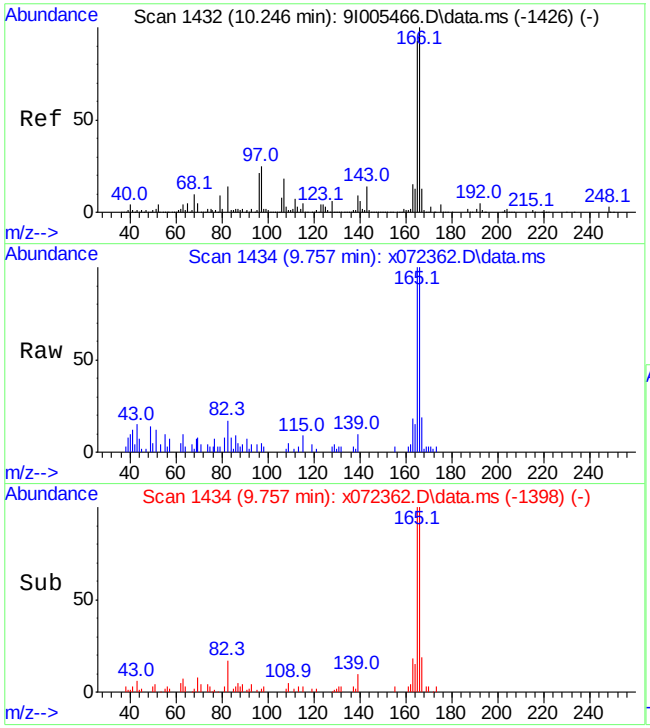


#60
Dibenzofuran
Concen: 0.07 ppm
RT: 9.356 min Scan# 1359
Delta R.T. -0.005 min
Lab File: x072362.D
Acq: 12 Aug 2020 12:33 pm

Tgt Ion:168 Resp: 1024

Ion	Ratio	Lower	Upper
168	100		
139	30.1	3.0	63.0
169	14.0	0.0	43.5

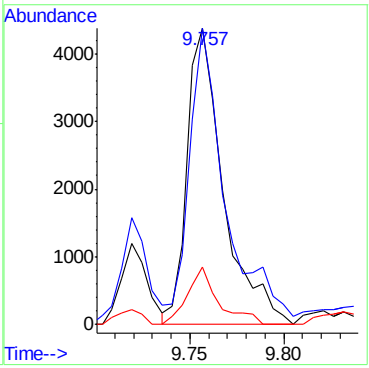


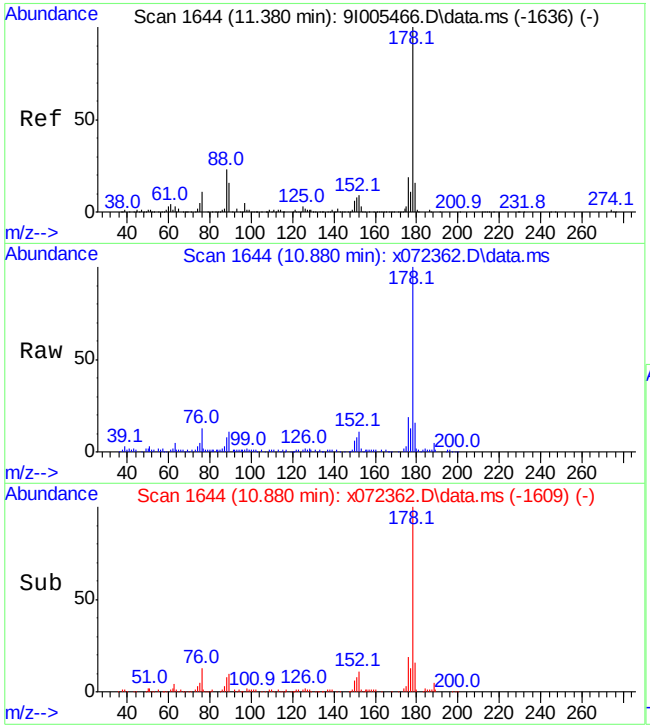


#65
Fluorene
Concen: 0.55 ppm
RT: 9.757 min Scan# 1434
Delta R.T. -0.005 min
Lab File: x072362.D
Acq: 12 Aug 2020 12:33 pm

Tgt Ion:166 Resp: 5874

Ion	Ratio	Lower	Upper
166	100		
165	97.1	62.7	122.7
167	19.6	0.0	43.5

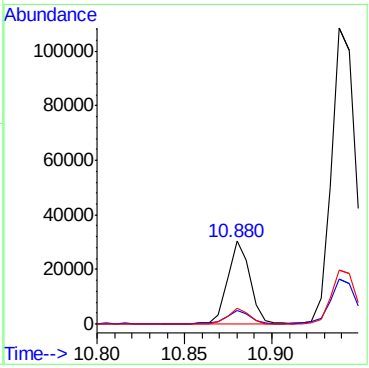


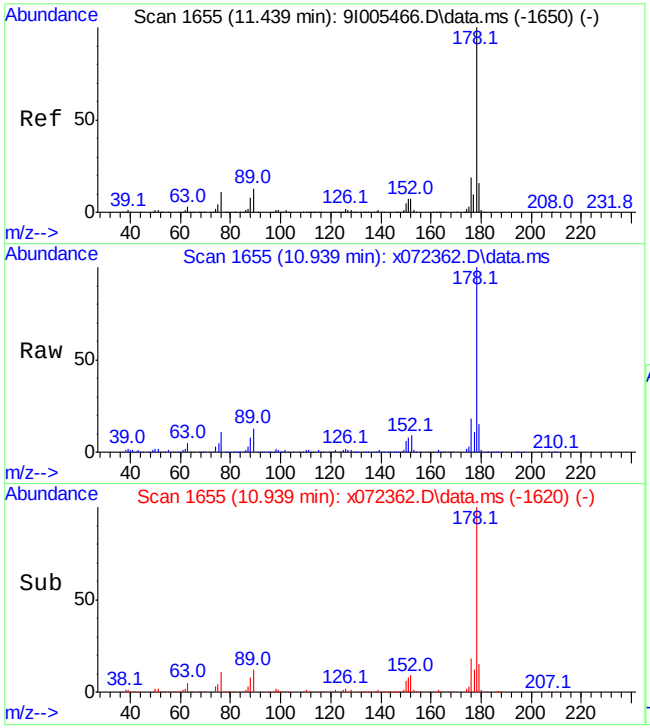


#84
Phenanthrene
Concen: 1.72 ppm
RT: 10.880 min Scan# 1644
Delta R.T. -0.011 min
Lab File: x072362.D
Acq: 12 Aug 2020 12:33 pm

Tgt Ion:178 Resp: 27256

Ion	Ratio	Lower	Upper
178	100		
179	15.3	0.0	45.8
176	19.4	0.0	49.3

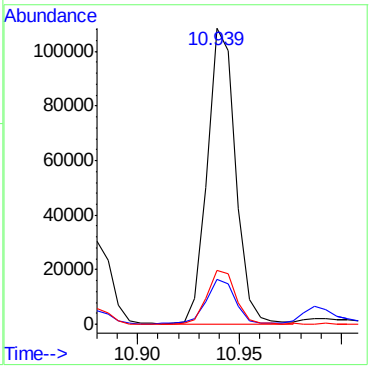


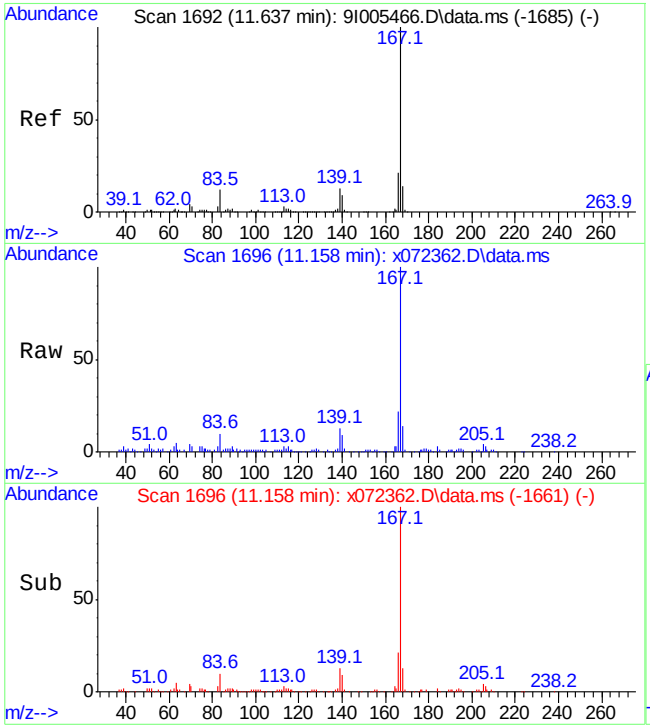


#85
Anthracene
Concen: 6.30 ppm
RT: 10.939 min Scan# 1655
Delta R.T. -0.011 min
Lab File: x072362.D
Acq: 12 Aug 2020 12:33 pm

Tgt Ion:178 Resp: 104116

Ion	Ratio	Lower	Upper
178	100		
179	14.6	0.0	46.0
176	18.3	0.0	49.3

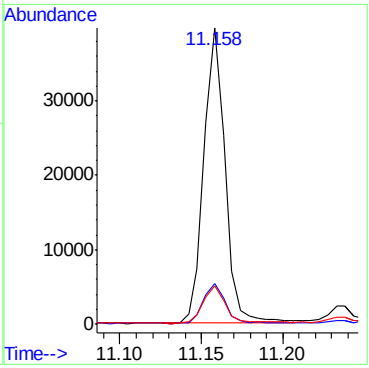


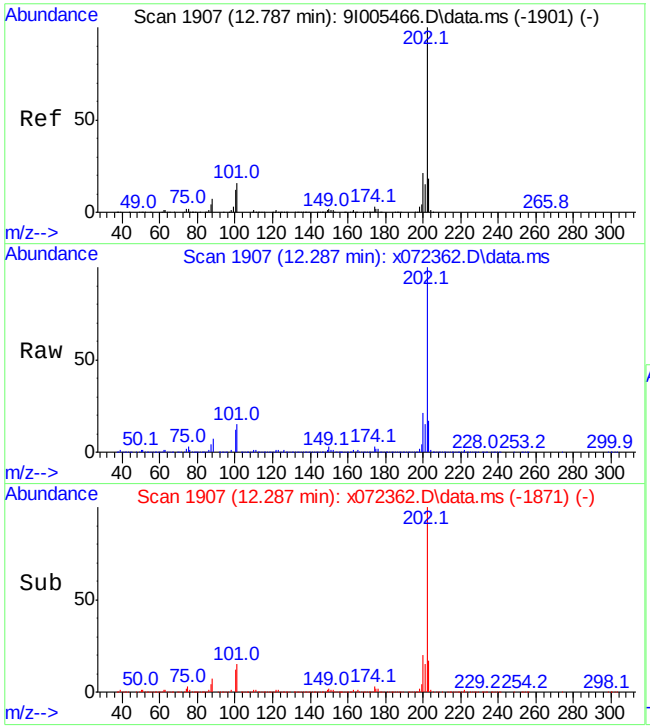


#87
Carbazole
Concen: 2.48 ppm
RT: 11.158 min Scan# 1696
Delta R.T. -0.011 min
Lab File: x072362.D
Acq: 12 Aug 2020 12:33 pm

Tgt Ion:167 Resp: 36126

Ion	Ratio	Lower	Upper
167	100		
168	13.3	0.0	43.9
139	12.7	0.0	42.7

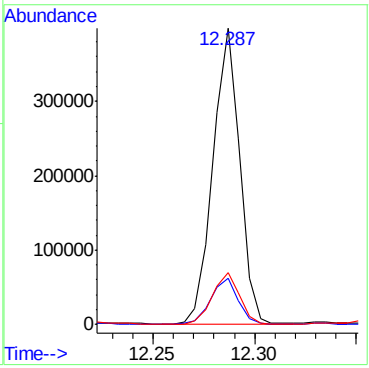


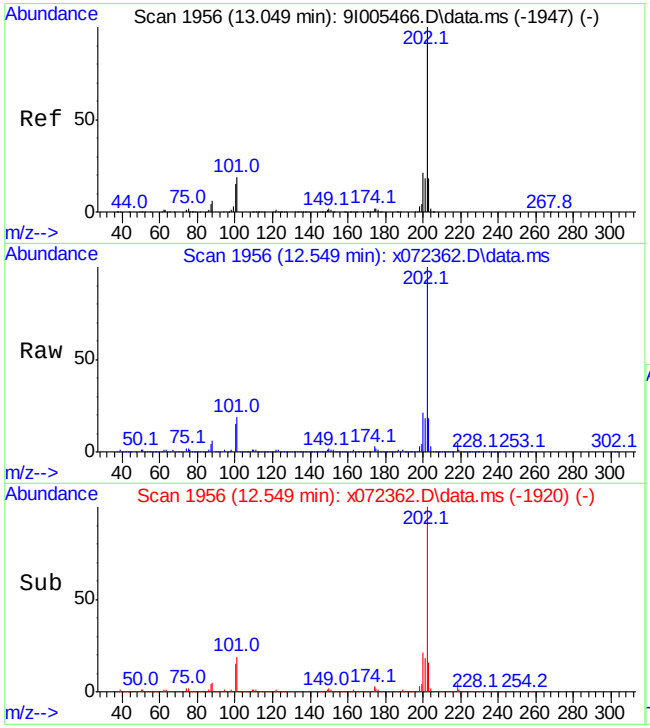


#91
Fluoranthene
Concen: 24.73 ppm
RT: 12.287 min Scan# 1907
Delta R.T. -0.005 min
Lab File: x072362.D
Acq: 12 Aug 2020 12:33 pm

Tgt Ion:202 Resp: 363782

Ion	Ratio	Lower	Upper
202	100		
101	15.3	0.0	45.8
203	17.4	0.0	48.1

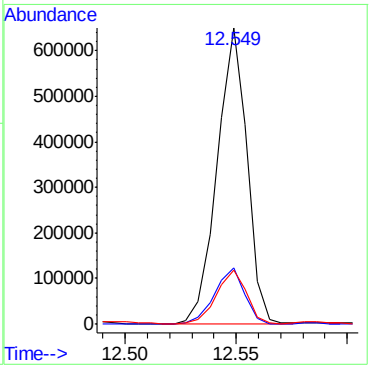


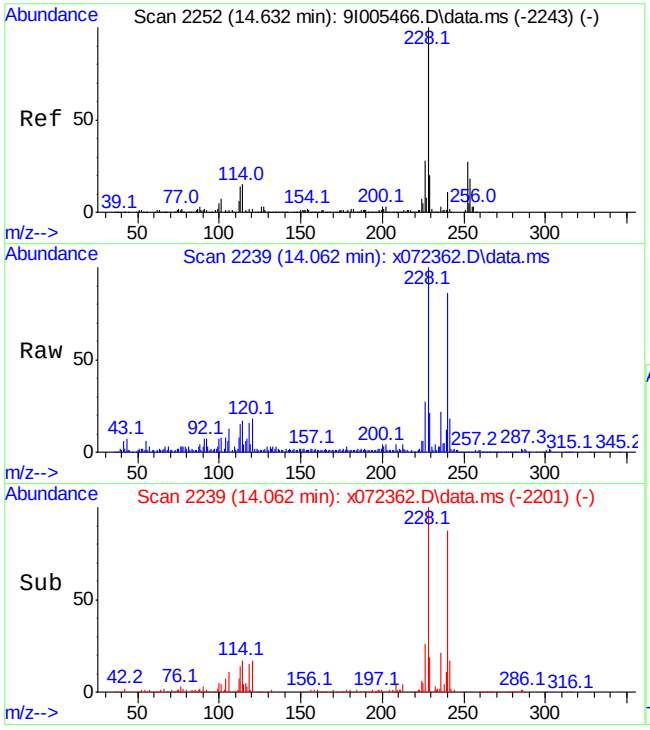


#94
Pyrene
Concen: 34.28 ppm
RT: 12.549 min Scan# 1956
Delta R.T. -0.005 min
Lab File: x072362.D
Acq: 12 Aug 2020 12:33 pm

Tgt Ion:202 Resp: 609468

Ion	Ratio	Lower	Upper
202	100		
101	18.7	0.0	48.7
203	17.9	0.0	48.4

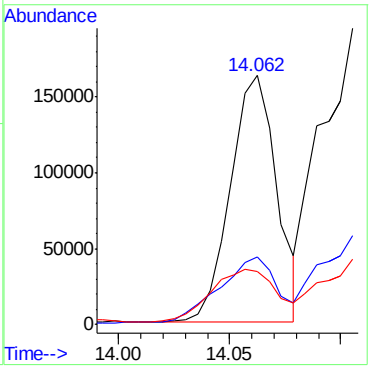


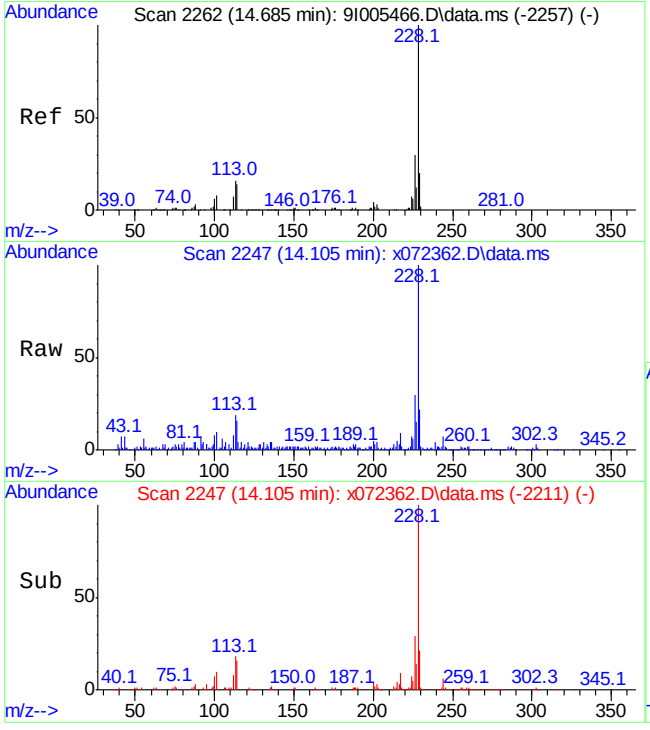


#99
Benzo[a]anthracene
Concen: 17.55 ppm
RT: 14.062 min Scan# 2239
Delta R.T. 0.005 min
Lab File: x072362.D
Acq: 12 Aug 2020 12:33 pm

Tgt Ion:228 Resp: 236231

Ion	Ratio	Lower	Upper
228	100		
226	25.9	0.0	57.5
229	18.7	0.0	49.9

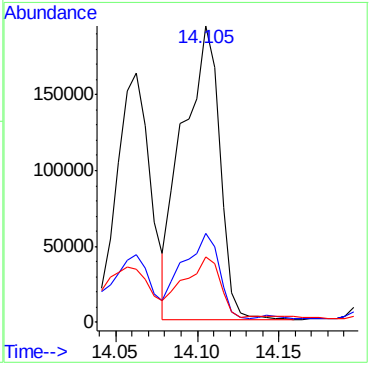


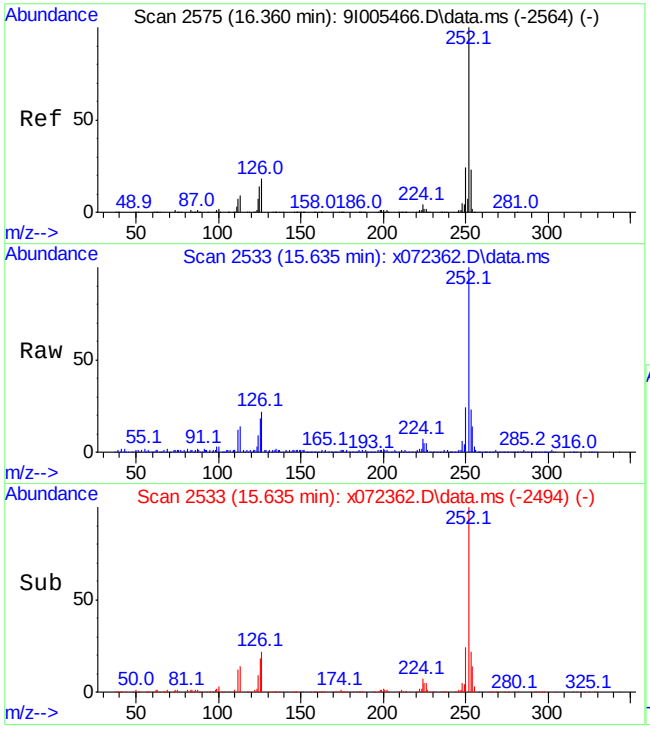


#100
Chrysene
Concen: 21.52 ppm
RT: 14.105 min Scan# 2247
Delta R.T. -0.005 min
Lab File: x072362.D
Acq: 12 Aug 2020 12:33 pm

Tgt Ion:228 Resp: 308532

Ion	Ratio	Lower	Upper
228	100		
226	29.3	0.4	60.4
229	20.0	0.0	50.1

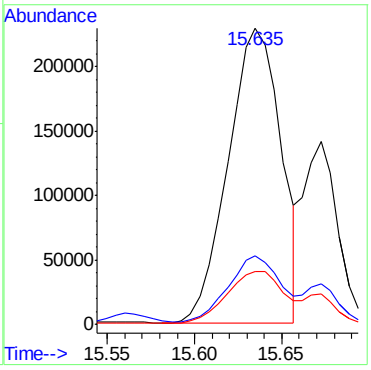


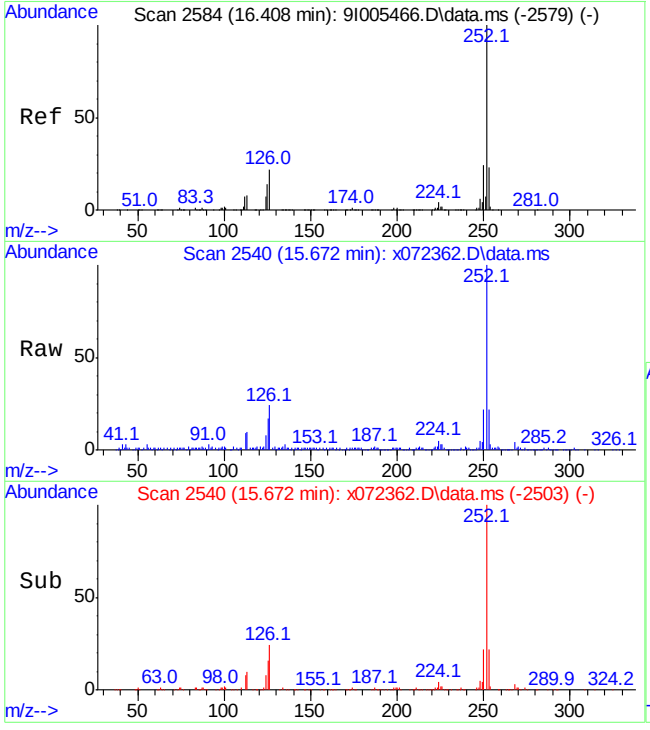


#104
Benzo[b]fluoranthene
Concen: 47.55 ppm
RT: 15.635 min Scan# 2533
Delta R.T. 0.011 min
Lab File: x072362.D
Acq: 12 Aug 2020 12:33 pm

Tgt Ion:252 Resp: 482834

Ion	Ratio	Lower	Upper
252	100		
253	22.2	0.0	52.5
125	17.2	0.0	44.0

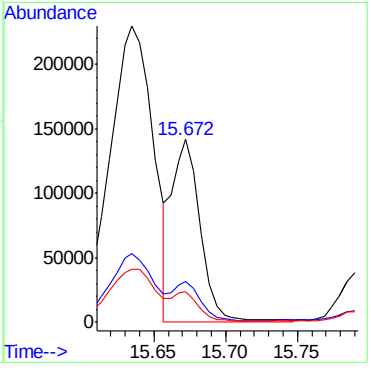


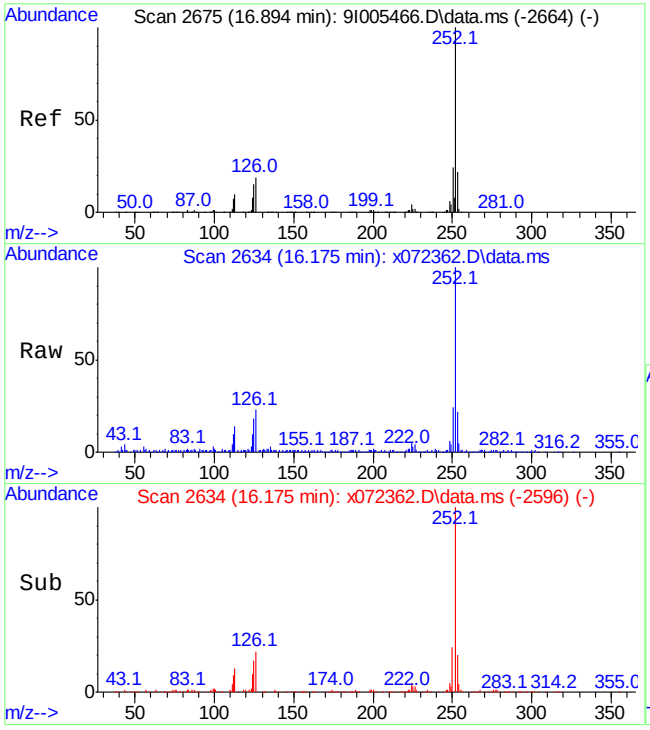


#105
Benzo[k]fluoranthene
Concen: 16.06 ppm m
RT: 15.672 min Scan# 2540
Delta R.T. -0.000 min
Lab File: x072362.D
Acq: 12 Aug 2020 12:33 pm

Tgt Ion:252 Resp: 195941

Ion	Ratio	Lower	Upper
252	100		
253	22.2	0.0	52.5
125	16.7	0.0	44.4

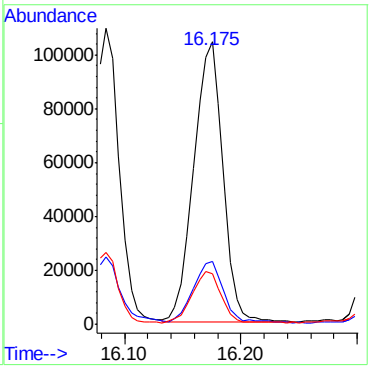


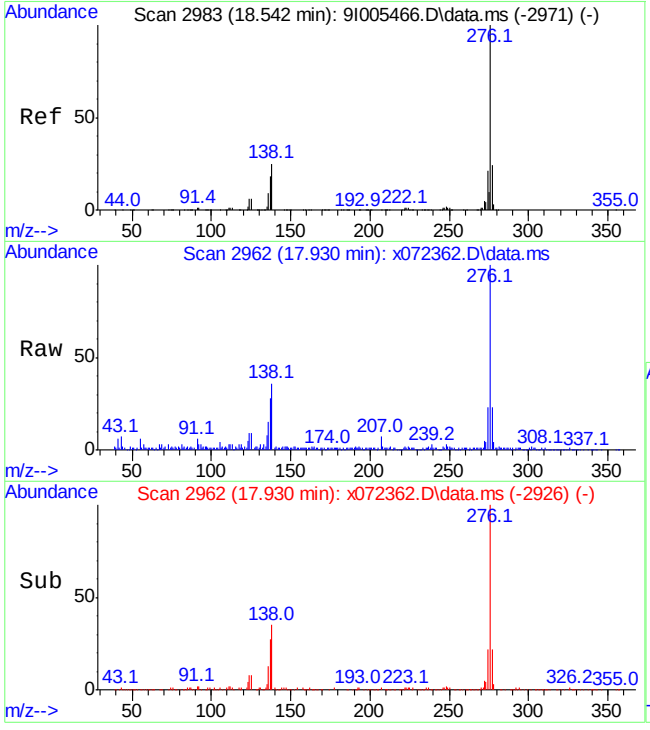


#106
Benzo[a]pyrene
Concen: 19.88 ppm
RT: 16.175 min Scan# 2634
Delta R.T. 0.005 min
Lab File: x072362.D
Acq: 12 Aug 2020 12:33 pm

Tgt Ion:252 Resp: 181671

Ion	Ratio	Lower	Upper
252	100		
253	21.5	0.0	52.3
125	17.4	0.0	44.7

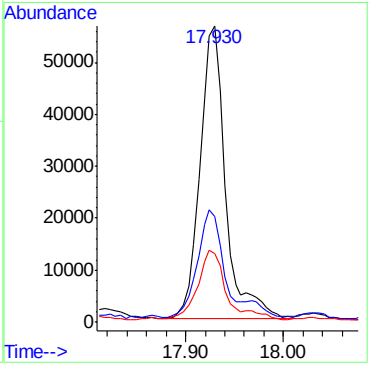


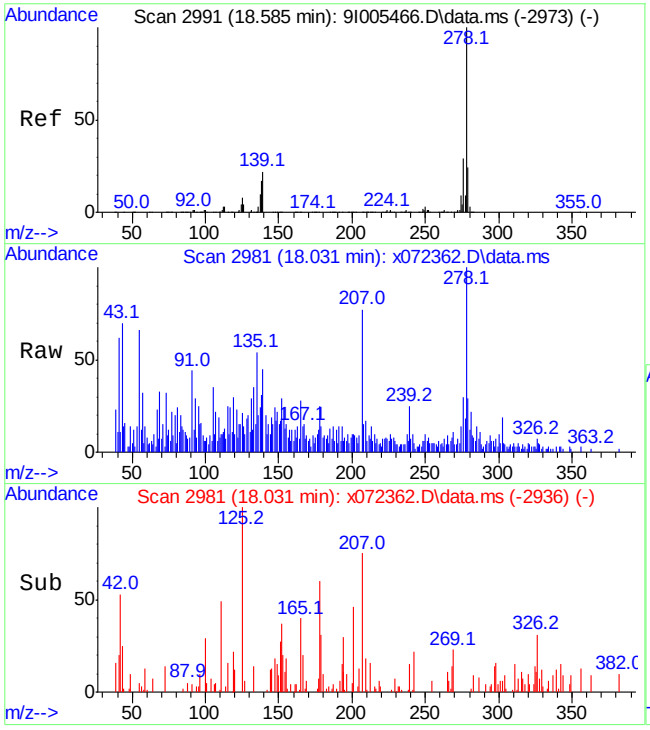


#107
Indeno[1,2,3-cd]pyrene
Concen: 18.58 ppm
RT: 17.930 min Scan# 2962
Delta R.T. -0.005 min
Lab File: x072362.D
Acq: 12 Aug 2020 12:33 pm

Tgt Ion:276 Resp: 102365

Ion	Ratio	Lower	Upper
276	100		
138	34.4	0.0	54.7
277	22.3	0.0	53.8

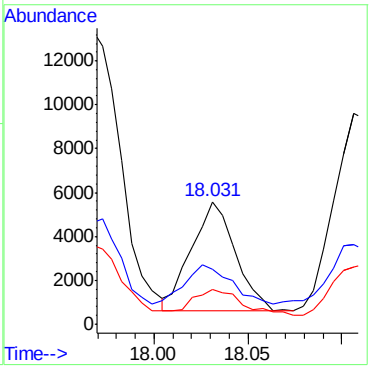


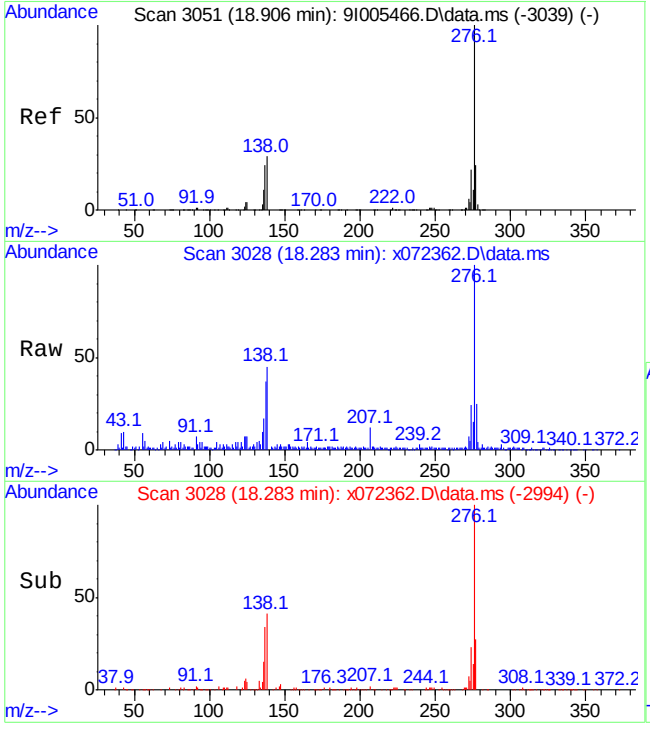


#108
Dibenz[a,h]anthracene
Concen: 1.50 ppm
RT: 18.031 min Scan# 2981
Delta R.T. 0.043 min
Lab File: x072362.D
Acq: 12 Aug 2020 12:33 pm

Tgt Ion:278 Resp: 8063

Ion	Ratio	Lower	Upper
278	100		
139	30.0	0.0	52.4
279	22.6	0.0	54.4

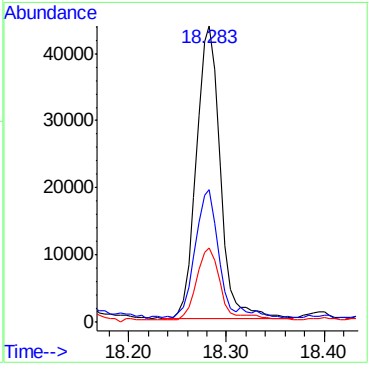




#109
Benzo[g,h,i]perylene
Concen: 9.17 ppm
RT: 18.283 min Scan# 3028
Delta R.T. -0.016 min
Lab File: x072362.D
Acq: 12 Aug 2020 12:33 pm

Tgt Ion:276 Resp: 73964

Ion	Ratio	Lower	Upper
276	100		
138	43.4	0.0	59.4
277	24.5	0.0	54.1



Manual Integration Approval Summary

Sample Number: FA77576-5
Lab FileID: X072362.D
Injection Time: 08/12/20 12:33

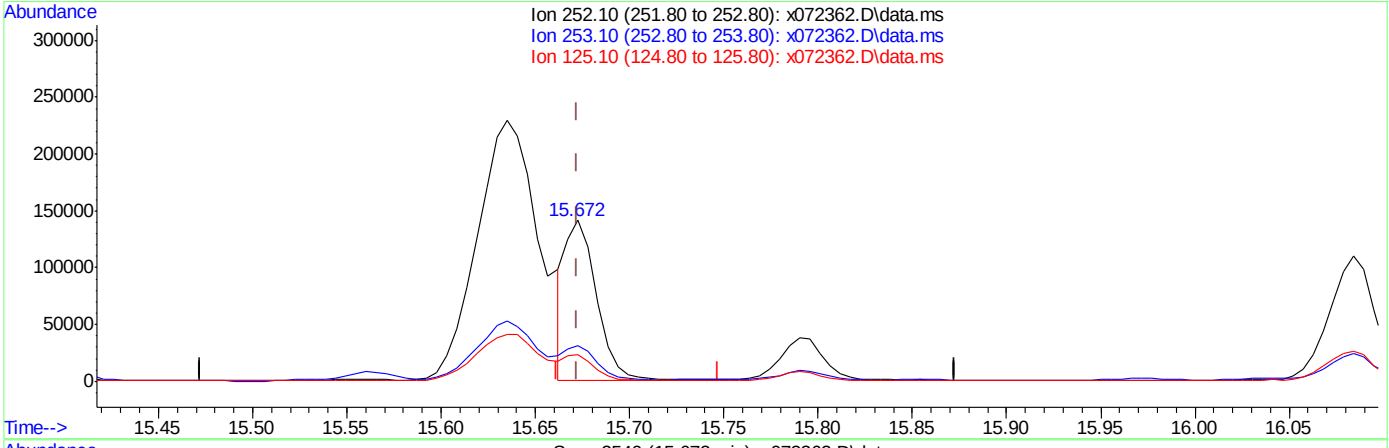
Method: SW846 8270E
Analyst approved: 08/12/20 16:00 Martha Valls
Supervisor approved: 08/12/20 16:57 Naresh Jiawan

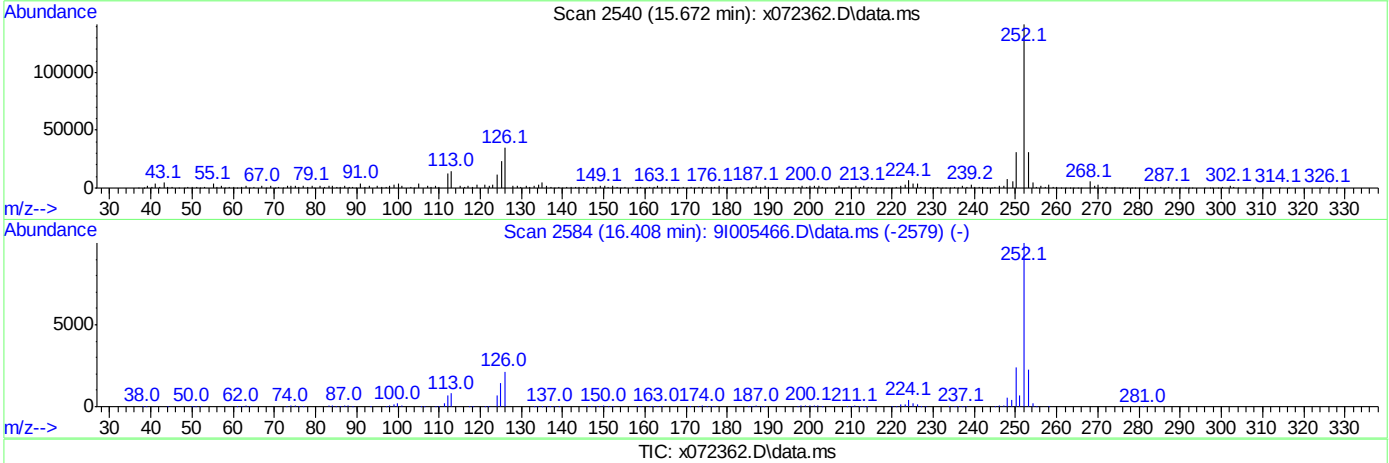
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(k)fluoranthene	207-08-9		15.67	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072362.D
Acq On : 12 Aug 2020 12:33 pm
Operator : marthav
Sample : fa77576-5 E,5 Inst : MSBNA05
Misc : op81482,sx2950,30.1,,,1,5,soil
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 12 14:15:48 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration





TIC: x072362.D\data.ms

(105) Benzo[k]fluoranthene (P)

15.672min (-0.000) 13.28ppm

response 162011

Ion	Exp%	Act%
252.10	100	100
253.10	22.50	21.31
125.10	14.40	15.57
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072338.d
Acq On : 11 Aug 2020 4:42 pm
Operator : marthav
Sample : fa77576-6 E
Misc : op81482,sx2950,30.2,,,1,1,soil
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 12 02:32:28 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.665	152	166126	40.00	ppm	0.00
22) Naphthalene-d8	7.088	136	627119	40.00	ppm	0.00
43) Acenaphthene-d10	9.126	164	312912	40.00	ppm	0.00
70) Phenanthrene-d10	10.869	188	546006	40.00	ppm	0.00
92) Chrysene-d12	14.089	240	436102	40.00	ppm	0.02
102) Perylene-d12	16.288	264	346747	40.00	ppm	0.03
110) 1,4-Dichlorobenzene-d4A	5.665	152	166126	40.00	ppm	0.00
120) Naphthalene-d8A	7.088	136	627119	40.00	ppm	0.00
127) Acenaphthene-d10A	9.126	164	312912	40.00	ppm	0.00
136) Phenanthrene-d10A	10.869	188	546006	40.00	ppm	0.00
146) Chrysene-d12A	14.089	240	436102	40.00	ppm	0.02
153) Perylene-d12A	16.288	264	346747	40.00	ppm	0.03
System Monitoring Compounds						
7) 2-Fluorophenol	4.323	112	422216	70.88	ppm	0.02
Spiked Amount 100.000	Range 40 - 102		Recovery = 70.88%			
9) Phenol-d5	5.344	99	527699	74.46	ppm	0.01
Spiked Amount 100.000	Range 41 - 100		Recovery = 74.46%			
23) Nitrobenzene-d5	6.280	82	220084	33.98	ppm	0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 67.96%			
47) 2-Fluorobiphenyl	8.355	172	404734	35.73	ppm	0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 71.46%			
75) 2,4,6-Tribromophenol	10.062	330	85442	73.67	ppm	0.00
Spiked Amount 100.000	Range 42 - 108		Recovery = 73.67%			
95) Terphenyl-d14	12.790	244	423924	36.58	ppm	0.01
Spiked Amount 50.000	Range 45 - 119		Recovery = 73.16%			
Target Compounds						Qvalue
5) Benzaldehyde	5.200	106	2228	0.45	ppm	# 77
16) 2,2'-Oxybis(1-chloropr...	5.959	45	1782	0.14	ppm	# 50
17) 2-Methylphenol	6.007	108	626	0.10	ppm	# 70
18) Acetophenone	6.120	105	3021	0.34	ppm	81
21) 3&4-Methylphenol	6.184	108	2116	0.34	ppm	93
27) 2,4-Dimethylphenol	6.756	107	1746	0.31	ppm	# 77
30) Benzoic Acid	6.890	105	27668	7.04	ppm	92
34) Naphthalene	7.109	128	10317	0.61	ppm	98
40) 2-Methylnaphthalene	7.912	142	4835	0.43	ppm	98
41) 1-Methylnaphthalene	8.024	142	2841	0.26	ppm	94
48) 1,1'-Biphenyl	8.468	154	1802	0.14	ppm	96
52) Acenaphthylene	8.955	152	203431	13.02	ppm	99
57) Acenaphthene	9.158	153	11744	1.13	ppm	95
60) Dibenzofuran	9.366	168	8848	0.64	ppm	98
65) Fluorene	9.768	166	25113	2.32	ppm	97
84) Phenanthrene	10.896	178	104915	6.36	ppm	97
85) Anthracene	10.955	178	497933	28.96	ppm	98
87) Carbazole	11.169	167	122650	8.08	ppm	99
89) Di-n-butylphthalate	11.634	149	1522	0.09	ppm	87
91) Fluoranthene	12.308	202	1090530	71.24	ppm	97
94) Pyrene	12.570	202	1469217	81.14	ppm	97
99) Benzo[a]anthracene	14.073	228	555879	40.56	ppm	99
100) Chrysene	14.121	228	708697	48.55	ppm	99
101) bis(2-Ethylhexyl)phtha...	14.234	149	3263	0.36	ppm	88
104) Benzo[b]fluoranthene	15.656	252	991714	89.02	ppm	96
105) Benzo[k]fluoranthene	15.688	252	298464	24.25	ppm	97
106) Benzo[a]pyrene	16.191	252	290542	30.71	ppm	96
107) Indeno[1,2,3-cd]pyrene	17.951	276	236148	37.50	ppm	85
108) Dibenz[a,h]anthracene	17.988	278	49659	8.62	ppm	87

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072338.d
Acq On : 11 Aug 2020 4:42 pm
Operator : marthav
Sample : fa77576-6 E
Misc : op81482,sx2950,30.2,,,1,1,soil
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 12 02:32:28 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

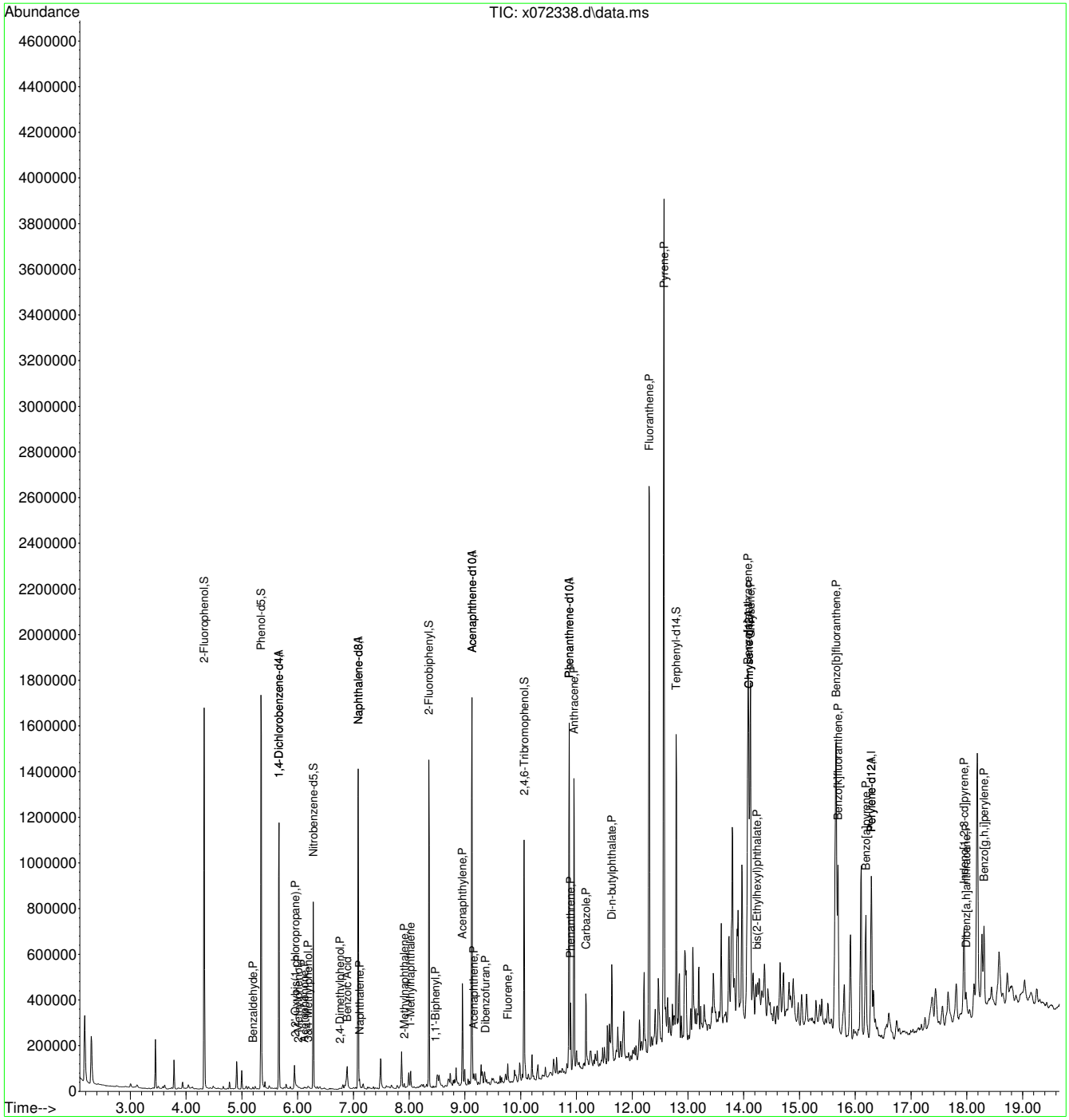
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
109) Benzo[g,h,i]perylene	18.309	276	181195	21.15	ppm	87

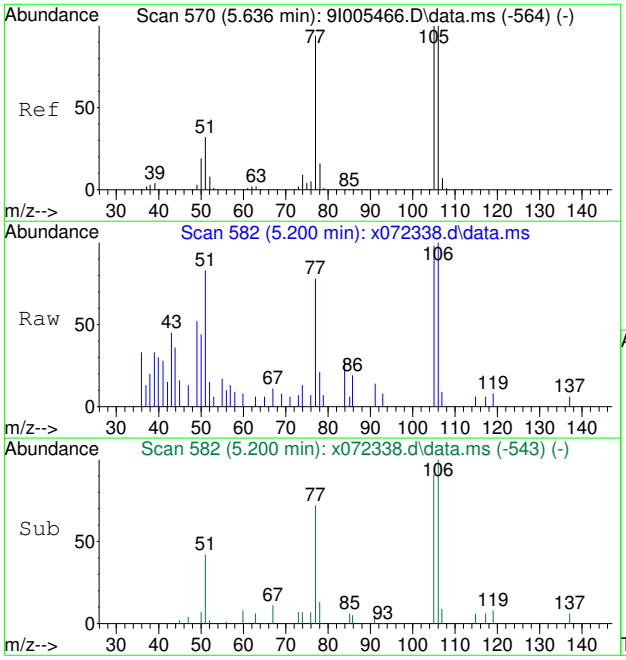
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072338.d
Acq On : 11 Aug 2020 4:42 pm
Operator : marthav
Sample : fa77576-6 E
Misc : op81482,sx2950,30.2,,,1,1,soil
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 12 02:32:28 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

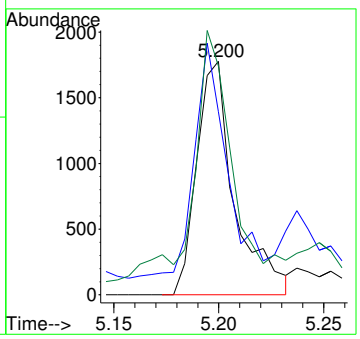


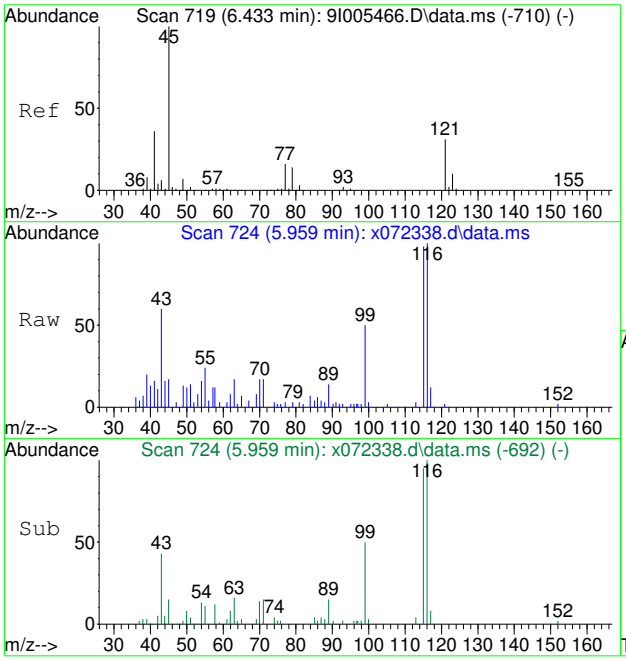


#5
Benzaldehyde
Concen: 0.45 ppm
RT: 5.200 min Scan# 582
Delta R.T. 0.011 min
Lab File: x072338.d
Acq: 11 Aug 2020 4:42 pm

Tgt Ion:106 Resp: 2228

Ion	Ratio	Lower	Upper
106	100		
77	62.6	63.9	123.9#
105	85.6	70.0	130.0

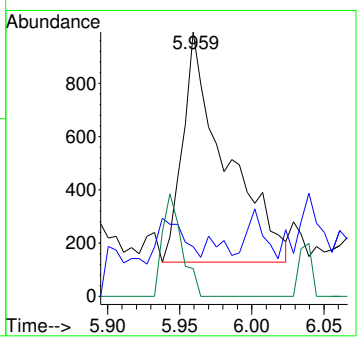


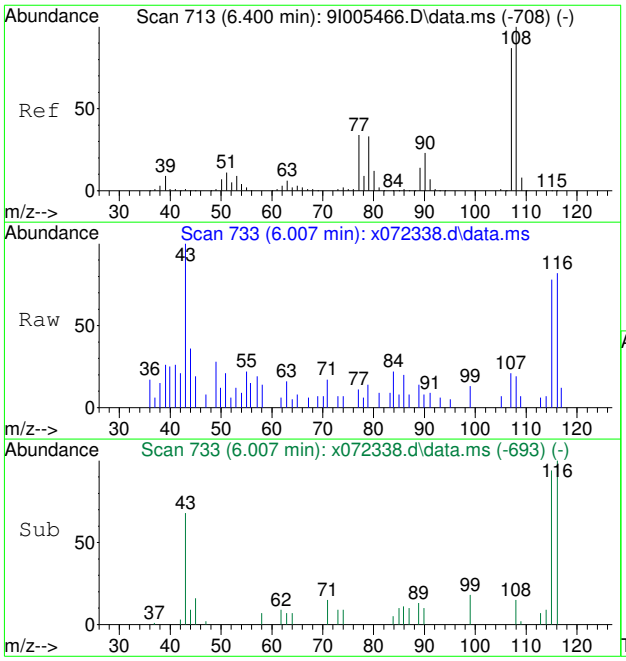


#16
2,2'-Oxybis(1-chloropropane)
Concen: 0.14 ppm
RT: 5.959 min Scan# 724
Delta R.T. -0.027 min
Lab File: x072338.d
Acq: 11 Aug 2020 4:42 pm

Tgt Ion: 45 Resp: 1782

Ion	Ratio	Lower	Upper
45	100		
77	0.0	0.0	46.2
121	0.0	1.4	61.4#

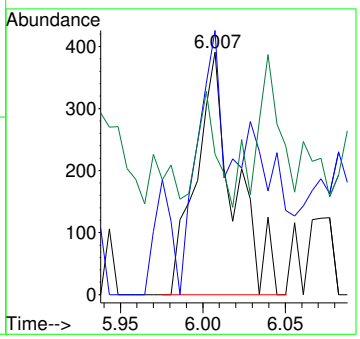


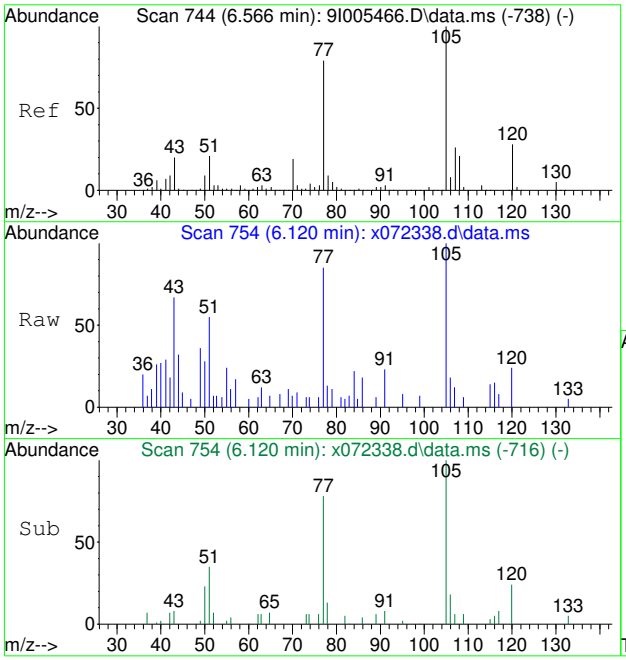


#17
2-Methylphenol
Concen: 0.10 ppm
RT: 6.007 min Scan# 733
Delta R.T. 0.016 min
Lab File: x072338.d
Acq: 11 Aug 2020 4:42 pm

Tgt Ion:108 Resp: 626

Ion	Ratio	Lower	Upper
108	100		
107	67.9	57.2	117.2
77	3.5	3.8	63.8#

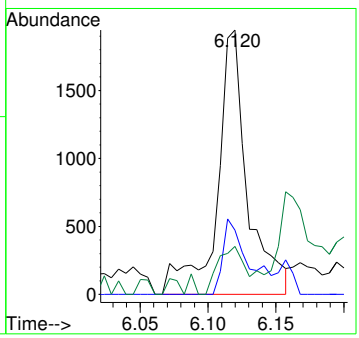


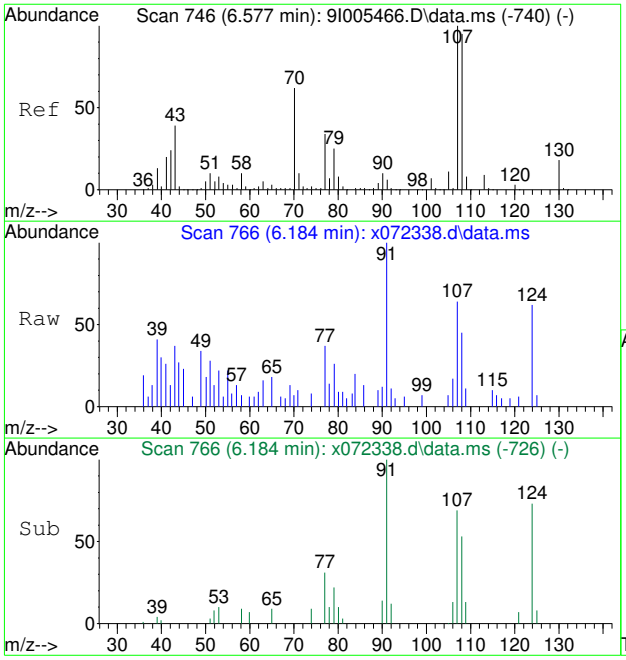


#18
Acetophenone
Concen: 0.34 ppm
RT: 6.120 min Scan# 754
Delta R.T. 0.005 min
Lab File: x072338.d
Acq: 11 Aug 2020 4:42 pm

Tgt Ion:105 Resp: 3021

Ion	Ratio	Lower	Upper
105	100		
120	18.7	0.0	58.3
106	0.0	0.0	38.0

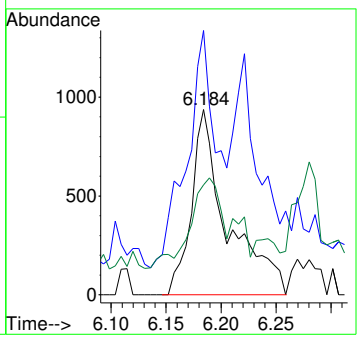


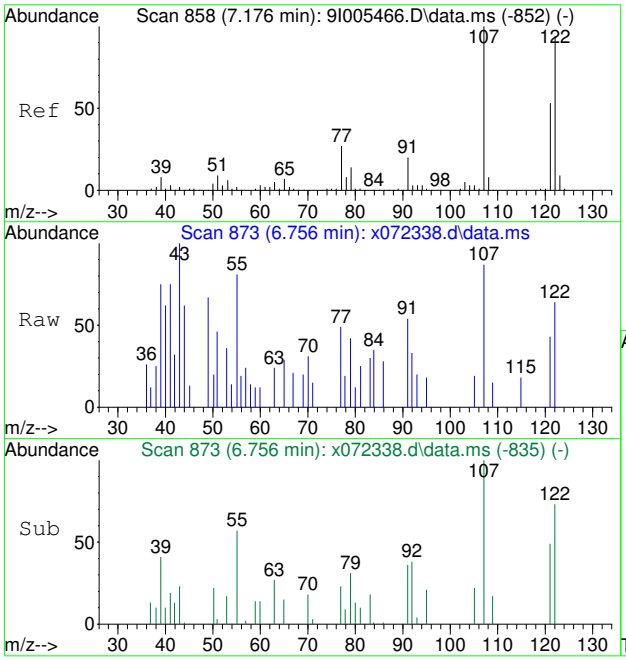


#21
3&4-Methylphenol
Concen: 0.34 ppm
RT: 6.184 min Scan# 766
Delta R.T. 0.016 min
Lab File: x072338.d
Acq: 11 Aug 2020 4:42 pm

Tgt Ion:108 Resp: 2116

Ion	Ratio	Lower	Upper
108	100		
107	109.3	75.4	135.4
79	36.8	0.0	56.3

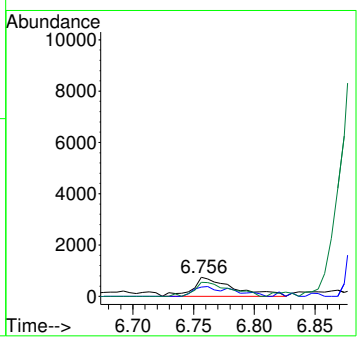


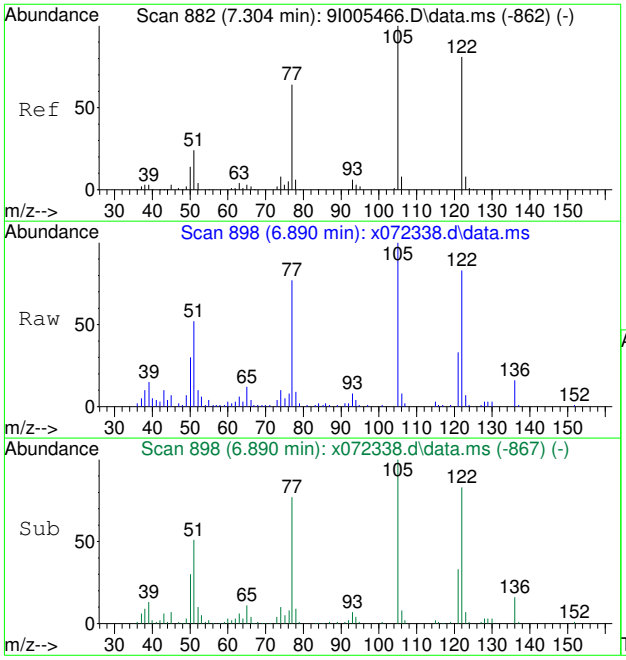


#27
2,4-Dimethylphenol
Concen: 0.31 ppm
RT: 6.756 min Scan# 873
Delta R.T. 0.005 min
Lab File: x072338.d
Acq: 11 Aug 2020 4:42 pm

Tgt Ion:107 Resp: 1746

Ion	Ratio	Lower	Upper
107	100		
121	49.3	23.4	83.4
122	62.5	64.3	124.3#

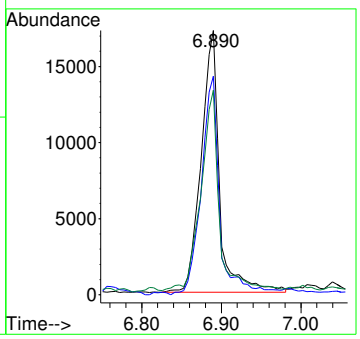


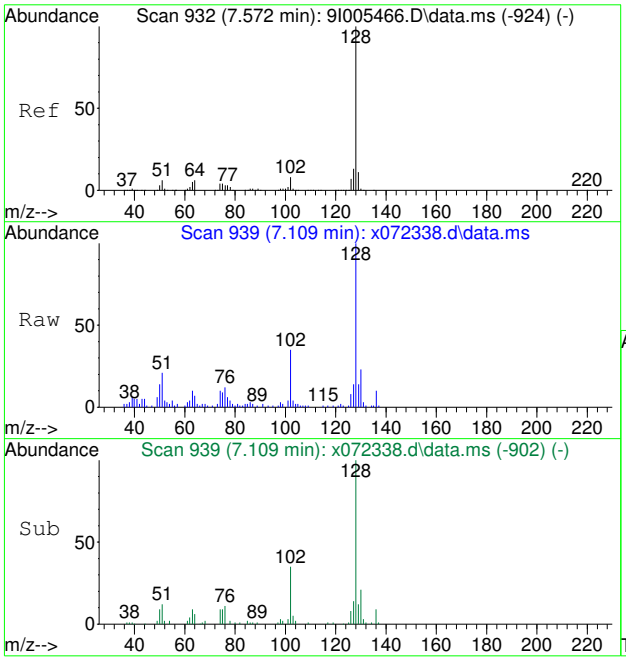


#30
Benzoic Acid
Concen: 7.04 ppm
RT: 6.890 min Scan# 898
Delta R.T. -0.032 min
Lab File: x072338.d
Acq: 11 Aug 2020 4:42 pm

Tgt Ion:105 Resp: 27668

Ion	Ratio	Lower	Upper
105	100		
122	82.3	51.2	111.2
77	76.6	34.1	94.1

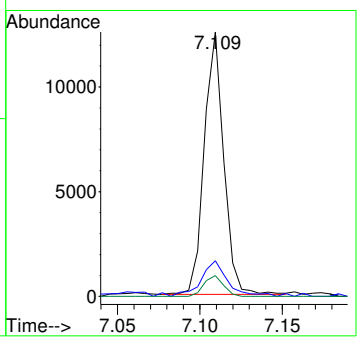


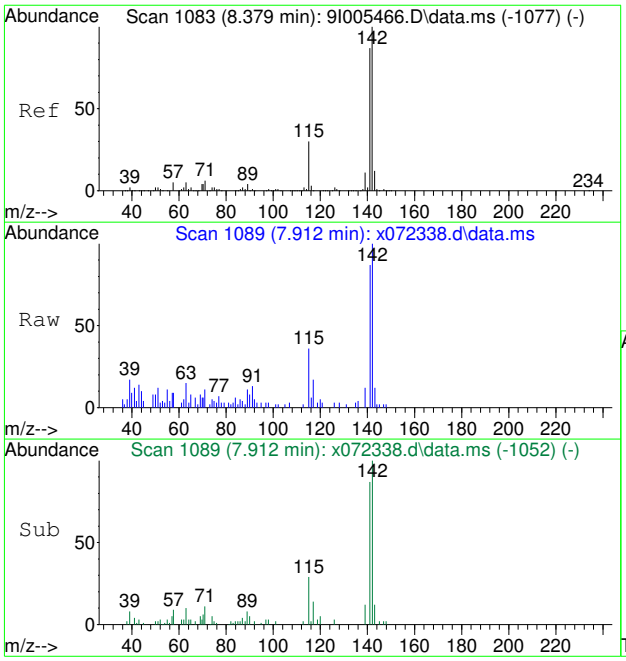


#34
Naphthalene
Concen: 0.61 ppm
RT: 7.109 min Scan# 939
Delta R.T. 0.000 min
Lab File: x072338.d
Acq: 11 Aug 2020 4:42 pm

Tgt Ion:128 Resp: 10317

Ion	Ratio	Lower	Upper
128	100		
129	12.4	0.0	41.4
126	7.9	0.0	37.4

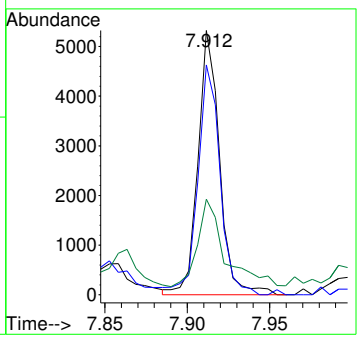


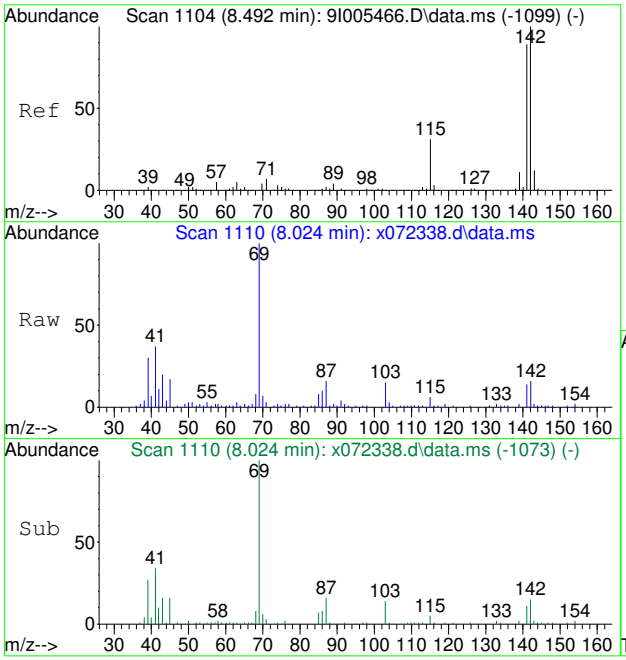


#40
2-Methylnaphthalene
Concen: 0.43 ppm
RT: 7.912 min Scan# 1089
Delta R.T. 0.000 min
Lab File: x072338.d
Acq: 11 Aug 2020 4:42 pm

Tgt Ion:142 Resp: 4835

Ion	Ratio	Lower	Upper
142	100		
141	86.4	56.8	116.8
115	32.9	0.0	60.0

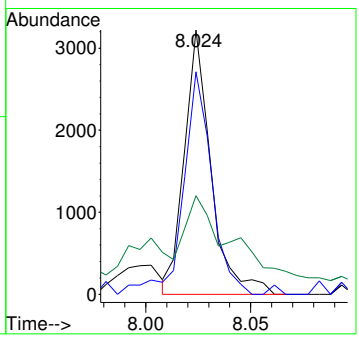


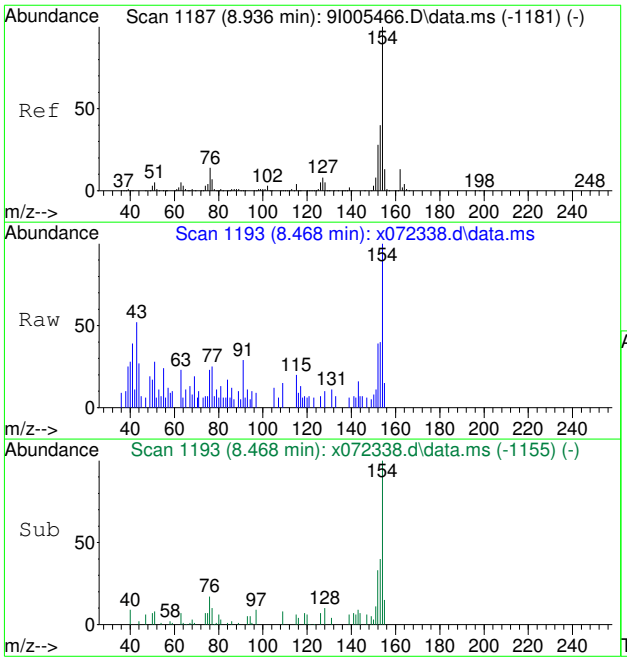


#41
1-Methylnaphthalene
Concen: 0.26 ppm
RT: 8.024 min Scan# 1110
Delta R.T. 0.000 min
Lab File: x072338.d
Acq: 11 Aug 2020 4:42 pm

Tgt Ion:142 Resp: 2841

Ion	Ratio	Lower	Upper
142	100		
141	84.2	59.0	119.0
115	25.7	1.1	61.1

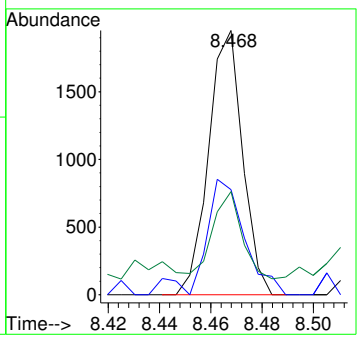


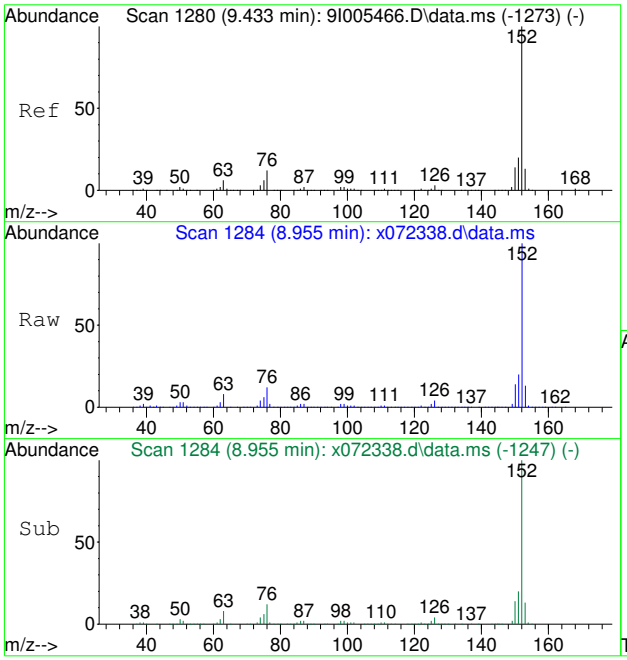


#48
1,1'-Biphenyl
Concen: 0.14 ppm
RT: 8.468 min Scan# 1193
Delta R.T. 0.005 min
Lab File: x072338.d
Acq: 11 Aug 2020 4:42 pm

Tgt Ion:154 Resp: 1802

Ion	Ratio	Lower	Upper
154	100		
153	36.6	10.3	70.3
152	29.5	0.0	58.2

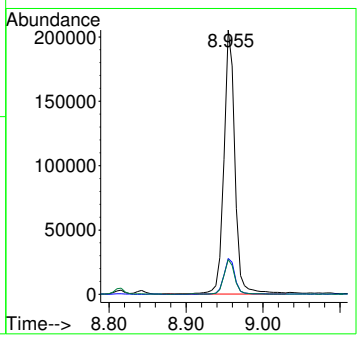


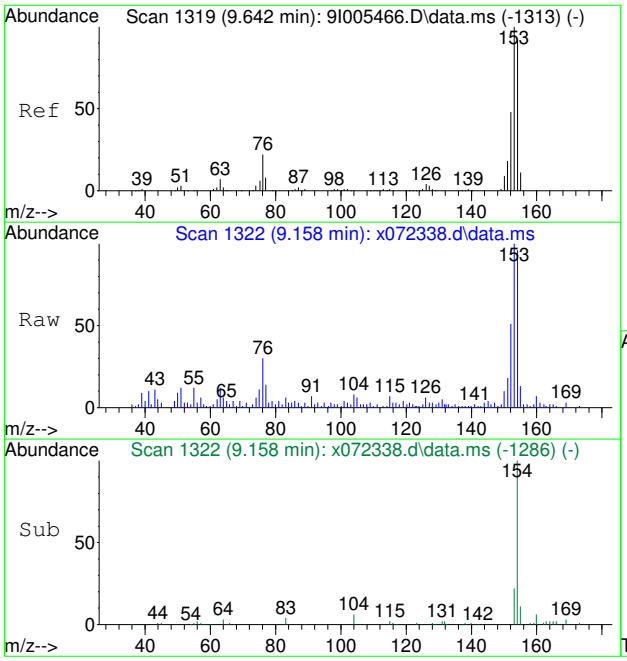


#52
Acenaphthylene
Concen: 13.02 ppm
RT: 8.955 min Scan# 1284
Delta R.T. 0.000 min
Lab File: x072338.d
Acq: 11 Aug 2020 4:42 pm

Tgt Ion:152 Resp: 203431

Ion	Ratio	Lower	Upper
152	100		
150	13.6	0.0	44.3
153	13.1	0.0	43.3

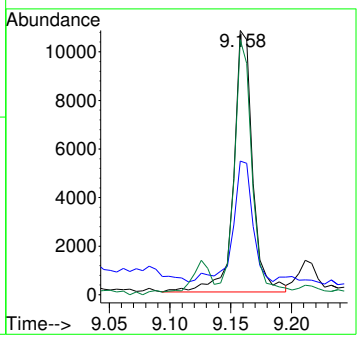


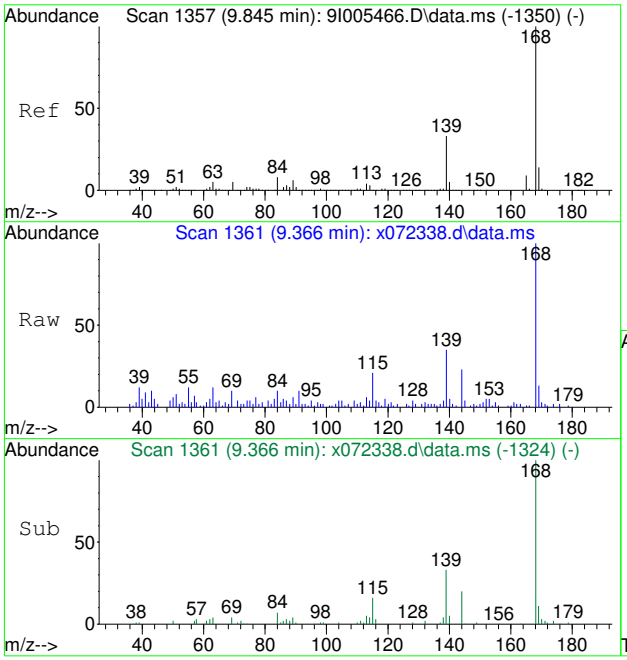


#57
Acenaphthene
Concen: 1.13 ppm
RT: 9.158 min Scan# 1322
Delta R.T. -0.005 min
Lab File: x072338.d
Acq: 11 Aug 2020 4:42 pm

Tgt Ion:153 Resp: 11744

Ion	Ratio	Lower	Upper
153	100		
152	44.8	18.4	78.4
154	96.8	62.4	122.4

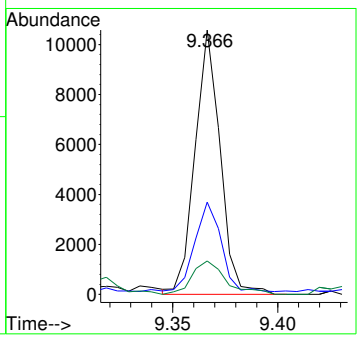


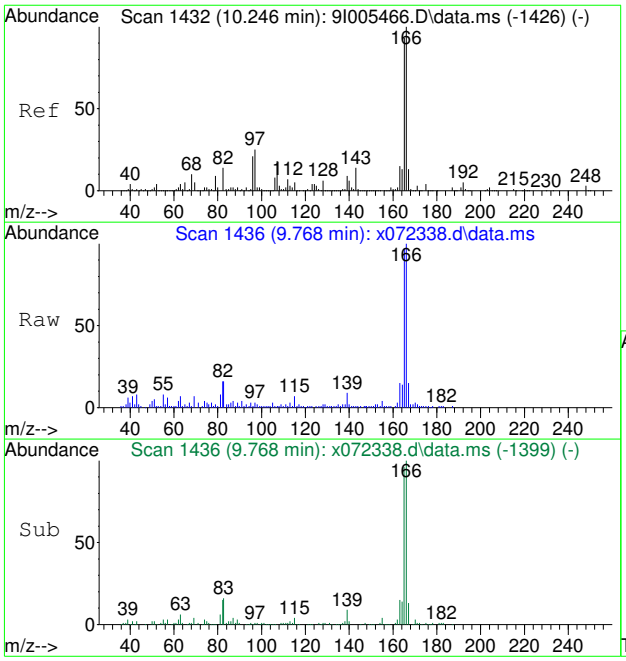


#60
Dibenzofuran
Concen: 0.64 ppm
RT: 9.366 min Scan# 1361
Delta R.T. 0.000 min
Lab File: x072338.d
Acq: 11 Aug 2020 4:42 pm

Tgt Ion:168 Resp: 8848

Ion	Ratio	Lower	Upper
168	100		
139	34.0	3.0	63.0
169	12.7	0.0	43.5

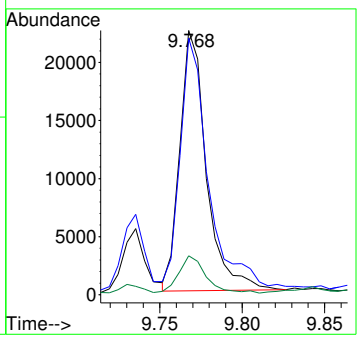


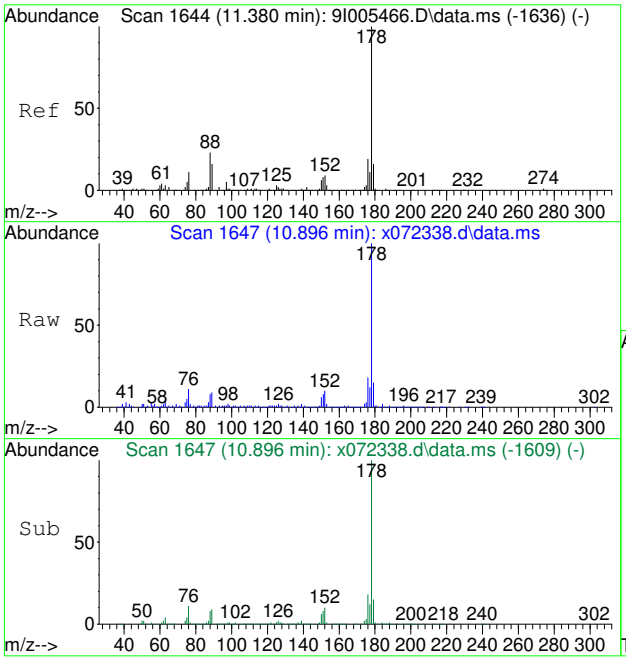


#65
Fluorene
Concen: 2.32 ppm
RT: 9.768 min Scan# 1436
Delta R.T. 0.000 min
Lab File: x072338.d
Acq: 11 Aug 2020 4:42 pm

Tgt Ion:166 Resp: 25113

Ion	Ratio	Lower	Upper
166	100		
165	96.1	62.7	122.7
167	13.7	0.0	43.5

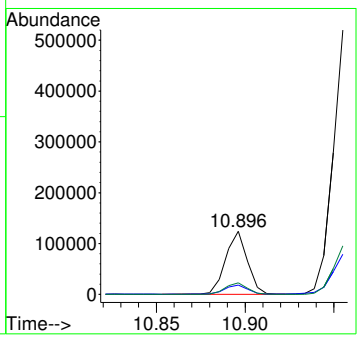


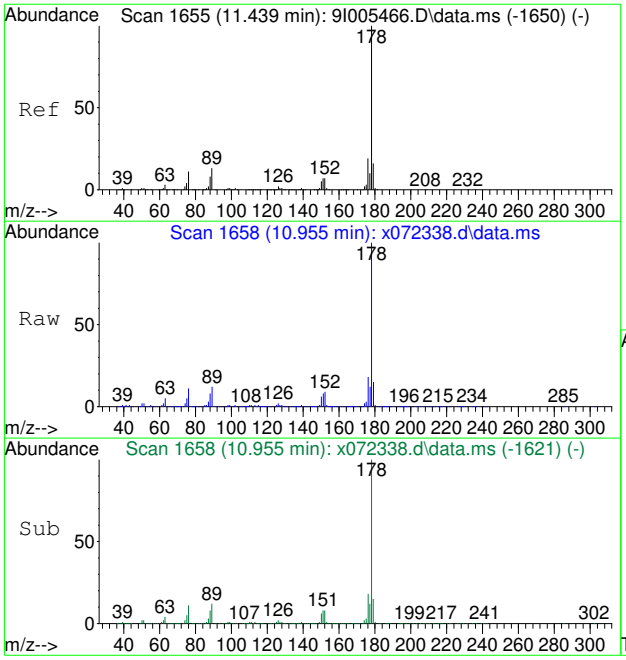


#84
Phenanthrene
Concen: 6.36 ppm
RT: 10.896 min Scan# 1647
Delta R.T. 0.005 min
Lab File: x072338.d
Acq: 11 Aug 2020 4:42 pm

Tgt Ion:178 Resp: 104915

Ion	Ratio	Lower	Upper
178	100		
179	14.6	0.0	45.8
176	18.2	0.0	49.3

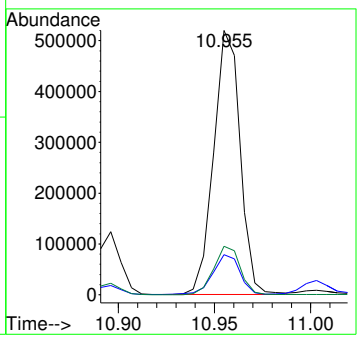


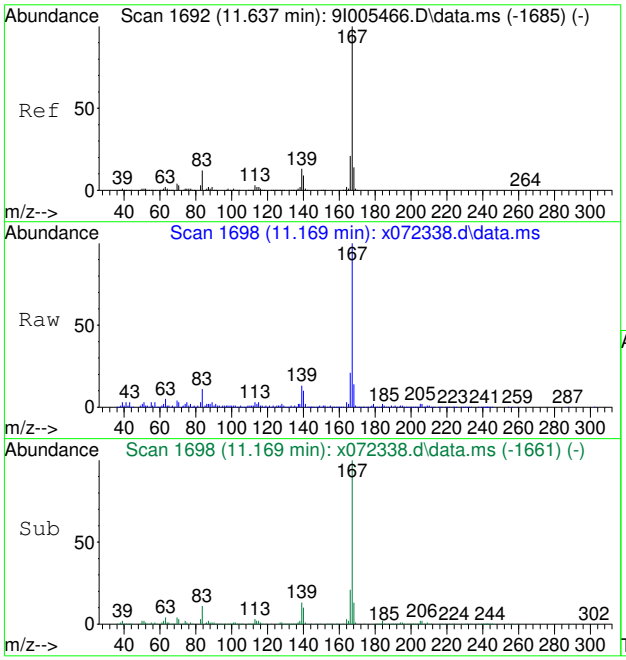


#85
Anthracene
Concen: 28.96 ppm
RT: 10.955 min Scan# 1658
Delta R.T. 0.000 min
Lab File: x072338.d
Acq: 11 Aug 2020 4:42 pm

Tgt Ion:178 Resp: 497933

Ion	Ratio	Lower	Upper
178	100		
179	14.9	0.0	46.0
176	18.4	0.0	49.3

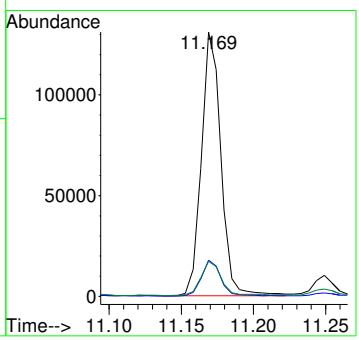


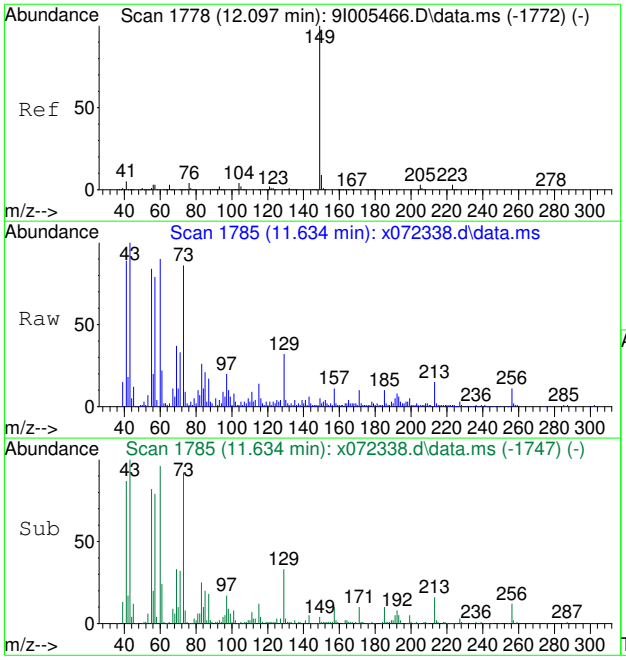


#87
Carbazole
Concen: 8.08 ppm
RT: 11.169 min Scan# 1698
Delta R.T. 0.000 min
Lab File: x072338.d
Acq: 11 Aug 2020 4:42 pm

Tgt Ion:167 Resp: 122650

Ion	Ratio	Lower	Upper
167	100		
168	13.6	0.0	43.9
139	12.8	0.0	42.7

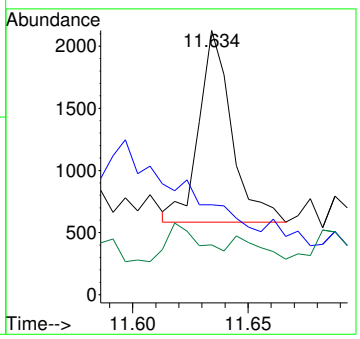


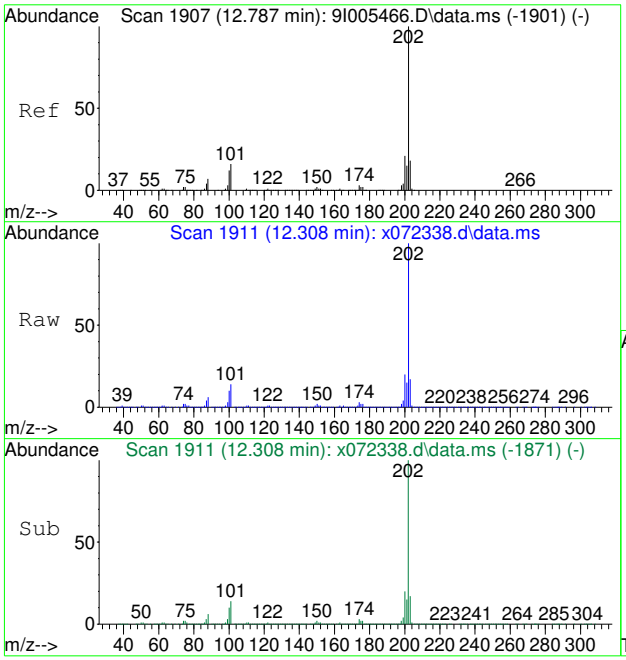


#89
Di-n-butylphthalate
Concen: 0.09 ppm
RT: 11.634 min Scan# 1785
Delta R.T. 0.005 min
Lab File: x072338.d
Acq: 11 Aug 2020 4:42 pm

Tgt Ion:149 Resp: 1522

Ion	Ratio	Lower	Upper
149	100		
150	2.9	0.0	39.5
104	5.1	0.0	34.2

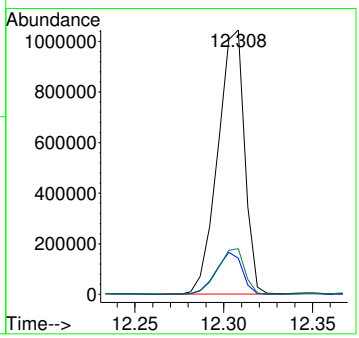


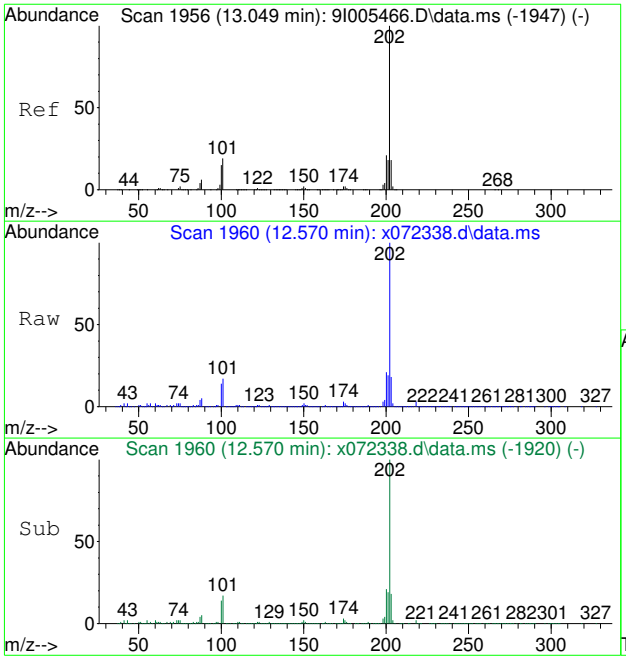


#91
Fluoranthene
Concen: 71.24 ppm
RT: 12.308 min Scan# 1911
Delta R.T. 0.016 min
Lab File: x072338.d
Acq: 11 Aug 2020 4:42 pm

Tgt Ion:202 Resp: 1090530

Ion	Ratio	Lower	Upper
202	100		
101	13.6	0.0	45.8
203	17.3	0.0	48.1

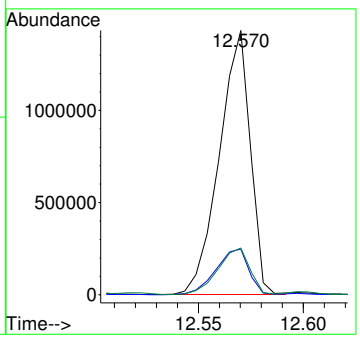


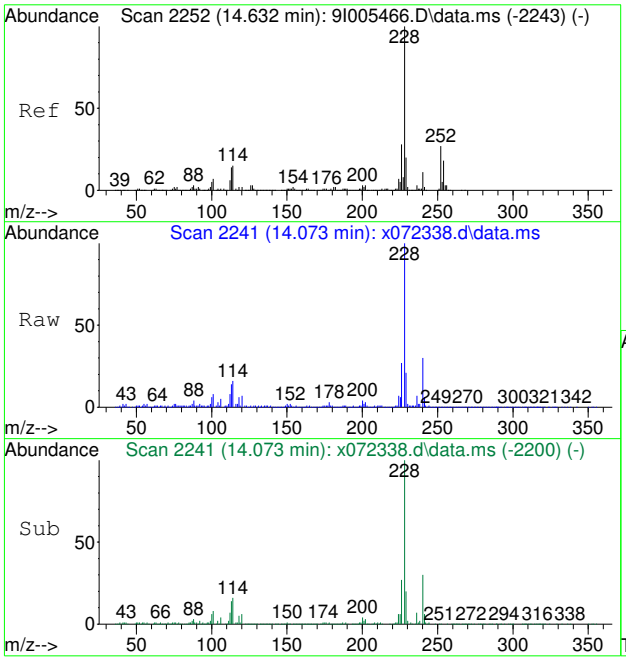


#94
Pyrene
Concen: 81.14 ppm
RT: 12.570 min Scan# 1960
Delta R.T. 0.016 min
Lab File: x072338.d
Acq: 11 Aug 2020 4:42 pm

Tgt Ion:202 Resp: 1469217

Ion	Ratio	Lower	Upper
202	100		
101	17.2	0.0	48.7
203	17.4	0.0	48.4

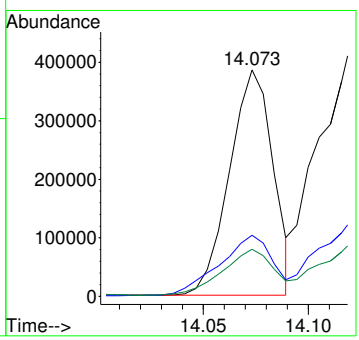


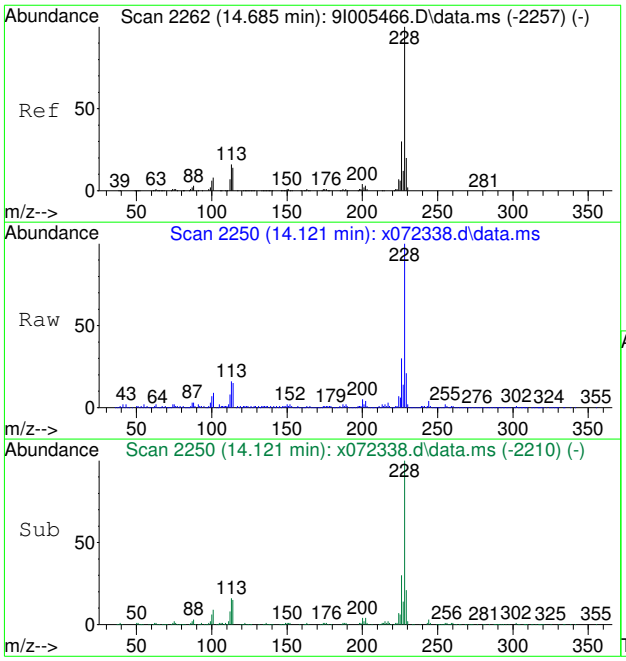


#99
Benzo[a]anthracene
Concen: 40.56 ppm
RT: 14.073 min Scan# 2241
Delta R.T. 0.021 min
Lab File: x072338.d
Acq: 11 Aug 2020 4:42 pm

Tgt Ion:228 Resp: 555879

Ion	Ratio	Lower	Upper
228	100		
226	26.6	0.0	57.5
229	19.6	0.0	49.9

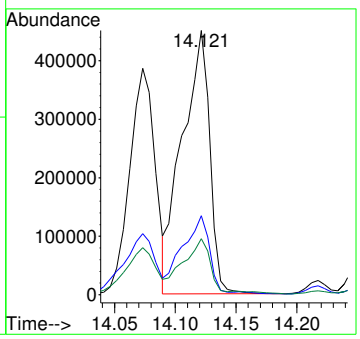


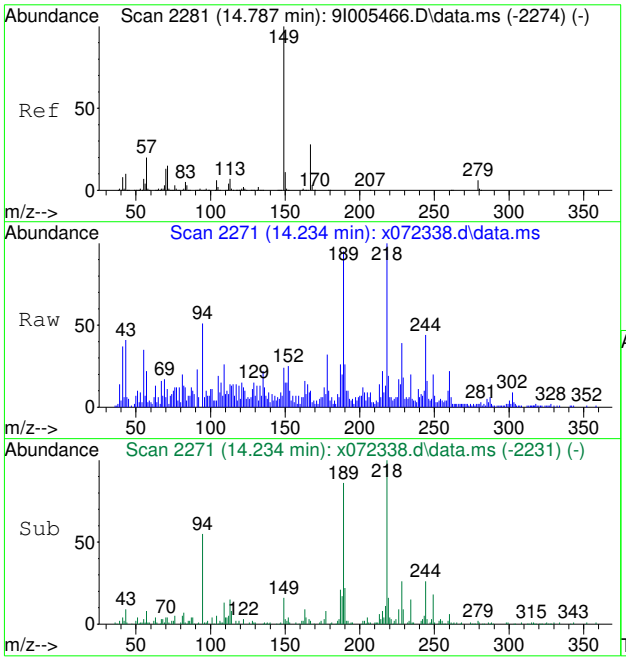


#100
Chrysene
Concen: 48.55 ppm
RT: 14.121 min Scan# 2250
Delta R.T. 0.016 min
Lab File: x072338.d
Acq: 11 Aug 2020 4:42 pm

Tgt Ion:228 Resp: 708697

Ion	Ratio	Lower	Upper
228	100		
226	30.0	0.4	60.4
229	20.4	0.0	50.1

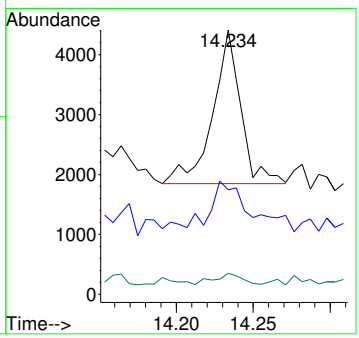


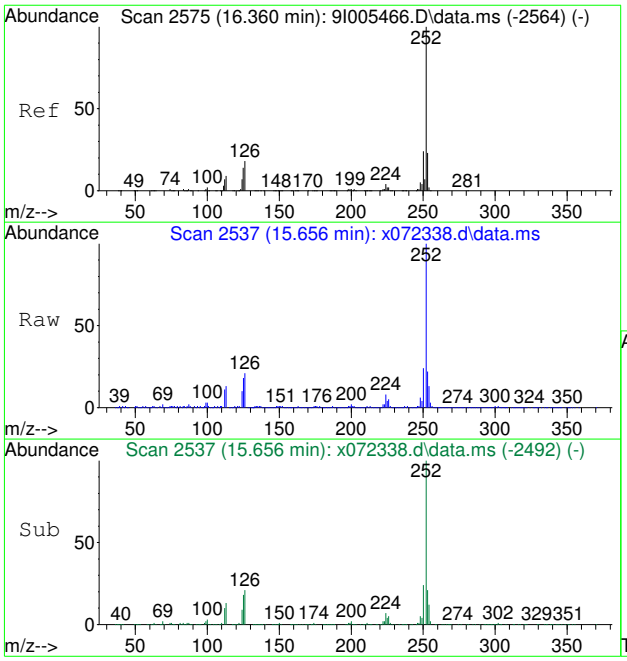


#101
bis(2-Ethylhexyl)phthalate
Concen: 0.36 ppm
RT: 14.234 min Scan# 2271
Delta R.T. 0.016 min
Lab File: x072338.d
Acq: 11 Aug 2020 4:42 pm

Tgt Ion:149 Resp: 3263

Ion	Ratio	Lower	Upper
149	100		
167	21.0	0.0	58.5
279	5.2	0.0	35.7

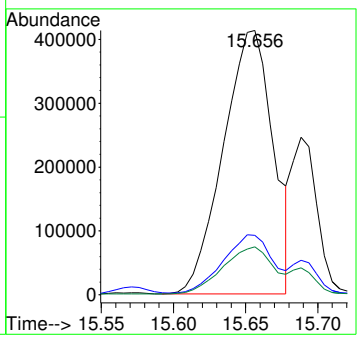


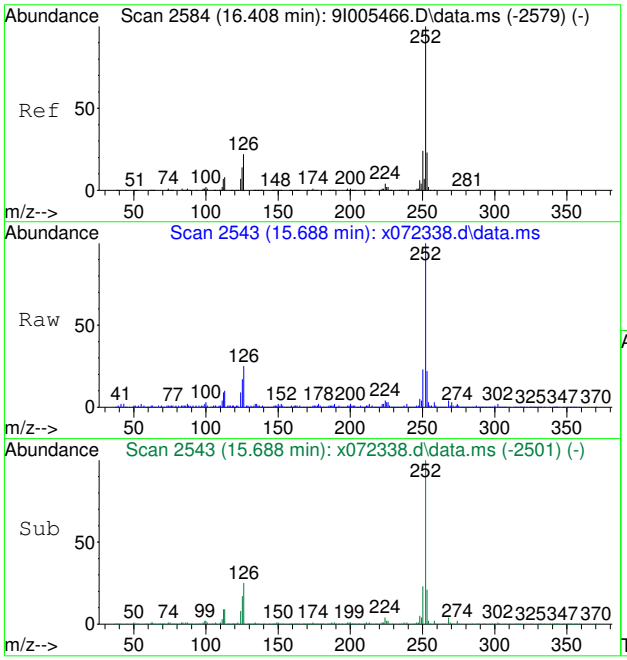


#104
Benzo[b]fluoranthene
Concen: 89.02 ppm
RT: 15.656 min Scan# 2537
Delta R.T. 0.043 min
Lab File: x072338.d
Acq: 11 Aug 2020 4:42 pm

Tgt Ion:252 Resp: 991714

Ion	Ratio	Lower	Upper
252	100		
253	22.1	0.0	52.5
125	17.8	0.0	44.0

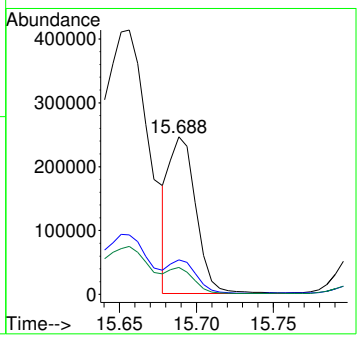


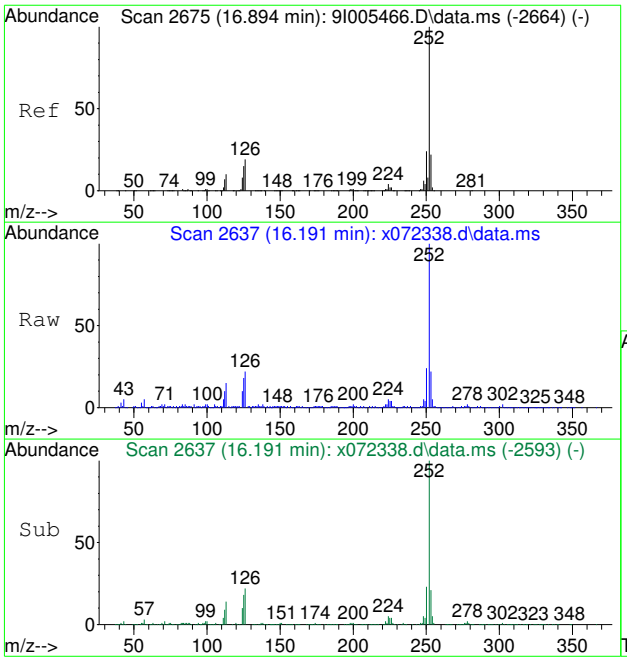


#105
Benzo[k]fluoranthene
Concen: 24.25 ppm
RT: 15.688 min Scan# 2543
Delta R.T. 0.027 min
Lab File: x072338.d
Acq: 11 Aug 2020 4:42 pm

Tgt Ion:252 Resp: 298464

Ion	Ratio	Lower	Upper
252	100		
253	21.3	0.0	52.5
125	16.0	0.0	44.4

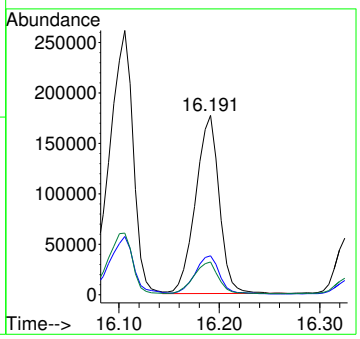


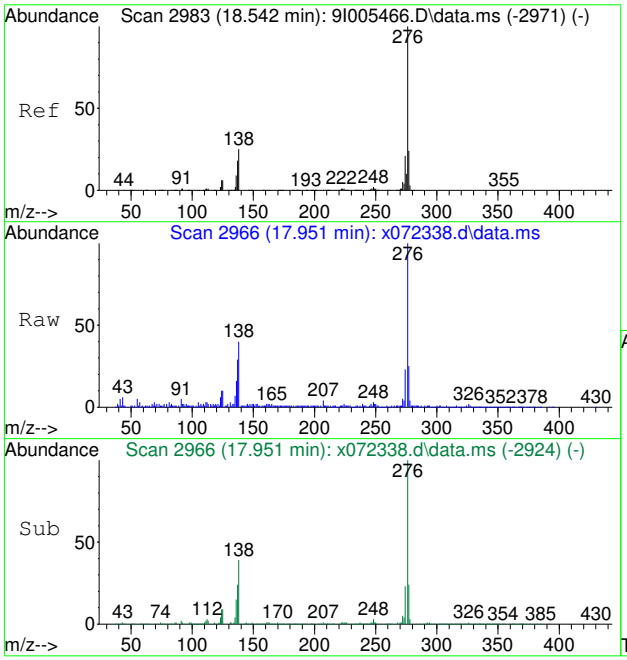


#106
Benzo[a]pyrene
Concen: 30.71 ppm
RT: 16.191 min Scan# 2637
Delta R.T. 0.037 min
Lab File: x072338.d
Acq: 11 Aug 2020 4:42 pm

Tgt Ion:252 Resp: 290542

Ion	Ratio	Lower	Upper
252	100		
253	21.1	0.0	52.3
125	17.8	0.0	44.7

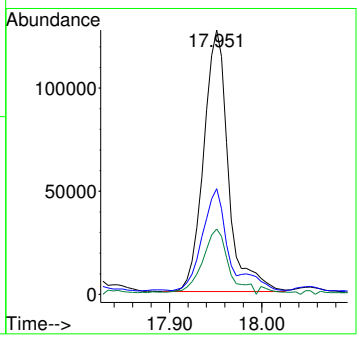


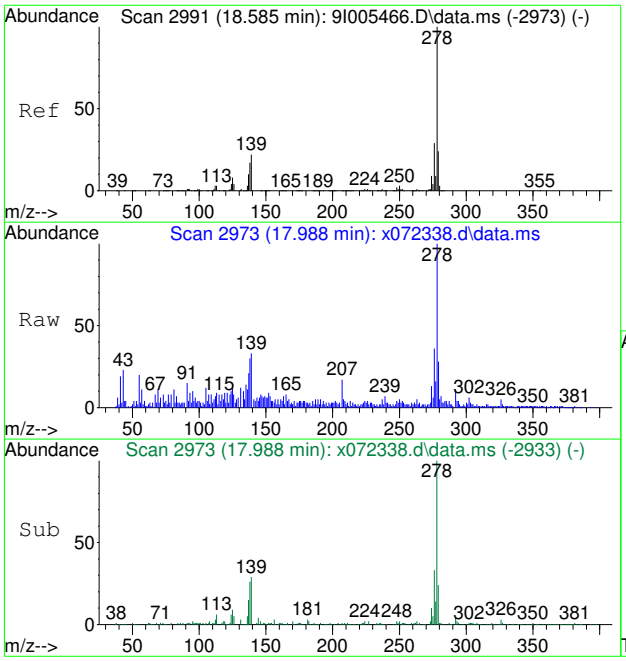


#107
Indeno[1,2,3-cd]pyrene
Concen: 37.50 ppm
RT: 17.951 min Scan# 2966
Delta R.T. 0.027 min
Lab File: x072338.d
Acq: 11 Aug 2020 4:42 pm

Tgt Ion:276 Resp: 236148

Ion	Ratio	Lower	Upper
276	100		
138	38.9	0.0	54.7
277	24.2	0.0	53.8

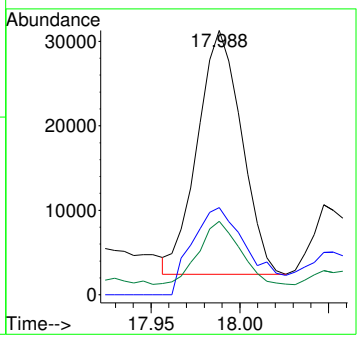


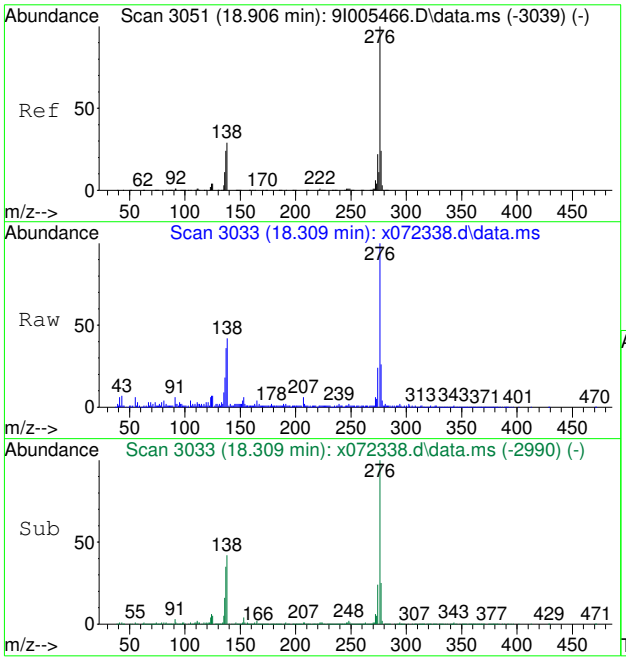


#108
Dibenz[a,h]anthracene
Concen: 8.62 ppm
RT: 17.988 min Scan# 2973
Delta R.T. 0.016 min
Lab File: x072338.d
Acq: 11 Aug 2020 4:42 pm

Tgt Ion:278 Resp: 49659

Ion	Ratio	Lower	Upper
278	100		
139	32.9	0.0	52.4
279	26.6	0.0	54.4

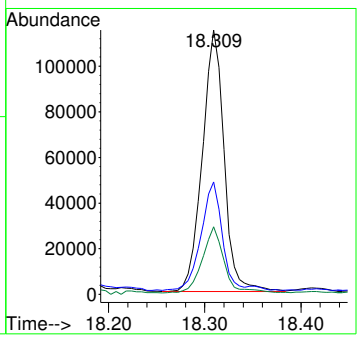




#109
Benzo[g,h,i]perylene
Concen: 21.15 ppm
RT: 18.309 min Scan# 3033
Delta R.T. 0.032 min
Lab File: x072338.d
Acq: 11 Aug 2020 4:42 pm

Tgt Ion:276 Resp: 181195

Ion	Ratio	Lower	Upper
276	100		
138	41.4	0.0	59.4
277	25.2	0.0	54.1



Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan
08/12/20 16:38

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072339.d
Acq On : 11 Aug 2020 5:08 pm
Operator : marthav
Sample : fa77576-7 E
Misc : op81482,sx2950,30.3,,,1,1,soil
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 12 02:37:46 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.665	152	163700	40.00	ppm	0.00
22) Naphthalene-d8	7.088	136	621390	40.00	ppm	0.00
43) Acenaphthene-d10	9.126	164	321115	40.00	ppm	0.00
70) Phenanthrene-d10	10.869	188	550417	40.00	ppm	0.00
92) Chrysene-d12	14.100	240	432468	40.00	ppm	0.03
102) Perylene-d12	16.319	264	356470	40.00	ppm	0.06
110) 1,4-Dichlorobenzene-d4A	5.665	152	163700	40.00	ppm	0.00
120) Naphthalene-d8A	7.088	136	621390	40.00	ppm	0.00
127) Acenaphthene-d10A	9.126	164	321115	40.00	ppm	0.00
136) Phenanthrene-d10A	10.869	188	550417	40.00	ppm	0.00
146) Chrysene-d12A	14.100	240	432468	40.00	ppm	0.03
153) Perylene-d12A	16.319	264	356470	40.00	ppm	0.06
System Monitoring Compounds						
7) 2-Fluorophenol	4.322	112	457334	77.92	ppm	0.02
Spiked Amount 100.000	Range 40 - 102		Recovery = 77.92%			
9) Phenol-d5	5.344	99	570424	81.68	ppm	0.01
Spiked Amount 100.000	Range 41 - 100		Recovery = 81.68%			
23) Nitrobenzene-d5	6.280	82	245059	38.19	ppm	0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 76.38%			
47) 2-Fluorobiphenyl	8.355	172	439532	37.81	ppm	0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 75.62%			
75) 2,4,6-Tribromophenol	10.062	330	93085	78.81	ppm	0.00
Spiked Amount 100.000	Range 42 - 108		Recovery = 78.81%			
95) Terphenyl-d14	12.795	244	469754	40.88	ppm	0.02
Spiked Amount 50.000	Range 45 - 119		Recovery = 81.76%			
Target Compounds						Qvalue
5) Benzaldehyde	5.200	106	2312	0.47	ppm	# 73
6) Aniline	5.323	93	12162	1.25	ppm	88
10) Phenol	5.360	94	5846	0.71	ppm	# 64
18) Acetophenone	6.120	105	6455	0.73	ppm	90
27) 2,4-Dimethylphenol	6.761	107	3744	0.67	ppm	89
30) Benzoic Acid	6.884	105	12460	3.26	ppm	95
34) Naphthalene	7.109	128	20682	1.23	ppm	95
40) 2-Methylnaphthalene	7.917	142	10412	0.93	ppm	96
41) 1-Methylnaphthalene	8.024	142	7206	0.68	ppm	92
48) 1,1'-Biphenyl	8.468	154	3785	0.29	ppm	99
52) Acenaphthylene	8.960	152	724925	45.20	ppm	99
56) o-Dinitrobenzene	8.960	50	20740	8.10	ppm	# 1
57) Acenaphthene	9.163	153	37163	3.48	ppm	99
60) Dibenzofuran	9.366	168	22758	1.60	ppm	95
65) Fluorene	9.773	166	74922	6.75	ppm	98
84) Phenanthrene	10.896	178	435284	26.17	ppm	99
85) Anthracene	10.965	178	1961004	113.12	ppm	98
87) Carbazole	11.174	167	482098	31.52	ppm	98
91) Fluoranthene	12.324	202	3568214	231.22	ppm	96
94) Pyrene	12.591	202	4548352	253.30	ppm	95
99) Benzo[a]anthracene	14.089	228	1341751	98.71	ppm	98
100) Chrysene	14.148	228	2395759	165.51	ppm	97
104) Benzo[b]fluoranthene	15.699	252	3450261	234.92	ppm	97
105) Benzo[k]fluoranthene	15.736	252	781395m	61.74	ppm	
106) Benzo[a]pyrene	16.234	252	941240	85.83	ppm	97
107) Indeno[1,2,3-cd]pyrene	17.988	276	730119	86.50	ppm	88
108) Dibenz[a,h]anthracene	18.015	278	156757	23.52	ppm	90
109) Benzo[g,h,i]perylene	18.341	276	540687	53.97	ppm	88

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072339.d
Acq On : 11 Aug 2020 5:08 pm
Operator : marthav
Sample : fa77576-7 E
Misc : op81482,sx2950,30.3,,,1,1,soil
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 12 02:37:46 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

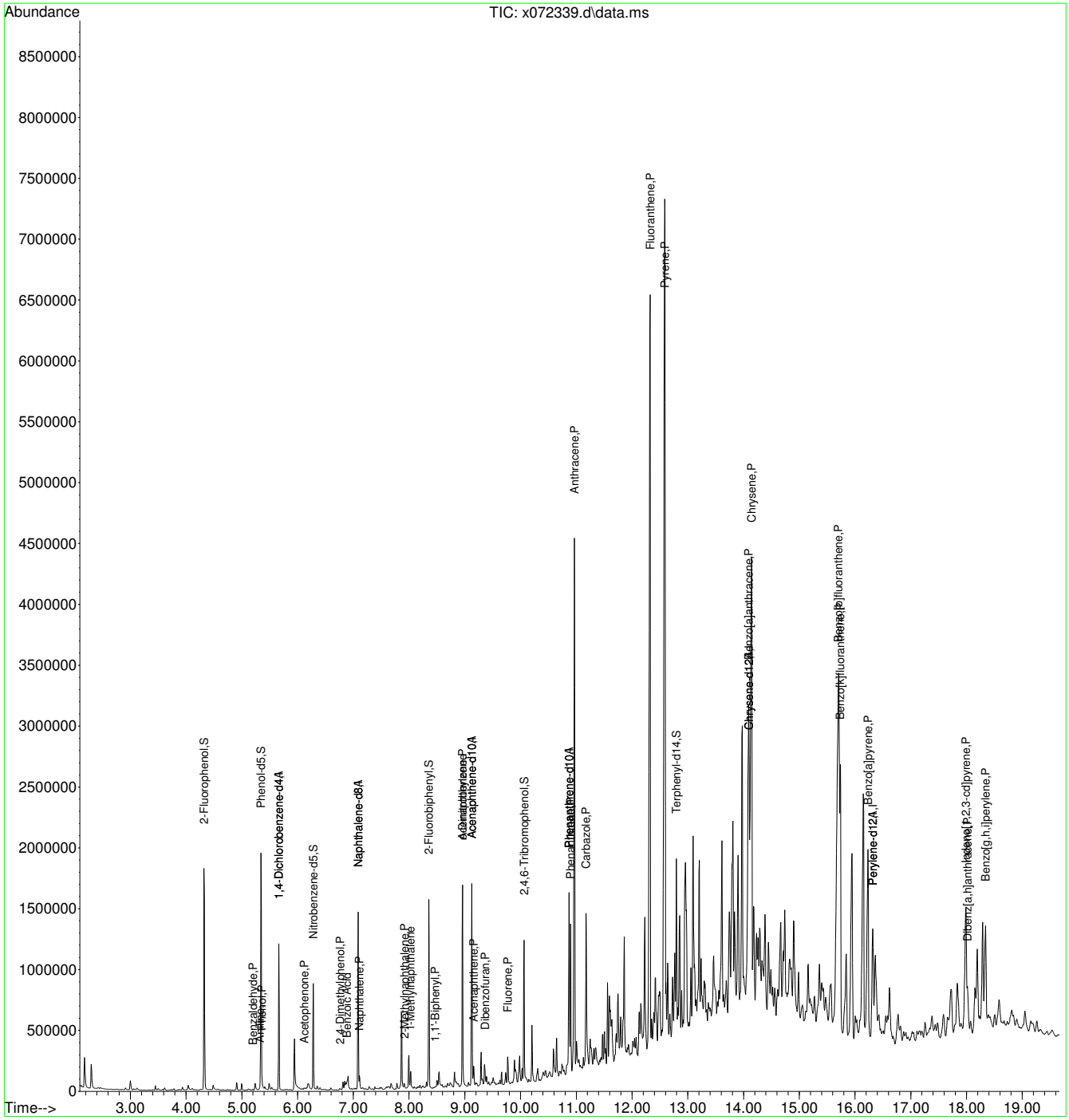
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

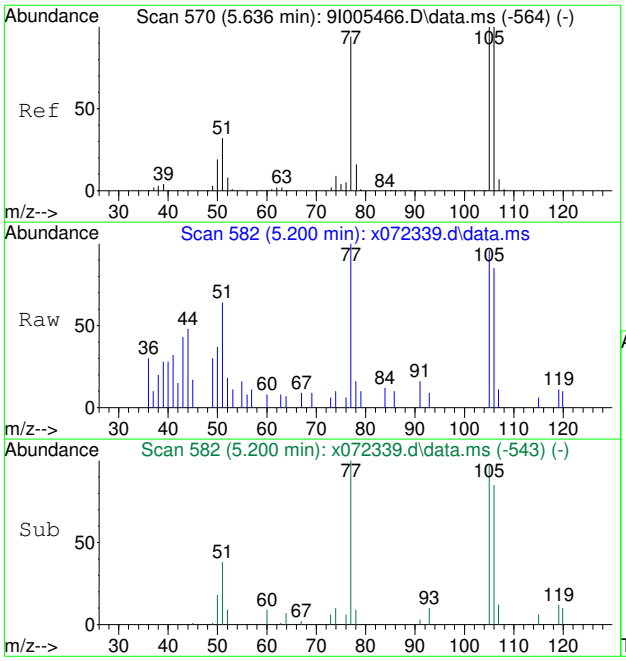
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072339.d
Acq On : 11 Aug 2020 5:08 pm
Operator : marthav
Sample : fa77576-7 E
Misc : op81482,sx2950,30.3,,,1,1,soil
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 12 02:37:46 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

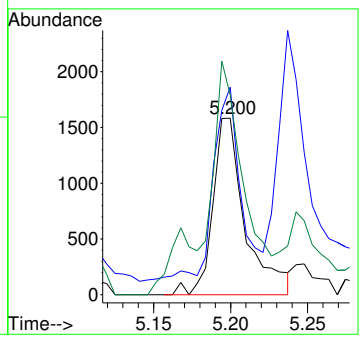


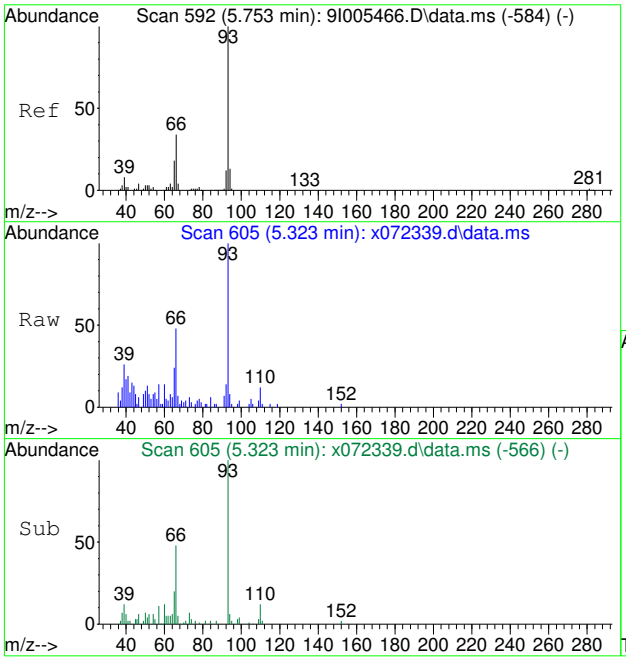


#5
Benzaldehyde
Concen: 0.47 ppm
RT: 5.200 min Scan# 582
Delta R.T. 0.011 min
Lab File: x072339.d
Acq: 11 Aug 2020 5:08 pm

Tgt Ion:106 Resp: 2312

Ion	Ratio	Lower	Upper
106	100		
77	40.3	63.9	123.9#
105	99.5	70.0	130.0

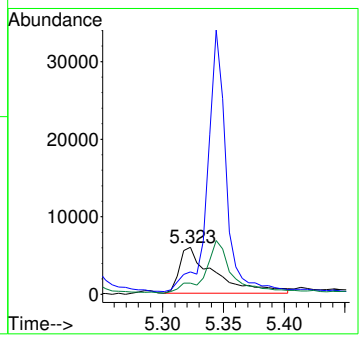


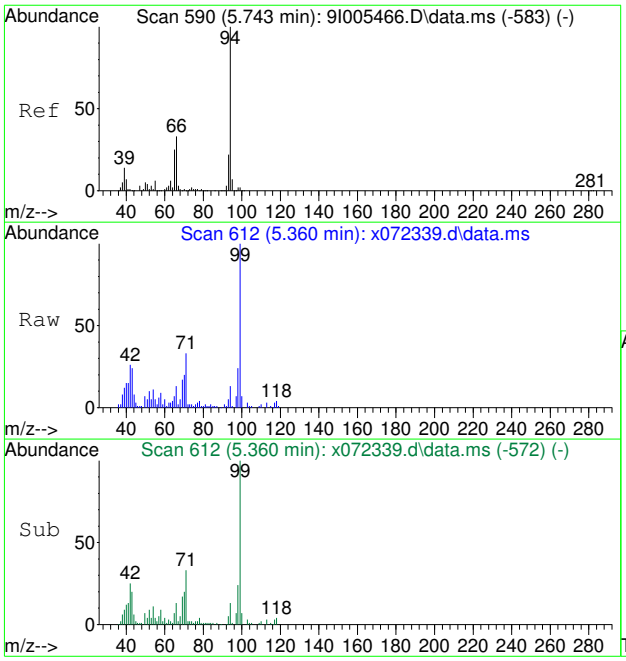


#6
Aniline
Concen: 1.25 ppm
RT: 5.323 min Scan# 605
Delta R.T. 0.011 min
Lab File: x072339.d
Acq: 11 Aug 2020 5:08 pm

Tgt Ion: 93 Resp: 12162

Ion	Ratio	Lower	Upper
93	100		
66	42.8	3.5	63.5
65	19.5	0.0	48.0

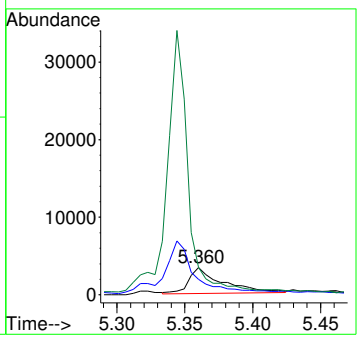


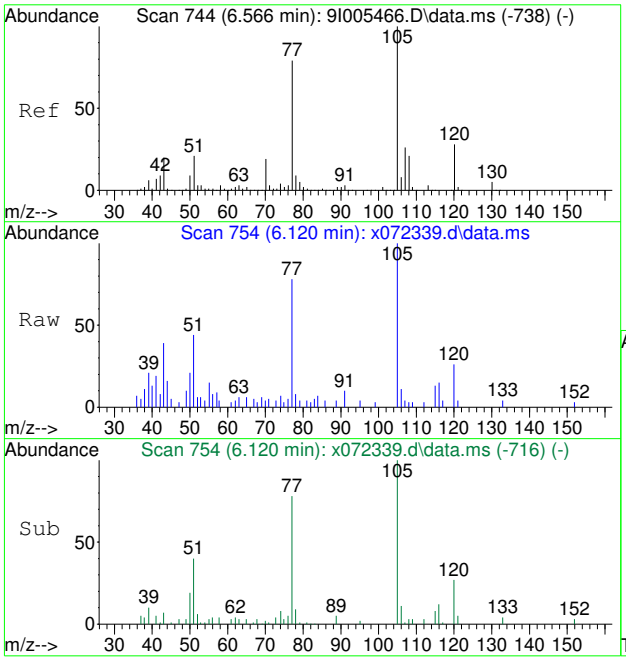


#10
Phenol
Concen: 0.71 ppm
RT: 5.360 min Scan# 612
Delta R.T. 0.016 min
Lab File: x072339.d
Acq: 11 Aug 2020 5:08 pm

Tgt Ion: 94 Resp: 5846

Ion	Ratio	Lower	Upper
94	100		
65	21.4	0.0	54.8
66	0.0	3.0	63.0#

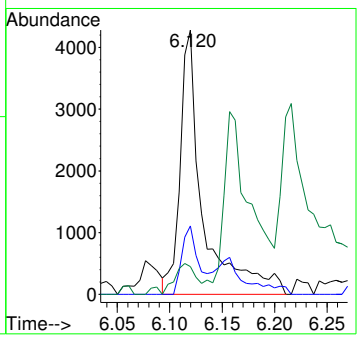


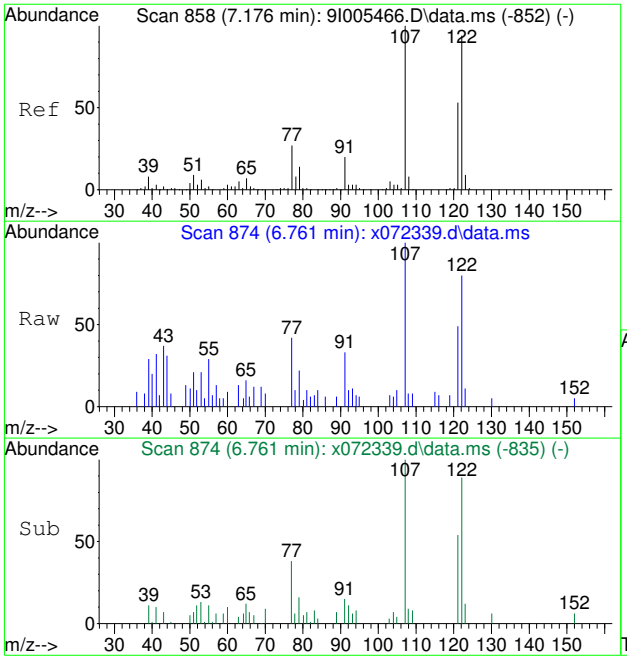


#18
Acetophenone
Concen: 0.73 ppm
RT: 6.120 min Scan# 754
Delta R.T. 0.005 min
Lab File: x072339.d
Acq: 11 Aug 2020 5:08 pm

Tgt Ion:105 Resp: 6455

Ion	Ratio	Lower	Upper
105	100		
120	25.2	0.0	58.3
106	0.0	0.0	38.0

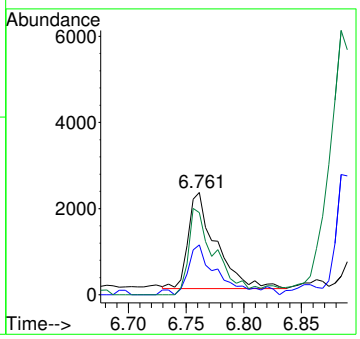


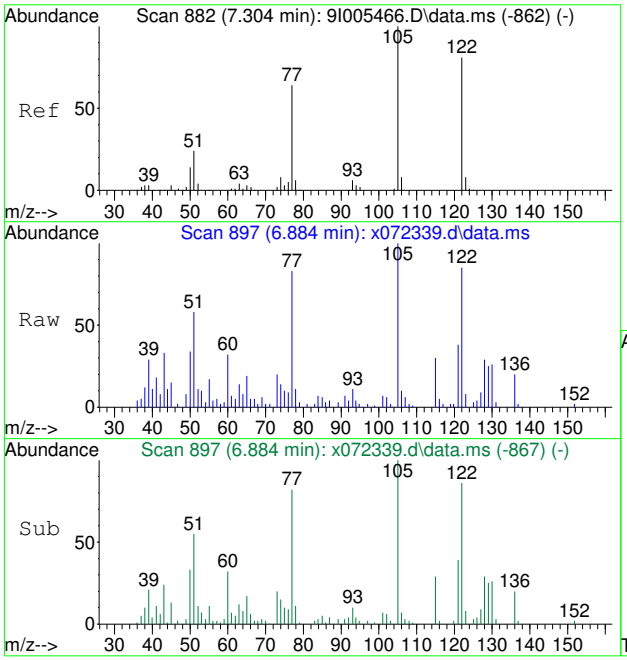


#27
2,4-Dimethylphenol
Concen: 0.67 ppm
RT: 6.761 min Scan# 874
Delta R.T. 0.011 min
Lab File: x072339.d
Acq: 11 Aug 2020 5:08 pm

Tgt Ion:107 Resp: 3744

Ion	Ratio	Lower	Upper
107	100		
121	47.8	23.4	83.4
122	82.5	64.3	124.3

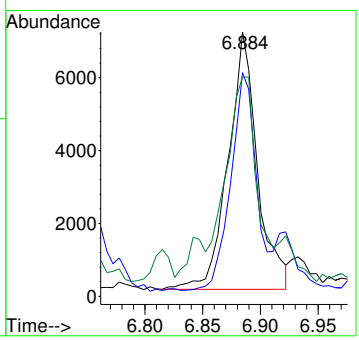




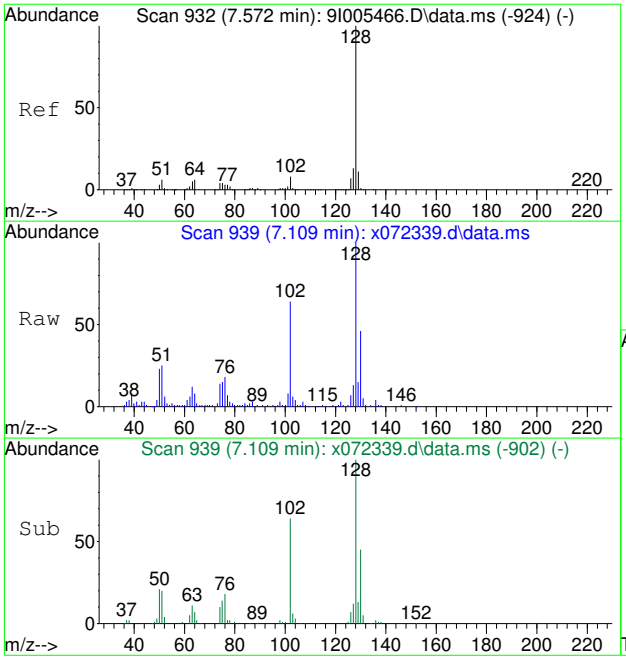
#30
Benzoic Acid
Concen: 3.26 ppm
RT: 6.884 min Scan# 897
Delta R.T. -0.038 min
Lab File: x072339.d
Acq: 11 Aug 2020 5:08 pm

Tgt Ion:105 Resp: 12460

Ion	Ratio	Lower	Upper
105	100		
122	76.9	51.2	111.2
77	67.6	34.1	94.1



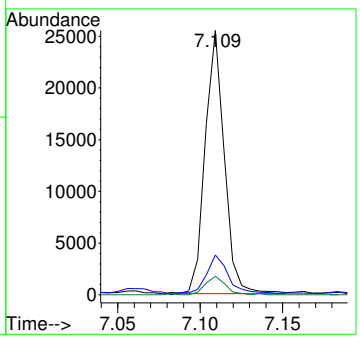
7.11.11

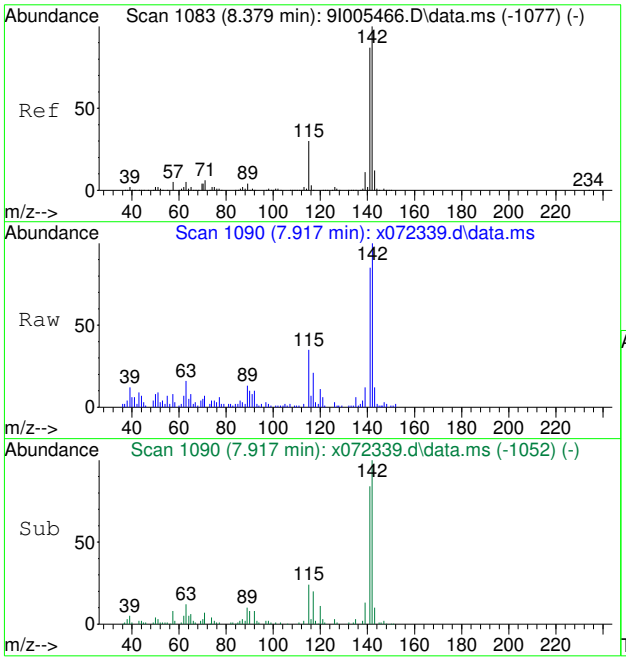


#34
Naphthalene
Concen: 1.23 ppm
RT: 7.109 min Scan# 939
Delta R.T. -0.000 min
Lab File: x072339.d
Acq: 11 Aug 2020 5:08 pm

Tgt Ion:128 Resp: 20682

Ion	Ratio	Lower	Upper
128	100		
129	14.4	0.0	41.4
126	7.0	0.0	37.4

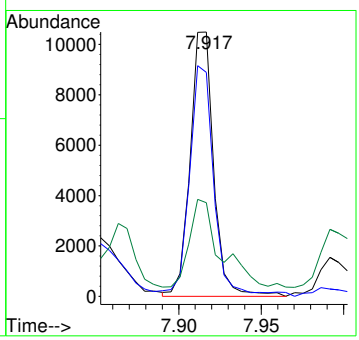


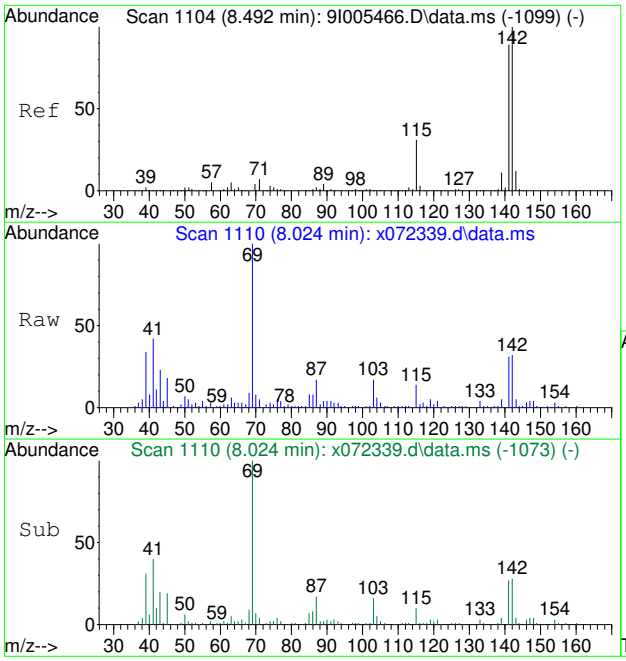


#40
2-Methylnaphthalene
Concen: 0.93 ppm
RT: 7.917 min Scan# 1090
Delta R.T. 0.005 min
Lab File: x072339.d
Acq: 11 Aug 2020 5:08 pm

Tgt Ion:142 Resp: 10412

Ion	Ratio	Lower	Upper
142	100		
141	83.4	56.8	116.8
115	32.2	0.0	60.0

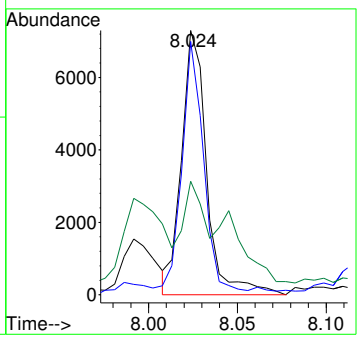


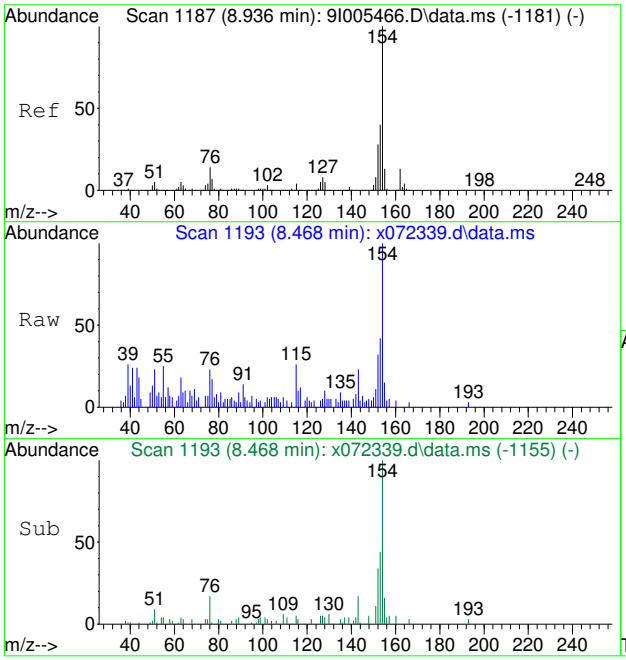


#41
1-Methylnaphthalene
Concen: 0.68 ppm
RT: 8.024 min Scan# 1110
Delta R.T. -0.000 min
Lab File: x072339.d
Acq: 11 Aug 2020 5:08 pm

Tgt Ion:142 Resp: 7206

Ion	Ratio	Lower	Upper
142	100		
141	97.7	59.0	119.0
115	28.3	1.1	61.1

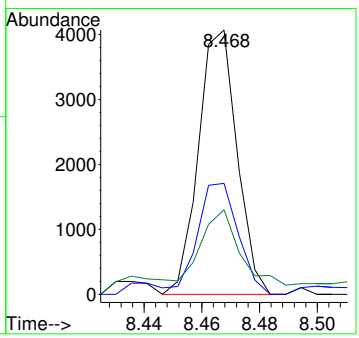




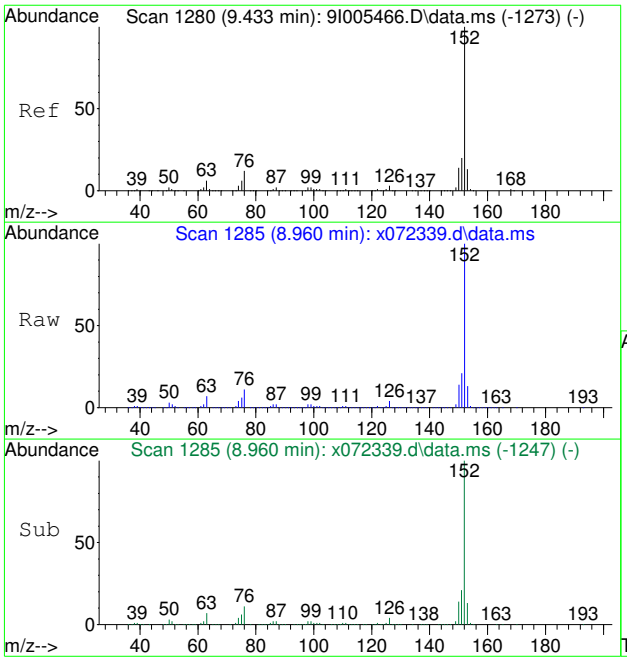
#48
1,1'-Biphenyl
Concen: 0.29 ppm
RT: 8.468 min Scan# 1193
Delta R.T. 0.005 min
Lab File: x072339.d
Acq: 11 Aug 2020 5:08 pm

Tgt Ion:154 Resp: 3785

Ion	Ratio	Lower	Upper
154	100		
153	40.7	10.3	70.3
152	27.5	0.0	58.2



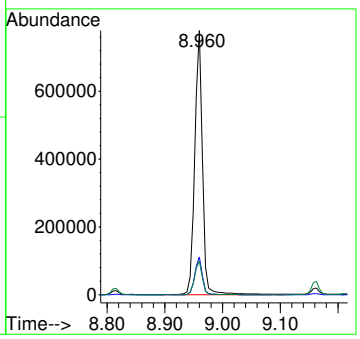
7.11.11

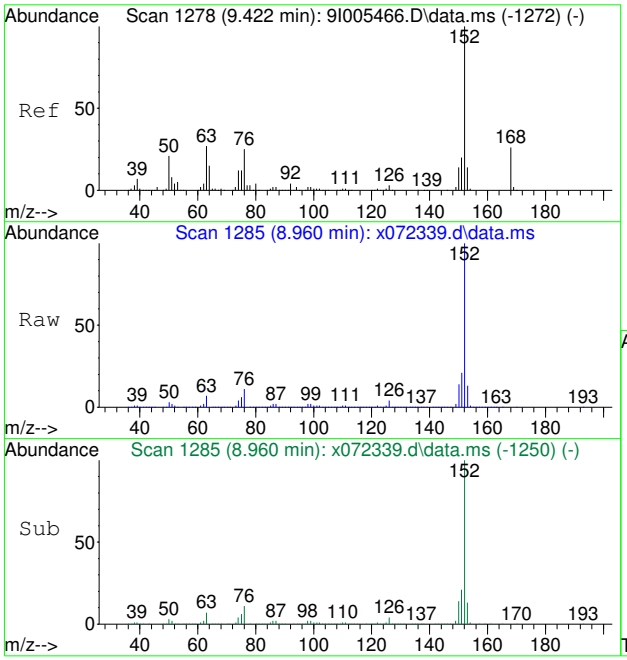


#52
Acenaphthylene
Concen: 45.20 ppm
RT: 8.960 min Scan# 1285
Delta R.T. 0.005 min
Lab File: x072339.d
Acq: 11 Aug 2020 5:08 pm

Tgt Ion:152 Resp: 724925

Ion	Ratio	Lower	Upper
152	100		
150	14.3	0.0	44.3
153	12.7	0.0	43.3

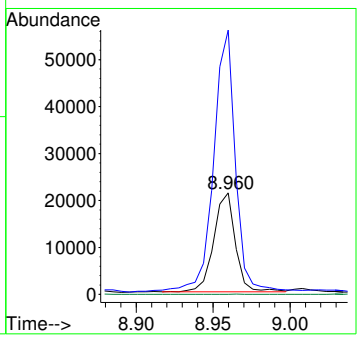


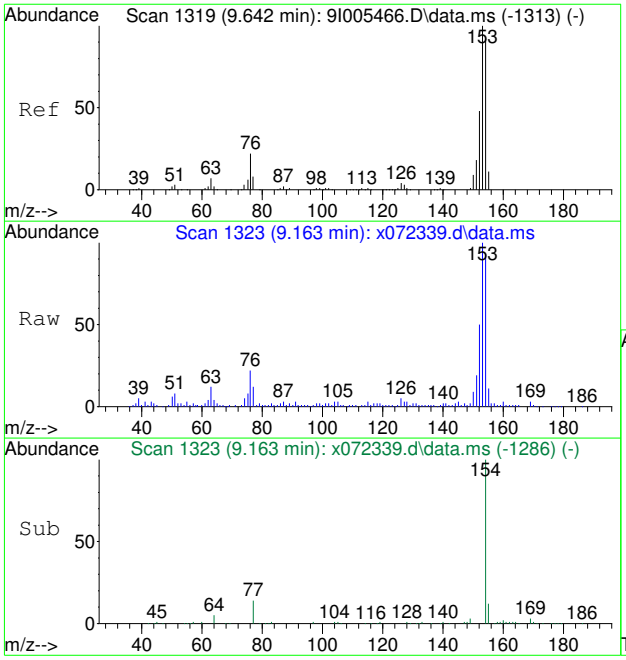


#56
o-Dinitrobenzene
Concen: 8.10 ppm
RT: 8.960 min Scan# 1285
Delta R.T. -0.011 min
Lab File: x072339.d
Acq: 11 Aug 2020 5:08 pm

Tgt Ion: 50 Resp: 20740

Ion	Ratio	Lower	Upper
50	100		
63	263.5	110.3	150.3#
168	0.0	104.0	144.0#

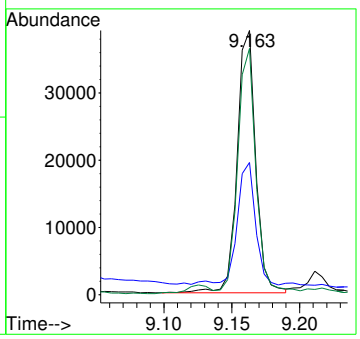


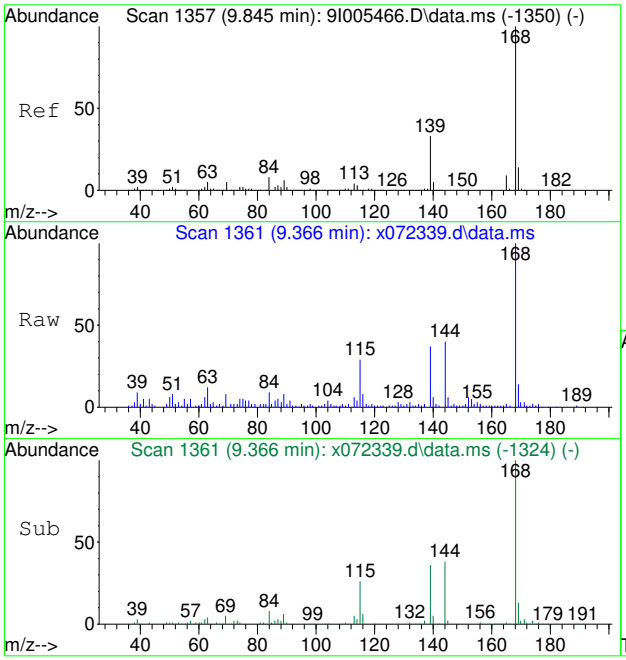


#57
Acenaphthene
Concen: 3.48 ppm
RT: 9.163 min Scan# 1323
Delta R.T. -0.000 min
Lab File: x072339.d
Acq: 11 Aug 2020 5:08 pm

Tgt Ion:153 Resp: 37163

Ion	Ratio	Lower	Upper
153	100		
152	46.2	18.4	78.4
154	92.9	62.4	122.4

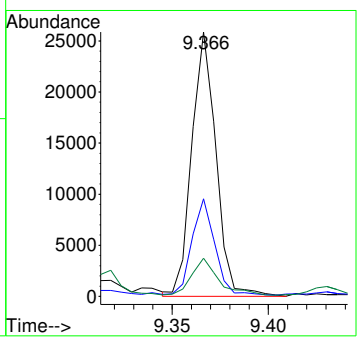


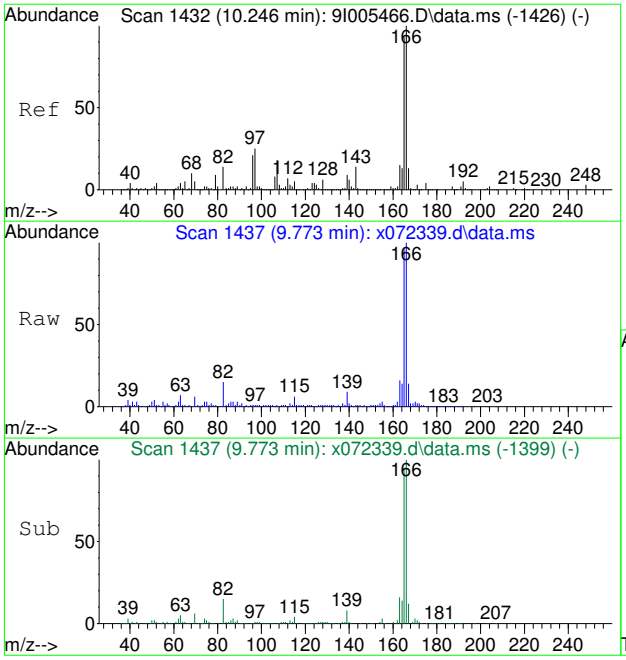


#60
Dibenzofuran
Concen: 1.60 ppm
RT: 9.366 min Scan# 1361
Delta R.T. -0.000 min
Lab File: x072339.d
Acq: 11 Aug 2020 5:08 pm

Tgt Ion:168 Resp: 22758

Ion	Ratio	Lower	Upper
168	100		
139	36.4	3.0	63.0
169	13.9	0.0	43.5

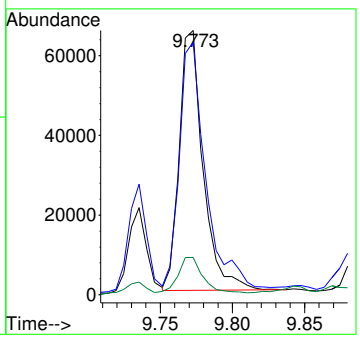


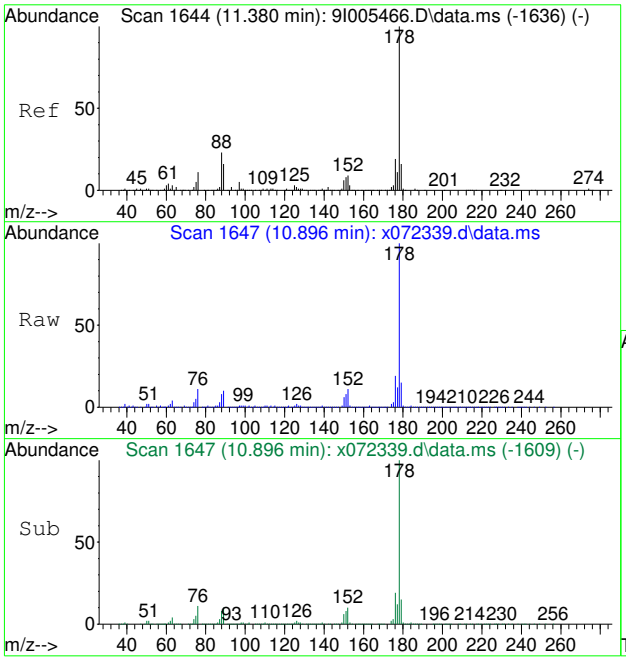


#65
Fluorene
Concen: 6.75 ppm
RT: 9.773 min Scan# 1437
Delta R.T. 0.005 min
Lab File: x072339.d
Acq: 11 Aug 2020 5:08 pm

Tgt Ion:166 Resp: 74922

Ion	Ratio	Lower	Upper
166	100		
165	94.7	62.7	122.7
167	12.7	0.0	43.5

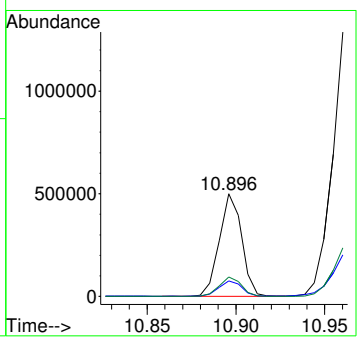


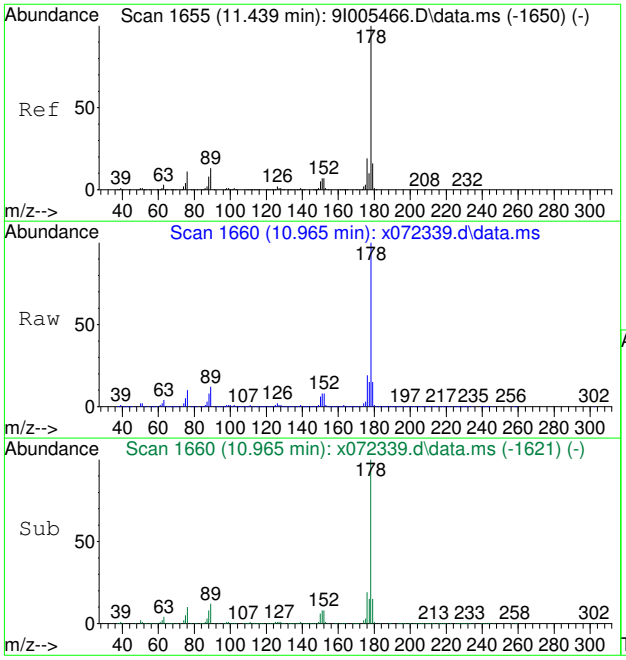


#84
Phenanthrene
Concen: 26.17 ppm
RT: 10.896 min Scan# 1647
Delta R.T. 0.005 min
Lab File: x072339.d
Acq: 11 Aug 2020 5:08 pm

Tgt Ion:178 Resp: 435284

Ion	Ratio	Lower	Upper
178	100		
179	14.9	0.0	45.8
176	18.9	0.0	49.3

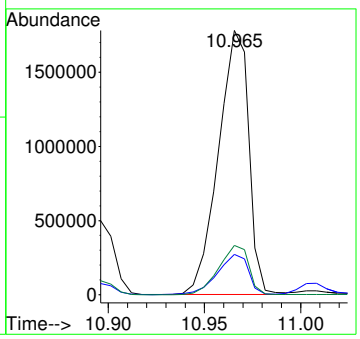


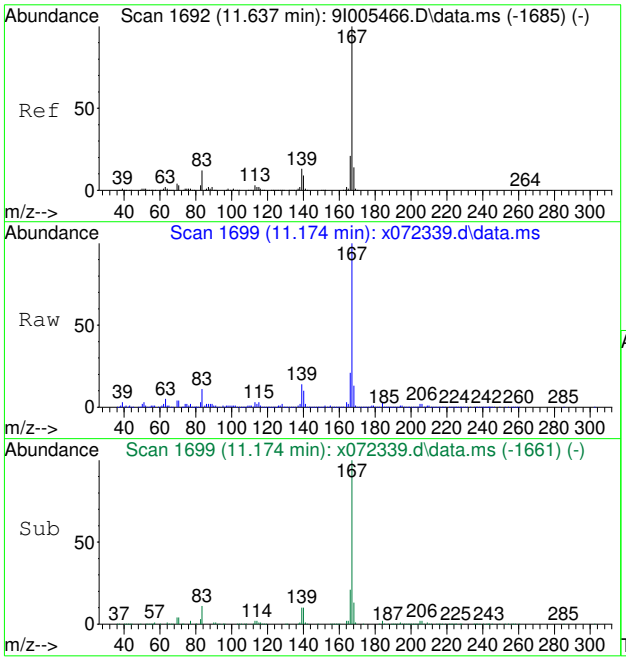


#85
Anthracene
Concen: 113.12 ppm
RT: 10.965 min Scan# 1660
Delta R.T. 0.011 min
Lab File: x072339.d
Acq: 11 Aug 2020 5:08 pm

Tgt Ion:178 Resp: 1961004

Ion	Ratio	Lower	Upper
178	100		
179	15.0	0.0	46.0
176	18.7	0.0	49.3

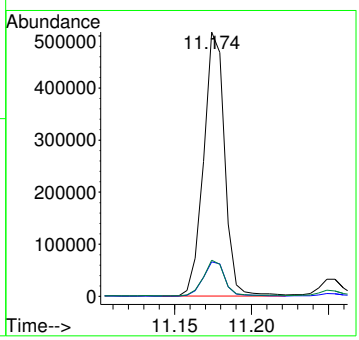


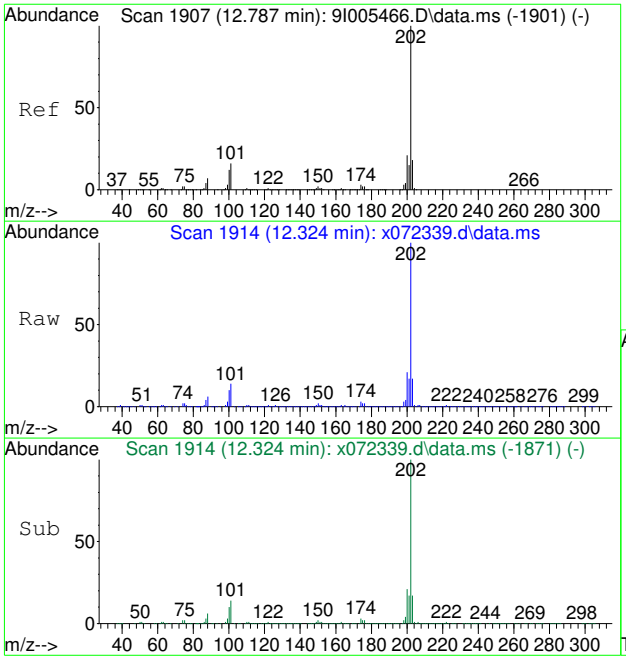


#87
Carbazole
Concen: 31.52 ppm
RT: 11.174 min Scan# 1699
Delta R.T. 0.005 min
Lab File: x072339.d
Acq: 11 Aug 2020 5:08 pm

Tgt Ion:167 Resp: 482098

Ion	Ratio	Lower	Upper
167	100		
168	13.0	0.0	43.9
139	13.4	0.0	42.7

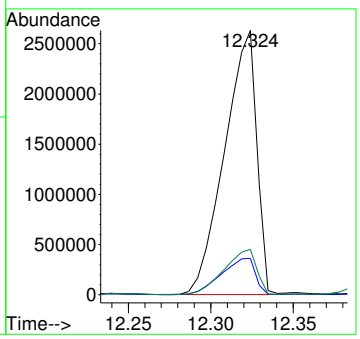


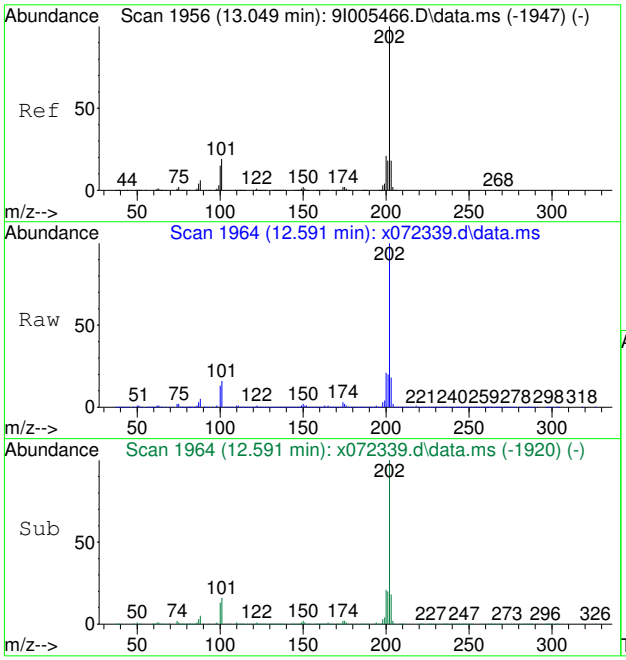


#91
Fluoranthene
Concen: 231.22 ppm
RT: 12.324 min Scan# 1914
Delta R.T. 0.032 min
Lab File: x072339.d
Acq: 11 Aug 2020 5:08 pm

Tgt Ion:202 Resp: 3568214

Ion	Ratio	Lower	Upper
202	100		
101	13.7	0.0	45.8
203	17.0	0.0	48.1

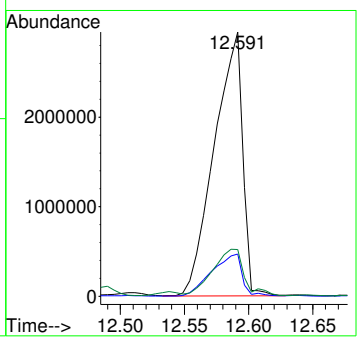


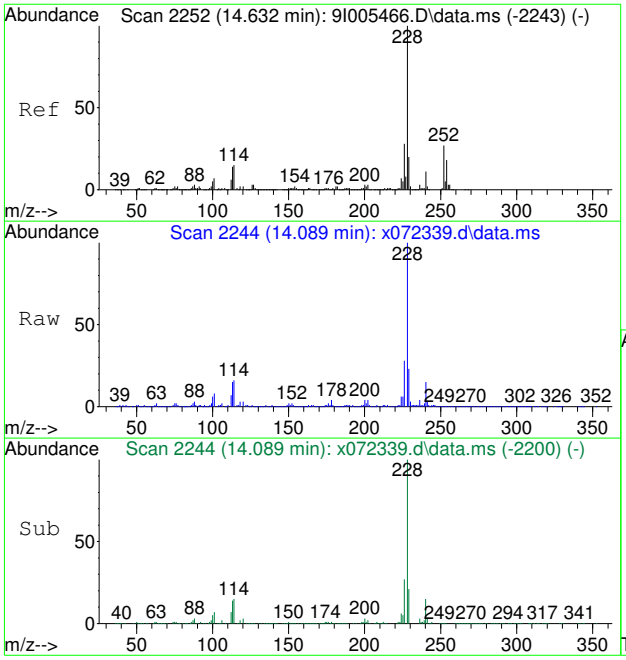


#94
Pyrene
Concen: 253.30 ppm
RT: 12.591 min Scan# 1964
Delta R.T. 0.037 min
Lab File: x072339.d
Acq: 11 Aug 2020 5:08 pm

Tgt Ion:202 Resp: 4548352

Ion	Ratio	Lower	Upper
202	100		
101	15.9	0.0	48.7
203	16.9	0.0	48.4

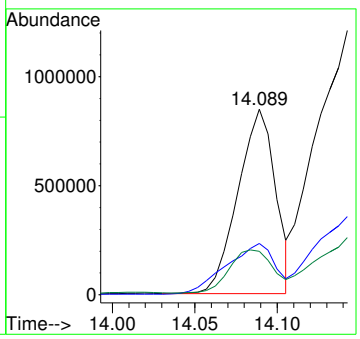


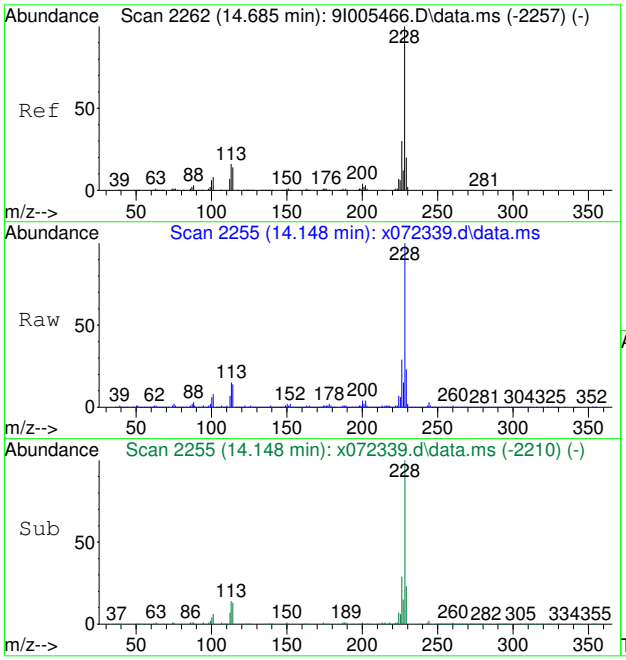


#99
Benzo[a]anthracene
Concen: 98.71 ppm
RT: 14.089 min Scan# 2244
Delta R.T. 0.037 min
Lab File: x072339.d
Acq: 11 Aug 2020 5:08 pm

Tgt Ion:228 Resp: 1341751

Ion	Ratio	Lower	Upper
228	100		
226	27.2	0.0	57.5
229	22.2	0.0	49.9

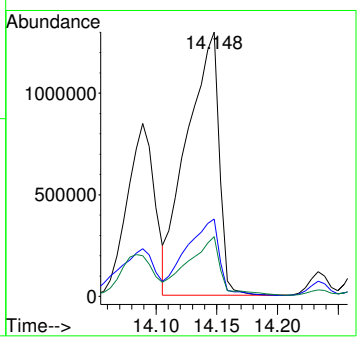


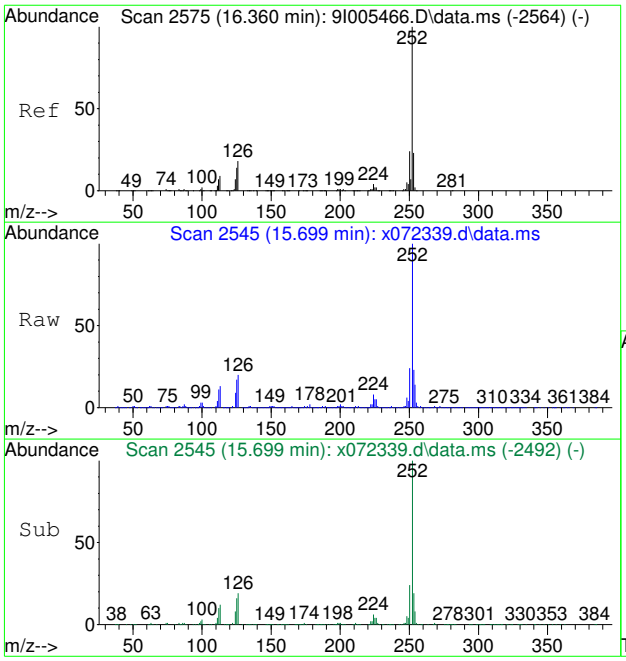


#100
Chrysene
Concen: 165.51 ppm
RT: 14.148 min Scan# 2255
Delta R.T. 0.043 min
Lab File: x072339.d
Acq: 11 Aug 2020 5:08 pm

Tgt Ion:228 Resp: 2395759

Ion	Ratio	Lower	Upper
228	100		
226	29.1	0.4	60.4
229	21.9	0.0	50.1

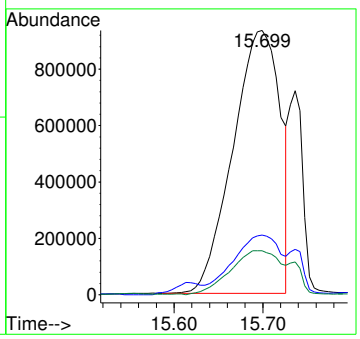


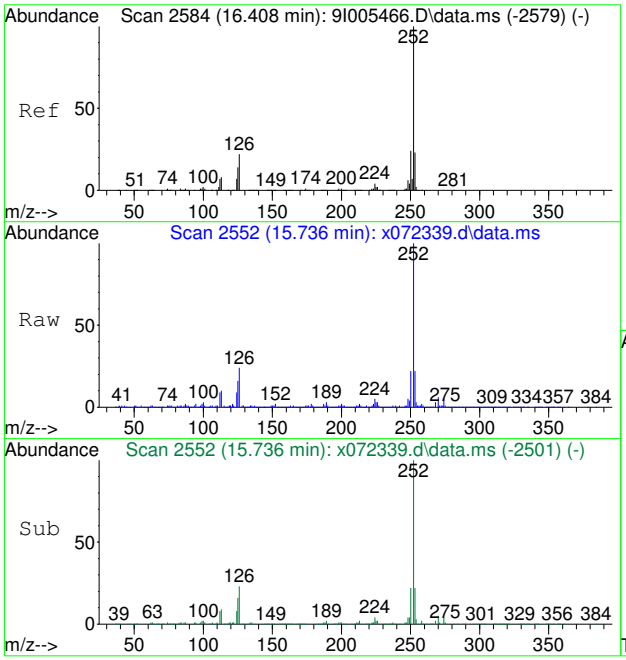


#104
Benzo[b]fluoranthene
Concen: 234.92 ppm
RT: 15.699 min Scan# 2545
Delta R.T. 0.085 min
Lab File: x072339.d
Acq: 11 Aug 2020 5:08 pm

Tgt Ion:252 Resp: 3450261

Ion	Ratio	Lower	Upper
252	100		
253	21.9	0.0	52.5
125	16.2	0.0	44.0

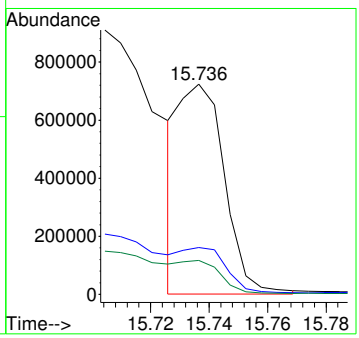


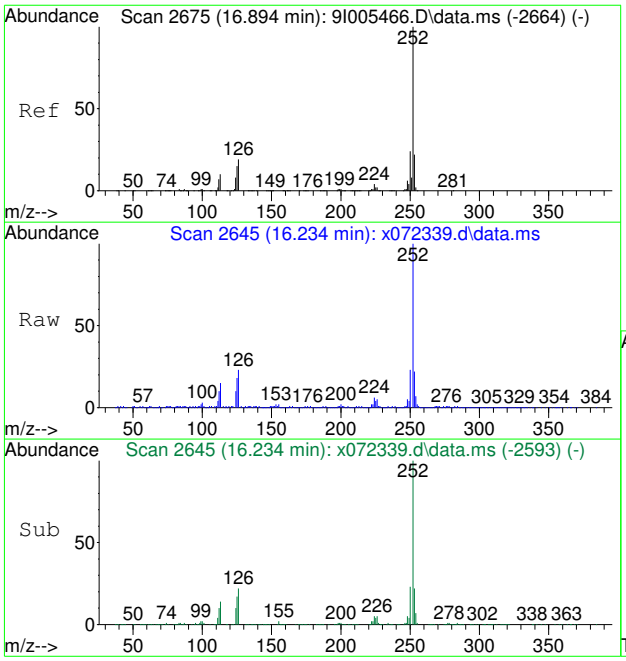


#105
Benzo[k]fluoranthene
Concen: 61.74 ppm m
RT: 15.736 min Scan# 2552
Delta R.T. 0.075 min
Lab File: x072339.d
Acq: 11 Aug 2020 5:08 pm

Tgt Ion:252 Resp: 781395

Ion	Ratio	Lower	Upper
252	100		
253	22.2	0.0	52.5
125	16.1	0.0	44.4

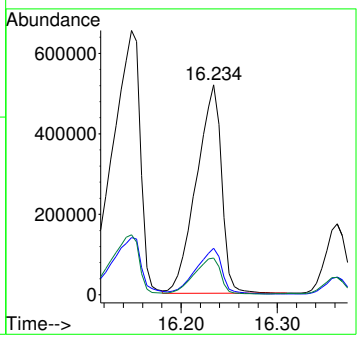


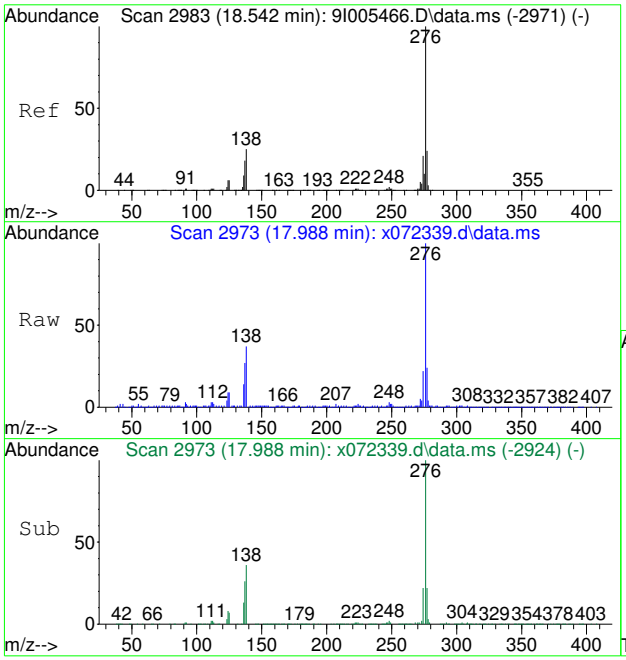


#106
Benzo[a]pyrene
Concen: 85.83 ppm
RT: 16.234 min Scan# 2645
Delta R.T. 0.080 min
Lab File: x072339.d
Acq: 11 Aug 2020 5:08 pm

Tgt Ion:252 Resp: 941240

Ion	Ratio	Lower	Upper
252	100		
253	21.3	0.0	52.3
125	17.0	0.0	44.7

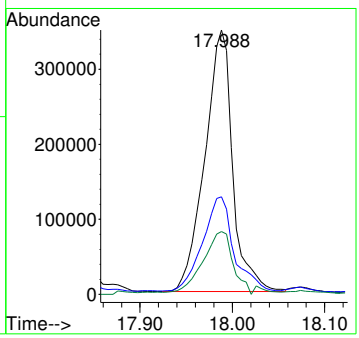


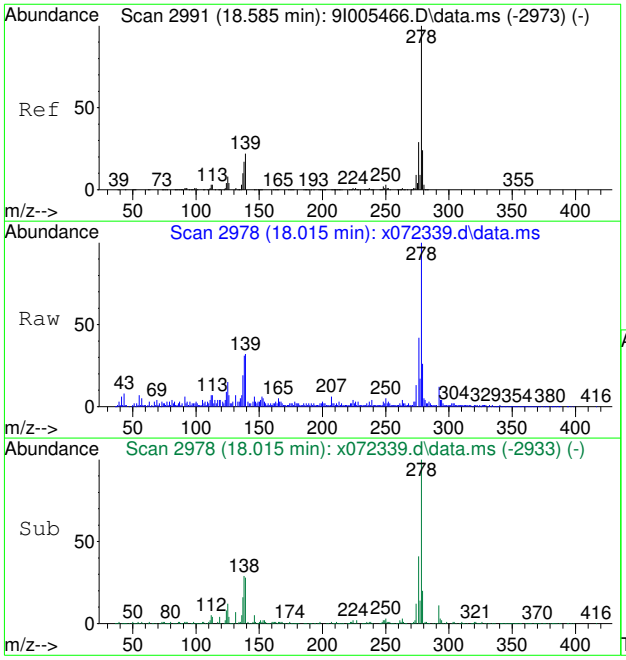


#107
Indeno[1,2,3-cd]pyrene
Concen: 86.50 ppm
RT: 17.988 min Scan# 2973
Delta R.T. 0.064 min
Lab File: x072339.d
Acq: 11 Aug 2020 5:08 pm

Tgt Ion:276 Resp: 730119

Ion	Ratio	Lower	Upper
276	100		
138	35.8	0.0	54.7
277	23.2	0.0	53.8

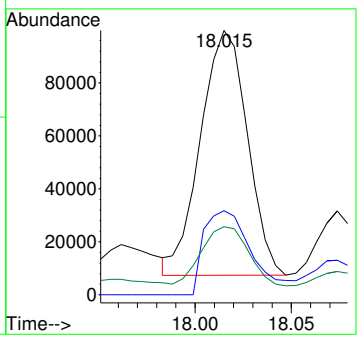


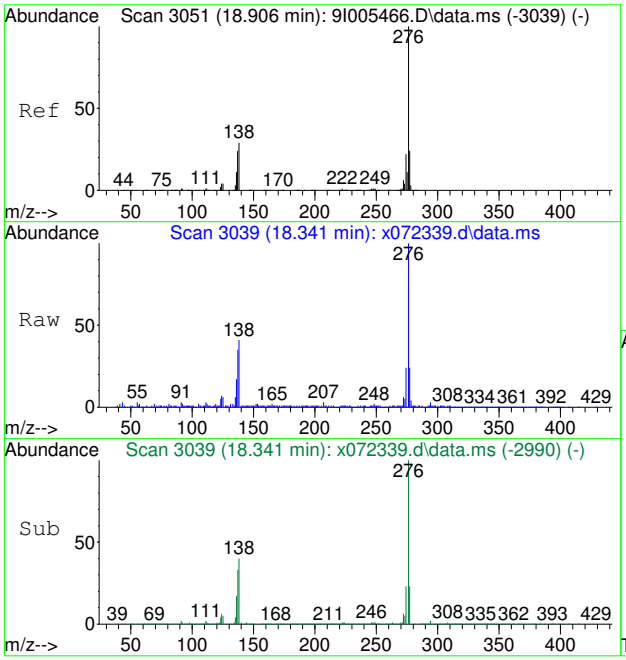


#108
Dibenz[a,h]anthracene
Concen: 23.52 ppm
RT: 18.015 min Scan# 2978
Delta R.T. 0.043 min
Lab File: x072339.d
Acq: 11 Aug 2020 5:08 pm

Tgt Ion:278 Resp: 156757

Ion	Ratio	Lower	Upper
278	100		
139	32.7	0.0	52.4
279	24.3	0.0	54.4

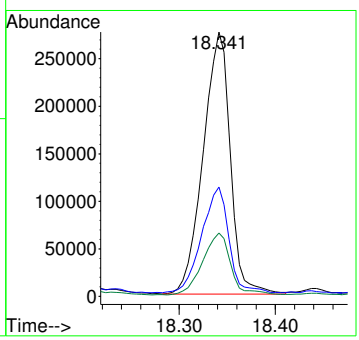




#109
Benzo[g,h,i]perylene
Concen: 53.97 ppm
RT: 18.341 min Scan# 3039
Delta R.T. 0.064 min
Lab File: x072339.d
Acq: 11 Aug 2020 5:08 pm

Tgt Ion:276 Resp: 540687

Ion	Ratio	Lower	Upper
276	100		
138	40.4	0.0	59.4
277	23.6	0.0	54.1



Manual Integration Approval Summary

Sample Number: FA77576-7
Lab FileID: X072339.D
Injection Time: 08/11/20 17:08

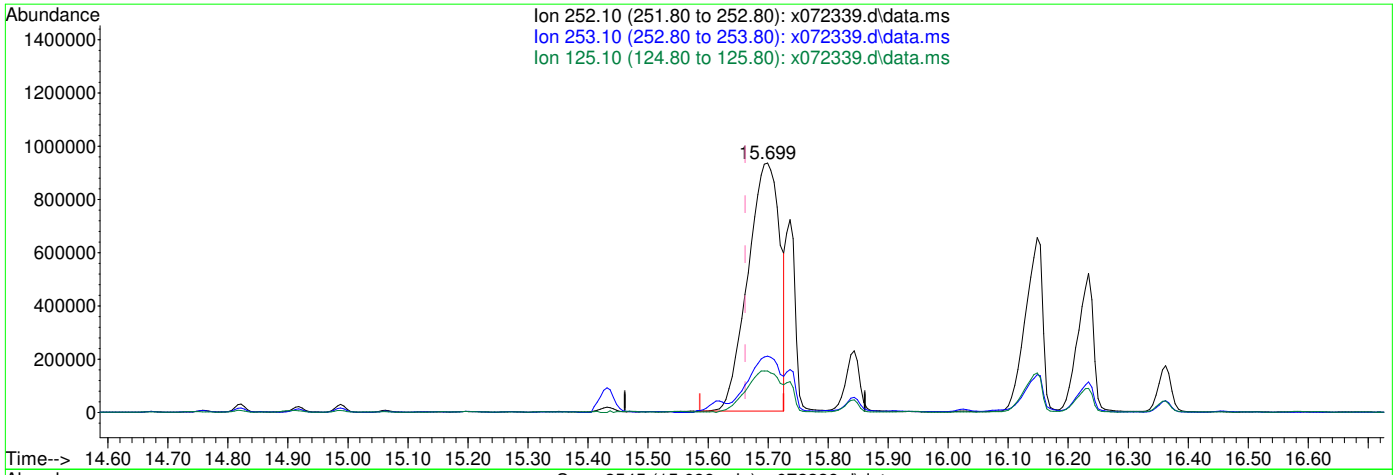
Method: SW846 8270E
Analyst approved: 08/12/20 16:01 Martha Valls
Supervisor approved: 08/12/20 16:38 Naresh Jiawan

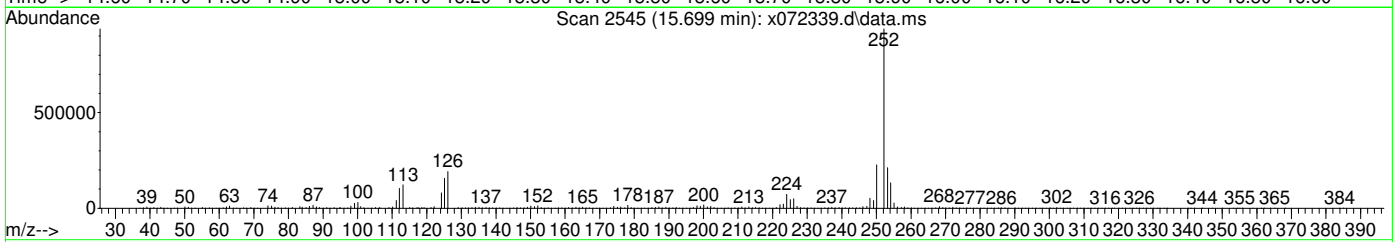
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(k)fluoranthene	207-08-9		15.74	Missed peak

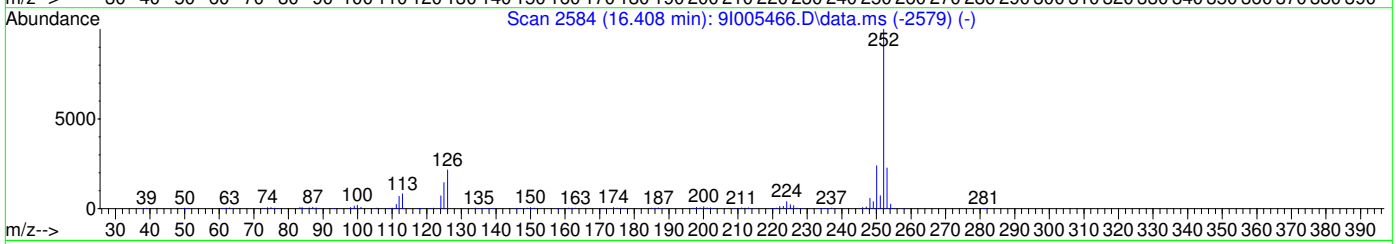
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072339.d
Acq On : 11 Aug 2020 5:08 pm
Operator : marthav
Sample : fa77576-7 E
Misc : op81482,sx2950,30.3,,,1,1,soil
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 12 01:47:33 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration







TIC: x072339.d\data.ms

(105) Benzo[k]fluoranthene (P)

15.699min (+0.037) 272.63ppm

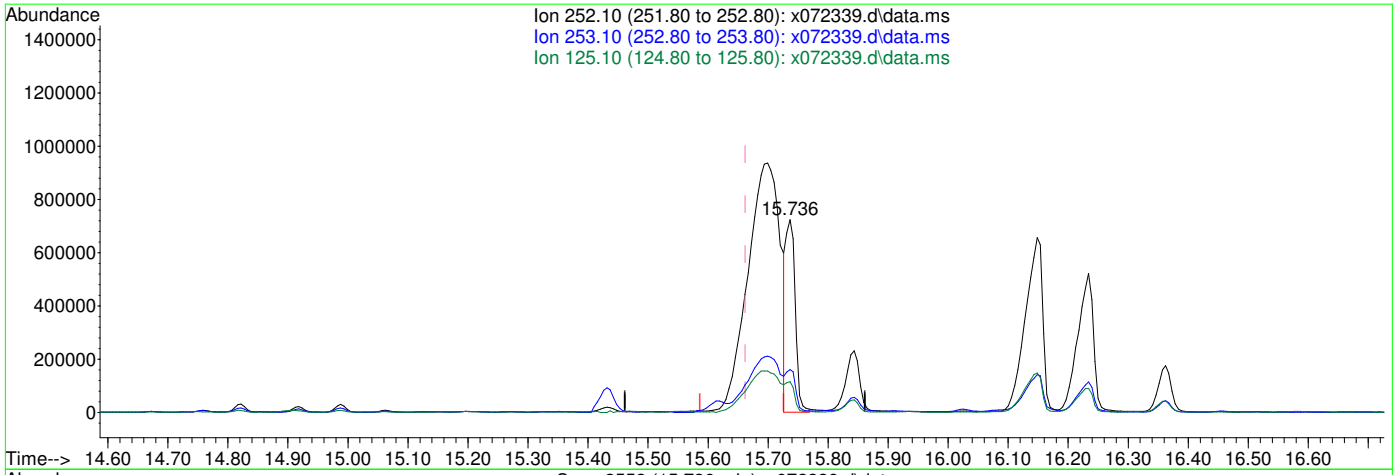
response 3450261

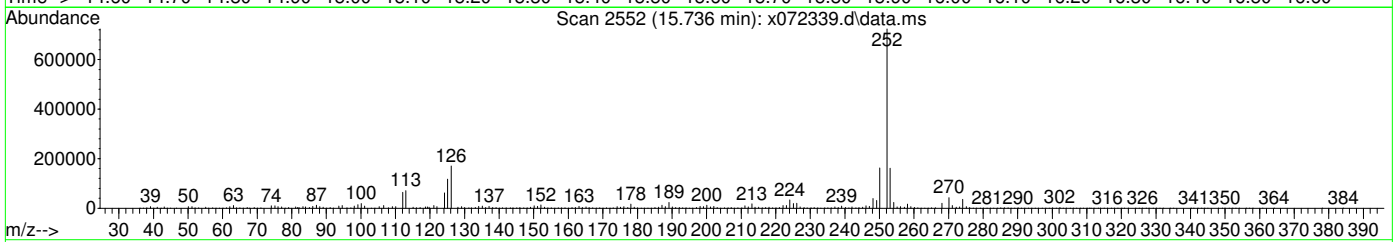
Ion	Exp%	Act%
252.10	100	100
253.10	22.50	21.92
125.10	14.40	16.20
0.00	0.00	0.00

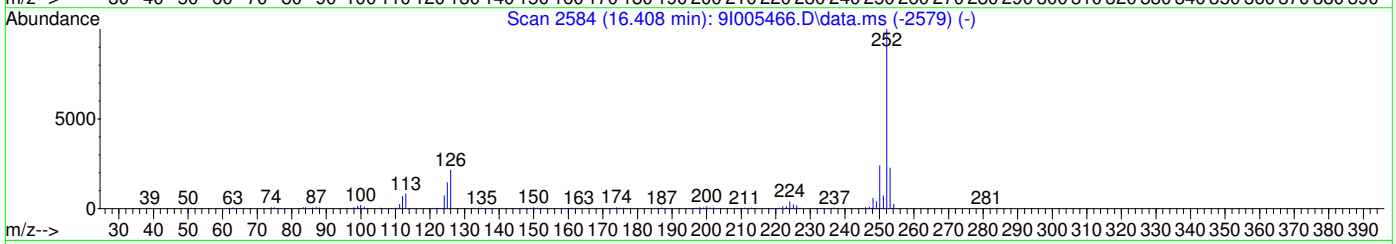
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072339.d
Acq On : 11 Aug 2020 5:08 pm
Operator : marthav
Sample : fa77576-7 E
Misc : op81482,sx2950,30.3,,,1,1,soil
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 12 01:47:33 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration







TIC: x072339.d\data.ms

(105) Benzo[k]fluoranthene (P)

15.736min (+0.075) 61.74ppm m

response 781395

Ion	Exp%	Act%
252.10	100	100
253.10	22.50	22.24
125.10	14.40	16.12
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072368.D
Acq On : 12 Aug 2020 3:08 pm
Operator : marthav
Sample : fa77576-7 E,5 Inst : MSBNA05
Misc : op81482,sx2950,30.3,,,1,5,soil
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Aug 12 15:44:16 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.654	152	196243	40.00	ppm	0.00
22) Naphthalene-d8	7.077	136	758444	40.00	ppm	0.00
43) Acenaphthene-d10	9.115	164	369807	40.00	ppm	0.00
70) Phenanthrene-d10	10.859	188	653011	40.00	ppm	0.00
92) Chrysene-d12	14.073	240	554493	40.00	ppm	0.00
102) Perylene-d12	16.277	264	423056	40.00	ppm	0.01
110) 1,4-Dichlorobenzene-d4A	5.654	152	196243	40.00	ppm	0.00
120) Naphthalene-d8A	7.077	136	758444	40.00	ppm	0.00
127) Acenaphthene-d10A	9.115	164	369807	40.00	ppm	0.00
136) Phenanthrene-d10A	10.859	188	653011	40.00	ppm	0.00
146) Chrysene-d12A	14.073	240	554493	40.00	ppm	0.00
153) Perylene-d12A	16.277	264	423056	40.00	ppm	0.01
System Monitoring Compounds						
7) 2-Fluorophenol	4.312	112	78703	11.18	ppm	0.00
Spiked Amount 100.000	Range 40 - 102		Recovery = 11.18%#			
9) Phenol-d5	5.333	99	95207	11.37	ppm	0.00
Spiked Amount 100.000	Range 41 - 100		Recovery = 11.37%#			
23) Nitrobenzene-d5	6.269	82	40832	5.21	ppm	0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 10.42%#			
47) 2-Fluorobiphenyl	8.345	172	73816	5.51	ppm	0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 11.02%#			
75) 2,4,6-Tribromophenol	10.051	330	13914	11.43	ppm	0.00
Spiked Amount 100.000	Range 42 - 108		Recovery = 11.43%#			
95) Terphenyl-d14	12.773	244	77336	5.25	ppm	0.00
Spiked Amount 50.000	Range 45 - 119		Recovery = 10.50%#			
Target Compounds						Qvalue
24) Nitrobenzene	6.291	77	1186	0.15	ppm	79
30) Benzoic Acid	6.858	105	1990	0.43	ppm	83
34) Naphthalene	7.098	128	3901	0.19	ppm	94
40) 2-Methylnaphthalene	7.906	142	1952	0.14	ppm	84
41) 1-Methylnaphthalene	8.018	142	1160	0.09	ppm	96
48) 1,1'-Biphenyl	8.452	154	705	0.05	ppm	91
52) Acenaphthylene	8.949	152	122805	6.65	ppm	98
57) Acenaphthene	9.152	153	7864	0.64	ppm	97
60) Dibenzofuran	9.356	168	3994	0.24	ppm	91
61) 2,4-Dinitrotoluene	9.382	165	639	0.16	ppm	92
65) Fluorene	9.757	166	15502	1.21	ppm	97
84) Phenanthrene	10.885	178	70837	3.59	ppm	99
85) Anthracene	10.944	178	282388	13.73	ppm	98
87) Carbazole	11.163	167	79078	4.36	ppm	98
91) Fluoranthene	12.292	202	654092	35.73	ppm	99
94) Pyrene	12.554	202	878680	38.17	ppm	99
99) Benzo[a]anthracene	14.057	228	233982	13.43	ppm	100
100) Chrysene	14.105	228	441889	23.81	ppm	99
104) Benzo[b]fluoranthene	15.635	252	555484	44.70	ppm	96
105) Benzo[k]fluoranthene	15.667	252	175913	11.71	ppm	98
106) Benzo[a]pyrene	16.170	252	159853	14.39	ppm	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072368.D
Acq On : 12 Aug 2020 3:08 pm
Operator : marthav
Sample : fa77576-7 E,5 Inst : MSBNA05
Misc : op81482,sx2950,30.3,,,1,5,soil
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Aug 12 15:44:16 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration

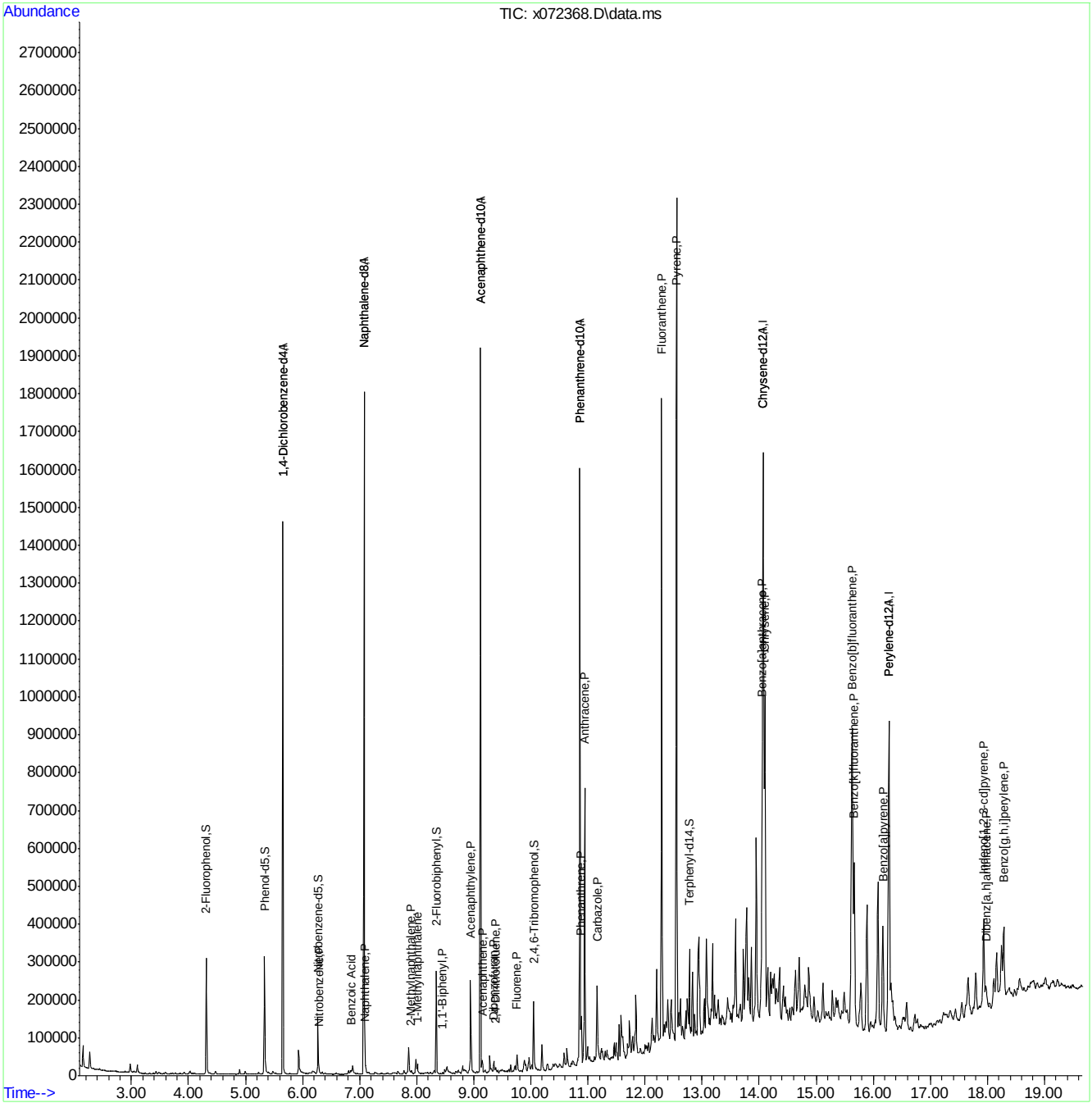
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
107) Indeno[1,2,3-cd]pyrene	17.935	276	130481	19.16	ppm	87
108) Dibenz[a,h]anthracene	17.972	278	26423	3.92	ppm	87
109) Benzo[g,h,i]perylene	18.288	276	99869	10.02	ppm	88

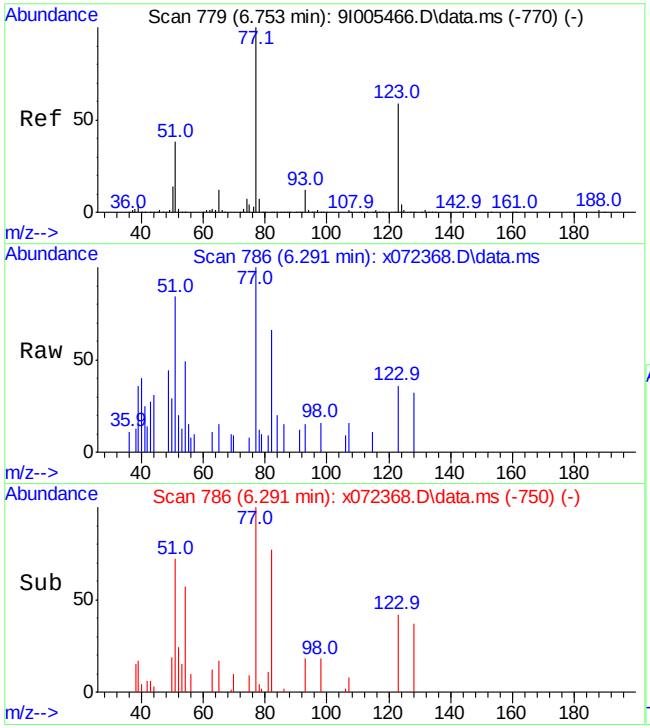
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072368.D
Acq On : 12 Aug 2020 3:08 pm
Operator : marthav
Sample : fa77576-7 E,5 Inst : MSBNA05
Misc : op81482,sx2950,30.3,,,1,5,soil
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Aug 12 15:44:16 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration

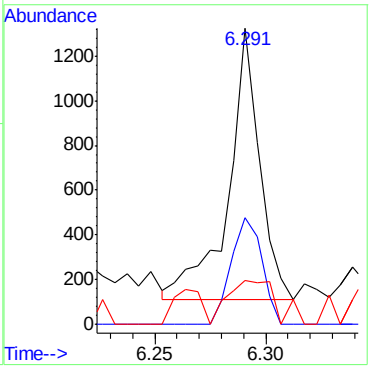


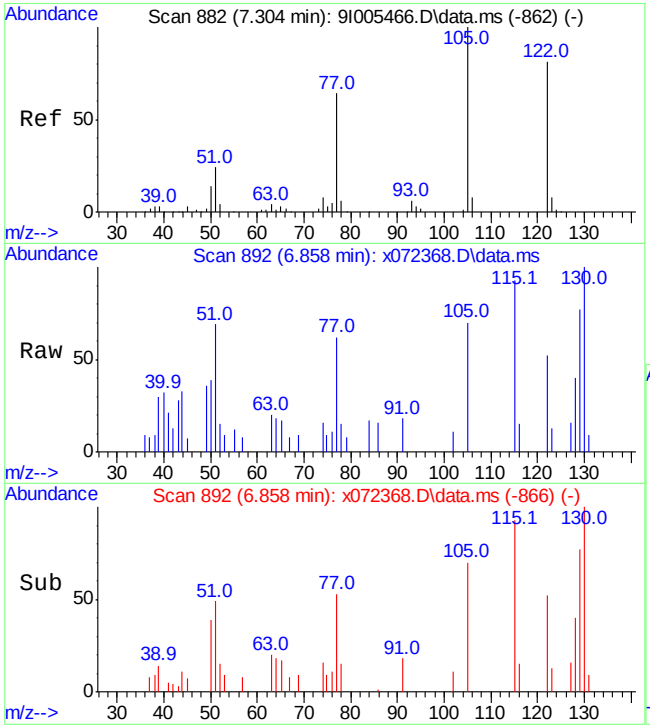


#24
Nitrobenzene
Concen: 0.15 ppm
RT: 6.291 min Scan# 786
Delta R.T. -0.005 min
Lab File: x072368.D
Acq: 12 Aug 2020 3:08 pm

Tgt Ion: 77 Resp: 1186

Ion	Ratio	Lower	Upper
77	100		
123	39.8	28.7	88.7
65	11.7	0.0	42.1

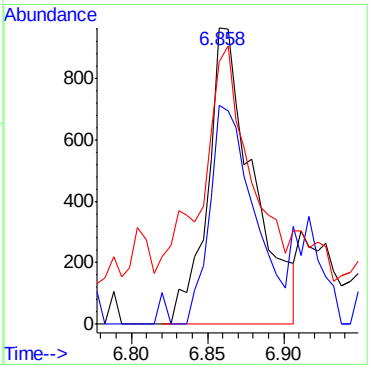


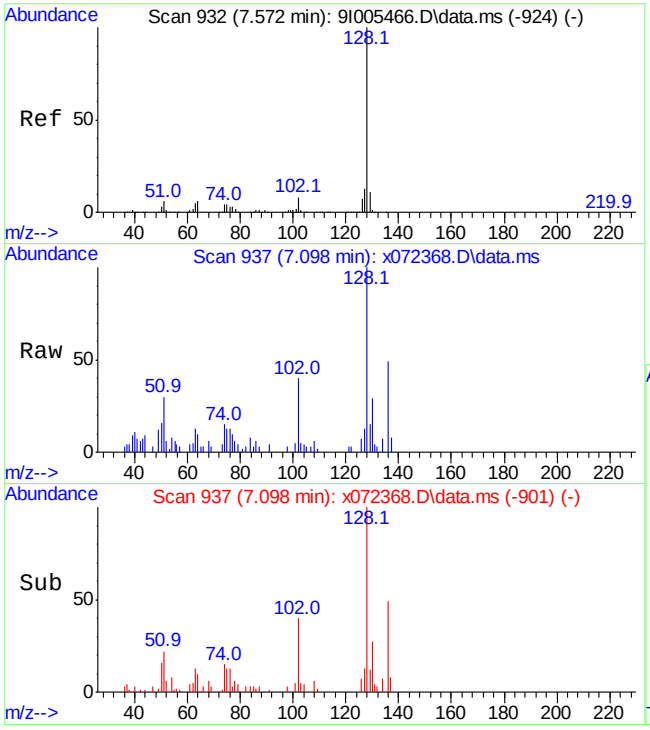


#30
Benzoic Acid
Concen: 0.43 ppm
RT: 6.858 min Scan# 892
Delta R.T. -0.059 min
Lab File: x072368.D
Acq: 12 Aug 2020 3:08 pm

Tgt Ion:105 Resp: 1990

Ion	Ratio	Lower	Upper
105	100		
122	57.8	51.2	111.2
77	68.6	34.1	94.1

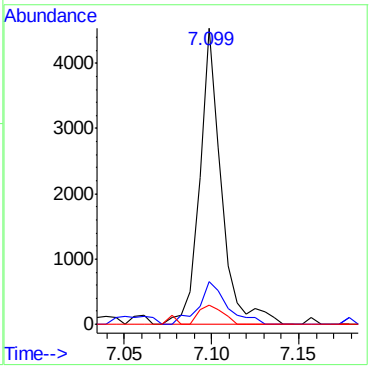


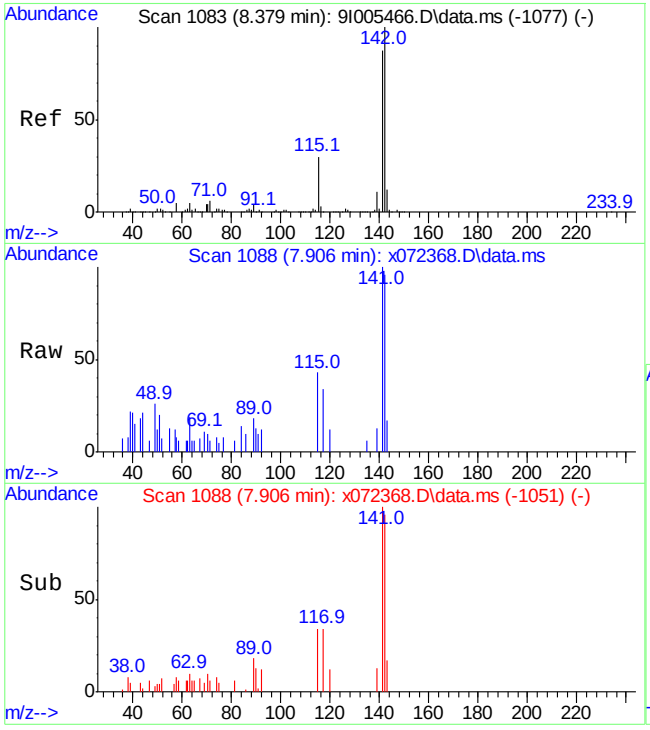


#34
Naphthalene
Concen: 0.19 ppm
RT: 7.098 min Scan# 937
Delta R.T. -0.005 min
Lab File: x072368.D
Acq: 12 Aug 2020 3:08 pm

Tgt Ion:128 Resp: 3901

Ion	Ratio	Lower	Upper
128	100		
129	14.6	0.0	41.4
126	6.5	0.0	37.4

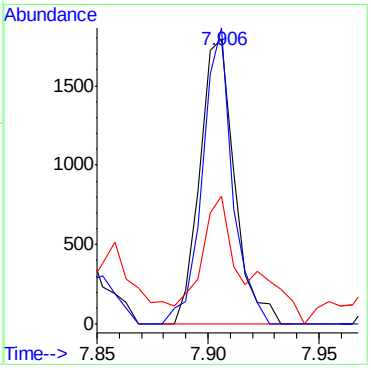


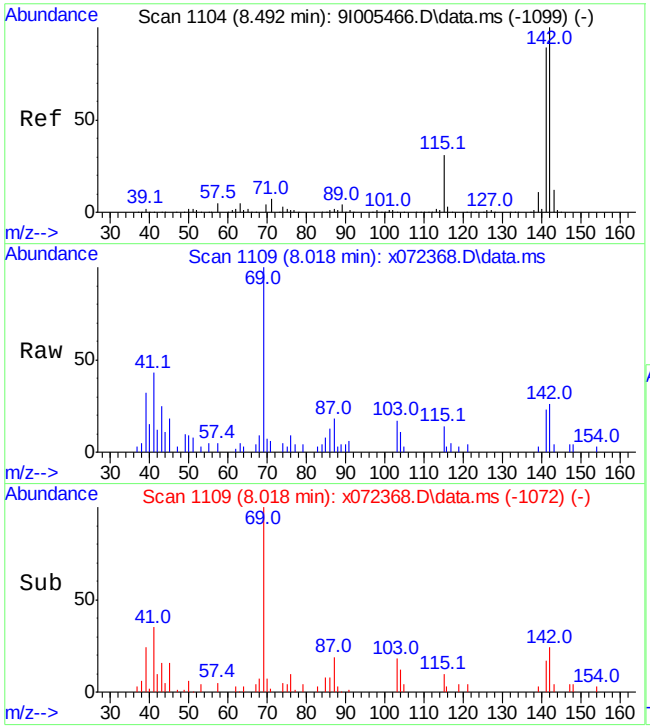


#40
2-Methylnaphthalene
Concen: 0.14 ppm
RT: 7.906 min Scan# 1088
Delta R.T. -0.000 min
Lab File: x072368.D
Acq: 12 Aug 2020 3:08 pm

Tgt Ion:142 Resp: 1952

Ion	Ratio	Lower	Upper
142	100		
141	104.0	56.8	116.8
115	33.9	0.0	60.0

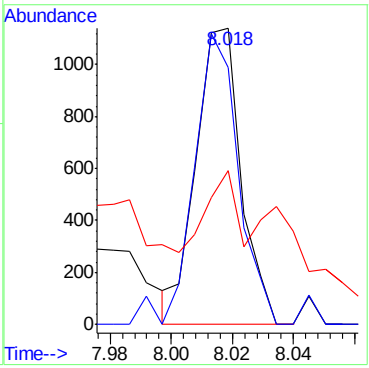


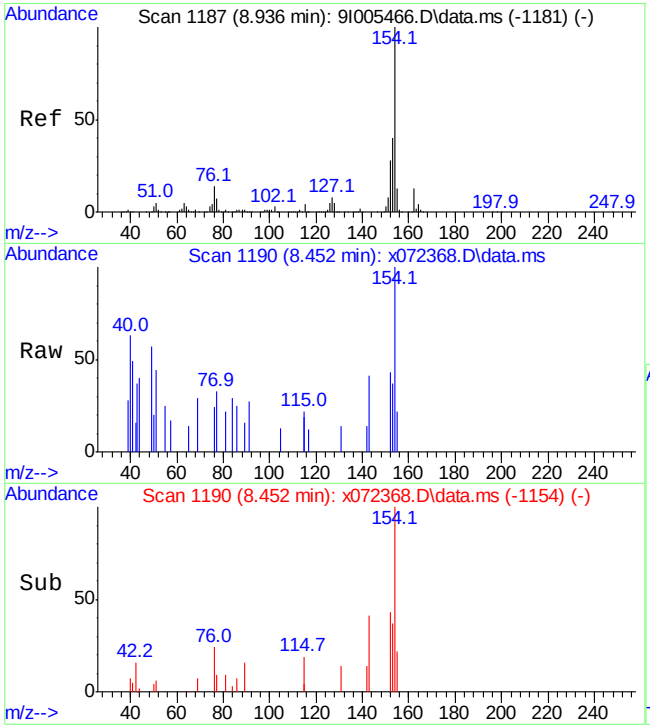


#41
1-Methylnaphthalene
Concen: 0.09 ppm
RT: 8.018 min Scan# 1109
Delta R.T. -0.000 min
Lab File: x072368.D
Acq: 12 Aug 2020 3:08 pm

Tgt Ion:142 Resp: 1160

Ion	Ratio	Lower	Upper
142	100		
141	91.9	59.0	119.0
115	34.5	1.1	61.1

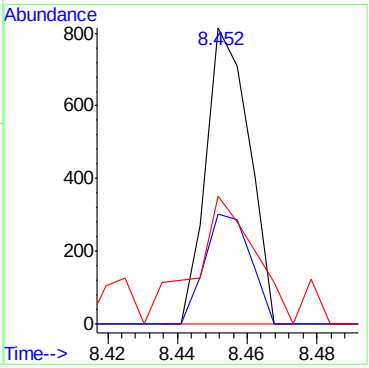


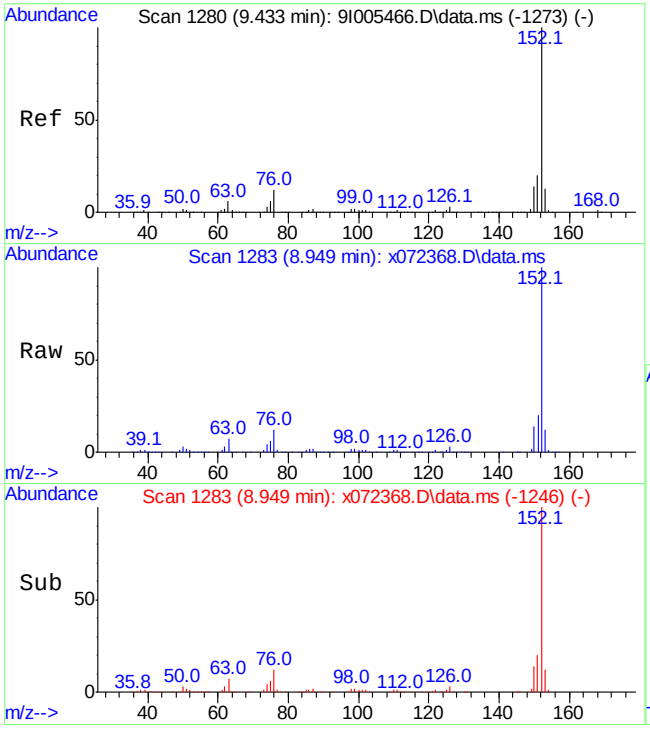


#48
1,1'-Biphenyl
Concen: 0.05 ppm
RT: 8.452 min Scan# 1190
Delta R.T. -0.005 min
Lab File: x072368.D
Acq: 12 Aug 2020 3:08 pm

Tgt Ion:154 Resp: 705

Ion	Ratio	Lower	Upper
154	100		
153	37.1	10.3	70.3
152	36.0	0.0	58.2

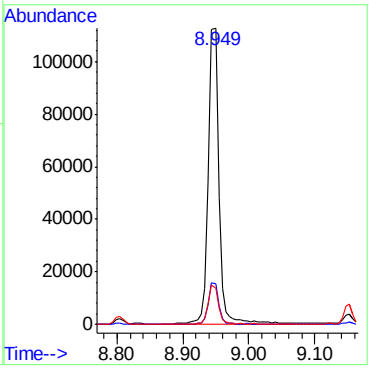


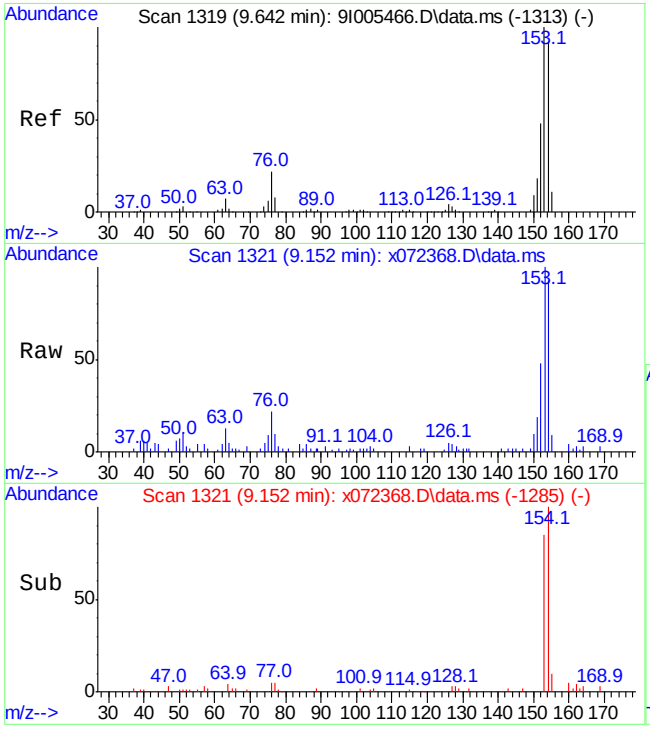


#52
Acenaphthylene
Concen: 6.65 ppm
RT: 8.949 min Scan# 1283
Delta R.T. -0.000 min
Lab File: x072368.D
Acq: 12 Aug 2020 3:08 pm

Tgt Ion:152 Resp: 122805

Ion	Ratio	Lower	Upper
152	100		
150	13.8	0.0	44.3
153	12.1	0.0	43.3

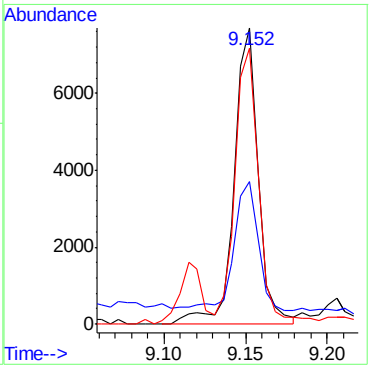


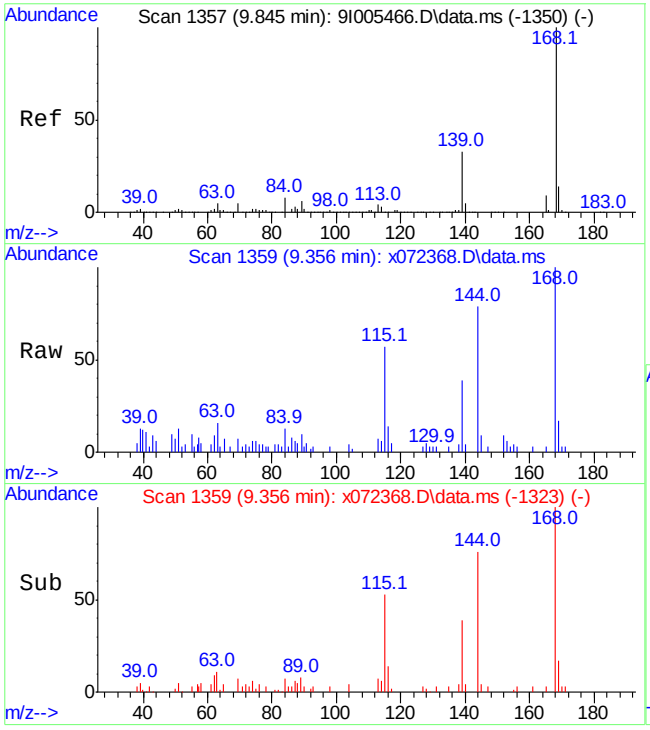


#57
Acenaphthene
Concen: 0.64 ppm
RT: 9.152 min Scan# 1321
Delta R.T. -0.005 min
Lab File: x072368.D
Acq: 12 Aug 2020 3:08 pm

Tgt Ion:153 Resp: 7864

Ion	Ratio	Lower	Upper
153	100		
152	42.8	18.4	78.4
154	92.3	62.4	122.4

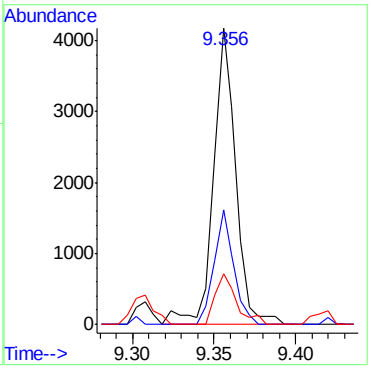


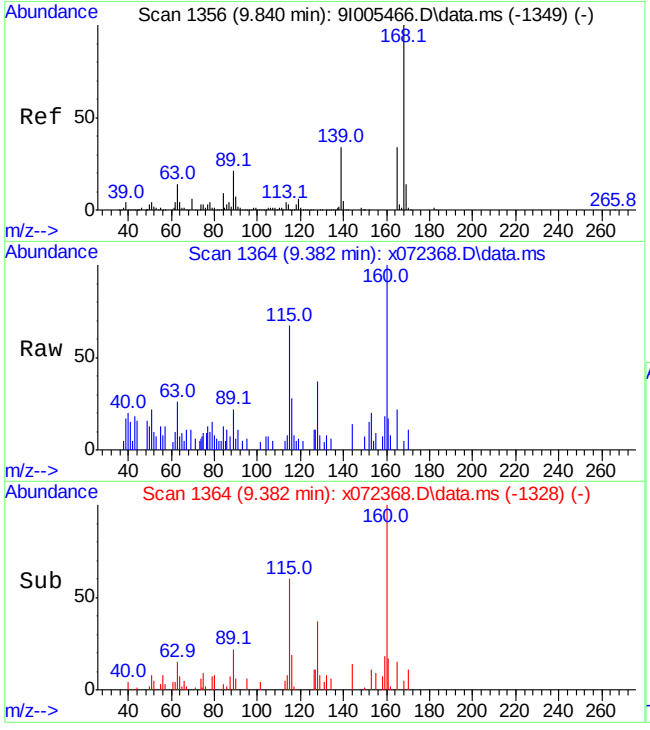


#60
Dibenzofuran
Concen: 0.24 ppm
RT: 9.356 min Scan# 1359
Delta R.T. -0.005 min
Lab File: x072368.D
Acq: 12 Aug 2020 3:08 pm

Tgt Ion:168 Resp: 3994

Ion	Ratio	Lower	Upper
168	100		
139	38.6	3.0	63.0
169	15.8	0.0	43.5

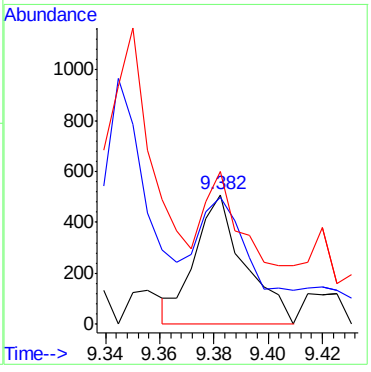


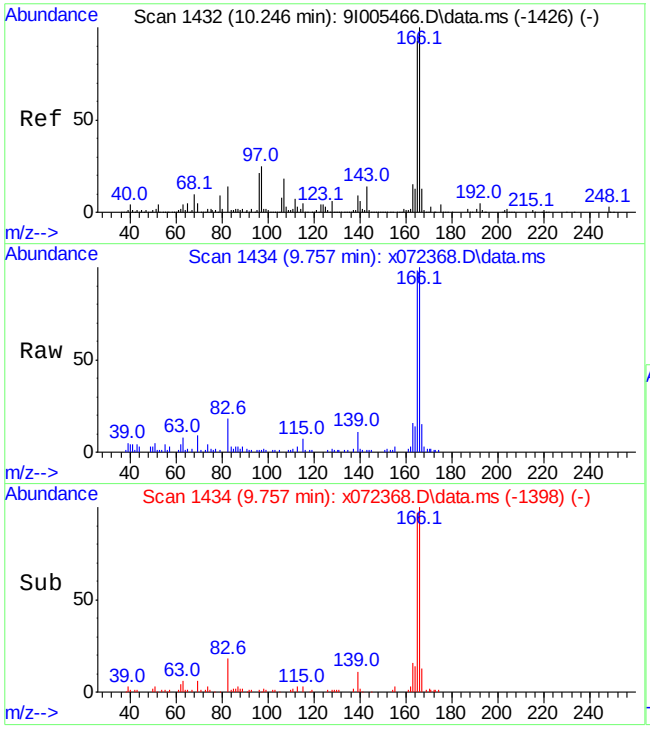


#61
2,4-Dinitrotoluene
Concen: 0.16 ppm
RT: 9.382 min Scan# 1364
Delta R.T. -0.005 min
Lab File: x072368.D
Acq: 12 Aug 2020 3:08 pm

Tgt Ion:165 Resp: 639

Ion	Ratio	Lower	Upper
165	100		
89	62.4	32.4	92.4
63	52.4	9.5	69.5

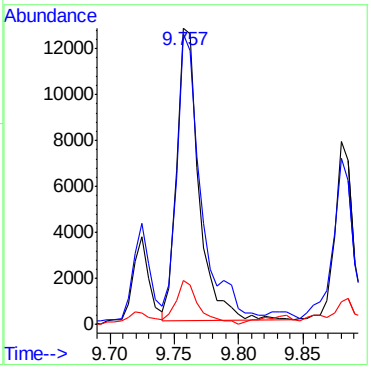


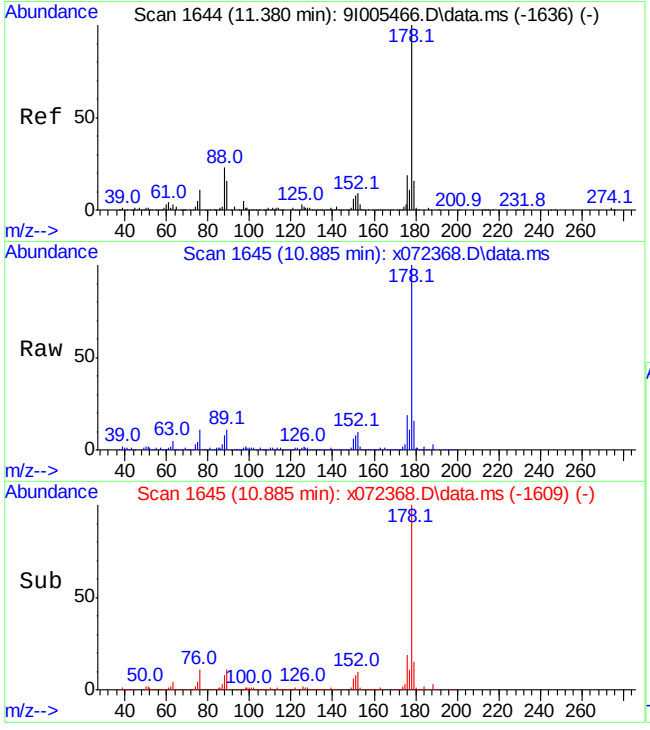


#65
Fluorene
Concen: 1.21 ppm
RT: 9.757 min Scan# 1434
Delta R.T. -0.005 min
Lab File: x072368.D
Acq: 12 Aug 2020 3:08 pm

Tgt Ion:166 Resp: 15502

Ion	Ratio	Lower	Upper
166	100		
165	96.4	62.7	122.7
167	13.7	0.0	43.5

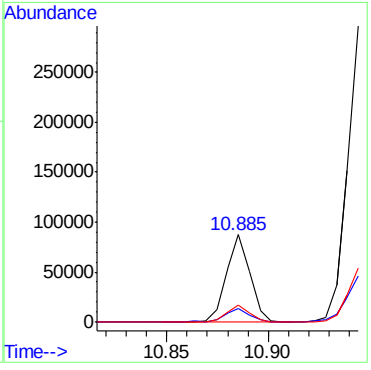


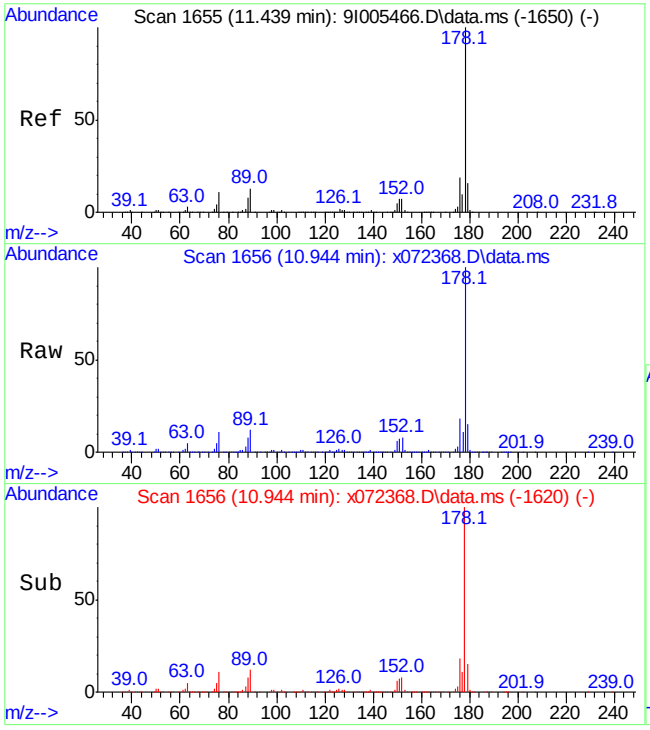


#84
Phenanthrene
Concen: 3.59 ppm
RT: 10.885 min Scan# 1645
Delta R.T. -0.005 min
Lab File: x072368.D
Acq: 12 Aug 2020 3:08 pm

Tgt Ion:178 Resp: 70837

Ion	Ratio	Lower	Upper
178	100		
179	15.3	0.0	45.8
176	19.0	0.0	49.3

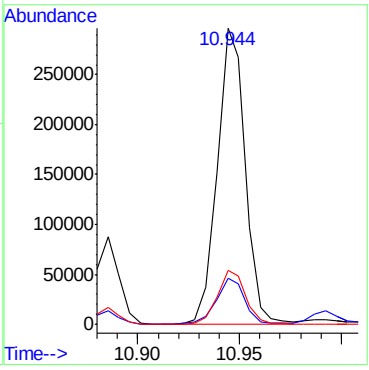


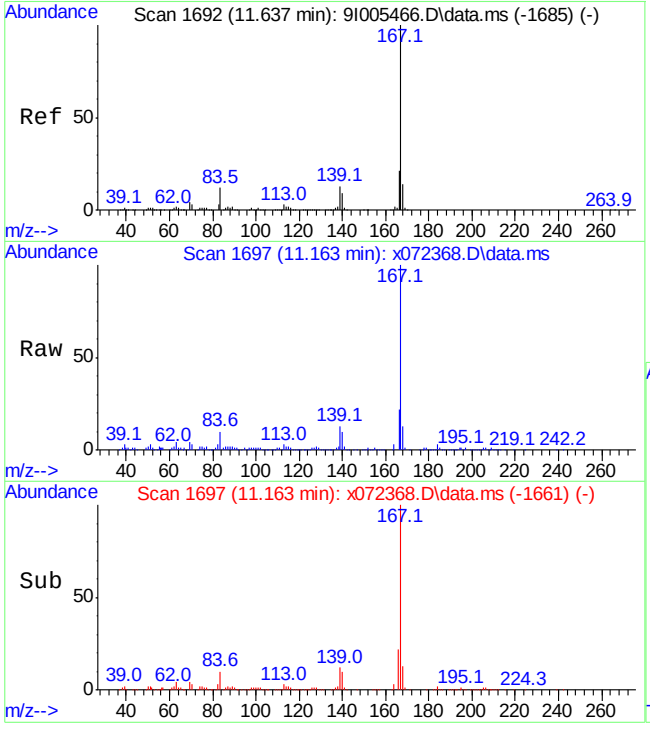


#85
Anthracene
Concen: 13.73 ppm
RT: 10.944 min Scan# 1656
Delta R.T. -0.005 min
Lab File: x072368.D
Acq: 12 Aug 2020 3:08 pm

Tgt Ion:178 Resp: 282388

Ion	Ratio	Lower	Upper
178	100		
179	15.3	0.0	46.0
176	18.1	0.0	49.3

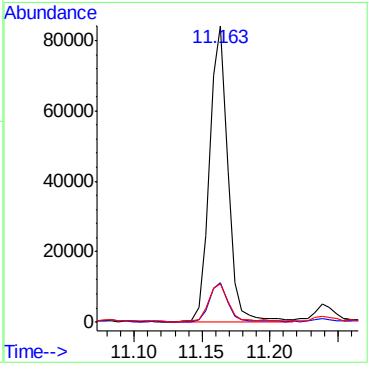


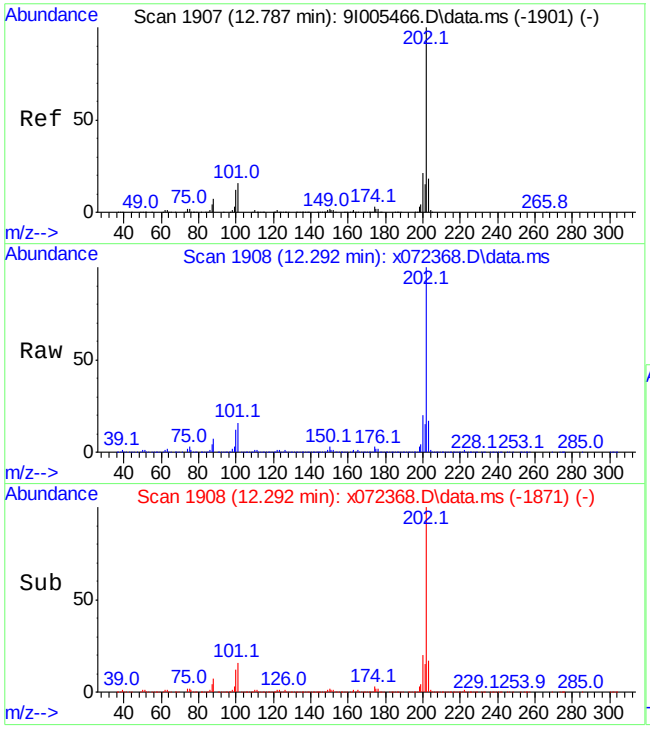


#87
Carbazole
Concen: 4.36 ppm
RT: 11.163 min Scan# 1697
Delta R.T. -0.005 min
Lab File: x072368.D
Acq: 12 Aug 2020 3:08 pm

Tgt Ion:167 Resp: 79078

Ion	Ratio	Lower	Upper
167	100		
168	12.9	0.0	43.9
139	12.4	0.0	42.7

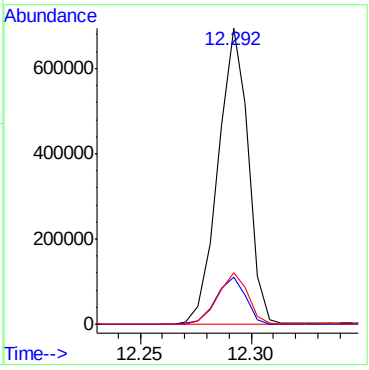


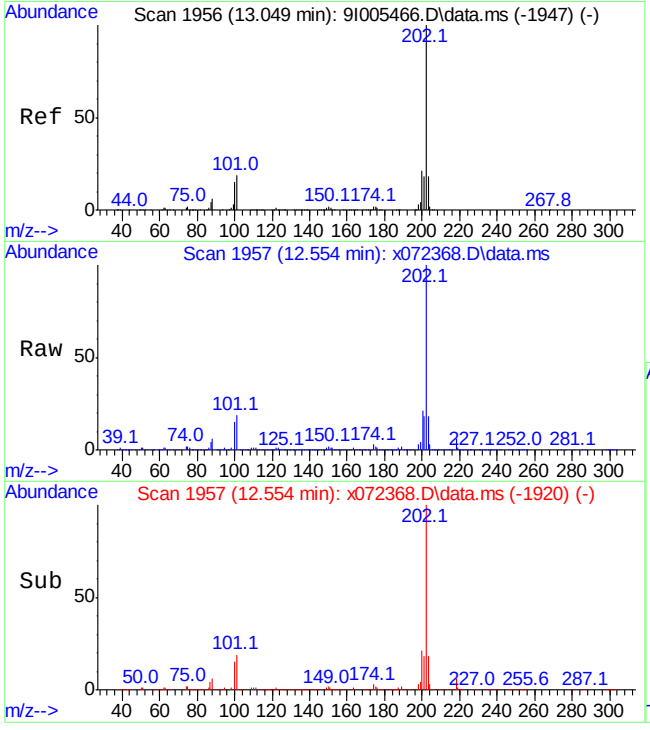


#91
Fluoranthene
Concen: 35.73 ppm
RT: 12.292 min Scan# 1908
Delta R.T. -0.000 min
Lab File: x072368.D
Acq: 12 Aug 2020 3:08 pm

Tgt Ion:202 Resp: 654092

Ion	Ratio	Lower	Upper
202	100		
101	15.9	0.0	45.8
203	17.4	0.0	48.1

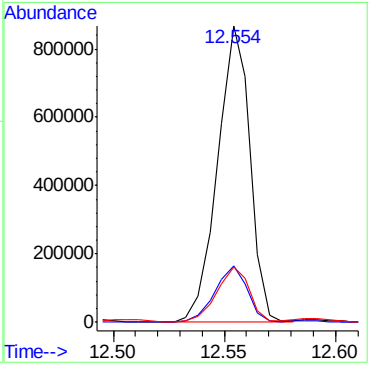


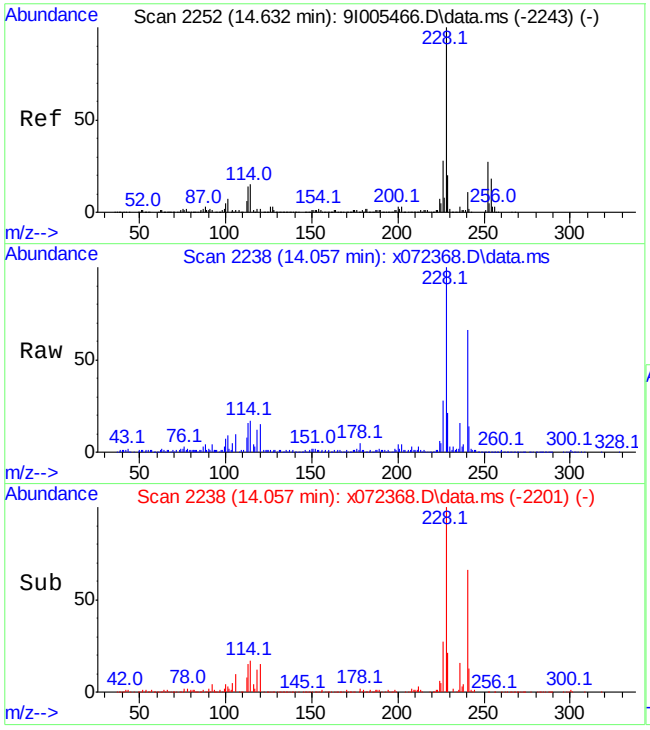


#94
Pyrene
Concen: 38.17 ppm
RT: 12.554 min Scan# 1957
Delta R.T. -0.000 min
Lab File: x072368.D
Acq: 12 Aug 2020 3:08 pm

Tgt Ion:202 Resp: 878680

Ion	Ratio	Lower	Upper
202	100		
101	19.0	0.0	48.7
203	18.1	0.0	48.4

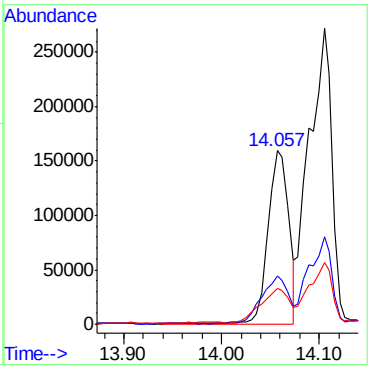


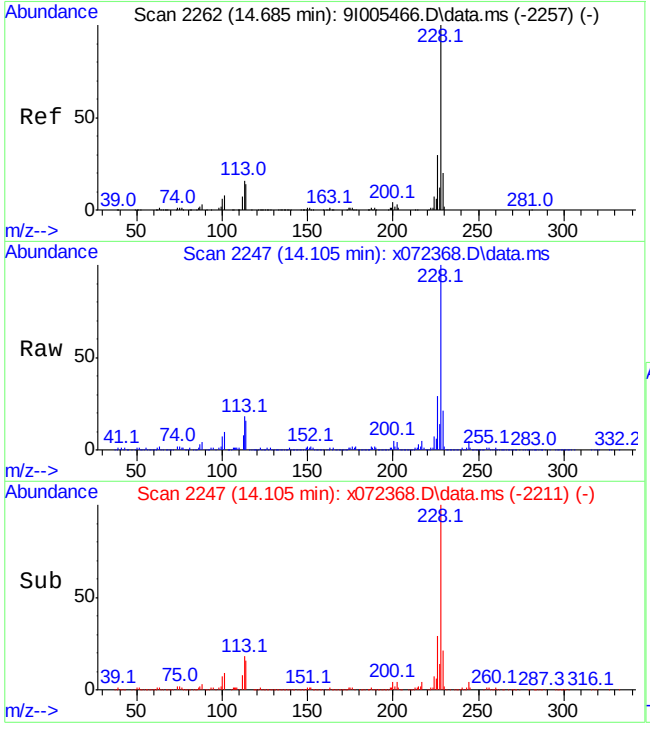


#99
Benzo[a]anthracene
Concen: 13.43 ppm
RT: 14.057 min Scan# 2238
Delta R.T. -0.000 min
Lab File: x072368.D
Acq: 12 Aug 2020 3:08 pm

Tgt Ion:228 Resp: 233982

Ion	Ratio	Lower	Upper
228	100		
226	27.5	0.0	57.5
229	19.4	0.0	49.9

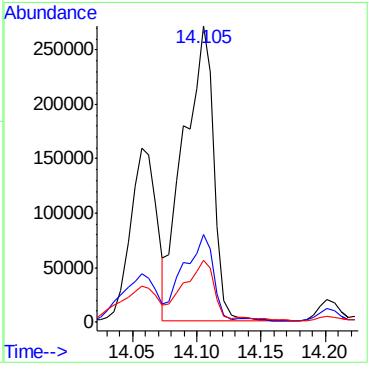


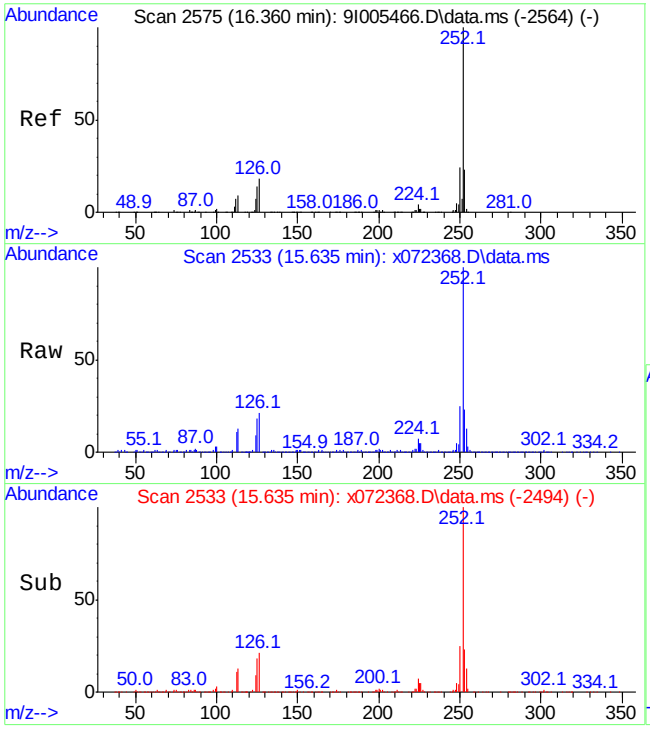


#100
Chrysene
Concen: 23.81 ppm
RT: 14.105 min Scan# 2247
Delta R.T. -0.005 min
Lab File: x072368.D
Acq: 12 Aug 2020 3:08 pm

Tgt Ion:228 Resp: 441889

Ion	Ratio	Lower	Upper
228	100		
226	29.4	0.4	60.4
229	20.1	0.0	50.1

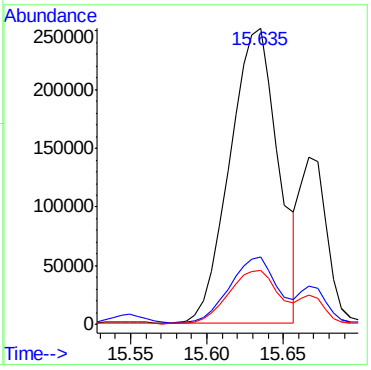


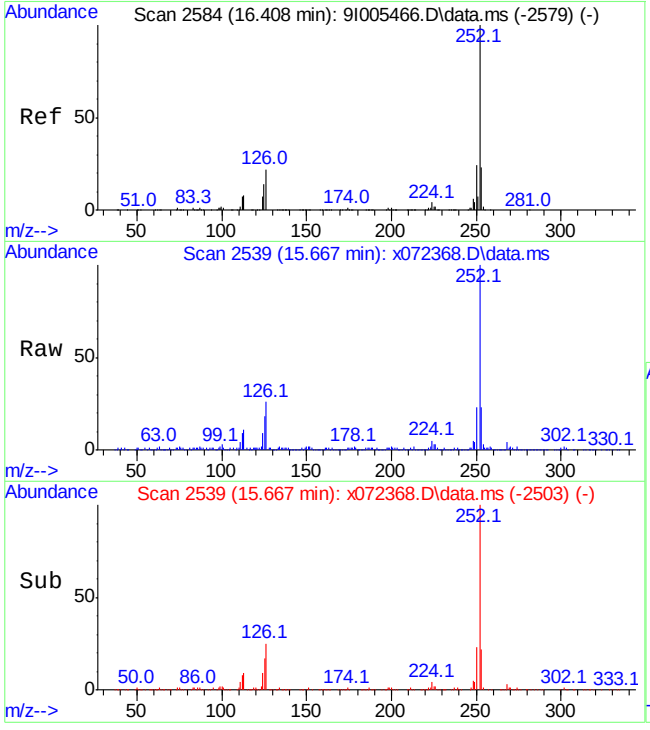


#104
Benzo[b]fluoranthene
Concen: 44.70 ppm
RT: 15.635 min Scan# 2533
Delta R.T. 0.011 min
Lab File: x072368.D
Acq: 12 Aug 2020 3:08 pm

Tgt Ion:252 Resp: 555484

Ion	Ratio	Lower	Upper
252	100		
253	22.8	0.0	52.5
125	17.9	0.0	44.0

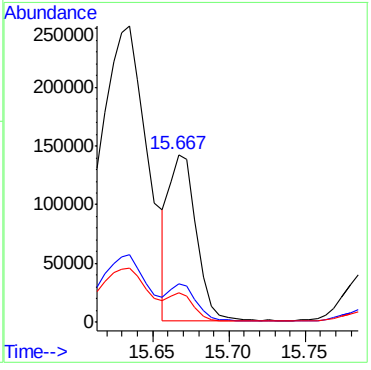


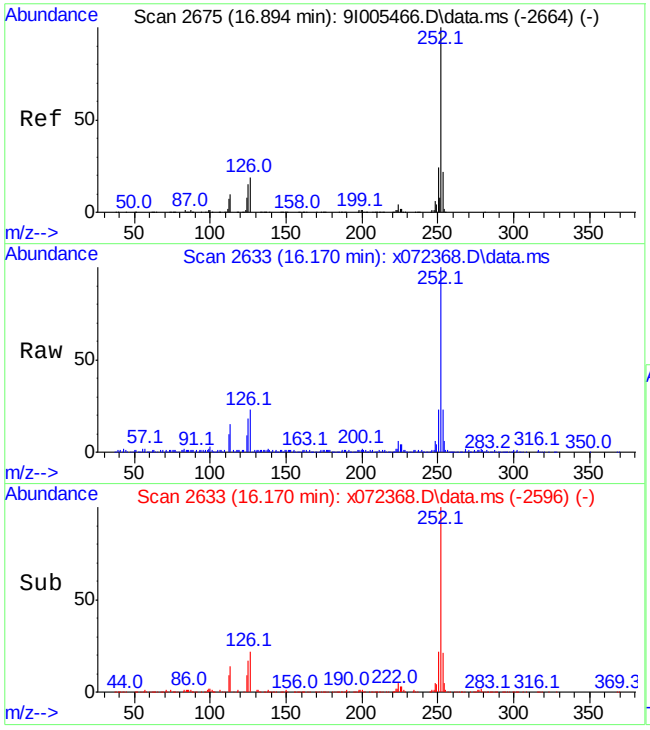


#105
Benzo[k]fluoranthene
Concen: 11.71 ppm
RT: 15.667 min Scan# 2539
Delta R.T. -0.005 min
Lab File: x072368.D
Acq: 12 Aug 2020 3:08 pm

Tgt Ion:252 Resp: 175913

Ion	Ratio	Lower	Upper
252	100		
253	22.6	0.0	52.5
125	16.7	0.0	44.4

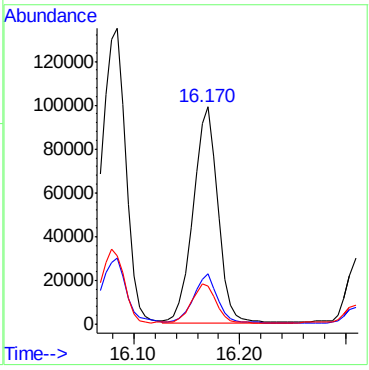


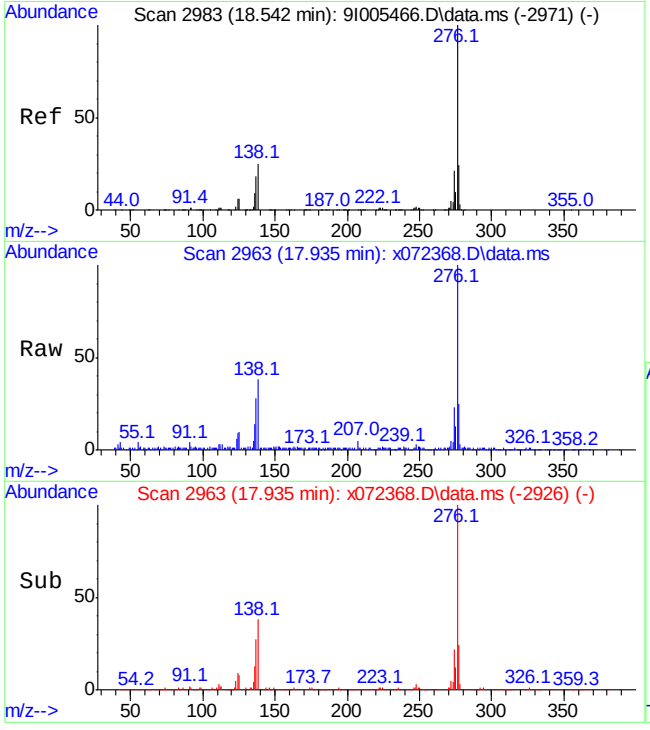


#106
Benzo[a]pyrene
Concen: 14.39 ppm
RT: 16.170 min Scan# 2633
Delta R.T. -0.000 min
Lab File: x072368.D
Acq: 12 Aug 2020 3:08 pm

Tgt Ion:252 Resp: 159853

Ion	Ratio	Lower	Upper
252	100		
253	22.5	0.0	52.3
125	16.9	0.0	44.7

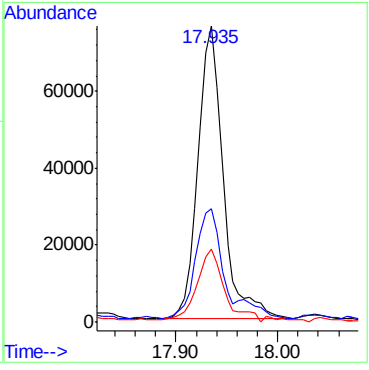


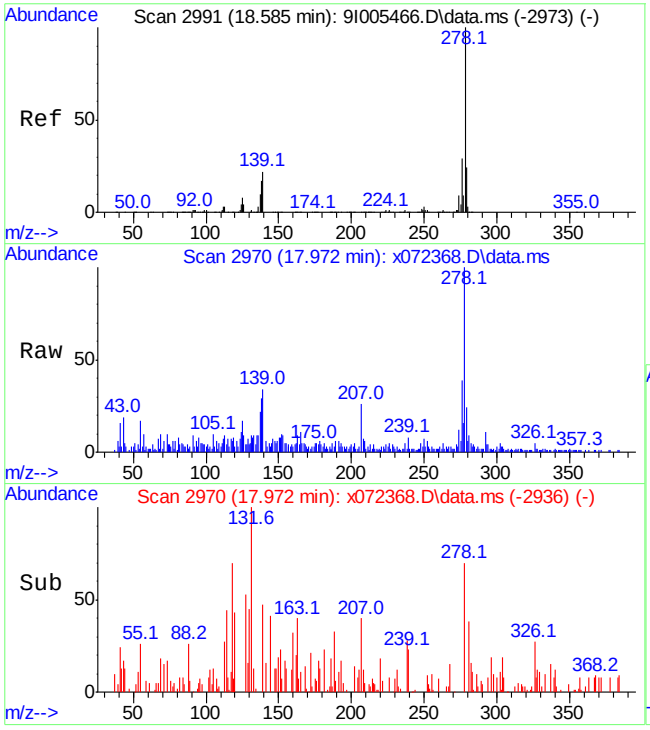


#107
Indeno[1,2,3-cd]pyrene
Concen: 19.16 ppm
RT: 17.935 min Scan# 2963
Delta R.T. -0.000 min
Lab File: x072368.D
Acq: 12 Aug 2020 3:08 pm

Tgt Ion:276 Resp: 130481

Ion	Ratio	Lower	Upper
276	100		
138	37.5	0.0	54.7
277	23.9	0.0	53.8

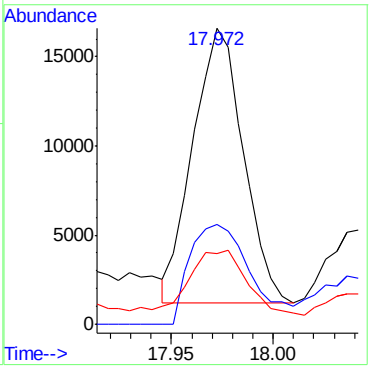


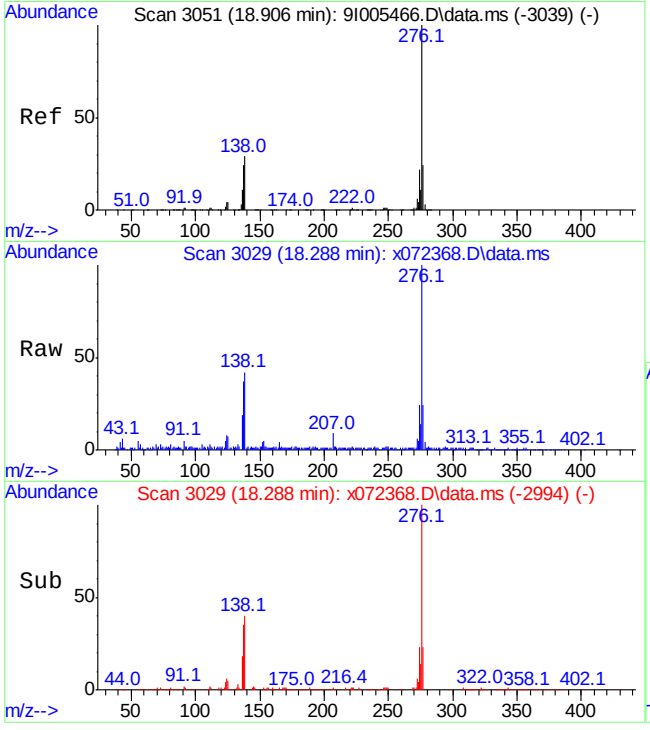


#108
Dibenz[a,h]anthracene
Concen: 3.92 ppm
RT: 17.972 min Scan# 2970
Delta R.T. -0.016 min
Lab File: x072368.D
Acq: 12 Aug 2020 3:08 pm

Tgt Ion:278 Resp: 26423

Ion	Ratio	Lower	Upper
278	100		
139	31.3	0.0	52.4
279	20.2	0.0	54.4

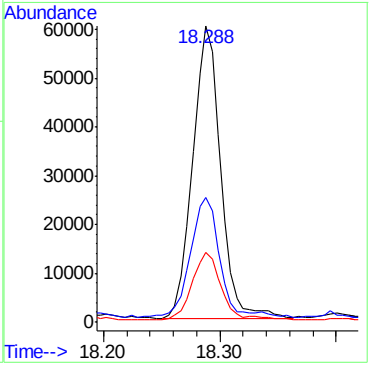




#109
Benzo[g,h,i]perylene
Concen: 10.02 ppm
RT: 18.288 min Scan# 3029
Delta R.T. -0.011 min
Lab File: x072368.D
Acq: 12 Aug 2020 3:08 pm

Tgt Ion:276 Resp: 99869

Ion	Ratio	Lower	Upper
276	100		
138	40.7	0.0	59.4
277	23.1	0.0	54.1



Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan
08/12/20 16:38

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0811_sx2950\
Data File : x072340.d
Acq On : 11 Aug 2020 5:34 pm
Operator : marthav
Sample : fa77576-8 E Inst : MSBNA05
Misc : op81482,sx2950,30.0,,,1,1,soil
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 12 11:22:14 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.665	152	167208	40.00	ppm	0.00
22) Naphthalene-d8	7.088	136	621905	40.00	ppm	0.00
43) Acenaphthene-d10	9.126	164	313510	40.00	ppm	0.00
70) Phenanthrene-d10	10.869	188	546236	40.00	ppm	0.00
92) Chrysene-d12	14.100	240	437821	40.00	ppm	0.03
102) Perylene-d12	16.314	264	364432	40.00	ppm	0.06
110) 1,4-Dichlorobenzene-d4A	5.665	152	167208	40.00	ppm	0.00
120) Naphthalene-d8A	7.088	136	621905	40.00	ppm	0.00
127) Acenaphthene-d10A	9.126	164	313510	40.00	ppm	0.00
136) Phenanthrene-d10A	10.869	188	546236	40.00	ppm	0.00
146) Chrysene-d12A	14.100	240	437821	40.00	ppm	0.03
153) Perylene-d12A	16.314	264	364432	40.00	ppm	0.06
System Monitoring Compounds						
7) 2-Fluorophenol	4.328	112	443469	73.97	ppm	0.02
Spiked Amount 100.000	Range 40 - 102		Recovery = 73.97%			
9) Phenol-d5	5.344	99	559254	78.40	ppm	0.01
Spiked Amount 100.000	Range 41 - 100		Recovery = 78.40%			
23) Nitrobenzene-d5	6.280	82	234787	36.56	ppm	0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 73.12%			
47) 2-Fluorobiphenyl	8.355	172	423194	37.29	ppm	0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 74.58%			
75) 2,4,6-Tribromophenol	10.062	330	88895	76.23	ppm	0.00
Spiked Amount 100.000	Range 42 - 108		Recovery = 76.23%			
95) Terphenyl-d14	12.795	244	456107	39.21	ppm	0.02
Spiked Amount 50.000	Range 45 - 119		Recovery = 78.42%			
Target Compounds						Qvalue
5) Benzaldehyde	5.194	106	1346	0.27	ppm	# 71
15) Benzyl alcohol	5.847	108	707	0.16	ppm	90
16) 2,2'-Oxybis(1-chloropr...	5.959	45	1850	0.14	ppm	66
17) 2-Methylphenol	6.002	108	1087	0.18	ppm	83
18) Acetophenone	6.120	105	2583	0.29	ppm	92
21) 3&4-Methylphenol	6.184	108	4600	0.73	ppm	# 69
27) 2,4-Dimethylphenol	6.762	107	3547	0.63	ppm	90
34) Naphthalene	7.109	128	12510	0.74	ppm	96
40) 2-Methylnaphthalene	7.911	142	7800	0.70	ppm	97
41) 1-Methylnaphthalene	8.024	142	6804	0.64	ppm	96
48) 1,1'-Biphenyl	8.468	154	3202	0.25	ppm	93
52) Acenaphthylene	8.960	152	542198	34.63	ppm	99
57) Acenaphthene	9.163	153	45024	4.32	ppm	96
60) Dibenzofuran	9.366	168	25541	1.84	ppm	94
65) Fluorene	9.767	166	81583	7.52	ppm	98
83) Pentachlorophenol	10.671	266	593	0.42	ppm	89
84) Phenanthrene	10.901	178	598289	36.24	ppm	98
85) Anthracene	10.966	178	1278071	74.29	ppm	98
87) Carbazole	11.174	167	343633	22.64	ppm	99
91) Fluoranthene	12.329	202	4524038	295.40	ppm	96
94) Pyrene	12.592	202	4662200	256.46	ppm	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0811_sx2950\
Data File : x072340.d
Acq On : 11 Aug 2020 5:34 pm
Operator : marthav
Sample : fa77576-8 E Inst : MSBNA05
Misc : op81482,sx2950,30.0,,,1,1,soil
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 12 11:22:14 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

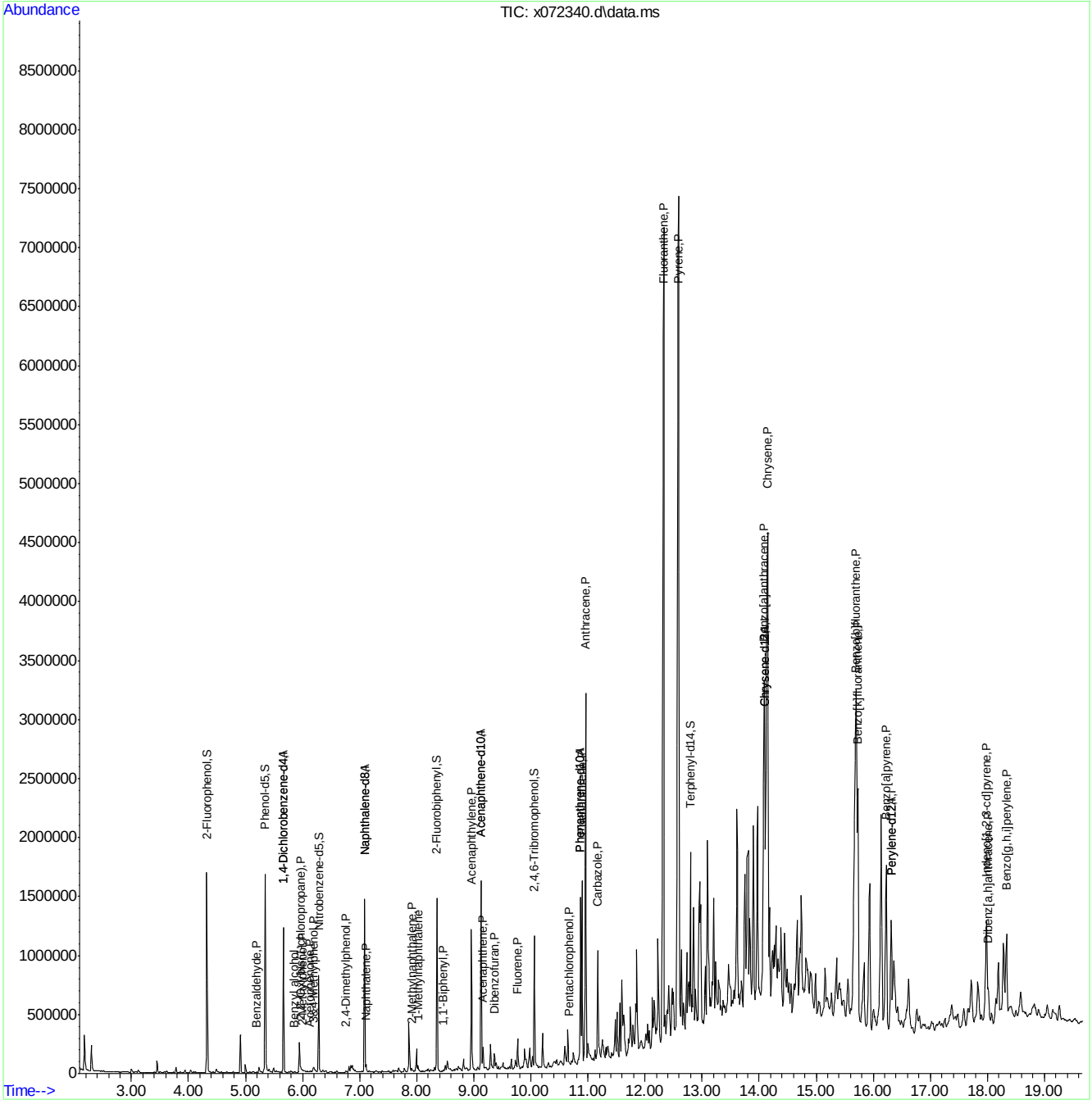
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
99)	Benzo[a]anthracene	14.089	228	1557956	113.22	ppm	100
100)	Chrysene	14.148	228	2571660	175.49	ppm	98
104)	Benzo[b]fluoranthene	15.694	252	3051219	210.86	ppm	96
105)	Benzo[k]fluoranthene	15.731	252	774746m	59.88	ppm	
106)	Benzo[a]pyrene	16.229	252	824815	75.21	ppm	96
107)	Indeno[1,2,3-cd]pyrene	17.983	276	600636	74.00	ppm	86
108)	Dibenz[a,h]anthracene	18.015	278	127781	19.36	ppm	89
109)	Benzo[g,h,i]perylene	18.336	276	450961	45.46	ppm	88

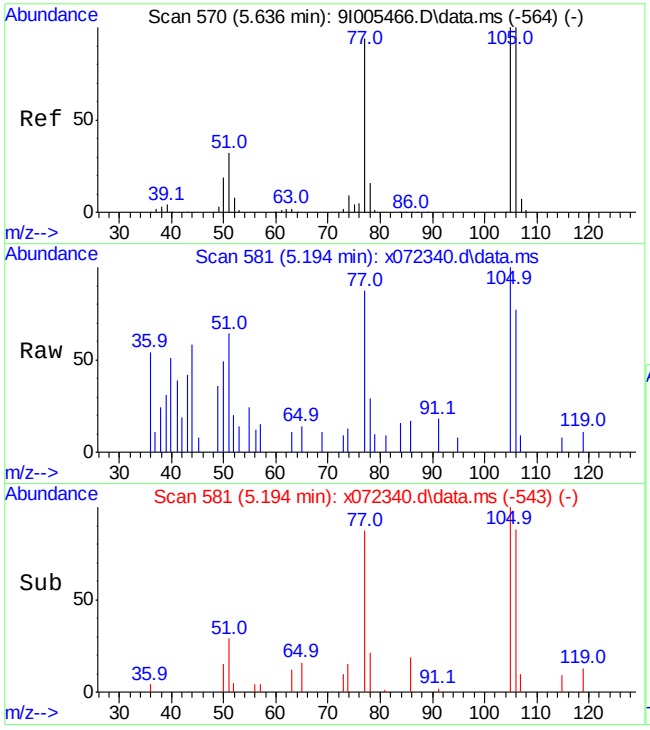
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0811_sx2950\
Data File : x072340.d
Acq On : 11 Aug 2020 5:34 pm
Operator : marthav
Sample : fa77576-8 E Inst : MSBNA05
Misc : op81482,sx2950,30.0,,,1,1,soil
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 12 11:22:14 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

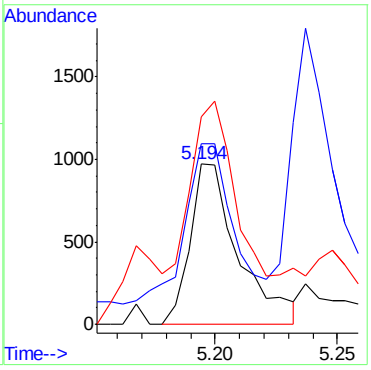


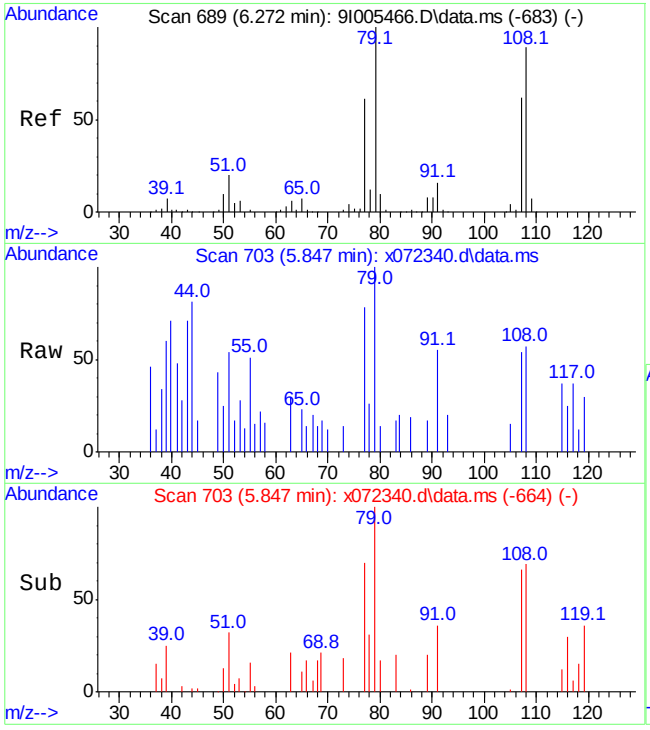


#5
Benzaldehyde
Concen: 0.27 ppm
RT: 5.194 min Scan# 581
Delta R.T. 0.005 min
Lab File: x072340.d
Acq: 11 Aug 2020 5:34 pm

Tgt Ion:106 Resp: 1346

Ion	Ratio	Lower	Upper
106	100		
77	40.3	63.9	123.9#
105	103.2	70.0	130.0

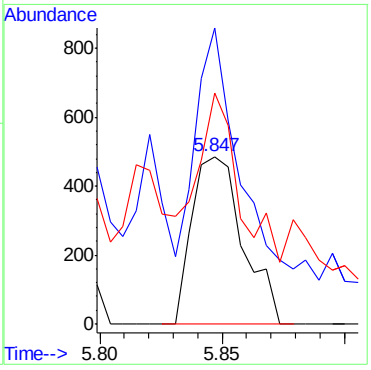


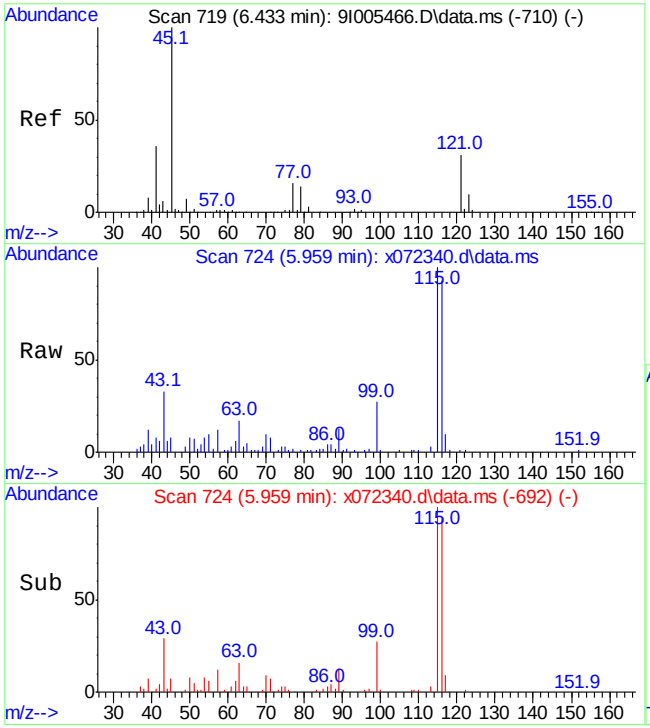


#15
Benzyl alcohol
Concen: 0.16 ppm
RT: 5.847 min Scan# 703
Delta R.T. 0.011 min
Lab File: x072340.d
Acq: 11 Aug 2020 5:34 pm

Tgt Ion:108 Resp: 707

Ion	Ratio	Lower	Upper
108	100		
79	124.2	81.8	141.8
77	74.3	38.6	98.6

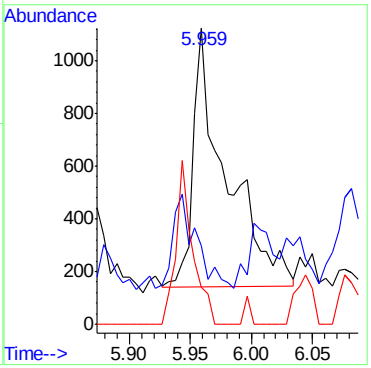


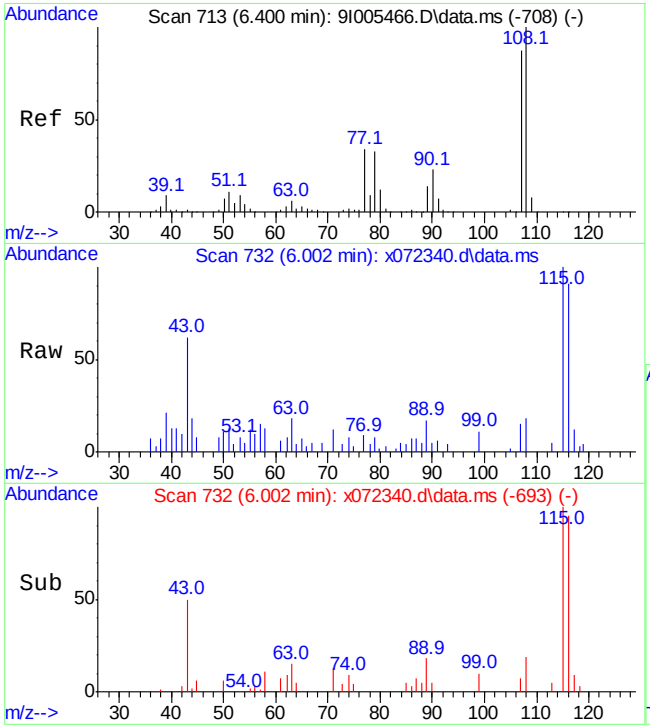


#16
2,2'-Oxybis(1-chloropropane)
Concen: 0.14 ppm
RT: 5.959 min Scan# 724
Delta R.T. -0.027 min
Lab File: x072340.d
Acq: 11 Aug 2020 5:34 pm

Tgt Ion: 45 Resp: 1850

Ion	Ratio	Lower	Upper
45	100		
77	7.9	0.0	46.2
121	8.5	1.4	61.4

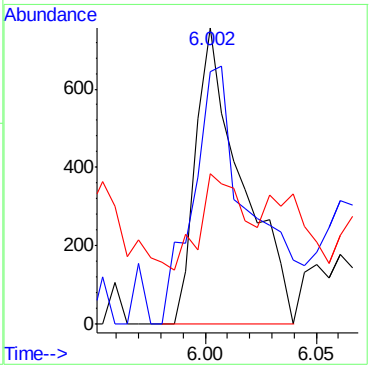


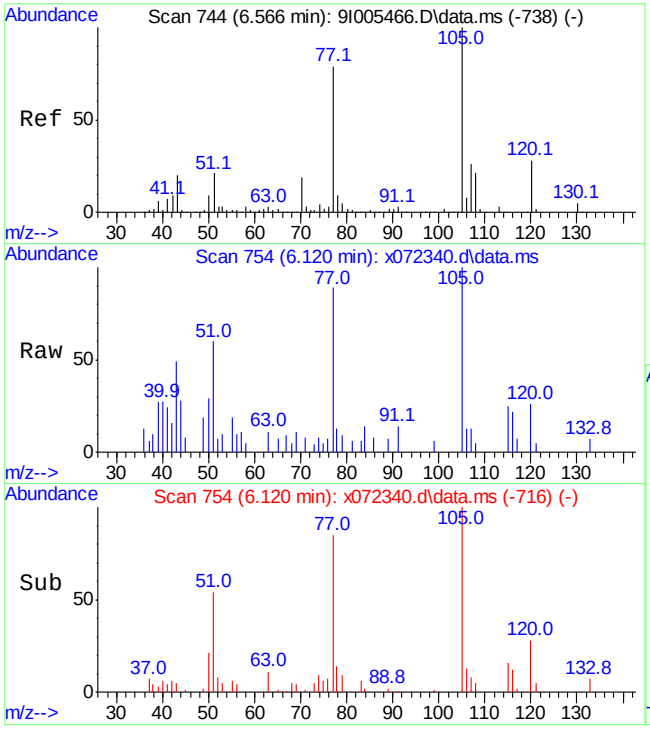


#17
2-Methylphenol
Concen: 0.18 ppm
RT: 6.002 min Scan# 732
Delta R.T. 0.011 min
Lab File: x072340.d
Acq: 11 Aug 2020 5:34 pm

Tgt Ion:108 Resp: 1087

Ion	Ratio	Lower	Upper
108	100		
107	74.5	57.2	117.2
77	18.3	3.8	63.8

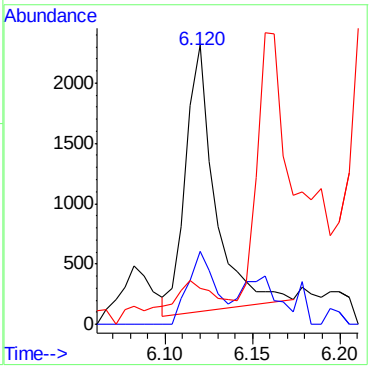


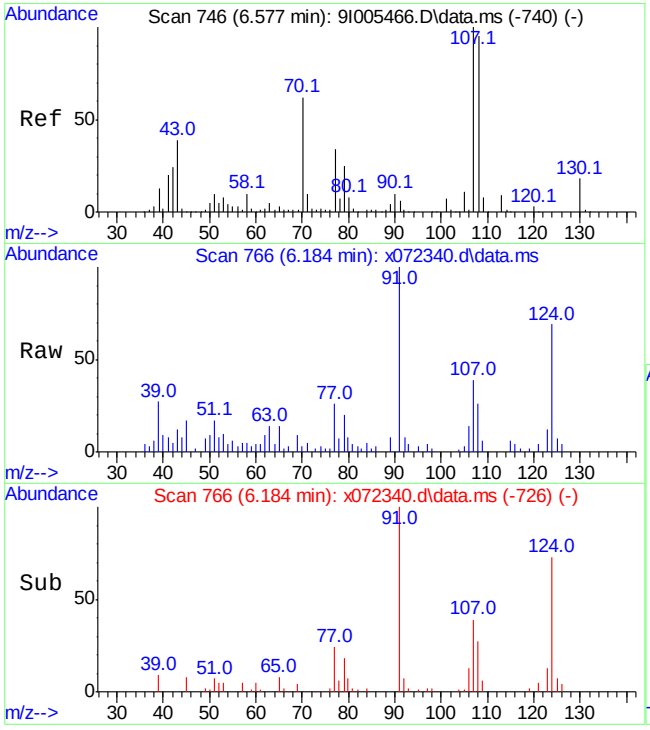


#18
Acetophenone
Concen: 0.29 ppm
RT: 6.120 min Scan# 754
Delta R.T. 0.005 min
Lab File: x072340.d
Acq: 11 Aug 2020 5:34 pm

Tgt Ion:105 Resp: 2583

Ion	Ratio	Lower	Upper
105	100		
120	26.4	0.0	58.3
106	0.0	0.0	38.0

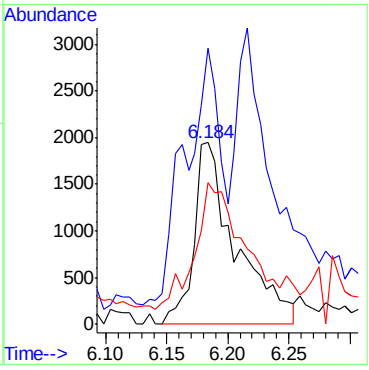


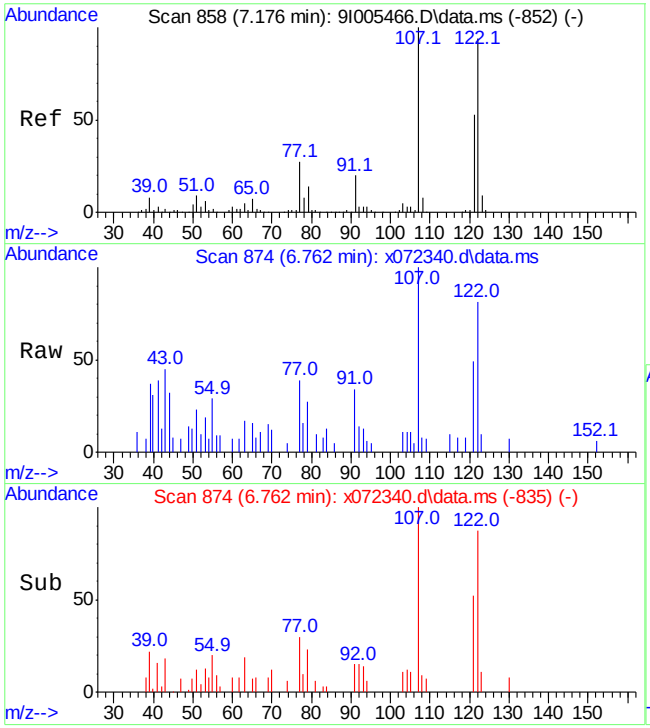


#21
3&4-Methylphenol
Concen: 0.73 ppm
RT: 6.184 min Scan# 766
Delta R.T. 0.016 min
Lab File: x072340.d
Acq: 11 Aug 2020 5:34 pm

Tgt Ion:108 Resp: 4600

Ion	Ratio	Lower	Upper
108	100		
107	125.2	75.4	135.4
79	65.4	0.0	56.3#

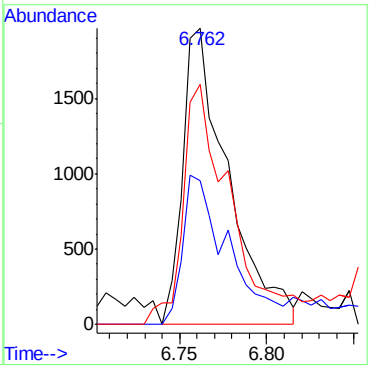


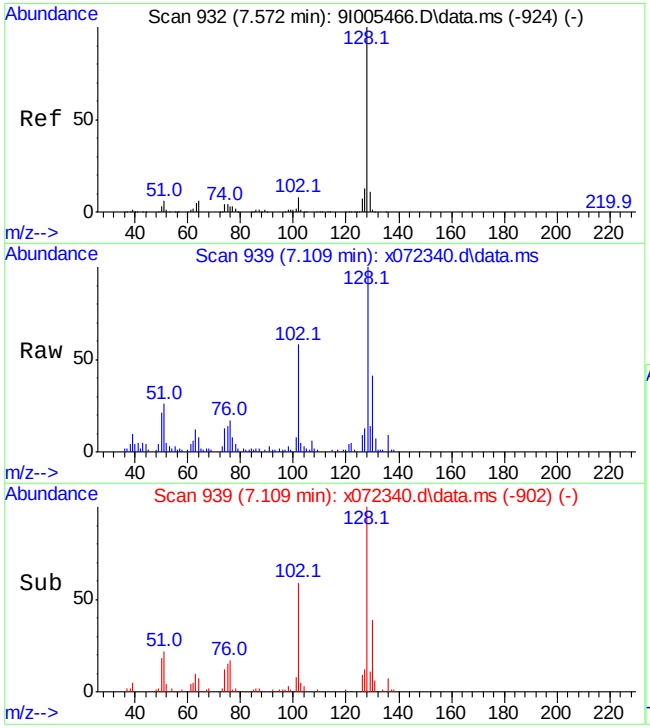


#27
2,4-Dimethylphenol
Concen: 0.63 ppm
RT: 6.762 min Scan# 874
Delta R.T. 0.011 min
Lab File: x072340.d
Acq: 11 Aug 2020 5:34 pm

Tgt Ion:107 Resp: 3547

Ion	Ratio	Lower	Upper
107	100		
121	45.3	23.4	83.4
122	85.2	64.3	124.3

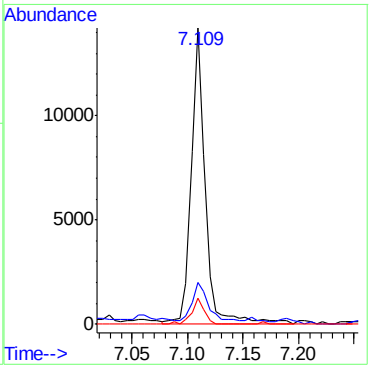


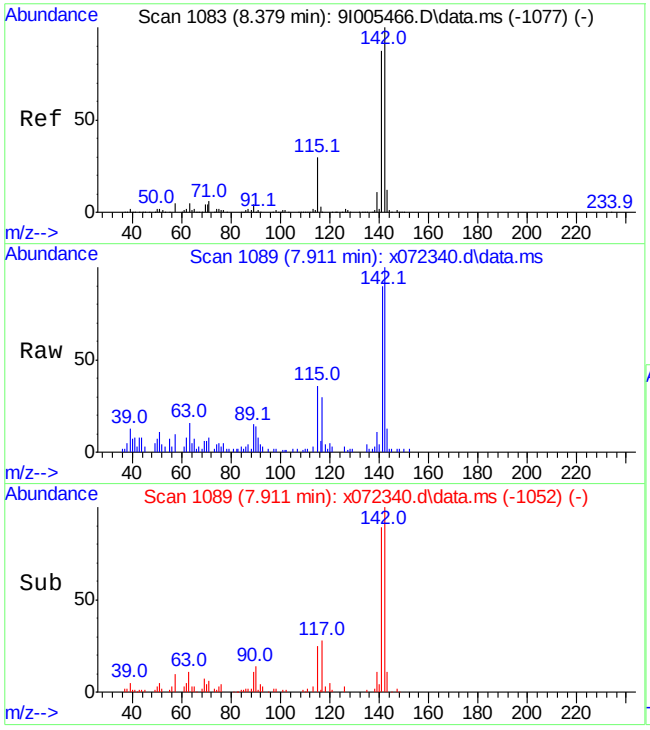


#34
Naphthalene
Concen: 0.74 ppm
RT: 7.109 min Scan# 939
Delta R.T. -0.000 min
Lab File: x072340.d
Acq: 11 Aug 2020 5:34 pm

Tgt Ion:128 Resp: 12510

Ion	Ratio	Lower	Upper
128	100		
129	12.6	0.0	41.4
126	9.0	0.0	37.4

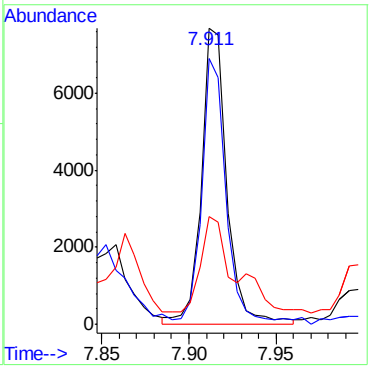


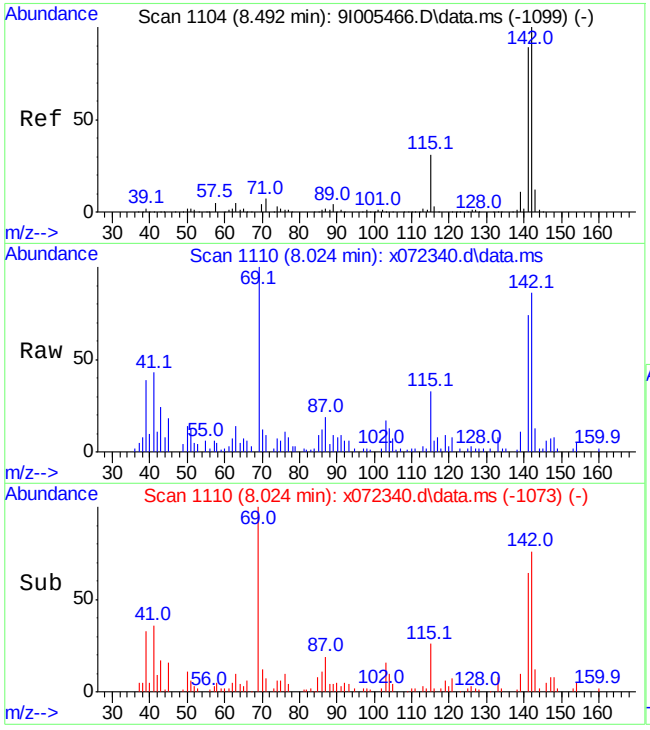


#40
2-Methylnaphthalene
Concen: 0.70 ppm
RT: 7.911 min Scan# 1089
Delta R.T. -0.000 min
Lab File: x072340.d
Acq: 11 Aug 2020 5:34 pm

Tgt Ion:142 Resp: 7800

Ion	Ratio	Lower	Upper
142	100		
141	88.8	56.8	116.8
115	32.2	0.0	60.0

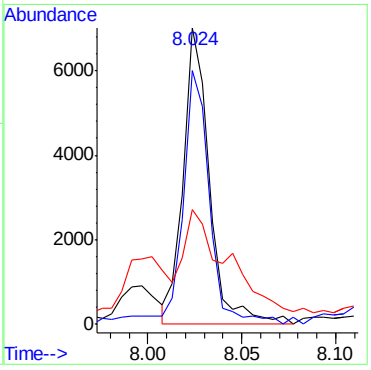


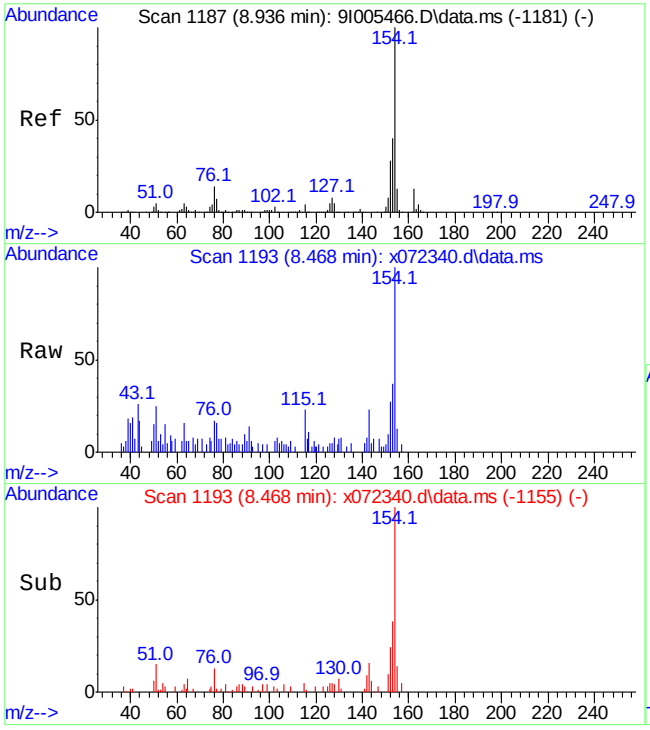


#41
1-Methylnaphthalene
Concen: 0.64 ppm
RT: 8.024 min Scan# 1110
Delta R.T. -0.000 min
Lab File: x072340.d
Acq: 11 Aug 2020 5:34 pm

Tgt Ion:142 Resp: 6804

Ion	Ratio	Lower	Upper
142	100		
141	86.0	59.0	119.0
115	28.3	1.1	61.1

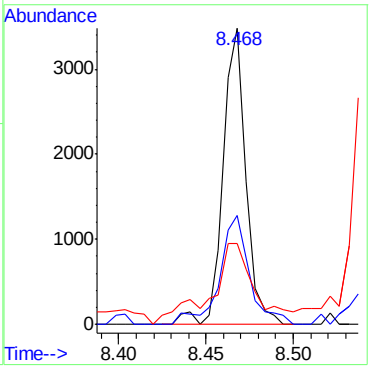


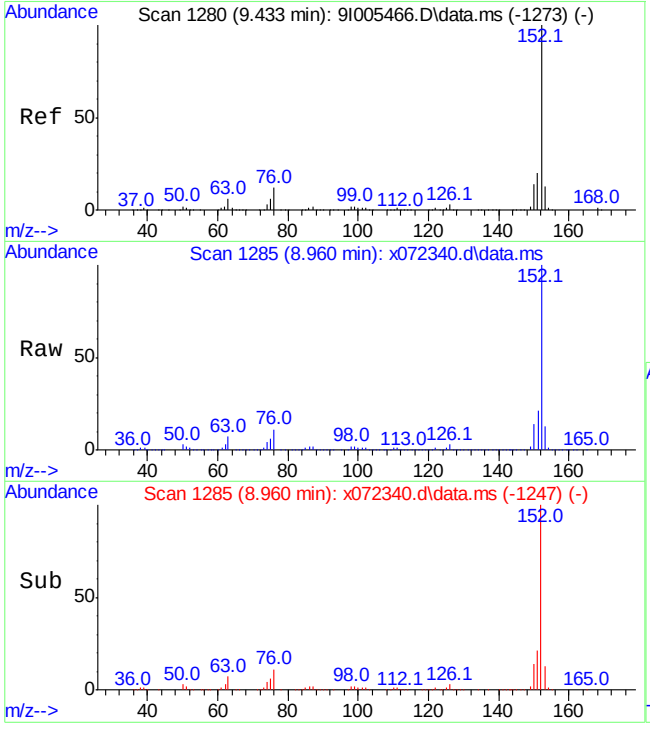


#48
1,1'-Biphenyl
Concen: 0.25 ppm
RT: 8.468 min Scan# 1193
Delta R.T. 0.005 min
Lab File: x072340.d
Acq: 11 Aug 2020 5:34 pm

Tgt Ion:154 Resp: 3202

Ion	Ratio	Lower	Upper
154	100		
153	36.7	10.3	70.3
152	23.6	0.0	58.2

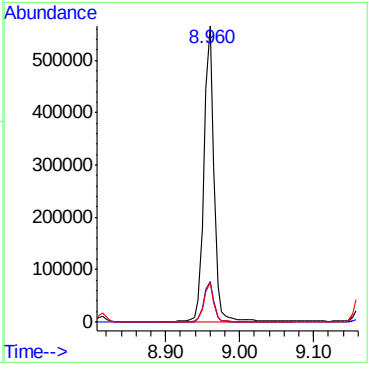


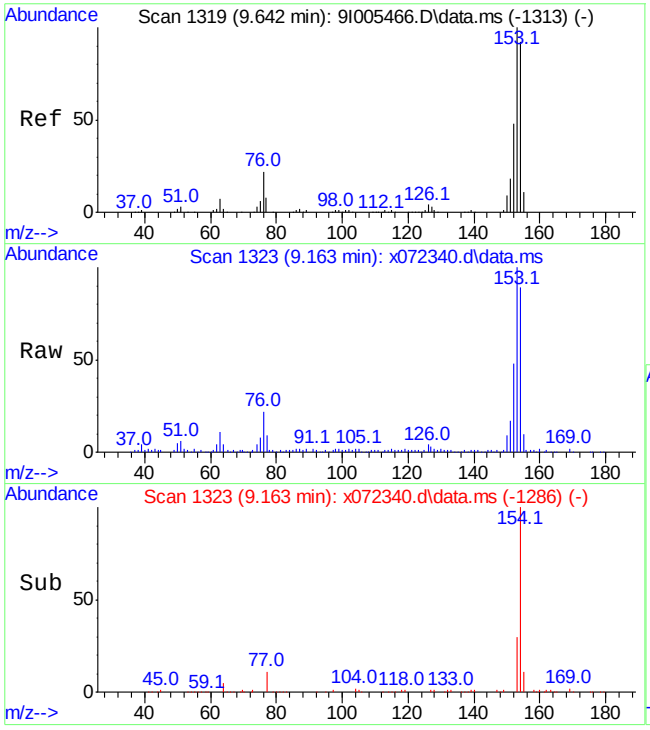


#52
Acenaphthylene
Concen: 34.63 ppm
RT: 8.960 min Scan# 1285
Delta R.T. 0.005 min
Lab File: x072340.d
Acq: 11 Aug 2020 5:34 pm

Tgt Ion:152 Resp: 542198

Ion	Ratio	Lower	Upper
152	100		
150	13.7	0.0	44.3
153	13.1	0.0	43.3

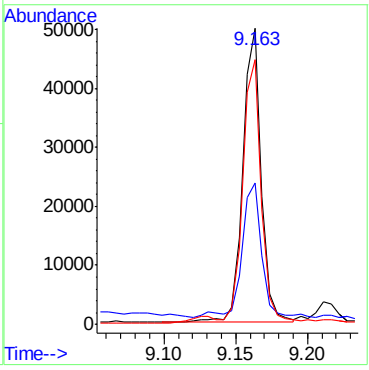


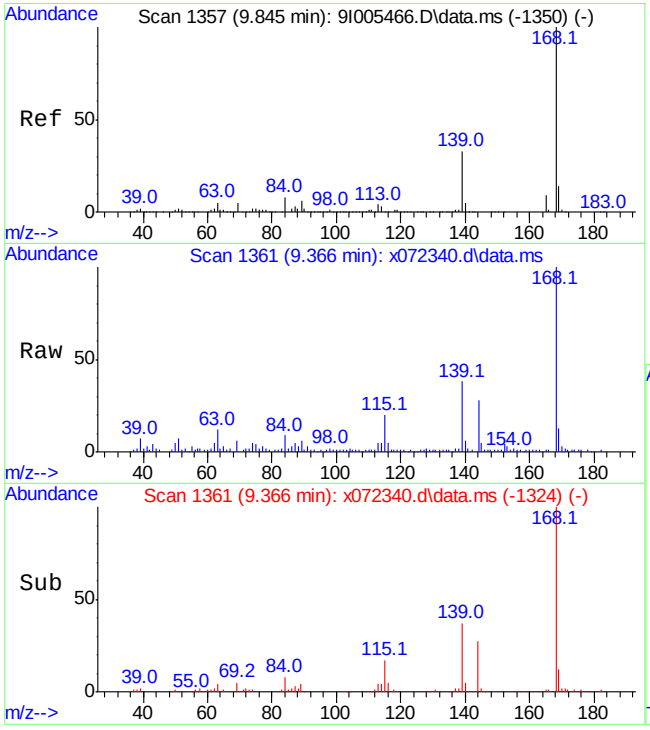


#57
Acenaphthene
Concen: 4.32 ppm
RT: 9.163 min Scan# 1323
Delta R.T. -0.000 min
Lab File: x072340.d
Acq: 11 Aug 2020 5:34 pm

Tgt Ion:153 Resp: 45024

Ion	Ratio	Lower	Upper
153	100		
152	45.3	18.4	78.4
154	89.2	62.4	122.4

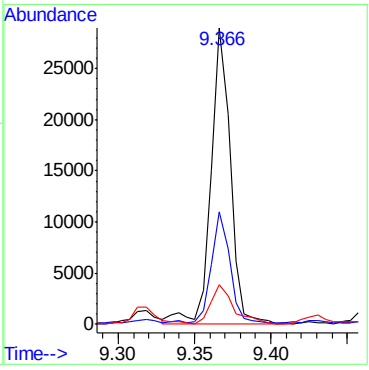


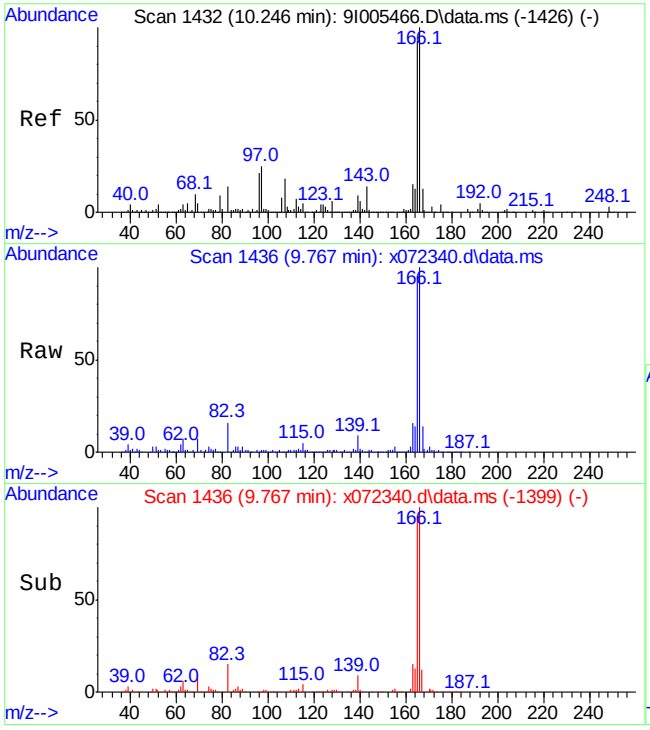


#60
Dibenzofuran
Concen: 1.84 ppm
RT: 9.366 min Scan# 1361
Delta R.T. -0.000 min
Lab File: x072340.d
Acq: 11 Aug 2020 5:34 pm

Tgt Ion:168 Resp: 25541

Ion	Ratio	Lower	Upper
168	100		
139	37.4	3.0	63.0
169	12.7	0.0	43.5

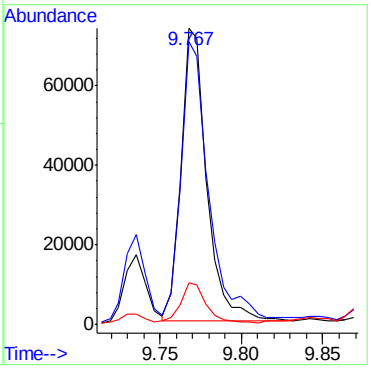


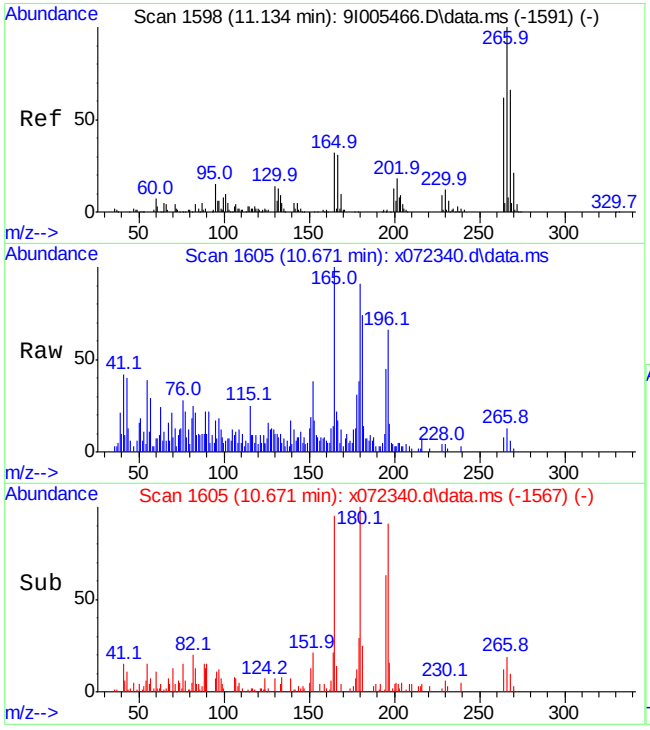


#65
Fluorene
Concen: 7.52 ppm
RT: 9.767 min Scan# 1436
Delta R.T. -0.000 min
Lab File: x072340.d
Acq: 11 Aug 2020 5:34 pm

Tgt Ion:166 Resp: 81583

Ion	Ratio	Lower	Upper
166	100		
165	94.4	62.7	122.7
167	13.1	0.0	43.5

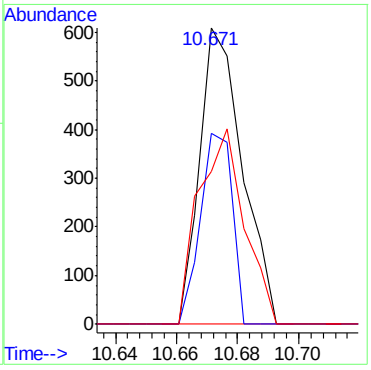


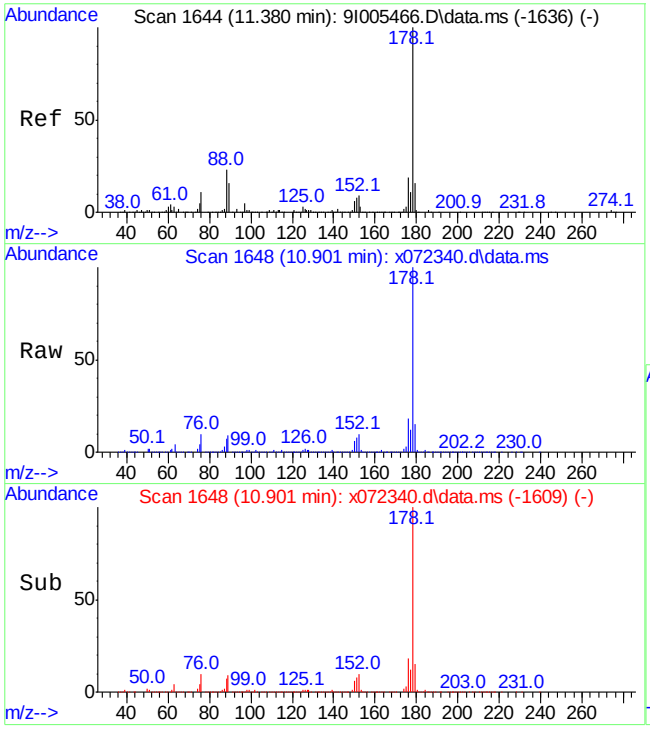


#83
Pentachlorophenol
Concen: 0.42 ppm
RT: 10.671 min Scan# 1605
Delta R.T. 0.005 min
Lab File: x072340.d
Acq: 11 Aug 2020 5:34 pm

Tgt Ion:266 Resp: 593

Ion	Ratio	Lower	Upper
266	100		
264	64.4	31.8	91.8
268	51.4	35.6	95.6

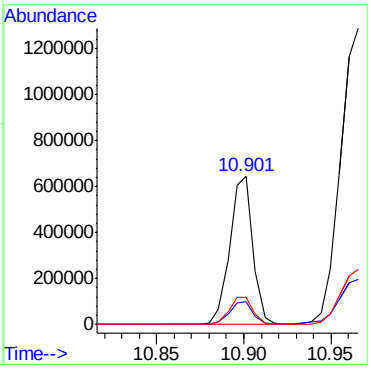


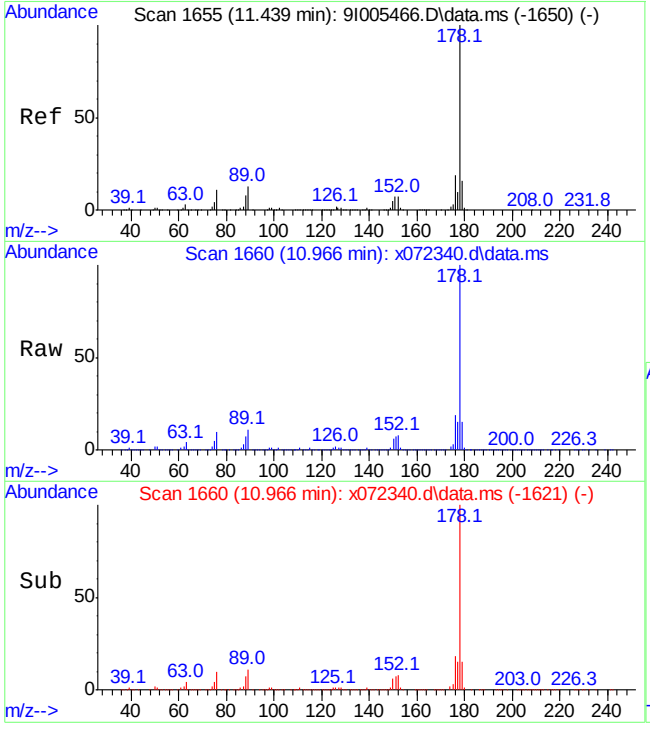


#84
Phenanthrene
Concen: 36.24 ppm
RT: 10.901 min Scan# 1648
Delta R.T. 0.011 min
Lab File: x072340.d
Acq: 11 Aug 2020 5:34 pm

Tgt Ion:178 Resp: 598289

Ion	Ratio	Lower	Upper
178	100		
179	14.7	0.0	45.8
176	18.5	0.0	49.3

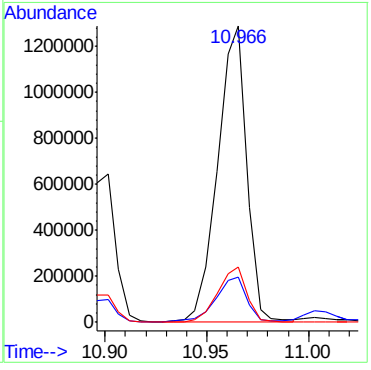


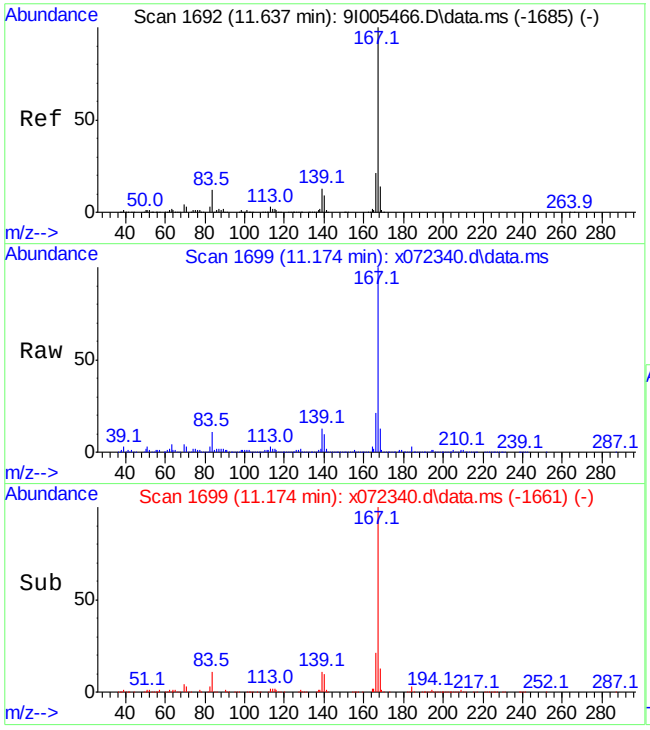


#85
Anthracene
Concen: 74.29 ppm
RT: 10.966 min Scan# 1660
Delta R.T. 0.011 min
Lab File: x072340.d
Acq: 11 Aug 2020 5:34 pm

Tgt Ion:178 Resp: 1278071

Ion	Ratio	Lower	Upper
178	100		
179	14.7	0.0	46.0
176	18.5	0.0	49.3

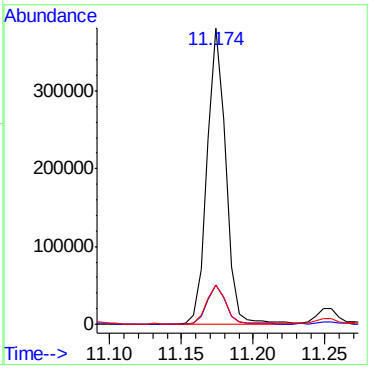


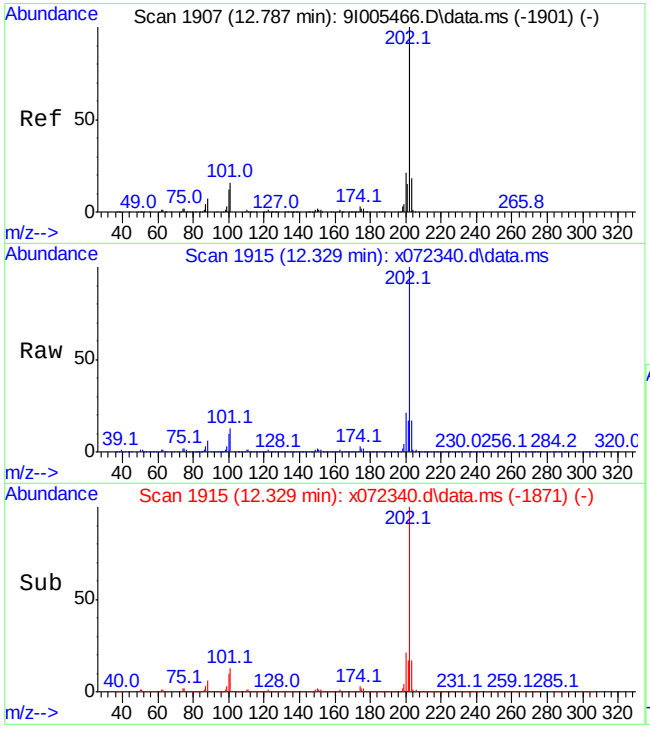


#87
Carbazole
Concen: 22.64 ppm
RT: 11.174 min Scan# 1699
Delta R.T. 0.005 min
Lab File: x072340.d
Acq: 11 Aug 2020 5:34 pm

Tgt Ion:167 Resp: 343633

Ion	Ratio	Lower	Upper
167	100		
168	13.2	0.0	43.9
139	13.0	0.0	42.7

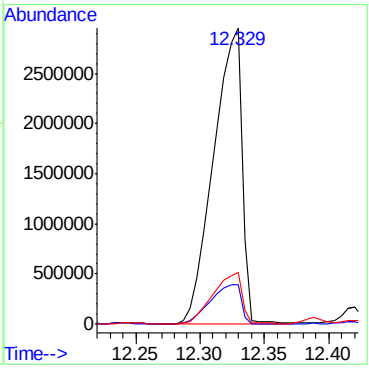


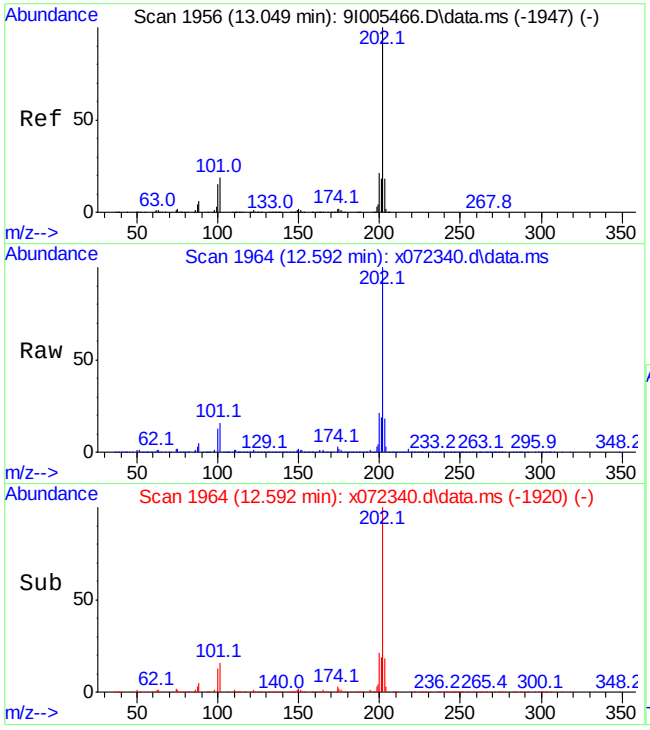


#91
Fluoranthene
Concen: 295.40 ppm
RT: 12.329 min Scan# 1915
Delta R.T. 0.037 min
Lab File: x072340.d
Acq: 11 Aug 2020 5:34 pm

Tgt Ion:202 Resp: 4524038

Ion	Ratio	Lower	Upper
202	100		
101	13.3	0.0	45.8
203	17.2	0.0	48.1

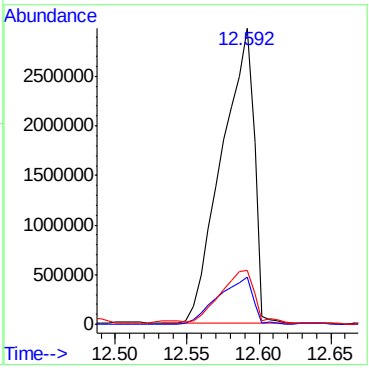


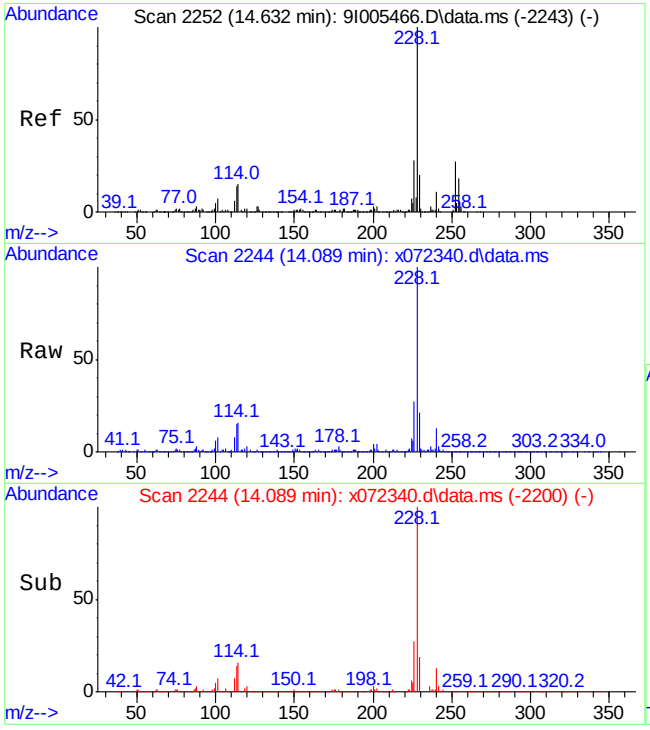


#94
Pyrene
Concen: 256.46 ppm
RT: 12.592 min Scan# 1964
Delta R.T. 0.037 min
Lab File: x072340.d
Acq: 11 Aug 2020 5:34 pm

Tgt Ion:202 Resp: 4662200

Ion	Ratio	Lower	Upper
202	100		
101	15.9	0.0	48.7
203	17.6	0.0	48.4

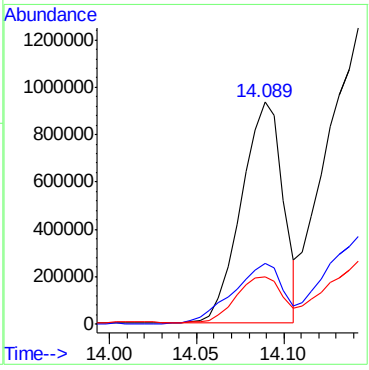


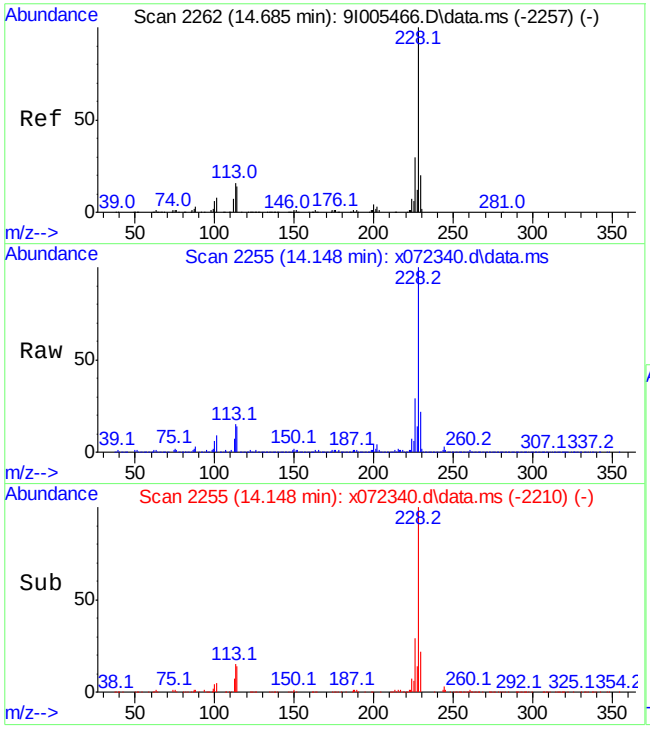


#99
Benzo[a]anthracene
Concen: 113.22 ppm
RT: 14.089 min Scan# 2244
Delta R.T. 0.037 min
Lab File: x072340.d
Acq: 11 Aug 2020 5:34 pm

Tgt Ion:228 Resp: 1557956

Ion	Ratio	Lower	Upper
228	100		
226	27.2	0.0	57.5
229	20.0	0.0	49.9

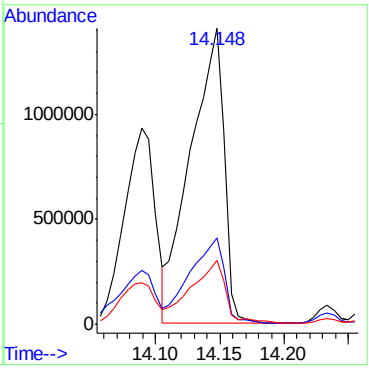


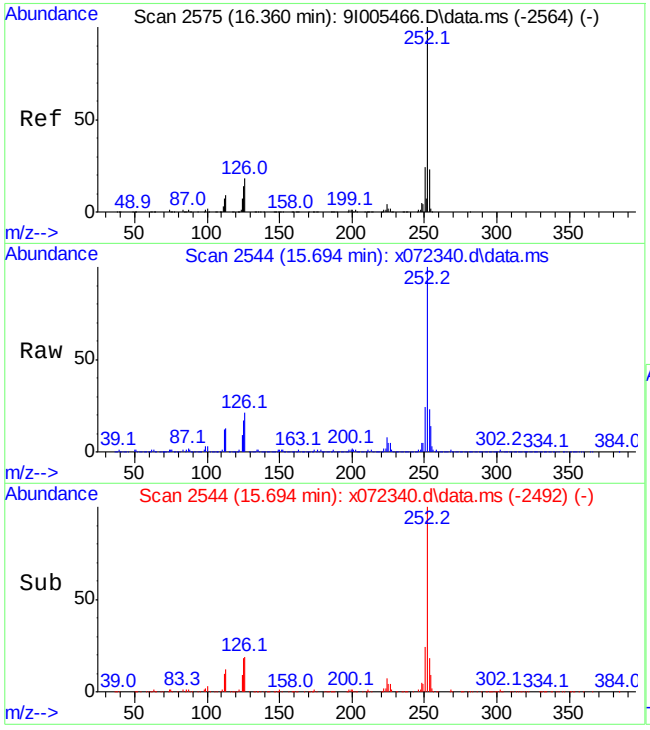


#100
Chrysene
Concen: 175.49 ppm
RT: 14.148 min Scan# 2255
Delta R.T. 0.043 min
Lab File: x072340.d
Acq: 11 Aug 2020 5:34 pm

Tgt Ion:228 Resp: 2571660

Ion	Ratio	Lower	Upper
228	100		
226	29.1	0.4	60.4
229	21.2	0.0	50.1

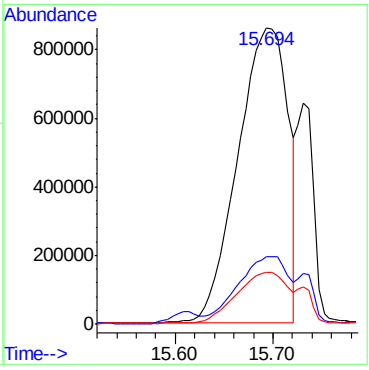


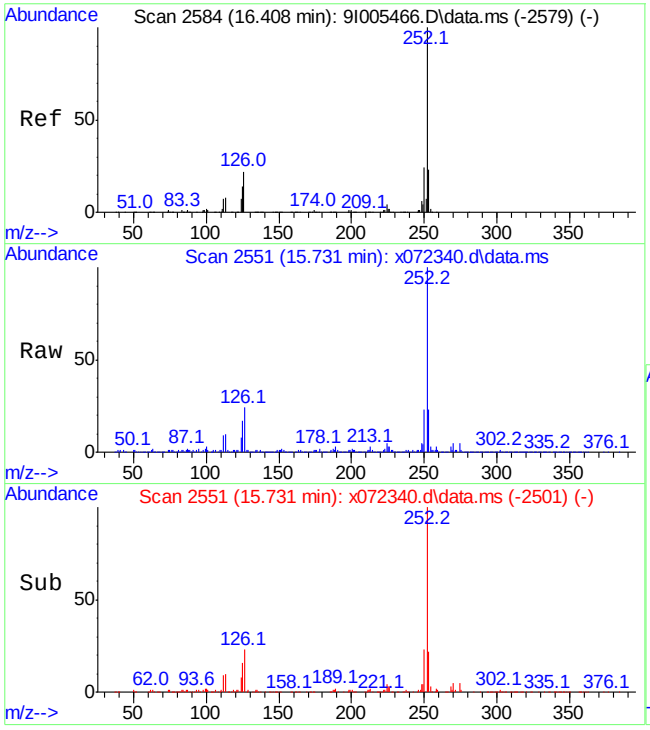


#104
Benzo[b]fluoranthene
Concen: 210.86 ppm
RT: 15.694 min Scan# 2544
Delta R.T. 0.080 min
Lab File: x072340.d
Acq: 11 Aug 2020 5:34 pm

Tgt Ion:252 Resp: 3051219

Ion	Ratio	Lower	Upper
252	100		
253	21.9	0.0	52.5
125	17.4	0.0	44.0

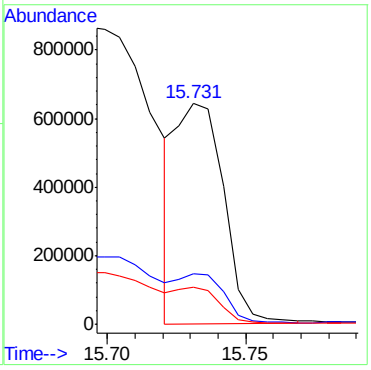


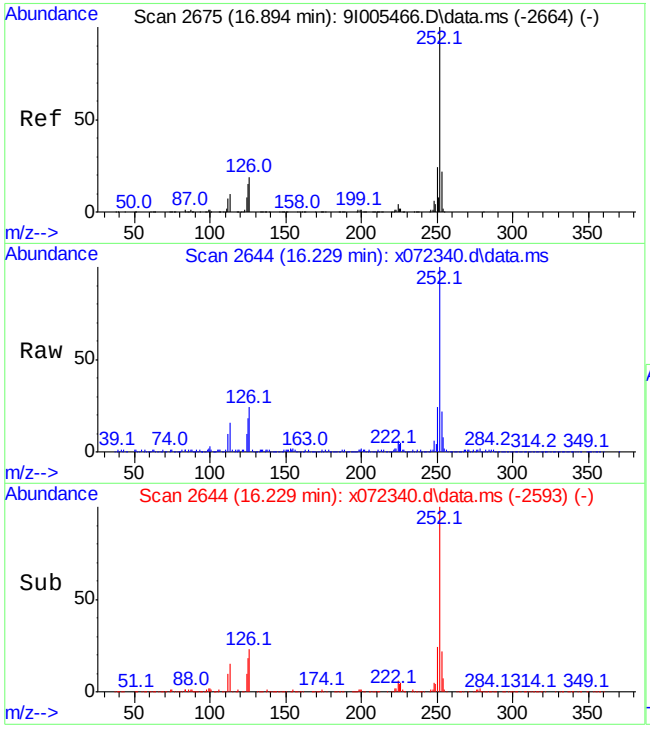


#105
Benzo[k]fluoranthene
Concen: 59.88 ppm m
RT: 15.731 min Scan# 2551
Delta R.T. 0.069 min
Lab File: x072340.d
Acq: 11 Aug 2020 5:34 pm

Tgt Ion:252 Resp: 774746

Ion	Ratio	Lower	Upper
252	100		
253	22.7	0.0	52.5
125	16.6	0.0	44.4

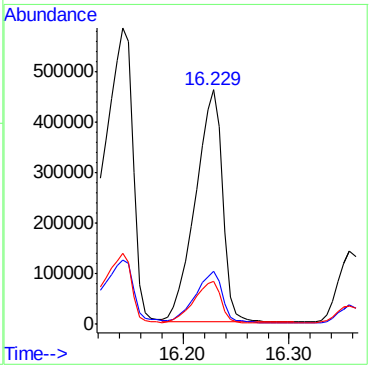


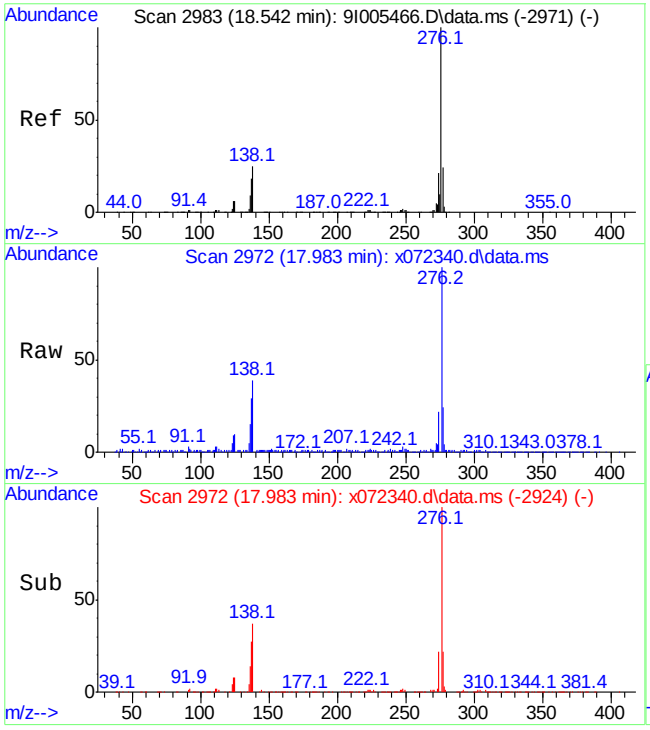


#106
Benzo[a]pyrene
Concen: 75.21 ppm
RT: 16.229 min Scan# 2644
Delta R.T. 0.075 min
Lab File: x072340.d
Acq: 11 Aug 2020 5:34 pm

Tgt Ion:252 Resp: 824815

Ion	Ratio	Lower	Upper
252	100		
253	21.8	0.0	52.3
125	17.7	0.0	44.7

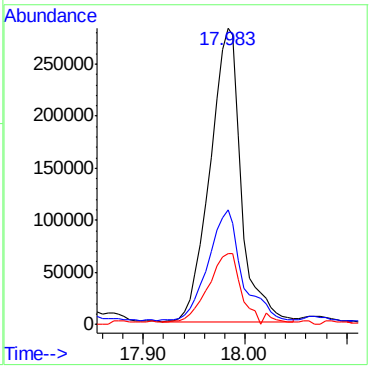


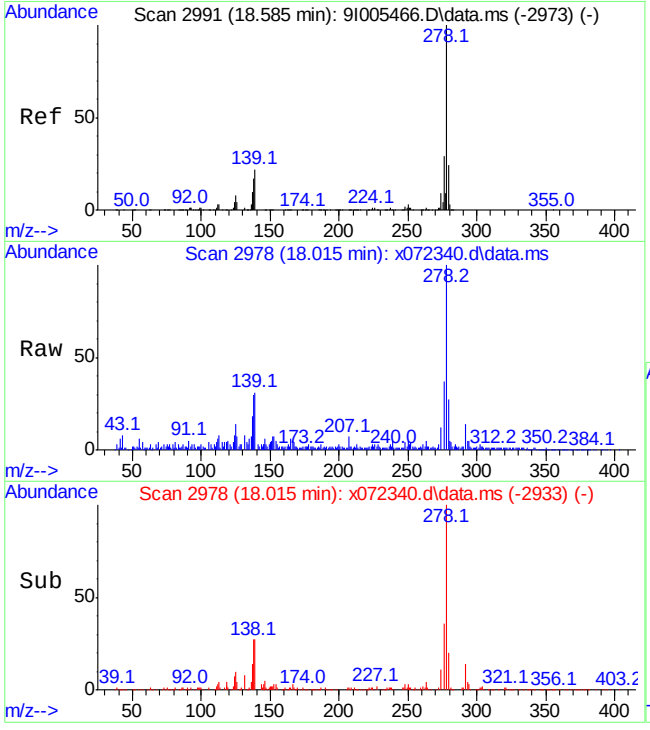


#107
Indeno[1,2,3-cd]pyrene
Concen: 74.00 ppm
RT: 17.983 min Scan# 2972
Delta R.T. 0.059 min
Lab File: x072340.d
Acq: 11 Aug 2020 5:34 pm

Tgt Ion:276 Resp: 600636

Ion	Ratio	Lower	Upper
276	100		
138	37.7	0.0	54.7
277	23.5	0.0	53.8

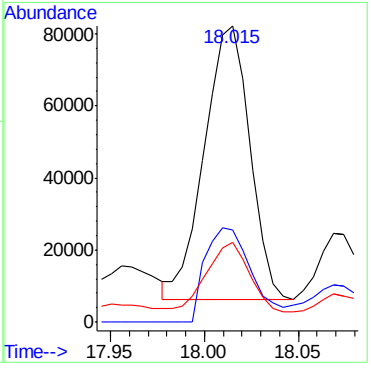


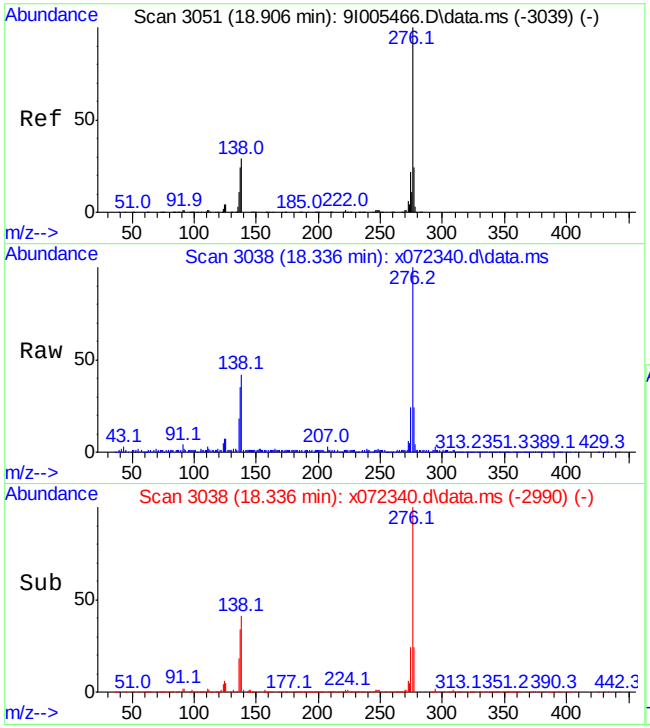


#108
Dibenz[a,h]anthracene
Concen: 19.36 ppm
RT: 18.015 min Scan# 2978
Delta R.T. 0.043 min
Lab File: x072340.d
Acq: 11 Aug 2020 5:34 pm

Tgt Ion:278 Resp: 127781

Ion	Ratio	Lower	Upper
278	100		
139	31.7	0.0	52.4
279	25.6	0.0	54.4

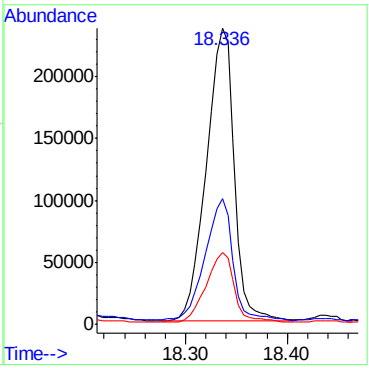




#109
Benzo[g,h,i]perylene
Concen: 45.46 ppm
RT: 18.336 min Scan# 3038
Delta R.T. 0.059 min
Lab File: x072340.d
Acq: 11 Aug 2020 5:34 pm

Tgt Ion:276 Resp: 450961

Ion	Ratio	Lower	Upper
276	100		
138	41.3	0.0	59.4
277	23.8	0.0	54.1



Manual Integration Approval Summary

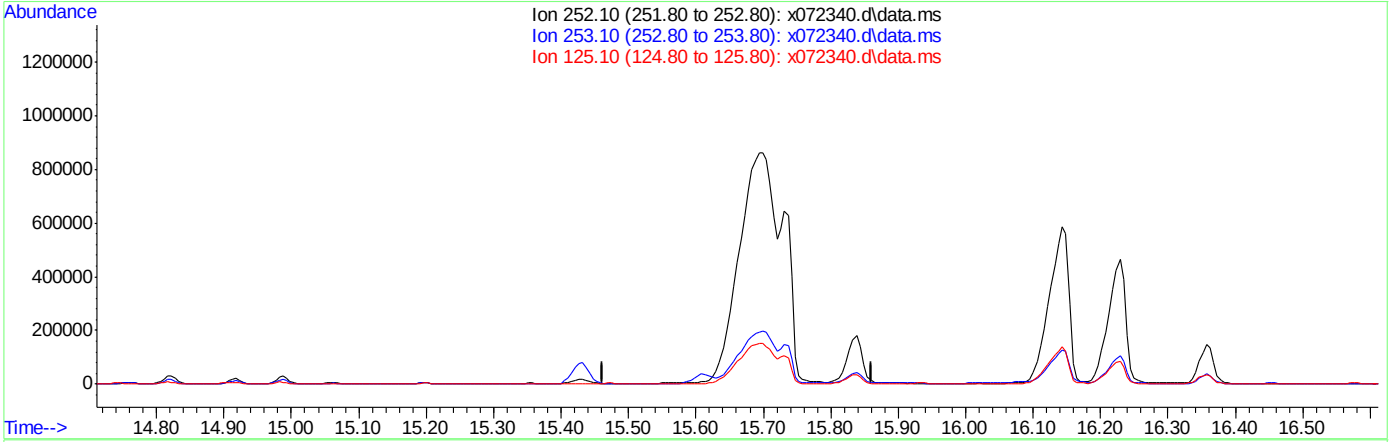
Sample Number:	FA77576-8	**Method:**	SW846 8270E
Lab FileID:	X072340.D	**Analyst approved:**	08/12/20 16:21 Martha Valls
Injection Time:	08/11/20 17:34	**Supervisor approved:**	08/12/20 16:38 Naresh Jiawan

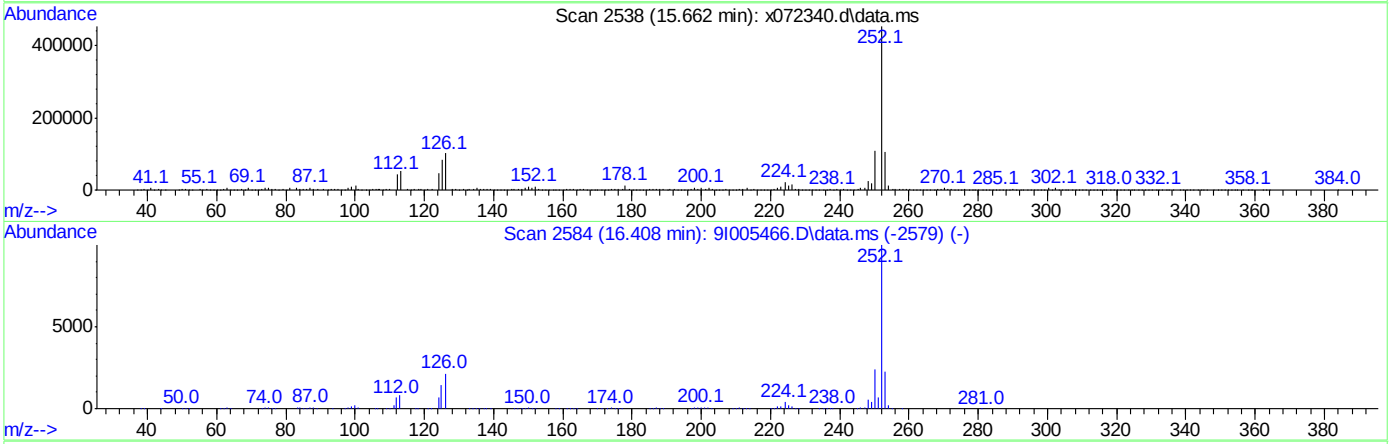
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(k)fluoranthene	207-08-9		15.73	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0811_sx2950\
Data File : x072340.d
Acq On : 11 Aug 2020 5:34 pm
Operator : marthav
Sample : fa77576-8 E Inst : MSBNA05
Misc : op81482,sx2950,30.0,,,1,1,soil
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 12 02:40:50 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration





TIC: x072340.d\data.ms

(105) Benzo[k]fluoranthene (P)

15.662min 0.00ppm d

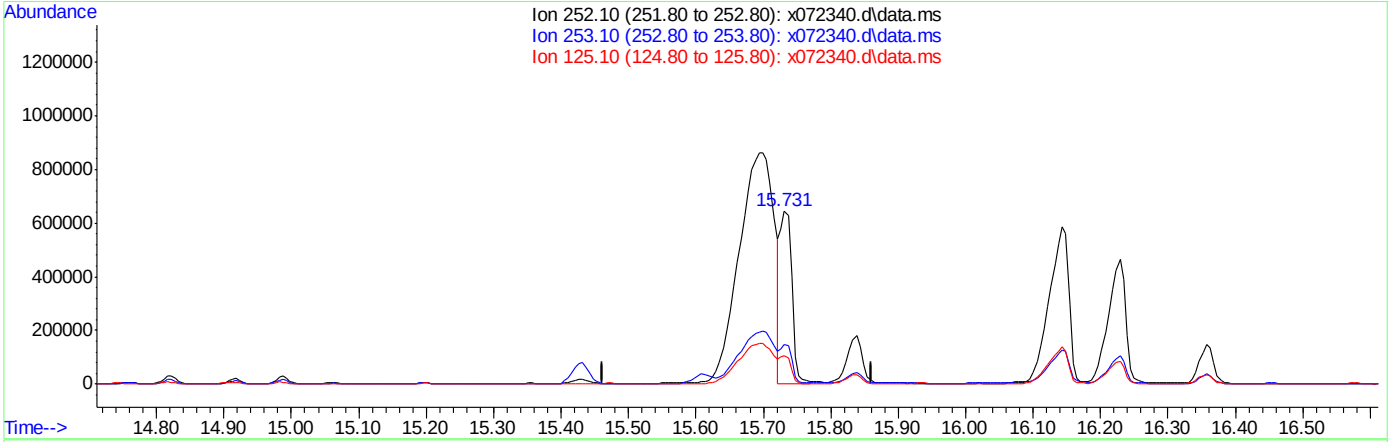
response 0

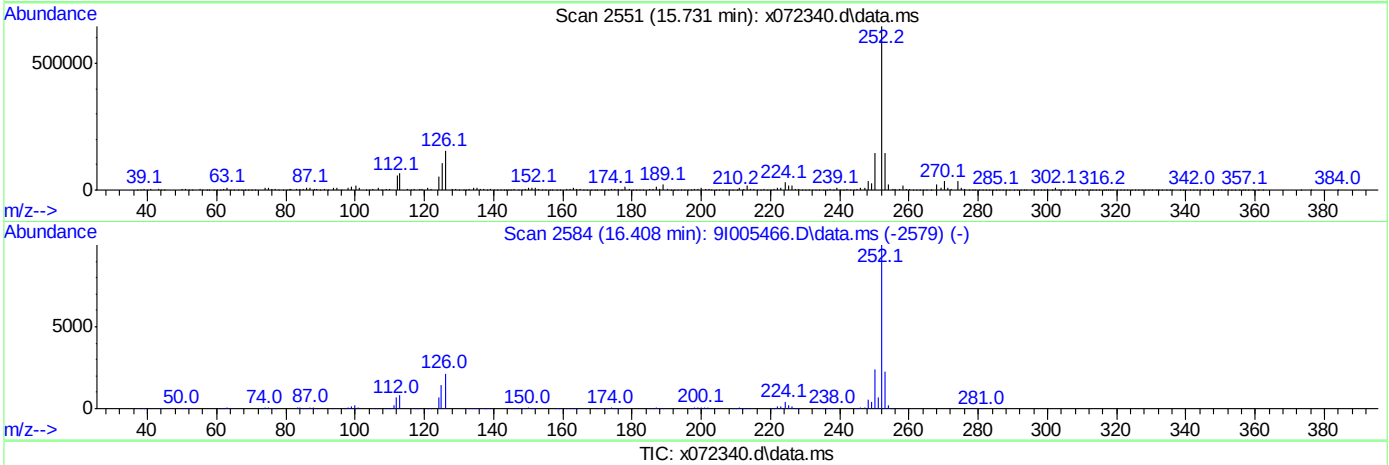
Ion	Exp%	Act%
252.10	100	0.00
253.10	22.50	0.00
125.10	14.40	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0811_sx2950\
Data File : x072340.d
Acq On : 11 Aug 2020 5:34 pm
Operator : marthav
Sample : fa77576-8 E Inst : MSBNA05
Misc : op81482,sx2950,30.0,,,1,1,soil
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 12 02:40:50 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration





TIC: x072340.d\data.ms

(105) Benzo[k]fluoranthene (P)

15.731min (+0.069) 59.88ppm m

response 774746

Ion	Exp%	Act%
252.10	100	100
253.10	22.50	22.69
125.10	14.40	16.60
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072369.D
Acq On : 12 Aug 2020 3:33 pm
Operator : marthav
Sample : fa77576-8 E,5 Inst : MSBNA05
Misc : op81482,sx2950,30.0,,,1,5,soil
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Aug 12 16:03:49 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	5.654	152	137435	40.00	ppm		0.00
22) Naphthalene-d8	7.077	136	499201	40.00	ppm		0.00
43) Acenaphthene-d10	9.115	164	241962	40.00	ppm		0.00
70) Phenanthrene-d10	10.859	188	418598	40.00	ppm		0.00
92) Chrysene-d12	14.073	240	357671	40.00	ppm		0.00
102) Perylene-d12	16.271	264	282742	40.00	ppm		0.00
110) 1,4-Dichlorobenzene-d4A	5.654	152	137435	40.00	ppm		0.00
120) Naphthalene-d8A	7.077	136	499201	40.00	ppm		0.00
127) Acenaphthene-d10A	9.115	164	241962	40.00	ppm		0.00
136) Phenanthrene-d10A	10.859	188	418598	40.00	ppm		0.00
146) Chrysene-d12A	14.073	240	357671	40.00	ppm		0.00
153) Perylene-d12A	16.271	264	282742	40.00	ppm		0.00
System Monitoring Compounds							
7) 2-Fluorophenol	4.312	112	77532	15.73	ppm		0.00
Spiked Amount 100.000	Range 40 - 102		Recovery = 15.73%#				
9) Phenol-d5	5.333	99	94669	16.15	ppm		0.00
Spiked Amount 100.000	Range 41 - 100		Recovery = 16.15%#				
23) Nitrobenzene-d5	6.269	82	39912	7.74	ppm		0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 15.48%#				
47) 2-Fluorobiphenyl	8.345	172	72438	8.27	ppm		0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 16.54%#				
75) 2,4,6-Tribromophenol	10.051	330	13711	17.35	ppm		0.00
Spiked Amount 100.000	Range 42 - 108		Recovery = 17.35%#				
95) Terphenyl-d14	12.779	244	76452	8.04	ppm		0.00
Spiked Amount 50.000	Range 45 - 119		Recovery = 16.08%#				
Target Compounds							Qvalue
24) Nitrobenzene	6.291	77	877	0.17	ppm		90
30) Benzoic Acid	6.858	105	1246	0.41	ppm	#	75
34) Naphthalene	7.098	128	2454	0.18	ppm		96
40) 2-Methylnaphthalene	7.906	142	1432	0.16	ppm		95
41) 1-Methylnaphthalene	8.013	142	1263	0.15	ppm		97
48) 1,1'-Biphenyl	8.457	154	501	0.05	ppm		96
52) Acenaphthylene	8.949	152	91179	7.54	ppm		99
57) Acenaphthene	9.152	153	8535	1.06	ppm		98
60) Dibenzofuran	9.356	168	4387	0.41	ppm		90
65) Fluorene	9.757	166	14408	1.72	ppm		100
84) Phenanthrene	10.885	178	98912	7.82	ppm		98
85) Anthracene	10.944	178	174116	13.21	ppm		98
87) Carbazole	11.163	167	55571	4.78	ppm		98
91) Fluoranthene	12.297	202	839731	71.55	ppm		98
94) Pyrene	12.554	202	908574	61.18	ppm		98
99) Benzo[a]anthracene	14.062	228	284334	25.29	ppm		98
100) Chrysene	14.105	228	461335	38.54	ppm		99
104) Benzo[b]fluoranthene	15.630	252	497383	58.22	ppm		96
105) Benzo[k]fluoranthene	15.667	252	159743	15.91	ppm		98
106) Benzo[a]pyrene	16.170	252	138685	18.50	ppm		96
107) Indeno[1,2,3-cd]pyrene	17.935	276	104936	22.53	ppm		89

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072369.D
Acq On : 12 Aug 2020 3:33 pm
Operator : marthav
Sample : fa77576-8 E,5 Inst : MSBNA05
Misc : op81482,sx2950,30.0,,,1,5,soil
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Aug 12 16:03:49 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration

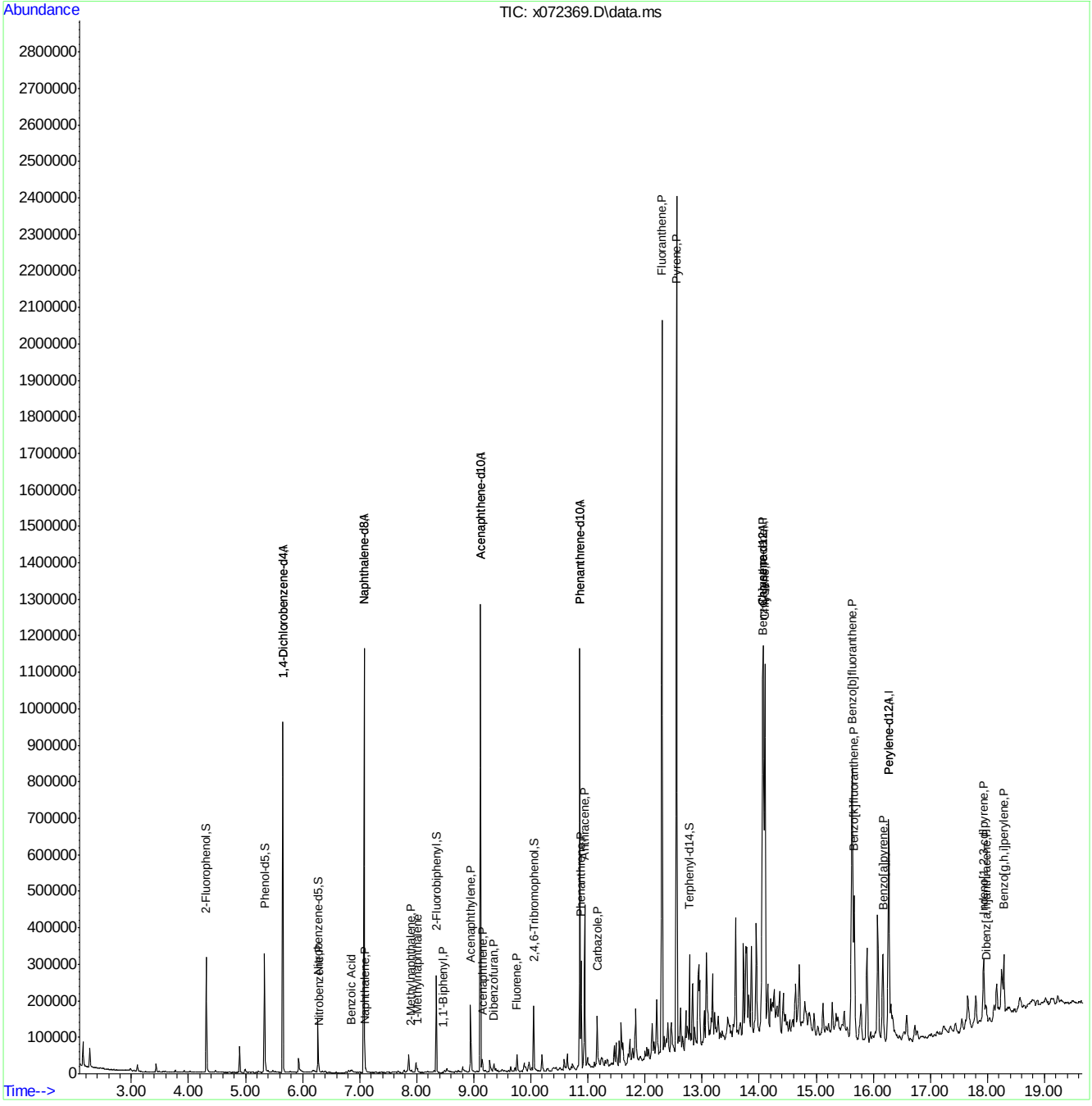
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
108) Dibenz[a,h]anthracene	17.972	278	21438	4.72	ppm	84
109) Benzo[g,h,i]perylene	18.288	276	83215	12.36	ppm	89

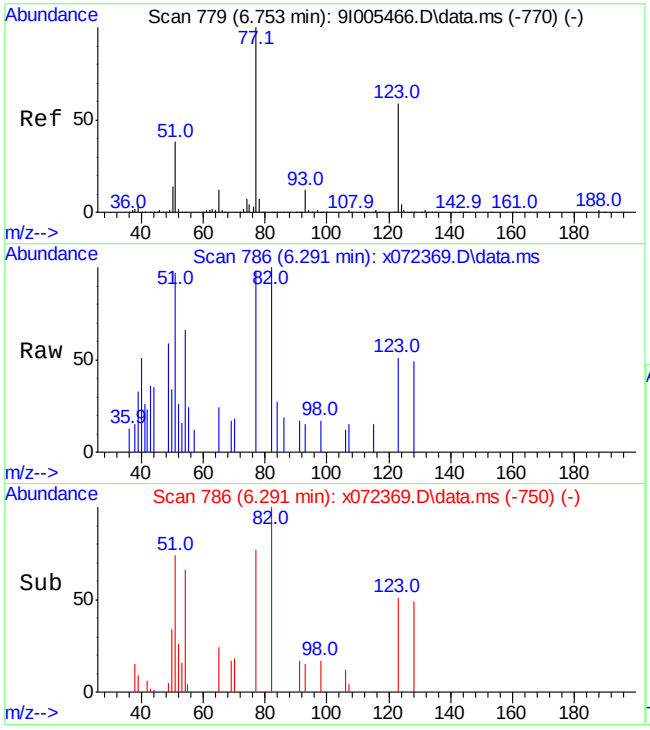
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072369.D
Acq On : 12 Aug 2020 3:33 pm
Operator : marthav
Sample : fa77576-8 E,5 Inst : MSBNA05
Misc : op81482,sx2950,30.0,,,1,5,soil
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Aug 12 16:03:49 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration

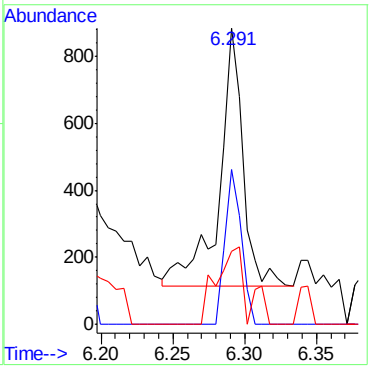


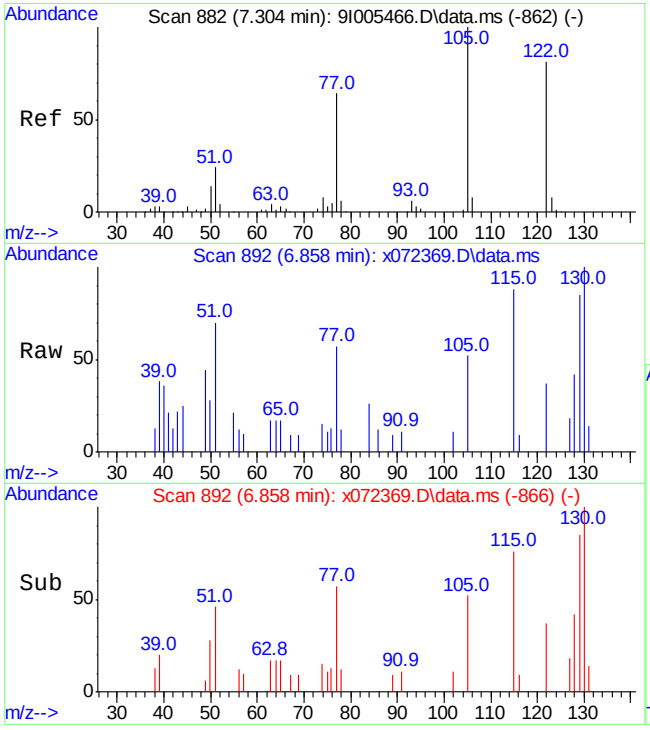


#24
Nitrobenzene
Concen: 0.17 ppm
RT: 6.291 min Scan# 786
Delta R.T. -0.005 min
Lab File: x072369.D
Acq: 12 Aug 2020 3:33 pm

Tgt Ion: 77 Resp: 877

Ion	Ratio	Lower	Upper
77	100		
123	60.7	28.7	88.7
65	28.8	0.0	42.1

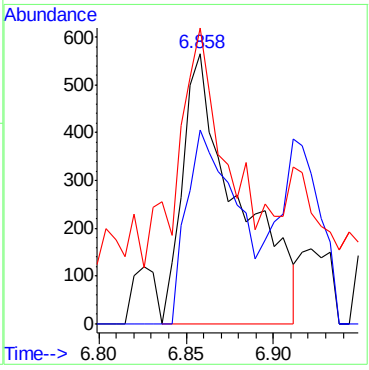


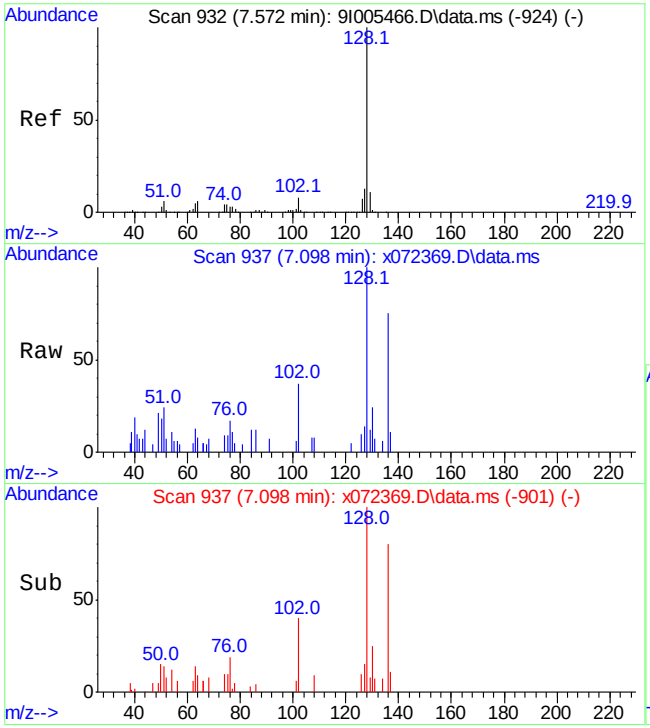


#30
Benzoic Acid
Concen: 0.41 ppm
RT: 6.858 min Scan# 892
Delta R.T. -0.059 min
Lab File: x072369.D
Acq: 12 Aug 2020 3:33 pm

Tgt Ion:105 Resp: 1246

Ion	Ratio	Lower	Upper
105	100		
122	42.1	51.2	111.2#
77	64.9	34.1	94.1

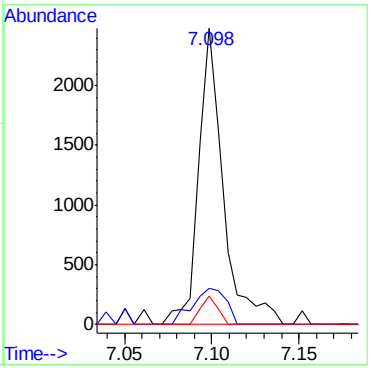


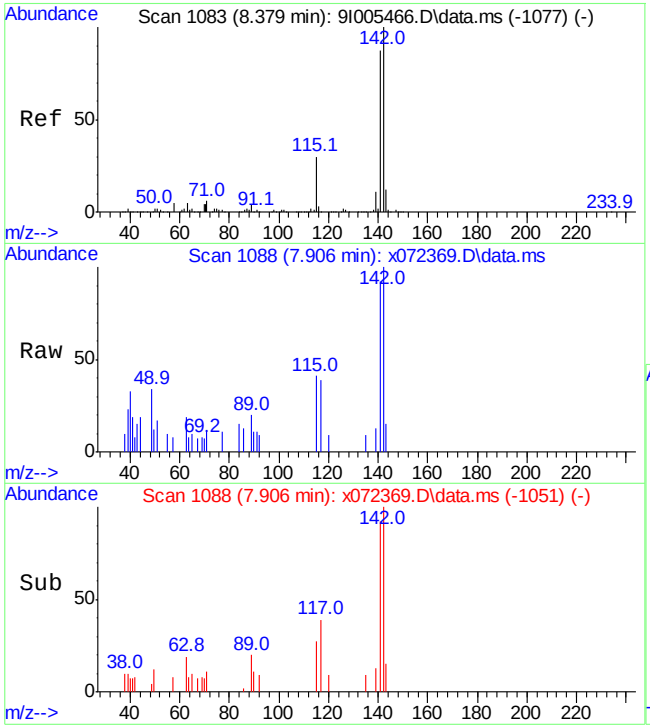


#34
Naphthalene
Concen: 0.18 ppm
RT: 7.098 min Scan# 937
Delta R.T. -0.005 min
Lab File: x072369.D
Acq: 12 Aug 2020 3:33 pm

Tgt Ion:128 Resp: 2454

Ion	Ratio	Lower	Upper
128	100		
129	12.3	0.0	41.4
126	9.5	0.0	37.4

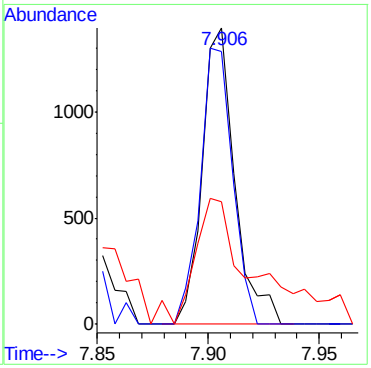


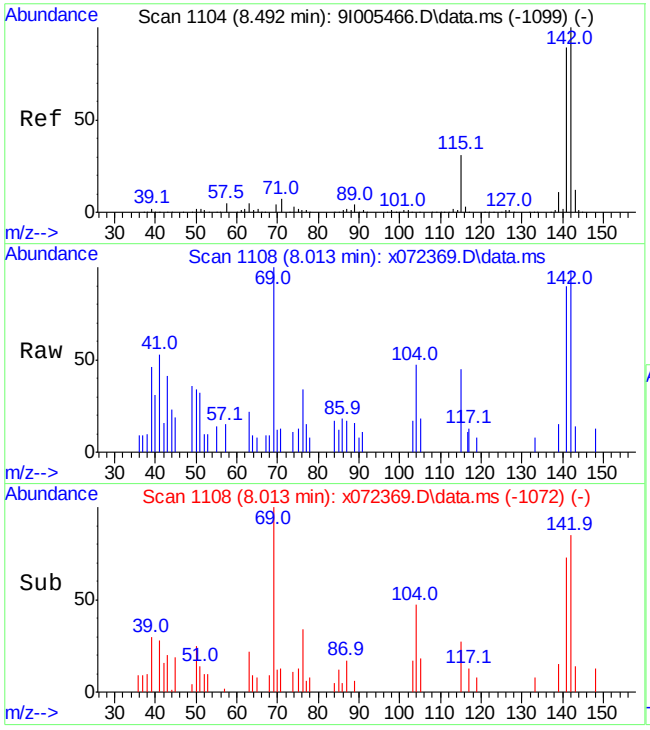


#40
2-Methylnaphthalene
Concen: 0.16 ppm
RT: 7.906 min Scan# 1088
Delta R.T. -0.000 min
Lab File: x072369.D
Acq: 12 Aug 2020 3:33 pm

Tgt Ion:142 Resp: 1432

Ion	Ratio	Lower	Upper
142	100		
141	92.1	56.8	116.8
115	32.2	0.0	60.0

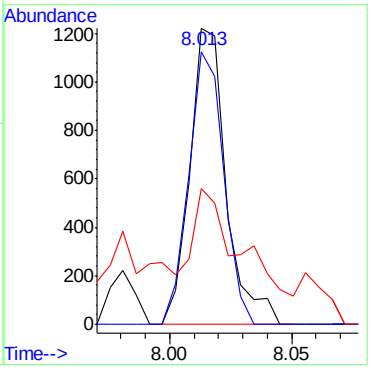


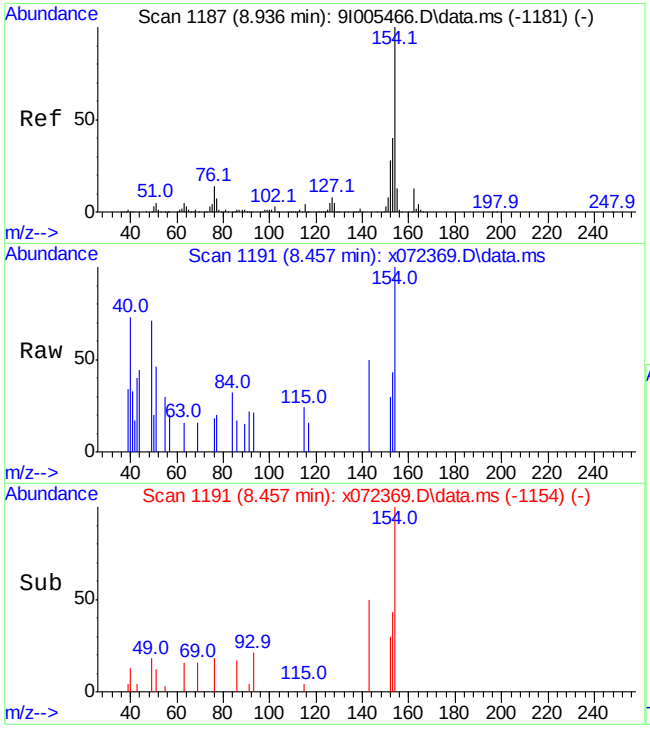


#41
1-Methylnaphthalene
Concen: 0.15 ppm
RT: 8.013 min Scan# 1108
Delta R.T. -0.005 min
Lab File: x072369.D
Acq: 12 Aug 2020 3:33 pm

Tgt Ion:142 Resp: 1263

Ion	Ratio	Lower	Upper
142	100		
141	91.9	59.0	119.0
115	30.4	1.1	61.1

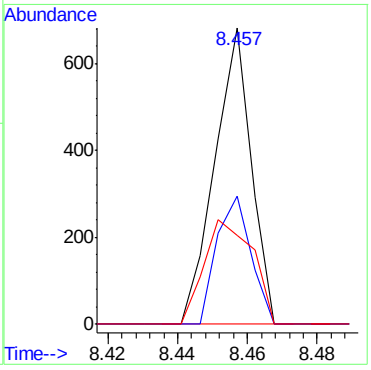


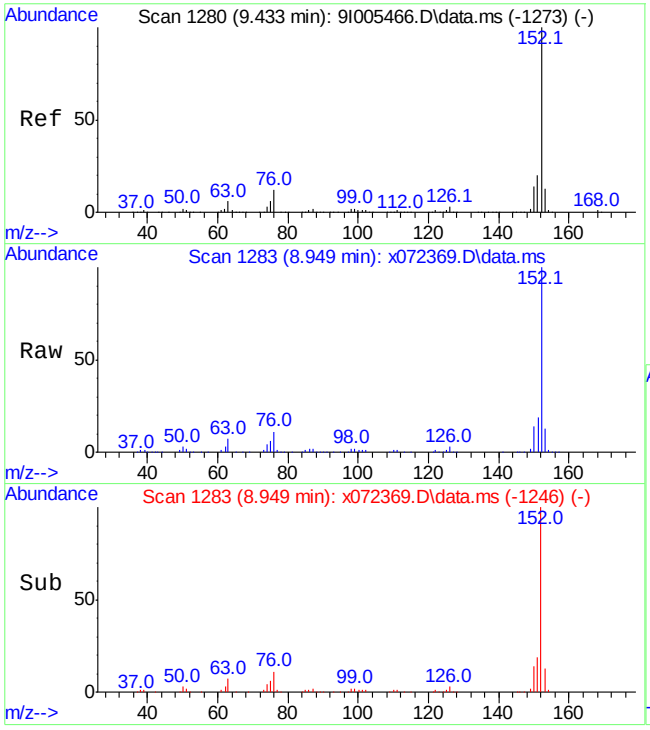


#48
1,1'-Biphenyl
Concen: 0.05 ppm
RT: 8.457 min Scan# 1191
Delta R.T. -0.000 min
Lab File: x072369.D
Acq: 12 Aug 2020 3:33 pm

Tgt Ion:154 Resp: 501

Ion	Ratio	Lower	Upper
154	100		
153	43.3	10.3	70.3
152	30.1	0.0	58.2

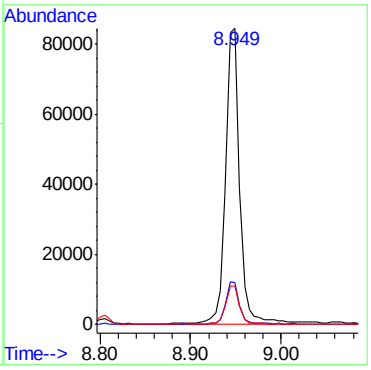


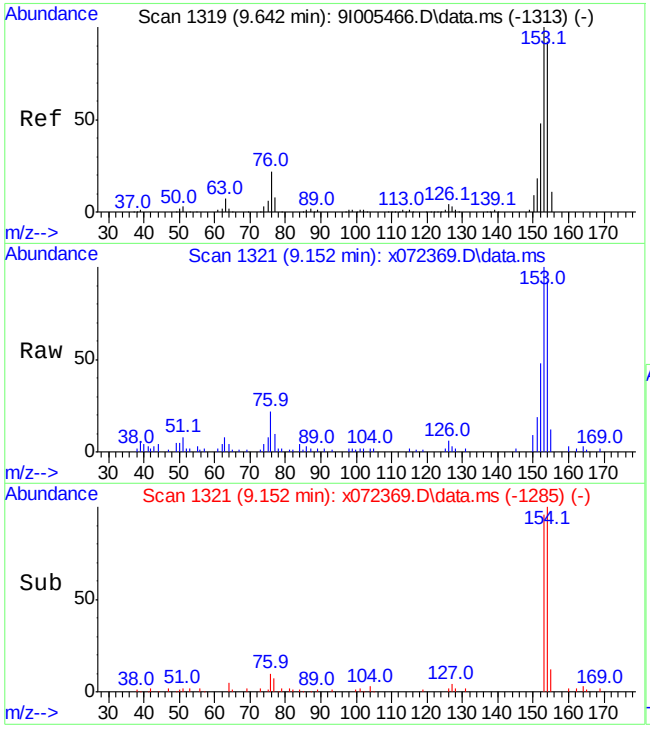


#52
Acenaphthylene
Concen: 7.54 ppm
RT: 8.949 min Scan# 1283
Delta R.T. -0.000 min
Lab File: x072369.D
Acq: 12 Aug 2020 3:33 pm

Tgt Ion:152 Resp: 91179

Ion	Ratio	Lower	Upper
152	100		
150	13.9	0.0	44.3
153	12.8	0.0	43.3

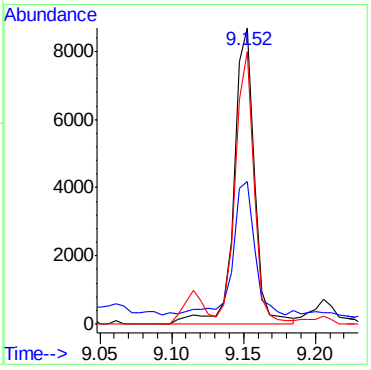


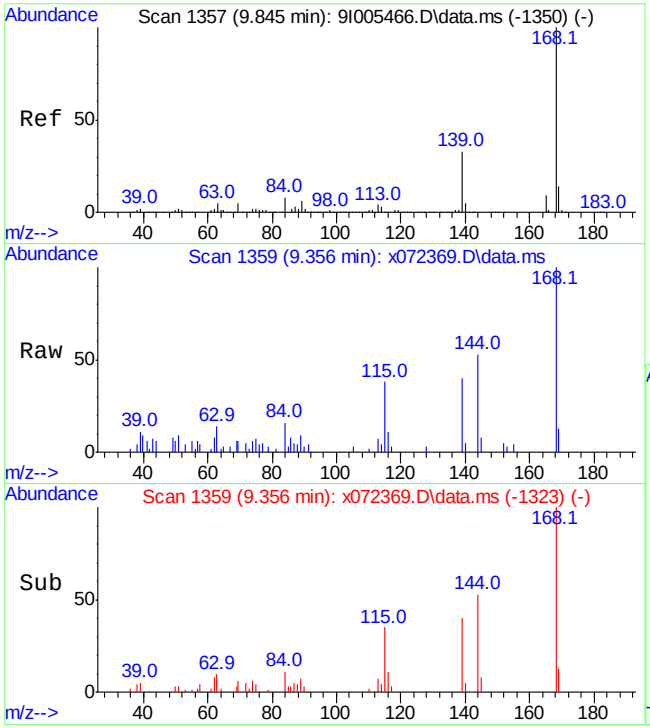


#57
Acenaphthene
Concen: 1.06 ppm
RT: 9.152 min Scan# 1321
Delta R.T. -0.005 min
Lab File: x072369.D
Acq: 12 Aug 2020 3:33 pm

Tgt Ion:153 Resp: 8535

Ion	Ratio	Lower	Upper
153	100		
152	44.8	18.4	78.4
154	92.2	62.4	122.4

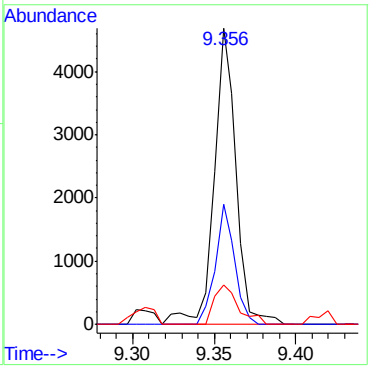


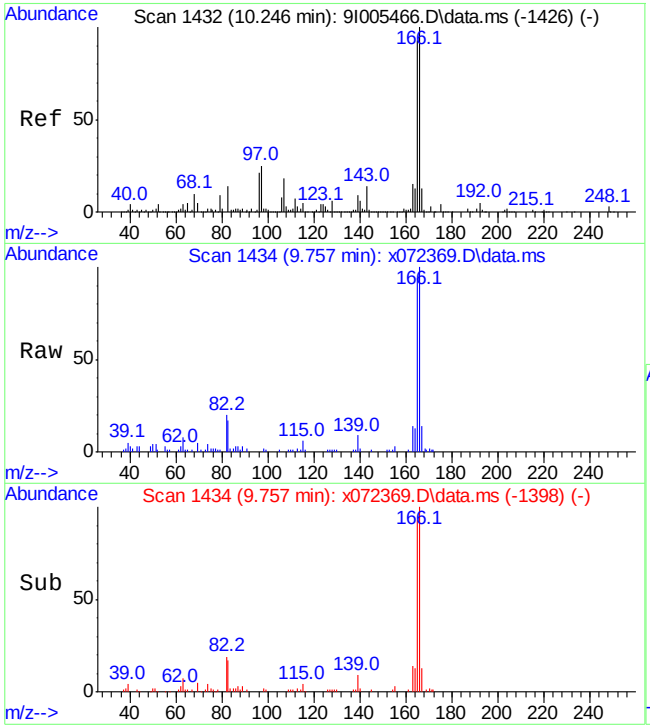


#60
Dibenzofuran
Concen: 0.41 ppm
RT: 9.356 min Scan# 1359
Delta R.T. -0.005 min
Lab File: x072369.D
Acq: 12 Aug 2020 3:33 pm

Tgt Ion:168 Resp: 4387

Ion	Ratio	Lower	Upper
168	100		
139	40.4	3.0	63.0
169	13.1	0.0	43.5

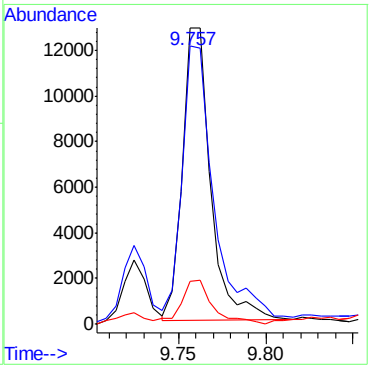


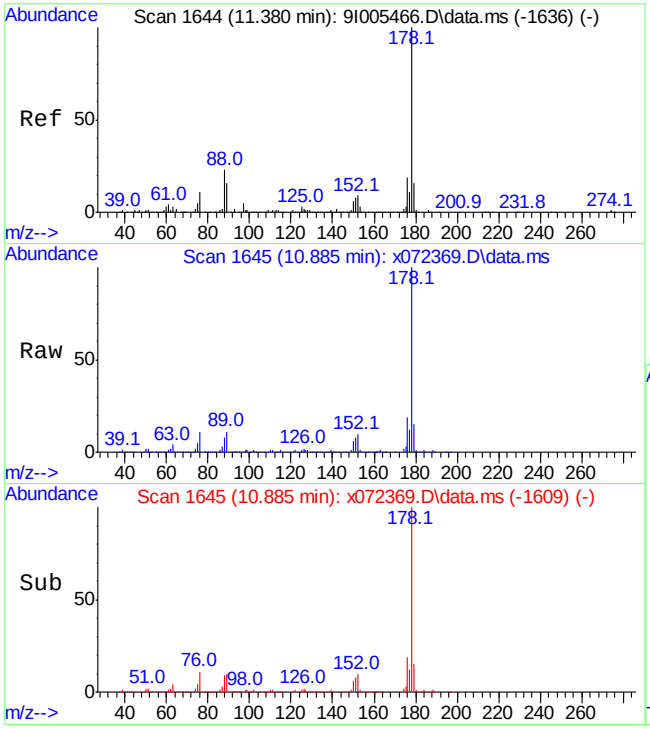


#65
Fluorene
Concen: 1.72 ppm
RT: 9.757 min Scan# 1434
Delta R.T. -0.005 min
Lab File: x072369.D
Acq: 12 Aug 2020 3:33 pm

Tgt Ion:166 Resp: 14408

Ion	Ratio	Lower	Upper
166	100		
165	92.7	62.7	122.7
167	12.9	0.0	43.5

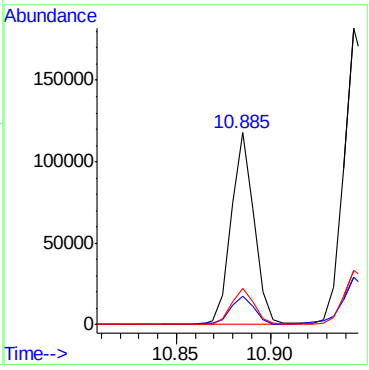


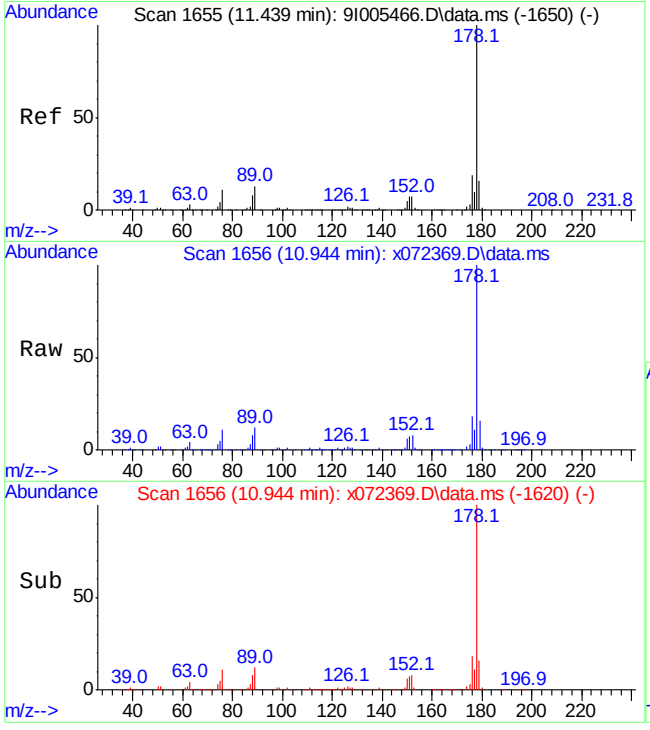


#84
Phenanthrene
Concen: 7.82 ppm
RT: 10.885 min Scan# 1645
Delta R.T. -0.005 min
Lab File: x072369.D
Acq: 12 Aug 2020 3:33 pm

Tgt Ion:178 Resp: 98912

Ion	Ratio	Lower	Upper
178	100		
179	14.8	0.0	45.8
176	18.6	0.0	49.3

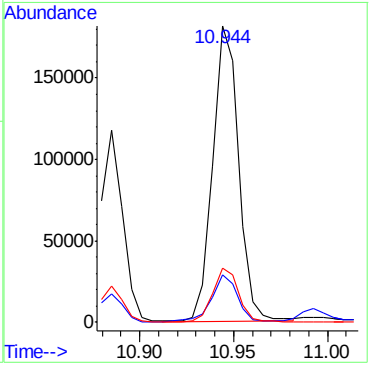


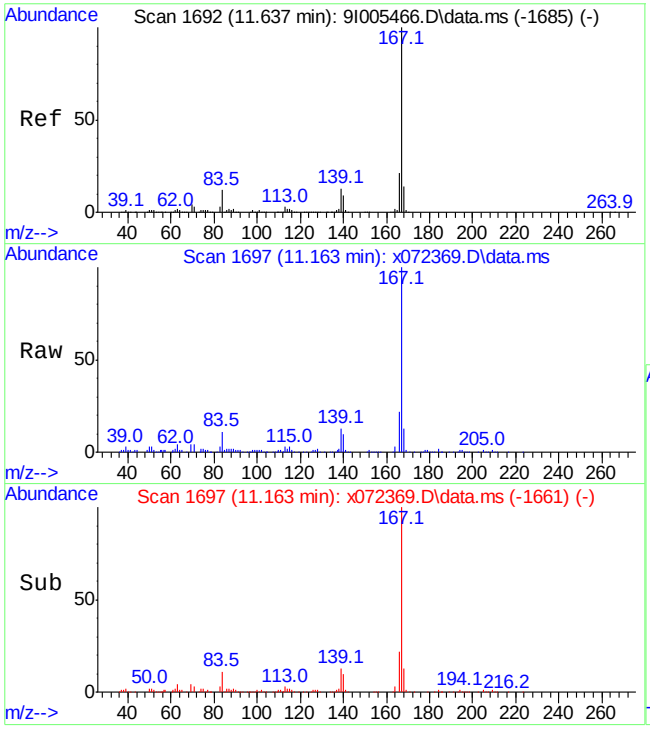


#85
Anthracene
Concen: 13.21 ppm
RT: 10.944 min Scan# 1656
Delta R.T. -0.005 min
Lab File: x072369.D
Acq: 12 Aug 2020 3:33 pm

Tgt Ion:178 Resp: 174116

Ion	Ratio	Lower	Upper
178	100		
179	15.2	0.0	46.0
176	18.4	0.0	49.3

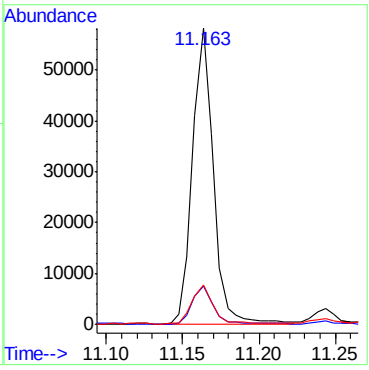


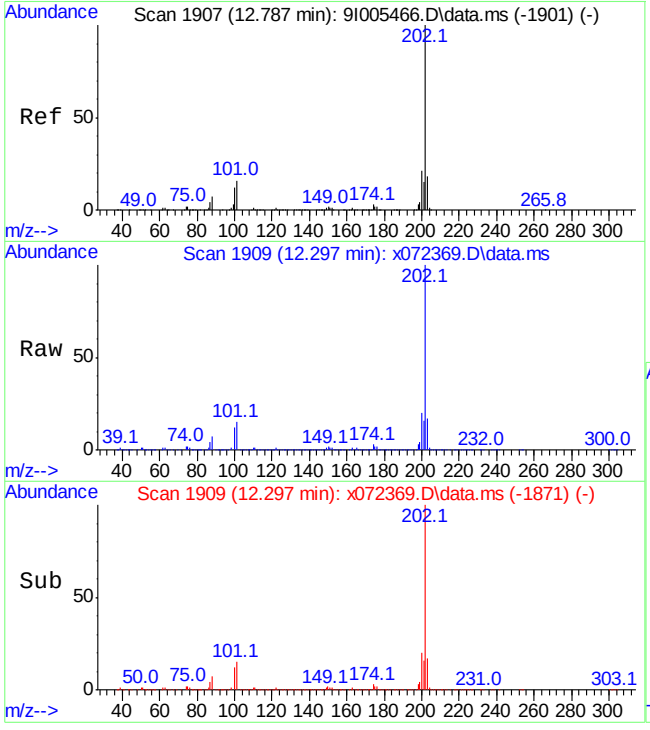


#87
Carbazole
Concen: 4.78 ppm
RT: 11.163 min Scan# 1697
Delta R.T. -0.005 min
Lab File: x072369.D
Acq: 12 Aug 2020 3:33 pm

Tgt Ion:167 Resp: 55571

Ion	Ratio	Lower	Upper
167	100		
168	12.8	0.0	43.9
139	13.1	0.0	42.7

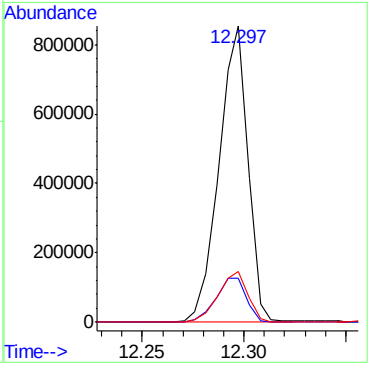


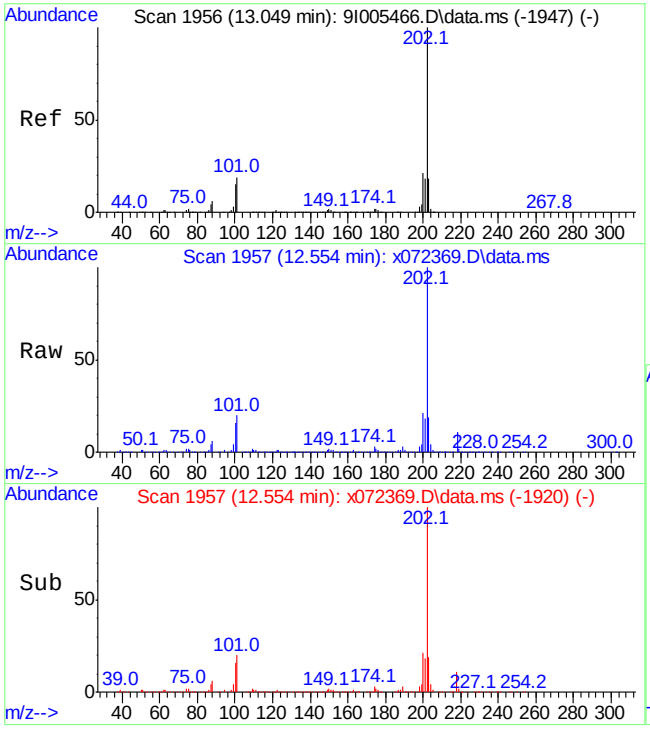


#91
Fluoranthene
Concen: 71.55 ppm
RT: 12.297 min Scan# 1909
Delta R.T. 0.005 min
Lab File: x072369.D
Acq: 12 Aug 2020 3:33 pm

Tgt Ion:202 Resp: 839731

Ion	Ratio	Lower	Upper
202	100		
101	14.9	0.0	45.8
203	17.0	0.0	48.1

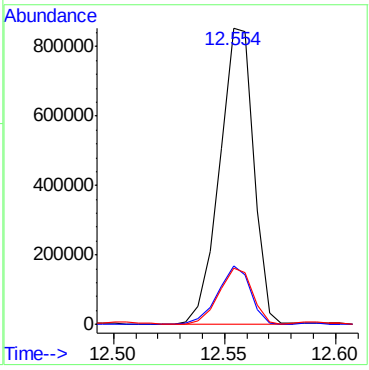


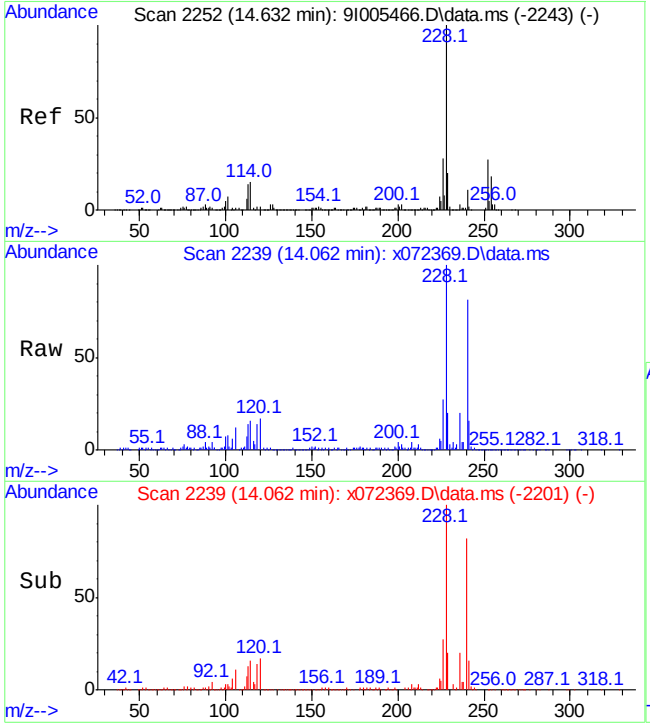


#94
Pyrene
Concen: 61.18 ppm
RT: 12.554 min Scan# 1957
Delta R.T. -0.000 min
Lab File: x072369.D
Acq: 12 Aug 2020 3:33 pm

Tgt Ion:202 Resp: 908574

Ion	Ratio	Lower	Upper
202	100		
101	19.7	0.0	48.7
203	18.8	0.0	48.4

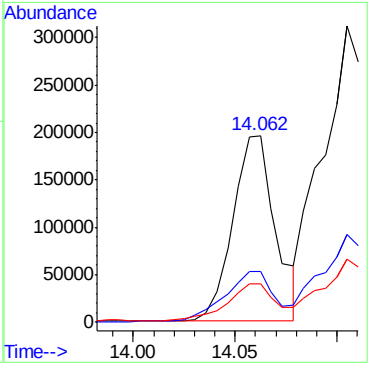


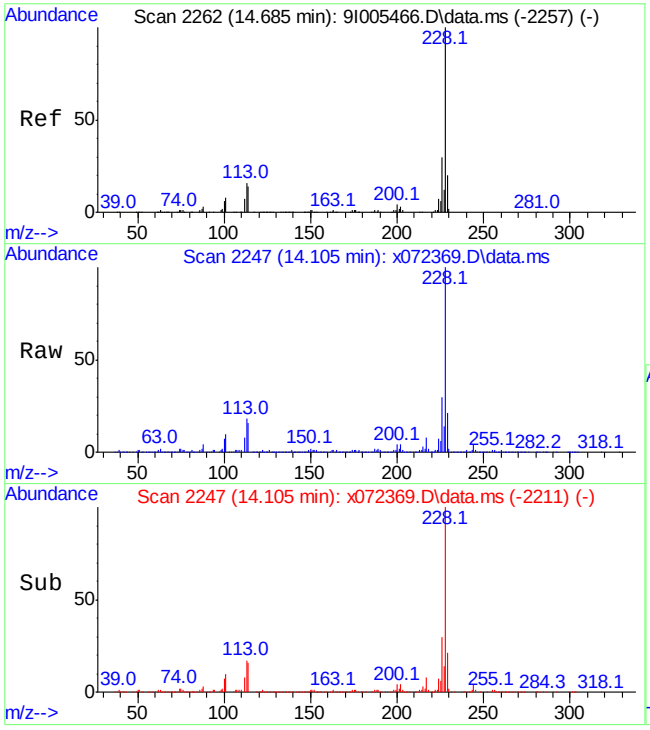


#99
Benzo[a]anthracene
Concen: 25.29 ppm
RT: 14.062 min Scan# 2239
Delta R.T. 0.005 min
Lab File: x072369.D
Acq: 12 Aug 2020 3:33 pm

Tgt Ion:228 Resp: 284334

Ion	Ratio	Lower	Upper
228	100		
226	26.2	0.0	57.5
229	19.1	0.0	49.9

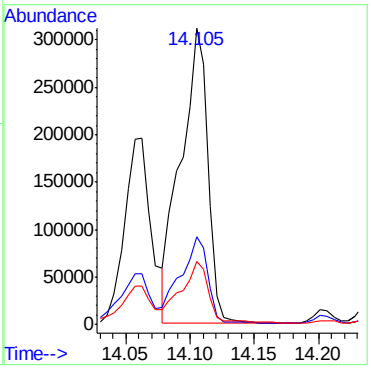


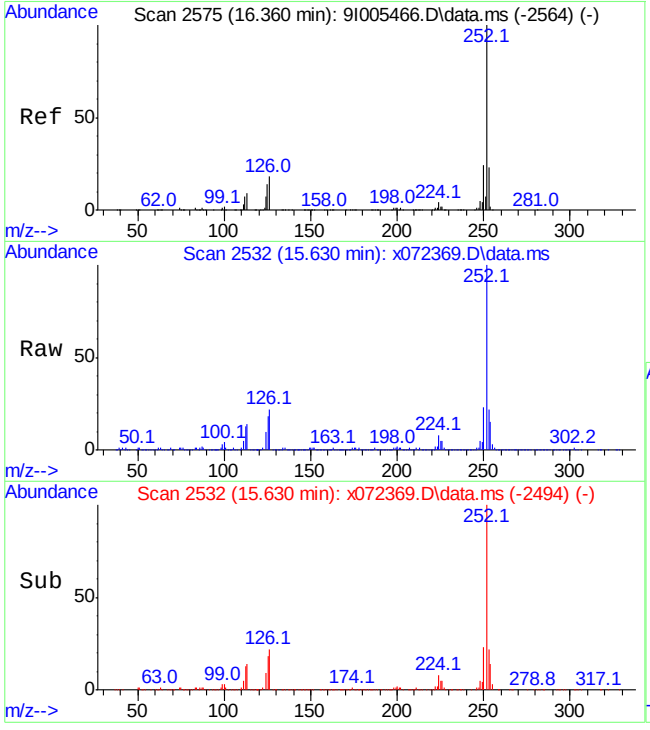


#100
Chrysene
Concen: 38.54 ppm
RT: 14.105 min Scan# 2247
Delta R.T. -0.005 min
Lab File: x072369.D
Acq: 12 Aug 2020 3:33 pm

Tgt Ion:228 Resp: 461335

Ion	Ratio	Lower	Upper
228	100		
226	29.7	0.4	60.4
229	20.6	0.0	50.1

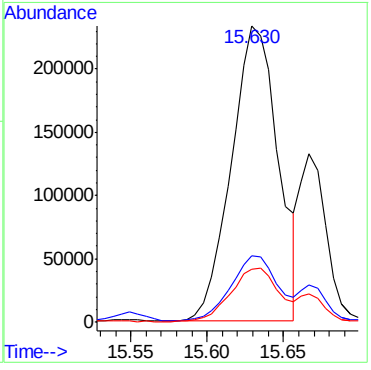


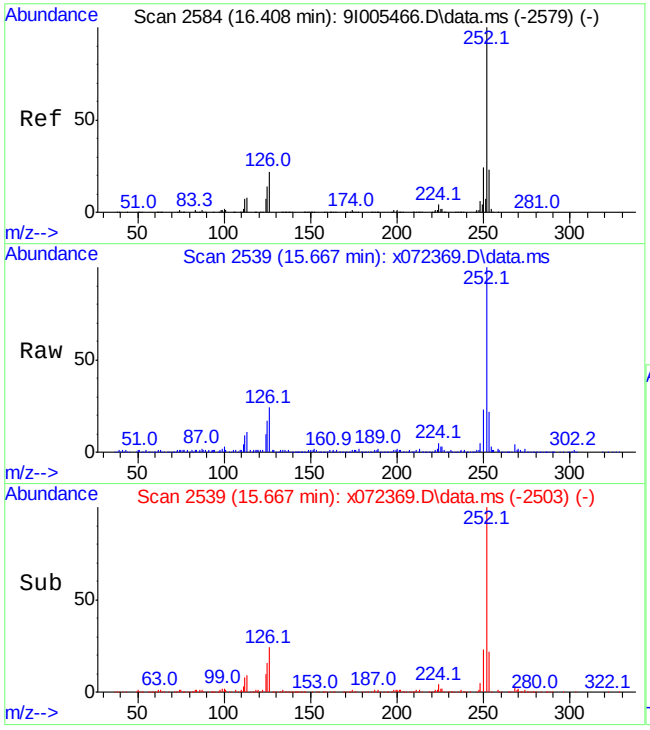


#104
Benzo[b]fluoranthene
Concen: 58.22 ppm
RT: 15.630 min Scan# 2532
Delta R.T. 0.005 min
Lab File: x072369.D
Acq: 12 Aug 2020 3:33 pm

Tgt Ion:252 Resp: 497383

Ion	Ratio	Lower	Upper
252	100		
253	21.8	0.0	52.5
125	17.6	0.0	44.0

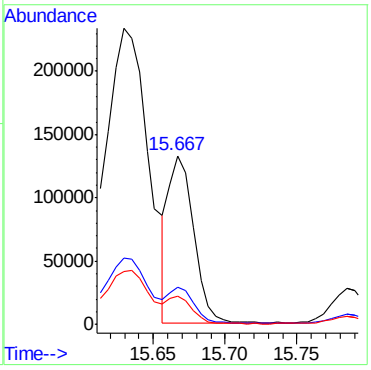


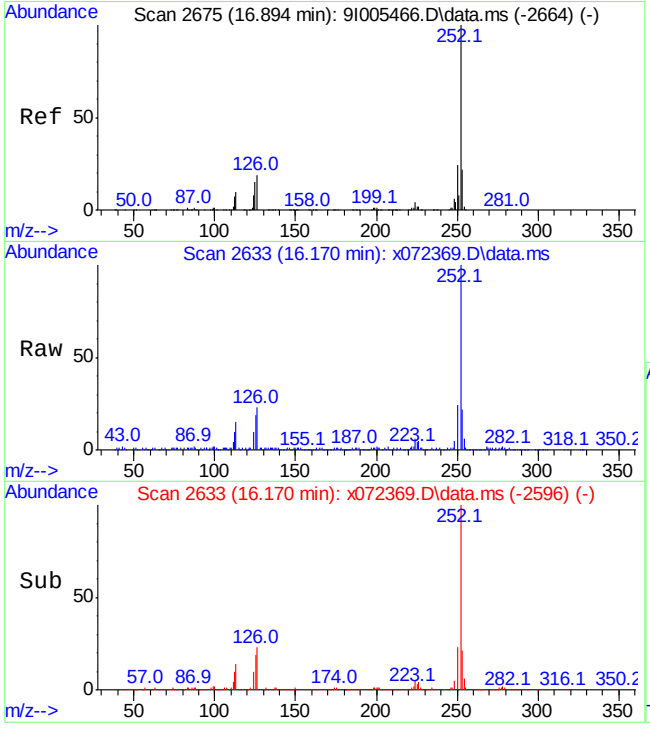


#105
Benzo[k]fluoranthene
Concen: 15.91 ppm
RT: 15.667 min Scan# 2539
Delta R.T. -0.005 min
Lab File: x072369.D
Acq: 12 Aug 2020 3:33 pm

Tgt Ion:252 Resp: 159743

Ion	Ratio	Lower	Upper
252	100		
253	21.2	0.0	52.5
125	15.2	0.0	44.4

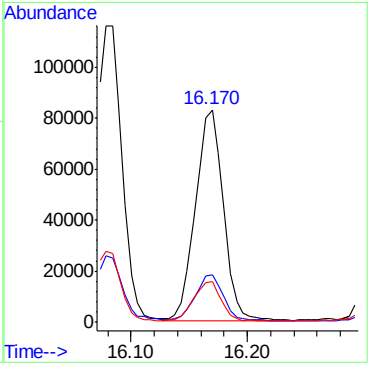


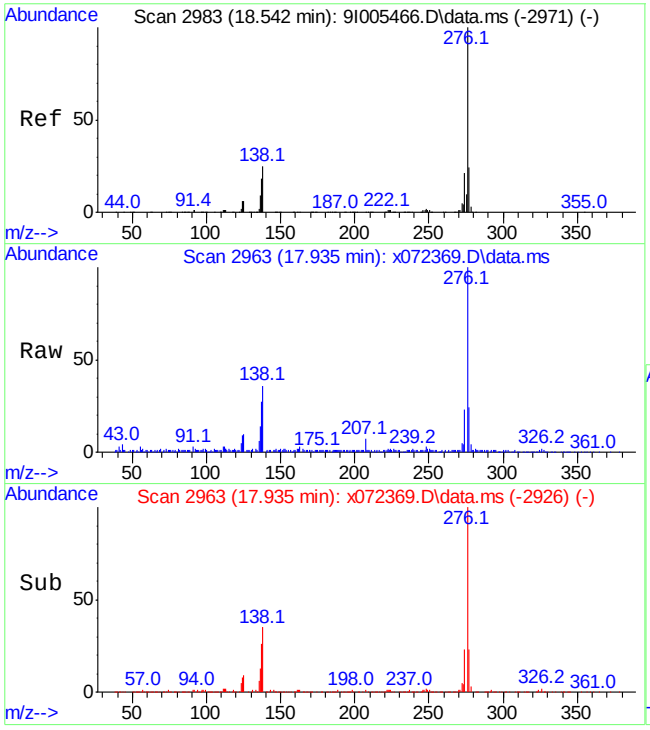


#106
Benzo[a]pyrene
Concen: 18.50 ppm
RT: 16.170 min Scan# 2633
Delta R.T. -0.000 min
Lab File: x072369.D
Acq: 12 Aug 2020 3:33 pm

Tgt Ion:252 Resp: 138685

Ion	Ratio	Lower	Upper
252	100		
253	21.9	0.0	52.3
125	18.4	0.0	44.7

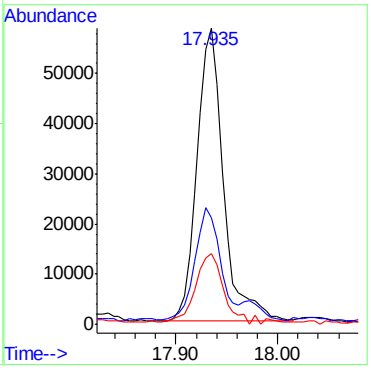


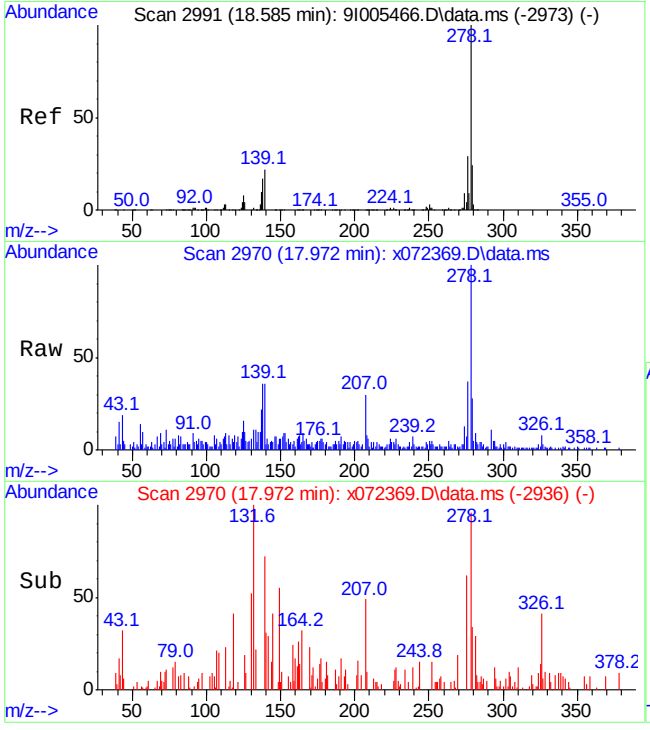


#107
Indeno[1,2,3-cd]pyrene
Concen: 22.53 ppm
RT: 17.935 min Scan# 2963
Delta R.T. -0.000 min
Lab File: x072369.D
Acq: 12 Aug 2020 3:33 pm

Tgt Ion:276 Resp: 104936

Ion	Ratio	Lower	Upper
276	100		
138	34.7	0.0	54.7
277	23.2	0.0	53.8

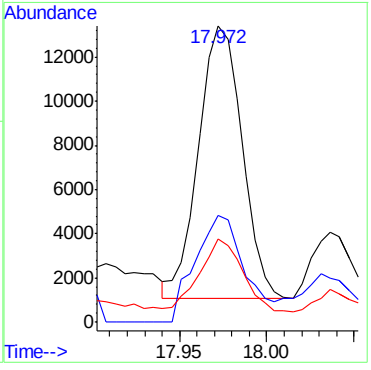


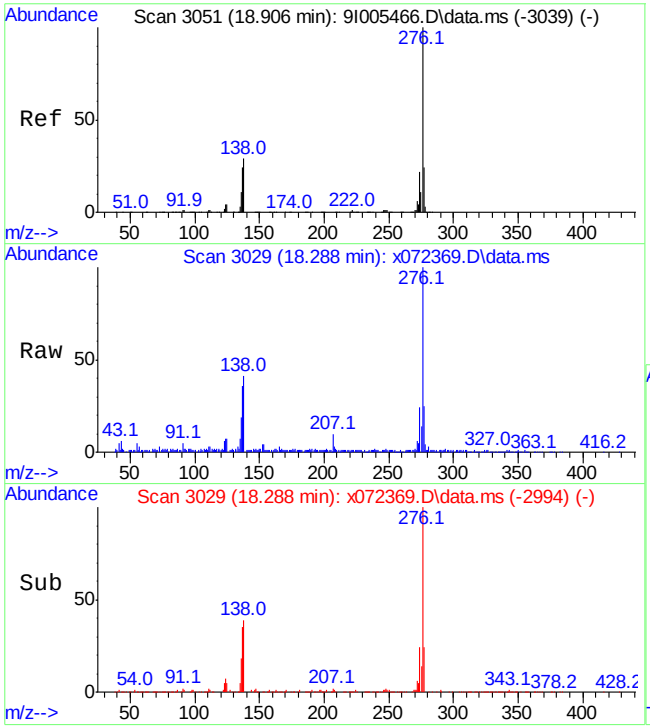


#108
Dibenz[a,h]anthracene
Concen: 4.72 ppm
RT: 17.972 min Scan# 2970
Delta R.T. -0.016 min
Lab File: x072369.D
Acq: 12 Aug 2020 3:33 pm

Tgt Ion:278 Resp: 21438

Ion	Ratio	Lower	Upper
278	100		
139	36.0	0.0	52.4
279	27.2	0.0	54.4

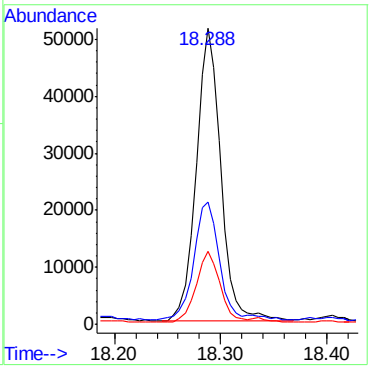




#109
Benzo[g,h,i]perylene
Concen: 12.36 ppm
RT: 18.288 min Scan# 3029
Delta R.T. -0.011 min
Lab File: x072369.D
Acq: 12 Aug 2020 3:33 pm

Tgt Ion:276 Resp: 83215

Ion	Ratio	Lower	Upper
276	100		
138	40.2	0.0	59.4
277	24.2	0.0	54.1



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072341.d
Acq On : 11 Aug 2020 6:00 pm
Operator : marthav
Sample : fa77576-9 E
Misc : op81482,sx2950,30.2,,,1,1,soil
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 12 02:43:00 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

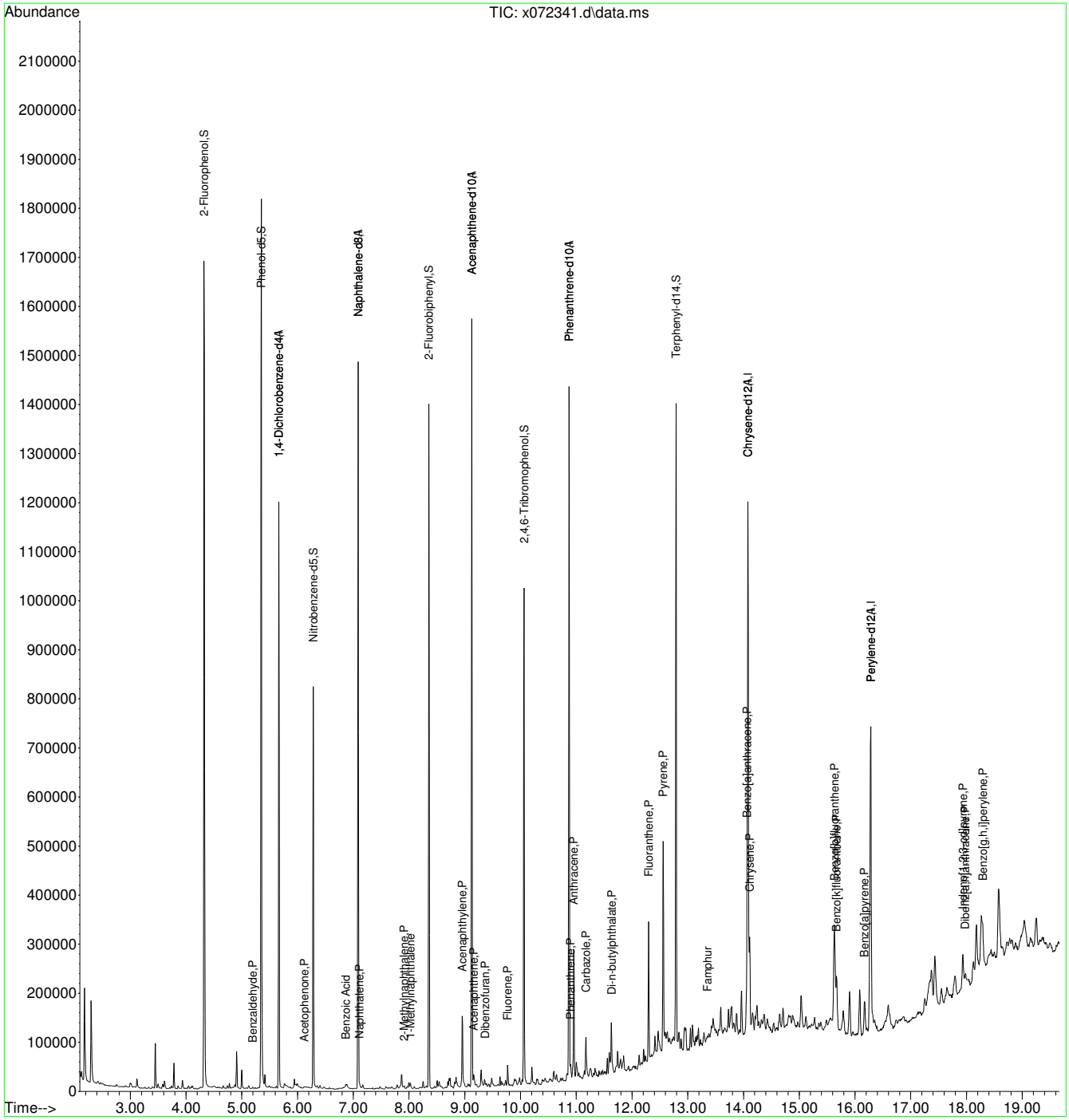
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.665	152	164828	40.00	ppm	0.00
22) Naphthalene-d8	7.088	136	608415	40.00	ppm	0.00
43) Acenaphthene-d10	9.126	164	297163	40.00	ppm	0.00
70) Phenanthrene-d10	10.869	188	508088	40.00	ppm	0.00
92) Chrysene-d12	14.079	240	407717	40.00	ppm	0.01
102) Perylene-d12	16.282	264	326292	40.00	ppm	0.03
110) 1,4-Dichlorobenzene-d4A	5.665	152	164828	40.00	ppm	0.00
120) Naphthalene-d8A	7.088	136	608415	40.00	ppm	0.00
127) Acenaphthene-d10A	9.126	164	297163	40.00	ppm	0.00
136) Phenanthrene-d10A	10.869	188	508088	40.00	ppm	0.00
146) Chrysene-d12A	14.079	240	407717	40.00	ppm	0.01
153) Perylene-d12A	16.282	264	326292	40.00	ppm	0.03
System Monitoring Compounds						
7) 2-Fluorophenol	4.323	112	435870	73.75	ppm	0.02
Spiked Amount 100.000	Range 40 - 102		Recovery = 73.75%			
9) Phenol-d5	5.350	99	539327	76.70	ppm	0.02
Spiked Amount 100.000	Range 41 - 100		Recovery = 76.70%			
23) Nitrobenzene-d5	6.280	82	227477	36.20	ppm	0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 72.40%			
47) 2-Fluorobiphenyl	8.356	172	399053	37.10	ppm	0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 74.20%			
75) 2,4,6-Tribromophenol	10.062	330	80912	74.80	ppm	0.00
Spiked Amount 100.000	Range 42 - 108		Recovery = 74.80%			
95) Terphenyl-d14	12.790	244	391329	36.12	ppm	0.01
Spiked Amount 50.000	Range 45 - 119		Recovery = 72.24%			
Target Compounds						Qvalue
5) Benzaldehyde	5.194	106	745	0.15	ppm	98
18) Acetophenone	6.120	105	1029	0.12	ppm	91
30) Benzoic Acid	6.863	105	3346	0.90	ppm	83
34) Naphthalene	7.109	128	1970	0.12	ppm	95
40) 2-Methylnaphthalene	7.912	142	1634	0.15	ppm	98
41) 1-Methylnaphthalene	8.024	142	1016	0.10	ppm	93
52) Acenaphthylene	8.955	152	80663	5.43	ppm	100
57) Acenaphthene	9.163	153	6924	0.70	ppm	95
60) Dibenzofuran	9.366	168	1288	0.10	ppm	91
65) Fluorene	9.768	166	13335	1.30	ppm	96
84) Phenanthrene	10.896	178	9951	0.65	ppm	98
85) Anthracene	10.955	178	98137	6.13	ppm	96
87) Carbazole	11.174	167	33661	2.38	ppm	99
89) Di-n-butylphthalate	11.634	149	706	0.04	ppm	81
91) Fluoranthene	12.297	202	102411	7.19	ppm	99
94) Pyrene	12.560	202	147144	8.69	ppm	98
96) Famphur	13.351	218	3063	0.76	ppm	59
99) Benzo[a]anthracene	14.063	228	53655	4.19	ppm	98
100) Chrysene	14.111	228	94425	6.92	ppm	98
104) Benzo[b]fluoranthene	15.630	252	130312	14.52	ppm	96
105) Benzo[k]fluoranthene	15.667	252	42304	3.65	ppm	98
106) Benzo[a]pyrene	16.170	252	39245	4.69	ppm	94
107) Indeno[1,2,3-cd]pyrene	17.935	276	37114	7.68	ppm	83
108) Dibenz[a,h]anthracene	17.978	278	7253	1.43	ppm	93
109) Benzo[g,h,i]perylene	18.293	276	31552	4.21	ppm	91

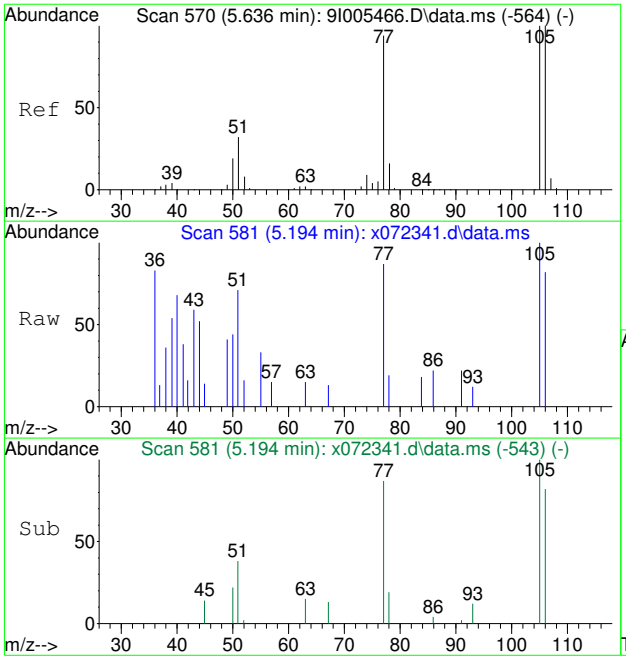
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072341.d
Acq On : 11 Aug 2020 6:00 pm
Operator : marthav
Sample : fa77576-9 E
Misc : op81482,sx2950,30.2,,,1,1,soil
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 12 02:43:00 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

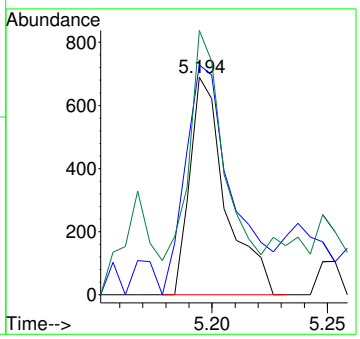


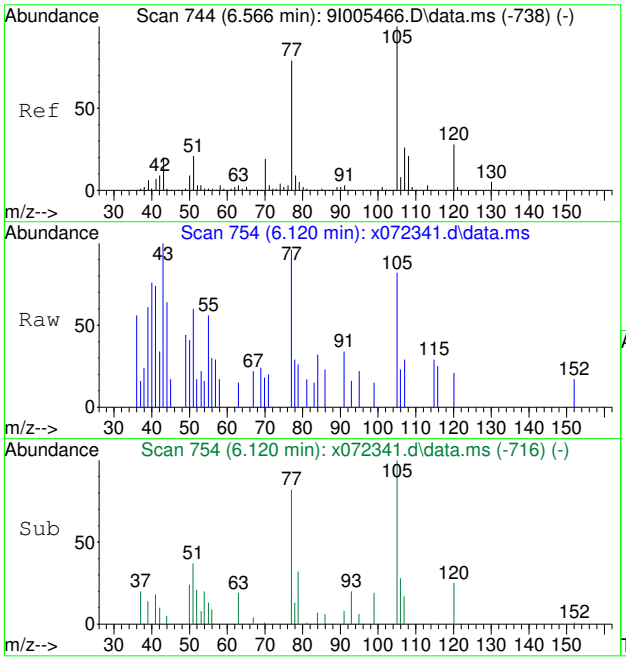


#5
Benzaldehyde
Concen: 0.15 ppm
RT: 5.194 min Scan# 581
Delta R.T. 0.005 min
Lab File: x072341.d
Acq: 11 Aug 2020 6:00 pm

Tgt Ion:106 Resp: 745

Ion	Ratio	Lower	Upper
106	100		
77	92.3	63.9	123.9
105	102.4	70.0	130.0

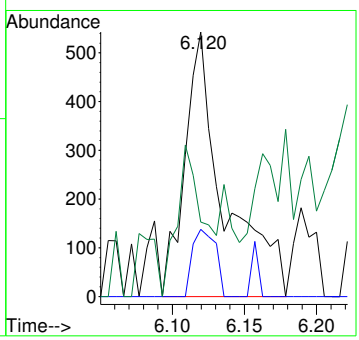


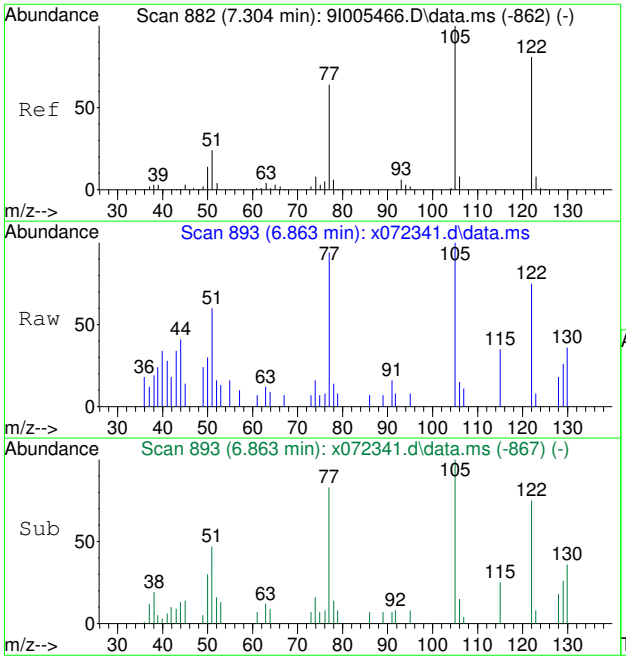


#18
Acetophenone
Concen: 0.12 ppm
RT: 6.120 min Scan# 754
Delta R.T. 0.005 min
Lab File: x072341.d
Acq: 11 Aug 2020 6:00 pm

Tgt Ion:105 Resp: 1029

Ion	Ratio	Lower	Upper
105	100		
120	25.4	0.0	58.3
106	0.0	0.0	38.0

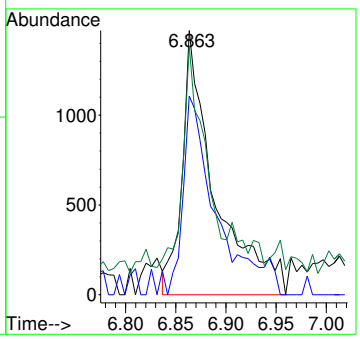


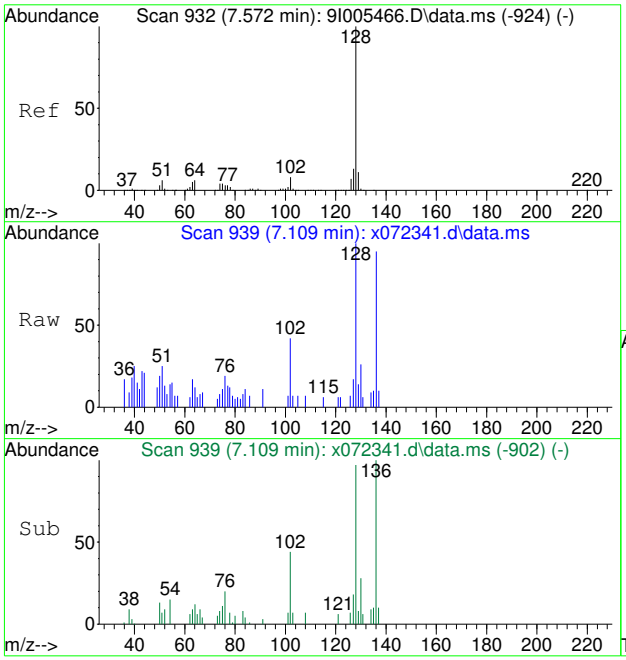


#30
Benzoic Acid
Concen: 0.90 ppm
RT: 6.863 min Scan# 893
Delta R.T. -0.059 min
Lab File: x072341.d
Acq: 11 Aug 2020 6:00 pm

Tgt Ion:105 Resp: 3346

Ion	Ratio	Lower	Upper
105	100		
122	73.8	51.2	111.2
77	86.5	34.1	94.1

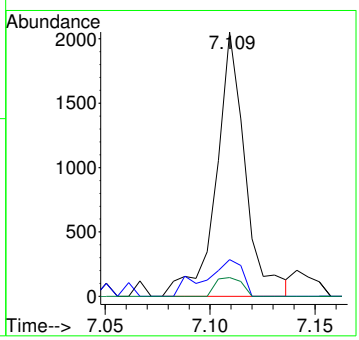


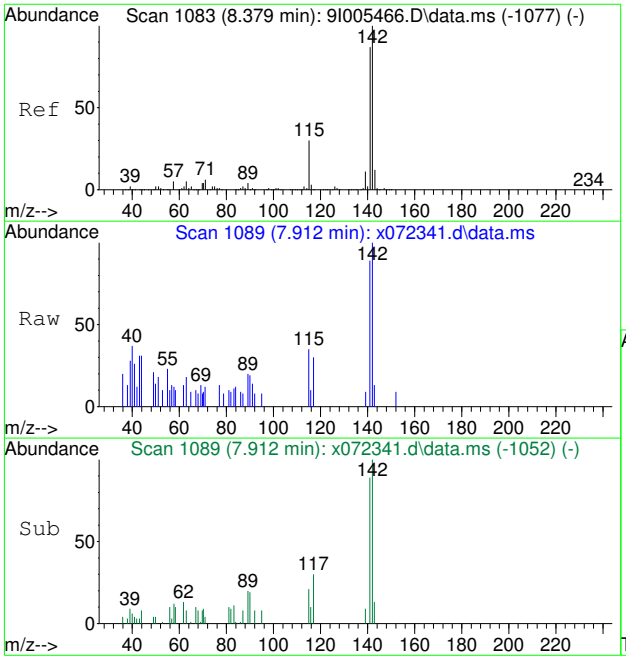


#34
Naphthalene
Concen: 0.12 ppm
RT: 7.109 min Scan# 939
Delta R.T. 0.000 min
Lab File: x072341.d
Acq: 11 Aug 2020 6:00 pm

Tgt Ion:128 Resp: 1970

Ion	Ratio	Lower	Upper
128	100		
129	14.4	0.0	41.4
126	7.3	0.0	37.4

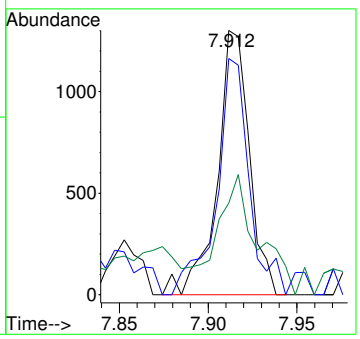


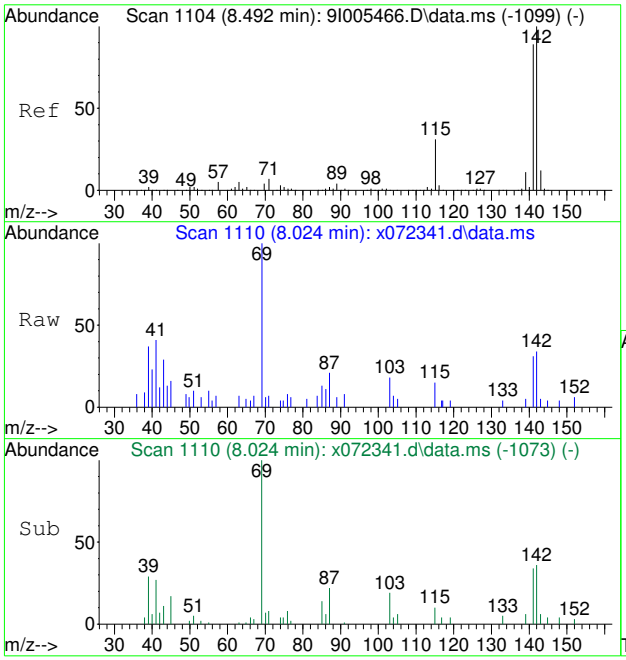


#40
2-Methylnaphthalene
Concen: 0.15 ppm
RT: 7.912 min Scan# 1089
Delta R.T. 0.000 min
Lab File: x072341.d
Acq: 11 Aug 2020 6:00 pm

Tgt Ion:142 Resp: 1634

Ion	Ratio	Lower	Upper
142	100		
141	89.3	56.8	116.8
115	30.1	0.0	60.0

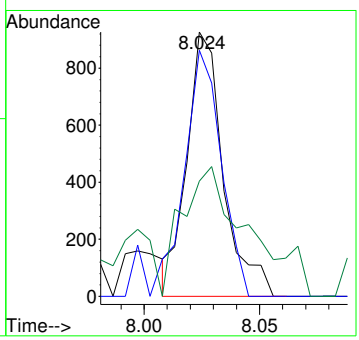


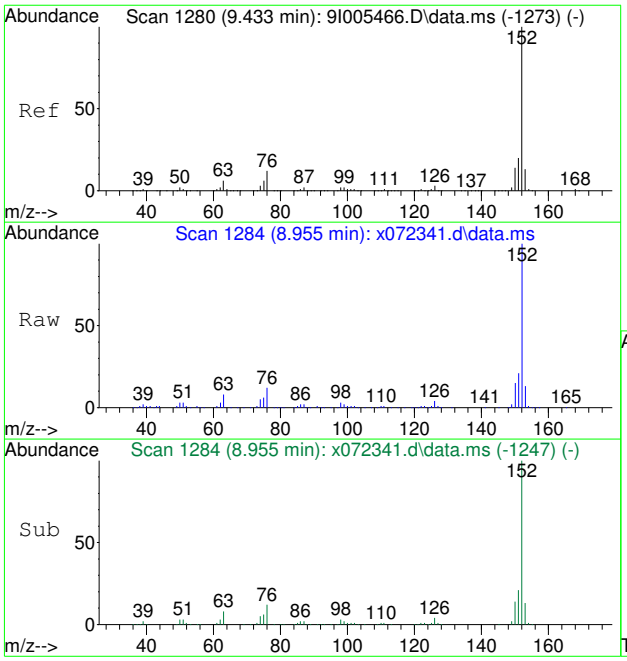


#41
1-Methylnaphthalene
Concen: 0.10 ppm
RT: 8.024 min Scan# 1110
Delta R.T. 0.000 min
Lab File: x072341.d
Acq: 11 Aug 2020 6:00 pm

Tgt Ion:142 Resp: 1016

Ion	Ratio	Lower	Upper
142	100		
141	92.6	59.0	119.0
115	39.1	1.1	61.1

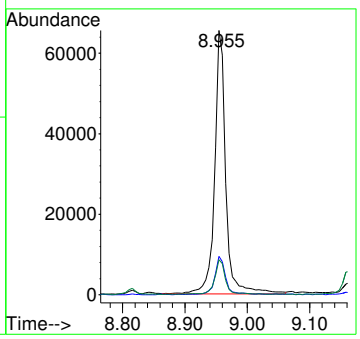


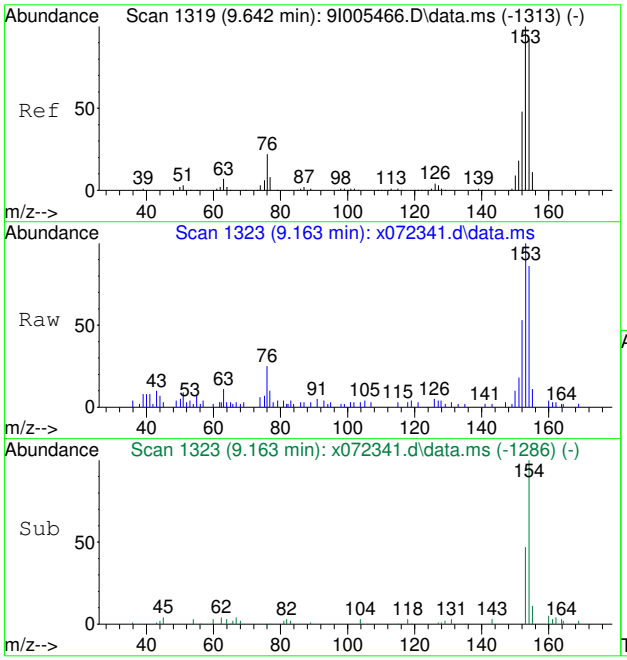


#52
Acenaphthylene
Concen: 5.43 ppm
RT: 8.955 min Scan# 1284
Delta R.T. 0.000 min
Lab File: x072341.d
Acq: 11 Aug 2020 6:00 pm

Tgt Ion:152 Resp: 80663

Ion	Ratio	Lower	Upper
152	100		
150	14.5	0.0	44.3
153	13.2	0.0	43.3

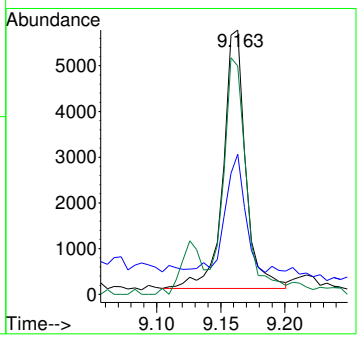


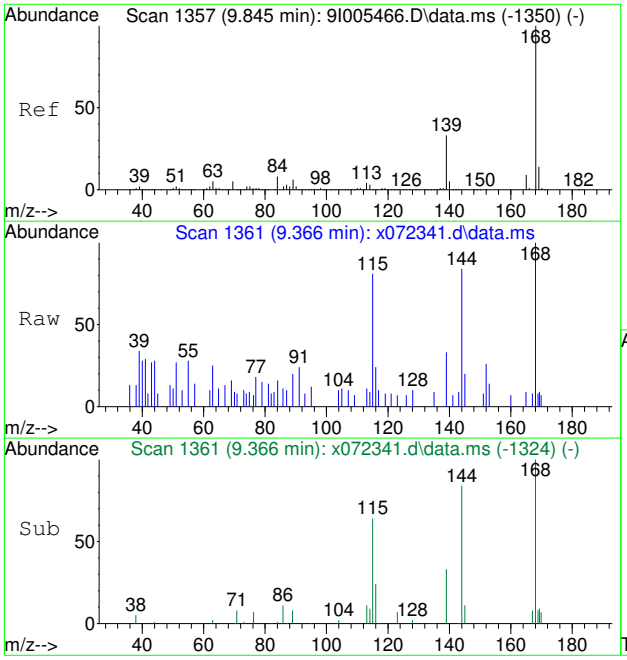


#57
Acenaphthene
Concen: 0.70 ppm
RT: 9.163 min Scan# 1323
Delta R.T. 0.000 min
Lab File: x072341.d
Acq: 11 Aug 2020 6:00 pm

Tgt Ion:153 Resp: 6924

Ion	Ratio	Lower	Upper
153	100		
152	45.9	18.4	78.4
154	86.5	62.4	122.4

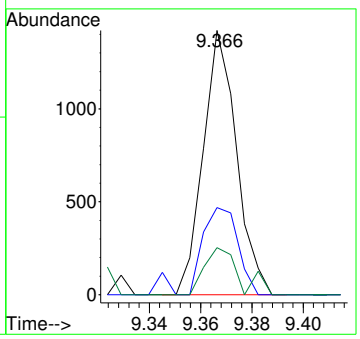


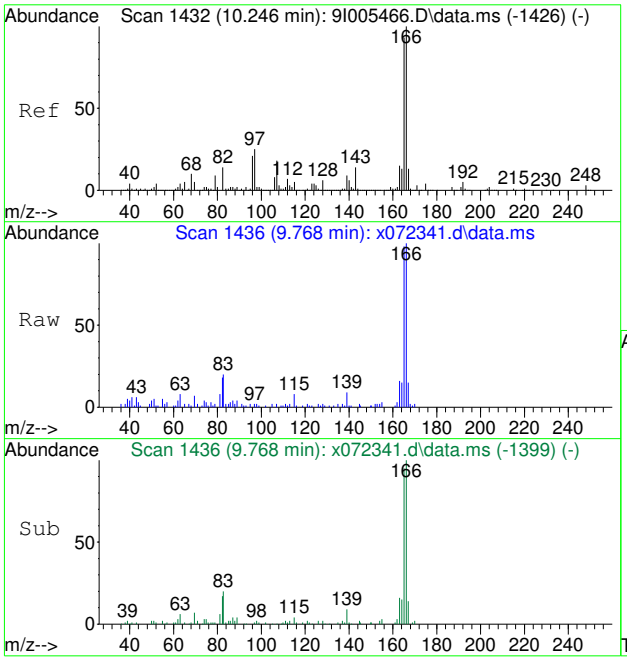


#60
Dibenzofuran
Concen: 0.10 ppm
RT: 9.366 min Scan# 1361
Delta R.T. 0.000 min
Lab File: x072341.d
Acq: 11 Aug 2020 6:00 pm

Tgt Ion:168 Resp: 1288

Ion	Ratio	Lower	Upper
168	100		
139	28.7	3.0	63.0
169	17.8	0.0	43.5

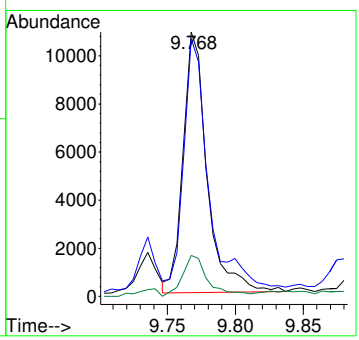


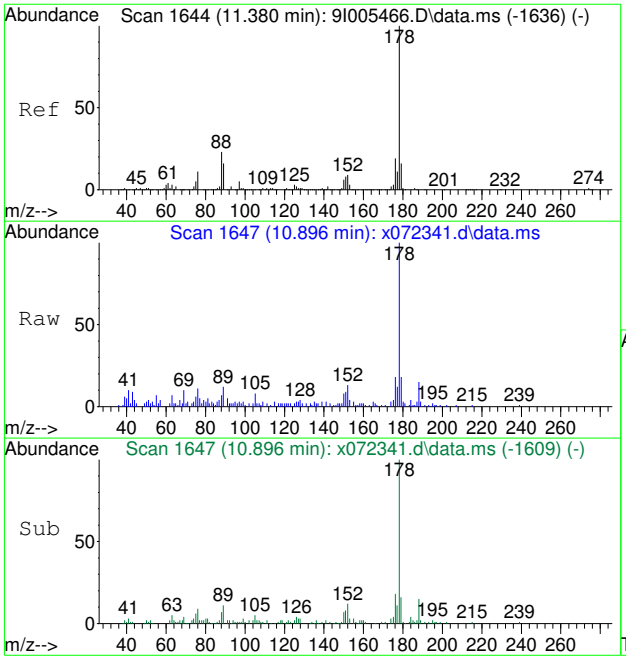


#65
Fluorene
Concen: 1.30 ppm
RT: 9.768 min Scan# 1436
Delta R.T. 0.000 min
Lab File: x072341.d
Acq: 11 Aug 2020 6:00 pm

Tgt Ion:166 Resp: 13335

Ion	Ratio	Lower	Upper
166	100		
165	96.3	62.7	122.7
167	15.0	0.0	43.5

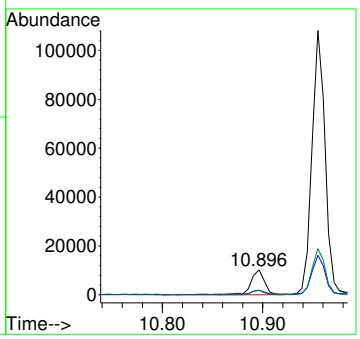


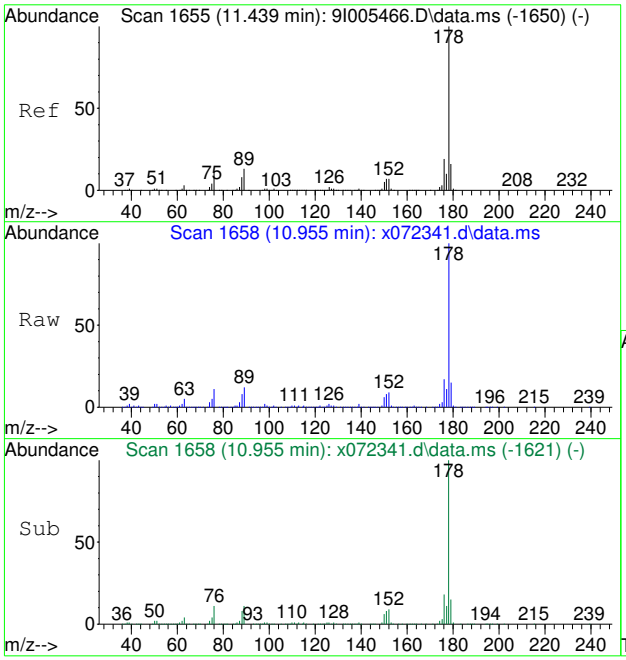


#84
Phenanthrene
Concen: 0.65 ppm
RT: 10.896 min Scan# 1647
Delta R.T. 0.005 min
Lab File: x072341.d
Acq: 11 Aug 2020 6:00 pm

Tgt Ion:178 Resp: 9951

Ion	Ratio	Lower	Upper
178	100		
179	16.1	0.0	45.8
176	17.7	0.0	49.3

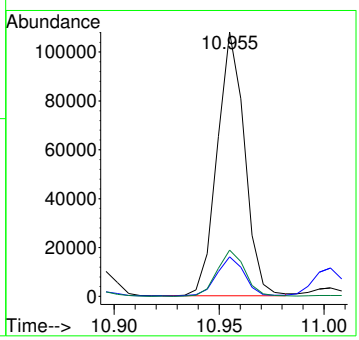


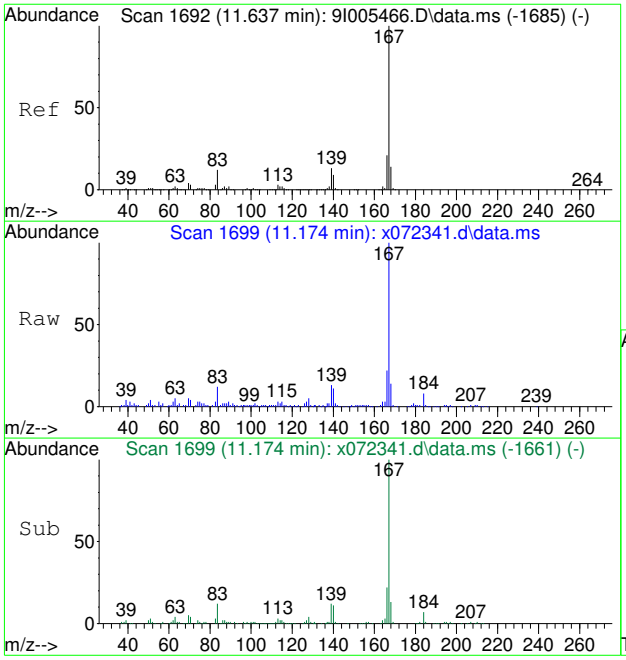


#85
Anthracene
Concen: 6.13 ppm
RT: 10.955 min Scan# 1658
Delta R.T. 0.000 min
Lab File: x072341.d
Acq: 11 Aug 2020 6:00 pm

Tgt Ion:178 Resp: 98137

Ion	Ratio	Lower	Upper
178	100		
179	14.7	0.0	46.0
176	17.4	0.0	49.3

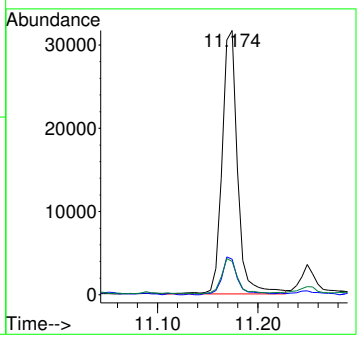


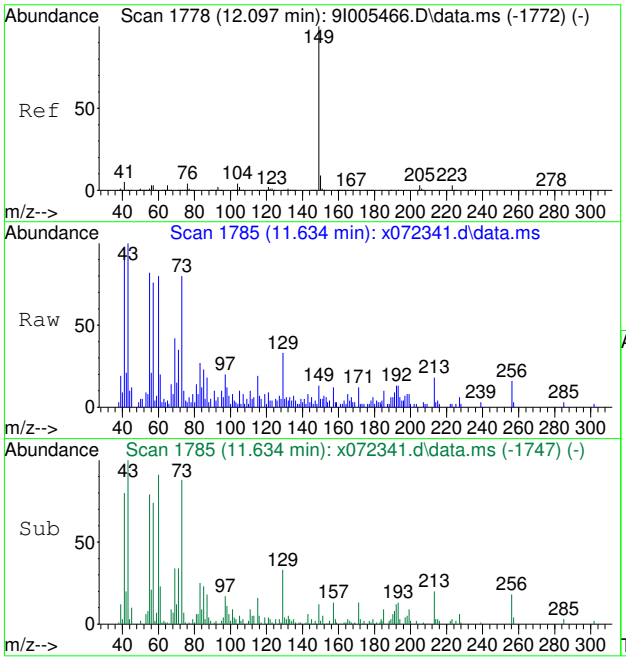


#87
Carbazole
Concen: 2.38 ppm
RT: 11.174 min Scan# 1699
Delta R.T. 0.005 min
Lab File: x072341.d
Acq: 11 Aug 2020 6:00 pm

Tgt Ion:167 Resp: 33661

Ion	Ratio	Lower	Upper
167	100		
168	13.5	0.0	43.9
139	12.0	0.0	42.7

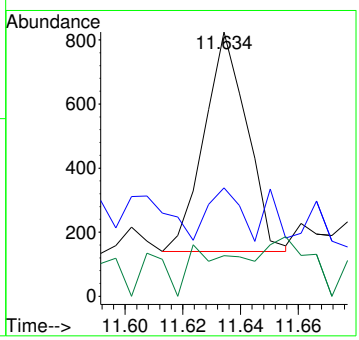


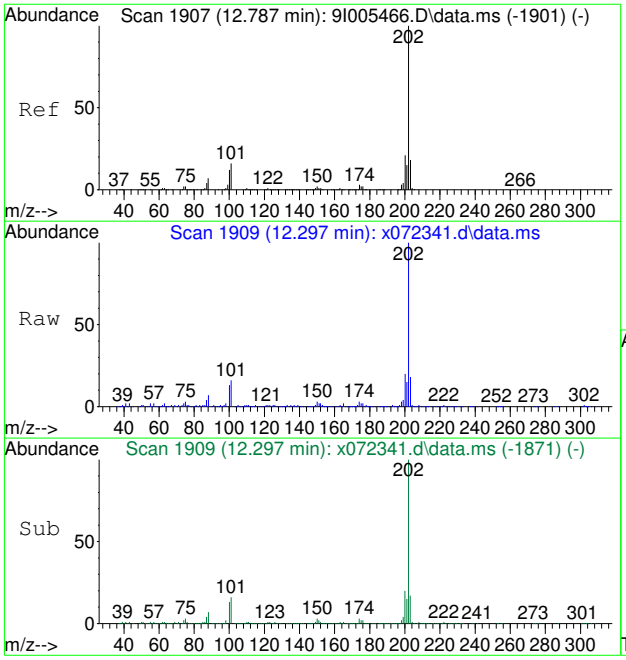


#89
Di-n-butylphthalate
Concen: 0.04 ppm
RT: 11.634 min Scan# 1785
Delta R.T. 0.005 min
Lab File: x072341.d
Acq: 11 Aug 2020 6:00 pm

Tgt Ion:149 Resp: 706

Ion	Ratio	Lower	Upper
149	100		
150	17.3	0.0	39.5
104	0.0	0.0	34.2

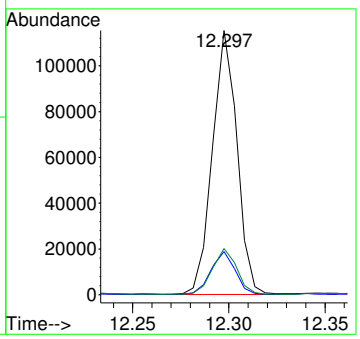


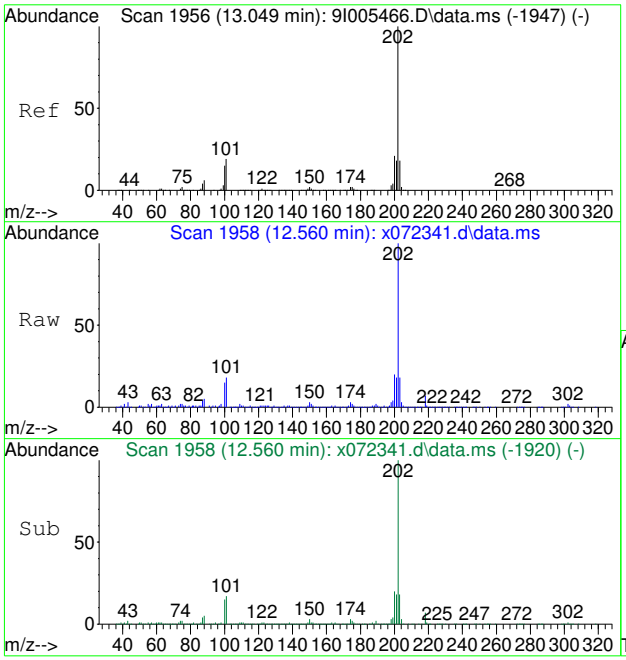


#91
Fluoranthene
Concen: 7.19 ppm
RT: 12.297 min Scan# 1909
Delta R.T. 0.005 min
Lab File: x072341.d
Acq: 11 Aug 2020 6:00 pm

Tgt Ion:202 Resp: 102411

Ion	Ratio	Lower	Upper
202	100		
101	16.0	0.0	45.8
203	17.4	0.0	48.1

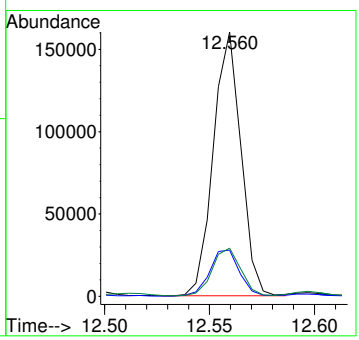


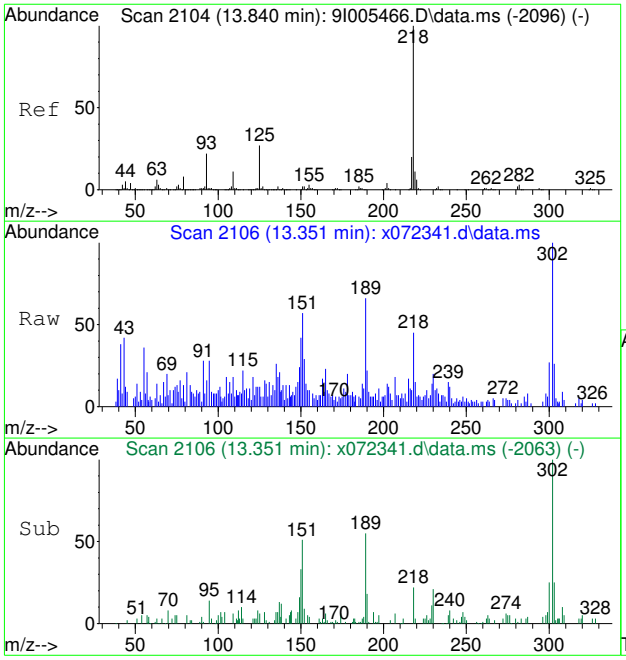


#94
Pyrene
Concen: 8.69 ppm
RT: 12.560 min Scan# 1958
Delta R.T. 0.005 min
Lab File: x072341.d
Acq: 11 Aug 2020 6:00 pm

Tgt Ion:202 Resp: 147144

Ion	Ratio	Lower	Upper
202	100		
101	17.3	0.0	48.7
203	17.8	0.0	48.4

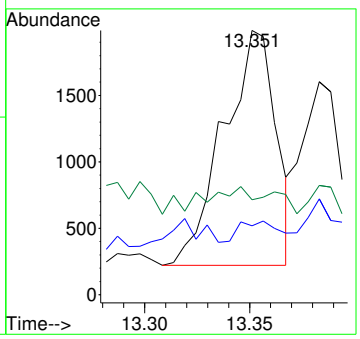


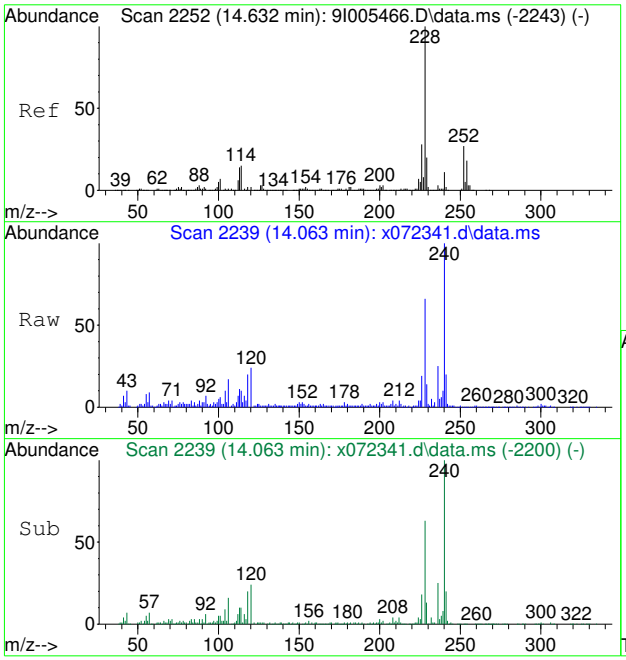


#96
Famphur
Concen: 0.76 ppm
RT: 13.351 min Scan# 2106
Delta R.T. 0.032 min
Lab File: x072341.d
Acq: 11 Aug 2020 6:00 pm

Tgt Ion:218 Resp: 3063

Ion	Ratio	Lower	Upper
218	100		
125	5.4	0.0	57.1
93	2.5	0.0	52.0

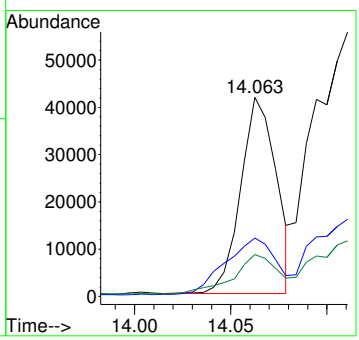


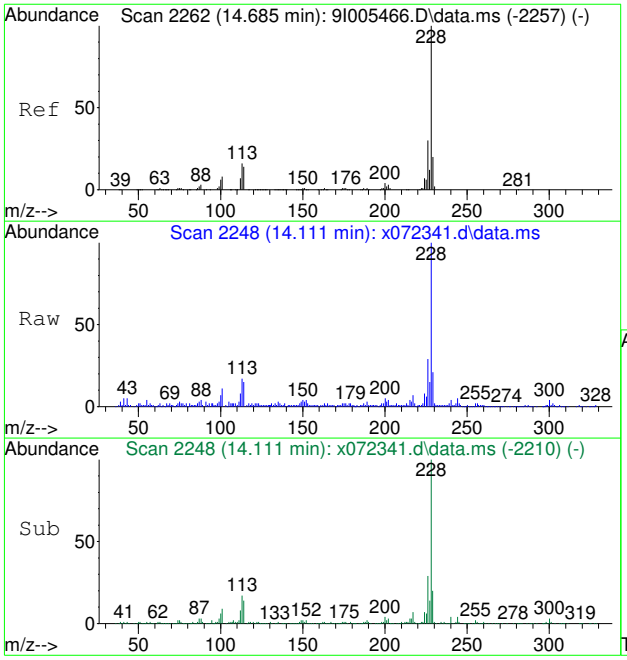


#99
Benzo[a]anthracene
Concen: 4.19 ppm
RT: 14.063 min Scan# 2239
Delta R.T. 0.011 min
Lab File: x072341.d
Acq: 11 Aug 2020 6:00 pm

Tgt Ion:228 Resp: 53655

Ion	Ratio	Lower	Upper
228	100		
226	29.0	0.0	57.5
229	19.4	0.0	49.9

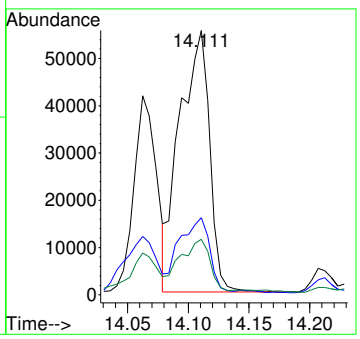


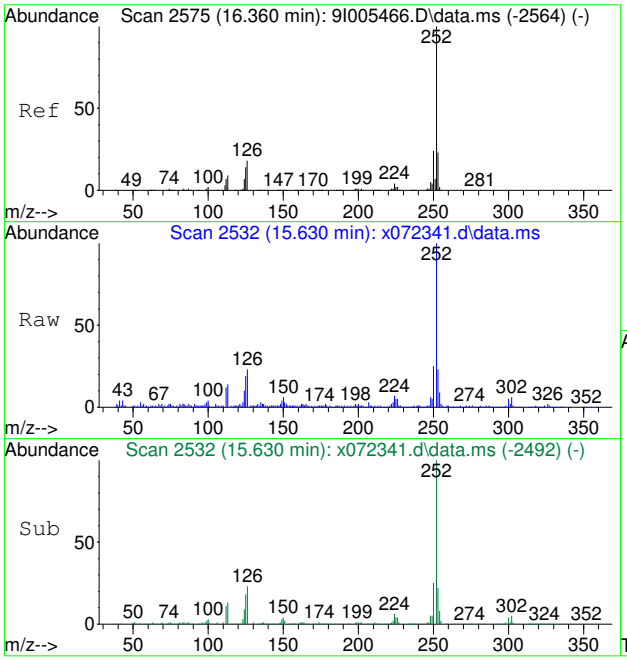


#100
Chrysene
Concen: 6.92 ppm
RT: 14.111 min Scan# 2248
Delta R.T. 0.005 min
Lab File: x072341.d
Acq: 11 Aug 2020 6:00 pm

Tgt Ion:228 Resp: 94425

Ion	Ratio	Lower	Upper
228	100		
226	28.8	0.4	60.4
229	19.7	0.0	50.1

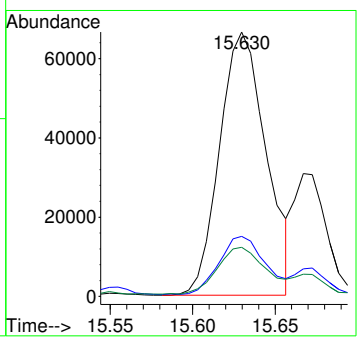


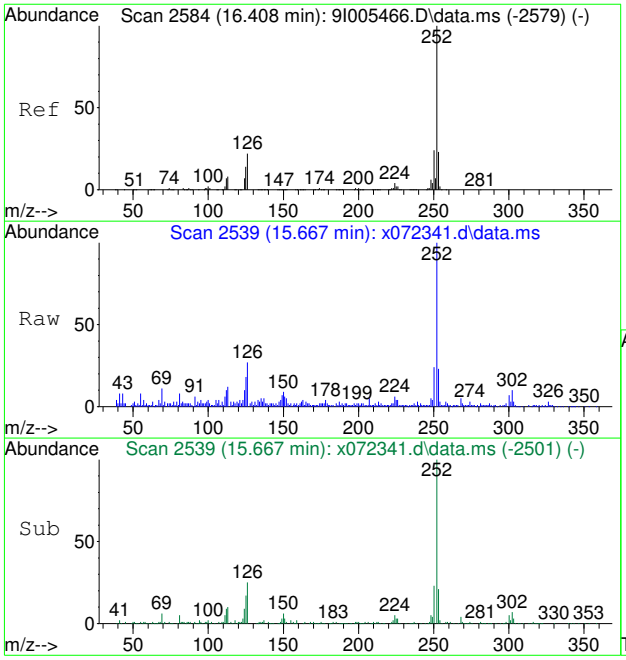


#104
Benzo[b]fluoranthene
Concen: 14.52 ppm
RT: 15.630 min Scan# 2532
Delta R.T. 0.016 min
Lab File: x072341.d
Acq: 11 Aug 2020 6:00 pm

Tgt Ion:252 Resp: 130312

Ion	Ratio	Lower	Upper
252	100		
253	22.3	0.0	52.5
125	17.5	0.0	44.0

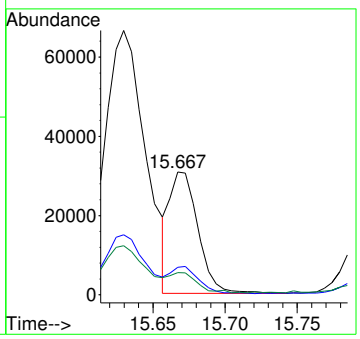


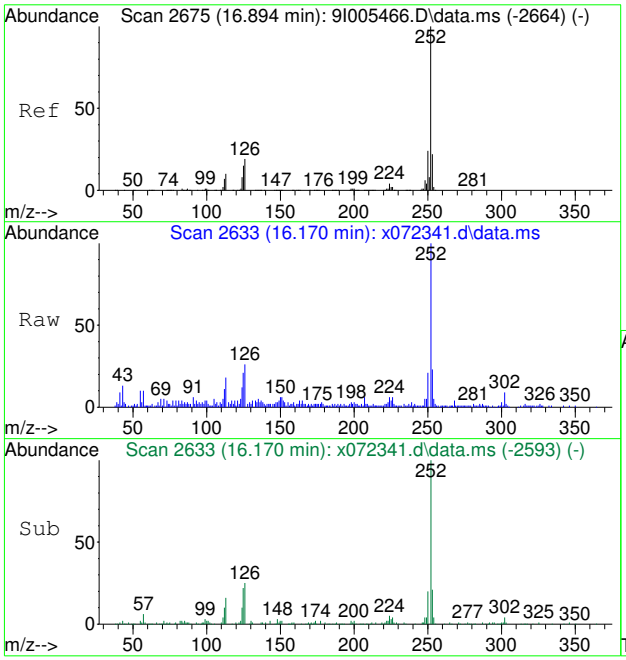


#105
Benzo[k]fluoranthene
Concen: 3.65 ppm
RT: 15.667 min Scan# 2539
Delta R.T. 0.005 min
Lab File: x072341.d
Acq: 11 Aug 2020 6:00 pm

Tgt Ion:252 Resp: 42304

Ion	Ratio	Lower	Upper
252	100		
253	21.5	0.0	52.5
125	15.3	0.0	44.4

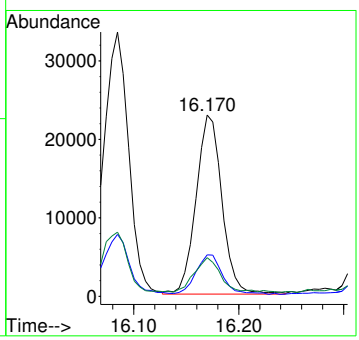


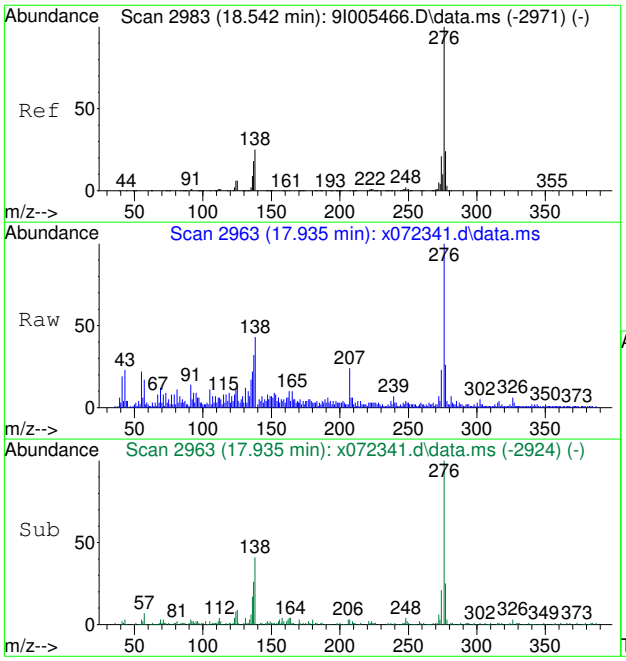


#106
Benzo[a]pyrene
Concen: 4.69 ppm
RT: 16.170 min Scan# 2633
Delta R.T. 0.016 min
Lab File: x072341.d
Acq: 11 Aug 2020 6:00 pm

Tgt Ion:252 Resp: 39245

Ion	Ratio	Lower	Upper
252	100		
253	21.2	0.0	52.3
125	19.1	0.0	44.7

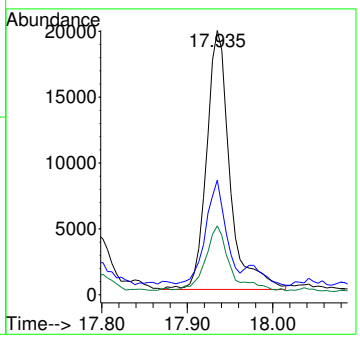


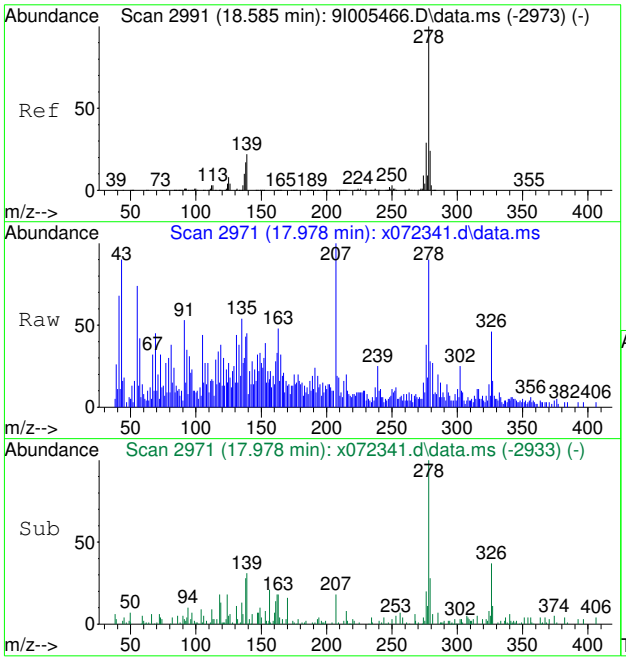


#107
Indeno[1,2,3-cd]pyrene
Concen: 7.68 ppm
RT: 17.935 min Scan# 2963
Delta R.T. 0.011 min
Lab File: x072341.d
Acq: 11 Aug 2020 6:00 pm

Tgt Ion:276 Resp: 37114

Ion	Ratio	Lower	Upper
276	100		
138	40.1	0.0	54.7
277	24.8	0.0	53.8

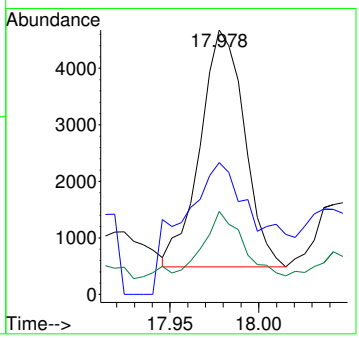


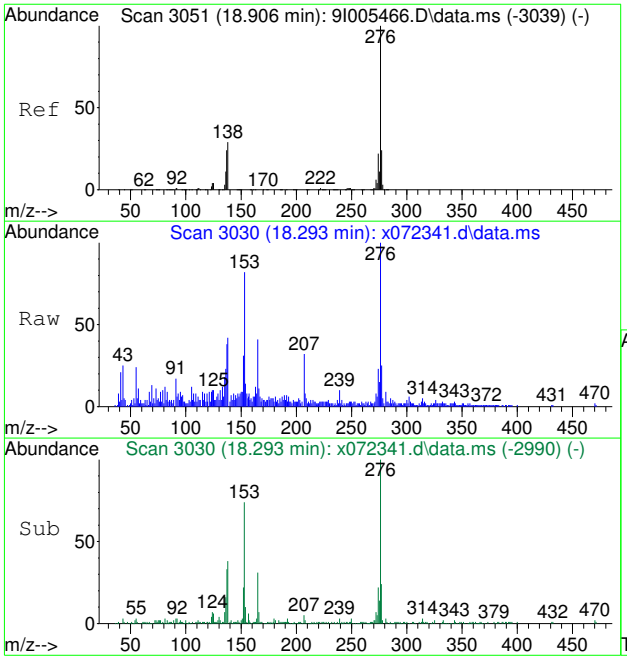


#108
Dibenz[a,h]anthracene
Concen: 1.43 ppm
RT: 17.978 min Scan# 2971
Delta R.T. 0.005 min
Lab File: x072341.d
Acq: 11 Aug 2020 6:00 pm

Tgt Ion:278 Resp: 7253

Ion	Ratio	Lower	Upper
278	100		
139	27.7	0.0	52.4
279	25.7	0.0	54.4

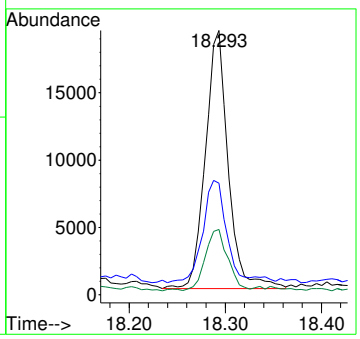




#109
Benzo[g,h,i]perylene
Concen: 4.21 ppm
RT: 18.293 min Scan# 3030
Delta R.T. 0.016 min
Lab File: x072341.d
Acq: 11 Aug 2020 6:00 pm

Tgt Ion:276 Resp: 31552

Ion	Ratio	Lower	Upper
276	100		
138	37.7	0.0	59.4
277	23.4	0.0	54.1



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072342.d
Acq On : 11 Aug 2020 6:26 pm
Operator : marthav
Sample : fa77576-10 E
Misc : op81482,sx2950,30.1,,,1,1,soil
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 12 02:48:13 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	5.665	152	165990	40.00	ppm		0.00
22) Naphthalene-d8	7.088	136	622894	40.00	ppm		0.00
43) Acenaphthene-d10	9.126	164	308442	40.00	ppm		0.00
70) Phenanthrene-d10	10.869	188	528417	40.00	ppm		0.00
92) Chrysene-d12	14.084	240	428216	40.00	ppm		0.02
102) Perylene-d12	16.293	264	342052	40.00	ppm		0.04
110) 1,4-Dichlorobenzene-d4A	5.665	152	165990	40.00	ppm		0.00
120) Naphthalene-d8A	7.088	136	622894	40.00	ppm		0.00
127) Acenaphthene-d10A	9.126	164	308442	40.00	ppm		0.00
136) Phenanthrene-d10A	10.869	188	528417	40.00	ppm		0.00
146) Chrysene-d12A	14.084	240	428216	40.00	ppm		0.02
153) Perylene-d12A	16.293	264	342052	40.00	ppm		0.04
System Monitoring Compounds							
7) 2-Fluorophenol	4.323	112	428459	71.99	ppm		0.02
Spiked Amount 100.000	Range 40 - 102		Recovery = 71.99%				
9) Phenol-d5	5.344	99	540131	76.28	ppm		0.01
Spiked Amount 100.000	Range 41 - 100		Recovery = 76.28%				
23) Nitrobenzene-d5	6.280	82	232113	36.08	ppm		0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 72.16%				
47) 2-Fluorobiphenyl	8.356	172	413245	37.01	ppm		0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 74.02%				
75) 2,4,6-Tribromophenol	10.062	330	84336	74.94	ppm		0.00
Spiked Amount 100.000	Range 42 - 108		Recovery = 74.94%				
95) Terphenyl-d14	12.790	244	417212	36.67	ppm		0.01
Spiked Amount 50.000	Range 45 - 119		Recovery = 73.34%				
Target Compounds							Qvalue
5) Benzaldehyde	5.194	106	2546	0.51	ppm		95
15) Benzyl alcohol	5.847	108	1014	0.23	ppm		78
18) Acetophenone	6.120	105	2575	0.29	ppm		94
27) 2,4-Dimethylphenol	6.762	107	1296	0.23	ppm		77
34) Naphthalene	7.109	128	6114	0.36	ppm		90
40) 2-Methylnaphthalene	7.912	142	4674	0.42	ppm		93
41) 1-Methylnaphthalene	8.024	142	2874	0.27	ppm		96
48) 1,1'-Biphenyl	8.468	154	1314	0.10	ppm		95
52) Acenaphthylene	8.960	152	256740	16.67	ppm		98
56) o-Dinitrobenzene	8.955	50	7660	3.11	ppm	#	1
57) Acenaphthene	9.163	153	18902	1.85	ppm		100
60) Dibenzofuran	9.366	168	6447	0.47	ppm		92
65) Fluorene	9.773	166	30930	2.90	ppm		97
84) Phenanthrene	10.896	178	71744	4.49	ppm		98
85) Anthracene	10.960	178	806555	48.46	ppm		98
87) Carbazole	11.174	167	140884	9.59	ppm		98
91) Fluoranthene	12.303	202	544943	36.78	ppm		98
94) Pyrene	12.565	202	755329	42.48	ppm		99
99) Benzo[a]anthracene	14.073	228	263660	19.59	ppm		98
100) Chrysene	14.121	228	481304	33.58	ppm		99
101) bis(2-Ethylhexyl)phtha...	14.234	149	4773	0.53	ppm		87
104) Benzo[b]fluoranthene	15.651	252	657564	63.01	ppm		97
105) Benzo[k]fluoranthene	15.689	252	205192	16.90	ppm		98
106) Benzo[a]pyrene	16.186	252	187728	20.60	ppm		95
107) Indeno[1,2,3-cd]pyrene	17.951	276	169346	28.81	ppm		87
108) Dibenz[a,h]anthracene	17.988	278	32255	5.82	ppm		84
109) Benzo[g,h,i]perylene	18.309	276	131268	15.88	ppm		89

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072342.d
Acq On : 11 Aug 2020 6:26 pm
Operator : marthav
Sample : fa77576-10 E
Misc : op81482,sx2950,30.1,,,1,1,soil
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 12 02:48:13 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

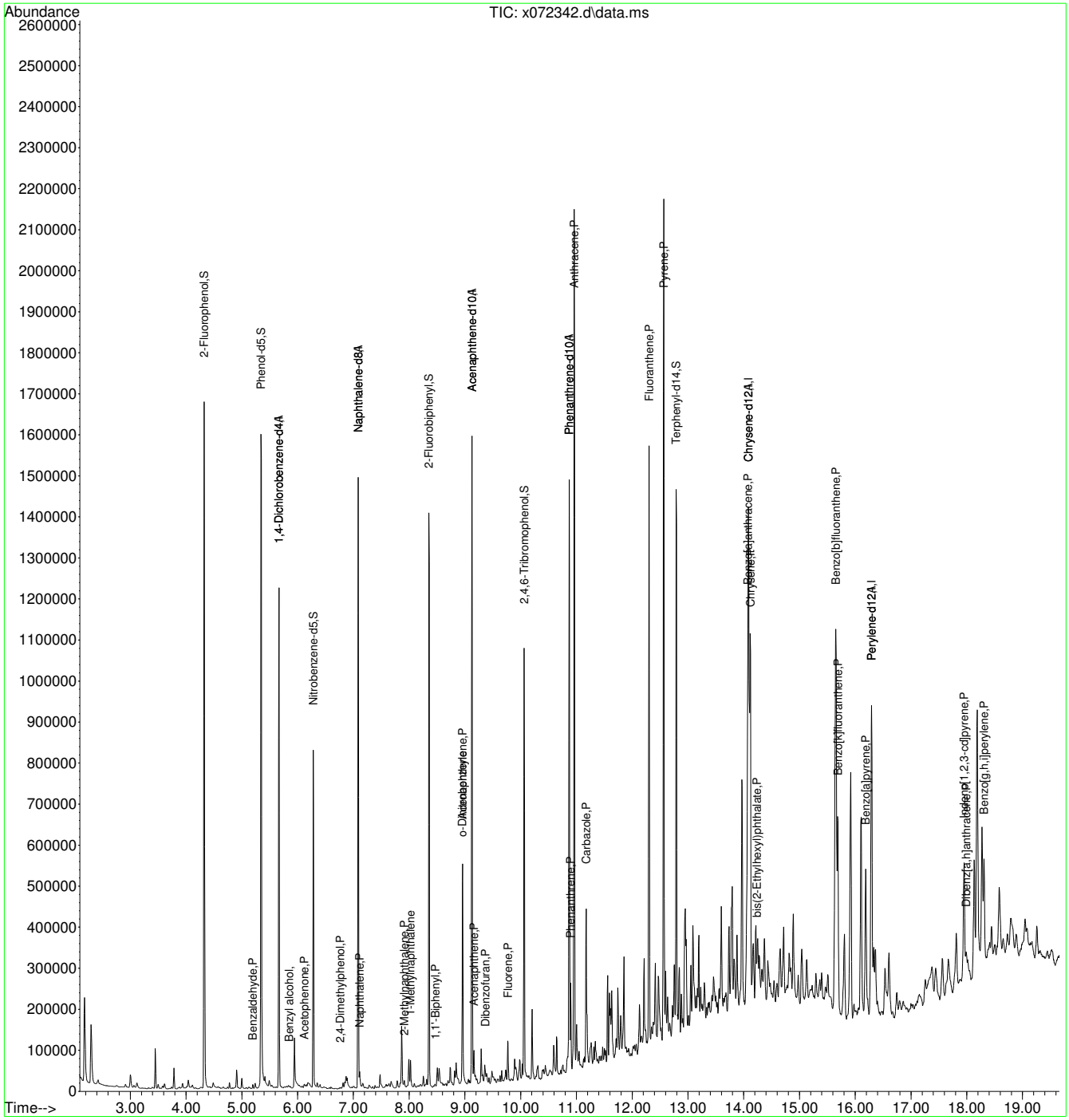
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

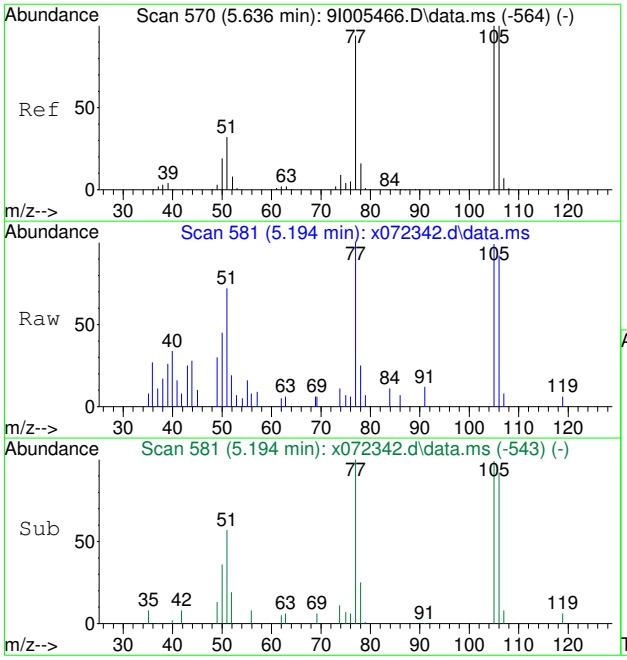
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072342.d
Acq On : 11 Aug 2020 6:26 pm
Operator : marthav
Sample : fa77576-10 E
Misc : op81482,sx2950,30.1,,,1,1,soil
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 12 02:48:13 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

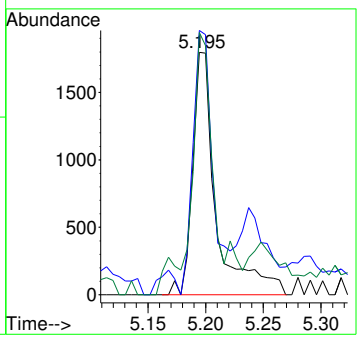


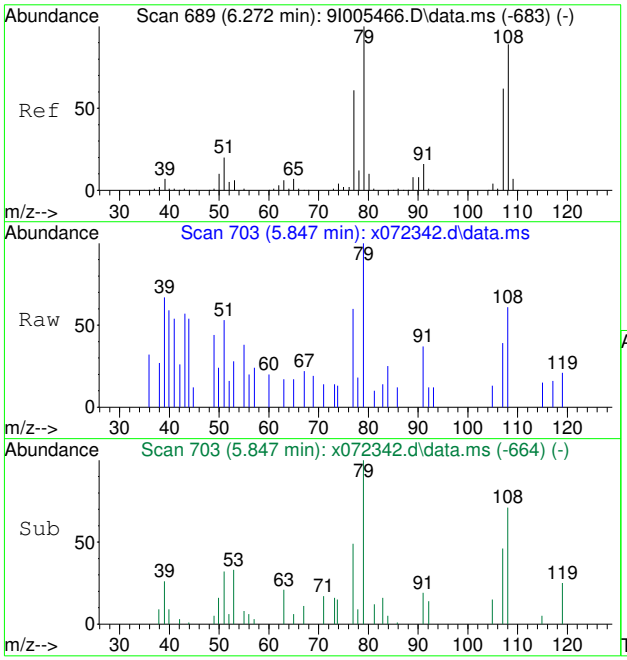


#5
Benzaldehyde
Concen: 0.51 ppm
RT: 5.194 min Scan# 581
Delta R.T. 0.005 min
Lab File: x072342.d
Acq: 11 Aug 2020 6:26 pm

Tgt Ion:106 Resp: 2546

Ion	Ratio	Lower	Upper
106	100		
77	99.6	63.9	123.9
105	96.7	70.0	130.0

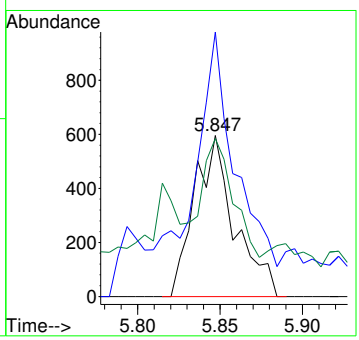


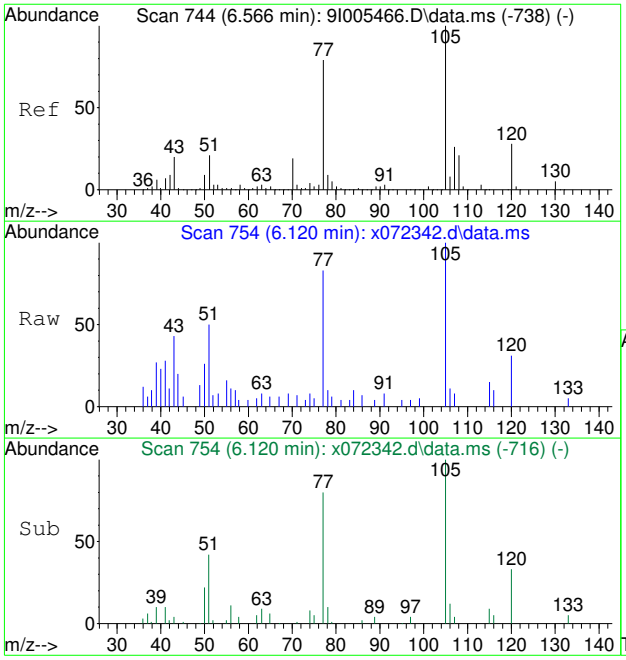


#15
Benzyl alcohol
Concen: 0.23 ppm
RT: 5.847 min Scan# 703
Delta R.T. 0.011 min
Lab File: x072342.d
Acq: 11 Aug 2020 6:26 pm

Tgt Ion:108 Resp: 1014

Ion	Ratio	Lower	Upper
108	100		
79	131.5	81.8	141.8
77	46.3	38.6	98.6

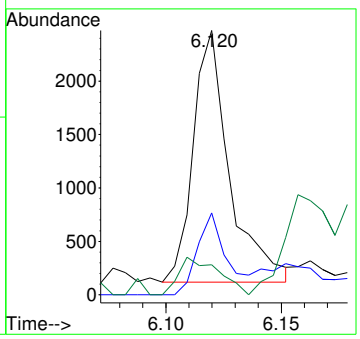


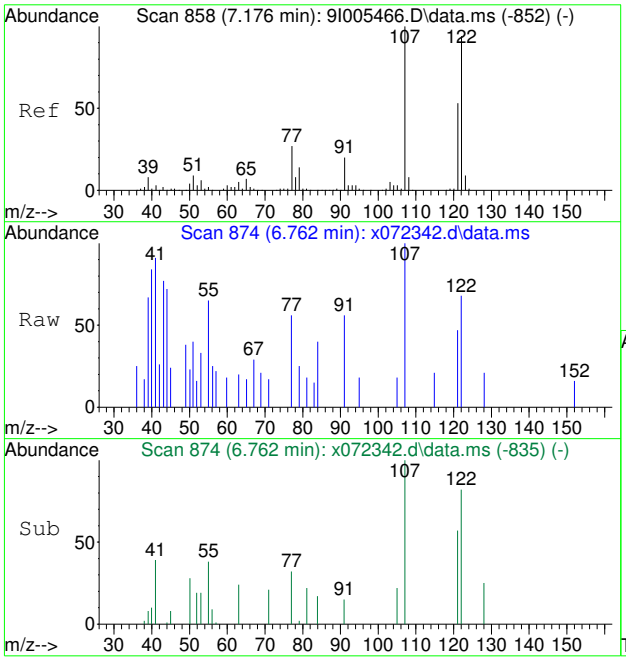


#18
Acetophenone
Concen: 0.29 ppm
RT: 6.120 min Scan# 754
Delta R.T. 0.005 min
Lab File: x072342.d
Acq: 11 Aug 2020 6:26 pm

Tgt Ion:105 Resp: 2575

Ion	Ratio	Lower	Upper
105	100		
120	27.1	0.0	58.3
106	0.6	0.0	38.0

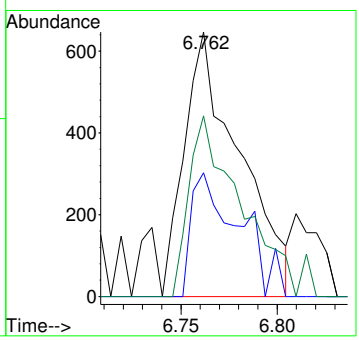


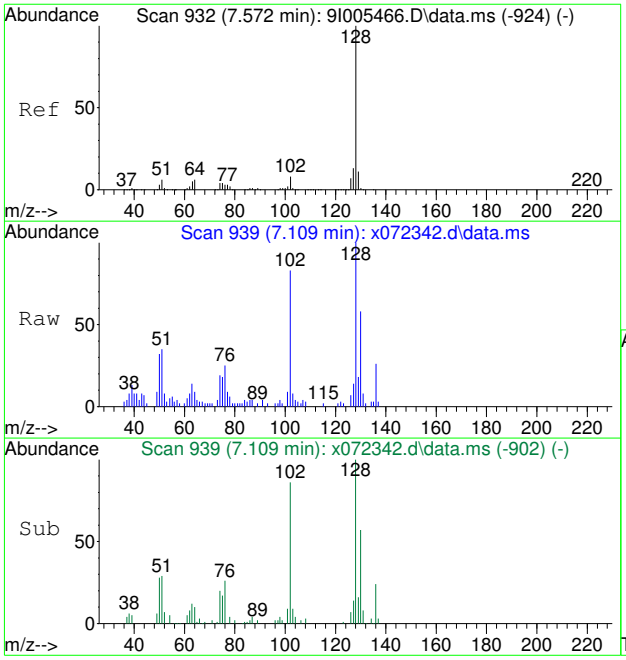


#27
2,4-Dimethylphenol
Concen: 0.23 ppm
RT: 6.762 min Scan# 874
Delta R.T. 0.011 min
Lab File: x072342.d
Acq: 11 Aug 2020 6:26 pm

Tgt Ion:107 Resp: 1296

Ion	Ratio	Lower	Upper
107	100		
121	43.2	23.4	83.4
122	67.0	64.3	124.3

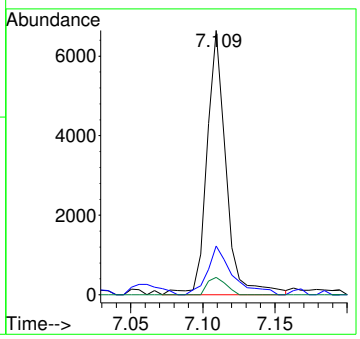


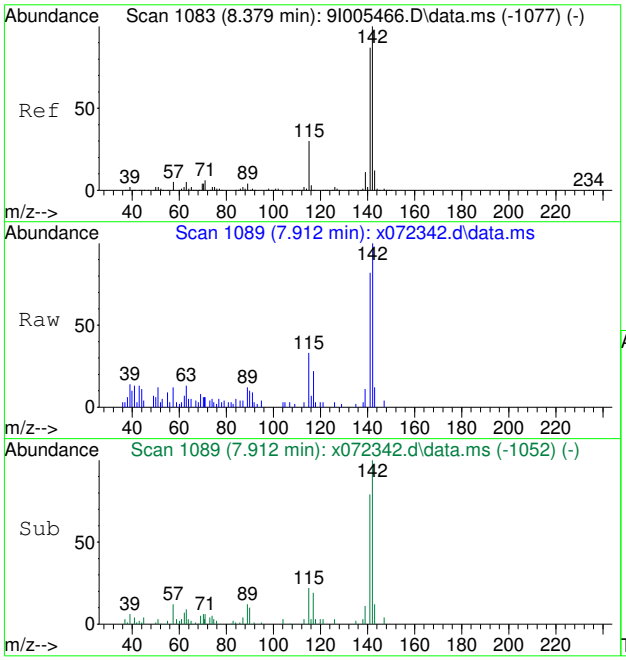


#34
Naphthalene
Concen: 0.36 ppm
RT: 7.109 min Scan# 939
Delta R.T. 0.000 min
Lab File: x072342.d
Acq: 11 Aug 2020 6:26 pm

Tgt Ion:128 Resp: 6114

Ion	Ratio	Lower	Upper
128	100		
129	17.4	0.0	41.4
126	6.7	0.0	37.4

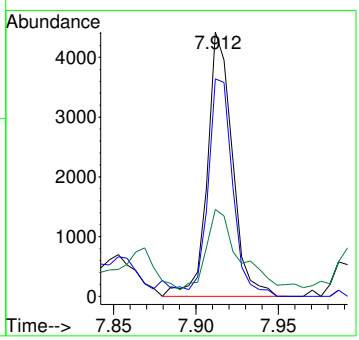


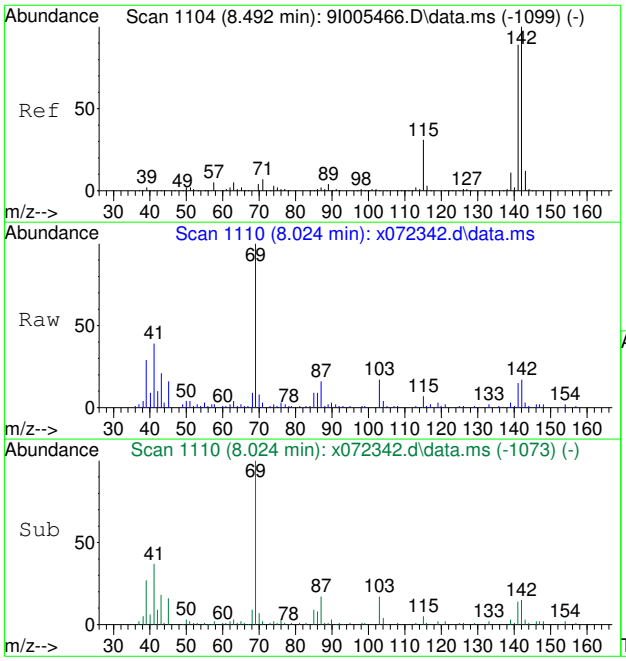


#40
2-Methylnaphthalene
Concen: 0.42 ppm
RT: 7.912 min Scan# 1089
Delta R.T. 0.000 min
Lab File: x072342.d
Acq: 11 Aug 2020 6:26 pm

Tgt Ion:142 Resp: 4674

Ion	Ratio	Lower	Upper
142	100		
141	79.2	56.8	116.8
115	27.7	0.0	60.0

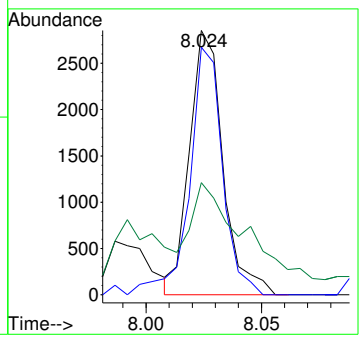


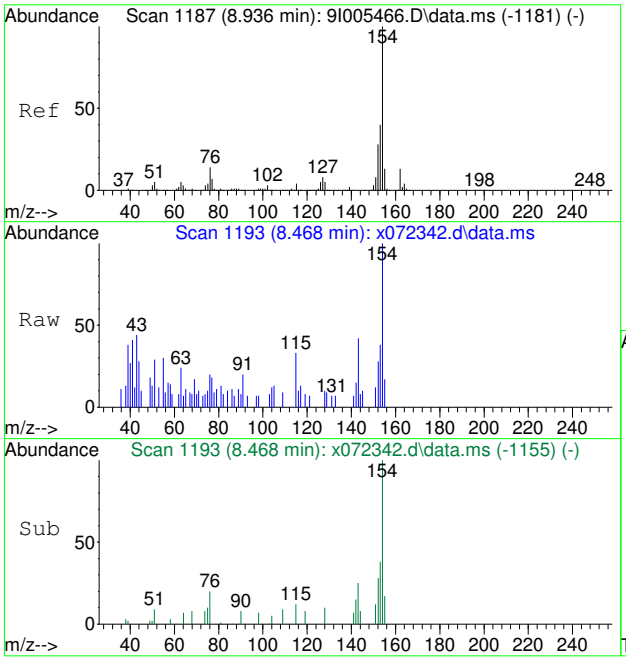


#41
1-Methylnaphthalene
Concen: 0.27 ppm
RT: 8.024 min Scan# 1110
Delta R.T. 0.000 min
Lab File: x072342.d
Acq: 11 Aug 2020 6:26 pm

Tgt Ion:142 Resp: 2874

Ion	Ratio	Lower	Upper
142	100		
141	93.7	59.0	119.0
115	29.6	1.1	61.1

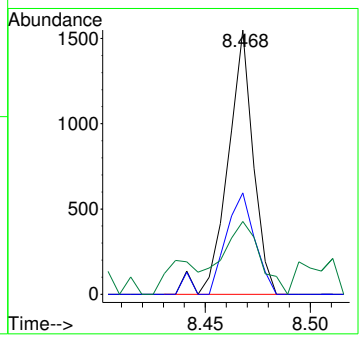


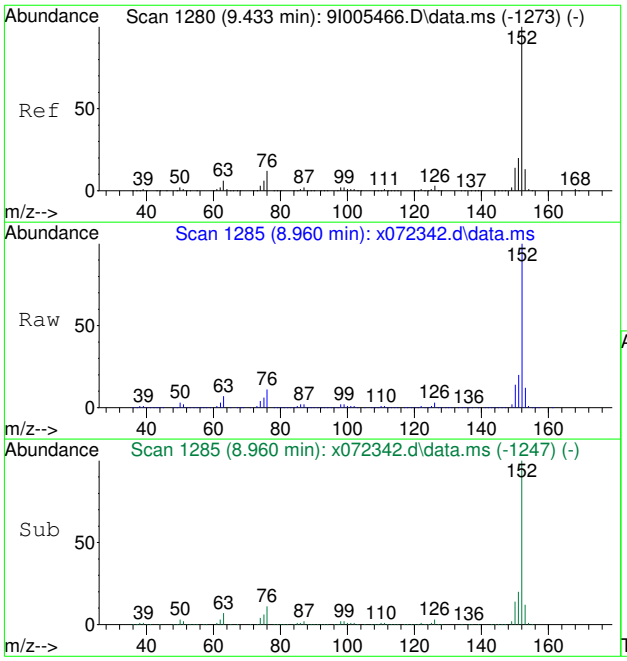


#48
1,1'-Biphenyl
Concen: 0.10 ppm
RT: 8.468 min Scan# 1193
Delta R.T. 0.005 min
Lab File: x072342.d
Acq: 11 Aug 2020 6:26 pm

Tgt Ion:154 Resp: 1314

Ion	Ratio	Lower	Upper
154	100		
153	38.4	10.3	70.3
152	23.6	0.0	58.2

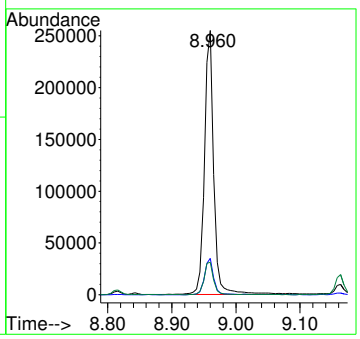


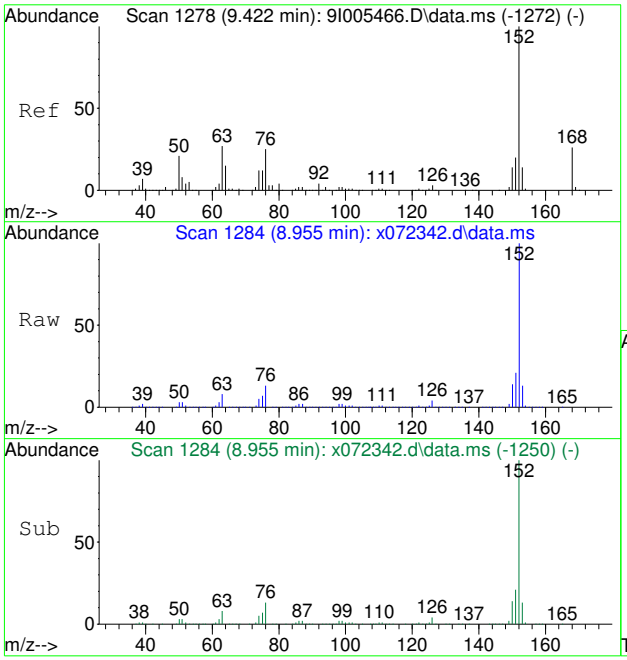


#52
Acenaphthylene
Concen: 16.67 ppm
RT: 8.960 min Scan# 1285
Delta R.T. 0.005 min
Lab File: x072342.d
Acq: 11 Aug 2020 6:26 pm

Tgt Ion:152 Resp: 256740

Ion	Ratio	Lower	Upper
152	100		
150	13.8	0.0	44.3
153	12.3	0.0	43.3

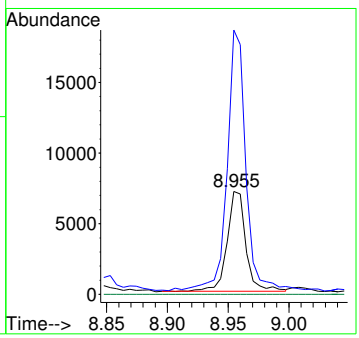


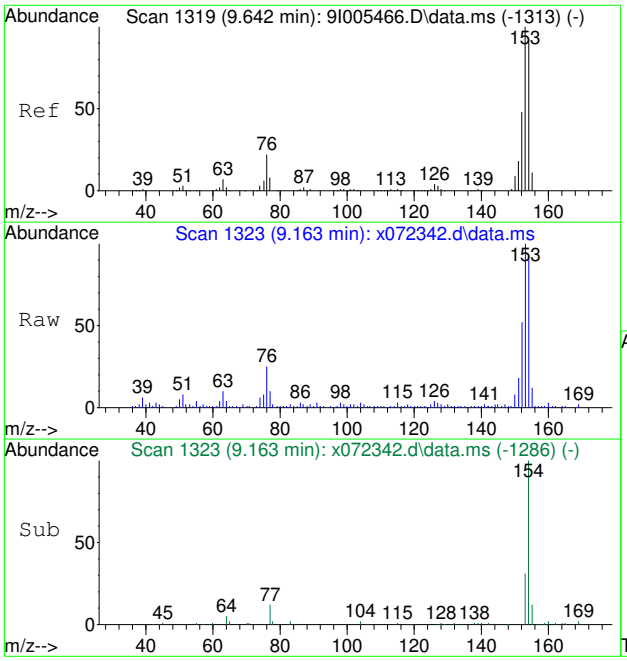


#56
o-Dinitrobenzene
Concen: 3.11 ppm
RT: 8.955 min Scan# 1284
Delta R.T. -0.016 min
Lab File: x072342.d
Acq: 11 Aug 2020 6:26 pm

Tgt Ion: 50 Resp: 7660

Ion	Ratio	Lower	Upper
50	100		
63	261.3	110.3	150.3#
168	0.0	104.0	144.0#

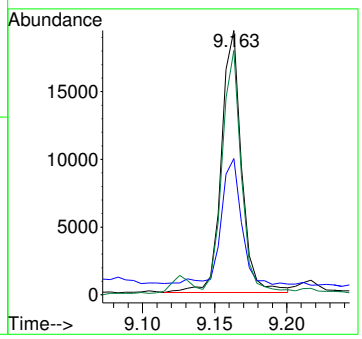


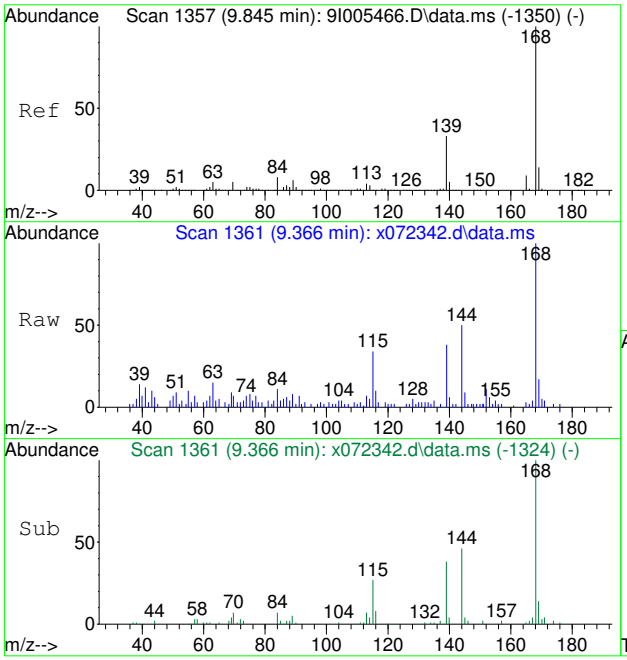


#57
Acenaphthene
Concen: 1.85 ppm
RT: 9.163 min Scan# 1323
Delta R.T. 0.000 min
Lab File: x072342.d
Acq: 11 Aug 2020 6:26 pm

Tgt Ion:153 Resp: 18902

Ion	Ratio	Lower	Upper
153	100		
152	48.2	18.4	78.4
154	92.4	62.4	122.4

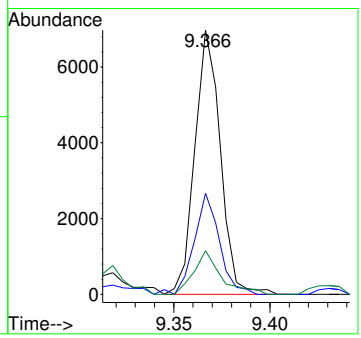


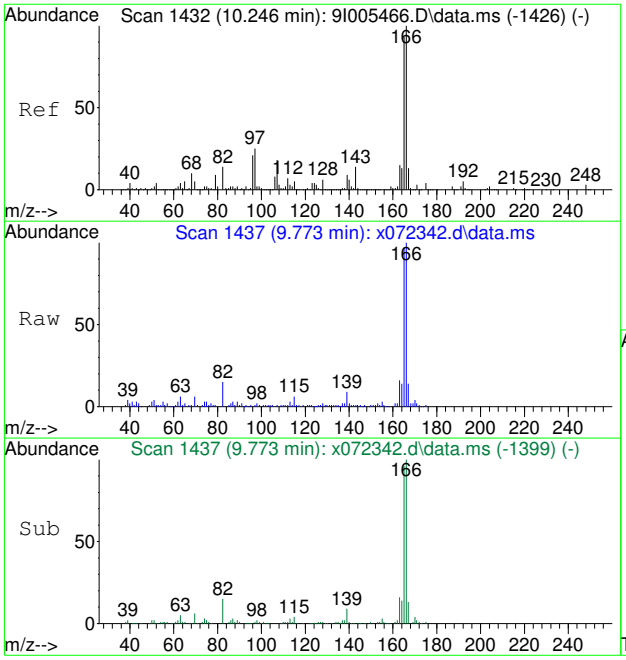


#60
Dibenzofuran
Concen: 0.47 ppm
RT: 9.366 min Scan# 1361
Delta R.T. 0.000 min
Lab File: x072342.d
Acq: 11 Aug 2020 6:26 pm

Tgt Ion:168 Resp: 6447

Ion	Ratio	Lower	Upper
168	100		
139	37.4	3.0	63.0
169	16.6	0.0	43.5

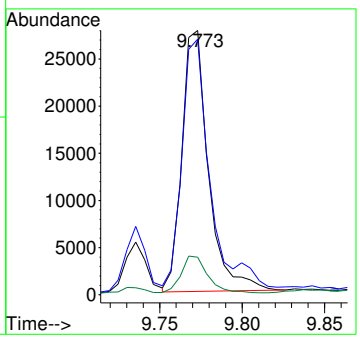


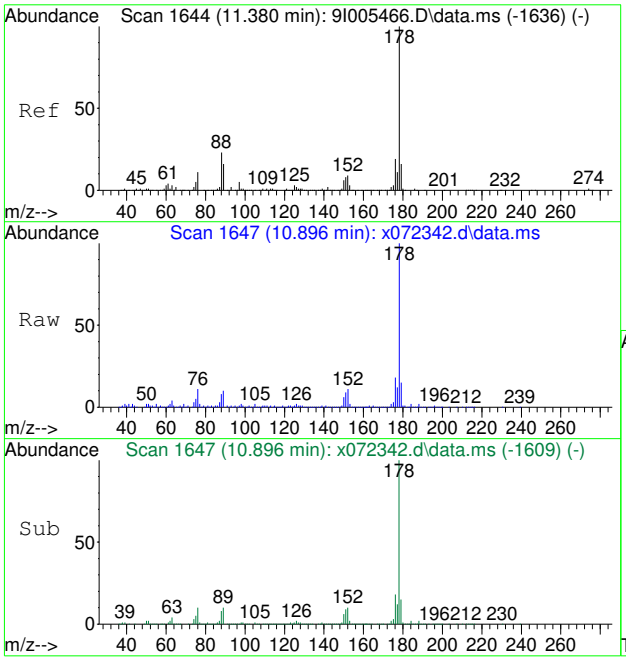


#65
Fluorene
Concen: 2.90 ppm
RT: 9.773 min Scan# 1437
Delta R.T. 0.005 min
Lab File: x072342.d
Acq: 11 Aug 2020 6:26 pm

Tgt Ion:166 Resp: 30930

Ion	Ratio	Lower	Upper
166	100		
165	95.5	62.7	122.7
167	13.4	0.0	43.5

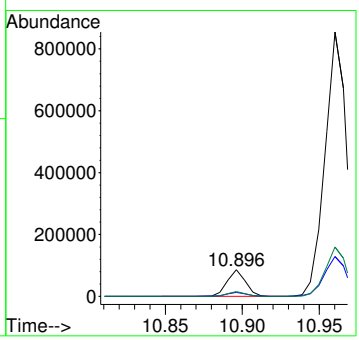


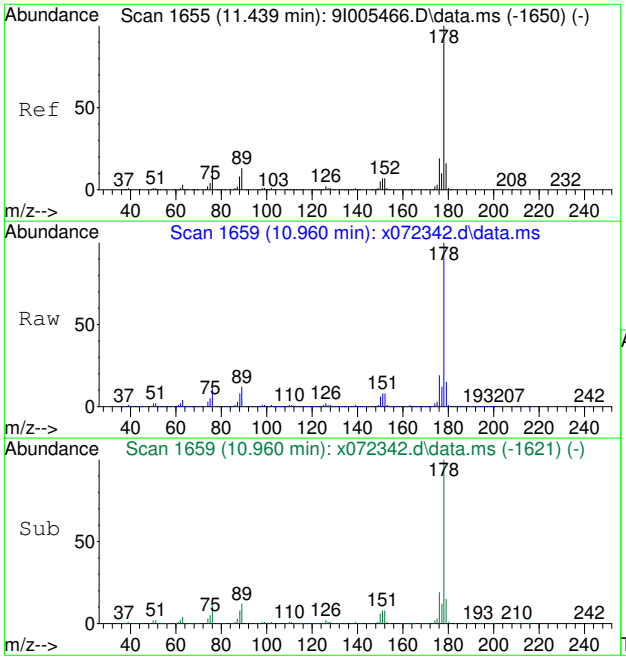


#84
Phenanthrene
Concen: 4.49 ppm
RT: 10.896 min Scan# 1647
Delta R.T. 0.005 min
Lab File: x072342.d
Acq: 11 Aug 2020 6:26 pm

Tgt Ion:178 Resp: 71744

Ion	Ratio	Lower	Upper
178	100		
179	14.7	0.0	45.8
176	18.4	0.0	49.3

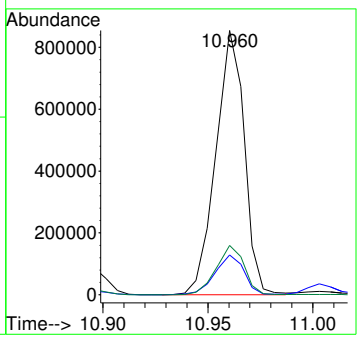


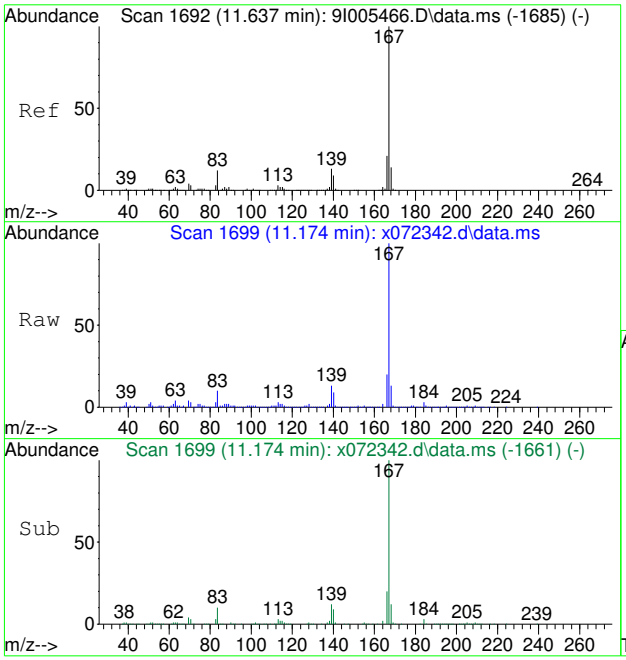


#85
Anthracene
Concen: 48.46 ppm
RT: 10.960 min Scan# 1659
Delta R.T. 0.005 min
Lab File: x072342.d
Acq: 11 Aug 2020 6:26 pm

Tgt Ion:178 Resp: 806555

Ion	Ratio	Lower	Upper
178	100		
179	15.0	0.0	46.0
176	18.7	0.0	49.3

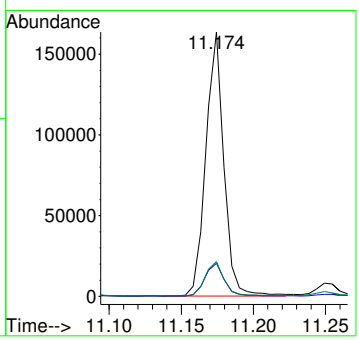


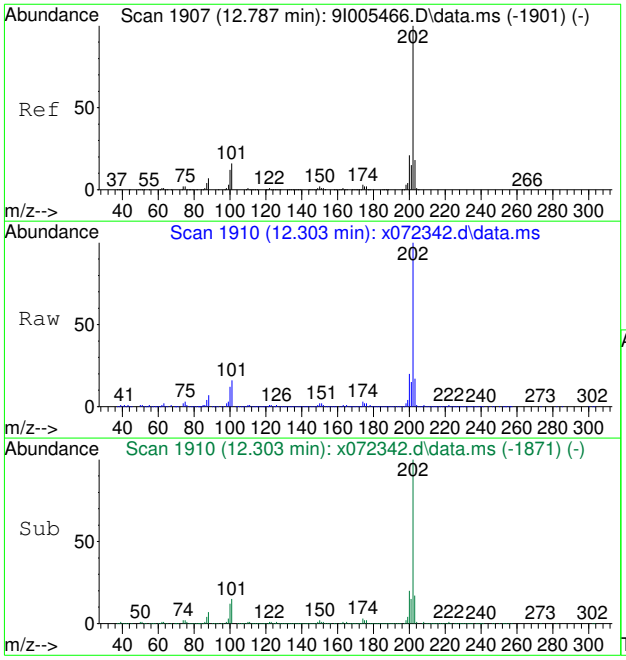


#87
Carbazole
Concen: 9.59 ppm
RT: 11.174 min Scan# 1699
Delta R.T. 0.005 min
Lab File: x072342.d
Acq: 11 Aug 2020 6:26 pm

Tgt Ion:167 Resp: 140884

Ion	Ratio	Lower	Upper
167	100		
168	12.5	0.0	43.9
139	12.9	0.0	42.7

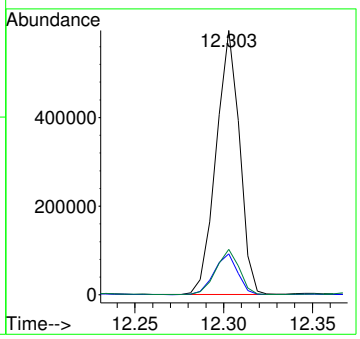


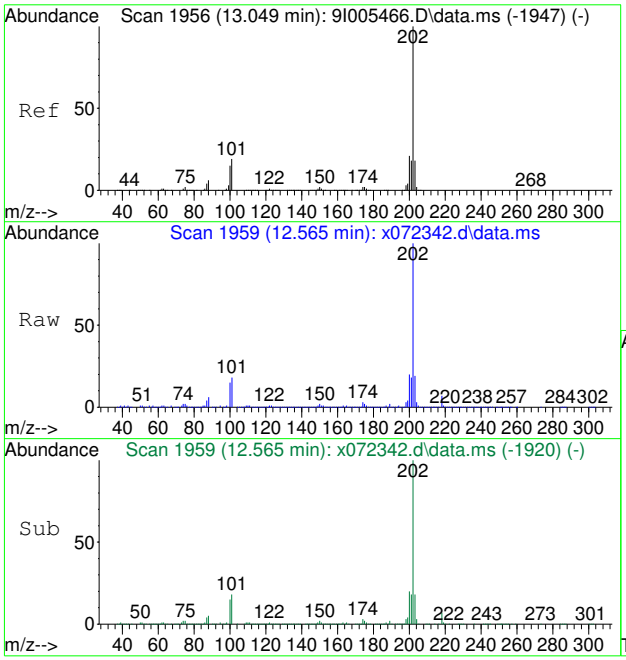


#91
Fluoranthene
Concen: 36.78 ppm
RT: 12.303 min Scan# 1910
Delta R.T. 0.011 min
Lab File: x072342.d
Acq: 11 Aug 2020 6:26 pm

Tgt Ion:202 Resp: 544943

Ion	Ratio	Lower	Upper
202	100		
101	15.5	0.0	45.8
203	17.1	0.0	48.1

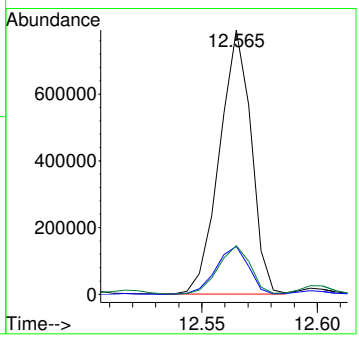


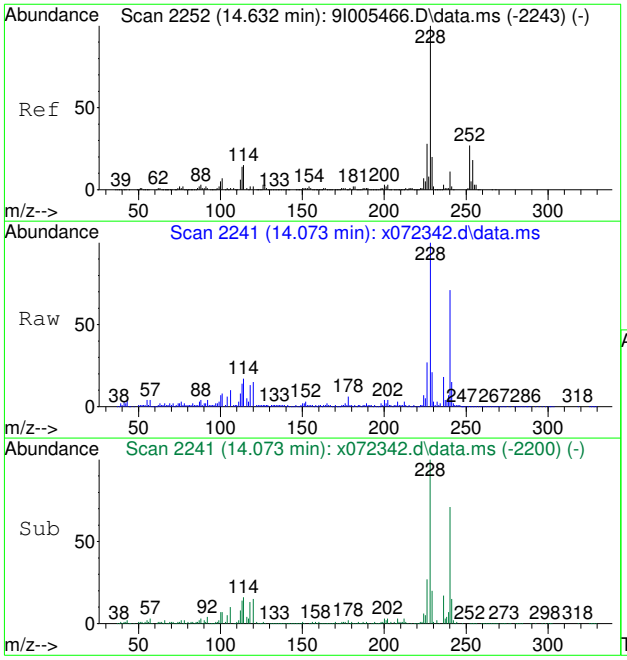


#94
Pyrene
Concen: 42.48 ppm
RT: 12.565 min Scan# 1959
Delta R.T. 0.011 min
Lab File: x072342.d
Acq: 11 Aug 2020 6:26 pm

Tgt Ion:202 Resp: 755329

Ion	Ratio	Lower	Upper
202	100		
101	17.9	0.0	48.7
203	18.2	0.0	48.4

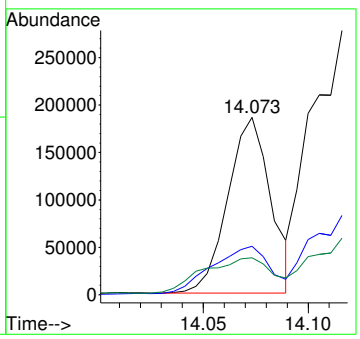


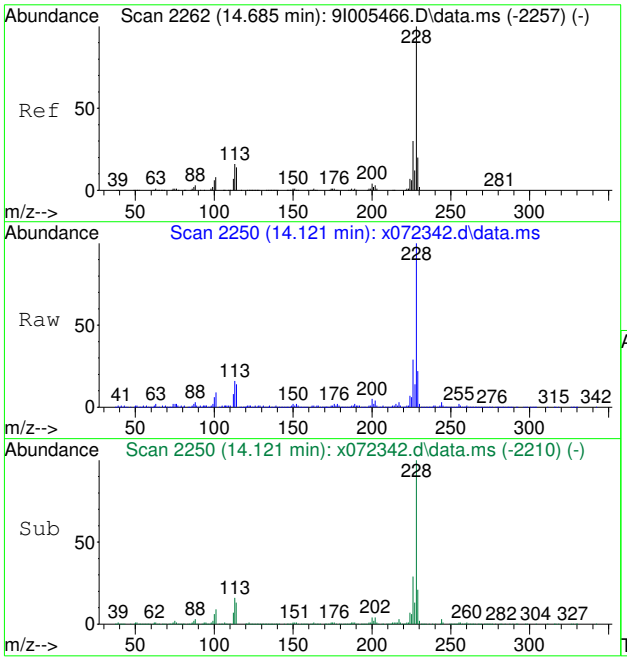


#99
Benzo[a]anthracene
Concen: 19.59 ppm
RT: 14.073 min Scan# 2241
Delta R.T. 0.021 min
Lab File: x072342.d
Acq: 11 Aug 2020 6:26 pm

Tgt Ion:228 Resp: 263660

Ion	Ratio	Lower	Upper
228	100		
226	26.8	0.0	57.5
229	18.3	0.0	49.9

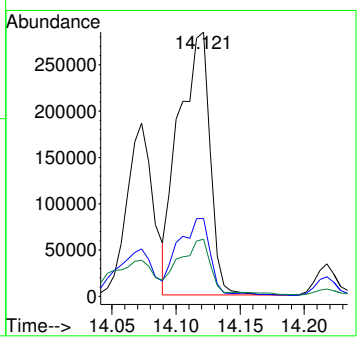


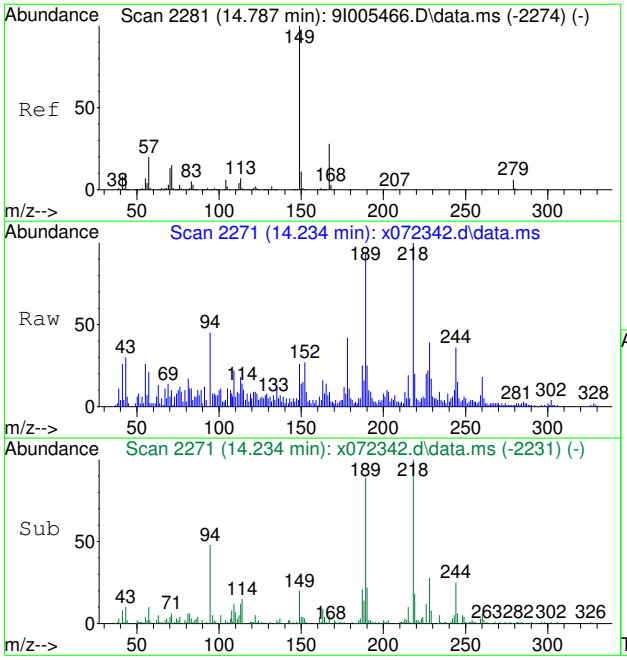


#100
Chrysene
Concen: 33.58 ppm
RT: 14.121 min Scan# 2250
Delta R.T. 0.016 min
Lab File: x072342.d
Acq: 11 Aug 2020 6:26 pm

Tgt Ion:228 Resp: 481304

Ion	Ratio	Lower	Upper
228	100		
226	29.4	0.4	60.4
229	20.2	0.0	50.1

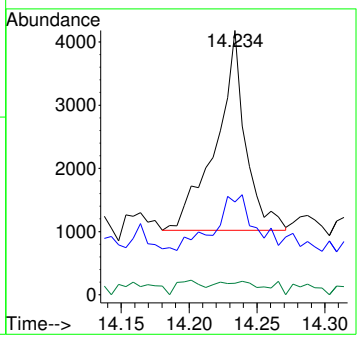


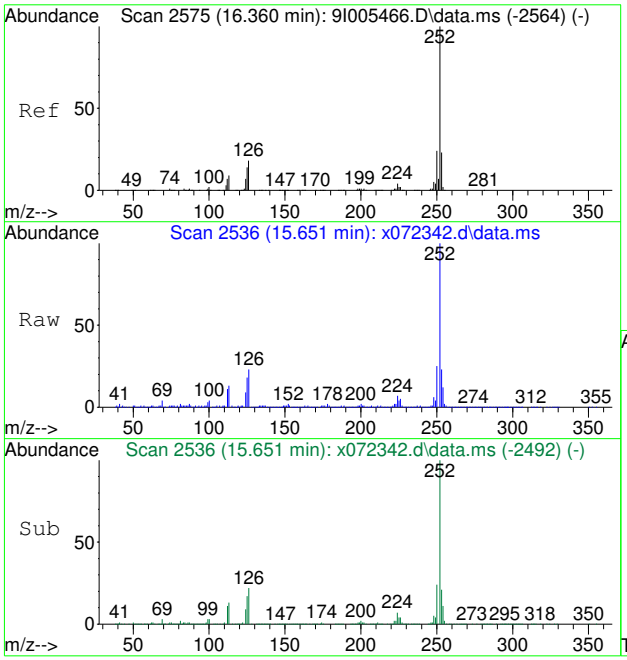


#101
bis(2-Ethylhexyl)phthalate
Concen: 0.53 ppm
RT: 14.234 min Scan# 2271
Delta R.T. 0.016 min
Lab File: x072342.d
Acq: 11 Aug 2020 6:26 pm

Tgt Ion:149 Resp: 4773

Ion	Ratio	Lower	Upper
149	100		
167	20.6	0.0	58.5
279	3.7	0.0	35.7

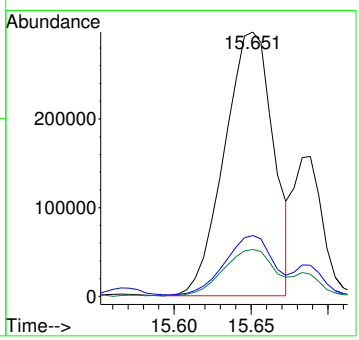


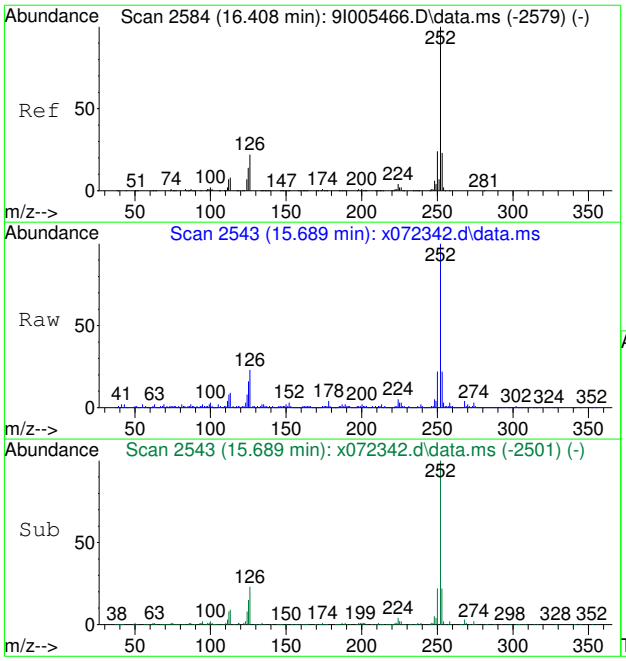


#104
Benzo[b]fluoranthene
Concen: 63.01 ppm
RT: 15.651 min Scan# 2536
Delta R.T. 0.038 min
Lab File: x072342.d
Acq: 11 Aug 2020 6:26 pm

Tgt Ion:252 Resp: 657564

Ion	Ratio	Lower	Upper
252	100		
253	22.8	0.0	52.5
125	17.1	0.0	44.0

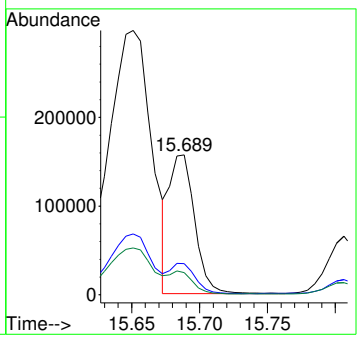


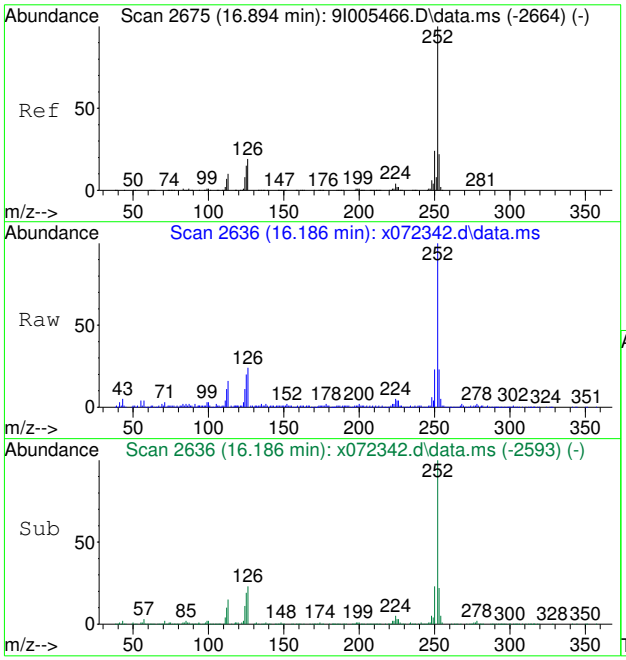


#105
Benzo[k]fluoranthene
Concen: 16.90 ppm
RT: 15.689 min Scan# 2543
Delta R.T. 0.027 min
Lab File: x072342.d
Acq: 11 Aug 2020 6:26 pm

Tgt Ion:252 Resp: 205192

Ion	Ratio	Lower	Upper
252	100		
253	21.8	0.0	52.5
125	13.4	0.0	44.4

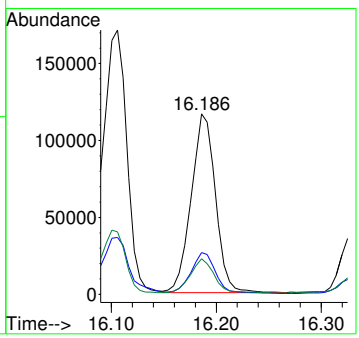


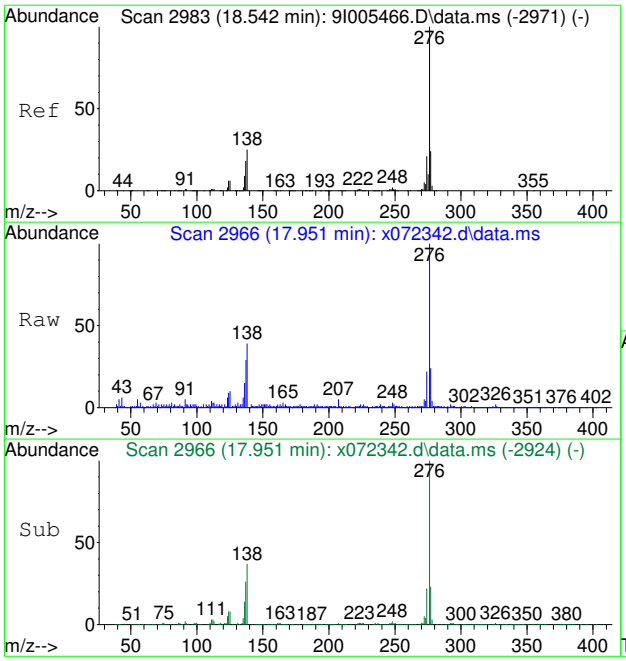


#106
Benzo[a]pyrene
Concen: 20.60 ppm
RT: 16.186 min Scan# 2636
Delta R.T. 0.032 min
Lab File: x072342.d
Acq: 11 Aug 2020 6:26 pm

Tgt Ion:252 Resp: 187728

Ion	Ratio	Lower	Upper
252	100		
253	22.5	0.0	52.3
125	19.2	0.0	44.7

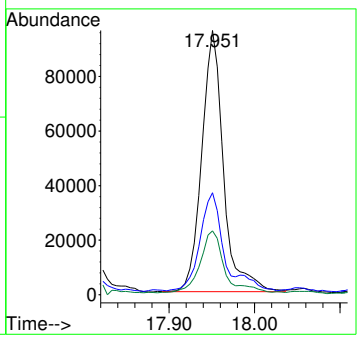


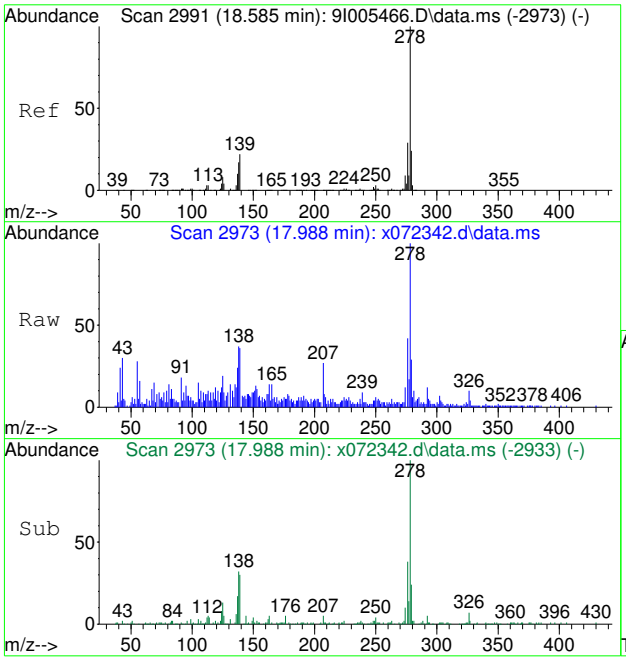


#107
Indeno[1,2,3-cd]pyrene
Concen: 28.81 ppm
RT: 17.951 min Scan# 2966
Delta R.T. 0.027 min
Lab File: x072342.d
Acq: 11 Aug 2020 6:26 pm

Tgt Ion:276 Resp: 169346

Ion	Ratio	Lower	Upper
276	100		
138	37.3	0.0	54.7
277	23.6	0.0	53.8

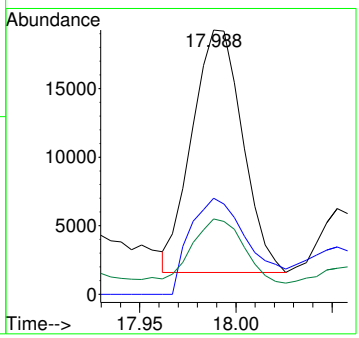


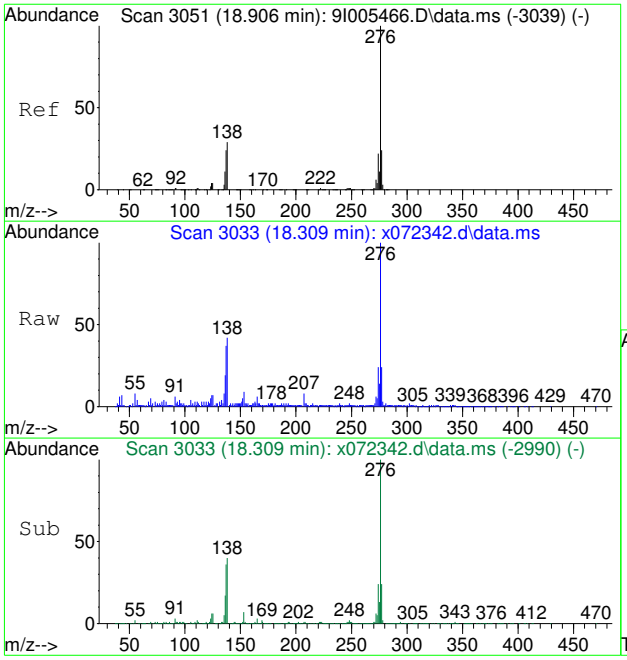


#108
Dibenz[a,h]anthracene
Concen: 5.82 ppm
RT: 17.988 min Scan# 2973
Delta R.T. 0.016 min
Lab File: x072342.d
Acq: 11 Aug 2020 6:26 pm

Tgt Ion:278 Resp: 32255

Ion	Ratio	Lower	Upper
278	100		
139	36.0	0.0	52.4
279	26.7	0.0	54.4

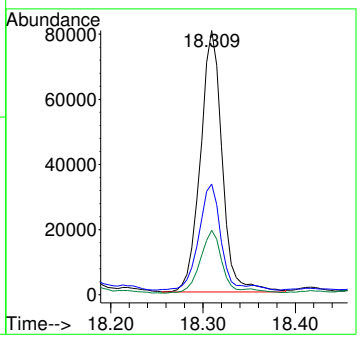




#109
Benzo[g,h,i]perylene
Concen: 15.88 ppm
RT: 18.309 min Scan# 3033
Delta R.T. 0.032 min
Lab File: x072342.d
Acq: 11 Aug 2020 6:26 pm

Tgt Ion:276 Resp: 131268

Ion	Ratio	Lower	Upper
276	100		
138	40.4	0.0	59.4
277	24.0	0.0	54.1



Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan
08/13/20 09:53

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0811_sx2950\
Data File : x072343.d
Acq On : 11 Aug 2020 6:52 pm
Operator : marthav
Sample : fa77576-11 E Inst : MSBNA05
Misc : op81482,sx2950,30.0,,,1,1,soil
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 13 09:46:11 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.665	152	165681	40.00	ppm	0.00
22) Naphthalene-d8	7.088	136	617067	40.00	ppm	0.00
43) Acenaphthene-d10	9.126	164	311960	40.00	ppm	0.00
70) Phenanthrene-d10	10.869	188	549008	40.00	ppm	0.00
92) Chrysene-d12	14.094	240	475656	40.00	ppm	0.03
102) Perylene-d12	16.303	264	371515	40.00	ppm	0.05
110) 1,4-Dichlorobenzene-d4A	5.665	152	165681	40.00	ppm	0.00
120) Naphthalene-d8A	7.088	136	617067	40.00	ppm	0.00
127) Acenaphthene-d10A	9.126	164	311960	40.00	ppm	0.00
136) Phenanthrene-d10A	10.869	188	549008	40.00	ppm	0.00
146) Chrysene-d12A	14.094	240	475656	40.00	ppm	0.03
153) Perylene-d12A	16.303	264	371515	40.00	ppm	0.05
System Monitoring Compounds						
7) 2-Fluorophenol	4.322	112	422480	71.12	ppm	0.02
Spiked Amount 100.000	Range 40 - 102		Recovery = 71.12%			
9) Phenol-d5	5.349	99	537296	76.02	ppm	0.02
Spiked Amount 100.000	Range 41 - 100		Recovery = 76.02%			
23) Nitrobenzene-d5	6.280	82	224523	35.23	ppm	0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 70.46%			
47) 2-Fluorobiphenyl	8.355	172	411454	36.43	ppm	0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 72.86%			
75) 2,4,6-Tribromophenol	10.067	330	88421	75.54	ppm	0.01
Spiked Amount 100.000	Range 42 - 108		Recovery = 75.54%			
95) Terphenyl-d14	12.795	244	469503	37.15	ppm	0.02
Spiked Amount 50.000	Range 45 - 119		Recovery = 74.30%			
Target Compounds						Qvalue
21) 3&4-Methylphenol	6.184	108	3017	0.48	ppm	93
34) Naphthalene	7.109	128	5539	0.33	ppm	100
40) 2-Methylnaphthalene	7.917	142	3220	0.29	ppm	92
41) 1-Methylnaphthalene	8.024	142	2564	0.24	ppm	84
48) 1,1'-Biphenyl	8.468	154	1288	0.10	ppm	96
52) Acenaphthylene	8.960	152	317403	20.37	ppm	99
57) Acenaphthene	9.163	153	17304	1.67	ppm	97
60) Dibenzofuran	9.366	168	8855	0.64	ppm	98
65) Fluorene	9.773	166	36122	3.35	ppm	98
84) Phenanthrene	10.901	178	422538	25.47	ppm	99
85) Anthracene	10.960	178	647083	37.42	ppm	97
87) Carbazole	11.174	167	210645	13.81	ppm	99
89) Di-n-butylphthalate	11.639	149	2071	0.12	ppm	78
91) Fluoranthene	12.319	202	3053575m	198.38	ppm	
94) Pyrene	12.586	202	3223870	163.24	ppm	95
99) Benzo[a]anthracene	14.078	228	600487	40.17	ppm	99
100) Chrysene	14.132	228	1290044	81.03	ppm	98
104) Benzo[b]fluoranthene	15.672	252	1508633m	119.38	ppm	
105) Benzo[k]fluoranthene	15.704	252	462762m	35.09	ppm	
106) Benzo[a]pyrene	16.207	252	424571	40.92	ppm	95
107) Indeno[1,2,3-cd]pyrene	17.967	276	297464	42.71	ppm	89

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0811_sx2950\
Data File : x072343.d
Acq On : 11 Aug 2020 6:52 pm
Operator : marthav
Sample : fa77576-11 E Inst : MSBNA05
Misc : op81482,sx2950,30.0,,,1,1,soil
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 13 09:46:11 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

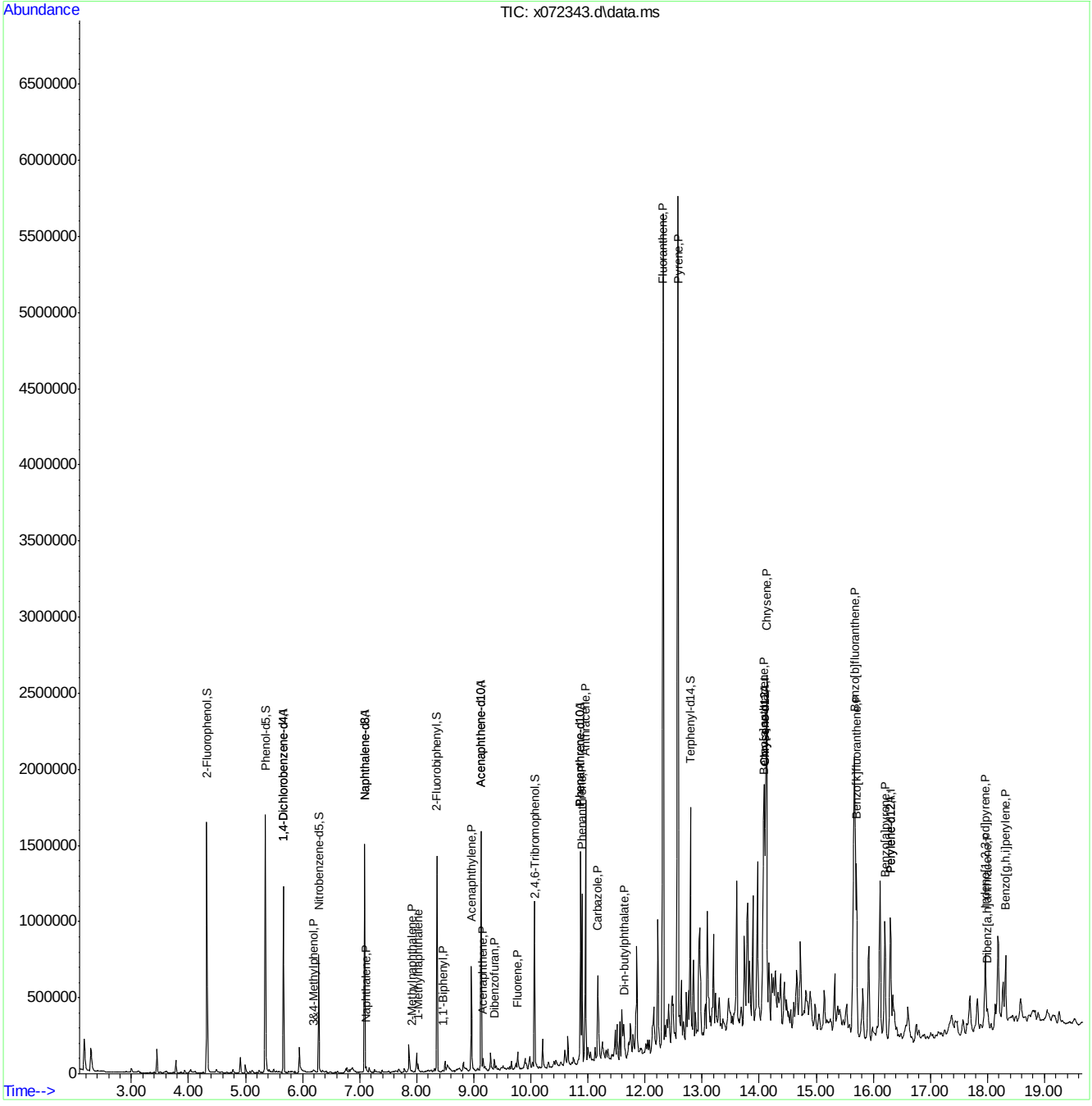
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
108) Dibenz[a,h]anthracene	17.999	278	61423	9.85	ppm	85
109) Benzo[g,h,i]perylene	18.320	276	232401	24.92	ppm	87

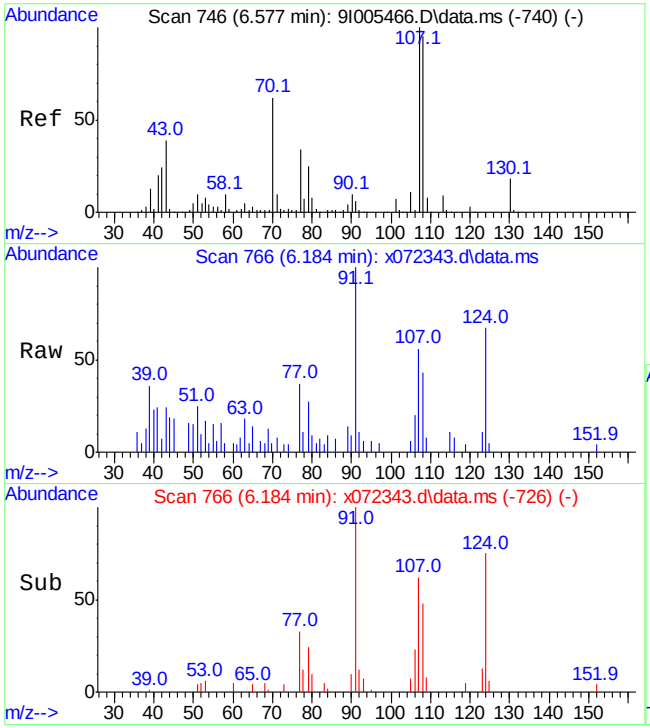
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0811_sx2950\
Data File : x072343.d
Acq On : 11 Aug 2020 6:52 pm
Operator : marthav
Sample : fa77576-11 E Inst : MSBNA05
Misc : op81482,sx2950,30.0,,,1,1,soil
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 13 09:46:11 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

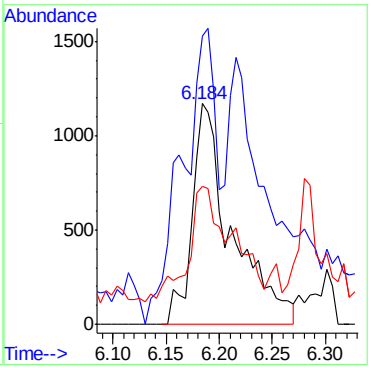


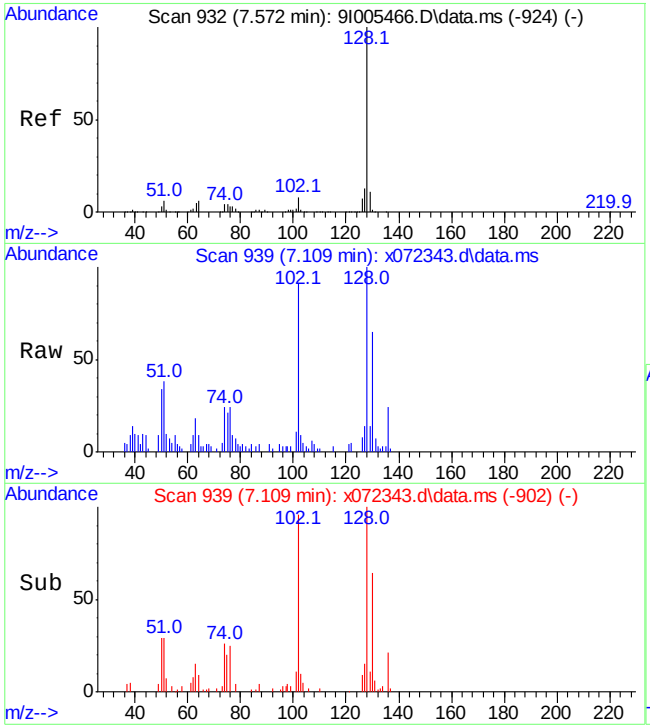


#21
3&4-Methylphenol
Concen: 0.48 ppm
RT: 6.184 min Scan# 766
Delta R.T. 0.016 min
Lab File: x072343.d
Acq: 11 Aug 2020 6:52 pm

Tgt Ion:108 Resp: 3017

Ion	Ratio	Lower	Upper
108	100		
107	105.8	75.4	135.4
79	42.2	0.0	56.3

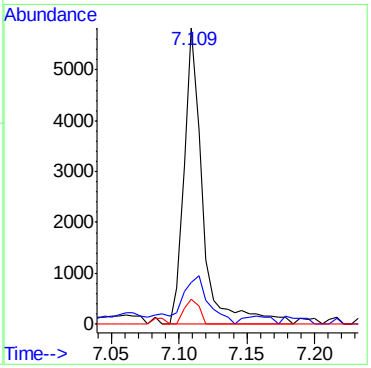


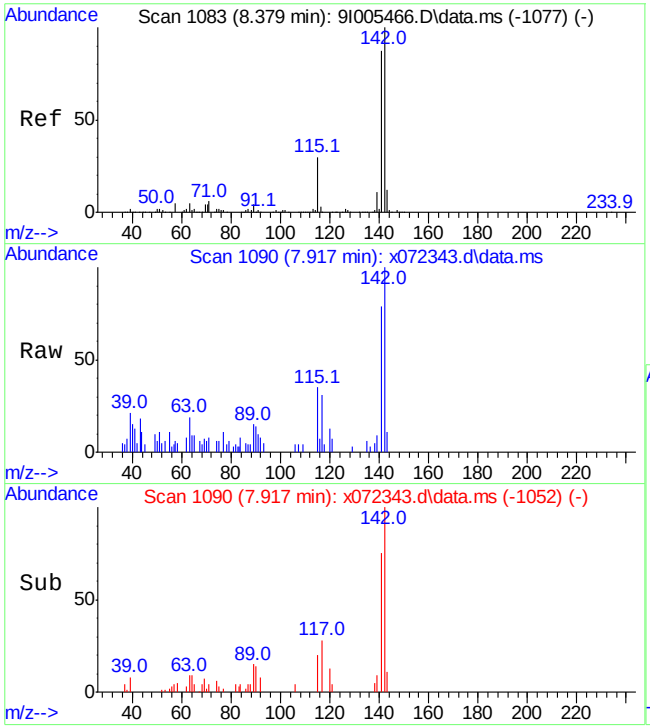


#34
Naphthalene
Concen: 0.33 ppm
RT: 7.109 min Scan# 939
Delta R.T. -0.000 min
Lab File: x072343.d
Acq: 11 Aug 2020 6:52 pm

Tgt Ion:128 Resp: 5539

Ion	Ratio	Lower	Upper
128	100		
129	11.3	0.0	41.4
126	7.4	0.0	37.4

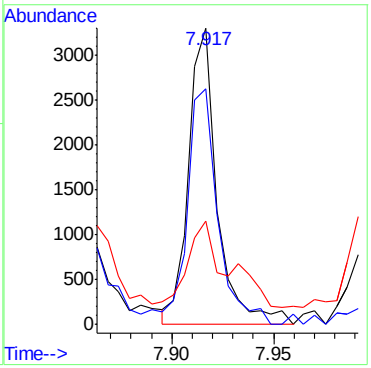


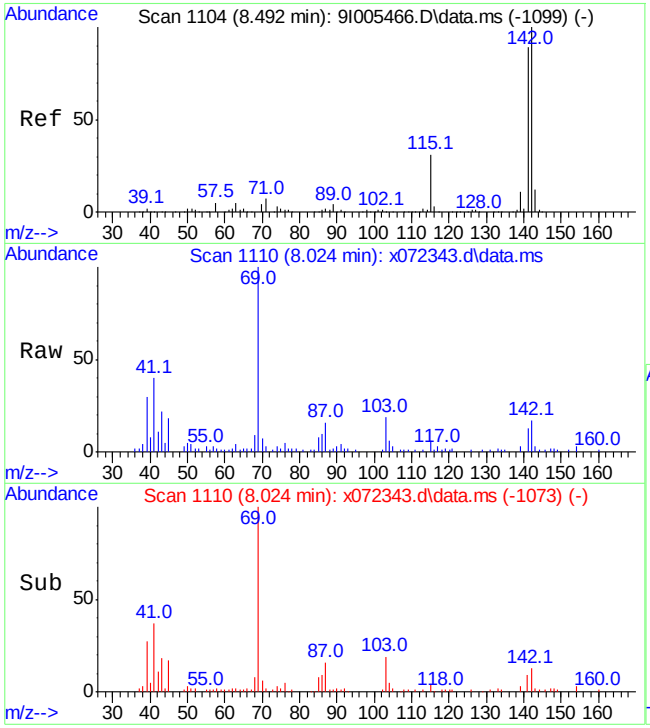


#40
2-Methylnaphthalene
Concen: 0.29 ppm
RT: 7.917 min Scan# 1090
Delta R.T. 0.005 min
Lab File: x072343.d
Acq: 11 Aug 2020 6:52 pm

Tgt Ion:142 Resp: 3220

Ion	Ratio	Lower	Upper
142	100		
141	77.5	56.8	116.8
115	28.8	0.0	60.0

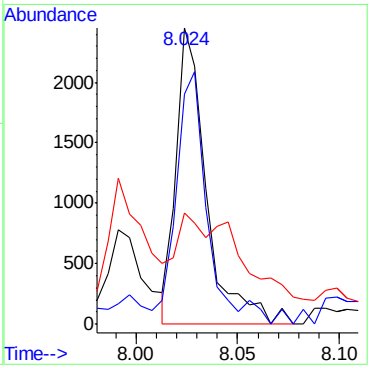


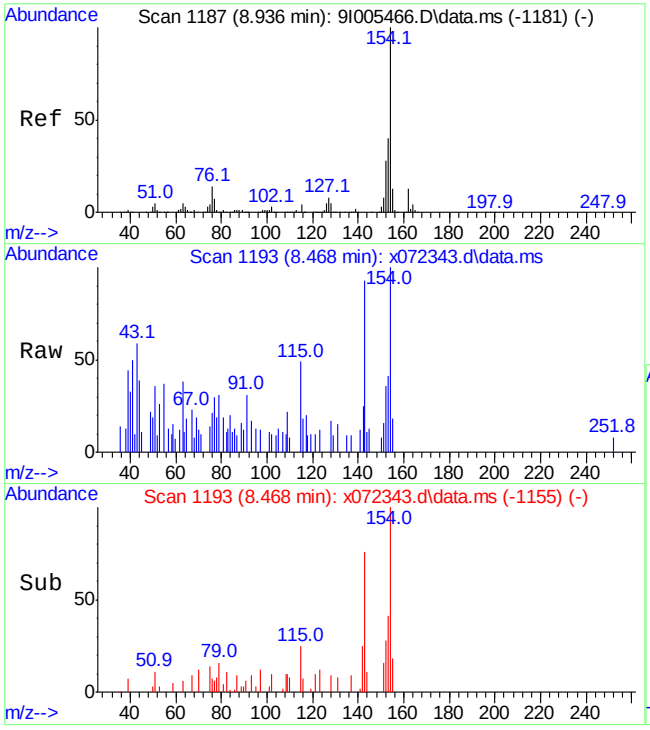


#41
1-Methylnaphthalene
Concen: 0.24 ppm
RT: 8.024 min Scan# 1110
Delta R.T. -0.000 min
Lab File: x072343.d
Acq: 11 Aug 2020 6:52 pm

Tgt Ion:142 Resp: 2564

Ion	Ratio	Lower	Upper
142	100		
141	77.8	59.0	119.0
115	16.4	1.1	61.1

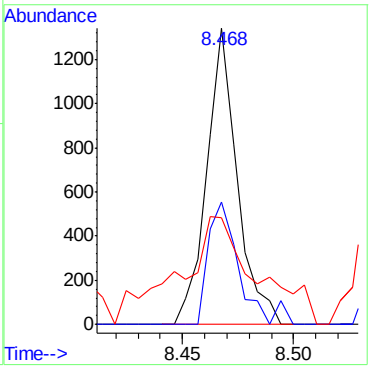


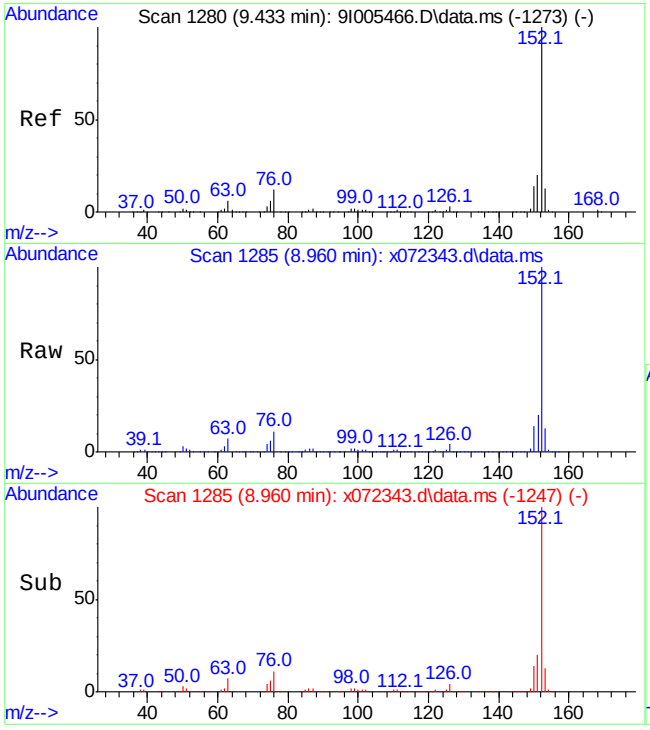


#48
1,1'-Biphenyl
Concen: 0.10 ppm
RT: 8.468 min Scan# 1193
Delta R.T. 0.005 min
Lab File: x072343.d
Acq: 11 Aug 2020 6:52 pm

Tgt Ion:154 Resp: 1288

Ion	Ratio	Lower	Upper
154	100		
153	41.4	10.3	70.3
152	24.0	0.0	58.2

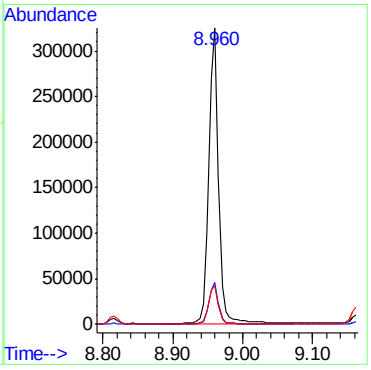


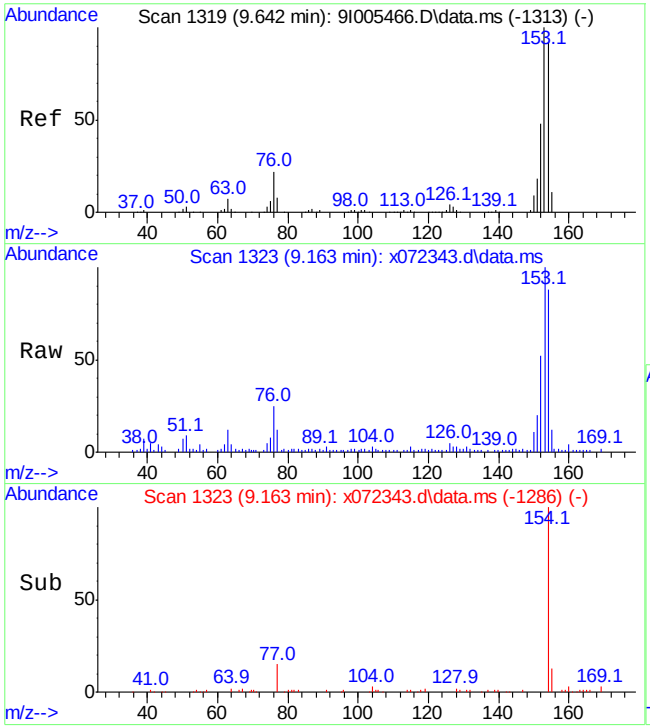


#52
Acenaphthylene
Concen: 20.37 ppm
RT: 8.960 min Scan# 1285
Delta R.T. 0.005 min
Lab File: x072343.d
Acq: 11 Aug 2020 6:52 pm

Tgt Ion:152 Resp: 317403

Ion	Ratio	Lower	Upper
152	100		
150	14.1	0.0	44.3
153	12.9	0.0	43.3

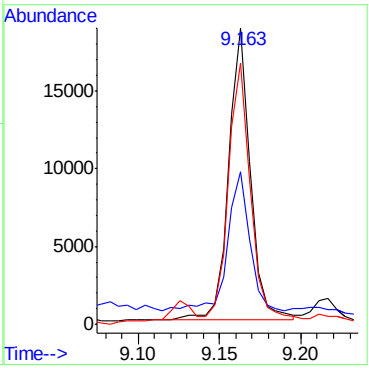


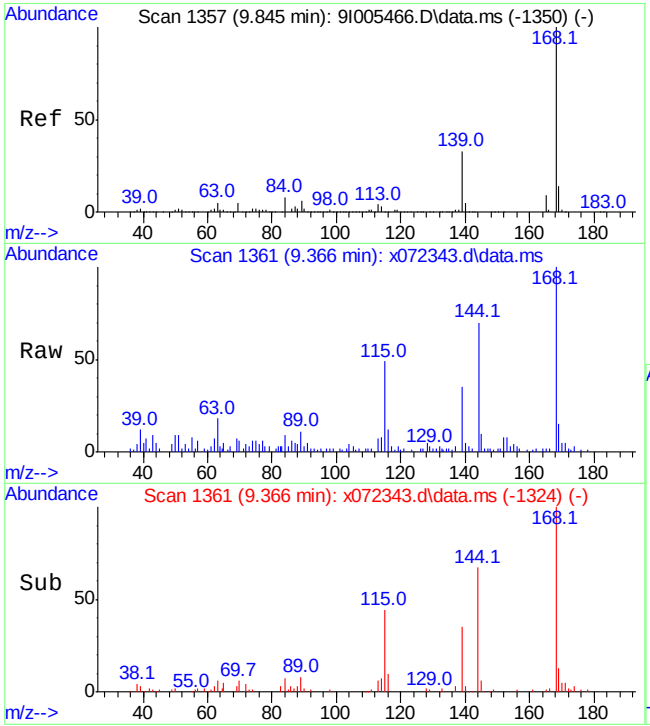


#57
Acenaphthene
Concen: 1.67 ppm
RT: 9.163 min Scan# 1323
Delta R.T. -0.000 min
Lab File: x072343.d
Acq: 11 Aug 2020 6:52 pm

Tgt Ion:153 Resp: 17304

Ion	Ratio	Lower	Upper
153	100		
152	47.7	18.4	78.4
154	88.2	62.4	122.4

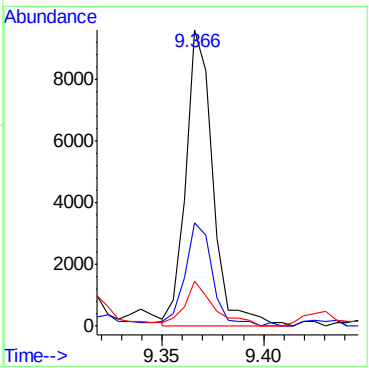


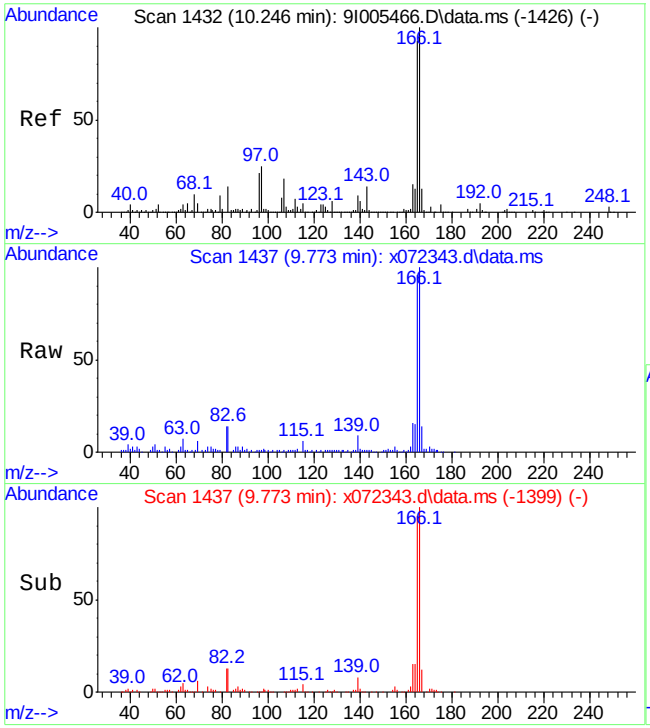


#60
Dibenzofuran
Concen: 0.64 ppm
RT: 9.366 min Scan# 1361
Delta R.T. -0.000 min
Lab File: x072343.d
Acq: 11 Aug 2020 6:52 pm

Tgt Ion:168 Resp: 8855

Ion	Ratio	Lower	Upper
168	100		
139	34.7	3.0	63.0
169	14.0	0.0	43.5

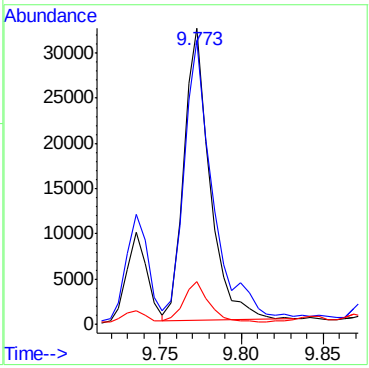


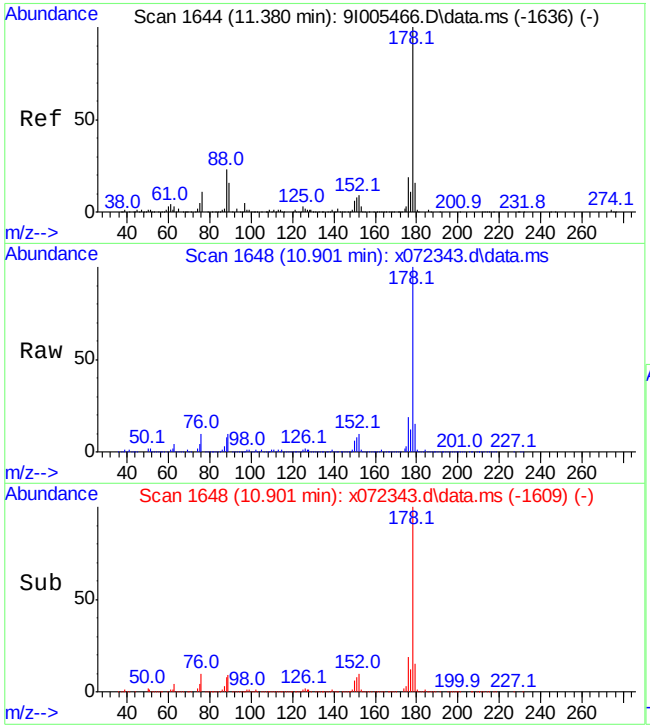


#65
Fluorene
Concen: 3.35 ppm
RT: 9.773 min Scan# 1437
Delta R.T. 0.005 min
Lab File: x072343.d
Acq: 11 Aug 2020 6:52 pm

Tgt Ion:166 Resp: 36122

Ion	Ratio	Lower	Upper
166	100		
165	94.7	62.7	122.7
167	13.4	0.0	43.5

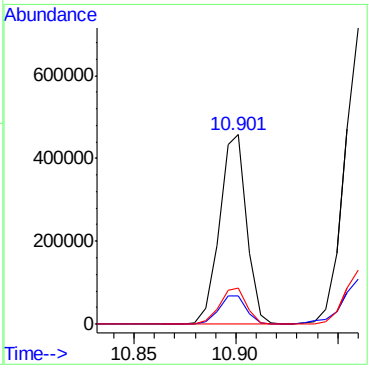


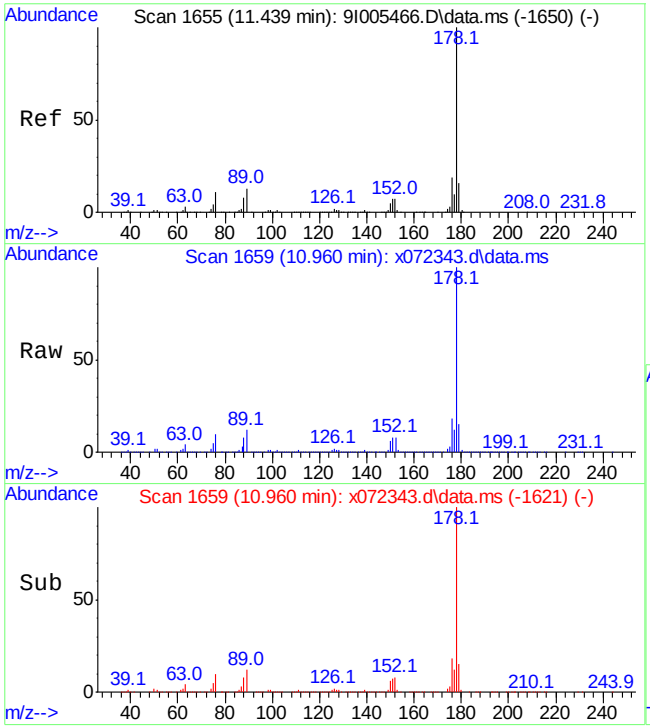


#84
Phenanthrene
Concen: 25.47 ppm
RT: 10.901 min Scan# 1648
Delta R.T. 0.011 min
Lab File: x072343.d
Acq: 11 Aug 2020 6:52 pm

Tgt Ion:178 Resp: 422538

Ion	Ratio	Lower	Upper
178	100		
179	15.1	0.0	45.8
176	18.9	0.0	49.3

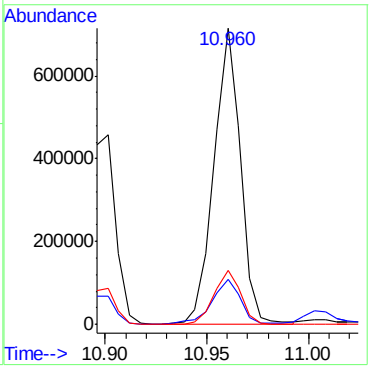


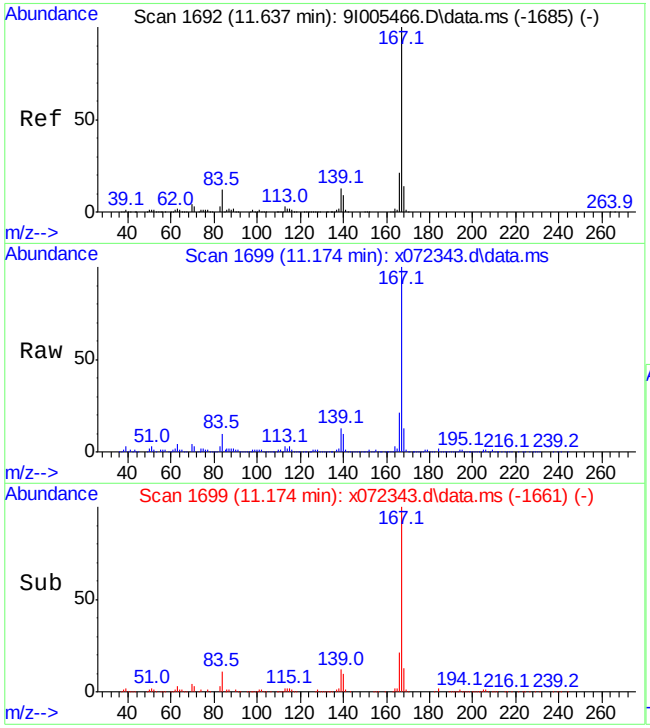


#85
Anthracene
Concen: 37.42 ppm
RT: 10.960 min Scan# 1659
Delta R.T. 0.005 min
Lab File: x072343.d
Acq: 11 Aug 2020 6:52 pm

Tgt Ion:178 Resp: 647083

Ion	Ratio	Lower	Upper
178	100		
179	14.7	0.0	46.0
176	18.3	0.0	49.3

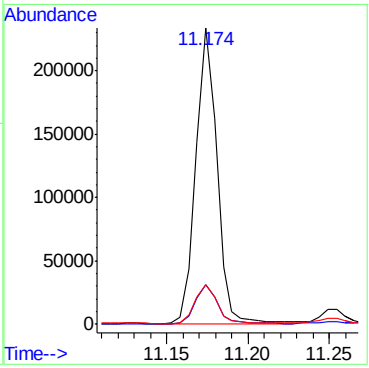


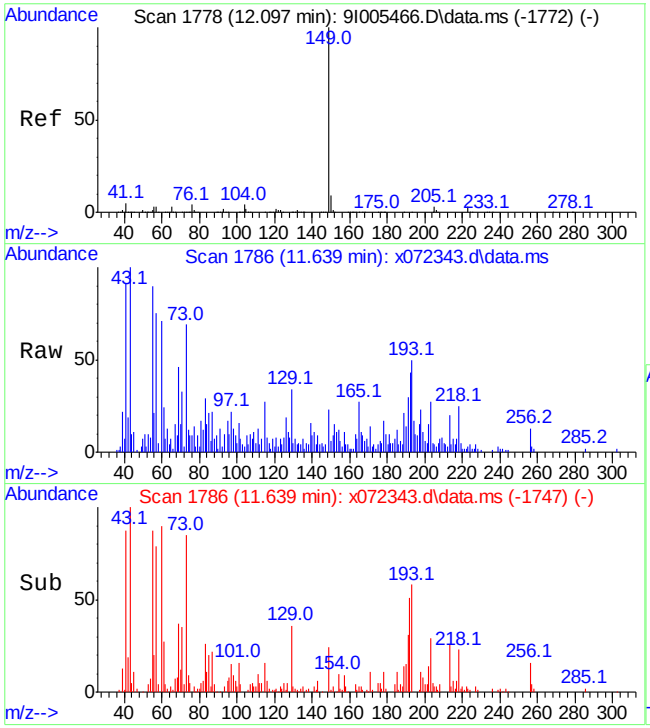


#87
Carbazole
Concen: 13.81 ppm
RT: 11.174 min Scan# 1699
Delta R.T. 0.005 min
Lab File: x072343.d
Acq: 11 Aug 2020 6:52 pm

Tgt Ion:167 Resp: 210645

Ion	Ratio	Lower	Upper
167	100		
168	13.1	0.0	43.9
139	12.9	0.0	42.7

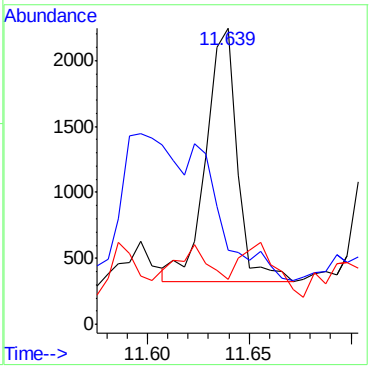


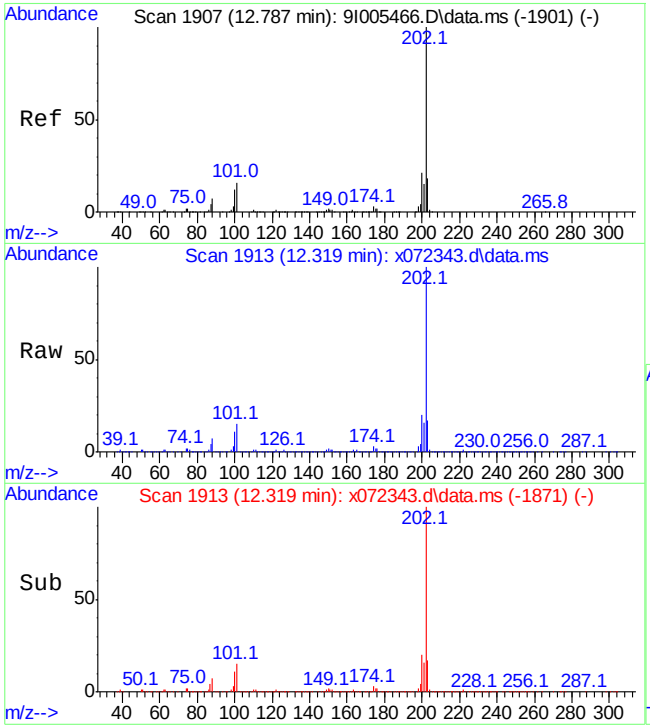


#89
Di-n-butylphthalate
Concen: 0.12 ppm
RT: 11.639 min Scan# 1786
Delta R.T. 0.011 min
Lab File: x072343.d
Acq: 11 Aug 2020 6:52 pm

Tgt Ion:149 Resp: 2071

Ion	Ratio	Lower	Upper
149	100		
150	0.0	0.0	39.5
104	0.1	0.0	34.2

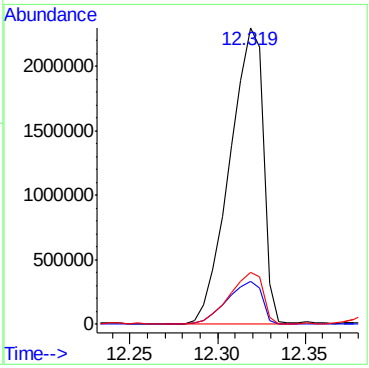


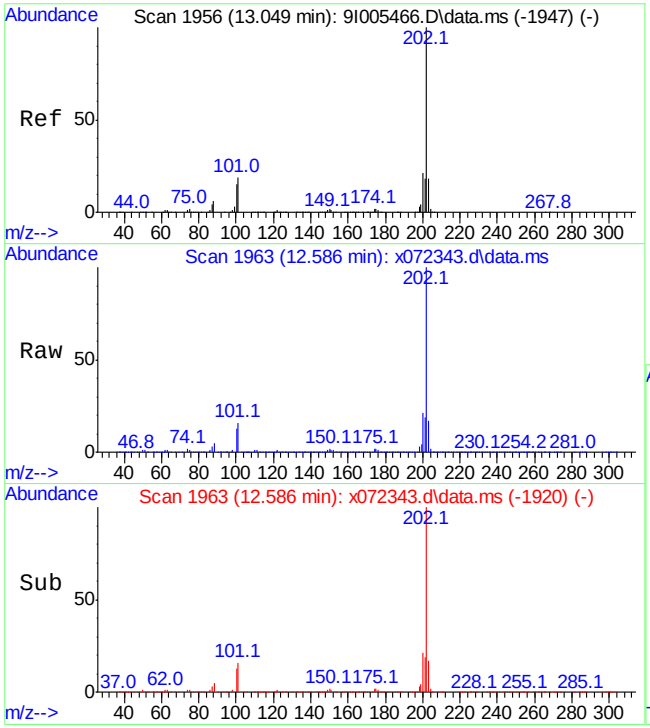


#91
Fluoranthene
Concen: 198.38 ppm m
RT: 12.319 min Scan# 1913
Delta R.T. 0.027 min
Lab File: x072343.d
Acq: 11 Aug 2020 6:52 pm

Tgt Ion:202 Resp: 3053575

Ion	Ratio	Lower	Upper
202	100		
101	14.6	0.0	45.8
203	17.3	0.0	48.1

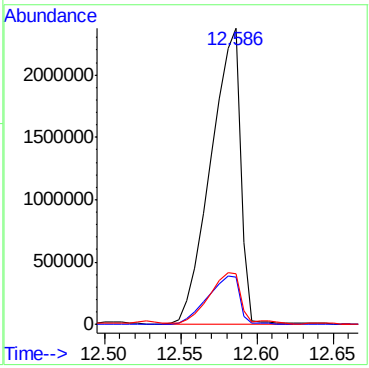


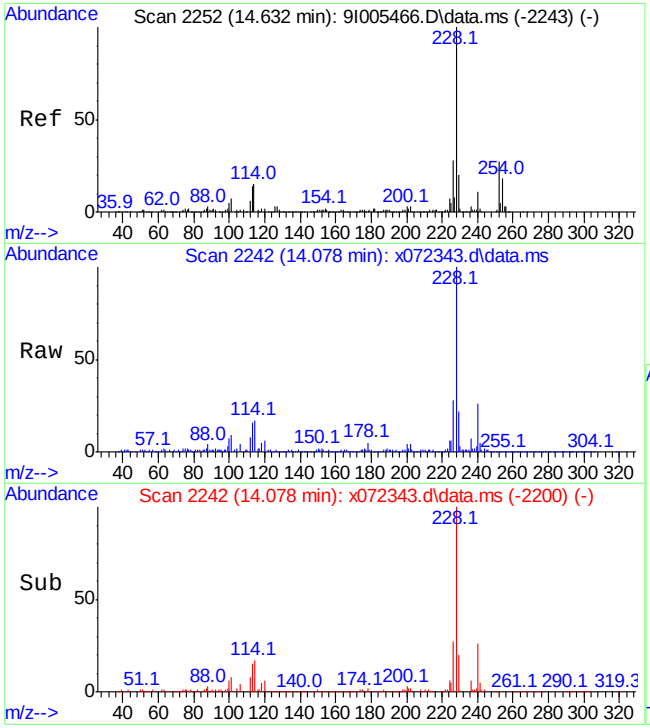


#94
Pyrene
Concen: 163.24 ppm
RT: 12.586 min Scan# 1963
Delta R.T. 0.032 min
Lab File: x072343.d
Acq: 11 Aug 2020 6:52 pm

Tgt Ion:202 Resp: 3223870

Ion	Ratio	Lower	Upper
202	100		
101	15.9	0.0	48.7
203	16.9	0.0	48.4

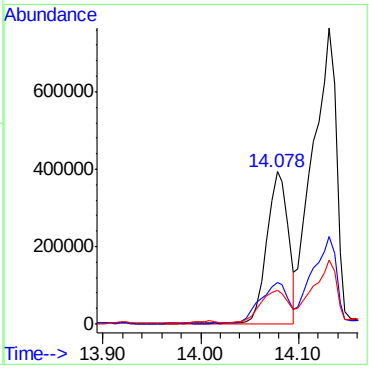


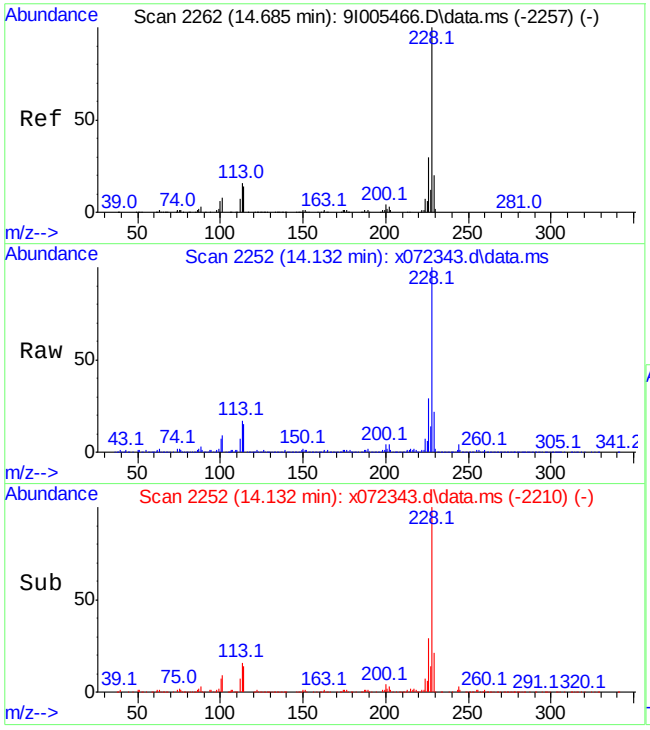


#99
Benzo[a]anthracene
Concen: 40.17 ppm
RT: 14.078 min Scan# 2242
Delta R.T. 0.027 min
Lab File: x072343.d
Acq: 11 Aug 2020 6:52 pm

Tgt Ion:228 Resp: 600487

Ion	Ratio	Lower	Upper
228	100		
226	27.4	0.0	57.5
229	20.5	0.0	49.9

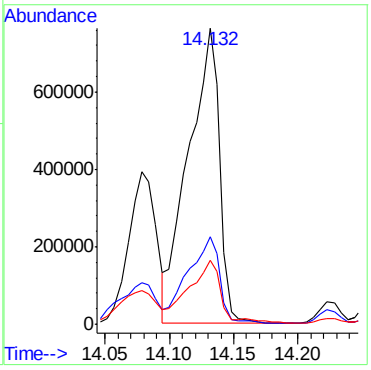


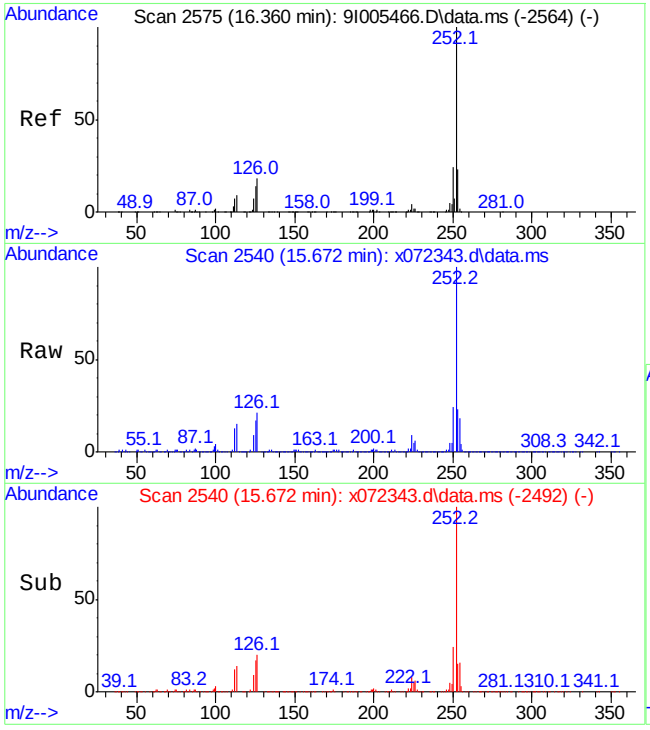


#100
Chrysene
Concen: 81.03 ppm
RT: 14.132 min Scan# 2252
Delta R.T. 0.027 min
Lab File: x072343.d
Acq: 11 Aug 2020 6:52 pm

Tgt Ion:228 Resp: 1290044

Ion	Ratio	Lower	Upper
228	100		
226	29.5	0.4	60.4
229	20.8	0.0	50.1

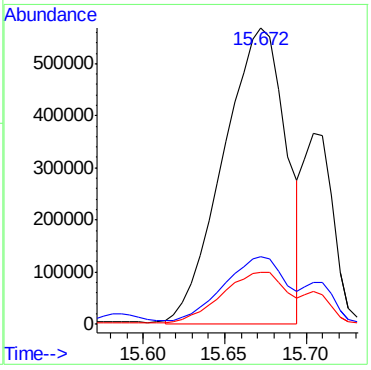


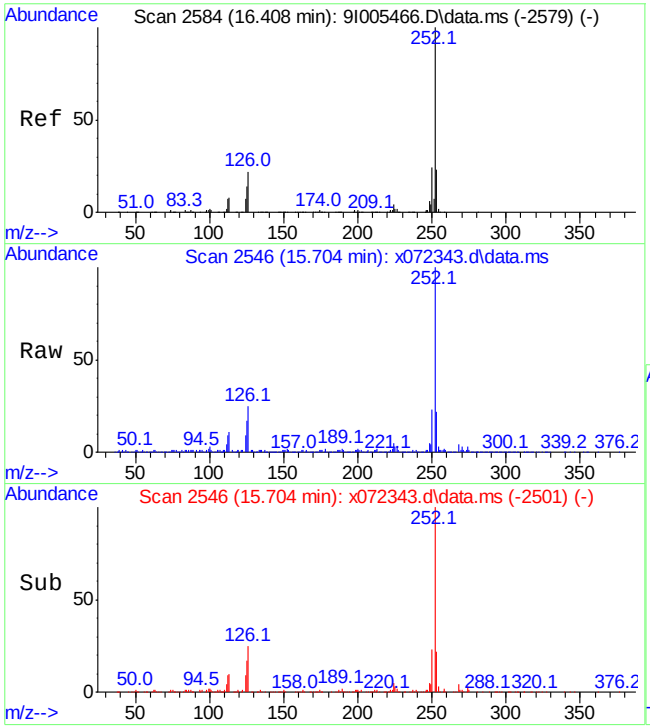


#104
Benzo[b]fluoranthene
Concen: 119.38 ppm m
RT: 15.672 min Scan# 2540
Delta R.T. 0.059 min
Lab File: x072343.d
Acq: 11 Aug 2020 6:52 pm

Tgt Ion:252 Resp: 1508633

Ion	Ratio	Lower	Upper
252	100		
253	22.9	0.0	52.5
125	17.5	0.0	44.0

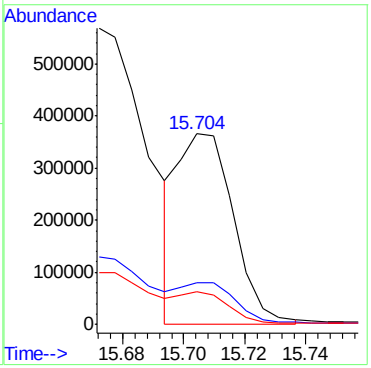


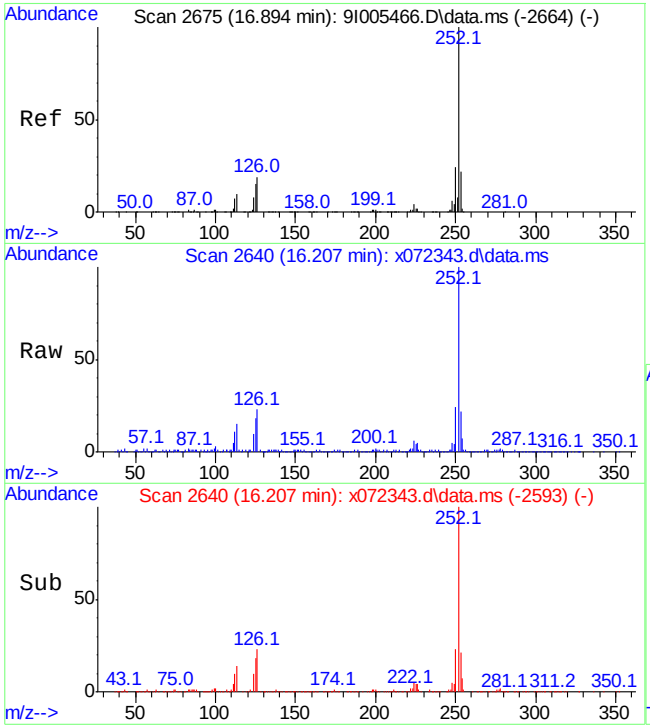


#105
Benzo[k]fluoranthene
Concen: 35.09 ppm m
RT: 15.704 min Scan# 2546
Delta R.T. 0.043 min
Lab File: x072343.d
Acq: 11 Aug 2020 6:52 pm

Tgt Ion:252 Resp: 462762

Ion	Ratio	Lower	Upper
252	100		
253	22.2	0.0	52.5
125	17.1	0.0	44.4

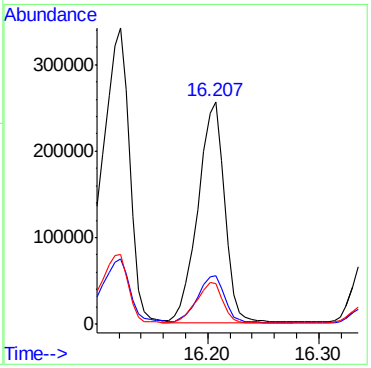


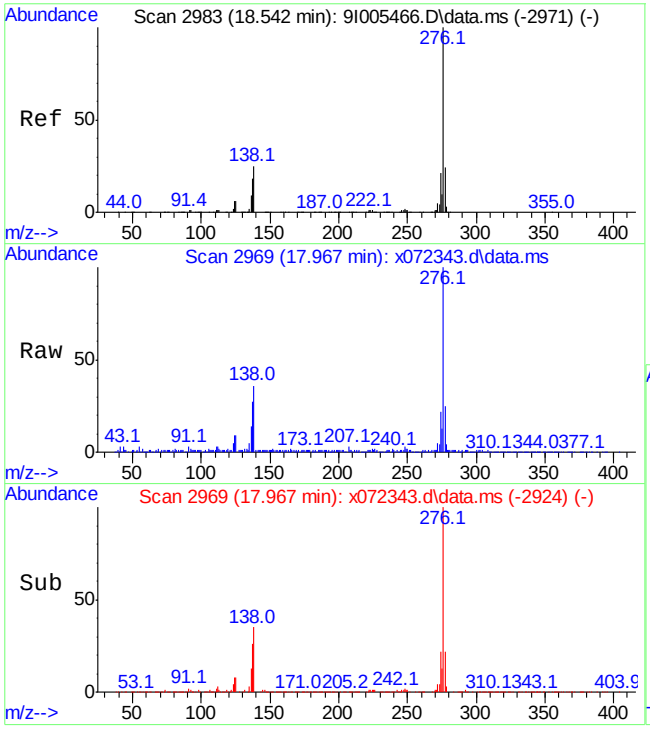


#106
Benzo[a]pyrene
Concen: 40.92 ppm
RT: 16.207 min Scan# 2640
Delta R.T. 0.053 min
Lab File: x072343.d
Acq: 11 Aug 2020 6:52 pm

Tgt Ion:252 Resp: 424571

Ion	Ratio	Lower	Upper
252	100		
253	21.1	0.0	52.3
125	17.9	0.0	44.7

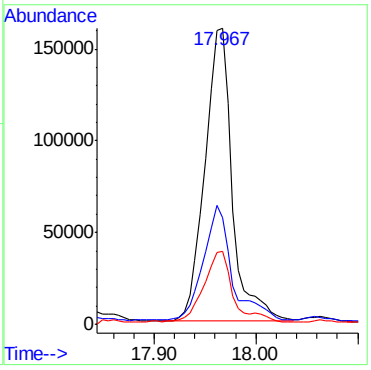


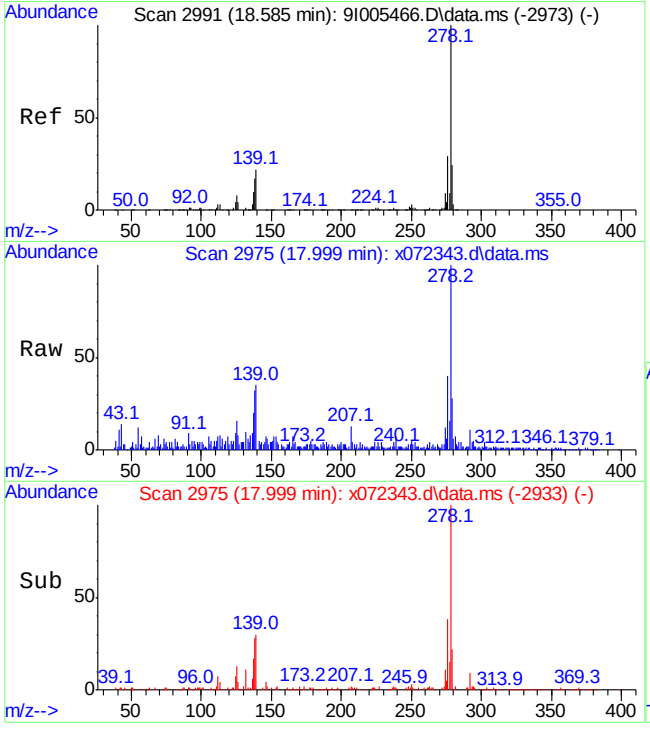


#107
Indeno[1,2,3-cd]pyrene
Concen: 42.71 ppm
RT: 17.967 min Scan# 2969
Delta R.T. 0.043 min
Lab File: x072343.d
Acq: 11 Aug 2020 6:52 pm

Tgt Ion:276 Resp: 297464

Ion	Ratio	Lower	Upper
276	100		
138	35.1	0.0	54.7
277	24.4	0.0	53.8

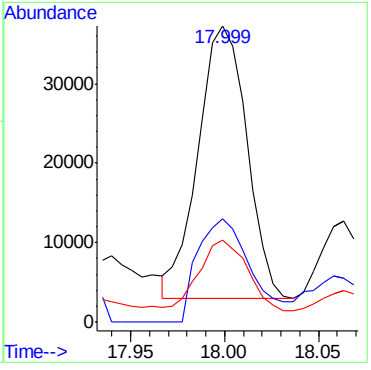


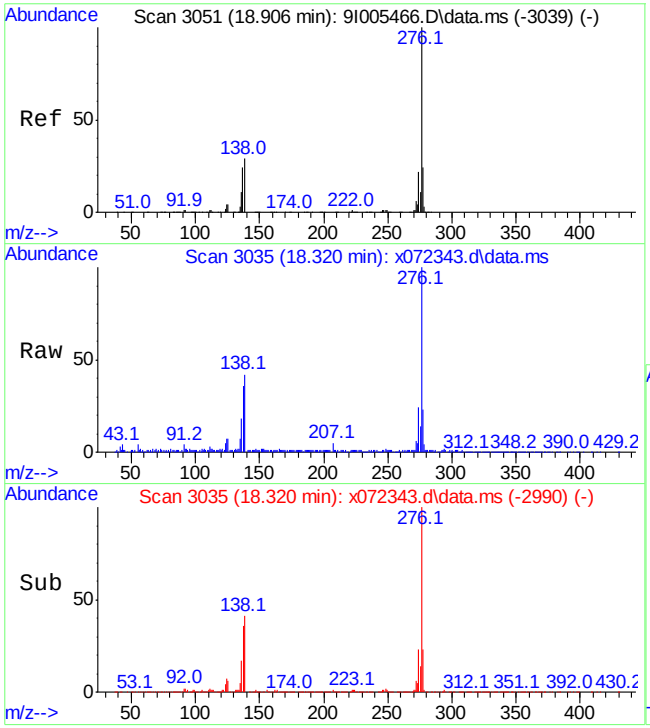


#108
Dibenz[a,h]anthracene
Concen: 9.85 ppm
RT: 17.999 min Scan# 2975
Delta R.T. 0.027 min
Lab File: x072343.d
Acq: 11 Aug 2020 6:52 pm

Tgt Ion:278 Resp: 61423

Ion	Ratio	Lower	Upper
278	100		
139	35.6	0.0	52.4
279	26.1	0.0	54.4

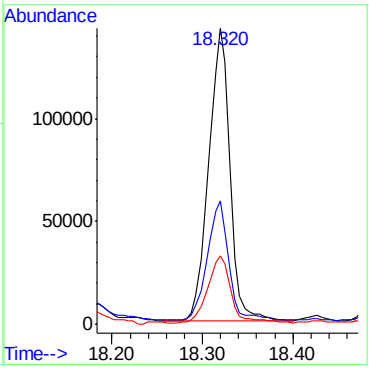




#109
Benzo[g,h,i]perylene
Concen: 24.92 ppm
RT: 18.320 min Scan# 3035
Delta R.T. 0.043 min
Lab File: x072343.d
Acq: 11 Aug 2020 6:52 pm

Tgt Ion:276 Resp: 232401

Ion	Ratio	Lower	Upper
276	100		
138	40.8	0.0	59.4
277	22.9	0.0	54.1



Manual Integration Approval Summary

Sample Number: FA77576-11
Lab FileID: X072343.D
Injection Time: 08/11/20 18:52

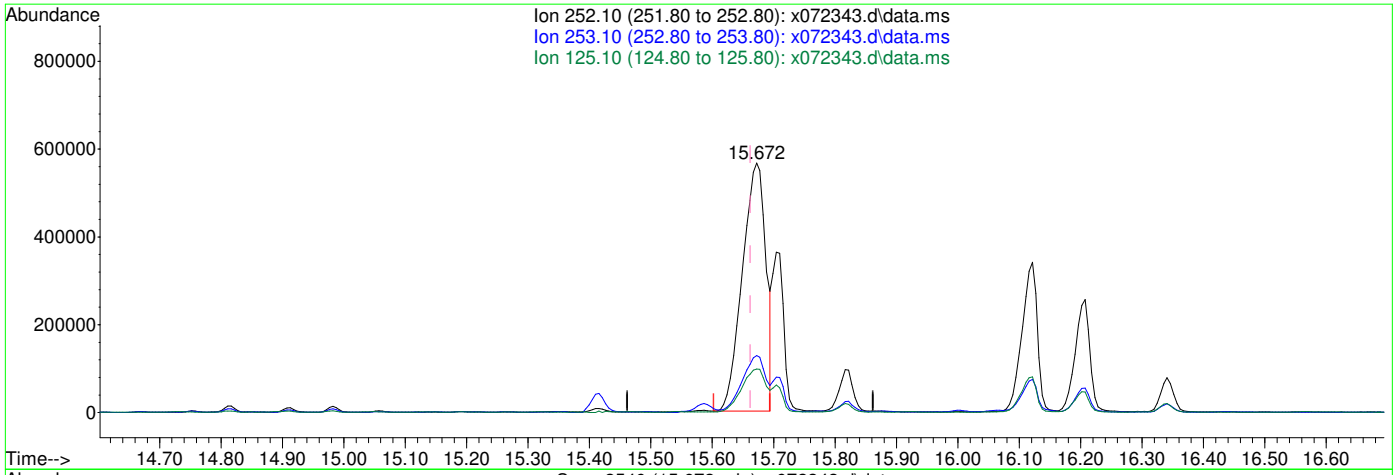
Method: SW846 8270E
Analyst approved: 08/13/20 09:48 Martha Valls
Supervisor approved: 08/13/20 09:53 Naresh Jiawan

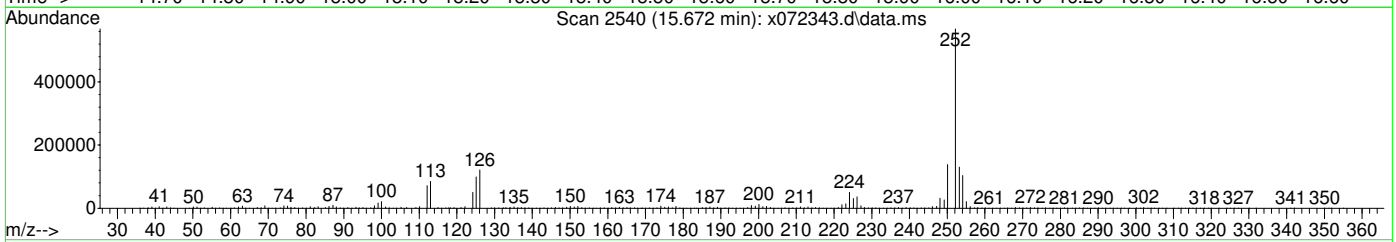
Parameter	CAS	Sig#	R.T. (min.)	Reason
Fluoranthene	206-44-0		12.32	Missed peak
Benzo(b)fluoranthene	205-99-2		15.67	Missed peak
Benzo(k)fluoranthene	207-08-9		15.70	Missed peak

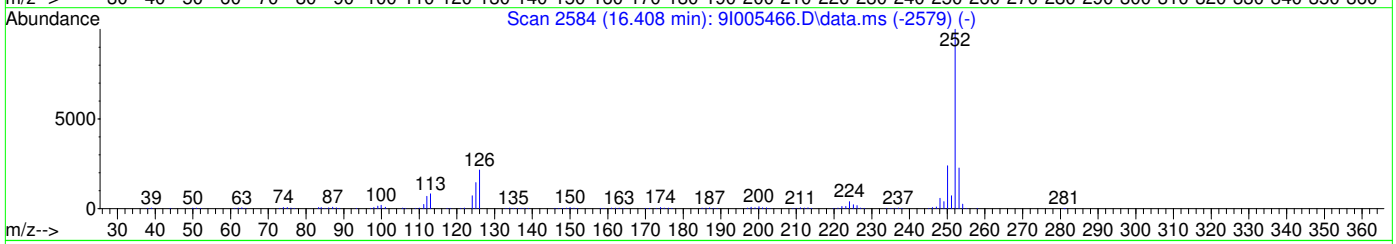
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072343.d
Acq On : 11 Aug 2020 6:52 pm
Operator : marthav
Sample : fa77576-11 E
Misc : op81482,sx2950,30.0,,,1,1,soil
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 12 01:47:47 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration







TIC: x072343.d\data.ms

(105) Benzo[k]fluoranthene (P)

15.672min (+0.011) 113.55ppm

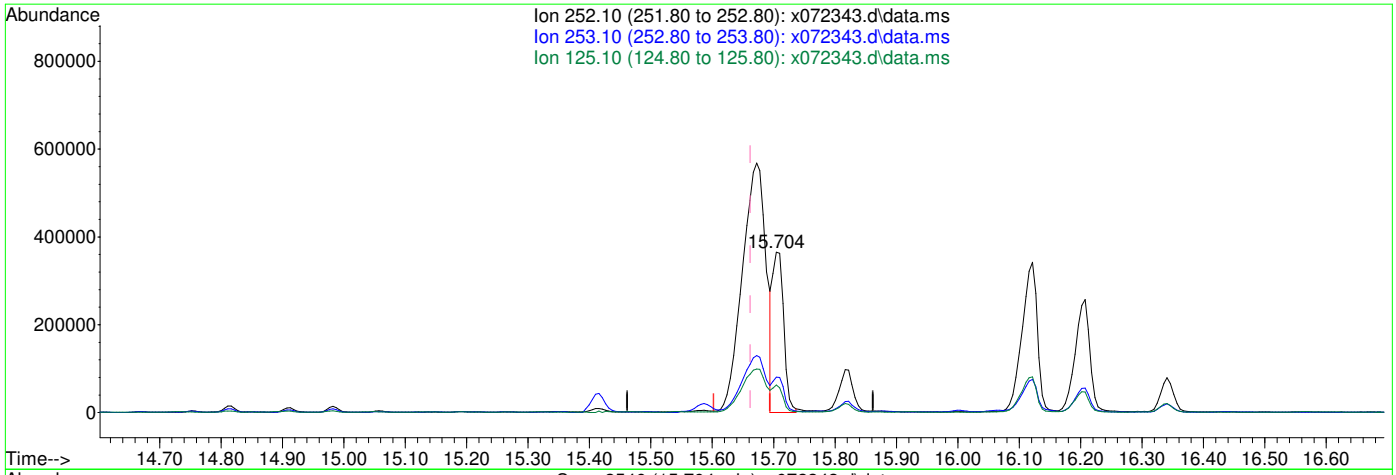
response 1497720

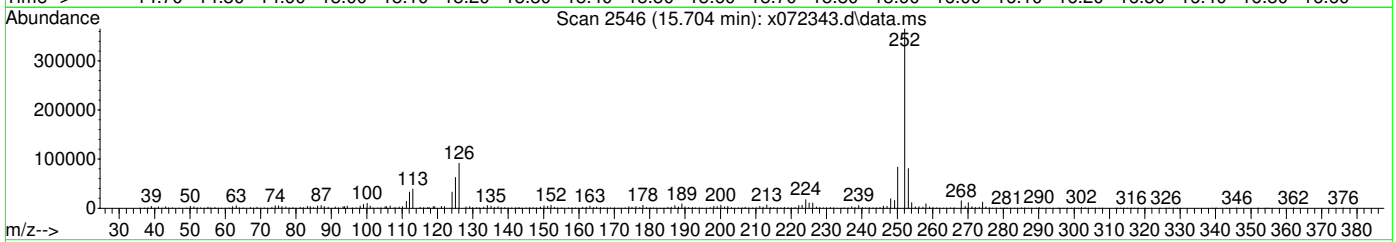
Ion	Exp%	Act%
252.10	100	100
253.10	22.50	22.13
125.10	14.40	17.08
0.00	0.00	0.00

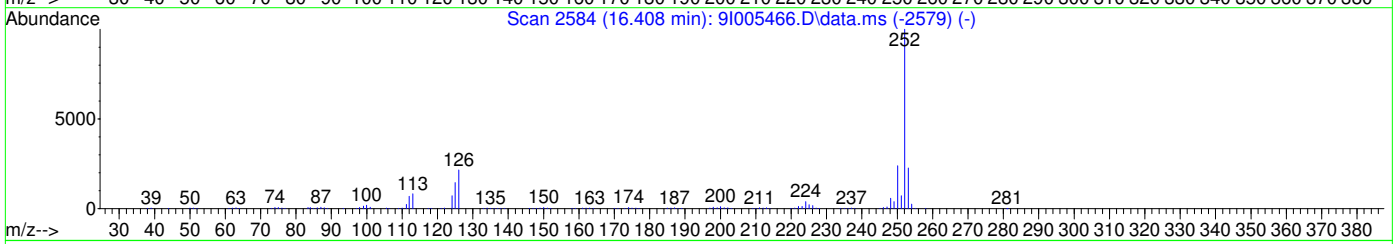
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072343.d
Acq On : 11 Aug 2020 6:52 pm
Operator : marthav
Sample : fa77576-11 E
Misc : op81482,sx2950,30.0,,,1,1,soil
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 12 01:47:47 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration







TIC: x072343.d\data.ms

(105) Benzo[k]fluoranthene (P)

15.704min (+0.043) 35.09ppm m

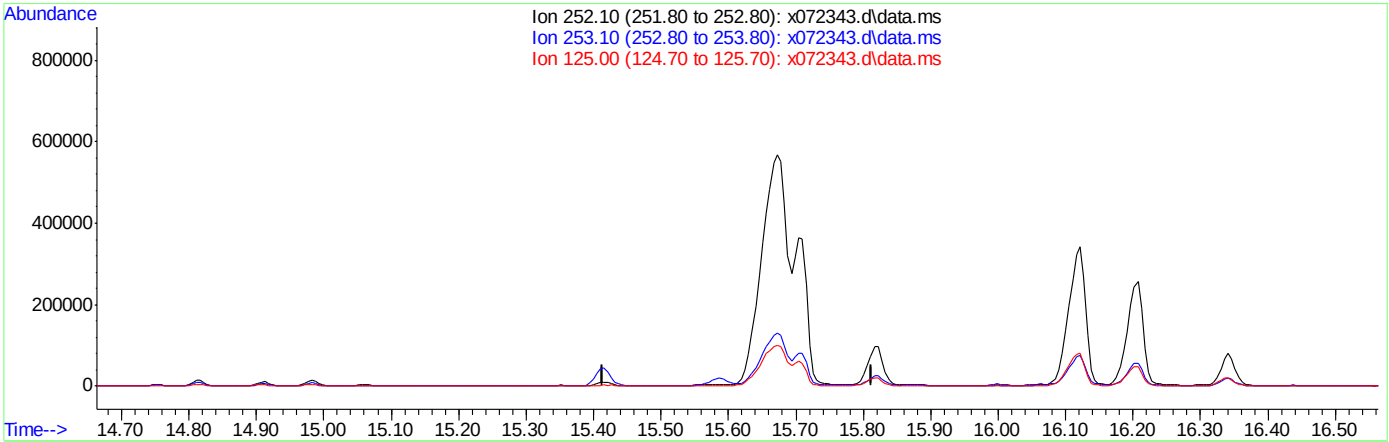
response 462762

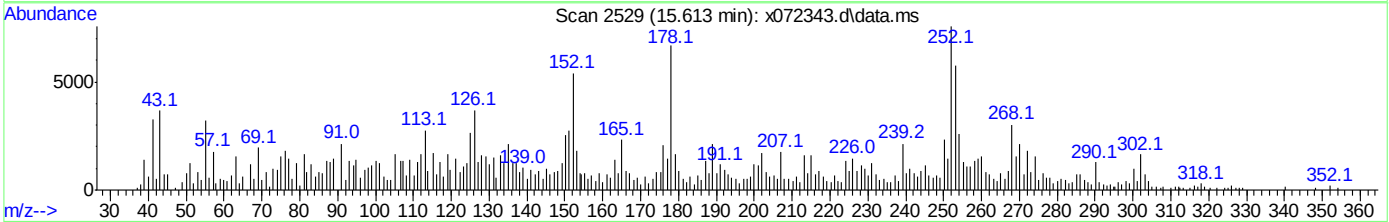
Ion	Exp%	Act%
252.10	100	100
253.10	22.50	22.16
125.10	14.40	17.13
0.00	0.00	0.00

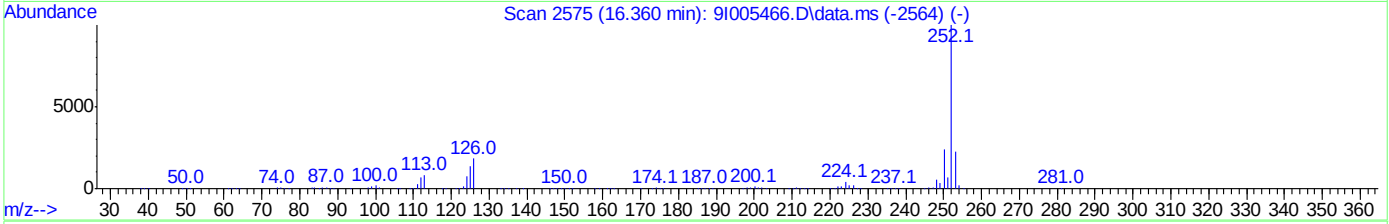
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0811_sx2950\
Data File : x072343.d
Acq On : 11 Aug 2020 6:52 pm
Operator : marthav
Sample : fa77576-11 E Inst : MSBNA05
Misc : op81482,sx2950,30.0,,,1,1,soil
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 12 02:51:13 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration







TIC: x072343.d\data.ms

(104) Benzo[b]fluoranthene (P)

15.614min 0.00ppm d

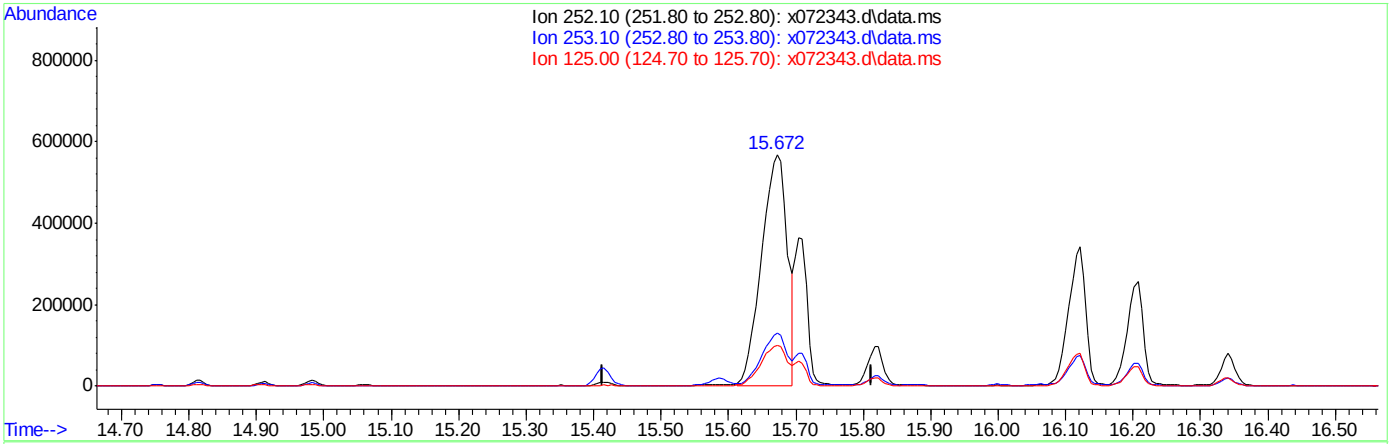
response 0

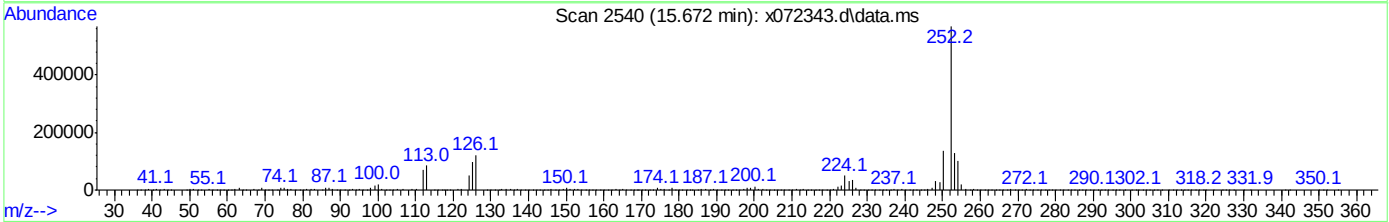
Ion	Exp%	Act%
252.10	100	0.00
253.10	22.50	0.00
125.00	14.00	0.00
0.00	0.00	0.00

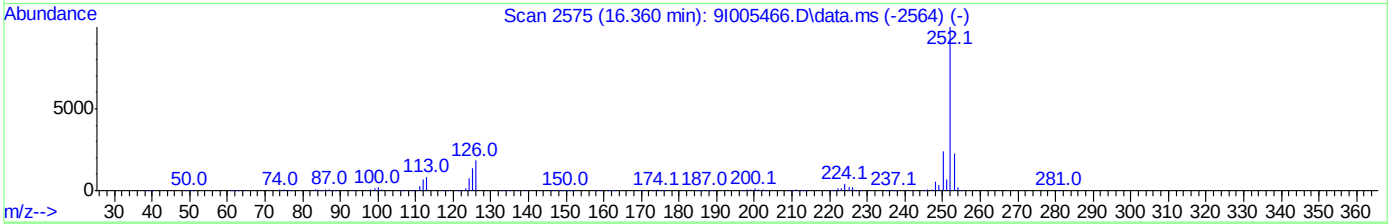
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0811_sx2950\
Data File : x072343.d
Acq On : 11 Aug 2020 6:52 pm
Operator : marthav
Sample : fa77576-11 E Inst : MSBNA05
Misc : op81482,sx2950,30.0,,,1,1,soil
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 12 02:51:13 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration







TIC: x072343.d\data.ms

(104) Benzo[b]fluoranthene (P)

15.672min (+0.059) 119.38ppm m

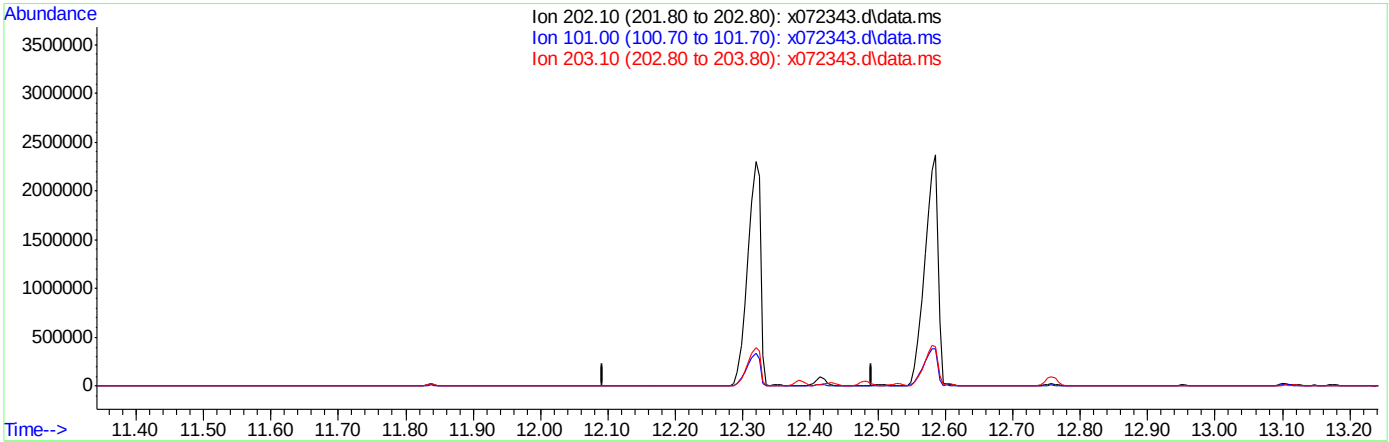
response 1508633

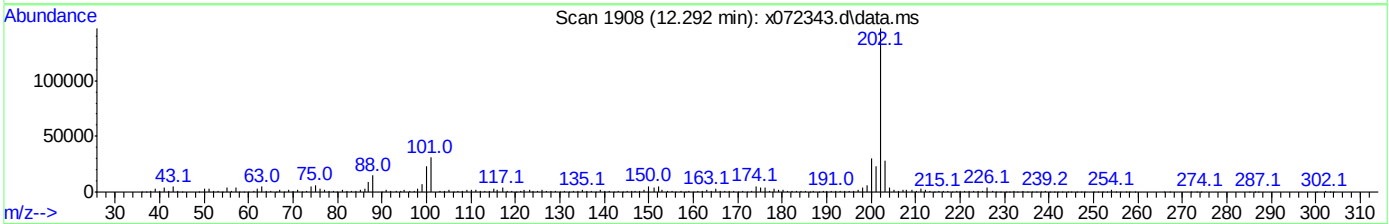
Ion	Exp%	Act%
252.10	100	100
253.10	22.50	22.89
125.00	14.00	17.48
0.00	0.00	0.00

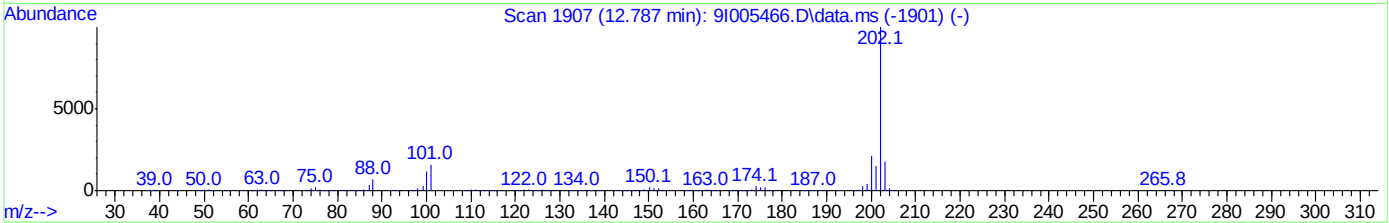
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0811_sx2950\
Data File : x072343.d
Acq On : 11 Aug 2020 6:52 pm
Operator : marthav
Sample : fa77576-11 E Inst : MSBNA05
Misc : op81482,sx2950,30.0,,,1,1,soil
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 12 09:20:57 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration







TIC: x072343.d\data.ms

(91) Fluoranthene (P)

12.292min 0.00ppm d

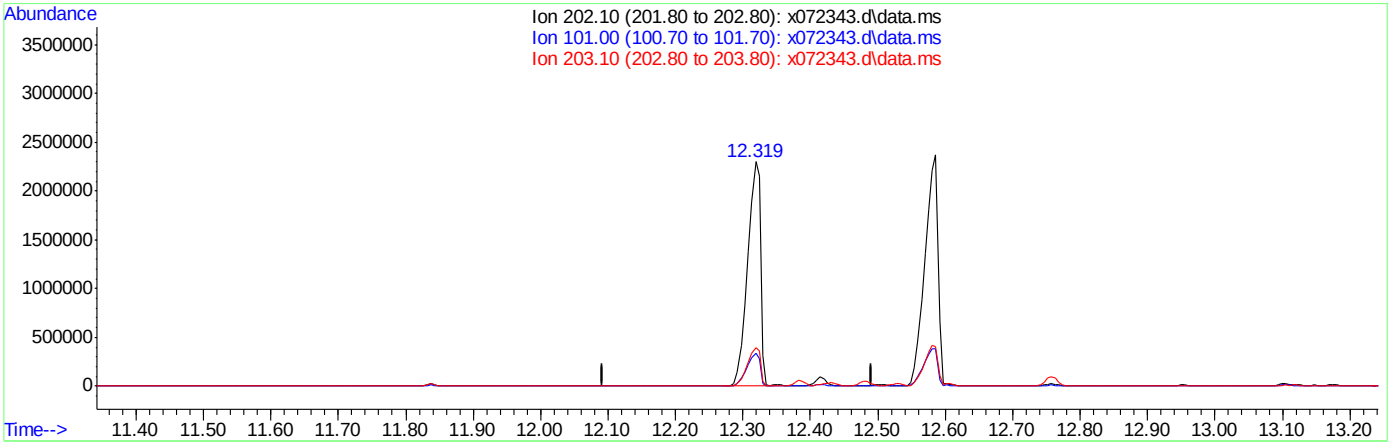
response 0

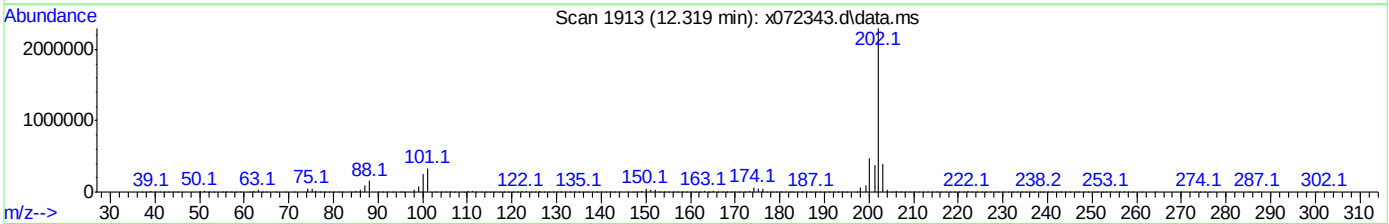
Ion	Exp%	Act%
202.10	100	0.00
101.00	15.80	0.00
203.10	18.10	0.00
0.00	0.00	0.00

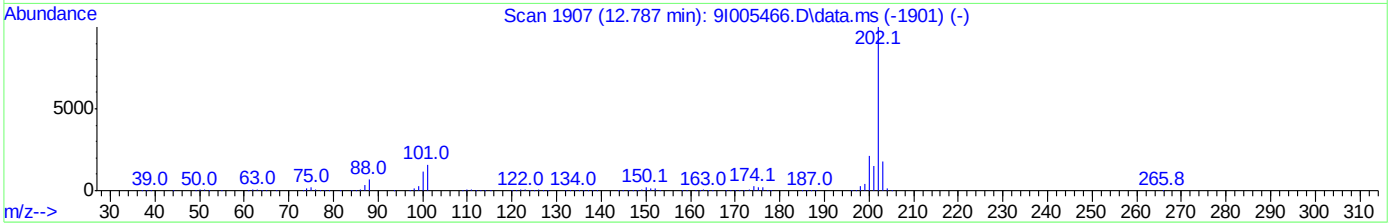
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0811_sx2950\
Data File : x072343.d
Acq On : 11 Aug 2020 6:52 pm
Operator : marthav
Sample : fa77576-11 E Inst : MSBNA05
Misc : op81482,sx2950,30.0,,,1,1,soil
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 12 09:20:57 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration







TIC: x072343.d\data.ms

(91) Fluoranthene (P)

12.319min (+0.027) 198.38ppm m

response 3053575

Ion	Exp%	Act%
202.10	100	100
101.00	15.80	14.59
203.10	18.10	17.27
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan
08/13/20 11:23

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-13-2020\sx2951\
Data File : x072375.d
Acq On : 12 Aug 2020 6:09 pm
Operator : marthav
Sample : fa77576-11 E,5
Misc : op81482,sx2951,30.0,,,1,5,soil
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Aug 13 02:59:52 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

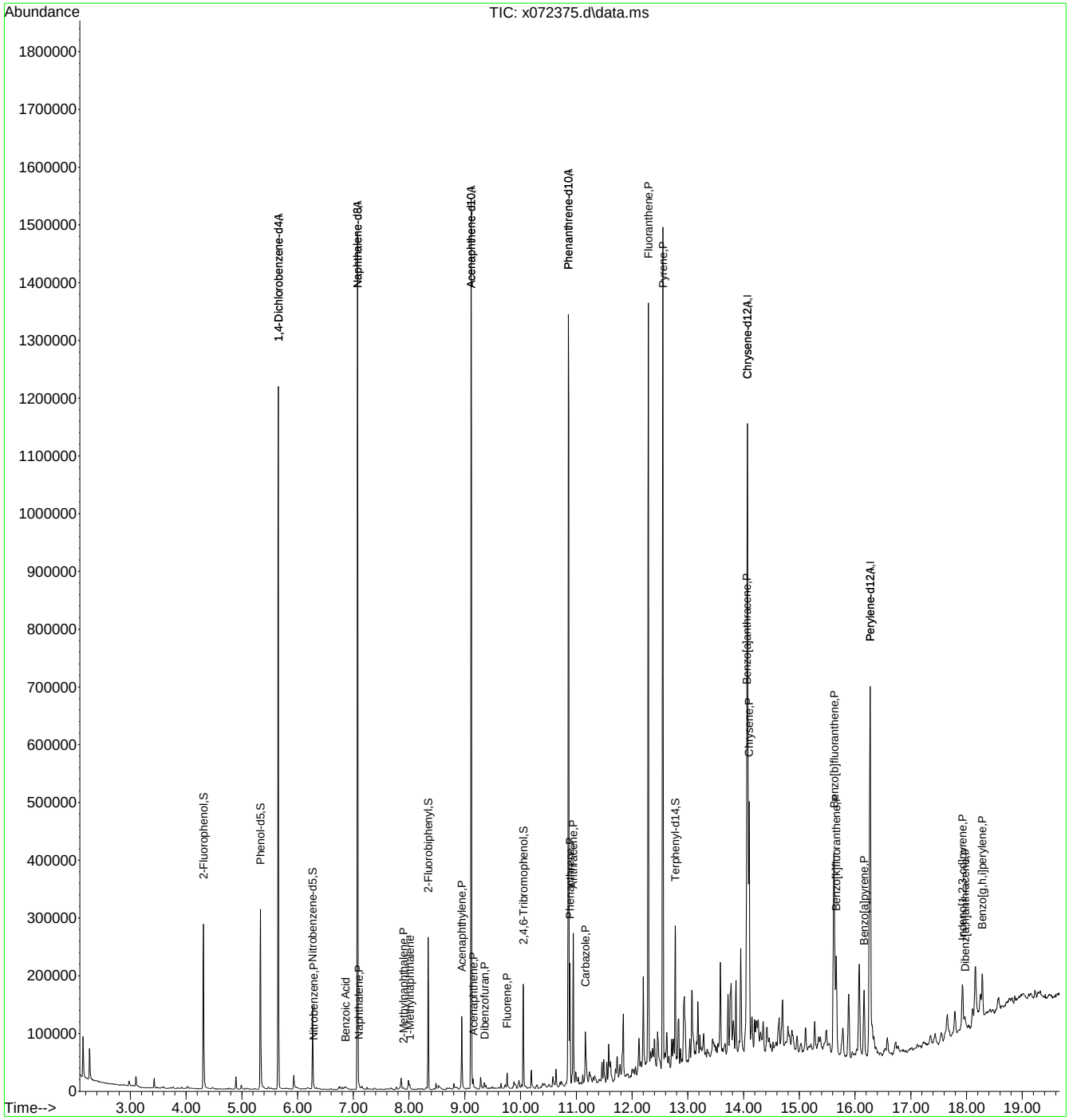
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.654	152	168839	40.00	ppm	0.00
22) Naphthalene-d8	7.077	136	622102	40.00	ppm	0.00
43) Acenaphthene-d10	9.115	164	300831	40.00	ppm	0.00
70) Phenanthrene-d10	10.859	188	515565	40.00	ppm	0.00
92) Chrysene-d12	14.068	240	420124	40.00	ppm	0.00
102) Perylene-d12	16.271	264	329022	40.00	ppm	0.02
110) 1,4-Dichlorobenzene-d4A	5.654	152	168839	40.00	ppm	0.00
120) Naphthalene-d8A	7.077	136	622102	40.00	ppm	0.00
127) Acenaphthene-d10A	9.115	164	300831	40.00	ppm	0.00
136) Phenanthrene-d10A	10.859	188	515565	40.00	ppm	0.00
146) Chrysene-d12A	14.068	240	420124	40.00	ppm	0.00
153) Perylene-d12A	16.271	264	329022	40.00	ppm	0.02
System Monitoring Compounds						
7) 2-Fluorophenol	4.312	112	75127	12.41	ppm	0.00
Spiked Amount 100.000	Range 40 - 102		Recovery = 12.41%#			
9) Phenol-d5	5.334	99	94041	13.06	ppm	0.00
Spiked Amount 100.000	Range 41 - 100		Recovery = 13.06%#			
23) Nitrobenzene-d5	6.270	82	39373	6.13	ppm	-0.01
Spiked Amount 50.000	Range 40 - 105		Recovery = 12.26%#			
47) 2-Fluorobiphenyl	8.345	172	73617	6.76	ppm	-0.01
Spiked Amount 50.000	Range 43 - 107		Recovery = 13.52%#			
75) 2,4,6-Tribromophenol	10.051	330	13994	14.47	ppm	0.00
Spiked Amount 100.000	Range 42 - 108		Recovery = 14.47%#			
95) Terphenyl-d14	12.773	244	74415	6.67	ppm	0.00
Spiked Amount 50.000	Range 45 - 119		Recovery = 13.34%#			
Target Compounds						Qvalue
24) Nitrobenzene	6.291	77	1405	0.22	ppm	69
30) Benzoic Acid	6.858	105	1023	0.27	ppm	84
34) Naphthalene	7.099	128	1117	0.07	ppm	74
40) 2-Methylnaphthalene	7.901	142	662	0.06	ppm	90
41) 1-Methylnaphthalene	8.013	142	636	0.06	ppm	99
52) Acenaphthylene	8.944	152	66402	4.42	ppm	99
57) Acenaphthene	9.152	153	3773	0.38	ppm	96
60) Dibenzofuran	9.356	168	1673	0.13	ppm	91
65) Fluorene	9.757	166	8435	0.81	ppm	94
84) Phenanthrene	10.885	178	69923	4.49	ppm	99
85) Anthracene	10.944	178	94566	5.82	ppm	98
87) Carbazole	11.164	167	34620	2.42	ppm	99
91) Fluoranthene	12.292	202	501477	34.69	ppm	99
94) Pyrene	12.554	202	546378	31.32	ppm	98
99) Benzo[a]anthracene	14.057	228	95332	7.22	ppm	99
100) Chrysene	14.100	228	204998	14.58	ppm	98
104) Benzo[b]fluoranthene	15.624	252	222747	24.10	ppm	94
105) Benzo[k]fluoranthene	15.662	252	82582m	7.07	ppm	
106) Benzo[a]pyrene	16.165	252	64633	7.61	ppm	97
107) Indeno[1,2,3-cd]pyrene	17.930	276	48693	9.84	ppm	87
108) Dibenz[a,h]anthracene	17.972	278	9733	1.89	ppm	86
109) Benzo[g,h,i]perylene	18.283	276	37992	5.01	ppm	86

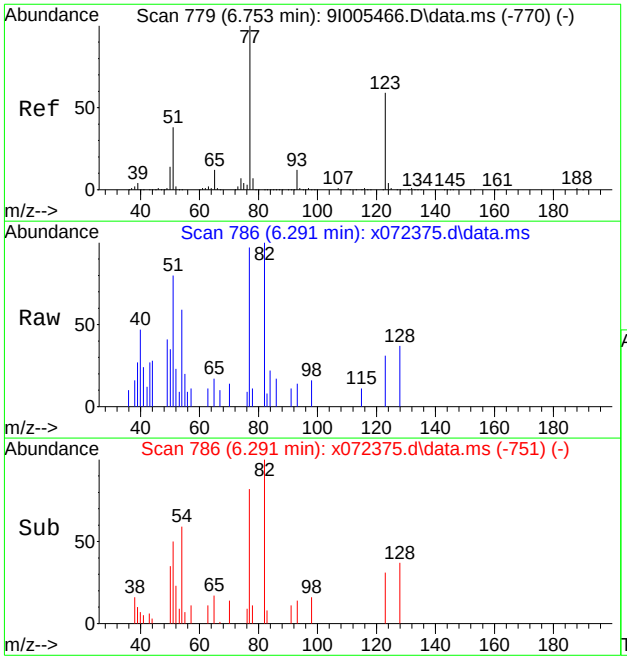
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-13-2020\sx2951\
Data File : x072375.d
Acq On : 12 Aug 2020 6:09 pm
Operator : marthav
Sample : fa77576-11 E,5
Misc : op81482,sx2951,30.0,,,1,5,soil
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Aug 13 02:59:52 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

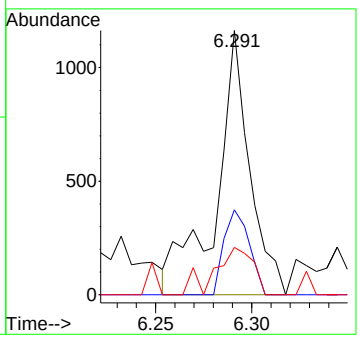


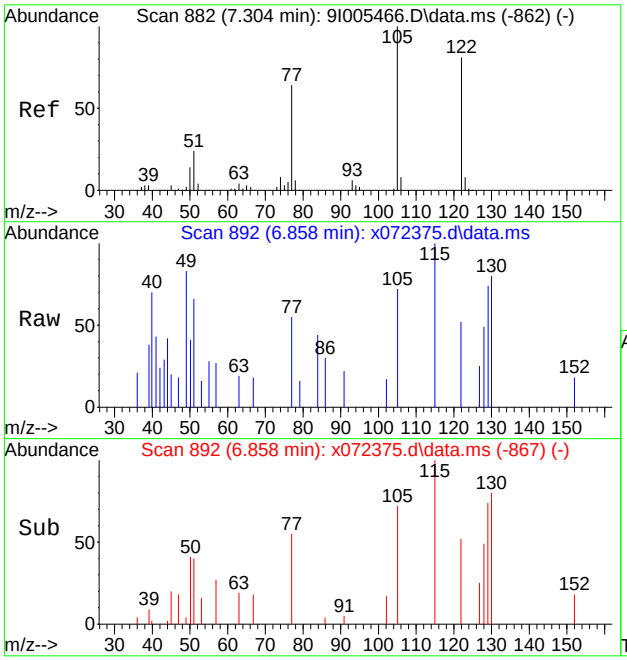


#24
Nitrobenzene
Concen: 0.22 ppm
RT: 6.291 min Scan# 786
Delta R.T. -0.011 min
Lab File: x072375.d
Acq: 12 Aug 2020 6:09 pm

Tgt Ion: 77 Resp: 1405

Ion	Ratio	Lower	Upper
77	100		
123	33.7	28.7	88.7
65	18.9	0.0	42.1

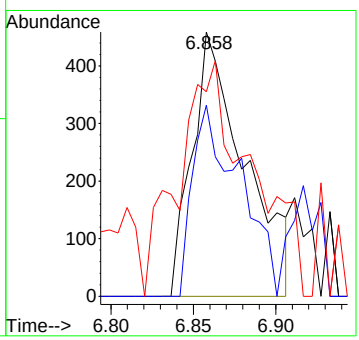


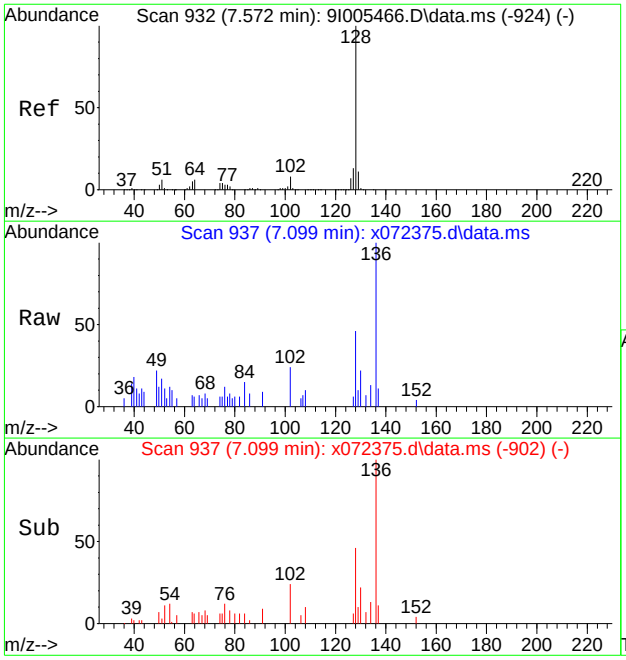


#30
Benzoic Acid
Concen: 0.27 ppm
RT: 6.858 min Scan# 892
Delta R.T. -0.064 min
Lab File: x072375.d
Acq: 12 Aug 2020 6:09 pm

Tgt Ion:105 Resp: 1023

Ion	Ratio	Lower	Upper
105	100		
122	71.8	51.2	111.2
77	46.6	34.1	94.1

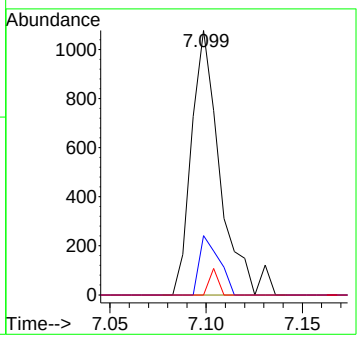


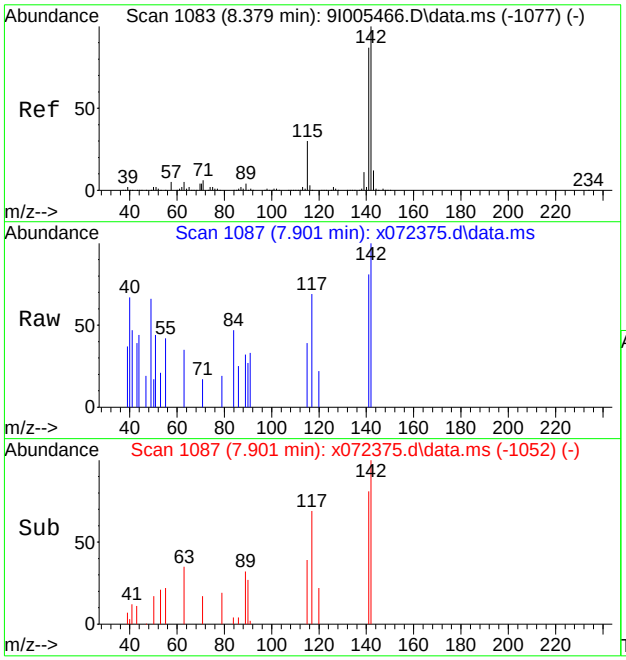


#34
Naphthalene
Concen: 0.07 ppm
RT: 7.099 min Scan# 937
Delta R.T. -0.011 min
Lab File: x072375.d
Acq: 12 Aug 2020 6:09 pm

Tgt Ion:128 Resp: 1117

Ion	Ratio	Lower	Upper
128	100		
129	22.4	0.0	41.4
126	0.0	0.0	37.4

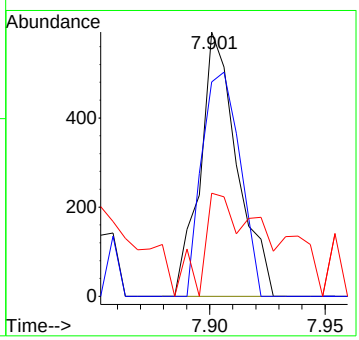


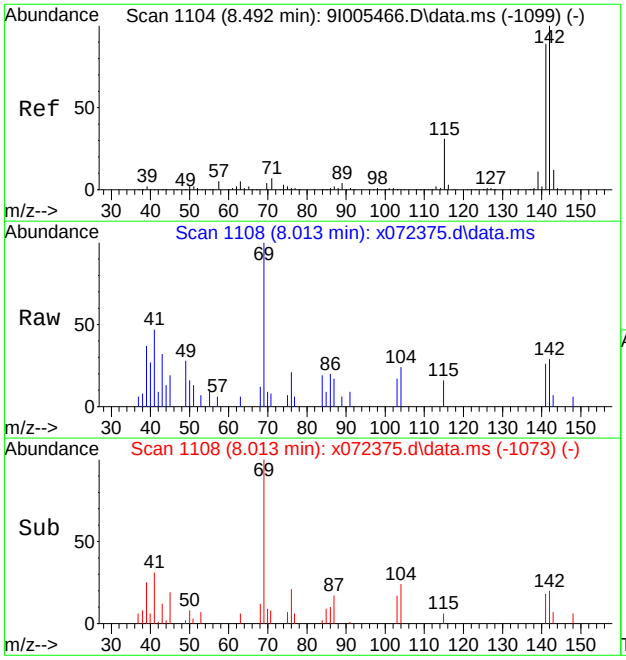


#40
2-Methylnaphthalene
Concen: 0.06 ppm
RT: 7.901 min Scan# 1087
Delta R.T. -0.011 min
Lab File: x072375.d
Acq: 12 Aug 2020 6:09 pm

Tgt Ion:142 Resp: 662

Ion	Ratio	Lower	Upper
142	100		
141	81.1	56.8	116.8
115	17.9	0.0	60.0

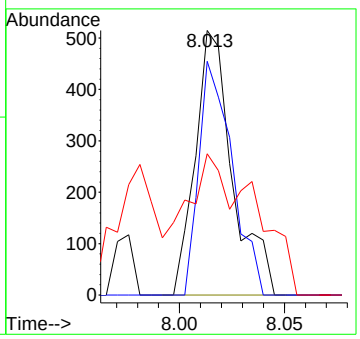


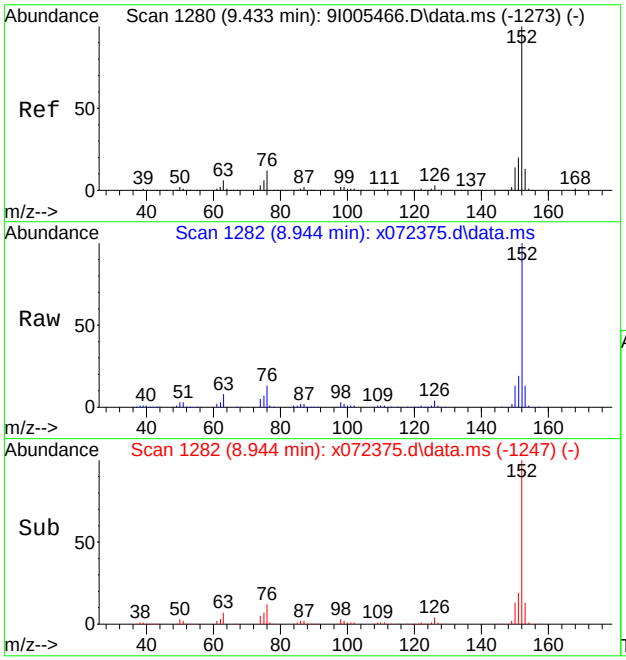


#41
1-Methylnaphthalene
Concen: 0.06 ppm
RT: 8.013 min Scan# 1108
Delta R.T. -0.011 min
Lab File: x072375.d
Acq: 12 Aug 2020 6:09 pm

Tgt Ion:142 Resp: 636

Ion	Ratio	Lower	Upper
142	100		
141	88.3	59.0	119.0
115	31.6	1.1	61.1

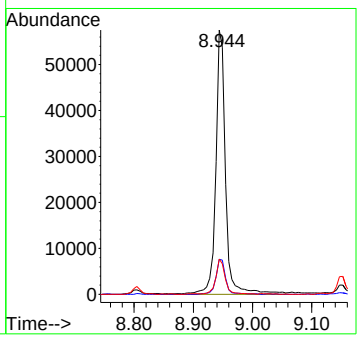


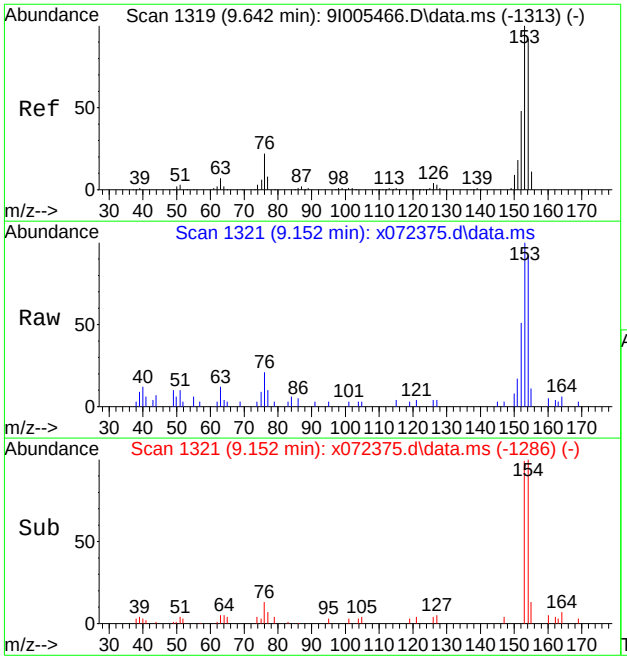


#52
Acenaphthylene
Concen: 4.42 ppm
RT: 8.944 min Scan# 1282
Delta R.T. -0.011 min
Lab File: x072375.d
Acq: 12 Aug 2020 6:09 pm

Tgt Ion:152 Resp: 66402

Ion	Ratio	Lower	Upper
152	100		
150	13.3	0.0	44.3
153	13.3	0.0	43.3

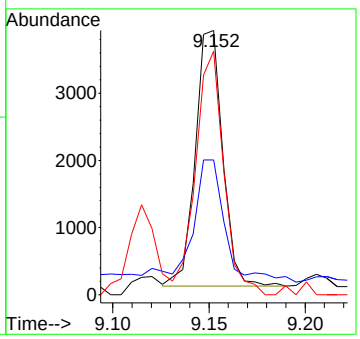


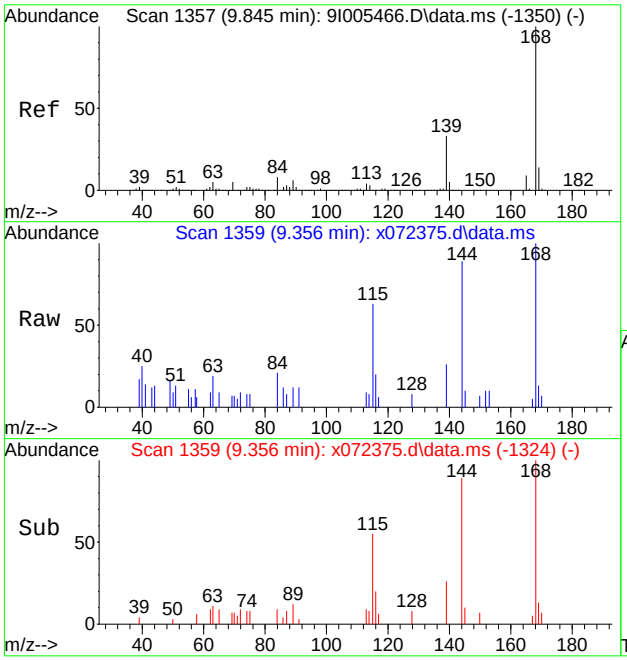


#57
Acenaphthene
Concen: 0.38 ppm
RT: 9.152 min Scan# 1321
Delta R.T. -0.011 min
Lab File: x072375.d
Acq: 12 Aug 2020 6:09 pm

Tgt Ion:153 Resp: 3773

Ion	Ratio	Lower	Upper
153	100		
152	44.7	18.4	78.4
154	89.6	62.4	122.4

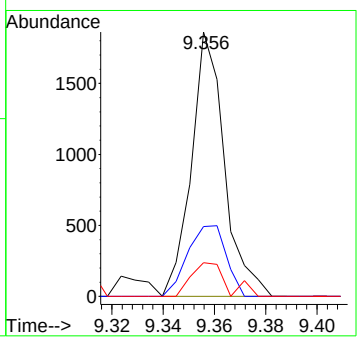


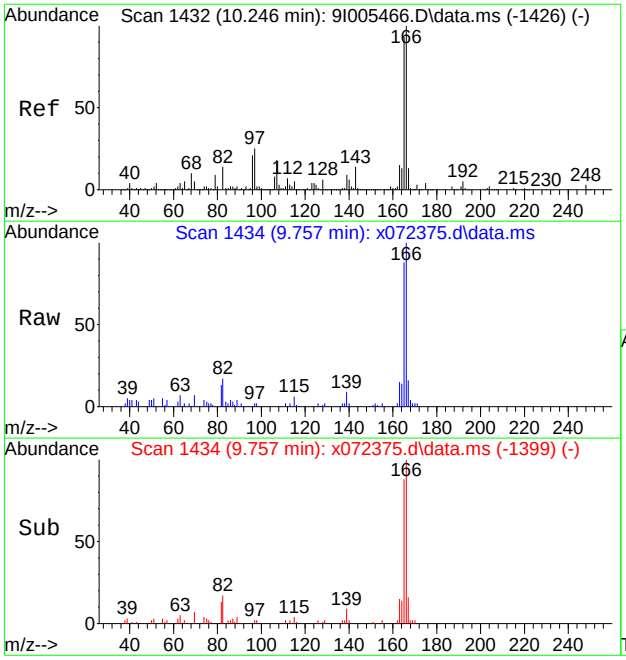


#60
Dibenzofuran
Concen: 0.13 ppm
RT: 9.356 min Scan# 1359
Delta R.T. -0.011 min
Lab File: x072375.d
Acq: 12 Aug 2020 6:09 pm

Tgt Ion:168 Resp: 1673

Ion	Ratio	Lower	Upper
168	100		
139	26.4	3.0	63.0
169	12.7	0.0	43.5

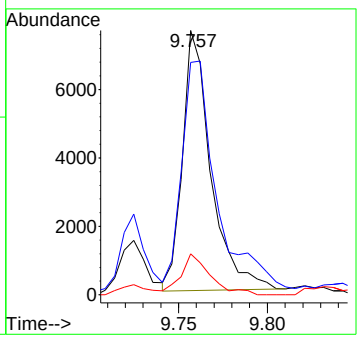


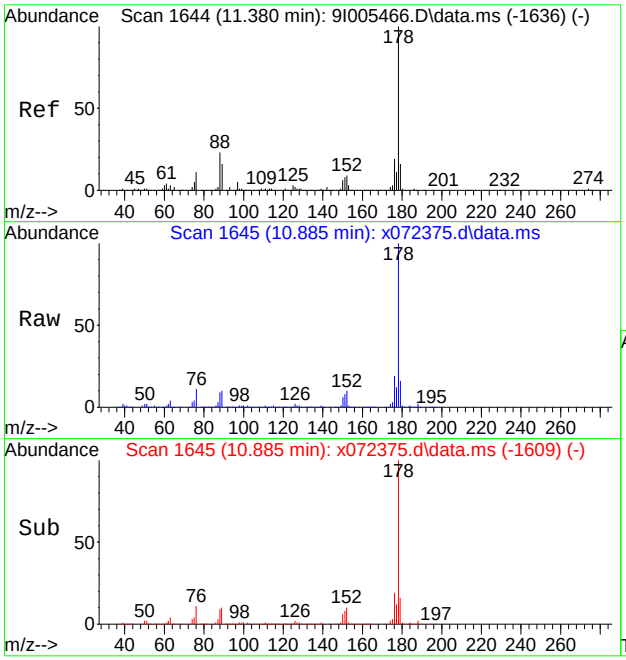


#65
Fluorene
Concen: 0.81 ppm
RT: 9.757 min Scan# 1434
Delta R.T. -0.011 min
Lab File: x072375.d
Acq: 12 Aug 2020 6:09 pm

Tgt Ion:166 Resp: 8435

Ion	Ratio	Lower	Upper
166	100		
165	87.1	62.7	122.7
167	15.3	0.0	43.5

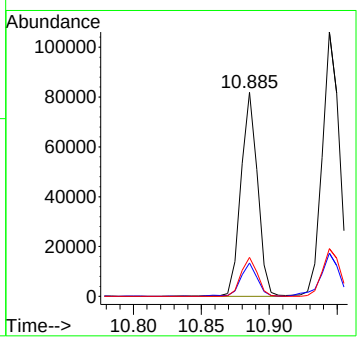


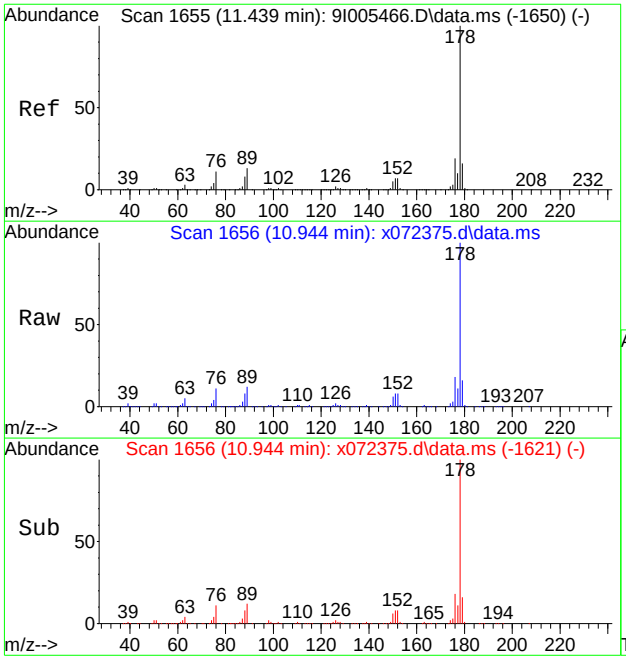


#84
Phenanthrene
Concen: 4.49 ppm
RT: 10.885 min Scan# 1645
Delta R.T. -0.005 min
Lab File: x072375.d
Acq: 12 Aug 2020 6:09 pm

Tgt Ion:178 Resp: 69923

Ion	Ratio	Lower	Upper
178	100		
179	16.4	0.0	45.8
176	19.2	0.0	49.3

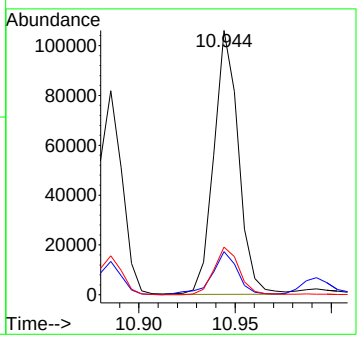


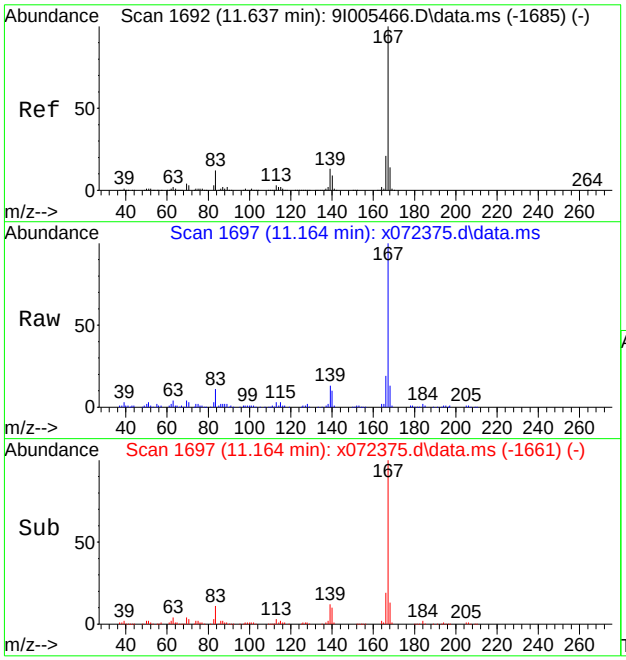


#85
Anthracene
Concen: 5.82 ppm
RT: 10.944 min Scan# 1656
Delta R.T. -0.011 min
Lab File: x072375.d
Acq: 12 Aug 2020 6:09 pm

Tgt Ion:178 Resp: 94566

Ion	Ratio	Lower	Upper
178	100		
179	16.2	0.0	46.0
176	18.0	0.0	49.3

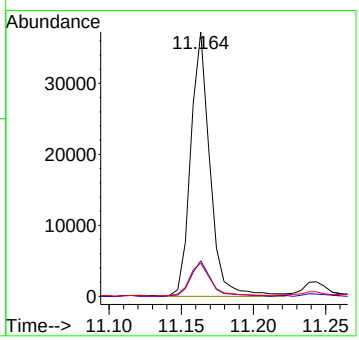


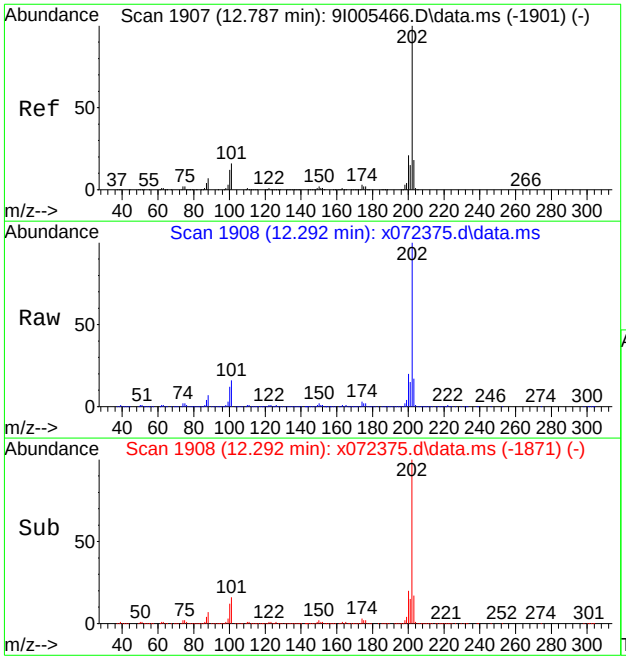


#87
Carbazole
Concen: 2.42 ppm
RT: 11.164 min Scan# 1697
Delta R.T. -0.005 min
Lab File: x072375.d
Acq: 12 Aug 2020 6:09 pm

Tgt Ion:167 Resp: 34620

Ion	Ratio	Lower	Upper
167	100		
168	13.4	0.0	43.9
139	12.2	0.0	42.7

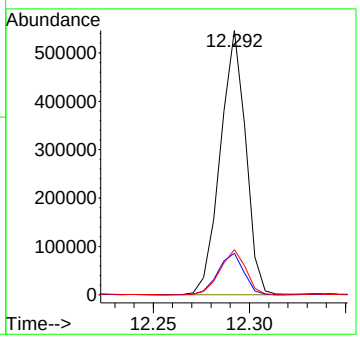


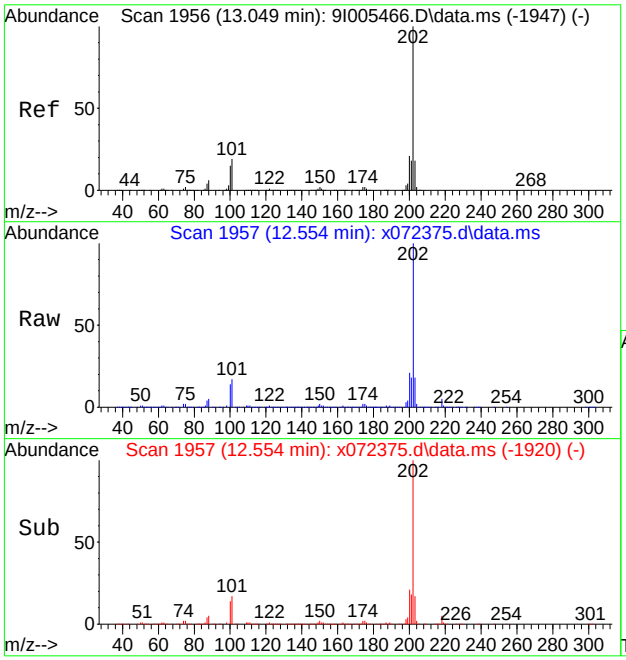


#91
Fluoranthene
Concen: 34.69 ppm
RT: 12.292 min Scan# 1908
Delta R.T. 0.000 min
Lab File: x072375.d
Acq: 12 Aug 2020 6:09 pm

Tgt Ion:202 Resp: 501477

Ion	Ratio	Lower	Upper
202	100		
101	15.7	0.0	45.8
203	17.1	0.0	48.1

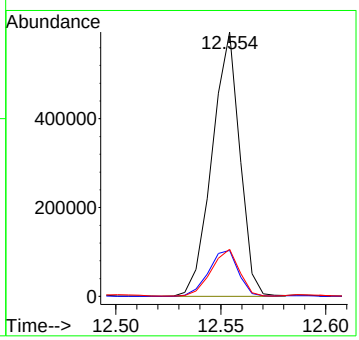


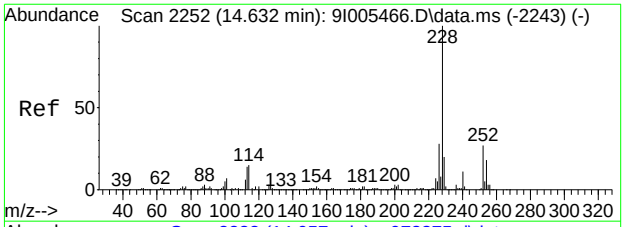


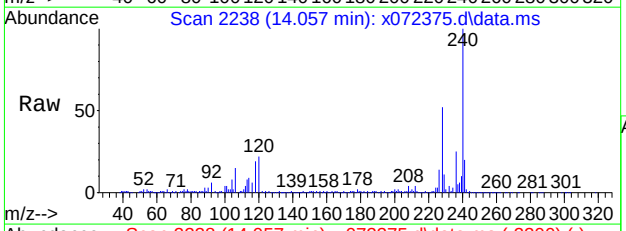
#94
Pyrene
Concen: 31.32 ppm
RT: 12.554 min Scan# 1957
Delta R.T. 0.000 min
Lab File: x072375.d
Acq: 12 Aug 2020 6:09 pm

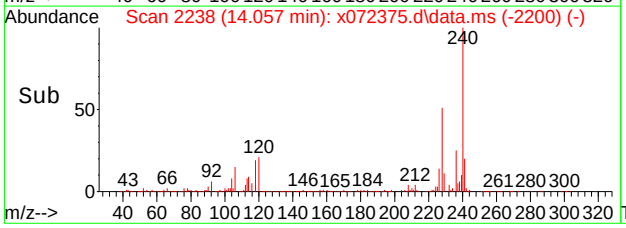
Tgt Ion:202 Resp: 546378

Ion	Ratio	Lower	Upper
202	100		
101	17.3	0.0	48.7
203	17.7	0.0	48.4





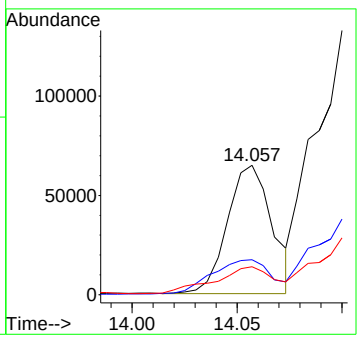


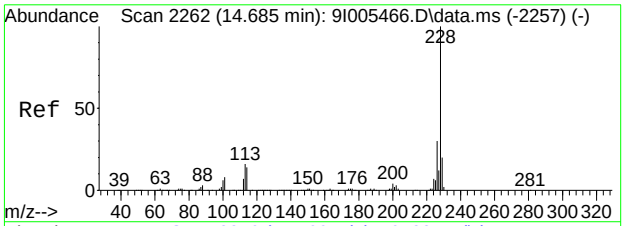


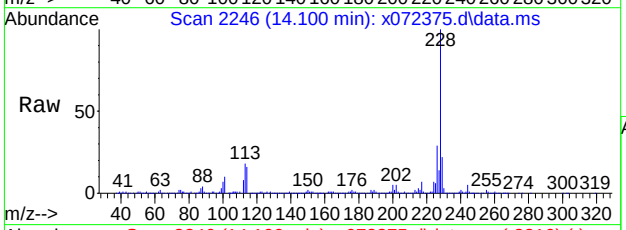
#99
Benzo[a]anthracene
Concen: 7.22 ppm
RT: 14.057 min Scan# 2238
Delta R.T. 0.005 min
Lab File: x072375.d
Acq: 12 Aug 2020 6:09 pm

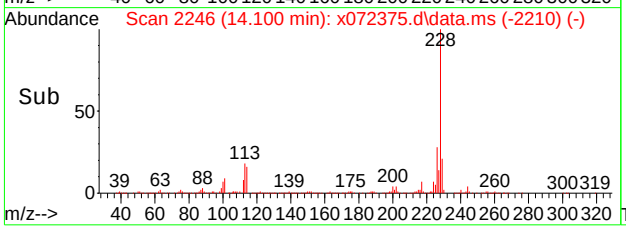
Tgt Ion:228 Resp: 95332

Ion	Ratio	Lower	Upper
228	100		
226	26.4	0.0	57.5
229	19.6	0.0	49.9





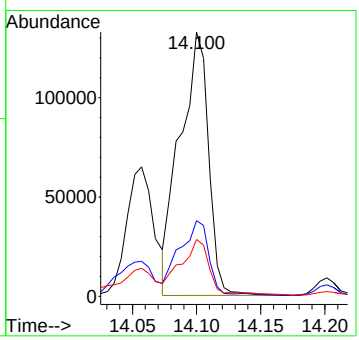


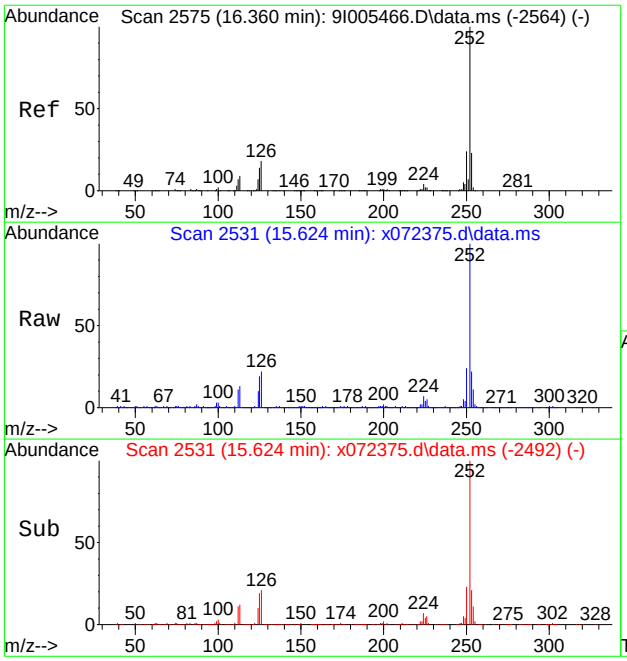


#100
Chrysene
Concen: 14.58 ppm
RT: 14.100 min Scan# 2246
Delta R.T. -0.005 min
Lab File: x072375.d
Acq: 12 Aug 2020 6:09 pm

Tgt Ion:228 Resp: 204998

Ion	Ratio	Lower	Upper
228	100		
226	28.6	0.4	60.4
229	20.6	0.0	50.1

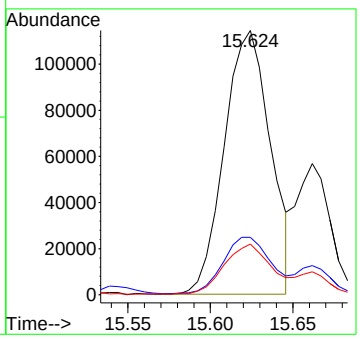


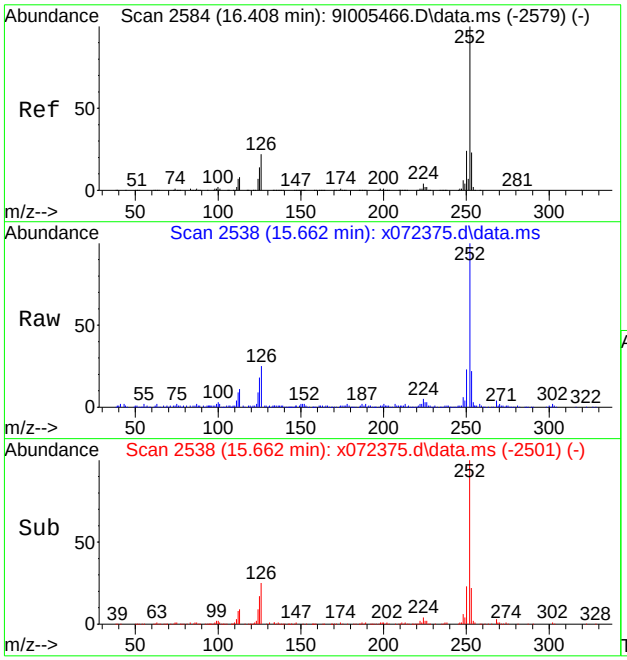


#104
Benzo[b]fluoranthene
Concen: 24.10 ppm
RT: 15.624 min Scan# 2531
Delta R.T. 0.011 min
Lab File: x072375.d
Acq: 12 Aug 2020 6:09 pm

Tgt Ion:252 Resp: 222747

Ion	Ratio	Lower	Upper
252	100		
253	21.3	0.0	52.5
125	18.7	0.0	44.0

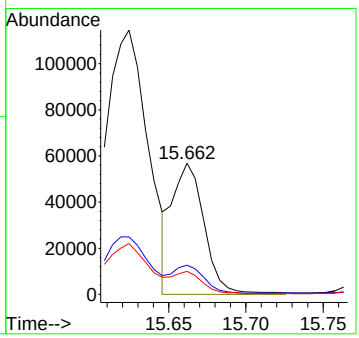


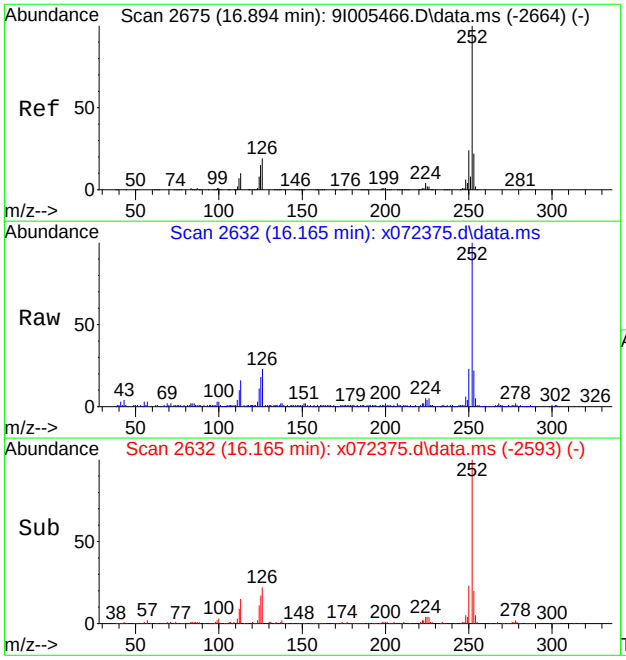


#105
Benzo[k]fluoranthene
Concen: 7.07 ppm m
RT: 15.662 min Scan# 2538
Delta R.T. 0.000 min
Lab File: x072375.d
Acq: 12 Aug 2020 6:09 pm

Tgt Ion:252 Resp: 82582

Ion	Ratio	Lower	Upper
252	100		
253	22.3	0.0	52.5
125	17.5	0.0	44.4

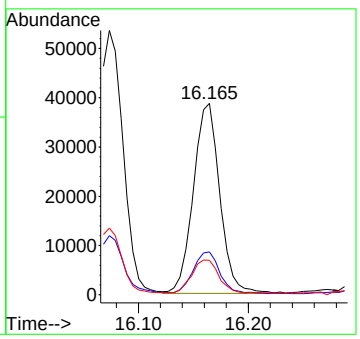


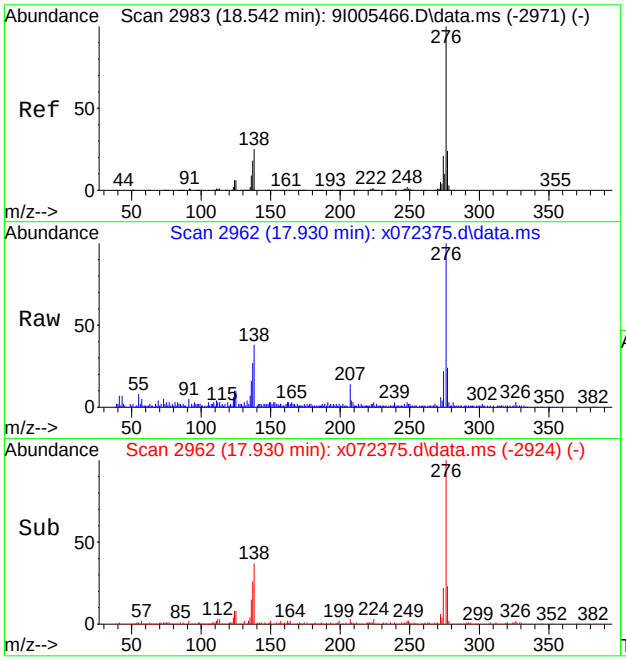


#106
Benzo[a]pyrene
Concen: 7.61 ppm
RT: 16.165 min Scan# 2632
Delta R.T. 0.011 min
Lab File: x072375.d
Acq: 12 Aug 2020 6:09 pm

Tgt Ion:252 Resp: 64633

Ion	Ratio	Lower	Upper
252	100		
253	21.7	0.0	52.3
125	17.3	0.0	44.7

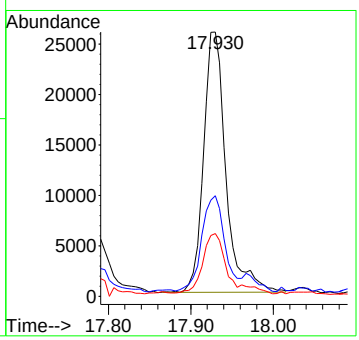


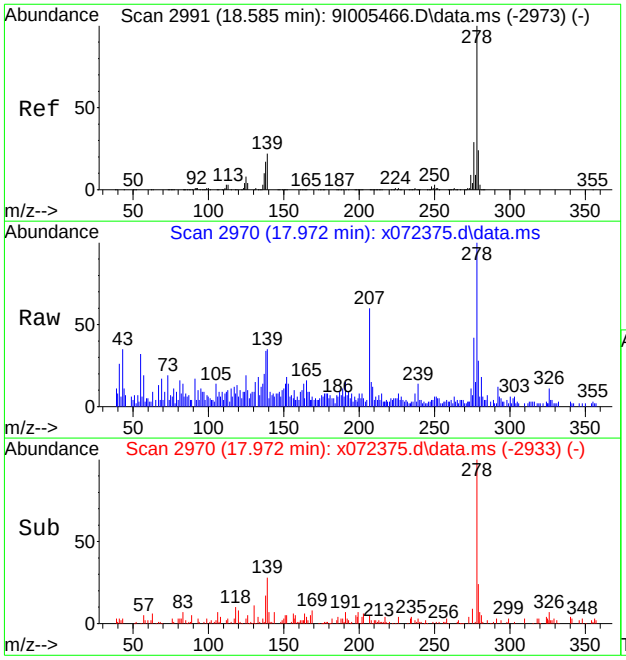


#107
Indeno[1,2,3-cd]pyrene
Concen: 9.84 ppm
RT: 17.930 min Scan# 2962
Delta R.T. 0.005 min
Lab File: x072375.d
Acq: 12 Aug 2020 6:09 pm

Tgt Ion:276 Resp: 48693

Ion	Ratio	Lower	Upper
276	100		
138	36.4	0.0	54.7
277	22.8	0.0	53.8

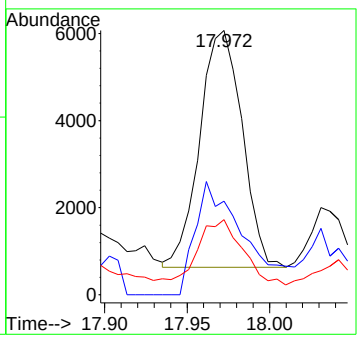


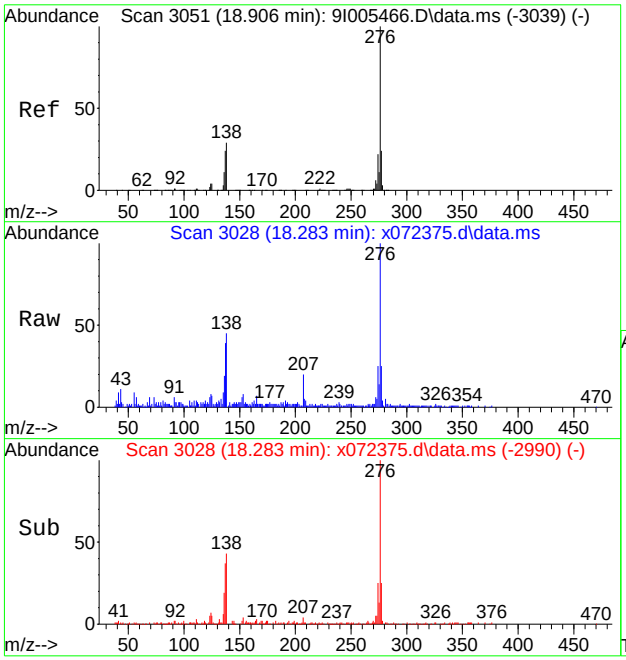


#108
Dibenz[a,h]anthracene
Concen: 1.89 ppm
RT: 17.972 min Scan# 2970
Delta R.T. 0.000 min
Lab File: x072375.d
Acq: 12 Aug 2020 6:09 pm

Tgt Ion:278 Resp: 9733

Ion	Ratio	Lower	Upper
278	100		
139	33.8	0.0	52.4
279	26.6	0.0	54.4

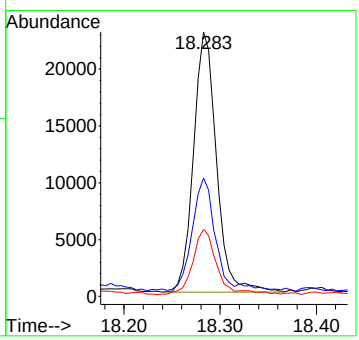




#109
Benzo[g,h,i]perylene
Concen: 5.01 ppm
RT: 18.283 min Scan# 3028
Delta R.T. 0.005 min
Lab File: x072375.d
Acq: 12 Aug 2020 6:09 pm

Tgt Ion:276 Resp: 37992

Ion	Ratio	Lower	Upper
276	100		
138	42.5	0.0	59.4
277	24.8	0.0	54.1



Manual Integration Approval Summary

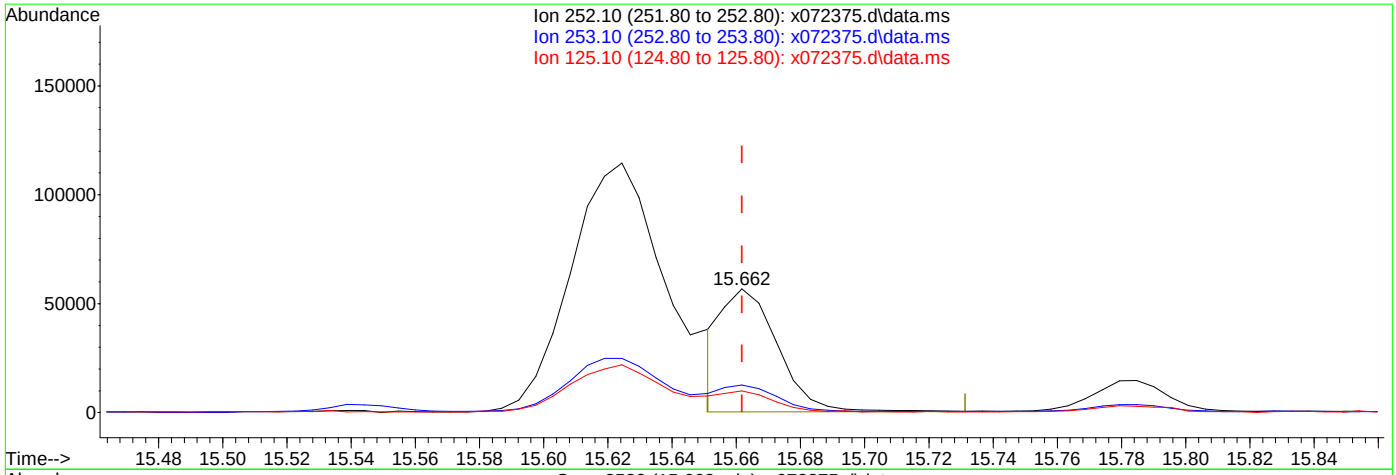
Sample Number:	FA77576-11	**Method:**	SW846 8270E
Lab FileID:	X072375.D	**Analyst approved:**	08/13/20 08:49 Martha Valls
Injection Time:	08/12/20 18:09	**Supervisor approved:**	08/13/20 11:23 Naresh Jiawan

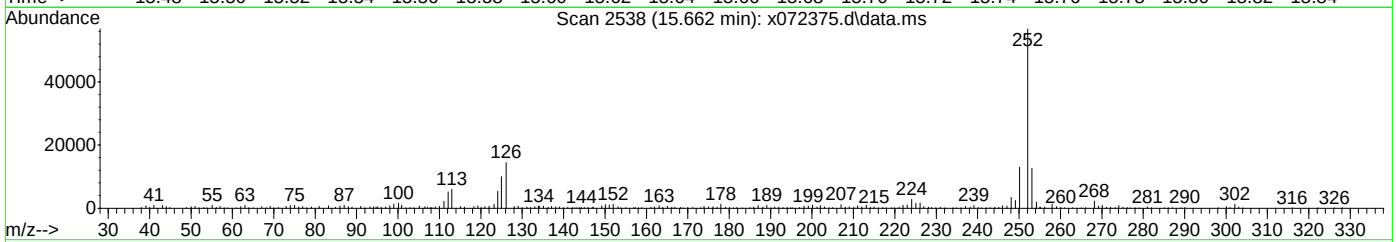
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(k)fluoranthene	207-08-9		15.66	Poor instrument integration

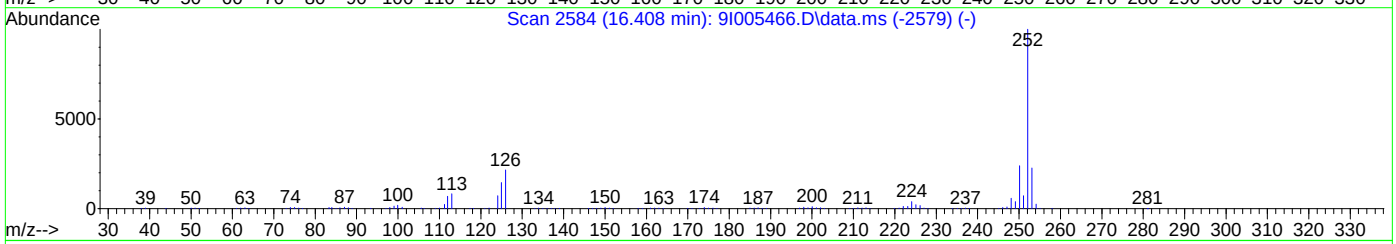
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-13-2020\sx2951\
Data File : x072375.d
Acq On : 12 Aug 2020 6:09 pm
Operator : marthav
Sample : fa77576-11 E,5
Misc : op81482,sx2951,30.0,,,1,5,soil
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Aug 13 02:45:32 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration







TIC: x072375.d\data.ms

(105) Benzo[k]fluoranthene (P)

15.662min (+0.000) 5.88ppm

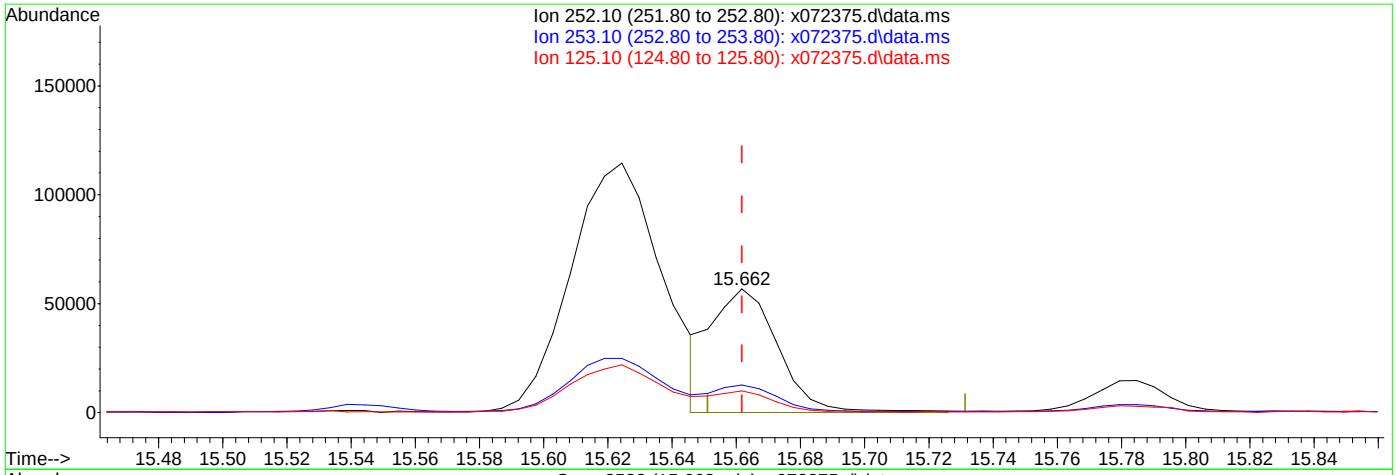
response 68689

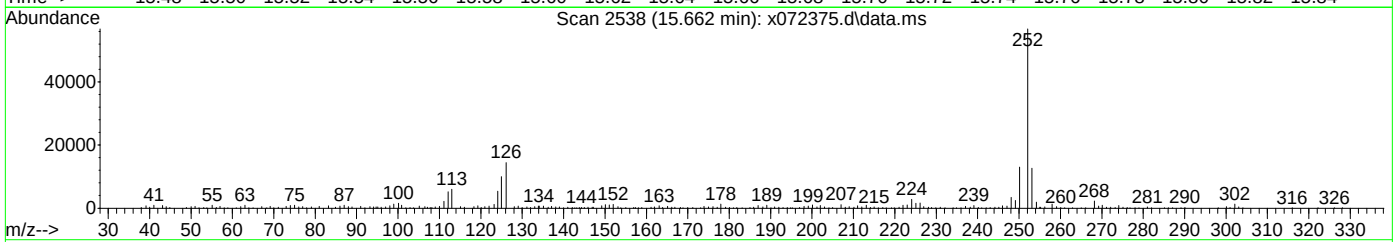
Ion	Exp%	Act%
252.10	100	100
253.10	22.50	21.42
125.10	14.40	16.08
0.00	0.00	0.00

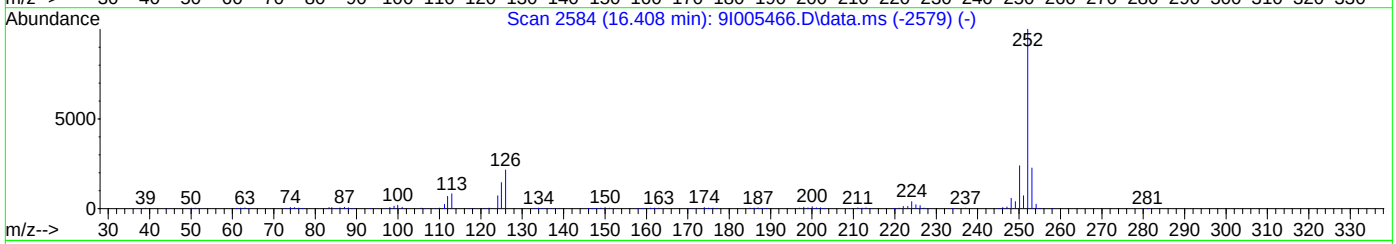
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-13-2020\sx2951\
Data File : x072375.d
Acq On : 12 Aug 2020 6:09 pm
Operator : marthav
Sample : fa77576-11 E,5
Misc : op81482,sx2951,30.0,,,1,5,soil
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Aug 13 02:57:28 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration







TIC: x072375.d\data.ms

(105) Benzo[k]fluoranthene (P)

15.662min (+0.000) 7.07ppm m

response 82582

Ion	Exp%	Act%
252.10	100	100
253.10	22.50	22.29
125.10	14.40	17.54
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072344.d
Acq On : 11 Aug 2020 7:18 pm
Operator : marthav
Sample : fa77576-12 E
Misc : op81482,sx2950,30.2,,,1,1,soil
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Aug 12 02:53:42 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.665	152	163360	40.00	ppm	0.00
22) Naphthalene-d8	7.088	136	611409	40.00	ppm	0.00
43) Acenaphthene-d10	9.126	164	297748	40.00	ppm	0.00
70) Phenanthrene-d10	10.869	188	510859	40.00	ppm	0.00
92) Chrysene-d12	14.084	240	424050	40.00	ppm	0.02
102) Perylene-d12	16.287	264	339724	40.00	ppm	0.03
110) 1,4-Dichlorobenzene-d4A	5.665	152	163360	40.00	ppm	0.00
120) Naphthalene-d8A	7.088	136	611409	40.00	ppm	0.00
127) Acenaphthene-d10A	9.126	164	297748	40.00	ppm	0.00
136) Phenanthrene-d10A	10.869	188	510859	40.00	ppm	0.00
146) Chrysene-d12A	14.084	240	424050	40.00	ppm	0.02
153) Perylene-d12A	16.287	264	339724	40.00	ppm	0.03
System Monitoring Compounds						
7) 2-Fluorophenol	4.328	112	446608	76.25	ppm	0.02
Spiked Amount 100.000	Range 40 - 102		Recovery = 76.25%			
9) Phenol-d5	5.349	99	550488	78.99	ppm	0.02
Spiked Amount 100.000	Range 41 - 100		Recovery = 78.99%			
23) Nitrobenzene-d5	6.280	82	231798	36.71	ppm	0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 73.42%			
47) 2-Fluorobiphenyl	8.361	172	411111	38.14	ppm	0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 76.28%			
75) 2,4,6-Tribromophenol	10.067	330	82471	75.69	ppm	0.01
Spiked Amount 100.000	Range 42 - 108		Recovery = 75.69%			
95) Terphenyl-d14	12.789	244	414702	36.81	ppm	0.01
Spiked Amount 50.000	Range 45 - 119		Recovery = 73.62%			
Target Compounds						Qvalue
5) Benzaldehyde	5.200	106	754	0.15	ppm	96
18) Acetophenone	6.120	105	1657	0.19	ppm	90
21) 3&4-Methylphenol	6.189	108	1327	0.22	ppm #	69
27) 2,4-Dimethylphenol	6.767	107	702	0.13	ppm	84
30) Benzoic Acid	6.874	105	9167	2.45	ppm	95
34) Naphthalene	7.109	128	4082	0.25	ppm	92
40) 2-Methylnaphthalene	7.917	142	2935	0.27	ppm	89
41) 1-Methylnaphthalene	8.024	142	3648	0.35	ppm	96
48) 1,1'-Biphenyl	8.468	154	956	0.08	ppm	96
52) Acenaphthylene	8.960	152	162336	10.92	ppm	98
57) Acenaphthene	9.163	153	14270	1.44	ppm	99
60) Dibenzofuran	9.366	168	7979	0.60	ppm	91
65) Fluorene	9.773	166	25728	2.50	ppm	99
84) Phenanthrene	10.896	178	335237	21.72	ppm	98
85) Anthracene	10.960	178	280250	17.42	ppm	97
87) Carbazole	11.174	167	106563	7.51	ppm	99
91) Fluoranthene	12.308	202	1085269	75.77	ppm	98
94) Pyrene	12.570	202	1052331	59.77	ppm	98
96) Famphur	13.356	218	9447	2.26	ppm	69
99) Benzo[a]anthracene	14.073	228	274386	20.59	ppm	98
100) Chrysene	14.121	228	552418	38.92	ppm	99
104) Benzo[b]fluoranthene	15.651	252	652487	62.96	ppm	95
105) Benzo[k]fluoranthene	15.688	252	184683	15.31	ppm	99
106) Benzo[a]pyrene	16.186	252	176261	19.52	ppm	95
107) Indeno[1,2,3-cd]pyrene	17.951	276	148275	25.90	ppm	89
108) Dibenz[a,h]anthracene	17.988	278	29925	5.45	ppm	90
109) Benzo[g,h,i]perylene	18.304	276	116876	14.33	ppm	88

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072344.d
Acq On : 11 Aug 2020 7:18 pm
Operator : marthav
Sample : fa77576-12 E
Misc : op81482,sx2950,30.2,,,1,1,soil
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Aug 12 02:53:42 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

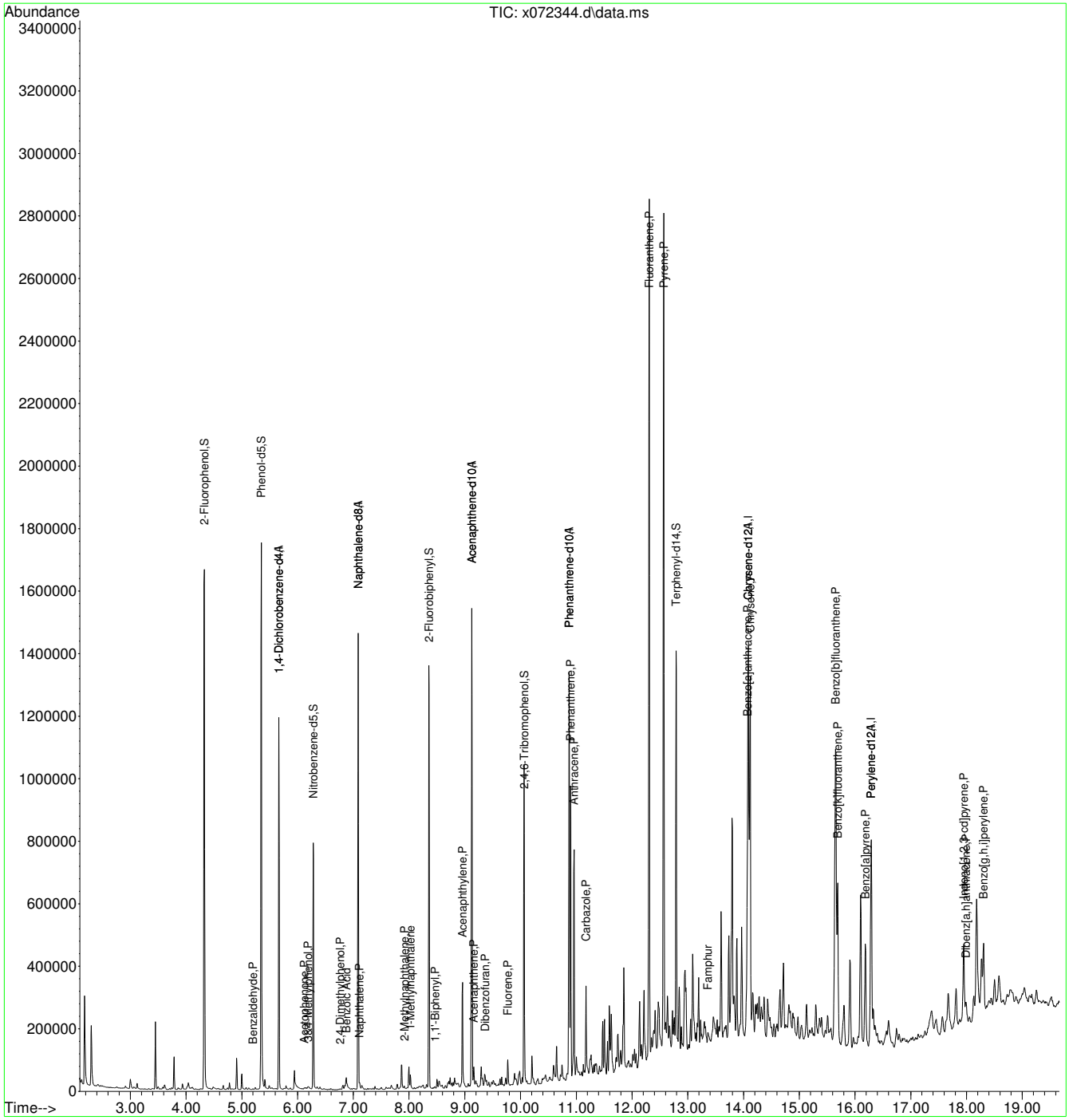
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

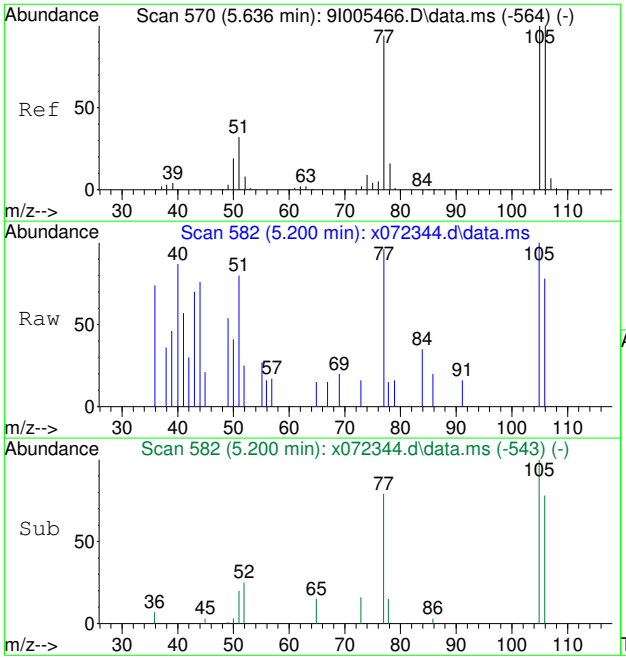
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072344.d
Acq On : 11 Aug 2020 7:18 pm
Operator : marthav
Sample : fa77576-12 E
Misc : op81482,sx2950,30.2,,,1,1,soil
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Aug 12 02:53:42 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

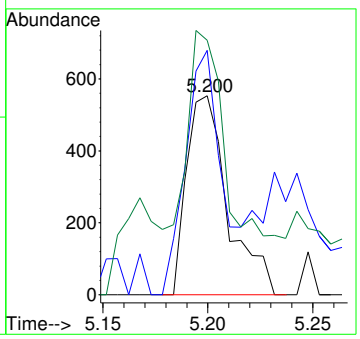


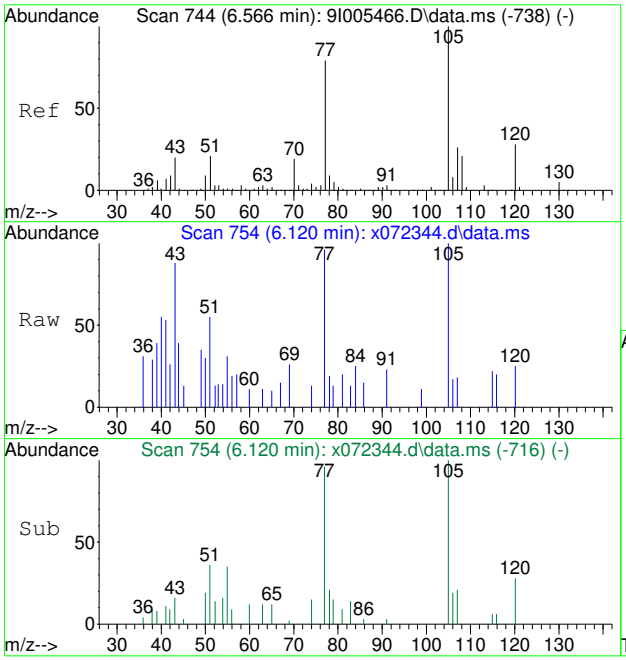


#5
Benzaldehyde
Concen: 0.15 ppm
RT: 5.200 min Scan# 582
Delta R.T. 0.011 min
Lab File: x072344.d
Acq: 11 Aug 2020 7:18 pm

Tgt Ion:106 Resp: 754

Ion	Ratio	Lower	Upper
106	100		
77	99.4	63.9	123.9
105	97.2	70.0	130.0

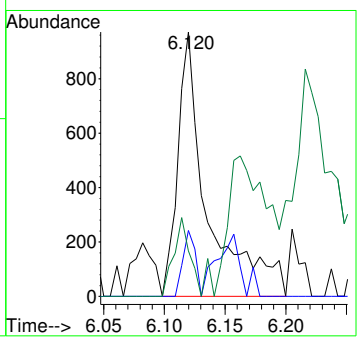


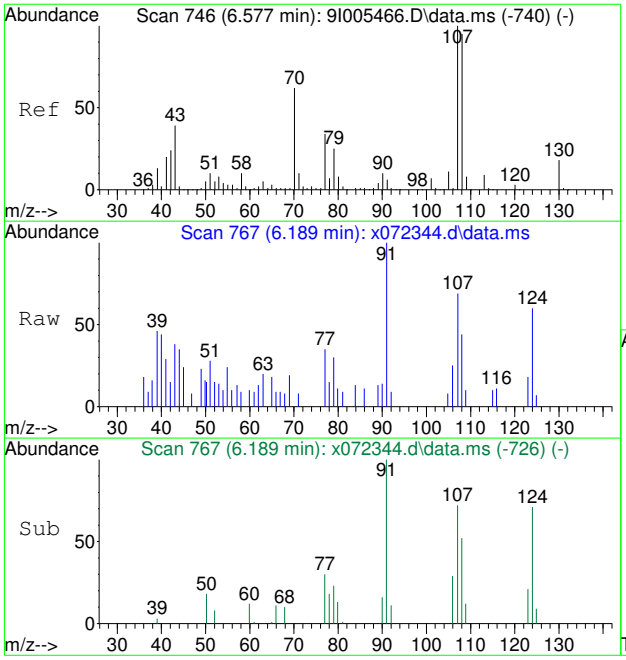


#18
Acetophenone
Concen: 0.19 ppm
RT: 6.120 min Scan# 754
Delta R.T. 0.005 min
Lab File: x072344.d
Acq: 11 Aug 2020 7:18 pm

Tgt Ion:105 Resp: 1657

Ion	Ratio	Lower	Upper
105	100		
120	24.9	0.0	58.3
106	0.0	0.0	38.0

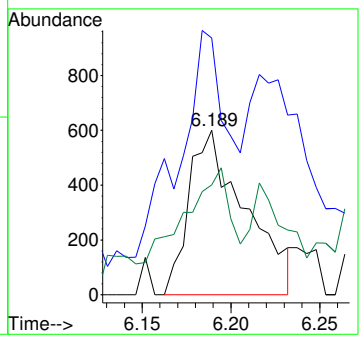


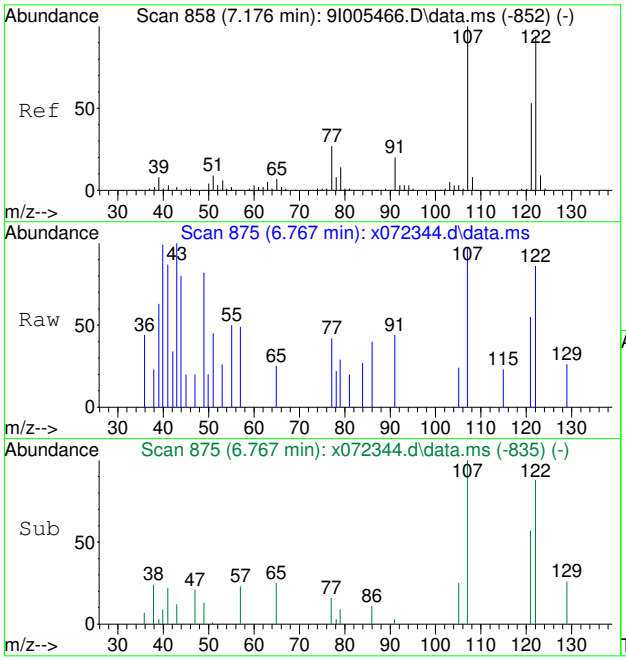


#21
3&4-Methylphenol
Concen: 0.22 ppm
RT: 6.189 min Scan# 767
Delta R.T. 0.021 min
Lab File: x072344.d
Acq: 11 Aug 2020 7:18 pm

Tgt Ion:108 Resp: 1327

Ion	Ratio	Lower	Upper
108	100		
107	70.1	75.4	135.4#
79	34.4	0.0	56.3

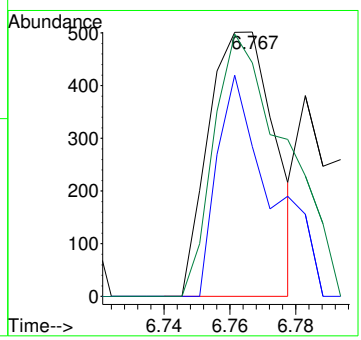


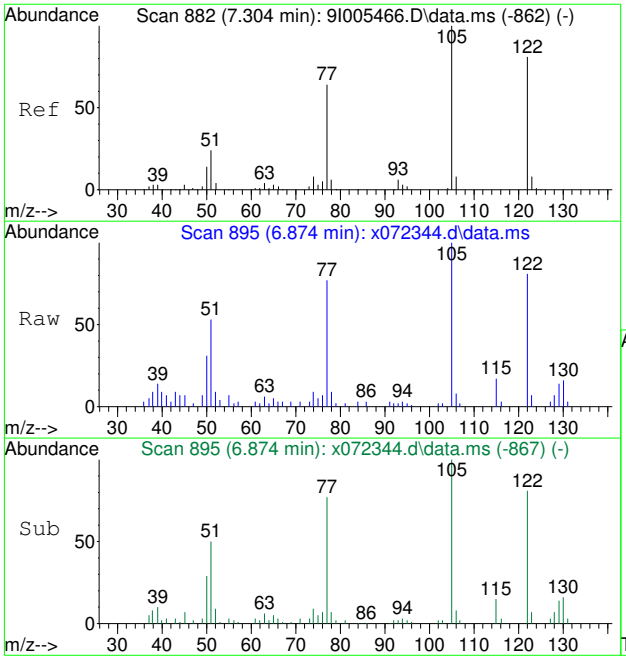


#27
2,4-Dimethylphenol
Concen: 0.13 ppm
RT: 6.767 min Scan# 875
Delta R.T. 0.016 min
Lab File: x072344.d
Acq: 11 Aug 2020 7:18 pm

Tgt Ion:107 Resp: 702

Ion	Ratio	Lower	Upper
107	100		
121	48.0	23.4	83.4
122	74.6	64.3	124.3

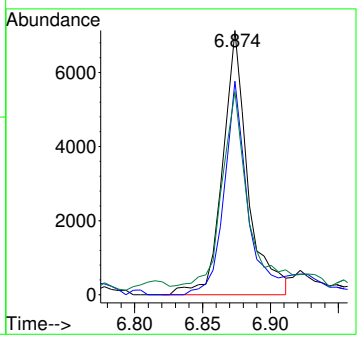


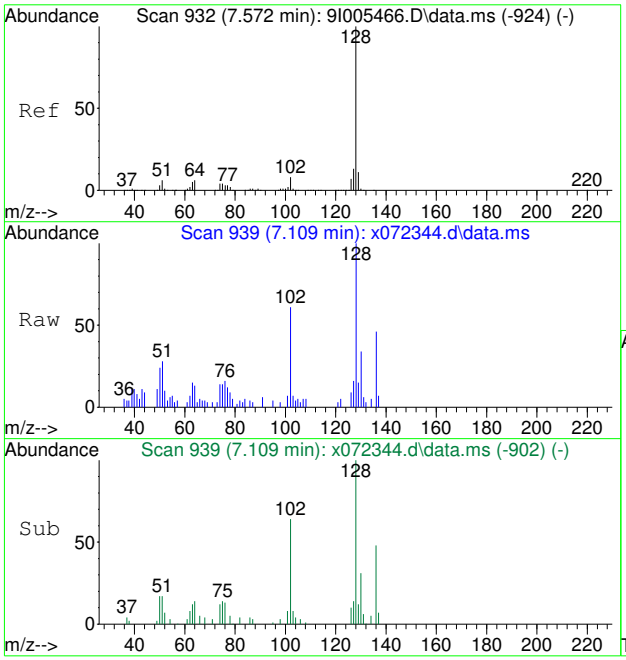


#30
Benzoic Acid
Concen: 2.45 ppm
RT: 6.874 min Scan# 895
Delta R.T. -0.048 min
Lab File: x072344.d
Acq: 11 Aug 2020 7:18 pm

Tgt Ion:105 Resp: 9167

Ion	Ratio	Lower	Upper
105	100		
122	79.8	51.2	111.2
77	72.0	34.1	94.1

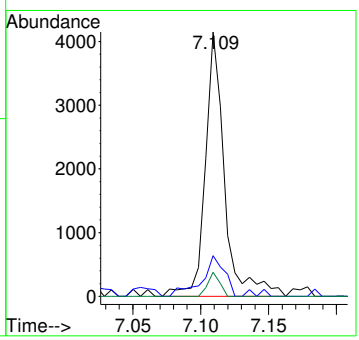


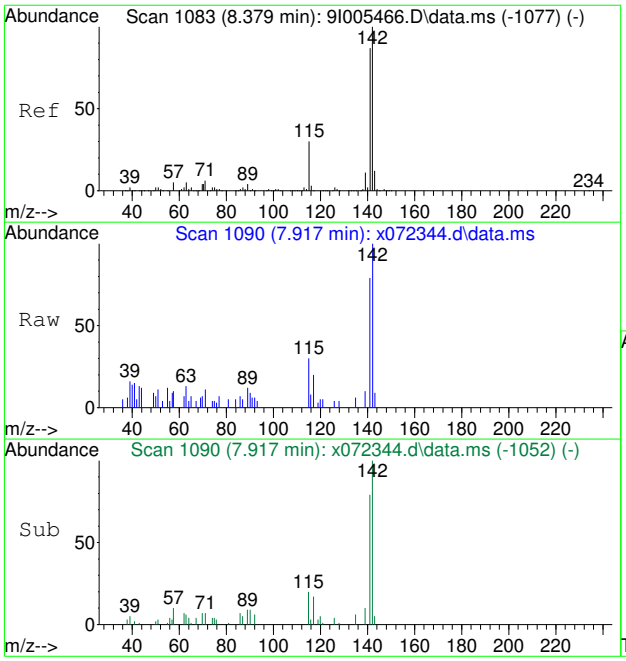


#34
Naphthalene
Concen: 0.25 ppm
RT: 7.109 min Scan# 939
Delta R.T. -0.000 min
Lab File: x072344.d
Acq: 11 Aug 2020 7:18 pm

Tgt Ion:128 Resp: 4082

Ion	Ratio	Lower	Upper
128	100		
129	15.4	0.0	41.4
126	9.1	0.0	37.4

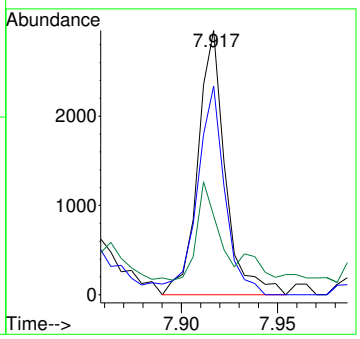


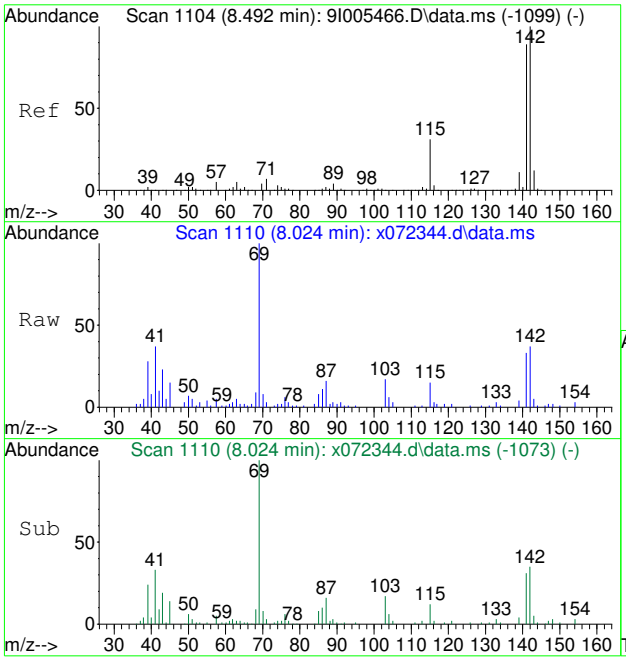


#40
2-Methylnaphthalene
Concen: 0.27 ppm
RT: 7.917 min Scan# 1090
Delta R.T. 0.005 min
Lab File: x072344.d
Acq: 11 Aug 2020 7:18 pm

Tgt Ion:142 Resp: 2935

Ion	Ratio	Lower	Upper
142	100		
141	76.9	56.8	116.8
115	22.8	0.0	60.0

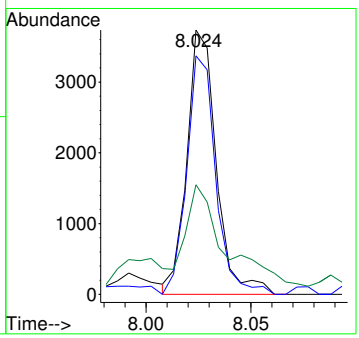


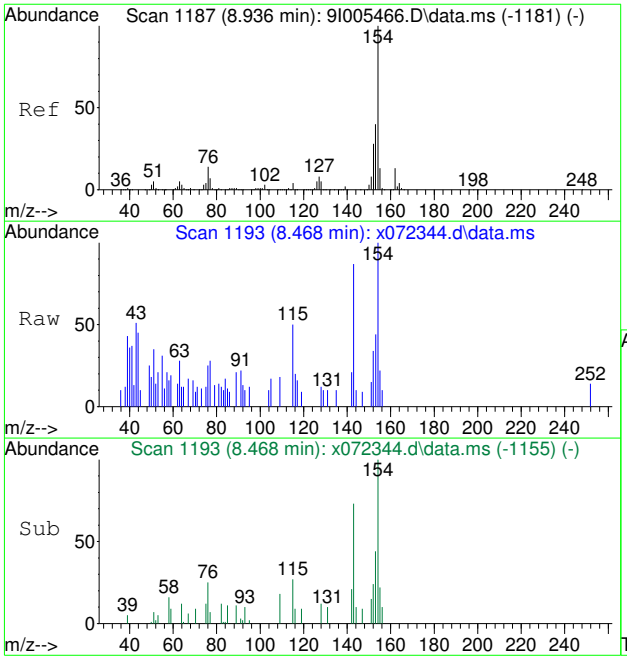


#41
1-Methylnaphthalene
Concen: 0.35 ppm
RT: 8.024 min Scan# 1110
Delta R.T. -0.000 min
Lab File: x072344.d
Acq: 11 Aug 2020 7:18 pm

Tgt Ion:142 Resp: 3648

Ion	Ratio	Lower	Upper
142	100		
141	91.9	59.0	119.0
115	34.9	1.1	61.1

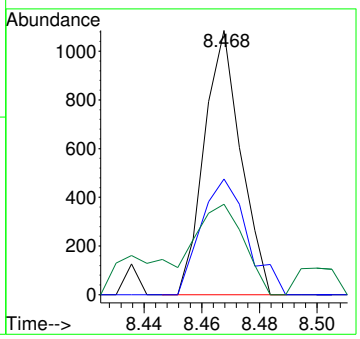


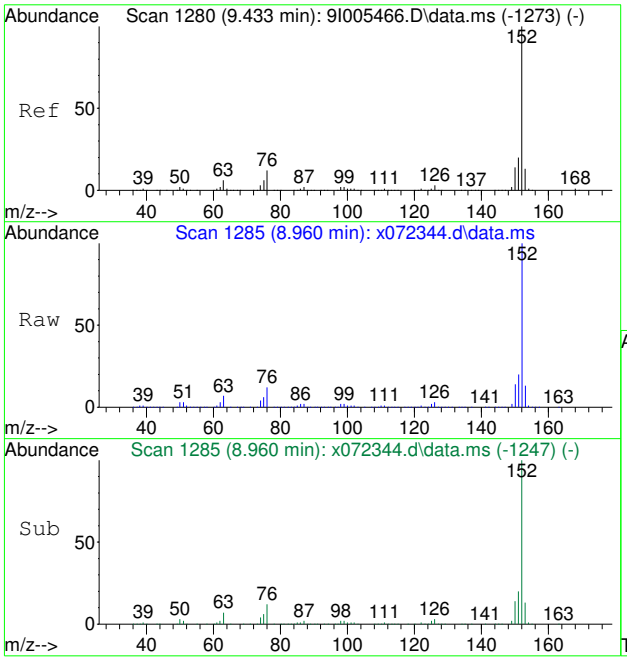


#48
1,1'-Biphenyl
Concen: 0.08 ppm
RT: 8.468 min Scan# 1193
Delta R.T. 0.005 min
Lab File: x072344.d
Acq: 11 Aug 2020 7:18 pm

Tgt Ion:154 Resp: 956

Ion	Ratio	Lower	Upper
154	100		
153	43.7	10.3	70.3
152	27.6	0.0	58.2

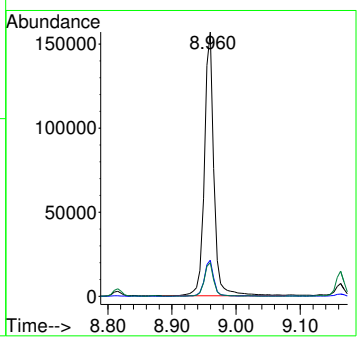


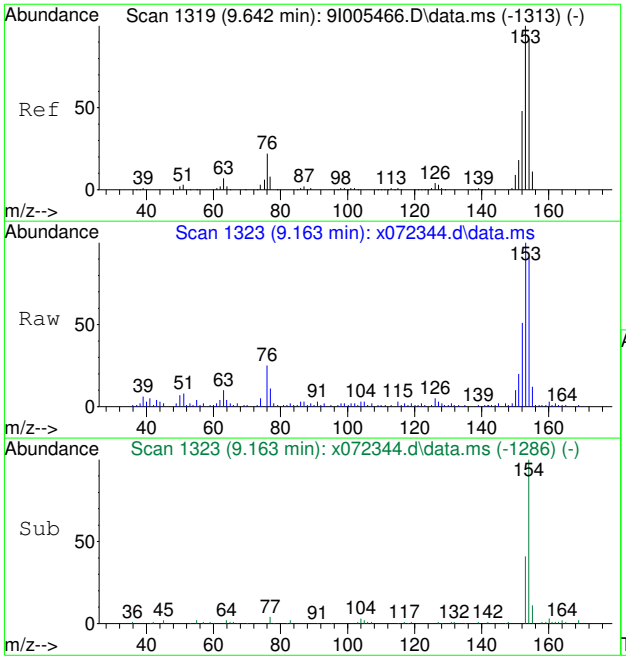


#52
Acenaphthylene
Concen: 10.92 ppm
RT: 8.960 min Scan# 1285
Delta R.T. 0.005 min
Lab File: x072344.d
Acq: 11 Aug 2020 7:18 pm

Tgt Ion:152 Resp: 162336

Ion	Ratio	Lower	Upper
152	100		
150	13.7	0.0	44.3
153	12.7	0.0	43.3

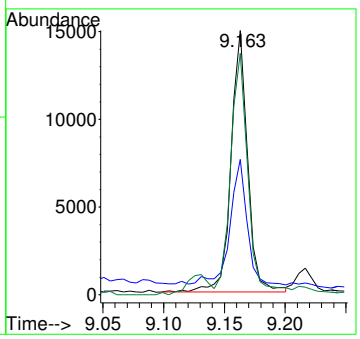


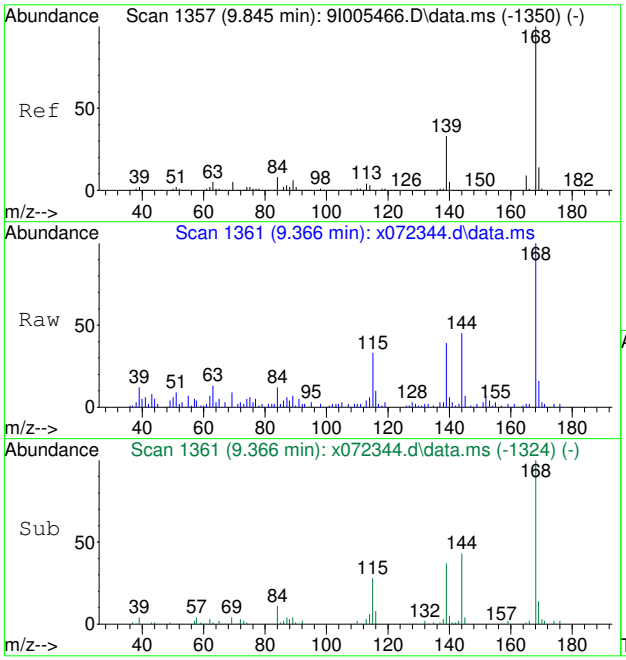


#57
Acenaphthene
Concen: 1.44 ppm
RT: 9.163 min Scan# 1323
Delta R.T. -0.000 min
Lab File: x072344.d
Acq: 11 Aug 2020 7:18 pm

Tgt Ion:153 Resp: 14270

Ion	Ratio	Lower	Upper
153	100		
152	48.1	18.4	78.4
154	91.4	62.4	122.4

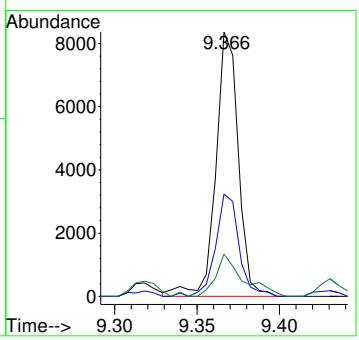


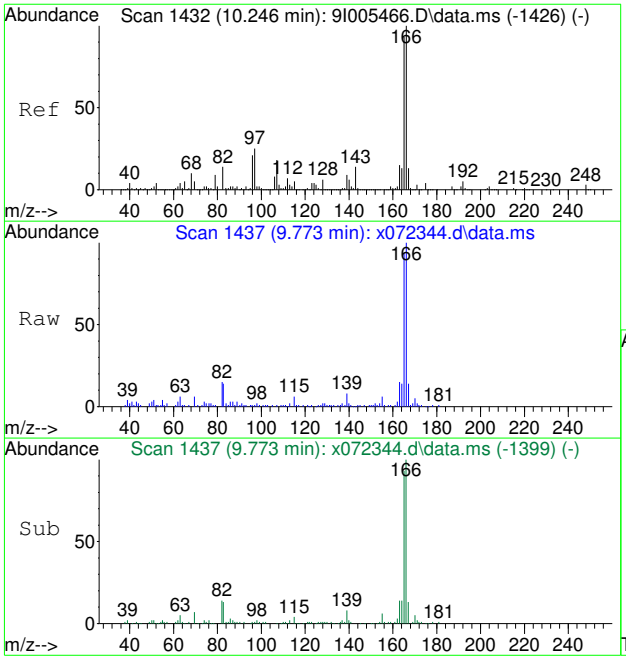


#60
Dibenzofuran
Concen: 0.60 ppm
RT: 9.366 min Scan# 1361
Delta R.T. -0.000 min
Lab File: x072344.d
Acq: 11 Aug 2020 7:18 pm

Tgt Ion:168 Resp: 7979

Ion	Ratio	Lower	Upper
168	100		
139	39.0	3.0	63.0
169	15.2	0.0	43.5

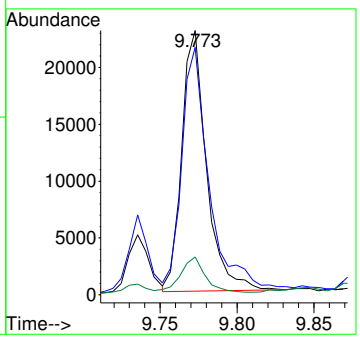


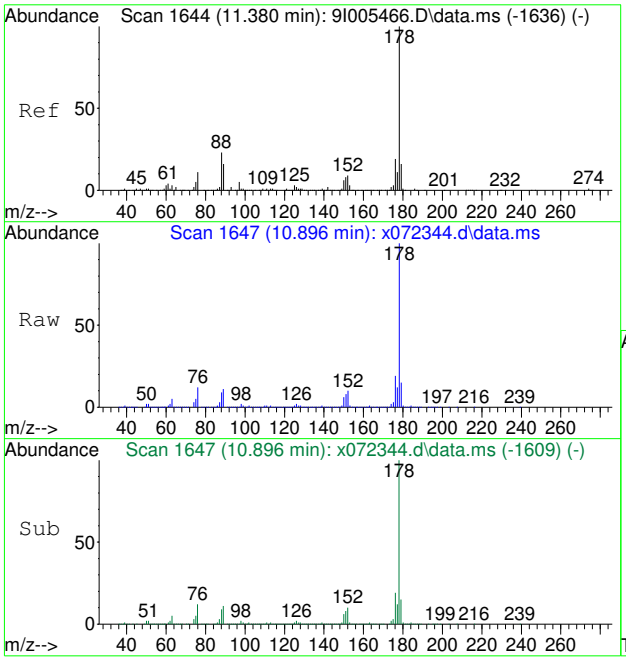


#65
Fluorene
Concen: 2.50 ppm
RT: 9.773 min Scan# 1437
Delta R.T. 0.005 min
Lab File: x072344.d
Acq: 11 Aug 2020 7:18 pm

Tgt Ion:166 Resp: 25728

Ion	Ratio	Lower	Upper
166	100		
165	92.2	62.7	122.7
167	12.8	0.0	43.5

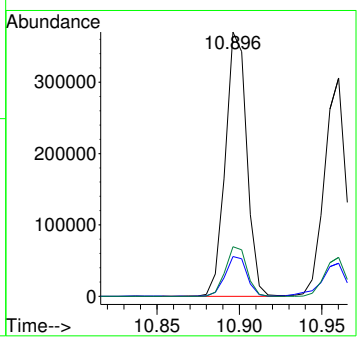


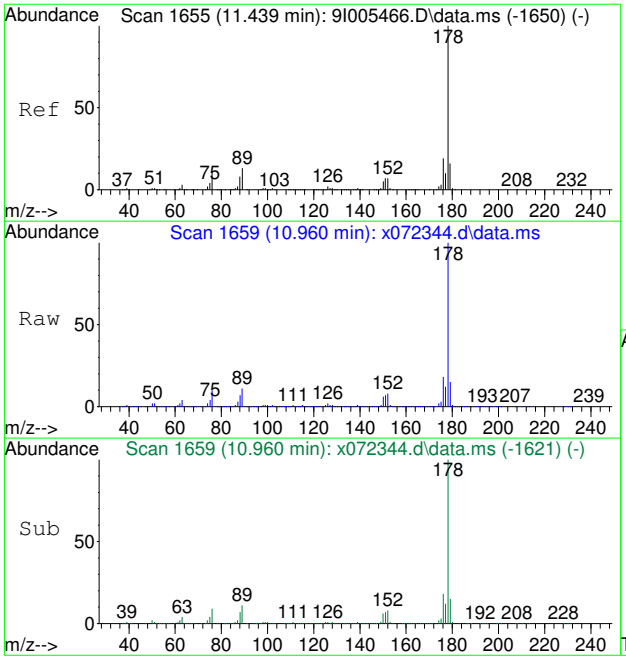


#84
Phenanthrene
Concen: 21.72 ppm
RT: 10.896 min Scan# 1647
Delta R.T. 0.005 min
Lab File: x072344.d
Acq: 11 Aug 2020 7:18 pm

Tgt Ion:178 Resp: 335237

Ion	Ratio	Lower	Upper
178	100		
179	15.0	0.0	45.8
176	18.8	0.0	49.3

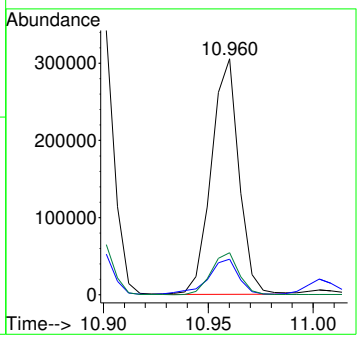


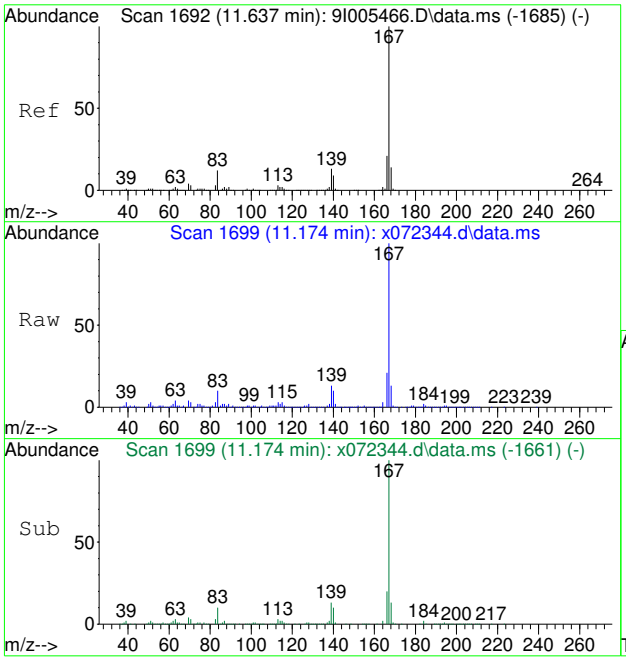


#85
Anthracene
Concen: 17.42 ppm
RT: 10.960 min Scan# 1659
Delta R.T. 0.005 min
Lab File: x072344.d
Acq: 11 Aug 2020 7:18 pm

Tgt Ion:178 Resp: 280250

Ion	Ratio	Lower	Upper
178	100		
179	14.8	0.0	46.0
176	17.8	0.0	49.3

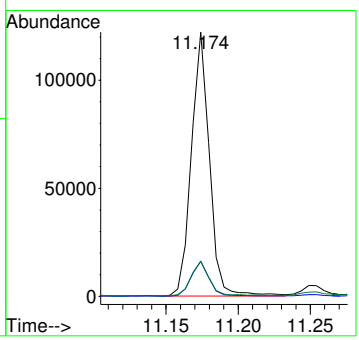


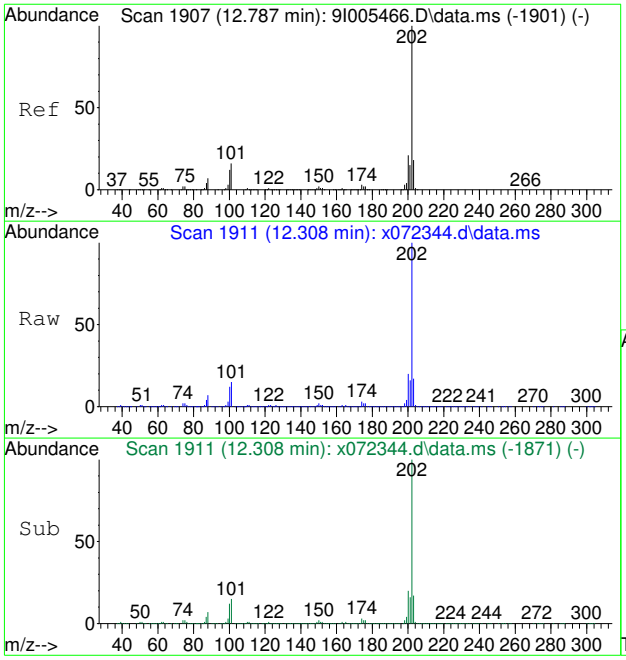


#87
Carbazole
Concen: 7.51 ppm
RT: 11.174 min Scan# 1699
Delta R.T. 0.005 min
Lab File: x072344.d
Acq: 11 Aug 2020 7:18 pm

Tgt Ion:167 Resp: 106563

Ion	Ratio	Lower	Upper
167	100		
168	13.3	0.0	43.9
139	12.8	0.0	42.7

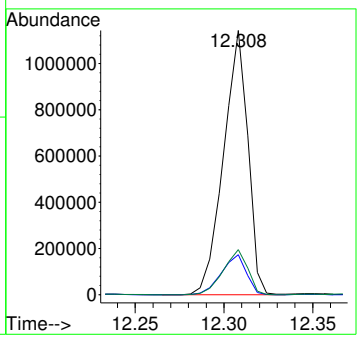


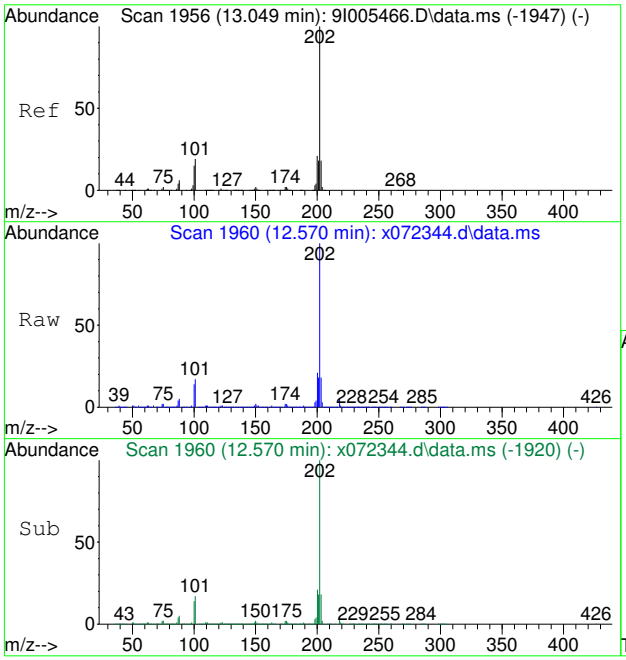


#91
Fluoranthene
Concen: 75.77 ppm
RT: 12.308 min Scan# 1911
Delta R.T. 0.016 min
Lab File: x072344.d
Acq: 11 Aug 2020 7:18 pm

Tgt Ion:202 Resp: 1085269

Ion	Ratio	Lower	Upper
202	100		
101	15.2	0.0	45.8
203	17.0	0.0	48.1

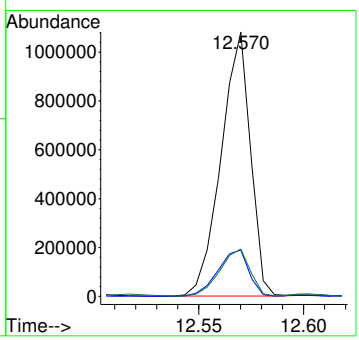


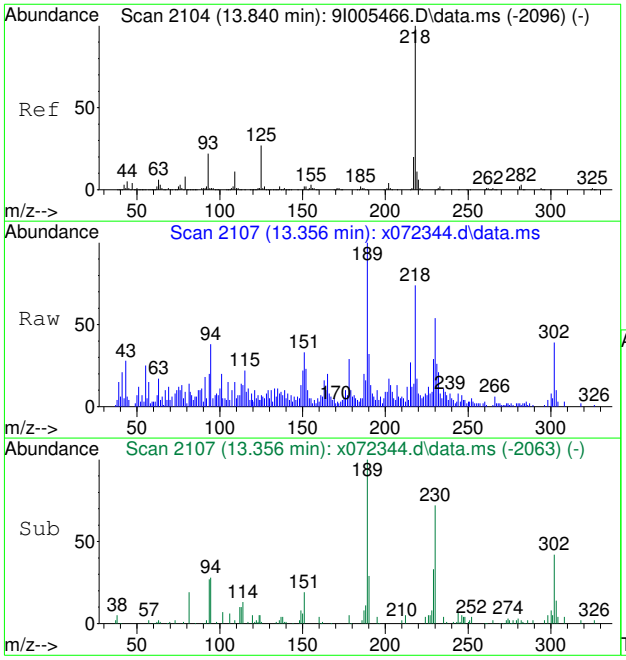


#94
Pyrene
Concen: 59.77 ppm
RT: 12.570 min Scan# 1960
Delta R.T. 0.016 min
Lab File: x072344.d
Acq: 11 Aug 2020 7:18 pm

Tgt Ion:202 Resp: 1052331

Ion	Ratio	Lower	Upper
202	100		
101	17.4	0.0	48.7
203	17.7	0.0	48.4

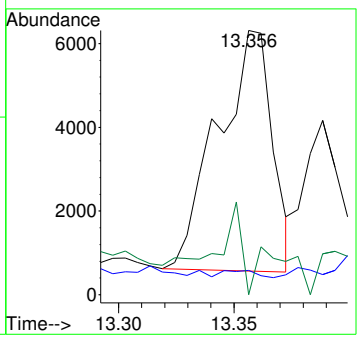


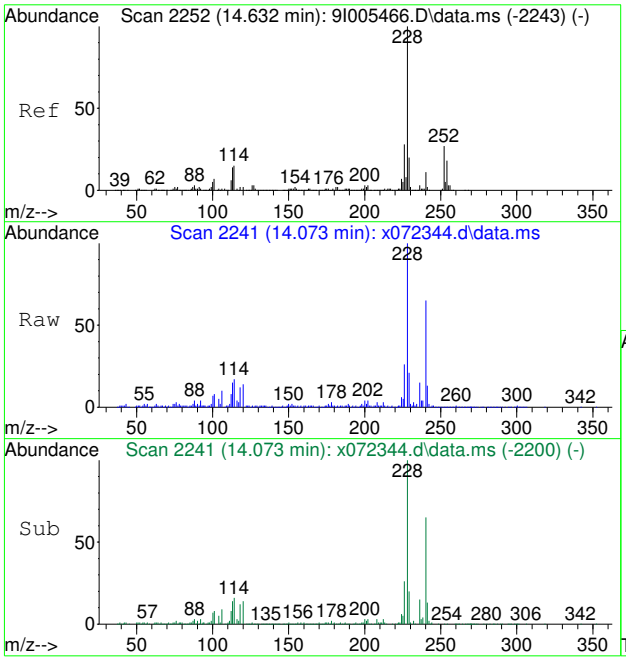


#96
Famphur
Concen: 2.26 ppm
RT: 13.356 min Scan# 2107
Delta R.T. 0.037 min
Lab File: x072344.d
Acq: 11 Aug 2020 7:18 pm

Tgt Ion:218 Resp: 9447

Ion	Ratio	Lower	Upper
218	100		
125	1.4	0.0	57.1
93	18.3	0.0	52.0

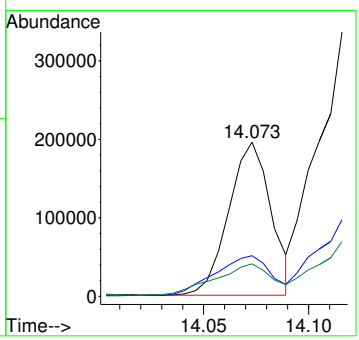


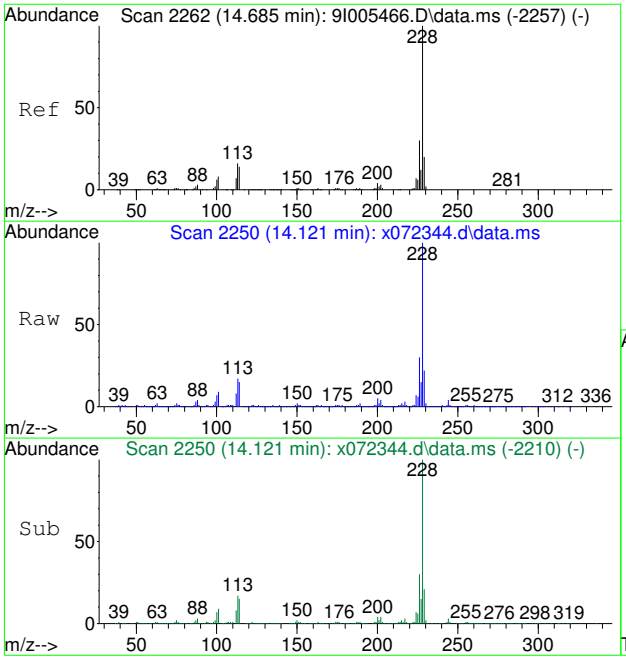


#99
Benzo[a]anthracene
Concen: 20.59 ppm
RT: 14.073 min Scan# 2241
Delta R.T. 0.021 min
Lab File: x072344.d
Acq: 11 Aug 2020 7:18 pm

Tgt Ion:228 Resp: 274386

Ion	Ratio	Lower	Upper
228	100		
226	25.8	0.0	57.5
229	19.5	0.0	49.9

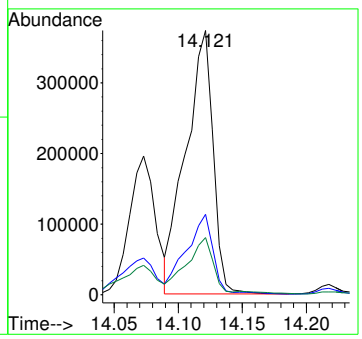


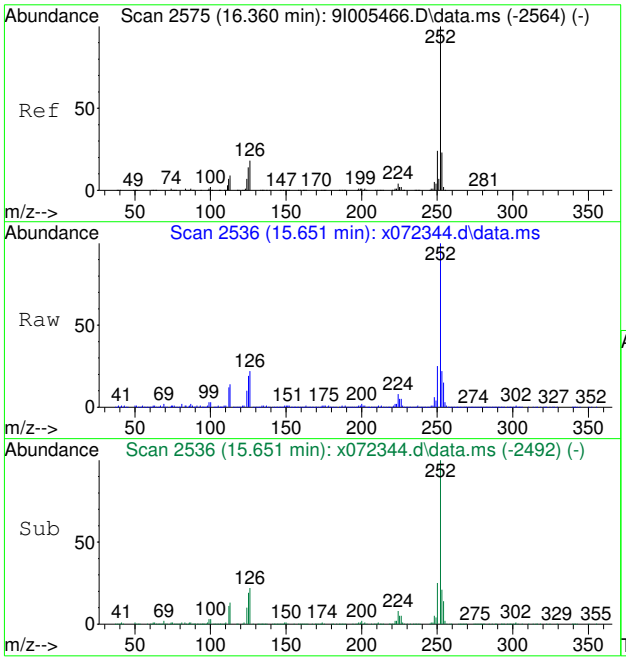


#100
Chrysene
Concen: 38.92 ppm
RT: 14.121 min Scan# 2250
Delta R.T. 0.016 min
Lab File: x072344.d
Acq: 11 Aug 2020 7:18 pm

Tgt Ion:228 Resp: 552418

Ion	Ratio	Lower	Upper
228	100		
226	30.5	0.4	60.4
229	20.9	0.0	50.1

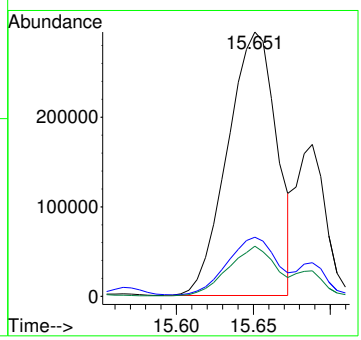


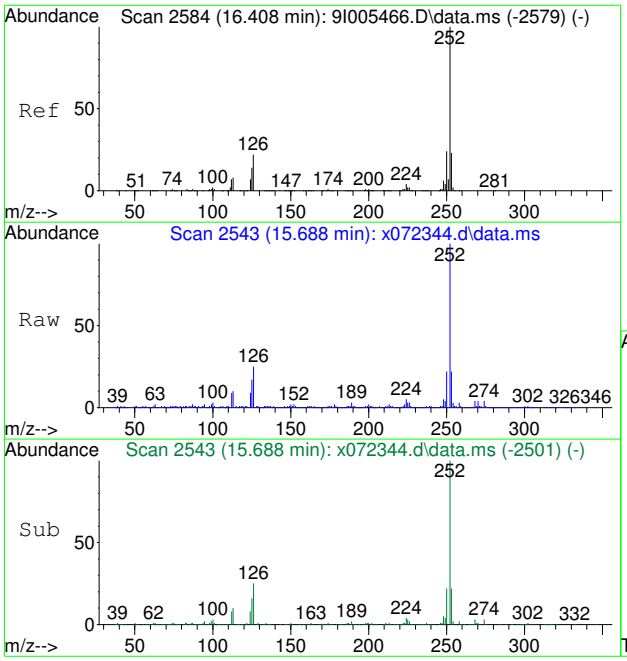


#104
Benzo[b]fluoranthene
Concen: 62.96 ppm
RT: 15.651 min Scan# 2536
Delta R.T. 0.037 min
Lab File: x072344.d
Acq: 11 Aug 2020 7:18 pm

Tgt Ion:252 Resp: 652487

Ion	Ratio	Lower	Upper
252	100		
253	22.0	0.0	52.5
125	19.1	0.0	44.0

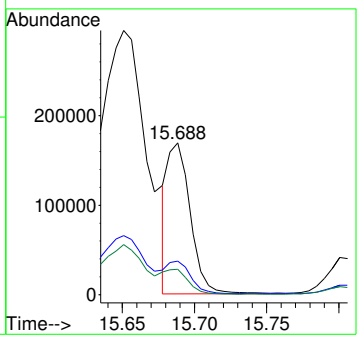


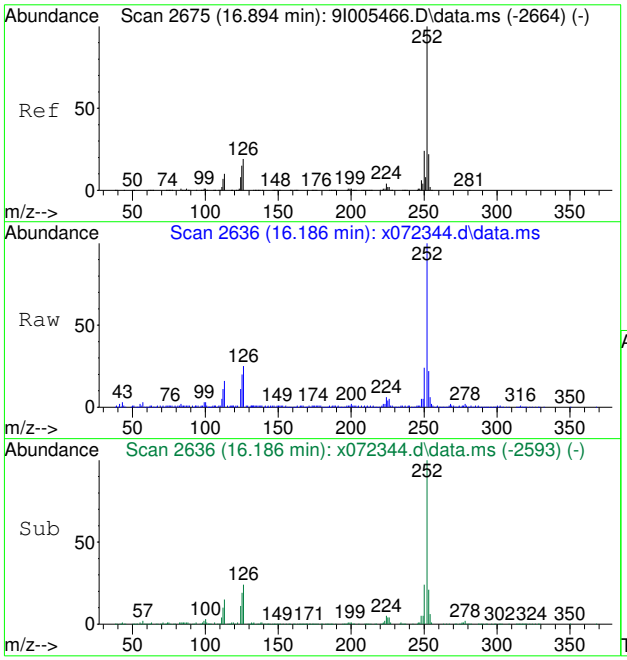


#105
Benzo[k]fluoranthene
Concen: 15.31 ppm
RT: 15.688 min Scan# 2543
Delta R.T. 0.027 min
Lab File: x072344.d
Acq: 11 Aug 2020 7:18 pm

Tgt Ion:252 Resp: 184683

Ion	Ratio	Lower	Upper
252	100		
253	21.5	0.0	52.5
125	14.5	0.0	44.4

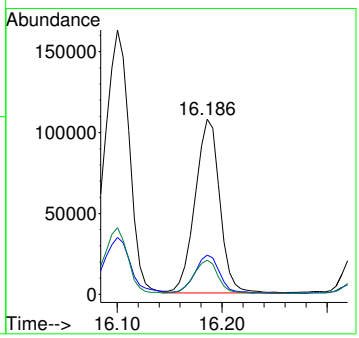


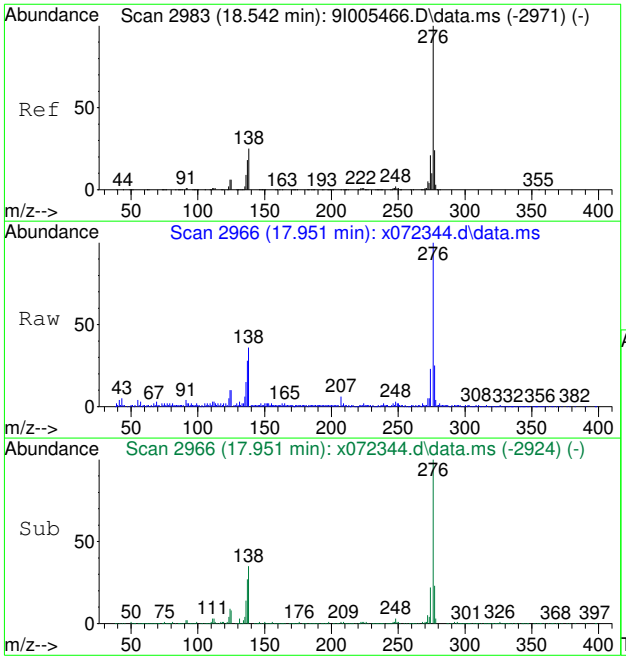


#106
Benzo[a]pyrene
Concen: 19.52 ppm
RT: 16.186 min Scan# 2636
Delta R.T. 0.032 min
Lab File: x072344.d
Acq: 11 Aug 2020 7:18 pm

Tgt Ion:252 Resp: 176261

Ion	Ratio	Lower	Upper
252	100		
253	21.7	0.0	52.3
125	19.0	0.0	44.7

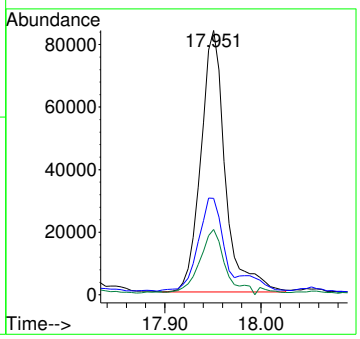


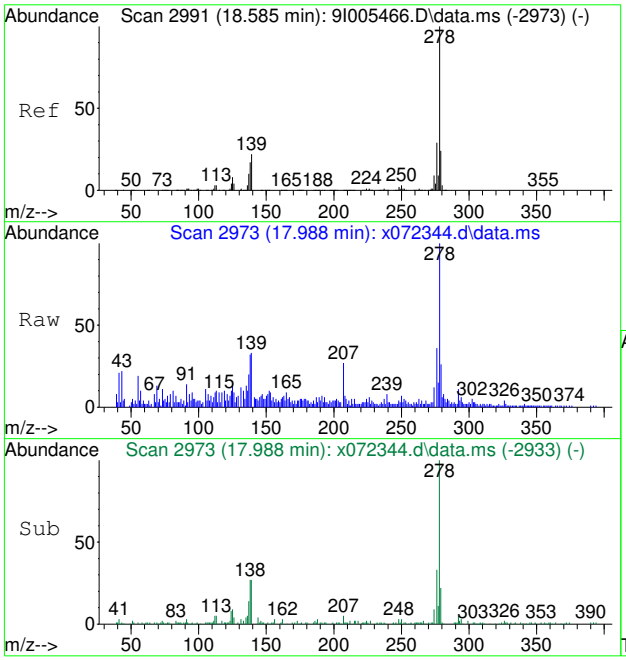


#107
Indeno[1,2,3-cd]pyrene
Concen: 25.90 ppm
RT: 17.951 min Scan# 2966
Delta R.T. 0.027 min
Lab File: x072344.d
Acq: 11 Aug 2020 7:18 pm

Tgt Ion:276 Resp: 148275

Ion	Ratio	Lower	Upper
276	100		
138	35.2	0.0	54.7
277	24.1	0.0	53.8

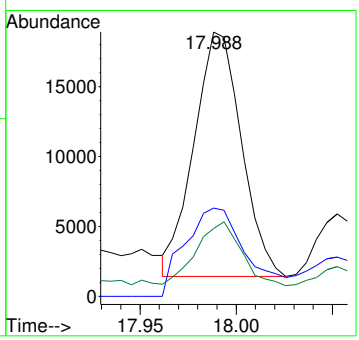


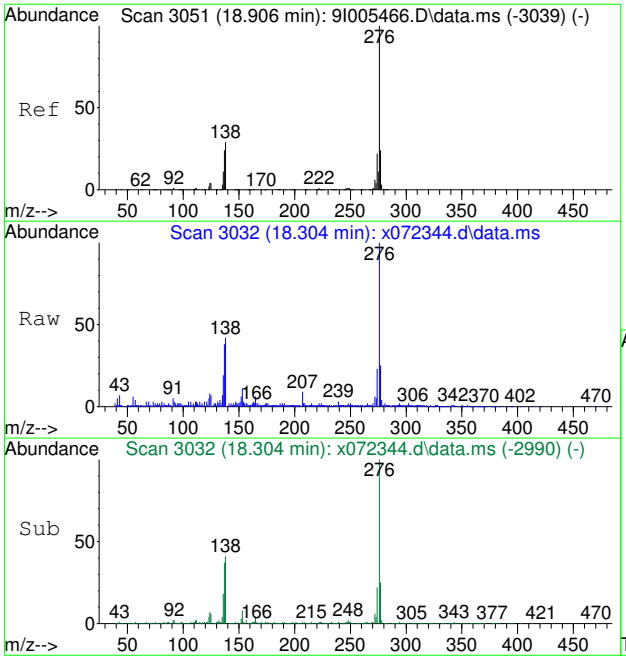


#108
Dibenz[a,h]anthracene
Concen: 5.45 ppm
RT: 17.988 min Scan# 2973
Delta R.T. 0.016 min
Lab File: x072344.d
Acq: 11 Aug 2020 7:18 pm

Tgt Ion:278 Resp: 29925

Ion	Ratio	Lower	Upper
278	100		
139	31.7	0.0	52.4
279	24.1	0.0	54.4

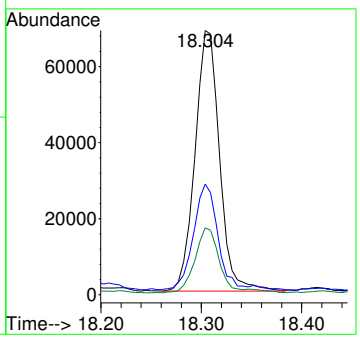




#109
Benzo[g,h,i]perylene
Concen: 14.33 ppm
RT: 18.304 min Scan# 3032
Delta R.T. 0.027 min
Lab File: x072344.d
Acq: 11 Aug 2020 7:18 pm

Tgt Ion:276 Resp: 116876

Ion	Ratio	Lower	Upper
276	100		
138	40.6	0.0	59.4
277	24.9	0.0	54.1



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072345.d
Acq On : 11 Aug 2020 7:44 pm
Operator : marthav
Sample : fa77576-13 E
Misc : op81482,sx2950,30.0,,,1,1,soil
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Aug 12 03:07:23 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	5.665	152	166234	40.00	ppm		0.00
22) Naphthalene-d8	7.088	136	621926	40.00	ppm		0.00
43) Acenaphthene-d10	9.126	164	300813	40.00	ppm		0.00
70) Phenanthrene-d10	10.869	188	516250	40.00	ppm		0.00
92) Chrysene-d12	14.078	240	407517	40.00	ppm		0.01
102) Perylene-d12	16.282	264	319861	40.00	ppm		0.03
110) 1,4-Dichlorobenzene-d4A	5.665	152	166234	40.00	ppm		0.00
120) Naphthalene-d8A	7.088	136	621926	40.00	ppm		0.00
127) Acenaphthene-d10A	9.126	164	300813	40.00	ppm		0.00
136) Phenanthrene-d10A	10.869	188	516250	40.00	ppm		0.00
146) Chrysene-d12A	14.078	240	407517	40.00	ppm		0.01
153) Perylene-d12A	16.282	264	319861	40.00	ppm		0.03
System Monitoring Compounds							
7) 2-Fluorophenol	4.328	112	460698	77.29	ppm		0.02
Spiked Amount 100.000	Range 40 - 102		Recovery = 77.29%				
9) Phenol-d5	5.344	99	560882	79.09	ppm		0.01
Spiked Amount 100.000	Range 41 - 100		Recovery = 79.09%				
23) Nitrobenzene-d5	6.280	82	241293	37.57	ppm		0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 75.14%				
47) 2-Fluorobiphenyl	8.355	172	420263	38.59	ppm		0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 77.18%				
75) 2,4,6-Tribromophenol	10.062	330	84721	76.78	ppm		0.00
Spiked Amount 100.000	Range 42 - 108		Recovery = 76.78%				
95) Terphenyl-d14	12.789	244	402401	37.16	ppm		0.01
Spiked Amount 50.000	Range 45 - 119		Recovery = 74.32%				
Target Compounds							Qvalue
5) Benzaldehyde	5.200	106	4551	0.92	ppm		95
10) Phenol	5.360	94	1342	0.16	ppm	#	1
18) Acetophenone	6.120	105	1490	0.17	ppm		87
30) Benzoic Acid	6.874	105	8848	2.32	ppm		89
34) Naphthalene	7.109	128	1683	0.10	ppm		87
40) 2-Methylnaphthalene	7.917	142	1295	0.12	ppm		93
41) 1-Methylnaphthalene	8.029	142	852	0.08	ppm		73
52) Acenaphthylene	8.954	152	68492	4.56	ppm		98
56) o-Dinitrobenzene	8.954	50	2025	0.84	ppm	#	1
57) Acenaphthene	9.163	153	5283	0.53	ppm		93
60) Dibenzofuran	9.366	168	794	0.06	ppm		88
65) Fluorene	9.767	166	9873	0.95	ppm		96
84) Phenanthrene	10.896	178	6558	0.42	ppm		99
85) Anthracene	10.955	178	79621	4.90	ppm		98
86) Disulfoton	10.955	88	6405	1.03	ppm		56
87) Carbazole	11.174	167	27913	1.95	ppm		99
89) Di-n-butylphthalate	11.634	149	965	0.06	ppm		82
91) Fluoranthene	12.297	202	104202	7.20	ppm		99
94) Pyrene	12.559	202	206848	12.22	ppm		99
99) Benzo[a]anthracene	14.068	228	51177	4.00	ppm		99
100) Chrysene	14.111	228	95197	6.98	ppm		96
101) bis(2-Ethylhexyl)phtha...	14.228	149	1665	0.20	ppm		96
104) Benzo[b]fluoranthene	15.630	252	120646	13.74	ppm		96
105) Benzo[k]fluoranthene	15.672	252	40048	3.53	ppm		99
106) Benzo[a]pyrene	16.175	252	33030	4.03	ppm		97
107) Indeno[1,2,3-cd]pyrene	17.940	276	24661	5.30	ppm		85
108) Dibenz[a,h]anthracene	17.983	278	4805	0.97	ppm		91
109) Benzo[g,h,i]perylene	18.299	276	19772	2.71	ppm		88

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072345.d
Acq On : 11 Aug 2020 7:44 pm
Operator : marthav
Sample : fa77576-13 E
Misc : op81482,sx2950,30.0,,,1,1,soil
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Aug 12 03:07:23 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

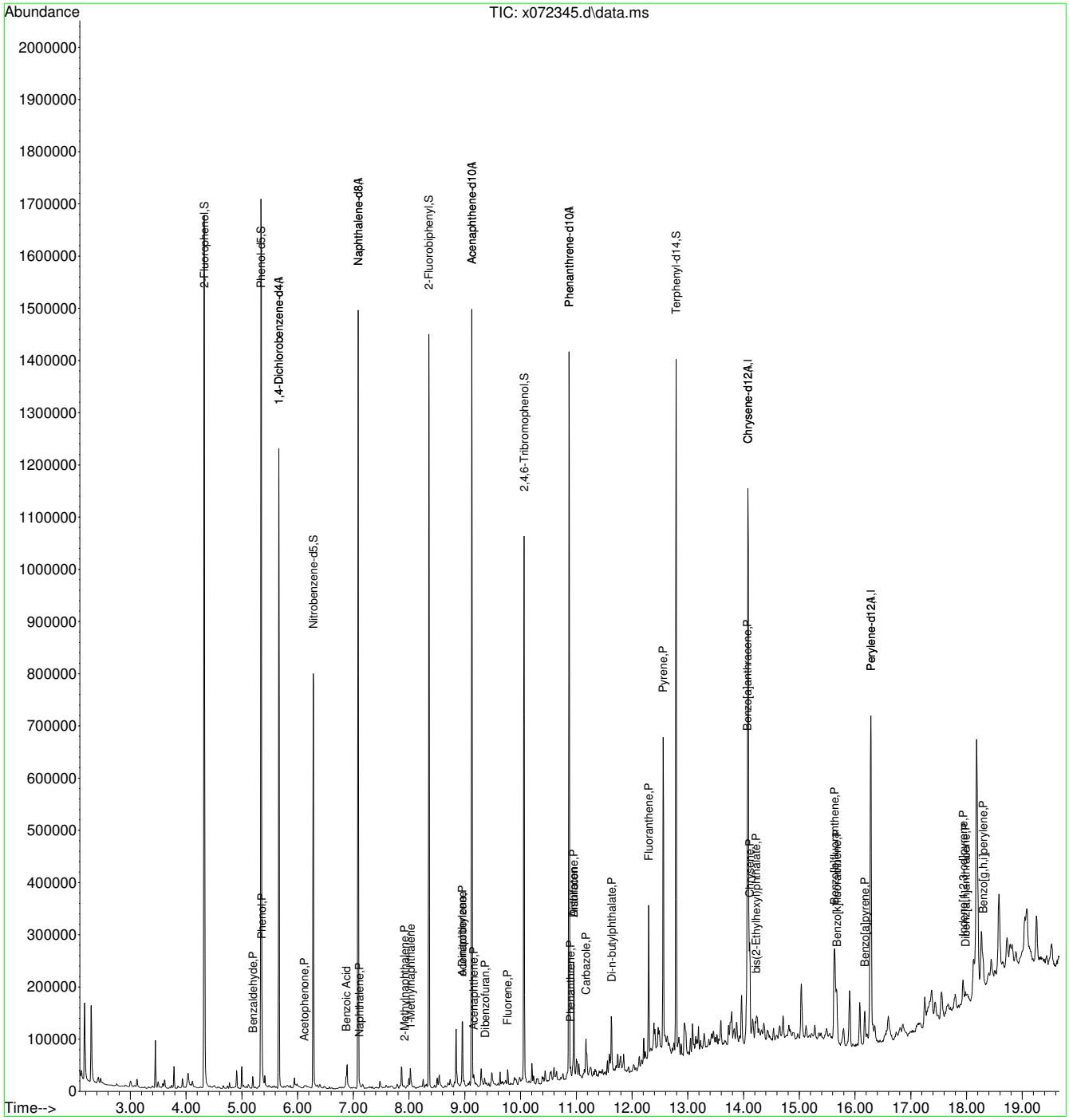
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

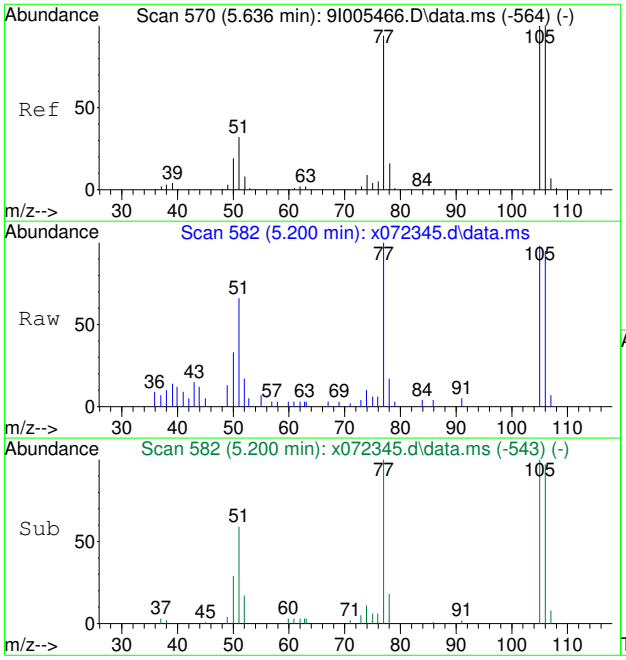
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072345.d
Acq On : 11 Aug 2020 7:44 pm
Operator : marthav
Sample : fa77576-13 E
Misc : op81482,sx2950,30.0,,,1,1,soil
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Aug 12 03:07:23 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

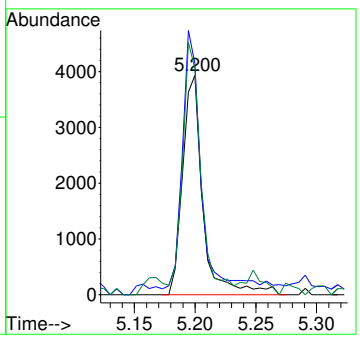


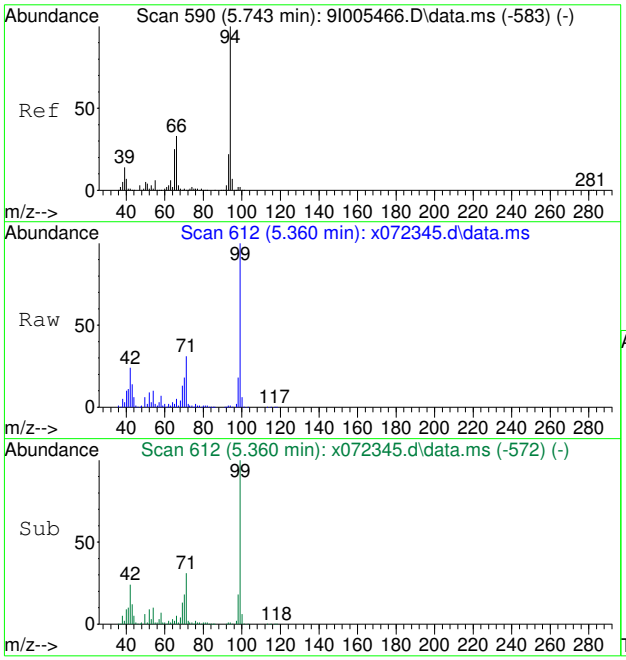


#5
Benzaldehyde
Concen: 0.92 ppm
RT: 5.200 min Scan# 582
Delta R.T. 0.011 min
Lab File: x072345.d
Acq: 11 Aug 2020 7:44 pm

Tgt Ion:106 Resp: 4551

Ion	Ratio	Lower	Upper
106	100		
77	101.9	63.9	123.9
105	97.8	70.0	130.0

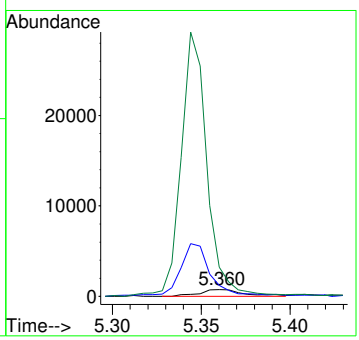


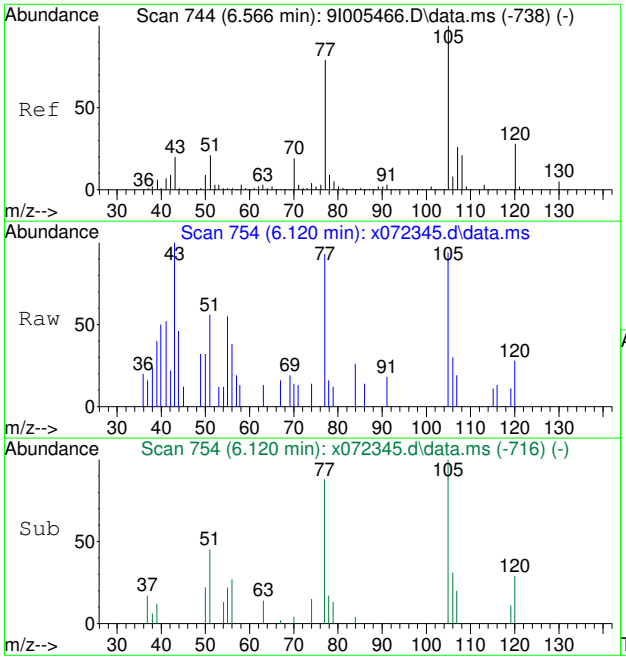


#10
Phenol
Concen: 0.16 ppm
RT: 5.360 min Scan# 612
Delta R.T. 0.016 min
Lab File: x072345.d
Acq: 11 Aug 2020 7:44 pm

Tgt Ion: 94 Resp: 1342

Ion	Ratio	Lower	Upper
94	100		
65	142.9	0.0	54.8#
66	394.8	3.0	63.0#

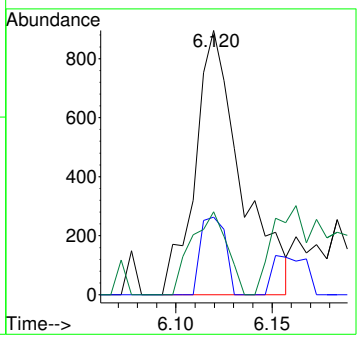


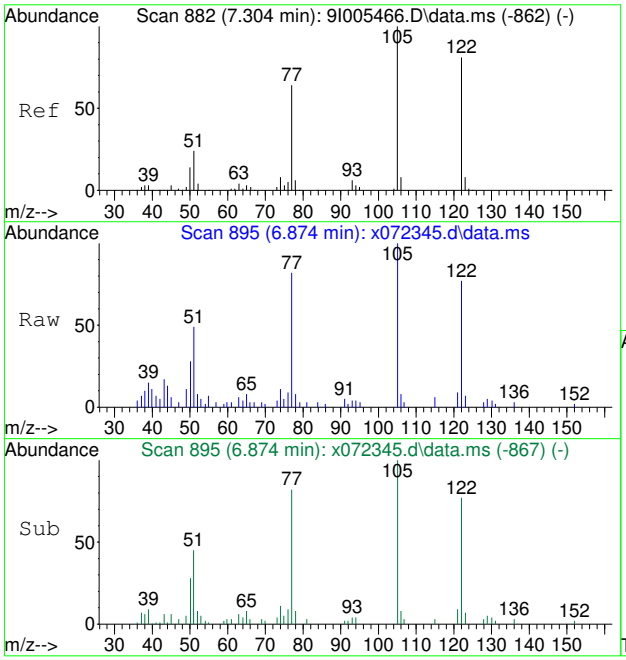


#18
Acetophenone
Concen: 0.17 ppm
RT: 6.120 min Scan# 754
Delta R.T. 0.005 min
Lab File: x072345.d
Acq: 11 Aug 2020 7:44 pm

Tgt Ion:105 Resp: 1490

Ion	Ratio	Lower	Upper
105	100		
120	23.9	0.0	58.3
106	19.1	0.0	38.0

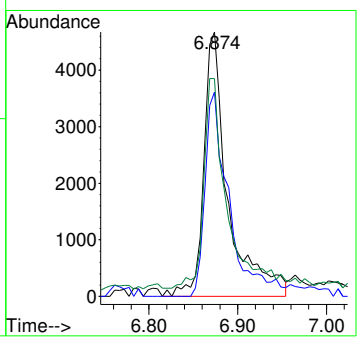


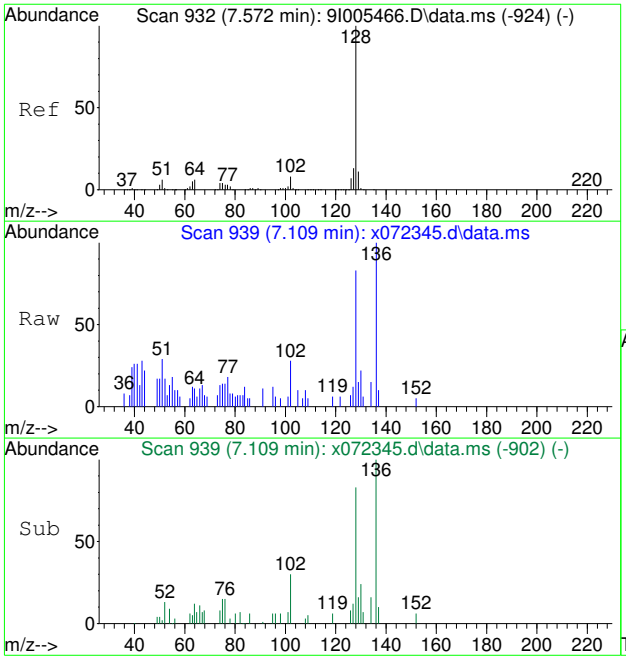


#30
Benzoic Acid
Concen: 2.32 ppm
RT: 6.874 min Scan# 895
Delta R.T. -0.048 min
Lab File: x072345.d
Acq: 11 Aug 2020 7:44 pm

Tgt Ion:105 Resp: 8848

Ion	Ratio	Lower	Upper
105	100		
122	77.8	51.2	111.2
77	80.0	34.1	94.1

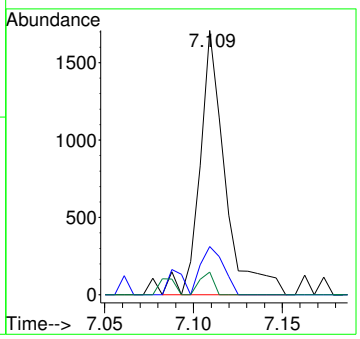


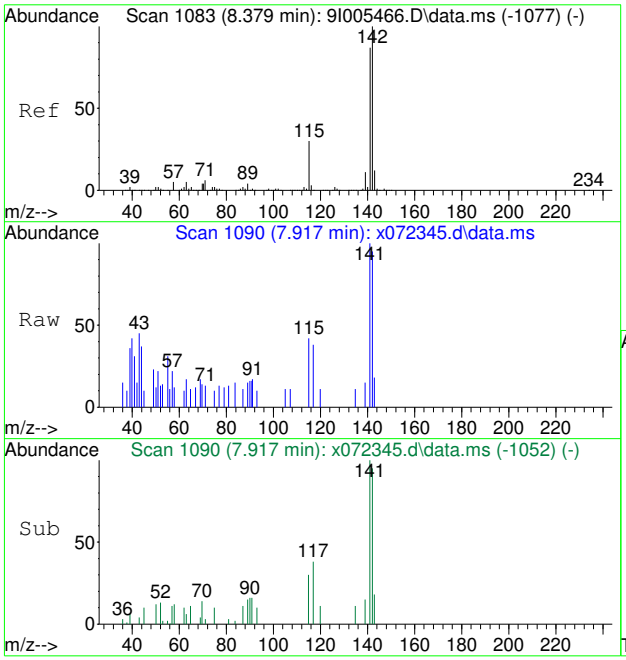


#34
Naphthalene
Concen: 0.10 ppm
RT: 7.109 min Scan# 939
Delta R.T. -0.000 min
Lab File: x072345.d
Acq: 11 Aug 2020 7:44 pm

Tgt Ion:128 Resp: 1683

Ion	Ratio	Lower	Upper
128	100		
129	18.3	0.0	41.4
126	5.6	0.0	37.4

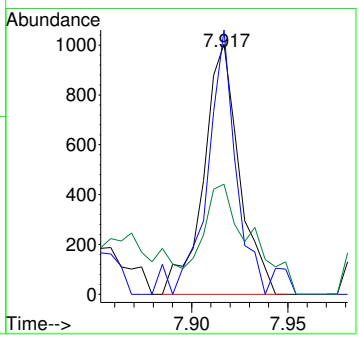


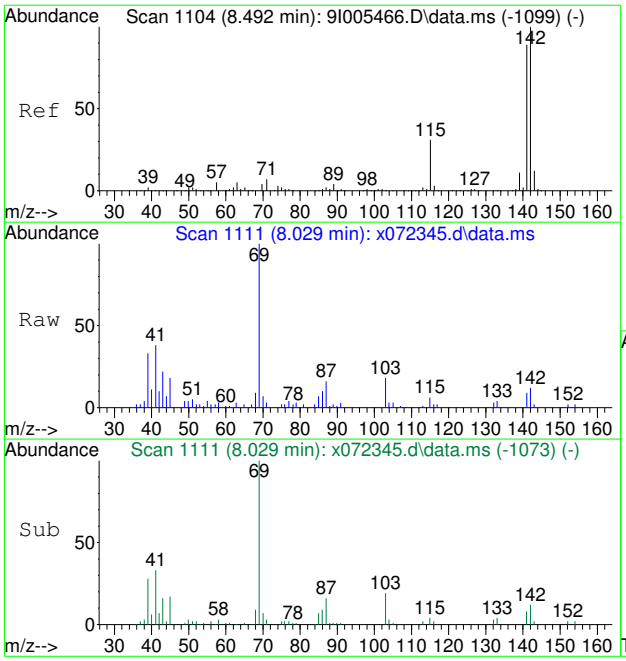


#40
2-Methylnaphthalene
Concen: 0.12 ppm
RT: 7.917 min Scan# 1090
Delta R.T. 0.005 min
Lab File: x072345.d
Acq: 11 Aug 2020 7:44 pm

Tgt Ion:142 Resp: 1295

Ion	Ratio	Lower	Upper
142	100		
141	94.7	56.8	116.8
115	28.3	0.0	60.0

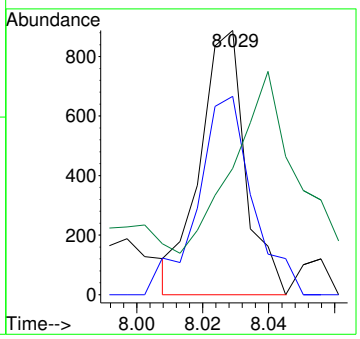


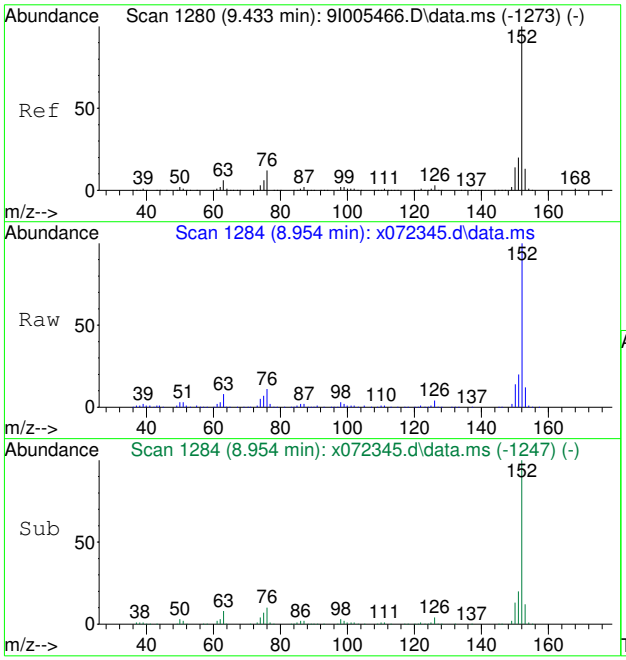


#41
1-Methylnaphthalene
Concen: 0.08 ppm
RT: 8.029 min Scan# 1111
Delta R.T. 0.005 min
Lab File: x072345.d
Acq: 11 Aug 2020 7:44 pm

Tgt Ion:142 Resp: 852

Ion	Ratio	Lower	Upper
142	100		
141	65.7	59.0	119.0
115	12.9	1.1	61.1

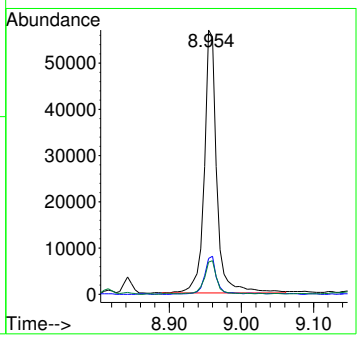


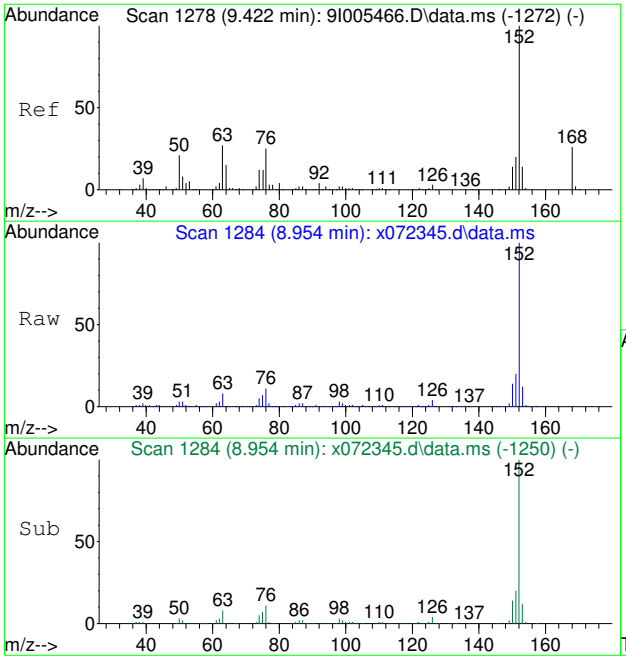


#52
Acenaphthylene
Concen: 4.56 ppm
RT: 8.954 min Scan# 1284
Delta R.T. -0.000 min
Lab File: x072345.d
Acq: 11 Aug 2020 7:44 pm

Tgt Ion:152 Resp: 68492

Ion	Ratio	Lower	Upper
152	100		
150	13.6	0.0	44.3
153	12.1	0.0	43.3

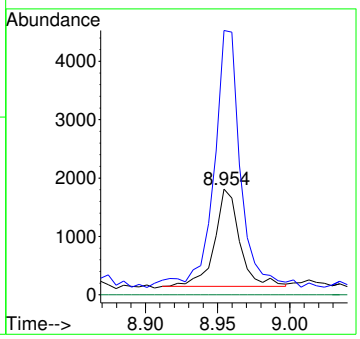


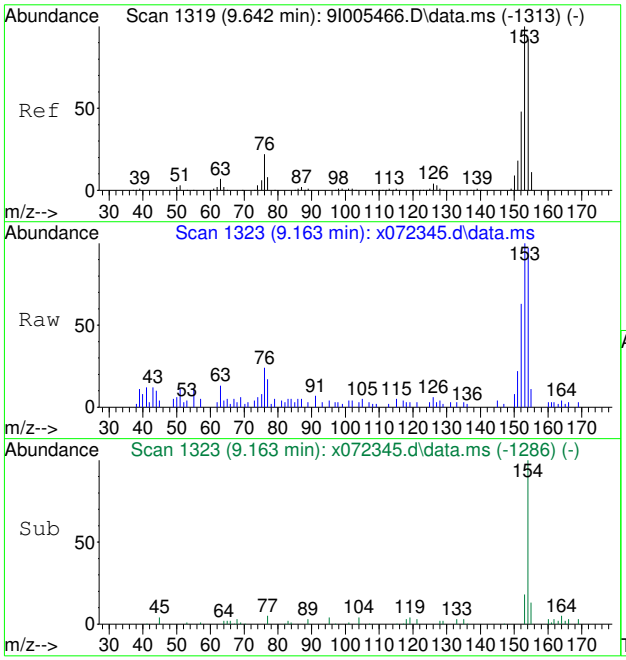


#56
o-Dinitrobenzene
Concen: 0.84 ppm
RT: 8.954 min Scan# 1284
Delta R.T. -0.016 min
Lab File: x072345.d
Acq: 11 Aug 2020 7:44 pm

Tgt Ion: 50 Resp: 2025

Ion	Ratio	Lower	Upper
50	100		
63	260.4	110.3	150.3#
168	0.0	104.0	144.0#

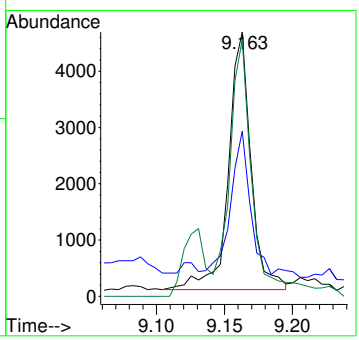


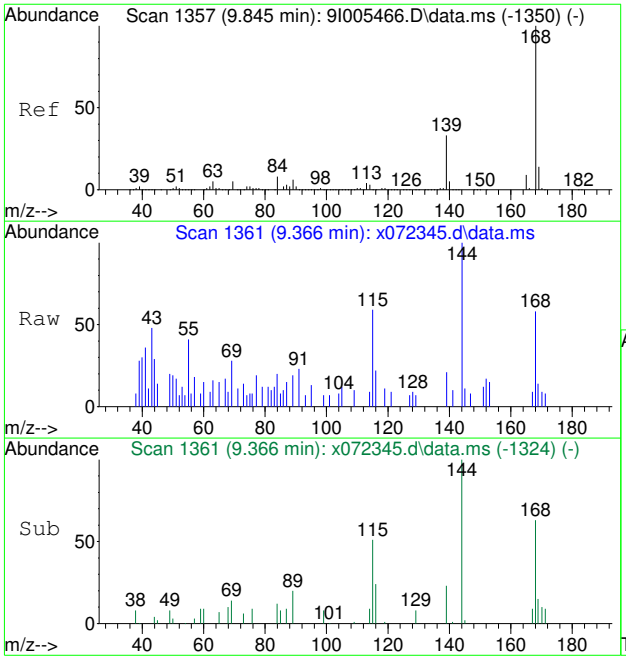


#57
Acenaphthene
Concen: 0.53 ppm
RT: 9.163 min Scan# 1323
Delta R.T. -0.000 min
Lab File: x072345.d
Acq: 11 Aug 2020 7:44 pm

Tgt Ion:153 Resp: 5283

Ion	Ratio	Lower	Upper
153	100		
152	55.3	18.4	78.4
154	98.1	62.4	122.4

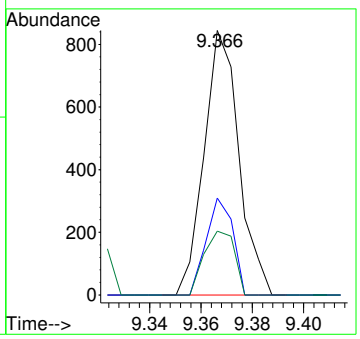


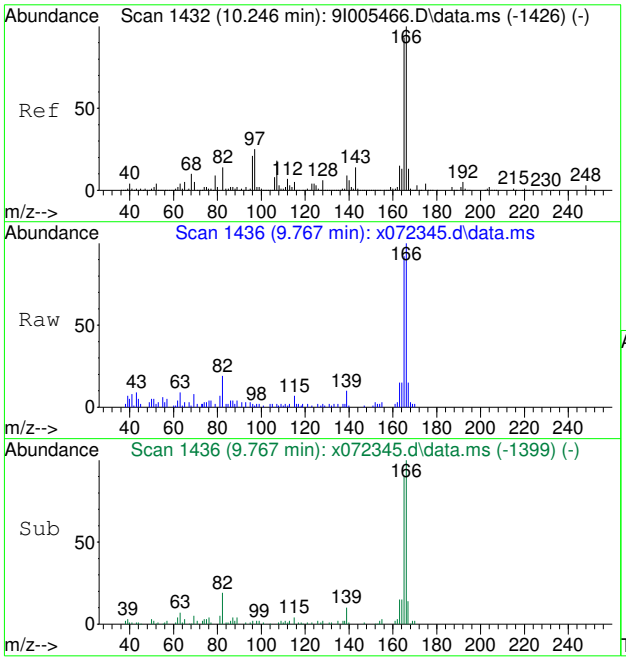


#60
Dibenzofuran
Concen: 0.06 ppm
RT: 9.366 min Scan# 1361
Delta R.T. -0.000 min
Lab File: x072345.d
Acq: 11 Aug 2020 7:44 pm

Tgt Ion:168 Resp: 794

Ion	Ratio	Lower	Upper
168	100		
139	36.6	3.0	63.0
169	24.1	0.0	43.5

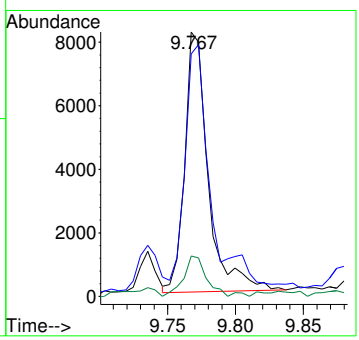


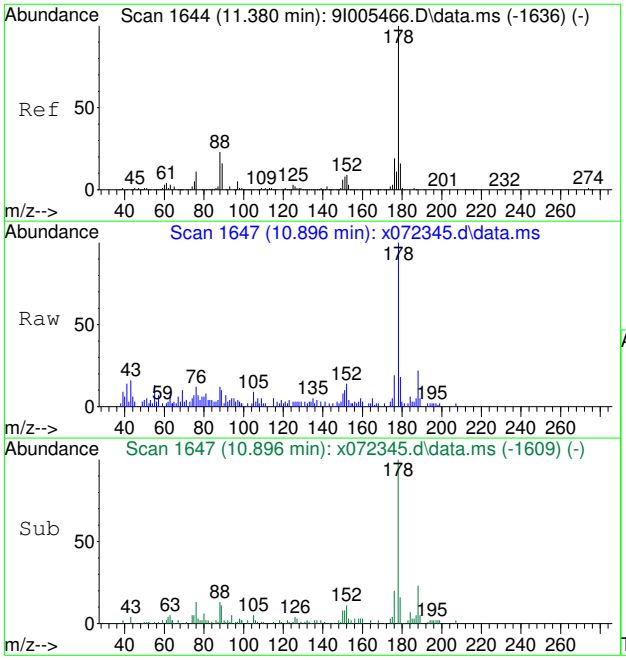


#65
Fluorene
Concen: 0.95 ppm
RT: 9.767 min Scan# 1436
Delta R.T. -0.000 min
Lab File: x072345.d
Acq: 11 Aug 2020 7:44 pm

Tgt Ion:166 Resp: 9873

Ion	Ratio	Lower	Upper
166	100		
165	88.4	62.7	122.7
167	14.9	0.0	43.5

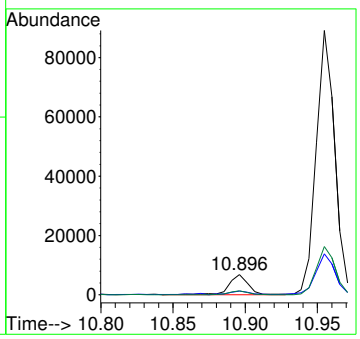


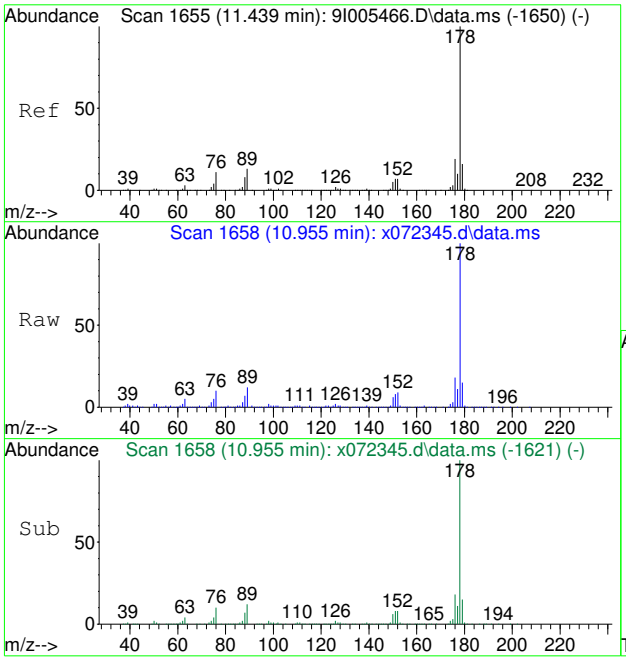


#84
Phenanthrene
Concen: 0.42 ppm
RT: 10.896 min Scan# 1647
Delta R.T. 0.005 min
Lab File: x072345.d
Acq: 11 Aug 2020 7:44 pm

Tgt Ion:178 Resp: 6558

Ion	Ratio	Lower	Upper
178	100		
179	15.2	0.0	45.8
176	19.6	0.0	49.3

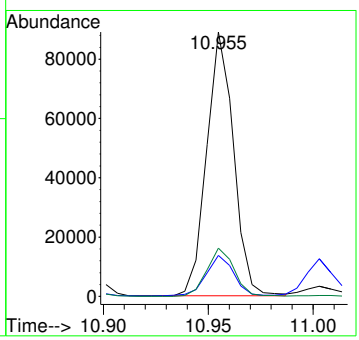


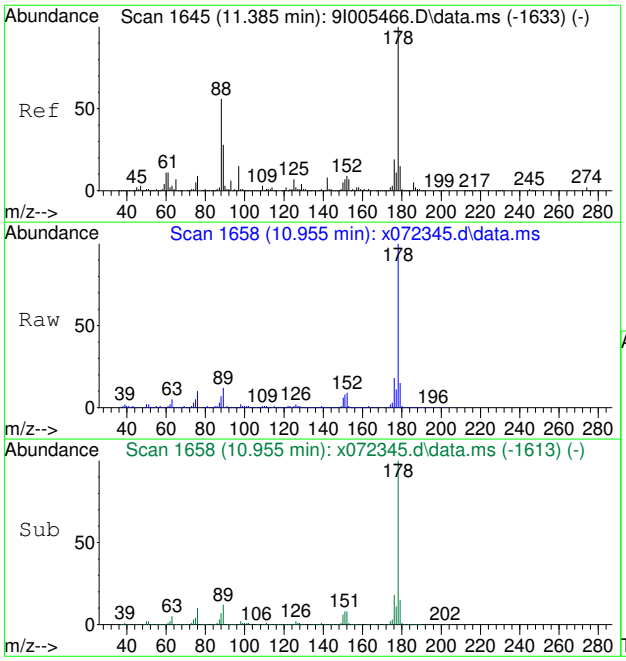


#85
Anthracene
Concen: 4.90 ppm
RT: 10.955 min Scan# 1658
Delta R.T. -0.000 min
Lab File: x072345.d
Acq: 11 Aug 2020 7:44 pm

Tgt Ion:178 Resp: 79621

Ion	Ratio	Lower	Upper
178	100		
179	15.0	0.0	46.0
176	18.3	0.0	49.3

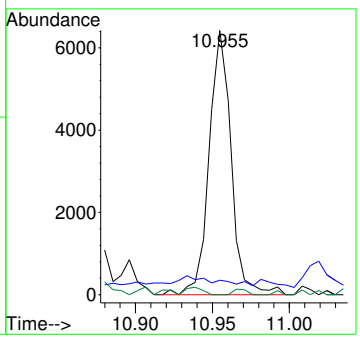


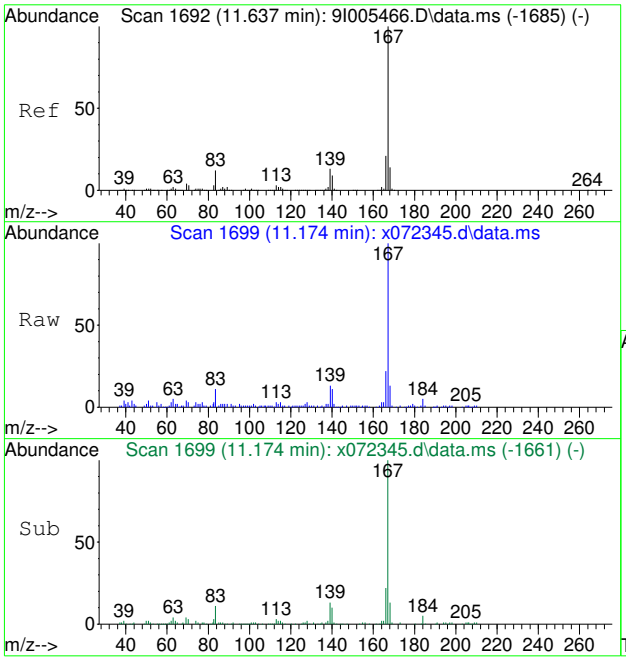


#86
Disulfoton
Concen: 1.03 ppm
RT: 10.955 min Scan# 1658
Delta R.T. 0.043 min
Lab File: x072345.d
Acq: 11 Aug 2020 7:44 pm

Tgt Ion: 88 Resp: 6405

Ion	Ratio	Lower	Upper
88	100		
97	1.4	0.0	56.5
142	0.0	0.0	44.2

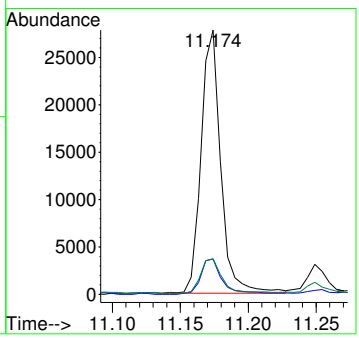


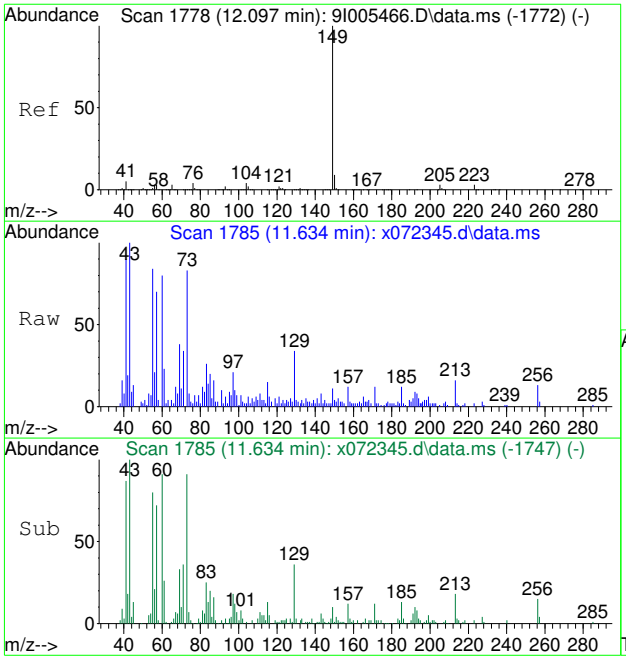


#87
Carbazole
Concen: 1.95 ppm
RT: 11.174 min Scan# 1699
Delta R.T. 0.005 min
Lab File: x072345.d
Acq: 11 Aug 2020 7:44 pm

Tgt Ion:167 Resp: 27913

Ion	Ratio	Lower	Upper
167	100		
168	13.2	0.0	43.9
139	13.0	0.0	42.7

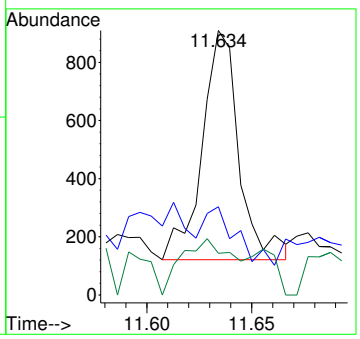


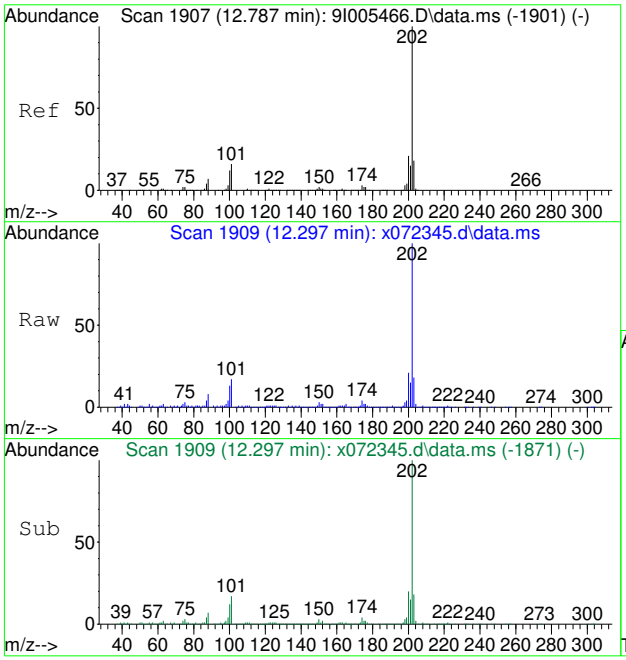


#89
Di-n-butylphthalate
Concen: 0.06 ppm
RT: 11.634 min Scan# 1785
Delta R.T. 0.005 min
Lab File: x072345.d
Acq: 11 Aug 2020 7:44 pm

Tgt Ion:149 Resp: 965

Ion	Ratio	Lower	Upper
149	100		
150	11.6	0.0	39.5
104	18.8	0.0	34.2

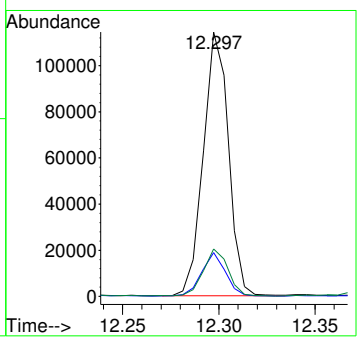


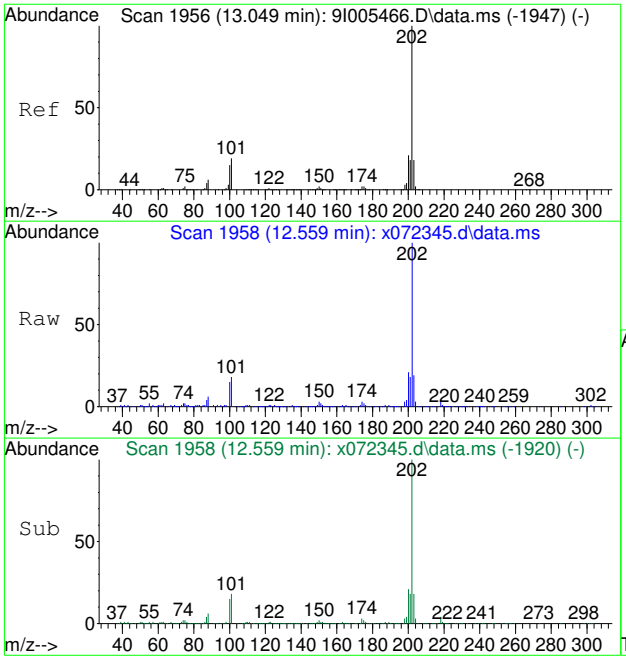


#91
Fluoranthene
Concen: 7.20 ppm
RT: 12.297 min Scan# 1909
Delta R.T. 0.005 min
Lab File: x072345.d
Acq: 11 Aug 2020 7:44 pm

Tgt Ion:202 Resp: 104202

Ion	Ratio	Lower	Upper
202	100		
101	16.4	0.0	45.8
203	17.7	0.0	48.1

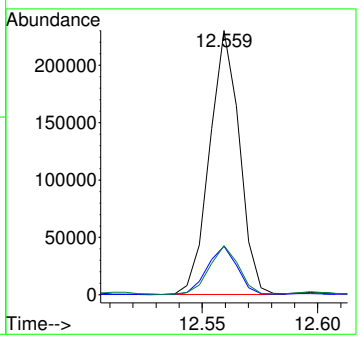


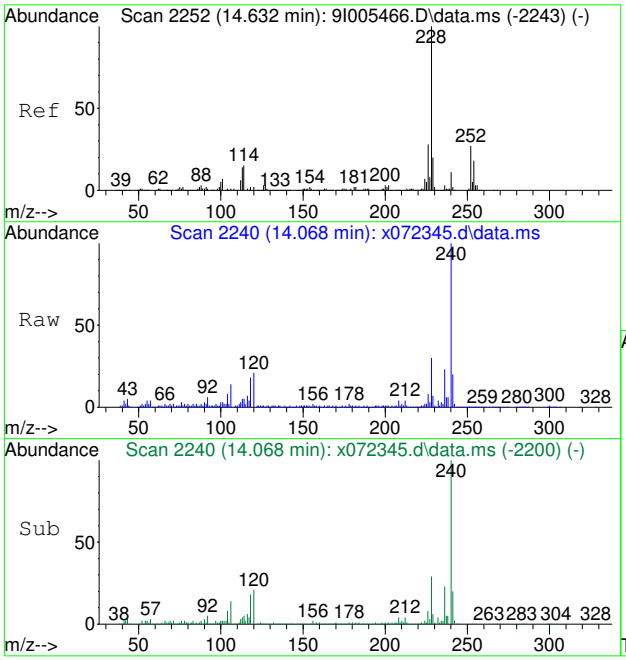


#94
Pyrene
Concen: 12.22 ppm
RT: 12.559 min Scan# 1958
Delta R.T. 0.005 min
Lab File: x072345.d
Acq: 11 Aug 2020 7:44 pm

Tgt Ion:202 Resp: 206848

Ion	Ratio	Lower	Upper
202	100		
101	18.2	0.0	48.7
203	18.3	0.0	48.4

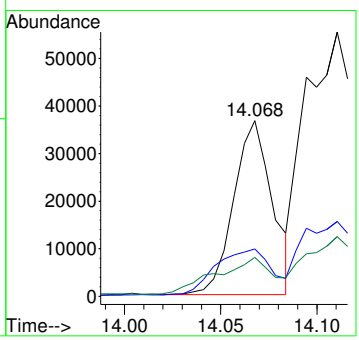


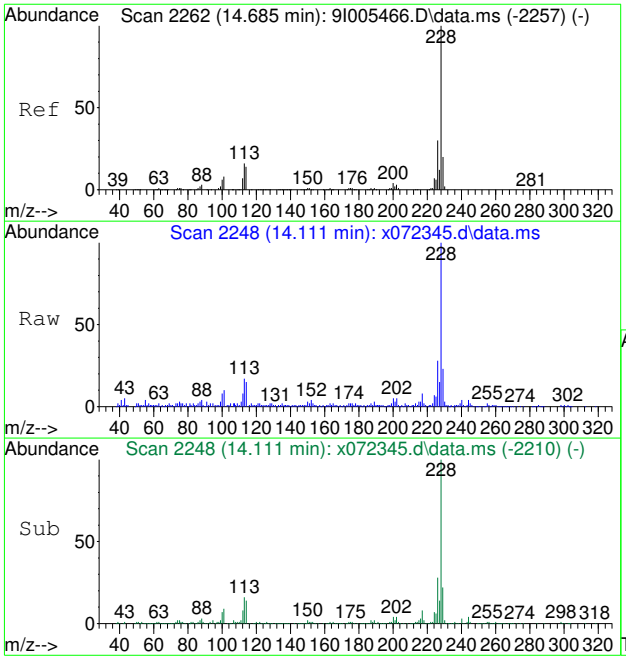


#99
Benzo[a]anthracene
Concen: 4.00 ppm
RT: 14.068 min Scan# 2240
Delta R.T. 0.016 min
Lab File: x072345.d
Acq: 11 Aug 2020 7:44 pm

Tgt Ion:228 Resp: 51177

Ion	Ratio	Lower	Upper
228	100		
226	26.3	0.0	57.5
229	19.9	0.0	49.9

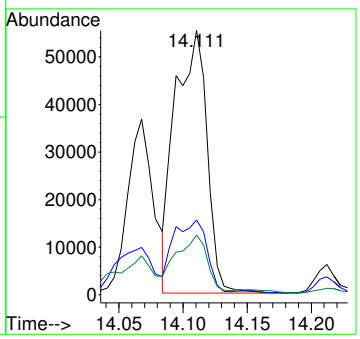


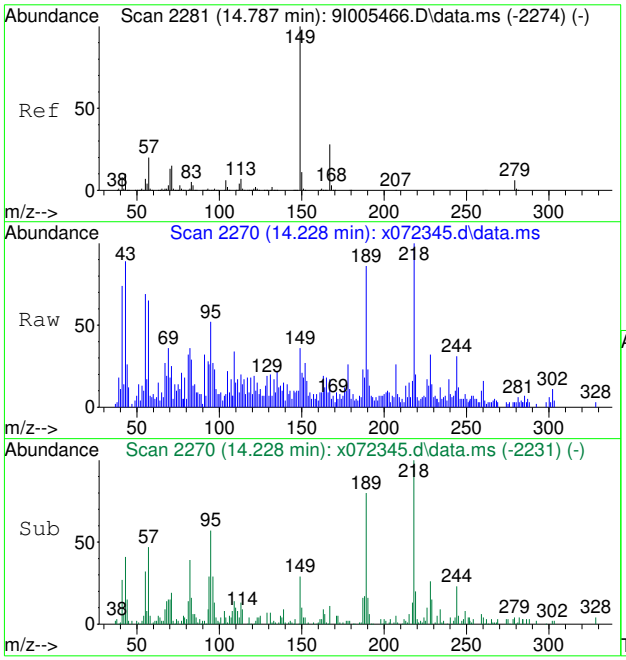


#100
Chrysene
Concen: 6.98 ppm
RT: 14.111 min Scan# 2248
Delta R.T. 0.005 min
Lab File: x072345.d
Acq: 11 Aug 2020 7:44 pm

Tgt Ion:228 Resp: 95197

Ion	Ratio	Lower	Upper
228	100		
226	28.0	0.4	60.4
229	21.3	0.0	50.1

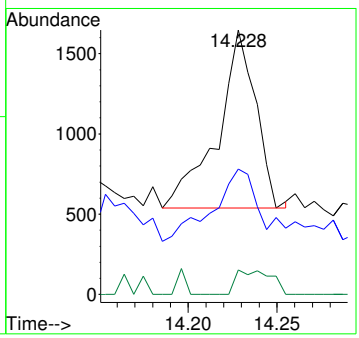


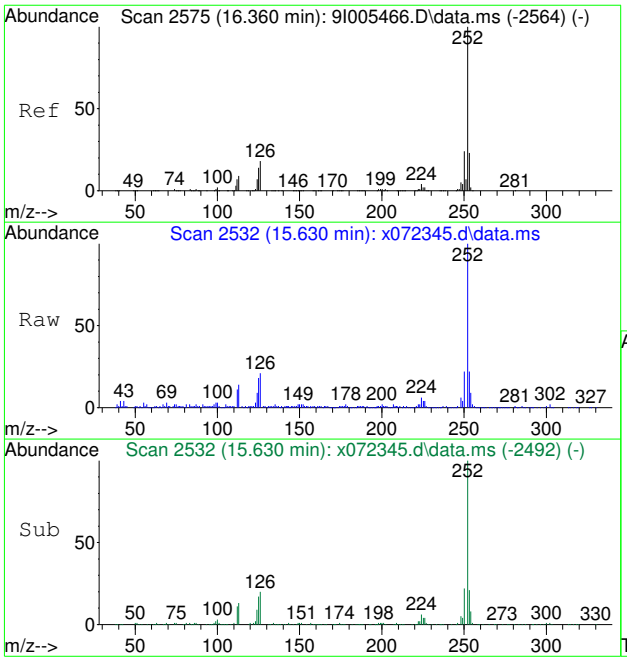


#101
bis(2-Ethylhexyl)phthalate
Concen: 0.20 ppm
RT: 14.228 min Scan# 2270
Delta R.T. 0.011 min
Lab File: x072345.d
Acq: 11 Aug 2020 7:44 pm

Tgt Ion:149 Resp: 1665

Ion	Ratio	Lower	Upper
149	100		
167	28.4	0.0	58.5
279	14.0	0.0	35.7

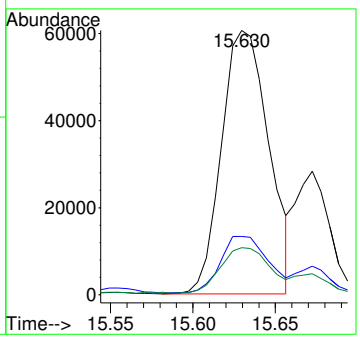


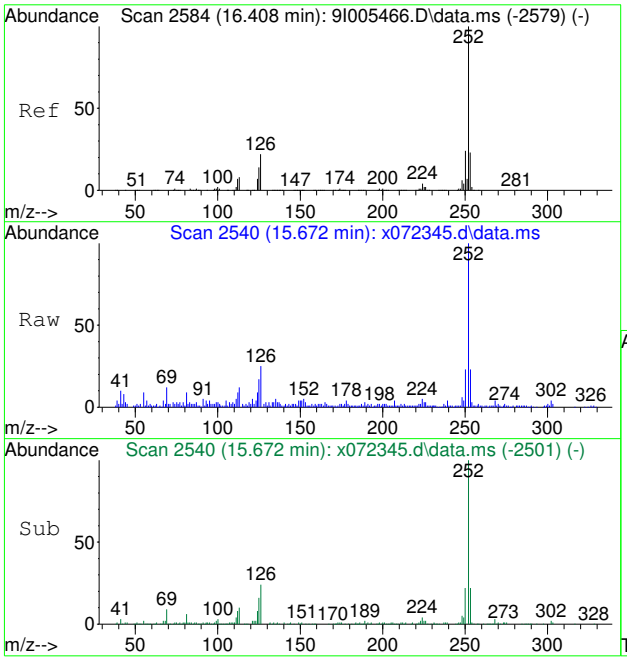


#104
Benzo[b]fluoranthene
Concen: 13.74 ppm
RT: 15.630 min Scan# 2532
Delta R.T. 0.016 min
Lab File: x072345.d
Acq: 11 Aug 2020 7:44 pm

Tgt Ion:252 Resp: 120646

Ion	Ratio	Lower	Upper
252	100		
253	21.8	0.0	52.5
125	17.1	0.0	44.0

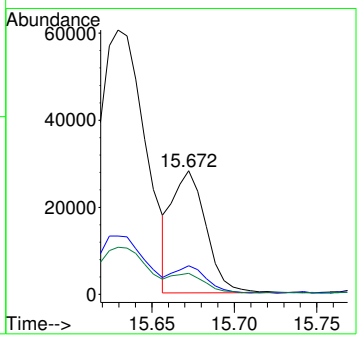


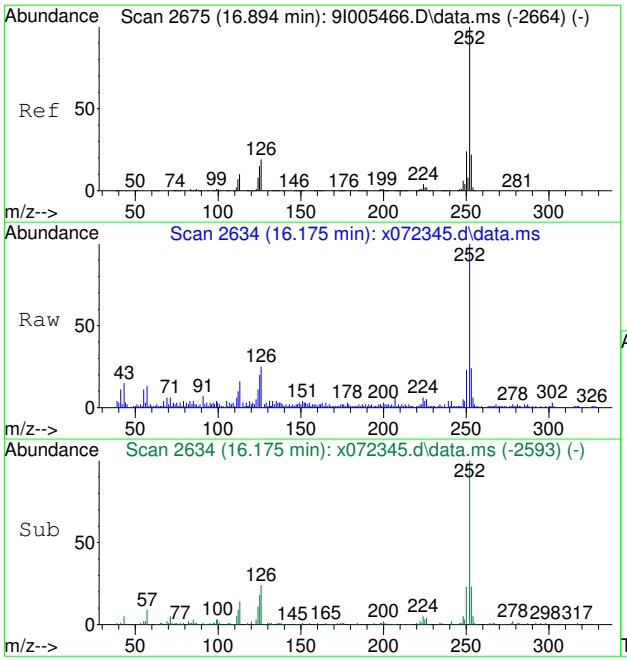


#105
Benzo[k]fluoranthene
Concen: 3.53 ppm
RT: 15.672 min Scan# 2540
Delta R.T. 0.011 min
Lab File: x072345.d
Acq: 11 Aug 2020 7:44 pm

Tgt Ion:252 Resp: 40048

Ion	Ratio	Lower	Upper
252	100		
253	23.0	0.0	52.5
125	14.9	0.0	44.4

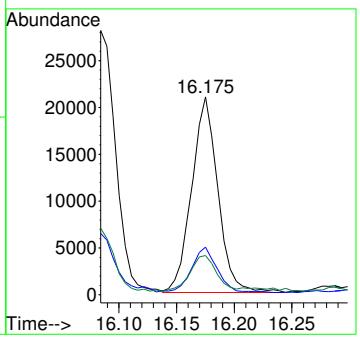


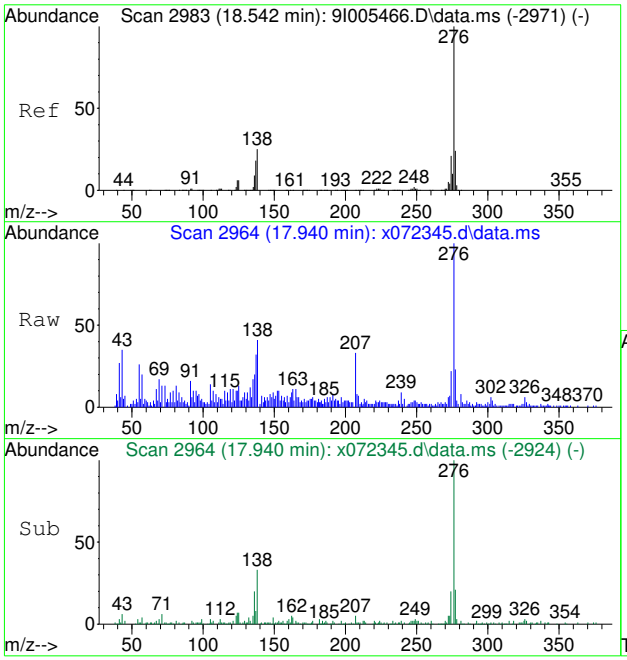


#106
Benzo[a]pyrene
Concen: 4.03 ppm
RT: 16.175 min Scan# 2634
Delta R.T. 0.021 min
Lab File: x072345.d
Acq: 11 Aug 2020 7:44 pm

Tgt Ion:252 Resp: 33030

Ion	Ratio	Lower	Upper
252	100		
253	22.8	0.0	52.3
125	17.6	0.0	44.7

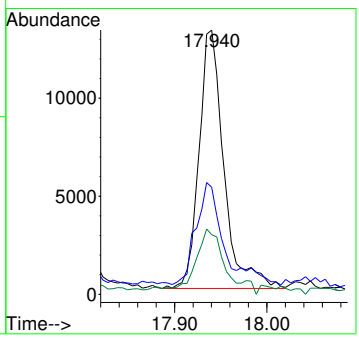


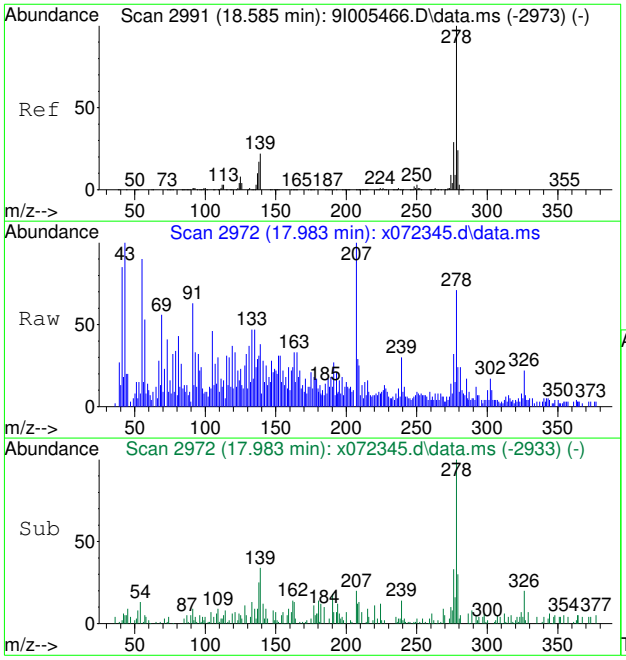


#107
Indeno[1,2,3-cd]pyrene
Concen: 5.30 ppm
RT: 17.940 min Scan# 2964
Delta R.T. 0.016 min
Lab File: x072345.d
Acq: 11 Aug 2020 7:44 pm

Tgt Ion:276 Resp: 24661

Ion	Ratio	Lower	Upper
276	100		
138	36.3	0.0	54.7
277	20.9	0.0	53.8

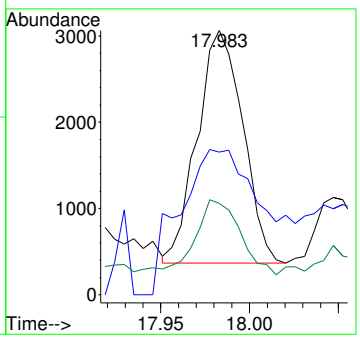


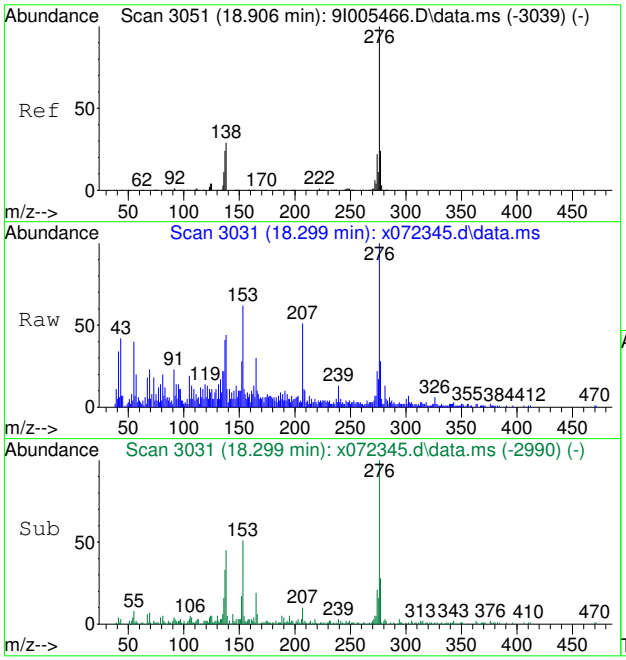


#108
Dibenz[a,h]anthracene
Concen: 0.97 ppm
RT: 17.983 min Scan# 2972
Delta R.T. 0.011 min
Lab File: x072345.d
Acq: 11 Aug 2020 7:44 pm

Tgt Ion:278 Resp: 4805

Ion	Ratio	Lower	Upper
278	100		
139	27.1	0.0	52.4
279	28.3	0.0	54.4

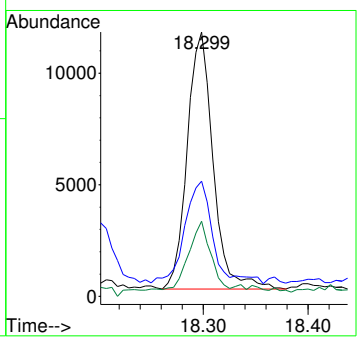




#109
Benzo[g,h,i]perylene
Concen: 2.71 ppm
RT: 18.299 min Scan# 3031
Delta R.T. 0.021 min
Lab File: x072345.d
Acq: 11 Aug 2020 7:44 pm

Tgt Ion:276 Resp: 19772

Ion	Ratio	Lower	Upper
276	100		
138	38.7	0.0	59.4
277	26.7	0.0	54.1



Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan
08/13/20 09:53

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0811_sx2950\
Data File : x072346.d
Acq On : 11 Aug 2020 8:10 pm
Operator : marthav
Sample : fa77576-14 E Inst : MSBNA05
Misc : op81482,sx2950,30.3,,,1,1,soil
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Aug 13 09:45:21 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	5.665	152	171443	40.00	ppm		0.00
22) Naphthalene-d8	7.088	136	646034	40.00	ppm		0.00
43) Acenaphthene-d10	9.126	164	320314	40.00	ppm		0.00
70) Phenanthrene-d10	10.875	188	553392	40.00	ppm		0.01
92) Chrysene-d12	14.089	240	444089	40.00	ppm		0.02
102) Perylene-d12	16.298	264	351993	40.00	ppm		0.04
110) 1,4-Dichlorobenzene-d4A	5.665	152	171443	40.00	ppm		0.00
120) Naphthalene-d8A	7.088	136	646034	40.00	ppm		0.00
127) Acenaphthene-d10A	9.126	164	320314	40.00	ppm		0.00
136) Phenanthrene-d10A	10.875	188	553392	40.00	ppm		0.01
146) Chrysene-d12A	14.089	240	444089	40.00	ppm		0.02
153) Perylene-d12A	16.298	264	351993	40.00	ppm		0.04
System Monitoring Compounds							
7) 2-Fluorophenol	4.328	112	451624	73.47	ppm		0.02
Spiked Amount 100.000	Range 40 - 102		Recovery = 73.47%				
9) Phenol-d5	5.350	99	561137	76.73	ppm		0.02
Spiked Amount 100.000	Range 41 - 100		Recovery = 76.73%				
23) Nitrobenzene-d5	6.286	82	237909	35.66	ppm		0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 71.32%				
47) 2-Fluorobiphenyl	8.361	172	427293	36.85	ppm		0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 73.70%				
75) 2,4,6-Tribromophenol	10.067	330	87377	74.24	ppm		0.01
Spiked Amount 100.000	Range 42 - 108		Recovery = 74.24%				
95) Terphenyl-d14	12.795	244	435036	36.87	ppm		0.02
Spiked Amount 50.000	Range 45 - 119		Recovery = 73.74%				
Target Compounds							Qvalue
5) Benzaldehyde	5.194	106	1749	0.34	ppm		95
18) Acetophenone	6.120	105	1488	0.16	ppm		76
21) 3&4-Methylphenol	6.189	108	2177	0.34	ppm	#	68
27) 2,4-Dimethylphenol	6.762	107	1591	0.27	ppm	#	74
34) Naphthalene	7.109	128	5362	0.31	ppm		97
40) 2-Methylnaphthalene	7.917	142	3004	0.26	ppm		95
41) 1-Methylnaphthalene	8.029	142	2054	0.19	ppm		90
48) 1,1'-Biphenyl	8.468	154	1018	0.08	ppm		87
52) Acenaphthylene	8.960	152	244623	15.29	ppm		99
57) Acenaphthene	9.163	153	11494	1.08	ppm		98
60) Dibenzofuran	9.366	168	4722	0.33	ppm		91
65) Fluorene	9.773	166	25337	2.29	ppm		99
84) Phenanthrene	10.896	178	133379	7.98	ppm		99
85) Anthracene	10.960	178	595832	34.19	ppm		97
87) Carbazole	11.174	167	154496	10.05	ppm		98
91) Fluoranthene	12.313	202	1561293	100.63	ppm		98
94) Pyrene	12.576	202	1593997	86.45	ppm		97
99) Benzo[a]anthracene	14.079	228	524065m	37.55	ppm		
100) Chrysene	14.127	228	920175	61.91	ppm		99
104) Benzo[b]fluoranthene	15.667	252	1117478	97.26	ppm		96
105) Benzo[k]fluoranthene	15.699	252	337758	27.03	ppm		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0811_sx2950\
Data File : x072346.d
Acq On : 11 Aug 2020 8:10 pm
Operator : marthav
Sample : fa77576-14 E Inst : MSBNA05
Misc : op81482,sx2950,30.3,,,1,1,soil
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Aug 13 09:45:21 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

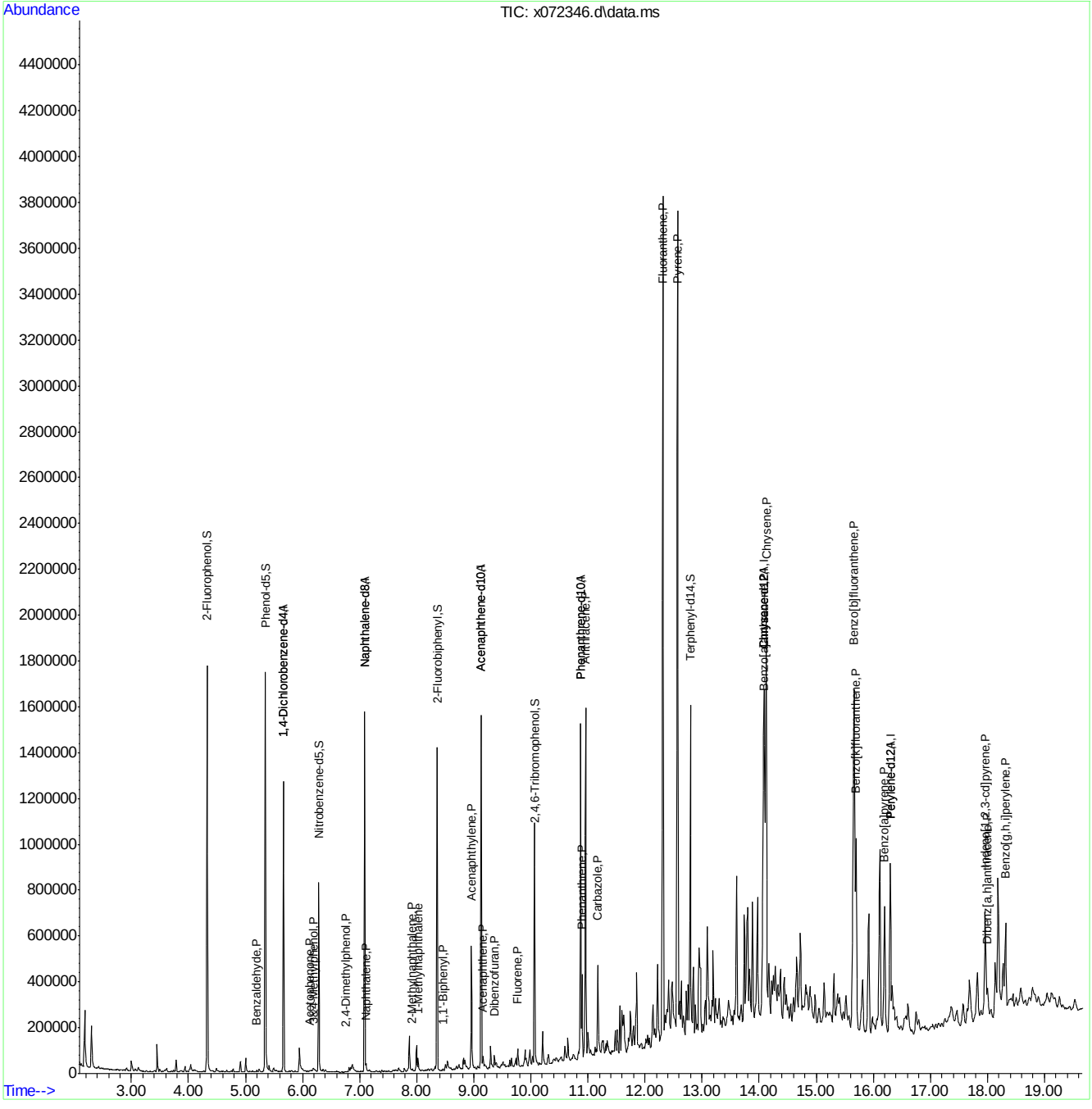
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
106) Benzo[a]pyrene	16.197	252	294371	30.66	ppm	96
107) Indeno[1,2,3-cd]pyrene	17.962	276	275435	41.94	ppm	85
108) Dibenz[a,h]anthracene	17.999	278	55189	9.38	ppm	89
109) Benzo[g,h,i]perylene	18.320	276	208849	23.75	ppm	89

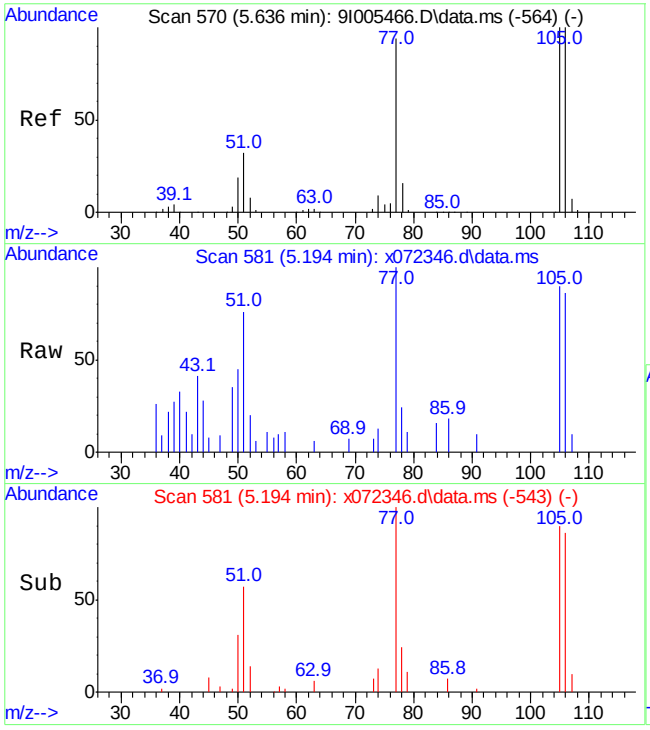
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0811_sx2950\
Data File : x072346.d
Acq On : 11 Aug 2020 8:10 pm
Operator : marthav
Sample : fa77576-14 E Inst : MSBNA05
Misc : op81482,sx2950,30.3,,,1,1,soil
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Aug 13 09:45:21 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

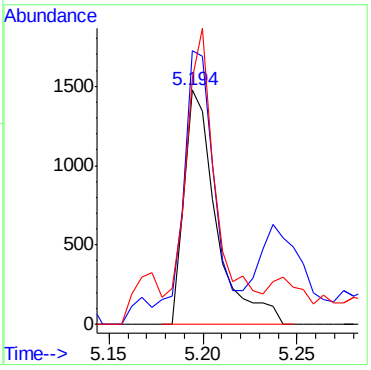


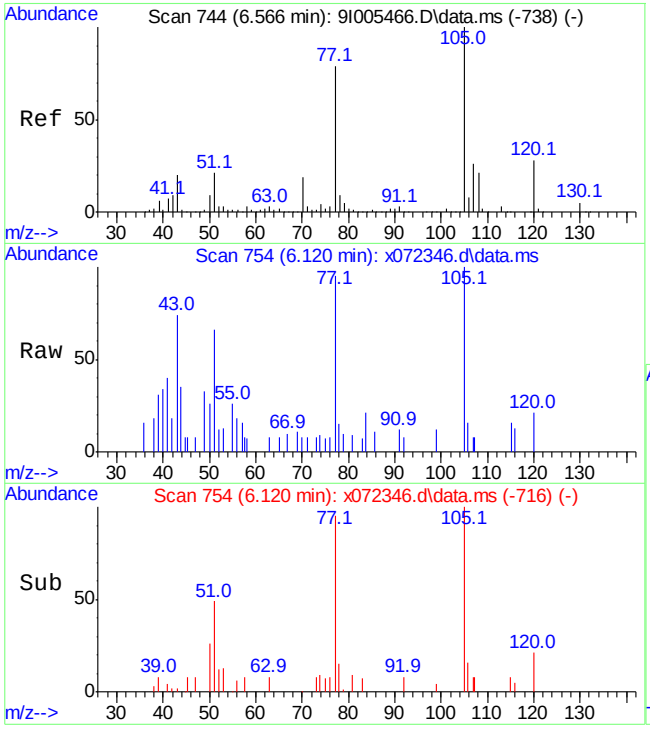


#5
Benzaldehyde
Concen: 0.34 ppm
RT: 5.194 min Scan# 581
Delta R.T. 0.005 min
Lab File: x072346.d
Acq: 11 Aug 2020 8:10 pm

Tgt Ion:106 Resp: 1749

Ion	Ratio	Lower	Upper
106	100		
77	94.9	63.9	123.9
105	91.2	70.0	130.0

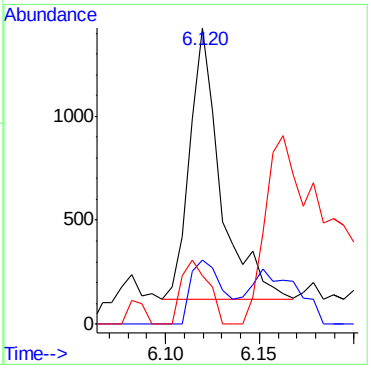


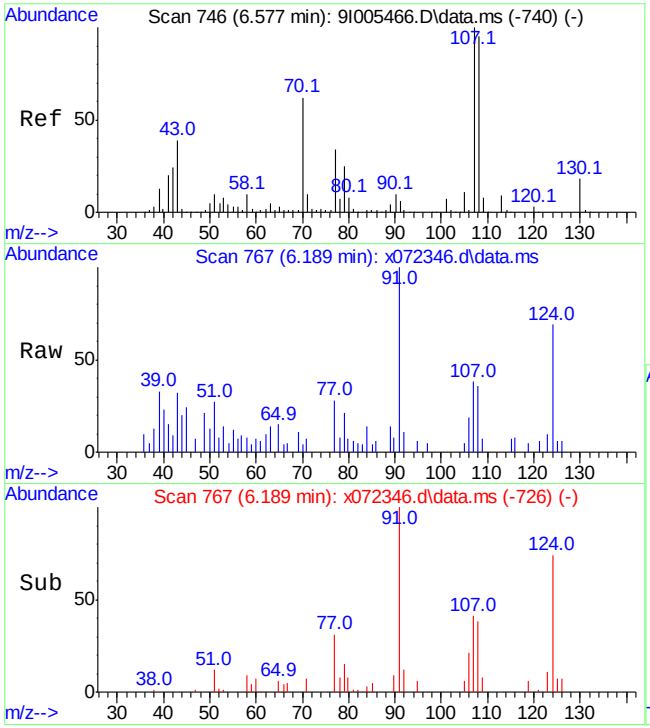


#18
Acetophenone
Concen: 0.16 ppm
RT: 6.120 min Scan# 754
Delta R.T. 0.005 min
Lab File: x072346.d
Acq: 11 Aug 2020 8:10 pm

Tgt Ion:105 Resp: 1488

Ion	Ratio	Lower	Upper
105	100		
120	15.6	0.0	58.3
106	0.0	0.0	38.0

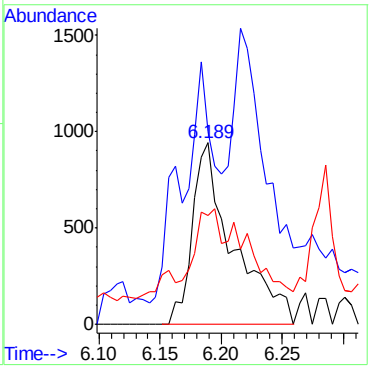


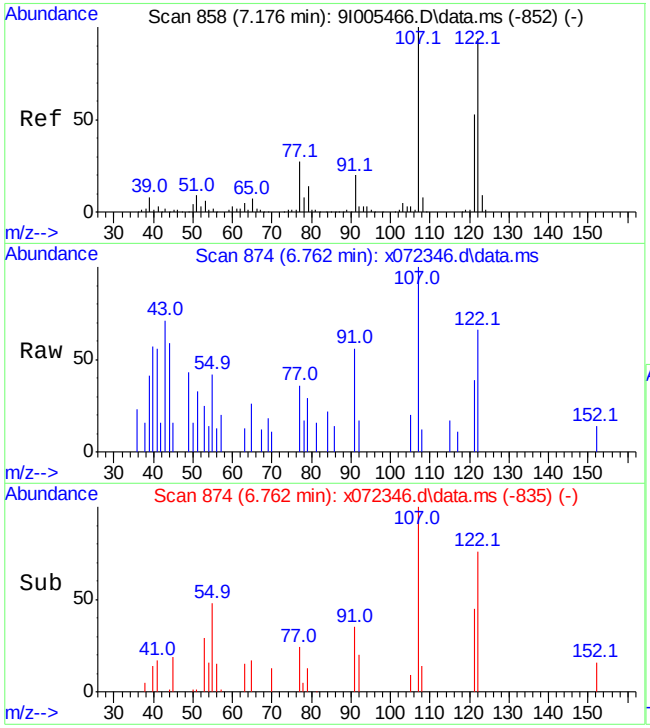


#21
3&4-Methylphenol
Concen: 0.34 ppm
RT: 6.189 min Scan# 767
Delta R.T. 0.021 min
Lab File: x072346.d
Acq: 11 Aug 2020 8:10 pm

Tgt Ion:108 Resp: 2177

Ion	Ratio	Lower	Upper
108	100		
107	69.7	75.4	135.4#
79	37.2	0.0	56.3

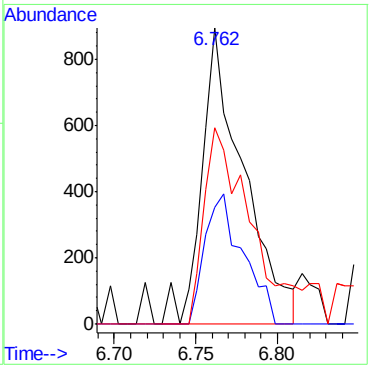


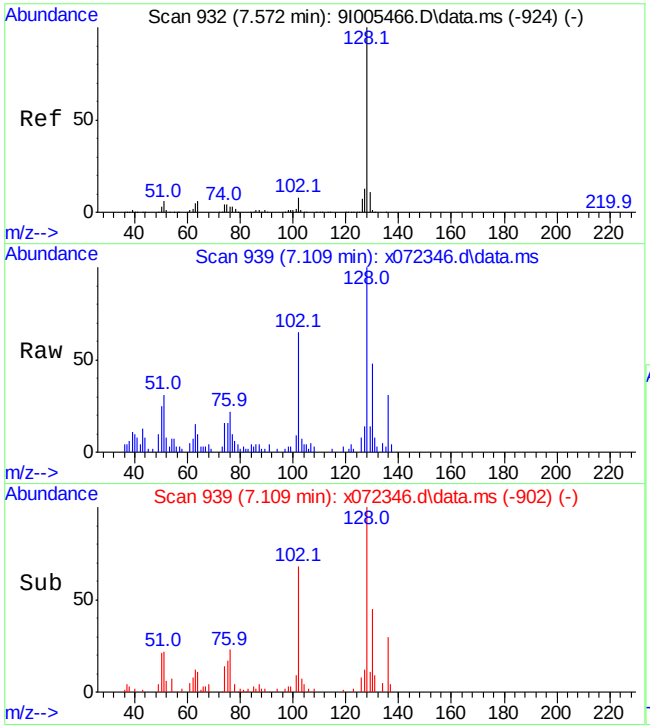


#27
2,4-Dimethylphenol
Concen: 0.27 ppm
RT: 6.762 min Scan# 874
Delta R.T. 0.011 min
Lab File: x072346.d
Acq: 11 Aug 2020 8:10 pm

Tgt Ion:107 Resp: 1591

Ion	Ratio	Lower	Upper
107	100		
121	41.8	23.4	83.4
122	63.8	64.3	124.3#

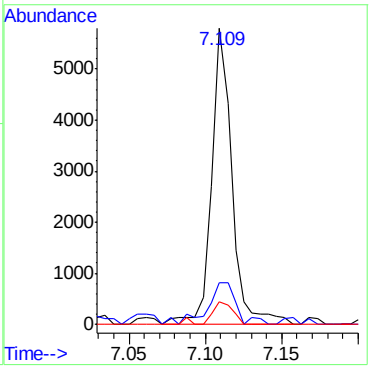


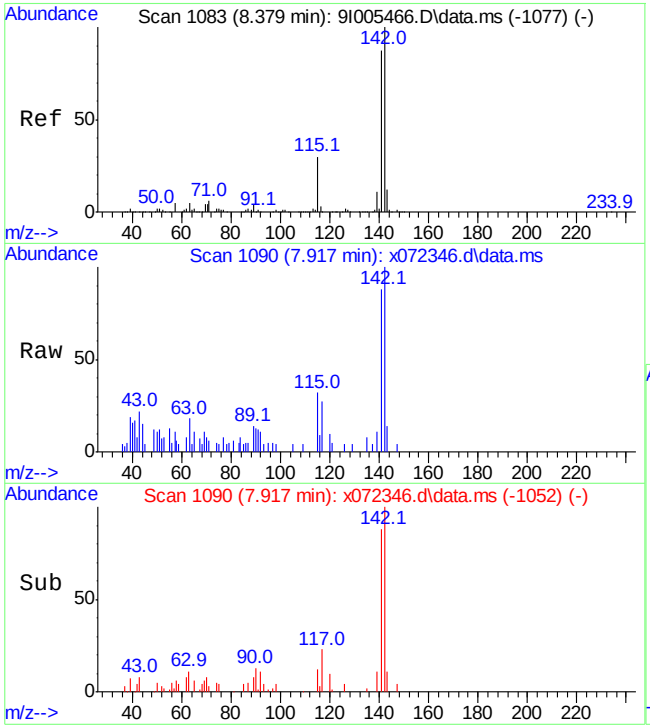


#34
Naphthalene
Concen: 0.31 ppm
RT: 7.109 min Scan# 939
Delta R.T. 0.000 min
Lab File: x072346.d
Acq: 11 Aug 2020 8:10 pm

Tgt Ion:128 Resp: 5362

Ion	Ratio	Lower	Upper
128	100		
129	13.1	0.0	41.4
126	7.6	0.0	37.4

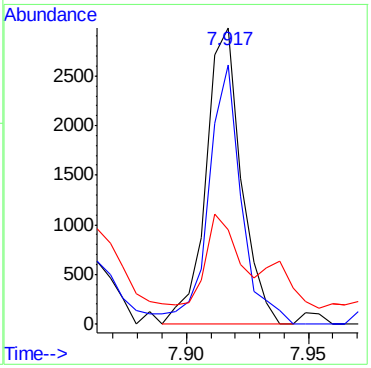


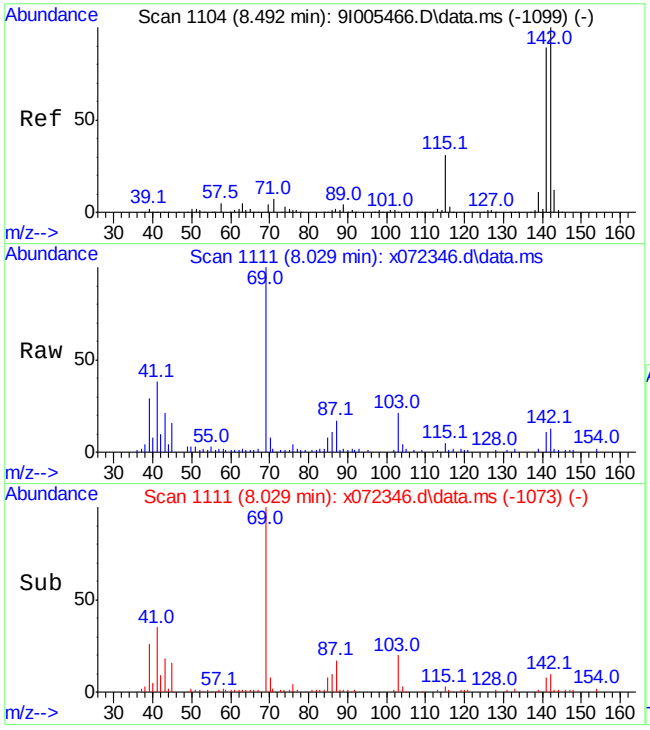


#40
2-Methylnaphthalene
Concen: 0.26 ppm
RT: 7.917 min Scan# 1090
Delta R.T. 0.005 min
Lab File: x072346.d
Acq: 11 Aug 2020 8:10 pm

Tgt Ion:142 Resp: 3004

Ion	Ratio	Lower	Upper
142	100		
141	85.8	56.8	116.8
115	22.1	0.0	60.0

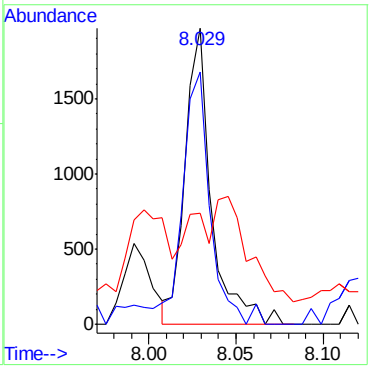


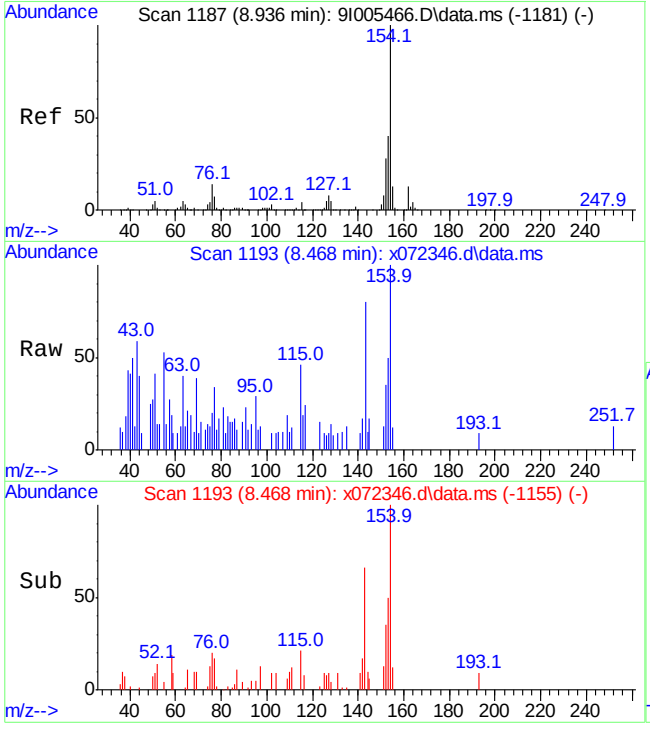


#41
1-Methylnaphthalene
Concen: 0.19 ppm
RT: 8.029 min Scan# 1111
Delta R.T. 0.005 min
Lab File: x072346.d
Acq: 11 Aug 2020 8:10 pm

Tgt Ion:142 Resp: 2054

Ion	Ratio	Lower	Upper
142	100		
141	85.0	59.0	119.0
115	16.4	1.1	61.1

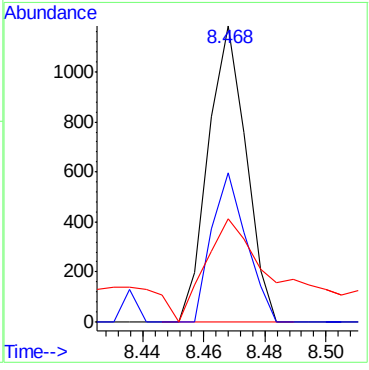


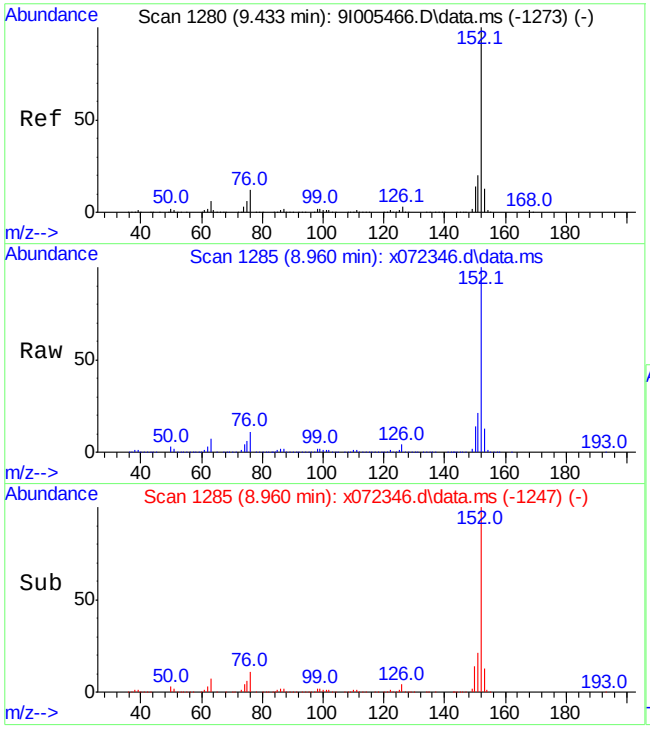


#48
1,1'-Biphenyl
Concen: 0.08 ppm
RT: 8.468 min Scan# 1193
Delta R.T. 0.005 min
Lab File: x072346.d
Acq: 11 Aug 2020 8:10 pm

Tgt Ion:154 Resp: 1018

Ion	Ratio	Lower	Upper
154	100		
153	50.3	10.3	70.3
152	23.1	0.0	58.2

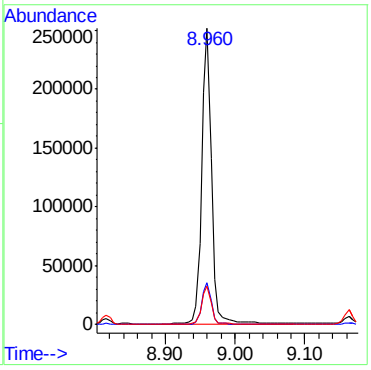


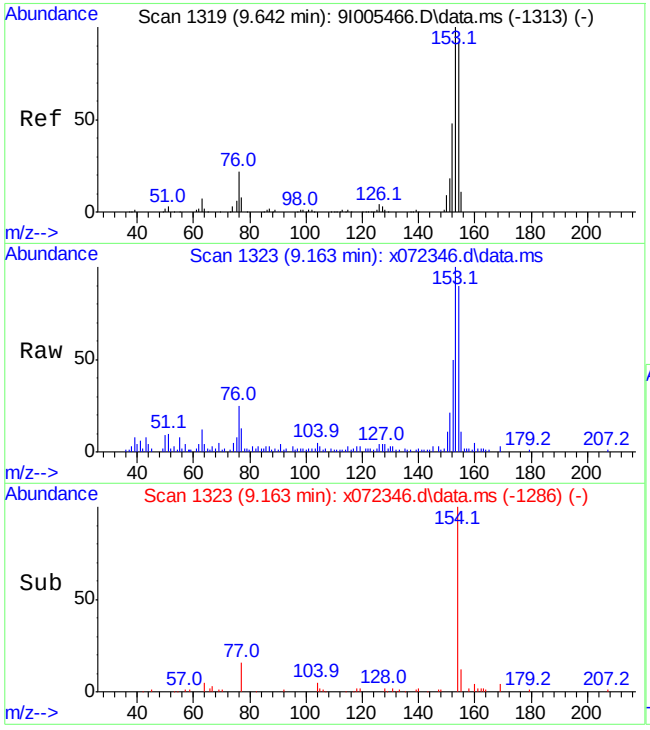


#52
Acenaphthylene
Concen: 15.29 ppm
RT: 8.960 min Scan# 1285
Delta R.T. 0.005 min
Lab File: x072346.d
Acq: 11 Aug 2020 8:10 pm

Tgt Ion:152 Resp: 244623

Ion	Ratio	Lower	Upper
152	100		
150	14.0	0.0	44.3
153	12.9	0.0	43.3

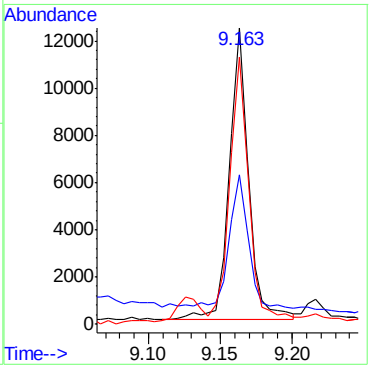


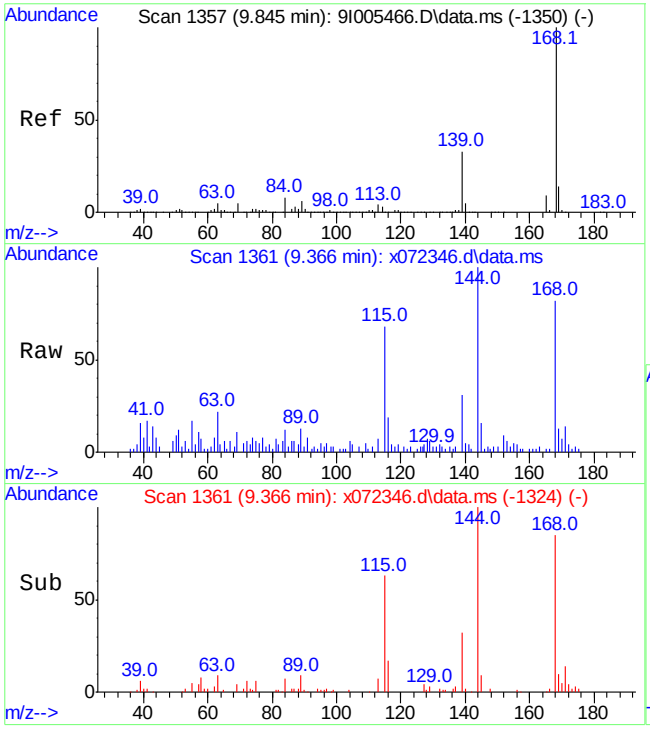


#57
Acenaphthene
Concen: 1.08 ppm
RT: 9.163 min Scan# 1323
Delta R.T. -0.000 min
Lab File: x072346.d
Acq: 11 Aug 2020 8:10 pm

Tgt Ion:153 Resp: 11494

Ion	Ratio	Lower	Upper
153	100		
152	46.0	18.4	78.4
154	90.6	62.4	122.4

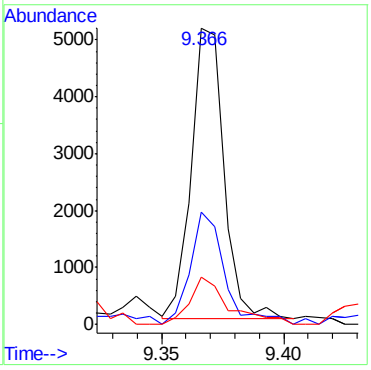


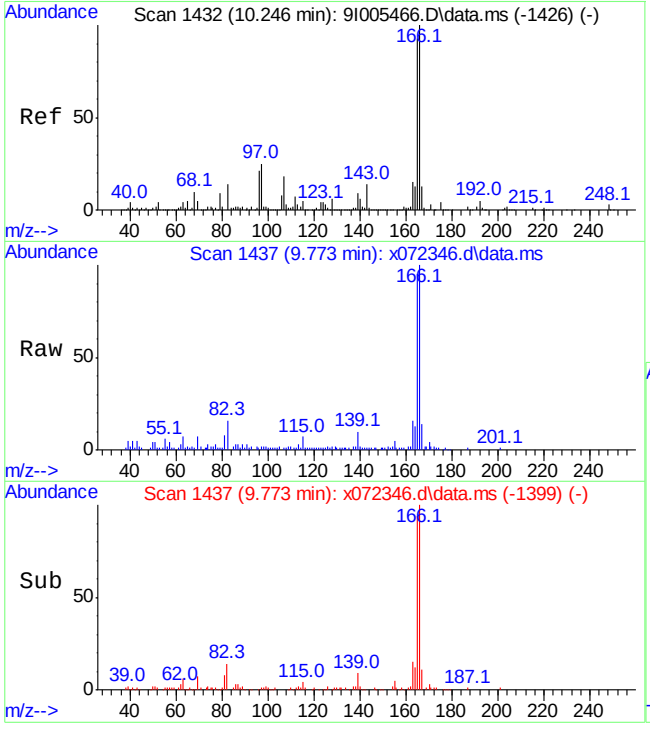


#60
Dibenzofuran
Concen: 0.33 ppm
RT: 9.366 min Scan# 1361
Delta R.T. -0.000 min
Lab File: x072346.d
Acq: 11 Aug 2020 8:10 pm

Tgt Ion:168 Resp: 4722

Ion	Ratio	Lower	Upper
168	100		
139	38.7	3.0	63.0
169	16.5	0.0	43.5

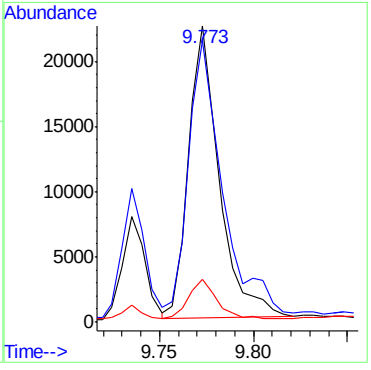


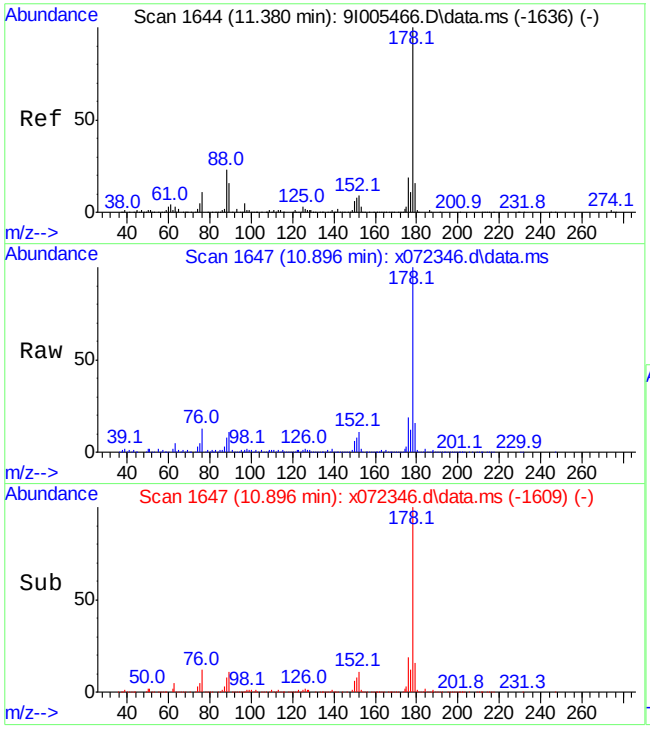


#65
Fluorene
Concen: 2.29 ppm
RT: 9.773 min Scan# 1437
Delta R.T. 0.005 min
Lab File: x072346.d
Acq: 11 Aug 2020 8:10 pm

Tgt Ion:166 Resp: 25337

Ion	Ratio	Lower	Upper
166	100		
165	93.5	62.7	122.7
167	13.6	0.0	43.5

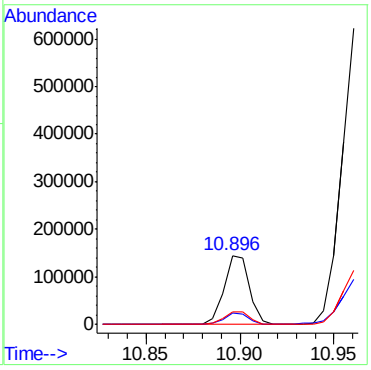


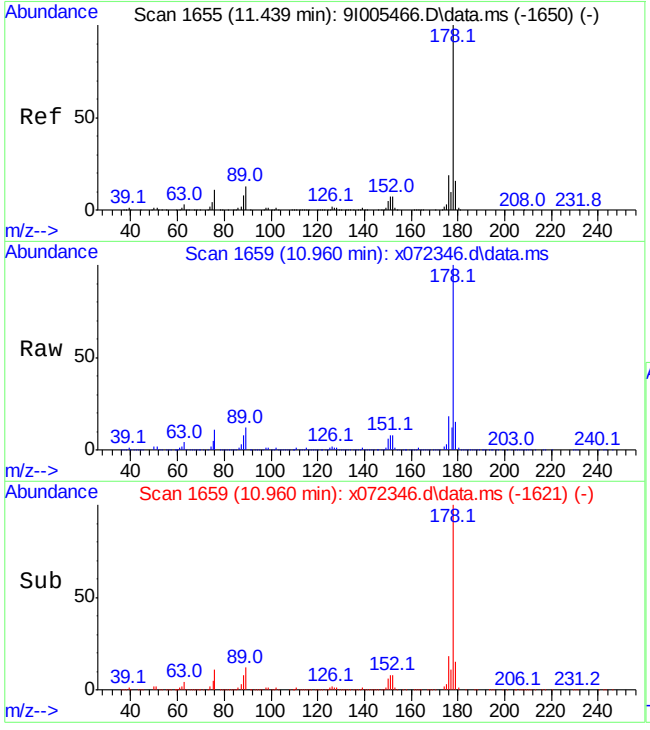


#84
Phenanthrene
Concen: 7.98 ppm
RT: 10.896 min Scan# 1647
Delta R.T. 0.005 min
Lab File: x072346.d
Acq: 11 Aug 2020 8:10 pm

Tgt Ion:178 Resp: 133379

Ion	Ratio	Lower	Upper
178	100		
179	15.8	0.0	45.8
176	18.7	0.0	49.3

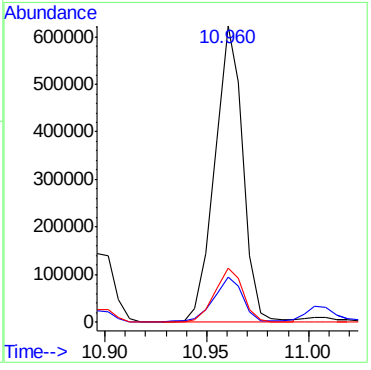


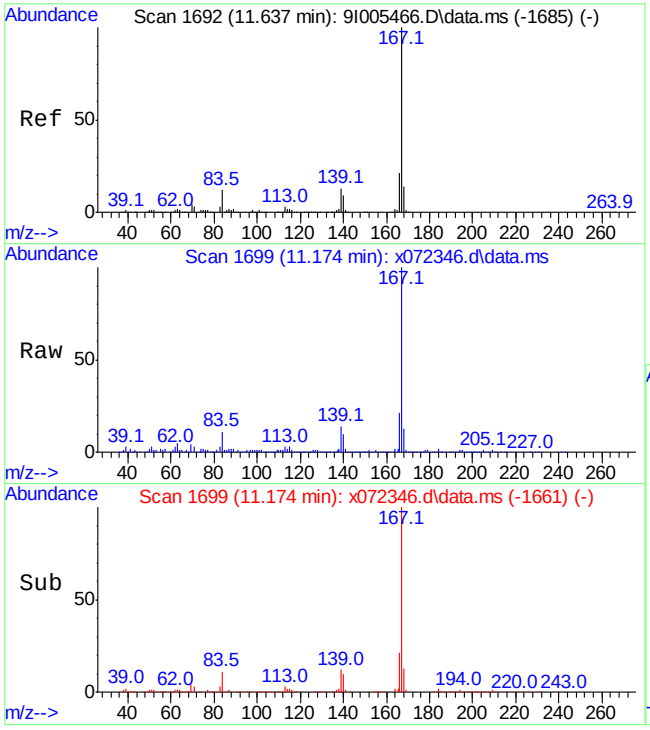


#85
Anthracene
Concen: 34.19 ppm
RT: 10.960 min Scan# 1659
Delta R.T. 0.005 min
Lab File: x072346.d
Acq: 11 Aug 2020 8:10 pm

Tgt Ion:178 Resp: 595832

Ion	Ratio	Lower	Upper
178	100		
179	14.8	0.0	46.0
176	18.2	0.0	49.3

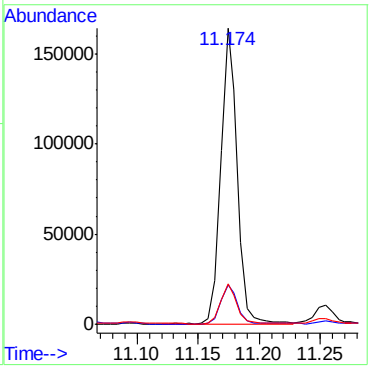


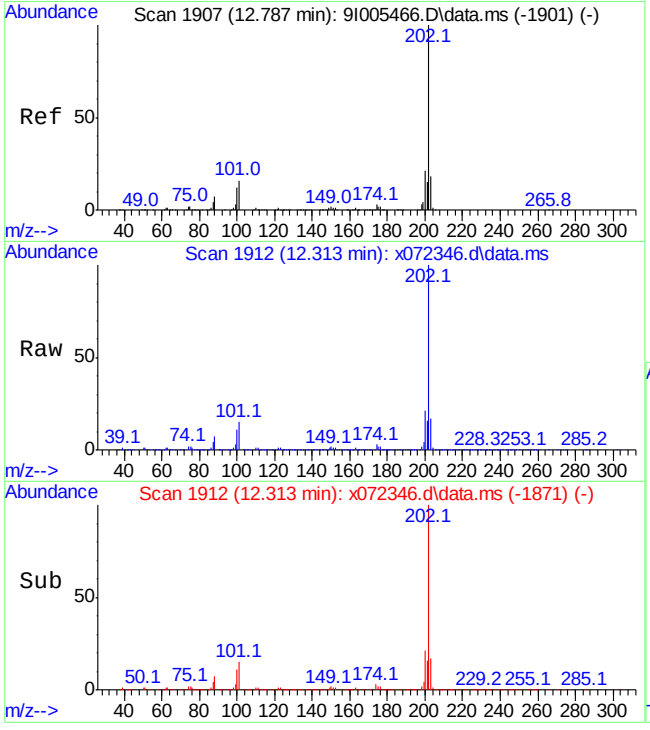


#87
Carbazole
Concen: 10.05 ppm
RT: 11.174 min Scan# 1699
Delta R.T. 0.005 min
Lab File: x072346.d
Acq: 11 Aug 2020 8:10 pm

Tgt Ion:167 Resp: 154496

Ion	Ratio	Lower	Upper
167	100		
168	13.2	0.0	43.9
139	13.4	0.0	42.7

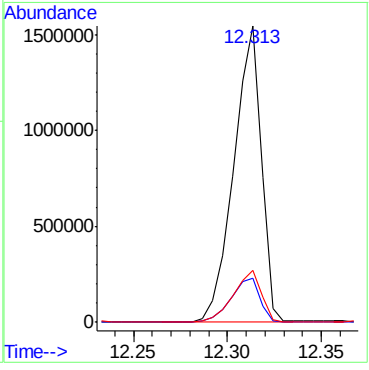


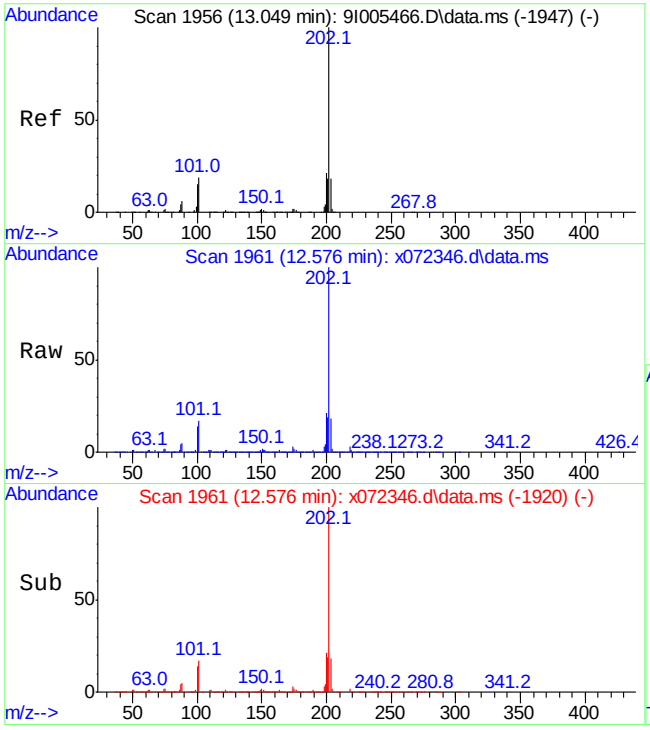


#91
Fluoranthene
Concen: 100.63 ppm
RT: 12.313 min Scan# 1912
Delta R.T. 0.021 min
Lab File: x072346.d
Acq: 11 Aug 2020 8:10 pm

Tgt Ion:202 Resp: 1561293

Ion	Ratio	Lower	Upper
202	100		
101	14.7	0.0	45.8
203	17.3	0.0	48.1

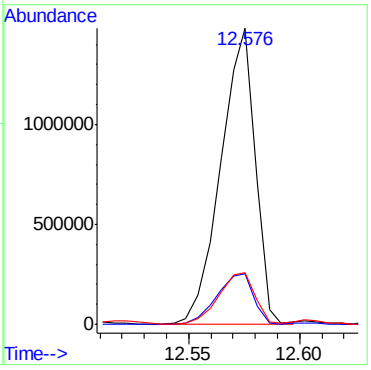


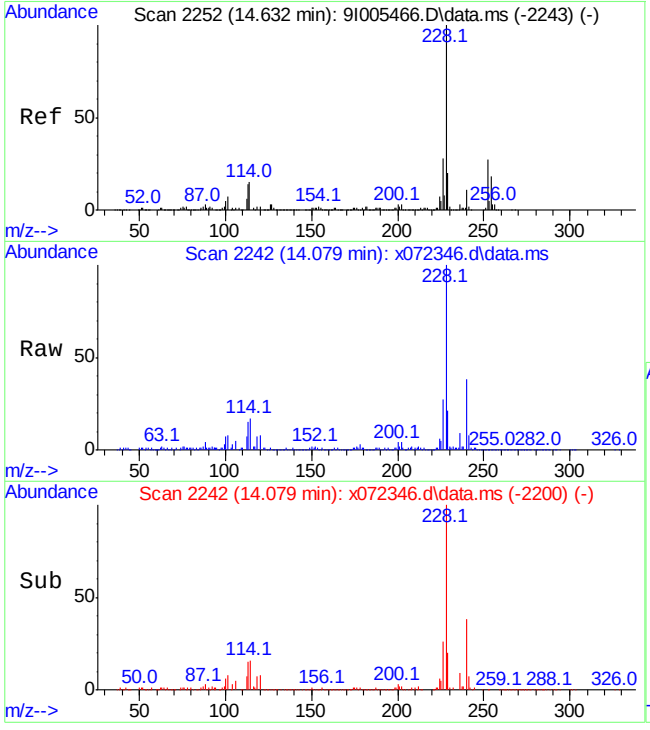


#94
Pyrene
Concen: 86.45 ppm
RT: 12.576 min Scan# 1961
Delta R.T. 0.021 min
Lab File: x072346.d
Acq: 11 Aug 2020 8:10 pm

Tgt Ion:202 Resp: 1593997

Ion	Ratio	Lower	Upper
202	100		
101	17.1	0.0	48.7
203	17.2	0.0	48.4

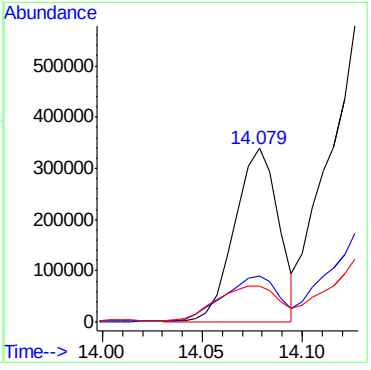


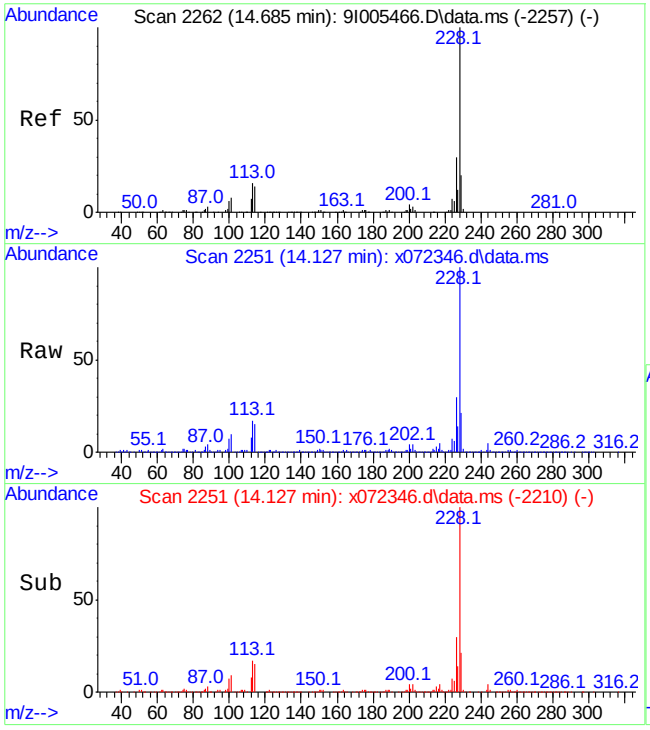


#99
Benzo[a]anthracene
Concen: 37.55 ppm m
RT: 14.079 min Scan# 2242
Delta R.T. 0.027 min
Lab File: x072346.d
Acq: 11 Aug 2020 8:10 pm

Tgt Ion:228 Resp: 524065

Ion	Ratio	Lower	Upper
228	100		
226	26.6	0.0	57.5
229	20.7	0.0	49.9

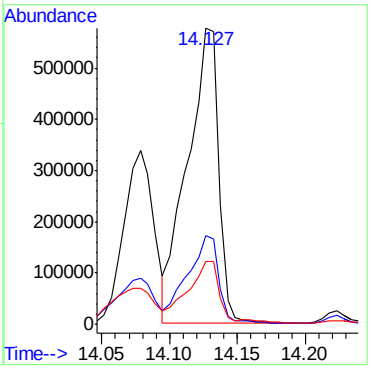


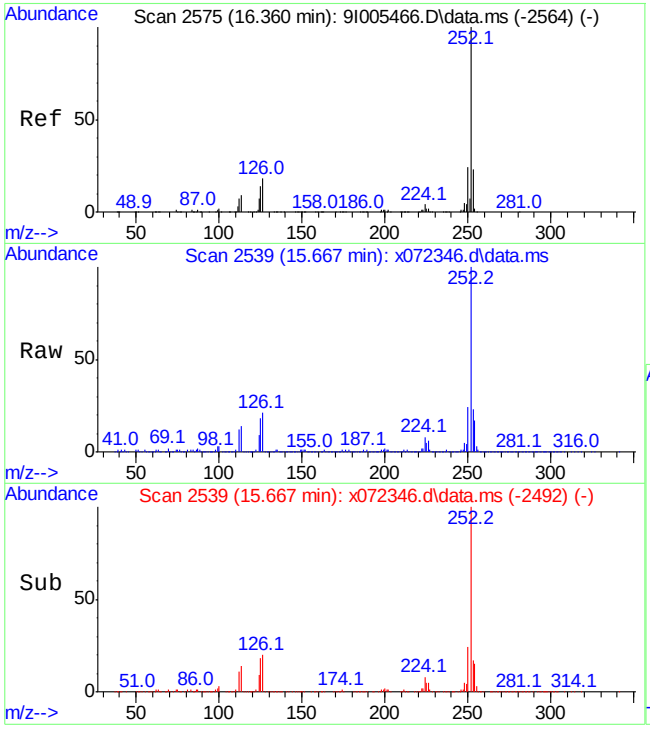


#100
Chrysene
Concen: 61.91 ppm
RT: 14.127 min Scan# 2251
Delta R.T. 0.021 min
Lab File: x072346.d
Acq: 11 Aug 2020 8:10 pm

Tgt Ion:228 Resp: 920175

Ion	Ratio	Lower	Upper
228	100		
226	29.8	0.4	60.4
229	20.5	0.0	50.1

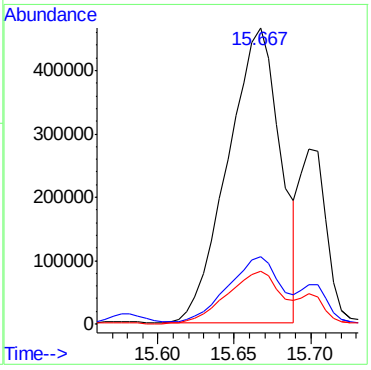


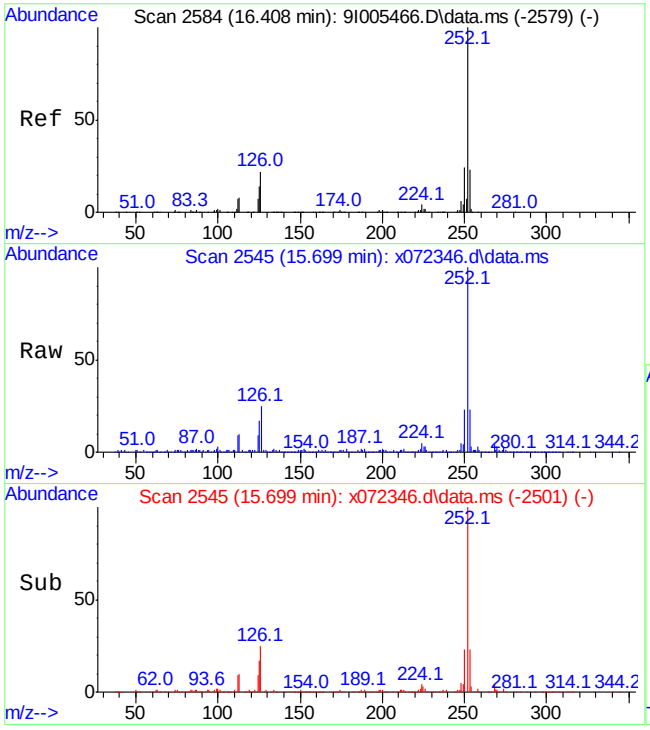


#104
Benzo[b]fluoranthene
Concen: 97.26 ppm
RT: 15.667 min Scan# 2539
Delta R.T. 0.053 min
Lab File: x072346.d
Acq: 11 Aug 2020 8:10 pm

Tgt Ion:252 Resp: 1117478

Ion	Ratio	Lower	Upper
252	100		
253	22.2	0.0	52.5
125	17.6	0.0	44.0

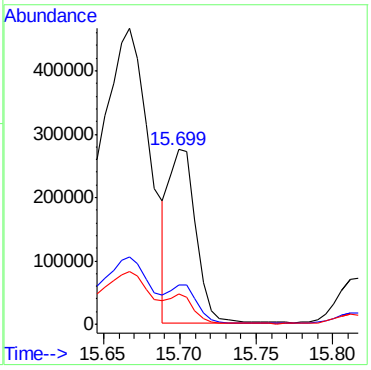


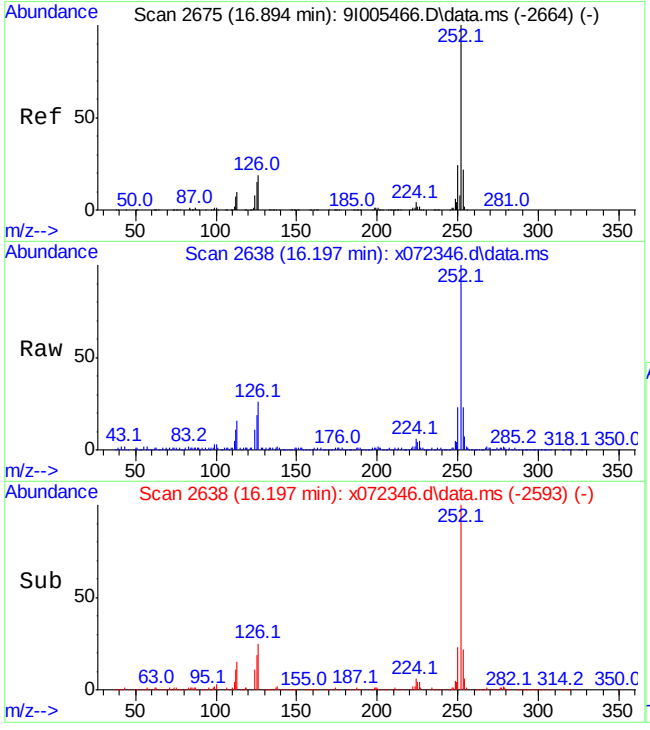


#105
Benzo[k]fluoranthene
Concen: 27.03 ppm
RT: 15.699 min Scan# 2545
Delta R.T. 0.037 min
Lab File: x072346.d
Acq: 11 Aug 2020 8:10 pm

Tgt Ion:252 Resp: 337758

Ion	Ratio	Lower	Upper
252	100		
253	22.1	0.0	52.5
125	16.1	0.0	44.4

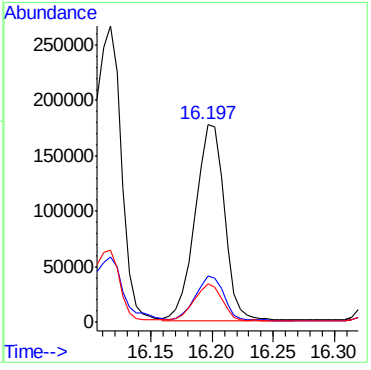


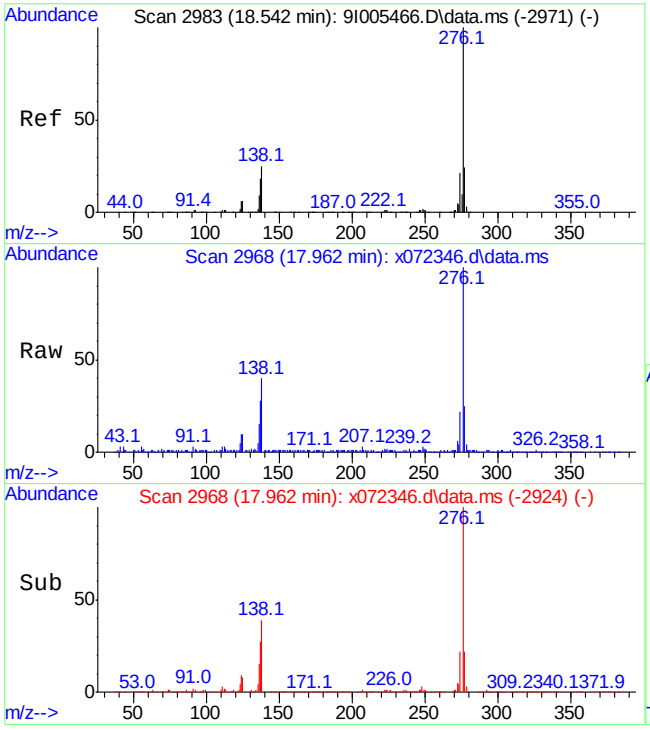


#106
Benzo[a]pyrene
Concen: 30.66 ppm
RT: 16.197 min Scan# 2638
Delta R.T. 0.043 min
Lab File: x072346.d
Acq: 11 Aug 2020 8:10 pm

Tgt Ion:252 Resp: 294371

Ion	Ratio	Lower	Upper
252	100		
253	22.4	0.0	52.3
125	18.7	0.0	44.7

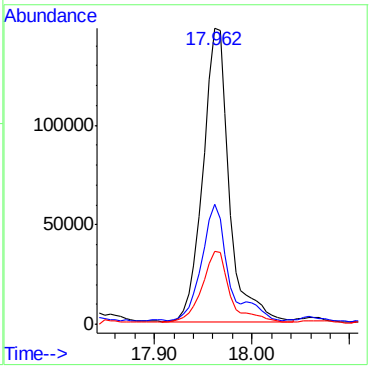


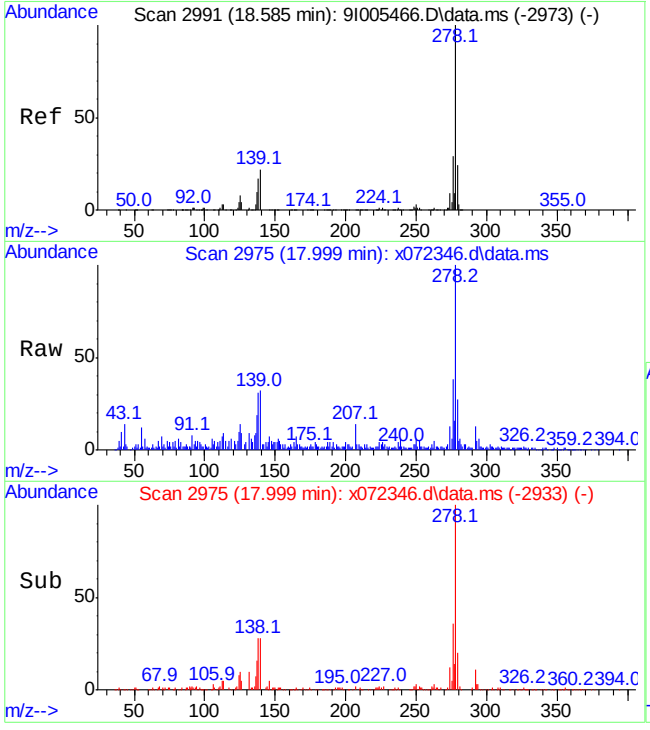


#107
Indeno[1,2,3-cd]pyrene
Concen: 41.94 ppm
RT: 17.962 min Scan# 2968
Delta R.T. 0.037 min
Lab File: x072346.d
Acq: 11 Aug 2020 8:10 pm

Tgt Ion:276 Resp: 275435

Ion	Ratio	Lower	Upper
276	100		
138	39.4	0.0	54.7
277	24.1	0.0	53.8

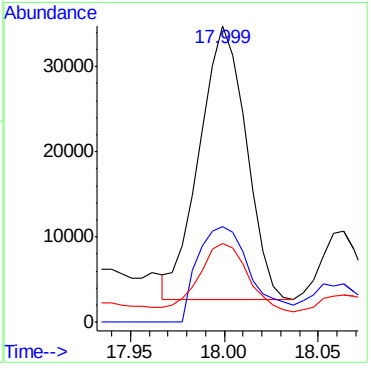


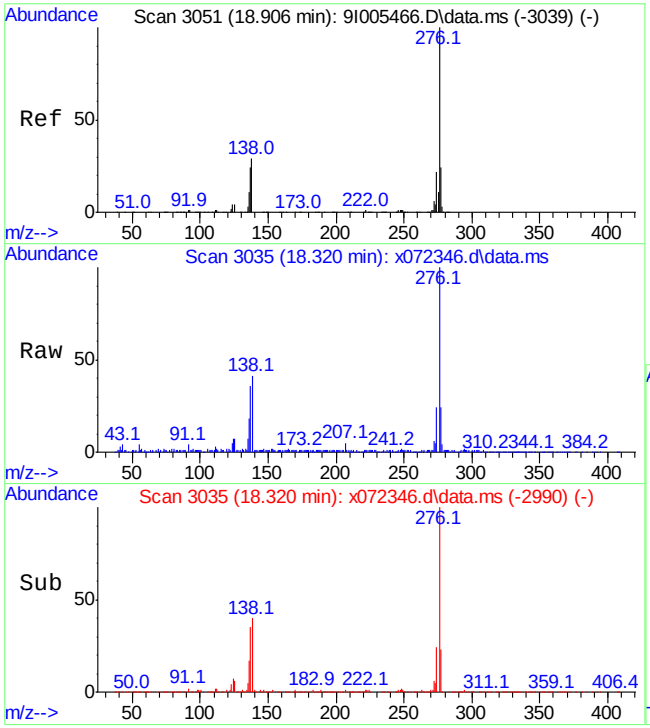


#108
Dibenz[a,h]anthracene
Concen: 9.38 ppm
RT: 17.999 min Scan# 2975
Delta R.T. 0.027 min
Lab File: x072346.d
Acq: 11 Aug 2020 8:10 pm

Tgt Ion:278 Resp: 55189

Ion	Ratio	Lower	Upper
278	100		
139	32.1	0.0	52.4
279	25.4	0.0	54.4

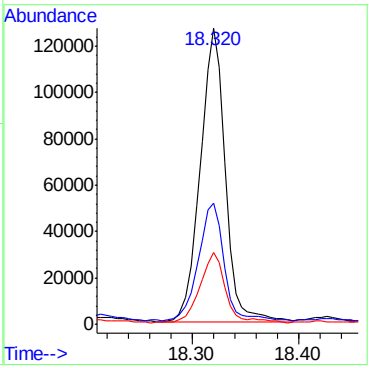




#109
Benzo[g,h,i]perylene
Concen: 23.75 ppm
RT: 18.320 min Scan# 3035
Delta R.T. 0.043 min
Lab File: x072346.d
Acq: 11 Aug 2020 8:10 pm

Tgt Ion:276 Resp: 208849

Ion	Ratio	Lower	Upper
276	100		
138	39.9	0.0	59.4
277	23.9	0.0	54.1



Manual Integration Approval Summary

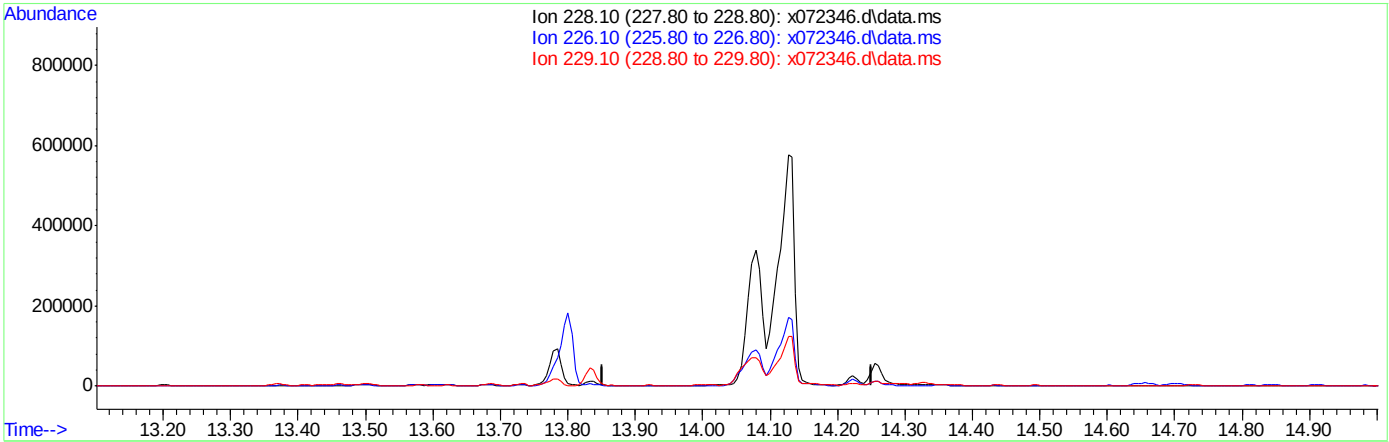
Sample Number: FA77576-14
Lab FileID: X072346.D
Injection Time: 08/11/20 20:10
Method: SW846 8270E
Analyst approved: 08/13/20 09:47 Martha Valls
Supervisor approved: 08/13/20 09:53 Naresh Jiawan

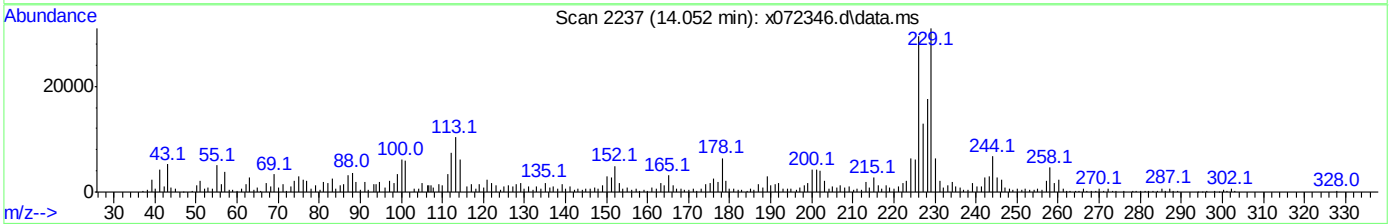
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(a)anthracene	56-55-3		14.08	Missed peak

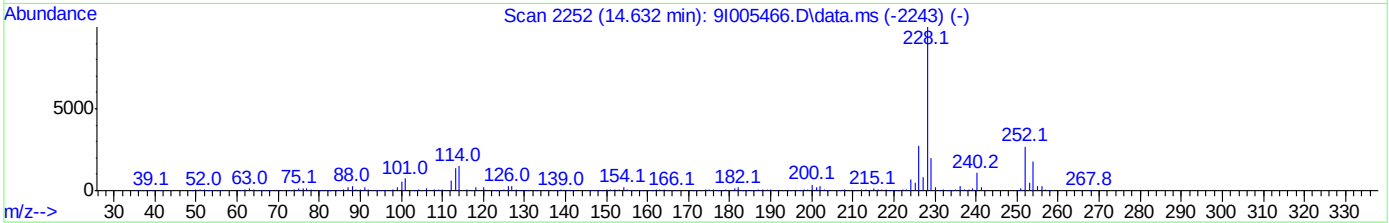
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0811_sx2950\
Data File : x072346.d
Acq On : 11 Aug 2020 8:10 pm
Operator : marthav
Sample : fa77576-14 E Inst : MSBNA05
Misc : op81482,sx2950,30.3,,,1,1,soil
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Aug 12 16:47:52 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration







TIC: x072346.d\data.ms

(99) Benzo[a]anthracene (P)

14.052min 0.00ppm d

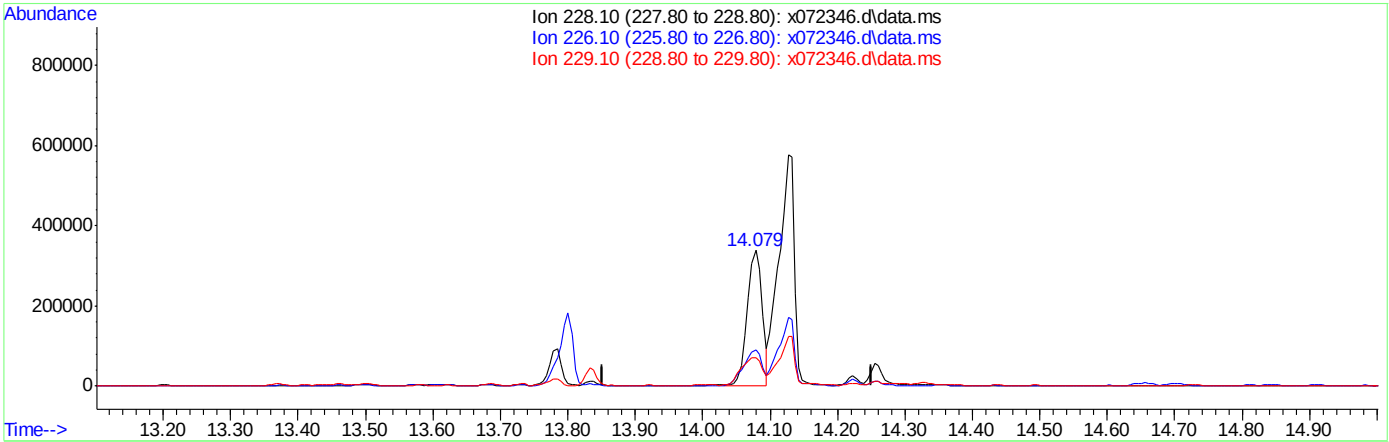
response 0

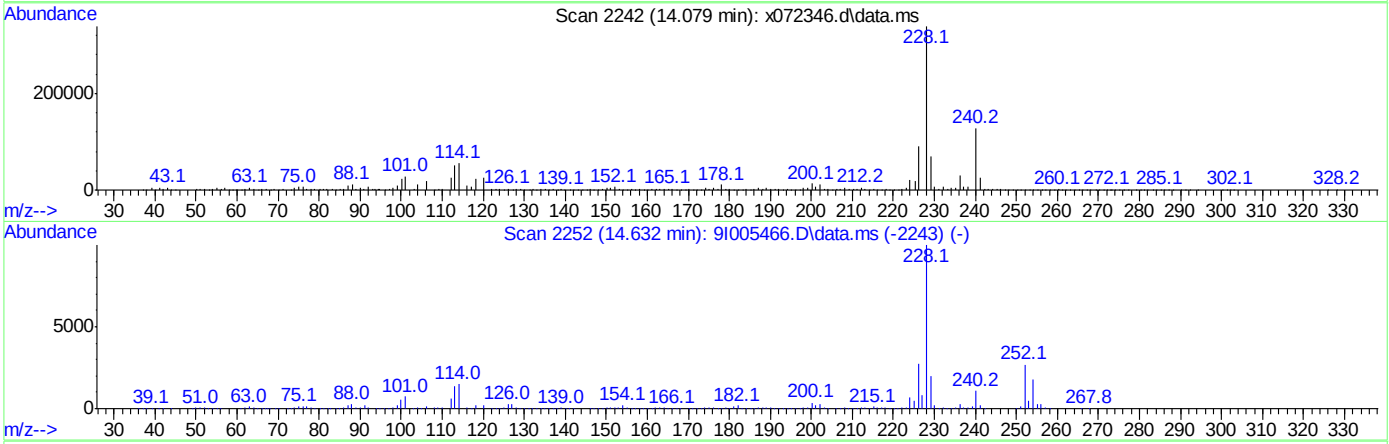
Ion	Exp%	Act%
228.10	100	0.00
226.10	27.50	0.00
229.10	19.90	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0811_sx2950\
Data File : x072346.d
Acq On : 11 Aug 2020 8:10 pm
Operator : marthav
Sample : fa77576-14 E Inst : MSBNA05
Misc : op81482,sx2950,30.3,,,1,1,soil
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Aug 12 16:47:52 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration





TIC: x072346.d\data.ms

(99) Benzo[a]anthracene (P)

14.079min (+0.027) 37.55ppm m

response 524065

Ion	Exp%	Act%
228.10	100	100
226.10	27.50	26.56
229.10	19.90	20.67
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072366.D
Acq On : 12 Aug 2020 2:16 pm
Operator : marthav
Sample : fa77576-14 E Inst : MSBNA05
Misc : op81482,sx2951,30.3,,,1,1,soil
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 12 16:11:52 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.655	152	181771	40.00	ppm	0.00
22) Naphthalene-d8	7.077	136	641174	40.00	ppm	0.00
43) Acenaphthene-d10	9.115	164	304582	40.00	ppm	0.00
70) Phenanthrene-d10	10.859	188	513802	40.00	ppm	0.00
92) Chrysene-d12	14.073	240	409295	40.00	ppm	0.00
102) Perylene-d12	16.282	264	349024	40.00	ppm	0.02
110) 1,4-Dichlorobenzene-d4A	5.655	152	181771	40.00	ppm	0.00
120) Naphthalene-d8A	7.077	136	641174	40.00	ppm	0.00
127) Acenaphthene-d10A	9.115	164	304582	40.00	ppm	0.00
136) Phenanthrene-d10A	10.859	188	513802	40.00	ppm	0.00
146) Chrysene-d12A	14.073	240	409295	40.00	ppm	0.00
153) Perylene-d12A	16.282	264	349024	40.00	ppm	0.02
System Monitoring Compounds						
7) 2-Fluorophenol	4.312	112	436217	66.93	ppm	0.00
Spiked Amount 100.000	Range 40 - 102		Recovery = 66.93%			
9) Phenol-d5	5.339	99	523207	67.47	ppm	0.00
Spiked Amount 100.000	Range 41 - 100		Recovery = 67.47%			
23) Nitrobenzene-d5	6.270	82	222707	33.63	ppm	0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 67.26%			
47) 2-Fluorobiphenyl	8.345	172	387184	35.12	ppm	0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 70.24%			
75) 2,4,6-Tribromophenol	10.051	330	75706	69.88	ppm	0.00
Spiked Amount 100.000	Range 42 - 108		Recovery = 69.88%			
95) Terphenyl-d14	12.779	244	367582	33.80	ppm	0.00
Spiked Amount 50.000	Range 45 - 119		Recovery = 67.60%			
Target Compounds						Qvalue
5) Benzaldehyde	5.184	106	1303	0.24	ppm	90
18) Acetophenone	6.109	105	1101	0.11	ppm	94
27) 2,4-Dimethylphenol	6.751	107	1337	0.23	ppm	98
30) Benzoic Acid	6.858	105	6149	1.57	ppm	90
34) Naphthalene	7.099	128	5060	0.29	ppm	95
40) 2-Methylnaphthalene	7.901	142	2663	0.23	ppm	94
41) 1-Methylnaphthalene	8.013	142	1733	0.16	ppm	81
48) 1,1'-Biphenyl	8.457	154	949	0.08	ppm	90
52) Acenaphthylene	8.944	152	179023	11.77	ppm	99
57) Acenaphthene	9.153	153	8756	0.87	ppm	95
60) Dibenzofuran	9.356	168	4468	0.33	ppm	94
65) Fluorene	9.757	166	21254	2.02	ppm	92
84) Phenanthrene	10.885	178	115822	7.46	ppm	98
85) Anthracene	10.944	178	434591	26.86	ppm	98
87) Carbazole	11.164	167	133560	9.35	ppm	99
91) Fluoranthene	12.298	202	1348242	93.59	ppm	99
94) Pyrene	12.560	202	1366729	80.42	ppm	100
99) Benzo[a]anthracene	14.063	228	454201	35.31	ppm	99
100) Chrysene	14.111	228	798729	58.30	ppm	99
101) bis(2-Ethylhexyl)phtha...	14.218	149	2199	0.26	ppm	91
104) Benzo[b]fluoranthene	15.646	252	1015428	90.32	ppm	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072366.D
Acq On : 12 Aug 2020 2:16 pm
Operator : marthav
Sample : fa77576-14 E Inst : MSBNA05
Misc : op81482,sx2951,30.3,,,1,1,soil
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 12 16:11:52 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration

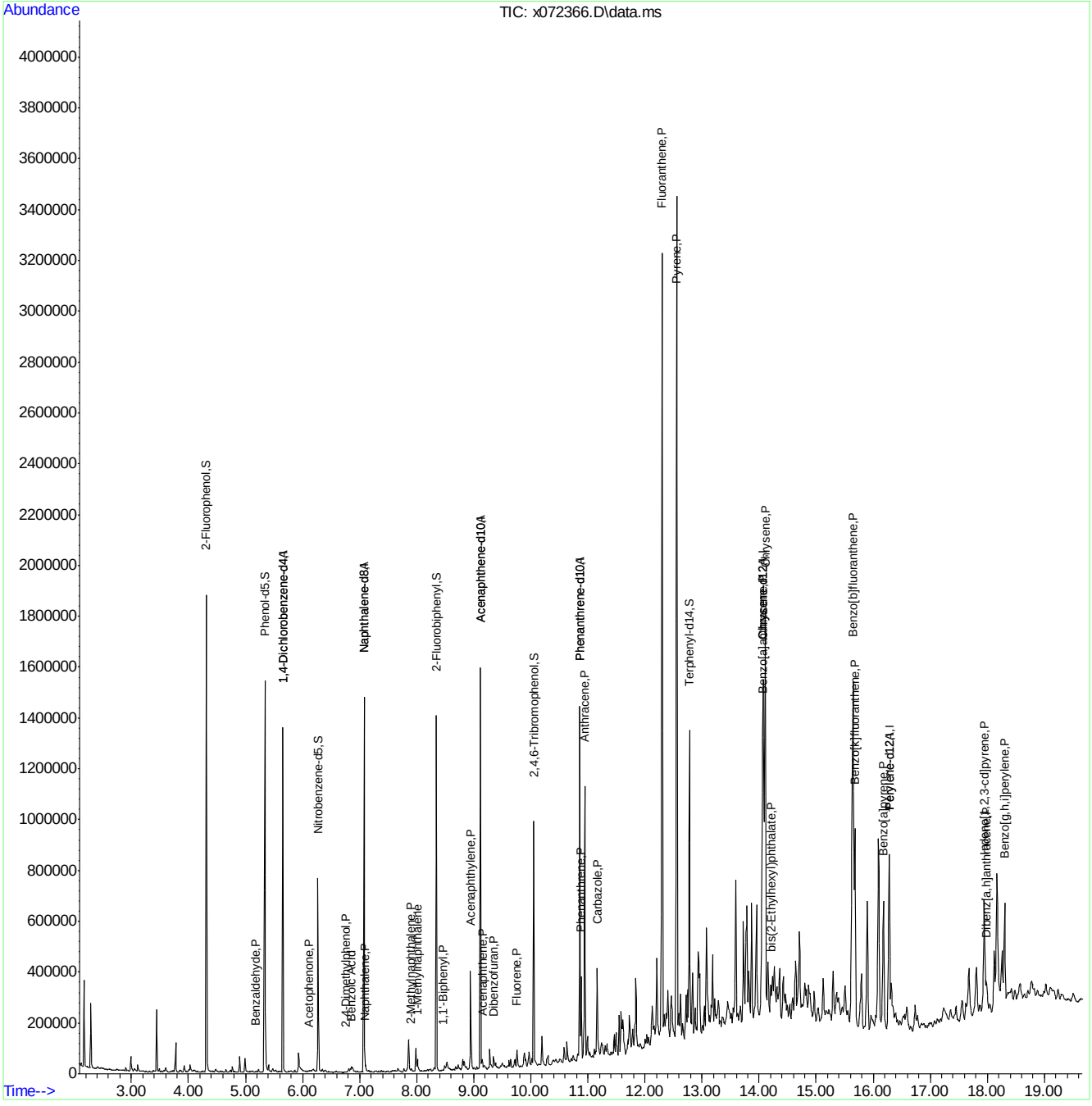
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
105) Benzo[k]fluoranthene	15.678	252	322369	26.02	ppm	97
106) Benzo[a]pyrene	16.181	252	274615	28.96	ppm	96
107) Indeno[1,2,3-cd]pyrene	17.946	276	265485	41.00	ppm	87
108) Dibenz[a,h]anthracene	17.983	278	53559	9.20	ppm	88
109) Benzo[g,h,i]perylene	18.304	276	203478	23.37	ppm	89

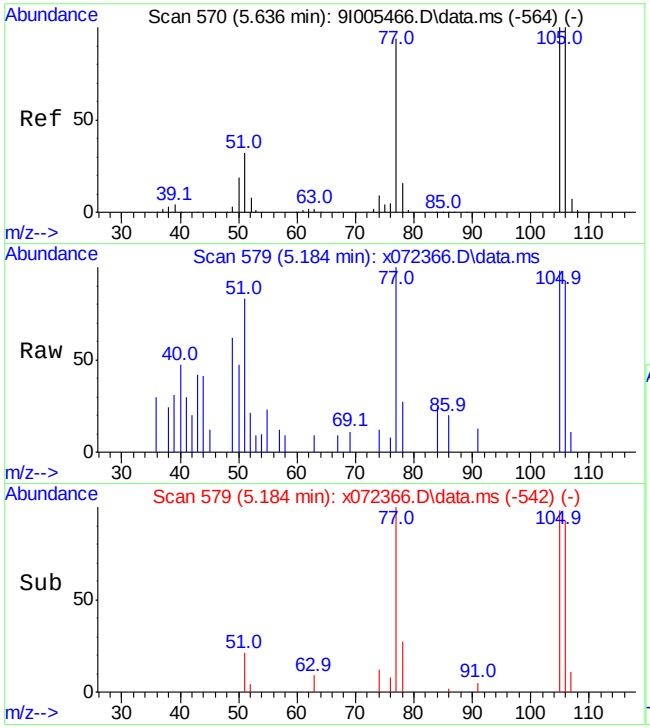
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072366.D
Acq On : 12 Aug 2020 2:16 pm
Operator : marthav
Sample : fa77576-14 E Inst : MSBNA05
Misc : op81482,sx2951,30.3,,,1,1,soil
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 12 16:11:52 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration

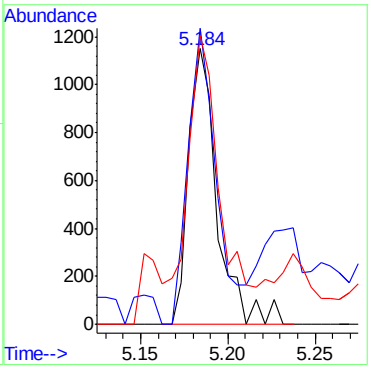


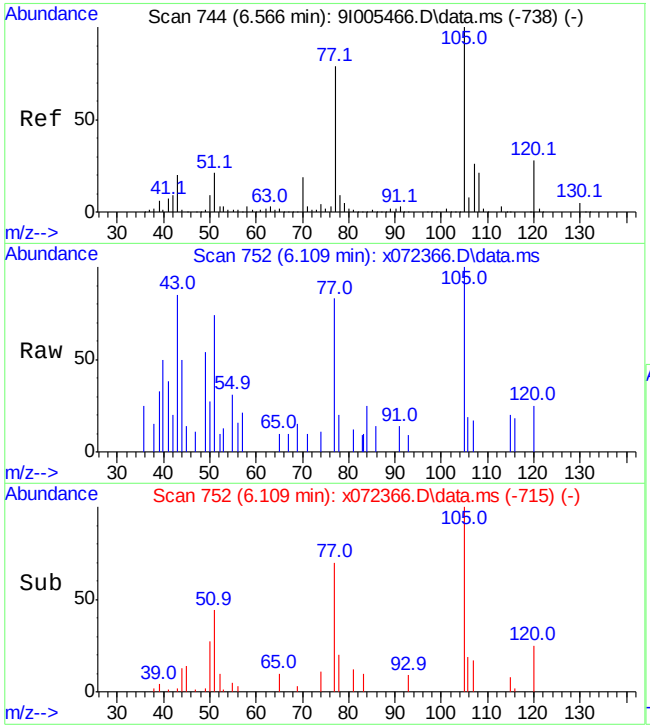


#5
Benzaldehyde
Concen: 0.24 ppm
RT: 5.184 min Scan# 579
Delta R.T. 0.000 min
Lab File: x072366.D
Acq: 12 Aug 2020 2:16 pm

Tgt Ion:106 Resp: 1303

Ion	Ratio	Lower	Upper
106	100		
77	90.0	63.9	123.9
105	85.0	70.0	130.0

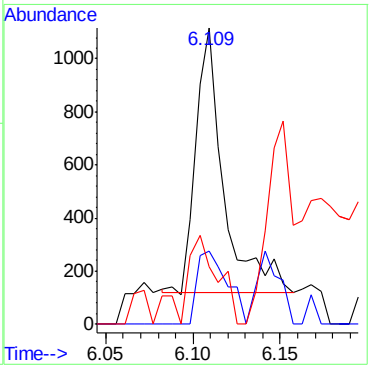


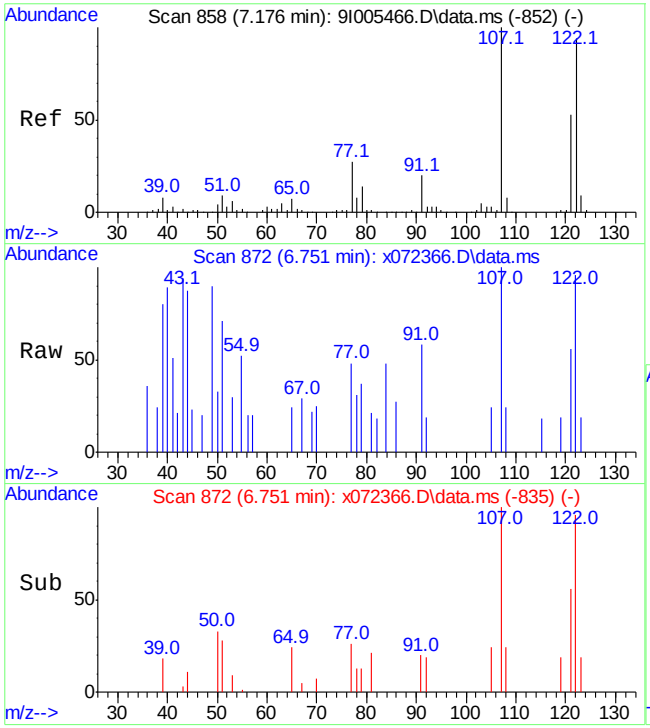


#18
Acetophenone
Concen: 0.11 ppm
RT: 6.109 min Scan# 752
Delta R.T. 0.000 min
Lab File: x072366.D
Acq: 12 Aug 2020 2:16 pm

Tgt Ion:105 Resp: 1101

Ion	Ratio	Lower	Upper
105	100		
120	27.8	0.0	58.3
106	0.0	0.0	38.0

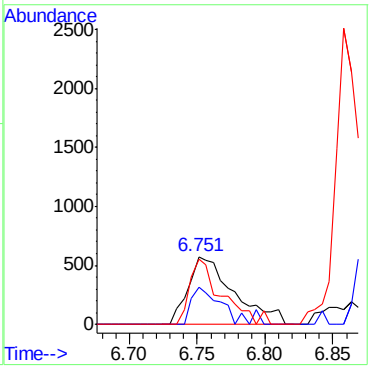


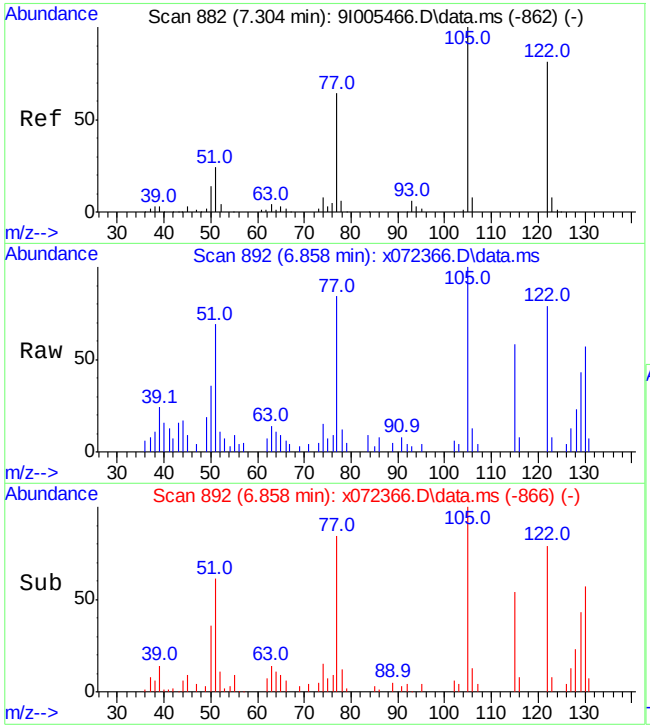


#27
2,4-Dimethylphenol
Concen: 0.23 ppm
RT: 6.751 min Scan# 872
Delta R.T. 0.000 min
Lab File: x072366.D
Acq: 12 Aug 2020 2:16 pm

Tgt Ion:107 Resp: 1337

Ion	Ratio	Lower	Upper
107	100		
121	55.8	23.4	83.4
122	95.8	64.3	124.3

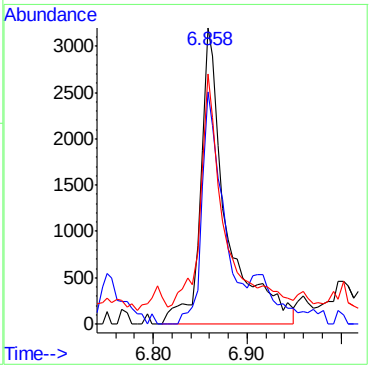


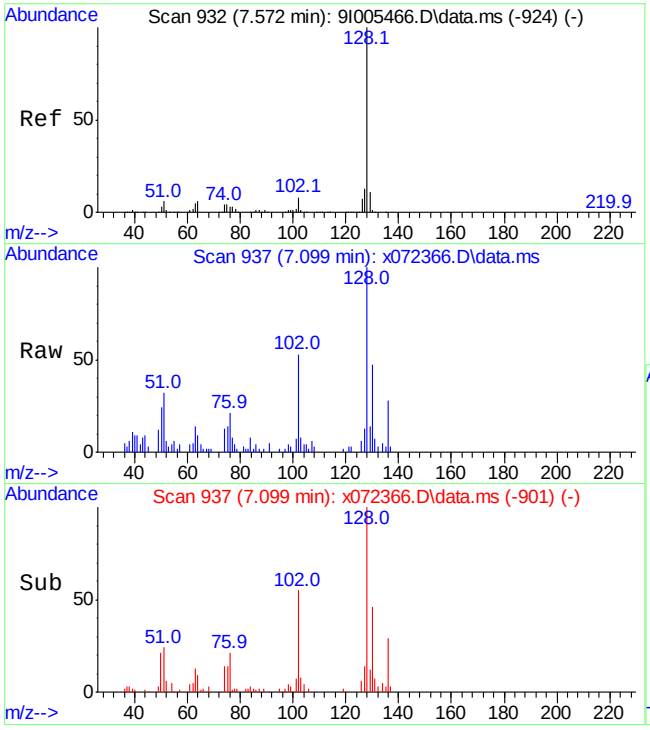


#30
Benzoic Acid
Concen: 1.57 ppm
RT: 6.858 min Scan# 892
Delta R.T. -0.059 min
Lab File: x072366.D
Acq: 12 Aug 2020 2:16 pm

Tgt Ion:105 Resp: 6149

Ion	Ratio	Lower	Upper
105	100		
122	77.9	51.2	111.2
77	78.0	34.1	94.1

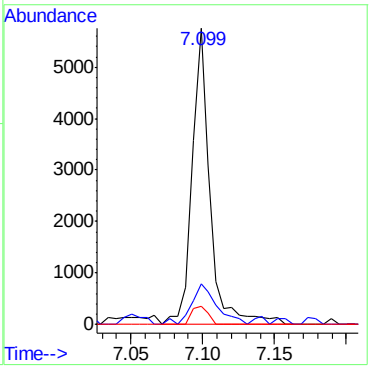


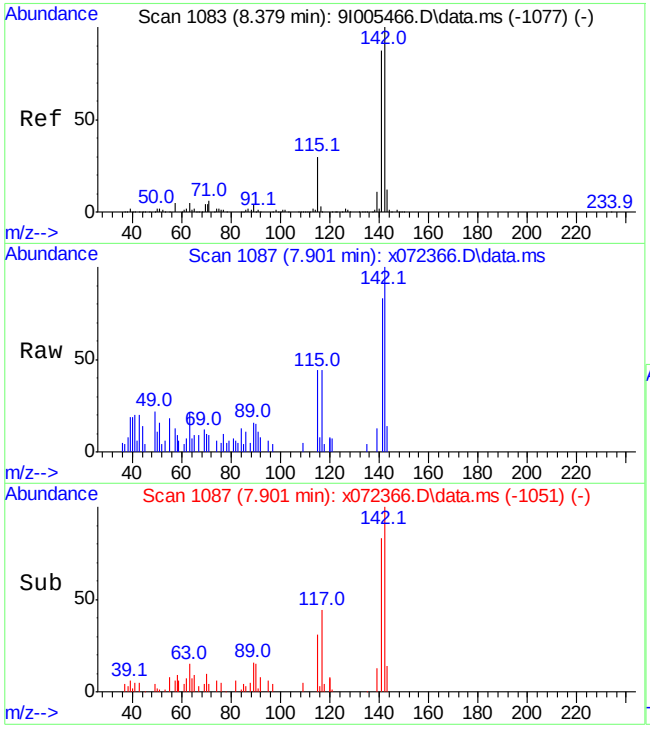


#34
Naphthalene
Concen: 0.29 ppm
RT: 7.099 min Scan# 937
Delta R.T. -0.005 min
Lab File: x072366.D
Acq: 12 Aug 2020 2:16 pm

Tgt Ion:128 Resp: 5060

Ion	Ratio	Lower	Upper
128	100		
129	13.7	0.0	41.4
126	6.2	0.0	37.4

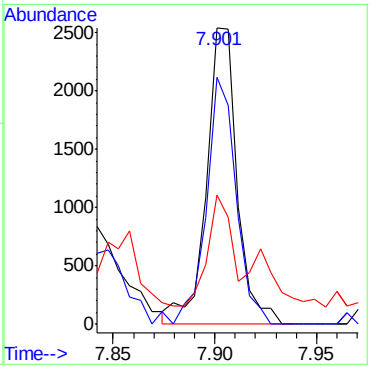


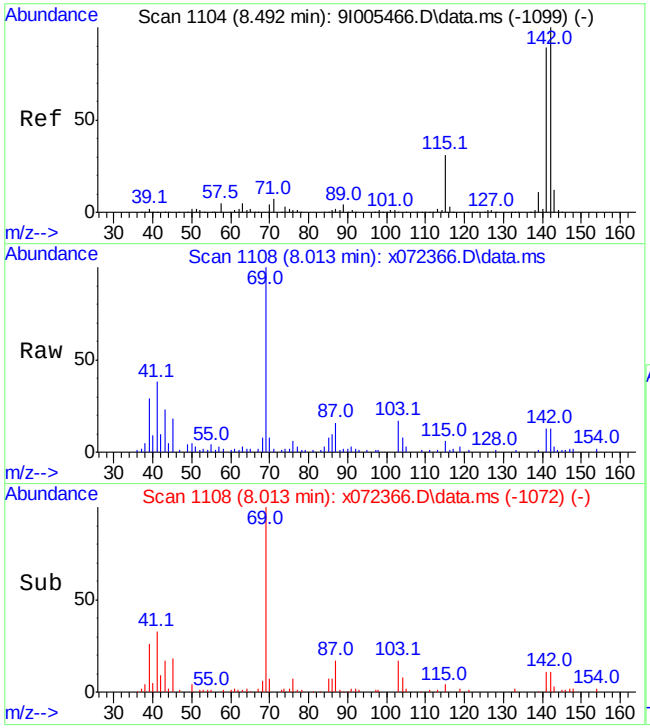


#40
2-Methylnaphthalene
Concen: 0.23 ppm
RT: 7.901 min Scan# 1087
Delta R.T. -0.005 min
Lab File: x072366.D
Acq: 12 Aug 2020 2:16 pm

Tgt Ion:142 Resp: 2663

Ion	Ratio	Lower	Upper
142	100		
141	83.1	56.8	116.8
115	36.4	0.0	60.0

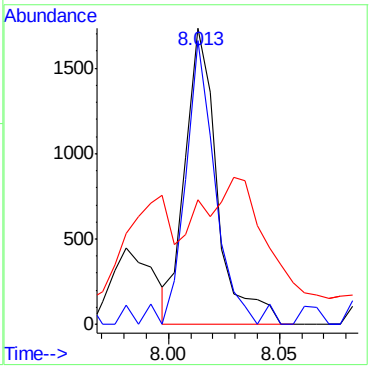


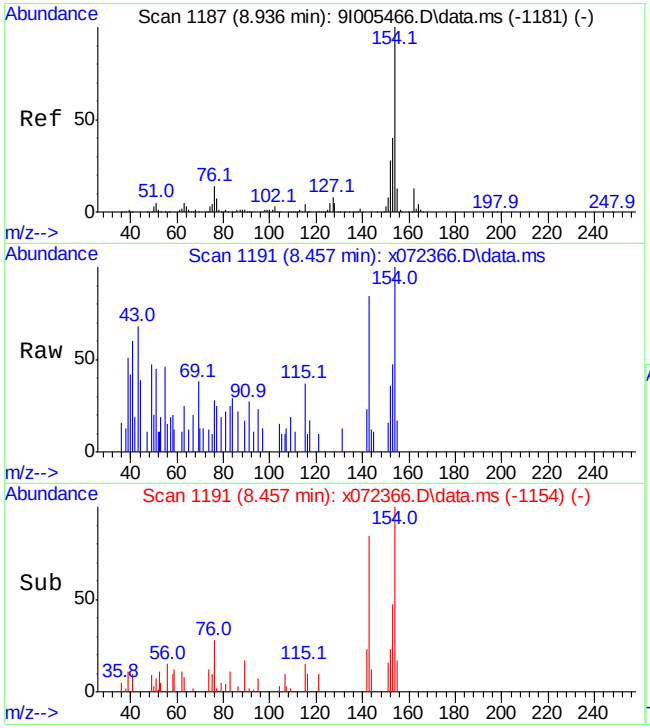


#41
1-Methylnaphthalene
Concen: 0.16 ppm
RT: 8.013 min Scan# 1108
Delta R.T. -0.005 min
Lab File: x072366.D
Acq: 12 Aug 2020 2:16 pm

Tgt Ion:142 Resp: 1733

Ion	Ratio	Lower	Upper
142	100		
141	102.4	59.0	119.0
115	14.3	1.1	61.1

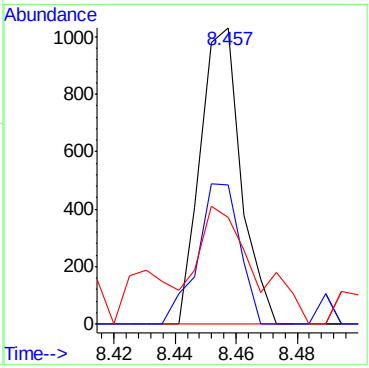


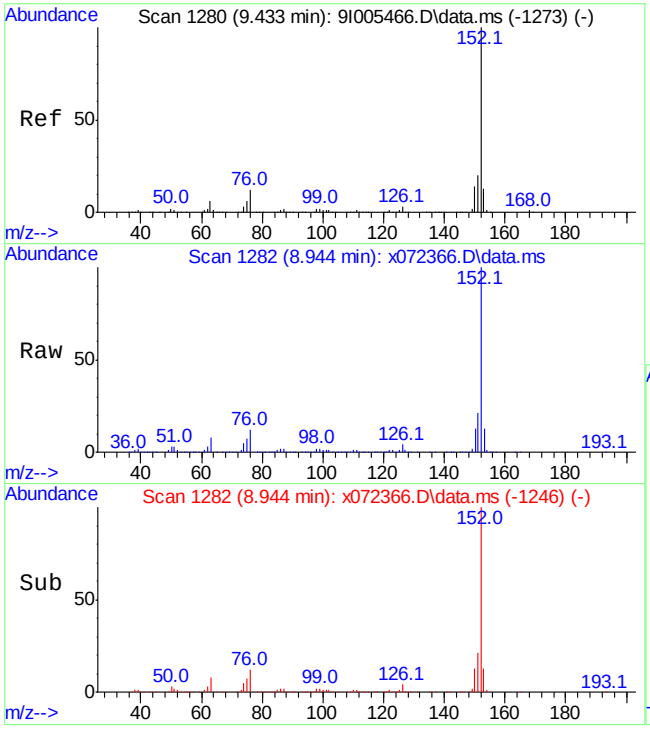


#48
1,1'-Biphenyl
Concen: 0.08 ppm
RT: 8.457 min Scan# 1191
Delta R.T. 0.000 min
Lab File: x072366.D
Acq: 12 Aug 2020 2:16 pm

Tgt Ion:154 Resp: 949

Ion	Ratio	Lower	Upper
154	100		
153	46.9	10.3	70.3
152	23.9	0.0	58.2

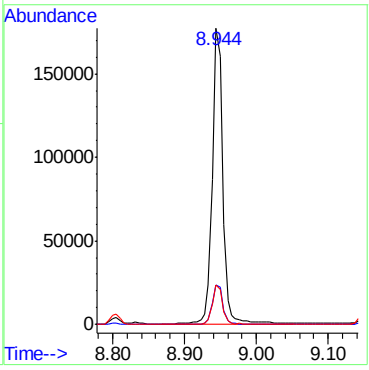


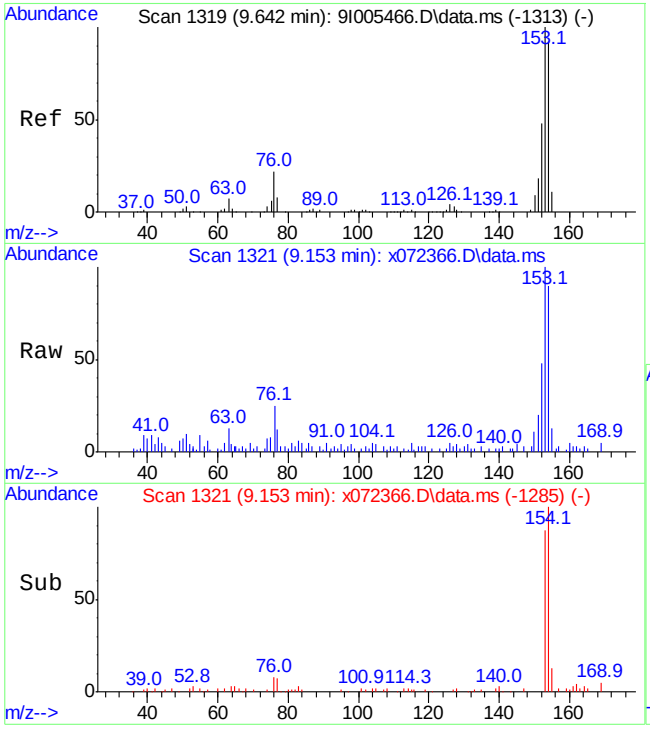


#52
Acenaphthylene
Concen: 11.77 ppm
RT: 8.944 min Scan# 1282
Delta R.T. -0.005 min
Lab File: x072366.D
Acq: 12 Aug 2020 2:16 pm

Tgt Ion:152 Resp: 179023

Ion	Ratio	Lower	Upper
152	100		
150	13.4	0.0	44.3
153	13.4	0.0	43.3

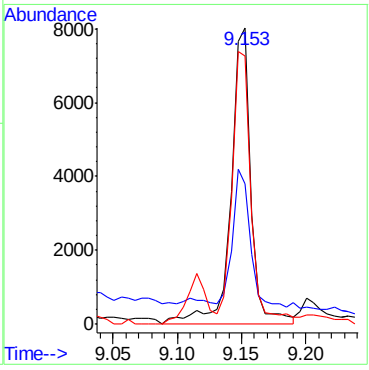


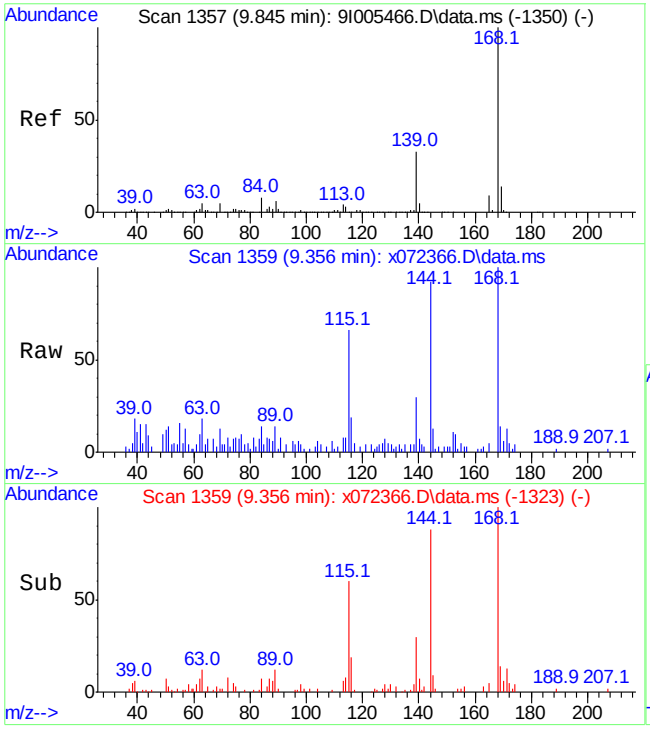


#57
Acenaphthene
Concen: 0.87 ppm
RT: 9.153 min Scan# 1321
Delta R.T. -0.005 min
Lab File: x072366.D
Acq: 12 Aug 2020 2:16 pm

Tgt Ion:153 Resp: 8756

Ion	Ratio	Lower	Upper
153	100		
152	41.0	18.4	78.4
154	90.4	62.4	122.4

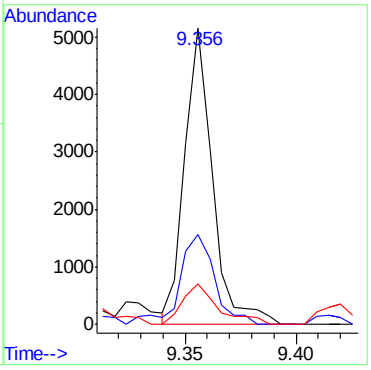


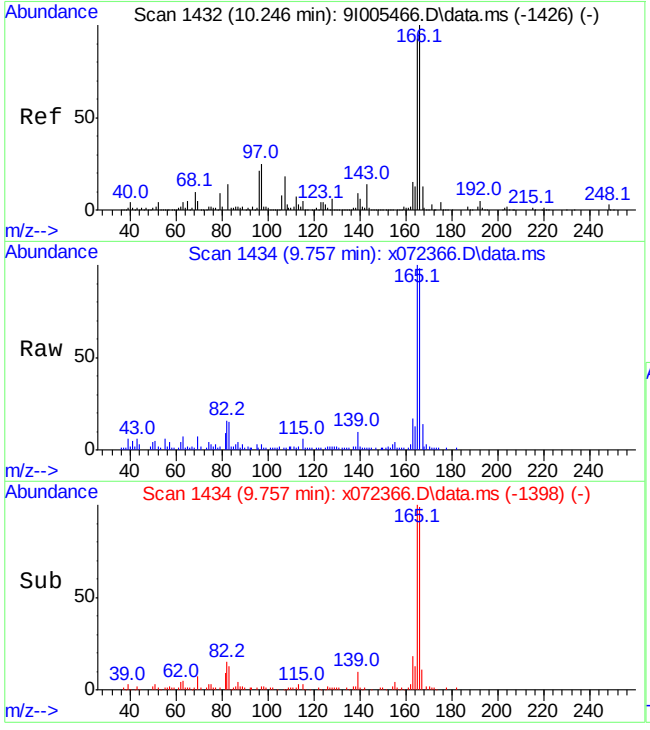


#60
Dibenzofuran
Concen: 0.33 ppm
RT: 9.356 min Scan# 1359
Delta R.T. -0.005 min
Lab File: x072366.D
Acq: 12 Aug 2020 2:16 pm

Tgt Ion:168 Resp: 4468

Ion	Ratio	Lower	Upper
168	100		
139	28.6	3.0	63.0
169	14.0	0.0	43.5

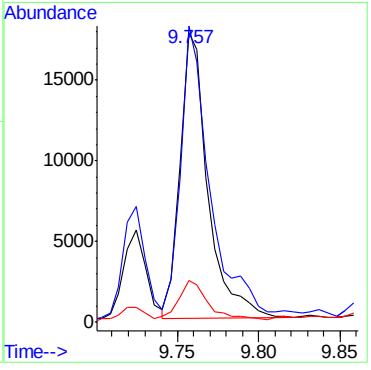


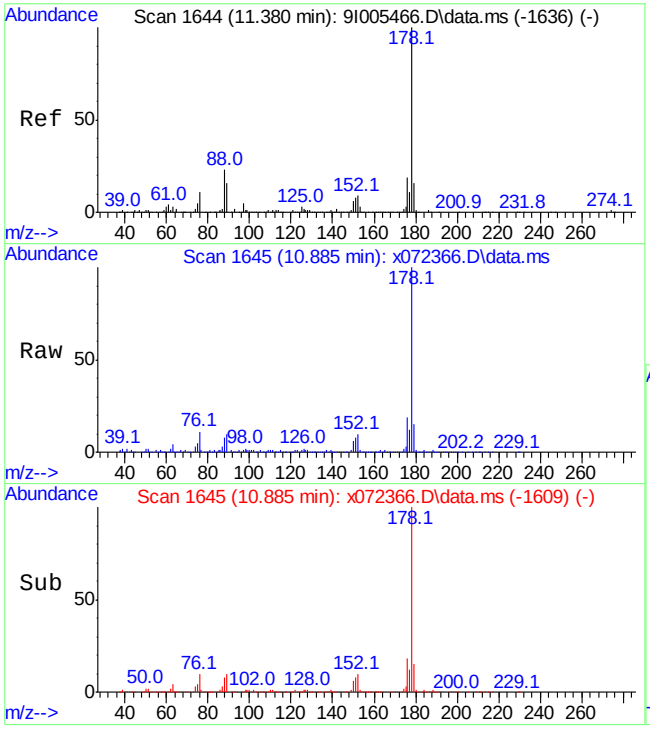


#65
Fluorene
Concen: 2.02 ppm
RT: 9.757 min Scan# 1434
Delta R.T. -0.005 min
Lab File: x072366.D
Acq: 12 Aug 2020 2:16 pm

Tgt Ion:166 Resp: 21254

Ion	Ratio	Lower	Upper
166	100		
165	101.7	62.7	122.7
167	13.0	0.0	43.5

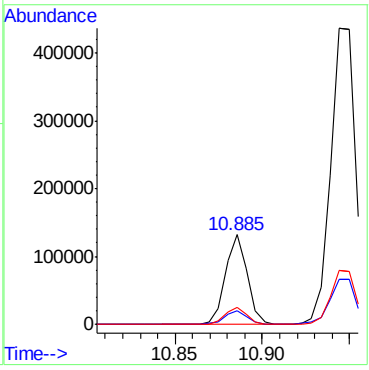


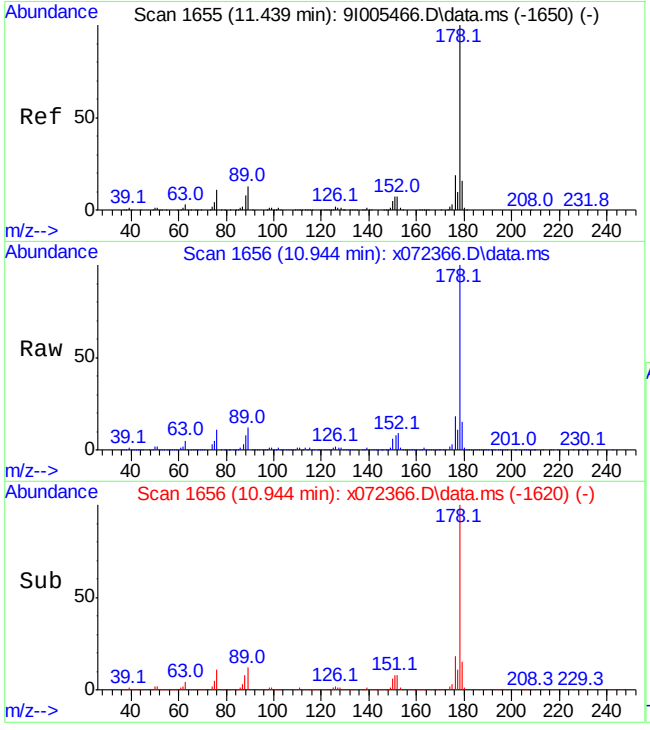


#84
Phenanthrene
Concen: 7.46 ppm
RT: 10.885 min Scan# 1645
Delta R.T. -0.005 min
Lab File: x072366.D
Acq: 12 Aug 2020 2:16 pm

Tgt Ion:178 Resp: 115822

Ion	Ratio	Lower	Upper
178	100		
179	14.7	0.0	45.8
176	18.4	0.0	49.3

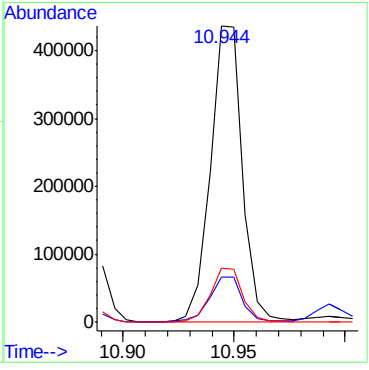


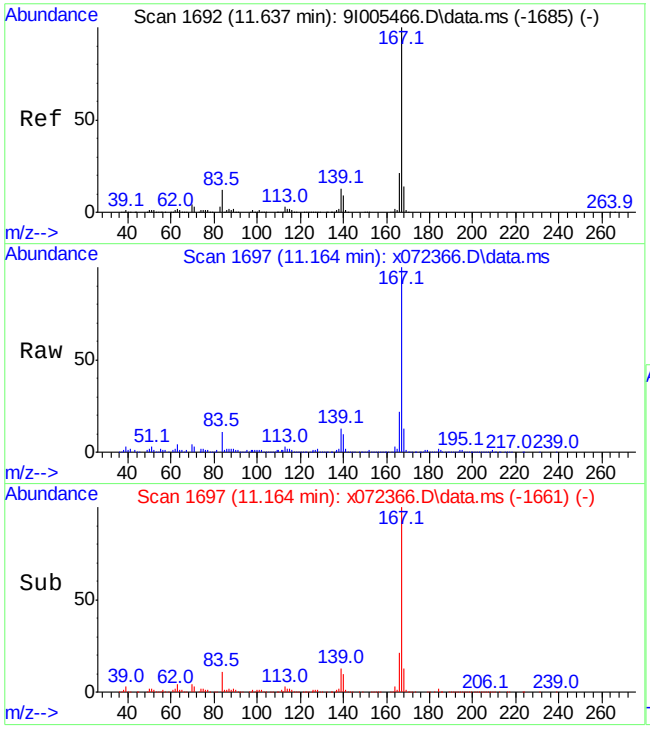


#85
Anthracene
Concen: 26.86 ppm
RT: 10.944 min Scan# 1656
Delta R.T. -0.005 min
Lab File: x072366.D
Acq: 12 Aug 2020 2:16 pm

Tgt Ion:178 Resp: 434591

Ion	Ratio	Lower	Upper
178	100		
179	15.0	0.0	46.0
176	18.2	0.0	49.3

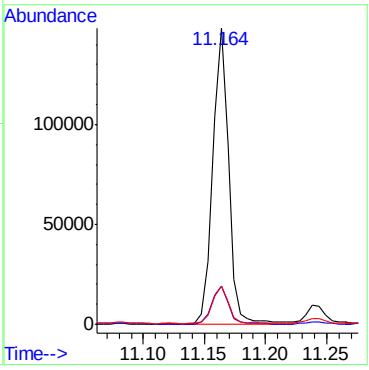


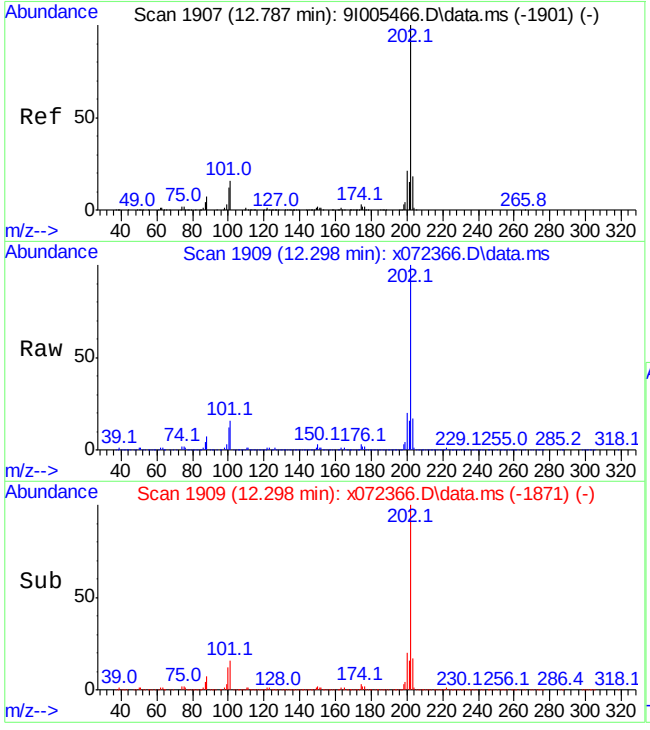


#87
Carbazole
Concen: 9.35 ppm
RT: 11.164 min Scan# 1697
Delta R.T. -0.005 min
Lab File: x072366.D
Acq: 12 Aug 2020 2:16 pm

Tgt Ion:167 Resp: 133560

Ion	Ratio	Lower	Upper
167	100		
168	13.0	0.0	43.9
139	12.7	0.0	42.7

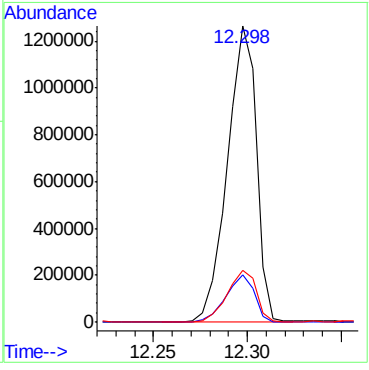


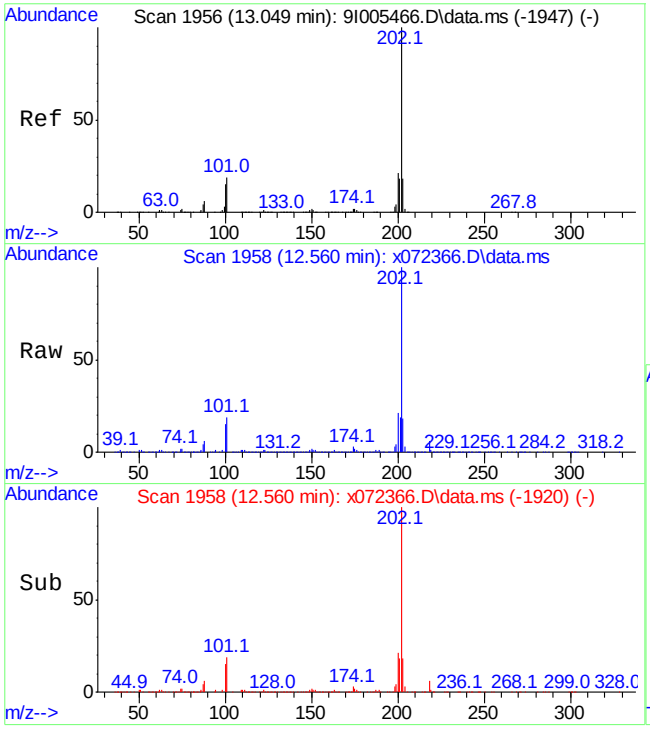


#91
Fluoranthene
Concen: 93.59 ppm
RT: 12.298 min Scan# 1909
Delta R.T. 0.005 min
Lab File: x072366.D
Acq: 12 Aug 2020 2:16 pm

Tgt Ion:202 Resp: 1348242

Ion	Ratio	Lower	Upper
202	100		
101	15.8	0.0	45.8
203	17.3	0.0	48.1

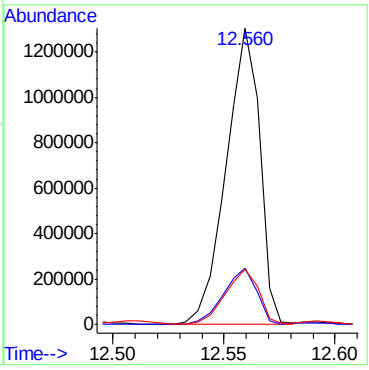


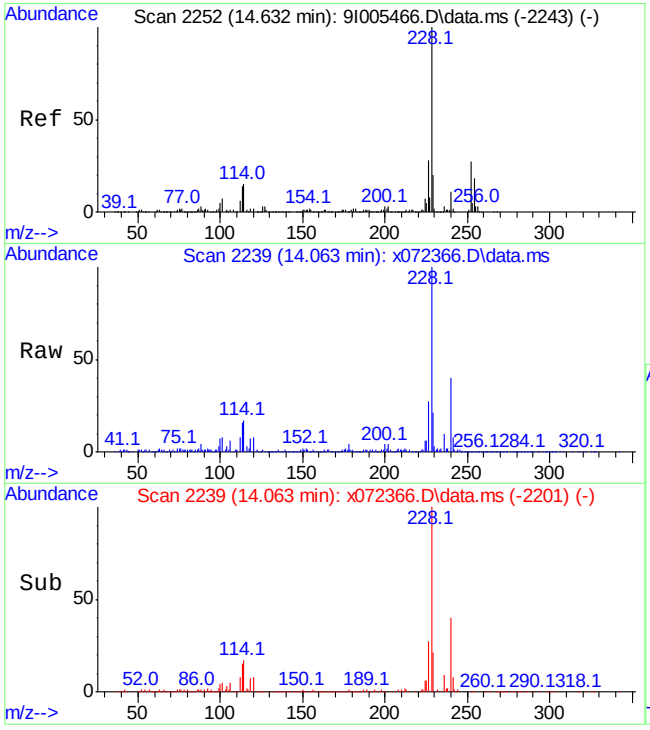


#94
Pyrene
Concen: 80.42 ppm
RT: 12.560 min Scan# 1958
Delta R.T. 0.005 min
Lab File: x072366.D
Acq: 12 Aug 2020 2:16 pm

Tgt Ion:202 Resp: 1366729

Ion	Ratio	Lower	Upper
202	100		
101	18.8	0.0	48.7
203	18.1	0.0	48.4

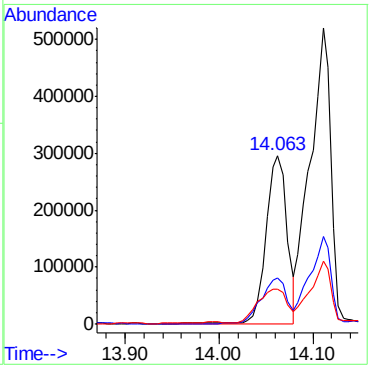


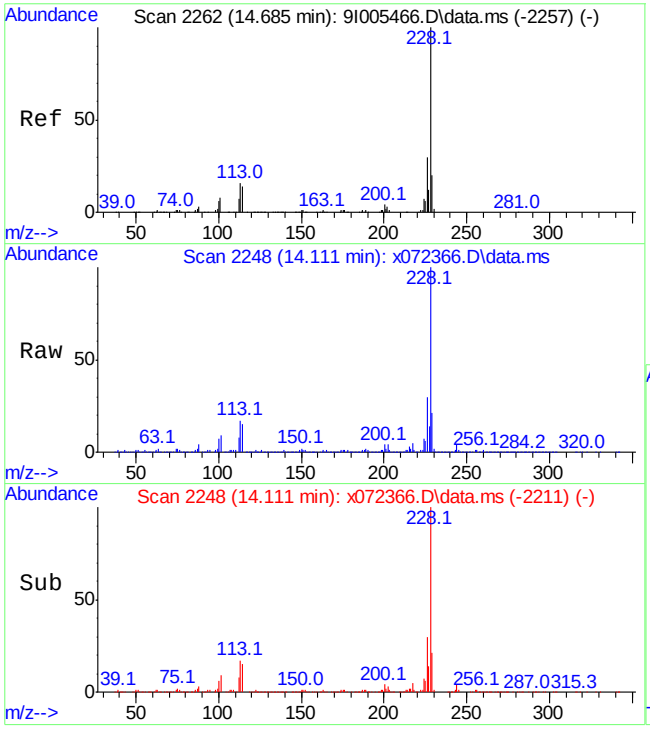


#99
Benzo[a]anthracene
Concen: 35.31 ppm
RT: 14.063 min Scan# 2239
Delta R.T. 0.005 min
Lab File: x072366.D
Acq: 12 Aug 2020 2:16 pm

Tgt Ion:228 Resp: 454201

Ion	Ratio	Lower	Upper
228	100		
226	26.7	0.0	57.5
229	19.5	0.0	49.9

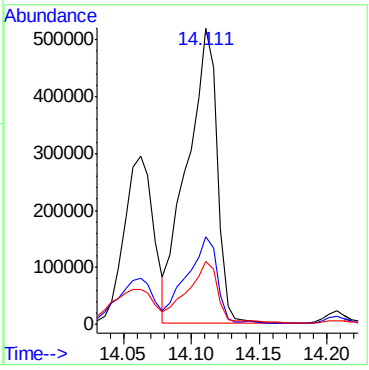


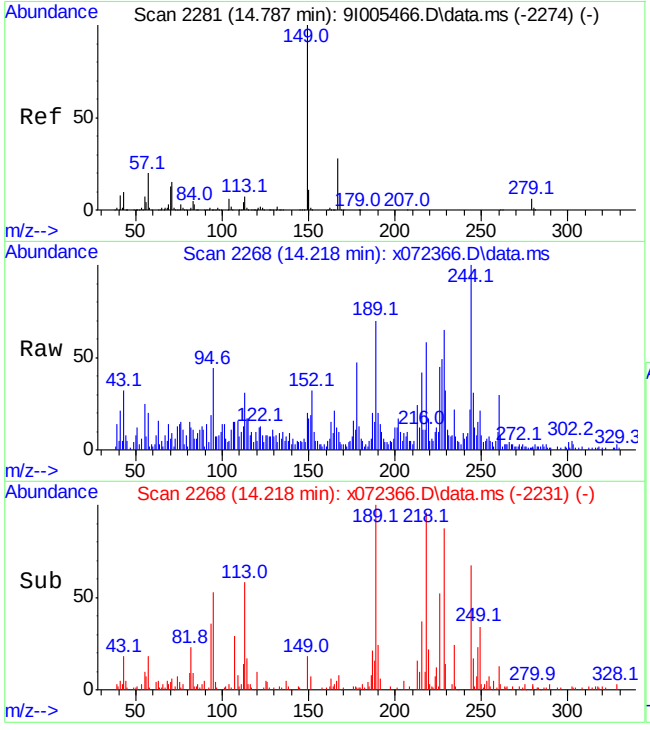


#100
Chrysene
Concen: 58.30 ppm
RT: 14.111 min Scan# 2248
Delta R.T. 0.000 min
Lab File: x072366.D
Acq: 12 Aug 2020 2:16 pm

Tgt Ion:228 Resp: 798729

Ion	Ratio	Lower	Upper
228	100		
226	29.6	0.4	60.4
229	20.4	0.0	50.1

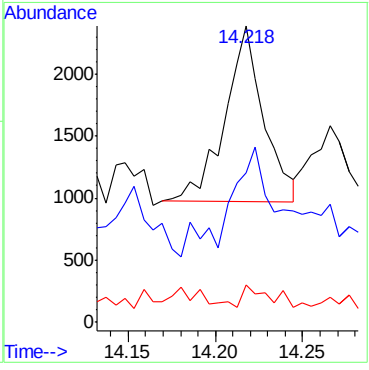


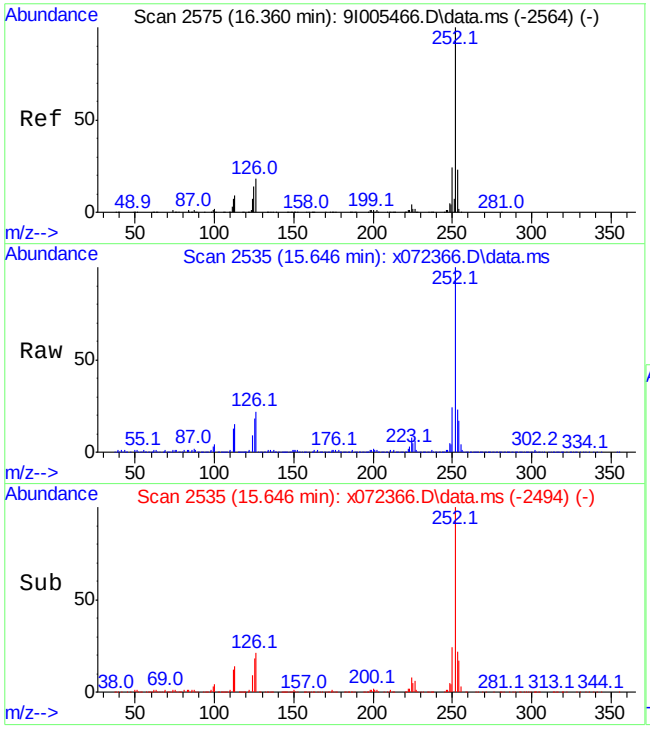


#101
bis(2-Ethylhexyl)phthalate
Concen: 0.26 ppm
RT: 14.218 min Scan# 2268
Delta R.T. 0.000 min
Lab File: x072366.D
Acq: 12 Aug 2020 2:16 pm

Tgt Ion:149 Resp: 2199

Ion	Ratio	Lower	Upper
149	100		
167	26.8	0.0	58.5
279	18.7	0.0	35.7

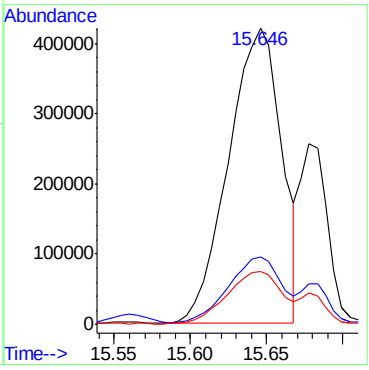


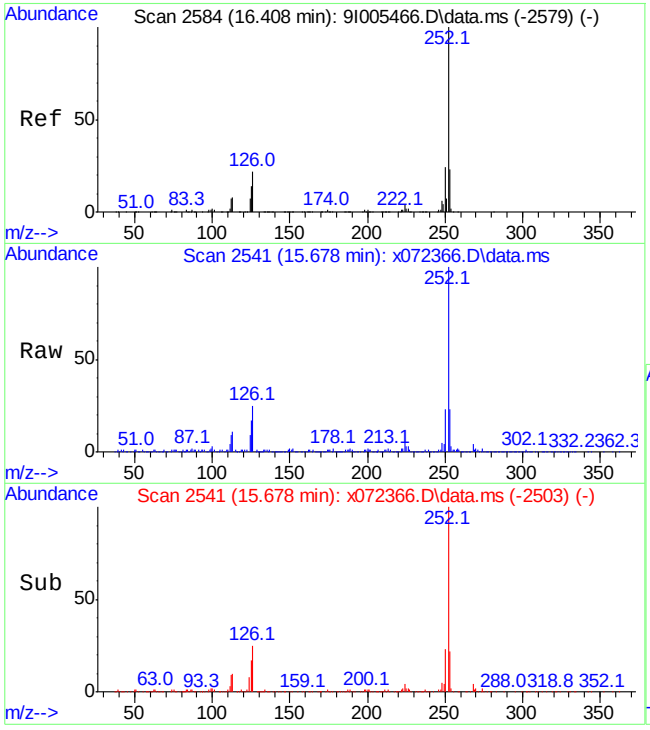


#104
Benzo[b]fluoranthene
Concen: 90.32 ppm
RT: 15.646 min Scan# 2535
Delta R.T. 0.021 min
Lab File: x072366.D
Acq: 12 Aug 2020 2:16 pm

Tgt Ion:252 Resp: 1015428

Ion	Ratio	Lower	Upper
252	100		
253	22.0	0.0	52.5
125	17.7	0.0	44.0

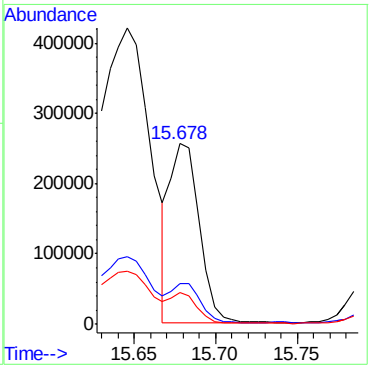


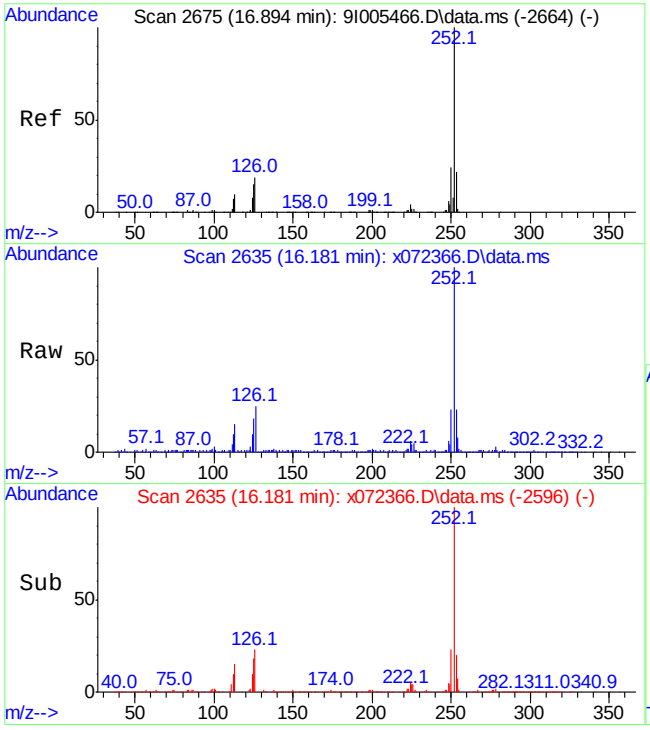


#105
Benzo[k]fluoranthene
Concen: 26.02 ppm
RT: 15.678 min Scan# 2541
Delta R.T. 0.005 min
Lab File: x072366.D
Acq: 12 Aug 2020 2:16 pm

Tgt Ion:252 Resp: 322369

Ion	Ratio	Lower	Upper
252	100		
253	21.8	0.0	52.5
125	16.3	0.0	44.4

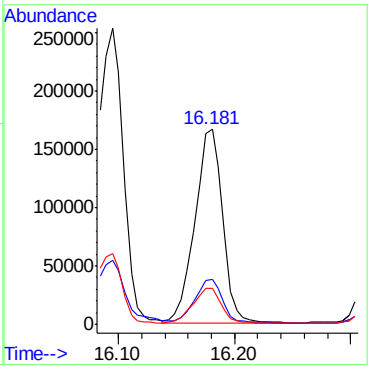


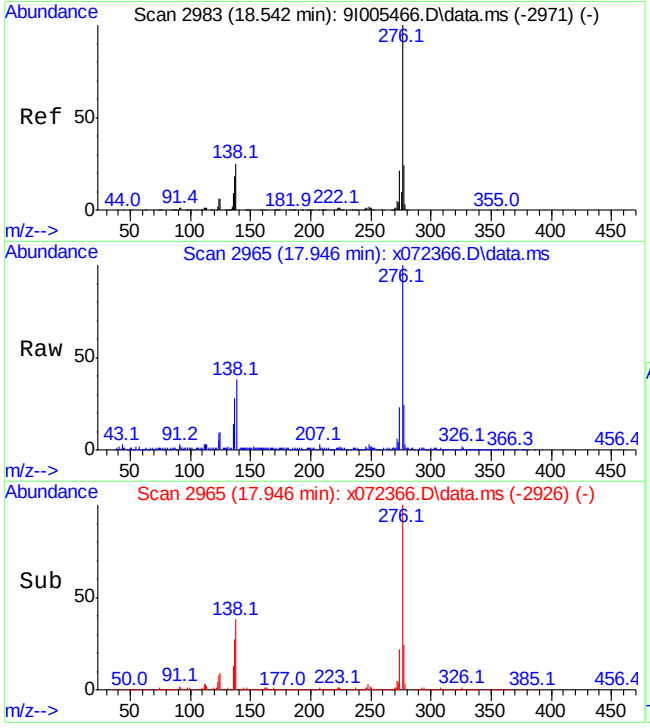


#106
Benzo[a]pyrene
Concen: 28.96 ppm
RT: 16.181 min Scan# 2635
Delta R.T. 0.011 min
Lab File: x072366.D
Acq: 12 Aug 2020 2:16 pm

Tgt Ion:252 Resp: 274615

Ion	Ratio	Lower	Upper
252	100		
253	21.9	0.0	52.3
125	17.9	0.0	44.7

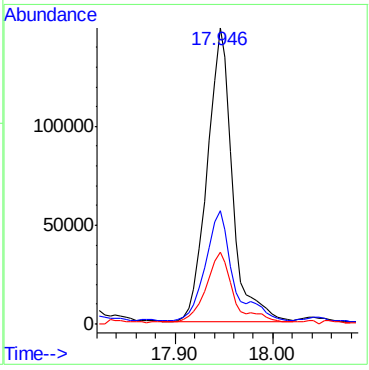


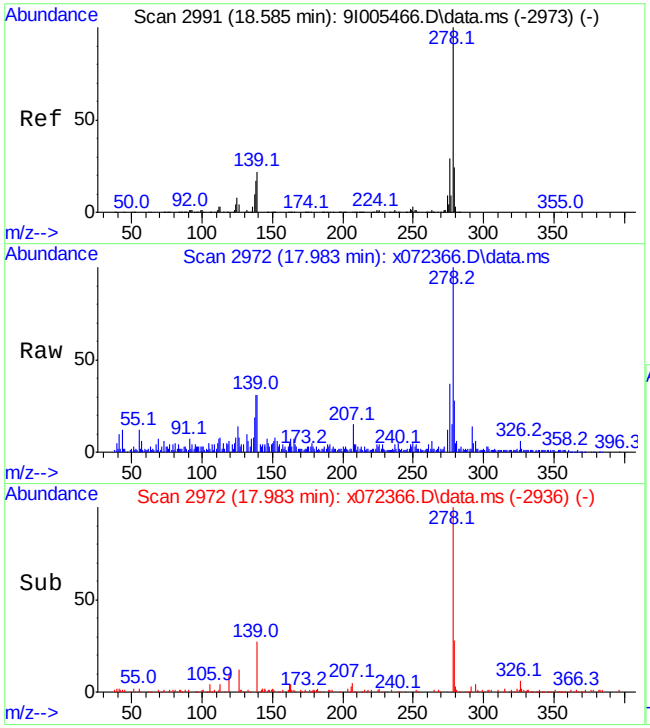


#107
Indeno[1,2,3-cd]pyrene
Concen: 41.00 ppm
RT: 17.946 min Scan# 2965
Delta R.T. 0.011 min
Lab File: x072366.D
Acq: 12 Aug 2020 2:16 pm

Tgt Ion:276 Resp: 265485

Ion	Ratio	Lower	Upper
276	100		
138	37.6	0.0	54.7
277	23.8	0.0	53.8

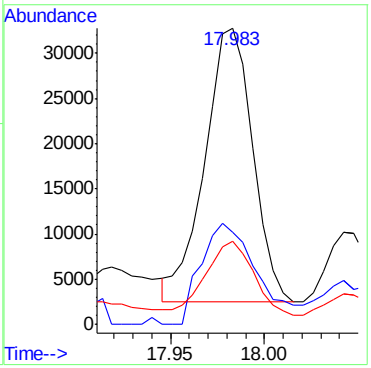


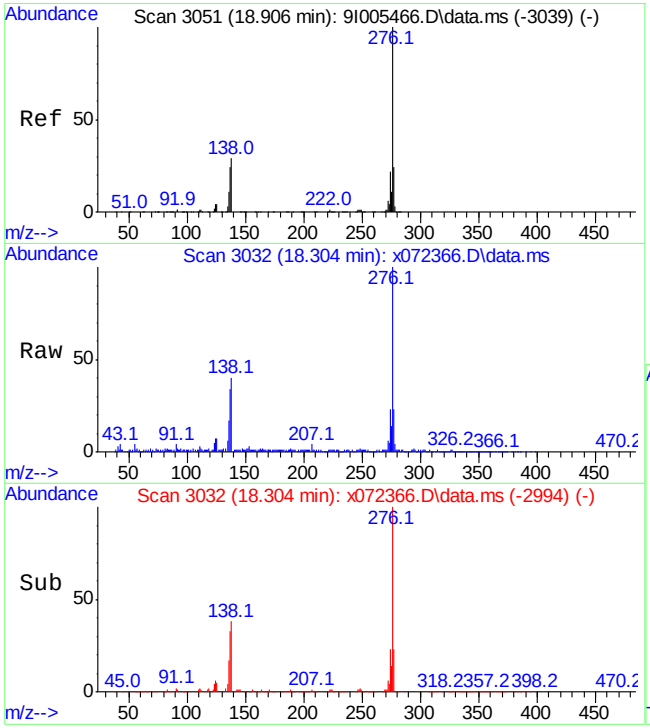


#108
Dibenz[a,h]anthracene
Concen: 9.20 ppm
RT: 17.983 min Scan# 2972
Delta R.T. -0.005 min
Lab File: x072366.D
Acq: 12 Aug 2020 2:16 pm

Tgt Ion:278 Resp: 53559

Ion	Ratio	Lower	Upper
278	100		
139	31.7	0.0	52.4
279	27.2	0.0	54.4

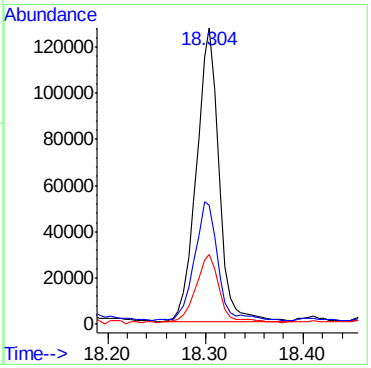




#109
Benzo[g,h,i]perylene
Concen: 23.37 ppm
RT: 18.304 min Scan# 3032
Delta R.T. 0.005 min
Lab File: x072366.D
Acq: 12 Aug 2020 2:16 pm

Tgt Ion:276 Resp: 203478

Ion	Ratio	Lower	Upper
276	100		
138	39.1	0.0	59.4
277	23.0	0.0	54.1



Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 08/12/20 11:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11155.d
Acq On : 11 Aug 2020 6:30 pm
Operator : FOUADS
Sample : fa77576-1 e Inst : MSBNA8
Misc : op81483,S7G483,15.0,,,1,1,soil
ALS Vial : 27 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:50:28 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.628	136	23412	4.00	ppm	0.00
6) Acenaphthene-d10	6.114	164	21177	4.00	ppm	0.00
11) Phenanthrene-d10	7.396	188	41713	4.00	ppm	0.00
18) Chrysene-d12	9.756	240	87234	4.00	ppm	0.03
22) Perylene-d12	11.540	264	60316	4.00	ppm	0.06
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.205	152	36796	10.47	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery =	104.70%		
17) Fluoranthene-d10	8.445	212	229247	10.51	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery =	105.10%		
Target Compounds						Qvalue
2) Naphthalene	4.646	128	18249	2.75	ppm	99
3) 2-Methylnaphthalene	5.235	142	15573	2.99	ppm	94
5) 1-Methylnaphthalene	5.311	142	8836	1.92	ppm	98
7) Acenaphthylene	5.993	152	190597	15.23	ppm	99
8) Acenaphthene	6.138	153	14905	1.88	ppm	98
9) Dibenzofuran	6.297	168	28209	5.03	ppm	96
10) Fluorene	6.592	166	16991	1.97	ppm	100
13) Phenanthrene	7.417	178	89112	6.42	ppm	97
14) Anthracene	7.473	178	510403	33.82	ppm	99
15) Carbazole	7.640	167	78509	3.15	ppm	97
16) Fluoranthene	8.470	202	1388555	47.64	ppm	97
19) Pyrene	8.667	202	1747057	47.42	ppm	96
20) Benzo[a]anthracene	9.746	228	940383	31.80	ppm	72
21) Chrysene	9.790	228	1084512	36.02	ppm	97
23) Benzo[b]fluoranthene	11.045	252	2375608m	116.04	ppm	
24) Benzo[k]fluoranthene	11.074	252	307034m	13.70	ppm	
25) Benzo[a]pyrene	11.394	252	746067m	37.40	ppm	
26) Indeno[1,2,3-cd]pyrene	13.267	276	131172	10.07	ppm	95
27) Dibenz[a,h]anthracene	13.311	278	31689	2.19	ppm	97
28) Benzo[g,h,i]perylene	13.728	276	70254	4.48	ppm	95

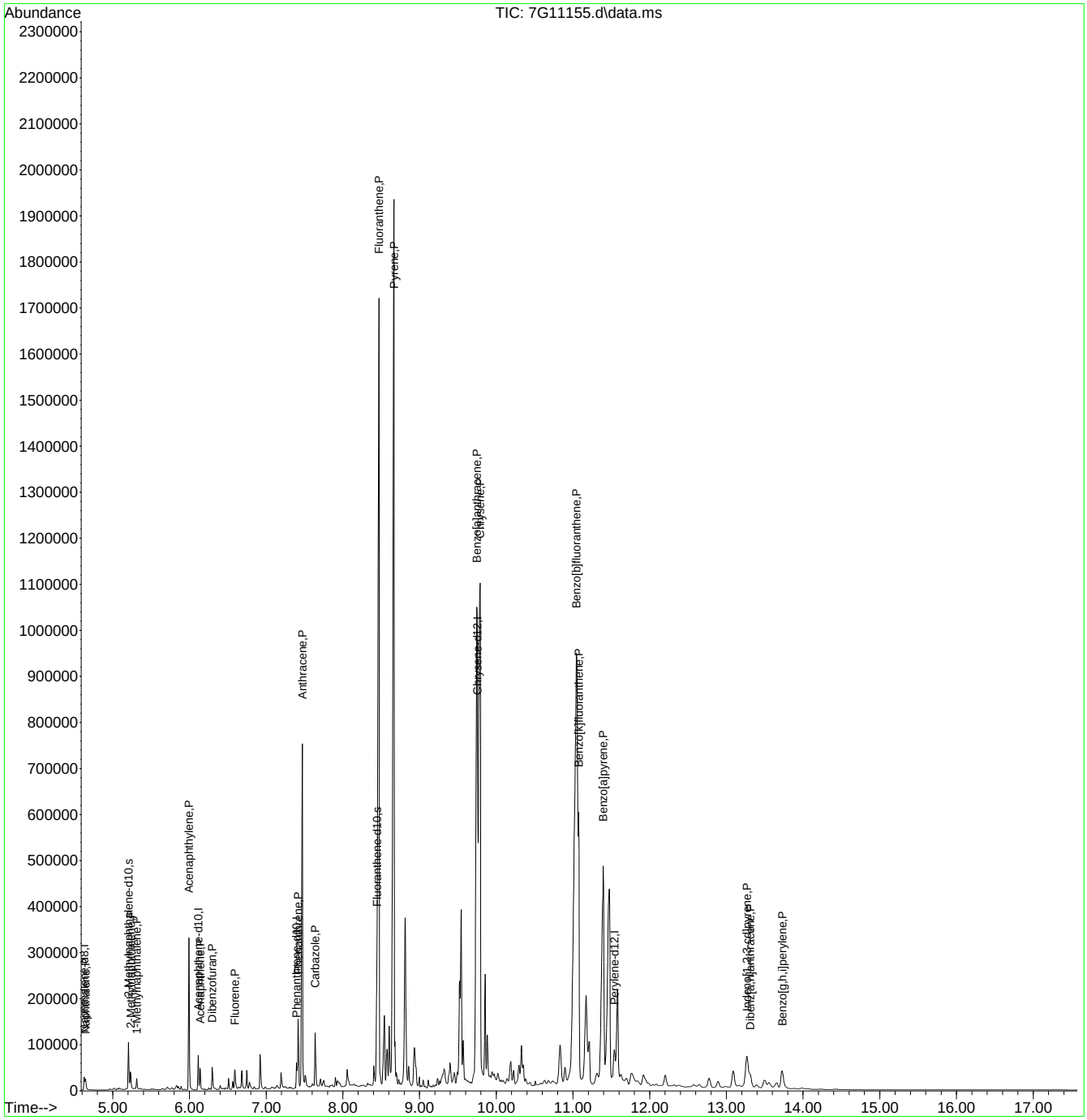
(#) = qualifier out of range (m) = manual integration (+) = signals summed

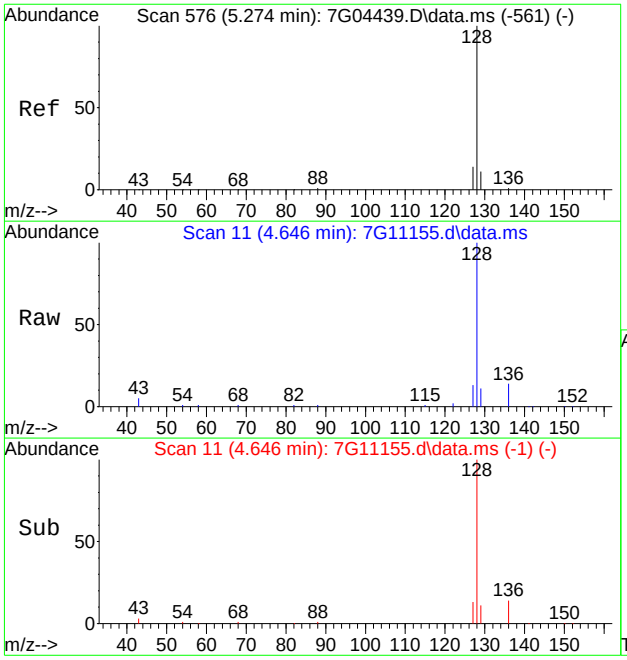
7.1.23
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11155.d
Acq On : 11 Aug 2020 6:30 pm
Operator : FOUADS
Sample : fa77576-1 e Inst : MSBNA8
Misc : op81483,S7G483,15.0,,,1,1,soil
ALS Vial : 27 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:50:28 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

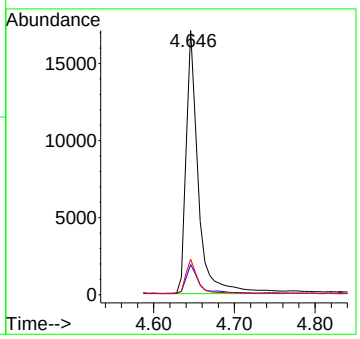


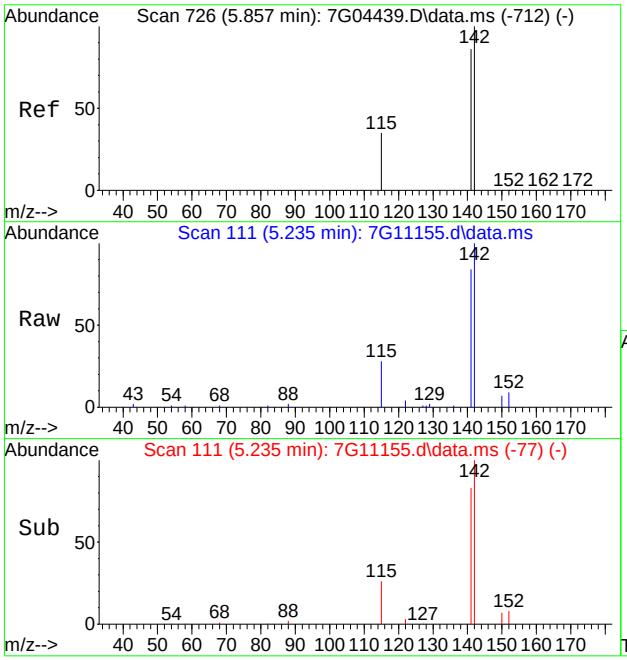


#2
Naphthalene
Concen: 2.75 ppm
RT: 4.646 min Scan# 11
Delta R.T. -0.000 min
Lab File: 7G11155.d
Acq: 11 Aug 2020 6:30 pm

Tgt Ion:128 Resp: 18249

Ion	Ratio	Lower	Upper
128	100		
129	11.0	0.0	40.9
127	13.1	0.0	43.5

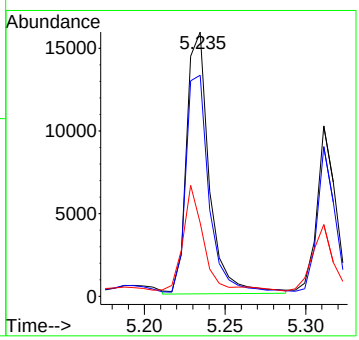


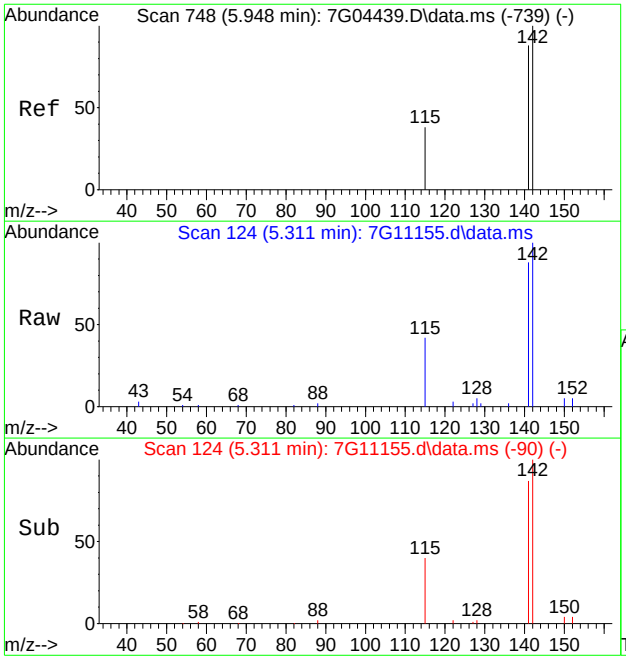


#3
2-Methylnaphthalene
Concen: 2.99 ppm
RT: 5.235 min Scan# 111
Delta R.T. -0.000 min
Lab File: 7G11155.d
Acq: 11 Aug 2020 6:30 pm

Tgt Ion:142 Resp: 15573

Ion	Ratio	Lower	Upper
142	100		
141	83.6	55.7	115.7
115	26.1	5.4	65.4

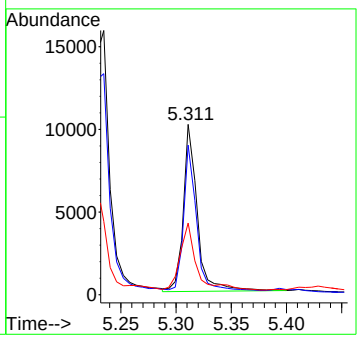


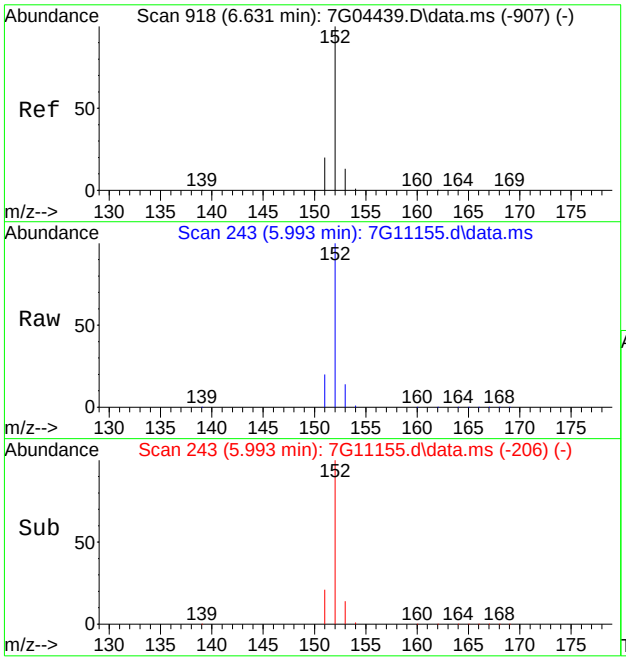


#5
1-Methylnaphthalene
Concen: 1.92 ppm
RT: 5.311 min Scan# 124
Delta R.T. -0.000 min
Lab File: 7G11155.d
Acq: 11 Aug 2020 6:30 pm

Tgt Ion:142 Resp: 8836

Ion	Ratio	Lower	Upper
142	100		
141	87.4	58.1	118.1
115	40.4	7.7	67.7

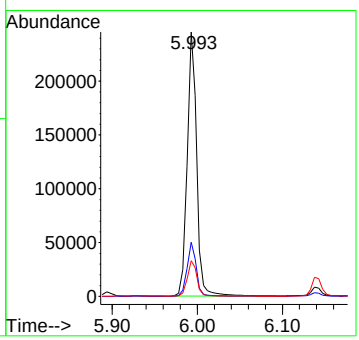


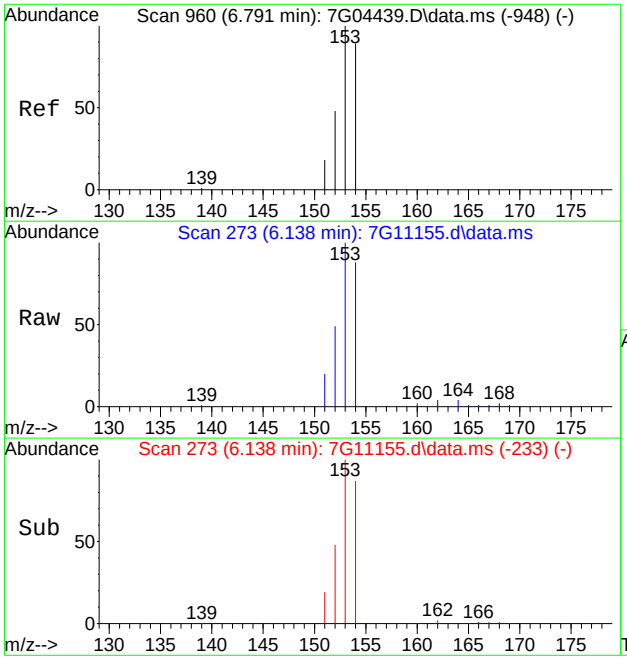


#7
Acenaphthylene
Concen: 15.23 ppm
RT: 5.993 min Scan# 243
Delta R.T. -0.000 min
Lab File: 7G11155.d
Acq: 11 Aug 2020 6:30 pm

Tgt Ion:152 Resp: 190597

Ion	Ratio	Lower	Upper
152	100		
151	20.4	0.0	49.8
153	13.4	0.0	42.8

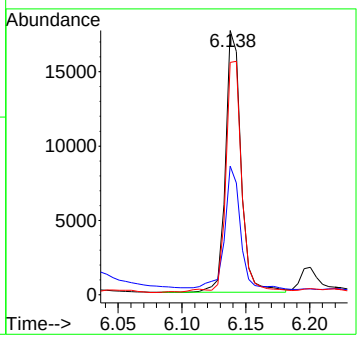


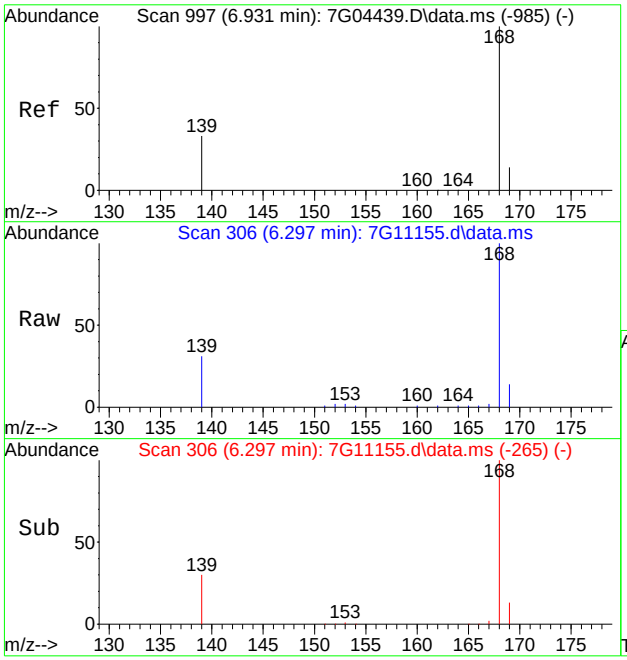


#8
Acenaphthene
Concen: 1.88 ppm
RT: 6.138 min Scan# 273
Delta R.T. -0.005 min
Lab File: 7G11155.d
Acq: 11 Aug 2020 6:30 pm

Tgt Ion:153 Resp: 14905

Ion	Ratio	Lower	Upper
153	100		
152	46.6	18.3	78.3
154	87.7	59.3	119.3

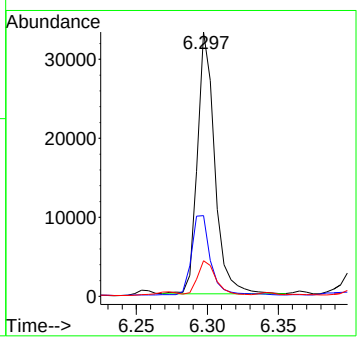


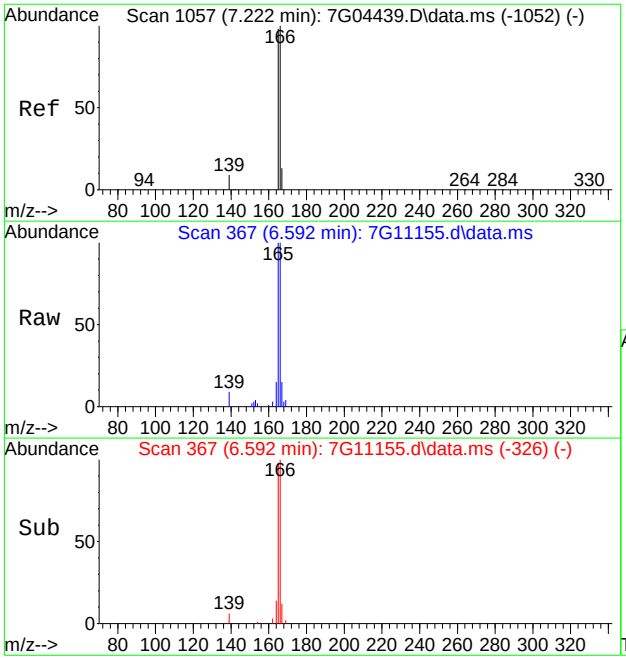


#9
Dibenzofuran
Concen: 5.03 ppm
RT: 6.297 min Scan# 306
Delta R.T. -0.000 min
Lab File: 7G11155.d
Acq: 11 Aug 2020 6:30 pm

Tgt Ion:168 Resp: 28209

Ion	Ratio	Lower	Upper
168	100		
139	30.2	12.6	52.6
169	12.5	0.0	33.8

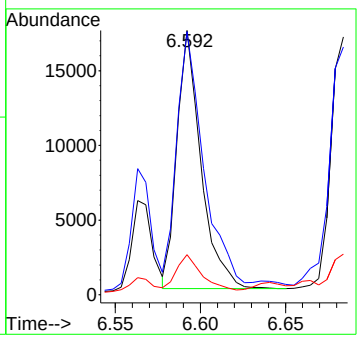


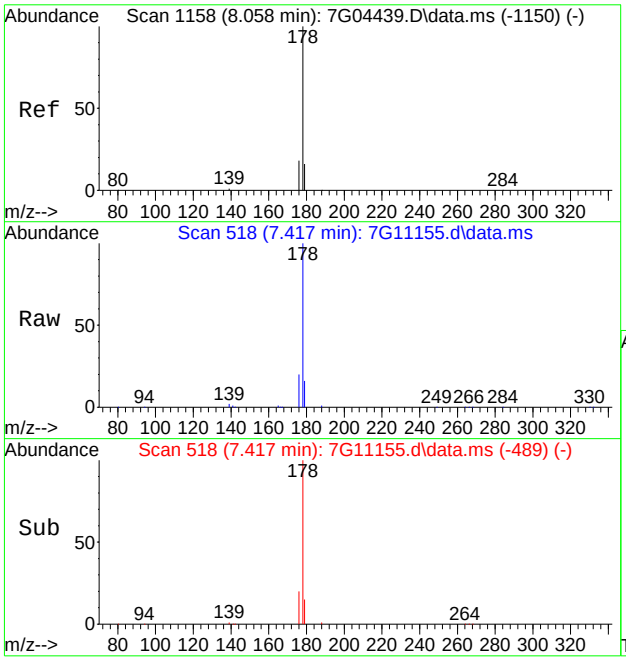


#10
Fluorene
Concen: 1.97 ppm
RT: 6.592 min Scan# 367
Delta R.T. -0.000 min
Lab File: 7G11155.d
Acq: 11 Aug 2020 6:30 pm

Tgt Ion:166 Resp: 16991

Ion	Ratio	Lower	Upper
166	100		
165	97.8	68.2	128.2
167	12.6	0.0	42.9

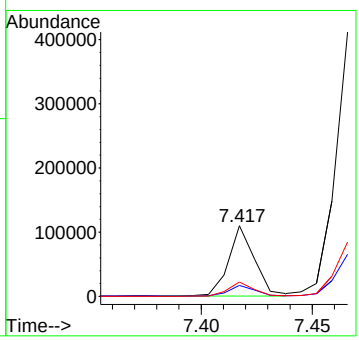


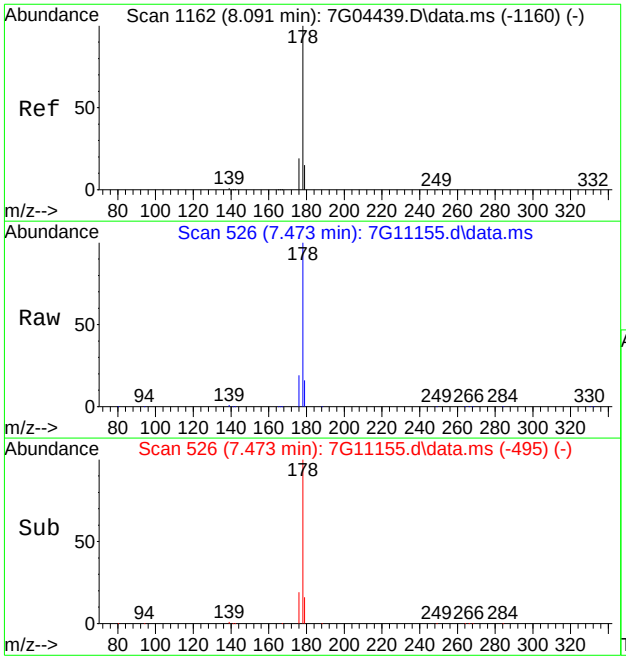


#13
Phenanthrene
Concen: 6.42 ppm
RT: 7.417 min Scan# 518
Delta R.T. -0.000 min
Lab File: 7G11155.d
Acq: 11 Aug 2020 6:30 pm

Tgt Ion:178 Resp: 89112

Ion	Ratio	Lower	Upper
178	100		
179	15.2	0.0	45.7
176	20.4	0.0	48.0

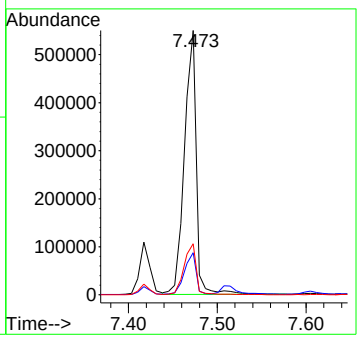


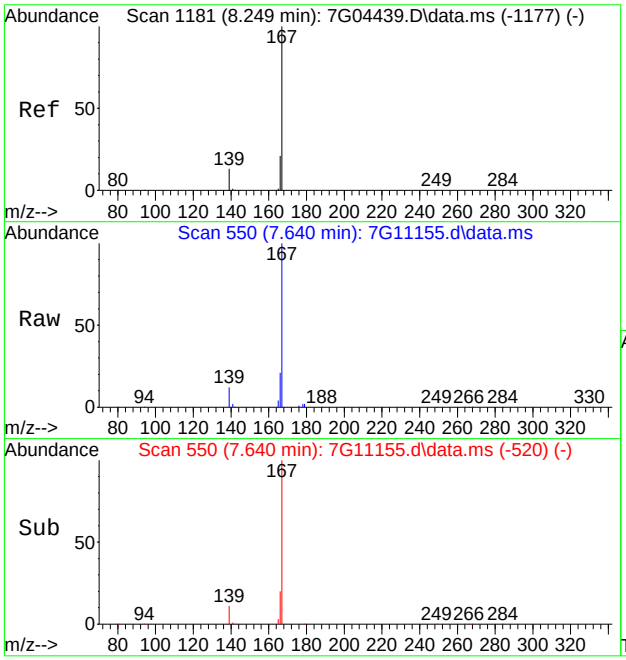


#14
Anthracene
Concen: 33.82 ppm
RT: 7.473 min Scan# 526
Delta R.T. 0.014 min
Lab File: 7G11155.d
Acq: 11 Aug 2020 6:30 pm

Tgt Ion:178 Resp: 510403

Ion	Ratio	Lower	Upper
178	100		
179	15.8	0.0	45.1
176	19.3	0.0	48.8

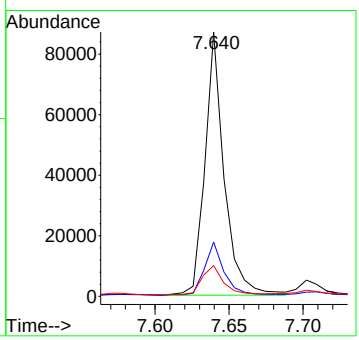


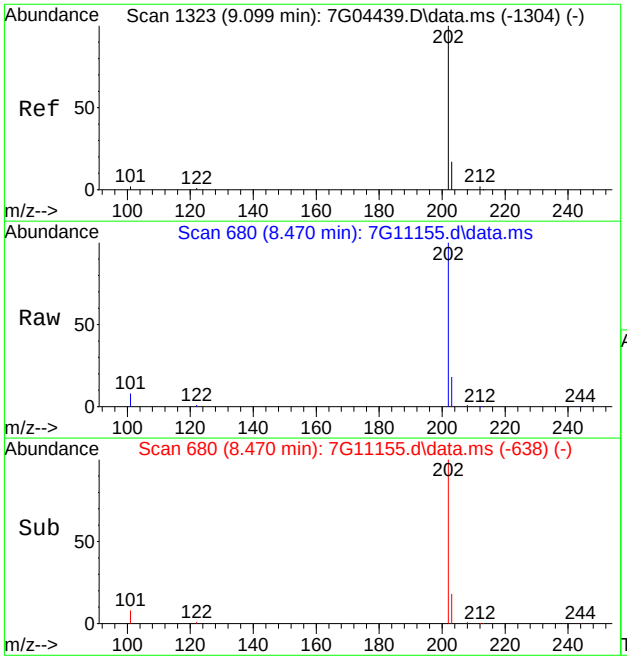


#15
Carbazole
Concen: 3.15 ppm
RT: 7.640 min Scan# 550
Delta R.T. 0.007 min
Lab File: 7G11155.d
Acq: 11 Aug 2020 6:30 pm

Tgt Ion:167 Resp: 78509

Ion	Ratio	Lower	Upper
167	100		
166	20.1	1.2	41.2
139	10.9	0.0	32.8

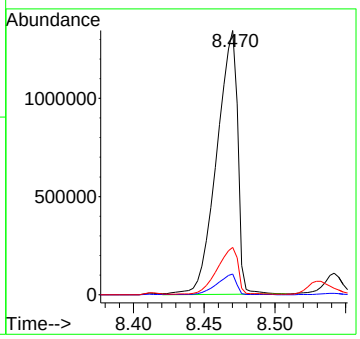


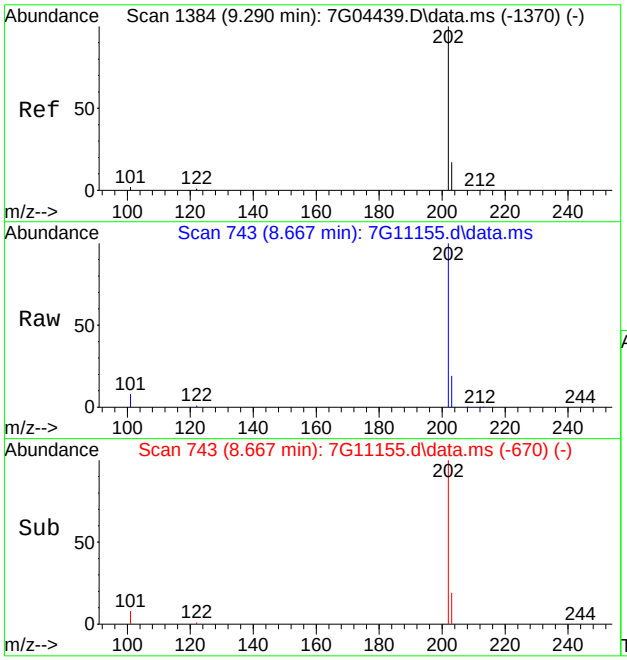


#16
Fluoranthene
Concen: 47.64 ppm
RT: 8.470 min Scan# 680
Delta R.T. 0.022 min
Lab File: 7G11155.d
Acq: 11 Aug 2020 6:30 pm

Tgt Ion:202 Resp: 1388555

Ion	Ratio	Lower	Upper
202	100		
101	7.8	0.0	32.2
203	17.7	0.0	47.2

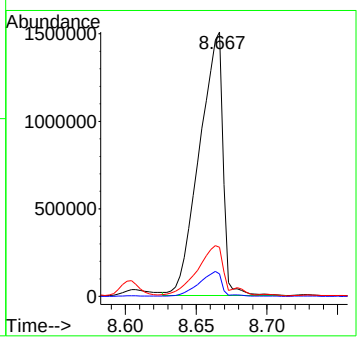


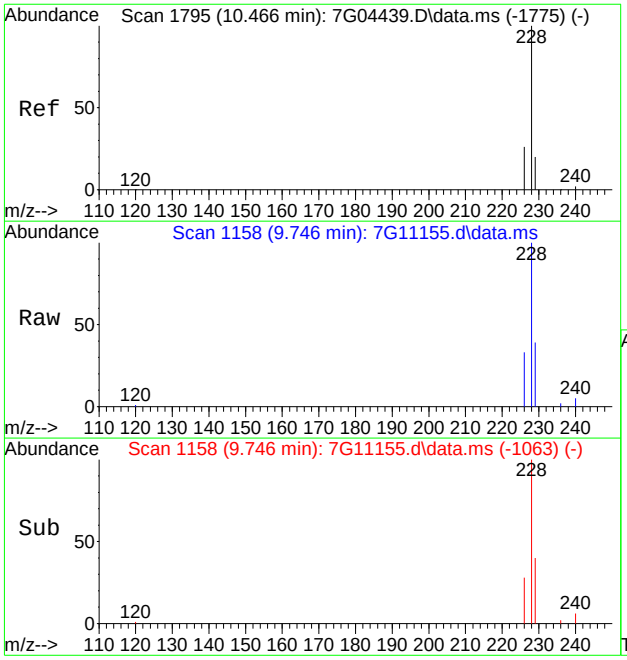


#19
Pyrene
Concen: 47.42 ppm
RT: 8.667 min Scan# 743
Delta R.T. 0.028 min
Lab File: 7G11155.d
Acq: 11 Aug 2020 6:30 pm

Tgt Ion:202 Resp: 1747057

Ion	Ratio	Lower	Upper
202	100		
101	8.4	0.0	32.4
203	18.3	0.0	47.4

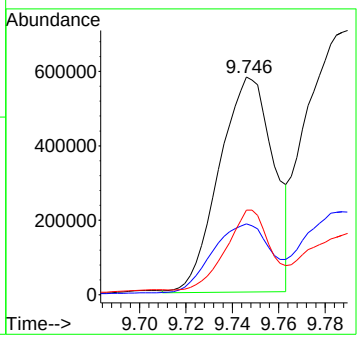


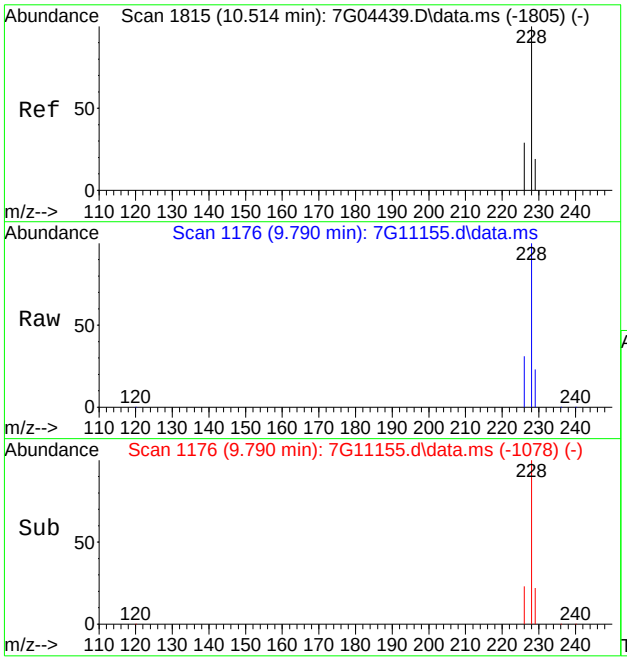


#20
Benzo[a]anthracene
Concen: 31.80 ppm
RT: 9.746 min Scan# 1158
Delta R.T. 0.029 min
Lab File: 7G11155.d
Acq: 11 Aug 2020 6:30 pm

Tgt Ion:228 Resp: 940383

Ion	Ratio	Lower	Upper
228	100		
226	32.5	0.0	56.1
229	42.0	0.0	49.5

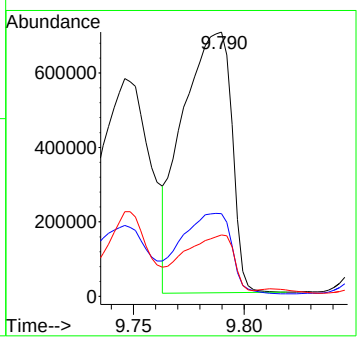


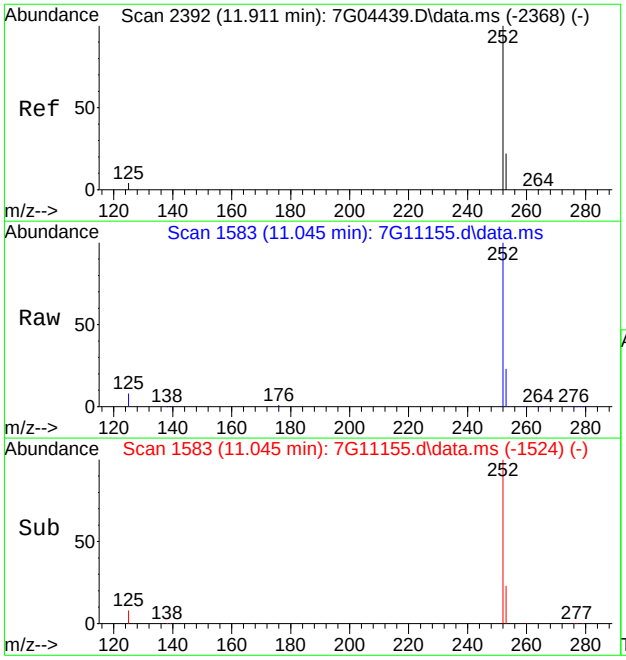


#21
Chrysene
Concen: 36.02 ppm
RT: 9.790 min Scan# 1176
Delta R.T. 0.036 min
Lab File: 7G11155.d
Acq: 11 Aug 2020 6:30 pm

Tgt Ion:228 Resp: 1084512

Ion	Ratio	Lower	Upper
228	100		
226	30.8	0.0	58.9
229	21.0	0.0	49.5

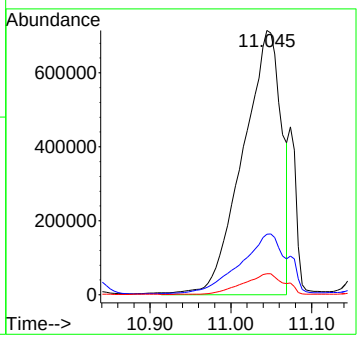


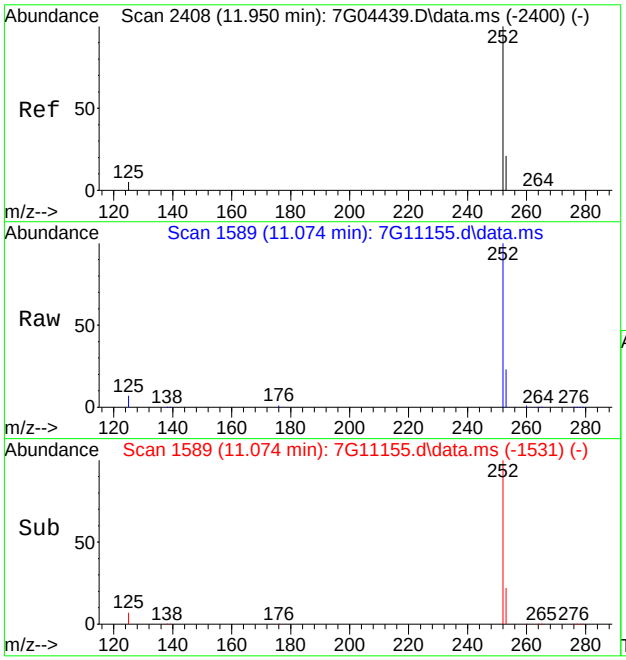


#23
Benzo[b]fluoranthene
Concen: 116.04 ppm m
RT: 11.045 min Scan# 1583
Delta R.T. 0.087 min
Lab File: 7G11155.d
Acq: 11 Aug 2020 6:30 pm

Tgt Ion:252 Resp: 2375608

Ion	Ratio	Lower	Upper
252	100		
253	22.9	0.0	51.7
125	8.0	0.0	34.5

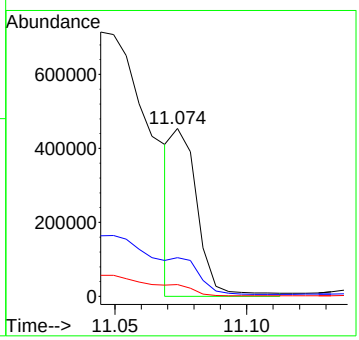


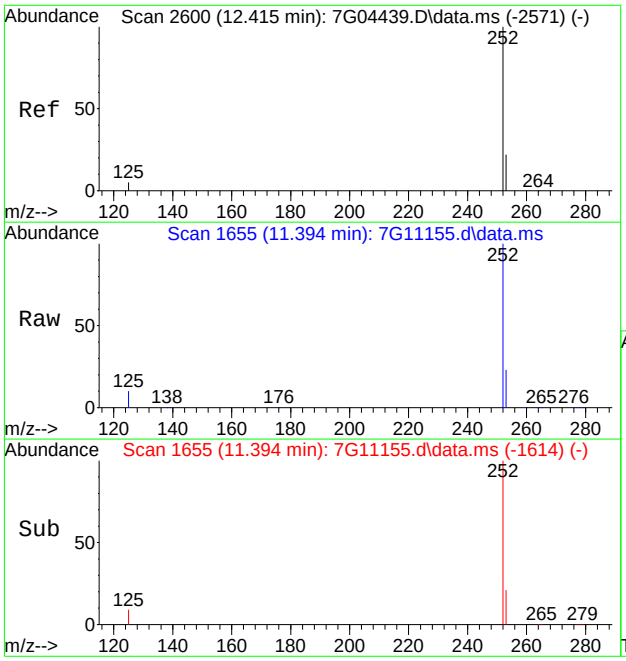


#24
Benzo[k]fluoranthene
Concen: 13.70 ppm m
RT: 11.074 min Scan# 1589
Delta R.T. 0.082 min
Lab File: 7G11155.d
Acq: 11 Aug 2020 6:30 pm

Tgt Ion:252 Resp: 307034

Ion	Ratio	Lower	Upper
252	100		
253	23.1	0.0	51.5
125	7.0	0.0	34.8

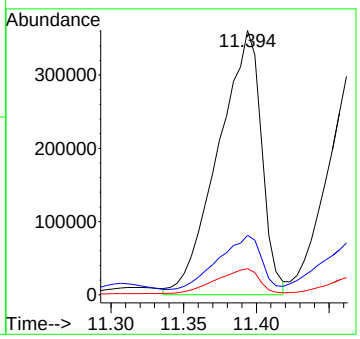


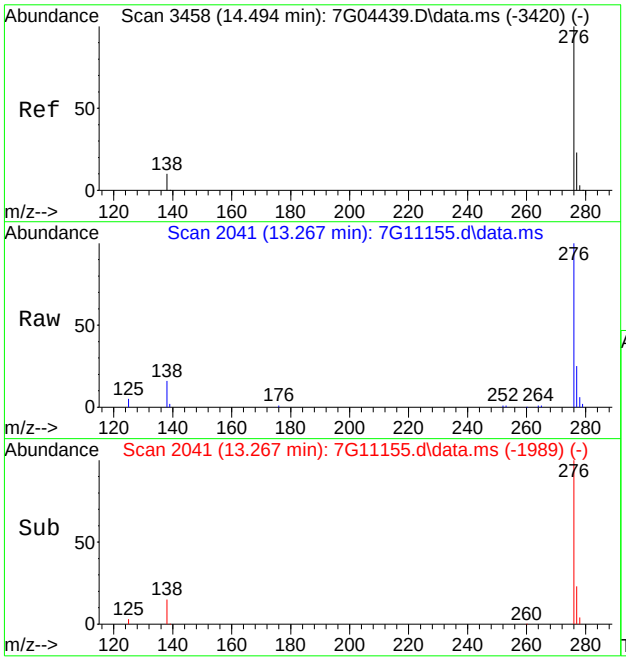


#25
Benzo[a]pyrene
Concen: 37.40 ppm m
RT: 11.394 min Scan# 1655
Delta R.T. -0.000 min
Lab File: 7G11155.d
Acq: 11 Aug 2020 6:30 pm

Tgt Ion:252 Resp: 746067

Ion	Ratio	Lower	Upper
252	100		
253	22.5	0.0	51.6
125	9.8	0.0	34.8

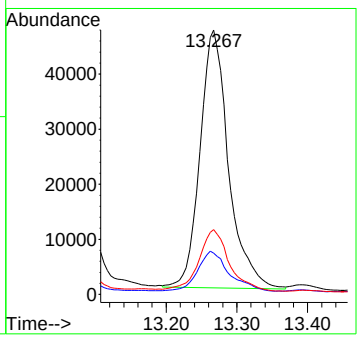


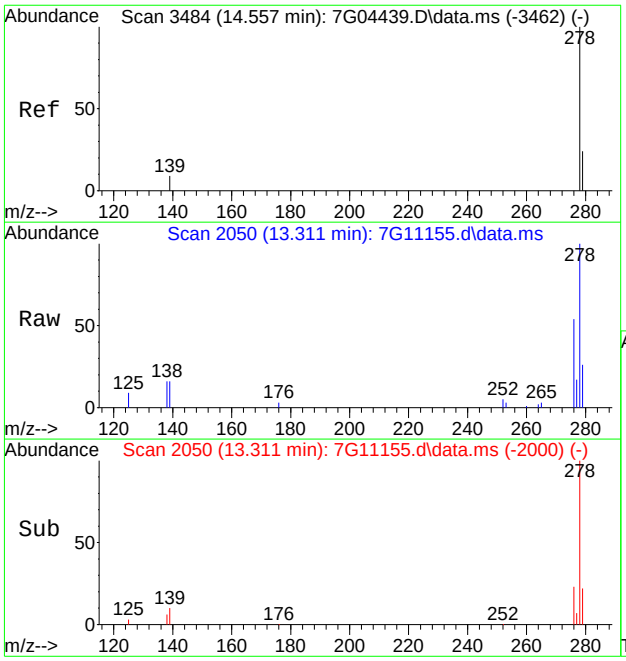


#26
Indeno[1,2,3-cd]pyrene
Concen: 10.07 ppm
RT: 13.267 min Scan# 2041
Delta R.T. 0.053 min
Lab File: 7G11155.d
Acq: 11 Aug 2020 6:30 pm

Tgt Ion:276 Resp: 131172

Ion	Ratio	Lower	Upper
276	100		
138	14.6	0.0	39.6
277	23.7	0.0	53.1

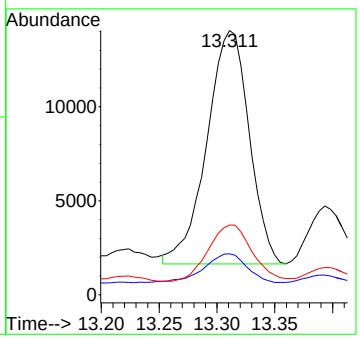


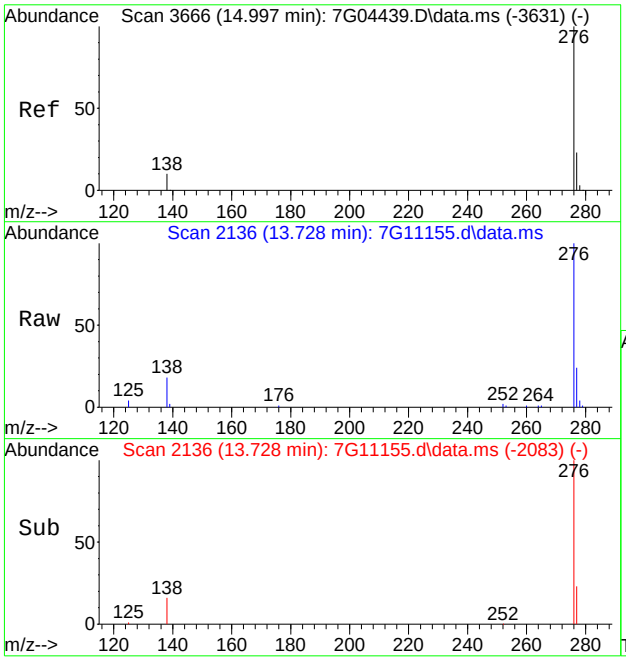


#27
Dibenz[a,h]anthracene
Concen: 2.19 ppm
RT: 13.311 min Scan# 2050
Delta R.T. 0.044 min
Lab File: 7G11155.d
Acq: 11 Aug 2020 6:30 pm

Tgt Ion:278 Resp: 31689

Ion	Ratio	Lower	Upper
278	100		
139	12.2	0.0	38.8
279	24.0	0.0	53.6

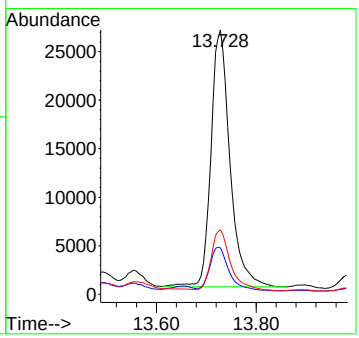




#28
Benzo[g,h,i]perylene
Concen: 4.48 ppm
RT: 13.728 min Scan# 2136
Delta R.T. 0.058 min
Lab File: 7G11155.d
Acq: 11 Aug 2020 6:30 pm

Tgt Ion:276 Resp: 70254

Ion	Ratio	Lower	Upper
276	100		
138	16.4	0.0	40.5
277	23.3	0.0	53.2



Manual Integration Approval Summary

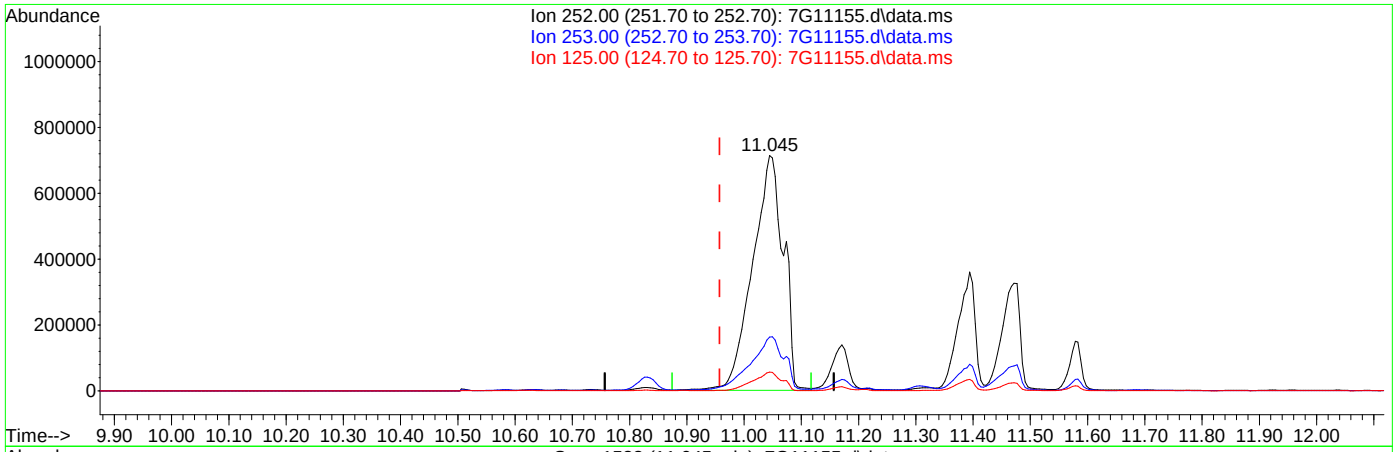
Sample Number: FA77576-1
Lab FileID: 7G11155.D
Injection Time: 08/11/20 18:30
Method: SW846 8270E BY SIM
Analyst approved: 08/12/20 09:33 Fouad Sekkar
Supervisor approved: 08/12/20 11:43 Nicole McCampbell

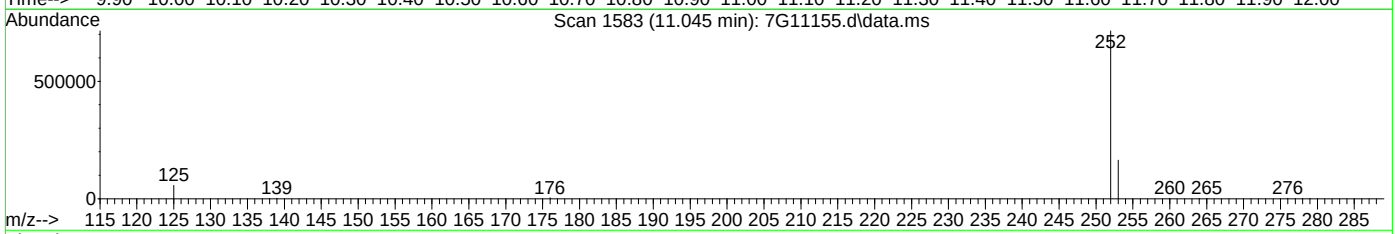
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(b)fluoranthene	205-99-2		11.04	Overlapping peak
Benzo(k)fluoranthene	207-08-9		11.07	Overlapping peak
Benzo(a)pyrene	50-32-8		11.39	Missed peak

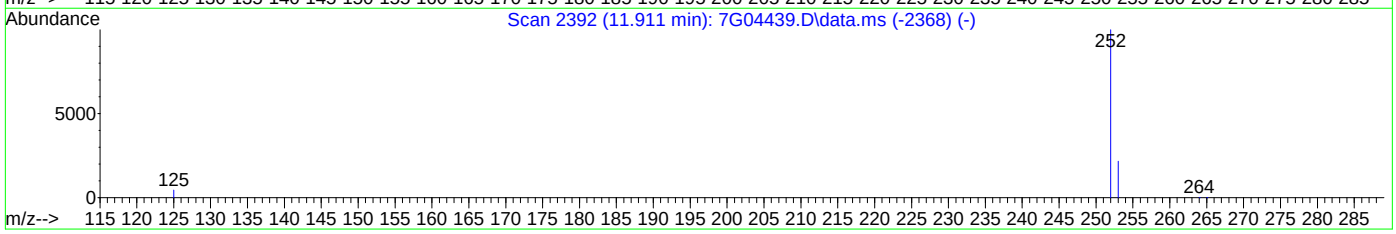
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11155.d
Acq On : 11 Aug 2020 6:30 pm
Operator : FOUADS
Sample : fa77576-1 e Inst : MSBNA8
Misc : op81483,S7G483,15.0,,,1,1,soil
ALS Vial : 27 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:27:23 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11155.d\data.ms

(23) Benzo[b]fluoranthene (P)

11.045min (+0.087) 129.87ppm

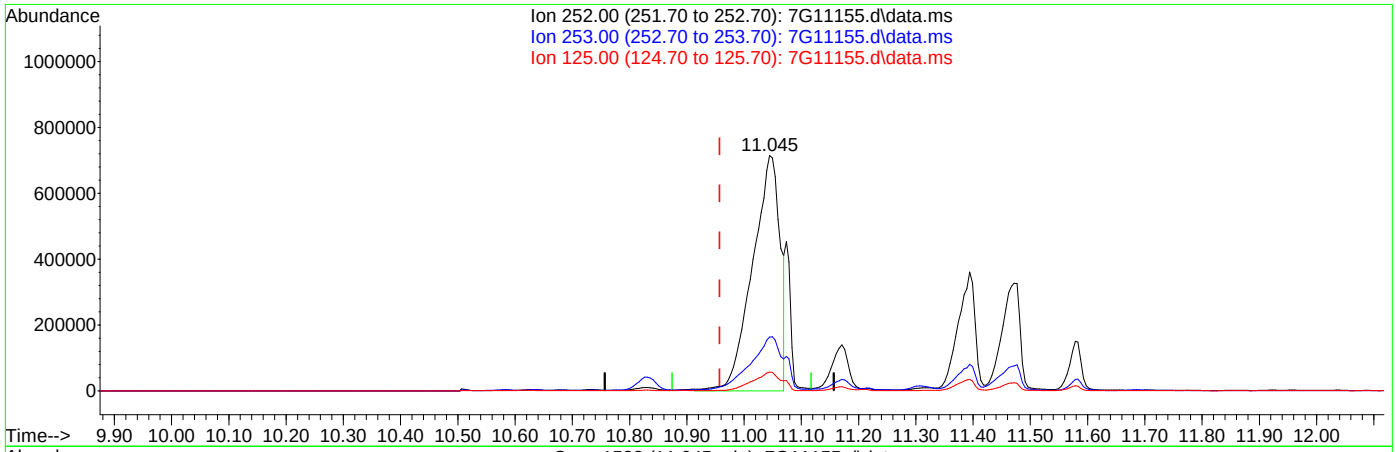
response 2658802

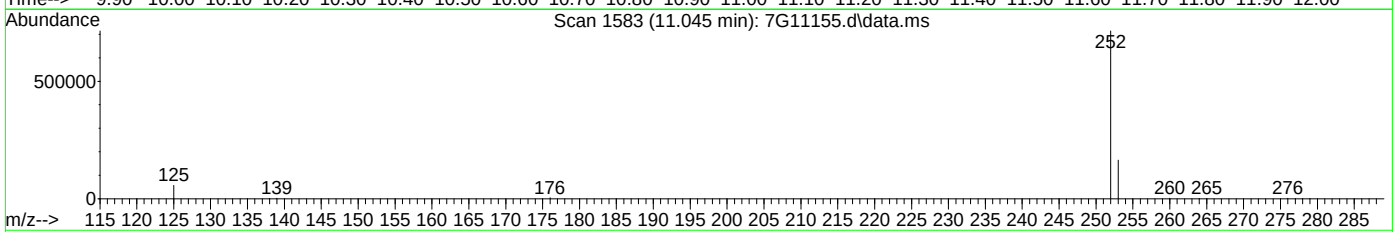
Ion	Exp%	Act%
252.00	100	100
253.00	21.70	22.49
125.00	4.50	7.89
0.00	0.00	0.00

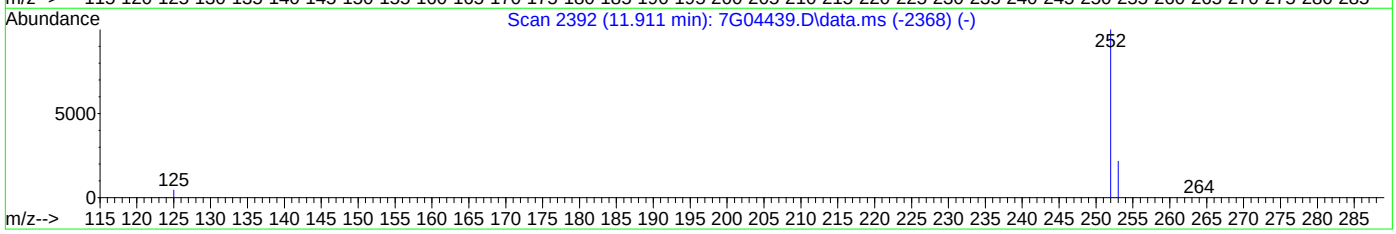
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11155.d
Acq On : 11 Aug 2020 6:30 pm
Operator : FOUADS
Sample : fa77576-1 e Inst : MSBNA8
Misc : op81483,S7G483,15.0,,,1,1,soil
ALS Vial : 27 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:27:23 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11155.d\data.ms

(23) Benzo[b]fluoranthene (P)

11.045min (+0.087) 116.04ppm m

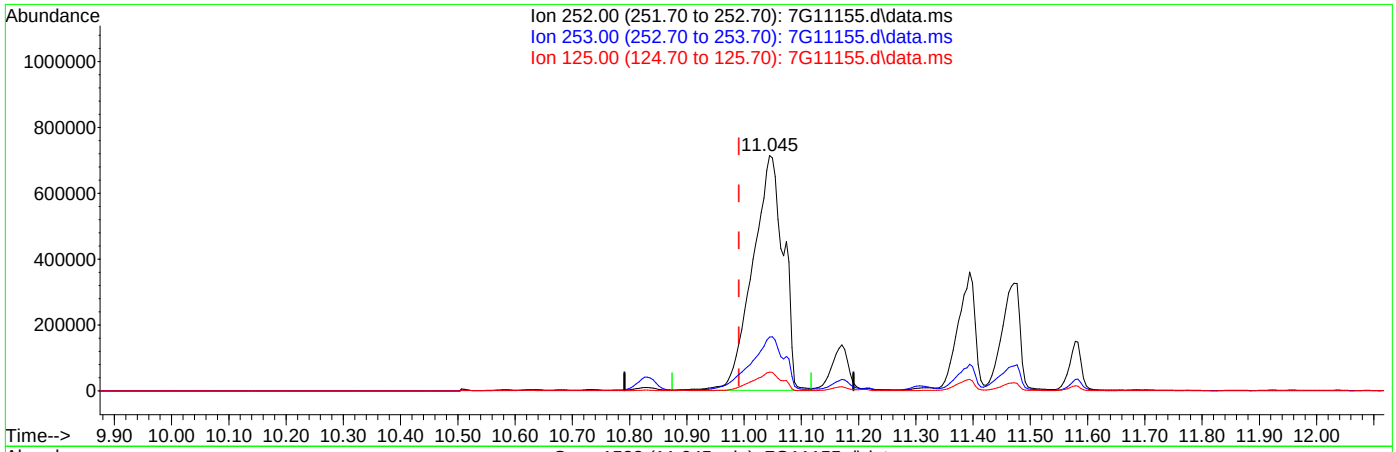
response 2375608

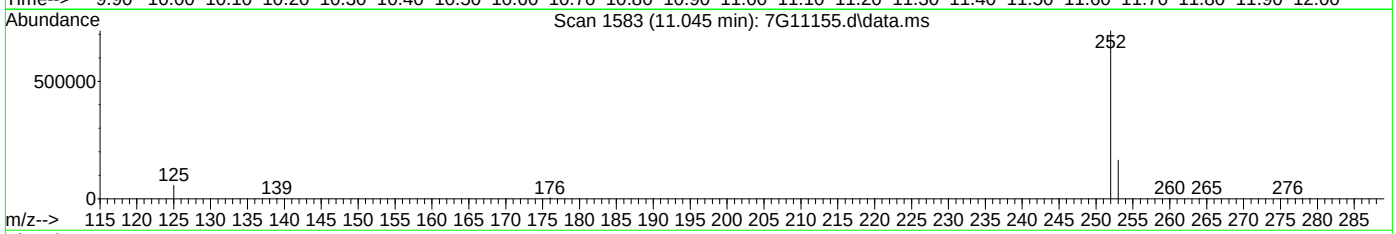
Ion	Exp%	Act%
252.00	100	100
253.00	21.70	22.93
125.00	4.50	8.02
0.00	0.00	0.00

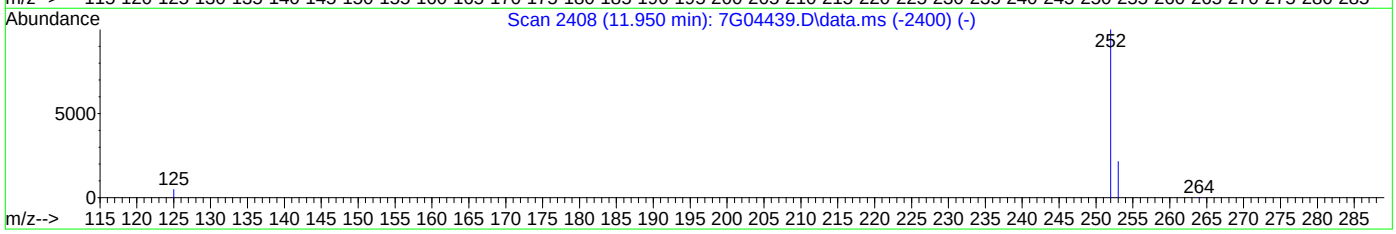
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11155.d
Acq On : 11 Aug 2020 6:30 pm
Operator : FOUADS
Sample : fa77576-1 e Inst : MSBNA8
Misc : op81483,S7G483,15.0,,,1,1,soil
ALS Vial : 27 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:27:23 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11155.d\data.ms

(24) Benzo[k]fluoranthene (P)

11.045min (+0.053) 95.65ppm

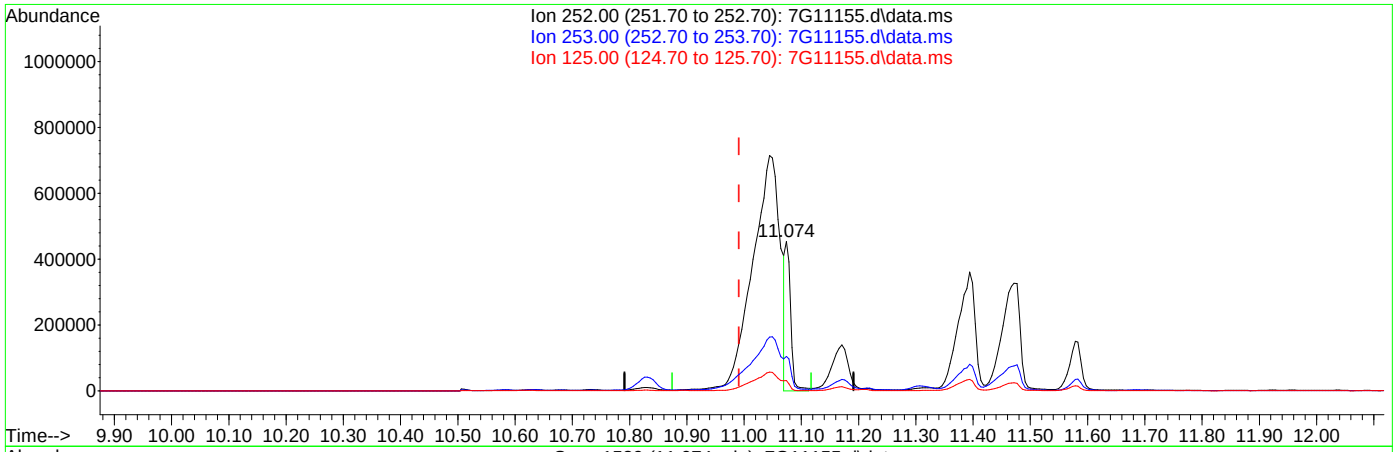
response 2658802

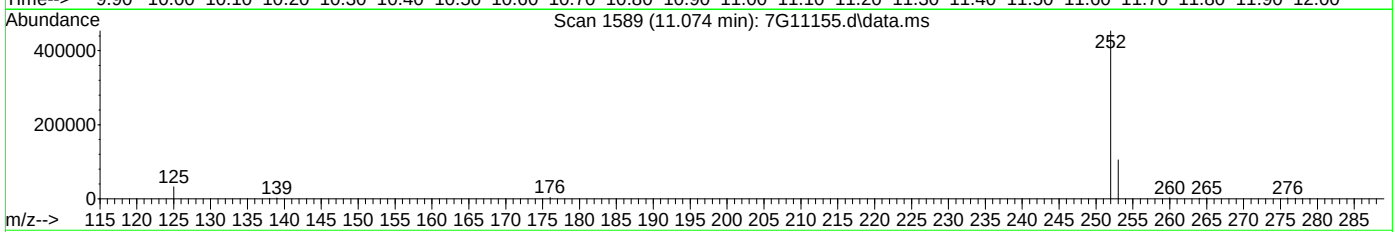
Ion	Exp%	Act%
252.00	100	100
253.00	21.50	22.49
125.00	4.80	7.89
0.00	0.00	0.00

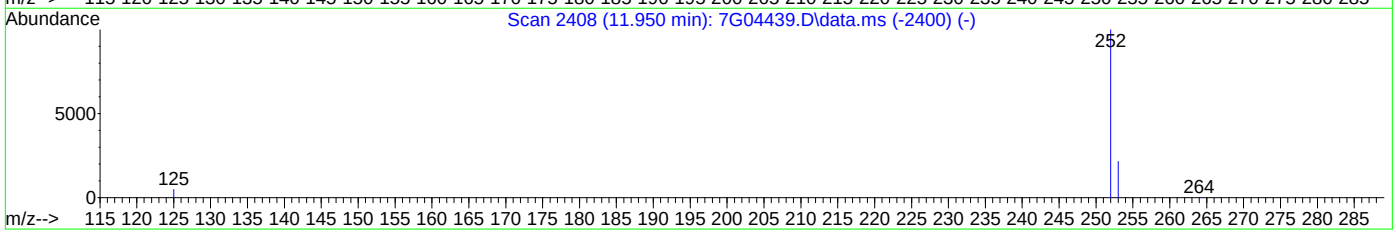
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11155.d
Acq On : 11 Aug 2020 6:30 pm
Operator : FOUADS
Sample : fa77576-1 e Inst : MSBNA8
Misc : op81483,S7G483,15.0,,,1,1,soil
ALS Vial : 27 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:27:23 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11155.d\data.ms

(24) Benzo[k]fluoranthene (P)

11.074min (+0.082) 13.70ppm m

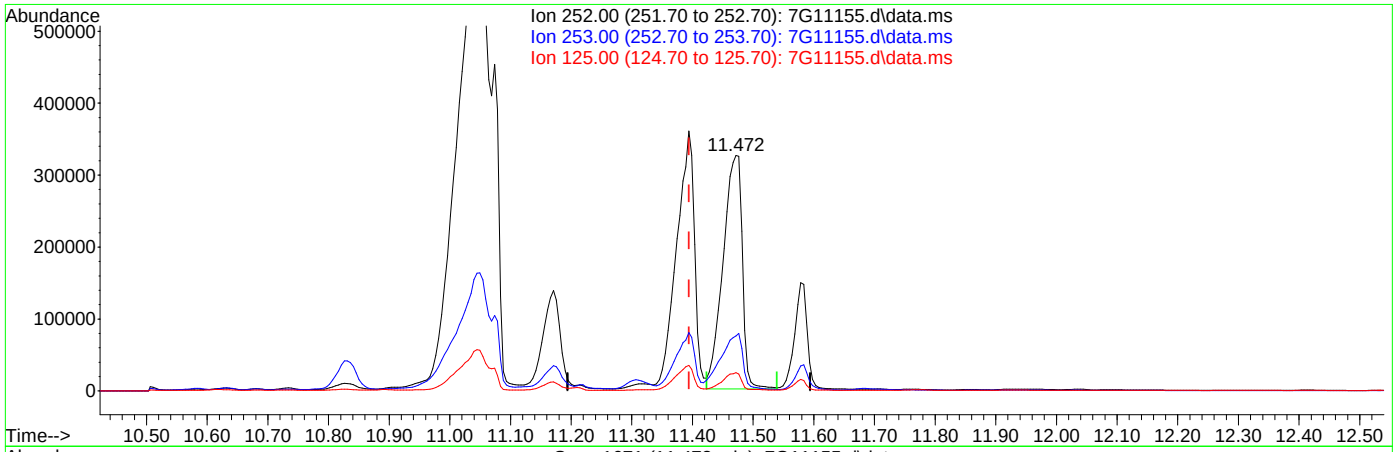
response 307034

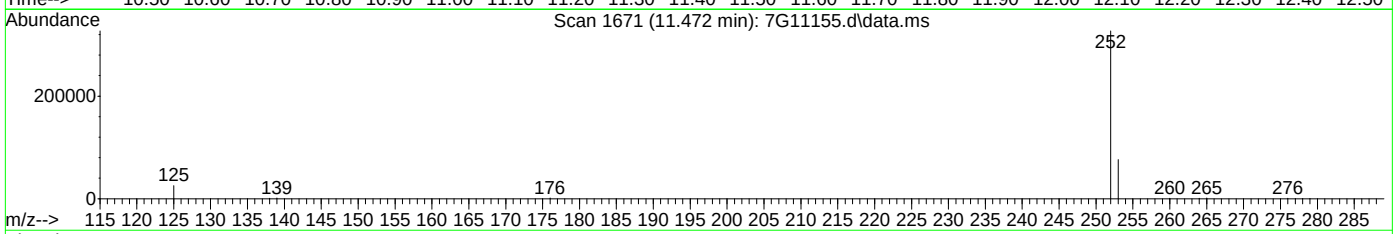
Ion	Exp%	Act%
252.00	100	100
253.00	21.50	23.13
125.00	4.80	7.03
0.00	0.00	0.00

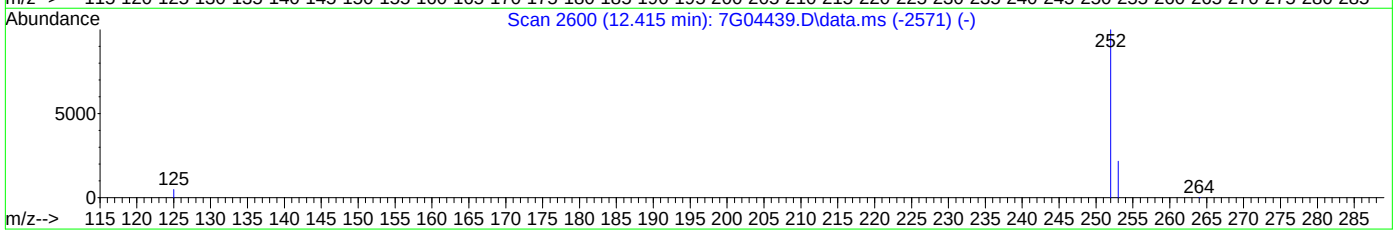
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11155.d
Acq On : 11 Aug 2020 6:30 pm
Operator : FOUADS
Sample : fa77576-1 e Inst : MSBNA8
Misc : op81483,S7G483,15.0,,,1,1,soil
ALS Vial : 27 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:27:23 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11155.d\data.ms

(25) Benzo[a]pyrene (P)

11.472min (+0.078) 35.92ppm

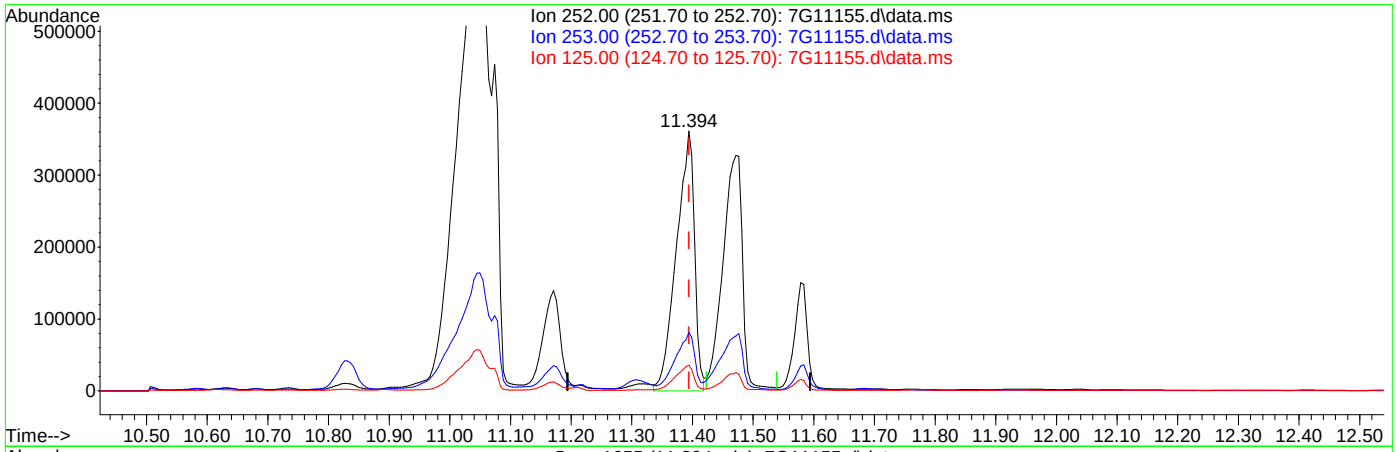
response 716537

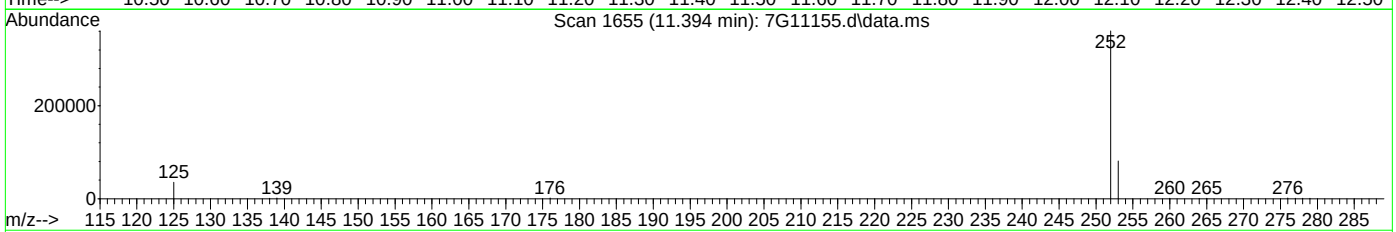
Ion	Exp%	Act%
252.00	100	100
253.00	21.60	21.48
125.00	4.80	7.34
0.00	0.00	0.00

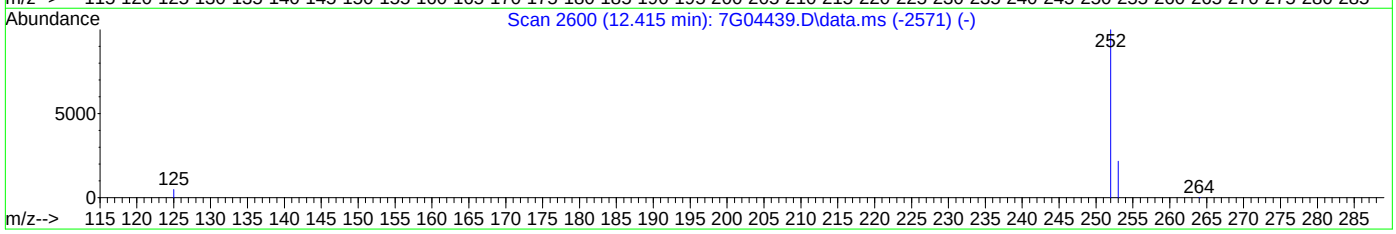
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11155.d
Acq On : 11 Aug 2020 6:30 pm
Operator : FOUADS
Sample : fa77576-1 e Inst : MSBNA8
Misc : op81483,S7G483,15.0,,,1,1,soil
ALS Vial : 27 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:27:23 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11155.d\data.ms

(25) Benzo[a]pyrene (P)

11.394min (-0.000) 37.40ppm m

response 746067

Ion	Exp%	Act%
252.00	100	100
253.00	21.60	22.51
125.00	4.80	9.83
0.00	0.00	0.00

Manual Integrations APPROVED
(compounds with "m" flag)
Naresh Jiawan
08/11/20 12:03

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11104.d
Acq On : 10 Aug 2020 4:10 pm
Operator : FOUADS
Sample : fa77576-2 e
Misc : op81483,S7G482,15.4,,,1,1,soil
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 11 03:12:44 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

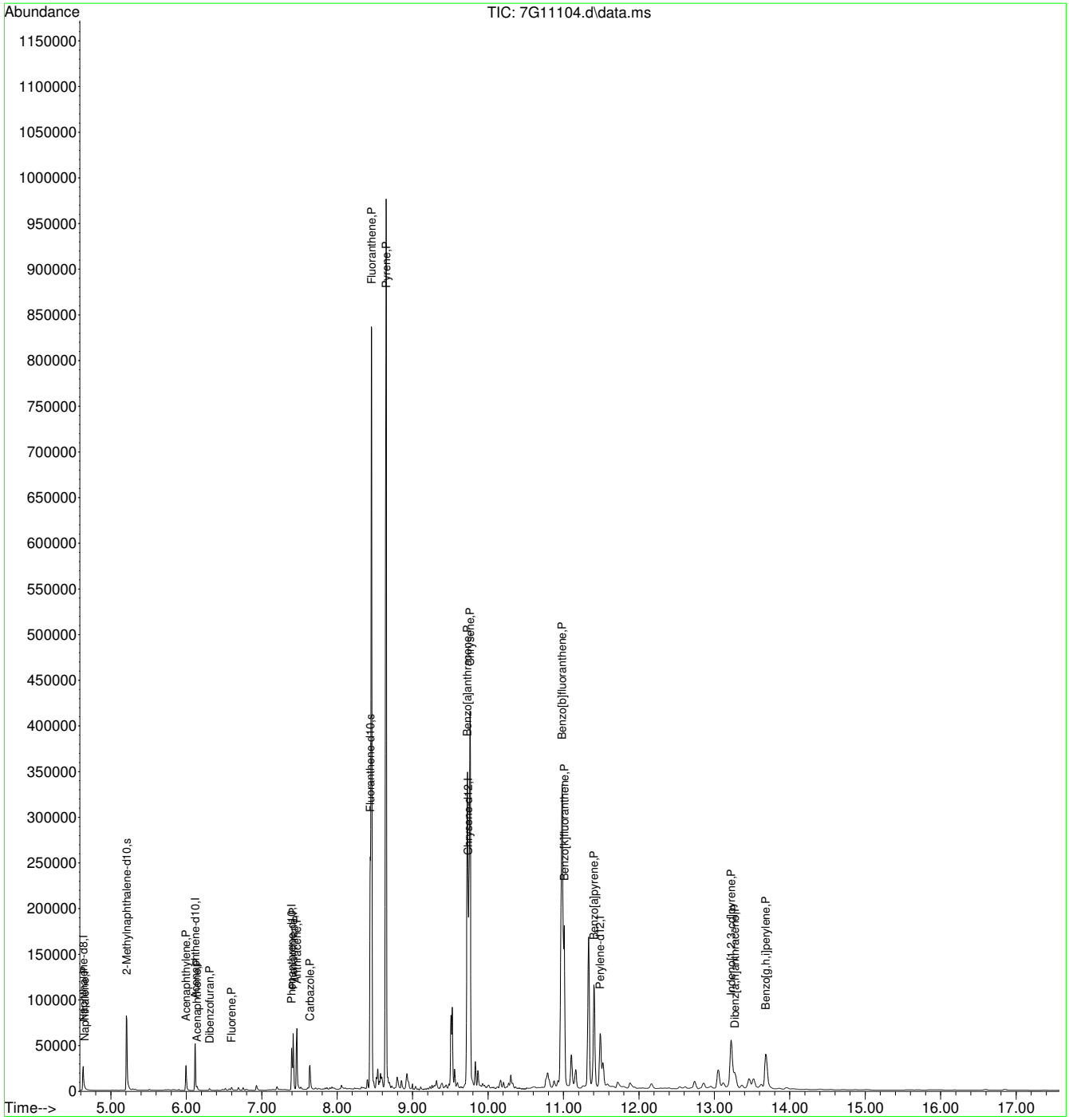
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.634	136	25518	4.00	ppm	0.00
6) Acenaphthene-d10	6.118	164	17323	4.00	ppm	0.00
11) Phenanthrene-d10	7.396	188	33094	4.00	ppm	0.00
18) Chrysene-d12	9.736	240	62623	4.00	ppm	0.01
22) Perylene-d12	11.486	264	62681	4.00	ppm	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.211	152	34918	9.16	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 91.60%			
17) Fluoranthene-d10	8.439	212	173261	10.02	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 100.20%			
Target Compounds						Qvalue
2) Naphthalene	4.652	128	1254	0.17	ppm	99
7) Acenaphthylene	5.997	152	19282	1.94	ppm	98
8) Acenaphthene	6.142	153	1199	0.19	ppm	99
9) Dibenzofuran	6.307	168	1473	0.32	ppm	95
10) Fluorene	6.597	166	1509	0.21	ppm	99
13) Phenanthrene	7.417	178	35730	3.27	ppm	97
14) Anthracene	7.466	178	48126	4.35	ppm	99
15) Carbazole	7.639	167	22199	1.12	ppm	95
16) Fluoranthene	8.457	202	543968	24.91	ppm	97
19) Pyrene	8.648	202	656970	25.60	ppm	95
20) Benzo[a]anthracene	9.724	228	221056	11.05	ppm	91
21) Chrysene	9.760	228	346328	15.98	ppm	98
23) Benzo[b]fluoranthene	10.981	252	488482	22.96	ppm	98
24) Benzo[k]fluoranthene	11.010	252	134980m	5.93	ppm	
25) Benzo[a]pyrene	11.403	252	130713	6.31	ppm	98
26) Indeno[1,2,3-cd]pyrene	13.223	276	93777	6.93	ppm	95
27) Dibenz[a,h]anthracene	13.272	278	21718	1.45	ppm	97
28) Benzo[g,h,i]perylene	13.679	276	67272	4.12	ppm	94

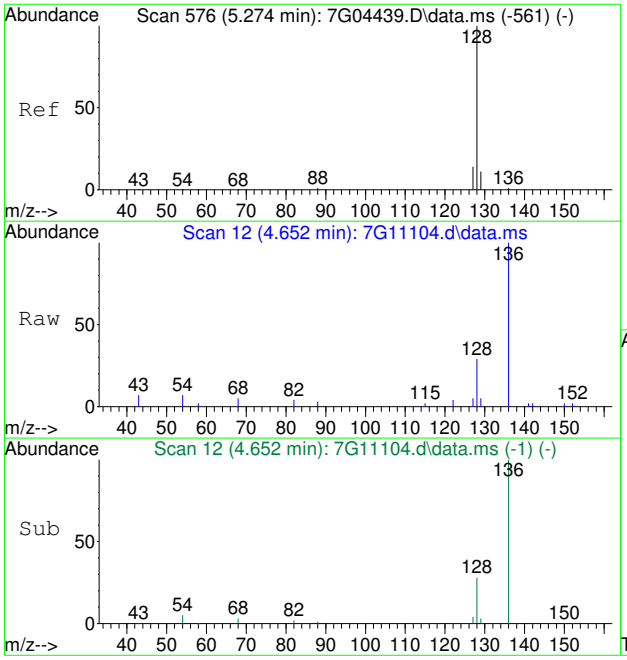
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11104.d
Acq On : 10 Aug 2020 4:10 pm
Operator : FOUADS
Sample : fa77576-2 e
Misc : op81483,S7G482,15.4,,,1,1,soil
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 11 03:12:44 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

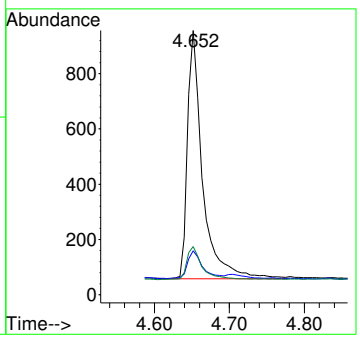


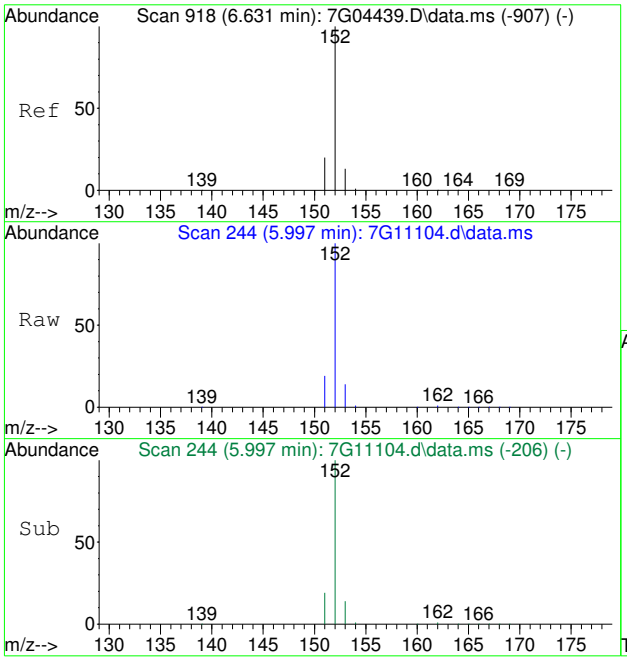


#2
Naphthalene
Concen: 0.17 ppm
RT: 4.652 min Scan# 12
Delta R.T. 0.006 min
Lab File: 7G11104.d
Acq: 10 Aug 2020 4:10 pm

Tgt Ion:128 Resp: 1254

Ion	Ratio	Lower	Upper
128	100		
129	11.1	0.0	40.9
127	13.2	0.0	43.5

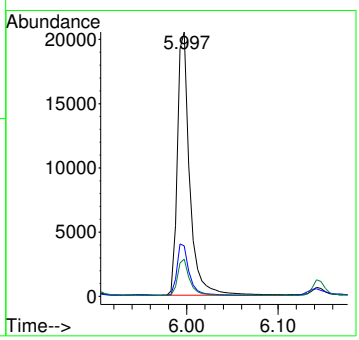


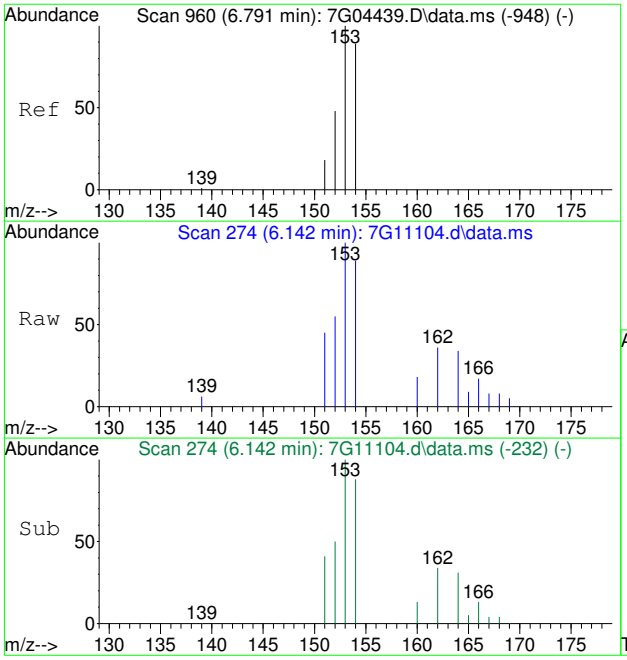


#7
Acenaphthylene
Concen: 1.94 ppm
RT: 5.997 min Scan# 244
Delta R.T. 0.005 min
Lab File: 7G11104.d
Acq: 10 Aug 2020 4:10 pm

Tgt Ion:152 Resp: 19282

Ion	Ratio	Lower	Upper
152	100		
151	18.8	0.0	49.8
153	13.8	0.0	42.8

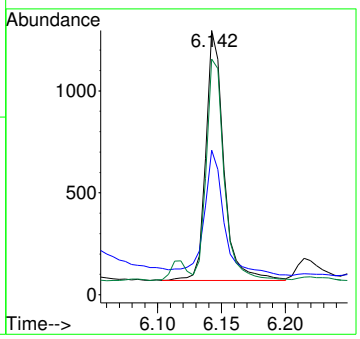


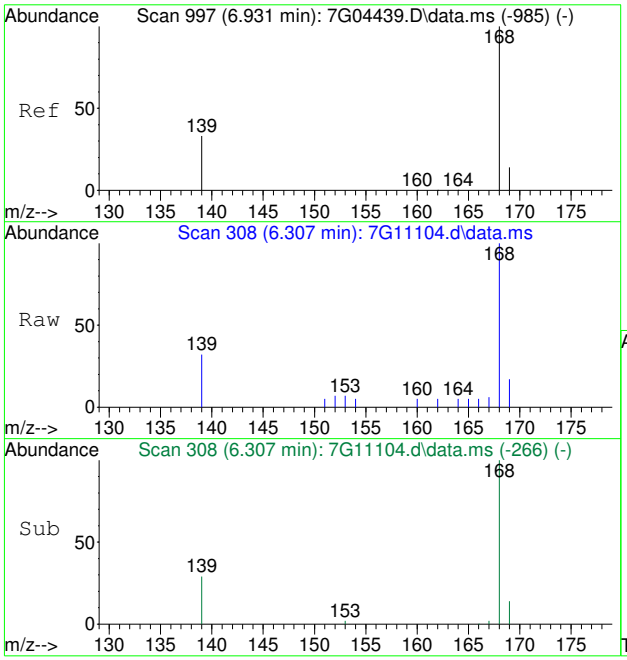


#8
Acenaphthene
Concen: 0.19 ppm
RT: 6.142 min Scan# 274
Delta R.T. 0.005 min
Lab File: 7G11104.d
Acq: 10 Aug 2020 4:10 pm

Tgt Ion:153 Resp: 1199

Ion	Ratio	Lower	Upper
153	100		
152	48.8	18.3	78.3
154	88.4	59.3	119.3

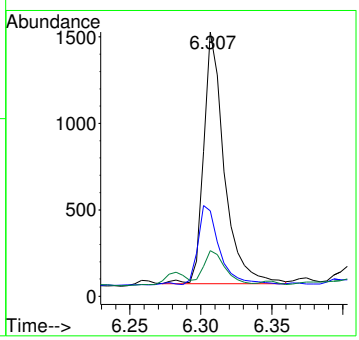


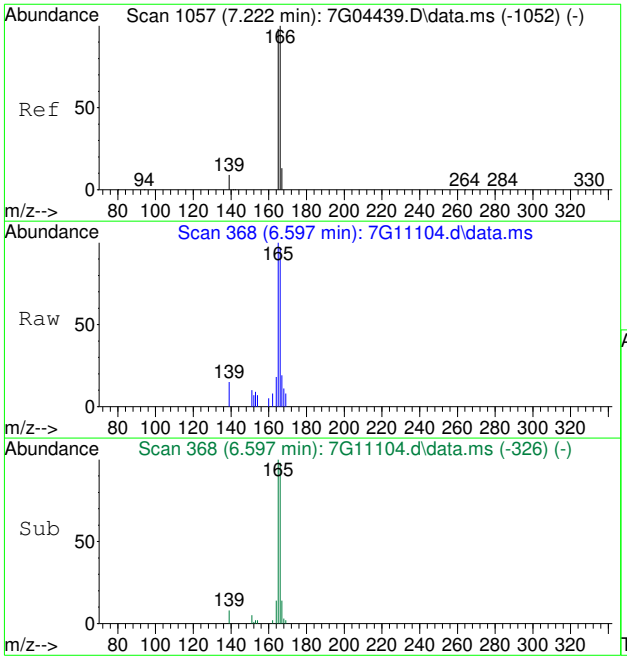


#9
Dibenzofuran
Concen: 0.32 ppm
RT: 6.307 min Scan# 308
Delta R.T. 0.005 min
Lab File: 7G11104.d
Acq: 10 Aug 2020 4:10 pm

Tgt Ion:168 Resp: 1473

Ion	Ratio	Lower	Upper
168	100		
139	29.0	12.6	52.6
169	12.8	0.0	33.8

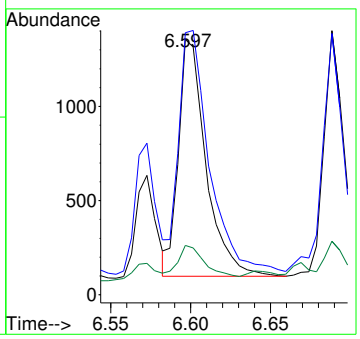


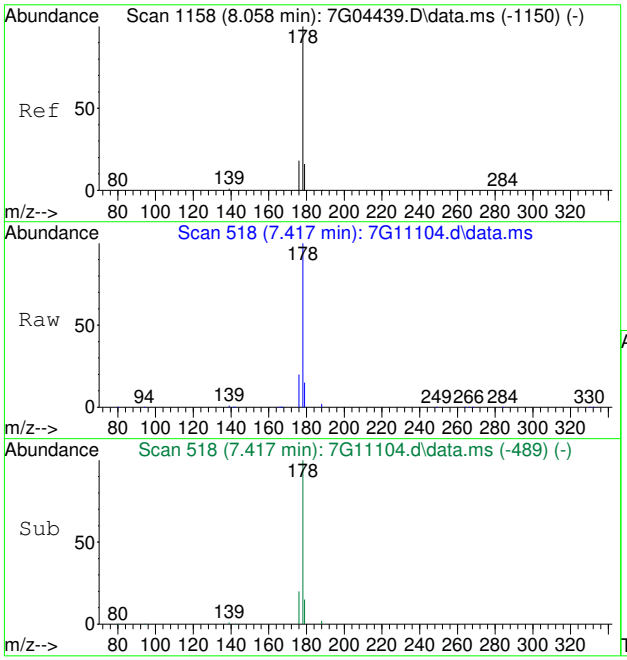


#10
Fluorene
Concen: 0.21 ppm
RT: 6.597 min Scan# 368
Delta R.T. 0.005 min
Lab File: 7G11104.d
Acq: 10 Aug 2020 4:10 pm

Tgt Ion:166 Resp: 1509

Ion	Ratio	Lower	Upper
166	100		
165	99.5	68.2	128.2
167	12.7	0.0	42.9

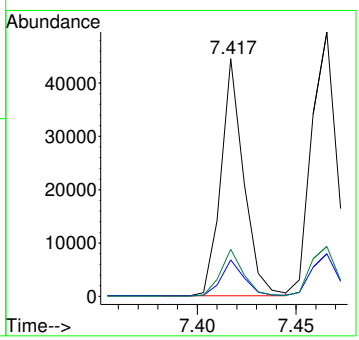


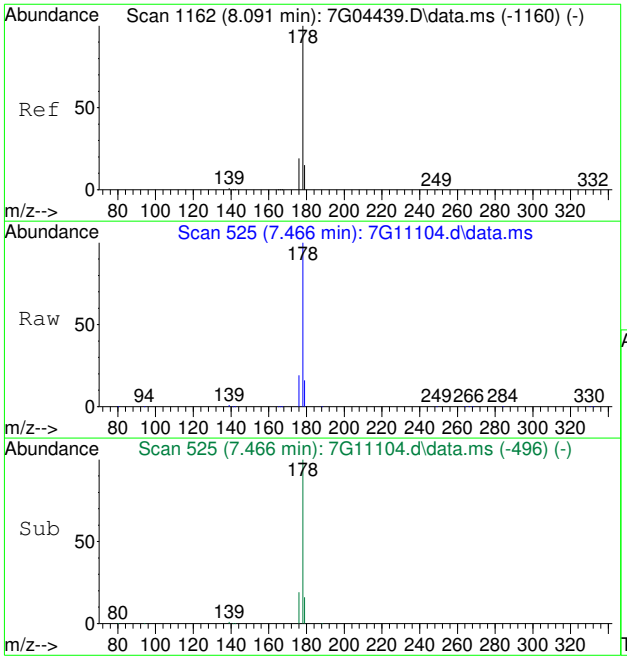


#13
Phenanthrene
Concen: 3.27 ppm
RT: 7.417 min Scan# 518
Delta R.T. -0.000 min
Lab File: 7G11104.d
Acq: 10 Aug 2020 4:10 pm

Tgt Ion:178 Resp: 35730

Ion	Ratio	Lower	Upper
178	100		
179	15.1	0.0	45.7
176	19.7	0.0	48.0

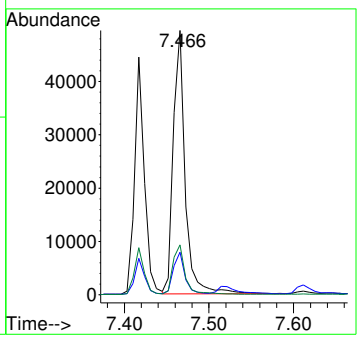


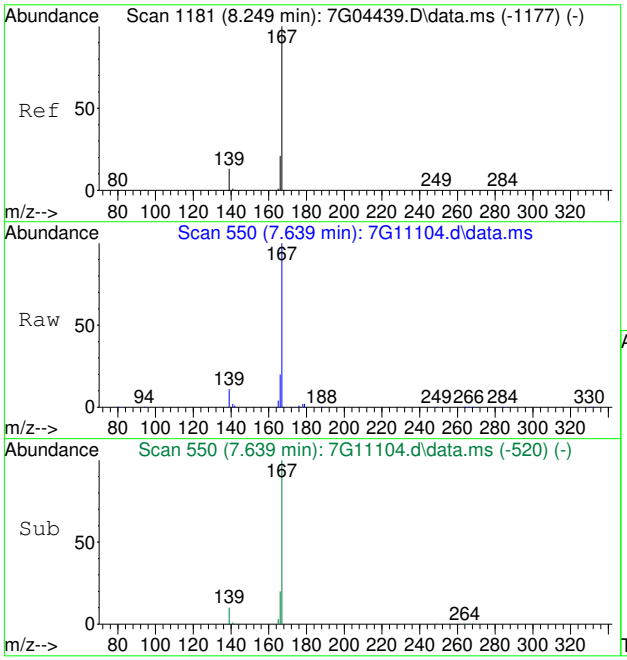


#14
Anthracene
Concen: 4.35 ppm
RT: 7.466 min Scan# 525
Delta R.T. -0.000 min
Lab File: 7G11104.d
Acq: 10 Aug 2020 4:10 pm

Tgt Ion:178 Resp: 48126

Ion	Ratio	Lower	Upper
178	100		
179	15.8	0.0	45.1
176	18.7	0.0	48.8

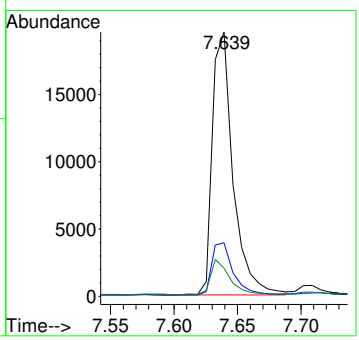


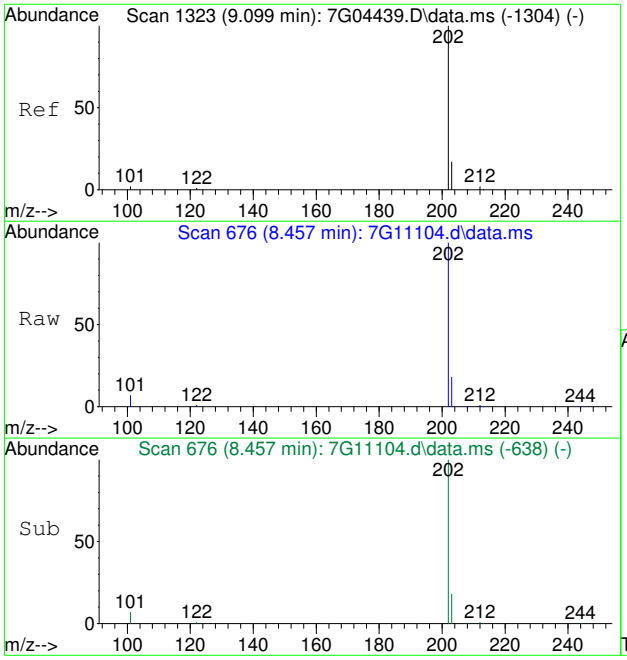


#15
Carbazole
Concen: 1.12 ppm
RT: 7.639 min Scan# 550
Delta R.T. 0.007 min
Lab File: 7G11104.d
Acq: 10 Aug 2020 4:10 pm

Tgt Ion:167 Resp: 22199

Ion	Ratio	Lower	Upper
167	100		
166	19.8	1.2	41.2
139	9.8	0.0	32.8

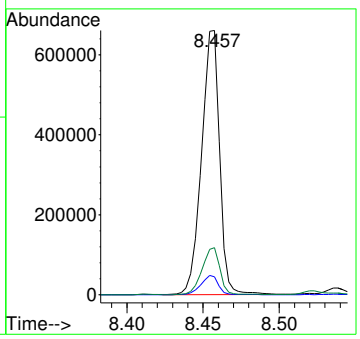


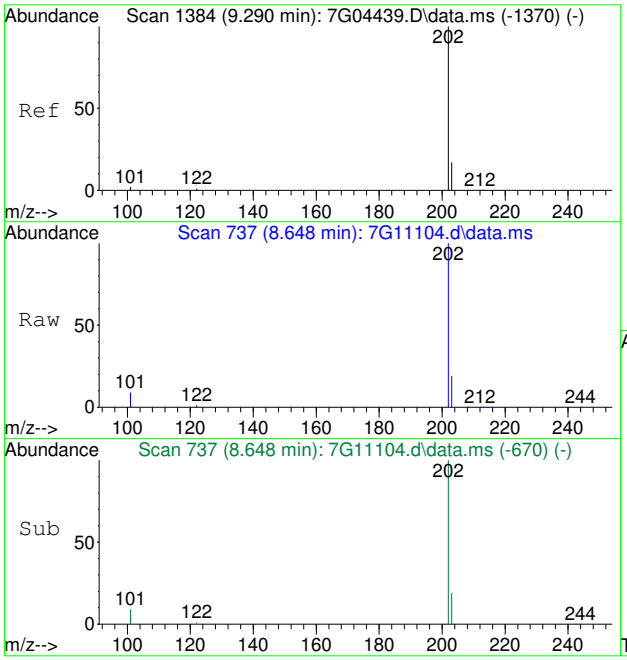


#16
Fluoranthene
Concen: 24.91 ppm
RT: 8.457 min Scan# 676
Delta R.T. 0.009 min
Lab File: 7G11104.d
Acq: 10 Aug 2020 4:10 pm

Tgt Ion:202 Resp: 543968

Ion	Ratio	Lower	Upper
202	100		
101	6.7	0.0	32.2
203	17.8	0.0	47.2

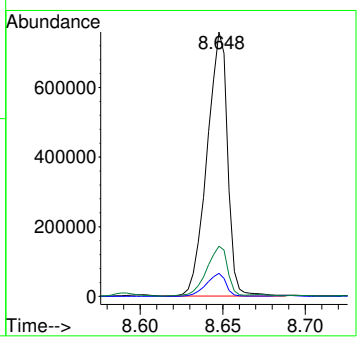


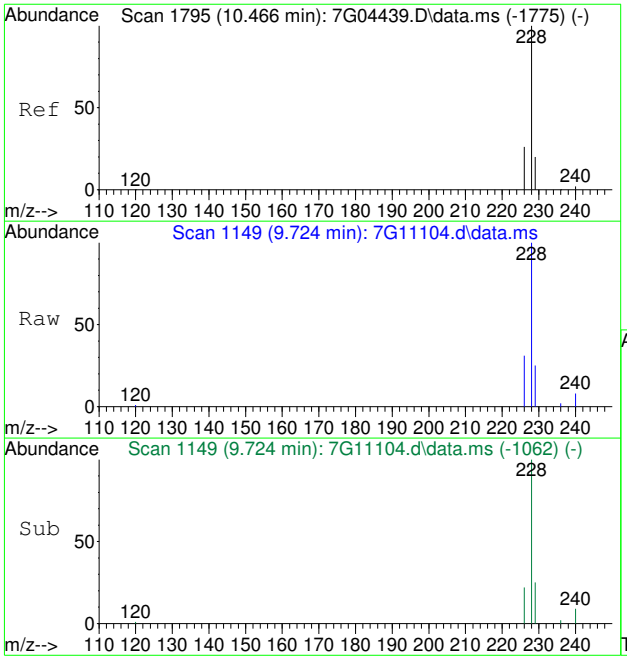


#19
Pyrene
Concen: 25.60 ppm
RT: 8.648 min Scan# 737
Delta R.T. 0.009 min
Lab File: 7G11104.d
Acq: 10 Aug 2020 4:10 pm

Tgt Ion:202 Resp: 656970

Ion	Ratio	Lower	Upper
202	100		
101	8.6	0.0	32.4
203	18.8	0.0	47.4

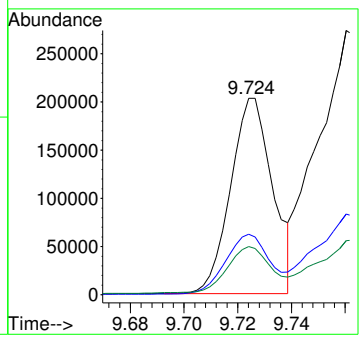


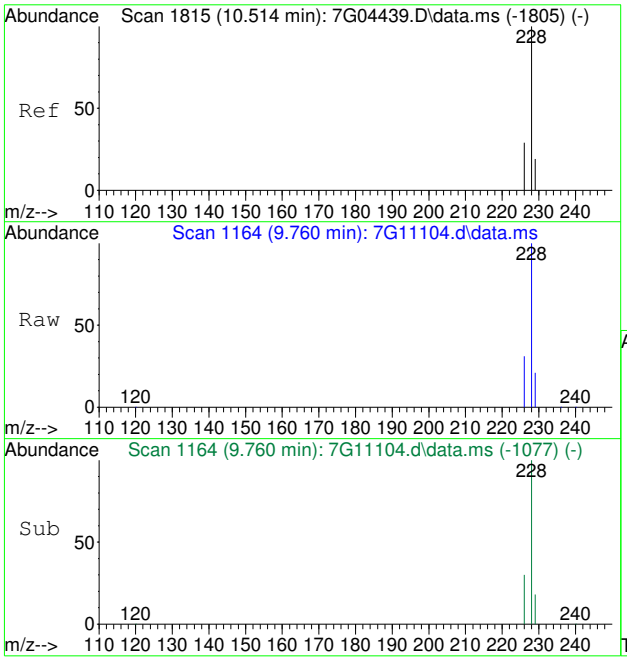


#20
Benzo[a]anthracene
Concen: 11.05 ppm
RT: 9.724 min Scan# 1149
Delta R.T. 0.009 min
Lab File: 7G11104.d
Acq: 10 Aug 2020 4:10 pm

Tgt Ion:228 Resp: 221056

Ion	Ratio	Lower	Upper
228	100		
226	30.5	0.0	56.1
229	24.1	0.0	49.5

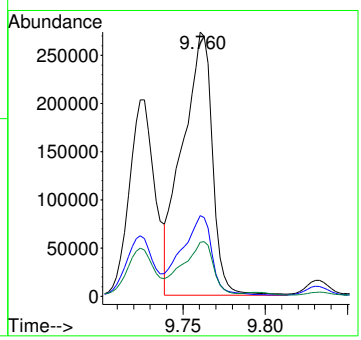


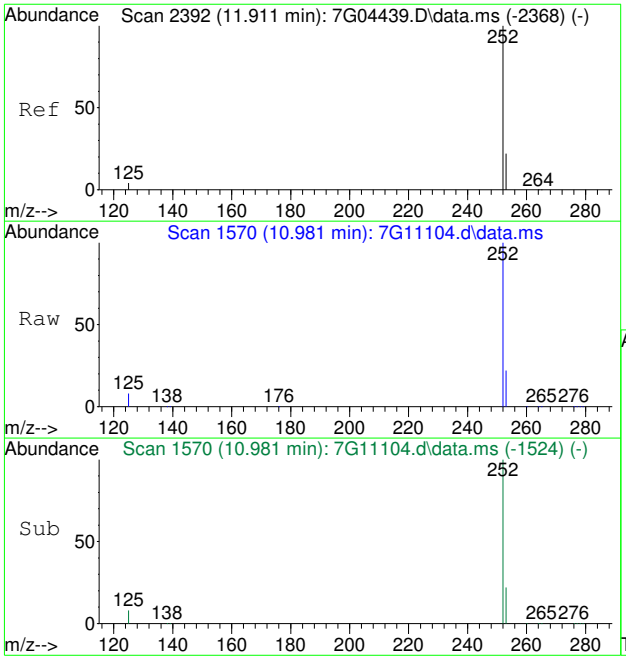


#21
Chrysene
Concen: 15.98 ppm
RT: 9.760 min Scan# 1164
Delta R.T. 0.009 min
Lab File: 7G11104.d
Acq: 10 Aug 2020 4:10 pm

Tgt Ion:228 Resp: 346328

Ion	Ratio	Lower	Upper
228	100		
226	30.2	0.0	58.9
229	19.7	0.0	49.5

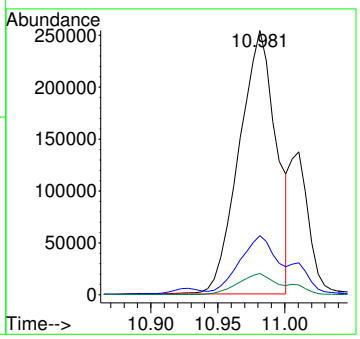


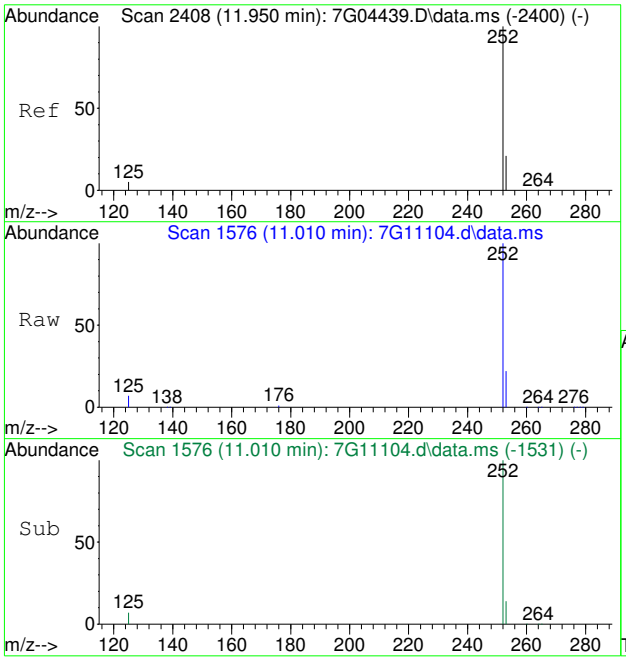


#23
Benzo[b]fluoranthene
Concen: 22.96 ppm
RT: 10.981 min Scan# 1570
Delta R.T. 0.024 min
Lab File: 7G11104.d
Acq: 10 Aug 2020 4:10 pm

Tgt Ion:252 Resp: 488482

Ion	Ratio	Lower	Upper
252	100		
253	21.8	0.0	51.7
125	8.2	0.0	34.5

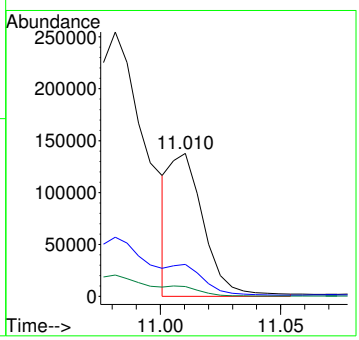


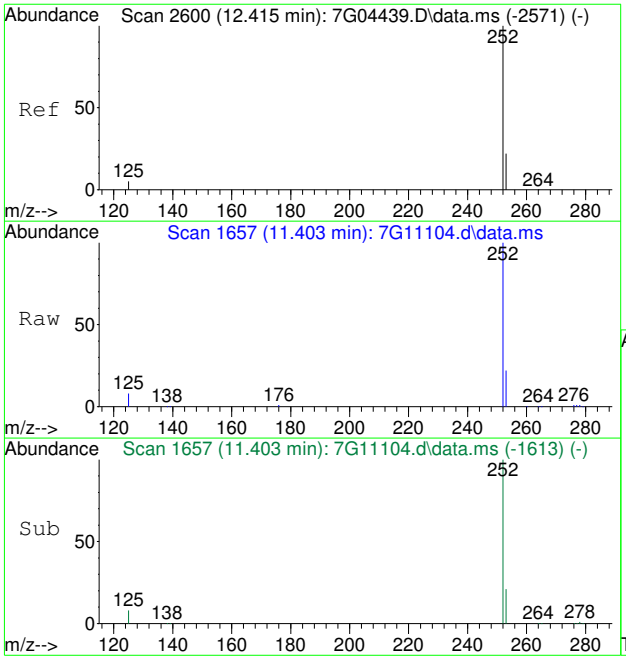


#24
Benzo[k]fluoranthene
Concen: 5.93 ppm m
RT: 11.010 min Scan# 1576
Delta R.T. 0.019 min
Lab File: 7G11104.d
Acq: 10 Aug 2020 4:10 pm

Tgt Ion:252 Resp: 134980

Ion	Ratio	Lower	Upper
252	100		
253	22.4	0.0	51.5
125	6.9	0.0	34.8

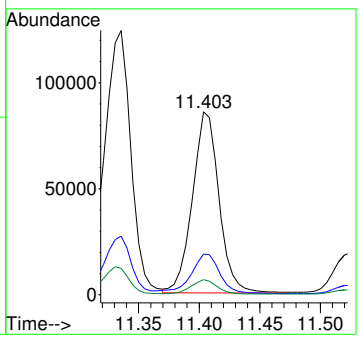


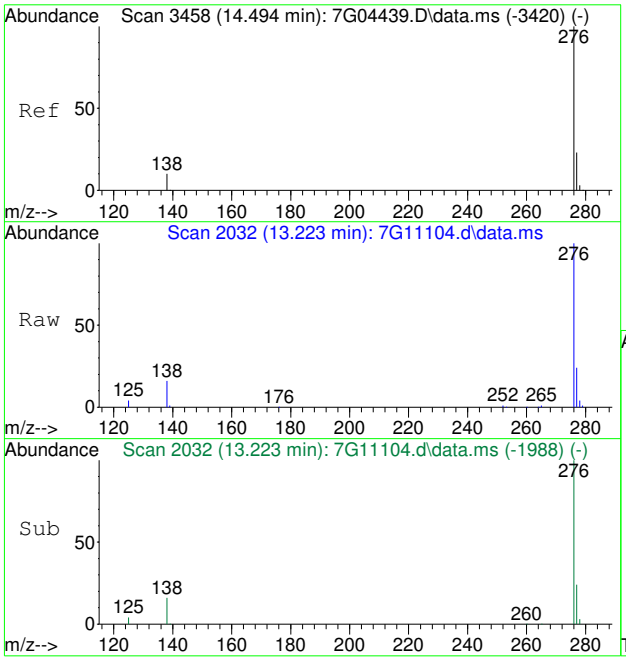


#25
Benzo[a]pyrene
Concen: 6.31 ppm
RT: 11.403 min Scan# 1657
Delta R.T. 0.014 min
Lab File: 7G11104.d
Acq: 10 Aug 2020 4:10 pm

Tgt Ion:252 Resp: 130713

Ion	Ratio	Lower	Upper
252	100		
253	21.2	0.0	51.6
125	7.9	0.0	34.8

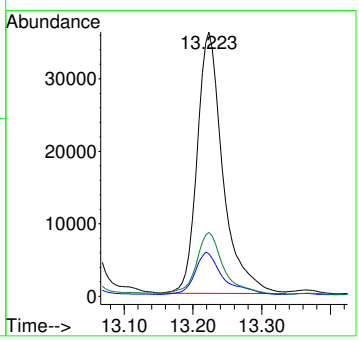


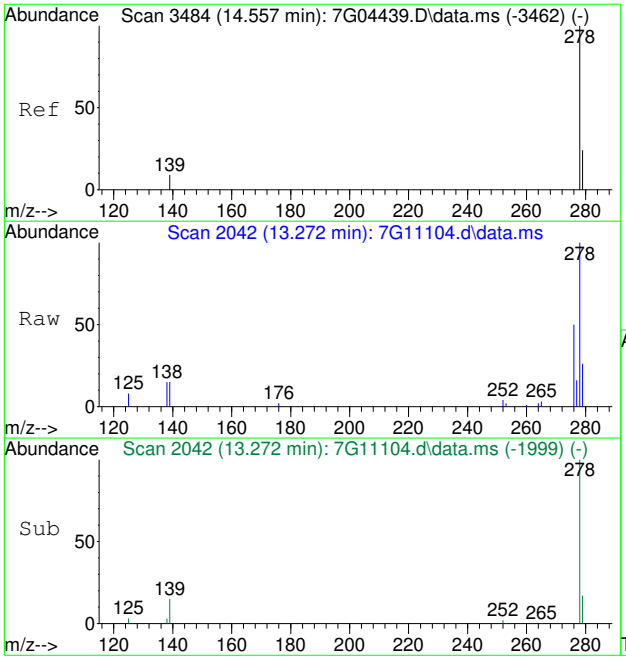


#26
Indeno[1,2,3-cd]pyrene
Concen: 6.93 ppm
RT: 13.223 min Scan# 2032
Delta R.T. 0.014 min
Lab File: 7G11104.d
Acq: 10 Aug 2020 4:10 pm

Tgt Ion:276 Resp: 93777

Ion	Ratio	Lower	Upper
276	100		
138	15.6	0.0	39.6
277	23.5	0.0	53.1

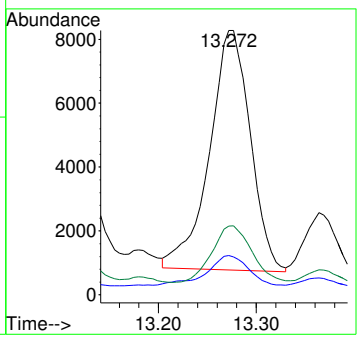


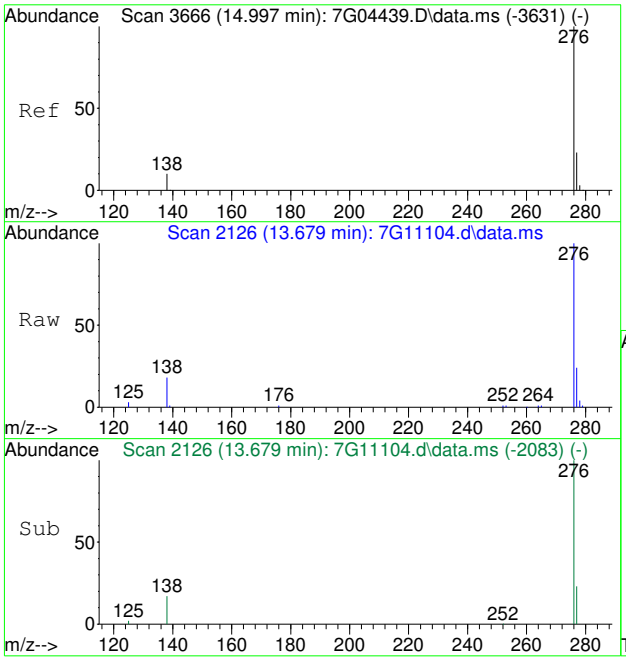


#27
Dibenz[a,h]anthracene
Concen: 1.45 ppm
RT: 13.272 min Scan# 2042
Delta R.T. 0.009 min
Lab File: 7G11104.d
Acq: 10 Aug 2020 4:10 pm

Tgt Ion:278 Resp: 21718

Ion	Ratio	Lower	Upper
278	100		
139	12.5	0.0	38.8
279	23.6	0.0	53.6

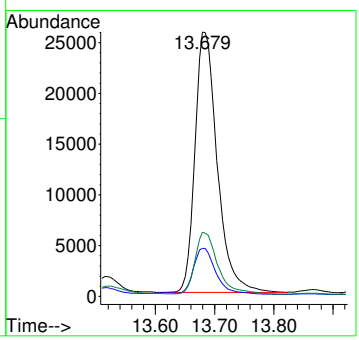




#28
Benzo[g,h,i]perylene
Concen: 4.12 ppm
RT: 13.679 min Scan# 2126
Delta R.T. 0.009 min
Lab File: 7G11104.d
Acq: 10 Aug 2020 4:10 pm

Tgt Ion:276 Resp: 67272

Ion	Ratio	Lower	Upper
276	100		
138	17.3	0.0	40.5
277	23.6	0.0	53.2



Manual Integration Approval Summary

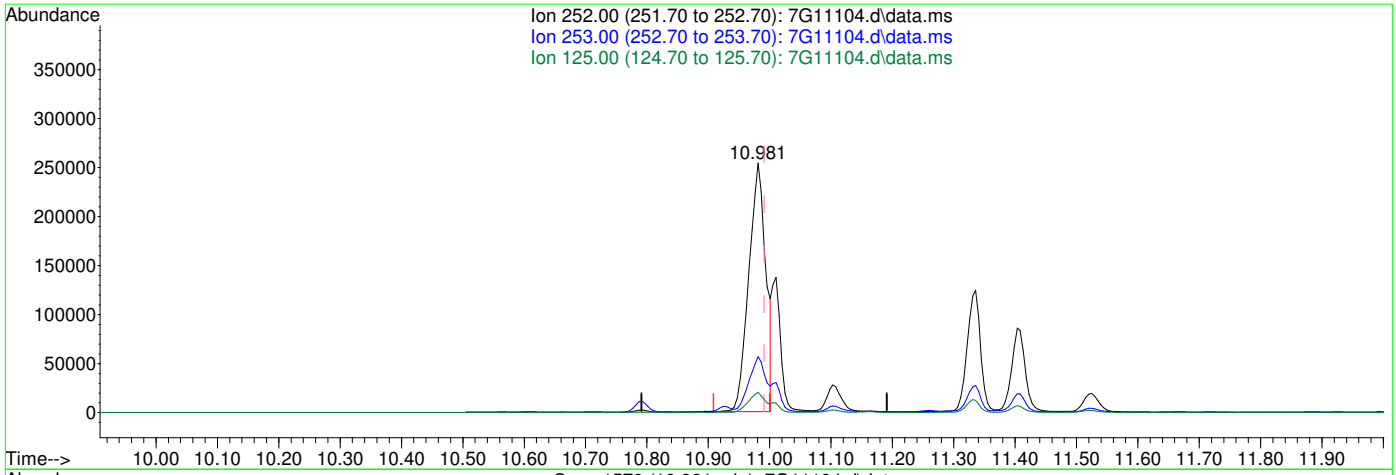
Sample Number: FA77576-2
Lab FileID: 7G11104.D
Injection Time: 08/10/20 16:10
Method: SW846 8270E BY SIM
Analyst approved: 08/11/20 10:52 Fouad Sekkar
Supervisor approved: 08/11/20 12:03 Naresh Jiawan

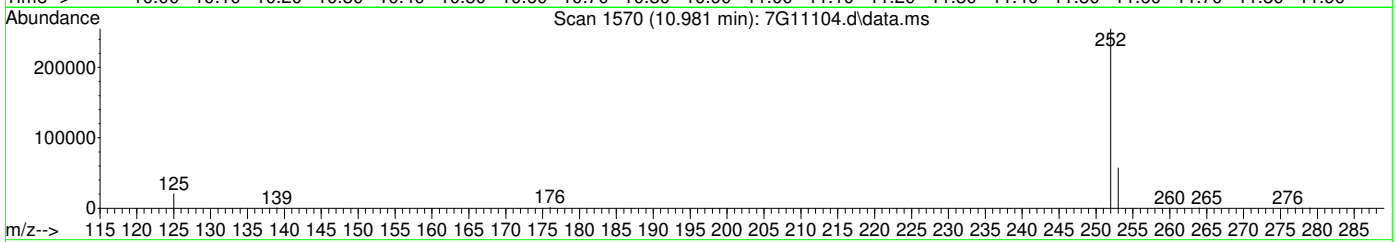
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(k)fluoranthene	207-08-9		11.01	Missed peak

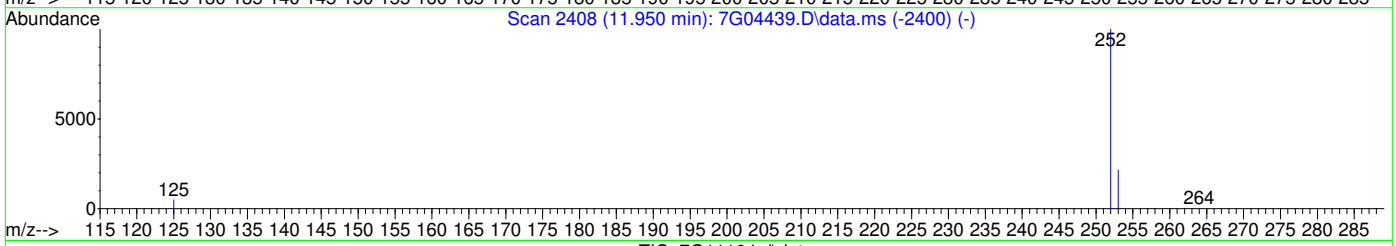
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11104.d
Acq On : 10 Aug 2020 4:10 pm
Operator : FOUADS
Sample : fa77576-2 e
Misc : op81483,S7G482,15.4,,,1,1,soil
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 11 02:37:05 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11104.d\data.ms

(24) Benzo[k]fluoranthene (P)

10.981min (-0.010) 20.55ppm

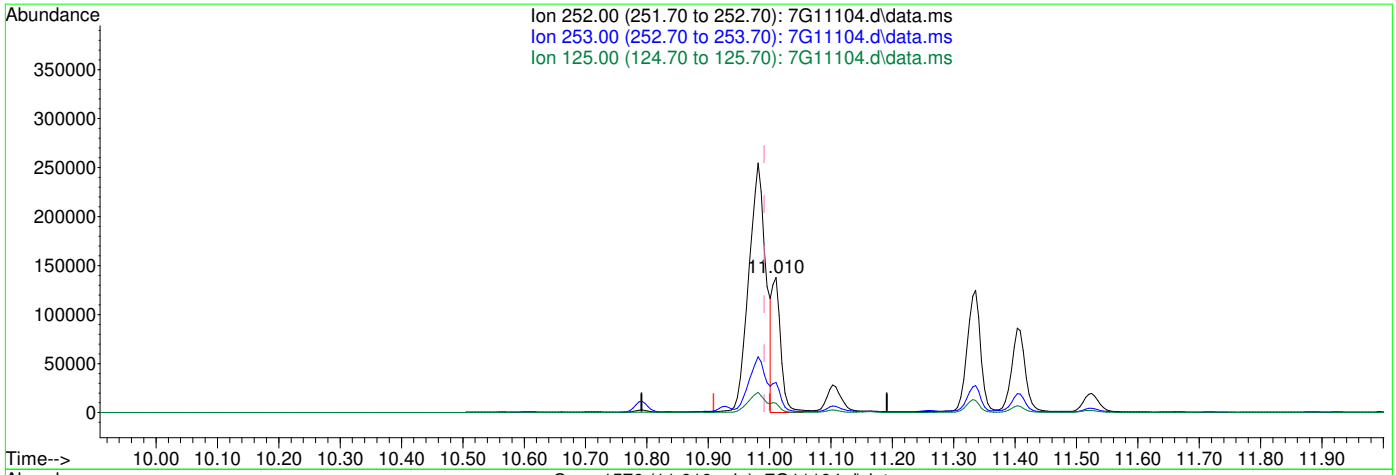
response 488482

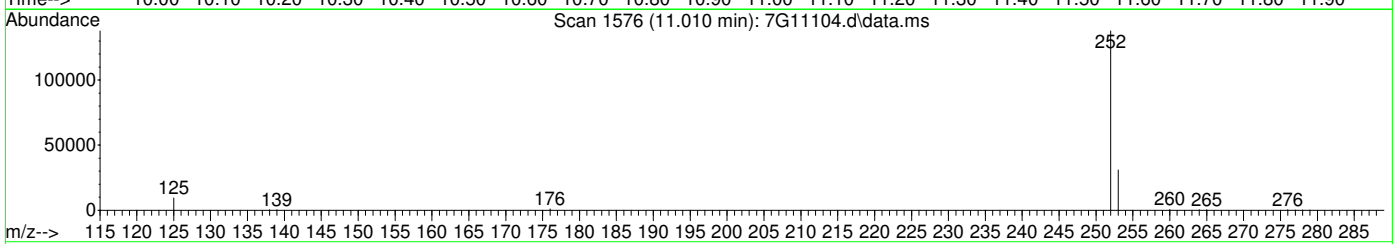
Ion	Exp%	Act%
252.00	100	100
253.00	21.50	21.77
125.00	4.80	8.19
0.00	0.00	0.00

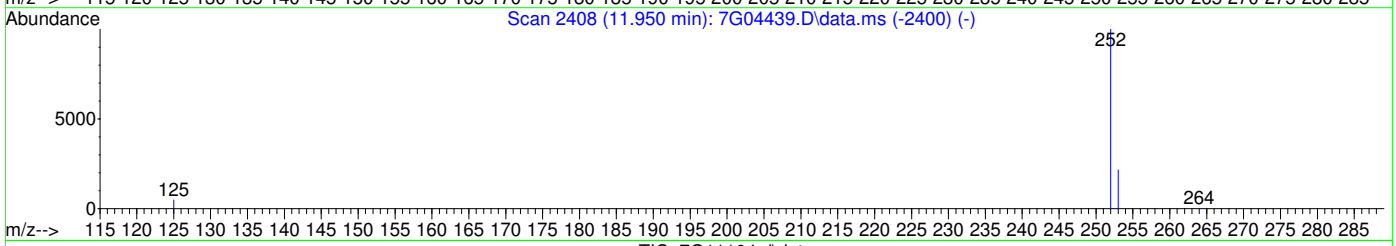
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11104.d
Acq On : 10 Aug 2020 4:10 pm
Operator : FOUADS
Sample : fa77576-2 e
Misc : op81483,S7G482,15.4,,,1,1,soil
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 11 02:37:05 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11104.d\data.ms

(24) Benzo[k]fluoranthene (P)

11.010min (+0.019) 5.93ppm m

response 134980

Ion	Exp%	Act%
252.00	100	100
253.00	21.50	22.36
125.00	4.80	6.86
0.00	0.00	0.00

Manual Integrations APPROVED
(compounds with "m" flag)
Naresh Jiawan
08/11/20 12:03

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11105.d
Acq On : 10 Aug 2020 4:34 pm
Operator : FOUADS
Sample : fa77576-3 e
Misc : op81483,S7G482,15.2,,,1,1,soil
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 11 03:13:45 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

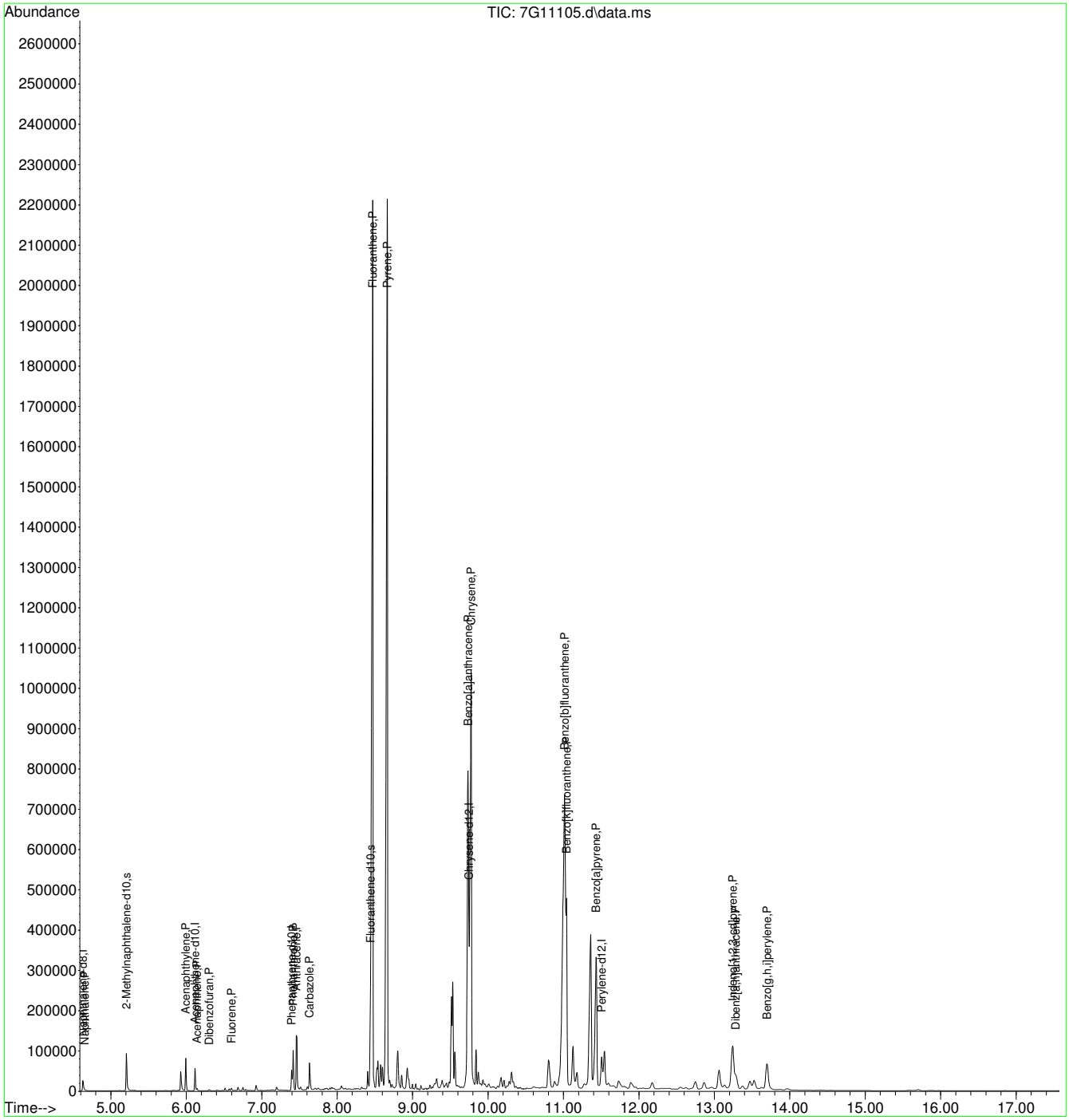
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.628	136	25113	4.00	ppm	0.00
6) Acenaphthene-d10	6.114	164	17665	4.00	ppm	0.00
11) Phenanthrene-d10	7.396	188	34389	4.00	ppm	0.00
18) Chrysene-d12	9.746	240	70970	4.00	ppm	0.02
22) Perylene-d12	11.506	264	67856	4.00	ppm	0.03
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.205	152	34734	9.25	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 92.50%			
17) Fluoranthene-d10	8.442	212	188597	10.48	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 104.80%			
Target Compounds						Qvalue
2) Naphthalene	4.652	128	1304	0.18	ppm	98
7) Acenaphthylene	5.993	152	45394	4.45	ppm	99
8) Acenaphthene	6.143	153	1783	0.27	ppm	99
9) Dibenzofuran	6.302	168	1768	0.38	ppm	98
10) Fluorene	6.597	166	2904	0.40	ppm	91
13) Phenanthrene	7.417	178	54798	4.81	ppm	97
14) Anthracene	7.459	178	99840	8.57	ppm	98
15) Carbazole	7.633	167	44699	2.17	ppm	99
16) Fluoranthene	8.470	202	1807058	71.10	ppm	97
19) Pyrene	8.664	202	2111746	68.48	ppm	94
20) Benzo[a]anthracene	9.734	228	614164	25.95	ppm	79
21) Chrysene	9.775	228	939688	38.38	ppm	97
23) Benzo[b]fluoranthene	11.016	252	1756613	76.27	ppm	97
24) Benzo[k]fluoranthene	11.040	252	325938m	12.95	ppm	
25) Benzo[a]pyrene	11.433	252	410602	18.30	ppm	98
26) Indeno[1,2,3-cd]pyrene	13.243	276	188424	12.86	ppm	94
27) Dibenz[a,h]anthracene	13.282	278	43725	2.69	ppm	97
28) Benzo[g,h,i]perylene	13.699	276	111735	6.33	ppm	94

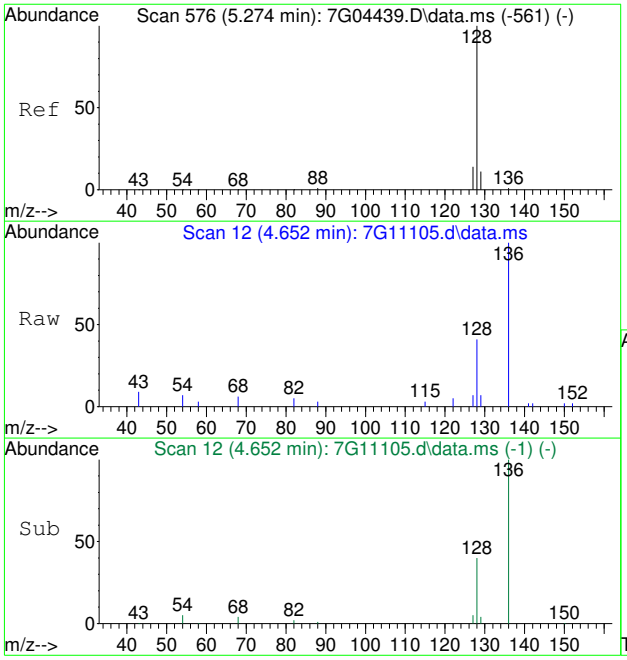
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11105.d
Acq On : 10 Aug 2020 4:34 pm
Operator : FOUADS
Sample : fa77576-3 e
Misc : op81483,S7G482,15.2,,,1,1,soil
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 11 03:13:45 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

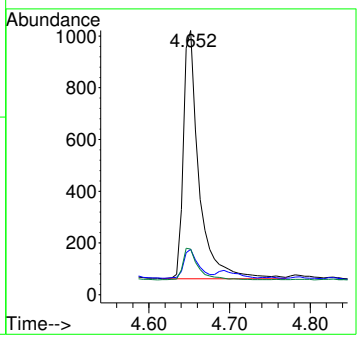


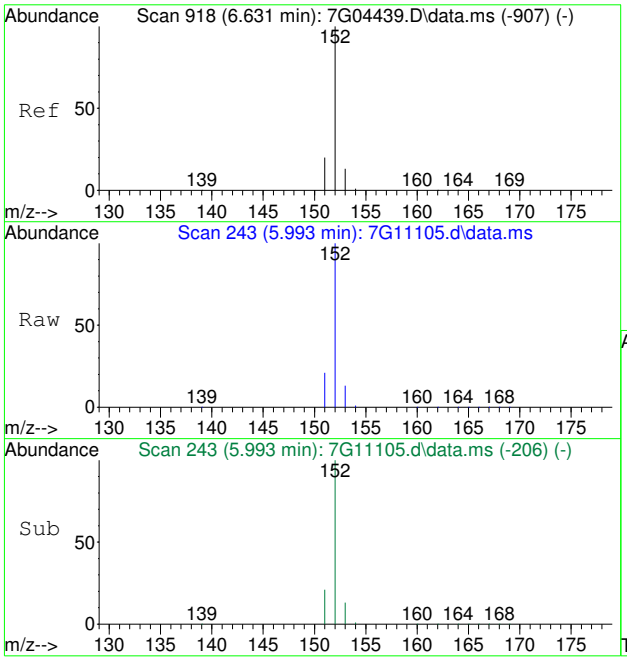


#2
Naphthalene
Concen: 0.18 ppm
RT: 4.652 min Scan# 12
Delta R.T. 0.006 min
Lab File: 7G11105.d
Acq: 10 Aug 2020 4:34 pm

Tgt Ion:128 Resp: 1304

Ion	Ratio	Lower	Upper
128	100		
129	11.6	0.0	40.9
127	12.3	0.0	43.5

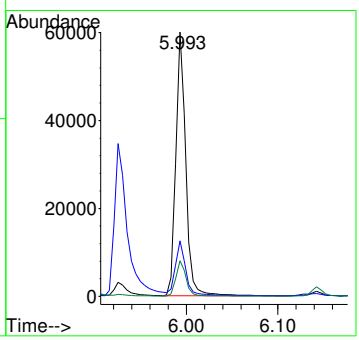


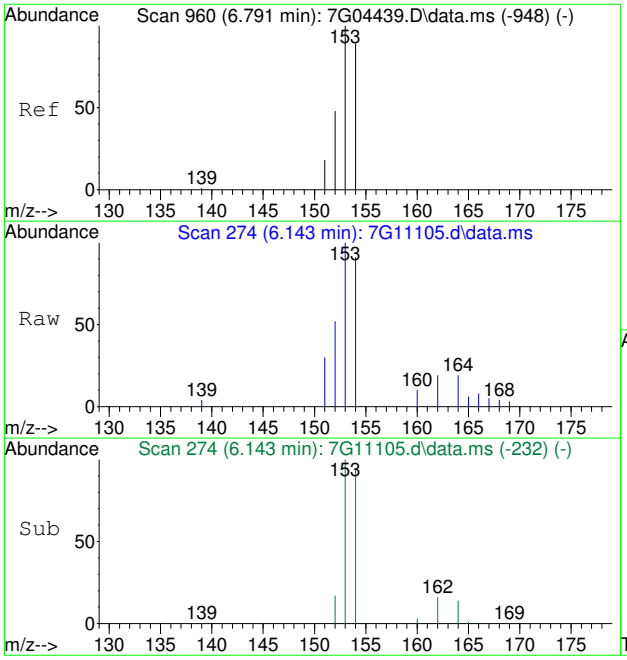


#7
Acenaphthylene
Concen: 4.45 ppm
RT: 5.993 min Scan# 243
Delta R.T. 0.000 min
Lab File: 7G11105.d
Acq: 10 Aug 2020 4:34 pm

Tgt Ion:152 Resp: 45394

Ion	Ratio	Lower	Upper
152	100		
151	20.1	0.0	49.8
153	13.3	0.0	42.8

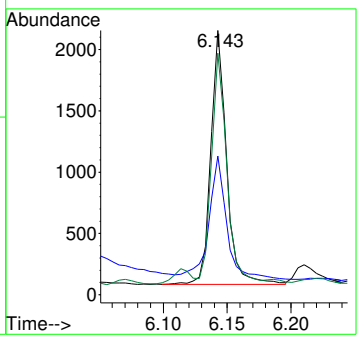


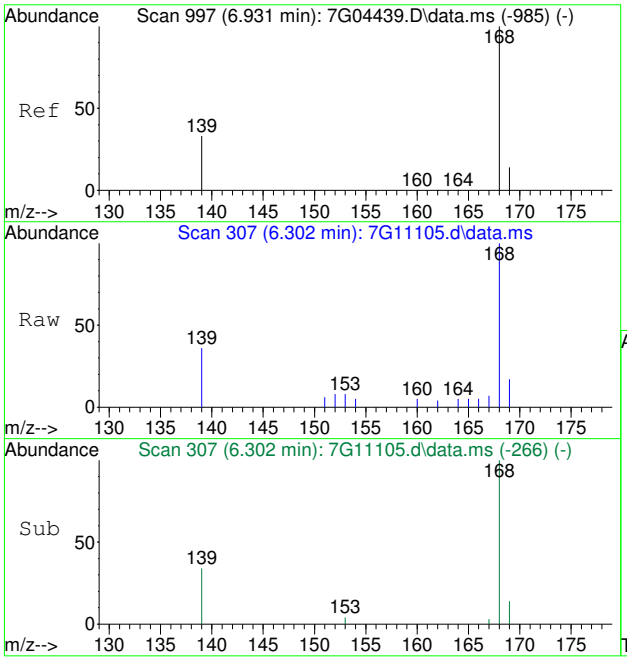


#8
Acenaphthene
Concen: 0.27 ppm
RT: 6.143 min Scan# 274
Delta R.T. 0.005 min
Lab File: 7G11105.d
Acq: 10 Aug 2020 4:34 pm

Tgt Ion:153 Resp: 1783

Ion	Ratio	Lower	Upper
153	100		
152	47.4	18.3	78.3
154	90.5	59.3	119.3

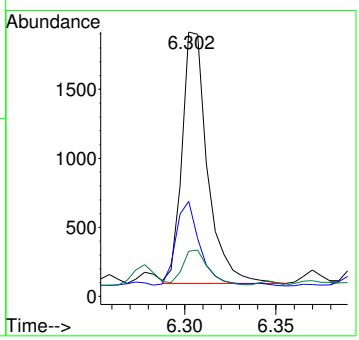


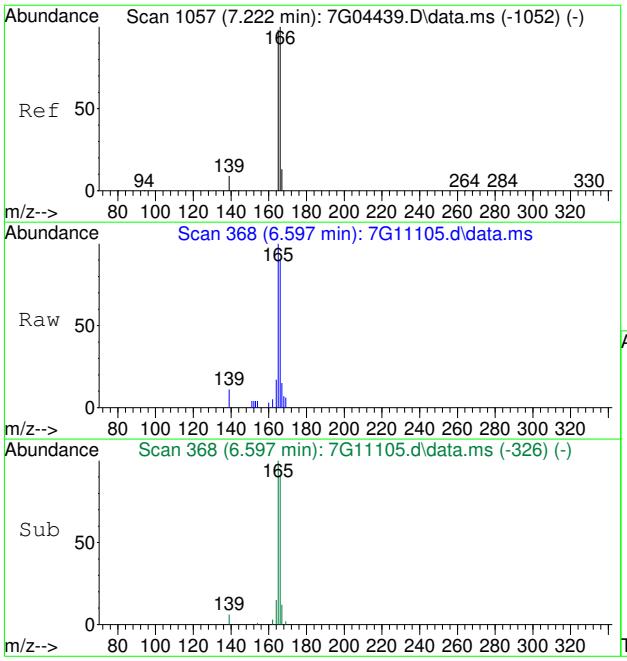


#9
Dibenzofuran
Concen: 0.38 ppm
RT: 6.302 min Scan# 307
Delta R.T. 0.000 min
Lab File: 7G11105.d
Acq: 10 Aug 2020 4:34 pm

Tgt Ion:168 Resp: 1768

Ion	Ratio	Lower	Upper
168	100		
139	33.5	12.6	52.6
169	12.8	0.0	33.8

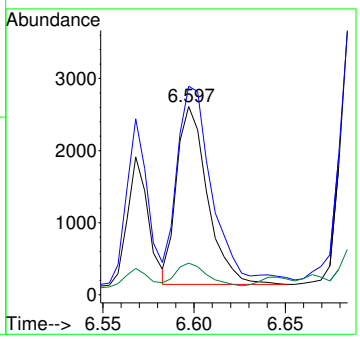


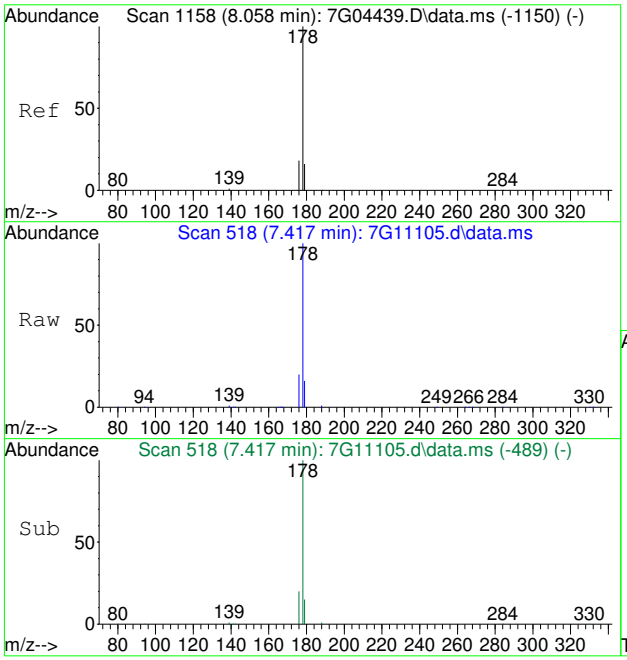


#10
Fluorene
Concen: 0.40 ppm
RT: 6.597 min Scan# 368
Delta R.T. 0.005 min
Lab File: 7G11105.d
Acq: 10 Aug 2020 4:34 pm

Tgt Ion:166 Resp: 2904

Ion	Ratio	Lower	Upper
166	100		
165	107.9	68.2	128.2
167	10.3	0.0	42.9

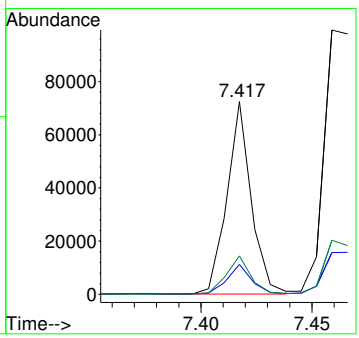


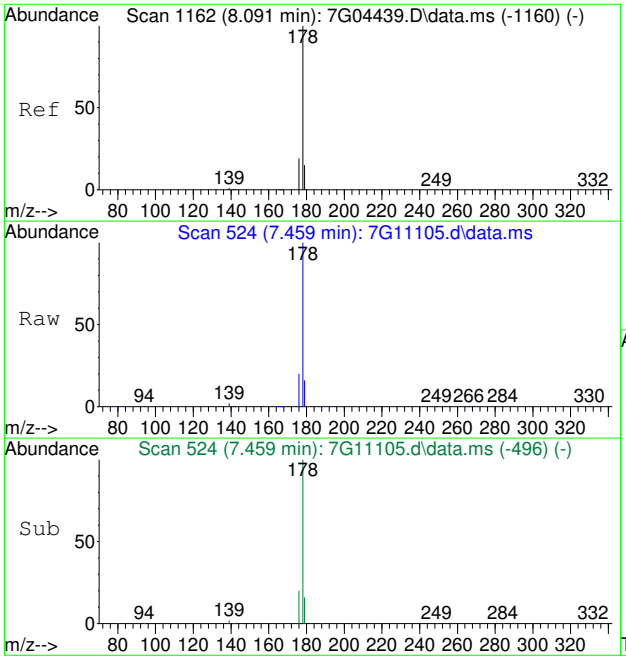


#13
Phenanthrene
Concen: 4.81 ppm
RT: 7.417 min Scan# 518
Delta R.T. 0.000 min
Lab File: 7G11105.d
Acq: 10 Aug 2020 4:34 pm

Tgt Ion:178 Resp: 54798

Ion	Ratio	Lower	Upper
178	100		
179	15.3	0.0	45.7
176	19.8	0.0	48.0

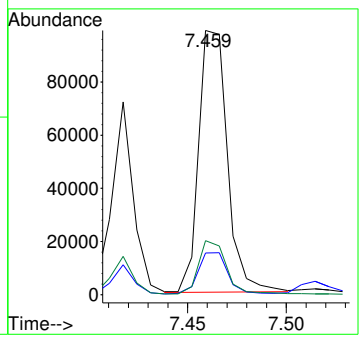


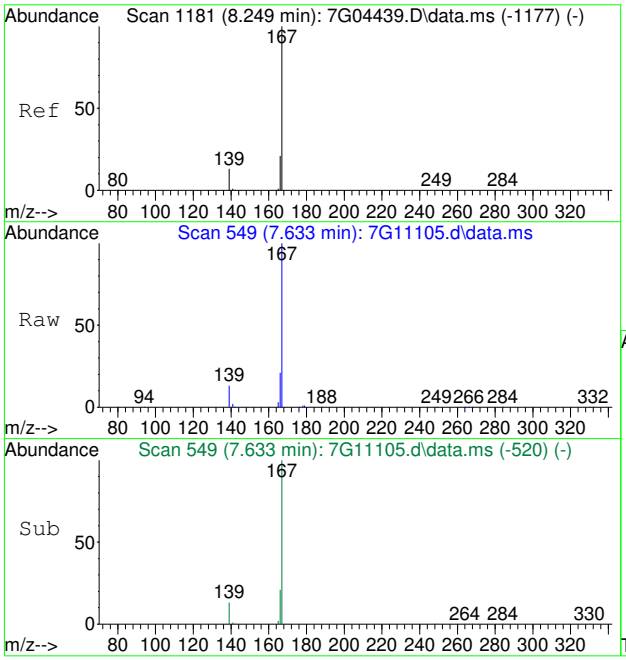


#14
Anthracene
Concen: 8.57 ppm
RT: 7.459 min Scan# 524
Delta R.T. -0.007 min
Lab File: 7G11105.d
Acq: 10 Aug 2020 4:34 pm

Tgt Ion:178 Resp: 99840

Ion	Ratio	Lower	Upper
178	100		
179	15.4	0.0	45.1
176	20.4	0.0	48.8

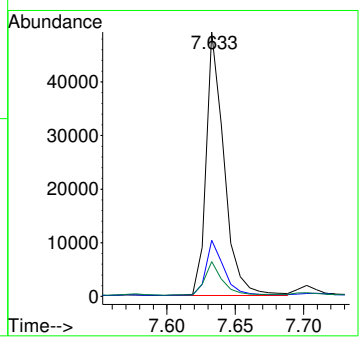


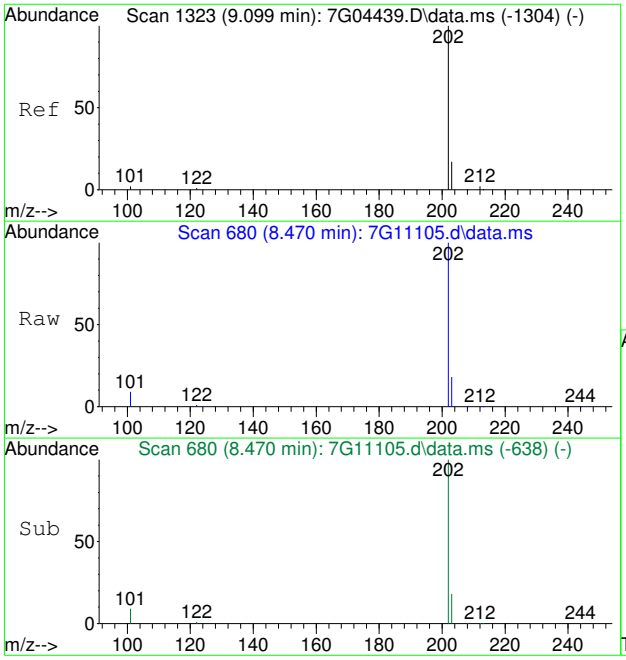


#15
Carbazole
Concen: 2.17 ppm
RT: 7.633 min Scan# 549
Delta R.T. 0.000 min
Lab File: 7G11105.d
Acq: 10 Aug 2020 4:34 pm

Tgt Ion:167 Resp: 44699

Ion	Ratio	Lower	Upper
167	100		
166	20.9	1.2	41.2
139	12.6	0.0	32.8

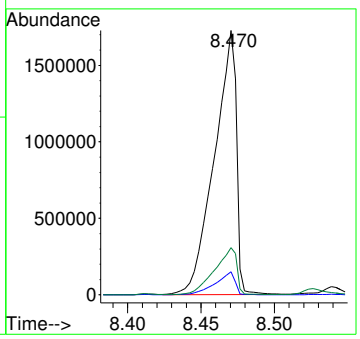


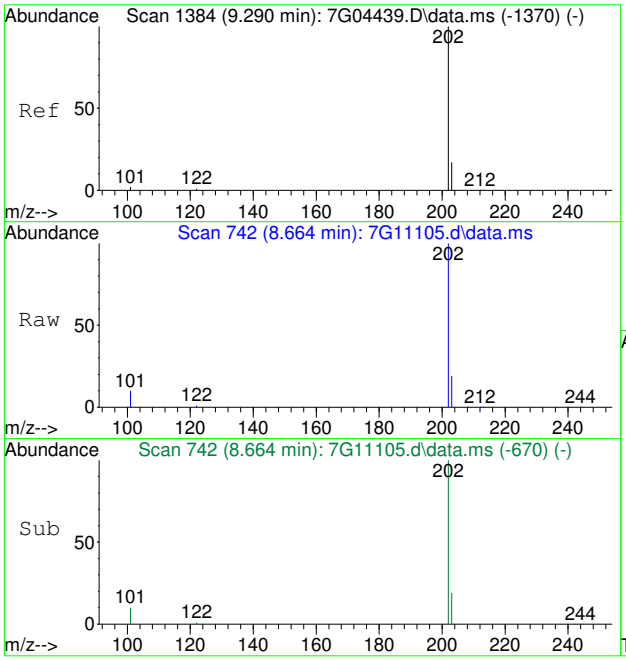


#16
Fluoranthene
Concen: 71.10 ppm
RT: 8.470 min Scan# 680
Delta R.T. 0.022 min
Lab File: 7G11105.d
Acq: 10 Aug 2020 4:34 pm

Tgt Ion:202 Resp: 1807058

Ion	Ratio	Lower	Upper
202	100		
101	8.7	0.0	32.2
203	17.8	0.0	47.2

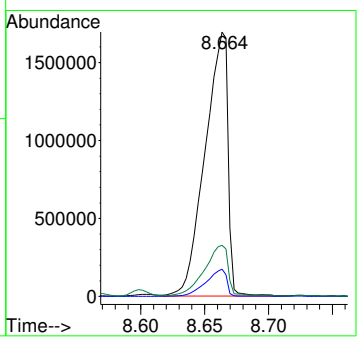


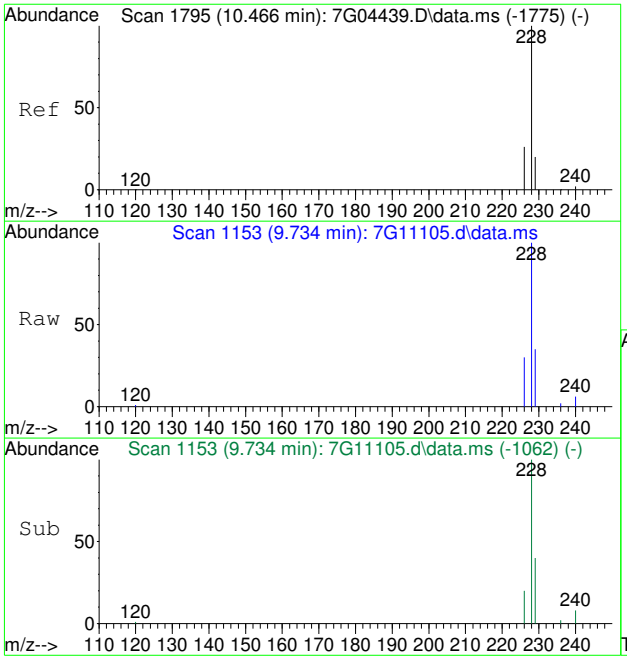


#19
Pyrene
Concen: 68.48 ppm
RT: 8.664 min Scan# 742
Delta R.T. 0.025 min
Lab File: 7G11105.d
Acq: 10 Aug 2020 4:34 pm

Tgt Ion:202 Resp: 2111746

Ion	Ratio	Lower	Upper
202	100		
101	10.3	0.0	32.4
203	19.2	0.0	47.4

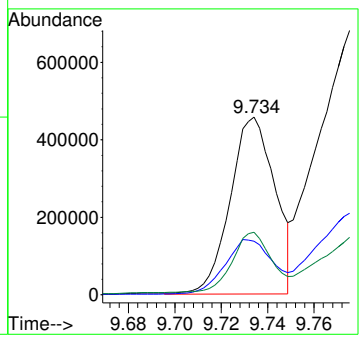


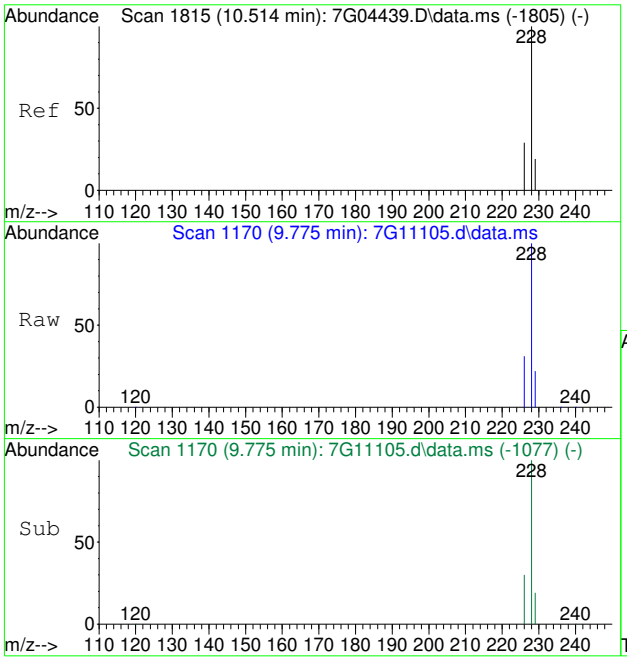


#20
Benzo[a]anthracene
Concen: 25.95 ppm
RT: 9.734 min Scan# 1153
Delta R.T. 0.019 min
Lab File: 7G11105.d
Acq: 10 Aug 2020 4:34 pm

Tgt Ion:228 Resp: 614164

Ion	Ratio	Lower	Upper
228	100		
226	29.8	0.0	56.1
229	37.1	0.0	49.5

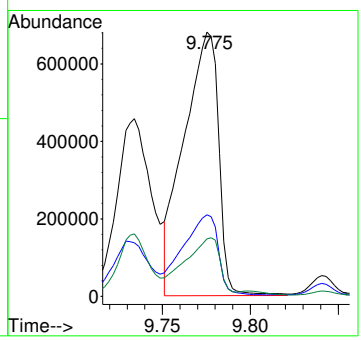


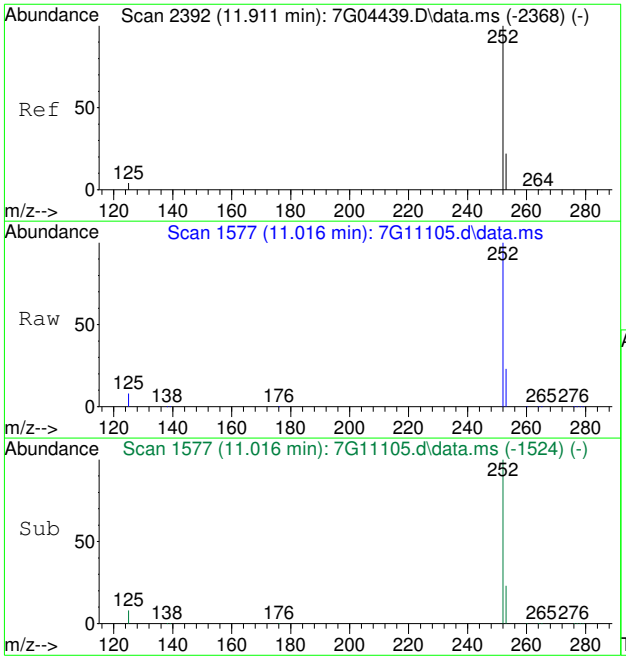


#21
Chrysene
Concen: 38.38 ppm
RT: 9.775 min Scan# 1170
Delta R.T. 0.024 min
Lab File: 7G11105.d
Acq: 10 Aug 2020 4:34 pm

Tgt Ion:228 Resp: 939688

Ion	Ratio	Lower	Upper
228	100		
226	30.6	0.0	58.9
229	21.0	0.0	49.5

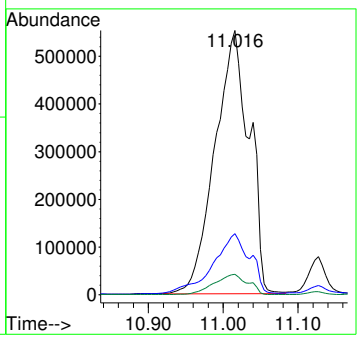


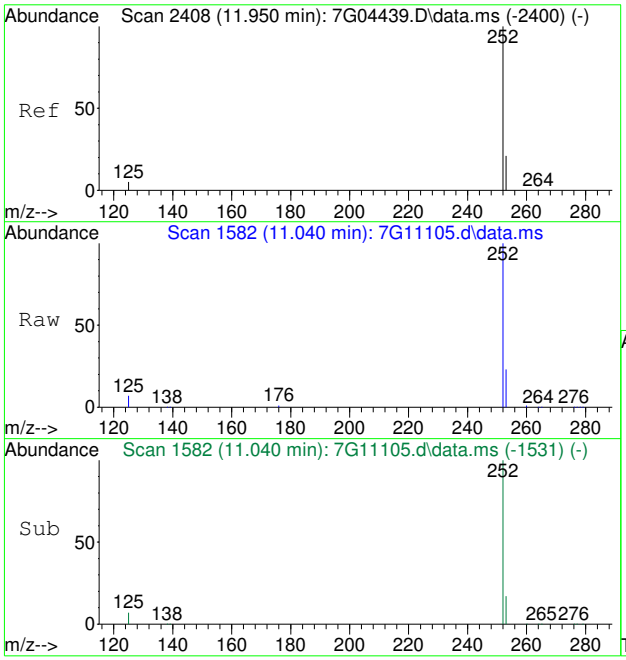


#23
Benzo[b]fluoranthene
Concen: 76.27 ppm
RT: 11.016 min Scan# 1577
Delta R.T. 0.058 min
Lab File: 7G11105.d
Acq: 10 Aug 2020 4:34 pm

Tgt Ion:252 Resp: 1756613

Ion	Ratio	Lower	Upper
252	100		
253	22.6	0.0	51.7
125	7.7	0.0	34.5

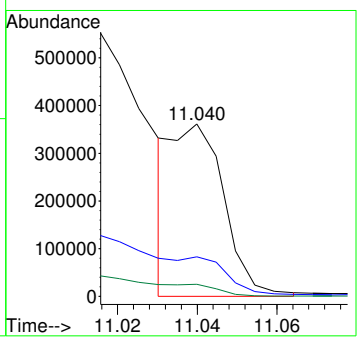


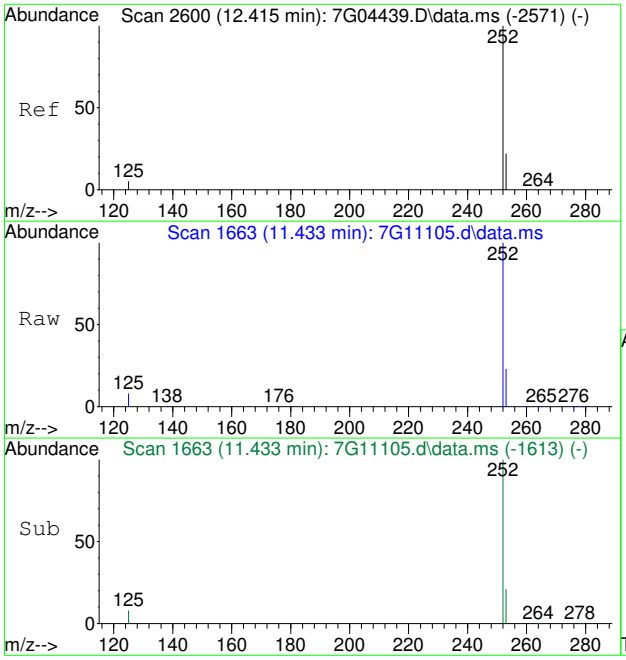


#24
Benzo[k]fluoranthene
Concen: 12.95 ppm m
RT: 11.040 min Scan# 1582
Delta R.T. 0.049 min
Lab File: 7G11105.d
Acq: 10 Aug 2020 4:34 pm

Tgt Ion:252 Resp: 325938

Ion	Ratio	Lower	Upper
252	100		
253	23.0	0.0	51.5
125	7.1	0.0	34.8

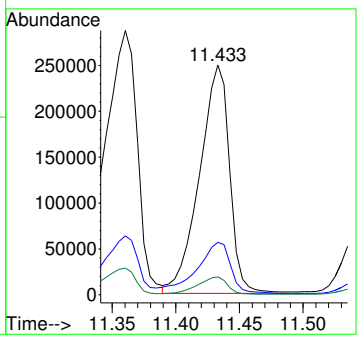


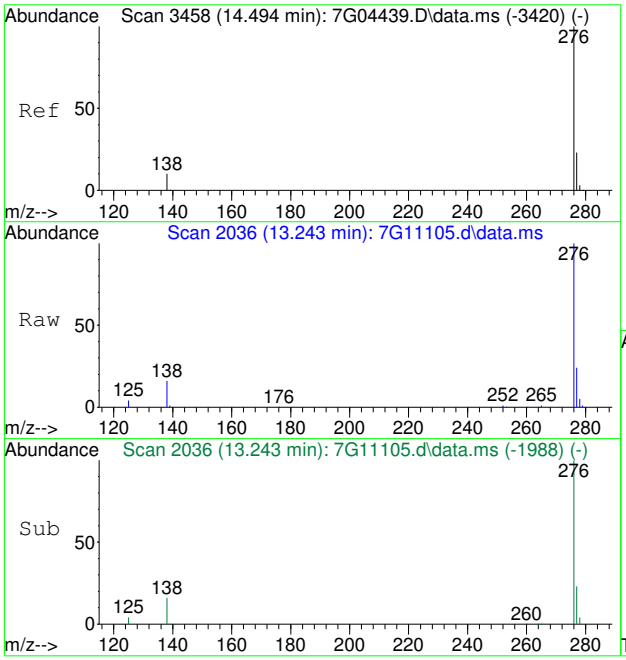


#25
Benzo[a]pyrene
Concen: 18.30 ppm
RT: 11.433 min Scan# 1663
Delta R.T. 0.044 min
Lab File: 7G11105.d
Acq: 10 Aug 2020 4:34 pm

Tgt Ion:252 Resp: 410602

Ion	Ratio	Lower	Upper
252	100		
253	21.4	0.0	51.6
125	7.7	0.0	34.8

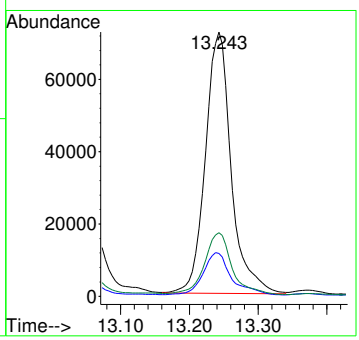


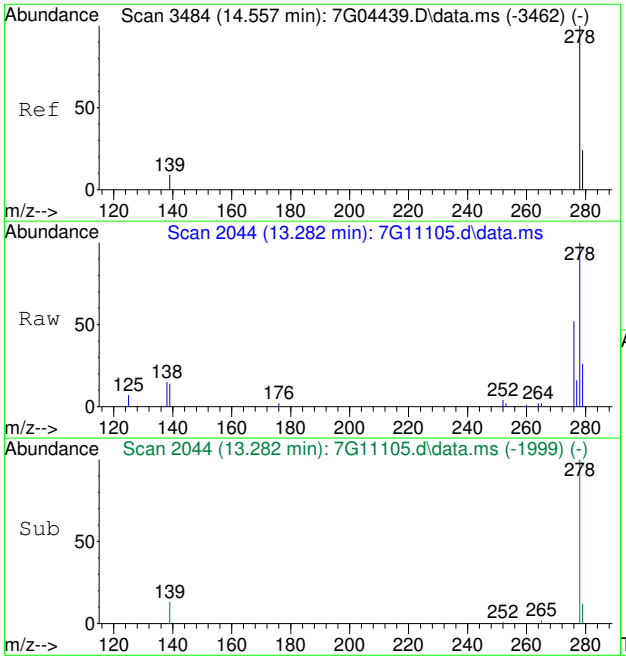


#26
Indeno[1,2,3-cd]pyrene
Concen: 12.86 ppm
RT: 13.243 min Scan# 2036
Delta R.T. 0.034 min
Lab File: 7G11105.d
Acq: 10 Aug 2020 4:34 pm

Tgt Ion:276 Resp: 188424

Ion	Ratio	Lower	Upper
276	100		
138	15.9	0.0	39.6
277	23.5	0.0	53.1

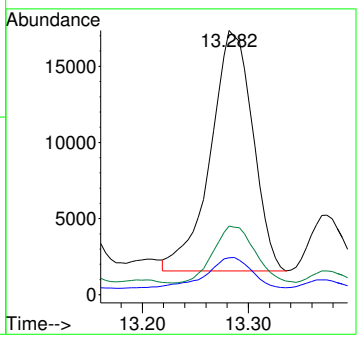


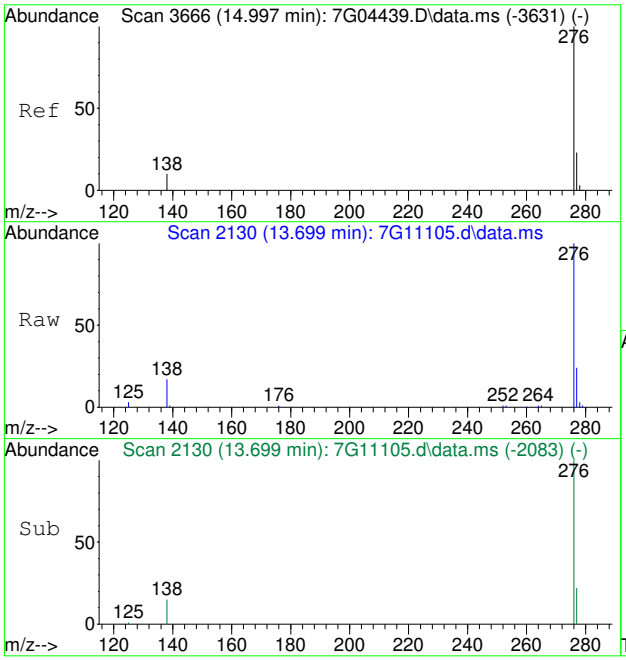


#27
Dibenz[a,h]anthracene
Concen: 2.69 ppm
RT: 13.282 min Scan# 2044
Delta R.T. 0.019 min
Lab File: 7G11105.d
Acq: 10 Aug 2020 4:34 pm

Tgt Ion:278 Resp: 43725

Ion	Ratio	Lower	Upper
278	100		
139	12.4	0.0	38.8
279	23.7	0.0	53.6

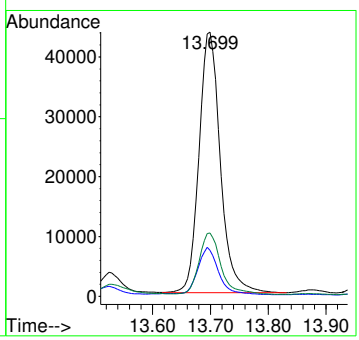




#28
Benzo[g,h,i]perylene
Concen: 6.33 ppm
RT: 13.699 min Scan# 2130
Delta R.T. 0.029 min
Lab File: 7G11105.d
Acq: 10 Aug 2020 4:34 pm

Tgt Ion:276 Resp: 111735

Ion	Ratio	Lower	Upper
276	100		
138	16.7	0.0	40.5
277	23.5	0.0	53.2



Manual Integration Approval Summary

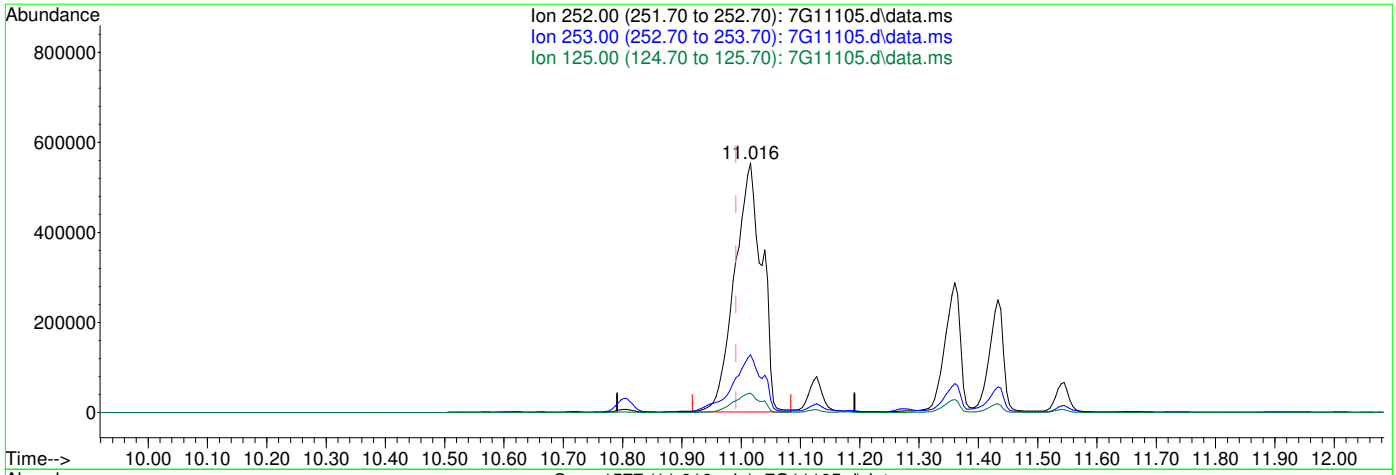
Sample Number: FA77576-3
Lab FileID: 7G11105.D
Injection Time: 08/10/20 16:34
Method: SW846 8270E BY SIM
Analyst approved: 08/11/20 10:52 Fouad Sekkar
Supervisor approved: 08/11/20 12:03 Naresh Jiawan

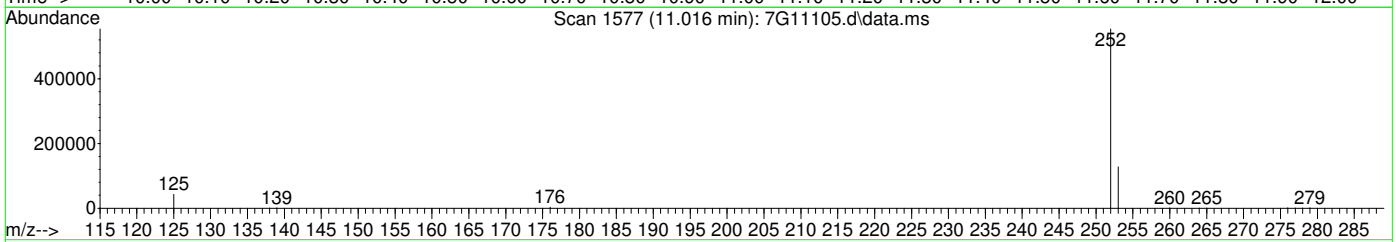
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(k)fluoranthene	207-08-9		11.04	Missed peak

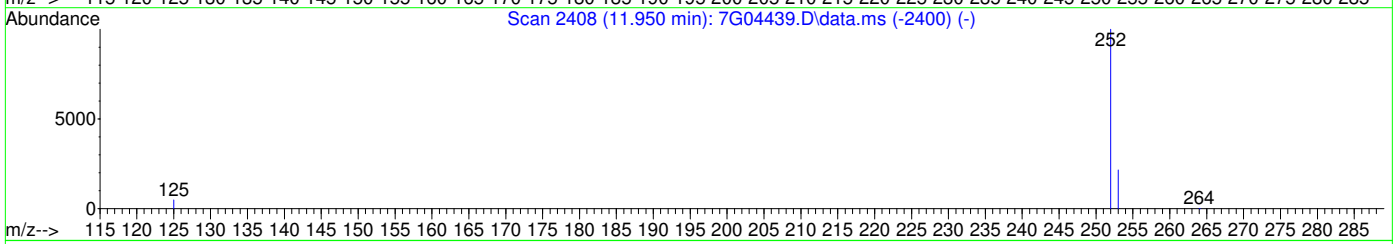
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11105.d
Acq On : 10 Aug 2020 4:34 pm
Operator : FOUADS
Sample : fa77576-3 e
Misc : op81483,S7G482,15.2,,,1,1,soil
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 11 02:37:08 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11105.d\data.ms

(24) Benzo[k]fluoranthene (P)

11.016min (+0.024) 61.38ppm

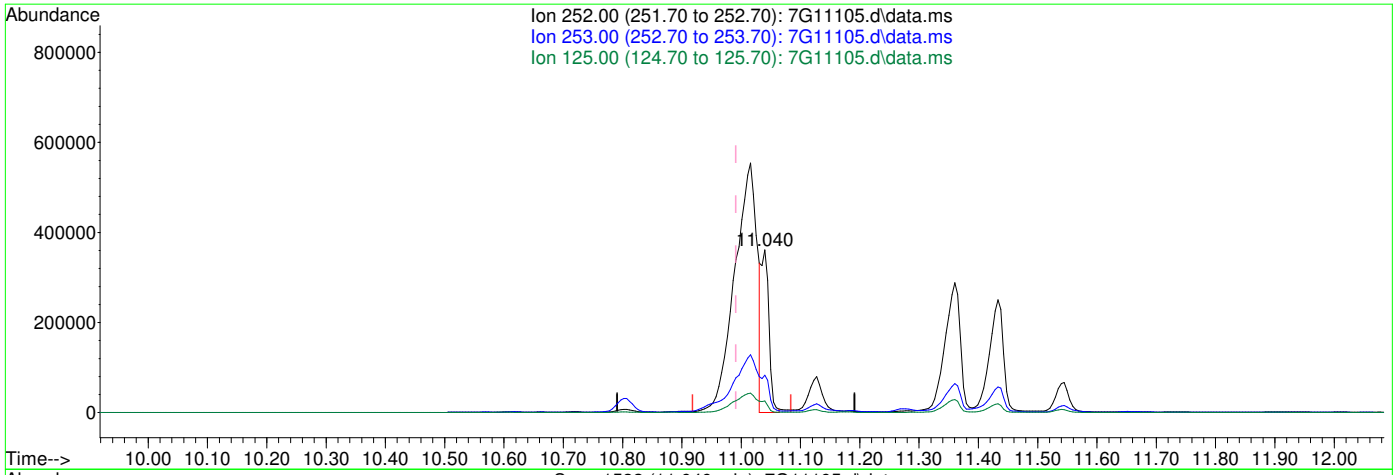
response 1764087

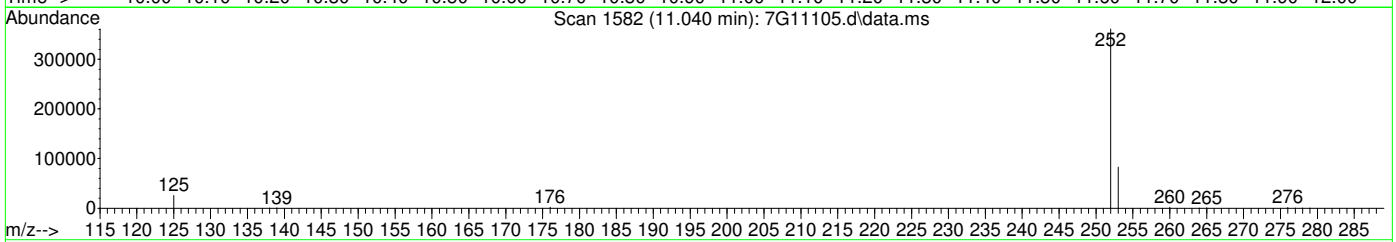
Ion	Exp%	Act%
252.00	100	100
253.00	21.50	22.62
125.00	4.80	7.71
0.00	0.00	0.00

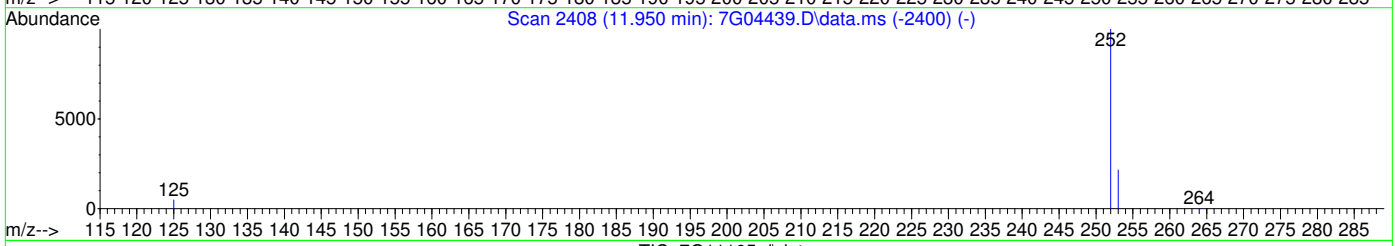
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11105.d
Acq On : 10 Aug 2020 4:34 pm
Operator : FOUADS
Sample : fa77576-3 e
Misc : op81483,S7G482,15.2,,,1,1,soil
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 11 02:37:08 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11105.d\data.ms

(24) Benzo[k]fluoranthene (P)

11.040min (+0.049) 12.95ppm m

response 325938

Ion	Exp%	Act%
252.00	100	100
253.00	21.50	22.96
125.00	4.80	7.07
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan
08/11/20 12:03

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11106.d
Acq On : 10 Aug 2020 4:58 pm
Operator : FOUADS
Sample : fa77576-4 e
Misc : op81483,S7G482,15.5,,,1,1,soil
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 11 03:14:43 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.628	136	26281	4.00	ppm	0.00
6) Acenaphthene-d10	6.113	164	18976	4.00	ppm	0.00
11) Phenanthrene-d10	7.396	188	36901	4.00	ppm	0.00
18) Chrysene-d12	9.756	240	80387	4.00	ppm	0.03
22) Perylene-d12	11.530	264	62069	4.00	ppm	0.05
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.205	152	35392	9.02	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 90.20%			
17) Fluoranthene-d10	8.445	212	200969	10.41	ppm	0.01
Spiked Amount 10.000	Range 50 - 150		Recovery = 104.10%			
Target Compounds						Qvalue
2) Naphthalene	4.646	128	5311	0.72	ppm	99
3) 2-Methylnaphthalene	5.234	142	2884	0.49	ppm	96
5) 1-Methylnaphthalene	5.317	142	2112	0.41	ppm	93
7) Acenaphthylene	5.993	152	104006	9.39	ppm	99
8) Acenaphthene	6.142	153	5767	0.82	ppm	96
9) Dibenzofuran	6.302	168	7411	1.49	ppm	81
10) Fluorene	6.592	166	7695	1.00	ppm	99
13) Phenanthrene	7.417	178	137628	11.09	ppm	96
14) Anthracene	7.466	178	346032	26.42	ppm	97
15) Carbazole	7.633	167	104949	4.76	ppm	99
16) Fluoranthene	8.473	202	2106927	76.33	ppm	97
19) Pyrene	8.670	202	2325916	66.74	ppm	96
20) Benzo[a]anthracene	9.741	228	780755	28.88	ppm	80
21) Chrysene	9.787	228	1311971	47.36	ppm	97
23) Benzo[b]fluoranthene	11.045	252	2866322	136.05	ppm	96
24) Benzo[k]fluoranthene	11.069	252	346653m	14.97	ppm	
25) Benzo[a]pyrene	11.462	252	565278	27.54	ppm	98
26) Indeno[1,2,3-cd]pyrene	13.253	276	146475	10.93	ppm	95
27) Dibenz[a,h]anthracene	13.301	278	35715	2.40	ppm	97
28) Benzo[g,h,i]perylene	13.709	276	73128	4.53	ppm	94

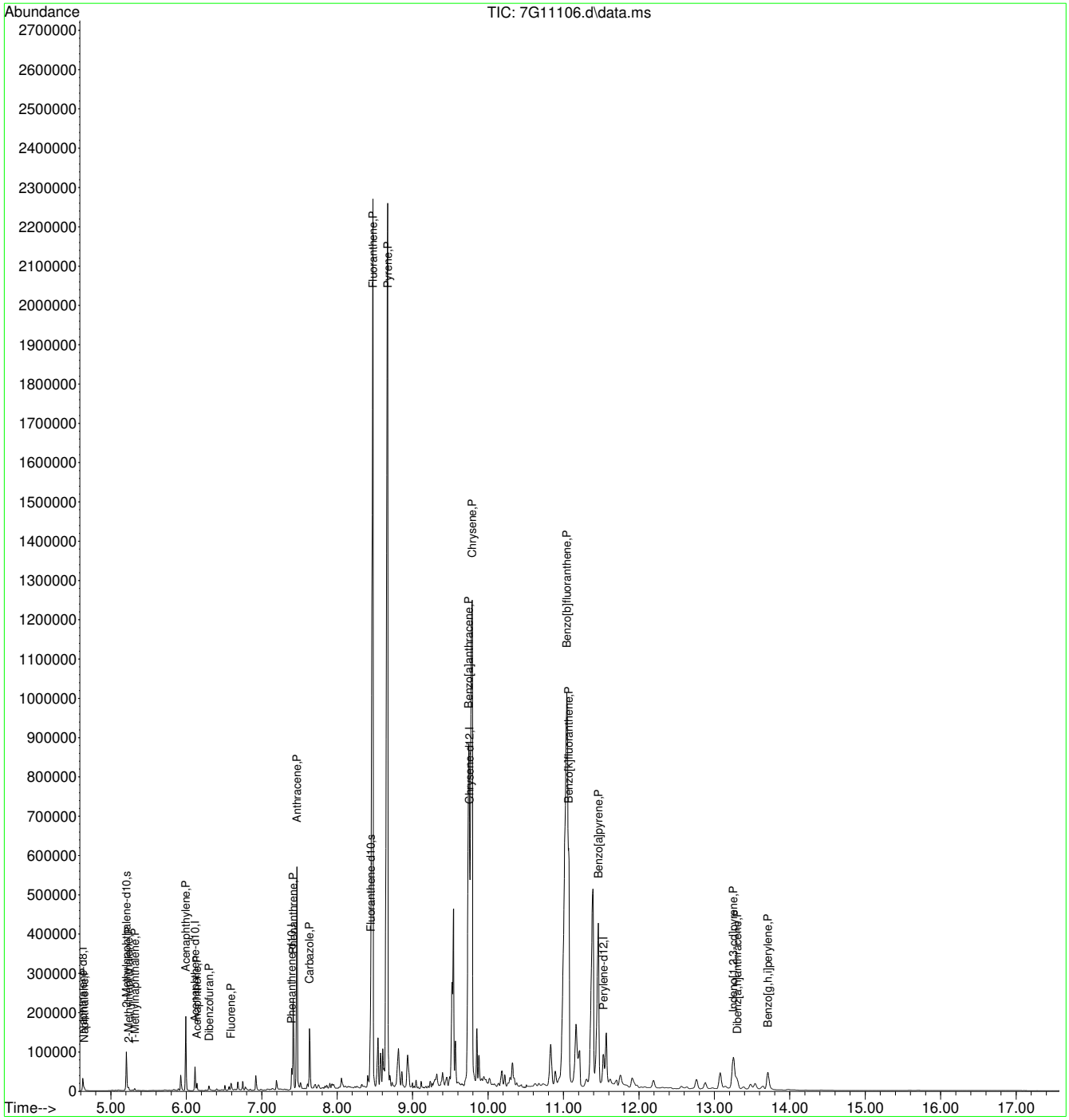
(#) = qualifier out of range (m) = manual integration (+) = signals summed

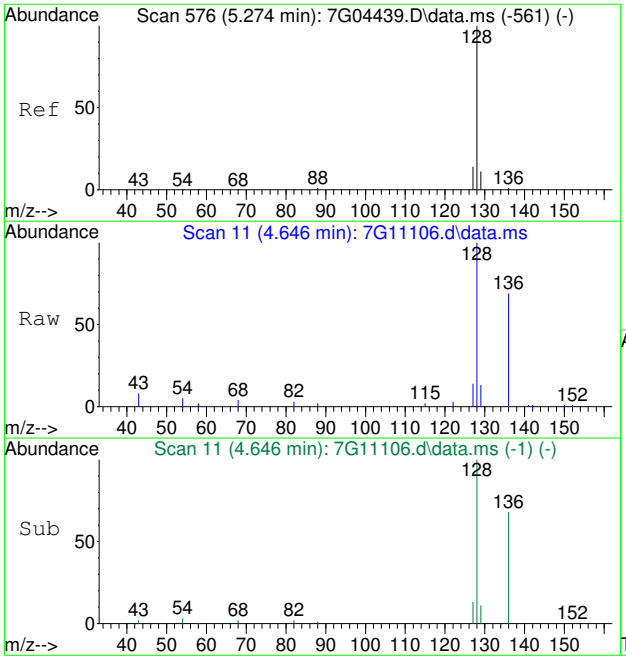
7.1.26
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11106.d
Acq On : 10 Aug 2020 4:58 pm
Operator : FOUADS
Sample : fa77576-4 e
Misc : op81483,S7G482,15.5,,,1,1,soil
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 11 03:14:43 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

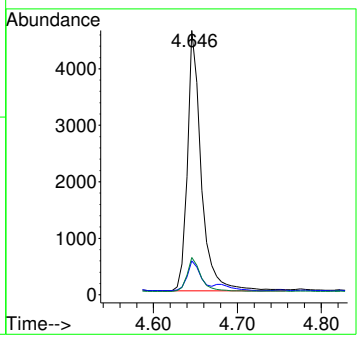


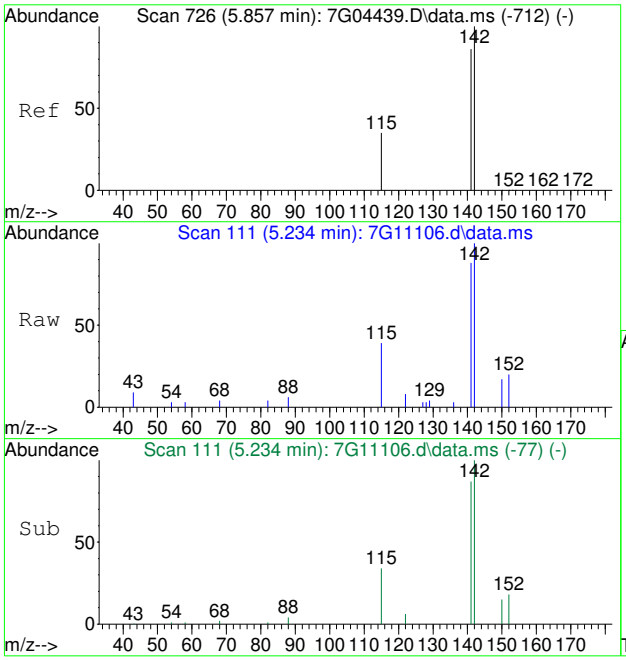


#2
Naphthalene
Concen: 0.72 ppm
RT: 4.646 min Scan# 11
Delta R.T. -0.000 min
Lab File: 7G11106.d
Acq: 10 Aug 2020 4:58 pm

Tgt Ion:128 Resp: 5311

Ion	Ratio	Lower	Upper
128	100		
129	11.4	0.0	40.9
127	13.0	0.0	43.5

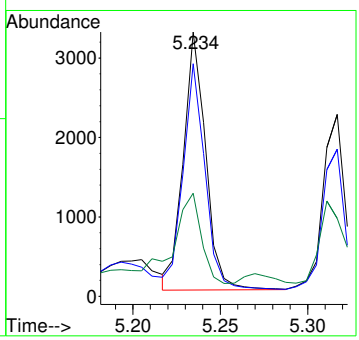


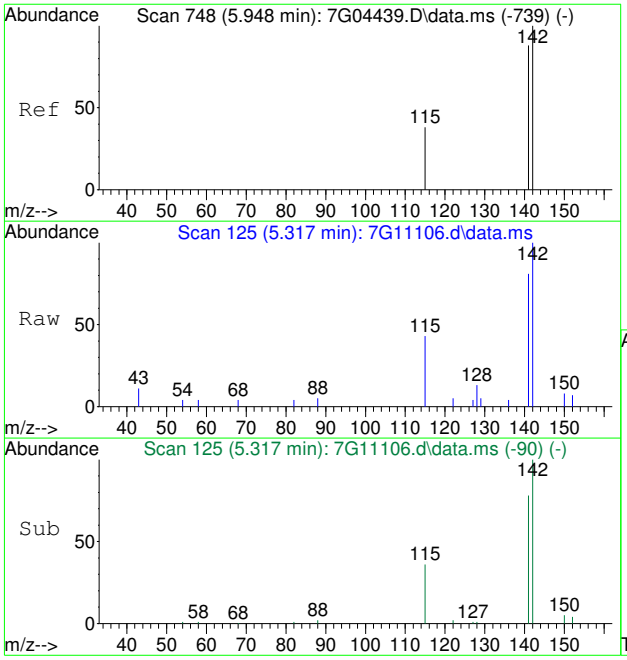


#3
2-Methylnaphthalene
Concen: 0.49 ppm
RT: 5.234 min Scan# 111
Delta R.T. -0.000 min
Lab File: 7G11106.d
Acq: 10 Aug 2020 4:58 pm

Tgt Ion:142 Resp: 2884

Ion	Ratio	Lower	Upper
142	100		
141	87.9	55.7	115.7
115	31.5	5.4	65.4

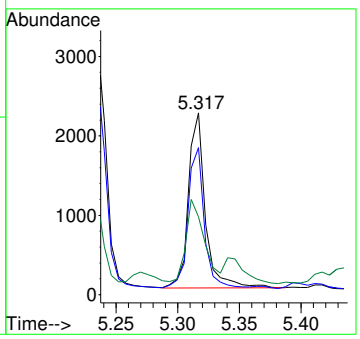


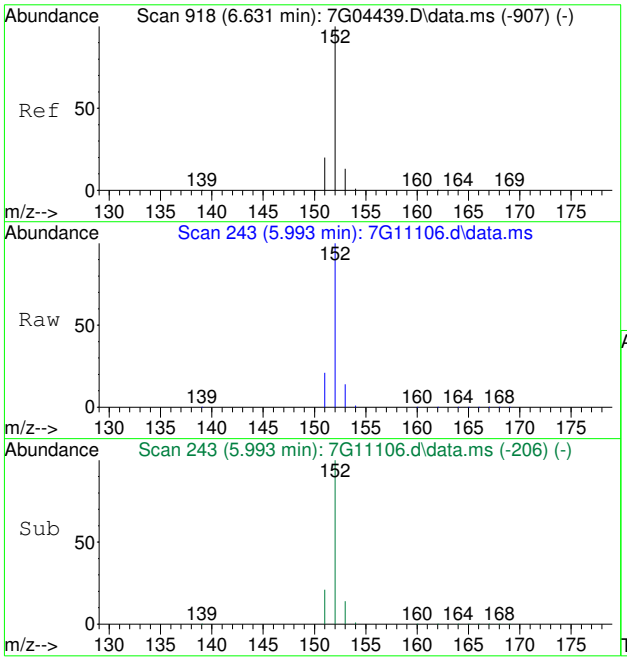


#5
1-Methylnaphthalene
Concen: 0.41 ppm
RT: 5.317 min Scan# 125
Delta R.T. 0.006 min
Lab File: 7G11106.d
Acq: 10 Aug 2020 4:58 pm

Tgt Ion:142 Resp: 2112

Ion	Ratio	Lower	Upper
142	100		
141	79.8	58.1	118.1
115	37.0	7.7	67.7

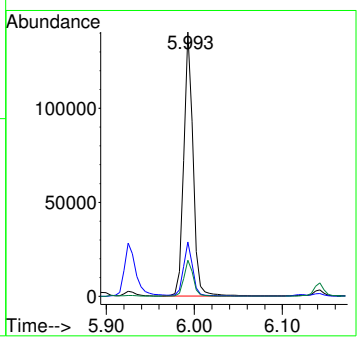


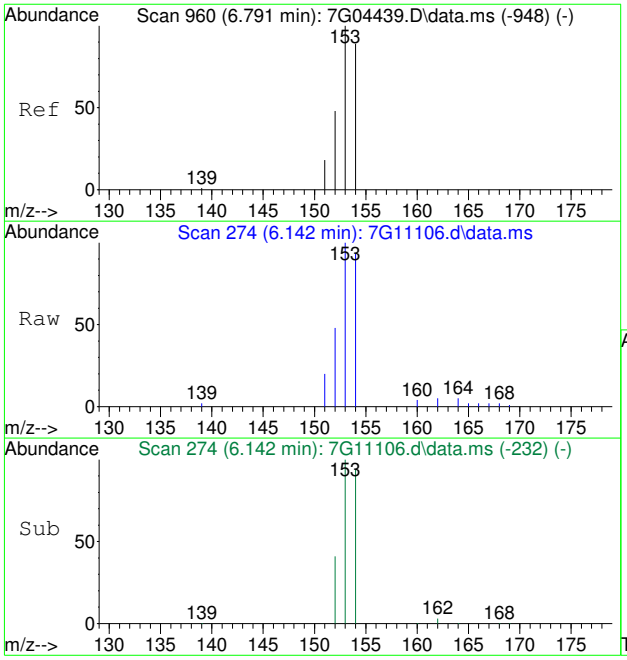


#7
Acenaphthylene
Concen: 9.39 ppm
RT: 5.993 min Scan# 243
Delta R.T. -0.000 min
Lab File: 7G11106.d
Acq: 10 Aug 2020 4:58 pm

Tgt Ion:152 Resp: 104006

Ion	Ratio	Lower	Upper
152	100		
151	20.3	0.0	49.8
153	13.6	0.0	42.8

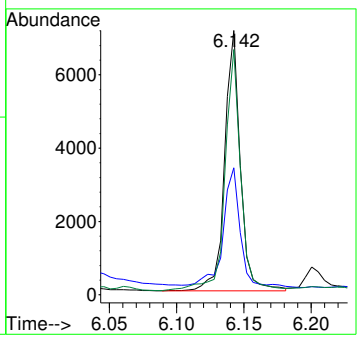


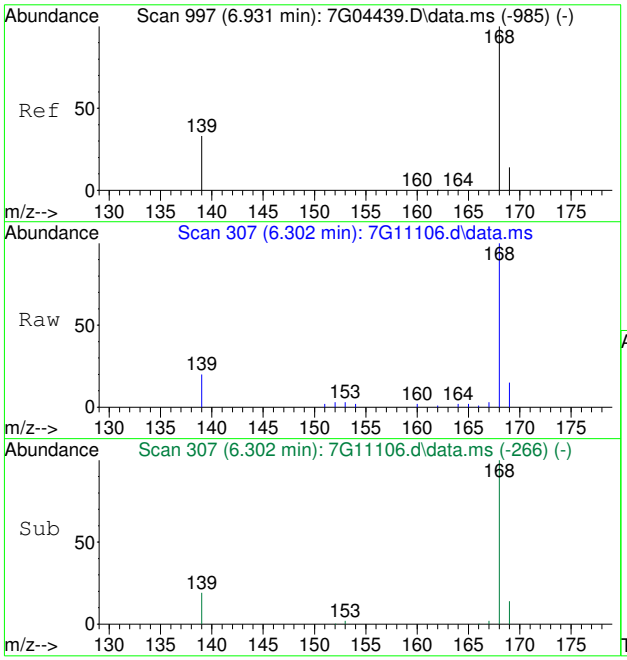


#8
Acenaphthene
Concen: 0.82 ppm
RT: 6.142 min Scan# 274
Delta R.T. 0.005 min
Lab File: 7G11106.d
Acq: 10 Aug 2020 4:58 pm

Tgt Ion:153 Resp: 5767

Ion	Ratio	Lower	Upper
153	100		
152	45.4	18.3	78.3
154	92.7	59.3	119.3

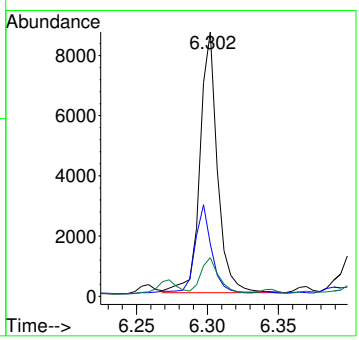


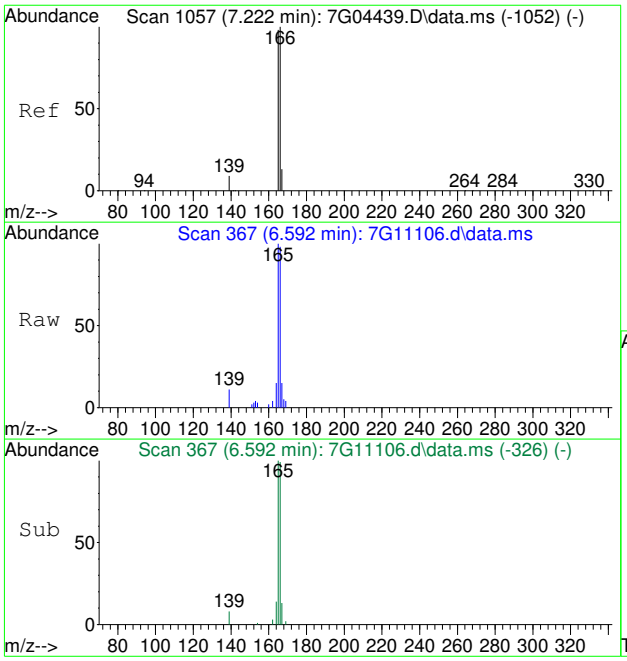


#9
Dibenzofuran
Concen: 1.49 ppm
RT: 6.302 min Scan# 307
Delta R.T. -0.000 min
Lab File: 7G11106.d
Acq: 10 Aug 2020 4:58 pm

Tgt Ion:168 Resp: 7411

Ion	Ratio	Lower	Upper
168	100		
139	18.6	12.6	52.6
169	11.5	0.0	33.8

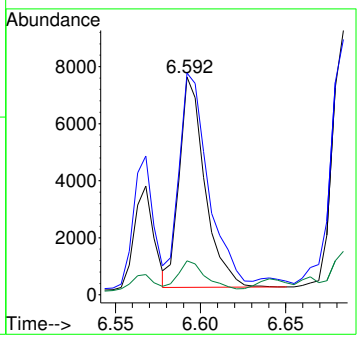


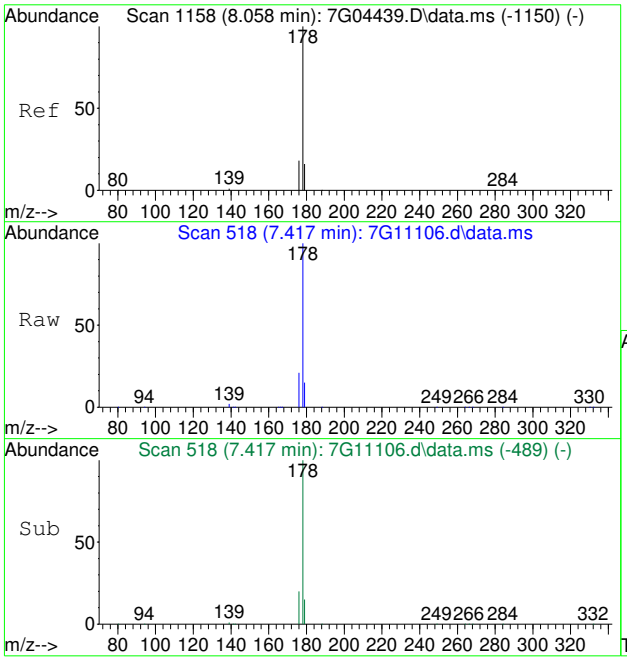


#10
Fluorene
Concen: 1.00 ppm
RT: 6.592 min Scan# 367
Delta R.T. -0.000 min
Lab File: 7G11106.d
Acq: 10 Aug 2020 4:58 pm

Tgt Ion:166 Resp: 7695

Ion	Ratio	Lower	Upper
166	100		
165	99.2	68.2	128.2
167	11.7	0.0	42.9

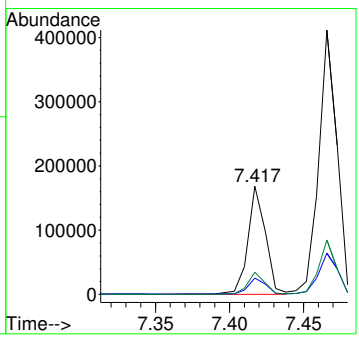


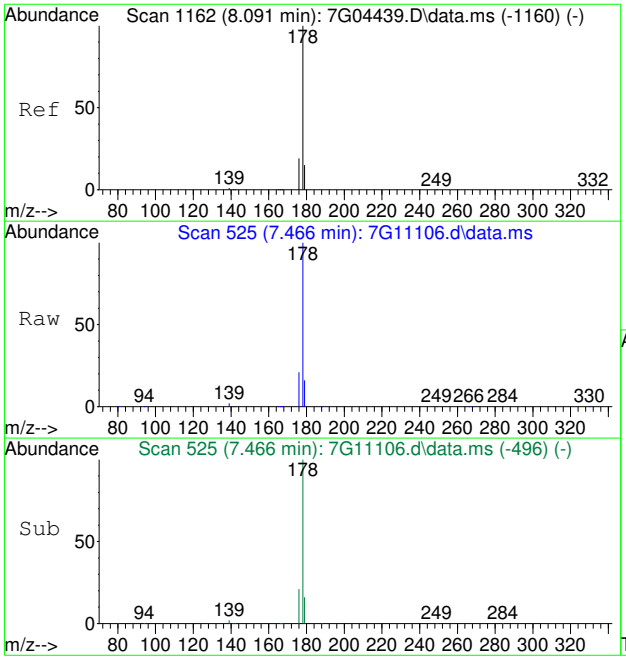


#13
Phenanthrene
Concen: 11.09 ppm
RT: 7.417 min Scan# 518
Delta R.T. -0.000 min
Lab File: 7G11106.d
Acq: 10 Aug 2020 4:58 pm

Tgt Ion:178 Resp: 137628

Ion	Ratio	Lower	Upper
178	100		
179	15.0	0.0	45.7
176	20.5	0.0	48.0

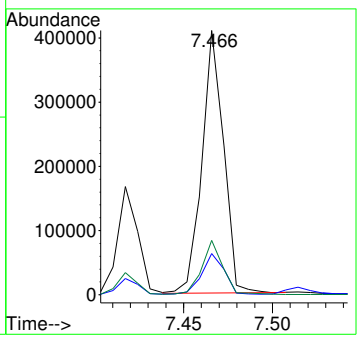


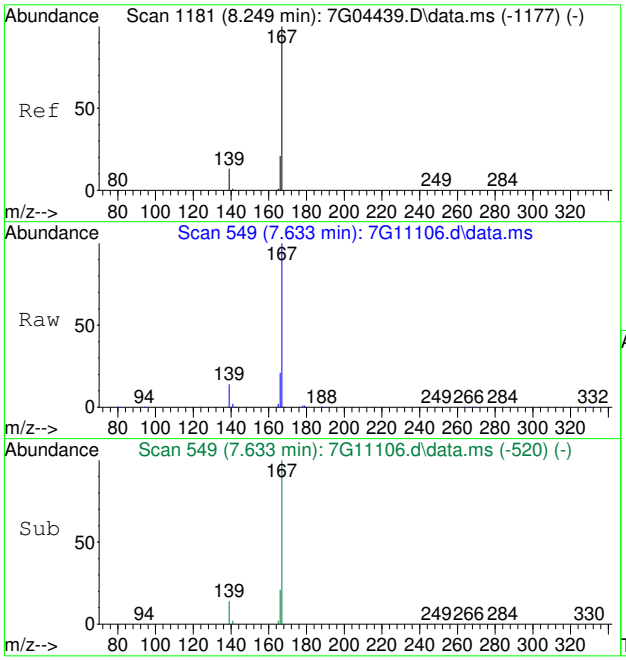


#14
Anthracene
Concen: 26.42 ppm
RT: 7.466 min Scan# 525
Delta R.T. -0.000 min
Lab File: 7G11106.d
Acq: 10 Aug 2020 4:58 pm

Tgt Ion:178 Resp: 346032

Ion	Ratio	Lower	Upper
178	100		
179	14.7	0.0	45.1
176	20.6	0.0	48.8

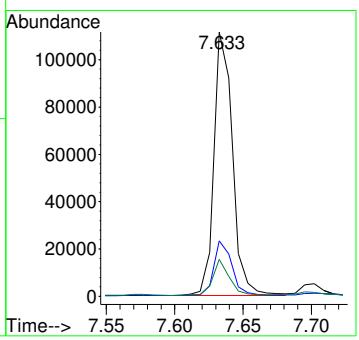


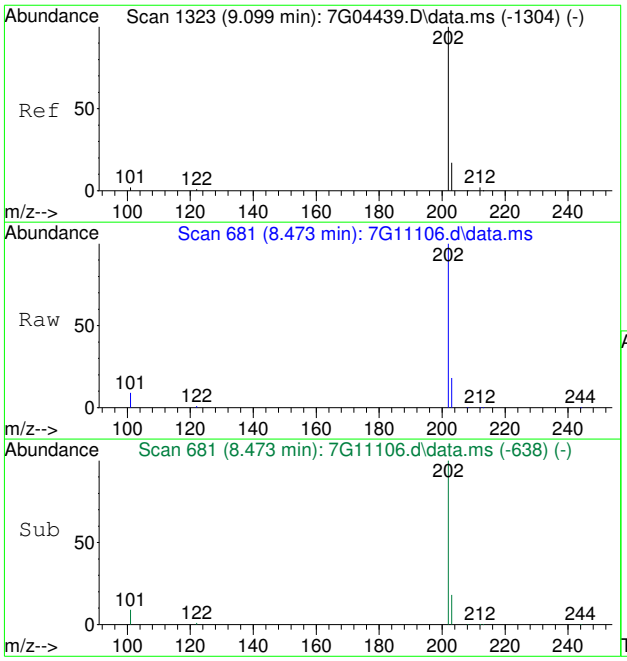


#15
Carbazole
Concen: 4.76 ppm
RT: 7.633 min Scan# 549
Delta R.T. -0.000 min
Lab File: 7G11106.d
Acq: 10 Aug 2020 4:58 pm

Tgt Ion:167 Resp: 104949

Ion	Ratio	Lower	Upper
167	100		
166	20.6	1.2	41.2
139	13.5	0.0	32.8

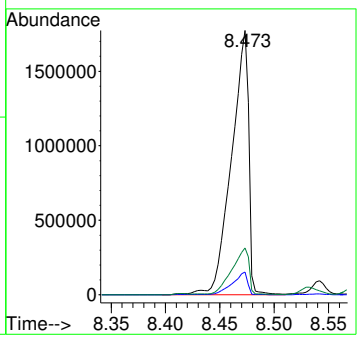


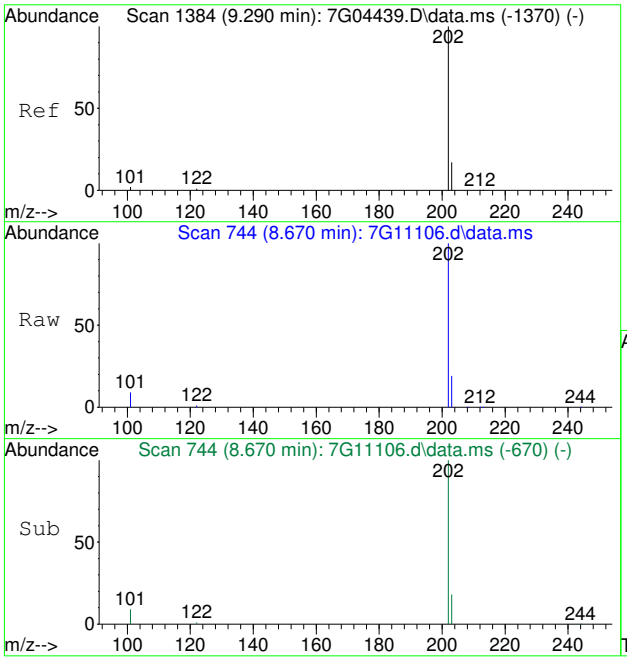


#16
Fluoranthene
Concen: 76.33 ppm
RT: 8.473 min Scan# 681
Delta R.T. 0.025 min
Lab File: 7G11106.d
Acq: 10 Aug 2020 4:58 pm

Tgt Ion:202 Resp: 2106927

Ion	Ratio	Lower	Upper
202	100		
101	8.6	0.0	32.2
203	17.7	0.0	47.2

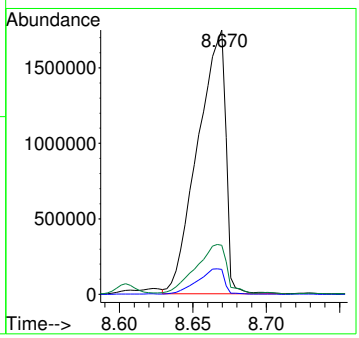


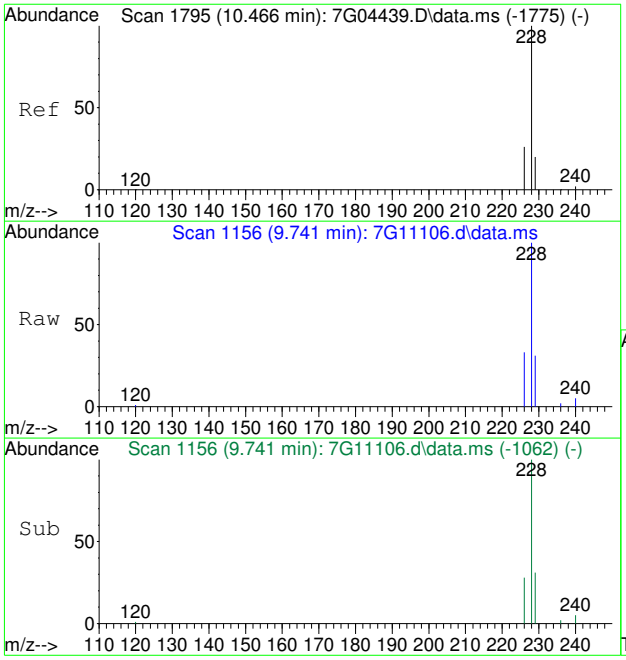


#19
Pyrene
Concen: 66.74 ppm
RT: 8.670 min Scan# 744
Delta R.T. 0.031 min
Lab File: 7G11106.d
Acq: 10 Aug 2020 4:58 pm

Tgt Ion:202 Resp: 2325916

Ion	Ratio	Lower	Upper
202	100		
101	9.5	0.0	32.4
203	18.3	0.0	47.4

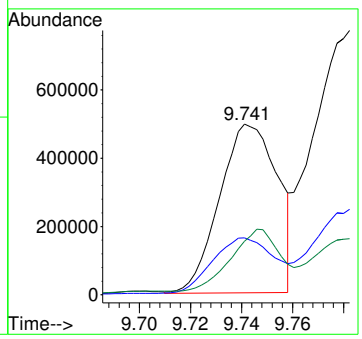


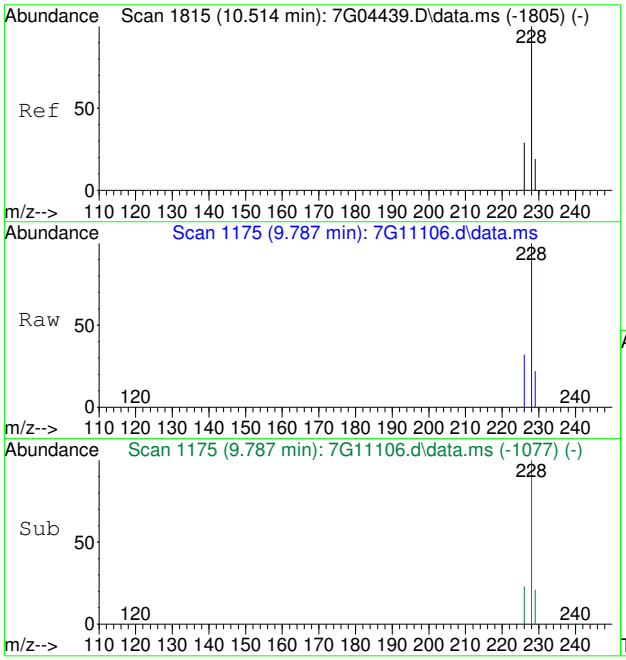


#20
Benzo[a]anthracene
Concen: 28.88 ppm
RT: 9.741 min Scan# 1156
Delta R.T. 0.026 min
Lab File: 7G11106.d
Acq: 10 Aug 2020 4:58 pm

Tgt Ion:228 Resp: 780755

Ion	Ratio	Lower	Upper
228	100		
226	34.3	0.0	56.1
229	30.9	0.0	49.5

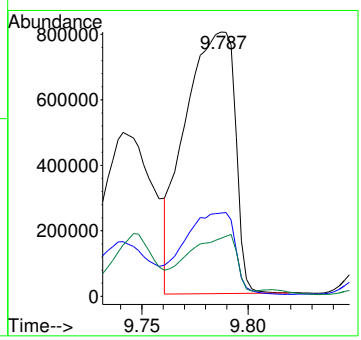


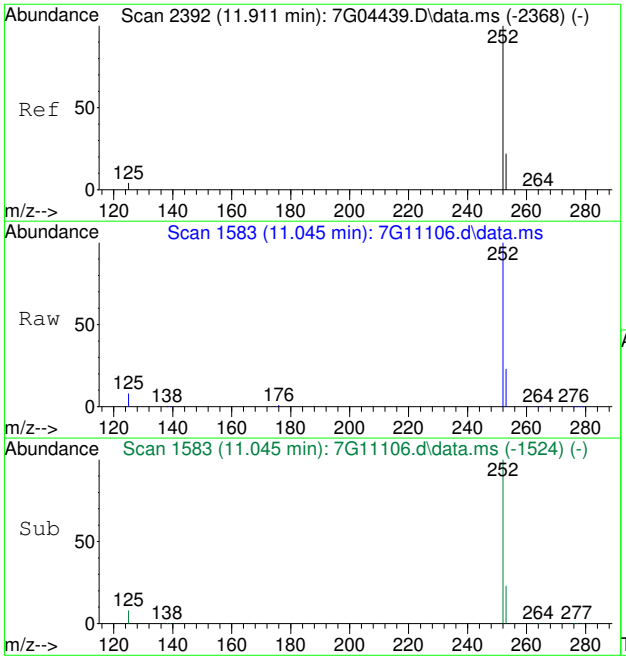


#21
Chrysene
Concen: 47.36 ppm
RT: 9.787 min Scan# 1175
Delta R.T. 0.036 min
Lab File: 7G11106.d
Acq: 10 Aug 2020 4:58 pm

Tgt Ion:228 Resp: 1311971

Ion	Ratio	Lower	Upper
228	100		
226	31.3	0.0	58.9
229	20.0	0.0	49.5

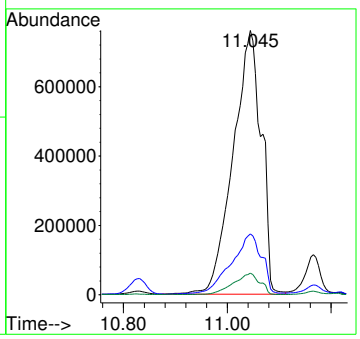


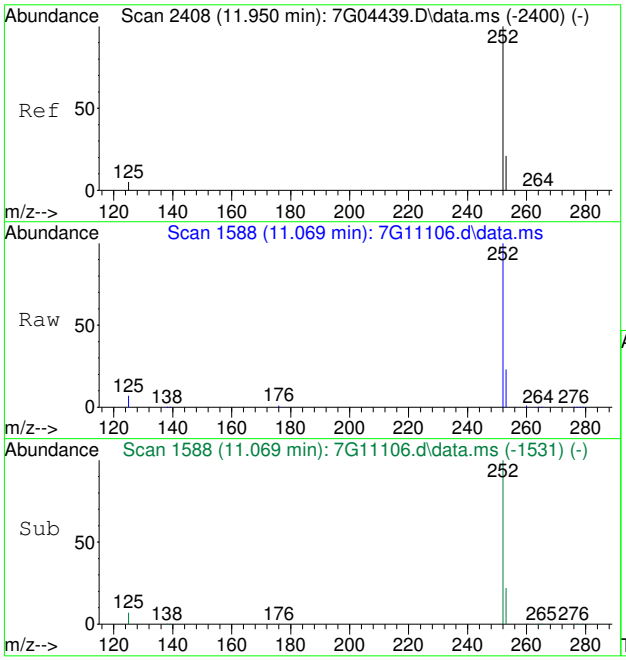


#23
Benzo[b]fluoranthene
Concen: 136.05 ppm
RT: 11.045 min Scan# 1583
Delta R.T. 0.087 min
Lab File: 7G11106.d
Acq: 10 Aug 2020 4:58 pm

Tgt Ion:252 Resp: 2866322

Ion	Ratio	Lower	Upper
252	100		
253	22.7	0.0	51.7
125	8.1	0.0	34.5

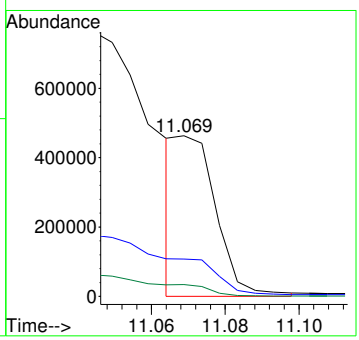


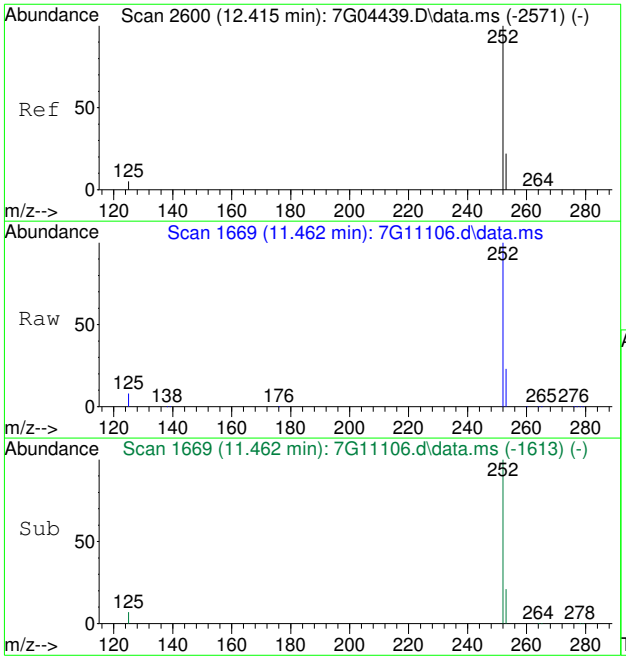


#24
Benzo[k]fluoranthene
Concen: 14.97 ppm m
RT: 11.069 min Scan# 1588
Delta R.T. 0.077 min
Lab File: 7G11106.d
Acq: 10 Aug 2020 4:58 pm

Tgt Ion:252 Resp: 346653

Ion	Ratio	Lower	Upper
252	100		
253	23.3	0.0	51.5
125	7.4	0.0	34.8

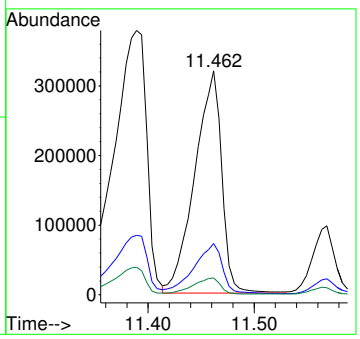


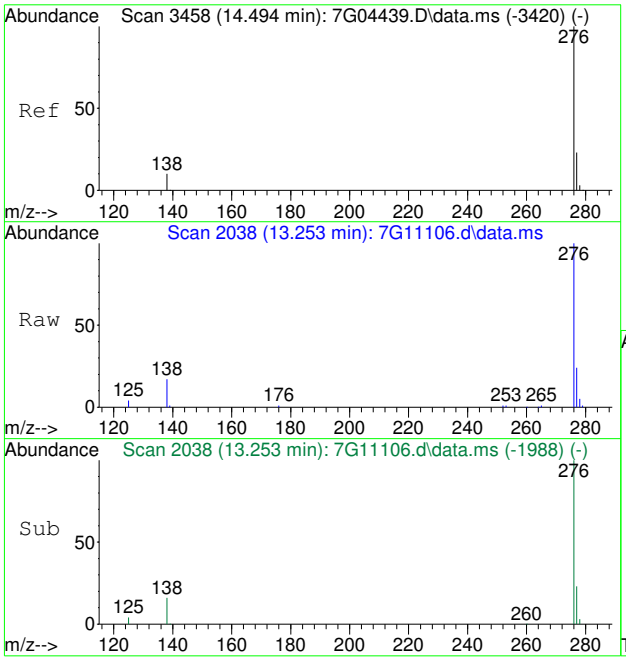


#25
Benzo[a]pyrene
Concen: 27.54 ppm
RT: 11.462 min Scan# 1669
Delta R.T. 0.073 min
Lab File: 7G11106.d
Acq: 10 Aug 2020 4:58 pm

Tgt Ion:252 Resp: 565278

Ion	Ratio	Lower	Upper
252	100		
253	22.0	0.0	51.6
125	7.2	0.0	34.8

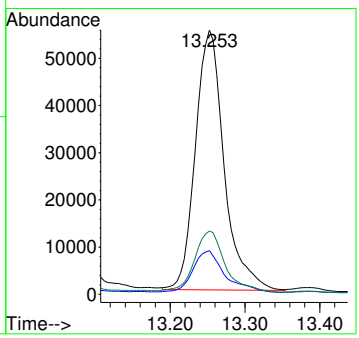


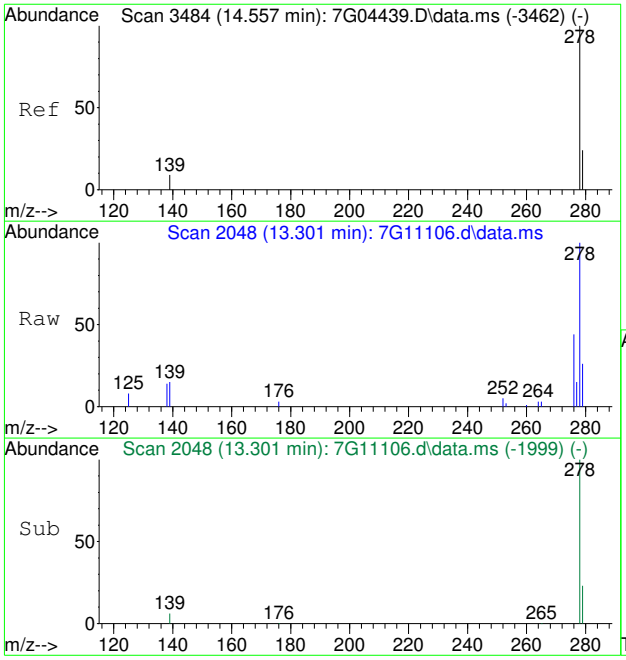


#26
Indeno[1,2,3-cd]pyrene
Concen: 10.93 ppm
RT: 13.253 min Scan# 2038
Delta R.T. 0.043 min
Lab File: 7G11106.d
Acq: 10 Aug 2020 4:58 pm

Tgt Ion:276 Resp: 146475

Ion	Ratio	Lower	Upper
276	100		
138	15.9	0.0	39.6
277	23.3	0.0	53.1

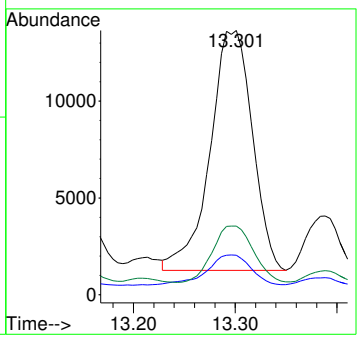


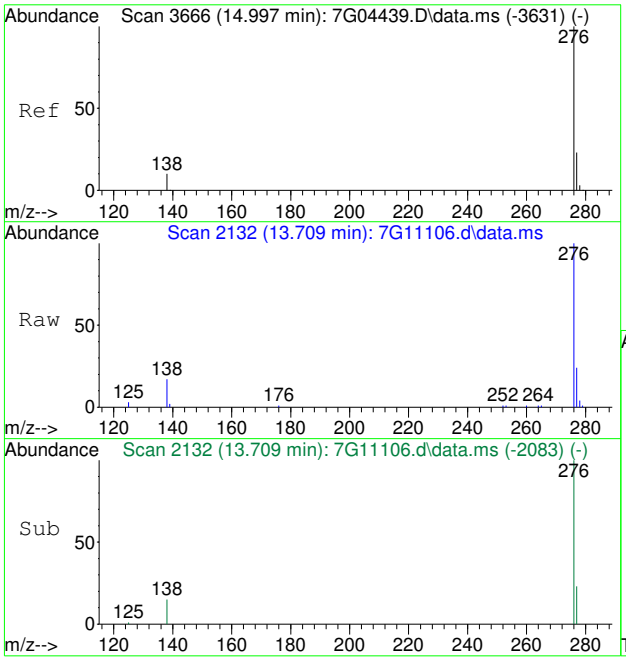


#27
Dibenz[a,h]anthracene
Concen: 2.40 ppm
RT: 13.301 min Scan# 2048
Delta R.T. 0.039 min
Lab File: 7G11106.d
Acq: 10 Aug 2020 4:58 pm

Tgt Ion:278 Resp: 35715

Ion	Ratio	Lower	Upper
278	100		
139	12.4	0.0	38.8
279	23.7	0.0	53.6

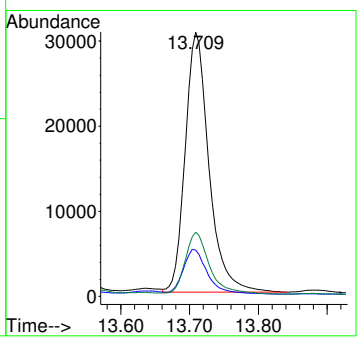




#28
Benzo[g,h,i]perylene
Concen: 4.53 ppm
RT: 13.709 min Scan# 2132
Delta R.T. 0.039 min
Lab File: 7G11106.d
Acq: 10 Aug 2020 4:58 pm

Tgt Ion:276 Resp: 73128

Ion	Ratio	Lower	Upper
276	100		
138	16.6	0.0	40.5
277	23.7	0.0	53.2



Manual Integration Approval Summary

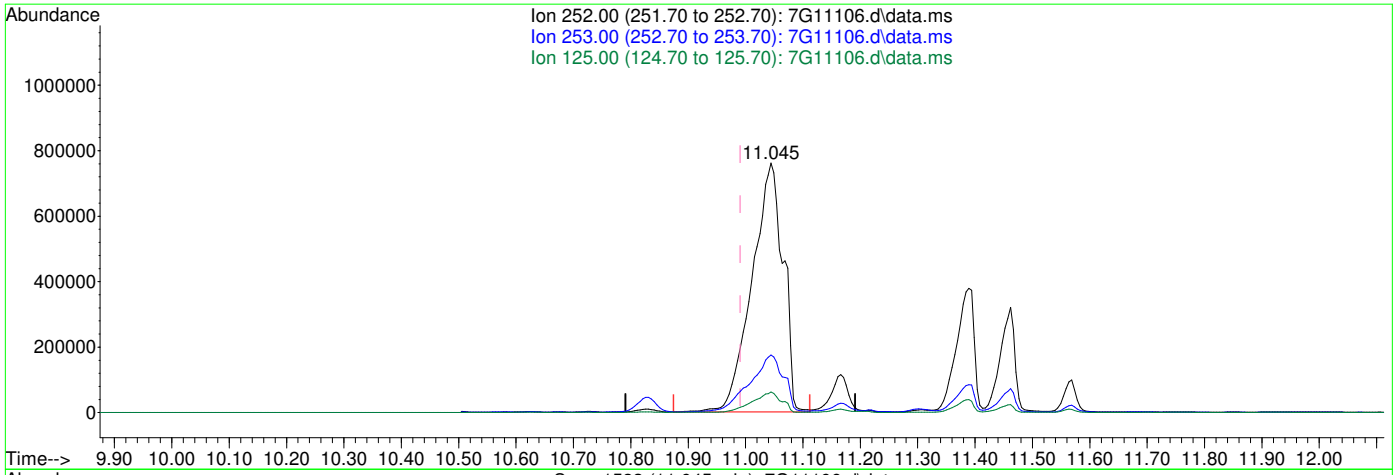
Sample Number: FA77576-4
Lab FileID: 7G11106.D
Injection Time: 08/10/20 16:58
Method: SW846 8270E BY SIM
Analyst approved: 08/11/20 10:52 Fouad Sekkar
Supervisor approved: 08/11/20 12:03 Naresh Jiawan

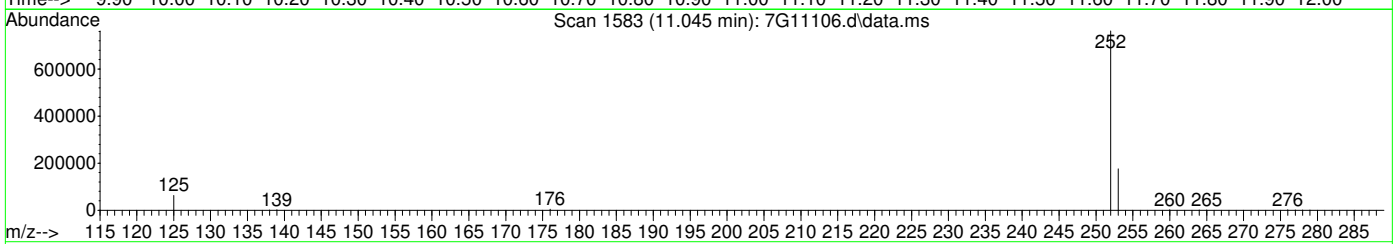
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(k)fluoranthene	207-08-9		11.07	Missed peak

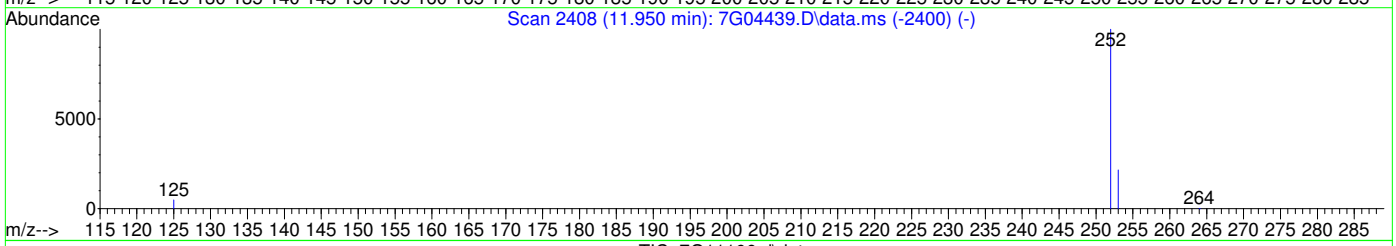
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11106.d
Acq On : 10 Aug 2020 4:58 pm
Operator : FOUADS
Sample : fa77576-4 e
Misc : op81483,S7G482,15.5,,,1,1,soil
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 11 02:37:11 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11106.d\data.ms

(24) Benzo[k]fluoranthene (P)

11.045min (+0.053) 99.34ppm

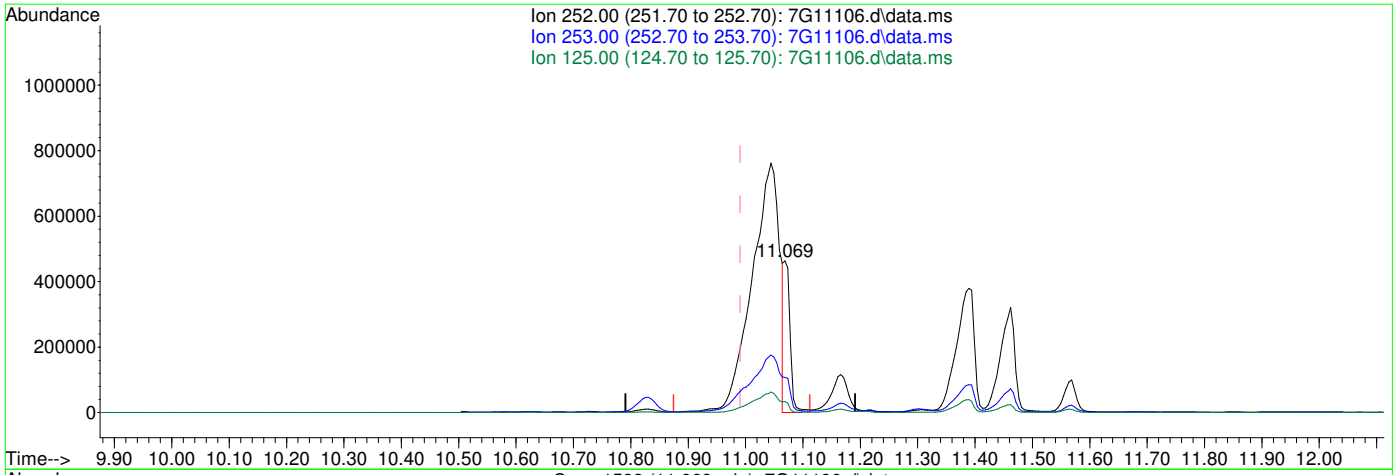
response 2866322

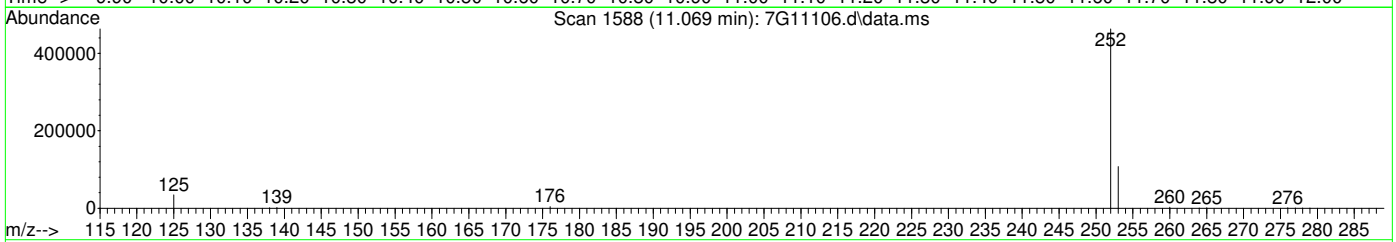
Ion	Exp%	Act%
252.00	100	100
253.00	21.50	22.74
125.00	4.80	8.12
0.00	0.00	0.00

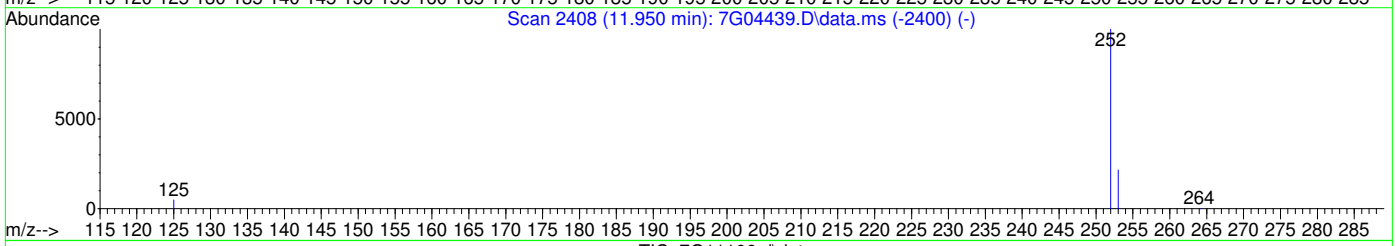
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11106.d
Acq On : 10 Aug 2020 4:58 pm
Operator : FOUADS
Sample : fa77576-4 e
Misc : op81483,S7G482,15.5,,,1,1,soil
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 11 02:37:11 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11106.d\data.ms

(24) Benzo[k]fluoranthene (P)

11.069min (+0.077) 14.97ppm m

response 346653

Ion	Exp%	Act%
252.00	100	100
253.00	21.50	23.26
125.00	4.80	7.37
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 08/12/20 11:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11156.d
Acq On : 11 Aug 2020 6:54 pm
Operator : FOUADS
Sample : fa77576-5 e Inst : MSBNA8
Misc : op81483,S7G483,15.3,,,1,1,soil
ALS Vial : 28 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:54:34 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

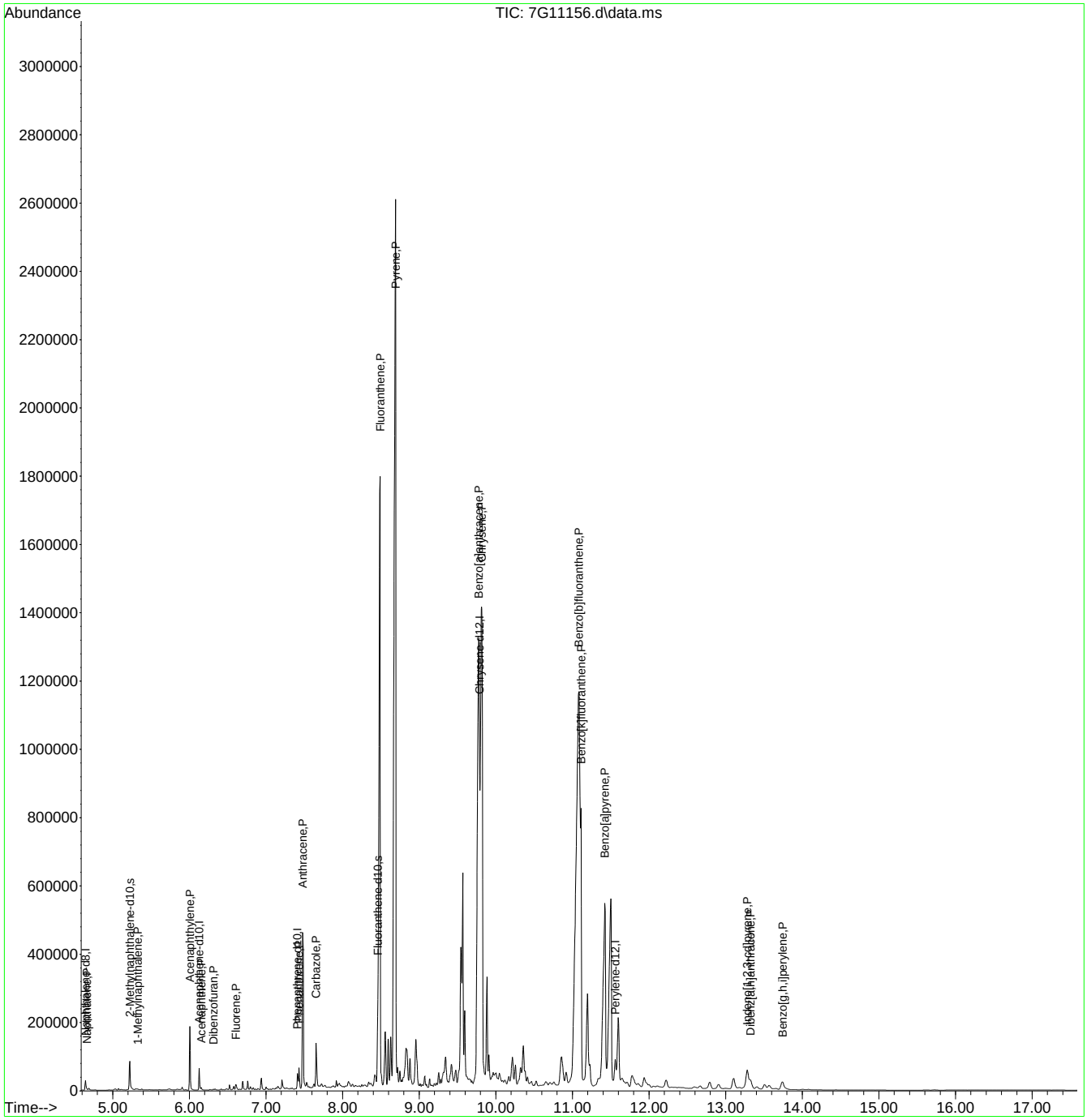
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.646	136	19939	4.00	ppm	0.02
6) Acenaphthene-d10	6.128	164	18574	4.00	ppm	0.01
11) Phenanthrene-d10	7.410	188	36812	4.00	ppm	0.01
18) Chrysene-d12	9.787	240	95748	4.00	ppm	0.06
22) Perylene-d12	11.559	264	51358	4.00	ppm	0.08
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.223	152	35172	11.69	ppm	0.02
Spiked Amount 10.000	Range 50 - 150		Recovery = 116.90%			
17) Fluoranthene-d10	8.461	212	225663	11.70	ppm	0.02
Spiked Amount 10.000	Range 50 - 150		Recovery = 117.00%			
Target Compounds						Qvalue
2) Naphthalene	4.664	128	1460	0.26	ppm	97
5) 1-Methylnaphthalene	5.329	142	1045	0.27	ppm	72
7) Acenaphthylene	6.007	152	105119	9.69	ppm	99
8) Acenaphthene	6.157	153	2143	0.31	ppm	96
9) Dibenzofuran	6.317	168	1814	0.37	ppm	80
10) Fluorene	6.607	166	7348	0.97	ppm	97
13) Phenanthrene	7.431	178	36195	2.98	ppm	97
14) Anthracene	7.480	178	337368	25.86	ppm	98
15) Carbazole	7.654	167	90621	4.12	ppm	100
16) Fluoranthene	8.489	202	1480234	56.34	ppm	97
19) Pyrene	8.692	202	2965205	71.03	ppm	95
20) Benzo[a]anthracene	9.775	228	1602500	47.31	ppm	81
21) Chrysene	9.814	228	1457395	44.15	ppm	96
23) Benzo[b]fluoranthene	11.084	252	3287099m	188.57	ppm	
24) Benzo[k]fluoranthene	11.113	252	512085m	25.90	ppm	
25) Benzo[a]pyrene	11.423	252	901958m	53.10	ppm	
26) Indeno[1,2,3-cd]pyrene	13.282	276	102990	9.29	ppm	94
27) Dibenz[a,h]anthracene	13.326	278	27178	2.21	ppm	97
28) Benzo[g,h,i]perylene	13.743	276	45555	3.41	ppm	94

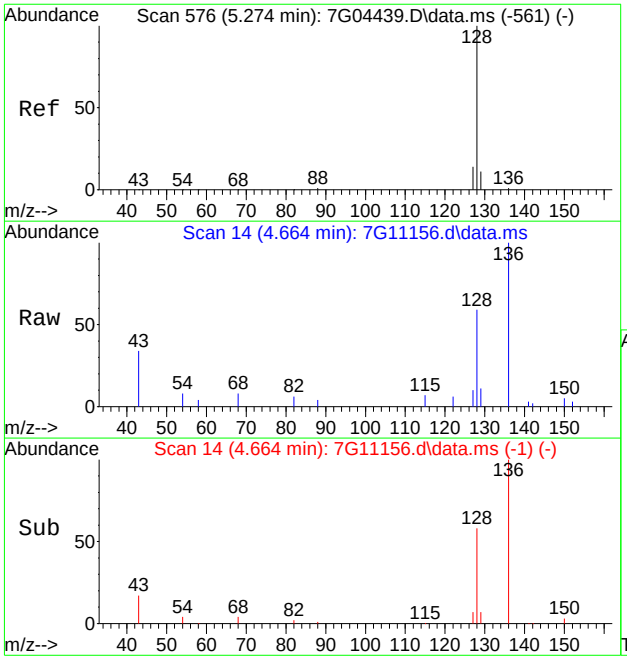
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11156.d
Acq On : 11 Aug 2020 6:54 pm
Operator : FOUADS
Sample : fa77576-5 e Inst : MSBNA8
Misc : op81483,S7G483,15.3,,,1,1,soil
ALS Vial : 28 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:54:34 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

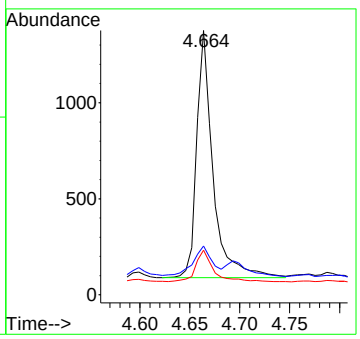


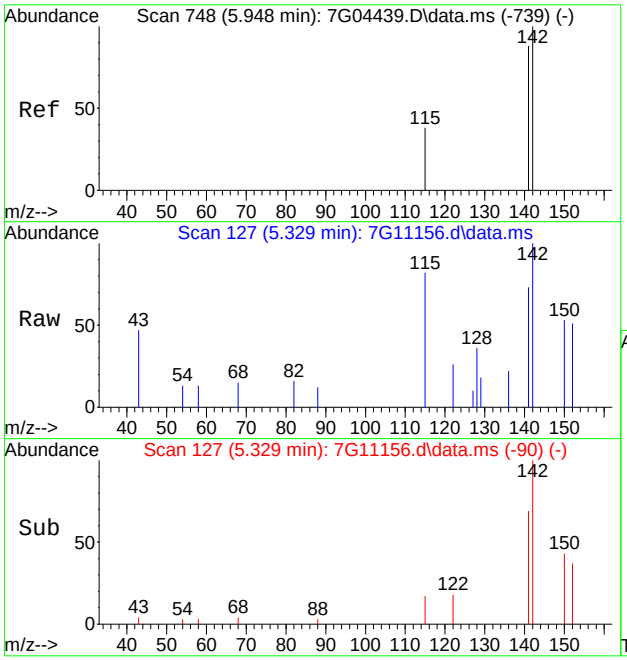


#2
Naphthalene
Concen: 0.26 ppm
RT: 4.664 min Scan# 14
Delta R.T. 0.018 min
Lab File: 7G11156.d
Acq: 11 Aug 2020 6:54 pm

Tgt Ion:128 Resp: 1460

Ion	Ratio	Lower	Upper
128	100		
129	12.2	0.0	40.9
127	12.7	0.0	43.5

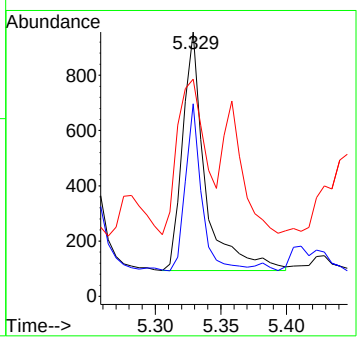


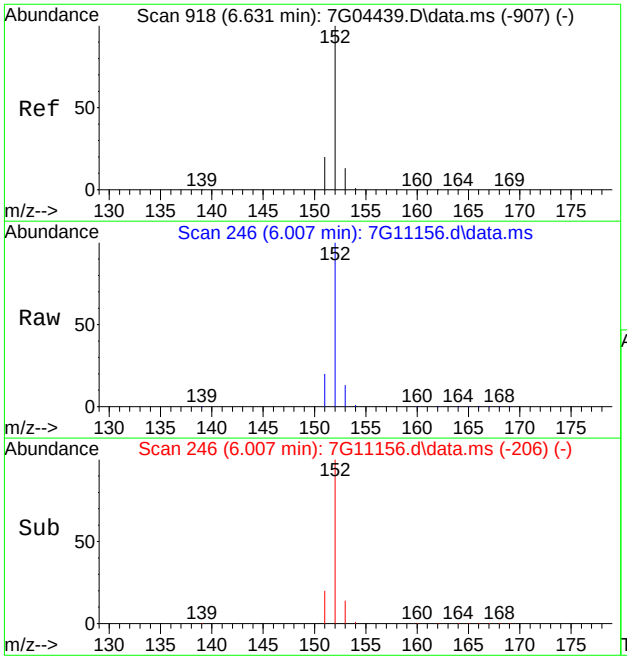


#5
1-Methylnaphthalene
Concen: 0.27 ppm
RT: 5.329 min Scan# 127
Delta R.T. 0.018 min
Lab File: 7G11156.d
Acq: 11 Aug 2020 6:54 pm

Tgt Ion:142 Resp: 1045

Ion	Ratio	Lower	Upper
142	100		
141	69.5	58.1	118.1
115	64.8	7.7	67.7

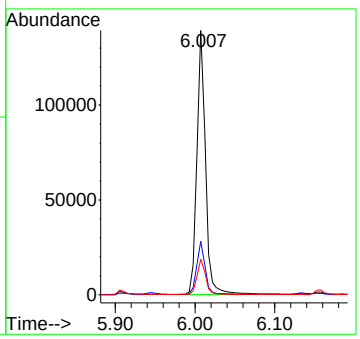


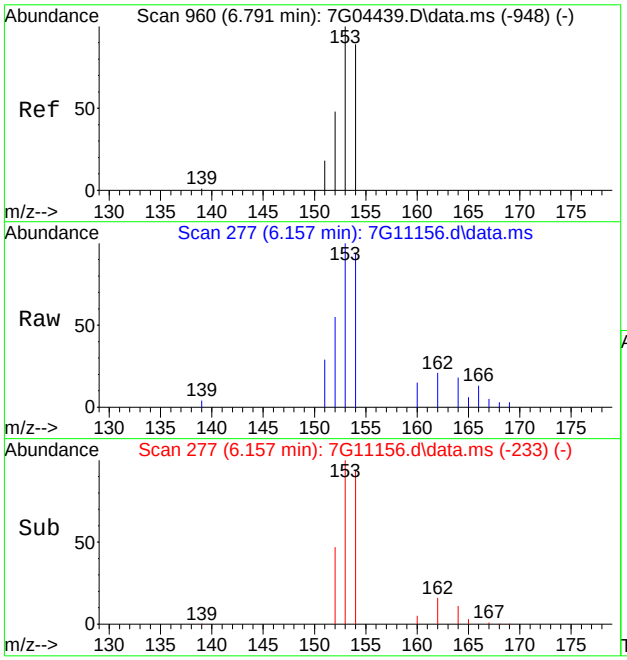


#7
Acenaphthylene
Concen: 9.69 ppm
RT: 6.007 min Scan# 246
Delta R.T. 0.015 min
Lab File: 7G11156.d
Acq: 11 Aug 2020 6:54 pm

Tgt Ion:152 Resp: 105119

Ion	Ratio	Lower	Upper
152	100		
151	20.1	0.0	49.8
153	13.4	0.0	42.8

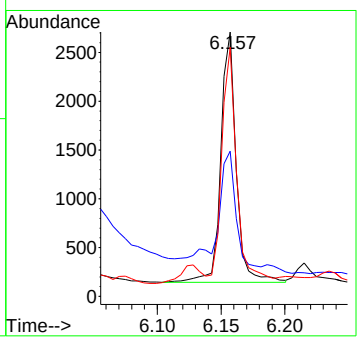


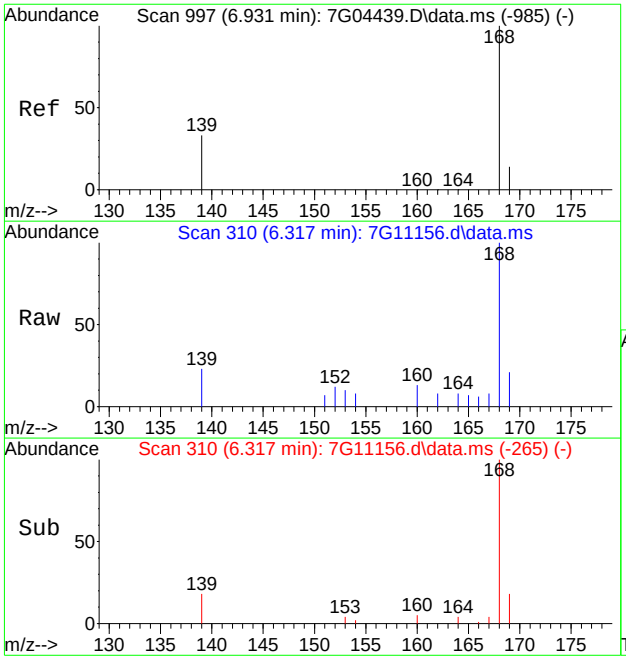


#8
Acenaphthene
Concen: 0.31 ppm
RT: 6.157 min Scan# 277
Delta R.T. 0.014 min
Lab File: 7G11156.d
Acq: 11 Aug 2020 6:54 pm

Tgt Ion:153 Resp: 2143

Ion	Ratio	Lower	Upper
153	100		
152	45.3	18.3	78.3
154	93.2	59.3	119.3

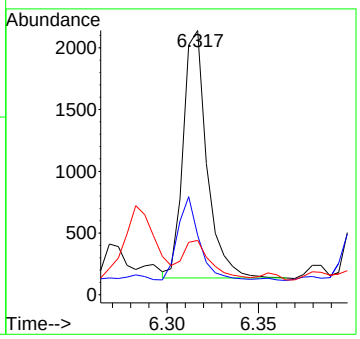


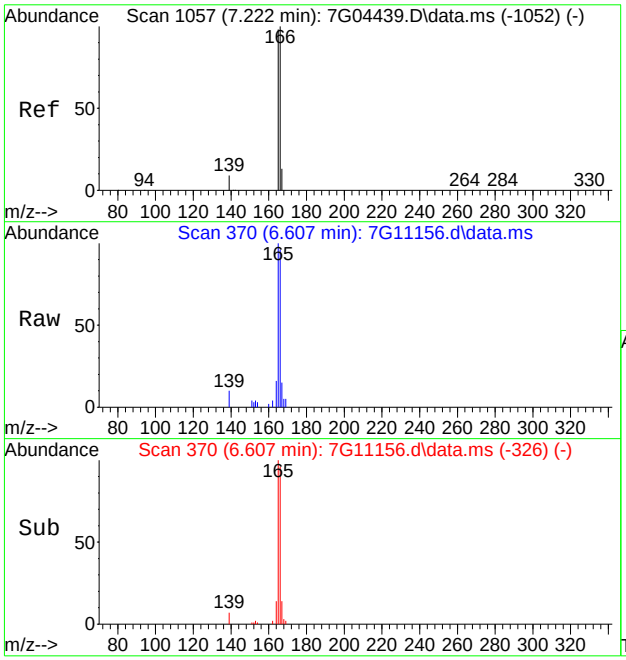


#9
Dibenzofuran
Concen: 0.37 ppm
RT: 6.317 min Scan# 310
Delta R.T. 0.019 min
Lab File: 7G11156.d
Acq: 11 Aug 2020 6:54 pm

Tgt Ion:168 Resp: 1814

Ion	Ratio	Lower	Upper
168	100		
139	18.3	12.6	52.6
169	11.3	0.0	33.8

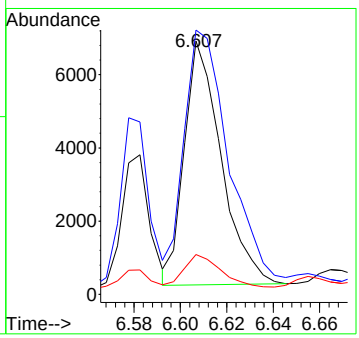


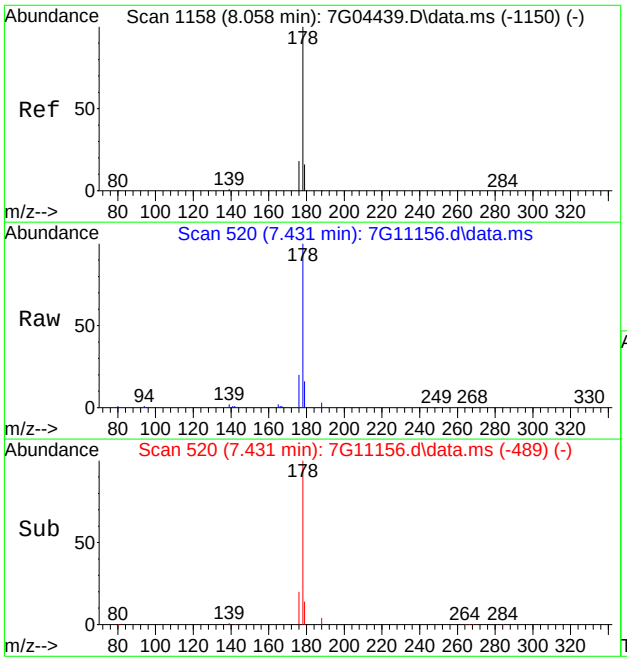


#10
Fluorene
Concen: 0.97 ppm
RT: 6.607 min Scan# 370
Delta R.T. 0.014 min
Lab File: 7G11156.d
Acq: 11 Aug 2020 6:54 pm

Tgt Ion:166 Resp: 7348

Ion	Ratio	Lower	Upper
166	100		
165	101.7	68.2	128.2
167	13.0	0.0	42.9

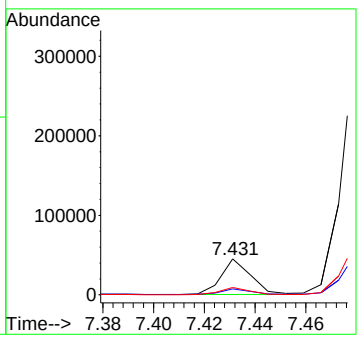


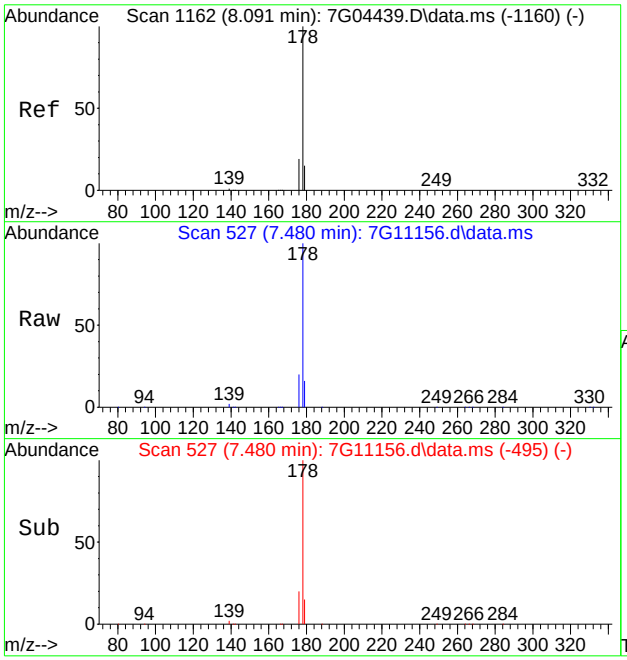


#13
Phenanthrene
Concen: 2.98 ppm
RT: 7.431 min Scan# 520
Delta R.T. 0.014 min
Lab File: 7G11156.d
Acq: 11 Aug 2020 6:54 pm

Tgt Ion:178 Resp: 36195

Ion	Ratio	Lower	Upper
178	100		
179	15.3	0.0	45.7
176	20.2	0.0	48.0

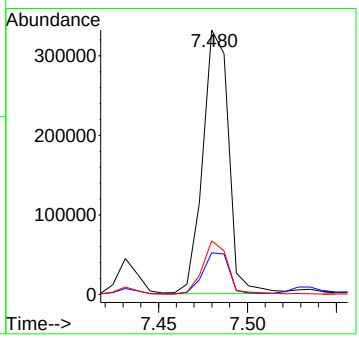


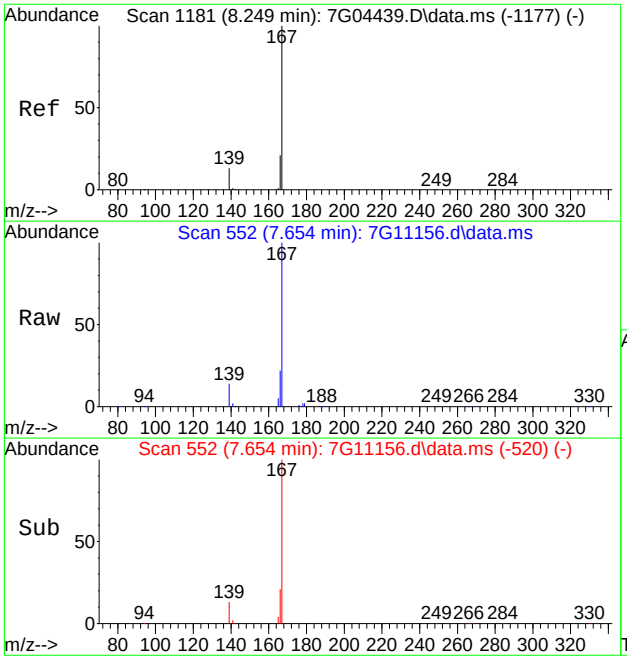


#14
Anthracene
Concen: 25.86 ppm
RT: 7.480 min Scan# 527
Delta R.T. 0.021 min
Lab File: 7G11156.d
Acq: 11 Aug 2020 6:54 pm

Tgt Ion:178 Resp: 337368

Ion	Ratio	Lower	Upper
178	100		
179	15.2	0.0	45.1
176	20.2	0.0	48.8

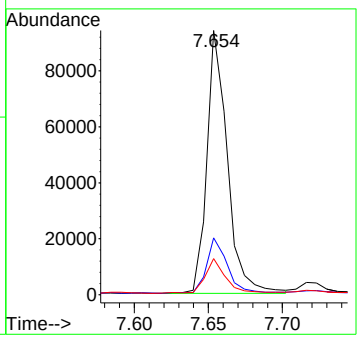


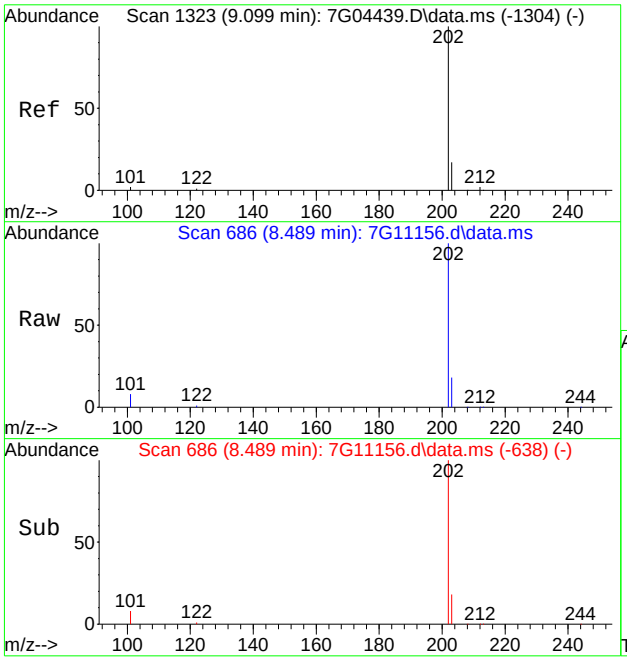


#15
Carbazole
Concen: 4.12 ppm
RT: 7.654 min Scan# 552
Delta R.T. 0.021 min
Lab File: 7G11156.d
Acq: 11 Aug 2020 6:54 pm

Tgt Ion:167 Resp: 90621

Ion	Ratio	Lower	Upper
167	100		
166	21.0	1.2	41.2
139	13.0	0.0	32.8

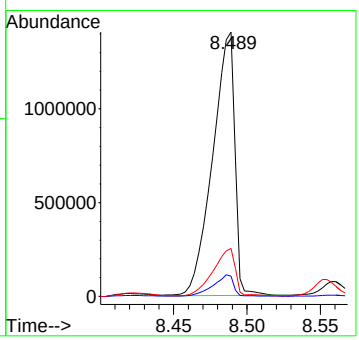


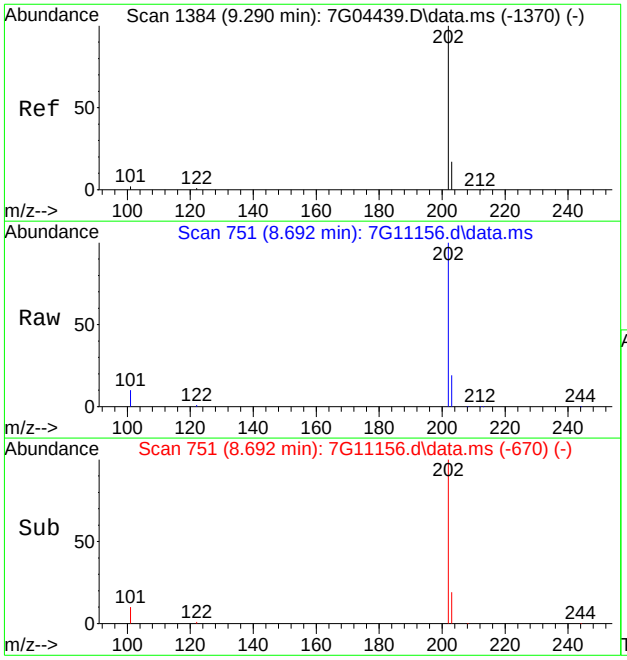


#16
Fluoranthene
Concen: 56.34 ppm
RT: 8.489 min Scan# 686
Delta R.T. 0.041 min
Lab File: 7G11156.d
Acq: 11 Aug 2020 6:54 pm

Tgt Ion:202 Resp: 1480234

Ion	Ratio	Lower	Upper
202	100		
101	7.6	0.0	32.2
203	17.9	0.0	47.2

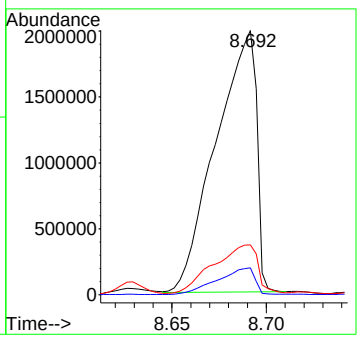


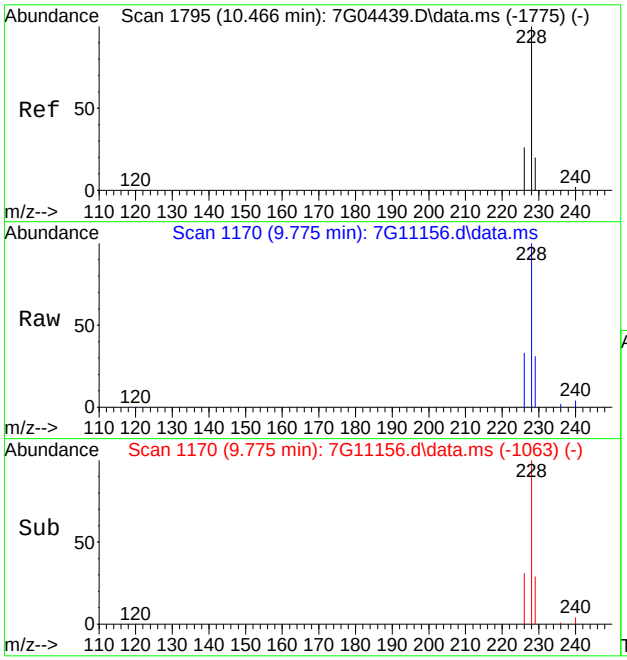


#19
Pyrene
Concen: 71.03 ppm
RT: 8.692 min Scan# 751
Delta R.T. 0.053 min
Lab File: 7G11156.d
Acq: 11 Aug 2020 6:54 pm

Tgt Ion:202 Resp: 2965205

Ion	Ratio	Lower	Upper
202	100		
101	10.1	0.0	32.4
203	18.4	0.0	47.4

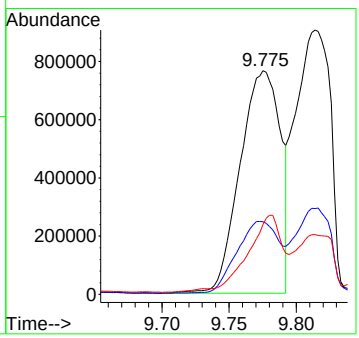


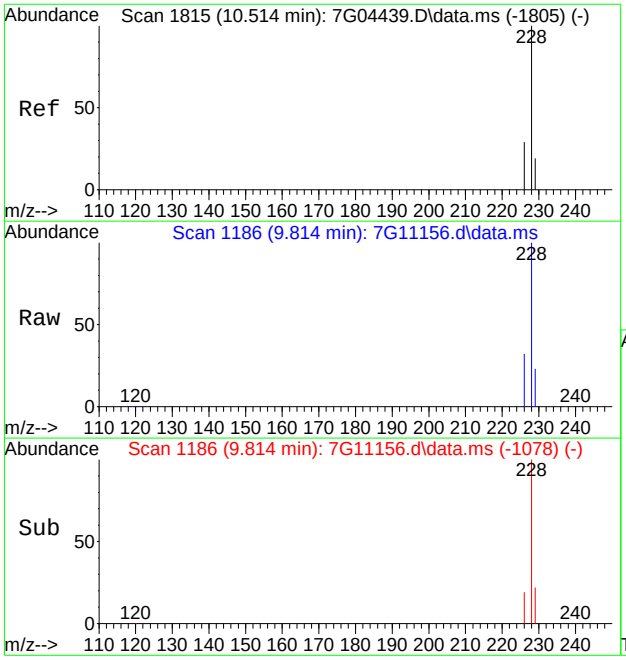


#20
Benzo[a]anthracene
Concen: 47.31 ppm
RT: 9.775 min Scan# 1170
Delta R.T. 0.058 min
Lab File: 7G11156.d
Acq: 11 Aug 2020 6:54 pm

Tgt Ion:228 Resp: 1602500

Ion	Ratio	Lower	Upper
228	100		
226	32.4	0.0	56.1
229	32.3	0.0	49.5

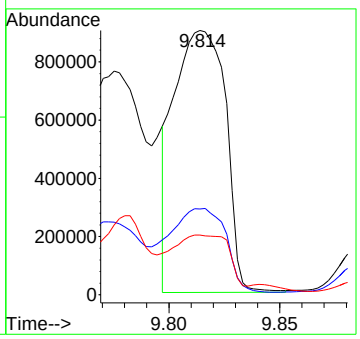


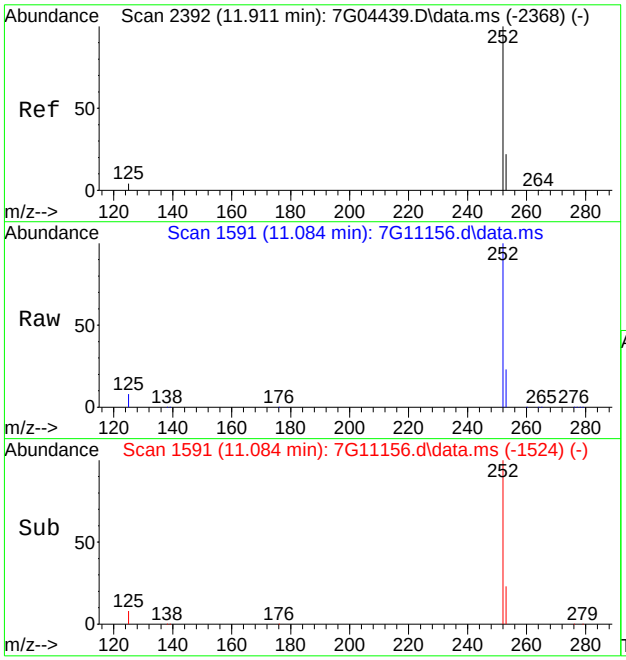


#21
Chrysene
Concen: 44.15 ppm
RT: 9.814 min Scan# 1186
Delta R.T. 0.060 min
Lab File: 7G11156.d
Acq: 11 Aug 2020 6:54 pm

Tgt Ion:228 Resp: 1457395

Ion	Ratio	Lower	Upper
228	100		
226	32.0	0.0	58.9
229	20.4	0.0	49.5

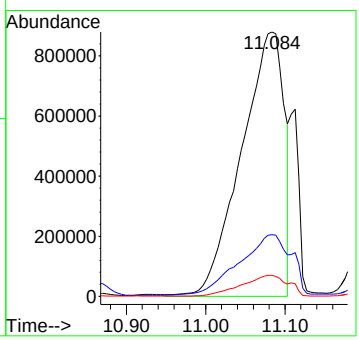


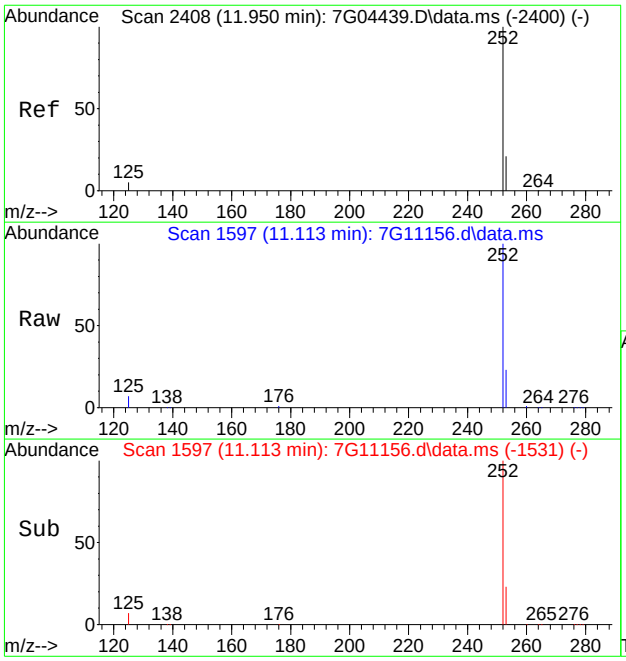


#23
Benzo[b]fluoranthene
Concen: 188.57 ppm m
RT: 11.084 min Scan# 1591
Delta R.T. 0.126 min
Lab File: 7G11156.d
Acq: 11 Aug 2020 6:54 pm

Tgt Ion:252 Resp: 3287099

Ion	Ratio	Lower	Upper
252	100		
253	23.3	0.0	51.7
125	7.9	0.0	34.5

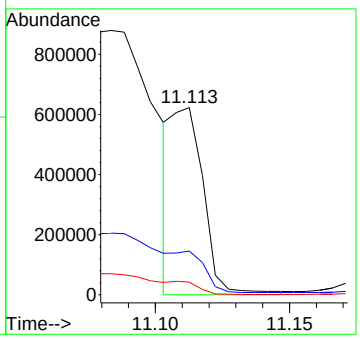


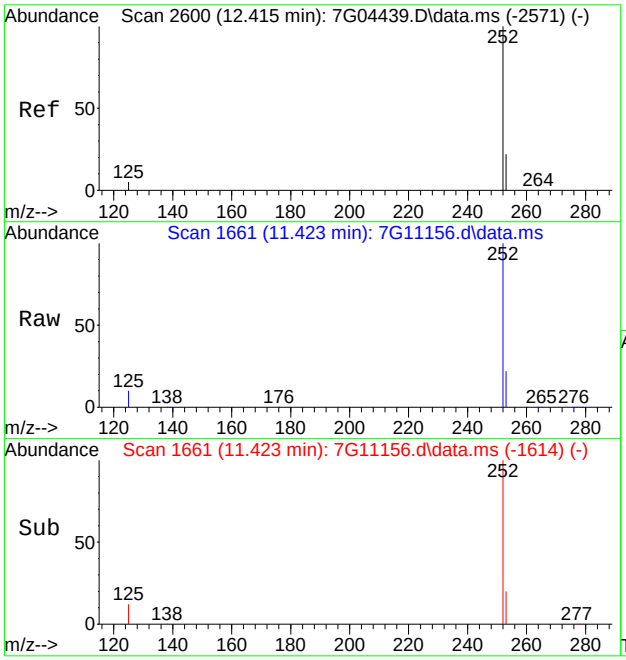


#24
Benzo[k]fluoranthene
Concen: 25.90 ppm m
RT: 11.113 min Scan# 1597
Delta R.T. 0.121 min
Lab File: 7G11156.d
Acq: 11 Aug 2020 6:54 pm

Tgt Ion:252 Resp: 512085

Ion	Ratio	Lower	Upper
252	100		
253	23.4	0.0	51.5
125	6.7	0.0	34.8

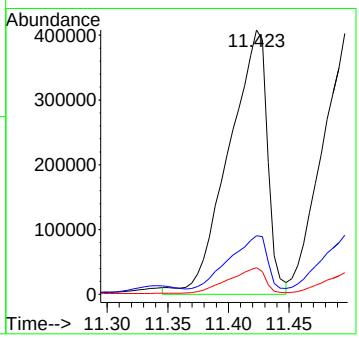


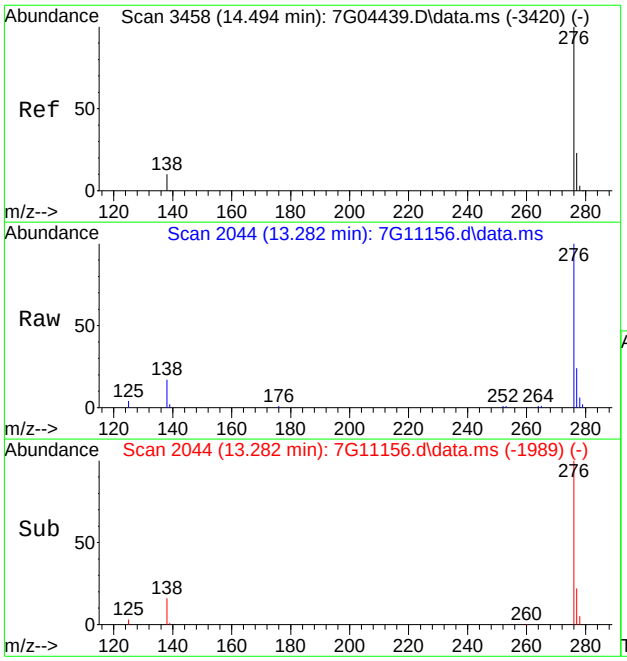


#25
Benzo[a]pyrene
Concen: 53.10 ppm m
RT: 11.423 min Scan# 1661
Delta R.T. 0.029 min
Lab File: 7G11156.d
Acq: 11 Aug 2020 6:54 pm

Tgt Ion:252 Resp: 901958

Ion	Ratio	Lower	Upper
252	100		
253	22.2	0.0	51.6
125	10.1	0.0	34.8

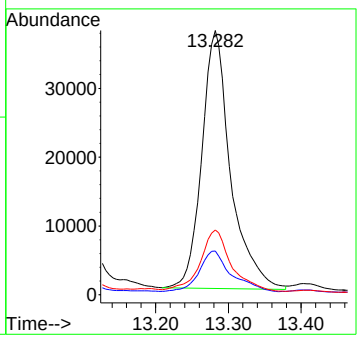


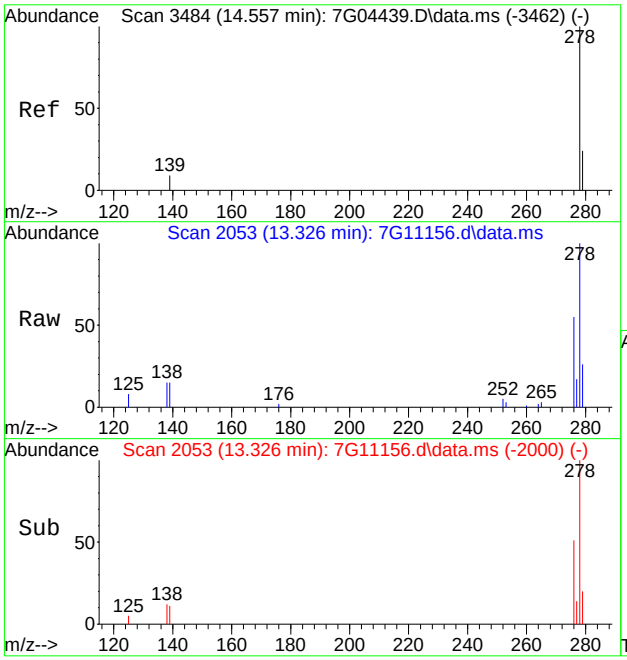


#26
Indeno[1,2,3-cd]pyrene
Concen: 9.29 ppm
RT: 13.282 min Scan# 2044
Delta R.T. 0.068 min
Lab File: 7G11156.d
Acq: 11 Aug 2020 6:54 pm

Tgt Ion:276 Resp: 102990

Ion	Ratio	Lower	Upper
276	100		
138	15.7	0.0	39.6
277	23.5	0.0	53.1

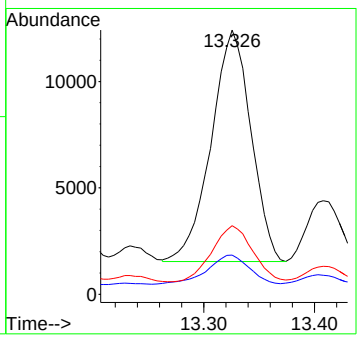


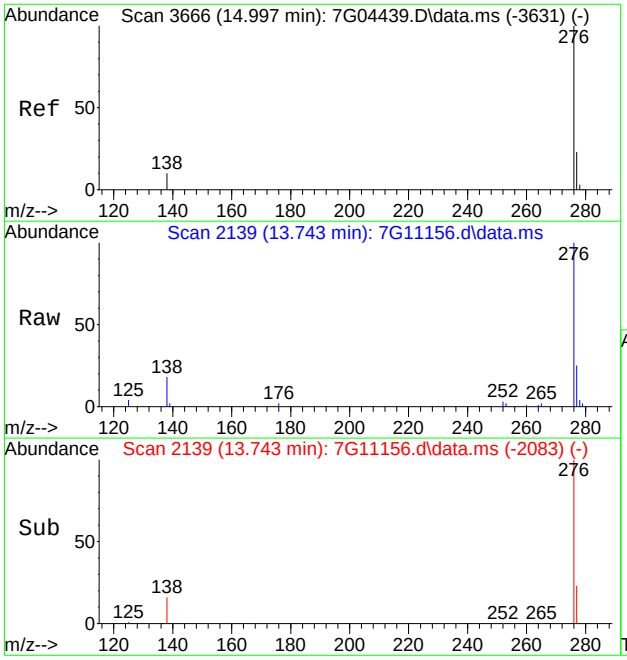


#27
Dibenz[a,h]anthracene
Concen: 2.21 ppm
RT: 13.326 min Scan# 2053
Delta R.T. 0.058 min
Lab File: 7G11156.d
Acq: 11 Aug 2020 6:54 pm

Tgt Ion:278 Resp: 27178

Ion	Ratio	Lower	Upper
278	100		
139	12.1	0.0	38.8
279	23.9	0.0	53.6

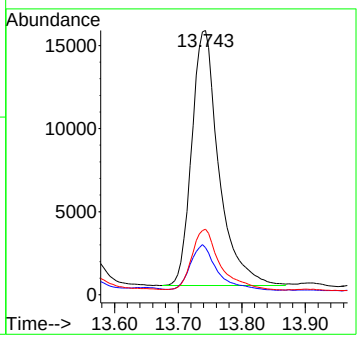




#28
Benzo[g,h,i]perylene
Concen: 3.41 ppm
RT: 13.743 min Scan# 2139
Delta R.T. 0.073 min
Lab File: 7G11156.d
Acq: 11 Aug 2020 6:54 pm

Tgt Ion:276 Resp: 45555

Ion	Ratio	Lower	Upper
276	100		
138	16.5	0.0	40.5
277	23.8	0.0	53.2



Manual Integration Approval Summary

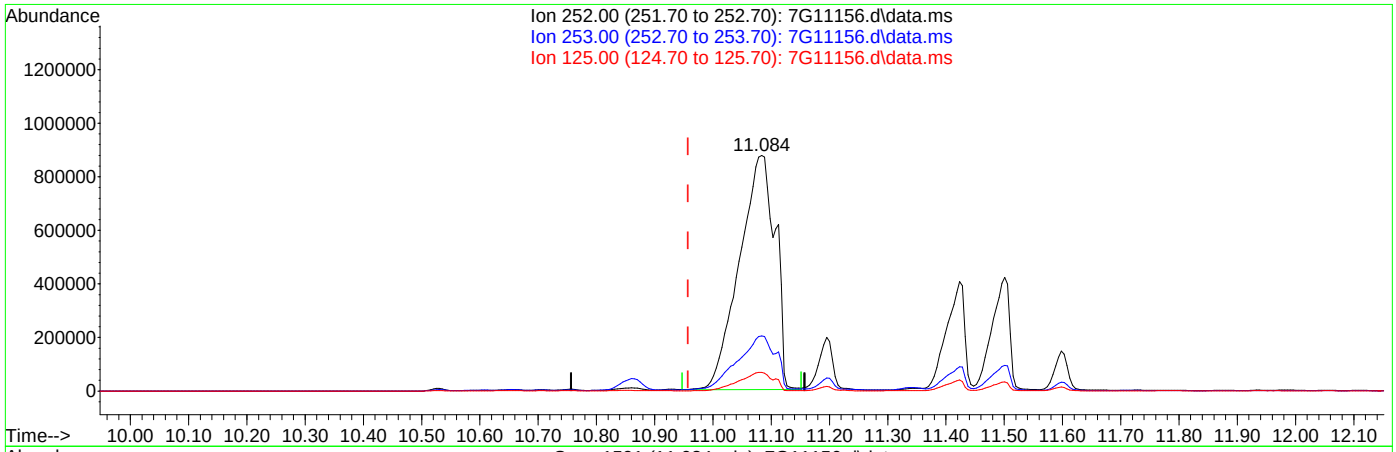
Sample Number: FA77576-5
Lab FileID: 7G11156.D
Injection Time: 08/11/20 18:54
Method: SW846 8270E BY SIM
Analyst approved: 08/12/20 09:33 Fouad Sekkar
Supervisor approved: 08/12/20 11:43 Nicole McCampbell

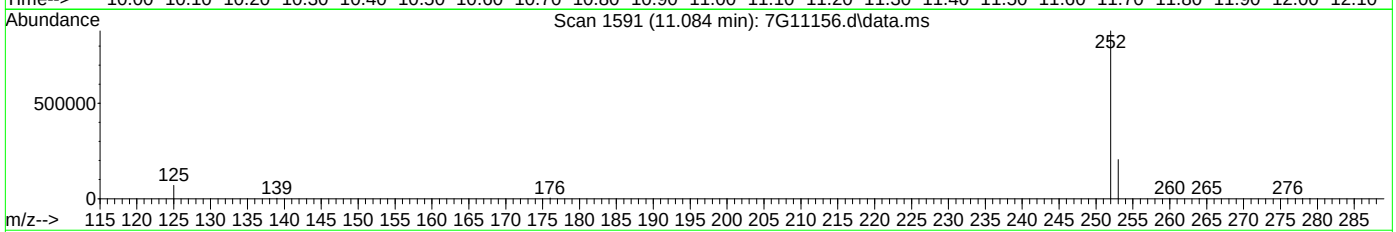
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(b)fluoranthene	205-99-2		11.08	Overlapping peak
Benzo(k)fluoranthene	207-08-9		11.11	Overlapping peak
Benzo(a)pyrene	50-32-8		11.42	Missed peak

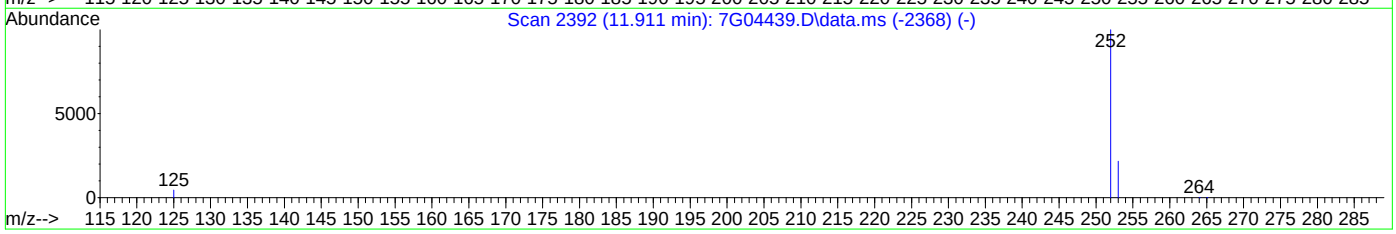
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11156.d
Acq On : 11 Aug 2020 6:54 pm
Operator : FOUADS
Sample : fa77576-5 e Inst : MSBNA8
Misc : op81483,S7G483,15.3,,,1,1,soil
ALS Vial : 28 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:27:27 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11156.d\data.ms

(23) Benzo[b]fluoranthene (P)

11.084min (+0.126) 214.69ppm

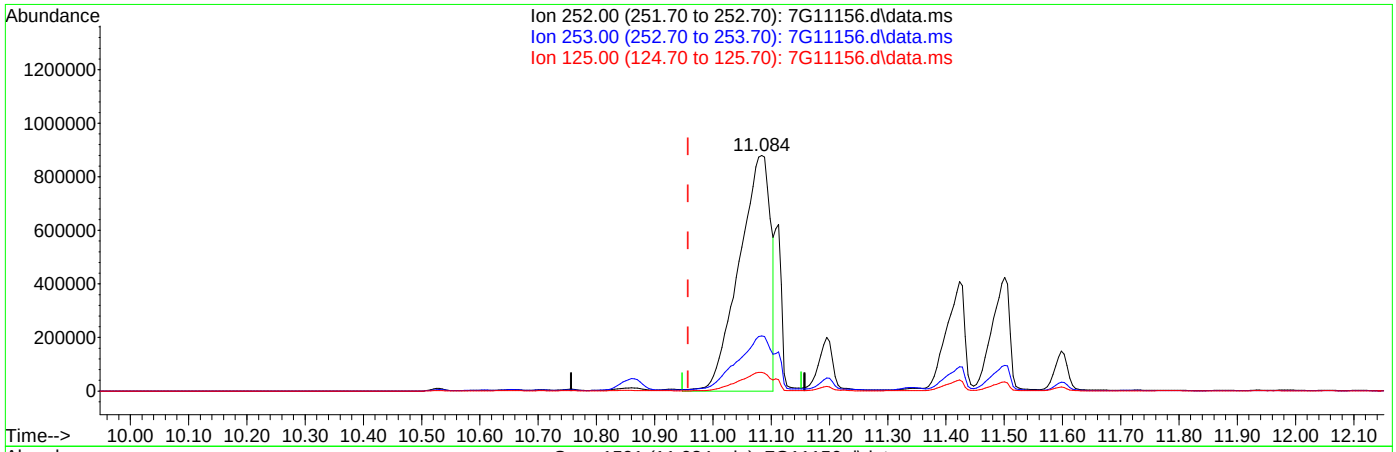
response 3742424

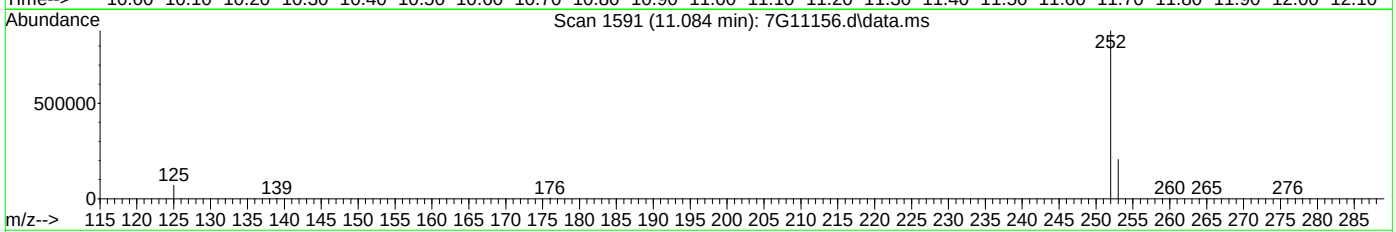
Ion	Exp%	Act%
252.00	100	100
253.00	21.70	22.84
125.00	4.50	7.86
0.00	0.00	0.00

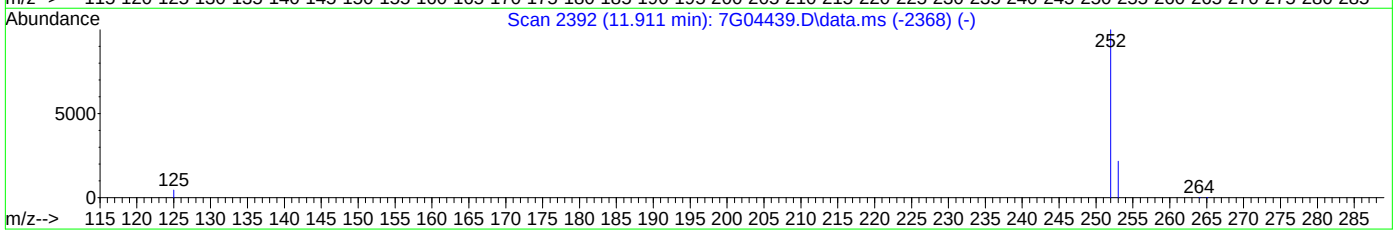
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11156.d
Acq On : 11 Aug 2020 6:54 pm
Operator : FOUADS
Sample : fa77576-5 e Inst : MSBNA8
Misc : op81483,S7G483,15.3,,,1,1,soil
ALS Vial : 28 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:27:27 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11156.d\data.ms

(23) Benzo[b]fluoranthene (P)

11.084min (+0.126) 188.57ppm m

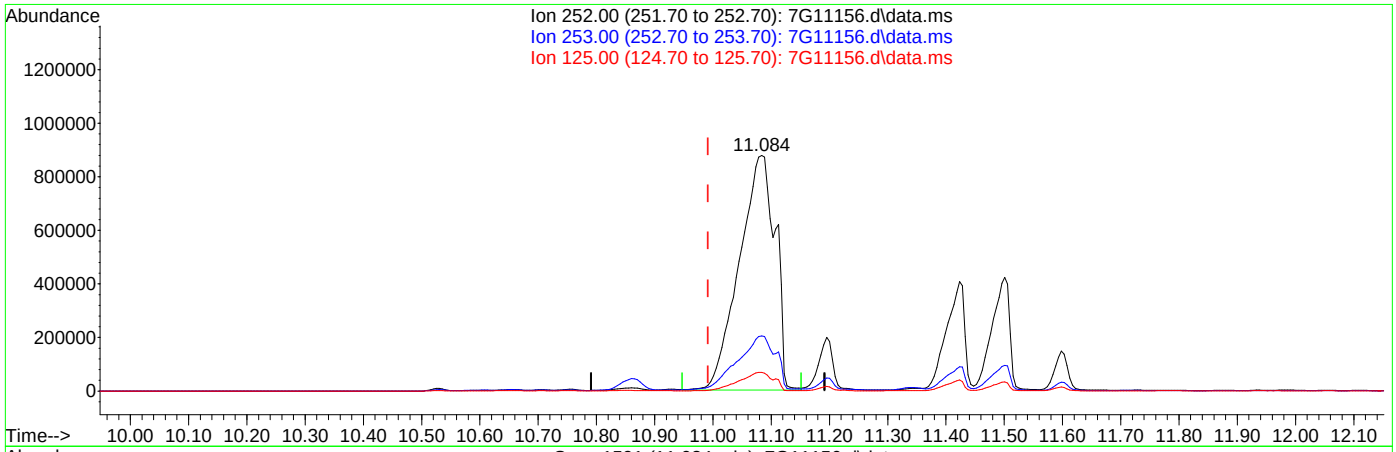
response 3287099

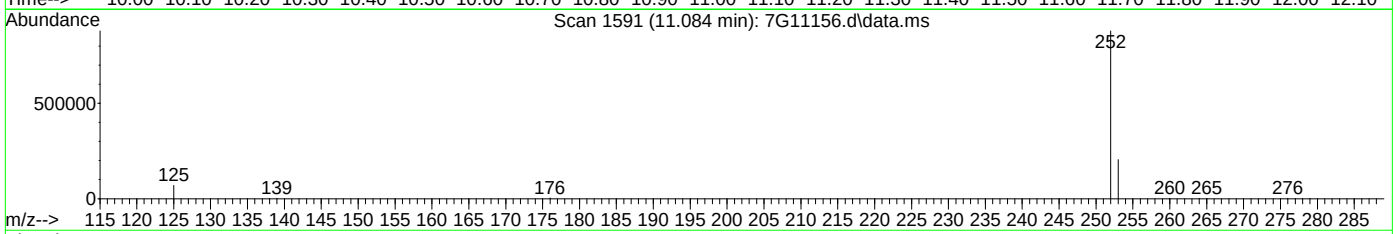
Ion	Exp%	Act%
252.00	100	100
253.00	21.70	23.32
125.00	4.50	7.93
0.00	0.00	0.00

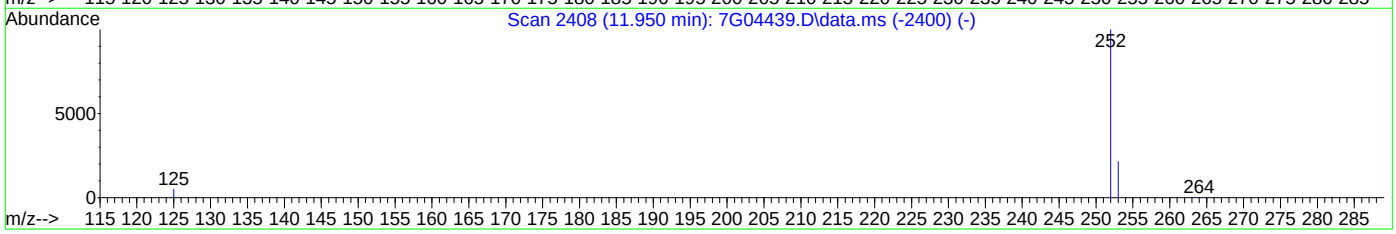
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11156.d
Acq On : 11 Aug 2020 6:54 pm
Operator : FOUADS
Sample : fa77576-5 e Inst : MSBNA8
Misc : op81483,S7G483,15.3,,,1,1,soil
ALS Vial : 28 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:27:27 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11156.d\data.ms

(24) Benzo[k]fluoranthene (P)

11.084min (+0.092) 142.90ppm

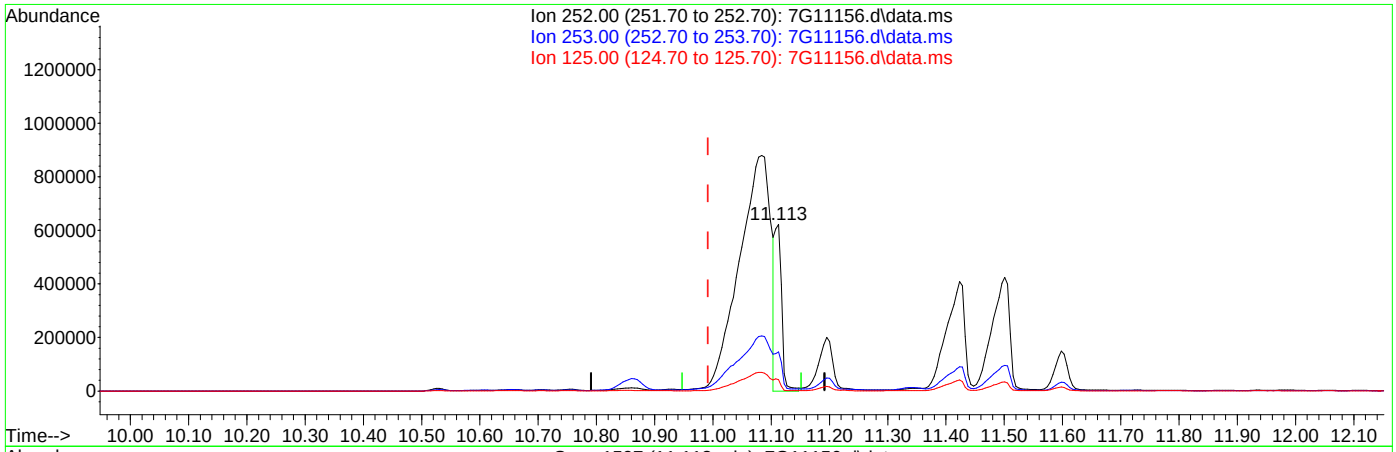
response 3759373

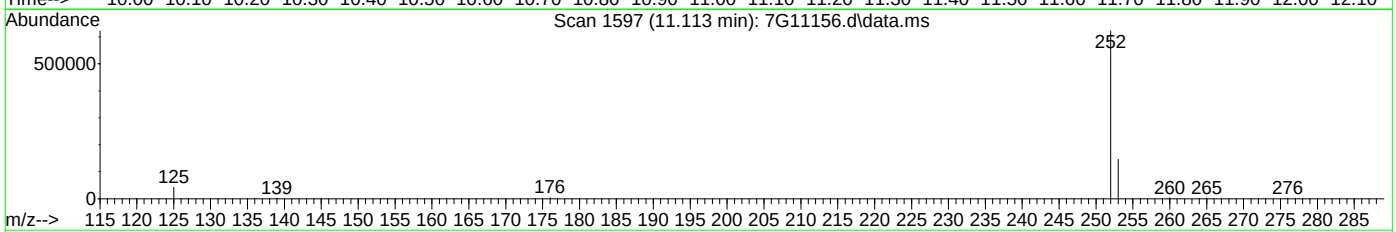
Ion	Exp%	Act%
252.00	100	100
253.00	21.50	22.84
125.00	4.80	7.86
0.00	0.00	0.00

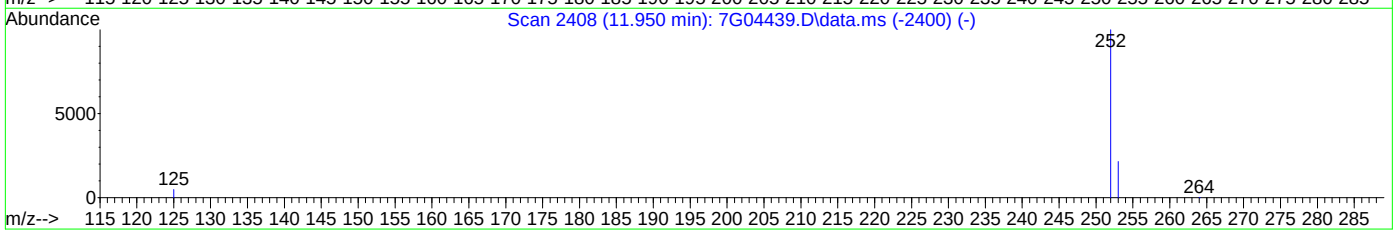
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11156.d
Acq On : 11 Aug 2020 6:54 pm
Operator : FOUADS
Sample : fa77576-5 e Inst : MSBNA8
Misc : op81483,S7G483,15.3,,,1,1,soil
ALS Vial : 28 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:27:27 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11156.d\data.ms

(24) Benzo[k]fluoranthene (P)

11.113min (+0.121) 25.90ppm m

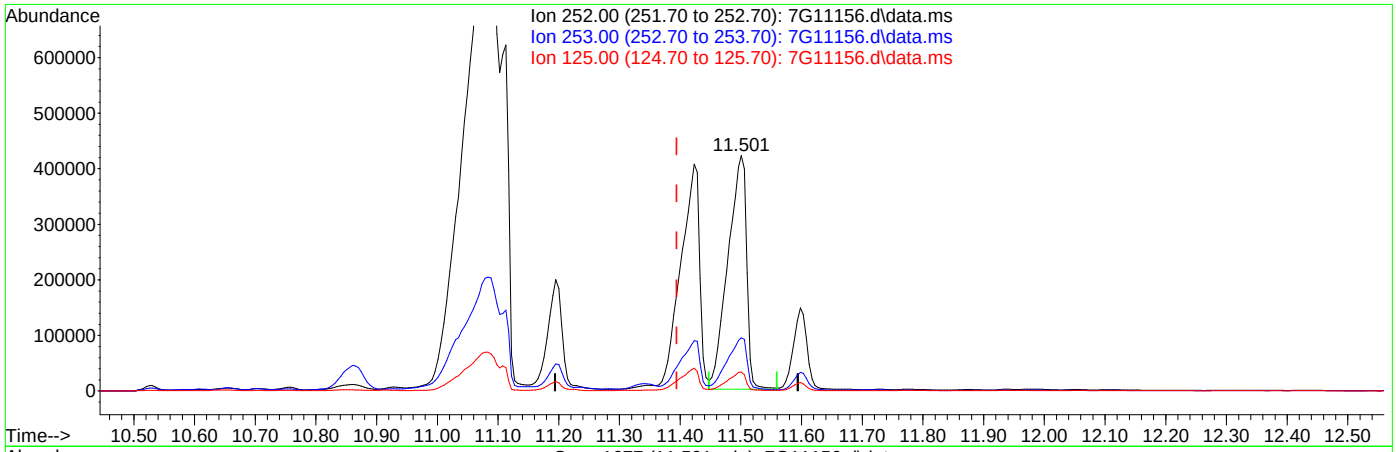
response 512085

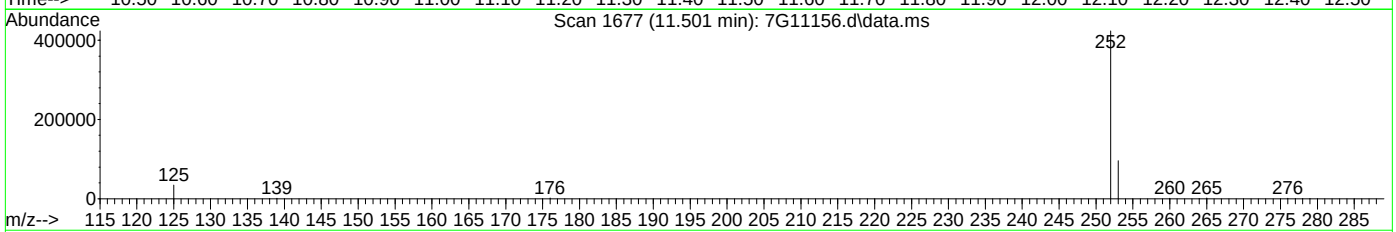
Ion	Exp%	Act%
252.00	100	100
253.00	21.50	23.38
125.00	4.80	6.73
0.00	0.00	0.00

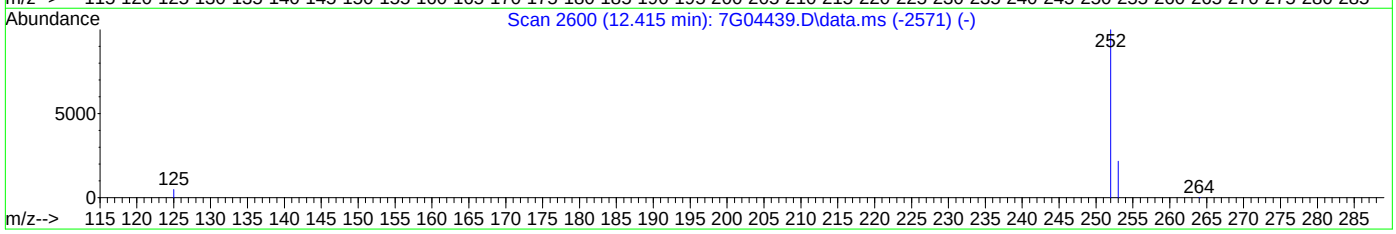
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11156.d
Acq On : 11 Aug 2020 6:54 pm
Operator : FOUADS
Sample : fa77576-5 e Inst : MSBNA8
Misc : op81483,S7G483,15.3,,,1,1,soil
ALS Vial : 28 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:27:27 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11156.d\data.ms

(25) Benzo[a]pyrene (P)

11.501min (+0.107) 52.87ppm

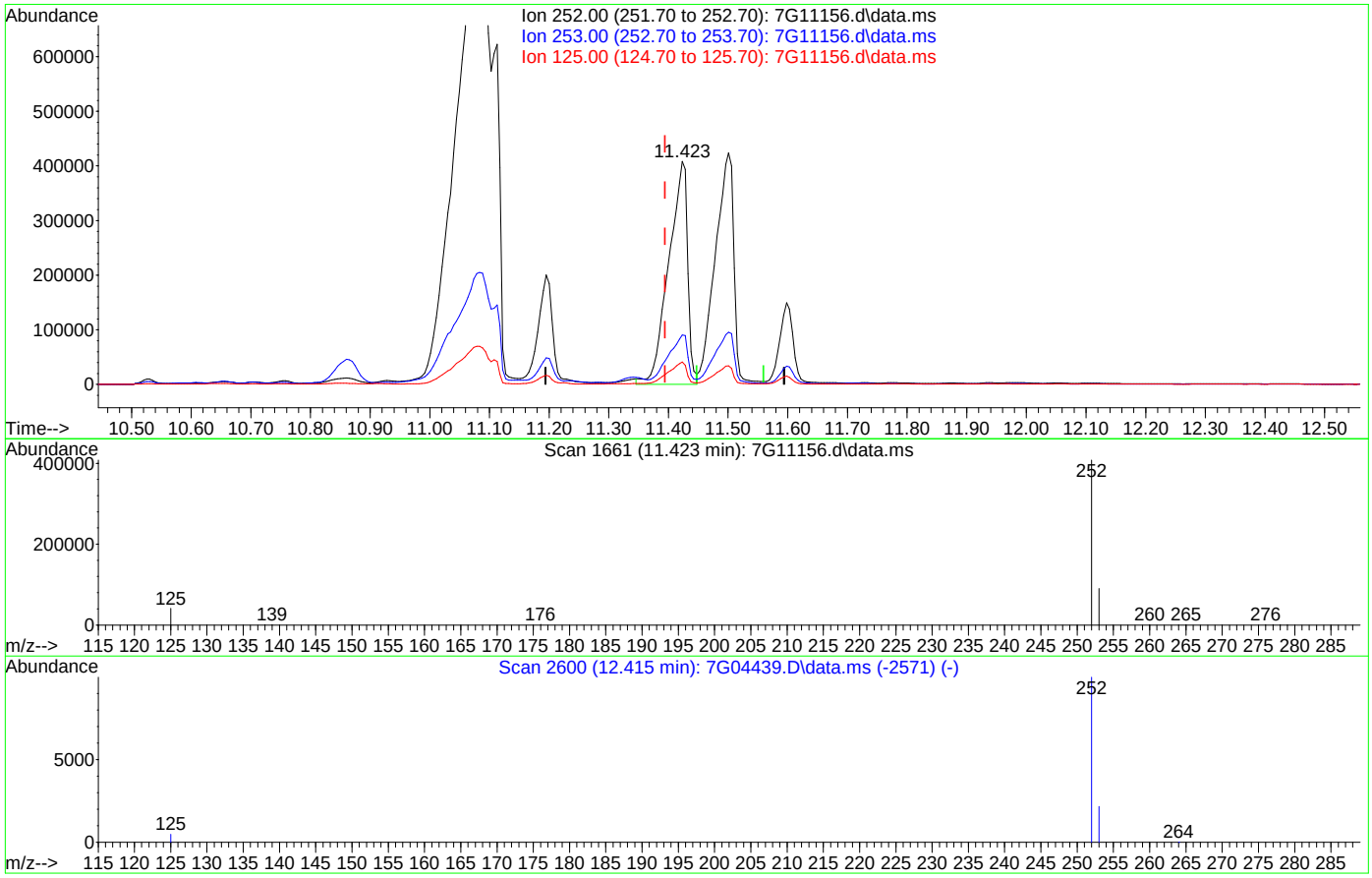
response 898054

Ion	Exp%	Act%
252.00	100	100
253.00	21.60	21.84
125.00	4.80	7.77
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11156.d
Acq On : 11 Aug 2020 6:54 pm
Operator : FOUADS
Sample : fa77576-5 e Inst : MSBNA8
Misc : op81483,S7G483,15.3,,,1,1,soil
ALS Vial : 28 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:27:27 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration



TIC: 7G11156.d\data.ms

(25) Benzo[a]pyrene (P)

11.423min (+0.029) 53.10ppm m

response 901958

Ion	Exp%	Act%
252.00	100	100
253.00	21.60	22.20
125.00	4.80	10.09
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 08/11/20 12:03

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11108.d
Acq On : 10 Aug 2020 5:47 pm
Operator : FOUADS
Sample : fa77576-6 e
Misc : op81483,S7G482,15.5,,,1,1,soil
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 11 03:15:56 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

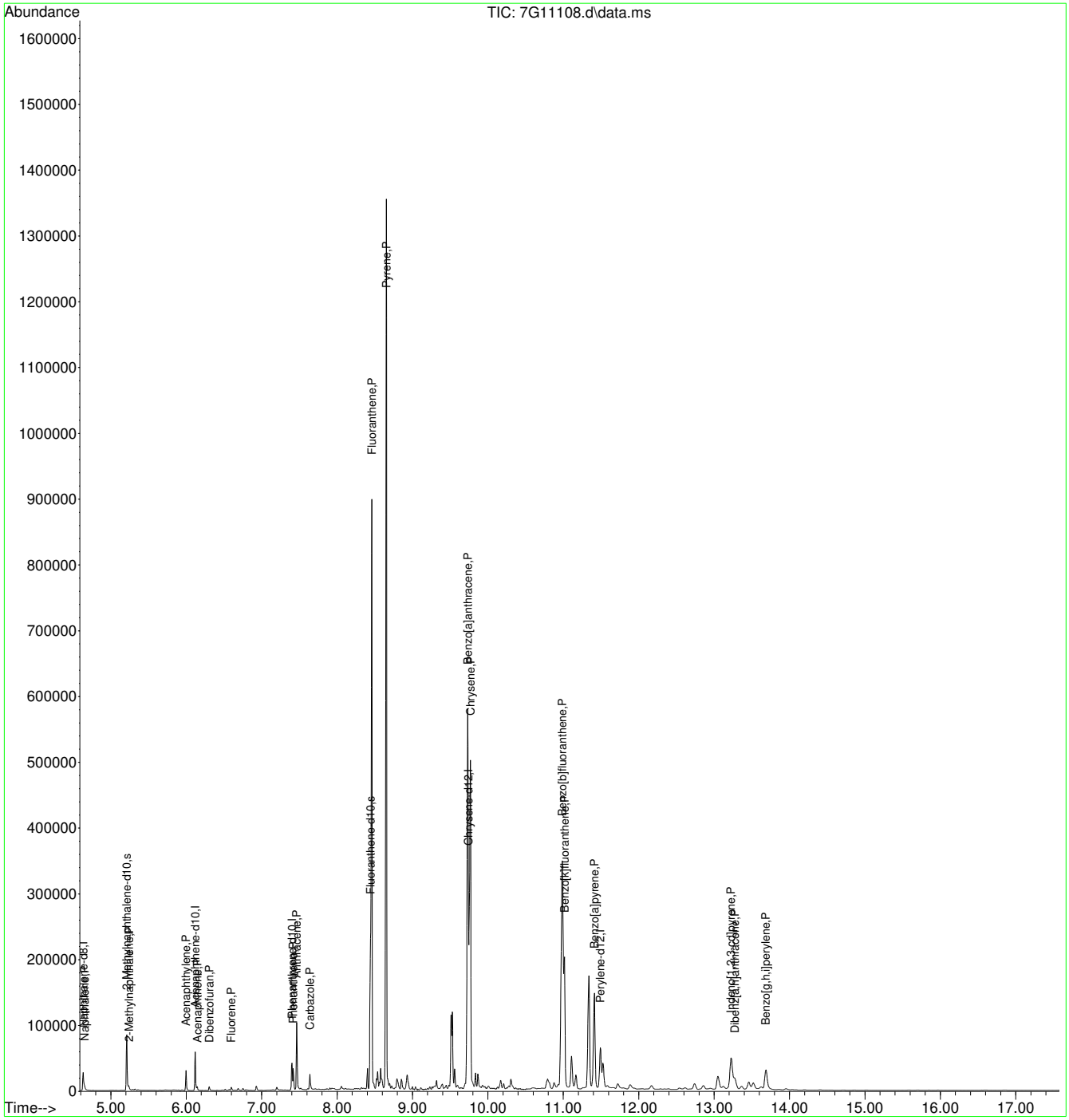
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.634	136	25295	4.00	ppm	0.00
6) Acenaphthene-d10	6.118	164	17856	4.00	ppm	0.00
11) Phenanthrene-d10	7.403	188	34979	4.00	ppm	0.00
18) Chrysene-d12	9.741	240	67215	4.00	ppm	0.02
22) Perylene-d12	11.491	264	61009	4.00	ppm	0.01
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.211	152	31562	8.38	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 83.80%			
17) Fluoranthene-d10	8.442	212	164766	9.03	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 90.30%			
Target Compounds						Qvalue
2) Naphthalene	4.652	128	4612	0.65	ppm	99
3) 2-Methylnaphthalene	5.240	142	1869	0.33	ppm	97
7) Acenaphthylene	5.997	152	19162	1.87	ppm	99
8) Acenaphthene	6.147	153	1828	0.28	ppm	96
9) Dibenzofuran	6.307	168	4064	0.87	ppm	84
10) Fluorene	6.597	166	2030	0.28	ppm	99
13) Phenanthrene	7.417	178	20236	1.76	ppm	96
14) Anthracene	7.466	178	64890	5.52	ppm	99
15) Carbazole	7.640	167	17130	0.82	ppm	97
16) Fluoranthene	8.461	202	576295	24.97	ppm	98
19) Pyrene	8.654	202	911458	32.76	ppm	96
20) Benzo[a]anthracene	9.732	228	401326	18.30	ppm	95
21) Chrysene	9.768	228	396641	17.06	ppm	98
23) Benzo[b]fluoranthene	10.986	252	533861	25.78	ppm	97
24) Benzo[k]fluoranthene	11.015	252	156233m	7.03	ppm	
25) Benzo[a]pyrene	11.413	252	170247	8.44	ppm	98
26) Indeno[1,2,3-cd]pyrene	13.224	276	84656	6.43	ppm	94
27) Dibenz[a,h]anthracene	13.272	278	21546	1.47	ppm	97
28) Benzo[g,h,i]perylene	13.685	276	52239	3.29	ppm	94

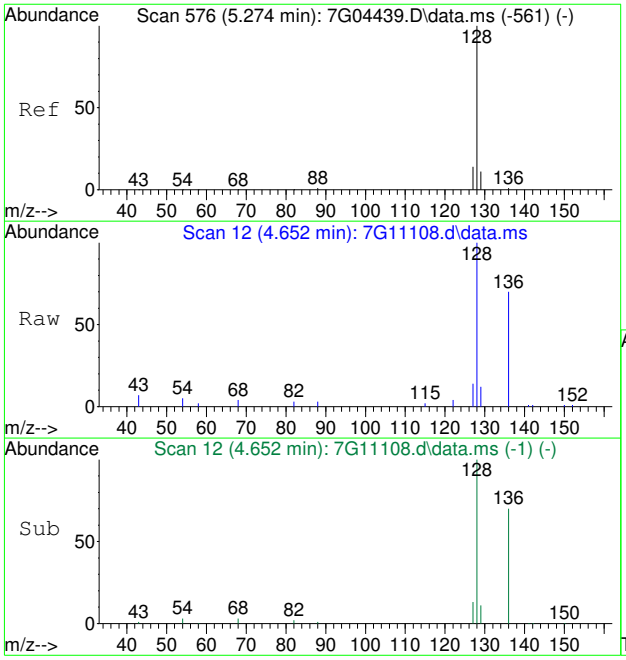
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11108.d
Acq On : 10 Aug 2020 5:47 pm
Operator : FOUADS
Sample : fa77576-6 e
Misc : op81483,S7G482,15.5,,,1,1,soil
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 11 03:15:56 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

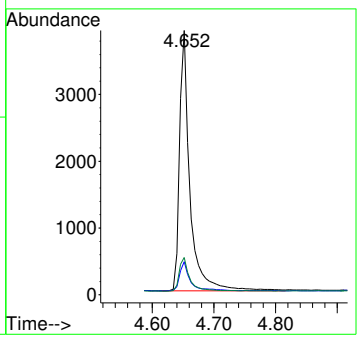


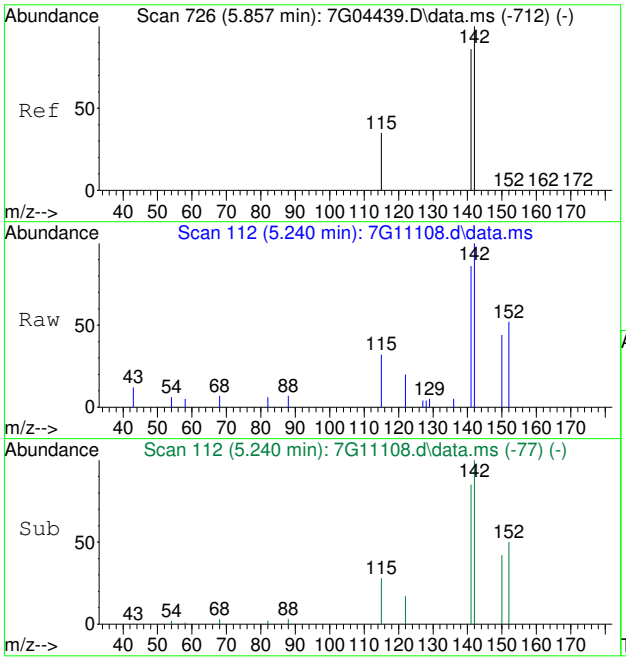


#2
Naphthalene
Concen: 0.65 ppm
RT: 4.652 min Scan# 12
Delta R.T. 0.006 min
Lab File: 7G11108.d
Acq: 10 Aug 2020 5:47 pm

Tgt Ion:128 Resp: 4612

Ion	Ratio	Lower	Upper
128	100		
129	11.2	0.0	40.9
127	12.9	0.0	43.5

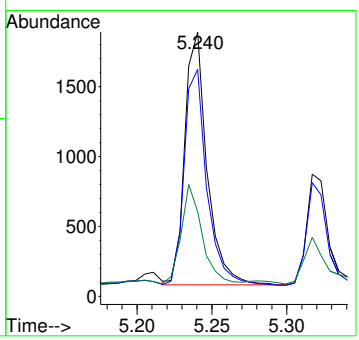


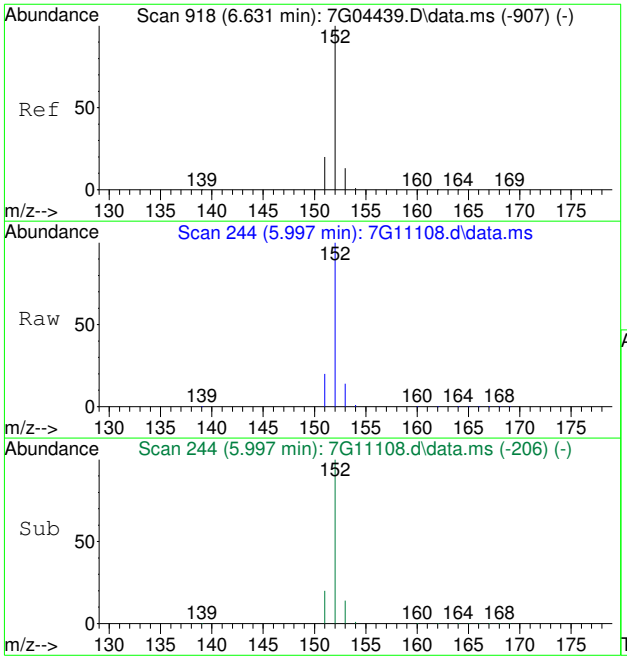


#3
2-Methylnaphthalene
Concen: 0.33 ppm
RT: 5.240 min Scan# 112
Delta R.T. 0.006 min
Lab File: 7G11108.d
Acq: 10 Aug 2020 5:47 pm

Tgt Ion:142 Resp: 1869

Ion	Ratio	Lower	Upper
142	100		
141	85.8	55.7	115.7
115	28.7	5.4	65.4

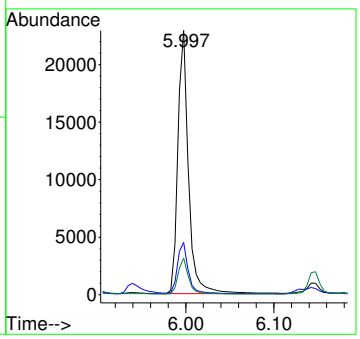


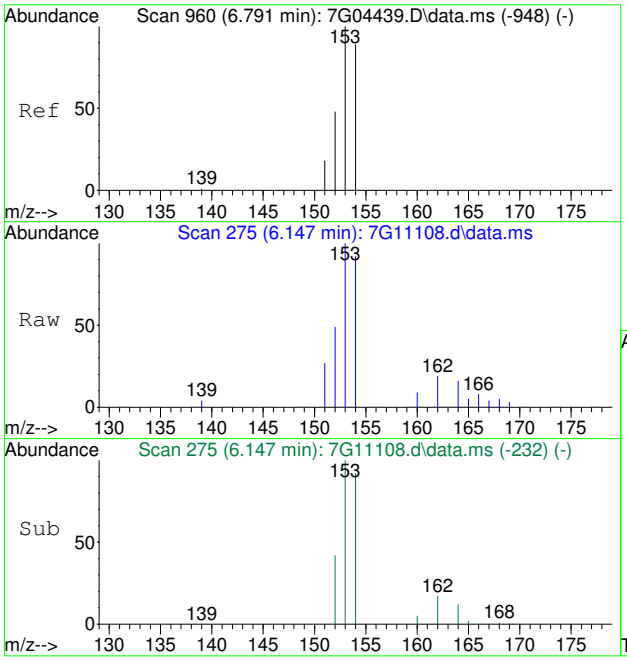


#7
Acenaphthylene
Concen: 1.87 ppm
RT: 5.997 min Scan# 244
Delta R.T. 0.005 min
Lab File: 7G11108.d
Acq: 10 Aug 2020 5:47 pm

Tgt Ion:152 Resp: 19162

Ion	Ratio	Lower	Upper
152	100		
151	19.4	0.0	49.8
153	13.6	0.0	42.8

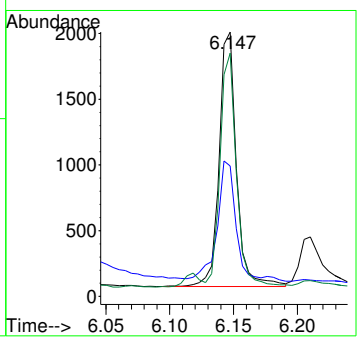


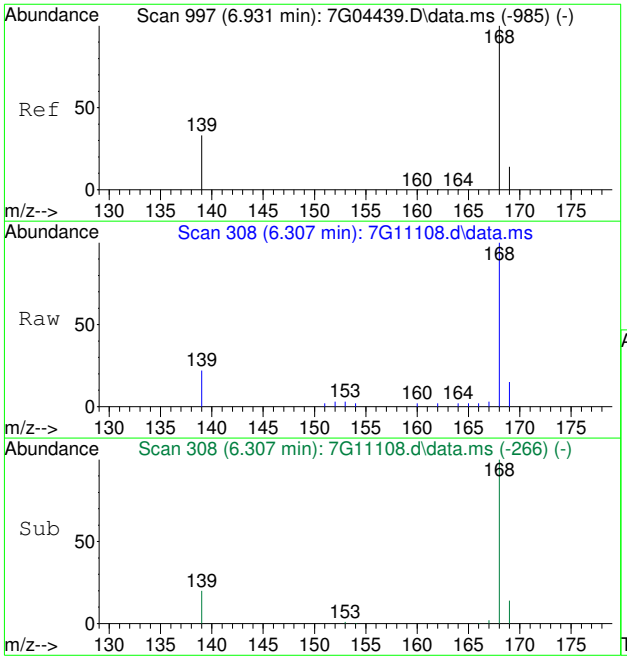


#8
Acenaphthene
Concen: 0.28 ppm
RT: 6.147 min Scan# 275
Delta R.T. 0.010 min
Lab File: 7G11108.d
Acq: 10 Aug 2020 5:47 pm

Tgt Ion:153 Resp: 1828

Ion	Ratio	Lower	Upper
153	100		
152	44.7	18.3	78.3
154	91.8	59.3	119.3

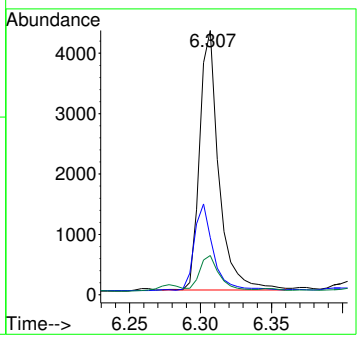


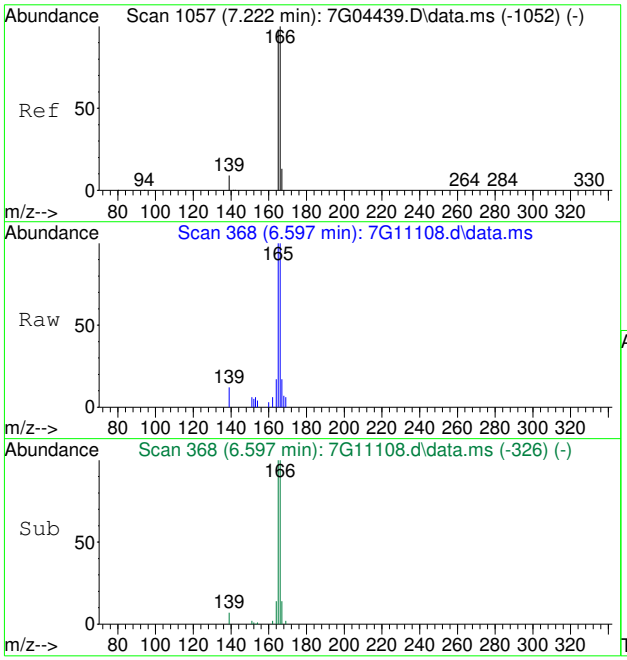


#9
Dibenzofuran
Concen: 0.87 ppm
RT: 6.307 min Scan# 308
Delta R.T. 0.005 min
Lab File: 7G11108.d
Acq: 10 Aug 2020 5:47 pm

Tgt Ion:168 Resp: 4064

Ion	Ratio	Lower	Upper
168	100		
139	20.2	12.6	52.6
169	12.6	0.0	33.8

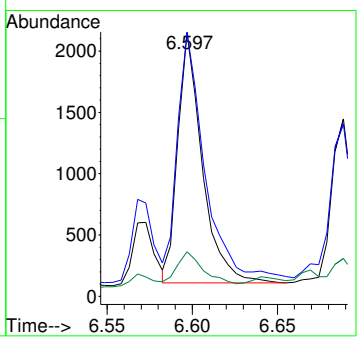


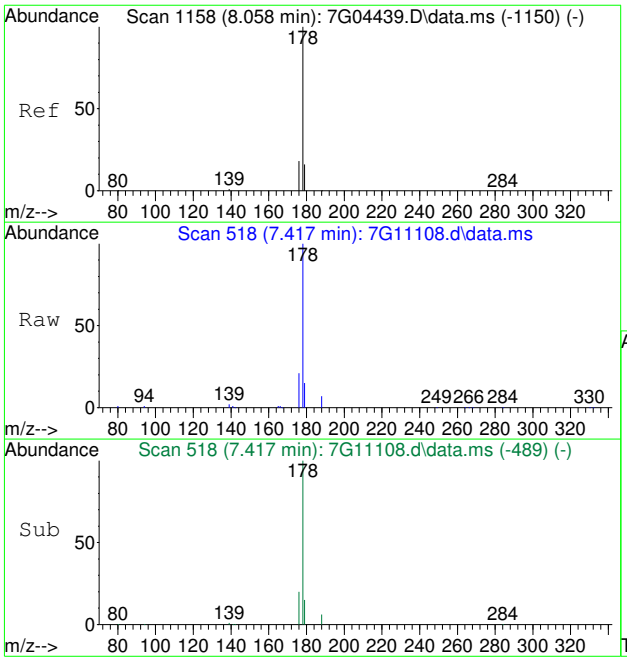


#10
Fluorene
Concen: 0.28 ppm
RT: 6.597 min Scan# 368
Delta R.T. 0.005 min
Lab File: 7G11108.d
Acq: 10 Aug 2020 5:47 pm

Tgt Ion:166 Resp: 2030

Ion	Ratio	Lower	Upper
166	100		
165	97.6	68.2	128.2
167	12.0	0.0	42.9

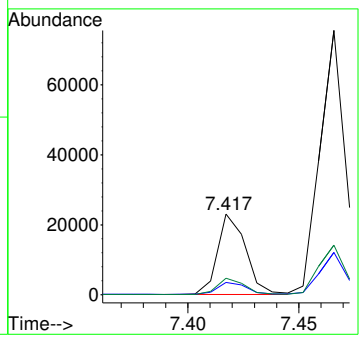


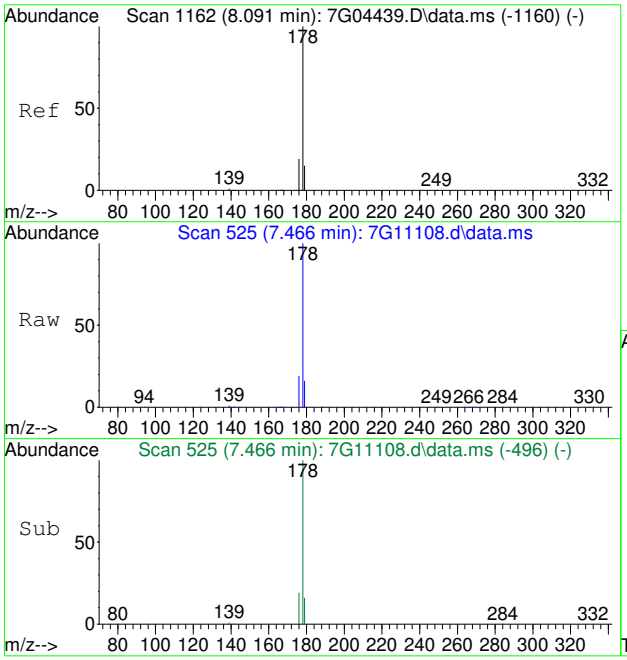


#13
Phenanthrene
Concen: 1.76 ppm
RT: 7.417 min Scan# 518
Delta R.T. -0.000 min
Lab File: 7G11108.d
Acq: 10 Aug 2020 5:47 pm

Tgt Ion:178 Resp: 20236

Ion	Ratio	Lower	Upper
178	100		
179	14.9	0.0	45.7
176	20.4	0.0	48.0

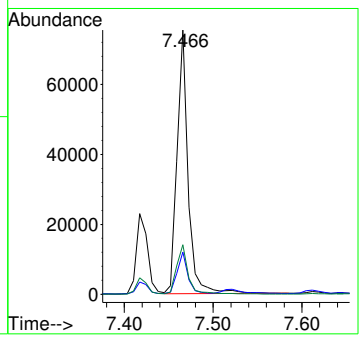


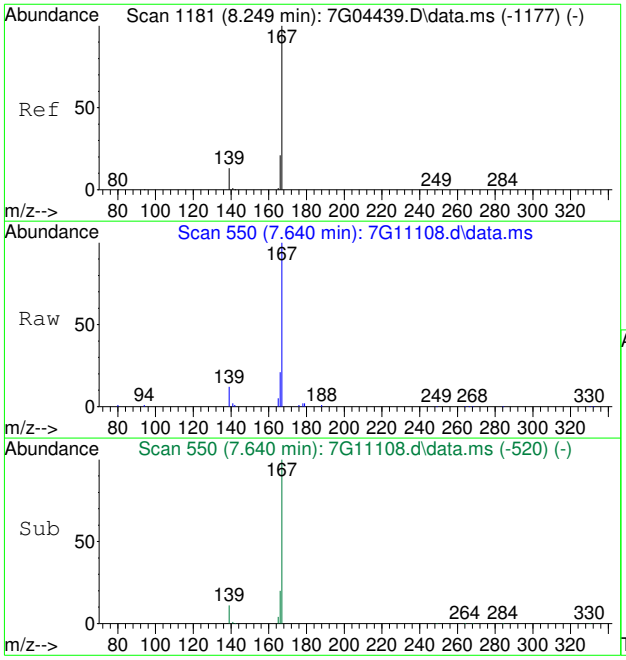


#14
Anthracene
Concen: 5.52 ppm
RT: 7.466 min Scan# 525
Delta R.T. -0.000 min
Lab File: 7G11108.d
Acq: 10 Aug 2020 5:47 pm

Tgt Ion:178 Resp: 64890

Ion	Ratio	Lower	Upper
178	100		
179	15.8	0.0	45.1
176	18.7	0.0	48.8

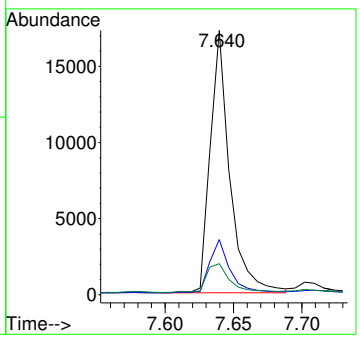


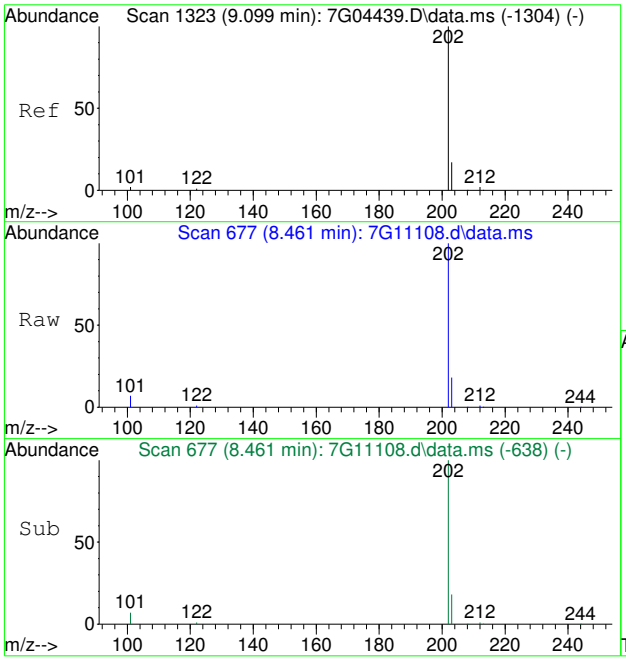


#15
Carbazole
Concen: 0.82 ppm
RT: 7.640 min Scan# 550
Delta R.T. 0.007 min
Lab File: 7G11108.d
Acq: 10 Aug 2020 5:47 pm

Tgt Ion:167 Resp: 17130

Ion	Ratio	Lower	Upper
167	100		
166	20.3	1.2	41.2
139	10.8	0.0	32.8

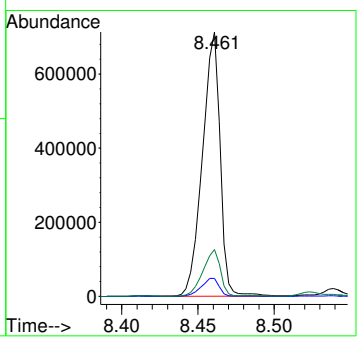


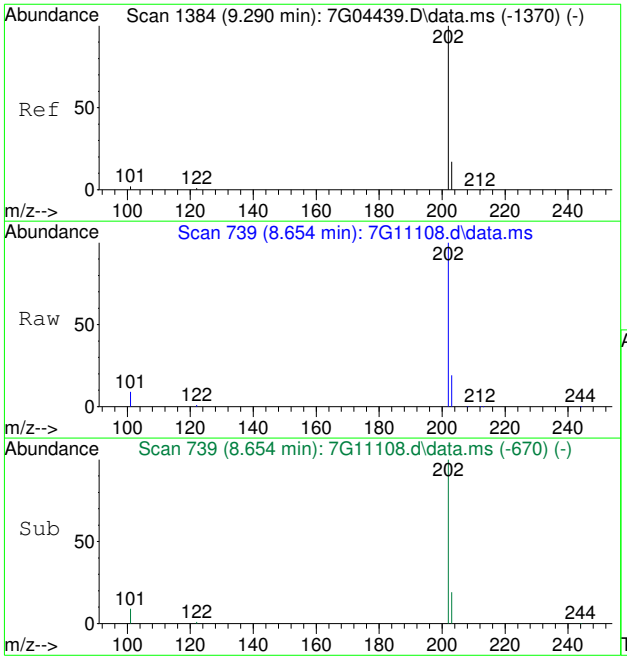


#16
Fluoranthene
Concen: 24.97 ppm
RT: 8.461 min Scan# 677
Delta R.T. 0.012 min
Lab File: 7G11108.d
Acq: 10 Aug 2020 5:47 pm

Tgt Ion:202 Resp: 576295

Ion	Ratio	Lower	Upper
202	100		
101	6.8	0.0	32.2
203	17.6	0.0	47.2

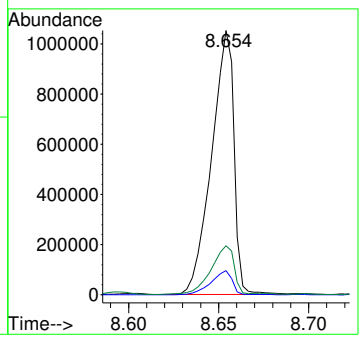


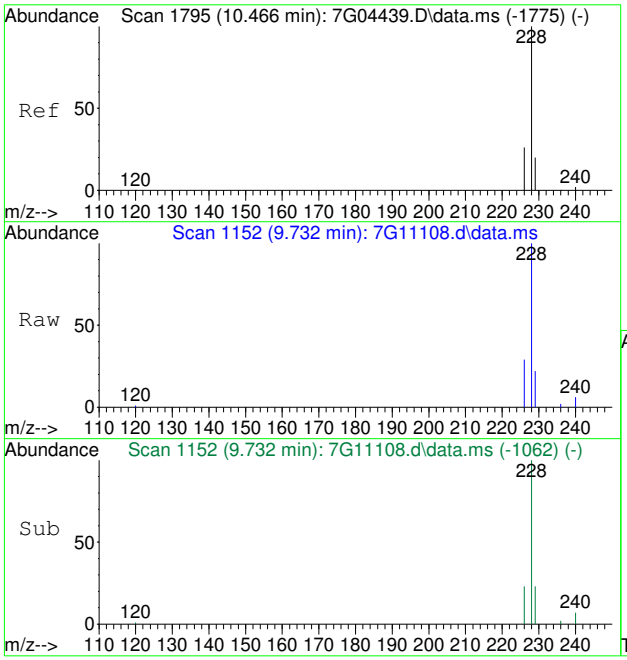


#19
Pyrene
Concen: 32.76 ppm
RT: 8.654 min Scan# 739
Delta R.T. 0.015 min
Lab File: 7G11108.d
Acq: 10 Aug 2020 5:47 pm

Tgt Ion:202 Resp: 911458

Ion	Ratio	Lower	Upper
202	100		
101	9.1	0.0	32.4
203	18.4	0.0	47.4

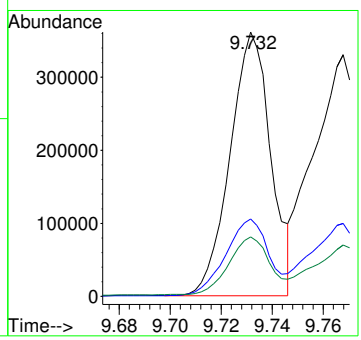


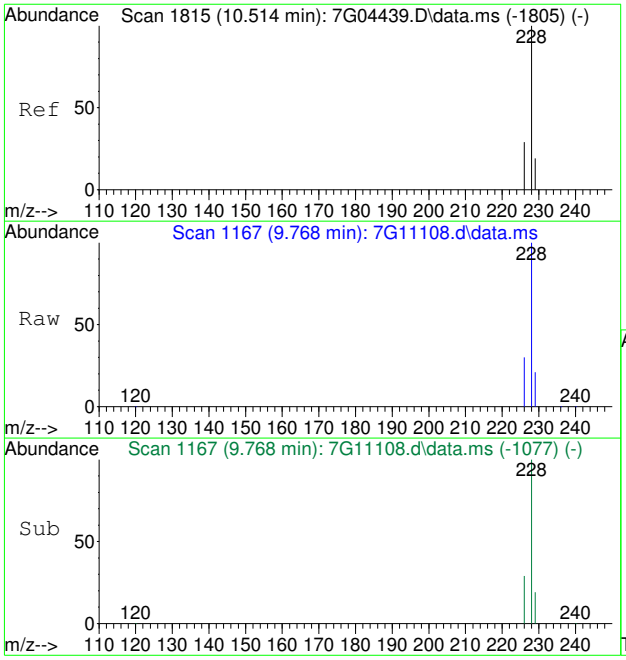


#20
Benzo[a]anthracene
Concen: 18.30 ppm
RT: 9.732 min Scan# 1152
Delta R.T. 0.017 min
Lab File: 7G11108.d
Acq: 10 Aug 2020 5:47 pm

Tgt Ion:228 Resp: 401326

Ion	Ratio	Lower	Upper
228	100		
226	28.8	0.0	56.1
229	22.0	0.0	49.5

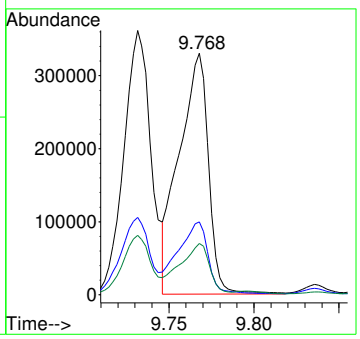


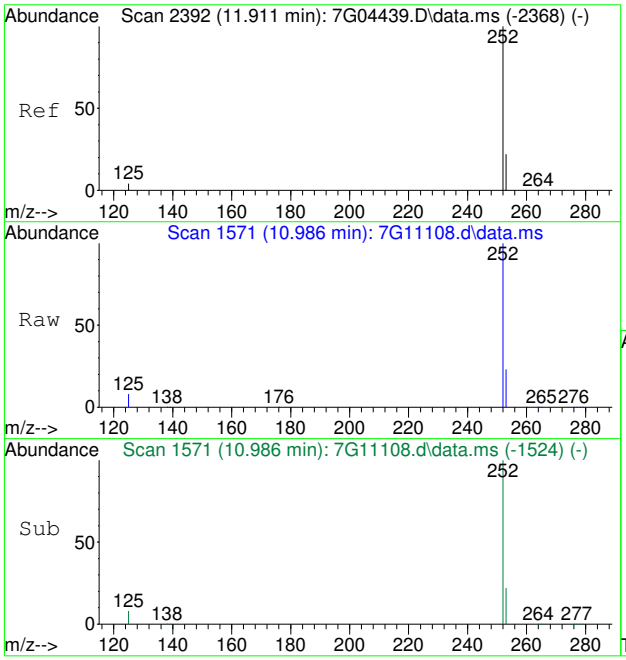


#21
Chrysene
Concen: 17.06 ppm
RT: 9.768 min Scan# 1167
Delta R.T. 0.017 min
Lab File: 7G11108.d
Acq: 10 Aug 2020 5:47 pm

Tgt Ion:228 Resp: 396641

Ion	Ratio	Lower	Upper
228	100		
226	29.8	0.0	58.9
229	20.7	0.0	49.5

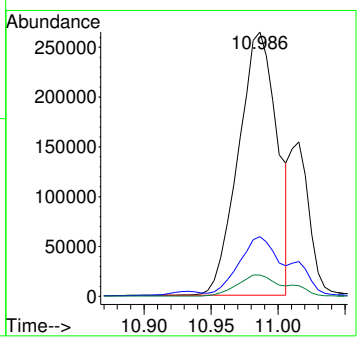


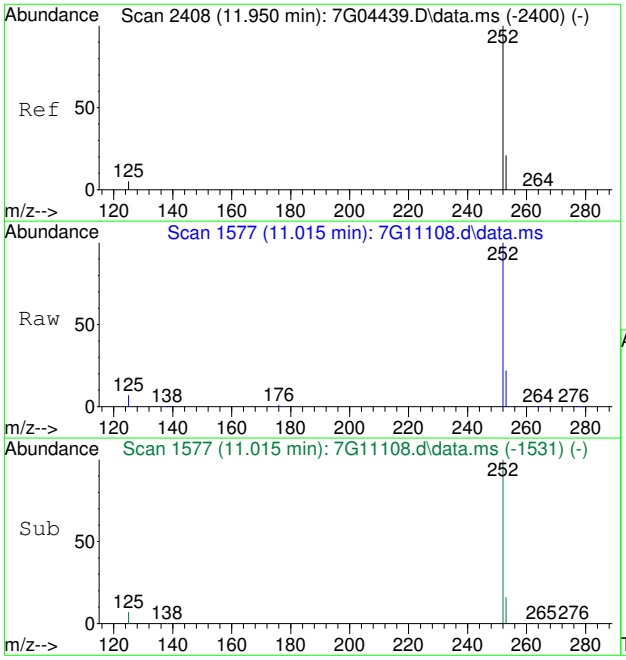


#23
Benzo[b]fluoranthene
Concen: 25.78 ppm
RT: 10.986 min Scan# 1571
Delta R.T. 0.029 min
Lab File: 7G11108.d
Acq: 10 Aug 2020 5:47 pm

Tgt Ion:252 Resp: 533861

Ion	Ratio	Lower	Upper
252	100		
253	22.1	0.0	51.7
125	8.0	0.0	34.5

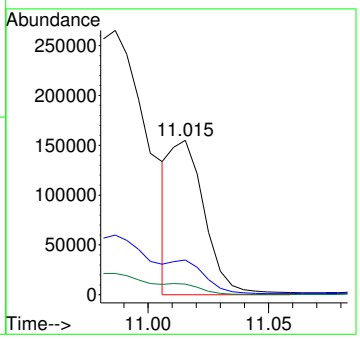


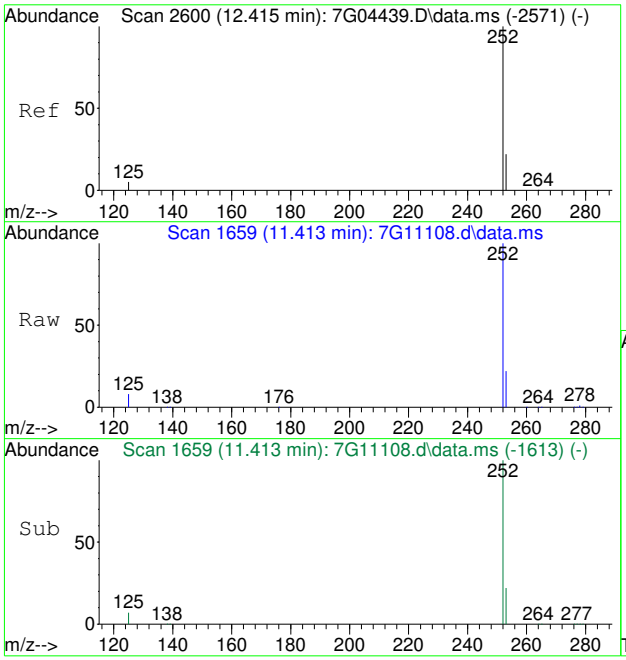


#24
Benzo[k]fluoranthene
Concen: 7.03 ppm m
RT: 11.015 min Scan# 1577
Delta R.T. 0.024 min
Lab File: 7G11108.d
Acq: 10 Aug 2020 5:47 pm

Tgt Ion:252 Resp: 156233

Ion	Ratio	Lower	Upper
252	100		
253	22.5	0.0	51.5
125	7.0	0.0	34.8

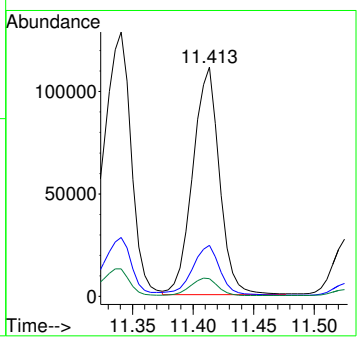


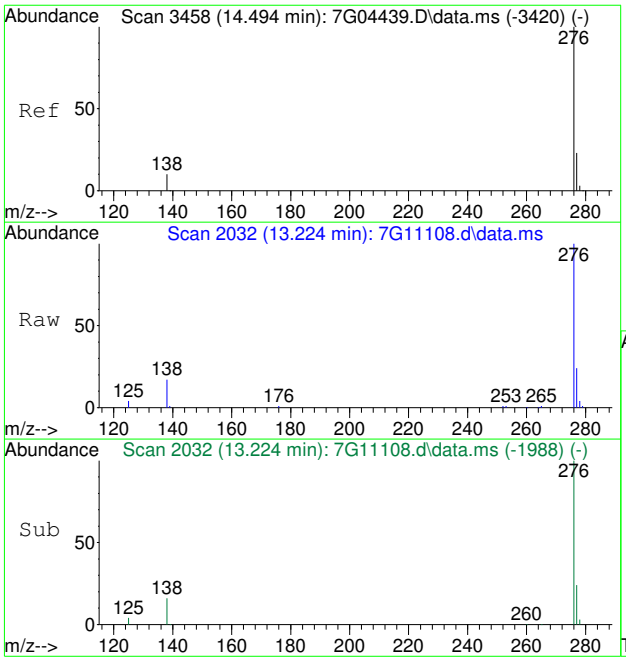


#25
Benzo[a]pyrene
Concen: 8.44 ppm
RT: 11.413 min Scan# 1659
Delta R.T. 0.024 min
Lab File: 7G11108.d
Acq: 10 Aug 2020 5:47 pm

Tgt Ion:252 Resp: 170247

Ion	Ratio	Lower	Upper
252	100		
253	21.5	0.0	51.6
125	7.4	0.0	34.8

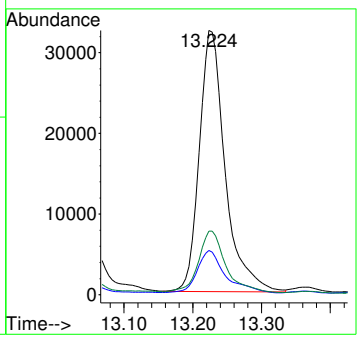


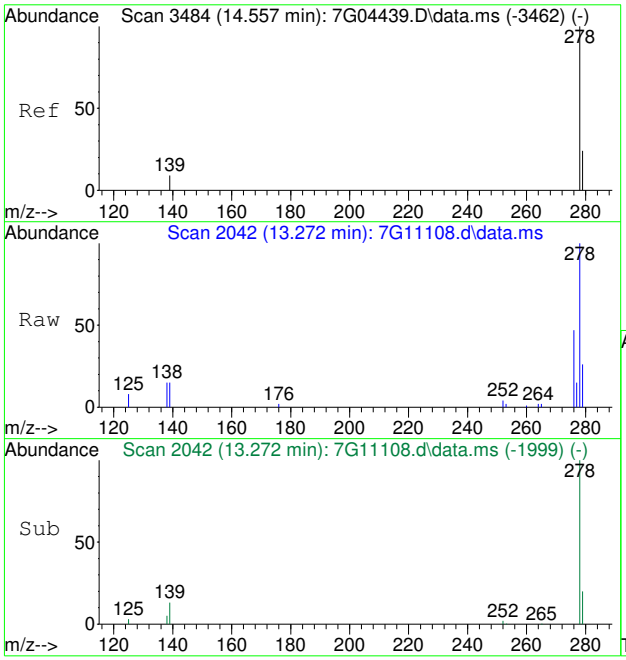


#26
Indeno[1,2,3-cd]pyrene
Concen: 6.43 ppm
RT: 13.224 min Scan# 2032
Delta R.T. 0.014 min
Lab File: 7G11108.d
Acq: 10 Aug 2020 5:47 pm

Tgt Ion:276 Resp: 84656

Ion	Ratio	Lower	Upper
276	100		
138	16.2	0.0	39.6
277	23.4	0.0	53.1

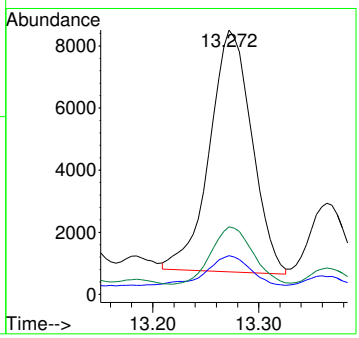


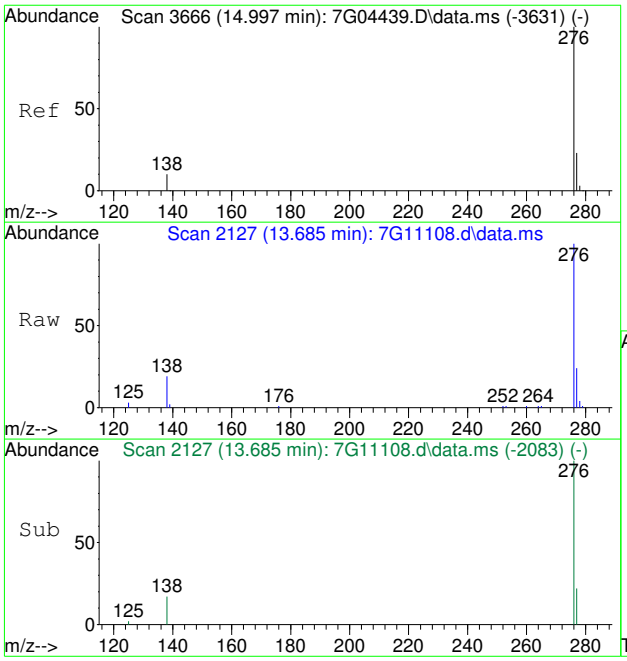


#27
Dibenz[a,h]anthracene
Concen: 1.47 ppm
RT: 13.272 min Scan# 2042
Delta R.T. 0.010 min
Lab File: 7G11108.d
Acq: 10 Aug 2020 5:47 pm

Tgt Ion:278 Resp: 21546

Ion	Ratio	Lower	Upper
278	100		
139	12.3	0.0	38.8
279	23.9	0.0	53.6

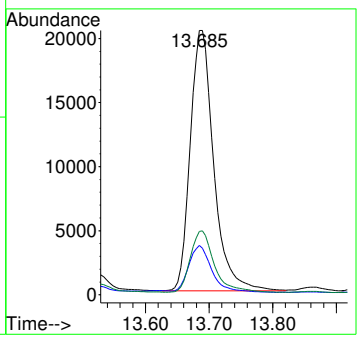




#28
Benzo[g,h,i]perylene
Concen: 3.29 ppm
RT: 13.685 min Scan# 2127
Delta R.T. 0.014 min
Lab File: 7G11108.d
Acq: 10 Aug 2020 5:47 pm

Tgt Ion:276 Resp: 52239

Ion	Ratio	Lower	Upper
276	100		
138	17.6	0.0	40.5
277	23.4	0.0	53.2



Manual Integration Approval Summary

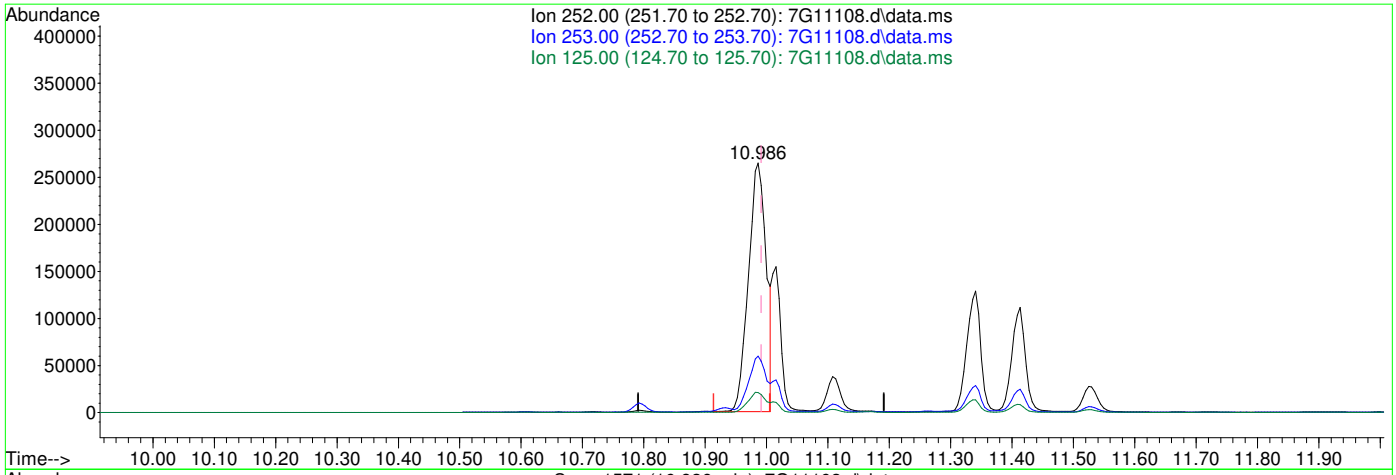
Sample Number: FA77576-6
Lab FileID: 7G11108.D
Injection Time: 08/10/20 17:47
Method: SW846 8270E BY SIM
Analyst approved: 08/11/20 10:52 Fouad Sekkar
Supervisor approved: 08/11/20 12:03 Naresh Jiawan

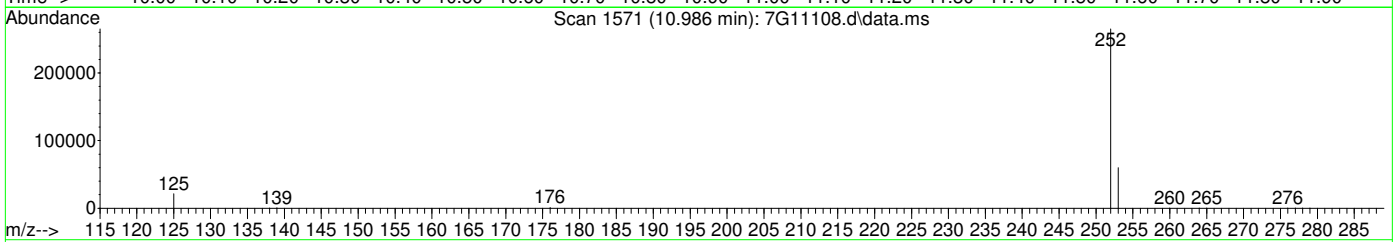
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(k)fluoranthene	207-08-9		11.02	Missed peak

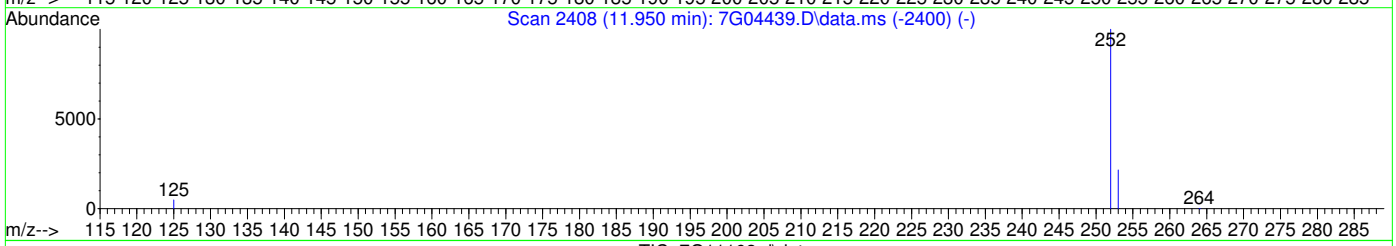
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11108.d
Acq On : 10 Aug 2020 5:47 pm
Operator : FOUADS
Sample : fa77576-6 e
Misc : op81483,S7G482,15.5,,,1,1,soil
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 11 02:37:15 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11108.d\data.ms

(24) Benzo[k]fluoranthene (P)

10.986min (-0.005) 22.92ppm

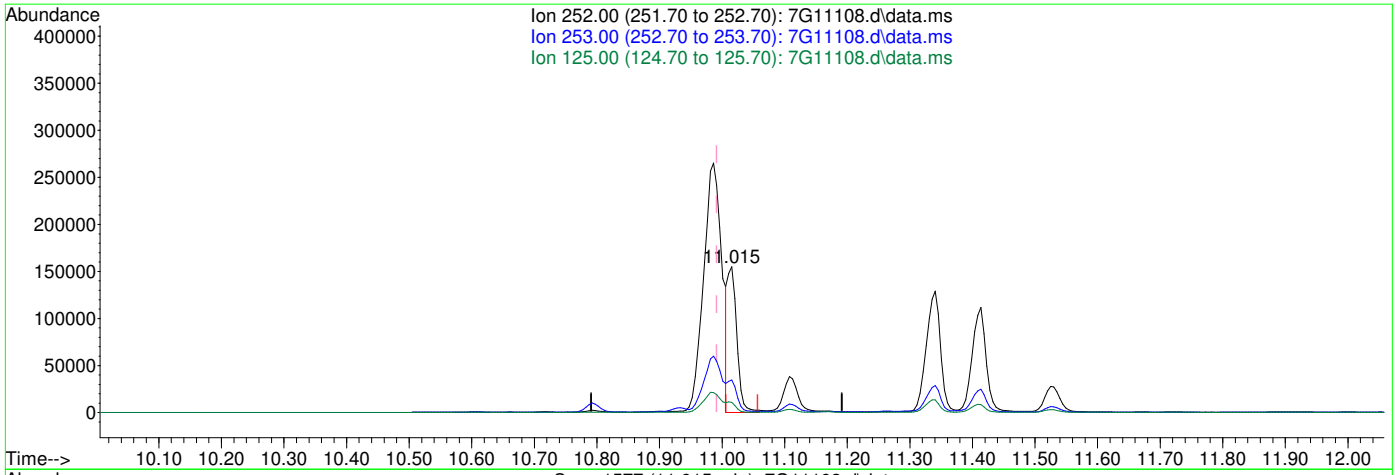
response 533861

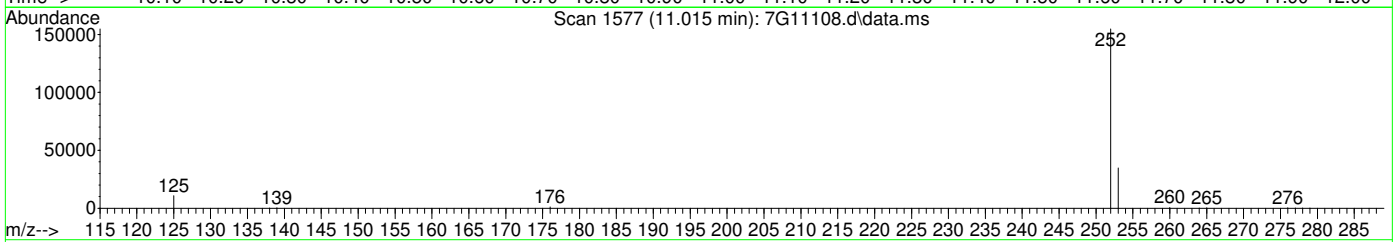
Ion	Exp%	Act%
252.00	100	100
253.00	21.50	22.09
125.00	4.80	8.02
0.00	0.00	0.00

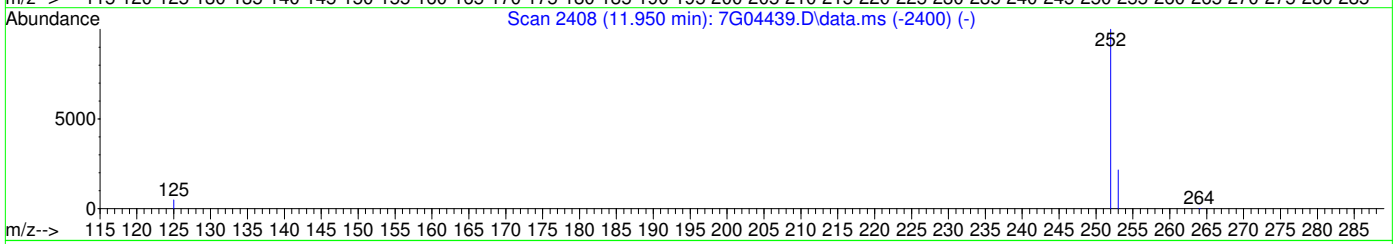
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11108.d
Acq On : 10 Aug 2020 5:47 pm
Operator : FOUADS
Sample : fa77576-6 e
Misc : op81483,S7G482,15.5,,,1,1,soil
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 11 02:37:15 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11108.d\data.ms

(24) Benzo[k]fluoranthene (P)

11.015min (+0.024) 7.03ppm m

response 156233

Ion	Exp%	Act%
252.00	100	100
253.00	21.50	22.46
125.00	4.80	7.02
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 08/11/20 12:03

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11109.d
Acq On : 10 Aug 2020 6:12 pm
Operator : FOUADS
Sample : fa77576-7 e
Misc : op81483,S7G482,15.5,,,1,1,soil
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 11 03:17:51 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.628	136	25434	4.00	ppm	0.00
6) Acenaphthene-d10	6.118	164	18768	4.00	ppm	0.00
11) Phenanthrene-d10	7.396	188	36665	4.00	ppm	0.00
18) Chrysene-d12	9.748	240	78381	4.00	ppm	0.02
22) Perylene-d12	11.520	264	64840	4.00	ppm	0.04
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.205	152	34633	9.12	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 91.20%			
17) Fluoranthene-d10	8.445	212	199555	10.41	ppm	0.01
Spiked Amount 10.000	Range 50 - 150		Recovery = 104.10%			
Target Compounds						Qvalue
2) Naphthalene	4.646	128	4094	0.57	ppm	100
3) 2-Methylnaphthalene	5.234	142	2185	0.39	ppm	97
5) 1-Methylnaphthalene	5.317	142	1567	0.32	ppm	93
7) Acenaphthylene	5.993	152	71243	6.55	ppm	99
8) Acenaphthene	6.142	153	4513	0.65	ppm	97
9) Dibenzofuran	6.302	168	5915	1.20	ppm	89
10) Fluorene	6.597	166	6166	0.81	ppm	97
13) Phenanthrene	7.417	178	128068	10.40	ppm	96
14) Anthracene	7.466	178	233482	18.32	ppm	98
15) Carbazole	7.633	167	76499	3.49	ppm	99
16) Fluoranthene	8.470	202	1610071	60.86	ppm	97
19) Pyrene	8.666	202	1831648	54.78	ppm	96
20) Benzo[a]anthracene	9.739	228	620914	23.89	ppm	80
21) Chrysene	9.782	228	1099158	40.66	ppm	96
23) Benzo[b]fluoranthene	11.030	252	2097378	95.30	ppm	97
24) Benzo[k]fluoranthene	11.054	252	243044m	10.19	ppm	
25) Benzo[a]pyrene	11.447	252	438306	20.44	ppm	98
26) Indeno[1,2,3-cd]pyrene	13.243	276	156374	11.17	ppm	94
27) Dibenz[a,h]anthracene	13.291	278	38198	2.46	ppm	97
28) Benzo[g,h,i]perylene	13.704	276	79831	4.73	ppm	95

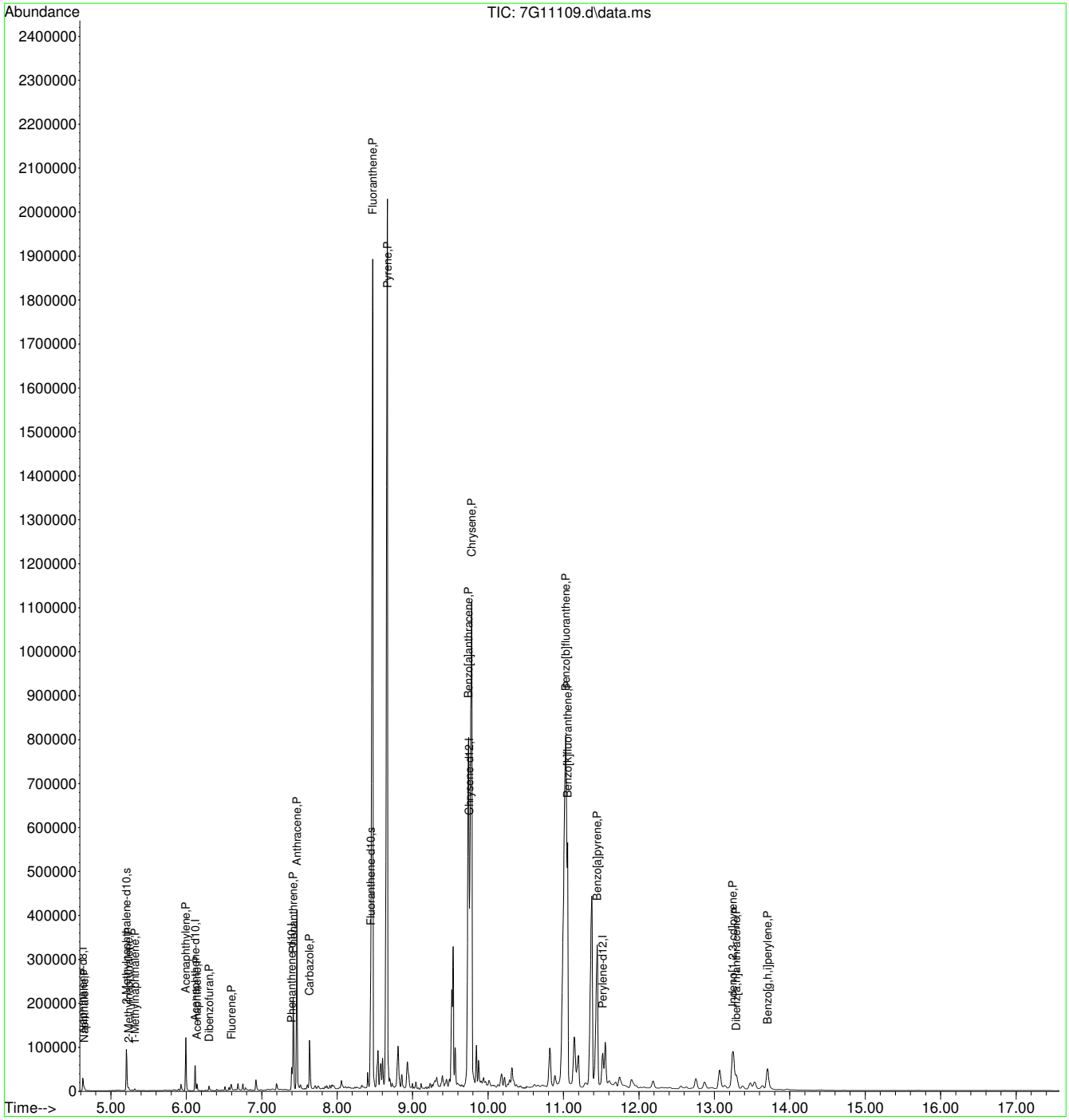
(#) = qualifier out of range (m) = manual integration (+) = signals summed

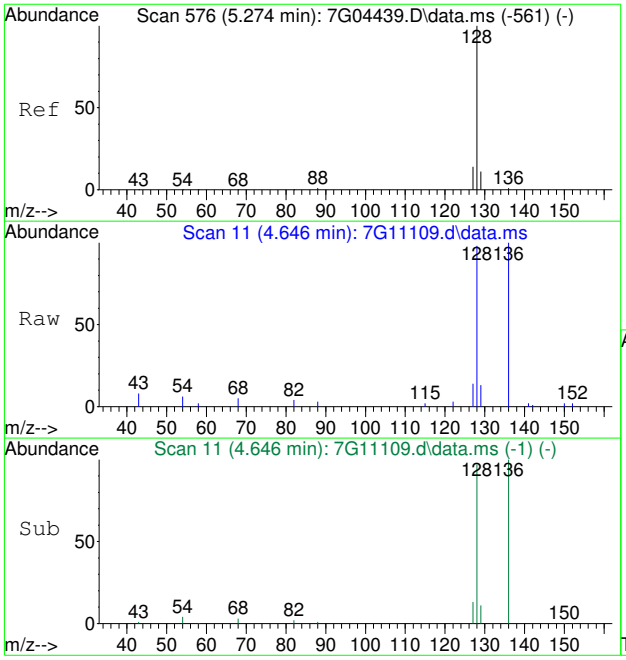
7.1.29
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11109.d
Acq On : 10 Aug 2020 6:12 pm
Operator : FOUADS
Sample : fa77576-7 e
Misc : op81483,S7G482,15.5,,,1,1,soil
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 11 03:17:51 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

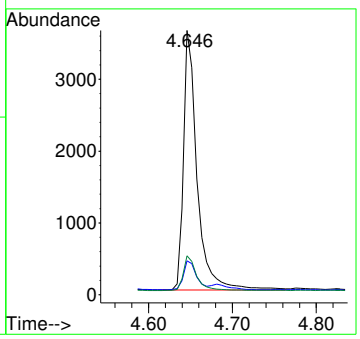


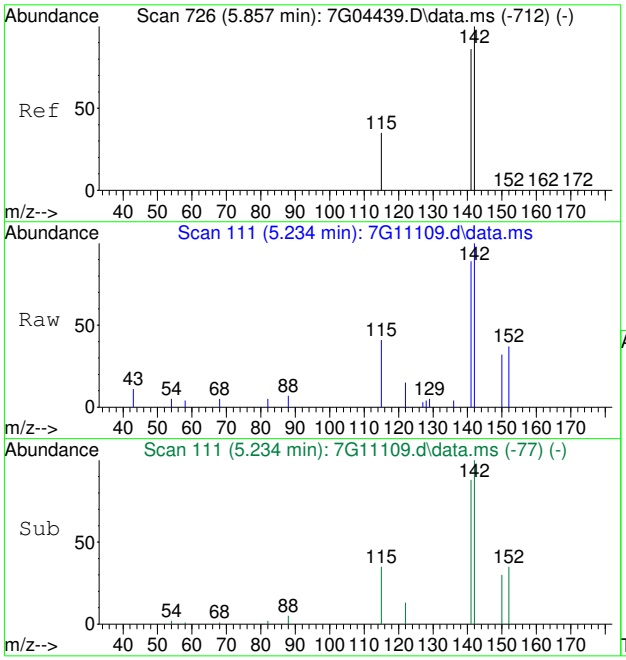


#2
Naphthalene
Concen: 0.57 ppm
RT: 4.646 min Scan# 11
Delta R.T. -0.000 min
Lab File: 7G11109.d
Acq: 10 Aug 2020 6:12 pm

Tgt Ion:128 Resp: 4094

Ion	Ratio	Lower	Upper
128	100		
129	11.2	0.0	40.9
127	13.4	0.0	43.5

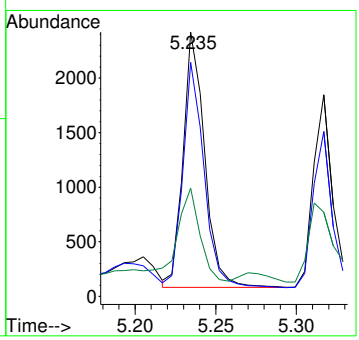


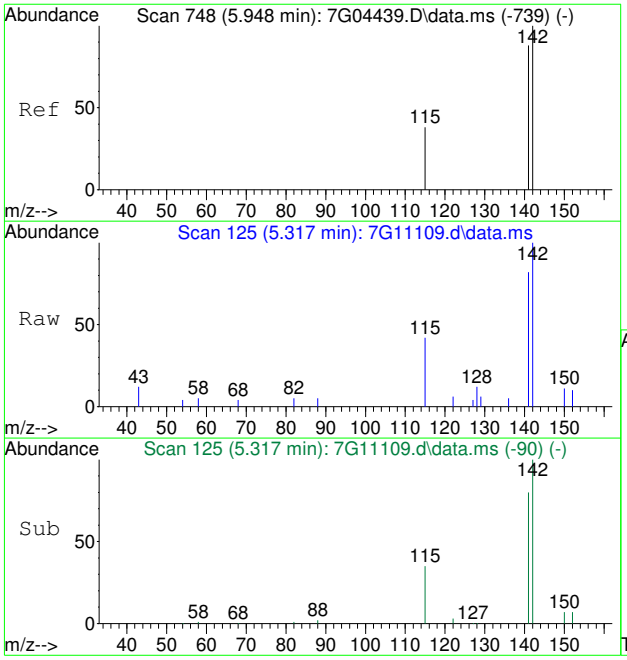


#3
2-Methylnaphthalene
Concen: 0.39 ppm
RT: 5.234 min Scan# 111
Delta R.T. -0.000 min
Lab File: 7G11109.d
Acq: 10 Aug 2020 6:12 pm

Tgt Ion:142 Resp: 2185

Ion	Ratio	Lower	Upper
142	100		
141	88.5	55.7	115.7
115	34.5	5.4	65.4

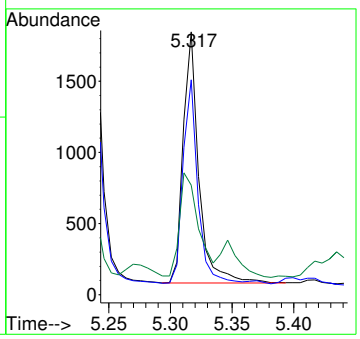


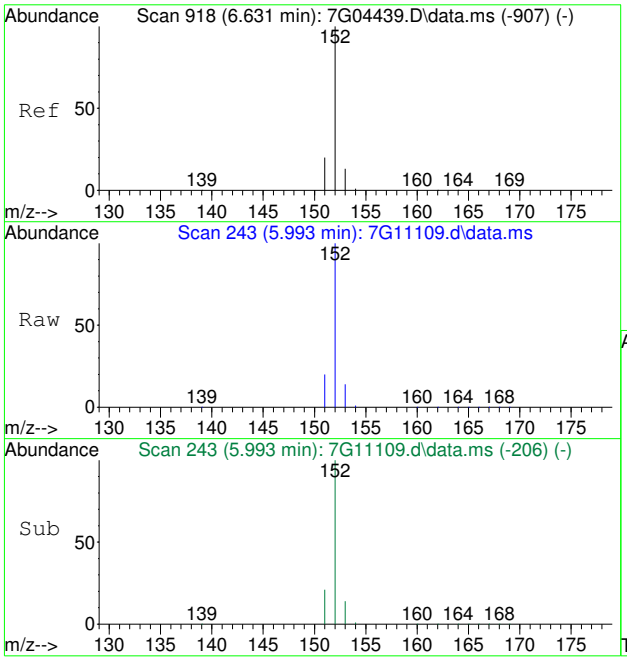


#5
1-Methylnaphthalene
Concen: 0.32 ppm
RT: 5.317 min Scan# 125
Delta R.T. 0.006 min
Lab File: 7G11109.d
Acq: 10 Aug 2020 6:12 pm

Tgt Ion:142 Resp: 1567

Ion	Ratio	Lower	Upper
142	100		
141	80.0	58.1	118.1
115	36.2	7.7	67.7

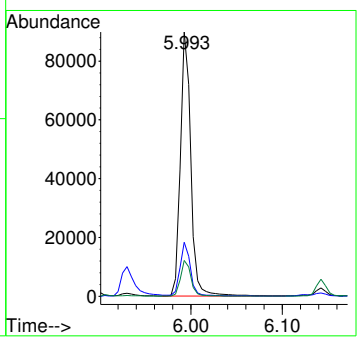


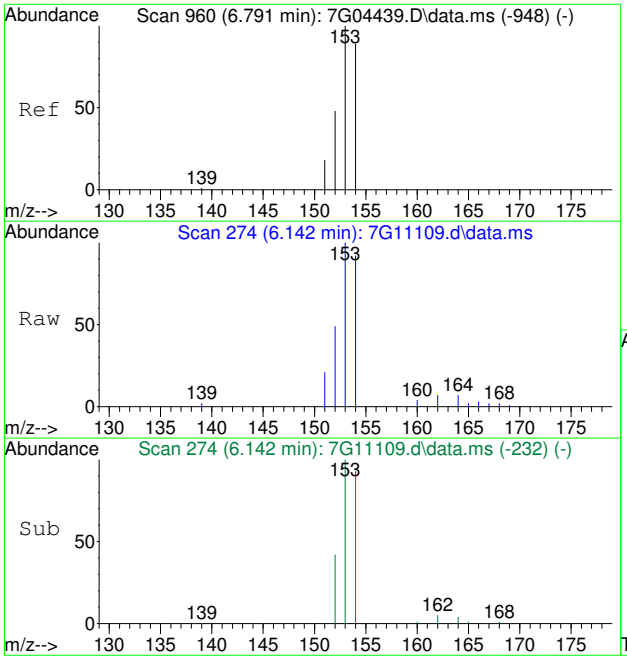


#7
Acenaphthylene
Concen: 6.55 ppm
RT: 5.993 min Scan# 243
Delta R.T. -0.000 min
Lab File: 7G11109.d
Acq: 10 Aug 2020 6:12 pm

Tgt Ion:152 Resp: 71243

Ion	Ratio	Lower	Upper
152	100		
151	20.2	0.0	49.8
153	13.5	0.0	42.8

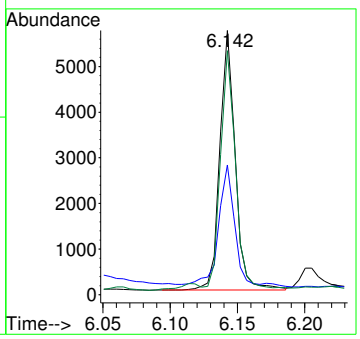


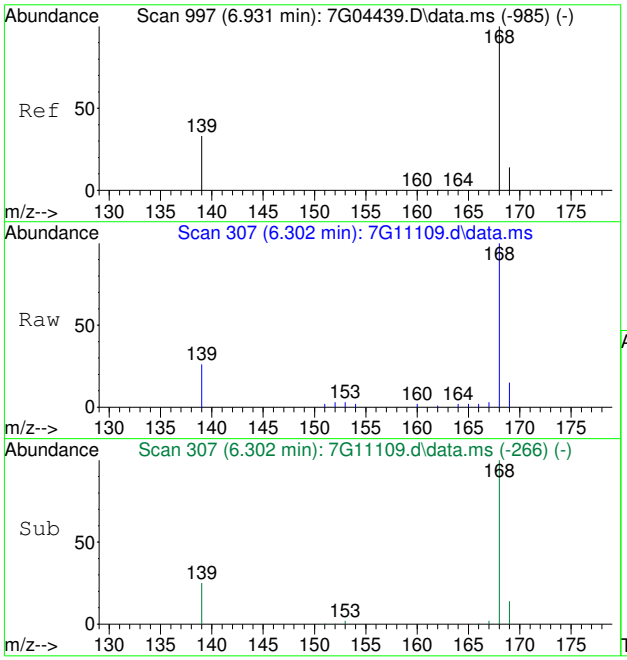


#8
Acenaphthene
Concen: 0.65 ppm
RT: 6.142 min Scan# 274
Delta R.T. 0.005 min
Lab File: 7G11109.d
Acq: 10 Aug 2020 6:12 pm

Tgt Ion:153 Resp: 4513

Ion	Ratio	Lower	Upper
153	100		
152	46.4	18.3	78.3
154	91.9	59.3	119.3

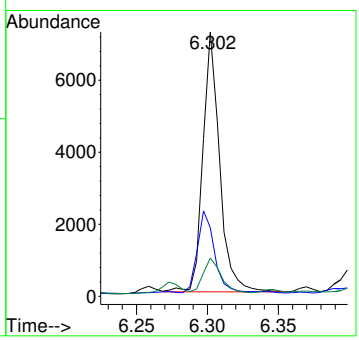


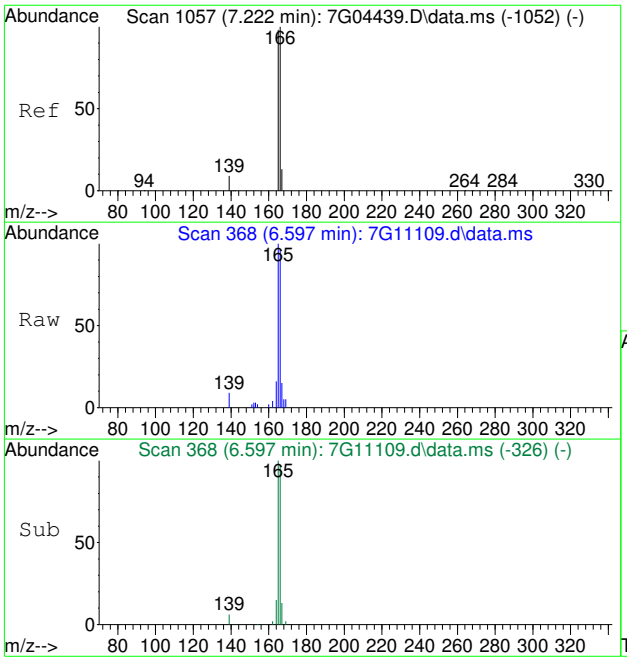


#9
Dibenzofuran
Concen: 1.20 ppm
RT: 6.302 min Scan# 307
Delta R.T. -0.000 min
Lab File: 7G11109.d
Acq: 10 Aug 2020 6:12 pm

Tgt Ion:168 Resp: 5915

Ion	Ratio	Lower	Upper
168	100		
139	24.9	12.6	52.6
169	12.2	0.0	33.8

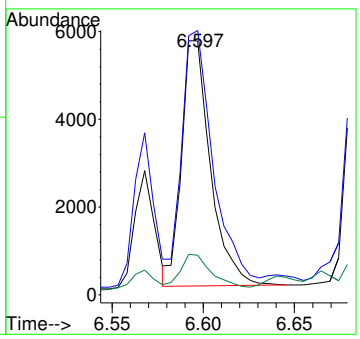


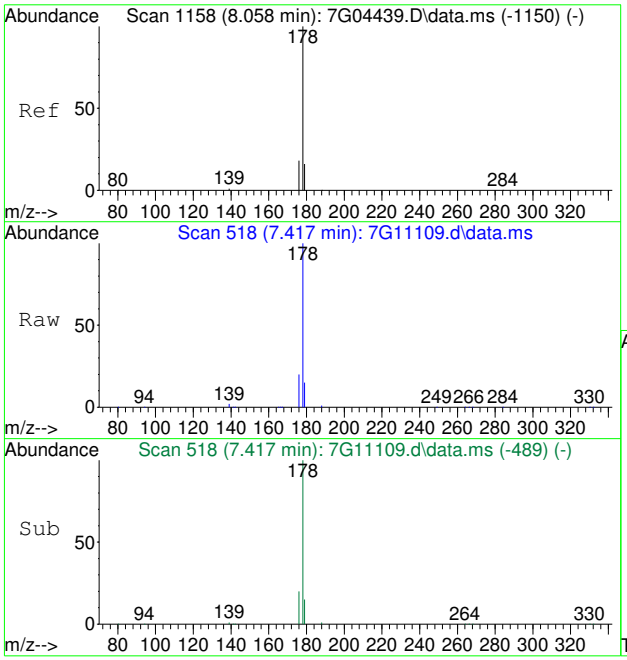


#10
Fluorene
Concen: 0.81 ppm
RT: 6.597 min Scan# 368
Delta R.T. 0.005 min
Lab File: 7G11109.d
Acq: 10 Aug 2020 6:12 pm

Tgt Ion:166 Resp: 6166

Ion	Ratio	Lower	Upper
166	100		
165	101.1	68.2	128.2
167	11.0	0.0	42.9

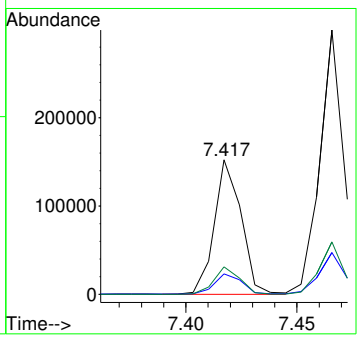


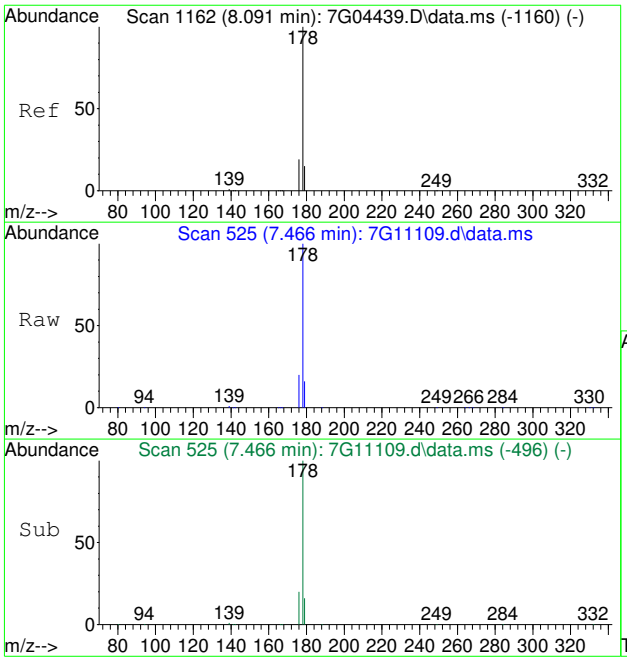


#13
Phenanthrene
Concen: 10.40 ppm
RT: 7.417 min Scan# 518
Delta R.T. -0.000 min
Lab File: 7G11109.d
Acq: 10 Aug 2020 6:12 pm

Tgt Ion:178 Resp: 128068

Ion	Ratio	Lower	Upper
178	100		
179	15.0	0.0	45.7
176	20.4	0.0	48.0

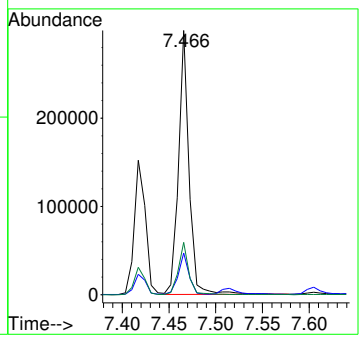


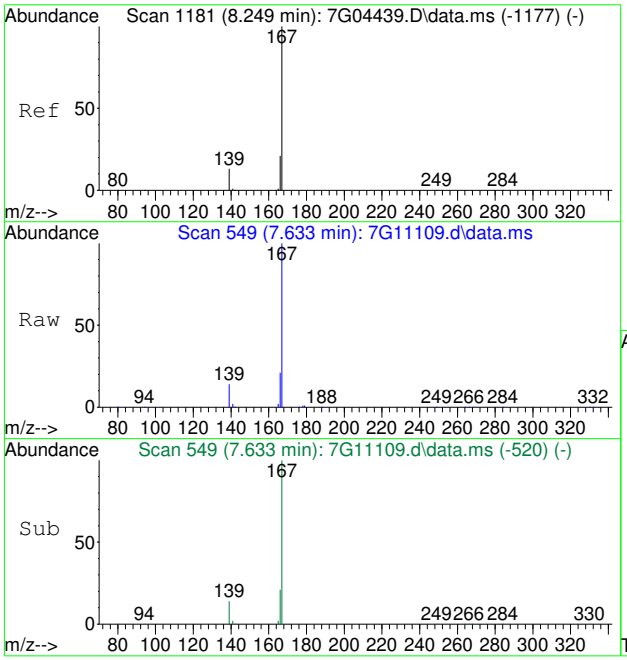


#14
Anthracene
Concen: 18.32 ppm
RT: 7.466 min Scan# 525
Delta R.T. -0.000 min
Lab File: 7G11109.d
Acq: 10 Aug 2020 6:12 pm

Tgt Ion:178 Resp: 233482

Ion	Ratio	Lower	Upper
178	100		
179	15.6	0.0	45.1
176	19.8	0.0	48.8

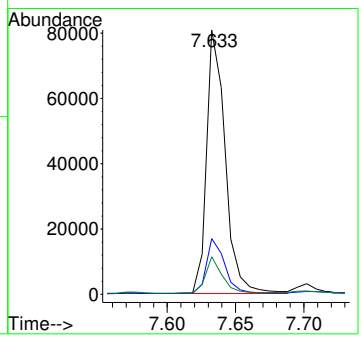


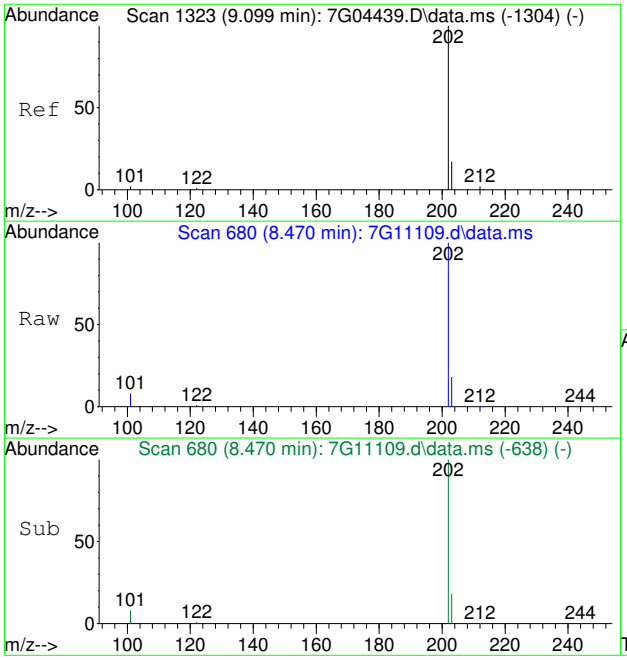


#15
Carbazole
Concen: 3.49 ppm
RT: 7.633 min Scan# 549
Delta R.T. -0.000 min
Lab File: 7G11109.d
Acq: 10 Aug 2020 6:12 pm

Tgt Ion:167 Resp: 76499

Ion	Ratio	Lower	Upper
167	100		
166	20.8	1.2	41.2
139	13.7	0.0	32.8

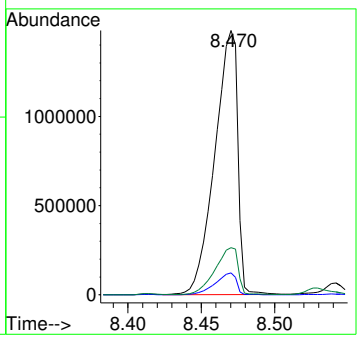


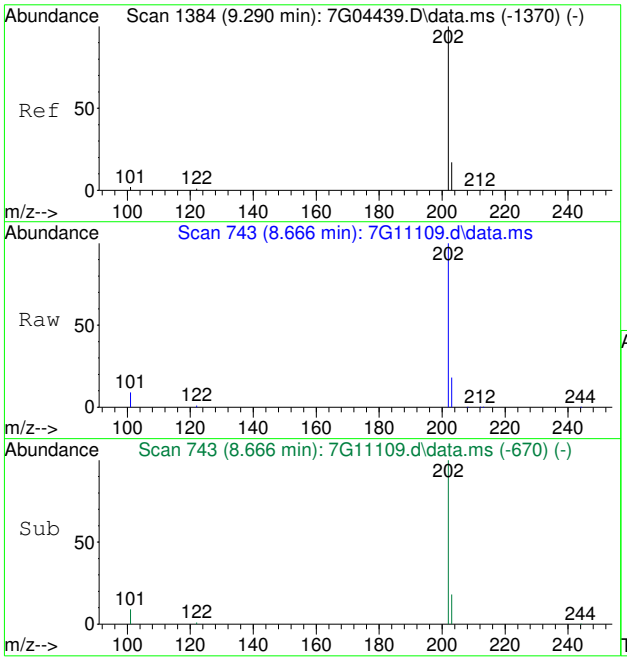


#16
Fluoranthene
Concen: 60.86 ppm
RT: 8.470 min Scan# 680
Delta R.T. 0.022 min
Lab File: 7G11109.d
Acq: 10 Aug 2020 6:12 pm

Tgt Ion:202 Resp: 1610071

Ion	Ratio	Lower	Upper
202	100		
101	8.3	0.0	32.2
203	17.8	0.0	47.2

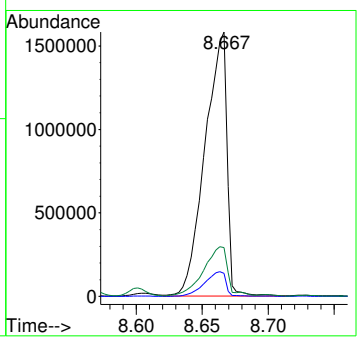


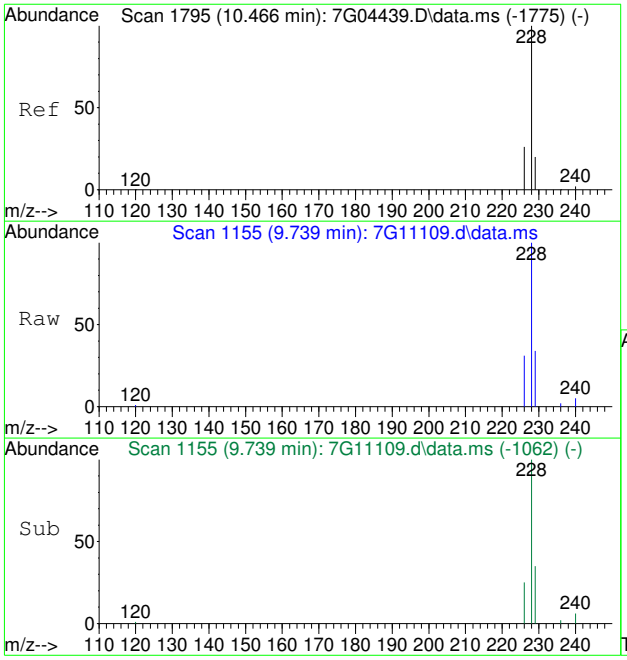


#19
Pyrene
Concen: 54.78 ppm
RT: 8.666 min Scan# 743
Delta R.T. 0.028 min
Lab File: 7G11109.d
Acq: 10 Aug 2020 6:12 pm

Tgt Ion:202 Resp: 1831648

Ion	Ratio	Lower	Upper
202	100		
101	8.7	0.0	32.4
203	18.3	0.0	47.4

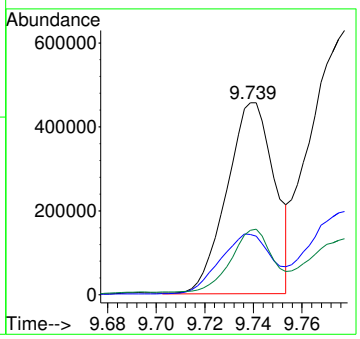


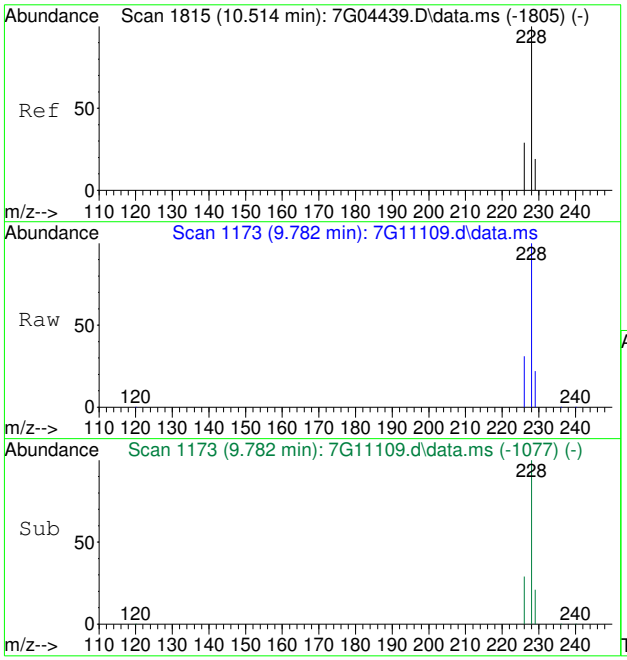


#20
Benzo[a]anthracene
Concen: 23.89 ppm
RT: 9.739 min Scan# 1155
Delta R.T. 0.024 min
Lab File: 7G11109.d
Acq: 10 Aug 2020 6:12 pm

Tgt Ion:228 Resp: 620914

Ion	Ratio	Lower	Upper
228	100		
226	31.2	0.0	56.1
229	35.2	0.0	49.5

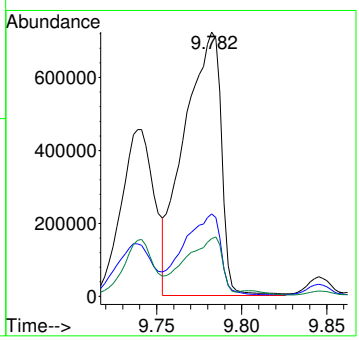


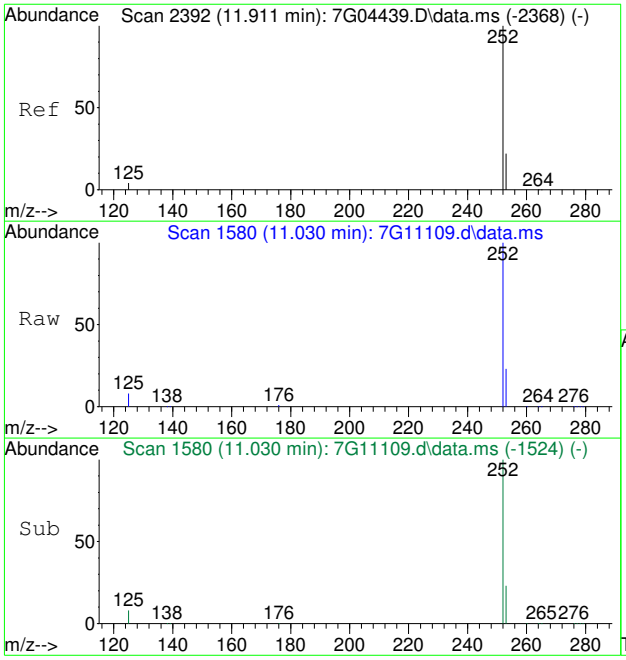


#21
Chrysene
Concen: 40.66 ppm
RT: 9.782 min Scan# 1173
Delta R.T. 0.031 min
Lab File: 7G11109.d
Acq: 10 Aug 2020 6:12 pm

Tgt Ion:228 Resp: 1099158

Ion	Ratio	Lower	Upper
228	100		
226	30.9	0.0	58.9
229	20.9	0.0	49.5

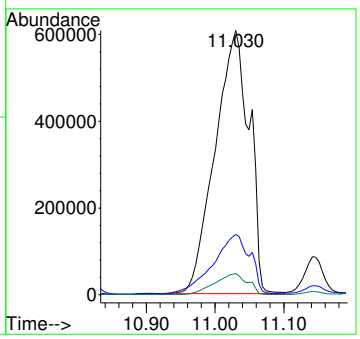


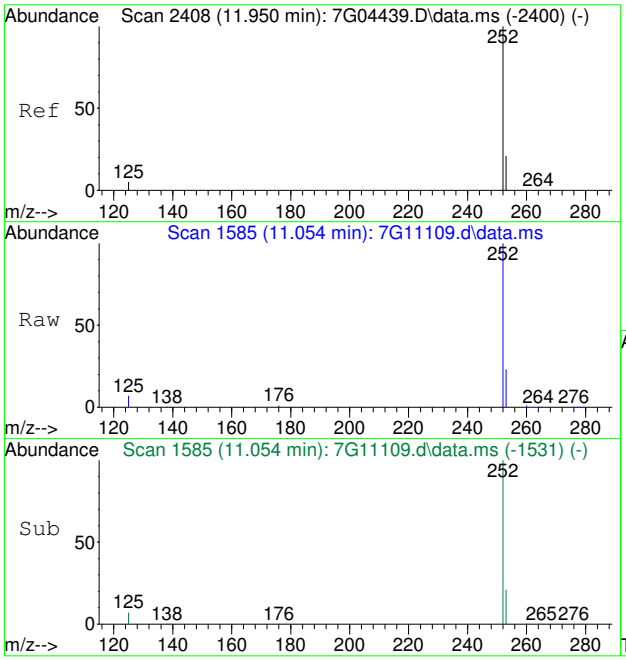


#23
Benzo[b]fluoranthene
Concen: 95.30 ppm
RT: 11.030 min Scan# 1580
Delta R.T. 0.073 min
Lab File: 7G11109.d
Acq: 10 Aug 2020 6:12 pm

Tgt Ion:252 Resp: 2097378

Ion	Ratio	Lower	Upper
252	100		
253	22.4	0.0	51.7
125	8.0	0.0	34.5

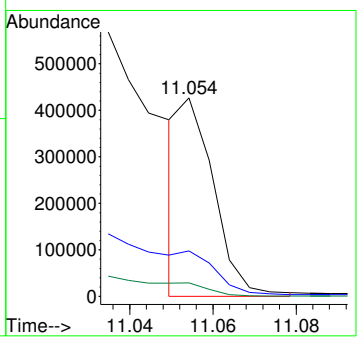


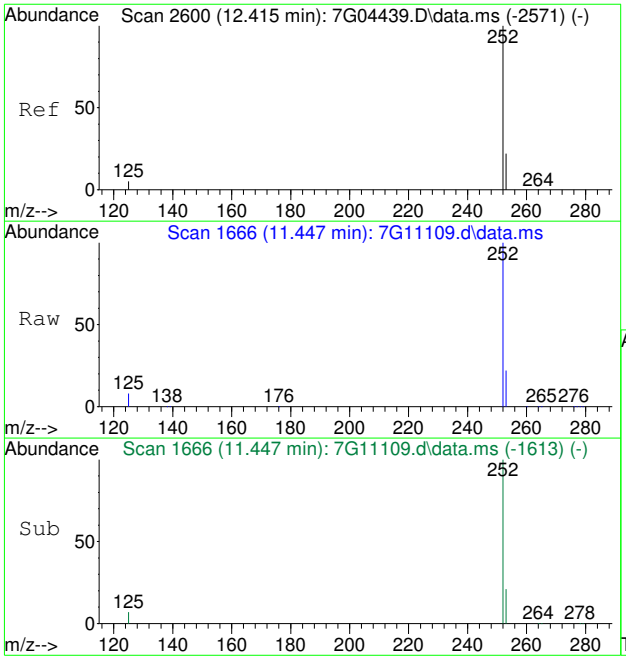


#24
Benzo[k]fluoranthene
Concen: 10.19 ppm m
RT: 11.054 min Scan# 1585
Delta R.T. 0.063 min
Lab File: 7G11109.d
Acq: 10 Aug 2020 6:12 pm

Tgt Ion:252 Resp: 243044

Ion	Ratio	Lower	Upper
252	100		
253	22.9	0.0	51.5
125	6.8	0.0	34.8

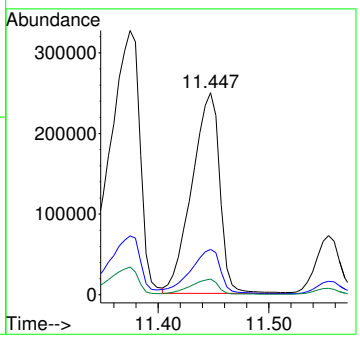


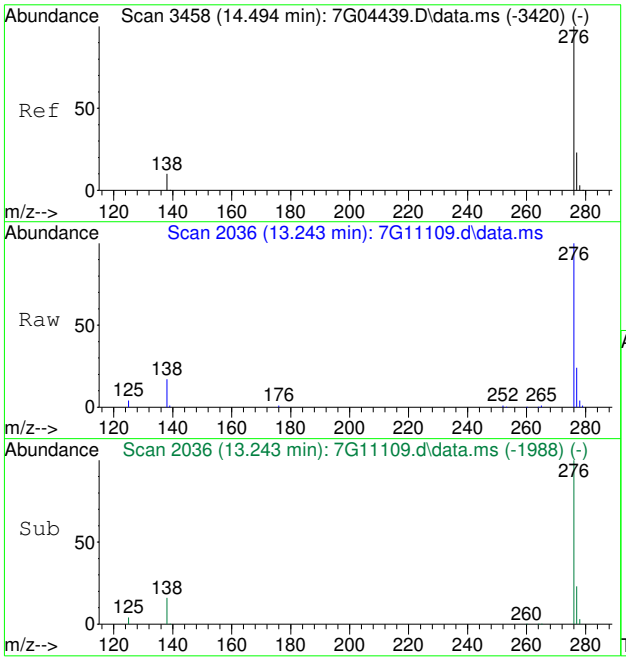


#25
Benzo[a]pyrene
Concen: 20.44 ppm
RT: 11.447 min Scan# 1666
Delta R.T. 0.058 min
Lab File: 7G11109.d
Acq: 10 Aug 2020 6:12 pm

Tgt Ion:252 Resp: 438306

Ion	Ratio	Lower	Upper
252	100		
253	21.3	0.0	51.6
125	7.4	0.0	34.8

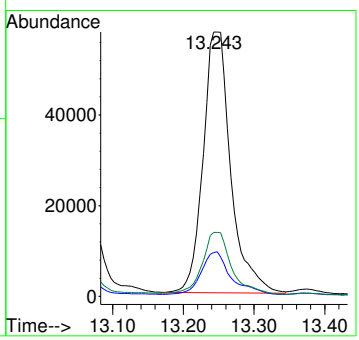


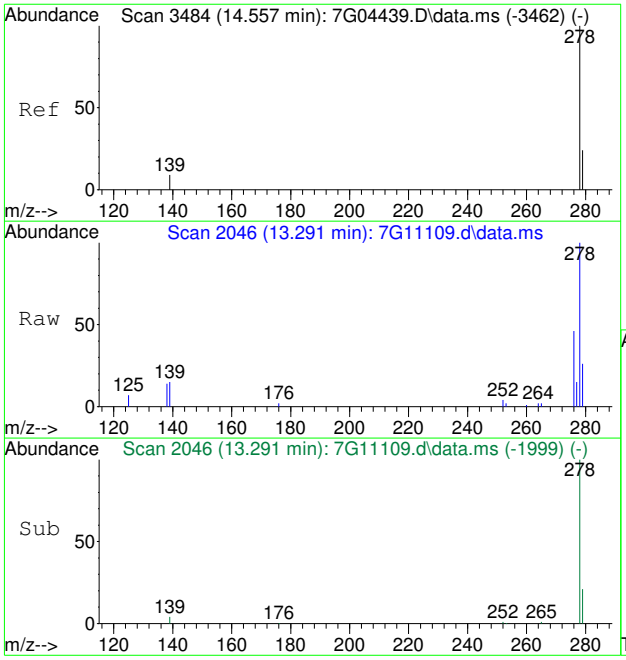


#26
Indeno[1,2,3-cd]pyrene
Concen: 11.17 ppm
RT: 13.243 min Scan# 2036
Delta R.T. 0.034 min
Lab File: 7G11109.d
Acq: 10 Aug 2020 6:12 pm

Tgt Ion:276 Resp: 156374

Ion	Ratio	Lower	Upper
276	100		
138	16.0	0.0	39.6
277	23.6	0.0	53.1

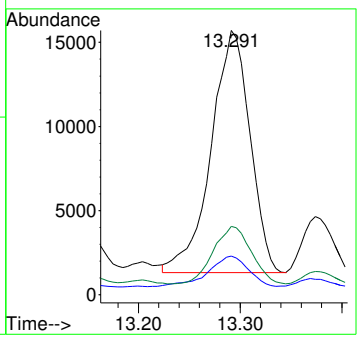


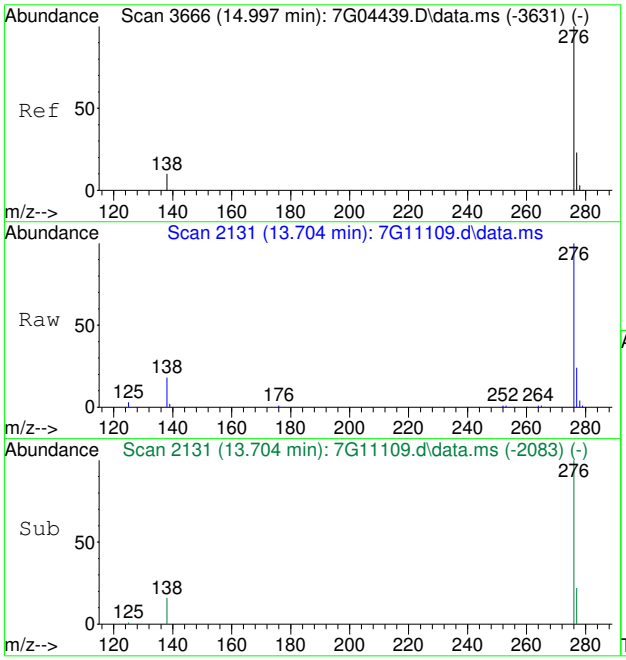


#27
Dibenz[a,h]anthracene
Concen: 2.46 ppm
RT: 13.291 min Scan# 2046
Delta R.T. 0.029 min
Lab File: 7G11109.d
Acq: 10 Aug 2020 6:12 pm

Tgt Ion:278 Resp: 38198

Ion	Ratio	Lower	Upper
278	100		
139	12.4	0.0	38.8
279	23.9	0.0	53.6

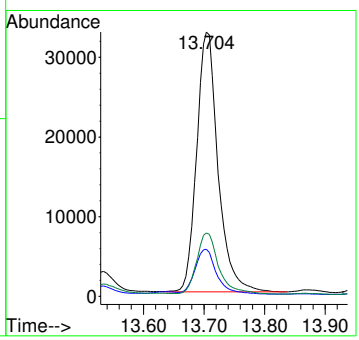




#28
Benzo[g,h,i]perylene
Concen: 4.73 ppm
RT: 13.704 min Scan# 2131
Delta R.T. 0.034 min
Lab File: 7G11109.d
Acq: 10 Aug 2020 6:12 pm

Tgt Ion:276 Resp: 79831

Ion	Ratio	Lower	Upper
276	100		
138	16.8	0.0	40.5
277	23.3	0.0	53.2



Manual Integration Approval Summary

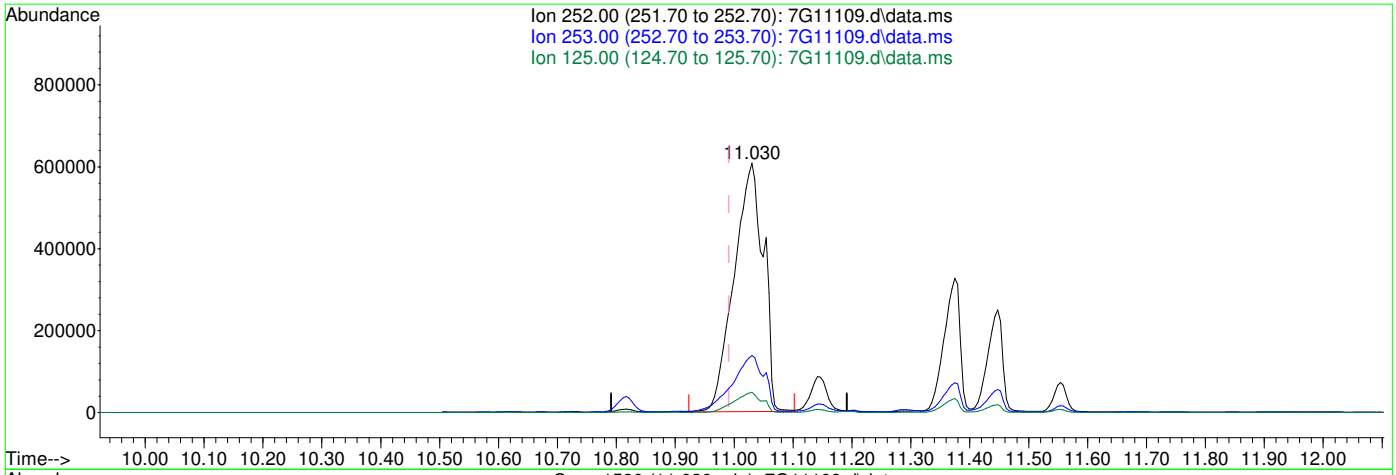
Sample Number: FA77576-7
Lab FileID: 7G11109.D
Injection Time: 08/10/20 18:12
Method: SW846 8270E BY SIM
Analyst approved: 08/11/20 10:52 Fouad Sekkar
Supervisor approved: 08/11/20 12:03 Naresh Jiawan

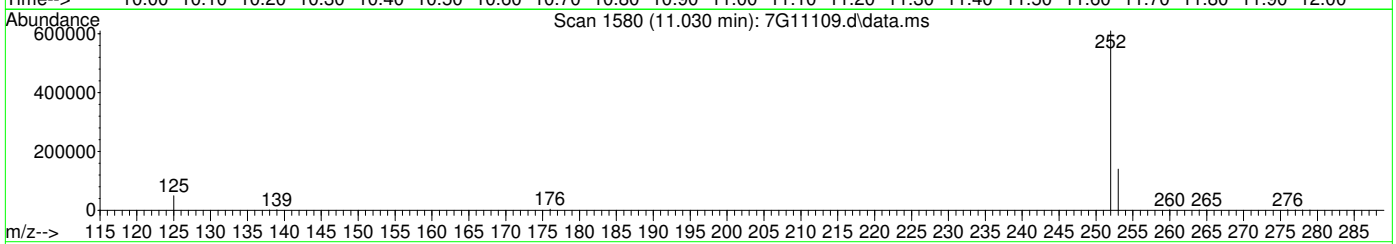
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(k)fluoranthene	207-08-9		11.05	Missed peak

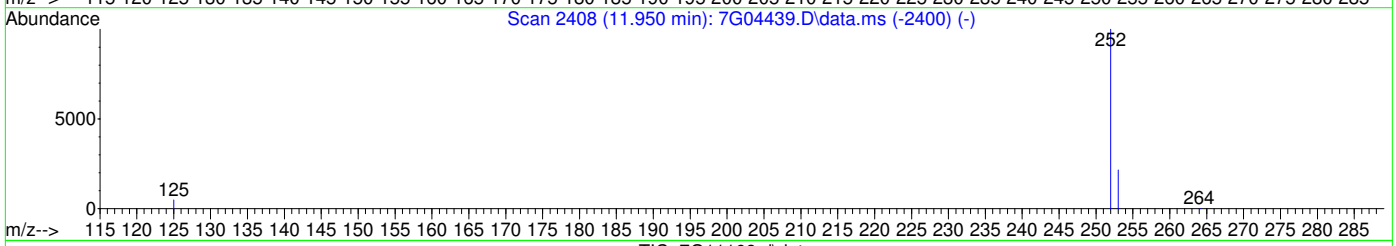
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11109.d
Acq On : 10 Aug 2020 6:12 pm
Operator : FOUADS
Sample : fa77576-7 e
Misc : op81483,S7G482,15.5,,,1,1,soil
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 11 02:37:18 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11109.d\data.ms

(24) Benzo[k]fluoranthene (P)

11.030min (+0.039) 74.09ppm

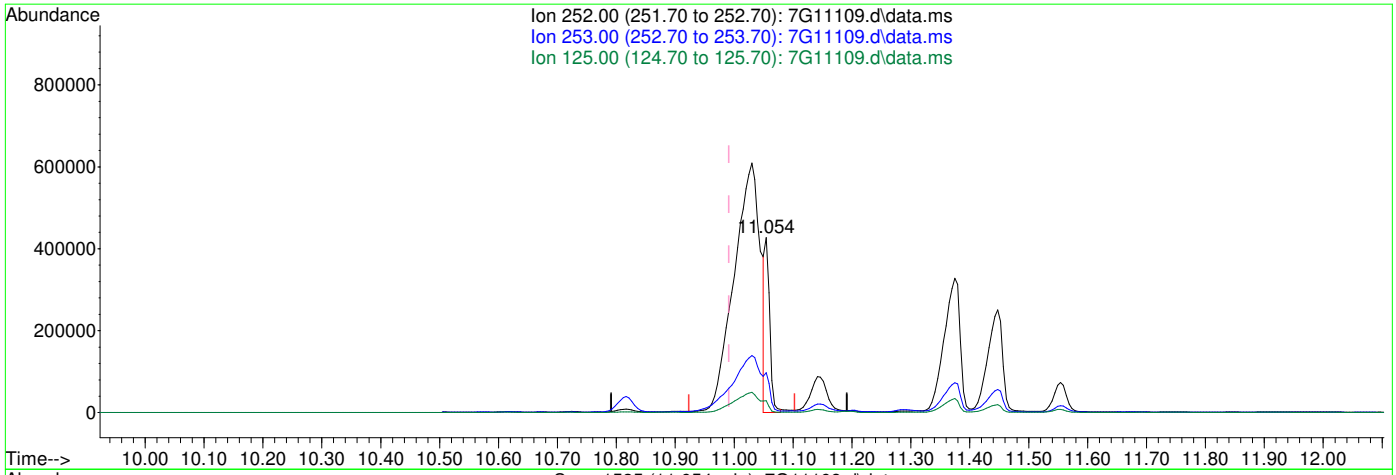
response 2101035

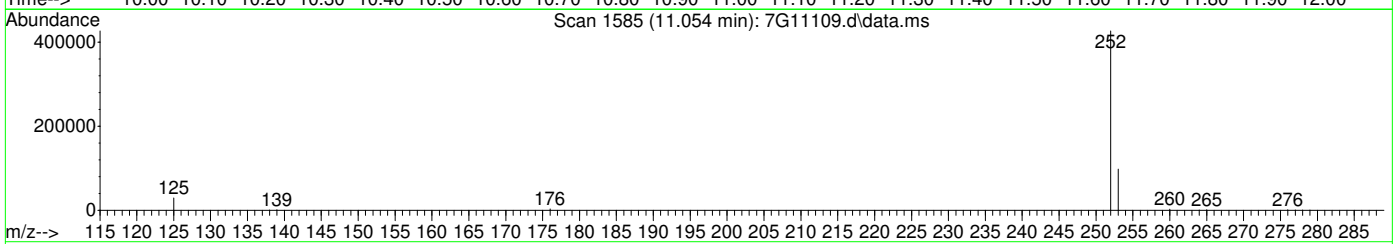
Ion	Exp%	Act%
252.00	100	100
253.00	21.50	22.41
125.00	4.80	8.03
0.00	0.00	0.00

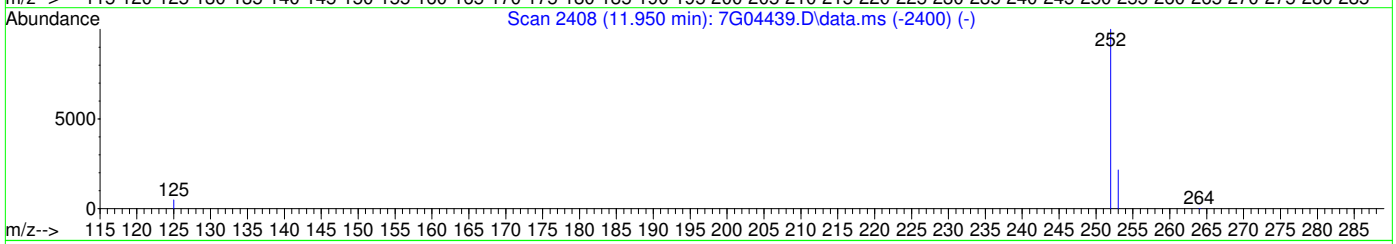
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11109.d
Acq On : 10 Aug 2020 6:12 pm
Operator : FOUADS
Sample : fa77576-7 e
Misc : op81483,S7G482,15.5,,,1,1,soil
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 11 02:37:18 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11109.d\data.ms

(24) Benzo[k]fluoranthene (P)

11.054min (+0.063) 10.19ppm m

response 243044

Ion	Exp%	Act%
252.00	100	100
253.00	21.50	22.91
125.00	4.80	6.79
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 08/12/20 11:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11157.d
Acq On : 11 Aug 2020 7:18 pm
Operator : FOUADS
Sample : fa77576-8 e Inst : MSBNA8
Misc : op81483,S7G483,15.3,,,1,1,soil
ALS Vial : 29 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:56:28 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

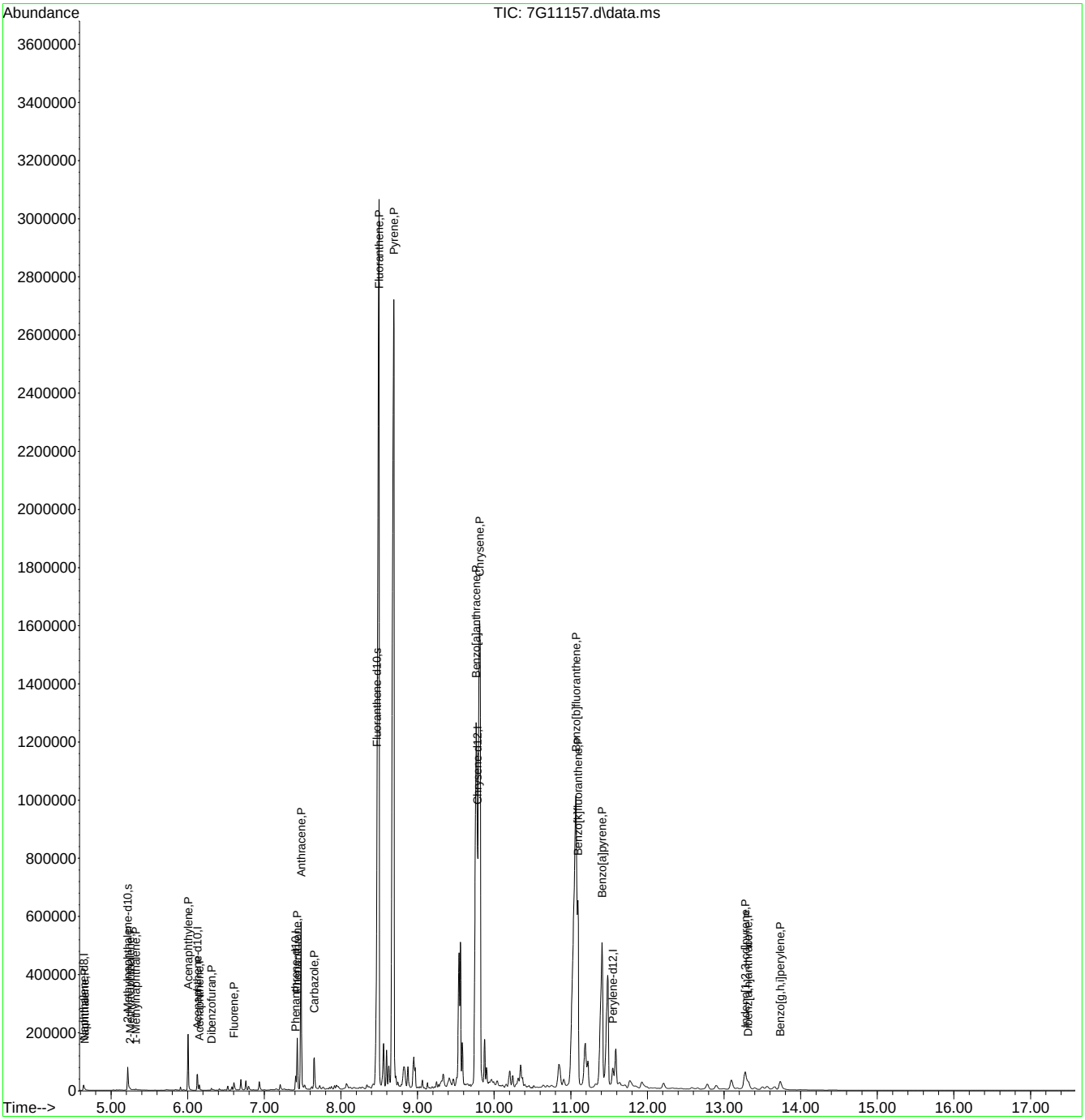
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.646	136	19555	4.00	ppm	0.02
6) Acenaphthene-d10	6.128	164	18327	4.00	ppm	0.01
11) Phenanthrene-d10	7.410	188	36349	4.00	ppm	0.01
18) Chrysene-d12	9.782	240	85919	4.00	ppm	0.06
22) Perylene-d12	11.549	264	55818	4.00	ppm	0.07
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.217	152	32279	10.97	ppm	0.01
Spiked Amount 10.000	Range 50 - 150		Recovery =	109.70%		
17) Fluoranthene-d10	8.470	212	226152	11.87	ppm	0.03
Spiked Amount 10.000	Range 50 - 150		Recovery =	118.70%		
Target Compounds						Qvalue
2) Naphthalene	4.658	128	2797	0.51	ppm	99
3) 2-Methylnaphthalene	5.246	142	1540	0.35	ppm	95
5) 1-Methylnaphthalene	5.323	142	1339	0.35	ppm	88
7) Acenaphthylene	6.007	152	125564	11.68	ppm	98
8) Acenaphthene	6.152	153	5416	0.79	ppm	98
9) Dibenzofuran	6.312	168	4586	0.95	ppm	87
10) Fluorene	6.602	166	11332	1.52	ppm	100
13) Phenanthrene	7.431	178	103843	8.54	ppm	98
14) Anthracene	7.480	178	359390	27.76	ppm	97
15) Carbazole	7.654	167	87576	4.03	ppm	95
16) Fluoranthene	8.498	202	3478307	117.00	ppm	96
19) Pyrene	8.692	202	3482110	90.60	ppm	91
20) Benzo[a]anthracene	9.765	228	1536732	50.18	ppm	88
21) Chrysene	9.809	228	1879889	63.63	ppm	95
23) Benzo[b]fluoranthene	11.069	252	2476285m	130.70	ppm	
24) Benzo[k]fluoranthene	11.093	252	470244m	22.12	ppm	
25) Benzo[a]pyrene	11.409	252	780759m	42.29	ppm	
26) Indeno[1,2,3-cd]pyrene	13.277	276	113085	9.39	ppm	94
27) Dibenz[a,h]anthracene	13.316	278	27839	2.08	ppm	96
28) Benzo[g,h,i]perylene	13.733	276	53150	3.66	ppm	94

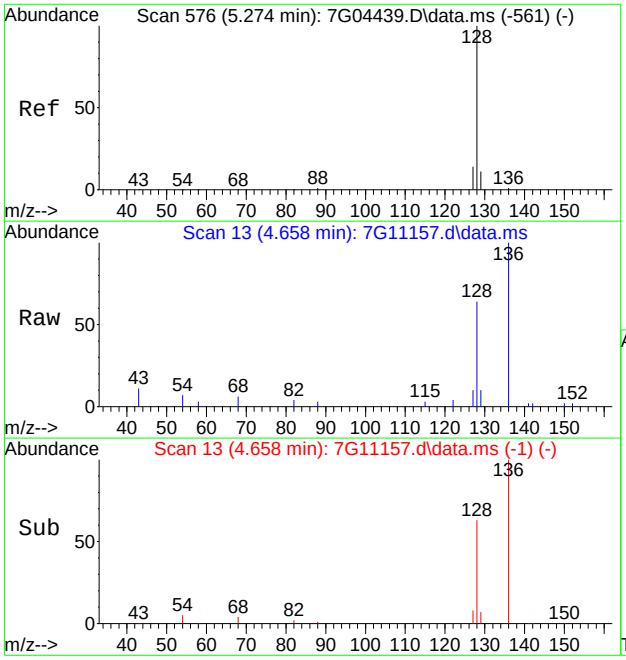
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11157.d
Acq On : 11 Aug 2020 7:18 pm
Operator : FOUADS
Sample : fa77576-8 e Inst : MSBNA8
Misc : op81483,S7G483,15.3,,,1,1,soil
ALS Vial : 29 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:56:28 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

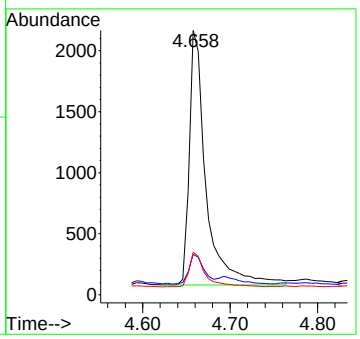


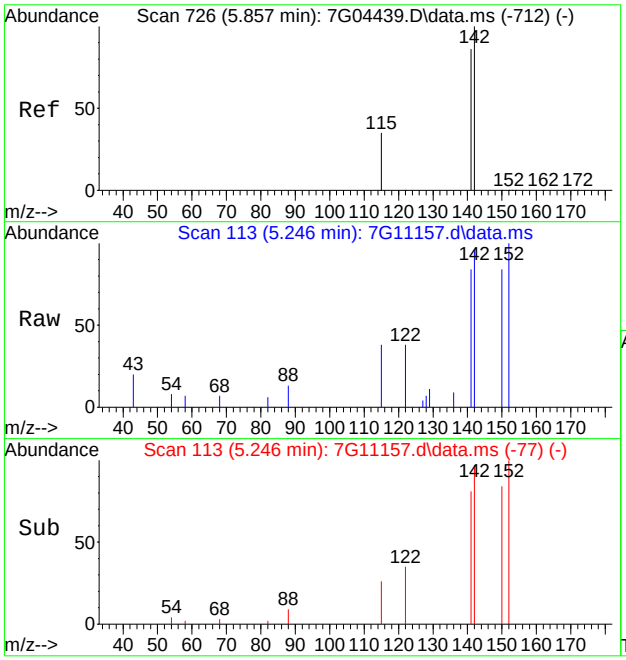


#2
Naphthalene
Concen: 0.51 ppm
RT: 4.658 min Scan# 13
Delta R.T. 0.012 min
Lab File: 7G11157.d
Acq: 11 Aug 2020 7:18 pm

Tgt Ion:128 Resp: 2797

Ion	Ratio	Lower	Upper
128	100		
129	11.5	0.0	40.9
127	13.5	0.0	43.5

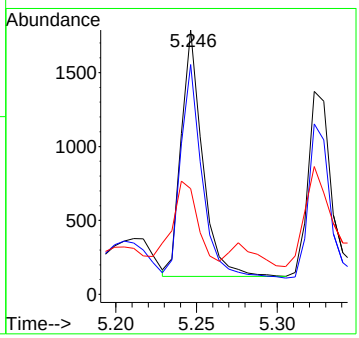


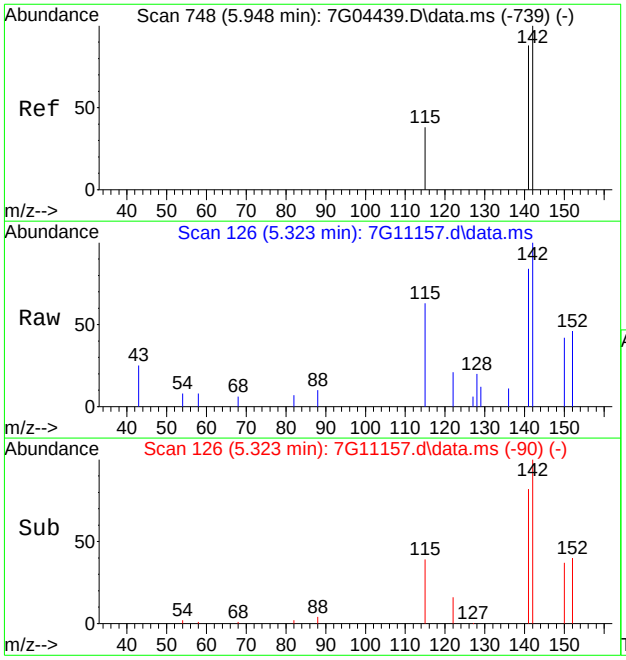


#3
2-Methylnaphthalene
Concen: 0.35 ppm
RT: 5.246 min Scan# 113
Delta R.T. 0.012 min
Lab File: 7G11157.d
Acq: 11 Aug 2020 7:18 pm

Tgt Ion:142 Resp: 1540

Ion	Ratio	Lower	Upper
142	100		
141	86.7	55.7	115.7
115	27.2	5.4	65.4

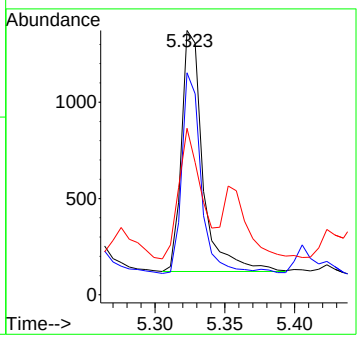


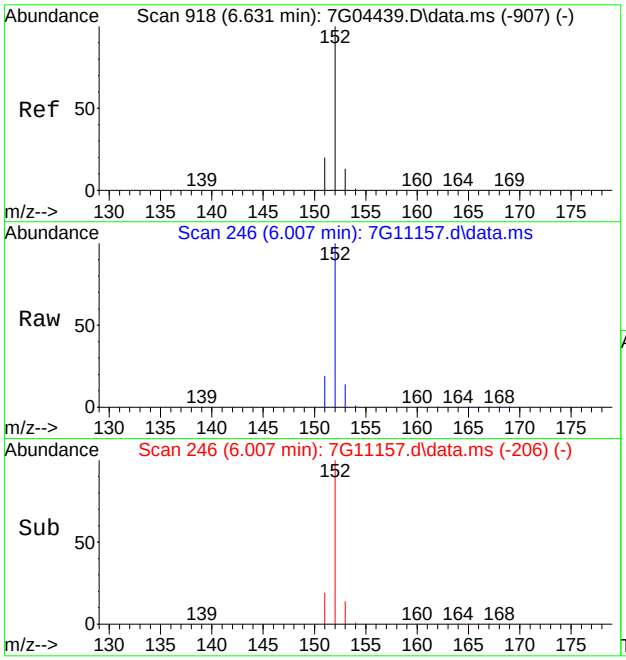


#5
1-Methylnaphthalene
Concen: 0.35 ppm
RT: 5.323 min Scan# 126
Delta R.T. 0.012 min
Lab File: 7G11157.d
Acq: 11 Aug 2020 7:18 pm

Tgt Ion:142 Resp: 1339

Ion	Ratio	Lower	Upper
142	100		
141	83.2	58.1	118.1
115	53.7	7.7	67.7

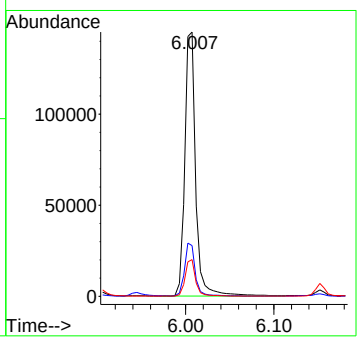


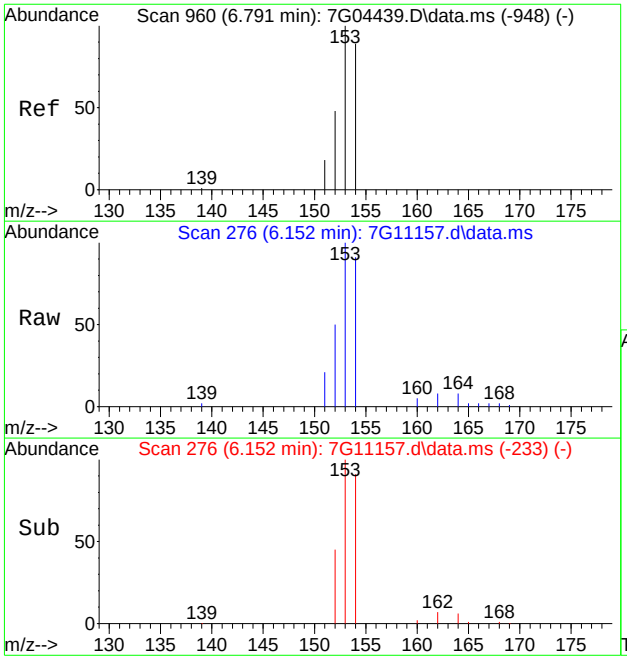


#7
Acenaphthylene
Concen: 11.68 ppm
RT: 6.007 min Scan# 246
Delta R.T. 0.014 min
Lab File: 7G11157.d
Acq: 11 Aug 2020 7:18 pm

Tgt Ion:152 Resp: 125564

Ion	Ratio	Lower	Upper
152	100		
151	19.1	0.0	49.8
153	13.9	0.0	42.8

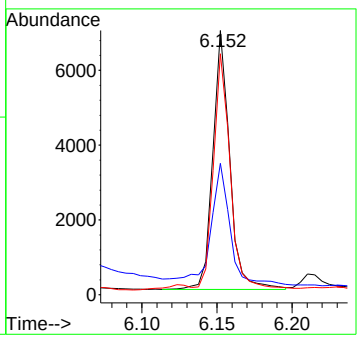


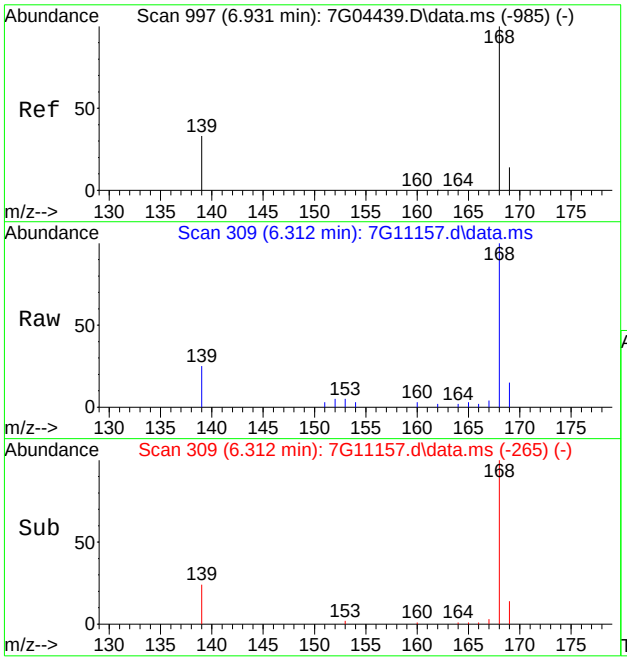


#8
Acenaphthene
Concen: 0.79 ppm
RT: 6.152 min Scan# 276
Delta R.T. 0.010 min
Lab File: 7G11157.d
Acq: 11 Aug 2020 7:18 pm

Tgt Ion:153 Resp: 5416

Ion	Ratio	Lower	Upper
153	100		
152	45.8	18.3	78.3
154	90.6	59.3	119.3

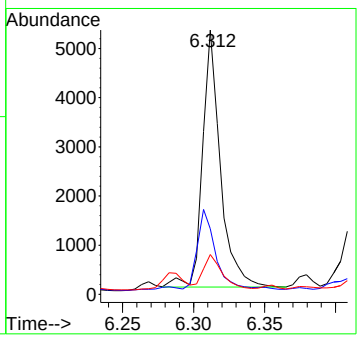


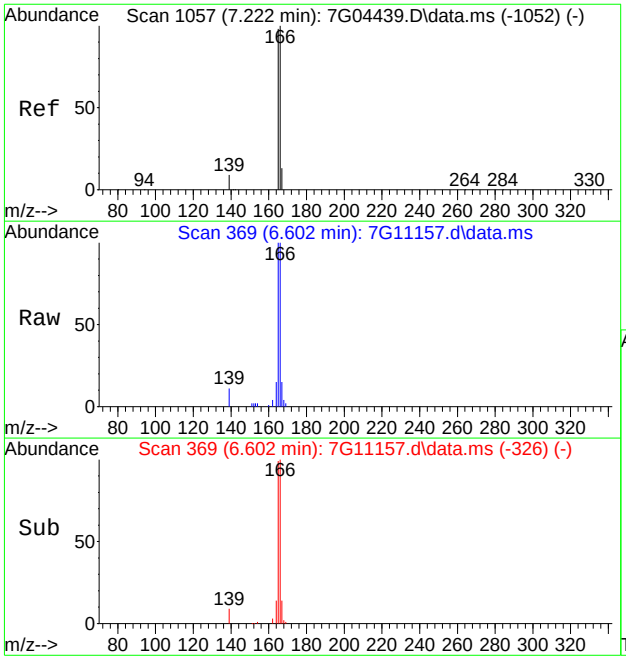


#9
Dibenzofuran
Concen: 0.95 ppm
RT: 6.312 min Scan# 309
Delta R.T. 0.014 min
Lab File: 7G11157.d
Acq: 11 Aug 2020 7:18 pm

Tgt Ion:168 Resp: 4586

Ion	Ratio	Lower	Upper
168	100		
139	23.2	12.6	52.6
169	11.7	0.0	33.8

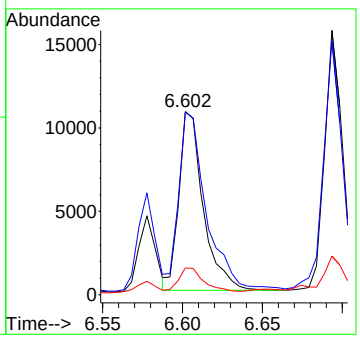


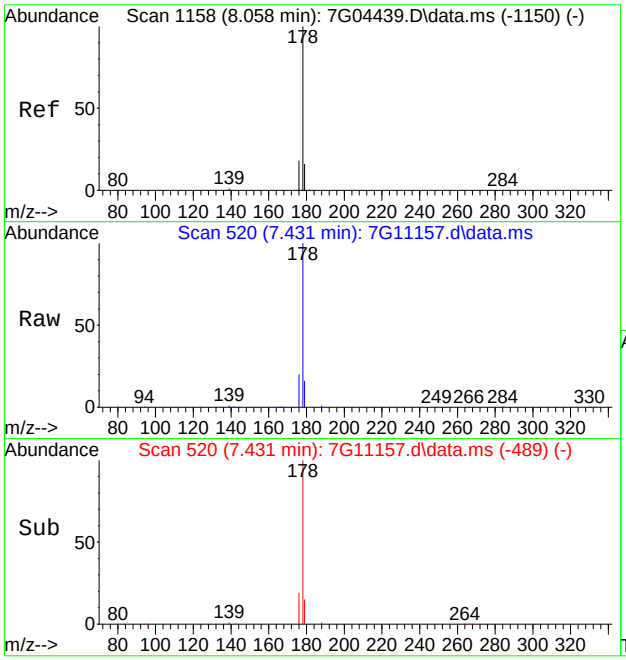


#10
Fluorene
Concen: 1.52 ppm
RT: 6.602 min Scan# 369
Delta R.T. 0.010 min
Lab File: 7G11157.d
Acq: 11 Aug 2020 7:18 pm

Tgt Ion:166 Resp: 11332

Ion	Ratio	Lower	Upper
166	100		
165	98.1	68.2	128.2
167	13.0	0.0	42.9

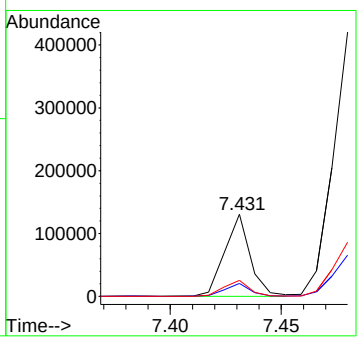


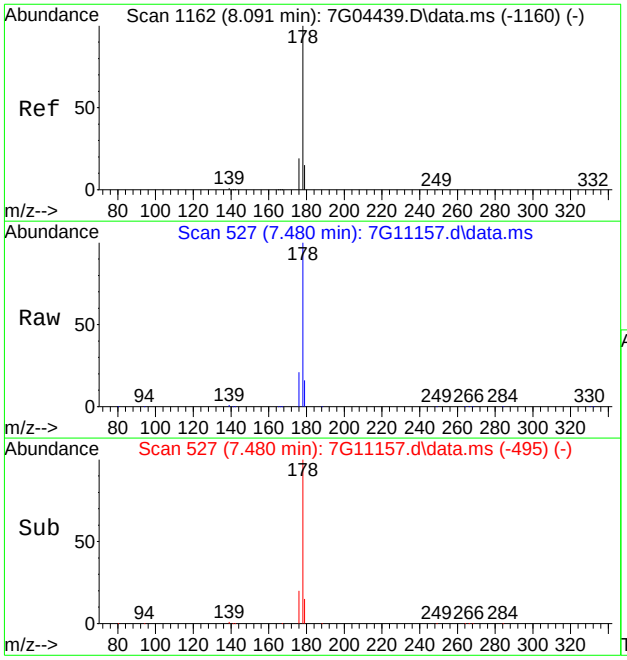


#13
Phenanthrene
Concen: 8.54 ppm
RT: 7.431 min Scan# 520
Delta R.T. 0.014 min
Lab File: 7G11157.d
Acq: 11 Aug 2020 7:18 pm

Tgt Ion:178 Resp: 103843

Ion	Ratio	Lower	Upper
178	100		
179	15.5	0.0	45.7
176	19.5	0.0	48.0

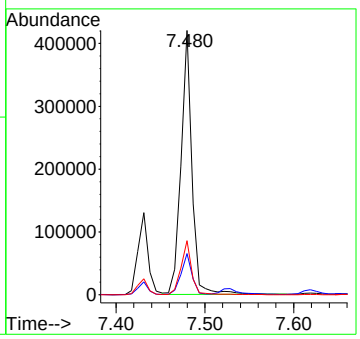


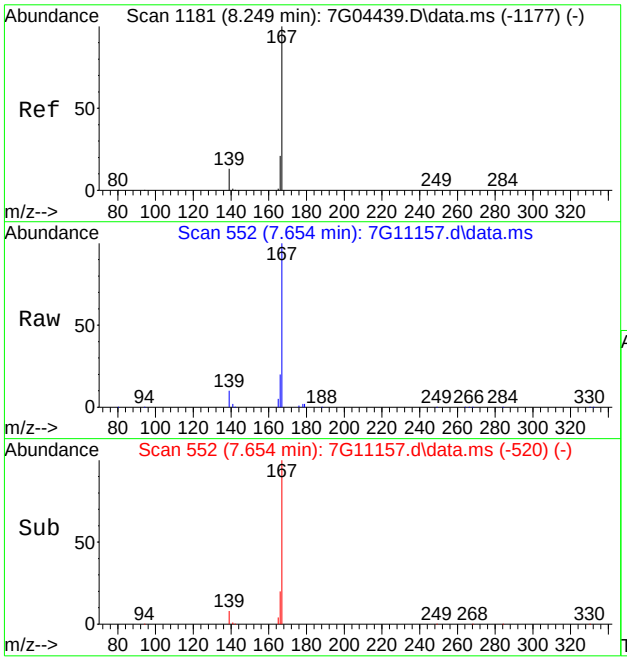


#14
Anthracene
Concen: 27.76 ppm
RT: 7.480 min Scan# 527
Delta R.T. 0.021 min
Lab File: 7G11157.d
Acq: 11 Aug 2020 7:18 pm

Tgt Ion:178 Resp: 359390

Ion	Ratio	Lower	Upper
178	100		
179	15.5	0.0	45.1
176	20.5	0.0	48.8

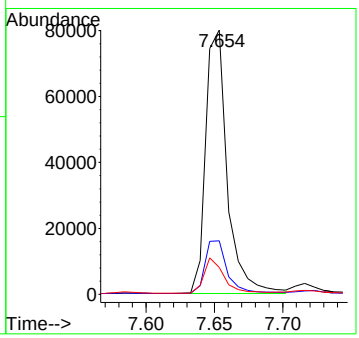


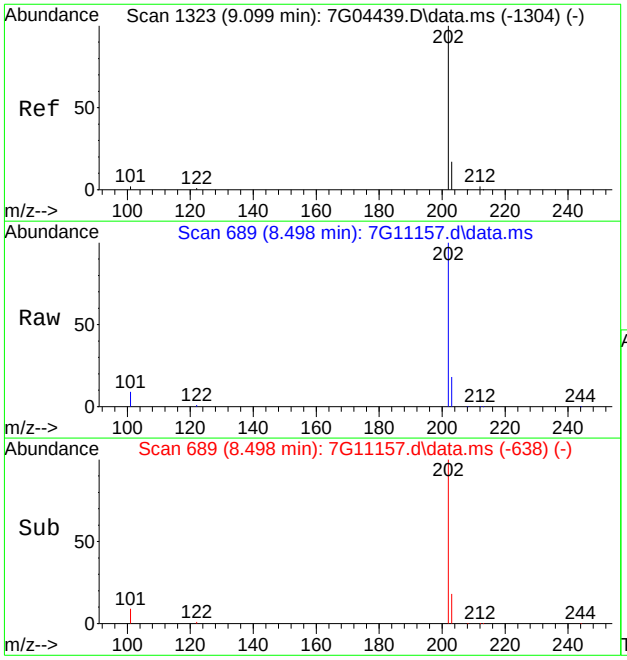


#15
Carbazole
Concen: 4.03 ppm
RT: 7.654 min Scan# 552
Delta R.T. 0.021 min
Lab File: 7G11157.d
Acq: 11 Aug 2020 7:18 pm

Tgt Ion:167 Resp: 87576

Ion	Ratio	Lower	Upper
167	100		
166	20.0	1.2	41.2
139	9.6	0.0	32.8

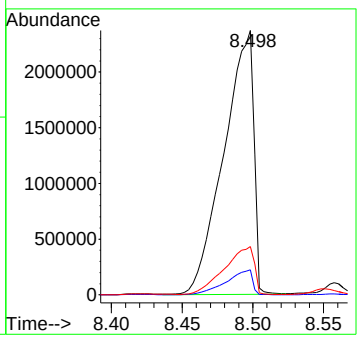


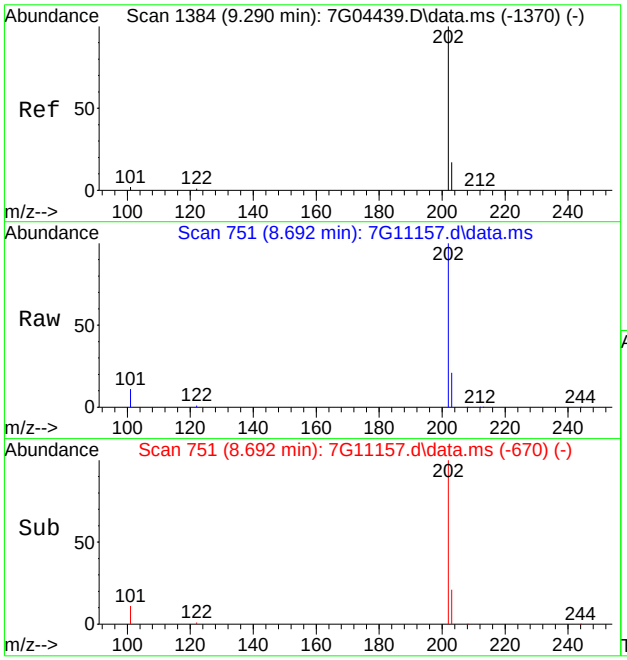


#16
Fluoranthene
Concen: 117.00 ppm
RT: 8.498 min Scan# 689
Delta R.T. 0.050 min
Lab File: 7G11157.d
Acq: 11 Aug 2020 7:18 pm

Tgt Ion:202 Resp: 3478307

Ion	Ratio	Lower	Upper
202	100		
101	9.4	0.0	32.2
203	18.1	0.0	47.2

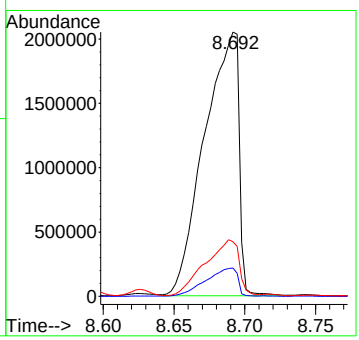


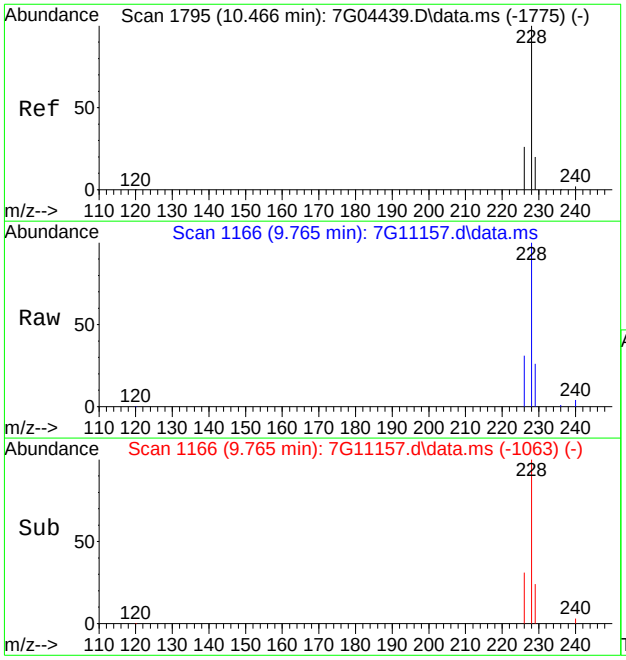


#19
Pyrene
Concen: 90.60 ppm
RT: 8.692 min Scan# 751
Delta R.T. 0.053 min
Lab File: 7G11157.d
Acq: 11 Aug 2020 7:18 pm

Tgt Ion:202 Resp: 3482110

Ion	Ratio	Lower	Upper
202	100		
101	10.7	0.0	32.4
203	20.5	0.0	47.4

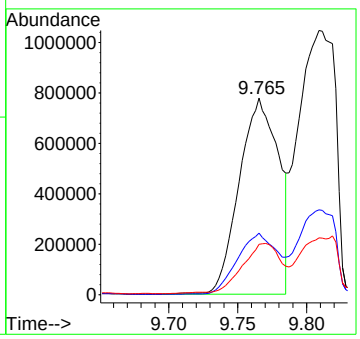


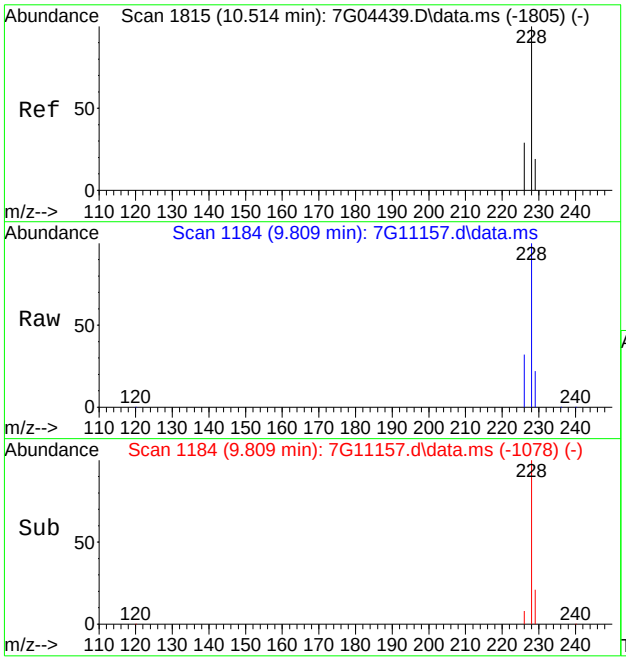


#20
Benzo[a]anthracene
Concen: 50.18 ppm
RT: 9.765 min Scan# 1166
Delta R.T. 0.048 min
Lab File: 7G11157.d
Acq: 11 Aug 2020 7:18 pm

Tgt Ion:228 Resp: 1536732

Ion	Ratio	Lower	Upper
228	100		
226	31.4	0.0	56.1
229	26.2	0.0	49.5

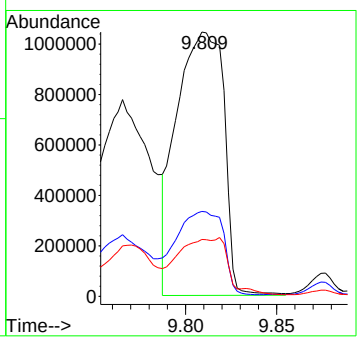


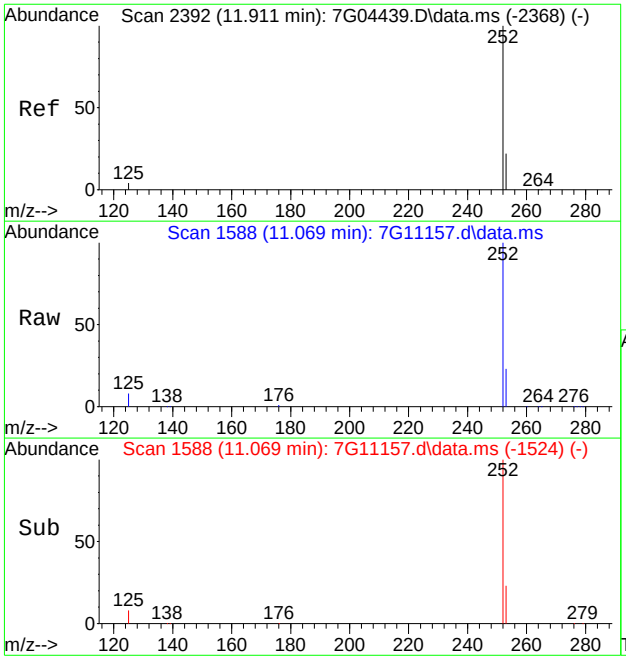


#21
Chrysene
Concen: 63.63 ppm
RT: 9.809 min Scan# 1184
Delta R.T. 0.056 min
Lab File: 7G11157.d
Acq: 11 Aug 2020 7:18 pm

Tgt Ion:228 Resp: 1879889

Ion	Ratio	Lower	Upper
228	100		
226	32.0	0.0	58.9
229	20.9	0.0	49.5

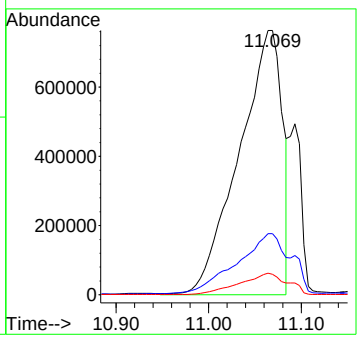


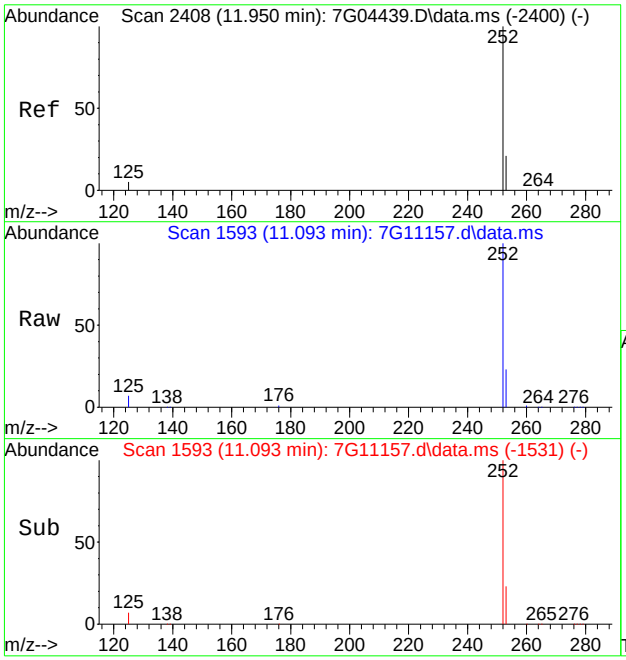


#23
Benzo[b]fluoranthene
Concen: 130.70 ppm m
RT: 11.069 min Scan# 1588
Delta R.T. 0.112 min
Lab File: 7G11157.d
Acq: 11 Aug 2020 7:18 pm

Tgt Ion:252 Resp: 2476285

Ion	Ratio	Lower	Upper
252	100		
253	23.1	0.0	51.7
125	7.7	0.0	34.5

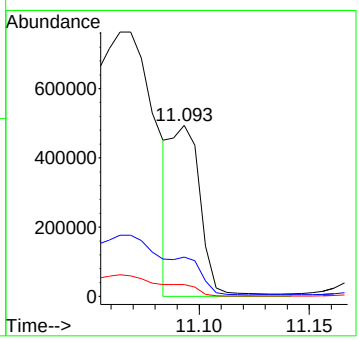


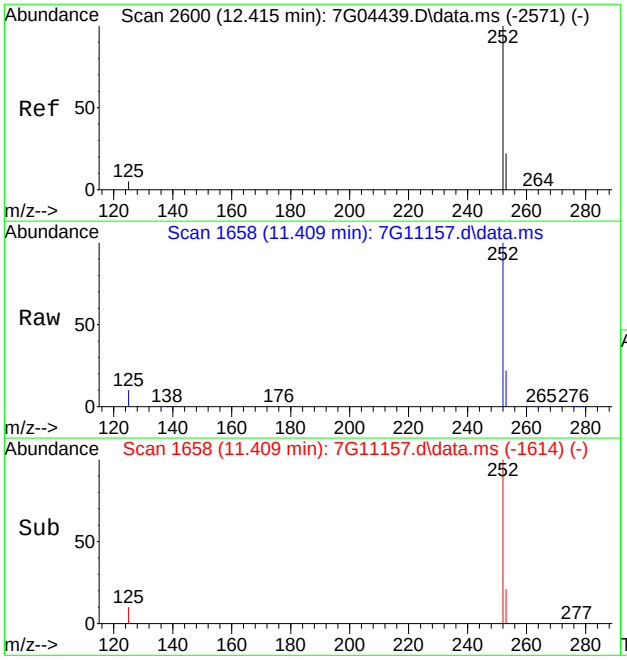


#24
Benzo[k]fluoranthene
Concen: 22.12 ppm m
RT: 11.093 min Scan# 1593
Delta R.T. 0.102 min
Lab File: 7G11157.d
Acq: 11 Aug 2020 7:18 pm

Tgt Ion:252 Resp: 470244

Ion	Ratio	Lower	Upper
252	100		
253	23.0	0.0	51.5
125	6.9	0.0	34.8

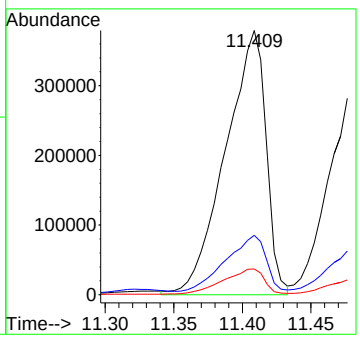


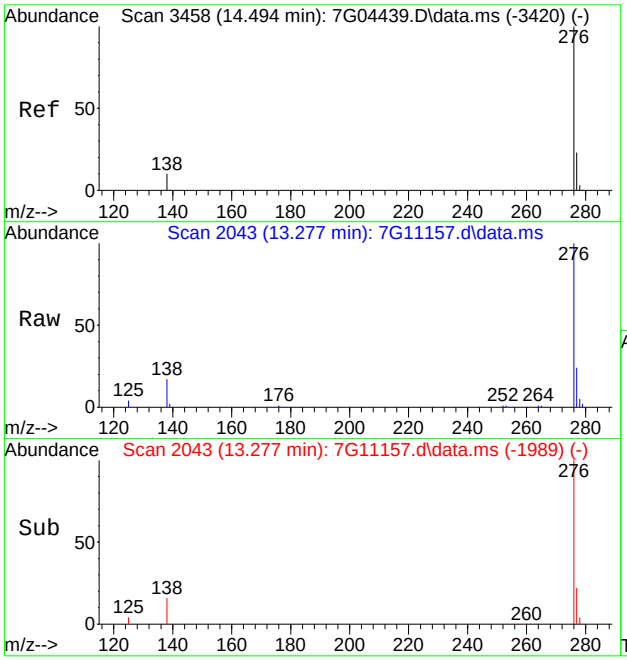


#25
Benzo[a]pyrene
Concen: 42.29 ppm m
RT: 11.409 min Scan# 1658
Delta R.T. 0.014 min
Lab File: 7G11157.d
Acq: 11 Aug 2020 7:18 pm

Tgt Ion:252 Resp: 780759

Ion	Ratio	Lower	Upper
252	100		
253	22.4	0.0	51.6
125	9.8	0.0	34.8

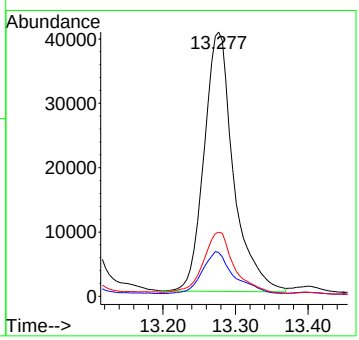


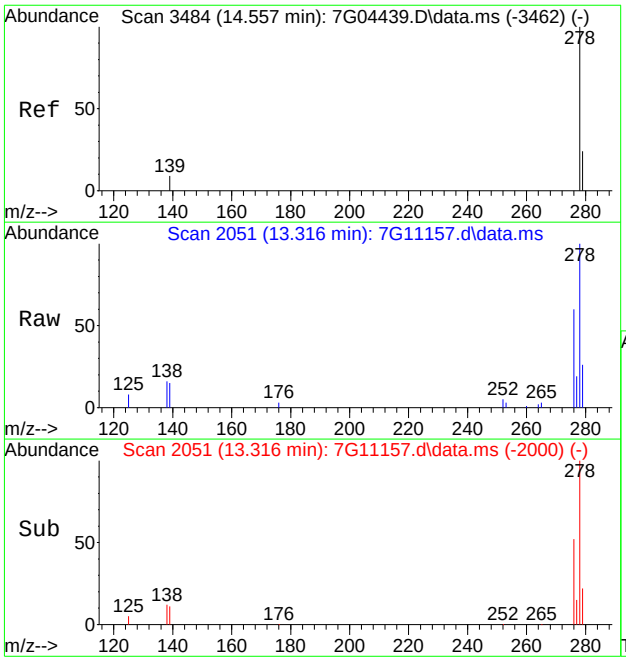


#26
Indeno[1,2,3-cd]pyrene
Concen: 9.39 ppm
RT: 13.277 min Scan# 2043
Delta R.T. 0.063 min
Lab File: 7G11157.d
Acq: 11 Aug 2020 7:18 pm

Tgt Ion:276 Resp: 113085

Ion	Ratio	Lower	Upper
276	100		
138	15.9	0.0	39.6
277	23.5	0.0	53.1

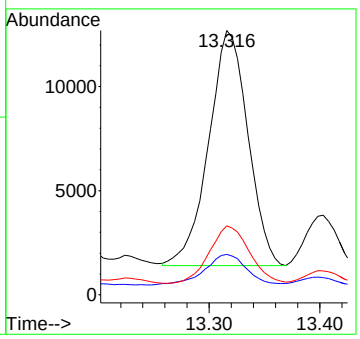


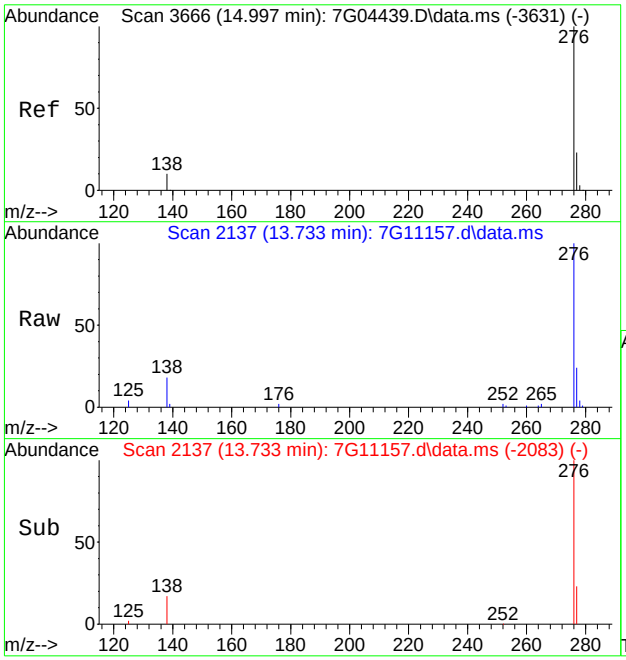


#27
Dibenz[a,h]anthracene
Concen: 2.08 ppm
RT: 13.316 min Scan# 2051
Delta R.T. 0.048 min
Lab File: 7G11157.d
Acq: 11 Aug 2020 7:18 pm

Tgt Ion:278 Resp: 27839

Ion	Ratio	Lower	Upper
278	100		
139	12.5	0.0	38.8
279	24.2	0.0	53.6

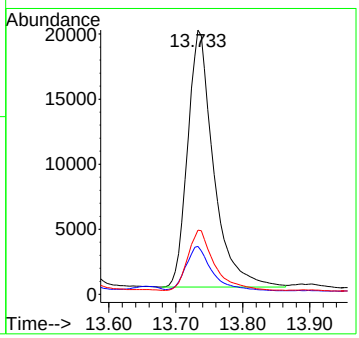




#28
Benzo[g,h,i]perylene
Concen: 3.66 ppm
RT: 13.733 min Scan# 2137
Delta R.T. 0.063 min
Lab File: 7G11157.d
Acq: 11 Aug 2020 7:18 pm

Tgt Ion:276 Resp: 53150

Ion	Ratio	Lower	Upper
276	100		
138	17.0	0.0	40.5
277	23.5	0.0	53.2



Manual Integration Approval Summary

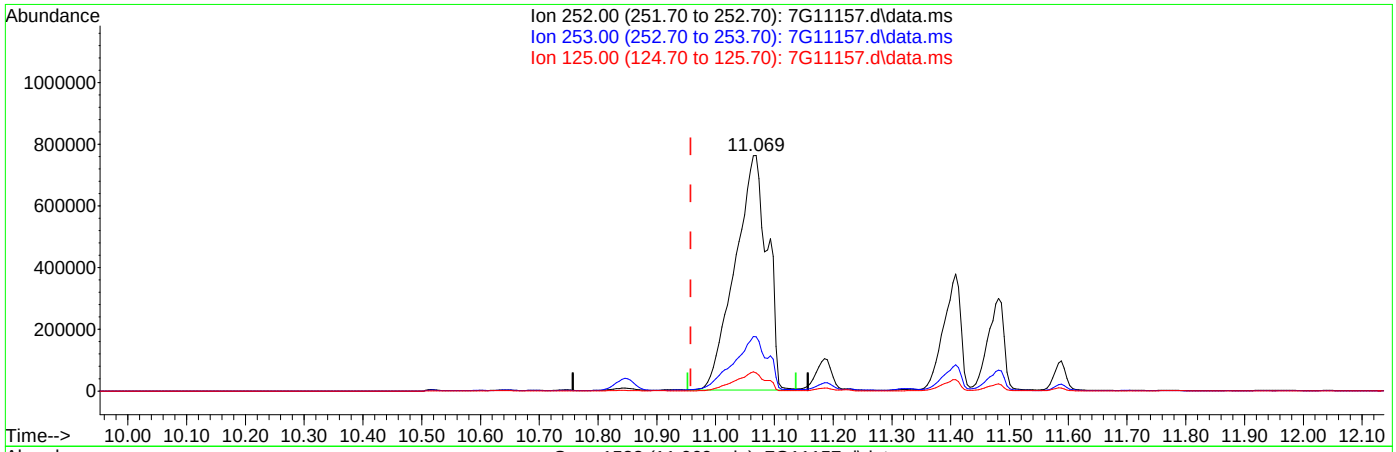
Sample Number: FA77576-8
Lab FileID: 7G11157.D
Injection Time: 08/11/20 19:18
Method: SW846 8270E BY SIM
Analyst approved: 08/12/20 09:33 Fouad Sekkar
Supervisor approved: 08/12/20 11:43 Nicole McCampbell

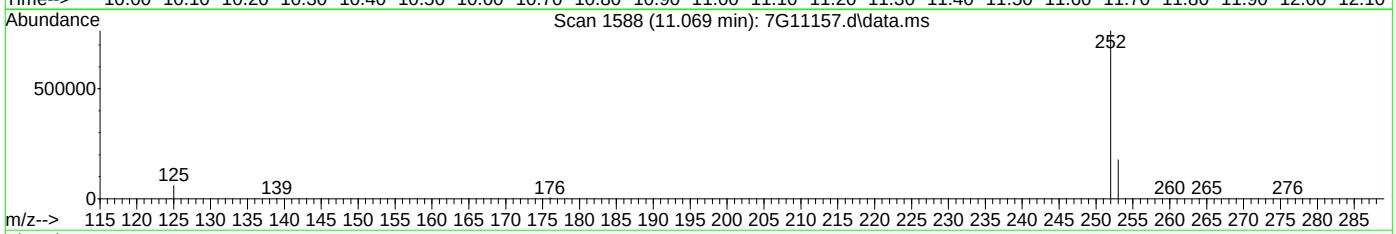
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(b)fluoranthene	205-99-2		11.07	Overlapping peak
Benzo(k)fluoranthene	207-08-9		11.09	Overlapping peak
Benzo(a)pyrene	50-32-8		11.41	Missed peak

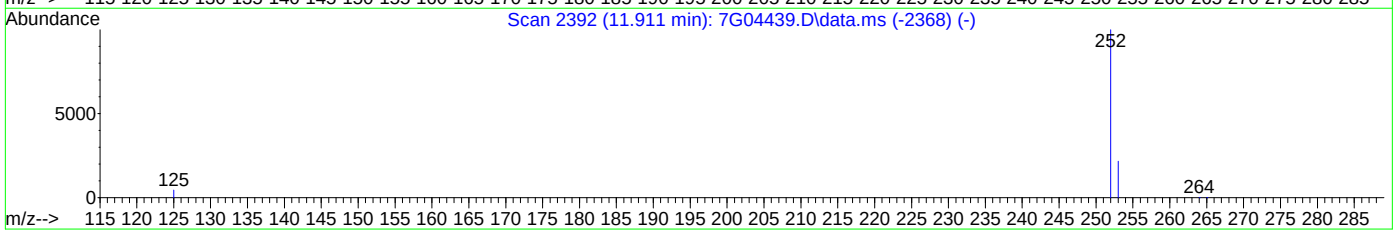
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11157.d
Acq On : 11 Aug 2020 7:18 pm
Operator : FOUADS
Sample : fa77576-8 e Inst : MSBNA8
Misc : op81483,S7G483,15.3,,,1,1,soil
ALS Vial : 29 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:27:30 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11157.d\data.ms

(23) Benzo[b]fluoranthene (P)

11.069min (+0.112) 153.22ppm

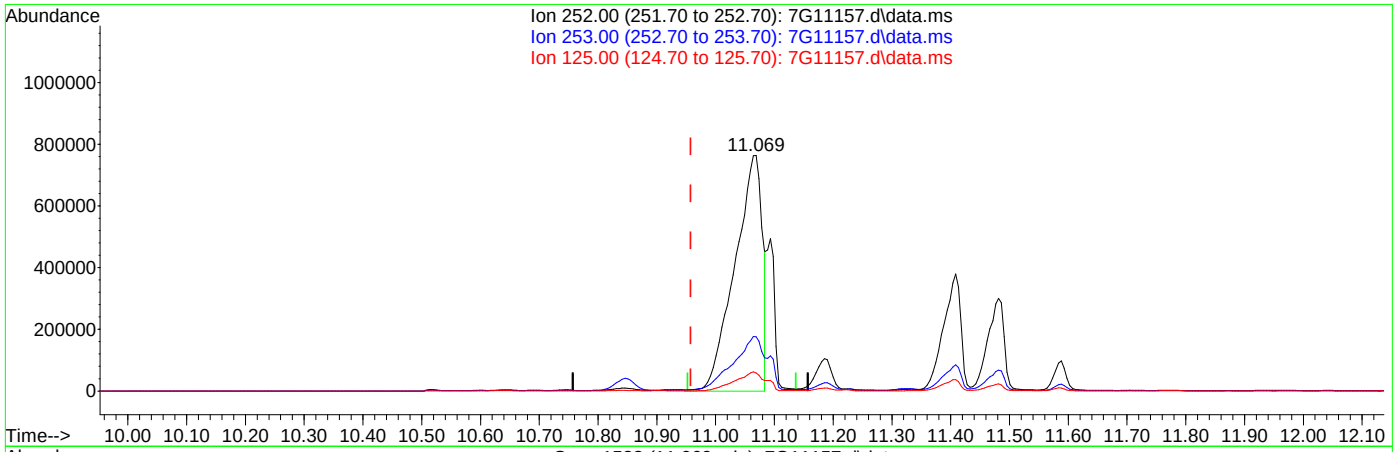
response 2902941

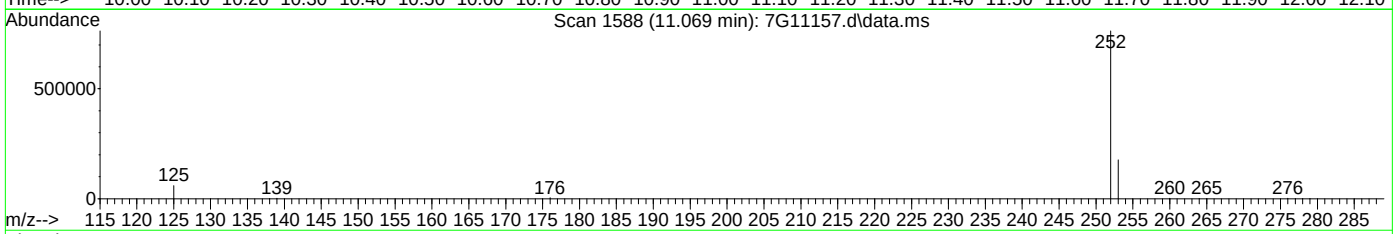
Ion	Exp%	Act%
252.00	100	100
253.00	21.70	22.67
125.00	4.50	7.67
0.00	0.00	0.00

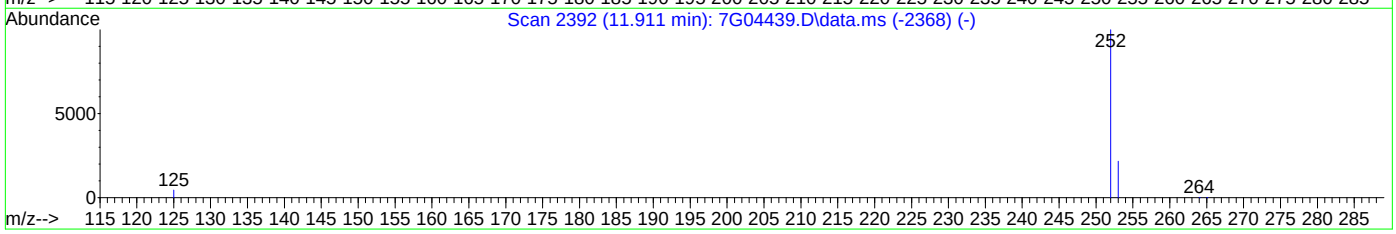
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11157.d
Acq On : 11 Aug 2020 7:18 pm
Operator : FOUADS
Sample : fa77576-8 e Inst : MSBNA8
Misc : op81483,S7G483,15.3,,,1,1,soil
ALS Vial : 29 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:27:30 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11157.d\data.ms

(23) Benzo[b]fluoranthene (P)

11.069min (+0.112) 130.70ppm m

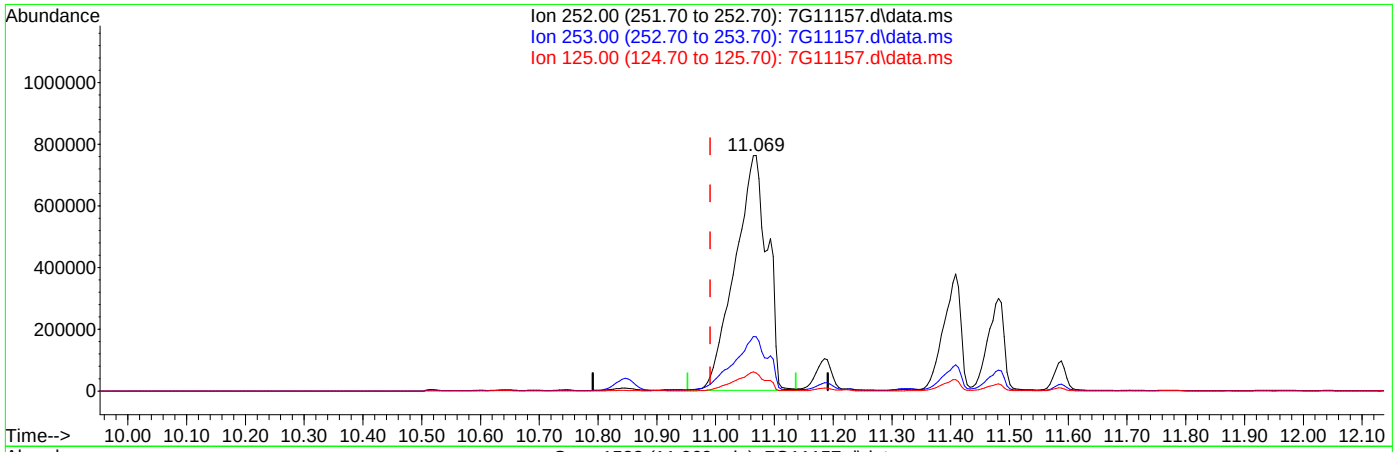
response 2476285

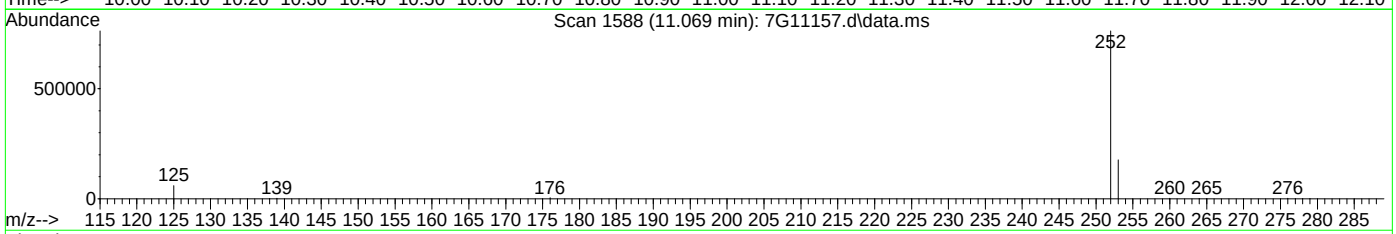
Ion	Exp%	Act%
252.00	100	100
253.00	21.70	23.08
125.00	4.50	7.73
0.00	0.00	0.00

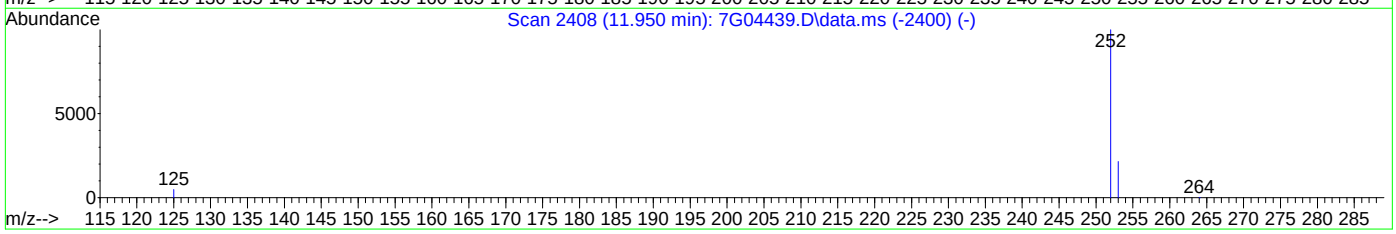
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11157.d
Acq On : 11 Aug 2020 7:18 pm
Operator : FOUADS
Sample : fa77576-8 e Inst : MSBNA8
Misc : op81483,S7G483,15.3,,,1,1,soil
ALS Vial : 29 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:27:30 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11157.d\data.ms

(24) Benzo[k]fluoranthene (P)

11.069min (+0.078) 109.76ppm

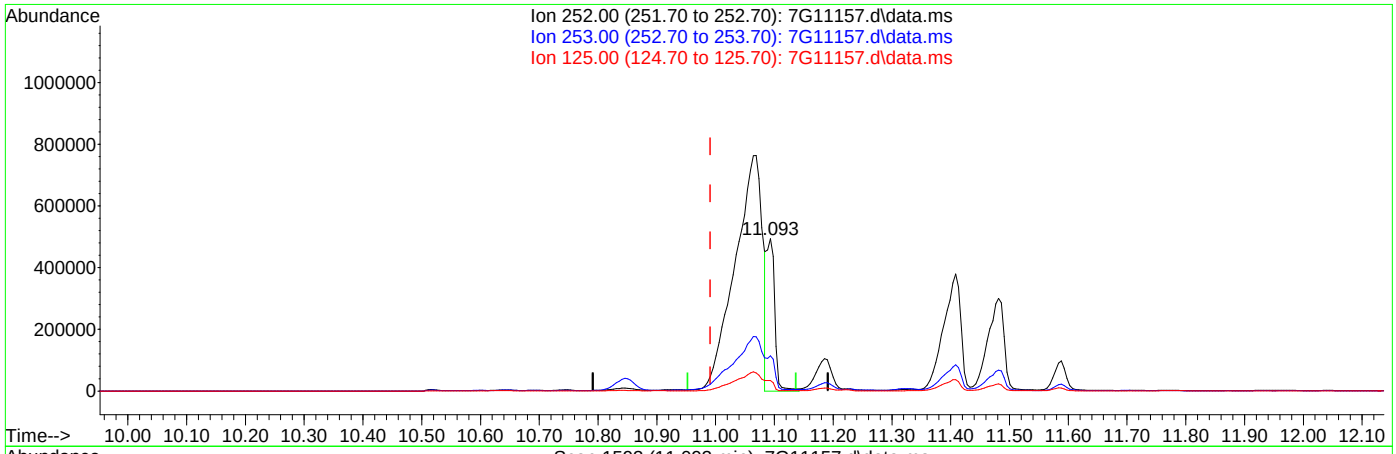
response 2917525

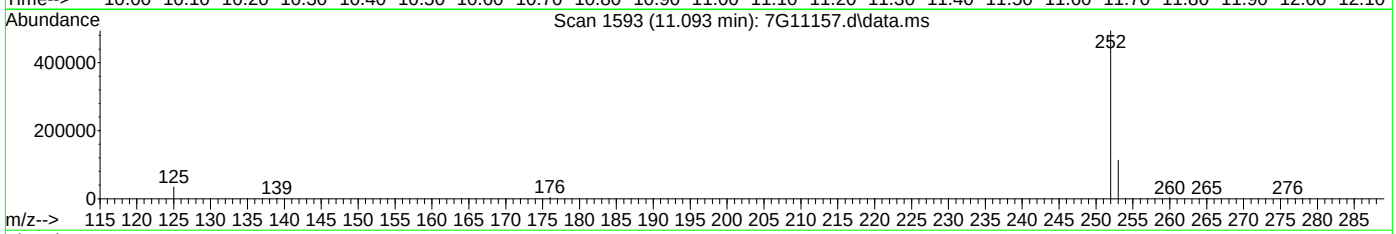
Ion	Exp%	Act%
252.00	100	100
253.00	21.50	22.67
125.00	4.80	7.67
0.00	0.00	0.00

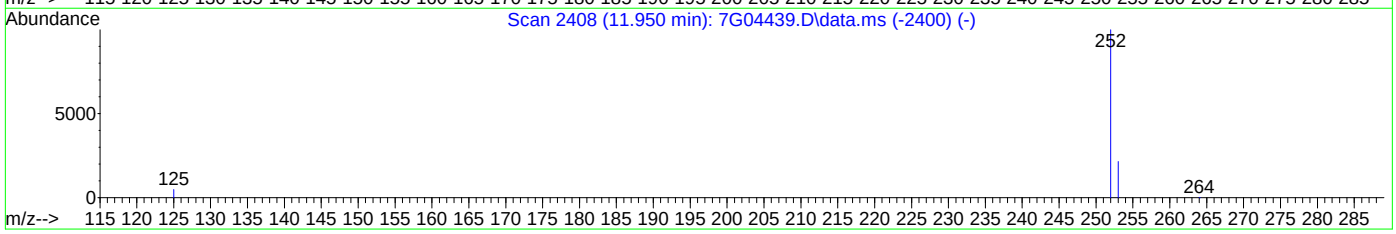
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11157.d
Acq On : 11 Aug 2020 7:18 pm
Operator : FOUADS
Sample : fa77576-8 e Inst : MSBNA8
Misc : op81483,S7G483,15.3,,,1,1,soil
ALS Vial : 29 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:27:30 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11157.d\data.ms

(24) Benzo[k]fluoranthene (P)

11.093min (+0.102) 22.12ppm m

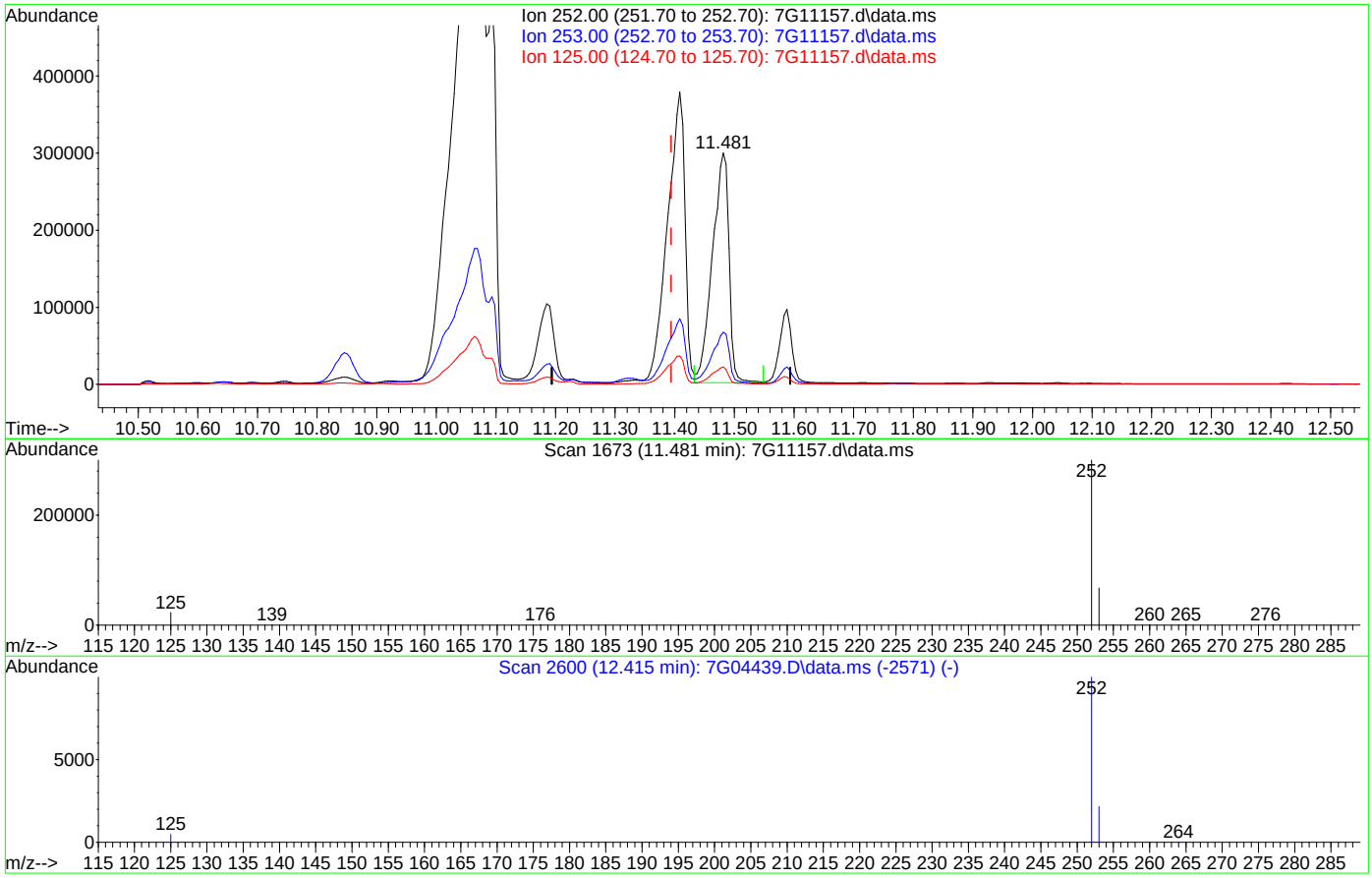
response 470244

Ion	Exp%	Act%
252.00	100	100
253.00	21.50	23.04
125.00	4.80	6.89
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11157.d
Acq On : 11 Aug 2020 7:18 pm
Operator : FOUADS
Sample : fa77576-8 e Inst : MSBNA8
Misc : op81483,S7G483,15.3,,,1,1,soil
ALS Vial : 29 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:27:30 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration



TIC: 7G11157.d\data.ms

(25) Benzo[a]pyrene (P)

11.481min (+0.087) 31.31ppm

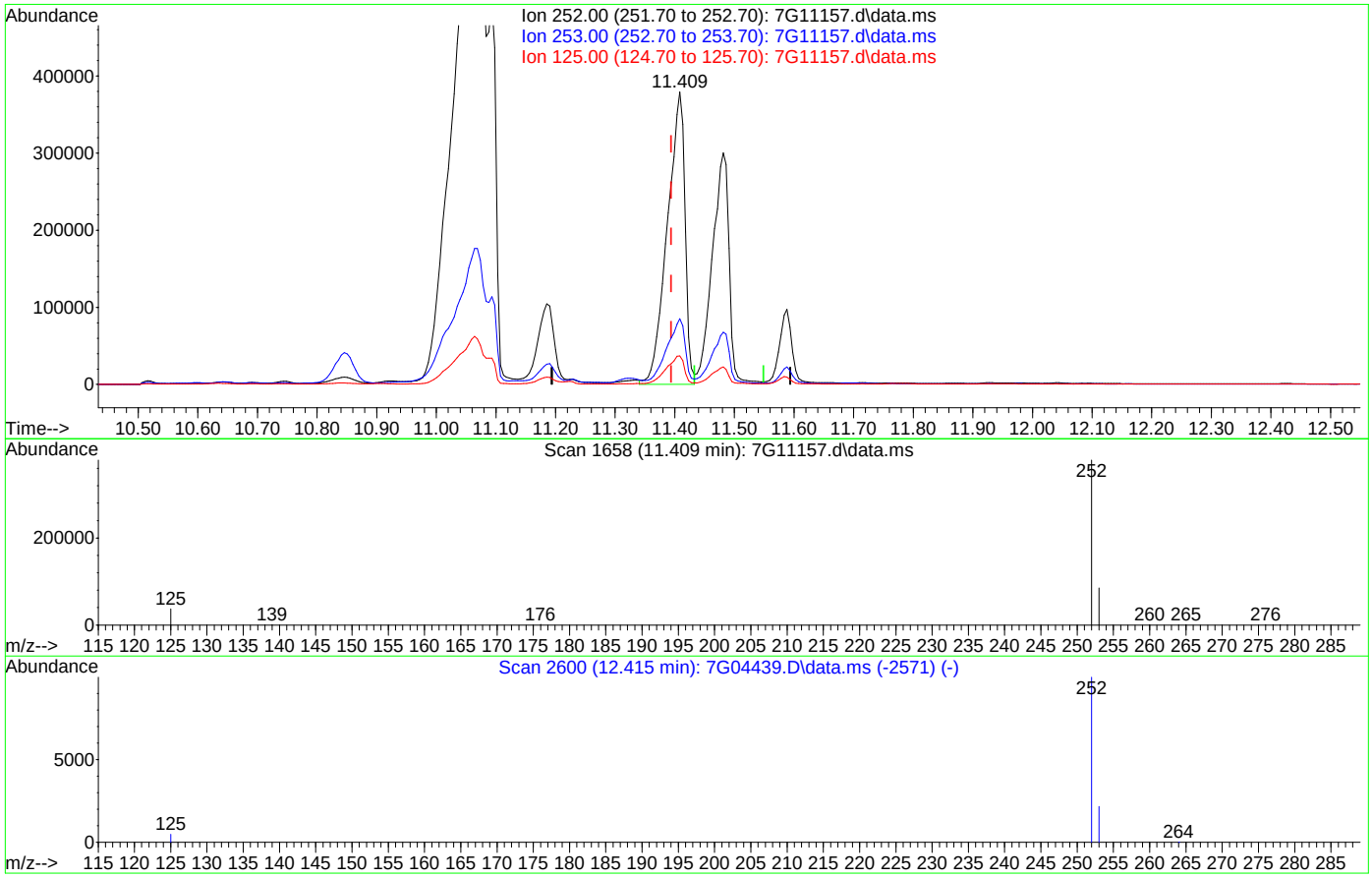
response 577966

Ion	Exp%	Act%
252.00	100	100
253.00	21.60	21.65
125.00	4.80	7.32
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11157.d
Acq On : 11 Aug 2020 7:18 pm
Operator : FOUADS
Sample : fa77576-8 e Inst : MSBNA8
Misc : op81483,S7G483,15.3,,,1,1,soil
ALS Vial : 29 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:27:30 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration



TIC: 7G11157.d\data.ms

(25) Benzo[a]pyrene (P)

11.409min (+0.014) 42.29ppm m

response 780759

Ion	Exp%	Act%
252.00	100	100
253.00	21.60	22.44
125.00	4.80	9.76
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan
08/11/20 12:03

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11111.d
Acq On : 10 Aug 2020 7:01 pm
Operator : FOUADS
Sample : fa77576-9 e
Misc : op81483,S7G482,15.2,,,1,1,soil
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 11 03:18:48 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.634	136	26585	4.00	ppm	0.00
6) Acenaphthene-d10	6.118	164	19395	4.00	ppm	0.00
11) Phenanthrene-d10	7.403	188	37305	4.00	ppm	0.00
18) Chrysene-d12	9.732	240	66203	4.00	ppm	0.00
22) Perylene-d12	11.481	264	59245	4.00	ppm	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.211	152	34844	8.78	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 87.80%			
17) Fluoranthene-d10	8.439	212	172512	8.86	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 88.60%			
Target Compounds						Qvalue
7) Acenaphthylene	5.998	152	5502	0.50	ppm	99
13) Phenanthrene	7.417	178	2831	0.23	ppm	96
14) Anthracene	7.466	178	16038	1.30	ppm	98
15) Carbazole	7.647	167	4421	0.20	ppm	96
16) Fluoranthene	8.455	202	68248	2.94	ppm	98
19) Pyrene	8.645	202	97634	3.71	ppm	96
20) Benzo[a]anthracene	9.722	228	37829	1.84	ppm	86
21) Chrysene	9.756	228	64885	2.83	ppm	98
23) Benzo[b]fluoranthene	10.967	252	101877	5.07	ppm	97
24) Benzo[k]fluoranthene	11.001	252	28920m	1.36	ppm	
25) Benzo[a]pyrene	11.399	252	29901	1.53	ppm	98
26) Indeno[1,2,3-cd]pyrene	13.224	276	17980	1.41	ppm	95
27) Dibenz[a,h]anthracene	13.267	278	4173	0.29	ppm	97
28) Benzo[g,h,i]perylene	13.685	276	12461	0.81	ppm	95

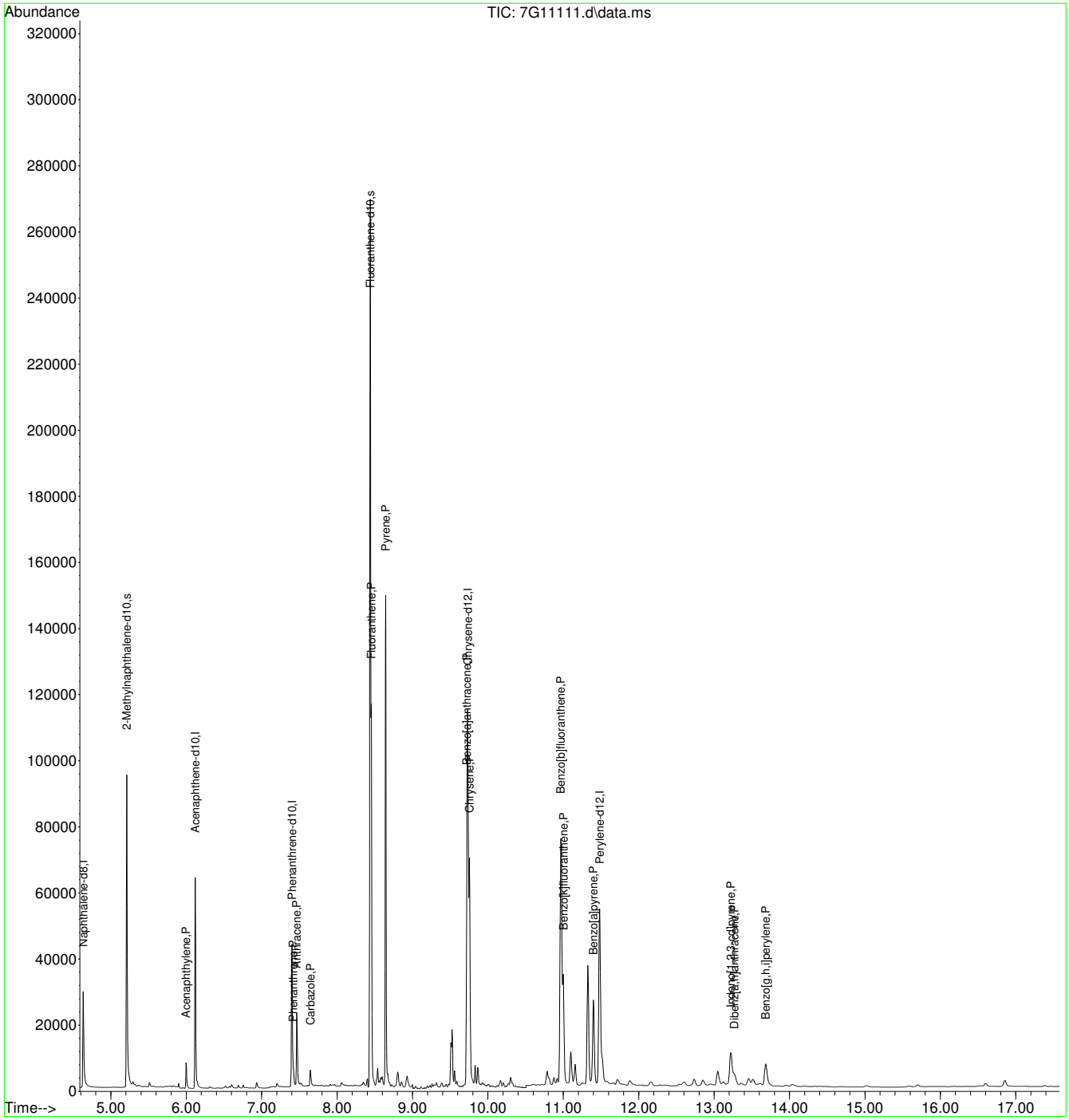
(#) = qualifier out of range (m) = manual integration (+) = signals summed

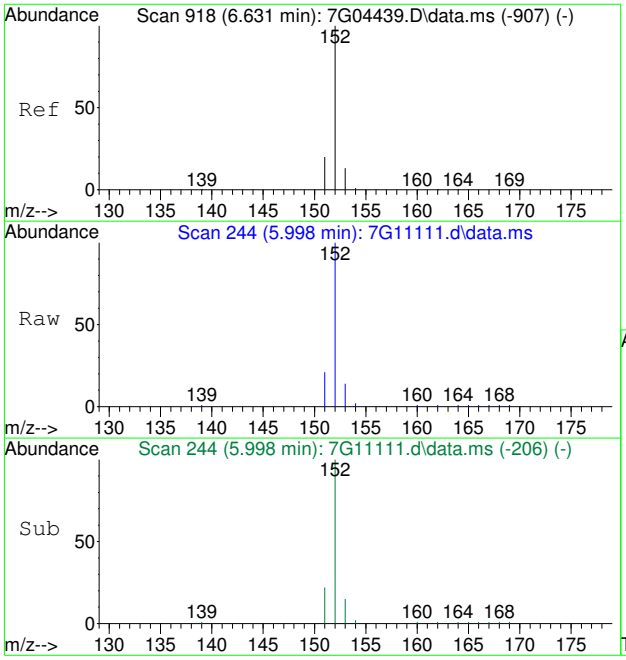
7.1.31
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11111.d
Acq On : 10 Aug 2020 7:01 pm
Operator : FOUADS
Sample : fa77576-9 e
Misc : op81483,S7G482,15.2,,,1,1,soil
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 11 03:18:48 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

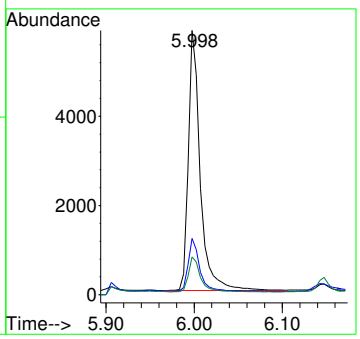


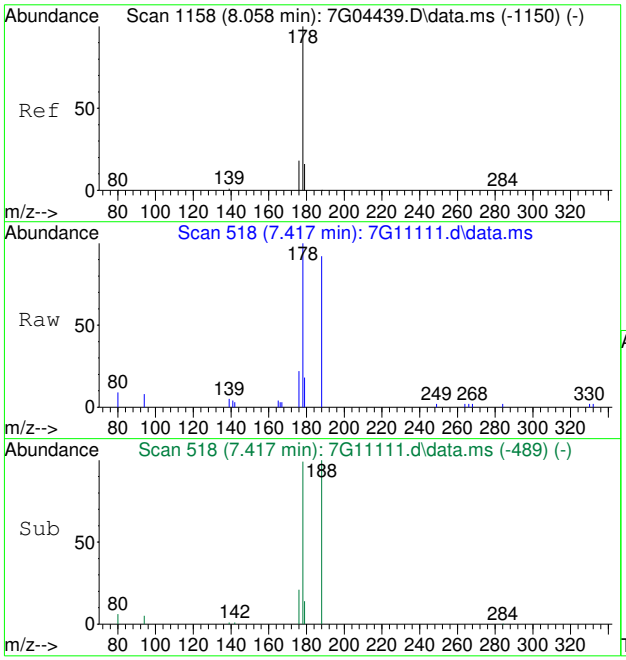


#7
Acenaphthylene
Concen: 0.50 ppm
RT: 5.998 min Scan# 244
Delta R.T. 0.005 min
Lab File: 7G11111.d
Acq: 10 Aug 2020 7:01 pm

Tgt Ion:152 Resp: 5502

Ion	Ratio	Lower	Upper
152	100		
151	20.2	0.0	49.8
153	13.3	0.0	42.8

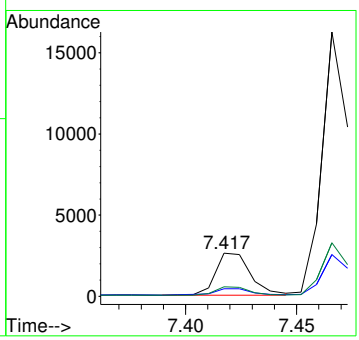


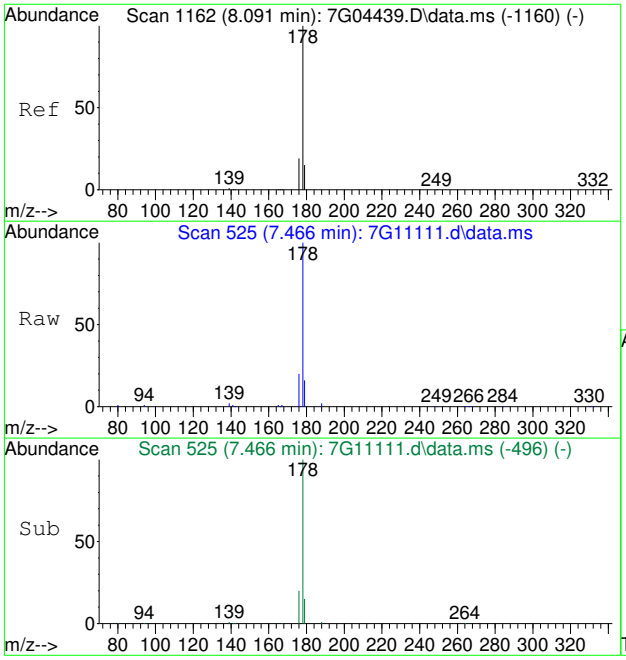


#13
Phenanthrene
Concen: 0.23 ppm
RT: 7.417 min Scan# 518
Delta R.T. 0.000 min
Lab File: 7G11111.d
Acq: 10 Aug 2020 7:01 pm

Tgt Ion:178 Resp: 2831

Ion	Ratio	Lower	Upper
178	100		
179	14.9	0.0	45.7
176	20.6	0.0	48.0

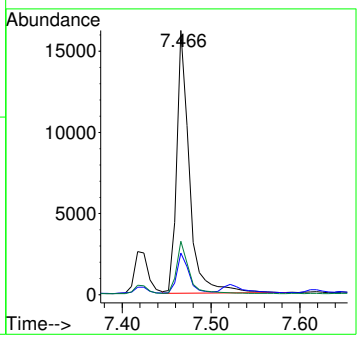


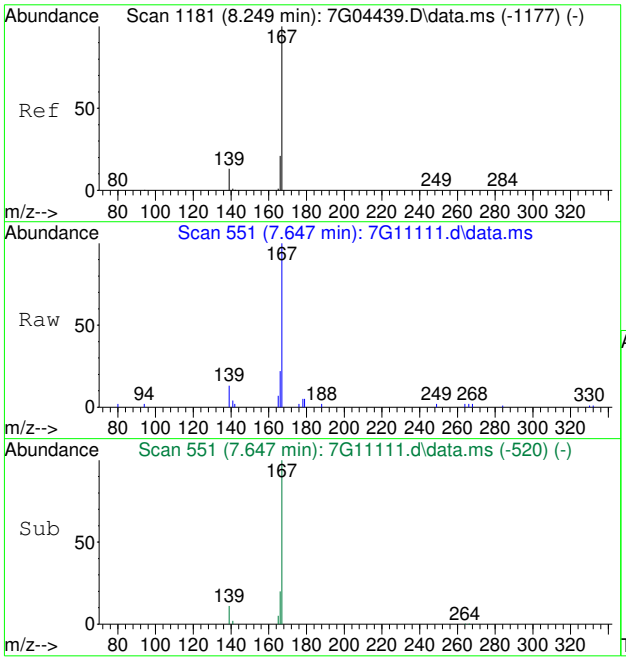


#14
Anthracene
Concen: 1.30 ppm
RT: 7.466 min Scan# 525
Delta R.T. 0.000 min
Lab File: 7G11111.d
Acq: 10 Aug 2020 7:01 pm

Tgt Ion:178 Resp: 16038

Ion	Ratio	Lower	Upper
178	100		
179	15.2	0.0	45.1
176	19.9	0.0	48.8

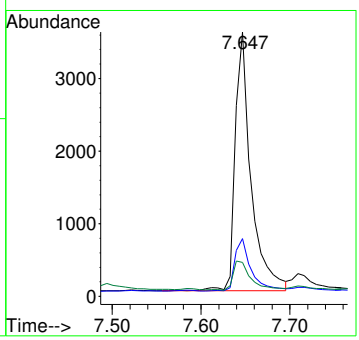


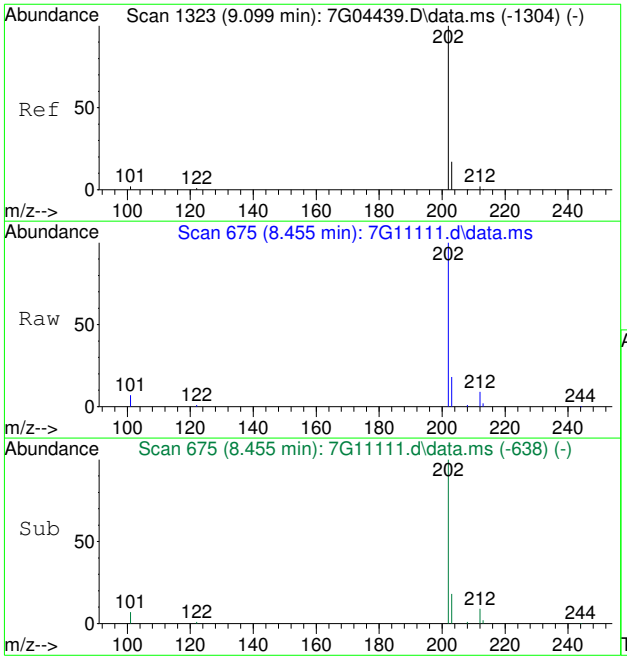


#15
Carbazole
Concen: 0.20 ppm
RT: 7.647 min Scan# 551
Delta R.T. 0.014 min
Lab File: 7G11111.d
Acq: 10 Aug 2020 7:01 pm

Tgt Ion:167 Resp: 4421

Ion	Ratio	Lower	Upper
167	100		
166	20.2	1.2	41.2
139	10.4	0.0	32.8

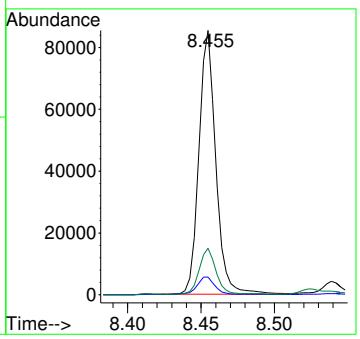


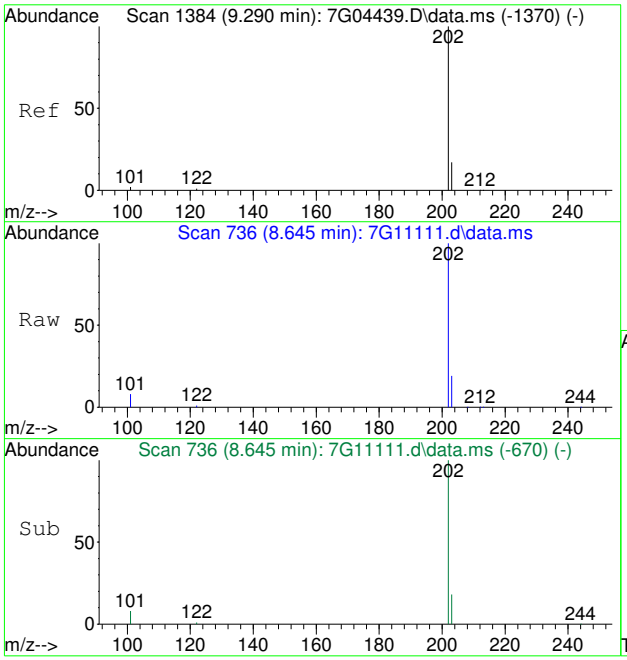


#16
Fluoranthene
Concen: 2.94 ppm
RT: 8.455 min Scan# 675
Delta R.T. 0.006 min
Lab File: 7G11111.d
Acq: 10 Aug 2020 7:01 pm

Tgt Ion:202 Resp: 68248

Ion	Ratio	Lower	Upper
202	100		
101	6.6	0.0	32.2
203	17.5	0.0	47.2

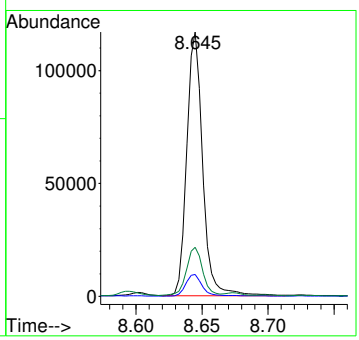


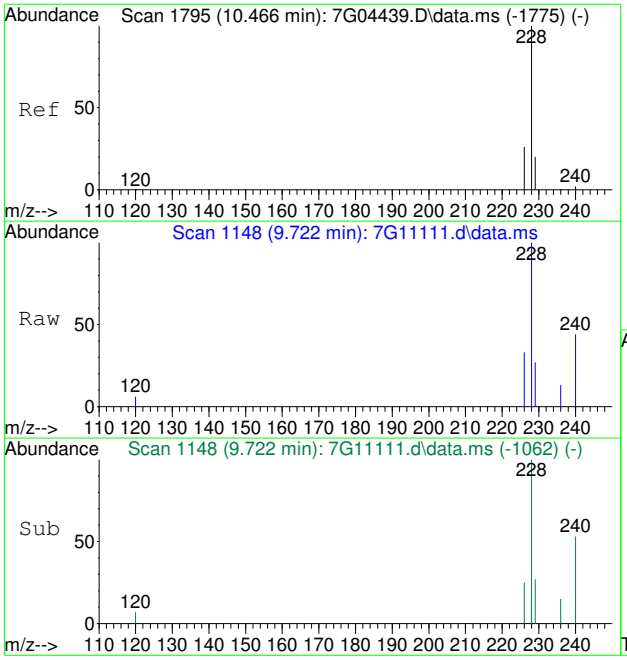


#19
Pyrene
Concen: 3.71 ppm
RT: 8.645 min Scan# 736
Delta R.T. 0.006 min
Lab File: 7G11111.d
Acq: 10 Aug 2020 7:01 pm

Tgt Ion:202 Resp: 97634

Ion	Ratio	Lower	Upper
202	100		
101	8.1	0.0	32.4
203	18.3	0.0	47.4

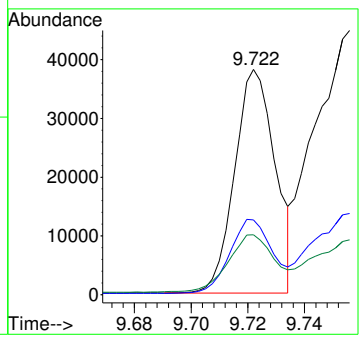


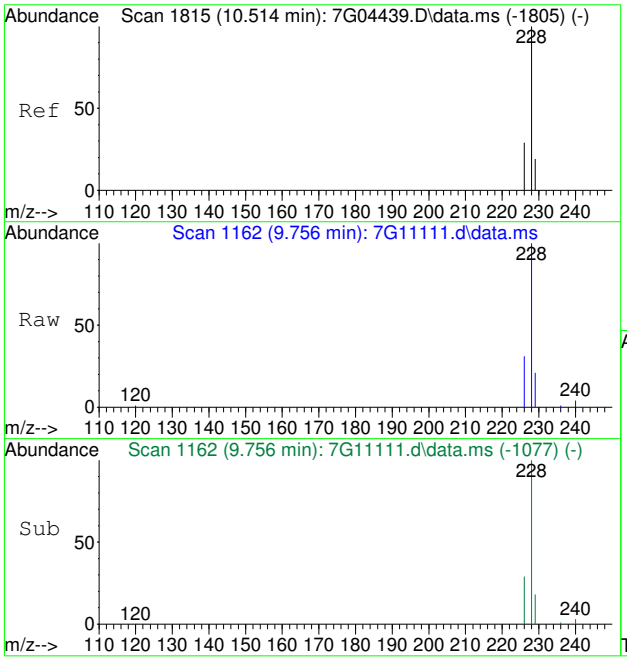


#20
Benzo[a]anthracene
Concen: 1.84 ppm
RT: 9.722 min Scan# 1148
Delta R.T. 0.007 min
Lab File: 7G11111.d
Acq: 10 Aug 2020 7:01 pm

Tgt Ion:228 Resp: 37829

Ion	Ratio	Lower	Upper
228	100		
226	33.4	0.0	56.1
229	25.5	0.0	49.5

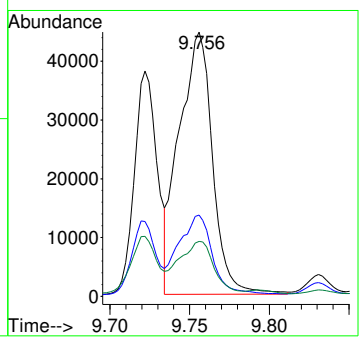


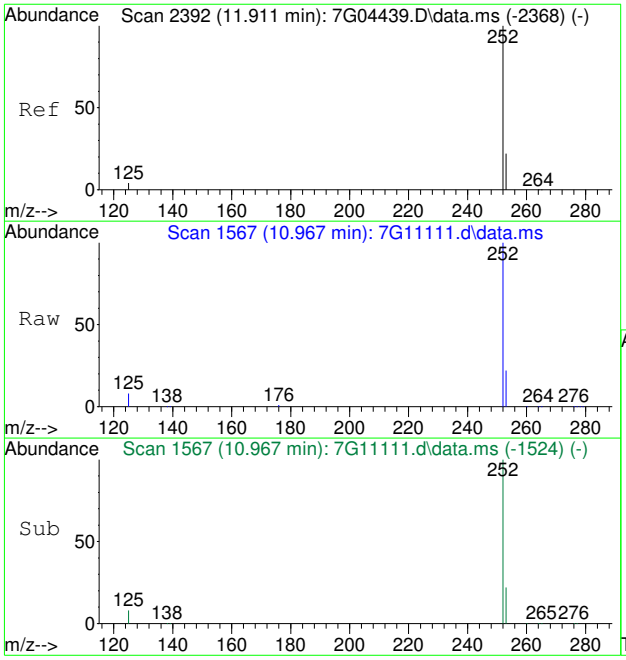


#21
Chrysene
Concen: 2.83 ppm
RT: 9.756 min Scan# 1162
Delta R.T. 0.005 min
Lab File: 7G11111.d
Acq: 10 Aug 2020 7:01 pm

Tgt Ion:228 Resp: 64885

Ion	Ratio	Lower	Upper
228	100		
226	30.4	0.0	58.9
229	18.8	0.0	49.5

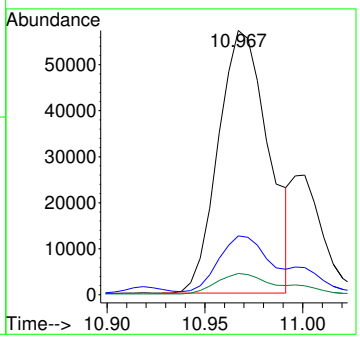


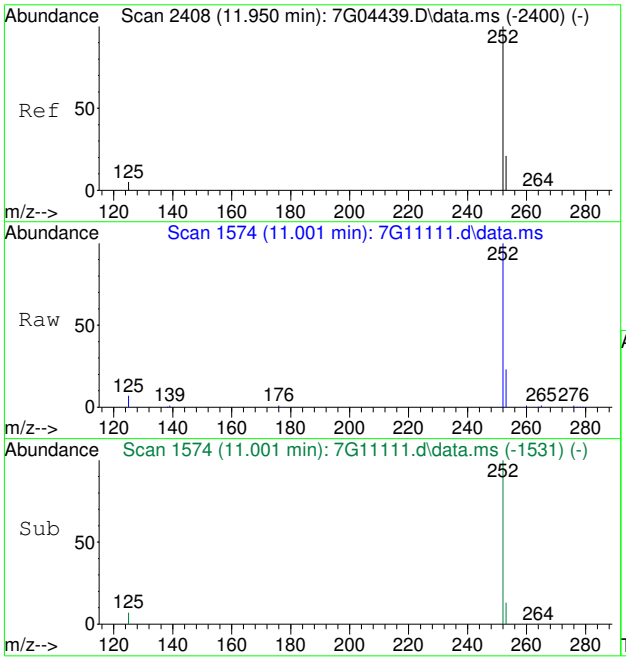


#23
Benzo[b]fluoranthene
Concen: 5.07 ppm
RT: 10.967 min Scan# 1567
Delta R.T. 0.010 min
Lab File: 7G11111.d
Acq: 10 Aug 2020 7:01 pm

Tgt Ion:252 Resp: 101877

Ion	Ratio	Lower	Upper
252	100		
253	20.8	0.0	51.7
125	7.8	0.0	34.5

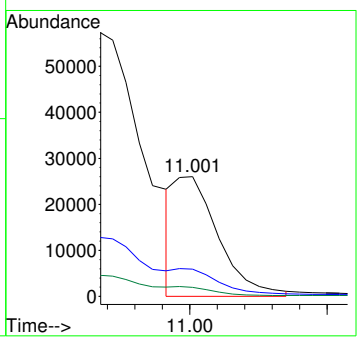


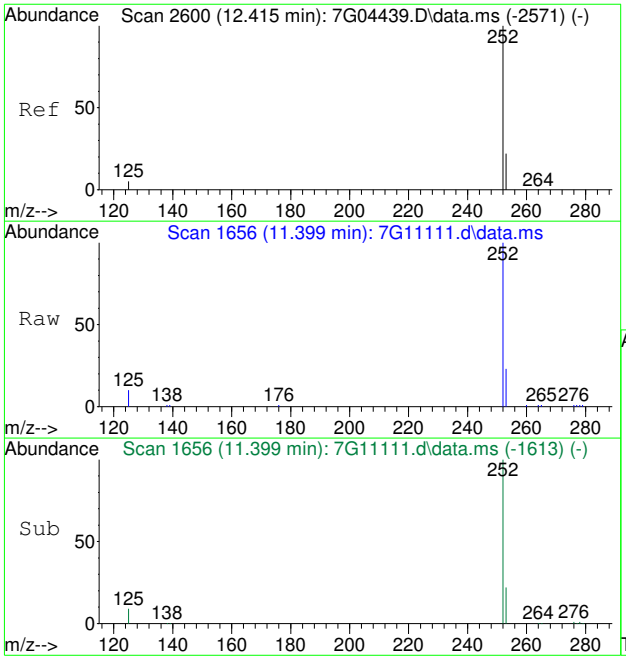


#24
Benzo[k]fluoranthene
Concen: 1.36 ppm m
RT: 11.001 min Scan# 1574
Delta R.T. 0.010 min
Lab File: 7G11111.d
Acq: 10 Aug 2020 7:01 pm

Tgt Ion:252 Resp: 28920

Ion	Ratio	Lower	Upper
252	100		
253	22.8	0.0	51.5
125	7.5	0.0	34.8

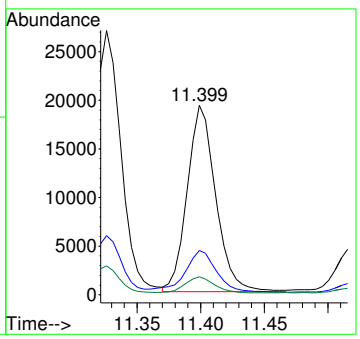


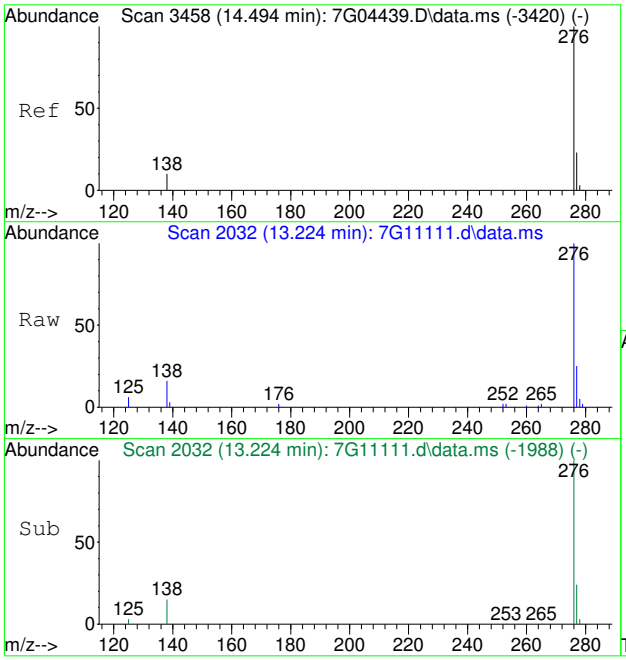


#25
Benzo[a]pyrene
Concen: 1.53 ppm
RT: 11.399 min Scan# 1656
Delta R.T. 0.010 min
Lab File: 7G11111.d
Acq: 10 Aug 2020 7:01 pm

Tgt Ion:252 Resp: 29901

Ion	Ratio	Lower	Upper
252	100		
253	21.4	0.0	51.6
125	8.6	0.0	34.8

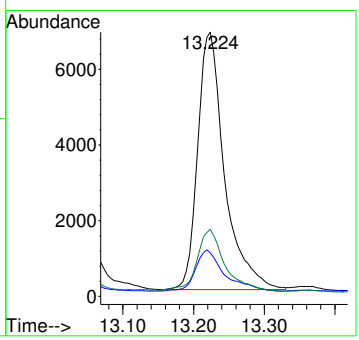


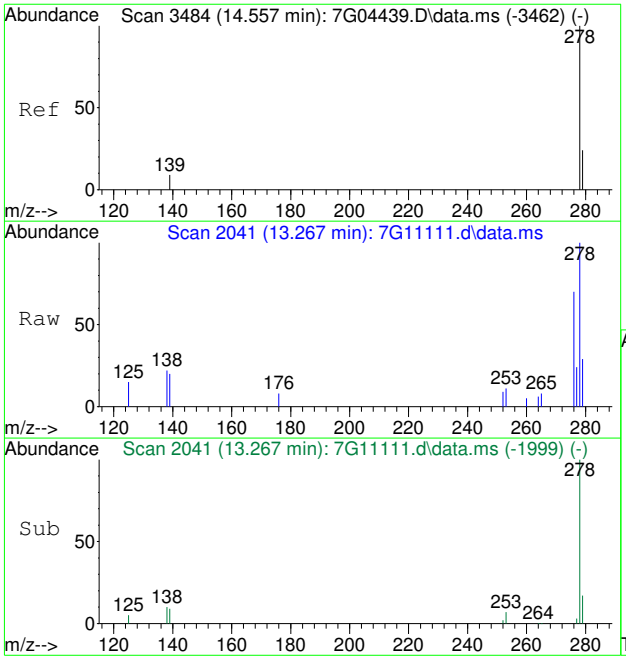


#26
Indeno[1,2,3-cd]pyrene
Concen: 1.41 ppm
RT: 13.224 min Scan# 2032
Delta R.T. 0.015 min
Lab File: 7G11111.d
Acq: 10 Aug 2020 7:01 pm

Tgt Ion:276 Resp: 17980

Ion	Ratio	Lower	Upper
276	100		
138	14.8	0.0	39.6
277	23.9	0.0	53.1

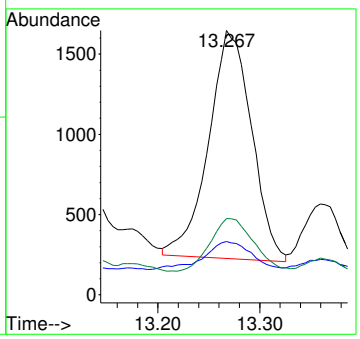


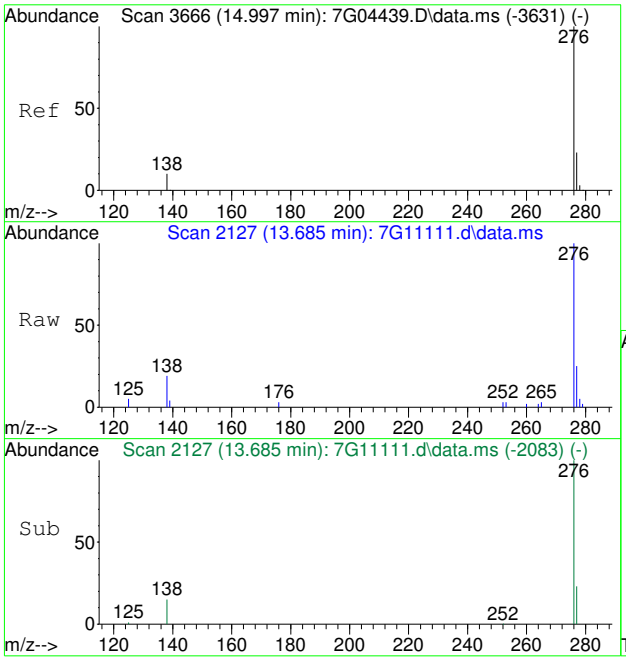


#27
Dibenz[a,h]anthracene
Concen: 0.29 ppm
RT: 13.267 min Scan# 2041
Delta R.T. 0.005 min
Lab File: 7G11111.d
Acq: 10 Aug 2020 7:01 pm

Tgt Ion:278 Resp: 4173

Ion	Ratio	Lower	Upper
278	100		
139	11.6	0.0	38.8
279	22.8	0.0	53.6

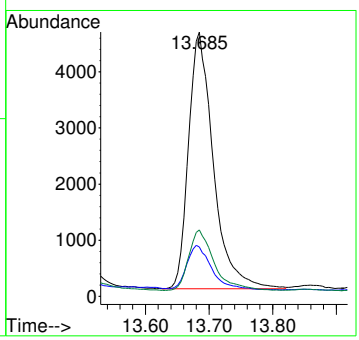




#28
Benzo[g,h,i]perylene
Concen: 0.81 ppm
RT: 13.685 min Scan# 2127
Delta R.T. 0.015 min
Lab File: 7G11111.d
Acq: 10 Aug 2020 7:01 pm

Tgt Ion:276 Resp: 12461

Ion	Ratio	Lower	Upper
276	100		
138	16.4	0.0	40.5
277	23.5	0.0	53.2



Manual Integration Approval Summary

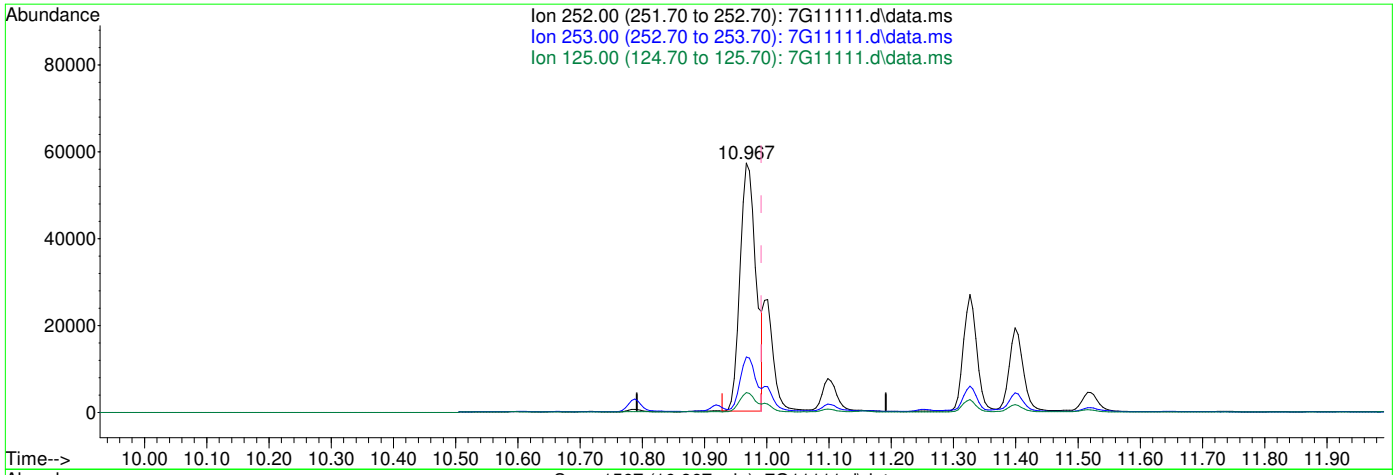
Sample Number: FA77576-9
Lab FileID: 7G11111.D
Injection Time: 08/10/20 19:01
Method: SW846 8270E BY SIM
Analyst approved: 08/11/20 10:52 Fouad Sekkar
Supervisor approved: 08/11/20 12:03 Naresh Jiawan

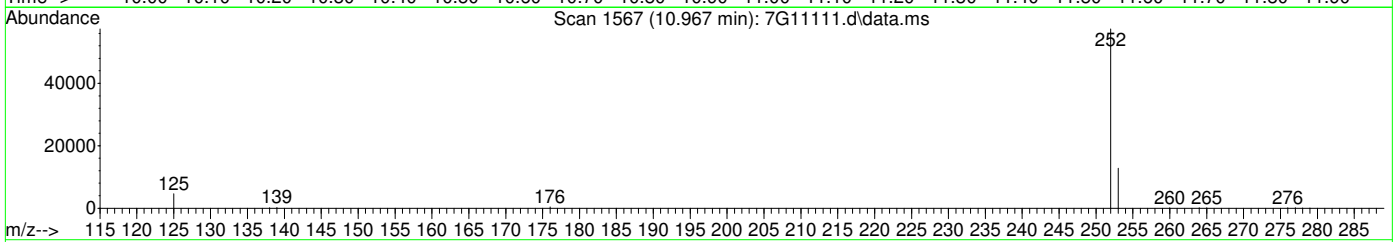
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(k)fluoranthene	207-08-9		11.00	Missed peak

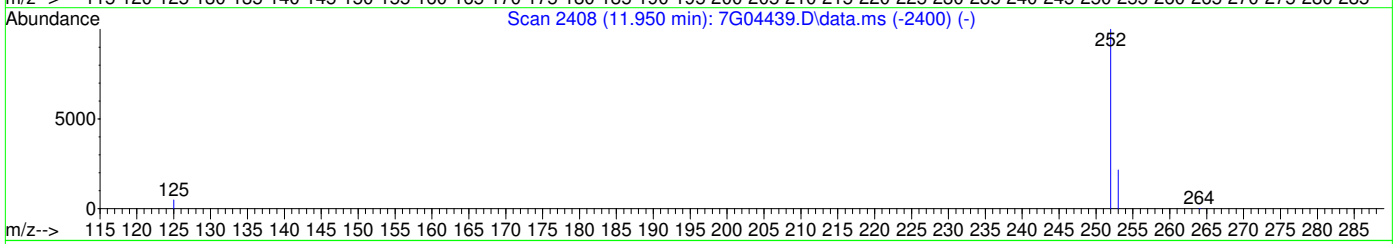
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11111.d
Acq On : 10 Aug 2020 7:01 pm
Operator : FOUADS
Sample : fa77576-9 e
Misc : op81483,S7G482,15.2,,,1,1,soil
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 11 02:37:23 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11111.d\data.ms

(24) Benzo[k]fluoranthene (P)

10.967min (-0.024) 4.75ppm

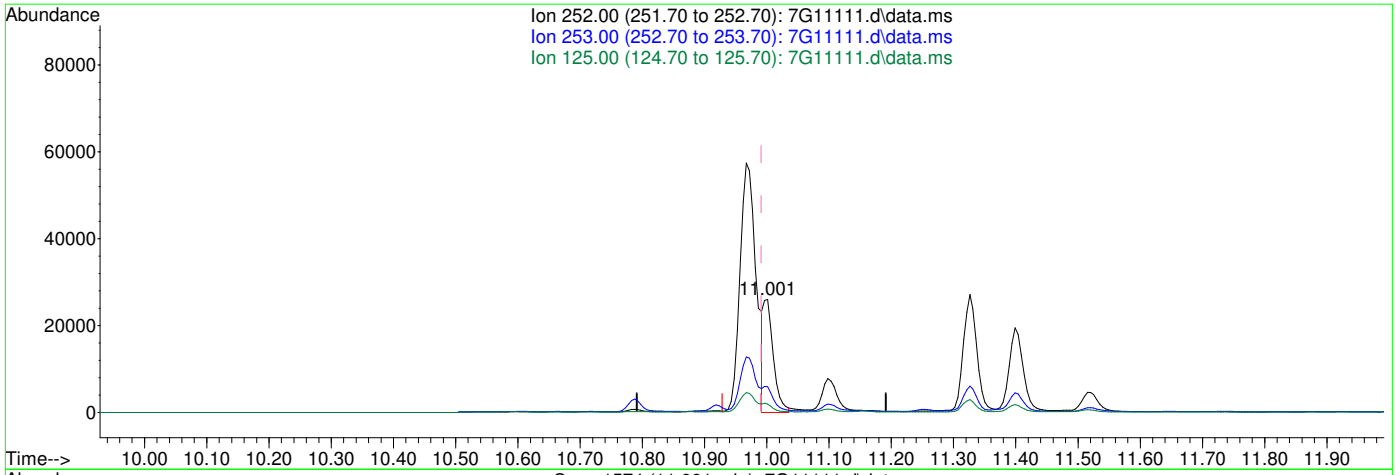
response 101877

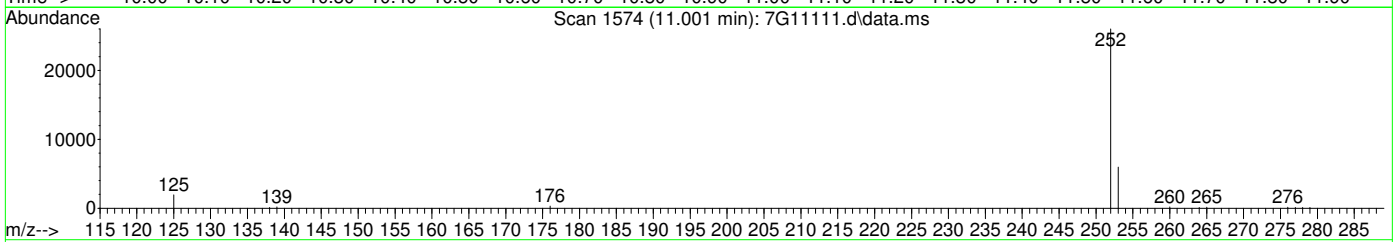
Ion	Exp%	Act%
252.00	100	100
253.00	21.50	20.76
125.00	4.80	7.76
0.00	0.00	0.00

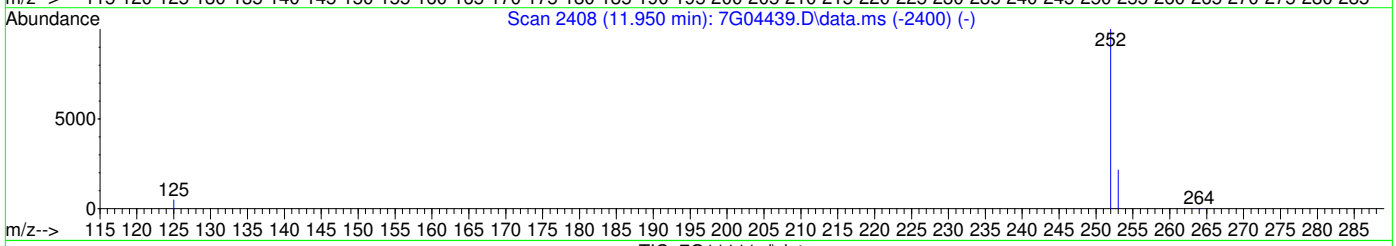
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11111.d
Acq On : 10 Aug 2020 7:01 pm
Operator : FOUADS
Sample : fa77576-9 e
Misc : op81483,S7G482,15.2,,,1,1,soil
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 11 02:37:23 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11111.d\data.ms

(24) Benzo[k]fluoranthene (P)

11.001min (+0.010) 1.36ppm m

response 28920

Ion	Exp%	Act%
252.00	100	100
253.00	21.50	22.83
125.00	4.80	7.46
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 08/11/20 12:03

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11112.d
Acq On : 10 Aug 2020 7:25 pm
Operator : FOUADS
Sample : fa77576-10 e
Misc : op81483,S7G482,15.1,,,1,1,soil
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 11 03:19:14 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

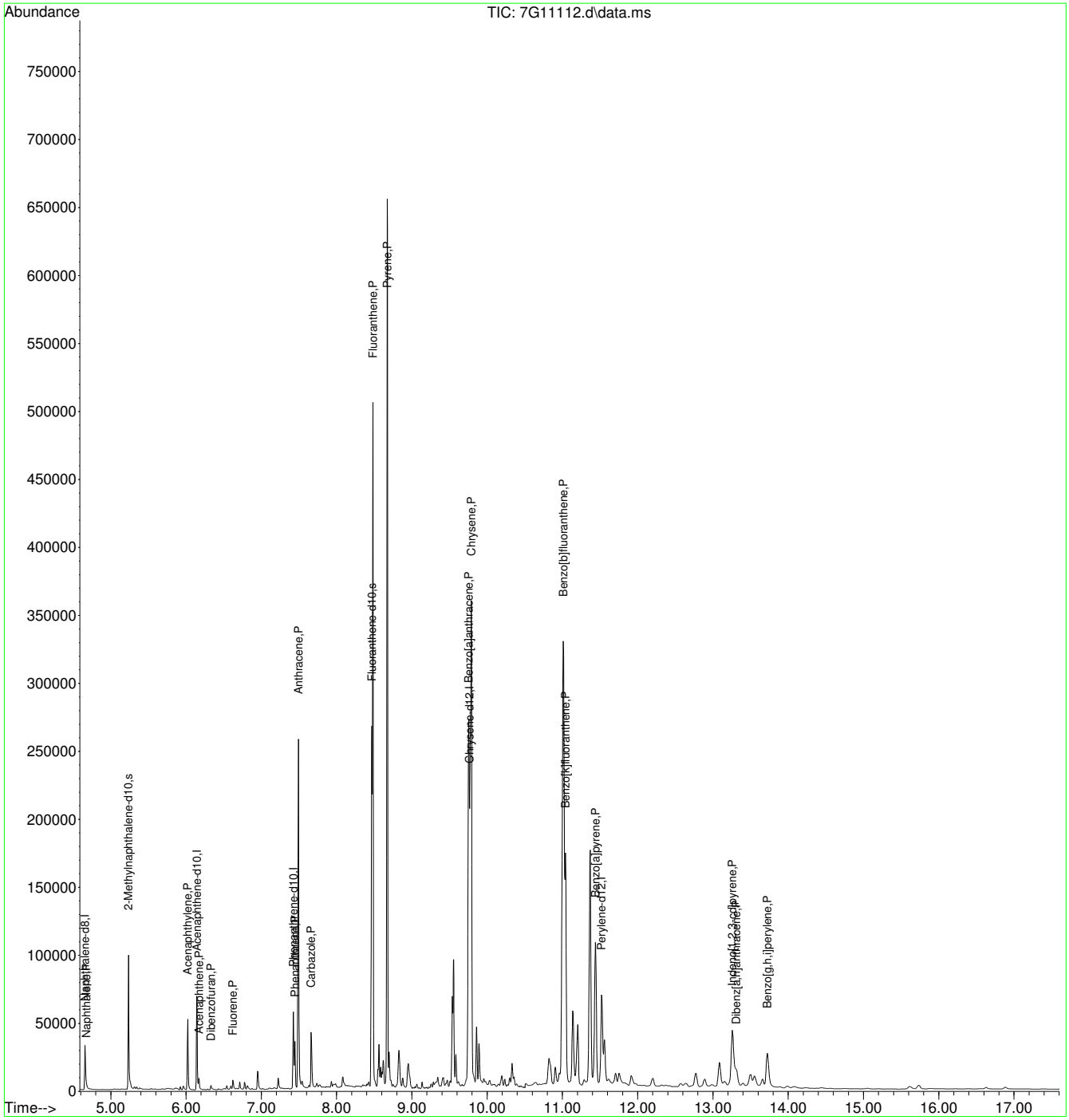
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.658	136	27962	4.00	ppm	0.03
6) Acenaphthene-d10	6.143	164	20151	4.00	ppm	0.03
11) Phenanthrene-d10	7.424	188	38334	4.00	ppm	0.03
18) Chrysene-d12	9.766	240	76169	4.00	ppm	0.04
22) Perylene-d12	11.520	264	66878	4.00	ppm	0.04
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.235	152	34368	8.26	ppm	0.03
Spiked Amount 10.000	Range 50 - 150		Recovery = 82.60%			
17) Fluoranthene-d10	8.467	212	163154	8.17	ppm	0.03
Spiked Amount 10.000	Range 50 - 150		Recovery = 81.70%			
Target Compounds						Qvalue
2) Naphthalene	4.675	128	1087	0.14	ppm	99
7) Acenaphthylene	6.022	152	31810	2.75	ppm	99
8) Acenaphthene	6.172	153	2536	0.34	ppm	96
9) Dibenzofuran	6.331	168	1898	0.36	ppm	89
10) Fluorene	6.621	166	2847	0.35	ppm	100
13) Phenanthrene	7.445	178	20098	1.59	ppm	97
14) Anthracene	7.494	178	162021	12.36	ppm	99
15) Carbazole	7.661	167	30553	1.33	ppm	99
16) Fluoranthene	8.483	202	290186	11.88	ppm	98
19) Pyrene	8.673	202	415726	13.55	ppm	96
20) Benzo[a]anthracene	9.753	228	163137	6.79	ppm	83
21) Chrysene	9.790	228	322775	12.24	ppm	98
23) Benzo[b]fluoranthene	11.011	252	629408	27.73	ppm	98
24) Benzo[k]fluoranthene	11.040	252	114109m	4.71	ppm	
25) Benzo[a]pyrene	11.438	252	129545	5.86	ppm	98
26) Indeno[1,2,3-cd]pyrene	13.258	276	72882	5.05	ppm	94
27) Dibenz[a,h]anthracene	13.311	278	16054	1.00	ppm	96
28) Benzo[g,h,i]perylene	13.723	276	44571	2.56	ppm	95

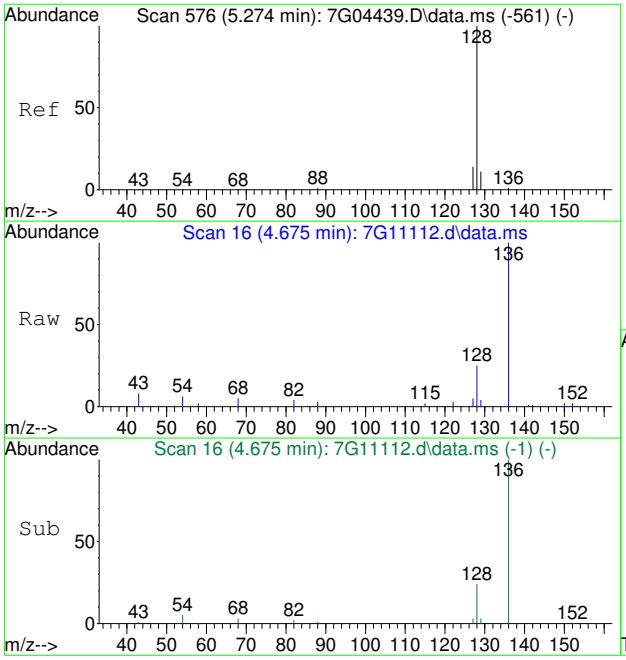
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11112.d
Acq On : 10 Aug 2020 7:25 pm
Operator : FOUADS
Sample : fa77576-10 e
Misc : op81483,S7G482,15.1,,,1,1,soil
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 11 03:19:14 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

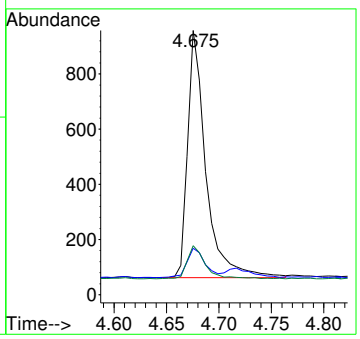


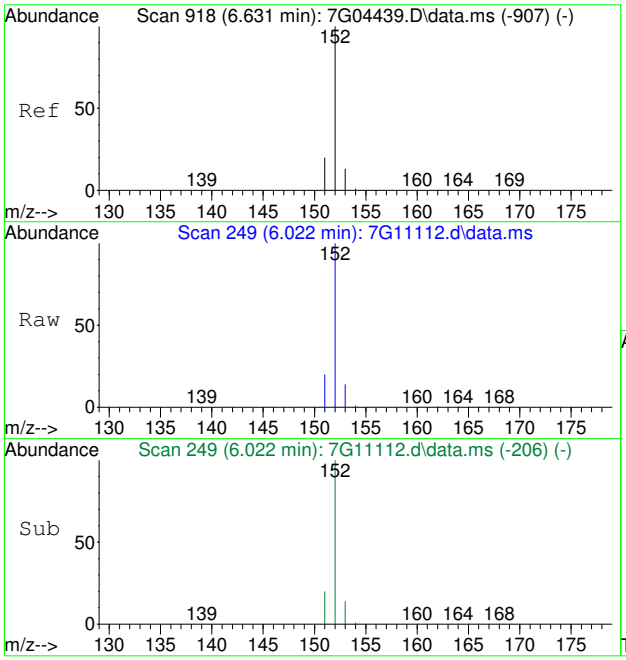


#2
Naphthalene
Concen: 0.14 ppm
RT: 4.675 min Scan# 16
Delta R.T. 0.029 min
Lab File: 7G11112.d
Acq: 10 Aug 2020 7:25 pm

Tgt Ion:128 Resp: 1087

Ion	Ratio	Lower	Upper
128	100		
129	11.8	0.0	40.9
127	13.4	0.0	43.5

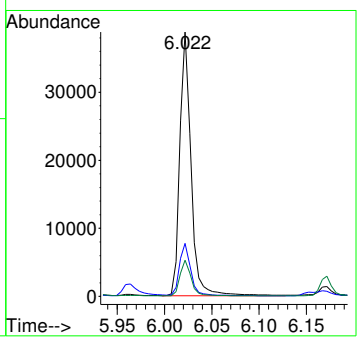


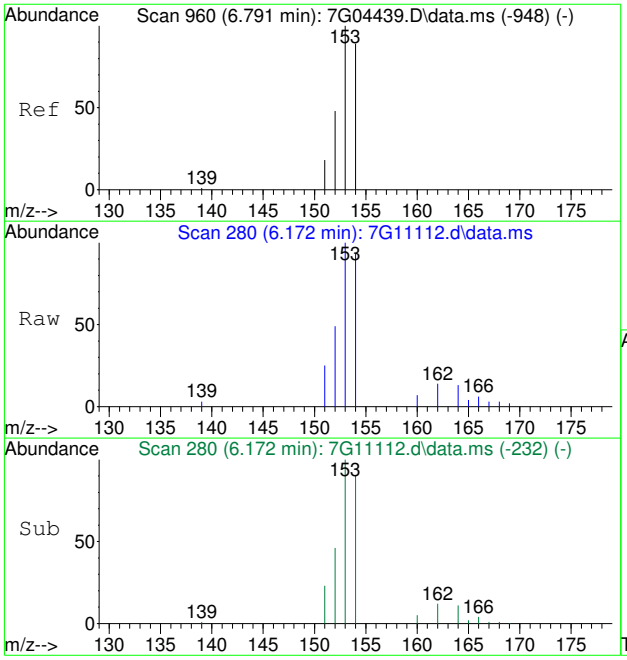


#7
Acenaphthylene
Concen: 2.75 ppm
RT: 6.022 min Scan# 249
Delta R.T. 0.029 min
Lab File: 7G11112.d
Acq: 10 Aug 2020 7:25 pm

Tgt Ion:152 Resp: 31810

Ion	Ratio	Lower	Upper
152	100		
151	19.8	0.0	49.8
153	13.5	0.0	42.8

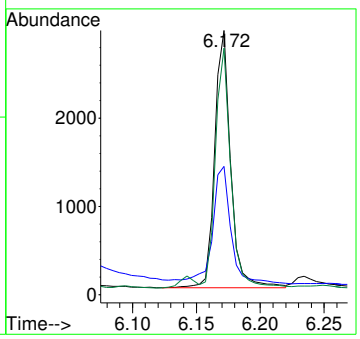


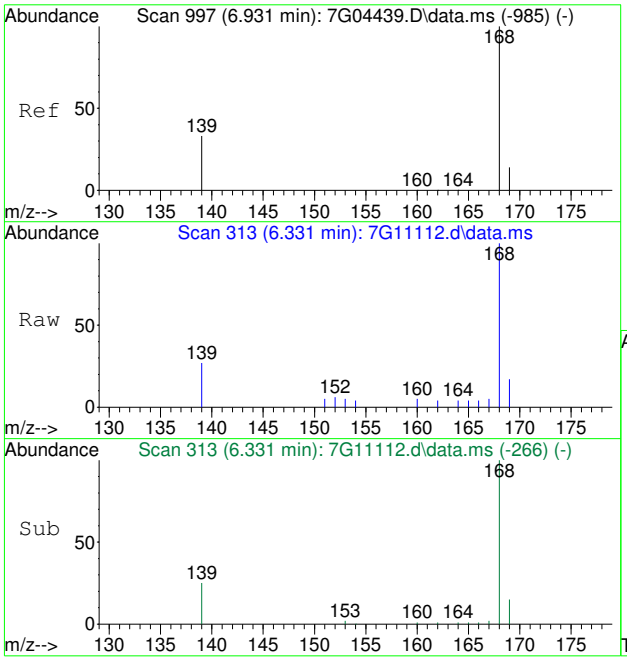


#8
Acenaphthene
Concen: 0.34 ppm
RT: 6.172 min Scan# 280
Delta R.T. 0.034 min
Lab File: 7G11112.d
Acq: 10 Aug 2020 7:25 pm

Tgt Ion:153 Resp: 2536

Ion	Ratio	Lower	Upper
153	100		
152	44.9	18.3	78.3
154	93.2	59.3	119.3

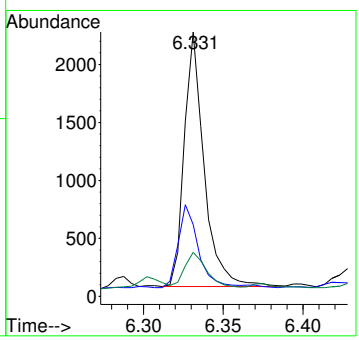


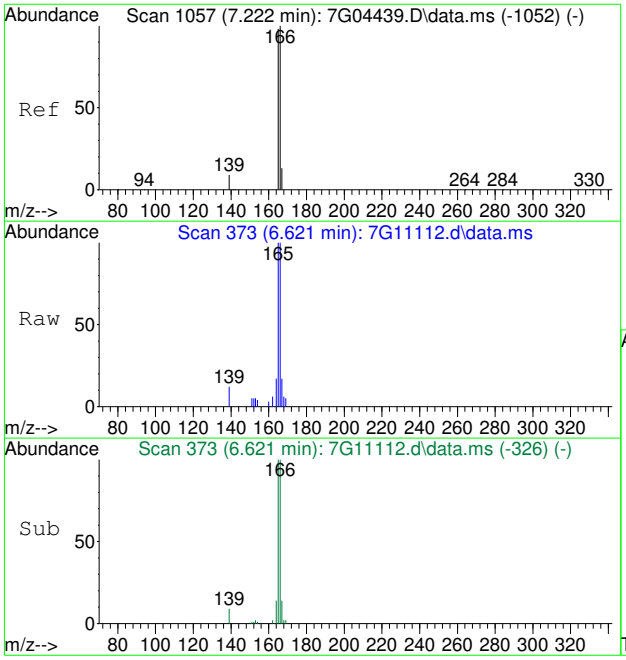


#9
Dibenzofuran
Concen: 0.36 ppm
RT: 6.331 min Scan# 313
Delta R.T. 0.029 min
Lab File: 7G11112.d
Acq: 10 Aug 2020 7:25 pm

Tgt Ion:168 Resp: 1898

Ion	Ratio	Lower	Upper
168	100		
139	24.7	12.6	52.6
169	12.7	0.0	33.8

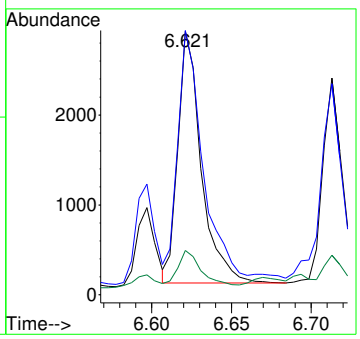


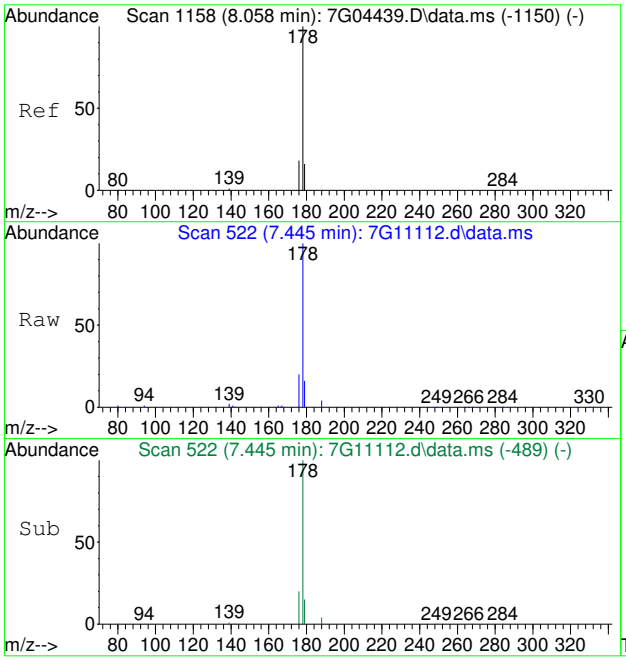


#10
Fluorene
Concen: 0.35 ppm
RT: 6.621 min Scan# 373
Delta R.T. 0.029 min
Lab File: 7G11112.d
Acq: 10 Aug 2020 7:25 pm

Tgt Ion:166 Resp: 2847

Ion	Ratio	Lower	Upper
166	100		
165	98.3	68.2	128.2
167	12.9	0.0	42.9

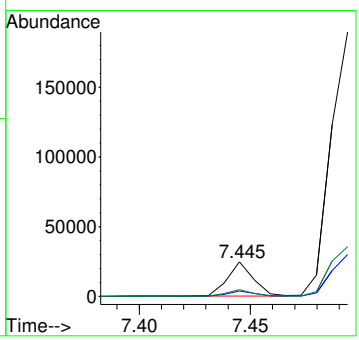


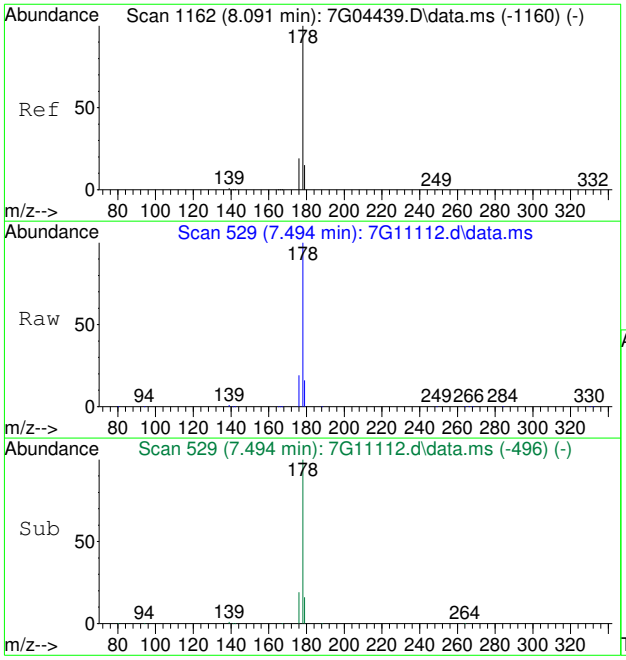


#13
Phenanthrene
Concen: 1.59 ppm
RT: 7.445 min Scan# 522
Delta R.T. 0.028 min
Lab File: 7G11112.d
Acq: 10 Aug 2020 7:25 pm

Tgt Ion:178 Resp: 20098

Ion	Ratio	Lower	Upper
178	100		
179	15.2	0.0	45.7
176	19.8	0.0	48.0

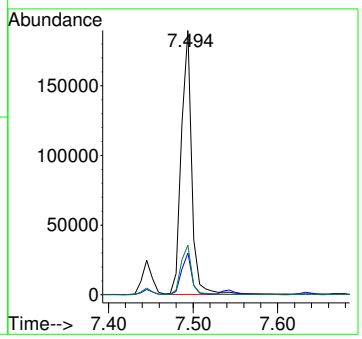


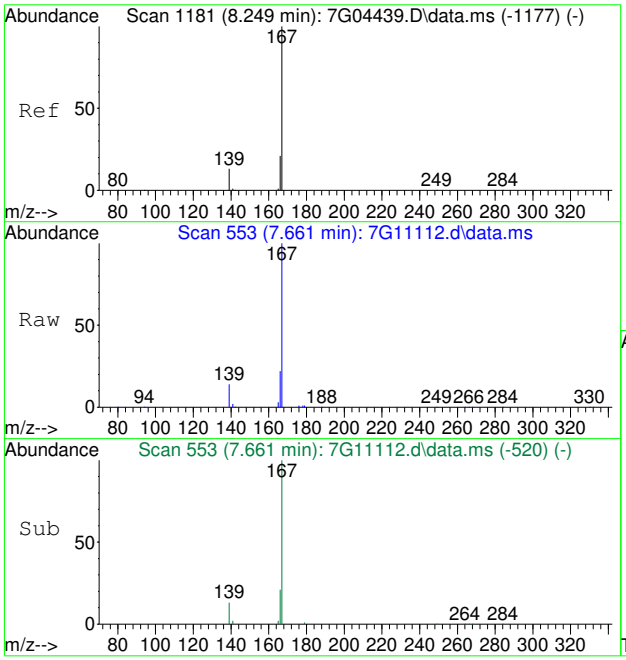


#14
Anthracene
Concen: 12.36 ppm
RT: 7.494 min Scan# 529
Delta R.T. 0.028 min
Lab File: 7G11112.d
Acq: 10 Aug 2020 7:25 pm

Tgt Ion:178 Resp: 162021

Ion	Ratio	Lower	Upper
178	100		
179	15.8	0.0	45.1
176	18.7	0.0	48.8

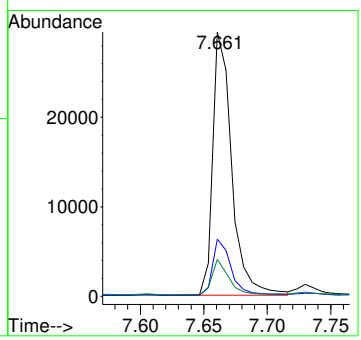


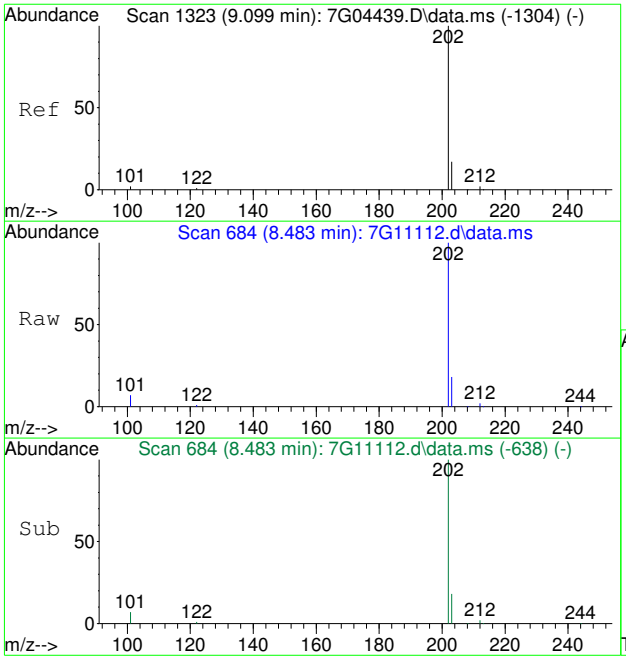


#15
Carbazole
Concen: 1.33 ppm
RT: 7.661 min Scan# 553
Delta R.T. 0.028 min
Lab File: 7G11112.d
Acq: 10 Aug 2020 7:25 pm

Tgt Ion:167 Resp: 30553

Ion	Ratio	Lower	Upper
167	100		
166	21.3	1.2	41.2
139	13.4	0.0	32.8

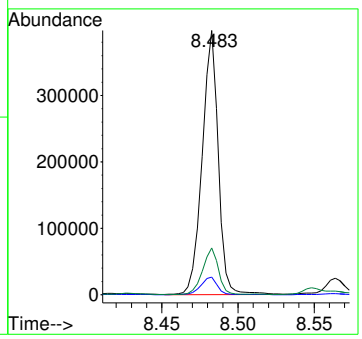


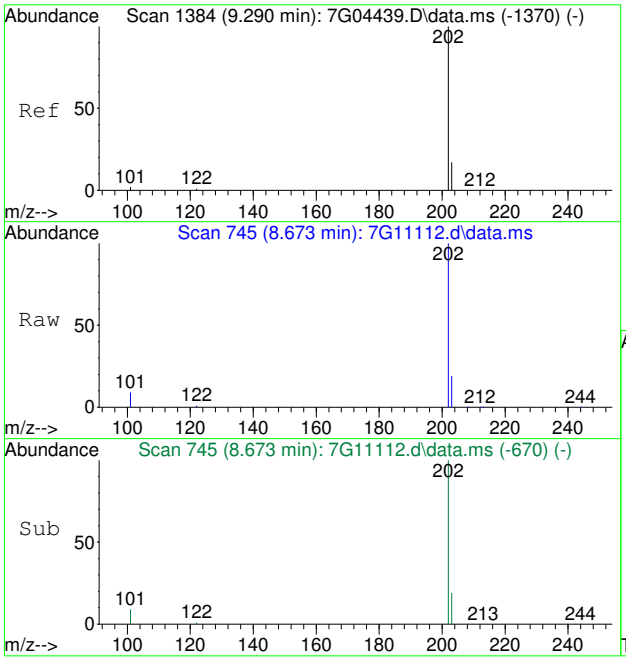


#16
Fluoranthene
Concen: 11.88 ppm
RT: 8.483 min Scan# 684
Delta R.T. 0.034 min
Lab File: 7G11112.d
Acq: 10 Aug 2020 7:25 pm

Tgt Ion:202 Resp: 290186

Ion	Ratio	Lower	Upper
202	100		
101	6.6	0.0	32.2
203	17.6	0.0	47.2

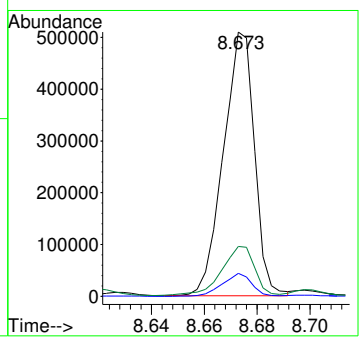


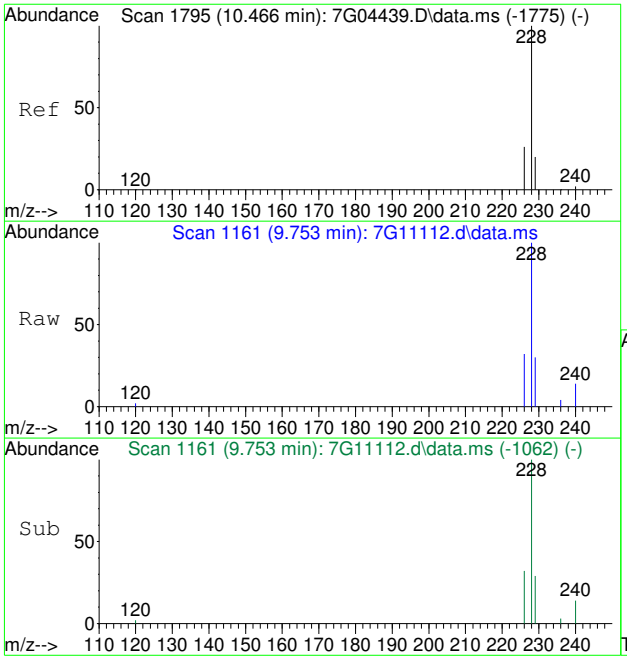


#19
Pyrene
Concen: 13.55 ppm
RT: 8.673 min Scan# 745
Delta R.T. 0.034 min
Lab File: 7G11112.d
Acq: 10 Aug 2020 7:25 pm

Tgt Ion:202 Resp: 415726

Ion	Ratio	Lower	Upper
202	100		
101	8.6	0.0	32.4
203	18.3	0.0	47.4

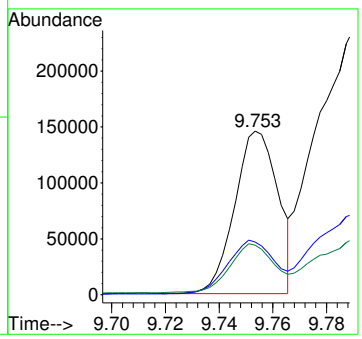


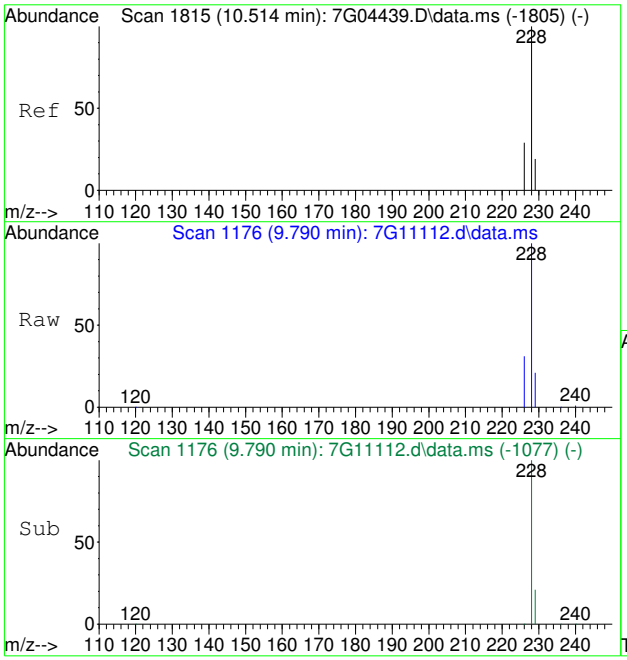


#20
Benzo[a]anthracene
Concen: 6.79 ppm
RT: 9.753 min Scan# 1161
Delta R.T. 0.039 min
Lab File: 7G11112.d
Acq: 10 Aug 2020 7:25 pm

Tgt Ion:228 Resp: 163137

Ion	Ratio	Lower	Upper
228	100		
226	32.3	0.0	56.1
229	30.5	0.0	49.5

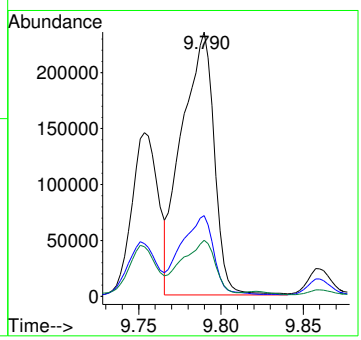


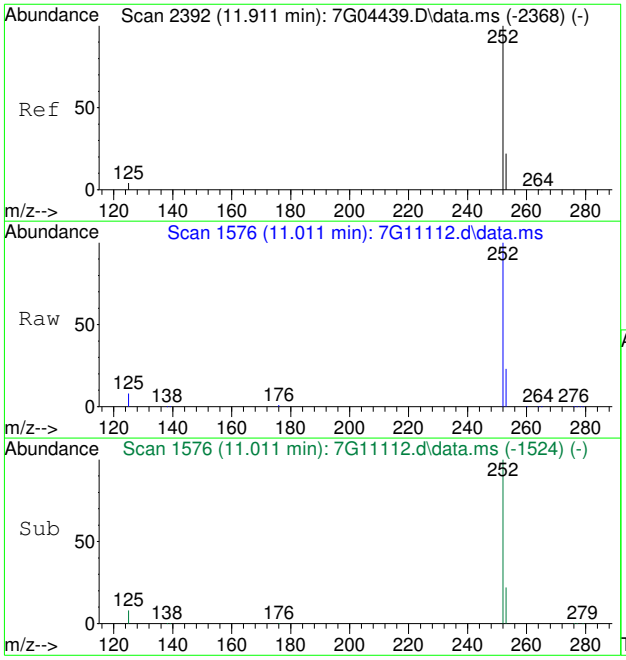


#21
Chrysene
Concen: 12.24 ppm
RT: 9.790 min Scan# 1176
Delta R.T. 0.039 min
Lab File: 7G11112.d
Acq: 10 Aug 2020 7:25 pm

Tgt Ion:228 Resp: 322775

Ion	Ratio	Lower	Upper
228	100		
226	30.2	0.0	58.9
229	20.0	0.0	49.5

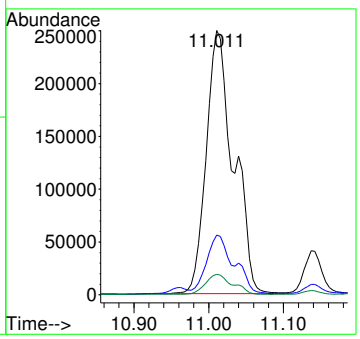


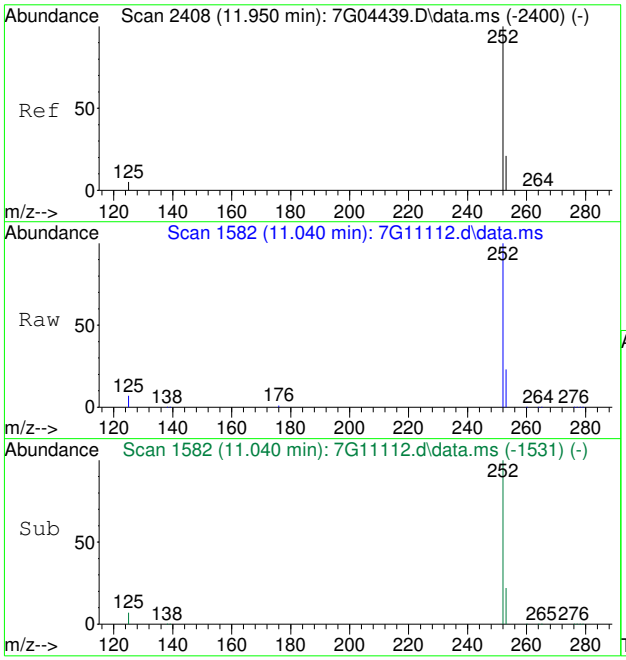


#23
Benzo[b]fluoranthene
Concen: 27.73 ppm
RT: 11.011 min Scan# 1576
Delta R.T. 0.053 min
Lab File: 7G11112.d
Acq: 10 Aug 2020 7:25 pm

Tgt Ion:252 Resp: 629408

Ion	Ratio	Lower	Upper
252	100		
253	22.1	0.0	51.7
125	7.7	0.0	34.5

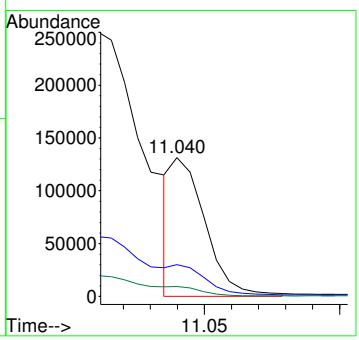


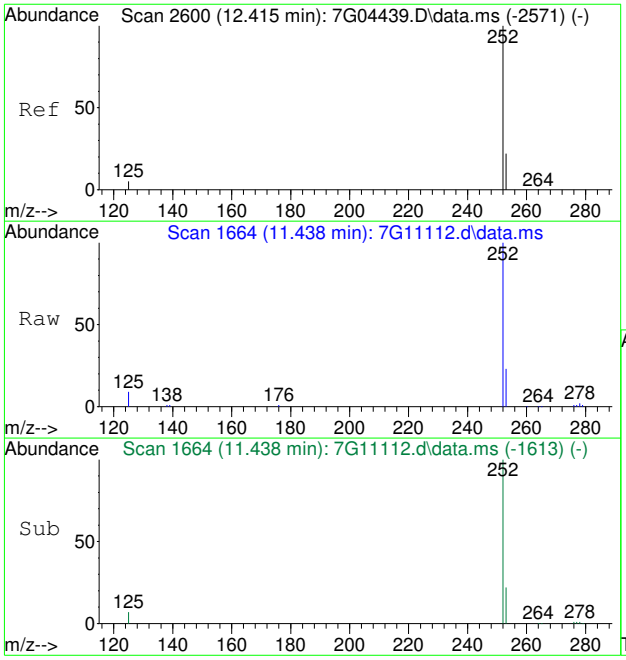


#24
Benzo[k]fluoranthene
Concen: 4.71 ppm m
RT: 11.040 min Scan# 1582
Delta R.T. 0.049 min
Lab File: 7G11112.d
Acq: 10 Aug 2020 7:25 pm

Tgt Ion:252 Resp: 114109

Ion	Ratio	Lower	Upper
252	100		
253	22.8	0.0	51.5
125	7.2	0.0	34.8

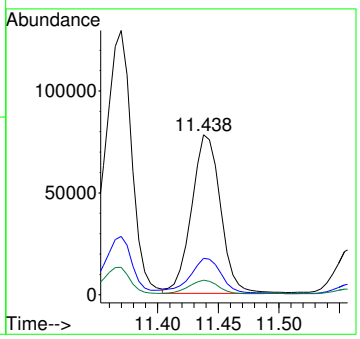


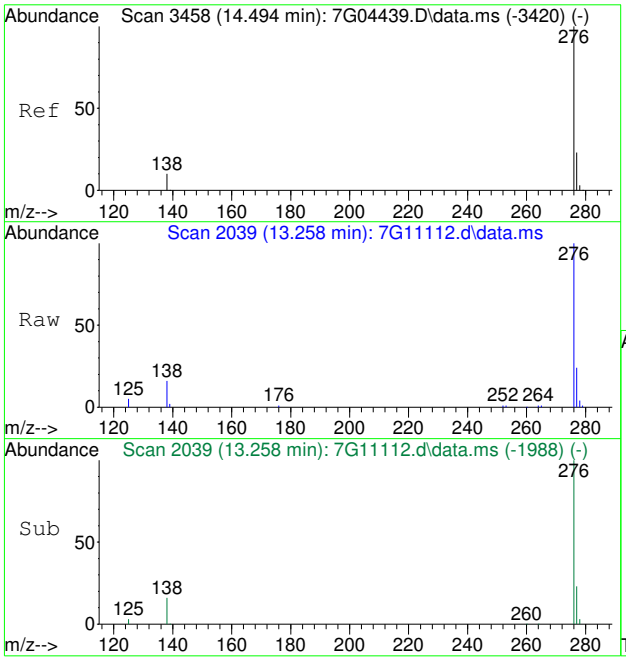


#25
Benzo[a]pyrene
Concen: 5.86 ppm
RT: 11.438 min Scan# 1664
Delta R.T. 0.049 min
Lab File: 7G11112.d
Acq: 10 Aug 2020 7:25 pm

Tgt Ion:252 Resp: 129545

Ion	Ratio	Lower	Upper
252	100		
253	21.5	0.0	51.6
125	8.4	0.0	34.8

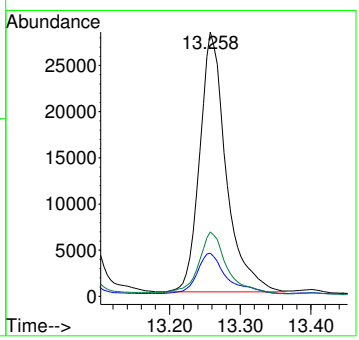


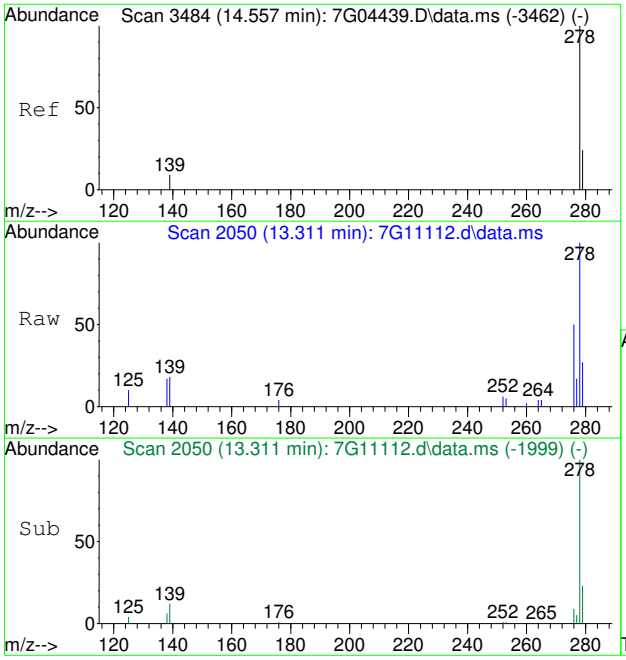


#26
Indeno[1,2,3-cd]pyrene
Concen: 5.05 ppm
RT: 13.258 min Scan# 2039
Delta R.T. 0.049 min
Lab File: 7G11112.d
Acq: 10 Aug 2020 7:25 pm

Tgt Ion:276 Resp: 72882

Ion	Ratio	Lower	Upper
276	100		
138	15.5	0.0	39.6
277	23.6	0.0	53.1

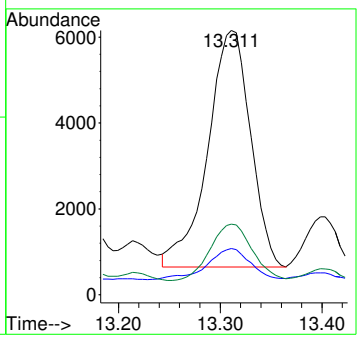


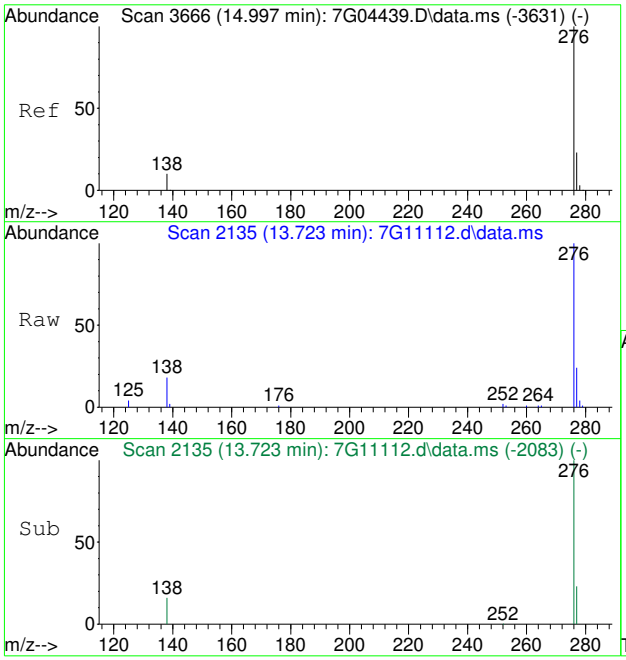


#27
Dibenz[a,h]anthracene
Concen: 1.00 ppm
RT: 13.311 min Scan# 2050
Delta R.T. 0.049 min
Lab File: 7G11112.d
Acq: 10 Aug 2020 7:25 pm

Tgt Ion:278 Resp: 16054

Ion	Ratio	Lower	Upper
278	100		
139	12.9	0.0	38.8
279	24.0	0.0	53.6

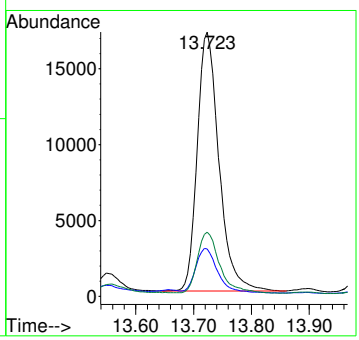




#28
Benzo[g,h,i]perylene
Concen: 2.56 ppm
RT: 13.723 min Scan# 2135
Delta R.T. 0.053 min
Lab File: 7G11112.d
Acq: 10 Aug 2020 7:25 pm

Tgt Ion:276 Resp: 44571

Ion	Ratio	Lower	Upper
276	100		
138	16.6	0.0	40.5
277	23.5	0.0	53.2



Manual Integration Approval Summary

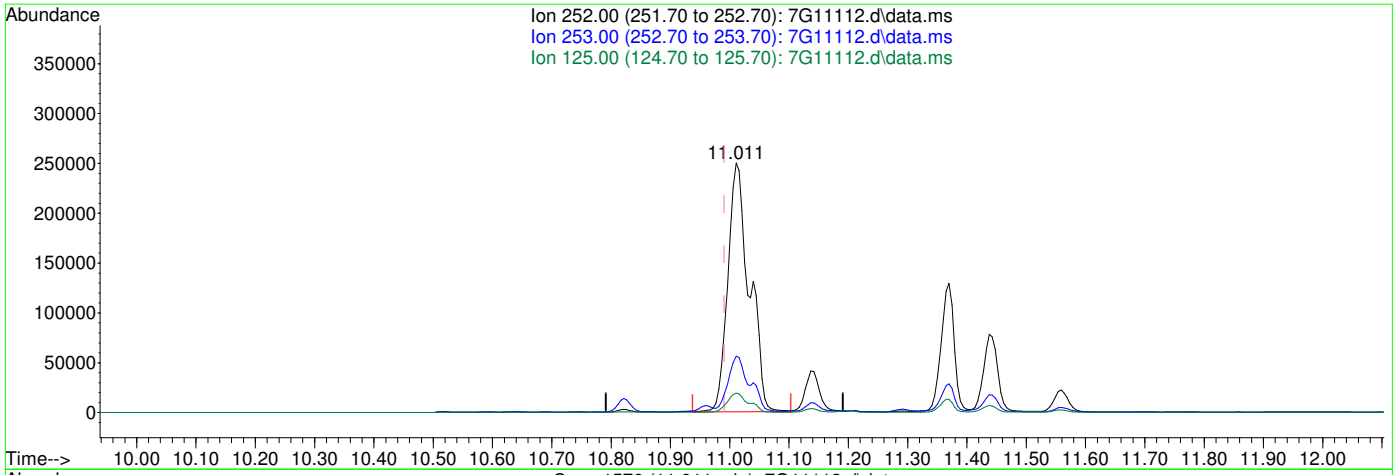
Sample Number: FA77576-10
Lab FileID: 7G11112.D
Injection Time: 08/10/20 19:25
Method: SW846 8270E BY SIM
Analyst approved: 08/11/20 10:52 Fouad Sekkar
Supervisor approved: 08/11/20 12:03 Naresh Jiawan

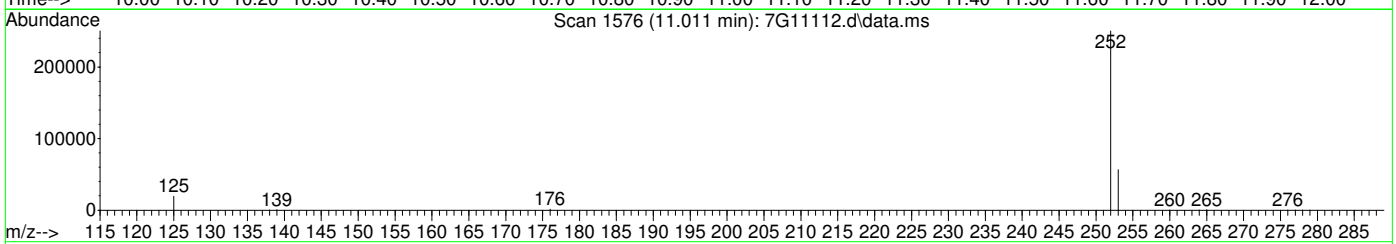
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(k)fluoranthene	207-08-9		11.04	Missed peak

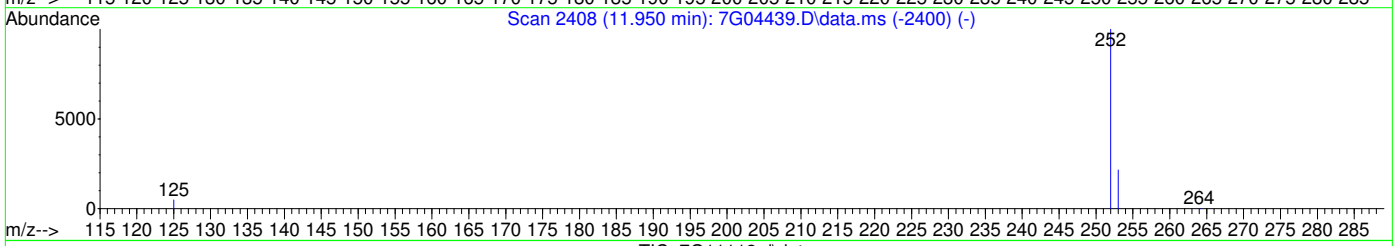
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11112.d
Acq On : 10 Aug 2020 7:25 pm
Operator : FOUADS
Sample : fa77576-10 e
Misc : op81483,S7G482,15.1,,,1,1,soil
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 11 02:37:25 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11112.d\data.ms

(24) Benzo[k]fluoranthene (P)

11.011min (+0.019) 24.60ppm

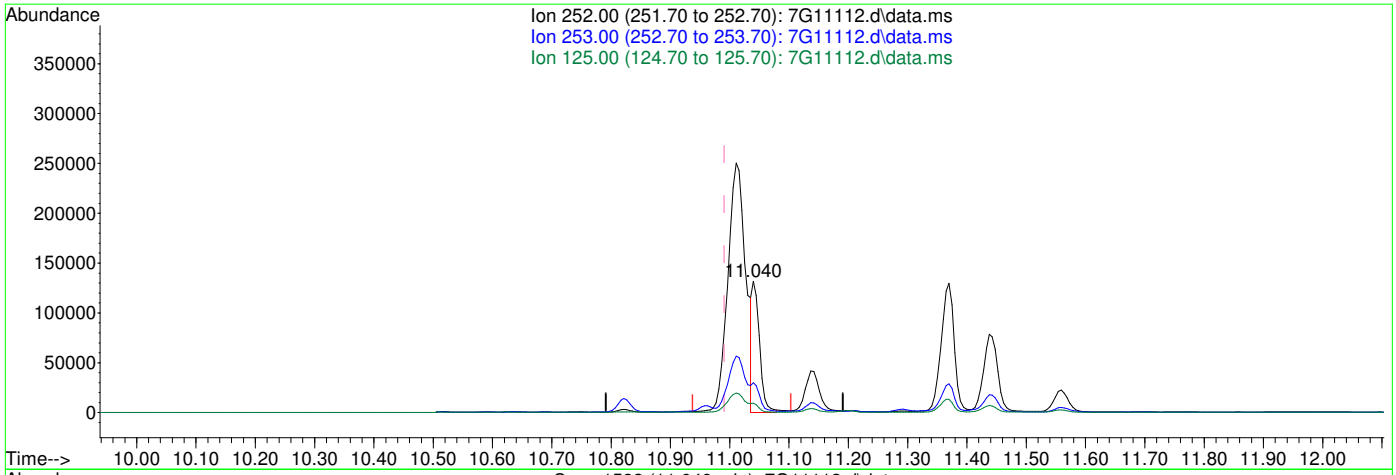
response 630997

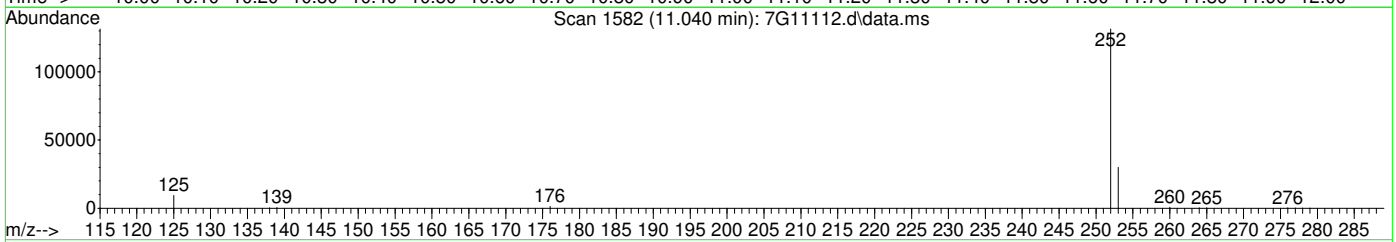
Ion	Exp%	Act%
252.00	100	100
253.00	21.50	22.08
125.00	4.80	7.65
0.00	0.00	0.00

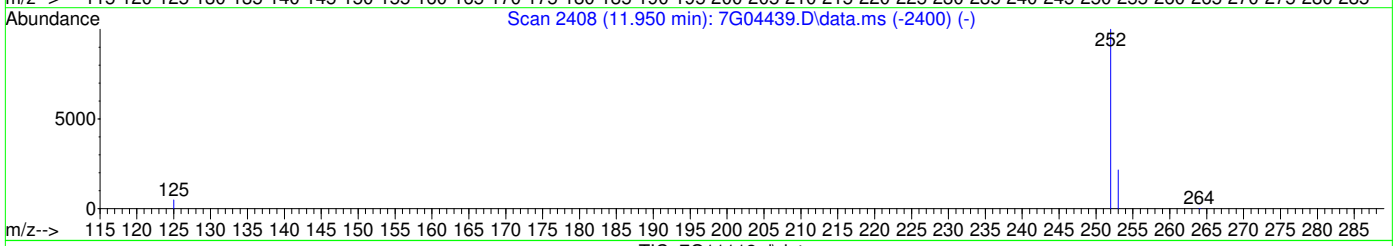
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11112.d
Acq On : 10 Aug 2020 7:25 pm
Operator : FOUADS
Sample : fa77576-10 e
Misc : op81483,S7G482,15.1,,,1,1,soil
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 11 02:37:25 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11112.d\data.ms

(24) Benzo[k]fluoranthene (P)

11.040min (+0.049) 4.71ppm m

response 114109

Ion	Exp%	Act%
252.00	100	100
253.00	21.50	22.82
125.00	4.80	7.16
0.00	0.00	0.00

Manual Integrations APPROVED
(compounds with "m" flag)
Naresh Jiawan
08/11/20 12:03

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11113.d
Acq On : 10 Aug 2020 7:50 pm
Operator : FOUADS
Sample : fa77576-11 e
Misc : op81483,S7G482,14.9,,,1,1,soil
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 11 03:19:41 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

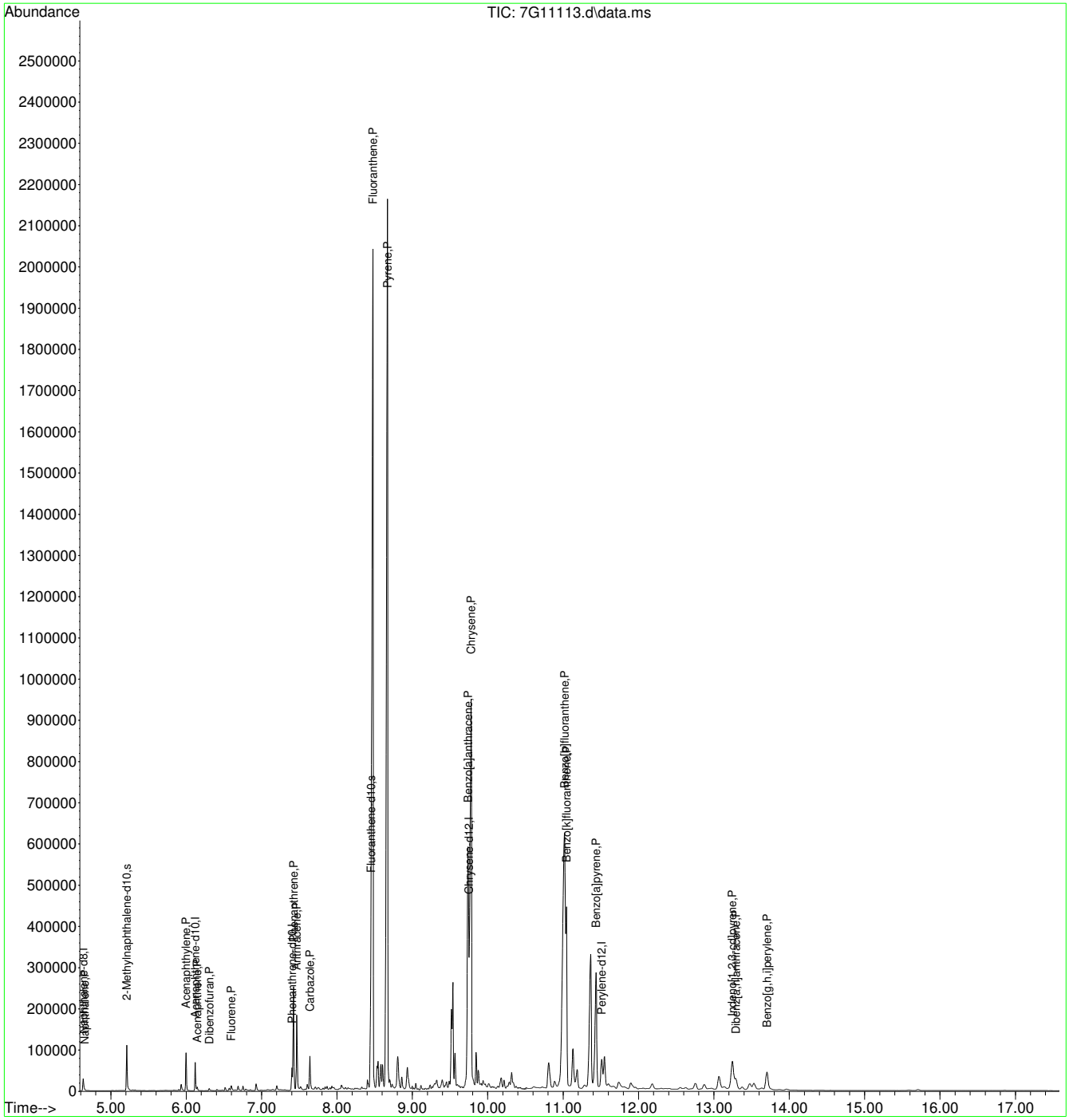
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.634	136	26538	4.00	ppm	0.00
6) Acenaphthene-d10	6.118	164	19824	4.00	ppm	0.00
11) Phenanthrene-d10	7.403	188	38236	4.00	ppm	0.00
18) Chrysene-d12	9.749	240	80910	4.00	ppm	0.02
22) Perylene-d12	11.511	264	66469	4.00	ppm	0.03
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.211	152	37798	9.52	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 95.20%			
17) Fluoranthene-d10	8.452	212	205652	10.29	ppm	0.02
Spiked Amount 10.000	Range 50 - 150		Recovery = 102.90%			
Target Compounds						Qvalue
2) Naphthalene	4.652	128	1389	0.19	ppm	98
7) Acenaphthylene	5.998	152	52538	4.59	ppm	99
8) Acenaphthene	6.147	153	2796	0.38	ppm	96
9) Dibenzofuran	6.307	168	3416	0.66	ppm	85
10) Fluorene	6.597	166	5138	0.64	ppm	98
13) Phenanthrene	7.424	178	147272	11.44	ppm	97
14) Anthracene	7.466	178	110207	8.51	ppm	98
15) Carbazole	7.640	167	50155	2.19	ppm	97
16) Fluoranthene	8.476	202	1897441	67.68	ppm	97
19) Pyrene	8.670	202	2050679	59.07	ppm	95
20) Benzo[a]anthracene	9.736	228	417454	15.92	ppm	73
21) Chrysene	9.780	228	857966	30.70	ppm	96
23) Benzo[b]fluoranthene	11.020	252	1249596	55.39	ppm	97
24) Benzo[k]fluoranthene	11.045	252	282780m	11.52	ppm	
25) Benzo[a]pyrene	11.438	252	340344	15.48	ppm	98
26) Indeno[1,2,3-cd]pyrene	13.243	276	122698	8.55	ppm	94
27) Dibenz[a,h]anthracene	13.291	278	30341	1.91	ppm	96
28) Benzo[g,h,i]perylene	13.704	276	70926	4.10	ppm	95

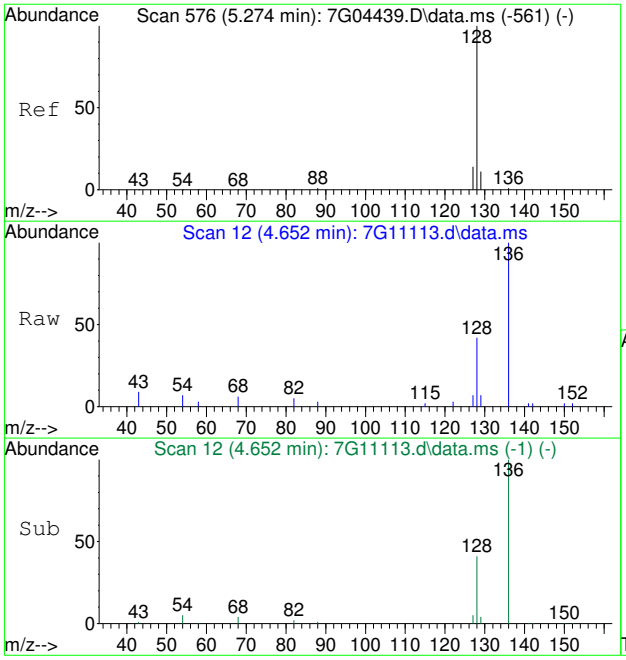
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11113.d
Acq On : 10 Aug 2020 7:50 pm
Operator : FOUADS
Sample : fa77576-11 e
Misc : op81483,S7G482,14.9,,,1,1,soil
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 11 03:19:41 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

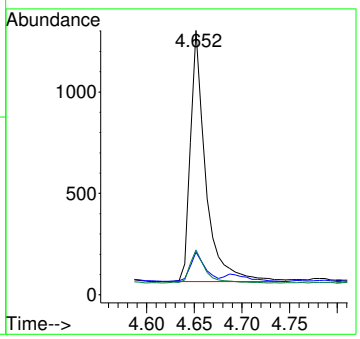


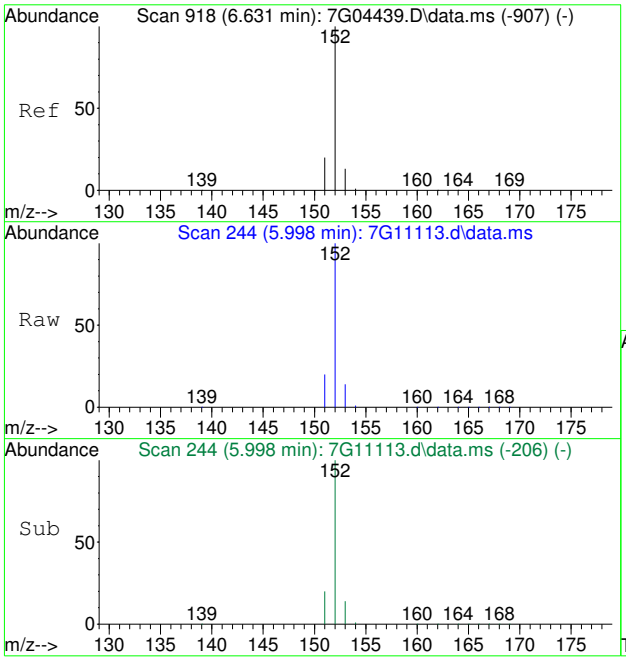


#2
Naphthalene
Concen: 0.19 ppm
RT: 4.652 min Scan# 12
Delta R.T. 0.006 min
Lab File: 7G11113.d
Acq: 10 Aug 2020 7:50 pm

Tgt Ion:128 Resp: 1389

Ion	Ratio	Lower	Upper
128	100		
129	11.7	0.0	40.9
127	13.1	0.0	43.5

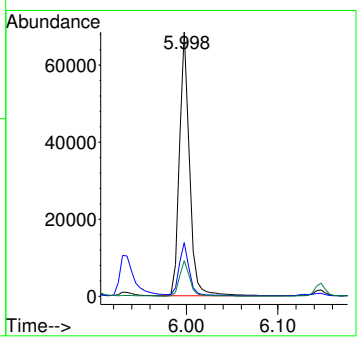


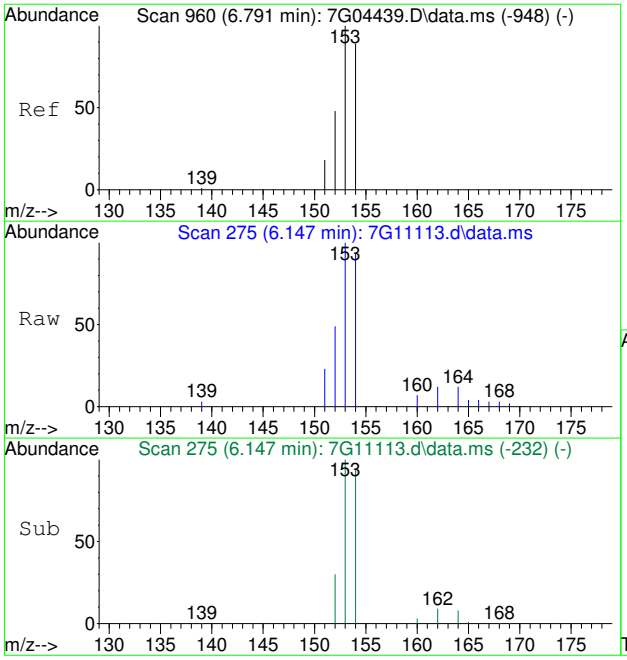


#7
Acenaphthylene
Concen: 4.59 ppm
RT: 5.998 min Scan# 244
Delta R.T. 0.005 min
Lab File: 7G11113.d
Acq: 10 Aug 2020 7:50 pm

Tgt Ion:152 Resp: 52538

Ion	Ratio	Lower	Upper
152	100		
151	19.9	0.0	49.8
153	13.4	0.0	42.8

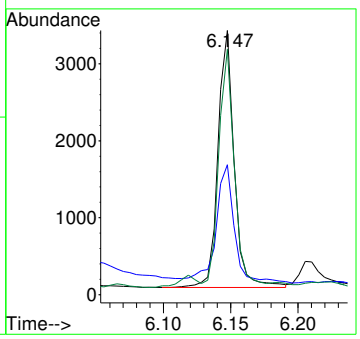


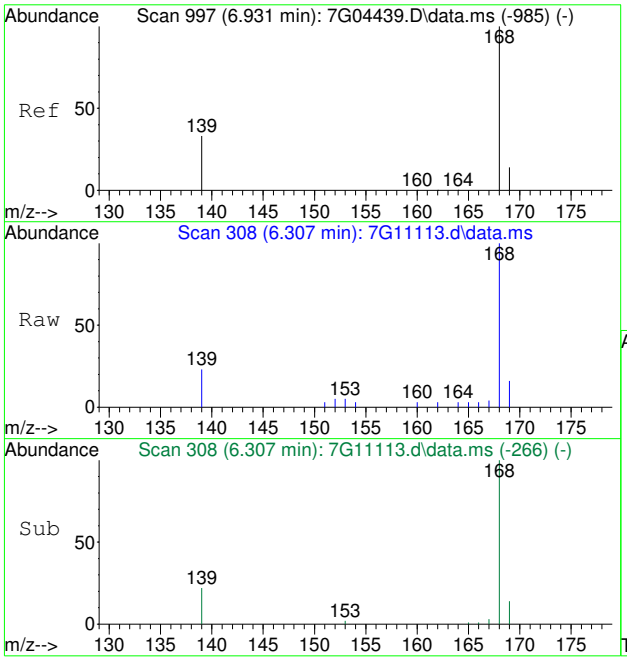


#8
Acenaphthene
Concen: 0.38 ppm
RT: 6.147 min Scan# 275
Delta R.T. 0.010 min
Lab File: 7G11113.d
Acq: 10 Aug 2020 7:50 pm

Tgt Ion:153 Resp: 2796

Ion	Ratio	Lower	Upper
153	100		
152	44.9	18.3	78.3
154	92.0	59.3	119.3

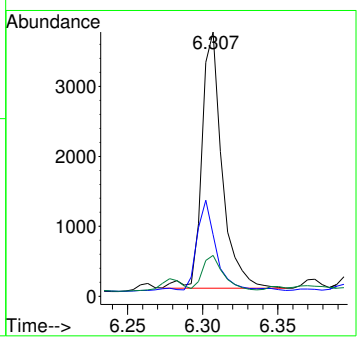


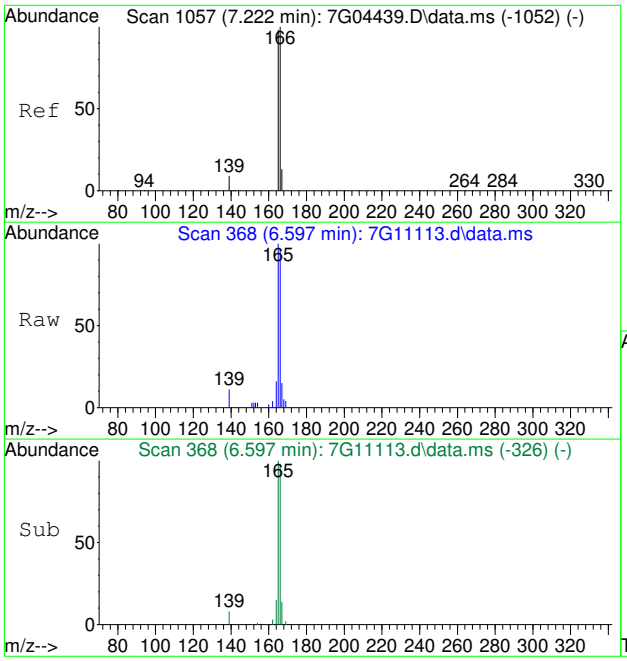


#9
Dibenzofuran
Concen: 0.66 ppm
RT: 6.307 min Scan# 308
Delta R.T. 0.005 min
Lab File: 7G11113.d
Acq: 10 Aug 2020 7:50 pm

Tgt Ion:168 Resp: 3416

Ion	Ratio	Lower	Upper
168	100		
139	21.4	12.6	52.6
169	11.8	0.0	33.8

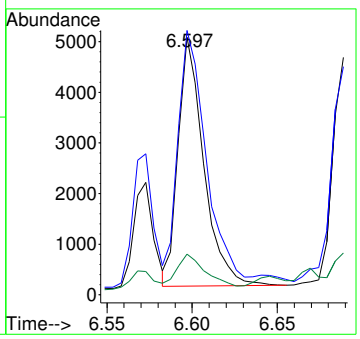


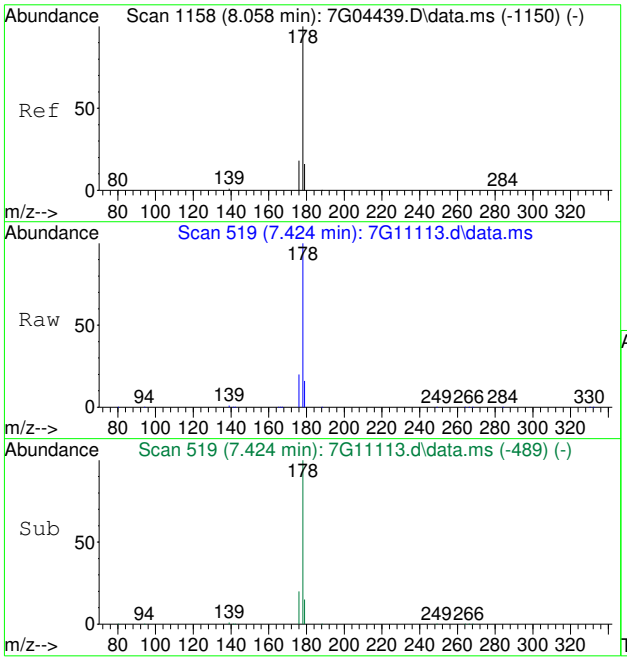


#10
Fluorene
Concen: 0.64 ppm
RT: 6.597 min Scan# 368
Delta R.T. 0.005 min
Lab File: 7G11113.d
Acq: 10 Aug 2020 7:50 pm

Tgt Ion:166 Resp: 5138

Ion	Ratio	Lower	Upper
166	100		
165	100.4	68.2	128.2
167	11.6	0.0	42.9

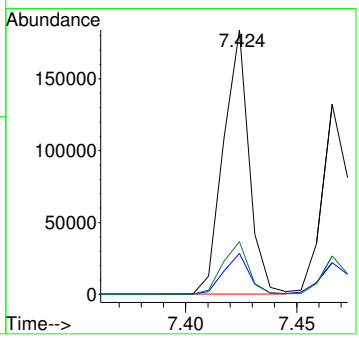


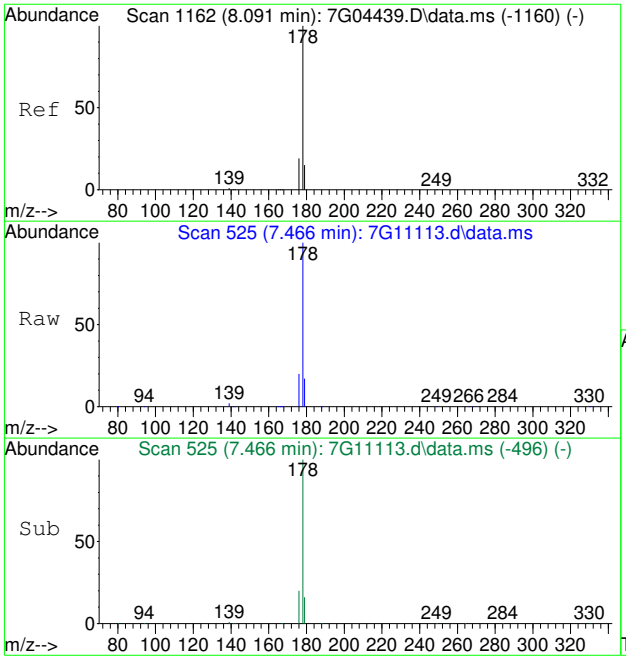


#13
Phenanthrene
Concen: 11.44 ppm
RT: 7.424 min Scan# 519
Delta R.T. 0.007 min
Lab File: 7G11113.d
Acq: 10 Aug 2020 7:50 pm

Tgt Ion:178 Resp: 147272

Ion	Ratio	Lower	Upper
178	100		
179	15.4	0.0	45.7
176	20.0	0.0	48.0

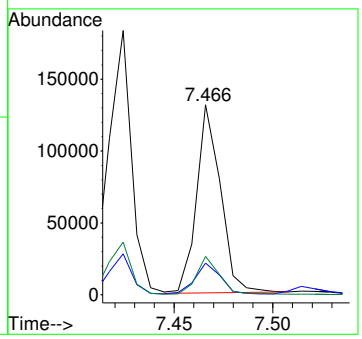


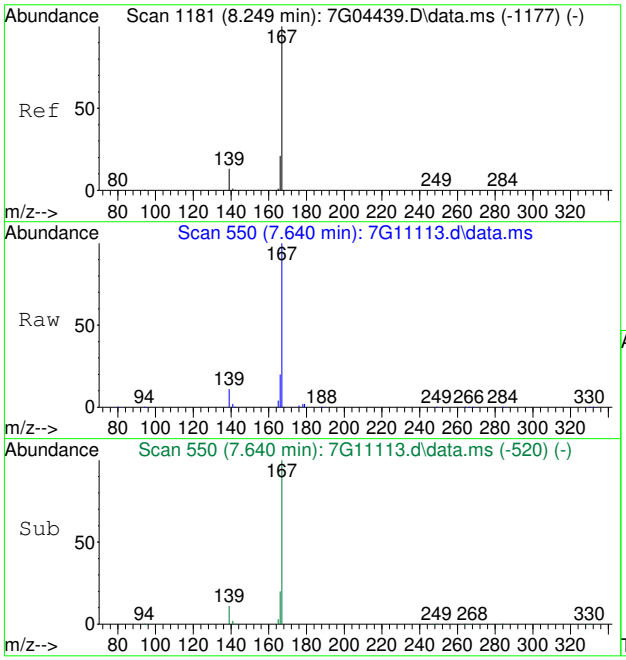


#14
Anthracene
Concen: 8.51 ppm
RT: 7.466 min Scan# 525
Delta R.T. -0.000 min
Lab File: 7G11113.d
Acq: 10 Aug 2020 7:50 pm

Tgt Ion:178 Resp: 110207

Ion	Ratio	Lower	Upper
178	100		
179	15.8	0.0	45.1
176	20.1	0.0	48.8

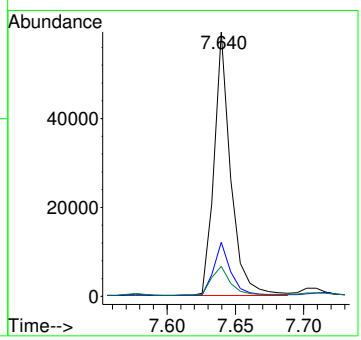


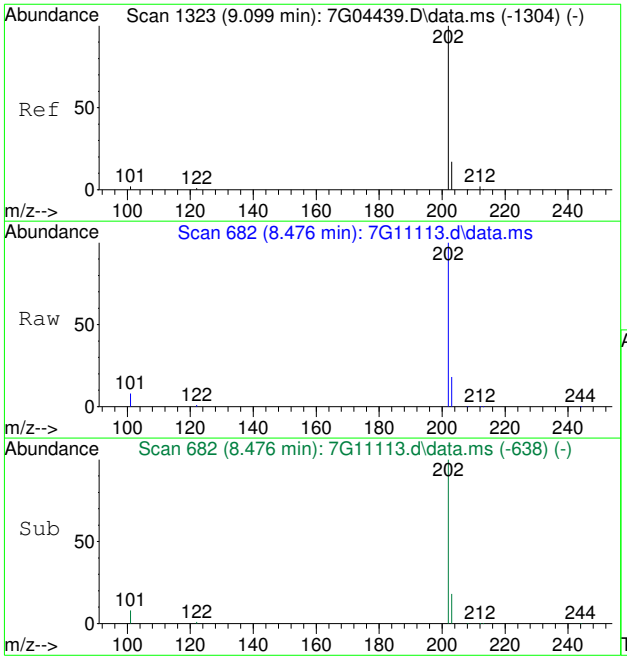


#15
Carbazole
Concen: 2.19 ppm
RT: 7.640 min Scan# 550
Delta R.T. 0.007 min
Lab File: 7G11113.d
Acq: 10 Aug 2020 7:50 pm

Tgt Ion:167 Resp: 50155

Ion	Ratio	Lower	Upper
167	100		
166	20.1	1.2	41.2
139	10.8	0.0	32.8

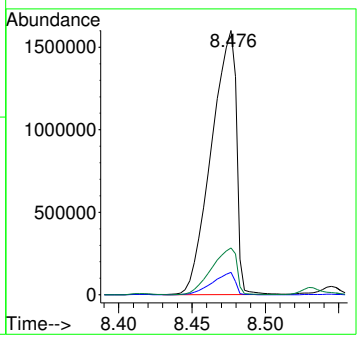


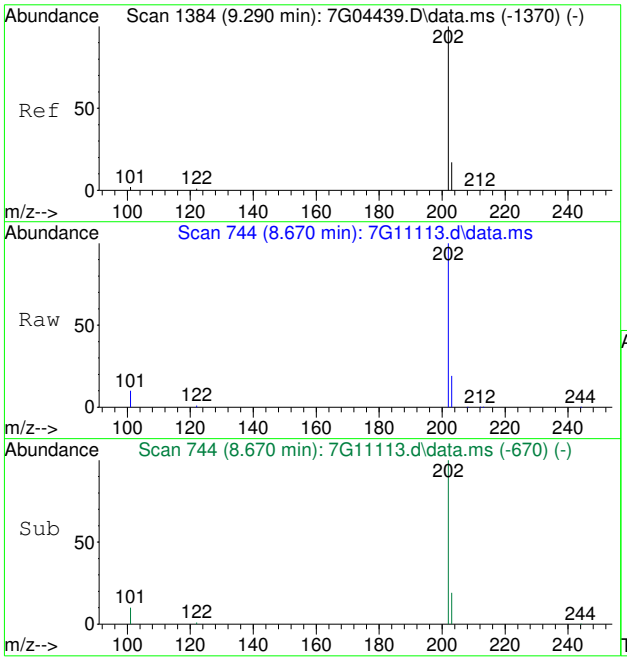


#16
Fluoranthene
Concen: 67.68 ppm
RT: 8.476 min Scan# 682
Delta R.T. 0.028 min
Lab File: 7G11113.d
Acq: 10 Aug 2020 7:50 pm

Tgt Ion:202 Resp: 1897441

Ion	Ratio	Lower	Upper
202	100		
101	8.4	0.0	32.2
203	17.7	0.0	47.2

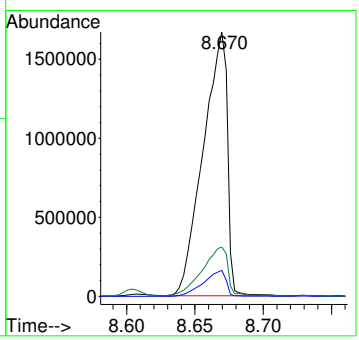


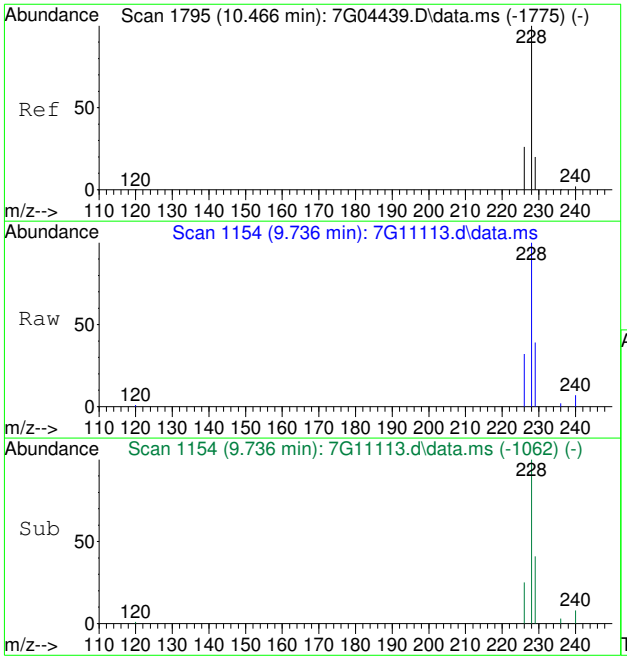


#19
Pyrene
Concen: 59.07 ppm
RT: 8.670 min Scan# 744
Delta R.T. 0.031 min
Lab File: 7G11113.d
Acq: 10 Aug 2020 7:50 pm

Tgt Ion:202 Resp: 2050679

Ion	Ratio	Lower	Upper
202	100		
101	9.8	0.0	32.4
203	18.5	0.0	47.4

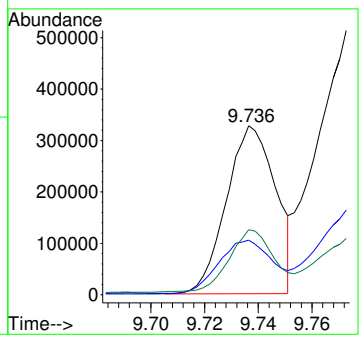


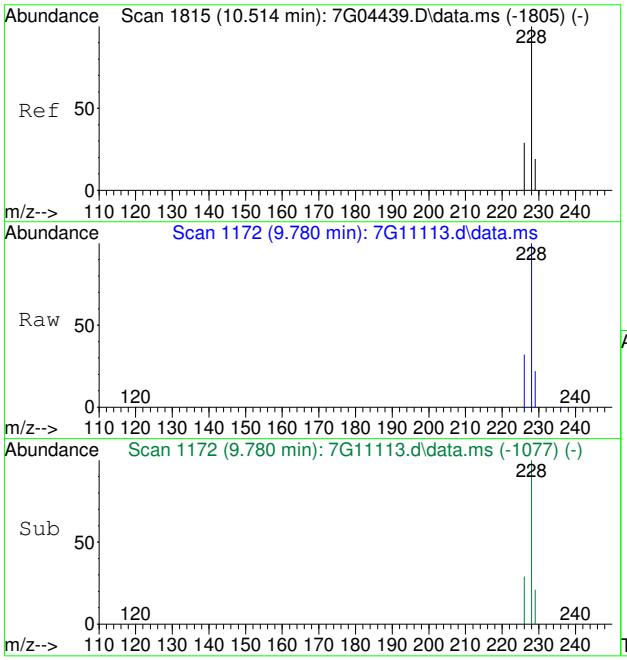


#20
Benzo[a]anthracene
Concen: 15.92 ppm
RT: 9.736 min Scan# 1154
Delta R.T. 0.022 min
Lab File: 7G11113.d
Acq: 10 Aug 2020 7:50 pm

Tgt Ion:228 Resp: 417454

Ion	Ratio	Lower	Upper
228	100		
226	32.7	0.0	56.1
229	40.7	0.0	49.5

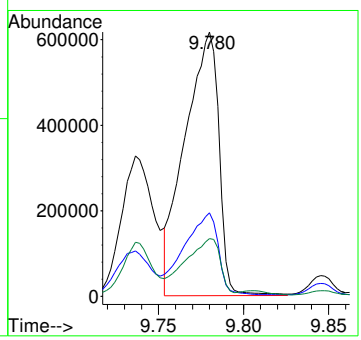


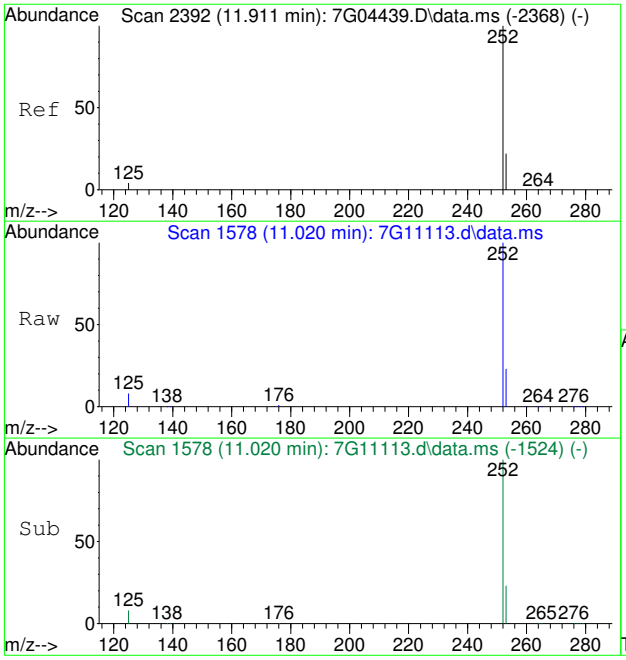


#21
Chrysene
Concen: 30.70 ppm
RT: 9.780 min Scan# 1172
Delta R.T. 0.029 min
Lab File: 7G11113.d
Acq: 10 Aug 2020 7:50 pm

Tgt Ion:228 Resp: 857966

Ion	Ratio	Lower	Upper
228	100		
226	31.3	0.0	58.9
229	21.1	0.0	49.5

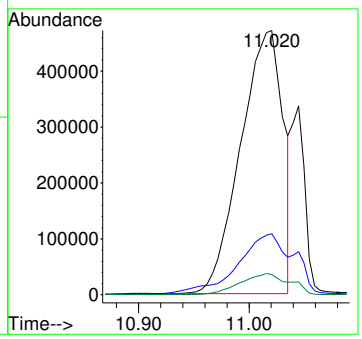


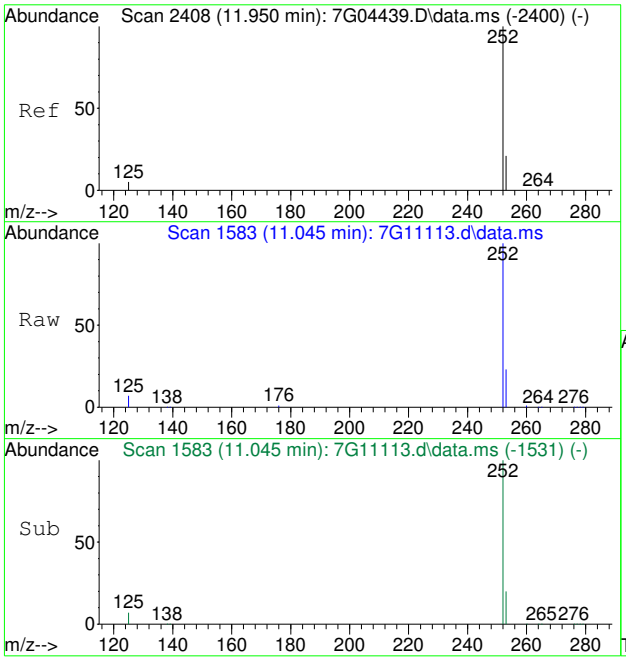


#23
Benzo[b]fluoranthene
Concen: 55.39 ppm
RT: 11.020 min Scan# 1578
Delta R.T. 0.063 min
Lab File: 7G11113.d
Acq: 10 Aug 2020 7:50 pm

Tgt Ion:252 Resp: 1249596

Ion	Ratio	Lower	Upper
252	100		
253	22.5	0.0	51.7
125	7.6	0.0	34.5

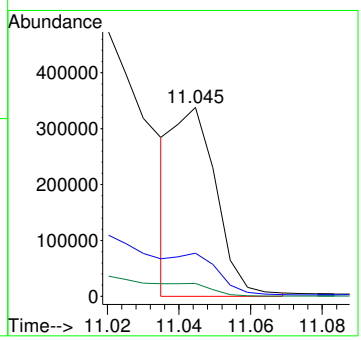


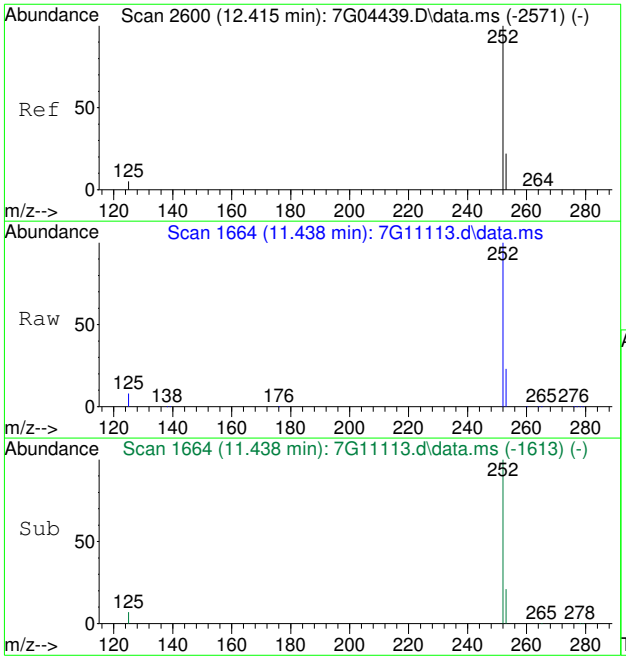


#24
Benzo[k]fluoranthene
Concen: 11.52 ppm m
RT: 11.045 min Scan# 1583
Delta R.T. 0.053 min
Lab File: 7G11113.d
Acq: 10 Aug 2020 7:50 pm

Tgt Ion:252 Resp: 282780

Ion	Ratio	Lower	Upper
252	100		
253	22.9	0.0	51.5
125	6.9	0.0	34.8

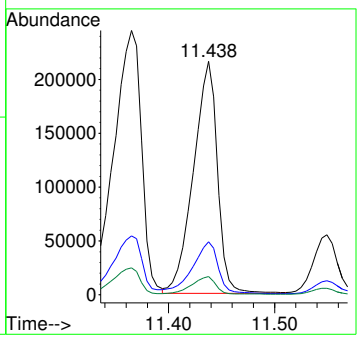


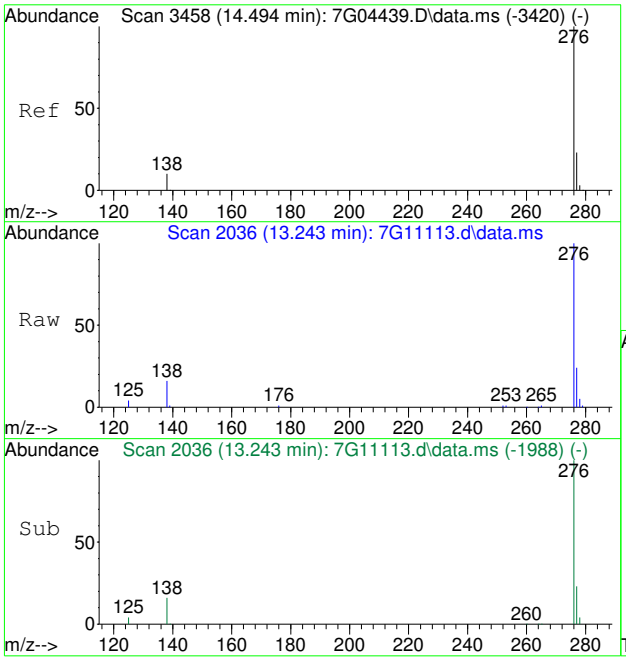


#25
Benzo[a]pyrene
Concen: 15.48 ppm
RT: 11.438 min Scan# 1664
Delta R.T. 0.048 min
Lab File: 7G11113.d
Acq: 10 Aug 2020 7:50 pm

Tgt Ion:252 Resp: 340344

Ion	Ratio	Lower	Upper
252	100		
253	21.7	0.0	51.6
125	7.6	0.0	34.8

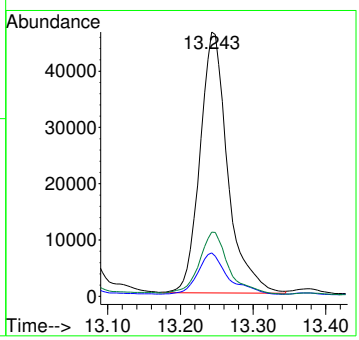


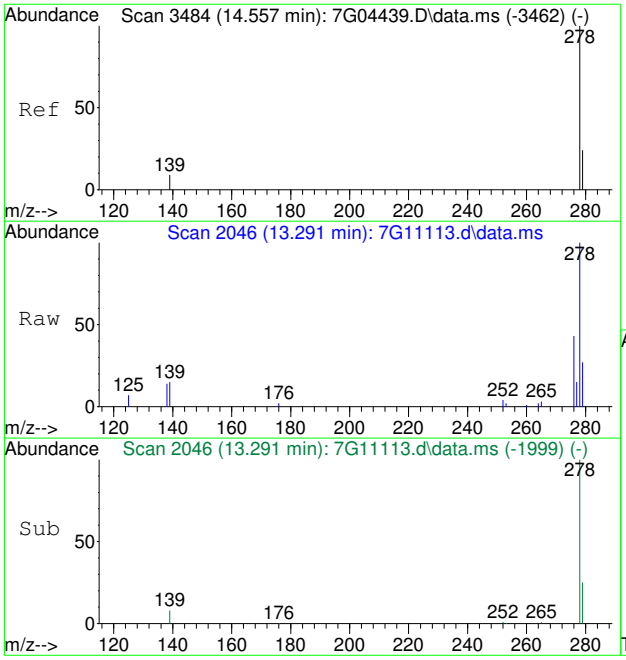


#26
Indeno[1,2,3-cd]pyrene
Concen: 8.55 ppm
RT: 13.243 min Scan# 2036
Delta R.T. 0.034 min
Lab File: 7G11113.d
Acq: 10 Aug 2020 7:50 pm

Tgt Ion:276 Resp: 122698

Ion	Ratio	Lower	Upper
276	100		
138	15.8	0.0	39.6
277	23.6	0.0	53.1

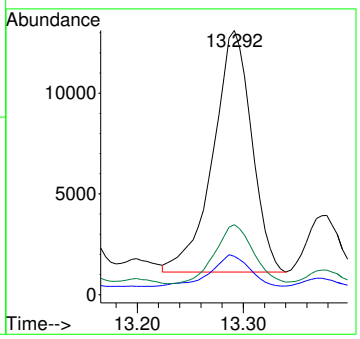


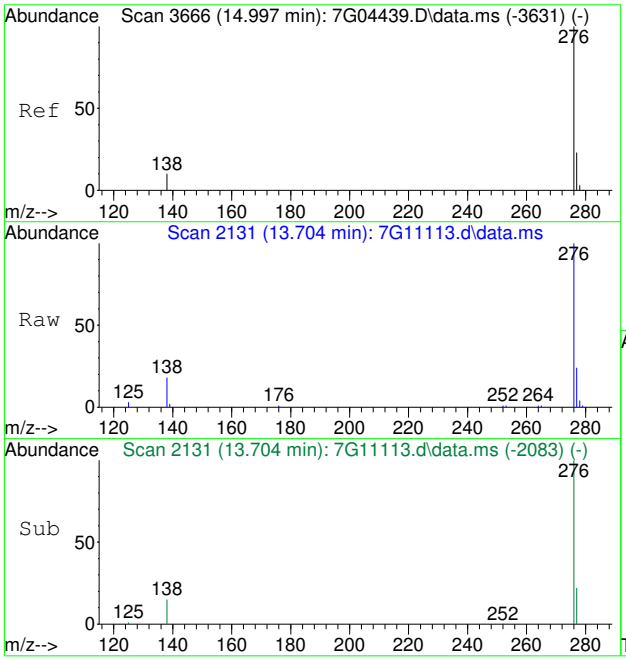


#27
Dibenz[a,h]anthracene
Concen: 1.91 ppm
RT: 13.291 min Scan# 2046
Delta R.T. 0.029 min
Lab File: 7G11113.d
Acq: 10 Aug 2020 7:50 pm

Tgt Ion:278 Resp: 30341

Ion	Ratio	Lower	Upper
278	100		
139	12.3	0.0	38.8
279	24.3	0.0	53.6

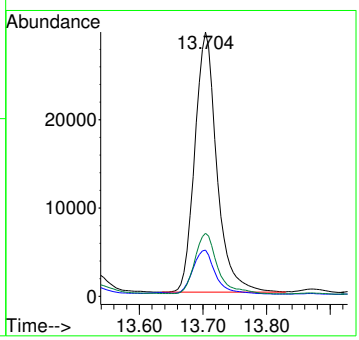




#28
Benzo[g,h,i]perylene
Concen: 4.10 ppm
RT: 13.704 min Scan# 2131
Delta R.T. 0.034 min
Lab File: 7G11113.d
Acq: 10 Aug 2020 7:50 pm

Tgt Ion:276 Resp: 70926

Ion	Ratio	Lower	Upper
276	100		
138	16.6	0.0	40.5
277	23.3	0.0	53.2



Manual Integration Approval Summary

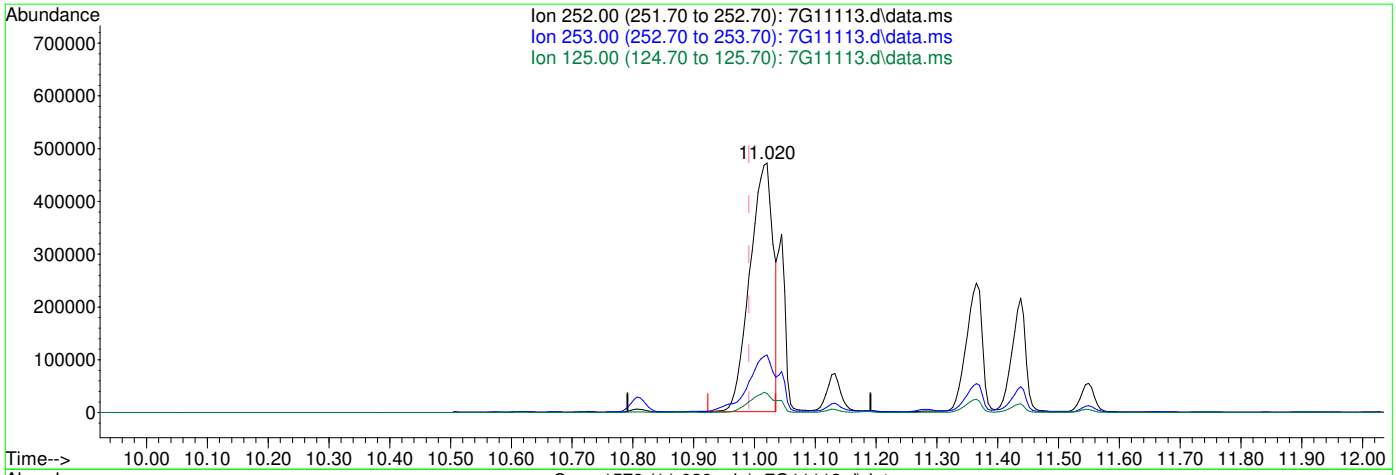
Sample Number: FA77576-11
Lab FileID: 7G11113.D
Injection Time: 08/10/20 19:50
Method: SW846 8270E BY SIM
Analyst approved: 08/11/20 10:52 Fouad Sekkar
Supervisor approved: 08/11/20 12:03 Naresh Jiawan

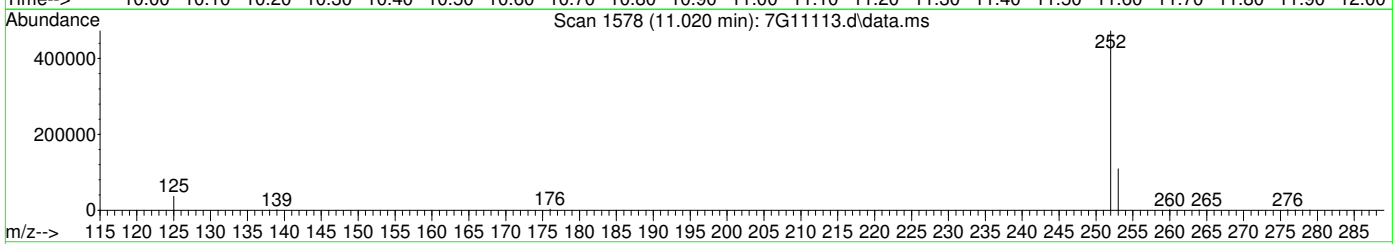
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(k)fluoranthene	207-08-9		11.04	Missed peak

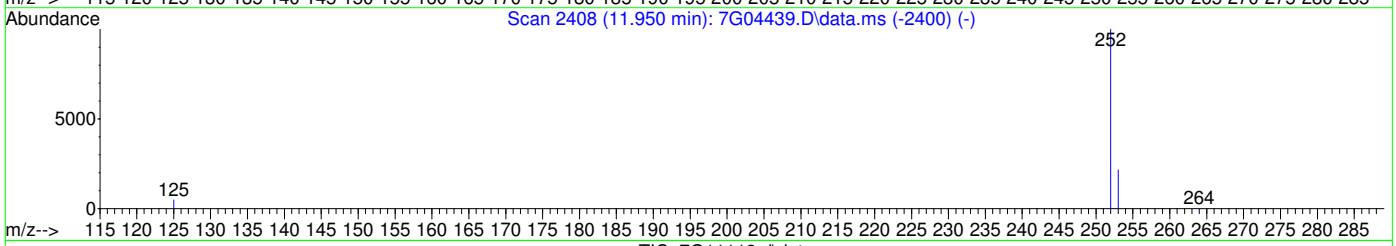
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11113.d
Acq On : 10 Aug 2020 7:50 pm
Operator : FOUADS
Sample : fa77576-11 e
Misc : op81483,S7G482,14.9,,,1,1,soil
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 11 02:37:27 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11113.d\data.ms

(24) Benzo[k]fluoranthene (P)

11.020min (+0.029) 46.19ppm

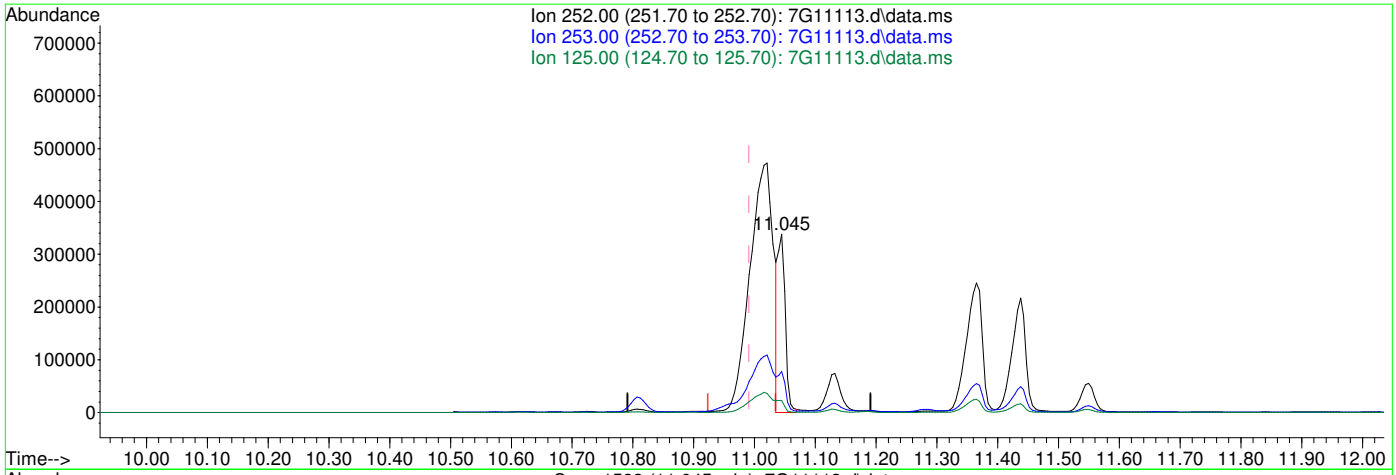
response 1249596

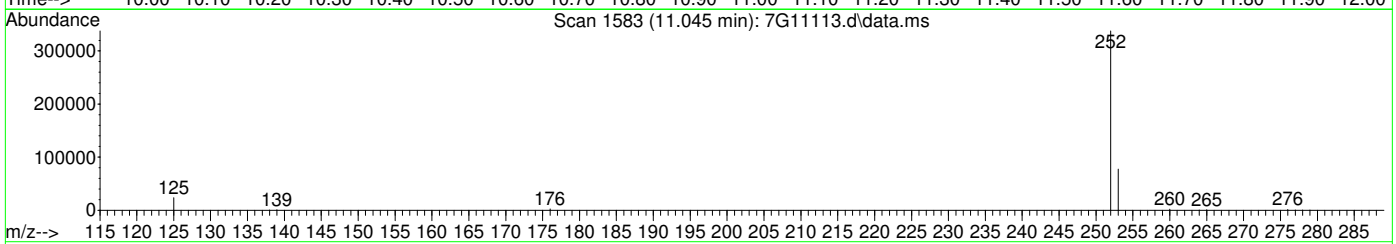
Ion	Exp%	Act%
252.00	100	100
253.00	21.50	22.55
125.00	4.80	7.57
0.00	0.00	0.00

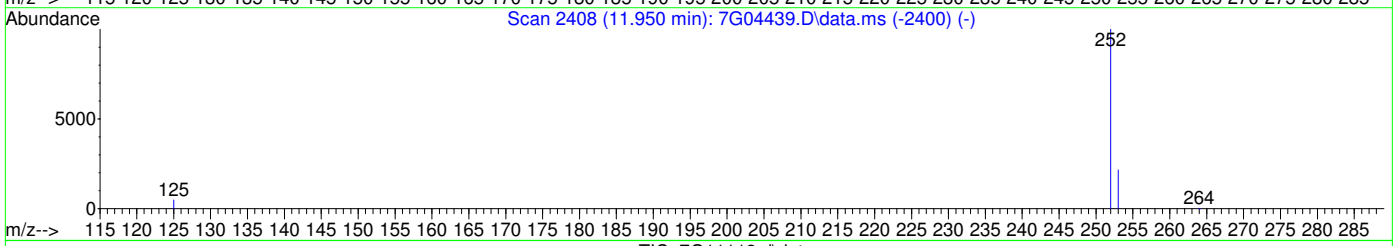
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11113.d
Acq On : 10 Aug 2020 7:50 pm
Operator : FOUADS
Sample : fa77576-11 e
Misc : op81483,S7G482,14.9,,,1,1,soil
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 11 02:37:27 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11113.d\data.ms

(24) Benzo[k]fluoranthene (P)

11.045min (+0.053) 11.52ppm m

response 282780

Ion	Exp%	Act%
252.00	100	100
253.00	21.50	22.94
125.00	4.80	6.89
0.00	0.00	0.00

Manual Integrations APPROVED
(compounds with "m" flag)
Naresh Jiawan
08/11/20 12:03

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11114.d
Acq On : 10 Aug 2020 8:14 pm
Operator : FOUADS
Sample : fa77576-12 e
Misc : op81483,S7G482,15.5,,,1,1,soil
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 11 03:20:26 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

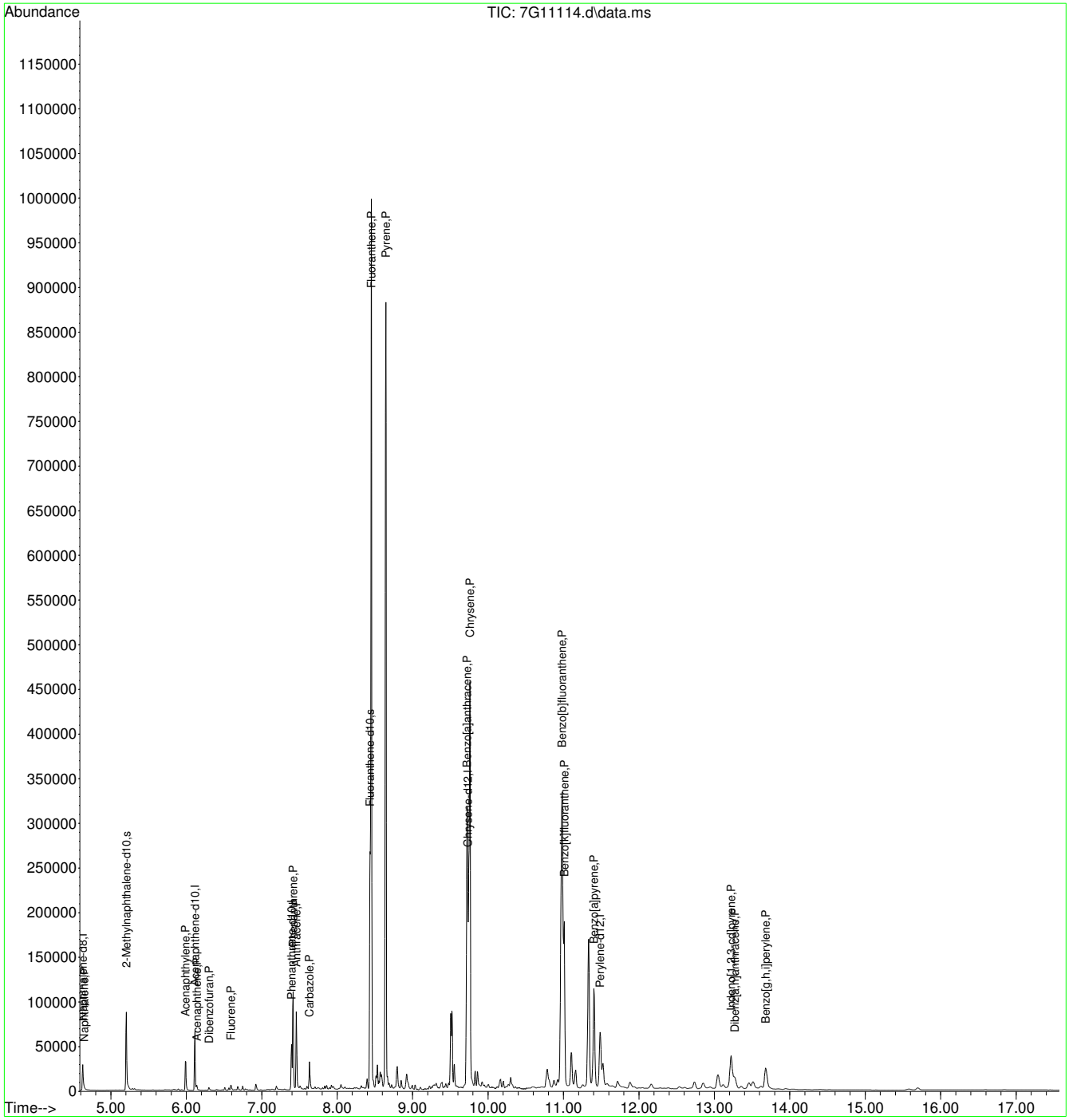
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.628	136	26888	4.00	ppm	0.00
6) Acenaphthene-d10	6.114	164	20464	4.00	ppm	0.00
11) Phenanthrene-d10	7.396	188	39282	4.00	ppm	0.00
18) Chrysene-d12	9.732	240	75929	4.00	ppm	0.00
22) Perylene-d12	11.486	264	66526	4.00	ppm	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.205	152	33737	8.42	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 84.20%			
17) Fluoranthene-d10	8.436	212	184047	8.98	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 89.80%			
Target Compounds						Qvalue
2) Naphthalene	4.646	128	1286	0.17	ppm	98
7) Acenaphthylene	5.988	152	22743	1.94	ppm	99
8) Acenaphthene	6.138	153	1585	0.21	ppm	99
9) Dibenzofuran	6.302	168	2076	0.39	ppm	86
10) Fluorene	6.592	166	2492	0.30	ppm	97
13) Phenanthrene	7.417	178	72555	5.56	ppm	98
14) Anthracene	7.459	178	55457	4.22	ppm	98
15) Carbazole	7.633	167	21846	0.93	ppm	97
16) Fluoranthene	8.455	202	598608	23.20	ppm	97
19) Pyrene	8.645	202	580904	18.85	ppm	96
20) Benzo[a]anthracene	9.722	228	192212	8.00	ppm	88
21) Chrysene	9.761	228	382857	14.57	ppm	97
23) Benzo[b]fluoranthene	10.982	252	511029	22.63	ppm	98
24) Benzo[k]fluoranthene	11.011	252	136435m	5.65	ppm	
25) Benzo[a]pyrene	11.404	252	129470	5.88	ppm	98
26) Indeno[1,2,3-cd]pyrene	13.224	276	66264	4.61	ppm	95
27) Dibenz[a,h]anthracene	13.272	278	15634	0.98	ppm	97
28) Benzo[g,h,i]perylene	13.680	276	42268	2.44	ppm	94

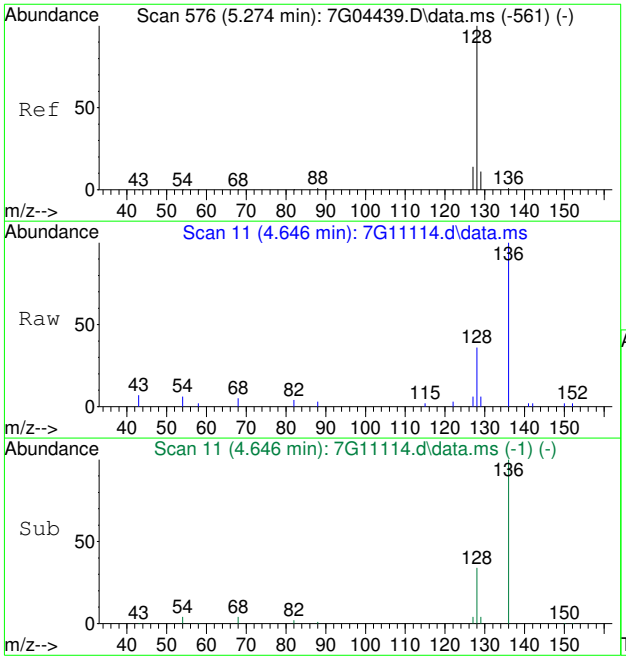
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11114.d
Acq On : 10 Aug 2020 8:14 pm
Operator : FOUADS
Sample : fa77576-12 e
Misc : op81483,S7G482,15.5,,,1,1,soil
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 11 03:20:26 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

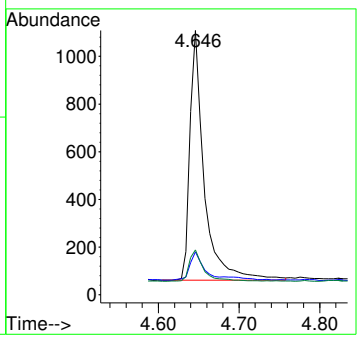


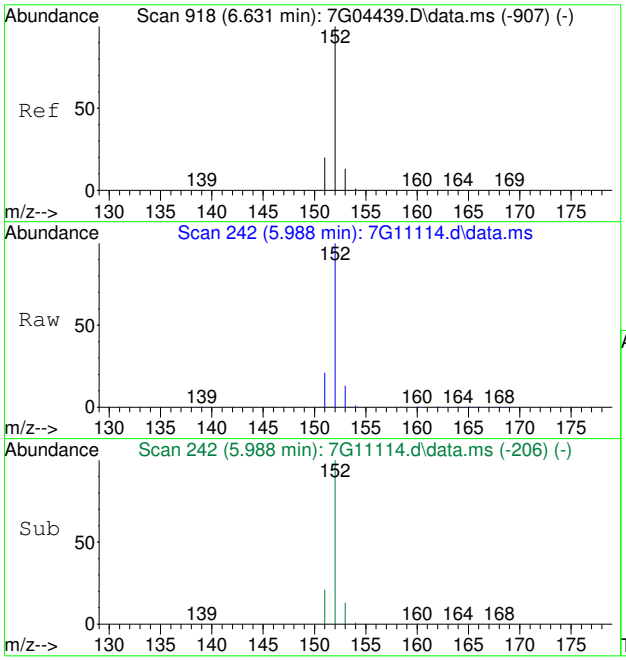


#2
Naphthalene
Concen: 0.17 ppm
RT: 4.646 min Scan# 11
Delta R.T. 0.000 min
Lab File: 7G11114.d
Acq: 10 Aug 2020 8:14 pm

Tgt Ion:128 Resp: 1286

Ion	Ratio	Lower	Upper
128	100		
129	11.3	0.0	40.9
127	12.5	0.0	43.5

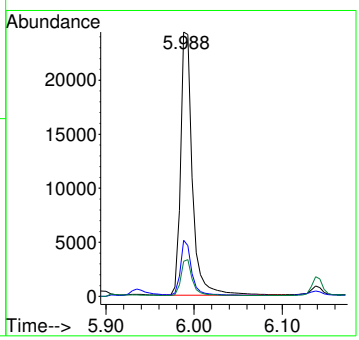


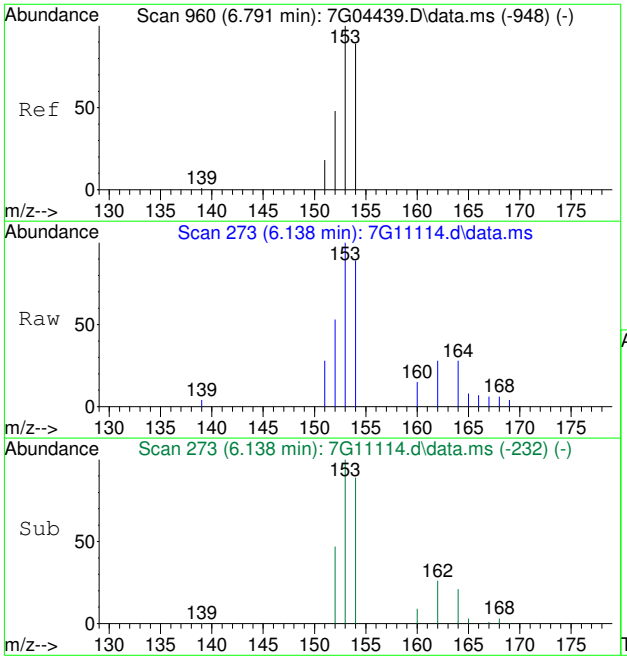


#7
Acenaphthylene
Concen: 1.94 ppm
RT: 5.988 min Scan# 242
Delta R.T. -0.005 min
Lab File: 7G11114.d
Acq: 10 Aug 2020 8:14 pm

Tgt Ion:152 Resp: 22743

Ion	Ratio	Lower	Upper
152	100		
151	20.8	0.0	49.8
153	13.0	0.0	42.8

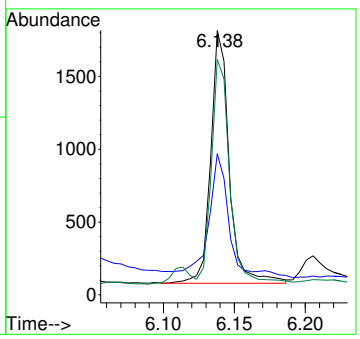


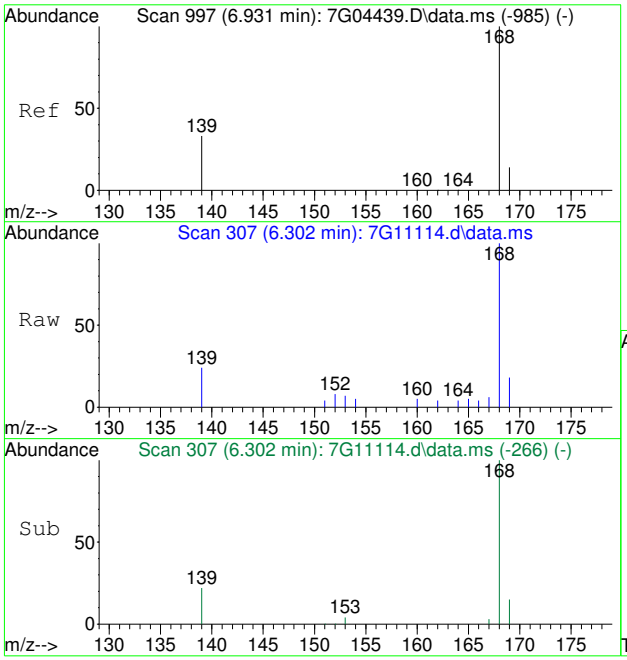


#8
Acenaphthene
Concen: 0.21 ppm
RT: 6.138 min Scan# 273
Delta R.T. 0.000 min
Lab File: 7G11114.d
Acq: 10 Aug 2020 8:14 pm

Tgt Ion:153 Resp: 1585

Ion	Ratio	Lower	Upper
153	100		
152	47.6	18.3	78.3
154	88.5	59.3	119.3

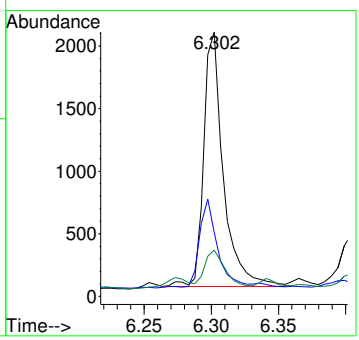


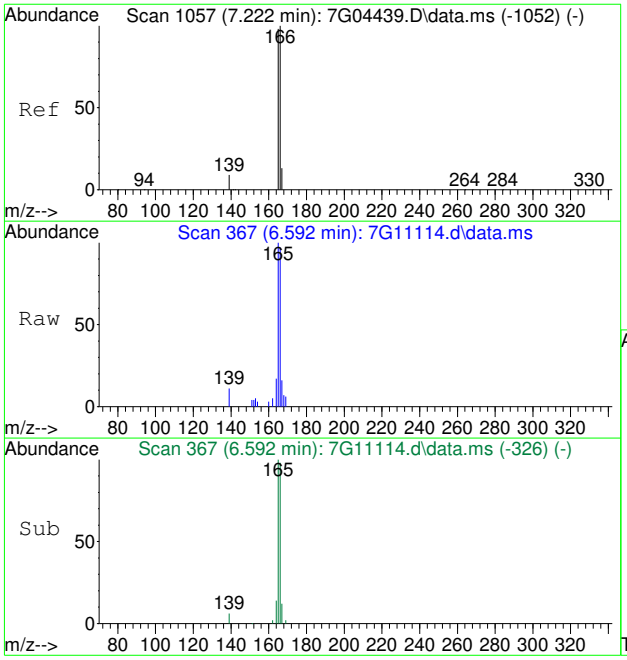


#9
Dibenzofuran
Concen: 0.39 ppm
RT: 6.302 min Scan# 307
Delta R.T. 0.000 min
Lab File: 7G11114.d
Acq: 10 Aug 2020 8:14 pm

Tgt Ion:168 Resp: 2076

Ion	Ratio	Lower	Upper
168	100		
139	21.5	12.6	52.6
169	13.9	0.0	33.8

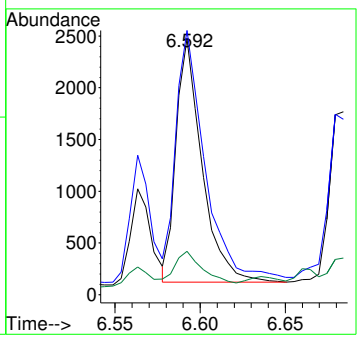


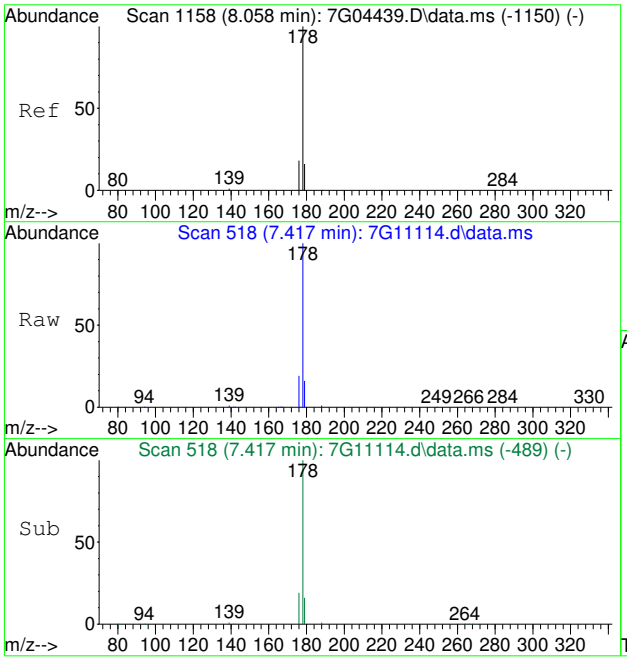


#10
Fluorene
Concen: 0.30 ppm
RT: 6.592 min Scan# 367
Delta R.T. 0.000 min
Lab File: 7G11114.d
Acq: 10 Aug 2020 8:14 pm

Tgt Ion:166 Resp: 2492

Ion	Ratio	Lower	Upper
166	100		
165	100.9	68.2	128.2
167	12.1	0.0	42.9

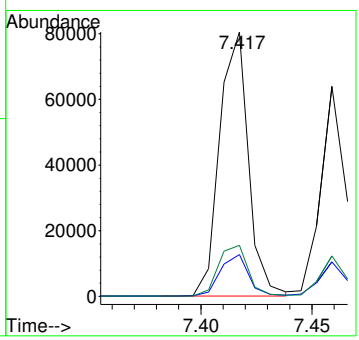


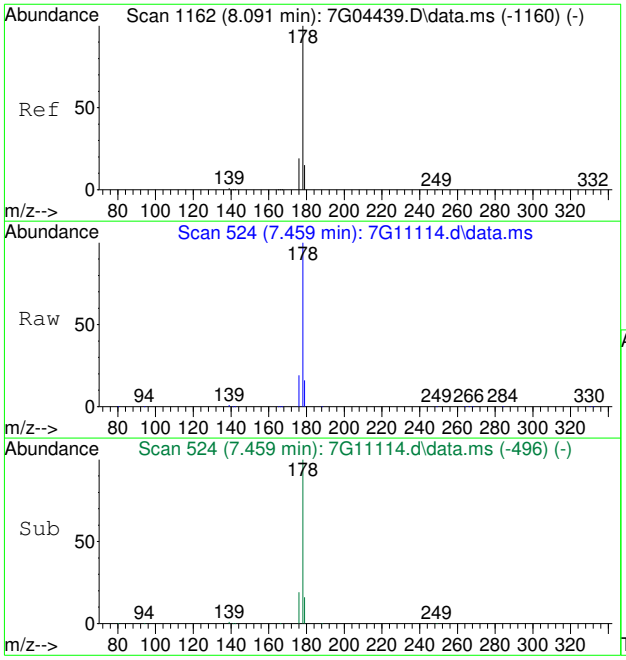


#13
Phenanthrene
Concen: 5.56 ppm
RT: 7.417 min Scan# 518
Delta R.T. 0.000 min
Lab File: 7G11114.d
Acq: 10 Aug 2020 8:14 pm

Tgt Ion:178 Resp: 72555

Ion	Ratio	Lower	Upper
178	100		
179	15.7	0.0	45.7
176	19.2	0.0	48.0

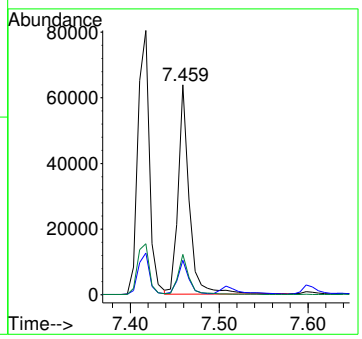


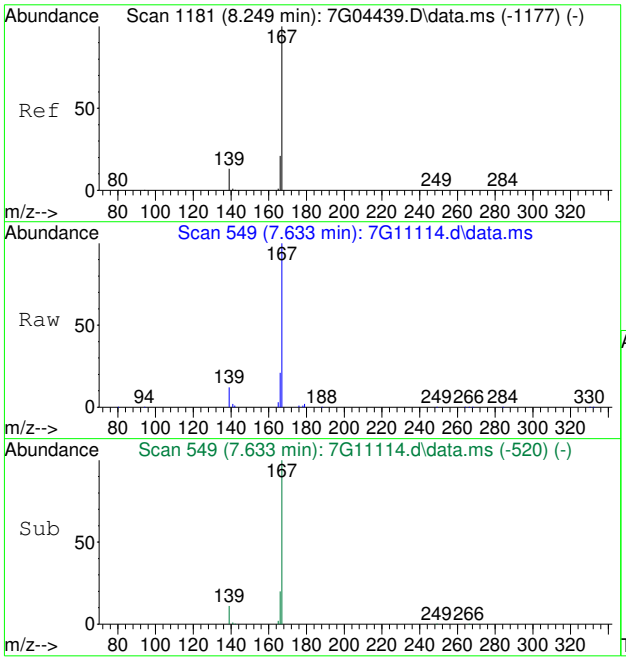


#14
Anthracene
Concen: 4.22 ppm
RT: 7.459 min Scan# 524
Delta R.T. -0.007 min
Lab File: 7G11114.d
Acq: 10 Aug 2020 8:14 pm

Tgt Ion:178 Resp: 55457

Ion	Ratio	Lower	Upper
178	100		
179	16.2	0.0	45.1
176	19.2	0.0	48.8

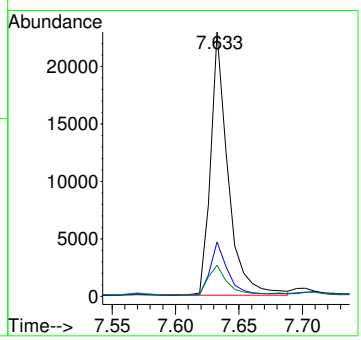


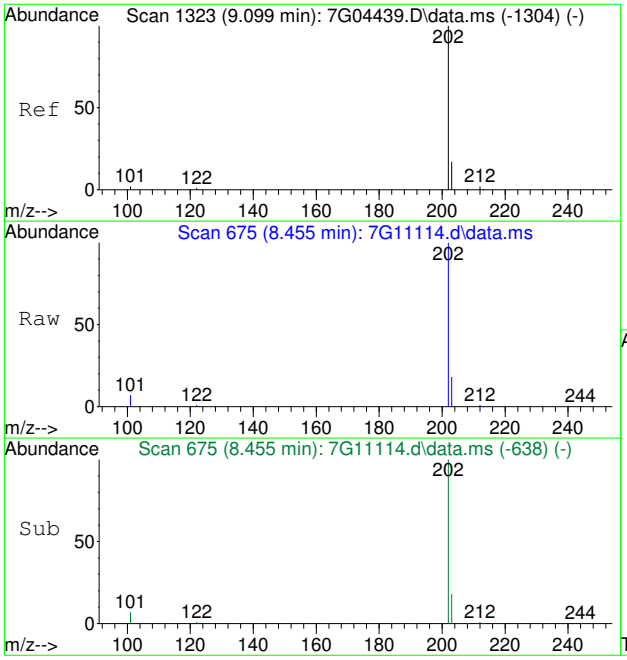


#15
Carbazole
Concen: 0.93 ppm
RT: 7.633 min Scan# 549
Delta R.T. 0.000 min
Lab File: 7G11114.d
Acq: 10 Aug 2020 8:14 pm

Tgt Ion:167 Resp: 21846

Ion	Ratio	Lower	Upper
167	100		
166	20.1	1.2	41.2
139	11.1	0.0	32.8

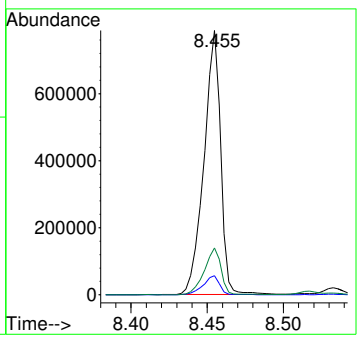


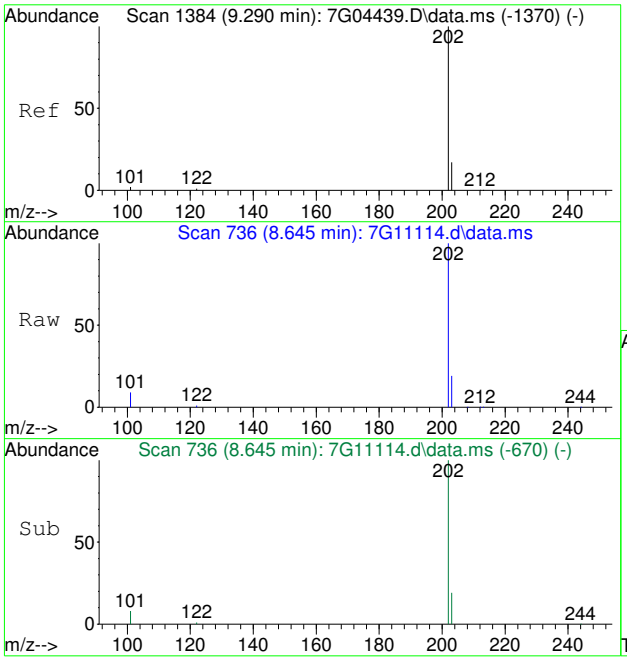


#16
Fluoranthene
Concen: 23.20 ppm
RT: 8.455 min Scan# 675
Delta R.T. 0.006 min
Lab File: 7G11114.d
Acq: 10 Aug 2020 8:14 pm

Tgt Ion:202 Resp: 598608

Ion	Ratio	Lower	Upper
202	100		
101	7.2	0.0	32.2
203	17.6	0.0	47.2

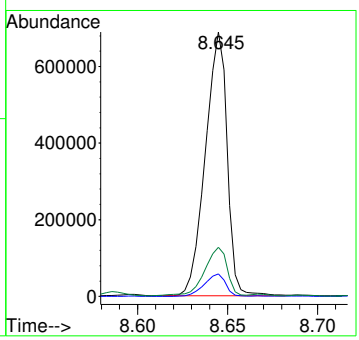


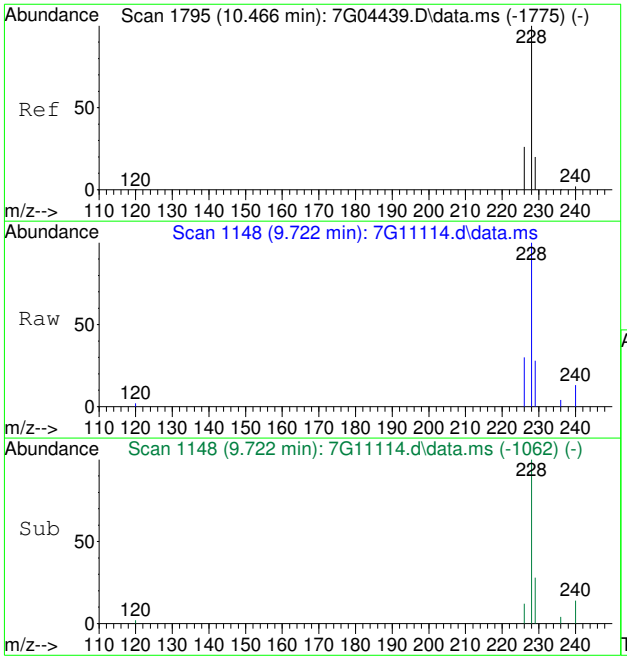


#19
Pyrene
Concen: 18.85 ppm
RT: 8.645 min Scan# 736
Delta R.T. 0.006 min
Lab File: 7G11114.d
Acq: 10 Aug 2020 8:14 pm

Tgt Ion:202 Resp: 580904

Ion	Ratio	Lower	Upper
202	100		
101	8.5	0.0	32.4
203	18.2	0.0	47.4

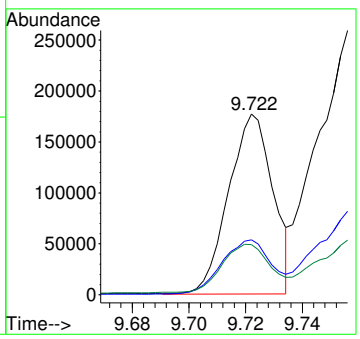


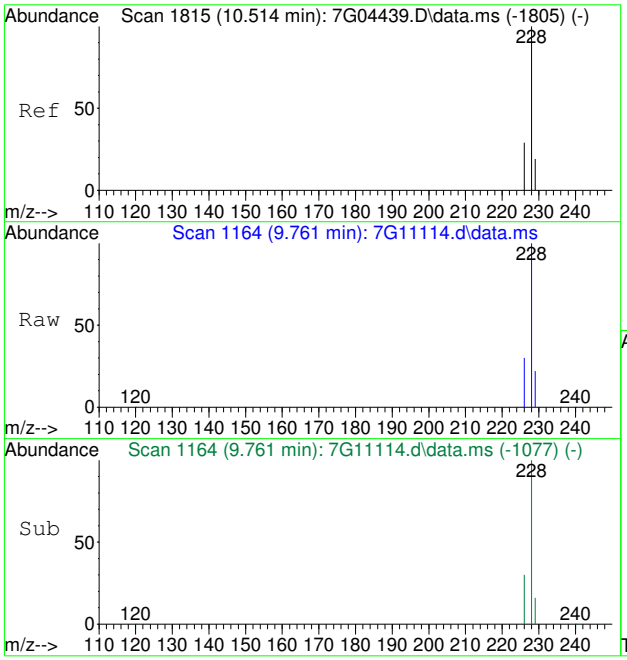


#20
Benzo[a]anthracene
Concen: 8.00 ppm
RT: 9.722 min Scan# 1148
Delta R.T. 0.007 min
Lab File: 7G11114.d
Acq: 10 Aug 2020 8:14 pm

Tgt Ion:228 Resp: 192212

Ion	Ratio	Lower	Upper
228	100		
226	30.2	0.0	56.1
229	27.5	0.0	49.5

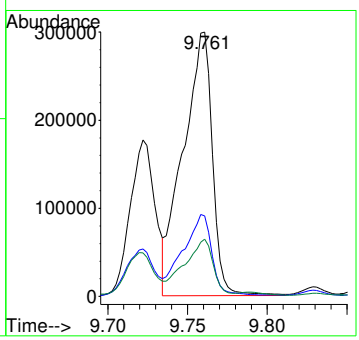


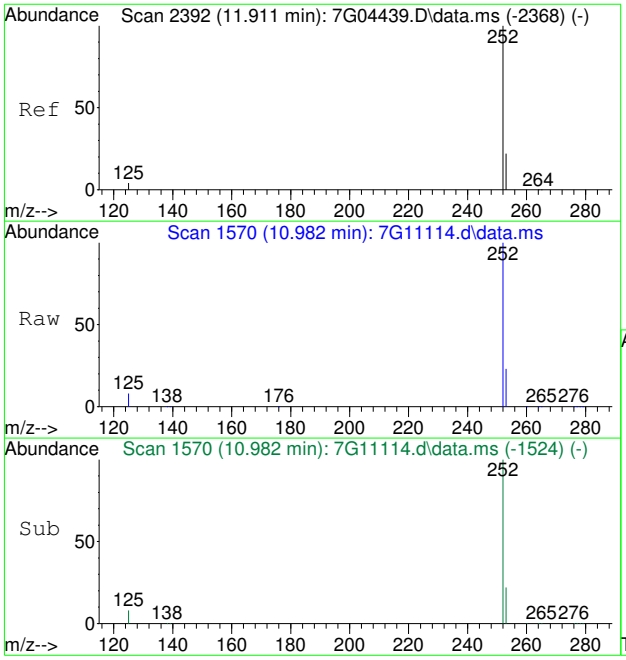


#21
Chrysene
Concen: 14.57 ppm
RT: 9.761 min Scan# 1164
Delta R.T. 0.010 min
Lab File: 7G11114.d
Acq: 10 Aug 2020 8:14 pm

Tgt Ion:228 Resp: 382857

Ion	Ratio	Lower	Upper
228	100		
226	30.3	0.0	58.9
229	20.9	0.0	49.5

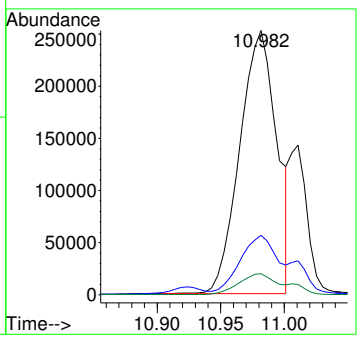


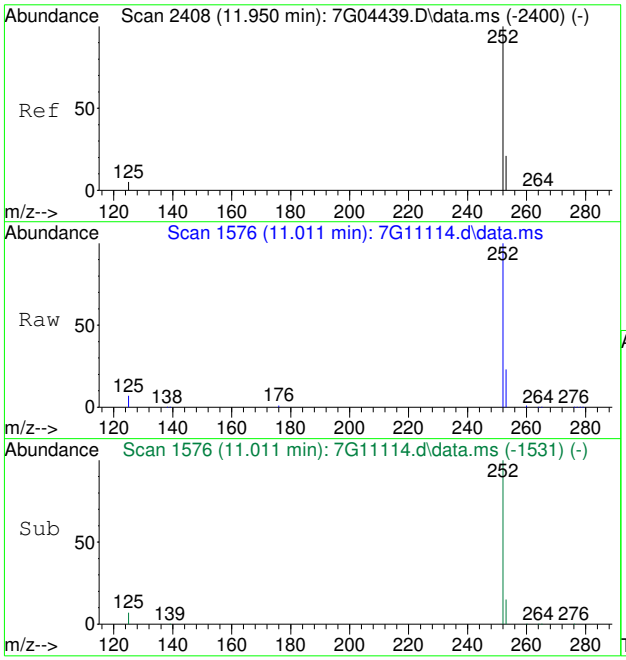


#23
Benzo[b]fluoranthene
Concen: 22.63 ppm
RT: 10.982 min Scan# 1570
Delta R.T. 0.024 min
Lab File: 7G11114.d
Acq: 10 Aug 2020 8:14 pm

Tgt Ion:252 Resp: 511029

Ion	Ratio	Lower	Upper
252	100		
253	21.8	0.0	51.7
125	8.0	0.0	34.5

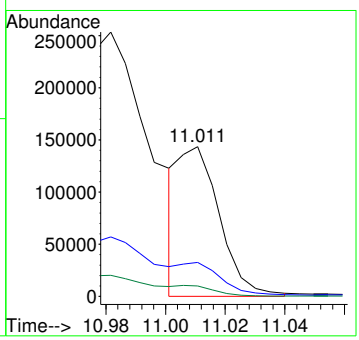


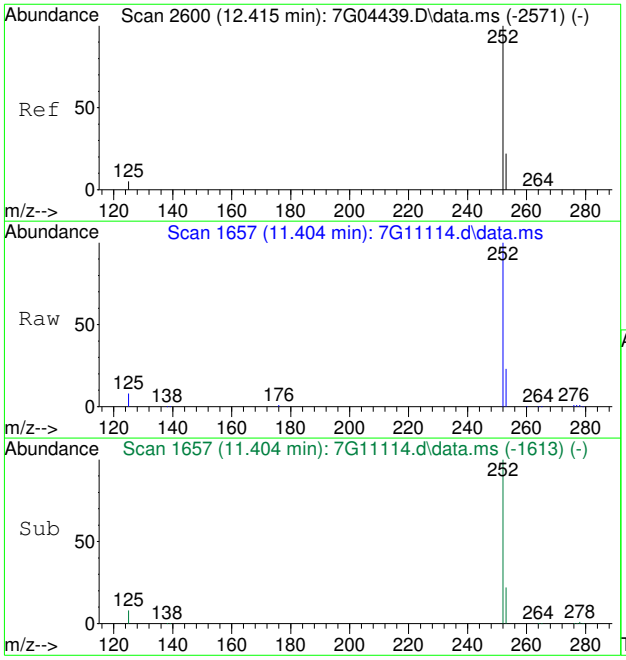


#24
Benzo[k]fluoranthene
Concen: 5.65 ppm m
RT: 11.011 min Scan# 1576
Delta R.T. 0.019 min
Lab File: 7G11114.d
Acq: 10 Aug 2020 8:14 pm

Tgt Ion:252 Resp: 136435

Ion	Ratio	Lower	Upper
252	100		
253	22.7	0.0	51.5
125	7.0	0.0	34.8

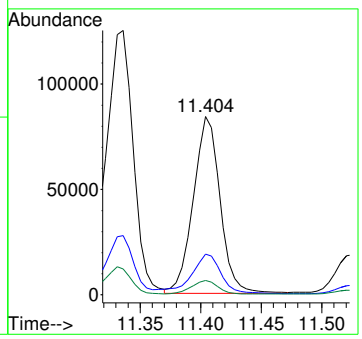


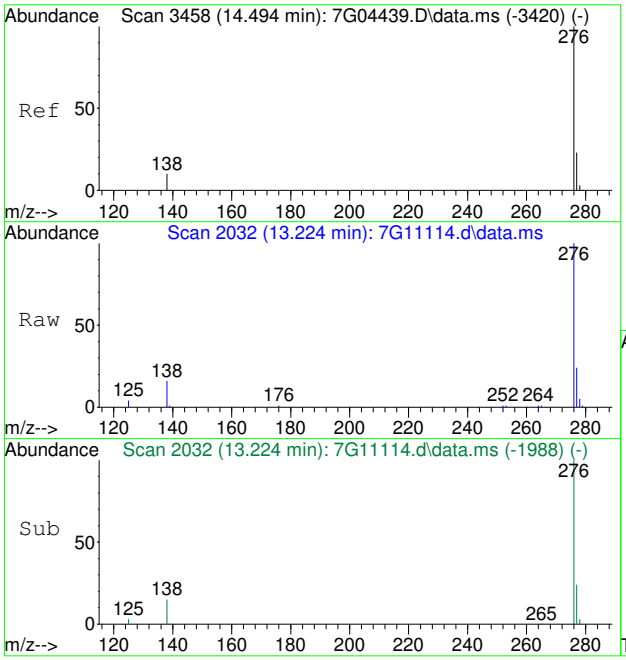


#25
Benzo[a]pyrene
Concen: 5.88 ppm
RT: 11.404 min Scan# 1657
Delta R.T. 0.015 min
Lab File: 7G11114.d
Acq: 10 Aug 2020 8:14 pm

Tgt Ion:252 Resp: 129470

Ion	Ratio	Lower	Upper
252	100		
253	21.2	0.0	51.6
125	7.7	0.0	34.8

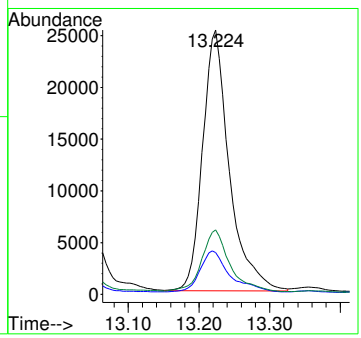


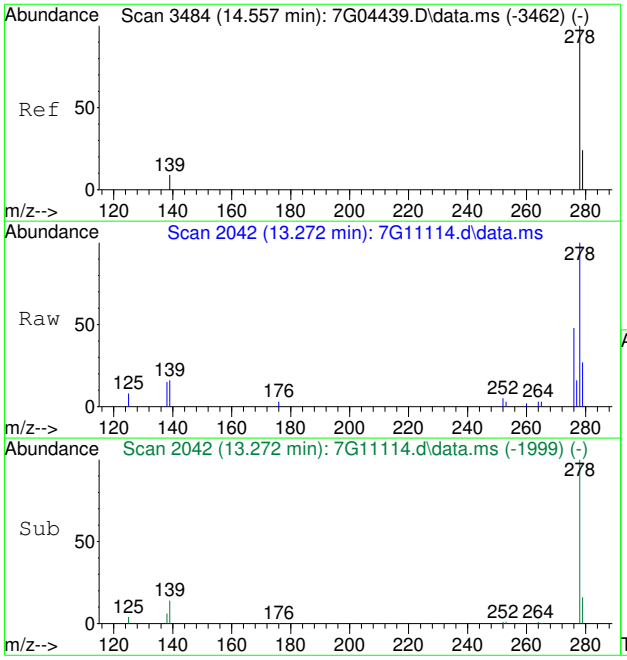


#26
Indeno[1,2,3-cd]pyrene
Concen: 4.61 ppm
RT: 13.224 min Scan# 2032
Delta R.T. 0.015 min
Lab File: 7G11114.d
Acq: 10 Aug 2020 8:14 pm

Tgt Ion:276 Resp: 66264

Ion	Ratio	Lower	Upper
276	100		
138	15.2	0.0	39.6
277	23.7	0.0	53.1

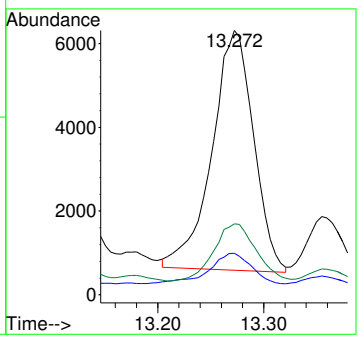


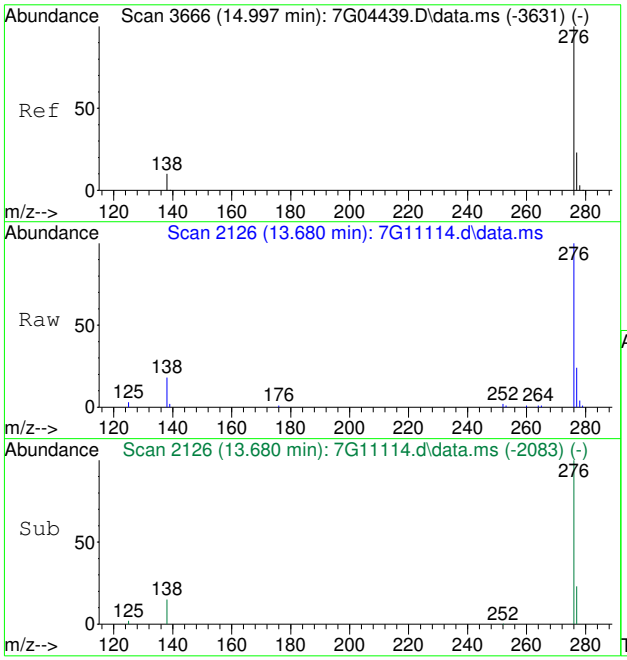


#27
Dibenz[a,h]anthracene
Concen: 0.98 ppm
RT: 13.272 min Scan# 2042
Delta R.T. 0.010 min
Lab File: 7G11114.d
Acq: 10 Aug 2020 8:14 pm

Tgt Ion:278 Resp: 15634

Ion	Ratio	Lower	Upper
278	100		
139	12.7	0.0	38.8
279	23.8	0.0	53.6

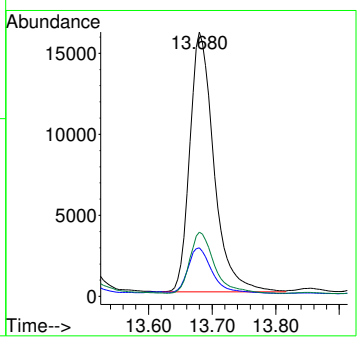




#28
Benzo[g,h,i]perylene
Concen: 2.44 ppm
RT: 13.680 min Scan# 2126
Delta R.T. 0.010 min
Lab File: 7G11114.d
Acq: 10 Aug 2020 8:14 pm

Tgt Ion:276 Resp: 42268

Ion	Ratio	Lower	Upper
276	100		
138	17.3	0.0	40.5
277	23.5	0.0	53.2



Manual Integration Approval Summary

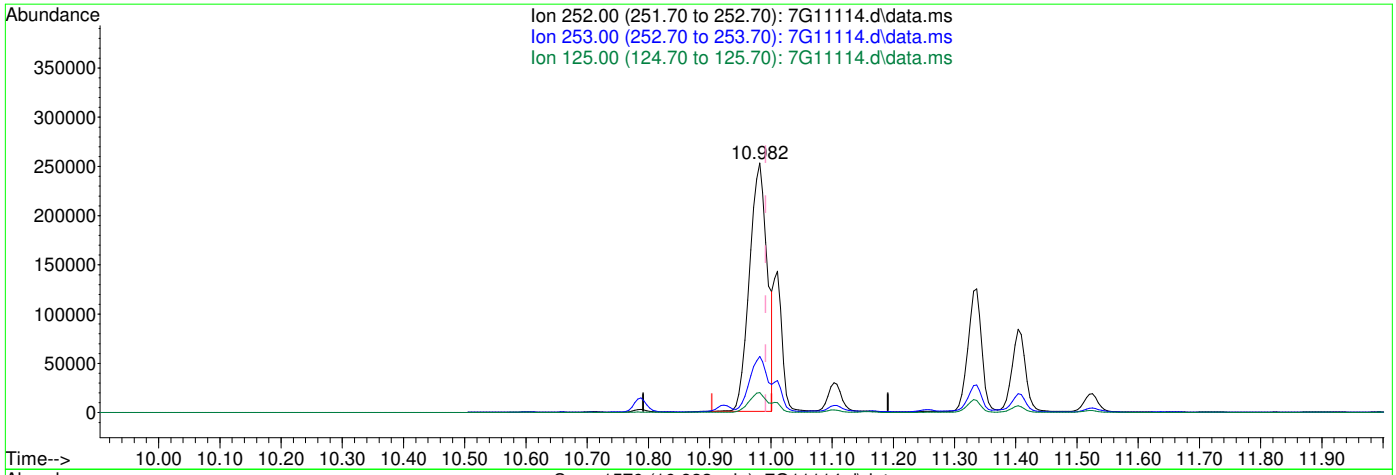
Sample Number: FA77576-12
Lab FileID: 7G11114.D
Injection Time: 08/10/20 20:14
Method: SW846 8270E BY SIM
Analyst approved: 08/11/20 10:52 Fouad Sekkar
Supervisor approved: 08/11/20 12:03 Naresh Jiawan

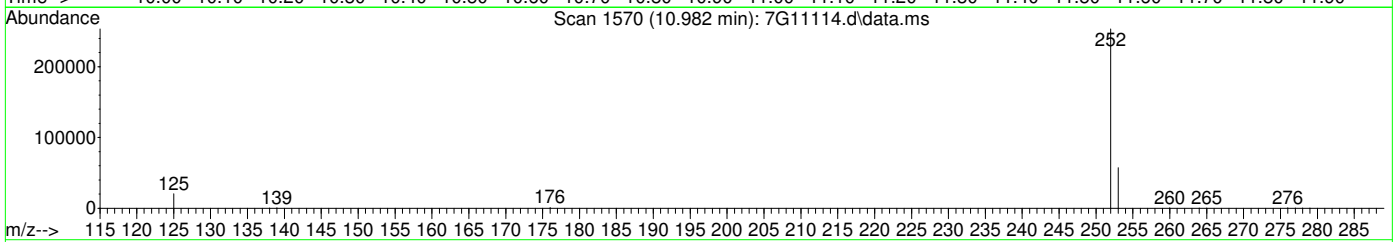
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(k)fluoranthene	207-08-9		11.01	Missed peak

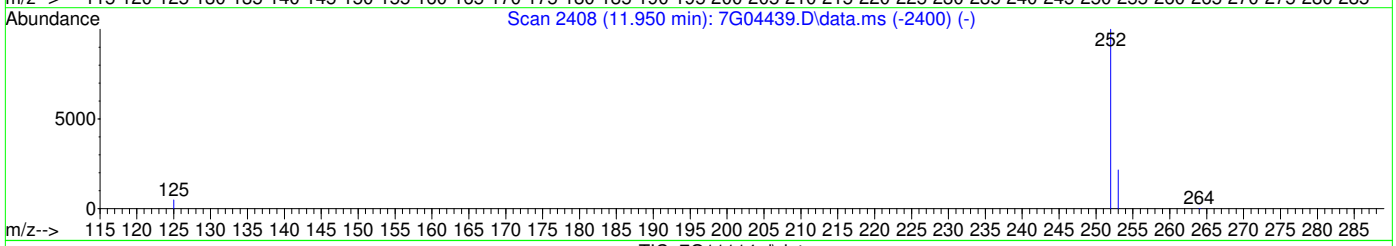
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11114.d
Acq On : 10 Aug 2020 8:14 pm
Operator : FOUADS
Sample : fa77576-12 e
Misc : op81483,S7G482,15.5,,,1,1,soil
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 11 02:37:30 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11114.d\data.ms

(24) Benzo[k]fluoranthene (P)

10.982min (-0.010) 20.28ppm

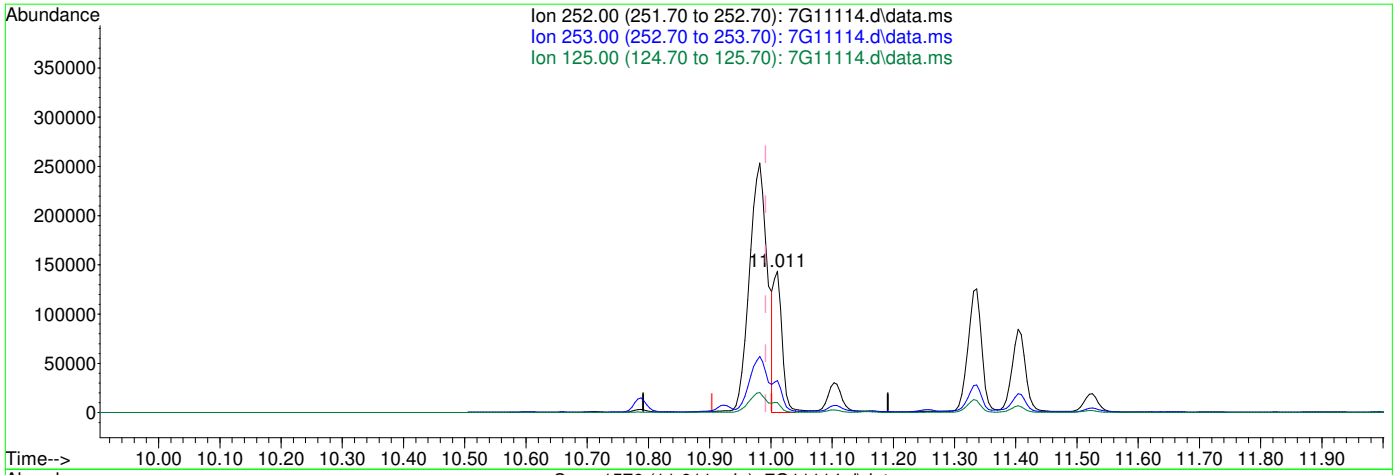
response 511029

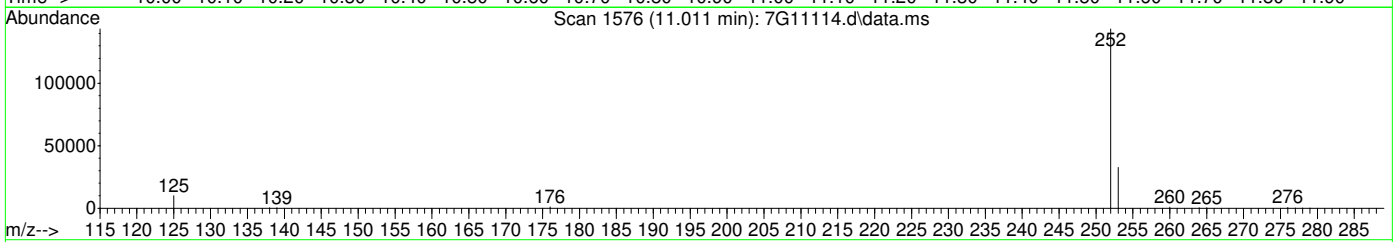
Ion	Exp%	Act%
252.00	100	100
253.00	21.50	21.77
125.00	4.80	8.05
0.00	0.00	0.00

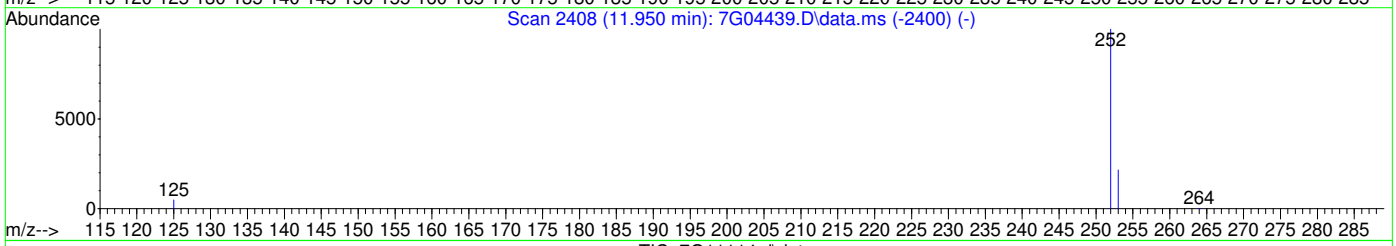
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11114.d
Acq On : 10 Aug 2020 8:14 pm
Operator : FOUADS
Sample : fa77576-12 e
Misc : op81483,S7G482,15.5,,,1,1,soil
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 11 02:37:30 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11114.d\data.ms

(24) Benzo[k]fluoranthene (P)

11.011min (+0.019) 5.65ppm m

response 136435

Ion	Exp%	Act%
252.00	100	100
253.00	21.50	22.68
125.00	4.80	7.03
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11115.d
Acq On : 10 Aug 2020 8:38 pm
Operator : FOUADS
Sample : fa77576-13 e
Misc : op81483,S7G482,15.3,,,1,1,soil
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Aug 11 03:21:02 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

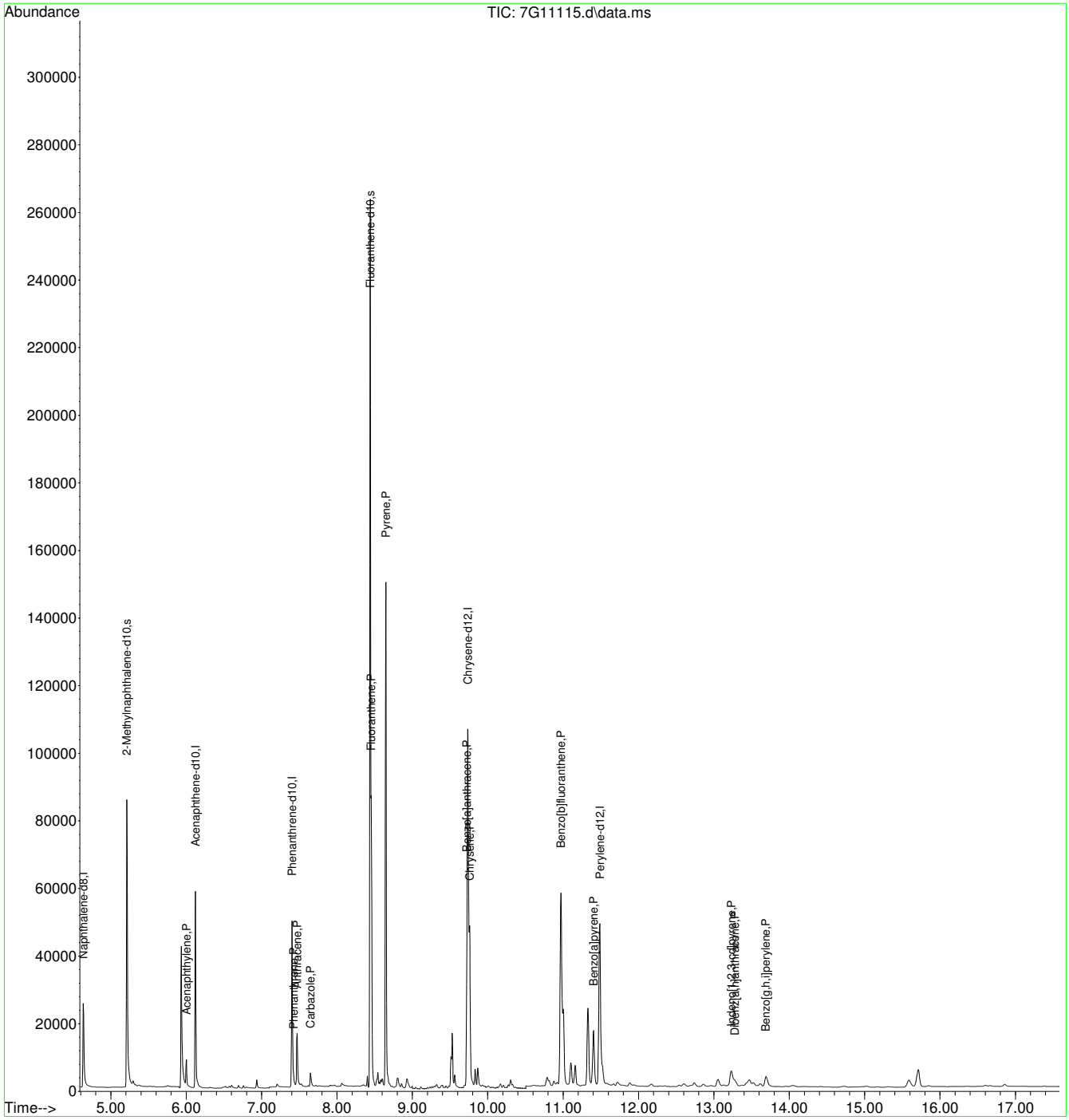
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.634	136	24374	4.00	ppm	0.00
6) Acenaphthene-d10	6.123	164	18480	4.00	ppm	0.00
11) Phenanthrene-d10	7.403	188	35638	4.00	ppm	0.00
18) Chrysene-d12	9.734	240	62003	4.00	ppm	0.00
22) Perylene-d12	11.486	264	54949	4.00	ppm	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.211	152	34872	9.56	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 95.60%			
17) Fluoranthene-d10	8.442	212	167333	9.00	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 90.00%			
Target Compounds						Qvalue
7) Acenaphthylene	6.002	152	4878	0.46	ppm	99
13) Phenanthrene	7.424	178	1360	0.12	ppm	97
14) Anthracene	7.473	178	12880	1.09	ppm	99
15) Carbazole	7.646	167	3452	0.16	ppm	99
16) Fluoranthene	8.455	202	48458	2.19	ppm	98
19) Pyrene	8.648	202	94711	3.85	ppm	96
20) Benzo[a]anthracene	9.724	228	23772	1.24	ppm	83
21) Chrysene	9.760	228	49906	2.32	ppm	99
23) Benzo[b]fluoranthene	10.972	252	94833	5.08	ppm	98
25) Benzo[a]pyrene	11.404	252	18974	1.04	ppm	97
26) Indeno[1,2,3-cd]pyrene	13.233	276	8965	0.76	ppm	95
27) Dibenz[a,h]anthracene	13.277	278	1962	0.15	ppm	97
28) Benzo[g,h,i]perylene	13.689	276	5932	0.41	ppm	94

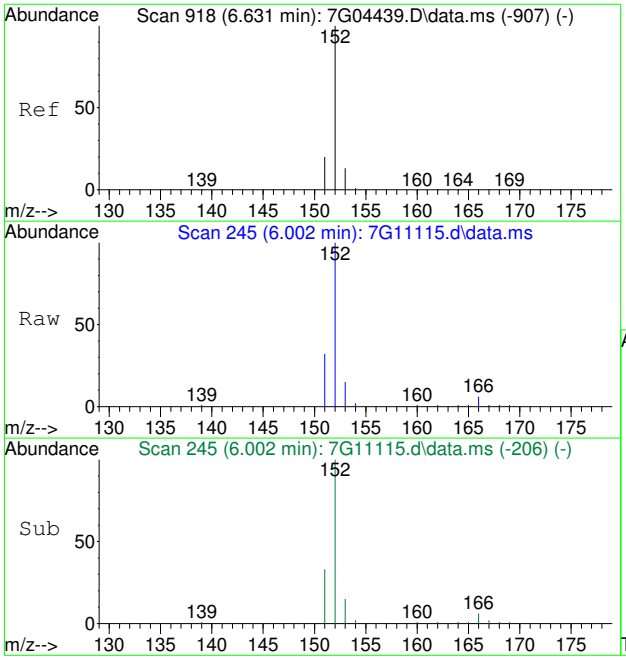
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11115.d
Acq On : 10 Aug 2020 8:38 pm
Operator : FOUADS
Sample : fa77576-13 e
Misc : op81483,S7G482,15.3,,,1,1,soil
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Aug 11 03:21:02 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

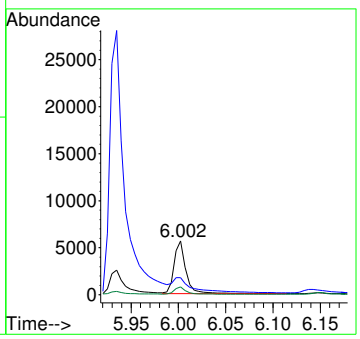


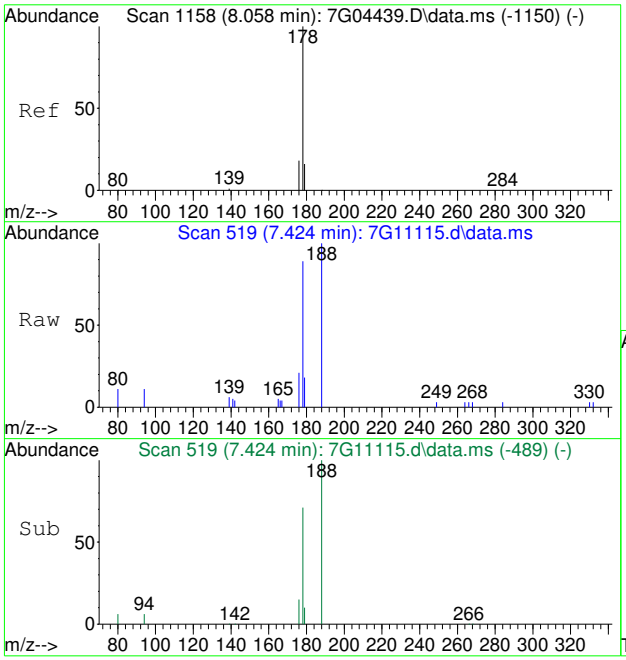


#7
Acenaphthylene
Concen: 0.46 ppm
RT: 6.002 min Scan# 245
Delta R.T. 0.009 min
Lab File: 7G11115.d
Acq: 10 Aug 2020 8:38 pm

Tgt Ion:152 Resp: 4878

Ion	Ratio	Lower	Upper
152	100		
151	20.1	0.0	49.8
153	13.7	0.0	42.8

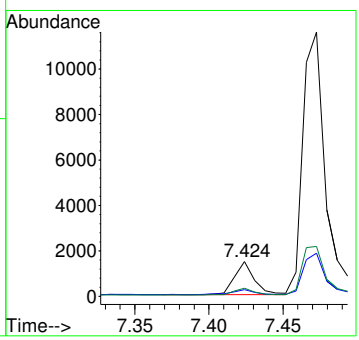


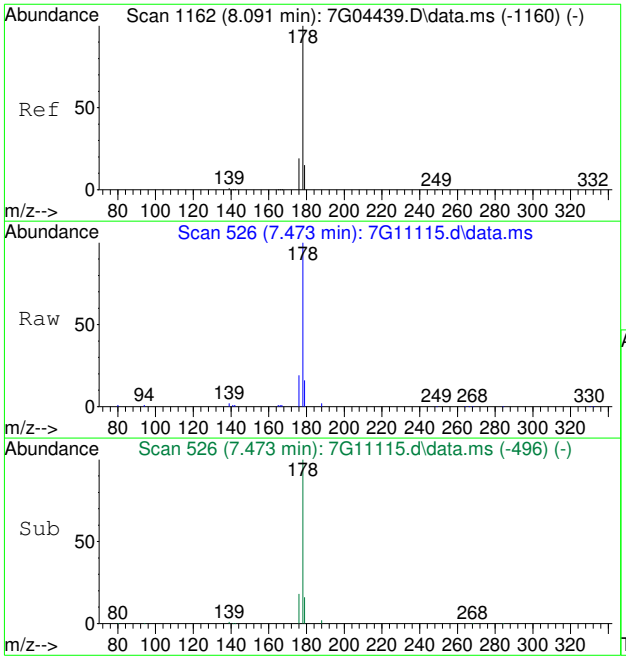


#13
Phenanthrene
Concen: 0.12 ppm
RT: 7.424 min Scan# 519
Delta R.T. 0.007 min
Lab File: 7G11115.d
Acq: 10 Aug 2020 8:38 pm

Tgt Ion:178 Resp: 1360

Ion	Ratio	Lower	Upper
178	100		
179	15.2	0.0	45.7
176	20.0	0.0	48.0

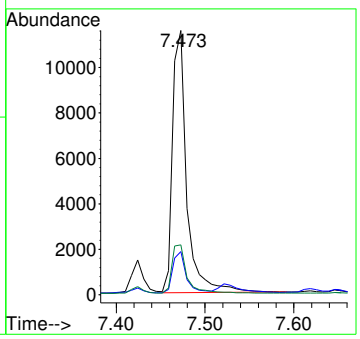


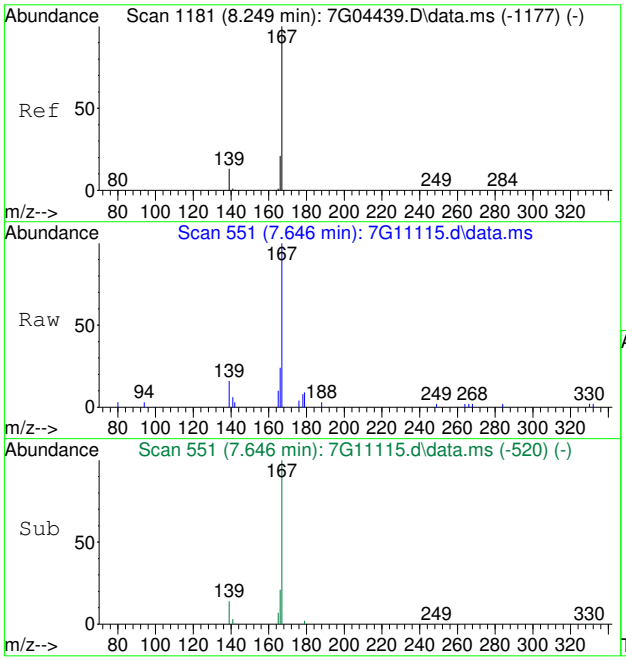


#14
Anthracene
Concen: 1.09 ppm
RT: 7.473 min Scan# 526
Delta R.T. 0.007 min
Lab File: 7G11115.d
Acq: 10 Aug 2020 8:38 pm

Tgt Ion:178 Resp: 12880

Ion	Ratio	Lower	Upper
178	100		
179	15.7	0.0	45.1
176	18.4	0.0	48.8

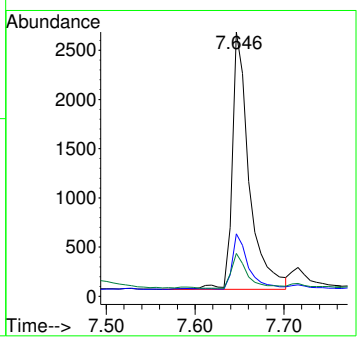


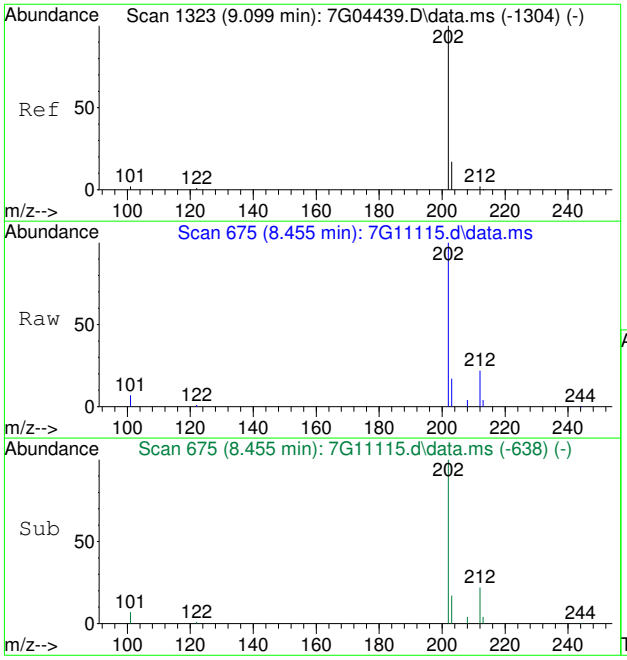


#15
Carbazole
Concen: 0.16 ppm
RT: 7.646 min Scan# 551
Delta R.T. 0.014 min
Lab File: 7G11115.d
Acq: 10 Aug 2020 8:38 pm

Tgt Ion:167 Resp: 3452

Ion	Ratio	Lower	Upper
167	100		
166	21.6	1.2	41.2
139	13.3	0.0	32.8

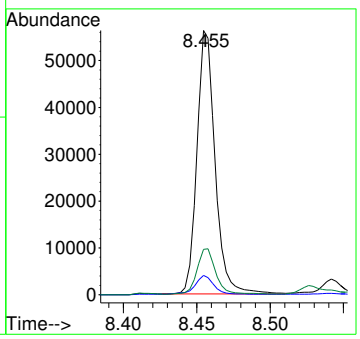


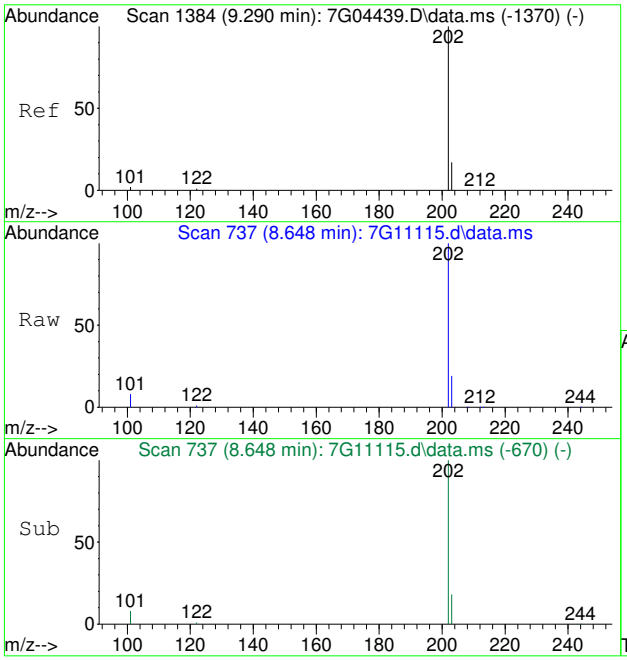


#16
Fluoranthene
Concen: 2.19 ppm
RT: 8.455 min Scan# 675
Delta R.T. 0.006 min
Lab File: 7G11115.d
Acq: 10 Aug 2020 8:38 pm

Tgt Ion:202 Resp: 48458

Ion	Ratio	Lower	Upper
202	100		
101	7.2	0.0	32.2
203	16.9	0.0	47.2

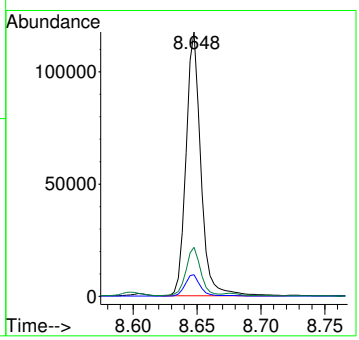


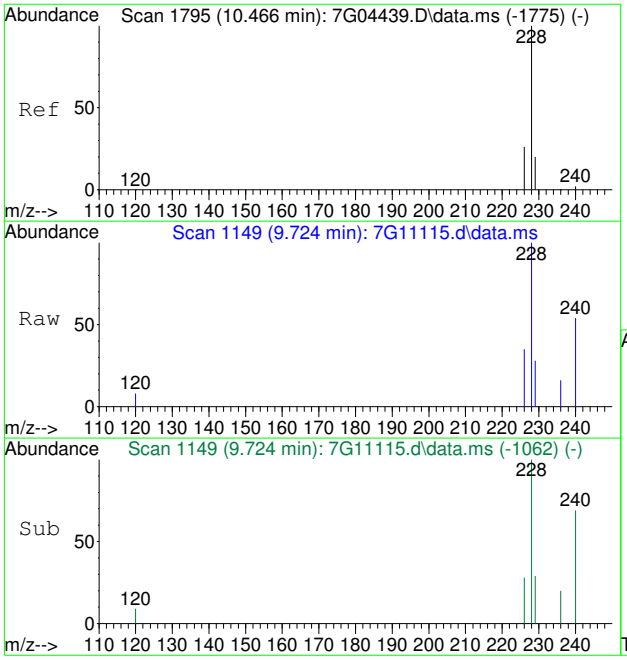


#19
Pyrene
Concen: 3.85 ppm
RT: 8.648 min Scan# 737
Delta R.T. 0.009 min
Lab File: 7G11115.d
Acq: 10 Aug 2020 8:38 pm

Tgt Ion:202 Resp: 94711

Ion	Ratio	Lower	Upper
202	100		
101	8.1	0.0	32.4
203	18.3	0.0	47.4

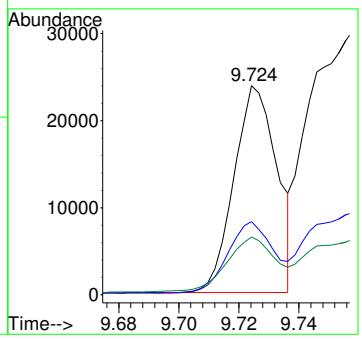


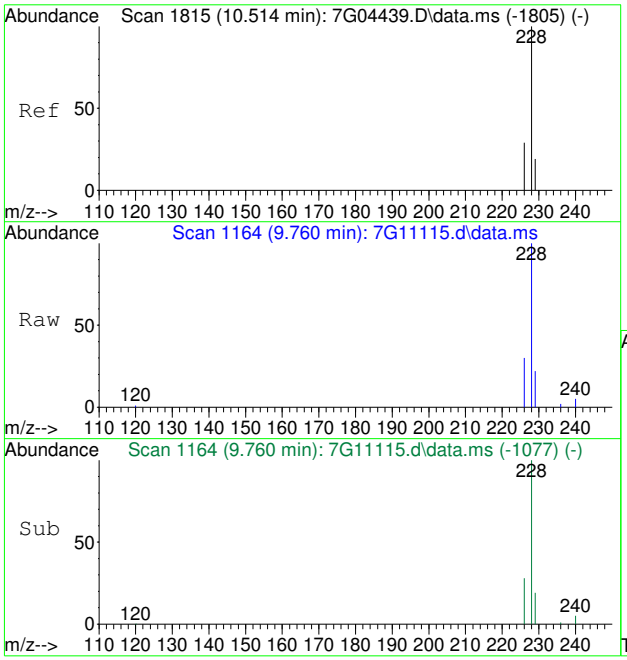


#20
Benzo[a]anthracene
Concen: 1.24 ppm
RT: 9.724 min Scan# 1149
Delta R.T. 0.009 min
Lab File: 7G11115.d
Acq: 10 Aug 2020 8:38 pm

Tgt Ion:228 Resp: 23772

Ion	Ratio	Lower	Upper
228	100		
226	35.3	0.0	56.1
229	26.8	0.0	49.5

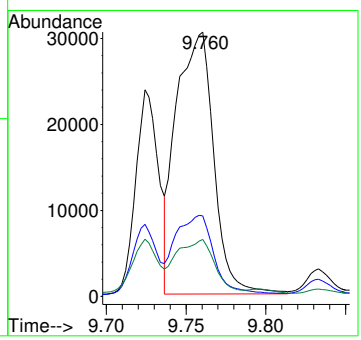


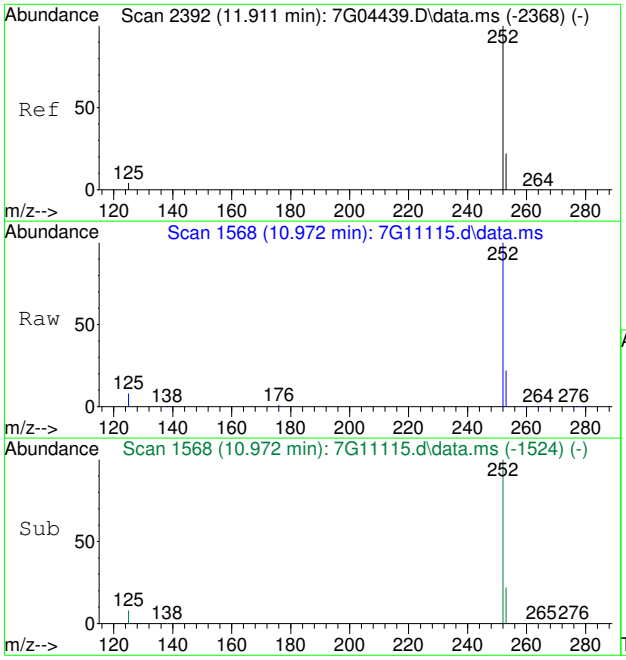


#21
Chrysene
Concen: 2.32 ppm
RT: 9.760 min Scan# 1164
Delta R.T. 0.009 min
Lab File: 7G11115.d
Acq: 10 Aug 2020 8:38 pm

Tgt Ion:228 Resp: 49906

Ion	Ratio	Lower	Upper
228	100		
226	29.5	0.0	58.9
229	19.7	0.0	49.5

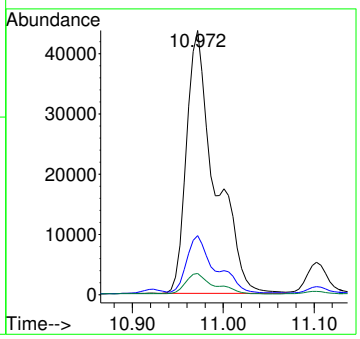


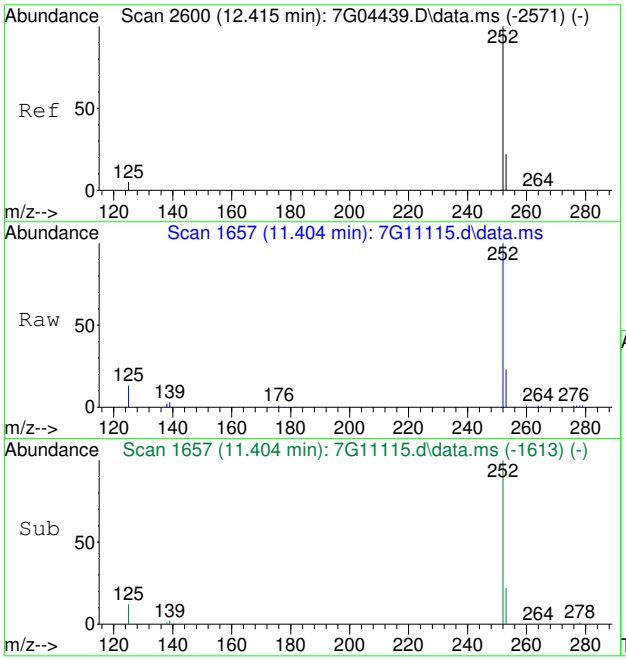


#23
Benzo[b]fluoranthene
Concen: 5.08 ppm
RT: 10.972 min Scan# 1568
Delta R.T. 0.014 min
Lab File: 7G11115.d
Acq: 10 Aug 2020 8:38 pm

Tgt Ion:252 Resp: 94833

Ion	Ratio	Lower	Upper
252	100		
253	21.5	0.0	51.7
125	7.7	0.0	34.5

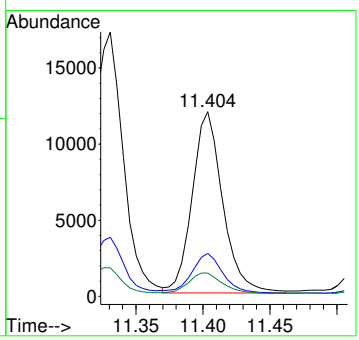


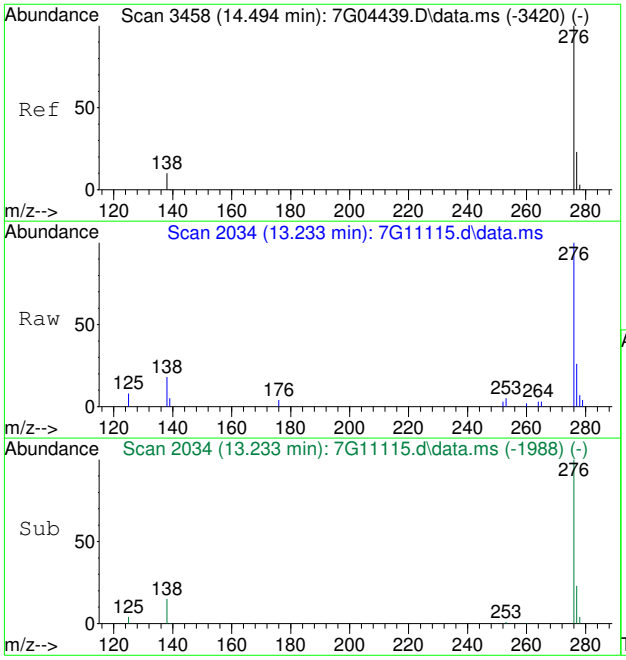


#25
Benzo[a]pyrene
Concen: 1.04 ppm
RT: 11.404 min Scan# 1657
Delta R.T. 0.014 min
Lab File: 7G11115.d
Acq: 10 Aug 2020 8:38 pm

Tgt Ion:252 Resp: 18974

Ion	Ratio	Lower	Upper
252	100		
253	21.6	0.0	51.6
125	11.0	0.0	34.8

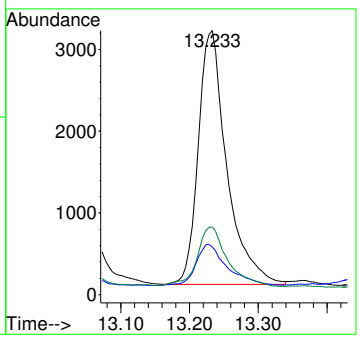


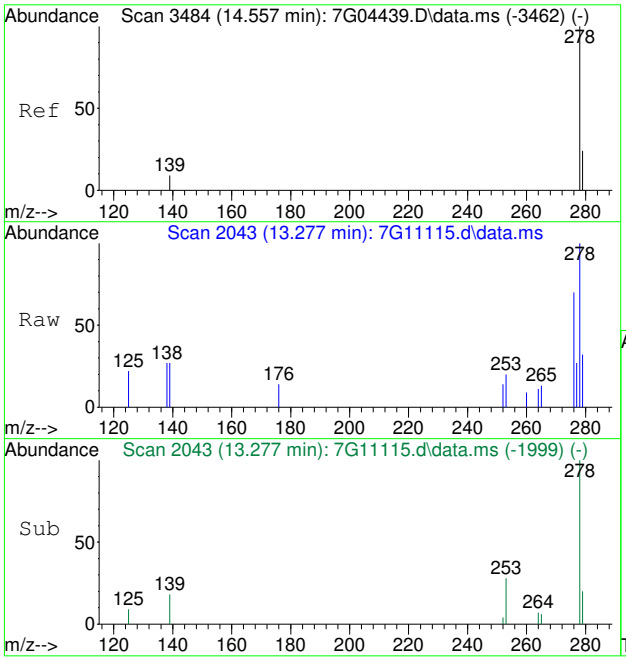


#26
Indeno[1,2,3-cd]pyrene
Concen: 0.76 ppm
RT: 13.233 min Scan# 2034
Delta R.T. 0.024 min
Lab File: 7G11115.d
Acq: 10 Aug 2020 8:38 pm

Tgt Ion:276 Resp: 8965

Ion	Ratio	Lower	Upper
276	100		
138	15.2	0.0	39.6
277	23.2	0.0	53.1

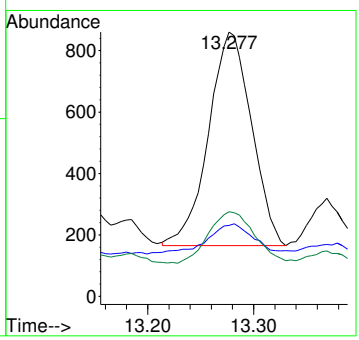


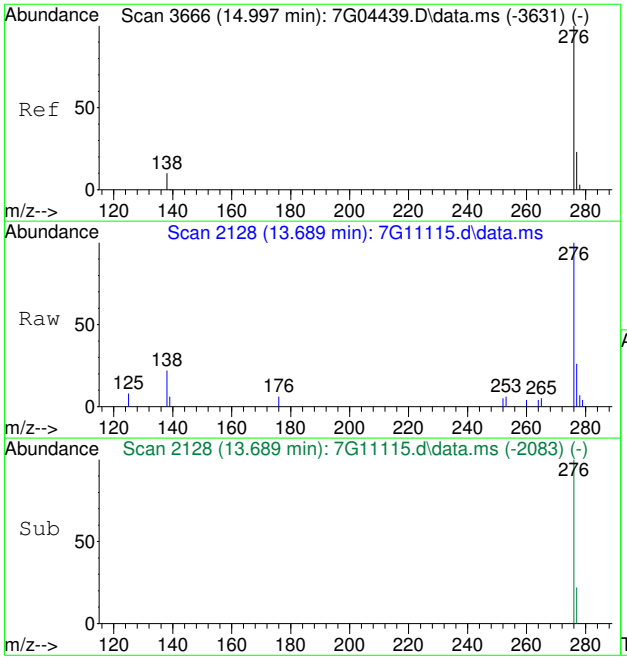


#27
Dibenz[a,h]anthracene
Concen: 0.15 ppm
RT: 13.277 min Scan# 2043
Delta R.T. 0.014 min
Lab File: 7G11115.d
Acq: 10 Aug 2020 8:38 pm

Tgt Ion:278 Resp: 1962

Ion	Ratio	Lower	Upper
278	100		
139	12.3	0.0	38.8
279	23.6	0.0	53.6

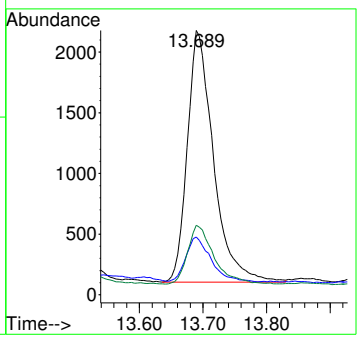




#28
Benzo[g,h,i]perylene
Concen: 0.41 ppm
RT: 13.689 min Scan# 2128
Delta R.T. 0.019 min
Lab File: 7G11115.d
Acq: 10 Aug 2020 8:38 pm

Tgt Ion:276 Resp: 5932

Ion	Ratio	Lower	Upper
276	100		
138	17.5	0.0	40.5
277	23.3	0.0	53.2



Manual Integrations APPROVED
(compounds with "m" flag)
Naresh Jiawan
08/11/20 12:03

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11116.d
Acq On : 10 Aug 2020 9:02 pm
Operator : FOUADS
Sample : fa77576-14 e
Misc : op81483,S7G482,14.9,,,1,1,soil
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Aug 11 03:21:27 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

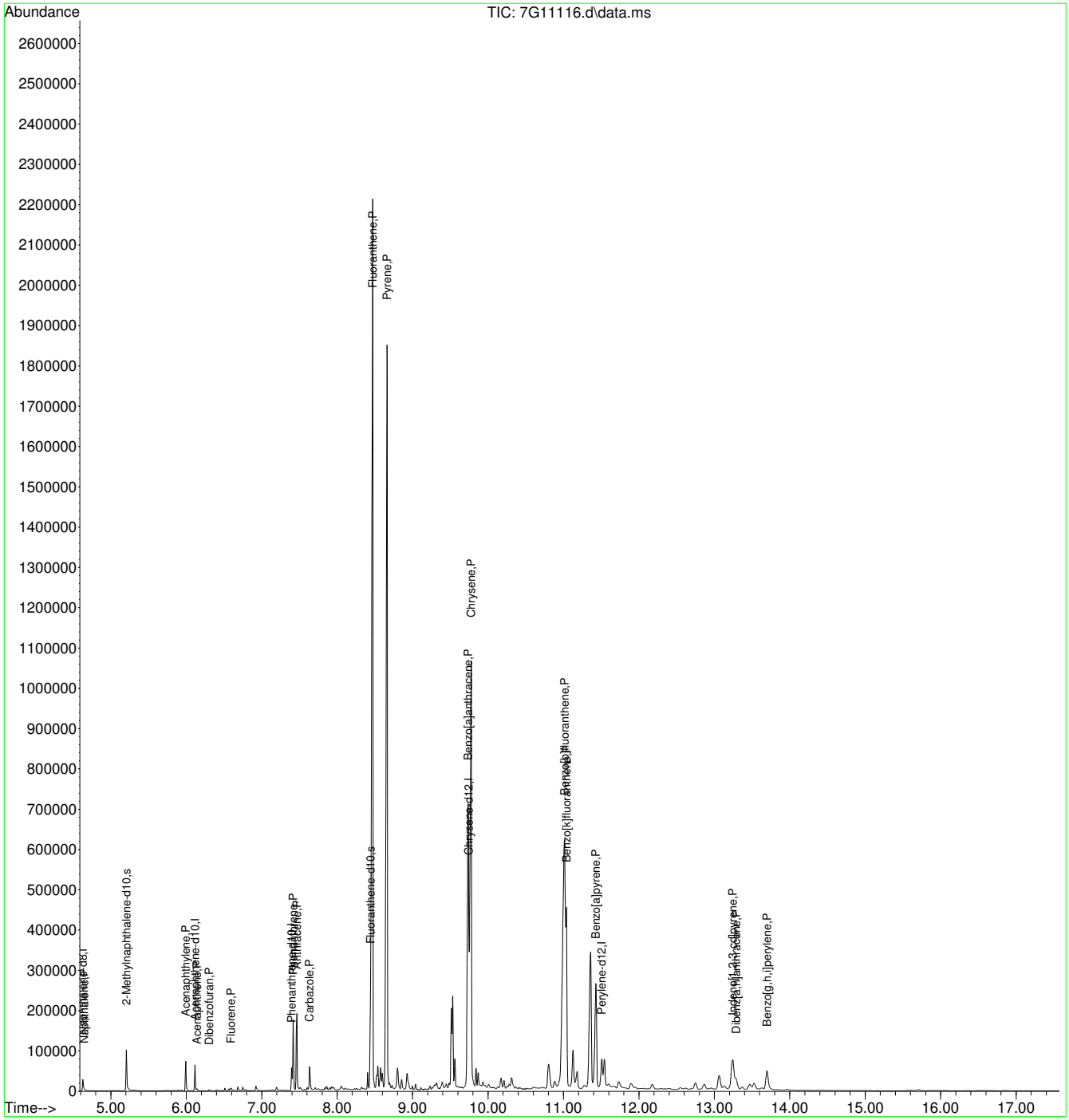
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.628	136	25172	4.00	ppm	0.00
6) Acenaphthene-d10	6.113	164	19675	4.00	ppm	0.00
11) Phenanthrene-d10	7.396	188	38015	4.00	ppm	0.00
18) Chrysene-d12	9.744	240	81424	4.00	ppm	0.02
22) Perylene-d12	11.506	264	67018	4.00	ppm	0.03
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.205	152	36394	9.66	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 96.60%			
17) Fluoranthene-d10	8.442	212	201249	10.13	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 101.30%			
Target Compounds						Qvalue
2) Naphthalene	4.646	128	1350	0.19	ppm	99
7) Acenaphthylene	5.993	152	44295	3.91	ppm	99
8) Acenaphthene	6.142	153	1523	0.21	ppm	96
9) Dibenzofuran	6.302	168	1883	0.36	ppm	89
10) Fluorene	6.592	166	3166	0.40	ppm	97
13) Phenanthrene	7.417	178	96016	7.57	ppm	97
14) Anthracene	7.466	178	130691	10.11	ppm	99
15) Carbazole	7.633	167	42208	1.86	ppm	99
16) Fluoranthene	8.470	202	1743911	63.23	ppm	97
19) Pyrene	8.660	202	1641014	47.70	ppm	94
20) Benzo[a]anthracene	9.734	228	572941	21.38	ppm	85
21) Chrysene	9.775	228	919018	32.69	ppm	97
23) Benzo[b]fluoranthene	11.015	252	1557018	68.45	ppm	97
24) Benzo[k]fluoranthene	11.040	252	293854m	11.86	ppm	
25) Benzo[a]pyrene	11.428	252	317412	14.32	ppm	98
26) Indeno[1,2,3-cd]pyrene	13.243	276	137240	9.49	ppm	95
27) Dibenz[a,h]anthracene	13.287	278	33079	2.06	ppm	97
28) Benzo[g,h,i]perylene	13.699	276	78170	4.48	ppm	94

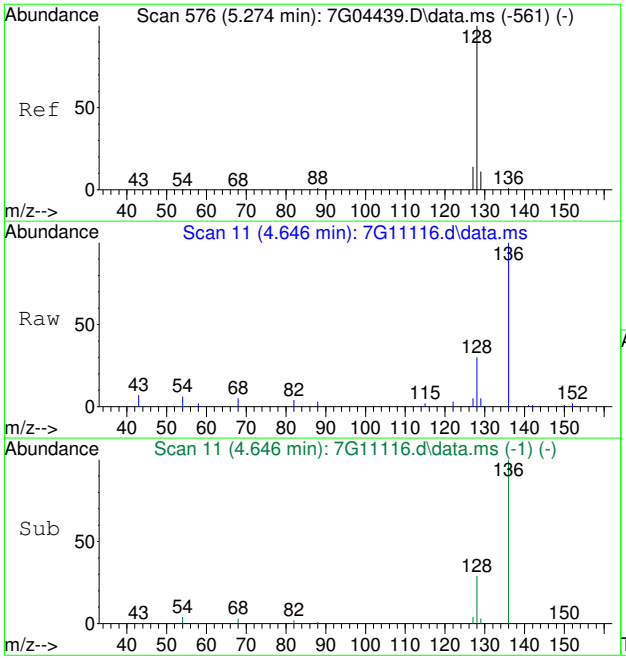
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11116.d
Acq On : 10 Aug 2020 9:02 pm
Operator : FOUADS
Sample : fa77576-14 e
Misc : op81483,S7G482,14.9,,,1,1,soil
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Aug 11 03:21:27 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

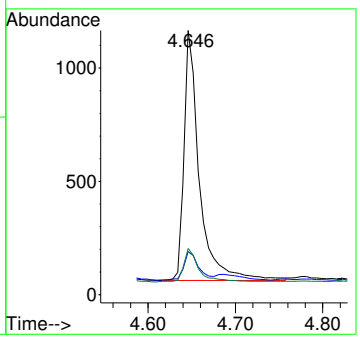


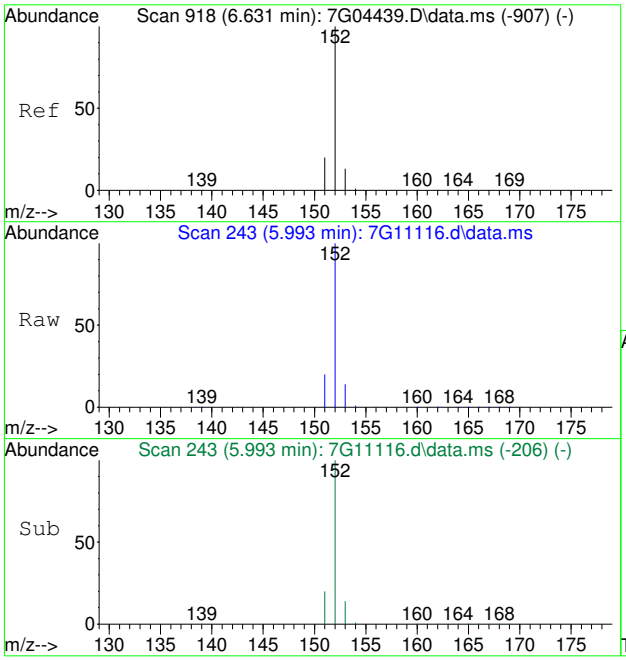


#2
Naphthalene
Concen: 0.19 ppm
RT: 4.646 min Scan# 11
Delta R.T. -0.000 min
Lab File: 7G11116.d
Acq: 10 Aug 2020 9:02 pm

Tgt Ion:128 Resp: 1350

Ion	Ratio	Lower	Upper
128	100		
129	11.3	0.0	40.9
127	13.2	0.0	43.5

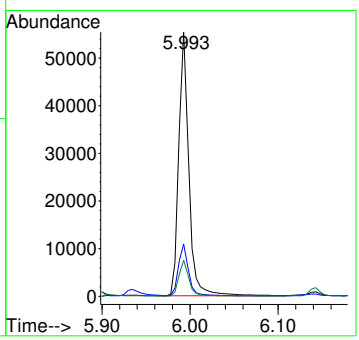


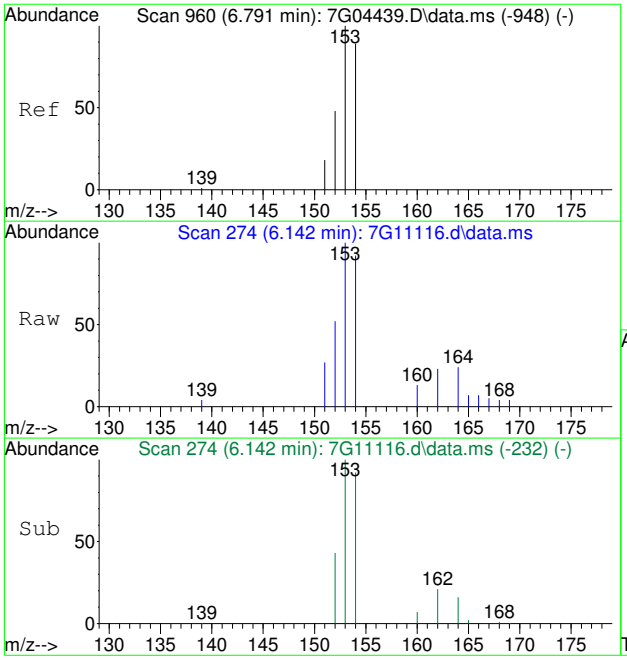


#7
Acenaphthylene
Concen: 3.91 ppm
RT: 5.993 min Scan# 243
Delta R.T. -0.000 min
Lab File: 7G11116.d
Acq: 10 Aug 2020 9:02 pm

Tgt Ion:152 Resp: 44295

Ion	Ratio	Lower	Upper
152	100		
151	19.6	0.0	49.8
153	13.6	0.0	42.8

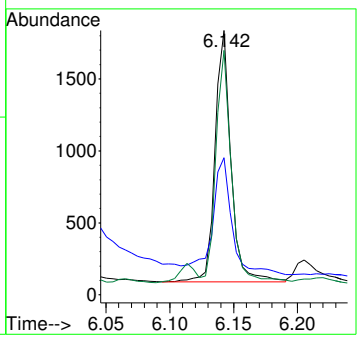


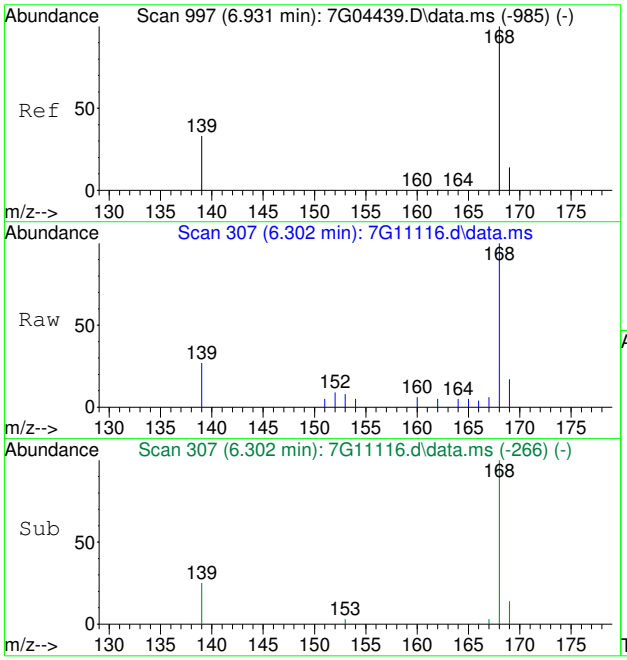


#8
Acenaphthene
Concen: 0.21 ppm
RT: 6.142 min Scan# 274
Delta R.T. 0.005 min
Lab File: 7G11116.d
Acq: 10 Aug 2020 9:02 pm

Tgt Ion:153 Resp: 1523

Ion	Ratio	Lower	Upper
153	100		
152	44.6	18.3	78.3
154	92.0	59.3	119.3

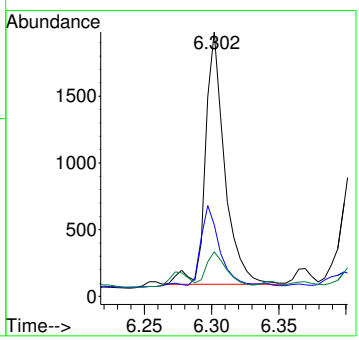


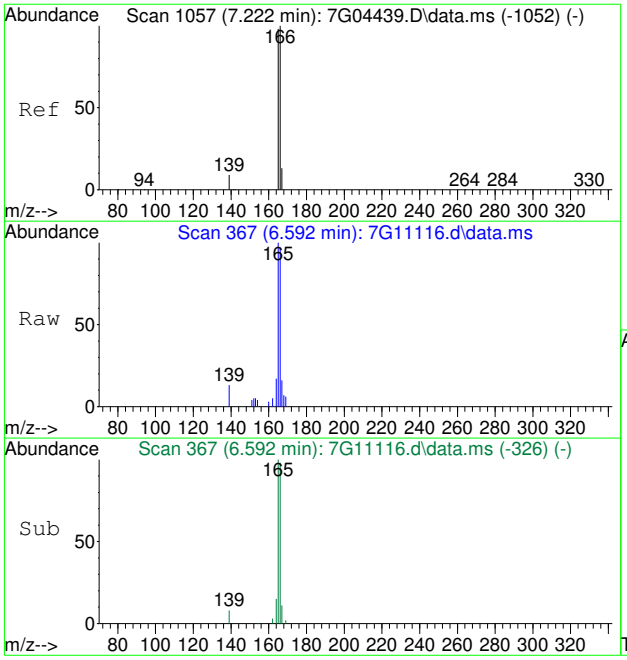


#9
Dibenzofuran
Concen: 0.36 ppm
RT: 6.302 min Scan# 307
Delta R.T. -0.000 min
Lab File: 7G11116.d
Acq: 10 Aug 2020 9:02 pm

Tgt Ion:168 Resp: 1883

Ion	Ratio	Lower	Upper
168	100		
139	24.3	12.6	52.6
169	13.1	0.0	33.8

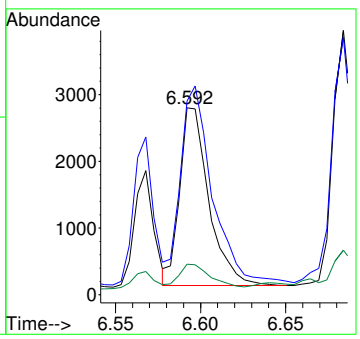


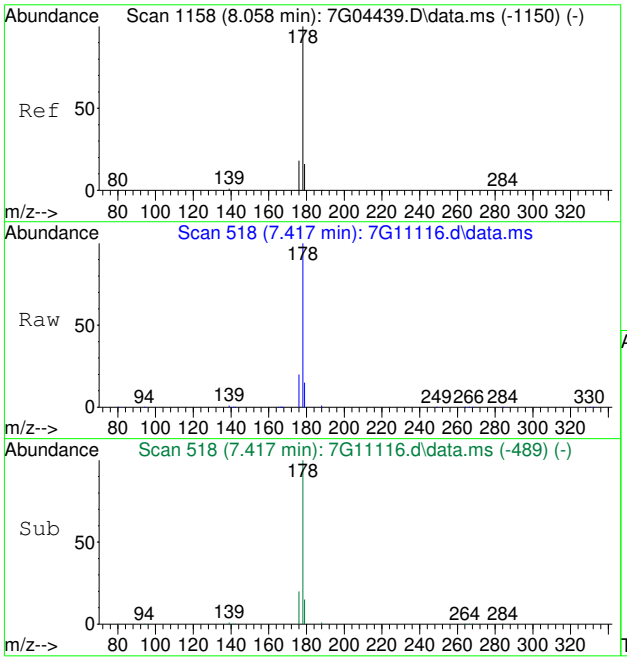


#10
Fluorene
Concen: 0.40 ppm
RT: 6.592 min Scan# 367
Delta R.T. -0.000 min
Lab File: 7G11116.d
Acq: 10 Aug 2020 9:02 pm

Tgt Ion:166 Resp: 3166

Ion	Ratio	Lower	Upper
166	100		
165	100.7	68.2	128.2
167	11.9	0.0	42.9

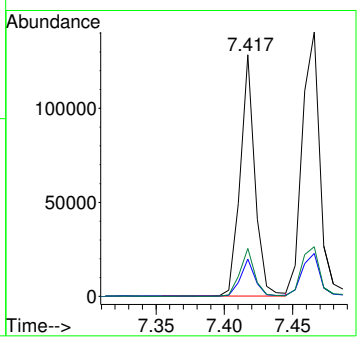


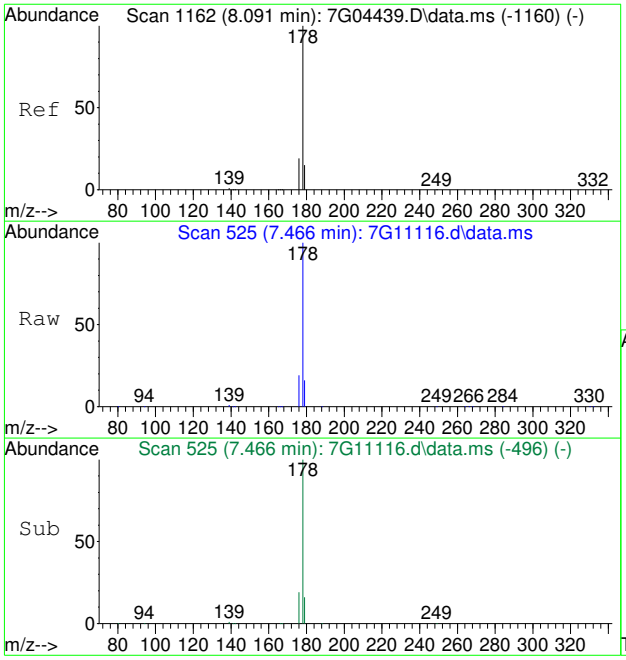


#13
Phenanthrene
Concen: 7.57 ppm
RT: 7.417 min Scan# 518
Delta R.T. -0.000 min
Lab File: 7G11116.d
Acq: 10 Aug 2020 9:02 pm

Tgt Ion:178 Resp: 96016

Ion	Ratio	Lower	Upper
178	100		
179	15.2	0.0	45.7
176	19.8	0.0	48.0

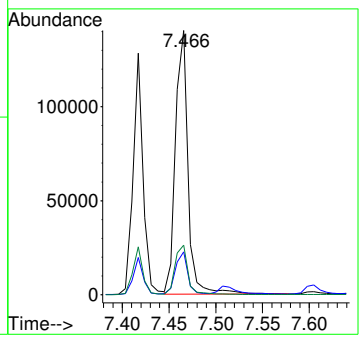


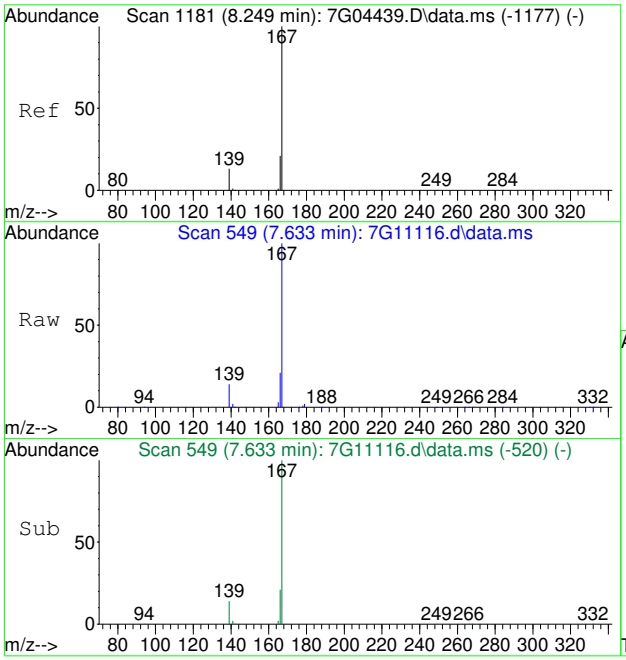


#14
Anthracene
Concen: 10.11 ppm
RT: 7.466 min Scan# 525
Delta R.T. -0.000 min
Lab File: 7G11116.d
Acq: 10 Aug 2020 9:02 pm

Tgt Ion:178 Resp: 130691

Ion	Ratio	Lower	Upper
178	100		
179	16.1	0.0	45.1
176	18.7	0.0	48.8

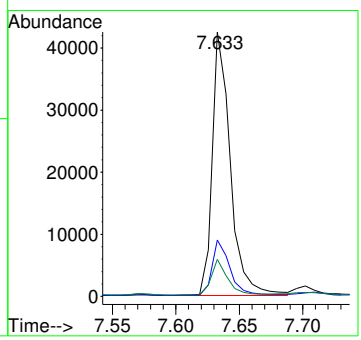


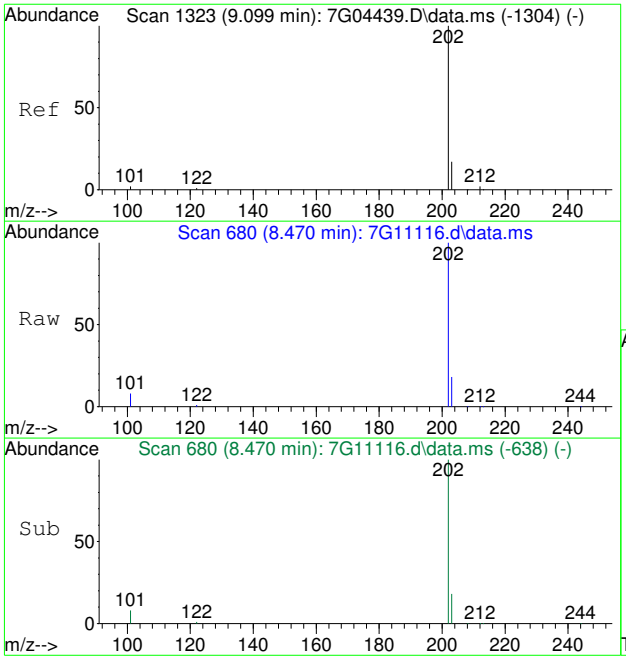


#15
Carbazole
Concen: 1.86 ppm
RT: 7.633 min Scan# 549
Delta R.T. -0.000 min
Lab File: 7G11116.d
Acq: 10 Aug 2020 9:02 pm

Tgt Ion:167 Resp: 42208

Ion	Ratio	Lower	Upper
167	100		
166	20.9	1.2	41.2
139	13.3	0.0	32.8

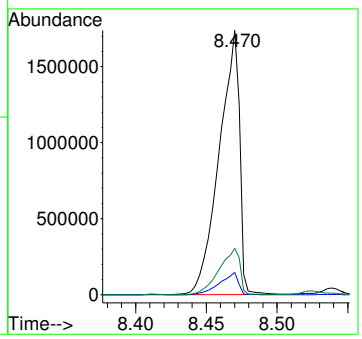


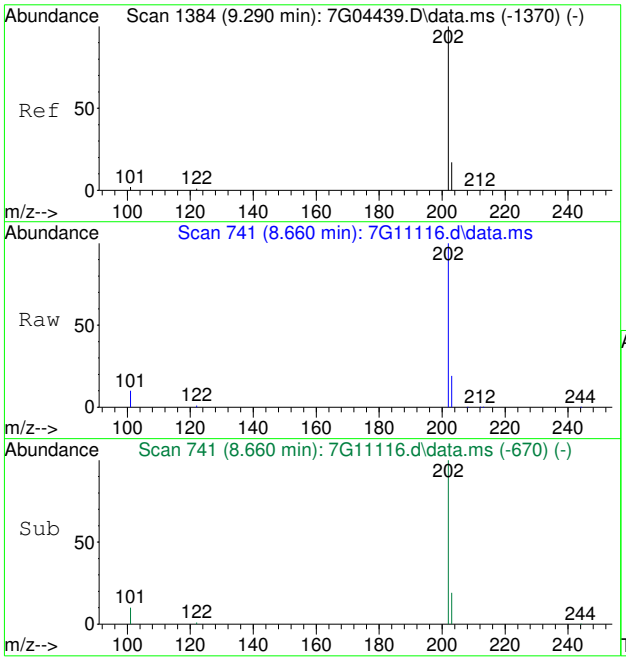


#16
Fluoranthene
Concen: 63.23 ppm
RT: 8.470 min Scan# 680
Delta R.T. 0.022 min
Lab File: 7G11116.d
Acq: 10 Aug 2020 9:02 pm

Tgt Ion:202 Resp: 1743911

Ion	Ratio	Lower	Upper
202	100		
101	8.4	0.0	32.2
203	17.5	0.0	47.2

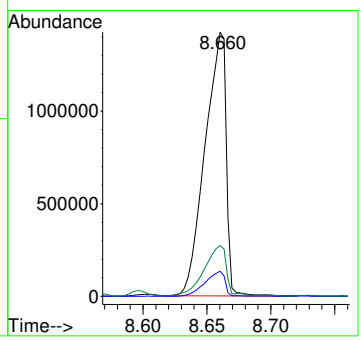


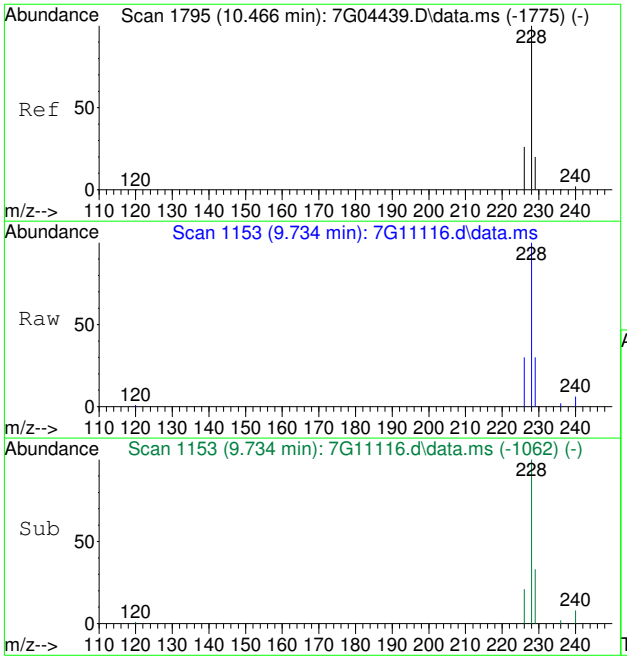


#19
Pyrene
Concen: 47.70 ppm
RT: 8.660 min Scan# 741
Delta R.T. 0.022 min
Lab File: 7G11116.d
Acq: 10 Aug 2020 9:02 pm

Tgt Ion:202 Resp: 1641014

Ion	Ratio	Lower	Upper
202	100		
101	9.6	0.0	32.4
203	19.1	0.0	47.4

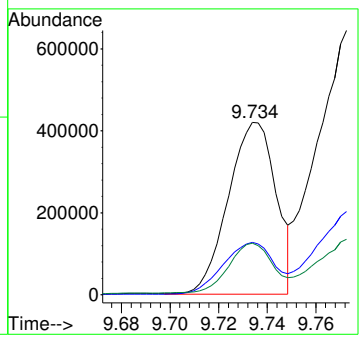


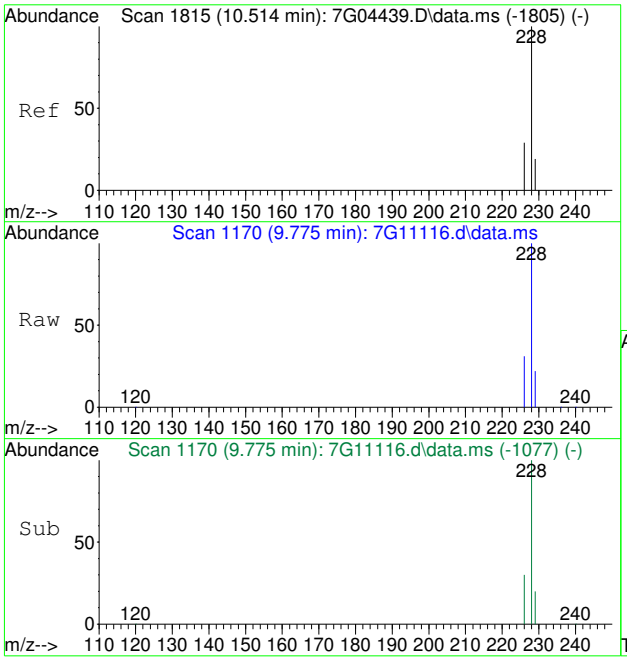


#20
Benzo[a]anthracene
Concen: 21.38 ppm
RT: 9.734 min Scan# 1153
Delta R.T. 0.019 min
Lab File: 7G11116.d
Acq: 10 Aug 2020 9:02 pm

Tgt Ion:228 Resp: 572941

Ion	Ratio	Lower	Upper
228	100		
226	30.3	0.0	56.1
229	30.7	0.0	49.5

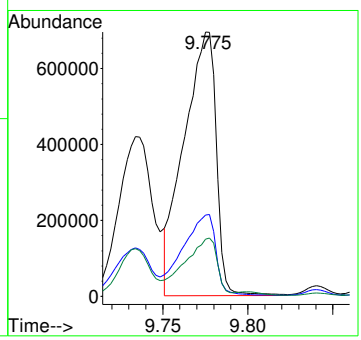


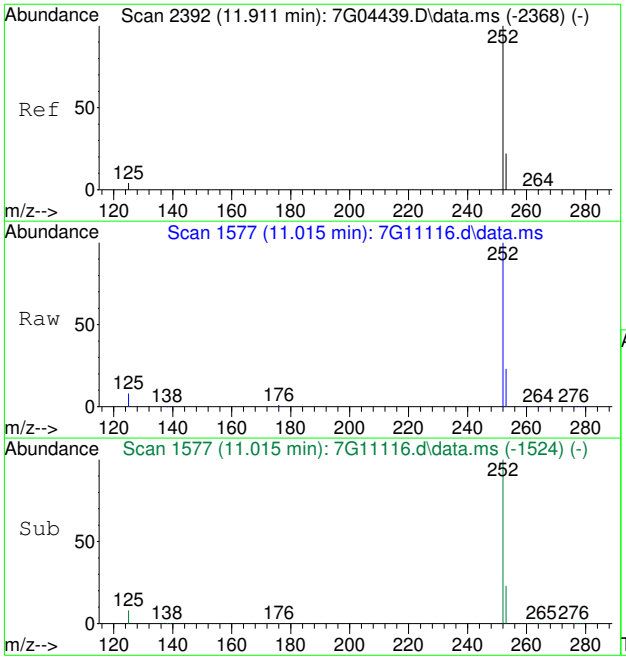


#21
Chrysene
Concen: 32.69 ppm
RT: 9.775 min Scan# 1170
Delta R.T. 0.024 min
Lab File: 7G11116.d
Acq: 10 Aug 2020 9:02 pm

Tgt Ion:228 Resp: 919018

Ion	Ratio	Lower	Upper
228	100		
226	30.5	0.0	58.9
229	21.1	0.0	49.5

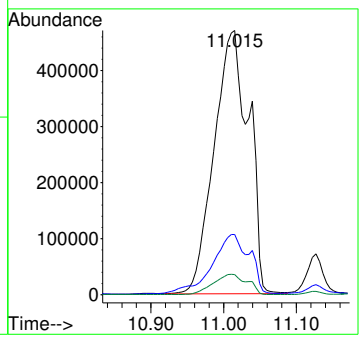


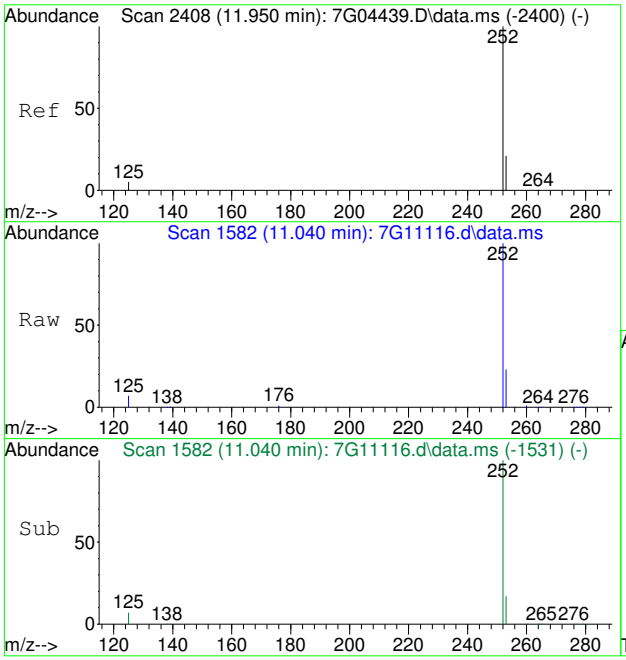


#23
Benzo[b]fluoranthene
Concen: 68.45 ppm
RT: 11.015 min Scan# 1577
Delta R.T. 0.058 min
Lab File: 7G11116.d
Acq: 10 Aug 2020 9:02 pm

Tgt Ion:252 Resp: 1557018

Ion	Ratio	Lower	Upper
252	100		
253	22.3	0.0	51.7
125	7.6	0.0	34.5

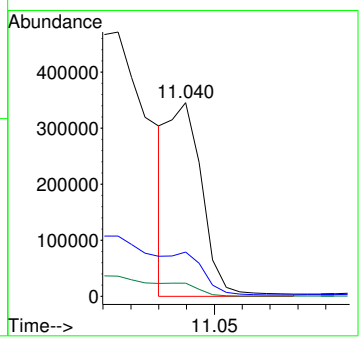


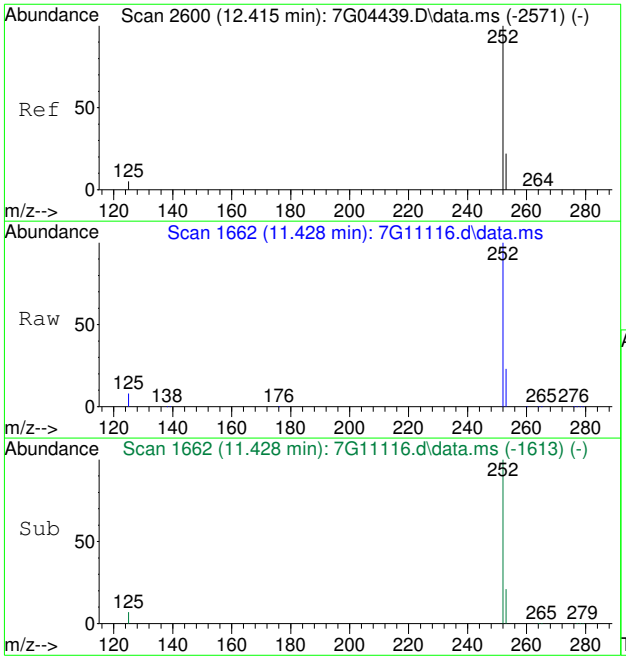


#24
Benzo[k]fluoranthene
Concen: 11.86 ppm m
RT: 11.040 min Scan# 1582
Delta R.T. 0.048 min
Lab File: 7G11116.d
Acq: 10 Aug 2020 9:02 pm

Tgt Ion:252 Resp: 293854

Ion	Ratio	Lower	Upper
252	100		
253	22.8	0.0	51.5
125	6.9	0.0	34.8

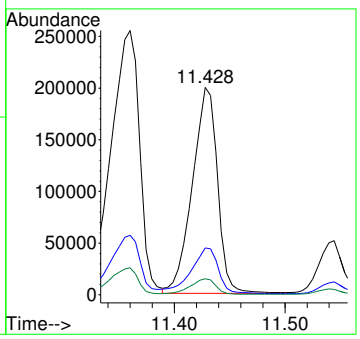


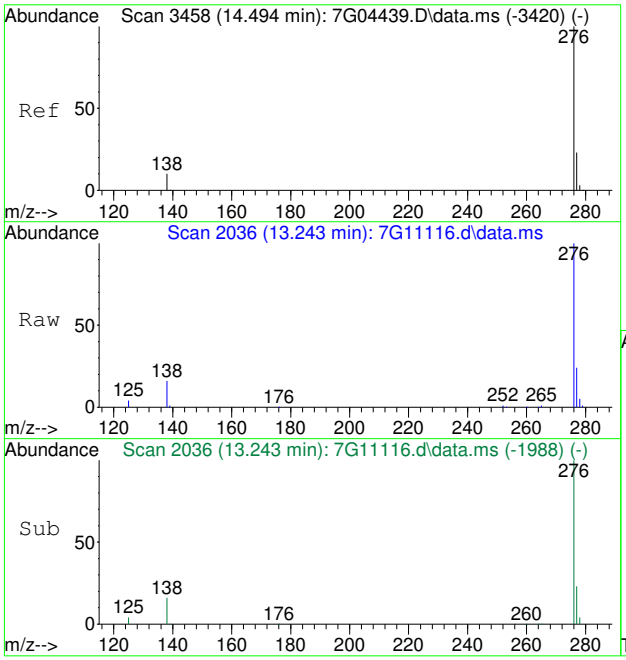


#25
Benzo[a]pyrene
Concen: 14.32 ppm
RT: 11.428 min Scan# 1662
Delta R.T. 0.039 min
Lab File: 7G11116.d
Acq: 10 Aug 2020 9:02 pm

Tgt Ion:252 Resp: 317412

Ion	Ratio	Lower	Upper
252	100		
253	21.4	0.0	51.6
125	7.5	0.0	34.8

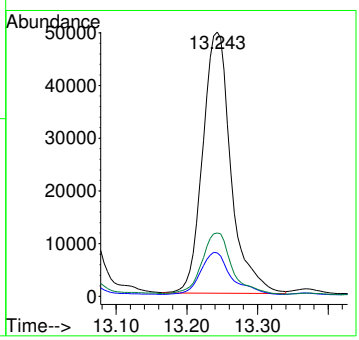


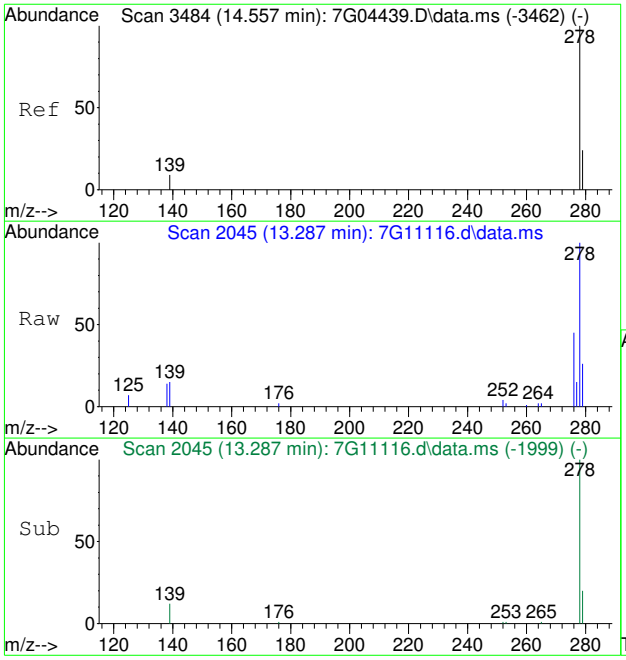


#26
Indeno[1,2,3-cd]pyrene
Concen: 9.49 ppm
RT: 13.243 min Scan# 2036
Delta R.T. 0.034 min
Lab File: 7G11116.d
Acq: 10 Aug 2020 9:02 pm

Tgt Ion:276 Resp: 137240

Ion	Ratio	Lower	Upper
276	100		
138	15.9	0.0	39.6
277	23.4	0.0	53.1

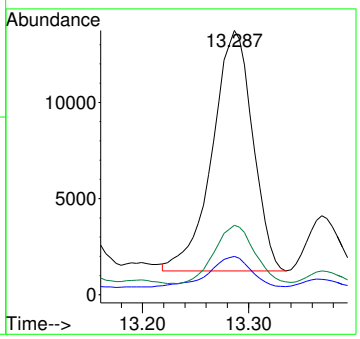


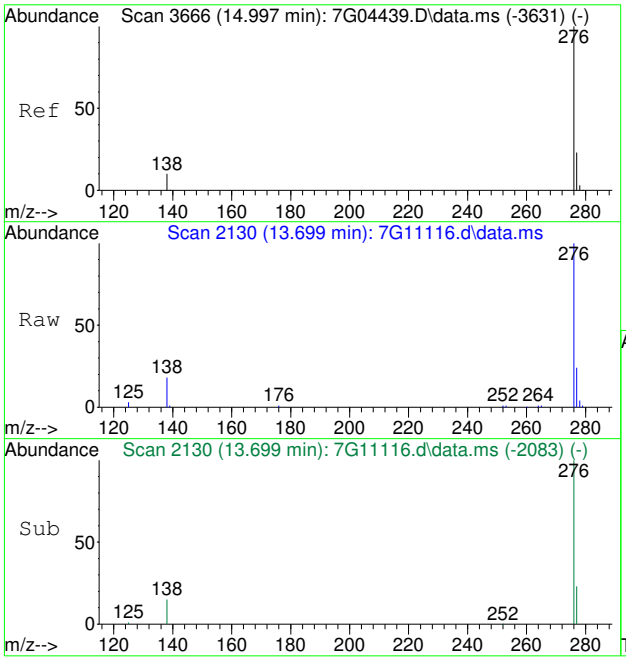


#27
Dibenz[a,h]anthracene
Concen: 2.06 ppm
RT: 13.287 min Scan# 2045
Delta R.T. 0.024 min
Lab File: 7G11116.d
Acq: 10 Aug 2020 9:02 pm

Tgt Ion:278 Resp: 33079

Ion	Ratio	Lower	Upper
278	100		
139	12.6	0.0	38.8
279	24.0	0.0	53.6

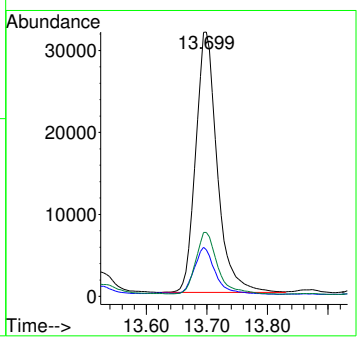




#28
Benzo[g,h,i]perylene
Concen: 4.48 ppm
RT: 13.699 min Scan# 2130
Delta R.T. 0.029 min
Lab File: 7G11116.d
Acq: 10 Aug 2020 9:02 pm

Tgt Ion:276 Resp: 78170

Ion	Ratio	Lower	Upper
276	100		
138	16.8	0.0	40.5
277	23.6	0.0	53.2



Manual Integration Approval Summary

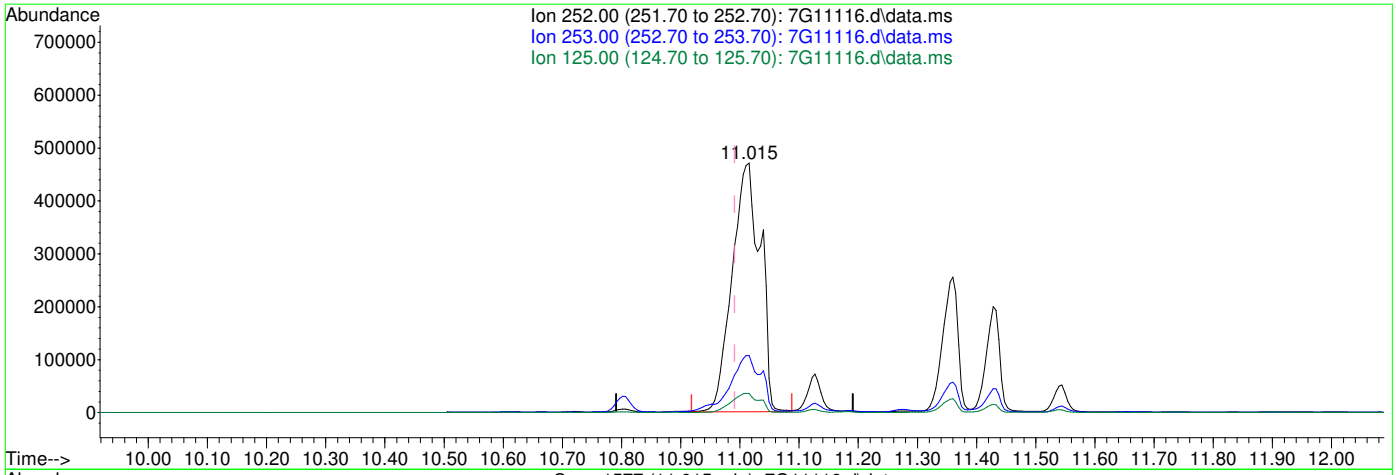
Sample Number: FA77576-14
Lab FileID: 7G11116.D
Injection Time: 08/10/20 21:02
Method: SW846 8270E BY SIM
Analyst approved: 08/11/20 10:52 Fouad Sekkar
Supervisor approved: 08/11/20 12:03 Naresh Jiawan

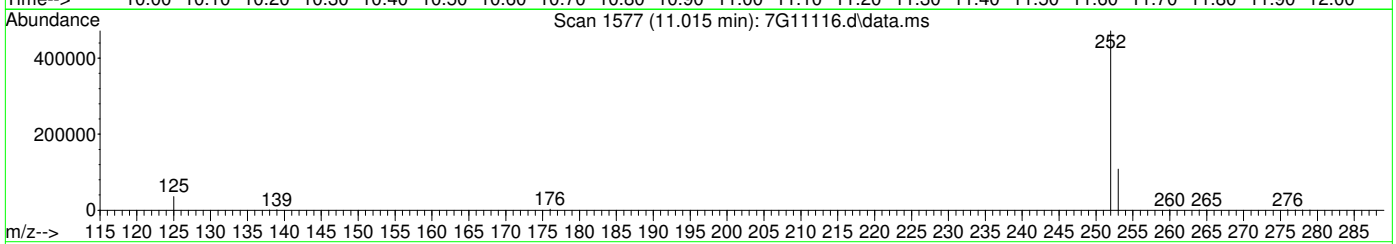
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(k)fluoranthene	207-08-9		11.04	Missed peak

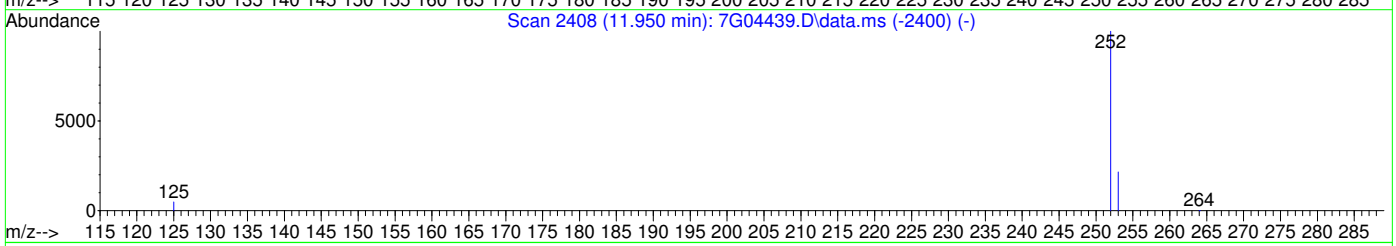
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11116.d
Acq On : 10 Aug 2020 9:02 pm
Operator : FOUADS
Sample : fa77576-14 e
Misc : op81483,S7G482,14.9,,,1,1,soil
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Aug 11 02:37:34 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11116.d\data.ms

(24) Benzo[k]fluoranthene (P)

11.015min (+0.024) 55.73ppm

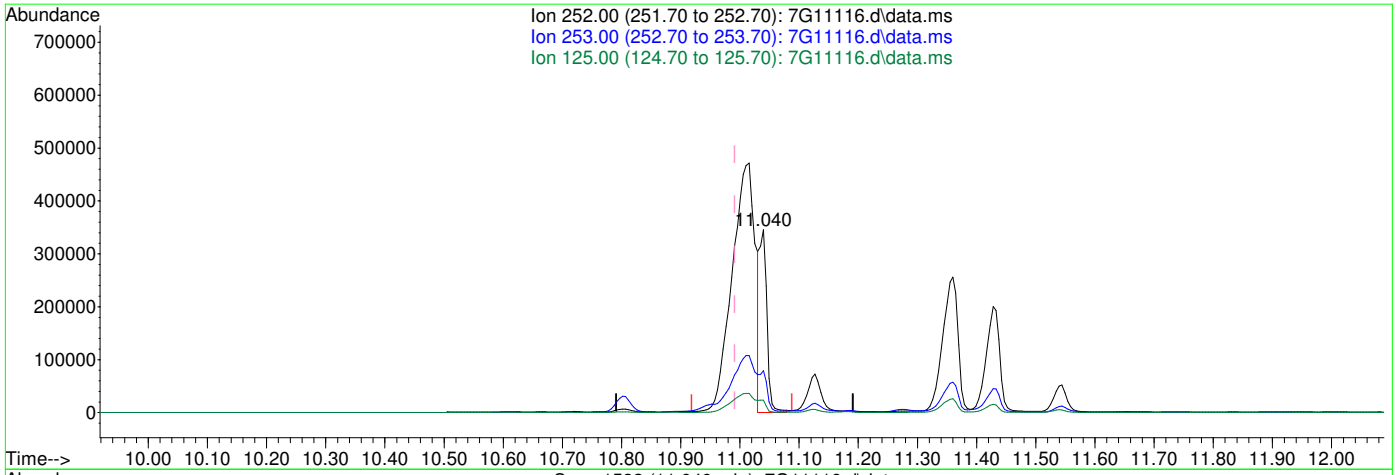
response 1559046

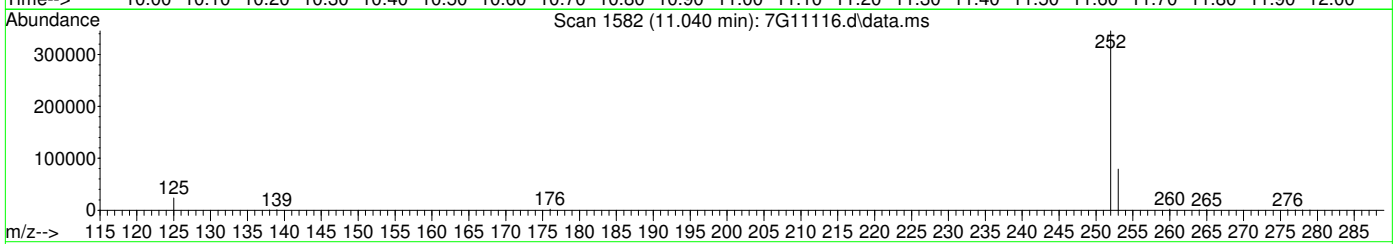
Ion	Exp%	Act%
252.00	100	100
253.00	21.50	22.32
125.00	4.80	7.57
0.00	0.00	0.00

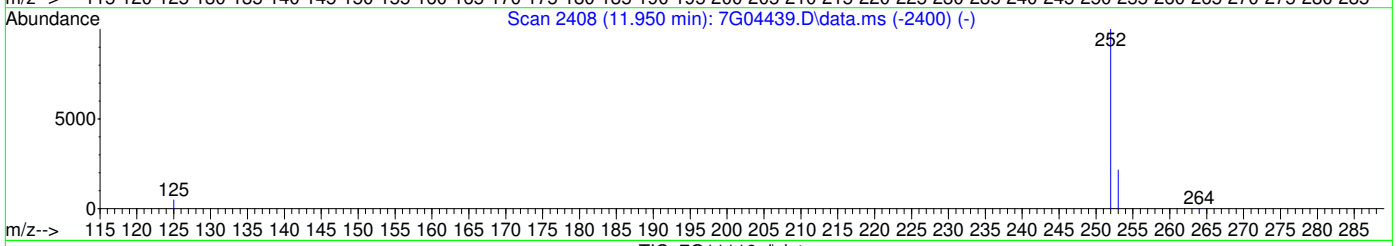
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11116.d
Acq On : 10 Aug 2020 9:02 pm
Operator : FOUADS
Sample : fa77576-14 e
Misc : op81483,S7G482,14.9,,,1,1,soil
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Aug 11 02:37:34 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11116.d\data.ms

(24) Benzo[k]fluoranthene (P)

11.040min (+0.048) 11.86ppm m

response 293854

Ion	Exp%	Act%
252.00	100	100
253.00	21.50	22.83
125.00	4.80	6.85
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072332.d
Acq On : 11 Aug 2020 2:05 pm
Operator : marthav
Sample : op81482-mb E
Misc : op81482,sx2950,30.0,,,1,1,soil
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 12 02:02:52 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

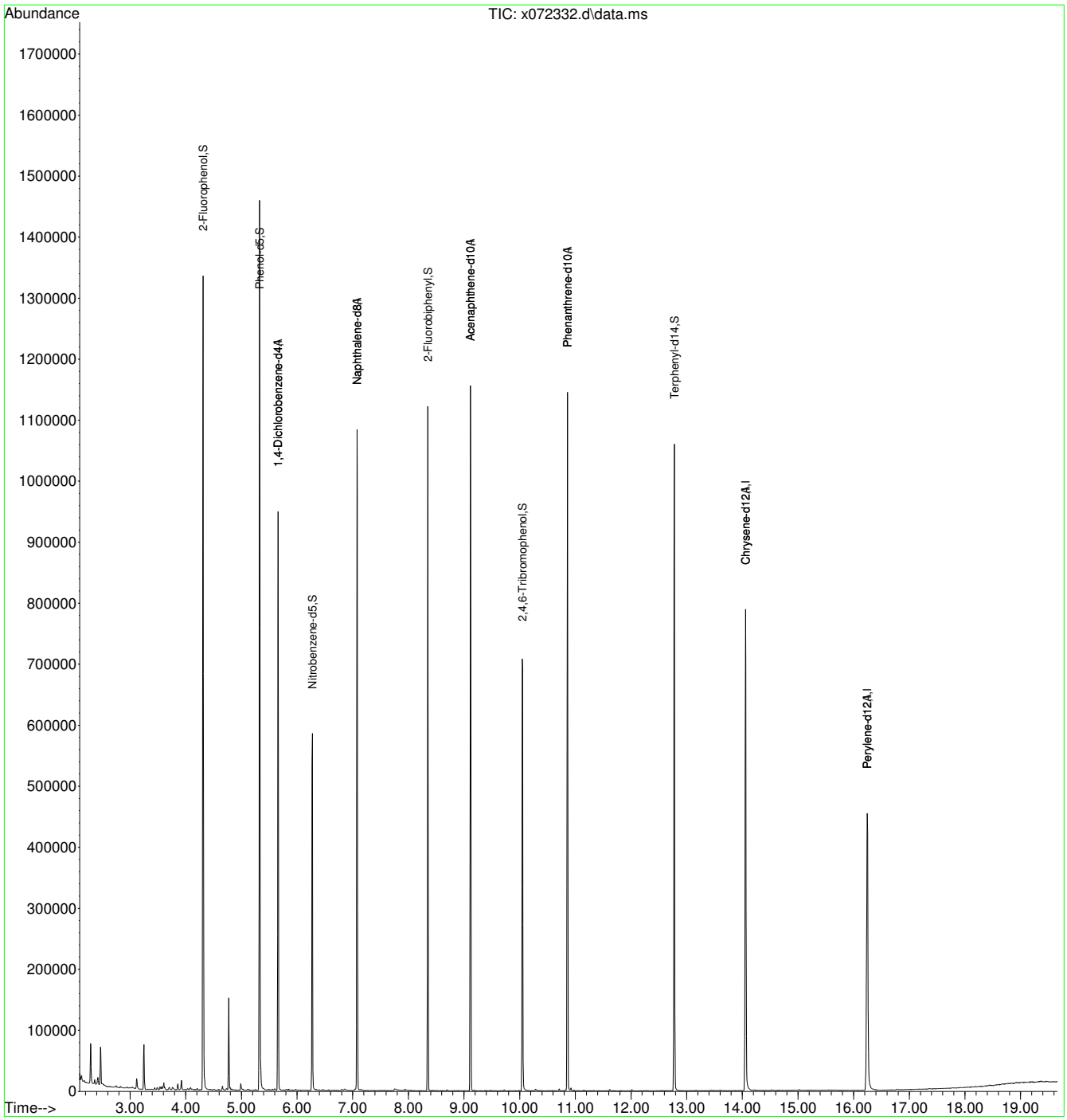
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.660	152	129549	40.00	ppm	0.00
22) Naphthalene-d8	7.077	136	480676	40.00	ppm	0.00
43) Acenaphthene-d10	9.115	164	235184	40.00	ppm	0.00
70) Phenanthrene-d10	10.859	188	406815	40.00	ppm	0.00
92) Chrysene-d12	14.057	240	312428	40.00	ppm	-0.01
102) Perylene-d12	16.245	264	255107	40.00	ppm	-0.01
110) 1,4-Dichlorobenzene-d4A	5.660	152	129549	40.00	ppm	0.00
120) Naphthalene-d8A	7.077	136	480676	40.00	ppm	0.00
127) Acenaphthene-d10A	9.115	164	235184	40.00	ppm	0.00
136) Phenanthrene-d10A	10.859	188	406815	40.00	ppm	0.00
146) Chrysene-d12A	14.057	240	312428	40.00	ppm	-0.01
153) Perylene-d12A	16.245	264	255107	40.00	ppm	-0.01
System Monitoring Compounds						
7) 2-Fluorophenol	4.312	112	328073	70.63	ppm	0.00
Spiked Amount 100.000	Range 40 - 102		Recovery = 70.63%			
9) Phenol-d5	5.328	99	414975	75.09	ppm	0.00
Spiked Amount 100.000	Range 41 - 100		Recovery = 75.09%			
23) Nitrobenzene-d5	6.275	82	170268	34.30	ppm	0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 68.60%			
47) 2-Fluorobiphenyl	8.350	172	305266	35.86	ppm	0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 71.72%			
75) 2,4,6-Tribromophenol	10.051	330	61615	71.59	ppm	0.00
Spiked Amount 100.000	Range 42 - 108		Recovery = 71.59%			
95) Terphenyl-d14	12.779	244	312465	37.64	ppm	0.00
Spiked Amount 50.000	Range 45 - 119		Recovery = 75.28%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072332.d
Acq On : 11 Aug 2020 2:05 pm
Operator : marthav
Sample : op81482-mb E
Misc : op81482,sx2950,30.0,,,1,1,soil
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 12 02:02:52 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11101.d
Acq On : 10 Aug 2020 2:57 pm
Operator : FOUADS
Sample : op81483-mb e
Misc : op81483,S7G482,15.0,,,1,1,soil
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 11 02:36:58 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

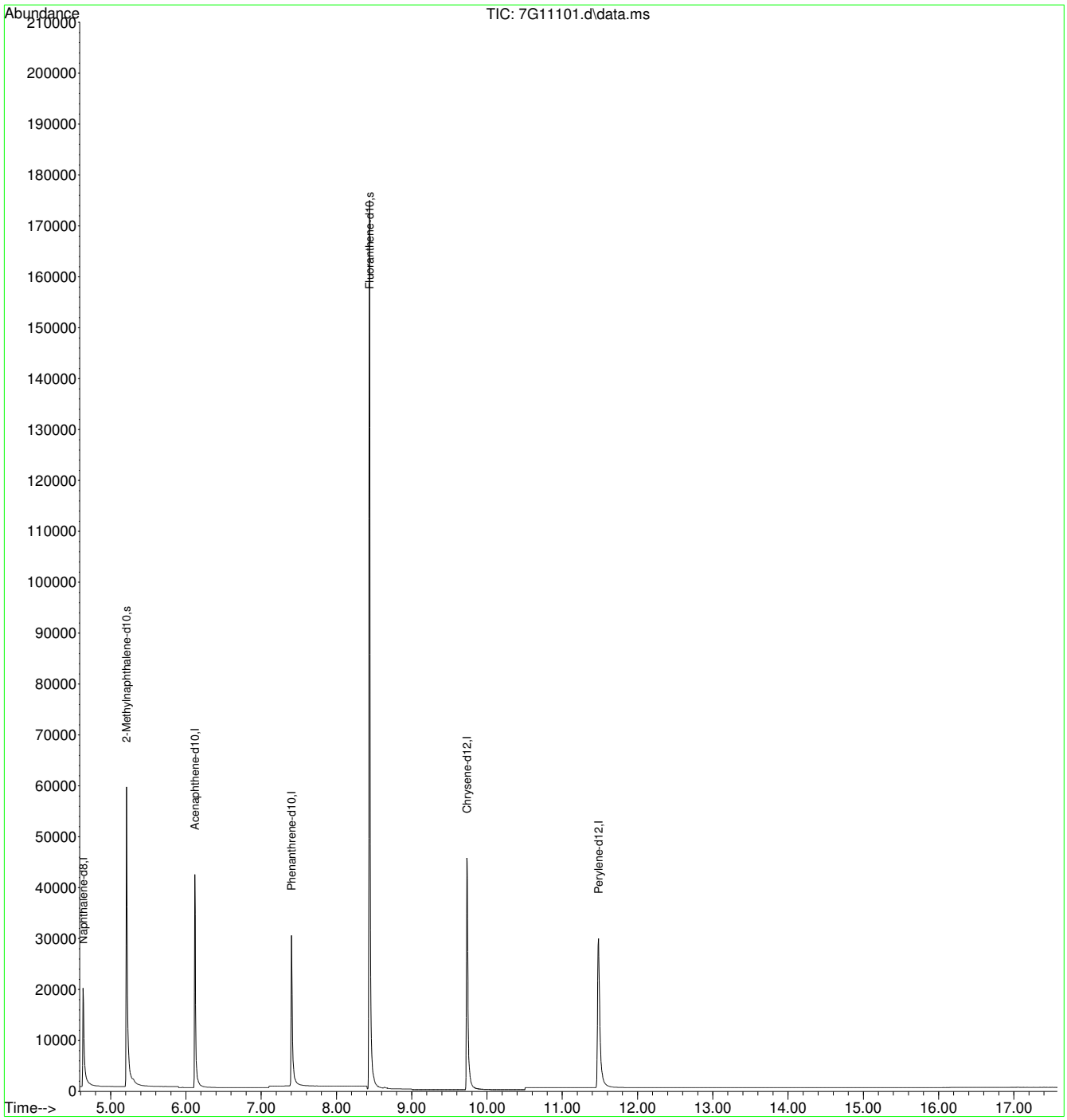
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.634	136	24312	4.00	ppm	0.00
6) Acenaphthene-d10	6.118	164	16384	4.00	ppm	0.00
11) Phenanthrene-d10	7.403	188	31665	4.00	ppm	0.00
18) Chrysene-d12	9.734	240	48325	4.00	ppm	0.00
22) Perylene-d12	11.481	264	44401	4.00	ppm	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.211	152	29841	8.24	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 82.40%			
17) Fluoranthene-d10	8.439	212	136534	8.27	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 82.70%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11101.d
Acq On : 10 Aug 2020 2:57 pm
Operator : FOUADS
Sample : op81483-mb e
Misc : op81483,S7G482,15.0,,,1,1,soil
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 11 02:36:58 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072331.d
Acq On : 11 Aug 2020 1:39 pm
Operator : marthav
Sample : op81482-bs E
Misc : op81482,sx2950,30.0,,,1,1,soil
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 12 02:01:14 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.660	152	148110	40.00	ppm	0.00
22) Naphthalene-d8	7.082	136	595100	40.00	ppm	0.00
43) Acenaphthene-d10	9.120	164	297901	40.00	ppm	0.00
70) Phenanthrene-d10	10.864	188	501986	40.00	ppm	0.00
92) Chrysene-d12	14.068	240	391828	40.00	ppm	0.00
102) Perylene-d12	16.255	264	303605	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	5.660	152	148110	40.00	ppm	0.00
120) Naphthalene-d8A	7.082	136	595100	40.00	ppm	0.00
127) Acenaphthene-d10A	9.120	164	297901	40.00	ppm	0.00
136) Phenanthrene-d10A	10.864	188	501986	40.00	ppm	0.00
146) Chrysene-d12A	14.068	240	391828	40.00	ppm	0.00
153) Perylene-d12A	16.255	264	303605	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	4.312	112	350002	65.91	ppm	0.00
Spiked Amount 100.000	Range 40 - 102		Recovery = 65.91%			
9) Phenol-d5	5.328	99	460169	72.83	ppm	0.00
Spiked Amount 100.000	Range 41 - 100		Recovery = 72.83%			
23) Nitrobenzene-d5	6.275	82	207266	33.72	ppm	0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 67.44%			
47) 2-Fluorobiphenyl	8.355	172	388866	36.06	ppm	0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 72.12%			
75) 2,4,6-Tribromophenol	10.056	330	82454	76.84	ppm	0.00
Spiked Amount 100.000	Range 42 - 108		Recovery = 76.84%			
95) Terphenyl-d14	12.779	244	380351	36.53	ppm	0.00
Spiked Amount 50.000	Range 45 - 119		Recovery = 73.06%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.488	88	63110	24.86	ppm	# 44
3) N-nitrosodimethylamine	2.820	42	122920	27.27	ppm	# 44
4) Pyridine	2.852	79	192300	31.14	ppm	# 42
5) Benzaldehyde	5.189	106	137478	31.14	ppm	95
6) Aniline	5.312	93	227282	25.81	ppm	64
8) bis(2-Chloroethyl)ether	5.392	93	182274	33.54	ppm	81
10) Phenol	5.344	94	247896	33.08	ppm	91
11) 2-Chlorophenol	5.446	128	194548	34.33	ppm	81
12) 1,3-Dichlorobenzene	5.596	146	192413	32.68	ppm	98
13) 1,4-Dichlorobenzene	5.676	146	203187	32.62	ppm	95
14) 1,2-Dichlorobenzene	5.836	146	188261	31.81	ppm	96
15) Benzyl alcohol	5.836	108	135734	34.61	ppm	86
16) 2,2'-Oxybis(1-chloropr...	5.986	45	323585	28.34	ppm	68
17) 2-Methylphenol	5.986	108	180831	33.54	ppm	90
18) Acetophenone	6.114	105	261927	32.83	ppm	96
19) Hexachloroethane	6.211	117	78759	33.67	ppm	94
20) N-Nitroso-di-n-propyla...	6.130	70	147903	35.11	ppm	67
21) 3&4-Methylphenol	6.168	108	414998	74.47	ppm	96
24) Nitrobenzene	6.302	77	212866	35.01	ppm	86
25) Isophorone	6.574	82	382772	35.26	ppm	95
26) 2-Nitrophenol	6.655	139	105063	36.34	ppm	71
27) 2,4-Dimethylphenol	6.751	107	176121	32.81	ppm	94
29) bis(2-Chloroethoxy)met...	6.842	93	224215	35.30	ppm	94
30) Benzoic Acid	6.954	105	332248	68.66	ppm	92
31) 2,4-Dichlorophenol	6.954	162	161444	37.31	ppm	96
32) 1,2,4-Trichlorobenzene	7.024	180	154599	34.96	ppm	98
34) Naphthalene	7.104	128	556504	34.49	ppm	99
35) 4-Chloroaniline	7.195	127	231076	33.91	ppm	92
36) 2,6-Dichlorophenol	7.200	162	161091	36.51	ppm	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072331.d
Acq On : 11 Aug 2020 1:39 pm
Operator : marthav
Sample : op81482-bs E
Misc : op81482,sx2950,30.0,,,1,1,soil
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 12 02:01:14 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

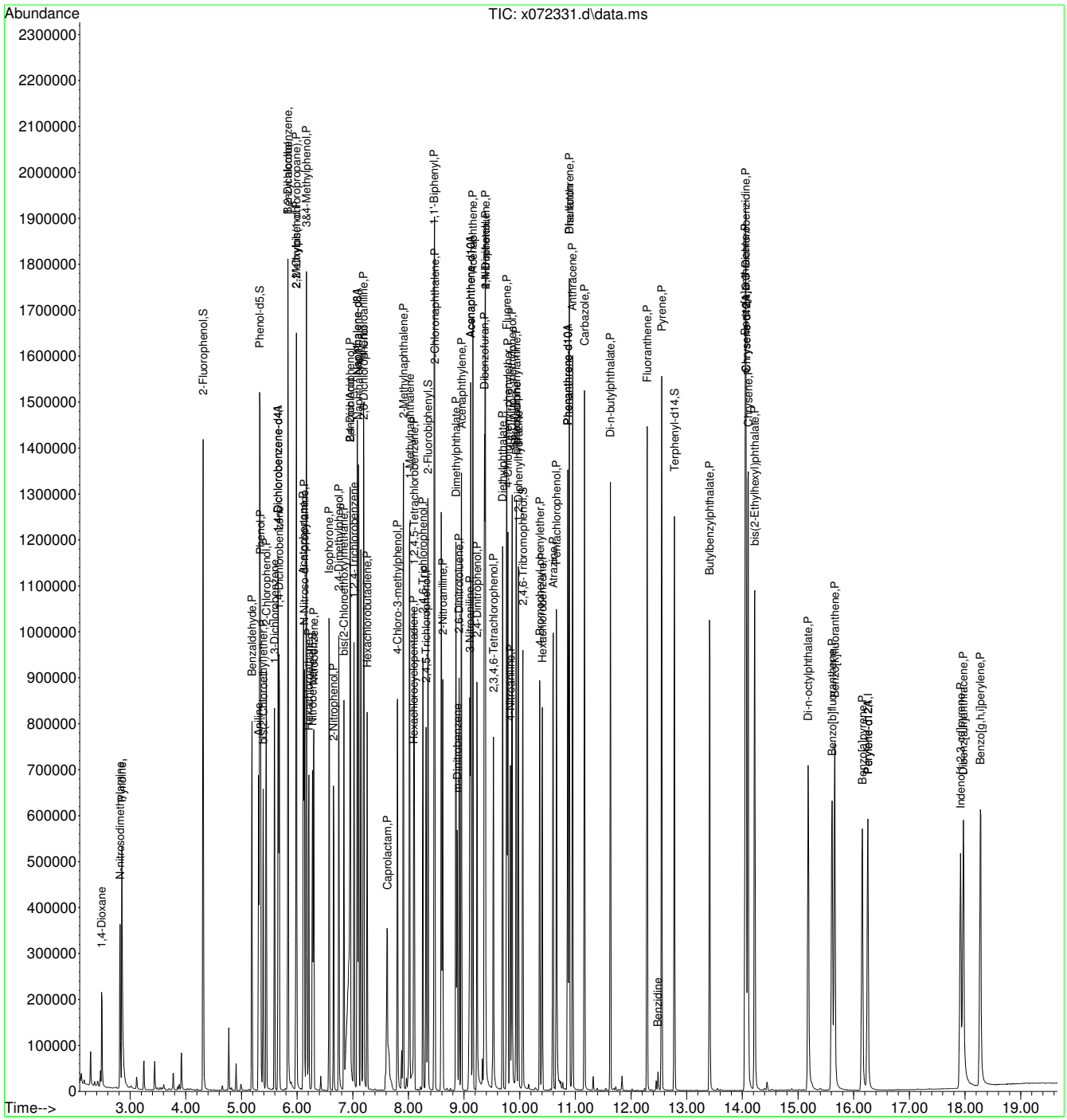
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
37)	Hexachlorobutadiene	7.259	225	78982	36.22	ppm		99
38)	Caprolactam	7.623	113	68662	38.24	ppm	#	65
39)	4-Chloro-3-methylphenol	7.805	107	168886	36.60	ppm		96
40)	2-Methylnaphthalene	7.912	142	363155	34.03	ppm		98
41)	1-Methylnaphthalene	8.024	142	336379	32.92	ppm		98
42)	1,2,4,5-Tetrachloroben...	8.104	216	150791	33.97	ppm		97
44)	Hexachlorocyclopentadiene	8.093	237	59256	26.93	ppm		97
45)	2,4,6-Trichlorophenol	8.259	196	107032	39.14	ppm		99
46)	2,4,5-Trichlorophenol	8.318	196	121399	40.57	ppm		98
48)	1,1'-Biphenyl	8.462	154	436969	35.92	ppm		99
49)	2-Chloronaphthalene	8.473	162	333926	36.57	ppm		94
50)	2-Nitroaniline	8.618	65	162579	48.36	ppm	#	71
52)	Acenaphthylene	8.954	152	602879	40.52	ppm		99
53)	Dimethylphthalate	8.853	163	421656	40.12	ppm		99
54)	m-Dinitrobenzene	8.880	168	71491	40.82	ppm		84
55)	2,6-Dinitrotoluene	8.912	165	99190	39.99	ppm		70
57)	Acenaphthene	9.158	153	374709	37.87	ppm		99
58)	3-Nitroaniline	9.104	138	112153	41.10	ppm		96
59)	2,4-Dinitrophenol	9.233	184	119368	80.40	ppm	#	43
60)	Dibenzofuran	9.366	168	489369	37.05	ppm		93
61)	2,4-Dinitrotoluene	9.382	165	142827	45.16	ppm	#	66
62)	4-Nitrophenol	9.382	109	112651	73.90	ppm	#	65
64)	2,3,4,6-Tetrachlorophenol	9.527	232	87004	37.93	ppm		88
65)	Fluorene	9.767	166	420042	40.76	ppm		97
66)	4-Chlorophenyl-phenyle...	9.789	204	201868	40.59	ppm		92
67)	Diethylphthalate	9.693	149	429122	40.88	ppm		97
69)	4-Nitroaniline	9.832	138	121253	39.94	ppm		86
71)	4,6-Dinitro-2-methylph...	9.864	198	179570	84.96	ppm	#	67
72)	n-Nitrosodiphenylamine	9.939	169	321803	41.25	ppm		94
73)	Diphenylamine	9.939	169	321803	35.15	ppm		94
74)	1,2-Diphenylhydrazine	9.976	77	428374	38.08	ppm		95
78)	4-Bromophenyl-phenylether	10.361	248	95328	39.55	ppm		85
79)	Hexachlorobenzene	10.404	284	93253	38.78	ppm		75
82)	Atrazine	10.602	200	111657	38.10	ppm		89
83)	Pentachlorophenol	10.661	266	107947	64.54	ppm		98
84)	Phenanthrene	10.891	178	616726	40.66	ppm		99
85)	Anthracene	10.950	178	616363	38.99	ppm		98
86)	Disulfoton	10.891	88	55486	9.15	ppm		54
87)	Carbazole	11.163	167	592268	42.45	ppm		99
89)	Di-n-butylphthalate	11.629	149	688406	44.21	ppm		98
91)	Fluoranthene	12.292	202	596174	42.36	ppm		97
93)	Benzidine	12.485	184	17275	2.49	ppm		99
94)	Pyrene	12.549	202	620310	38.13	ppm		99
97)	Butylbenzylphthalate	13.410	149	286981	42.79	ppm		89
98)	3,3'-Dichlorobenzidine	14.057	252	166556	41.17	ppm		97
99)	Benzo[a]anthracene	14.052	228	508689	41.31	ppm		99
100)	Chrysene	14.105	228	572889	43.68	ppm		98
101)	bis(2-Ethylhexyl)phtha...	14.223	149	408817	44.79	ppm		98
103)	Di-n-octylphthalate	15.180	149	569141	47.23	ppm		94
104)	Benzo[b]fluoranthene	15.614	252	419454	46.83	ppm		97
105)	Benzo[k]fluoranthene	15.662	252	450300	41.78	ppm		97
106)	Benzo[a]pyrene	16.154	252	368205	43.21	ppm		96
107)	Indeno[1,2,3-cd]pyrene	17.919	276	311441	51.87	ppm		87
108)	Dibenz[a,h]anthracene	17.972	278	340712	50.06	ppm		90
109)	Benzo[g,h,i]perylene	18.277	276	373851	45.26	ppm		86

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072331.d
Acq On : 11 Aug 2020 1:39 pm
Operator : marthav
Sample : op81482-bs E
Misc : op81482,sx2950,30.0,,,1,1,soil
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 12 02:01:14 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11102.d
Acq On : 10 Aug 2020 3:21 pm
Operator : FOUADS
Sample : op81483-bs e
Misc : op81483,S7G482,15.0,,,1,1,soil
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 11 02:37:01 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

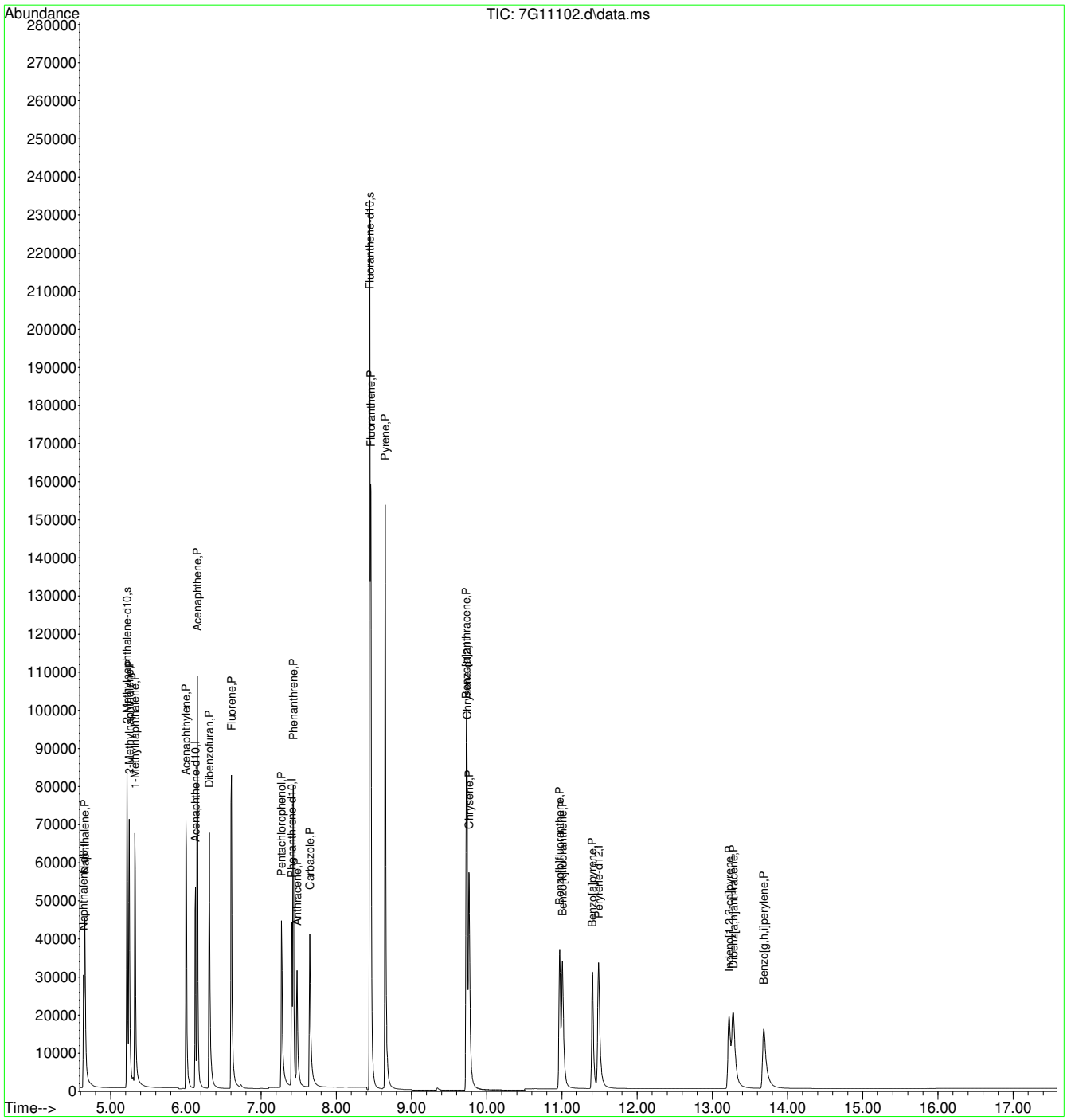
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.640	136	25347	4.00	ppm	0.01
6) Acenaphthene-d10	6.128	164	16910	4.00	ppm	0.01
11) Phenanthrene-d10	7.410	188	32726	4.00	ppm	0.01
18) Chrysene-d12	9.739	240	51832	4.00	ppm	0.01
22) Perylene-d12	11.486	264	48241	4.00	ppm	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.217	152	30918	8.19	ppm	0.01
Spiked Amount 10.000	Range 50 - 150		Recovery = 81.90%			
17) Fluoranthene-d10	8.445	212	144811	8.49	ppm	0.01
Spiked Amount 10.000	Range 50 - 150		Recovery = 84.90%			
Target Compounds						Qvalue
2) Naphthalene	4.658	128	37812	5.22	ppm	99
3) 2-Methylnaphthalene	5.246	142	29606	5.25	ppm	97
5) 1-Methylnaphthalene	5.323	142	31354	6.18	ppm	92
7) Acenaphthylene	6.002	152	50679	5.18	ppm	99
8) Acenaphthene	6.152	153	35325	5.53	ppm	99
9) Dibenzofuran	6.312	168	50362	11.10	ppm	96
10) Fluorene	6.607	166	39665	5.71	ppm	95
12) Pentachlorophenol	7.271	266	17815	14.06	ppm	99
13) Phenanthrene	7.431	178	60290	5.55	ppm	98
14) Anthracene	7.480	178	28806	2.64	ppm	99
15) Carbazole	7.647	167	41442	2.12	ppm	97
16) Fluoranthene	8.461	202	117026	5.70	ppm	98
19) Pyrene	8.651	202	120602	5.84	ppm	97
20) Benzo[a]anthracene	9.729	228	46916	2.90	ppm	99
21) Chrysene	9.765	228	56247	3.13	ppm	99
23) Benzo[b]fluoranthene	10.972	252	41146	2.51	ppm	98
24) Benzo[k]fluoranthene	11.006	252	52321	3.01	ppm	98
25) Benzo[a]pyrene	11.404	252	42005	2.63	ppm	98
26) Indeno[1,2,3-cd]pyrene	13.224	276	44134	4.24	ppm	94
27) Dibenz[a,h]anthracene	13.282	278	33692	2.92	ppm	97
28) Benzo[g,h,i]perylene	13.685	276	37924	3.02	ppm	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11102.d
Acq On : 10 Aug 2020 3:21 pm
Operator : FOUADS
Sample : op81483-bs e
Misc : op81483,S7G482,15.0,,,1,1,soil
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 11 02:37:01 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072352.d
Acq On : 11 Aug 2020 10:44 pm
Operator : marthav
Sample : op81482-ms E
Misc : op81482,sx2950,30.0,,,1,1,soil
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Aug 12 03:28:19 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.670	152	177475	40.00	ppm	0.01
22) Naphthalene-d8	7.093	136	686382	40.00	ppm	0.01
43) Acenaphthene-d10	9.131	164	329211	40.00	ppm	0.01
70) Phenanthrene-d10	10.880	188	543265	40.00	ppm	0.02
92) Chrysene-d12	14.105	240	406529	40.00	ppm	0.04
102) Perylene-d12	16.314	264	336362	40.00	ppm	0.06
110) 1,4-Dichlorobenzene-d4A	5.670	152	177475	40.00	ppm	0.01
120) Naphthalene-d8A	7.093	136	686382	40.00	ppm	0.01
127) Acenaphthene-d10A	9.131	164	329211	40.00	ppm	0.01
136) Phenanthrene-d10A	10.880	188	543265	40.00	ppm	0.02
146) Chrysene-d12A	14.105	240	406529	40.00	ppm	0.04
153) Perylene-d12A	16.314	264	336362	40.00	ppm	0.06
System Monitoring Compounds						
7) 2-Fluorophenol	4.328	112	456913	71.80	ppm	0.02
Spiked Amount 100.000	Range 40 - 102		Recovery = 71.80%			
9) Phenol-d5	5.355	99	589819	77.91	ppm	0.02
Spiked Amount 100.000	Range 41 - 100		Recovery = 77.91%			
23) Nitrobenzene-d5	6.291	82	268588	37.89	ppm	0.01
Spiked Amount 50.000	Range 40 - 105		Recovery = 75.78%			
47) 2-Fluorobiphenyl	8.361	172	488546	40.99	ppm	0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 81.98%			
75) 2,4,6-Tribromophenol	10.072	330	98049	83.37	ppm	0.02
Spiked Amount 100.000	Range 42 - 108		Recovery = 83.37%			
95) Terphenyl-d14	12.795	244	446336	41.32	ppm	0.02
Spiked Amount 50.000	Range 45 - 119		Recovery = 82.64%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.499	88	79330	26.08	ppm	# 47
3) N-nitrosodimethylamine	2.836	42	163727	30.32	ppm	# 42
4) Pyridine	2.868	79	240611	32.52	ppm	# 36
5) Benzaldehyde	5.200	106	175226	33.12	ppm	93
6) Aniline	5.323	93	251788	23.86	ppm	64
8) bis(2-Chloroethyl)ether	5.403	93	248901	38.23	ppm	81
10) Phenol	5.365	94	330285	36.78	ppm	87
11) 2-Chlorophenol	5.462	128	257333	37.90	ppm	84
12) 1,3-Dichlorobenzene	5.601	146	253214	35.90	ppm	97
13) 1,4-Dichlorobenzene	5.686	146	267485	35.84	ppm	97
14) 1,2-Dichlorobenzene	5.847	146	243098	34.28	ppm	97
15) Benzyl alcohol	5.852	108	169659	36.10	ppm	83
16) 2,2'-Oxybis(1-chloropr...	5.997	45	452473	33.07	ppm	81
17) 2-Methylphenol	6.007	108	233122	36.09	ppm	97
18) Acetophenone	6.125	105	335254	35.07	ppm	95
19) Hexachloroethane	6.216	117	88752	31.67	ppm	91
20) N-Nitroso-di-n-propyla...	6.146	70	179837	35.62	ppm	# 67
21) 3&4-Methylphenol	6.189	108	509677	76.33	ppm	96
24) Nitrobenzene	6.312	77	266581	38.01	ppm	85
25) Isophorone	6.590	82	464828	37.12	ppm	96
26) 2-Nitrophenol	6.671	139	130857	39.25	ppm	80
27) 2,4-Dimethylphenol	6.767	107	225696	36.45	ppm	95
29) bis(2-Chloroethoxy)met...	6.852	93	279724	38.18	ppm	95
30) Benzoic Acid	6.943	105	198353	39.81	ppm	91
31) 2,4-Dichlorophenol	6.970	162	201736	40.42	ppm	96
32) 1,2,4-Trichlorobenzene	7.034	180	198084	38.83	ppm	98
34) Naphthalene	7.114	128	704769	37.87	ppm	99
35) 4-Chloroaniline	7.205	127	234727	29.87	ppm	90
36) 2,6-Dichlorophenol	7.216	162	200992	39.49	ppm	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072352.d
Acq On : 11 Aug 2020 10:44 pm
Operator : marthav
Sample : op81482-ms E
Misc : op81482,sx2950,30.0,,,1,1,soil
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Aug 12 03:28:19 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

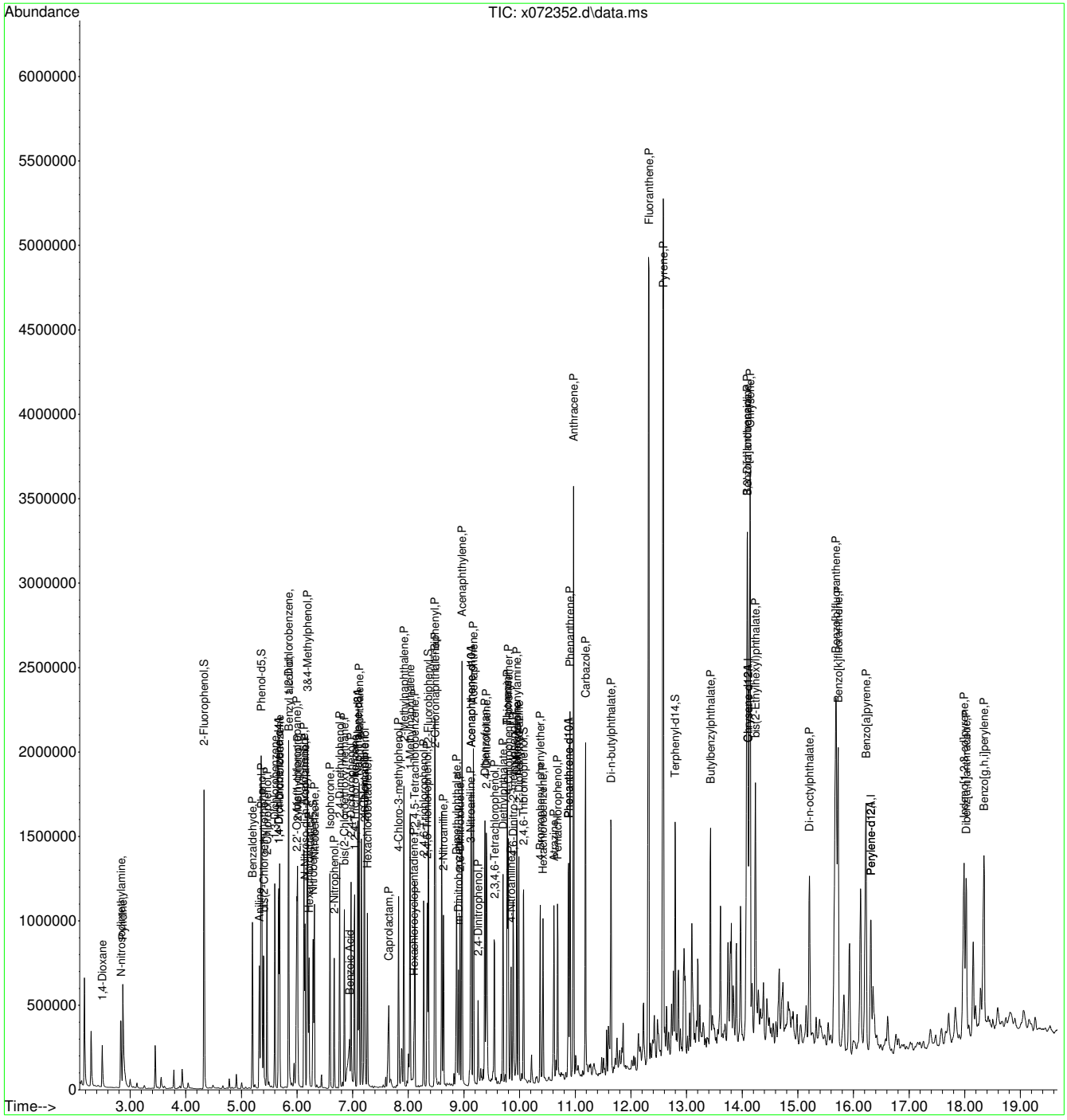
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
37)	Hexachlorobutadiene	7.264	225	100325	39.88	ppm		100
38)	Caprolactam	7.649	113	71321	34.44	ppm	#	48
39)	4-Chloro-3-methylphenol	7.826	107	205755	38.66	ppm		95
40)	2-Methylnaphthalene	7.922	142	466786	37.93	ppm		98
41)	1-Methylnaphthalene	8.034	142	432696	36.72	ppm		99
42)	1,2,4,5-Tetrachloroben...	8.115	216	190428	37.20	ppm		99
44)	Hexachlorocyclopentadiene	8.104	237	31442	13.61	ppm		99
45)	2,4,6-Trichlorophenol	8.275	196	135365	44.80	ppm		97
46)	2,4,5-Trichlorophenol	8.339	196	148369	44.87	ppm		98
48)	1,1'-Biphenyl	8.473	154	539280	40.12	ppm		100
49)	2-Chloronaphthalene	8.484	162	419819	41.61	ppm		96
50)	2-Nitroaniline	8.633	65	167419	45.07	ppm	#	67
52)	Acenaphthylene	8.965	152	1107431	67.35	ppm		99
53)	Dimethylphthalate	8.869	163	486842	41.92	ppm		100
54)	m-Dinitrobenzene	8.901	168	79611	41.13	ppm	#	34
55)	2,6-Dinitrotoluene	8.928	165	110709	40.39	ppm		71
57)	Acenaphthene	9.168	153	466707	42.68	ppm		99
58)	3-Nitroaniline	9.120	138	124948	41.44	ppm		92
59)	2,4-Dinitrophenol	9.254	184	69453	49.27	ppm	#	46
60)	Dibenzofuran	9.377	168	600738	41.16	ppm		96
61)	2,4-Dinitrotoluene	9.404	165	150753	43.14	ppm		82
64)	2,3,4,6-Tetrachlorophenol	9.548	232	103068	40.66	ppm		92
65)	Fluorene	9.778	166	532408	46.76	ppm		98
66)	4-Chlorophenyl-phenyle...	9.799	204	239257	43.53	ppm		93
67)	Diethylphthalate	9.703	149	486267	41.92	ppm		97
68)	Thionazin	9.778	97	1455	0.59	ppm	#	19
69)	4-Nitroaniline	9.848	138	123007	36.66	ppm		86
71)	4,6-Dinitro-2-methylph...	9.885	198	142431	66.78	ppm		82
72)	n-Nitrosodiphenylamine	9.949	169	364488	43.17	ppm		96
73)	Diphenylamine	9.949	169	364488	36.79	ppm		96
74)	1,2-Diphenylhydrazine	9.987	77	485001	39.84	ppm		95
78)	4-Bromophenyl-phenylether	10.372	248	110229	42.26	ppm	#	84
79)	Hexachlorobenzene	10.420	284	106472	40.91	ppm		72
82)	Atrazine	10.618	200	109698	34.58	ppm		80
83)	Pentachlorophenol	10.682	266	113236	62.92	ppm		97
84)	Phenanthrene	10.907	178	760504	46.32	ppm		98
85)	Anthracene	10.971	178	1387784	81.11	ppm		98
87)	Carbazole	11.185	167	785204	52.01	ppm		98
89)	Di-n-butylphthalate	11.645	149	788614	46.80	ppm		99
91)	Fluoranthene	12.324	202	2508173	164.67	ppm		96
94)	Pyrene	12.586	202	2739503	162.30	ppm		97
97)	Butylbenzylphthalate	13.431	149	347255	49.39	ppm		93
98)	3,3'-Dichlorobenzidine	14.089	252	123056	30.12	ppm		97
99)	Benzo[a]anthracene	14.089	228	1497917	117.23	ppm		99
100)	Chrysene	14.143	228	1776964	130.59	ppm		98
101)	bis(2-Ethylhexyl)phtha...	14.239	149	471335	49.26	ppm		97
103)	Di-n-octylphthalate	15.207	149	723076	52.79	ppm		93
104)	Benzo[b]fluoranthene	15.683	252	1932104	157.78	ppm		96
105)	Benzo[k]fluoranthene	15.726	252	908762	76.10	ppm		99
106)	Benzo[a]pyrene	16.229	252	988246	93.94	ppm		97
107)	Indeno[1,2,3-cd]pyrene	17.988	276	752175	92.03	ppm		90
108)	Dibenz[a,h]anthracene	18.026	278	481975	60.13	ppm		90
109)	Benzo[g,h,i]perylene	18.347	276	701504	70.06	ppm		88

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072352.d
Acq On : 11 Aug 2020 10:44 pm
Operator : marthav
Sample : op81482-ms E
Misc : op81482,sx2950,30.0,,,1,1,soil
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Aug 12 03:28:19 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072353.d
Acq On : 11 Aug 2020 11:09 pm
Operator : marthav
Sample : op81482-msd E
Misc : op81482,sx2950,30.0,,,1,1,soil
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Aug 12 03:30:30 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.671	152	176300	40.00	ppm	0.01
22) Naphthalene-d8	7.093	136	694985	40.00	ppm	0.01
43) Acenaphthene-d10	9.131	164	336531	40.00	ppm	0.01
70) Phenanthrene-d10	10.880	188	565950	40.00	ppm	0.02
92) Chrysene-d12	14.105	240	430062	40.00	ppm	0.04
102) Perylene-d12	16.320	264	345207	40.00	ppm	0.06
110) 1,4-Dichlorobenzene-d4A	5.671	152	176300	40.00	ppm	0.01
120) Naphthalene-d8A	7.093	136	694985	40.00	ppm	0.01
127) Acenaphthene-d10A	9.131	164	336531	40.00	ppm	0.01
136) Phenanthrene-d10A	10.880	188	565950	40.00	ppm	0.02
146) Chrysene-d12A	14.105	240	430062	40.00	ppm	0.04
153) Perylene-d12A	16.320	264	345207	40.00	ppm	0.06
System Monitoring Compounds						
7) 2-Fluorophenol	4.328	112	437044	69.14	ppm	0.02
Spiked Amount 100.000	Range 40 - 102		Recovery = 69.14%			
9) Phenol-d5	5.355	99	577619	76.80	ppm	0.02
Spiked Amount 100.000	Range 41 - 100		Recovery = 76.80%			
23) Nitrobenzene-d5	6.291	82	261743	36.47	ppm	0.01
Spiked Amount 50.000	Range 40 - 105		Recovery = 72.94%			
47) 2-Fluorobiphenyl	8.361	172	495301	40.66	ppm	0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 81.32%			
75) 2,4,6-Tribromophenol	10.073	330	103974	84.65	ppm	0.02
Spiked Amount 100.000	Range 42 - 108		Recovery = 84.65%			
95) Terphenyl-d14	12.800	244	491027	42.97	ppm	0.02
Spiked Amount 50.000	Range 45 - 119		Recovery = 85.94%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.493	88	63334	20.96	ppm	# 44
3) N-nitrosodimethylamine	2.830	42	149315	27.83	ppm	# 39
4) Pyridine	2.868	79	208874	28.42	ppm	# 34
5) Benzaldehyde	5.200	106	164699	31.34	ppm	92
6) Aniline	5.323	93	236009	22.52	ppm	60
8) bis(2-Chloroethyl)ether	5.403	93	239534	37.03	ppm	81
10) Phenol	5.366	94	324362	36.36	ppm	87
11) 2-Chlorophenol	5.462	128	250115	37.08	ppm	84
12) 1,3-Dichlorobenzene	5.601	146	236100	33.69	ppm	97
13) 1,4-Dichlorobenzene	5.687	146	251571	33.93	ppm	97
14) 1,2-Dichlorobenzene	5.847	146	227305	32.27	ppm	97
15) Benzyl alcohol	5.852	108	168389	36.07	ppm	88
16) 2,2'-Oxybis(1-chloropr...	5.997	45	438961	32.29	ppm	80
17) 2-Methylphenol	6.008	108	231548	36.09	ppm	97
18) Acetophenone	6.125	105	325956	34.33	ppm	96
19) Hexachloroethane	6.216	117	79671	28.62	ppm	93
20) N-Nitroso-di-n-propyla...	6.147	70	175997	35.09	ppm	# 68
21) 3&4-Methylphenol	6.189	108	514604	77.58	ppm	96
24) Nitrobenzene	6.312	77	259185	36.50	ppm	86
25) Isophorone	6.591	82	467689	36.89	ppm	95
26) 2-Nitrophenol	6.671	139	129488	38.36	ppm	79
27) 2,4-Dimethylphenol	6.767	107	226855	36.18	ppm	94
29) bis(2-Chloroethoxy)met...	6.853	93	276000	37.21	ppm	95
30) Benzoic Acid	6.954	105	228466	44.43	ppm	94
31) 2,4-Dichlorophenol	6.970	162	206577	40.88	ppm	96
32) 1,2,4-Trichlorobenzene	7.034	180	195182	37.79	ppm	98
34) Naphthalene	7.115	128	696687	36.97	ppm	99
35) 4-Chloroaniline	7.206	127	246606	30.99	ppm	89
36) 2,6-Dichlorophenol	7.216	162	202133	39.23	ppm	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072353.d
Acq On : 11 Aug 2020 11:09 pm
Operator : marthav
Sample : op81482-msd E
Misc : op81482,sx2950,30.0,,,1,1,soil
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Aug 12 03:30:30 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

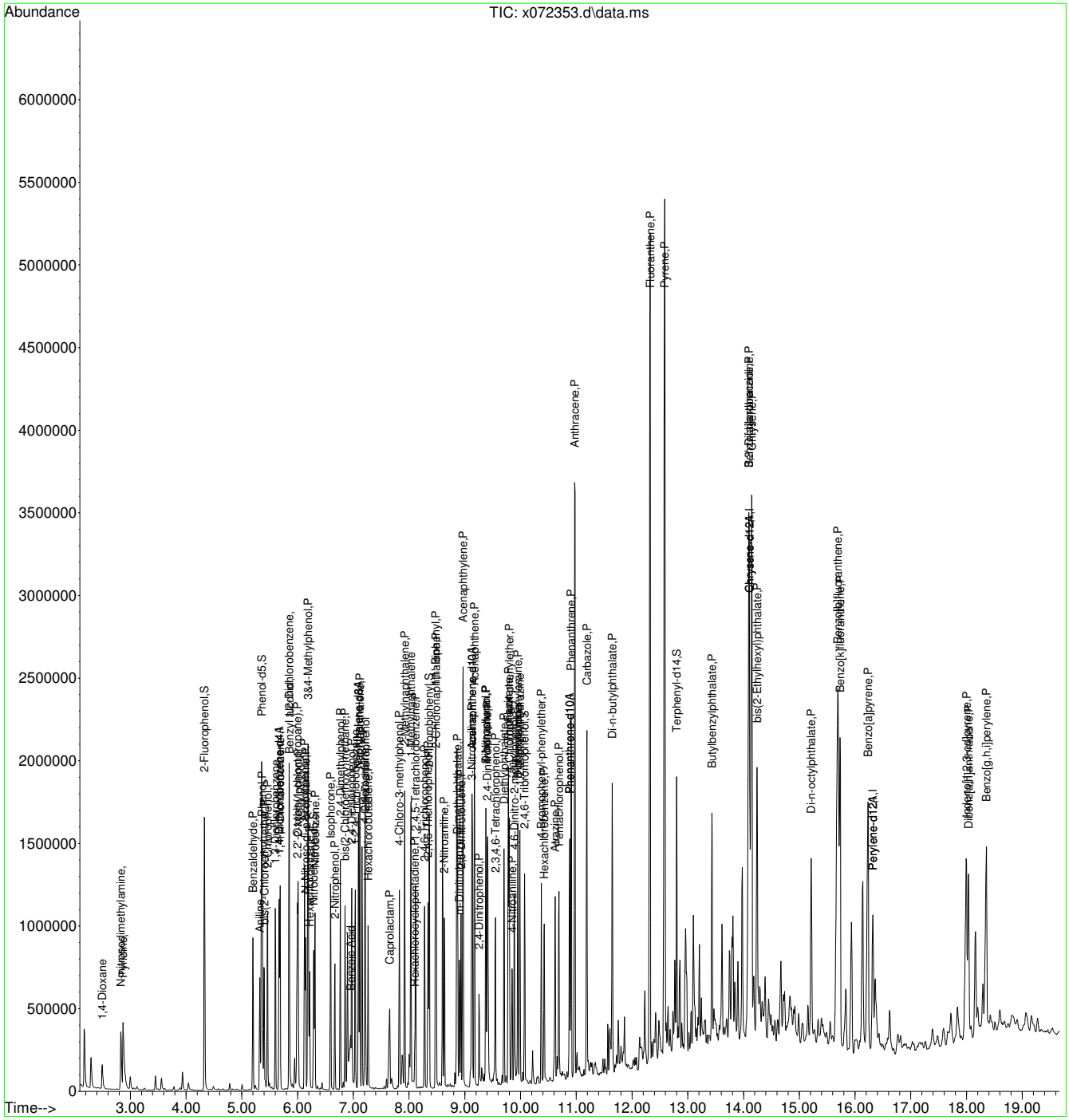
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
37)	Hexachlorobutadiene	7.264	225	98325	38.61	ppm		98
38)	Caprolactam	7.655	113	73899	35.24	ppm	#	60
39)	4-Chloro-3-methylphenol	7.826	107	214393	39.79	ppm		95
40)	2-Methylnaphthalene	7.922	142	467519	37.52	ppm		98
41)	1-Methylnaphthalene	8.035	142	439782	36.86	ppm		98
42)	1,2,4,5-Tetrachloroben...	8.115	216	193971	37.42	ppm		99
44)	Hexachlorocyclopentadiene	8.104	237	27077	11.56	ppm		98
45)	2,4,6-Trichlorophenol	8.281	196	141588	45.84	ppm		100
46)	2,4,5-Trichlorophenol	8.340	196	156545	46.31	ppm		98
48)	1,1'-Biphenyl	8.473	154	550151	40.03	ppm		99
49)	2-Chloronaphthalene	8.484	162	430363	41.72	ppm		95
50)	2-Nitroaniline	8.634	65	176832	46.57	ppm	#	68
52)	Acenaphthylene	8.971	152	1196662	71.19	ppm		99
53)	Dimethylphthalate	8.869	163	530140	44.65	ppm		99
54)	m-Dinitrobenzene	8.901	168	86388	43.67	ppm	#	56
55)	2,6-Dinitrotoluene	8.933	165	119642	42.70	ppm		76
57)	Acenaphthene	9.174	153	483848	43.29	ppm		99
58)	3-Nitroaniline	9.126	138	132029	42.83	ppm		99
59)	2,4-Dinitrophenol	9.254	184	78993	53.60	ppm	#	65
60)	Dibenzofuran	9.377	168	627048	42.03	ppm		96
61)	2,4-Dinitrotoluene	9.404	165	162433	45.47	ppm		80
62)	4-Nitrophenol	9.377	109	2160	1.25	ppm	#	1
64)	2,3,4,6-Tetrachlorophenol	9.548	232	110438	42.62	ppm		91
65)	Fluorene	9.784	166	570090	48.98	ppm		100
66)	4-Chlorophenyl-phenyle...	9.800	204	250116	44.51	ppm		91
67)	Diethylphthalate	9.703	149	513719	43.32	ppm		98
68)	Thionazin	9.778	97	1793	0.71	ppm	#	17
69)	4-Nitroaniline	9.853	138	134920	39.34	ppm		91
71)	4,6-Dinitro-2-methylph...	9.891	198	154645	68.99	ppm		74
72)	n-Nitrosodiphenylamine	9.949	169	387923	44.11	ppm		95
73)	Diphenylamine	9.949	169	387923	37.59	ppm		95
74)	1,2-Diphenylhydrazine	9.987	77	504302	39.76	ppm		93
78)	4-Bromophenyl-phenylether	10.372	248	117952	43.41	ppm	#	82
79)	Hexachlorobenzene	10.426	284	112832	41.62	ppm		79
82)	Atrazine	10.623	200	119239	36.08	ppm		87
83)	Pentachlorophenol	10.688	266	125353	66.11	ppm		98
84)	Phenanthrene	10.907	178	833922	48.76	ppm		98
85)	Anthracene	10.976	178	1574749	88.35	ppm		98
87)	Carbazole	11.190	167	876369	55.72	ppm		99
89)	Di-n-butylphthalate	11.645	149	861652	49.08	ppm		98
91)	Fluoranthene	12.324	202	2492424	157.08	ppm		98
94)	Pyrene	12.586	202	2839805	159.03	ppm		98
97)	Butylbenzylphthalate	13.431	149	380639	51.04	ppm		88
98)	3,3'-Dichlorobenzidine	14.095	252	134885	31.13	ppm		98
99)	Benzo[a]anthracene	14.095	228	1630312	120.61	ppm		99
100)	Chrysene	14.148	228	1726453	119.94	ppm		99
101)	bis(2-Ethylhexyl)phtha...	14.244	149	514467	50.66	ppm		97
103)	Di-n-octylphthalate	15.213	149	798583	55.99	ppm		94
104)	Benzo[b]fluoranthene	15.689	252	2186944	170.36	ppm		96
105)	Benzo[k]fluoranthene	15.731	252	896224	73.13	ppm		99
106)	Benzo[a]pyrene	16.234	252	1061015	97.56	ppm		96
107)	Indeno[1,2,3-cd]pyrene	17.999	276	798707	94.25	ppm		92
108)	Dibenz[a,h]anthracene	18.037	278	515199	61.96	ppm		92
109)	Benzo[g,h,i]perylene	18.358	276	752645	72.60	ppm		89

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072353.d
Acq On : 11 Aug 2020 11:09 pm
Operator : marthav
Sample : op81482-msd E
Misc : op81482,sx2950,30.0,,,1,1,soil
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Aug 12 03:30:30 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan
08/13/20 11:23

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11122.d
Acq On : 10 Aug 2020 11:25 pm
Operator : FOUADS
Sample : op81483-ms e,5
Misc : op81483,S7G482,15.4,,,1,5,soil
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Aug 11 03:24:48 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

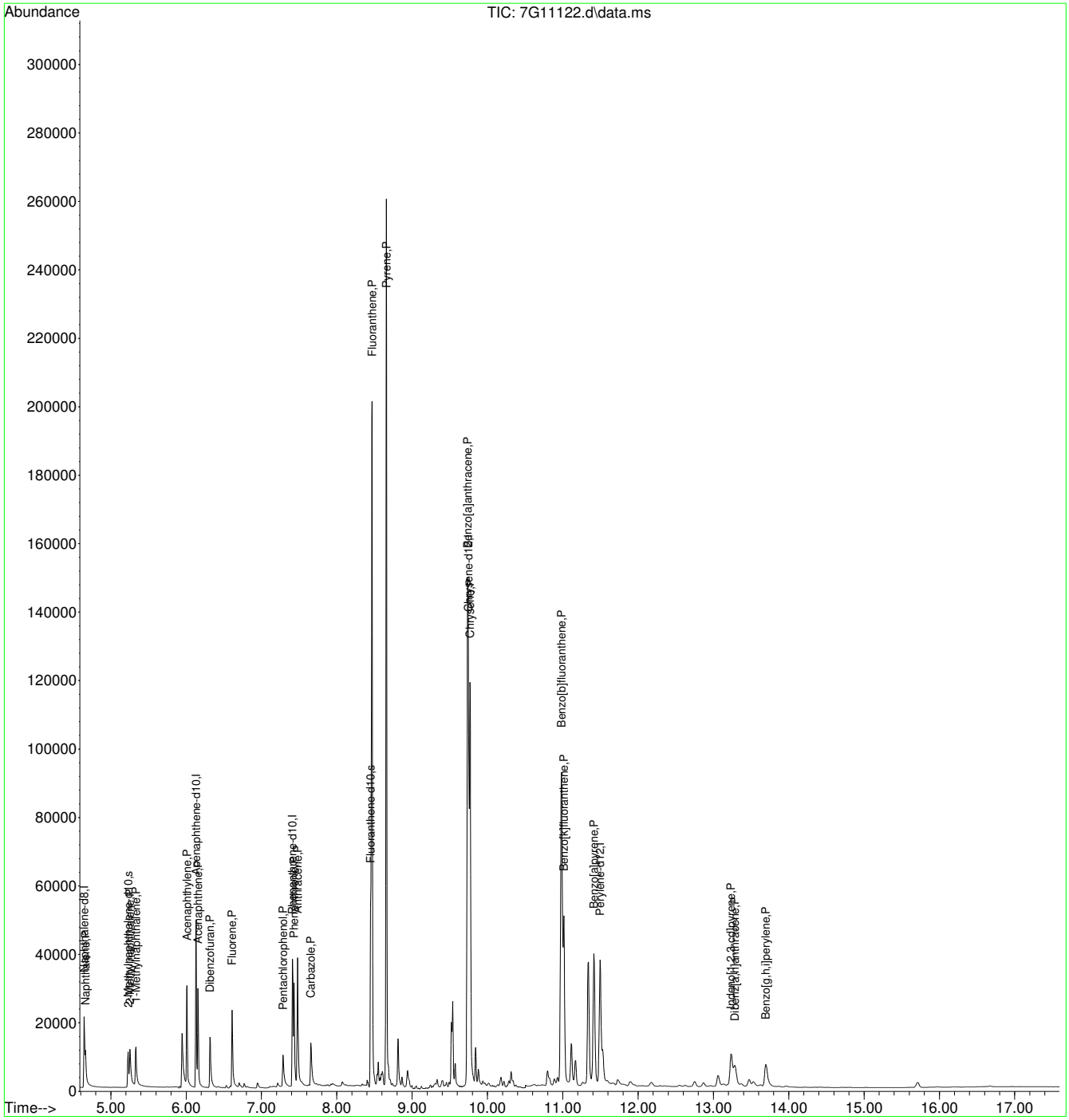
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.646	136	20120	4.00	ppm	0.02
6) Acenaphthene-d10	6.133	164	16826	4.00	ppm	0.02
11) Phenanthrene-d10	7.410	188	32850	4.00	ppm	0.01
18) Chrysene-d12	9.746	240	58735	4.00	ppm	0.02
22) Perylene-d12	11.496	264	41508	4.00	ppm	0.02
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.229	152	5905	2.02	ppm	0.02
Spiked Amount 10.000	Range 50 - 150		Recovery = 20.20%#			
17) Fluoranthene-d10	8.448	212	34225	2.02	ppm	0.02
Spiked Amount 10.000	Range 50 - 150		Recovery = 20.20%#			
Target Compounds						Qvalue
2) Naphthalene	4.664	128	7709	1.35	ppm	100
3) 2-Methylnaphthalene	5.252	142	5925	1.32	ppm	98
5) 1-Methylnaphthalene	5.335	142	7262	1.84	ppm	96
7) Acenaphthylene	6.012	152	20507	2.12	ppm	98
8) Acenaphthene	6.157	153	9125	1.45	ppm	99
9) Dibenzofuran	6.317	168	12486	2.81	ppm	97
10) Fluorene	6.611	166	10563	1.54	ppm	98
12) Pentachlorophenol	7.285	266	4520	3.79	ppm	99
13) Phenanthrene	7.431	178	18630	1.72	ppm	96
14) Anthracene	7.480	178	29339	2.68	ppm	99
15) Carbazole	7.654	167	14199	0.72	ppm	99
16) Fluoranthene	8.467	202	137602	6.66	ppm	97
19) Pyrene	8.657	202	164903	7.04	ppm	95
20) Benzo[a]anthracene	9.736	228	80320	4.37	ppm	94
21) Chrysene	9.768	228	100207	4.92	ppm	98
23) Benzo[b]fluoranthene	10.982	252	128534	9.12	ppm	98
24) Benzo[k]fluoranthene	11.015	252	42227m	2.83	ppm	
25) Benzo[a]pyrene	11.413	252	48908	3.56	ppm	98
26) Indeno[1,2,3-cd]pyrene	13.233	276	19810	2.21	ppm	94
27) Dibenz[a,h]anthracene	13.287	278	7784	0.78	ppm	96
28) Benzo[g,h,i]perylene	13.694	276	13638	1.26	ppm	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11122.d
Acq On : 10 Aug 2020 11:25 pm
Operator : FOUADS
Sample : op81483-ms e,5
Misc : op81483,S7G482,15.4,,,1,5,soil
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Aug 11 03:24:48 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration



Manual Integration Approval Summary

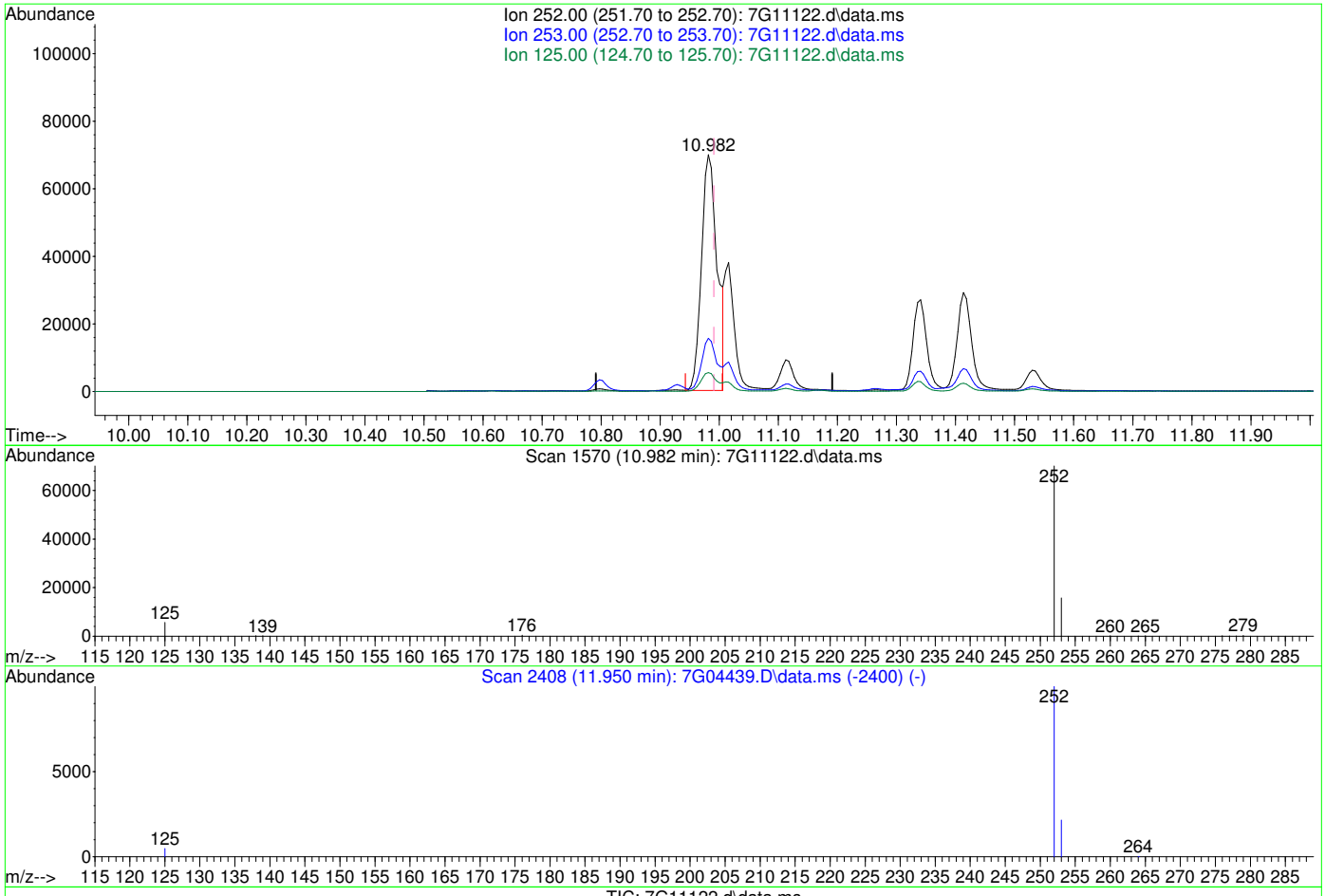
Sample Number: OP81483-MS
Lab FileID: 7G11122.D
Injection Time: 08/10/20 23:25
Method: SW846 8270E BY SIM
Analyst approved: 08/11/20 10:52 Fouad Sekkar
Supervisor approved: 08/13/20 11:23 Naresh Jiawan

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(k)fluoranthene	207-08-9		11.02	Missed peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11122.d
Acq On : 10 Aug 2020 11:25 pm
Operator : FOUADS
Sample : op81483-ms e,5
Misc : op81483,S7G482,15.4,,,1,5,soil
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Aug 11 02:37:51 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration



TIC: 7G11122.d\data.ms

(24) Benzo[k]fluoranthene (P)

10.982min (-0.010) 8.46ppm

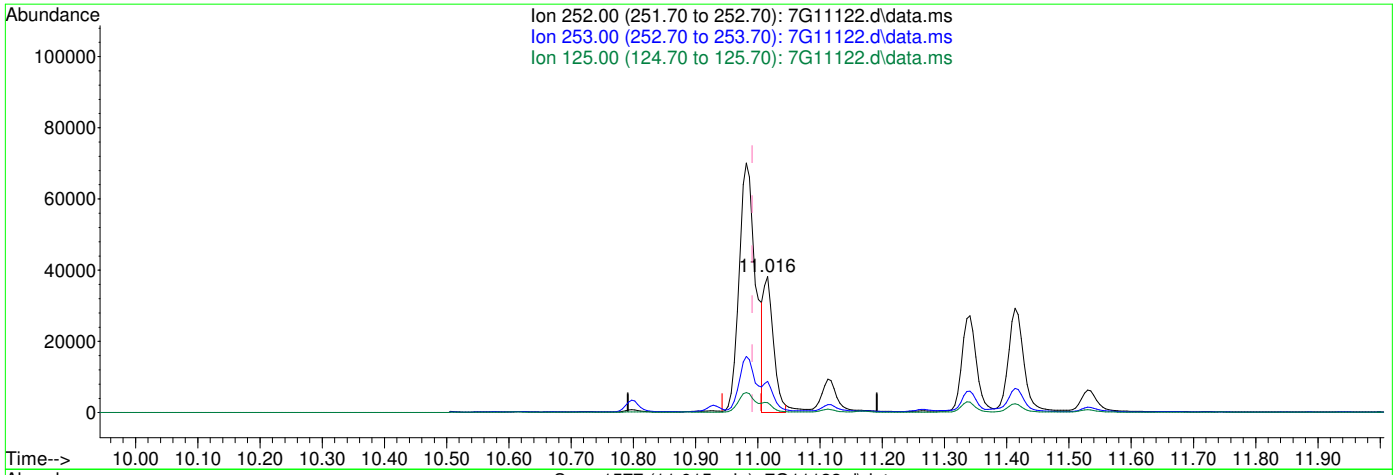
response 128534

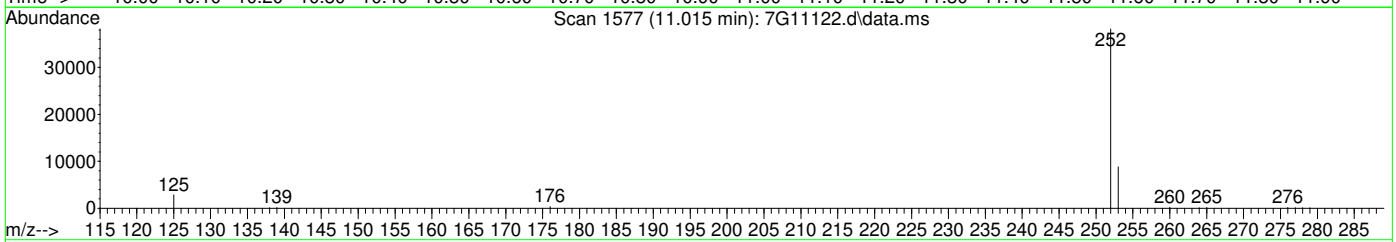
Ion	Exp%	Act%
252.00	100	100
253.00	21.50	21.47
125.00	4.80	7.86
0.00	0.00	0.00

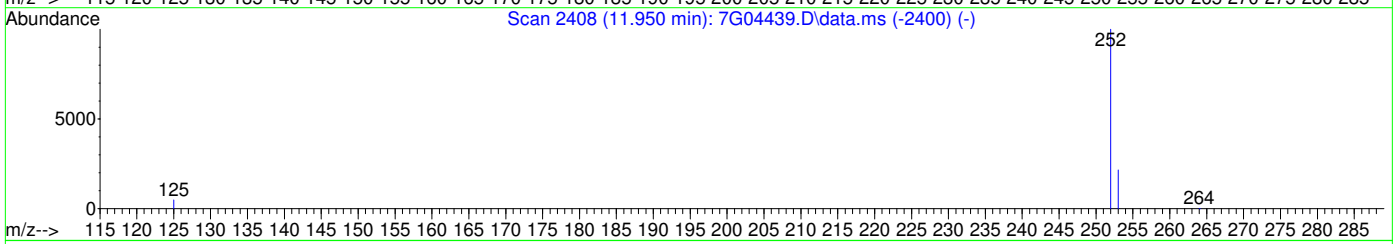
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11122.d
Acq On : 10 Aug 2020 11:25 pm
Operator : FOUADS
Sample : op81483-ms e,5
Misc : op81483,S7G482,15.4,,,1,5,soil
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Aug 11 02:37:51 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11122.d\data.ms

(24) Benzo[k]fluoranthene (P)

11.015min (+0.024) 2.83ppm m

response 42227

Ion	Exp%	Act%
252.00	100	100
253.00	21.50	23.02
125.00	4.80	7.38
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan
08/13/20 11:23

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11123.d
Acq On : 10 Aug 2020 11:49 pm
Operator : FOUADS
Sample : op81483-msd e,5
Misc : op81483,S7G482,15.3,,,1,5,soil
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Aug 11 03:25:14 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

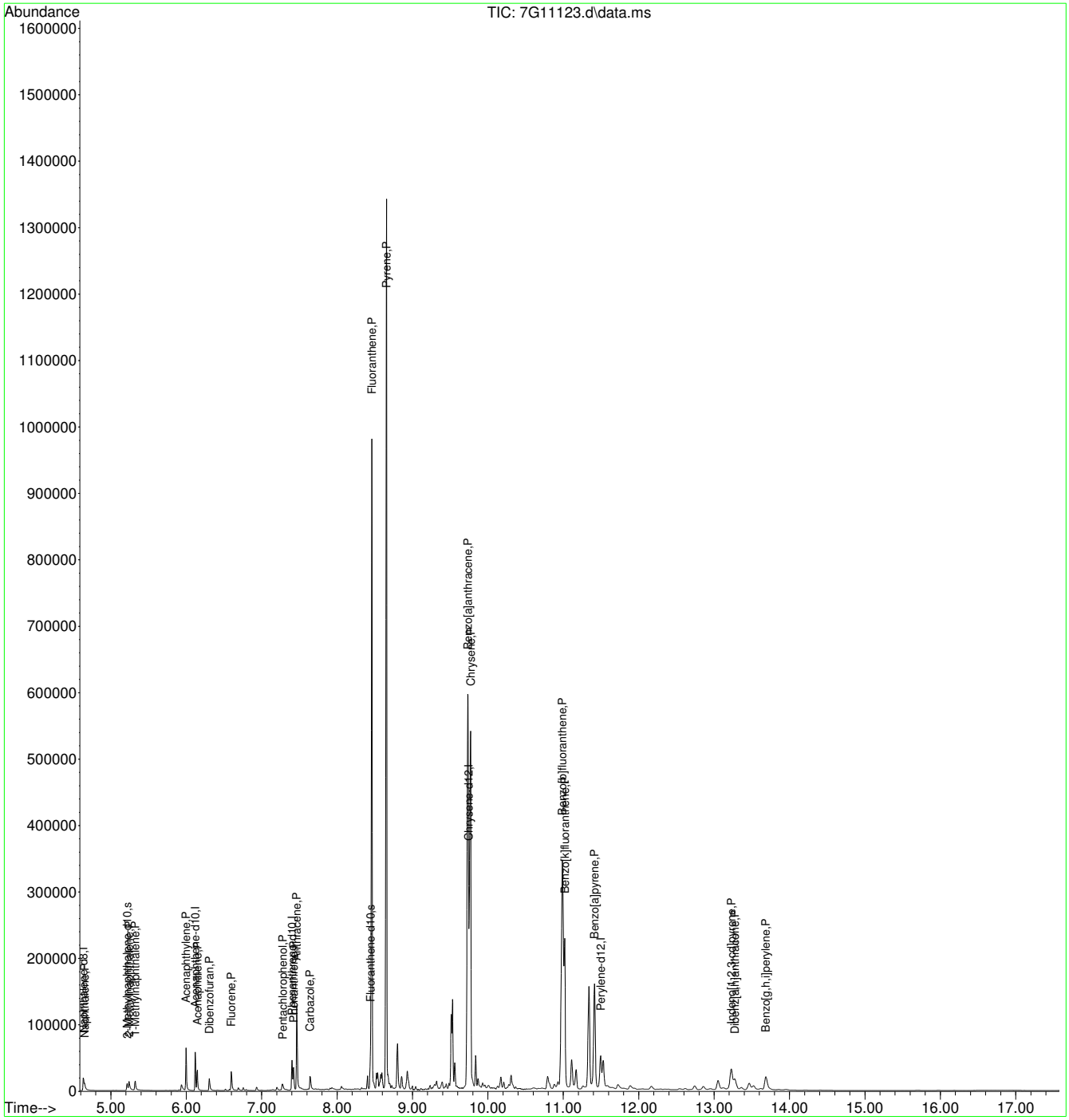
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.634	136	20877	4.00	ppm	0.00
6) Acenaphthene-d10	6.118	164	17525	4.00	ppm	0.00
11) Phenanthrene-d10	7.403	188	34643	4.00	ppm	0.00
18) Chrysene-d12	9.744	240	69789	4.00	ppm	0.02
22) Perylene-d12	11.496	264	49534	4.00	ppm	0.02
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.217	152	6012	1.98	ppm	0.01
Spiked Amount 10.000	Range 50 - 150		Recovery = 19.80%#			
17) Fluoranthene-d10	8.442	212	39464	2.21	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 22.10%#			
Target Compounds						Qvalue
2) Naphthalene	4.652	128	8629	1.46	ppm	100
3) 2-Methylnaphthalene	5.240	142	6909	1.49	ppm	98
5) 1-Methylnaphthalene	5.323	142	8125	1.98	ppm	97
7) Acenaphthylene	5.998	152	39534	3.91	ppm	99
8) Acenaphthene	6.147	153	10323	1.58	ppm	96
9) Dibenzofuran	6.307	168	13986	3.02	ppm	91
10) Fluorene	6.597	166	11598	1.63	ppm	98
12) Pentachlorophenol	7.278	266	4914	3.90	ppm	95
13) Phenanthrene	7.424	178	24130	2.12	ppm	99
14) Anthracene	7.466	178	83106	7.11	ppm	99
15) Carbazole	7.640	167	19961	0.96	ppm	99
16) Fluoranthene	8.461	202	645470	28.01	ppm	98
19) Pyrene	8.657	202	891525	30.94	ppm	95
20) Benzo[a]anthracene	9.734	228	437899	19.18	ppm	94
21) Chrysene	9.770	228	439823	18.22	ppm	97
23) Benzo[b]fluoranthene	10.986	252	515037	30.63	ppm	97
24) Benzo[k]fluoranthene	11.020	252	197738m	10.83	ppm	
25) Benzo[a]pyrene	11.413	252	194902	11.90	ppm	97
26) Indeno[1,2,3-cd]pyrene	13.228	276	58423	5.46	ppm	95
27) Dibenz[a,h]anthracene	13.272	278	18607	1.57	ppm	96
28) Benzo[g,h,i]perylene	13.685	276	38097	2.96	ppm	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11123.d
Acq On : 10 Aug 2020 11:49 pm
Operator : FOUADS
Sample : op81483-msd e,5
Misc : op81483,S7G482,15.3,,,1,5,soil
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Aug 11 03:25:14 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration



Manual Integration Approval Summary

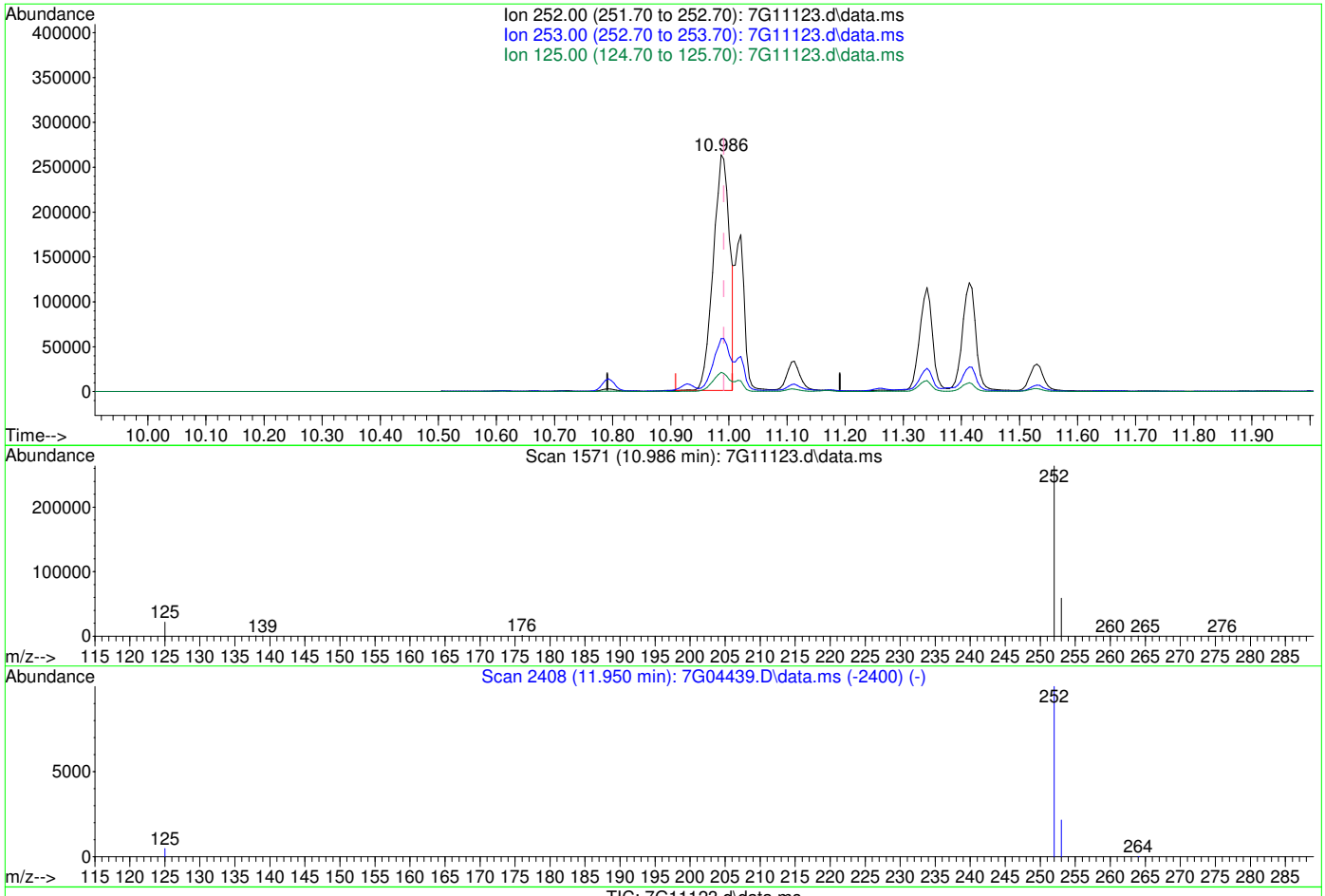
Sample Number: OP81483-MSD
Lab FileID: 7G11123.D
Injection Time: 08/10/20 23:49
Method: SW846 8270E BY SIM
Analyst approved: 08/11/20 10:52 Fouad Sekkar
Supervisor approved: 08/13/20 11:23 Naresh Jiawan

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(k)fluoranthene	207-08-9		11.02	Missed peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11123.d
Acq On : 10 Aug 2020 11:49 pm
Operator : FOUADS
Sample : op81483-msd e,5
Misc : op81483,S7G482,15.3,,,1,5,soil
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Aug 11 02:37:54 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration



TIC: 7G11123.d\data.ms

(24) Benzo[k]fluoranthene (P)

10.986min (-0.005) 26.93ppm

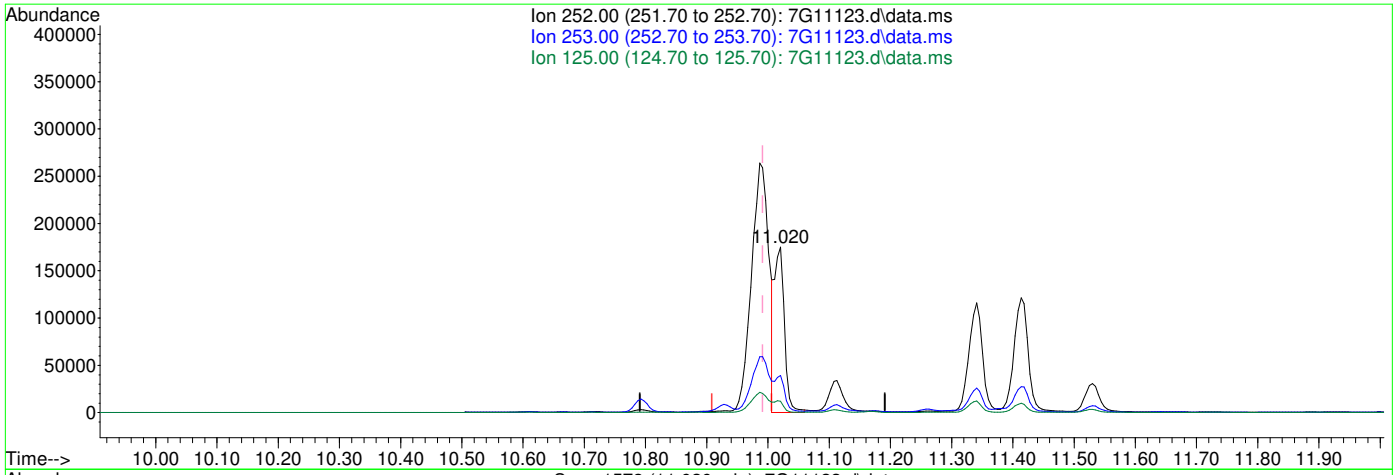
response 515037

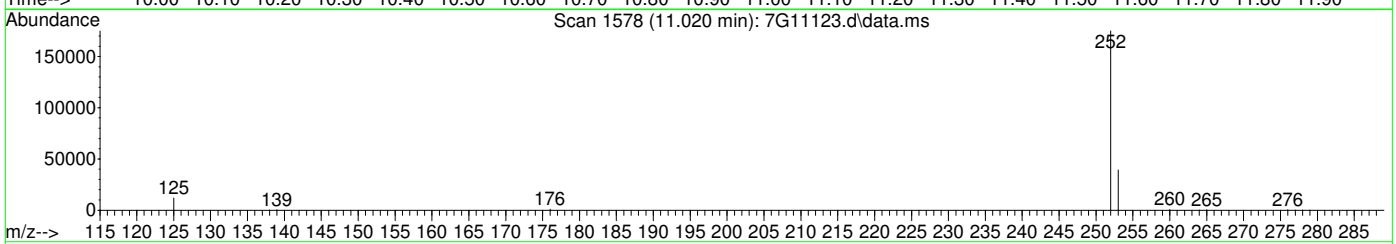
Ion	Exp%	Act%
252.00	100	100
253.00	21.50	21.30
125.00	4.80	8.19
0.00	0.00	0.00

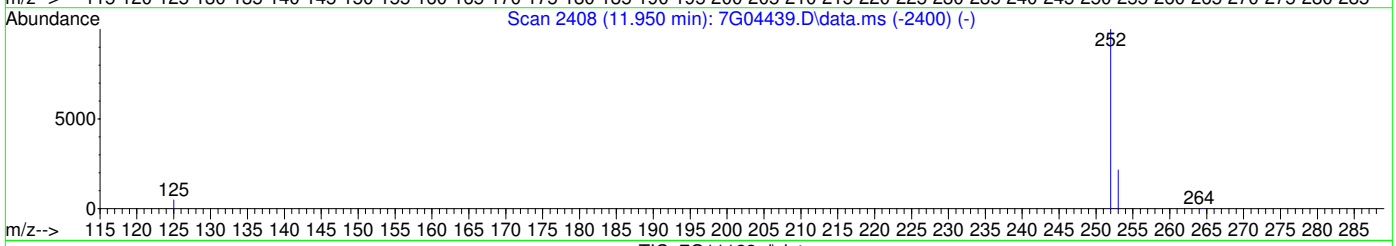
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11123.d
Acq On : 10 Aug 2020 11:49 pm
Operator : FOUADS
Sample : op81483-msd e,5
Misc : op81483,S7G482,15.3,,,1,5,soil
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Aug 11 02:37:54 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11123.d\data.ms

(24) Benzo[k]fluoranthene (P)

11.020min (+0.029) 10.83ppm m

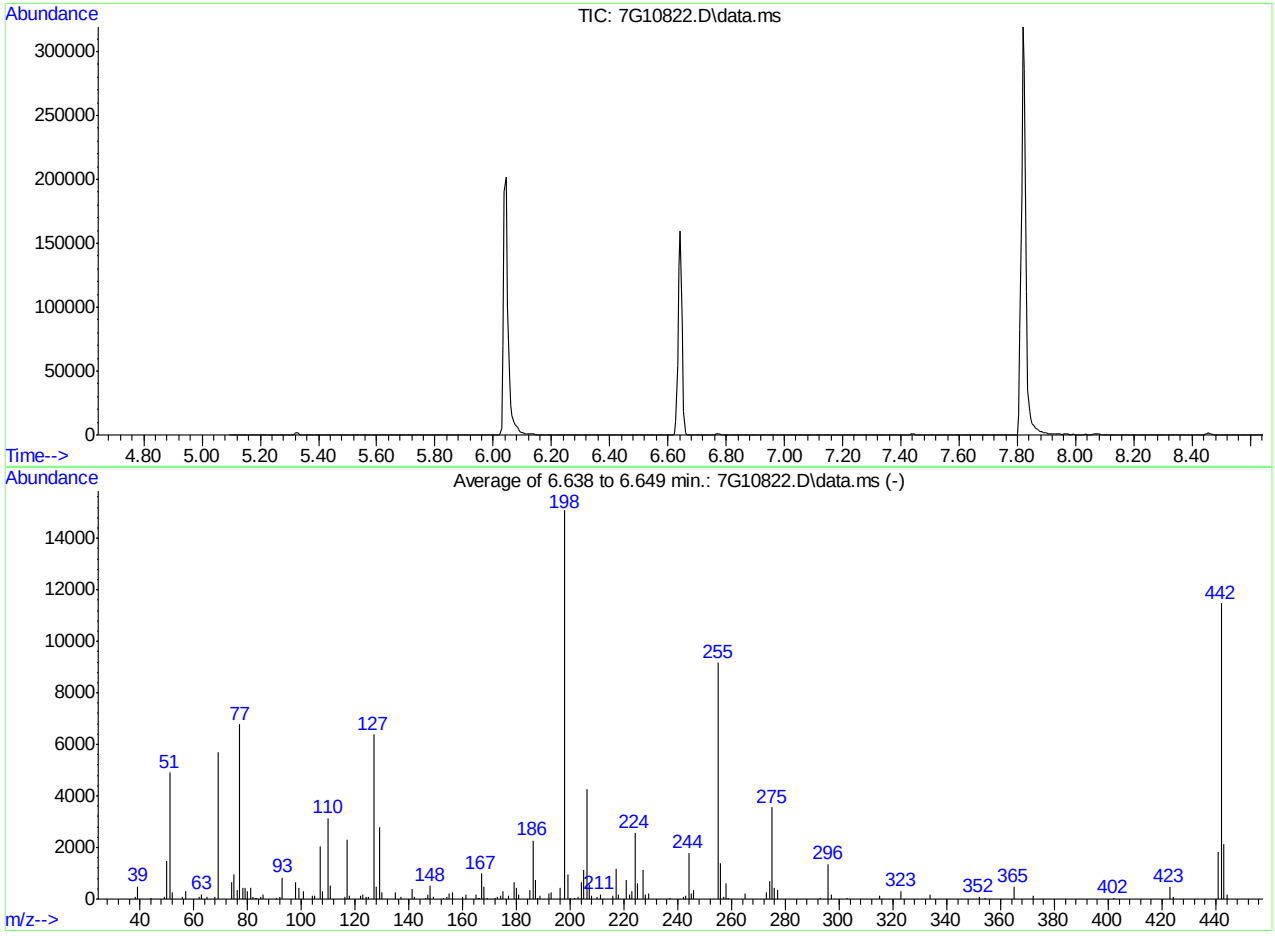
response 197738

Ion	Exp%	Act%
252.00	100	100
253.00	21.50	22.45
125.00	4.80	6.78
0.00	0.00	0.00

SW-846 Method 8270

Data File : C:\msdchem\1\data\072120_7G472\7G10822.D Vial: 1
Acq On : 21 Jul 2020 8:44 am Operator: fouads
Sample : dftpp Inst : MSBNA8
Misc : op80679,S7G472,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\methods\dftpp.m (RTE Integrator)
Title : Tune Evaluation



AutoFind: Scans 290, 291, 292; Background Corrected with Scan 285

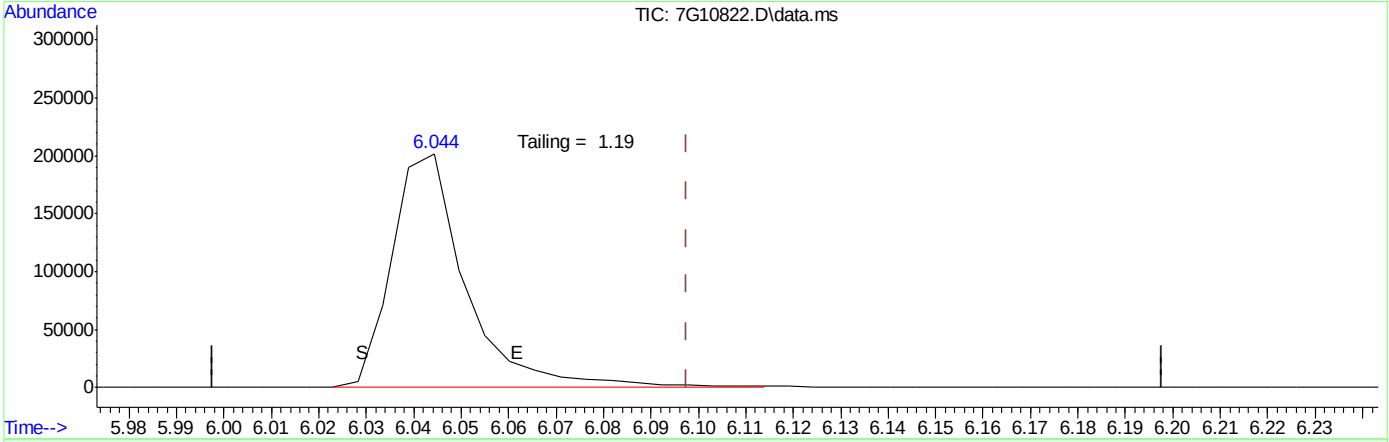
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	32.6	4908	PASS
68	69	0.00	2	1.6	91	PASS
69	198	0.00	100	37.7	5683	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	42.3	6380	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	15078	PASS
199	198	5	9	6.3	953	PASS
275	198	10	30	23.5	3550	PASS
365	198	1	100	3.1	473	PASS
441	443	0.01	100	84.1	1808	PASS
442	198	40	100	76.1	11474	PASS
443	442	17	23	18.7	2149	PASS

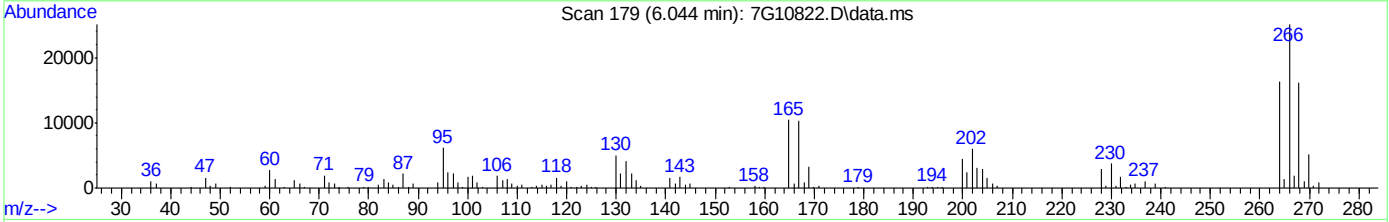
7G10822.D dftpp.m Wed Jul 22 13:20:11 2020

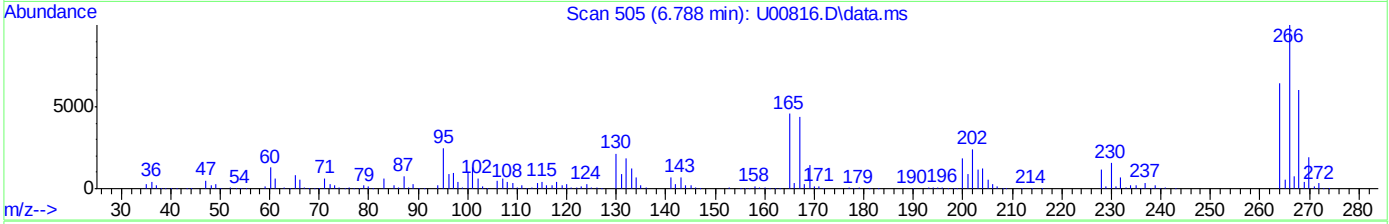
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10822.D
Acq On : 21 Jul 2020 8:44 am
Operator : fouads
Sample : dftpp
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 21 08:58:05 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Tue Jun 23 13:15:39 2020
Response via : Initial Calibration







TIC: 7G10822.D\data.ms

(1) Pentachlorophenol

6.044min (-0.053) 9.28

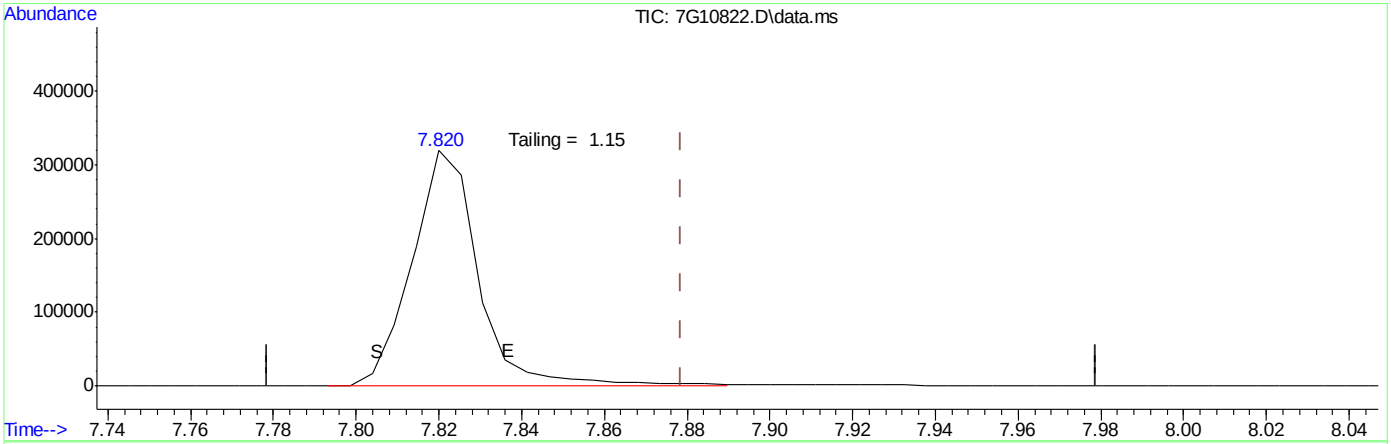
response 221934

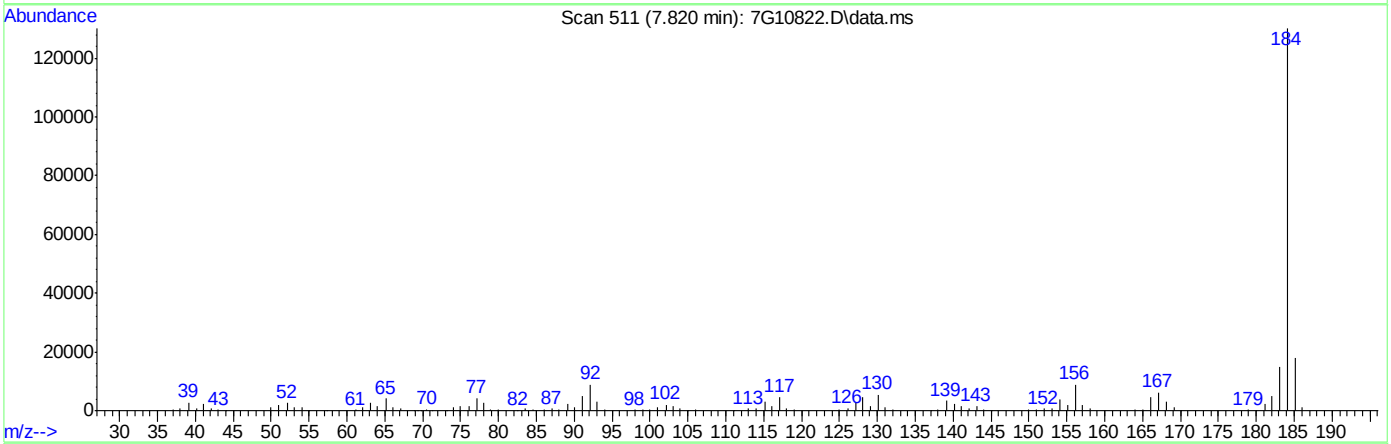
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10822.D
Acq On : 21 Jul 2020 8:44 am
Operator : fouads
Sample : dftpp
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 21 08:58:05 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Tue Jun 23 13:15:39 2020
Response via : Initial Calibration





TIC: 7G10822.D\data.ms

(3) Benzidine

7.820min (-0.059) 8.36

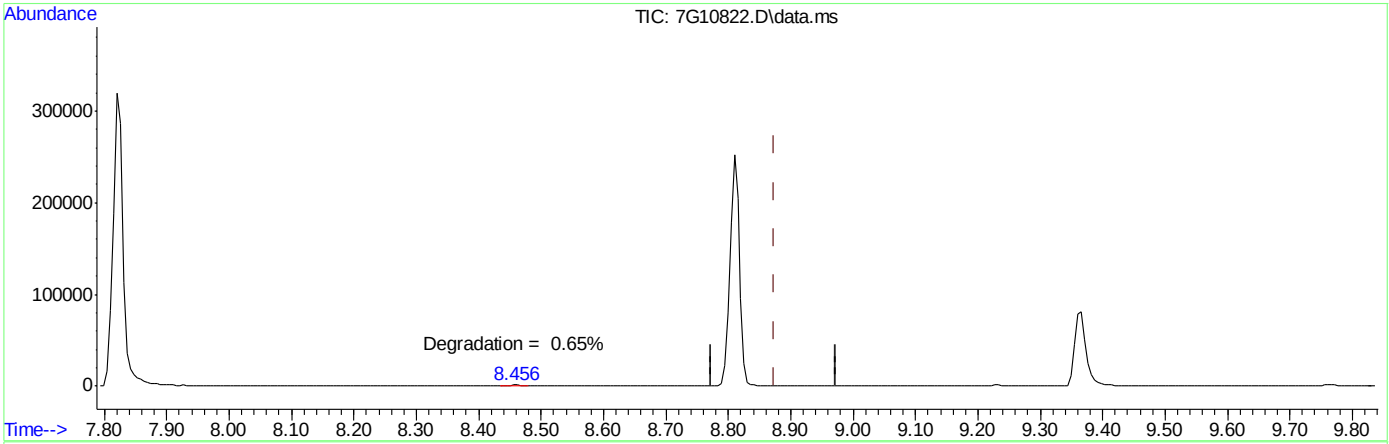
response 354536

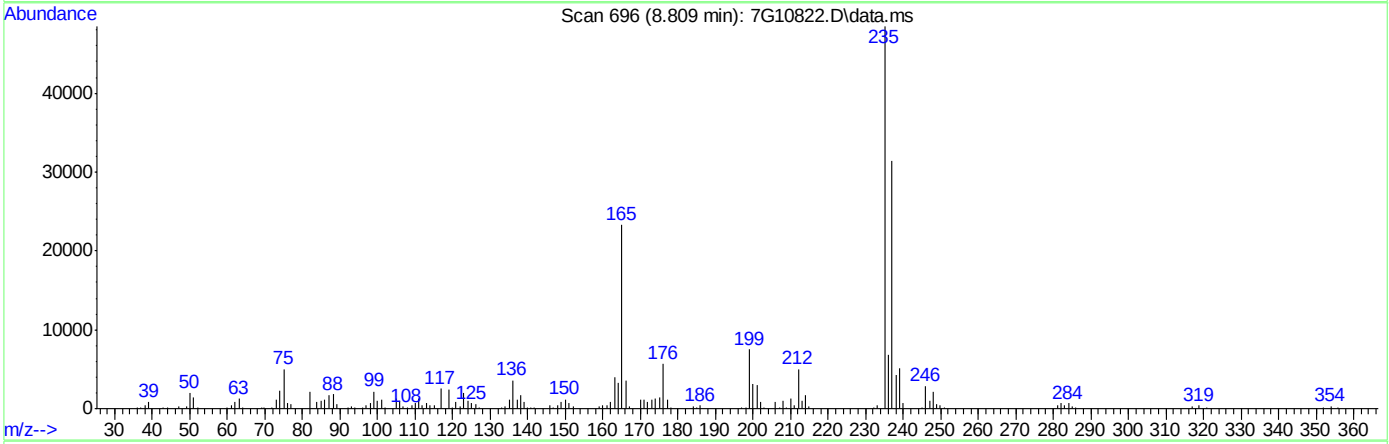
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10822.D
Acq On : 21 Jul 2020 8:44 am
Operator : fouads
Sample : dftpp
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 21 08:58:05 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Tue Jun 23 13:15:39 2020
Response via : Initial Calibration





TIC: 7G10822.D\data.ms

(4) DDT

8.809min (-0.064) 7.86

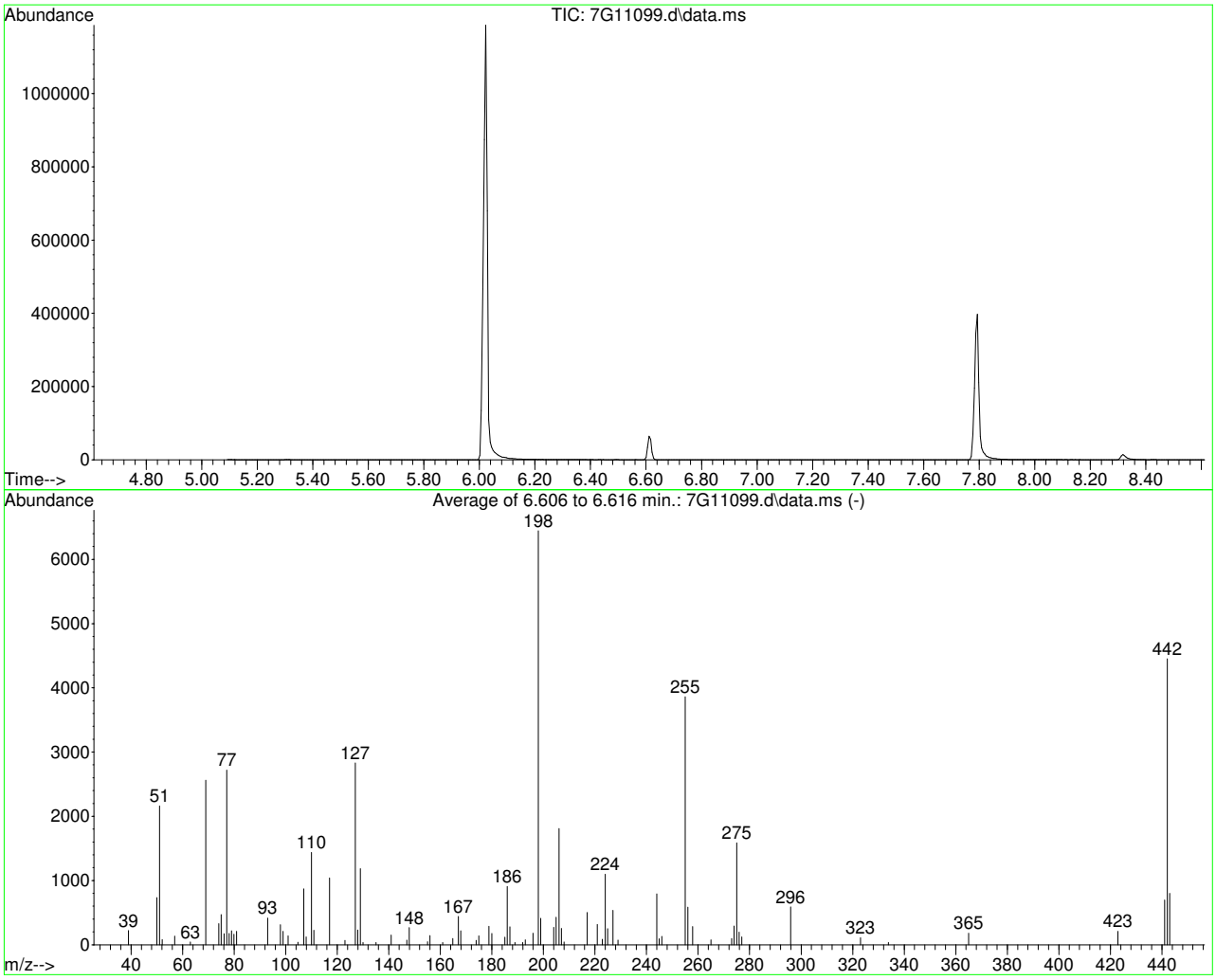
response 274297

Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

SW-846 Method 8270

Data File : C:\msdchem\1\data\jo...2020\s7g482\7G11099.d Vial: 1
Acq On : 10 Aug 2020 2:10 pm Operator: FOUADS
Sample : DFTPP Inst : MSBNA8
Misc : op81342,S7G482,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\methods\dftpp.m (RTE Integrator)
Title : Tune Evaluation



AutoFind: Scans 284, 285, 286; Background Corrected with Scan 280

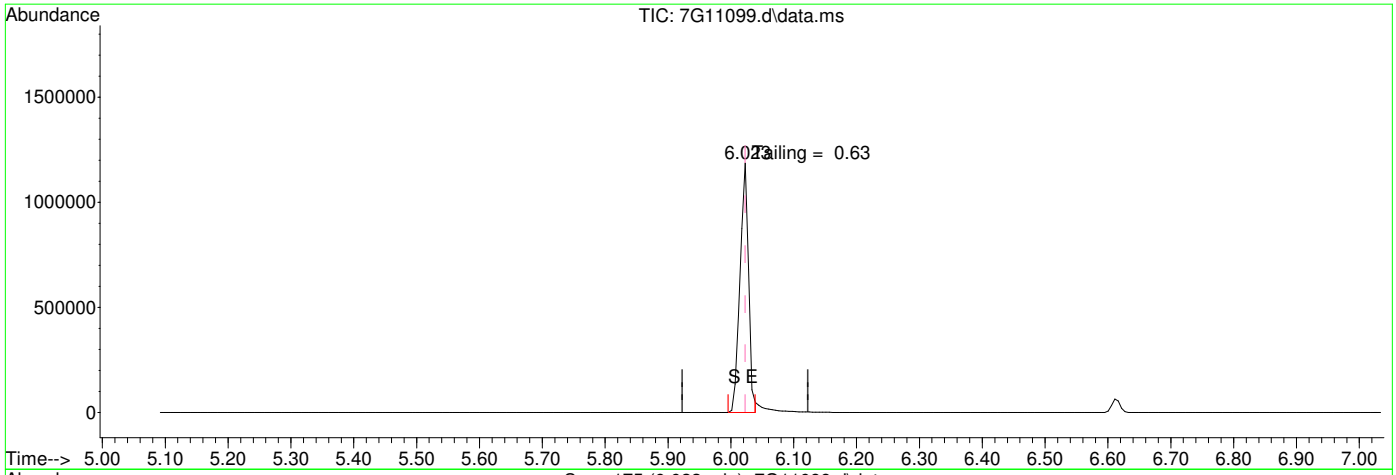
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	33.6	2163	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	39.7	2561	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	43.9	2830	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	6444	PASS
199	198	5	9	6.4	412	PASS
275	198	10	30	24.6	1585	PASS
365	198	1	100	2.8	182	PASS
441	443	0.01	100	87.4	698	PASS
442	198	40	100	69.1	4451	PASS
443	442	17	23	18.0	799	PASS

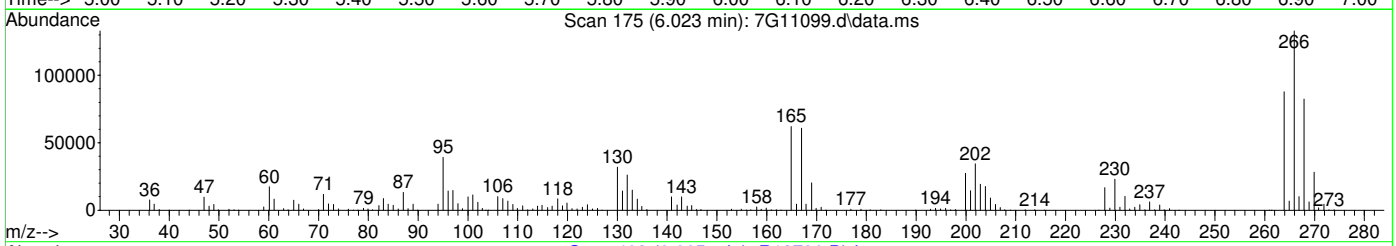
7G11099.d dftpp.m Tue Aug 11 02:33:21 2020

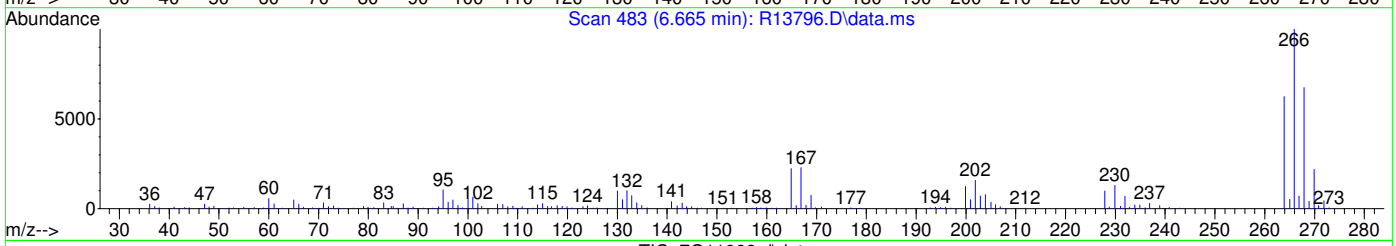
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11099.d
Acq On : 10 Aug 2020 2:10 pm
Operator : FOUADS
Sample : DFTPP
Misc : op81342,S7G482,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 11 02:32:18 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Tue Aug 11 02:32:16 2020
Response via : Initial Calibration







TIC: 7G11099.d\data.ms

(1) Pentachlorophenol

6.023min (0.000) 47.13

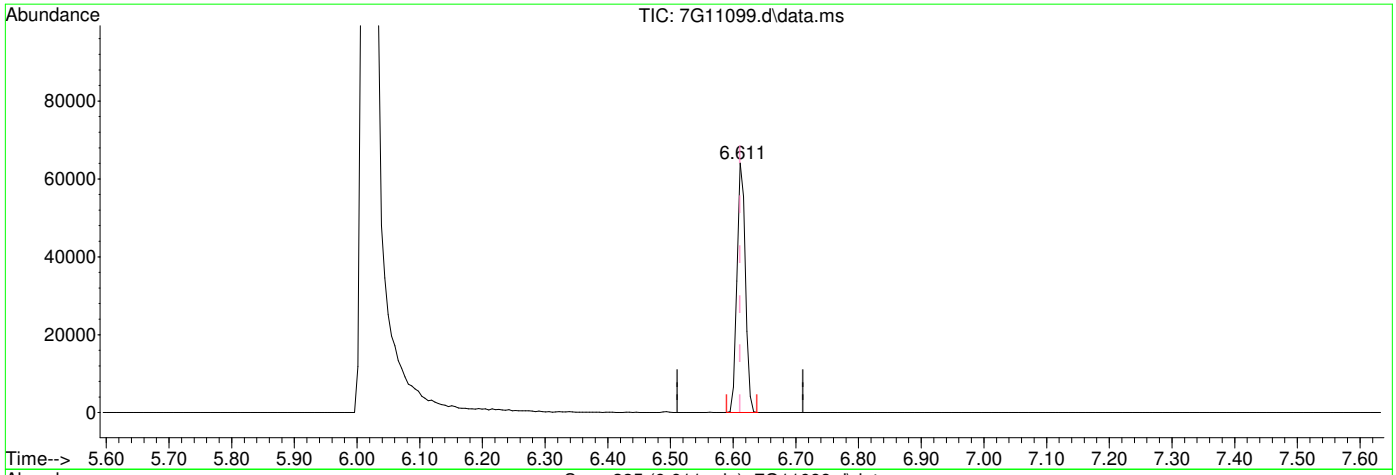
response 1127348

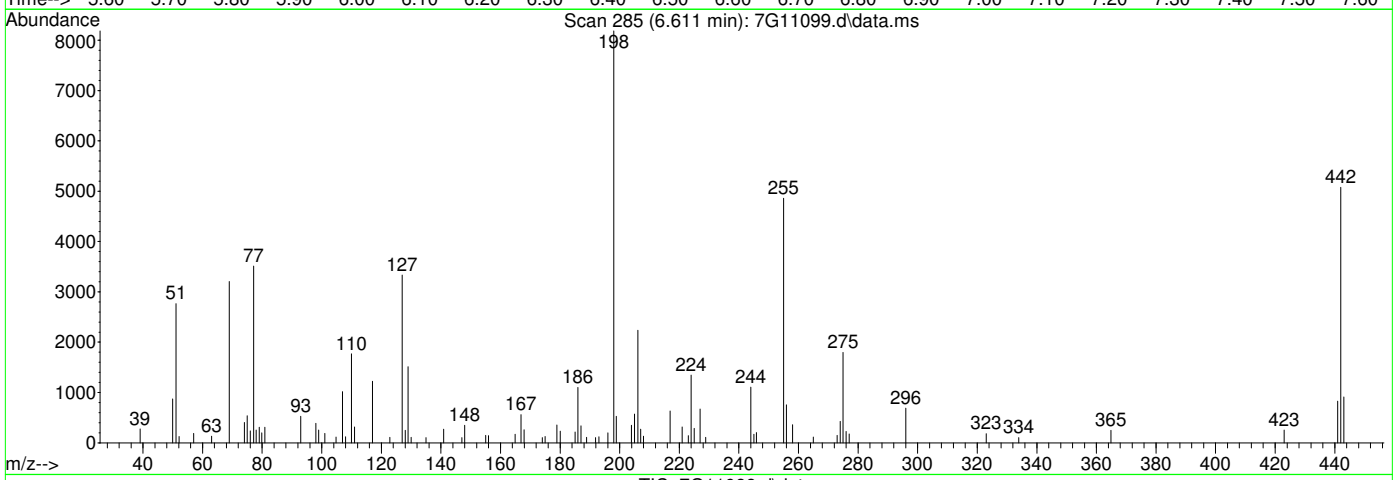
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11099.d
Acq On : 10 Aug 2020 2:10 pm
Operator : FOUADS
Sample : DFTPP
Misc : op81342,S7G482,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 11 02:32:18 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Tue Aug 11 02:32:16 2020
Response via : Initial Calibration





TIC: 7G11099.d\data.ms

(2) DFTPP

6.611min (0.000) 2.11

response 59533

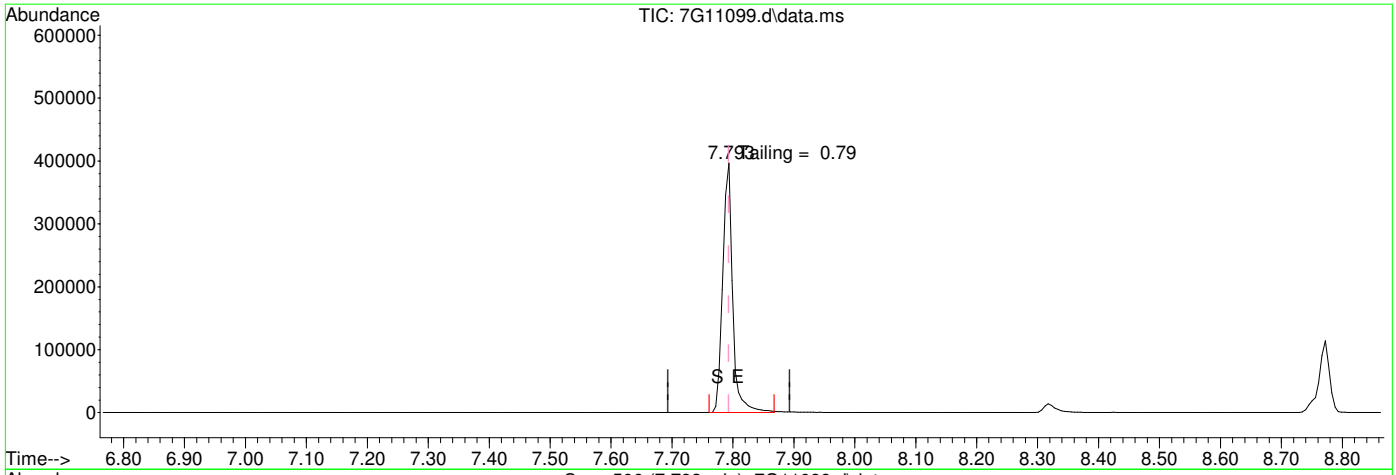
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

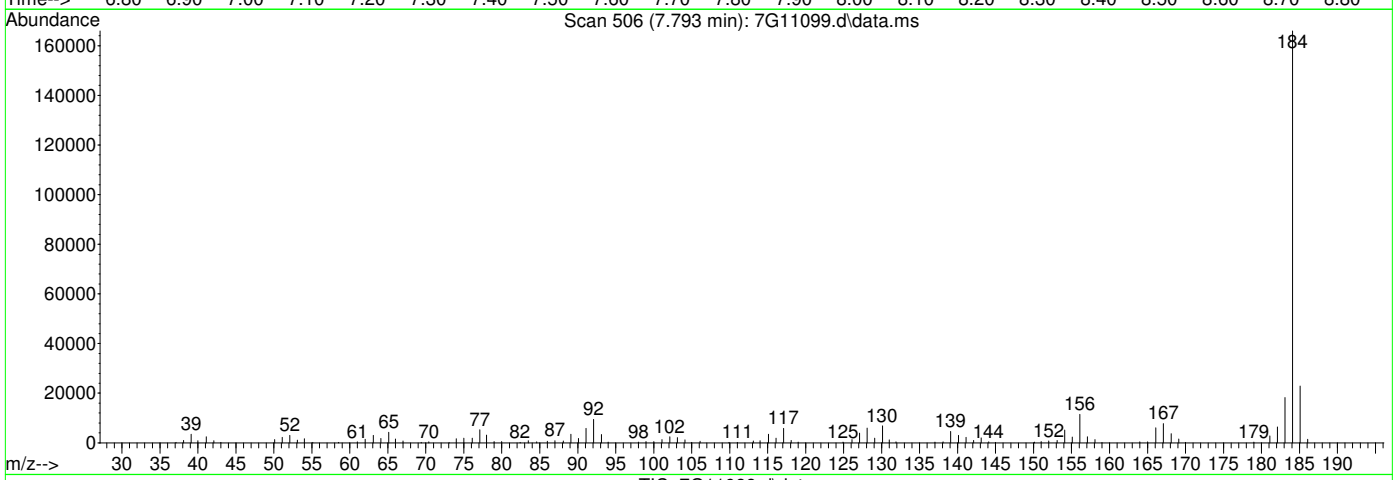
SGS FA77576

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11099.d
Acq On : 10 Aug 2020 2:10 pm
Operator : FOUADS
Sample : DFTPP
Misc : op81342,S7G482,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 11 02:32:18 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Tue Aug 11 02:32:16 2020
Response via : Initial Calibration





TIC: 7G11099.d\data.ms

(3) Benzidine

7.793min (0.000) 10.64

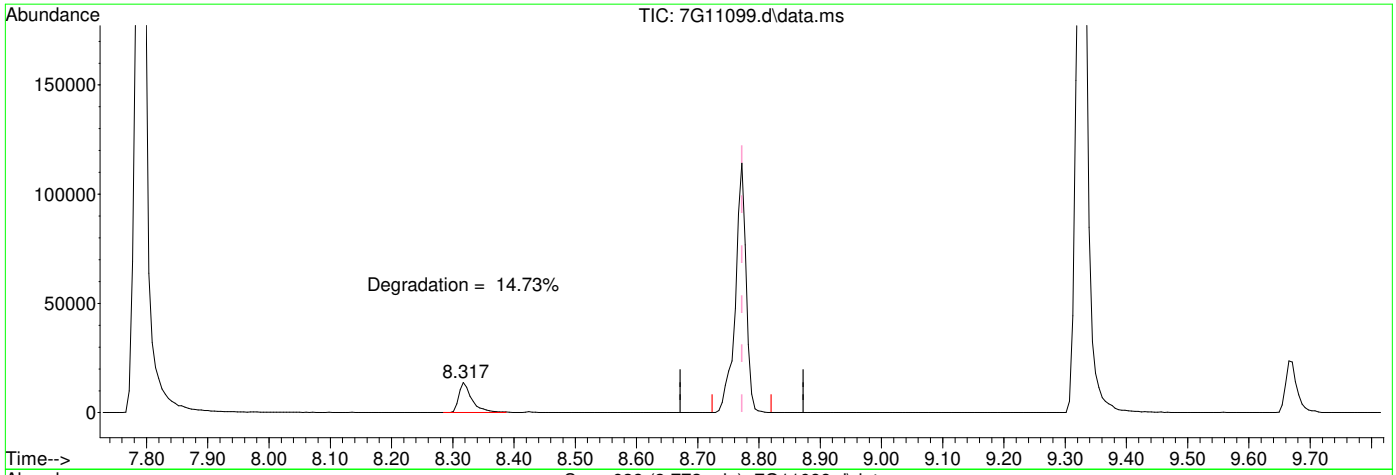
response 451409

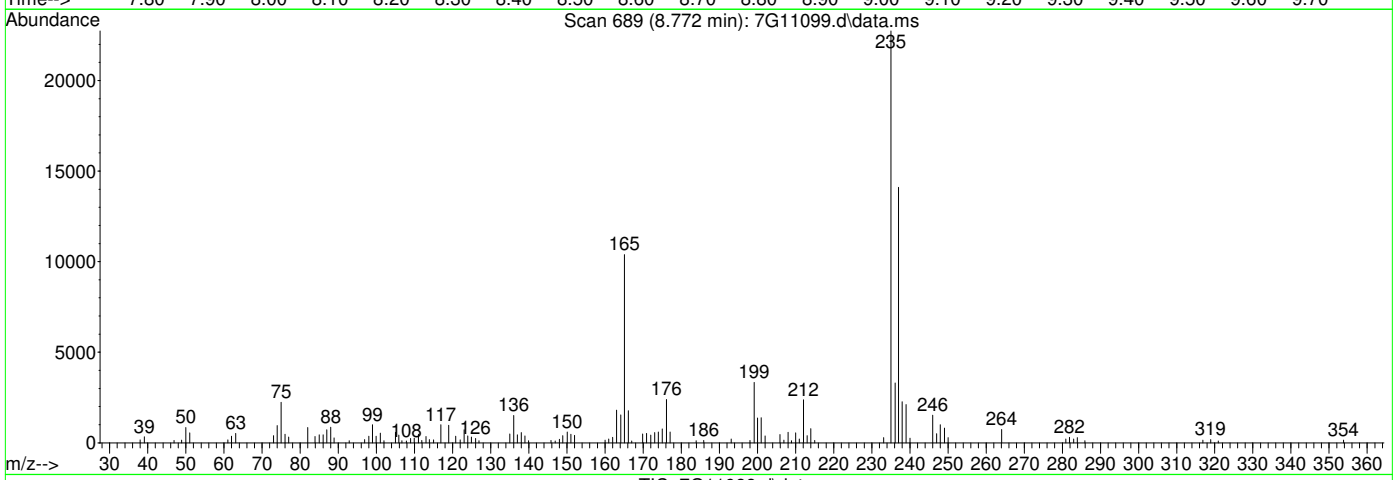
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11099.d
Acq On : 10 Aug 2020 2:10 pm
Operator : FOUADS
Sample : DFTPP
Misc : op81342,S7G482,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 11 02:32:18 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Tue Aug 11 02:32:16 2020
Response via : Initial Calibration





TIC: 7G11099.d\data.ms

(4) DDT

8.772min (0.000) 3.99

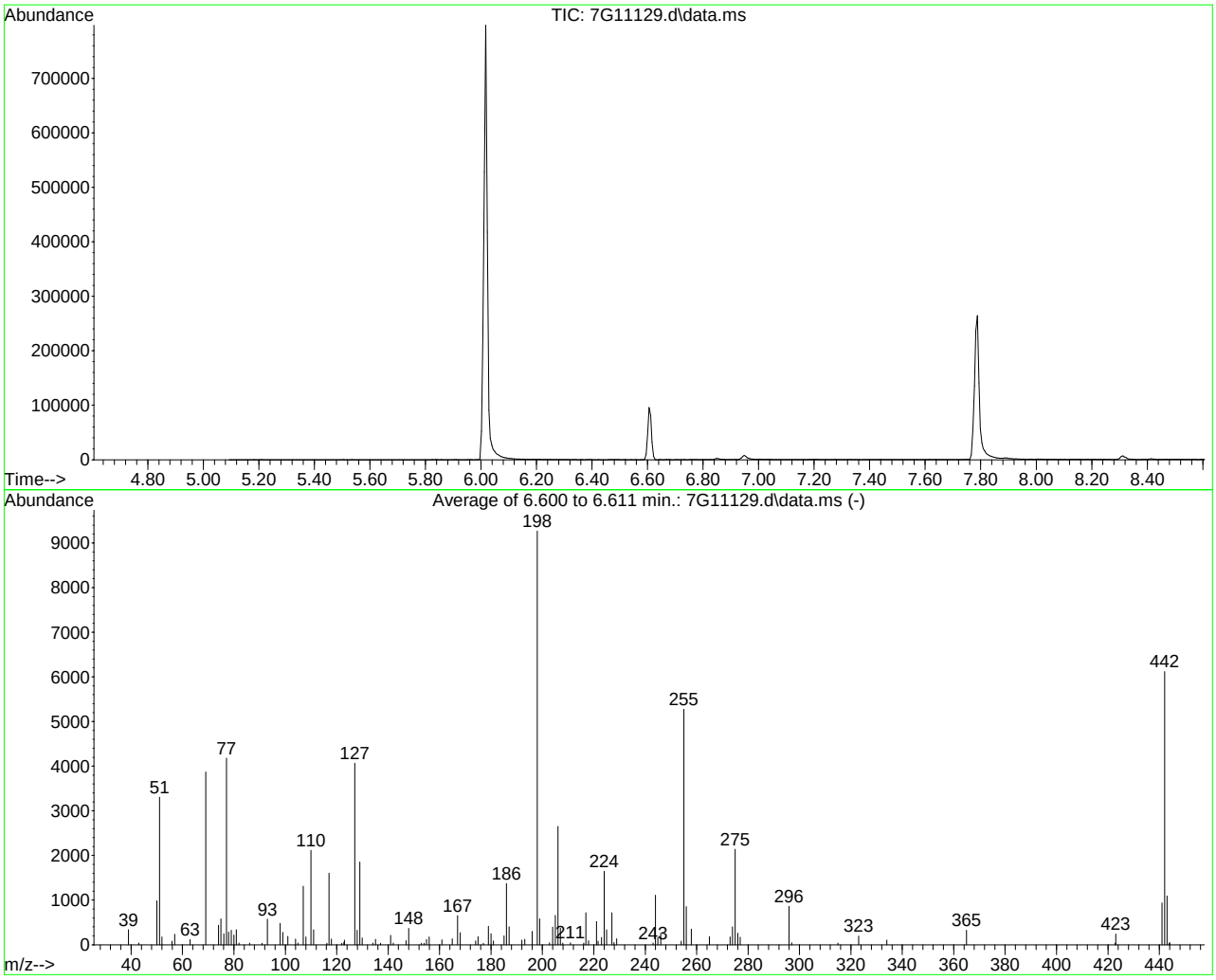
response 139298

Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

SW-846 Method 8270

Data File : C:\msdchem\1\data\Je...2020\S7G483\7G11129.d Vial: 1
Acq On : 11 Aug 2020 8:11 am Operator: FOUADS
Sample : dftpp Inst : MSBNA8
Misc : op81342,S7G483,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\methods\dftpp.m (RTE Integrator)
Title : Tune Evaluation



AutoFind: Scans 283, 284, 285; Background Corrected with Scan 279

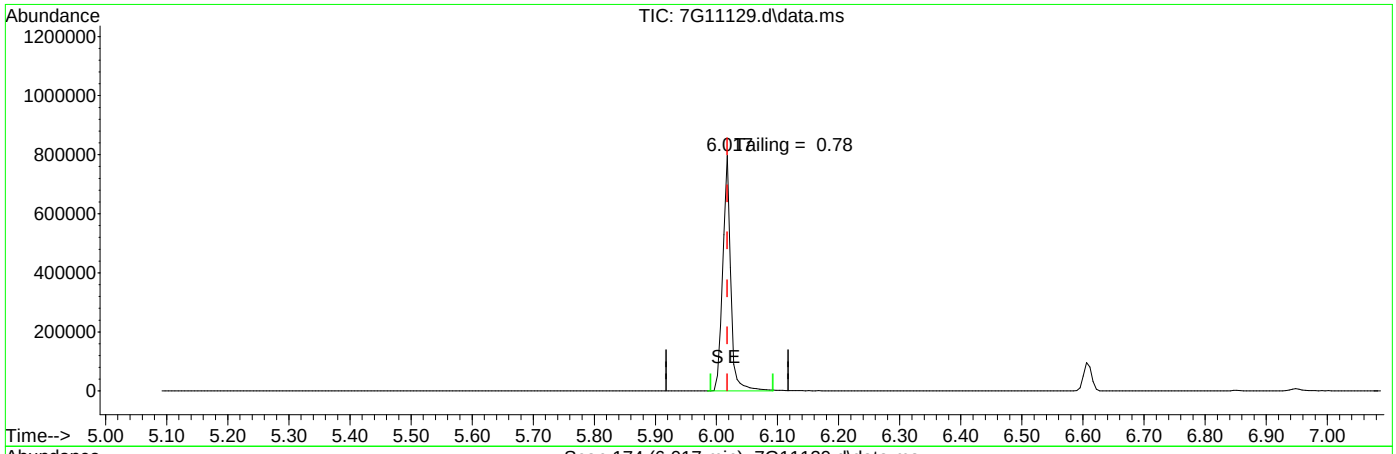
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	35.6	3303	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	41.8	3872	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	43.9	4068	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	9270	PASS
199	198	5	9	6.3	583	PASS
275	198	10	30	23.1	2141	PASS
365	198	1	100	3.5	327	PASS
441	443	0.01	100	86.0	938	PASS
442	198	40	100	66.0	6121	PASS
443	442	17	23	17.8	1091	PASS

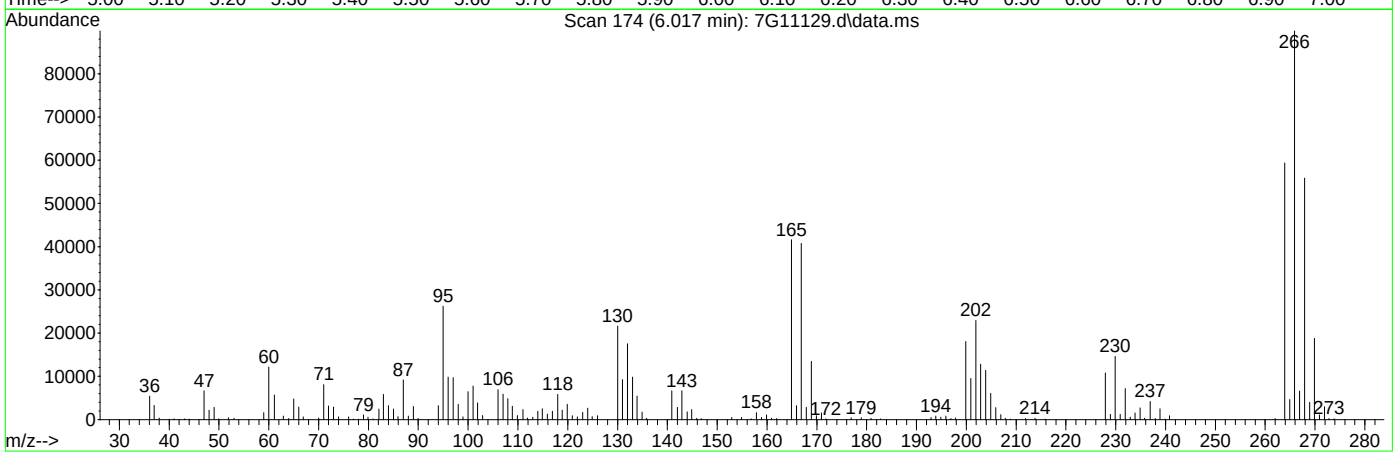
7G11129.d dftpp.m Wed Aug 12 07:16:58 2020

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11129.d
Acq On : 11 Aug 2020 8:11 am
Operator : FOUADS
Sample : dftpp Inst : MSBNA8
Misc : op81342,S7G483,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Results File: dftpp.RES
Quant Time: Aug 12 07:14:47 2020
Quant Title : Tune Evaluation
QLast Update : Wed Aug 12 07:14:44 2020
Response via : Initial Calibration





TIC: 7G11129.d\data.ms

(1) Pentachlorophenol

6.017min (0.000) 30.34

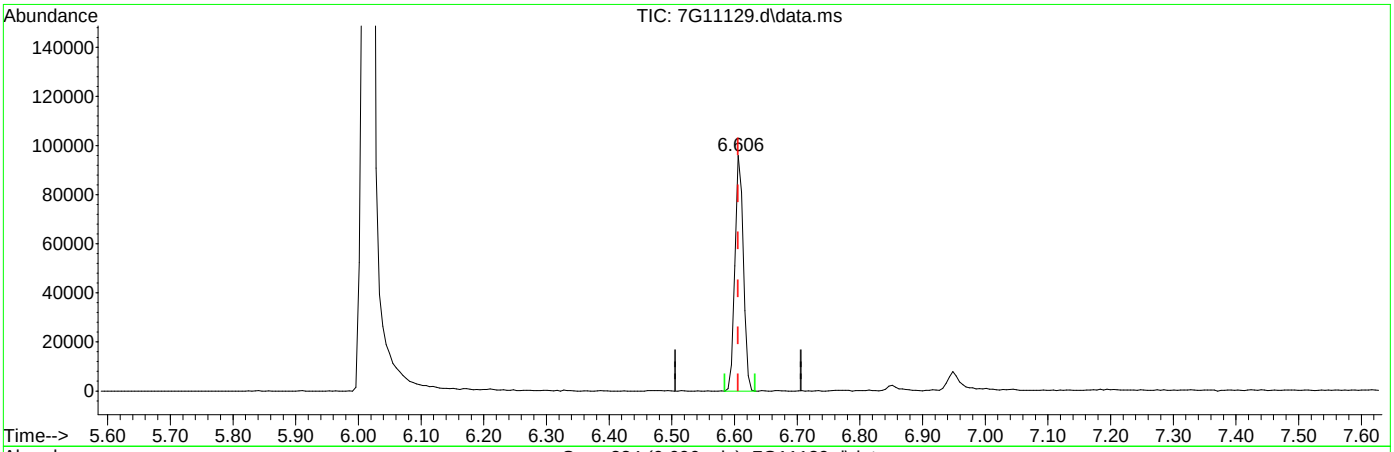
response 725833

Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11129.d
Acq On : 11 Aug 2020 8:11 am
Operator : FOUADS
Sample : dftpp Inst : MSBNA8
Misc : op81342,S7G483,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Results File: dftpp.RES
Quant Time: Aug 12 07:14:47 2020
Quant Title : Tune Evaluation
QLast Update : Wed Aug 12 07:14:44 2020
Response via : Initial Calibration



TIC: 7G11129.d\data.ms

(2) DFTPP

6.606min (0.000) 3.17

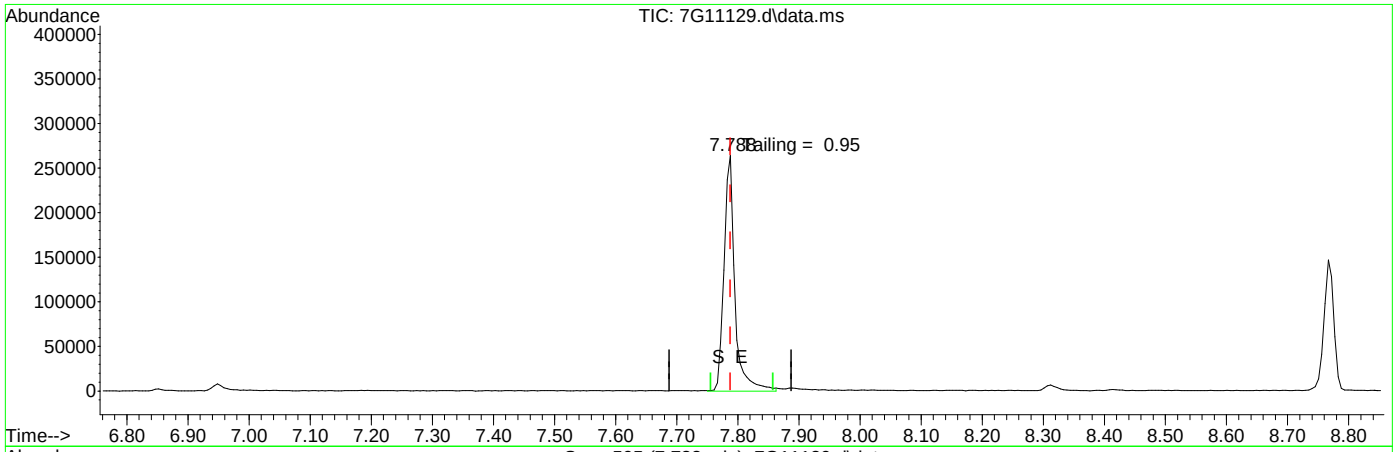
response 89512

Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11129.d
Acq On : 11 Aug 2020 8:11 am
Operator : FOUADS
Sample : dftpp Inst : MSBNA8
Misc : op81342,S7G483,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Results File: dftpp.RES
Quant Time: Aug 12 07:14:47 2020
Quant Title : Tune Evaluation
QLast Update : Wed Aug 12 07:14:44 2020
Response via : Initial Calibration



TIC: 7G11129.d\data.ms

(3) Benzidine

7.788min (0.000) 7.66

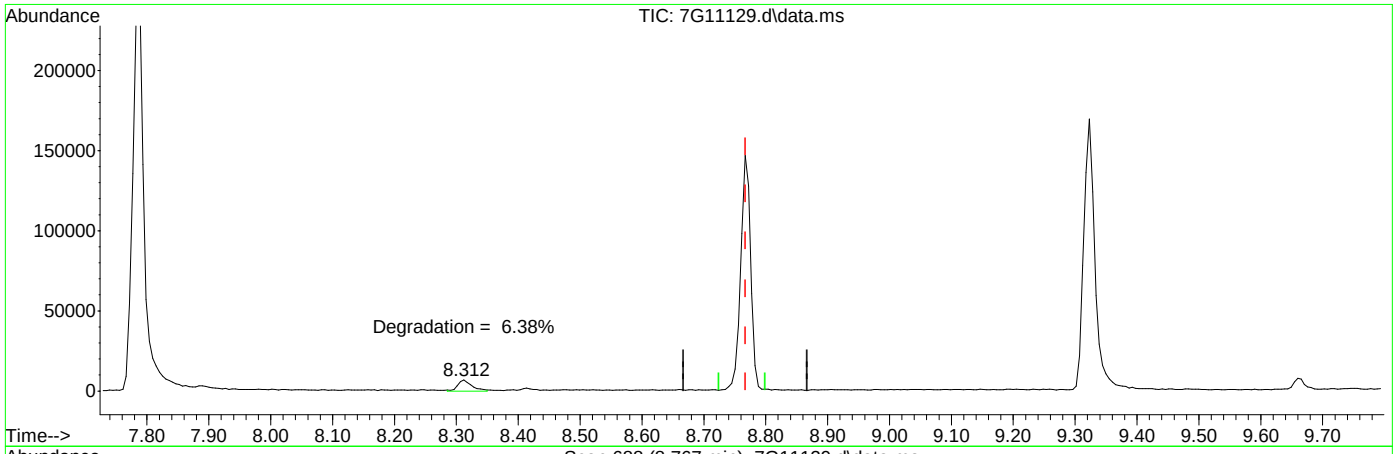
response 324892

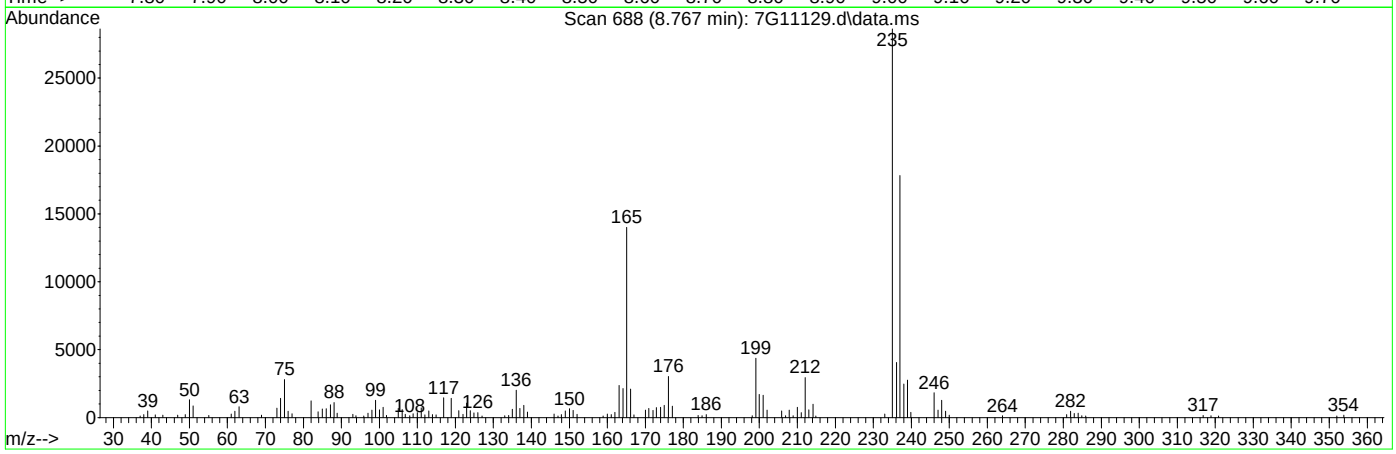
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11129.d
Acq On : 11 Aug 2020 8:11 am
Operator : FOUADS
Sample : dftpp Inst : MSBNA8
Misc : op81342,S7G483,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Results File: dftpp.RES
Quant Time: Aug 12 07:14:47 2020
Quant Title : Tune Evaluation
QLast Update : Wed Aug 12 07:14:44 2020
Response via : Initial Calibration





TIC: 7G11129.d\data.ms

(4) DDT

8.767min (0.000) 4.71

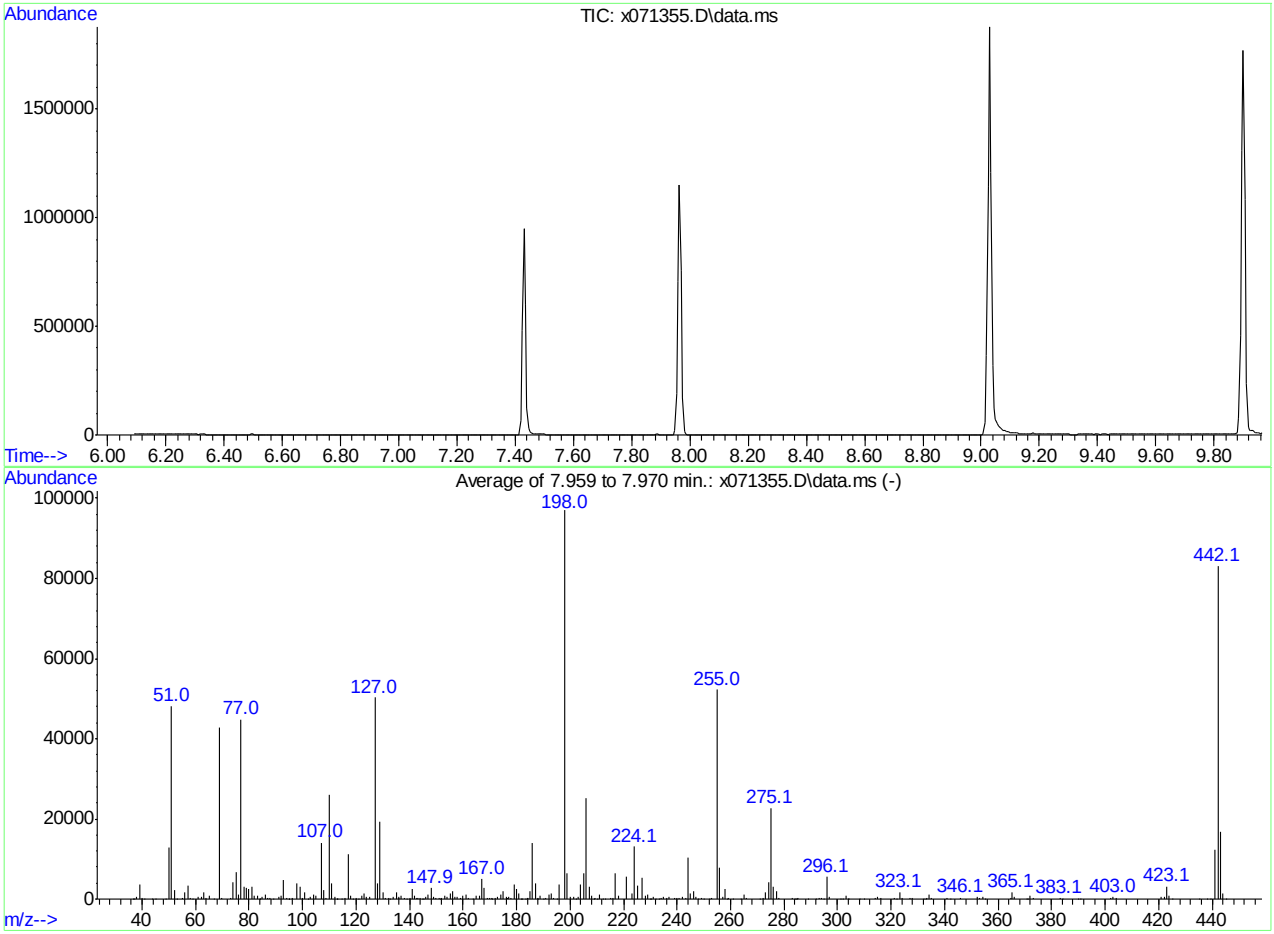
response 164421

Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

SW-846 Method 8270

Data File : C:\msdchem\1\DATA\0623_sx2918\x071355.D Vial: 1
Acq On : 23 Jun 2020 9:47 am Operator: marthav
Sample : dftpp Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\METHODS\dftpp.m (RTE Integrator)
Title : Tune Evaluation



AutoFind: Scans 350, 351, 352; Background Corrected with Scan 344

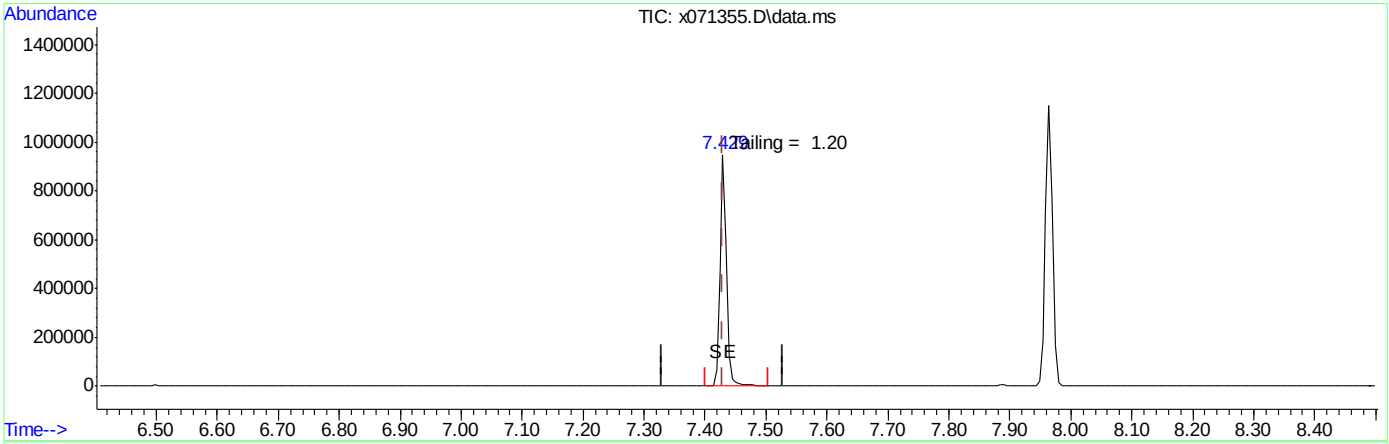
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	49.7	48227	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	44.1	42739	PASS
70	69	0.00	2	0.5	206	PASS
127	198	40	60	51.8	50221	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	96957	PASS
199	198	5	9	6.7	6460	PASS
275	198	10	30	23.4	22665	PASS
365	198	1	100	1.9	1798	PASS
441	443	0.01	100	74.3	12438	PASS
442	198	40	100	85.7	83123	PASS
443	442	17	23	20.1	16733	PASS

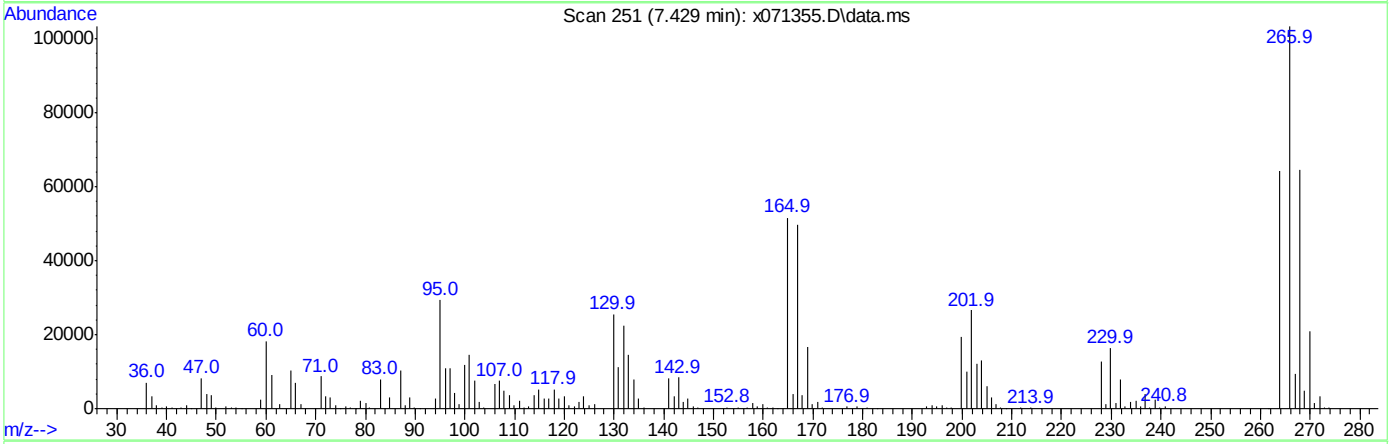
x071355.D dftpp.m Tue Jun 23 16:05:39 2020

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071355.D
Acq On : 23 Jun 2020 9:47 am
Operator : marthav
Sample : dftpp Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 23 16:05:35 2020
Quant Method : C:\msdchem\1\METHODS\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Tue Jun 23 16:05:31 2020
Response via : Initial Calibration





TIC: x071355.D\data.ms

(1) Pentachlorophenol

7.429min (0.000) 30.90

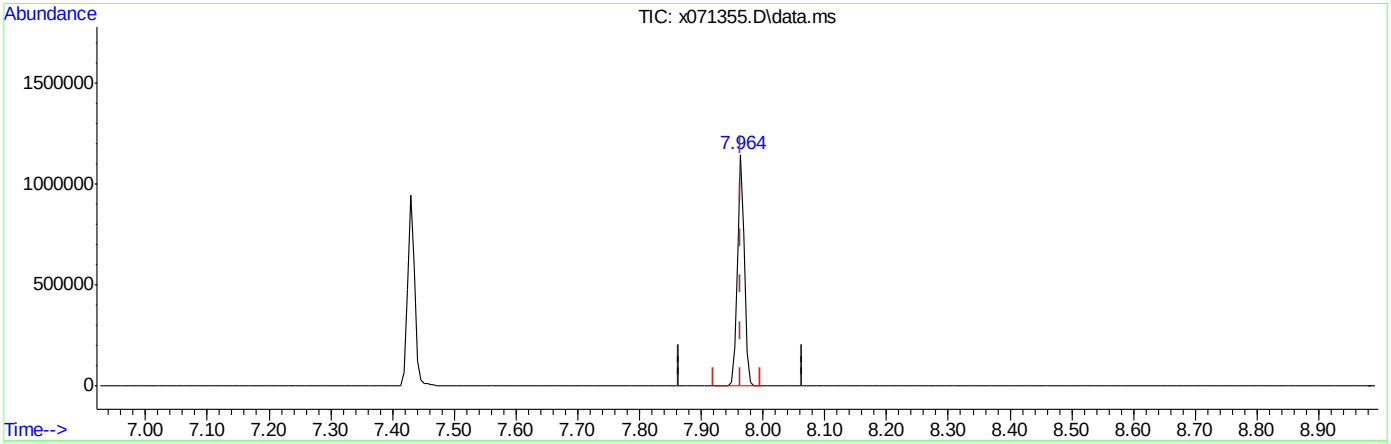
response 739095

Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071355.D
Acq On : 23 Jun 2020 9:47 am
Operator : marthav
Sample : dftpp Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 23 16:05:35 2020
Quant Method : C:\msdchem\1\METHODS\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Tue Jun 23 16:05:31 2020
Response via : Initial Calibration



TIC: x071355.D\data.ms

(2) DFTPP

7.964min (0.000) 34.25

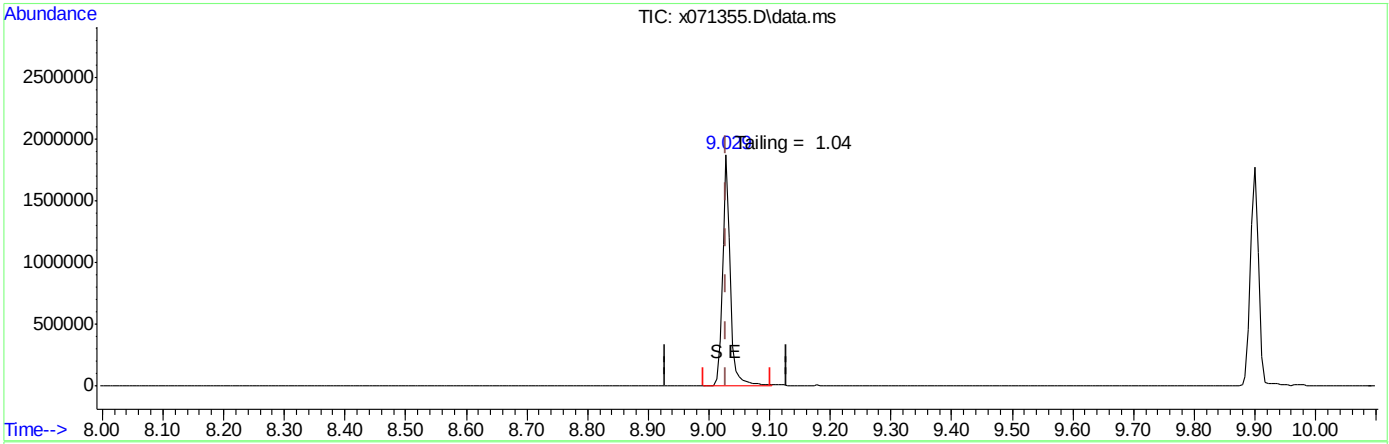
response 966439

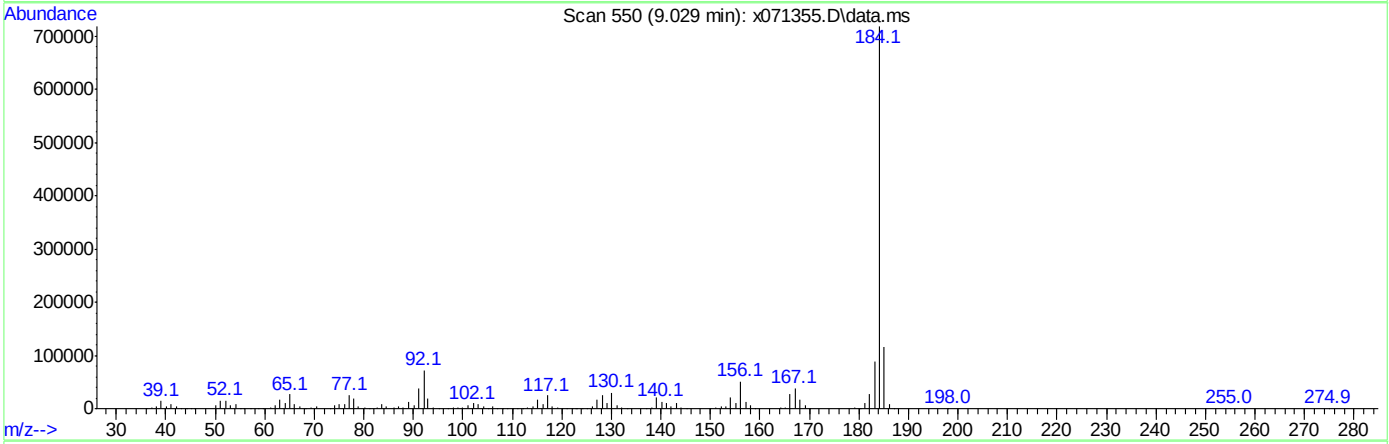
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071355.D
Acq On : 23 Jun 2020 9:47 am
Operator : marthav
Sample : dftpp Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 23 16:05:35 2020
Quant Method : C:\msdchem\1\METHODS\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Tue Jun 23 16:05:31 2020
Response via : Initial Calibration





TIC: x071355.D\data.ms

(3) Benzidine

9.029min (0.000) 40.81

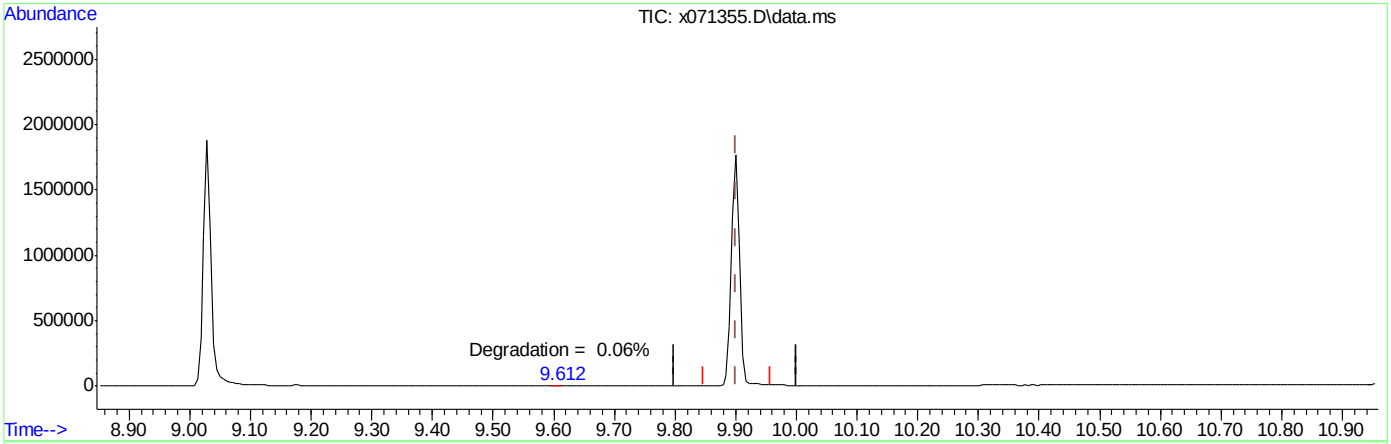
response 1730836

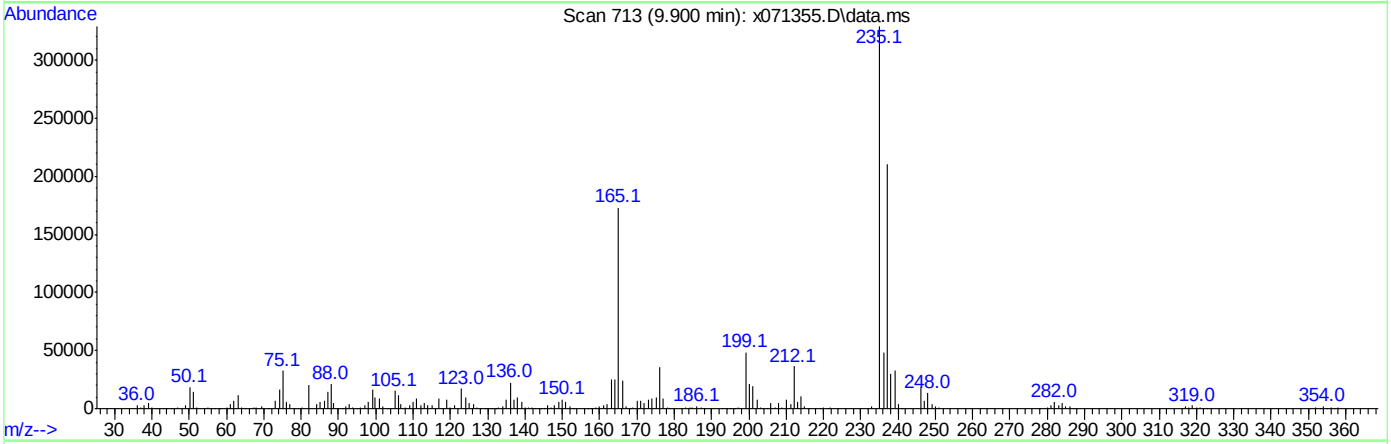
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071355.D
Acq On : 23 Jun 2020 9:47 am
Operator : marthav
Sample : dftpp Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 23 16:05:35 2020
Quant Method : C:\msdchem\1\METHODS\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Tue Jun 23 16:05:31 2020
Response via : Initial Calibration





TIC: x071355.D\data.ms

(4) DDT

9.900min (0.000) 46.28

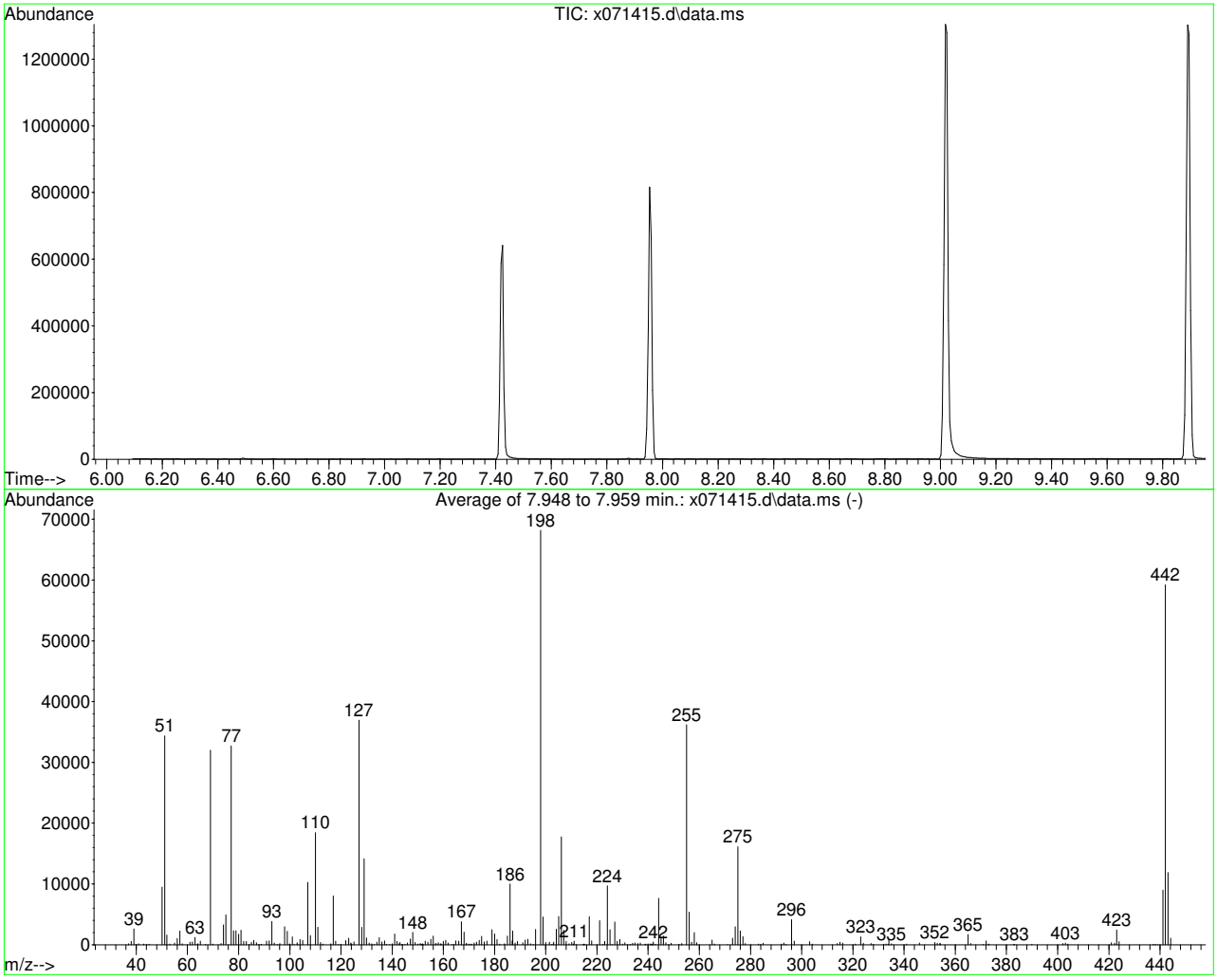
response 1615385

Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

SW-846 Method 8270

Data File : C:\msdchem\1\data\jo...2020\sx2919\x071415.d Vial: 1
Acq On : 24 Jun 2020 3:04 pm Operator: marthav
Sample : dftpp Inst : MSBNA05
Misc : op80508,sx2919,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\methods\dftpp.m (RTE Integrator)
Title : Tune Evaluation



AutoFind: Scans 348, 349, 350; Background Corrected with Scan 344

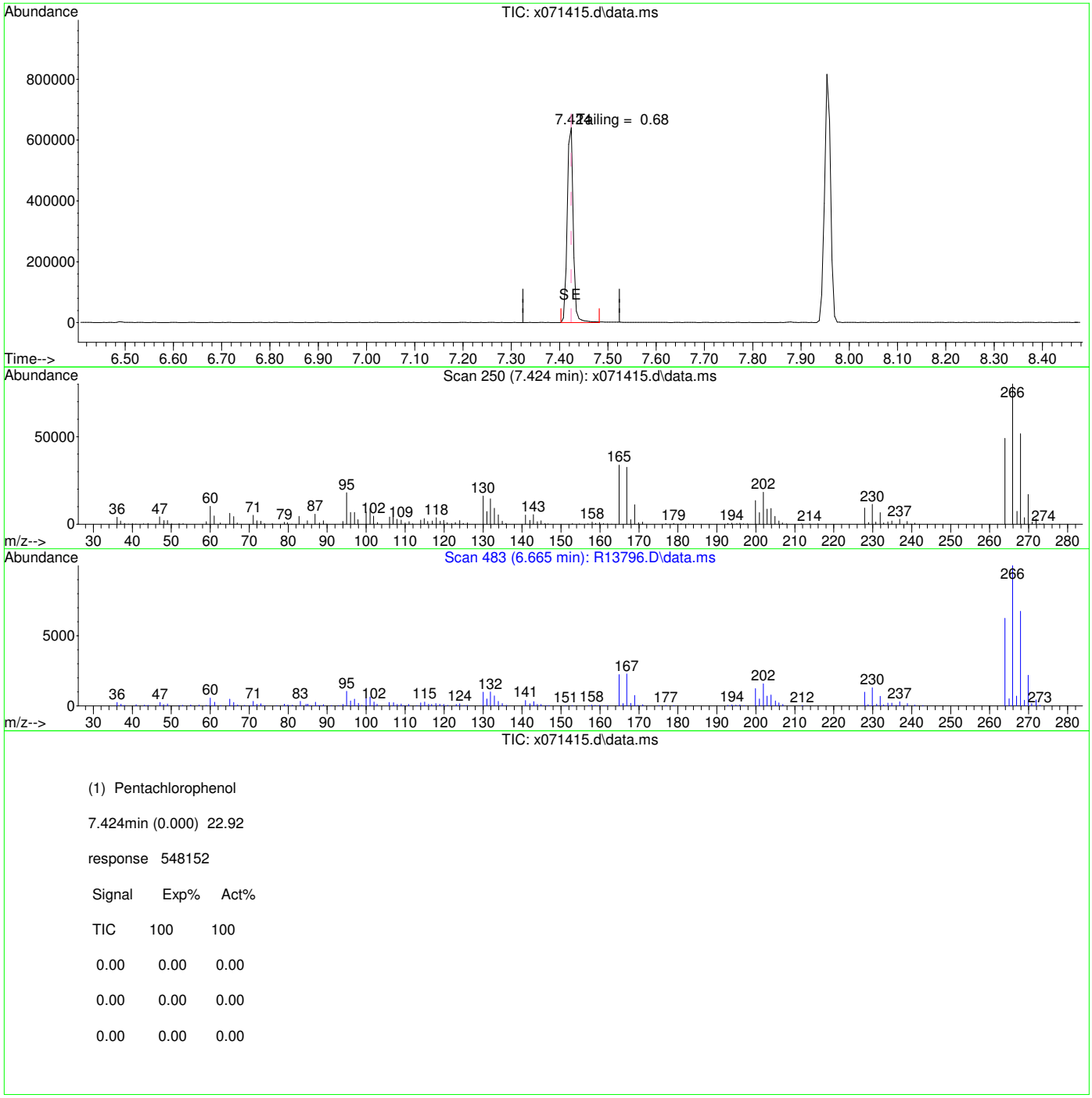
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	50.4	34387	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	47.0	32027	PASS
70	69	0.00	2	0.3	101	PASS
127	198	40	60	54.2	36939	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	68165	PASS
199	198	5	9	6.7	4563	PASS
275	198	10	30	23.7	16125	PASS
365	198	1	100	2.5	1684	PASS
441	443	0.01	100	75.9	9013	PASS
442	198	40	100	86.9	59211	PASS
443	442	17	23	20.0	11869	PASS

x071415.d dftpp.m Thu Jun 25 04:11:49 2020

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\June 2020\06-25-2020\sx2919\
Data File : x071415.d
Acq On : 24 Jun 2020 3:04 pm
Operator : marthav
Sample : dftpp
Misc : op80508,sx2919,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 25 02:42:47 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Thu Jun 25 02:42:45 2020
Response via : Initial Calibration



TIC: x071415.d\data.ms

(1) Pentachlorophenol

7.424min (0.000) 22.92

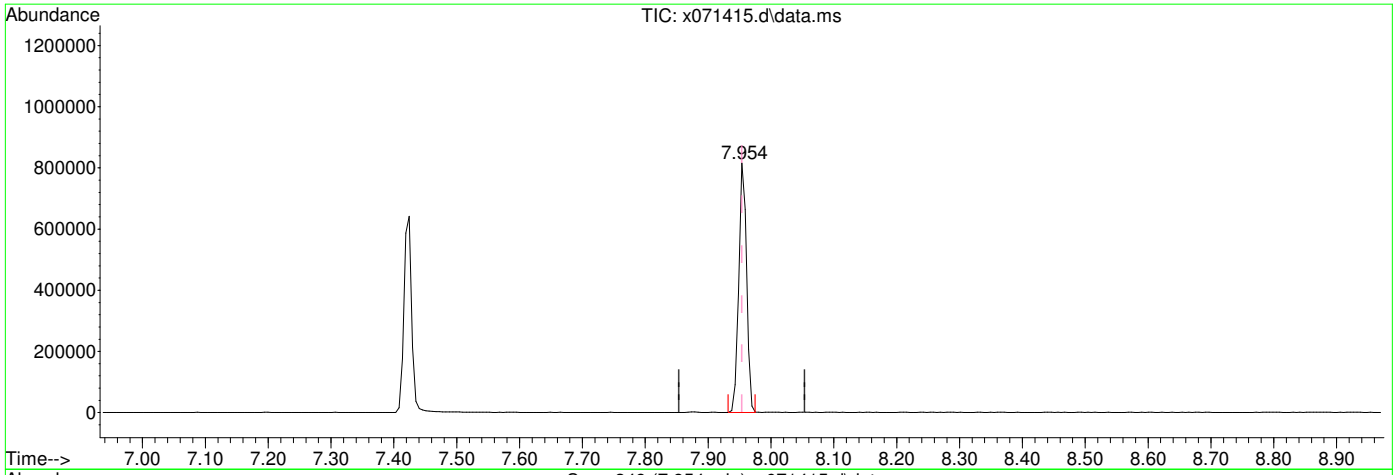
response 548152

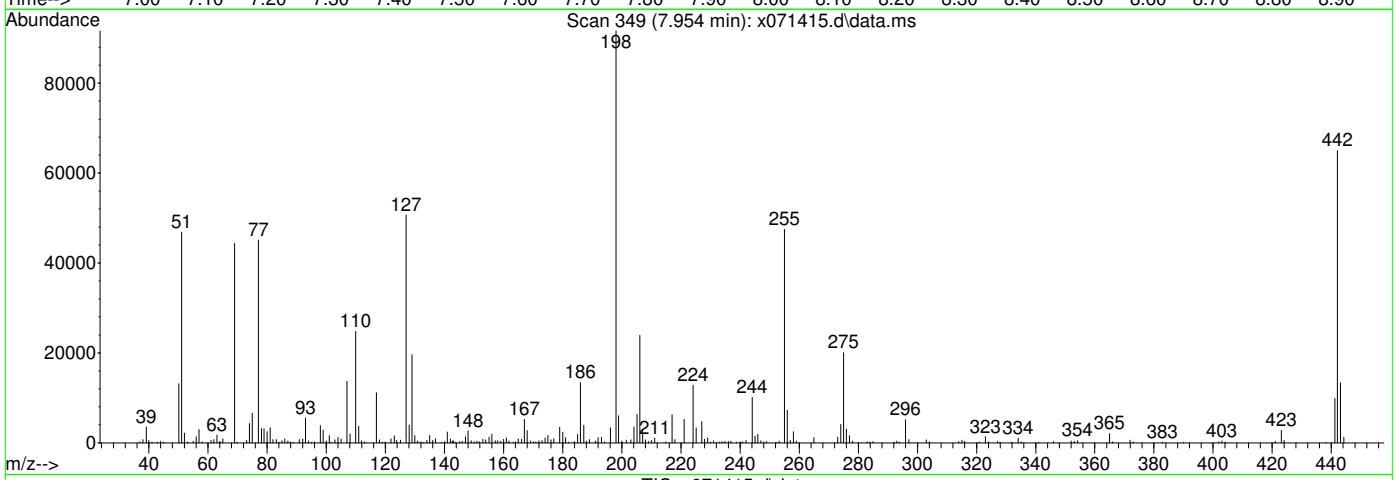
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\June 2020\06-25-2020\sx2919\
Data File : x071415.d
Acq On : 24 Jun 2020 3:04 pm
Operator : marthav
Sample : dftpp
Misc : op80508,sx2919,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 25 02:42:47 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Thu Jun 25 02:42:45 2020
Response via : Initial Calibration





TIC: x071415.d\data.ms

(2) DFTPP

7.954min (0.000) 24.97

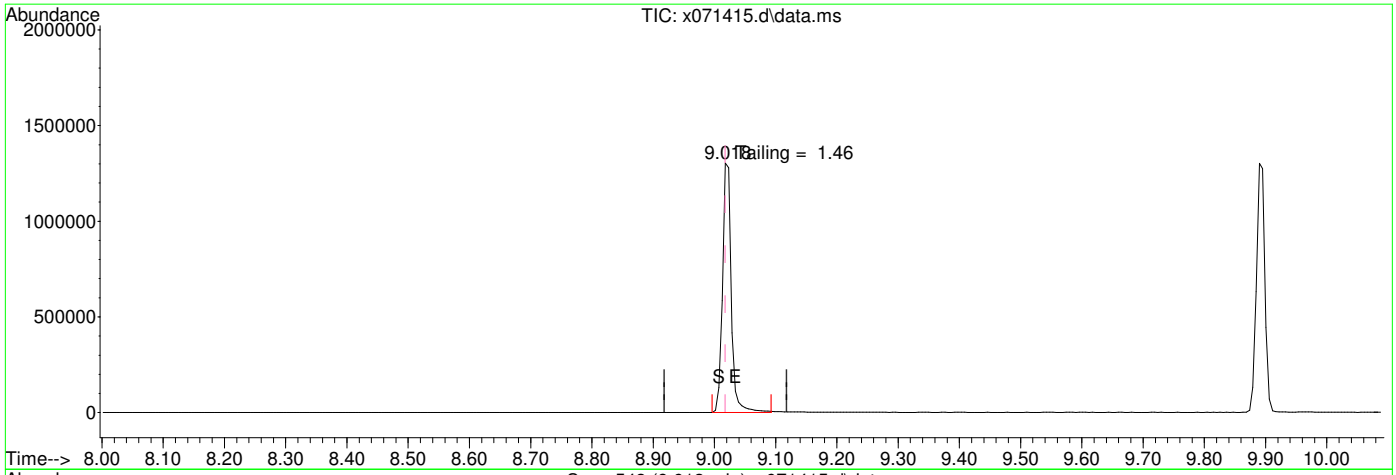
response 704578

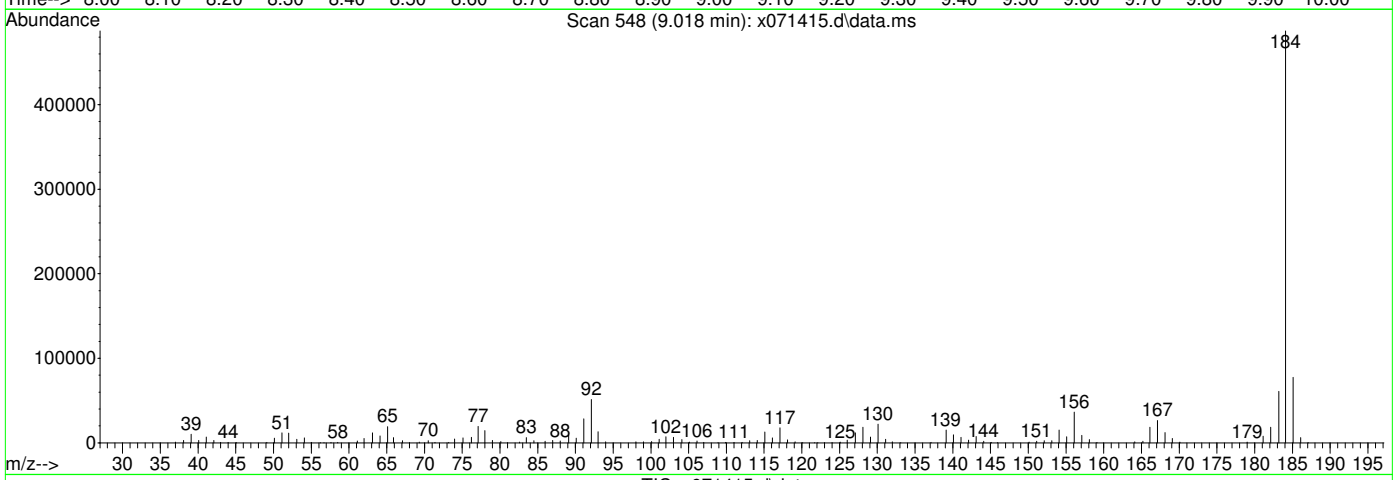
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\June 2020\06-25-2020\sx2919\
Data File : x071415.d
Acq On : 24 Jun 2020 3:04 pm
Operator : marthav
Sample : dftpp
Misc : op80508,sx2919,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 25 02:42:47 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Thu Jun 25 02:42:45 2020
Response via : Initial Calibration





TIC: x071415.d\data.ms

(3) Benzidine

9.018min (0.000) 30.47

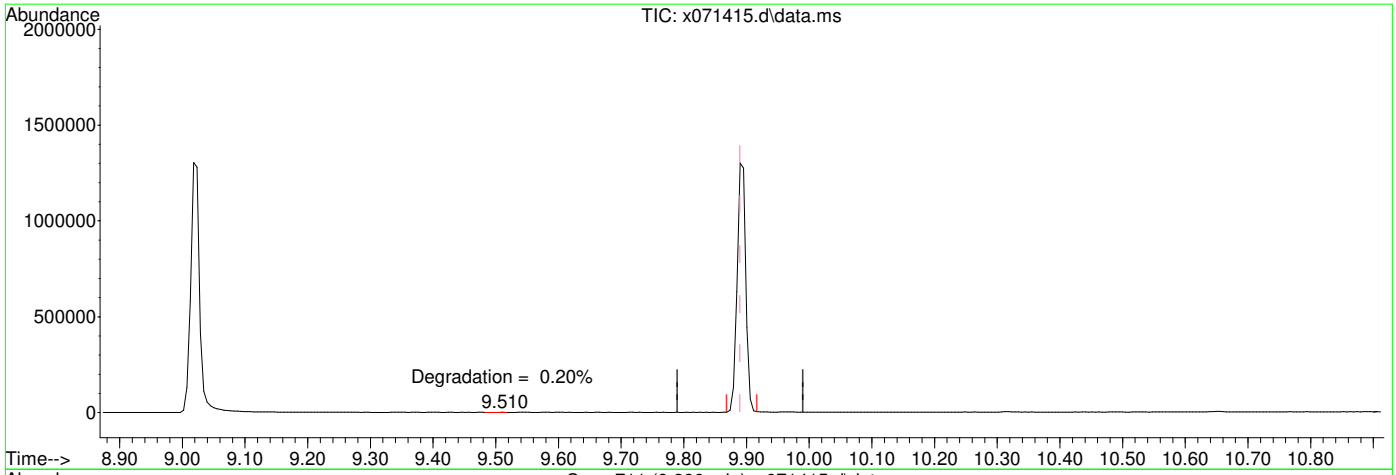
response 1292283

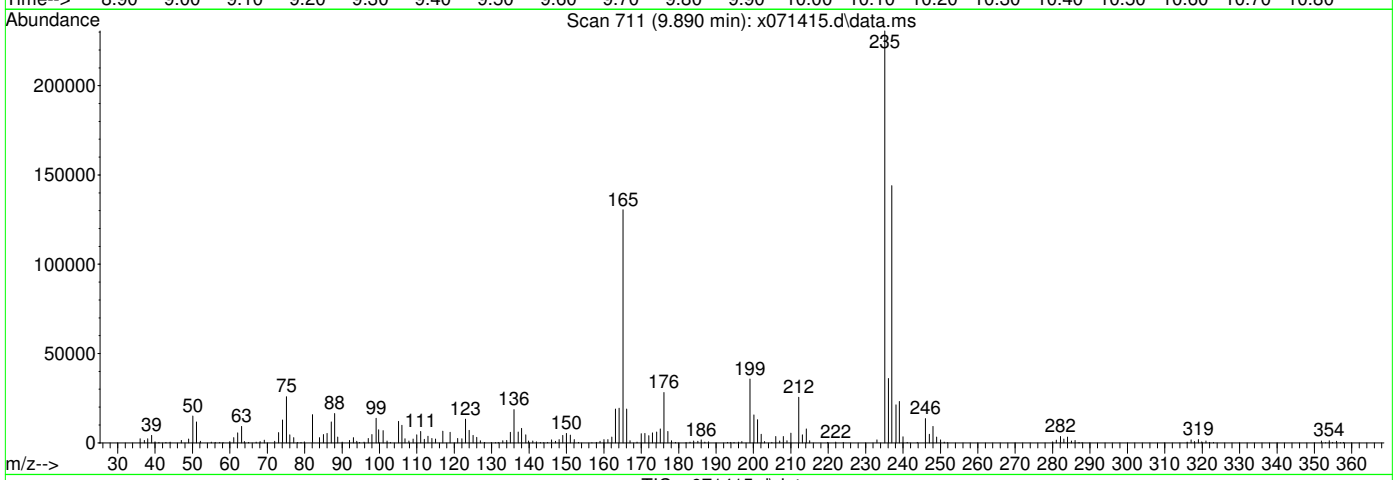
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\June 2020\06-25-2020\sx2919\
Data File : x071415.d
Acq On : 24 Jun 2020 3:04 pm
Operator : marthav
Sample : dftpp
Misc : op80508,sx2919,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 25 02:42:47 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Thu Jun 25 02:42:45 2020
Response via : Initial Calibration





TIC: x071415.d\data.ms

(4) DDT

9.890min (0.000) 35.58

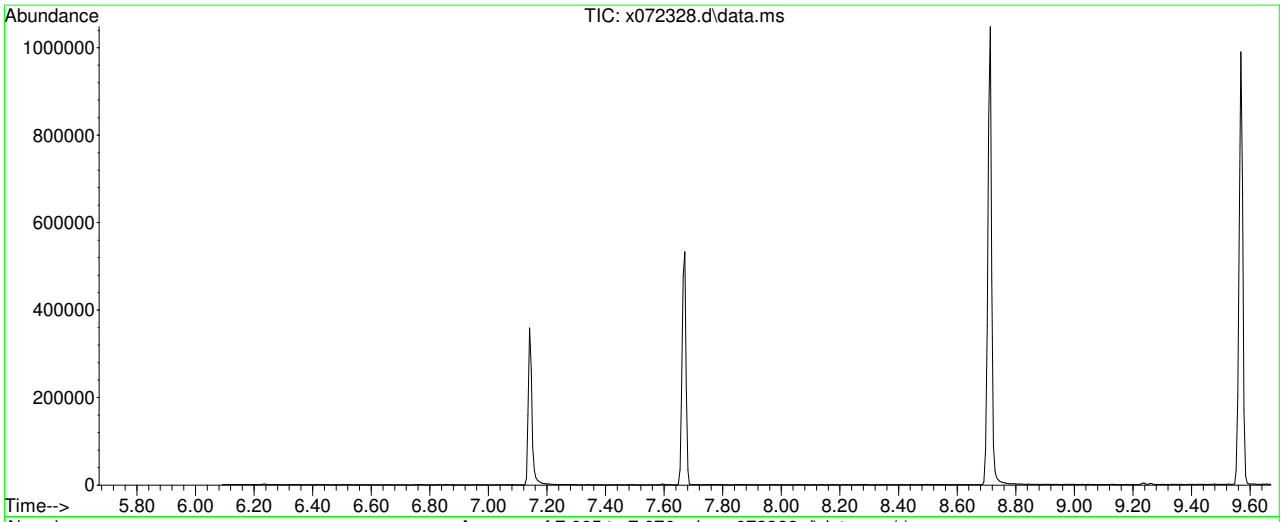
response 1241968

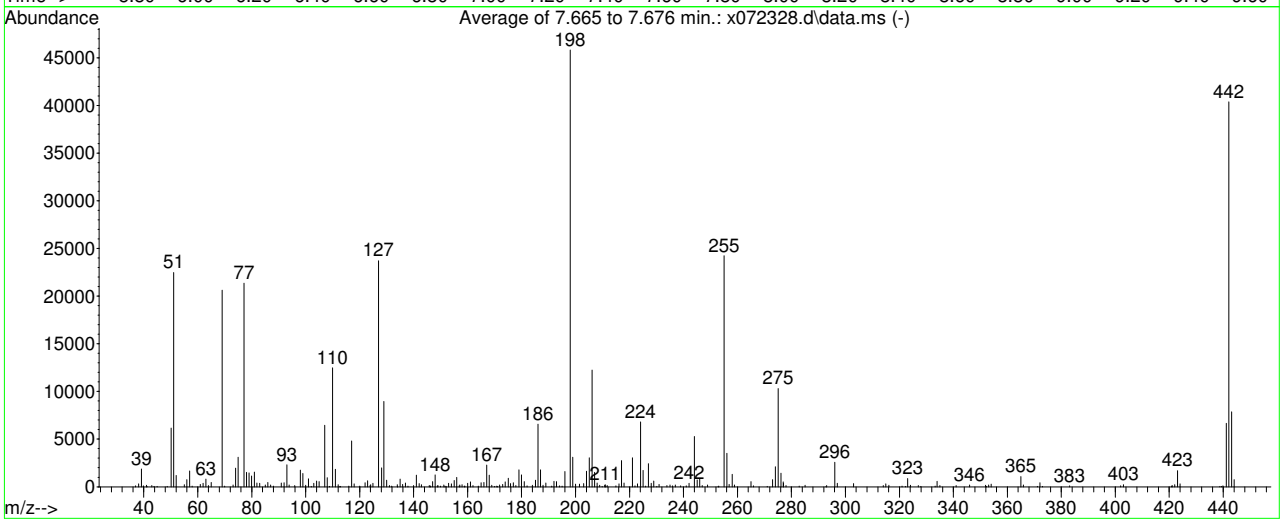
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

SW-846 Method 8270

Data File : C:\msdchem\1\data\jo...2020\sx2950\x072328.d Vial: 1
Acq On : 11 Aug 2020 12:30 pm Operator: marthav
Sample : dftpp Inst : MSBNA05
Misc : op81484,sx2950,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\methods\dftpp.m (RTE Integrator)
Title : Tune Evaluation





AutoFind: Scans 295, 296, 297; Background Corrected with Scan 290

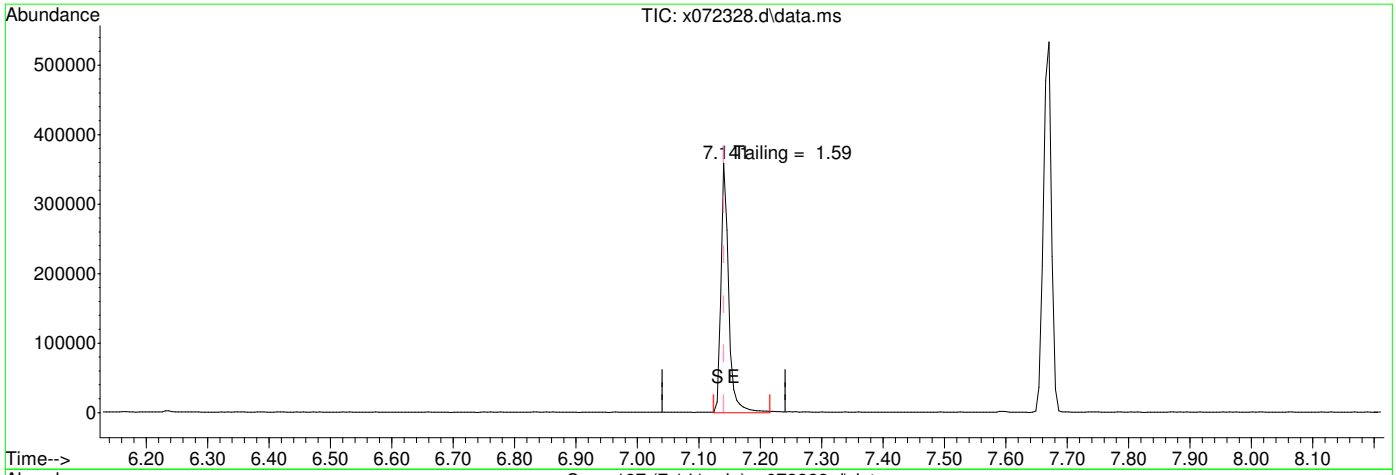
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	49.1	22485	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	45.0	20622	PASS
70	69	0.00	2	0.4	80	PASS
127	198	40	60	51.8	23723	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	45800	PASS
199	198	5	9	6.8	3103	PASS
275	198	10	30	22.5	10316	PASS
365	198	1	100	2.3	1067	PASS
441	443	0.01	100	84.6	6664	PASS
442	198	40	100	88.1	40365	PASS
443	442	17	23	19.5	7879	PASS

x072328.d dftpp.m Wed Aug 12 01:35:16 2020

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072328.d
Acq On : 11 Aug 2020 12:30 pm
Operator : marthav
Sample : dftpp
Misc : op81484,sx2950,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 12 01:34:05 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Wed Aug 12 01:34:04 2020
Response via : Initial Calibration



TIC: x072328.d\data.ms

(1) Pentachlorophenol

7.141min (0.000) 13.04

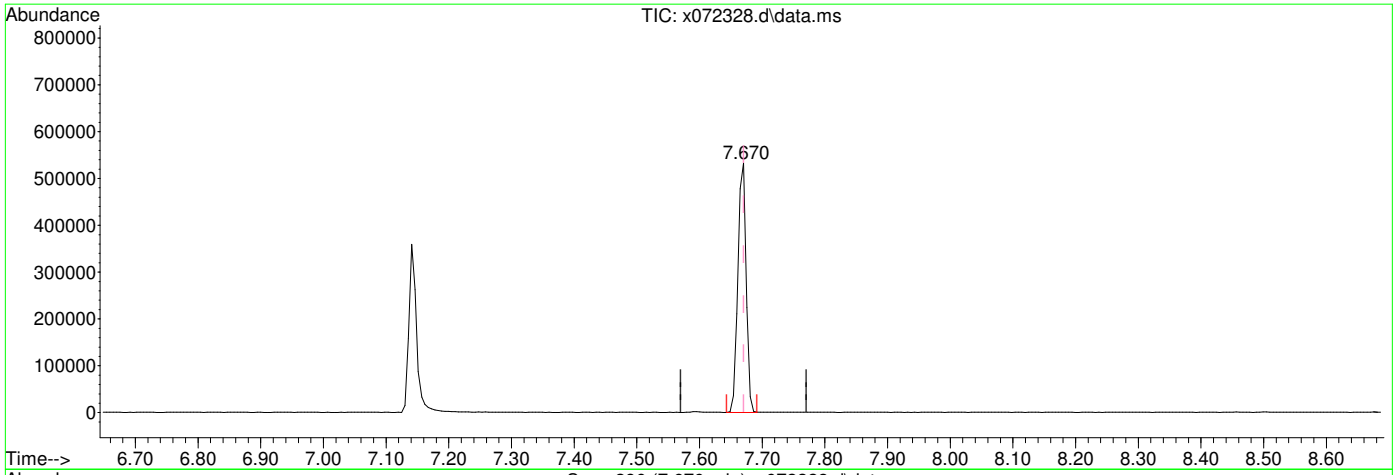
response 311869

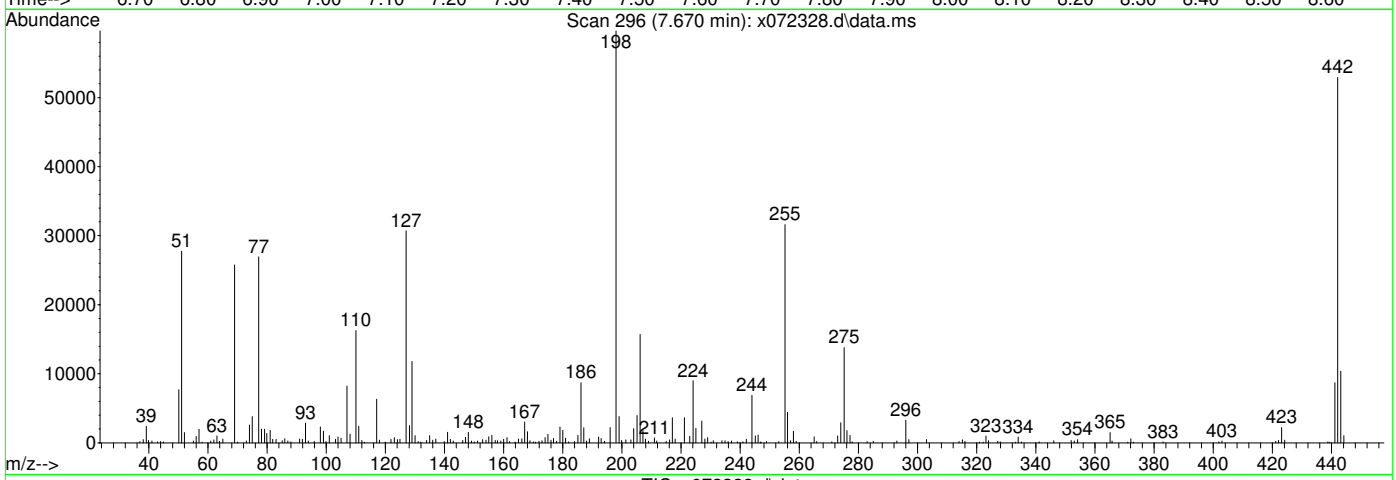
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072328.d
Acq On : 11 Aug 2020 12:30 pm
Operator : marthav
Sample : dftpp
Misc : op81484,sx2950,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 12 01:34:05 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Wed Aug 12 01:34:04 2020
Response via : Initial Calibration





TIC: x072328.d\data.ms

(2) DFTPP

7.670min (0.000) 17.26

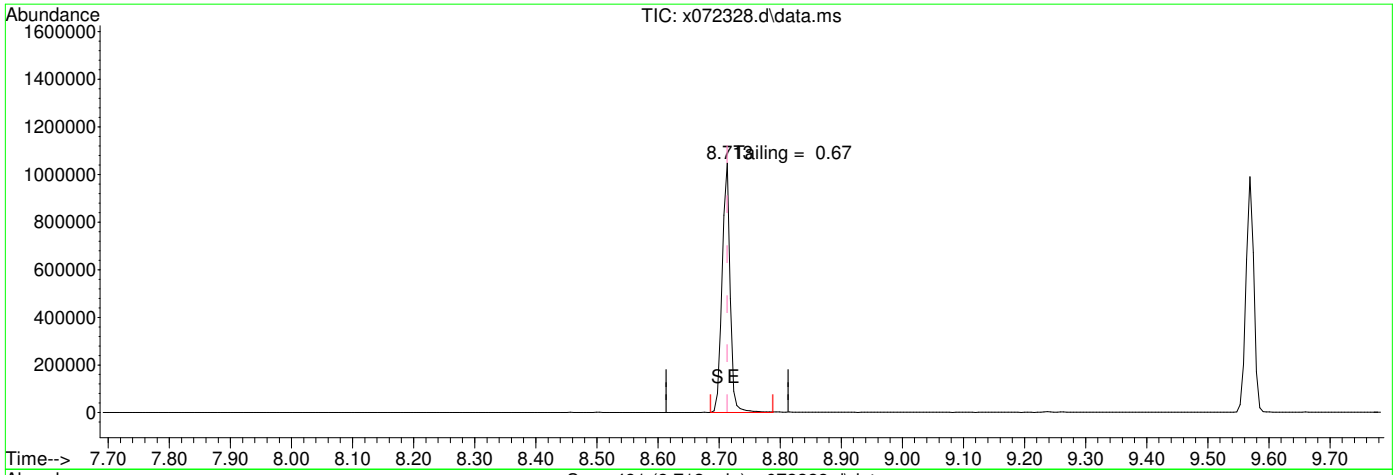
response 486964

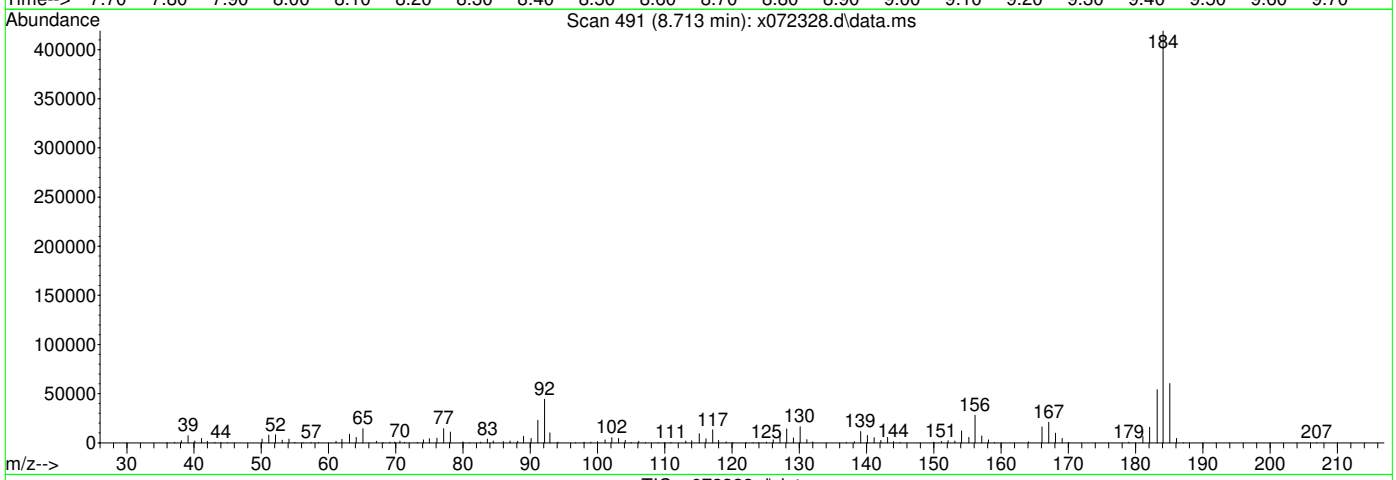
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072328.d
Acq On : 11 Aug 2020 12:30 pm
Operator : marthav
Sample : dftpp
Misc : op81484,sx2950,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 12 01:34:05 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Wed Aug 12 01:34:04 2020
Response via : Initial Calibration





TIC: x072328.d\data.ms

(3) Benzidine

8.713min (0.000) 22.59

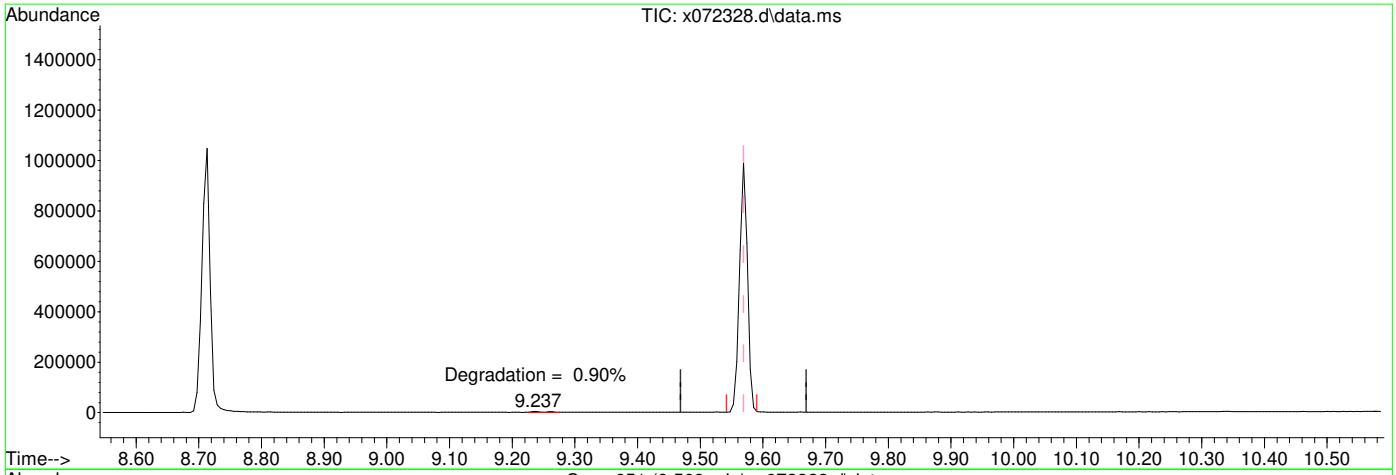
response 958072

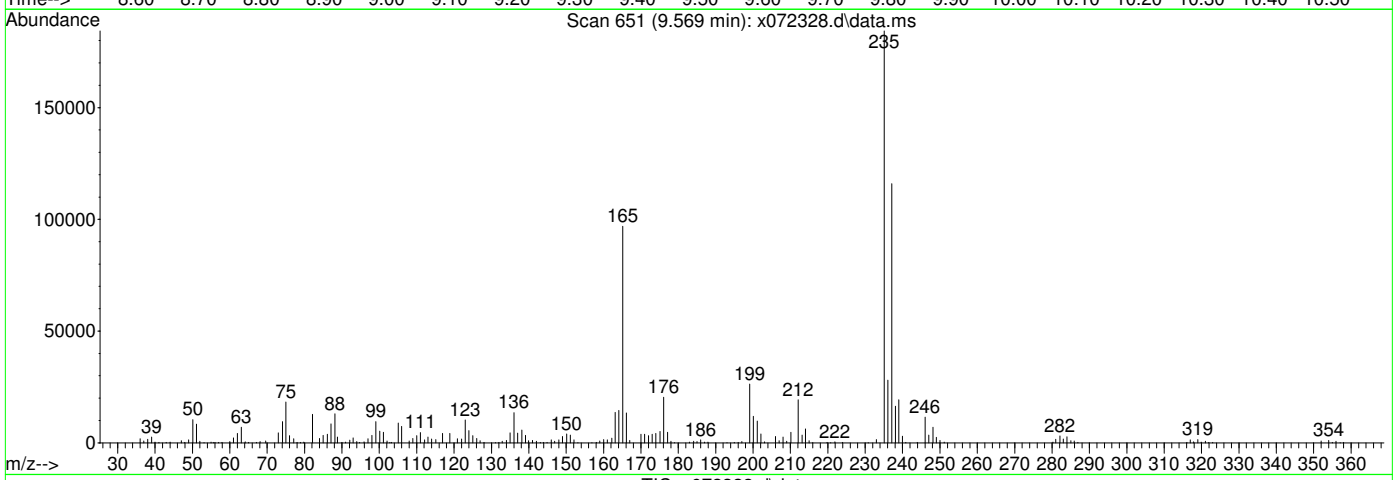
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072328.d
Acq On : 11 Aug 2020 12:30 pm
Operator : marthav
Sample : dftpp
Misc : op81484,sx2950,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 12 01:34:05 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Wed Aug 12 01:34:04 2020
Response via : Initial Calibration





TIC: x072328.d\data.ms

(4) DDT

9.569min (0.000) 25.08

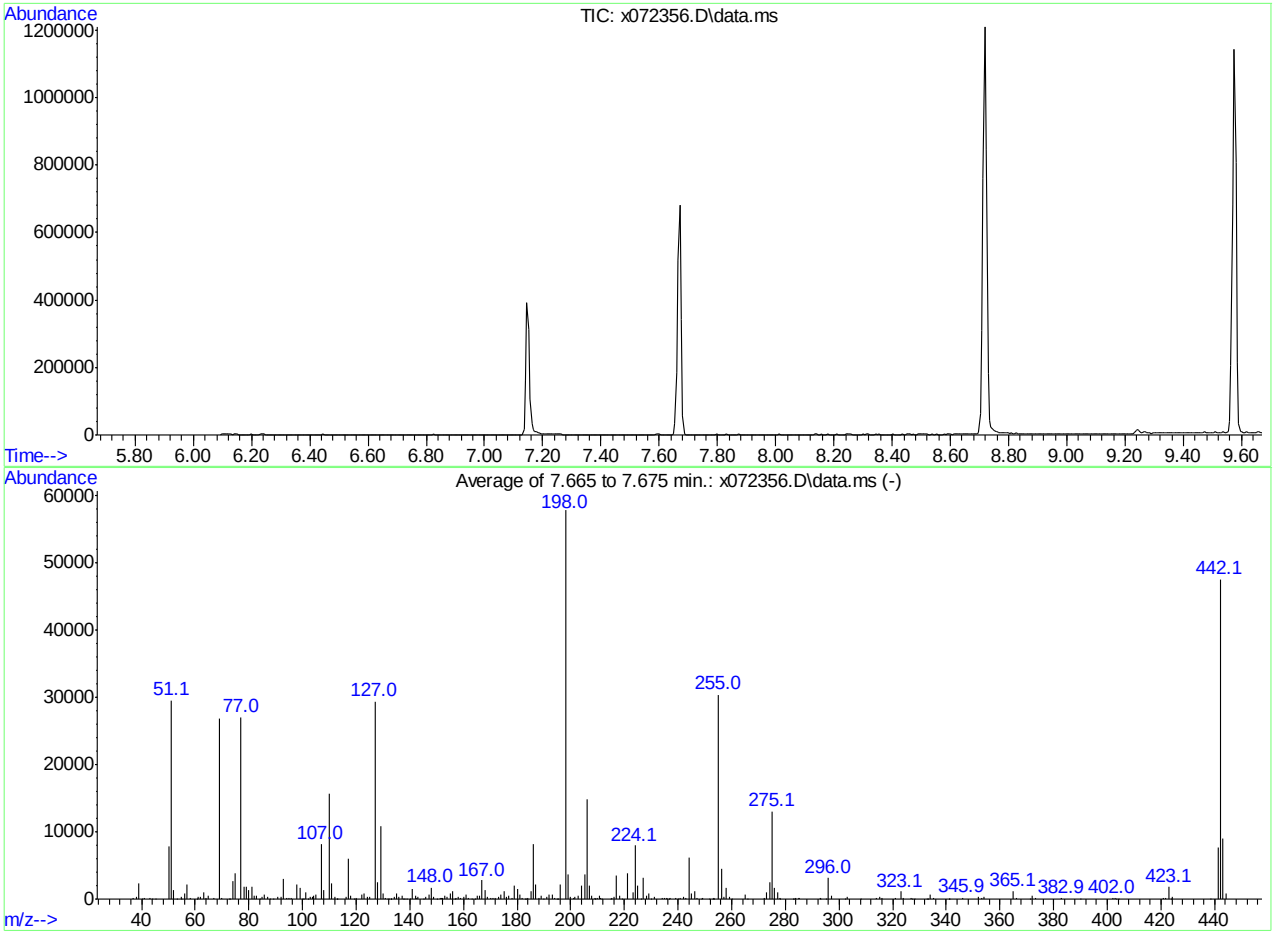
response 875407

Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

SW-846 Method 8270

Data File : C:\msdchem\1\DATA\0812_sx2951\x072356.D Vial: 1
Acq On : 12 Aug 2020 10:07 am Operator: marthav
Sample : dftpp Inst : MSBNA05
Misc : op81484,sx2951,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\METHODS\dftpp.m (RTE Integrator)
Title : Tune Evaluation



AutoFind: Scans 295, 296, 297; Background Corrected with Scan 289

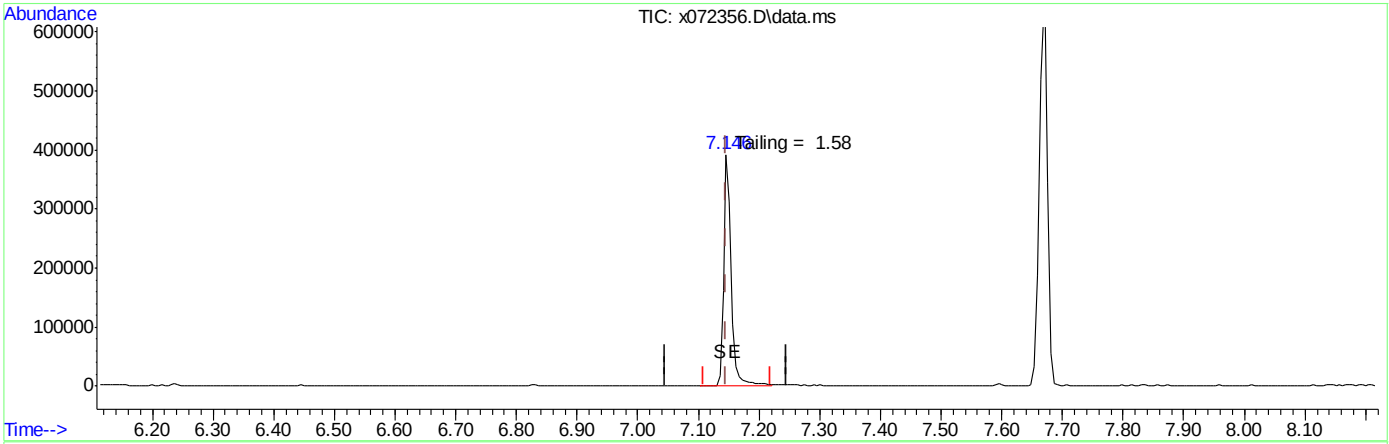
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	51.2	29610	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	46.4	26838	PASS
70	69	0.00	2	0.4	95	PASS
127	198	40	60	50.9	29425	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	57845	PASS
199	198	5	9	6.3	3631	PASS
275	198	10	30	22.6	13046	PASS
365	198	1	100	2.1	1226	PASS
441	443	0.01	100	85.3	7696	PASS
442	198	40	100	82.3	47624	PASS
443	442	17	23	18.9	9017	PASS

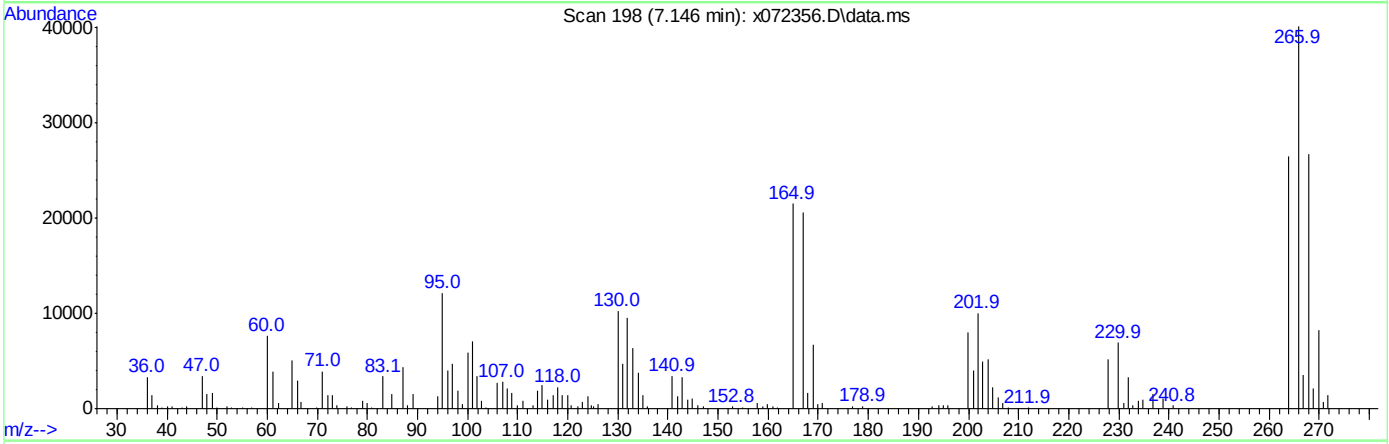
x072356.D dftpp.m Wed Aug 12 13:53:52 2020

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072356.D
Acq On : 12 Aug 2020 10:07 am
Operator : marthav
Sample : dftpp Inst : MSBNA05
Misc : op81484,sx2951,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 12 13:53:48 2020
Quant Method : C:\msdchem\1\METHODS\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Wed Aug 12 13:53:46 2020
Response via : Initial Calibration





TIC: x072356.D\data.ms

(1) Pentachlorophenol

7.146min (0.000) 14.49

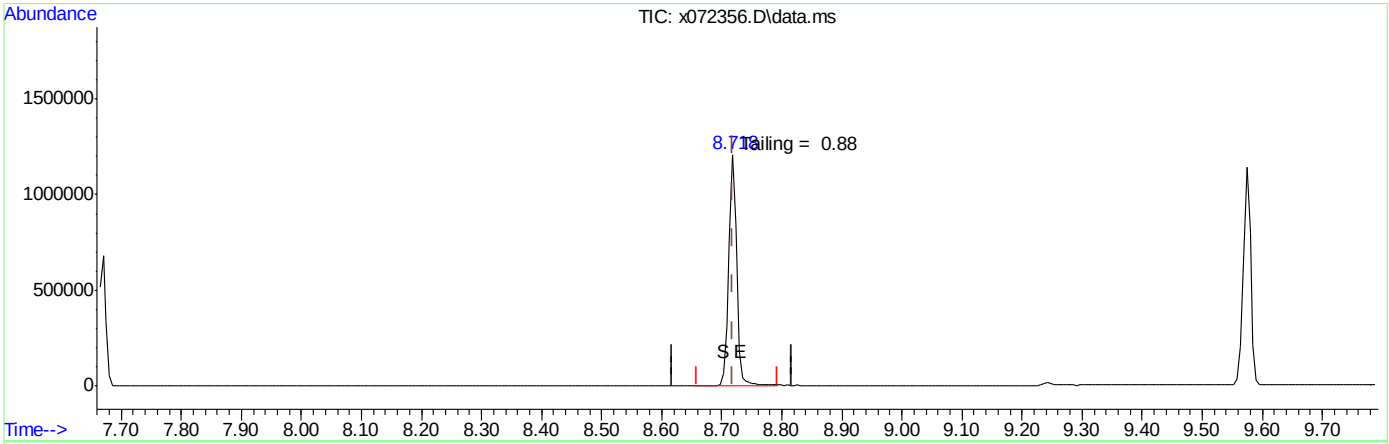
response 346616

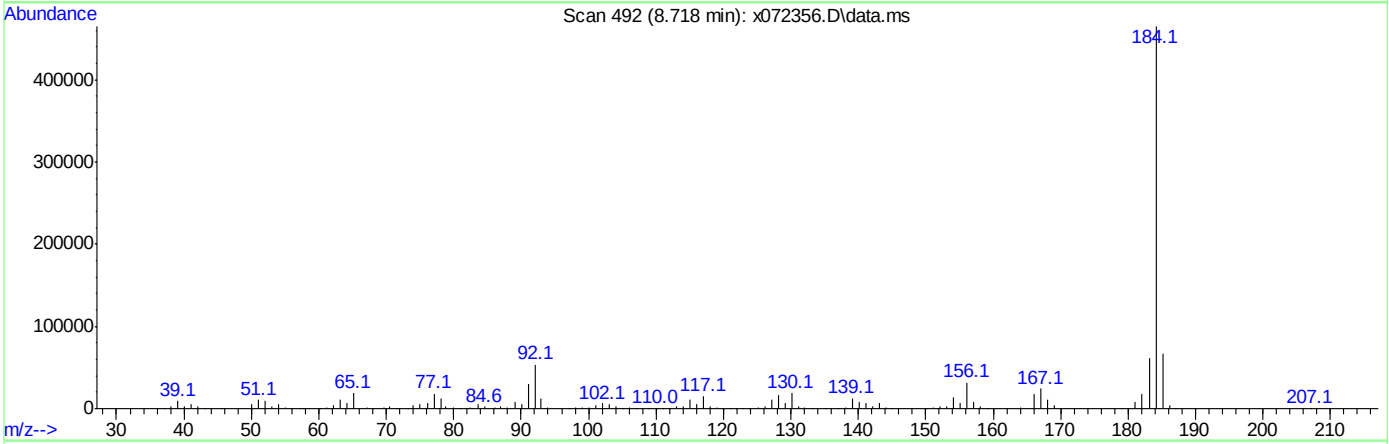
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072356.D
Acq On : 12 Aug 2020 10:07 am
Operator : marthav
Sample : dftpp Inst : MSBNA05
Misc : op81484,sx2951,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 12 13:53:48 2020
Quant Method : C:\msdchem\1\METHODS\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Wed Aug 12 13:53:46 2020
Response via : Initial Calibration





TIC: x072356.D\data.ms

(3) Benzidine

8.718min (0.000) 26.47

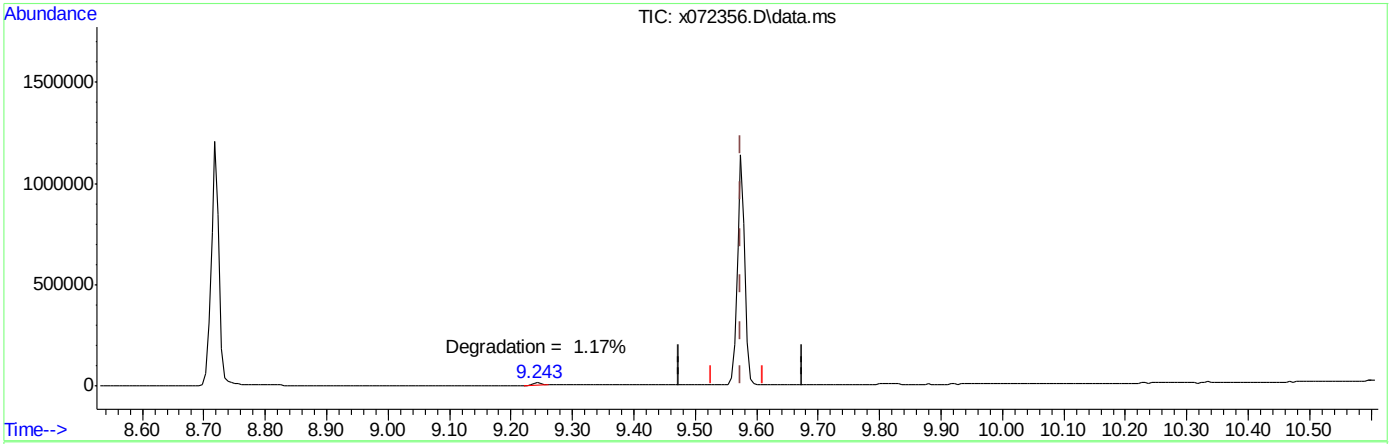
response 1122844

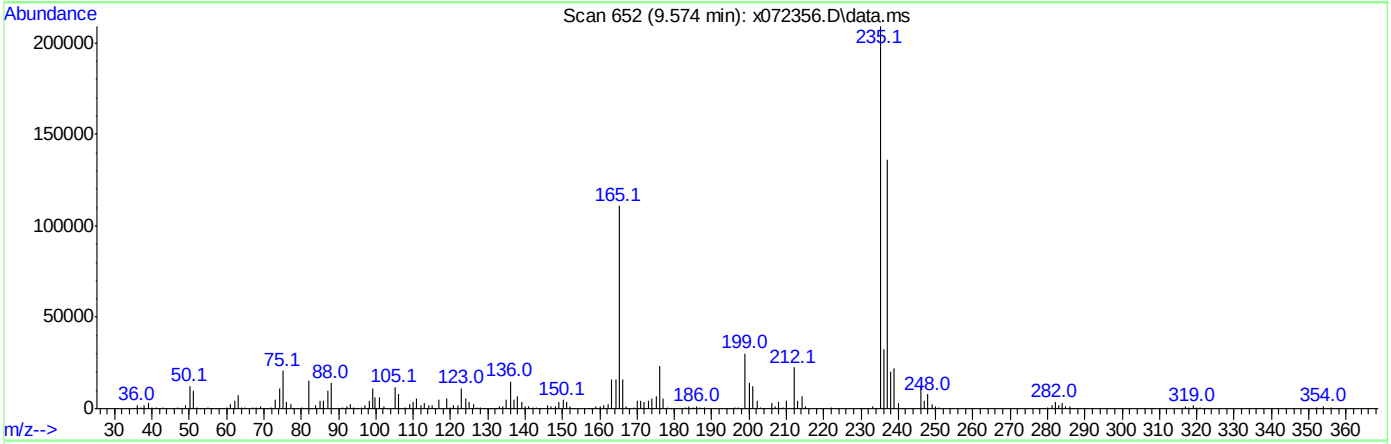
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072356.D
Acq On : 12 Aug 2020 10:07 am
Operator : marthav
Sample : dftpp Inst : MSBNA05
Misc : op81484,sx2951,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 12 13:53:48 2020
Quant Method : C:\msdchem\1\METHODS\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Wed Aug 12 13:53:46 2020
Response via : Initial Calibration





TIC: x072356.D\data.ms

(4) DDT

9.574min (0.000) 28.36

response 990085

Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integrations APPROVED
(compounds with "m" flag)
Nicole McCampbell
07/22/20 17:04

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10833.D
Acq On : 21 Jul 2020 1:31 pm
Operator : fouads
Sample : ic472-1
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 21 16:22:34 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration

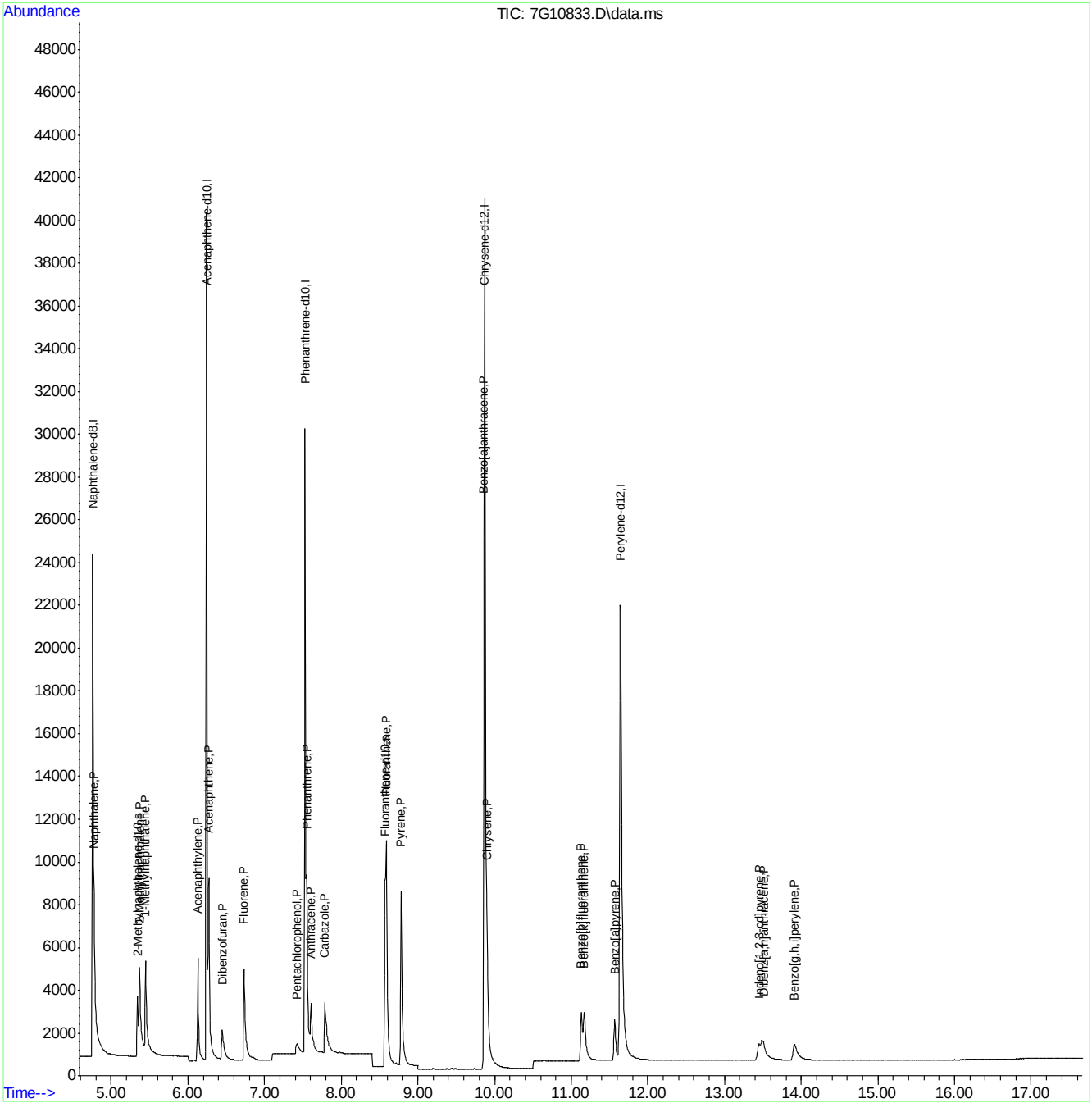
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.758	136	23994	4.00	ppm	-0.01
6) Acenaphthene-d10	6.244	164	13702	4.00	ppm	-0.01
11) Phenanthrene-d10	7.528	188	24543	4.00	ppm	-0.01
18) Chrysene-d12	9.872	240	38114	4.00	ppm	-0.01
22) Perylene-d12	11.639	264	32339	4.00	ppm	-0.02
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.346	152	2098	0.52	ppm	-0.02
Spiked Amount 10.000	Range 50 - 150		Recovery =	5.20%#		
17) Fluoranthene-d10	8.573	212	7444	0.53	ppm	-0.03
Spiked Amount 10.000	Range 50 - 150		Recovery =	5.30%#		
Target Compounds						Qvalue
2) Naphthalene	4.775	128	4289	0.56	ppm	98
3) 2-Methylnaphthalene	5.370	142	2500	0.43	ppm	97
5) 1-Methylnaphthalene	5.447	142	3106	0.56	ppm	91
7) Acenaphthylene	6.128	152	4559	0.52	ppm	99
8) Acenaphthene	6.273	153	3108	0.54	ppm	97
9) Dibenzofuran	6.447	168	2138	0.53	ppm	100
10) Fluorene	6.732	166	3338	0.54	ppm	100
12) Pentachlorophenol	7.424	266	516m	0.70	ppm	
13) Phenanthrene	7.549	178	4926	0.55	ppm	99
14) Anthracene	7.605	178	2668	0.30	ppm	99
15) Carbazole	7.785	167	3902	0.26	ppm	95
16) Fluoranthene	8.588	202	9291	0.54	ppm	99
19) Pyrene	8.782	202	9492	0.53	ppm	100
20) Benzo[a]anthracene	9.862	228	3464	0.26	ppm	98
21) Chrysene	9.898	228	4647	0.32	ppm	100
23) Benzo[b]fluoranthene	11.129	252	2712	0.21	ppm	99
24) Benzo[k]fluoranthene	11.168	252	3873	0.26	ppm	99
25) Benzo[a]pyrene	11.566	252	2679	0.24	ppm	100
26) Indeno[1,2,3-cd]pyrene	13.449	276	1438m	0.29	ppm	
27) Dibenz[a,h]anthracene	13.507	278	1764	0.34	ppm	99
28) Benzo[g,h,i]perylene	13.910	276	2089	0.39	ppm	92

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10833.D
Acq On : 21 Jul 2020 1:31 pm
Operator : fouads
Sample : ic472-1
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 21 16:22:34 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration



Manual Integration Approval Summary

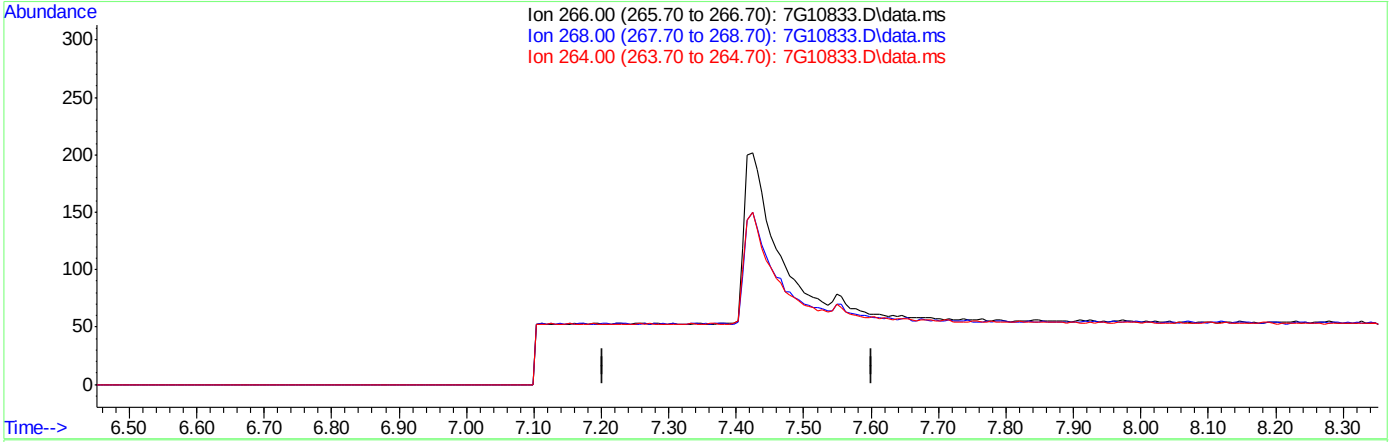
Sample Number: S7G472-IC472
Lab FileID: 7G10833.D
Injection Time: 07/21/20 13:31
Method: SW846 8270D BY SIM
Analyst approved: 07/22/20 13:31 Fouad Sekkar
Supervisor approved: 07/22/20 17:04 Nicole McCampbell

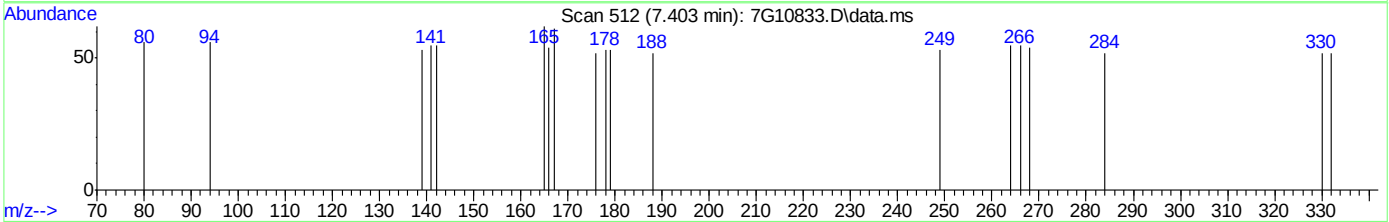
Parameter	CAS	Sig#	R.T. (min.)	Reason
Pentachlorophenol	87-86-5		7.42	Missed peak
Indeno(1,2,3-cd)pyrene	193-39-5		13.45	Missed peak

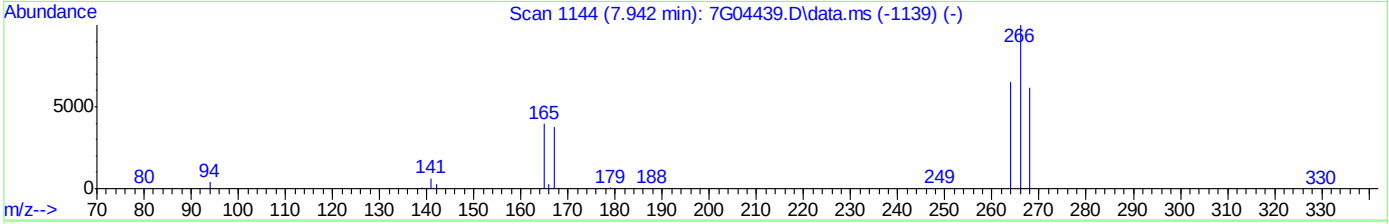
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10833.D
Acq On : 21 Jul 2020 1:31 pm
Operator : fouads
Sample : ic472-1
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 21 16:18:33 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration







TIC: 7G10833.D\data.ms

(12) Pentachlorophenol (P)

7.402min (-7.402) 0.00ppm

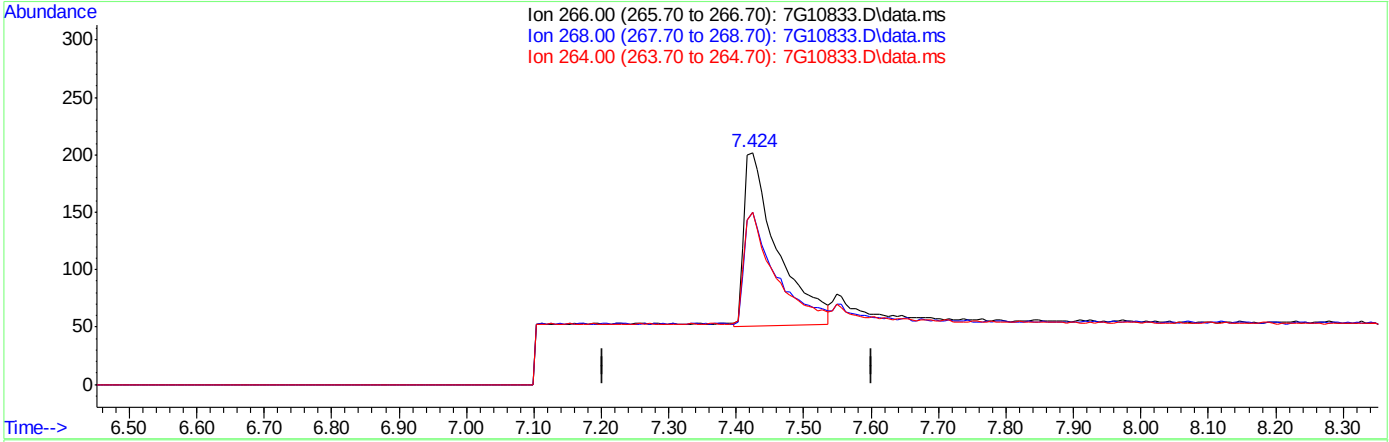
response 0

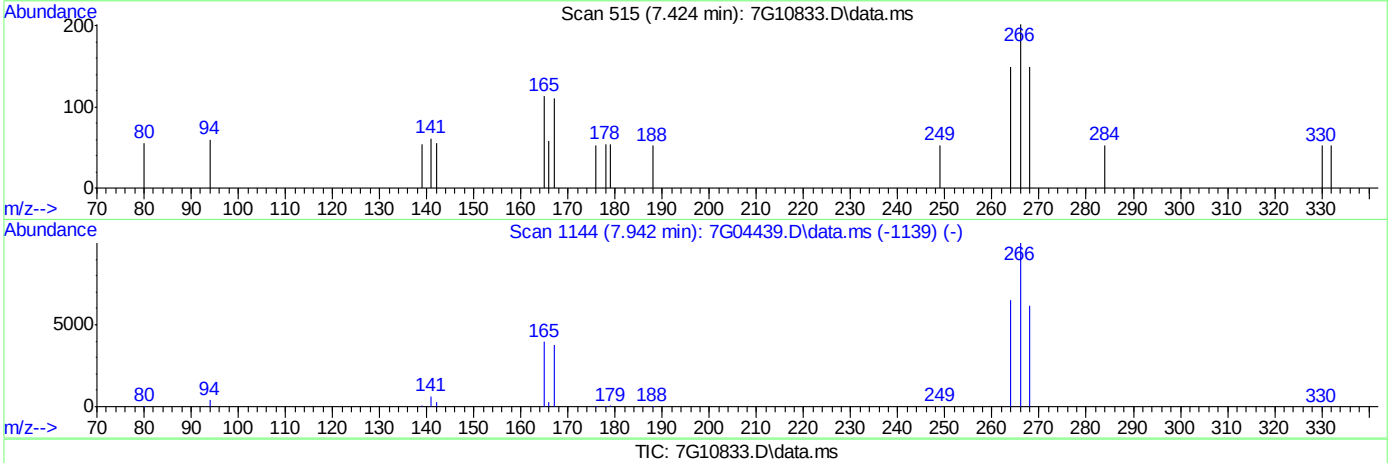
Ion	Exp%	Act%
266.00	100	0.00
268.00	61.80	0.00#
264.00	65.30	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10833.D
Acq On : 21 Jul 2020 1:31 pm
Operator : fouads
Sample : ic472-1
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 21 16:18:33 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration





TIC: 7G10833.D\data.ms

(12) Pentachlorophenol (P)

7.424min (+0.022) 0.70ppm m

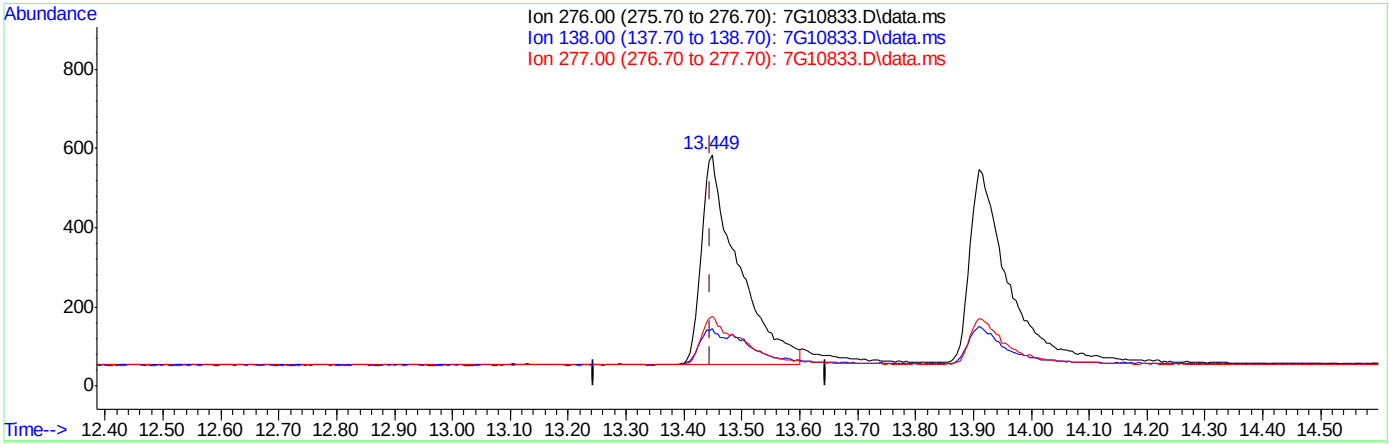
response 516

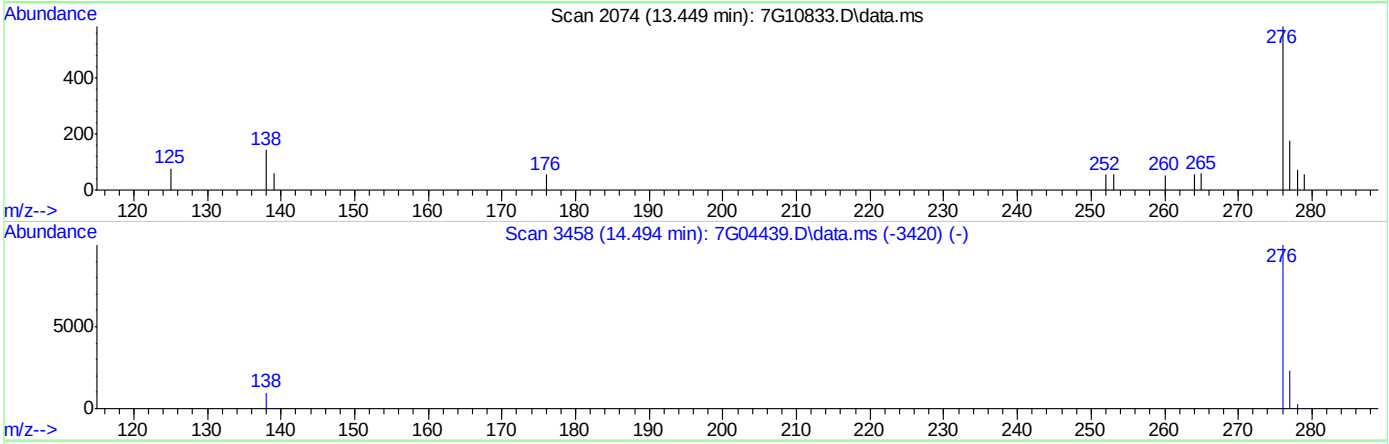
Ion	Exp%	Act%
266.00	100	100
268.00	61.80	74.26
264.00	65.30	74.26
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10833.D
Acq On : 21 Jul 2020 1:31 pm
Operator : fouads
Sample : ic472-1
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 21 16:18:33 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration





TIC: 7G10833.D\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.449min (+0.004) 0.47ppm

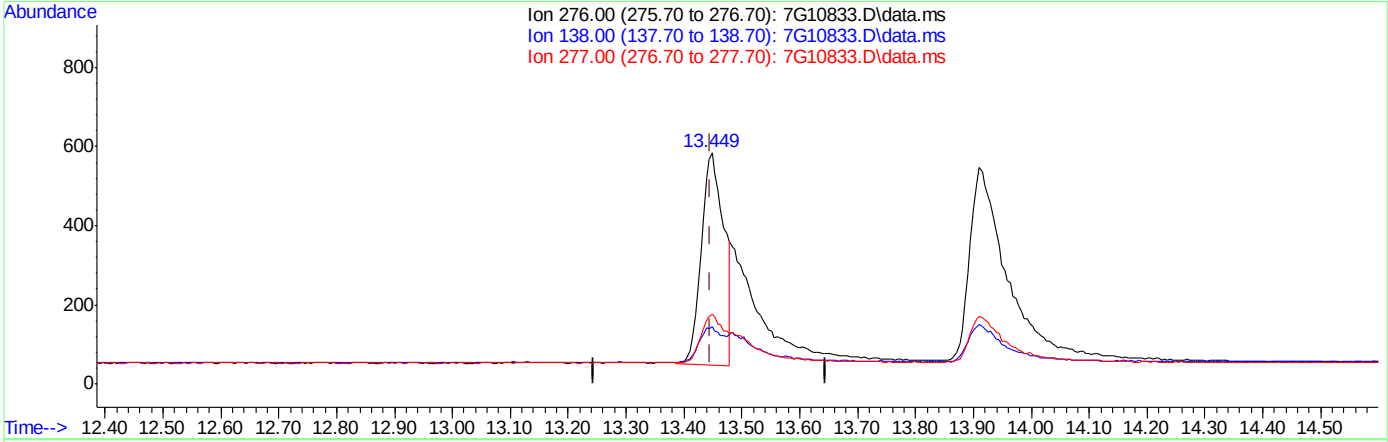
response 2338

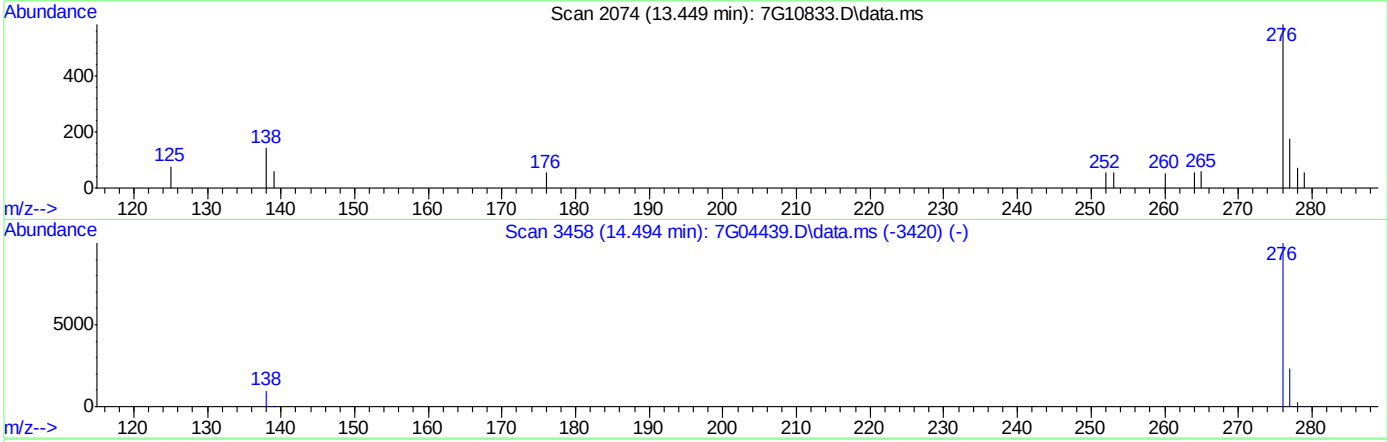
Ion	Exp%	Act%
276.00	100	100
138.00	14.60	16.37
277.00	22.90	23.10
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10833.D
Acq On : 21 Jul 2020 1:31 pm
Operator : fouads
Sample : ic472-1
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 21 16:18:33 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration





TIC: 7G10833.D\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.449min (+0.004) 0.29ppm m

response 1438

Ion	Exp%	Act%
276.00	100	100
138.00	14.60	24.62
277.00	22.90	30.26
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 07/22/20 17:04

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10834.D
Acq On : 21 Jul 2020 1:55 pm
Operator : fouads
Sample : ic472-2
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 21 16:23:38 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration

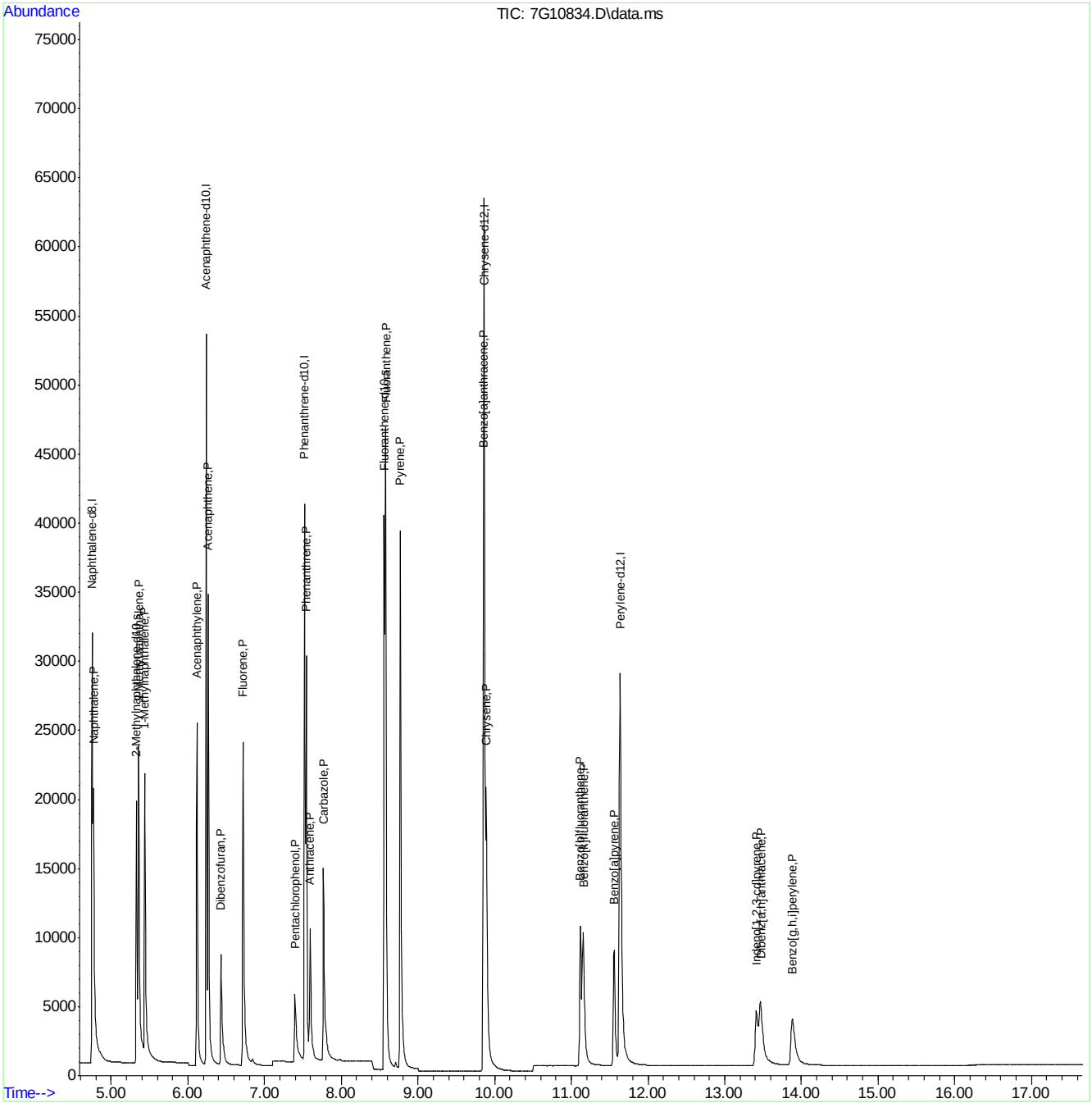
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.752	136	29081	4.00	ppm	-0.02
6) Acenaphthene-d10	6.239	164	16862	4.00	ppm	-0.02
11) Phenanthrene-d10	7.521	188	30203	4.00	ppm	-0.02
18) Chrysene-d12	9.862	240	48257	4.00	ppm	-0.02
22) Perylene-d12	11.636	264	41825	4.00	ppm	-0.03
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.329	152	7918	1.62	ppm	-0.04
Spiked Amount 10.000	Range 50 - 150		Recovery = 16.20%#			
17) Fluoranthene-d10	8.560	212	29862	1.74	ppm	-0.04
Spiked Amount 10.000	Range 50 - 150		Recovery = 17.40%#			
Target Compounds						Qvalue
2) Naphthalene	4.769	128	16703	1.81	ppm	100
3) 2-Methylnaphthalene	5.358	142	11209	1.60	ppm	98
5) 1-Methylnaphthalene	5.435	142	11625	1.74	ppm	84
7) Acenaphthylene	6.118	152	18703	1.74	ppm	99
8) Acenaphthene	6.263	153	12399	1.77	ppm	94
9) Dibenzofuran	6.432	168	8863	1.80	ppm	95
10) Fluorene	6.717	166	13533	1.79	ppm	100
12) Pentachlorophenol	7.396	266	3019	3.31	ppm	98
13) Phenanthrene	7.542	178	19355	1.76	ppm	99
14) Anthracene	7.591	178	10083	0.91	ppm	100
15) Carbazole	7.764	167	16301	0.88	ppm	97
16) Fluoranthene	8.579	202	36358	1.73	ppm	99
19) Pyrene	8.769	202	37461	1.66	ppm	98
20) Benzo[a]anthracene	9.855	228	14421	0.85	ppm	99
21) Chrysene	9.891	228	17593	0.97	ppm	99
23) Benzo[b]fluoranthene	11.117	252	12271	0.74	ppm	99
24) Benzo[k]fluoranthene	11.156	252	15759	0.82	ppm	99
25) Benzo[a]pyrene	11.559	252	12673	0.88	ppm	99
26) Indeno[1,2,3-cd]pyrene	13.412	276	7001m	1.08	ppm	
27) Dibenz[a,h]anthracene	13.471	278	8032	1.18	ppm	100
28) Benzo[g,h,i]perylene	13.883	276	9167	1.33	ppm	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10834.D
Acq On : 21 Jul 2020 1:55 pm
Operator : fouads
Sample : ic472-2
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 21 16:23:38 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration



Manual Integration Approval Summary

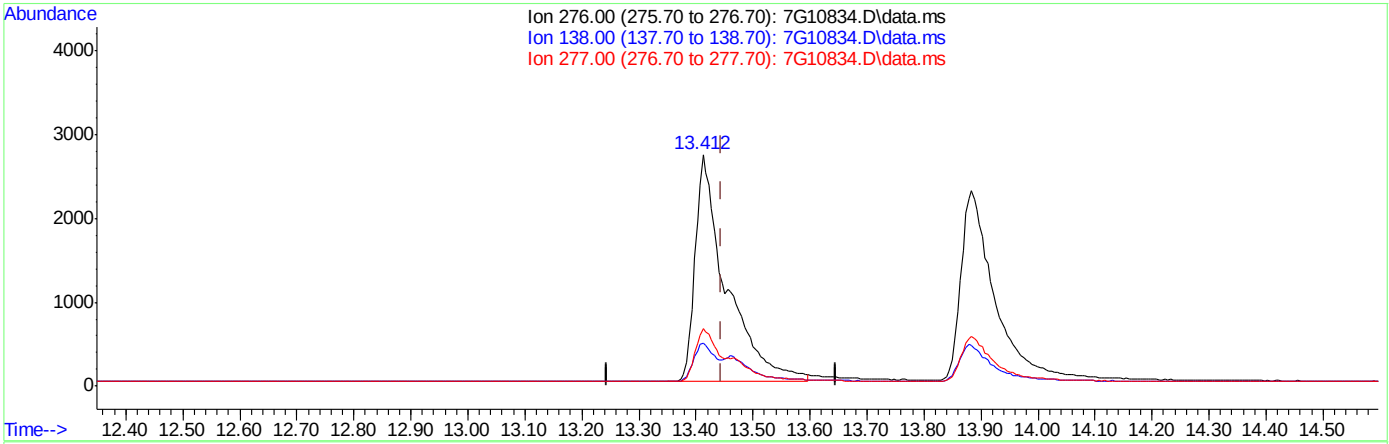
Sample Number: S7G472-IC472
Lab FileID: 7G10834.D
Injection Time: 07/21/20 13:55
Method: SW846 8270D BY SIM
Analyst approved: 07/22/20 13:31 Fouad Sekkar
Supervisor approved: 07/22/20 17:04 Nicole McCampbell

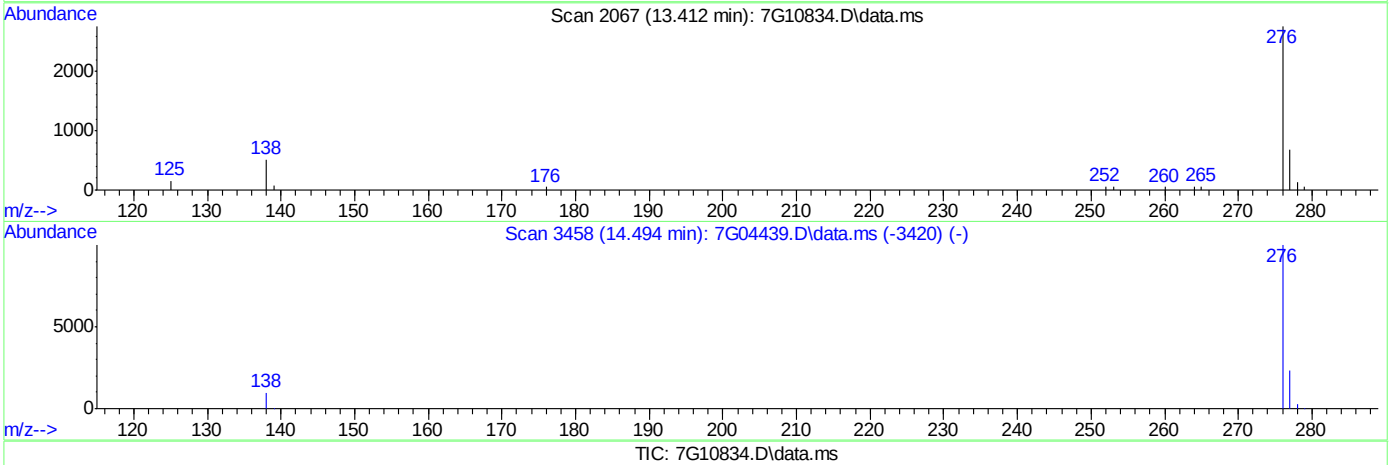
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		13.41	Missed peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10834.D
Acq On : 21 Jul 2020 1:55 pm
Operator : fouads
Sample : ic472-2
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 21 16:18:37 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration





TIC: 7G10834.D\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.412min (-0.033) 1.59ppm

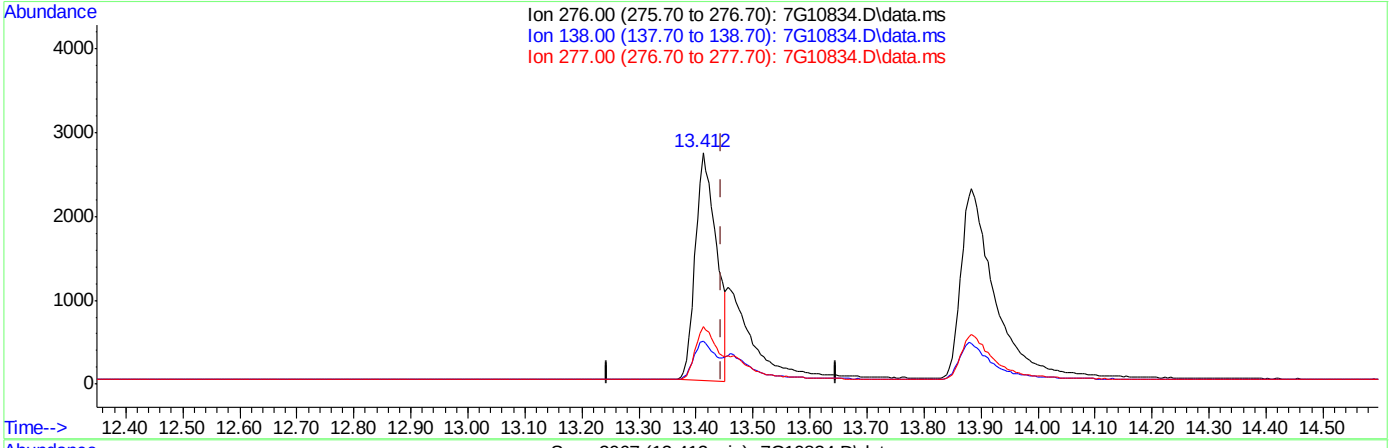
response 10318

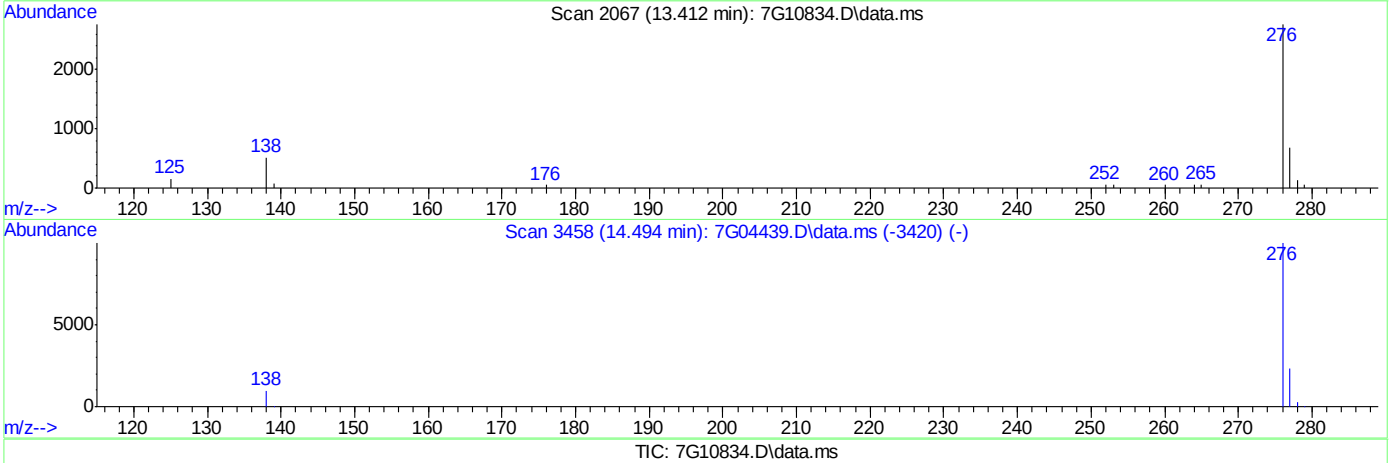
Ion	Exp%	Act%
276.00	100	100
138.00	14.60	16.99
277.00	22.90	23.44
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10834.D
Acq On : 21 Jul 2020 1:55 pm
Operator : fouads
Sample : ic472-2
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 21 16:18:37 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration





TIC: 7G10834.D\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.412min (-0.033) 1.08ppm m

response 7001

Ion	Exp%	Act%
276.00	100	100
138.00	14.60	18.75
277.00	22.90	24.95
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 07/22/20 17:04

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10835.D
Acq On : 21 Jul 2020 2:19 pm
Operator : fouads
Sample : ic472-3
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 21 16:24:24 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration

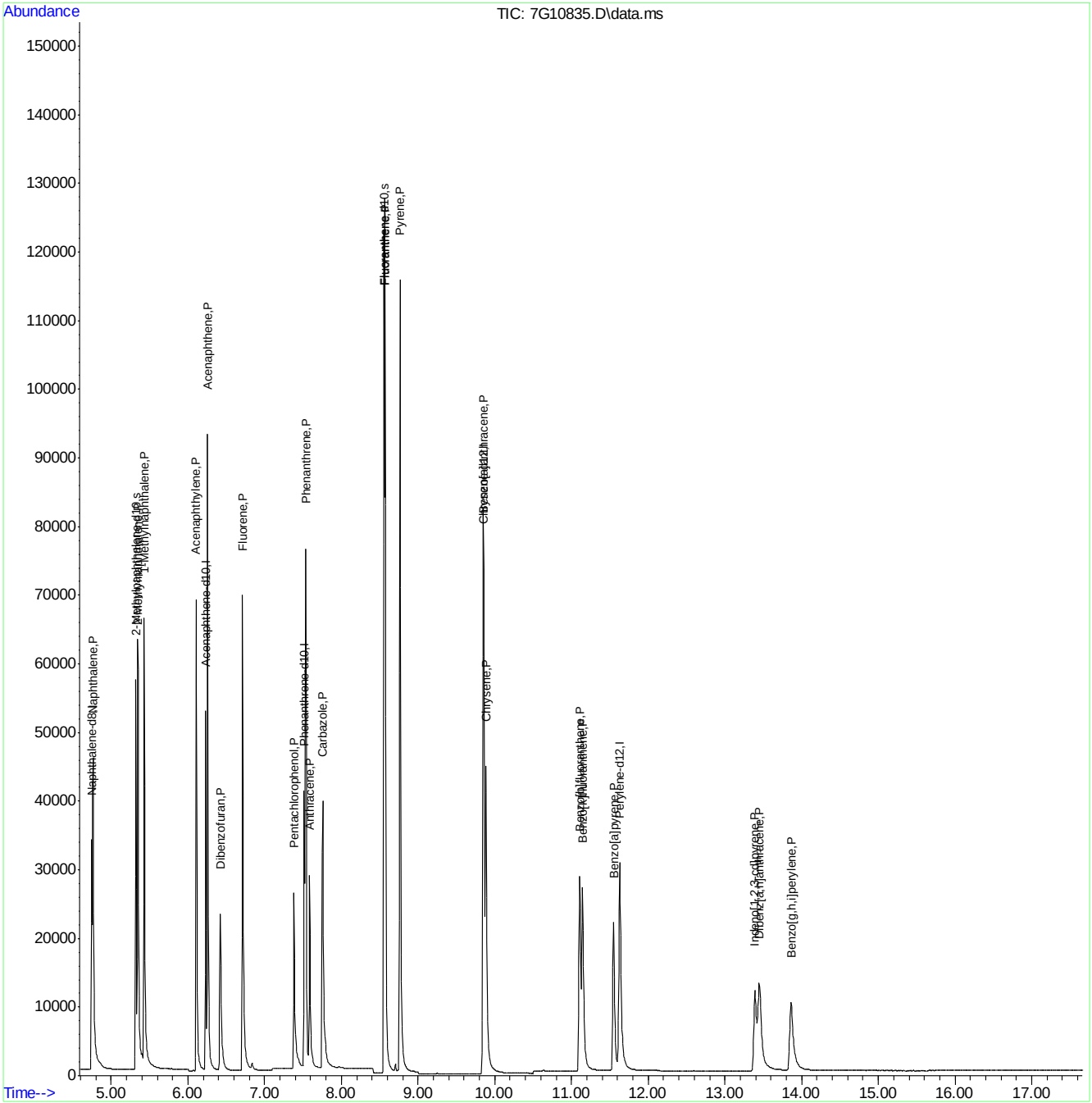
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.746	136	28715	4.00	ppm	-0.02
6) Acenaphthene-d10	6.234	164	16760	4.00	ppm	-0.02
11) Phenanthrene-d10	7.514	188	29264	4.00	ppm	-0.03
18) Chrysene-d12	9.857	240	48140	4.00	ppm	-0.03
22) Perylene-d12	11.627	264	42133	4.00	ppm	-0.04
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.323	152	19987	4.15	ppm	-0.04
Spiked Amount 10.000	Range 50 - 150		Recovery = 41.50%#			
17) Fluoranthene-d10	8.557	212	74078	4.46	ppm	-0.04
Spiked Amount 10.000	Range 50 - 150		Recovery = 44.60%#			
Target Compounds						Qvalue
2) Naphthalene	4.764	128	40296	4.43	ppm	100
3) 2-Methylnaphthalene	5.352	142	28506	4.13	ppm	98
5) 1-Methylnaphthalene	5.429	142	27972	4.23	ppm	89
7) Acenaphthylene	6.108	152	46420	4.35	ppm	98
8) Acenaphthene	6.258	153	30591	4.38	ppm	96
9) Dibenzofuran	6.423	168	21620	4.42	ppm	92
10) Fluorene	6.713	166	32883	4.37	ppm	98
12) Pentachlorophenol	7.382	266	10713	12.12	ppm	97
13) Phenanthrene	7.535	178	47680	4.47	ppm	99
14) Anthracene	7.584	178	23874	2.22	ppm	100
15) Carbazole	7.757	167	40148	2.22	ppm	100
16) Fluoranthene	8.570	202	89721	4.40	ppm	99
19) Pyrene	8.763	202	92682	4.12	ppm	99
20) Benzo[a]anthracene	9.847	228	36400	2.15	ppm	99
21) Chrysene	9.886	228	41406	2.29	ppm	100
23) Benzo[b]fluoranthene	11.107	252	32655	1.96	ppm	99
24) Benzo[k]fluoranthene	11.141	252	37458	1.94	ppm	100
25) Benzo[a]pyrene	11.549	252	31646	2.17	ppm	100
26) Indeno[1,2,3-cd]pyrene	13.393	276	20359m	3.11	ppm	
27) Dibenz[a,h]anthracene	13.446	278	21793	3.19	ppm	99
28) Benzo[g,h,i]perylene	13.864	276	24010	3.45	ppm	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10835.D
Acq On : 21 Jul 2020 2:19 pm
Operator : fouads
Sample : ic472-3
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 21 16:24:24 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: S7G472-IC472
Lab FileID: 7G10835.D
Injection Time: 07/21/20 14:19

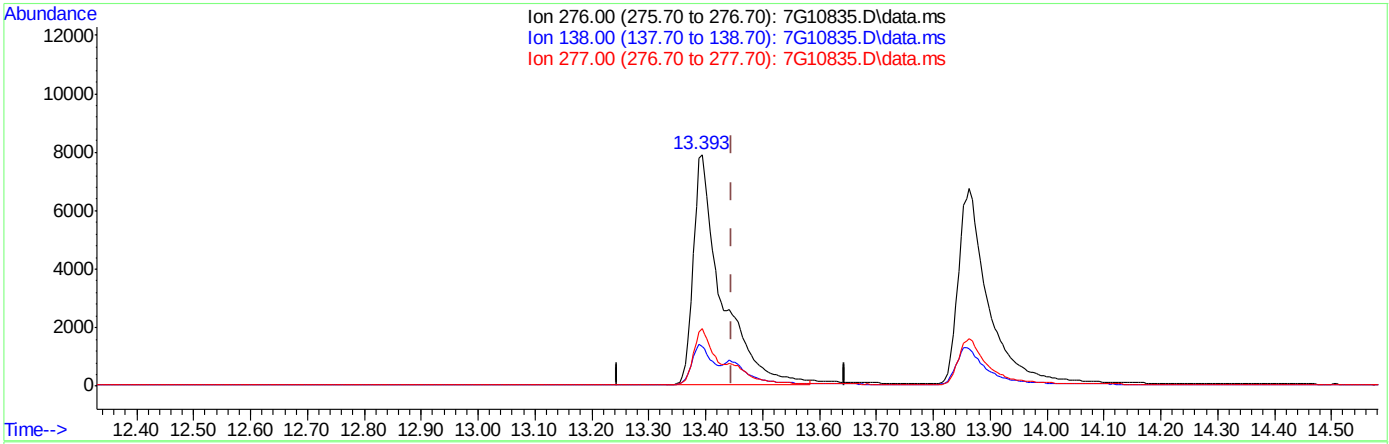
Method: SW846 8270D BY SIM
Analyst approved: 07/22/20 13:31 Fouad Sekkar
Supervisor approved: 07/22/20 17:04 Nicole McCampbell

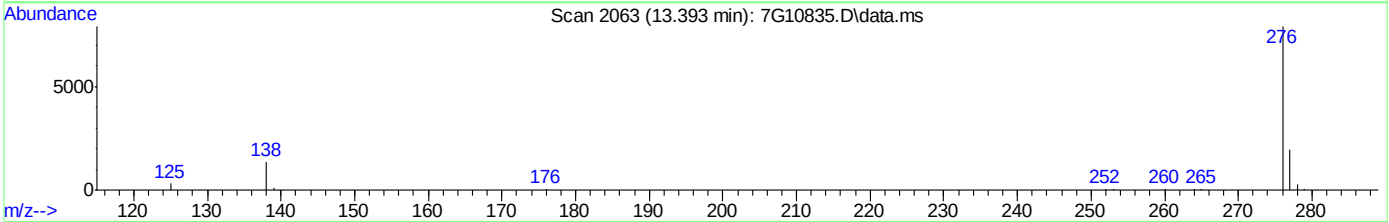
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		13.39	Missed peak

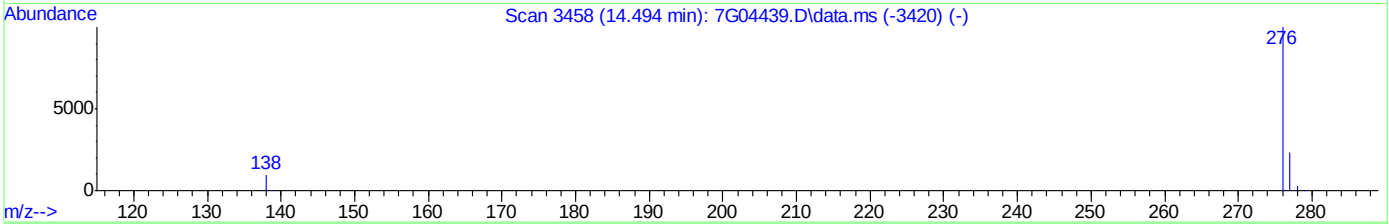
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10835.D
Acq On : 21 Jul 2020 2:19 pm
Operator : fouads
Sample : ic472-3
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 21 16:18:41 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration







TIC: 7G10835.D\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.393min (-0.052) 4.18ppm

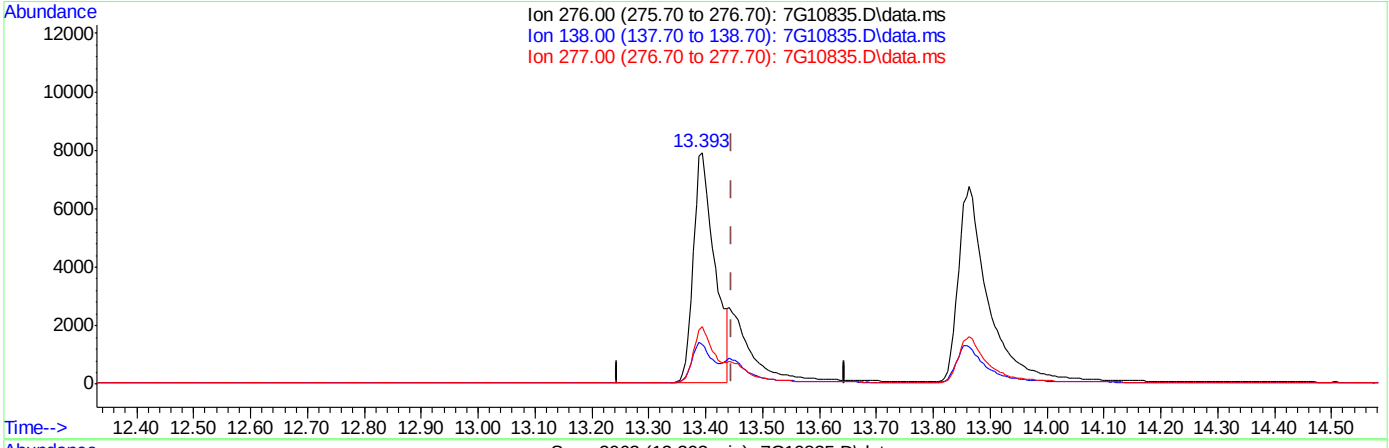
response 27333

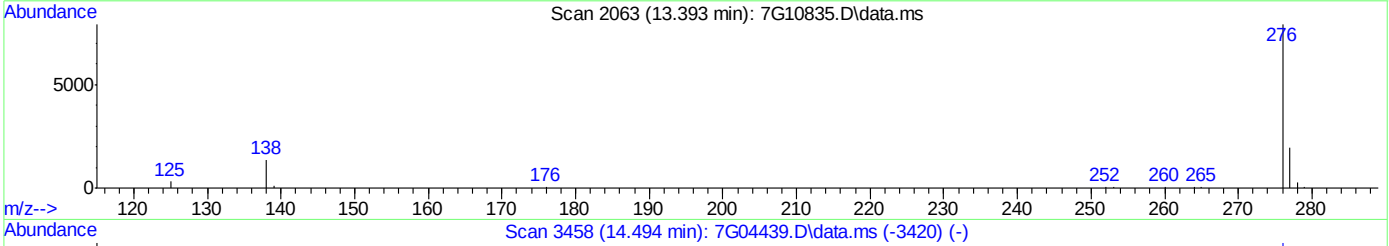
Ion	Exp%	Act%
276.00	100	100
138.00	14.60	16.53
277.00	22.90	24.07
0.00	0.00	0.00

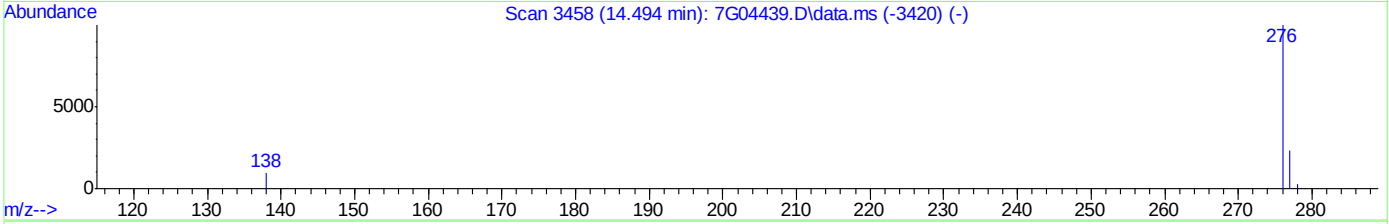
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10835.D
Acq On : 21 Jul 2020 2:19 pm
Operator : fouads
Sample : ic472-3
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 21 16:18:41 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration







TIC: 7G10835.D\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.393min (-0.052) 3.11ppm m

response 20359

Ion	Exp%	Act%
276.00	100	100
138.00	14.60	17.21
277.00	22.90	24.62
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10836.D
Acq On : 21 Jul 2020 2:43 pm
Operator : fouads
Sample : icc472-4
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 21 16:18:45 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration

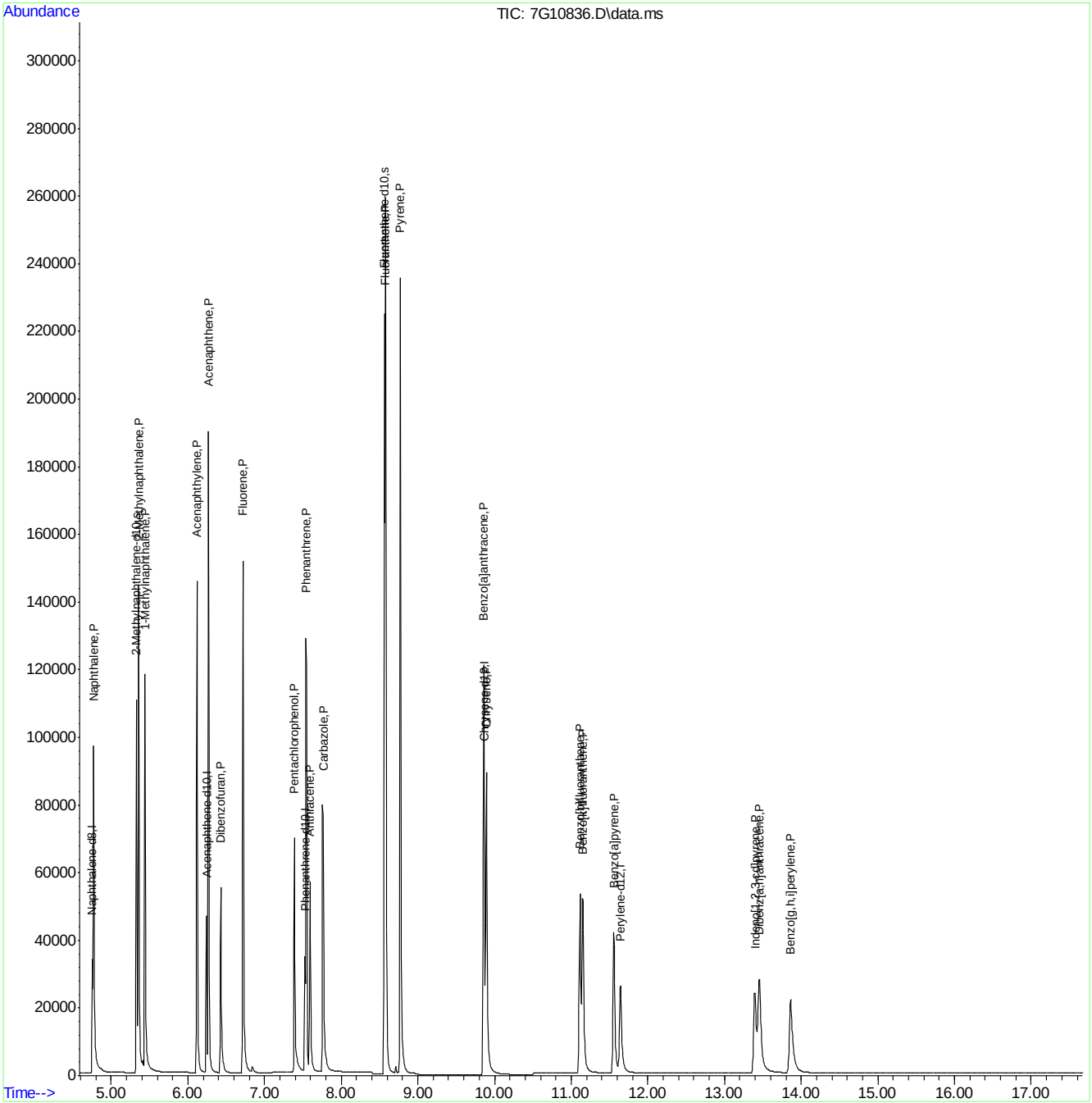
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.752	136	25300	4.00	ppm	-0.02
6) Acenaphthene-d10	6.244	164	14609	4.00	ppm	-0.01
11) Phenanthrene-d10	7.528	188	26093	4.00	ppm	-0.01
18) Chrysene-d12	9.867	240	42851	4.00	ppm	-0.02
22) Perylene-d12	11.644	264	37551	4.00	ppm	-0.02
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.329	152	38049	8.97	ppm	-0.04
Spiked Amount 10.000	Range 50 - 150		Recovery = 89.70%			
17) Fluoranthene-d10	8.567	212	140061	9.46	ppm	-0.03
Spiked Amount 10.000	Range 50 - 150		Recovery = 94.60%			
Target Compounds						Qvalue
2) Naphthalene	4.770	128	74430	9.28	ppm	100
3) 2-Methylnaphthalene	5.358	142	54816	9.01	ppm	99
5) 1-Methylnaphthalene	5.441	142	52432	9.01	ppm	97
7) Acenaphthylene	6.118	152	88343	9.50	ppm	99
8) Acenaphthene	6.268	153	57505	9.45	ppm	98
9) Dibenzofuran	6.428	168	40635	9.53	ppm	95
10) Fluorene	6.718	166	61698	9.42	ppm	98
12) Pentachlorophenol	7.389	266	24644	31.26	ppm	96
13) Phenanthrene	7.542	178	89406	9.41	ppm	98
14) Anthracene	7.591	178	44114	4.59	ppm	100
15) Carbazole	7.764	167	75881	4.72	ppm	100
16) Fluoranthene	8.579	202	169605	9.33	ppm	99
19) Pyrene	8.769	202	173437	8.66	ppm	99
20) Benzo[a]anthracene	9.857	228	68306	4.53	ppm	99
21) Chrysene	9.893	228	77498	4.81	ppm	100
23) Benzo[b]fluoranthene	11.115	252	63976	4.30	ppm	100
24) Benzo[k]fluoranthene	11.149	252	70592	4.10	ppm	99
25) Benzo[a]pyrene	11.556	252	60678	4.68	ppm	100
26) Indeno[1,2,3-cd]pyrene	13.400	276	41853	7.17	ppm	99
27) Dibenz[a,h]anthracene	13.454	278	44122	7.25	ppm	99
28) Benzo[g,h,i]perylene	13.861	276	47313	7.62	ppm	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10836.D
Acq On : 21 Jul 2020 2:43 pm
Operator : fouads
Sample : icc472-4
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

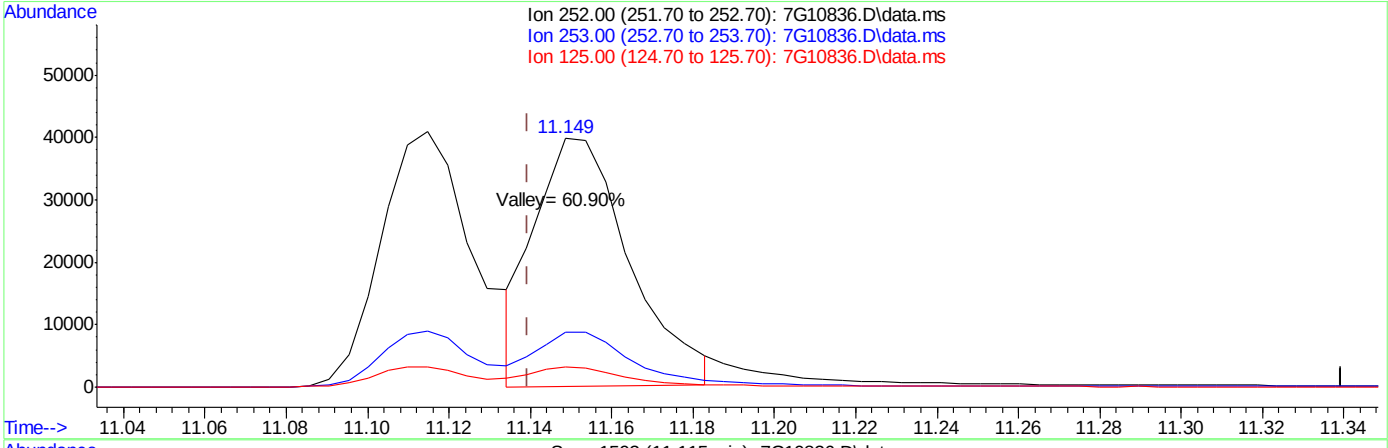
Quant Time: Jul 21 16:18:45 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration

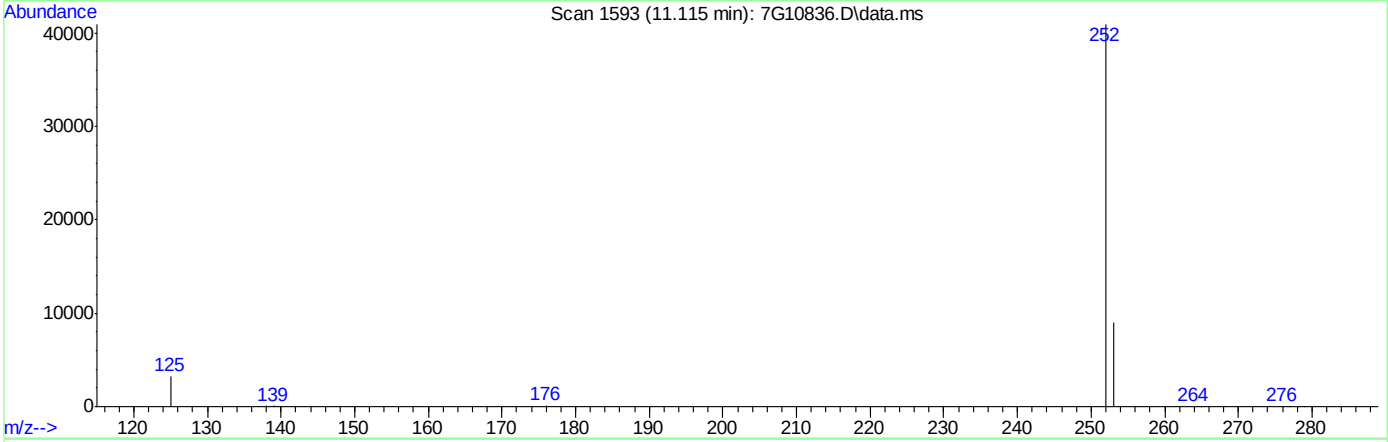


Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10836.D
Acq On : 21 Jul 2020 2:43 pm
Operator : fouads
Sample : icc472-4
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 21 16:18:45 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration





TIC: 7G10836.D\data.ms

(23) Benzo[b]fluoranthene (P)

11.115min (-0.025) 4.30ppm

response 63976

Ion	Exp%	Act%
252.00	100	100
253.00	22.10	22.03
125.00	7.40	7.61
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10837.D
Acq On : 21 Jul 2020 3:07 pm
Operator : fouads
Sample : ic472-5
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 21 16:18:49 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration

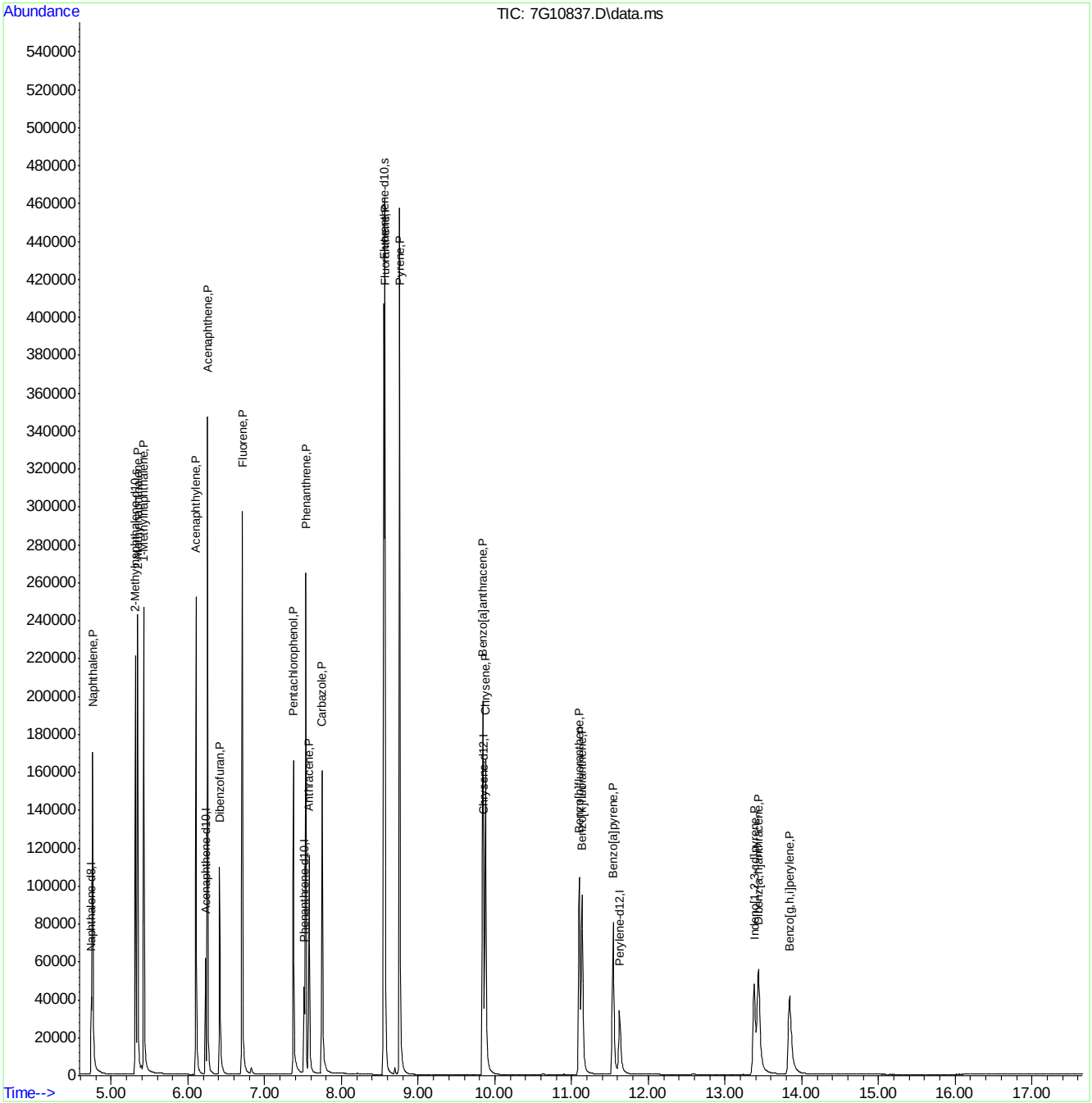
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.740	136	29180	4.00	ppm	-0.03
6) Acenaphthene-d10	6.229	164	17414	4.00	ppm	-0.03
11) Phenanthrene-d10	7.514	188	31347	4.00	ppm	-0.03
18) Chrysene-d12	9.852	240	50970	4.00	ppm	-0.03
22) Perylene-d12	11.624	264	45434	4.00	ppm	-0.04
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.317	152	67210	13.75	ppm	-0.05
Spiked Amount 10.000	Range 50 - 150		Recovery = 137.50%			
17) Fluoranthene-d10	8.554	212	243460	13.69	ppm	-0.04
Spiked Amount 10.000	Range 50 - 150		Recovery = 136.90%			
Target Compounds						Qvalue
2) Naphthalene	4.758	128	128711	13.92	ppm	100
3) 2-Methylnaphthalene	5.347	142	95557	13.62	ppm	97
5) 1-Methylnaphthalene	5.423	142	90151	13.42	ppm	85
7) Acenaphthylene	6.104	152	152885	13.80	ppm	98
8) Acenaphthene	6.253	153	101085	13.94	ppm	95
9) Dibenzofuran	6.413	168	71111	13.99	ppm	91
10) Fluorene	6.708	166	109450	14.01	ppm	97
12) Pentachlorophenol	7.375	266	52326	55.25	ppm	97
13) Phenanthrene	7.535	178	157070	13.76	ppm	99
14) Anthracene	7.577	178	78741	6.82	ppm	100
15) Carbazole	7.744	167	133273	6.89	ppm	93
16) Fluoranthene	8.570	202	298825	13.68	ppm	99
19) Pyrene	8.757	202	307670	12.91	ppm	99
20) Benzo[a]anthracene	9.843	228	121166	6.75	ppm	99
21) Chrysene	9.879	228	131534	6.86	ppm	100
23) Benzo[b]fluoranthene	11.100	252	113926	6.33	ppm	100
24) Benzo[k]fluoranthene	11.134	252	121858	5.85	ppm	98
25) Benzo[a]pyrene	11.542	252	108027	6.88	ppm	100
26) Indeno[1,2,3-cd]pyrene	13.381	276	76251	10.80	ppm	99
27) Dibenz[a,h]anthracene	13.434	278	81827	11.11	ppm	99
28) Benzo[g,h,i]perylene	13.842	276	86286	11.49	ppm	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10837.D
Acq On : 21 Jul 2020 3:07 pm
Operator : fouads
Sample : ic472-5
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 21 16:18:49 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10838.D
Acq On : 21 Jul 2020 3:31 pm
Operator : fouads
Sample : ic472-6
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 21 16:18:53 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration

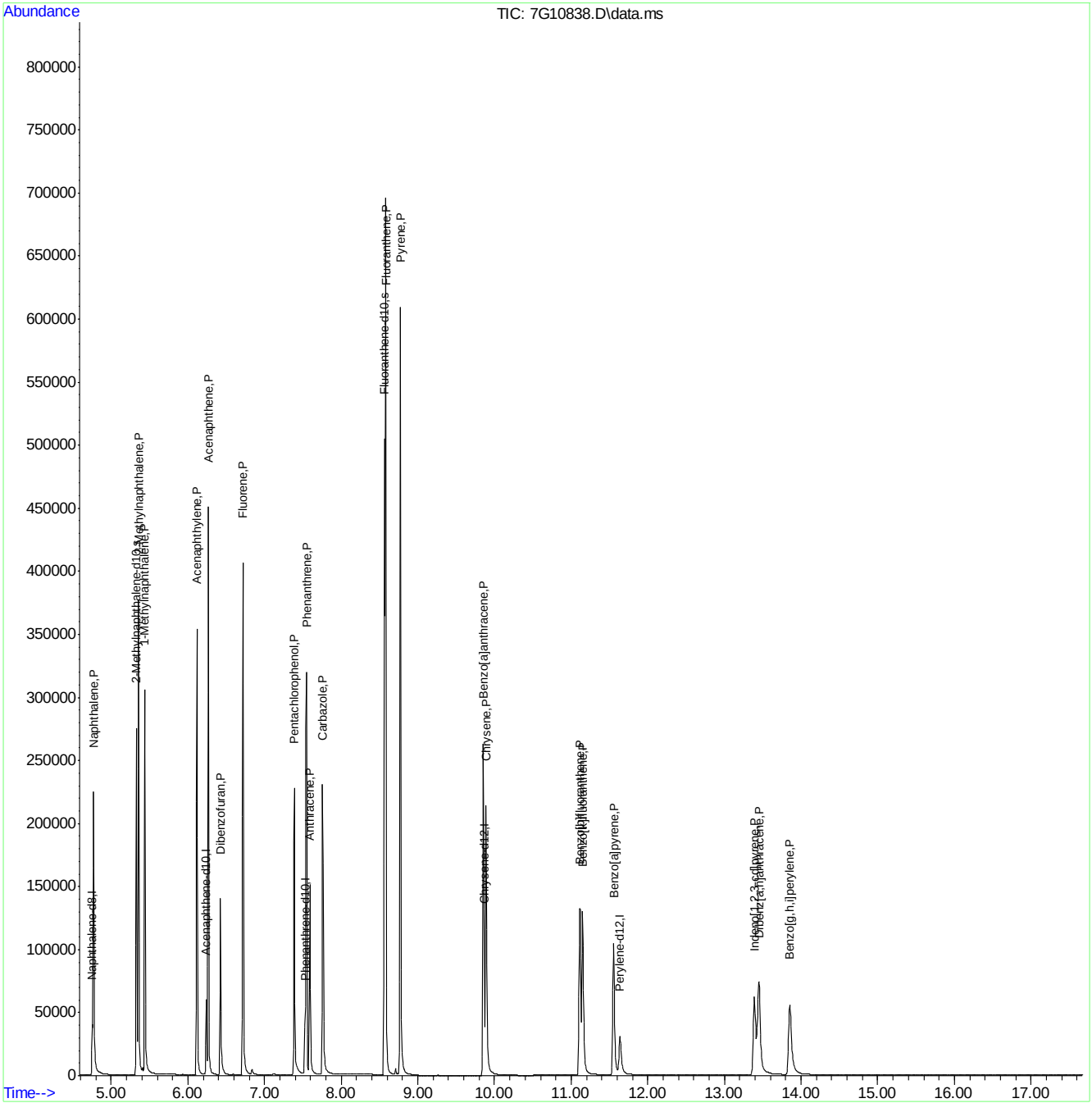
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.752	136	27924	4.00	ppm	-0.02
6) Acenaphthene-d10	6.239	164	16693	4.00	ppm	-0.02
11) Phenanthrene-d10	7.528	188	29642	4.00	ppm	-0.01
18) Chrysene-d12	9.867	240	49529	4.00	ppm	-0.02
22) Perylene-d12	11.636	264	43958	4.00	ppm	-0.03
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.329	152	87127	18.62	ppm	-0.04
Spiked Amount 10.000	Range 50 - 150		Recovery = 186.20%#			
17) Fluoranthene-d10	8.566	212	316580	18.82	ppm	-0.03
Spiked Amount 10.000	Range 50 - 150		Recovery = 188.20%#			
Target Compounds						Qvalue
2) Naphthalene	4.770	128	165015	18.64	ppm	99
3) 2-Methylnaphthalene	5.358	142	126792	18.88	ppm	100
5) 1-Methylnaphthalene	5.435	142	118187	18.39	ppm	82
7) Acenaphthylene	6.118	152	198973	18.73	ppm	99
8) Acenaphthene	6.268	153	129983	18.69	ppm	96
9) Dibenzofuran	6.423	168	89811	18.43	ppm	98
10) Fluorene	6.717	166	141988	18.97	ppm	98
12) Pentachlorophenol	7.389	266	73035	81.55	ppm	95
13) Phenanthrene	7.549	178	204799	18.97	ppm	98
14) Anthracene	7.591	178	101141	9.27	ppm	99
15) Carbazole	7.757	167	170049	9.30	ppm	93
16) Fluoranthene	8.582	202	386576	18.71	ppm	99
19) Pyrene	8.772	202	403389	17.42	ppm	99
20) Benzo[a]anthracene	9.855	228	156963	9.00	ppm	100
21) Chrysene	9.891	228	169372	9.09	ppm	98
23) Benzo[b]fluoranthene	11.112	252	146078	8.39	ppm	99
24) Benzo[k]fluoranthene	11.151	252	161554	8.02	ppm	99
25) Benzo[a]pyrene	11.554	252	141460	9.32	ppm	100
26) Indeno[1,2,3-cd]pyrene	13.393	276	99407	14.56	ppm	98
27) Dibenz[a,h]anthracene	13.451	278	109943	15.42	ppm	99
28) Benzo[g,h,i]perylene	13.854	276	114554	15.76	ppm	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10838.D
Acq On : 21 Jul 2020 3:31 pm
Operator : fouads
Sample : ic472-6
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 21 16:18:53 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10839.D
Acq On : 21 Jul 2020 3:55 pm
Operator : fouads
Sample : ic472-7
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 21 16:18:56 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration

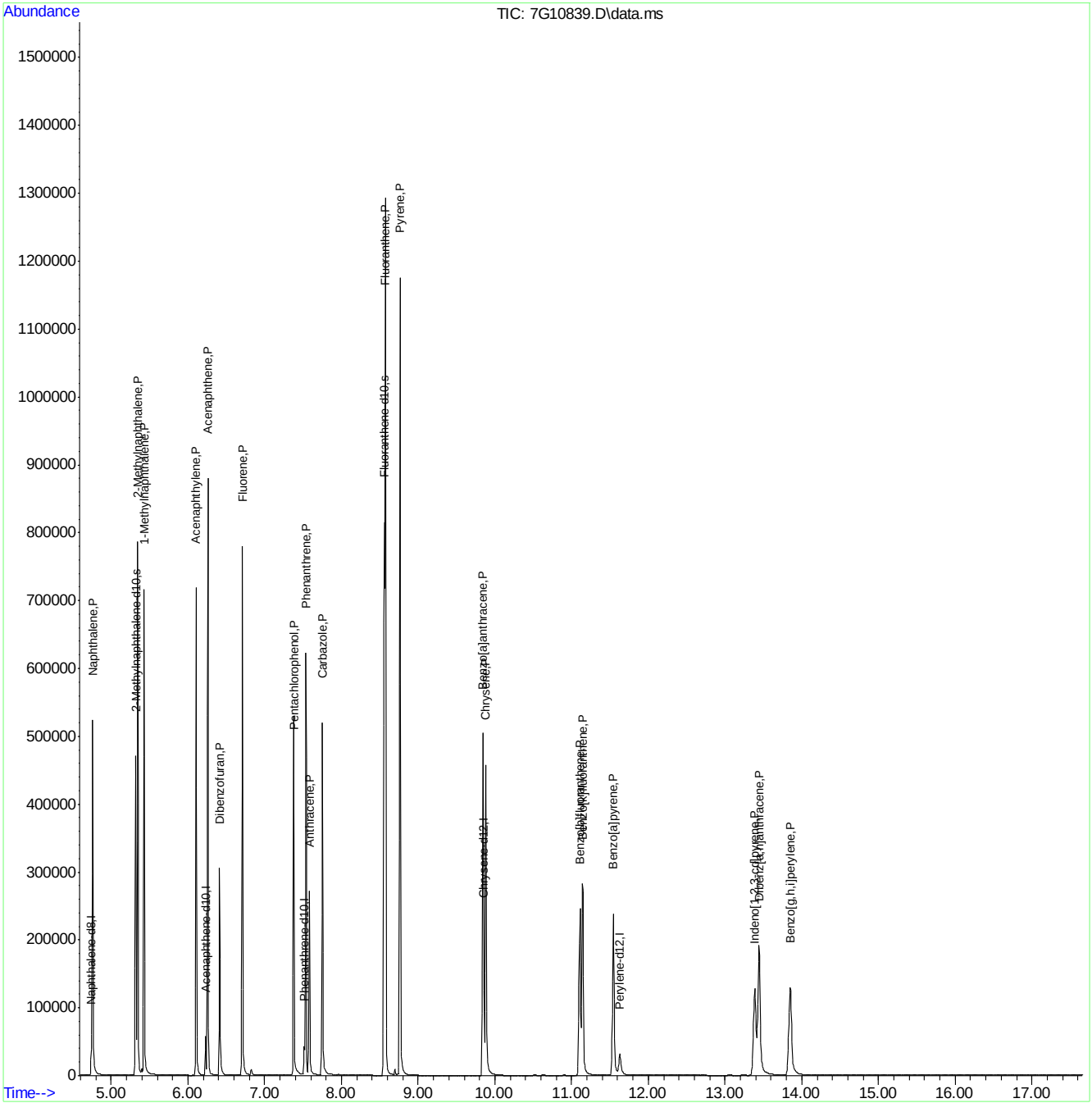
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.740	136	26293	4.00	ppm	-0.03
6) Acenaphthene-d10	6.229	164	15786	4.00	ppm	-0.03
11) Phenanthrene-d10	7.514	188	28087	4.00	ppm	-0.03
18) Chrysene-d12	9.855	240	46860	4.00	ppm	-0.03
22) Perylene-d12	11.629	264	41097	4.00	ppm	-0.03
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.323	152	176001	39.95	ppm	-0.04
Spiked Amount 10.000	Range 50 - 150		Recovery =	399.50%#		
17) Fluoranthene-d10	8.560	212	616116	38.66	ppm	-0.04
Spiked Amount 10.000	Range 50 - 150		Recovery =	386.60%#		
Target Compounds						Qvalue
2) Naphthalene	4.758	128	329242	39.51	ppm	99
3) 2-Methylnaphthalene	5.347	142	255780	40.45	ppm	90
5) 1-Methylnaphthalene	5.429	142	239953	39.66	ppm	92
7) Acenaphthylene	6.108	152	393285	39.15	ppm	98
8) Acenaphthene	6.258	153	260794	39.66	ppm	95
9) Dibenzofuran	6.413	168	179943	39.06	ppm	90
10) Fluorene	6.708	166	280750	39.66	ppm	98
12) Pentachlorophenol	7.382	266	163526	192.69	ppm	92
13) Phenanthrene	7.535	178	404134	39.50	ppm	98
14) Anthracene	7.584	178	196055	18.96	ppm	97
15) Carbazole	7.751	167	325209	18.77	ppm	95
16) Fluoranthene	8.576	202	770477	39.36	ppm	98
19) Pyrene	8.763	202	783512	35.75	ppm	99
20) Benzo[a]anthracene	9.845	228	307361	18.64	ppm	99
21) Chrysene	9.881	228	324523	18.40	ppm	99
23) Benzo[b]fluoranthene	11.110	252	284281	17.47	ppm	99
24) Benzo[k]fluoranthene	11.144	252	311293	16.53	ppm	100
25) Benzo[a]pyrene	11.547	252	275786	19.43	ppm	99
26) Indeno[1,2,3-cd]pyrene	13.391	276	209818	32.86	ppm	99
27) Dibenz[a,h]anthracene	13.444	278	229817	34.49	ppm	99
28) Benzo[g,h,i]perylene	13.852	276	234890	34.57	ppm	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10839.D
Acq On : 21 Jul 2020 3:55 pm
Operator : fouads
Sample : ic472-7
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 21 16:18:56 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration



Manual Integrations APPROVED
(compounds with "m" flag)
Nicole McCampbell
07/22/20 17:04

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10840.D
Acq On : 21 Jul 2020 4:19 pm
Operator : fouads
Sample : icv472-4
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 21 16:47:23 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

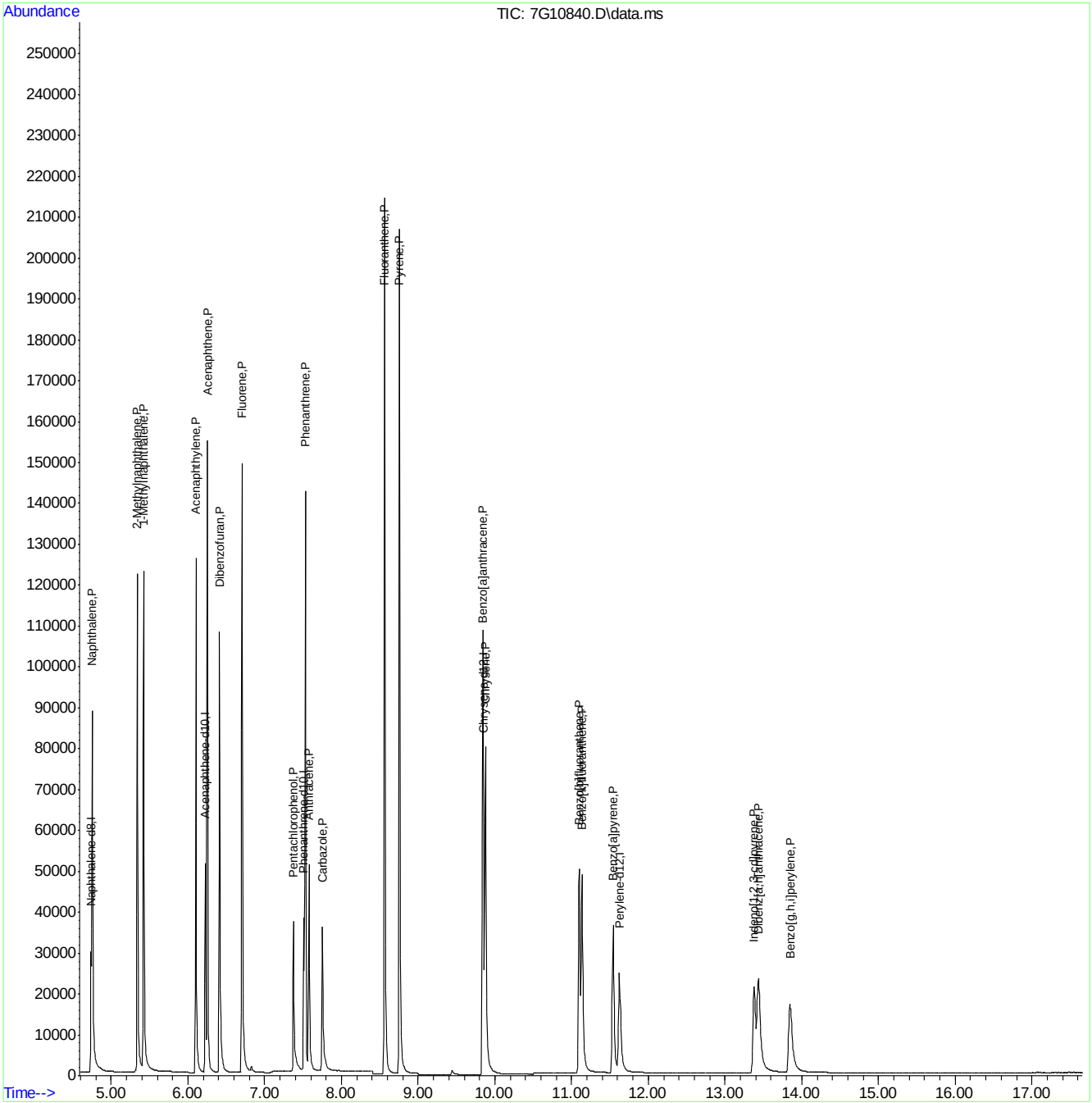
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.734	136	24813	4.00	ppm	0.00
6) Acenaphthene-d10	6.224	164	14478	4.00	ppm	0.00
11) Phenanthrene-d10	7.507	188	26182	4.00	ppm	0.00
18) Chrysene-d12	9.852	240	41612	4.00	ppm	0.00
22) Perylene-d12	11.624	264	36348	4.00	ppm	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	0.000	152	0	0.00	ppm	
Spiked Amount 10.000	Range 50 - 150		Recovery =	0.00%#		
17) Fluoranthene-d10	0.000	212	0d	0.00	ppm	
Spiked Amount 10.000	Range 50 - 150		Recovery =	0.00%#		
Target Compounds						Qvalue
2) Naphthalene	4.752	128	68472	9.54	ppm	99
3) 2-Methylnaphthalene	5.341	142	45097	8.17	ppm	95
5) 1-Methylnaphthalene	5.423	142	49815	9.88	ppm	97
7) Acenaphthylene	6.104	152	76527	9.07	ppm	100
8) Acenaphthene	6.253	153	53203	9.63	ppm	98
9) Dibenzofuran	6.408	168	74284	18.81	ppm	90
10) Fluorene	6.703	166	58318	9.70	ppm	98
12) Pentachlorophenol	7.375	266	15014	14.76	ppm	99
13) Phenanthrene	7.528	178	83170	9.48	ppm	99
14) Anthracene	7.577	178	37274	4.25	ppm	99
15) Carbazole	7.750	167	37176	2.38	ppm	99
16) Fluoranthene	8.563	202	144320	8.72	ppm	100
19) Pyrene	8.753	202	152837	9.18	ppm	99
20) Benzo[a]anthracene	9.840	228	58564	4.49	ppm	99
21) Chrysene	9.879	228	72701	5.04	ppm	100
23) Benzo[b]fluoranthene	11.100	252	57562	4.67	ppm	100
24) Benzo[k]fluoranthene	11.134	252	62383	4.74	ppm	100
25) Benzo[a]pyrene	11.542	252	54221	4.51	ppm	100
26) Indeno[1,2,3-cd]pyrene	13.376	276	34907m	4.45	ppm	
27) Dibenz[a,h]anthracene	13.439	278	38293	4.40	ppm	99
28) Benzo[g,h,i]perylene	13.847	276	40149	4.24	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10840.D
Acq On : 21 Jul 2020 4:19 pm
Operator : fouads
Sample : icv472-4
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 21 16:47:23 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration



Manual Integration Approval Summary

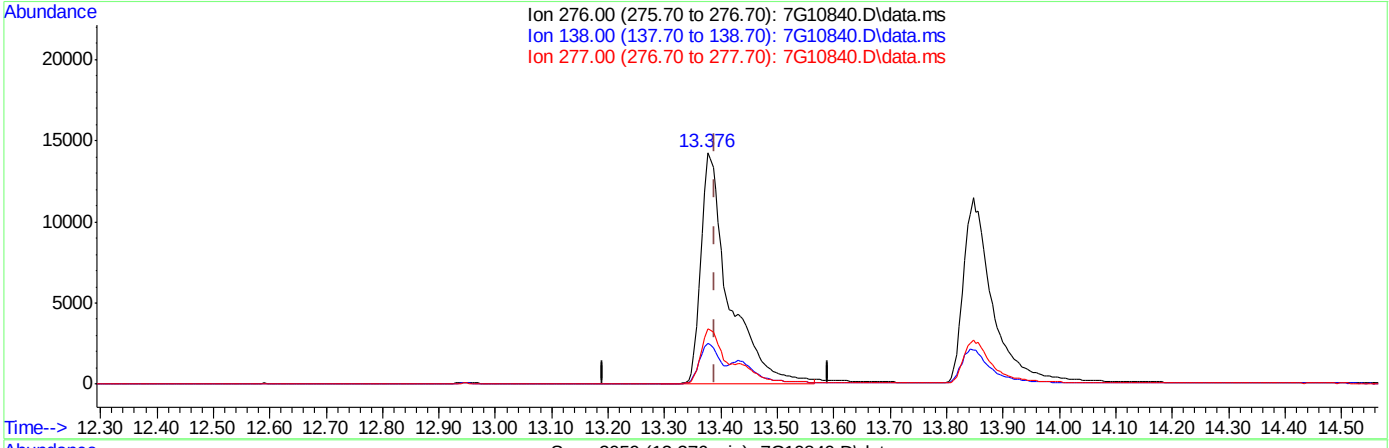
Sample Number: S7G472-ICV472
Lab FileID: 7G10840.D
Injection Time: 07/21/20 16:19
Method: SW846 8270D BY SIM
Analyst approved: 07/22/20 13:31 Fouad Sekkar
Supervisor approved: 07/22/20 17:04 Nicole McCampbell

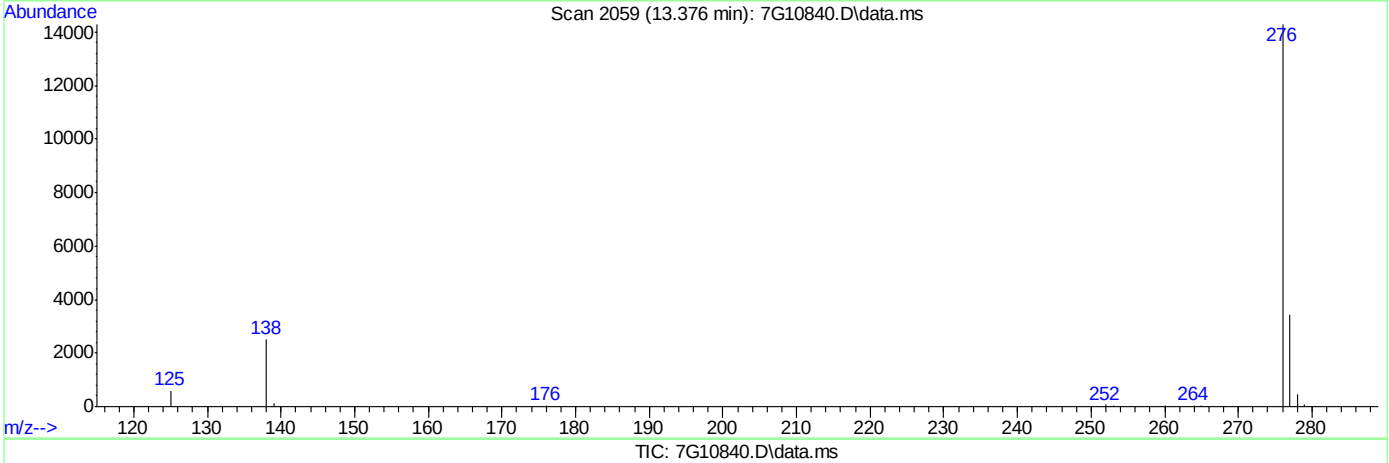
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		13.38	Missed peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10840.D
Acq On : 21 Jul 2020 4:19 pm
Operator : fouads
Sample : icv472-4
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 21 16:46:41 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration





TIC: 7G10840.D\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.376min (-0.015) 6.21ppm

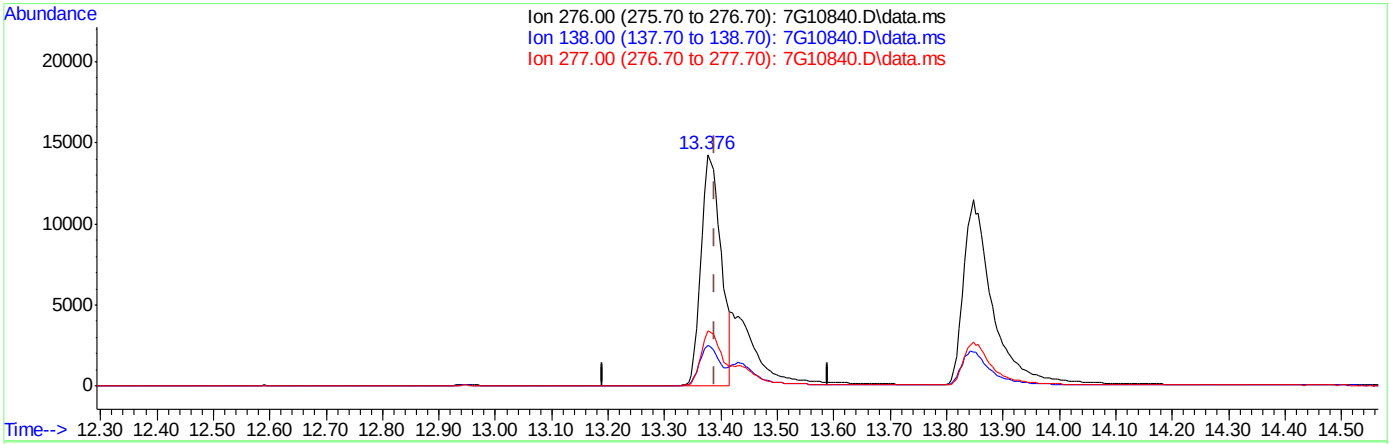
response 48737

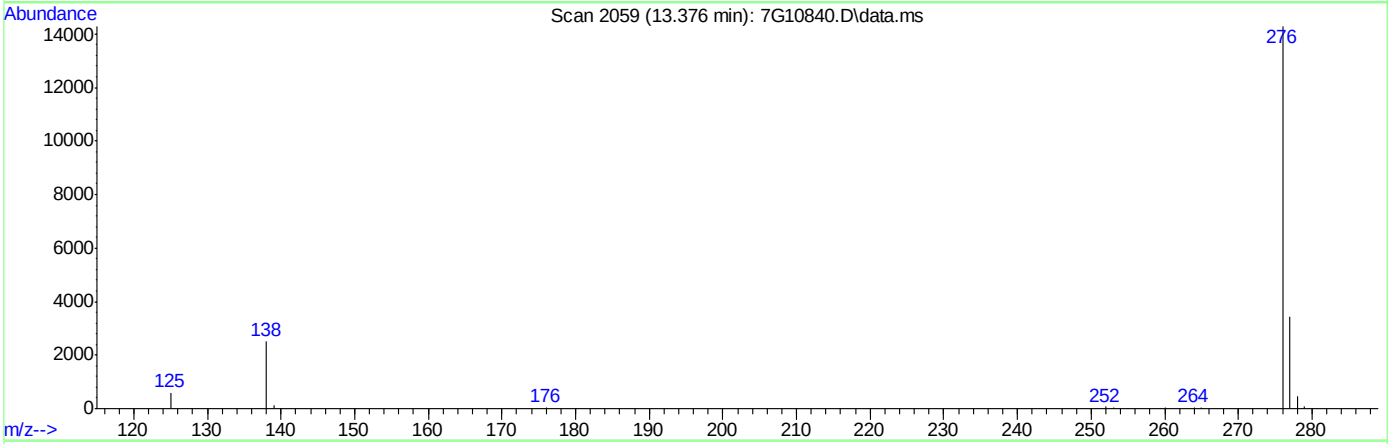
Ion	Exp%	Act%
276.00	100	100
138.00	14.00	17.25
277.00	23.10	23.60
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10840.D
Acq On : 21 Jul 2020 4:19 pm
Operator : fouads
Sample : icv472-4
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 21 16:46:41 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration





TIC: 7G10840.D\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.376min (-0.015) 4.45ppm m

response 34907

Ion	Exp%	Act%
276.00	100	100
138.00	14.00	17.64
277.00	23.10	23.92
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 08/11/20 12:03

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\081020_7G482\
Data File : 7G11100.D
Acq On : 10 Aug 2020 2:28 pm
Operator : FOUADS
Sample : CC472-4
Misc : op81342,S7G482,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 11 10:55:47 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

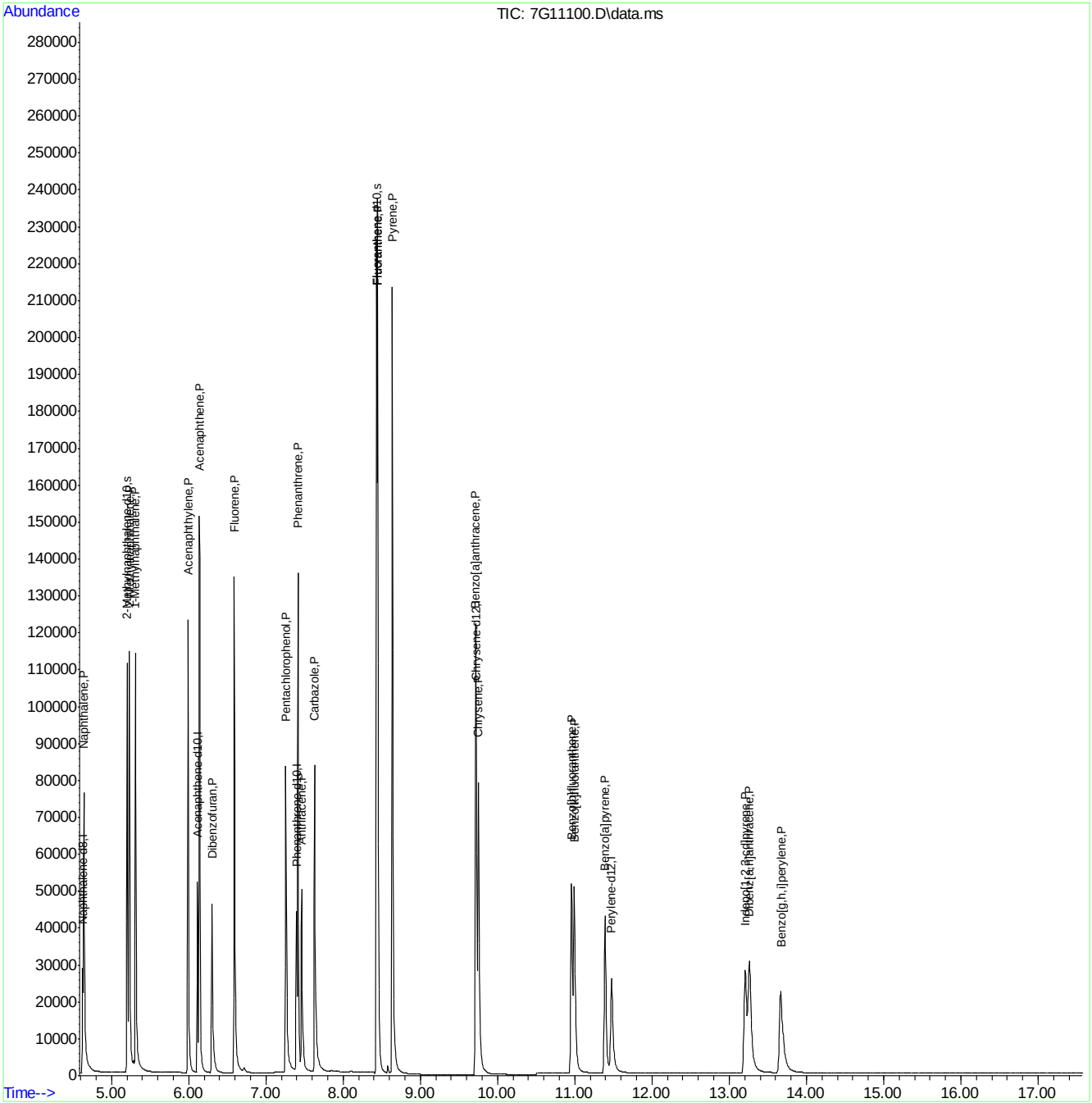
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.628	136	22910	4.00	ppm	0.00
6) Acenaphthene-d10	6.114	164	14625	4.00	ppm	0.00
11) Phenanthrene-d10	7.396	188	27961	4.00	ppm	0.00
18) Chrysene-d12	9.724	240	44464	4.00	ppm	0.00
22) Perylene-d12	11.477	264	38799	4.00	ppm	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.205	152	36026	10.47	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 104.70%			
17) Fluoranthene-d10	8.433	212	142417	9.75	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 97.50%			
Target Compounds						Qvalue
2) Naphthalene	4.646	128	62116	9.38	ppm	99
3) 2-Methylnaphthalene	5.235	142	49645	9.74	ppm	98
5) 1-Methylnaphthalene	5.311	142	47057	10.09	ppm	88
7) Acenaphthylene	5.993	152	80037	9.38	ppm	99
8) Acenaphthene	6.138	153	51526	9.24	ppm	96
9) Dibenzofuran	6.302	168	38761	9.90	ppm	97
10) Fluorene	6.592	166	55324	9.13	ppm	96
12) Pentachlorophenol	7.257	266	29508	25.53	ppm	98
13) Phenanthrene	7.417	178	82670	8.84	ppm	97
14) Anthracene	7.466	178	43838	4.68	ppm	99
15) Carbazole	7.633	167	72628	4.35	ppm	99
16) Fluoranthene	8.448	202	161075	9.10	ppm	98
19) Pyrene	8.639	202	164778	9.26	ppm	97
20) Benzo[a]anthracene	9.715	228	66903	4.80	ppm	99
21) Chrysene	9.751	228	73670	4.78	ppm	99
23) Benzo[b]fluoranthene	10.957	252	62772	4.77	ppm	100
24) Benzo[k]fluoranthene	10.991	252	68920	4.91	ppm	99
25) Benzo[a]pyrene	11.389	252	58943	4.59	ppm	99
26) Indeno[1,2,3-cd]pyrene	13.209	276	47796m	5.71	ppm	
27) Dibenz[a,h]anthracene	13.262	278	48138	5.18	ppm	98
28) Benzo[g,h,i]perylene	13.670	276	53492	5.30	ppm	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\081020_7G482\
Data File : 7G11100.D
Acq On : 10 Aug 2020 2:28 pm
Operator : FOUADS
Sample : CC472-4
Misc : op81342,S7G482,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 11 10:55:47 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration



Manual Integration Approval Summary

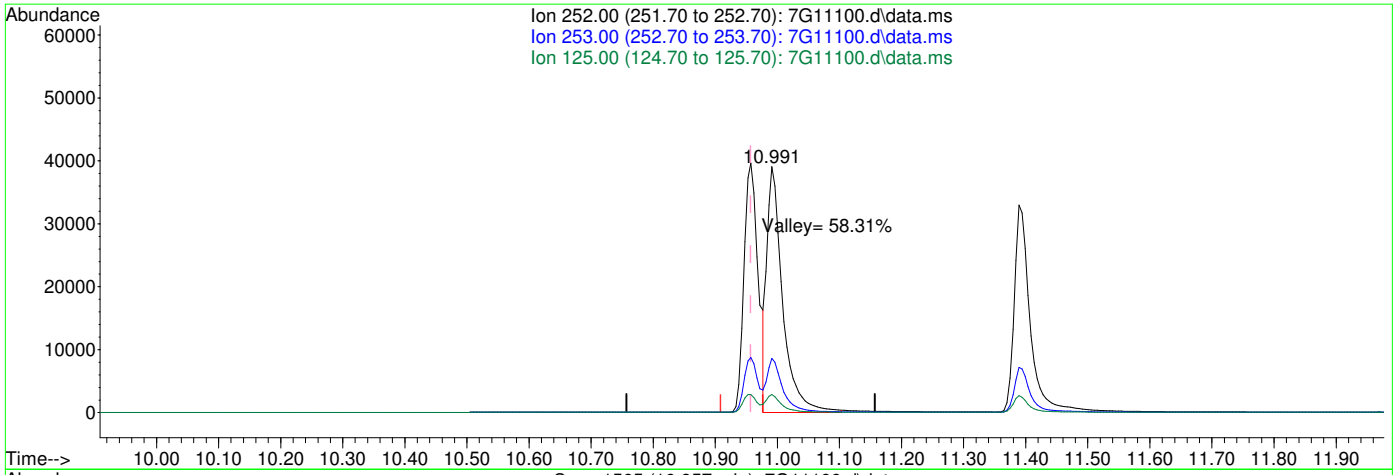
Sample Number:	S7G482-CC472	**Method:**	SW846 8270D BY SIM
Lab FileID:	7G11100.D	**Analyst approved:**	08/11/20 11:02 Fouad Sekkar
Injection Time:	08/10/20 14:28	**Supervisor approved:**	08/11/20 12:03 Naresh Jiawan

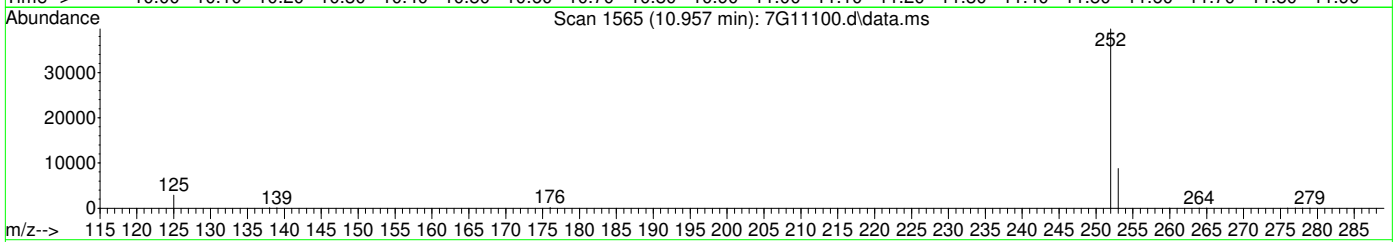
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		13.21	Missed peak

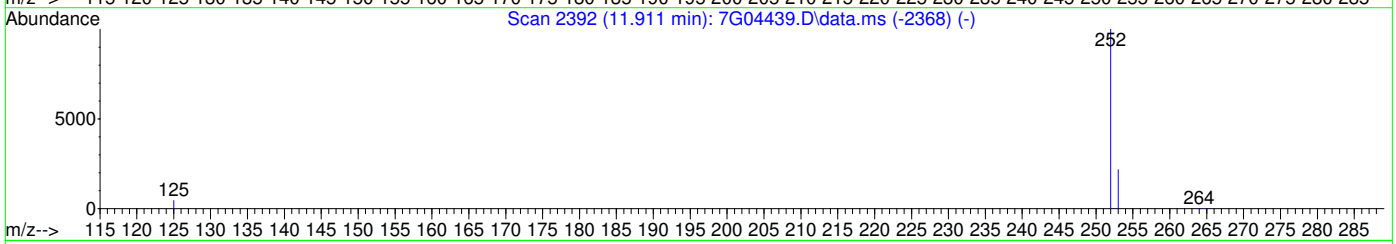
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11100.d
Acq On : 10 Aug 2020 2:28 pm
Operator : FOUADS
Sample : CC472-4
Misc : op81342,S7G482,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 11 02:36:04 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Aug 11 02:35:57 2020
Response via : Initial Calibration







TIC: 7G11100.d\data.ms

(23) Benzo[b]fluoranthene (P)

10.957min (0.000) 4.76ppm

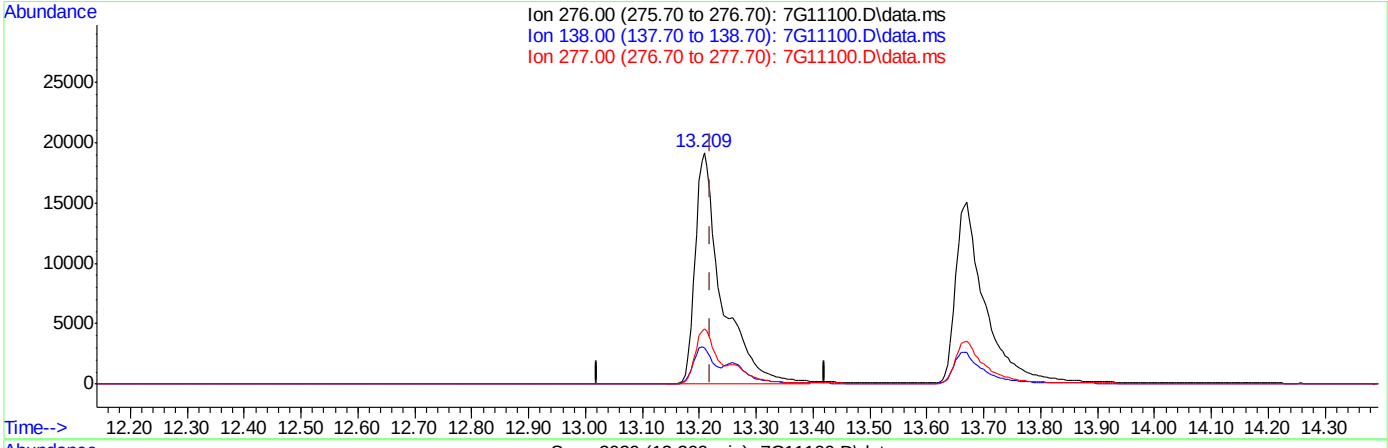
response 62772

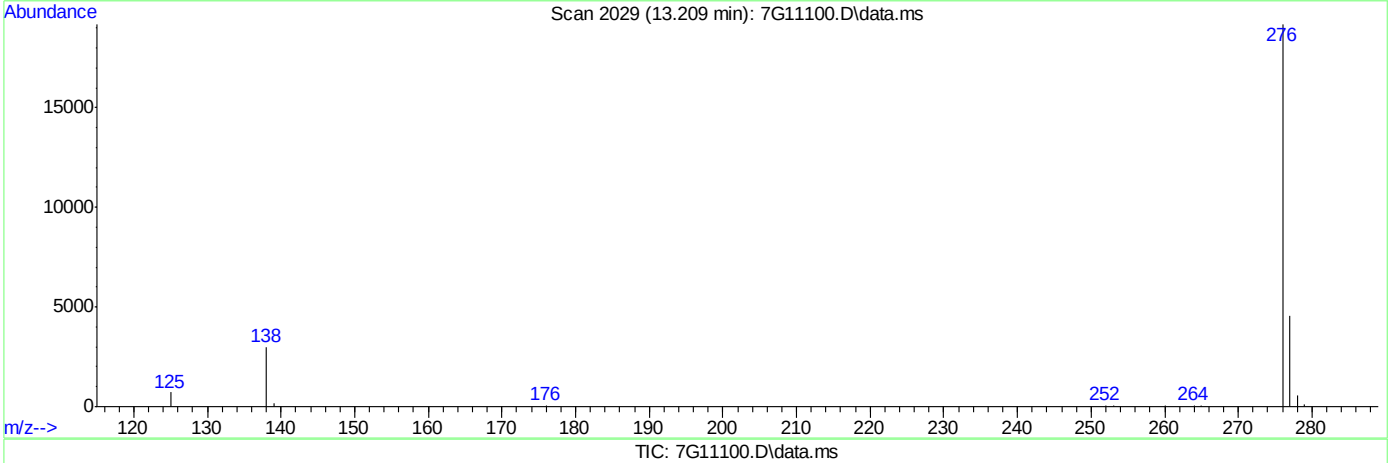
Ion	Exp%	Act%
252.00	100	100
253.00	21.70	22.00
125.00	4.50	7.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\081020_7G482\
Data File : 7G11100.D
Acq On : 10 Aug 2020 2:28 pm
Operator : FOUADS
Sample : CC472-4
Misc : op81342,S7G482,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 10 14:50:52 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration





TIC: 7G11100.D\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.209min (-0.012) 7.41ppm

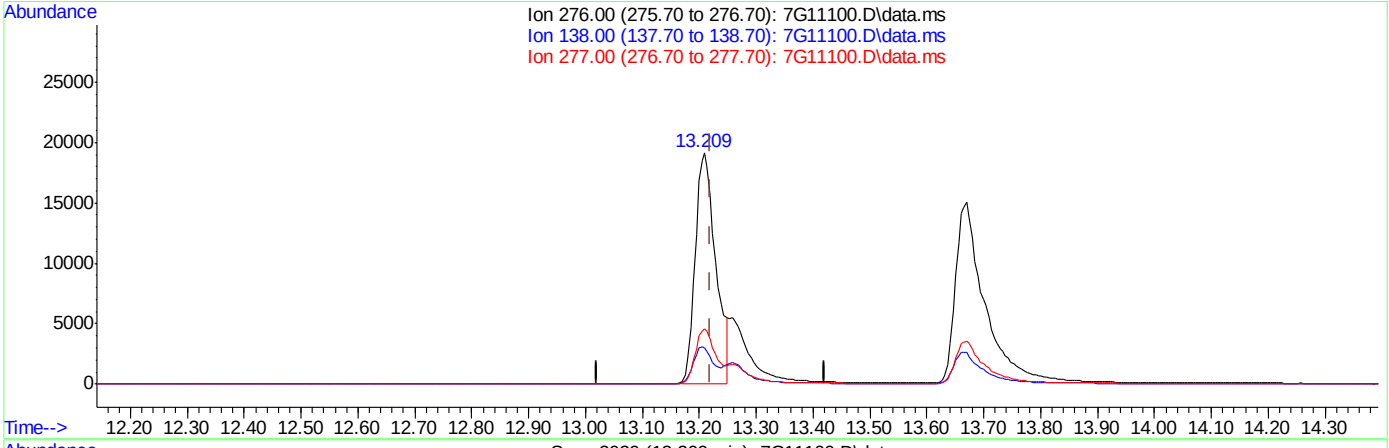
response 62085

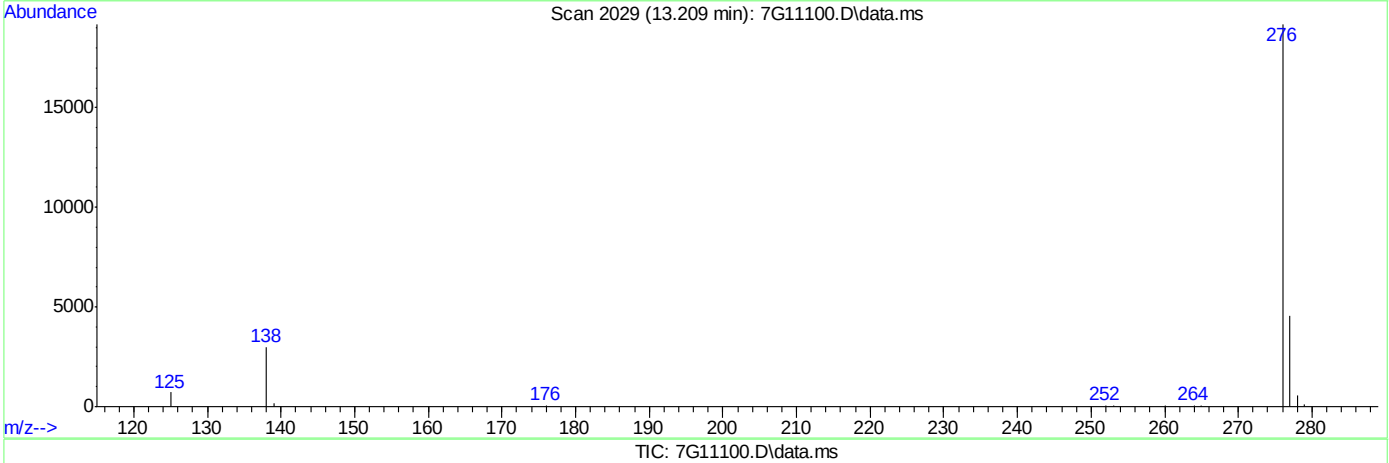
Ion	Exp%	Act%
276.00	100	100
138.00	14.00	15.39
277.00	23.10	23.60
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\081020_7G482\
Data File : 7G11100.D
Acq On : 10 Aug 2020 2:28 pm
Operator : FOUADS
Sample : CC472-4
Misc : op81342,S7G482,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 10 14:50:52 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration





TIC: 7G11100.D\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.209min (-0.012) 5.71ppm m

response 47796

Ion	Exp%	Act%
276.00	100	100
138.00	14.00	15.66
277.00	23.10	23.82
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 08/11/20 12:03

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\081020_7G482\
Data File : 7G11126.D
Acq On : 11 Aug 2020 1:00 am
Operator : FOUADS
Sample : ecc472-4
Misc : op81483,S7G482,15.0,,,1,1,soil
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 11 10:56:21 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

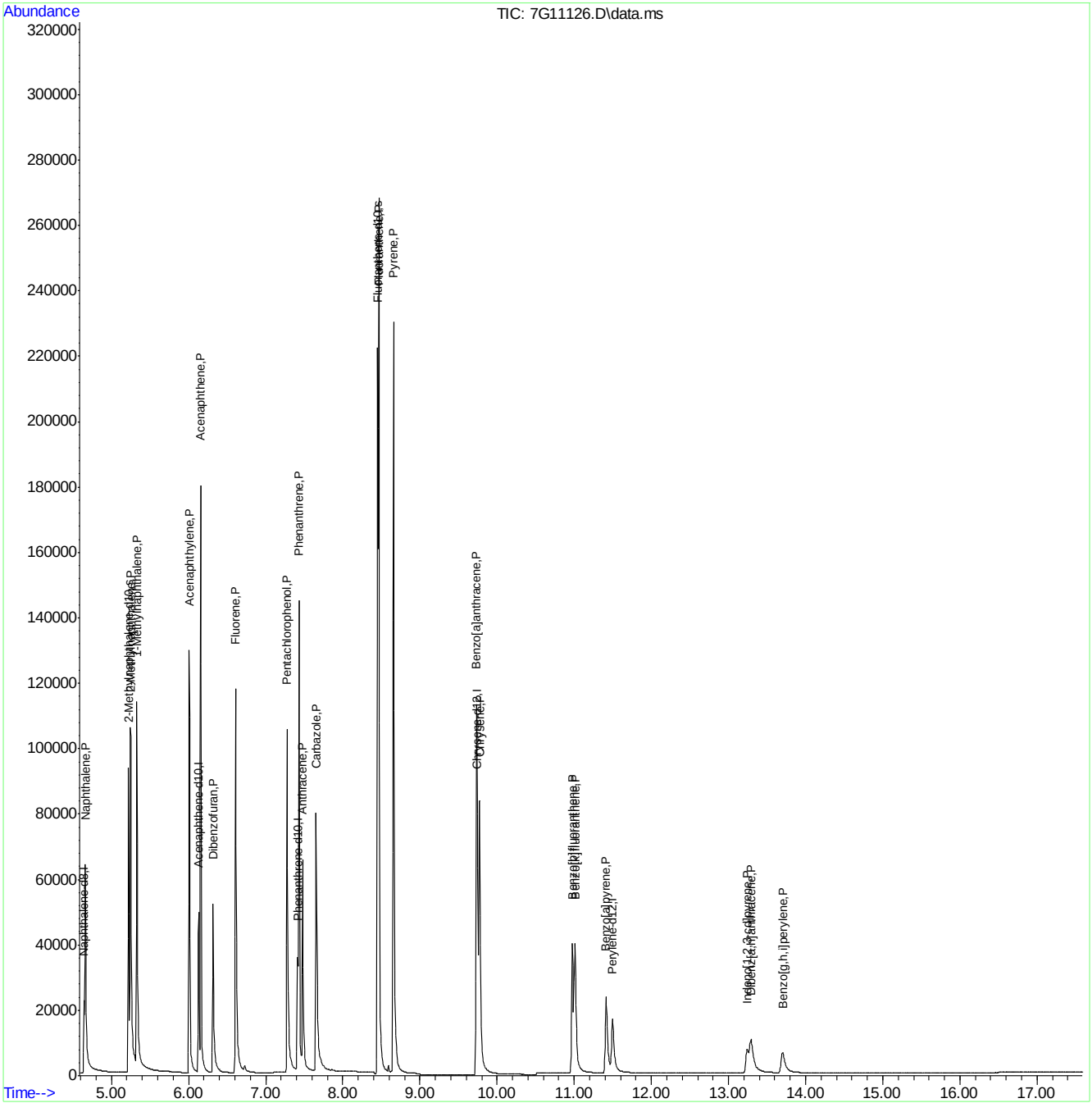
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.646	136	20422	4.00	ppm	0.01
6) Acenaphthene-d10	6.133	164	15731	4.00	ppm	0.01
11) Phenanthrene-d10	7.417	188	30214	4.00	ppm	0.01
18) Chrysene-d12	9.746	240	47844	4.00	ppm	0.01
22) Perylene-d12	11.496	264	26167	4.00	ppm	0.01
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.223	152	34792	11.31	ppm	0.02
Spiked Amount 10.000	Range 50 - 150		Recovery = 113.10%			
17) Fluoranthene-d10	8.452	212	154307	9.77	ppm	0.02
Spiked Amount 10.000	Range 50 - 150		Recovery = 97.70%			
Target Compounds						Qvalue
2) Naphthalene	4.664	128	56119	9.50	ppm	100
3) 2-Methylnaphthalene	5.252	142	49798	10.96	ppm	97
5) 1-Methylnaphthalene	5.329	142	49329	11.79	ppm	92
7) Acenaphthylene	6.007	152	86040	9.37	ppm	98
8) Acenaphthene	6.157	153	56481	9.41	ppm	98
9) Dibenzofuran	6.317	168	42175	10.01	ppm	95
10) Fluorene	6.612	166	61761	9.46	ppm	95
12) Pentachlorophenol	7.278	266	37334	29.28	ppm	98
13) Phenanthrene	7.431	178	92528	9.15	ppm	100
14) Anthracene	7.480	178	48327	4.77	ppm	100
15) Carbazole	7.654	167	82060	4.54	ppm	97
16) Fluoranthene	8.467	202	180701	9.44	ppm	99
19) Pyrene	8.657	202	183127	9.56	ppm	98
20) Benzo[a]anthracene	9.734	228	69359	4.63	ppm	100
21) Chrysene	9.770	228	82223	4.96	ppm	99
23) Benzo[b]fluoranthene	10.977	252	45428	5.11	ppm	99
24) Benzo[k]fluoranthene	11.011	252	60889	6.40	ppm	99
25) Benzo[a]pyrene	11.414	252	40560	4.69	ppm	99
26) Indeno[1,2,3-cd]pyrene	13.243	276	15604m	2.76	ppm	
27) Dibenz[a,h]anthracene	13.296	278	18839	3.01	ppm	98
28) Benzo[g,h,i]perylene	13.704	276	16571	2.43	ppm	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\081020_7G482\
Data File : 7G11126.D
Acq On : 11 Aug 2020 1:00 am
Operator : FOUADS
Sample : ecc472-4
Misc : op81483,S7G482,15.0,,,1,1,soil
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 11 10:56:21 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration



Manual Integration Approval Summary

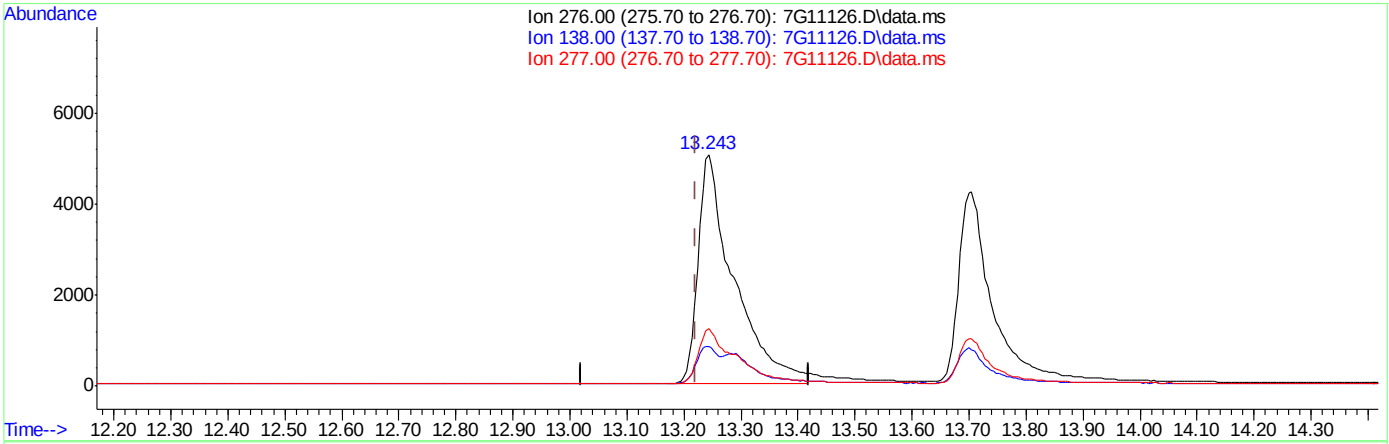
Sample Number:	S7G482-ECC472	**Method:**	SW846 8270D BY SIM
Lab FileID:	7G11126.D	**Analyst approved:**	08/11/20 11:02 Fouad Sekkar
Injection Time:	08/11/20 01:00	**Supervisor approved:**	08/11/20 12:03 Naresh Jiawan

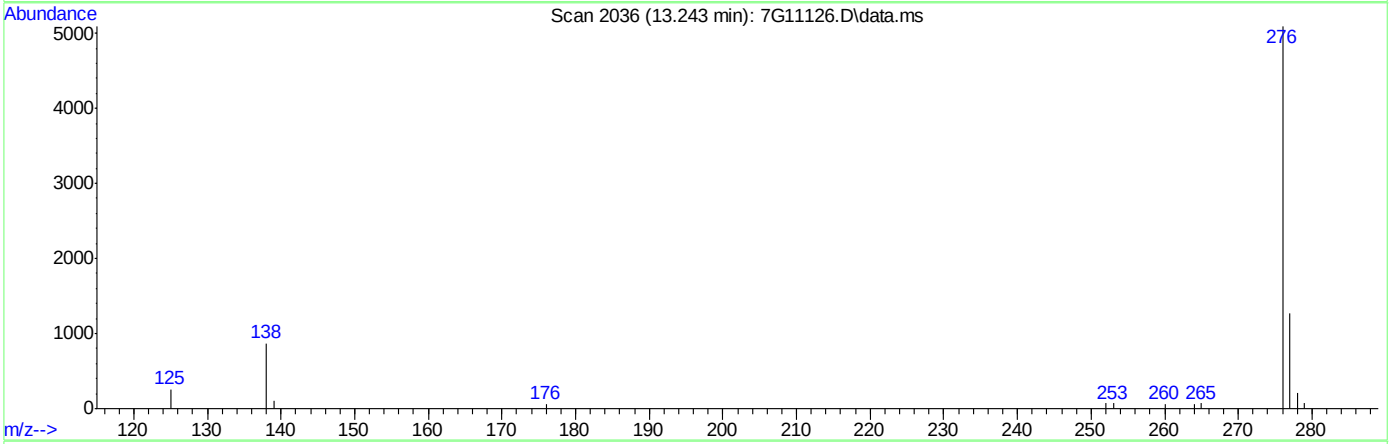
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		13.24	Missed peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\081020_7G482\
Data File : 7G11126.D
Acq On : 11 Aug 2020 1:00 am
Operator : FOUADS
Sample : ecc472-4
Misc : op81483,S7G482,15.0,,,1,1,soil
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 11 06:52:13 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration





TIC: 7G11126.D\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.243min (+0.022) 3.87ppm

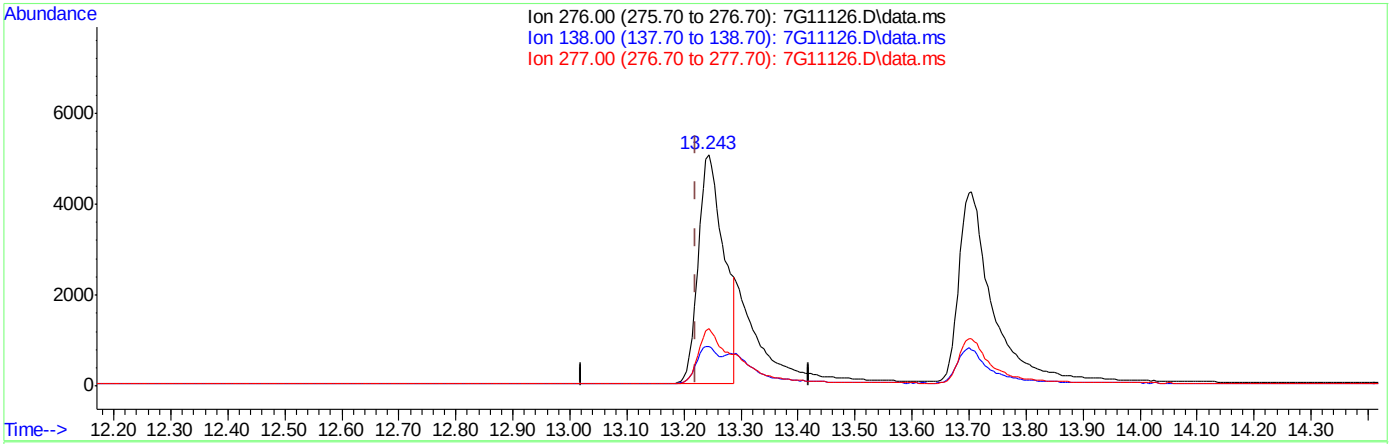
response 21868

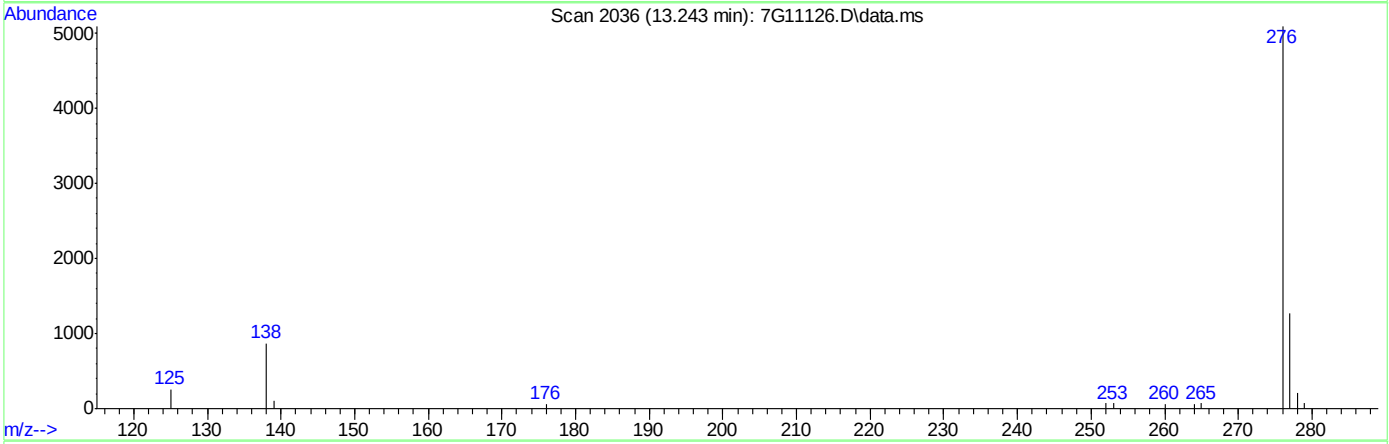
Ion	Exp%	Act%
276.00	100	100
138.00	14.00	15.97
277.00	23.10	23.97
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\081020_7G482\
Data File : 7G11126.D
Acq On : 11 Aug 2020 1:00 am
Operator : FOUADS
Sample : ecc472-4
Misc : op81483,S7G482,15.0,,,1,1,soil
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 11 06:52:13 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration





TIC: 7G11126.D\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.243min (+0.022) 2.76ppm m

response 15604

Ion	Exp%	Act%
276.00	100	100
138.00	14.00	17.15
277.00	23.10	24.89
0.00	0.00	0.00

Manual Integrations APPROVED
(compounds with "m" flag)
Nicole McCampbell
08/12/20 11:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11130.d
Acq On : 11 Aug 2020 8:29 am
Operator : FOUADS
Sample : CC472-4 Inst : MSBNA8
Misc : op81342,S7G483,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:24:22 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Wed Aug 12 07:23:49 2020
Response via : Initial Calibration

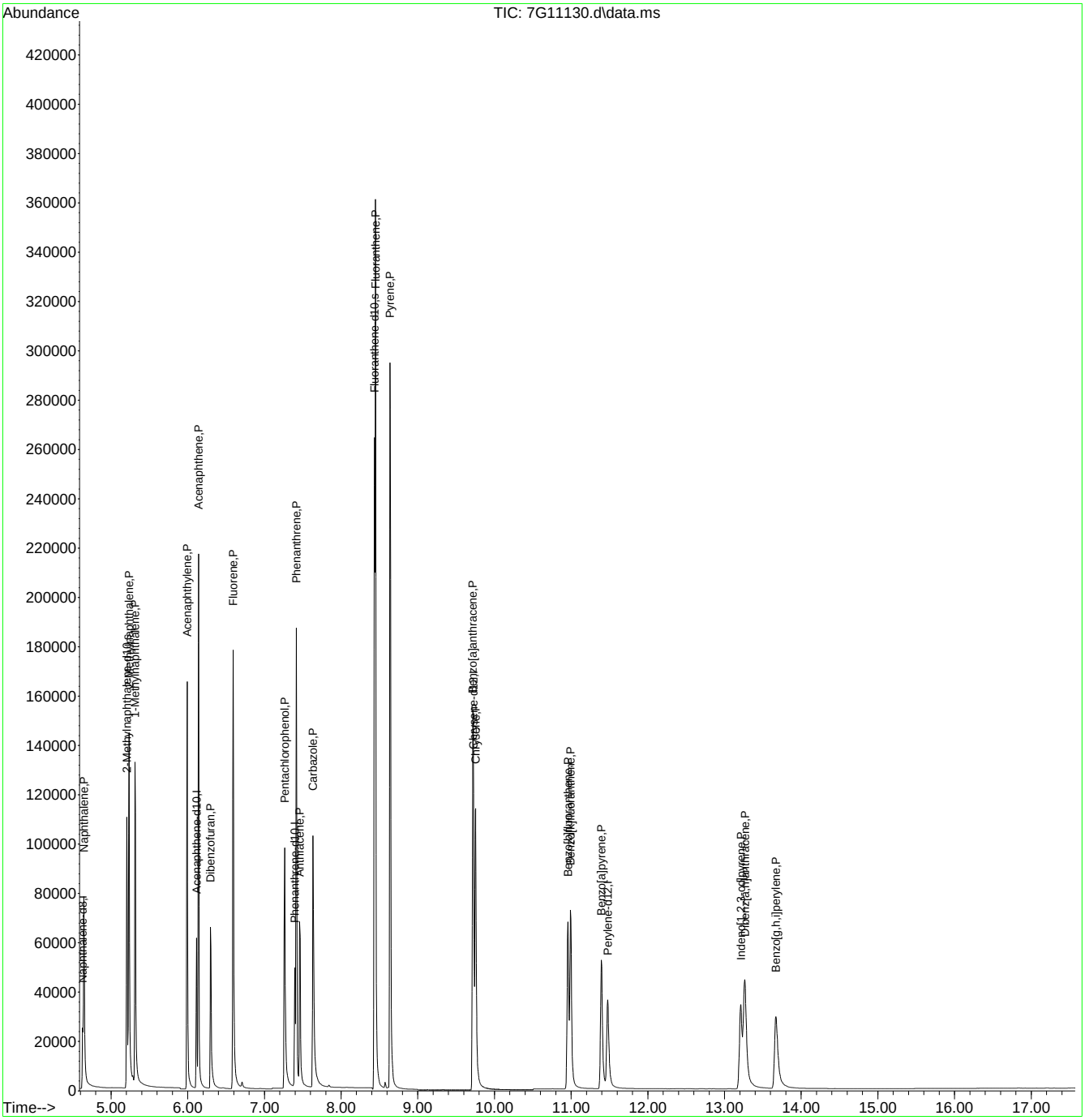
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.628	136	23021	4.00	ppm	0.00
6) Acenaphthene-d10	6.114	164	17904	4.00	ppm	0.00
11) Phenanthrene-d10	7.396	188	34538	4.00	ppm	0.00
18) Chrysene-d12	9.727	240	58481	4.00	ppm	0.00
22) Perylene-d12	11.477	264	51783	4.00	ppm	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.205	152	40233	11.59	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery =	115.90%		
17) Fluoranthene-d10	8.436	212	182607	10.11	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery =	101.10%		
Target Compounds						Qvalue
2) Naphthalene	4.646	128	63624	9.56	ppm	99
3) 2-Methylnaphthalene	5.235	142	57650	11.26	ppm	96
5) 1-Methylnaphthalene	5.311	142	56829	12.04	ppm	90
7) Acenaphthylene	5.993	152	100391	9.61	ppm	99
8) Acenaphthene	6.143	153	66186	9.68	ppm	95
9) Dibenzofuran	6.297	168	49385	10.29	ppm	98
10) Fluorene	6.592	166	73249	9.85	ppm	96
12) Pentachlorophenol	7.264	266	35848	25.16	ppm	96
13) Phenanthrene	7.417	178	108455	9.37	ppm	97
14) Anthracene	7.459	178	56294	4.86	ppm	98
15) Carbazole	7.633	167	97922	4.74	ppm	99
16) Fluoranthene	8.448	202	215976	9.86	ppm	98
19) Pyrene	8.639	202	220794	9.43	ppm	97
20) Benzo[a]anthracene	9.717	228	89564	4.88	ppm	98
21) Chrysene	9.753	228	98780	4.87	ppm	99
23) Benzo[b]fluoranthene	10.957	252	82074	4.67	ppm	98
24) Benzo[k]fluoranthene	10.991	252	90262	4.81	ppm	97
25) Benzo[a]pyrene	11.394	252	78638	4.59	ppm	98
26) Indeno[1,2,3-cd]pyrene	13.214	276	59178m	5.29	ppm	
27) Dibenz[a,h]anthracene	13.267	278	69669	5.62	ppm	96
28) Benzo[g,h,i]perylene	13.670	276	68425	5.08	ppm	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11130.d
Acq On : 11 Aug 2020 8:29 am
Operator : FOUADS
Sample : CC472-4 Inst : MSBNA8
Misc : op81342,S7G483,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:24:22 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Wed Aug 12 07:23:49 2020
Response via : Initial Calibration



Manual Integration Approval Summary

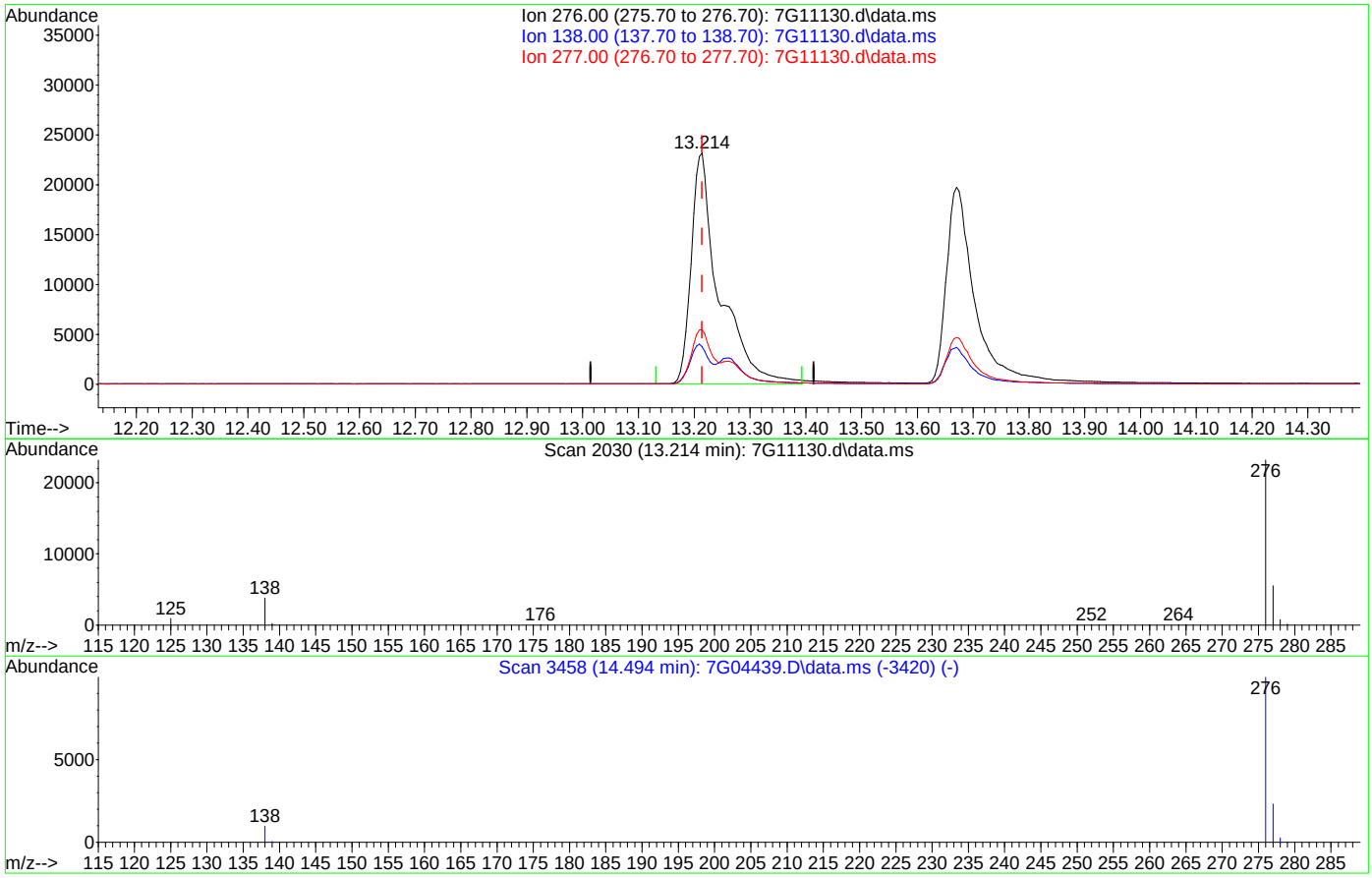
Sample Number: S7G483-CC472
Lab FileID: 7G11130.D
Injection Time: 08/11/20 08:29
Method: SW846 8270D BY SIM
Analyst approved: 08/12/20 08:06 Jennifer Fereira
Supervisor approved: 08/12/20 11:43 Nicole McCampbell

Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		13.21	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11130.d
Acq On : 11 Aug 2020 8:29 am
Operator : FOUADS
Sample : CC472-4 Inst : MSBNA8
Misc : op81342,S7G483,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:23:52 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Wed Aug 12 07:23:49 2020
Response via : Initial Calibration



TIC: 7G11130.d\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.214min (0.000) 7.26ppm

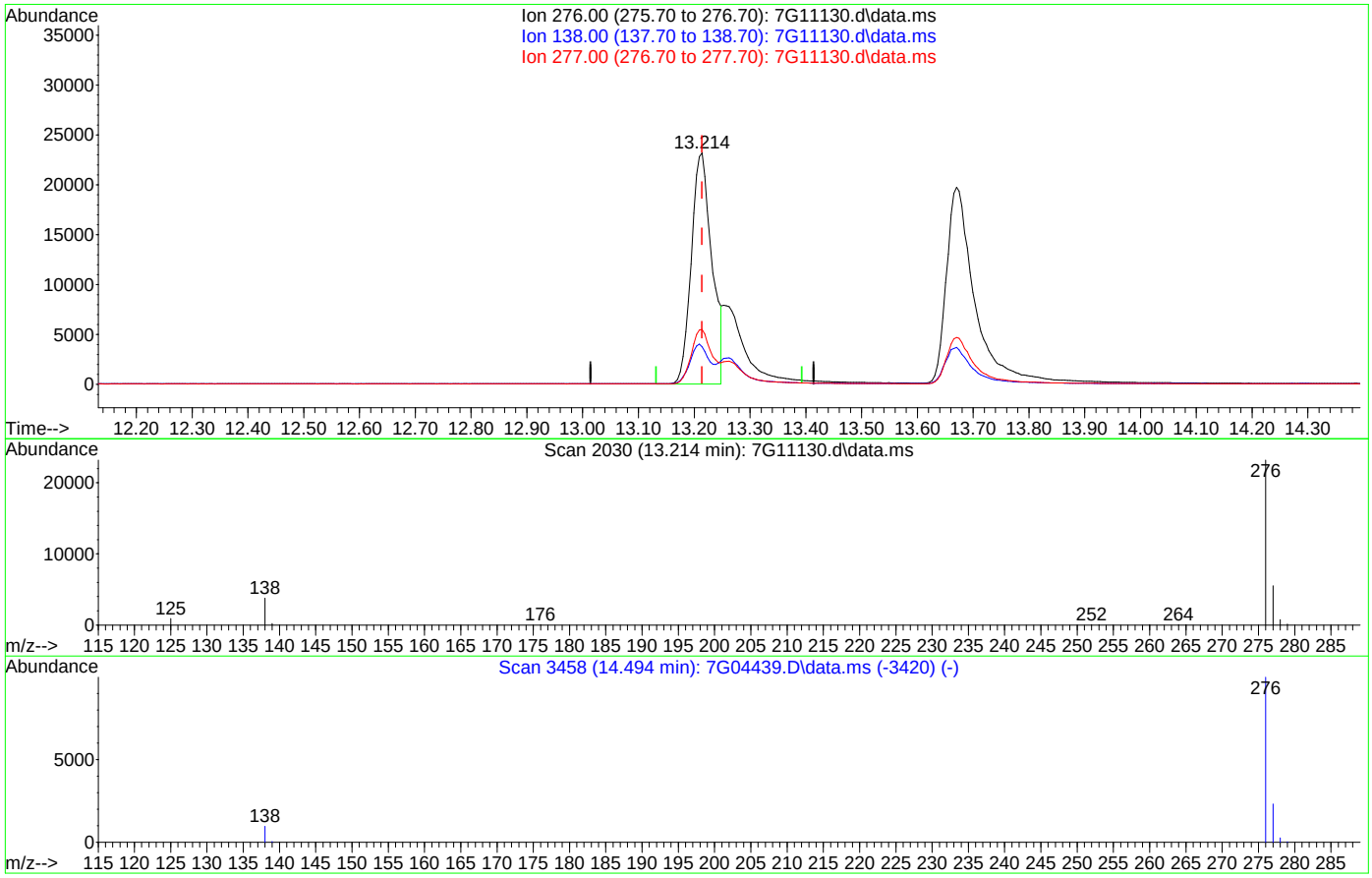
response 81139

Ion	Exp%	Act%
276.00	100	100
138.00	9.60	15.96
277.00	23.10	23.53
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11130.d
Acq On : 11 Aug 2020 8:29 am
Operator : FOUADS
Sample : CC472-4 Inst : MSBNA8
Misc : op81342,S7G483,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:23:52 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Wed Aug 12 07:23:49 2020
Response via : Initial Calibration



TIC: 7G11130.d\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.214min (0.000) 5.29ppm m

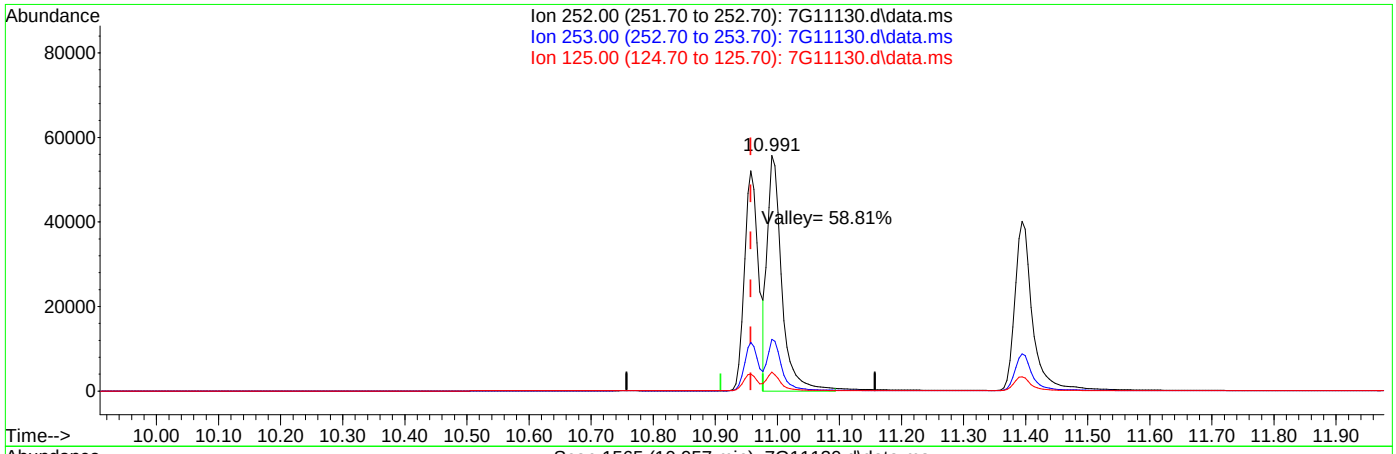
response 59178

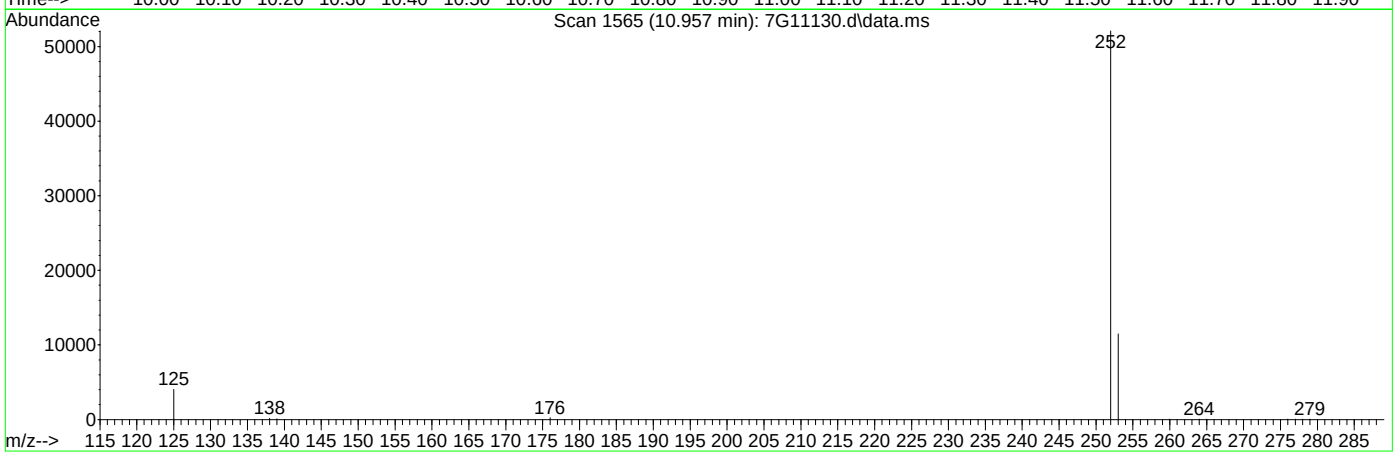
Ion	Exp%	Act%
276.00	100	100
138.00	9.60	16.27
277.00	23.10	23.75
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11130.d
Acq On : 11 Aug 2020 8:29 am
Operator : FOUADS
Sample : CC472-4 Inst : MSBNA8
Misc : op81342,S7G483,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:24:22 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Wed Aug 12 07:23:49 2020
Response via : Initial Calibration





TIC: 7G11130.d\data.ms

(23) Benzo[b]fluoranthene (P)

10.957min (0.000) 4.67ppm

response 82074

Ion	Exp%	Act%
252.00	100	100
253.00	21.70	22.12
125.00	4.50	7.54
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 06/24/20 14:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071356.D
Acq On : 23 Jun 2020 10:04 am
Operator : marthav
Sample : ic2918-1 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 23 16:54:17 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	0.000	152	0m	40.00	ppm		-6.00
22) Naphthalene-d8	0.000	136	0m	40.00	ppm		-7.43
43) Acenaphthene-d10	0.000	164	0m	40.00	ppm		-9.48
70) Phenanthrene-d10	0.000	188	0m	40.00	ppm		-11.22
92) Chrysene-d12	0.000	240	0m	40.00	ppm		-14.49
102) Perylene-d12	0.000	264	0m	40.00	ppm		-16.82
110) 1,4-Dichlorobenzene-d4A	6.005	152	175495	40.00	ppm		0.00
120) Naphthalene-d8A	7.433	136	686765	40.00	ppm		0.00
127) Acenaphthene-d10A	9.476	164	358350	40.00	ppm		0.00
136) Phenanthrene-d10A	11.225	188	643792	40.00	ppm		0.00
146) Chrysene-d12A	14.493	240	465781	40.00	ppm		0.00
153) Perylene-d12A	16.809	264	402255	40.00	ppm		-0.01
System Monitoring Compounds							
7) 2-Fluorophenol	0.000	112	0d	0.00	ppm		
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#			
9) Phenol-d5	0.000	99	0d	0.00	ppm		
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#			
23) Nitrobenzene-d5	0.000	82	0d	0.00	ppm		
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#			
47) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm		
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#			
75) 2,4,6-Tribromophenol	0.000	330	0d	0.00	ppm		
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#			
95) Terphenyl-d14	0.000	244	0d	0.00	ppm		
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#			
Target Compounds							Qvalue
111) 2-Picoline	3.994	93	8256	0.95	ppm		89
112) N-Nitrosomethylethylamine	4.111	42	6507m	2.11	ppm		
113) Methyl methanesulfonate	4.432	80	3965	0.92	ppm		92
114) N-Nitrosodiethylamine	4.849	102	3125	0.90	ppm	#	7
115) Ethyl methanesulfonate	5.176	79	5412	0.89	ppm		96
116) Pentachloroethane	5.700	167	2337	0.94	ppm		92
117) N-Nitrosopyrrolidine	6.417	100	2483	0.70	ppm	#	1
118) N-Nitrosomorpholine	6.470	56	5091	1.38	ppm	#	70
119) O-Toluidine	6.486	106	10147	0.94	ppm		97
121) N-Nitrosopiperidine	6.807	42	6295	1.67	ppm	#	58
122) A,A-Dimethylphenethyla...	7.267	58	20213m	1.12	ppm		
123) Hexachloropropene	7.561	213	2268	0.62	ppm		94
124) N-Nitrosodi-n-butylamine	7.925	84	3931	0.87	ppm	#	20
125) p-Phenylenediamine	7.930	108	5377	0.96	ppm		88
126) Isosafrole	8.171	162	4342	0.97	ppm		87
128) Safrole	8.775	162	4333	0.93	ppm		90
129) 1-Chloronaphthalene	8.845	162	10813	0.97	ppm		97
130) Diphenyl Ether	8.941	170	7575	1.00	ppm		94
131) 1,4-Naphthoquinone	9.032	158	3169	0.65	ppm		76
132) Pentachlorobenzene	9.663	250	4141	0.80	ppm		92
133) 1-Naphthylamine	9.808	143	11709	1.03	ppm		92

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071356.D
Acq On : 23 Jun 2020 10:04 am
Operator : marthav
Sample : ic2918-1 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 23 16:54:17 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration

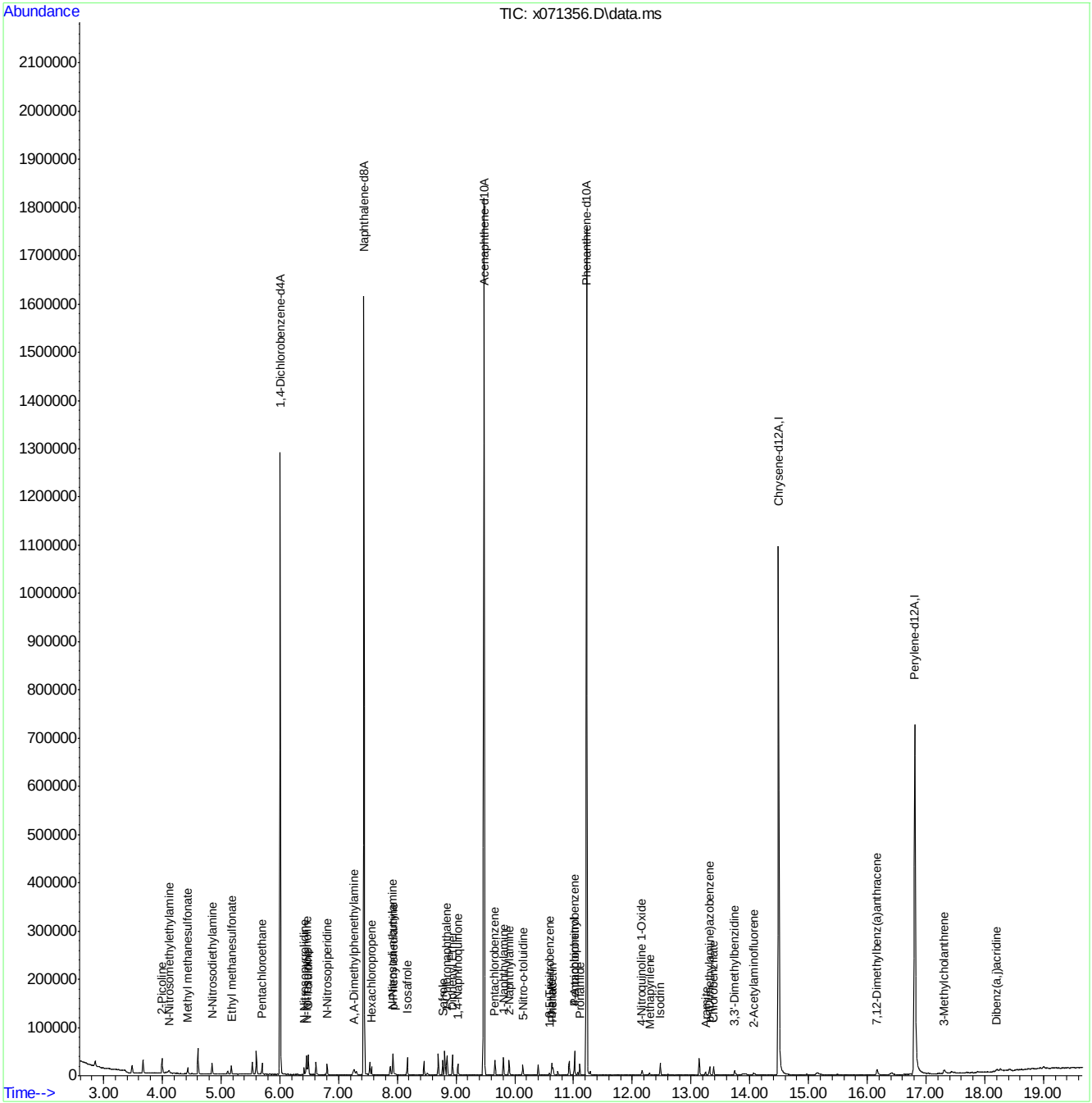
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
134) 2-Naphthylamine	9.904	143	12300	1.06	ppm		96
135) 5-Nitro-o-toluidine	10.134	152	2552	0.69	ppm	#	68
137) 1,3,5-Trinitrobenzene	10.589	75	1080	0.28	ppm	#	76
138) Diallate	10.631	43	10150m	1.43	ppm		
139) Phenacetin	10.647	108	4577	0.71	ppm		85
140) 4-Aminobiphenyl	11.016	169	12376	1.14	ppm		96
141) Pronamide	11.107	173	3728	0.69	ppm		95
142) Pentachloronitrobenzene	11.016	237	1011	0.62	ppm		84
143) 4-Nitroquinoline 1-Oxide	12.166	190	192m	0.47	ppm		
144) Methapyrilene	12.295	58	2289	0.29	ppm	#	66
145) Isodrin	12.477	193	1891	0.85	ppm		82
147) Aramite	13.247	185	738m	0.42	ppm		
148) p-(Dimethylamine)azobe...	13.316	120	3227	0.58	ppm		77
149) Chlorobenzilate	13.386	139	4146	0.75	ppm	#	59
151) 3,3'-Dimethylbenzidine	13.744	212	5535	0.83	ppm		100
152) 2-Acetylaminofluorene	14.065	181	2599	0.46	ppm		84
154) 7,12-Dimethylbenz(a)an...	16.162	256	4637	0.80	ppm		96
156) 3-Methylcholanthrene	17.306	268	3799	0.74	ppm		95
157) Dibenz(a,j)acridine	18.200	279	3086	0.41	ppm		86

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071356.D
Acq On : 23 Jun 2020 10:04 am
Operator : marthav
Sample : ic2918-1 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 23 16:54:17 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration



SGS FA77576

Manual Integration Approval Summary

Sample Number: SX2918-IC2918
Lab FileID: X071356.D
Injection Time: 06/23/20 10:04

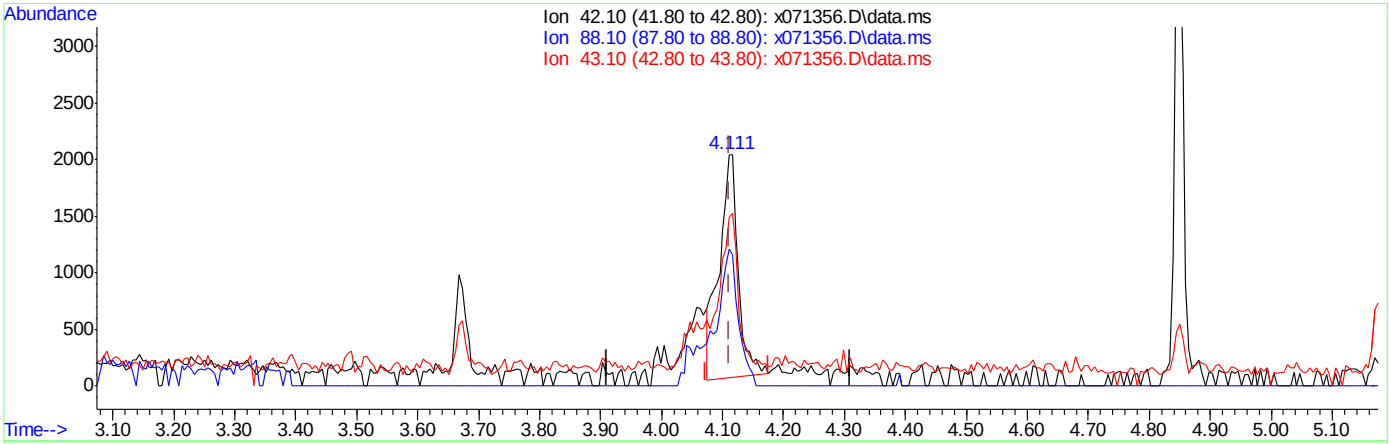
Method: EPA 625.1
Analyst approved: 06/24/20 09:50 Martha Valls
Supervisor approved: 06/24/20 14:07 Naresh Jiawan

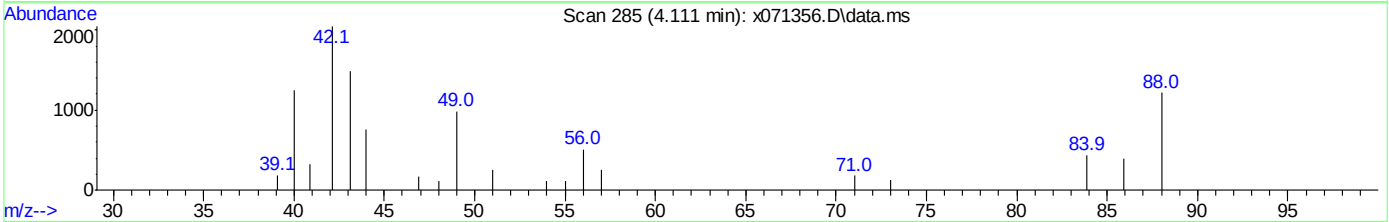
Parameter	CAS	Sig#	R.T. (min.)	Reason
N-Nitrosomethylethylamine	10595-95-6		4.11	Split peak
A,A-Dimethylphenethylamine	122-09-8		7.27	Split peak
Diallate	2303-16-4		10.63	Split peak
4-Nitroquinoline 1-Oxide	56-57-5		12.17	Split peak
Aramite	140-57-8		13.25	Split peak

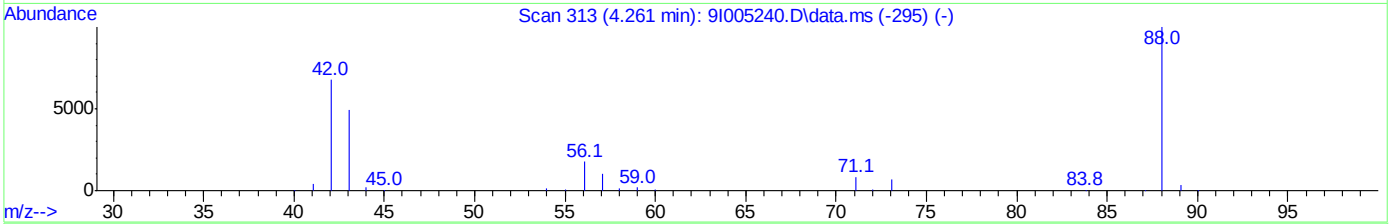
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071356.D
Acq On : 23 Jun 2020 10:04 am
Operator : marthav
Sample : ic2918-1 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 23 14:00:58 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071356.D\data.ms

(112) N-Nitrosomethylethylamine

4.111min (+0.000) 1.40ppm

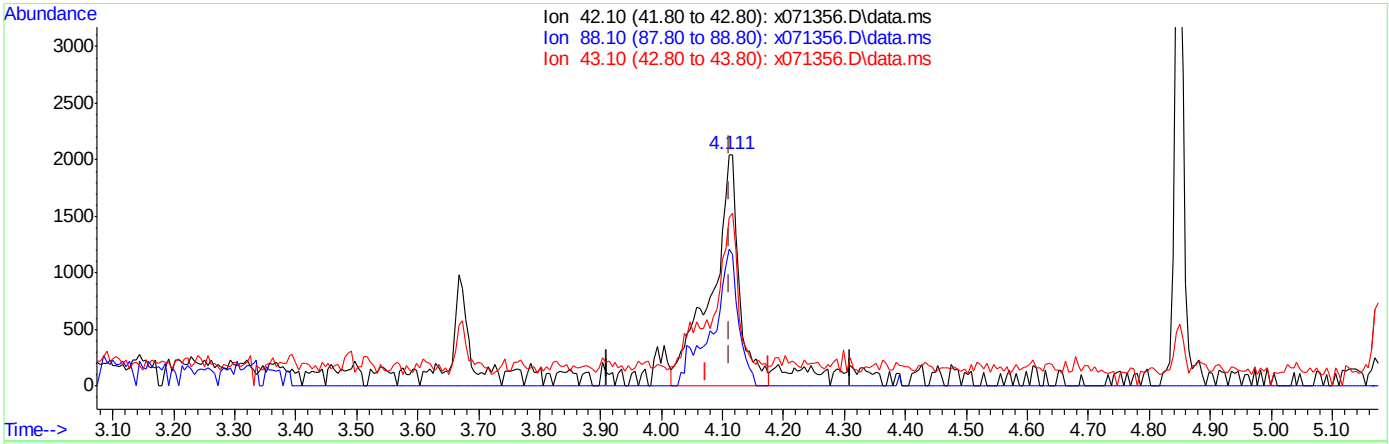
response 4325

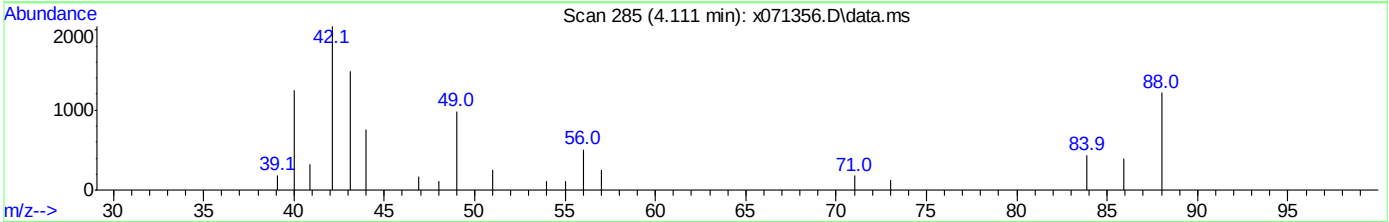
Ion	Exp%	Act%
42.10	100	100
88.10	147.70	62.09#
43.10	72.60	67.64
0.00	0.00	0.00

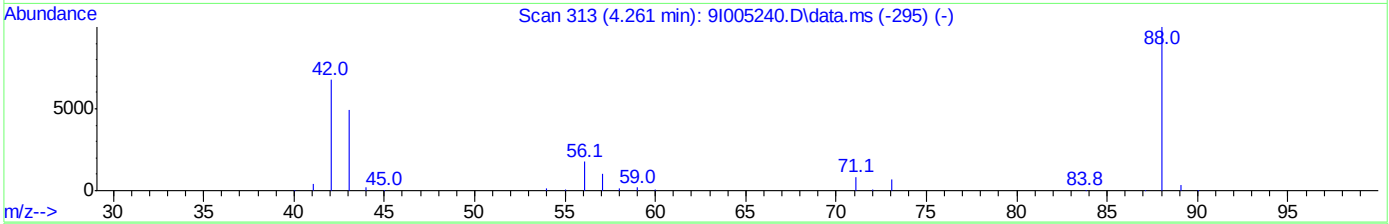
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071356.D
Acq On : 23 Jun 2020 10:04 am
Operator : marthav
Sample : ic2918-1 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 23 14:00:58 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071356.D\data.ms

(112) N-Nitrosomethylethylamine

4.111min (+0.000) 2.11ppm m

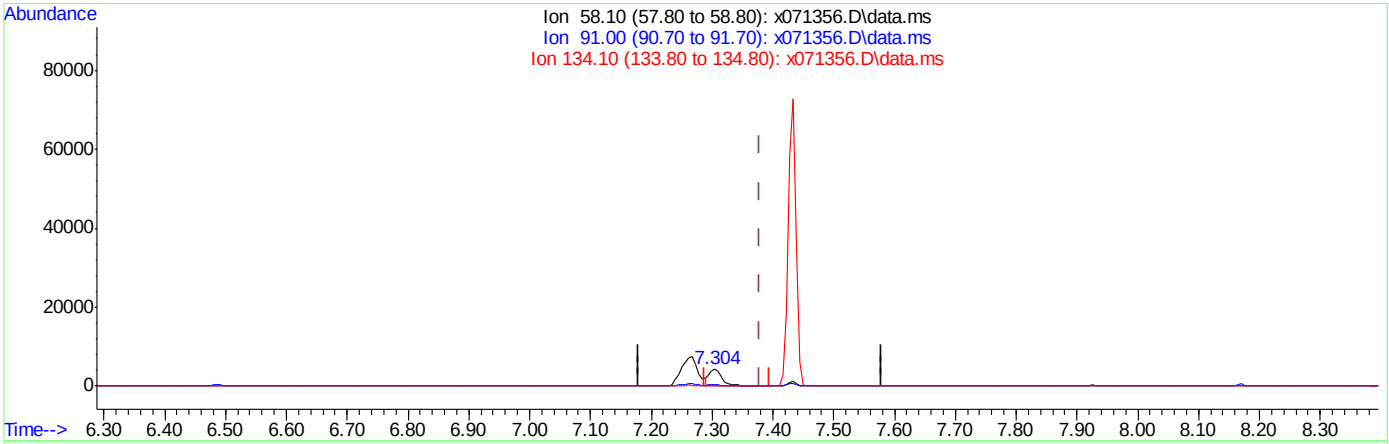
response 6507

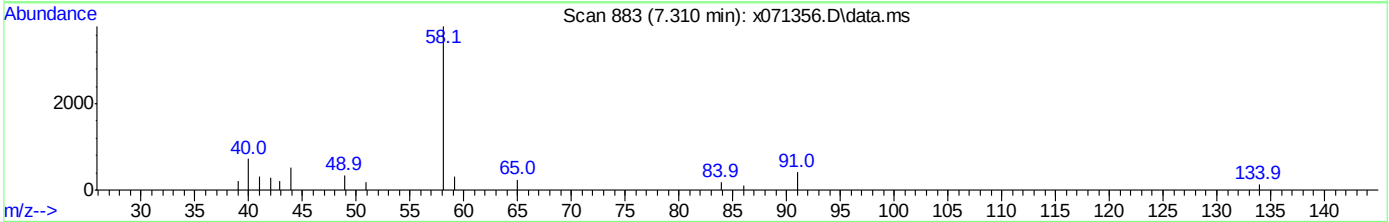
Ion	Exp%	Act%
42.10	100	100
88.10	147.70	59.31#
43.10	72.60	72.84
0.00	0.00	0.00

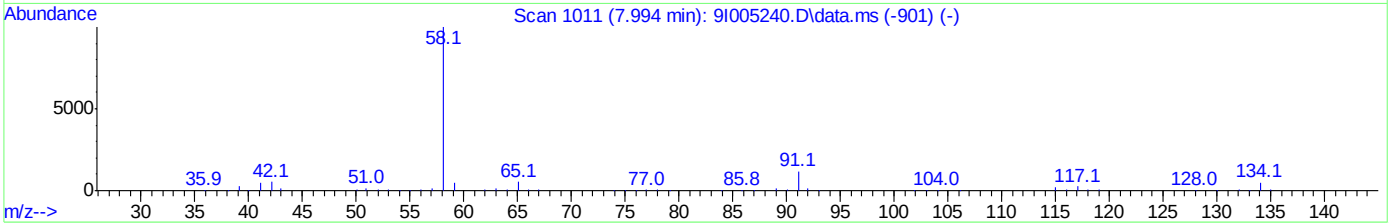
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071356.D
Acq On : 23 Jun 2020 10:04 am
Operator : marthav
Sample : ic2918-1 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 23 14:00:58 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071356.D\data.ms

(122) A,A-Dimethylphenethylamine

7.304min (-0.075) 0.36ppm

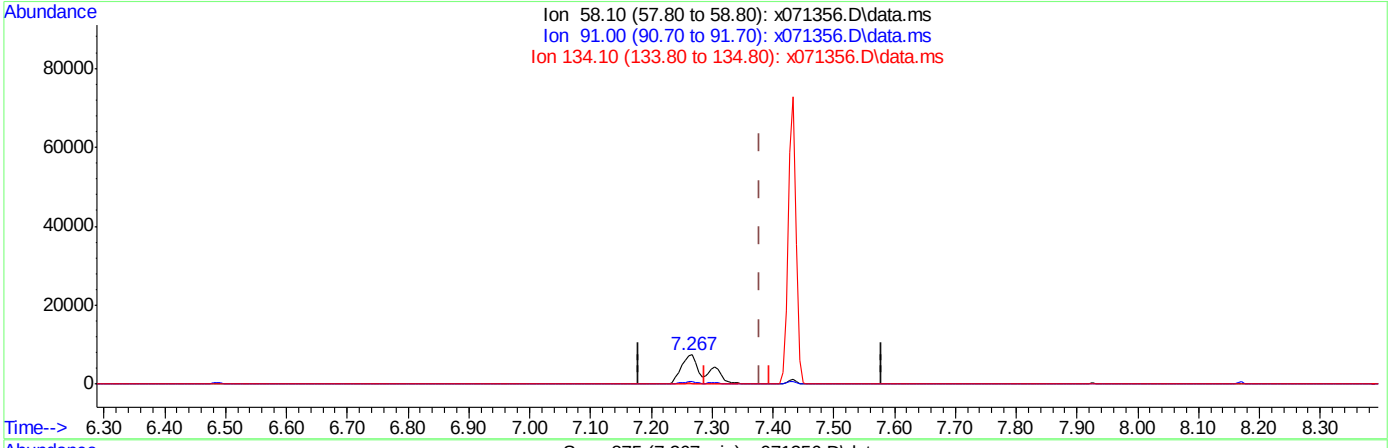
response 6599

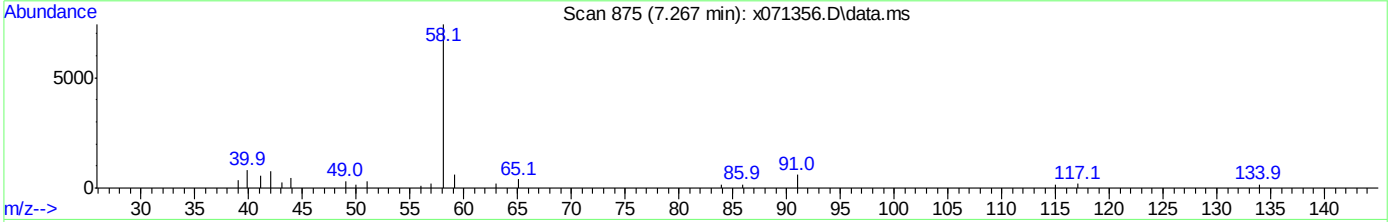
Ion	Exp%	Act%
58.10	100	100
91.00	11.70	9.31
134.10	5.10	4.38
0.00	0.00	0.00

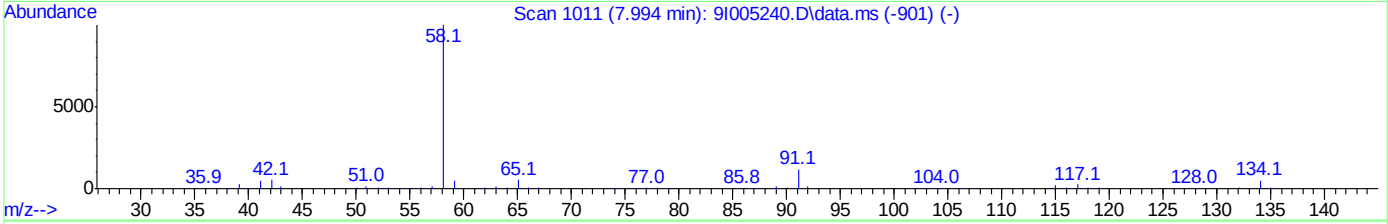
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071356.D
Acq On : 23 Jun 2020 10:04 am
Operator : marthav
Sample : ic2918-1 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 23 14:00:58 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071356.D\data.ms

(122) A,A-Dimethylphenethylamine

7.267min (-0.112) 1.12ppm m

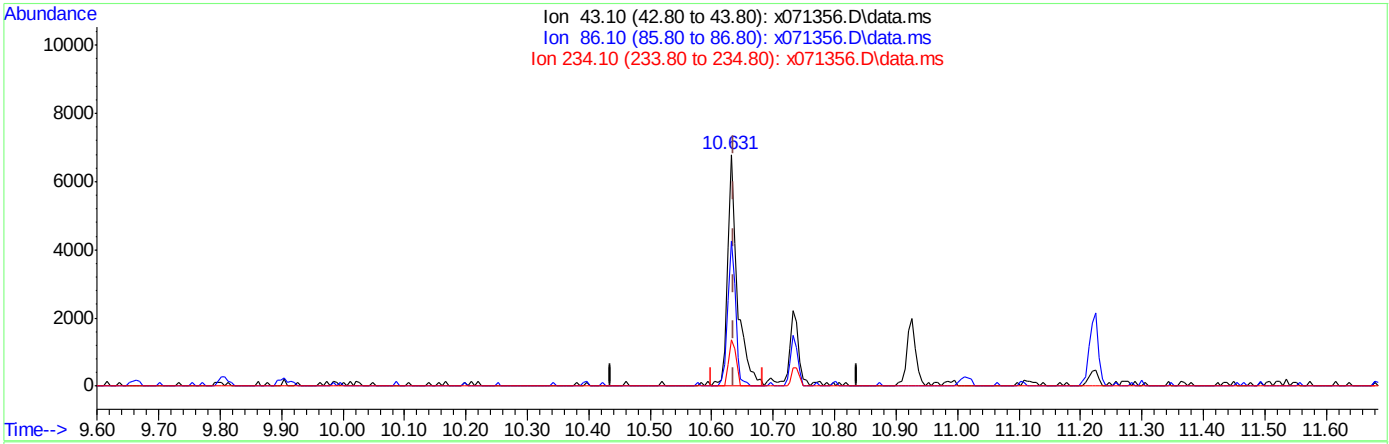
response 20213

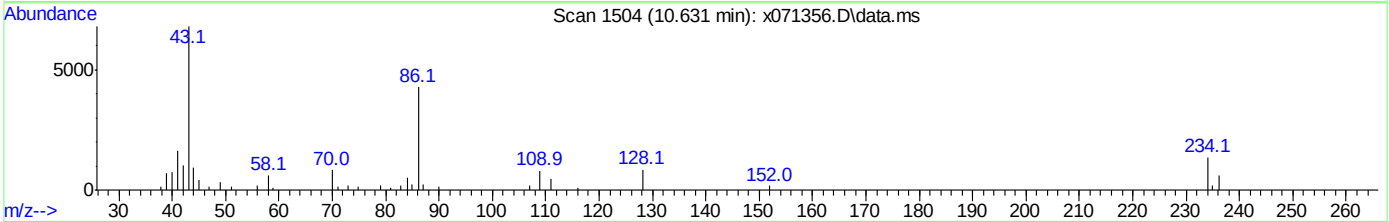
Ion	Exp%	Act%
58.10	100	100
91.00	11.70	8.08
134.10	5.10	2.17
0.00	0.00	0.00

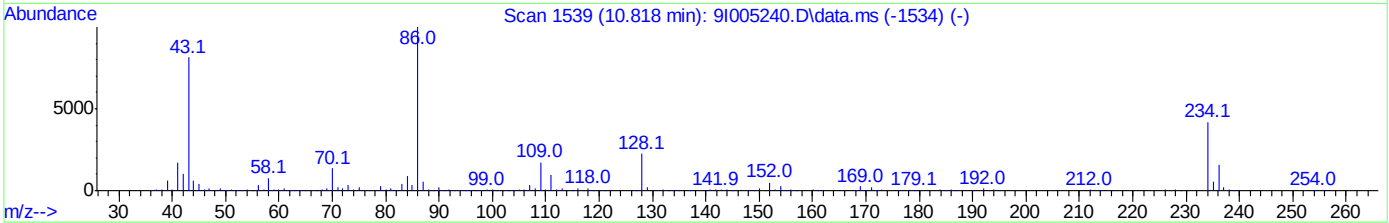
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071356.D
Acq On : 23 Jun 2020 10:04 am
Operator : marthav
Sample : ic2918-1 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 23 14:00:58 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071356.D\data.ms

(138) Diallate

10.631min (-0.005) 1.08ppm

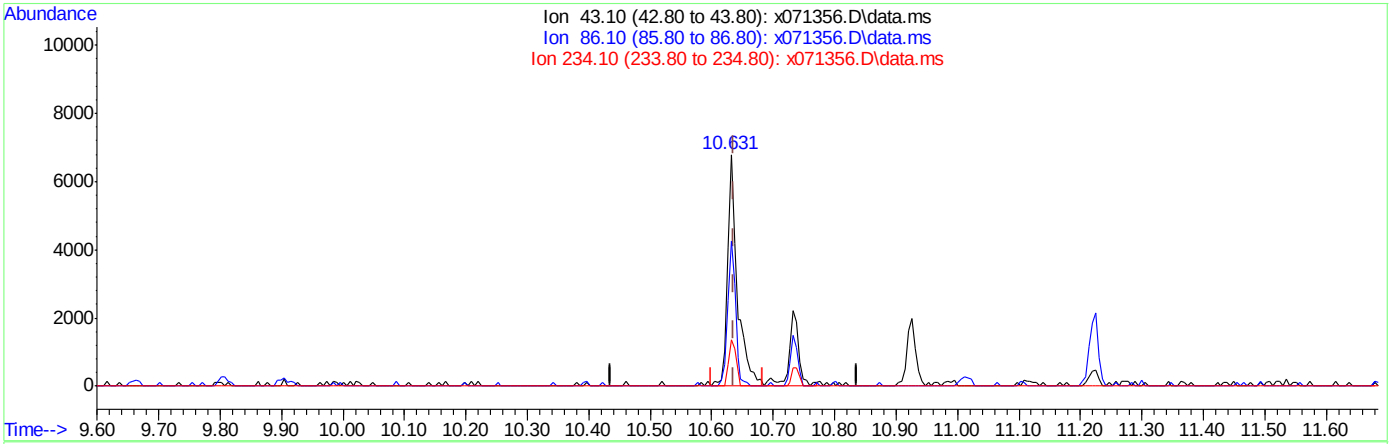
response 7646

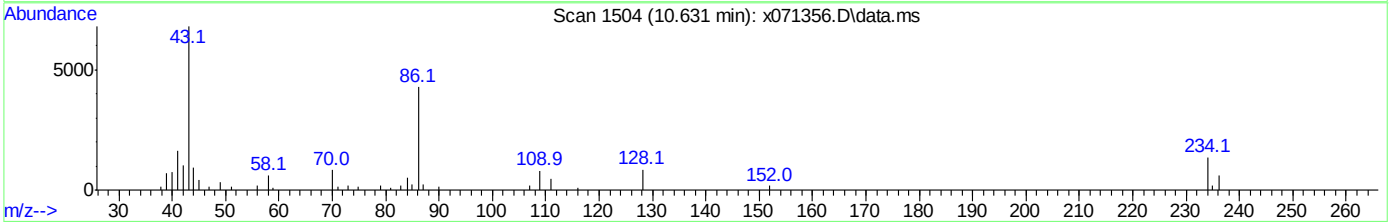
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	62.82#
234.10	51.50	20.16#
0.00	0.00	0.00

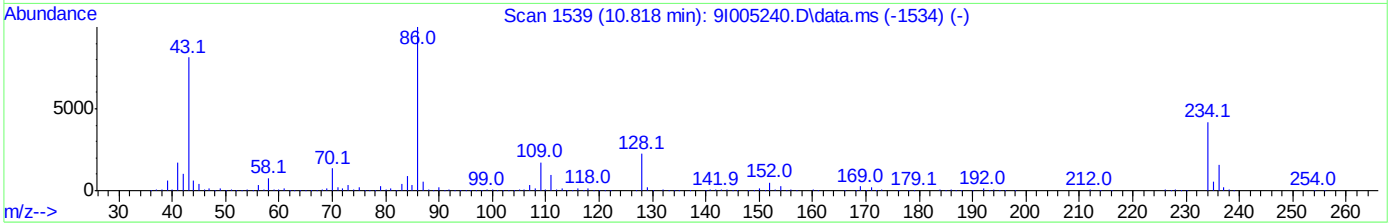
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071356.D
Acq On : 23 Jun 2020 10:04 am
Operator : marthav
Sample : ic2918-1 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 23 14:00:58 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071356.D\data.ms

(138) Diallate

10.631min (-0.005) 1.43ppm m

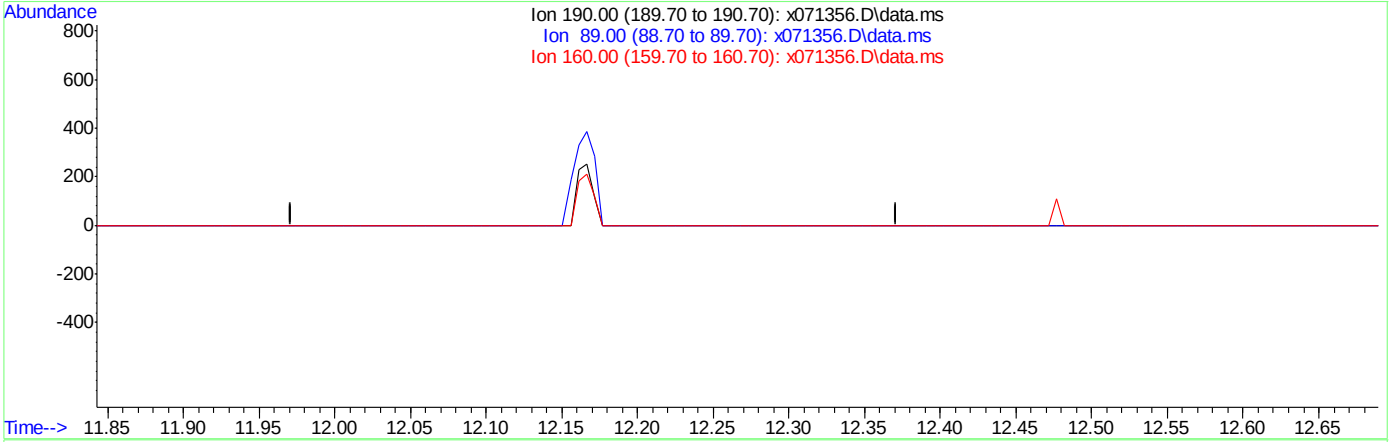
response 10150

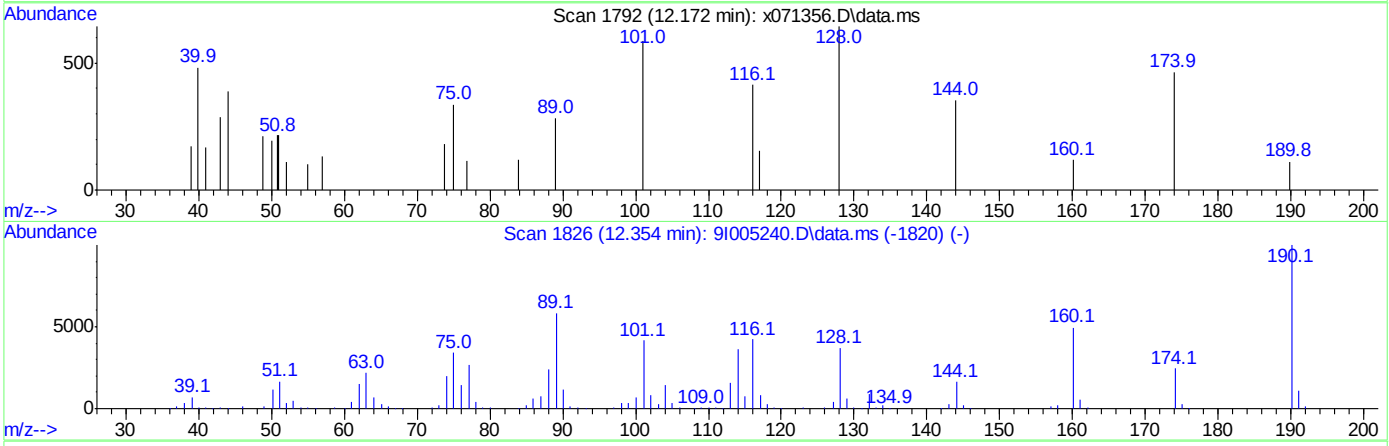
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	62.82#
234.10	51.50	20.16#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071356.D
Acq On : 23 Jun 2020 10:04 am
Operator : marthav
Sample : ic2918-1 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 23 14:00:58 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration





TIC: x071356.D\data.ms

(143) 4-Nitroquinoline 1-Oxide

12.172min (-12.172) 0.00ppm

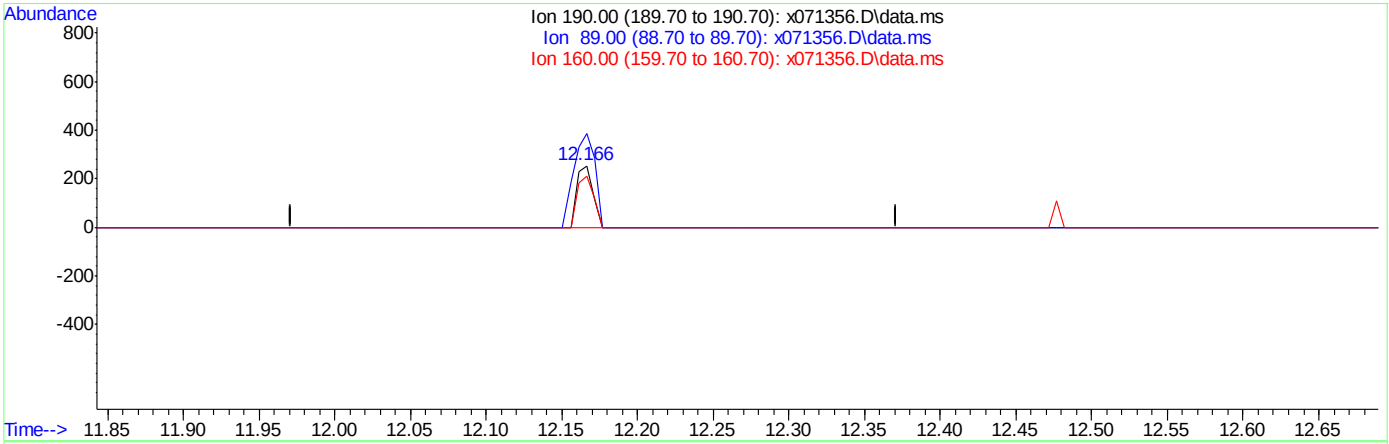
response 0

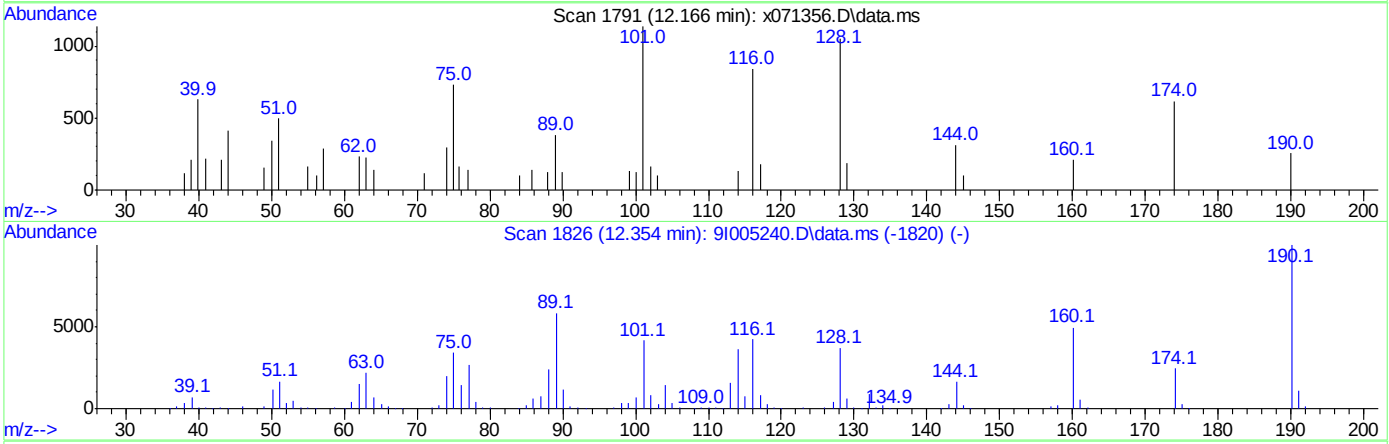
Ion	Exp%	Act%
190.00	100	0.00
89.00	58.20	0.00#
160.00	49.40	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071356.D
Acq On : 23 Jun 2020 10:04 am
Operator : marthav
Sample : ic2918-1 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 23 14:00:58 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration





TIC: x071356.D\data.ms

(143) 4-Nitroquinoline 1-Oxide

12.166min (-0.005) 0.47ppm m

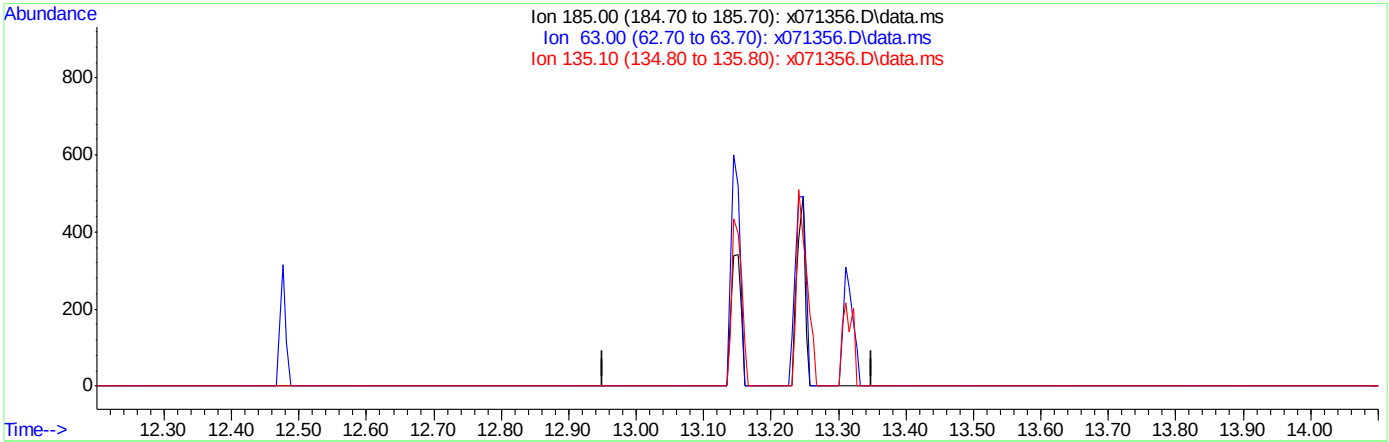
response 192

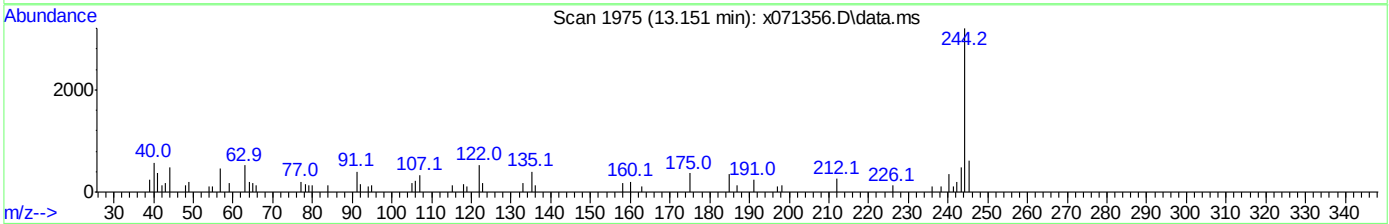
Ion	Exp%	Act%
190.00	100	100
89.00	58.20	150.98#
160.00	49.40	81.96#
0.00	0.00	0.00

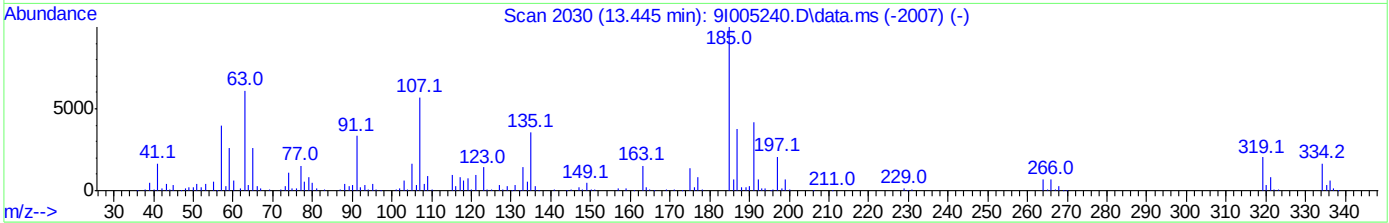
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071356.D
Acq On : 23 Jun 2020 10:04 am
Operator : marthav
Sample : ic2918-1 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 23 14:00:58 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071356.D\data.ms

(147) Aramite

13.150min (-13.150) 0.00ppm

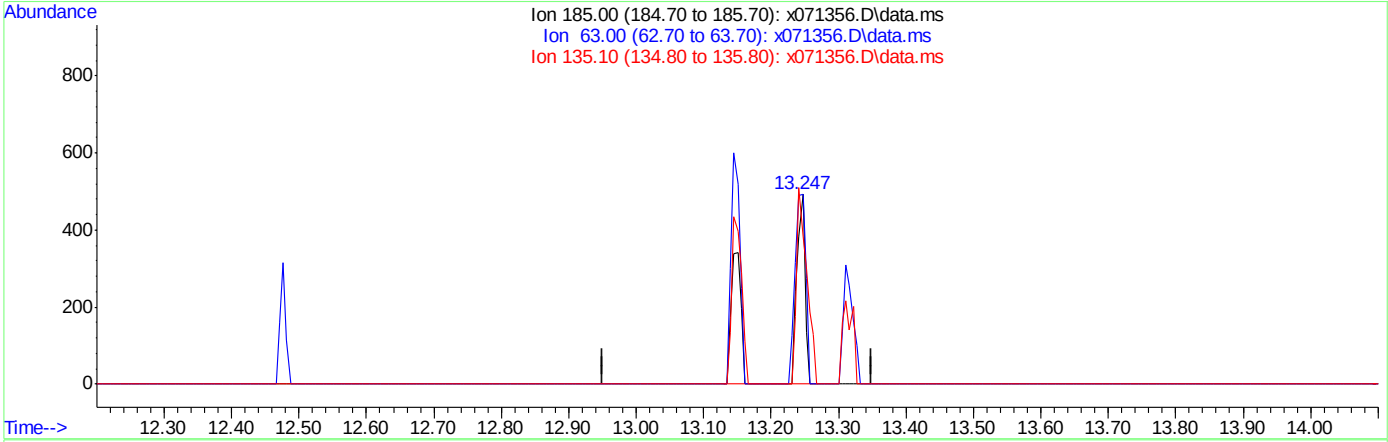
response 0

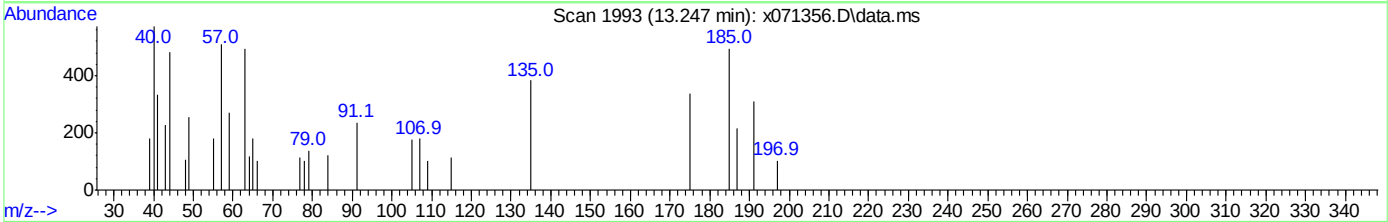
Ion	Exp%	Act%
185.00	100	0.00
63.00	61.10	0.00#
135.10	35.60	0.00#
0.00	0.00	0.00

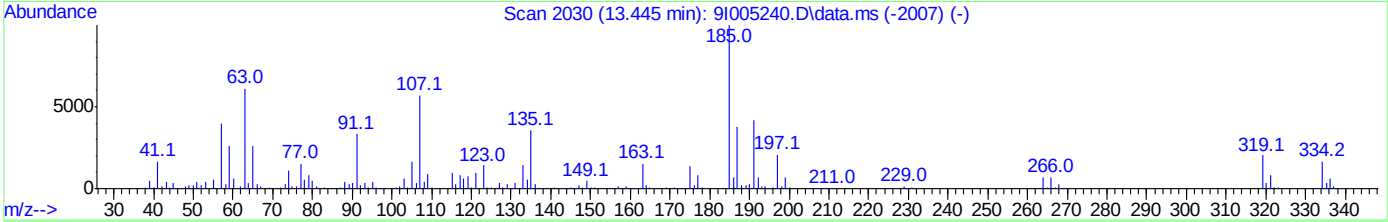
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071356.D
Acq On : 23 Jun 2020 10:04 am
Operator : marthav
Sample : ic2918-1 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 23 14:00:58 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071356.D\data.ms

(147) Aramite

13.247min (+0.096) 0.42ppm m

response 738

Ion	Exp%	Act%
185.00	100	100
63.00	61.10	99.60#
135.10	35.60	77.53#
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 06/24/20 14:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071357.D
Acq On : 23 Jun 2020 10:30 am
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 23 16:54:30 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	0.000	152	0m	40.00	ppm	-6.00
22) Naphthalene-d8	0.000	136	0m	40.00	ppm	-7.43
43) Acenaphthene-d10	0.000	164	0m	40.00	ppm	-9.48
70) Phenanthrene-d10	0.000	188	0m	40.00	ppm	-11.22
92) Chrysene-d12	0.000	240	0m	40.00	ppm	-14.49
102) Perylene-d12	0.000	264	0m	40.00	ppm	-16.82
110) 1,4-Dichlorobenzene-d4A	6.005	152	149418	40.00	ppm	0.00
120) Naphthalene-d8A	7.433	136	609909	40.00	ppm	0.00
127) Acenaphthene-d10A	9.476	164	331998	40.00	ppm	0.00
136) Phenanthrene-d10A	11.219	188	590459	40.00	ppm	0.00
146) Chrysene-d12A	14.487	240	412323	40.00	ppm	0.00
153) Perylene-d12A	16.809	264	356217	40.00	ppm	-0.01
System Monitoring Compounds						
7) 2-Fluorophenol	0.000	112	0d	0.00	ppm	
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#		
9) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#		
23) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#		
47) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#		
75) 2,4,6-Tribromophenol	0.000	330	0d	0.00	ppm	
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#		
95) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#		
Target Compounds						Qvalue
111) 2-Picoline	3.988	93	35007	4.72	ppm	89
112) N-Nitrosomethylethylamine	4.111	42	22841	8.69	ppm #	52
113) Methyl methanesulfonate	4.427	80	16633	4.53	ppm	92
114) N-Nitrosodiethylamine	4.849	102	13558	4.60	ppm #	26
115) Ethyl methanesulfonate	5.175	79	22557	4.34	ppm	99
116) Pentachloroethane	5.700	167	9643	4.56	ppm	96
117) N-Nitrosopyrrolidine	6.416	100	12046	3.99	ppm #	25
118) N-Nitrosomorpholine	6.470	56	22583	7.17	ppm #	66
119) O-Toluidine	6.486	106	45385	4.96	ppm	96
121) N-Nitrosopiperidine	6.807	42	27579	8.25	ppm #	61
122) A,A-Dimethylphenethyla...	7.299	58	109296m	6.74	ppm	
123) Hexachloropropene	7.561	213	10599	3.27	ppm	97
124) N-Nitrosodi-n-butylamine	7.930	84	18823	4.65	ppm #	43
125) p-Phenylenediamine	7.925	108	31553	6.43	ppm	91
126) Isosafrole	8.171	162	19762	4.95	ppm	88
128) Safrole	8.775	162	19808	4.61	ppm	88
129) 1-Chloronaphthalene	8.845	162	47557	4.61	ppm	96
130) Diphenyl Ether	8.941	170	32892	4.70	ppm	93
131) 1,4-Naphthoquinone	9.032	158	17887	3.98	ppm	76
132) Pentachlorobenzene	9.668	250	17118	3.58	ppm	95
133) 1-Naphthylamine	9.807	143	55061	5.20	ppm	93

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071357.D
Acq On : 23 Jun 2020 10:30 am
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 23 16:54:30 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration

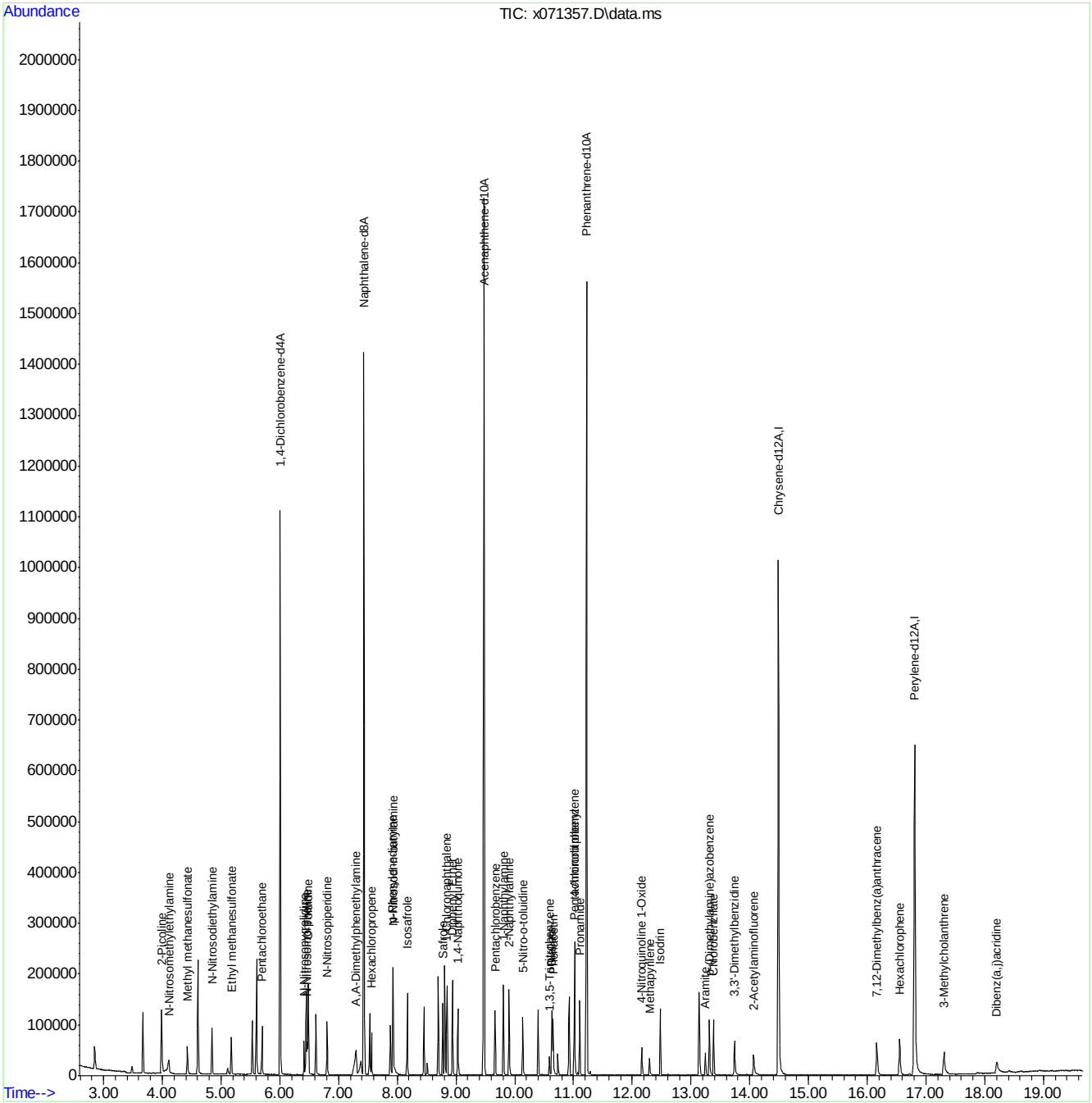
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
134) 2-Naphthylamine	9.904	143	58142	5.40	ppm		99
135) 5-Nitro-o-toluidine	10.134	152	14085	4.07	ppm		71
137) 1,3,5-Trinitrobenzene	10.588	75	6902	1.97	ppm		78
138) Diallate	10.631	43	46068m	7.07	ppm		
139) Phenacetin	10.652	108	25046	4.22	ppm		87
140) 4-Aminobiphenyl	11.016	169	59632	5.99	ppm		96
141) Pronamide	11.107	173	20771	4.18	ppm		96
142) Pentachloronitrobenzene	11.011	237	5479	3.65	ppm		86
143) 4-Nitroquinoline 1-Oxide	12.166	190	1319	3.38	ppm	#	26
144) Methapyrilene	12.294	58	13373	1.83	ppm		71
145) Isodrin	12.476	193	8210	4.01	ppm	#	77
147) Aramite	13.241	185	5359m	3.41	ppm		
148) p-(Dimethylamine)azobe...	13.311	120	18718	3.82	ppm		77
149) Chlorobenzilate	13.386	139	22927	4.66	ppm	#	65
151) 3,3'-Dimethylbenzidine	13.739	212	31071	5.26	ppm		96
152) 2-Acetylaminofluorene	14.065	181	17579	3.50	ppm		88
154) 7,12-Dimethylbenz(a)an...	16.162	256	21270	4.16	ppm		95
155) Hexachlorophene	16.552	196	7994	119.27	ppm		97
156) 3-Methylcholanthrene	17.306	268	17684	3.87	ppm		91
157) Dibenz(a,j)acridine	18.205	279	24909m	3.73	ppm		

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071357.D
Acq On : 23 Jun 2020 10:30 am
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 23 16:54:30 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: SX2918-IC2918
Lab FileID: X071357.D
Injection Time: 06/23/20 10:30

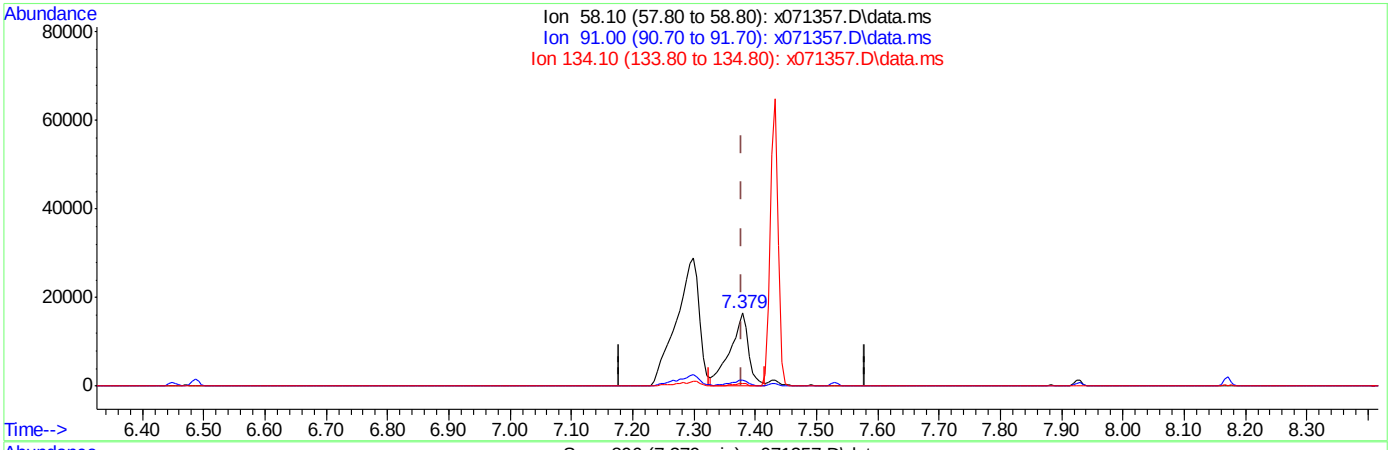
Method: EPA 625.1
Analyst approved: 06/24/20 09:50 Martha Valls
Supervisor approved: 06/24/20 14:07 Naresh Jiawan

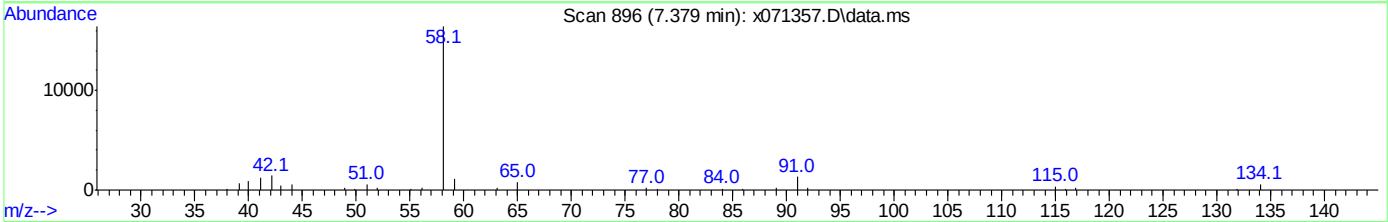
Parameter	CAS	Sig#	R.T. (min.)	Reason
A,A-Dimethylphenethylamine	122-09-8		7.30	Split peak
Diallate	2303-16-4		10.63	Split peak
Aramite	140-57-8		13.24	Split peak
Dibenz(a,j)acridine	224-42-0		18.20	Split peak

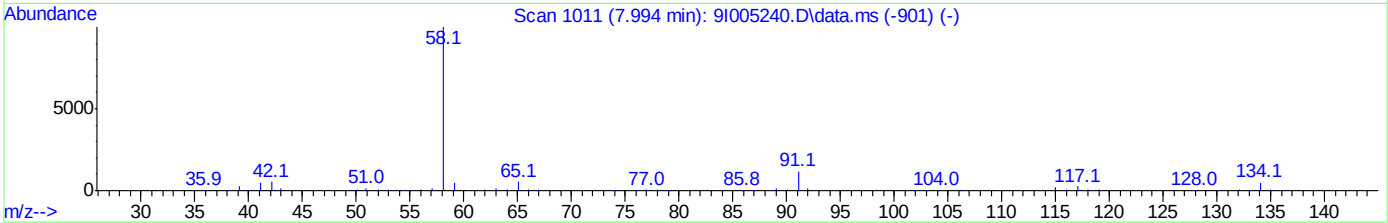
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071357.D
Acq On : 23 Jun 2020 10:30 am
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 23 14:01:00 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071357.D\data.ms

(122) A,A-Dimethylphenethylamine

7.379min (-0.000) 2.08ppm

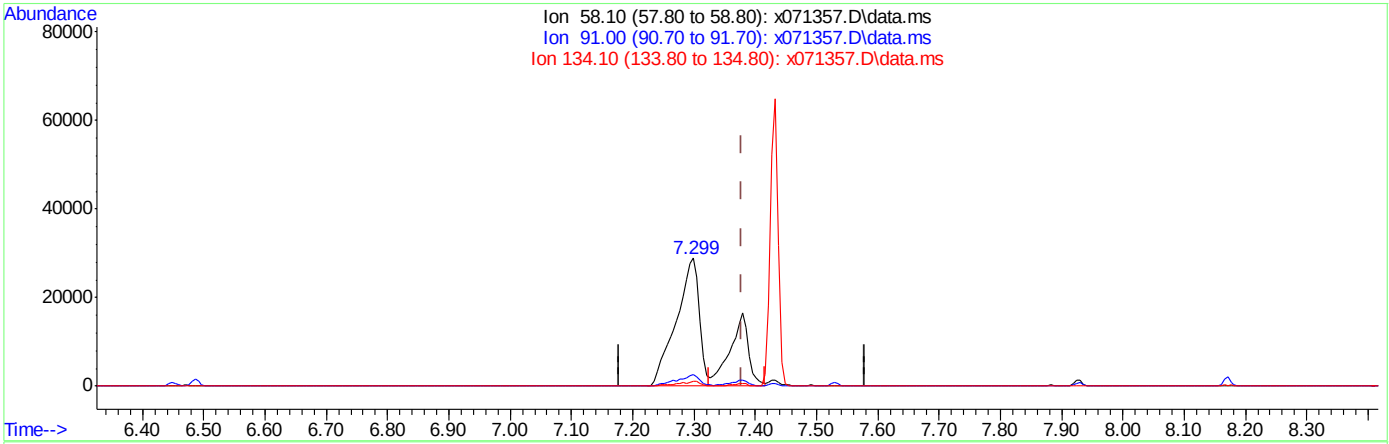
response 33554

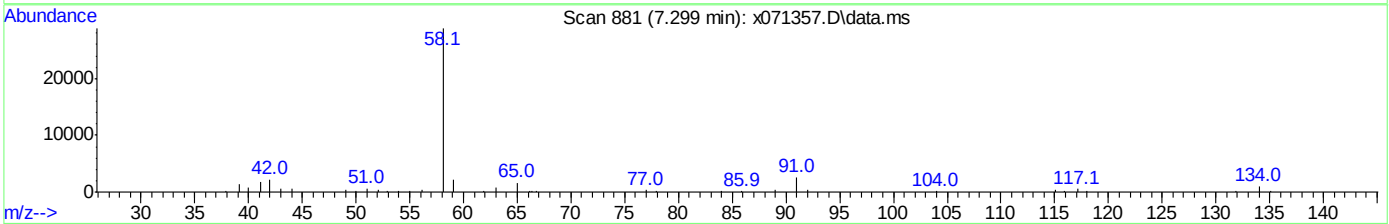
Ion	Exp%	Act%
58.10	100	100
91.00	11.70	7.51
134.10	5.10	0.00
0.00	0.00	0.00

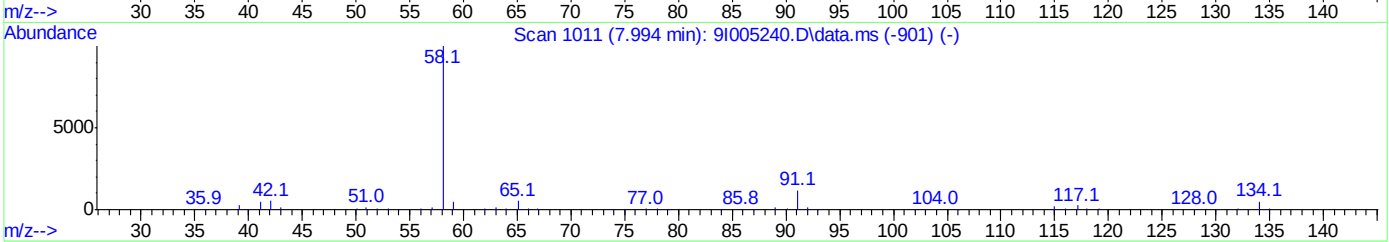
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071357.D
Acq On : 23 Jun 2020 10:30 am
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 23 14:01:00 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071357.D\data.ms

(122) A,A-Dimethylphenethylamine

7.299min (-0.080) 6.74ppm m

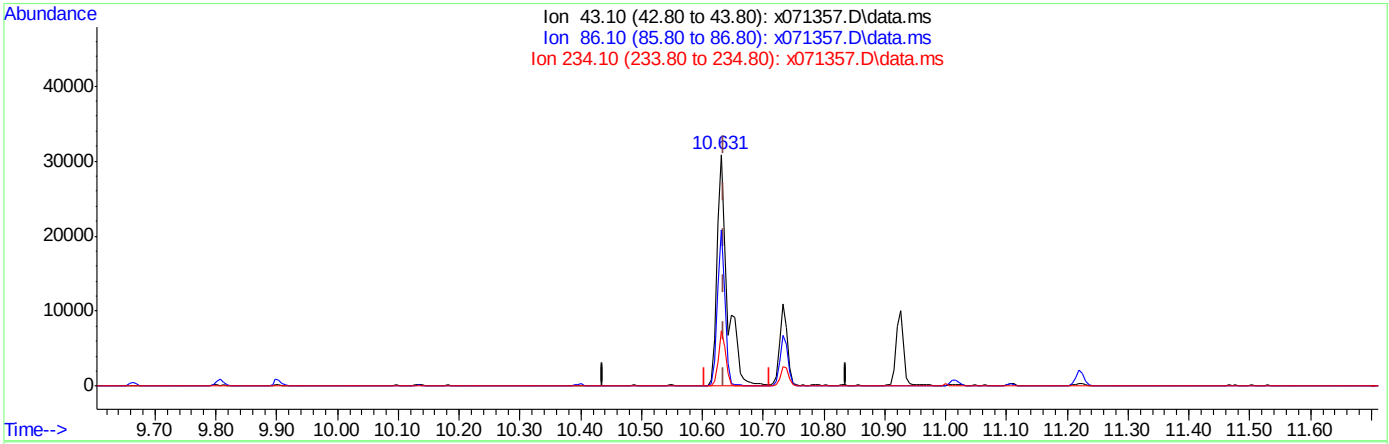
response 109296

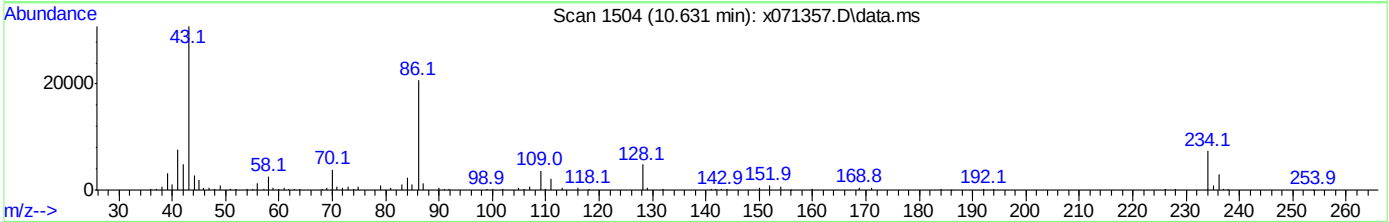
Ion	Exp%	Act%
58.10	100	100
91.00	11.70	8.96
134.10	5.10	3.54
0.00	0.00	0.00

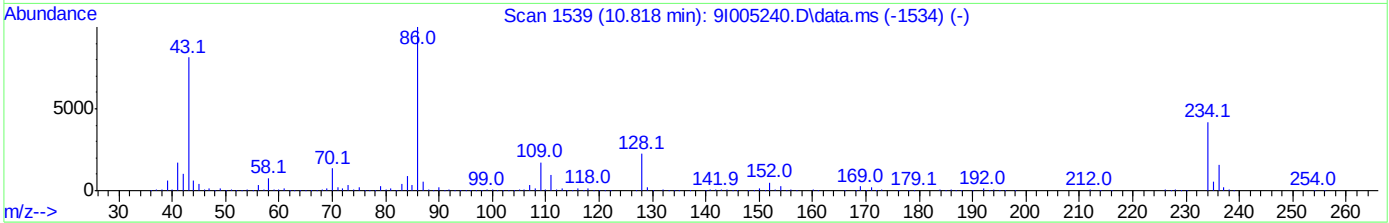
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071357.D
Acq On : 23 Jun 2020 10:30 am
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 23 14:01:00 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071357.D\data.ms

(138) Diallate

10.631min (-0.005) 5.62ppm

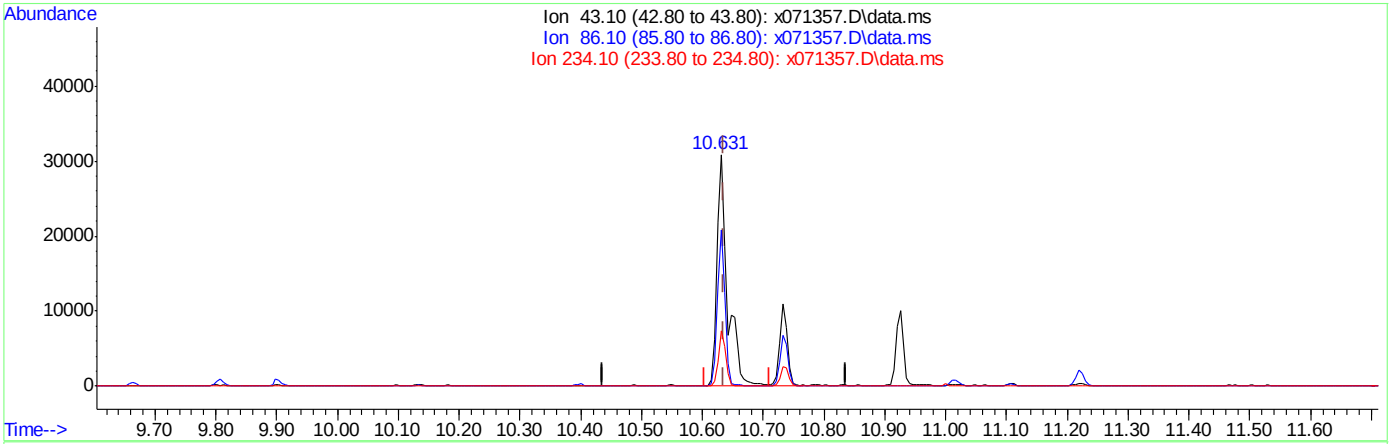
response 36663

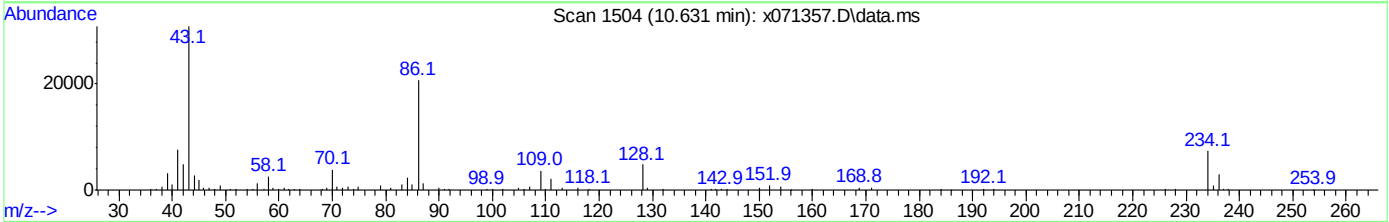
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	67.74#
234.10	51.50	24.04
0.00	0.00	0.00

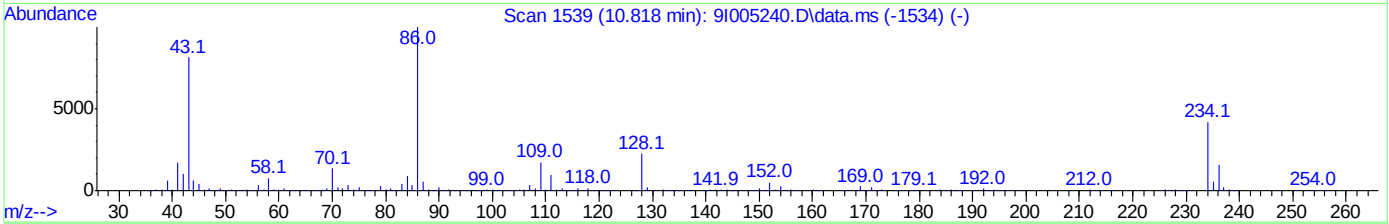
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071357.D
Acq On : 23 Jun 2020 10:30 am
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 23 14:01:00 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071357.D\data.ms

(138) Diallate

10.631min (-0.005) 7.07ppm m

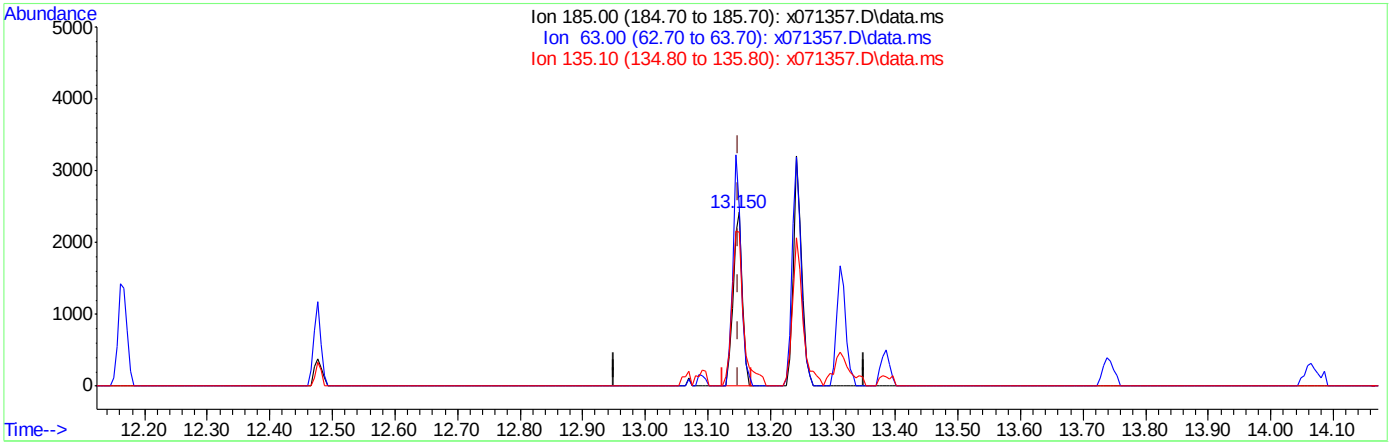
response 46068

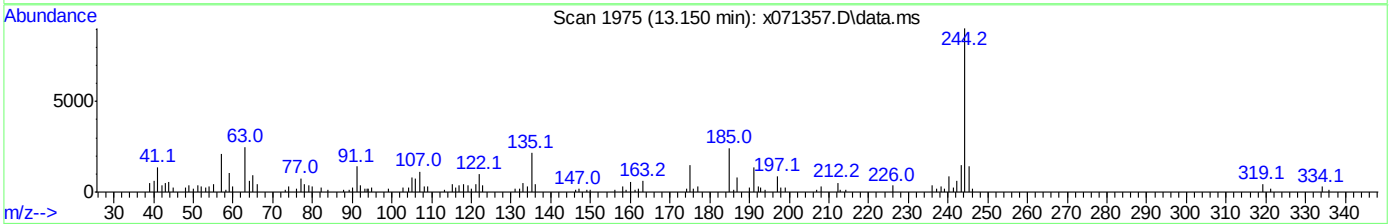
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	67.49#
234.10	51.50	23.95
0.00	0.00	0.00

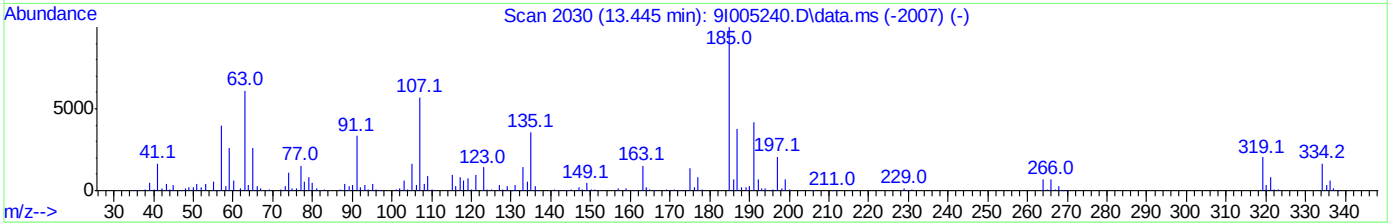
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071357.D
Acq On : 23 Jun 2020 10:30 am
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 23 14:01:00 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071357.D\data.ms

(147) Aramite

13.150min (-0.000) 1.55ppm

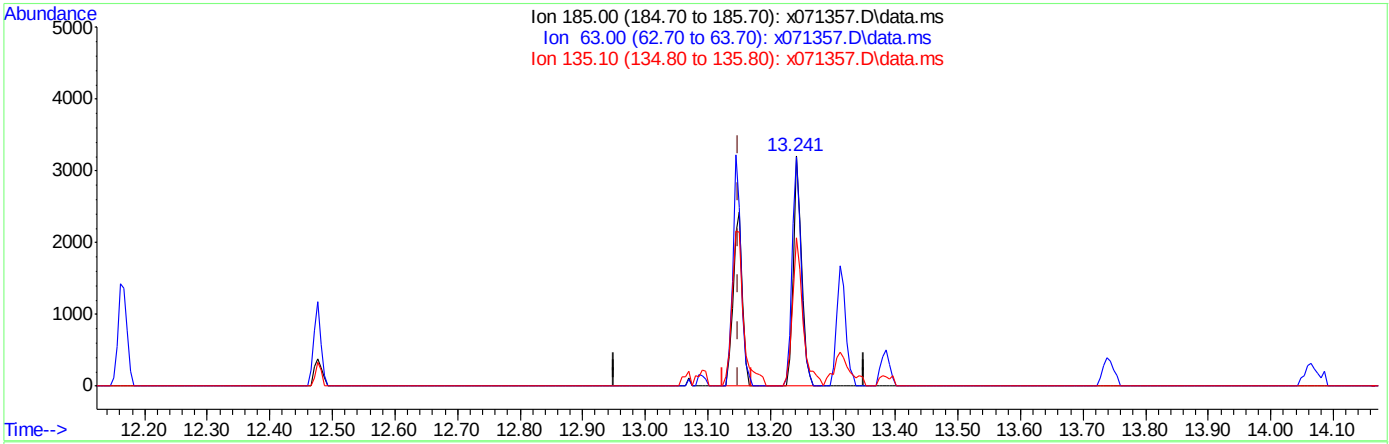
response 2431

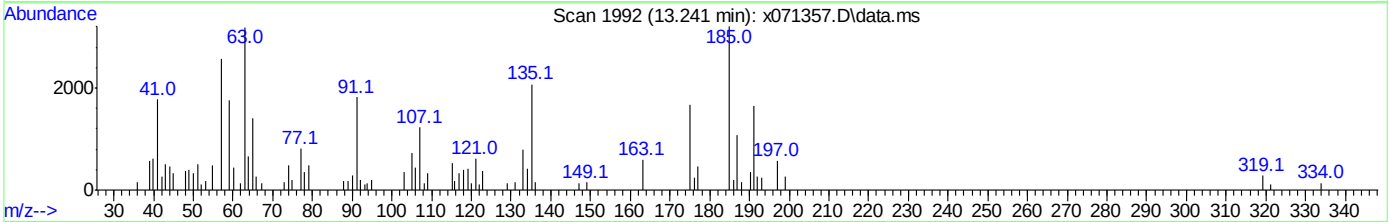
Ion	Exp%	Act%
185.00	100	100
63.00	61.10	102.64#
135.10	35.60	84.51#
0.00	0.00	0.00

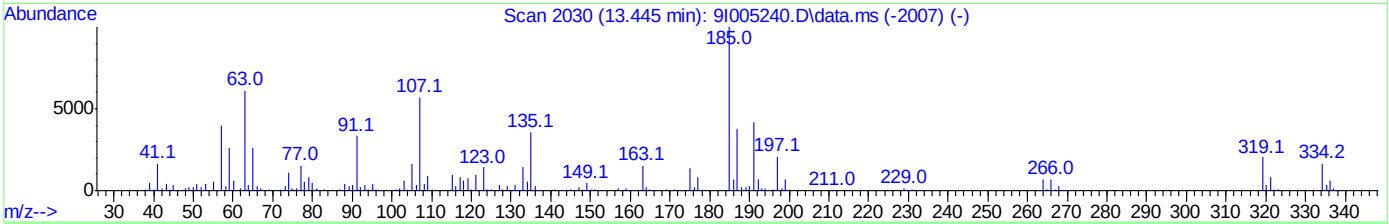
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071357.D
Acq On : 23 Jun 2020 10:30 am
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 23 14:01:00 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071357.D\data.ms

(147) Aramite

13.241min (+0.091) 3.41ppm m

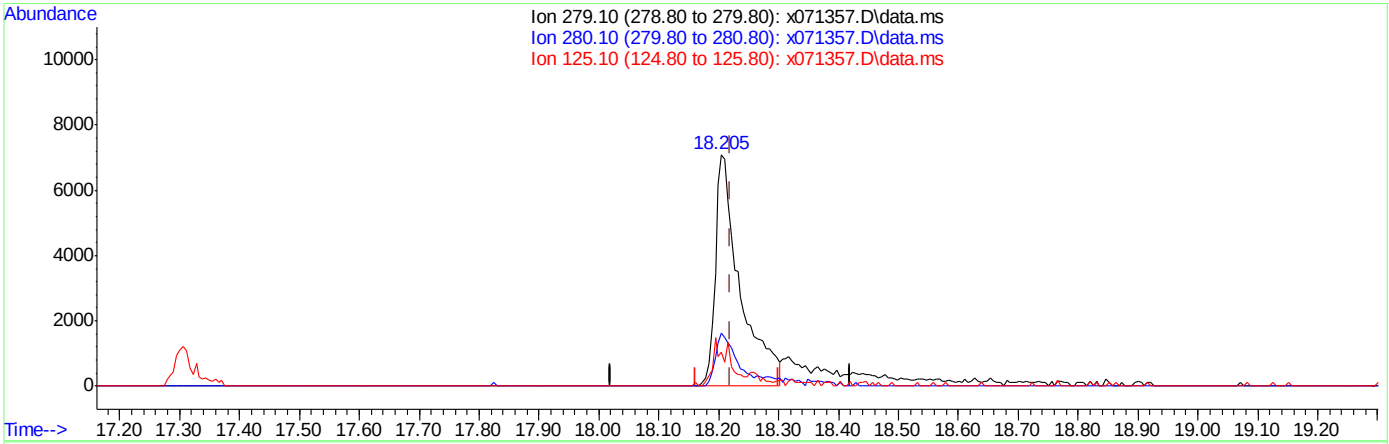
response 5359

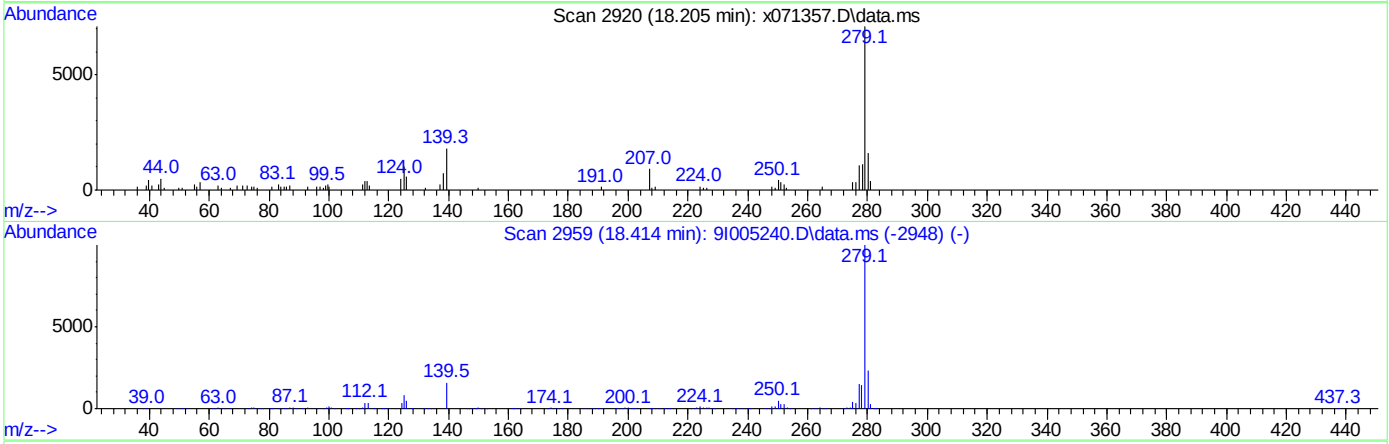
Ion	Exp%	Act%
185.00	100	100
63.00	61.10	99.63#
135.10	35.60	64.66
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071357.D
Acq On : 23 Jun 2020 10:30 am
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 23 14:01:00 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration





TIC: x071357.D\data.ms

(157) Dibenz(a,j)acridine

18.205min (-0.016) 3.05ppm

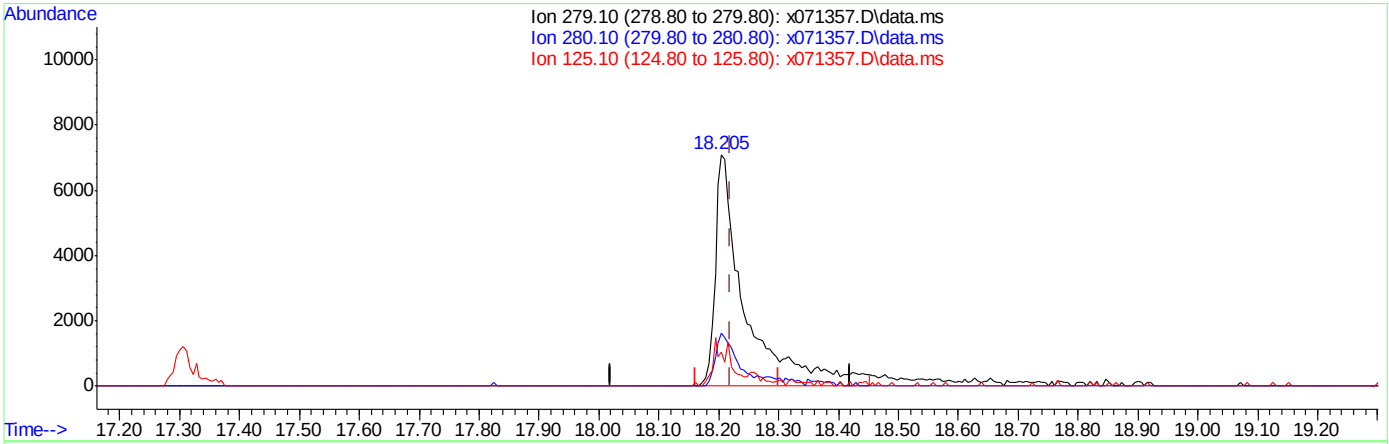
response 20312

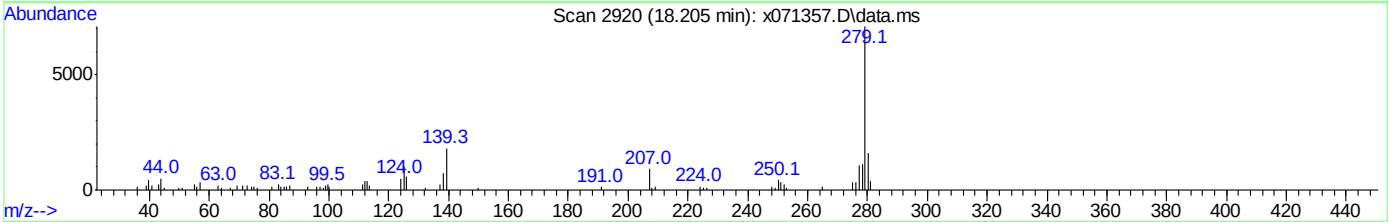
Ion	Exp%	Act%
279.10	100	100
280.10	23.20	22.27
125.10	8.60	13.11
0.00	0.00	0.00

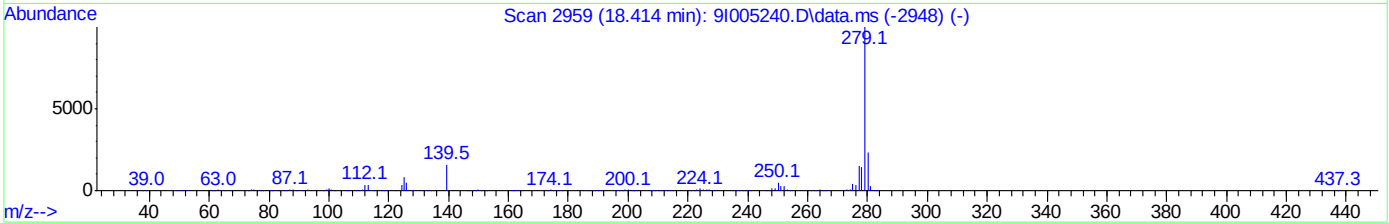
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071357.D
Acq On : 23 Jun 2020 10:30 am
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 23 14:01:00 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071357.D\data.ms

(157) Dibenz(a,j)acridine

18.205min (-0.016) 3.73ppm m

response 24909

Ion	Exp%	Act%
279.10	100	100
280.10	23.20	22.95
125.10	8.60	14.56
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 06/24/20 14:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071358.D
Acq On : 23 Jun 2020 10:55 am
Operator : marthav
Sample : ic2918-10 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 23 16:54:45 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	0.000	152	0m	40.00	ppm		-6.00
22) Naphthalene-d8	0.000	136	0m	40.00	ppm		-7.43
43) Acenaphthene-d10	0.000	164	0m	40.00	ppm		-9.48
70) Phenanthrene-d10	0.000	188	0m	40.00	ppm		-11.22
92) Chrysene-d12	0.000	240	0m	40.00	ppm		-14.49
102) Perylene-d12	0.000	264	0m	40.00	ppm		-16.82
110) 1,4-Dichlorobenzene-d4A	6.005	152	156922	40.00	ppm		0.00
120) Naphthalene-d8A	7.433	136	643577	40.00	ppm		0.00
127) Acenaphthene-d10A	9.476	164	345206	40.00	ppm		0.00
136) Phenanthrene-d10A	11.225	188	622990	40.00	ppm		0.00
146) Chrysene-d12A	14.488	240	421200	40.00	ppm		0.00
153) Perylene-d12A	16.809	264	365416	40.00	ppm		-0.01
System Monitoring Compounds							
7) 2-Fluorophenol	0.000	112	0d	0.00	ppm		
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#			
9) Phenol-d5	0.000	99	0d	0.00	ppm		
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#			
23) Nitrobenzene-d5	0.000	82	0d	0.00	ppm		
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#			
47) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm		
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#			
75) 2,4,6-Tribromophenol	0.000	330	0d	0.00	ppm		
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#			
95) Terphenyl-d14	0.000	244	0d	0.00	ppm		
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#			
Target Compounds							Qvalue
111) 2-Picoline	3.983	93	74366	9.54	ppm		87
112) N-Nitrosomethylethylamine	4.106	42	49731	18.02	ppm	#	53
113) Methyl methanesulfonate	4.427	80	35567	9.23	ppm		90
114) N-Nitrosodiethylamine	4.849	102	29289	9.46	ppm	#	24
115) Ethyl methanesulfonate	5.176	79	48879	8.96	ppm		98
116) Pentachloroethane	5.700	167	20367	9.18	ppm		94
117) N-Nitrosopyrrolidine	6.417	100	26896	8.48	ppm	#	19
118) N-Nitrosomorpholine	6.470	56	48542	14.67	ppm	#	66
119) O-Toluidine	6.486	106	97569	10.14	ppm		99
121) N-Nitrosopiperidine	6.807	42	59493	16.87	ppm	#	59
122) A,A-Dimethylphenethyla...	7.326	58	235966m	13.68	ppm		
123) Hexachloropropene	7.561	213	24561	7.17	ppm		98
124) N-Nitrosodi-n-butylamine	7.930	84	40055	9.28	ppm	#	44
125) p-Phenylenediamine	7.925	108	66930	13.14	ppm		92
126) Isosafrole	8.171	162	42968	10.20	ppm		83
128) Safrole	8.775	162	43049	9.64	ppm		89
129) 1-Chloronaphthalene	8.845	162	102922	9.60	ppm		97
130) Diphenyl Ether	8.941	170	73174	10.05	ppm		93
131) 1,4-Naphthoquinone	9.032	158	42030	9.17	ppm		78
132) Pentachlorobenzene	9.669	250	36760	7.39	ppm		98
133) 1-Naphthylamine	9.808	143	118101	10.74	ppm		96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071358.D
Acq On : 23 Jun 2020 10:55 am
Operator : marthav
Sample : ic2918-10 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 23 16:54:45 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration

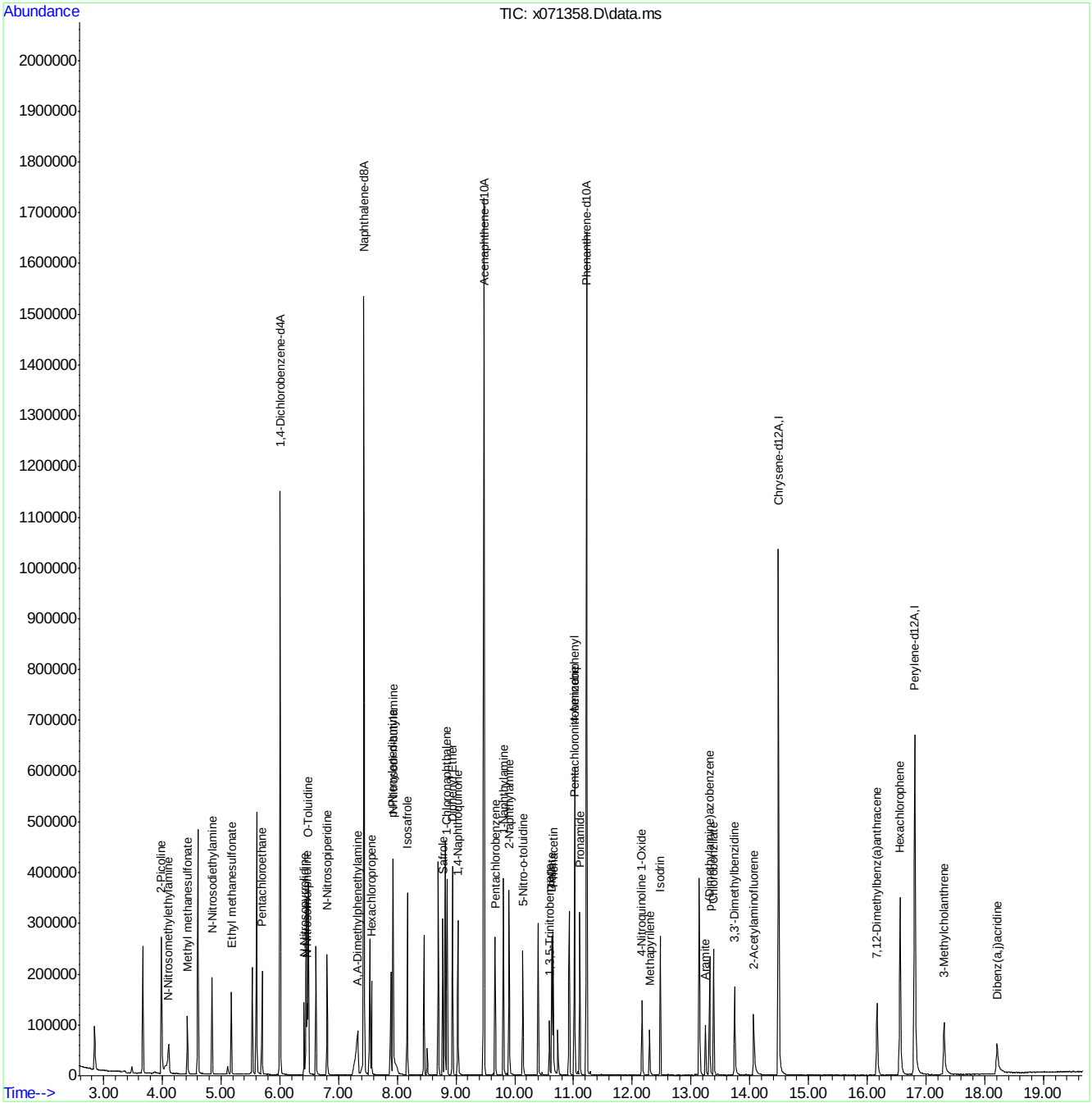
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
134) 2-Naphthylamine	9.904	143	127640	11.39	ppm		98
135) 5-Nitro-o-toluidine	10.134	152	32916	9.09	ppm	#	70
137) 1,3,5-Trinitrobenzene	10.589	75	20814	5.61	ppm		80
138) Diallate	10.631	43	99125m	14.41	ppm		
139) Phenacetin	10.653	108	56928	9.03	ppm		94
140) 4-Aminobiphenyl	11.016	169	131145	12.49	ppm		97
141) Pronamide	11.107	173	48051	9.12	ppm		96
142) Pentachloronitrobenzene	11.011	237	11641	7.34	ppm		86
143) 4-Nitroquinoline 1-Oxide	12.166	190	4741	10.73	ppm	#	62
144) Methapyrilene	12.295	58	33362	4.33	ppm		72
145) Isodrin	12.477	193	17893	8.28	ppm	#	76
147) Aramite	13.241	185	13073m	8.08	ppm		
148) p-(Dimethylamine)azobe...	13.316	120	44838	9.01	ppm		87
149) Chlorobenzilate	13.386	139	50891	10.08	ppm	#	67
151) 3,3'-Dimethylbenzidine	13.744	212	72156	11.91	ppm		98
152) 2-Acetylaminofluorene	14.065	181	46047	8.83	ppm		91
154) 7,12-Dimethylbenz(a)an...	16.167	256	46557	8.85	ppm		94
155) Hexachlorophene	16.558	196	41927	186.26	ppm		96
156) 3-Methylcholanthrene	17.306	268	41211	8.77	ppm		94
157) Dibenz(a,j)acridine	18.210	279	51661	7.45	ppm		89

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071358.D
Acq On : 23 Jun 2020 10:55 am
Operator : marthav
Sample : ic2918-10 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 23 16:54:45 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: SX2918-IC2918
Lab FileID: X071358.D
Injection Time: 06/23/20 10:55

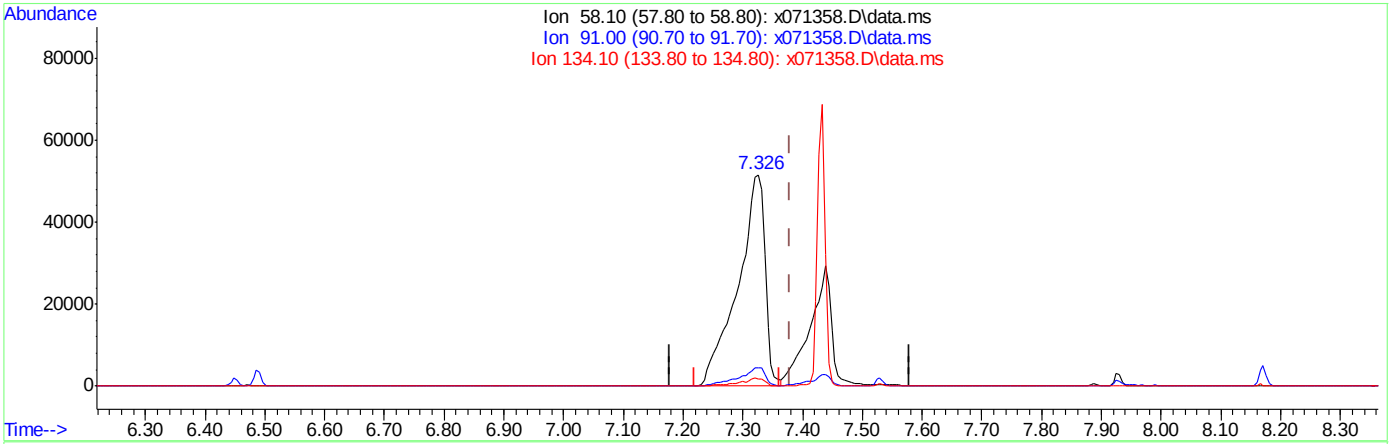
Method: EPA 625.1
Analyst approved: 06/24/20 09:50 Martha Valls
Supervisor approved: 06/24/20 14:07 Naresh Jiawan

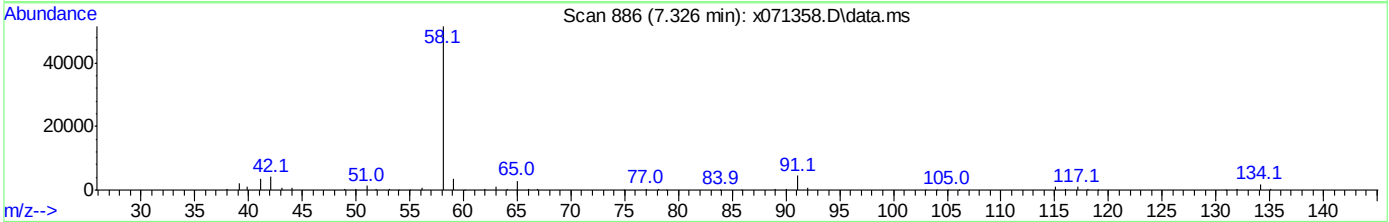
Parameter	CAS	Sig#	R.T. (min.)	Reason
A,A-Dimethylphenethylamine	122-09-8		7.33	Split peak
Diallate	2303-16-4		10.63	Split peak
Aramite	140-57-8		13.24	Split peak

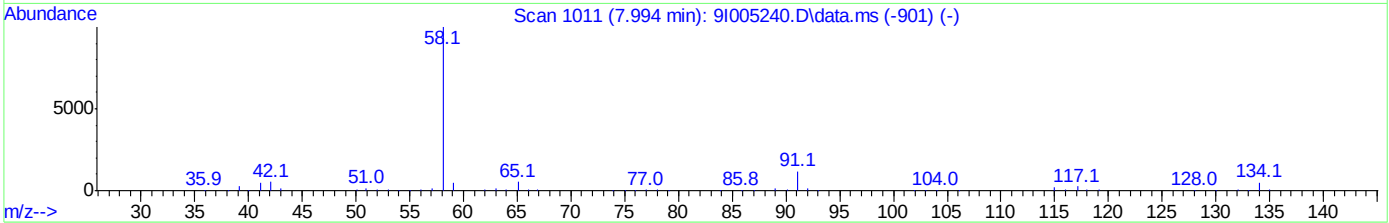
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071358.D
Acq On : 23 Jun 2020 10:55 am
Operator : marthav
Sample : ic2918-10 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 23 14:01:02 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071358.D\data.ms

(122) A,A-Dimethylphenethylamine

7.326min (-0.053) 9.43ppm

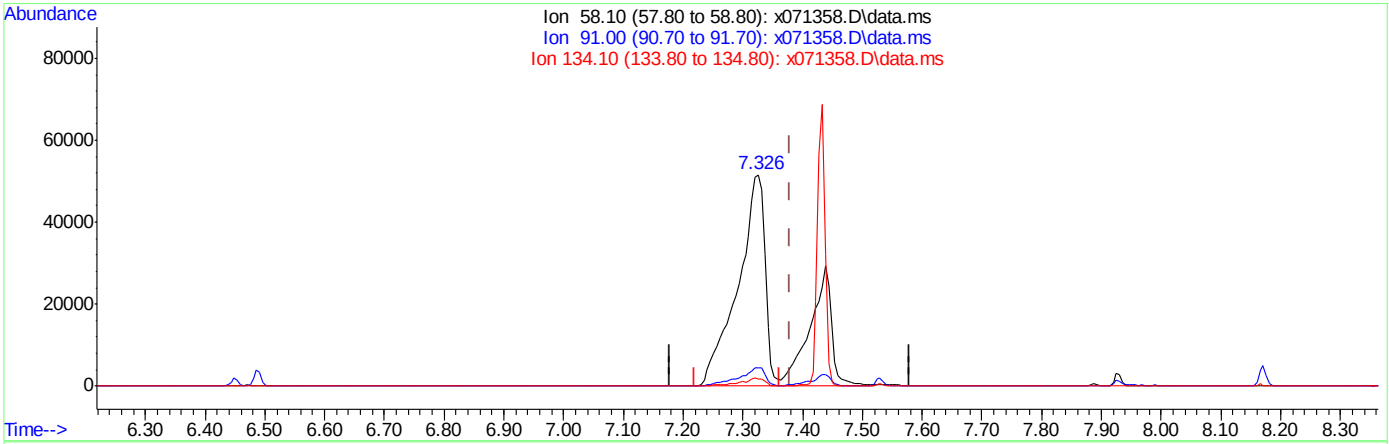
response 161765

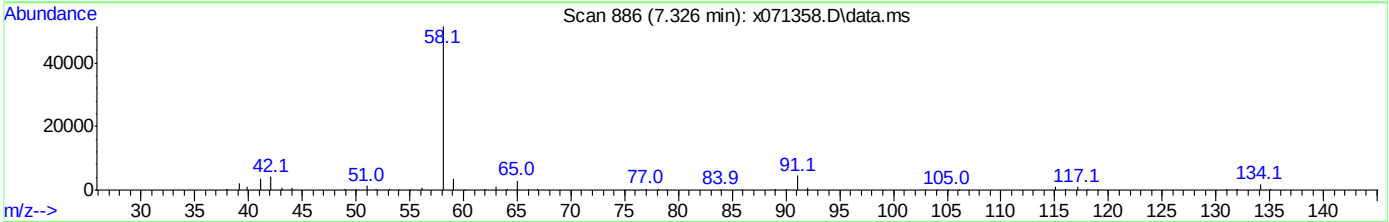
Ion	Exp%	Act%
58.10	100	100
91.00	11.70	8.75
134.10	5.10	3.52
0.00	0.00	0.00

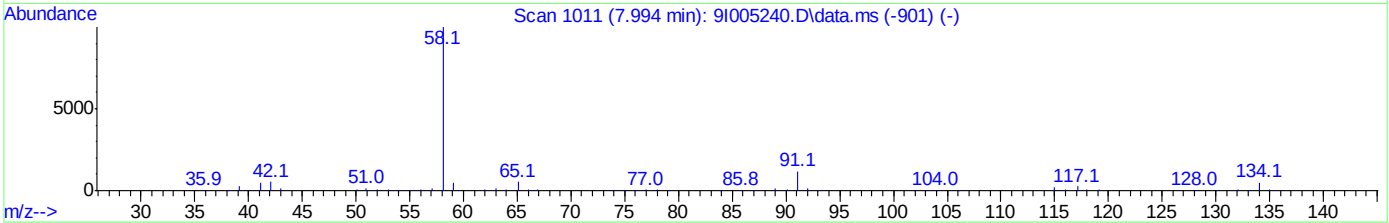
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071358.D
Acq On : 23 Jun 2020 10:55 am
Operator : marthav
Sample : ic2918-10 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 23 14:01:02 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071358.D\data.ms

(122) A,A-Dimethylphenethylamine

7.326min (-0.053) 13.68ppm m

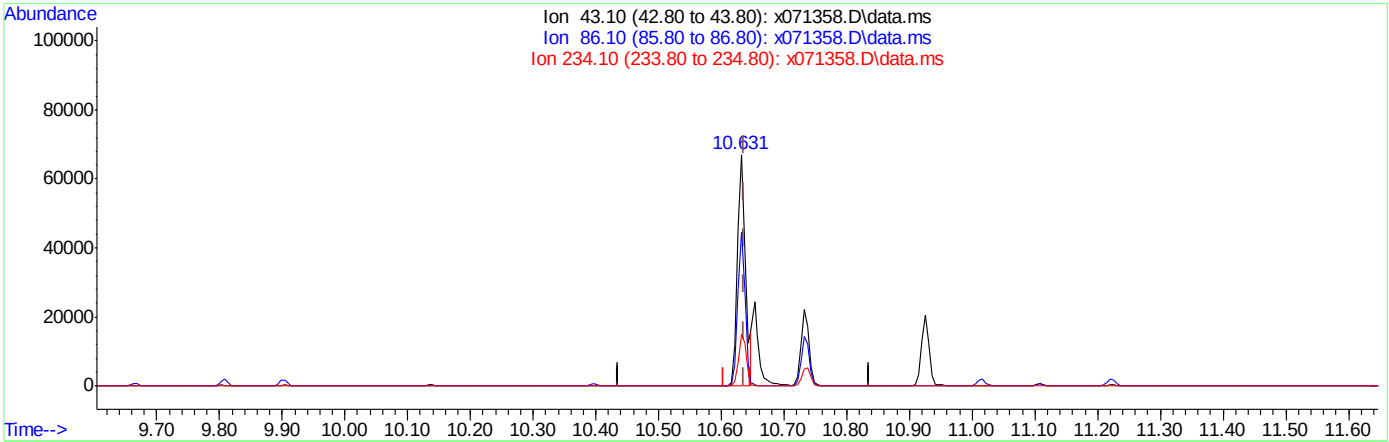
response 235966

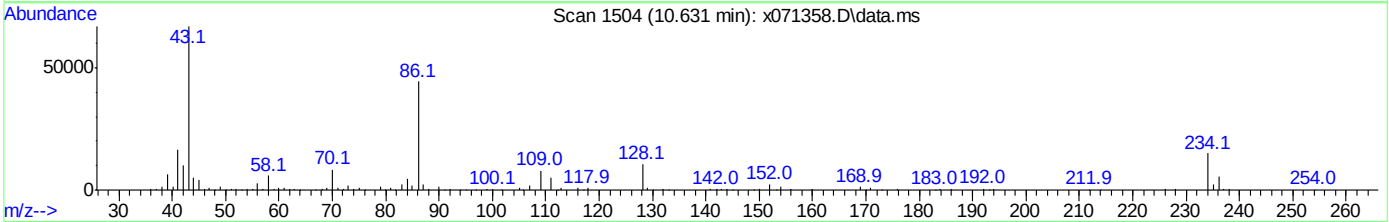
Ion	Exp%	Act%
58.10	100	100
91.00	11.70	8.82
134.10	5.10	3.47
0.00	0.00	0.00

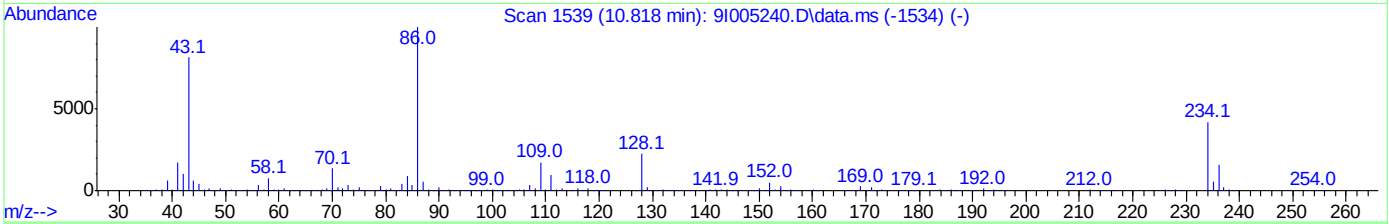
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071358.D
Acq On : 23 Jun 2020 10:55 am
Operator : marthav
Sample : ic2918-10 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 23 14:01:02 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071358.D\data.ms

(138) Diallate

10.631min (-0.005) 9.05ppm

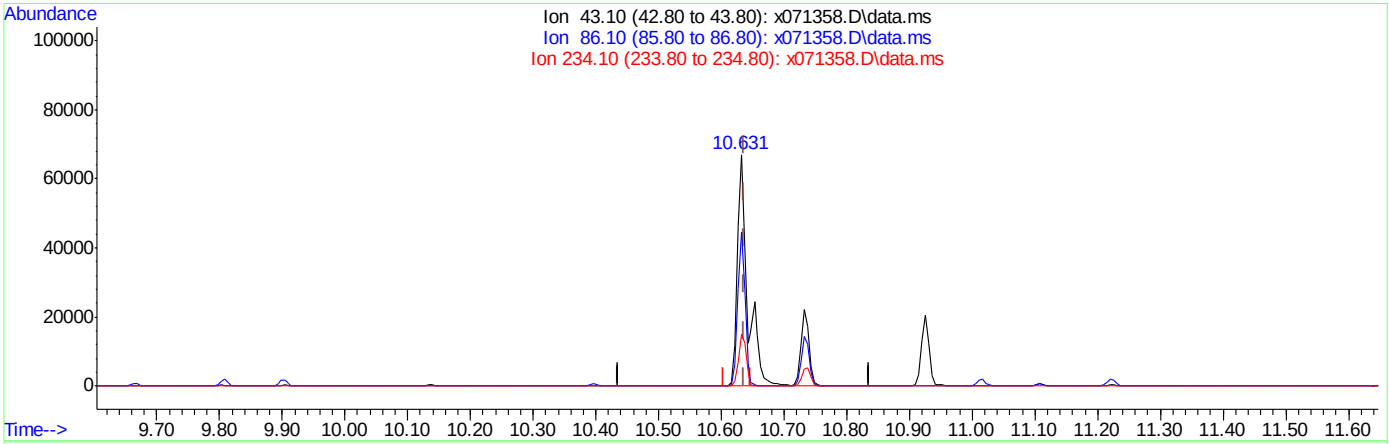
response 62255

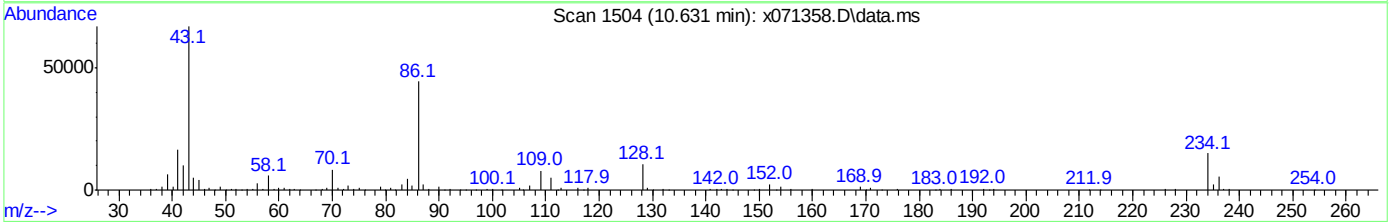
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	74.38#
234.10	51.50	24.76
0.00	0.00	0.00

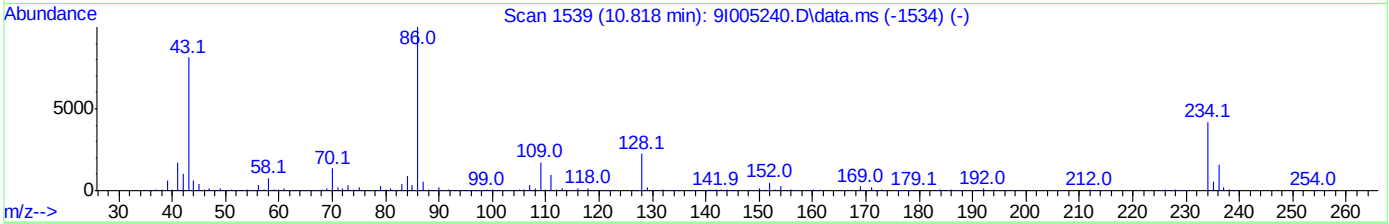
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071358.D
Acq On : 23 Jun 2020 10:55 am
Operator : marthav
Sample : ic2918-10 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 23 14:01:02 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071358.D\data.ms

(138) Diallate

10.631min (-0.005) 14.41ppm m

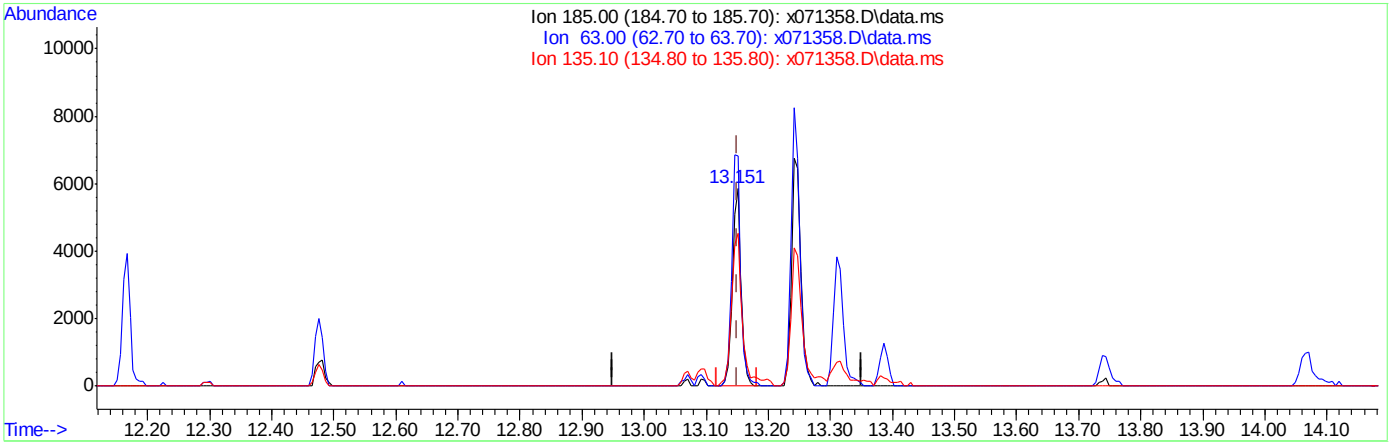
response 99125

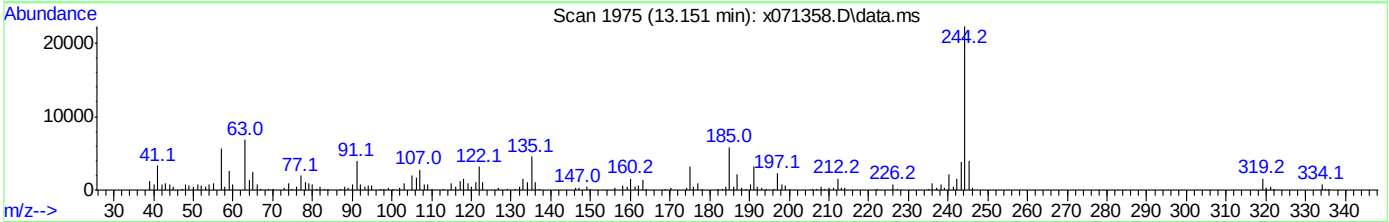
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	66.38#
234.10	51.50	22.30
0.00	0.00	0.00

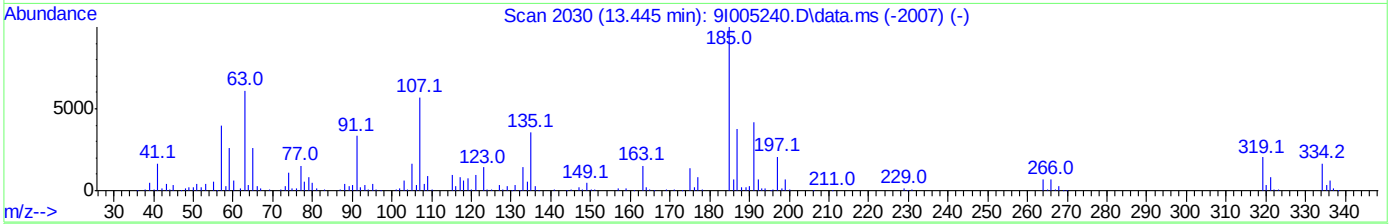
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071358.D
Acq On : 23 Jun 2020 10:55 am
Operator : marthav
Sample : ic2918-10 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 23 14:08:36 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071358.D\data.ms

(147) Aramite

13.151min (+0.000) 3.78ppm

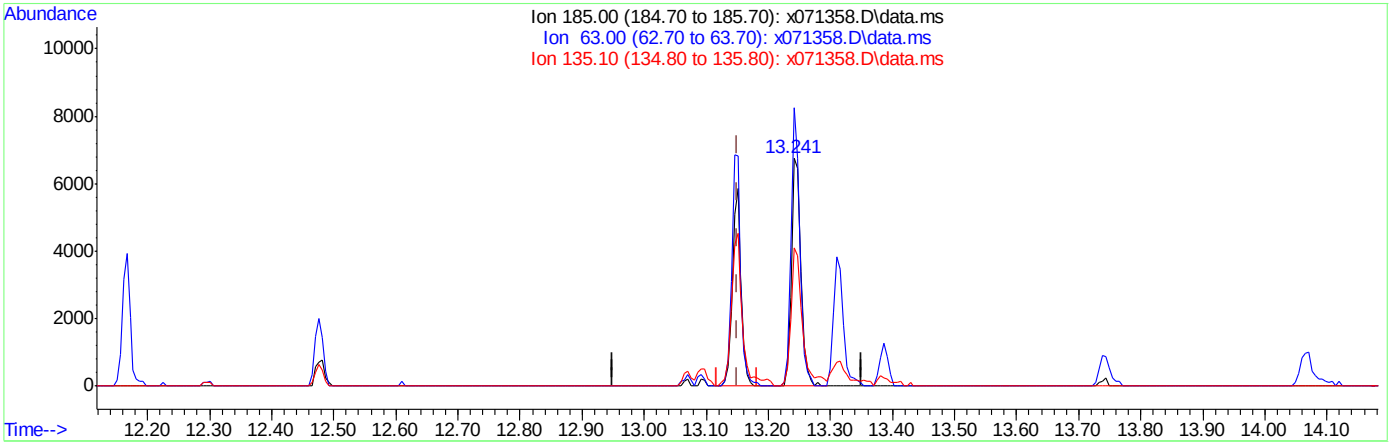
response 6080

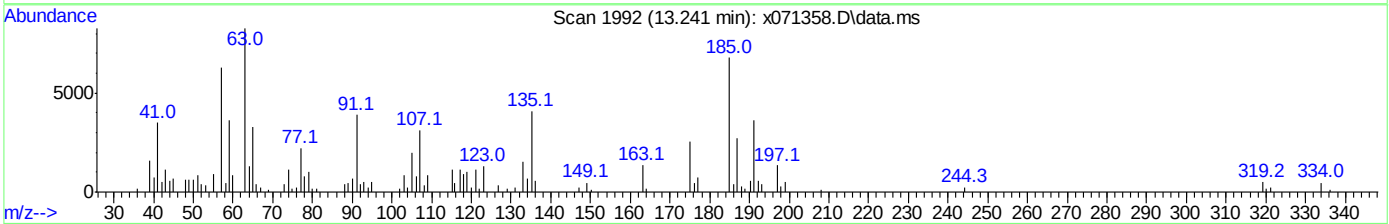
Ion	Exp%	Act%
185.00	100	100
63.00	61.10	115.07#
135.10	35.60	74.78#
0.00	0.00	0.00

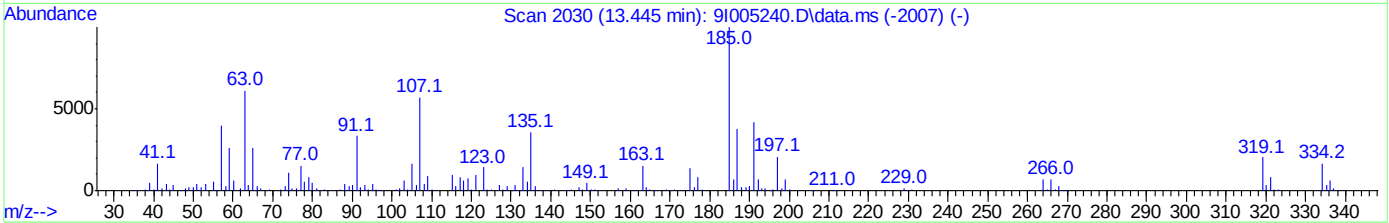
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071358.D
Acq On : 23 Jun 2020 10:55 am
Operator : marthav
Sample : ic2918-10 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 23 14:08:36 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071358.D\data.ms

(147) Aramite

13.241min (+0.091) 8.08ppm m

response 13073

Ion	Exp%	Act%
185.00	100	100
63.00	61.10	122.06#
135.10	35.60	60.55
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 06/24/20 14:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071359.D
Acq On : 23 Jun 2020 11:21 am
Operator : marthav
Sample : ic2918-25 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 23 16:54:59 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	0.000	152	0m	40.00	ppm	-6.00
22) Naphthalene-d8	0.000	136	0m	40.00	ppm	-7.43
43) Acenaphthene-d10	0.000	164	0m	40.00	ppm	-9.48
70) Phenanthrene-d10	0.000	188	0m	40.00	ppm	-11.22
92) Chrysene-d12	0.000	240	0m	40.00	ppm	-14.49
102) Perylene-d12	0.000	264	0m	40.00	ppm	-16.82
110) 1,4-Dichlorobenzene-d4A	6.005	152	158676	40.00	ppm	0.00
120) Naphthalene-d8A	7.433	136	654937	40.00	ppm	0.00
127) Acenaphthene-d10A	9.476	164	355001	40.00	ppm	0.00
136) Phenanthrene-d10A	11.225	188	638763	40.00	ppm	0.00
146) Chrysene-d12A	14.487	240	425269	40.00	ppm	0.00
153) Perylene-d12A	16.814	264	360527	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	0.000	112	0d	0.00	ppm	
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#		
9) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#		
23) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#		
47) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#		
75) 2,4,6-Tribromophenol	0.000	330	0d	0.00	ppm	
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#		
95) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#		
Target Compounds						Qvalue
111) 2-Picoline	3.983	93	185422	23.53	ppm	87
112) N-Nitrosomethylethylamine	4.106	42	124718	44.70	ppm #	53
113) Methyl methanesulfonate	4.432	80	89970	23.09	ppm	91
114) N-Nitrosodiethylamine	4.849	102	74730	23.86	ppm #	18
115) Ethyl methanesulfonate	5.176	79	123287	22.35	ppm	93
116) Pentachloroethane	5.700	167	52204	23.27	ppm	97
117) N-Nitrosopyrrolidine	6.422	100	68904	21.49	ppm #	26
118) N-Nitrosomorpholine	6.475	56	125871	37.61	ppm #	67
119) O-Toluidine	6.491	106	251000	25.81	ppm	98
121) N-Nitrosopiperidine	6.807	42	150841	42.04	ppm #	57
122) A,A-Dimethylphenethyla...	7.352	58	614390m	34.13	ppm	
123) Hexachloropropene	7.561	213	68332	19.62	ppm	100
124) N-Nitrosodi-n-butylamine	7.930	84	101921	22.53	ppm #	41
125) p-Phenylenediamine	7.930	108	173372m	35.56	ppm	
126) Isosafrole	8.171	162	110395	25.75	ppm	81
128) Safrole	8.775	162	112129	24.41	ppm	85
129) 1-Chloronaphthalene	8.850	162	269339	24.44	ppm	98
130) Diphenyl Ether	8.941	170	190986	25.51	ppm	92
131) 1,4-Naphthoquinone	9.037	158	118609	26.87	ppm	87
132) Pentachlorobenzene	9.668	250	94218	18.43	ppm	100
133) 1-Naphthylamine	9.807	143	302346	26.73	ppm	92

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071359.D
Acq On : 23 Jun 2020 11:21 am
Operator : marthav
Sample : ic2918-25 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 23 16:54:59 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration

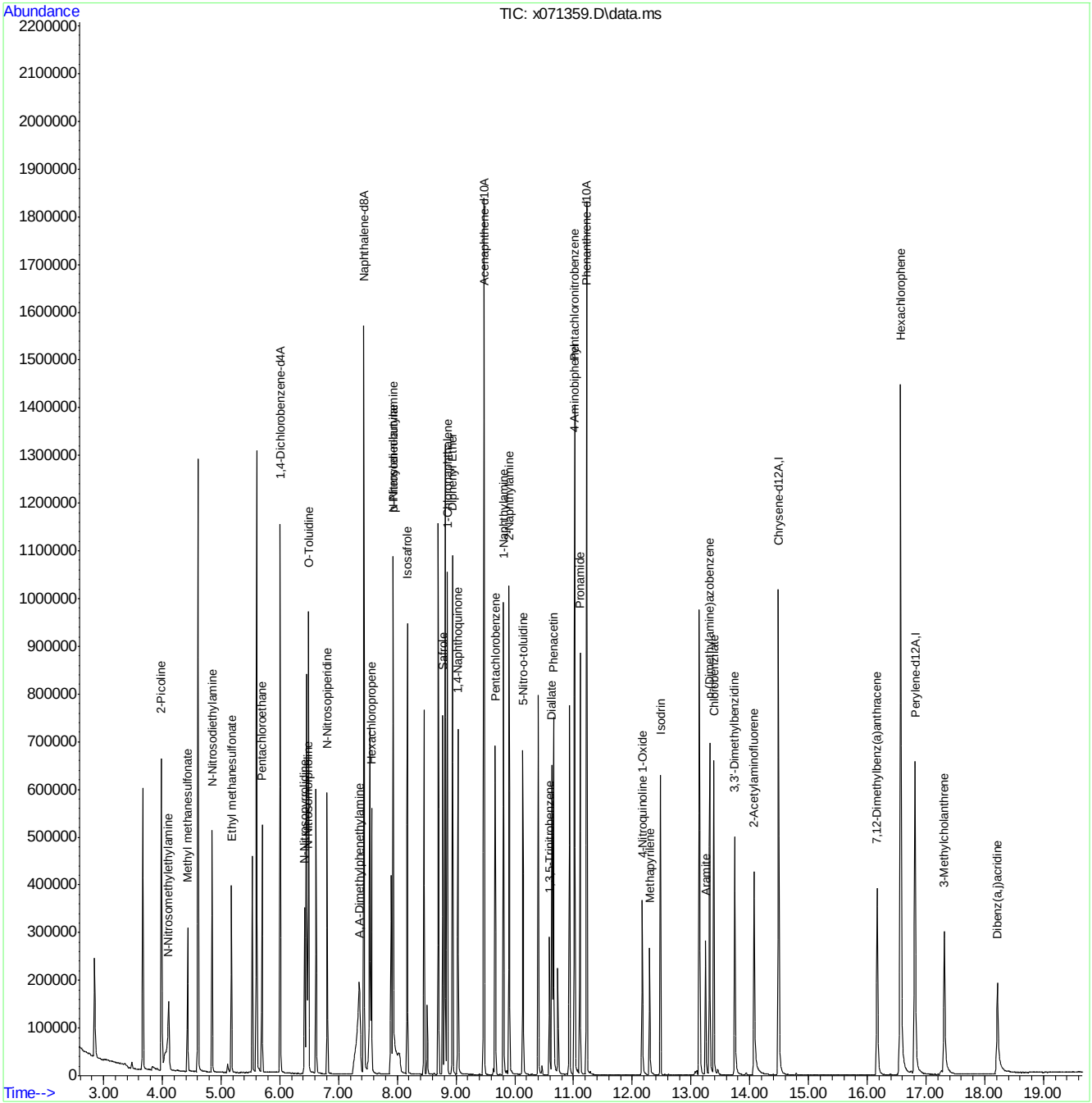
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
134) 2-Naphthylamine	9.904	143	327376	28.41	ppm		96
135) 5-Nitro-o-toluidine	10.139	152	91941	24.27	ppm		80
137) 1,3,5-Trinitrobenzene	10.588	75	67291	17.44	ppm		84
138) Diallate	10.631	43	252842m	35.85	ppm		
139) Phenacetin	10.658	108	154829	23.52	ppm		91
140) 4-Aminobiphenyl	11.022	169	342587	31.81	ppm		98
141) Pronamide	11.112	173	128388	23.47	ppm		98
142) Pentachloronitrobenzene	11.016	237	31448	19.34	ppm		90
143) 4-Nitroquinoline 1-Oxide	12.172	190	21069	37.18	ppm		72
144) Methapyrilene	12.295	58	93392	11.77	ppm	#	70
145) Isodrin	12.482	193	43906	19.81	ppm		85
147) Aramite	13.247	185	39644m	23.75	ppm		
148) p-(Dimethylamine)azobe...	13.316	120	121096	24.52	ppm		82
149) Chlorobenzilate	13.391	139	138411	26.77	ppm		74
151) 3,3'-Dimethylbenzidine	13.744	212	185725	30.03	ppm		99
152) 2-Acetylaminofluorene	14.070	181	141745	25.52	ppm		91
154) 7,12-Dimethylbenz(a)an...	16.167	256	123384	23.57	ppm		95
155) Hexachlorophene	16.568	196	189721	433.83	ppm		99
156) 3-Methylcholanthrene	17.312	268	110629	23.67	ppm		91
157) Dibenz(a,j)acridine	18.215	279	142603	19.95	ppm		97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071359.D
Acq On : 23 Jun 2020 11:21 am
Operator : marthav
Sample : ic2918-25 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 23 16:54:59 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration



8270DApp9SX-062320.m Tue Jun 23 19:10:19 2020 Page: 3

Manual Integration Approval Summary

Sample Number: SX2918-IC2918
Lab FileID: X071359.D
Injection Time: 06/23/20 11:21

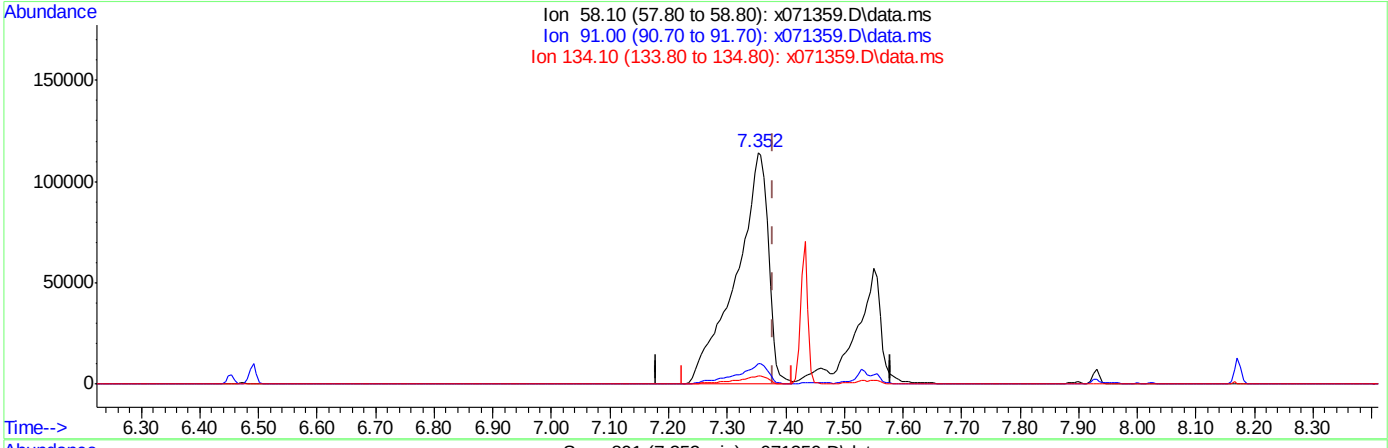
Method: EPA 625.1
Analyst approved: 06/24/20 09:50 Martha Valls
Supervisor approved: 06/24/20 14:07 Naresh Jiawan

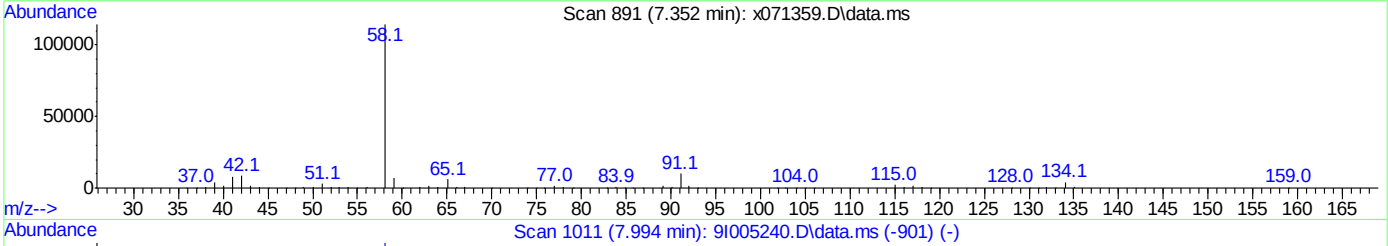
Parameter	CAS	Sig#	R.T. (min.)	Reason
A,A-Dimethylphenethylamine	122-09-8		7.35	Split peak
p-Phenylenediamine	106-50-3		7.93	Split peak
Diallate	2303-16-4		10.63	Split peak
Aramite	140-57-8		13.25	Split peak

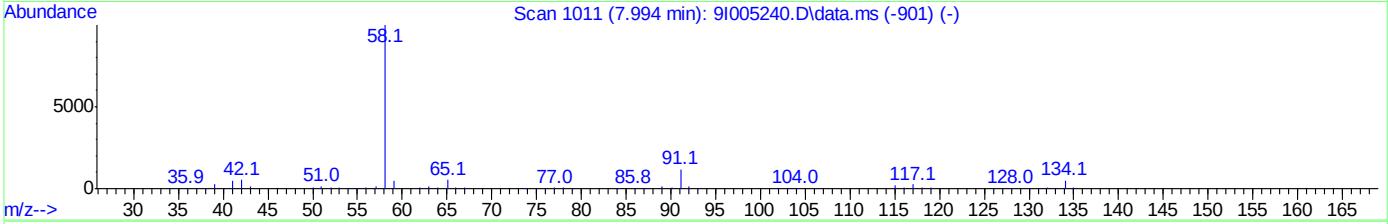
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071359.D
Acq On : 23 Jun 2020 11:21 am
Operator : marthav
Sample : ic2918-25 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 23 14:01:04 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071359.D\data.ms

(122) A,A-Dimethylphenethylamine

7.352min (-0.027) 24.61ppm

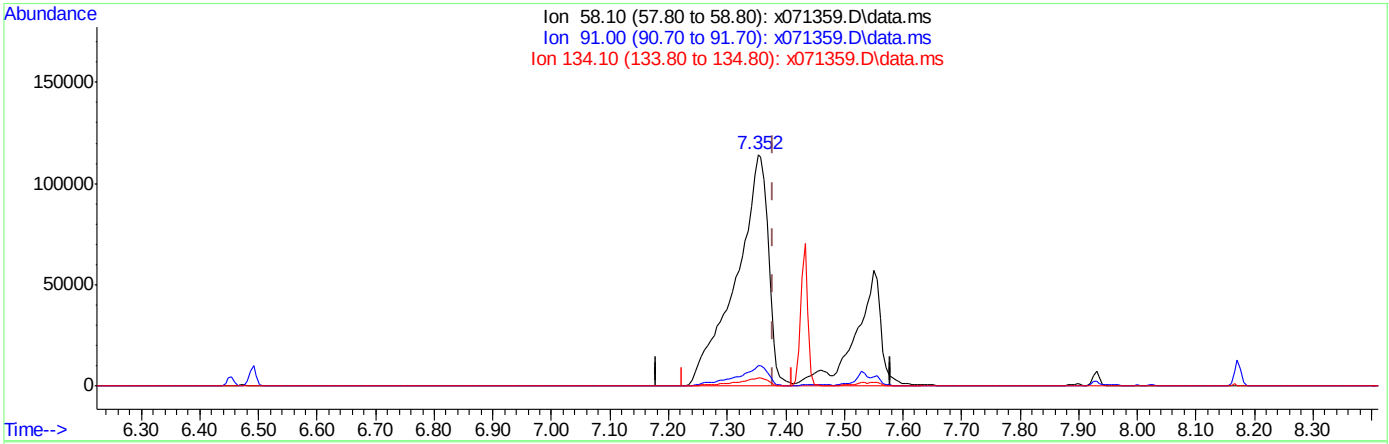
response 437927

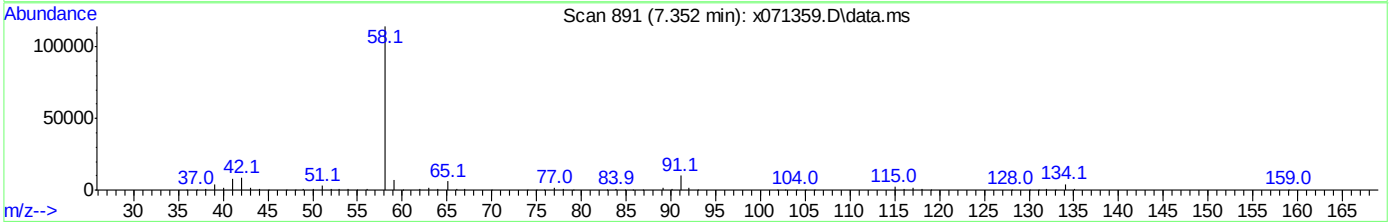
Ion	Exp%	Act%
58.10	100	100
91.00	11.70	8.67
134.10	5.10	3.64
0.00	0.00	0.00

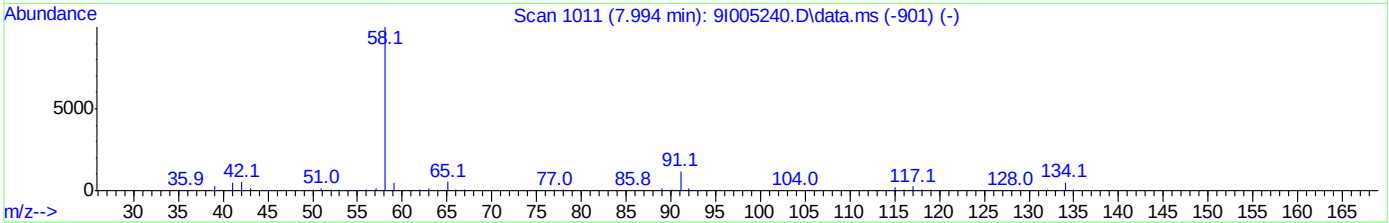
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071359.D
Acq On : 23 Jun 2020 11:21 am
Operator : marthav
Sample : ic2918-25 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 23 14:01:04 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071359.D\data.ms

(122) A,A-Dimethylphenethylamine

7.352min (-0.027) 34.13ppm m

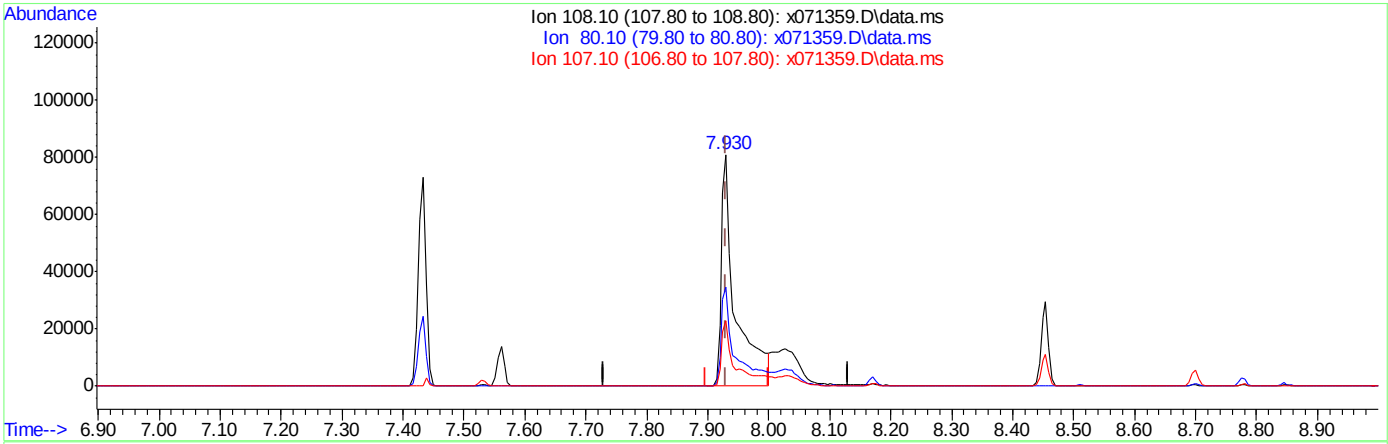
response 614390

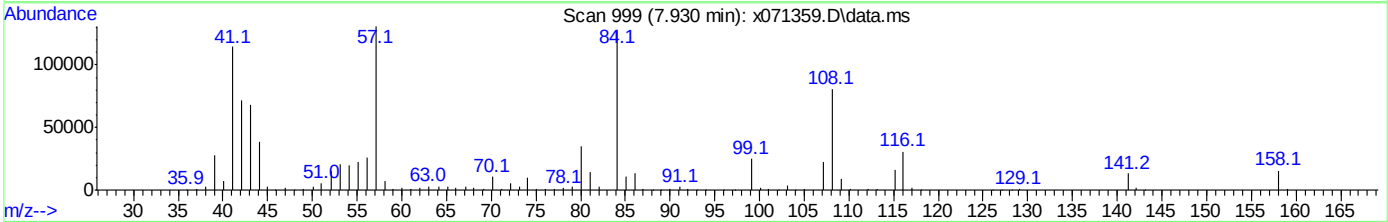
Ion	Exp%	Act%
58.10	100	100
91.00	11.70	8.72
134.10	5.10	3.70
0.00	0.00	0.00

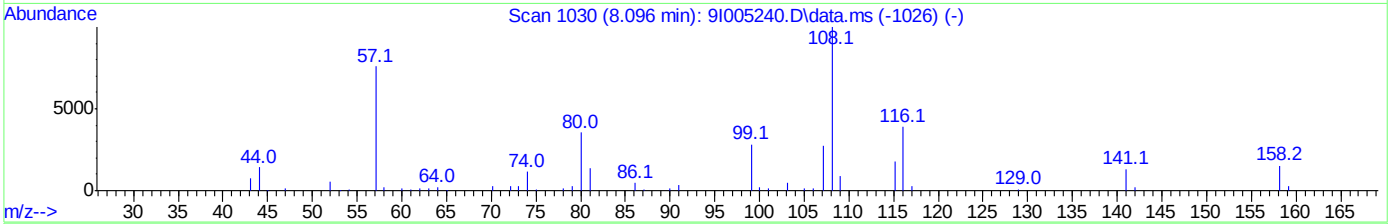
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071359.D
Acq On : 23 Jun 2020 11:21 am
Operator : marthav
Sample : ic2918-25 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 23 14:01:04 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071359.D\data.ms

(125) p-Phenylenediamine

7.930min (0.000) 26.70ppm

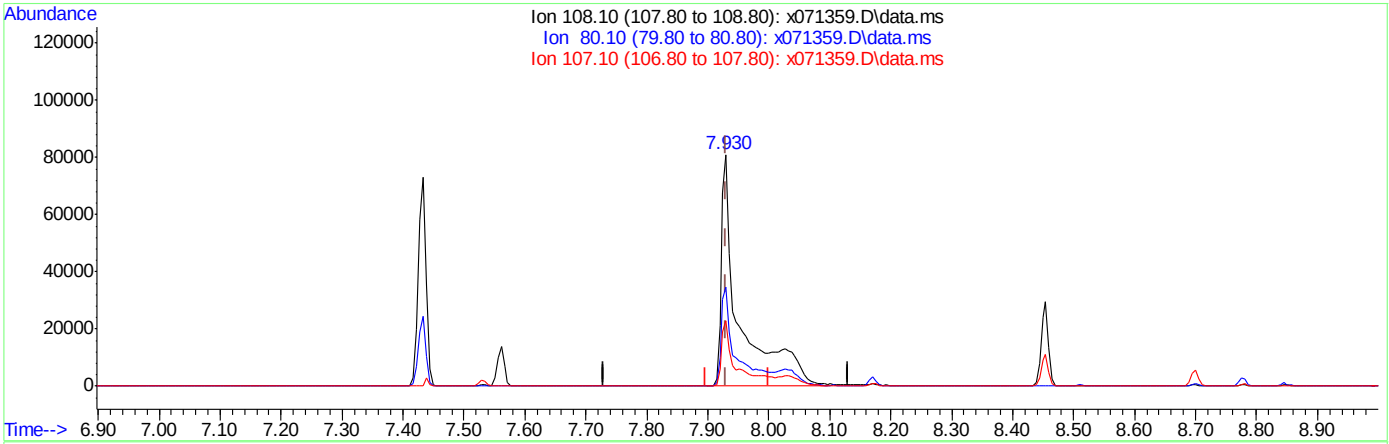
response 133387

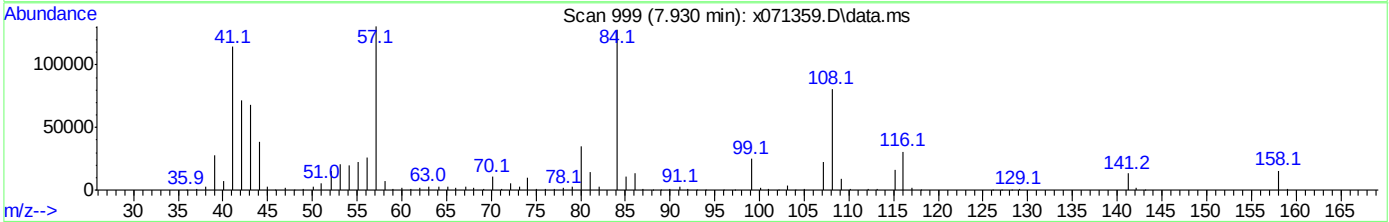
Ion	Exp%	Act%
108.10	100	100
80.10	35.50	42.72
107.10	27.70	28.16
0.00	0.00	0.00

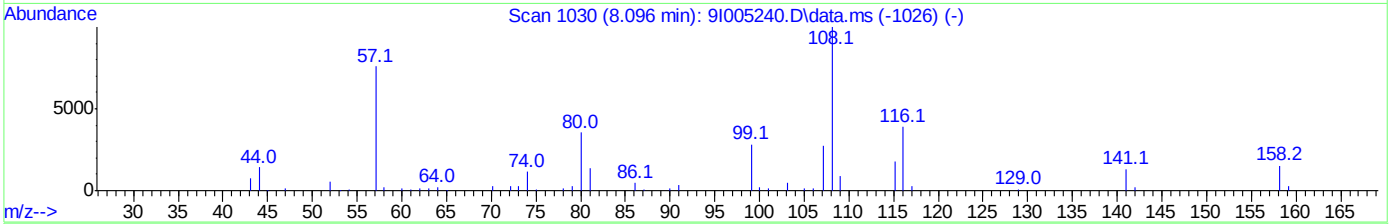
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071359.D
Acq On : 23 Jun 2020 11:21 am
Operator : marthav
Sample : ic2918-25 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 23 14:01:04 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071359.D\data.ms

(125) p-Phenylenediamine

7.930min (0.000) 35.56ppm m

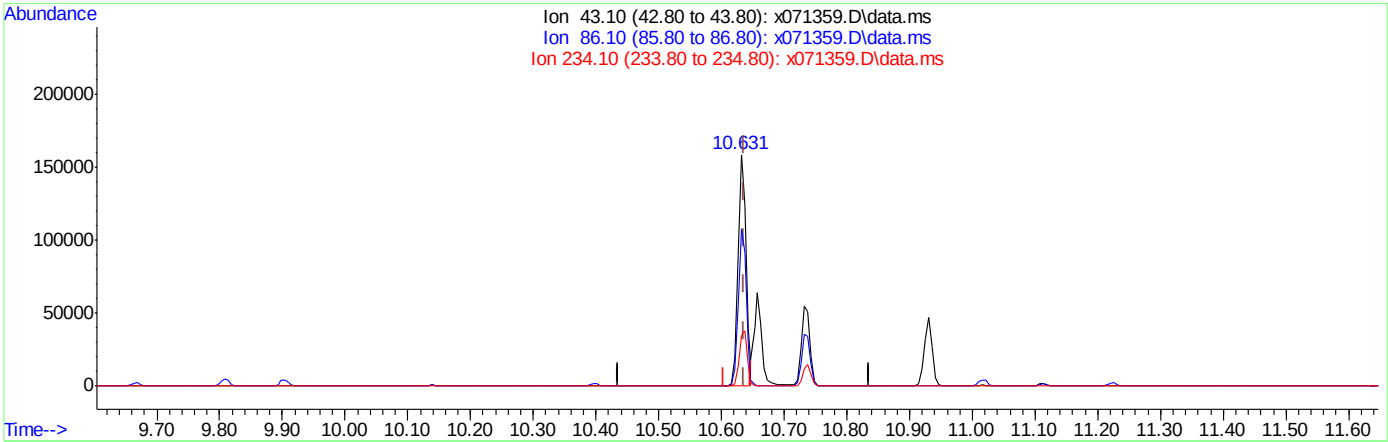
response 173372

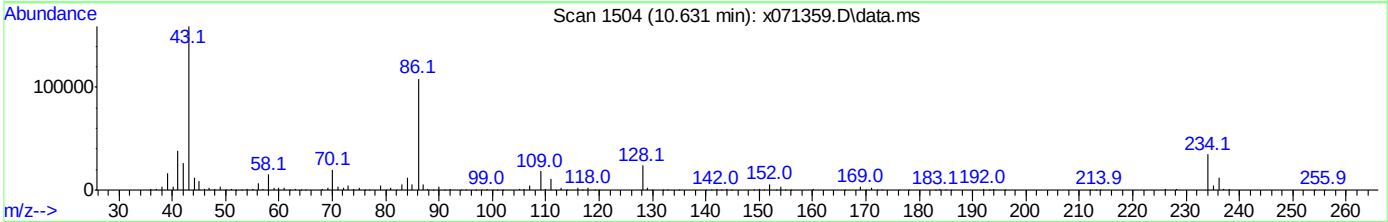
Ion	Exp%	Act%
108.10	100	100
80.10	35.50	42.92
107.10	27.70	28.19
0.00	0.00	0.00

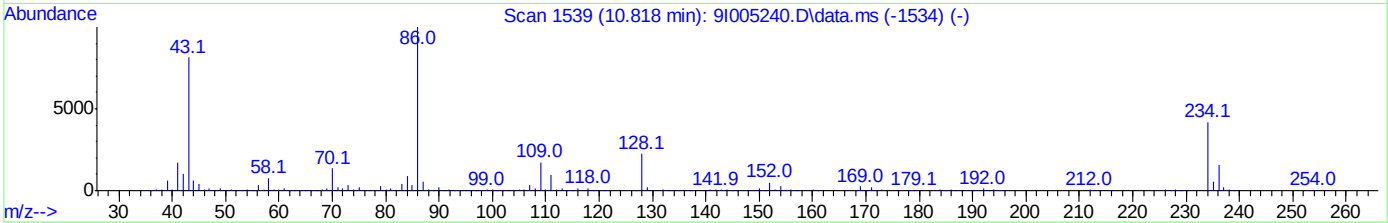
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071359.D
Acq On : 23 Jun 2020 11:21 am
Operator : marthav
Sample : ic2918-25 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 23 14:01:04 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071359.D\data.ms

(138) Diallate

10.631min (-0.005) 20.55ppm

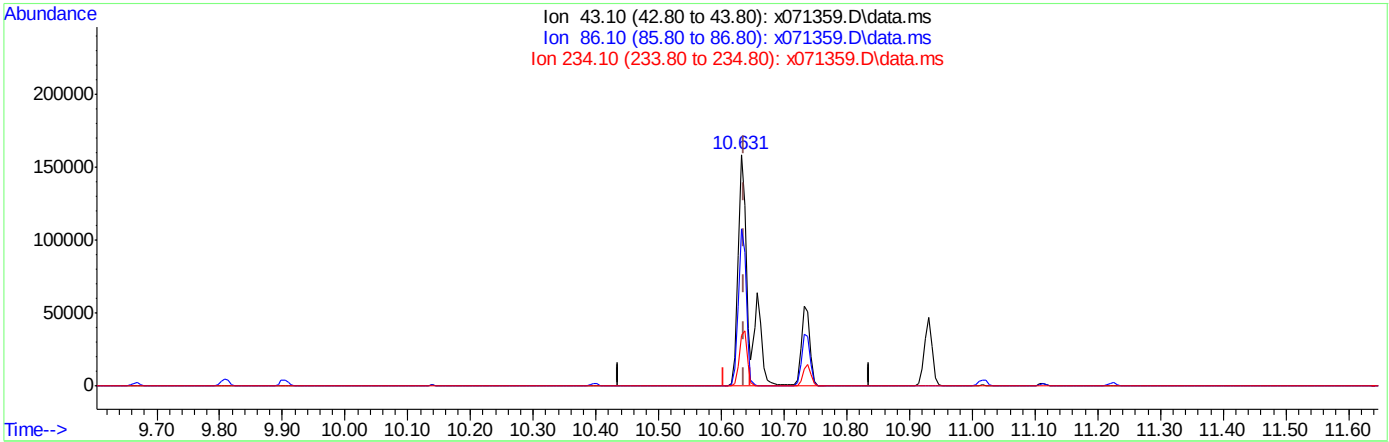
response 144925

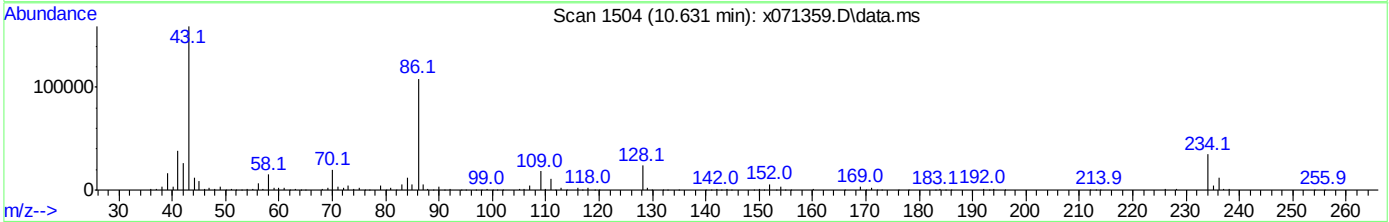
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	70.53#
234.10	51.50	22.40
0.00	0.00	0.00

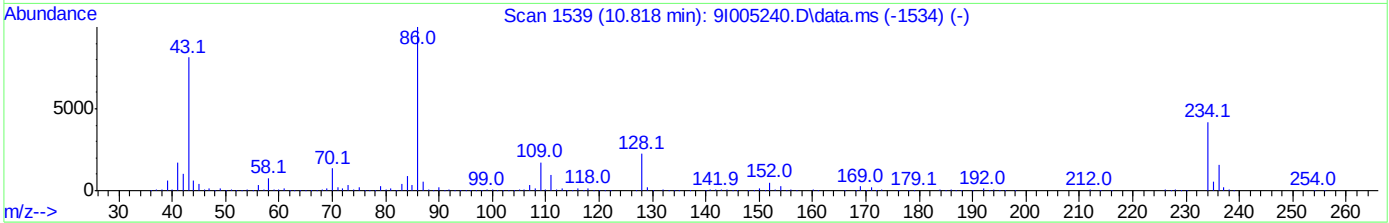
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071359.D
Acq On : 23 Jun 2020 11:21 am
Operator : marthav
Sample : ic2918-25 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 23 14:01:04 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071359.D\data.ms

(138) Diallate

10.631min (-0.005) 35.85ppm m

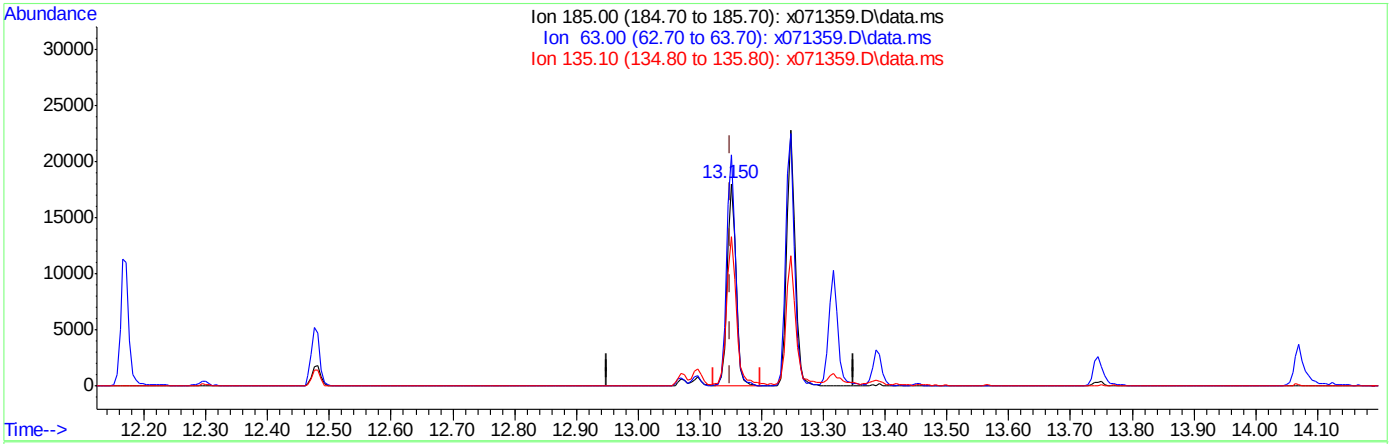
response 252842

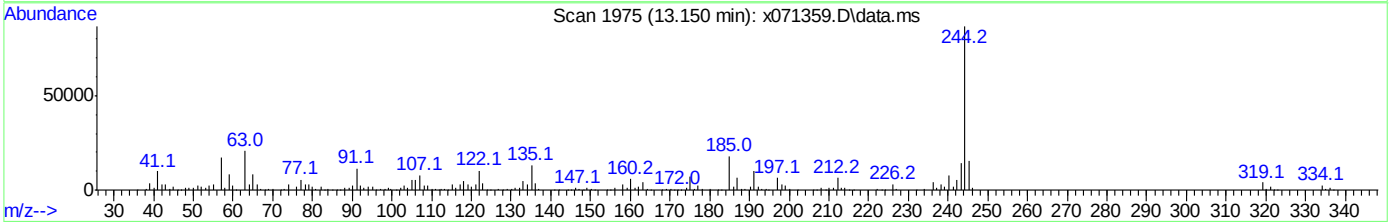
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	67.84#
234.10	51.50	21.87
0.00	0.00	0.00

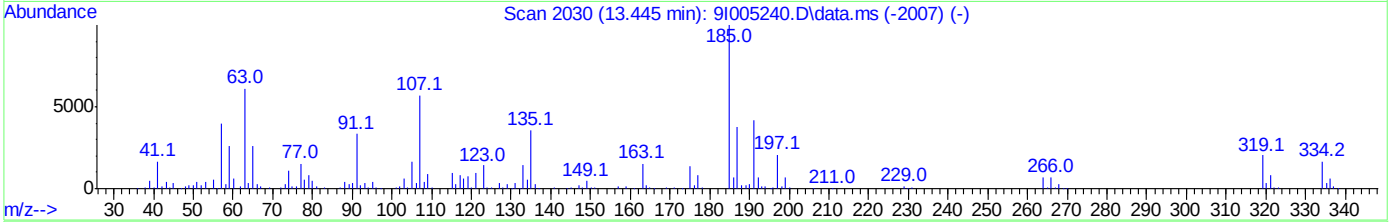
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071359.D
Acq On : 23 Jun 2020 11:21 am
Operator : marthav
Sample : ic2918-25 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 23 14:01:04 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071359.D\data.ms

(147) Aramite

13.150min (0.000) 10.97ppm

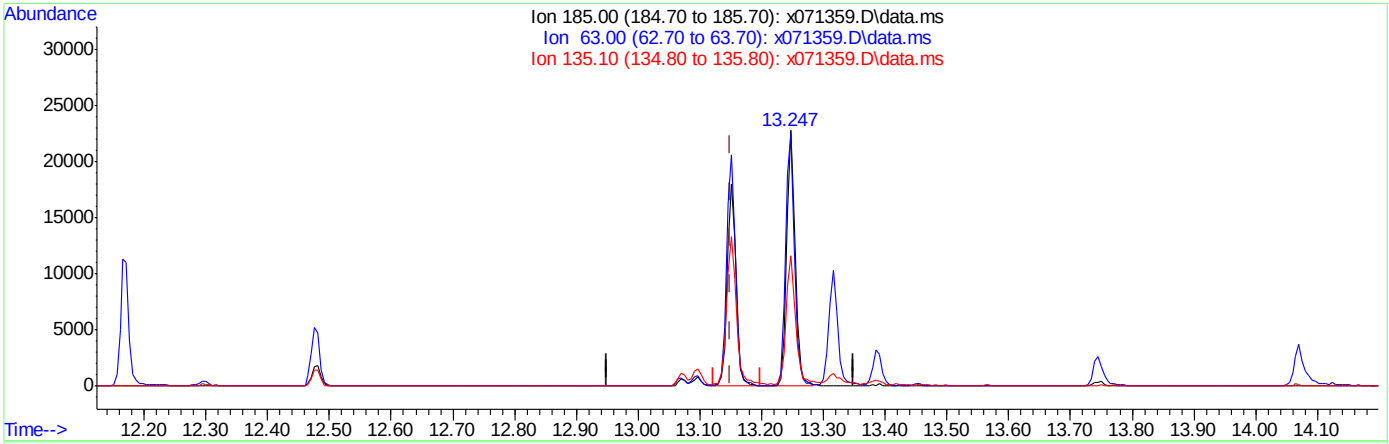
response 17983

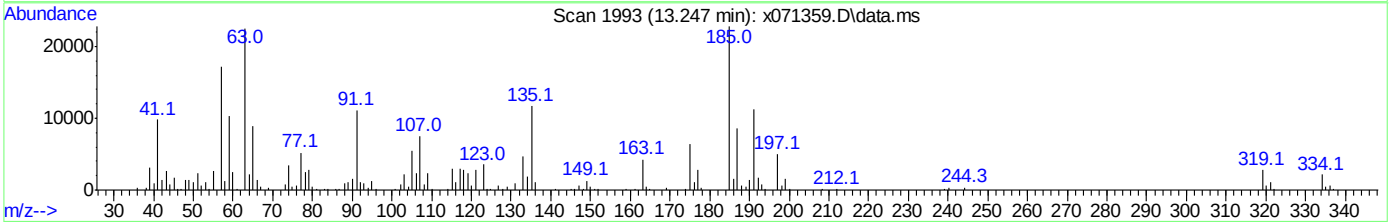
Ion	Exp%	Act%
185.00	100	100
63.00	61.10	114.08#
135.10	35.60	72.34#
0.00	0.00	0.00

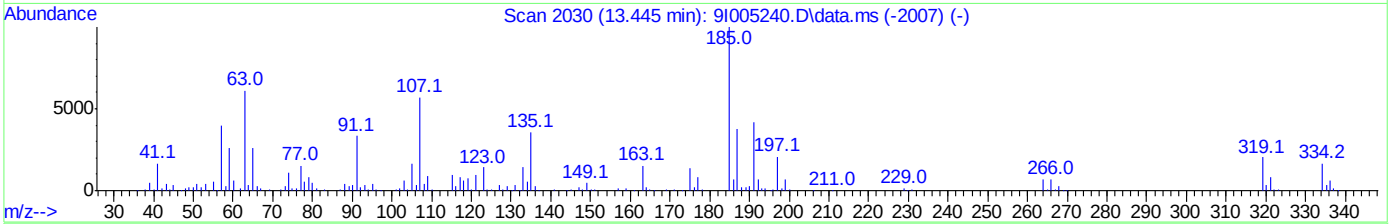
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071359.D
Acq On : 23 Jun 2020 11:21 am
Operator : marthav
Sample : ic2918-25 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 23 14:01:04 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071359.D\data.ms

(147) Aramite

13.247min (+0.096) 23.72ppm m

response 39594

Ion	Exp%	Act%
185.00	100	100
63.00	61.10	98.70#
135.10	35.60	51.18
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 06/24/20 14:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071360.D
Acq On : 23 Jun 2020 11:46 am
Operator : marthav
Sample : ic2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 23 16:55:12 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	0.000	152	0m	40.00	ppm		-6.00
22) Naphthalene-d8	0.000	136	0m	40.00	ppm		-7.43
43) Acenaphthene-d10	0.000	164	0m	40.00	ppm		-9.48
70) Phenanthrene-d10	0.000	188	0m	40.00	ppm		-11.22
92) Chrysene-d12	0.000	240	0m	40.00	ppm		-14.49
102) Perylene-d12	0.000	264	0m	40.00	ppm		-16.82
110) 1,4-Dichlorobenzene-d4A	6.005	152	151564	40.00	ppm		0.00
120) Naphthalene-d8A	7.433	136	655182	40.00	ppm		0.00
127) Acenaphthene-d10A	9.476	164	349855	40.00	ppm		0.00
136) Phenanthrene-d10A	11.225	188	638196	40.00	ppm		0.00
146) Chrysene-d12A	14.487	240	407074	40.00	ppm		0.00
153) Perylene-d12A	16.819	264	338302	40.00	ppm		0.00
System Monitoring Compounds							
7) 2-Fluorophenol	0.000	112	0d	0.00	ppm		
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#			
9) Phenol-d5	0.000	99	0d	0.00	ppm		
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#			
23) Nitrobenzene-d5	0.000	82	0d	0.00	ppm		
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#			
47) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm		
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#			
75) 2,4,6-Tribromophenol	0.000	330	0d	0.00	ppm		
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#			
95) Terphenyl-d14	0.000	244	0d	0.00	ppm		
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#			
Target Compounds							Qvalue
111) 2-Picoline	3.983	93	378323	50.26	ppm		88
112) N-Nitrosomethylethylamine	4.111	42	260501	97.75	ppm	#	52
113) Methyl methanesulfonate	4.437	80	187573	50.40	ppm		91
114) N-Nitrosodiethylamine	4.855	102	158519	52.99	ppm	#	28
115) Ethyl methanesulfonate	5.181	79	259741	49.29	ppm		97
116) Pentachloroethane	5.700	167	109705	51.19	ppm		93
117) N-Nitrosopyrrolidine	6.432	100	147319	48.12	ppm	#	36
118) N-Nitrosomorpholine	6.481	56	265918	83.18	ppm	#	67
119) O-Toluidine	6.497	106	549182	59.12	ppm		98
121) N-Nitrosopiperidine	6.812	42	316635	88.22	ppm	#	58
122) A,A-Dimethylphenethyla...	7.379	58	1293311m	68.93	ppm		
123) Hexachloropropene	7.561	213	155362	44.58	ppm		100
124) N-Nitrosodi-n-butylamine	7.935	84	281690	57.84	ppm	#	52
125) p-Phenylenediamine	7.930	108	342749m	80.37	ppm		
126) Isosafrole	8.176	162	237534	55.38	ppm		84
128) Safrole	8.780	162	246210	54.39	ppm		89
129) 1-Chloronaphthalene	8.850	162	588257	54.17	ppm		96
130) Diphenyl Ether	8.941	170	409072	55.45	ppm		90
131) 1,4-Naphthoquinone	9.037	158	244539	66.13	ppm		80
132) Pentachlorobenzene	9.668	250	198634	39.42	ppm		100
133) 1-Naphthylamine	9.813	143	634517	56.92	ppm		95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071360.D
Acq On : 23 Jun 2020 11:46 am
Operator : marthav
Sample : ic2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 23 16:55:12 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
134) 2-Naphthylamine	9.904	143	686741	60.48	ppm	95
135) 5-Nitro-o-toluidine	10.144	152	201942	52.44	ppm	78
137) 1,3,5-Trinitrobenzene	10.594	75	166805	42.00	ppm	87
138) Diallate	10.636	43	519071m	73.66	ppm	
139) Phenacetin	10.669	108	343358	50.50	ppm	92
140) 4-Aminobiphenyl	11.022	169	699848	65.04	ppm	99
141) Pronamide	11.118	173	280696	50.21	ppm	98
142) Pentachloronitrobenzene	11.016	237	68116	41.94	ppm	93
143) 4-Nitroquinoline 1-Oxide	12.172	190	60083	80.11	ppm	73
144) Methapyrilene	12.295	58	185003m	23.18	ppm	
145) Isodrin	12.482	193	93557	42.24	ppm	87
147) Aramite	13.247	185	90482m	54.36	ppm	
148) p-(Dimethylamine)azobe...	13.321	120	263027	57.86	ppm	88
149) Chlorobenzilate	13.391	139	302437	59.53	ppm	74
150) Kepone	13.771	272	673	0.46	ppm	86
151) 3,3'-Dimethylbenzidine	13.749	212	377447	62.52	ppm	96
152) 2-Acetylaminofluorene	14.076	181	315144	54.38	ppm	90
154) 7,12-Dimethylbenz(a)an...	16.172	256	259627	51.97	ppm	96
155) Hexachlorophene	16.584	196	479639	831.02	ppm	97
156) 3-Methylcholanthrene	17.322	268	235721	52.86	ppm	95
157) Dibenz(a,j)acridine	18.221	279	319323	44.00	ppm	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071360.D
Acq On : 23 Jun 2020 11:46 am
Operator : marthav
Sample : ic2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
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Quant Title : SW846 8270D OR EPA 625
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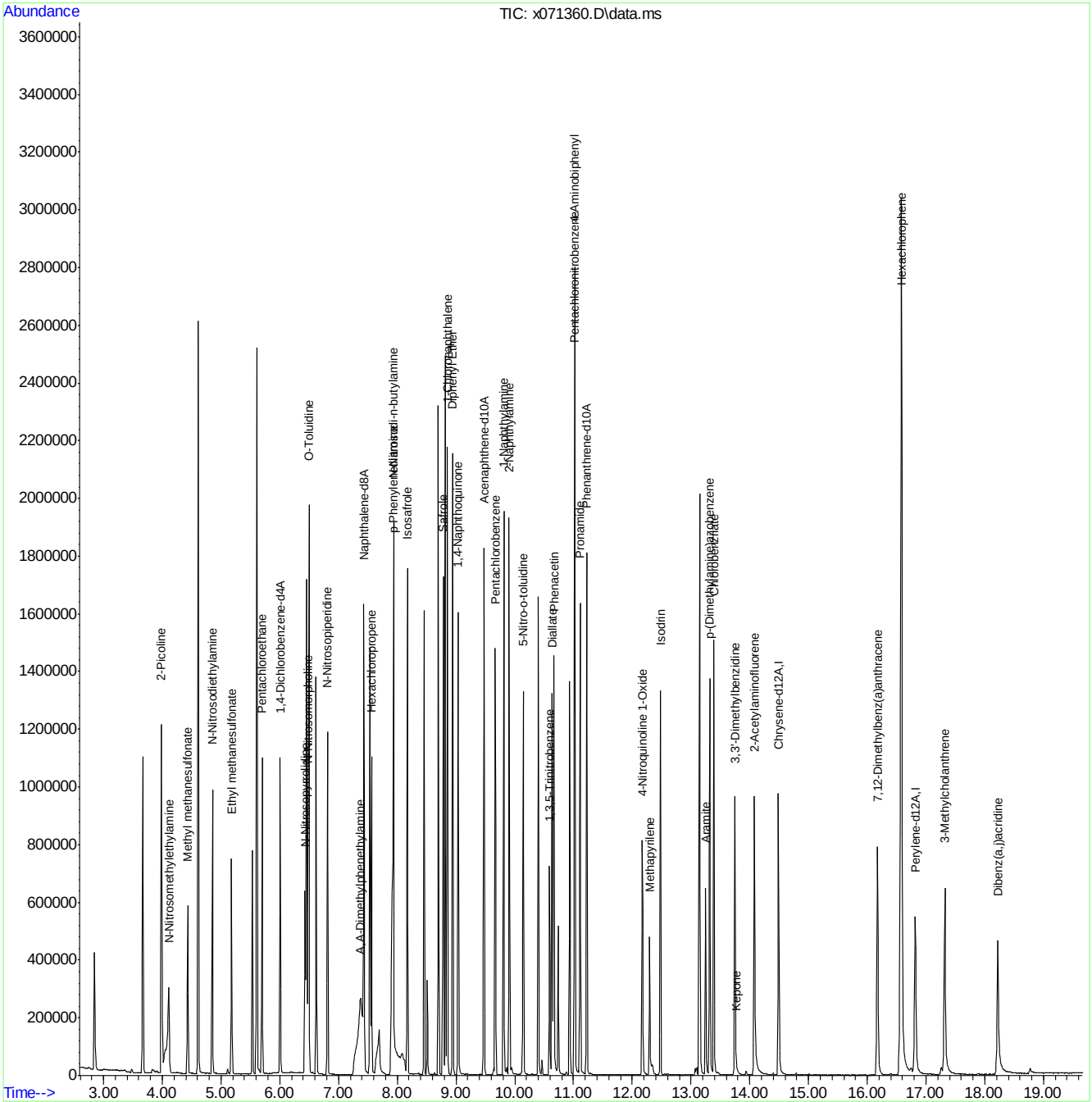

Manual Integration Approval Summary

Sample Number: SX2918-IC2918
Lab FileID: X071360.D
Injection Time: 06/23/20 11:46

Method: EPA 625.1
Analyst approved: 06/24/20 09:50 Martha Valls
Supervisor approved: 06/24/20 14:07 Naresh Jiawan

Parameter	CAS	Sig#	R.T. (min.)	Reason
A,A-Dimethylphenethylamine	122-09-8		7.38	Split peak
p-Phenylenediamine	106-50-3		7.93	Split peak
Diallate	2303-16-4		10.64	Split peak
Methapyrilene	91-80-5		12.29	Split peak
Aramite	140-57-8		13.25	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071360.D
Acq On : 23 Jun 2020 11:46 am
Operator : marthav
Sample : ic2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 23 14:01:06 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
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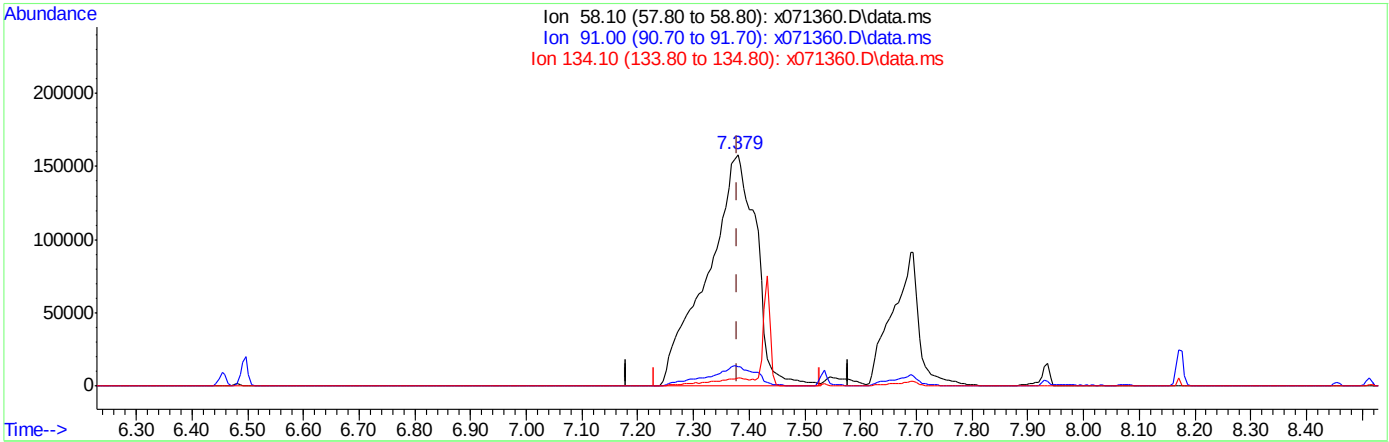

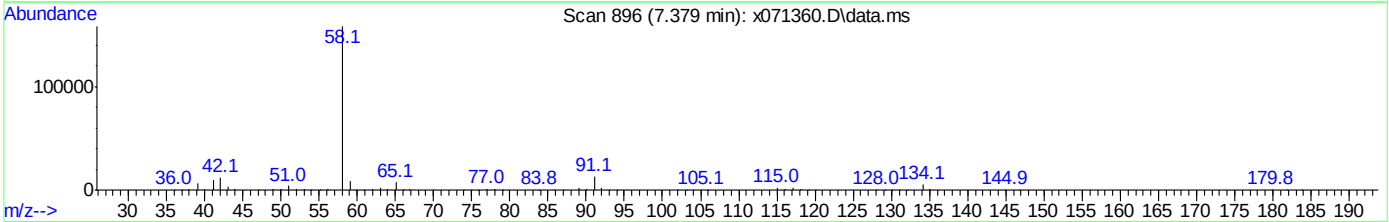

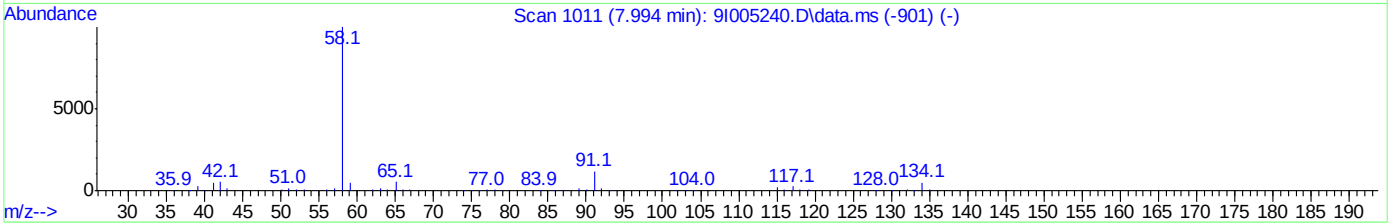

TIC: x071360.D\data.ms

(122) A,A-Dimethylphenethylamine

7.379min (0.000) 52.39ppm

response 964162

Ion	Exp%	Act%
58.10	100	100
91.00	11.70	6.05
134.10	5.10	3.27
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071360.D
Acq On : 23 Jun 2020 11:46 am
Operator : marthav
Sample : ic2918-50 Inst : MSBNA05
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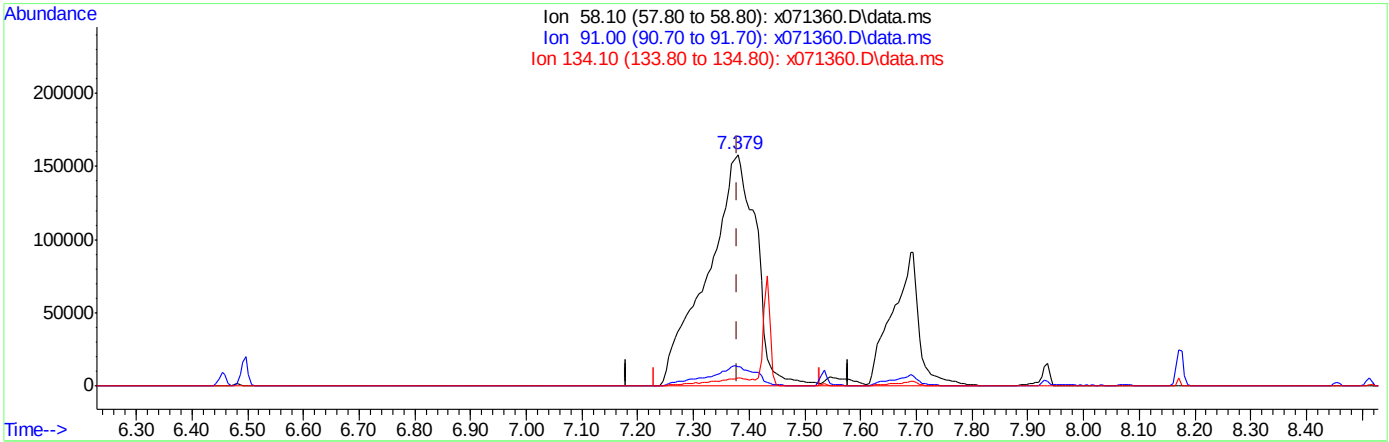

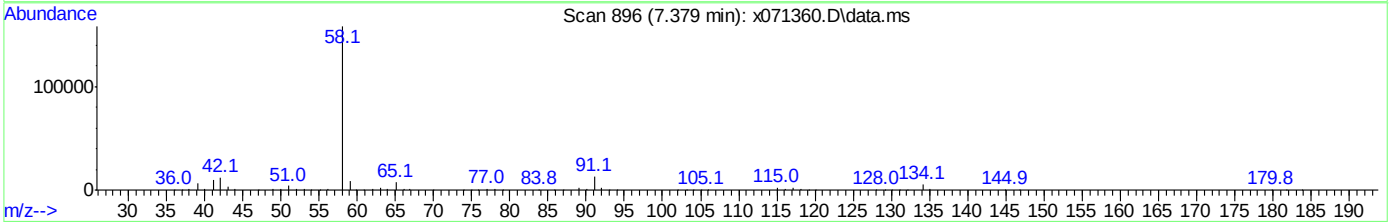

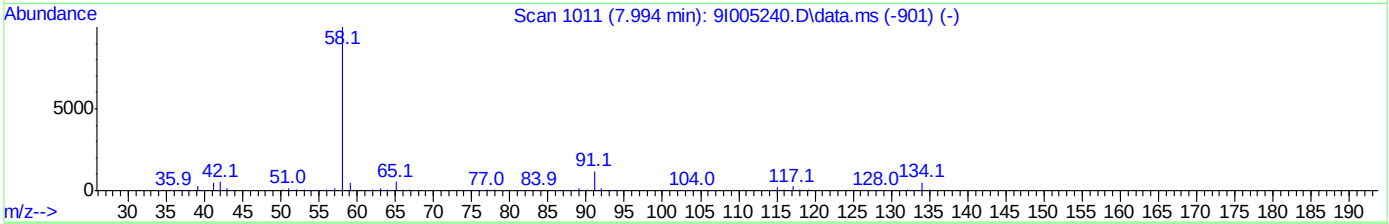

TIC: x071360.D\data.ms

(122) A,A-Dimethylphenethylamine

7.379min (0.000) 68.93ppm m

response 1293311

Ion	Exp%	Act%
58.10	100	100
91.00	11.70	8.30
134.10	5.10	3.68
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071360.D
Acq On : 23 Jun 2020 11:46 am
Operator : marthav
Sample : ic2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 23 14:01:06 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
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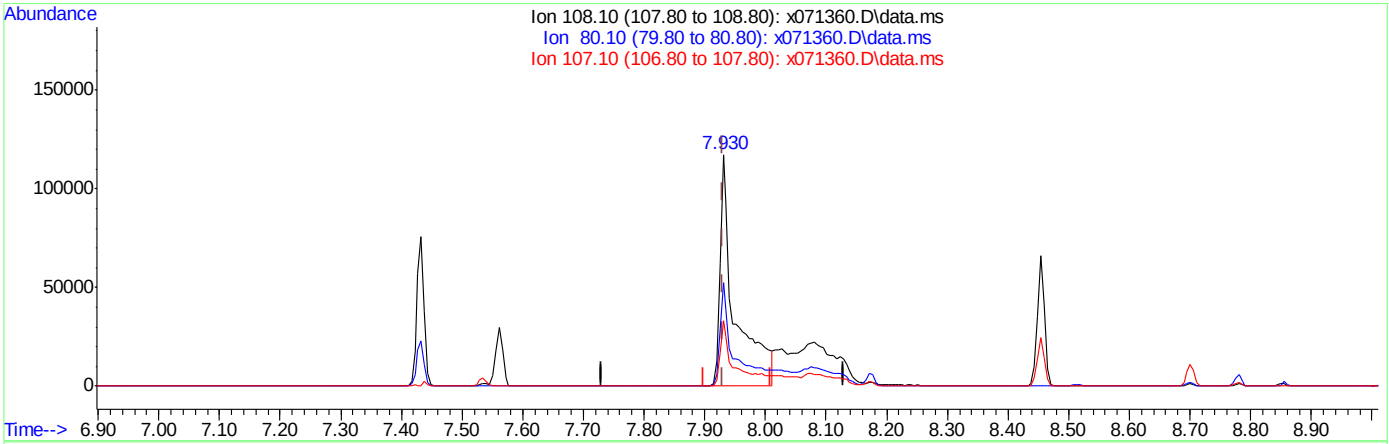
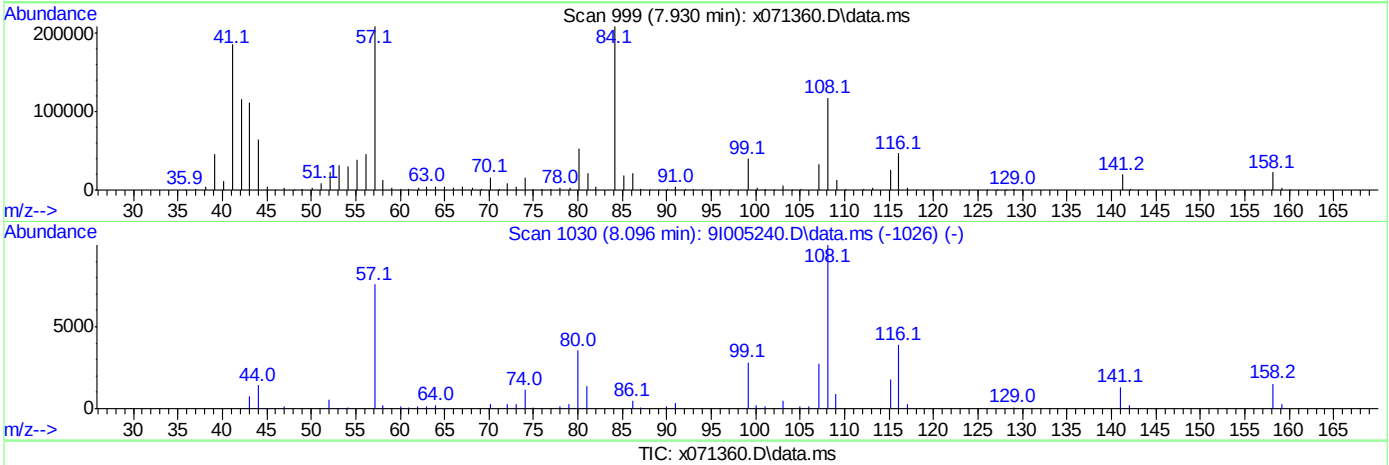
Response via : Initial Calibration





TIC: x071360.D\data.ms

(125) p-Phenylenediamine

7.930min (0.000) 43.42ppm

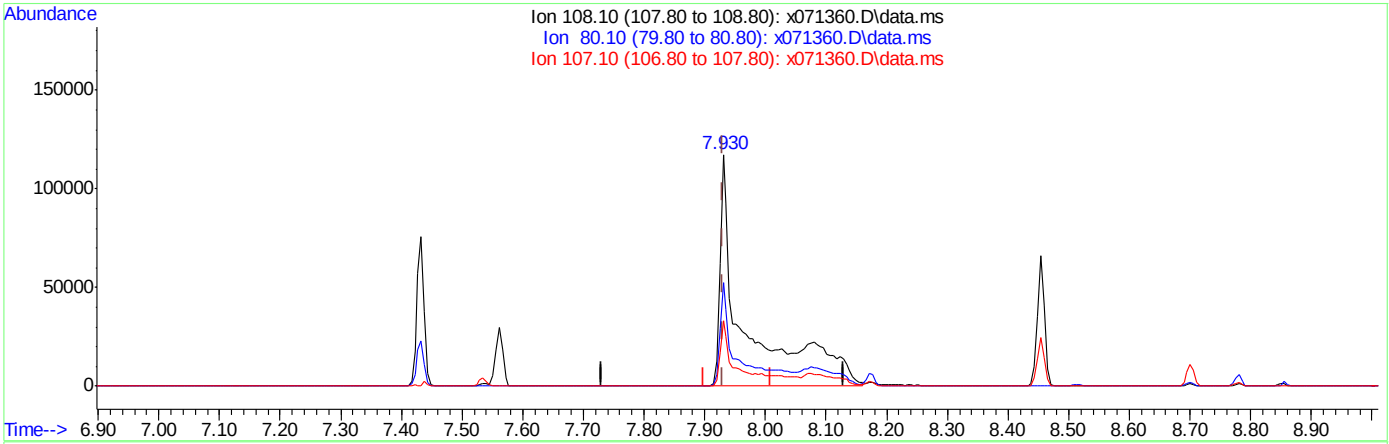
response 207105

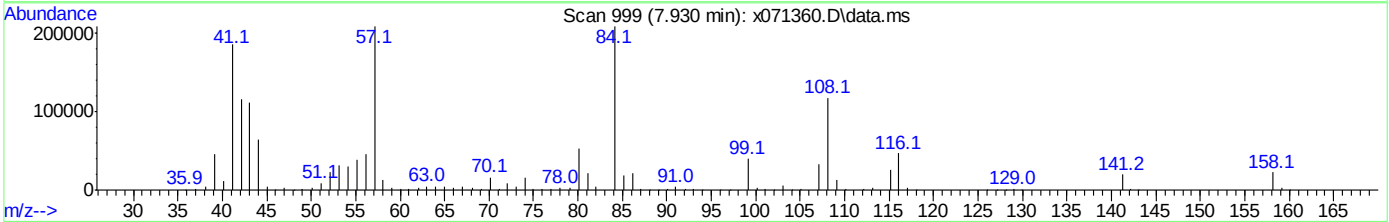
Ion	Exp%	Act%
108.10	100	100
80.10	35.50	44.36
107.10	27.70	28.19
0.00	0.00	0.00

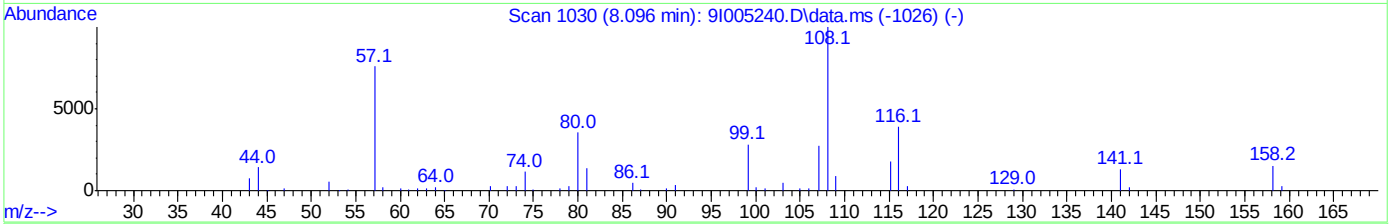
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071360.D
Acq On : 23 Jun 2020 11:46 am
Operator : marthav
Sample : ic2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 23 14:01:06 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071360.D\data.ms

(125) p-Phenylenediamine

7.930min (0.000) 80.37ppm m

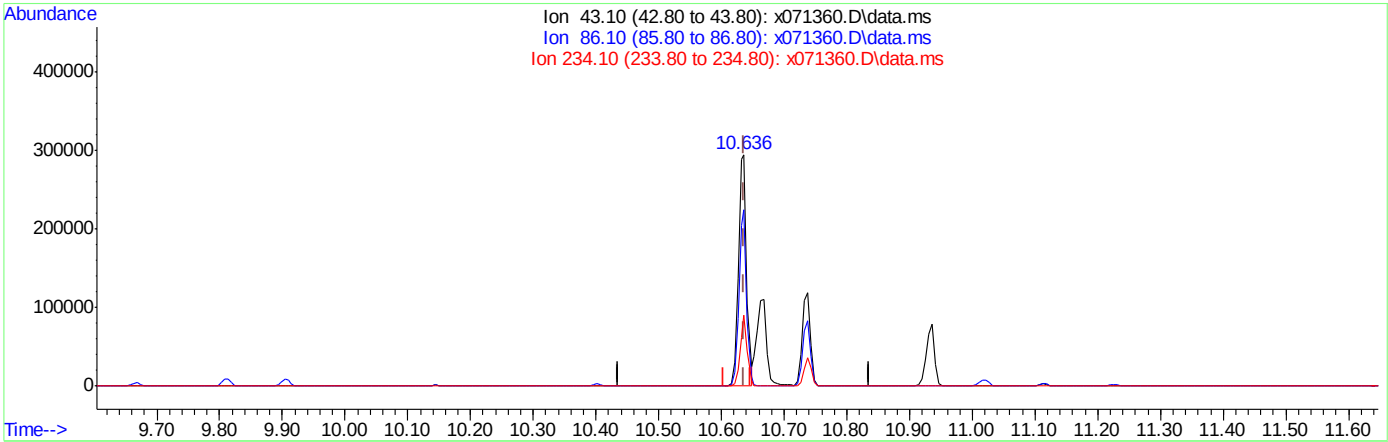
response 342749

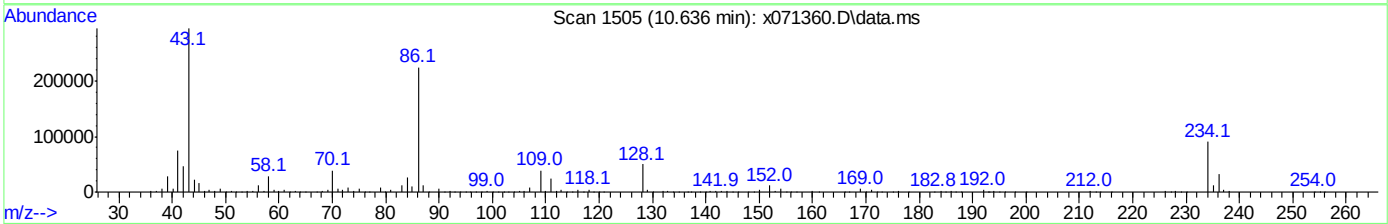
Ion	Exp%	Act%
108.10	100	100
80.10	35.50	44.57
107.10	27.70	28.29
0.00	0.00	0.00

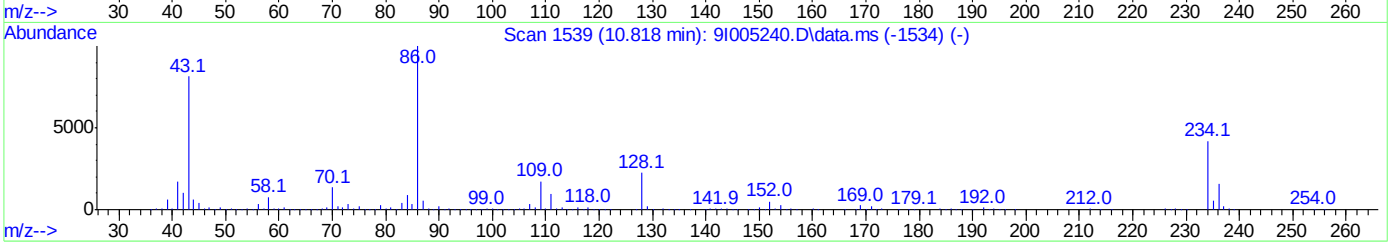
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071360.D
Acq On : 23 Jun 2020 11:46 am
Operator : marthav
Sample : ic2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 23 14:01:06 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071360.D\data.ms

(138) Diallate

10.636min (0.000) 40.34ppm

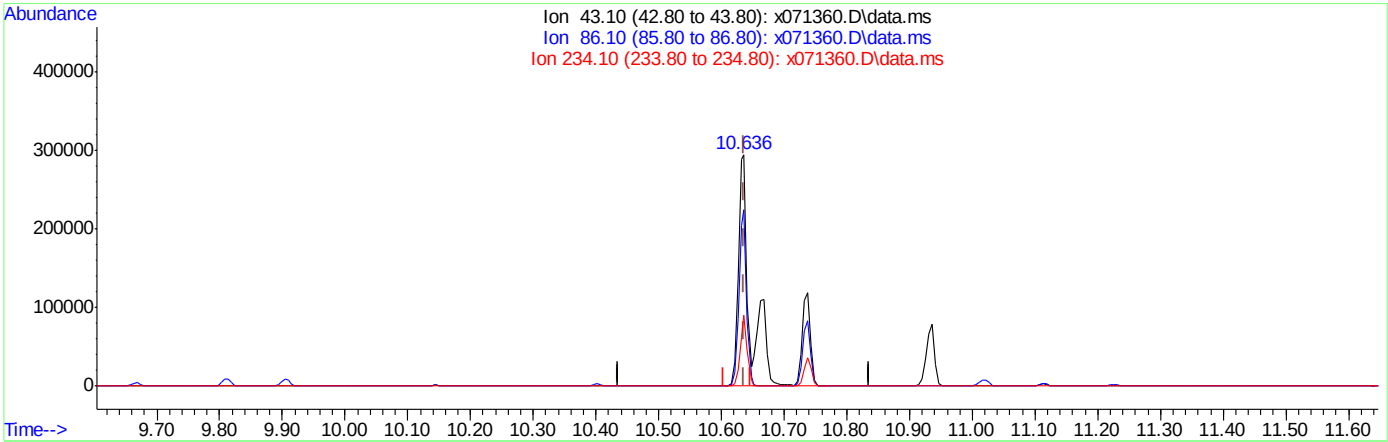
response 284269

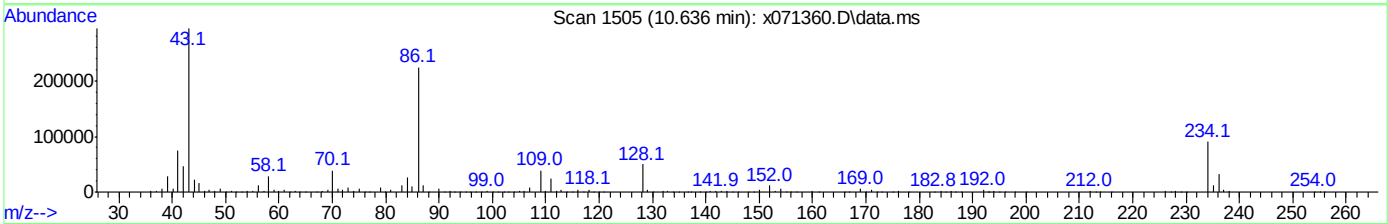
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	77.18#
234.10	51.50	30.56
0.00	0.00	0.00

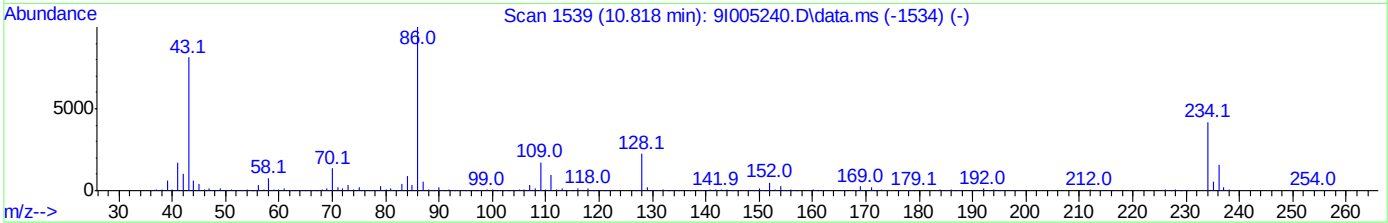
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071360.D
Acq On : 23 Jun 2020 11:46 am
Operator : marthav
Sample : ic2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 23 14:01:06 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071360.D\data.ms

(138) Diallate

10.636min (0.000) 73.66ppm m

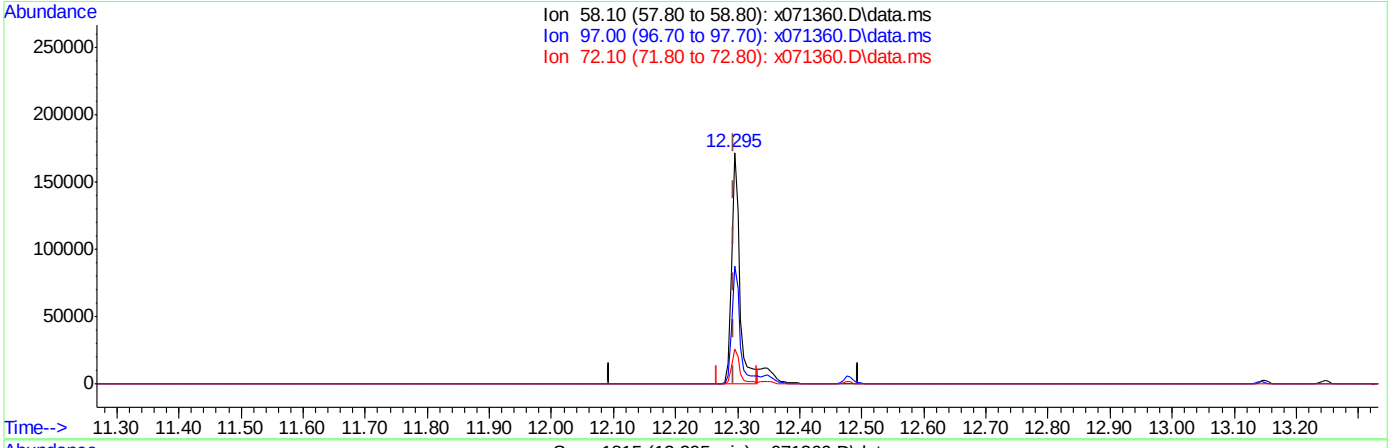
response 519071

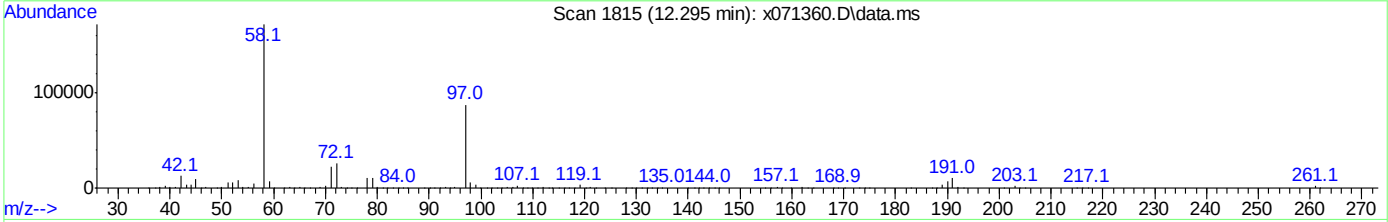
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	76.03#
234.10	51.50	30.57
0.00	0.00	0.00

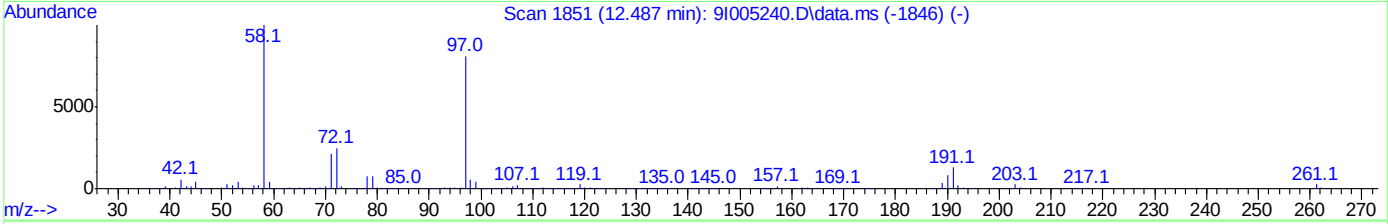
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071360.D
Acq On : 23 Jun 2020 11:46 am
Operator : marthav
Sample : ic2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 23 14:01:06 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071360.D\data.ms

(144) Methapyrilene

12.295min (0.000) 20.65ppm

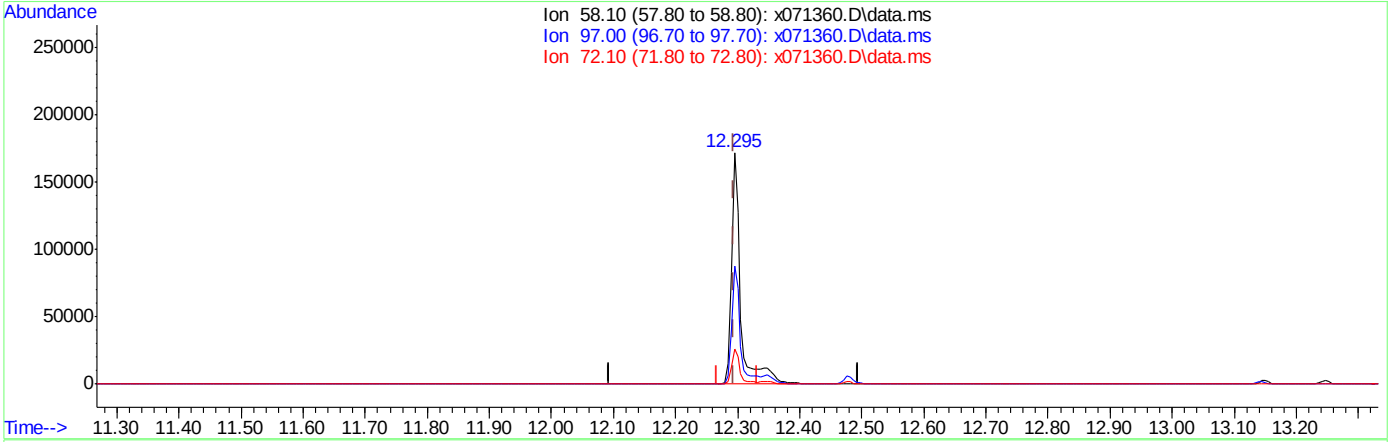
response 164618

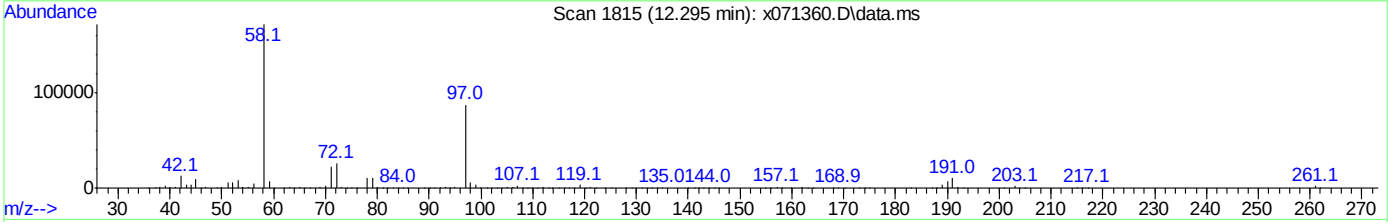
Ion	Exp%	Act%
58.10	100	100
97.00	80.90	50.84#
72.10	24.80	15.37
0.00	0.00	0.00

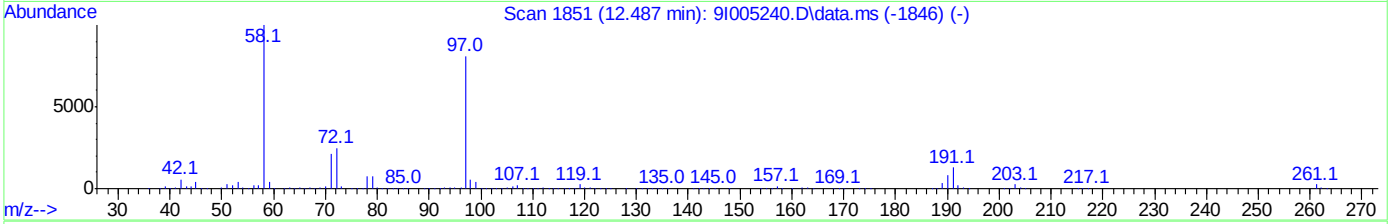
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071360.D
Acq On : 23 Jun 2020 11:46 am
Operator : marthav
Sample : ic2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 23 14:01:06 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071360.D\data.ms

(144) Methapyrilene

12.295min (0.000) 23.18ppm m

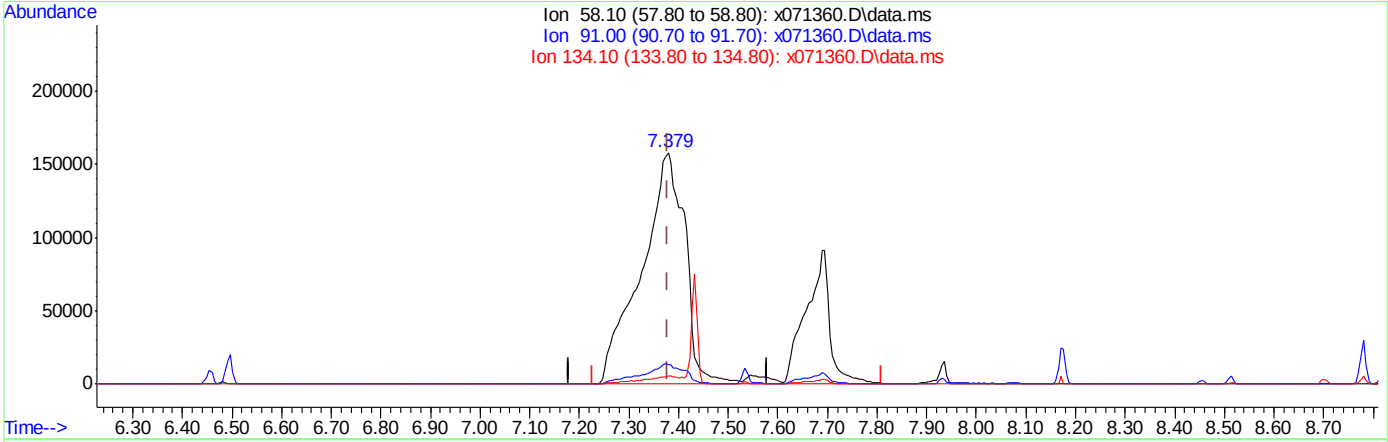
response 185003

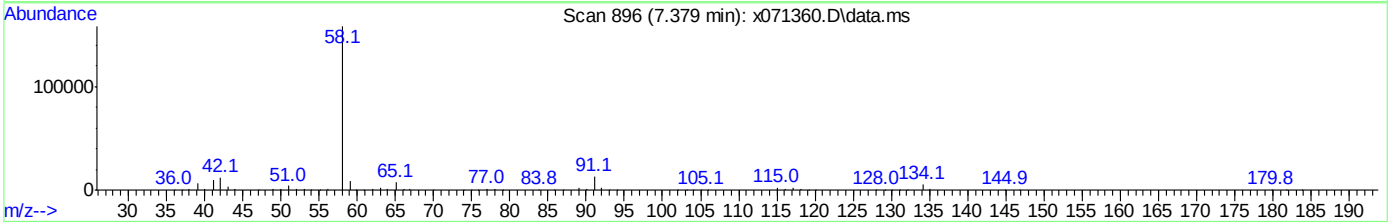
Ion	Exp%	Act%
58.10	100	100
97.00	80.90	51.00
72.10	24.80	15.30
0.00	0.00	0.00

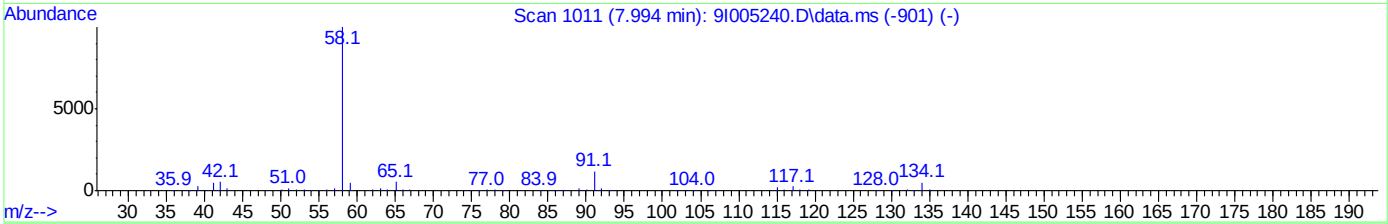
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071360.D
Acq On : 23 Jun 2020 11:46 am
Operator : marthav
Sample : ic2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 23 14:01:06 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071360.D\data.ms

(122) A,A-Dimethylphenethylamine

7.379min (0.000) 68.93ppm m

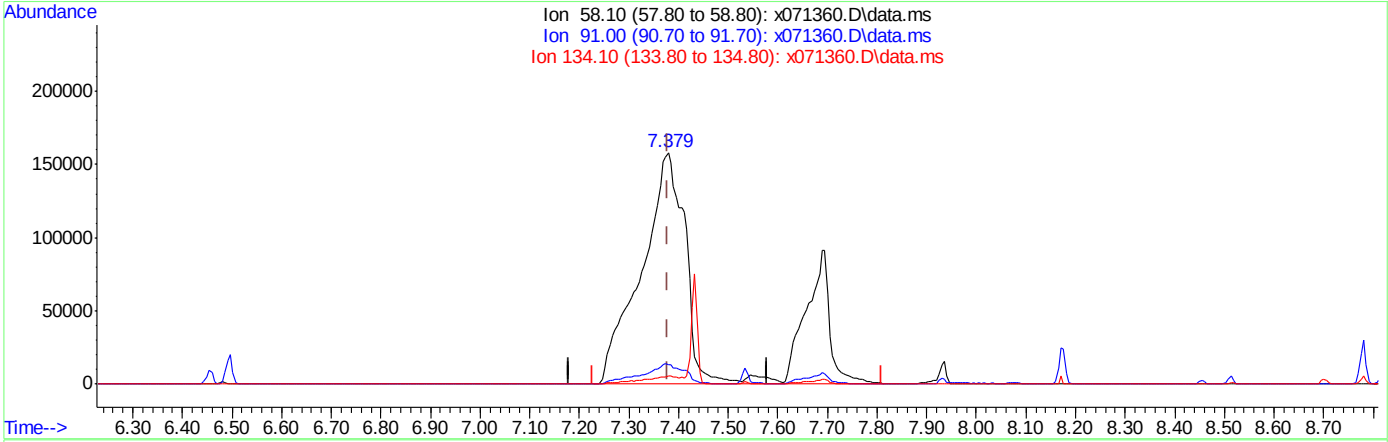
response 1293311

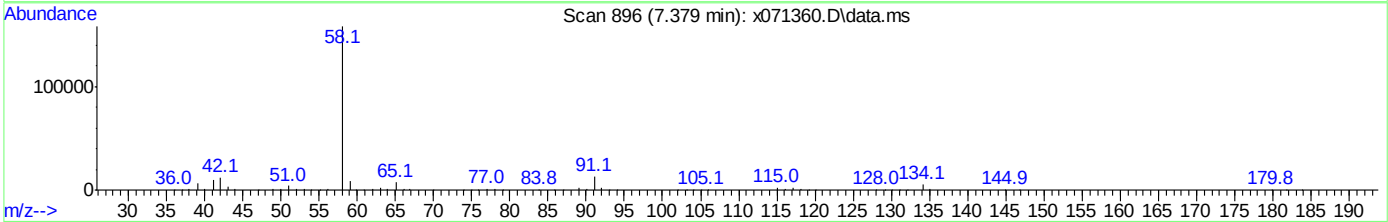
Ion	Exp%	Act%
58.10	100	100
91.00	11.70	8.30
134.10	5.10	3.68
0.00	0.00	0.00

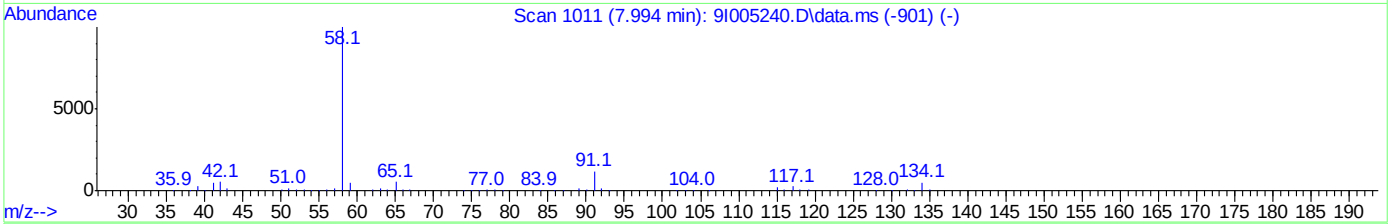
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071360.D
Acq On : 23 Jun 2020 11:46 am
Operator : marthav
Sample : ic2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 23 14:01:06 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071360.D\data.ms

(122) A,A-Dimethylphenethylamine

7.379min (0.000) 68.93ppm m

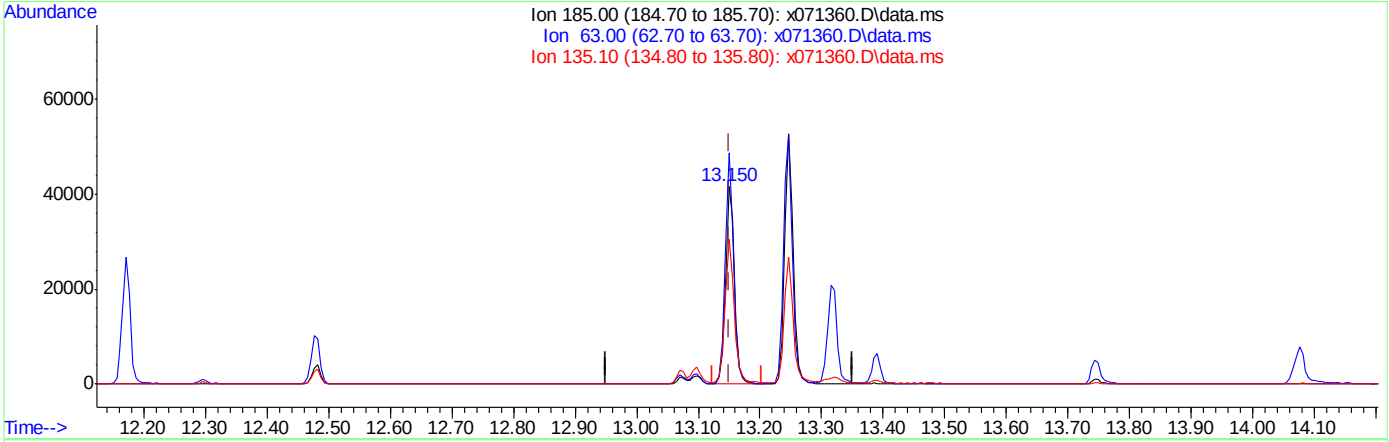
response 1293311

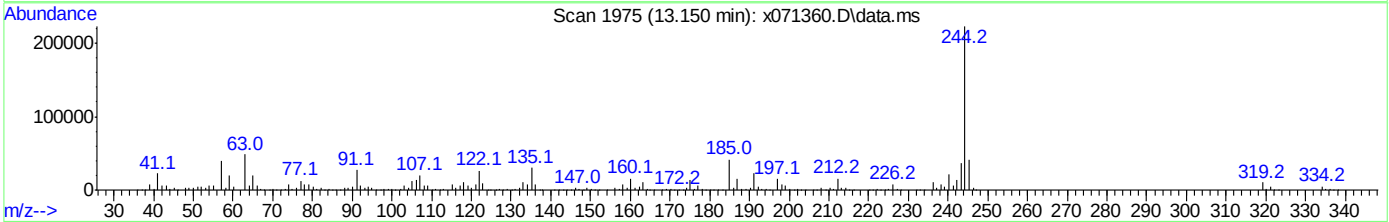
Ion	Exp%	Act%
58.10	100	100
91.00	11.70	8.30
134.10	5.10	3.68
0.00	0.00	0.00

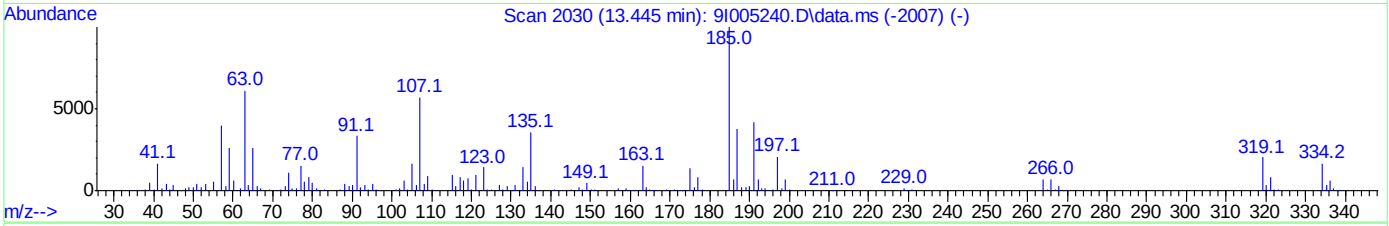
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071360.D
Acq On : 23 Jun 2020 11:46 am
Operator : marthav
Sample : ic2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 23 14:16:35 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071360.D\data.ms

(147) Aramite

13.150min (0.000) 25.40ppm

response 40679

Ion	Exp%	Act%
185.00	100	100
63.00	61.10	116.81#
135.10	35.60	72.41#
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 06/24/20 14:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071361.D
Acq On : 23 Jun 2020 12:12 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 23 16:55:26 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	0.000	152	0m	40.00	ppm		-6.00
22) Naphthalene-d8	0.000	136	0m	40.00	ppm		-7.43
43) Acenaphthene-d10	0.000	164	0m	40.00	ppm		-9.48
70) Phenanthrene-d10	0.000	188	0m	40.00	ppm		-11.22
92) Chrysene-d12	0.000	240	0m	40.00	ppm		-14.49
102) Perylene-d12	0.000	264	0m	40.00	ppm		-16.82
110) 1,4-Dichlorobenzene-d4A	6.005	152	164144	40.00	ppm		0.00
120) Naphthalene-d8A	7.433	136	698026	40.00	ppm		0.00
127) Acenaphthene-d10A	9.476	164	366185	40.00	ppm		0.00
136) Phenanthrene-d10A	11.225	188	677538	40.00	ppm		0.00
146) Chrysene-d12A	14.493	240	429861	40.00	ppm		0.00
153) Perylene-d12A	16.820	264	357481	40.00	ppm		0.00
System Monitoring Compounds							
7) 2-Fluorophenol	0.000	112	0d	0.00	ppm		
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#			
9) Phenol-d5	0.000	99	0d	0.00	ppm		
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#			
23) Nitrobenzene-d5	0.000	82	0d	0.00	ppm		
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#			
47) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm		
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#			
75) 2,4,6-Tribromophenol	0.000	330	0d	0.00	ppm		
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#			
95) Terphenyl-d14	0.000	244	0d	0.00	ppm		
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#			
Target Compounds							Qvalue
111) 2-Picoline	3.983	93	482356	59.18	ppm		88
112) N-Nitrosomethylethylamine	4.111	42	335860	116.37	ppm	#	53
113) Methyl methanesulfonate	4.438	80	237961	59.04	ppm		90
114) N-Nitrosodiethylamine	4.855	102	201274	62.12	ppm	#	22
115) Ethyl methanesulfonate	5.186	79	330136	57.85	ppm		96
116) Pentachloroethane	5.700	167	140826	60.68	ppm		94
117) N-Nitrosopyrrolidine	6.438	100	185562	55.98	ppm	#	47
118) N-Nitrosomorpholine	6.481	56	332467	96.03	ppm	#	66
119) O-Toluidine	6.497	106	694865	69.07	ppm		99
121) N-Nitrosopiperidine	6.818	42	391759	102.45	ppm	#	62
122) A,A-Dimethylphenethyla...	7.401	58	1613562m	79.73	ppm		
123) Hexachloropropene	7.561	213	198594	53.49	ppm		99
124) N-Nitrosodi-n-butylamine	7.936	84	354651	67.10	ppm	#	53
125) p-Phenylenediamine	7.930	108	407415m	93.67	ppm		
126) Isosafrole	8.176	162	302122	66.11	ppm		83
128) Safrole	8.781	162	308936	65.20	ppm		87
129) 1-Chloronaphthalene	8.856	162	735524	64.70	ppm		98
130) Diphenyl Ether	8.946	170	509112	65.94	ppm		92
131) 1,4-Naphthoquinone	9.037	158	305070	86.96	ppm		79
132) Pentachlorobenzene	9.669	250	245692	46.59	ppm		99
133) 1-Naphthylamine	9.813	143	798365	68.42	ppm		94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071361.D
Acq On : 23 Jun 2020 12:12 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 23 16:55:26 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration

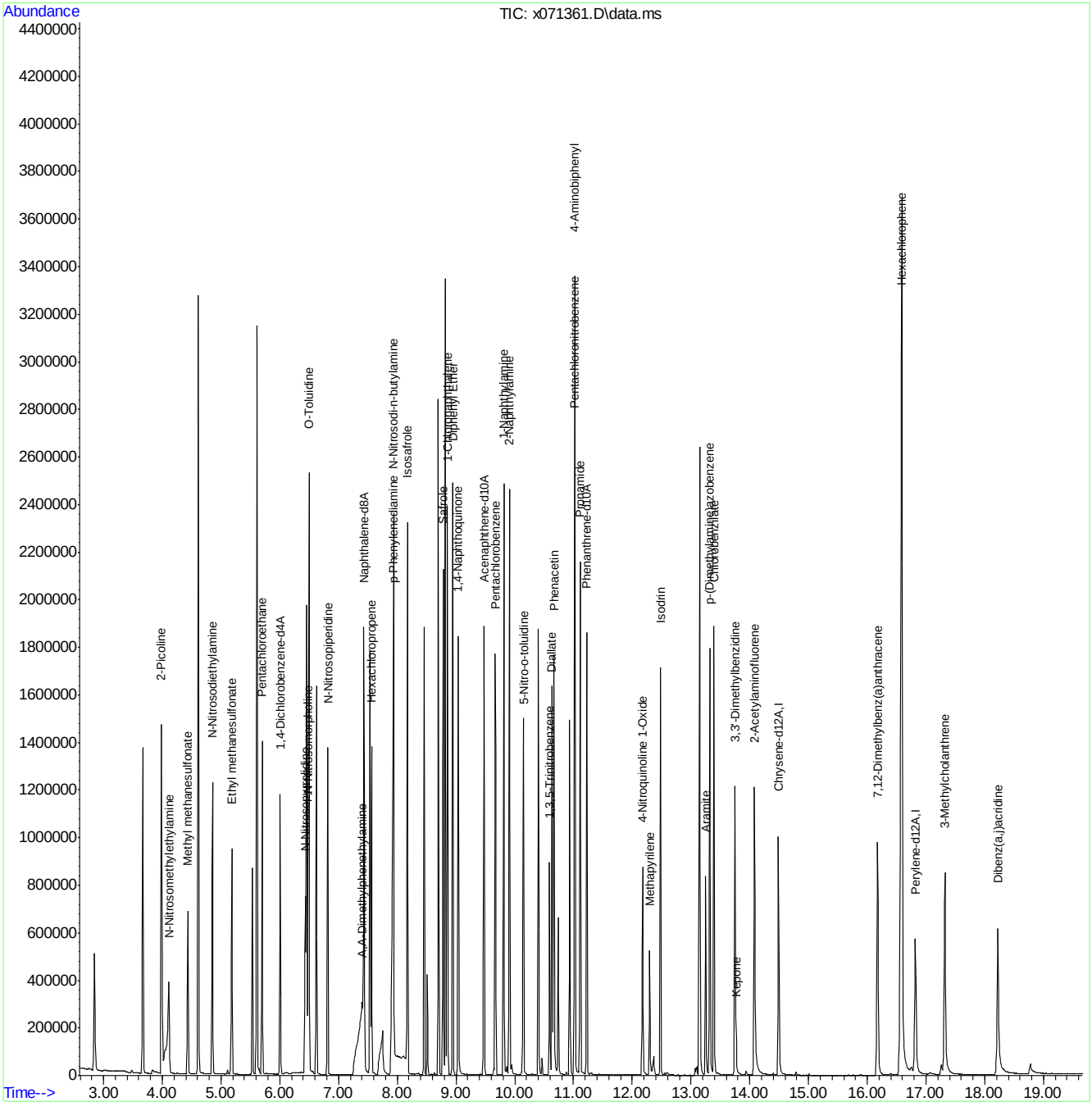
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
134) 2-Naphthylamine	9.909	143	845717	71.16	ppm		96
135) 5-Nitro-o-toluidine	10.150	152	253152	62.16	ppm		86
137) 1,3,5-Trinitrobenzene	10.594	75	217752	51.09	ppm		86
138) Diallate	10.631	43	644225m	86.11	ppm		
139) Phenacetin	10.669	108	433725	59.44	ppm		91
140) 4-Aminobiphenyl	11.022	169	833196	72.94	ppm		99
141) Pronamide	11.118	173	353013	59.04	ppm		98
142) Pentachloronitrobenzene	11.016	237	83820	48.61	ppm		90
143) 4-Nitroquinoline 1-Oxide	12.177	190	77483	91.41	ppm		83
144) Methapyrilene	12.295	58	227166m	26.75	ppm		
145) Isodrin	12.482	193	115911	49.30	ppm		87
147) Aramite	13.247	185	116692m	65.43	ppm		
148) p-(Dimethylamine)azobe...	13.322	120	333830	70.62	ppm		86
149) Chlorobenzilate	13.391	139	386556	71.38	ppm	#	72
150) Kepone	13.771	272	3034	1.98	ppm		87
151) 3,3'-Dimethylbenzidine	13.750	212	456299	71.20	ppm		97
152) 2-Acetylaminofluorene	14.081	181	404560	64.28	ppm		93
154) 7,12-Dimethylbenz(a)an...	16.178	256	327919	61.76	ppm		97
155) Hexachlorophene	16.590	196	614267	942.16	ppm		99
156) 3-Methylcholanthrene	17.322	268	302821	63.88	ppm		94
157) Dibenz(a,j)acridine	18.221	279	416799	52.87	ppm		97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071361.D
Acq On : 23 Jun 2020 12:12 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 23 16:55:26 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: SX2918-IC2918
Lab FileID: X071361.D
Injection Time: 06/23/20 12:12

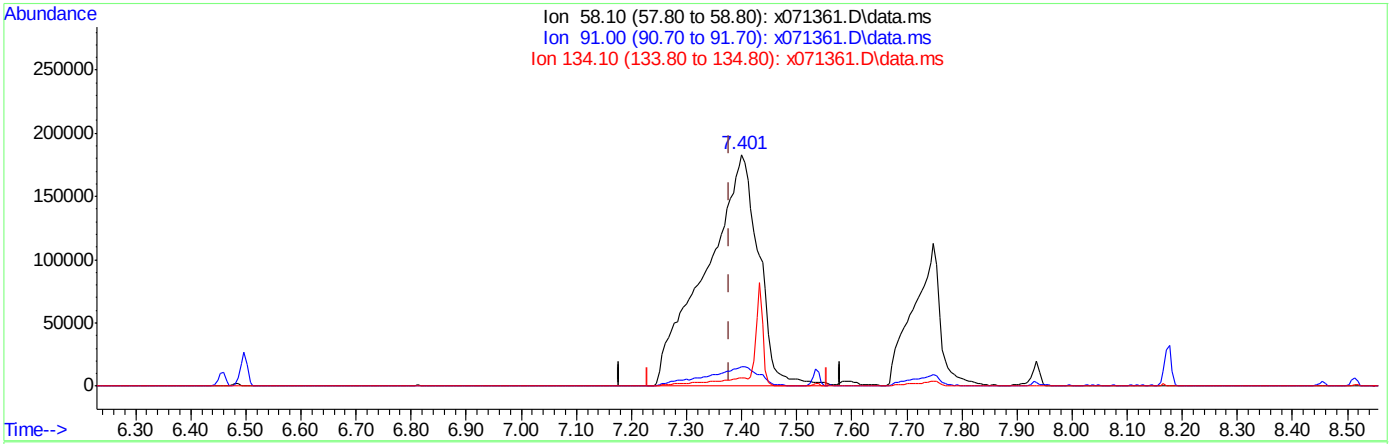
Method: EPA 625.1
Analyst approved: 06/24/20 09:50 Martha Valls
Supervisor approved: 06/24/20 14:07 Naresh Jiawan

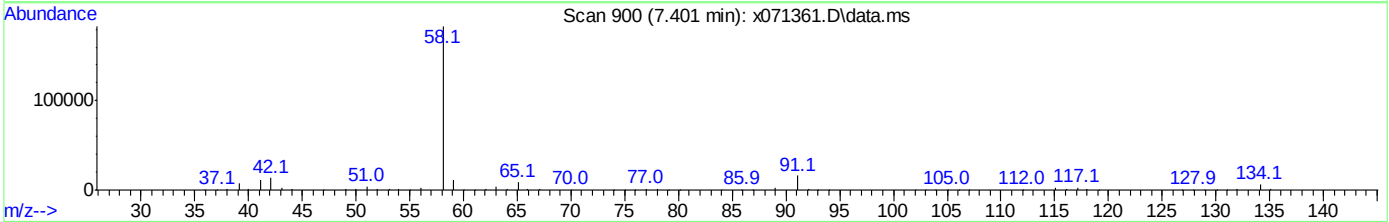
Parameter	CAS	Sig#	R.T. (min.)	Reason
A,A-Dimethylphenethylamine	122-09-8		7.40	Split peak
p-Phenylenediamine	106-50-3		7.93	Split peak
Diallate	2303-16-4		10.63	Split peak
Methapyrilene	91-80-5		12.29	Split peak
Aramite	140-57-8		13.25	Split peak

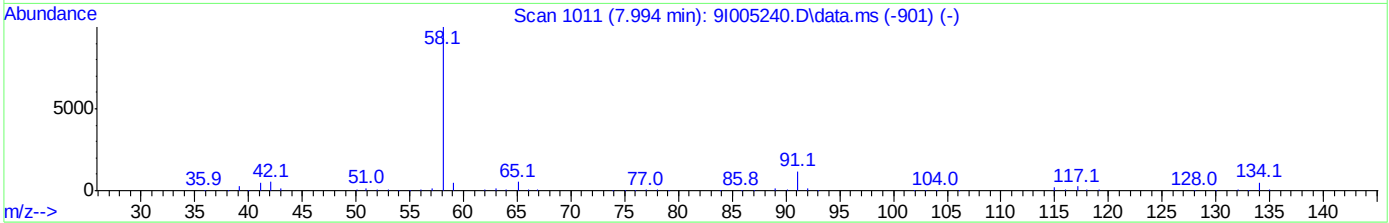
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071361.D
Acq On : 23 Jun 2020 12:12 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 23 14:01:08 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071361.D\data.ms

(122) A,A-Dimethylphenethylamine

7.401min (+0.022) 61.38ppm

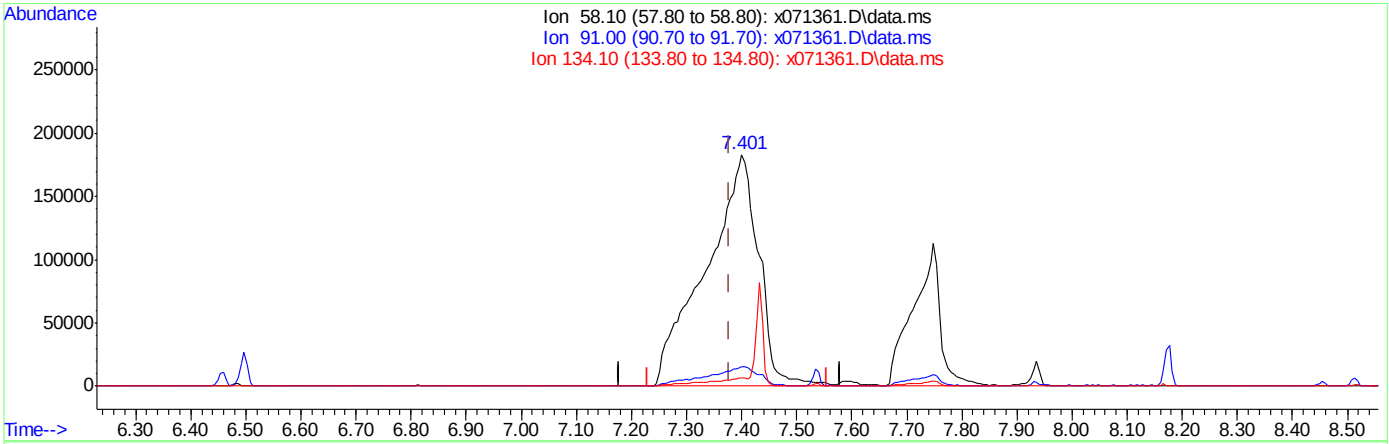
response 1216131

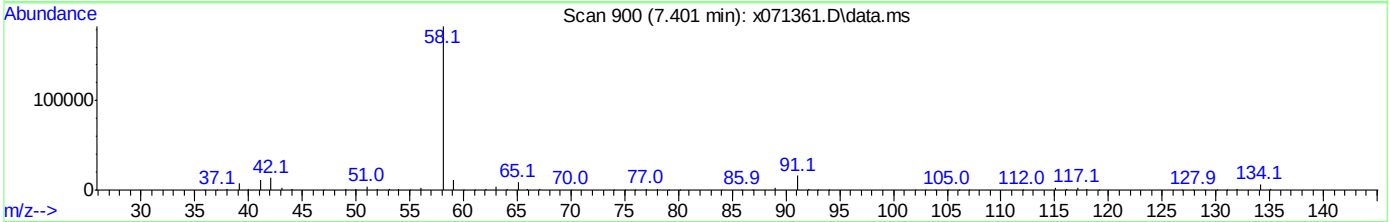
Ion	Exp%	Act%
58.10	100	100
91.00	11.70	8.50
134.10	5.10	3.64
0.00	0.00	0.00

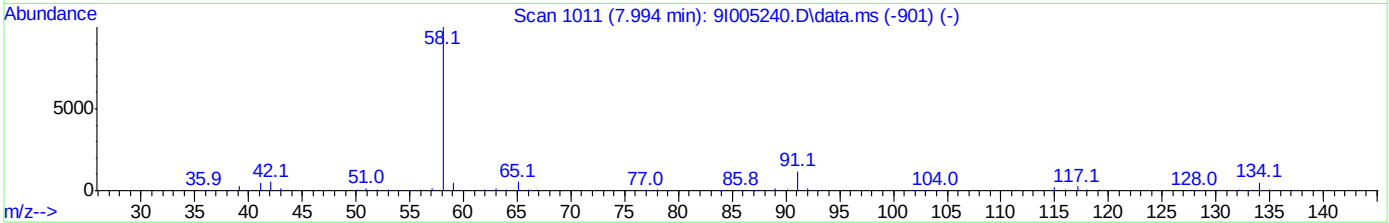
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071361.D
Acq On : 23 Jun 2020 12:12 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 23 14:01:08 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071361.D\data.ms

(122) A,A-Dimethylphenethylamine

7.401min (+0.022) 79.73ppm m

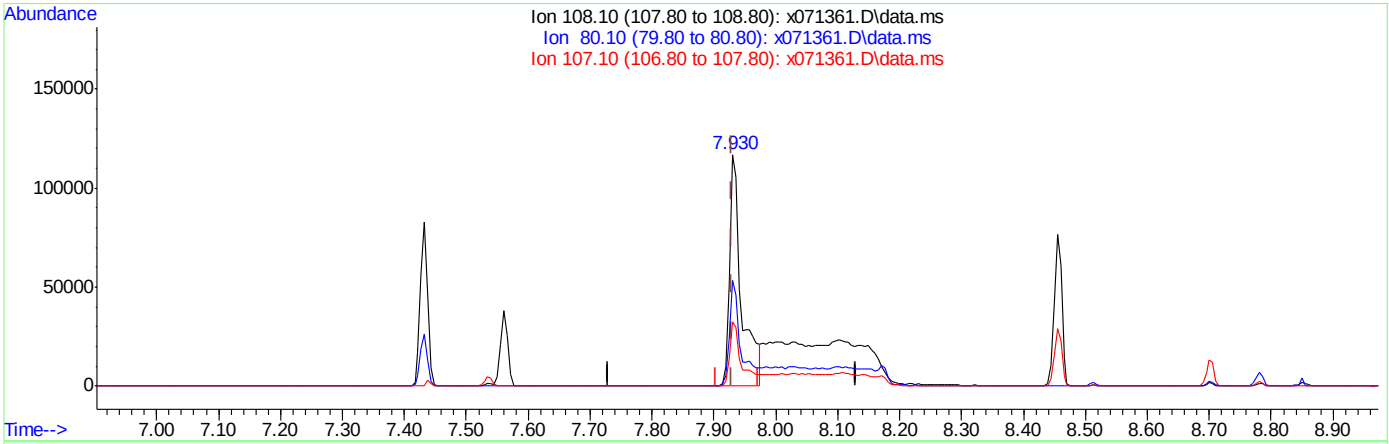
response 1613562

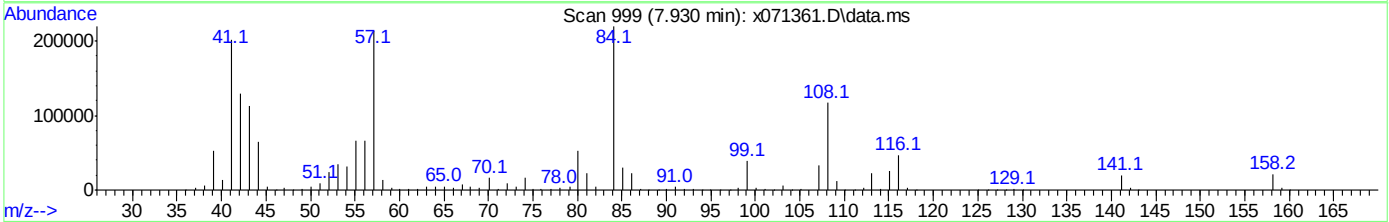
Ion	Exp%	Act%
58.10	100	100
91.00	11.70	8.62
134.10	5.10	3.71
0.00	0.00	0.00

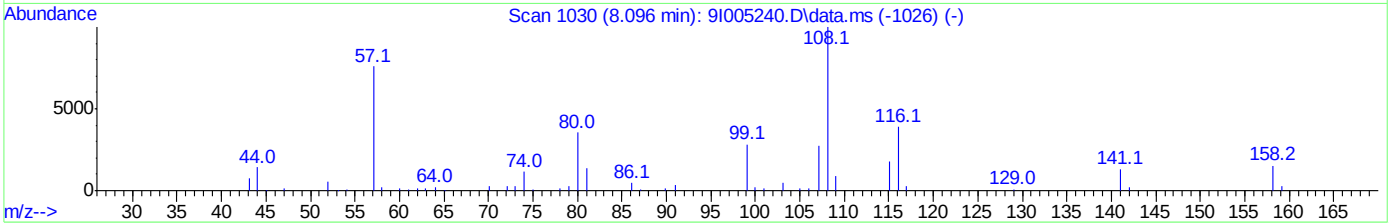
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071361.D
Acq On : 23 Jun 2020 12:12 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 23 14:01:08 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071361.D\data.ms

(125) p-Phenylenediamine

7.930min (+0.000) 29.55ppm

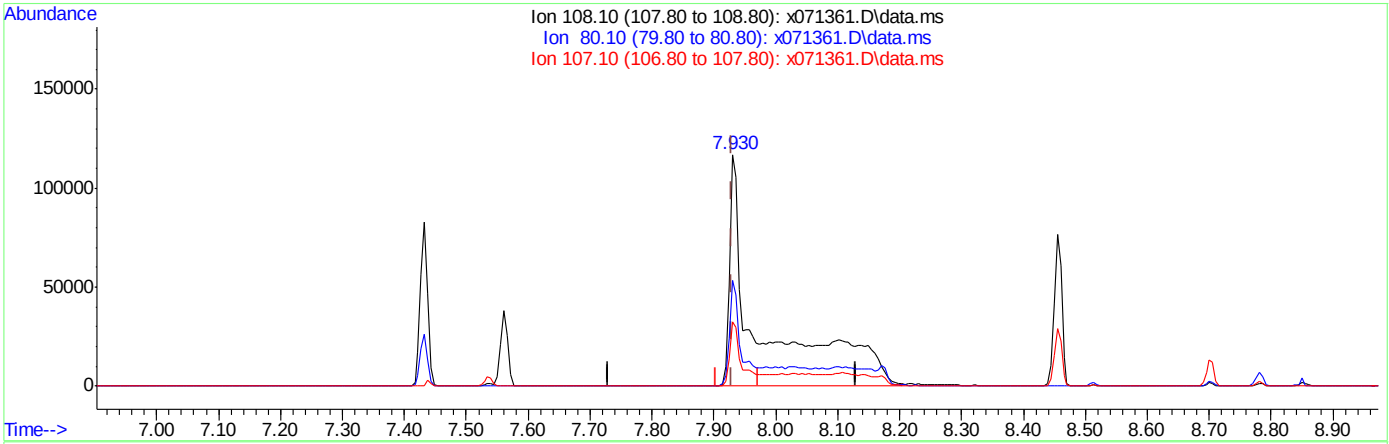
response 156113

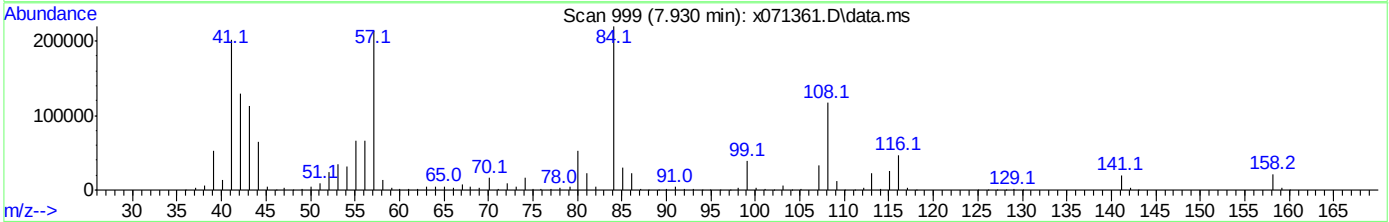
Ion	Exp%	Act%
108.10	100	100
80.10	35.50	45.74
107.10	27.70	27.90
0.00	0.00	0.00

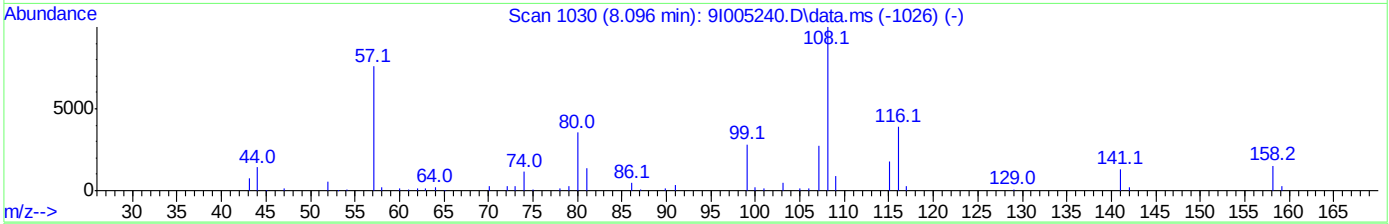
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071361.D
Acq On : 23 Jun 2020 12:12 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 23 14:01:08 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071361.D\data.ms

(125) p-Phenylenediamine

7.930min (+0.000) 93.67ppm m

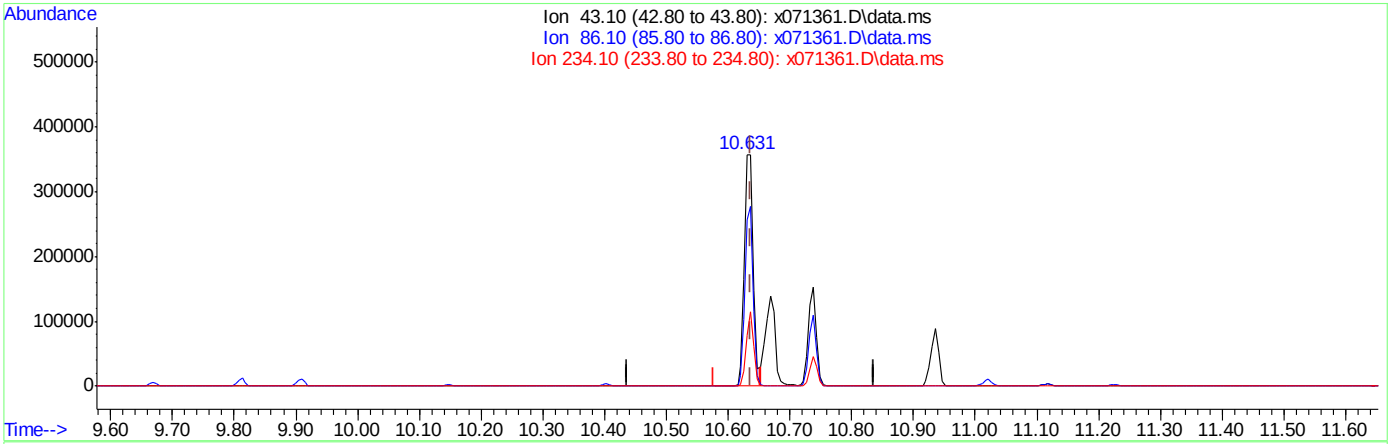
response 407415

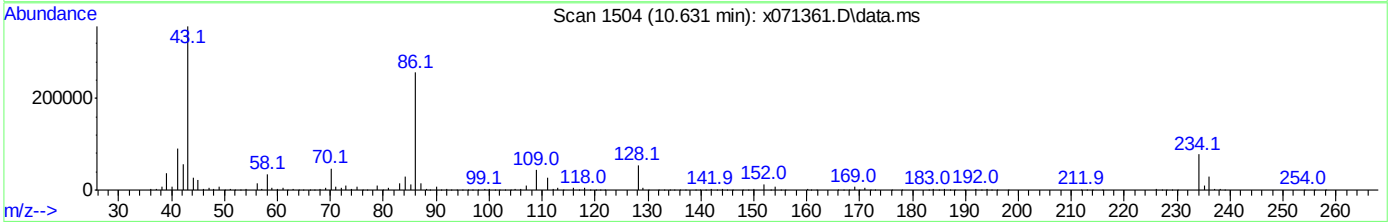
Ion	Exp%	Act%
108.10	100	100
80.10	35.50	45.61
107.10	27.70	27.91
0.00	0.00	0.00

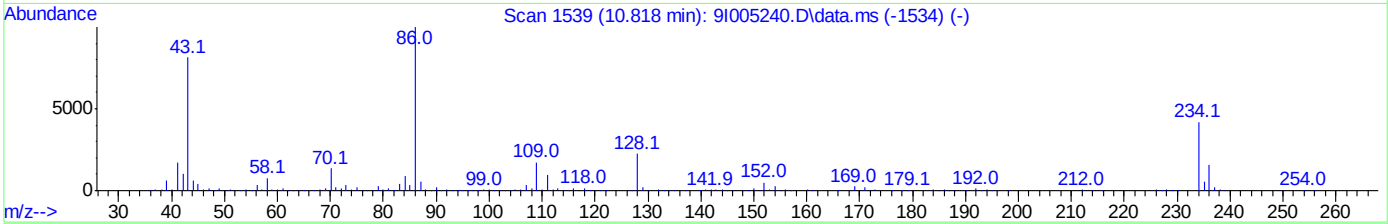
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071361.D
Acq On : 23 Jun 2020 12:12 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 23 14:01:08 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071361.D\data.ms

(138) Diallate

10.631min (-0.005) 47.83ppm

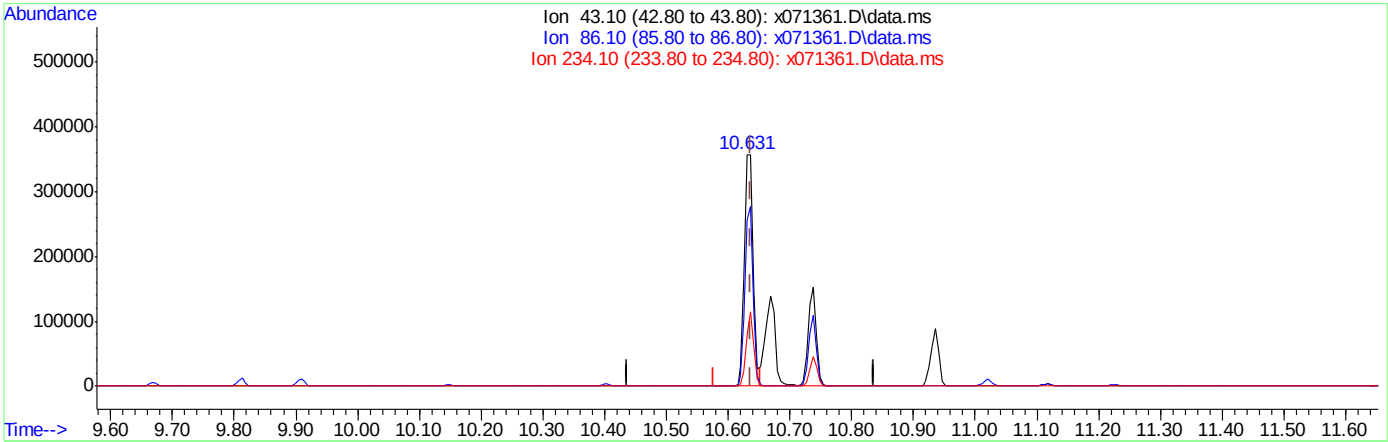
response 357785

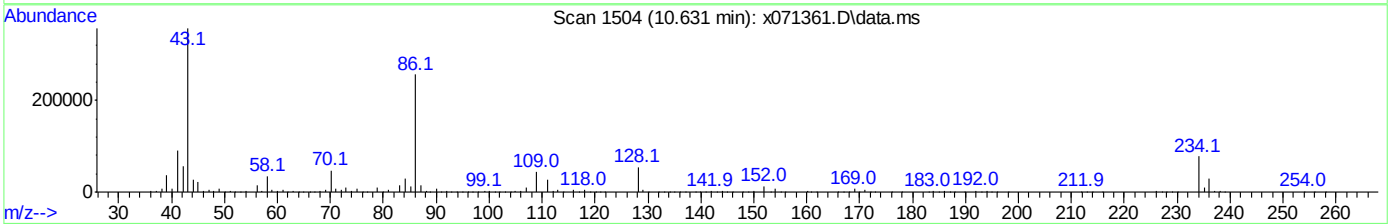
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	74.60#
234.10	51.50	22.72
0.00	0.00	0.00

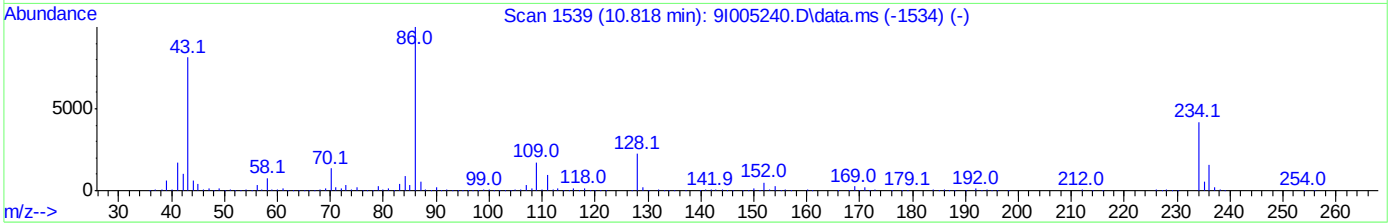
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071361.D
Acq On : 23 Jun 2020 12:12 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 23 14:01:08 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071361.D\data.ms

(138) Diallate

10.631min (-0.005) 86.11ppm m

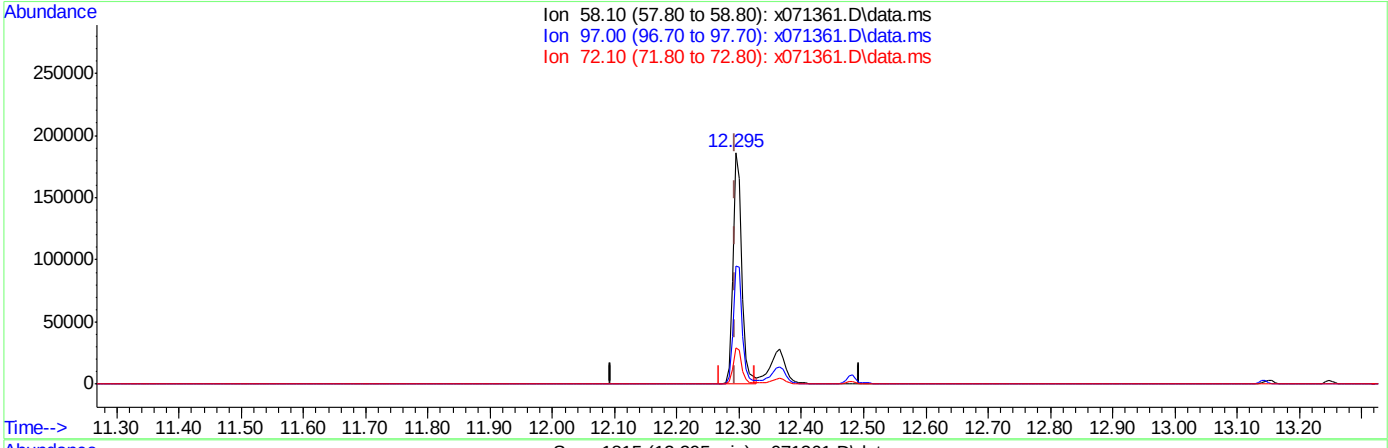
response 644225

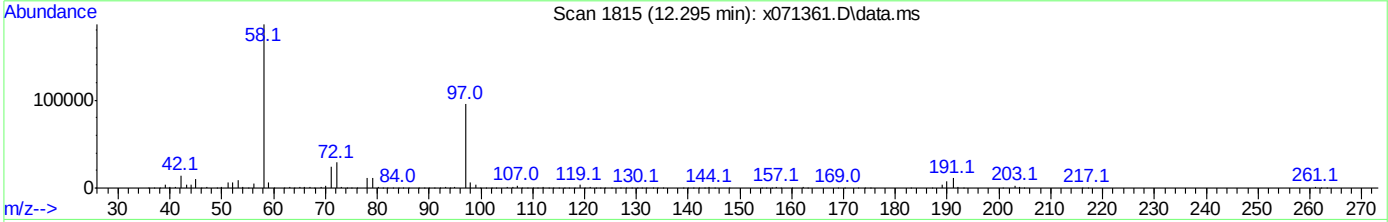
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	71.83#
234.10	51.50	21.85
0.00	0.00	0.00

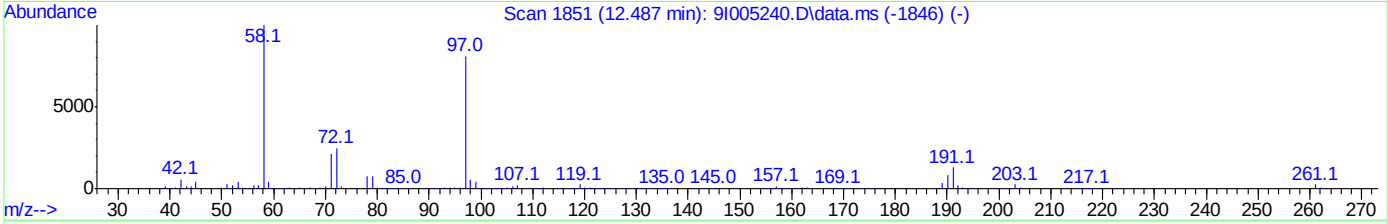
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071361.D
Acq On : 23 Jun 2020 12:12 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 23 14:01:08 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071361.D\data.ms

(144) Methapyrilene

12.295min (+0.000) 21.05ppm

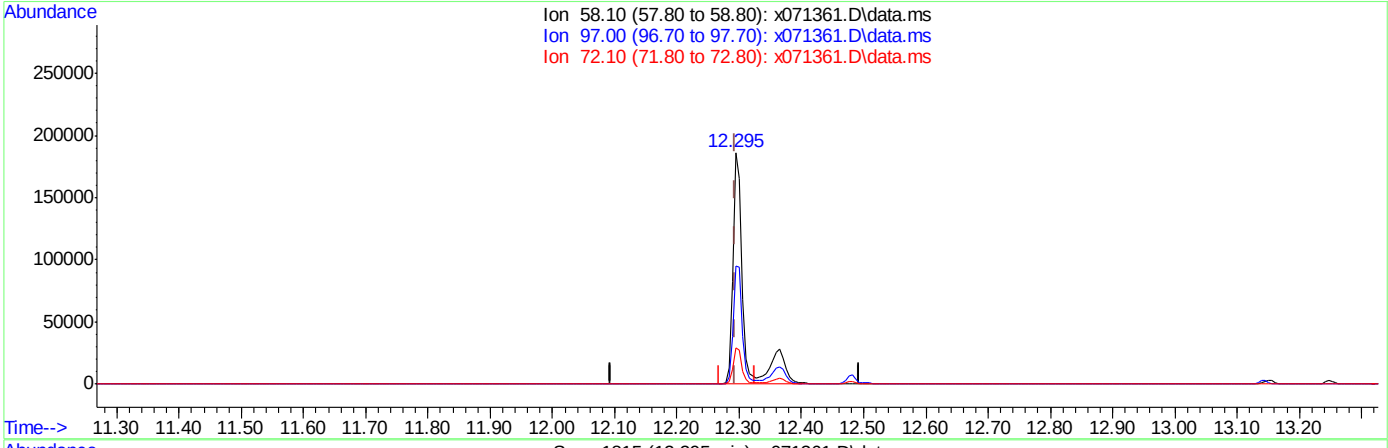
response 178201

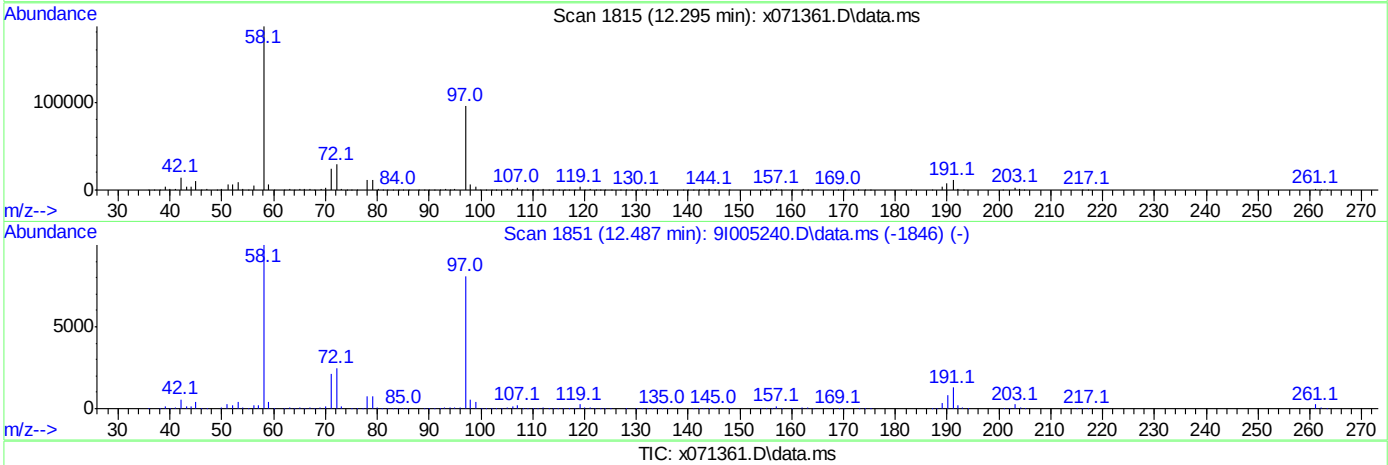
Ion	Exp%	Act%
58.10	100	100
97.00	80.90	51.08
72.10	24.80	15.54
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071361.D
Acq On : 23 Jun 2020 12:12 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 23 14:01:08 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration





TIC: x071361.D\data.ms

(144) Methapyrilene

12.295min (+0.000) 26.75ppm m

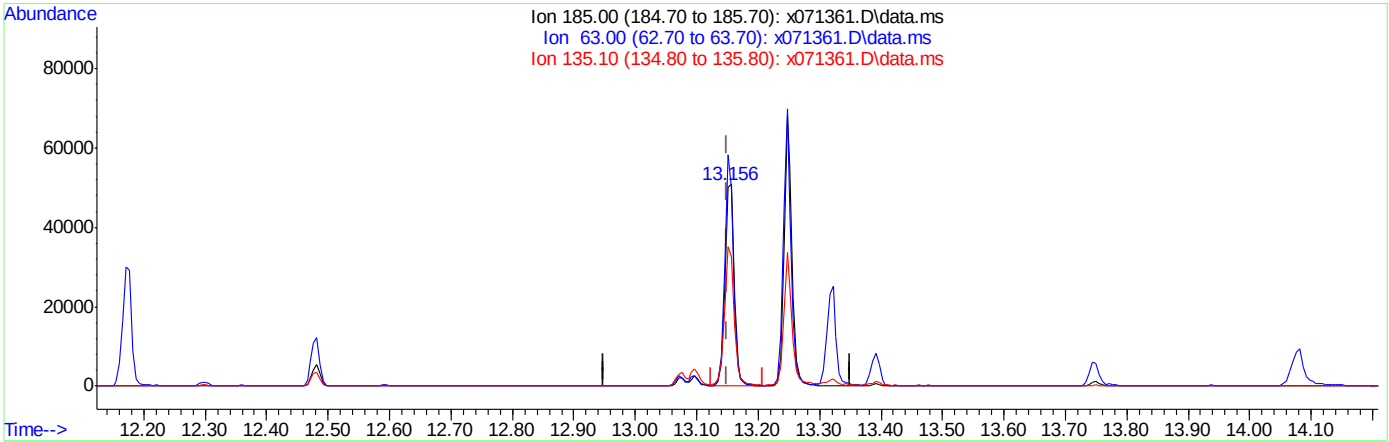
response 227166

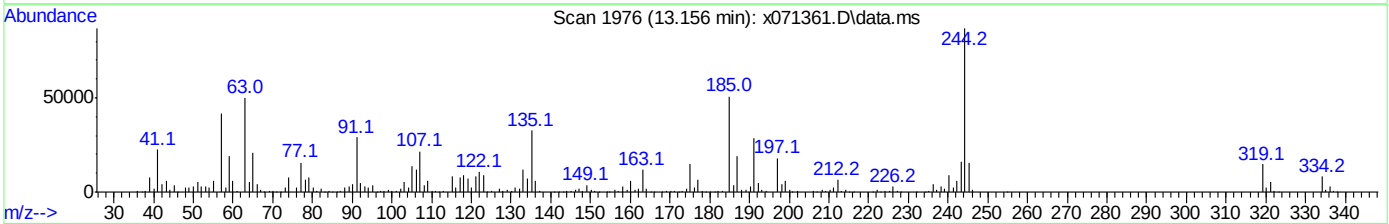
Ion	Exp%	Act%
58.10	100	100
97.00	80.90	51.12
72.10	24.80	15.55
0.00	0.00	0.00

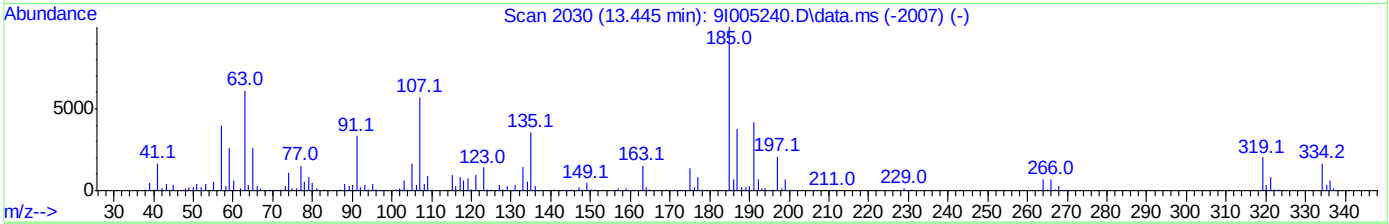
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071361.D
Acq On : 23 Jun 2020 12:12 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 23 14:01:08 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071361.D\data.ms

(147) Aramite

13.156min (+0.006) 30.90ppm

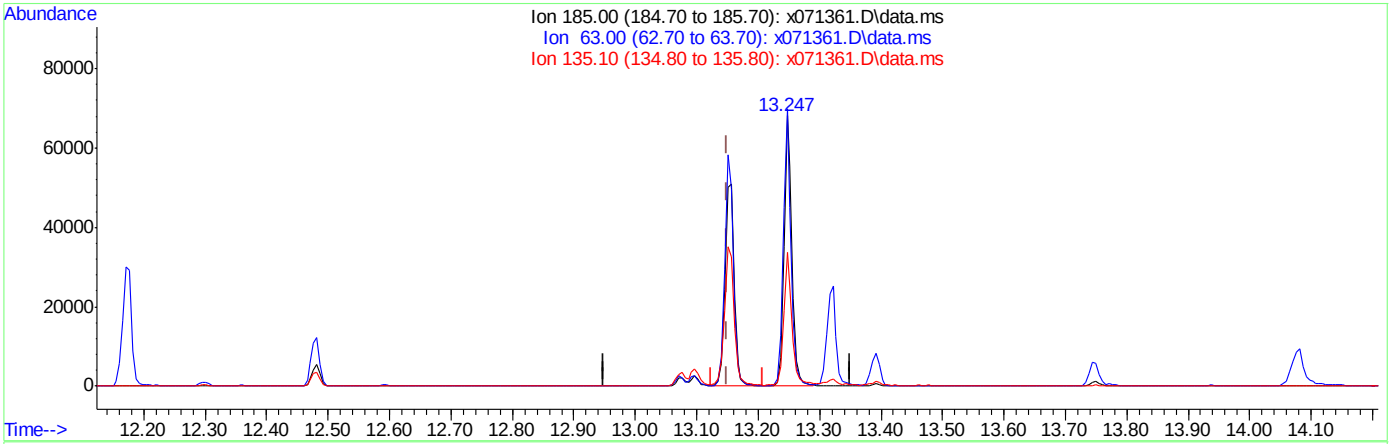
response 52639

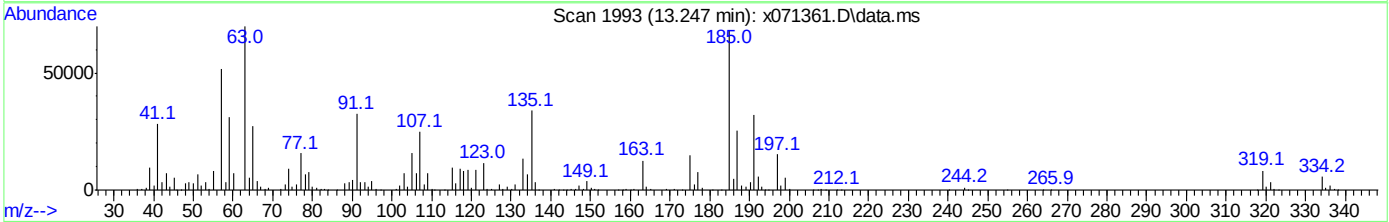
Ion	Exp%	Act%
185.00	100	100
63.00	61.10	97.59#
135.10	35.60	63.72
0.00	0.00	0.00

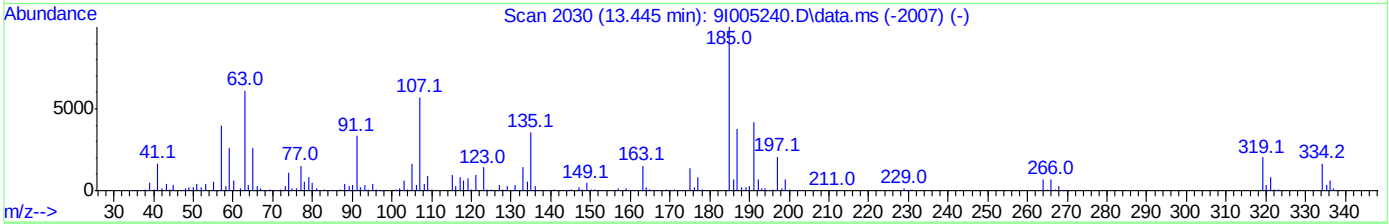
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071361.D
Acq On : 23 Jun 2020 12:12 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 23 14:01:08 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071361.D\data.ms

(147) Aramite

13.247min (+0.096) 65.43ppm m

response 116692

Ion	Exp%	Act%
185.00	100	100
63.00	61.10	102.56#
135.10	35.60	49.62
0.00	0.00	0.00

X071362.D

Manual Integrations APPROVED (compounds with "m" flag)

Naresh Jiawan 06/24/20 14:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071362.D
Acq On : 23 Jun 2020 12:37 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 23 16:55:40 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	0.000	152	0m	40.00	ppm	-6.00
22) Naphthalene-d8	0.000	136	0m	40.00	ppm	-7.43
43) Acenaphthene-d10	0.000	164	0m	40.00	ppm	-9.48
70) Phenanthrene-d10	0.000	188	0m	40.00	ppm	-11.22
92) Chrysene-d12	0.000	240	0m	40.00	ppm	-14.49
102) Perylene-d12	0.000	264	0m	40.00	ppm	-16.82
110) 1,4-Dichlorobenzene-d4A	6.005	152	162385	40.00	ppm	0.00
120) Naphthalene-d8A	7.433	136	698390	40.00	ppm	0.00
127) Acenaphthene-d10A	9.476	164	364024	40.00	ppm	0.00
136) Phenanthrene-d10A	11.225	188	682783	40.00	ppm	0.00
146) Chrysene-d12A	14.493	240	432572	40.00	ppm	0.00
153) Perylene-d12A	16.825	264	357392	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	0.000	112	0d	0.00	ppm	
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#		
9) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#		
23) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#		
47) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#		
75) 2,4,6-Tribromophenol	0.000	330	0d	0.00	ppm	
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#		
95) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#		
Target Compounds						Qvalue
111) 2-Picoline	3.983	93	578839	71.78	ppm	86
112) N-Nitrosomethylethylamine	4.111	42	403837	141.44	ppm #	54
113) Methyl methanesulfonate	4.443	80	288958	72.47	ppm	90
114) N-Nitrosodiethylamine	4.860	102	247345	77.17	ppm #	36
115) Ethyl methanesulfonate	5.186	79	400843	71.00	ppm	95
116) Pentachloroethane	5.700	167	171923	74.88	ppm	93
117) N-Nitrosopyrrolidine	6.438	100	228116	69.58	ppm #	20
118) N-Nitrosomorpholine	6.486	56	407544	118.99	ppm #	70
119) O-Toluidine	6.497	106	848373	85.24	ppm	99
121) N-Nitrosopiperidine	6.818	42	477710	124.86	ppm #	59
122) A,A-Dimethylphenethyla...	7.417	58	1993287m	96.58	ppm	
123) Hexachloropropene	7.561	213	245225	66.01	ppm	99
124) N-Nitrosodi-n-butylamine	7.935	84	428055	79.08	ppm #	53
125) p-Phenylenediamine	7.930	108	467834m	116.33	ppm	
126) Isosafrole	8.176	162	367589	80.39	ppm	83
128) Safrole	8.781	162	384141	81.55	ppm	86
129) 1-Chloronaphthalene	8.855	162	898137	79.48	ppm	97
130) Diphenyl Ether	8.946	170	623653	81.25	ppm	93
131) 1,4-Naphthoquinone	9.043	158	347003	116.71	ppm	85
132) Pentachlorobenzene	9.668	250	309864	59.10	ppm	98
133) 1-Naphthylamine	9.813	143	976524	84.19	ppm	92

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071362.D
Acq On : 23 Jun 2020 12:37 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 23 16:55:40 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
134) 2-Naphthylamine	9.909	143	1057229	89.49	ppm	96
135) 5-Nitro-o-toluidine	10.150	152	315750	76.78	ppm	82
137) 1,3,5-Trinitrobenzene	10.599	75	274775	63.07	ppm	90
138) Diallate	10.637	43	784030m	104.00	ppm	
139) Phenacetin	10.674	108	541870	72.54	ppm	90
140) 4-Aminobiphenyl	11.027	169	1005962	87.39	ppm	99
141) Pronamide	11.118	173	434232	71.34	ppm	98
142) Pentachloronitrobenzene	11.016	237	105065	60.46	ppm	91
143) 4-Nitroquinoline 1-Oxide	12.177	190	94011	103.40	ppm	82
144) Methapyrilene	12.295	58	273027m	31.81	ppm	
145) Isodrin	12.482	193	143445	60.54	ppm	87
147) Aramite	13.247	185	149117m	81.41	ppm	
148) p-(Dimethylamine)azobe...	13.322	120	418081	90.01	ppm	84
149) Chlorobenzilate	13.391	139	482994	87.52	ppm	72
150) Kepone	13.776	272	9074	5.86	ppm	93
151) 3,3'-Dimethylbenzidine	13.749	212	533573	82.19	ppm	98
152) 2-Acetylaminofluorene	14.081	181	512353	77.94	ppm	91
154) 7,12-Dimethylbenz(a)an...	16.178	256	409390	76.47	ppm	96
155) Hexachlorophene	16.595	196	808908	1125.67	ppm	100
156) 3-Methylcholanthrene	17.328	268	385313	80.55	ppm	92
157) Dibenz(a,j)acridine	18.226	279	538705	65.75	ppm	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071362.D
Acq On : 23 Jun 2020 12:37 pm
Operator : marthav
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Misc : op80734,sx2918,1000,,,1,1,water
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Quant Time: Jun 23 16:55:40 2020
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Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
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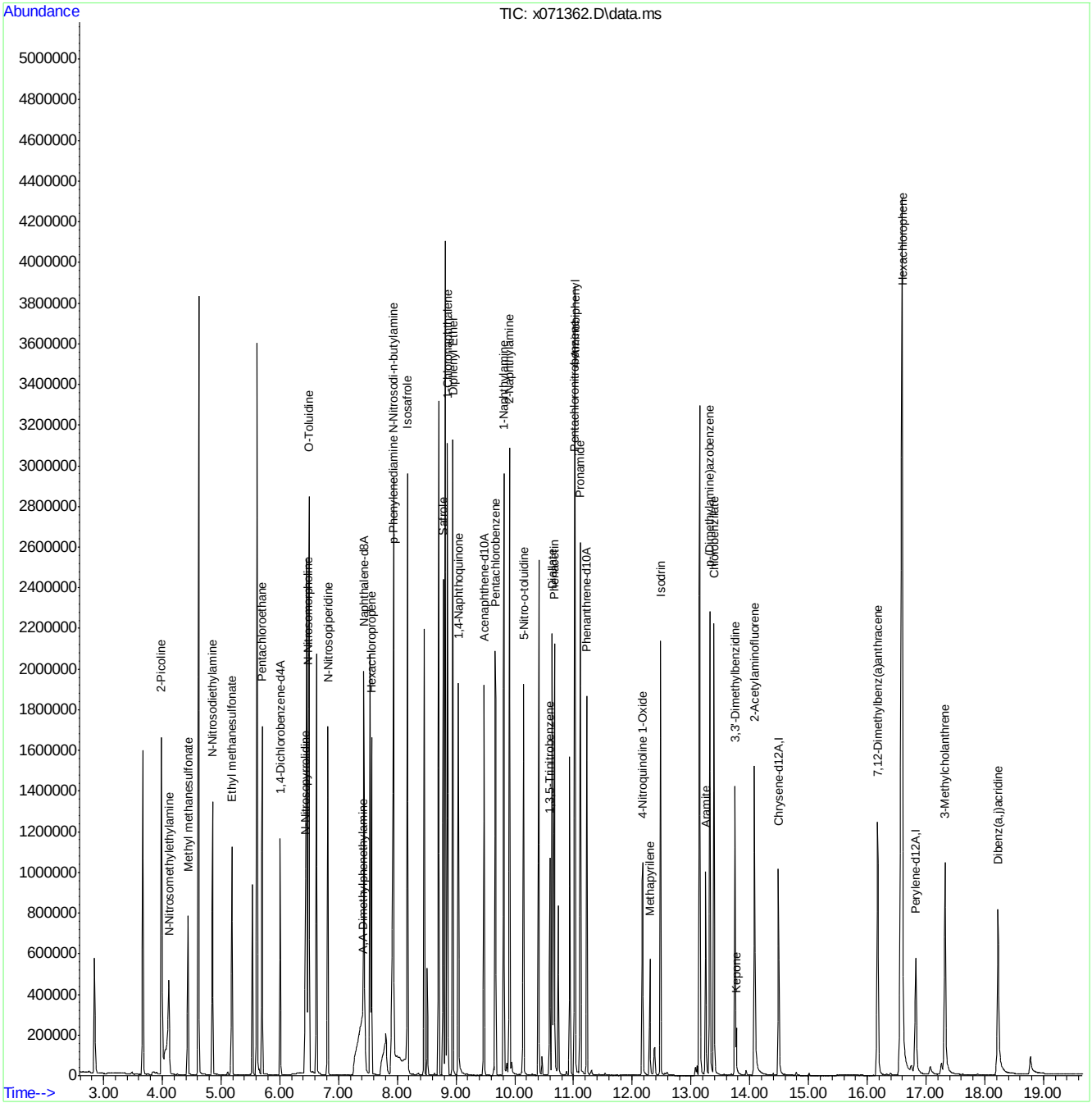


8270DApp9SX-062320.m Tue Jun 23 19:10:25 2020 Page: 3

Manual Integration Approval Summary

Sample Number: SX2918-IC2918
Lab FileID: X071362.D
Injection Time: 06/23/20 12:37

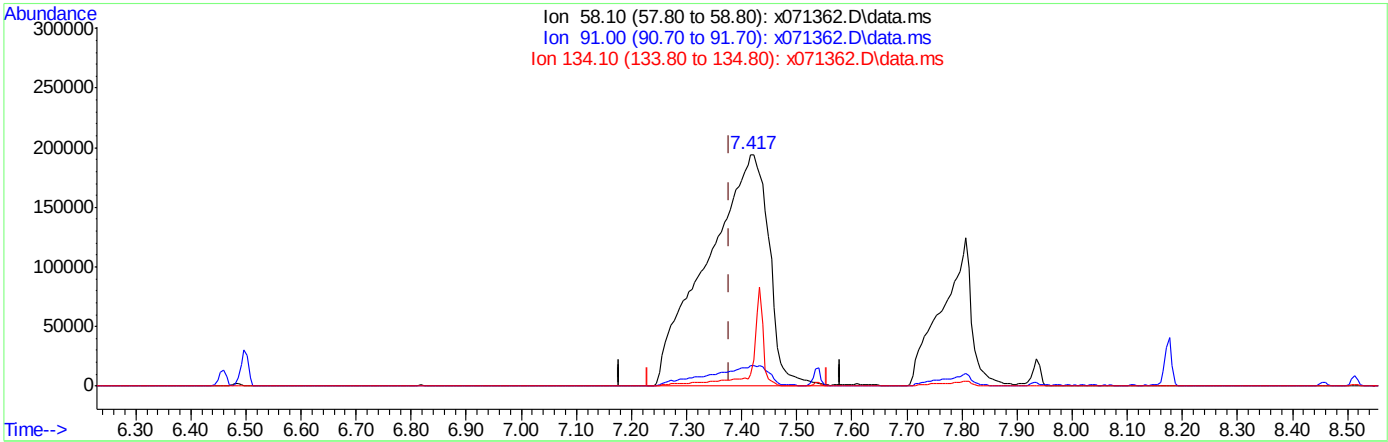
Method: EPA 625.1
Analyst approved: 06/24/20 09:50 Martha Valls
Supervisor approved: 06/24/20 14:07 Naresh Jiawan

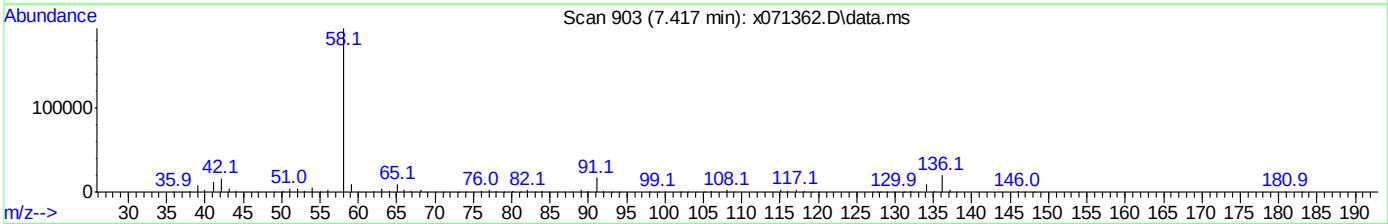
Parameter	CAS	Sig#	R.T. (min.)	Reason
A,A-Dimethylphenethylamine	122-09-8		7.42	Split peak
p-Phenylenediamine	106-50-3		7.93	Split peak
Diallate	2303-16-4		10.64	Split peak
Methapyrilene	91-80-5		12.29	Split peak
Aramite	140-57-8		13.25	Split peak

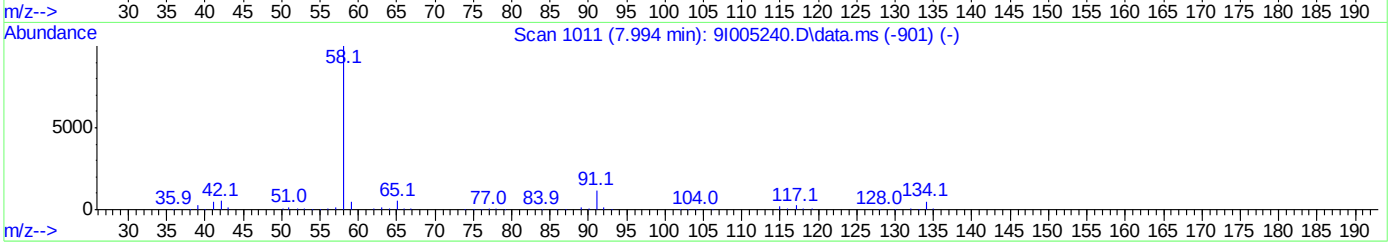
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071362.D
Acq On : 23 Jun 2020 12:37 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 23 14:01:10 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071362.D\data.ms

(122) A,A-Dimethylphenethylamine

7.417min (+0.037) 74.94ppm

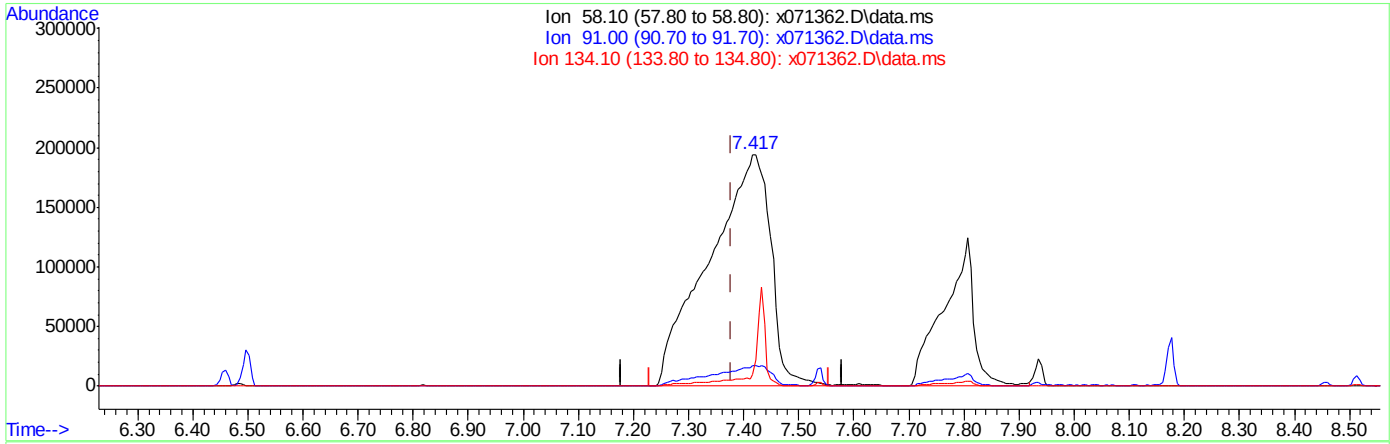
response 1509105

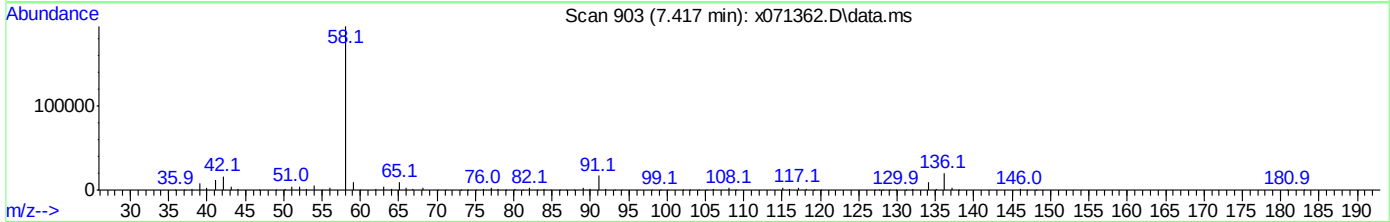
Ion	Exp%	Act%
58.10	100	100
91.00	11.70	8.64
134.10	5.10	4.79
0.00	0.00	0.00

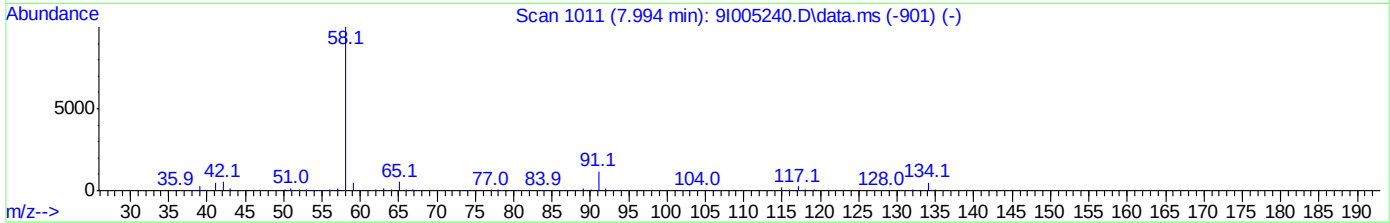
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071362.D
Acq On : 23 Jun 2020 12:37 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 23 14:01:10 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071362.D\data.ms

(122) A,A-Dimethylphenethylamine

7.417min (+0.037) 96.58ppm m

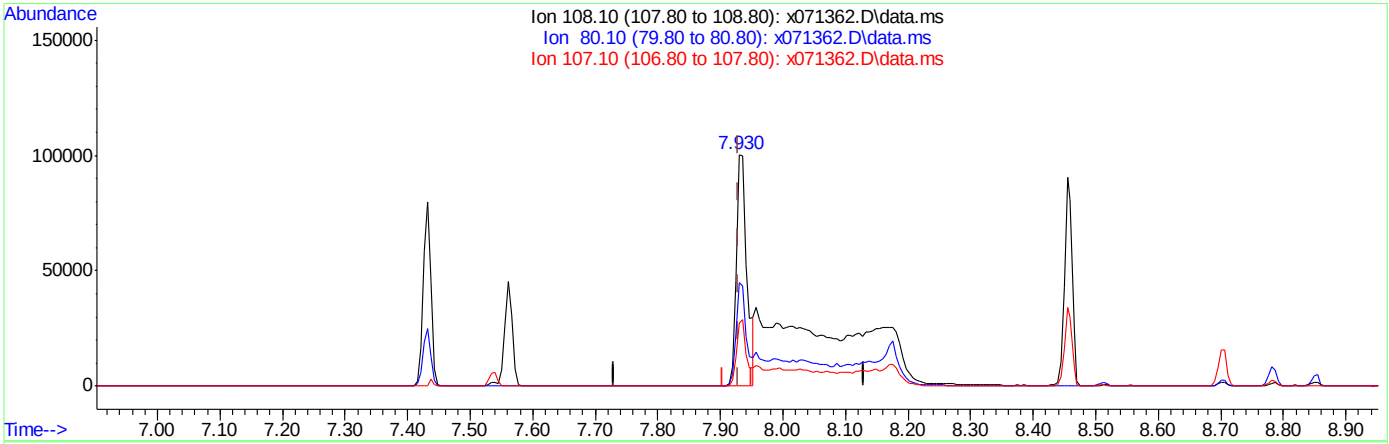
response 1993287

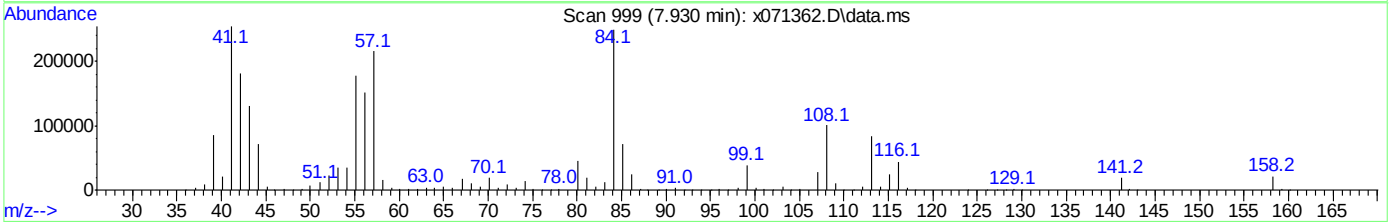
Ion	Exp%	Act%
58.10	100	100
91.00	11.70	8.75
134.10	5.10	4.81
0.00	0.00	0.00

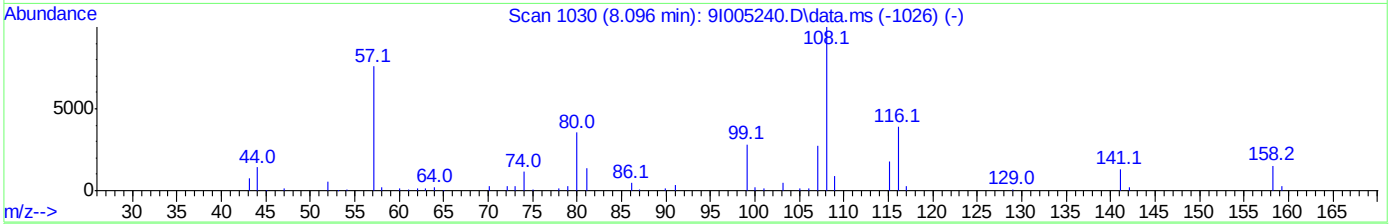
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071362.D
Acq On : 23 Jun 2020 12:37 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 23 14:01:10 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071362.D\data.ms

(125) p-Phenylenediamine

7.930min (+0.000) 21.84ppm

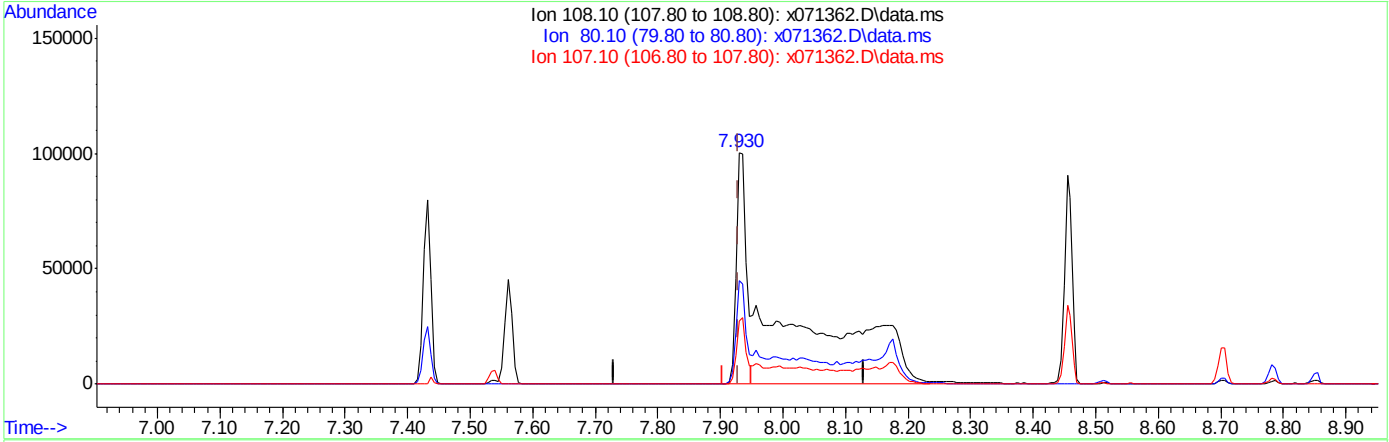
response 117920

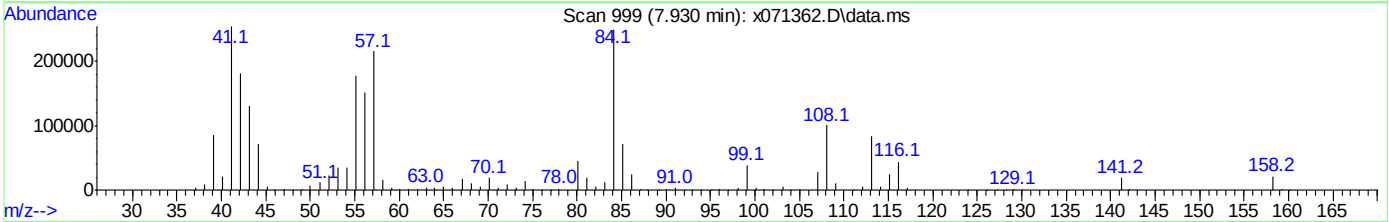
Ion	Exp%	Act%
108.10	100	100
80.10	35.50	45.05
107.10	27.70	27.34
0.00	0.00	0.00

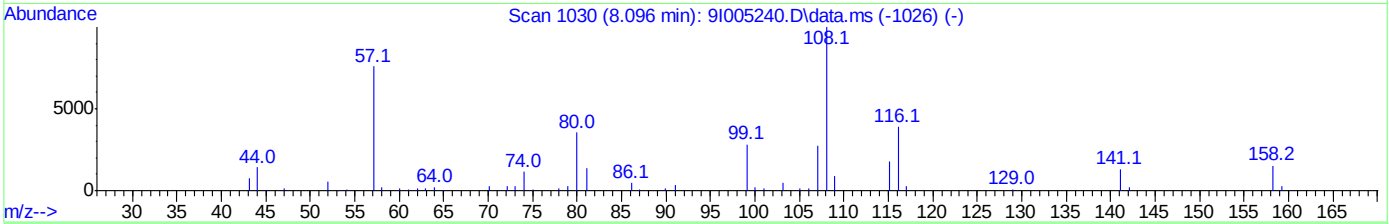
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071362.D
Acq On : 23 Jun 2020 12:37 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 23 14:01:10 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071362.D\data.ms

(125) p-Phenylenediamine

7.930min (+0.000) 116.33ppm m

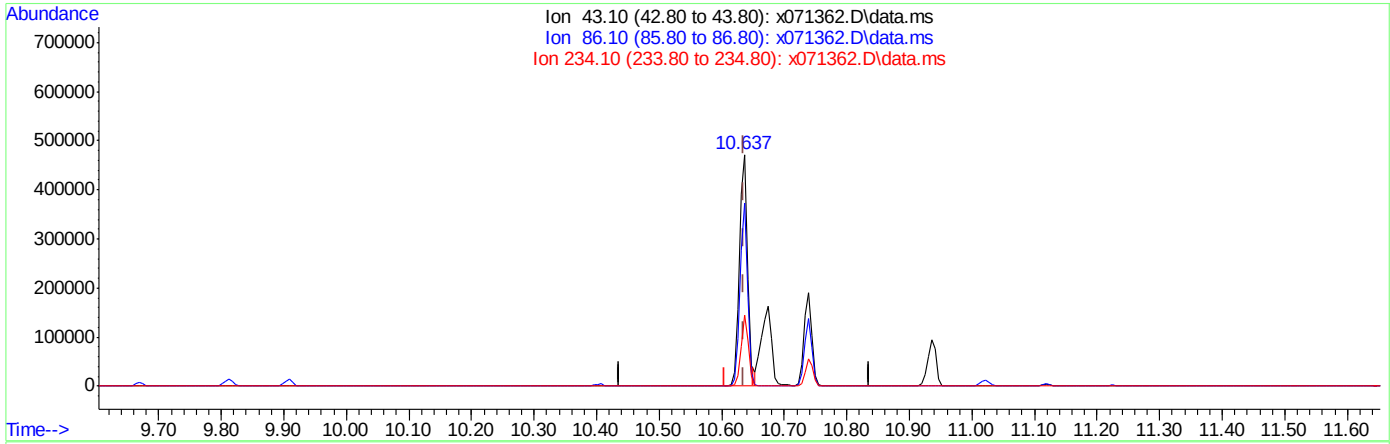
response 467834

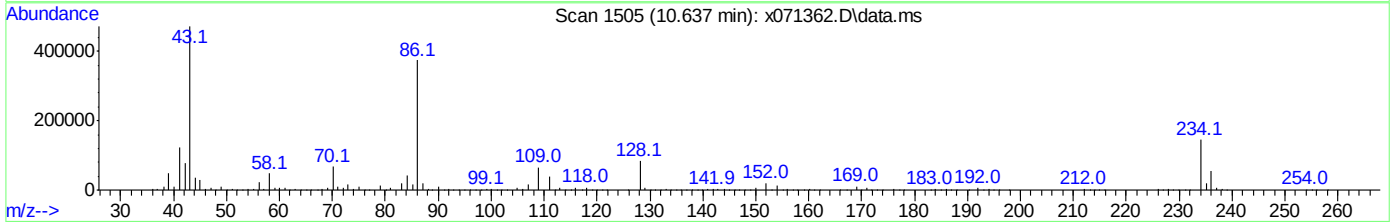
Ion	Exp%	Act%
108.10	100	100
80.10	35.50	44.62
107.10	27.70	27.32
0.00	0.00	0.00

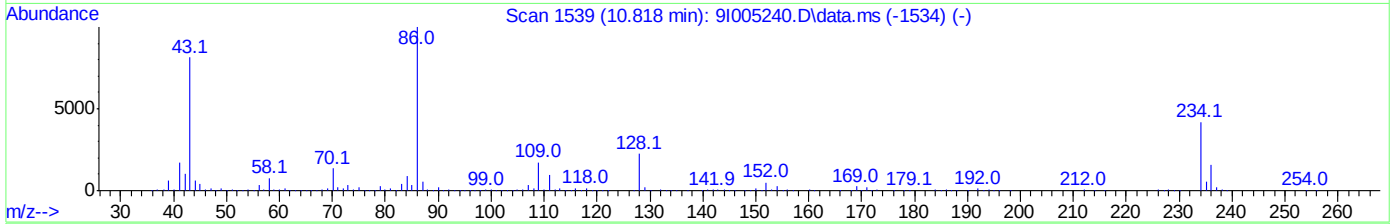
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071362.D
Acq On : 23 Jun 2020 12:37 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 23 14:01:10 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071362.D\data.ms

(138) Diallate

10.637min (+0.000) 56.94ppm

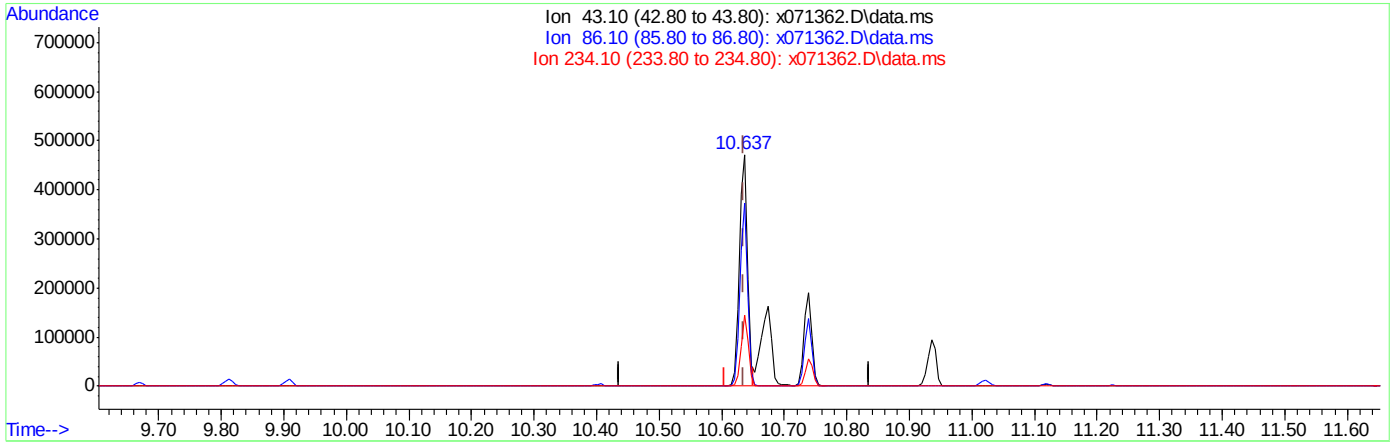
response 429265

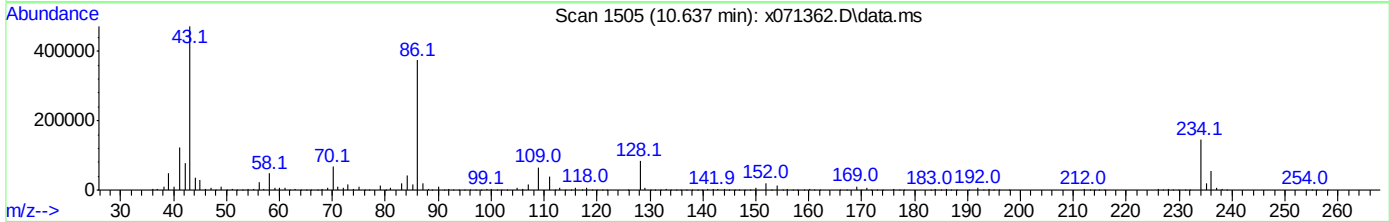
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	81.31#
234.10	51.50	31.39
0.00	0.00	0.00

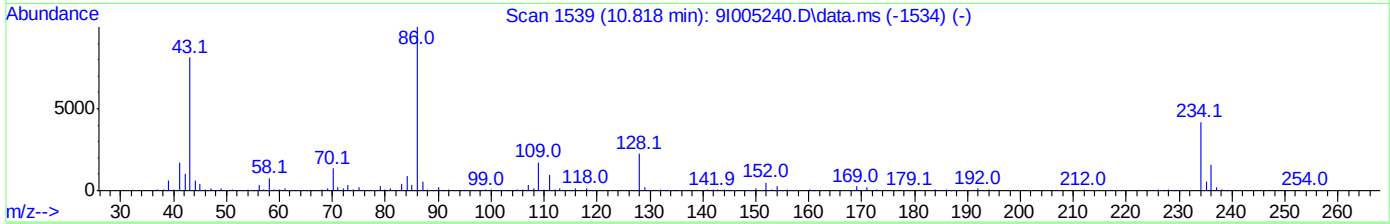
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071362.D
Acq On : 23 Jun 2020 12:37 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 23 14:01:10 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071362.D\data.ms

(138) Diallate

10.637min (+0.000) 104.00ppm m

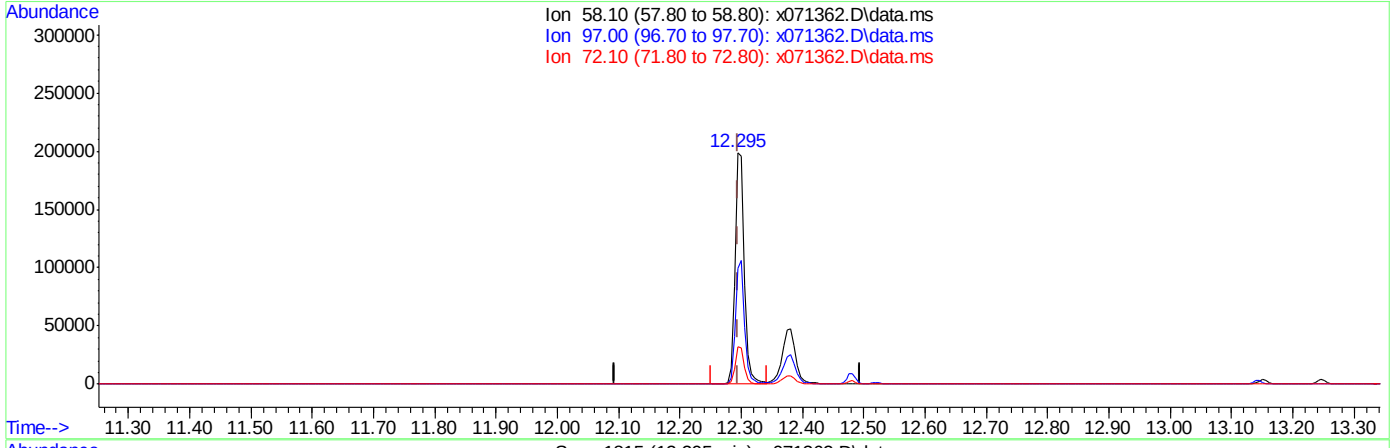
response 784030

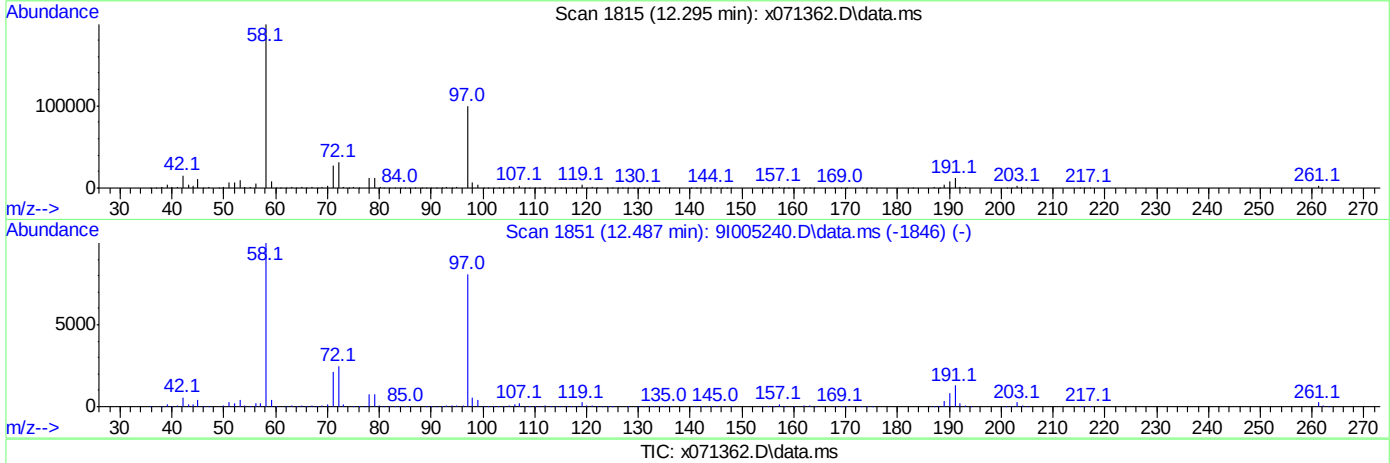
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	79.23#
234.10	51.50	30.56
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071362.D
Acq On : 23 Jun 2020 12:37 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 23 14:01:10 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration





TIC: x071362.D\data.ms

(144) Methapyrilene

12.295min (+0.000) 23.54ppm

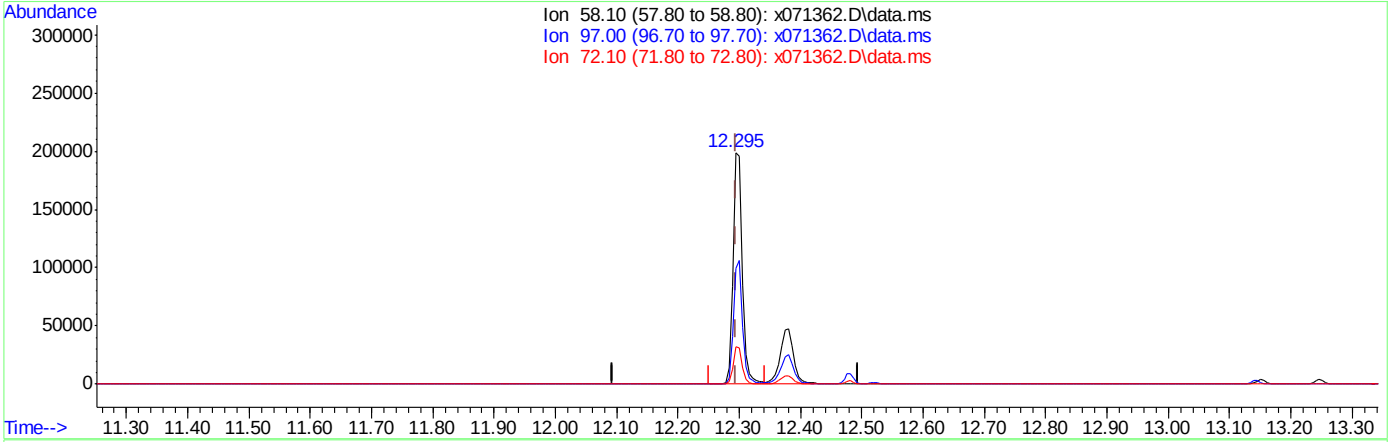
response 201112

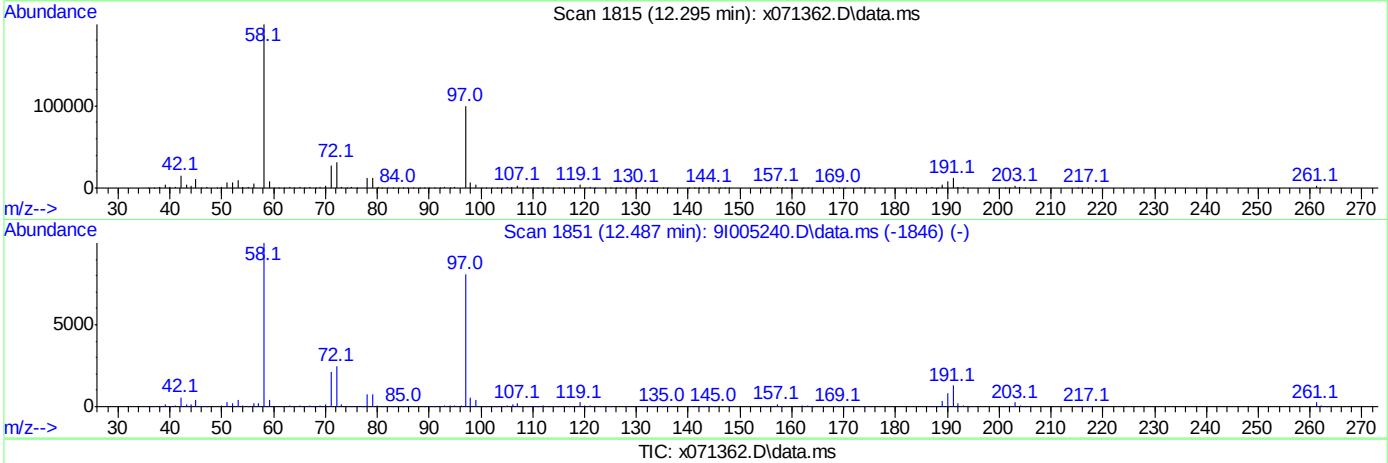
Ion	Exp%	Act%
58.10	100	100
97.00	80.90	50.07#
72.10	24.80	15.89
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071362.D
Acq On : 23 Jun 2020 12:37 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 23 14:01:10 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration





TIC: x071362.D\data.ms

(144) Methapyrilene

12.295min (+0.000) 31.81ppm m

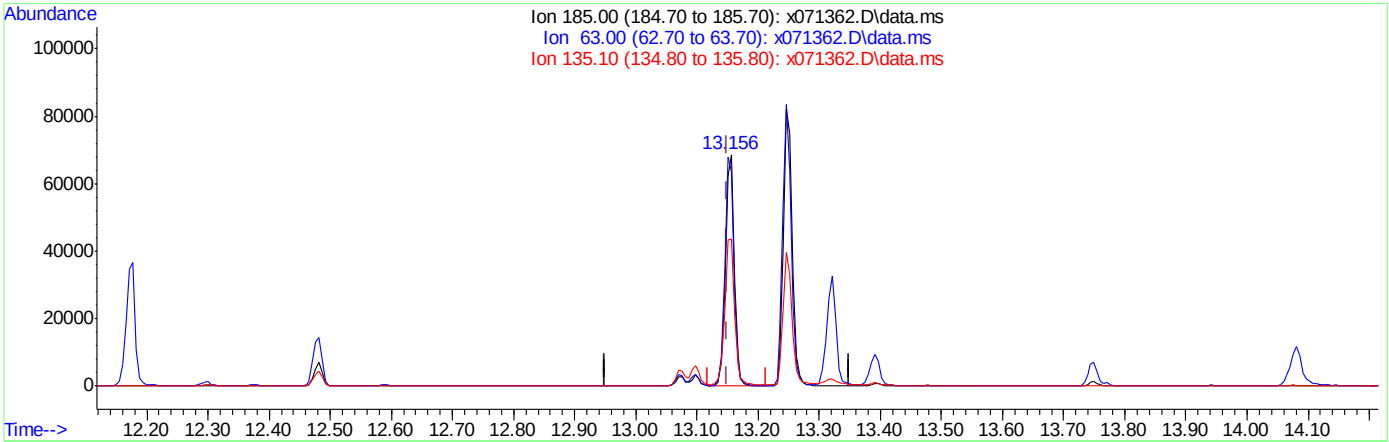
response 273027

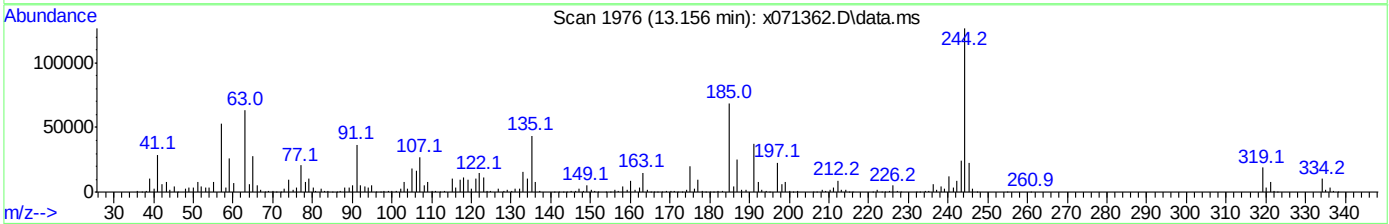
Ion	Exp%	Act%
58.10	100	100
97.00	80.90	50.10#
72.10	24.80	15.93
0.00	0.00	0.00

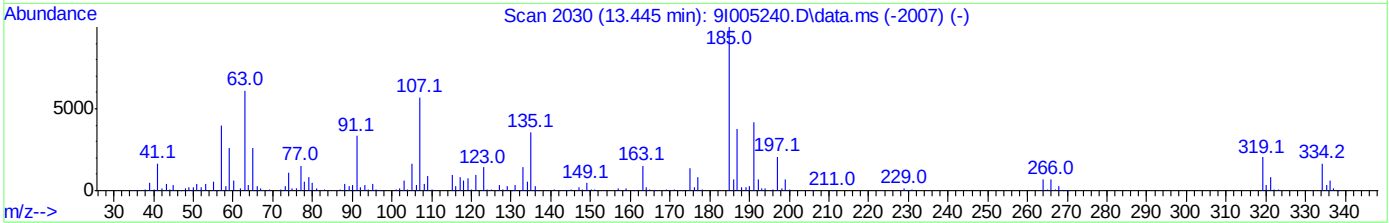
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071362.D
Acq On : 23 Jun 2020 12:37 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 23 14:01:10 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071362.D\data.ms

(147) Aramite

13.156min (+0.005) 39.17ppm

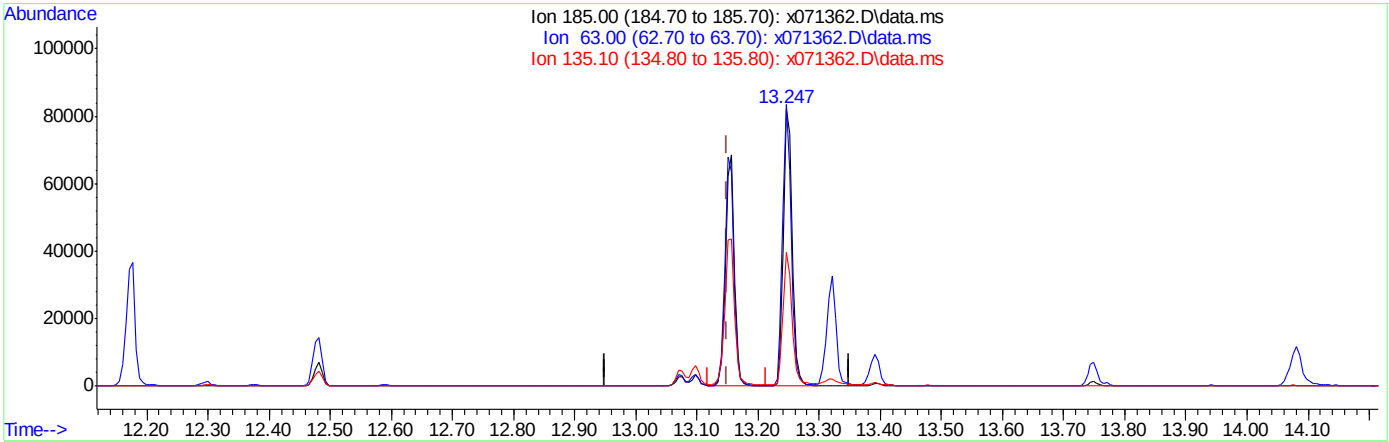
response 67896

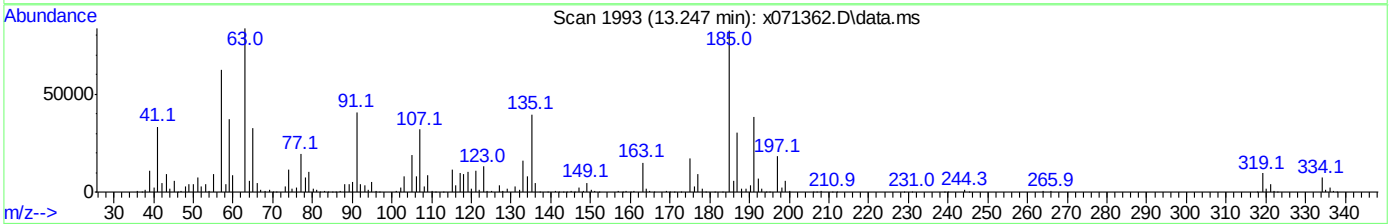
Ion	Exp%	Act%
185.00	100	100
63.00	61.10	92.71#
135.10	35.60	63.15
0.00	0.00	0.00

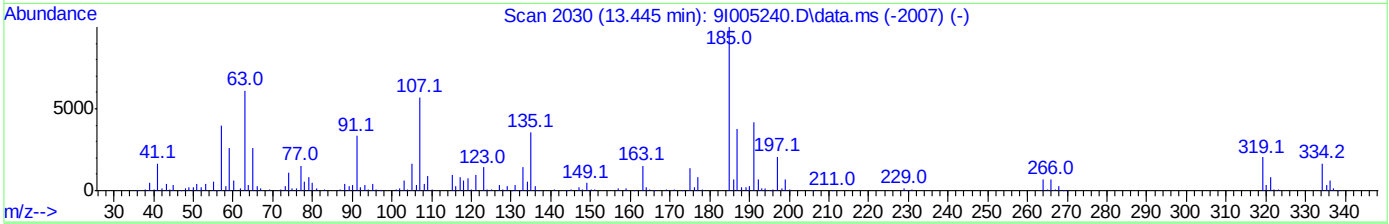
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071362.D
Acq On : 23 Jun 2020 12:37 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 23 14:01:10 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071362.D\data.ms

(147) Aramite

13.247min (+0.096) 81.41ppm m

response 149117

Ion	Exp%	Act%
185.00	100	100
63.00	61.10	101.63#
135.10	35.60	48.30
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 06/24/20 14:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071363.D
Acq On : 23 Jun 2020 1:03 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 23 17:10:52 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	0.000	152	0m	40.00	ppm		-6.00
22) Naphthalene-d8	0.000	136	0m	40.00	ppm		-7.43
43) Acenaphthene-d10	0.000	164	0m	40.00	ppm		-9.48
70) Phenanthrene-d10	0.000	188	0m	40.00	ppm		-11.22
92) Chrysene-d12	0.000	240	0m	40.00	ppm		-14.49
102) Perylene-d12	0.000	264	0m	40.00	ppm		-16.82
110) 1,4-Dichlorobenzene-d4A	6.005	152	163786	40.00	ppm		0.00
120) Naphthalene-d8A	7.433	136	700883	40.00	ppm		0.00
127) Acenaphthene-d10A	9.476	164	365750	40.00	ppm		0.00
136) Phenanthrene-d10A	11.225	188	688047	40.00	ppm		0.00
146) Chrysene-d12A	14.488	240	434561	40.00	ppm		0.00
153) Perylene-d12A	16.836	264	355855	40.00	ppm		0.02
System Monitoring Compounds							
7) 2-Fluorophenol	0.000	112	0d	0.00	ppm		
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#			
9) Phenol-d5	0.000	99	0d	0.00	ppm		
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#			
23) Nitrobenzene-d5	0.000	82	0d	0.00	ppm		
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#			
47) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm		
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#			
75) 2,4,6-Tribromophenol	0.000	330	0d	0.00	ppm		
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#			
95) Terphenyl-d14	0.000	244	0d	0.00	ppm		
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#			
Target Compounds							Qvalue
111) 2-Picoline	3.983	93	770885	94.78	ppm		88
112) N-Nitrosomethylethylamine	4.111	42	538567	187.02	ppm	#	54
113) Methyl methanesulfonate	4.443	80	379784	94.44	ppm		91
114) N-Nitrosodiethylamine	4.860	102	325074	100.55	ppm	#	26
115) Ethyl methanesulfonate	5.192	79	529425	92.97	ppm		96
116) Pentachloroethane	5.700	167	227433	98.21	ppm		94
117) N-Nitrosopyrrolidine	6.449	100	300078	90.78	ppm	#	51
118) N-Nitrosomorpholine	6.491	56	515740	149.30	ppm	#	72
119) O-Toluidine	6.502	106	1097953	109.37	ppm		99
121) N-Nitrosopiperidine	6.818	42	615840	160.39	ppm	#	58
122) A,A-Dimethylphenethyla...	7.449	58	2657015m	124.39	ppm		
123) Hexachloropropene	7.561	213	325540	87.32	ppm		99
124) N-Nitrosodi-n-butylamine	7.941	84	552594	98.13	ppm	#	61
125) p-Phenylenediamine	7.930	108	534166m	152.00	ppm		
126) Isosafrole	8.176	162	476964	103.94	ppm		80
128) Safrole	8.786	162	507081	107.15	ppm		90
129) 1-Chloronaphthalene	8.856	162	1155136	101.74	ppm		97
130) Diphenyl Ether	8.946	170	802823	104.10	ppm		92
131) 1,4-Naphthoquinone	9.043	158	340836m	109.51	ppm		
132) Pentachlorobenzene	9.674	250	407827	77.42	ppm		99
133) 1-Naphthylamine	9.818	143	1293951	111.03	ppm		95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071363.D
Acq On : 23 Jun 2020 1:03 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 23 17:10:52 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration

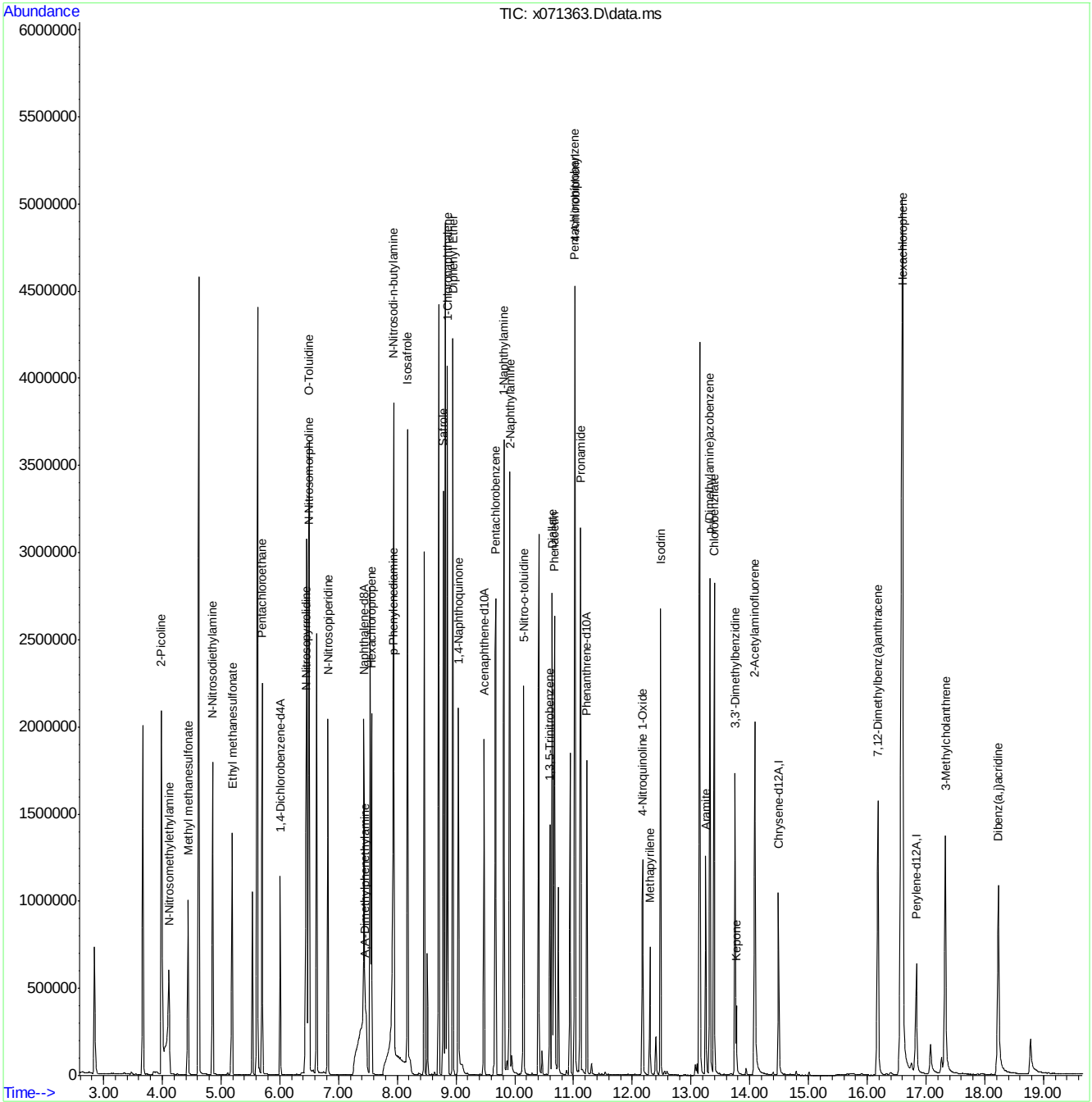
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
134) 2-Naphthylamine	9.915	143	1364529	114.95	ppm	98
135) 5-Nitro-o-toluidine	10.155	152	423615	100.08	ppm	87
137) 1,3,5-Trinitrobenzene	10.599	75	371047	82.63	ppm	87
138) Diallate	10.637	43	1020639m	134.35	ppm	
139) Phenacetin	10.679	108	727692	94.25	ppm	89
140) 4-Aminobiphenyl	11.027	169	1255640	108.24	ppm	99
141) Pronamide	11.123	173	570411	91.47	ppm	98
142) Pentachloronitrobenzene	11.022	237	137647	78.60	ppm	92
143) 4-Nitroquinoline 1-Oxide	12.177	190	117036	118.63	ppm	82
144) Methapyrilene	12.300	58	346867m	39.90	ppm	
145) Isodrin	12.482	193	190850	79.93	ppm	85
147) Aramite	13.252	185	197374m	104.24	ppm	
148) p-(Dimethylamine)azobe...	13.322	120	548044	122.37	ppm	84
149) Chlorobenzilate	13.391	139	629934	111.55	ppm	72
150) Kepone	13.776	272	19564	12.50	ppm	93
151) 3,3'-Dimethylbenzidine	13.750	212	651285	98.88	ppm	98
152) 2-Acetylaminofluorene	14.087	181	686507	98.52	ppm	92
154) 7,12-Dimethylbenz(a)an...	16.183	256	539852	99.92	ppm	95
155) Hexachlorophene	16.600	196	1092597	1366.31	ppm	98
156) 3-Methylcholanthrene	17.333	268	523043	108.16	ppm	94
157) Dibenz(a,j)acridine	18.232	279	769588	88.43	ppm	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071363.D
Acq On : 23 Jun 2020 1:03 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 23 17:10:52 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: SX2918-IC2918
Lab FileID: X071363.D
Injection Time: 06/23/20 13:03

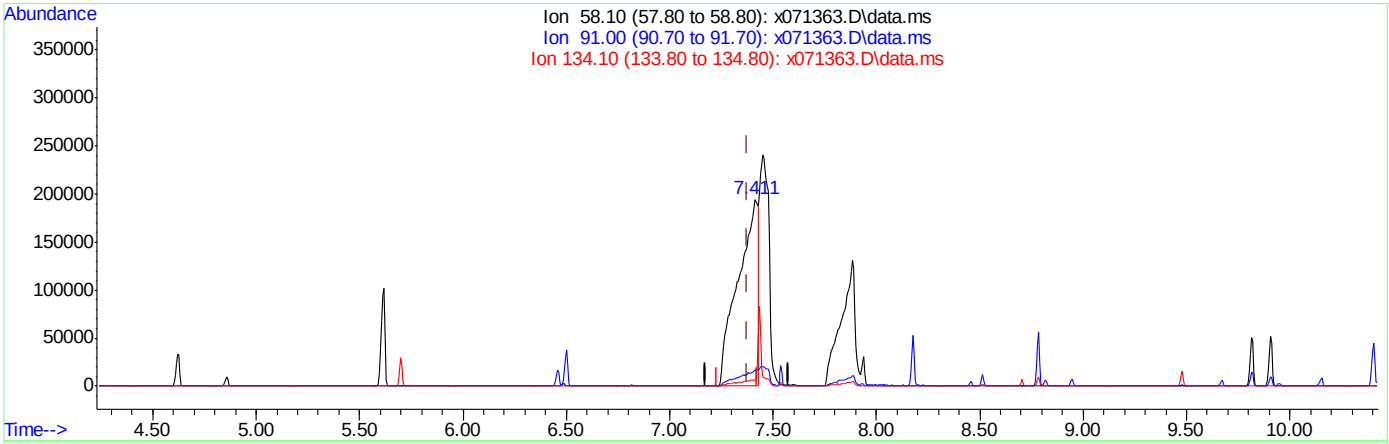
Method: EPA 625.1
Analyst approved: 06/24/20 09:50 Martha Valls
Supervisor approved: 06/24/20 14:07 Naresh Jiawan

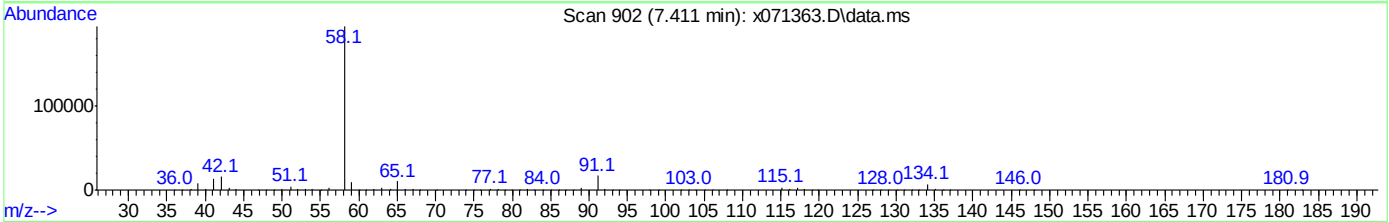
Parameter	CAS	Sig#	R.T. (min.)	Reason
A,A-Dimethylphenethylamine	122-09-8		7.45	Split peak
p-Phenylenediamine	106-50-3		7.93	Split peak
Diallate	2303-16-4		10.64	Split peak
Methapyrilene	91-80-5		12.30	Split peak
Aramite	140-57-8		13.25	Split peak

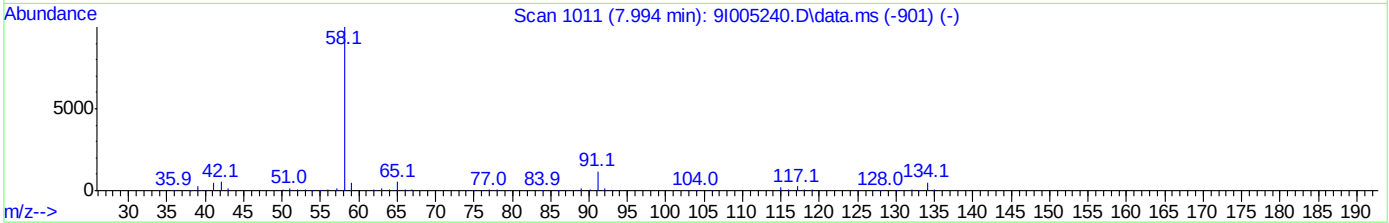
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071363.D
Acq On : 23 Jun 2020 1:03 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 23 14:01:12 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071363.D\data.ms

(122) A,A-Dimethylphenethylamine

7.411min (+0.032) 64.09ppm

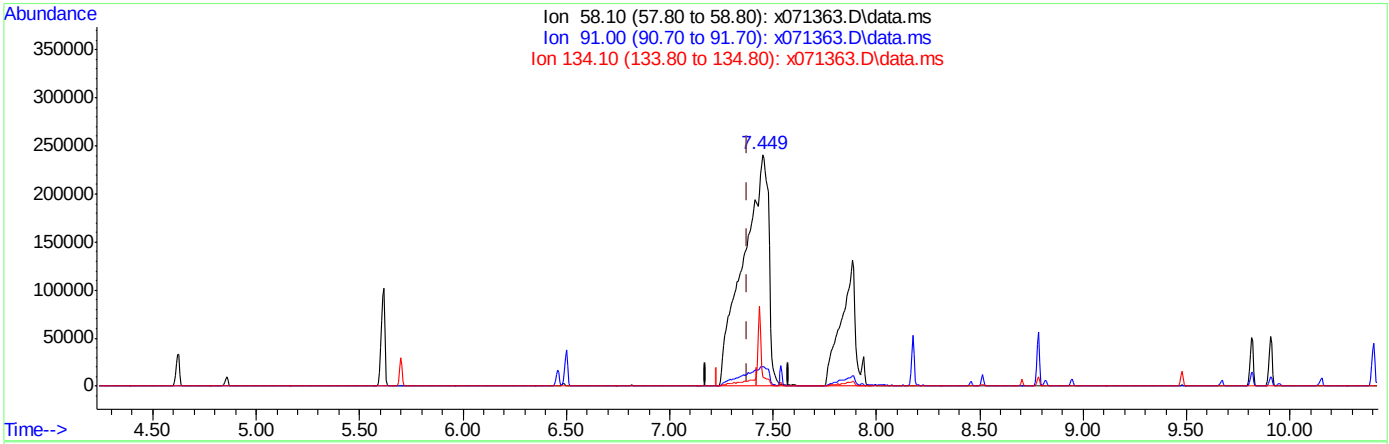
response 1279100

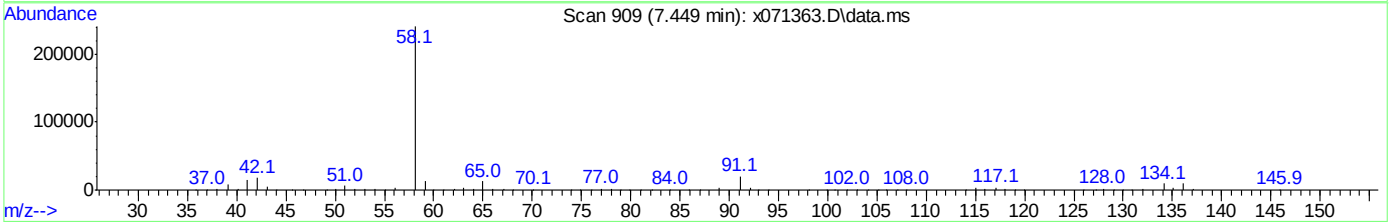
Ion	Exp%	Act%
58.10	100	100
91.00	11.70	8.33
134.10	5.10	0.00
0.00	0.00	0.00

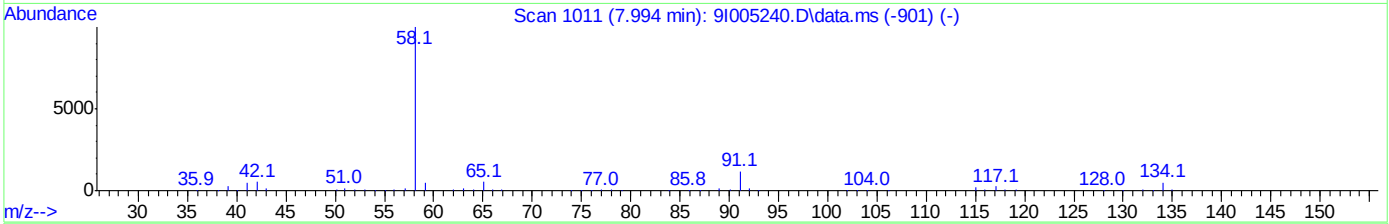
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071363.D
Acq On : 23 Jun 2020 1:03 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 23 14:01:12 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071363.D\data.ms

(122) A,A-Dimethylphenethylamine

7.449min (+0.070) 124.39ppm m

response 2657015

Ion	Exp%	Act%
58.10	100	100
91.00	11.70	8.26
134.10	5.10	4.07
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071363.D
Acq On : 23 Jun 2020 1:03 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 23 14:01:12 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
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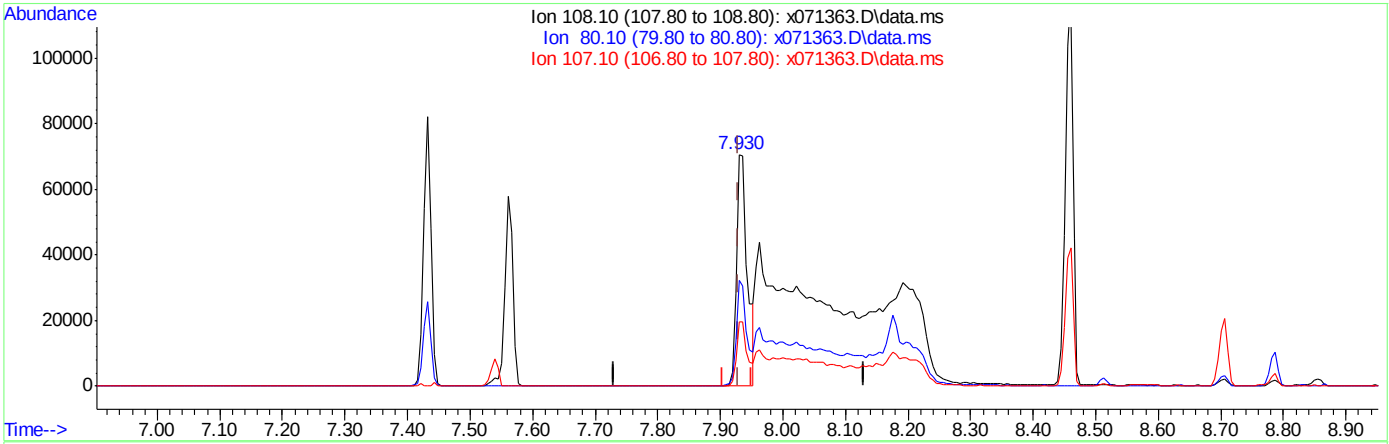
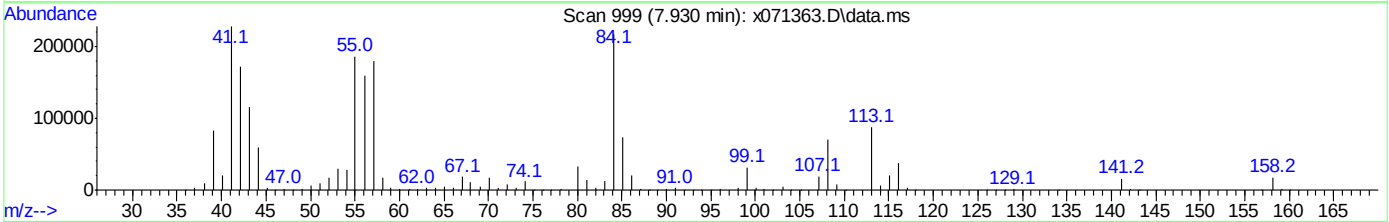
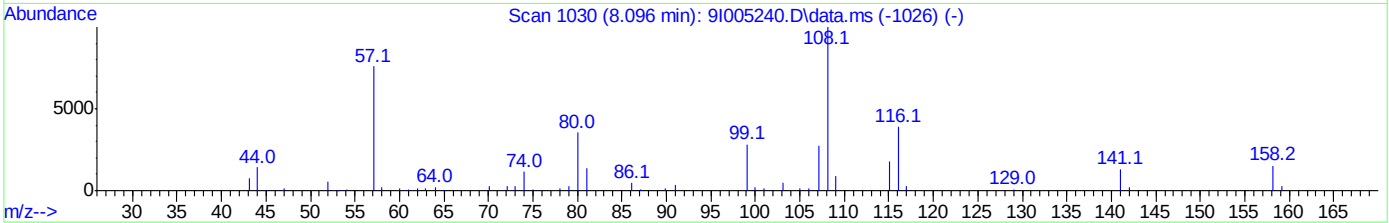






TIC: x071363.D\data.ms

(125) p-Phenylenediamine

7.930min (+0.000) 15.16ppm

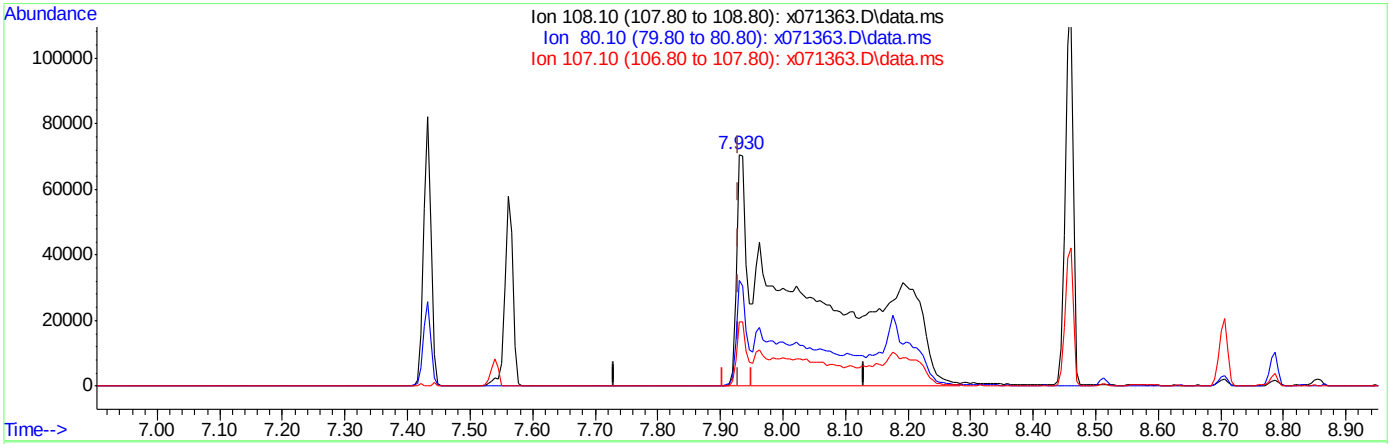
response 83601

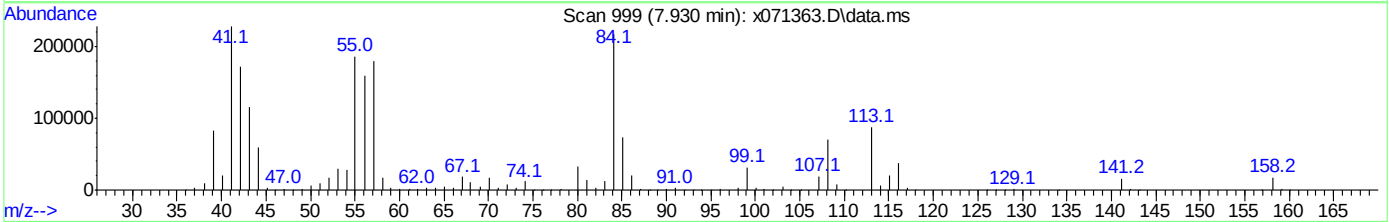
Ion	Exp%	Act%
108.10	100	100
80.10	35.50	46.00
107.10	27.70	27.66
0.00	0.00	0.00

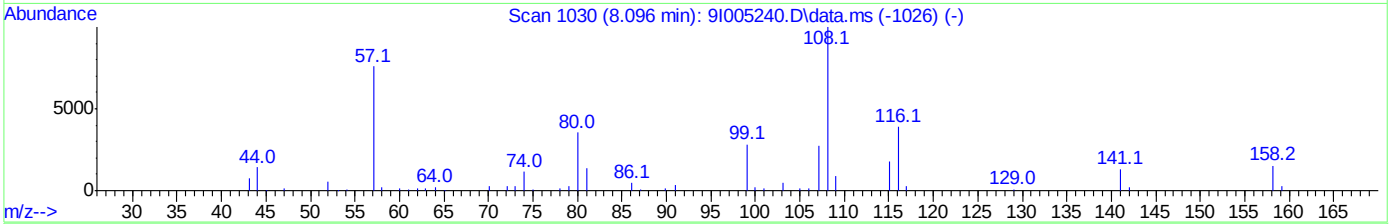
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071363.D
Acq On : 23 Jun 2020 1:03 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 23 14:01:12 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071363.D\data.ms

(125) p-Phenylenediamine

7.930min (+0.000) 152.00ppm m

response 534166

Ion	Exp%	Act%
108.10	100	100
80.10	35.50	45.66
107.10	27.70	27.59
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071363.D
Acq On : 23 Jun 2020 1:03 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
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Quant Time: Jun 23 14:01:12 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
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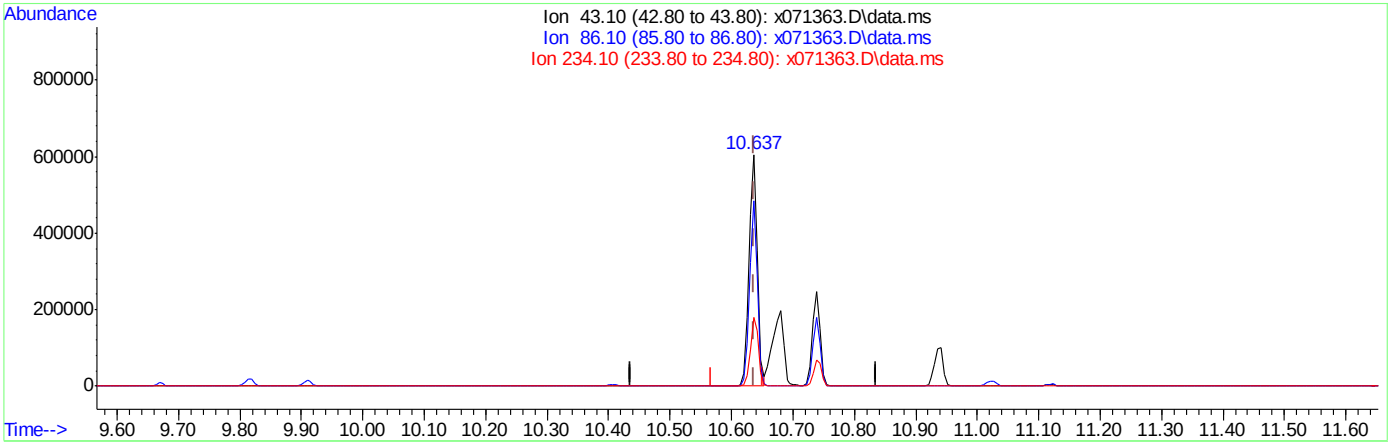

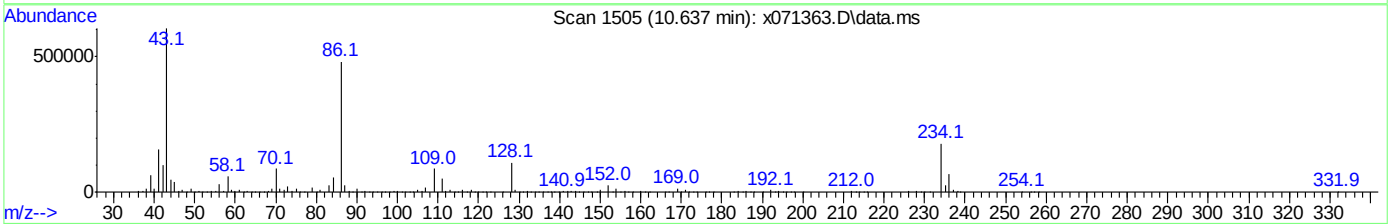

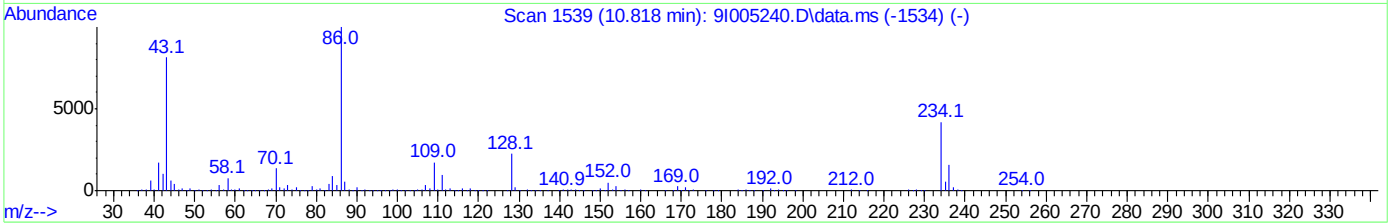

TIC: x071363.D\data.ms

(138) Diallate

10.637min (+0.000) 72.84ppm

response 553405

Ion	Exp%	Act%
43.10	100	100
86.10	123.10	80.94#
234.10	51.50	29.93
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071363.D
Acq On : 23 Jun 2020 1:03 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 23 14:01:12 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
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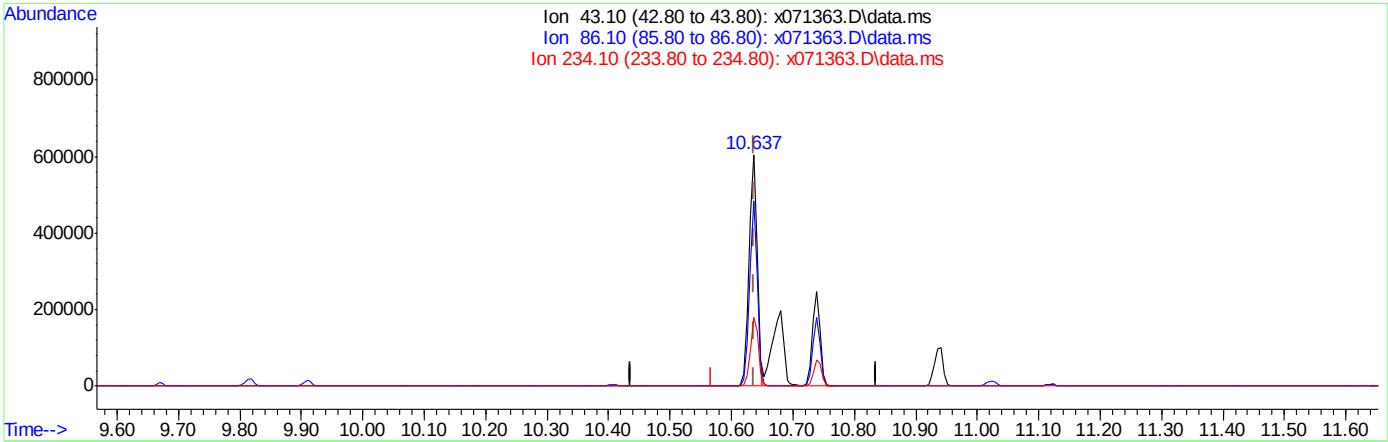
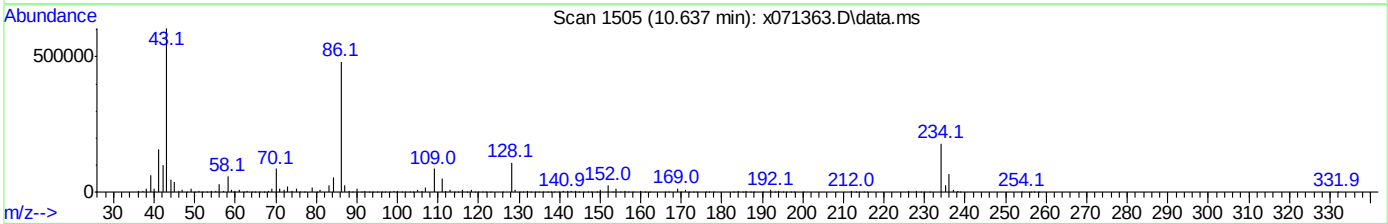
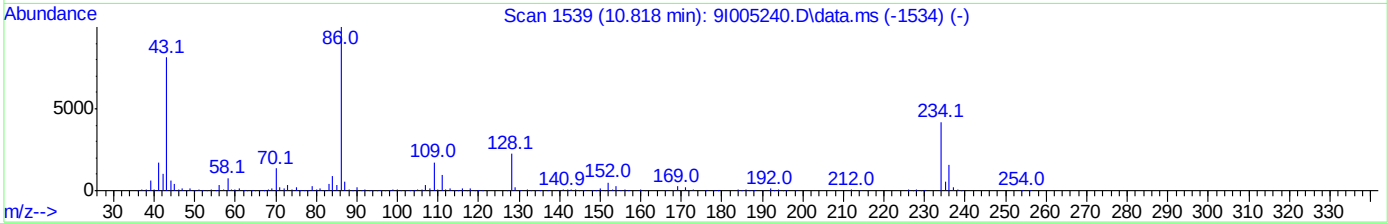
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071363.D\data.ms

(138) Diallate

10.637min (+0.000) 134.35ppm m

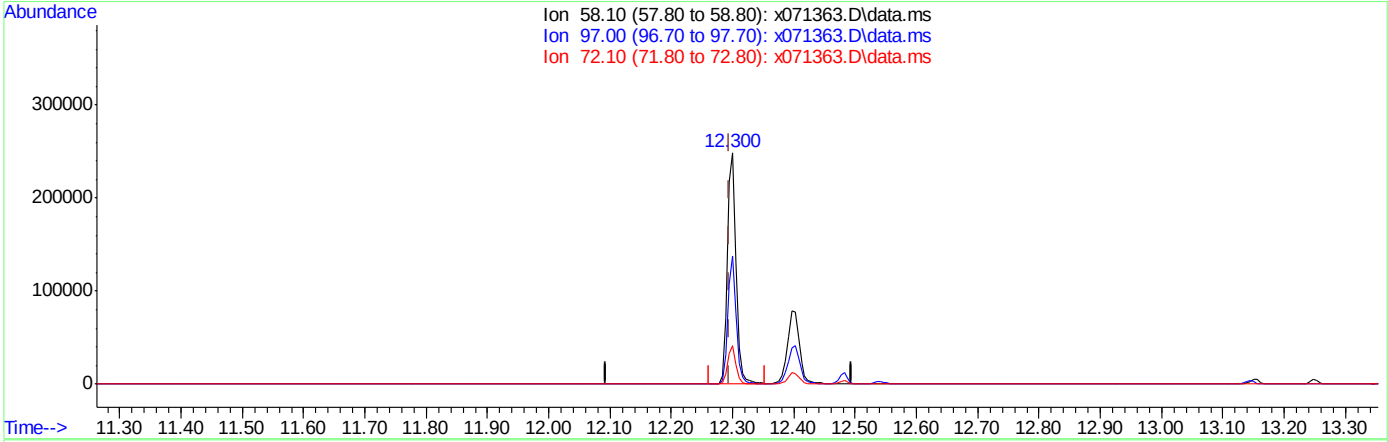
response 1020639

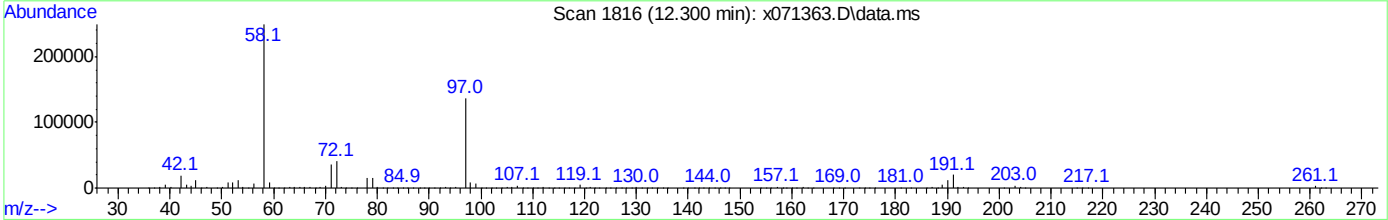
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	79.79#
234.10	51.50	29.55
0.00	0.00	0.00

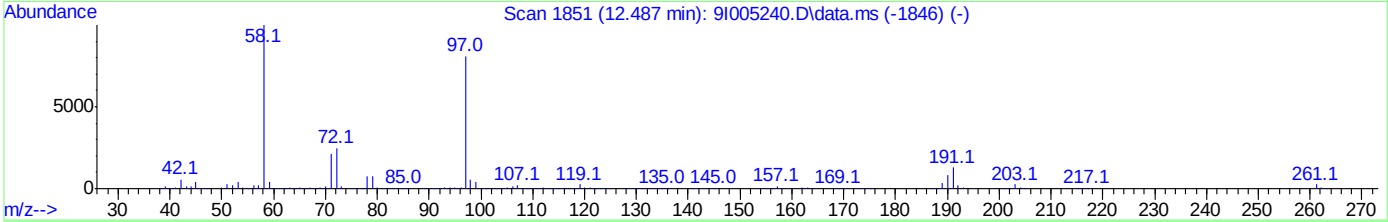
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071363.D
Acq On : 23 Jun 2020 1:03 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 23 14:01:12 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071363.D\data.ms

(144) Methapyrilene

12.300min (+0.006) 27.74ppm

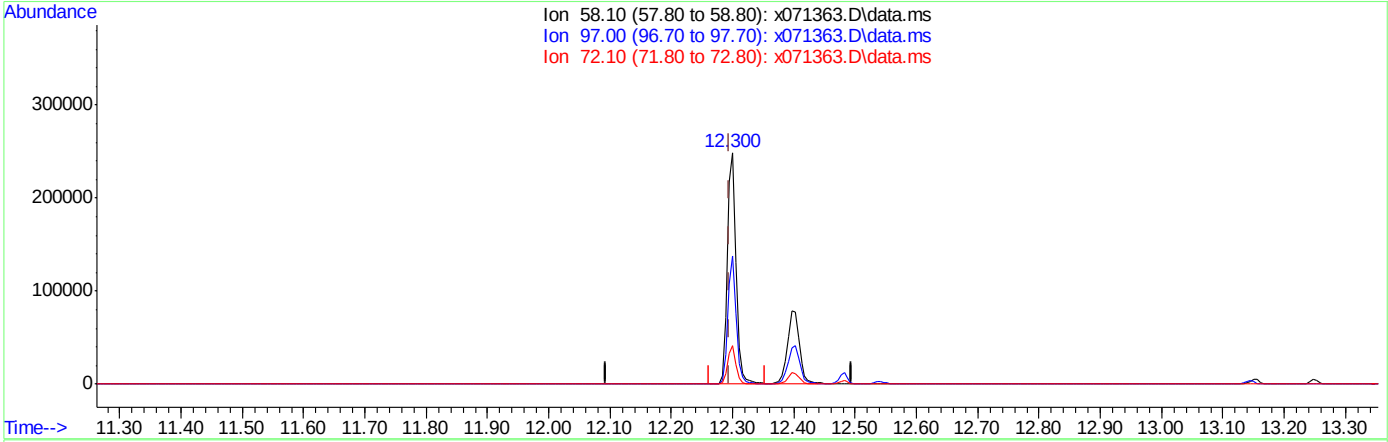
response 239390

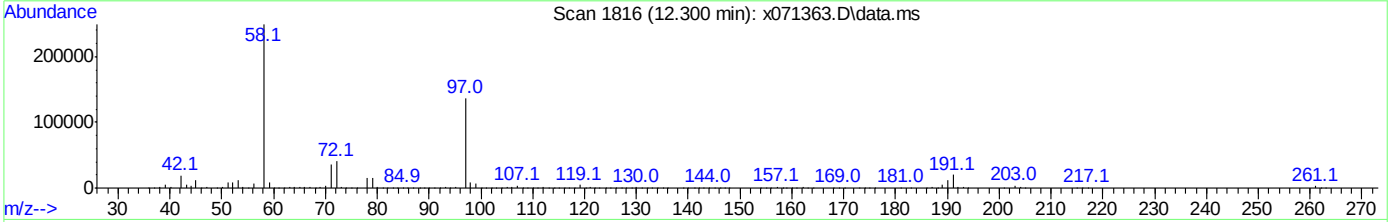
Ion	Exp%	Act%
58.10	100	100
97.00	80.90	55.12
72.10	24.80	16.74
0.00	0.00	0.00

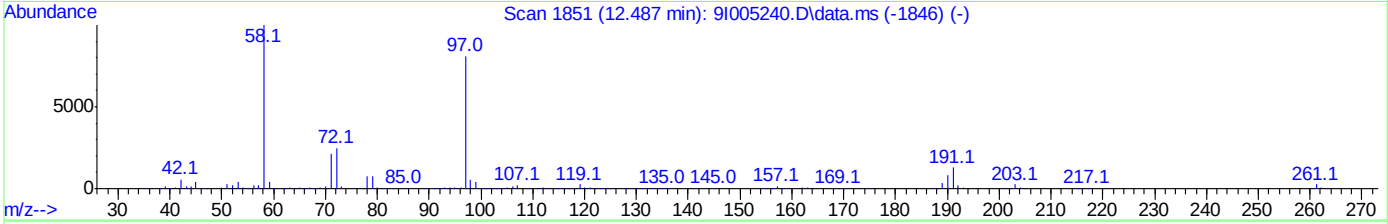
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071363.D
Acq On : 23 Jun 2020 1:03 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 23 14:01:12 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071363.D\data.ms

(144) Methapyrilene

12.300min (+0.006) 39.90ppm m

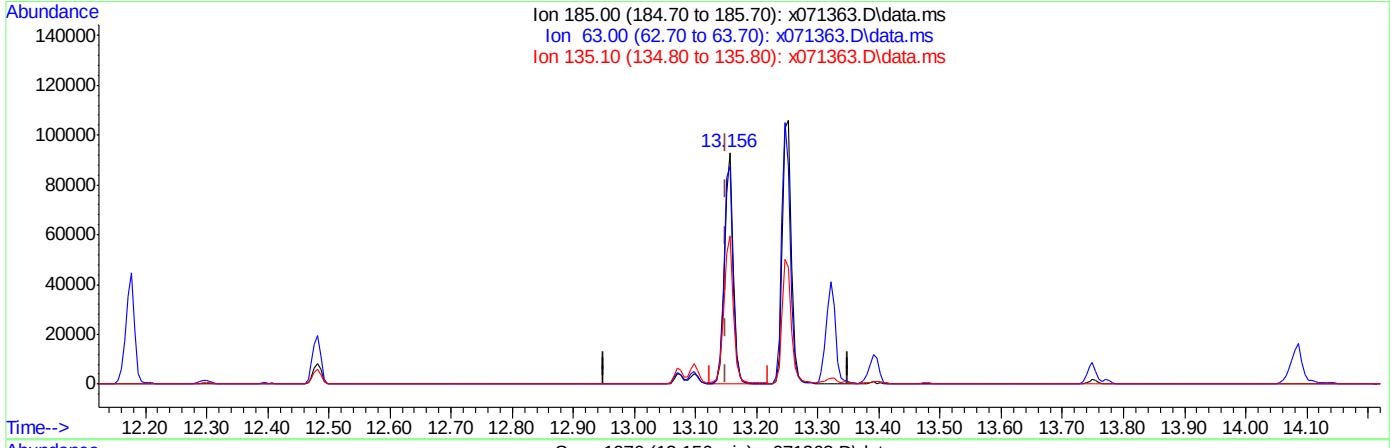
response 346867

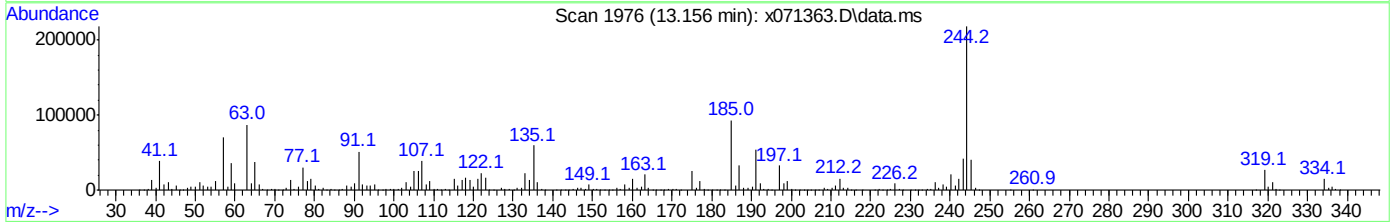
Ion	Exp%	Act%
58.10	100	100
97.00	80.90	55.14
72.10	24.80	16.74
0.00	0.00	0.00

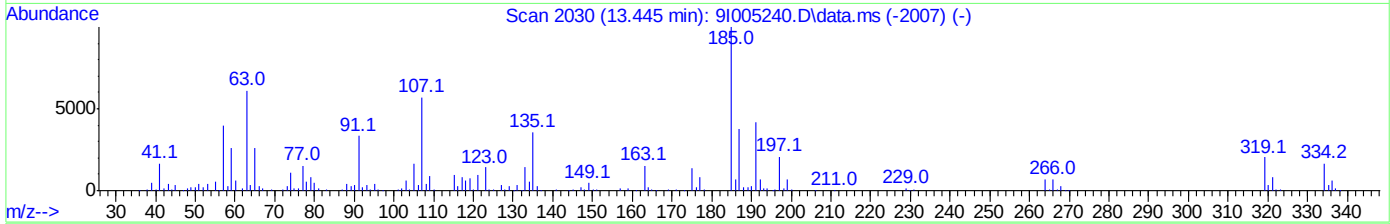
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071363.D
Acq On : 23 Jun 2020 1:03 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 23 14:25:07 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071363.D\data.ms

(147) Aramite

13.156min (+0.006) 50.24ppm

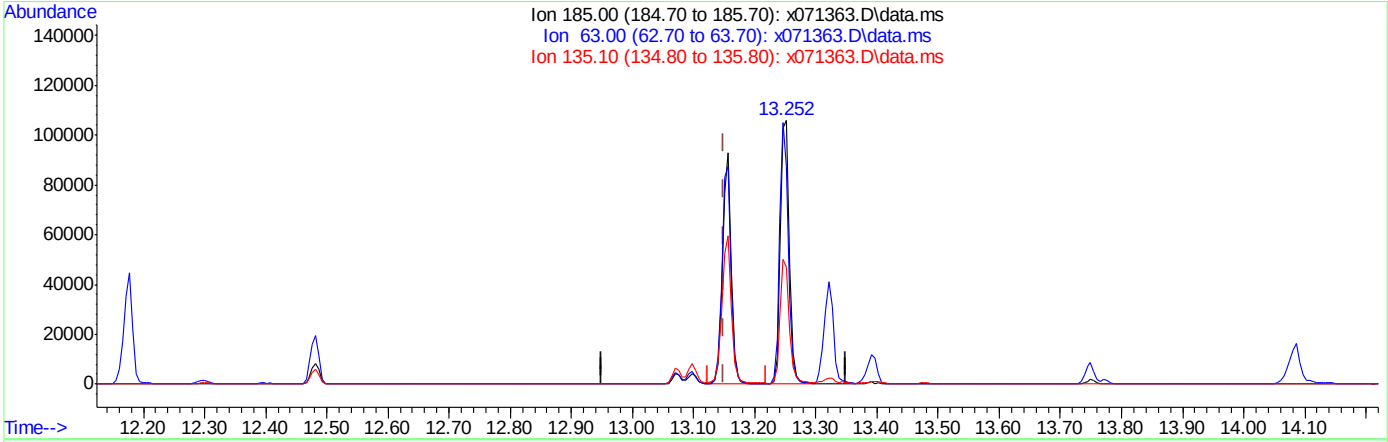
response 88801

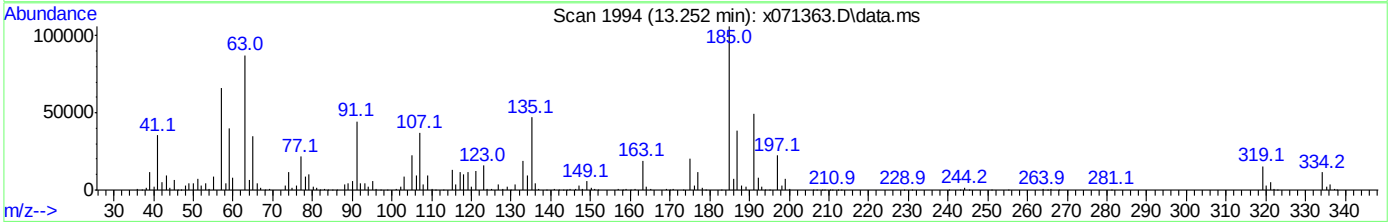
Ion	Exp%	Act%
185.00	100	100
63.00	61.10	93.92#
135.10	35.60	63.61
0.00	0.00	0.00

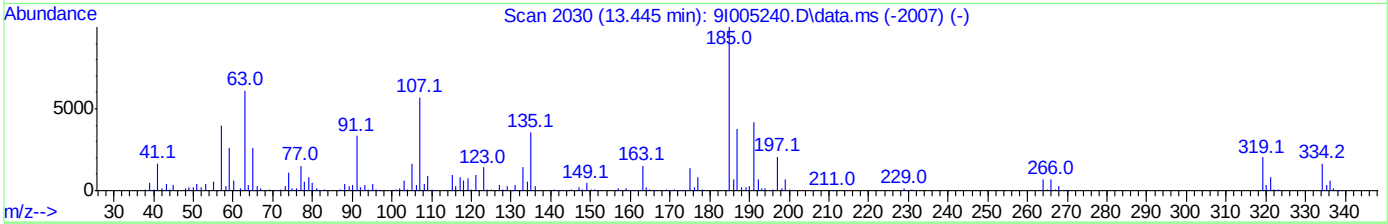
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071363.D
Acq On : 23 Jun 2020 1:03 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 23 14:25:07 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071363.D\data.ms

(147) Aramite

13.252min (+0.102) 104.24ppm m

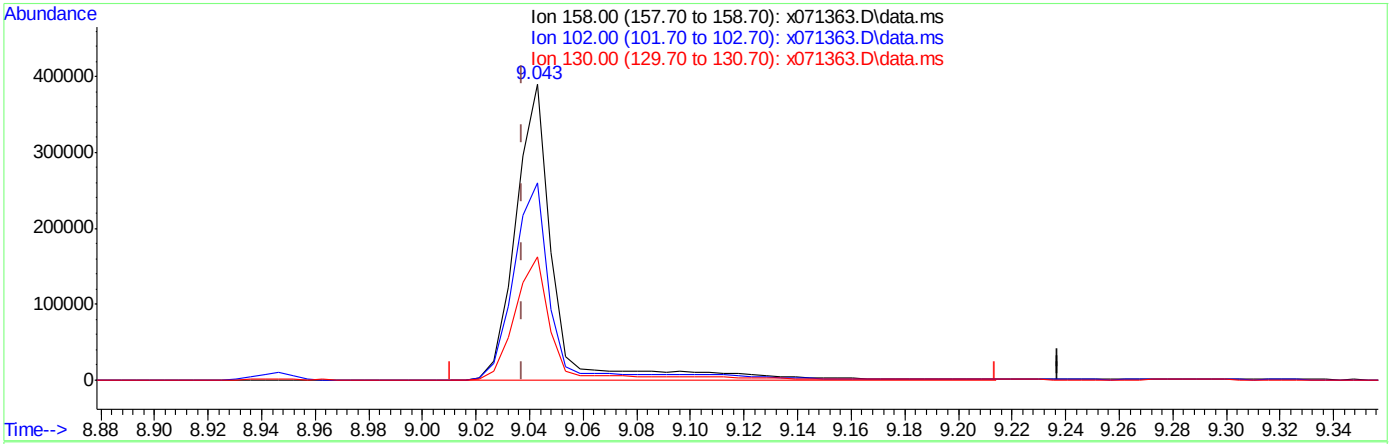
response 197374

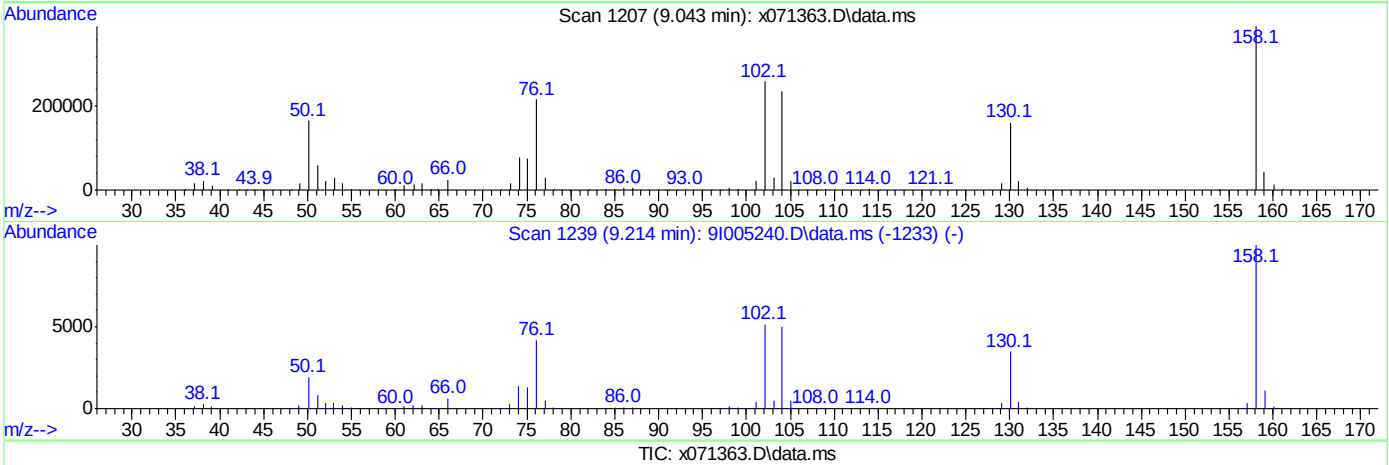
Ion	Exp%	Act%
185.00	100	100
63.00	61.10	82.44
135.10	35.60	44.38
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071363.D
Acq On : 23 Jun 2020 1:03 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 23 16:55:54 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration





TIC: x071363.D\data.ms

(131) 1,4-Naphthoquinone

9.043min (+0.006) -40.00ppm

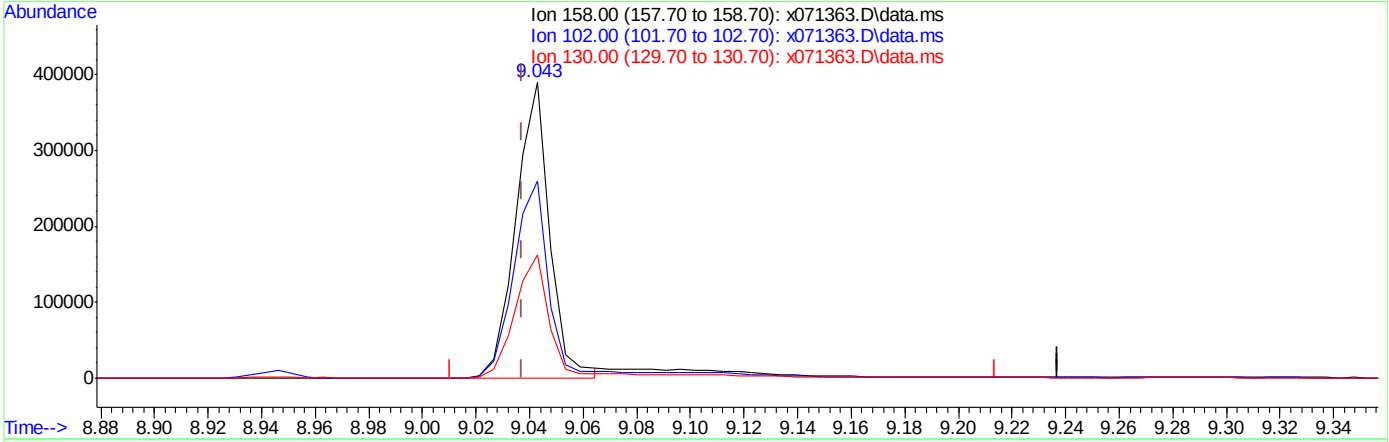
response 385634

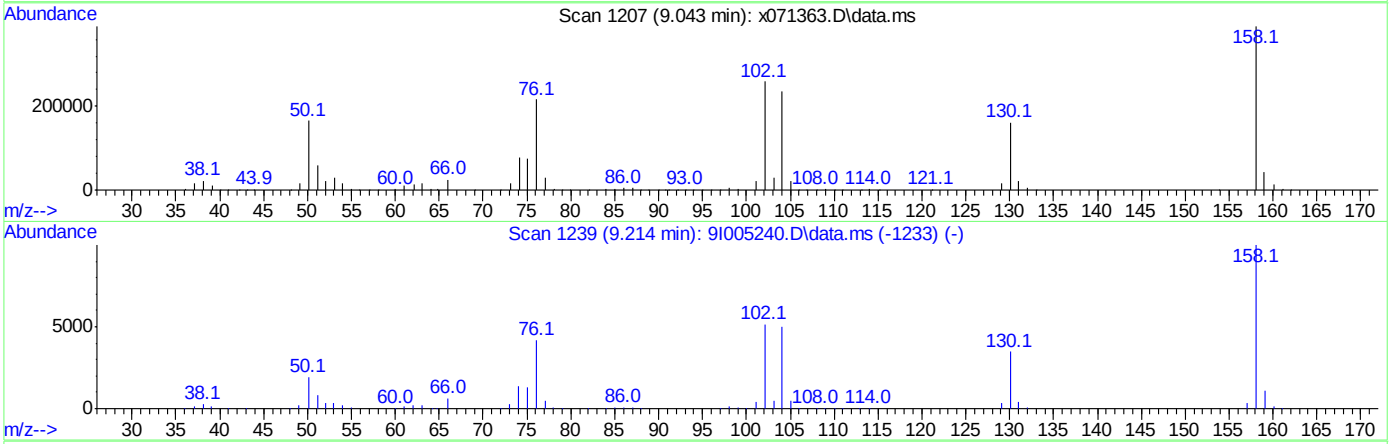
Ion	Exp%	Act%
158.00	100	100
102.00	51.70	66.40
130.00	34.90	41.35
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071363.D
Acq On : 23 Jun 2020 1:03 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 23 16:55:54 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration





TIC: x071363.D\data.ms

(131) 1,4-Naphthoquinone

9.043min (+0.006) 109.51ppm m

response 340836

Ion	Exp%	Act%
158.00	100	100
102.00	51.70	66.40
130.00	34.90	41.34
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan
06/24/20 14:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071364.D
Acq On : 23 Jun 2020 1:29 pm
Operator : marthav
Sample : ic2918-1 8270 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 23 16:56:07 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 15:18:55 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.005	152	144015	40.00	ppm	0.00
22) Naphthalene-d8	7.433	136	575045	40.00	ppm	0.00
43) Acenaphthene-d10	9.476	164	313667	40.00	ppm	0.00
70) Phenanthrene-d10	11.219	188	566431	40.00	ppm	0.00
92) Chrysene-d12	14.487	240	391149	40.00	ppm	0.00
102) Perylene-d12	16.809	264	333880	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	0.000	152	0m	40.00	ppm	-6.00
120) Naphthalene-d8A	0.000	136	0m	40.00	ppm	-7.43
127) Acenaphthene-d10A	0.000	164	0m	40.00	ppm	-9.48
136) Phenanthrene-d10A	0.000	188	0m	40.00	ppm	-11.22
146) Chrysene-d12A	0.000	240	0m	40.00	ppm	-14.49
153) Perylene-d12A	0.000	264	0m	40.00	ppm	-16.82
System Monitoring Compounds						
7) 2-Fluorophenol	4.609	112	10582	4.26	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery =	4.26%#		
9) Phenol-d5	5.603	99	11874	4.44	ppm	0.00
Spiked Amount 100.000	Range 10 - 50		Recovery =	4.44%#		
23) Nitrobenzene-d5	6.614	82	5896	2.14	ppm	0.00
Spiked Amount 50.000	Range 42 - 108		Recovery =	4.28%#		
47) 2-Fluorobiphenyl	8.695	172	11323	2.40	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery =	4.80%#		
75) 2,4,6-Tribromophenol	10.401	330	1785	2.38	ppm	0.00
Spiked Amount 100.000	Range 33 - 118		Recovery =	2.38%#		
95) Terphenyl-d14	13.140	244	9017	1.72	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery =	3.44%#		
Target Compounds						Qvalue
2) 1,4-Dioxane	2.849	88	2730	2.27	ppm	# 18
3) N-nitrosodimethylamine	3.180	42	4556	4.29	ppm	# 30
4) Pyridine	3.229	79	5659	2.25	ppm	# 27
5) Benzaldehyde	5.528	106	3940	1.89	ppm	92
6) Aniline	5.641	93	7747	2.05	ppm	96
8) bis(2-Chloroethyl)ether	5.721	93	5283	2.01	ppm	# 69
10) Phenol	5.614	94	6535	1.92	ppm	91
11) 2-Chlorophenol	5.769	128	4992	2.04	ppm	81
12) 1,3-Dichlorobenzene	5.940	146	5811	2.32	ppm	94
13) 1,4-Dichlorobenzene	6.026	146	6113	2.39	ppm	91
14) 1,2-Dichlorobenzene	6.186	146	5638	2.36	ppm	97
15) Benzyl alcohol	6.154	108	3389	2.10	ppm	83
16) 2,2'-Oxybis(1-chloropr...	6.320	45	11659	3.71	ppm	71
17) 2-Methylphenol	6.283	108	4611	2.10	ppm	99
18) Acetophenone	6.448	105	6688	1.93	ppm	95
19) Hexachloroethane	6.566	117	2216	2.04	ppm	91
20) N-Nitroso-di-n-propyla...	6.454	70	3871	2.17	ppm	# 48
21) 3&4-Methylphenol	6.454	108	4803	2.11	ppm	95
24) Nitrobenzene	6.636	77	5746	2.20	ppm	84
25) Isophorone	6.908	82	10485	2.20	ppm	90
26) 2-Nitrophenol	6.999	139	2481	1.97	ppm	75

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071364.D
Acq On : 23 Jun 2020 1:29 pm
Operator : marthav
Sample : ic2918-1 8270 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 23 16:56:07 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 15:18:55 2020
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
27)	2,4-Dimethylphenol	7.053	107	4687	2.16	ppm		90
28)	O,O,O-Triethylphosphor...	7.144	198	2001	1.99	ppm		71
29)	bis(2-Chloroethoxy)met...	7.170	93	6233	2.09	ppm		95
30)	Benzoic Acid	7.090	105	1123	0.69	ppm	#	78
31)	2,4-Dichlorophenol	7.267	162	3672	2.12	ppm		92
32)	1,2,4-Trichlorobenzene	7.368	180	4440	2.27	ppm		95
34)	Naphthalene	7.454	128	15939	2.46	ppm		98
35)	4-Chloroaniline	7.524	127	6467	2.38	ppm		88
36)	2,6-Dichlorophenol	7.529	162	4127	2.33	ppm		93
37)	Hexachlorobutadiene	7.609	225	2132	1.96	ppm		95
38)	Caprolactam	7.882	113	1341	1.86	ppm	#	36
39)	4-Chloro-3-methylphenol	8.090	107	3984	2.11	ppm		97
40)	2-Methylnaphthalene	8.256	142	10437	2.49	ppm		93
41)	1-Methylnaphthalene	8.374	142	10027	2.55	ppm		96
42)	1,2,4,5-Tetrachloroben...	8.454	216	4309	2.12	ppm		96
44)	Hexachlorocyclopentadiene	8.449	237	1709	1.59	ppm		82
45)	2,4,6-Trichlorophenol	8.588	196	2542	1.98	ppm		93
46)	2,4,5-Trichlorophenol	8.625	196	2702	1.97	ppm		97
48)	1,1'-Biphenyl	8.813	154	11390	2.20	ppm		97
49)	2-Chloronaphthalene	8.823	162	9331	2.33	ppm		95
50)	2-Nitroaniline	8.946	65	3109	2.38	ppm	#	62
51)	p-Dinitrobenzene	9.117	75	1540	1.61	ppm	#	53
52)	Acenaphthylene	9.305	152	14844	2.42	ppm		99
53)	Dimethylphthalate	9.182	163	11507	2.50	ppm		99
54)	m-Dinitrobenzene	9.198	168	1329	1.66	ppm	#	70
55)	2,6-Dinitrotoluene	9.240	165	2299	2.06	ppm	#	52
56)	o-Dinitrobenzene	9.289	50	2701	4.08	ppm	#	40
57)	Acenaphthene	9.513	153	10744	2.65	ppm		100
58)	3-Nitroaniline	9.428	138	2290	1.91	ppm		94
59)	2,4-Dinitrophenol	9.556	184	160m	0.30	ppm		
60)	Dibenzofuran	9.716	168	14854	2.67	ppm		95
61)	2,4-Dinitrotoluene	9.711	165	2798	1.98	ppm	#	55
62)	4-Nitrophenol	9.636	109	987	1.74	ppm	#	61
63)	2,3,5,6-Tetrachlorophenol	9.813	232	1704	1.61	ppm	#	73
64)	2,3,4,6-Tetrachlorophenol	9.861	232	2151	1.90	ppm		84
65)	Fluorene	10.118	166	10994	2.53	ppm		100
66)	4-Chlorophenyl-phenyle...	10.139	204	5190	2.38	ppm		88
67)	Diethylphthalate	10.021	149	10638	2.32	ppm		98
68)	Thionazin	10.112	97	2096	1.94	ppm		89
69)	4-Nitroaniline	10.139	138	2736	2.23	ppm		73
71)	4,6-Dinitro-2-methylph...	10.182	198	604	0.77	ppm	#	55
72)	n-Nitrosodiphenylamine	10.273	169	9328	2.99	ppm		88
73)	Diphenylamine	10.273	169	9328	2.56	ppm		88
74)	1,2-Diphenylhydrazine	10.321	77	11835	2.32	ppm		89
76)	Sulfotep	10.497	97	1291	1.62	ppm	#	67
77)	Phorate	10.642	75	4229	1.50	ppm		99
78)	4-Bromophenyl-phenylether	10.711	248	2321	1.78	ppm	#	67
79)	Hexachlorobenzene	10.759	284	2860	1.92	ppm		83
80)	Dimethoate	10.824	87	2766	1.64	ppm		91
81)	Simazine	10.882	201	1601	2.51	ppm		91

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071364.D
Acq On : 23 Jun 2020 1:29 pm
Operator : marthav
Sample : ic2918-1 8270 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 23 16:56:07 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 15:18:55 2020
Response via : Initial Calibration

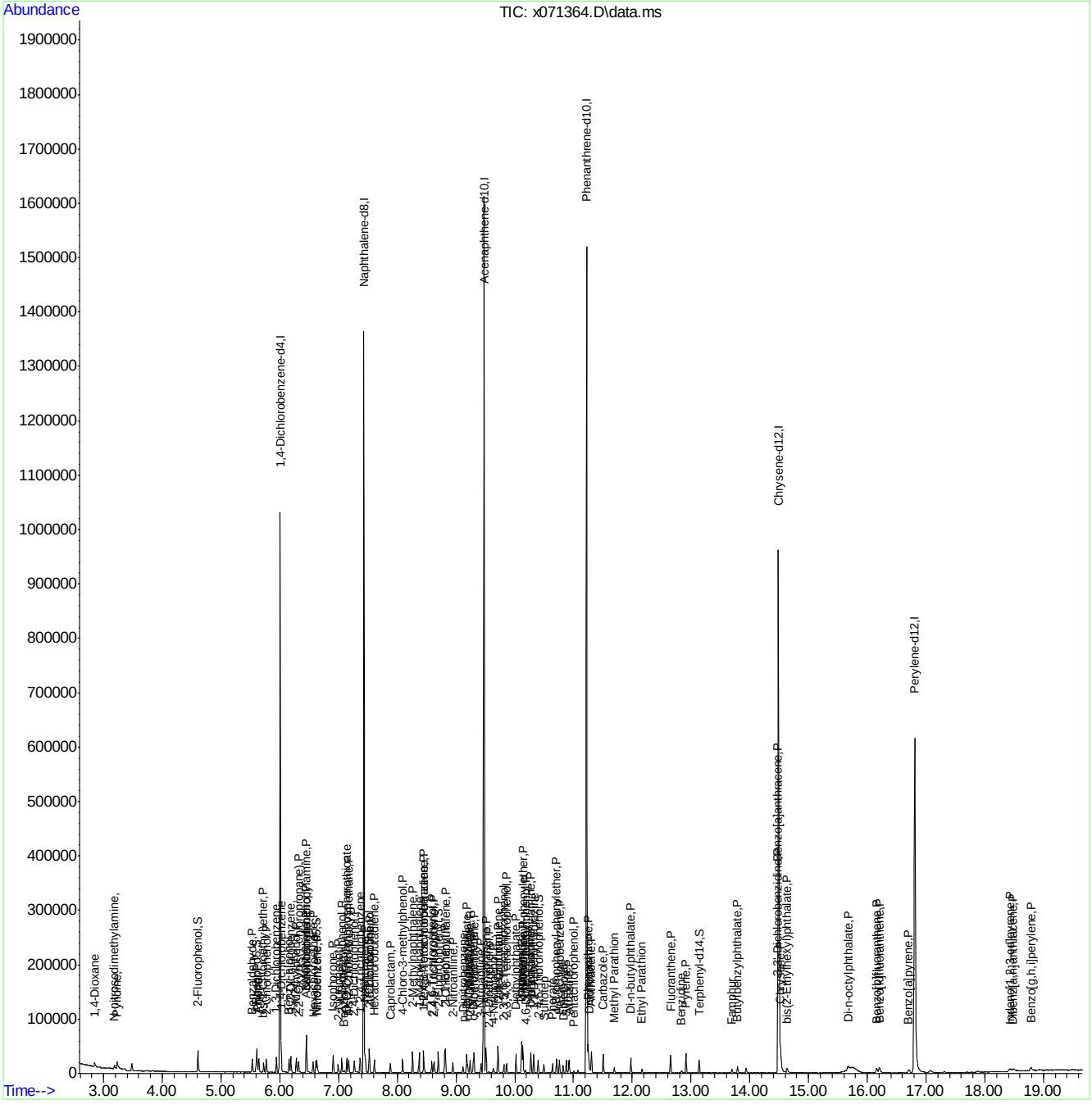
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
82)	Atrazine	10.925	200	2395	1.93	ppm	#	73
83)	Pentachlorophenol	11.000	266	529	0.71	ppm		99
84)	Phenanthrene	11.246	178	17522	2.81	ppm		99
85)	Anthracene	11.305	178	16450	2.58	ppm		96
86)	Disulfoton	11.262	88	5104	1.76	ppm		75
87)	Carbazole	11.508	167	14422	2.54	ppm		98
88)	Methyl Parathion	11.695	109	1825	1.28	ppm	#	75
89)	Di-n-butylphthalate	11.974	149	12697	1.75	ppm		96
90)	Ethyl Parathion	12.166	97	941	1.00	ppm	#	74
91)	Fluoranthene	12.653	202	13932	2.10	ppm		96
93)	Benzidine	12.835	184	3039	1.29	ppm		99
94)	Pyrene	12.915	202	14445	2.04	ppm		96
96)	Famphur	13.696	218	2070	1.55	ppm		77
97)	Butylbenzylphthalate	13.792	149	3749	1.21	ppm		91
98)	3,3'-Dichlorobenzidine	14.471	252	2309	1.24	ppm		94
99)	Benzo[a]anthracene	14.477	228	11906	2.04	ppm		99
100)	Chrysene	14.525	228	13100	2.26	ppm		95
101)	bis(2-Ethylhexyl)phtha...	14.637	149	3571	0.89	ppm		91
103)	Di-n-octylphthalate	15.675	149	9858m	1.57	ppm		
104)	Benzo[b]fluoranthene	16.156	252	6565	1.34	ppm		88
105)	Benzo[k]fluoranthene	16.210	252	11113m	2.06	ppm		
106)	Benzo[a]pyrene	16.702	252	5647	1.15	ppm		93
107)	Indeno[1,2,3-cd]pyrene	18.429	276	2595	0.61	ppm		88
108)	Dibenz[a,h]anthracene	18.483	278	4110m	0.89	ppm		
109)	Benzo[g,h,i]perylene	18.788	276	6615m	1.35	ppm		

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071364.D
Acq On : 23 Jun 2020 1:29 pm
Operator : marthav
Sample : ic2918-1 8270 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 23 16:56:07 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 15:18:55 2020
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: SX2918-IC2918
Lab FileID: X071364.D
Injection Time: 06/23/20 13:29

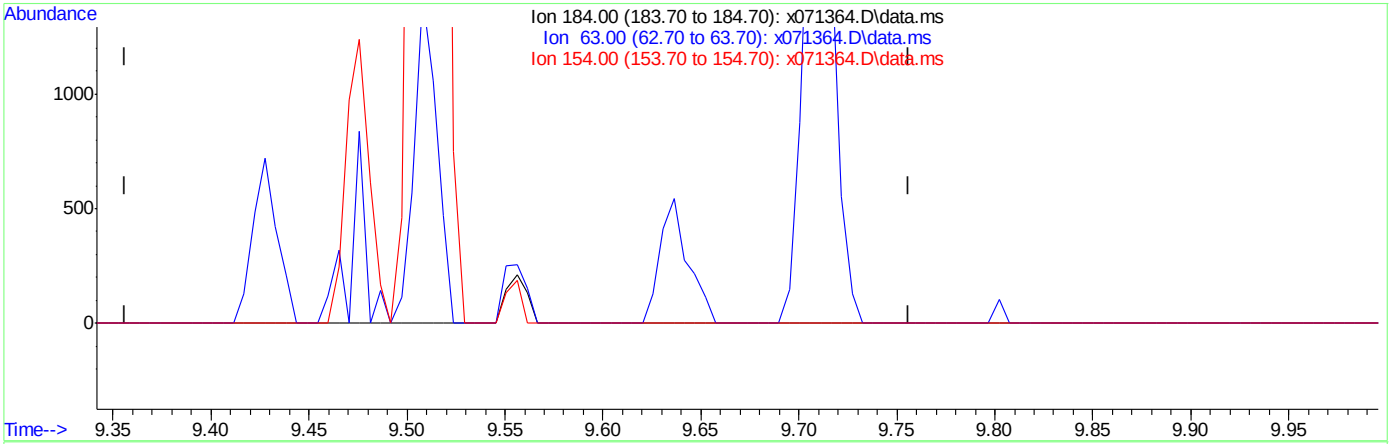
Method: EPA 625.1
Analyst approved: 06/24/20 09:50 Martha Valls
Supervisor approved: 06/24/20 14:07 Naresh Jiawan

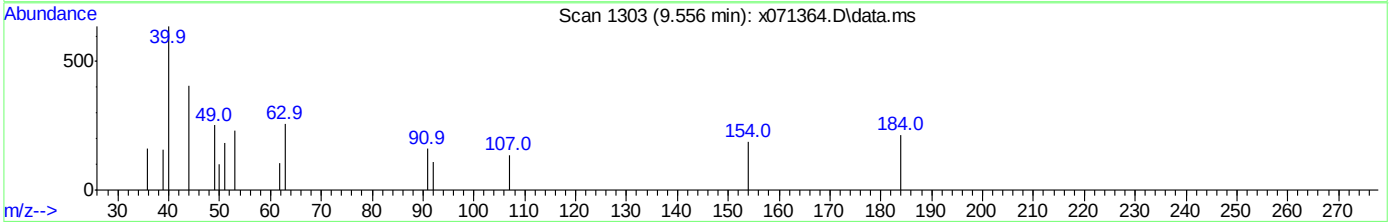
Parameter	CAS	Sig#	R.T. (min.)	Reason
2,4-Dinitrophenol	51-28-5		9.56	Split peak
Di-n-octyl Phthalate	117-84-0		15.67	Split peak
Benzo(k)fluoranthene	207-08-9		16.21	Split peak
Dibenzo(a,h)anthracene	53-70-3		18.48	Split peak
Benzo(g,h,i)perylene	191-24-2		18.79	Split peak

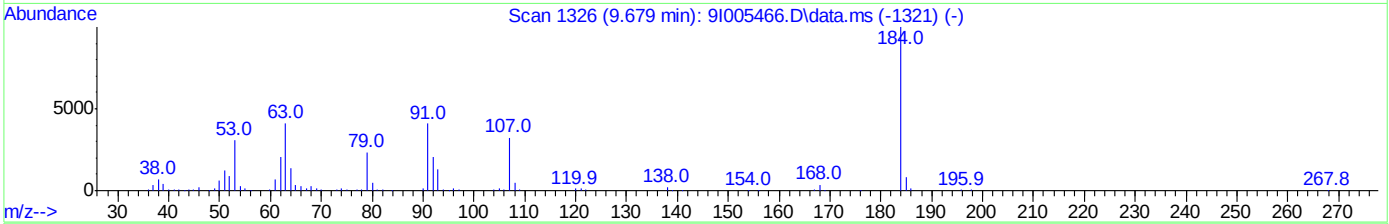
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071364.D
Acq On : 23 Jun 2020 1:29 pm
Operator : marthav
Sample : ic2918-1 8270 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 23 15:19:07 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 15:18:55 2020
Response via : Initial Calibration







TIC: x071364.D\data.ms

(59) 2,4-Dinitrophenol (P)

9.556min (-9.556) 0.00ppm

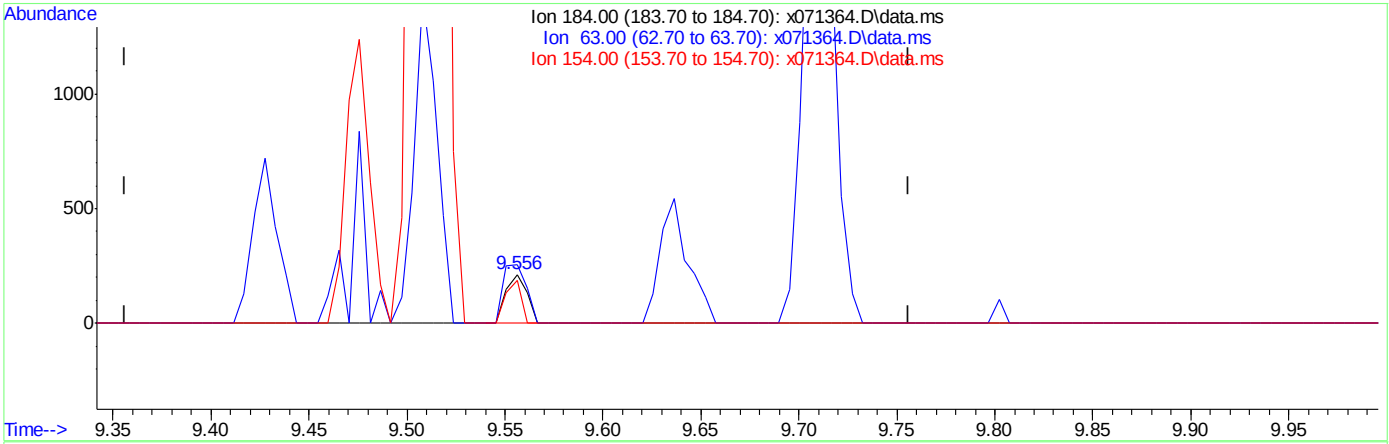
response 0

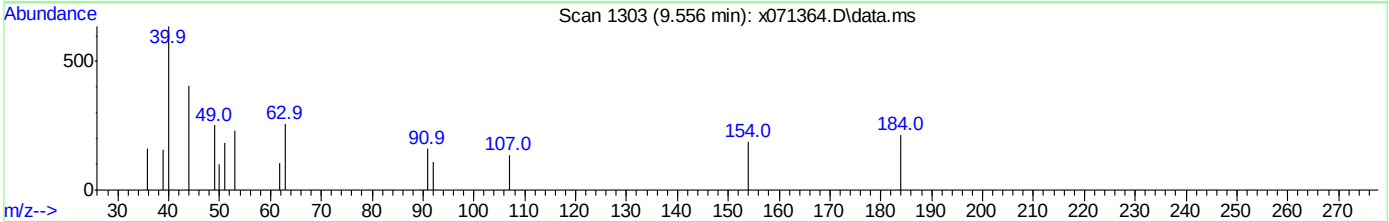
Ion	Exp%	Act%
184.00	100	0.00
63.00	41.30	0.00#
154.00	0.30	0.00
0.00	0.00	0.00

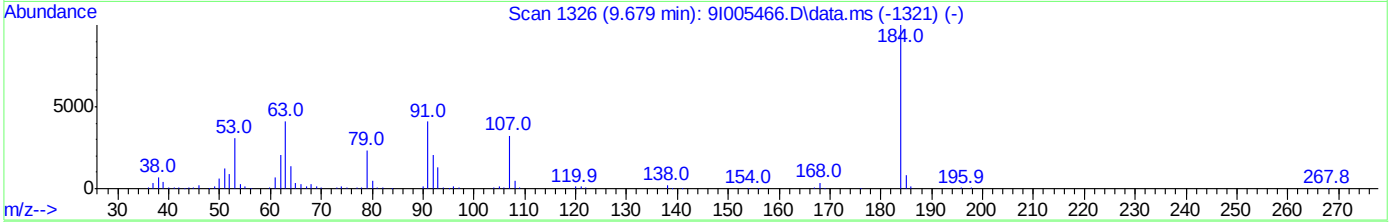
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071364.D
Acq On : 23 Jun 2020 1:29 pm
Operator : marthav
Sample : ic2918-1 8270 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 23 15:19:07 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 15:18:55 2020
Response via : Initial Calibration







TIC: x071364.D\data.ms

(59) 2,4-Dinitrophenol (P)

9.556min (-0.000) 0.30ppm m

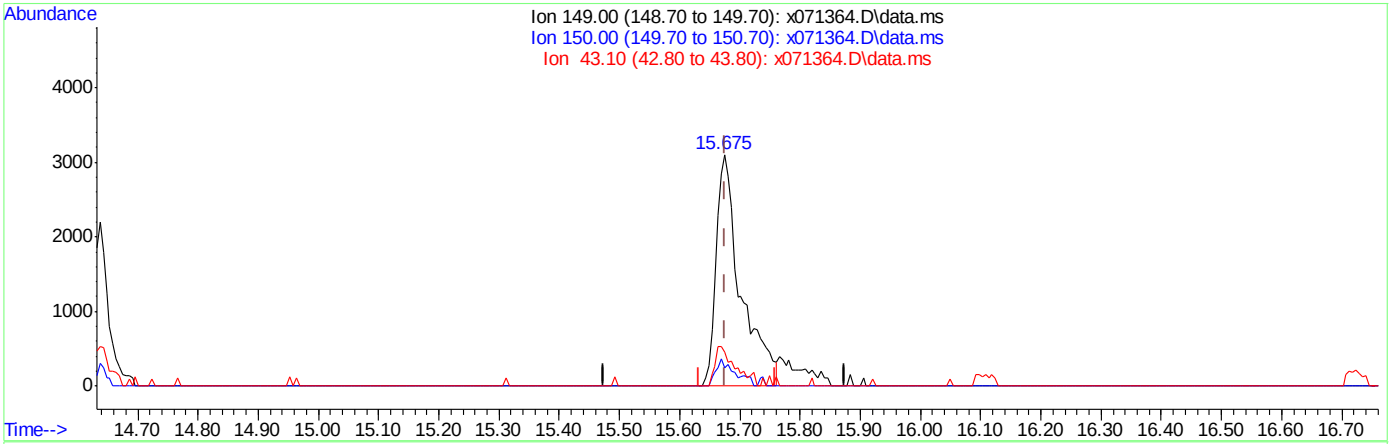
response 160

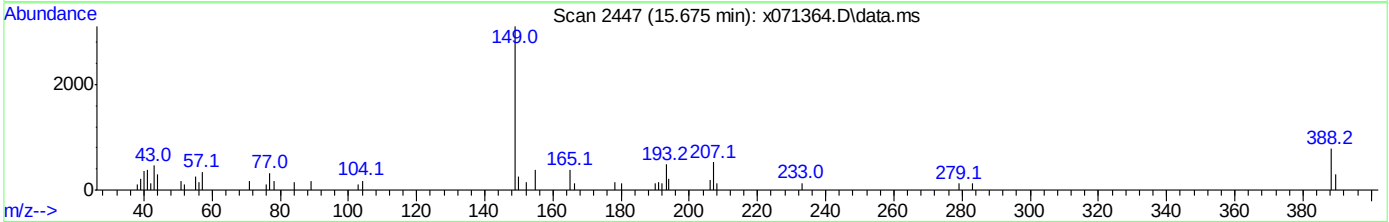
Ion	Exp%	Act%
184.00	100	100
63.00	41.30	119.63#
154.00	0.30	87.38#
0.00	0.00	0.00

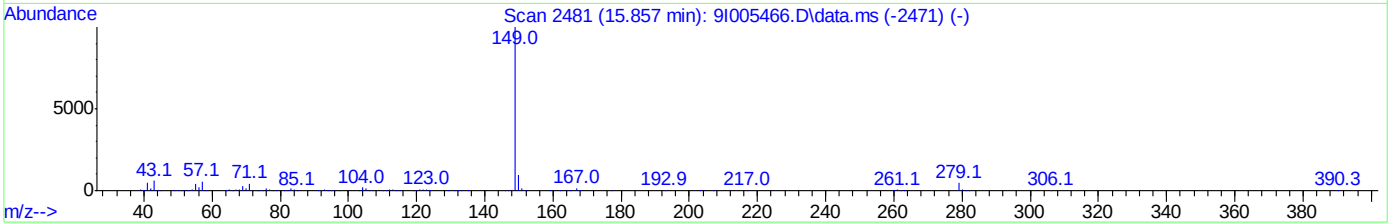
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071364.D
Acq On : 23 Jun 2020 1:29 pm
Operator : marthav
Sample : ic2918-1 8270 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 23 15:19:07 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 15:18:55 2020
Response via : Initial Calibration







TIC: x071364.D\data.ms

(103) Di-n-octylphthalate (P)

15.675min (-0.000) 1.39ppm

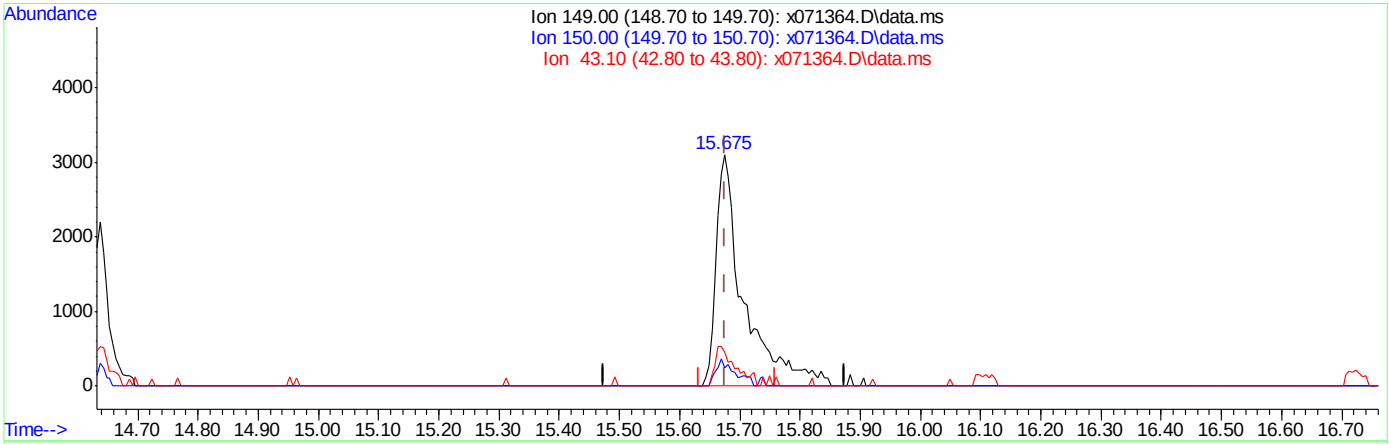
response 8731

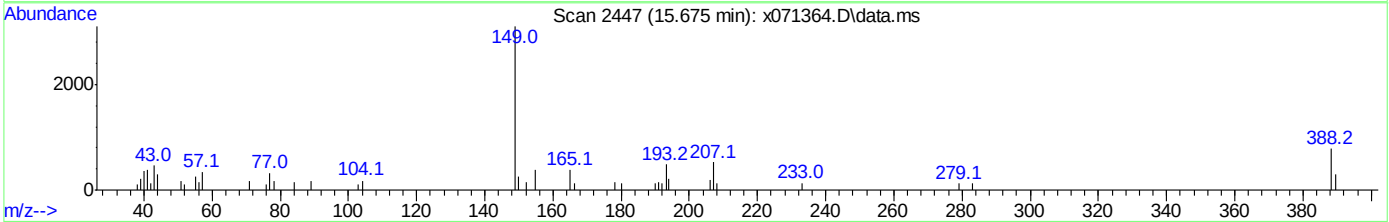
Ion	Exp%	Act%
149.00	100	100
150.00	9.90	8.50
43.10	6.00	13.64
0.00	0.00	0.00

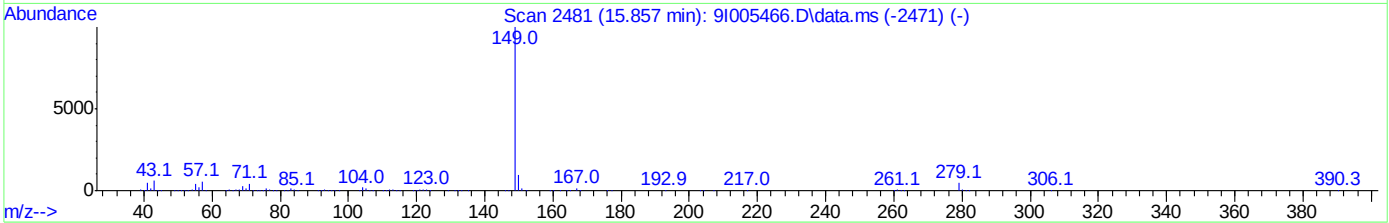
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071364.D
Acq On : 23 Jun 2020 1:29 pm
Operator : marthav
Sample : ic2918-1 8270 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 23 15:19:07 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 15:18:55 2020
Response via : Initial Calibration







TIC: x071364.D\data.ms

(103) Di-n-octylphthalate (P)

15.675min (-0.000) 1.57ppm m

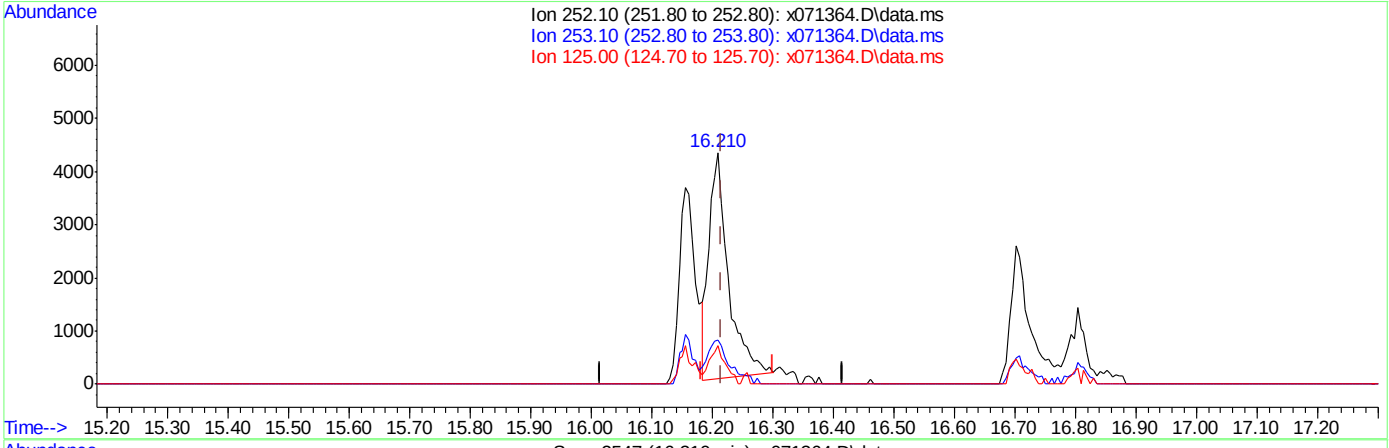
response 9858

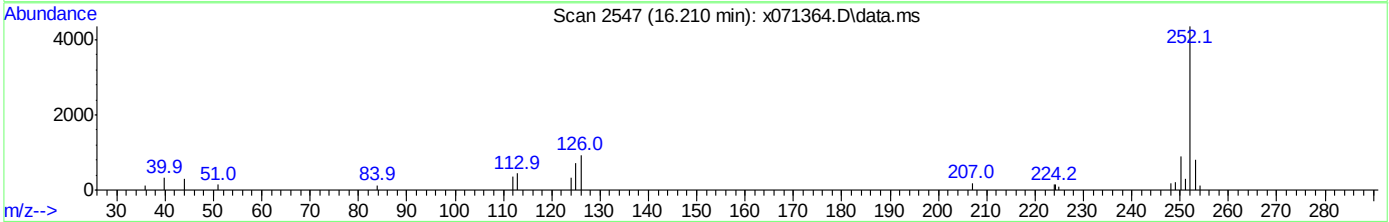
Ion	Exp%	Act%
149.00	100	100
150.00	9.90	8.05
43.10	6.00	14.87
0.00	0.00	0.00

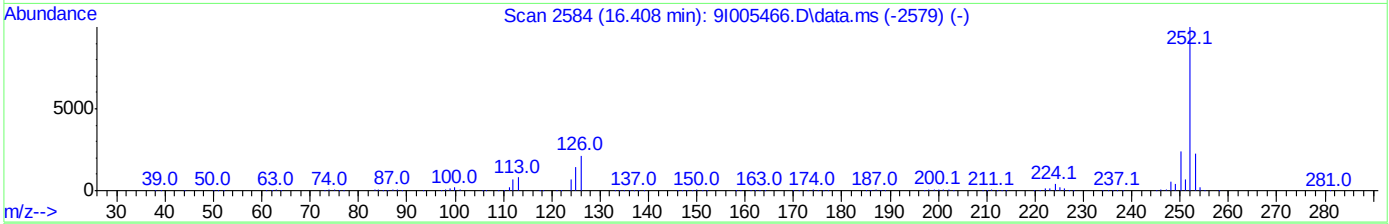
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071364.D
Acq On : 23 Jun 2020 1:29 pm
Operator : marthav
Sample : ic2918-1 8270 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 23 15:19:07 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 15:18:55 2020
Response via : Initial Calibration







TIC: x071364.D\data.ms

(105) Benzo[k]fluoranthene (P)

16.210min (-0.005) 1.77ppm

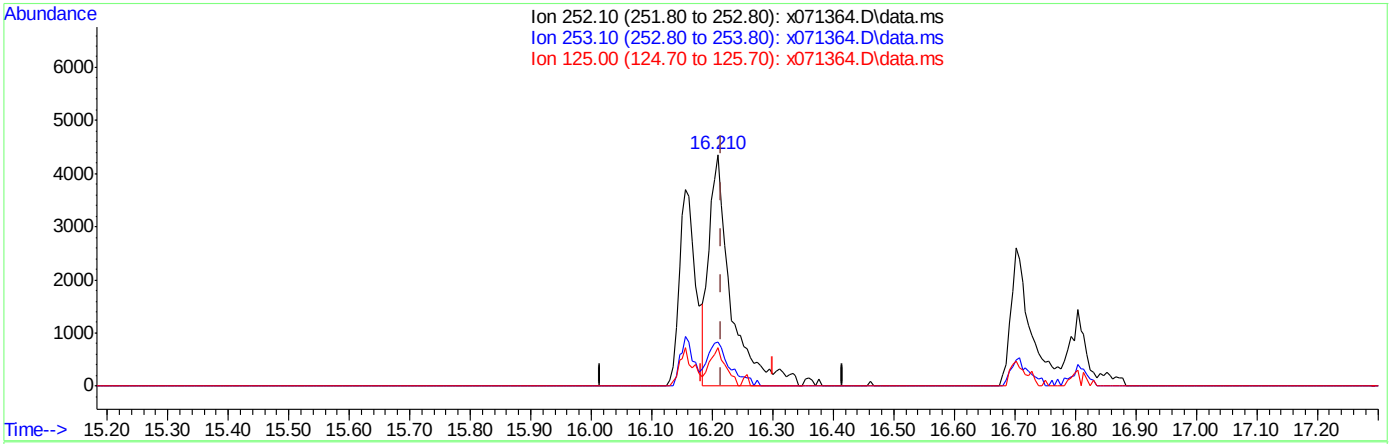
response 9543

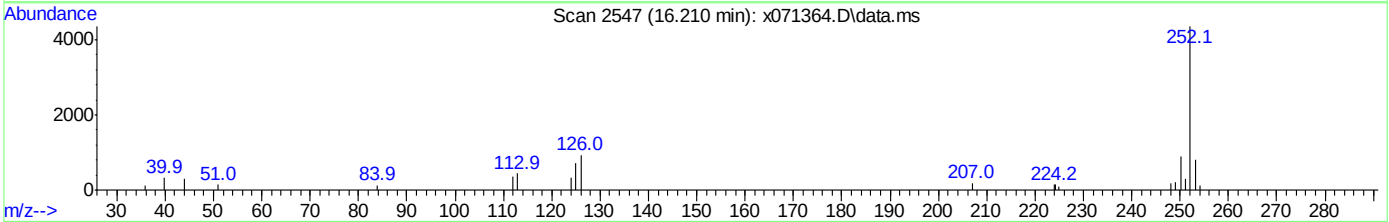
Ion	Exp%	Act%
252.10	100	100
253.10	22.50	19.11
125.00	14.40	17.92
0.00	0.00	0.00

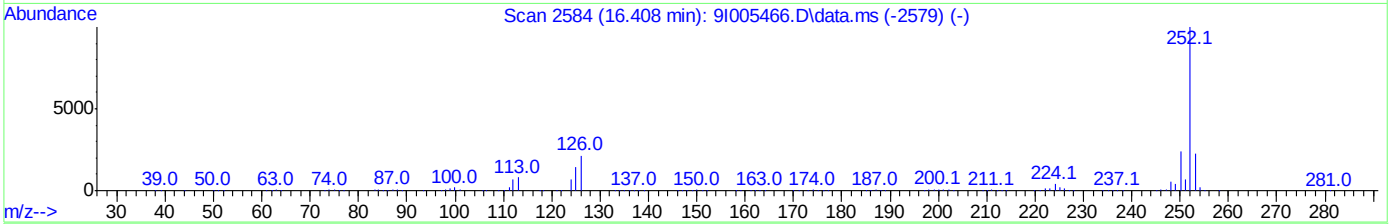
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071364.D
Acq On : 23 Jun 2020 1:29 pm
Operator : marthav
Sample : ic2918-1 8270 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 23 15:19:07 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 15:18:55 2020
Response via : Initial Calibration







TIC: x071364.D\data.ms

(105) Benzo[k]fluoranthene (P)

16.210min (-0.005) 2.06ppm m

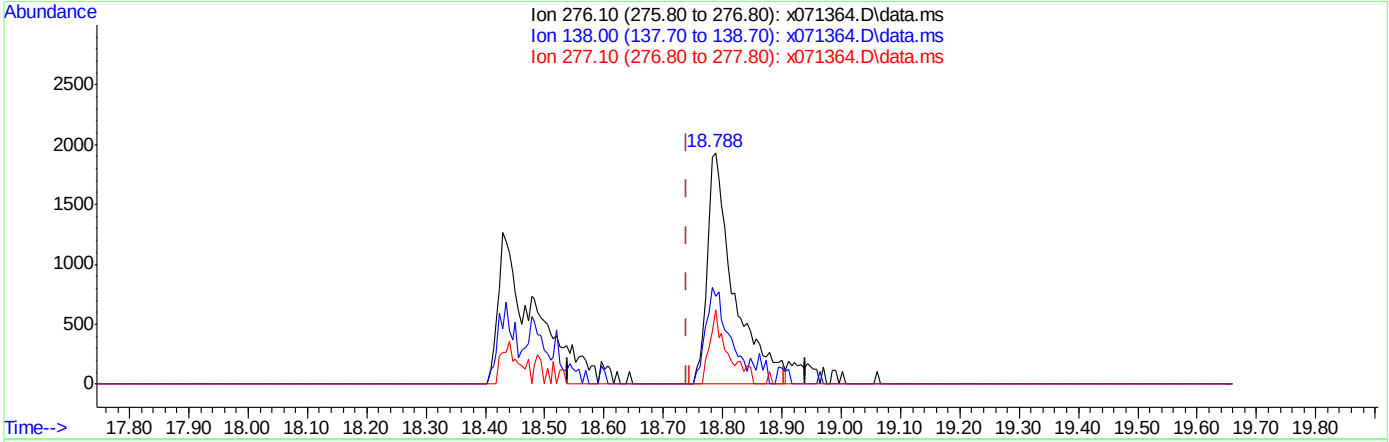
response 11113

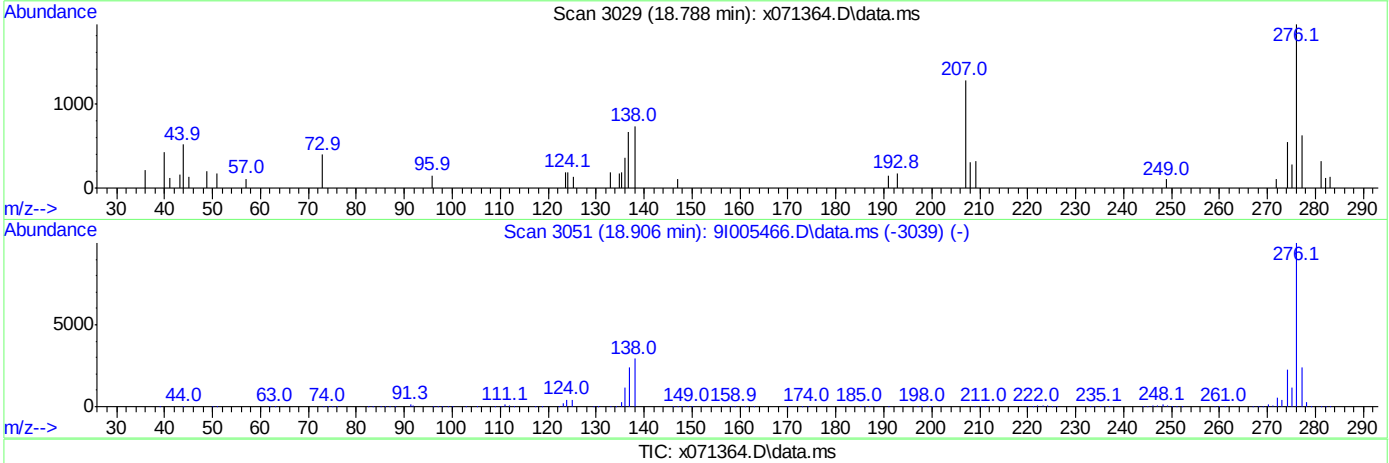
Ion	Exp%	Act%
252.10	100	100
253.10	22.50	18.85
125.00	14.40	16.42
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071364.D
Acq On : 23 Jun 2020 1:29 pm
Operator : marthav
Sample : ic2918-1 8270 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 23 15:19:07 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 15:18:55 2020
Response via : Initial Calibration





TIC: x071364.D\data.ms

(109) Benzo[g,h,i]perylene (P)

18.788min (+0.048) 1.23ppm

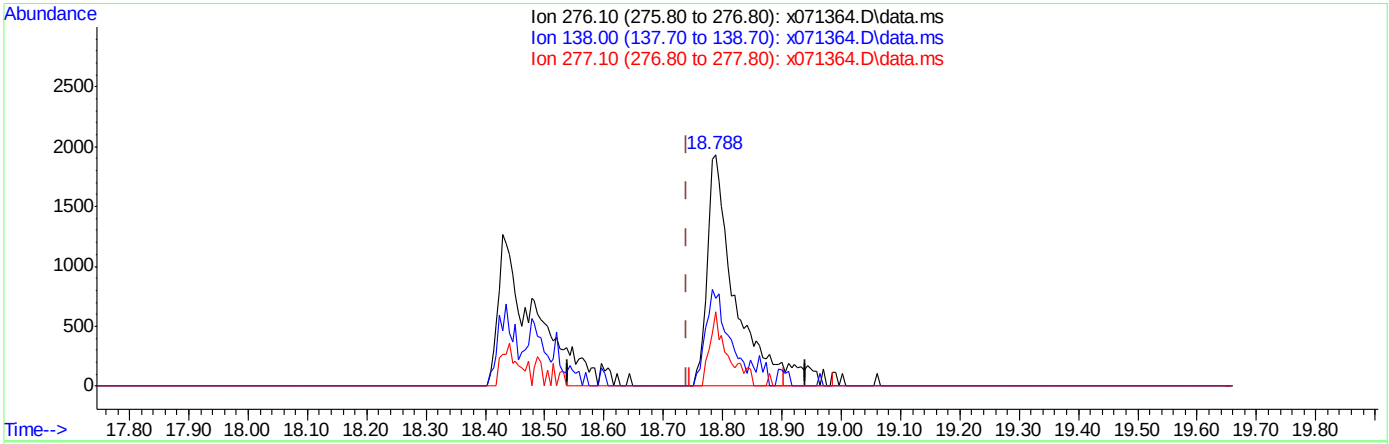
response 6037

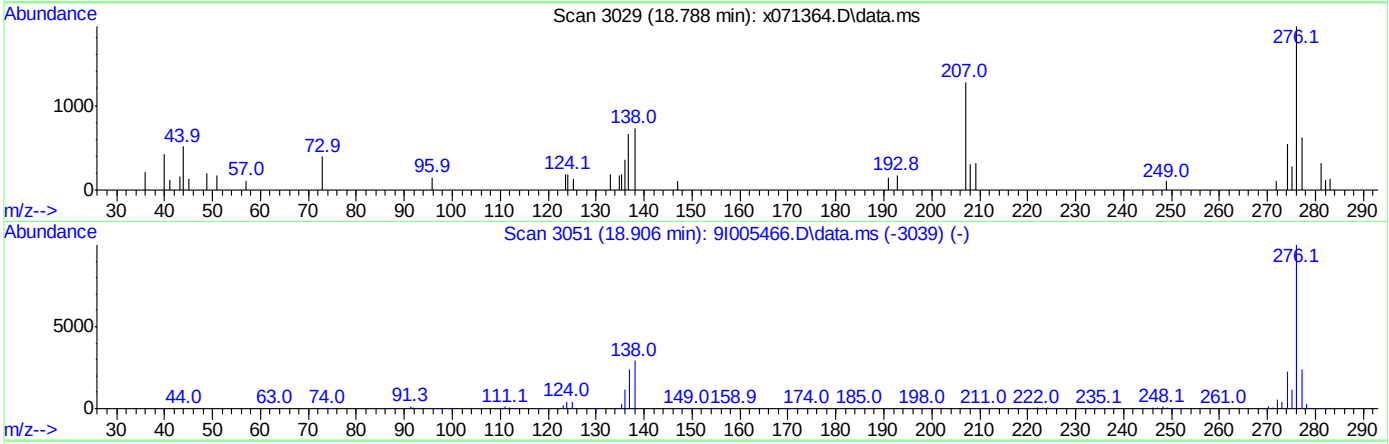
Ion	Exp%	Act%
276.10	100	100
138.00	31.00	36.21
277.10	23.90	33.12
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071364.D
Acq On : 23 Jun 2020 1:29 pm
Operator : marthav
Sample : ic2918-1 8270 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 23 15:19:07 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 15:18:55 2020
Response via : Initial Calibration





TIC: x071364.D\data.ms

(109) Benzo[g,h,i]perylene (P)

18.788min (+0.048) 1.35ppm m

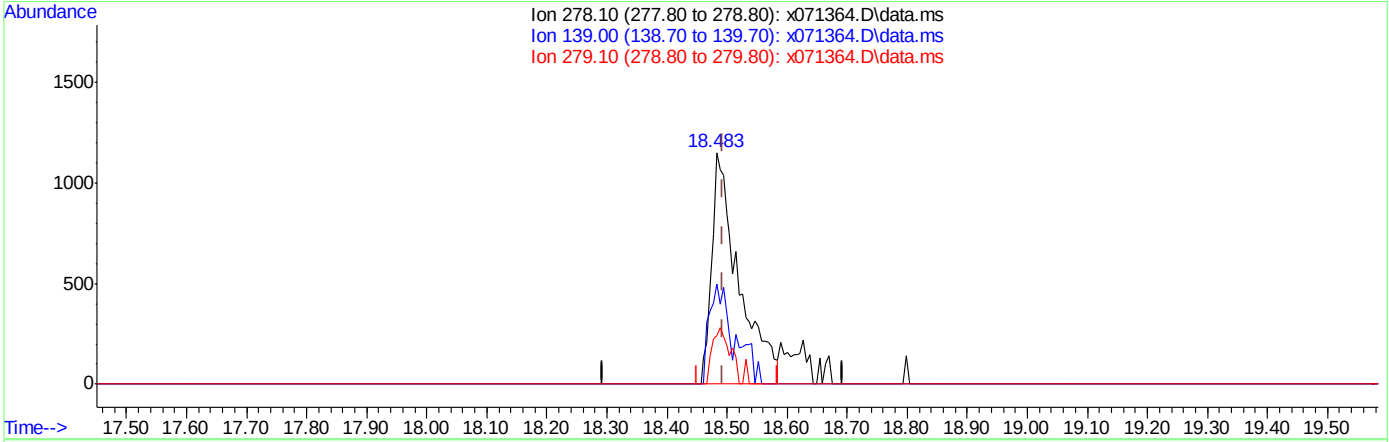
response 6615

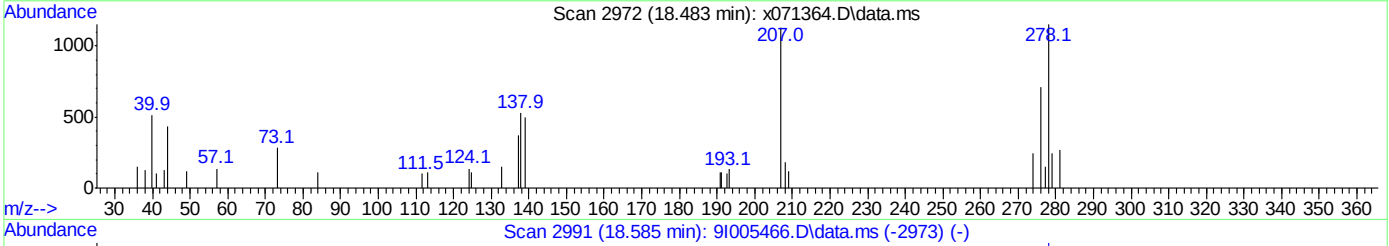
Ion	Exp%	Act%
276.10	100	100
138.00	31.00	37.98
277.10	23.90	32.14
0.00	0.00	0.00

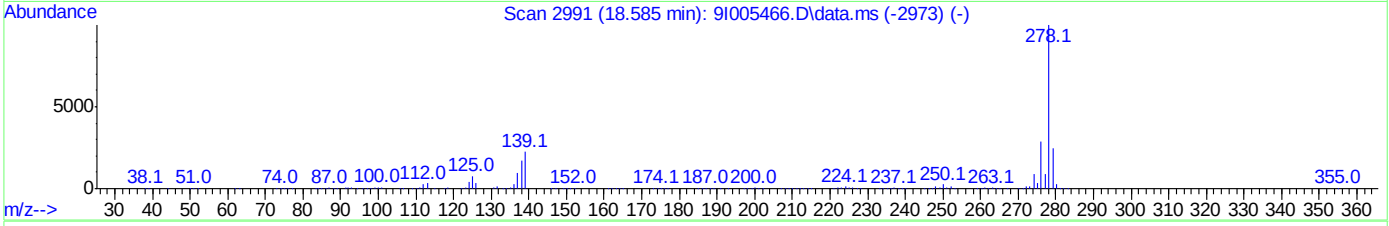
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071364.D
Acq On : 23 Jun 2020 1:29 pm
Operator : marthav
Sample : ic2918-1 8270 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 23 15:19:07 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 15:18:55 2020
Response via : Initial Calibration







TIC: x071364.D\data.ms

(108) Dibenz[a,h]anthracene (P)

18.483min (-0.011) 0.78ppm

response 3566

Ion	Exp%	Act%
278.10	100	100
139.00	22.40	45.54
279.10	24.40	22.22
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071364.D
Acq On : 23 Jun 2020 1:29 pm
Operator : marthav
Sample : ic2918-1 8270 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 23 15:19:07 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 15:18:55 2020
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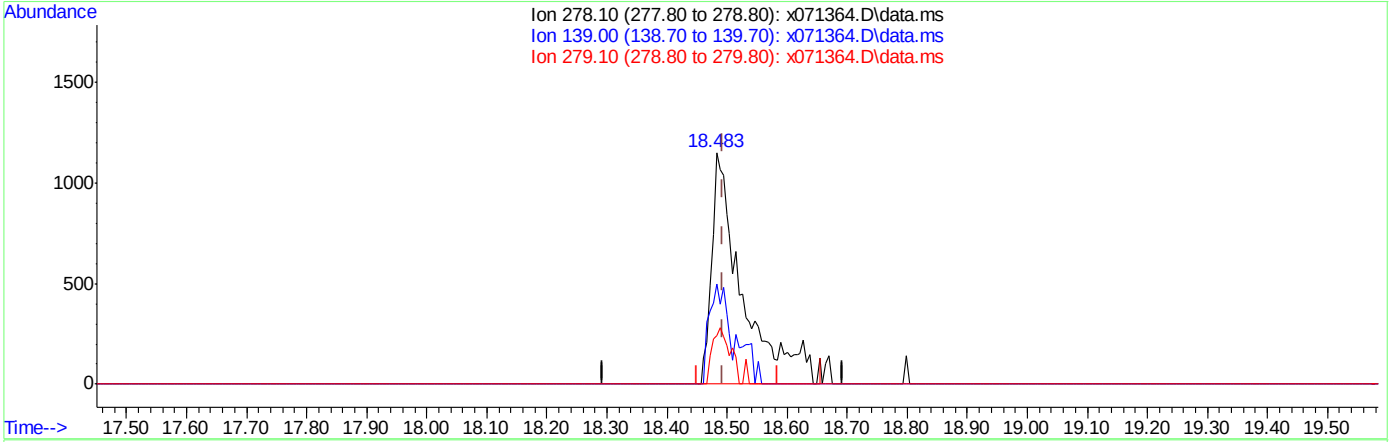
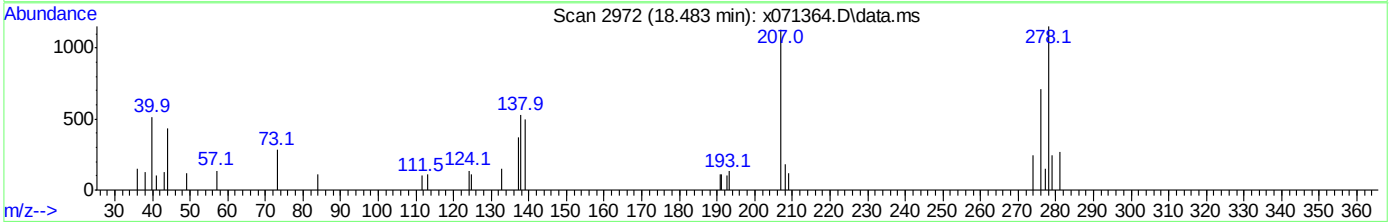
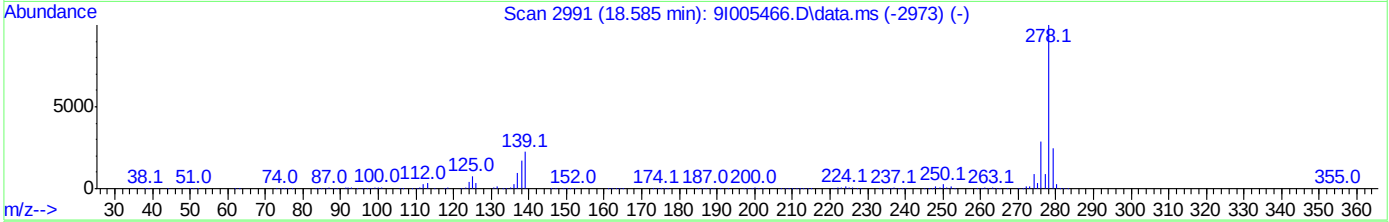






TIC: x071364.D\data.ms

(108) Dibenz[a,h]anthracene (P)

18.483min (-0.011) 0.89ppm m

response 4110

Ion	Exp%	Act%
278.10	100	100
139.00	22.40	43.23
279.10	24.40	21.09
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071365.D
Acq On : 23 Jun 2020 1:54 pm
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 24 12:53:43 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.005	152	153213	40.00	ppm	0.00
22) Naphthalene-d8	7.433	136	638047	40.00	ppm	0.00
43) Acenaphthene-d10	9.476	164	345272	40.00	ppm	0.00
70) Phenanthrene-d10	11.225	188	604959	40.00	ppm	0.00
92) Chrysene-d12	14.488	240	419398	40.00	ppm	0.00
102) Perylene-d12	16.809	264	355811	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	0.000	152	0m	40.00	ppm	-6.00
120) Naphthalene-d8A	0.000	136	0m	40.00	ppm	-7.43
127) Acenaphthene-d10A	0.000	164	0m	40.00	ppm	-9.48
136) Phenanthrene-d10A	0.000	188	0m	40.00	ppm	-11.22
146) Chrysene-d12A	0.000	240	0m	40.00	ppm	-14.49
153) Perylene-d12A	0.000	264	0m	40.00	ppm	-16.82
System Monitoring Compounds						
7) 2-Fluorophenol	4.609	112	54506	20.64	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 20.64%			
9) Phenol-d5	5.604	99	62273	21.90	ppm	0.00
Spiked Amount 100.000	Range 10 - 50		Recovery = 21.90%			
23) Nitrobenzene-d5	6.614	82	30954	10.10	ppm	0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 20.20%#			
47) 2-Fluorobiphenyl	8.700	172	59356	11.43	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 22.86%#			
75) 2,4,6-Tribromophenol	10.401	330	10209	12.76	ppm	0.00
Spiked Amount 100.000	Range 33 - 118		Recovery = 12.76%#			
95) Terphenyl-d14	13.140	244	51464	9.16	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 18.32%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.849	88	13616	10.62	ppm	# 33
3) N-nitrosodimethylamine	3.170	42	22798	20.20	ppm	# 34
4) Pyridine	3.213	79	30208	11.30	ppm	# 17
5) Benzaldehyde	5.529	106	23984	10.83	ppm	91
6) Aniline	5.646	93	41928	10.44	ppm	89
8) bis(2-Chloroethyl)ether	5.727	93	26138	9.35	ppm	75
10) Phenol	5.614	94	33511	9.23	ppm	93
11) 2-Chlorophenol	5.769	128	25959	9.97	ppm	77
12) 1,3-Dichlorobenzene	5.940	146	28900	10.83	ppm	96
13) 1,4-Dichlorobenzene	6.026	146	30913	11.34	ppm	97
14) 1,2-Dichlorobenzene	6.187	146	28675	11.28	ppm	97
15) Benzyl alcohol	6.154	108	18012	10.50	ppm	81
16) 2,2'-Oxybis(1-chloropr...	6.315	45	59027	17.67	ppm	72
17) 2-Methylphenol	6.283	108	26103	11.20	ppm	96
18) Acetophenone	6.449	105	42629	11.58	ppm	95
19) Hexachloroethane	6.566	117	11399	9.87	ppm	84
20) N-Nitroso-di-n-propyla...	6.454	70	21567	11.37	ppm	# 52
21) 3&4-Methylphenol	6.454	108	27468	11.32	ppm	94
24) Nitrobenzene	6.636	77	31070	10.71	ppm	83
25) Isophorone	6.909	82	56848	10.73	ppm	95
26) 2-Nitrophenol	7.000	139	13250	9.48	ppm	85

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071365.D
Acq On : 23 Jun 2020 1:54 pm
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 24 12:53:43 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
27) 2,4-Dimethylphenol	7.058	107	27475	11.43	ppm		88
28) O,O,O-Triethylphosphor...	7.144	198	11974	10.72	ppm		74
29) bis(2-Chloroethoxy)met...	7.171	93	32252	9.76	ppm		98
30) Benzoic Acid	7.112	105	11853	6.54	ppm		93
31) 2,4-Dichlorophenol	7.267	162	21072	10.94	ppm		95
32) 1,2,4-Trichlorobenzene	7.369	180	22305	10.29	ppm		96
34) Naphthalene	7.454	128	83411	11.60	ppm		99
35) 4-Chloroaniline	7.524	127	35261	11.69	ppm		89
36) 2,6-Dichlorophenol	7.529	162	22234	11.31	ppm		97
37) Hexachlorobutadiene	7.609	225	10837	8.96	ppm		99
38) Caprolactam	7.893	113	9906	12.39	ppm	#	56
39) 4-Chloro-3-methylphenol	8.091	107	23324	11.14	ppm		93
40) 2-Methylnaphthalene	8.262	142	56022	12.05	ppm		97
41) 1-Methylnaphthalene	8.374	142	53213	12.21	ppm		97
42) 1,2,4,5-Tetrachloroben...	8.454	216	22402	9.94	ppm		100
44) Hexachlorocyclopentadiene	8.449	237	9902	8.37	ppm		97
45) 2,4,6-Trichlorophenol	8.588	196	14307	10.11	ppm		98
46) 2,4,5-Trichlorophenol	8.625	196	15337m	10.15	ppm		
48) 1,1'-Biphenyl	8.813	154	73891	12.99	ppm		98
49) 2-Chloronaphthalene	8.823	162	50082	11.35	ppm		96
50) 2-Nitroaniline	8.946	65	18263	12.69	ppm	#	66
51) p-Dinitrobenzene	9.118	75	9297	8.81	ppm	#	59
52) Acenaphthylene	9.305	152	81401	12.05	ppm		100
53) Dimethylphthalate	9.187	163	59459	11.72	ppm		99
54) m-Dinitrobenzene	9.203	168	9085	10.31	ppm	#	72
55) 2,6-Dinitrotoluene	9.246	165	13549	11.04	ppm	#	64
56) o-Dinitrobenzene	9.294	50	13934	19.10	ppm	#	53
57) Acenaphthene	9.513	153	55757	12.48	ppm		100
58) 3-Nitroaniline	9.428	138	14873	11.26	ppm		94
59) 2,4-Dinitrophenol	9.556	184	3149	5.37	ppm	#	35
60) Dibenzofuran	9.717	168	74600	12.18	ppm		92
61) 2,4-Dinitrotoluene	9.711	165	17732	11.40	ppm		70
62) 4-Nitrophenol	9.636	109	7265	11.63	ppm	#	65
63) 2,3,5,6-Tetrachlorophenol	9.813	232	10983	9.40	ppm	#	84
64) 2,3,4,6-Tetrachlorophenol	9.861	232	11983m	9.61	ppm		
65) Fluorene	10.118	166	58317	12.20	ppm		98
66) 4-Chlorophenyl-phenyle...	10.139	204	27722	11.56	ppm		85
67) Diethylphthalate	10.021	149	57887	11.48	ppm		96
68) Thionazin	10.112	97	13361	11.25	ppm		99
69) 4-Nitroaniline	10.139	138	16256	12.02	ppm		83
71) 4,6-Dinitro-2-methylph...	10.187	198	6121	7.31	ppm	#	64
72) n-Nitrosodiphenylamine	10.273	169	51304	15.42	ppm		95
73) Diphenylamine	10.273	169	51304	13.16	ppm		95
74) 1,2-Diphenylhydrazine	10.321	77	64320	11.81	ppm		91
76) Sulfotep	10.498	97	9868	11.58	ppm	#	64
77) Phorate	10.642	75	33799	11.21	ppm		99
78) 4-Bromophenyl-phenylether	10.711	248	13131	9.44	ppm	#	76
79) Hexachlorobenzene	10.760	284	12669	7.97	ppm	#	61
80) Dimethoate	10.824	87	21744	12.09	ppm		94
81) Simazine	10.883	201	9688	14.23	ppm		95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071365.D
Acq On : 23 Jun 2020 1:54 pm
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 24 12:53:43 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration

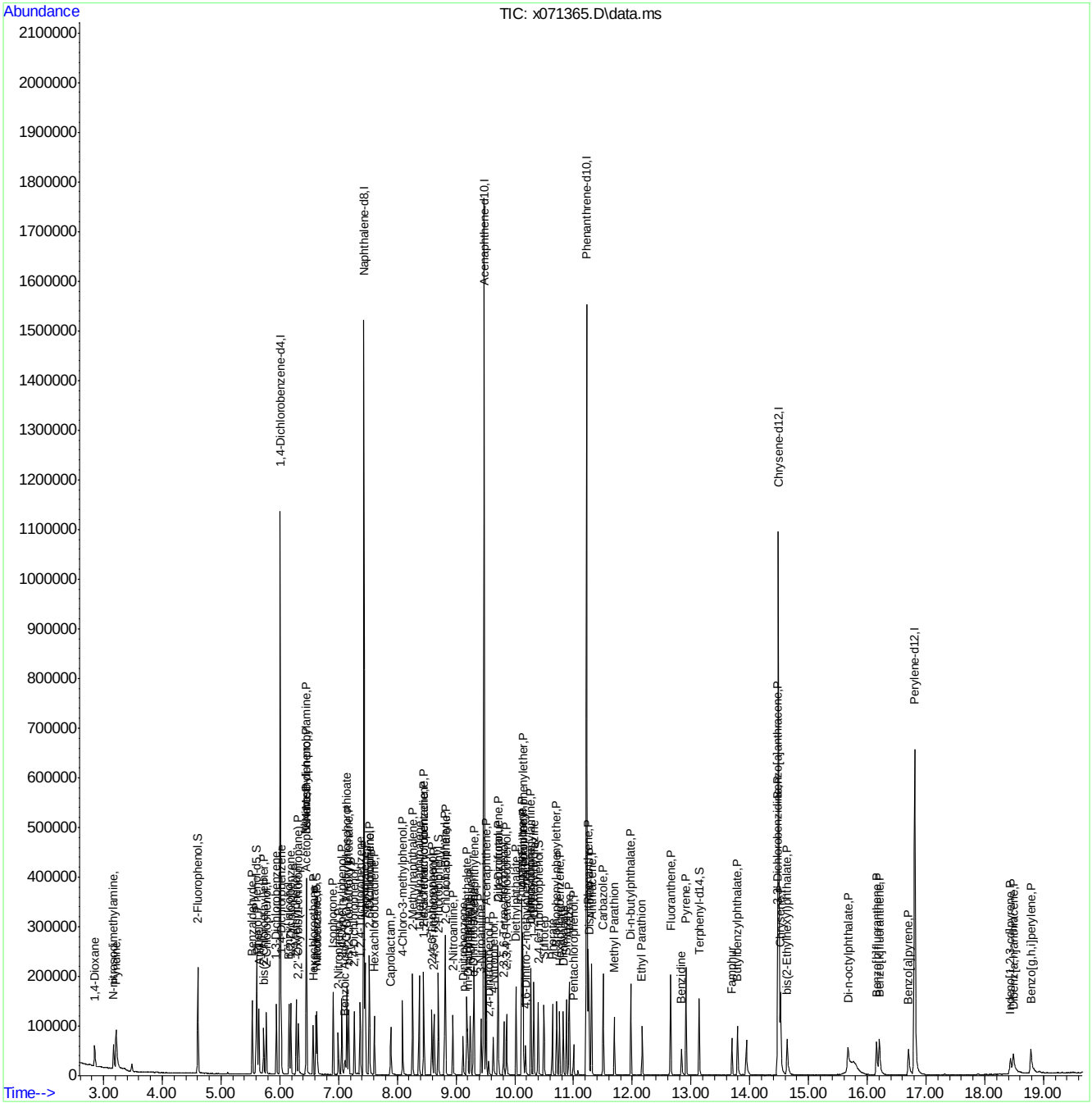
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
82) Atrazine	10.925	200	16977	12.83	ppm	#	74
83) Pentachlorophenol	11.000	266	5568	7.00	ppm		95
84) Phenanthrene	11.246	178	89391	13.41	ppm		99
85) Anthracene	11.310	178	89678	13.17	ppm		97
86) Disulfoton	11.262	88	36118	11.68	ppm		91
87) Carbazole	11.508	167	78812	12.97	ppm		98
88) Methyl Parathion	11.696	109	17952	11.83	ppm	#	82
89) Di-n-butylphthalate	11.974	149	85133	11.01	ppm		98
90) Ethyl Parathion	12.166	97	9653	9.58	ppm		78
91) Fluoranthene	12.653	202	78579	11.09	ppm		97
93) Benzidine	12.835	184	25116	9.97	ppm		93
94) Pyrene	12.915	202	83933	11.06	ppm		98
96) Famphur	13.696	218	20230	14.14	ppm		89
97) Butylbenzylphthalate	13.792	149	29273	8.79	ppm		88
98) 3,3'-Dichlorobenzidine	14.472	252	16143	8.07	ppm		97
99) Benzo[a]anthracene	14.477	228	61251	9.80	ppm		100
100) Chrysene	14.525	228	65072	10.46	ppm		95
101) bis(2-Ethylhexyl)phtha...	14.637	149	33892	7.85	ppm		93
103) Di-n-octylphthalate	15.675	149	59386	8.88	ppm		93
104) Benzo[b]fluoranthene	16.156	252	43287	8.28	ppm		99
105) Benzo[k]fluoranthene	16.210	252	56428	9.80	ppm		98
106) Benzo[a]pyrene	16.702	252	38337	7.31	ppm		94
107) Indeno[1,2,3-cd]pyrene	18.435	276	22408	4.94	ppm		96
108) Dibenz[a,h]anthracene	18.488	278	23664	4.83	ppm		91
109) Benzo[g,h,i]perylene	18.788	276	37051	7.11	ppm		90

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071365.D
Acq On : 23 Jun 2020 1:54 pm
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 11 Sample Multiplier: 1

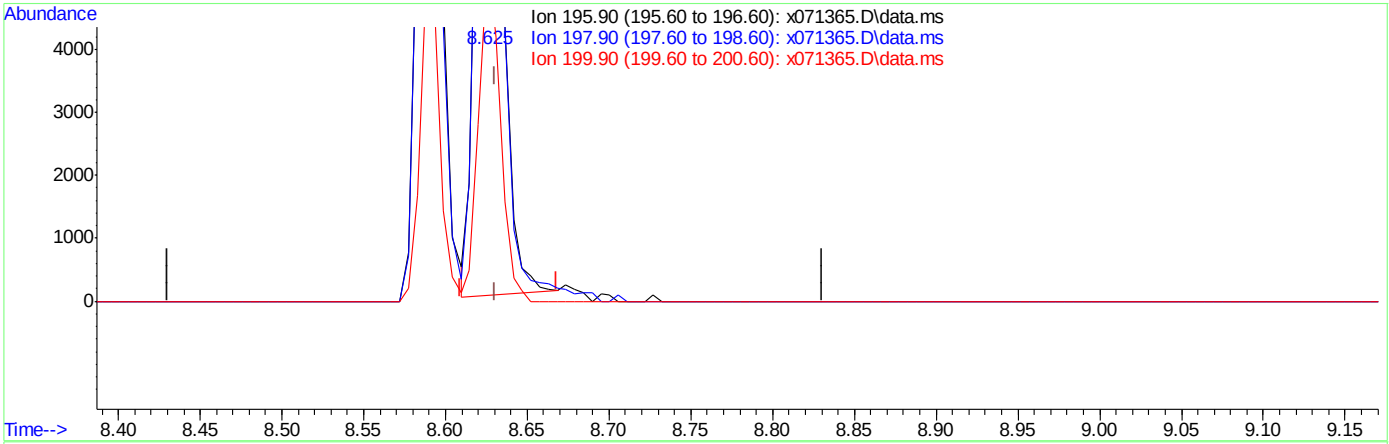
Quant Time: Jun 24 12:53:43 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration

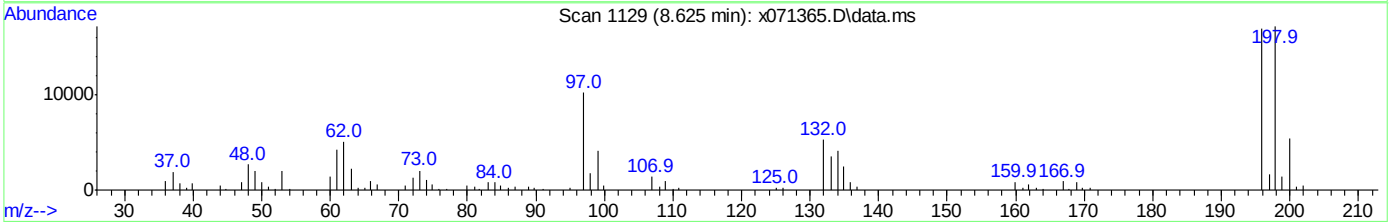


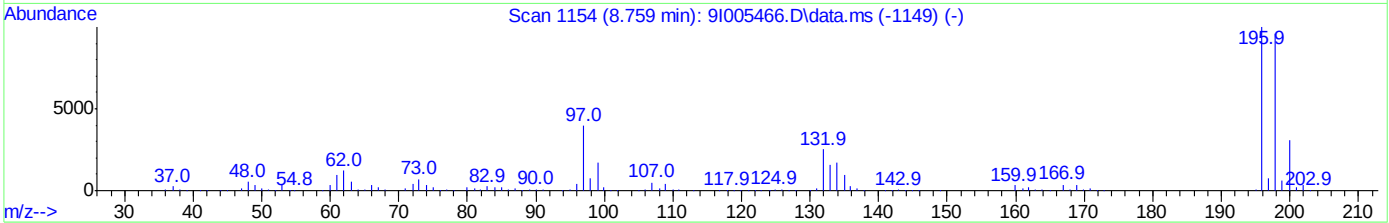
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071365.D
Acq On : 23 Jun 2020 1:54 pm
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 23 16:56:20 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration







TIC: x071365.D\data.ms

(46) 2,4,5-Trichlorophenol (P)

8.625min (-0.005) 9.87ppm

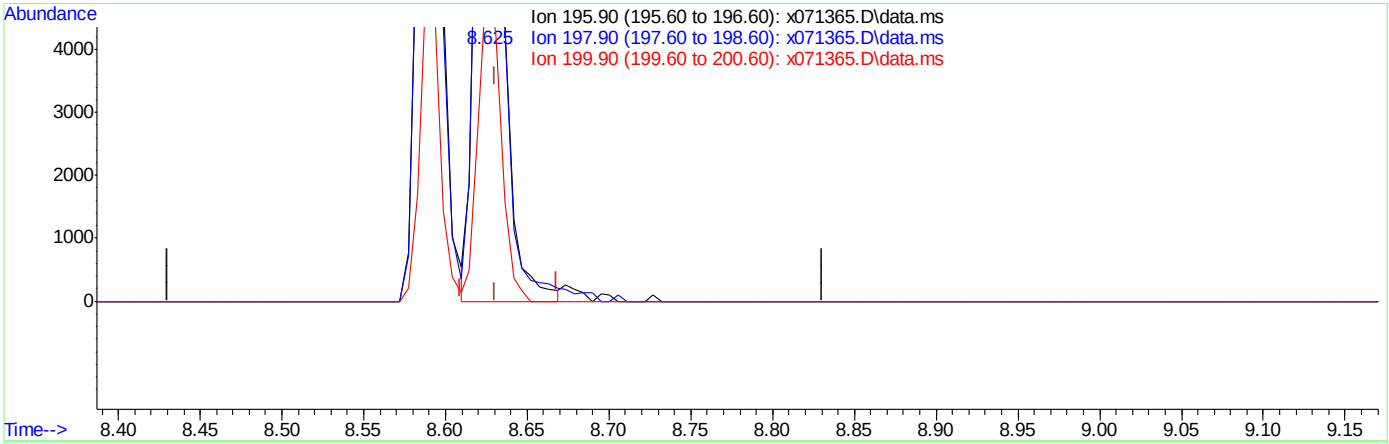
response 14908

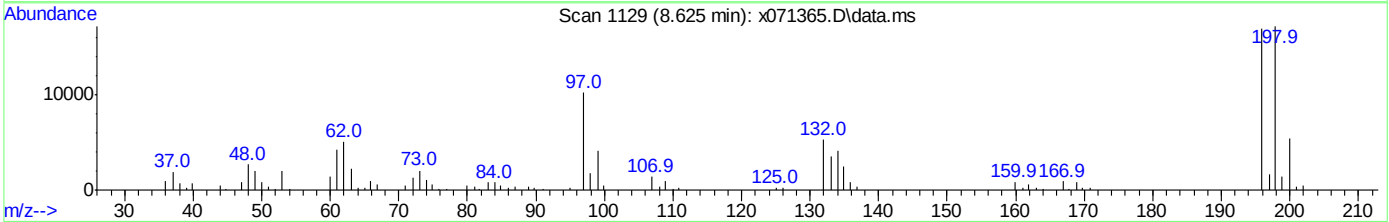
Ion	Exp%	Act%
195.90	100	100
197.90	96.00	101.59
199.90	30.90	32.14
0.00	0.00	0.00

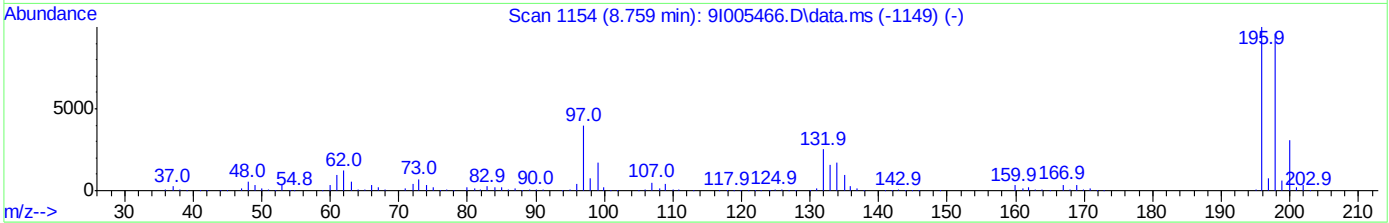
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071365.D
Acq On : 23 Jun 2020 1:54 pm
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 23 16:56:20 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration







TIC: x071365.D\data.ms

(46) 2,4,5-Trichlorophenol (P)

8.625min (-0.005) 10.15ppm m

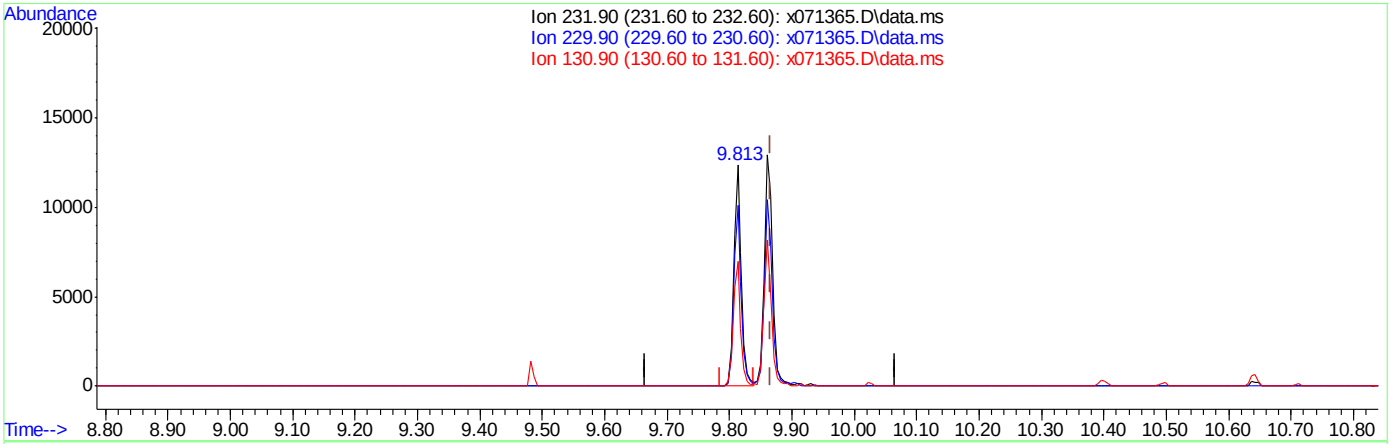
response 15337

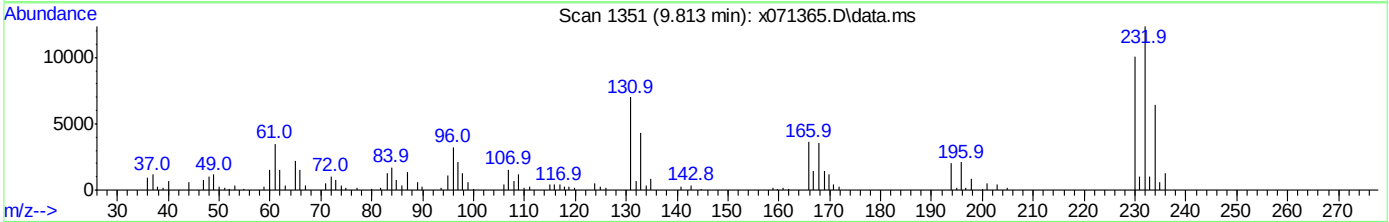
Ion	Exp%	Act%
195.90	100	100
197.90	96.00	101.08
199.90	30.90	31.85
0.00	0.00	0.00

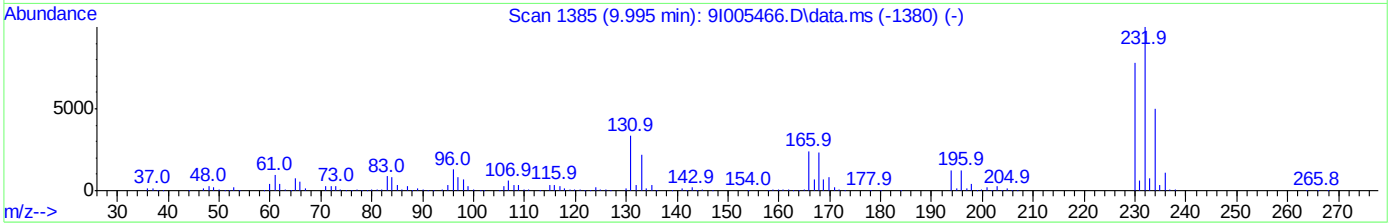
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071365.D
Acq On : 23 Jun 2020 1:54 pm
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 24 12:53:06 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration







TIC: x071365.D\data.ms

(64) 2,3,4,6-Tetrachlorophenol (P)

9.813min (-0.053) 8.81ppm

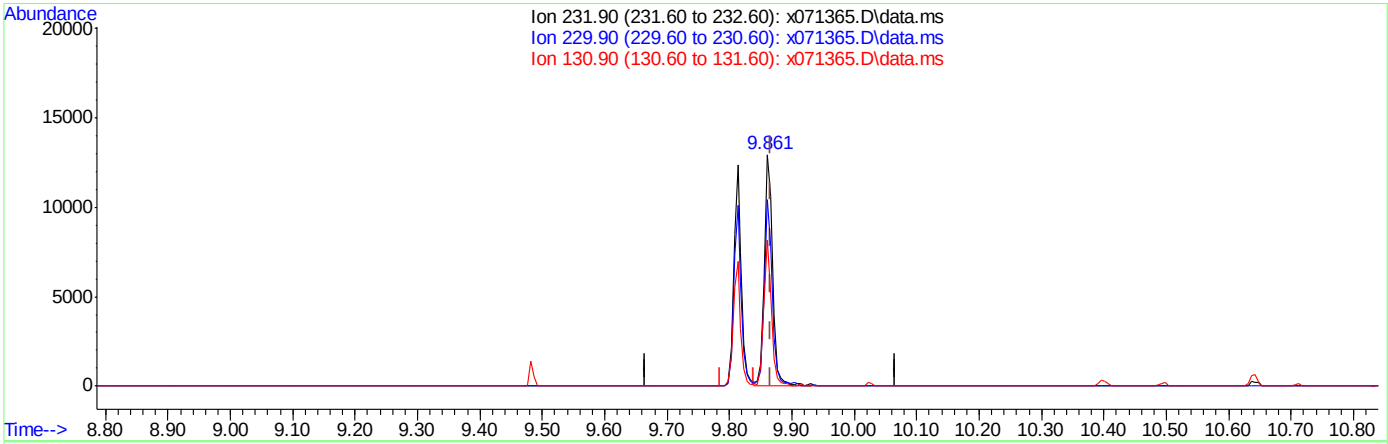
response 10983

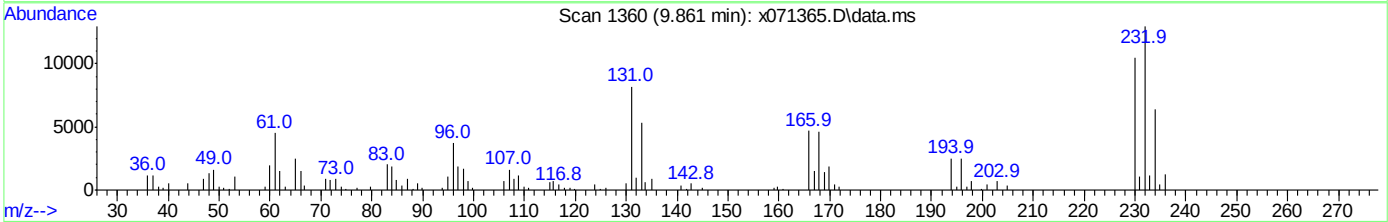
Ion	Exp%	Act%
231.90	100	100
229.90	78.40	81.93
130.90	33.30	56.61
0.00	0.00	0.00

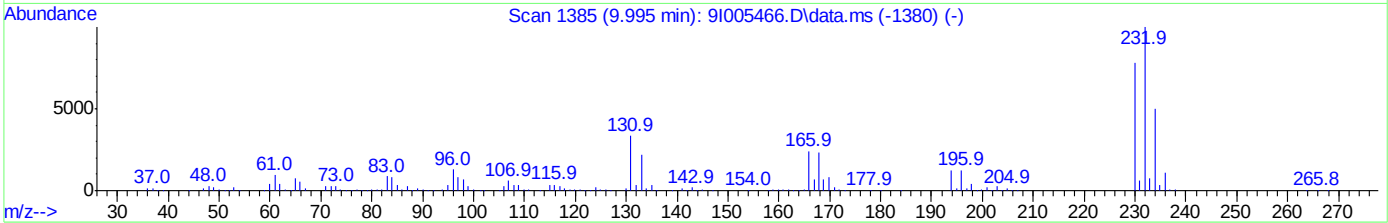
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071365.D
Acq On : 23 Jun 2020 1:54 pm
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 24 12:53:06 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration







TIC: x071365.D\data.ms

(64) 2,3,4,6-Tetrachlorophenol (P)

9.861min (-0.005) 9.61ppm m

response 11983

Ion	Exp%	Act%
231.90	100	100
229.90	78.40	80.64
130.90	33.30	63.25
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071366.D
Acq On : 23 Jun 2020 2:20 pm
Operator : marthav
Sample : ic2918-10 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 23 16:56:48 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.005	152	155496	40.00	ppm	0.00
22) Naphthalene-d8	7.433	136	654391	40.00	ppm	0.00
43) Acenaphthene-d10	9.476	164	353292	40.00	ppm	0.00
70) Phenanthrene-d10	11.225	188	615230	40.00	ppm	0.00
92) Chrysene-d12	14.493	240	423636	40.00	ppm	0.00
102) Perylene-d12	16.809	264	348672	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	0.000	152	0m	40.00	ppm	-6.00
120) Naphthalene-d8A	0.000	136	0m	40.00	ppm	-7.43
127) Acenaphthene-d10A	0.000	164	0m	40.00	ppm	-9.48
136) Phenanthrene-d10A	0.000	188	0m	40.00	ppm	-11.22
146) Chrysene-d12A	0.000	240	0m	40.00	ppm	-14.49
153) Perylene-d12A	0.000	264	0m	40.00	ppm	-16.82
System Monitoring Compounds						
7) 2-Fluorophenol	4.609	112	114758	42.82	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 42.82%			
9) Phenol-d5	5.603	99	134134	46.48	ppm	0.00
Spiked Amount 100.000	Range 10 - 50		Recovery = 46.48%			
23) Nitrobenzene-d5	6.614	82	66899	21.29	ppm	0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 42.58%			
47) 2-Fluorobiphenyl	8.700	172	125790	23.68	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 47.36%			
75) 2,4,6-Tribromophenol	10.401	330	23184	28.48	ppm	0.00
Spiked Amount 100.000	Range 33 - 118		Recovery = 28.48%#			
95) Terphenyl-d14	13.140	244	110276	19.43	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 38.86%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.849	88	28140	21.62	ppm	# 32
3) N-nitrosodimethylamine	3.170	42	49226	42.97	ppm	# 35
4) Pyridine	3.207	79	66089	24.35	ppm	# 15
5) Benzaldehyde	5.528	106	49405	21.98	ppm	93
6) Aniline	5.646	93	88588	21.73	ppm	86
8) bis(2-Chloroethyl)ether	5.726	93	56030	19.74	ppm	# 74
10) Phenol	5.614	94	74149	20.13	ppm	96
11) 2-Chlorophenol	5.769	128	57618	21.81	ppm	79
12) 1,3-Dichlorobenzene	5.940	146	61108	22.57	ppm	97
13) 1,4-Dichlorobenzene	6.026	146	64641	23.36	ppm	99
14) 1,2-Dichlorobenzene	6.186	146	60961	23.63	ppm	96
15) Benzyl alcohol	6.154	108	39919	22.93	ppm	79
16) 2,2'-Oxybis(1-chloropr...	6.315	45	123847	36.53	ppm	75
17) 2-Methylphenol	6.283	108	56254	23.78	ppm	97
18) Acetophenone	6.448	105	88063	23.58	ppm	96
19) Hexachloroethane	6.566	117	24344	20.77	ppm	89
20) N-Nitroso-di-n-propyla...	6.459	70	45135	23.44	ppm	# 55
21) 3&4-Methylphenol	6.454	108	59928	24.33	ppm	97
24) Nitrobenzene	6.636	77	66335	22.29	ppm	82
25) Isophorone	6.914	82	122821	22.61	ppm	98
26) 2-Nitrophenol	6.999	139	30272	21.13	ppm	86

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071366.D
Acq On : 23 Jun 2020 2:20 pm
Operator : marthav
Sample : ic2918-10 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 23 16:56:48 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
27)	2,4-Dimethylphenol	7.058	107	60041	24.36	ppm		96
28)	O,O,O-Triethylphosphor...	7.144	198	25587	22.34	ppm		67
29)	bis(2-Chloroethoxy)met...	7.176	93	69341	20.45	ppm		97
30)	Benzoic Acid	7.128	105	36022	19.37	ppm		89
31)	2,4-Dichlorophenol	7.272	162	47127	23.86	ppm		98
32)	1,2,4-Trichlorobenzene	7.368	180	47830	21.52	ppm		97
34)	Naphthalene	7.454	128	180087	24.41	ppm		99
35)	4-Chloroaniline	7.524	127	76278	24.65	ppm		89
36)	2,6-Dichlorophenol	7.529	162	49400	24.50	ppm		96
37)	Hexachlorobutadiene	7.609	225	23667	19.08	ppm		99
38)	Caprolactam	7.898	113	21367	26.05	ppm	#	44
39)	4-Chloro-3-methylphenol	8.090	107	52723	24.56	ppm		90
40)	2-Methylnaphthalene	8.262	142	120867	25.34	ppm		97
41)	1-Methylnaphthalene	8.374	142	114860	25.70	ppm		98
42)	1,2,4,5-Tetrachloroben...	8.454	216	47554	20.57	ppm		99
44)	Hexachlorocyclopentadiene	8.449	237	22969	18.98	ppm		98
45)	2,4,6-Trichlorophenol	8.593	196	31015	21.41	ppm		99
46)	2,4,5-Trichlorophenol	8.625	196	34887	22.57	ppm		98
48)	1,1'-Biphenyl	8.813	154	149463	25.69	ppm		99
49)	2-Chloronaphthalene	8.823	162	107769	23.86	ppm		95
50)	2-Nitroaniline	8.946	65	40476	27.48	ppm	#	66
51)	p-Dinitrobenzene	9.117	75	21846	20.22	ppm	#	57
52)	Acenaphthylene	9.305	152	178166	25.78	ppm		100
53)	Dimethylphthalate	9.187	163	125366	24.15	ppm		99
54)	m-Dinitrobenzene	9.203	168	20257	22.47	ppm	#	47
55)	2,6-Dinitrotoluene	9.246	165	28857	22.98	ppm	#	63
56)	o-Dinitrobenzene	9.294	50	30312	40.61	ppm	#	47
57)	Acenaphthene	9.513	153	118768	25.98	ppm		99
58)	3-Nitroaniline	9.433	138	32061	23.73	ppm		98
59)	2,4-Dinitrophenol	9.556	184	9607	16.00	ppm	#	32
60)	Dibenzofuran	9.716	168	158964	25.37	ppm		91
61)	2,4-Dinitrotoluene	9.711	165	37895	23.81	ppm	#	64
62)	4-Nitrophenol	9.636	109	16992	26.57	ppm	#	65
63)	2,3,5,6-Tetrachlorophenol	9.813	232	25132	21.02	ppm		90
64)	2,3,4,6-Tetrachlorophenol	9.861	232	26671	20.90	ppm		83
65)	Fluorene	10.118	166	126410	25.84	ppm		99
66)	4-Chlorophenyl-phenyle...	10.139	204	59056	24.08	ppm		86
67)	Diethylphthalate	10.027	149	126377	24.50	ppm		98
68)	Thionazin	10.118	97	28910	23.78	ppm		98
69)	4-Nitroaniline	10.144	138	35972	26.00	ppm		82
71)	4,6-Dinitro-2-methylph...	10.187	198	16902	19.85	ppm	#	62
72)	n-Nitrosodiphenylamine	10.278	169	109884	32.48	ppm		97
73)	Diphenylamine	10.278	169	109884	27.73	ppm		97
74)	1,2-Diphenylhydrazine	10.321	77	138419	24.99	ppm		89
76)	Sulfotep	10.497	97	21074	24.32	ppm	#	63
77)	Phorate	10.642	75	73892	24.09	ppm		97
78)	4-Bromophenyl-phenylether	10.711	248	28119	19.88	ppm	#	73
79)	Hexachlorobenzene	10.759	284	27000	16.69	ppm	#	61
80)	Dimethoate	10.824	87	47659	26.05	ppm		92
81)	Simazine	10.888	201	21012	30.35	ppm		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071366.D
Acq On : 23 Jun 2020 2:20 pm
Operator : marthav
Sample : ic2918-10 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 23 16:56:48 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration

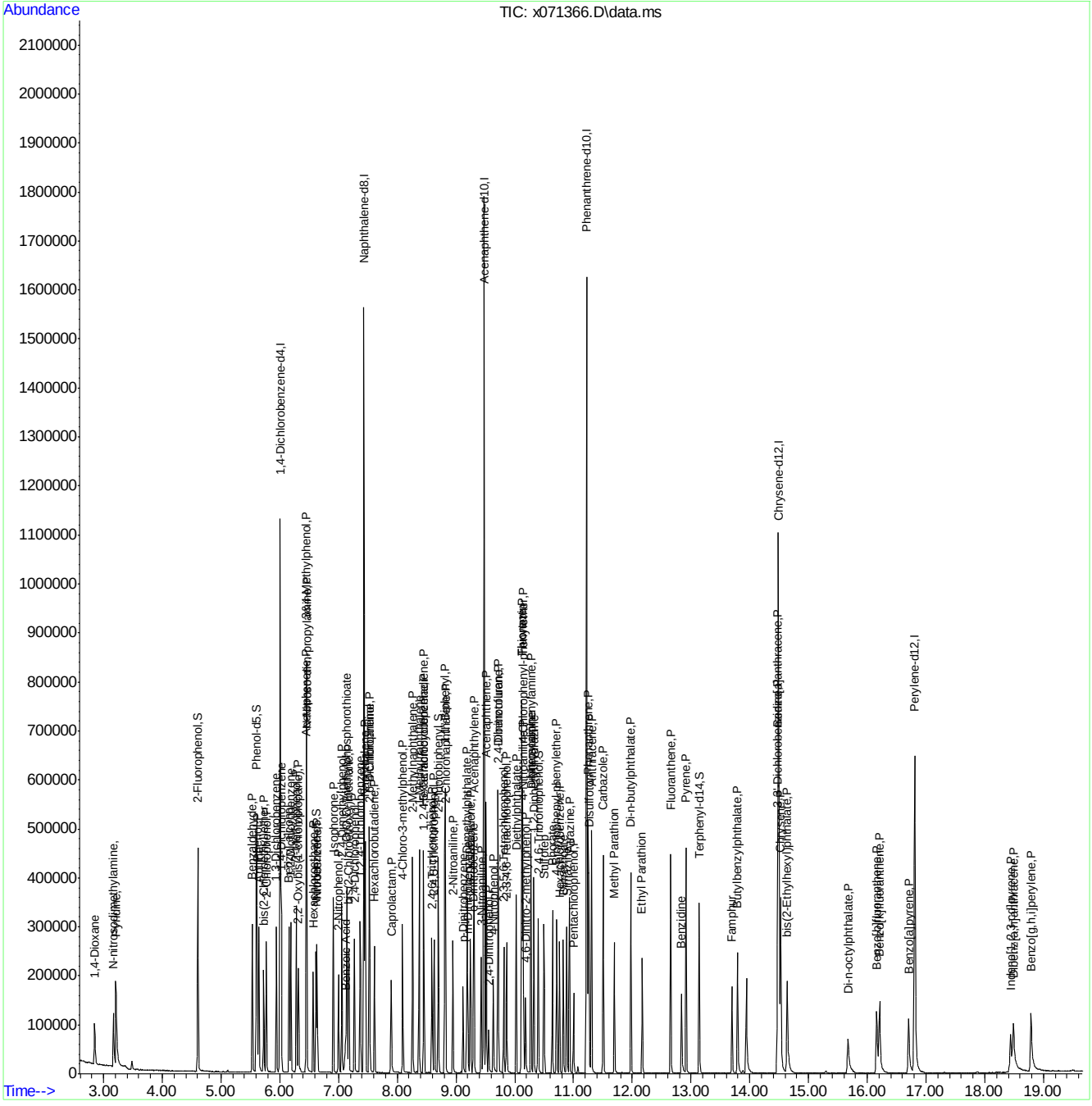
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
82) Atrazine	10.931	200	35344	26.26	ppm		84
83) Pentachlorophenol	11.000	266	15136	18.71	ppm		95
84) Phenanthrene	11.246	178	184650	27.24	ppm		99
85) Anthracene	11.310	178	191041	27.59	ppm		98
86) Disulfoton	11.262	88	77727	24.73	ppm		91
87) Carbazole	11.508	167	170347	27.57	ppm		99
88) Methyl Parathion	11.695	109	41081	26.63	ppm	#	85
89) Di-n-butylphthalate	11.974	149	191605	24.36	ppm		99
90) Ethyl Parathion	12.166	97	22244	21.70	ppm		84
91) Fluoranthene	12.653	202	169848	23.58	ppm		97
93) Benzidine	12.835	184	68168	26.79	ppm		95
94) Pyrene	12.915	202	178407	23.26	ppm		97
96) Famphur	13.696	218	45272	31.33	ppm		85
97) Butylbenzylphthalate	13.792	149	68441	20.35	ppm		87
98) 3,3'-Dichlorobenzidine	14.471	252	38018	18.83	ppm		95
99) Benzo[a]anthracene	14.477	228	130952	20.74	ppm		100
100) Chrysene	14.525	228	140095	22.28	ppm		98
101) bis(2-Ethylhexyl)phtha...	14.637	149	84382	19.34	ppm		96
103) Di-n-octylphthalate	15.675	149	86621	13.22	ppm		93
104) Benzo[b]fluoranthene	16.162	252	79954	15.61	ppm		97
105) Benzo[k]fluoranthene	16.210	252	114793	20.34	ppm		100
106) Benzo[a]pyrene	16.707	252	78804	15.33	ppm		99
107) Indeno[1,2,3-cd]pyrene	18.440	276	47837	10.76	ppm		93
108) Dibenz[a,h]anthracene	18.488	278	62126	12.94	ppm		89
109) Benzo[g,h,i]perylene	18.793	276	83957	16.44	ppm		94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071366.D
Acq On : 23 Jun 2020 2:20 pm
Operator : marthav
Sample : ic2918-10 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 23 16:56:48 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 06/24/20 14:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071367.D
Acq On : 23 Jun 2020 2:46 pm
Operator : marthav
Sample : ic2918-25 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 23 16:57:01 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.010	152	167074	40.00	ppm	0.00
22) Naphthalene-d8	7.433	136	718312	40.00	ppm	0.00
43) Acenaphthene-d10	9.476	164	380711	40.00	ppm	0.00
70) Phenanthrene-d10	11.225	188	643412	40.00	ppm	0.00
92) Chrysene-d12	14.493	240	456853	40.00	ppm	0.00
102) Perylene-d12	16.809	264	354803	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	0.000	152	0m	40.00	ppm	-6.00
120) Naphthalene-d8A	0.000	136	0m	40.00	ppm	-7.43
127) Acenaphthene-d10A	0.000	164	0m	40.00	ppm	-9.48
136) Phenanthrene-d10A	0.000	188	0m	40.00	ppm	-11.22
146) Chrysene-d12A	0.000	240	0m	40.00	ppm	-14.49
153) Perylene-d12A	0.000	264	0m	40.00	ppm	-16.82
System Monitoring Compounds						
7) 2-Fluorophenol	4.609	112	296188	102.86	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 102.86%#			
9) Phenol-d5	5.609	99	352148	113.56	ppm	0.00
Spiked Amount 100.000	Range 10 - 50		Recovery = 113.56%#			
23) Nitrobenzene-d5	6.620	82	184362	53.45	ppm	0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 106.90%			
47) 2-Fluorobiphenyl	8.700	172	337040	58.87	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 117.74%#			
75) 2,4,6-Tribromophenol	10.401	330	66539	78.17	ppm	0.00
Spiked Amount 100.000	Range 33 - 118		Recovery = 78.17%			
95) Terphenyl-d14	13.140	244	305446	49.89	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 99.78%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.844	88	71707	51.29	ppm	# 25
3) N-nitrosodimethylamine	3.164	42	127558	103.64	ppm	# 36
4) Pyridine	3.202	79	176874	60.66	ppm	# 18
5) Benzaldehyde	5.534	106	125669	52.05	ppm	96
6) Aniline	5.646	93	240316	54.85	ppm	84
8) bis(2-Chloroethyl)ether	5.726	93	150380	49.31	ppm	# 74
10) Phenol	5.619	94	202082	51.07	ppm	91
11) 2-Chlorophenol	5.769	128	156153	55.01	ppm	78
12) 1,3-Dichlorobenzene	5.940	146	162398	55.82	ppm	96
13) 1,4-Dichlorobenzene	6.026	146	172045	57.87	ppm	97
14) 1,2-Dichlorobenzene	6.186	146	162906	58.76	ppm	96
15) Benzyl alcohol	6.160	108	109579	58.57	ppm	81
16) 2,2'-Oxybis(1-chloropr...	6.320	45	329775	90.53	ppm	75
17) 2-Methylphenol	6.283	108	153153	60.25	ppm	95
18) Acetophenone	6.454	105	231507	57.68	ppm	97
19) Hexachloroethane	6.566	117	66075	52.47	ppm	90
20) N-Nitroso-di-n-propyla...	6.459	70	123252	59.57	ppm	# 57
21) 3&4-Methylphenol	6.459	108	164224	62.06	ppm	97
24) Nitrobenzene	6.641	77	184755	56.55	ppm	85
25) Isophorone	6.914	82	328957	55.17	ppm	95
26) 2-Nitrophenol	6.999	139	88328	56.16	ppm	74

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071367.D
Acq On : 23 Jun 2020 2:46 pm
Operator : marthav
Sample : ic2918-25 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 23 16:57:01 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
27)	2,4-Dimethylphenol	7.058	107	161238	59.61	ppm		92
28)	O,O,O-Triethylphosphor...	7.149	198	68176	54.22	ppm		81
29)	bis(2-Chloroethoxy)met...	7.176	93	194366	52.22	ppm		95
30)	Benzoic Acid	7.155	105	123126m	60.30	ppm		
31)	2,4-Dichlorophenol	7.272	162	129306	59.63	ppm		97
32)	1,2,4-Trichlorobenzene	7.368	180	130434	53.46	ppm		96
34)	Naphthalene	7.459	128	487020	60.15	ppm		99
35)	4-Chloroaniline	7.524	127	209742	61.76	ppm		89
36)	2,6-Dichlorophenol	7.534	162	134562	60.79	ppm		98
37)	Hexachlorobutadiene	7.609	225	63913	46.95	ppm		99
38)	Caprolactam	7.925	113	55078	61.17	ppm	#	49
39)	4-Chloro-3-methylphenol	8.096	107	140174	59.48	ppm		92
40)	2-Methylnaphthalene	8.262	142	316307	60.41	ppm		97
41)	1-Methylnaphthalene	8.374	142	301274	61.42	ppm		97
42)	1,2,4,5-Tetrachloroben...	8.454	216	130158	51.29	ppm		98
44)	Hexachlorocyclopentadiene	8.449	237	70261	53.87	ppm		96
45)	2,4,6-Trichlorophenol	8.593	196	87035	55.75	ppm		99
46)	2,4,5-Trichlorophenol	8.631	196	95733	57.47	ppm		98
48)	1,1'-Biphenyl	8.813	154	386811	61.69	ppm		100
49)	2-Chloronaphthalene	8.823	162	292275	60.05	ppm		94
50)	2-Nitroaniline	8.946	65	110868	69.86	ppm	#	61
51)	p-Dinitrobenzene	9.123	75	62645	53.81	ppm	#	68
52)	Acenaphthylene	9.310	152	478876	64.29	ppm		99
53)	Dimethylphthalate	9.192	163	330261	59.04	ppm		99
54)	m-Dinitrobenzene	9.203	168	58044	59.74	ppm	#	22
55)	2,6-Dinitrotoluene	9.246	165	78532	58.04	ppm	#	52
56)	o-Dinitrobenzene	9.299	50	77948	96.90	ppm	#	53
57)	Acenaphthene	9.513	153	314387	63.82	ppm		99
58)	3-Nitroaniline	9.433	138	89750	61.64	ppm		91
59)	2,4-Dinitrophenol	9.556	184	35846	55.41	ppm	#	25
60)	Dibenzofuran	9.722	168	422234	62.52	ppm		94
61)	2,4-Dinitrotoluene	9.717	165	103282	60.23	ppm	#	64
62)	4-Nitrophenol	9.642	109	49624	72.02	ppm	#	69
63)	2,3,5,6-Tetrachlorophenol	9.813	232	72401	56.20	ppm		89
64)	2,3,4,6-Tetrachlorophenol	9.866	232	73940	53.77	ppm		88
65)	Fluorene	10.123	166	329261	62.46	ppm		99
66)	4-Chlorophenyl-phenyle...	10.139	204	158495	59.96	ppm		85
67)	Diethylphthalate	10.032	149	335780	60.42	ppm		97
68)	Thionazin	10.118	97	73744	56.30	ppm		100
69)	4-Nitroaniline	10.150	138	101280	67.94	ppm		78
71)	4,6-Dinitro-2-methylph...	10.187	198	54403	61.11	ppm	#	56
72)	n-Nitrosodiphenylamine	10.278	169	296377	83.76	ppm		97
73)	Diphenylamine	10.278	169	296377	71.50	ppm		97
74)	1,2-Diphenylhydrazine	10.326	77	365382	63.08	ppm		92
76)	Sulfotep	10.497	97	54825	60.50	ppm	#	58
77)	Phorate	10.642	75	195293	60.89	ppm		97
78)	4-Bromophenyl-phenylether	10.717	248	76134	51.48	ppm		83
79)	Hexachlorobenzene	10.765	284	71650	42.36	ppm		72
80)	Dimethoate	10.829	87	128904	67.38	ppm		94
81)	Simazine	10.893	201	55700	76.94	ppm		94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071367.D
Acq On : 23 Jun 2020 2:46 pm
Operator : marthav
Sample : ic2918-25 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 23 16:57:01 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration

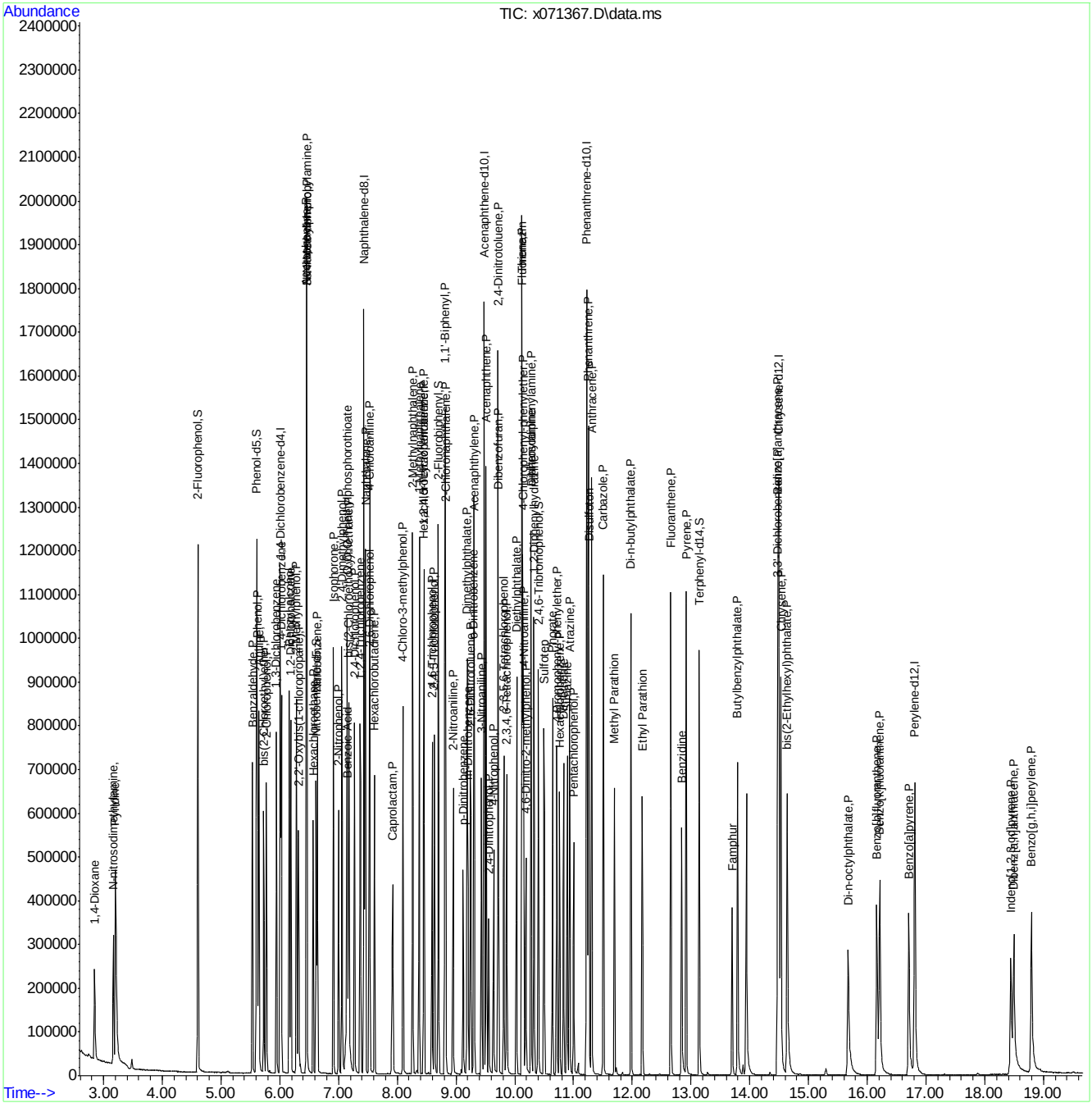
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
82) Atrazine	10.936	200	93870	66.68	ppm		87
83) Pentachlorophenol	11.000	266	45957	54.31	ppm		96
84) Phenanthrene	11.252	178	482902	68.13	ppm		99
85) Anthracene	11.310	178	509170	70.32	ppm		98
86) Disulfoton	11.262	88	206671	62.87	ppm		92
87) Carbazole	11.508	167	451343	69.84	ppm		98
88) Methyl Parathion	11.696	109	111405	69.05	ppm	#	83
89) Di-n-butylphthalate	11.974	149	519074	63.12	ppm		98
90) Ethyl Parathion	12.172	97	62808	58.60	ppm		88
91) Fluoranthene	12.653	202	447785	59.44	ppm		99
93) Benzidine	12.840	184	219352	79.93	ppm		96
94) Pyrene	12.920	202	475210	57.46	ppm		95
96) Famphur	13.701	218	106685	68.46	ppm		93
97) Butylbenzylphthalate	13.792	149	198022	54.61	ppm		88
98) 3,3'-Dichlorobenzidine	14.471	252	115753	53.15	ppm		96
99) Benzo[a]anthracene	14.477	228	354729	52.10	ppm		99
100) Chrysene	14.530	228	378801	55.87	ppm		98
101) bis(2-Ethylhexyl)phtha...	14.637	149	263880	56.09	ppm		95
103) Di-n-octylphthalate	15.675	149	309620	46.43	ppm		92
104) Benzo[b]fluoranthene	16.162	252	243405	46.69	ppm		98
105) Benzo[k]fluoranthene	16.215	252	310730	54.11	ppm		100
106) Benzo[a]pyrene	16.713	252	239153	45.73	ppm		98
107) Indeno[1,2,3-cd]pyrene	18.440	276	157709	34.86	ppm		92
108) Dibenz[a,h]anthracene	18.494	278	181799	37.20	ppm		92
109) Benzo[g,h,i]perylene	18.799	276	230159	44.30	ppm		94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071367.D
Acq On : 23 Jun 2020 2:46 pm
Operator : marthav
Sample : ic2918-25 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 23 16:57:01 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration



Manual Integration Approval Summary

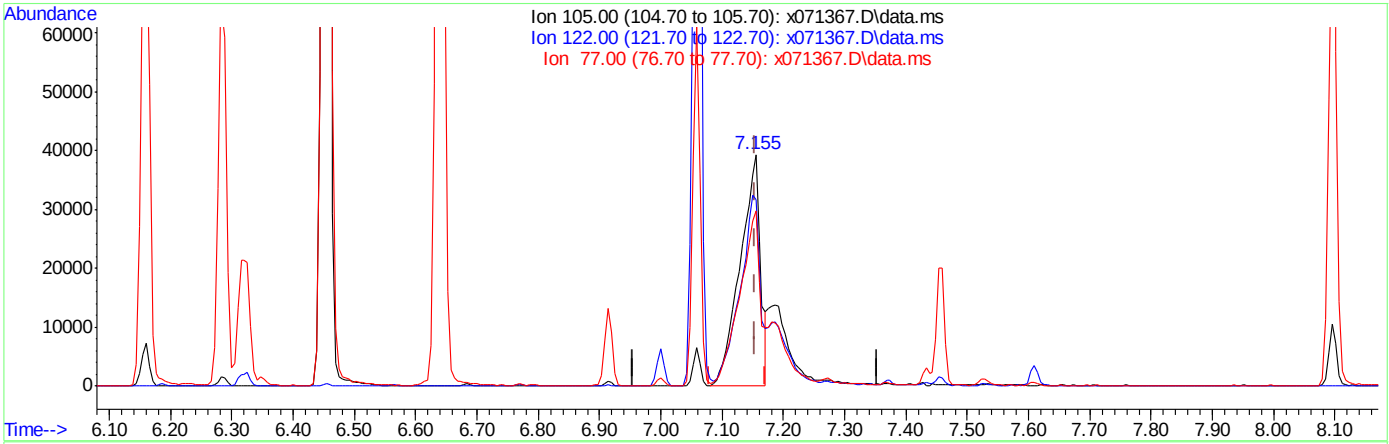
Sample Number:	SX2918-IC2918	**Method:**	EPA 625.1
Lab FileID:	X071367.D	**Analyst approved:**	06/24/20 09:50 Martha Valls
Injection Time:	06/23/20 14:46	**Supervisor approved:**	06/24/20 14:07 Naresh Jiawan

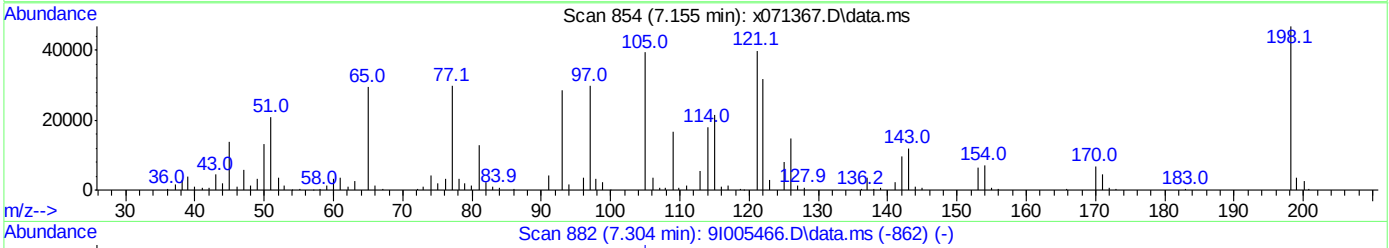
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic Acid	65-85-0		7.15	Split peak

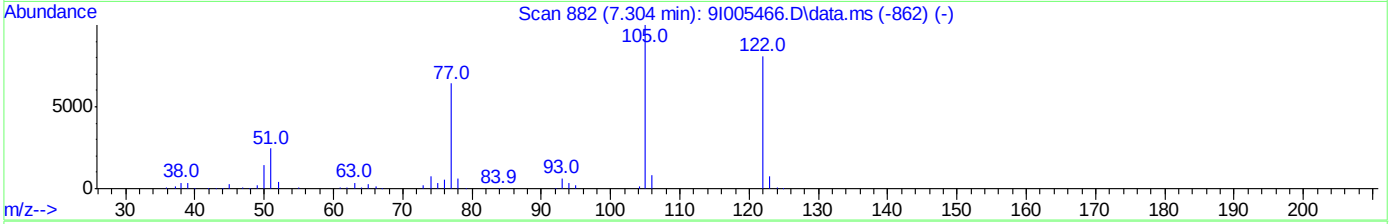
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071367.D
Acq On : 23 Jun 2020 2:46 pm
Operator : marthav
Sample : ic2918-25 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 23 15:19:13 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration







TIC: x071367.D\data.ms

(30) Benzoic Acid

7.155min (0.000) 43.78ppm

response 89388

Ion	Exp%	Act%
105.00	100	100
122.00	81.20	79.14
77.00	64.10	74.62
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071367.D
Acq On : 23 Jun 2020 2:46 pm
Operator : marthav
Sample : ic2918-25 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 23 15:19:13 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
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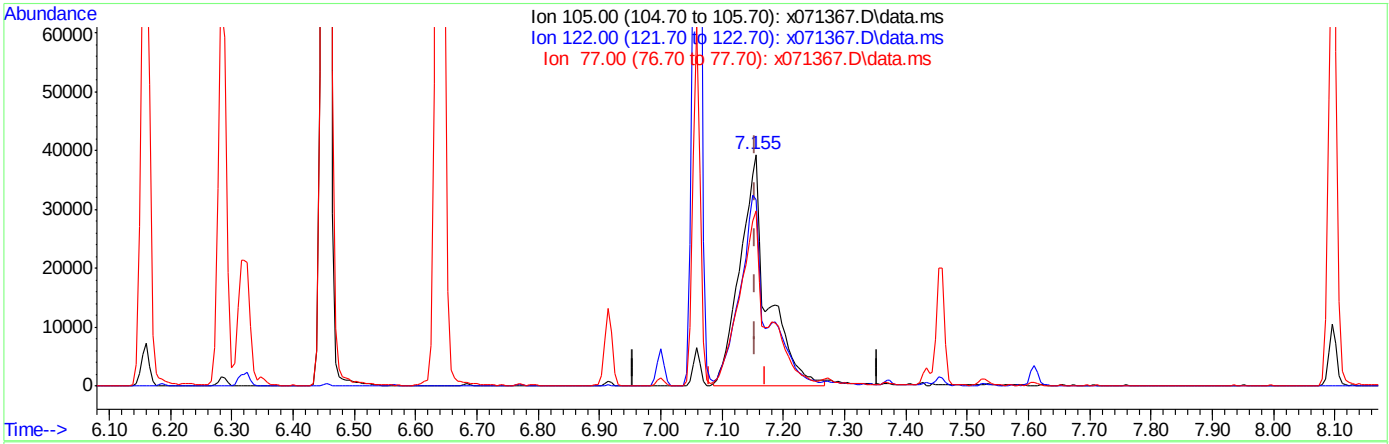
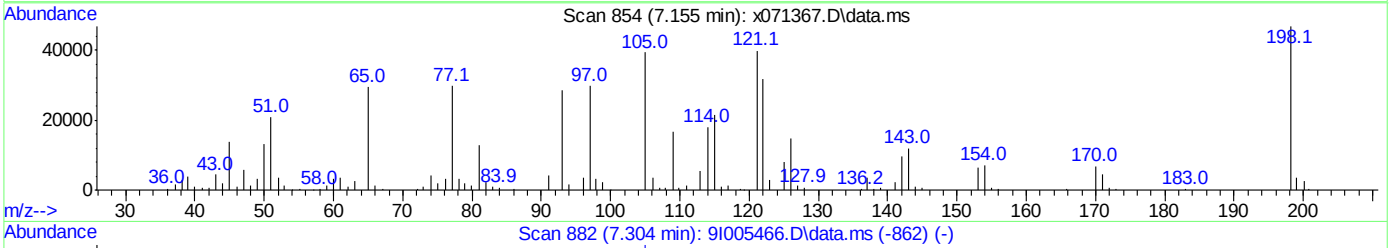
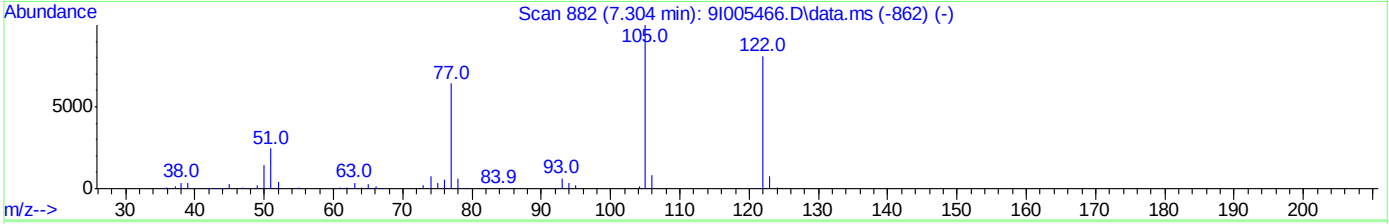






TIC: x071367.D\data.ms

(30) Benzoic Acid

7.155min (0.000) 60.30ppm m

response 123126

Ion	Exp%	Act%
105.00	100	100
122.00	81.20	80.35
77.00	64.10	75.61
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 06/24/20 14:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071368.D
Acq On : 23 Jun 2020 3:12 pm
Operator : marthav
Sample : icc2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 23 16:57:37 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.010	152	170190	40.00	ppm	0.00
22) Naphthalene-d8	7.433	136	730199	40.00	ppm	0.00
43) Acenaphthene-d10	9.481	164	379384	40.00	ppm	0.00
70) Phenanthrene-d10	11.225	188	636433	40.00	ppm	0.00
92) Chrysene-d12	14.498	240	474373	40.00	ppm	0.00
102) Perylene-d12	16.809	264	348798	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	0.000	152	0m	40.00	ppm	-6.00
120) Naphthalene-d8A	0.000	136	0m	40.00	ppm	-7.43
127) Acenaphthene-d10A	0.000	164	0m	40.00	ppm	-9.48
136) Phenanthrene-d10A	0.000	188	0m	40.00	ppm	-11.22
146) Chrysene-d12A	0.000	240	0m	40.00	ppm	-14.49
153) Perylene-d12A	0.000	264	0m	40.00	ppm	-16.82
System Monitoring Compounds						
7) 2-Fluorophenol	4.609	112	581541	198.25	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 198.25%#			
9) Phenol-d5	5.614	99	702165	222.29	ppm	0.00
Spiked Amount 100.000	Range 10 - 50		Recovery = 222.29%#			
23) Nitrobenzene-d5	6.620	82	371628	105.99	ppm	0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 211.98%#			
47) 2-Fluorobiphenyl	8.700	172	687481	120.50	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 241.00%#			
75) 2,4,6-Tribromophenol	10.407	330	141075	167.55	ppm	0.00
Spiked Amount 100.000	Range 33 - 118		Recovery = 167.55%#			
95) Terphenyl-d14	13.140	244	632272	99.47	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 198.94%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.844	88	135258	94.97	ppm	# 29
3) N-nitrosodimethylamine	3.165	42	247597	197.49	ppm	# 34
4) Pyridine	3.202	79	347463	116.98	ppm	# 20
5) Benzaldehyde	5.534	106	244610	99.45	ppm	94
6) Aniline	5.652	93	517495	115.96	ppm	91
8) bis(2-Chloroethyl)ether	5.732	93	310263	99.87	ppm	75
10) Phenol	5.625	94	447918	111.12	ppm	84
11) 2-Chlorophenol	5.775	128	331118	114.52	ppm	81
12) 1,3-Dichlorobenzene	5.941	146	332239	112.10	ppm	96
13) 1,4-Dichlorobenzene	6.026	146	355012	117.23	ppm	97
14) 1,2-Dichlorobenzene	6.187	146	338462	119.85	ppm	95
15) Benzyl alcohol	6.165	108	225749	118.46	ppm	84
16) 2,2'-Oxybis(1-chloropr...	6.326	45	647052	174.37	ppm	77
17) 2-Methylphenol	6.288	108	316556	122.24	ppm	96
18) Acetophenone	6.459	105	458751	112.21	ppm	97
19) Hexachloroethane	6.566	117	133396	104.00	ppm	86
20) N-Nitroso-di-n-propyla...	6.470	70	245638	116.54	ppm	# 66
21) 3&4-Methylphenol	6.465	108	325992	120.95	ppm	97
24) Nitrobenzene	6.647	77	370334	111.50	ppm	86
25) Isophorone	6.919	82	648108	106.92	ppm	96
26) 2-Nitrophenol	7.000	139	179002	111.96	ppm	81

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071368.D
Acq On : 23 Jun 2020 3:12 pm
Operator : marthav
Sample : icc2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 23 16:57:37 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
27)	2,4-Dimethylphenol	7.064	107	328379	119.42	ppm		93
28)	O,O,O-Triethylphosphor...	7.155	198	137643	107.68	ppm		88
29)	bis(2-Chloroethoxy)met...	7.181	93	384175	101.55	ppm		96
30)	Benzoic Acid	7.176	105	281742m	135.74	ppm		
31)	2,4-Dichlorophenol	7.278	162	269208	122.13	ppm		97
32)	1,2,4-Trichlorobenzene	7.374	180	263849	106.37	ppm		97
34)	Naphthalene	7.460	128	978658	118.90	ppm		99
35)	4-Chloroaniline	7.529	127	417641	120.97	ppm		91
36)	2,6-Dichlorophenol	7.534	162	269840	119.92	ppm		97
37)	Hexachlorobutadiene	7.609	225	130690	94.44	ppm		99
38)	Caprolactam	7.952	113	108415	118.45	ppm	#	53
39)	4-Chloro-3-methylphenol	8.101	107	280801	117.22	ppm		93
40)	2-Methylnaphthalene	8.262	142	638104	119.89	ppm		98
41)	1-Methylnaphthalene	8.374	142	612512	122.84	ppm		97
42)	1,2,4,5-Tetrachloroben...	8.460	216	270199	104.75	ppm		97
44)	Hexachlorocyclopentadiene	8.449	237	154031	118.51	ppm		98
45)	2,4,6-Trichlorophenol	8.593	196	180184	115.82	ppm		97
46)	2,4,5-Trichlorophenol	8.636	196	195993	118.08	ppm		99
48)	1,1'-Biphenyl	8.813	154	774415	123.94	ppm		99
49)	2-Chloronaphthalene	8.829	162	587674	121.17	ppm		96
50)	2-Nitroaniline	8.952	65	217159	137.31	ppm	#	65
51)	p-Dinitrobenzene	9.123	75	126328	108.90	ppm	#	60
52)	Acenaphthylene	9.310	152	963028	129.74	ppm		99
53)	Dimethylphthalate	9.198	163	651563	116.88	ppm		99
54)	m-Dinitrobenzene	9.209	168	117437	121.30	ppm	#	25
55)	2,6-Dinitrotoluene	9.251	165	162115	120.23	ppm		76
56)	o-Dinitrobenzene	9.310	50	147548	184.06	ppm	#	63
57)	Acenaphthene	9.519	153	622009	126.70	ppm		98
58)	3-Nitroaniline	9.439	138	180019	124.06	ppm		89
59)	2,4-Dinitrophenol	9.562	184	83541	129.58	ppm	#	41
60)	Dibenzofuran	9.722	168	822372	122.20	ppm		93
61)	2,4-Dinitrotoluene	9.722	165	205436	120.22	ppm	#	67
62)	4-Nitrophenol	9.647	109	98995	144.17	ppm	#	66
63)	2,3,5,6-Tetrachlorophenol	9.818	232	149105	116.15	ppm		93
64)	2,3,4,6-Tetrachlorophenol	9.866	232	150195	109.60	ppm		85
65)	Fluorene	10.123	166	646099	122.99	ppm		98
66)	4-Chlorophenyl-phenyle...	10.145	204	316481	120.15	ppm		92
67)	Diethylphthalate	10.038	149	662960	119.71	ppm		98
68)	Thionazin	10.129	97	142705	109.33	ppm		97
69)	4-Nitroaniline	10.166	138	196264	132.11	ppm		85
71)	4,6-Dinitro-2-methylph...	10.198	198	118222	134.24	ppm		89
72)	n-Nitrosodiphenylamine	10.284	169	584050	166.87	ppm		97
73)	Diphenylamine	10.284	169	584050	142.45	ppm		97
74)	1,2-Diphenylhydrazine	10.326	77	718418	125.39	ppm		91
76)	Sulfotep	10.503	97	109712	122.40	ppm	#	73
77)	Phorate	10.642	75	385046	121.36	ppm		96
78)	4-Bromophenyl-phenylether	10.717	248	152873	104.50	ppm	#	81
79)	Hexachlorobenzene	10.765	284	150881	90.19	ppm		69
80)	Dimethoate	10.835	87	254067	134.25	ppm		94
81)	Simazine	10.904	201	110243	153.95	ppm		95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071368.D
Acq On : 23 Jun 2020 3:12 pm
Operator : marthav
Sample : icc2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 23 16:57:37 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration

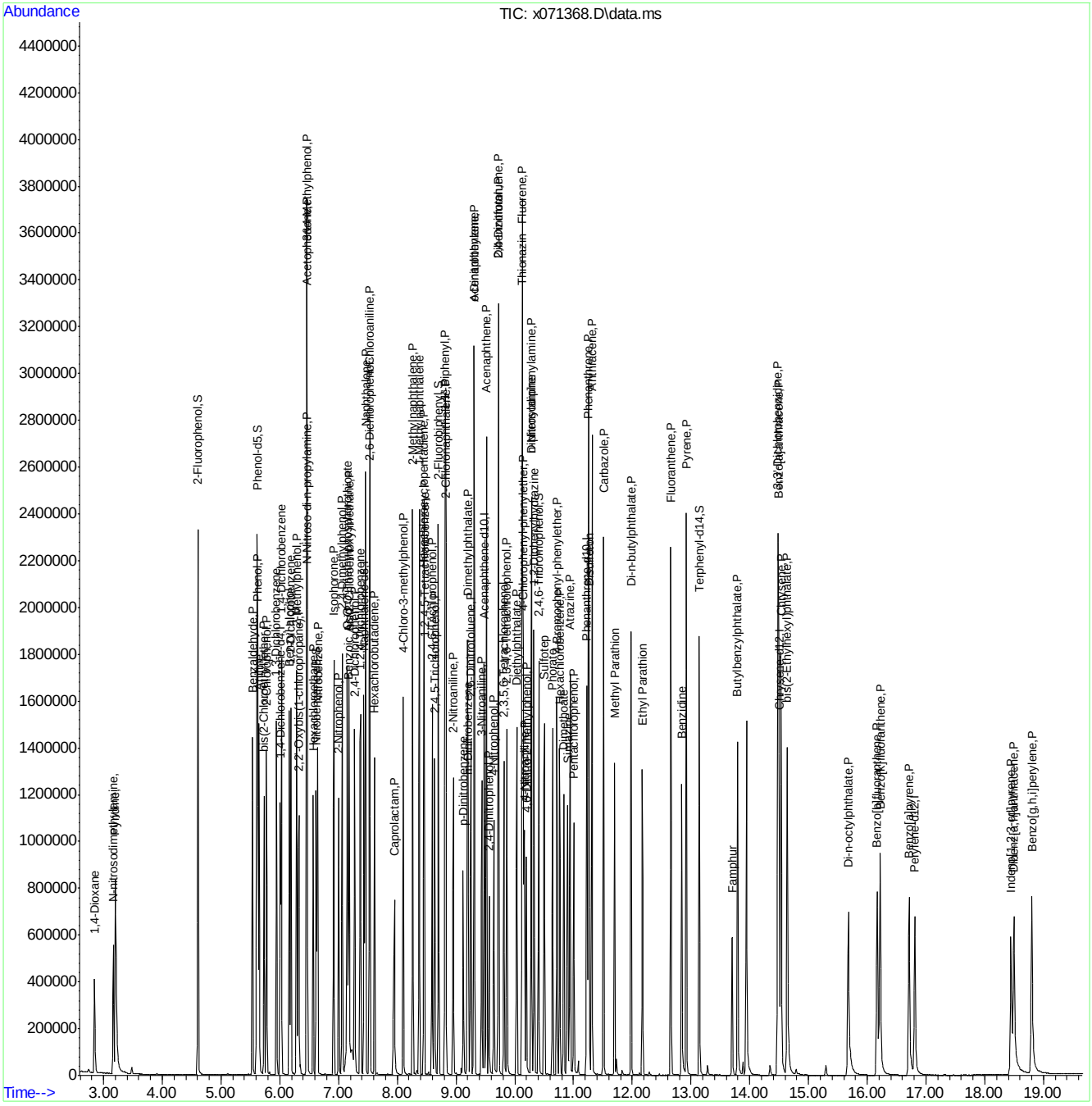
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
82) Atrazine	10.941	200	186308	133.80	ppm		88
83) Pentachlorophenol	11.006	266	102560	122.54	ppm		98
84) Phenanthrene	11.252	178	955958	136.34	ppm		99
85) Anthracene	11.316	178	1017200	142.02	ppm		98
86) Disulfoton	11.268	88	401616	123.51	ppm		90
87) Carbazole	11.514	167	882727	138.09	ppm		98
88) Methyl Parathion	11.701	109	218419	136.86	ppm	#	88
89) Di-n-butylphthalate	11.979	149	1036569	127.42	ppm		98
90) Ethyl Parathion	12.172	97	126325	119.15	ppm		87
91) Fluoranthene	12.658	202	894676	120.07	ppm		97
93) Benzidine	12.840	184	473506	166.17	ppm		98
94) Pyrene	12.920	202	967727	112.69	ppm		97
96) Famphur	13.701	218	170704	105.50	ppm		92
97) Butylbenzylphthalate	13.792	149	404219	107.36	ppm		87
98) 3,3'-Dichlorobenzidine	14.477	252	252309	111.58	ppm		97
99) Benzo[a]anthracene	14.482	228	739664	104.62	ppm		99
100) Chrysene	14.536	228	782608	111.17	ppm		99
101) bis(2-Ethylhexyl)phtha...	14.637	149	568149	116.31	ppm		96
103) Di-n-octylphthalate	15.680	149	709158	108.17	ppm		93
104) Benzo[b]fluoranthene	16.167	252	507571	99.05	ppm		99
105) Benzo[k]fluoranthene	16.221	252	615358	109.00	ppm		99
106) Benzo[a]pyrene	16.718	252	488606	95.04	ppm		99
107) Indeno[1,2,3-cd]pyrene	18.446	276	334683	75.26	ppm		90
108) Dibenz[a,h]anthracene	18.499	278	380638	79.23	ppm		93
109) Benzo[g,h,i]perylene	18.804	276	470714	92.15	ppm		94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071368.D
Acq On : 23 Jun 2020 3:12 pm
Operator : marthav
Sample : icc2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 23 16:57:37 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number:	SX2918-ICC2918	**Method:**	EPA 625.1
Lab FileID:	X071368.D	**Analyst approved:**	06/24/20 09:50 Martha Valls
Injection Time:	06/23/20 15:12	**Supervisor approved:**	06/24/20 14:07 Naresh Jiawan

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic Acid	65-85-0		7.18	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071368.D
Acq On : 23 Jun 2020 3:12 pm
Operator : marthav
Sample : icc2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 23 15:47:06 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
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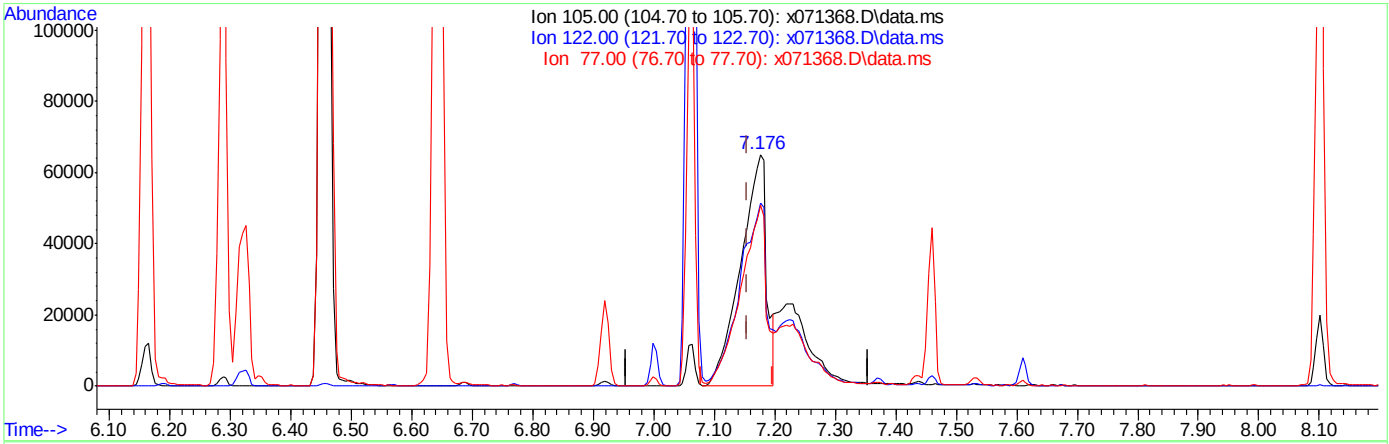

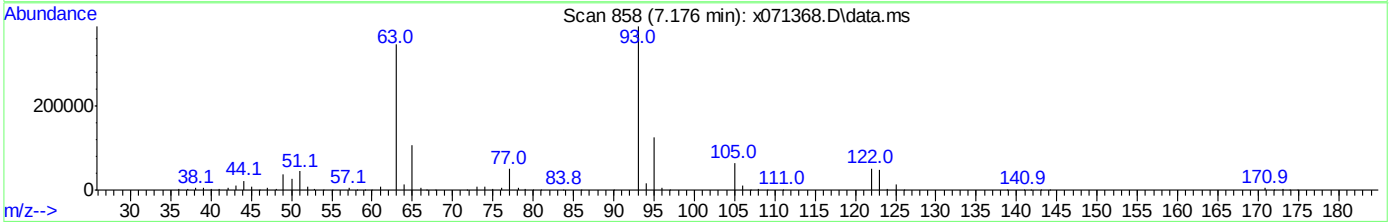

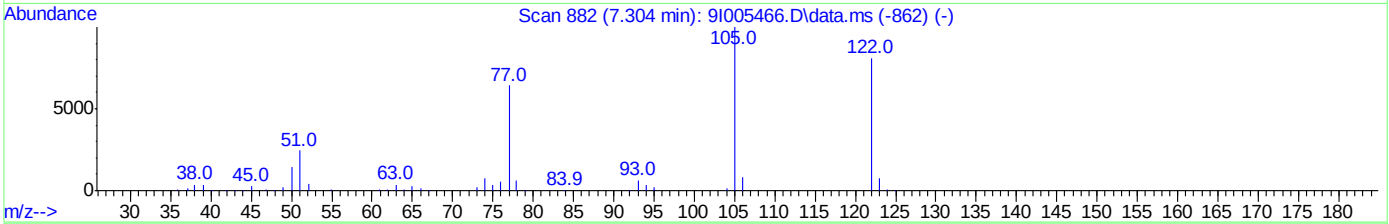

TIC: x071368.D\data.ms

(30) Benzoic Acid

7.176min (+0.022) 92.98ppm

response 192977

Ion	Exp%	Act%
105.00	100	100
122.00	81.20	77.04
77.00	64.10	77.97
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
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Acq On : 23 Jun 2020 3:12 pm
Operator : marthav
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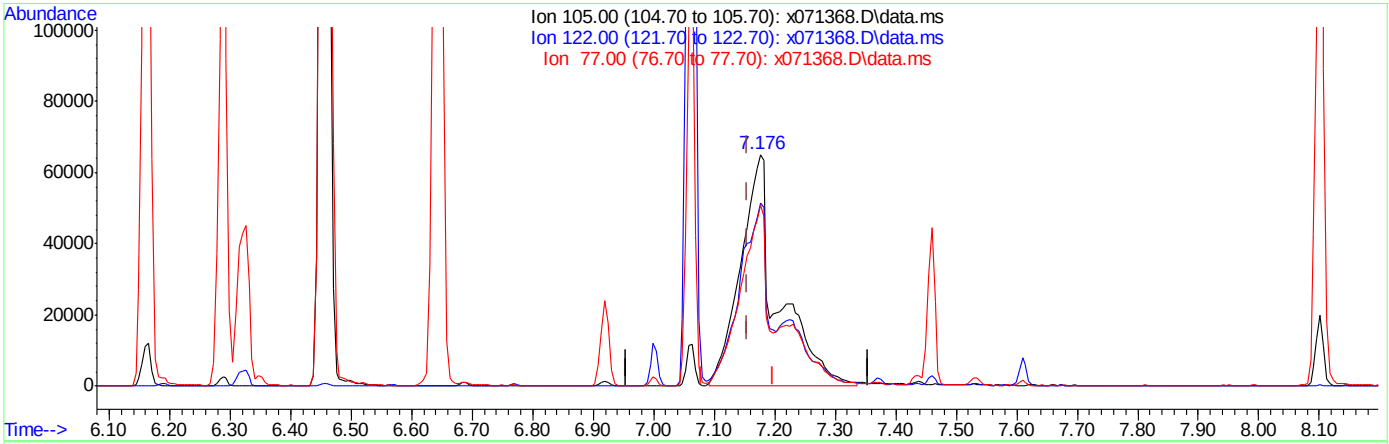

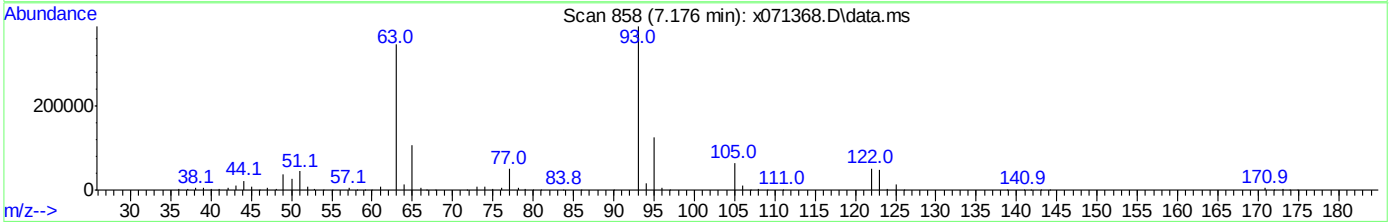

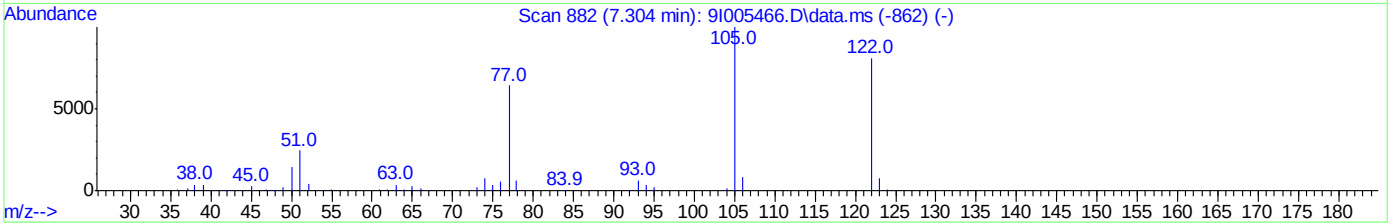

TIC: x071368.D\data.ms

(30) Benzoic Acid

7.176min (+0.022) 135.74ppm m

response 281742

Ion	Exp%	Act%
105.00	100	100
122.00	81.20	79.16
77.00	64.10	77.84
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071368.D
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Operator : marthav
Sample : icc2918-50 Inst : MSBNA05
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Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
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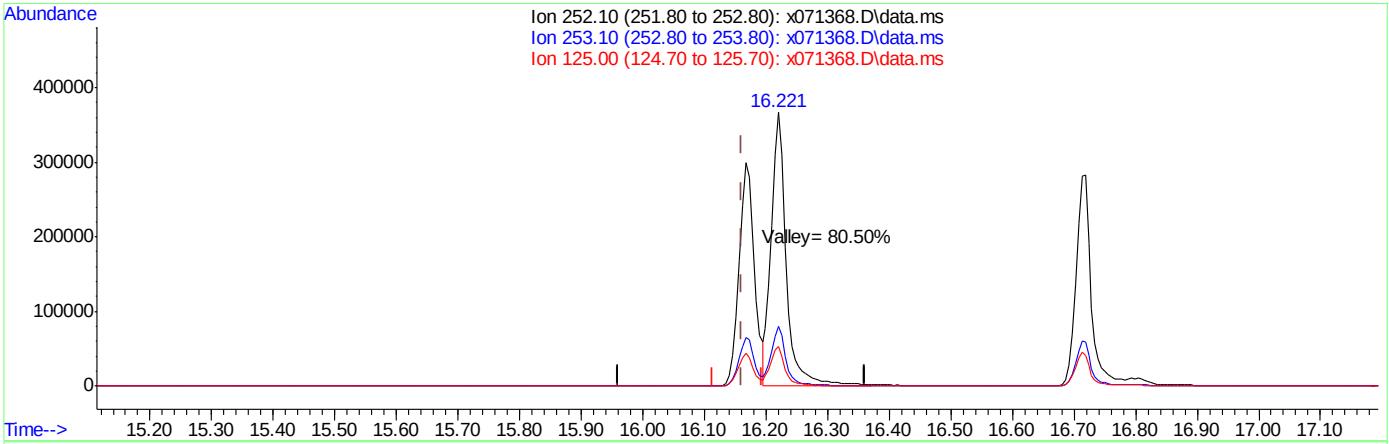
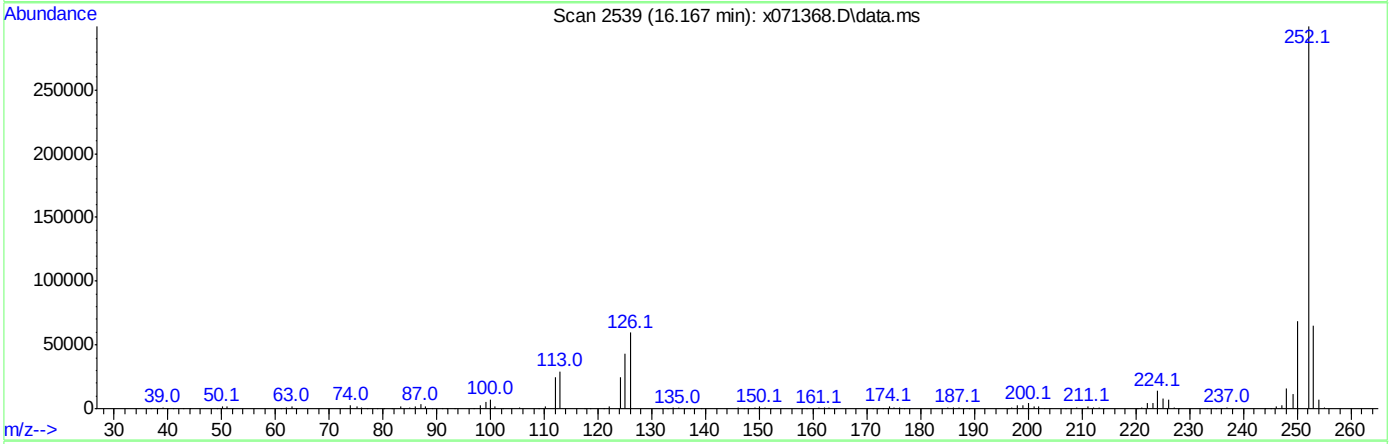
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration





TIC: x071368.D\data.ms

(104) Benzo[b]fluoranthene (P)

16.167min (+0.005) 99.05ppm

response 507571

Ion	Exp%	Act%
252.10	100	100
253.10	22.50	21.85
125.00	14.00	14.47
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 06/24/20 14:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071369.D
Acq On : 23 Jun 2020 3:39 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 23 16:57:50 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.010	152	174295	40.00	ppm	0.00
22) Naphthalene-d8	7.438	136	737140	40.00	ppm	0.00
43) Acenaphthene-d10	9.481	164	387286	40.00	ppm	0.00
70) Phenanthrene-d10	11.225	188	649330	40.00	ppm	0.00
92) Chrysene-d12	14.498	240	486162	40.00	ppm	0.00
102) Perylene-d12	16.814	264	350182	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	0.000	152	0m	40.00	ppm	-6.00
120) Naphthalene-d8A	0.000	136	0m	40.00	ppm	-7.43
127) Acenaphthene-d10A	0.000	164	0m	40.00	ppm	-9.48
136) Phenanthrene-d10A	0.000	188	0m	40.00	ppm	-11.22
146) Chrysene-d12A	0.000	240	0m	40.00	ppm	-14.49
153) Perylene-d12A	0.000	264	0m	40.00	ppm	-16.82
System Monitoring Compounds						
7) 2-Fluorophenol	4.608	112	736130	245.04	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 245.04%#			
9) Phenol-d5	5.614	99	889040	274.83	ppm	0.00
Spiked Amount 100.000	Range 10 - 50		Recovery = 274.83%#			
23) Nitrobenzene-d5	6.625	82	467597	132.10	ppm	0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 264.20%#			
47) 2-Fluorobiphenyl	8.705	172	862858	148.15	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 296.30%#			
75) 2,4,6-Tribromophenol	10.412	330	183053	213.09	ppm	0.01
Spiked Amount 100.000	Range 33 - 118		Recovery = 213.09%#			
95) Terphenyl-d14	13.145	244	807081	123.89	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 247.78%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.843	88	168471	115.50	ppm	# 32
3) N-nitrosodimethylamine	3.170	42	314954	245.30	ppm	# 36
4) Pyridine	3.202	79	431489	141.85	ppm	# 17
5) Benzaldehyde	5.534	106	306979	121.87	ppm	93
6) Aniline	5.651	93	653163	142.91	ppm	86
8) bis(2-Chloroethyl)ether	5.732	93	391334	123.00	ppm	75
10) Phenol	5.630	94	570547	138.21	ppm	86
11) 2-Chlorophenol	5.774	128	418524	141.34	ppm	81
12) 1,3-Dichlorobenzene	5.946	146	419455	138.20	ppm	98
13) 1,4-Dichlorobenzene	6.026	146	443073	142.87	ppm	97
14) 1,2-Dichlorobenzene	6.192	146	426380	147.42	ppm	98
15) Benzyl alcohol	6.165	108	283907	145.47	ppm	81
16) 2,2'-Oxybis(1-chloropr...	6.325	45	790430	207.99	ppm	77
17) 2-Methylphenol	6.288	108	392943	148.17	ppm	96
18) Acetophenone	6.459	105	565958	135.17	ppm	96
19) Hexachloroethane	6.566	117	166318	126.61	ppm	86
20) N-Nitroso-di-n-propyla...	6.470	70	299849	138.91	ppm	# 64
21) 3&4-Methylphenol	6.464	108	405941	147.06	ppm	95
24) Nitrobenzene	6.646	77	463119	138.12	ppm	84
25) Isophorone	6.924	82	810323	132.42	ppm	97
26) 2-Nitrophenol	7.005	139	228478	141.56	ppm	76

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071369.D
Acq On : 23 Jun 2020 3:39 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 23 16:57:50 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
27) 2,4-Dimethylphenol	7.063	107	416013	149.86	ppm		92
28) O,O,O-Triethylphosphor...	7.154	198	173675	134.58	ppm		79
29) bis(2-Chloroethoxy)met...	7.181	93	482396	126.31	ppm		96
30) Benzoic Acid	7.192	105	368165m	175.71	ppm		
31) 2,4-Dichlorophenol	7.277	162	341207	153.34	ppm		96
32) 1,2,4-Trichlorobenzene	7.374	180	334150	133.45	ppm		98
34) Naphthalene	7.459	128	1209565	145.57	ppm		99
35) 4-Chloroaniline	7.529	127	517431	148.46	ppm		89
36) 2,6-Dichlorophenol	7.534	162	336531	148.15	ppm		96
37) Hexachlorobutadiene	7.614	225	166131	118.92	ppm		99
38) Caprolactam	7.962	113	138158	149.52	ppm	#	52
39) 4-Chloro-3-methylphenol	8.101	107	354807	146.72	ppm		93
40) 2-Methylnaphthalene	8.262	142	793056	147.60	ppm		98
41) 1-Methylnaphthalene	8.379	142	771536	153.27	ppm		98
42) 1,2,4,5-Tetrachloroben...	8.459	216	337842	129.74	ppm		99
44) Hexachlorocyclopentadiene	8.454	237	196644	148.21	ppm		98
45) 2,4,6-Trichlorophenol	8.593	196	226012	142.32	ppm		97
46) 2,4,5-Trichlorophenol	8.636	196	250094	147.60	ppm		99
48) 1,1'-Biphenyl	8.818	154	970793	152.20	ppm		99
49) 2-Chloronaphthalene	8.829	162	734690	148.39	ppm		95
50) 2-Nitroaniline	8.957	65	273674	169.52	ppm	#	71
51) p-Dinitrobenzene	9.128	75	161352	136.26	ppm	#	67
52) Acenaphthylene	9.315	152	1199982	158.37	ppm		99
53) Dimethylphthalate	9.198	163	828709	145.62	ppm		99
54) m-Dinitrobenzene	9.214	168	148275	150.03	ppm	#	40
55) 2,6-Dinitrotoluene	9.256	165	202871	147.39	ppm		78
56) o-Dinitrobenzene	9.310	50	181502	221.80	ppm	#	59
57) Acenaphthene	9.518	153	781995	156.04	ppm		98
58) 3-Nitroaniline	9.444	138	226359	152.81	ppm		94
59) 2,4-Dinitrophenol	9.561	184	111911	170.04	ppm	#	26
60) Dibenzofuran	9.722	168	1035619	150.74	ppm		92
61) 2,4-Dinitrotoluene	9.722	165	259054	148.50	ppm	#	63
62) 4-Nitrophenol	9.652	109	127212	181.48	ppm	#	68
63) 2,3,5,6-Tetrachlorophenol	9.818	232	191147	145.87	ppm		91
64) 2,3,4,6-Tetrachlorophenol	9.871	232	192270	137.44	ppm		90
65) Fluorene	10.128	166	807040	150.50	ppm		99
66) 4-Chlorophenyl-phenyle...	10.144	204	401786	149.43	ppm		91
67) Diethylphthalate	10.037	149	842703	149.06	ppm		97
68) Thionazin	10.134	97	179844	134.97	ppm		97
69) 4-Nitroaniline	10.171	138	251396	165.77	ppm		84
71) 4,6-Dinitro-2-methylph...	10.198	198	155251	172.79	ppm		64
72) n-Nitrosodiphenylamine	10.289	169	740920	207.48	ppm		97
73) Diphenylamine	10.289	169	740920	177.13	ppm		97
74) 1,2-Diphenylhydrazine	10.331	77	901177	154.16	ppm		94
76) Sulfotep	10.503	97	138038	150.95	ppm	#	68
77) Phorate	10.647	75	488040	150.77	ppm		98
78) 4-Bromophenyl-phenylether	10.717	248	198083	132.71	ppm	#	80
79) Hexachlorobenzene	10.770	284	192411	112.73	ppm		78
80) Dimethoate	10.840	87	324379	168.00	ppm		93
81) Simazine	10.909	201	141563	193.75	ppm		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071369.D
Acq On : 23 Jun 2020 3:39 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 23 16:57:50 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration

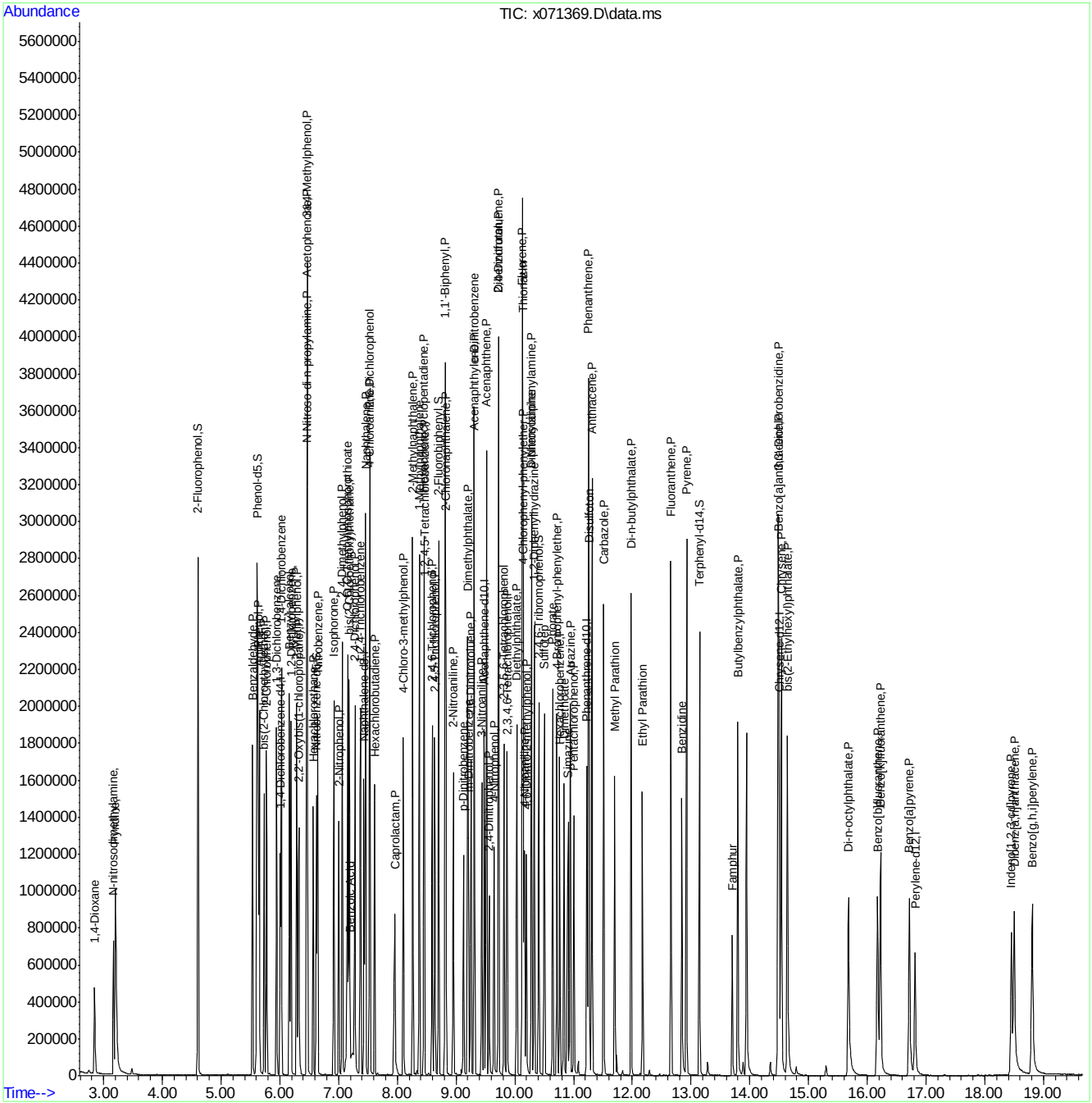
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
82) Atrazine	10.947	200	241370	169.90	ppm		93
83) Pentachlorophenol	11.005	266	132964	155.71	ppm		98
84) Phenanthrene	11.257	178	1187834	166.05	ppm		99
85) Anthracene	11.316	178	1278417	174.94	ppm		98
86) Disulfoton	11.267	88	504419	152.04	ppm		91
87) Carbazole	11.519	167	1125795	172.62	ppm		98
88) Methyl Parathion	11.701	109	277600	170.49	ppm	#	87
89) Di-n-butylphthalate	11.979	149	1311478	158.01	ppm		98
90) Ethyl Parathion	12.171	97	165428	152.93	ppm		86
91) Fluoranthene	12.658	202	1151897	151.51	ppm		98
93) Benzidine	12.845	184	611414	209.37	ppm		98
94) Pyrene	12.926	202	1254185	142.51	ppm		94
96) Famphur	13.701	218	199377	120.23	ppm		86
97) Butylbenzylphthalate	13.797	149	525040	136.07	ppm		92
98) 3,3'-Dichlorobenzidine	14.482	252	323705	139.68	ppm		96
99) Benzo[a]anthracene	14.487	228	942720	130.11	ppm		99
100) Chrysene	14.536	228	1006458	139.50	ppm		98
101) bis(2-Ethylhexyl)phtha...	14.642	149	730142	145.85	ppm		96
103) Di-n-octylphthalate	15.680	149	926997	140.84	ppm		94
104) Benzo[b]fluoranthene	16.172	252	652829	126.89	ppm		98
105) Benzo[k]fluoranthene	16.226	252	789311	139.26	ppm		99
106) Benzo[a]pyrene	16.718	252	624413	120.97	ppm		97
107) Indeno[1,2,3-cd]pyrene	18.451	276	443513	99.33	ppm		91
108) Dibenz[a,h]anthracene	18.504	278	504897	104.68	ppm		93
109) Benzo[g,h,i]perylene	18.814	276	611844	119.31	ppm		96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071369.D
Acq On : 23 Jun 2020 3:39 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 23 16:57:50 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: SX2918-IC2918
Lab FileID: X071369.D
Injection Time: 06/23/20 15:39

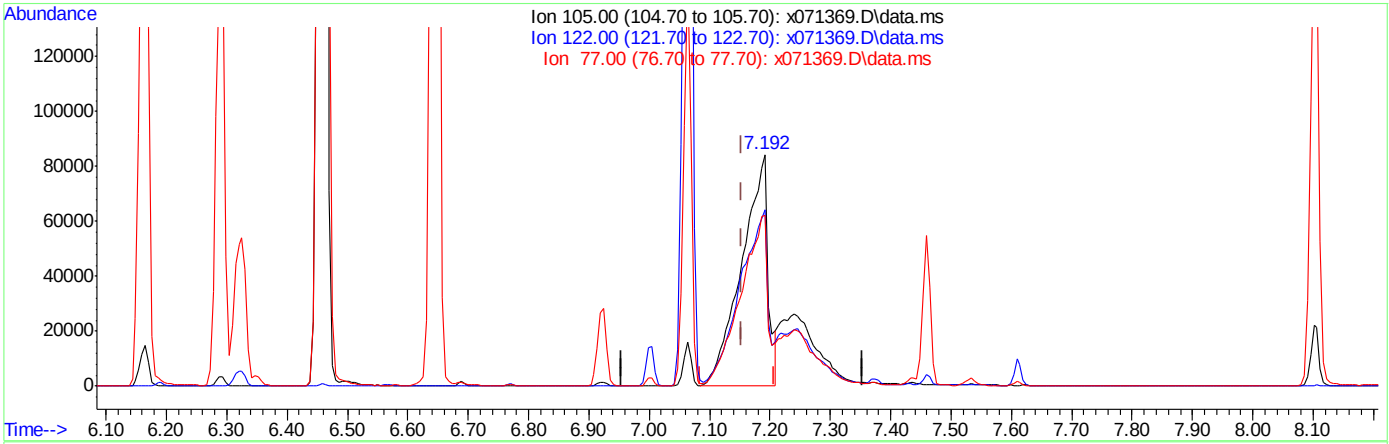
Method: EPA 625.1
Analyst approved: 06/24/20 09:50 Martha Valls
Supervisor approved: 06/24/20 14:07 Naresh Jiawan

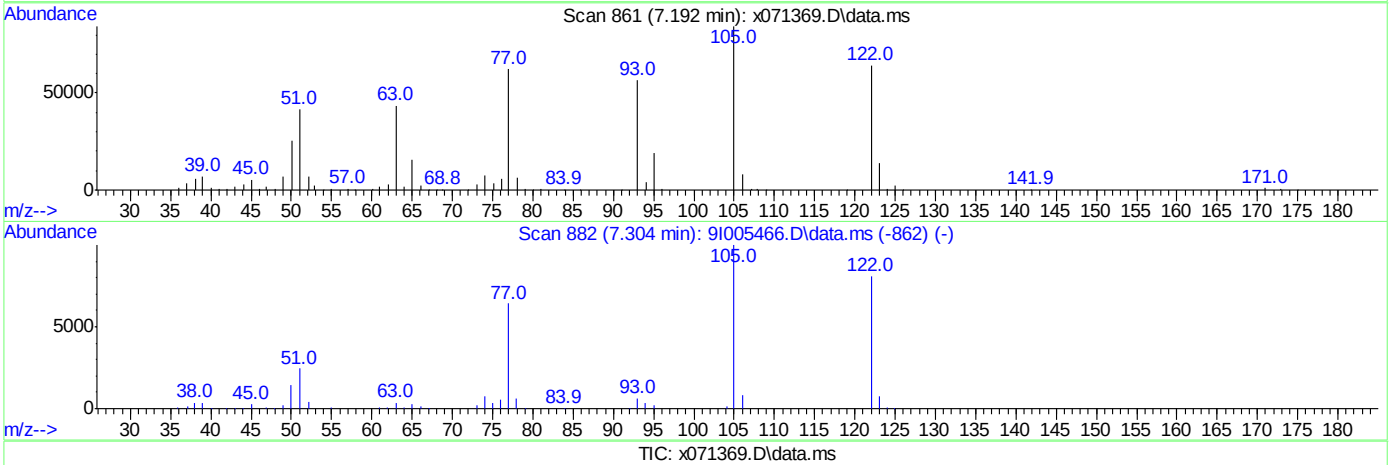
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic Acid	65-85-0		7.19	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071369.D
Acq On : 23 Jun 2020 3:39 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 23 16:03:31 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration





TIC: x071369.D\data.ms

(30) Benzoic Acid

7.192min (+0.037) 120.63ppm

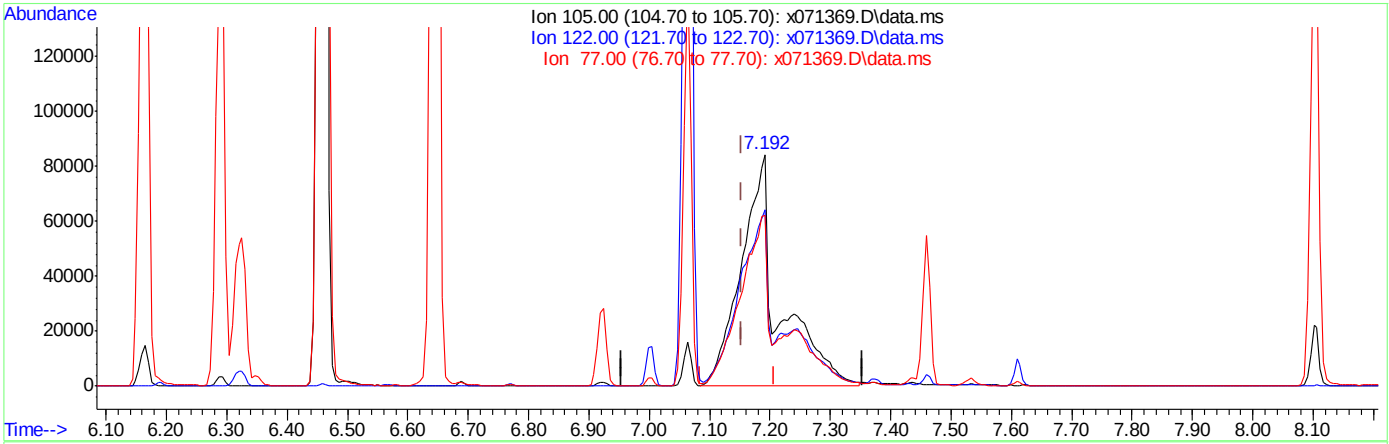
response 252754

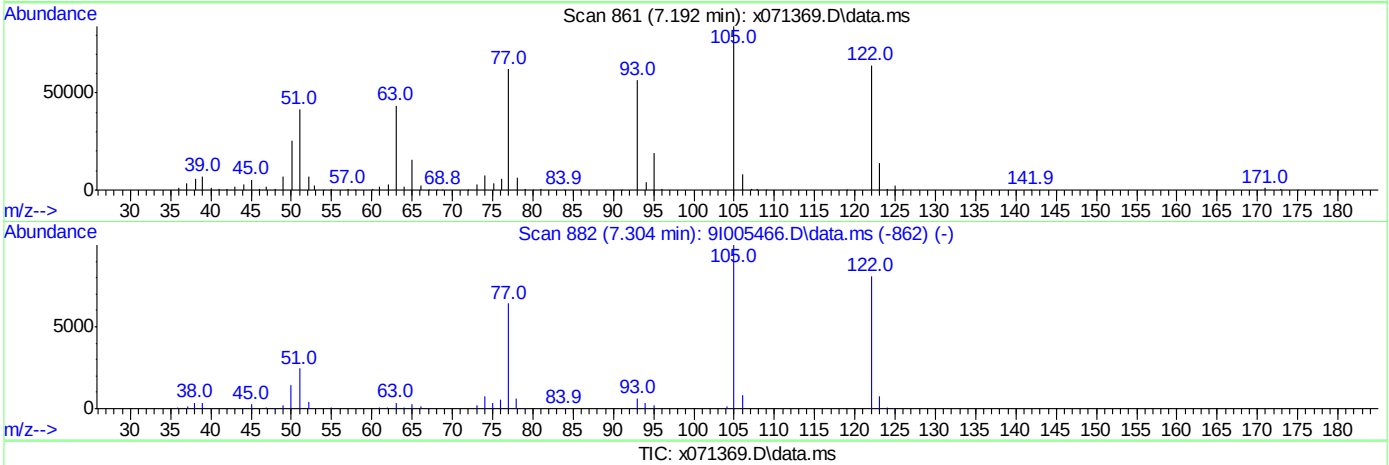
Ion	Exp%	Act%
105.00	100	100
122.00	81.20	74.21
77.00	64.10	72.76
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071369.D
Acq On : 23 Jun 2020 3:39 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 23 16:03:31 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration





TIC: x071369.D\data.ms

(30) Benzoic Acid

7.192min (+0.037) 175.71ppm m

response 368165

Ion	Exp%	Act%
105.00	100	100
122.00	81.20	76.12
77.00	64.10	73.68
0.00	0.00	0.00

X071370.D

Manual Integrations APPROVED (compounds with "m" flag)

Naresh Jiawan 06/24/20 14:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071370.D
Acq On : 23 Jun 2020 4:05 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jun 23 16:58:06 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:33:00 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.010	152	184182	40.00	ppm	0.00
22) Naphthalene-d8	7.438	136	795596	40.00	ppm	0.00
43) Acenaphthene-d10	9.481	164	415197	40.00	ppm	0.00
70) Phenanthrene-d10	11.225	188	687369	40.00	ppm	0.00
92) Chrysene-d12	14.498	240	513475	40.00	ppm	0.00
102) Perylene-d12	16.814	264	367168	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	0.000	152	0m	40.00	ppm	-6.00
120) Naphthalene-d8A	0.000	136	0m	40.00	ppm	-7.43
127) Acenaphthene-d10A	0.000	164	0m	40.00	ppm	-9.48
136) Phenanthrene-d10A	0.000	188	0m	40.00	ppm	-11.22
146) Chrysene-d12A	0.000	240	0m	40.00	ppm	-14.49
153) Perylene-d12A	0.000	264	0m	40.00	ppm	-16.82
System Monitoring Compounds						
7) 2-Fluorophenol	4.614	112	993932	313.10	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 313.10%#			
9) Phenol-d5	5.620	99	1229702	359.73	ppm	0.01
Spiked Amount 100.000	Range 10 - 50		Recovery = 359.73%#			
23) Nitrobenzene-d5	6.625	82	632075	165.45	ppm	0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 330.90%#			
47) 2-Fluorobiphenyl	8.706	172	1167244	186.94	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 373.88%#			
75) 2,4,6-Tribromophenol	10.412	330	252496	277.66	ppm	0.01
Spiked Amount 100.000	Range 33 - 118		Recovery = 277.66%#			
95) Terphenyl-d14	13.145	244	1091853	158.69	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 317.38%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.844	88	228596	148.31	ppm	# 30
3) N-nitrosodimethylamine	3.170	42	414509	305.50	ppm	# 37
4) Pyridine	3.202	79	596326	185.52	ppm	# 19
5) Benzaldehyde	5.534	106	412817	155.09	ppm	93
6) Aniline	5.652	93	890215	184.32	ppm	97
8) bis(2-Chloroethyl)ether	5.737	93	528529	157.21	ppm	78
10) Phenol	5.630	94	781504	179.15	ppm	82
11) 2-Chlorophenol	5.775	128	577643	184.61	ppm	80
12) 1,3-Dichlorobenzene	5.946	146	566579	176.65	ppm	97
13) 1,4-Dichlorobenzene	6.026	146	597968	182.46	ppm	96
14) 1,2-Dichlorobenzene	6.192	146	579586	189.64	ppm	98
15) Benzyl alcohol	6.165	108	386231	187.27	ppm	78
16) 2,2'-Oxybis(1-chloropr...	6.326	45	1048750	261.15	ppm	78
17) 2-Methylphenol	6.293	108	530008	189.13	ppm	96
18) Acetophenone	6.459	105	750263	169.57	ppm	96
19) Hexachloroethane	6.566	117	225072	162.14	ppm	87
20) N-Nitroso-di-n-propyla...	6.475	70	392032	171.87	ppm	# 67
21) 3&4-Methylphenol	6.470	108	534960	183.40	ppm	97
24) Nitrobenzene	6.646	77	622089	171.90	ppm	83
25) Isophorone	6.925	82	1086778	164.55	ppm	95
26) 2-Nitrophenol	7.005	139	315215	180.94	ppm	84

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071370.D
Acq On : 23 Jun 2020 4:05 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jun 23 16:58:06 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:33:00 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
27) 2,4-Dimethylphenol	7.069	107	558703	186.47	ppm		94
28) O,O,O-Triethylphosphor...	7.160	198	234536	168.39	ppm		90
29) bis(2-Chloroethoxy)met...	7.181	93	650917	157.91	ppm		97
30) Benzoic Acid	7.208	105	509248m	225.18	ppm		
31) 2,4-Dichlorophenol	7.278	162	462509	192.58	ppm		94
32) 1,2,4-Trichlorobenzene	7.374	180	451987	167.24	ppm		97
34) Naphthalene	7.459	128	1617864	180.41	ppm		99
35) 4-Chloroaniline	7.534	127	687303	182.71	ppm		92
36) 2,6-Dichlorophenol	7.540	162	449742	183.45	ppm		97
37) Hexachlorobutadiene	7.609	225	226837	150.44	ppm		98
38) Caprolactam	7.978	113	184819	185.32	ppm	#	57
39) 4-Chloro-3-methylphenol	8.107	107	478341	183.27	ppm		95
40) 2-Methylnaphthalene	8.267	142	1076778	185.68	ppm		98
41) 1-Methylnaphthalene	8.379	142	1032928	190.13	ppm		98
42) 1,2,4,5-Tetrachloroben...	8.460	216	465425	165.60	ppm		98
44) Hexachlorocyclopentadiene	8.454	237	276347	194.28	ppm		99
45) 2,4,6-Trichlorophenol	8.599	196	307240	180.46	ppm		100
46) 2,4,5-Trichlorophenol	8.636	196	340155	187.25	ppm		99
48) 1,1'-Biphenyl	8.818	154	1288409	188.41	ppm		99
49) 2-Chloronaphthalene	8.829	162	985180	185.60	ppm		94
50) 2-Nitroaniline	8.957	65	366840	211.95	ppm	#	68
51) p-Dinitrobenzene	9.128	75	214772	169.17	ppm	#	64
52) Acenaphthylene	9.315	152	1607770	197.92	ppm		99
53) Dimethylphthalate	9.203	163	1105697	181.24	ppm		99
54) m-Dinitrobenzene	9.214	168	204112	192.64	ppm	#	30
55) 2,6-Dinitrotoluene	9.257	165	276132	187.13	ppm		70
56) o-Dinitrobenzene	9.315	50	233849	266.56	ppm	#	61
57) Acenaphthene	9.519	153	1037545	193.12	ppm		98
58) 3-Nitroaniline	9.449	138	306081	192.74	ppm		100
59) 2,4-Dinitrophenol	9.567	184	155926	220.99	ppm	#	45
60) Dibenzofuran	9.727	168	1364487	185.26	ppm		95
61) 2,4-Dinitrotoluene	9.727	165	344922	184.43	ppm		74
62) 4-Nitrophenol	9.652	109	169451	225.48	ppm	#	64
63) 2,3,5,6-Tetrachlorophenol	9.818	232	260523	185.44	ppm		90
64) 2,3,4,6-Tetrachlorophenol	9.872	232	260254	173.53	ppm		89
65) Fluorene	10.128	166	1087568	189.18	ppm		100
66) 4-Chlorophenyl-phenyle...	10.145	204	529204	183.59	ppm		91
67) Diethylphthalate	10.038	149	1125649	185.72	ppm		97
68) Thionazin	10.134	97	226094	158.27	ppm		97
69) 4-Nitroaniline	10.177	138	335101	206.12	ppm		85
71) 4,6-Dinitro-2-methylph...	10.209	198	213402	224.37	ppm		81
72) n-Nitrosodiphenylamine	10.289	169	988849	261.59	ppm		97
73) Diphenylamine	10.289	169	988849	223.32	ppm		97
74) 1,2-Diphenylhydrazine	10.332	77	1192123	192.65	ppm		93
76) Sulfotep	10.503	97	180883	186.85	ppm	#	70
77) Phorate	10.647	75	639802	186.72	ppm		98
78) 4-Bromophenyl-phenylether	10.722	248	272545	172.50	ppm		86
79) Hexachlorobenzene	10.770	284	264744	146.52	ppm		79
80) Dimethoate	10.845	87	422017	206.47	ppm		92
81) Simazine	10.915	201	190208	245.93	ppm		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071370.D
Acq On : 23 Jun 2020 4:05 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jun 23 16:58:06 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:33:00 2020
Response via : Initial Calibration

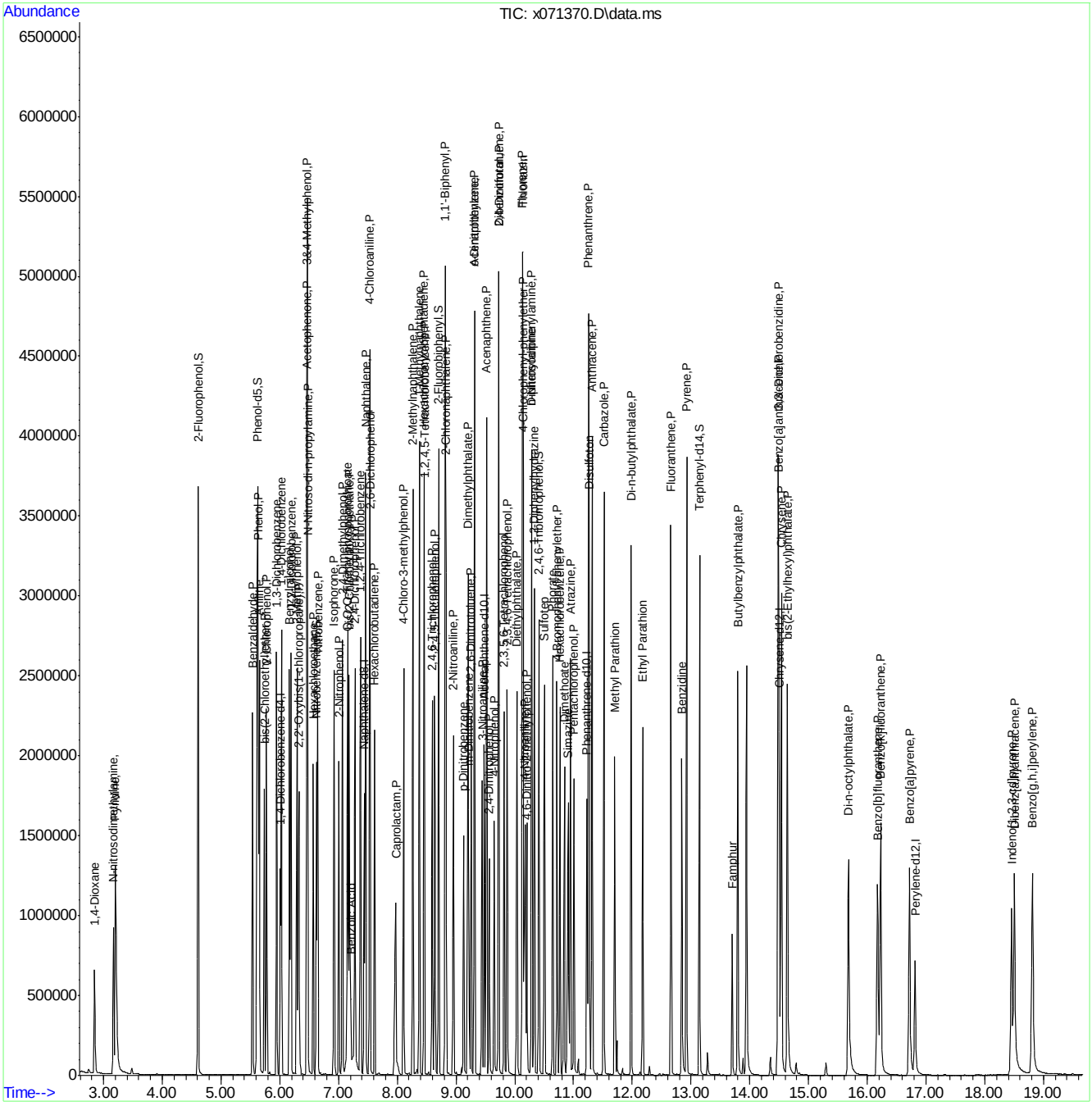
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
82) Atrazine	10.947	200	320374	213.03	ppm		86
83) Pentachlorophenol	11.006	266	181453	200.73	ppm		97
84) Phenanthrene	11.257	178	1573875	207.84	ppm		99
85) Anthracene	11.321	178	1704703	220.37	ppm		98
86) Disulfoton	11.268	88	650007	185.08	ppm		90
87) Carbazole	11.519	167	1494706	216.50	ppm		98
88) Methyl Parathion	11.701	109	362465	210.29	ppm	#	85
89) Di-n-butylphthalate	11.979	149	1744713	198.58	ppm		98
90) Ethyl Parathion	12.177	97	218449	190.77	ppm		91
91) Fluoranthene	12.664	202	1544086	191.86	ppm		95
93) Benzidine	12.846	184	805812	261.26	ppm		97
94) Pyrene	12.926	202	1665026	179.13	ppm		95
96) Famphur	13.701	218	239023	136.47	ppm		91
97) Butylbenzylphthalate	13.798	149	694470	170.40	ppm		91
98) 3,3'-Dichlorobenzidine	14.482	252	436466	178.31	ppm		99
99) Benzo[a]anthracene	14.488	228	1267054	165.57	ppm		99
100) Chrysene	14.541	228	1324468	173.81	ppm		98
101) bis(2-Ethylhexyl)phtha...	14.643	149	961974	181.94	ppm		98
103) Di-n-octylphthalate	15.680	149	1260410	182.63	ppm		94
104) Benzo[b]fluoranthene	16.178	252	869683	161.22	ppm		99
105) Benzo[k]fluoranthene	16.231	252	1058843	178.17	ppm		97
106) Benzo[a]pyrene	16.723	252	831194	153.59	ppm		98
107) Indeno[1,2,3-cd]pyrene	18.456	276	627476	134.03	ppm		94
108) Dibenz[a,h]anthracene	18.504	278	694066	137.24	ppm		91
109) Benzo[g,h,i]perylene	18.815	276	832318	154.79	ppm		94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071370.D
Acq On : 23 Jun 2020 4:05 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jun 23 16:58:06 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:33:00 2020
Response via : Initial Calibration



Manual Integration Approval Summary

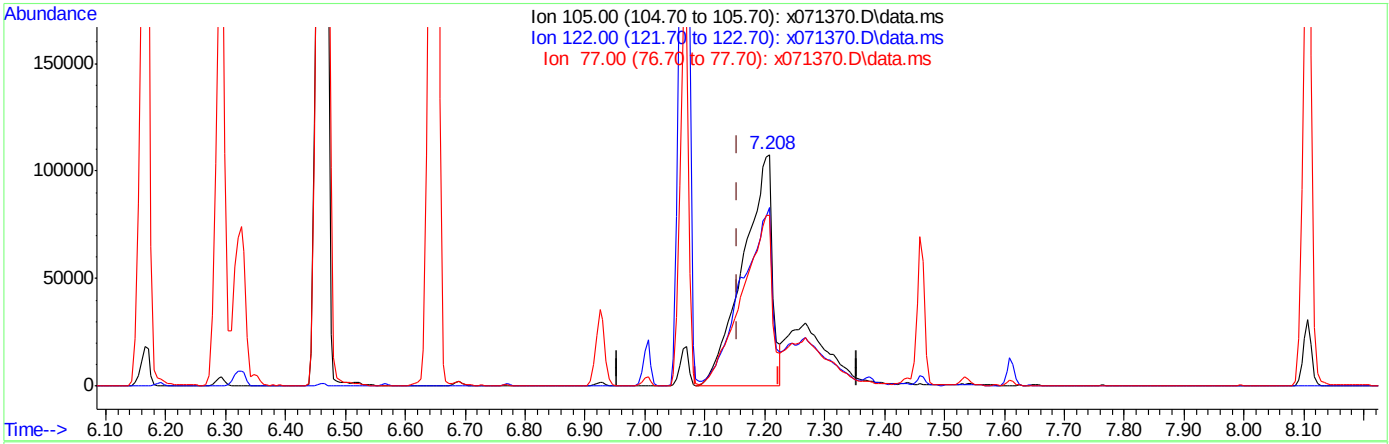
Sample Number:	SX2918-IC2918	**Method:**	EPA 625.1
Lab FileID:	X071370.D	**Analyst approved:**	06/24/20 09:50 Martha Valls
Injection Time:	06/23/20 16:05	**Supervisor approved:**	06/24/20 14:07 Naresh Jiawan

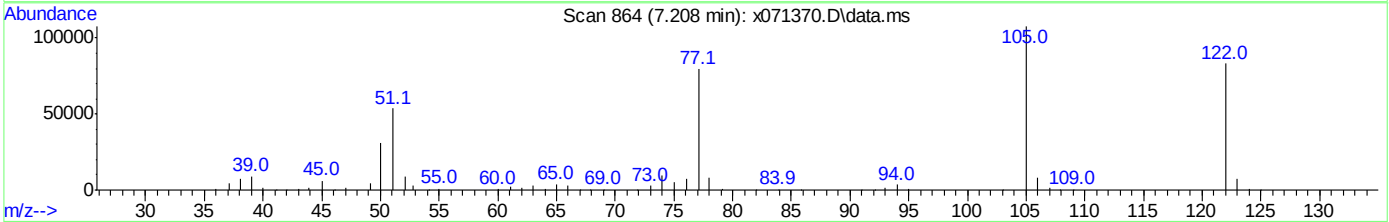
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic Acid	65-85-0		7.21	Split peak

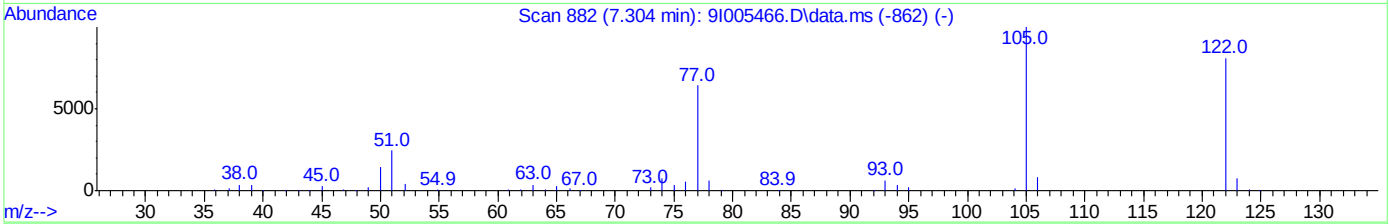
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071370.D
Acq On : 23 Jun 2020 4:05 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jun 23 16:34:49 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:33:00 2020
Response via : Initial Calibration







TIC: x071370.D\data.ms

(30) Benzoic Acid

7.208min (+0.054) 160.19ppm

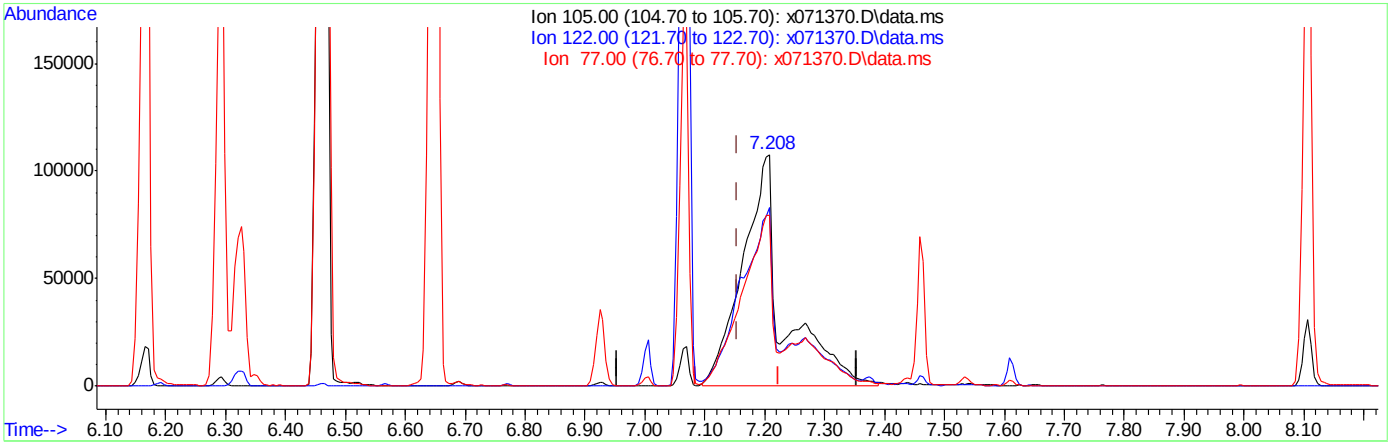
response 362267

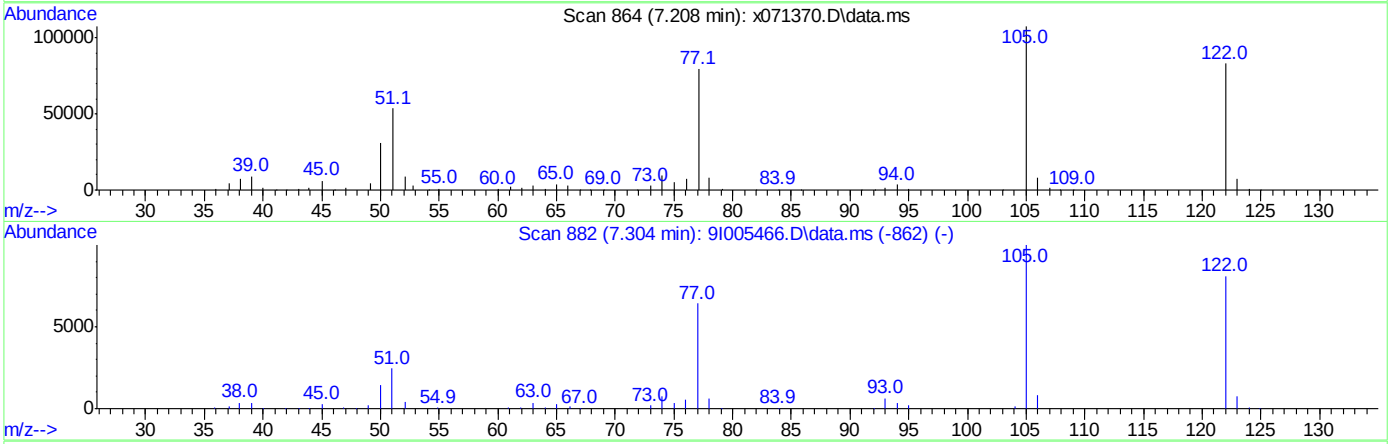
Ion	Exp%	Act%
105.00	100	100
122.00	81.20	75.13
77.00	64.10	72.53
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071370.D
Acq On : 23 Jun 2020 4:05 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jun 23 16:34:49 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:33:00 2020
Response via : Initial Calibration





TIC: x071370.D\data.ms

(30) Benzoic Acid

7.208min (+0.054) 225.18ppm m

response 509248

Ion	Exp%	Act%
105.00	100	100
122.00	81.20	77.24
77.00	64.10	73.76
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 06/24/20 14:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071371.D
Acq On : 23 Jun 2020 4:31 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jun 23 16:58:19 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:33:00 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.010	152	196466	40.00	ppm	0.00
22) Naphthalene-d8	7.438	136	851386	40.00	ppm	0.00
43) Acenaphthene-d10	9.481	164	445105	40.00	ppm	0.00
70) Phenanthrene-d10	11.230	188	723575	40.00	ppm	0.00
92) Chrysene-d12	14.504	240	534252	40.00	ppm	0.01
102) Perylene-d12	16.820	264	385695	40.00	ppm	0.01
110) 1,4-Dichlorobenzene-d4A	0.000	152	0m	40.00	ppm	-6.00
120) Naphthalene-d8A	0.000	136	0m	40.00	ppm	-7.43
127) Acenaphthene-d10A	0.000	164	0m	40.00	ppm	-9.48
136) Phenanthrene-d10A	0.000	188	0m	40.00	ppm	-11.22
146) Chrysene-d12A	0.000	240	0m	40.00	ppm	-14.49
153) Perylene-d12A	0.000	264	0m	40.00	ppm	-16.82
System Monitoring Compounds						
7) 2-Fluorophenol	4.614	112	1447342	427.42	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 427.42%#			
9) Phenol-d5	5.625	99	1801216	493.97	ppm	0.02
Spiked Amount 100.000	Range 10 - 50		Recovery = 493.97%#			
23) Nitrobenzene-d5	6.631	82	922012	225.52	ppm	0.01
Spiked Amount 50.000	Range 42 - 108		Recovery = 451.04%#			
47) 2-Fluorobiphenyl	8.706	172	1657926	247.68	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 495.36%#			
75) 2,4,6-Tribromophenol	10.417	330	382386	399.45	ppm	0.02
Spiked Amount 100.000	Range 33 - 118		Recovery = 399.45%#			
95) Terphenyl-d14	13.151	244	1577008	220.28	ppm	0.01
Spiked Amount 50.000	Range 39 - 121		Recovery = 440.56%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.844	88	325295	197.85	ppm	# 34
3) N-nitrosodimethylamine	3.175	42	601707	415.75	ppm	# 38
4) Pyridine	3.202	79	878586	256.24	ppm	# 23
5) Benzaldehyde	5.539	106	588752	207.36	ppm	94
6) Aniline	5.657	93	1274273	247.34	ppm	99
8) bis(2-Chloroethyl)ether	5.737	93	756907	211.06	ppm	77
10) Phenol	5.641	94	1097312	235.81	ppm	73
11) 2-Chlorophenol	5.780	128	831993	249.27	ppm	85
12) 1,3-Dichlorobenzene	5.946	146	816430	238.63	ppm	96
13) 1,4-Dichlorobenzene	6.031	146	854881	244.55	ppm	98
14) 1,2-Dichlorobenzene	6.192	146	831789	255.14	ppm	97
15) Benzyl alcohol	6.171	108	555751	252.62	ppm	79
16) 2,2'-Oxybis(1-chloropr...	6.331	45	1427748	333.30	ppm	80
17) 2-Methylphenol	6.294	108	768068	256.94	ppm	96
18) Acetophenone	6.465	105	1068591	226.42	ppm	97
19) Hexachloroethane	6.566	117	328380	221.77	ppm	86
20) N-Nitroso-di-n-propyla...	6.481	70	551620	226.71	ppm	# 68
21) 3&4-Methylphenol	6.475	108	747847	240.35	ppm	97
24) Nitrobenzene	6.652	77	897664	231.79	ppm	85
25) Isophorone	6.930	82	1576566	223.07	ppm	95
26) 2-Nitrophenol	7.005	139	468000	251.04	ppm	80

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071371.D
Acq On : 23 Jun 2020 4:31 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jun 23 16:58:19 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:33:00 2020
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
27)	2,4-Dimethylphenol	7.074	107	807736	251.93	ppm		93
28)	O,O,O-Triethylphosphor...	7.165	198	345847	232.04	ppm		94
29)	bis(2-Chloroethoxy)met...	7.187	93	909033	206.07	ppm		97
30)	Benzoic Acid	7.230	105	746921m	308.64	ppm		
31)	2,4-Dichlorophenol	7.283	162	676134	263.08	ppm		95
32)	1,2,4-Trichlorobenzene	7.374	180	664863	229.89	ppm		96
34)	Naphthalene	7.465	128	2311700	240.88	ppm		99
35)	4-Chloroaniline	7.540	127	963011	239.23	ppm		94
36)	2,6-Dichlorophenol	7.545	162	646414	246.39	ppm		98
37)	Hexachlorobutadiene	7.615	225	332067	205.80	ppm		99
38)	Caprolactam	8.000	113	270490m	253.45	ppm		
39)	4-Chloro-3-methylphenol	8.112	107	697931	249.88	ppm		93
40)	2-Methylnaphthalene	8.267	142	1549268	249.65	ppm		98
41)	1-Methylnaphthalene	8.380	142	1478955	254.39	ppm		98
42)	1,2,4,5-Tetrachloroben...	8.465	216	664043	220.79	ppm		98
44)	Hexachlorocyclopentadiene	8.454	237	411690	269.98	ppm		99
45)	2,4,6-Trichlorophenol	8.599	196	446173	244.45	ppm		97
46)	2,4,5-Trichlorophenol	8.642	196	496266	254.84	ppm		98
48)	1,1'-Biphenyl	8.823	154	1808755	246.74	ppm		99
49)	2-Chloronaphthalene	8.834	162	1379237	242.38	ppm		95
50)	2-Nitroaniline	8.963	65	519455	279.96	ppm	#	71
51)	p-Dinitrobenzene	9.134	75	313814	230.58	ppm	#	68
52)	Acenaphthylene	9.316	152	2239279	257.14	ppm		100
53)	Dimethylphthalate	9.209	163	1575597	240.91	ppm		99
54)	m-Dinitrobenzene	9.225	168	292540	257.54	ppm	#	46
55)	2,6-Dinitrotoluene	9.262	165	394575	249.43	ppm		71
56)	o-Dinitrobenzene	9.321	50	322363	342.76	ppm	#	60
57)	Acenaphthene	9.524	153	1457637	253.08	ppm		97
58)	3-Nitroaniline	9.455	138	435862	256.02	ppm		97
59)	2,4-Dinitrophenol	9.572	184	232415	307.26	ppm	#	57
60)	Dibenzofuran	9.727	168	1913807	242.39	ppm		93
61)	2,4-Dinitrotoluene	9.733	165	494120	246.45	ppm		78
62)	4-Nitrophenol	9.663	109	242809	301.39	ppm	#	67
63)	2,3,5,6-Tetrachlorophenol	9.824	232	377511	250.66	ppm		93
64)	2,3,4,6-Tetrachlorophenol	9.877	232	379105	235.79	ppm		92
65)	Fluorene	10.134	166	1503962	244.03	ppm		99
66)	4-Chlorophenyl-phenyle...	10.145	204	740272	239.55	ppm		91
67)	Diethylphthalate	10.043	149	1603423	246.77	ppm		97
68)	Thionazin	10.139	97	311496	203.40	ppm		98
69)	4-Nitroaniline	10.193	138	473902	271.90	ppm		85
71)	4,6-Dinitro-2-methylph...	10.214	198	312932	312.55	ppm		89
72)	n-Nitrosodiphenylamine	10.294	169	1419678	356.77	ppm		96
73)	Diphenylamine	10.294	169	1419678	304.57	ppm		96
74)	1,2-Diphenylhydrazine	10.337	77	1669778	256.34	ppm		96
76)	Sulfotep	10.508	97	252251	247.54	ppm	#	81
77)	Phorate	10.653	75	905489	251.03	ppm		99
78)	4-Bromophenyl-phenylether	10.722	248	397568	239.04	ppm	#	82
79)	Hexachlorobenzene	10.776	284	392614	206.42	ppm		82
80)	Dimethoate	10.851	87	595879	276.95	ppm		94
81)	Simazine	10.925	201	275623	338.53	ppm		92

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071371.D
Acq On : 23 Jun 2020 4:31 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jun 23 16:58:19 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:33:00 2020
Response via : Initial Calibration

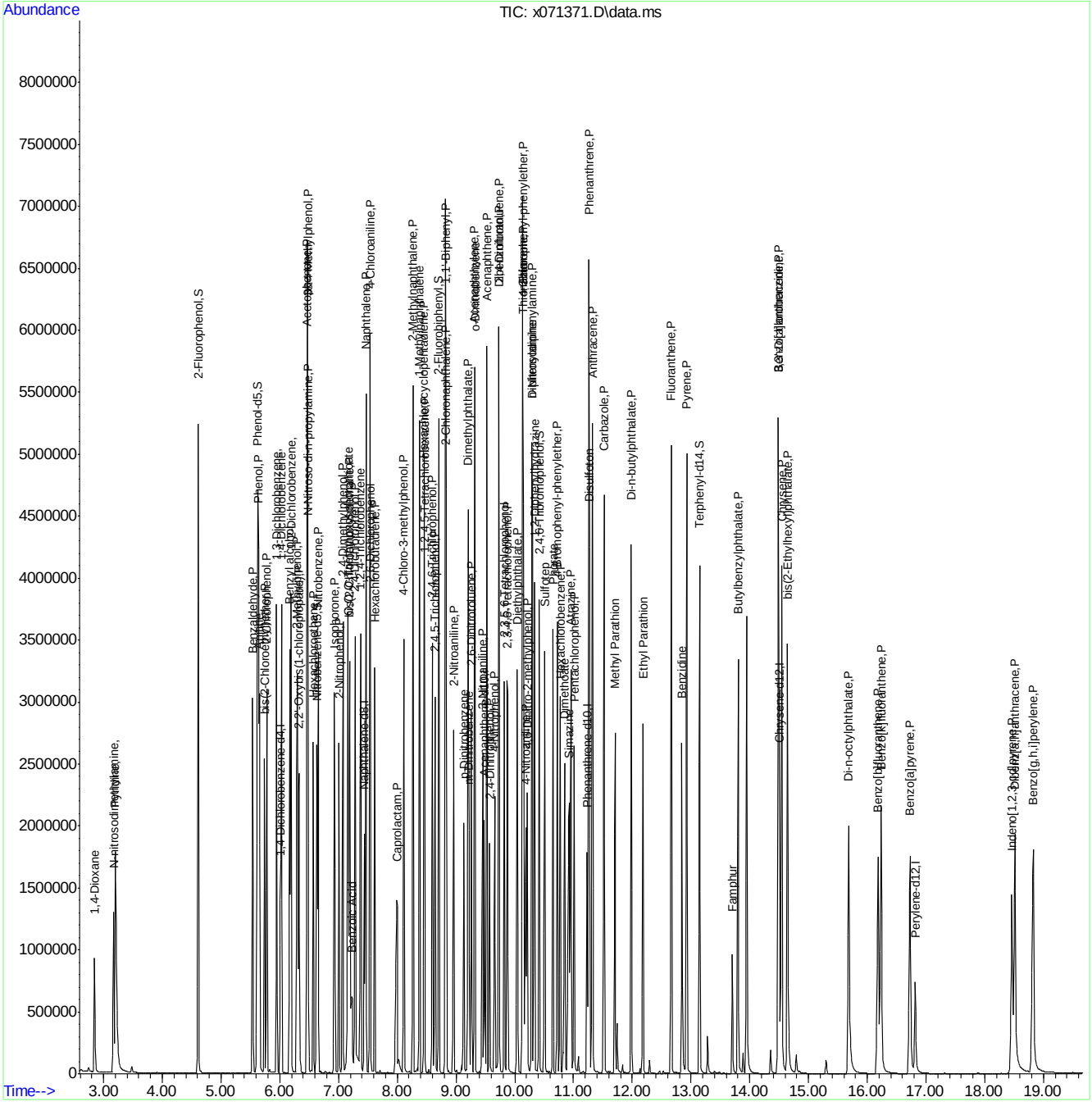
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
82) Atrazine	10.958	200	508273	321.06	ppm		93
83) Pentachlorophenol	11.011	266	264451	277.91	ppm		98
84) Phenanthrene	11.262	178	2183315	273.89	ppm		99
85) Anthracene	11.327	178	2366894	290.66	ppm		98
86) Disulfoton	11.273	88	870469	235.45	ppm		90
87) Carbazole	11.525	167	2129541	293.02	ppm		98
88) Methyl Parathion	11.706	109	508609	280.32	ppm	#	88
89) Di-n-butylphthalate	11.985	149	2467839	266.82	ppm		98
90) Ethyl Parathion	12.182	97	314399	260.82	ppm		93
91) Fluoranthene	12.664	202	2217272	261.72	ppm		97
93) Benzidine	12.846	184	1108204	345.33	ppm		99
94) Pyrene	12.931	202	2375247	245.60	ppm		95
96) Famphur	13.707	218	284954	156.37	ppm		95
97) Butylbenzylphthalate	13.803	149	989049	233.25	ppm		95
98) 3,3'-Dichlorobenzidine	14.488	252	617680	242.53	ppm		97
99) Benzo[a]anthracene	14.488	228	1785259	224.22	ppm		100
100) Chrysene	14.547	228	1876003	236.62	ppm		98
101) bis(2-Ethylhexyl)phtha...	14.643	149	1377435	250.38	ppm		98
103) Di-n-octylphthalate	15.686	149	1860855	256.69	ppm		94
104) Benzo[b]fluoranthene	16.183	252	1257505	221.92	ppm		98
105) Benzo[k]fluoranthene	16.242	252	1533403	245.63	ppm		97
106) Benzo[a]pyrene	16.734	252	1216893	214.05	ppm		99
107) Indeno[1,2,3-cd]pyrene	18.467	276	959240	195.06	ppm		95
108) Dibenz[a,h]anthracene	18.515	278	1148615	216.21	ppm		94
109) Benzo[g,h,i]perylene	18.825	276	1267870	224.47	ppm		96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071371.D
Acq On : 23 Jun 2020 4:31 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jun 23 16:58:19 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:33:00 2020
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: SX2918-IC2918
Lab FileID: X071371.D
Injection Time: 06/23/20 16:31

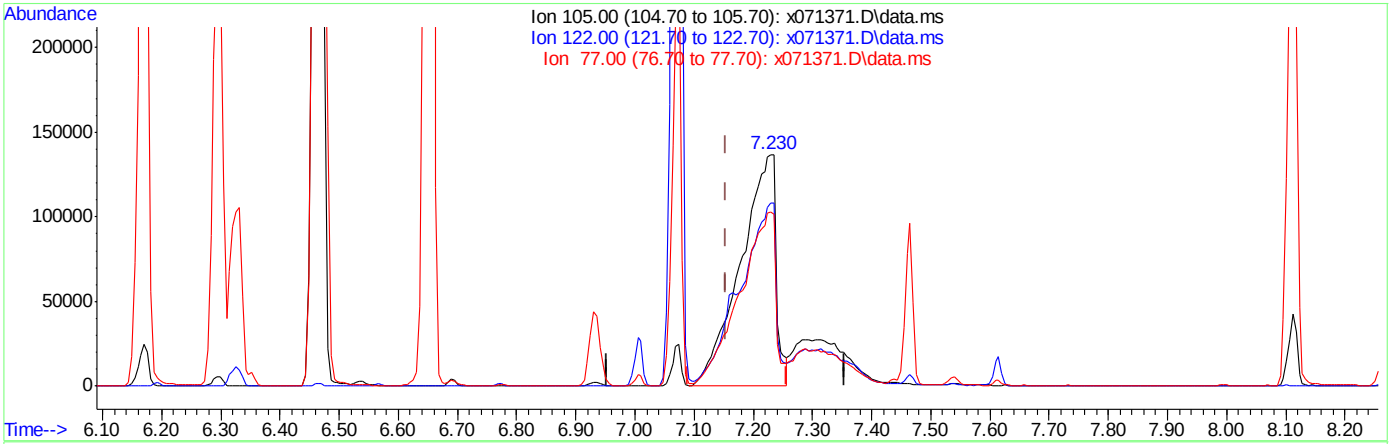
Method: EPA 625.1
Analyst approved: 06/24/20 09:50 Martha Valls
Supervisor approved: 06/24/20 14:07 Naresh Jiawan

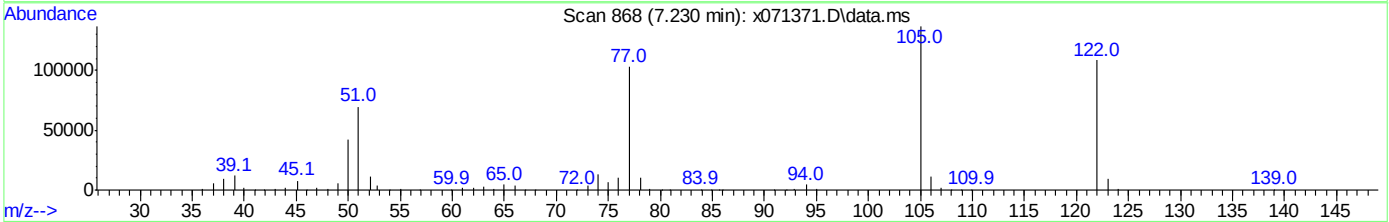
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic Acid	65-85-0		7.23	Split peak
Caprolactam	105-60-2		8.00	Split peak

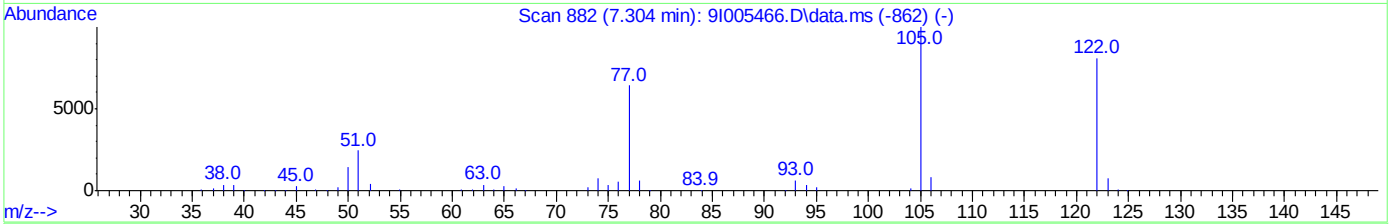
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071371.D
Acq On : 23 Jun 2020 4:31 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jun 23 16:51:36 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:33:00 2020
Response via : Initial Calibration







TIC: x071371.D\data.ms

(30) Benzoic Acid

7.230min (+0.075) 234.38ppm

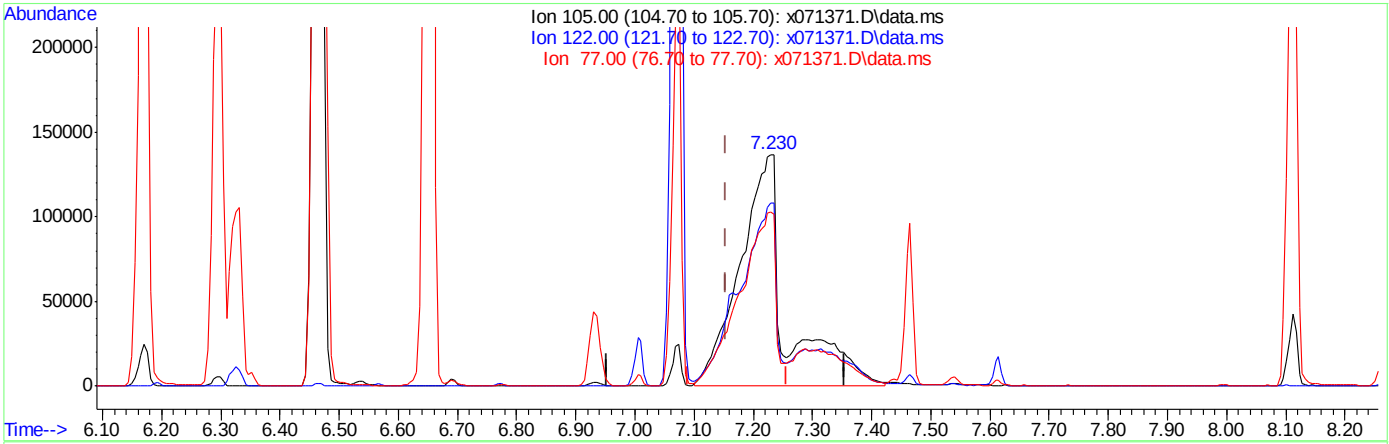
response 567202

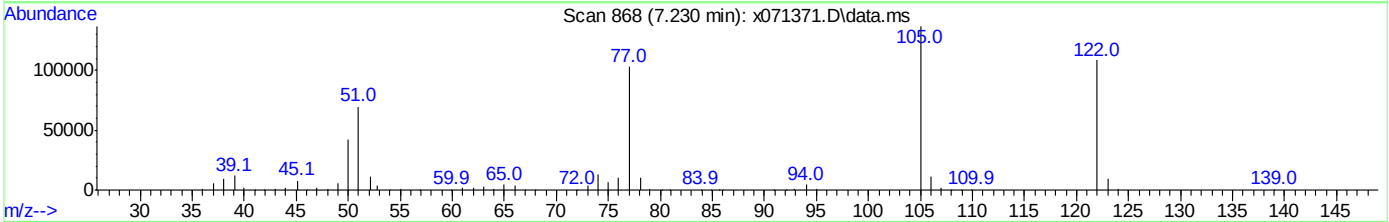
Ion	Exp%	Act%
105.00	100	100
122.00	81.20	77.79
77.00	64.10	74.35
0.00	0.00	0.00

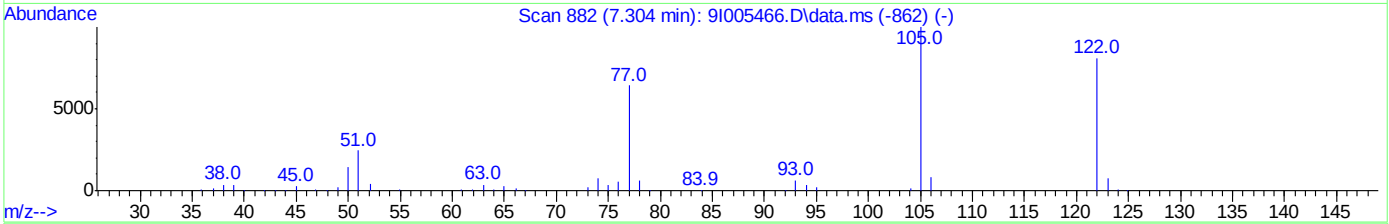
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071371.D
Acq On : 23 Jun 2020 4:31 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jun 23 16:51:36 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:33:00 2020
Response via : Initial Calibration







TIC: x071371.D\data.ms

(30) Benzoic Acid

7.230min (+0.075) 308.64ppm m

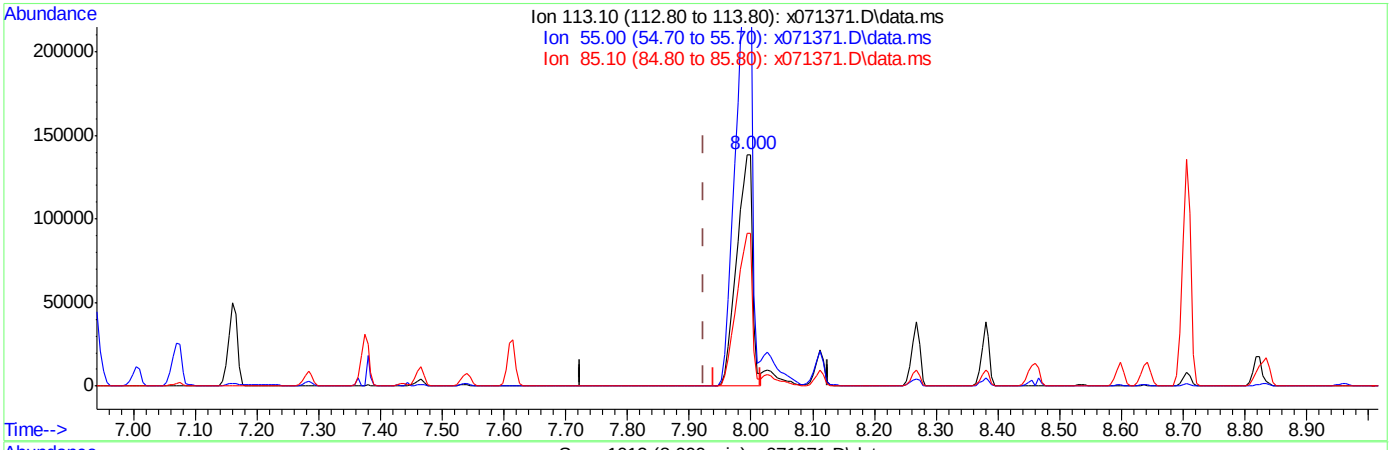
response 746921

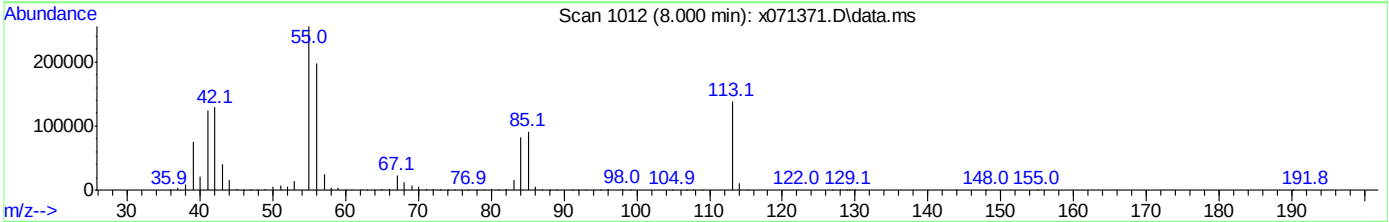
Ion	Exp%	Act%
105.00	100	100
122.00	81.20	79.27
77.00	64.10	75.09
0.00	0.00	0.00

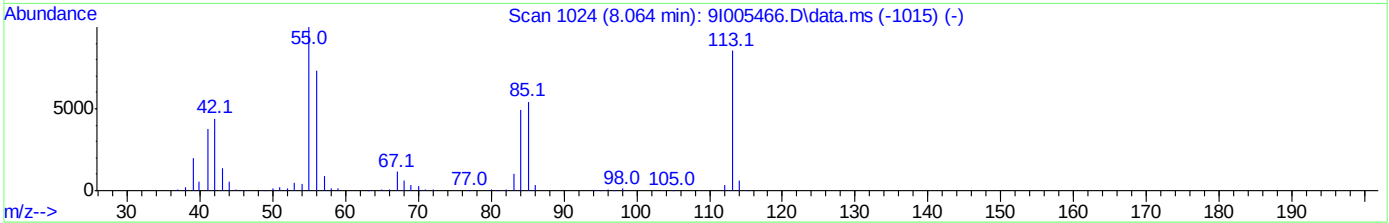
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071371.D
Acq On : 23 Jun 2020 4:31 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jun 23 16:51:36 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:33:00 2020
Response via : Initial Calibration







TIC: x071371.D\data.ms

(38) Caprolactam (P)

8.000min (+0.075) 235.97ppm

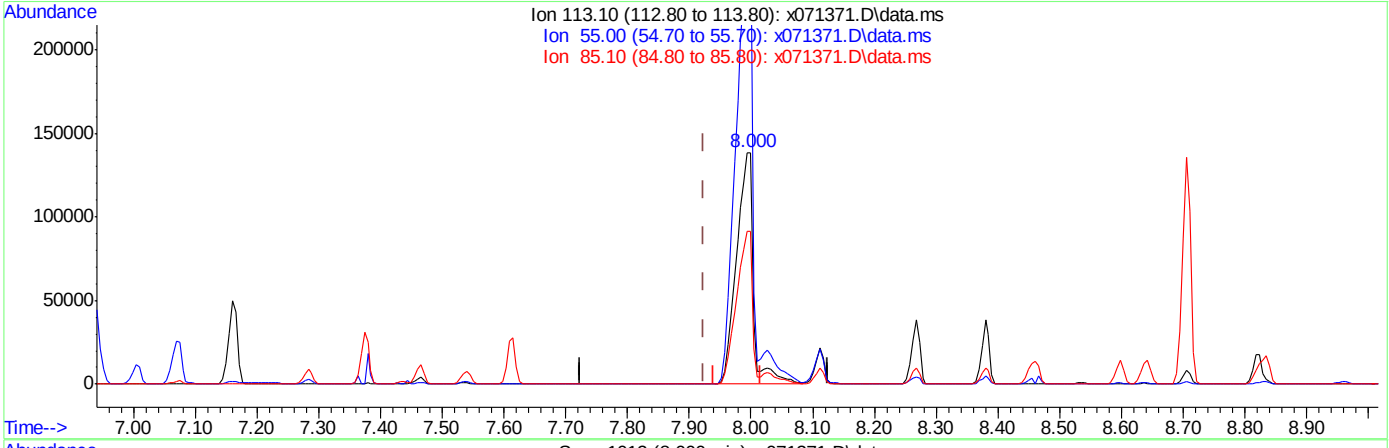
response 251829

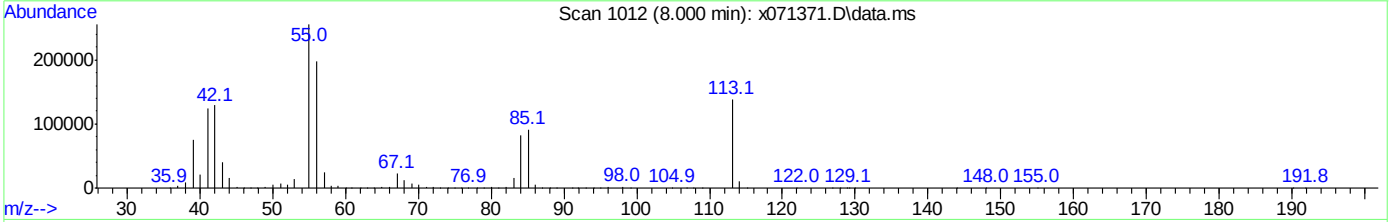
Ion	Exp%	Act%
113.10	100	100
55.00	117.00	183.66#
85.10	63.40	66.16
0.00	0.00	0.00

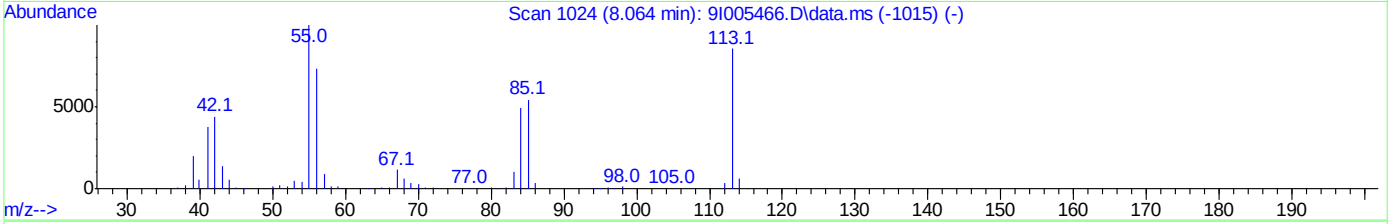
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071371.D
Acq On : 23 Jun 2020 4:31 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jun 23 16:51:36 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:33:00 2020
Response via : Initial Calibration







TIC: x071371.D\data.ms

(38) Caprolactam (P)

8.000min (+0.075) 253.45ppm m

response 270490

Ion	Exp%	Act%
113.10	100	100
55.00	117.00	184.25#
85.10	63.40	66.06
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071372.D
Acq On : 23 Jun 2020 4:58 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jun 24 13:02:09 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.010	152	183379	40.00	ppm	0.00
22) Naphthalene-d8	7.433	136	761641	40.00	ppm	0.00
43) Acenaphthene-d10	9.476	164	366243	40.00	ppm	0.00
70) Phenanthrene-d10	11.225	188	590804	40.00	ppm	0.00
92) Chrysene-d12	14.493	240	381234	40.00	ppm	0.00
102) Perylene-d12	16.809	264	308770	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	6.010	152	183379	40.00	ppm	0.00
120) Naphthalene-d8A	7.433	136	761641	40.00	ppm	0.00
127) Acenaphthene-d10A	9.476	164	366243	40.00	ppm	0.00
136) Phenanthrene-d10A	11.225	188	590804	40.00	ppm	0.00
146) Chrysene-d12A	14.493	240	381234	40.00	ppm	0.00
153) Perylene-d12A	16.809	264	309063	40.00	ppm	-0.02
System Monitoring Compounds						
7) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#		
9) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#		
23) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#		
47) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#		
75) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#		
95) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#		
Target Compounds						Qvalue
2) 1,4-Dioxane	2.854	88	149489	47.57	ppm	98
3) N-nitrosodimethylamine	3.175	42	258160	46.26	ppm	96
5) Benzaldehyde	5.534	106	205047	37.51	ppm	98
8) bis(2-Chloroethyl)ether	5.727	93	288499	42.88	ppm	97
10) Phenol	5.625	94	378450	40.78	ppm	97
11) 2-Chlorophenol	5.775	128	317439	45.24	ppm	98
12) 1,3-Dichlorobenzene	5.946	146	347468	47.67	ppm	98
13) 1,4-Dichlorobenzene	6.026	146	369369	47.89	ppm	99
14) 1,2-Dichlorobenzene	6.187	146	341657	46.63	ppm	99
16) 2,2'-Oxybis(1-chloropr...	6.326	45	661107	46.76	ppm	99
17) 2-Methylphenol	6.288	108	296147	44.37	ppm	99
18) Acetophenone	6.454	105	448943	45.45	ppm	99
19) Hexachloroethane	6.566	117	144318	49.84	ppm	98
20) N-Nitroso-di-n-propyla...	6.465	70	236671	45.37	ppm	98
21) 3&4-Methylphenol	6.465	108	640525	92.84	ppm	98
24) Nitrobenzene	6.641	77	359823	46.24	ppm	98
25) Isophorone	6.919	82	588290	42.34	ppm	99
26) 2-Nitrophenol	7.000	139	177715	48.03	ppm	93
27) 2,4-Dimethylphenol	7.064	107	297230	43.26	ppm	99
29) bis(2-Chloroethoxy)met...	7.176	93	377117	46.39	ppm	100
30) Benzoic Acid	7.235	105	562871	85.51	ppm	94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071372.D
Acq On : 23 Jun 2020 4:58 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jun 24 13:02:09 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration

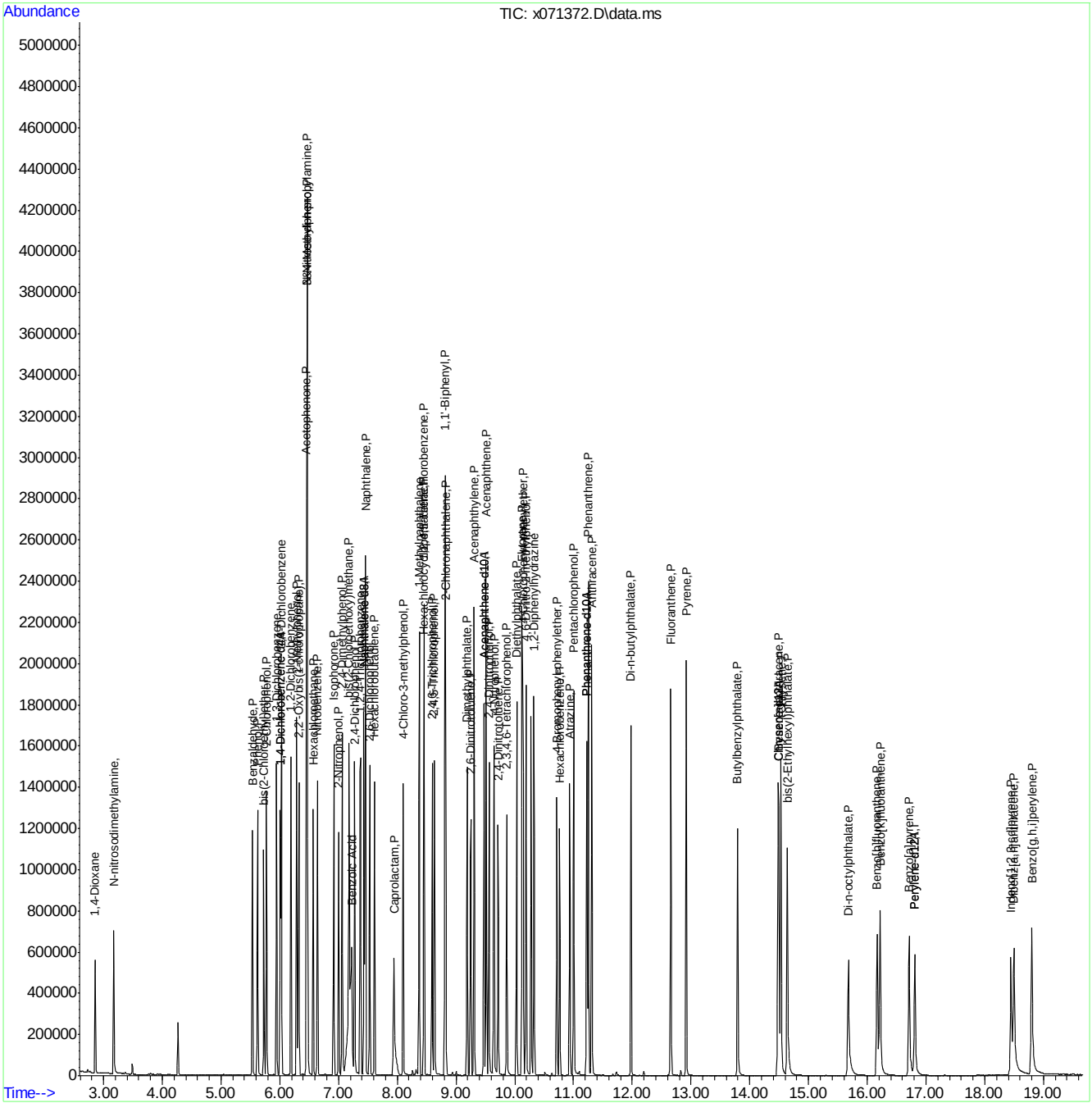
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
31)	2,4-Dichlorophenol	7.278	162	269185	48.60	ppm	98
32)	1,2,4-Trichlorobenzene	7.374	180	272003	48.06	ppm	97
34)	Naphthalene	7.460	128	959832	46.48	ppm	100
36)	2,6-Dichlorophenol	7.534	162	263049	46.58	ppm	98
37)	Hexachlorobutadiene	7.609	225	137064	49.11	ppm	98
38)	Caprolactam	7.946	113	96386	41.94	ppm	98
39)	4-Chloro-3-methylphenol	8.101	107	257540	43.61	ppm	97
41)	1-Methylnaphthalene	8.374	142	543287	41.55	ppm	98
42)	1,2,4,5-Tetrachloroben...	8.454	216	249473	43.92	ppm	98
44)	Hexachlorocyclopentadiene	8.449	237	140580	48.13	ppm	99
45)	2,4,6-Trichlorophenol	8.593	196	172067	51.18	ppm	100
46)	2,4,5-Trichlorophenol	8.631	196	193062	52.32	ppm	98
48)	1,1'-Biphenyl	8.813	154	703618	47.05	ppm	100
49)	2-Chloronaphthalene	8.829	162	568344	50.63	ppm	99
52)	Acenaphthylene	9.310	152	937291	51.24	ppm	99
53)	Dimethylphthalate	9.193	163	607393	47.01	ppm	100
55)	2,6-Dinitrotoluene	9.251	165	137746	45.17	ppm	93
57)	Acenaphthene	9.513	153	574692	47.24	ppm	98
59)	2,4-Dinitrophenol	9.562	184	180349	93.33	ppm	98
61)	2,4-Dinitrotoluene	9.717	165	191936	49.37	ppm	86
62)	4-Nitrophenol	9.652	109	180279	96.19	ppm	93
64)	2,3,4,6-Tetrachlorophenol	9.866	232	128385	45.10	ppm	95
65)	Fluorene	10.123	166	615161	48.56	ppm	99
66)	4-Chlorophenyl-phenyle...	10.139	204	303003	49.55	ppm	93
67)	Diethylphthalate	10.032	149	616706	47.79	ppm	99
71)	4,6-Dinitro-2-methylph...	10.193	198	241924	94.07	ppm	80
74)	1,2-Diphenylhydrazine	10.326	77	633167	47.82	ppm	98
78)	4-Bromophenyl-phenylether	10.717	248	140300	49.46	ppm	97
79)	Hexachlorobenzene	10.765	284	129727	45.84	ppm	97
82)	Atrazine	10.936	200	149174	43.24	ppm	96
83)	Pentachlorophenol	11.006	266	190511	89.05	ppm	99
84)	Phenanthrene	11.252	178	850710	47.65	ppm	99
85)	Anthracene	11.316	178	870452	46.78	ppm	100
89)	Di-n-butylphthalate	11.974	149	903668	49.31	ppm	99
91)	Fluoranthene	12.658	202	758618	45.80	ppm	100
94)	Pyrene	12.921	202	791178	49.98	ppm	99
97)	Butylbenzylphthalate	13.792	149	336762	50.95	ppm	98
99)	Benzo[a]anthracene	14.482	228	569609	47.54	ppm	99
100)	Chrysene	14.530	228	626698	49.11	ppm	99
101)	bis(2-Ethylhexyl)phtha...	14.643	149	456979	50.76	ppm	98
103)	Di-n-octylphthalate	15.680	149	563435	46.20	ppm	99
104)	Benzo[b]fluoranthene	16.167	252	436889	47.85	ppm	99
105)	Benzo[k]fluoranthene	16.221	252	523305	47.74	ppm	99
106)	Benzo[a]pyrene	16.713	252	423489	48.31	ppm	99
107)	Indeno[1,2,3-cd]pyrene	18.446	276	310730	51.10	ppm	99
108)	Dibenz[a,h]anthracene	18.499	278	352524	50.72	ppm	100
109)	Benzo[g,h,i]perylene	18.804	276	446029	51.81	ppm	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071372.D
Acq On : 23 Jun 2020 4:58 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jun 24 13:02:09 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071373.D
Acq On : 23 Jun 2020 5:25 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jun 23 19:01:20 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

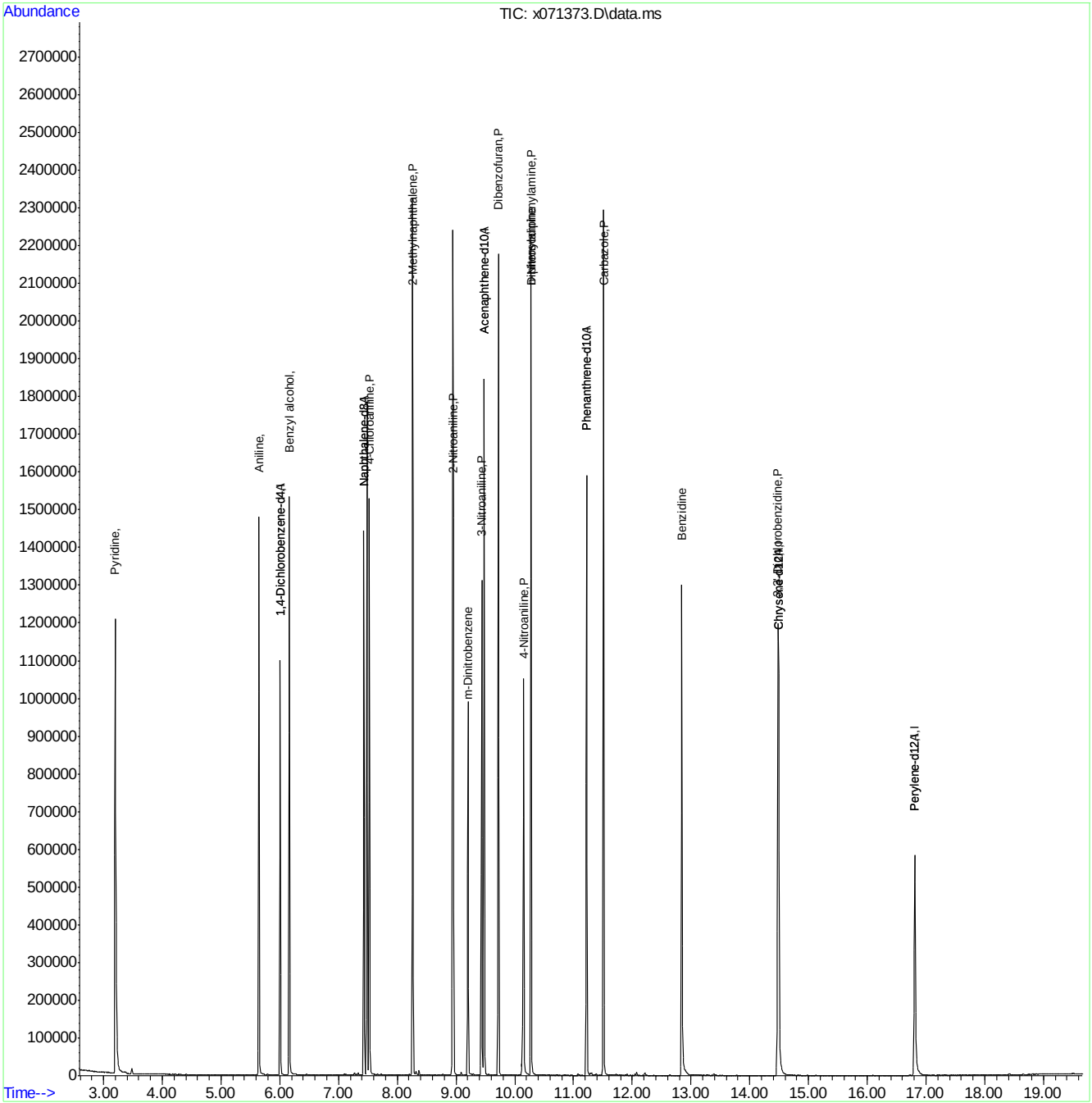
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.005	152	150227	40.00	ppm	0.00
22) Naphthalene-d8	7.433	136	615206	40.00	ppm	0.00
43) Acenaphthene-d10	9.476	164	365093	40.00	ppm	0.00
70) Phenanthrene-d10	11.219	188	599891	40.00	ppm	0.00
92) Chrysene-d12	14.493	240	424744	40.00	ppm	0.00
102) Perylene-d12	16.809	264	319412	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	6.005	152	150227	40.00	ppm	0.00
120) Naphthalene-d8A	7.433	136	615206	40.00	ppm	0.00
127) Acenaphthene-d10A	9.476	164	365093	40.00	ppm	0.00
136) Phenanthrene-d10A	11.219	188	599891	40.00	ppm	0.00
146) Chrysene-d12A	14.493	240	424744	40.00	ppm	0.00
153) Perylene-d12A	16.809	264	319412	40.00	ppm	-0.02
System Monitoring Compounds						
7) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#		
9) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#		
23) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#		
47) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#		
75) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#		
95) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#		
Target Compounds						Qvalue
4) Pyridine	3.196	79	390264	62.31	ppm	99
6) Aniline	5.646	93	431423	48.31	ppm	74
15) Benzyl alcohol	6.160	108	207097	52.06	ppm	94
35) 4-Chloroaniline	7.529	127	402810	57.18	ppm	98
40) 2-Methylnaphthalene	8.262	142	597160	54.13	ppm	99
50) 2-Nitroaniline	8.957	65	257908	62.60	ppm	94
54) m-Dinitrobenzene	9.208	168	111952	52.16	ppm	84
58) 3-Nitroaniline	9.438	138	189950	56.80	ppm	95
60) Dibenzofuran	9.722	168	826121	51.04	ppm	99
69) 4-Nitroaniline	10.155	138	182518	49.05	ppm	97
72) n-Nitrosodiphenylamine	10.278	169	512961	55.03	ppm	99
73) Diphenylamine	10.278	169	512961	46.89	ppm	99
87) Carbazole	11.514	167	881162	52.85	ppm	99
93) Benzidine	12.840	184	485848	57.66	ppm	98
98) 3,3'-Dichlorobenzidine	14.477	252	205960	46.38	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071373.D
Acq On : 23 Jun 2020 5:25 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jun 23 19:01:20 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071374.D
Acq On : 23 Jun 2020 5:51 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jun 24 09:47:41 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 09:47:01 2020
Response via : Initial Calibration

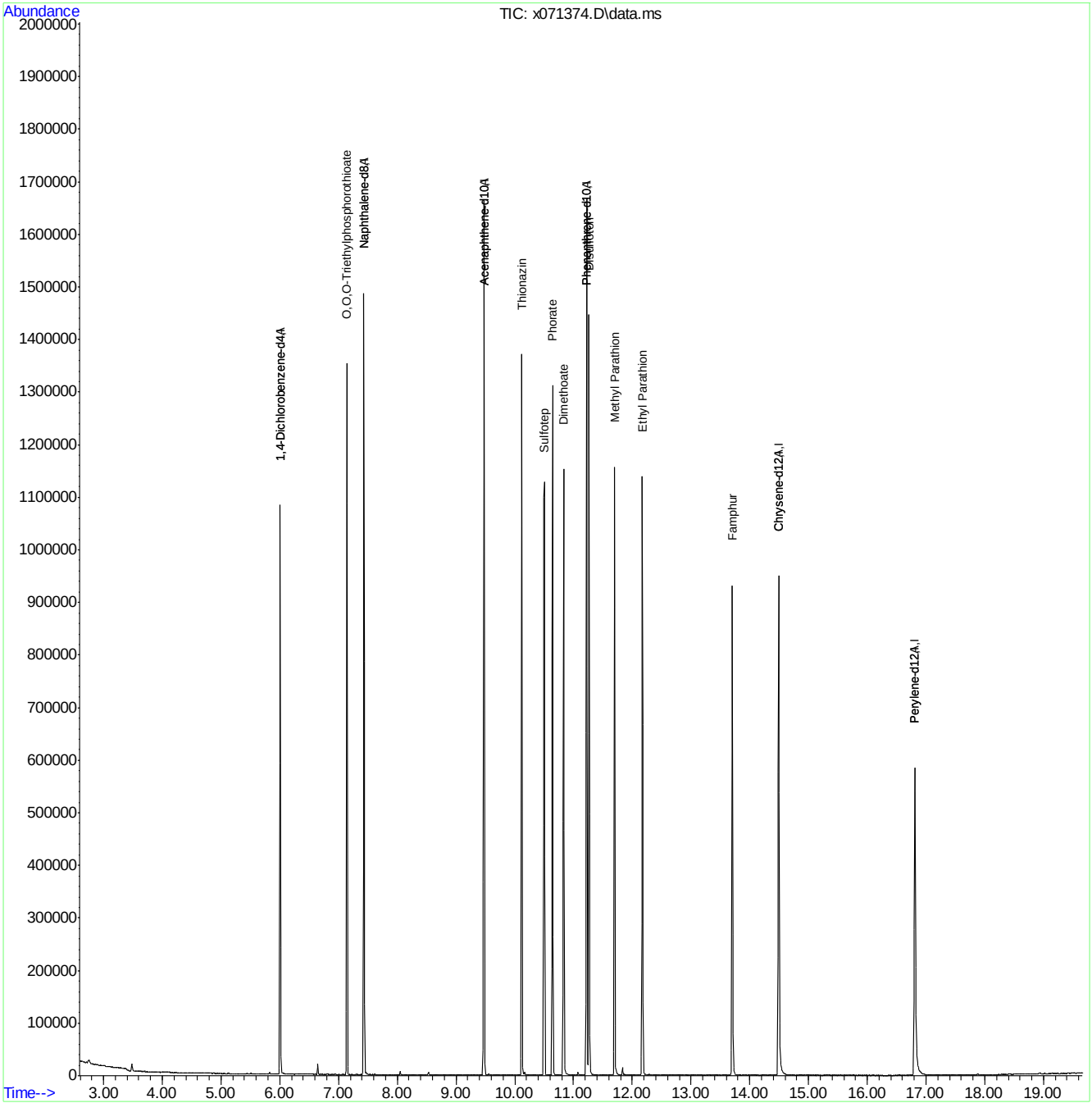
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.005	152	148473	40.00	ppm	0.00
22) Naphthalene-d8	7.433	136	622145	40.00	ppm	0.00
43) Acenaphthene-d10	9.476	164	318777	40.00	ppm	0.00
70) Phenanthrene-d10	11.225	188	611399	40.00	ppm	0.00
92) Chrysene-d12	14.493	240	410353	40.00	ppm	0.00
102) Perylene-d12	16.809	264	324234	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	6.005	152	148473	40.00	ppm	0.00
120) Naphthalene-d8A	7.433	136	622145	40.00	ppm	0.00
127) Acenaphthene-d10A	9.476	164	318777	40.00	ppm	0.00
136) Phenanthrene-d10A	11.225	188	611399	40.00	ppm	0.00
146) Chrysene-d12A	14.493	240	410353	40.00	ppm	0.00
153) Perylene-d12A	16.809	264	324958	40.00	ppm	-0.02
System Monitoring Compounds						
7) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#		
9) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#		
23) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#		
47) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#		
75) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#		
95) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#		
Target Compounds						Qvalue
28) O,O,O-Triethylphosphor...	7.144	198	105879	44.45	ppm	83
68) Thionazin	10.118	97	120853	50.65	ppm	97
76) Sulfotep	10.498	97	86642	43.01	ppm	81
77) Phorate	10.642	75	319548	45.28	ppm	100
80) Dimethoate	10.835	87	214899	43.90	ppm	97
86) Disulfoton	11.262	88	274405	37.15	ppm	98
88) Methyl Parathion	11.701	109	189499	45.13	ppm	99
90) Ethyl Parathion	12.172	97	110890	45.60	ppm	99
96) Famphur	13.701	218	254343	81.91	ppm	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071374.D
Acq On : 23 Jun 2020 5:51 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jun 24 09:47:41 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 09:47:01 2020
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 06/24/20 14:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071375.D
Acq On : 23 Jun 2020 6:17 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jun 23 19:09:37 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.005	152	172015	40.00	ppm	0.00
22) Naphthalene-d8	7.433	136	793987	40.00	ppm	0.00
43) Acenaphthene-d10	9.476	164	393550	40.00	ppm	0.00
70) Phenanthrene-d10	11.225	188	731895	40.00	ppm	0.00
92) Chrysene-d12	14.493	240	462942	40.00	ppm	0.00
102) Perylene-d12	16.825	264	392896	40.00	ppm	0.01
110) 1,4-Dichlorobenzene-d4A	6.005	152	172015	40.00	ppm	0.00
120) Naphthalene-d8A	7.433	136	793987	40.00	ppm	0.00
127) Acenaphthene-d10A	9.476	164	393550	40.00	ppm	0.00
136) Phenanthrene-d10A	11.225	188	731895	40.00	ppm	0.00
146) Chrysene-d12A	14.493	240	462942	40.00	ppm	0.00
153) Perylene-d12A	16.825	264	392896	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#		
9) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#		
23) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#		
47) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#		
75) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#		
95) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#		
Target Compounds						Qvalue
111) 2-Picoline	3.983	93	342381	41.74	ppm	98
112) N-Nitrosomethylethylamine	4.111	42	225307	39.50	ppm	98
113) Methyl methanesulfonate	4.438	80	168971	42.24	ppm	99
114) N-Nitrosodiethylamine	4.855	102	139040	41.73	ppm	97
115) Ethyl methanesulfonate	5.181	79	220292	39.97	ppm	99
116) Pentachloroethane	5.700	167	91780	39.11	ppm	98
117) N-Nitrosopyrrolidine	6.427	100	132223	43.89	ppm	89
118) N-Nitrosomorpholine	6.481	56	229903	41.82	ppm	97
119) O-Toluidine	6.497	106	485556	43.12	ppm	98
121) N-Nitrosopiperidine	6.812	42	267559	36.63	ppm	99
122) A,A-Dimethylphenethyla...	7.347	58	1119809m	38.45	ppm	
123) Hexachloropropene	7.561	213	157157	47.16	ppm	98
124) N-Nitrosodi-n-butylamine	7.936	84	192456	32.17	ppm	98
125) p-Phenylenediamine	7.930	108	311107	41.30	ppm	99
126) Isosafrole	8.176	162	205499	37.99	ppm	99
128) Safrole	8.781	162	242204	46.80	ppm	99
129) 1-Chloronaphthalene	8.850	162	563217	45.69	ppm	99
131) 1,4-Naphthoquinone	9.037	158	155250m	29.96	ppm	
132) Pentachlorobenzene	9.668	250	183989	42.42	ppm	99
133) 1-Naphthylamine	9.813	143	566555	41.45	ppm	98
134) 2-Naphthylamine	9.909	143	621752	42.56	ppm	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071375.D
Acq On : 23 Jun 2020 6:17 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jun 23 19:09:37 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

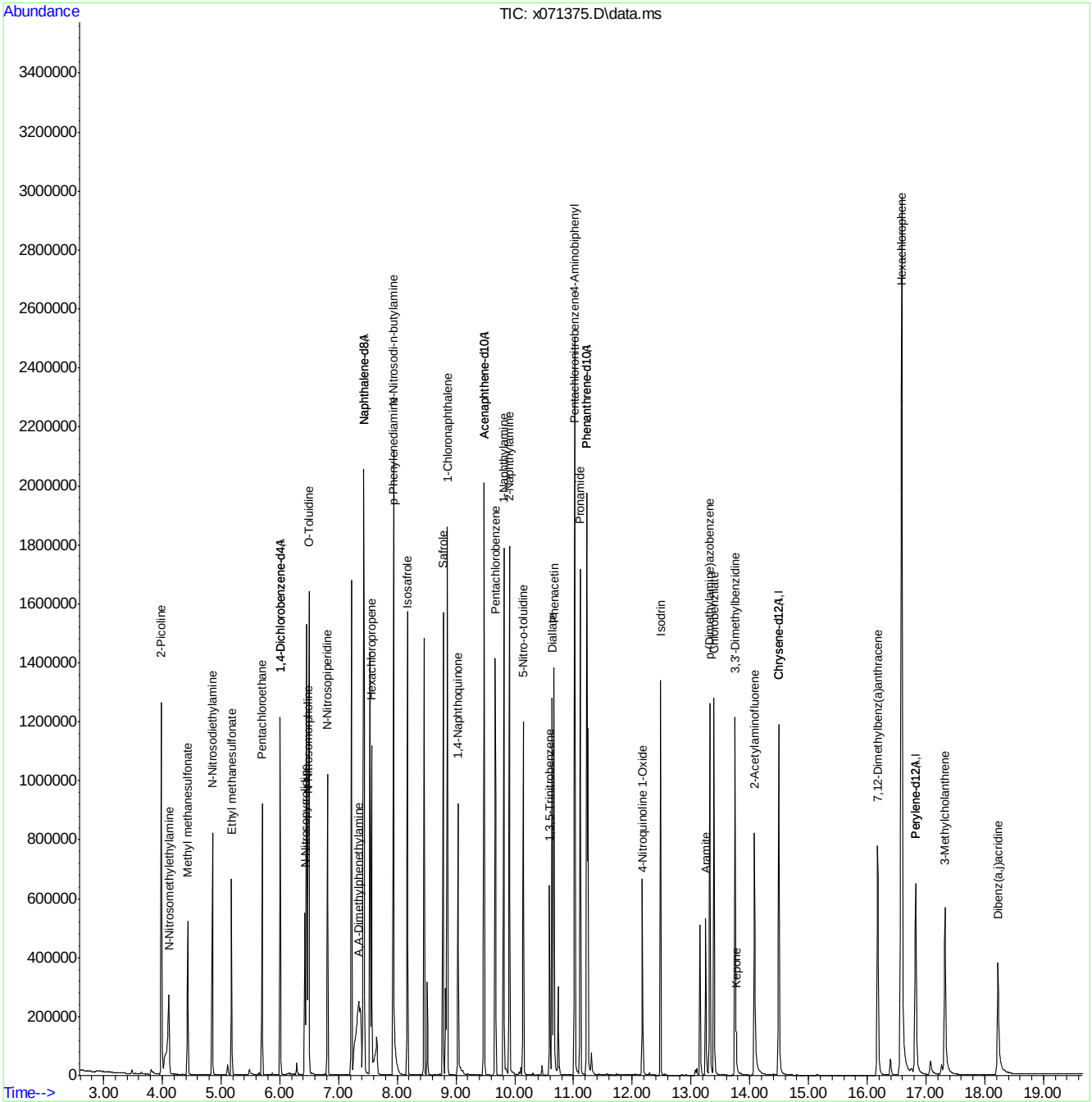
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
135) 5-Nitro-o-toluidine	10.145	152	175241	40.97	ppm	100
137) 1,3,5-Trinitrobenzene	10.594	75	152873	44.22	ppm	97
138) Diallate	10.637	43	439408m	38.31	ppm	
139) Phenacetin	10.669	108	309981	44.00	ppm	100
140) 4-Aminobiphenyl	11.022	169	600349	40.45	ppm	99
141) Pronamide	11.118	173	257415	44.78	ppm	99
142) Pentachloronitrobenzene	11.016	237	59311	41.79	ppm	97
143) 4-Nitroquinoline 1-Oxide	12.177	190	48279	36.49	ppm	90
145) Isodrin	12.482	193	85930	41.38	ppm	95
147) Aramite	13.247	185	78750m	41.76	ppm	
148) p-(Dimethylamine)azobe...	13.322	120	235287	40.07	ppm	96
149) Chlorobenzilate	13.391	139	267455	41.31	ppm	92
150) Kepone	13.776	272	4803	23.05	ppm	90
151) 3,3'-Dimethylbenzidine	13.749	212	450468	60.24	ppm	97
152) 2-Acetylaminofluorene	14.081	181	275835	41.97	ppm	98
154) 7,12-Dimethylbenz(a)an...	16.178	256	253624	46.53	ppm	99
155) Hexachlorophene	16.590	196	456808	469.07	ppm	97
156) 3-Methylcholanthrene	17.328	268	211601	39.83	ppm	98
157) Dibenz(a,j)acridine	18.226	279	276905	40.35	ppm	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071375.D
Acq On : 23 Jun 2020 6:17 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jun 23 19:09:37 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration



8270DApp9SX-062320.m Tue Jun 23 19:10:51 2020 Page: 3

SGS FA77576

Manual Integration Approval Summary

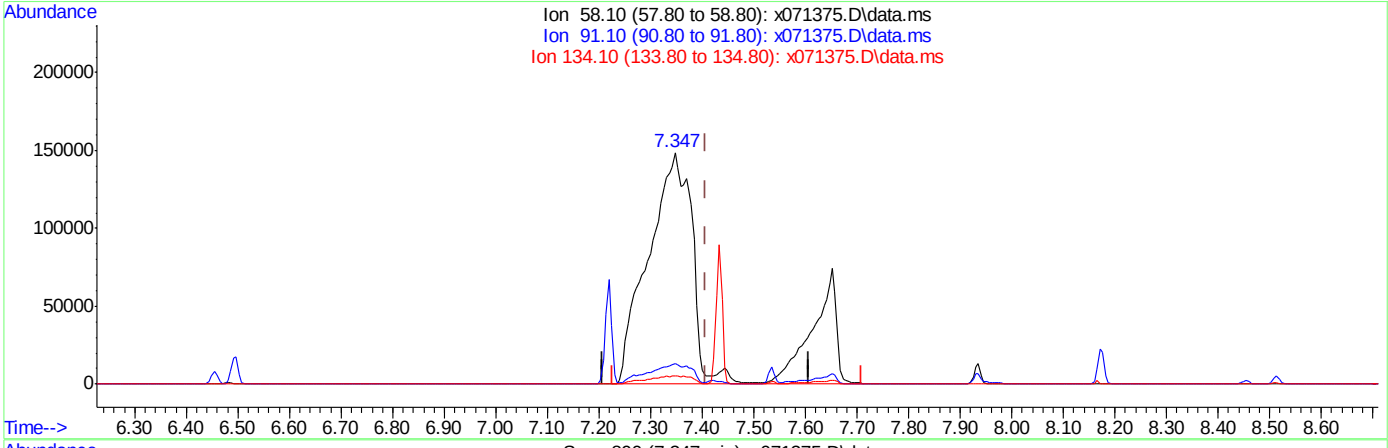
Sample Number: SX2918-ICV2918 **Method:** EPA 625.1
Lab FileID: X071375.D **Analyst approved:** 06/24/20 09:50 Martha Valls
Injection Time: 06/23/20 18:17 **Supervisor approved:** 06/24/20 14:07 Naresh Jiawan

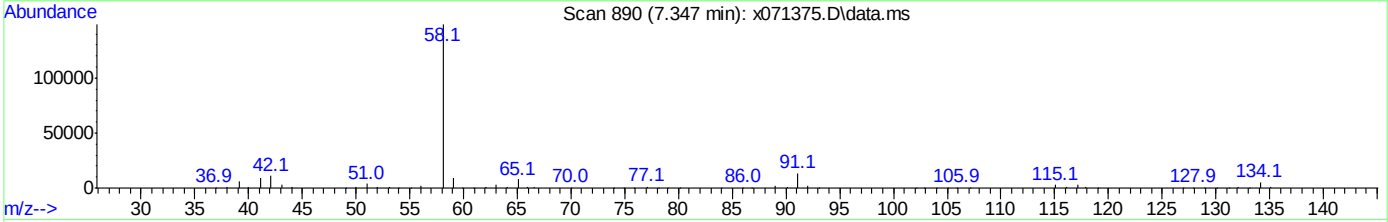
Parameter	CAS	Sig#	R.T. (min.)	Reason
A,A-Dimethylphenethylamine	122-09-8		7.35	Split peak
1,4-Naphthoquinone	130-15-4		9.04	Split peak
Diallate	2303-16-4		10.64	Split peak
Aramite	140-57-8		13.25	Split peak

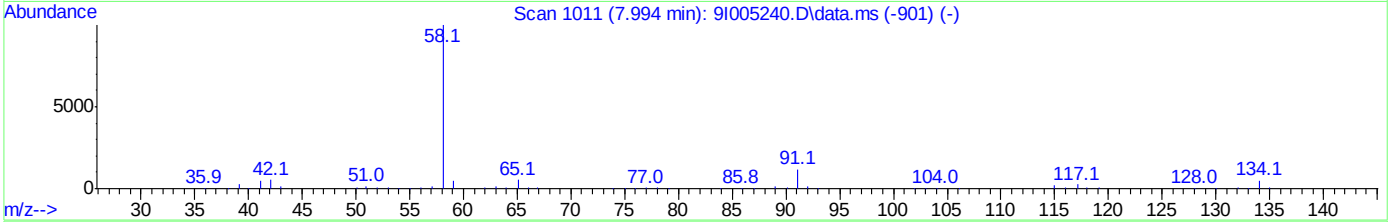
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071375.D
Acq On : 23 Jun 2020 6:17 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jun 23 19:02:41 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration







TIC: x071375.D\data.ms

(122) A,A-Dimethylphenethylamine

7.347min (-0.061) 38.45ppm m

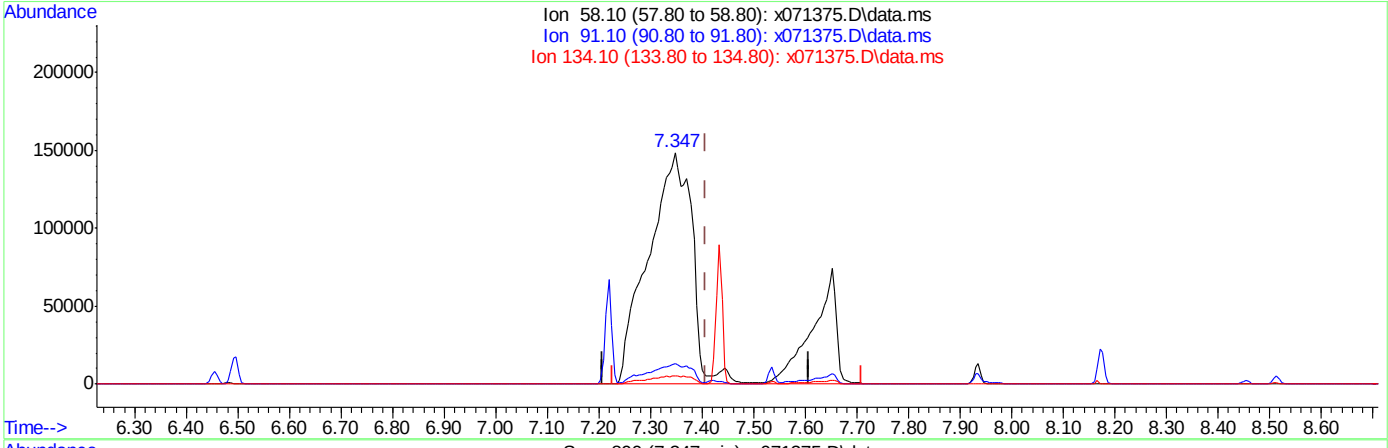
response 1119854

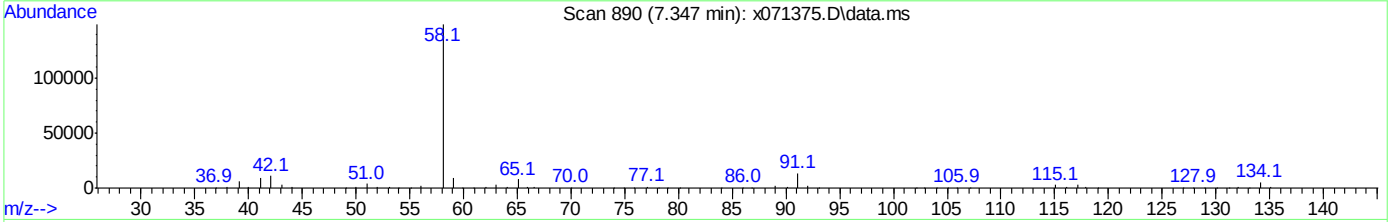
Ion	Exp%	Act%
58.10	100	100
91.10	8.30	9.03
134.10	3.70	3.76
0.00	0.00	0.00

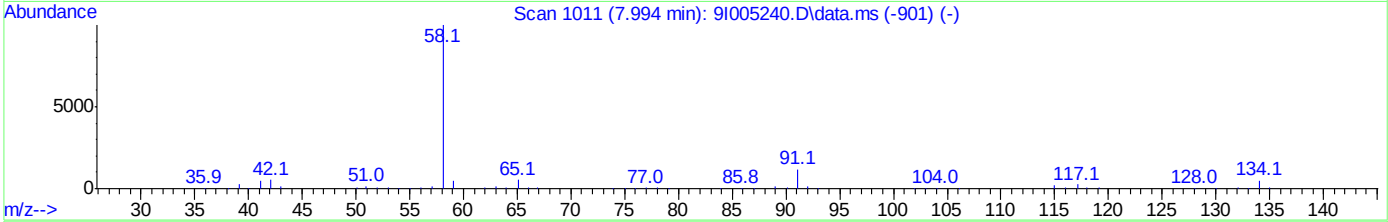
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071375.D
Acq On : 23 Jun 2020 6:17 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jun 23 19:02:41 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration







TIC: x071375.D\data.ms

(122) A,A-Dimethylphenethylamine

7.347min (-0.061) 38.45ppm m

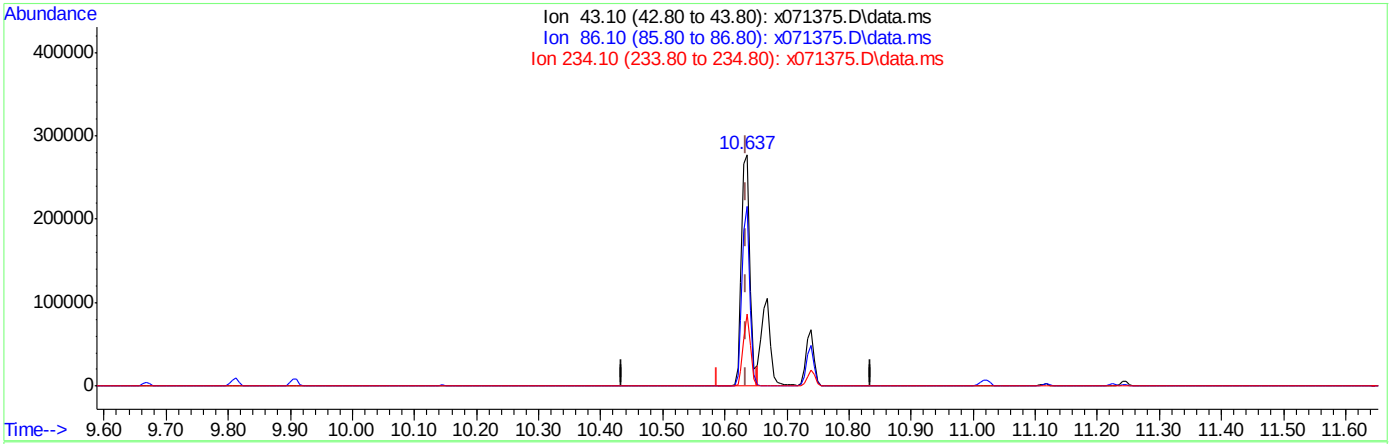
response 1119809

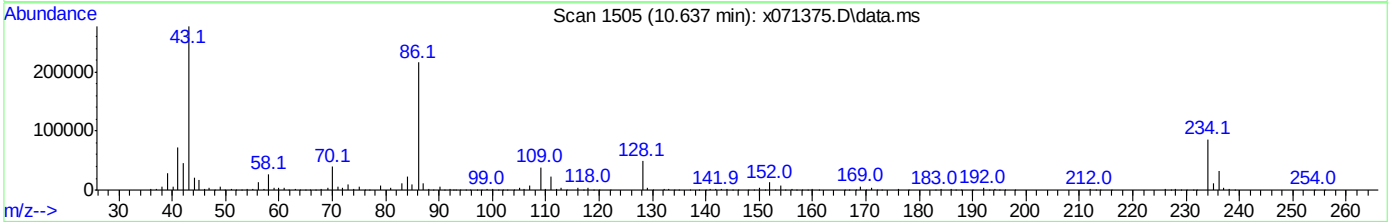
Ion	Exp%	Act%
58.10	100	100
91.10	8.30	9.03
134.10	3.70	3.76
0.00	0.00	0.00

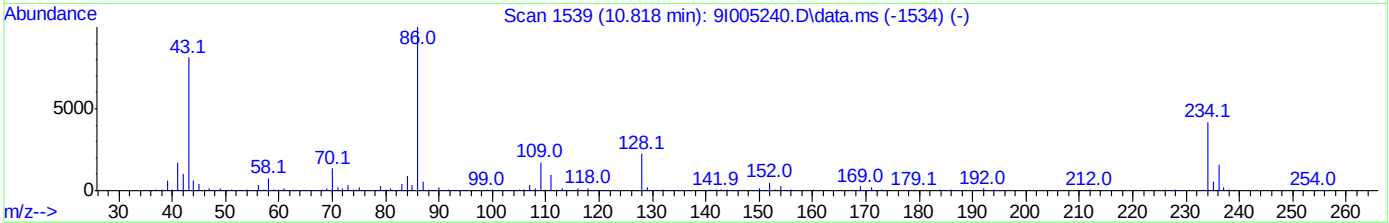
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071375.D
Acq On : 23 Jun 2020 6:17 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jun 23 19:02:41 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration







TIC: x071375.D\data.ms

(138) Diallate

10.637min (+0.002) 23.83ppm

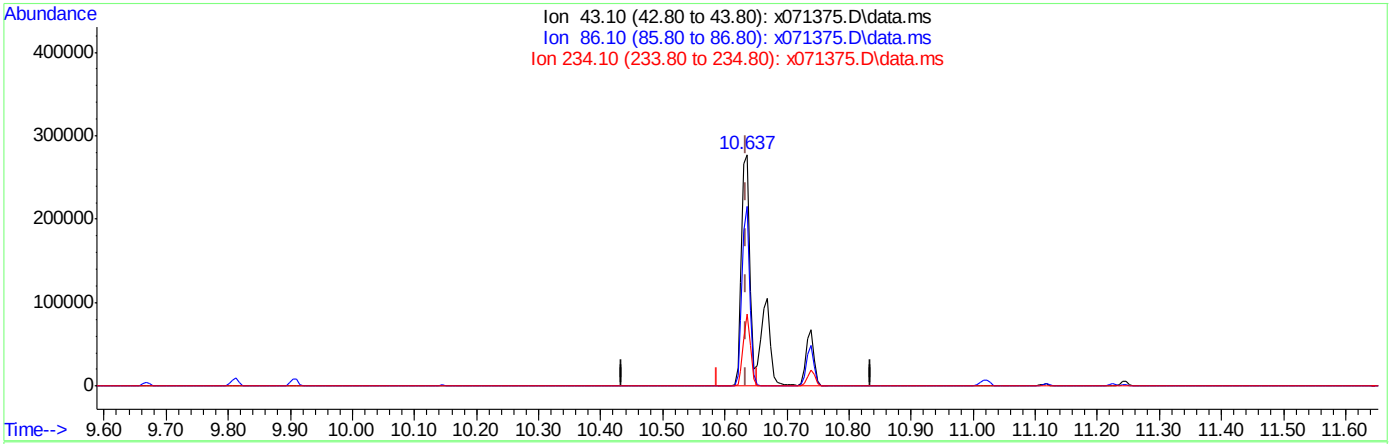
response 273290

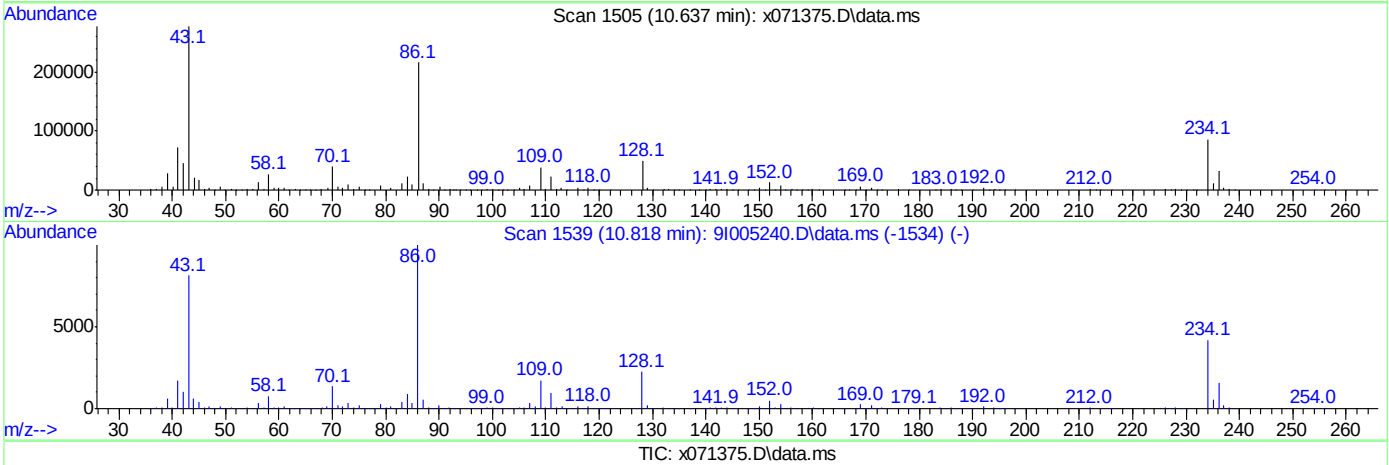
Ion	Exp%	Act%
43.10	100	100
86.10	76.00	80.95
234.10	30.60	32.24
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071375.D
Acq On : 23 Jun 2020 6:17 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jun 23 19:02:41 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration





TIC: x071375.D\data.ms

(138) Diallate

10.637min (+0.002) 38.31ppm m

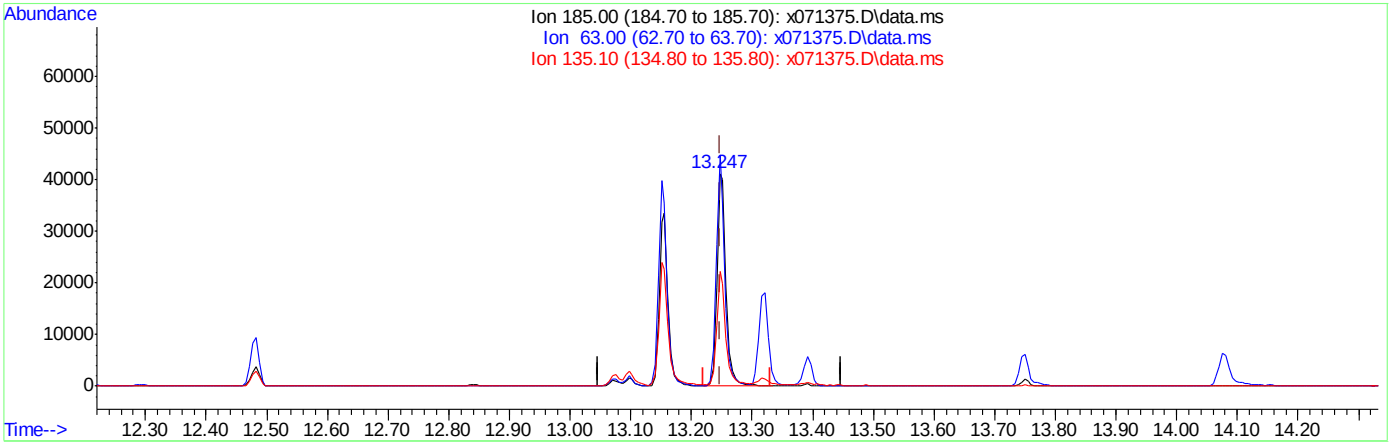
response 439408

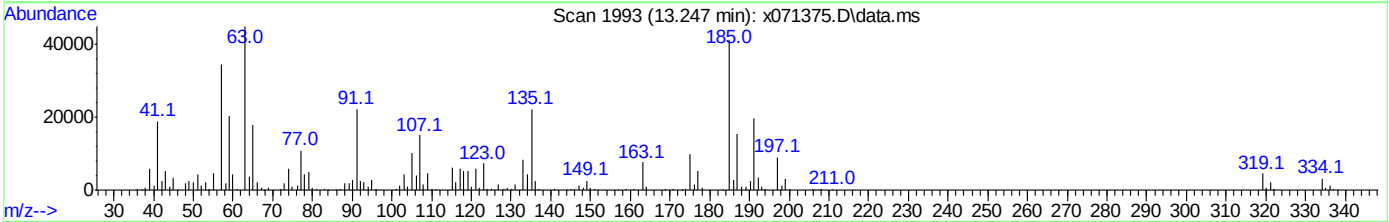
Ion	Exp%	Act%
43.10	100	100
86.10	76.00	77.78
234.10	30.60	31.05
0.00	0.00	0.00

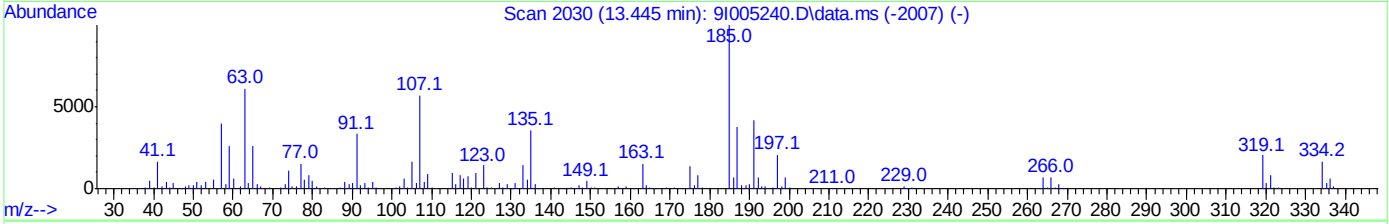
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071375.D
Acq On : 23 Jun 2020 6:17 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jun 23 19:07:08 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration







TIC: x071375.D\data.ms

(147) Aramite

13.247min (-0.001) 24.60ppm

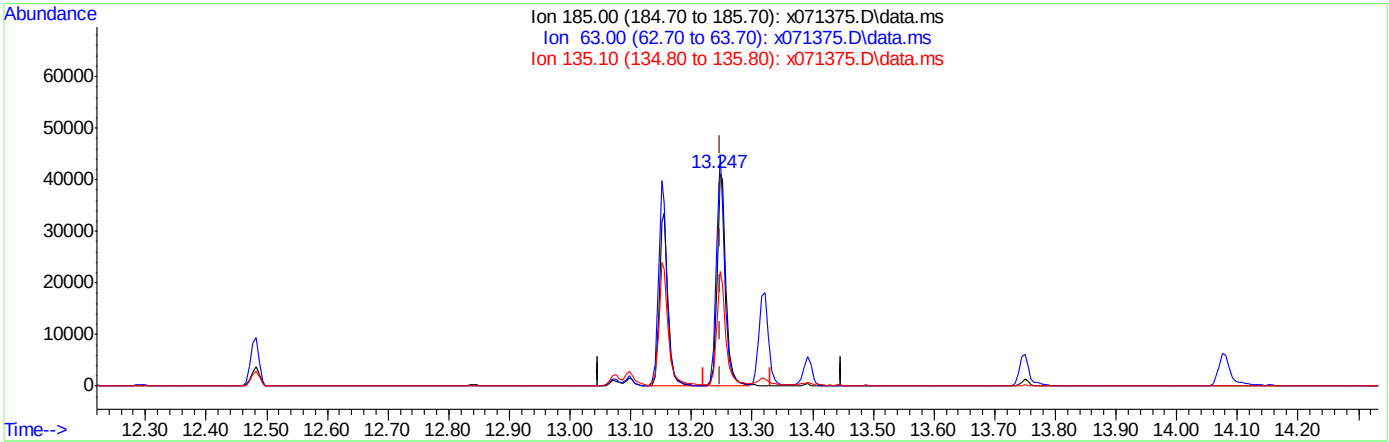
response 44104

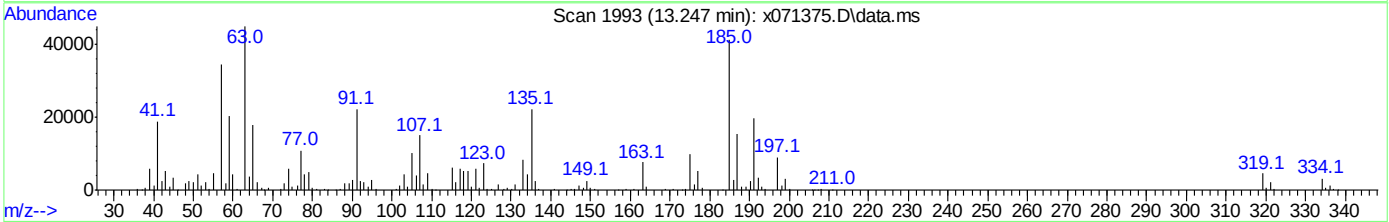
Ion	Exp%	Act%
185.00	100	100
63.00	99.40	105.13
135.10	50.50	53.08
0.00	0.00	0.00

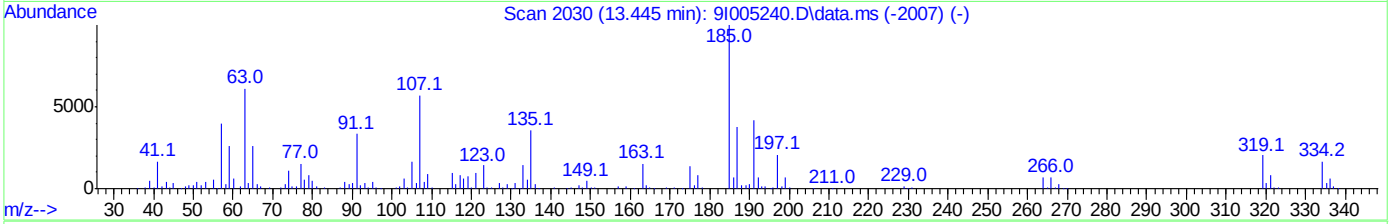
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071375.D
Acq On : 23 Jun 2020 6:17 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jun 23 19:07:08 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration







TIC: x071375.D\data.ms

(147) Aramite

13.247min (-0.001) 41.76ppm m

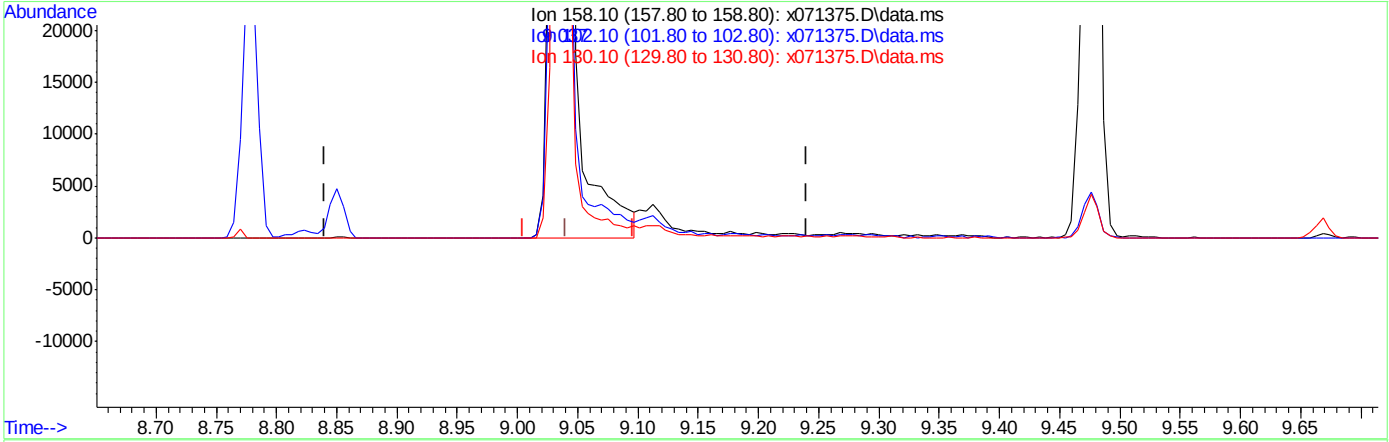
response 78750

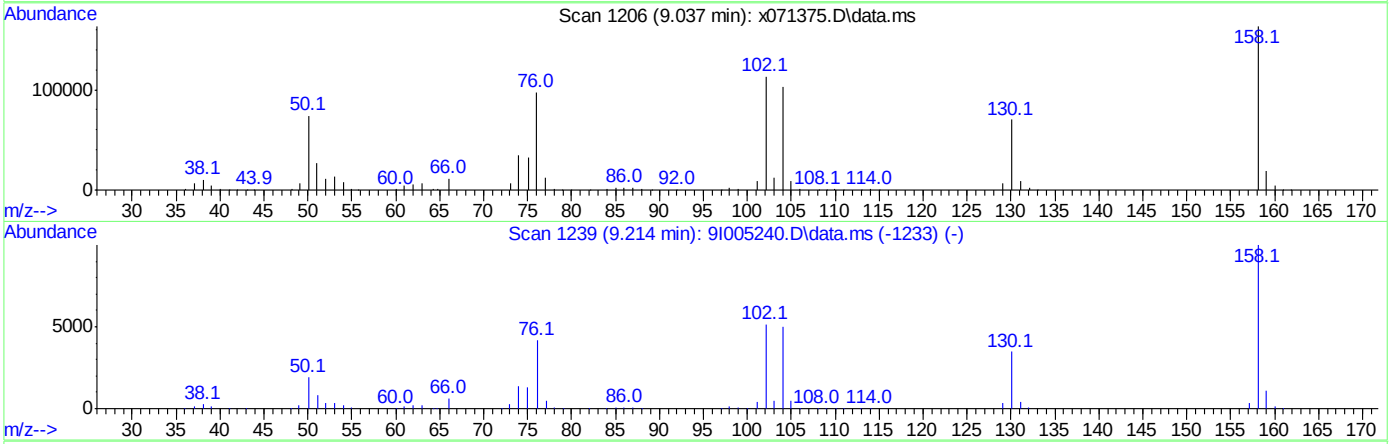
Ion	Exp%	Act%
185.00	100	100
63.00	99.40	108.99
135.10	50.50	54.14
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071375.D
Acq On : 23 Jun 2020 6:17 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jun 23 19:07:08 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration





TIC: x071375.D\data.ms

(131) 1,4-Naphthoquinone

9.037min (-0.003) 28.96ppm

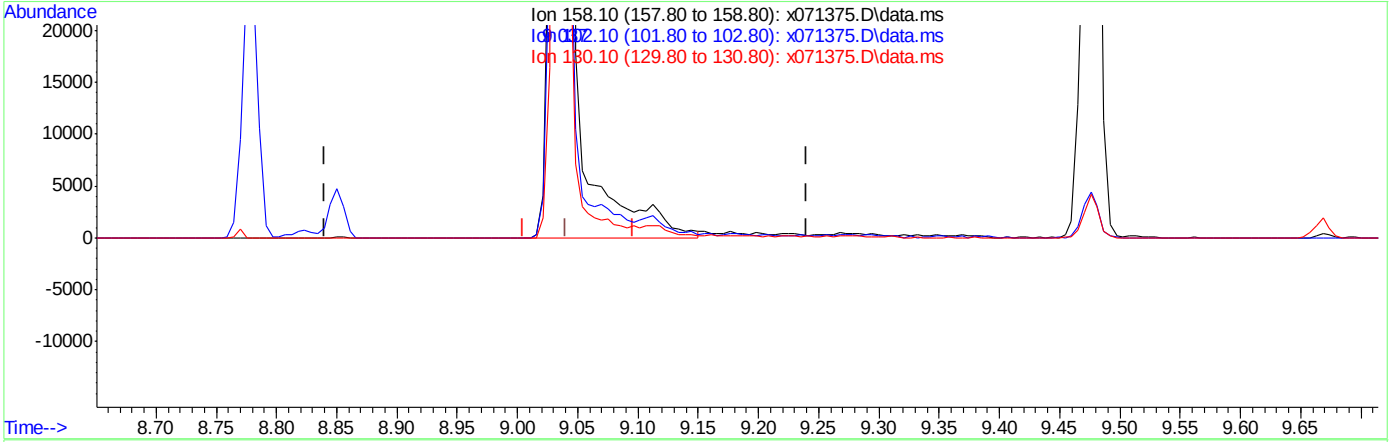
response 149991

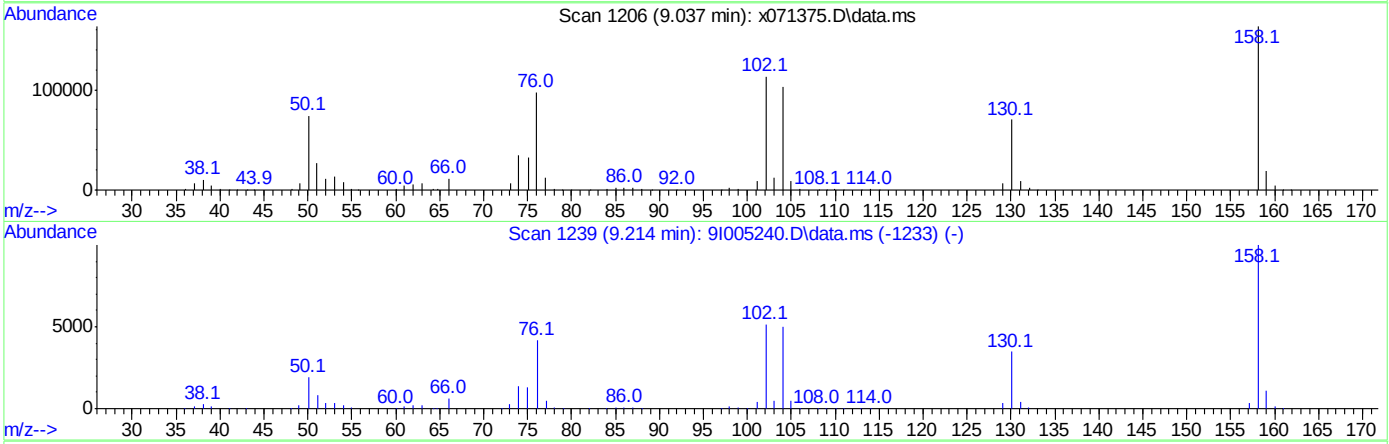
Ion	Exp%	Act%
158.10	100	100
102.10	69.70	69.26
130.10	42.30	43.02
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071375.D
Acq On : 23 Jun 2020 6:17 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jun 23 19:07:08 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration





TIC: x071375.D\data.ms

(131) 1,4-Naphthoquinone

9.037min (-0.003) 29.96ppm m

response 155250

Ion	Exp%	Act%
158.10	100	100
102.10	69.70	69.18
130.10	42.30	43.05
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071376.D
Acq On : 23 Jun 2020 6:43 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jun 23 19:07:50 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

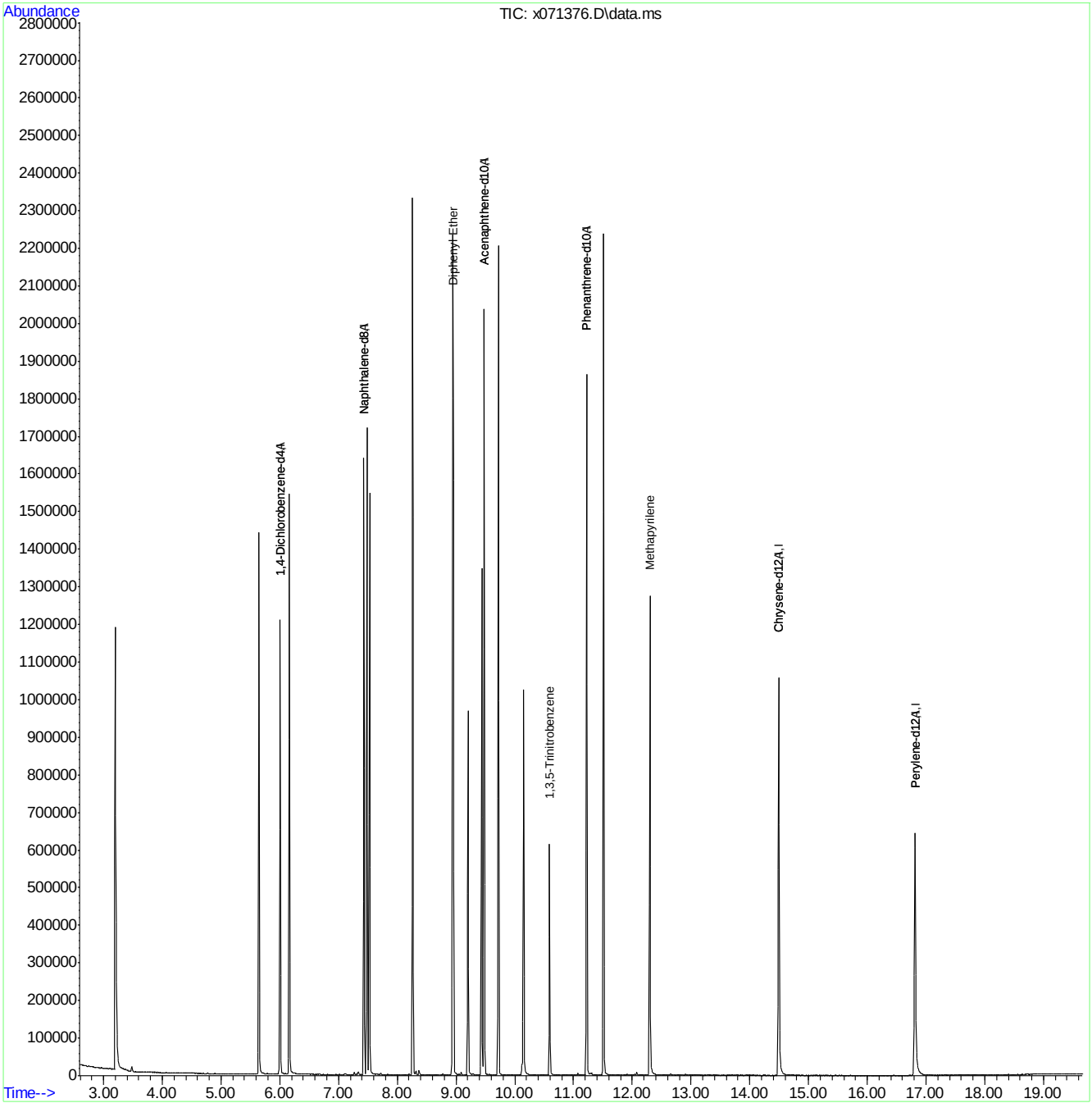
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.005	152	162946	40.00	ppm	0.00
22) Naphthalene-d8	7.433	136	686954	40.00	ppm	0.00
43) Acenaphthene-d10	9.476	164	413885	40.00	ppm	0.00
70) Phenanthrene-d10	11.225	188	667116	40.00	ppm	0.00
92) Chrysene-d12	14.493	240	441735	40.00	ppm	0.00
102) Perylene-d12	16.814	264	357783	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	6.005	152	162946	40.00	ppm	0.00
120) Naphthalene-d8A	7.433	136	686954	40.00	ppm	0.00
127) Acenaphthene-d10A	9.476	164	413885	40.00	ppm	0.00
136) Phenanthrene-d10A	11.225	188	667116	40.00	ppm	0.00
146) Chrysene-d12A	14.493	240	441735	40.00	ppm	0.00
153) Perylene-d12A	16.814	264	358466	40.00	ppm	-0.01
System Monitoring Compounds						
7) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#		
9) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#		
23) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#		
47) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#		
75) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#		
95) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#		
Target Compounds						Qvalue
130) Diphenyl Ether	8.946	170	374652	41.38	ppm	98
137) 1,3,5-Trinitrobenzene	10.594	75	141558	44.82	ppm	97
144) Methapyrilene	12.295	58	438223	128.03	ppm	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071376.D
Acq On : 23 Jun 2020 6:43 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jun 23 19:07:50 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan
06/25/20 15:55

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\June 2020\06-25-2020\sx2919\
Data File : x071416.d
Acq On : 24 Jun 2020 3:22 pm
Operator : marthav
Sample : icv2918-50 app9
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 25 02:53:35 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Thu Jun 25 02:50:18 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	5.994	152	159488	40.00	ppm		0.00
22) Naphthalene-d8	7.422	136	675368	40.00	ppm		0.00
43) Acenaphthene-d10	9.465	164	316836	40.00	ppm		0.00
70) Phenanthrene-d10	11.214	188	574623	40.00	ppm		0.00
92) Chrysene-d12	14.477	240	403905	40.00	ppm		0.00
102) Perylene-d12	16.803	264	385155	40.00	ppm		0.00
110) 1,4-Dichlorobenzene-d4A	5.994	152	159488	40.00	ppm		0.00
120) Naphthalene-d8A	7.422	136	675368	40.00	ppm		0.00
127) Acenaphthene-d10A	9.465	164	316836	40.00	ppm		0.00
136) Phenanthrene-d10A	11.214	188	574623	40.00	ppm		0.00
146) Chrysene-d12A	14.477	240	403905	40.00	ppm		0.00
153) Perylene-d12A	16.803	264	385155	40.00	ppm		0.00
System Monitoring Compounds							
7) 2-Fluorophenol	0.000	112	0	0.00	ppm		
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#			
9) Phenol-d5	0.000	99	0d	0.00	ppm		
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#			
23) Nitrobenzene-d5	0.000	82	0	0.00	ppm		
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#			
47) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm		
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#			
75) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm		
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#			
95) Terphenyl-d14	0.000	244	0	0.00	ppm		
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#			
Target Compounds							Qvalue
111) 2-Picoline	3.967	93	395982	52.06	ppm		87
112) N-Nitrosomethylethylamine	4.095	42	260669	49.28	ppm	#	56
113) Methyl methanesulfonate	4.421	80	176859	47.69	ppm		90
114) N-Nitrosodiethylamine	4.839	102	158768	51.39	ppm	#	30
115) Ethyl methanesulfonate	5.170	79	224922	44.02	ppm		96
116) Pentachloroethane	5.684	167	101460	46.63	ppm		91
117) N-Nitrosopyrrolidine	6.416	100	143191	51.26	ppm	#	20
118) N-Nitrosomorpholine	6.465	56	245205	48.10	ppm	#	66
119) O-Toluidine	6.481	106	538729	51.60	ppm		99
121) N-Nitrosopiperidine	6.801	42	281884	45.37	ppm	#	60
122) A,A-Dimethylphenethyla...	7.315	58	951947	38.43	ppm		87
123) Hexachloropropene	7.550	213	167883	59.22	ppm		100
124) N-Nitrosodi-n-butylamine	7.925	84	203432	39.53	ppm	#	54
125) p-Phenylenediamine	7.925	108	336165	52.46	ppm		93
126) Isosafrole	8.160	162	200621	43.60	ppm		78
128) Safrole	8.770	162	232090	55.71	ppm		92
129) 1-Chloronaphthalene	8.839	162	544498	54.87	ppm		97
131) 1,4-Naphthoquinone	9.027	158	126951	30.43	ppm		82
132) Pentachlorobenzene	9.658	250	174738	50.04	ppm		99
133) 1-Naphthylamine	9.802	143	587293	53.36	ppm		94
134) 2-Naphthylamine	9.898	143	619160	52.64	ppm		98
135) 5-Nitro-o-toluidine	10.134	152	180970	51.69	ppm		80
137) 1,3,5-Trinitrobenzene	10.588	75	146886	52.54	ppm		90
138) Diallate	10.620	43	416437m	46.24	ppm		
139) Phenacetin	10.658	108	305531	55.23	ppm		91
140) 4-Aminobiphenyl	11.011	169	619883	53.19	ppm		99
141) Pronamide	11.107	173	248936	55.16	ppm		98
142) Pentachloronitrobenzene	11.006	237	55950	50.21	ppm		91
143) 4-Nitroquinoline 1-Oxide	12.166	190	51977	50.37	ppm		88

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\June 2020\06-25-2020\sx2919\
Data File : x071416.d
Acq On : 24 Jun 2020 3:22 pm
Operator : marthav
Sample : icv2918-50 app9
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 25 02:53:35 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Thu Jun 25 02:50:18 2020
Response via : Initial Calibration

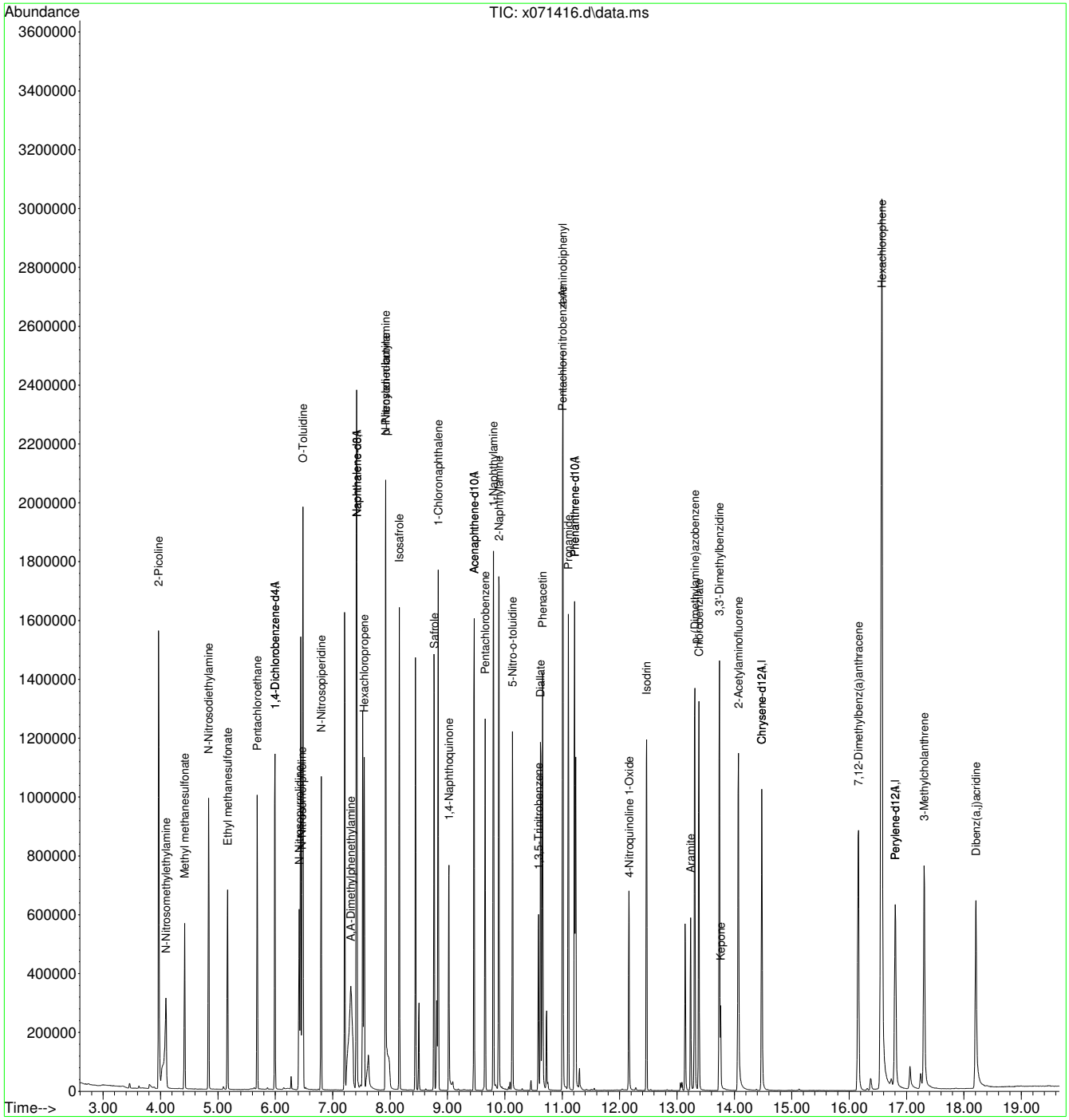
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
145) Isodrin	12.471	193	82017	50.31	ppm	87
147) Aramite	13.236	185	83620m	49.69	ppm	
148) p-(Dimethylamine)azobe...	13.311	120	253632	49.47	ppm	86
149) Chlorobenzilate	13.380	139	264506	46.52	ppm	74
150) Kepone	13.760	272	14639	80.51	ppm	90
151) 3,3'-Dimethylbenzidine	13.739	212	540574	82.86	ppm	97
152) 2-Acetylaminofluorene	14.070	181	352354	58.75	ppm	91
154) 7,12-Dimethylbenz(a)an...	16.162	256	287086	53.73	ppm	96
155) Hexachlorophene	16.568	196	511787	520.12	ppm	99
156) 3-Methylcholanthrene	17.306	268	265370	50.15	ppm	93
157) Dibenz(a,j)acridine	18.210	279	404847	56.31	ppm	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\June 2020\06-25-2020\sx2919\
Data File : x071416.d
Acq On : 24 Jun 2020 3:22 pm
Operator : marthav
Sample : icv2918-50 app9
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 25 02:53:35 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Thu Jun 25 02:50:18 2020
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: SX2918-ICV2918
Lab FileID: X071416.D
Injection Time: 06/24/20 15:22

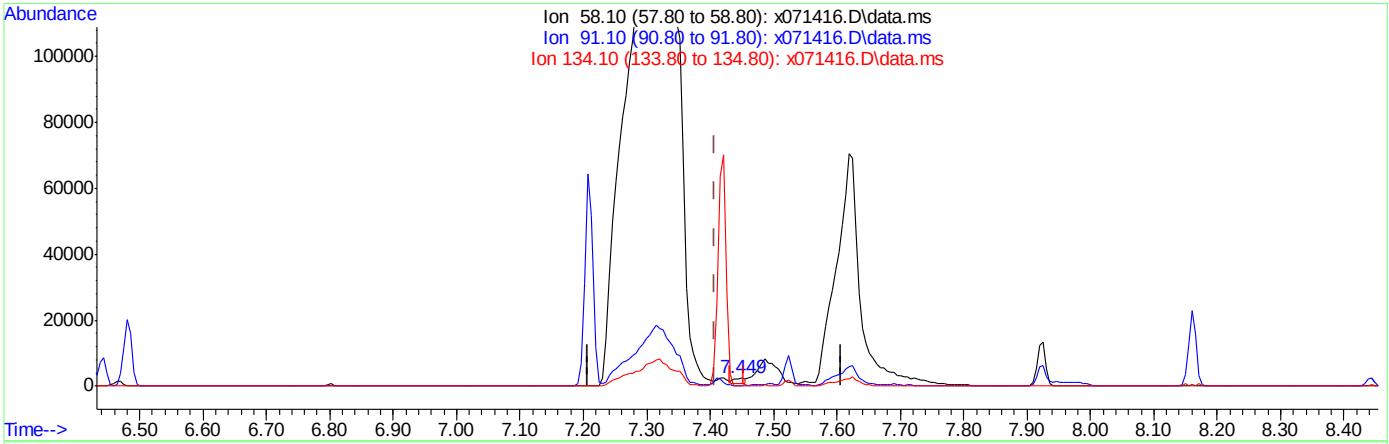
Method: EPA 625.1
Analyst approved: 06/25/20 15:55 Naresh Jiawan
Supervisor approved: 06/25/20 15:55 Naresh Jiawan

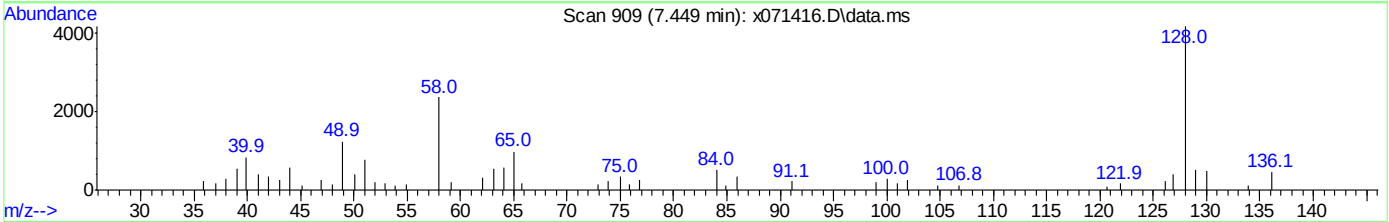
Parameter	CAS	Sig#	R.T. (min.)	Reason
Diallate	2303-16-4		10.62	Split peak
Aramite	140-57-8		13.24	Split peak

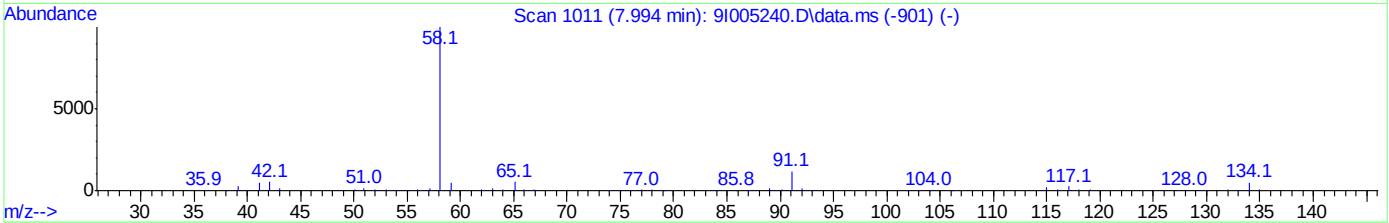
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0624_sx2919\
Data File : x071416.D
Acq On : 24 Jun 2020 3:22 pm
Operator : marthav
Sample : icv2918-50 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 24 15:43:42 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration







TIC: x071416.D\data.ms

(122) A,A-Dimethylphenethylamine

7.449min (+0.041) 0.08ppm

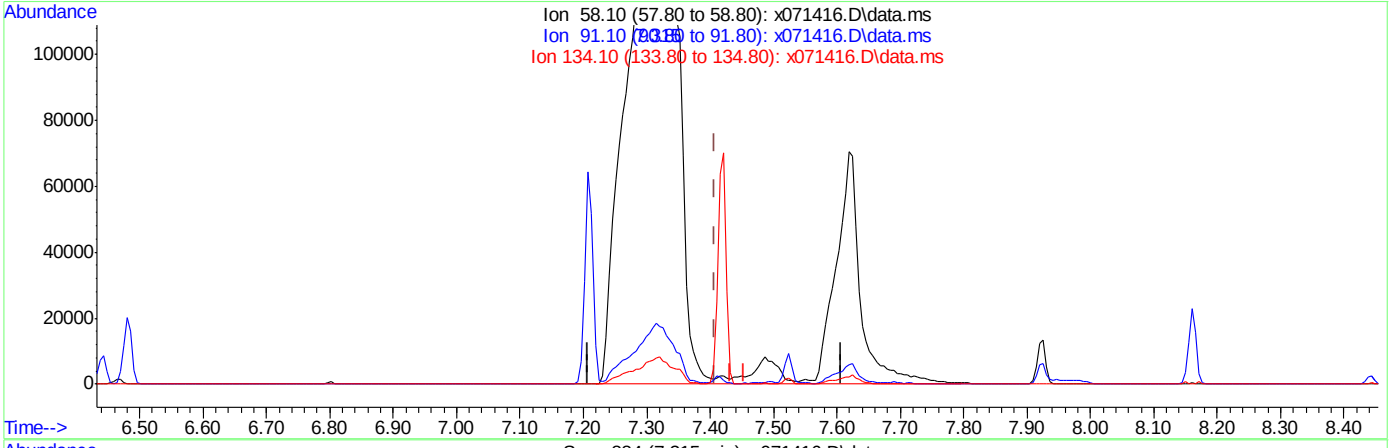
response 1956

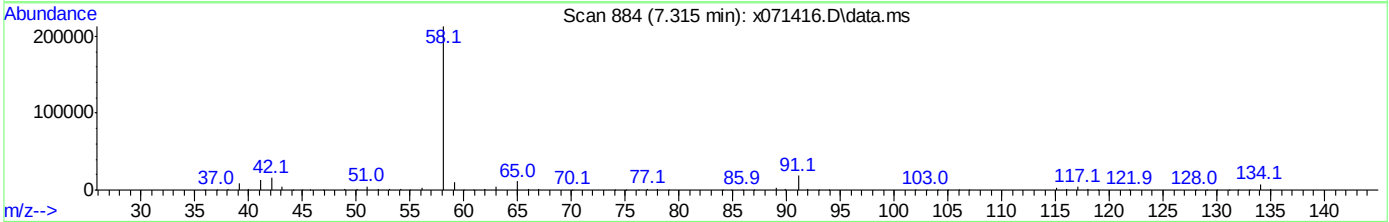
Ion	Exp%	Act%
58.10	100	100
91.10	8.30	0.00
134.10	3.70	0.00
0.00	0.00	0.00

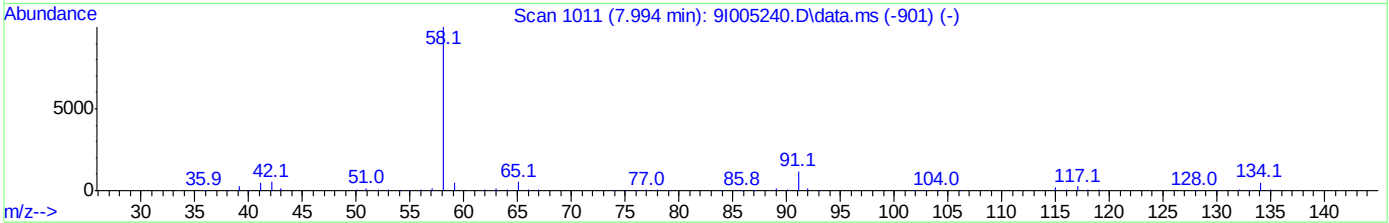
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0624_sx2919\
Data File : x071416.D
Acq On : 24 Jun 2020 3:22 pm
Operator : marthav
Sample : icv2918-50 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 24 15:43:42 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration







TIC: x071416.D\data.ms

(122) A,A-Dimethylphenethylamine

7.315min (-0.093) 47.29ppm m

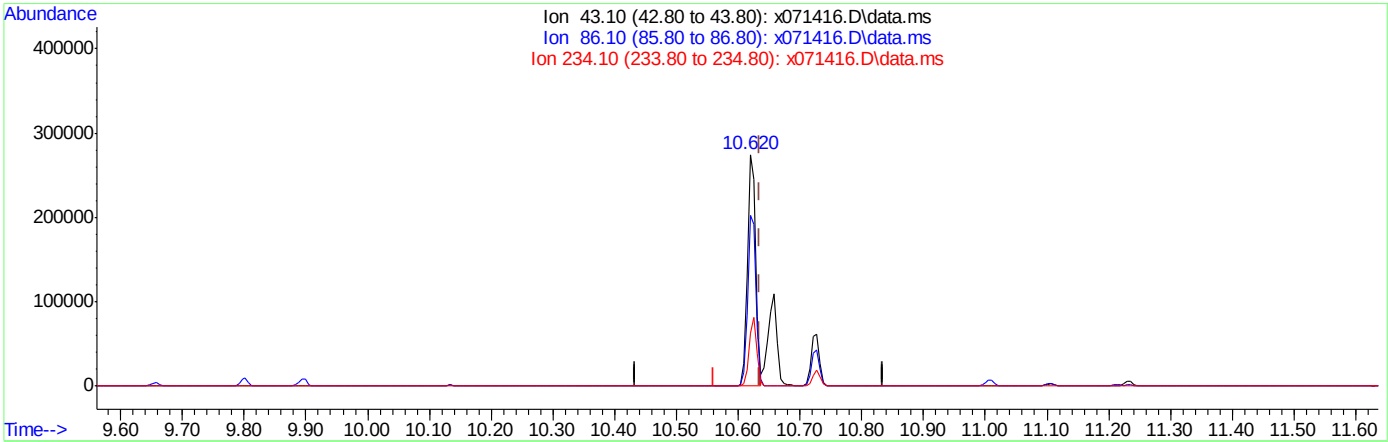
response 1171334

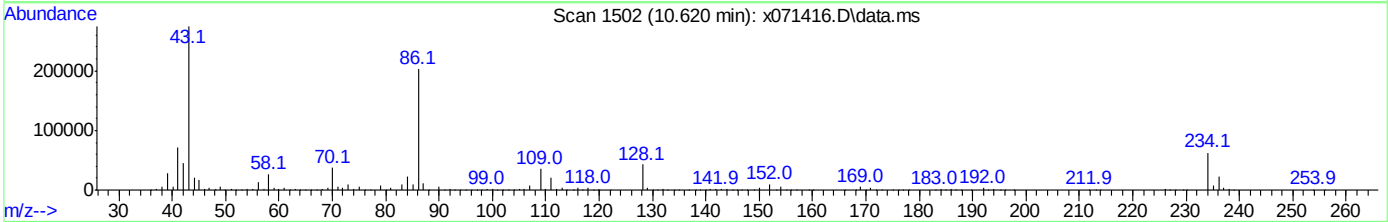
Ion	Exp%	Act%
58.10	100	100
91.10	8.30	8.67
134.10	3.70	3.66
0.00	0.00	0.00

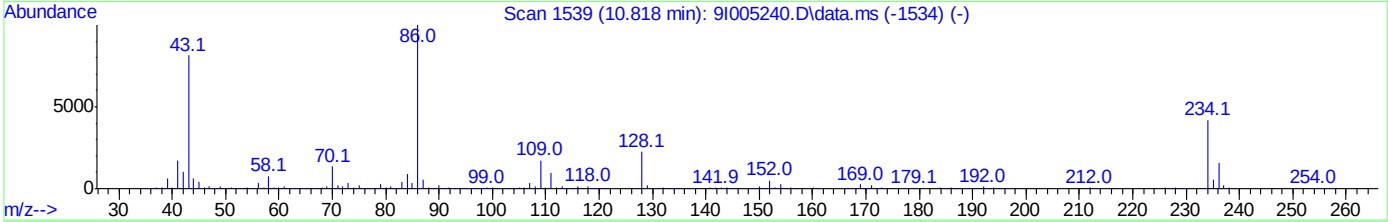
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0624_sx2919\
Data File : x071416.D
Acq On : 24 Jun 2020 3:22 pm
Operator : marthav
Sample : icv2918-50 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 24 15:43:42 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration







TIC: x071416.D\data.ms

(138) Diallate

10.620min (-0.014) 27.71ppm

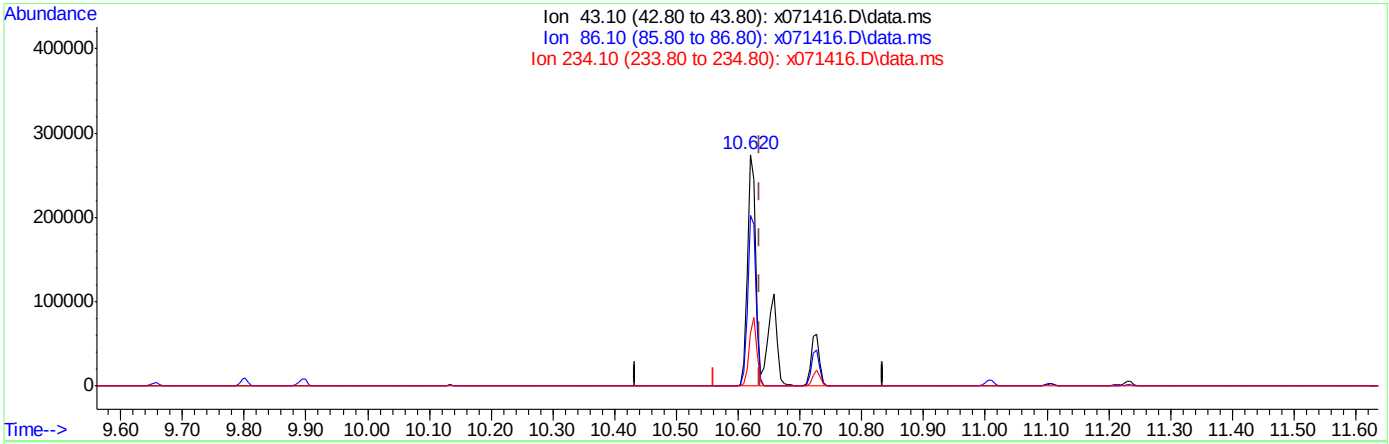
response 249556

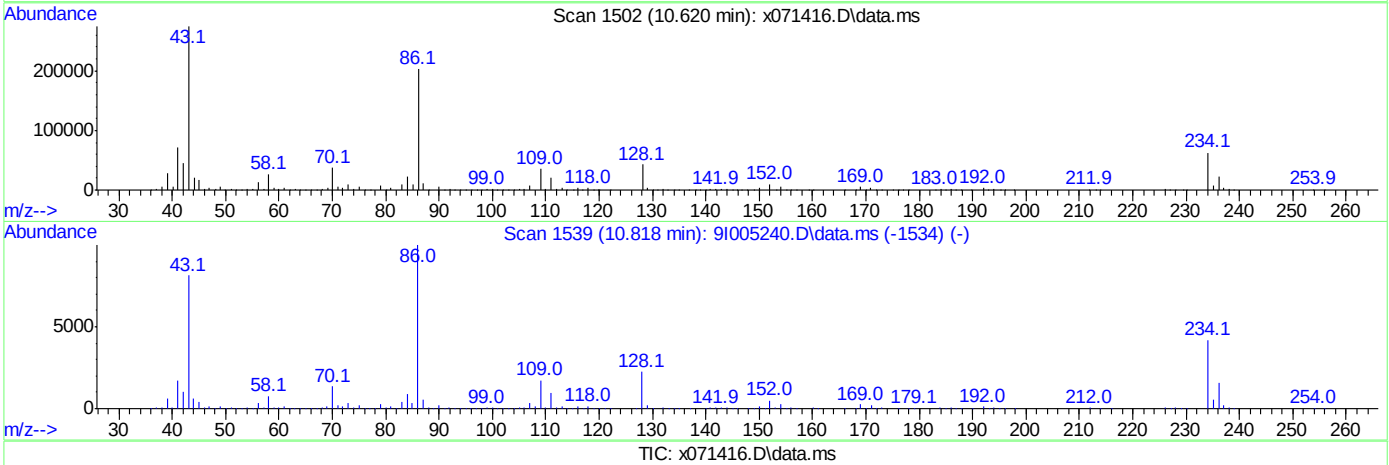
Ion	Exp%	Act%
43.10	100	100
86.10	76.00	74.00
234.10	30.60	22.32
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0624_sx2919\
Data File : x071416.D
Acq On : 24 Jun 2020 3:22 pm
Operator : marthav
Sample : icv2918-50 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 24 15:43:42 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration





TIC: x071416.D\data.ms

(138) Diallate

10.620min (-0.014) 46.24ppm m

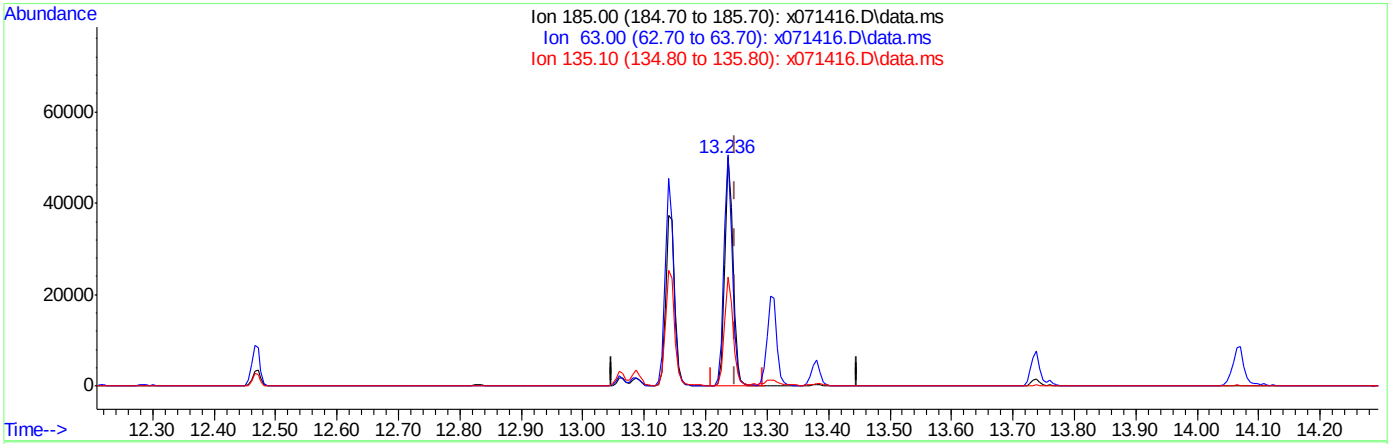
response 416360

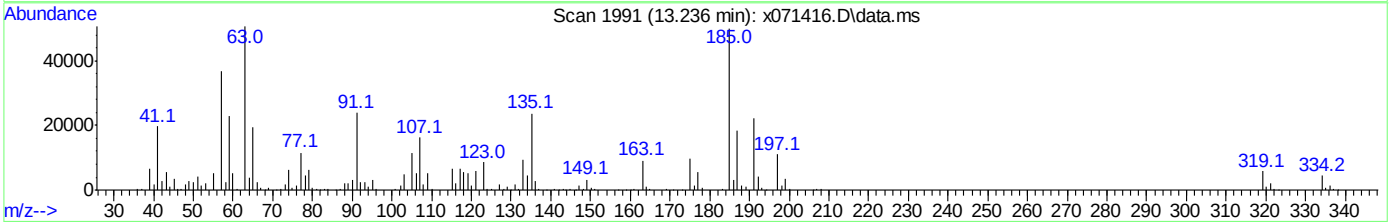
Ion	Exp%	Act%
43.10	100	100
86.10	76.00	73.74
234.10	30.60	22.86
0.00	0.00	0.00

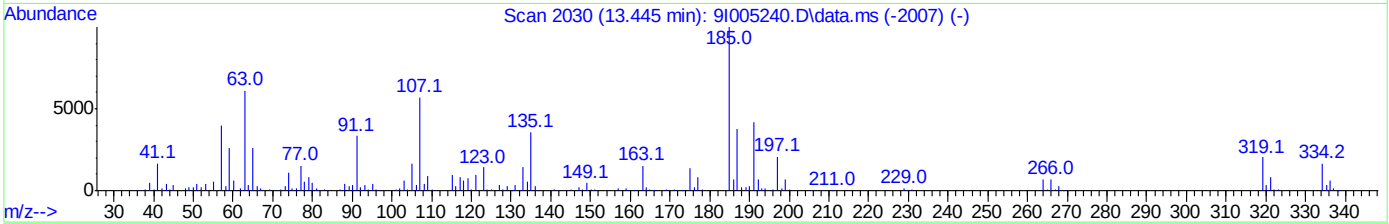
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0624_sx2919\
Data File : x071416.D
Acq On : 24 Jun 2020 3:22 pm
Operator : marthav
Sample : icv2918-50 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 24 15:43:42 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration







TIC: x071416.D\data.ms

(147) Aramite

13.236min (-0.012) 29.24ppm

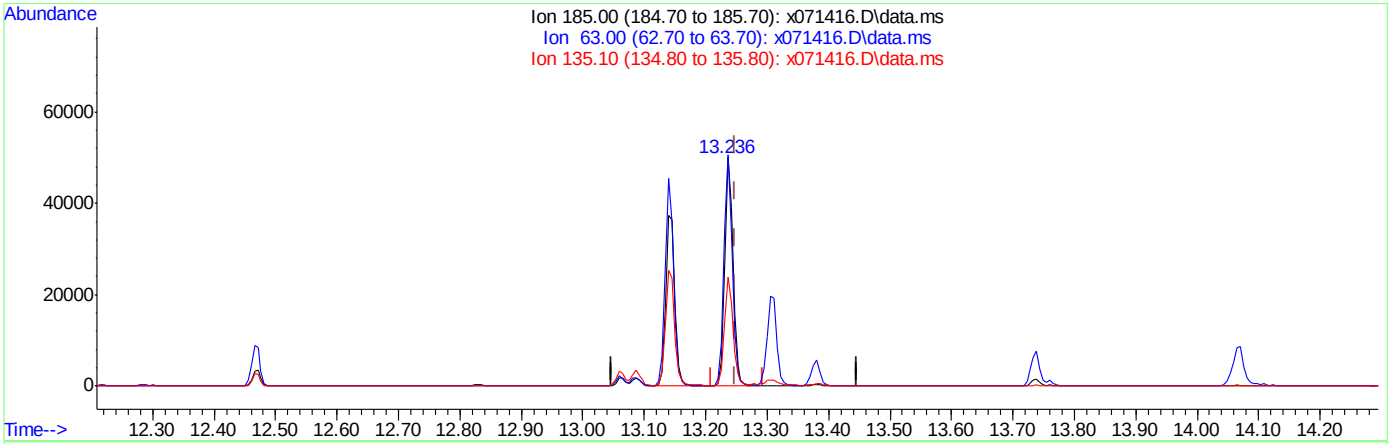
response 46379

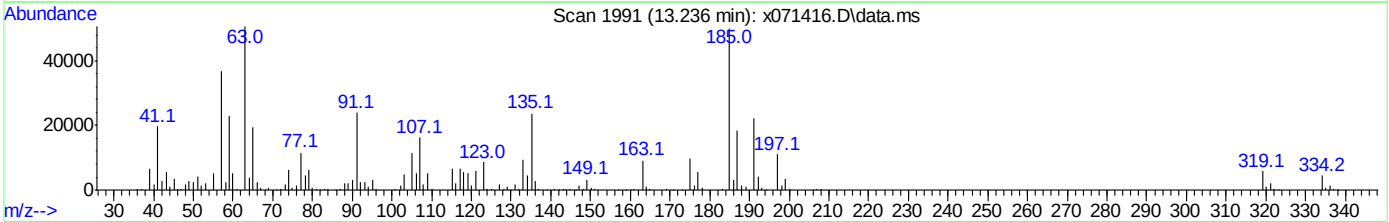
Ion	Exp%	Act%
185.00	100	100
63.00	99.40	97.60
135.10	50.50	46.70
0.00	0.00	0.00

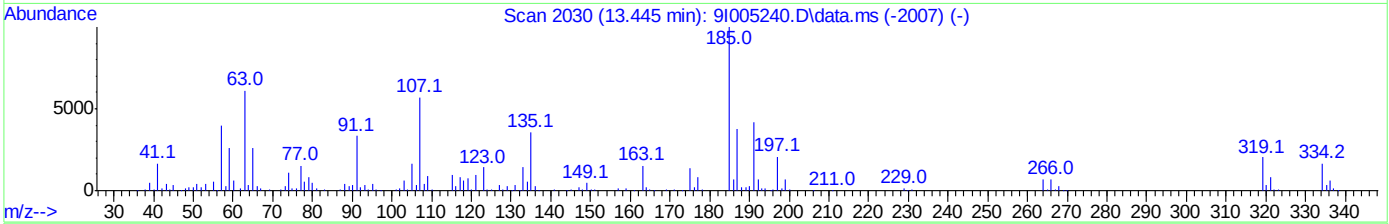
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0624_sx2919\
Data File : x071416.D
Acq On : 24 Jun 2020 3:22 pm
Operator : marthav
Sample : icv2918-50 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 24 15:43:42 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration







TIC: x071416.D\data.ms

(147) Aramite

13.236min (-0.012) 49.65ppm m

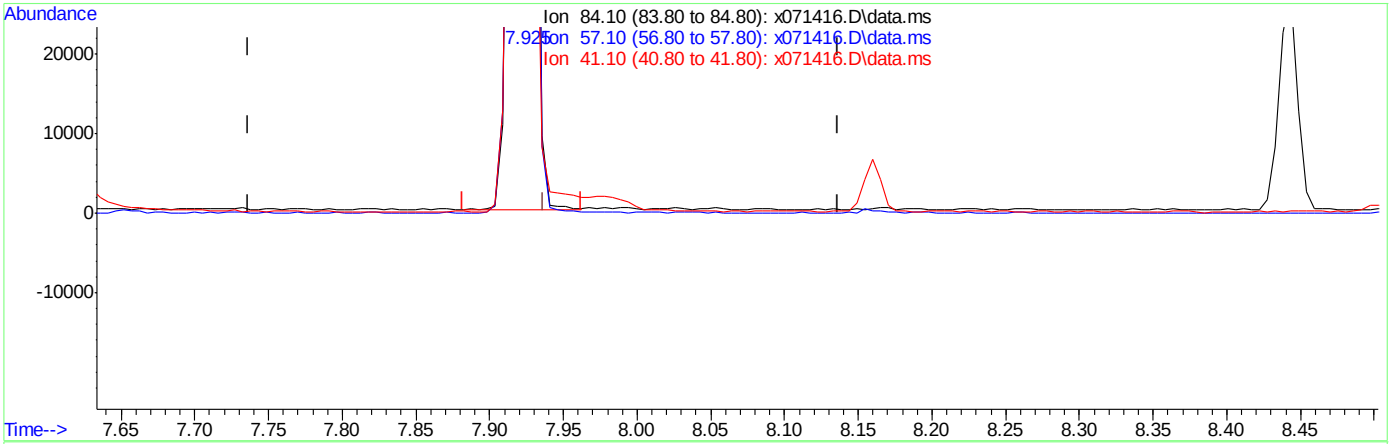
response 83540

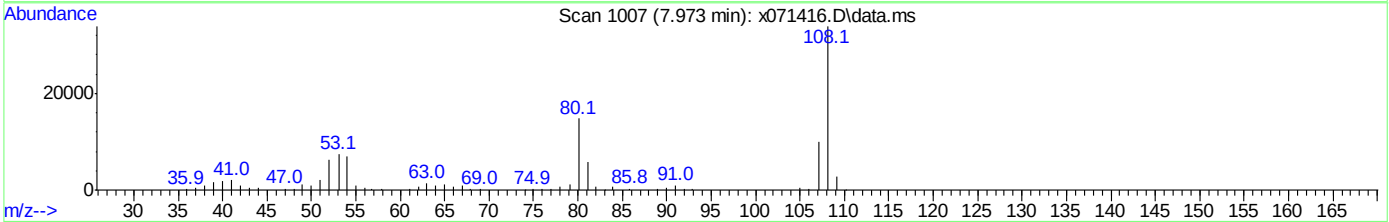
Ion	Exp%	Act%
185.00	100	100
63.00	99.40	101.34
135.10	50.50	47.53
0.00	0.00	0.00

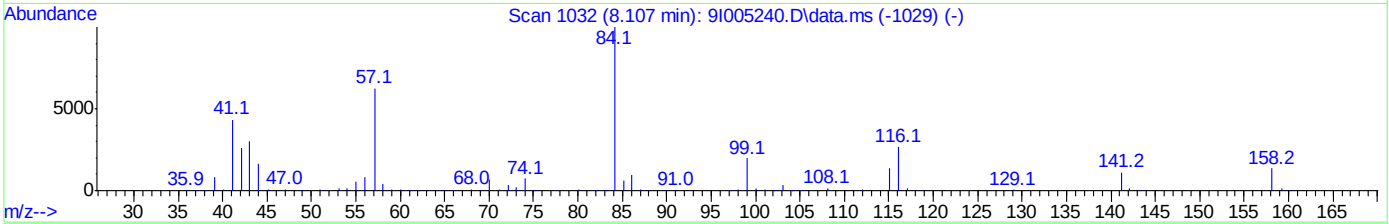
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0624_sx2919\
Data File : x071416.D
Acq On : 24 Jun 2020 3:22 pm
Operator : marthav
Sample : icv2918-50 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 24 15:45:01 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration







TIC: x071416.D\data.ms

(124) N-Nitrosodi-n-butylamine

7.925min (-0.012) 39.53ppm

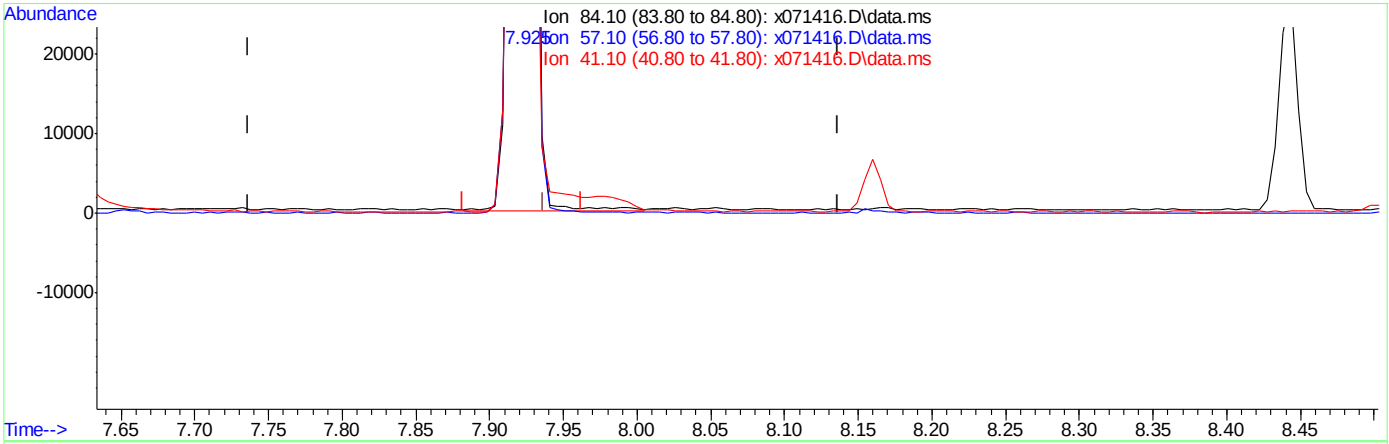
response 203432

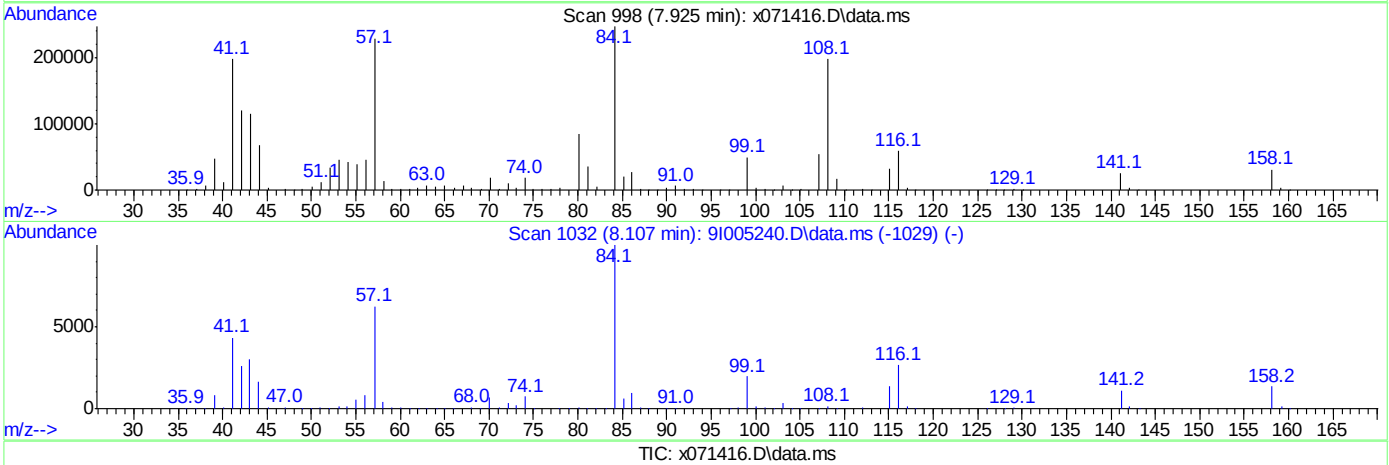
Ion	Exp%	Act%
84.10	100	100
57.10	94.40	92.34
41.10	81.30	79.76
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0624_sx2919\
Data File : x071416.D
Acq On : 24 Jun 2020 3:22 pm
Operator : marthav
Sample : icv2918-50 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 24 15:45:01 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration





TIC: x071416.D\data.ms

(124) N-Nitrosodi-n-butylamine

7.925min (-0.012) 39.74ppm m

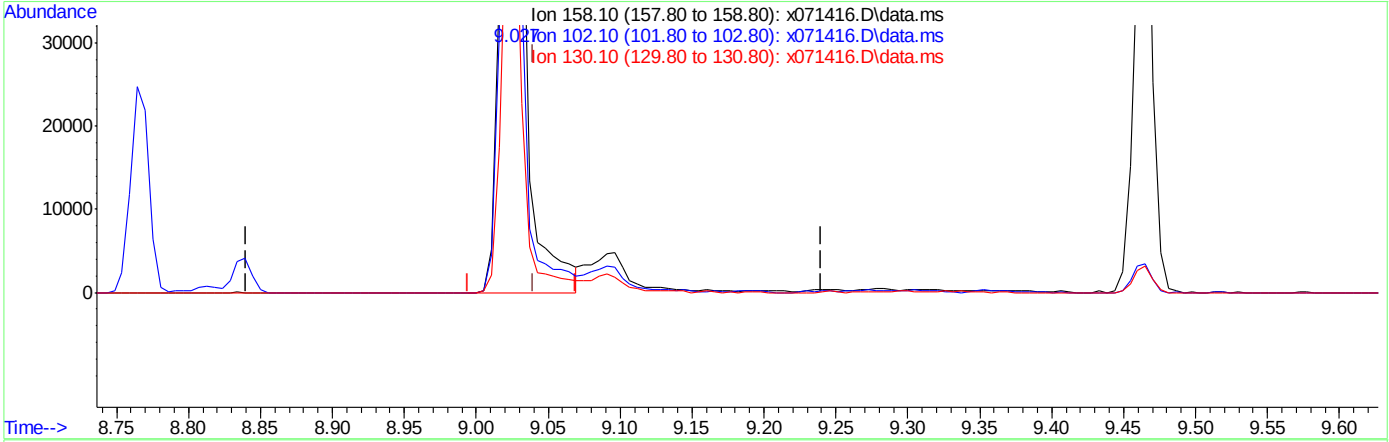
response 204562

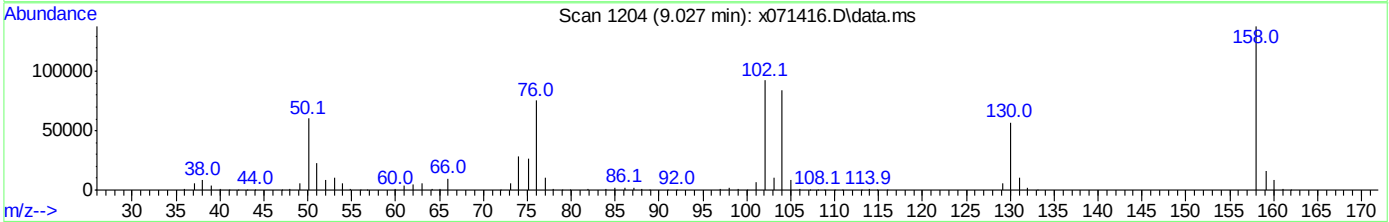
Ion	Exp%	Act%
84.10	100	100
57.10	94.40	92.19
41.10	81.30	80.06
0.00	0.00	0.00

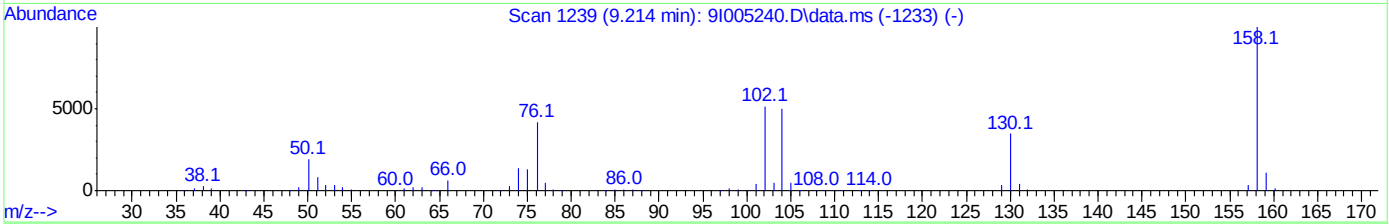
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0624_sx2919\
Data File : x071416.D
Acq On : 24 Jun 2020 3:22 pm
Operator : marthav
Sample : icv2918-50 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 24 15:45:01 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration







TIC: x071416.D\data.ms

(131) 1,4-Naphthoquinone

9.027min (-0.013) 30.43ppm

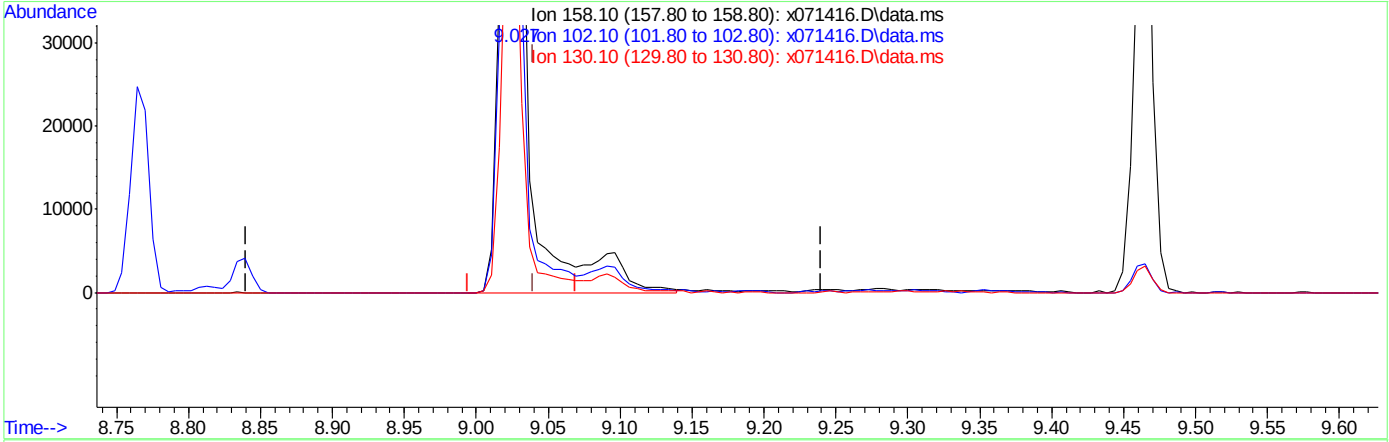
response 126951

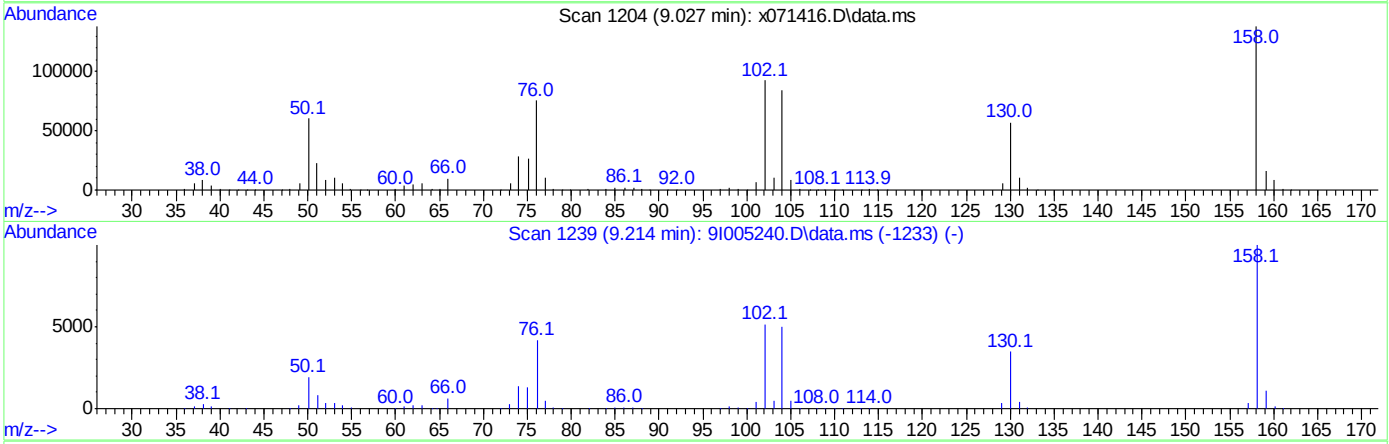
Ion	Exp%	Act%
158.10	100	100
102.10	69.70	67.02
130.10	42.30	41.38
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0624_sx2919\
Data File : x071416.D
Acq On : 24 Jun 2020 3:22 pm
Operator : marthav
Sample : icv2918-50 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 24 15:45:01 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration





TIC: x071416.D\data.ms

(131) 1,4-Naphthoquinone

9.027min (-0.013) 32.56ppm m

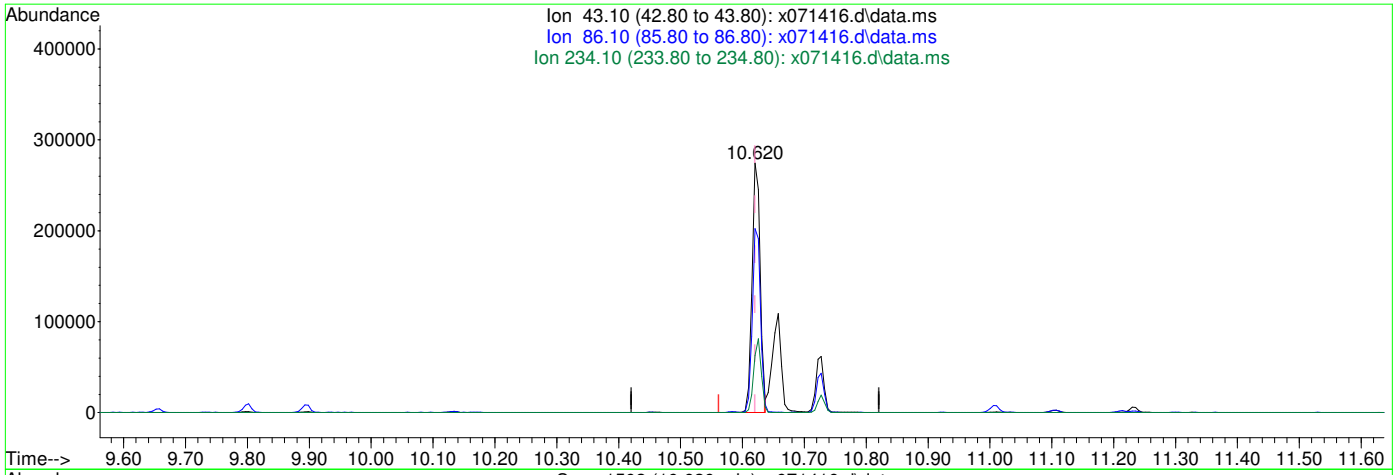
response 135960

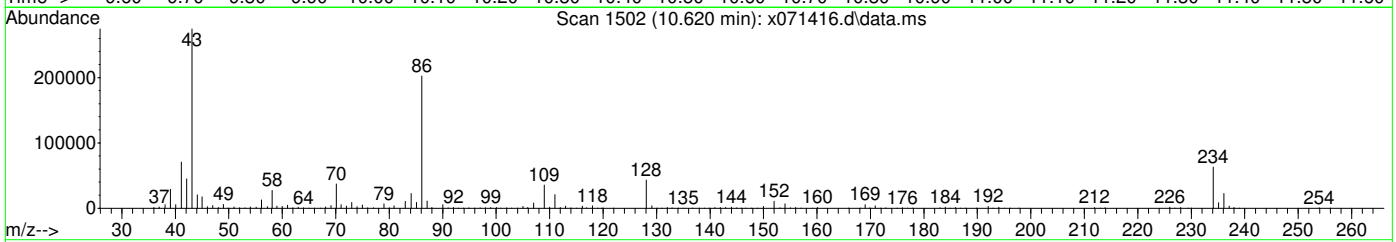
Ion	Exp%	Act%
158.10	100	100
102.10	69.70	67.02
130.10	42.30	41.45
0.00	0.00	0.00

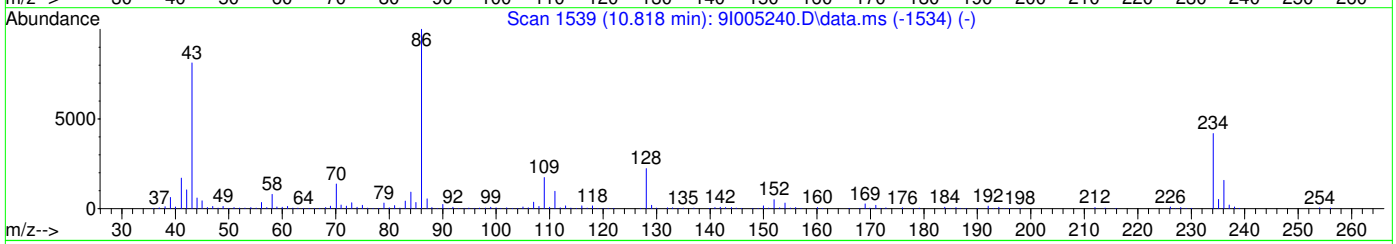
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\June 2020\06-25-2020\sx2919\
Data File : x071416.d
Acq On : 24 Jun 2020 3:22 pm
Operator : marthav
Sample : icv2918-50 app9
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 25 02:50:38 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Thu Jun 25 02:50:18 2020
Response via : Initial Calibration







TIC: x071416.d\data.ms

(138) Diallate

10.620min (0.000) 27.71ppm

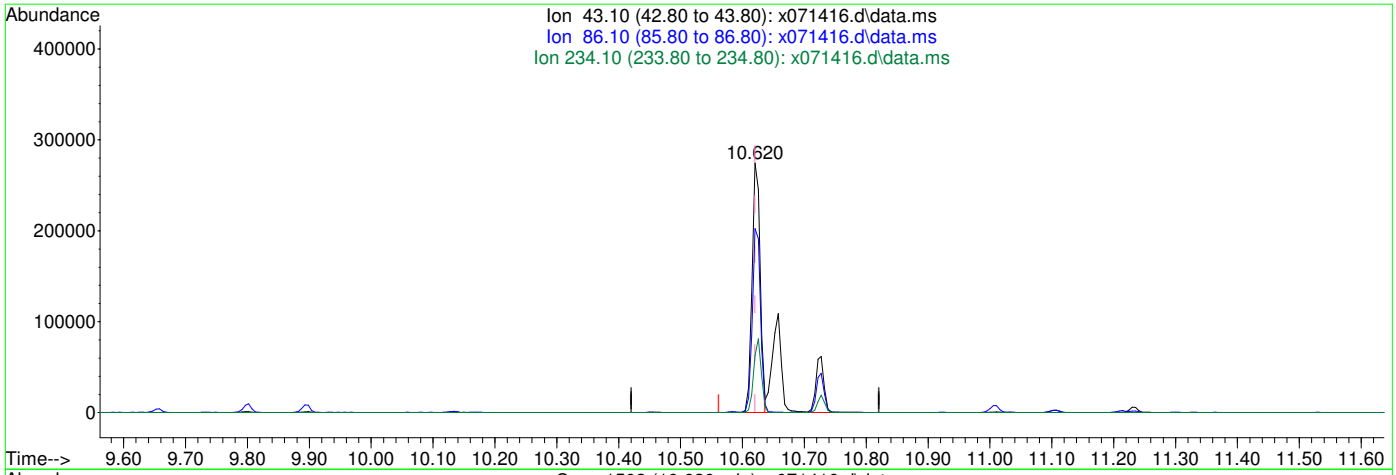
response 249556

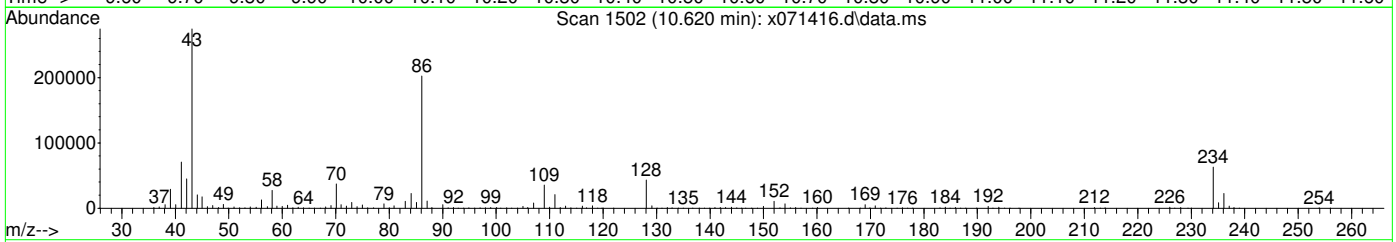
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	74.00#
234.10	51.50	22.32
0.00	0.00	0.00

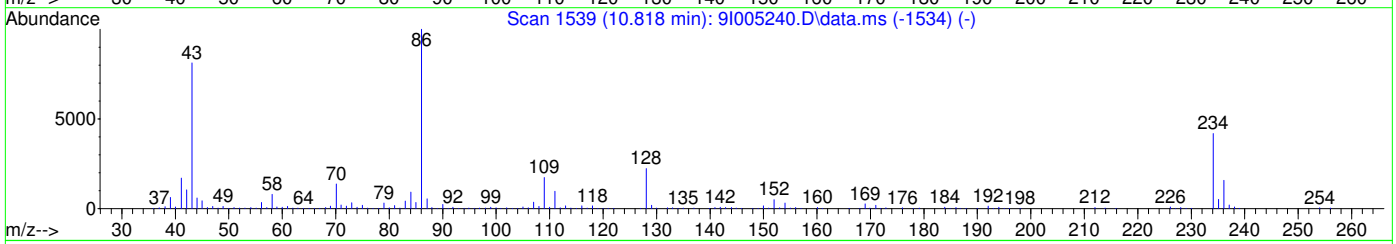
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\June 2020\06-25-2020\sx2919\
Data File : x071416.d
Acq On : 24 Jun 2020 3:22 pm
Operator : marthav
Sample : icv2918-50 app9
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 25 02:50:38 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Thu Jun 25 02:50:18 2020
Response via : Initial Calibration







TIC: x071416.d\data.ms

(138) Diallate

10.620min (0.000) 46.24ppm m

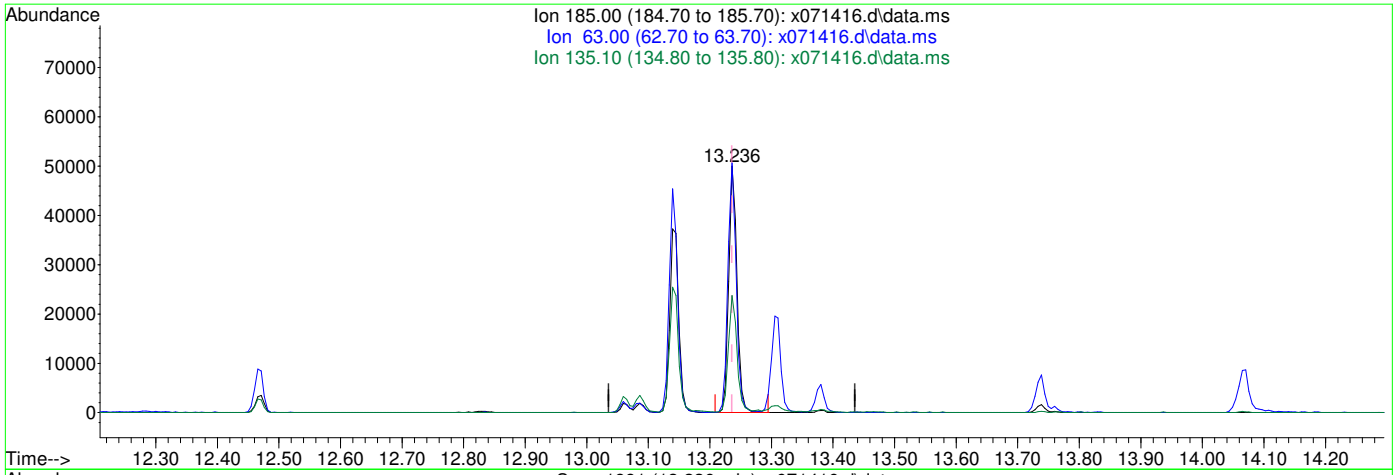
response 416437

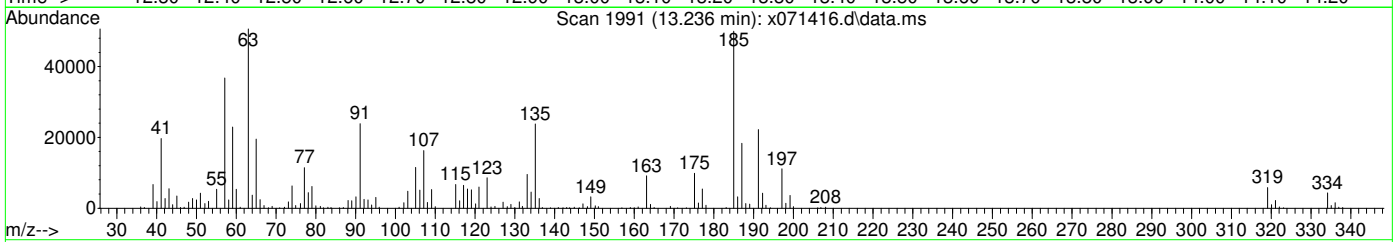
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	73.74#
234.10	51.50	22.86
0.00	0.00	0.00

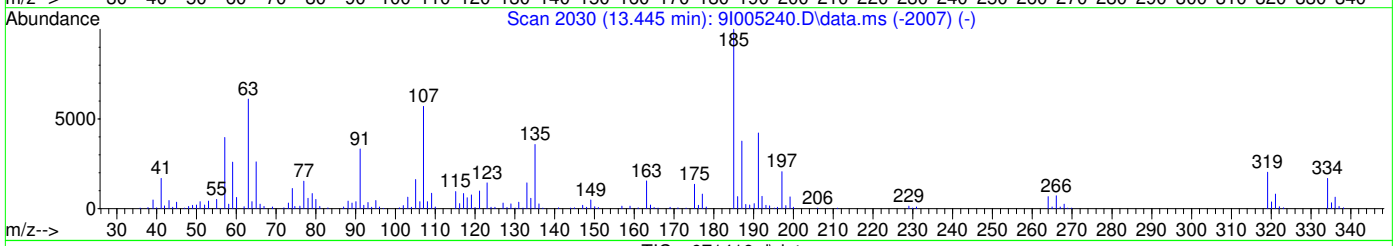
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\June 2020\06-25-2020\sx2919\
Data File : x071416.d
Acq On : 24 Jun 2020 3:22 pm
Operator : marthav
Sample : icv2918-50 app9
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 25 02:50:38 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Thu Jun 25 02:50:18 2020
Response via : Initial Calibration







TIC: x071416.d\data.ms

(147) Aramite

13.236min (0.000) 29.24ppm

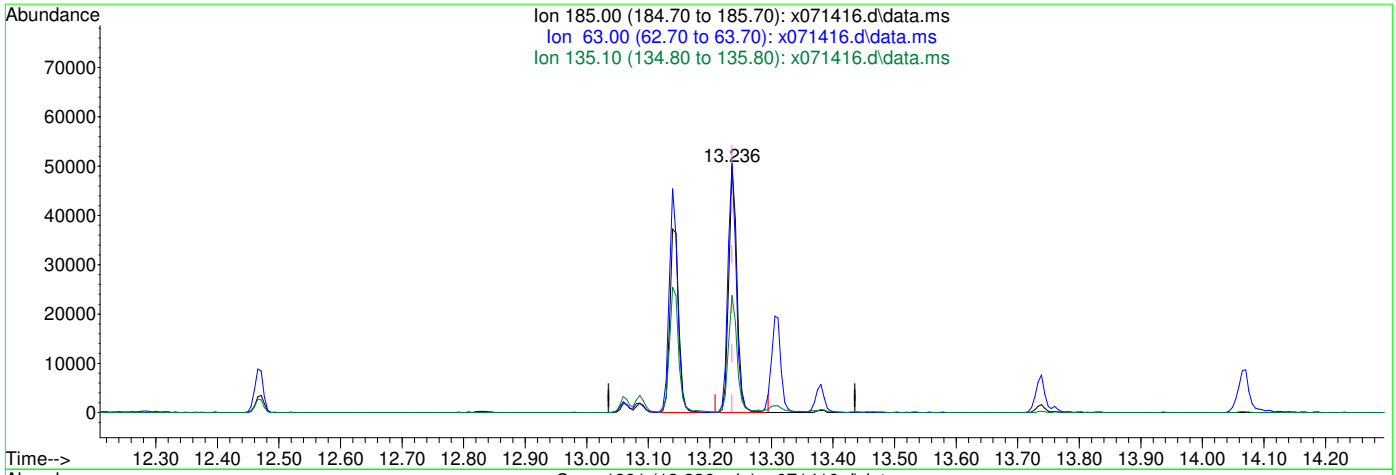
response 46379

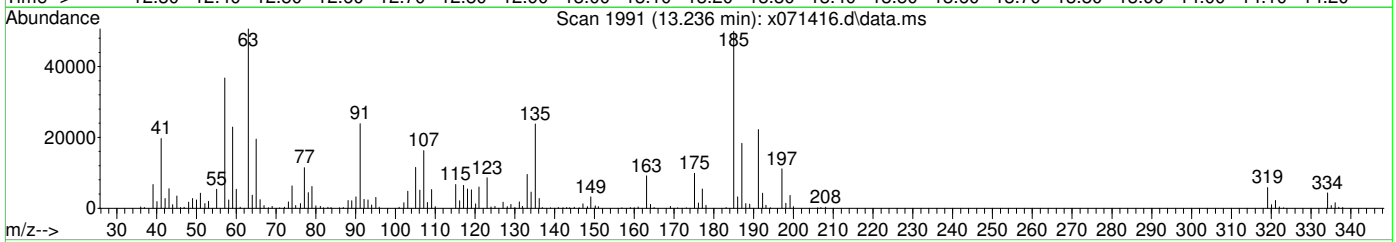
Ion	Exp%	Act%
185.00	100	100
63.00	61.10	97.60#
135.10	35.60	46.70
0.00	0.00	0.00

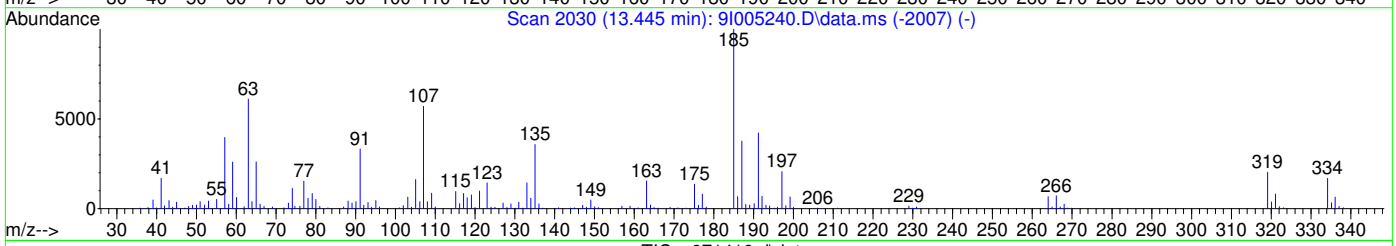
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\June 2020\06-25-2020\sx2919\
Data File : x071416.d
Acq On : 24 Jun 2020 3:22 pm
Operator : marthav
Sample : icv2918-50 app9
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 25 02:50:38 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Thu Jun 25 02:50:18 2020
Response via : Initial Calibration







TIC: x071416.d\data.ms

(147) Aramite

13.236min (0.000) 49.69ppm m

response 83620

Ion	Exp%	Act%
185.00	100	100
63.00	61.10	101.34#
135.10	35.60	47.53
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan
08/12/20 11:57

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072329.d
Acq On : 11 Aug 2020 12:47 pm
Operator : marthav
Sample : cc2918-50 8270
Misc : op81484,sx2950,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 12 01:45:18 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Aug 12 01:44:14 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.660	152	166366	40.00	ppm	0.00
22) Naphthalene-d8	7.082	136	662768	40.00	ppm	0.00
43) Acenaphthene-d10	9.120	164	340989	40.00	ppm	0.00
70) Phenanthrene-d10	10.864	188	587050	40.00	ppm	0.00
92) Chrysene-d12	14.068	240	485410	40.00	ppm	0.00
102) Perylene-d12	16.255	264	371635	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	5.660	152	166366	40.00	ppm	0.00
120) Naphthalene-d8A	7.082	136	662768	40.00	ppm	0.00
127) Acenaphthene-d10A	9.120	164	340989	40.00	ppm	0.00
136) Phenanthrene-d10A	10.864	188	587050	40.00	ppm	0.00
146) Chrysene-d12A	14.068	240	485410	40.00	ppm	0.00
153) Perylene-d12A	16.255	264	371635	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	4.307	112	576200	96.59	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 96.59%#			
9) Phenol-d5	5.333	99	697618	98.30	ppm	0.00
Spiked Amount 100.000	Range 10 - 50		Recovery = 98.30%#			
23) Nitrobenzene-d5	6.280	82	342201	50.00	ppm	0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 100.00%			
47) 2-Fluorobiphenyl	8.355	172	619430	50.18	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 100.36%			
75) 2,4,6-Tribromophenol	10.056	330	128073	98.00	ppm	0.00
Spiked Amount 100.000	Range 33 - 118		Recovery = 98.00%			
95) Terphenyl-d14	12.779	244	618640	47.97	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 95.94%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.483	88	128599	45.10	ppm	# 49
3) N-nitrosodimethylamine	2.814	42	208823	41.25	ppm	# 41
4) Pyridine	2.846	79	368115	53.07	ppm	# 41
5) Benzaldehyde	5.189	106	214170	43.19	ppm	93
6) Aniline	5.312	93	426637	43.14	ppm	75
8) bis(2-Chloroethyl)ether	5.392	93	295436	48.40	ppm	77
10) Phenol	5.344	94	400261	47.55	ppm	90
11) 2-Chlorophenol	5.446	128	318888	50.10	ppm	82
12) 1,3-Dichlorobenzene	5.596	146	325263	49.19	ppm	97
13) 1,4-Dichlorobenzene	5.681	146	343721	49.13	ppm	99
14) 1,2-Dichlorobenzene	5.836	146	310868	46.77	ppm	96
15) Benzyl alcohol	5.836	108	201251	45.69	ppm	84
16) 2,2'-Oxybis(1-chloropr...	5.986	45	489257	38.14	ppm	67
17) 2-Methylphenol	5.991	108	288920	47.71	ppm	98
18) Acetophenone	6.114	105	415156	46.33	ppm	97
19) Hexachloroethane	6.211	117	128129	48.77	ppm	96
20) N-Nitroso-di-n-propyla...	6.136	70	226250	47.81	ppm	# 67
21) 3&4-Methylphenol	6.168	108	314084	50.18	ppm	97
24) Nitrobenzene	6.302	77	337981	49.91	ppm	85
25) Isophorone	6.580	82	558467	46.19	ppm	95
26) 2-Nitrophenol	6.660	139	166950	51.86	ppm	79
27) 2,4-Dimethylphenol	6.751	107	275067	46.01	ppm	95
28) O,O,O-Triethylphosphor...	6.820	198	121073	47.71	ppm	92
29) bis(2-Chloroethoxy)met...	6.847	93	343367	48.54	ppm	97
30) Benzoic Acid	6.922	105	241525m	48.46	ppm	
31) 2,4-Dichlorophenol	6.954	162	247274	51.31	ppm	95
32) 1,2,4-Trichlorobenzene	7.024	180	245741	49.89	ppm	98
34) Naphthalene	7.109	128	878615	48.89	ppm	99
35) 4-Chloroaniline	7.195	127	369452	48.68	ppm	91

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072329.d
Acq On : 11 Aug 2020 12:47 pm
Operator : marthav
Sample : cc2918-50 8270
Misc : op81484,sx2950,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 12 01:45:18 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Aug 12 01:44:14 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
36) 2,6-Dichlorophenol	7.200	162	238229	48.48	ppm		96
37) Hexachlorobutadiene	7.259	225	122374	50.38	ppm		98
38) Caprolactam	7.639	113	95517	47.77	ppm	#	63
39) 4-Chloro-3-methylphenol	7.805	107	247701	48.20	ppm	#	69
40) 2-Methylnaphthalene	7.912	142	563802	47.44	ppm		99
41) 1-Methylnaphthalene	8.024	142	540293	47.48	ppm		98
42) 1,2,4,5-Tetrachloroben...	8.109	216	239704	48.49	ppm		98
44) Hexachlorocyclopentadiene	8.099	237	94936	36.39	ppm		98
45) 2,4,6-Trichlorophenol	8.265	196	157363	50.28	ppm		99
46) 2,4,5-Trichlorophenol	8.318	196	174280	50.89	ppm		98
48) 1,1'-Biphenyl	8.462	154	666539	47.87	ppm		99
49) 2-Chloronaphthalene	8.473	162	510830	48.88	ppm		95
50) 2-Nitroaniline	8.618	65	192113	49.93	ppm	#	68
51) p-Dinitrobenzene	8.794	75	111020	51.46	ppm	#	67
52) Acenaphthylene	8.955	152	839186	49.27	ppm		99
53) Dimethylphthalate	8.858	163	576521	47.93	ppm		99
54) m-Dinitrobenzene	8.880	168	106352	53.05	ppm	#	61
55) 2,6-Dinitrotoluene	8.917	165	143051	50.39	ppm		92
56) o-Dinitrobenzene	8.971	50	135027	49.66	ppm	#	50
57) Acenaphthene	9.163	153	550117	48.57	ppm		99
58) 3-Nitroaniline	9.110	138	166849	53.42	ppm		95
59) 2,4-Dinitrophenol	9.233	184	78998	53.05	ppm	#	44
60) Dibenzofuran	9.366	168	714929	47.29	ppm		94
61) 2,4-Dinitrotoluene	9.388	165	191676	52.95	ppm		88
62) 4-Nitrophenol	9.382	109	80120	45.91	ppm	#	58
63) 2,3,5,6-Tetrachlorophenol	9.479	232	126884	50.07	ppm		93
64) 2,3,4,6-Tetrachlorophenol	9.527	232	137540	52.38	ppm		89
65) Fluorene	9.768	166	587110	49.78	ppm		99
66) 4-Chlorophenyl-phenyle...	9.789	204	279477	49.09	ppm		93
67) Diethylphthalate	9.693	149	566585	47.16	ppm		97
68) Thionazin	9.784	97	130940	51.31	ppm		99
69) 4-Nitroaniline	9.837	138	177649	51.12	ppm		87
71) 4,6-Dinitro-2-methylph...	9.869	198	116068	53.23	ppm		77
72) n-Nitrosodiphenylamine	9.939	169	525534	57.61	ppm		96
73) Diphenylamine	9.939	169	525534	49.09	ppm		96
74) 1,2-Diphenylhydrazine	9.976	77	628363	47.76	ppm		94
76) Sulfotep	10.158	97	92683	47.91	ppm	#	68
77) Phorate	10.292	75	336893	49.72	ppm		95
78) 4-Bromophenyl-phenylether	10.361	248	138729	49.22	ppm		82
79) Hexachlorobenzene	10.409	284	139586	49.64	ppm		82
80) Dimethoate	10.495	87	240505	50.92	ppm		96
81) Simazine	10.570	201	94909	45.86	ppm		97
82) Atrazine	10.607	200	166829	48.67	ppm		90
83) Pentachlorophenol	10.666	266	73358	40.92	ppm		99
84) Phenanthrene	10.891	178	857540	48.34	ppm		99
85) Anthracene	10.955	178	906748	49.04	ppm		99
86) Disulfoton	10.912	88	370583	52.26	ppm		92
87) Carbazole	11.169	167	799624	49.01	ppm		98
88) Methyl Parathion	11.351	109	198630	49.14	ppm	#	87
89) Di-n-butylphthalate	11.629	149	921704	50.61	ppm		98
90) Ethyl Parathion	11.821	97	116550	49.53	ppm		87
91) Fluoranthene	12.292	202	832675	50.59	ppm		98
93) Benzidine	12.490	184	440974	46.78	ppm		95
94) Pyrene	12.554	202	894248	44.37	ppm		96
96) Famphur	13.319	218	211856	63.11	ppm		89
97) Butylbenzylphthalate	13.410	149	385159	46.11	ppm		89
98) 3,3'-Dichlorobenzidine	14.062	252	257997	50.36	ppm		98
99) Benzo[a]anthracene	14.052	228	711882	46.66	ppm		100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072329.d
Acq On : 11 Aug 2020 12:47 pm
Operator : marthav
Sample : cc2918-50 8270
Misc : op81484,sx2950,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 12 01:45:18 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Aug 12 01:44:14 2020
Response via : Initial Calibration

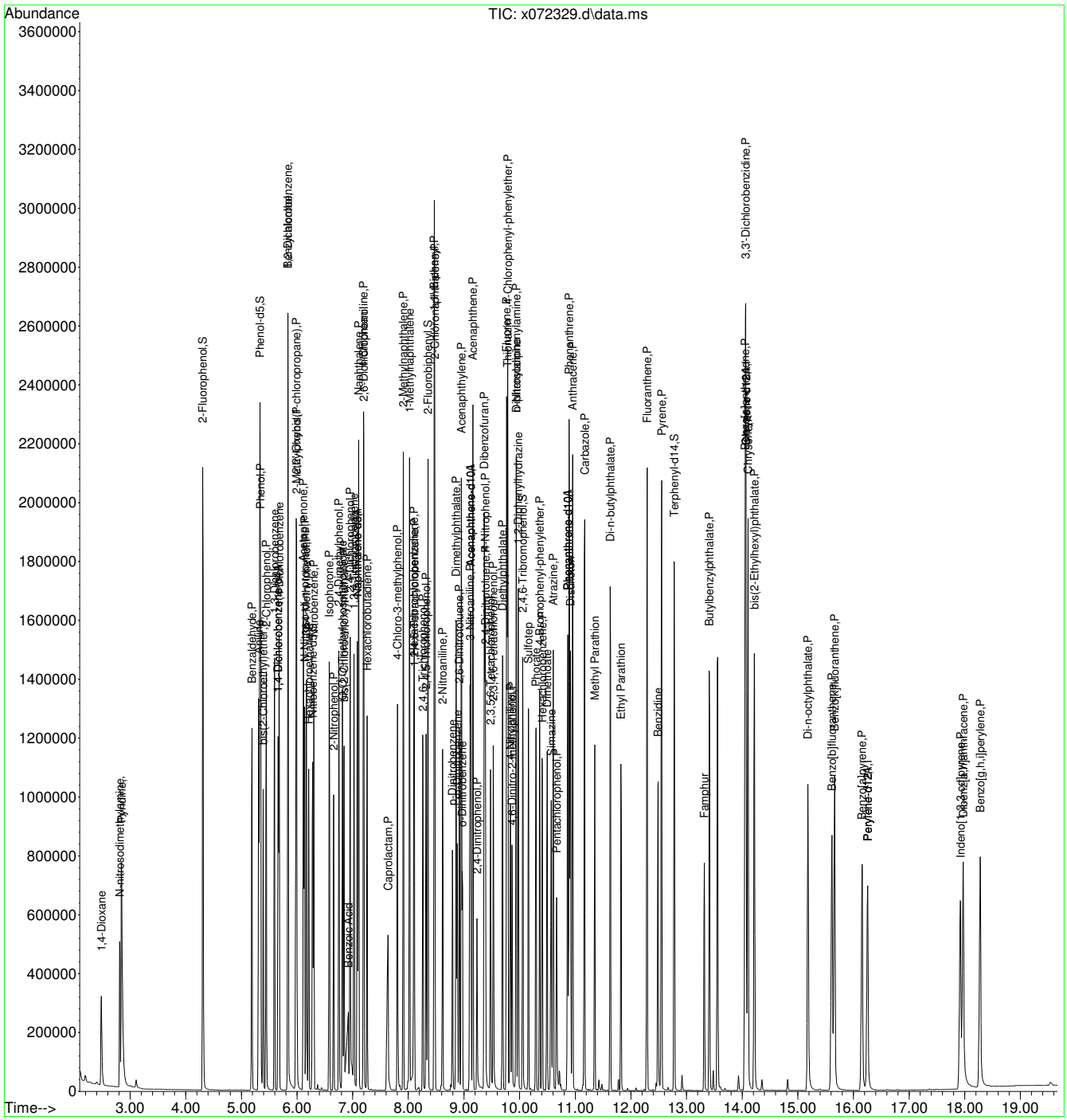
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
100) Chrysene	14.105	228	781765	48.12	ppm	98
101) bis(2-Ethylhexyl)phtha...	14.218	149	550022	48.25	ppm	96
103) Di-n-octylphthalate	15.180	149	786741	52.14	ppm	94
104) Benzo[b]fluoranthene	15.614	252	570599	51.53	ppm	97
105) Benzo[k]fluoranthene	15.662	252	620601	47.04	ppm	97
106) Benzo[a]pyrene	16.154	252	512360	48.53	ppm	96
107) Indeno[1,2,3-cd]pyrene	17.924	276	413385	55.20	ppm	91
108) Dibenz[a,h]anthracene	17.972	278	478583	55.54	ppm	91
109) Benzo[g,h,i]perylene	18.277	276	480221	47.16	ppm	87

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072329.d
Acq On : 11 Aug 2020 12:47 pm
Operator : marthav
Sample : cc2918-50 8270
Misc : op81484,sx2950,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 12 01:45:18 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Aug 12 01:44:14 2020
Response via : Initial Calibration



Manual Integration Approval Summary

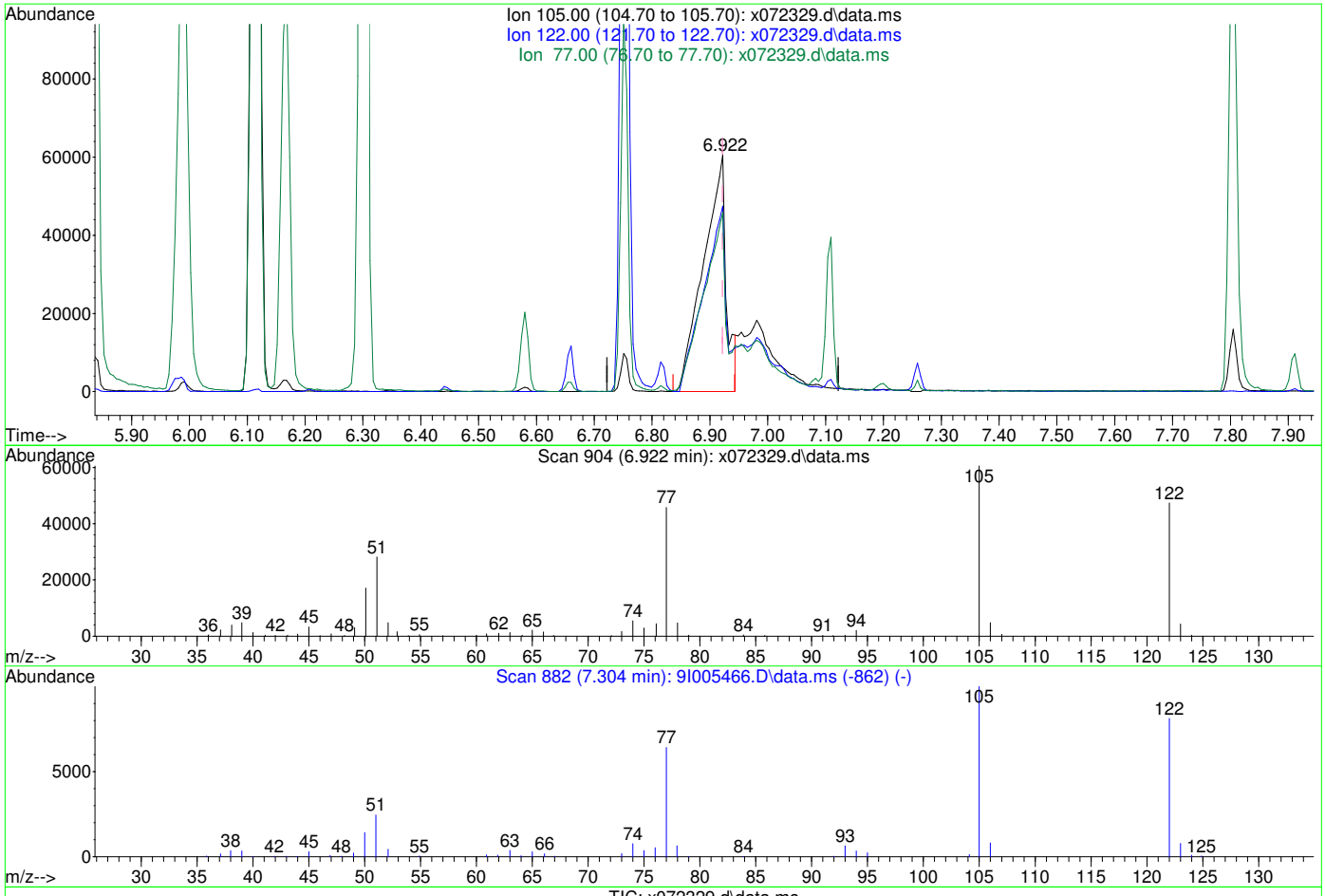
Sample Number: SX2950-CC2918
Lab FileID: X072329.D
Injection Time: 08/11/20 12:47
Method: SW846 8270D
Analyst approved: 08/12/20 04:02 John Matthew de Guzman
Supervisor approved: 08/12/20 11:57 Naresh Jiawan

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic Acid	65-85-0		6.92	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072329.d
Acq On : 11 Aug 2020 12:47 pm
Operator : marthav
Sample : cc2918-50 8270
Misc : op81484,sx2950,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 12 01:44:20 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Aug 12 01:44:14 2020
Response via : Initial Calibration



TIC: x072329.d\data.ms

(30) Benzoic Acid

6.922min (0.000) 34.99ppm

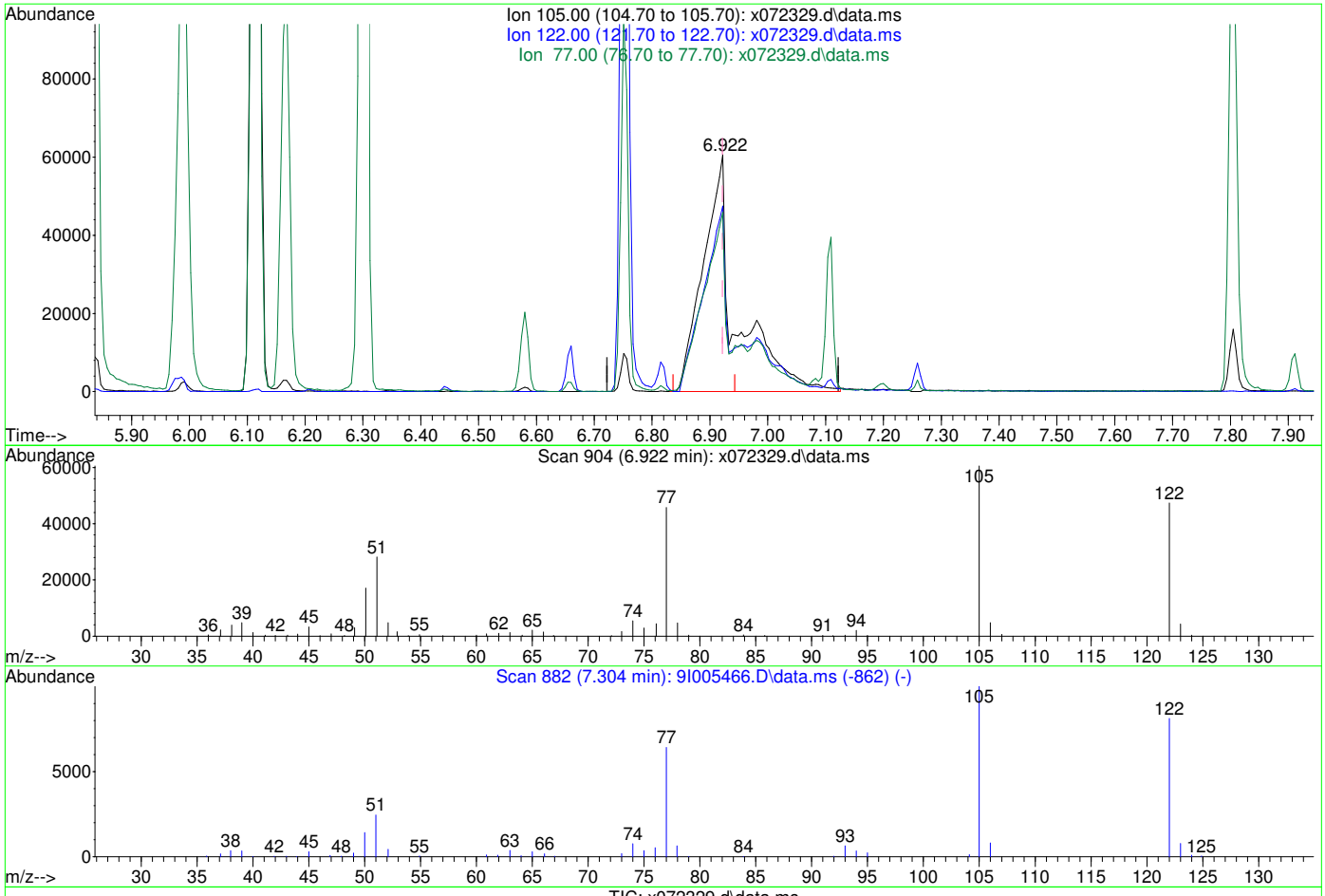
response 164956

Ion	Exp%	Act%
105.00	100	100
122.00	81.20	78.37
77.00	64.10	74.51
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072329.d
Acq On : 11 Aug 2020 12:47 pm
Operator : marthav
Sample : cc2918-50 8270
Misc : op81484,sx2950,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 12 01:44:20 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Aug 12 01:44:14 2020
Response via : Initial Calibration



TIC: x072329.d\data.ms

(30) Benzoic Acid

6.922min (0.000) 48.46ppm m

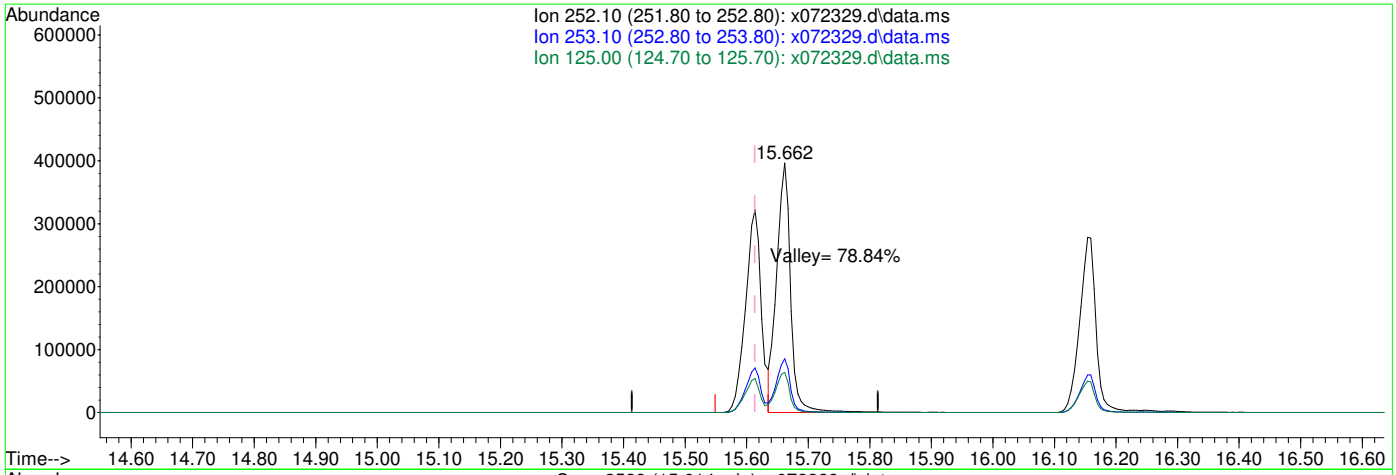
response 241525

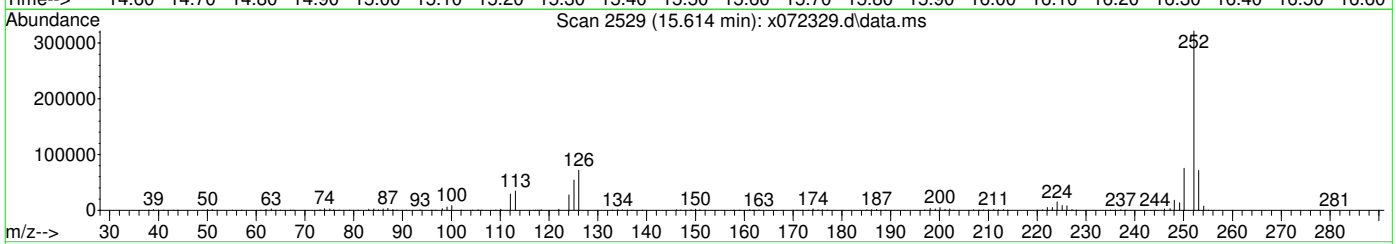
Ion	Exp%	Act%
105.00	100	100
122.00	81.20	78.25
77.00	64.10	75.55
0.00	0.00	0.00

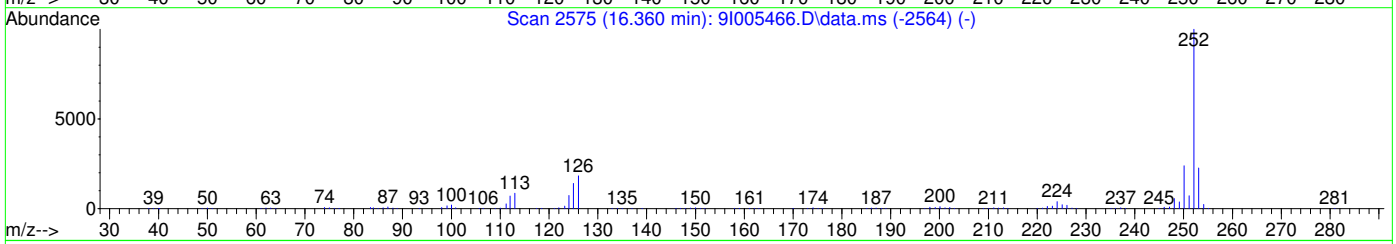
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072329.d
Acq On : 11 Aug 2020 12:47 pm
Operator : marthav
Sample : cc2918-50 8270
Misc : op81484,sx2950,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 12 01:45:18 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Aug 12 01:44:14 2020
Response via : Initial Calibration







TIC: x072329.d\data.ms

(104) Benzo[b]fluoranthene (P)

15.614min (0.000) 51.53ppm

response 570599

Ion	Exp%	Act%
252.10	100	100
253.10	22.50	21.98
125.00	14.00	16.56
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072330.d
Acq On : 11 Aug 2020 1:13 pm
Operator : marthav
Sample : cc2918-5 8270
Misc : op81484,sx2950,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 12 01:57:04 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.660	152	123854	40.00	ppm	0.00
22) Naphthalene-d8	7.082	136	486509	40.00	ppm	0.00
43) Acenaphthene-d10	9.120	164	250696	40.00	ppm	0.00
70) Phenanthrene-d10	10.859	188	443966	40.00	ppm	0.00
92) Chrysene-d12	14.062	240	352829	40.00	ppm	0.00
102) Perylene-d12	16.250	264	289664	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	5.660	152	123854	40.00	ppm	0.00
120) Naphthalene-d8A	7.082	136	486509	40.00	ppm	0.00
127) Acenaphthene-d10A	9.120	164	250696	40.00	ppm	0.00
136) Phenanthrene-d10A	10.859	188	443966	40.00	ppm	0.00
146) Chrysene-d12A	14.062	240	352829	40.00	ppm	0.00
153) Perylene-d12A	16.250	264	289664	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	4.312	112	45337	10.21	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 10.21%#			
9) Phenol-d5	5.328	99	51815	9.81	ppm	0.00
Spiked Amount 100.000	Range 10 - 50		Recovery = 9.81%#			
23) Nitrobenzene-d5	6.270	82	24780	4.93	ppm	-0.01
Spiked Amount 50.000	Range 42 - 108		Recovery = 9.86%#			
47) 2-Fluorobiphenyl	8.350	172	45659	5.03	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 10.06%#			
75) 2,4,6-Tribromophenol	10.051	330	7837	9.51	ppm	0.00
Spiked Amount 100.000	Range 33 - 118		Recovery = 9.51%#			
95) Terphenyl-d14	12.773	244	44376	4.73	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 9.46%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.488	88	11423	5.38	ppm	# 40
3) N-nitrosodimethylamine	2.820	42	17526	4.65	ppm	# 43
4) Pyridine	2.862	79	26940	5.22	ppm	# 31
5) Benzaldehyde	5.184	106	19213	5.20	ppm	92
6) Aniline	5.307	93	33517	4.55	ppm	90
8) bis(2-Chloroethyl)ether	5.387	93	21288	4.68	ppm	77
10) Phenol	5.339	94	27975	4.46	ppm	94
11) 2-Chlorophenol	5.446	128	22442	4.74	ppm	85
12) 1,3-Dichlorobenzene	5.590	146	24385	4.95	ppm	97
13) 1,4-Dichlorobenzene	5.676	146	25624	4.92	ppm	98
14) 1,2-Dichlorobenzene	5.836	146	23549	4.76	ppm	96
15) Benzyl alcohol	5.831	108	14163	4.32	ppm	85
16) 2,2'-Oxybis(1-chloropr...	5.981	45	39489	4.14	ppm	65
17) 2-Methylphenol	5.986	108	20644	4.58	ppm	92
18) Acetophenone	6.109	105	31875	4.78	ppm	95
19) Hexachloroethane	6.205	117	9484	4.85	ppm	86
20) N-Nitroso-di-n-propyla...	6.120	70	16586	4.71	ppm	# 64
21) 3&4-Methylphenol	6.163	108	21469	4.61	ppm	96
24) Nitrobenzene	6.291	77	25458	5.12	ppm	82
25) Isophorone	6.569	82	42299	4.77	ppm	95
26) 2-Nitrophenol	6.655	139	11735	4.97	ppm	76
27) 2,4-Dimethylphenol	6.746	107	19923	4.54	ppm	94
28) O,O,O-Triethylphosphor...	6.810	198	9313	5.00	ppm	88
29) bis(2-Chloroethoxy)met...	6.836	93	25088	4.83	ppm	96
30) Benzoic Acid	6.863	105	11729	3.91	ppm	95
31) 2,4-Dichlorophenol	6.954	162	16836	4.76	ppm	95
32) 1,2,4-Trichlorobenzene	7.018	180	17555	4.86	ppm	96
34) Naphthalene	7.104	128	65948	5.00	ppm	99
35) 4-Chloroaniline	7.189	127	26709	4.79	ppm	91

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072330.d
Acq On : 11 Aug 2020 1:13 pm
Operator : marthav
Sample : cc2918-5 8270
Misc : op81484,sx2950,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 12 01:57:04 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
36)	2,6-Dichlorophenol	7.195	162	16791	4.65	ppm		97
37)	Hexachlorobutadiene	7.259	225	9137	5.12	ppm		98
38)	Caprolactam	7.564	113	7291	4.97	ppm	#	55
39)	4-Chloro-3-methylphenol	7.799	107	18194	4.82	ppm		97
40)	2-Methylnaphthalene	7.906	142	43427	4.98	ppm		97
41)	1-Methylnaphthalene	8.019	142	40322	4.83	ppm		98
42)	1,2,4,5-Tetrachloroben...	8.104	216	16901	4.66	ppm		99
44)	Hexachlorocyclopentadiene	8.093	237	2406	1.44	ppm		94
45)	2,4,6-Trichlorophenol	8.259	196	10982	4.77	ppm		96
46)	2,4,5-Trichlorophenol	8.318	196	11848	4.71	ppm		97
48)	1,1'-Biphenyl	8.457	154	51810	5.06	ppm		98
49)	2-Chloronaphthalene	8.468	162	37391	4.87	ppm		96
50)	2-Nitroaniline	8.607	65	13551	4.79	ppm	#	63
51)	p-Dinitrobenzene	8.789	75	7340	4.63	ppm	#	70
52)	Acenaphthylene	8.949	152	58784	4.69	ppm		99
53)	Dimethylphthalate	8.842	163	43048	4.87	ppm		99
54)	m-Dinitrobenzene	8.869	168	6941	4.71	ppm	#	75
55)	2,6-Dinitrotoluene	8.906	165	10139	4.86	ppm		69
56)	o-Dinitrobenzene	8.955	50	9791	4.90	ppm	#	54
57)	Acenaphthene	9.152	153	41412	4.97	ppm		99
58)	3-Nitroaniline	9.094	138	11763	5.12	ppm		91
59)	2,4-Dinitrophenol	9.233	184	1145	1.43	ppm	#	66
60)	Dibenzofuran	9.361	168	54209	4.88	ppm		95
61)	2,4-Dinitrotoluene	9.377	165	13149	4.94	ppm		89
62)	4-Nitrophenol	9.382	109	4944	3.85	ppm	#	55
63)	2,3,5,6-Tetrachlorophenol	9.473	232	7565	4.06	ppm		89
64)	2,3,4,6-Tetrachlorophenol	9.527	232	8902	4.61	ppm		88
65)	Fluorene	9.762	166	43353	5.00	ppm		98
66)	4-Chlorophenyl-phenyle...	9.784	204	20075	4.80	ppm		88
67)	Diethylphthalate	9.682	149	43461	4.92	ppm		97
68)	Thionazin	9.768	97	9832	5.24	ppm		99
69)	4-Nitroaniline	9.810	138	11938	4.67	ppm		93
71)	4,6-Dinitro-2-methylph...	9.853	198	4616	3.54	ppm	#	64
72)	n-Nitrosodiphenylamine	9.928	169	37688	5.46	ppm		96
73)	Diphenylamine	9.928	169	37688	4.66	ppm		96
74)	1,2-Diphenylhydrazine	9.965	77	46139	4.64	ppm		89
76)	Sulfotep	10.153	97	7183	4.91	ppm	#	59
77)	Phorate	10.286	75	25496	4.98	ppm		95
78)	4-Bromophenyl-phenylether	10.356	248	9702	4.55	ppm	#	79
79)	Hexachlorobenzene	10.399	284	9959	4.68	ppm		68
80)	Dimethoate	10.479	87	17121	4.95	ppm		94
81)	Simazine	10.548	201	6729	4.30	ppm		99
82)	Atrazine	10.591	200	12417	4.79	ppm		88
83)	Pentachlorophenol	10.661	266	1975	1.72	ppm		87
84)	Phenanthrene	10.885	178	65200	4.86	ppm		98
85)	Anthracene	10.944	178	66155	4.73	ppm		97
86)	Disulfoton	10.907	88	21356	3.98	ppm		93
87)	Carbazole	11.158	167	59919	4.86	ppm		98
88)	Methyl Parathion	11.345	109	13518	4.55	ppm	#	88
89)	Di-n-butylphthalate	11.629	149	67839	4.93	ppm		98
90)	Ethyl Parathion	11.816	97	8122	5.00	ppm		86
91)	Fluoranthene	12.287	202	63813	5.13	ppm		97
93)	Benzidine	12.485	184	31364	4.99	ppm		95
94)	Pyrene	12.543	202	66078	4.51	ppm		100
96)	Famphur	13.314	218	19621	5.74	ppm		85
97)	Butylbenzylphthalate	13.405	149	27392	4.82	ppm		85
98)	3,3'-Dichlorobenzidine	14.052	252	17476	5.25	ppm		96
99)	Benzo[a]anthracene	14.046	228	53134	4.79	ppm		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072330.d
Acq On : 11 Aug 2020 1:13 pm
Operator : marthav
Sample : cc2918-5 8270
Misc : op81484,sx2950,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 12 01:57:04 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

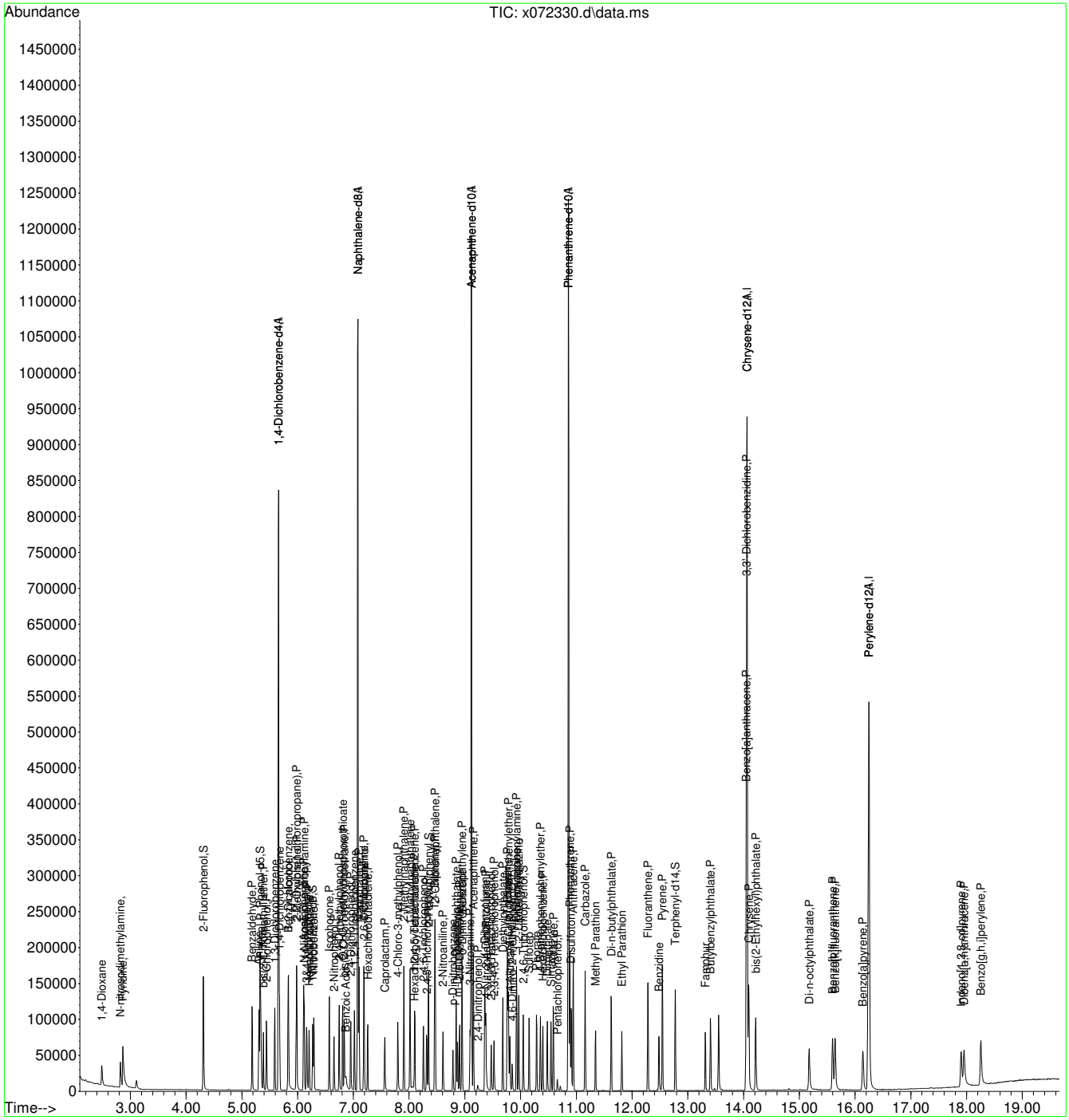
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
100) Chrysene	14.095	228	57802	4.89	ppm	95
101) bis(2-Ethylhexyl)phtha...	14.218	149	34757	4.66	ppm	97
103) Di-n-octylphthalate	15.175	149	47934	5.19	ppm	92
104) Benzo[b]fluoranthene	15.598	252	40248	5.16	ppm	98
105) Benzo[k]fluoranthene	15.640	252	46762	4.55	ppm	96
106) Benzo[a]pyrene	16.138	252	36453	4.91	ppm	94
107) Indeno[1,2,3-cd]pyrene	17.903	276	29261	6.87	ppm	87
108) Dibenz[a,h]anthracene	17.956	278	32779	6.91	ppm	90
109) Benzo[g,h,i]perylene	18.256	276	39191	5.85	ppm	85

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072330.d
Acq On : 11 Aug 2020 1:13 pm
Operator : marthav
Sample : cc2918-5 8270
Misc : op81484,sx2950,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 12 01:57:04 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration



FA77576

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan
08/12/20 16:38

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072357.D
Acq On : 12 Aug 2020 10:24 am
Operator : marthav
Sample : cc2918-50 8270 Inst : MSBNA05
Misc : op81484,sx2951,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 12 14:04:41 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Aug 12 14:02:37 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.654	152	163781	40.00	ppm	0.00
22) Naphthalene-d8	7.077	136	635873	40.00	ppm	0.00
43) Acenaphthene-d10	9.115	164	311303	40.00	ppm	0.00
70) Phenanthrene-d10	10.859	188	516972	40.00	ppm	0.00
92) Chrysene-d12	14.073	240	400284	40.00	ppm	0.00
102) Perylene-d12	16.266	264	293676	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	5.654	152	163781	40.00	ppm	0.00
120) Naphthalene-d8A	7.077	136	635873	40.00	ppm	0.00
127) Acenaphthene-d10A	9.115	164	311303	40.00	ppm	0.00
136) Phenanthrene-d10A	10.859	188	516972	40.00	ppm	0.00
146) Chrysene-d12A	14.073	240	400284	40.00	ppm	0.00
153) Perylene-d12A	16.266	264	293676	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	4.307	112	592760	100.94	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 100.94%#			
9) Phenol-d5	5.334	99	714039	102.20	ppm	0.00
Spiked Amount 100.000	Range 10 - 50		Recovery = 102.20%#			
23) Nitrobenzene-d5	6.275	82	351199	53.48	ppm	0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 106.96%			
47) 2-Fluorobiphenyl	8.350	172	625223	55.48	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 110.96%#			
75) 2,4,6-Tribromophenol	10.056	330	121276	104.17	ppm	0.00
Spiked Amount 100.000	Range 33 - 118		Recovery = 104.17%			
95) Terphenyl-d14	12.779	244	573536	53.93	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 107.86%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.467	88	128978	45.95	ppm	# 45
3) N-nitrosodimethylamine	2.809	42	215855	43.31	ppm	# 41
4) Pyridine	2.836	79	368282	53.93	ppm	# 35
5) Benzaldehyde	5.184	106	234014	47.93	ppm	94
6) Aniline	5.307	93	431203	44.29	ppm	82
8) bis(2-Chloroethyl)ether	5.387	93	307785	51.22	ppm	78
10) Phenol	5.350	94	404362	48.79	ppm	92
11) 2-Chlorophenol	5.440	128	328467	52.42	ppm	79
12) 1,3-Dichlorobenzene	5.585	146	337226	51.80	ppm	96
13) 1,4-Dichlorobenzene	5.670	146	353449	51.31	ppm	97
14) 1,2-Dichlorobenzene	5.831	146	316716	48.40	ppm	97
15) Benzyl alcohol	5.836	108	207502	47.85	ppm	88
16) 2,2'-Oxybis(1-chloropr...	5.975	45	545480	43.20	ppm	79
17) 2-Methylphenol	5.991	108	294066	49.33	ppm	96
18) Acetophenone	6.109	105	420398	47.66	ppm	96
19) Hexachloroethane	6.200	117	136346	52.72	ppm	88
20) N-Nitroso-di-n-propyla...	6.130	70	227402	48.81	ppm	# 67
21) 3&4-Methylphenol	6.168	108	314576	51.05	ppm	97
24) Nitrobenzene	6.296	77	342947	52.79	ppm	84
25) Isophorone	6.574	82	561636	48.42	ppm	94
26) 2-Nitrophenol	6.655	139	171457	55.51	ppm	76

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072357.D
Acq On : 12 Aug 2020 10:24 am
Operator : marthav
Sample : cc2918-50 8270 Inst : MSBNA05
Misc : op81484,sx2951,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 12 14:04:41 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Aug 12 14:02:37 2020
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
27)	2,4-Dimethylphenol	6.751	107	272949	47.58	ppm		95
28)	O,O,O-Triethylphosphor...	6.810	198	123659	50.79	ppm		80
29)	bis(2-Chloroethoxy)met...	6.836	93	345910	50.97	ppm		96
30)	Benzoic Acid	6.917	105	210919m	44.77	ppm		
31)	2,4-Dichlorophenol	6.954	162	242314	52.40	ppm		97
32)	1,2,4-Trichlorobenzene	7.018	180	252165	53.36	ppm		97
34)	Naphthalene	7.104	128	887333	51.46	ppm		99
35)	4-Chloroaniline	7.189	127	358866	49.29	ppm		88
36)	2,6-Dichlorophenol	7.200	162	237128	50.29	ppm		99
37)	Hexachlorobutadiene	7.248	225	127572	54.74	ppm		99
38)	Caprolactam	7.639	113	92107	48.01	ppm	#	60
39)	4-Chloro-3-methylphenol	7.810	107	242298	49.14	ppm	#	72
40)	2-Methylnaphthalene	7.906	142	567792	49.80	ppm		99
41)	1-Methylnaphthalene	8.019	142	544627	49.89	ppm		98
42)	1,2,4,5-Tetrachloroben...	8.104	216	238867	50.36	ppm		99
44)	Hexachlorocyclopentadiene	8.088	237	86891	36.48	ppm		99
45)	2,4,6-Trichlorophenol	8.259	196	157484	55.11	ppm		98
46)	2,4,5-Trichlorophenol	8.323	196	172817	55.10	ppm		100
48)	1,1'-Biphenyl	8.457	154	667012	52.47	ppm		99
49)	2-Chloronaphthalene	8.473	162	514756	53.95	ppm		98
50)	2-Nitroaniline	8.618	65	190569	54.25	ppm	#	68
51)	p-Dinitrobenzene	8.799	75	108973	55.33	ppm	#	72
52)	Acenaphthylene	8.949	152	829146	53.33	ppm		99
53)	Dimethylphthalate	8.858	163	562893	51.25	ppm		99
54)	m-Dinitrobenzene	8.885	168	102567	56.04	ppm	#	59
55)	2,6-Dinitrotoluene	8.917	165	139001	53.63	ppm		84
56)	o-Dinitrobenzene	8.971	50	133955	53.96	ppm	#	50
57)	Acenaphthene	9.158	153	538498	52.08	ppm		99
58)	3-Nitroaniline	9.110	138	159083	55.79	ppm		95
59)	2,4-Dinitrophenol	9.238	184	68103	50.71	ppm	#	83
60)	Dibenzofuran	9.361	168	700276	50.74	ppm		94
61)	2,4-Dinitrotoluene	9.388	165	184292	55.77	ppm		73
62)	4-Nitrophenol	9.393	109	67427	42.33	ppm	#	44
63)	2,3,5,6-Tetrachlorophenol	9.479	232	118472	51.21	ppm		91
64)	2,3,4,6-Tetrachlorophenol	9.532	232	125961	52.06	ppm		92
65)	Fluorene	9.762	166	572740	53.19	ppm		98
66)	4-Chlorophenyl-phenyle...	9.784	204	274145	52.74	ppm		91
67)	Diethylphthalate	9.687	149	556583	50.74	ppm		97
68)	Thionazin	9.778	97	127497	54.72	ppm		97
69)	4-Nitroaniline	9.837	138	167730	52.87	ppm		89
71)	4,6-Dinitro-2-methylph...	9.874	198	104721	54.29	ppm		83
72)	n-Nitrosodiphenylamine	9.939	169	505118	62.88	ppm		96
73)	Diphenylamine	9.939	169	505118	53.58	ppm		96
74)	1,2-Diphenylhydrazine	9.971	77	612491	52.87	ppm		93
76)	Sulfotep	10.153	97	91855	53.92	ppm	#	65
77)	Phorate	10.286	75	334816	56.11	ppm		94
78)	4-Bromophenyl-phenylether	10.356	248	130683	52.65	ppm	#	85
79)	Hexachlorobenzene	10.404	284	132859	53.65	ppm		73
80)	Dimethoate	10.495	87	231881	55.58	ppm		96
81)	Simazine	10.570	201	88581	48.60	ppm		96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072357.D
Acq On : 12 Aug 2020 10:24 am
Operator : marthav
Sample : cc2918-50 8270 Inst : MSBNA05
Misc : op81484,sx2951,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 12 14:04:41 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Aug 12 14:02:37 2020
Response via : Initial Calibration

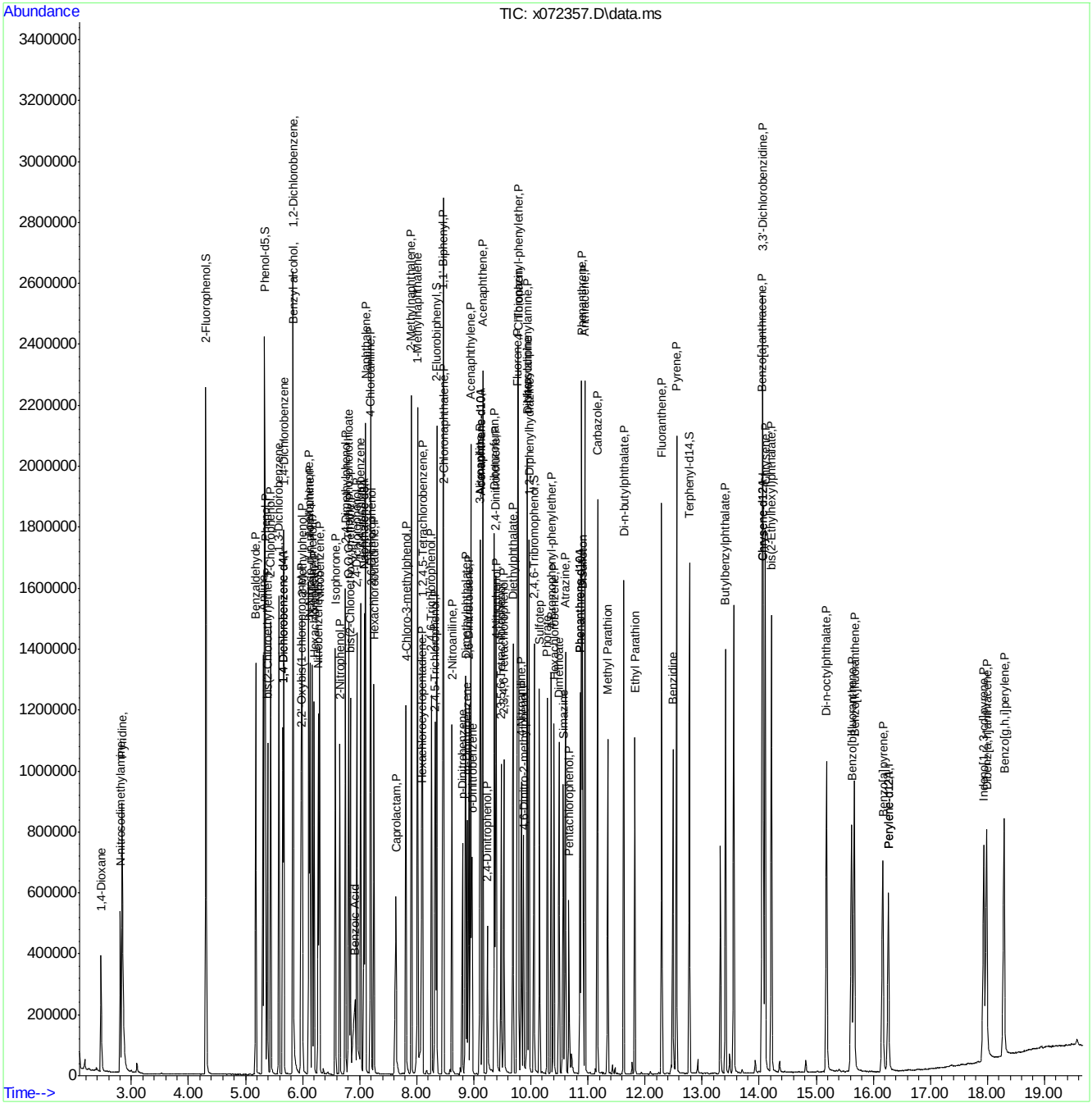
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
82) Atrazine	10.607	200	157747	52.26	ppm	87
83) Pentachlorophenol	10.666	266	58786	37.70	ppm	97
84) Phenanthrene	10.891	178	812429	52.00	ppm	99
85) Anthracene	10.950	178	863778	53.05	ppm	99
86) Disulfoton	10.907	88	276711m	44.31	ppm	
87) Carbazole	11.169	167	758862	52.82	ppm	98
88) Methyl Parathion	11.351	109	192066	53.79	ppm	89
89) Di-n-butylphthalate	11.629	149	875439	54.59	ppm	98
90) Ethyl Parathion	11.821	97	112854	53.98	ppm	89
91) Fluoranthene	12.292	202	778551	53.71	ppm	99
93) Benzidine	12.490	184	403212	51.40	ppm	96
94) Pyrene	12.554	202	829934	49.94	ppm	99
97) Butylbenzylphthalate	13.410	149	361195	51.96	ppm	89
98) 3,3'-Dichlorobenzidine	14.062	252	233526	54.72	ppm	97
99) Benzo[a]anthracene	14.057	228	653024	51.91	ppm	99
100) Chrysene	14.111	228	698491	52.14	ppm	98
101) bis(2-Ethylhexyl)phtha...	14.218	149	513106	53.89	ppm	97
103) Di-n-octylphthalate	15.180	149	761823	61.31	ppm	93
104) Benzo[b]fluoranthene	15.624	252	510521	57.61	ppm	96
105) Benzo[k]fluoranthene	15.672	252	555619	53.29	ppm	97
106) Benzo[a]pyrene	16.170	252	461880	54.63	ppm	97
107) Indeno[1,2,3-cd]pyrene	17.935	276	418817	66.55	ppm	88
108) Dibenz[a,h]anthracene	17.988	278	464950	64.70	ppm	92
109) Benzo[g,h,i]perylene	18.299	276	451918	54.62	ppm	90

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072357.D
Acq On : 12 Aug 2020 10:24 am
Operator : marthav
Sample : cc2918-50 8270 Inst : MSBNA05
Misc : op81484,sx2951,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 12 14:04:41 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Aug 12 14:02:37 2020
Response via : Initial Calibration



Manual Integration Approval Summary

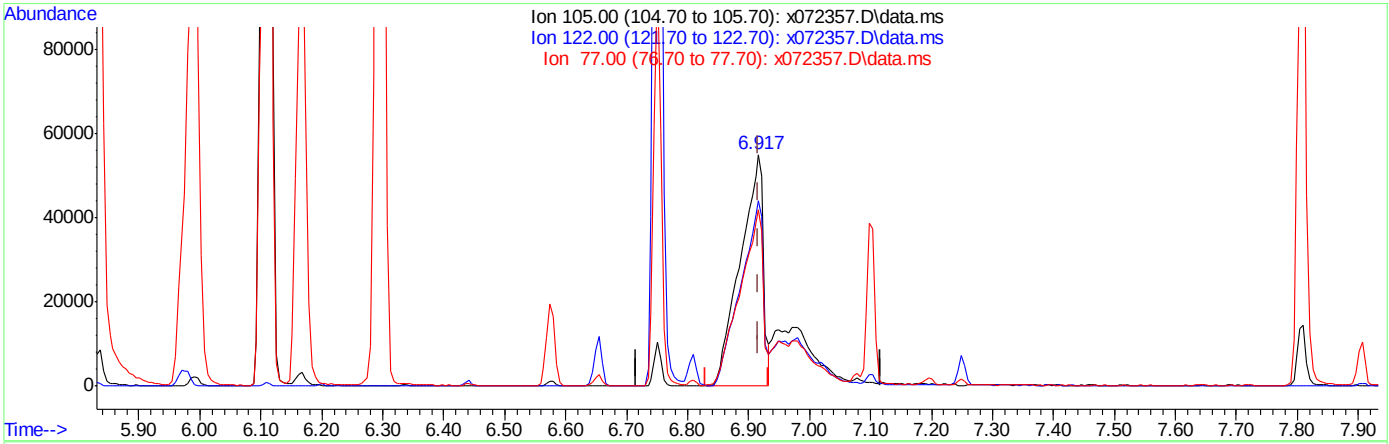
Sample Number:	SX2951-CC2918	**Method:**	SW846 8270D
Lab FileID:	X072357.D	**Analyst approved:**	08/12/20 15:54 Martha Valls
Injection Time:	08/12/20 10:24	**Supervisor approved:**	08/12/20 16:38 Naresh Jiawan

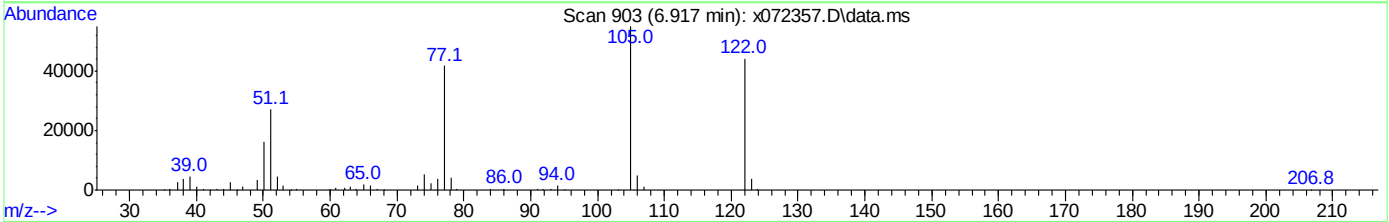
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic Acid	65-85-0		6.92	Split peak
Disulfoton	298-04-4		10.91	Split peak

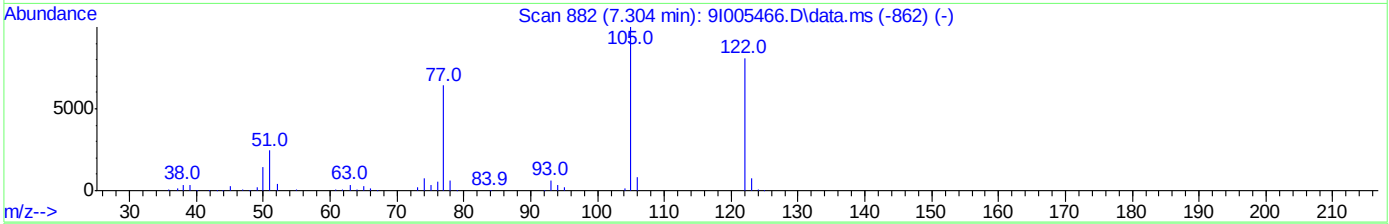
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072357.D
Acq On : 12 Aug 2020 10:24 am
Operator : marthav
Sample : cc2918-50 8270 Inst : MSBNA05
Misc : op81484,sx2951,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 12 14:03:15 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Aug 12 14:02:37 2020
Response via : Initial Calibration







TIC: x072357.D\data.ms

(30) Benzoic Acid

6.917min (0.000) 32.55ppm

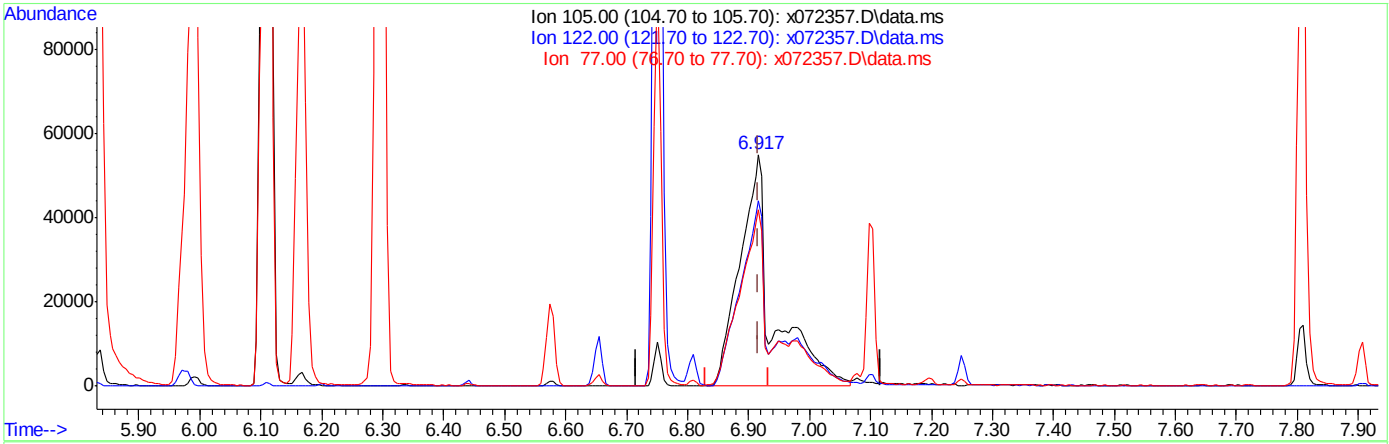
response 145700

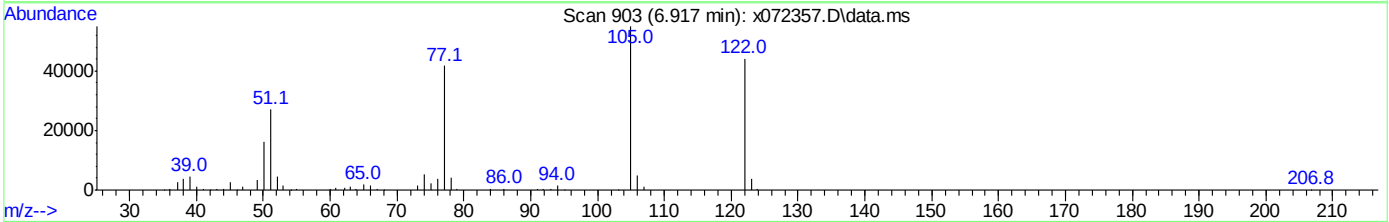
Ion	Exp%	Act%
105.00	100	100
122.00	81.20	80.80
77.00	64.10	75.55
0.00	0.00	0.00

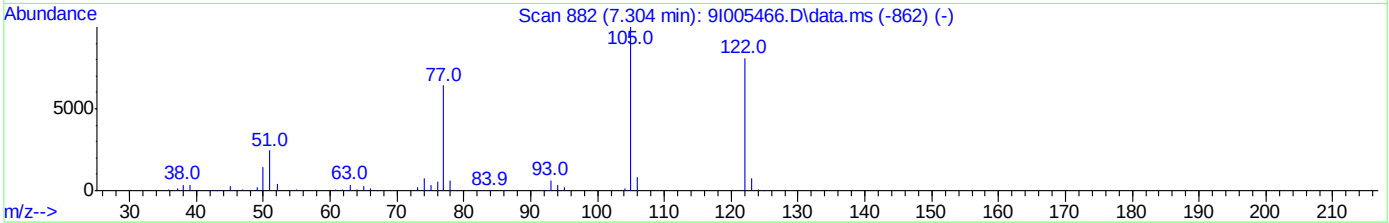
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072357.D
Acq On : 12 Aug 2020 10:24 am
Operator : marthav
Sample : cc2918-50 8270 Inst : MSBNA05
Misc : op81484,sx2951,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 12 14:03:15 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Aug 12 14:02:37 2020
Response via : Initial Calibration







TIC: x072357.D\data.ms

(30) Benzoic Acid

6.917min (0.000) 44.77ppm m

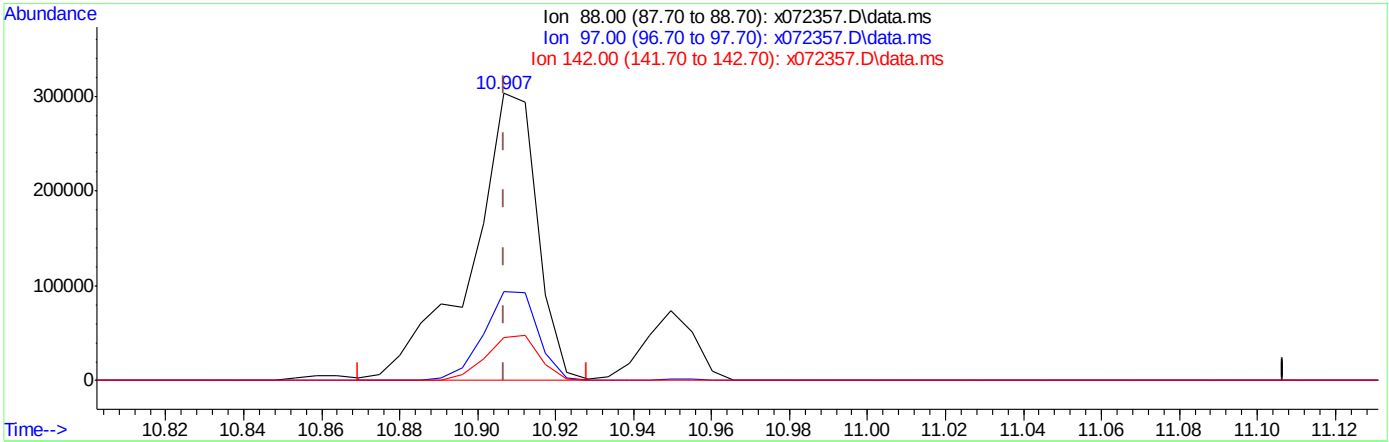
response 210919

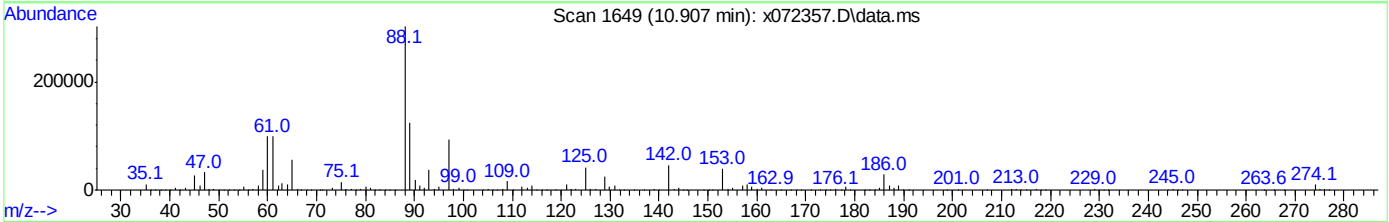
Ion	Exp%	Act%
105.00	100	100
122.00	81.20	80.22
77.00	64.10	75.96
0.00	0.00	0.00

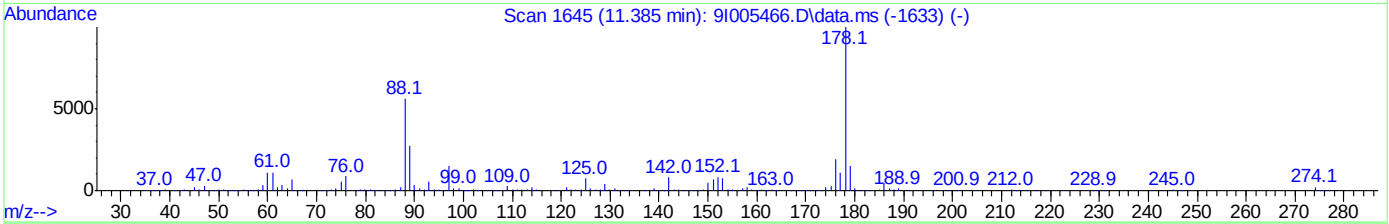
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072357.D
Acq On : 12 Aug 2020 10:24 am
Operator : marthav
Sample : cc2918-50 8270 Inst : MSBNA05
Misc : op81484,sx2951,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 12 14:03:15 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Aug 12 14:02:37 2020
Response via : Initial Calibration







TIC: x072357.D\data.ms

(86) Disulfoton

10.907min (0.000) 57.27ppm

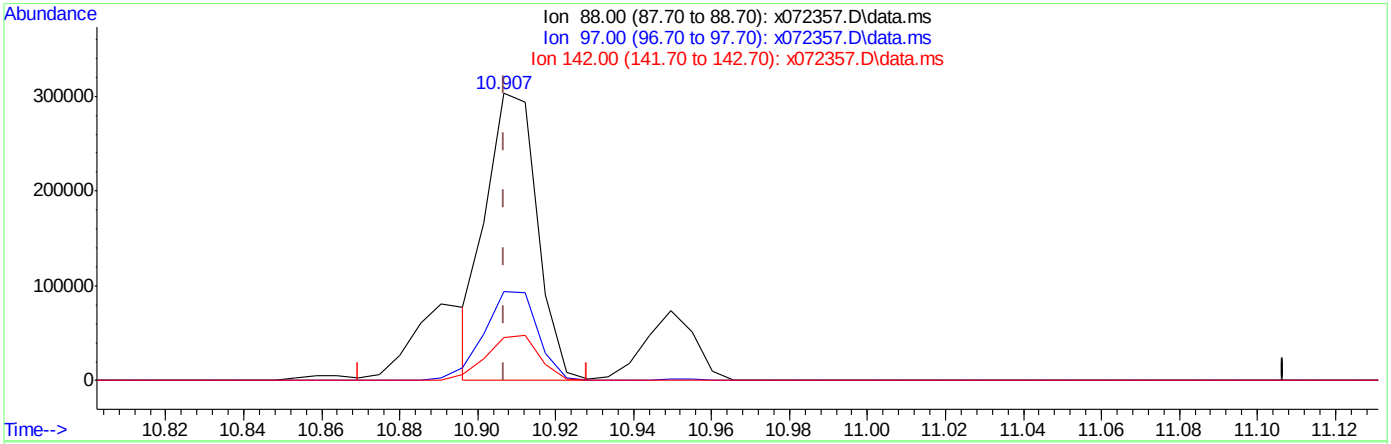
response 357632

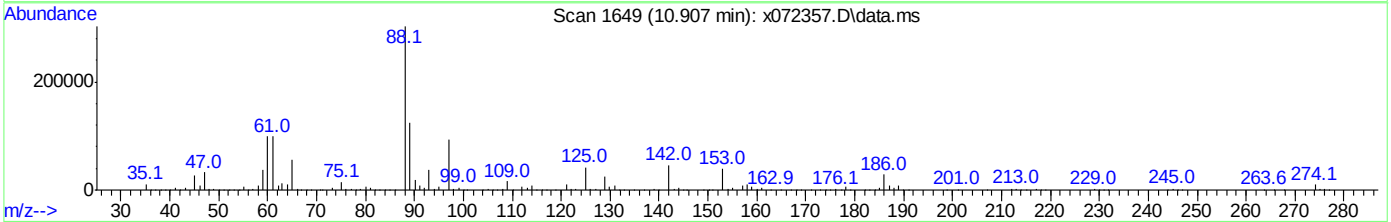
Ion	Exp%	Act%
88.00	100	100
97.00	26.50	31.01
142.00	14.20	15.14
0.00	0.00	0.00

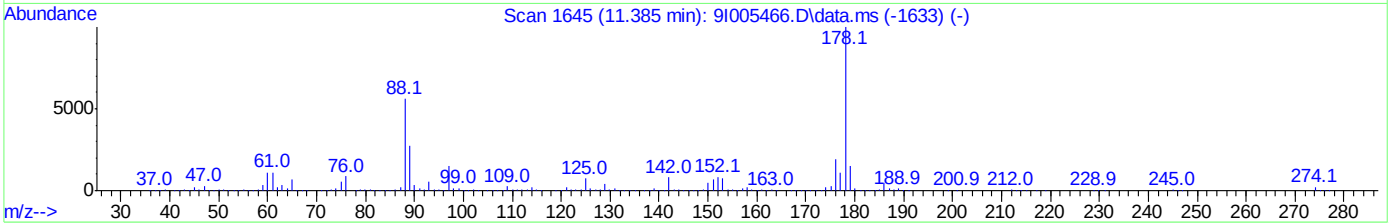
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072357.D
Acq On : 12 Aug 2020 10:24 am
Operator : marthav
Sample : cc2918-50 8270 Inst : MSBNA05
Misc : op81484,sx2951,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 12 14:03:15 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Aug 12 14:02:37 2020
Response via : Initial Calibration







TIC: x072357.D\data.ms

(86) Disulfoton

10.907min (0.000) 44.31ppm m

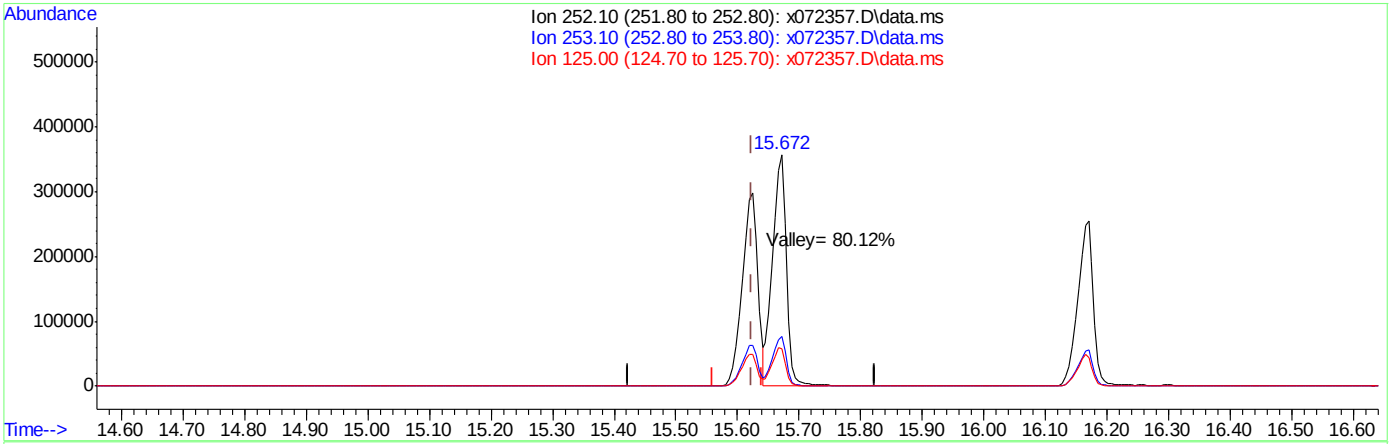
response 276711

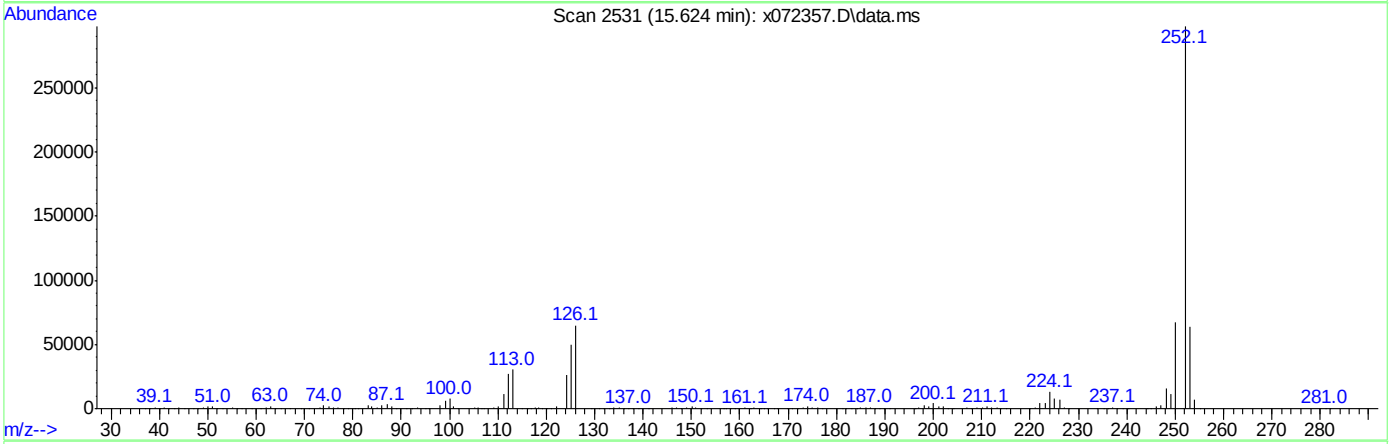
Ion	Exp%	Act%
88.00	100	100
97.00	26.50	30.86
142.00	14.20	15.17
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072357.D
Acq On : 12 Aug 2020 10:24 am
Operator : marthav
Sample : cc2918-50 8270 Inst : MSBNA05
Misc : op81484,sx2951,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 12 14:04:41 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Aug 12 14:02:37 2020
Response via : Initial Calibration





TIC: x072357.D\data.ms

(104) Benzo[b]fluoranthene (P)

15.624min (0.000) 57.61ppm

response 510521

Ion	Exp%	Act%
252.10	100	100
253.10	22.50	21.21
125.00	14.00	16.63
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072358.D
Acq On : 12 Aug 2020 10:49 am
Operator : marthav
Sample : cc2918-5 8270 Inst : MSBNA05
Misc : op81484,sx2951,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 12 14:05:17 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.649	152	167506	40.00	ppm	0.00
22) Naphthalene-d8	7.077	136	643671	40.00	ppm	0.00
43) Acenaphthene-d10	9.115	164	325538	40.00	ppm	0.00
70) Phenanthrene-d10	10.858	188	548983	40.00	ppm	0.00
92) Chrysene-d12	14.062	240	412046	40.00	ppm	-0.01
102) Perylene-d12	16.261	264	349424	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	5.649	152	167506	40.00	ppm	0.00
120) Naphthalene-d8A	7.077	136	643671	40.00	ppm	0.00
127) Acenaphthene-d10A	9.115	164	325538	40.00	ppm	0.00
136) Phenanthrene-d10A	10.858	188	548983	40.00	ppm	0.00
146) Chrysene-d12A	14.062	240	412046	40.00	ppm	-0.01
153) Perylene-d12A	16.261	264	349424	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	4.306	112	62578	10.42	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 10.42%#			
9) Phenol-d5	5.328	99	69489	9.72	ppm	0.00
Spiked Amount 100.000	Range 10 - 50		Recovery = 9.72%#			
23) Nitrobenzene-d5	6.269	82	33686	5.07	ppm	0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 10.14%#			
47) 2-Fluorobiphenyl	8.345	172	57380	4.87	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 9.74%#			
75) 2,4,6-Tribromophenol	10.046	330	9980	9.79	ppm	-0.01
Spiked Amount 100.000	Range 33 - 118		Recovery = 9.79%#			
95) Terphenyl-d14	12.773	244	50807	4.64	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 9.28%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.477	88	13647	4.75	ppm	# 43
3) N-nitrosodimethylamine	2.814	42	22247	4.36	ppm	# 41
4) Pyridine	2.857	79	37488	5.37	ppm	# 33
5) Benzaldehyde	5.178	106	24741	4.95	ppm	94
6) Aniline	5.301	93	43426	4.36	ppm	87
8) bis(2-Chloroethyl)ether	5.381	93	28448	4.63	ppm	74
10) Phenol	5.344	94	37222	4.39	ppm	96
11) 2-Chlorophenol	5.440	128	29998	4.68	ppm	85
12) 1,3-Dichlorobenzene	5.585	146	32329	4.86	ppm	94
13) 1,4-Dichlorobenzene	5.670	146	33973	4.82	ppm	99
14) 1,2-Dichlorobenzene	5.831	146	31879	4.76	ppm	97
15) Benzyl alcohol	5.825	108	19098	4.31	ppm	86
16) 2,2'-Oxybis(1-chloropr...	5.970	45	55985	4.33	ppm	77
17) 2-Methylphenol	5.981	108	27552	4.52	ppm	90
18) Acetophenone	6.104	105	40603	4.50	ppm	96
19) Hexachloroethane	6.200	117	12738	4.82	ppm	96
20) N-Nitroso-di-n-propyla...	6.114	70	21070	4.42	ppm	# 60
21) 3&4-Methylphenol	6.162	108	28557	4.53	ppm	97
24) Nitrobenzene	6.285	77	33521	5.10	ppm	82
25) Isophorone	6.564	82	54665	4.66	ppm	95
26) 2-Nitrophenol	6.649	139	15591	4.99	ppm	76

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072358.D
Acq On : 12 Aug 2020 10:49 am
Operator : marthav
Sample : cc2918-5 8270 Inst : MSBNA05
Misc : op81484,sx2951,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 12 14:05:17 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
27) 2,4-Dimethylphenol	6.745	107	26534	4.57	ppm		94
28) O,O,O-Triethylphosphor...	6.804	198	11584	4.70	ppm		88
29) bis(2-Chloroethoxy)met...	6.831	93	32309	4.70	ppm		95
30) Benzoic Acid	6.858	105	14049	3.54	ppm		93
31) 2,4-Dichlorophenol	6.949	162	22597	4.83	ppm		97
32) 1,2,4-Trichlorobenzene	7.013	180	23693	4.95	ppm		97
34) Naphthalene	7.098	128	86837	4.98	ppm		98
35) 4-Chloroaniline	7.184	127	34989	4.75	ppm		89
36) 2,6-Dichlorophenol	7.189	162	23116	4.84	ppm		97
37) Hexachlorobutadiene	7.248	225	12502	5.30	ppm		97
38) Caprolactam	7.569	113	8954	4.61	ppm	#	45
39) 4-Chloro-3-methylphenol	7.799	107	23363	4.68	ppm		95
40) 2-Methylnaphthalene	7.901	142	55695	4.83	ppm		99
41) 1-Methylnaphthalene	8.013	142	52311	4.73	ppm		98
42) 1,2,4,5-Tetrachloroben...	8.099	216	22437	4.67	ppm		97
44) Hexachlorocyclopentadiene	8.083	237	2943	1.35	ppm		93
45) 2,4,6-Trichlorophenol	8.254	196	14434	4.83	ppm		94
46) 2,4,5-Trichlorophenol	8.313	196	15051	4.59	ppm		95
48) 1,1'-Biphenyl	8.452	154	64132	4.82	ppm		98
49) 2-Chloronaphthalene	8.462	162	47928	4.80	ppm		95
50) 2-Nitroaniline	8.607	65	17823	4.85	ppm	#	63
51) p-Dinitrobenzene	8.789	75	9240	4.49	ppm	#	65
52) Acenaphthylene	8.944	152	73929	4.55	ppm		98
53) Dimethylphthalate	8.842	163	52583	4.58	ppm		99
54) m-Dinitrobenzene	8.874	168	8711	4.55	ppm	#	59
55) 2,6-Dinitrotoluene	8.906	165	12466	4.60	ppm		82
56) o-Dinitrobenzene	8.954	50	12647	4.87	ppm	#	47
57) Acenaphthene	9.147	153	51818	4.79	ppm		99
58) 3-Nitroaniline	9.093	138	14412	4.83	ppm		89
59) 2,4-Dinitrophenol	9.238	184	1511	1.45	ppm	#	82
60) Dibenzofuran	9.356	168	67274	4.66	ppm		95
61) 2,4-Dinitrotoluene	9.377	165	16202	4.69	ppm		93
62) 4-Nitrophenol	9.393	109	5395	3.24	ppm	#	73
63) 2,3,5,6-Tetrachlorophenol	9.473	232	9364	3.87	ppm		87
64) 2,3,4,6-Tetrachlorophenol	9.527	232	10771	4.26	ppm		91
65) Fluorene	9.757	166	53357	4.74	ppm		98
66) 4-Chlorophenyl-phenyle...	9.778	204	24483	4.50	ppm		88
67) Diethylphthalate	9.676	149	51647	4.50	ppm		96
68) Thionazin	9.767	97	12000	4.93	ppm		99
69) 4-Nitroaniline	9.810	138	14417	4.35	ppm		86
71) 4,6-Dinitro-2-methylph...	9.858	198	5341	3.32	ppm	#	61
72) n-Nitrosodiphenylamine	9.928	169	45910	5.38	ppm		97
73) Diphenylamine	9.928	169	45910	4.59	ppm		97
74) 1,2-Diphenylhydrazine	9.965	77	54857	4.46	ppm		93
76) Sulfotep	10.147	97	8375	4.63	ppm	#	61
77) Phorate	10.281	75	30633	4.83	ppm		93
78) 4-Bromophenyl-phenylether	10.350	248	11948	4.53	ppm	#	82
79) Hexachlorobenzene	10.399	284	11860	4.51	ppm		73
80) Dimethoate	10.479	87	20383	4.76	ppm		95
81) Simazine	10.548	201	7999	4.13	ppm		96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072358.D
Acq On : 12 Aug 2020 10:49 am
Operator : marthav
Sample : cc2918-5 8270 Inst : MSBNA05
Misc : op81484,sx2951,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 12 14:05:17 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration

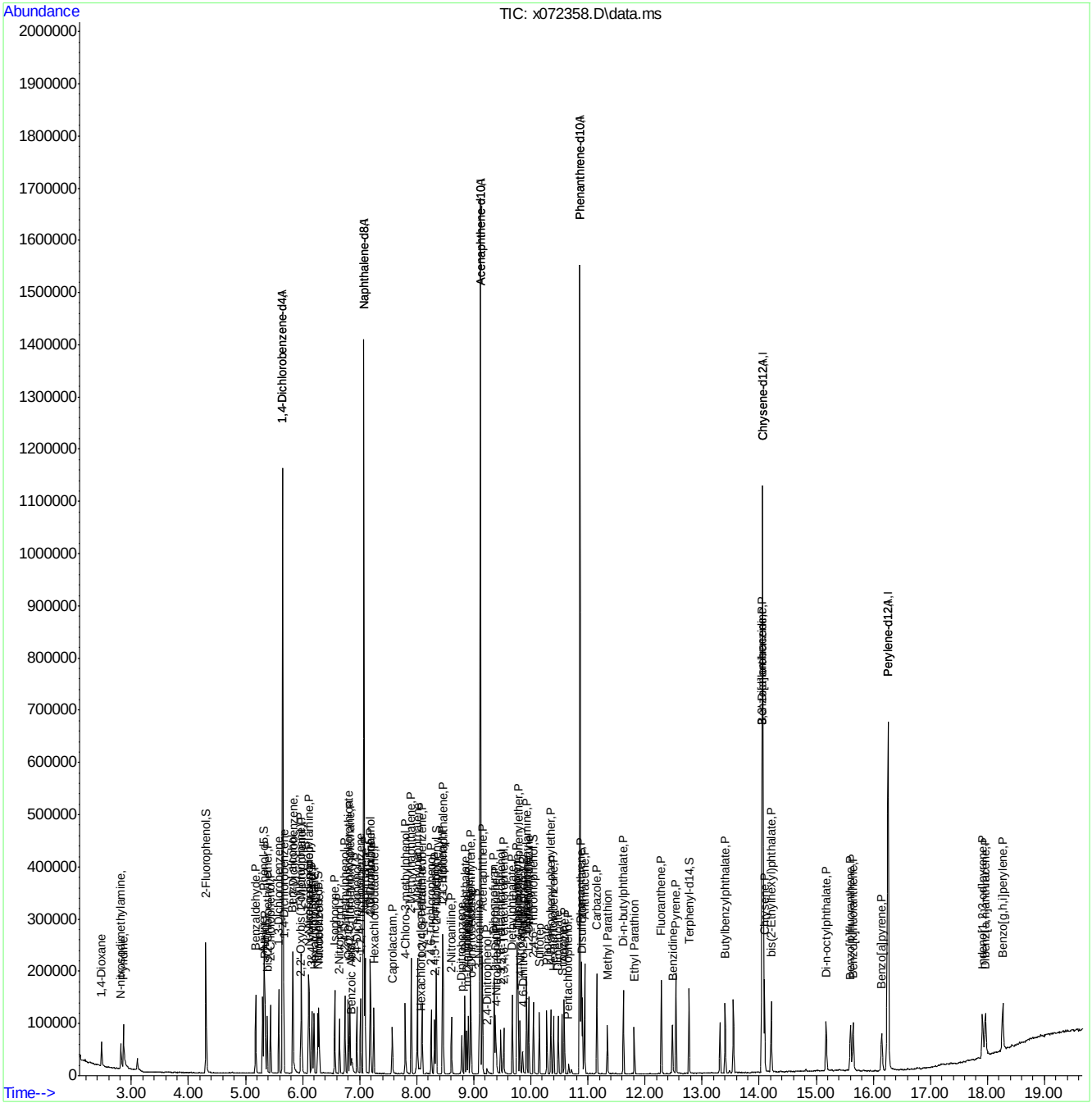
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
82) Atrazine	10.591	200	13611	4.25	ppm		87
83) Pentachlorophenol	10.661	266	2112	1.49	ppm		91
84) Phenanthrene	10.885	178	76795	4.63	ppm		98
85) Anthracene	10.944	178	79388	4.59	ppm		97
86) Disulfoton	10.901	88	32475	4.90	ppm		94
87) Carbazole	11.158	167	70398	4.61	ppm		98
88) Methyl Parathion	11.340	109	16804	4.58	ppm	#	83
89) Di-n-butylphthalate	11.623	149	80870	4.75	ppm		99
90) Ethyl Parathion	11.811	97	9517	4.75	ppm		85
91) Fluoranthene	12.287	202	72748	4.73	ppm		98
93) Benzidine	12.484	184	39546	5.38	ppm		96
94) Pyrene	12.543	202	74545	4.36	ppm		98
97) Butylbenzylphthalate	13.404	149	33390	5.03	ppm		93
98) 3,3'-Dichlorobenzidine	14.052	252	20901	5.38	ppm		93
99) Benzo[a]anthracene	14.052	228	60020	4.63	ppm		98
100) Chrysene	14.094	228	62727	4.55	ppm		98
101) bis(2-Ethylhexyl)phtha...	14.212	149	43601	5.00	ppm		97
103) Di-n-octylphthalate	15.169	149	68079	6.08	ppm		92
104) Benzo[b]fluoranthene	15.603	252	48644	5.17	ppm		97
105) Benzo[k]fluoranthene	15.646	252	51049	4.12	ppm		95
106) Benzo[a]pyrene	16.148	252	44652	4.98	ppm		96
107) Indeno[1,2,3-cd]pyrene	17.913	276	43843	8.43	ppm		89
108) Dibenz[a,h]anthracene	17.967	278	45145	7.83	ppm		91
109) Benzo[g,h,i]perylene	18.272	276	49002	6.06	ppm		86

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072358.D
Acq On : 12 Aug 2020 10:49 am
Operator : marthav
Sample : cc2918-5 8270 Inst : MSBNA05
Misc : op81484,sx2951,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 12 14:05:17 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration



DATE	7/21/2020	**METHODS**	8270D Simpah	**IC/ICC STD LOT**	**s6349**
COLUMN TYPE	ZB5-MS	**ACQ. METHOD**	FASTPAH	**ICV STD LOT**	**E6624**
AMOUNT INJ	1ul	**PROC. METHOD**	SIMPAHF7GD072120.M	**DFTPP**	**s6313**
INSTRUMENT	MSBNA-S7G	**CALIB. DATE**	7/21/2020	**EM VOLTAGE**	**ev1376**
ANALYST	fouads	**RUN BATCH**	S7G472	**ISTD LOT**	**s6358**

DATA FILE	ALS	SAMPLE NAME	METHOD	DF	MISC. INFO	COMMENTS
7G10821	1	dftpp	DFTPP	1	op80679,S7G472,1000,,,1,1,water	
7G10822	1	dftpp	DFTPP	1	op80679,S7G472,1000,,,1,1,water	tune passed, response(148973)
7G10823	2	cc470-4	FASTPAH	100/400	op80679,S7G472,1000,,,1,1,water	failed
7G10824	3	ic472-1	FASTPAH	na	op80679,S7G472,1000,,,1,1,water	
7G10825	4	ic472-2	FASTPAH	na	op80679,S7G472,1000,,,1,1,water	
7G10826	5	ic472-3	FASTPAH	na	op80679,S7G472,1000,,,1,1,water	
7G10827	6	icc472-4	FASTPAH	na	op80679,S7G472,1000,,,1,1,water	na
7G10828	7	ic472-5	FASTPAH	na	op80679,S7G472,1000,,,1,1,water	
7G10829	8	ic472-6	FASTPAH	na	op80679,S7G472,1000,,,1,1,water	
7G10830	9	ic472-7	FASTPAH	na	op80679,S7G472,1000,,,1,1,water	
7G10831	10	ic472-4	FASTPAH	na	op80679,S7G472,1000,,,1,1,water	
7G10832	2	cc472-1	FASTPAH	na	op80679,S7G472,1000,,,1,1,water	na
7G10833	3	ic472-1	FASTPAH	5+495	op80679,S7G472,1000,,,1,1,water	
7G10834	4	ic472-2	FASTPAH	20+380	op80679,S7G472,1000,,,1,1,water	
7G10835	5	ic472-3	FASTPAH	50+350	op80679,S7G472,1000,,,1,1,water	
7G10836	6	icc472-4	FASTPAH	100+300	op80679,S7G472,1000,,,1,1,water	curve passed
7G10837	7	ic472-5	FASTPAH	150+250	op80679,S7G472,1000,,,1,1,water	
7G10838	8	ic472-6	FASTPAH	200+200	op80679,S7G472,1000,,,1,1,water	
7G10839	9	ic472-7	FASTPAH	1X	op80679,S7G472,1000,,,1,1,water	
7G10840	10	icV472-4	FASTPAH	2X SPK	op80679,S7G472,1000,,,1,1,water	passed dibenzo high,carbz low ,pcp less30%
7G10841	1	dftpp	DFTPP	1	op80679,S7G472,1000,,,1,1,water	tune passed
7G10842	2	cc472-4	FASTPAH	100+300	op81126-,s7G472,1000,,,1,1,water	ccv passed
7G10843	3	op71120-mb	FASTPAH	1	op81120,s7G472,1000,,,1,1,water	nd
7G10844	4	op71120-bs	FASTPAH	1	op81120,s7G472,1000,,,1,1,water	8270 spk used rr@1x
7G10845	5	op71126-mb	FASTPAH	1	op81126,s7G472,15.0,,,1,1,soil	nd
7G10846	6	op71126-bs	FASTPAH	1	op81126,s7G472,15.0,,,1,1,soil	ok
7G10847	7	fa76888-1	FASTPAH	1	op81120,s7G472,1050,,,1,1,water	nd
7G10848	8	fa76888-2	FASTPAH	1	op81120,s7G472,1050,,,1,1,water	nd
7G10849	9	fa76888-3	FASTPAH	1	op81120,s7G472,1050,,,1,1,water	nd
7G10850	10	fa76888-4	FASTPAH	1	op81120,s7G472,1050,,,1,1,water	nd
7G10851	11	fa76888-5	FASTPAH	1	op81120,s7G472,1050,,,1,1,water	nd
7G10852	12	fa76888-6	FASTPAH	1	op81120,s7G472,1050,,,1,1,water	nd
7G10853	13	op81120-ms	FASTPAH	1	op81120,s7G472,520,,,1,1,water	ok
7G10854	14	op81120-msd	FASTPAH	1	op81120,s7G472,520,,,1,1,water	ok
7G10855	15	fa76853-2	FASTPAH	1	op81126,s7G472,15.0,,,1,1,soil	ok
7G10856	16	fa76854-2	FASTPAH	1	op81126,s7G472,15.0,,,1,1,soil	ok
7G10857	17	fa76825-1a,5	FASTPAH	5	op81126,s7G472,15.3,,,1,5,soil	ok,dl req matrix viscous
7G10858	18	fa76878-1	FASTPAH	1	op81126,s7G472,15.1,,,1,1,soil	ok
7G10859	19	op81126-ms	FASTPAH	1	op81126,s7G472,15.2,,,1,1,soil	ok
7G10860	20	op81126-msd	FASTPAH	1	op81126,s7G472,14.9,,,1,1,soil	ok
7G10861	21	fa76878-2	FASTPAH	1	op81126,s7G472,14.9,,,1,1,soil	ok
7G10862	22	fa76878-3	FASTPAH	1	op81126,s7G472,15.2,,,1,1,soil	ok
7G10863	23	fa76886-1,5	FASTPAH	5	op81126,s7G472,15.2,,,1,1,soil	ok,dl req matrix viscous
7G10864	24	fa76886-2,5	FASTPAH	5	op81126,s7G472,15.0,,,2,5,soil	ok,dl req matrix viscous
7G10865	25	fa76886-3,5	FASTPAH	5	op81126,s7G472,15.4,,,1,5,soil	ok,dl req matrix viscous
7G10866	26	fa76886-4,5	FASTPAH	5	op81126,s7G472,15.1,,,1,5,soil	surrg low rr@5x
7G10867	27	fa76886-5,5	FASTPAH	5	op81126,s7G472,15.2,,,1,5,soil	ok.dl req matrix viscous
7G10868	28	fa76886-6	FASTPAH	1	op81126,s7G472,15.3,,,1,1,soil	ok
7G10869	3	blk	FASTPAH	1	op81126,s7G472,15.3,,,1,1,soil	na

DATE	8/10/2020	**METHODS**	8270D Simpah	**IC/ICC STD LOT**	**s6420**
COLUMN TYPE	ZB5-MS	**ACQ. METHOD**	FASTPAH	**ICV STD LOT**	**E6750**
AMOUNT INJ	1ul	**PROC. METHOD**	SIMPAHF7GD0072120.M	**DFTPP**	**s6313**
INSTRUMENT	MSBNA-S7G	**CALIB. DATE**	7/21/2020	**EM VOLTAGE**	**ev1376**
ANALYST	nj	**RUN BATCH**	S7G482	**ISTD LOT**	**s6415**

DATA FILE	ALS	SAMPLE NAME	METHOD	DF	MISC. INFO	COMMENTS
7G11098	1	dftpp	DFTPP	1	op81342,S7G482,1000,,,1,1,water	
7G11099	1	DFTPP	DFTPP	1	op81342,S7G482,1000,,,1,1,water	Pass (Response: 59533)
7G11100	2	CC472-4	8270	100/400	op81342,S7G482,1000,,,1,1,water	Ok
7G11101	3	op81483-mb e	8270	1	op81483,S7G482,15.0,,,1,1,soil	ND
7G11102	4	op81483-bs e	8270	1	op81483,S7G482,15.0,,,1,1,soil	Ok
7G11103	5	fa77576-1 e,5	8270	5	op81483,S7G482,15.0,,,1,5,soil	#24(MP) dl req matrix viscous
7G11104	6	fa77576-2 e	8270	1	op81483,S7G482,15.4,,,1,1,soil	#24(MP) ND
7G11105	7	fa77576-3 e	8270	1	op81483,S7G482,15.2,,,1,1,soil	#24(MP) ND
7G11106	8	fa77576-4 e	8270	1	op81483,S7G482,15.5,,,1,1,soil	#24(MP) ND
7G11107	9	fa77576-5 e,5	8270	5	op81483,S7G482,15.3,,,1,5,soil	#24(MP) ND,dl req matrix viscous
7G11108	10	fa77576-6 e	8270	1	op81483,S7G482,15.5,,,1,1,soil	#24(MP) ND
7G11109	11	fa77576-7 e	8270	1	op81483,S7G482,15.5,,,1,1,soil	#24(MP) ND
7G11110	12	fa77576-8 e,5	8270	5	op81483,S7G482,15.3,,,1,5,soil	#24(MP) ,dl req matrix viscous
7G11111	13	fa77576-9 e	8270	1	op81483,S7G482,15.2,,,1,1,soil	#24(MP) ND
7G11112	14	fa77576-10 e	8270	1	op81483,S7G482,15.1,,,1,1,soil	#24(MP) ND
7G11113	15	fa77576-11 e	8270	1	op81483,S7G482,14.9,,,1,1,soil	#24(MP) ND
7G11114	16	fa77576-12 e	8270	1	op81483,S7G482,15.5,,,1,1,soil	#24(MP) ND
7G11115	17	fa77576-13 e	8270	1	op81483,S7G482,15.3,,,1,1,soil	ND
7G11116	18	fa77576-14 e	8270	1	op81483,S7G482,14.9,,,1,1,soil	#24(MP) ND
7G11117	19	fa77581-1 e	8270	1	op81483,S7G482,15.2,,,1,1,soil	#24(MP) ND
7G11118	20	fa77581-2 e	8270	1	op81483,S7G482,15.4,,,1,1,soil	#24(MP) ND
7G11119	21	fa77581-3 e	8270	1	op81483,S7G482,14.9,,,1,1,soil	#24(MP) ND
7G11120	22	fa77581-4 e	8270	1	op81483,S7G482,15.3,,,1,1,soil	#24(MP) ND
7G11121	23	fa77581-5 e,5	8270	5	op81483,S7G482,15.0,,,1,5,soil	ND,dl req matrix viscous
7G11122	24	op81483-ms e,5	8270	5	op81483,S7G482,15.4,,,1,5,soil	#24(MP) Ok,dl req matrix viscous
7G11123	25	op81483-msd e,5	8270	5	op81483,S7G482,15.3,,,1,5,soil	#24(MP) Ok
7G11124	26	fa77581-6 e	8270	1	op81483,S7G482,15.0,,,1,1,soil	#24(MP) ND
7G11125	3	blk	8270	1	op81483,S7G482,15.0,,,1,1,soil	na
7G11126	2	ecc472-4	8270	100/400	op81483,S7G482,15.0,,,1,1,soil	ok for pcp=na

DATE	8/11/2020	**METHODS**	8270D Simpah	**IC/ICC STD LOT**	**s6420**
COLUMN TYPE	ZB5-MS	**ACQ. METHOD**	FASTPAH	**ICV STD LOT**	**E6750**
AMOUNT INJ	1ul	**PROC. METHOD**	SIMPAHF7GD0072120.M	**DFTPP**	**s6313**
INSTRUMENT	MSBNA-S7G	**CALIB. DATE**	7/21/2020	**EM VOLTAGE**	**ev1376**
ANALYST	fouads	**RUN BATCH**	S7G483	**ISTD LOT**	**s6415**

DATA FILE	ALS	SAMPLE NAME	METHOD	DF	MISC. INFO	COMMENTS
7G11127	1	dftpp	DFTPP	1	op81342,S7G483,1000,,,1,1,water	-
7G11128	1	DFTPP	DFTPP	1	op81342,S7G483,1000,,,1,1,water	-
7G11129	1	dftpp	DFTPP	1	op81342,S7G483,1000,,,1,1,water	Passed (Response: 89512)
7G11130	2	CC472-4	8270	1	op81342,S7G483,1000,,,1,1,water	1MNap high, #26(OP)
7G11131	3	op81485-mb e	8270	1	op81485,S7G483,15.0,,,1,1,soil	ND
7G11132	4	op81485-bs e	8270	1	op81485,S7G483,15.0,,,1,1,soil	#26(OP); Passed
7G11133	5	fa77581-7 e	8270	1	op81485,S7G483,15.3,,,1,1,soil	Ok
7G11134	6	fa77581-8 e	8270	1	op81485,S7G483,15.1,,,1,1,soil	#24(MP), Ok
7G11135	7	fa77581-9 e	8270	1	op81485,S7G483,15.3,,,1,1,soil	#24(MP), Ok
7G11136	8	fa77581-10 e	8270	1	op81485,S7G483,15.3,,,1,1,soil	#24(MP), Ok
7G11137	9	fa77615-1 e	8270	1	op81485,S7G483,15.4,,,1,1,soil	Ok
7G11138	10	fa77615-2 e	8270	1	op81485,S7G483,15.4,,,1,1,soil	#24(MP), Ok
7G11139	11	fa77615-3 e	8270	1	op81485,S7G483,15.1,,,1,1,soil	#23,24(OP),Ok
7G11140	12	fa77615-4 e	8270	1	op81485,S7G483,15.4,,,1,1,soil	Ok
7G11141	13	fa77615-5 e	8270	1	op81485,S7G483,15.2,,,1,1,soil	#24(MP), Ok
7G11142	14	fa77615-6 e	8270	1	op81485,S7G483,15.2,,,1,1,soil	#24(MP), Ok
7G11143	15	op81485-ms e	8270	1	op81485,S7G483,15.3,,,1,1,soil	#26(OP), Ok
7G11144	16	op81485-msd e	8270	1	op81485,S7G483,15.2,,,1,1,soil	#26(OP), Ok
7G11145	17	fa77615-7 e	8270	1	op81485,S7G483,15.0,,,1,1,soil	#24(MP), Ok
7G11146	18	fa77615-8 e	8270	1	op81485,S7G483,15.4,,,1,1,soil	#24(MP), Ok
7G11147	19	fa77615-9 e	8270	1	op81485,S7G483,15.2,,,1,1,soil	#24(MP), Ok
7G11148	20	fa77615-10 e	8270	1	op81485,S7G483,15.3,,,1,1,soil	#23,24(OP) #25(MP), Ok
7G11149	21	fa77615-11 e	8270	1	op81485,S7G483,15.1,,,1,1,soil	Ok
7G11150	22	fa77615-12 e	8270	1	op81485,S7G483,15.0,,,1,1,soil	#23,24(OP) #25(MP), Ok
7G11151	23	fa77615-13 e	8270	1	op81485,S7G483,15.3,,,1,1,soil	#23,24(OP)
7G11152	24	fa77616-1 e	8270	1	op81485,S7G483,15.2,,,1,1,soil	#24(MP), Ok
7G11153	25	fa77616-2 e	8270	1	op81485,S7G483,15.3,,,1,1,soil	#5,20,21(MP) #23,24(OP), Ok
7G11154	26	fa77616-3 e	8270	1	op81485,S7G483,15.0,,,1,1,soil	#24(MP), Ok
7G11155	27	fa77576-1 e	8270	1	op81483,S7G483,15.0,,,1,1,soil	#23,24(OP) #25(MP), Ok
7G11156	28	fa77576-5 e	8270	1	op81483,S7G483,15.3,,,1,1,soil	#23,24(OP) #25(MP), Ok
7G11157	29	fa77576-8 e	8270	1	op81483,S7G483,15.3,,,1,1,soil	#23,24(OP) #25(MP), Ok
7G11158	30	fa77581-5 e	8270	1	op81483,S7G483,15.0,,,1,1,soil	Ok
7G11159	31	blk	8270	1	op81483,S7G483,15.0,,,1,1,soil	-

SGS-ORLANDO **MS BNA05-X** **ANALYSIS LOG**

DATE	6/23/2020	**METHODS**	8270D	**IC/ICC STD LOT**	**S6387/S6388**
COLUMN TYPE	DB-5MS	**ACQ. METHOD**	ACQ-BNA	**ICV STD LOT**	**9821D**
AMOUNT INJ	2	**PROC. METHOD**	8270DAPP9SX-062320	**DFTPP**	**S6384**
INSTRUMENT	MS-SX	**CALIB. DATE**	6/23/2020	**EM VOLTAGE**	**1000V**
ANALYST	MV	**RUN BATCH**	SX2918	**ISTD LOT**	**1011OE**

ICV(1) 9821HD ICV(2) 9809A + 9782 + 10072D ICV(3) (OP) 9934A

DATA FILE	ALS	SAMPLE NAME	METHOD	DF	MISC. INFO	COMMENTS
x071355	1	dftpp	DFTPP	1x	op80734,sx2918,1000,,,1,1,water	Pass
x071356	2	ic2918-1 app9	8270	2/400	op80734,sx2918,1000,,,1,1,water	Curve Pass, no Kepone
x071357	3	ic2918-5	8270	10+4/400	op80734,sx2918,1000,,,1,1,water	Curve Pass, no Kepone
x071358	4	ic2918-10	8270	20+8/400	op80734,sx2918,1000,,,1,1,water	Curve Pass, no Kepone
x071359	5	ic2918-25	8270	50+20/400	op80734,sx2918,1000,,,1,1,water	Curve Pass, no Kepone
x071360	6	ic2918-50	8270	100+40/400	op80734,sx2918,1000,,,1,1,water	Curve Pass, no Kepone
x071361	7	ic2918-60	8270	120+48/400	op80734,sx2918,1000,,,1,1,water	Curve Pass, no Kepone
x071362	8	ic2918-75	8270	150+60/400	op80734,sx2918,1000,,,1,1,water	Curve Pass, no Kepone
x071363	9	ic2918-100	8270	200+80/400	op80734,sx2918,1000,,,1,1,water	Curve Pass, no Kepone
x071364	10	ic2918-1 8270	8270	2+2/400	op80734,sx2918,1000,,,1,1,water	Curve Pass
x071365	11	ic2918-5	8270	10+10/400	op80734,sx2918,1000,,,1,1,water	Curve Pass
x071366	12	ic2918-10	8270	20+20/400	op80734,sx2918,1000,,,1,1,water	Curve Pass
x071367	13	ic2918-25	8270	50+50/400	op80734,sx2918,1000,,,1,1,water	Curve Pass
x071368	14	icc2918-50	8270	100+100/400	op80734,sx2918,1000,,,1,1,water	Curve Pass
x071369	15	ic2918-60	8270	120+120/400	op80734,sx2918,1000,,,1,1,water	Curve Pass
x071370	16	ic2918-75	8270	150+150/400	op80734,sx2918,1000,,,1,1,water	Curve Pass
x071371	17	ic2918-100	8270	200+200	op80734,sx2918,1000,,,1,1,water	Curve Pass
x071372	18	icv2918-50	8270	200/400	op80734,sx2918,1000,,,1,1,water	Benzaldehyde low dod
x071373	19	icv2918-50	8270	20+20+10/400	op80734,sx2918,1000,,,1,1,water	Pyridine, 2-Nitroaniline high dod
x071374	20	icv2918-50	8270	10/400	op80734,sx2918,1000,,,1,1,water	Disulfoton low dod, Famphur fail high
x071375	21	icv2918-50	8270	10+20+100/400	op80734,sx2918,1000,,,1,1,water	Low for dod, RR for DOD
x071376	22	icv2918-50	8270	20+20+20/400	op80734,sx2918,1000,,,1,1,water	Methapyr fail high
x071377	1	dftpp	DFTPP	1x	op80734,sx2918,1000,,,1,1,water	Passed (Response: 777585)

x071378	6	cc2918-50 app9	8270	100+40/400	op80734,sx2918,1000,,,1,1,water	Pass, #122,138,147(SP) #125(PII);
x071379	14	cc2918-50 8270	8270	100+100/400	op80734,sx2918,1000,,,1,1,water	#30(SP); Passed
x071380	23	op80558-bs	8270	1x	op80558,sx2918,1000,,,1,1,water	OP compounds fail high
x071381	24	op80558-bs2	8270	1x	op80558,sx2918,1000,,,1,1,water	#122,138,147(SP) #125(PII)
x071382	25	op80558-mb	8270	1x	op80558,sx2918,1000,,,1,1,water	ND
x071383	26	fa75495-7	8270	1x	op80558,sx2918,960,,,1,1,water	**ND, surr high**
x071384	27	fa75495-8	8270	1x	op80558,sx2918,980,,,1,1,water	Ok
x071385	28	fa75495-9	8270	1x	op80558,sx2918,1000,,,1,1,water	Ok
x071386	29	fa75495-10	8270	1x	op80558,sx2918,1000,,,1,1,water	Ok
x071387	30	op80508-bs	8270	1x	op80508,sx2918,1000,,,1,1,water	Fail high
x071388	31	op80508-bs2	8270	1x	op80508,sx2918,1000,,,1,1,water	Fail high, #122,138,147(SP)
x071389	32	op80508-mb	8270	1x	op80508,sx2918,1000,,,1,1,water	ND, 2-Fluorobiphenyl high
x071390	33	fa75495-1	8270	1x	op80508,sx2918,1000,,,1,1,water	**IS,SS Fail RR@1x**
x071391	34	fa75495-2	8270	1x	op80508,sx2918,1000,,,1,1,water	**SS Fail RR@1x**
x071392	35	fa75495-3	8270	1x	op80508,sx2918,1000,,,1,1,water	**SS Fail RR@1x**
x071393	36	op80508-ms	8270	1x	op80508,sx2918,500,,,1,1,water	rr
x071394	37	op80508-msd	8270	1x	op80508,sx2918,500,,,1,1,water	rr
x071395	38	fa75495-4	8270	1x	op80508,sx2918,1000,,,1,1,water	**SS Fail RR@1x**
x071396	39	op80508-ms2	8270	1x	op80508,sx2918,500,,,1,1,water	#122,138,147(SP) #150(PII);rr
x071397	40	op80508-msd2	8270	1x	op80508,sx2918,500,,,1,1,water	#122,138,147(SP); rr
x071398	41	fa75495-5	8270	1x	op80508,sx2918,1000,,,1,1,water	**SS Fail RR@1x**
x071399	42	fa75495-6	8270	1x	op80508,sx2918,1000,,,1,1,water	**SS Fail RR@1x**
x071400	1	dftpp	DFTPP	1x	op80789,sx2918,1000,,,1,1,water	Tune fail
x071401	6	cc2918-50 app9	8270	100+40/400	op80789,sx2918,1000,,,1,1,water	Screen run
x071402	14	cc2918-50 8270	8270	100+100/400	op80789,sx2918,1000,,,1,1,water	Screen run
x071403	60	op80804-bs1	8270	1x	op80804,sx2918,30.0,,,1,1,soil	RR 1x
x071404	61	op80804-bs2	8270	1x	op80804,sx2918,30.0,,,1,1,soil	RR 1x
x071405	62	op80804-mb	8270	1x	op80804,sx2918,30.0,,,1,1,soil	RR 1x
x071406	63	fa76166-5,4	8270	100/400	op80804,sx2918,29.8,,,1,4,soil	RR 1x

x071407	64	fa76166-6,4	8270	100/400	op80804,sx2918,30.4,,,1,4,soil	RR 1x
x071408	65	fa75873-1,10	8270	50/500	op80804,sx2918,30.2,,,1,10,soil	RR 1x
x071409	66	fa75873-32,4	8270	100/400	op80804,sx2918,30.0,,,1,4,soil	RR 1x
x071410	67	fa76070-4,20	8270	25/500	op80804,sx2918,3.7,,,1,1,soil	RR 20x
x071411	68	fa76100-1	8270	1x	op80804,sx2918,3.7,,,1,1,soil	RR 1x
x071412	6	ecc2918-50 app9	8270	100+40/400	op80734,sx2918,1000,,,1,1,water	RR 1x
x071413	14	ecc2918-50 8270	8270	100+100/400	op80734,sx2918,1000,,,1,1,water	RR 1x

SGS-ORLANDO **MS BNA05-X** **ANALYSIS LOG**

DATE	8/11/2020	**METHODS**	8270D	**IC/ICC STD LOT**	**S6387/S6388**
COLUMN TYPE	DB-5MS	**ACQ. METHOD**	ACQ-BNA	**ICV STD LOT**	**9821D**
AMOUNT INJ	2	**PROC. METHOD**	8270DAPP9SX-062320	**DFTPP**	**S6384**
INSTRUMENT	MS-SX	**CALIB. DATE**	6/23/2020	**EM VOLTAGE**	**1000V**
ANALYST	MV	**RUN BATCH**	SX2950	**ISTD LOT**	**10132J**

ICV(1) 9821HD ICV(2) 9809A + 9782 + 10072D ICV(3) (OP) 9934A

DATA FILE	ALS	SAMPLE NAME	METHOD	DF	MISC. INFO	COMMENTS
x072327	100	Cond Std	8270	""""""""""	op81484,sx2950,1000,,,1,1,water	Conditioning
x072328	1	dftpp	DFTPP	1X	op81484,sx2950,1000,,,1,1,water	Pass (Response: 486964)
x072329	2	cc2918-50 8270	8270	100+100/400	op81484,sx2950,1000,,,1,1,water	#30(PII) 2,2'-Oxybis, Hccp low
x072330	3	cc2918-5 8270	8270	10+10/400	op81484,sx2950,1000,,,1,1,water	Peaks present
x072331	4	op81482-bs E	8270	1X	op81482,sx2950,30.0,,,1,1,soil	Pass
x072332	5	op81482-mb E	8270	1X	op81482,sx2950,30.0,,,1,1,soil	ND
x072333	6	fa77576-1 E	8270	1X	op81482,sx2950,30.3,,,1,1,soil	**#105(MP) ok + RR5x**
x072334	7	fa77576-2 E	8270	1X	op81482,sx2950,30.3,,,1,1,soil	Ok
x072335	8	fa77576-3 E	8270	1X	op81482,sx2950,30.2,,,1,1,soil	**ok + RR2x**
x072336	9	fa77576-4 E	8270	1X	op81482,sx2950,30.3,,,1,1,soil	**#105(MP) ok + RR5x**
x072337	10	fa77576-5 E	8270	1X	op81482,sx2950,30.1,,,1,1,soil	**matrix, RR5x**
x072338	11	fa77576-6 E	8270	1X	op81482,sx2950,30.2,,,1,1,soil	Ok
x072339	12	fa77576-7 E	8270	1X	op81482,sx2950,30.3,,,1,1,soil	**#105(MP) ok + RR5x**
x072340	13	fa77576-8 E	8270	1X	op81482,sx2950,30.0,,,1,1,soil	**RR5x**
x072341	14	fa77576-9 E	8270	1X	op81482,sx2950,30.2,,,1,1,soil	Ok
x072342	15	fa77576-10 E	8270	1X	op81482,sx2950,30.1,,,1,1,soil	OK
x072343	16	fa77576-11 E	8270	1X	op81482,sx2950,30.0,,,1,1,soil	**#105(MP) ok + RR2x**
x072344	17	fa77576-12 E	8270	1X	op81482,sx2950,30.2,,,1,1,soil	Ok
x072345	18	fa77576-13 E	8270	1X	op81482,sx2950,30.0,,,1,1,soil	Ok
x072346	19	fa77576-14 E	8270	1X	op81482,sx2950,30.3,,,1,1,soil	**RR2x**
x072347	20	fa77581-1 E	8270	1X	op81482,sx2950,30.1,,,1,1,soil	**RR2x**
x072348	21	fa77581-2 E	8270	1X	op81482,sx2950,30.0,,,1,1,soil	Ok
x072349	22	fa77581-3 E	8270	1X	op81482,sx2950,30.2,,,1,1,soil	**RR2x**

SGS-ORLANDO **MS BNA05-X** **ANALYSIS LOG**

x072350	23	fa77581-4 E	8270	1X	op81482,sx2950,30.2,,,1,1,soil	**RR2x**
x072351	24	fa77581-5 E	8270	1X	op81482,sx2950,30.2,,,1,1,soil	**RR2x**
x072352	25	op81482-ms E	8270	1X	op81482,sx2950,30.0,,,1,1,soil	Ok
x072353	26	op81482-msd E	8270	1X	op81482,sx2950,30.0,,,1,1,soil	Ok
x072354	27	fa77581-6 E	8270	1X	op81482,sx2950,30.2,,,1,1,soil	Ok

SGS-ORLANDO **MS BNA05-X** **ANALYSIS LOG**

DATE	8/12/2020	**METHODS**	8270D	**IC/ICC STD LOT**	**S6387/S6388**
COLUMN TYPE	DB-5MS	**ACQ. METHOD**	ACQ-BNA	**ICV STD LOT**	**9821D**
AMOUNT INJ	2	**PROC. METHOD**	8270DAPP9SX-062320	**DFTPP**	**S6384**
INSTRUMENT	MS-SX	**CALIB. DATE**	6/23/2020	**EM VOLTAGE**	**1000V**
ANALYST	MV	**RUN BATCH**	SX2951	**ISTD LOT**	**10132J**

ICV(1) 9821HD ICV(2) 9809A + 9782 + 10072D ICV(3) (OP) 9934A

DATA FILE	ALS	SAMPLE NAME	METHOD	DF	MISC. INFO	COMMENTS
x072355	100	Cond Std	8270	""""""""""	op81484,sx2951,1000,,,1,1,water	Conditioning
x072356	1	dftpp	DFTPP	1X	op81484,sx2951,1000,,,1,1,water	Pass (response: #30 (SP) Hccp, PCP low Di-n-octp,Indeno,Dz[a,h]anc high Peaks Present
x072357	2	cc2918-50 8270	8270	100+100/400	op81484,sx2951,1000,,,1,1,water	
x072358	3	cc2918-5 8270	8270	10+10/400	op81484,sx2951,1000,,,1,1,water	
x072359	4	fa77576-1 E,5	8270	100/500	op81482,sx2951,30.3,,,1,5,soil	ok, E combined
x072360	5	fa77576-3 E,2	8270	200/400	op81482,sx2951,30.2,,,1,2,soil	ok, E combined
x072361	6	fa77576-4 E,5	8270	100/500	op81482,sx2951,30.3,,,1,5,soil	ok, E combined
x072362	7	fa77576-5 E,5	8270	100/500	op81482,sx2951,30.1,,,1,5,soil	ok, E combined
x072363	8	fa77576-7 E,5	8270	100/500	op81482,sx2951,30.3,,,1,5,soil	wrong preparation, RR 5x
x072364	9	fa77576-8 E,5	8270	100/500	op81482,sx2951,30.0,,,1,5,soil	wrong preparation, RR 5x
x072365	10	fa77576-11 E,2	8270	200/400	op81482,sx2951,30.0,,,1,2,soil	wrong preparation, RR 2x
x072366	11	fa77576-14 E	8270	1x	op81482,sx2951,30.3,,,1,1,soil	ok, E combined
x072367	12	fa77581-1 E,2	8270	200/400	op81482,sx2951,30.1,,,1,2,soil	wrong preparation, RR 2x
x072368	29	fa77576-7 E,5	8270	100/500	op81482,sx2951,30.3,,,1,5,soil	ok, E combined
x072369	30	fa77576-8 E,5	8270	100/500	op81482,sx2951,30.0,,,1,5,soil	ok, E combined
x072370	31	fa77576-11 E,2	8270	200/400	op81482,sx2951,30.0,,,1,2,soil	rr 5X
x072371	33	fa77581-1 E,2	8270	200/400	op81482,sx2951,30.1,,,1,2,soil	ok, E combined
x072372	13	fa77581-3 E,5	8270	100/500	op81482,sx2951,30.2,,,1,5,soil	wrong preparation, RR 5x
x072373	14	fa77581-4 E,2	8270	200/400	op81482,sx2951,30.2,,,1,2,soil	ok, E combined
x072374	15	fa77581-5 E,2	8270	200/400	op81482,sx2951,30.2,,,1,2,soil	E-combine
x072375	34	fa77576-11 E,5	8270	100/500	op81482,sx2951,30.0,,,1,5,soil	E-combine #105(PII)
x072376	13	fa77581-3 E,5	8270	100/500	op81482,sx2951,30.2,,,1,5,soil	E-combine

x072377	16	fa77615-3 E,2	8270	200/400	op81484,sx2951,30.3,,,1,2,soil	E-combine
x072378	17	fa77615-10 E,5	8270	100/500	op81484,sx2951,30.3,,,1,5,soil	RR5x CCV hits #105(PII)
x072379	18	fa77615-12 E,5	8270	100/500	op81484,sx2951,30.0,,,1,5,soil	E-combine
x072380	19	fa77615-13 E	8270	200/400	op81484,sx2951,30.0,,,1,1,soil	R-ext surr↓
x072381	20	fa77612-2 E,5	8270	100/500	op81484,sx2951,30.2,,,1,5,soil	E-combine #6(MP)
x072382	21	fa77612-3 E,2	8270	200/400	op81484,sx2951,30.2,,,1,2,soil	E-combine #6(MP)
x072383	22	fa77615-11 E	8270	1X	op81484,sx2951,30.2,,,1,1,soil	OK
x072384	23	fa77384-1	8270	1X	op81455,sx2951,1000,,,1,1,water	surr↓, CFS
x072385	24	op81455-ms,5	8270	100/500	op81455,sx2951,500,,,1,5,water	RR5x Out of tune #30,62(MP)
x072386	25	op81455-ms,5	8270	100/500	op81455,sx2951,500,,,1,5,water	RR5x Out of tune #30,62(MP)

SGS - ORLANDO

SOLID SAMPLE PREP REPORT

Date/Time Started: 08/10/2020 08:30 {mm/dd/yy 24:00}

Date/Time Finished: 8/10/2020 15:20 {mm/dd/yy 24:00}

Prep Method: _____ 3550C _____ 3580A

Analytical Method: 8270

Batch No: OP81482

Ext. By: AF/JM Conc. By: EA Vialed By: AN Balance ID: NAVS

Sample ID	Bottle Number	Amount Extracted (g)	Surrogate Amount	Spike Amount	Final Volume (ml)	Comments
OP81482-MB	-	30.0	0.5		1ml	
OP81482-BS	-	30.0	0.5	0.5 + 0.5		
FA77576-1	1	30.3				
FA77576-2	1	30.3				
FA77576-3	1	30.2				
FA77576-4	1	30.3				
FA77576-5	1	30.1				
FA77576-6	1	30.2				
FA77576-7	1	30.3				
FA77576-8	1	30.0				
FA77576-9	1	30.2				
FA77576-10	1	30.1				
FA77576-11	1	30.0				
FA77576-12	1	30.2				
FA77576-13	1	30.0				
FA77576-14	1	30.3				
FA77581-1	1	30.1				
FA77581-2	1	30.0				
FA77581-3	1	30.2				
FA77581-4	1	30.2				
FA77581-5	1	30.2				
FA77581-6	1	30.2				
FA77581-5-MS	1	30.0	0.5	0.5 + 0.5		
FA77581-5-MSD	1	30.0	0.5	0.5 + 0.5		
DUP						

Comments:

Surr ID: E6743E Conc: 100/200 PPM Exp. Date: 12/30/20 Inj. By: AF Ver. By: JM

Spk ID: 101270 Conc: Varied Exp. Date: 12/31/20 Inj. By: AF Ver. By: JM

Spk ID2: E6746 Conc: 100 PPM Exp. Date: 01/01/21 Inj. By: AF Ver. By: JM

Initial Bath Temp (Therm ID): TH3.4

Observed Temp °C: 45°C

Exchange Bath/N-Evap Temp (Therm ID): —

Observed Temp °C: — Corr. Temp °C: —

CH_2Cl_2 Lot#	201444	Hexane Lot #	X	Na_2SO_4 Lot#	SS2551
CH_3CN Lot #	X	Methanol Lot #	X	Acetone Lot#	197447
Filter Paper Lot#	231019	pH Paper #	X	Reagent #	X

Copper Lot # X If Sulfur Cleaning is performed in Extractions (3660B)

Relinquished By: JM Date: 8/10/2020

Accepted By: SH Date: 8/10/20

NF 02/16

SGS ORLANDO

SOLID SAMPLE PREP REPORT

Date/Time Started: 8/10/20 10:22 (mm/dd/yy 24:00)

Date/Time Finished: 8/10/2020 14:00 (mm/dd/yy 24:00)

Prep Method: 3546 Analytical Method: SIMPCP

Microwave ID: MARS3 Program: SIMPCP

Batch#: OP81483 Balance ID: Advpro 8

Ext. By: JMAr Conc. By: EA Vialed By: AN

Sample ID	Bottle Number	Amount Extracted (g)	Surrogate Amount	Spike Amount	Final Volume (ml)	MW Pos	Comments
OP81483-MB	-	15.0	0.1		1 ML	17	
OP81483-BS	-	15.0	0.1	0.5		18	
FA77576-1	1	15.0				19	
FA77576-2	1	15.4				20	
FA77576-3	1	15.2				21	
FA77576-4	1	15.5				22	
FA77576-5	1	15.3				23	
FA77576-6	1	15.5				24	
FA77576-7	1	15.5				25	
FA77576-8	1	15.3				26	
FA77576-9	1	15.2				27	
FA77576-10	1	15.1				28	
FA77576-11	1	14.9				29	
FA77576-12	1	15.5				30	
FA77576-13	1	15.3				31	
FA77576-14	1	14.9				32	
FA77581-1	1	15.2				33	
FA77581-2	1	15.4				34	
FA77581-3	1	14.9				35	
FA77581-4	1	15.3				36	
FA77581-5	1	15.0				37	
FA77581-6	1	15.0	2			38	
FA77581-5-MS	1	15.4	0.1	0.5		39	
FA77581-5-MSD	1	15.3	0.1	0.5		40	
DUP							

Comments:

Surr ID: R66699 Conc: 100 PPM Exp. Date: 10/2020 Inj. By: JM Ver. By: AF

Spk ID: R66750 Conc: 20/10 PPM Exp. Date: 1/4/21 Inj. By: JM Ver. By: AF

Initial Bath Temp (Therm ID): _____ Exchange Bath/N-Evap Temp (Therm ID): _____

Observed Temp °C: _____ Observed Temp °C: _____ Corr. Temp °C: _____

CH2CL2 Lot#	201444	Hexane Lot #	X	Na2SO4 Lot#	SS2551
CH3CN Lot #	X	Methanol Lot #	X	Acetone Lot#	29110
Filter Paper Lot#	231019	pH Paper #	X	Reagent #	X
Copper Lot #	X	If Sulfur Cleaning is performed in Extractions (3660B)			

Relinquished By: _____ Date: 8/10/2020

Accepted By: _____ Date: 08/10/20

NF 02/16

7.8.2

7

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Percent Solids Raw Data Summary

Percent Solids Raw Data Summary

Job Number: FA77576
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: FA77576-1 **Analyzed:** 08-AUG-20 by JB **Method:** SM19 2540G
ClientID: CS-TB-07

Wet Weight (Total)	14.79	g
Tare Weight	2.54	g
Dry Weight (Total)	12.82	g
Solids, Percent	83.9	%

Sample: FA77576-2 **Analyzed:** 08-AUG-20 by JB **Method:** SM19 2540G
ClientID: CS-SS-106

Wet Weight (Total)	17.38	g
Tare Weight	2.55	g
Dry Weight (Total)	14.87	g
Solids, Percent	83.1	%

Sample: FA77576-3 **Analyzed:** 08-AUG-20 by JB **Method:** SM19 2540G
ClientID: CS-27

Wet Weight (Total)	15.75	g
Tare Weight	2.56	g
Dry Weight (Total)	14.67	g
Solids, Percent	91.8	%

Sample: FA77576-4 **Analyzed:** 08-AUG-20 by JB **Method:** SM19 2540G
ClientID: CS-35

Wet Weight (Total)	13.42	g
Tare Weight	2.52	g
Dry Weight (Total)	12.41	g
Solids, Percent	90.7	%

Sample: FA77576-5 **Analyzed:** 08-AUG-20 by JB **Method:** SM19 2540G
ClientID: CS-37

Wet Weight (Total)	18.19	g
Tare Weight	2.54	g
Dry Weight (Total)	15.14	g
Solids, Percent	80.5	%

Sample: FA77576-6 **Analyzed:** 08-AUG-20 by JB **Method:** SM19 2540G
ClientID: CS-SS-109

Wet Weight (Total)	14.88	g
Tare Weight	2.53	g
Dry Weight (Total)	12.01	g
Solids, Percent	76.8	%

Percent Solids Raw Data Summary

Job Number: FA77576
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: FA77576-7 **Analyzed:** 08-AUG-20 by JB **Method:** SM19 2540G
ClientID: DUP-02

Wet Weight (Total)	14.64	g
Tare Weight	2.53	g
Dry Weight (Total)	12.54	g
Solids, Percent	82.7	%

Sample: FA77576-8 **Analyzed:** 08-AUG-20 by JB **Method:** SM19 2540G
ClientID: CS-36

Wet Weight (Total)	16.52	g
Tare Weight	2.53	g
Dry Weight (Total)	13.6	g
Solids, Percent	79.1	%

Sample: FA77576-9 **Analyzed:** 08-AUG-20 by JB **Method:** SM19 2540G
ClientID: CS-39

Wet Weight (Total)	13.37	g
Tare Weight	2.56	g
Dry Weight (Total)	12.52	g
Solids, Percent	92.1	%

Sample: FA77576-10 **Analyzed:** 08-AUG-20 by JB **Method:** SM19 2540G
ClientID: CS-32

Wet Weight (Total)	13.12	g
Tare Weight	2.53	g
Dry Weight (Total)	11.86	g
Solids, Percent	88.1	%

Sample: FA77576-11 **Analyzed:** 08-AUG-20 by JB **Method:** SM19 2540G
ClientID: CS-28

Wet Weight (Total)	14.09	g
Tare Weight	2.54	g
Dry Weight (Total)	13.22	g
Solids, Percent	92.5	%

Sample: FA77576-12 **Analyzed:** 08-AUG-20 by JB **Method:** SM19 2540G
ClientID: CS-34

Wet Weight (Total)	13.52	g
Tare Weight	2.56	g
Dry Weight (Total)	12.74	g
Solids, Percent	92.9	%

Percent Solids Raw Data Summary

Job Number: FA77576
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: FA77576-13 **Analyzed:** 08-AUG-20 by JB **Method:** SM19 2540G
ClientID: CS-38

Wet Weight (Total)	16.41	g
Tare Weight	2.54	g
Dry Weight (Total)	14.79	g
Solids, Percent	88.3	%

Sample: FA77576-14 **Analyzed:** 08-AUG-20 by JB **Method:** SM19 2540G
ClientID: CS-33

Wet Weight (Total)	15.11	g
Tare Weight	2.56	g
Dry Weight (Total)	14.2	g
Solids, Percent	92.7	%

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report



Technical Report for

EarthCon Consultants, Inc

KMCC Navassa Site; 120 Quality Dr, Navassa, NC

02.20200007.00

SGS Job Number: FA77581

Sampling Date: 08/05/20

Report to:

EarthCon Consultants, Inc
1880 W Oak Pkwy Bldg 100, Suite 106
Marietta, GA 30062
mbrookshire@earthcon.com; bhatfield@earthcon.com

ATTN: Mary Ann Brookshire

Total number of pages in report: **1016**

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Norm Farmer
Technical Director

Client Service contact: Muna Mohammed 407-425-6700

Certifications: FL(E83510), LA(03051), KS(E-10327), IL(200063), NC(573), NJ(FL002), NY(12022), SC(96038001) DoD ELAP(ANAB L2229), AZ(AZ0806), CA(2937), TX(T104704404), PA(68-03573), VA(460177), AK, AR, IA, KY, MA, MS, ND, NH, NV, OK, OR, UT, WA, WV

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Please share your ideas about how we can serve you better at:
EHS.US.CustomerCare@sgs.com

September 1, 2020

Ms. Mary Ann Brookshire
EarthCon Consultants, Inc.
1880 West Oak Parkway
Bldg. 100, Suite 106
Marietta, GA 30062

RE: SGS North America Inc. - Orlando job FA77581 Reissue

Dear Ms. Brookshire,

The final report for job number FA77581 has been edited to reflect requested corrections. These edits have been incorporated into the revised report.

The sample ID has been revised.

SGS North America Inc. - Orlando apologies for any inconvenience this may have caused. Please feel free to contact us if we can be of further assistance.

Sincerely,

SGS North America, Inc. - Orlando

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SGS North America Inc.

Sample Summary

EarthCon Consultants, Inc

Job No: FA77581

KMCC Navassa Site; 120 Quality Dr, Navassa, NC
Project No: 02.20200007.00

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA77581-1	08/05/20	18:16	TMDF	08/07/20	SO	Soil	CS-SS-104
FA77581-2	08/05/20	17:00	TMDF	08/07/20	SO	Soil	CS-23
FA77581-3	08/05/20	17:27	TMDF	08/07/20	SO	Soil	CS-SS-101
FA77581-4	08/05/20	16:55	TMDF	08/07/20	SO	Soil	CS-22
FA77581-5	08/05/20	17:40	TMDF	08/07/20	SO	Soil	CS-24
FA77581-5D	08/05/20	17:40	TMDF	08/07/20	SO	Soil Dup/MSD	CS-24
FA77581-5S	08/05/20	17:40	TMDF	08/07/20	SO	Soil Matrix Spike	CS-24
FA77581-6	08/05/20	13:30	TMDF	08/07/20	SO	Soil	CS-RISB-02
FA77581-7	08/05/20	14:00	TMDF	08/07/20	SO	Soil	SS-108-D
FA77581-8	08/05/20	16:48	TMDF	08/07/20	SO	Soil	CS-SB-125
FA77581-9	08/05/20	18:10	TMDF	08/07/20	SO	Soil	CS-25
FA77581-10	08/05/20	17:55	TMDF	08/07/20	SO	Soil	CS-26

This report contains results reported as ND = Not detected. The following applies:
Organics ND = Not detected above the MDL

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: EarthCon Consultants, Inc **Job No:** FA77581

Site: KMCC Navassa Site; 120 Quality Dr, Navassa, NC **Report Date** 8/13/2020 11:34:35

10 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were collected on 08/05/2020 and were received at SGS North America Inc - Orlando on 08/07/2020 properly preserved, at 2.3 Deg. C and intact. These Samples received an SGS Orlando job number of FA77581. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section. Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

MS Semi-volatiles By Method SW846 8270E

Matrix: SO **Batch ID:** OP81482

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

Sample(s) FA77581-5MS, FA77581-5MSD were used as the QC samples indicated.

All method blanks for this batch meet method specific criteria.

Matrix Spike Recovery(s) for Benzo(a)anthracene, Chrysene, Fluoranthene, Pyrene are outside control limits. Probable cause is due to matrix interference.

Matrix Spike Duplicate Recovery(s) for Benzo(a)anthracene, Chrysene, Fluoranthene, Pyrene are outside control limits. Probable cause is due to matrix interference.

Matrix: SO **Batch ID:** OP81484

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA77615-6MS, FA77615-6MSD were used as the QC samples indicated.

MS Semi-volatiles By Method SW846 8270E BY SIM

Matrix: SO **Batch ID:** OP81483

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

Sample(s) FA77581-5MS, FA77581-5MSD were used as the QC samples indicated.

All method blanks for this batch meet method specific criteria.

Matrix: SO **Batch ID:** OP81485

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

Sample(s) FA77615-6MS, FA77615-6MSD were used as the QC samples indicated.

All method blanks for this batch meet method specific criteria.

General Chemistry By Method SM19 2540G

Matrix: SO **Batch ID:** GN85880

Sample(s) FA77581-5DUP were used as the QC samples for Solids, Percent.

Matrix: SO **Batch ID:** GN85881

Sample(s) FA77615-6DUP were used as the QC samples for Solids, Percent.

SGS Orlando certifies that this report meets the project requirements for analytical data produced for the samples as received at SGS Orlando and as stated on the COC. SGS Orlando certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the SGS Orlando Quality Manual except as noted above. This report is to be used in its entirety. SGS Orlando is not responsible for any assumptions of data quality if partial data packages are used.

Narrative prepared by:

_____

Ariel Hartney, Client Services *(Signature on file)*

Summary of Hits

Job Number: FA77581
Account: EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC
Collected: 08/05/20

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FA77581-1	**CS-SS-104**					
Acenaphthene		45.5 J	190	20	ug/kg	SW846 8270E
Acenaphthylene		599	190	19	ug/kg	SW846 8270E
Anthracene		1160	190	21	ug/kg	SW846 8270E
Benzo(a)anthracene		1780	190	19	ug/kg	SW846 8270E
Benzo(a)pyrene		1770	190	23	ug/kg	SW846 8270E
Benzo(b)fluoranthene		4100	380	42	ug/kg	SW846 8270E
Benzo(g,h,i)perylene		1040	190	20	ug/kg	SW846 8270E
Benzo(k)fluoranthene		1170	190	25	ug/kg	SW846 8270E
Chrysene		2450	190	19	ug/kg	SW846 8270E
Dibenzo(a,h)anthracene		455	190	24	ug/kg	SW846 8270E
Fluoranthene		2780	190	19	ug/kg	SW846 8270E
Fluorene		92.4 J	190	20	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene		1780	190	23	ug/kg	SW846 8270E
2-Methylnaphthalene		26.9 J	190	19	ug/kg	SW846 8270E
Naphthalene		29.3 J	190	19	ug/kg	SW846 8270E
Phenanthrene		288	190	19	ug/kg	SW846 8270E
Pyrene		3230	190	22	ug/kg	SW846 8270E
FA77581-2	**CS-23**					
Acenaphthene		28.8 J	180	19	ug/kg	SW846 8270E
Acenaphthylene		283	180	18	ug/kg	SW846 8270E
Anthracene		500	180	20	ug/kg	SW846 8270E
Benzo(a)anthracene		278	180	18	ug/kg	SW846 8270E
Benzo(a)pyrene		375	180	21	ug/kg	SW846 8270E
Benzo(b)fluoranthene		1160	180	20	ug/kg	SW846 8270E
Benzo(g,h,i)perylene		357	180	19	ug/kg	SW846 8270E
Benzo(k)fluoranthene		304	180	24	ug/kg	SW846 8270E
Chrysene		536	180	18	ug/kg	SW846 8270E
Dibenzo(a,h)anthracene		125 J	180	22	ug/kg	SW846 8270E
Fluoranthene		572	180	18	ug/kg	SW846 8270E
Fluorene		47.9 J	180	19	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene		642	180	22	ug/kg	SW846 8270E
Phenanthrene		53.0 J	180	18	ug/kg	SW846 8270E
Pyrene		656	180	21	ug/kg	SW846 8270E
FA77581-3	**CS-SS-101**					
Acenaphthene		65.7 J	180	19	ug/kg	SW846 8270E
Acenaphthylene		772	180	18	ug/kg	SW846 8270E
Anthracene		1910	180	20	ug/kg	SW846 8270E
Benzo(a)anthracene		2230	180	18	ug/kg	SW846 8270E
Benzo(a)pyrene		1510	180	21	ug/kg	SW846 8270E

Summary of Hits

Job Number: FA77581
Account: EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC
Collected: 08/05/20

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Benzo(b)fluoranthene		6450	900	99	ug/kg	SW846 8270E
Benzo(g,h,i)perylene		969	180	19	ug/kg	SW846 8270E
Benzo(k)fluoranthene		1230	180	24	ug/kg	SW846 8270E
Chrysene		3100	180	18	ug/kg	SW846 8270E
Dibenzo(a,h)anthracene		405	180	23	ug/kg	SW846 8270E
Fluoranthene		7470	900	90	ug/kg	SW846 8270E
Fluorene		127 J	180	19	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene		1700	180	22	ug/kg	SW846 8270E
2-Methylnaphthalene		21.6 J	180	18	ug/kg	SW846 8270E
Naphthalene		28.3 J	180	18	ug/kg	SW846 8270E
Phenanthrene		825	180	18	ug/kg	SW846 8270E
Pyrene		6120	900	100	ug/kg	SW846 8270E
FA77581-4	**CS-22**					
Acenaphthene		73.7 J	180	20	ug/kg	SW846 8270E
Acenaphthylene		1050	180	18	ug/kg	SW846 8270E
Anthracene		2800	180	21	ug/kg	SW846 8270E
Benzo(a)anthracene		1960	180	18	ug/kg	SW846 8270E
Benzo(a)pyrene		1840	180	22	ug/kg	SW846 8270E
Benzo(b)fluoranthene		5620	370	40	ug/kg	SW846 8270E
Benzo(g,h,i)perylene		1390	180	19	ug/kg	SW846 8270E
Benzo(k)fluoranthene		1310	180	24	ug/kg	SW846 8270E
Chrysene		2860	180	19	ug/kg	SW846 8270E
Dibenzo(a,h)anthracene		561	180	23	ug/kg	SW846 8270E
Fluoranthene		4880	370	37	ug/kg	SW846 8270E
Fluorene		157 J	180	20	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene		2280	180	22	ug/kg	SW846 8270E
2-Methylnaphthalene		24.7 J	180	18	ug/kg	SW846 8270E
Naphthalene		27.6 J	180	18	ug/kg	SW846 8270E
Phenanthrene		653	180	18	ug/kg	SW846 8270E
Pyrene		4190	370	42	ug/kg	SW846 8270E
FA77581-5	**CS-24**					
Acenaphthene		75.1 J	190	20	ug/kg	SW846 8270E
Acenaphthylene		872	190	19	ug/kg	SW846 8270E
Anthracene		1600	190	21	ug/kg	SW846 8270E
Benzo(a)anthracene		2060	190	19	ug/kg	SW846 8270E
Benzo(a)pyrene		1970	190	22	ug/kg	SW846 8270E
Benzo(b)fluoranthene		4530	380	41	ug/kg	SW846 8270E
Benzo(g,h,i)perylene		1180	190	19	ug/kg	SW846 8270E
Benzo(k)fluoranthene		1230	190	25	ug/kg	SW846 8270E
Chrysene		2380	190	19	ug/kg	SW846 8270E
Dibenzo(a,h)anthracene		454	190	23	ug/kg	SW846 8270E

Summary of Hits

Job Number: FA77581
Account: EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC
Collected: 08/05/20

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Fluoranthene		3000	190	19	ug/kg	SW846 8270E
Fluorene		149 J	190	20	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene		1880	190	23	ug/kg	SW846 8270E
2-Methylnaphthalene		21.6 J	190	19	ug/kg	SW846 8270E
Naphthalene		25.1 J	190	19	ug/kg	SW846 8270E
Phenanthrene		176 J	190	19	ug/kg	SW846 8270E
Pyrene		3120	190	22	ug/kg	SW846 8270E
FA77581-6	**CS-RISB-02**					
Acenaphthene		47.6 J	180	19	ug/kg	SW846 8270E
Acenaphthylene		576	180	18	ug/kg	SW846 8270E
Anthracene		1040	180	20	ug/kg	SW846 8270E
Benzo(a)anthracene		1110	180	18	ug/kg	SW846 8270E
Benzo(a)pyrene		1180	180	21	ug/kg	SW846 8270E
Benzo(b)fluoranthene		3300	180	20	ug/kg	SW846 8270E
Benzo(g,h,i)perylene		834	180	19	ug/kg	SW846 8270E
Benzo(k)fluoranthene		917	180	24	ug/kg	SW846 8270E
Chrysene		2200	180	18	ug/kg	SW846 8270E
Dibenzo(a,h)anthracene		324	180	23	ug/kg	SW846 8270E
Fluoranthene		2840	180	18	ug/kg	SW846 8270E
Fluorene		95.5 J	180	19	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene		1430	180	22	ug/kg	SW846 8270E
Phenanthrene		229	180	18	ug/kg	SW846 8270E
Pyrene		2500	180	21	ug/kg	SW846 8270E
FA77581-7	**SS-108-D**					
Acenaphthylene		66.8 J	210	21	ug/kg	SW846 8270E
Anthracene		122 J	210	23	ug/kg	SW846 8270E
Benzo(a)anthracene		190 J	210	21	ug/kg	SW846 8270E
Benzo(a)pyrene		183 J	210	24	ug/kg	SW846 8270E
Benzo(b)fluoranthene		424	210	23	ug/kg	SW846 8270E
Benzo(g,h,i)perylene		99.5 J	210	21	ug/kg	SW846 8270E
Benzo(k)fluoranthene		151 J	210	27	ug/kg	SW846 8270E
Chrysene		271	210	21	ug/kg	SW846 8270E
Fluoranthene		254	210	21	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene		132 J	210	25	ug/kg	SW846 8270E
Phenanthrene		42.8 J	210	21	ug/kg	SW846 8270E
Pyrene		364	210	24	ug/kg	SW846 8270E
FA77581-8	**CS-SB-125**					
Acenaphthylene		172 J	180	18	ug/kg	SW846 8270E
Anthracene		310	180	20	ug/kg	SW846 8270E

Summary of Hits

Job Number: FA77581
Account: EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC
Collected: 08/05/20

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Benzo(a)anthracene		546	180	18	ug/kg	SW846 8270E
Benzo(a)pyrene		497	180	21	ug/kg	SW846 8270E
Benzo(b)fluoranthene		1610	180	20	ug/kg	SW846 8270E
Benzo(g,h,i)perylene		322	180	19	ug/kg	SW846 8270E
Benzo(k)fluoranthene		504	180	24	ug/kg	SW846 8270E
Chrysene		1050	180	19	ug/kg	SW846 8270E
Dibenzo(a,h)anthracene		80.9 J	180	23	ug/kg	SW846 8270E
Fluoranthene		1570	180	18	ug/kg	SW846 8270E
Fluorene		22.3 J	180	19	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene		444	180	22	ug/kg	SW846 8270E
Phenanthrene		199	180	18	ug/kg	SW846 8270E
Pyrene		1610	180	21	ug/kg	SW846 8270E
FA77581-9	**CS-25**					
Acenaphthylene		300	190	19	ug/kg	SW846 8270E
Anthracene		596	190	21	ug/kg	SW846 8270E
Benzo(a)anthracene		832	190	19	ug/kg	SW846 8270E
Benzo(a)pyrene		1180	190	22	ug/kg	SW846 8270E
Benzo(b)fluoranthene		2840	190	20	ug/kg	SW846 8270E
Benzo(g,h,i)perylene		724	190	19	ug/kg	SW846 8270E
Benzo(k)fluoranthene		955	190	25	ug/kg	SW846 8270E
Chrysene		1490	190	19	ug/kg	SW846 8270E
Dibenzo(a,h)anthracene		211	190	23	ug/kg	SW846 8270E
Fluoranthene		1450	190	19	ug/kg	SW846 8270E
Fluorene		34.4 J	190	20	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene		1040	190	23	ug/kg	SW846 8270E
Phenanthrene		61.4 J	190	19	ug/kg	SW846 8270E
Pyrene		2230	190	22	ug/kg	SW846 8270E
FA77581-10	**CS-26**					
Acenaphthylene		161 J	180	18	ug/kg	SW846 8270E
Anthracene		352	180	20	ug/kg	SW846 8270E
Benzo(a)anthracene		545	180	18	ug/kg	SW846 8270E
Benzo(a)pyrene		453	180	21	ug/kg	SW846 8270E
Benzo(b)fluoranthene		1670	180	20	ug/kg	SW846 8270E
Benzo(g,h,i)perylene		342	180	19	ug/kg	SW846 8270E
Benzo(k)fluoranthene		549	180	23	ug/kg	SW846 8270E
Chrysene		1140	180	18	ug/kg	SW846 8270E
Dibenzo(a,h)anthracene		84.9 J	180	22	ug/kg	SW846 8270E
Fluoranthene		1790	180	18	ug/kg	SW846 8270E
Fluorene		28.1 J	180	19	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene		488	180	22	ug/kg	SW846 8270E
Phenanthrene		106 J	180	18	ug/kg	SW846 8270E

Summary of Hits

Job Number: FA77581
Account: EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC
Collected: 08/05/20

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Pyrene		2120	180	21	ug/kg	SW846 8270E

Sample Results

Report of Analysis

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-SS-104		
Lab Sample ID:	FA77581-1	**Date Sampled:**	08/05/20
Matrix:	SO - Soil	**Date Received:**	08/07/20
Method:	SW846 8270E SW846 3550C	**Percent Solids:**	86.9
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X072347.D	1	08/11/20 20:35	MV	08/10/20 08:30	OP81482	SX2950
Run #2	X072371.D	2	08/12/20 16:25	MV	08/10/20 08:30	OP81482	SX2951

	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2	30.1 g	1.0 ml

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	45.5	190	20	ug/kg	J
208-96-8	Acenaphthylene	599	190	19	ug/kg	
120-12-7	Anthracene	1160	190	21	ug/kg	
56-55-3	Benzo(a)anthracene	1780	190	19	ug/kg	
50-32-8	Benzo(a)pyrene	1770	190	23	ug/kg	
205-99-2	Benzo(b)fluoranthene	4100 [a]	380	42	ug/kg	
191-24-2	Benzo(g,h,i)perylene	1040	190	20	ug/kg	
207-08-9	Benzo(k)fluoranthene	1170	190	25	ug/kg	
218-01-9	Chrysene	2450	190	19	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	455	190	24	ug/kg	
206-44-0	Fluoranthene	2780	190	19	ug/kg	
86-73-7	Fluorene	92.4	190	20	ug/kg	J
193-39-5	Indeno(1,2,3-cd)pyrene	1780	190	23	ug/kg	
90-12-0	1-Methylnaphthalene	ND	190	19	ug/kg	
91-57-6	2-Methylnaphthalene	26.9	190	19	ug/kg	J
91-20-3	Naphthalene	29.3	190	19	ug/kg	J
85-01-8	Phenanthrene	288	190	19	ug/kg	
129-00-0	Pyrene	3230	190	22	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	75%	68%	40-105%
321-60-8	2-Fluorobiphenyl	76%	71%	43-107%
1718-51-0	Terphenyl-d14	77%	66%	45-119%

(a) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-SS-104		
Lab Sample ID:	FA77581-1	**Date Sampled:**	08/05/20
Matrix:	SO - Soil	**Date Received:**	08/07/20
Method:	SW846 8270E BY SIM SW846 3546	**Percent Solids:**	86.9
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7G11117.D	1	08/10/20 21:26	FS	08/10/20 10:22	OP81483	S7G482
Run #2							

	Initial Weight	Final Volume
Run #1	15.2 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	150	19	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
7297-45-2	2-Methylnaphthalene-d10	90%		50-150%
93951-69-0	Fluoranthene-d10	94%		50-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CS-SS-104		
Lab Sample ID:	FA77581-1	**Date Sampled:**	08/05/20
Matrix:	SO - Soil	**Date Received:**	08/07/20
		Percent Solids:	86.9
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Moisture, Percent	13.1		%	1	08/08/20 16:39	JB	SM19 2540G
Solids, Percent	86.9		%	1	08/08/20 16:39	JB	SM19 2540G

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-23		
Lab Sample ID:	FA77581-2	**Date Sampled:**	08/05/20
Matrix:	SO - Soil	**Date Received:**	08/07/20
Method:	SW846 8270E SW846 3550C	**Percent Solids:**	92.8
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X072348.D	1	08/11/20 21:01	MV	08/10/20 08:30	OP81482	SX2950
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	28.8	180	19	ug/kg	J
208-96-8	Acenaphthylene	283	180	18	ug/kg	
120-12-7	Anthracene	500	180	20	ug/kg	
56-55-3	Benzo(a)anthracene	278	180	18	ug/kg	
50-32-8	Benzo(a)pyrene	375	180	21	ug/kg	
205-99-2	Benzo(b)fluoranthene	1160	180	20	ug/kg	
191-24-2	Benzo(g,h,i)perylene	357	180	19	ug/kg	
207-08-9	Benzo(k)fluoranthene	304	180	24	ug/kg	
218-01-9	Chrysene	536	180	18	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	125	180	22	ug/kg	J
206-44-0	Fluoranthene	572	180	18	ug/kg	
86-73-7	Fluorene	47.9	180	19	ug/kg	J
193-39-5	Indeno(1,2,3-cd)pyrene	642	180	22	ug/kg	
90-12-0	1-Methylnaphthalene	ND	180	18	ug/kg	
91-57-6	2-Methylnaphthalene	ND	180	18	ug/kg	
91-20-3	Naphthalene	ND	180	18	ug/kg	
85-01-8	Phenanthrene	53.0	180	18	ug/kg	J
129-00-0	Pyrene	656	180	21	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	75%		40-105%
321-60-8	2-Fluorobiphenyl	77%		43-107%
1718-51-0	Terphenyl-d14	79%		45-119%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-23		
Lab Sample ID:	FA77581-2	**Date Sampled:**	08/05/20
Matrix:	SO - Soil	**Date Received:**	08/07/20
Method:	SW846 8270E BY SIM SW846 3546	**Percent Solids:**	92.8
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7G11118.D	1	08/10/20 21:50	FS	08/10/20 10:22	OP81483	S7G482
Run #2							

	Initial Weight	Final Volume
Run #1	15.4 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	140	17	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
7297-45-2	2-Methylnaphthalene-d10	90%		50-150%
93951-69-0	Fluoranthene-d10	90%		50-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CS-23		
Lab Sample ID:	FA77581-2	**Date Sampled:**	08/05/20
Matrix:	SO - Soil	**Date Received:**	08/07/20
		Percent Solids:	92.8
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Moisture, Percent	7.2		%	1	08/08/20 16:39	JB	SM19 2540G
Solids, Percent	92.8		%	1	08/08/20 16:39	JB	SM19 2540G

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-SS-101		
Lab Sample ID:	FA77581-3	**Date Sampled:**	08/05/20
Matrix:	SO - Soil	**Date Received:**	08/07/20
Method:	SW846 8270E SW846 3550C	**Percent Solids:**	91.5
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X072349.D	1	08/11/20 21:27	MV	08/10/20 08:30	OP81482	SX2950
Run #2	X072376.D	5	08/12/20 18:34	MV	08/10/20 08:30	OP81482	SX2951

	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2	30.2 g	1.0 ml

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	65.7	180	19	ug/kg	J
208-96-8	Acenaphthylene	772	180	18	ug/kg	
120-12-7	Anthracene	1910	180	20	ug/kg	
56-55-3	Benzo(a)anthracene	2230	180	18	ug/kg	
50-32-8	Benzo(a)pyrene	1510	180	21	ug/kg	
205-99-2	Benzo(b)fluoranthene	6450 [a]	900	99	ug/kg	
191-24-2	Benzo(g,h,i)perylene	969	180	19	ug/kg	
207-08-9	Benzo(k)fluoranthene	1230	180	24	ug/kg	
218-01-9	Chrysene	3100	180	18	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	405	180	23	ug/kg	
206-44-0	Fluoranthene	7470 [a]	900	90	ug/kg	
86-73-7	Fluorene	127	180	19	ug/kg	J
193-39-5	Indeno(1,2,3-cd)pyrene	1700	180	22	ug/kg	
90-12-0	1-Methylnaphthalene	ND	180	18	ug/kg	
91-57-6	2-Methylnaphthalene	21.6	180	18	ug/kg	J
91-20-3	Naphthalene	28.3	180	18	ug/kg	J
85-01-8	Phenanthrene	825	180	18	ug/kg	
129-00-0	Pyrene	6120 [a]	900	100	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	69%	85%	40-105%
321-60-8	2-Fluorobiphenyl	72%	93%	43-107%
1718-51-0	Terphenyl-d14	73%	89%	45-119%

(a) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID: CS-SS-101
Lab Sample ID: FA77581-3
Matrix: SO - Soil
Method: SW846 8270E BY SIM SW846 3546
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Date Sampled: 08/05/20
Date Received: 08/07/20
Percent Solids: 91.5

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7G11119.D	1	08/10/20 22:14	FS	08/10/20 10:22	OP81483	S7G482
Run #2							

	Initial Weight	Final Volume
Run #1	14.9 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	150	18	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
7297-45-2	2-Methylnaphthalene-d10	94%		50-150%
93951-69-0	Fluoranthene-d10	100%		50-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CS-SS-101		
Lab Sample ID:	FA77581-3	**Date Sampled:**	08/05/20
Matrix:	SO - Soil	**Date Received:**	08/07/20
		Percent Solids:	91.5
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Moisture, Percent	8.5		%	1	08/08/20 16:39	JB	SM19 2540G
Solids, Percent	91.5		%	1	08/08/20 16:39	JB	SM19 2540G

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-22		
Lab Sample ID:	FA77581-4	**Date Sampled:**	08/05/20
Matrix:	SO - Soil	**Date Received:**	08/07/20
Method:	SW846 8270E SW846 3550C	**Percent Solids:**	89.9
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X072350.D	1	08/11/20 21:52	MV	08/10/20 08:30	OP81482	SX2950
Run #2	X072373.D	2	08/12/20 17:17	MV	08/10/20 08:30	OP81482	SX2951

	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2	30.2 g	1.0 ml

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	73.7	180	20	ug/kg	J
208-96-8	Acenaphthylene	1050	180	18	ug/kg	
120-12-7	Anthracene	2800	180	21	ug/kg	
56-55-3	Benzo(a)anthracene	1960	180	18	ug/kg	
50-32-8	Benzo(a)pyrene	1840	180	22	ug/kg	
205-99-2	Benzo(b)fluoranthene	5620 [a]	370	40	ug/kg	
191-24-2	Benzo(g,h,i)perylene	1390	180	19	ug/kg	
207-08-9	Benzo(k)fluoranthene	1310	180	24	ug/kg	
218-01-9	Chrysene	2860	180	19	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	561	180	23	ug/kg	
206-44-0	Fluoranthene	4880 [a]	370	37	ug/kg	
86-73-7	Fluorene	157	180	20	ug/kg	J
193-39-5	Indeno(1,2,3-cd)pyrene	2280	180	22	ug/kg	
90-12-0	1-Methylnaphthalene	ND	180	18	ug/kg	
91-57-6	2-Methylnaphthalene	24.7	180	18	ug/kg	J
91-20-3	Naphthalene	27.6	180	18	ug/kg	J
85-01-8	Phenanthrene	653	180	18	ug/kg	
129-00-0	Pyrene	4190 [a]	370	42	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	68%	71%	40-105%
321-60-8	2-Fluorobiphenyl	70%	76%	43-107%
1718-51-0	Terphenyl-d14	71%	72%	45-119%

(a) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-22		
Lab Sample ID:	FA77581-4	**Date Sampled:**	08/05/20
Matrix:	SO - Soil	**Date Received:**	08/07/20
Method:	SW846 8270E BY SIM SW846 3546	**Percent Solids:**	89.9
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7G11120.D	1	08/10/20 22:38	FS	08/10/20 10:22	OP81483	S7G482
Run #2							

	Initial Weight	Final Volume
Run #1	15.3 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	150	18	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
7297-45-2	2-Methylnaphthalene-d10	96%		50-150%
93951-69-0	Fluoranthene-d10	87%		50-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CS-22		
Lab Sample ID:	FA77581-4	**Date Sampled:**	08/05/20
Matrix:	SO - Soil	**Date Received:**	08/07/20
		Percent Solids:	89.9
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Moisture, Percent	10.1		%	1	08/08/20 16:39	JB	SM19 2540G
Solids, Percent	89.9		%	1	08/08/20 16:39	JB	SM19 2540G

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-24		
Lab Sample ID:	FA77581-5	**Date Sampled:**	08/05/20
Matrix:	SO - Soil	**Date Received:**	08/07/20
Method:	SW846 8270E SW846 3550C	**Percent Solids:**	88.3
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X072351.D	1	08/11/20 22:18	MV	08/10/20 08:30	OP81482	SX2950
Run #2	X072374.D	2	08/12/20 17:43	MV	08/10/20 08:30	OP81482	SX2951

	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2	30.2 g	1.0 ml

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	75.1	190	20	ug/kg	J
208-96-8	Acenaphthylene	872	190	19	ug/kg	
120-12-7	Anthracene	1600	190	21	ug/kg	
56-55-3	Benzo(a)anthracene	2060	190	19	ug/kg	
50-32-8	Benzo(a)pyrene	1970	190	22	ug/kg	
205-99-2	Benzo(b)fluoranthene	4530 [a]	380	41	ug/kg	
191-24-2	Benzo(g,h,i)perylene	1180	190	19	ug/kg	
207-08-9	Benzo(k)fluoranthene	1230	190	25	ug/kg	
218-01-9	Chrysene	2380	190	19	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	454	190	23	ug/kg	
206-44-0	Fluoranthene	3000	190	19	ug/kg	
86-73-7	Fluorene	149	190	20	ug/kg	J
193-39-5	Indeno(1,2,3-cd)pyrene	1880	190	23	ug/kg	
90-12-0	1-Methylnaphthalene	ND	190	19	ug/kg	
91-57-6	2-Methylnaphthalene	21.6	190	19	ug/kg	J
91-20-3	Naphthalene	25.1	190	19	ug/kg	J
85-01-8	Phenanthrene	176	190	19	ug/kg	J
129-00-0	Pyrene	3120	190	22	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	79%	77%	40-105%
321-60-8	2-Fluorobiphenyl	81%	83%	43-107%
1718-51-0	Terphenyl-d14	80%	79%	45-119%

(a) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID: CS-24
Lab Sample ID: FA77581-5
Matrix: SO - Soil
Method: SW846 8270E BY SIM SW846 3546
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Date Sampled: 08/05/20
Date Received: 08/07/20
Percent Solids: 88.3

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7G11158.D	1	08/11/20 19:42	FS	08/10/20 10:22	OP81483	S7G483
Run #2							

	Initial Weight	Final Volume
Run #1	15.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	150	19	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
7297-45-2	2-Methylnaphthalene-d10	99%		50-150%
93951-69-0	Fluoranthene-d10	98%		50-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CS-24		
Lab Sample ID:	FA77581-5	**Date Sampled:**	08/05/20
Matrix:	SO - Soil	**Date Received:**	08/07/20
		Percent Solids:	88.3
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Moisture, Percent	11.7		%	1	08/08/20 16:39	JB	SM19 2540G
Solids, Percent	88.3		%	1	08/08/20 16:39	JB	SM19 2540G

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-RISB-02		
Lab Sample ID:	FA77581-6	**Date Sampled:**	08/05/20
Matrix:	SO - Soil	**Date Received:**	08/07/20
Method:	SW846 8270E SW846 3550C	**Percent Solids:**	91.3
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X072354.D	1	08/11/20 23:34	MV	08/10/20 08:30	OP81482	SX2950
Run #2							

	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	47.6	180	19	ug/kg	J
208-96-8	Acenaphthylene	576	180	18	ug/kg	
120-12-7	Anthracene	1040	180	20	ug/kg	
56-55-3	Benzo(a)anthracene	1110	180	18	ug/kg	
50-32-8	Benzo(a)pyrene	1180	180	21	ug/kg	
205-99-2	Benzo(b)fluoranthene	3300	180	20	ug/kg	
191-24-2	Benzo(g,h,i)perylene	834	180	19	ug/kg	
207-08-9	Benzo(k)fluoranthene	917	180	24	ug/kg	
218-01-9	Chrysene	2200	180	18	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	324	180	23	ug/kg	
206-44-0	Fluoranthene	2840	180	18	ug/kg	
86-73-7	Fluorene	95.5	180	19	ug/kg	J
193-39-5	Indeno(1,2,3-cd)pyrene	1430	180	22	ug/kg	
90-12-0	1-Methylnaphthalene	ND	180	18	ug/kg	
91-57-6	2-Methylnaphthalene	ND	180	18	ug/kg	
91-20-3	Naphthalene	ND	180	18	ug/kg	
85-01-8	Phenanthrene	229	180	18	ug/kg	
129-00-0	Pyrene	2500	180	21	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	76%		40-105%
321-60-8	2-Fluorobiphenyl	79%		43-107%
1718-51-0	Terphenyl-d14	78%		45-119%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-RISB-02		
Lab Sample ID:	FA77581-6	**Date Sampled:**	08/05/20
Matrix:	SO - Soil	**Date Received:**	08/07/20
Method:	SW846 8270E BY SIM SW846 3546	**Percent Solids:**	91.3
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7G11124.D	1	08/11/20 00:12	FS	08/10/20 10:22	OP81483	S7G482
Run #2							

	Initial Weight	Final Volume
Run #1	15.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	150	18	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
7297-45-2	2-Methylnaphthalene-d10	92%		50-150%
93951-69-0	Fluoranthene-d10	98%		50-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CS-RISB-02		
Lab Sample ID:	FA77581-6	**Date Sampled:**	08/05/20
Matrix:	SO - Soil	**Date Received:**	08/07/20
		Percent Solids:	91.3
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Moisture, Percent	8.7		%	1	08/08/20 17:03	JB	SM19 2540G
Solids, Percent	91.3		%	1	08/08/20 17:03	JB	SM19 2540G

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	SS-108-D		
Lab Sample ID:	FA77581-7	**Date Sampled:**	08/05/20
Matrix:	SO - Soil	**Date Received:**	08/07/20
Method:	SW846 8270E SW846 3550C	**Percent Solids:**	80.2
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6F06489.D	1	08/11/20 14:12	MV	08/10/20 13:00	OP81484	S6F251
Run #2							

	Initial Weight	Final Volume
Run #1	30.3 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	210	22	ug/kg	
208-96-8	Acenaphthylene	66.8	210	21	ug/kg	J
120-12-7	Anthracene	122	210	23	ug/kg	J
56-55-3	Benzo(a)anthracene	190	210	21	ug/kg	J
50-32-8	Benzo(a)pyrene	183	210	24	ug/kg	J
205-99-2	Benzo(b)fluoranthene	424	210	23	ug/kg	
191-24-2	Benzo(g,h,i)perylene	99.5	210	21	ug/kg	J
207-08-9	Benzo(k)fluoranthene	151	210	27	ug/kg	J
218-01-9	Chrysene	271	210	21	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	210	26	ug/kg	
206-44-0	Fluoranthene	254	210	21	ug/kg	
86-73-7	Fluorene	ND	210	22	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	132	210	25	ug/kg	J
90-12-0	1-Methylnaphthalene	ND	210	21	ug/kg	
91-57-6	2-Methylnaphthalene	ND	210	21	ug/kg	
91-20-3	Naphthalene	ND	210	21	ug/kg	
85-01-8	Phenanthrene	42.8	210	21	ug/kg	J
129-00-0	Pyrene	364	210	24	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	69%		40-105%
321-60-8	2-Fluorobiphenyl	72%		43-107%
1718-51-0	Terphenyl-d14	76%		45-119%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	SS-108-D		
Lab Sample ID:	FA77581-7	**Date Sampled:**	08/05/20
Matrix:	SO - Soil	**Date Received:**	08/07/20
Method:	SW846 8270E BY SIM SW846 3546	**Percent Solids:**	80.2
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7G11133.D	1	08/11/20 09:39	FS	08/10/20 12:00	OP81485	S7G483
Run #2							

	Initial Weight	Final Volume
Run #1	15.3 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	160	20	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
7297-45-2	2-Methylnaphthalene-d10	94%		50-150%
93951-69-0	Fluoranthene-d10	88%		50-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SS-108-D		
Lab Sample ID:	FA77581-7	**Date Sampled:**	08/05/20
Matrix:	SO - Soil	**Date Received:**	08/07/20
		Percent Solids:	80.2
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Moisture, Percent	19.8		%	1	08/08/20 17:03	JB	SM19 2540G
Solids, Percent	80.2		%	1	08/08/20 17:03	JB	SM19 2540G

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-SB-125		
Lab Sample ID:	FA77581-8	**Date Sampled:**	08/05/20
Matrix:	SO - Soil	**Date Received:**	08/07/20
Method:	SW846 8270E SW846 3550C	**Percent Solids:**	91.7
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6F06490.D	1	08/11/20 14:38	MV	08/10/20 13:00	OP81484	S6F251
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	180	19	ug/kg	
208-96-8	Acenaphthylene	172	180	18	ug/kg	J
120-12-7	Anthracene	310	180	20	ug/kg	
56-55-3	Benzo(a)anthracene	546	180	18	ug/kg	
50-32-8	Benzo(a)pyrene	497	180	21	ug/kg	
205-99-2	Benzo(b)fluoranthene	1610	180	20	ug/kg	
191-24-2	Benzo(g,h,i)perylene	322	180	19	ug/kg	
207-08-9	Benzo(k)fluoranthene	504	180	24	ug/kg	
218-01-9	Chrysene	1050	180	19	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	80.9	180	23	ug/kg	J
206-44-0	Fluoranthene	1570	180	18	ug/kg	
86-73-7	Fluorene	22.3	180	19	ug/kg	J
193-39-5	Indeno(1,2,3-cd)pyrene	444	180	22	ug/kg	
90-12-0	1-Methylnaphthalene	ND	180	18	ug/kg	
91-57-6	2-Methylnaphthalene	ND	180	18	ug/kg	
91-20-3	Naphthalene	ND	180	18	ug/kg	
85-01-8	Phenanthrene	199	180	18	ug/kg	
129-00-0	Pyrene	1610	180	21	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	62%		40-105%
321-60-8	2-Fluorobiphenyl	68%		43-107%
1718-51-0	Terphenyl-d14	74%		45-119%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-SB-125		
Lab Sample ID:	FA77581-8	**Date Sampled:**	08/05/20
Matrix:	SO - Soil	**Date Received:**	08/07/20
Method:	SW846 8270E BY SIM SW846 3546	**Percent Solids:**	91.7
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7G11134.D	1	08/11/20 10:03	FS	08/10/20 12:00	OP81485	S7G483
Run #2							

	Initial Weight	Final Volume
Run #1	15.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	140	18	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
7297-45-2	2-Methylnaphthalene-d10	116%		50-150%
93951-69-0	Fluoranthene-d10	114%		50-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CS-SB-125		
Lab Sample ID:	FA77581-8	**Date Sampled:**	08/05/20
Matrix:	SO - Soil	**Date Received:**	08/07/20
		Percent Solids:	91.7
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Moisture, Percent	8.3		%	1	08/08/20 17:03	JB	SM19 2540G
Solids, Percent	91.7		%	1	08/08/20 17:03	JB	SM19 2540G

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-25		
Lab Sample ID:	FA77581-9	**Date Sampled:**	08/05/20
Matrix:	SO - Soil	**Date Received:**	08/07/20
Method:	SW846 8270E SW846 3550C	**Percent Solids:**	88.6
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6F06491.D	1	08/11/20 15:05	MV	08/10/20 13:00	OP81484	S6F251
Run #2							

	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	190	20	ug/kg	
208-96-8	Acenaphthylene	300	190	19	ug/kg	
120-12-7	Anthracene	596	190	21	ug/kg	
56-55-3	Benzo(a)anthracene	832	190	19	ug/kg	
50-32-8	Benzo(a)pyrene	1180	190	22	ug/kg	
205-99-2	Benzo(b)fluoranthene	2840	190	20	ug/kg	
191-24-2	Benzo(g,h,i)perylene	724	190	19	ug/kg	
207-08-9	Benzo(k)fluoranthene	955	190	25	ug/kg	
218-01-9	Chrysene	1490	190	19	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	211	190	23	ug/kg	
206-44-0	Fluoranthene	1450	190	19	ug/kg	
86-73-7	Fluorene	34.4	190	20	ug/kg	J
193-39-5	Indeno(1,2,3-cd)pyrene	1040	190	23	ug/kg	
90-12-0	1-Methylnaphthalene	ND	190	19	ug/kg	
91-57-6	2-Methylnaphthalene	ND	190	19	ug/kg	
91-20-3	Naphthalene	ND	190	19	ug/kg	
85-01-8	Phenanthrene	61.4	190	19	ug/kg	J
129-00-0	Pyrene	2230	190	22	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	68%		40-105%
321-60-8	2-Fluorobiphenyl	71%		43-107%
1718-51-0	Terphenyl-d14	76%		45-119%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-25		
Lab Sample ID:	FA77581-9	**Date Sampled:**	08/05/20
Matrix:	SO - Soil	**Date Received:**	08/07/20
Method:	SW846 8270E BY SIM SW846 3546	**Percent Solids:**	88.6
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7G11135.D	1	08/11/20 10:27	FS	08/10/20 12:00	OP81485	S7G483
Run #2							

	Initial Weight	Final Volume
Run #1	15.3 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	150	18	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
7297-45-2	2-Methylnaphthalene-d10	108%		50-150%
93951-69-0	Fluoranthene-d10	110%		50-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CS-25		
Lab Sample ID:	FA77581-9	**Date Sampled:**	08/05/20
Matrix:	SO - Soil	**Date Received:**	08/07/20
		Percent Solids:	88.6
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Moisture, Percent	11.4		%	1	08/08/20 17:03	JB	SM19 2540G
Solids, Percent	88.6		%	1	08/08/20 17:03	JB	SM19 2540G

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-26		
Lab Sample ID:	FA77581-10	**Date Sampled:**	08/05/20
Matrix:	SO - Soil	**Date Received:**	08/07/20
Method:	SW846 8270E SW846 3550C	**Percent Solids:**	93.0
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6F06492.D	1	08/11/20 15:31	MV	08/10/20 13:00	OP81484	S6F251
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	180	19	ug/kg	
208-96-8	Acenaphthylene	161	180	18	ug/kg	J
120-12-7	Anthracene	352	180	20	ug/kg	
56-55-3	Benzo(a)anthracene	545	180	18	ug/kg	
50-32-8	Benzo(a)pyrene	453	180	21	ug/kg	
205-99-2	Benzo(b)fluoranthene	1670	180	20	ug/kg	
191-24-2	Benzo(g,h,i)perylene	342	180	19	ug/kg	
207-08-9	Benzo(k)fluoranthene	549	180	23	ug/kg	
218-01-9	Chrysene	1140	180	18	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	84.9	180	22	ug/kg	J
206-44-0	Fluoranthene	1790	180	18	ug/kg	
86-73-7	Fluorene	28.1	180	19	ug/kg	J
193-39-5	Indeno(1,2,3-cd)pyrene	488	180	22	ug/kg	
90-12-0	1-Methylnaphthalene	ND	180	18	ug/kg	
91-57-6	2-Methylnaphthalene	ND	180	18	ug/kg	
91-20-3	Naphthalene	ND	180	18	ug/kg	
85-01-8	Phenanthrene	106	180	18	ug/kg	J
129-00-0	Pyrene	2120	180	21	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	70%		40-105%
321-60-8	2-Fluorobiphenyl	73%		43-107%
1718-51-0	Terphenyl-d14	73%		45-119%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-26		
Lab Sample ID:	FA77581-10	**Date Sampled:**	08/05/20
Matrix:	SO - Soil	**Date Received:**	08/07/20
Method:	SW846 8270E BY SIM SW846 3546	**Percent Solids:**	93.0
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7G11136.D	1	08/11/20 10:50	FS	08/10/20 12:00	OP81485	S7G483
Run #2							

	Initial Weight	Final Volume
Run #1	15.3 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	140	18	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
7297-45-2	2-Methylnaphthalene-d10	111%		50-150%
93951-69-0	Fluoranthene-d10	102%		50-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	CS-26		
Lab Sample ID:	FA77581-10	**Date Sampled:**	08/05/20
Matrix:	SO - Soil	**Date Received:**	08/07/20
		Percent Solids:	93.0
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Moisture, Percent	7		%	1	08/08/20 17:03	JB	SM19 2540G
Solids, Percent	93		%	1	08/08/20 17:03	JB	SM19 2540G

RL = Reporting Limit

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

Rush - 3 day TAT

FA77574

SGS North America Inc - Orlando

Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 FAX: 407-425-0707
www.sgs.com

SGS - ORLANDO JOB # : FA77581 PAGE 3 OF 3

SGS - ORLANDO Quote # | SKIP #

Client / Reporting Information

Company Name: EarthCon
Address: 1880 W. Oak Pkwy
City: Marietta State: GA Zip: 30062
Project Contact: M. Brookshire Email: mbrookshire@earthcon.com
Phone #: 770 (MB) 404-317-7748
Sampler(s) Name(s) (Printed)
Sampler 1: T. Messier Sampler 2: D. Fulton

Project Information

Project Name: KMCC Navassa
Street: 120 Quality Dr
City: Navassa State: NC
Project #: 02.20200007.00
Fax #:
Client Purchase Order #:

Analytical Information

PAHs (8270) + PCP (8270 SIM)

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid

	SGS Orlando Sample #	Field ID / Point of Collection	COLLECTION DATE	TIME	SAMPLED BY:	MATRIX	TOTAL # OF BOTTLES	CONTAINER INFORMATION: OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NAOH+ZNAC	DI WATER	MEOH	LAB USE ONLY
1	~~25~~	CS-SS-104	8/5/20	1816	TM	SO	1		1								
2	~~26~~	CS-23	8/5/20	1700	DF	SO	1		1								
3	~~27~~	CS-SS-101	8/5/20	1727	TM	SO	1		1								
4	~~28~~	CS-22	8/5/20	1655	ST	SO	1		1								
5	~~29~~	CS-24	8/5/20	1740	ST	SO	1		1								
		CS-24 MS	8/5/20	1740	ST	SO	1		1								
	↓	CS-24 MSD	8/5/20	1740	ST	SO	1		1								
6	~~30~~	CS-RISB-02	8/5/20	1330	TM	SO	1		1								
7	31	SS-108-D	8/5/20	1400	DF	SO	1		1								
8	~~32~~	CS-SB-125	8/5/20	1648	TM	SO	1		1								
9	~~33~~	CS-25	8/5/20	1810	ST	SO	1		1								
10	~~34~~	CS-26	8/5/20	1755	DF	SO	1		1								

Turnaround Time (Business days)

10 Day (Business)
7 Day
5 Day
(3 Day RUSH)
2 Day RUSH
1 Day RUSH
Other
Approved By: / Date:
Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- [ ] COMMERCIAL "A" (RESULTS ONLY)
- [ ] COMMERCIAL "B" (RESULTS PLUS QC)
- [ ] REDT1 (EPA LEVEL 3)
- [ ] FULLT1 (EPA LEVEL 4)
- [ ] EDD'S

Comments / Remarks

RUSH - 3 day TAT
Place rush samples in separate SDG.

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
1		8/6/20 1100	2	3	8/6/20 1630	
4	Relinquished by/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
5			6	7	8/7/20	8 0945

Lab Use Only: Cooler Temperature (s) Celsius (corrected): 1.4°/2.3°C 8/6/20

ORLD-SMT-0001-03-FORM-COC (4).xls Rev 031318

http://www.sgs.com/en/terms-and-conditions

SGS Sample Receipt Summary

Job Number: FA77581 **Client:** EARTHCON **Project:** KMCC NAVASSA

Date / Time Received: 8/7/2020 9:45:00 AM **Delivery Method:** FEDEX **Airbill #'s:** 1001891730910003281100900433723328

Therm ID: IR 1; **Therm CF:** -0.2; **# of Coolers:** 2

Cooler Temps (Raw Measured) °C: Cooler 1: (1.6); Cooler 2: (2.5);

Cooler Temps (Corrected) °C: Cooler 1: (1.4); Cooler 2: (2.3);

Cooler Information	Y	or	N
1. Custody Seals Present	☑		☐
2. Custody Seals Intact	☑		☐
3. Temp criteria achieved	☑		☐
4. Cooler temp verification	IR Gun		
5. Cooler media	Ice (Bag)		

Trip Blank Information	Y	or	N	N/A
1. Trip Blank present / cooler	☐		☐	☑
2. Trip Blank listed on COC	☐		☐	☑

	W	or	S	N/A
3. Type Of TB Received	☐		☐	☑

Sample Information	Y	or	N	N/A
1. Sample labels present on bottles	☑		☐	
2. Samples preserved properly	☑		☐	
3. Sufficient volume/containers recvd for analysis:	☑		☐	
4. Condition of sample	Intact			
5. Sample recvd within HT	☑		☐	
6. Dates/Times/IDs on COC match Sample Label	☑		☐	
7. VOCs have headspace	☐		☐	☑
8. Bottles received for unspecified tests	☐		☑	
9. Compositing instructions clear	☐		☐	☑
10. Voa Soil Kits/Jars received past 48hrs?	☐		☐	☑
11. % Solids Jar received?	☐		☐	☑
12. Residual Chlorine Present?	☐		☐	☑

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____ Number of 5035 Field Kits: _____ Number of Lab Filtered Metals: _____

Test Strip Lot #s: pH 0-3 230315 pH 10-12 219813A Other: (Specify) _____ _____

Residual Chlorine Test Strip Lot #: _____

Comments

SM001
Rev. Date 05/24/17

Technician: AKARIG Date: 8/7/2020 9:45:00 AM Reviewer: _____ Date: _____

MS Semi-volatiles

6

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (DFTPP)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries
- Run Sequence Reports

Method Blank Summary

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP81482-MB	X072332.D	1	08/11/20	MV	08/10/20	OP81482	SX2950

The QC reported here applies to the following samples: **Method:** SW846 8270E

FA77581-1, FA77581-2, FA77581-3, FA77581-4, FA77581-5, FA77581-6

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	170	18	ug/kg	
208-96-8	Acenaphthylene	ND	170	17	ug/kg	
120-12-7	Anthracene	ND	170	19	ug/kg	
56-55-3	Benzo(a)anthracene	ND	170	17	ug/kg	
50-32-8	Benzo(a)pyrene	ND	170	20	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	170	18	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	170	17	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	170	22	ug/kg	
218-01-9	Chrysene	ND	170	17	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	170	21	ug/kg	
206-44-0	Fluoranthene	ND	170	17	ug/kg	
86-73-7	Fluorene	ND	170	18	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	170	20	ug/kg	
90-12-0	1-Methylnaphthalene	ND	170	17	ug/kg	
91-57-6	2-Methylnaphthalene	ND	170	17	ug/kg	
91-20-3	Naphthalene	ND	170	17	ug/kg	
85-01-8	Phenanthrene	ND	170	17	ug/kg	
129-00-0	Pyrene	ND	170	19	ug/kg	

CAS No.	Surrogate Recoveries		Limits
4165-60-0	Nitrobenzene-d5	69%	40-105%
321-60-8	2-Fluorobiphenyl	72%	43-107%
1718-51-0	Terphenyl-d14	75%	45-119%

Method Blank Summary

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP81484-MB	6F06488.D	1	08/11/20	MV	08/10/20	OP81484	S6F251

The QC reported here applies to the following samples: **Method:** SW846 8270E

FA77581-7, FA77581-8, FA77581-9, FA77581-10

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	170	18	ug/kg	
208-96-8	Acenaphthylene	ND	170	17	ug/kg	
120-12-7	Anthracene	ND	170	19	ug/kg	
56-55-3	Benzo(a)anthracene	ND	170	17	ug/kg	
50-32-8	Benzo(a)pyrene	ND	170	20	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	170	18	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	170	17	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	170	22	ug/kg	
218-01-9	Chrysene	ND	170	17	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	170	21	ug/kg	
206-44-0	Fluoranthene	ND	170	17	ug/kg	
86-73-7	Fluorene	ND	170	18	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	170	20	ug/kg	
90-12-0	1-Methylnaphthalene	ND	170	17	ug/kg	
91-57-6	2-Methylnaphthalene	ND	170	17	ug/kg	
91-20-3	Naphthalene	ND	170	17	ug/kg	
85-01-8	Phenanthrene	ND	170	17	ug/kg	
129-00-0	Pyrene	ND	170	19	ug/kg	

CAS No.	Surrogate Recoveries		Limits
4165-60-0	Nitrobenzene-d5	71%	40-105%
321-60-8	2-Fluorobiphenyl	73%	43-107%
1718-51-0	Terphenyl-d14	75%	45-119%

Method Blank Summary

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP81483-MB	7G11101.D	1	08/10/20	FS	08/10/20	OP81483	S7G482

The QC reported here applies to the following samples: **Method:** SW846 8270E BY SIM

FA77581-1, FA77581-2, FA77581-3, FA77581-4, FA77581-5, FA77581-6

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	130	17	ug/kg	

CAS No.	Surrogate Recoveries		Limits
7297-45-2	2-Methylnaphthalene-d10	82%	50-150%
93951-69-0	Fluoranthene-d10	83%	50-150%

Method Blank Summary

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP81485-MB	7G11131.D	1	08/11/20	FS	08/10/20	OP81485	S7G483

The QC reported here applies to the following samples: **Method:** SW846 8270E BY SIM

FA77581-7, FA77581-8, FA77581-9, FA77581-10

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	130	17	ug/kg	

CAS No.	Surrogate Recoveries		Limits
7297-45-2	2-Methylnaphthalene-d10	79%	50-150%
93951-69-0	Fluoranthene-d10	90%	50-150%

Blank Spike Summary

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP81482-BS	X072331.D	1	08/11/20	MV	08/10/20	OP81482	SX2950

The QC reported here applies to the following samples: **Method:** SW846 8270E

FA77581-1, FA77581-2, FA77581-3, FA77581-4, FA77581-5, FA77581-6

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
83-32-9	Acenaphthene	1670	1260	76	56-109
208-96-8	Acenaphthylene	1670	1350	81	56-106
120-12-7	Anthracene	1670	1300	78	61-110
56-55-3	Benzo(a)anthracene	1670	1380	83	66-111
50-32-8	Benzo(a)pyrene	1670	1440	86	59-104
205-99-2	Benzo(b)fluoranthene	1670	1560	94	67-113
191-24-2	Benzo(g,h,i)perylene	1670	1510	91	67-113
207-08-9	Benzo(k)fluoranthene	1670	1390	83	67-114
218-01-9	Chrysene	1670	1460	88	65-112
53-70-3	Dibenzo(a,h)anthracene	1670	1670	100	68-115
206-44-0	Fluoranthene	1670	1410	85	60-108
86-73-7	Fluorene	1670	1360	82	58-109
193-39-5	Indeno(1,2,3-cd)pyrene	1670	1730	104	66-116
90-12-0	1-Methylnaphthalene	1670	1100	66	49-106
91-57-6	2-Methylnaphthalene	1670	1130	68	47-106
91-20-3	Naphthalene	1670	1150	69	44-104
85-01-8	Phenanthrene	1670	1360	82	63-111
129-00-0	Pyrene	1670	1270	76	65-115

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	67%	40-105%
321-60-8	2-Fluorobiphenyl	72%	43-107%
1718-51-0	Terphenyl-d14	73%	45-119%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP81484-BS	6F06487.D	1	08/11/20	MV	08/10/20	OP81484	S6F251

The QC reported here applies to the following samples: **Method:** SW846 8270E

FA77581-7, FA77581-8, FA77581-9, FA77581-10

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
83-32-9	Acenaphthene	1670	1280	77	56-109
208-96-8	Acenaphthylene	1670	1370	82	56-106
120-12-7	Anthracene	1670	1320	79	61-110
56-55-3	Benzo(a)anthracene	1670	1400	84	66-111
50-32-8	Benzo(a)pyrene	1670	1400	84	59-104
205-99-2	Benzo(b)fluoranthene	1670	1410	85	67-113
191-24-2	Benzo(g,h,i)perylene	1670	1490	89	67-113
207-08-9	Benzo(k)fluoranthene	1670	1440	86	67-114
218-01-9	Chrysene	1670	1430	86	65-112
53-70-3	Dibenzo(a,h)anthracene	1670	1440	86	68-115
206-44-0	Fluoranthene	1670	1400	84	60-108
86-73-7	Fluorene	1670	1350	81	58-109
193-39-5	Indeno(1,2,3-cd)pyrene	1670	1450	87	66-116
90-12-0	1-Methylnaphthalene	1670	1200	72	49-106
91-57-6	2-Methylnaphthalene	1670	1250	75	47-106
91-20-3	Naphthalene	1670	1200	72	44-104
85-01-8	Phenanthrene	1670	1360	82	63-111
129-00-0	Pyrene	1670	1430	86	65-115

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	71%	40-105%
321-60-8	2-Fluorobiphenyl	73%	43-107%
1718-51-0	Terphenyl-d14	76%	45-119%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP81483-BS	7G11102.D	1	08/10/20	FS	08/10/20	OP81483	S7G482

The QC reported here applies to the following samples: **Method:** SW846 8270E BY SIM

FA77581-1, FA77581-2, FA77581-3, FA77581-4, FA77581-5, FA77581-6

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
87-86-5	Pentachlorophenol	1330	938	70	46-135

CAS No.	Surrogate Recoveries	BSP	Limits
7297-45-2	2-Methylnaphthalene-d10	82%	50-150%
93951-69-0	Fluoranthene-d10	85%	50-150%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP81485-BS	7G11132.D	1	08/11/20	FS	08/10/20	OP81485	S7G483

The QC reported here applies to the following samples: **Method:** SW846 8270E BY SIM

FA77581-7, FA77581-8, FA77581-9, FA77581-10

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
87-86-5	Pentachlorophenol	1330	963	72	46-135

CAS No.	Surrogate Recoveries	BSP	Limits
7297-45-2	2-Methylnaphthalene-d10	88%	50-150%
93951-69-0	Fluoranthene-d10	90%	50-150%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP81482-MS	X072352.D	1	08/11/20	MV	08/10/20	OP81482	SX2950
OP81482-MSD	X072353.D	1	08/11/20	MV	08/10/20	OP81482	SX2950
FA77581-5	X072351.D	1	08/11/20	MV	08/10/20	OP81482	SX2950
FA77581-5	X072374.D	2	08/12/20	MV	08/10/20	OP81482	SX2951

The QC reported here applies to the following samples: **Method:** SW846 8270E

FA77581-1, FA77581-2, FA77581-3, FA77581-4, FA77581-5, FA77581-6

CAS No.	Compound	FA77581-5 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	75.1	J	1890	1610	81	1890	1630	82	1	56-109/23
208-96-8	Acenaphthylene	872		1890	2540	88	1890	2690	96	6	56-106/23
120-12-7	Anthracene	1600		1890	3060	77	1890	3340	92	9	61-110/21
56-55-3	Benzo(a)anthracene	2060		1890	4430	126*	1890	4550	132*	3	66-111/23
50-32-8	Benzo(a)pyrene	1970		1890	3550	84	1890	3680	91	4	59-104/23
205-99-2	Benzo(b)fluoranthene	4530 [a]		1890	5960	76	1890	6430	101	8	67-113/24
191-24-2	Benzo(g,h,i)perylene	1180		1890	2640	77	1890	2740	83	4	67-113/21
207-08-9	Benzo(k)fluoranthene	1230		1890	2870	87	1890	2760	81	4	67-114/22
218-01-9	Chrysene	2380		1890	4930	135*	1890	4530	114*	8	65-112/25
53-70-3	Dibenzo(a,h)anthracene	454		1890	2270	96	1890	2340	100	3	68-115/23
206-44-0	Fluoranthene	3000		1890	6220	171*	1890	5930	155*	5	60-108/25
86-73-7	Fluorene	149	J	1890	1770	86	1890	1850	90	4	58-109/21
193-39-5	Indeno(1,2,3-cd)pyrene	1880		1890	3470	84	1890	3560	89	3	66-116/22
90-12-0	1-Methylnaphthalene	ND		1890	1390	74	1890	1390	74	0	49-106/26
91-57-6	2-Methylnaphthalene	21.6	J	1890	1430	75	1890	1420	74	1	47-106/27
91-20-3	Naphthalene	25.1	J	1890	1430	74	1890	1400	73	2	44-104/27
85-01-8	Phenanthrene	176	J	1890	1750	83	1890	1840	88	5	63-111/22
129-00-0	Pyrene	3120		1890	6130	159*	1890	6000	153*	2	65-115/25

CAS No.	Surrogate Recoveries	MS	MSD	FA77581-5	FA77581-5	Limits
4165-60-0	Nitrobenzene-d5	76%	73%	79%	77%	40-105%
321-60-8	2-Fluorobiphenyl	82%	81%	81%	83%	43-107%
1718-51-0	Terphenyl-d14	83%	86%	80%	79%	45-119%

(a) Result is from Run #2.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP81484-MS	6F06499.D	1	08/11/20	MV	08/10/20	OP81484	S6F251
OP81484-MSD	6F06500.D	1	08/11/20	MV	08/10/20	OP81484	S6F251
FA77615-6	6F06498.D	1	08/11/20	MV	08/10/20	OP81484	S6F251

The QC reported here applies to the following samples: **Method:** SW846 8270E

FA77581-7, FA77581-8, FA77581-9, FA77581-10

CAS No.	Compound	FA77615-6 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	ND		1880	1440	77	1870	1520	81	5	56-109/23
208-96-8	Acenaphthylene	247		1880	1760	80	1870	1840	85	4	56-106/23
120-12-7	Anthracene	472		1880	1930	78	1870	1970	80	2	61-110/21
56-55-3	Benzo(a)anthracene	379		1880	2050	89	1870	1990	86	3	66-111/23
50-32-8	Benzo(a)pyrene	351		1880	1930	84	1870	1970	87	2	59-104/23
205-99-2	Benzo(b)fluoranthene	946		1880	2550	85	1870	2530	85	1	67-113/24
191-24-2	Benzo(g,h,i)perylene	293		1880	2040	93	1870	2090	96	2	67-113/21
207-08-9	Benzo(k)fluoranthene	276		1880	1810	82	1870	1850	84	2	67-114/22
218-01-9	Chrysene	538		1880	2170	87	1870	2110	84	3	65-112/25
53-70-3	Dibenzo(a,h)anthracene	72.0	J	1880	1800	92	1870	1890	97	5	68-115/23
206-44-0	Fluoranthene	539		1880	2320	95	1870	2140	86	8	60-108/25
86-73-7	Fluorene	42.1	J	1880	1560	81	1870	1610	84	3	58-109/21
193-39-5	Indeno(1,2,3-cd)pyrene	379		1880	2200	97	1870	2240	100	2	66-116/22
90-12-0	1-Methylnaphthalene	21.4	J	1880	1310	69	1870	1400	74	7	49-106/26
91-57-6	2-Methylnaphthalene	29.3	J	1880	1340	70	1870	1450	76	8	47-106/27
91-20-3	Naphthalene	25.7	J	1880	1310	68	1870	1410	74	7	44-104/27
85-01-8	Phenanthrene	95.1	J	1880	1620	81	1870	1660	84	2	63-111/22
129-00-0	Pyrene	672		1880	2440	94	1870	2250	84	8	65-115/25

CAS No.	Surrogate Recoveries	MS	MSD	FA77615-6	Limits
4165-60-0	Nitrobenzene-d5	66%	71%	73%	40-105%
321-60-8	2-Fluorobiphenyl	69%	73%	75%	43-107%
1718-51-0	Terphenyl-d14	73%	75%	74%	45-119%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP81483-MS [a]	7G11122.D	5	08/10/20	FS	08/10/20	OP81483	S7G482
OP81483-MSD [a]	7G11123.D	5	08/10/20	FS	08/10/20	OP81483	S7G482
FA77581-5	7G11158.D	1	08/11/20	FS	08/10/20	OP81483	S7G483

The QC reported here applies to the following samples: **Method:** SW846 8270E BY SIM

FA77581-1, FA77581-2, FA77581-3, FA77581-4, FA77581-5, FA77581-6

CAS No.	Compound	FA77581-5 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
87-86-5	Pentachlorophenol	ND		1470	1390	95	1480	1440	97	4	46-135/30

CAS No.	Surrogate Recoveries	MS	MSD	FA77581-5	Limits
7297-45-2	2-Methylnaphthalene-d10	101%	99%	99%	50-150%
93951-69-0	Fluoranthene-d10	101%	110%	98%	50-150%

(a) Dilution required due to matrix interference; extract was viscous.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP81485-MS	7G11143.D	1	08/11/20	FS	08/10/20	OP81485	S7G483
OP81485-MSD	7G11144.D	1	08/11/20	FS	08/10/20	OP81485	S7G483
FA77615-6	7G11142.D	1	08/11/20	FS	08/10/20	OP81485	S7G483

The QC reported here applies to the following samples: **Method:** SW846 8270E BY SIM

FA77581-7, FA77581-8, FA77581-9, FA77581-10

CAS No.	Compound	FA77615-6 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
87-86-5	Pentachlorophenol	ND		1480	1610	109	1490	1530	103	5	46-135/30

CAS No.	Surrogate Recoveries	MS	MSD	FA77615-6	Limits
7297-45-2	2-Methylnaphthalene-d10	113%	119%	107%	50-150%
93951-69-0	Fluoranthene-d10	103%	100%	103%	50-150%

* = Outside of Control Limits.

Instrument Performance Check (DFTPP)

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: S6F248-DFTPP
Lab File ID: 6F06435.D
Instrument ID: GCMS6F
Injection Date: 07/29/20
Injection Time: 12:37

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	99720	37.9		Pass
68	Less than 2.0% of mass 69	1843	0.70	(1.69) [a]	Pass
69	Mass 69 relative abundance	109212	41.5		Pass
70	Less than 2.0% of mass 69	588	0.22	(0.54) [a]	Pass
127	40.0 - 60.0% of mass 198	130053	49.4		Pass
197	Less than 1.0% of mass 198	1470	0.56		Pass
198	Base peak, 100% relative abundance	263083	100.0		Pass
199	5.0 - 9.0% of mass 198	17833	6.78		Pass
275	10.0 - 30.0% of mass 198	67861	25.8		Pass
365	1.0 - 100.0% of mass 198	8361	3.18		Pass
441	Present, but less than mass 443	35832	13.6	(77.9) [b]	Pass
442	40.0 - 100.0% of mass 198	242163	92.0		Pass
443	17.0 - 23.0% of mass 442	46013	17.5	(19.0) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
S6F248-IC248	6F06436.D	07/29/20	12:53	00:16	Initial cal 1
S6F248-IC248	6F06437.D	07/29/20	13:19	00:42	Initial cal 5
S6F248-IC248	6F06438.D	07/29/20	13:45	01:08	Initial cal 10
S6F248-IC248	6F06439.D	07/29/20	14:10	01:33	Initial cal 25
S6F248-ICC248	6F06440.D	07/29/20	14:36	01:59	Initial cal 50
S6F248-IC248	6F06441.D	07/29/20	15:02	02:25	Initial cal 60
S6F248-IC248	6F06442.D	07/29/20	15:28	02:51	Initial cal 75
S6F248-IC248	6F06443.D	07/29/20	15:54	03:17	Initial cal 100
S6F248-ICV248	6F06444.D	07/29/20	16:20	03:43	Initial cal verification 50
S6F248-ICV248	6F06445.D	07/29/20	16:46	04:09	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: S6F251-DFTPP
Lab File ID: 6F06485.D
Instrument ID: GCMS6F
Injection Date: 08/11/20
Injection Time: 12:38

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	86109	38.3		Pass
68	Less than 2.0% of mass 69	1447	0.64	(1.53) [a]	Pass
69	Mass 69 relative abundance	94603	42.0		Pass
70	Less than 2.0% of mass 69	507	0.23	(0.54) [a]	Pass
127	40.0 - 60.0% of mass 198	109275	48.6		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	225045	100.0		Pass
199	5.0 - 9.0% of mass 198	15094	6.71		Pass
275	10.0 - 30.0% of mass 198	57523	25.6		Pass
365	1.0 - 100.0% of mass 198	7450	3.31		Pass
441	Present, but less than mass 443	30951	13.8	(76.2) [b]	Pass
442	40.0 - 100.0% of mass 198	208749	92.8		Pass
443	17.0 - 23.0% of mass 442	40608	18.0	(19.5) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
S6F251-CC248	6F06486.D	08/11/20	12:54	00:16	Continuing cal 50
OP81484-BS	6F06487.D	08/11/20	13:20	00:42	Blank Spike
OP81484-MB	6F06488.D	08/11/20	13:46	01:08	Method Blank
FA77581-7	6F06489.D	08/11/20	14:12	01:34	SS-108-D
FA77581-8	6F06490.D	08/11/20	14:38	02:00	CS-SB-125
FA77581-9	6F06491.D	08/11/20	15:05	02:27	CS-25
FA77581-10	6F06492.D	08/11/20	15:31	02:53	CS-26
ZZZZZZ	6F06493.D	08/11/20	15:57	03:19	(unrelated sample)
ZZZZZZ	6F06494.D	08/11/20	16:24	03:46	(unrelated sample)
ZZZZZZ	6F06495.D	08/11/20	16:50	04:12	(unrelated sample)
ZZZZZZ	6F06496.D	08/11/20	17:16	04:38	(unrelated sample)
ZZZZZZ	6F06497.D	08/11/20	17:42	05:04	(unrelated sample)
FA77615-6	6F06498.D	08/11/20	18:08	05:30	(used for QC only; not part of job FA77581)
OP81484-MS	6F06499.D	08/11/20	18:34	05:56	Matrix Spike
OP81484-MSD	6F06500.D	08/11/20	19:00	06:22	Matrix Spike Duplicate
ZZZZZZ	6F06501.D	08/11/20	19:26	06:48	(unrelated sample)
ZZZZZZ	6F06502.D	08/11/20	19:52	07:14	(unrelated sample)
ZZZZZZ	6F06503.D	08/11/20	20:18	07:40	(unrelated sample)
ZZZZZZ	6F06504.D	08/11/20	20:44	08:06	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample:	S6F251-DFTPP	**Injection Date:**	08/11/20
Lab File ID:	6F06485.D	**Injection Time:**	12:38
Instrument ID:	GCMS6F		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	6F06505.D	08/11/20	21:10	08:32	(unrelated sample)
ZZZZZZ	6F06506.D	08/11/20	21:35	08:57	(unrelated sample)
ZZZZZZ	6F06508.D	08/11/20	22:27	09:49	(unrelated sample)
ZZZZZZ	6F06509.D	08/11/20	22:52	10:14	(unrelated sample)
ZZZZZZ	6F06510.D	08/11/20	23:18	10:40	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: S7G472-DFTPP
Lab File ID: 7G10822.D
Instrument ID: GCMS7G
Injection Date: 07/21/20
Injection Time: 08:44

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	4908	32.6		Pass
68	Less than 2.0% of mass 69	91	0.60	(1.60) [a]	Pass
69	Mass 69 relative abundance	5683	37.7		Pass
70	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
127	40.0 - 60.0% of mass 198	6380	42.3		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	15078	100.0		Pass
199	5.0 - 9.0% of mass 198	953	6.32		Pass
275	10.0 - 30.0% of mass 198	3550	23.5		Pass
365	1.0 - 100.0% of mass 198	473	3.14		Pass
441	Present, but less than mass 443	1808	12.0	(84.1) [b]	Pass
442	40.0 - 100.0% of mass 198	11474	76.1		Pass
443	17.0 - 23.0% of mass 442	2149	14.3	(18.7) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
S7G472-IC472	7G10833.D	07/21/20	13:31	04:47	Initial cal 1
S7G472-IC472	7G10834.D	07/21/20	13:55	05:11	Initial cal 2
S7G472-IC472	7G10835.D	07/21/20	14:19	05:35	Initial cal 3
S7G472-ICC472	7G10836.D	07/21/20	14:43	05:59	Initial cal 4
S7G472-IC472	7G10837.D	07/21/20	15:07	06:23	Initial cal 5
S7G472-IC472	7G10838.D	07/21/20	15:31	06:47	Initial cal 6
S7G472-IC472	7G10839.D	07/21/20	15:55	07:11	Initial cal 7
S7G472-ICV472	7G10840.D	07/21/20	16:19	07:35	Initial cal verification 4

Instrument Performance Check (DFTPP)

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: S7G482-DFTPP
Lab File ID: 7G11099.D
Instrument ID: GCMS7G
Injection Date: 08/10/20
Injection Time: 14:10

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	2163	33.6		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	2561	39.7		Pass
70	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
127	40.0 - 60.0% of mass 198	2830	43.9		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	6444	100.0		Pass
199	5.0 - 9.0% of mass 198	412	6.39		Pass
275	10.0 - 30.0% of mass 198	1585	24.6		Pass
365	1.0 - 100.0% of mass 198	182	2.82		Pass
441	Present, but less than mass 443	698	10.8	(87.4) [b]	Pass
442	40.0 - 100.0% of mass 198	4451	69.1		Pass
443	17.0 - 23.0% of mass 442	799	12.4	(18.0) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
S7G482-CC472	7G11100.D	08/10/20	14:28	00:18	Continuing cal 4
OP81483-MB	7G11101.D	08/10/20	14:57	00:47	Method Blank
OP81483-BS	7G11102.D	08/10/20	15:21	01:11	Blank Spike
ZZZZZZ	7G11104.D	08/10/20	16:10	02:00	(unrelated sample)
ZZZZZZ	7G11105.D	08/10/20	16:34	02:24	(unrelated sample)
ZZZZZZ	7G11106.D	08/10/20	16:58	02:48	(unrelated sample)
ZZZZZZ	7G11108.D	08/10/20	17:47	03:37	(unrelated sample)
ZZZZZZ	7G11109.D	08/10/20	18:12	04:02	(unrelated sample)
ZZZZZZ	7G11111.D	08/10/20	19:01	04:51	(unrelated sample)
ZZZZZZ	7G11112.D	08/10/20	19:25	05:15	(unrelated sample)
ZZZZZZ	7G11113.D	08/10/20	19:50	05:40	(unrelated sample)
ZZZZZZ	7G11114.D	08/10/20	20:14	06:04	(unrelated sample)
ZZZZZZ	7G11115.D	08/10/20	20:38	06:28	(unrelated sample)
ZZZZZZ	7G11116.D	08/10/20	21:02	06:52	(unrelated sample)
FA77581-1	7G11117.D	08/10/20	21:26	07:16	CS-SS-104
FA77581-2	7G11118.D	08/10/20	21:50	07:40	CS-23
FA77581-3	7G11119.D	08/10/20	22:14	08:04	CS-SS-101
FA77581-4	7G11120.D	08/10/20	22:38	08:28	CS-22
OP81483-MS	7G11122.D	08/10/20	23:25	09:15	Matrix Spike

Instrument Performance Check (DFTPP)

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample:	S7G482-DFTPP	**Injection Date:**	08/10/20
Lab File ID:	7G11099.D	**Injection Time:**	14:10
Instrument ID:	GCMS7G		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
OP81483-MSD	7G11123.D	08/10/20	23:49	09:39	Matrix Spike Duplicate
FA77581-6	7G11124.D	08/11/20	00:12	10:02	CS-RISB-02
S7G482-ECC472	7G11126.D	08/11/20	01:00	10:50	Ending cal 4

Instrument Performance Check (DFTPP)

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: S7G483-DFTPP
Lab File ID: 7G11129.D
Instrument ID: GCMS7G
Injection Date: 08/11/20
Injection Time: 08:11

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	3303	35.6		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	3872	41.8		Pass
70	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
127	40.0 - 60.0% of mass 198	4068	43.9		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	9270	100.0		Pass
199	5.0 - 9.0% of mass 198	583	6.29		Pass
275	10.0 - 30.0% of mass 198	2141	23.1		Pass
365	1.0 - 100.0% of mass 198	327	3.53		Pass
441	Present, but less than mass 443	938	10.1	(86.0) [b]	Pass
442	40.0 - 100.0% of mass 198	6121	66.0		Pass
443	17.0 - 23.0% of mass 442	1091	11.8	(17.8) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
S7G483-CC472	7G11130.D	08/11/20	08:29	00:18	Continuing cal 4
OP81485-MB	7G11131.D	08/11/20	08:52	00:41	Method Blank
OP81485-BS	7G11132.D	08/11/20	09:16	01:05	Blank Spike
FA77581-7	7G11133.D	08/11/20	09:39	01:28	SS-108-D
FA77581-8	7G11134.D	08/11/20	10:03	01:52	CS-SB-125
FA77581-9	7G11135.D	08/11/20	10:27	02:16	CS-25
FA77581-10	7G11136.D	08/11/20	10:50	02:39	CS-26
ZZZZZZ	7G11137.D	08/11/20	11:14	03:03	(unrelated sample)
ZZZZZZ	7G11138.D	08/11/20	11:38	03:27	(unrelated sample)
ZZZZZZ	7G11139.D	08/11/20	12:02	03:51	(unrelated sample)
ZZZZZZ	7G11140.D	08/11/20	12:26	04:15	(unrelated sample)
ZZZZZZ	7G11141.D	08/11/20	12:50	04:39	(unrelated sample)
FA77615-6	7G11142.D	08/11/20	13:14	05:03	(used for QC only; not part of job FA77581)
OP81485-MS	7G11143.D	08/11/20	13:38	05:27	Matrix Spike
OP81485-MSD	7G11144.D	08/11/20	14:02	05:51	Matrix Spike Duplicate
ZZZZZZ	7G11145.D	08/11/20	14:26	06:15	(unrelated sample)
ZZZZZZ	7G11146.D	08/11/20	14:51	06:40	(unrelated sample)
ZZZZZZ	7G11147.D	08/11/20	15:15	07:04	(unrelated sample)
ZZZZZZ	7G11148.D	08/11/20	15:39	07:28	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample:	S7G483-DFTPP	**Injection Date:**	08/11/20
Lab File ID:	7G11129.D	**Injection Time:**	08:11
Instrument ID:	GCMS7G		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	7G11149.D	08/11/20	16:04	07:53	(unrelated sample)
ZZZZZZ	7G11150.D	08/11/20	16:28	08:17	(unrelated sample)
ZZZZZZ	7G11151.D	08/11/20	16:53	08:42	(unrelated sample)
ZZZZZZ	7G11152.D	08/11/20	17:17	09:06	(unrelated sample)
ZZZZZZ	7G11153.D	08/11/20	17:41	09:30	(unrelated sample)
ZZZZZZ	7G11154.D	08/11/20	18:05	09:54	(unrelated sample)
ZZZZZZ	7G11155.D	08/11/20	18:30	10:19	(unrelated sample)
ZZZZZZ	7G11156.D	08/11/20	18:54	10:43	(unrelated sample)
ZZZZZZ	7G11157.D	08/11/20	19:18	11:07	(unrelated sample)
FA77581-5	7G11158.D	08/11/20	19:42	11:31	CS-24

Instrument Performance Check (DFTPP)

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-DFTPP
Lab File ID: X071355.D
Instrument ID: GCMSX
Injection Date: 06/23/20
Injection Time: 09:47

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	48227	49.7		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	42739	44.1		Pass
70	Less than 2.0% of mass 69	206	0.21	(0.48) [a]	Pass
127	40.0 - 60.0% of mass 198	50221	51.8		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	96957	100.0		Pass
199	5.0 - 9.0% of mass 198	6460	6.66		Pass
275	10.0 - 30.0% of mass 198	22665	23.4		Pass
365	1.0 - 100.0% of mass 198	1798	1.85		Pass
441	Present, but less than mass 443	12438	12.8	(74.3) [b]	Pass
442	40.0 - 100.0% of mass 198	83123	85.7		Pass
443	17.0 - 23.0% of mass 442	16733	17.3	(20.1) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
SX2918-IC2918	X071356.D	06/23/20	10:04	00:17	Initial cal 1
SX2918-IC2918	X071357.D	06/23/20	10:30	00:43	Initial cal 5
SX2918-IC2918	X071358.D	06/23/20	10:55	01:08	Initial cal 10
SX2918-IC2918	X071359.D	06/23/20	11:21	01:34	Initial cal 25
SX2918-IC2918	X071360.D	06/23/20	11:46	01:59	Initial cal 50
SX2918-IC2918	X071361.D	06/23/20	12:12	02:25	Initial cal 60
SX2918-IC2918	X071362.D	06/23/20	12:37	02:50	Initial cal 75
SX2918-IC2918	X071363.D	06/23/20	13:03	03:16	Initial cal 100
SX2918-IC2918	X071364.D	06/23/20	13:29	03:42	Initial cal 1
SX2918-IC2918	X071365.D	06/23/20	13:54	04:07	Initial cal 5
SX2918-IC2918	X071366.D	06/23/20	14:20	04:33	Initial cal 10
SX2918-IC2918	X071367.D	06/23/20	14:46	04:59	Initial cal 25
SX2918-ICC2918	X071368.D	06/23/20	15:12	05:25	Initial cal 50
SX2918-IC2918	X071369.D	06/23/20	15:39	05:52	Initial cal 60
SX2918-IC2918	X071370.D	06/23/20	16:05	06:18	Initial cal 75
SX2918-IC2918	X071371.D	06/23/20	16:31	06:44	Initial cal 100
SX2918-ICV2918	X071372.D	06/23/20	16:58	07:11	Initial cal verification 50
SX2918-ICV2918	X071373.D	06/23/20	17:25	07:38	Initial cal verification 50
SX2918-ICV2918	X071374.D	06/23/20	17:51	08:04	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample:	SX2918-DFTPP	**Injection Date:**	06/23/20
Lab File ID:	X071355.D	**Injection Time:**	09:47
Instrument ID:	GCMSX		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
SX2918-ICV2918	X071375.D	06/23/20	18:17	08:30	Initial cal verification 50
SX2918-ICV2918	X071376.D	06/23/20	18:43	08:56	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2919-DFTPP
Lab File ID: X071415.D
Instrument ID: GCMSX
Injection Date: 06/24/20
Injection Time: 15:04

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	34387	50.4		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	32027	47.0		Pass
70	Less than 2.0% of mass 69	101	0.15	(0.32) [a]	Pass
127	40.0 - 60.0% of mass 198	36939	54.2		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	68165	100.0		Pass
199	5.0 - 9.0% of mass 198	4563	6.69		Pass
275	10.0 - 30.0% of mass 198	16125	23.7		Pass
365	1.0 - 100.0% of mass 198	1684	2.47		Pass
441	Present, but less than mass 443	9013	13.2	(75.9) [b]	Pass
442	40.0 - 100.0% of mass 198	59211	86.9		Pass
443	17.0 - 23.0% of mass 442	11869	17.4	(20.0) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
SX2918-ICV2918	X071416.D	06/24/20	15:22	00:18	Initial cal verification 50
SX2919-CC2918	X071417.D	06/24/20	15:48	00:44	Continuing cal 50
SX2919-CC2918	X071418.D	06/24/20	16:15	01:11	Continuing cal 50
OP80770-BS	X071419.D	06/24/20	16:41	01:37	Blank Spike
OP80770-MB	X071420.D	06/24/20	17:08	02:04	Method Blank
OP80804-BS1	X071421.D	06/24/20	17:34	02:30	Blank Spike
OP80804-BS2	X071422.D	06/24/20	18:00	02:56	Blank Spike
ZZZZZZ	X071424.D	06/24/20	18:53	03:49	(unrelated sample)
FA75495-3	X071425.D	06/24/20	19:19	04:15	(used for QC only; not part of job FA77581)
FA75495-4	X071426.D	06/24/20	19:45	04:41	(used for QC only; not part of job FA77581)
FA76058-1	X071427.D	06/24/20	20:11	05:07	(used for QC only; not part of job FA77581)
ZZZZZZ	X071428.D	06/24/20	20:37	05:33	(unrelated sample)
ZZZZZZ	X071429.D	06/24/20	21:02	05:58	(unrelated sample)
ZZZZZZ	X071430.D	06/24/20	21:28	06:24	(unrelated sample)
OP80770-MS	X071432.D	06/24/20	22:19	07:15	Matrix Spike
OP80770-MSD	X071433.D	06/24/20	22:45	07:41	Matrix Spike Duplicate
ZZZZZZ	X071434.D	06/24/20	23:10	08:06	(unrelated sample)
ZZZZZZ	X071435.D	06/24/20	23:36	08:32	(unrelated sample)
ZZZZZZ	X071436.D	06/25/20	00:01	08:57	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample:	SX2919-DFTPP	**Injection Date:**	06/24/20
Lab File ID:	X071415.D	**Injection Time:**	15:04
Instrument ID:	GCMSX		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	X071437.D	06/25/20	00:26	09:22	(unrelated sample)
ZZZZZZ	X071438.D	06/25/20	00:52	09:48	(unrelated sample)
SX2919-ECC2918	X071440.D	06/25/20	01:43	10:39	Ending cal 50
SX2919-ECC2918	X071441.D	06/25/20	02:08	11:04	Ending cal 50

Instrument Performance Check (DFTPP)

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2950-DFTPP
Lab File ID: X072328.D
Instrument ID: GCMSX
Injection Date: 08/11/20
Injection Time: 12:30

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	22485	49.1		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	20622	45.0		Pass
70	Less than 2.0% of mass 69	80	0.17	(0.39) [a]	Pass
127	40.0 - 60.0% of mass 198	23723	51.8		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	45800	100.0		Pass
199	5.0 - 9.0% of mass 198	3103	6.78		Pass
275	10.0 - 30.0% of mass 198	10316	22.5		Pass
365	1.0 - 100.0% of mass 198	1067	2.33		Pass
441	Present, but less than mass 443	6664	14.6	(84.6) [b]	Pass
442	40.0 - 100.0% of mass 198	40365	88.1		Pass
443	17.0 - 23.0% of mass 442	7879	17.2	(19.5) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
SX2950-CC2918	X072329.D	08/11/20	12:47	00:17	Continuing cal 50
SX2950-CC2918	X072330.D	08/11/20	13:13	00:43	Continuing cal 5
OP81482-BS	X072331.D	08/11/20	13:39	01:09	Blank Spike
OP81482-MB	X072332.D	08/11/20	14:05	01:35	Method Blank
ZZZZZZ	X072333.D	08/11/20	14:31	02:01	(unrelated sample)
ZZZZZZ	X072334.D	08/11/20	14:57	02:27	(unrelated sample)
ZZZZZZ	X072335.D	08/11/20	15:23	02:53	(unrelated sample)
ZZZZZZ	X072336.D	08/11/20	15:50	03:20	(unrelated sample)
ZZZZZZ	X072337.D	08/11/20	16:16	03:46	(unrelated sample)
ZZZZZZ	X072338.D	08/11/20	16:42	04:12	(unrelated sample)
ZZZZZZ	X072339.D	08/11/20	17:08	04:38	(unrelated sample)
ZZZZZZ	X072340.D	08/11/20	17:34	05:04	(unrelated sample)
ZZZZZZ	X072341.D	08/11/20	18:00	05:30	(unrelated sample)
ZZZZZZ	X072342.D	08/11/20	18:26	05:56	(unrelated sample)
ZZZZZZ	X072343.D	08/11/20	18:52	06:22	(unrelated sample)
ZZZZZZ	X072344.D	08/11/20	19:18	06:48	(unrelated sample)
ZZZZZZ	X072345.D	08/11/20	19:44	07:14	(unrelated sample)
ZZZZZZ	X072346.D	08/11/20	20:10	07:40	(unrelated sample)
FA77581-1	X072347.D	08/11/20	20:35	08:05	CS-SS-104

Instrument Performance Check (DFTPP)

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample:	SX2950-DFTPP	**Injection Date:**	08/11/20
Lab File ID:	X072328.D	**Injection Time:**	12:30
Instrument ID:	GCMSX		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
FA77581-2	X072348.D	08/11/20	21:01	08:31	CS-23
FA77581-3	X072349.D	08/11/20	21:27	08:57	CS-SS-101
FA77581-4	X072350.D	08/11/20	21:52	09:22	CS-22
FA77581-5	X072351.D	08/11/20	22:18	09:48	CS-24
OP81482-MS	X072352.D	08/11/20	22:44	10:14	Matrix Spike
OP81482-MSD	X072353.D	08/11/20	23:09	10:39	Matrix Spike Duplicate
FA77581-6	X072354.D	08/11/20	23:34	11:04	CS-RISB-02

Instrument Performance Check (DFTPP)

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2951-DFTPP
Lab File ID: X072356.D
Instrument ID: GCMSX
Injection Date: 08/12/20
Injection Time: 10:07

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	29610	51.2		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	26838	46.4		Pass
70	Less than 2.0% of mass 69	95	0.16	(0.35) [a]	Pass
127	40.0 - 60.0% of mass 198	29425	50.9		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	57845	100.0		Pass
199	5.0 - 9.0% of mass 198	3631	6.28		Pass
275	10.0 - 30.0% of mass 198	13046	22.6		Pass
365	1.0 - 100.0% of mass 198	1226	2.12		Pass
441	Present, but less than mass 443	7696	13.3	(85.3) [b]	Pass
442	40.0 - 100.0% of mass 198	47624	82.3		Pass
443	17.0 - 23.0% of mass 442	9017	15.6	(18.9) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
SX2951-CC2918	X072357.D	08/12/20	10:24	00:17	Continuing cal 50
SX2951-CC2918	X072358.D	08/12/20	10:49	00:42	Continuing cal 5
ZZZZZZ	X072359.D	08/12/20	11:16	01:09	(unrelated sample)
ZZZZZZ	X072360.D	08/12/20	11:42	01:35	(unrelated sample)
ZZZZZZ	X072361.D	08/12/20	12:07	02:00	(unrelated sample)
ZZZZZZ	X072362.D	08/12/20	12:33	02:26	(unrelated sample)
ZZZZZZ	X072366.D	08/12/20	14:16	04:09	(unrelated sample)
ZZZZZZ	X072368.D	08/12/20	15:08	05:01	(unrelated sample)
ZZZZZZ	X072369.D	08/12/20	15:33	05:26	(unrelated sample)
FA77581-1	X072371.D	08/12/20	16:25	06:18	CS-SS-104
FA77581-4	X072373.D	08/12/20	17:17	07:10	CS-22
FA77581-5	X072374.D	08/12/20	17:43	07:36	CS-24
ZZZZZZ	X072375.D	08/12/20	18:09	08:02	(unrelated sample)
FA77581-3	X072376.D	08/12/20	18:34	08:27	CS-SS-101
ZZZZZZ	X072377.D	08/12/20	19:00	08:53	(unrelated sample)
ZZZZZZ	X072379.D	08/12/20	19:51	09:44	(unrelated sample)
ZZZZZZ	X072381.D	08/12/20	20:42	10:35	(unrelated sample)
ZZZZZZ	X072382.D	08/12/20	21:08	11:01	(unrelated sample)
ZZZZZZ	X072383.D	08/12/20	21:34	11:27	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample:	SX2951-DFTPP	**Injection Date:**	08/12/20
Lab File ID:	X072356.D	**Injection Time:**	10:07
Instrument ID:	GCMSX		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	X072384.D	08/12/20	21:59	11:52	(unrelated sample)

Internal Standard Area Summary

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Check Std:	S6F251-CC248	**Injection Date:**	08/11/20
Lab File ID:	6F06486.D	**Injection Time:**	12:54
Instrument ID:	GCMS6F	**Method:**	SW846 8270E

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Initial Cal [a]	302884	6.05	1170478	7.48	637579	9.53	1169544	11.29	1074260	14.59	1069323	16.95
Check Std [b]	320148	6.03	1244639	7.47	690499	9.52	1290149	11.28	1201004	14.58	1198860	16.93
Upper Limit [c]	640296	6.20	2489278	7.64	1380998	9.69	2580298	11.45	2402008	14.75	2397720	17.10
Lower Limit [d]	160074	5.86	622320	7.30	345250	9.35	645075	11.11	600502	14.41	599430	16.76

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP81484-BS	372320	6.03	1389543	7.47	731029	9.52	1322211	11.28	1161496	14.58	1125889	16.93
OP81484-MB	379614	6.03	1425462	7.46	760513	9.52	1370889	11.27	1142281	14.57	1117696	16.92
FA77581-7	371272	6.03	1386651	7.46	744152	9.52	1345757	11.28	1167562	14.57	1167783	16.93
FA77581-8	399115	6.03	1524247	7.47	829257	9.52	1517235	11.28	1316308	14.58	1252556	16.94
FA77581-9	388684	6.03	1487978	7.47	802996	9.52	1477264	11.28	1247562	14.58	1216283	16.94
FA77581-10	386926	6.03	1451329	7.47	757234	9.52	1373589	11.28	1176388	14.58	1159280	16.94
ZZZZZZ	376698	6.03	1389148	7.47	730822	9.52	1296535	11.28	1131159	14.57	1143949	16.93
ZZZZZZ	378731	6.03	1424753	7.47	745735	9.52	1338107	11.28	1171725	14.57	1170347	16.94
ZZZZZZ	381124	6.03	1412026	7.47	741775	9.52	1331566	11.28	1140619	14.58	1165331	16.95
ZZZZZZ	381333	6.03	1402351	7.47	727957	9.52	1293248	11.28	1102297	14.58	1150621	16.94
ZZZZZZ	360704	6.03	1367223	7.47	720277	9.52	1299540	11.28	1111358	14.58	1104378	16.95
FA77615-6	357490	6.03	1308447	7.47	684334	9.52	1224243	11.28	1063944	14.58	1099990	16.94
OP81484-MS	355841	6.03	1312698	7.47	687606	9.52	1237189	11.28	1078087	14.58	1108819	16.95
OP81484-MSD	349551	6.04	1288913	7.47	676015	9.53	1217631	11.28	1067199	14.59	1076080	16.95
ZZZZZZ	345535	6.03	1287704	7.47	675724	9.52	1201776	11.28	1071811	14.58	1105614	16.95
ZZZZZZ	365068	6.03	1346935	7.47	703545	9.52	1258184	11.28	1102573	14.58	1134044	16.95
ZZZZZZ	371245	6.03	1408625	7.47	759203	9.52	1396299	11.28	1170612	14.58	1155992	16.95
ZZZZZZ	378653	6.03	1415003	7.47	755254	9.52	1352234	11.28	1085577	14.61	1169120	17.00
ZZZZZZ	362583	6.04	1344236	7.47	715905	9.53	1294458	11.28	1120594	14.58	1164635	16.95
ZZZZZZ	361523	6.04	1352547	7.47	716437	9.53	1301320	11.28	1085653	14.60	1137038	16.97
ZZZZZZ	357359	6.04	1317070	7.47	692725	9.53	1245507	11.28	1083937	14.59	1125655	16.96
ZZZZZZ	324276	6.04	1201862	7.47	637791	9.53	1160927	11.28	974706	14.61	1038243	16.99
ZZZZZZ	340202	6.04	1268070	7.47	674004	9.53	1221594	11.28	1062925	14.59	1101284	16.97

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Initial Cal is: S6F248-ICC248 6F06440.D 07/29/20 14:36
(b) Check Std Limit = -50 to + 100% of initial cal area.

Internal Standard Area Summary

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Check Std:	S6F251-CC248	**Injection Date:**	08/11/20
Lab File ID:	6F06486.D	**Injection Time:**	12:54
Instrument ID:	GCMS6F	**Method:**	SW846 8270E

Lab	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
Sample ID	**AREA**	**RT**	**AREA**	**RT**	**AREA**	**RT**	**AREA**	**RT**	**AREA**	**RT**	**AREA**	**RT**

(c) Upper Limit = + 100% of check standard area; Retention time + 0.167 minutes.
(d) Lower Limit = -50% of check standard area; Retention time -0.167 minutes.

Internal Standard Area Summary

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Check Std:	S7G482-CC472	**Injection Date:**	08/10/20
Lab File ID:	7G11100.D	**Injection Time:**	14:28
Instrument ID:	GCMS7G	**Method:**	SW846 8270E BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Initial Cal [a]	25300	4.75	14609	6.24	26093	7.53	42851	9.87	37551	11.64
Check Std [b]	22910	4.63	14625	6.11	27961	7.40	44464	9.72	38799	11.48
Upper Limit [c]	45820	4.80	29250	6.28	55922	7.57	88928	9.89	77598	11.65
Lower Limit [d]	11455	4.46	7313	5.94	13981	7.23	22232	9.55	19400	11.31

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
OP81483-MB	24312	4.63	16384	6.12	31665	7.40	48325	9.73	44401	11.48
OP81483-BS	25347	4.64	16910	6.13	32726	7.41	51832	9.74	48241	11.49
ZZZZZZ	25518	4.63	17323	6.12	33094	7.40	62623	9.74	62681	11.49
ZZZZZZ	25113	4.63	17665	6.11	34389	7.40	70970	9.75	67856	11.51
ZZZZZZ	26281	4.63	18976	6.11	36901	7.40	80387	9.76	62069	11.53
ZZZZZZ	25295	4.63	17856	6.12	34979	7.40	67215	9.74	61009	11.49
ZZZZZZ	25434	4.63	18768	6.12	36665	7.40	78381	9.75	64840	11.52
ZZZZZZ	26585	4.63	19395	6.12	37305	7.40	66203	9.73	59245	11.48
ZZZZZZ	27962	4.66	20151	6.14	38334	7.42	76169	9.77	66878	11.52
ZZZZZZ	26538	4.63	19824	6.12	38236	7.40	80910	9.75	66469	11.51
ZZZZZZ	26888	4.63	20464	6.11	39282	7.40	75929	9.73	66526	11.49
ZZZZZZ	24374	4.63	18480	6.12	35638	7.40	62003	9.73	54949	11.49
ZZZZZZ	25172	4.63	19675	6.11	38015	7.40	81424	9.74	67018	11.51
FA77581-1	25146	4.64	19369	6.12	37579	7.40	78019	9.75	63658	11.51
FA77581-2	23601	4.63	18367	6.11	35759	7.40	66452	9.73	55322	11.49
FA77581-3	25511	4.63	20171	6.11	39891	7.40	84208	9.75	63567	11.51
FA77581-4	24455	4.65	19847	6.13	38256	7.41	79537	9.76	59109	11.53
OP81483-MS [e]	20120	4.65	16826	6.13	32850	7.41	58735	9.75	41508	11.50
OP81483-MSD [e]	20877	4.63	17525	6.12	34643	7.40	69789	9.74	49534	11.50
FA77581-6	21788	4.63	17966	6.11	35112	7.40	69684	9.73	52409	11.49
S7G482-ECC472	20422	4.65	15731	6.13	30214	7.42	47844	9.75	26167	11.50

IS 1 = Naphthalene-d8
IS 2 = Acenaphthene-d10
IS 3 = Phenanthrene-d10
IS 4 = Chrysene-d12
IS 5 = Perylene-d12

(a) Initial Cal is: S7G472-ICC472 7G10836.D 07/21/20 14:43
(b) Check Std Limit = -50 to + 100% of initial cal area.
(c) Upper Limit = + 100% of check standard area; Retention time + 0.167 minutes.
(d) Lower Limit = -50% of check standard area; Retention time -0.167 minutes.
(e) Dilution required due to matrix interference; extract was viscous.

Internal Standard Area Summary

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Check Std:	S7G483-CC472	**Injection Date:**	08/11/20
Lab File ID:	7G11130.D	**Injection Time:**	08:29
Instrument ID:	GCMS7G	**Method:**	SW846 8270E BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Initial Cal [a]	25300	4.75	14609	6.24	26093	7.53	42851	9.87	37551	11.64
Check Std [b]	23021	4.63	17904	6.11	34538	7.40	58481	9.73	51783	11.48
Upper Limit [c]	46042	4.80	35808	6.28	69076	7.57	116962	9.90	103566	11.65
Lower Limit [d]	11511	4.46	8952	5.94	17269	7.23	29241	9.56	25892	11.31

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
OP81485-MB	21667	4.63	17417	6.11	34159	7.40	60313	9.73	54929	11.47
OP81485-BS	22419	4.63	17721	6.12	35054	7.40	60725	9.73	55339	11.48
FA77581-7	21993	4.65	17751	6.13	34300	7.41	61199	9.74	56905	11.49
FA77581-8	20168	4.63	16497	6.11	32146	7.40	62432	9.73	59100	11.49
FA77581-9	20710	4.63	17089	6.12	33007	7.40	63976	9.74	62255	11.50
FA77581-10	19541	4.65	16538	6.13	32234	7.41	61692	9.74	57995	11.50
ZZZZZZ	19176	4.65	16041	6.13	31644	7.41	55090	9.74	53000	11.49
ZZZZZZ	20337	4.65	17240	6.13	33719	7.41	60041	9.74	58801	11.49
ZZZZZZ	20371	4.64	16941	6.12	32802	7.40	65875	9.75	62002	11.51
ZZZZZZ	19156	4.63	15860	6.11	31122	7.40	54619	9.73	52212	11.47
ZZZZZZ	20891	4.64	17140	6.12	33466	7.41	65680	9.74	63725	11.51
FA77615-6	20762	4.63	16997	6.11	32867	7.40	62212	9.73	58980	11.49
OP81485-MS	21679	4.64	17776	6.12	35130	7.41	63709	9.74	59713	11.50
OP81485-MSD	22295	4.65	18278	6.13	36401	7.41	66697	9.74	61462	11.50
ZZZZZZ	20600	4.63	17101	6.11	33516	7.40	60935	9.73	57729	11.49
ZZZZZZ	21624	4.64	17811	6.12	34710	7.40	65043	9.74	61378	11.50
ZZZZZZ	20528	4.64	17614	6.12	34676	7.40	64840	9.74	59121	11.49
ZZZZZZ	22511	4.64	18710	6.12	37890	7.41	95046	9.78	52199	11.55
ZZZZZZ	20947	4.63	18088	6.11	35722	7.40	62374	9.73	56624	11.48
ZZZZZZ	20517	4.65	18471	6.13	36375	7.41	75424	9.76	62403	11.53
ZZZZZZ	20299	4.63	18312	6.11	35117	7.40	65101	9.73	57852	11.49
ZZZZZZ	19792	4.63	18162	6.11	36276	7.40	67435	9.73	58097	11.49
ZZZZZZ	20730	4.63	18630	6.11	36508	7.40	80223	9.75	63857	11.52
ZZZZZZ	19006	4.64	17600	6.12	34496	7.40	64777	9.74	56828	11.50
ZZZZZZ	23412	4.63	21177	6.11	41713	7.40	87234	9.76	60316	11.54
ZZZZZZ	19939	4.65	18574	6.13	36812	7.41	95748	9.79	51358	11.56
ZZZZZZ	19555	4.65	18327	6.13	36349	7.41	85919	9.78	55818	11.55
FA77581-5	18661	4.65	17313	6.13	34578	7.41	71591	9.76	56542	11.52

IS 1 = Naphthalene-d8
IS 2 = Acenaphthene-d10
IS 3 = Phenanthrene-d10
IS 4 = Chrysene-d12

Internal Standard Area Summary

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Check Std:	S7G483-CC472	**Injection Date:**	08/11/20
Lab File ID:	7G11130.D	**Injection Time:**	08:29
Instrument ID:	GCMS7G	**Method:**	SW846 8270E BY SIM

Lab Sample ID	IS 1 AREA	IS 1 RT	IS 2 AREA	IS 2 RT	IS 3 AREA	IS 3 RT	IS 4 AREA	IS 4 RT	IS 5 AREA	IS 5 RT

IS 5 = Perylene-d12

(a) Initial Cal is: S7G472-ICC472 7G10836.D 07/21/20 14:43
(b) Check Std Limit = -50 to + 100% of initial cal area.
(c) Upper Limit = + 100% of check standard area; Retention time + 0.167 minutes.
(d) Lower Limit = -50% of check standard area; Retention time -0.167 minutes.

Internal Standard Area Summary

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Check Std:	SX2950-CC2918	**Injection Date:**	08/11/20
Lab File ID:	X072329.D	**Injection Time:**	12:47
Instrument ID:	GCMSX	**Method:**	SW846 8270E

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Initial Cal [a]	170190	6.01	730199	7.43	379384	9.48	636433	11.22	474373	14.50	348798	16.81
Check Std [b]	166366	5.66	662768	7.08	340989	9.12	587050	10.86	485410	14.07	371635	16.26
Upper Limit [c]	332732	5.83	1325536	7.25	681978	9.29	1174100	11.03	970820	14.24	743270	16.43
Lower Limit [d]	83183	5.49	331384	6.91	170495	8.95	293525	10.69	242705	13.90	185818	16.09

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP81482-BS	148110	5.66	595100	7.08	297901	9.12	501986	10.86	391828	14.07	303605	16.26
OP81482-MB	129549	5.66	480676	7.08	235184	9.12	406815	10.86	312428	14.06	255107	16.24
ZZZZZZ	178516	5.66	672615	7.08	353859	9.12	606812	10.86	474809	14.09	387366	16.30
ZZZZZZ	154000	5.66	582044	7.08	287902	9.12	503510	10.86	430460	14.07	327513	16.27
ZZZZZZ	155156	5.66	583505	7.08	289534	9.12	502484	10.86	418698	14.08	329587	16.28
ZZZZZZ	158036	5.66	596326	7.08	303497	9.12	529075	10.86	426380	14.09	346489	16.30
ZZZZZZ	178728	5.67	708905	7.08	327075	9.13	548591	10.87	347437	14.12	342422	16.36
ZZZZZZ	166126	5.67	627119	7.09	312912	9.13	546006	10.87	436102	14.09	346747	16.29
ZZZZZZ	163700	5.66	621390	7.09	321115	9.13	550417	10.87	432468	14.10	356470	16.32
ZZZZZZ	167208	5.67	621905	7.09	313510	9.13	546236	10.87	437821	14.10	364432	16.31
ZZZZZZ	164828	5.67	608415	7.09	297163	9.13	508088	10.87	407717	14.08	326292	16.28
ZZZZZZ	165990	5.67	622894	7.09	308442	9.13	528417	10.87	428216	14.08	342052	16.29
ZZZZZZ	165681	5.66	617067	7.09	311960	9.13	549008	10.87	475656	14.09	371515	16.30
ZZZZZZ	163360	5.67	611409	7.09	297748	9.13	510859	10.87	424050	14.08	339724	16.29
ZZZZZZ	166234	5.67	621926	7.09	300813	9.13	516250	10.87	407517	14.08	319861	16.28
ZZZZZZ	171443	5.67	646034	7.09	320314	9.13	553392	10.87	444089	14.09	351993	16.30
FA77581-1	166797	5.67	619193	7.09	307423	9.13	531106	10.87	430408	14.09	354939	16.30
FA77581-2	178161	5.67	662446	7.09	325937	9.13	552834	10.87	429188	14.08	341429	16.29
FA77581-3	177668	5.67	666706	7.09	331405	9.13	578753	10.87	472125	14.10	383289	16.31
FA77581-4	180366	5.67	667720	7.09	337538	9.13	577435	10.87	452483	14.10	368909	16.32
FA77581-5	147608	5.67	546571	7.09	270607	9.13	460128	10.87	376298	14.09	311161	16.30
OP81482-MS	177475	5.67	686382	7.09	329211	9.13	543265	10.88	406529	14.11	336362	16.31
OP81482-MSD	176300	5.67	694985	7.09	336531	9.13	565950	10.88	430062	14.11	345207	16.32
FA77581-6	161575	5.67	592845	7.09	287769	9.13	486909	10.87	401327	14.09	325605	16.30

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Initial Cal is: SX2918-ICC2918 X071368.D 06/23/20 15:12

Internal Standard Area Summary

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Check Std:	SX2950-CC2918	**Injection Date:**	08/11/20
Lab File ID:	X072329.D	**Injection Time:**	12:47
Instrument ID:	GCMSX	**Method:**	SW846 8270E

Lab	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
Sample ID	**AREA**	**RT**	**AREA**	**RT**	**AREA**	**RT**	**AREA**	**RT**	**AREA**	**RT**	**AREA**	**RT**

(b) Check Std Limit = -50 to + 100% of initial cal area.
(c) Upper Limit = + 100% of check standard area; Retention time + 0.167 minutes.
(d) Lower Limit = -50% of check standard area; Retention time -0.167 minutes.

Internal Standard Area Summary

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Check Std:	SX2951-CC2918	**Injection Date:**	08/12/20
Lab File ID:	X072357.D	**Injection Time:**	10:24
Instrument ID:	GCMSX	**Method:**	SW846 8270E

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Initial Cal [a]	170190	6.01	730199	7.43	379384	9.48	636433	11.22	474373	14.50	348798	16.81
Check Std [b]	163781	5.65	635873	7.08	311303	9.12	516972	10.86	400284	14.07	293676	16.27
Upper Limit [c]	327562	5.82	1271746	7.25	622606	9.29	1033944	11.03	800568	14.24	587352	16.44
Lower Limit [d]	81891	5.48	317937	6.91	155652	8.95	258486	10.69	200142	13.90	146838	16.10

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
ZZZZZZ	218136	5.65	810959	7.07	391709	9.11	662062	10.86	535598	14.07	417625	16.27
ZZZZZZ	176303	5.65	649197	7.08	305905	9.11	500197	10.86	394851	14.07	314921	16.27
ZZZZZZ	161302	5.65	614464	7.07	296208	9.12	511357	10.86	430440	14.07	327737	16.27
ZZZZZZ	182933	5.65	657427	7.08	310084	9.11	524672	10.86	428249	14.07	343608	16.28
ZZZZZZ	181771	5.65	641174	7.08	304582	9.12	513802	10.86	409295	14.07	349024	16.28
ZZZZZZ	196243	5.65	758444	7.08	369807	9.11	653011	10.86	554493	14.07	423056	16.28
ZZZZZZ	137435	5.65	499201	7.08	241962	9.11	418598	10.86	357671	14.07	282742	16.27
FA77581-1	161487	5.65	577827	7.08	278663	9.11	470342	10.86	403060	14.07	331354	16.27
FA77581-4	134513	5.65	483488	7.08	230817	9.12	396866	10.86	339628	14.07	273941	16.28
FA77581-5	141777	5.65	504392	7.08	237075	9.11	395558	10.86	332612	14.07	276558	16.28
ZZZZZZ	168839	5.65	622102	7.08	300831	9.12	515565	10.86	420124	14.07	329022	16.27
FA77581-3	126149	5.65	463289	7.08	221908	9.11	382867	10.86	316510	14.07	243526	16.27
ZZZZZZ	162640	5.65	591331	7.08	282884	9.11	479581	10.86	392317	14.07	316082	16.28
ZZZZZZ	172906	5.65	647699	7.08	316920	9.11	541722	10.86	452184	14.07	350415	16.27
ZZZZZZ	178537	5.65	655727	7.08	321143	9.11	552823	10.86	467385	14.07	367333	16.28
ZZZZZZ	188109	5.65	679562	7.08	331283	9.11	559907	10.86	465953	14.08	378757	16.28
ZZZZZZ	161914	5.65	574279	7.08	278406	9.12	458553	10.86	362449	14.07	291793	16.27
ZZZZZZ	161048	5.65	614812	7.08	304170	9.12	518000	10.86	382263	14.07	308707	16.27

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Initial Cal is: SX2918-ICC2918 X071368.D 06/23/20 15:12
(b) Check Std Limit = -50 to + 100% of initial cal area.
(c) Upper Limit = + 100% of check standard area; Retention time + 0.167 minutes.
(d) Lower Limit = -50% of check standard area; Retention time -0.167 minutes.

Surrogate Recovery Summary

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Method: SW846 8270E **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
FA77581-1	X072371.D	68	71	66
FA77581-1	X072347.D	75	76	77
FA77581-2	X072348.D	75	77	79
FA77581-3	X072376.D	85	93	89
FA77581-3	X072349.D	69	72	73
FA77581-4	X072373.D	71	76	72
FA77581-4	X072350.D	68	70	71
FA77581-5	X072374.D	77	83	79
FA77581-5	X072351.D	79	81	80
FA77581-6	X072354.D	76	79	78
FA77581-7	6F06489.D	69	72	76
FA77581-8	6F06490.D	62	68	74
FA77581-9	6F06491.D	68	71	76
FA77581-10	6F06492.D	70	73	73
OP81482-BS	X072331.D	67	72	73
OP81482-MB	X072332.D	69	72	75
OP81482-MS	X072352.D	76	82	83
OP81482-MSD	X072353.D	73	81	86
OP81484-BS	6F06487.D	71	73	76
OP81484-MB	6F06488.D	71	73	75
OP81484-MS	6F06499.D	66	69	73
OP81484-MSD	6F06500.D	71	73	75

Surrogate Compounds	Recovery Limits
S1 = Nitrobenzene-d5	40-105%
S2 = 2-Fluorobiphenyl	43-107%
S3 = Terphenyl-d14	45-119%

Surrogate Recovery Summary

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Method: SW846 8270E BY SIM **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2
FA77581-1	7G11117.D	90	94
FA77581-2	7G11118.D	90	90
FA77581-3	7G11119.D	94	100
FA77581-4	7G11120.D	96	87
FA77581-5	7G11158.D	99	98
FA77581-6	7G11124.D	92	98
FA77581-7	7G11133.D	94	88
FA77581-8	7G11134.D	116	114
FA77581-9	7G11135.D	108	110
FA77581-10	7G11136.D	111	102
OP81483-BS	7G11102.D	82	85
OP81483-MB	7G11101.D	82	83
OP81483-MS	7G11122.D	101	101
OP81483-MSD	7G11123.D	99	110
OP81485-BS	7G11132.D	88	90
OP81485-MB	7G11131.D	79	90
OP81485-MS	7G11143.D	113	103
OP81485-MSD	7G11144.D	119	100

Surrogate Compounds	Recovery Limits
S1 = 2-Methylnaphthalene-d10	50-150%
S2 = Fluoranthene-d10	50-150%

Initial Calibration Summary

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: S6F248-ICC248
Lab FileID: 6F06440.D

Response Factor Report MSBNA10

Method : C:\msdchem\1\met...\8270D6F072920.m (RTE Integrator)
Title : SW846 8270D OR EPA 625
Last Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

Calibration Files
5 =6F06437.D 10 =6F06438.D 25 =6F06439.D 50 =6F06440.D
60 =6F06441.D 75 =6F06442.D 100 =6F06443.D 1 =6F06436.D

Compound	5	10	25	50	60	75	100	1	Avg	%RSD
1) I 1,4-Dichlorobenzene-d	ISTD									
2) 1,4-Dioxane	0.575	0.563	0.558	0.580	0.597	0.597	0.682	0.608	0.595	6.61
3) N-nitrosodim	0.783	0.798	0.785	0.815	0.824	0.825	0.938	0.724	0.812	7.45
4) Pyridine	1.464	1.512	1.474	1.545	1.574	1.572	1.807	1.309	1.532	9.13
5) Benzaldehyde	1.207	1.201	1.207	1.272	1.273	1.229	1.212	1.199	1.225	2.51
6) Aniline	2.298	2.273	2.256	2.356	2.394	2.388	2.679	2.121	2.346	6.87
7) 2-Fluorophen	1.444	1.457	1.458	1.530	1.560	1.562	1.774	1.307	1.511	8.89
8) bis(2-Chloro	1.521	1.496	1.461	1.523	1.559	1.541	1.747	1.443	1.536	6.09
9) Phenol-d5	1.741	1.740	1.725	1.811	1.836	1.837	2.060	1.604	1.794	7.33
10) Phenol	2.043	2.032	2.003	2.096	2.119	2.111	2.373	1.912	2.086	6.44
11) 2-Chlorophen	1.489	1.513	1.482	1.559	1.577	1.582	1.806	1.383	1.549	7.90
12) 1,3-Dichloro	1.639	1.621	1.611	1.677	1.704	1.690	1.913	1.544	1.675	6.51
13) 1,4-Dichloro	1.680	1.659	1.631	1.696	1.726	1.706	1.926	1.559	1.698	6.24
14) 1,2-Dichloro	1.575	1.545	1.549	1.600	1.626	1.622	1.835	1.467	1.602	6.69
15) Benzyl alcoh	0.915	0.891	0.908	0.961	0.958	0.979	1.109	0.844	0.945	8.38
16) bis(2-chloro	1.930	1.913	1.850	1.893	1.913	1.901	2.112	1.859	1.921	4.26
17) 2-Methylphen	1.393	1.355	1.325	1.390	1.413	1.409	1.583	1.289	1.395	6.27
18) Acetophenone	2.023	2.042	1.991	2.104	2.110	2.099	2.212	1.962	2.068	3.86
19) Hexachloroet	0.687	0.681	0.671	0.694	0.711	0.697	0.794	0.610	0.693	7.34
20) N-Nitroso-di	1.097	1.078	1.033	1.085	1.091	1.091	1.233	1.073	1.098	5.32
21) 3&4-Methylph	1.443	1.413	1.383	1.442	1.445	1.453	1.646	1.371	1.450	5.87
22) I Naphthalene-d8	ISTD									
23) Nitrobenzene	0.428	0.421	0.421	0.434	0.452	0.448	0.498	0.409	0.439	6.30
24) Nitrobenzene	0.425	0.410	0.416	0.421	0.432	0.431	0.477	0.407	0.427	5.11
25) Isophorone	0.768	0.738	0.732	0.750	0.776	0.774	0.858	0.747	0.768	5.20
26) 2-Nitropheno	0.196	0.195	0.205	0.216	0.223	0.225	0.253	0.170	0.210	11.77
27) 2,4-Dimethyl	0.361	0.351	0.346	0.360	0.370	0.371	0.409	0.347	0.364	5.63
28) O,O,O-Trieth	0.185	0.180	0.182	0.189	0.193	0.195	0.200	0.180	0.188	3.99
29) bis(2-Chloro	0.476	0.452	0.455	0.458	0.473	0.475	0.514	0.459	0.470	4.27
30) Benzoic Acid	0.242	0.270	0.292	0.326	0.339	0.341	0.384	0.129	0.290	27.26
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9995										
Response Ratio = 0.00000 + 0.25630 *A + 0.05047 *A^2										
31) 2,4-Dichloro	0.319	0.309	0.314	0.323	0.330	0.331	0.365	0.301	0.324	6.06
32) 1,2,4-Trichl	0.355	0.343	0.346	0.356	0.369	0.366	0.406	0.341	0.360	5.91
33) alpha-Terpin									0.000	-1.00
34) Naphthalene	1.149	1.110	1.100	1.102	1.136	1.123	1.216	1.118	1.132	3.36
35) 4-Chloroanil	0.491	0.477	0.475	0.490	0.497	0.498	0.542	0.477	0.493	4.42
36) 2,6-Dichloro	0.310	0.303	0.302	0.311	0.320	0.322	0.354	0.297	0.315	5.70
37) Hexachlorobu	0.193	0.187	0.189	0.196	0.200	0.201	0.218	0.198	0.198	4.82
38) Caprolactam	0.122	0.123	0.123	0.130	0.134	0.133	0.138	0.109	0.126	7.30
39) 4-Chloro-3-m	0.326	0.319	0.322	0.336	0.341	0.343	0.381	0.304	0.334	6.86
40) 2-Methylnaph	0.667	0.643	0.644	0.655	0.665	0.665	0.724	0.630	0.662	4.28
41) 1-Methylnaph	0.726	0.701	0.699	0.716	0.740	0.737	0.799	0.701	0.727	4.57
42) 1,2,4,5-Tetr	0.343	0.330	0.328	0.344	0.353	0.354	0.389	0.337	0.347	5.57

Initial Calibration Summary

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: S6F248-ICC248
Lab FileID: 6F06440.D

43) I Acenaphthene-d10 ----------ISTD----------
44) Hexachlorocy 0.361 0.379 0.413 0.432 0.459 0.459 0.509 0.321 0.417 14.62
45) 2,4,6-Trichl 0.417 0.416 0.430 0.436 0.458 0.455 0.502 0.378 0.436 8.36
46) 2,4,5-Trichl 0.441 0.446 0.449 0.463 0.488 0.485 0.534 0.414 0.465 7.93
47) 2-Fluorobiph 1.558 1.507 1.533 1.521 1.576 1.555 1.683 1.575 1.563 3.47
48) 1,1'-Bipheny 1.625 1.630 1.655 1.655 1.733 1.708 1.706 1.652 1.671 2.38
49) 2-Chloronaph 1.303 1.276 1.279 1.271 1.339 1.327 1.439 1.281 1.314 4.28
50) 2-Nitroanili 0.386 0.390 0.409 0.417 0.438 0.436 0.475 0.341 0.412 9.82
51) p-Dinitroben 0.216 0.233 0.257 0.272 0.292 0.291 0.324 0.183 0.258 17.76
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9996
Response Ratio = 0.00000 + 0.22511 *A + 0.03904 *A^2

52) Acenaphthyle 1.987 1.947 1.962 1.947 2.035 2.000 2.165 1.949 1.999 3.69
53) Dimethylphth 1.482 1.436 1.452 1.454 1.521 1.509 1.629 1.460 1.493 4.18
54) m-Dinitroben 0.227 0.237 0.251 0.264 0.281 0.279 0.310 0.166 0.252 17.35
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9996
Response Ratio = 0.00000 + 0.22519 *A + 0.03294 *A^2

55) 2,6-Dinitrot 0.327 0.332 0.344 0.354 0.371 0.368 0.402 0.275 0.347 10.88
56) o-Dinitroben 0.257 0.259 0.258 0.251 0.262 0.255 0.279 0.238 0.257 4.38
57) Acenaphthene 1.341 1.282 1.285 1.277 1.337 1.325 1.437 1.337 1.328 3.90
58) 3-Nitroanili 0.381 0.389 0.396 0.403 0.419 0.424 0.464 0.324 0.400 10.00
59) 2,4-Dinitrop 0.078 0.114 0.166 0.203 0.225 0.233 0.270 0.016 0.163 53.37
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9985
Response Ratio = 0.00000 + 0.11955 *A + 0.06203 *A^2

60) Dibenzofuran 1.870 1.791 1.800 1.775 1.845 1.821 1.962 1.817 1.835 3.25
61) 2,4-Dinitrot 0.423 0.437 0.455 0.475 0.499 0.501 0.541 0.321 0.456 14.67
62) 4-Nitropheno 0.212 0.200 0.213 0.237 0.251 0.249 0.277 0.190 0.229 13.08
63) 2,3,5,6-Tetr 0.318 0.329 0.358 0.372 0.395 0.398 0.436 0.264 0.359 15.14
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9997
Response Ratio = 0.00000 + 0.31902 *A + 0.04612 *A^2

64) 2,3,4,6-Tetr 0.344 0.355 0.370 0.380 0.406 0.401 0.444 0.302 0.375 11.55
65) Fluorene 1.472 1.443 1.454 1.449 1.525 1.504 1.617 1.424 1.486 4.21
66) 4-Chlorophen 0.743 0.705 0.715 0.706 0.738 0.744 0.813 0.716 0.735 4.81
67) Diethylphtha 1.504 1.473 1.464 1.476 1.547 1.541 1.679 1.433 1.514 5.07
68) Thionazin 0.337 0.339 0.347 0.352 0.360 0.355 0.351 0.316 0.345 4.05
69) 4-Nitroanili 0.379 0.389 0.407 0.408 0.429 0.429 0.473 0.320 0.404 11.08

70) I Phenanthrene-d10 ----------ISTD----------
71) 4,6-Dinitro- 0.090 0.112 0.137 0.155 0.167 0.167 0.190 0.047 0.133 35.53
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9991
Response Ratio = 0.00000 + 0.11243 *A + 0.03151 *A^2

72) n-Nitrosodip 0.572 0.563 0.558 0.677 0.588 0.579 0.761 0.676 0.622 11.89
73) Diphenylamin 0.687 0.676 0.669 0.677 0.706 0.695 0.761 0.676 0.693 4.30
74) 1,2-Diphenyl 0.894 0.886 0.869 0.862 0.888 0.871 0.938 0.886 0.887 2.64
75) 2,4,6-Tribro 0.125 0.127 0.132 0.136 0.143 0.142 0.158 0.114 0.135 9.95
76) Sulfotep 0.141 0.146 0.144 0.146 0.150 0.148 0.148 0.135 0.145 3.34
77) Phorate 0.462 0.483 0.488 0.497 0.516 0.513 0.513 0.420 0.487 6.67
78) 4-Bromopheny 0.225 0.225 0.219 0.229 0.238 0.237 0.261 0.232 0.233 5.54
79) Hexachlorobe 0.264 0.254 0.253 0.257 0.268 0.268 0.297 0.272 0.267 5.28
80) Dimethoate 0.314 0.337 0.336 0.349 0.361 0.350 0.355 0.276 0.335 8.37
81) Simazine 0.137 0.139 0.138 0.138 0.142 0.140 0.153 0.129 0.140 4.68
82) Atrazine 0.226 0.230 0.228 0.235 0.245 0.238 0.267 0.216 0.236 6.48
83) Pentachlorop 0.071 0.100 0.127 0.149 0.160 0.160 0.186 0.136 28.94
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9984
Response Ratio = 0.00000 + 0.10221 *A + 0.03362 *A^2

Initial Calibration Summary

Job Number: FA77581 **Sample:** S6F248-ICC248
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** 6F06440.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

```
 84) Phenanthrene 1.199 1.162 1.147 1.157 1.201 1.173 1.261 1.284 1.198   4.17
 85) Anthracene   1.214 1.190 1.183 1.193 1.236 1.203 1.310 1.207 1.217   3.37
 86) Disulfoton   0.489 0.501 0.517 0.516 0.534 0.526 0.534 0.456 0.509   5.20
 87) Carbazole    1.086 1.065 1.068 1.078 1.104 1.101 1.202 1.070 1.097   4.10
 88) Methyl Parat 0.222 0.245 0.270 0.292 0.302 0.296 0.301 0.161 0.261  19.08
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9991
               Response Ratio = 0.00000 + 0.26072 *A + 0.01867 *A^2

 89) Di-n-butylph 1.350 1.347 1.361 1.389 1.435 1.396 1.503 1.277 1.382   4.85
 90) Ethyl Parath 0.142 0.160 0.173 0.185 0.194 0.191 0.195 0.106 0.168  18.50
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9993
               Response Ratio = 0.00000 + 0.16581 *A + 0.01307 *A^2

 91) Fluoranthene 1.229 1.226 1.223 1.250 1.290 1.277 1.398 1.195 1.261   5.01

 92) I   Chrysene-d12          ----------------ISTD--------------------
 93) Benzidine    0.853 0.866 0.839 0.821 0.844 0.815 0.824 0.819 0.835   2.19
 94) Pyrene       1.420 1.400 1.395 1.388 1.440 1.418 1.554 1.447 1.433   3.71
 95) Terphenyl-d1 1.085 1.086 1.089 1.088 1.140 1.143 1.244 1.120 1.124   4.82
 96) Famphur      0.490 0.504 0.480 0.460 0.452 0.420 0.380 0.449 0.454   8.79
 97) Butylbenzylp 0.652 0.655 0.673 0.676 0.713 0.709 0.769 0.644 0.686   6.12
 98) 3,3'-Dichlor 0.494 0.509 0.523 0.523 0.539 0.528 0.562 0.471 0.519   5.35
 99) Benzo[a]anth 1.284 1.296 1.282 1.303 1.364 1.354 1.460 1.379 1.340   4.58
100) Chrysene     1.306 1.271 1.252 1.242 1.294 1.288 1.398 1.353 1.300   4.02
101) bis(2-Ethylh 0.937 0.918 0.929 0.933 0.987 0.975 1.057 0.935 0.959   4.82

102) I   Perylene-d12          ----------------ISTD--------------------
103) Di-n-octylph 1.434 1.464 1.508 1.576 1.693 1.712 1.899 1.371 1.582  11.08
104) Benzo[b]fluo 1.194 1.193 1.213 1.255 1.341 1.366 1.515 1.194 1.284   9.00
105) Benzo[k]fluo 1.300 1.274 1.298 1.317 1.378 1.356 1.492 1.267 1.335   5.54
106) Benzo[a]pyre 1.128 1.112 1.146 1.175 1.238 1.241 1.371 1.127 1.192   7.33
107) Indeno[1,2,3 1.055 1.056 1.070 1.085 1.134 1.145 1.285 1.050 1.110   7.14
108) Dibenz[a,h]a 1.124 1.128 1.139 1.199 1.234 1.224 1.368 1.067 1.185   7.84
109) Benzo[g,h,i] 1.178 1.184 1.168 1.166 1.191 1.183 1.321 1.194 1.198   4.22
 ----------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

           8270D6F072920.m        Thu Jul 30 12:56:54 2020
```

Initial Calibration Verification

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: S6F248-ICV248
Lab FileID: 6F06444.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\S6F248_072920\6F06444.D Vial: 10
Acq On : 29 Jul 2020 4:20 pm Operator: marthav
Sample : icv248-50 Inst : MSBNA10
Misc : op81256,S6F248,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\msdchem\1\met...\8270D6F072920.m (RTE Integrator)
Title : SW846 8270D OR EPA 625
Last Update : Wed Jul 29 16:22:51 2020
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	127	0.00	6.05
2		1,4-Dioxane	50.000	46.216	7.6	121	0.03	2.90
3		N-nitrosodimethylamine	50.000	43.903	12.2	111	0.02	3.22
4		Pyridine		----------NA----------				
5	P	Benzaldehyde	50.000	44.828	10.3	110	0.00	5.57
6		Aniline		----------NA----------				
7	S	2-Fluorophenol		----------NA----------				
8	P	bis(2-Chloroethyl)ether	50.000	44.559	10.9	114	0.00	5.77
9	S	Phenol-d5		----------NA----------				
10	P	Phenol	50.000	39.595	20.8#	100	0.00	5.69
11	P	2-Chlorophenol	50.000	44.471	11.1	112	0.00	5.82
12		1,3-Dichlorobenzene	50.000	45.857	8.3	117	0.00	5.98
13		1,4-Dichlorobenzene	50.000	45.437	9.1	116	0.00	6.06
14		1,2-Dichlorobenzene	50.000	45.284	9.4	115	0.00	6.23
15		Benzyl alcohol		----------NA----------				
16	P	bis(2-chloroisopropyl)eth	50.000	44.816	10.4	116	0.00	6.36
17	P	2-Methylphenol	50.000	40.425	19.2	103	0.00	6.35
18	P	Acetophenone	50.000	43.446	13.1	109	0.00	6.49
19	P	Hexachloroethane	50.000	45.143	9.7	115	0.00	6.60
20	P	N-Nitroso-di-n-propylamin	50.000	42.791	14.4	110	0.00	6.51
21	P	3&4-Methylphenol	100.000	83.784	16.2	103	0.00	6.53
22	I	Naphthalene-d8	40.000	40.000	0.0	121	0.00	7.48
23	S	Nitrobenzene-d5		----------NA----------				
24	P	Nitrobenzene	50.000	44.480	11.0	109	0.00	6.68
25	P	Isophorone	50.000	45.582	8.8	113	0.00	6.96
26	P	2-Nitrophenol	50.000	47.780	4.4	113	0.00	7.05
27	P	2,4-Dimethylphenol	50.000	41.860	16.3	103	0.00	7.12
28		O,O,O-Triethylphosphoroth		----------NA----------				
29	P	bis(2-Chloroethoxy)methan	50.000	42.725	14.5	106	0.00	7.22
		----------	Amount	Calc.	%Drift	----------		
30		Benzoic Acid	100.000	81.252	18.7	100	0.05	7.31
		----------	Amount	Calc.	%Drift	----------		
31	P	2,4-Dichlorophenol	50.000	44.946	10.1	109	0.00	7.33
32		1,2,4-Trichlorobenzene	50.000	46.107	7.8	113	0.00	7.41
33		alpha-Terpineol		----------NA----------				
34	P	Naphthalene	50.000	44.412	11.2	110	0.00	7.51
35	P	4-Chloroaniline		----------NA----------				
36		2,6-Dichlorophenol	50.000	44.311	11.4	108	0.00	7.59
37	P	Hexachlorobutadiene	50.000	47.942	4.1	117	0.00	7.66

Initial Calibration Verification

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: S6F248-ICV248
Lab FileID: 6F06444.D

38	P	Caprolactam	50.000	42.439	15.1	100	0.00	8.00
39	P	4-Chloro-3-methylphenol	50.000	43.093	13.8	104	0.00	8.17
40	P	2-Methylnaphthalene		----------NA----------				
41		1-Methylnaphthalene	50.000	42.797	14.4	105	0.00	8.43
42	P	1,2,4,5-Tetrachlorobenzen	50.000	44.871	10.3	110	0.00	8.51
43	I	Acenaphthene-d10	40.000	40.000	0.0	114	0.00	9.53
44	P	Hexachlorocyclopentadiene	50.000	54.534	-9.1	120	0.00	8.50
45	P	2,4,6-Trichlorophenol	50.000	47.264	5.5	108	0.00	8.65
46	P	2,4,5-Trichlorophenol	50.000	47.628	4.7	109	0.00	8.70
47	S	2-Fluorobiphenyl		----------NA----------				
48	P	1,1'-Biphenyl	50.000	45.739	8.5	105	0.00	8.86
49	P	2-Chloronaphthalene	50.000	45.110	9.8	106	0.00	8.88
50	P	2-Nitroaniline		----------NA----------				

			Amount	Calc.	%Drift			
51		p-Dinitrobenzene		----------NA----------				

			Amount	Calc.	%Drift			
52	P	Acenaphthylene	50.000	49.165	1.7	115	0.00	9.36
53	P	Dimethylphthalate	50.000	44.087	11.8	103	0.00	9.24

			Amount	Calc.	%Drift			
54		m-Dinitrobenzene		----------NA----------				

			Amount	Calc.	%Drift			
55	P	2,6-Dinitrotoluene	50.000	44.436	11.1	99	0.00	9.31
56		o-Dinitrobenzene		----------NA----------				
57	P	Acenaphthene	50.000	44.705	10.6	106	0.00	9.57
58	P	3-Nitroaniline		----------NA----------				

			Amount	Calc.	%Drift			
59	P	2,4-Dinitrophenol	100.000	82.230	17.8	94	0.00	9.62

			Amount	Calc.	%Drift			
60	P	Dibenzofuran		----------NA----------				
61	P	2,4-Dinitrotoluene	50.000	47.506	5.0	104	0.00	9.78
62	P	4-Nitrophenol	100.000	87.747	12.3	90	0.00	9.75

			Amount	Calc.	%Drift			
63		2,3,5,6-Tetrachlorophenol		----------NA----------				

			Amount	Calc.	%Drift			
64	P	2,3,4,6-Tetrachlorophenol	50.000	44.338	11.3	100	0.00	9.93
65	P	Fluorene	50.000	45.537	8.9	107	0.00	10.19
66	P	4-Chlorophenyl-phenylethe	50.000	44.165	11.7	105	0.00	10.20
67	P	Diethylphthalate	50.000	44.593	10.8	104	0.00	10.09
68		Thionazin		----------NA----------				
69	P	4-Nitroaniline		----------NA----------				
70	I	Phenanthrene-d10	40.000	40.000	0.0	109	0.00	11.29

			Amount	Calc.	%Drift			
71	P	4,6-Dinitro-2-methylpheno	100.000	88.804	11.2	100	0.00	10.25

			Amount	Calc.	%Drift			
72	P	n-Nitrosodiphenylamine	50.000	41.363	17.3	83	0.00	10.34
73		Diphenylamine		----------NA----------				
74		1,2-Diphenylhydrazine	50.000	44.895	10.2	100	0.00	10.38
75	S	2,4,6-Tribromophenol		----------NA----------				

Initial Calibration Verification

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: S6F248-ICV248
Lab FileID: 6F06444.D

76		Sulfotep		----------NA----------					
77		Phorate		----------NA----------					
78	P	4-Bromophenyl-phenylether	50.000	47.065	5.9	104	0.00	10.77	
79	P	Hexachlorobenzene	50.000	45.472	9.1	103	0.00	10.83	
80		Dimethoate		----------NA----------					
81		Simazine		----------NA----------					
82	P	Atrazine	50.000	44.646	10.7	97	0.00	11.00	
		----------	Amount	Calc.	%Drift	----------			
83	P	Pentachlorophenol	100.000	87.054	12.9	97	0.00	11.07	
		----------	Amount	Calc.	%Drift	----------			
84	P	Phenanthrene	50.000	44.999	10.0	101	0.00	11.32	
85	P	Anthracene	50.000	43.934	12.1	97	0.00	11.38	
86		Disulfoton		----------NA----------					
87	P	Carbazole		----------NA----------					
		----------	Amount	Calc.	%Drift	----------			
88		Methyl Parathion		----------NA----------					
		----------	Amount	Calc.	%Drift	----------			
89	P	Di-n-butylphthalate	50.000	45.321	9.4	98	0.00	12.04	
		----------	Amount	Calc.	%Drift	----------			
90		Ethyl Parathion		----------NA----------					
		----------	Amount	Calc.	%Drift	----------			
91	P	Fluoranthene	50.000	44.168	11.7	97	0.00	12.73	
92	I	Chrysene-d12	40.000	40.000	0.0	98	0.00	14.59	
93		Benzidine		----------NA----------					
94	P	Pyrene	50.000	48.366	3.3	98	0.00	12.99	
95	S	Terphenyl-d14		----------NA----------					
96		Famphur		----------NA----------					
97	P	Butylbenzylphthalate	50.000	47.452	5.1	94	0.00	13.88	
98	P	3,3'-Dichlorobenzidine		----------NA----------					
99	P	Benzo[a]anthracene	50.000	45.797	8.4	92	0.00	14.58	
100	P	Chrysene	50.000	46.737	6.5	96	0.00	14.63	
101	P	bis(2-Ethylhexyl)phthalat	50.000	47.144	5.7	95	0.00	14.73	
102	I	Perylene-d12	40.000	40.000	0.0	94	0.00	16.95	
103	P	Di-n-octylphthalate	50.000	49.690	0.6	93	0.00	15.80	
104	P	Benzo[b]fluoranthene	50.000	46.616	6.8	89	0.00	16.31	
105	P	Benzo[k]fluoranthene	50.000	47.600	4.8	90	0.00	16.36	
106	P	Benzo[a]pyrene	50.000	46.589	6.8	88	0.00	16.86	
107	P	Indeno[1,2,3-cd]pyrene	50.000	44.889	10.2	86	0.00	18.58	
108	P	Dibenz[a,h]anthracene	50.000	44.387	11.2	82	0.00	18.63	
109	P	Benzo[g,h,i]perylene	50.000	44.815	10.4	86	0.00	18.95	

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6F06440.D 8270D6F072920.m Thu Jul 30 12:08:40 2020

Initial Calibration Verification

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: S6F248-ICV248
Lab FileID: 6F06445.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\S6F248_072920\6F06445.D Vial: 11
Acq On : 29 Jul 2020 4:46 pm Operator: marthav
Sample : icv248-50 Inst : MSBNA10
Misc : op81256,S6F248,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\msdchem\1\met...\8270D6F072920.m (RTE Integrator)
Title : SW846 8270D OR EPA 625
Last Update : Wed Jul 29 16:22:51 2020
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	107	0.00	6.04
2		1,4-Dioxane		----------NA----------				
3		N-nitrosodimethylamine		----------NA----------				
4		Pyridine	50.000	46.795	6.4	100	0.00	3.23
5	P	Benzaldehyde		----------NA----------				
6		Aniline	50.000	42.333	15.3	91	0.00	5.69
7	S	2-Fluorophenol		----------NA----------				
8	P	bis(2-Chloroethyl)ether		----------NA----------				
9	S	Phenol-d5		----------NA----------				
10	P	Phenol		----------NA----------				
11	P	2-Chlorophenol		----------NA----------				
12		1,3-Dichlorobenzene		----------NA----------				
13		1,4-Dichlorobenzene		----------NA----------				
14		1,2-Dichlorobenzene		----------NA----------				
15		Benzyl alcohol	50.000	47.296	5.4	100	0.00	6.21
16	P	bis(2-chloroisopropyl)eth		----------NA----------				
17	P	2-Methylphenol		----------NA----------				
18	P	Acetophenone		----------NA----------				
19	P	Hexachloroethane		----------NA----------				
20	P	N-Nitroso-di-n-propylamin		----------NA----------				
21	P	3&4-Methylphenol		----------NA----------				
22	I	Naphthalene-d8	40.000	40.000	0.0	109	0.00	7.47
23	S	Nitrobenzene-d5		----------NA----------				
24	P	Nitrobenzene		----------NA----------				
25	P	Isophorone		----------NA----------				
26	P	2-Nitrophenol		----------NA----------				
27	P	2,4-Dimethylphenol		----------NA----------				
28		O,O,O-Triethylphosphoroth		----------NA----------				
29	P	bis(2-Chloroethoxy)methan		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
30		Benzoic Acid		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
31	P	2,4-Dichlorophenol		----------NA----------				
32		1,2,4-Trichlorobenzene		----------NA----------				
33		alpha-Terpineol		----------NA----------				
34	P	Naphthalene		----------NA----------				
35	P	4-Chloroaniline	50.000	44.395	11.2	97	0.00	7.58
36		2,6-Dichlorophenol		----------NA----------				
37	P	Hexachlorobutadiene		----------NA----------				

Initial Calibration Verification

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: S6F248-ICV248
Lab FileID: 6F06445.D

38	P	Caprolactam		----------NA----------					
39	P	4-Chloro-3-methylphenol		----------NA----------					
40	P	2-Methylnaphthalene	50.000	43.358	13.3	95	0.00	8.31	
41		1-Methylnaphthalene		----------NA----------					
42	P	1,2,4,5-Tetrachlorobenzen		----------NA----------					
43	I	Acenaphthene-d10	40.000	40.000	0.0	108	0.00	9.53	
44	P	Hexachlorocyclopentadiene		----------NA----------					
45	P	2,4,6-Trichlorophenol		----------NA----------					
46	P	2,4,5-Trichlorophenol		----------NA----------					
47	S	2-Fluorobiphenyl		----------NA----------					
48	P	1,1'-Biphenyl		----------NA----------					
49	P	2-Chloronaphthalene		----------NA----------					
50	P	2-Nitroaniline	50.000	57.272	-14.5	121	0.00	9.01	
		---------- Amount	Calc.	%Drift	----------				
51		p-Dinitrobenzene		----------NA----------					
		---------- Amount	Calc.	%Drift	----------				
52	P	Acenaphthylene		----------NA----------					
53	P	Dimethylphthalate		----------NA----------					
		---------- Amount	Calc.	%Drift	----------				
54		m-Dinitrobenzene	50.000	44.477	11.0	95	-0.01	9.26	
		---------- Amount	Calc.	%Drift	----------				
55	P	2,6-Dinitrotoluene		----------NA----------					
56		o-Dinitrobenzene		----------NA----------					
57	P	Acenaphthene		----------NA----------					
58	P	3-Nitroaniline	50.000	47.397	5.2	101	0.00	9.50	
		---------- Amount	Calc.	%Drift	----------				
59	P	2,4-Dinitrophenol		----------NA----------					
		---------- Amount	Calc.	%Drift	----------				
60	P	Dibenzofuran	50.000	43.783	12.4	97	0.00	9.78	
61	P	2,4-Dinitrotoluene		----------NA----------					
62	P	4-Nitrophenol		----------NA----------					
		---------- Amount	Calc.	%Drift	----------				
63		2,3,5,6-Tetrachlorophenol		----------NA----------					
		---------- Amount	Calc.	%Drift	----------				
64	P	2,3,4,6-Tetrachlorophenol		----------NA----------					
65	P	Fluorene		----------NA----------					
66	P	4-Chlorophenyl-phenylethe		----------NA----------					
67	P	Diethylphthalate		----------NA----------					
68		Thionazin		----------NA----------					
69	P	4-Nitroaniline	50.000	46.067	7.9	98	-0.02	10.22	
70	I	Phenanthrene-d10	40.000	40.000	0.0	109	0.00	11.29	
		---------- Amount	Calc.	%Drift	----------				
71	P	4,6-Dinitro-2-methylpheno		----------NA----------					
		---------- Amount	Calc.	%Drift	----------				
72	P	n-Nitrosodiphenylamine	50.000	54.035	-8.1	108	0.00	10.34	
73		Diphenylamine	50.000	48.461	3.1	108	0.00	10.34	
74		1,2-Diphenylhydrazine		----------NA----------					
75	S	2,4,6-Tribromophenol		----------NA----------					

Initial Calibration Verification

Job Number: FA77581 **Sample:** S6F248-ICV248
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** 6F06445.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

				Amount	Calc.	%Drift			
76		Sulfotep			NA				
77		Phorate			NA				
78	P	4-Bromophenyl-phenylether			NA				
79	P	Hexachlorobenzene			NA				
80		Dimethoate			NA				
81		Simazine			NA				
82	P	Atrazine			NA				
				Amount	Calc.	%Drift			
83	P	Pentachlorophenol			NA				
				Amount	Calc.	%Drift			
84	P	Phenanthrene			NA				
85	P	Anthracene			NA				
86		Disulfoton			NA				
87	P	Carbazole		50.000	44.980	10.0	99	0.00	11.58
				Amount	Calc.	%Drift			
88		Methyl Parathion			NA				
				Amount	Calc.	%Drift			
89	P	Di-n-butylphthalate			NA				
				Amount	Calc.	%Drift			
90		Ethyl Parathion			NA				
				Amount	Calc.	%Drift			
91	P	Fluoranthene			NA				
92	I	Chrysene-d12		40.000	40.000	0.0	108	0.00	14.59
93		Benzidine		50.000	54.478	-9.0	119	0.00	12.91
94	P	Pyrene			NA				
95	S	Terphenyl-d14			NA				
96		Famphur			NA				
97	P	Butylbenzylphthalate			NA				
98	P	3,3'-Dichlorobenzidine		50.000	48.599	2.8	104	0.00	14.57
99	P	Benzo[a]anthracene			NA				
100	P	Chrysene			NA				
101	P	bis(2-Ethylhexyl)phthalat			NA				
102	I	Perylene-d12		40.000	40.000	0.0	105	0.00	16.95
103	P	Di-n-octylphthalate			NA				
104	P	Benzo[b]fluoranthene			NA				
105	P	Benzo[k]fluoranthene			NA				
106	P	Benzo[a]pyrene			NA				
107	P	Indeno[1,2,3-cd]pyrene			NA				
108	P	Dibenz[a,h]anthracene			NA				
109	P	Benzo[g,h,i]perylene			NA				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6F06440.D 8270D6F072920.m Thu Jul 30 12:08:42 2020

Continuing Calibration Summary

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: S6F251-CC248
Lab FileID: 6F06486.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\Je...2020\S6F251\6F06486.d Vial: 2
Acq On : 11 Aug 2020 12:54 pm Operator: marthav
Sample : cc248-50 Inst : MSBNA10
Misc : op81484,S6F251,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\msdchem\1\met...\8270D6F072920.m (RTE Integrator)
Title : SW846 8270D OR EPA 625
Last Update : Wed Jul 29 16:22:51 2020
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	106	0.00	6.03
2		1,4-Dioxane	0.595	0.579	2.7	106	0.00	2.86
3		N-nitrosodimethylamine	0.812	0.770	5.2	100	0.00	3.19
4		Pyridine	1.532	1.555	-1.5	106	0.00	3.23
5	P	Benzaldehyde	1.225	1.171	4.4	97	0.00	5.56
6		Aniline	2.346	2.244	4.3	101	0.00	5.68
7	S	2-Fluorophenol	1.511	1.499	0.8	104	0.00	4.66
8	P	bis(2-Chloroethyl)ether	1.536	1.498	2.5	104	0.00	5.76
9	S	Phenol-d5	1.794	1.788	0.3	104	0.00	5.67
10	P	Phenol	2.086	2.056	1.4	104	0.00	5.69
11	P	2-Chlorophenol	1.549	1.540	0.6	104	0.00	5.81
12		1,3-Dichlorobenzene	1.675	1.625	3.0	102	0.00	5.97
13		1,4-Dichlorobenzene	1.698	1.645	3.1	103	0.00	6.05
14		1,2-Dichlorobenzene	1.602	1.543	3.7	102	0.00	6.22
15		Benzyl alcohol	0.945	0.903	4.4	99	0.00	6.20
16	P	bis(2-chloroisopropyl)eth	1.921	1.836	4.4	103	0.00	6.35
17	P	2-Methylphenol	1.395	1.381	1.0	105	0.00	6.34
18	P	Acetophenone	2.068	2.084	-0.8	105	0.00	6.48
19	P	Hexachloroethane	0.693	0.668	3.6	102	0.00	6.59
20	P	N-Nitroso-di-n-propylamin	1.098	1.077	1.9	105	0.00	6.49
21	P	3&4-Methylphenol	1.450	1.446	0.3	106	0.00	6.52
22	I	Naphthalene-d8	1.000	1.000	0.0	106	0.00	7.47
23	S	Nitrobenzene-d5	0.439	0.428	2.5	105	0.00	6.65
24	P	Nitrobenzene	0.427	0.416	2.6	105	0.00	6.68
25	P	Isophorone	0.768	0.755	1.7	107	0.00	6.95
26	P	2-Nitrophenol	0.210	0.219	-4.3	108	0.00	7.03
27	P	2,4-Dimethylphenol	0.364	0.350	3.8	104	0.00	7.11
28		O,O,O-Triethylphosphoroth	0.188	0.187	0.5	105	0.00	7.18
29	P	bis(2-Chloroethoxy)methan	0.470	0.451	4.0	105	0.00	7.21
		----------	True	Calc.	% Drift	----------		
30		Benzoic Acid	50.000	52.715	-5.4	111	0.00	7.24
		----------	AvgRF	CCRF	% Dev	----------		
31	P	2,4-Dichlorophenol	0.324	0.321	0.9	106	0.00	7.32
32		1,2,4-Trichlorobenzene	0.360	0.349	3.1	104	0.00	7.40
33		alpha-Terpineol		----------NA----------				
34	P	Naphthalene	1.132	1.083	4.3	105	0.00	7.49
35	P	4-Chloroaniline	0.493	0.466	5.5	101	0.00	7.57
36		2,6-Dichlorophenol	0.315	0.308	2.2	105	0.00	7.58
37	P	Hexachlorobutadiene	0.198	0.191	3.5	104	0.00	7.64

Continuing Calibration Summary

Job Number: FA77581 **Sample:** S6F251-CC248
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** 6F06486.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

38	P	Caprolactam	0.126	0.134	-6.3	109	0.00	8.00
39	P	4-Chloro-3-methylphenol	0.334	0.341	-2.1	108	0.00	8.16
40	P	2-Methylnaphthalene	0.662	0.645	2.6	105	0.00	8.30
41		1-Methylnaphthalene	0.727	0.717	1.4	107	0.00	8.41
42	P	1,2,4,5-Tetrachlorobenzen	0.347	0.343	1.2	106	0.00	8.50
43	I	Acenaphthene-d10	1.000	1.000	0.0	108	0.00	9.52
44	P	Hexachlorocyclopentadiene	0.417	0.424	-1.7	106	0.00	8.49
45	P	2,4,6-Trichlorophenol	0.436	0.430	1.4	107	0.00	8.64
46	P	2,4,5-Trichlorophenol	0.465	0.463	0.4	108	0.00	8.69
47	S	2-Fluorobiphenyl	1.563	1.483	5.1	106	0.00	8.74
48	P	1,1'-Biphenyl	1.671	1.622	2.9	106	0.00	8.85
49	P	2-Chloronaphthalene	1.314	1.253	4.6	107	0.00	8.87
50	P	2-Nitroaniline	0.412	0.419	-1.7	109	0.00	9.00
		----------	True	Calc.	% Drift	----------		
51		p-Dinitrobenzene	50.000	51.328	-2.7	113	0.00	9.17
		----------	AvgRF	CCRF	% Dev	----------		
52	P	Acenaphthylene	1.999	1.957	2.1	109	0.00	9.36
53	P	Dimethylphthalate	1.493	1.447	3.1	108	0.00	9.24
		----------	True	Calc.	% Drift	----------		
54		m-Dinitrobenzene	50.000	50.721	-1.4	111	0.00	9.25
		----------	AvgRF	CCRF	% Dev	----------		
55	P	2,6-Dinitrotoluene	0.347	0.357	-2.9	109	0.00	9.30
56		o-Dinitrobenzene	0.257	0.246	4.3	106	0.00	9.36
57	P	Acenaphthene	1.328	1.273	4.1	108	0.00	9.56
58	P	3-Nitroaniline	0.400	0.396	1.0	106	0.00	9.49
		----------	True	Calc.	% Drift	----------		
59	P	2,4-Dinitrophenol	50.000	54.668	-9.3	119	0.00	9.61
		----------	AvgRF	CCRF	% Dev	----------		
60	P	Dibenzofuran	1.835	1.776	3.2	108	0.00	9.77
61	P	2,4-Dinitrotoluene	0.456	0.485	-6.4	111	0.00	9.77
62	P	4-Nitrophenol	0.229	0.238	-3.9	108	0.00	9.73
		----------	True	Calc.	% Drift	----------		
63		2,3,5,6-Tetrachlorophenol	50.000	50.513	-1.0	111	0.00	9.87
		----------	AvgRF	CCRF	% Dev	----------		
64	P	2,3,4,6-Tetrachlorophenol	0.375	0.388	-3.5	111	0.00	9.92
65	P	Fluorene	1.486	1.463	1.5	109	0.00	10.17
66	P	4-Chlorophenyl-phenylethe	0.735	0.714	2.9	109	0.00	10.19
67	P	Diethylphthalate	1.514	1.493	1.4	110	0.00	10.08
68		Thionazin	0.345	0.345	0.0	106	0.00	10.17
69	P	4-Nitroaniline	0.404	0.408	-1.0	108	0.00	10.22
70	I	Phenanthrene-d10	1.000	1.000	0.0	110	0.00	11.28
		----------	True	Calc.	% Drift	----------		
71	P	4,6-Dinitro-2-methylpheno	50.000	52.712	-5.4	116	0.00	10.25
		----------	AvgRF	CCRF	% Dev	----------		
72	P	n-Nitrosodiphenylamine	0.622	0.670	-7.7	109	0.00	10.34
73		Diphenylamine	0.693	0.670	3.3	109	0.00	10.34
74		1,2-Diphenylhydrazine	0.887	0.831	6.3	106	0.00	10.38
75	S	2,4,6-Tribromophenol	0.135	0.137	-1.5	112	0.00	10.46

Continuing Calibration Summary

Job Number: FA77581 **Sample:** S6F251-CC248
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** 6F06486.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

76		Sulfotep	0.145	0.141	2.8	106	0.00	10.55
77		Phorate	0.487	0.489	-0.4	109	0.00	10.69
78	P	4-Bromophenyl-phenylether	0.233	0.227	2.6	109	0.00	10.77
79	P	Hexachlorobenzene	0.267	0.259	3.0	111	0.00	10.82
80		Dimethoate	0.335	0.344	-2.7	109	0.00	10.89
81		Simazine	0.140	0.134	4.3	107	0.00	10.96
82	P	Atrazine	0.236	0.236	0.0	111	0.00	10.99
		----------	True	Calc.	% Drift	----------		
83	P	Pentachlorophenol	50.000	53.387	-6.8	116	0.00	11.06
		----------	AvgRF	CCRF	% Dev	----------		
84	P	Phenanthrene	1.198	1.156	3.5	110	0.00	11.31
85	P	Anthracene	1.217	1.166	4.2	108	0.00	11.37
86		Disulfoton	0.509	0.517	-1.6	111	0.00	11.31
87	P	Carbazole	1.097	1.068	2.6	109	0.00	11.57
		----------	True	Calc.	% Drift	----------		
88		Methyl Parathion	50.000	50.796	-1.6	109	0.00	11.75
		----------	AvgRF	CCRF	% Dev	----------		
89	P	Di-n-butylphthalate	1.382	1.358	1.7	108	0.00	12.03
		----------	True	Calc.	% Drift	----------		
90		Ethyl Parathion	50.000	50.127	-0.3	109	0.00	12.23
		----------	AvgRF	CCRF	% Dev	----------		
91	P	Fluoranthene	1.261	1.246	1.2	110	0.00	12.72
92	I	Chrysene-d12	1.000	1.000	0.0	112	0.00	14.58
93		Benzidine	0.835	0.673	19.4	92	0.00	12.90
94	P	Pyrene	1.433	1.377	3.9	111	0.00	12.98
95	S	Terphenyl-d14	1.124	1.078	4.1	111	0.00	13.20
96		Famphur	0.454	0.415	8.6	101	0.00	13.77
97	P	Butylbenzylphthalate	0.686	0.661	3.6	109	0.00	13.87
98	P	3,3'-Dichlorobenzidine	0.519	0.501	3.5	107	0.00	14.56
99	P	Benzo[a]anthracene	1.340	1.281	4.4	110	0.00	14.56
100	P	Chrysene	1.300	1.250	3.8	113	0.00	14.61
101	P	bis(2-Ethylhexyl)phthalat	0.959	0.920	4.1	110	0.00	14.72
102	I	Perylene-d12	1.000	1.000	0.0	112	0.00	16.93
103	P	Di-n-octylphthalate	1.582	1.542	2.5	110	0.00	15.79
104	P	Benzo[b]fluoranthene	1.284	1.252	2.5	112	0.00	16.29
105	P	Benzo[k]fluoranthene	1.335	1.291	3.3	110	0.00	16.34
106	P	Benzo[a]pyrene	1.192	1.164	2.3	111	0.00	16.84
107	P	Indeno[1,2,3-cd]pyrene	1.110	1.100	0.9	114	0.00	18.57
108	P	Dibenz[a,h]anthracene	1.185	1.188	-0.3	111	0.00	18.61
109	P	Benzo[g,h,i]perylene	1.198	1.148	4.2	110	0.00	18.93

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6F06440.D 8270D6F072920.m Wed Aug 12 05:55:21 2020

Initial Calibration Summary

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: S7G472-ICC472
Lab FileID: 7G10836.D

Response Factor Report MSBNA8

Method : C:\msdchem\1\met...pahf7gD0072120.m (RTE Integrator)
Title : PAH's by 8270 SIM
Last Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

Calibration Files
L1 =7G10833.D L2 =7G10834.D L3 =7G10835.D L4 =7G10836.D
L5 =7G10837.D L6 =7G10838.D L7 =7G10839.D

Compound	L1	L2	L3	L4	L5	L6	L7	Avg	%RSD
1) I Naphthalene-d8	ISTD								
2)P Naphthalene	1.788	1.149	1.123	1.177	1.176	1.182	1.252	1.264	18.55
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9999									
Response Ratio = 0.00000 + 1.12694 *A + 0.01247 *A^2									
3)P 2-Methylnaphthale	1.042	0.771	0.794	0.867	0.873	0.908	0.973	0.890	10.71
4)s 2-Methylnaphthale	0.874	0.545	0.557	0.602	0.614	0.624	0.669	0.641	17.36
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9999									
Response Ratio = 0.00000 + 0.57628 *A + 0.00934 *A^2									
5)P 1-Methylnaphthale	1.294	0.799	0.779	0.829	0.824	0.846	0.913	0.898	20.03
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9999									
Response Ratio = 0.00000 + 0.78065 *A + 0.01318 *A^2									
6) I Acenaphthene-d10	ISTD								
7)P Acenaphthylene	3.327	2.218	2.216	2.419	2.341	2.384	2.491	2.485	15.48
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9998									
Response Ratio = 0.00000 + 2.28588 *A + 0.02049 *A^2									
8)P Acenaphthene	2.268	1.471	1.460	1.575	1.548	1.557	1.652	1.647	17.08
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9999									
Response Ratio = 0.00000 + 1.48716 *A + 0.01640 *A^2									
9)P Dibenzofuran	1.560	1.051	1.032	1.113	1.089	1.076	1.140	1.152	15.96
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9998									
Response Ratio = 0.00000 + 1.04854 *A + 0.00901 *A^2									
10)P Fluorene	2.436	1.605	1.570	1.689	1.676	1.701	1.778	1.779	16.71
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9999									
Response Ratio = 0.00000 + 1.62233 *A + 0.01563 *A^2									
11) I Phenanthrene-d10	ISTD								
12)P Pentachlorophenol	0.084	0.080	0.117	0.151	0.178	0.197	0.233	0.149	39.03
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9987									
Response Ratio = 0.00000 + 0.14189 *A + 0.00368 *A^2									
13)P Phenanthrene	2.007	1.282	1.303	1.371	1.336	1.382	1.439	1.446	17.50
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9999									
Response Ratio = 0.00000 + 1.30979 *A + 0.01292 *A^2									
14)P Anthracene	2.174	1.335	1.305	1.353	1.340	1.365	1.396	1.467	21.35
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9999									
Response Ratio = 0.00000 + 1.32278 *A + 0.01470 *A^2									

Initial Calibration Summary

Job Number: FA77581 **Sample:** S7G472-ICC472
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** 7G10836.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

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15)P Carbazole          3.180 2.159 2.195 2.326 2.267 2.295 2.316 2.391  14.77
16)P Fluoranthene       3.786 2.408 2.453 2.600 2.542 2.608 2.743 2.734  17.43
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9999
              Response Ratio = 0.00000 + 2.46832 *A + 0.02745 *A^2

17)s Fluoranthene-d10  3.033 1.977 2.025 2.147 2.071 2.136 2.194 2.226  16.33
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9998
              Response Ratio = 0.00000 + 2.05640 *A + 0.01374 *A^2


18) I   Chrysene-d12           ----------------ISTD---------------------
19)P Pyrene             2.490 1.553 1.540 1.619 1.610 1.629 1.672 1.730  19.54
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9999
              Response Ratio = 0.00000 + 1.57982 *A + 0.00925 *A^2

20)P Benzo[a]anthracen 1.818 1.195 1.210 1.275 1.268 1.268 1.312 1.335  16.22
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9999
              Response Ratio = 0.00000 + 1.23579 *A + 0.01515 *A^2

21)P Chrysene           2.438 1.458 1.376 1.447 1.376 1.368 1.385 1.550  25.39
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9997
              Response Ratio = 0.00000 + 1.38698 *A + -0.00072 *A^2


22) I   Perylene-d12           ----------------ISTD---------------------
23)P Benzo[b]fluoranth 1.677 1.174 1.240 1.363 1.337 1.329 1.383 1.358  11.71
24)P Benzo[k]fluoranth 2.395 1.507 1.422 1.504 1.430 1.470 1.515 1.606  21.78
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9998
              Response Ratio = 0.00000 + 1.42711 *A + 0.01741 *A^2

25)P Benzo[a]pyrene     1.657 1.212 1.202 1.293 1.268 1.287 1.342 1.323  11.71
26)P Indeno[1,2,3-cd]p 0.889 0.670 0.773 0.892 0.895 0.905 1.021 0.863  12.93
27)P Dibenz[a,h]anthra 1.091 0.768 0.828 0.940 0.961 1.000 1.118 0.958  13.38
28)P Benzo[g,h,i]peryl 1.292 0.877 0.912 1.008 1.013 1.042 1.143 1.041  13.53
----------------------------------------------------------------------------
(#) = Out of Range

          simpahf7gD0072120.m       Wed Jul 22 13:15:14 2020
```

Initial Calibration Verification

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: S7G472-ICV472
Lab FileID: 7G10840.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\072120_7G472\7G10840.D Vial: 10
Acq On : 21 Jul 2020 4:19 pm Operator: fouads
Sample : icv472-4 Inst : MSBNA8
Misc : op80679,S7G472,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\met...pahf7gD0072120.m (RTE Integrator)
Title : PAH's by 8270 SIM
Last Update : Tue Jul 21 16:46:17 2020
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	R.T.
1	I	Naphthalene-d8	4.000	4.000	0.0	98	0.00	4.73
			Amount	Calc.	%Drift			
2	P	Naphthalene	10.000	9.543	4.6	92	0.00	4.75
			Amount	Calc.	%Drift			
3	P	2-Methylnaphthalene	10.000	8.171	18.3	82	0.00	5.34
			Amount	Calc.	%Drift			
4	s	2-Methylnaphthalene-d10		----------	NA	----------		
5	P	1-Methylnaphthalene	10.000	9.875	1.3	95	0.00	5.42
			Amount	Calc.	%Drift			
6	I	Acenaphthene-d10	4.000	4.000	0.0	99	0.00	6.22
			Amount	Calc.	%Drift			
7	P	Acenaphthylene	10.000	9.065	9.4	87	0.00	6.10
8	P	Acenaphthene	10.000	9.628	3.7	93	0.00	6.25
9	P	Dibenzofuran	10.000	18.813	-88.1#	183	0.00	6.41
10	P	Fluorene	10.000	9.705	2.9	95	0.00	6.70
			Amount	Calc.	%Drift			
11	I	Phenanthrene-d10	4.000	4.000	0.0	100	0.00	7.51
			Amount	Calc.	%Drift			
12	P	Pentachlorophenol	20.000	14.755	26.2#	61	0.00	7.38
13	P	Phenanthrene	10.000	9.479	5.2	93	0.00	7.53
14	P	Anthracene	5.000	4.255	14.9	84	0.00	7.58
			Amount	Calc.	%Drift			
15	P	Carbazole	5.000	2.375	52.5#	49	0.00	7.75
			Amount	Calc.	%Drift			
16	P	Fluoranthene	10.000	8.721	12.8	85	-0.01	8.56
17	s	Fluoranthene-d10		----------	NA	----------		
			Amount	Calc.	%Drift			
18	I	Chrysene-d12	4.000	4.000	0.0	97	0.00	9.85

Initial Calibration Verification

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: S7G472-ICV472
Lab FileID: 7G10840.D

			Amount	Calc.	%Drift			
19	P	Pyrene	10.000	9.176	8.2	88	0.00	8.75
20	P	Benzo[a]anthracene	5.000	4.494	10.1	86	0.00	9.84
21	P	Chrysene	5.000	5.042	-0.8	94	0.00	9.88

			Amount	Calc.	%Drift			
22	I	Perylene-d12	4.000	4.000	0.0	97	0.00	11.62
23	P	Benzo[b]fluoranthene	5.000	4.666	6.7	90	0.00	11.10

			Amount	Calc.	%Drift			
24	P	Benzo[k]fluoranthene	5.000	4.742	5.2	88	0.00	11.13

			Amount	Calc.	%Drift			
25	P	Benzo[a]pyrene	5.000	4.510	9.8	89	0.00	11.54
26	P	Indeno[1,2,3-cd]pyrene	5.000	4.449	11.0	83	-0.01	13.38
27	P	Dibenz[a,h]anthracene	5.000	4.399	12.0	87	0.00	13.44
28	P	Benzo[g,h,i]perylene	5.000	4.244	15.1	85	0.00	13.85

(#) = Out of Range SPCC's out = 0 CCC's out = 0
7G10836.D simpahf7gD0072120.m Wed Jul 22 13:16:09 2020

Continuing Calibration Summary

Job Number: FA77581 **Sample:** S7G482-CC472
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** 7G11100.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\081020_7G482\7G11100.D Vial: 2
Acq On : 10 Aug 2020 2:28 pm Operator: FOUADS
Sample : CC472-4 Inst : MSBNA8
Misc : op81342,S7G482,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\met...pahf7gD0072120.m (RTE Integrator)
Title : PAH's by 8270 SIM
Last Update : Tue Jul 21 16:46:17 2020
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Naphthalene-d8	1.000	1.000	0.0	91	0.00	4.63
			Amount	Calc.	%Drift			
2	P	Naphthalene	10.000	9.380	6.2	83	0.00	4.65
			AvgRF	CCRF	%Dev			
3	P	2-Methylnaphthalene	0.890	0.867	2.6	91	0.00	5.23
			Amount	Calc.	%Drift			
4	s	2-Methylnaphthalene-d10	10.000	10.471	-4.7	95	0.00	5.21
5	P	1-Methylnaphthalene	10.000	10.094	-0.9	90	0.00	5.31
			AvgRF	CCRF	%Dev			
6	I	Acenaphthene-d10	1.000	1.000	0.0	100	0.00	6.11
			Amount	Calc.	%Drift			
7	P	Acenaphthylene	10.000	9.379	6.2	91	0.00	5.99
8	P	Acenaphthene	10.000	9.241	7.6	90	0.00	6.14
9	P	Dibenzofuran	10.000	9.900	1.0	95	0.00	6.30
10	P	Fluorene	10.000	9.126	8.7	90	0.00	6.59
			AvgRF	CCRF	%Dev			
11	I	Phenanthrene-d10	1.000	1.000	0.0	107	0.00	7.40
			Amount	Calc.	%Drift			
12	P	Pentachlorophenol	25.000	25.528	-2.1	120	-0.02	7.26
13	P	Phenanthrene	10.000	8.837	11.6	92	0.00	7.42
14	P	Anthracene	5.000	4.680	6.4	99	0.00	7.47
			AvgRF	CCRF	%Dev			
15	P	Carbazole	2.391	2.078	13.1	96	0.00	7.63
			Amount	Calc.	%Drift			
16	P	Fluoranthene	10.000	9.105	8.9	95	0.00	8.45
17	s	Fluoranthene-d10	10.000	9.749	2.5	102	0.00	8.43
			AvgRF	CCRF	%Dev			
18	I	Chrysene-d12	1.000	1.000	0.0	104	0.00	9.72

Continuing Calibration Summary

Job Number: FA77581 **Sample:** S7G482-CC472
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** 7G11100.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

			Amount	Calc.	%Drift			
19	P	Pyrene	10.000	9.258	7.4	95	-0.01	8.64
20	P	Benzo[a]anthracene	5.000	4.800	4.0	98	0.00	9.71
21	P	Chrysene	5.000	4.781	4.4	95	0.00	9.75
			AvgRF	CCRF	%Dev			
22	I	Perylene-d12	1.000	1.000	0.0	103	0.00	11.48
23	P	Benzo[b]fluoranthene	1.358	1.294	4.7	98	-0.01	10.96
			Amount	Calc.	%Drift			
24	P	Benzo[k]fluoranthene	5.000	4.905	1.9	98	-0.01	10.99
			AvgRF	CCRF	%Dev			
25	P	Benzo[a]pyrene	1.323	1.215	8.2	97	-0.01	11.39
26	P	Indeno[1,2,3-cd]pyrene	0.863	0.986	-14.3	114	-0.01	13.21
27	P	Dibenz[a,h]anthracene	0.958	0.993	-3.7	109	-0.01	13.26
28	P	Benzo[g,h,i]perylene	1.041	1.103	-6.0	113	0.00	13.67

(#) = Out of Range SPCC's out = 0 CCC's out = 0
7G10836.D simpahf7gD0072120.m Tue Aug 11 11:04:33 2020

Continuing Calibration Summary

Job Number: FA77581 **Sample:** S7G482-ECC472
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** 7G11126.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\081020_7G482\7G11126.D Vial: 2
Acq On : 11 Aug 2020 1:00 am Operator: FOUADS
Sample : ecc472-4 Inst : MSBNA8
Misc : op81483,S7G482,15.0,,,1,1,soil Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\met...pahf7gD0072120.m (RTE Integrator)
Title : PAH's by 8270 SIM
Last Update : Tue Jul 21 16:46:17 2020
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 50% Max. Rel. Area : 200%

		Compound	AvgRF / Amount	CCRF / Calc.	%Dev / %Drift	Area%	Dev(min)	R.T.
1	I	Naphthalene-d8	1.000	1.000	0.0	81	0.01	4.65
2	P	Naphthalene	10.000	9.504	5.0	75	0.01	4.66
3	P	2-Methylnaphthalene	0.890	0.975	-9.6	91	0.02	5.25
4	s	2-Methylnaphthalene-d10	10.000	11.307	-13.1	91	0.02	5.22
5	P	1-Methylnaphthalene	10.000	11.790	-17.9	94	0.02	5.33
6	I	Acenaphthene-d10	1.000	1.000	0.0	108	0.01	6.13
7	P	Acenaphthylene	10.000	9.374	6.3	97	0.00	6.01
8	P	Acenaphthene	10.000	9.413	5.9	98	0.01	6.16
9	P	Dibenzofuran	10.000	10.012	-0.1	104	0.02	6.32
10	P	Fluorene	10.000	9.464	5.4	100	0.02	6.61
11	I	Phenanthrene-d10	1.000	1.000	0.0	116	0.01	7.42
12	P	Pentachlorophenol	25.000	29.279	-17.1	151	0.00	7.28
13	P	Phenanthrene	10.000	9.146	8.5	103	0.00	7.43
14	P	Anthracene	5.000	4.773	4.5	110	0.00	7.48
15	P	Carbazole	2.391	2.173	9.1	108	0.02	7.65
16	P	Fluoranthene	10.000	9.444	5.6	107	0.02	8.47
17	s	Fluoranthene-d10	10.000	9.775	2.2	110	0.02	8.45
18	I	Chrysene-d12	1.000	1.000	0.0	112	0.01	9.75

Continuing Calibration Summary

Job Number: FA77581 **Sample:** S7G482-ECC472
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** 7G11126.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

			Amount	Calc.	%Drift			
19	P	Pyrene	10.000	9.558	4.4	106	0.00	8.66
20	P	Benzo[a]anthracene	5.000	4.627	7.5	102	0.01	9.73
21	P	Chrysene	5.000	4.959	0.8	106	0.01	9.77

			AvgRF	CCRF	%Dev			
22	I	Perylene-d12	1.000	1.000	0.0	70	0.01	11.50
23	P	Benzo[b]fluoranthene	1.358	1.389	-2.3	71	0.00	10.98

			Amount	Calc.	%Drift			
24	P	Benzo[k]fluoranthene	5.000	6.397	-27.9	86	0.00	11.01

			AvgRF	CCRF	%Dev			
25	P	Benzo[a]pyrene	1.323	1.240	6.3	67	0.01	11.41
26	P	Indeno[1,2,3-cd]pyrene	0.863	0.477#	44.7	37#	0.02	13.24
27	P	Dibenz[a,h]anthracene	0.958	0.576	39.9	43#	0.02	13.30
28	P	Benzo[g,h,i]perylene	1.041	0.507	51.3#	35#	0.03	13.70

(#) = Out of Range SPCC's out = 1 CCC's out = 0
7G10836.D simpahf7gD0072120.m Tue Aug 11 11:04:54 2020

Continuing Calibration Summary

Job Number: FA77581 **Sample:** S7G483-CC472
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** 7G11130.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\Je...2020\S7G483\7G11130.d Vial: 2
Acq On : 11 Aug 2020 8:29 am Operator: FOUADS
Sample : CC472-4 Inst : MSBNA8
Misc : op81342,S7G483,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\met...pahf7gD0072120.m (RTE Integrator)
Title : PAH's by 8270 SIM
Last Update : Tue Jul 21 16:46:17 2020
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Naphthalene-d8	1.000	1.000	0.0	91	0.00	4.63
		---------- True	Calc.	% Drift	----------			
2	P	Naphthalene	10.000	9.557	4.4	85	0.00	4.65
		---------- AvgRF	CCRF	% Dev	----------			
3	P	2-Methylnaphthalene	0.890	1.002	-12.6	105	0.00	5.23
		---------- True	Calc.	% Drift	----------			
4	s	2-Methylnaphthalene-d10	10.000	11.587	-15.9	106	0.00	5.21
5	P	1-Methylnaphthalene	10.000	12.037	-20.4#	108	0.00	5.31
		---------- AvgRF	CCRF	% Dev	----------			
6	I	Acenaphthene-d10	1.000	1.000	0.0	123	0.00	6.11
		---------- True	Calc.	% Drift	----------			
7	P	Acenaphthylene	10.000	9.605	3.9	114	0.00	5.99
8	P	Acenaphthene	10.000	9.684	3.2	115	0.00	6.14
9	P	Dibenzofuran	10.000	10.295	-2.9	122	0.00	6.30
10	P	Fluorene	10.000	9.853	1.5	119	0.00	6.59
		---------- AvgRF	CCRF	% Dev	----------			
11	I	Phenanthrene-d10	1.000	1.000	0.0	132	0.00	7.40
		---------- True	Calc.	% Drift	----------			
12	P	Pentachlorophenol	25.000	25.159	-0.6	145	0.00	7.26
13	P	Phenanthrene	10.000	9.373	6.3	121	0.00	7.42
14	P	Anthracene	5.000	4.863	2.7	128	0.00	7.46
		---------- AvgRF	CCRF	% Dev	----------			
15	P	Carbazole	2.391	2.268	5.1	129	0.00	7.63
		---------- True	Calc.	% Drift	----------			
16	P	Fluoranthene	10.000	9.863	1.4	127	0.00	8.45
17	s	Fluoranthene-d10	10.000	10.113	-1.1	130	0.00	8.44
		---------- AvgRF	CCRF	% Dev	----------			
18	I	Chrysene-d12	1.000	1.000	0.0	136	0.00	9.73

Continuing Calibration Summary

Job Number: FA77581 **Sample:** S7G483-CC472
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** 7G11130.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

			True	Calc.	% Drift			
19	P	Pyrene	10.000	9.429	5.7	127	0.00	8.64
20	P	Benzo[a]anthracene	5.000	4.884	2.3	131	0.00	9.72
21	P	Chrysene	5.000	4.874	2.5	127	0.00	9.75

			AvgRF	CCRF	% Dev			
22	I	Perylene-d12	1.000	1.000	0.0	138	0.00	11.48
23	P	Benzo[b]fluoranthene	1.358	1.268	6.6	128	0.00	10.96

			True	Calc.	% Drift			
24	P	Benzo[k]fluoranthene	5.000	4.815	3.7	128	0.00	10.99

			AvgRF	CCRF	% Dev			
25	P	Benzo[a]pyrene	1.323	1.215	8.2	130	0.00	11.39
26	P	Indeno[1,2,3-cd]pyrene	0.863	0.914	-5.9	141	0.00	13.21
27	P	Dibenz[a,h]anthracene	0.958	1.076	-12.3	158	0.00	13.27
28	P	Benzo[g,h,i]perylene	1.041	1.057	-1.5	145	0.00	13.67

(#) = Out of Range SPCC's out = 0 CCC's out = 0
7G10836.D simpahf7gD0072120.m Wed Aug 12 07:25:19 2020

Initial Calibration Summary

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICC2918
Lab FileID: X071368.D

Response Factor Report MSBNA05

Method : C:\msdchem\1\MET...DApp9SX-062320.m (RTE Integrator)
Title : SW846 8270D OR EPA 625
Last Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration

Calibration Files
5 =x071365.D 10 =x071366.D 25 =x071367.D 50 =x071368.D
60 =x071369.D 75 =x071370.D 100 =x071363.D 1 =x071364.D

Compound	5	10	25	50	60	75	100	1	Avg	%RSD
1) I 1,4-Dichlorobenzene-d	ISTD									
2) 1,4-Dioxane	0.711	0.724	0.687	0.636	0.644	0.662	0.662	0.758	0.686	6.21
3) N-nitrosodim	1.190	1.266	1.222	1.164	1.205	1.200	1.225	1.265	1.217	2.92
4) Pyridine	1.577	1.700	1.694	1.633	1.650	1.727	1.789	1.572	1.668	4.46
5) Benzaldehyde	1.252	1.271	1.203	1.150	1.174	1.195	1.199	1.094	1.192	4.67
6) Aniline	2.189	2.279	2.301	2.433	2.498	2.578	2.594	2.152	2.378	7.23
7) 2-Fluorophen	1.423	1.476	1.418	1.367	1.408	1.439	1.473	1.470	1.434	2.66
8) bis(2-Chloro	1.365	1.441	1.440	1.458	1.497	1.530	1.541	1.467	1.468	3.85
9) Phenol-d5	1.626	1.725	1.686	1.650	1.700	1.780	1.834	1.649	1.706	4.17
10) Phenol	1.750	1.907	1.935	2.105	2.182	2.263	2.234	1.815	2.024	9.76
11) 2-Chlorophen	1.355	1.482	1.495	1.556	1.601	1.673	1.694	1.387	1.530	8.10
12) 1,3-Dichloro	1.509	1.572	1.555	1.562	1.604	1.641	1.662	1.614	1.590	3.14
13) 1,4-Dichloro	1.614	1.663	1.648	1.669	1.695	1.732	1.741	1.698	1.682	2.52
14) 1,2-Dichloro	1.497	1.568	1.560	1.591	1.631	1.678	1.694	1.566	1.598	4.11
15) Benzyl alcoh	0.940	1.027	1.049	1.061	1.086	1.118	1.131		1.059	6.06
16) 2,2'-Oxybis(	3.082	3.186	3.158	3.042	3.023	3.037	2.907	3.238	3.084	3.44
17) 2-Methylphen	1.363	1.447	1.467	1.488	1.503	1.535	1.564	1.281	1.456	6.39
18) Acetophenone	2.226	2.265	2.217	2.156	2.165	2.173	2.176	1.858	2.154	5.83
19) Hexachloroet	0.595	0.626	0.633	0.627	0.636	0.652	0.669	0.615	0.632	3.50
20) N-Nitroso-di	1.126	1.161	1.180	1.155	1.147	1.135	1.123	1.075	1.138	2.78
21) 3&4-Methylph	1.434	1.542	1.573	1.532	1.553	1.549	1.523	1.334	1.505	5.35
22) I Naphthalene-d8	ISTD									
23) Nitrobenzene	0.388	0.409	0.411	0.407	0.423	0.424	0.433	0.410	0.413	3.30
24) Nitrobenzene	0.390	0.405	0.412	0.406	0.419	0.417	0.422	0.400	0.409	2.64
25) Isophorone	0.713	0.751	0.733	0.710	0.733	0.729	0.741	0.729	0.730	1.84
26) 2-Nitropheno	0.166	0.185	0.197	0.196	0.207	0.211	0.220	0.173	0.194	9.64
27) 2,4-Dimethyl	0.344	0.367	0.359	0.360	0.376	0.375	0.379	0.326	0.361	5.02
28) O,O,O-Trieth	0.150	0.156	0.152	0.151	0.157	0.157	0.162	0.139	0.153	4.56
29) bis(2-Chloro	0.404	0.424	0.433	0.421	0.436	0.436	0.427	0.434	0.427	2.52
30) Benzoic Acid	0.149	0.220	0.274	0.309	0.333	0.341	0.351		0.282	26.36
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9977										
Response Ratio = 0.00000 + 0.24212 *A + 0.04845 *A^2										
31) 2,4-Dichloro	0.264	0.288	0.288	0.295	0.309	0.310	0.318	0.255	0.291	7.58
32) 1,2,4-Trichl	0.280	0.292	0.291	0.289	0.302	0.303	0.312	0.309	0.297	3.74
33) alpha-Terpin									0.000	-1.00
34) Naphthalene	1.046	1.101	1.085	1.072	1.094	1.085	1.086	1.109	1.085	1.77
35) 4-Chloroanil	0.442	0.466	0.467	0.458	0.468	0.461	0.452	0.450	0.458	2.04
36) 2,6-Dichloro	0.279	0.302	0.300	0.296	0.304	0.301	0.304	0.287	0.297	3.08
37) Hexachlorobu	0.136	0.145	0.142	0.143	0.150	0.152	0.156	0.148	0.147	4.34
38) Caprolactam	0.124	0.131	0.123	0.119	0.125	0.124	0.127	0.093	0.121	9.60
39) 4-Chloro-3-m	0.292	0.322	0.312	0.308	0.321	0.321	0.328	0.277	0.310	5.59
40) 2-Methylnaph	0.702	0.739	0.705	0.699	0.717	0.722	0.728	0.726	0.717	1.96
41) 1-Methylnaph	0.667	0.702	0.671	0.671	0.698	0.692	0.695	0.697	0.687	2.09
42) 1,2,4,5-Tetr	0.281	0.291	0.290	0.296	0.306	0.312	0.312	0.300	0.298	3.73

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43) I   Acenaphthene-d10      ----------------ISTD--------------------
44) Hexachlorocy 0.229 0.260 0.295 0.325 0.338 0.355 0.370 0.218 0.299  19.32
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9995
              Response Ratio = 0.00000 + 0.26566 *A + 0.04434 *A^2

45) 2,4,6-Trichl 0.331 0.351 0.366 0.380 0.389 0.395 0.401 0.324 0.367   7.92
46) 2,4,5-Trichl 0.355 0.395 0.402 0.413 0.431 0.437 0.446 0.345 0.403   9.19
47) 2-Fluorobiph 1.375 1.424 1.416 1.450 1.485 1.499 1.490 1.444 1.448   2.94
48) 1,1'-Bipheny 1.712 1.692 1.626 1.633 1.671 1.655 1.625 1.452 1.633   4.88
49) 2-Chloronaph 1.160 1.220 1.228 1.239 1.265 1.265 1.239 1.190 1.226   2.93
50) 2-Nitroanili 0.423 0.458 0.466 0.458 0.471 0.471 0.467 0.396 0.451   6.00
51) p-Dinitroben 0.215 0.247 0.263 0.266 0.278 0.276 0.282 0.196 0.253  12.42
52) Acenaphthyle 1.886 2.017 2.013 2.031 2.066 2.065 2.012 1.893 1.998   3.51
53) Dimethylphth 1.378 1.419 1.388 1.374 1.427 1.420 1.416 1.467 1.411   2.18
54) m-Dinitroben 0.211 0.229 0.244 0.248 0.255 0.262 0.263 0.169 0.235  13.54
55) 2,6-Dinitrot 0.314 0.327 0.330 0.342 0.349 0.355 0.355 0.293 0.333   6.50
56) o-Dinitroben 0.323 0.343 0.328 0.311 0.312 0.300 0.290 0.344 0.319   6.08
57) Acenaphthene 1.292 1.345 1.321 1.312 1.346 1.333 1.310 1.370 1.329   1.88
58) 3-Nitroanili 0.345 0.363 0.377 0.380 0.390 0.393 0.392 0.292 0.366   9.34
59) 2,4-Dinitrop 0.073 0.109 0.151 0.176 0.193 0.200 0.209       0.159  32.16
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9971
              Response Ratio = 0.00000 + 0.12676 *A + 0.03612 *A^2

60) Dibenzofuran 1.728 1.800 1.775 1.734 1.783 1.753 1.720 1.894 1.773   3.18
61) 2,4-Dinitrot 0.411 0.429 0.434 0.433 0.446 0.443 0.444 0.357 0.425   6.98
62) 4-Nitropheno 0.168 0.192 0.209 0.209 0.219 0.218 0.218       0.205   9.05
63) 2,3,5,6-Tetr 0.254 0.285 0.304 0.314 0.329 0.335 0.339 0.217 0.297  14.44
64) 2,3,4,6-Tetr 0.278 0.302 0.311 0.317 0.331 0.334 0.341 0.274 0.311   8.06
65) Fluorene     1.351 1.431 1.384 1.362 1.389 1.397 1.352 1.402 1.384   2.00
66) 4-Chlorophen 0.642 0.669 0.666 0.667 0.692 0.680 0.665 0.662 0.668   2.12
67) Diethylphtha 1.341 1.431 1.411 1.398 1.451 1.446 1.441 1.357 1.409   2.94
68) Thionazin    0.310 0.327 0.310 0.301 0.310 0.290 0.280 0.267 0.299   6.43
69) 4-Nitroanili 0.377 0.407 0.426 0.414 0.433 0.430 0.426 0.349 0.408   7.33

70) I   Phenanthrene-d10      ----------------ISTD--------------------
71) 4,6-Dinitro- 0.081 0.110 0.135 0.149 0.159 0.166 0.173 0.043 0.127  36.13
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9986
              Response Ratio = 0.00000 + 0.11526 *A + 0.02503 *A^2

72) n-Nitrosodip 0.565 0.595 0.614 0.612 0.634 0.639 0.654 0.659 0.622   5.05
73) Diphenylamin 0.678 0.714 0.737 0.734 0.761 0.767 0.785 0.659 0.729   5.99
74) 1,2-Diphenyl 0.851 0.900 0.909 0.903 0.925 0.925 0.923 0.836 0.896   3.85
75) 2,4,6-Tribro 0.068 0.075 0.083 0.089 0.094 0.098 0.106 0.063 0.084  17.77
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9999
              Response Ratio = 0.00000 + 0.07262 *A + 0.00671 *A^2

76) Sulfotep     0.130 0.137 0.136 0.138 0.142 0.140 0.139 0.091 0.132  12.72
77) Phorate      0.447 0.480 0.486 0.484 0.501 0.496 0.501 0.299 0.462  14.76
78) 4-Bromopheny 0.174 0.183 0.189 0.192 0.203 0.211 0.220 0.164 0.192   9.84
79) Hexachlorobe 0.168 0.176 0.178 0.190 0.198 0.205 0.217 0.202 0.192   8.83
80) Dimethoate   0.288 0.310 0.321 0.319 0.333 0.327 0.329 0.195 0.303  15.11
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9997
              Response Ratio = 0.00000 + 0.31064 *A + 0.00877 *A^2

81) Simazine     0.128 0.137 0.139 0.139 0.145 0.148 0.152       0.141   5.71
82) Atrazine     0.225 0.230 0.233 0.234 0.248 0.249 0.281 0.169 0.234  13.47
83) Pentachlorop 0.074 0.098 0.114 0.129 0.137 0.141 0.146       0.120  21.87
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9987
              Response Ratio = 0.00000 + 0.10286 *A + 0.01886 *A^2
```

Job Number: FA77581 **Sample:** SX2918-ICC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X071368.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

```
 84) Phenanthrene 1.182 1.201 1.201 1.202 1.220 1.221 1.207 1.237 1.209   1.39
 85) Anthracene   1.186 1.242 1.266 1.279 1.313 1.323 1.308 1.162 1.260   4.73
 86) Disulfoton   0.478 0.505 0.514 0.505 0.518 0.504 0.481 0.360 0.483  10.69
 87) Carbazole    1.042 1.108 1.122 1.110 1.156 1.160 1.177 1.018 1.112   5.07
 88) Methyl Parat 0.237 0.267 0.277 0.275 0.285 0.281 0.281 0.129 0.254  20.77
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9996
               Response Ratio = 0.00000 + 0.26658 *A + 0.00720 *A^2

 89) Di-n-butylph 1.126 1.246 1.291 1.303 1.346 1.354 1.364 0.897 1.241  12.82
 90) Ethyl Parath 0.128 0.145 0.156 0.159 0.170 0.169 0.174 0.066 0.146  24.35
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9995
               Response Ratio = 0.00000 + 0.14462 *A + 0.01269 *A^2

 91) Fluoranthene 1.039 1.104 1.114 1.125 1.183 1.198 1.226 0.984 1.121   7.27

 92) I   Chrysene-d12          ----------------ISTD---------------------
 93) Benzidine    0.479 0.644 0.768 0.799 0.838 0.837 0.830 0.311 0.688  28.62
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9980
               Response Ratio = 0.00000 + 0.70508 *A + 0.06135 *A^2

 94) Pyrene       1.601 1.685 1.664 1.632 1.720 1.729 1.778 1.477 1.661   5.61
 95) Terphenyl-d1 0.982 1.041 1.070 1.066 1.107 1.134 1.181 0.922 1.063   7.78
 96) Famphur      0.386 0.427 0.374 0.288 0.273 0.248 0.213 0.212 0.303  27.31
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9960
               Response Ratio = 0.00000 + 0.39855 *A + -0.07727 *A^2

 97) Butylbenzylp 0.558 0.646 0.694 0.682 0.720 0.721 0.741 0.383 0.643  18.60
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9995
               Response Ratio = 0.00000 + 0.63866 *A + 0.04308 *A^2

 98) 3,3'-Dichlor 0.308 0.359 0.405 0.426 0.444 0.453 0.462 0.236 0.387  20.72
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9994
               Response Ratio = 0.00000 + 0.37193 *A + 0.03988 *A^2

 99) Benzo[a]anth 1.168 1.236 1.242 1.247 1.293 1.316 1.337 1.218 1.257   4.38
100) Chrysene     1.241 1.323 1.327 1.320 1.380 1.376 1.405 1.340 1.339   3.75
101) bis(2-Ethylh 0.646 0.797 0.924 0.958 1.001 0.999 1.031 0.365 0.840  27.50
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9991
               Response Ratio = 0.00000 + 0.83541 *A + 0.08609 *A^2


102) I   Perylene-d12          ----------------ISTD---------------------
103) Di-n-octylph 1.335 0.994 1.396 1.627 1.765 1.831 1.930 1.181 1.507  22.09
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9981
               Response Ratio = 0.00000 + 1.23657 *A + 0.29737 *A^2

104) Benzo[b]fluo 0.973 0.917 1.098 1.164 1.243 1.263 1.304 0.787 1.094  16.94
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9995
               Response Ratio = 0.00000 + 1.06371 *A + 0.09950 *A^2

105) Benzo[k]fluo 1.269 1.317 1.401 1.411 1.503 1.538 1.590 1.331 1.420   8.05
106) Benzo[a]pyre 0.862 0.904 1.078 1.121 1.189 1.207 1.262 0.677 1.037  19.61
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9997
               Response Ratio = 0.00000 + 1.01363 *A + 0.10108 *A^2

107) Indeno[1,2,3 0.504 0.549 0.711 0.768 0.844 0.911 0.995 0.311 0.699  32.88
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9994
               Response Ratio = 0.00000 + 0.55750 *A + 0.18016 *A^2
```

Initial Calibration Summary

Job Number: FA77581 **Sample:** SX2918-ICC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X071368.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

```
108) Dibenz[a,h]a 0.532 0.713 0.820 0.873 0.961 1.008 1.191 0.492 0.824  28.93
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9991
               Response Ratio = 0.00000 + 0.61590 *A + 0.22433 *A^2

109) Benzo[g,h,i] 0.833 0.963 1.038 1.080 1.165 1.209 1.315 0.793 1.049  17.29
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9998
               Response Ratio = 0.00000 + 0.90101 *A + 0.16537 *A^2


110)     1,4-Dichlorobenzene-d ----------------ISTD---------------------
111) 2-Picoline   1.874 1.896 1.870 1.997 1.959 1.901 1.883 1.882 1.908   2.40
112) N-Nitrosomet 1.223 1.268 1.258 1.375 1.364 1.326 1.315 1.483 1.327   6.20
113) Methyl metha 0.891 0.907 0.907 0.990 0.966 0.949 0.928 0.904 0.930   3.77
114) N-Nitrosodie 0.726 0.747 0.754 0.837 0.817 0.812 0.794 0.712 0.775   5.97
115) Ethyl methan 1.208 1.246 1.243 1.371 1.341 1.317 1.293 1.234 1.281   4.51
116) Pentachloroe 0.516 0.519 0.526 0.579 0.572 0.565 0.555 0.533 0.546   4.58
117) N-Nitrosopyr 0.645 0.686 0.695 0.778 0.754 0.749 0.733 0.566 0.701   9.89
118) N-Nitrosomor 1.209 1.237 1.269 1.404 1.350 1.339 1.260 1.160 1.279   6.29
119) O-Toluidine  2.430 2.487 2.531 2.899 2.822 2.786 2.681 2.313 2.619   7.99

120)     Naphthalene-d8A       ----------------ISTD---------------------
121) N-Nitrosopip 0.362 0.370 0.369 0.387 0.374 0.365 0.351 0.367 0.368   2.74
122) A,A-Dimethyl 1.434 1.467 1.501 1.579 1.541 1.522 1.516 1.177 1.467   8.53
123) Hexachloropr 0.139 0.153 0.167 0.190 0.190 0.187 0.186 0.132 0.168  14.23
124) N-Nitrosodi- 0.247 0.249 0.249 0.344 0.339 0.327 0.315 0.229 0.287  16.73
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9932
               Response Ratio = 0.00000 + 0.28665 *A + 0.01834 *A^2

125) p-Phenylened 0.414 0.416 0.424 0.419 0.389 0.357 0.305 0.313 0.380  12.80
126) Isosafrole   0.259 0.267 0.270 0.290 0.289 0.281 0.272 0.253 0.273   4.87

127)     Acenaphthene-d10A     ----------------ISTD---------------------
128) Safrole      0.477 0.499 0.505 0.563 0.562 0.563 0.555 0.484 0.526   7.26
129) 1-Chloronaph 1.146 1.193 1.214 1.345 1.339 1.316 1.263 1.207 1.253   5.94
130) Diphenyl Eth 0.793 0.848 0.861 0.935 0.927 0.914 0.878 0.846 0.875   5.54
131) 1,4-Naphthoq 0.431 0.487 0.535 0.559 0.555 0.508       0.354 0.490  15.24
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9972
               Response Ratio = 0.00000 + 0.52072 *A + 0.00793 *A^2

132) Pentachlorob 0.412 0.426 0.425 0.454 0.447 0.454 0.446 0.462 0.441   3.99
133) 1-Naphthylam 1.327 1.368 1.363 1.451 1.453 1.431 1.415 1.307 1.389   4.05
134) 2-Naphthylam 1.401 1.479 1.475 1.570 1.540 1.549 1.492 1.373 1.485   4.70
135) 5-Nitro-o-to 0.339 0.381 0.414 0.462 0.461 0.463 0.463 0.285 0.409  16.64
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9989
               Response Ratio = 0.00000 + 0.40695 *A + 0.02715 *A^2


136)     Phenanthrene-d10A     ----------------ISTD---------------------
137) 1,3,5-Trinit 0.094 0.134 0.169 0.209 0.214 0.215 0.216 0.067 0.165  36.38
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9954
               Response Ratio = 0.00000 + 0.15899 *A + 0.02711 *A^2

138) Diallate     0.624 0.636 0.633 0.651 0.634 0.612 0.593 0.631 0.627   2.76
139) Phenacetin   0.339 0.366 0.388 0.430 0.427 0.423 0.423 0.284 0.385  13.64
140) 4-Aminobiphe 0.808 0.842 0.858 0.877 0.820 0.786 0.730 0.769 0.811   6.01
141) Pronamide    0.281 0.309 0.322 0.352 0.347 0.339 0.332 0.232 0.314  12.86
142) Pentachloron 0.074 0.075 0.079 0.085 0.082 0.082 0.080 0.063 0.078   9.11
143) 4-Nitroquino 0.018 0.030 0.053 0.075 0.076 0.073 0.068 0.012 0.051  53.03
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9905
               Response Ratio = 0.00000 + 0.07354 *A + -0.00135 *A^2
```

Initial Calibration Summary

Job Number: FA77581 **Sample:** SX2918-ICC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X071368.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

```
144) Methapyrilen 0.181 0.214 0.234 0.232 0.224 0.213 0.202 0.142 0.205  14.93
145) Isodrin      0.111 0.115 0.110 0.117 0.114 0.112 0.111 0.117 0.113   2.55

146) I   Chrysene-d12A         ----------------ISTD--------------------
147) Aramite      0.104 0.124 0.149 0.178 0.181 0.184 0.182 0.063 0.146  30.73
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9970
               Response Ratio = 0.00000 + 0.14341 *A + 0.01870 *A^2

148) p-(Dimethyla 0.363 0.426 0.456 0.517 0.518 0.515 0.504 0.277 0.447  19.70
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9989
               Response Ratio = 0.00000 + 0.50583 *A + 0.00152 *A^2

149) Chlorobenzil 0.445 0.483 0.521 0.594 0.600 0.596 0.580 0.356 0.522  16.99
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9981
               Response Ratio = 0.00000 + 0.53019 *A + 0.02834 *A^2

150) Kepone                                              0.018       0.018   0.00
151) 3,3'-Dimethy 0.603 0.685 0.699 0.742 0.708 0.658 0.599 0.475 0.646  13.16
152) 2-Acetylamin 0.341 0.437 0.533 0.619 0.627 0.632 0.632 0.223 0.506  30.99
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9971
               Response Ratio = 0.00000 + 0.50255 *A + 0.06226 *A^2


153) I   Perylene-d12A         ----------------ISTD--------------------
154) 7,12-Dimethy 0.478 0.510 0.548 0.614 0.612 0.611 0.607 0.461 0.555  11.68
155) Hexachloroph 0.018 0.046 0.084 0.113 0.115 0.121 0.123       0.089  46.87
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9919
               Response Ratio = 0.00000 + 0.07118 *A + 0.00238 *A^2

156) 3-Methylchol 0.397 0.451 0.491 0.557 0.565 0.575 0.588 0.378 0.500  16.70
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9995
               Response Ratio = 0.00000 + 0.50722 *A + 0.03377 *A^2

157) Dibenz(a,j)a 0.559 0.566 0.633 0.755 0.777 0.804 0.865 0.307 0.658  27.54
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9995
               Response Ratio = 0.00000 + 0.57753 *A + 0.12012 *A^2

 ----------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

           8270DApp9SX-062320.m        Wed Jun 24 13:09:08 2020
```

Initial Calibration Verification

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071372.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\0623_sx2918\x071372.D Vial: 18
Acq On : 23 Jun 2020 4:58 pm Operator: marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\MET...DApp9SX-062320.m (RTE Integrator)
Title : SW846 8270D OR EPA 625
Last Update : Wed Jun 24 12:54:05 2020
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	108	0.00	6.01
2		1,4-Dioxane	50.000	47.566	4.9	111	0.01	2.85
3		N-nitrosodimethylamine	50.000	46.264	7.5	104	0.00	3.18
4		Pyridine		----------NA----------				
5	P	Benzaldehyde	50.000	37.510	25.0#	84	0.00	5.53
6		Aniline		----------NA----------				
7	S	2-Fluorophenol		----------NA----------				
8	P	bis(2-Chloroethyl)ether	50.000	42.881	14.2	93	0.00	5.73
9	S	Phenol-d5		----------NA----------				
10	P	Phenol	50.000	40.785	18.4	84	0.00	5.62
11	P	2-Chlorophenol	50.000	45.244	9.5	96	0.00	5.77
12		1,3-Dichlorobenzene	50.000	47.671	4.7	105	0.00	5.95
13		1,4-Dichlorobenzene	50.000	47.894	4.2	104	0.00	6.03
14		1,2-Dichlorobenzene	50.000	46.632	6.7	101	0.00	6.19
15		Benzyl alcohol		----------NA----------				
16	P	2,2'-Oxybis(1-chloropropa	50.000	46.757	6.5	102	0.00	6.33
17	P	2-Methylphenol	50.000	44.371	11.3	94	0.00	6.29
18	P	Acetophenone	50.000	45.454	9.1	98	0.00	6.45
19	P	Hexachloroethane	50.000	49.837	0.3	108	0.00	6.57
20	P	N-Nitroso-di-n-propylamin	50.000	45.372	9.3	96	0.00	6.46
21	P	3&4-Methylphenol	100.000	92.840	7.2	86	0.00	6.46
22	I	Naphthalene-d8	40.000	40.000	0.0	104	0.00	7.43
23	S	Nitrobenzene-d5		----------NA----------				
24	P	Nitrobenzene	50.000	46.237	7.5	97	0.00	6.64
25	P	Isophorone	50.000	42.340	15.3	91	0.00	6.92
26	P	2-Nitrophenol	50.000	48.035	3.9	99	0.00	7.00
27	P	2,4-Dimethylphenol	50.000	43.260	13.5	91	0.00	7.06
28		O,O,O-Triethylphosphoroth		----------NA----------				
29	P	bis(2-Chloroethoxy)methan	50.000	46.392	7.2	98	0.00	7.18
		----------	Amount	Calc.	%Drift	----------		
30		Benzoic Acid	100.000	85.627	14.4	75	0.05	7.23
		----------	Amount	Calc.	%Drift	----------		
31	P	2,4-Dichlorophenol	50.000	48.603	2.8	100	0.00	7.28
32		1,2,4-Trichlorobenzene	50.000	48.057	3.9	103	0.00	7.37
33		alpha-Terpineol		----------NA----------				
34	P	Naphthalene	50.000	46.476	7.0	98	0.00	7.46
35	P	4-Chloroaniline		----------NA----------				
36		2,6-Dichlorophenol	50.000	46.579	6.8	97	0.00	7.53
37	P	Hexachlorobutadiene	50.000	49.106	1.8	105	0.00	7.61

Initial Calibration Verification

Job Number: FA77581
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Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC
Sample: SX2918-ICV2918
Lab FileID: X071372.D

38	P	Caprolactam	50.000	41.944	16.1	89	-0.01	7.95
39	P	4-Chloro-3-methylphenol	50.000	43.610	12.8	92	0.00	8.10
40	P	2-Methylnaphthalene		----------NA----------				
41		1-Methylnaphthalene	50.000	41.547	16.9	89	0.00	8.37
42	P	1,2,4,5-Tetrachlorobenzen	50.000	43.915	12.2	92	0.00	8.45
43	I	Acenaphthene-d10	40.000	40.000	0.0	97	0.00	9.48
		----------	Amount	Calc.	%Drift		----------	
44	P	Hexachlorocyclopentadiene	50.000	48.130	3.7	91	0.00	8.45
		----------	Amount	Calc.	%Drift		----------	
45	P	2,4,6-Trichlorophenol	50.000	51.185	-2.4	95	0.00	8.59
46	P	2,4,5-Trichlorophenol	50.000	52.484	-5.0	99	0.00	8.63
47	S	2-Fluorobiphenyl		----------NA----------				
48	P	1,1'-Biphenyl	50.000	47.048	5.9	91	0.00	8.81
49	P	2-Chloronaphthalene	50.000	50.632	-1.3	97	0.00	8.83
50	P	2-Nitroaniline		----------NA----------				
51		p-Dinitrobenzene		----------NA----------				
52	P	Acenaphthylene	50.000	51.239	-2.5	97	0.00	9.31
53	P	Dimethylphthalate	50.000	47.010	6.0	93	0.00	9.19
54		m-Dinitrobenzene		----------NA----------				
55	P	2,6-Dinitrotoluene	50.000	45.174	9.7	85	0.00	9.25
56		o-Dinitrobenzene		----------NA----------				
57	P	Acenaphthene	50.000	47.244	5.5	92	0.00	9.51
58	P	3-Nitroaniline		----------NA----------				
		----------	Amount	Calc.	%Drift		----------	
59	P	2,4-Dinitrophenol	100.000	93.332	6.7	78	0.00	9.56
		----------	Amount	Calc.	%Drift		----------	
60	P	Dibenzofuran		----------NA----------				
61	P	2,4-Dinitrotoluene	50.000	49.367	1.3	93	0.00	9.72
62	P	4-Nitrophenol	100.000	96.190	3.8	74	0.00	9.65
63		2,3,5,6-Tetrachlorophenol		----------NA----------				
64	P	2,3,4,6-Tetrachlorophenol	50.000	45.098	9.8	85	0.00	9.87
65	P	Fluorene	50.000	48.561	2.9	95	0.00	10.12
66	P	4-Chlorophenyl-phenylethe	50.000	49.551	0.9	96	0.00	10.14
67	P	Diethylphthalate	50.000	47.789	4.4	93	0.00	10.03
68		Thionazin		----------NA----------				
69	P	4-Nitroaniline		----------NA----------				
70	I	Phenanthrene-d10	40.000	40.000	0.0	93	0.00	11.22
		----------	Amount	Calc.	%Drift		----------	
71	P	4,6-Dinitro-2-methylpheno	100.000	94.066	5.9	77	0.00	10.19
		----------	Amount	Calc.	%Drift		----------	
72	P	n-Nitrosodiphenylamine		----------NA----------				
73		Diphenylamine		----------NA----------				
74		1,2-Diphenylhydrazine	50.000	47.822	4.4	88	0.00	10.33
		----------	Amount	Calc.	%Drift		----------	
75	S	2,4,6-Tribromophenol		----------NA----------				
		----------	Amount	Calc.	%Drift		----------	
76		Sulfotep		----------NA----------				
77		Phorate		----------NA----------				
78	P	4-Bromophenyl-phenylether	50.000	49.458	1.1	92	0.00	10.72
79	P	Hexachlorobenzene	50.000	45.838	8.3	86	0.00	10.77

Initial Calibration Verification

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071372.D

			Amount	Calc.	%Drift			
80		Dimethoate		NA				
81		Simazine		NA				
82	P	Atrazine	50.000	43.244	13.5	80	0.00	10.94
83	P	Pentachlorophenol	100.000	89.053	10.9	72	0.00	11.01
84	P	Phenanthrene	50.000	47.649	4.7	89	0.00	11.25
85	P	Anthracene	50.000	46.781	6.4	86	0.00	11.32
86		Disulfoton		NA				
87	P	Carbazole		NA				
88		Methyl Parathion		NA				
89	P	Di-n-butylphthalate	50.000	49.309	1.4	87	0.00	11.97
90		Ethyl Parathion		NA				
91	P	Fluoranthene	50.000	45.798	8.4	85	0.00	12.66
92	I	Chrysene-d12	40.000	40.000	0.0	80	0.00	14.49
93		Benzidine		NA				
94	P	Pyrene	50.000	49.982	0.0	82	0.00	12.92
95	S	Terphenyl-d14		NA				
96		Famphur		NA				
97	P	Butylbenzylphthalate	50.000	50.948	-1.9	83	0.00	13.79
98	P	3,3'-Dichlorobenzidine		NA				
99	P	Benzo[a]anthracene	50.000	47.538	4.9	77	0.00	14.48
100	P	Chrysene	50.000	49.114	1.8	80	0.00	14.53
101	P	bis(2-Ethylhexyl)phthalat	50.000	50.757	-1.5	80	0.00	14.64
102	I	Perylene-d12	40.000	40.000	0.0	89	0.00	16.81
103	P	Di-n-octylphthalate	50.000	46.197	7.6	79	0.00	15.68
104	P	Benzo[b]fluoranthene	50.000	47.853	4.3	86	0.00	16.17
105	P	Benzo[k]fluoranthene	50.000	47.749	4.5	85	0.00	16.22

Initial Calibration Verification

Job Number: FA77581 **Sample:** SX2918-ICV2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X071372.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

			Amount	Calc.	%Drift			
106	P	Benzo[a]pyrene	50.000	48.306	3.4	87	0.00	16.71
107	P	Indeno[1,2,3-cd]pyrene	50.000	51.104	-2.2	93	0.00	18.45
108	P	Dibenz[a,h]anthracene	50.000	50.722	-1.4	93	0.00	18.50
109	P	Benzo[g,h,i]perylene	50.000	51.848	-3.7	95	0.00	18.80

		Amount	Calc.	%Drift			
110	1,4-Dichlorobenzene-d4A	40.000	40.000	0.0	121	0.00	6.01
111	2-Picoline		NA				
112	N-Nitrosomethylethylamine		NA				
113	Methyl methanesulfonate		NA				
114	N-Nitrosodiethylamine		NA				
115	Ethyl methanesulfonate		NA				
116	Pentachloroethane		NA				
117	N-Nitrosopyrrolidine		NA				
118	N-Nitrosomorpholine		NA				
119	O-Toluidine		NA				
120	Naphthalene-d8A	40.000	40.000	0.0	116	0.00	7.43
121	N-Nitrosopiperidine		NA				
122	A,A-Dimethylphenethylamin		NA				
123	Hexachloropropene		NA				

		Amount	Calc.	%Drift			
124	N-Nitrosodi-n-butylamine		NA				

		Amount	Calc.	%Drift			
125	p-Phenylenediamine		NA				
126	Isosafrole		NA				
127	Acenaphthene-d10A	40.000	40.000	0.0	105	0.00	9.48
128	Safrole		NA				
129	1-Chloronaphthalene		NA				
130	Diphenyl Ether		NA				

		Amount	Calc.	%Drift			
131	1,4-Naphthoquinone		NA				

		Amount	Calc.	%Drift			
132	Pentachlorobenzene		NA				
133	1-Naphthylamine		NA				
134	2-Naphthylamine		NA				

		Amount	Calc.	%Drift			
135	5-Nitro-o-toluidine		NA				

		Amount	Calc.	%Drift			
136	Phenanthrene-d10A	40.000	40.000	0.0	93	0.00	11.22

		Amount	Calc.	%Drift			
137	1,3,5-Trinitrobenzene		NA				

		Amount	Calc.	%Drift			
138	Diallate		NA				
139	Phenacetin		NA				
140	4-Aminobiphenyl		NA				
141	Pronamide		NA				

Initial Calibration Verification

Job Number: FA77581 **Sample:** SX2918-ICV2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X071372.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

142		Pentachloronitrobenzene		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
143		4-Nitroquinoline 1-Oxide		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
144		Methapyrilene		----------NA----------				
145		Isodrin		----------NA----------				
146	I	Chrysene-d12A	40.000	40.000	0.0	94	0.00	14.49
		---------- Amount	Calc.	%Drift	----------			
147		Aramite		----------NA----------				
148		p-(Dimethylamine)azobenze		----------NA----------				
149		Chlorobenzilate		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
150		Kepone		----------NA----------				
151		3,3'-Dimethylbenzidine		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
152		2-Acetylaminofluorene		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
153	I	Perylene-d12A	40.000	40.000	0.0	91	-0.02	16.81
154		7,12-Dimethylbenz(a)anthr		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
155		Hexachlorophene		----------NA----------				
156		3-Methylcholanthrene		----------NA----------				
157		Dibenz(a,j)acridine		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
x071368.D 8270DApp9SX-062320.m Wed Jun 24 13:03:01 2020

Initial Calibration Verification

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071373.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\0623_sx2918\x071373.D Vial: 19
Acq On : 23 Jun 2020 5:25 pm Operator: marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\MET...DApp9SX-062320.m (RTE Integrator)
Title : SW846 8270D OR EPA 625
Last Update : Tue Jun 23 17:15:34 2020
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	88	0.00	6.00
2		1,4-Dioxane		----------NA----------				
3		N-nitrosodimethylamine		----------NA----------				
4		Pyridine	50.000	62.306	-24.6#	112	0.00	3.20
5	P	Benzaldehyde		----------NA----------				
6		Aniline	50.000	48.306	3.4	83	0.00	5.65
7	S	2-Fluorophenol		----------NA----------				
8	P	bis(2-Chloroethyl)ether		----------NA----------				
9	S	Phenol-d5		----------NA----------				
10	P	Phenol		----------NA----------				
11	P	2-Chlorophenol		----------NA----------				
12		1,3-Dichlorobenzene		----------NA----------				
13		1,4-Dichlorobenzene		----------NA----------				
14		1,2-Dichlorobenzene		----------NA----------				
15		Benzyl alcohol	50.000	52.065	-4.1	92	0.00	6.16
16	P	2,2'-Oxybis(1-chloropropa		----------NA----------				
17	P	2-Methylphenol		----------NA----------				
18	P	Acetophenone		----------NA----------				
19	P	Hexachloroethane		----------NA----------				
20	P	N-Nitroso-di-n-propylamin		----------NA----------				
21	P	3&4-Methylphenol		----------NA----------				
22	I	Naphthalene-d8	40.000	40.000	0.0	84	0.00	7.43
23	S	Nitrobenzene-d5		----------NA----------				
24	P	Nitrobenzene		----------NA----------				
25	P	Isophorone		----------NA----------				
26	P	2-Nitrophenol		----------NA----------				
27	P	2,4-Dimethylphenol		----------NA----------				
28		O,O,O-Triethylphosphoroth		----------NA----------				
29	P	bis(2-Chloroethoxy)methan		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
30		Benzoic Acid		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
31	P	2,4-Dichlorophenol		----------NA----------				
32		1,2,4-Trichlorobenzene		----------NA----------				
33		alpha-Terpineol		----------NA----------				
34	P	Naphthalene		----------NA----------				
35	P	4-Chloroaniline	50.000	57.182	-14.4	96	0.00	7.53
36		2,6-Dichlorophenol		----------NA----------				
37	P	Hexachlorobutadiene		----------NA----------				

Initial Calibration Verification

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071373.D

38	P	Caprolactam		----------NA----------				
39	P	4-Chloro-3-methylphenol		----------NA----------				
40	P	2-Methylnaphthalene	50.000	54.134	-8.3	94	0.00	8.26
41		1-Methylnaphthalene		----------NA----------				
42	P	1,2,4,5-Tetrachlorobenzen		----------NA----------				
43	I	Acenaphthene-d10	40.000	40.000	0.0	96	0.00	9.48
		---------- Amount	Calc.	%Drift	----------			
44	P	Hexachlorocyclopentadiene		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
45	P	2,4,6-Trichlorophenol		----------NA----------				
46	P	2,4,5-Trichlorophenol		----------NA----------				
47	S	2-Fluorobiphenyl		----------NA----------				
48	P	1,1'-Biphenyl		----------NA----------				
49	P	2-Chloronaphthalene		----------NA----------				
50	P	2-Nitroaniline	50.000	62.603	-25.2#	119	0.00	8.96
51		p-Dinitrobenzene		----------NA----------				
52	P	Acenaphthylene		----------NA----------				
53	P	Dimethylphthalate		----------NA----------				
54		m-Dinitrobenzene	50.000	52.160	-4.3	95	0.00	9.21
55	P	2,6-Dinitrotoluene		----------NA----------				
56		o-Dinitrobenzene		----------NA----------				
57	P	Acenaphthene		----------NA----------				
58	P	3-Nitroaniline	50.000	56.804	-13.6	106	0.00	9.44
		---------- Amount	Calc.	%Drift	----------			
59	P	2,4-Dinitrophenol		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
60	P	Dibenzofuran	50.000	51.041	-2.1	100	0.00	9.72
61	P	2,4-Dinitrotoluene		----------NA----------				
62	P	4-Nitrophenol		----------NA----------				
63		2,3,5,6-Tetrachlorophenol		----------NA----------				
64	P	2,3,4,6-Tetrachlorophenol		----------NA----------				
65	P	Fluorene		----------NA----------				
66	P	4-Chlorophenyl-phenylethe		----------NA----------				
67	P	Diethylphthalate		----------NA----------				
68		Thionazin		----------NA----------				
69	P	4-Nitroaniline	50.000	49.051	1.9	93	-0.01	10.16
70	I	Phenanthrene-d10	40.000	40.000	0.0	94	0.00	11.22
		---------- Amount	Calc.	%Drift	----------			
71	P	4,6-Dinitro-2-methylpheno		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
72	P	n-Nitrosodiphenylamine	60.000	55.026	8.3	88	0.00	10.28
73		Diphenylamine	50.000	46.890	6.2	88	0.00	10.28
74		1,2-Diphenylhydrazine		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
75	S	2,4,6-Tribromophenol		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
76		Sulfotep		----------NA----------				
77		Phorate		----------NA----------				
78	P	4-Bromophenyl-phenylether		----------NA----------				
79	P	Hexachlorobenzene		----------NA----------				

Initial Calibration Verification

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071373.D

			Amount	Calc.	%Drift			
80		Dimethoate		NA				
81		Simazine		NA				
82	P	Atrazine		NA				
83	P	Pentachlorophenol		NA				
84	P	Phenanthrene		NA				
85	P	Anthracene		NA				
86		Disulfoton		NA				
87	P	Carbazole	50.000	52.855	-5.7	100	0.00	11.51
88		Methyl Parathion		NA				
89	P	Di-n-butylphthalate		NA				
90		Ethyl Parathion		NA				
91	P	Fluoranthene		NA				
92	I	Chrysene-d12	40.000	40.000	0.0	90	0.00	14.49
93		Benzidine	50.000	57.661	-15.3	103	0.00	12.84
94	P	Pyrene		NA				
95	S	Terphenyl-d14		NA				
96		Famphur		NA				
97	P	Butylbenzylphthalate		NA				
98	P	3,3'-Dichlorobenzidine	50.000	46.383	7.2	82	0.00	14.48
99	P	Benzo[a]anthracene		NA				
100	P	Chrysene		NA				
101	P	bis(2-Ethylhexyl)phthalat		NA				
102	I	Perylene-d12	40.000	40.000	0.0	92	0.00	16.81
103	P	Di-n-octylphthalate		NA				
104	P	Benzo[b]fluoranthene		NA				
105	P	Benzo[k]fluoranthene		NA				

Initial Calibration Verification

Job Number: FA77581 **Sample:** SX2918-ICV2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X071373.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

			Amount	Calc.	%Drift			
106	P	Benzo[a]pyrene		NA				
107	P	Indeno[1,2,3-cd]pyrene		NA				
108	P	Dibenz[a,h]anthracene		NA				
109	P	Benzo[g,h,i]perylene		NA				

		Amount	Calc.	%Drift			
110	1,4-Dichlorobenzene-d4A	40.000	40.000	0.0	99	0.00	6.00
111	2-Picoline		NA				
112	N-Nitrosomethylethylamine		NA				
113	Methyl methanesulfonate		NA				
114	N-Nitrosodiethylamine		NA				
115	Ethyl methanesulfonate		NA				
116	Pentachloroethane		NA				
117	N-Nitrosopyrrolidine		NA				
118	N-Nitrosomorpholine		NA				
119	O-Toluidine		NA				
120	Naphthalene-d8A	40.000	40.000	0.0	94	0.00	7.43
121	N-Nitrosopiperidine		NA				
122	A,A-Dimethylphenethylamin		NA				
123	Hexachloropropene		NA				

		Amount	Calc.	%Drift			
124	N-Nitrosodi-n-butylamine		NA				

		Amount	Calc.	%Drift			
125	p-Phenylenediamine		NA				
126	Isosafrole		NA				
127	Acenaphthene-d10A	40.000	40.000	0.0	104	0.00	9.48
128	Safrole		NA				
129	1-Chloronaphthalene		NA				
130	Diphenyl Ether		NA				

		Amount	Calc.	%Drift			
131	1,4-Naphthoquinone		NA				

		Amount	Calc.	%Drift			
132	Pentachlorobenzene		NA				
133	1-Naphthylamine		NA				
134	2-Naphthylamine		NA				

		Amount	Calc.	%Drift			
135	5-Nitro-o-toluidine		NA				

		Amount	Calc.	%Drift			
136	Phenanthrene-d10A	40.000	40.000	0.0	94	0.00	11.22

		Amount	Calc.	%Drift			
137	1,3,5-Trinitrobenzene		NA				

		Amount	Calc.	%Drift			
138	Diallate		NA				
139	Phenacetin		NA				
140	4-Aminobiphenyl		NA				
141	Pronamide		NA				

Initial Calibration Verification

Job Number: FA77581 **Sample:** SX2918-ICV2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X071373.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

142		Pentachloronitrobenzene		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
143		4-Nitroquinoline 1-Oxide		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
144		Methapyrilene		----------NA----------				
145		Isodrin		----------NA----------				
146	I	Chrysene-d12A	40.000	40.000	0.0	104	0.00	14.49
		---------- Amount	Calc.	%Drift	----------			
147		Aramite		----------NA----------				
148		p-(Dimethylamine)azobenze		----------NA----------				
149		Chlorobenzilate		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
150		Kepone		----------NA----------				
151		3,3'-Dimethylbenzidine		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
152		2-Acetylaminofluorene		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
153	I	Perylene-d12A	40.000	40.000	0.0	94	-0.02	16.81
154		7,12-Dimethylbenz(a)anthr		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
155		Hexachlorophene		----------NA----------				
156		3-Methylcholanthrene		----------NA----------				
157		Dibenz(a,j)acridine		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
x071368.D 8270DApp9SX-062320.m Tue Jun 23 19:08:22 2020

Initial Calibration Verification

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071374.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\0623_sx2918\x071374.D Vial: 20
Acq On : 23 Jun 2020 5:51 pm Operator: marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\MET...DApp9SX-062320.m (RTE Integrator)
Title : SW846 8270D OR EPA 625
Last Update : Wed Jun 24 09:47:58 2020
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	87	0.00	6.00
2		1,4-Dioxane		----------	NA	----------		
3		N-nitrosodimethylamine		----------	NA	----------		
4		Pyridine		----------	NA	----------		
5	P	Benzaldehyde		----------	NA	----------		
6		Aniline		----------	NA	----------		
7	S	2-Fluorophenol		----------	NA	----------		
8	P	bis(2-Chloroethyl)ether		----------	NA	----------		
9	S	Phenol-d5		----------	NA	----------		
10	P	Phenol		----------	NA	----------		
11	P	2-Chlorophenol		----------	NA	----------		
12		1,3-Dichlorobenzene		----------	NA	----------		
13		1,4-Dichlorobenzene		----------	NA	----------		
14		1,2-Dichlorobenzene		----------	NA	----------		
15		Benzyl alcohol		----------	NA	----------		
16	P	2,2'-Oxybis(1-chloropropa		----------	NA	----------		
17	P	2-Methylphenol		----------	NA	----------		
18	P	Acetophenone		----------	NA	----------		
19	P	Hexachloroethane		----------	NA	----------		
20	P	N-Nitroso-di-n-propylamin		----------	NA	----------		
21	P	3&4-Methylphenol		----------	NA	----------		
22	I	Naphthalene-d8	40.000	40.000	0.0	85	0.00	7.43
23	S	Nitrobenzene-d5		----------	NA	----------		
24	P	Nitrobenzene		----------	NA	----------		
25	P	Isophorone		----------	NA	----------		
26	P	2-Nitrophenol		----------	NA	----------		
27	P	2,4-Dimethylphenol		----------	NA	----------		
28		O,O,O-Triethylphosphoroth	50.000	44.450	11.1	77	-0.01	7.14
29	P	bis(2-Chloroethoxy)methan		----------	NA	----------		
		----------	Amount	Calc.	%Drift	----------		
30		Benzoic Acid		----------	NA	----------		
		----------	Amount	Calc.	%Drift	----------		
31	P	2,4-Dichlorophenol		----------	NA	----------		
32		1,2,4-Trichlorobenzene		----------	NA	----------		
33		alpha-Terpineol		----------	NA	----------		
34	P	Naphthalene		----------	NA	----------		
35	P	4-Chloroaniline		----------	NA	----------		
36		2,6-Dichlorophenol		----------	NA	----------		
37	P	Hexachlorobutadiene		----------	NA	----------		

Initial Calibration Verification

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071374.D

38	P	Caprolactam		----------NA----------				
39	P	4-Chloro-3-methylphenol		----------NA----------				
40	P	2-Methylnaphthalene		----------NA----------				
41		1-Methylnaphthalene		----------NA----------				
42	P	1,2,4,5-Tetrachlorobenzen		----------NA----------				
43	I	Acenaphthene-d10	40.000	40.000	0.0	84	0.00	9.48
		---------- Amount	Calc.	%Drift	----------			
44	P	Hexachlorocyclopentadiene		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
45	P	2,4,6-Trichlorophenol		----------NA----------				
46	P	2,4,5-Trichlorophenol		----------NA----------				
47	S	2-Fluorobiphenyl		----------NA----------				
48	P	1,1'-Biphenyl		----------NA----------				
49	P	2-Chloronaphthalene		----------NA----------				
50	P	2-Nitroaniline		----------NA----------				
51		p-Dinitrobenzene		----------NA----------				
52	P	Acenaphthylene		----------NA----------				
53	P	Dimethylphthalate		----------NA----------				
54		m-Dinitrobenzene		----------NA----------				
55	P	2,6-Dinitrotoluene		----------NA----------				
56		o-Dinitrobenzene		----------NA----------				
57	P	Acenaphthene		----------NA----------				
58	P	3-Nitroaniline		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
59	P	2,4-Dinitrophenol		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
60	P	Dibenzofuran		----------NA----------				
61	P	2,4-Dinitrotoluene		----------NA----------				
62	P	4-Nitrophenol		----------NA----------				
63		2,3,5,6-Tetrachlorophenol		----------NA----------				
64	P	2,3,4,6-Tetrachlorophenol		----------NA----------				
65	P	Fluorene		----------NA----------				
66	P	4-Chlorophenyl-phenylethe		----------NA----------				
67	P	Diethylphthalate		----------NA----------				
68		Thionazin	50.000	50.655	-1.3	85	-0.01	10.12
69	P	4-Nitroaniline		----------NA----------				
70	I	Phenanthrene-d10	40.000	40.000	0.0	96	0.00	11.22
		---------- Amount	Calc.	%Drift	----------			
71	P	4,6-Dinitro-2-methylpheno		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
72	P	n-Nitrosodiphenylamine		----------NA----------				
73		Diphenylamine		----------NA----------				
74		1,2-Diphenylhydrazine		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
75	S	2,4,6-Tribromophenol		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
76		Sulfotep	50.000	43.006	14.0	79	0.00	10.50
77		Phorate	50.000	45.279	9.4	83	0.00	10.64
78	P	4-Bromophenyl-phenylether		----------NA----------				
79	P	Hexachlorobenzene		----------NA----------				

Initial Calibration Verification

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071374.D

			Amount	Calc.	%Drift			
80		Dimethoate	50.000	43.900	12.2	85	0.00	10.83
81		Simazine		NA				
82	P	Atrazine		NA				
83	P	Pentachlorophenol		NA				
84	P	Phenanthrene		NA				
85	P	Anthracene		NA				
86		Disulfoton	50.000	37.153	25.7#	68	0.00	11.26
87	P	Carbazole		NA				
88		Methyl Parathion	50.000	45.131	9.7	87	0.00	11.70
89	P	Di-n-butylphthalate		NA				
90		Ethyl Parathion	50.000	45.602	8.8	88	0.00	12.17
91	P	Fluoranthene		NA				
92	I	Chrysene-d12	40.000	40.000	0.0	87	0.00	14.49
93		Benzidine		NA				
94	P	Pyrene		NA				
95	S	Terphenyl-d14		NA				
96		Famphur	50.000	81.906	-63.8#	149	0.00	13.70
97	P	Butylbenzylphthalate		NA				
98	P	3,3'-Dichlorobenzidine		NA				
99	P	Benzo[a]anthracene		NA				
100	P	Chrysene		NA				
101	P	bis(2-Ethylhexyl)phthalat		NA				
102	I	Perylene-d12	40.000	40.000	0.0	93	0.00	16.81
103	P	Di-n-octylphthalate		NA				
104	P	Benzo[b]fluoranthene		NA				
105	P	Benzo[k]fluoranthene		NA				

Initial Calibration Verification

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071374.D

			Amount	Calc.	%Drift			
106	P	Benzo[a]pyrene		NA				
107	P	Indeno[1,2,3-cd]pyrene		NA				
108	P	Dibenz[a,h]anthracene		NA				
109	P	Benzo[g,h,i]perylene		NA				

		Amount	Calc.	%Drift			
110	1,4-Dichlorobenzene-d4A	40.000	40.000	0.0	98	0.00	6.00
111	2-Picoline		NA				
112	N-Nitrosomethylethylamine		NA				
113	Methyl methanesulfonate		NA				
114	N-Nitrosodiethylamine		NA				
115	Ethyl methanesulfonate		NA				
116	Pentachloroethane		NA				
117	N-Nitrosopyrrolidine		NA				
118	N-Nitrosomorpholine		NA				
119	O-Toluidine		NA				
120	Naphthalene-d8A	40.000	40.000	0.0	95	0.00	7.43
121	N-Nitrosopiperidine		NA				
122	A,A-Dimethylphenethylamin		NA				
123	Hexachloropropene		NA				

		Amount	Calc.	%Drift
124	N-Nitrosodi-n-butylamine		NA	

		Amount	Calc.	%Drift
125	p-Phenylenediamine		NA	
126	Isosafrole		NA	

		Amount	Calc.	%Drift			
127	Acenaphthene-d10A	40.000	40.000	0.0	91	0.00	9.48
128	Safrole		NA				
129	1-Chloronaphthalene		NA				
130	Diphenyl Ether		NA				

		Amount	Calc.	%Drift
131	1,4-Naphthoquinone		NA	

		Amount	Calc.	%Drift
132	Pentachlorobenzene		NA	
133	1-Naphthylamine		NA	
134	2-Naphthylamine		NA	

		Amount	Calc.	%Drift
135	5-Nitro-o-toluidine		NA	

		Amount	Calc.	%Drift			
136	Phenanthrene-d10A	40.000	40.000	0.0	96	0.00	11.22

		Amount	Calc.	%Drift
137	1,3,5-Trinitrobenzene		NA	

		Amount	Calc.	%Drift
138	Diallate		NA	
139	Phenacetin		NA	
140	4-Aminobiphenyl		NA	
141	Pronamide		NA	

Initial Calibration Verification

Job Number: FA77581 **Sample:** SX2918-ICV2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X071374.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

142		Pentachloronitrobenzene		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
143		4-Nitroquinoline 1-Oxide		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
144		Methapyrilene		----------NA----------				
145		Isodrin		----------NA----------				
146	I	Chrysene-d12A	40.000	40.000	0.0	101	0.00	14.49
		---------- Amount	Calc.	%Drift	----------			
147		Aramite		----------NA----------				
148		p-(Dimethylamine)azobenze		----------NA----------				
149		Chlorobenzilate		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
150		Kepone		----------NA----------				
151		3,3'-Dimethylbenzidine		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
152		2-Acetylaminofluorene		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
153	I	Perylene-d12A	40.000	40.000	0.0	96	-0.02	16.81
154		7,12-Dimethylbenz(a)anthr		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
155		Hexachlorophene		----------NA----------				
156		3-Methylcholanthrene		----------NA----------				
157		Dibenz(a,j)acridine		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
x071368.D 8270DApp9SX-062320.m Wed Jun 24 09:48:26 2020

Initial Calibration Verification

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071375.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\0623_sx2918\x071375.D Vial: 21
Acq On : 23 Jun 2020 6:17 pm Operator: marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\MET...DApp9SX-062320.m (RTE Integrator)
Title : SW846 8270D OR EPA 625
Last Update : Tue Jun 23 17:15:34 2020
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	101	0.00	6.00
2		1,4-Dioxane		----------	NA	----------		
3		N-nitrosodimethylamine		----------	NA	----------		
4		Pyridine		----------	NA	----------		
5	P	Benzaldehyde		----------	NA	----------		
6		Aniline		----------	NA	----------		
7	S	2-Fluorophenol		----------	NA	----------		
8	P	bis(2-Chloroethyl)ether		----------	NA	----------		
9	S	Phenol-d5		----------	NA	----------		
10	P	Phenol		----------	NA	----------		
11	P	2-Chlorophenol		----------	NA	----------		
12		1,3-Dichlorobenzene		----------	NA	----------		
13		1,4-Dichlorobenzene		----------	NA	----------		
14		1,2-Dichlorobenzene		----------	NA	----------		
15		Benzyl alcohol		----------	NA	----------		
16	P	2,2'-Oxybis(1-chloropropa		----------	NA	----------		
17	P	2-Methylphenol		----------	NA	----------		
18	P	Acetophenone		----------	NA	----------		
19	P	Hexachloroethane		----------	NA	----------		
20	P	N-Nitroso-di-n-propylamin		----------	NA	----------		
21	P	3&4-Methylphenol		----------	NA	----------		
22	I	Naphthalene-d8	40.000	40.000	0.0	109	0.00	7.43
23	S	Nitrobenzene-d5		----------	NA	----------		
24	P	Nitrobenzene		----------	NA	----------		
25	P	Isophorone		----------	NA	----------		
26	P	2-Nitrophenol		----------	NA	----------		
27	P	2,4-Dimethylphenol		----------	NA	----------		
28		O,O,O-Triethylphosphoroth		----------	NA	----------		
29	P	bis(2-Chloroethoxy)methan		----------	NA	----------		
		----------	Amount	Calc.	%Drift	----------		
30		Benzoic Acid		----------	NA	----------		
		----------	Amount	Calc.	%Drift	----------		
31	P	2,4-Dichlorophenol		----------	NA	----------		
32		1,2,4-Trichlorobenzene		----------	NA	----------		
33		alpha-Terpineol		----------	NA	----------		
34	P	Naphthalene		----------	NA	----------		
35	P	4-Chloroaniline		----------	NA	----------		
36		2,6-Dichlorophenol		----------	NA	----------		
37	P	Hexachlorobutadiene		----------	NA	----------		

Initial Calibration Verification

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071375.D

38	P	Caprolactam			NA				
39	P	4-Chloro-3-methylphenol			NA				
40	P	2-Methylnaphthalene			NA				
41		1-Methylnaphthalene			NA				
42	P	1,2,4,5-Tetrachlorobenzen			NA				
43	I	Acenaphthene-d10	40.000	40.000	0.0	104	0.00	9.48	
			Amount	Calc.	%Drift				
44	P	Hexachlorocyclopentadiene			NA				
			Amount	Calc.	%Drift				
45	P	2,4,6-Trichlorophenol			NA				
46	P	2,4,5-Trichlorophenol			NA				
47	S	2-Fluorobiphenyl			NA				
48	P	1,1'-Biphenyl			NA				
49	P	2-Chloronaphthalene			NA				
50	P	2-Nitroaniline			NA				
51		p-Dinitrobenzene			NA				
52	P	Acenaphthylene			NA				
53	P	Dimethylphthalate			NA				
54		m-Dinitrobenzene			NA				
55	P	2,6-Dinitrotoluene			NA				
56		o-Dinitrobenzene			NA				
57	P	Acenaphthene			NA				
58	P	3-Nitroaniline			NA				
			Amount	Calc.	%Drift				
59	P	2,4-Dinitrophenol			NA				
			Amount	Calc.	%Drift				
60	P	Dibenzofuran			NA				
61	P	2,4-Dinitrotoluene			NA				
62	P	4-Nitrophenol			NA				
63		2,3,5,6-Tetrachlorophenol			NA				
64	P	2,3,4,6-Tetrachlorophenol			NA				
65	P	Fluorene			NA				
66	P	4-Chlorophenyl-phenylethe			NA				
67	P	Diethylphthalate			NA				
68		Thionazin			NA				
69	P	4-Nitroaniline			NA				
70	I	Phenanthrene-d10	40.000	40.000	0.0	115	0.00	11.22	
			Amount	Calc.	%Drift				
71	P	4,6-Dinitro-2-methylpheno			NA				
			Amount	Calc.	%Drift				
72	P	n-Nitrosodiphenylamine			NA				
73		Diphenylamine			NA				
74		1,2-Diphenylhydrazine			NA				
			Amount	Calc.	%Drift				
75	S	2,4,6-Tribromophenol			NA				
			Amount	Calc.	%Drift				
76		Sulfotep			NA				
77		Phorate			NA				
78	P	4-Bromophenyl-phenylether			NA				
79	P	Hexachlorobenzene			NA				

			Amount	Calc.	%Drift			
80		Dimethoate		NA				
			Amount	Calc.	%Drift			
81		Simazine		NA				
82	P	Atrazine		NA				
			Amount	Calc.	%Drift			
83	P	Pentachlorophenol		NA				
			Amount	Calc.	%Drift			
84	P	Phenanthrene		NA				
85	P	Anthracene		NA				
86		Disulfoton		NA				
87	P	Carbazole		NA				
			Amount	Calc.	%Drift			
88		Methyl Parathion		NA				
			Amount	Calc.	%Drift			
89	P	Di-n-butylphthalate		NA				
			Amount	Calc.	%Drift			
90		Ethyl Parathion		NA				
			Amount	Calc.	%Drift			
91	P	Fluoranthene		NA				
92	I	Chrysene-d12	40.000	40.000	0.0	98	0.00	14.49
			Amount	Calc.	%Drift			
93		Benzidine		NA				
			Amount	Calc.	%Drift			
94	P	Pyrene		NA				
95	S	Terphenyl-d14		NA				
			Amount	Calc.	%Drift			
96		Famphur		NA				
97	P	Butylbenzylphthalate		NA				
98	P	3,3'-Dichlorobenzidine		NA				
			Amount	Calc.	%Drift			
99	P	Benzo[a]anthracene		NA				
100	P	Chrysene		NA				
			Amount	Calc.	%Drift			
101	P	bis(2-Ethylhexyl)phthalat		NA				
			Amount	Calc.	%Drift			
102	I	Perylene-d12	40.000	40.000	0.0	113	0.01	16.82
			Amount	Calc.	%Drift			
103	P	Di-n-octylphthalate		NA				
104	P	Benzo[b]fluoranthene		NA				
			Amount	Calc.	%Drift			
105	P	Benzo[k]fluoranthene		NA				

Initial Calibration Verification

Job Number: FA77581 **Sample:** SX2918-ICV2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X071375.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

			Amount	Calc.	%Drift			
106	P	Benzo[a]pyrene		NA				
107	P	Indeno[1,2,3-cd]pyrene		NA				
108	P	Dibenz[a,h]anthracene		NA				
109	P	Benzo[g,h,i]perylene		NA				

		Amount	Calc.	%Drift			
110	1,4-Dichlorobenzene-d4A	40.000	40.000	0.0	113	0.00	6.00
111	2-Picoline	50.000	41.736	16.5	90	0.00	3.98
112	N-Nitrosomethylethylamine	50.000	39.497	21.0#	86	0.00	4.11
113	Methyl methanesulfonate	50.000	42.243	15.5	90	0.00	4.44
114	N-Nitrosodiethylamine	50.000	41.727	16.5	88	0.00	4.85
115	Ethyl methanesulfonate	50.000	39.975	20.0#	85	0.00	5.18
116	Pentachloroethane	50.000	39.110	21.8#	84	0.00	5.70
117	N-Nitrosopyrrolidine	50.000	43.888	12.2	90	-0.01	6.43
118	N-Nitrosomorpholine	50.000	41.815	16.4	86	0.00	6.48
119	O-Toluidine	50.000	43.117	13.8	88	0.00	6.50
120	Naphthalene-d8A	40.000	40.000	0.0	121	0.00	7.43
121	N-Nitrosopiperidine	50.000	36.632	26.7#	85	0.00	6.81
122	A,A-Dimethylphenethylamin	50.000	38.452	23.1#	87	-0.06	7.35
123	Hexachloropropene	50.000	47.157	5.7	101	0.00	7.56

		Amount	Calc.	%Drift			
124	N-Nitrosodi-n-butylamine	50.000	32.169	35.7#	68	0.00	7.94

		Amount	Calc.	%Drift			
125	p-Phenylenediamine	50.000	41.295	17.4	91	0.00	7.93
126	Isosafrole	50.000	37.985	24.0#	87	0.00	8.18
127	Acenaphthene-d10A	40.000	40.000	0.0	112	0.00	9.48
128	Safrole	50.000	46.801	6.4	98	0.00	8.78
129	1-Chloronaphthalene	50.000	45.691	8.6	96	0.00	8.85
130	Diphenyl Ether		NA				

		Amount	Calc.	%Drift			
131	1,4-Naphthoquinone	50.000	29.961	40.1#	63	0.00	9.04

		Amount	Calc.	%Drift			
132	Pentachlorobenzene	50.000	42.419	15.2	93	0.00	9.67
133	1-Naphthylamine	50.000	41.445	17.1	89	0.00	9.81
134	2-Naphthylamine	50.000	42.556	14.9	91	0.00	9.91

		Amount	Calc.	%Drift			
135	5-Nitro-o-toluidine	50.000	40.969	18.1	87	0.00	10.14

		Amount	Calc.	%Drift			
136	Phenanthrene-d10A	40.000	40.000	0.0	115	0.00	11.22

		Amount	Calc.	%Drift			
137	1,3,5-Trinitrobenzene	50.000	44.216	11.6	92	0.00	10.59

		Amount	Calc.	%Drift			
138	Diallate	50.000	38.309	23.4#	85	0.00	10.64
139	Phenacetin	50.000	43.996	12.0	90	0.00	10.67
140	4-Aminobiphenyl	50.000	40.445	19.1	86	0.00	11.02
141	Pronamide	50.000	44.783	10.4	92	0.00	11.12

Initial Calibration Verification

Job Number: FA77581 **Sample:** SX2918-ICV2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X071375.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

			Amount	Calc.	%Drift			
142		Pentachloronitrobenzene	50.000	41.791	16.4	87	0.00	11.02
			Amount	Calc.	%Drift			
143		4-Nitroquinoline 1-Oxide	50.000	36.493	27.0#	80	0.00	12.18
			Amount	Calc.	%Drift			
144		Methapyrilene			NA			
145		Isodrin	50.000	41.381	17.2	92	0.00	12.48
146	I	Chrysene-d12A	40.000	40.000	0.0	114	0.00	14.49
			Amount	Calc.	%Drift			
147		Aramite	50.000	41.761	16.5	87	0.00	13.25
148		p-(Dimethylamine)azobenze	50.000	40.070	19.9	89	0.00	13.32
149		Chlorobenzilate	50.000	41.307	17.4	88	0.00	13.39
			Amount	Calc.	%Drift			
150		Kepone	50.000	23.045	53.9#	0	0.00	13.78
151		3,3'-Dimethylbenzidine	50.000	60.240	-20.5#	119	0.00	13.75
			Amount	Calc.	%Drift			
152		2-Acetylaminofluorene	50.000	41.969	16.1	88	0.00	14.08
			Amount	Calc.	%Drift			
153	I	Perylene-d12A	40.000	40.000	0.0	116	0.00	16.82
154		7,12-Dimethylbenz(a)anthr	50.000	46.532	6.9	98	0.00	16.18
			Amount	Calc.	%Drift			
155		Hexachlorophene	500.000	469.073	6.2	95	0.00	16.59
156		3-Methylcholanthrene	50.000	39.832	20.3#	90	0.00	17.33
157		Dibenz(a,j)acridine	50.000	40.348	19.3	87	0.00	18.23

(#) = Out of Range SPCC's out = 0 CCC's out = 0
x071368.D 8270DApp9SX-062320.m Tue Jun 23 19:09:56 2020

Initial Calibration Verification

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071376.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\0623_sx2918\x071376.D Vial: 22
Acq On : 23 Jun 2020 6:43 pm Operator: marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\MET...DApp9SX-062320.m (RTE Integrator)
Title : SW846 8270D OR EPA 625
Last Update : Tue Jun 23 17:15:34 2020
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	96	0.00	6.00
2		1,4-Dioxane		----------	NA	----------		
3		N-nitrosodimethylamine		----------	NA	----------		
4		Pyridine		----------	NA	----------		
5	P	Benzaldehyde		----------	NA	----------		
6		Aniline		----------	NA	----------		
7	S	2-Fluorophenol		----------	NA	----------		
8	P	bis(2-Chloroethyl)ether		----------	NA	----------		
9	S	Phenol-d5		----------	NA	----------		
10	P	Phenol		----------	NA	----------		
11	P	2-Chlorophenol		----------	NA	----------		
12		1,3-Dichlorobenzene		----------	NA	----------		
13		1,4-Dichlorobenzene		----------	NA	----------		
14		1,2-Dichlorobenzene		----------	NA	----------		
15		Benzyl alcohol		----------	NA	----------		
16	P	2,2'-Oxybis(1-chloropropa		----------	NA	----------		
17	P	2-Methylphenol		----------	NA	----------		
18	P	Acetophenone		----------	NA	----------		
19	P	Hexachloroethane		----------	NA	----------		
20	P	N-Nitroso-di-n-propylamin		----------	NA	----------		
21	P	3&4-Methylphenol		----------	NA	----------		
22	I	Naphthalene-d8	40.000	40.000	0.0	94	0.00	7.43
23	S	Nitrobenzene-d5		----------	NA	----------		
24	P	Nitrobenzene		----------	NA	----------		
25	P	Isophorone		----------	NA	----------		
26	P	2-Nitrophenol		----------	NA	----------		
27	P	2,4-Dimethylphenol		----------	NA	----------		
28		O,O,O-Triethylphosphoroth		----------	NA	----------		
29	P	bis(2-Chloroethoxy)methan		----------	NA	----------		
		----------	Amount	Calc.	%Drift	----------		
30		Benzoic Acid		----------	NA	----------		
		----------	Amount	Calc.	%Drift	----------		
31	P	2,4-Dichlorophenol		----------	NA	----------		
32		1,2,4-Trichlorobenzene		----------	NA	----------		
33		alpha-Terpineol		----------	NA	----------		
34	P	Naphthalene		----------	NA	----------		
35	P	4-Chloroaniline		----------	NA	----------		
36		2,6-Dichlorophenol		----------	NA	----------		
37	P	Hexachlorobutadiene		----------	NA	----------		

Initial Calibration Verification

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071376.D

38	P	Caprolactam			NA				
39	P	4-Chloro-3-methylphenol			NA				
40	P	2-Methylnaphthalene			NA				
41		1-Methylnaphthalene			NA				
42	P	1,2,4,5-Tetrachlorobenzen			NA				
43	I	Acenaphthene-d10	40.000	40.000	0.0	109	0.00	9.48	
			Amount	Calc.	%Drift				
44	P	Hexachlorocyclopentadiene			NA				
			Amount	Calc.	%Drift				
45	P	2,4,6-Trichlorophenol			NA				
46	P	2,4,5-Trichlorophenol			NA				
47	S	2-Fluorobiphenyl			NA				
48	P	1,1'-Biphenyl			NA				
49	P	2-Chloronaphthalene			NA				
50	P	2-Nitroaniline			NA				
51		p-Dinitrobenzene			NA				
52	P	Acenaphthylene			NA				
53	P	Dimethylphthalate			NA				
54		m-Dinitrobenzene			NA				
55	P	2,6-Dinitrotoluene			NA				
56		o-Dinitrobenzene			NA				
57	P	Acenaphthene			NA				
58	P	3-Nitroaniline			NA				
			Amount	Calc.	%Drift				
59	P	2,4-Dinitrophenol			NA				
			Amount	Calc.	%Drift				
60	P	Dibenzofuran			NA				
61	P	2,4-Dinitrotoluene			NA				
62	P	4-Nitrophenol			NA				
63		2,3,5,6-Tetrachlorophenol			NA				
64	P	2,3,4,6-Tetrachlorophenol			NA				
65	P	Fluorene			NA				
66	P	4-Chlorophenyl-phenylethe			NA				
67	P	Diethylphthalate			NA				
68		Thionazin			NA				
69	P	4-Nitroaniline			NA				
70	I	Phenanthrene-d10	40.000	40.000	0.0	105	0.00	11.22	
			Amount	Calc.	%Drift				
71	P	4,6-Dinitro-2-methylpheno			NA				
			Amount	Calc.	%Drift				
72	P	n-Nitrosodiphenylamine			NA				
73		Diphenylamine			NA				
74		1,2-Diphenylhydrazine			NA				
			Amount	Calc.	%Drift				
75	S	2,4,6-Tribromophenol			NA				
			Amount	Calc.	%Drift				
76		Sulfotep			NA				
77		Phorate			NA				
78	P	4-Bromophenyl-phenylether			NA				
79	P	Hexachlorobenzene			NA				

			Amount	Calc.	%Drift			
80		Dimethoate		NA				
			Amount	Calc.	%Drift			
81		Simazine		NA				
82	P	Atrazine		NA				
			Amount	Calc.	%Drift			
83	P	Pentachlorophenol		NA				
			Amount	Calc.	%Drift			
84	P	Phenanthrene		NA				
85	P	Anthracene		NA				
86		Disulfoton		NA				
87	P	Carbazole		NA				
			Amount	Calc.	%Drift			
88		Methyl Parathion		NA				
			Amount	Calc.	%Drift			
89	P	Di-n-butylphthalate		NA				
			Amount	Calc.	%Drift			
90		Ethyl Parathion		NA				
			Amount	Calc.	%Drift			
91	P	Fluoranthene		NA				
92	I	Chrysene-d12	40.000	40.000	0.0	93	0.00	14.49
			Amount	Calc.	%Drift			
93		Benzidine		NA				
			Amount	Calc.	%Drift			
94	P	Pyrene		NA				
95	S	Terphenyl-d14		NA				
			Amount	Calc.	%Drift			
96		Famphur		NA				
97	P	Butylbenzylphthalate		NA				
98	P	3,3'-Dichlorobenzidine		NA				
			Amount	Calc.	%Drift			
99	P	Benzo[a]anthracene		NA				
100	P	Chrysene		NA				
			Amount	Calc.	%Drift			
101	P	bis(2-Ethylhexyl)phthalat		NA				
			Amount	Calc.	%Drift			
102	I	Perylene-d12	40.000	40.000	0.0	103	0.00	16.81
			Amount	Calc.	%Drift			
103	P	Di-n-octylphthalate		NA				
104	P	Benzo[b]fluoranthene		NA				
			Amount	Calc.	%Drift			
105	P	Benzo[k]fluoranthene		NA				

Initial Calibration Verification

Job Number: FA77581 **Sample:** SX2918-ICV2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X071376.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

			Amount	Calc.	%Drift			
106	P	Benzo[a]pyrene		NA				
107	P	Indeno[1,2,3-cd]pyrene		NA				
108	P	Dibenz[a,h]anthracene		NA				
109	P	Benzo[g,h,i]perylene		NA				

		Amount	Calc.	%Drift			
110	1,4-Dichlorobenzene-d4A	40.000	40.000	0.0	108	0.00	6.00
111	2-Picoline		NA				
112	N-Nitrosomethylethylamine		NA				
113	Methyl methanesulfonate		NA				
114	N-Nitrosodiethylamine		NA				
115	Ethyl methanesulfonate		NA				
116	Pentachloroethane		NA				
117	N-Nitrosopyrrolidine		NA				
118	N-Nitrosomorpholine		NA				
119	O-Toluidine		NA				
120	Naphthalene-d8A	40.000	40.000	0.0	105	0.00	7.43
121	N-Nitrosopiperidine		NA				
122	A,A-Dimethylphenethylamin		NA				
123	Hexachloropropene		NA				

		Amount	Calc.	%Drift			
124	N-Nitrosodi-n-butylamine		NA				

		Amount	Calc.	%Drift			
125	p-Phenylenediamine		NA				
126	Isosafrole		NA				
127	Acenaphthene-d10A	40.000	40.000	0.0	118	0.00	9.48
128	Safrole		NA				
129	1-Chloronaphthalene		NA				
130	Diphenyl Ether	50.000	41.376	17.2	92	0.00	8.95

		Amount	Calc.	%Drift			
131	1,4-Naphthoquinone		NA				

		Amount	Calc.	%Drift			
132	Pentachlorobenzene		NA				
133	1-Naphthylamine		NA				
134	2-Naphthylamine		NA				

		Amount	Calc.	%Drift			
135	5-Nitro-o-toluidine		NA				

		Amount	Calc.	%Drift			
136	Phenanthrene-d10A	40.000	40.000	0.0	105	0.00	11.22

		Amount	Calc.	%Drift			
137	1,3,5-Trinitrobenzene	50.000	44.822	10.4	85	0.00	10.59

		Amount	Calc.	%Drift			
138	Diallate		NA				
139	Phenacetin		NA				
140	4-Aminobiphenyl		NA				
141	Pronamide		NA				

Initial Calibration Verification

Job Number: FA77581 **Sample:** SX2918-ICV2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X071376.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

142		Pentachloronitrobenzene		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
143		4-Nitroquinoline 1-Oxide		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
144		Methapyrilene	50.000	128.026	-156.1#	237	0.00	12.29
145		Isodrin		----------NA----------				
146	I	Chrysene-d12A	40.000	40.000	0.0	109	0.00	14.49
		---------- Amount	Calc.	%Drift	----------			
147		Aramite		----------NA----------				
148		p-(Dimethylamine)azobenze		----------NA----------				
149		Chlorobenzilate		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
150		Kepone		----------NA----------				
151		3,3'-Dimethylbenzidine		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
152		2-Acetylaminofluorene		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
153	I	Perylene-d12A	40.000	40.000	0.0	106	-0.01	16.81
154		7,12-Dimethylbenz(a)anthr		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
155		Hexachlorophene		----------NA----------				
156		3-Methylcholanthrene		----------NA----------				
157		Dibenz(a,j)acridine		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
x071368.D 8270DApp9SX-062320.m Tue Jun 23 19:08:29 2020

Initial Calibration Verification

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071416.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\jo...2020\sx2919\x071416.d Vial: 2
Acq On : 24 Jun 2020 3:22 pm Operator: marthav
Sample : icv2918-50 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\met...DApp9SX-062320.m (RTE Integrator)
Title : SW846 8270D OR EPA 625
Last Update : Tue Jun 23 17:15:34 2020
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	94	0.00	5.99
2		1,4-Dioxane		----------	NA	----------		
3		N-nitrosodimethylamine		----------	NA	----------		
4		Pyridine		----------	NA	----------		
5	P	Benzaldehyde		----------	NA	----------		
6		Aniline		----------	NA	----------		
7	S	2-Fluorophenol		----------	NA	----------		
8	P	bis(2-Chloroethyl)ether		----------	NA	----------		
9	S	Phenol-d5		----------	NA	----------		
10	P	Phenol		----------	NA	----------		
11	P	2-Chlorophenol		----------	NA	----------		
12		1,3-Dichlorobenzene		----------	NA	----------		
13		1,4-Dichlorobenzene		----------	NA	----------		
14		1,2-Dichlorobenzene		----------	NA	----------		
15		Benzyl alcohol		----------	NA	----------		
16	P	2,2'-Oxybis(1-chloropropa		----------	NA	----------		
17	P	2-Methylphenol		----------	NA	----------		
18	P	Acetophenone		----------	NA	----------		
19	P	Hexachloroethane		----------	NA	----------		
20	P	N-Nitroso-di-n-propylamin		----------	NA	----------		
21	P	3&4-Methylphenol		----------	NA	----------		
22	I	Naphthalene-d8	1.000	1.000	0.0	92	0.00	7.42
23	S	Nitrobenzene-d5		----------	NA	----------		
24	P	Nitrobenzene		----------	NA	----------		
25	P	Isophorone		----------	NA	----------		
26	P	2-Nitrophenol		----------	NA	----------		
27	P	2,4-Dimethylphenol		----------	NA	----------		
28		O,O,O-Triethylphosphoroth		----------	NA	----------		
29	P	bis(2-Chloroethoxy)methan		----------	NA	----------		
		----------	True	Calc.	% Drift	----------		
30		Benzoic Acid		----------	NA	----------		
		----------	AvgRF	CCRF	% Dev	----------		
31	P	2,4-Dichlorophenol		----------	NA	----------		
32		1,2,4-Trichlorobenzene		----------	NA	----------		
33		alpha-Terpineol		----------	NA	----------		
34	P	Naphthalene		----------	NA	----------		
35	P	4-Chloroaniline		----------	NA	----------		
36		2,6-Dichlorophenol		----------	NA	----------		
37	P	Hexachlorobutadiene		----------	NA	----------		

38	P	Caprolactam		----------NA----------				
39	P	4-Chloro-3-methylphenol		----------NA----------				
40	P	2-Methylnaphthalene		----------NA----------				
41		1-Methylnaphthalene		----------NA----------				
42	P	1,2,4,5-Tetrachlorobenzen		----------NA----------				
43	I	Acenaphthene-d10	1.000	1.000	0.0	84	0.00	9.47
		----------	True	Calc.	% Drift	----------		
44	P	Hexachlorocyclopentadiene		----------NA----------				
		----------	AvgRF	CCRF	% Dev	----------		
45	P	2,4,6-Trichlorophenol		----------NA----------				
46	P	2,4,5-Trichlorophenol		----------NA----------				
47	S	2-Fluorobiphenyl		----------NA----------				
48	P	1,1'-Biphenyl		----------NA----------				
49	P	2-Chloronaphthalene		----------NA----------				
50	P	2-Nitroaniline		----------NA----------				
51		p-Dinitrobenzene		----------NA----------				
52	P	Acenaphthylene		----------NA----------				
53	P	Dimethylphthalate		----------NA----------				
54		m-Dinitrobenzene		----------NA----------				
55	P	2,6-Dinitrotoluene		----------NA----------				
56		o-Dinitrobenzene		----------NA----------				
57	P	Acenaphthene		----------NA----------				
58	P	3-Nitroaniline		----------NA----------				
		----------	True	Calc.	% Drift	----------		
59	P	2,4-Dinitrophenol		----------NA----------				
		----------	AvgRF	CCRF	% Dev	----------		
60	P	Dibenzofuran		----------NA----------				
61	P	2,4-Dinitrotoluene		----------NA----------				
62	P	4-Nitrophenol		----------NA----------				
63		2,3,5,6-Tetrachlorophenol		----------NA----------				
64	P	2,3,4,6-Tetrachlorophenol		----------NA----------				
65	P	Fluorene		----------NA----------				
66	P	4-Chlorophenyl-phenylethe		----------NA----------				
67	P	Diethylphthalate		----------NA----------				
68		Thionazin		----------NA----------				
69	P	4-Nitroaniline		----------NA----------				
70	I	Phenanthrene-d10	1.000	1.000	0.0	90	0.00	11.21
		----------	True	Calc.	% Drift	----------		
71	P	4,6-Dinitro-2-methylpheno		----------NA----------				
		----------	AvgRF	CCRF	% Dev	----------		
72	P	n-Nitrosodiphenylamine		----------NA----------				
73		Diphenylamine		----------NA----------				
74		1,2-Diphenylhydrazine		----------NA----------				
		----------	True	Calc.	% Drift	----------		
75	S	2,4,6-Tribromophenol		----------NA----------				
		----------	AvgRF	CCRF	% Dev	----------		
76		Sulfotep		----------NA----------				
77		Phorate		----------NA----------				
78	P	4-Bromophenyl-phenylether		----------NA----------				
79	P	Hexachlorobenzene		----------NA----------				

		----------	True	Calc.	% Drift	----------			
80		Dimethoate		----------NA----------					
		----------	AvgRF	CCRF	% Dev	----------			
81		Simazine		----------NA----------					
82	P	Atrazine		----------NA----------					
		----------	True	Calc.	% Drift	----------			
83	P	Pentachlorophenol		----------NA----------					
		----------	AvgRF	CCRF	% Dev	----------			
84	P	Phenanthrene		----------NA----------					
85	P	Anthracene		----------NA----------					
86		Disulfoton		----------NA----------					
87	P	Carbazole		----------NA----------					
		----------	True	Calc.	% Drift	----------			
88		Methyl Parathion		----------NA----------					
		----------	AvgRF	CCRF	% Dev	----------			
89	P	Di-n-butylphthalate		----------NA----------					
		----------	True	Calc.	% Drift	----------			
90		Ethyl Parathion		----------NA----------					
		----------	AvgRF	CCRF	% Dev	----------			
91	P	Fluoranthene		----------NA----------					
92	I	Chrysene-d12	1.000	1.000	0.0	85	0.00	14.48	
		----------	True	Calc.	% Drift	----------			
93		Benzidine		----------NA----------					
		----------	AvgRF	CCRF	% Dev	----------			
94	P	Pyrene		----------NA----------					
95	S	Terphenyl-d14		----------NA----------					
		----------	True	Calc.	% Drift	----------			
96		Famphur		----------NA----------					
97	P	Butylbenzylphthalate		----------NA----------					
98	P	3,3'-Dichlorobenzidine		----------NA----------					
		----------	AvgRF	CCRF	% Dev	----------			
99	P	Benzo[a]anthracene		----------NA----------					
100	P	Chrysene		----------NA----------					
		----------	True	Calc.	% Drift	----------			
101	P	bis(2-Ethylhexyl)phthalat		----------NA----------					
		----------	AvgRF	CCRF	% Dev	----------			
102	I	Perylene-d12	1.000	1.000	0.0	110	0.00	16.80	
		----------	True	Calc.	% Drift	----------			
103	P	Di-n-octylphthalate		----------NA----------					
104	P	Benzo[b]fluoranthene		----------NA----------					
		----------	AvgRF	CCRF	% Dev	----------			
105	P	Benzo[k]fluoranthene		----------NA----------					

Initial Calibration Verification

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071416.D

			True	Calc.	% Drift			
106	P	Benzo[a]pyrene		NA				
107	P	Indeno[1,2,3-cd]pyrene		NA				
108	P	Dibenz[a,h]anthracene		NA				
109	P	Benzo[g,h,i]perylene		NA				

		AvgRF	CCRF	% Dev			
110	1,4-Dichlorobenzene-d4A	1.000	1.000	0.0	105	0.00	5.99
111	2-Picoline	1.908	1.986	-4.1	105	0.00	3.97
112	N-Nitrosomethylethylamine	1.327	1.308	1.4	100	0.00	4.10
113	Methyl methanesulfonate	0.930	0.887	4.6	94	0.00	4.42
114	N-Nitrosodiethylamine	0.775	0.796	-2.7	100	0.00	4.84
115	Ethyl methanesulfonate	1.281	1.128	11.9	87	0.00	5.17
116	Pentachloroethane	0.546	0.509	6.8	92	0.00	5.68
117	N-Nitrosopyrrolidine	0.701	0.718	-2.4	97	0.00	6.42
118	N-Nitrosomorpholine	1.279	1.230	3.8	92	0.00	6.46
119	O-Toluidine	2.619	2.702	-3.2	98	0.00	6.48
120	Naphthalene-d8A	1.000	1.000	0.0	103	0.00	7.42
121	N-Nitrosopiperidine	0.368	0.334	9.2	89	0.00	6.80
122	A,A-Dimethylphenethylamin	1.467	1.128	23.1#	74	-0.01	7.31
123	Hexachloropropene	0.168	0.199	-18.5	108	0.00	7.55

		True	Calc.	% Drift			
124	N-Nitrosodi-n-butylamine	50.000	39.533	20.9#	72	0.00	7.92

		AvgRF	CCRF	% Dev			
125	p-Phenylenediamine	0.380	0.398	-4.7	98	0.00	7.92
126	Isosafrole	0.273	0.238	12.8	84	0.00	8.16
127	Acenaphthene-d10A	1.000	1.000	0.0	91	0.00	9.47
128	Safrole	0.526	0.586	-11.4	94	0.00	8.77
129	1-Chloronaphthalene	1.253	1.375	-9.7	93	0.00	8.84
130	Diphenyl Ether		NA				

		True	Calc.	% Drift			
131	1,4-Naphthoquinone	50.000	30.427	39.1#	52	0.00	9.03

		AvgRF	CCRF	% Dev			
132	Pentachlorobenzene	0.441	0.441	0.0	88	0.00	9.66
133	1-Naphthylamine	1.389	1.483	-6.8	93	0.00	9.80
134	2-Naphthylamine	1.485	1.563	-5.3	90	0.00	9.90

		True	Calc.	% Drift			
135	5-Nitro-o-toluidine	50.000	51.687	-3.4	90	0.00	10.13

		AvgRF	CCRF	% Dev			
136	Phenanthrene-d10A	1.000	1.000	0.0	90	0.00	11.21

		True	Calc.	% Drift			
137	1,3,5-Trinitrobenzene	50.000	52.543	-5.1	88	0.00	10.59

		AvgRF	CCRF	% Dev			
138	Diallate	0.627	0.580	7.5	80	0.00	10.62
139	Phenacetin	0.385	0.425	-10.4	89	0.00	10.66
140	4-Aminobiphenyl	0.811	0.863	-6.4	89	0.00	11.01
141	Pronamide	0.314	0.347	-10.5	89	0.00	11.11

Initial Calibration Verification

Job Number: FA77581 **Sample:** SX2918-ICV2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X071416.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

142	Pentachloronitrobenzene	0.078	0.078	0.0	82	0.00	11.01
	----------	True	Calc.	% Drift	----------		
143	4-Nitroquinoline 1-Oxide	50.000	50.367	-0.7	87	0.00	12.17
	----------	AvgRF	CCRF	% Dev	----------		
144	Methapyrilene		----------NA----------				
145	Isodrin	0.113	0.114	-0.9	88	0.00	12.47
146 I	Chrysene-d12A	1.000	1.000	0.0	99	0.00	14.48
	----------	True	Calc.	% Drift	----------		
147	Aramite	50.000	49.694	0.6	92	0.00	13.24
148	p-(Dimethylamine)azobenze	50.000	49.472	1.1	96	0.00	13.31
149	Chlorobenzilate	50.000	46.515	7.0	87	0.00	13.38
	----------	AvgRF	CCRF	% Dev	----------		
150	Kepone	0.018	0.029	-61.1#	0#	0.00	13.76
151	3,3'-Dimethylbenzidine	0.646	1.071	-65.8#	143	0.00	13.74
	----------	True	Calc.	% Drift	----------		
152	2-Acetylaminofluorene	50.000	58.747	-17.5	112	0.00	14.07
	----------	AvgRF	CCRF	% Dev	----------		
153 I	Perylene-d12A	1.000	1.000	0.0	114	0.00	16.80
154	7,12-Dimethylbenz(a)anthr	0.555	0.596	-7.4	111	0.00	16.16
	----------	True	Calc.	% Drift	----------		
155	Hexachlorophene	500.000	520.124	-4.0	107	0.00	16.57
156	3-Methylcholanthrene	50.000	50.150	-0.3	113	0.00	17.31
157	Dibenz(a,j)acridine	50.000	56.312	-12.6	127	0.00	18.21

(#) = Out of Range SPCC's out = 54 CCC's out = 0
x071368.D 8270DApp9SX-062320.m Thu Jun 25 03:53:12 2020

Continuing Calibration Summary

Job Number: FA77581 **Sample:** SX2950-CC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072329.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\jo...2020\sx2950\x072329.d Vial: 2
Acq On : 11 Aug 2020 12:47 pm Operator: marthav
Sample : cc2918-50 8270 Inst : MSBNA05
Misc : op81484,sx2950,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\met...DApp9SX-062320.m (RTE Integrator)
Title : SW846 8270D OR EPA 625
Last Update : Tue Jun 23 17:15:34 2020
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	98	0.00	5.66
2		1,4-Dioxane	0.686	0.618	9.9	95	0.00	2.48
3		N-nitrosodimethylamine	1.217	1.004	17.5	84	0.00	2.81
4		Pyridine	1.668	1.770	-6.1	106	0.00	2.85
5	P	Benzaldehyde	1.192	1.030	13.6	88	0.00	5.19
6		Aniline	2.378	2.052	13.7	82	0.00	5.31
7	S	2-Fluorophenol	1.434	1.385	3.4	99	0.00	4.31
8	P	bis(2-Chloroethyl)ether	1.468	1.421	3.2	95	0.00	5.39
9	S	Phenol-d5	1.706	1.677	1.7	99	0.00	5.33
10	P	Phenol	2.024	1.925	4.9	89	0.00	5.34
11	P	2-Chlorophenol	1.530	1.533	-0.2	96	0.00	5.45
12		1,3-Dichlorobenzene	1.590	1.564	1.6	98	0.00	5.60
13		1,4-Dichlorobenzene	1.682	1.653	1.7	97	0.00	5.68
14		1,2-Dichlorobenzene	1.598	1.495	6.4	92	0.00	5.84
15		Benzyl alcohol	1.059	0.968	8.6	89	0.00	5.84
16	P	2,2'-Oxybis(1-chloropropa	3.084	2.353	23.7#	76	0.00	5.99
17	P	2-Methylphenol	1.456	1.389	4.6	91	0.00	5.99
18	P	Acetophenone	2.154	1.996	7.3	90	0.00	6.11
19	P	Hexachloroethane	0.632	0.616	2.5	96	0.00	6.21
20	P	N-Nitroso-di-n-propylamin	1.138	1.088	4.4	92	0.00	6.14
21	P	3&4-Methylphenol	1.505	1.510	-0.3	96	0.00	6.17
22	I	Naphthalene-d8	1.000	1.000	0.0	91	0.00	7.08
23	S	Nitrobenzene-d5	0.413	0.413	0.0	92	0.00	6.28
24	P	Nitrobenzene	0.409	0.408	0.2	91	0.00	6.30
25	P	Isophorone	0.730	0.674	7.7	86	0.00	6.58
26	P	2-Nitrophenol	0.194	0.202	-4.1	93	0.00	6.66
27	P	2,4-Dimethylphenol	0.361	0.332	8.0	84	0.00	6.75
28		O,O,O-Triethylphosphoroth	0.153	0.146	4.6	88	0.00	6.82
29	P	bis(2-Chloroethoxy)methan	0.427	0.414	3.0	89	0.00	6.85
		----------	True	Calc.	% Drift	----------		
30		Benzoic Acid	50.000	48.459	3.1	86	0.00	6.92
		----------	AvgRF	CCRF	% Dev	----------		
31	P	2,4-Dichlorophenol	0.291	0.298	-2.4	92	0.00	6.95
32		1,2,4-Trichlorobenzene	0.297	0.297	0.0	93	0.00	7.02
33		alpha-Terpineol	----------NA----------					
34	P	Naphthalene	1.085	1.061	2.2	90	0.00	7.11
35	P	4-Chloroaniline	0.458	0.446	2.6	88	0.00	7.19
36		2,6-Dichlorophenol	0.297	0.288	3.0	88	0.00	7.20
37	P	Hexachlorobutadiene	0.147	0.148	-0.7	94	0.00	7.26

Continuing Calibration Summary

Job Number: FA77581 **Sample:** SX2950-CC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072329.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

38	P	Caprolactam	0.121	0.115	5.0	88	0.00	7.64
39	P	4-Chloro-3-methylphenol	0.310	0.299	3.5	88	0.00	7.80
40	P	2-Methylnaphthalene	0.717	0.681	5.0	88	0.00	7.91
41		1-Methylnaphthalene	0.687	0.652	5.1	88	0.00	8.02
42	P	1,2,4,5-Tetrachlorobenzen	0.298	0.289	3.0	89	0.00	8.11
43	I	Acenaphthene-d10	1.000	1.000	0.0	90	0.00	9.12
		----------	True	Calc.	% Drift	----------		
44	P	Hexachlorocyclopentadiene	50.000	36.394	27.2#	62	0.00	8.10
		----------	AvgRF	CCRF	% Dev	----------		
45	P	2,4,6-Trichlorophenol	0.367	0.369	-0.5	87	0.00	8.26
46	P	2,4,5-Trichlorophenol	0.402	0.409	-1.7	89	0.00	8.32
47	S	2-Fluorobiphenyl	1.448	1.453	-0.3	90	0.00	8.36
48	P	1,1'-Biphenyl	1.633	1.564	4.2	86	0.00	8.46
49	P	2-Chloronaphthalene	1.226	1.198	2.3	87	0.00	8.47
50	P	2-Nitroaniline	0.451	0.451	0.0	88	0.00	8.62
51		p-Dinitrobenzene	0.253	0.260	-2.8	88	0.00	8.79
52	P	Acenaphthylene	1.998	1.969	1.5	87	0.00	8.95
53	P	Dimethylphthalate	1.411	1.353	4.1	88	0.00	8.86
54		m-Dinitrobenzene	0.235	0.250	-6.4	91	0.00	8.88
55	P	2,6-Dinitrotoluene	0.333	0.336	-0.9	88	0.00	8.92
56		o-Dinitrobenzene	0.319	0.317	0.6	92	0.00	8.97
57	P	Acenaphthene	1.329	1.291	2.9	88	0.00	9.16
58	P	3-Nitroaniline	0.366	0.391	-6.8	93	0.00	9.11
		----------	True	Calc.	% Drift	----------		
59	P	2,4-Dinitrophenol	50.000	53.053	-6.1	95	0.00	9.23
		----------	AvgRF	CCRF	% Dev	----------		
60	P	Dibenzofuran	1.773	1.677	5.4	87	0.00	9.37
61	P	2,4-Dinitrotoluene	0.425	0.450	-5.9	93	0.00	9.39
62	P	4-Nitrophenol	0.205	0.188	8.3	81	0.00	9.38
63		2,3,5,6-Tetrachlorophenol	0.297	0.298	-0.3	85	0.00	9.48
64	P	2,3,4,6-Tetrachlorophenol	0.308	0.323	-4.9	92	0.00	9.53
65	P	Fluorene	1.384	1.377	0.5	91	0.00	9.77
66	P	4-Chlorophenyl-phenylethe	0.668	0.656	1.8	88	0.00	9.79
67	P	Diethylphthalate	1.409	1.329	5.7	85	0.00	9.69
68		Thionazin	0.299	0.307	-2.7	92	0.00	9.78
69	P	4-Nitroaniline	0.408	0.417	-2.2	91	0.00	9.84
70	I	Phenanthrene-d10	1.000	1.000	0.0	92	0.00	10.86
		----------	True	Calc.	% Drift	----------		
71	P	4,6-Dinitro-2-methylpheno	50.000	53.230	-6.5	98	0.00	9.87
		----------	AvgRF	CCRF	% Dev	----------		
72	P	n-Nitrosodiphenylamine	0.622	0.597	4.0	90	0.00	9.94
73		Diphenylamine	0.729	0.716	1.8	90	0.00	9.94
74		1,2-Diphenylhydrazine	0.896	0.856	4.5	87	0.00	9.98
		----------	True	Calc.	% Drift	----------		
75	S	2,4,6-Tribromophenol	100.000	97.997	2.0	91	0.00	10.06
		----------	AvgRF	CCRF	% Dev	----------		
76		Sulfotep	0.132	0.126	4.5	84	0.00	10.16
77		Phorate	0.462	0.459	0.6	87	0.00	10.29
78	P	4-Bromophenyl-phenylether	0.192	0.189	1.6	91	0.00	10.36
79	P	Hexachlorobenzene	0.192	0.190	1.0	93	0.00	10.41

Continuing Calibration Summary

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2950-CC2918
Lab FileID: X072329.D

			True	Calc.	% Drift			
80		Dimethoate	50.000	50.924	-1.8	95	0.00	10.49
			AvgRF	CCRF	% Dev			
81		Simazine	0.141	0.129	8.5	86	0.00	10.57
82	P	Atrazine	0.234	0.227	3.0	90	0.00	10.61
			True	Calc.	% Drift			
83	P	Pentachlorophenol	50.000	40.920	18.2	72	0.00	10.67
			AvgRF	CCRF	% Dev			
84	P	Phenanthrene	1.209	1.169	3.3	90	0.00	10.89
85	P	Anthracene	1.260	1.236	1.9	89	0.00	10.95
86		Disulfoton	0.483	0.505	-4.6	92	0.00	10.91
87	P	Carbazole	1.112	1.090	2.0	91	0.00	11.17
			True	Calc.	% Drift			
88		Methyl Parathion	50.000	49.139	1.7	91	0.00	11.35
			AvgRF	CCRF	% Dev			
89	P	Di-n-butylphthalate	1.241	1.256	-1.2	89	0.00	11.63
			True	Calc.	% Drift			
90		Ethyl Parathion	50.000	49.529	0.9	92	0.00	11.82
			AvgRF	CCRF	% Dev			
91	P	Fluoranthene	1.121	1.135	-1.2	93	0.00	12.29
92	I	Chrysene-d12	1.000	1.000	0.0	102	0.00	14.07
			True	Calc.	% Drift			
93		Benzidine	50.000	46.778	6.4	93	0.00	12.49
			AvgRF	CCRF	% Dev			
94	P	Pyrene	1.661	1.474	11.3	92	0.00	12.55
95	S	Terphenyl-d14	1.063	1.020	4.0	98	0.00	12.78
			True	Calc.	% Drift			
96		Famphur	50.000	63.105	-26.2#	124	0.00	13.32
97	P	Butylbenzylphthalate	50.000	46.111	7.8	95	0.00	13.41
98	P	3,3'-Dichlorobenzidine	50.000	50.363	-0.7	102	0.00	14.06
			AvgRF	CCRF	% Dev			
99	P	Benzo[a]anthracene	1.257	1.173	6.7	96	0.00	14.05
100	P	Chrysene	1.339	1.288	3.8	100	0.00	14.11
			True	Calc.	% Drift			
101	P	bis(2-Ethylhexyl)phthalat	50.000	48.255	3.5	97	0.00	14.22
			AvgRF	CCRF	% Dev			
102	I	Perylene-d12	1.000	1.000	0.0	107	0.00	16.26
			True	Calc.	% Drift			
103	P	Di-n-octylphthalate	50.000	52.137	-4.3	111	0.00	15.18
104	P	Benzo[b]fluoranthene	50.000	51.528	-3.1	112	0.00	15.61
			AvgRF	CCRF	% Dev			
105	P	Benzo[k]fluoranthene	1.420	1.336	5.9	101	0.00	15.66

6.7.17
6

Continuing Calibration Summary

Job Number: FA77581 **Sample:** SX2950-CC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072329.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

			True	Calc.	% Drift			
106	P	Benzo[a]pyrene	50.000	48.533	2.9	105	0.00	16.15
107	P	Indeno[1,2,3-cd]pyrene	50.000	55.196	-10.4	124	0.00	17.92
108	P	Dibenz[a,h]anthracene	50.000	55.543	-11.1	126	0.00	17.97
109	P	Benzo[g,h,i]perylene	50.000	47.161	5.7	102	0.00	18.28

		AvgRF	CCRF	% Dev			
110	1,4-Dichlorobenzene-d4A	1.000	1.000	0.0	110	0.00	5.66
111	2-Picoline		NA				
112	N-Nitrosomethylethylamine		NA				
113	Methyl methanesulfonate		NA				
114	N-Nitrosodiethylamine		NA				
115	Ethyl methanesulfonate		NA				
116	Pentachloroethane		NA				
117	N-Nitrosopyrrolidine		NA				
118	N-Nitrosomorpholine		NA				
119	O-Toluidine		NA				
120	Naphthalene-d8A	1.000	1.000	0.0	101	0.00	7.08
121	N-Nitrosopiperidine		NA				
122	A,A-Dimethylphenethylamin		NA				
123	Hexachloropropene		NA				

		True	Calc.	% Drift
124	N-Nitrosodi-n-butylamine		NA	

		AvgRF	CCRF	% Dev			
125	p-Phenylenediamine		NA				
126	Isosafrole		NA				
127	Acenaphthene-d10A	1.000	1.000	0.0	97	0.00	9.12
128	Safrole		NA				
129	1-Chloronaphthalene		NA				
130	Diphenyl Ether		NA				

		True	Calc.	% Drift
131	1,4-Naphthoquinone		NA	

		AvgRF	CCRF	% Dev			
132	Pentachlorobenzene		NA				
133	1-Naphthylamine		NA				
134	2-Naphthylamine		NA				

		True	Calc.	% Drift
135	5-Nitro-o-toluidine		NA	

		AvgRF	CCRF	% Dev			
136	Phenanthrene-d10A	1.000	1.000	0.0	92	0.00	10.86

		True	Calc.	% Drift
137	1,3,5-Trinitrobenzene		NA	

		AvgRF	CCRF	% Dev			
138	Diallate		NA				
139	Phenacetin		NA				
140	4-Aminobiphenyl		NA				
141	Pronamide		NA				

Continuing Calibration Summary

Job Number: FA77581 **Sample:** SX2950-CC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072329.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

142		Pentachloronitrobenzene		----------NA----------				
		----------	True	Calc.	% Drift	----------		
143		4-Nitroquinoline 1-Oxide		----------NA----------				
		----------	AvgRF	CCRF	% Dev	----------		
144		Methapyrilene		----------NA----------				
145		Isodrin		----------NA----------				
146	I	Chrysene-d12A	1.000	1.000	0.0	119	0.00	14.07
		----------	True	Calc.	% Drift	----------		
147		Aramite		----------NA----------				
148		p-(Dimethylamine)azobenze		----------NA----------				
149		Chlorobenzilate		----------NA----------				
		----------	AvgRF	CCRF	% Dev	----------		
150		Kepone		----------NA----------				
151		3,3'-Dimethylbenzidine		----------NA----------				
		----------	True	Calc.	% Drift	----------		
152		2-Acetylaminofluorene		----------NA----------				
		----------	AvgRF	CCRF	% Dev	----------		
153	I	Perylene-d12A	1.000	1.000	0.0	110	0.00	16.26
154		7,12-Dimethylbenz(a)anthr		----------NA----------				
		----------	True	Calc.	% Drift	----------		
155		Hexachlorophene		----------NA----------				
156		3-Methylcholanthrene		----------NA----------				
157		Dibenz(a,j)acridine		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
x071368.D 8270DApp9SX-062320.m Wed Aug 12 03:33:40 2020

Continuing Calibration Summary

Job Number: FA77581 **Sample:** SX2950-CC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072330.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\jo...2020\sx2950\x072330.d Vial: 3
Acq On : 11 Aug 2020 1:13 pm Operator: marthav
Sample : cc2918-5 8270 Inst : MSBNA05
Misc : op81484,sx2950,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\met...DApp9SX-062320.m (RTE Integrator)
Title : SW846 8270D OR EPA 625
Last Update : Tue Jun 23 17:15:34 2020
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	81	0.00	5.66
2		1,4-Dioxane	0.686	0.738	-7.6	84	0.00	2.49
3		N-nitrosodimethylamine	1.217	1.132	7.0	77	0.00	2.82
4		Pyridine	1.668	1.740	-4.3	89	0.02	2.86
5	P	Benzaldehyde	1.192	1.241	-4.1	80	0.00	5.18
6		Aniline	2.378	2.165	9.0	80	0.00	5.31
7	S	2-Fluorophenol	1.434	1.464	-2.1	83	0.00	4.31
8	P	bis(2-Chloroethyl)ether	1.468	1.375	6.3	81	0.00	5.39
9	S	Phenol-d5	1.706	1.673	1.9	83	0.00	5.33
10	P	Phenol	2.024	1.807	10.7	83	0.00	5.34
11	P	2-Chlorophenol	1.530	1.450	5.2	86	0.00	5.45
12		1,3-Dichlorobenzene	1.590	1.575	0.9	84	0.00	5.59
13		1,4-Dichlorobenzene	1.682	1.655	1.6	83	0.00	5.68
14		1,2-Dichlorobenzene	1.598	1.521	4.8	82	0.00	5.84
15		Benzyl alcohol	1.059	0.915	13.6	79	0.00	5.83
16	P	2,2'-Oxybis(1-chloropropa	3.084	2.551	17.3	67	0.00	5.98
17	P	2-Methylphenol	1.456	1.333	8.4	79	0.00	5.99
18	P	Acetophenone	2.154	2.059	4.4	75	0.00	6.11
19	P	Hexachloroethane	0.632	0.613	3.0	83	0.00	6.21
20	P	N-Nitroso-di-n-propylamin	1.138	1.071	5.9	77	-0.02	6.12
21	P	3&4-Methylphenol	1.505	1.387	7.8	78	0.00	6.16
22	I	Naphthalene-d8	1.000	1.000	0.0	76	0.00	7.08
23	S	Nitrobenzene-d5	0.413	0.407	1.5	80	-0.01	6.27
24	P	Nitrobenzene	0.409	0.419	-2.4	82	-0.01	6.29
25	P	Isophorone	0.730	0.696	4.7	74	-0.01	6.57
26	P	2-Nitrophenol	0.194	0.193	0.5	89	0.00	6.65
27	P	2,4-Dimethylphenol	0.361	0.328	9.1	73	0.00	6.75
28		O,O,O-Triethylphosphoroth	0.153	0.153	0.0	78	-0.01	6.81
29	P	bis(2-Chloroethoxy)methan	0.427	0.413	3.3	78	-0.01	6.84
		----------	True	Calc.	% Drift	----------		
30		Benzoic Acid	5.000	3.907	21.9#	99	-0.06	6.86
		----------	AvgRF	CCRF	% Dev	----------		
31	P	2,4-Dichlorophenol	0.291	0.277	4.8	80	0.00	6.95
32		1,2,4-Trichlorobenzene	0.297	0.289	2.7	79	0.00	7.02
33		alpha-Terpineol		----------NA----------				
34	P	Naphthalene	1.085	1.084	0.1	79	0.00	7.10
35	P	4-Chloroaniline	0.458	0.439	4.1	76	0.00	7.19
36		2,6-Dichlorophenol	0.297	0.276	7.1	76	0.00	7.19
37	P	Hexachlorobutadiene	0.147	0.150	-2.0	84	0.00	7.26

Continuing Calibration Summary

Job Number: FA77581 **Sample:** SX2950-CC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072330.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

38	P	Caprolactam	0.121	0.120	0.8	74	-0.07	7.56
39	P	4-Chloro-3-methylphenol	0.310	0.299	3.5	78	0.00	7.80
40	P	2-Methylnaphthalene	0.717	0.714	0.4	78	0.00	7.91
41		1-Methylnaphthalene	0.687	0.663	3.5	76	0.00	8.02
42	P	1,2,4,5-Tetrachlorobenzen	0.298	0.278	6.7	75	0.00	8.10
43	I	Acenaphthene-d10	1.000	1.000	0.0	73	0.00	9.12
		----------	True	Calc.	% Drift	----------		
44	P	Hexachlorocyclopentadiene	5.000	1.436	71.3#	24	0.00	8.09
		----------	AvgRF	CCRF	% Dev	----------		
45	P	2,4,6-Trichlorophenol	0.367	0.350	4.6	77	0.00	8.26
46	P	2,4,5-Trichlorophenol	0.402	0.378	6.0	79	0.00	8.32
47	S	2-Fluorobiphenyl	1.448	1.457	-0.6	77	0.00	8.35
48	P	1,1'-Biphenyl	1.633	1.653	-1.2	70	0.00	8.46
49	P	2-Chloronaphthalene	1.226	1.193	2.7	75	0.00	8.47
50	P	2-Nitroaniline	0.451	0.432	4.2	74	-0.01	8.61
51		p-Dinitrobenzene	0.253	0.234	7.5	79	0.00	8.79
52	P	Acenaphthylene	1.998	1.876	6.1	72	0.00	8.95
53	P	Dimethylphthalate	1.411	1.374	2.6	72	-0.02	8.84
54		m-Dinitrobenzene	0.235	0.221	6.0	76	-0.01	8.87
55	P	2,6-Dinitrotoluene	0.333	0.324	2.7	75	-0.01	8.91
56		o-Dinitrobenzene	0.319	0.312	2.2	70	-0.02	8.95
57	P	Acenaphthene	1.329	1.322	0.5	74	-0.01	9.15
58	P	3-Nitroaniline	0.366	0.375	-2.5	79	-0.02	9.09
		----------	True	Calc.	% Drift	----------		
59	P	2,4-Dinitrophenol	5.000	1.427	71.5#	36	0.00	9.23
		----------	AvgRF	CCRF	% Dev	----------		
60	P	Dibenzofuran	1.773	1.730	2.4	73	0.00	9.36
61	P	2,4-Dinitrotoluene	0.425	0.420	1.2	74	-0.01	9.38
62	P	4-Nitrophenol	0.205	0.158	22.9#	68	0.00	9.38
63		2,3,5,6-Tetrachlorophenol	0.297	0.241	18.9	69	0.00	9.47
64	P	2,3,4,6-Tetrachlorophenol	0.308	0.284	7.8	81	0.00	9.53
65	P	Fluorene	1.384	1.383	0.1	74	0.00	9.76
66	P	4-Chlorophenyl-phenylethe	0.668	0.641	4.0	72	0.00	9.78
67	P	Diethylphthalate	1.409	1.387	1.6	75	-0.01	9.68
68		Thionazin	0.299	0.314	-5.0	74	-0.02	9.77
69	P	4-Nitroaniline	0.408	0.381	6.6	73	-0.03	9.81
70	I	Phenanthrene-d10	1.000	1.000	0.0	73	0.00	10.86
		----------	True	Calc.	% Drift	----------		
71	P	4,6-Dinitro-2-methylpheno	5.000	3.540	29.2#	75	-0.02	9.85
		----------	AvgRF	CCRF	% Dev	----------		
72	P	n-Nitrosodiphenylamine	0.622	0.566	9.0	73	-0.01	9.93
73		Diphenylamine	0.729	0.679	6.9	73	-0.01	9.93
74		1,2-Diphenylhydrazine	0.896	0.831	7.3	72	-0.01	9.97
		----------	True	Calc.	% Drift	----------		
75	S	2,4,6-Tribromophenol	10.000	9.514	4.9	77	0.00	10.05
		----------	AvgRF	CCRF	% Dev	----------		
76		Sulfotep	0.132	0.129	2.3	73	0.00	10.15
77		Phorate	0.462	0.459	0.6	75	0.00	10.29
78	P	4-Bromophenyl-phenylether	0.192	0.175	8.9	74	0.00	10.36
79	P	Hexachlorobenzene	0.192	0.179	6.8	79	-0.01	10.40

Continuing Calibration Summary

Job Number: FA77581 **Sample:** SX2950-CC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072330.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

			True	Calc.	% Drift			
80		Dimethoate	5.000	4.948	1.0	79	-0.02	10.48
			AvgRF	CCRF	% Dev			
81		Simazine	0.141	0.121	14.2	69	-0.02	10.55
82	P	Atrazine	0.234	0.224	4.3	73	-0.02	10.59
			True	Calc.	% Drift			
83	P	Pentachlorophenol	5.000	1.716	65.7#	35	0.00	10.66
			AvgRF	CCRF	% Dev			
84	P	Phenanthrene	1.209	1.175	2.8	73	0.00	10.89
85	P	Anthracene	1.260	1.192	5.4	74	-0.01	10.94
86		Disulfoton	0.483	0.385	20.3#	59	0.00	10.91
87	P	Carbazole	1.112	1.080	2.9	76	-0.01	11.16
			True	Calc.	% Drift			
88		Methyl Parathion	5.000	4.555	8.9	75	0.00	11.35
			AvgRF	CCRF	% Dev			
89	P	Di-n-butylphthalate	1.241	1.222	1.5	80	0.00	11.63
			True	Calc.	% Drift			
90		Ethyl Parathion	5.000	5.005	-0.1	84	0.00	11.82
			AvgRF	CCRF	% Dev			
91	P	Fluoranthene	1.121	1.150	-2.6	81	0.00	12.29
92	I	Chrysene-d12	1.000	1.000	0.0	84	0.00	14.06
			True	Calc.	% Drift			
93		Benzidine	5.000	4.989	0.2	125	0.00	12.48
			AvgRF	CCRF	% Dev			
94	P	Pyrene	1.661	1.498	9.8	79	-0.01	12.54
95	S	Terphenyl-d14	1.063	1.006	5.4	86	0.00	12.77
			True	Calc.	% Drift			
96		Famphur	5.000	5.741	-14.8	97	0.00	13.31
97	P	Butylbenzylphthalate	5.000	4.823	3.5	94	0.00	13.40
98	P	3,3'-Dichlorobenzidine	5.000	5.253	-5.1	108	-0.01	14.05
			AvgRF	CCRF	% Dev			
99	P	Benzo[a]anthracene	1.257	1.205	4.1	87	0.00	14.05
100	P	Chrysene	1.339	1.311	2.1	89	-0.01	14.09
			True	Calc.	% Drift			
101	P	bis(2-Ethylhexyl)phthalat	5.000	4.661	6.8	103	0.00	14.22
			AvgRF	CCRF	% Dev			
102	I	Perylene-d12	1.000	1.000	0.0	81	0.00	16.25
			True	Calc.	% Drift			
103	P	Di-n-octylphthalate	5.000	5.191	-3.8	81	0.00	15.18
104	P	Benzo[b]fluoranthene	5.000	5.163	-3.3	93	-0.02	15.60
			AvgRF	CCRF	% Dev			
105	P	Benzo[k]fluoranthene	1.420	1.291	9.1	83	-0.02	15.64

Continuing Calibration Summary

Job Number: FA77581 **Sample:** SX2950-CC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072330.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

			True	Calc.	% Drift			
106	P	Benzo[a]pyrene	5.000	4.906	1.9	95	-0.02	16.14
107	P	Indeno[1,2,3-cd]pyrene	5.000	6.867	-37.3#	131	-0.02	17.90
108	P	Dibenz[a,h]anthracene	5.000	6.914	-38.3#	139	-0.02	17.96
109	P	Benzo[g,h,i]perylene	5.000	5.850	-17.0	106	-0.02	18.26

		AvgRF	CCRF	% Dev			
110	1,4-Dichlorobenzene-d4A	1.000	1.000	0.0	83	0.00	5.66
111	2-Picoline		NA				
112	N-Nitrosomethylethylamine		NA				
113	Methyl methanesulfonate		NA				
114	N-Nitrosodiethylamine		NA				
115	Ethyl methanesulfonate		NA				
116	Pentachloroethane		NA				
117	N-Nitrosopyrrolidine		NA				
118	N-Nitrosomorpholine		NA				
119	O-Toluidine		NA				
120	Naphthalene-d8A	1.000	1.000	0.0	80	0.00	7.08
121	N-Nitrosopiperidine		NA				
122	A,A-Dimethylphenethylamin		NA				
123	Hexachloropropene		NA				

		True	Calc.	% Drift
124	N-Nitrosodi-n-butylamine		NA	

		AvgRF	CCRF	% Dev			
125	p-Phenylenediamine		NA				
126	Isosafrole		NA				
127	Acenaphthene-d10A	1.000	1.000	0.0	76	0.00	9.12
128	Safrole		NA				
129	1-Chloronaphthalene		NA				
130	Diphenyl Ether		NA				

		True	Calc.	% Drift
131	1,4-Naphthoquinone		NA	

		AvgRF	CCRF	% Dev			
132	Pentachlorobenzene		NA				
133	1-Naphthylamine		NA				
134	2-Naphthylamine		NA				

		True	Calc.	% Drift
135	5-Nitro-o-toluidine		NA	

		AvgRF	CCRF	% Dev			
136	Phenanthrene-d10A	1.000	1.000	0.0	75	0.00	10.86

		True	Calc.	% Drift
137	1,3,5-Trinitrobenzene		NA	

		AvgRF	CCRF	% Dev			
138	Diallate		NA				
139	Phenacetin		NA				
140	4-Aminobiphenyl		NA				
141	Pronamide		NA				

Continuing Calibration Summary

Job Number: FA77581 **Sample:** SX2950-CC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072330.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

142		Pentachloronitrobenzene		----------NA----------				
		---------- True	Calc.	% Drift	----------			
143		4-Nitroquinoline 1-Oxide		----------NA----------				
		---------- AvgRF	CCRF	% Dev	----------			
144		Methapyrilene		----------NA----------				
145		Isodrin		----------NA----------				
146	I	Chrysene-d12A	1.000	1.000	0.0	86	0.00	14.06
		---------- True	Calc.	% Drift	----------			
147		Aramite		----------NA----------				
148		p-(Dimethylamine)azobenze		----------NA----------				
149		Chlorobenzilate		----------NA----------				
		---------- AvgRF	CCRF	% Dev	----------			
150		Kepone		----------NA----------				
151		3,3'-Dimethylbenzidine		----------NA----------				
		---------- True	Calc.	% Drift	----------			
152		2-Acetylaminofluorene		----------NA----------				
		---------- AvgRF	CCRF	% Dev	----------			
153	I	Perylene-d12A	1.000	1.000	0.0	81	0.00	16.25
154		7,12-Dimethylbenz(a)anthr		----------NA----------				
		---------- True	Calc.	% Drift	----------			
155		Hexachlorophene		----------NA----------				
156		3-Methylcholanthrene		----------NA----------				
157		Dibenz(a,j)acridine		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
x071365.D 8270DApp9SX-062320.m Wed Aug 12 03:37:14 2020

Continuing Calibration Summary

Job Number: FA77581 **Sample:** SX2951-CC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072357.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\0812_sx2951\x072357.D Vial: 2
Acq On : 12 Aug 2020 10:24 am Operator: marthav
Sample : cc2918-50 8270 Inst : MSBNA05
Misc : op81484,sx2951,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\MET...DApp9SX-062320.m (RTE Integrator)
Title : SW846 8270D OR EPA 625
Last Update : Wed Jun 24 12:54:05 2020
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	96	0.00	5.65
2		1,4-Dioxane	0.686	0.630	8.2	95	0.00	2.47
3		N-nitrosodimethylamine	1.217	1.054	13.4	87	0.00	2.81
4		Pyridine	1.668	1.799	-7.9	106	0.00	2.84
5	P	Benzaldehyde	1.192	1.143	4.1	96	0.00	5.18
6		Aniline	2.378	2.106	11.4	83	0.00	5.31
7	S	2-Fluorophenol	1.434	1.448	-1.0	102	0.00	4.31
8	P	bis(2-Chloroethyl)ether	1.468	1.503	-2.4	99	0.00	5.39
9	S	Phenol-d5	1.706	1.744	-2.2	102	0.00	5.33
10	P	Phenol	2.024	1.975	2.4	90	0.00	5.35
11	P	2-Chlorophenol	1.530	1.604	-4.8	99	0.00	5.44
12		1,3-Dichlorobenzene	1.590	1.647	-3.6	102	0.00	5.58
13		1,4-Dichlorobenzene	1.682	1.726	-2.6	100	0.00	5.67
14		1,2-Dichlorobenzene	1.598	1.547	3.2	94	0.00	5.83
15		Benzyl alcohol	1.059	1.014	4.2	92	0.00	5.84
16	P	2,2'-Oxybis(1-chloropropa	3.084	2.664	13.6	84	0.00	5.98
17	P	2-Methylphenol	1.456	1.436	1.4	93	0.00	5.99
18	P	Acetophenone	2.154	2.053	4.7	92	0.00	6.11
19	P	Hexachloroethane	0.632	0.666	-5.4	102	0.00	6.20
20	P	N-Nitroso-di-n-propylamin	1.138	1.111	2.4	93	0.00	6.13
21	P	3&4-Methylphenol	1.505	1.537	-2.1	96	0.00	6.17
22	I	Naphthalene-d8	1.000	1.000	0.0	87	0.00	7.08
23	S	Nitrobenzene-d5	0.413	0.442	-7.0	95	0.00	6.27
24	P	Nitrobenzene	0.409	0.431	-5.4	93	0.00	6.30
25	P	Isophorone	0.730	0.707	3.2	87	0.00	6.57
26	P	2-Nitrophenol	0.194	0.216	-11.3	96	0.00	6.65
27	P	2,4-Dimethylphenol	0.361	0.343	5.0	83	0.00	6.75
28		O,O,O-Triethylphosphoroth	0.153	0.156	-2.0	90	0.00	6.81
29	P	bis(2-Chloroethoxy)methan	0.427	0.435	-1.9	90	0.00	6.84
		----------	Amount	Calc.	%Drift	----------		
30		Benzoic Acid	50.000	44.773	10.5	75	0.00	6.92
		----------	AvgRF	CCRF	%Dev	----------		
31	P	2,4-Dichlorophenol	0.291	0.305	-4.8	90	0.00	6.95
32		1,2,4-Trichlorobenzene	0.297	0.317	-6.7	96	0.00	7.02
33		alpha-Terpineol		----------NA----------				
34	P	Naphthalene	1.085	1.116	-2.9	91	0.00	7.10
35	P	4-Chloroaniline	0.458	0.451	1.5	86	0.00	7.19
36		2,6-Dichlorophenol	0.297	0.298	-0.3	88	0.00	7.20
37	P	Hexachlorobutadiene	0.147	0.160	-8.8	98	0.00	7.25

Continuing Calibration Summary

Job Number: FA77581 **Sample:** SX2951-CC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072357.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

38	P	Caprolactam	0.121	0.116	4.1	85	0.00	7.64
39	P	4-Chloro-3-methylphenol	0.310	0.305	1.6	86	0.00	7.81
40	P	2-Methylnaphthalene	0.717	0.714	0.4	89	0.00	7.91
41		1-Methylnaphthalene	0.687	0.685	0.3	89	0.00	8.02
42	P	1,2,4,5-Tetrachlorobenzen	0.298	0.301	-1.0	88	0.00	8.10
43	I	Acenaphthene-d10	1.000	1.000	0.0	82	0.00	9.12
		----------	Amount	Calc.	%Drift	----------		
44	P	Hexachlorocyclopentadiene	50.000	36.476	27.0#	56	0.00	8.09
		----------	AvgRF	CCRF	%Dev	----------		
45	P	2,4,6-Trichlorophenol	0.367	0.405	-10.4	87	0.00	8.26
46	P	2,4,5-Trichlorophenol	0.403	0.444	-10.2	88	0.00	8.32
47	S	2-Fluorobiphenyl	1.448	1.607	-11.0	91	0.00	8.35
48	P	1,1'-Biphenyl	1.633	1.714	-5.0	86	0.00	8.46
49	P	2-Chloronaphthalene	1.226	1.323	-7.9	88	0.00	8.47
50	P	2-Nitroaniline	0.451	0.490	-8.6	88	0.00	8.62
51		p-Dinitrobenzene	0.253	0.280	-10.7	86	0.00	8.80
52	P	Acenaphthylene	1.998	2.131	-6.7	86	0.00	8.95
53	P	Dimethylphthalate	1.411	1.447	-2.6	86	0.00	8.86
54		m-Dinitrobenzene	0.235	0.264	-12.3	87	0.00	8.89
55	P	2,6-Dinitrotoluene	0.333	0.357	-7.2	86	0.00	8.92
56		o-Dinitrobenzene	0.319	0.344	-7.8	91	0.00	8.97
57	P	Acenaphthene	1.329	1.384	-4.1	87	0.00	9.16
58	P	3-Nitroaniline	0.366	0.409	-11.7	88	0.00	9.11
		----------	Amount	Calc.	%Drift	----------		
59	P	2,4-Dinitrophenol	50.000	50.712	-1.4	82	0.00	9.24
		----------	AvgRF	CCRF	%Dev	----------		
60	P	Dibenzofuran	1.773	1.800	-1.5	85	0.00	9.36
61	P	2,4-Dinitrotoluene	0.425	0.474	-11.5	90	0.00	9.39
62	P	4-Nitrophenol	0.205	0.173	15.6	68	0.00	9.39
63		2,3,5,6-Tetrachlorophenol	0.297	0.304	-2.4	79	0.00	9.48
64	P	2,3,4,6-Tetrachlorophenol	0.311	0.324	-4.2	84	0.00	9.53
65	P	Fluorene	1.384	1.472	-6.4	89	0.00	9.76
66	P	4-Chlorophenyl-phenylethe	0.668	0.705	-5.5	87	0.00	9.78
67	P	Diethylphthalate	1.409	1.430	-1.5	84	0.00	9.69
68		Thionazin	0.299	0.328	-9.7	89	0.00	9.78
69	P	4-Nitroaniline	0.408	0.431	-5.6	85	0.00	9.84
70	I	Phenanthrene-d10	1.000	1.000	0.0	81	0.00	10.86
		----------	Amount	Calc.	%Drift	----------		
71	P	4,6-Dinitro-2-methylpheno	50.000	54.294	-8.6	89	0.00	9.87
		----------	AvgRF	CCRF	%Dev	----------		
72	P	n-Nitrosodiphenylamine	0.622	0.651	-4.7	86	0.00	9.94
73		Diphenylamine	0.729	0.782	-7.3	86	0.00	9.94
74		1,2-Diphenylhydrazine	0.896	0.948	-5.8	85	0.00	9.97
		----------	Amount	Calc.	%Drift	----------		
75	S	2,4,6-Tribromophenol	100.000	104.165	-4.2	86	0.00	10.06
		----------	AvgRF	CCRF	%Dev	----------		
76		Sulfotep	0.132	0.142	-7.6	84	0.00	10.15
77		Phorate	0.462	0.518	-12.1	87	0.00	10.29
78	P	4-Bromophenyl-phenylether	0.192	0.202	-5.2	85	0.00	10.36
79	P	Hexachlorobenzene	0.192	0.206	-7.3	88	0.00	10.40

Continuing Calibration Summary

Job Number: FA77581 **Sample:** SX2951-CC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072357.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

			Amount	Calc.	%Drift			
80		Dimethoate	50.000	55.577	-11.2	91	0.00	10.49
			AvgRF	CCRF	%Dev			
81		Simazine	0.141	0.137	2.8	80	0.00	10.57
82	P	Atrazine	0.234	0.244	-4.3	85	0.00	10.61
			Amount	Calc.	%Drift			
83	P	Pentachlorophenol	50.000	37.705	24.6#	57	0.00	10.67
			AvgRF	CCRF	%Dev			
84	P	Phenanthrene	1.209	1.257	-4.0	85	0.00	10.89
85	P	Anthracene	1.260	1.337	-6.1	85	0.00	10.95
86		Disulfoton	0.483	0.428	11.4	69	0.00	10.91
87	P	Carbazole	1.112	1.174	-5.6	86	0.00	11.17
			Amount	Calc.	%Drift			
88		Methyl Parathion	50.000	53.793	-7.6	88	0.00	11.35
			AvgRF	CCRF	%Dev			
89	P	Di-n-butylphthalate	1.241	1.355	-9.2	84	0.00	11.63
			Amount	Calc.	%Drift			
90		Ethyl Parathion	50.000	53.984	-8.0	89	0.00	11.82
			AvgRF	CCRF	%Dev			
91	P	Fluoranthene	1.121	1.205	-7.5	87	0.00	12.29
92	I	Chrysene-d12	1.000	1.000	0.0	84	0.00	14.07
			Amount	Calc.	%Drift			
93		Benzidine	50.000	51.400	-2.8	85	0.00	12.49
			AvgRF	CCRF	%Dev			
94	P	Pyrene	1.661	1.659	0.1	86	0.00	12.55
95	S	Terphenyl-d14	1.063	1.146	-7.8	91	0.00	12.78
			Amount	Calc.	%Drift			
96		Famphur		----------NA----------				
97	P	Butylbenzylphthalate	50.000	51.962	-3.9	89	0.00	13.41
98	P	3,3'-Dichlorobenzidine	50.000	54.718	-9.4	93	0.00	14.06
			AvgRF	CCRF	%Dev			
99	P	Benzo[a]anthracene	1.257	1.305	-3.8	88	0.00	14.06
100	P	Chrysene	1.339	1.396	-4.3	89	0.00	14.11
			Amount	Calc.	%Drift			
101	P	bis(2-Ethylhexyl)phthalat	50.000	53.893	-7.8	90	0.00	14.22
			AvgRF	CCRF	%Dev			
102	I	Perylene-d12	1.000	1.000	0.0	84	0.00	16.27
			Amount	Calc.	%Drift			
103	P	Di-n-octylphthalate	50.000	61.312	-22.6#	107	0.00	15.18
104	P	Benzo[b]fluoranthene	50.000	57.609	-15.2	101	0.00	15.62
			AvgRF	CCRF	%Dev			
105	P	Benzo[k]fluoranthene	1.420	1.514	-6.6	90	0.00	15.67

Continuing Calibration Summary

Job Number: FA77581 **Sample:** SX2951-CC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072357.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

			Amount	Calc.	%Drift			
106	P	Benzo[a]pyrene	50.000	54.625	-9.3	95	0.00	16.17
107	P	Indeno[1,2,3-cd]pyrene	50.000	66.545	-33.1#	125	0.00	17.93
108	P	Dibenz[a,h]anthracene	50.000	64.702	-29.4#	122	0.00	17.99
109	P	Benzo[g,h,i]perylene	50.000	54.625	-9.3	96	0.00	18.30

		AvgRF	CCRF	%Dev			
110	1,4-Dichlorobenzene-d4A	1.000	1.000	0.0	108	0.00	5.65
111	2-Picoline		NA				
112	N-Nitrosomethylethylamine		NA				
113	Methyl methanesulfonate		NA				
114	N-Nitrosodiethylamine		NA				
115	Ethyl methanesulfonate		NA				
116	Pentachloroethane		NA				
117	N-Nitrosopyrrolidine		NA				
118	N-Nitrosomorpholine		NA				
119	O-Toluidine		NA				
120	Naphthalene-d8A	1.000	1.000	0.0	97	0.00	7.08
121	N-Nitrosopiperidine		NA				
122	A,A-Dimethylphenethylamin		NA				
123	Hexachloropropene		NA				

		Amount	Calc.	%Drift			
124	N-Nitrosodi-n-butylamine		NA				

		AvgRF	CCRF	%Dev			
125	p-Phenylenediamine		NA				
126	Isosafrole		NA				
127	Acenaphthene-d10A	1.000	1.000	0.0	89	0.00	9.12
128	Safrole		NA				
129	1-Chloronaphthalene		NA				
130	Diphenyl Ether		NA				

		Amount	Calc.	%Drift			
131	1,4-Naphthoquinone		NA				

		AvgRF	CCRF	%Dev			
132	Pentachlorobenzene		NA				
133	1-Naphthylamine		NA				
134	2-Naphthylamine		NA				

		Amount	Calc.	%Drift			
135	5-Nitro-o-toluidine		NA				

		AvgRF	CCRF	%Dev			
136	Phenanthrene-d10A	1.000	1.000	0.0	81	0.00	10.86

		Amount	Calc.	%Drift			
137	1,3,5-Trinitrobenzene		NA				

		AvgRF	CCRF	%Dev			
138	Diallate		NA				
139	Phenacetin		NA				
140	4-Aminobiphenyl		NA				
141	Pronamide		NA				

Continuing Calibration Summary

Job Number: FA77581 **Sample:** SX2951-CC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072357.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

142		Pentachloronitrobenzene		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
143		4-Nitroquinoline 1-Oxide		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
144		Methapyrilene		----------NA----------				
145		Isodrin		----------NA----------				
146	I	Chrysene-d12A	1.000	1.000	0.0	98	0.00	14.07
		----------	Amount	Calc.	%Drift	----------		
147		Aramite		----------NA----------				
148		p-(Dimethylamine)azobenze		----------NA----------				
149		Chlorobenzilate		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
150		Kepone		----------NA----------				
151		3,3'-Dimethylbenzidine		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
152		2-Acetylaminofluorene		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
153	I	Perylene-d12A	1.000	1.000	0.0	87	0.00	16.27
154		7,12-Dimethylbenz(a)anthr		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
155		Hexachlorophene		----------NA----------				
156		3-Methylcholanthrene		----------NA----------				
157		Dibenz(a,j)acridine		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
x071368.D 8270DApp9SX-062320.m Wed Aug 12 15:21:44 2020

Continuing Calibration Summary

Job Number: FA77581 **Sample:** SX2951-CC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072358.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\0812_sx2951\x072358.D Vial: 3
Acq On : 12 Aug 2020 10:49 am Operator: marthav
Sample : cc2918-5 8270 Inst : MSBNA05
Misc : op81484,sx2951,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\MET...DApp9SX-062320.m (RTE Integrator)
Title : SW846 8270D OR EPA 625
Last Update : Wed Jun 24 12:54:05 2020
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	109	0.00	5.65
2		1,4-Dioxane	0.686	0.652	5.0	100	0.01	2.48
3		N-nitrosodimethylamine	1.217	1.063	12.7	98	0.00	2.81
4		Pyridine	1.668	1.790	-7.3	124	0.02	2.86
5	P	Benzaldehyde	1.192	1.182	0.8	103	0.00	5.18
6		Aniline	2.378	2.074	12.8	104	0.00	5.30
7	S	2-Fluorophenol	1.434	1.494	-4.2	115	0.00	4.31
8	P	bis(2-Chloroethyl)ether	1.468	1.359	7.4	109	0.00	5.38
9	S	Phenol-d5	1.706	1.659	2.8	112	0.00	5.33
10	P	Phenol	2.024	1.778	12.2	111	0.00	5.34
11	P	2-Chlorophenol	1.530	1.433	6.3	116	0.00	5.44
12		1,3-Dichlorobenzene	1.590	1.544	2.9	112	0.00	5.58
13		1,4-Dichlorobenzene	1.682	1.623	3.5	110	0.00	5.67
14		1,2-Dichlorobenzene	1.598	1.523	4.7	111	0.00	5.83
15		Benzyl alcohol	1.059	0.912	13.9	106	-0.01	5.83
16	P	2,2'-Oxybis(1-chloropropa	3.084	2.674	13.3	95	0.00	5.97
17	P	2-Methylphenol	1.456	1.316	9.6	106	-0.01	5.98
18	P	Acetophenone	2.154	1.939	10.0	95	0.00	6.10
19	P	Hexachloroethane	0.632	0.608	3.8	112	0.00	6.20
20	P	N-Nitroso-di-n-propylamin	1.138	1.006	11.6	98	-0.02	6.11
21	P	3&4-Methylphenol	1.505	1.364	9.4	104	0.00	6.16
22	I	Naphthalene-d8	1.000	1.000	0.0	101	0.00	7.08
23	S	Nitrobenzene-d5	0.413	0.419	-1.5	109	0.00	6.27
24	P	Nitrobenzene	0.409	0.417	-2.0	108	-0.01	6.29
25	P	Isophorone	0.730	0.679	7.0	96	-0.01	6.56
26	P	2-Nitrophenol	0.194	0.194	0.0	118	0.00	6.65
27	P	2,4-Dimethylphenol	0.361	0.330	8.6	97	0.00	6.75
28		O,O,O-Triethylphosphoroth	0.153	0.144	5.9	97	0.00	6.80
29	P	bis(2-Chloroethoxy)methan	0.427	0.402	5.9	100	0.00	6.83
		----------	Amount	Calc.	%Drift	----------		
30		Benzoic Acid	5.000	3.543	29.1#	119	-0.06	6.86
		----------	AvgRF	CCRF	%Dev	----------		
31	P	2,4-Dichlorophenol	0.291	0.281	3.4	107	0.00	6.95
32		1,2,4-Trichlorobenzene	0.297	0.294	1.0	106	0.00	7.01
33		alpha-Terpineol		----------NA----------				
34	P	Naphthalene	1.085	1.079	0.6	104	0.00	7.10
35	P	4-Chloroaniline	0.458	0.435	5.0	99	0.00	7.18
36		2,6-Dichlorophenol	0.297	0.287	3.4	104	-0.01	7.19
37	P	Hexachlorobutadiene	0.147	0.155	-5.4	115	0.00	7.25

Continuing Calibration Summary

Job Number: FA77581 **Sample:** SX2951-CC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072358.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

38	P	Caprolactam	0.121	0.111	8.3	90	-0.07	7.57
39	P	4-Chloro-3-methylphenol	0.310	0.290	6.5	100	-0.01	7.80
40	P	2-Methylnaphthalene	0.717	0.692	3.5	99	0.00	7.90
41		1-Methylnaphthalene	0.687	0.650	5.4	98	0.00	8.01
42	P	1,2,4,5-Tetrachlorobenzen	0.298	0.279	6.4	100	0.00	8.10
43	I	Acenaphthene-d10	1.000	1.000	0.0	94	0.00	9.11
		----------	Amount	Calc.	%Drift	----------		
44	P	Hexachlorocyclopentadiene	5.000	1.354	72.9#	30	0.00	8.08
		----------	AvgRF	CCRF	%Dev	----------		
45	P	2,4,6-Trichlorophenol	0.367	0.355	3.3	101	0.00	8.25
46	P	2,4,5-Trichlorophenol	0.403	0.370	8.2	98	-0.01	8.31
47	S	2-Fluorobiphenyl	1.448	1.410	2.6	97	0.00	8.34
48	P	1,1'-Biphenyl	1.633	1.576	3.5	87	0.00	8.45
49	P	2-Chloronaphthalene	1.226	1.178	3.9	96	-0.01	8.46
50	P	2-Nitroaniline	0.451	0.438	2.9	98	-0.01	8.61
51		p-Dinitrobenzene	0.253	0.227	10.3	99	-0.01	8.79
52	P	Acenaphthylene	1.998	1.817	9.1	91	0.00	8.94
53	P	Dimethylphthalate	1.411	1.292	8.4	88	-0.02	8.84
54		m-Dinitrobenzene	0.235	0.214	8.9	96	-0.01	8.87
55	P	2,6-Dinitrotoluene	0.333	0.306	8.1	92	-0.01	8.91
56		o-Dinitrobenzene	0.319	0.311	2.5	91	-0.02	8.95
57	P	Acenaphthene	1.329	1.273	4.2	93	-0.01	9.15
58	P	3-Nitroaniline	0.366	0.354	3.3	97	-0.02	9.09
		----------	Amount	Calc.	%Drift	----------		
59	P	2,4-Dinitrophenol	5.000	1.450	71.0#	48	0.00	9.24
		----------	AvgRF	CCRF	%Dev	----------		
60	P	Dibenzofuran	1.773	1.653	6.8	90	0.00	9.36
61	P	2,4-Dinitrotoluene	0.425	0.398	6.4	91	-0.01	9.38
62	P	4-Nitrophenol	0.205	0.133	35.1#	74	0.00	9.39
63		2,3,5,6-Tetrachlorophenol	0.297	0.230	22.6#	85	0.00	9.47
64	P	2,3,4,6-Tetrachlorophenol	0.311	0.265	14.8	90	0.00	9.53
65	P	Fluorene	1.384	1.311	5.3	91	0.00	9.76
66	P	4-Chlorophenyl-phenylethe	0.668	0.602	9.9	88	0.00	9.78
67	P	Diethylphthalate	1.409	1.269	9.9	89	-0.01	9.68
68		Thionazin	0.299	0.295	1.3	90	-0.01	9.77
69	P	4-Nitroaniline	0.408	0.354	13.2	89	-0.03	9.81
70	I	Phenanthrene-d10	1.000	1.000	0.0	91	0.00	10.86
		----------	Amount	Calc.	%Drift	----------		
71	P	4,6-Dinitro-2-methylpheno	5.000	3.317	33.7#	87	-0.02	9.86
		----------	AvgRF	CCRF	%Dev	----------		
72	P	n-Nitrosodiphenylamine	0.622	0.558	10.3	89	-0.01	9.93
73		Diphenylamine	0.729	0.669	8.2	89	-0.01	9.93
74		1,2-Diphenylhydrazine	0.896	0.799	10.8	85	0.00	9.97
		----------	Amount	Calc.	%Drift	----------		
75	S	2,4,6-Tribromophenol	10.000	9.792	2.1	98	-0.01	10.05
		----------	AvgRF	CCRF	%Dev	----------		
76		Sulfotep	0.132	0.122	7.6	85	0.00	10.15
77		Phorate	0.462	0.446	3.5	91	0.00	10.28
78	P	4-Bromophenyl-phenylether	0.192	0.174	9.4	91	0.00	10.35
79	P	Hexachlorobenzene	0.192	0.173	9.9	94	0.00	10.40

Continuing Calibration Summary

Job Number: FA77581 **Sample:** SX2951-CC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072358.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

			Amount	Calc.	%Drift			
80		Dimethoate	5.000	4.765	4.7	94	-0.02	10.48
			AvgRF	CCRF	%Dev			
81		Simazine	0.141	0.117	17.0	83	-0.02	10.55
82	P	Atrazine	0.234	0.198	15.4	80	-0.02	10.59
			Amount	Calc.	%Drift			
83	P	Pentachlorophenol	5.000	1.486	70.3#	38	0.00	10.66
			AvgRF	CCRF	%Dev			
84	P	Phenanthrene	1.209	1.119	7.4	86	0.00	10.89
85	P	Anthracene	1.260	1.157	8.2	89	0.00	10.94
86		Disulfoton	0.483	0.473	2.1	90	0.00	10.90
87	P	Carbazole	1.112	1.026	7.7	89	-0.01	11.16
			Amount	Calc.	%Drift			
88		Methyl Parathion	5.000	4.579	8.4	94	-0.01	11.34
			AvgRF	CCRF	%Dev			
89	P	Di-n-butylphthalate	1.241	1.178	5.1	95	0.00	11.62
			Amount	Calc.	%Drift			
90		Ethyl Parathion	5.000	4.745	5.1	99	-0.01	11.81
			AvgRF	CCRF	%Dev			
91	P	Fluoranthene	1.121	1.060	5.4	93	0.00	12.29
92	I	Chrysene-d12	1.000	1.000	0.0	98	-0.01	14.06
			Amount	Calc.	%Drift			
93		Benzidine	5.000	5.382	-7.6	157	0.00	12.48
			AvgRF	CCRF	%Dev			
94	P	Pyrene	1.661	1.447	12.9	89	-0.01	12.54
95	S	Terphenyl-d14	1.063	0.986	7.2	99	0.00	12.77
			Amount	Calc.	%Drift			
96		Famphur		----------	NA ----------			
97	P	Butylbenzylphthalate	5.000	5.033	-0.7	114	0.00	13.40
98	P	3,3'-Dichlorobenzidine	5.000	5.378	-7.6	129	-0.01	14.05
			AvgRF	CCRF	%Dev			
99	P	Benzo[a]anthracene	1.257	1.165	7.3	98	0.00	14.05
100	P	Chrysene	1.339	1.218	9.0	96	-0.02	14.09
			Amount	Calc.	%Drift			
101	P	bis(2-Ethylhexyl)phthalat	5.000	5.002	-0.0	129	0.00	14.21
			AvgRF	CCRF	%Dev			
102	I	Perylene-d12	1.000	1.000	0.0	98	0.00	16.26
			Amount	Calc.	%Drift			
103	P	Di-n-octylphthalate	5.000	6.080	-21.6#	115	-0.01	15.17
104	P	Benzo[b]fluoranthene	5.000	5.172	-3.4	112	-0.02	15.60
			AvgRF	CCRF	%Dev			
105	P	Benzo[k]fluoranthene	1.420	1.169	17.7	90	-0.03	15.65

Continuing Calibration Summary

Job Number: FA77581 **Sample:** SX2951-CC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072358.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

			Amount	Calc.	%Drift			
106	P	Benzo[a]pyrene	5.000	4.981	0.4	116	-0.02	16.15
107	P	Indeno[1,2,3-cd]pyrene	5.000	8.429	-68.6#	196	-0.02	17.91
108	P	Dibenz[a,h]anthracene	5.000	7.832	-56.6#	191	-0.02	17.97
109	P	Benzo[g,h,i]perylene	5.000	6.057	-21.1#	132	-0.03	18.27

		AvgRF	CCRF	%Dev			
110	1,4-Dichlorobenzene-d4A	1.000	1.000	0.0	112	0.00	5.65
111	2-Picoline		NA				
112	N-Nitrosomethylethylamine		NA				
113	Methyl methanesulfonate		NA				
114	N-Nitrosodiethylamine		NA				
115	Ethyl methanesulfonate		NA				
116	Pentachloroethane		NA				
117	N-Nitrosopyrrolidine		NA				
118	N-Nitrosomorpholine		NA				
119	O-Toluidine		NA				
120	Naphthalene-d8A	1.000	1.000	0.0	106	0.00	7.08
121	N-Nitrosopiperidine		NA				
122	A,A-Dimethylphenethylamin		NA				
123	Hexachloropropene		NA				

		Amount	Calc.	%Drift
124	N-Nitrosodi-n-butylamine		NA	

		AvgRF	CCRF	%Dev			
125	p-Phenylenediamine		NA				
126	Isosafrole		NA				
127	Acenaphthene-d10A	1.000	1.000	0.0	98	0.00	9.11
128	Safrole		NA				
129	1-Chloronaphthalene		NA				
130	Diphenyl Ether		NA				

		Amount	Calc.	%Drift
131	1,4-Naphthoquinone		NA	

		AvgRF	CCRF	%Dev			
132	Pentachlorobenzene		NA				
133	1-Naphthylamine		NA				
134	2-Naphthylamine		NA				

		Amount	Calc.	%Drift
135	5-Nitro-o-toluidine		NA	

		AvgRF	CCRF	%Dev			
136	Phenanthrene-d10A	1.000	1.000	0.0	93	0.00	10.86

		Amount	Calc.	%Drift
137	1,3,5-Trinitrobenzene		NA	

		AvgRF	CCRF	%Dev
138	Diallate		NA	
139	Phenacetin		NA	
140	4-Aminobiphenyl		NA	
141	Pronamide		NA	

Continuing Calibration Summary

Job Number: FA77581 **Sample:** SX2951-CC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072358.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

142		Pentachloronitrobenzene		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
143		4-Nitroquinoline 1-Oxide		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
144		Methapyrilene		----------NA----------				
145		Isodrin		----------NA----------				
146	I	Chrysene-d12A	1.000	1.000	0.0	100	-0.01	14.06
		----------	Amount	Calc.	%Drift	----------		
147		Aramite		----------NA----------				
148		p-(Dimethylamine)azobenze		----------NA----------				
149		Chlorobenzilate		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
150		Kepone		----------NA----------				
151		3,3'-Dimethylbenzidine		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
152		2-Acetylaminofluorene		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
153	I	Perylene-d12A	1.000	1.000	0.0	98	0.00	16.26
154		7,12-Dimethylbenz(a)anthr		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
155		Hexachlorophene		----------NA----------				
156		3-Methylcholanthrene		----------NA----------				
157		Dibenz(a,j)acridine		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
x071365.D 8270DApp9SX-062320.m Wed Aug 12 15:45:20 2020

Run Sequence Report

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Run ID: S6F248	**Method:** SW846 8270D	**Instrument ID:** GCMS6F

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
S6F248-DFTPP	6F06435.D	07/29/20 12:37	n/a	DFTPP Tune
S6F248-IC248	6F06436.D	07/29/20 12:53	n/a	Initial cal 1
S6F248-IC248	6F06437.D	07/29/20 13:19	n/a	Initial cal 5
S6F248-IC248	6F06438.D	07/29/20 13:45	n/a	Initial cal 10
S6F248-IC248	6F06439.D	07/29/20 14:10	n/a	Initial cal 25
S6F248-ICC248	6F06440.D	07/29/20 14:36	n/a	Initial cal 50
S6F248-IC248	6F06441.D	07/29/20 15:02	n/a	Initial cal 60
S6F248-IC248	6F06442.D	07/29/20 15:28	n/a	Initial cal 75
S6F248-IC248	6F06443.D	07/29/20 15:54	n/a	Initial cal 100
S6F248-ICV248	6F06444.D	07/29/20 16:20	n/a	Initial cal verification 50
S6F248-ICV248	6F06445.D	07/29/20 16:46	n/a	Initial cal verification 50

Run Sequence Report

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Run ID: S6F251	**Method:** SW846 8270E	**Instrument ID:** GCMS6F

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
S6F251-DFTPP	6F06485.D	08/11/20 12:38	n/a	DFTPP Tune
S6F251-CC248	6F06486.D	08/11/20 12:54	n/a	Continuing cal 50
OP81484-BS	6F06487.D	08/11/20 13:20	OP81484	Blank Spike
OP81484-MB	6F06488.D	08/11/20 13:46	OP81484	Method Blank
FA77581-7	6F06489.D	08/11/20 14:12	OP81484	SS-108-D
FA77581-8	6F06490.D	08/11/20 14:38	OP81484	CS-SB-125
FA77581-9	6F06491.D	08/11/20 15:05	OP81484	CS-25
FA77581-10	6F06492.D	08/11/20 15:31	OP81484	CS-26
ZZZZZZ	6F06493.D	08/11/20 15:57	OP81484	(unrelated sample)
ZZZZZZ	6F06494.D	08/11/20 16:24	OP81484	(unrelated sample)
ZZZZZZ	6F06495.D	08/11/20 16:50	OP81484	(unrelated sample)
ZZZZZZ	6F06496.D	08/11/20 17:16	OP81484	(unrelated sample)
ZZZZZZ	6F06497.D	08/11/20 17:42	OP81484	(unrelated sample)
FA77615-6	6F06498.D	08/11/20 18:08	OP81484	(used for QC only; not part of job FA77581)
OP81484-MS	6F06499.D	08/11/20 18:34	OP81484	Matrix Spike
OP81484-MSD	6F06500.D	08/11/20 19:00	OP81484	Matrix Spike Duplicate
ZZZZZZ	6F06501.D	08/11/20 19:26	OP81484	(unrelated sample)
ZZZZZZ	6F06502.D	08/11/20 19:52	OP81484	(unrelated sample)
ZZZZZZ	6F06503.D	08/11/20 20:18	OP81484	(unrelated sample)
ZZZZZZ	6F06504.D	08/11/20 20:44	OP81484	(unrelated sample)
ZZZZZZ	6F06505.D	08/11/20 21:10	OP81484	(unrelated sample)
ZZZZZZ	6F06506.D	08/11/20 21:35	OP81484	(unrelated sample)
ZZZZZZ	6F06508.D	08/11/20 22:27	OP81484	(unrelated sample)
ZZZZZZ	6F06509.D	08/11/20 22:52	OP81484	(unrelated sample)
ZZZZZZ	6F06510.D	08/11/20 23:18	OP81484	(unrelated sample)

Run Sequence Report

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Run ID: S7G472 **Method:** SW846 8270D BY SIM **Instrument ID:** GCMS7G

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
S7G472-DFTPP	7G10822.D	07/21/20 08:44	n/a	DFTPP Tune
S7G472-IC472	7G10833.D	07/21/20 13:31	n/a	Initial cal 1
S7G472-IC472	7G10834.D	07/21/20 13:55	n/a	Initial cal 2
S7G472-IC472	7G10835.D	07/21/20 14:19	n/a	Initial cal 3
S7G472-ICC472	7G10836.D	07/21/20 14:43	n/a	Initial cal 4
S7G472-IC472	7G10837.D	07/21/20 15:07	n/a	Initial cal 5
S7G472-IC472	7G10838.D	07/21/20 15:31	n/a	Initial cal 6
S7G472-IC472	7G10839.D	07/21/20 15:55	n/a	Initial cal 7
S7G472-ICV472	7G10840.D	07/21/20 16:19	n/a	Initial cal verification 4
S7G472-DFTPP	7G10841.D	07/21/20 16:43	n/a	DFTPP Tune
S7G472-CC472	7G10842.D	07/21/20 17:01	n/a	Continuing cal 4
OP81120-MB	7G10843.D	07/21/20 17:25	OP81120	Method Blank
OP81126-MB	7G10845.D	07/21/20 18:13	OP81126	Method Blank
OP81126-BS	7G10846.D	07/21/20 18:38	OP81126	Blank Spike
ZZZZZZ	7G10847.D	07/21/20 19:02	OP81120	(unrelated sample)
ZZZZZZ	7G10848.D	07/21/20 19:26	OP81120	(unrelated sample)
ZZZZZZ	7G10849.D	07/21/20 19:50	OP81120	(unrelated sample)
ZZZZZZ	7G10850.D	07/21/20 20:14	OP81120	(unrelated sample)
ZZZZZZ	7G10851.D	07/21/20 20:37	OP81120	(unrelated sample)
FA76888-6	7G10852.D	07/21/20 21:01	OP81120	(used for QC only; not part of job FA77581)
OP81120-MS	7G10853.D	07/21/20 21:25	OP81120	Matrix Spike
OP81120-MSD	7G10854.D	07/21/20 21:48	OP81120	Matrix Spike Duplicate
ZZZZZZ	7G10855.D	07/21/20 22:12	OP81126	(unrelated sample)
ZZZZZZ	7G10856.D	07/21/20 22:35	OP81126	(unrelated sample)
ZZZZZZ	7G10857.D	07/21/20 22:59	OP81126	(unrelated sample)
FA76878-1	7G10858.D	07/21/20 23:23	OP81126	(used for QC only; not part of job FA77581)
OP81126-MS	7G10859.D	07/21/20 23:47	OP81126	Matrix Spike
OP81126-MSD	7G10860.D	07/22/20 00:10	OP81126	Matrix Spike Duplicate
ZZZZZZ	7G10861.D	07/22/20 00:34	OP81126	(unrelated sample)
ZZZZZZ	7G10862.D	07/22/20 00:58	OP81126	(unrelated sample)
ZZZZZZ	7G10863.D	07/22/20 01:22	OP81126	(unrelated sample)
ZZZZZZ	7G10864.D	07/22/20 01:45	OP81126	(unrelated sample)
ZZZZZZ	7G10865.D	07/22/20 02:09	OP81126	(unrelated sample)
ZZZZZZ	7G10867.D	07/22/20 02:56	OP81126	(unrelated sample)
ZZZZZZ	7G10868.D	07/22/20 03:20	OP81126	(unrelated sample)

Run Sequence Report

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Run ID: S7G482 **Method:** SW846 8270E BY SIM **Instrument ID:** GCMS7G

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
S7G482-DFTPP	7G11099.D	08/10/20 14:10	n/a	DFTPP Tune
S7G482-CC472	7G11100.D	08/10/20 14:28	n/a	Continuing cal 4
OP81483-MB	7G11101.D	08/10/20 14:57	OP81483	Method Blank
OP81483-BS	7G11102.D	08/10/20 15:21	OP81483	Blank Spike
ZZZZZZ	7G11104.D	08/10/20 16:10	OP81483	(unrelated sample)
ZZZZZZ	7G11105.D	08/10/20 16:34	OP81483	(unrelated sample)
ZZZZZZ	7G11106.D	08/10/20 16:58	OP81483	(unrelated sample)
ZZZZZZ	7G11108.D	08/10/20 17:47	OP81483	(unrelated sample)
ZZZZZZ	7G11109.D	08/10/20 18:12	OP81483	(unrelated sample)
ZZZZZZ	7G11111.D	08/10/20 19:01	OP81483	(unrelated sample)
ZZZZZZ	7G11112.D	08/10/20 19:25	OP81483	(unrelated sample)
ZZZZZZ	7G11113.D	08/10/20 19:50	OP81483	(unrelated sample)
ZZZZZZ	7G11114.D	08/10/20 20:14	OP81483	(unrelated sample)
ZZZZZZ	7G11115.D	08/10/20 20:38	OP81483	(unrelated sample)
ZZZZZZ	7G11116.D	08/10/20 21:02	OP81483	(unrelated sample)
FA77581-1	7G11117.D	08/10/20 21:26	OP81483	CS-SS-104
FA77581-2	7G11118.D	08/10/20 21:50	OP81483	CS-23
FA77581-3	7G11119.D	08/10/20 22:14	OP81483	CS-SS-101
FA77581-4	7G11120.D	08/10/20 22:38	OP81483	CS-22
OP81483-MS	7G11122.D	08/10/20 23:25	OP81483	Matrix Spike
OP81483-MSD	7G11123.D	08/10/20 23:49	OP81483	Matrix Spike Duplicate
FA77581-6	7G11124.D	08/11/20 00:12	OP81483	CS-RISB-02
S7G482-ECC472	7G11126.D	08/11/20 01:00	n/a	Ending cal 4

Run Sequence Report

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Run ID: S7G483 **Method:** SW846 8270E BY SIM **Instrument ID:** GCMS7G

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
S7G483-DFTPP	7G11129.D	08/11/20 08:11	n/a	DFTPP Tune
S7G483-CC472	7G11130.D	08/11/20 08:29	n/a	Continuing cal 4
OP81485-MB	7G11131.D	08/11/20 08:52	OP81485	Method Blank
OP81485-BS	7G11132.D	08/11/20 09:16	OP81485	Blank Spike
FA77581-7	7G11133.D	08/11/20 09:39	OP81485	SS-108-D
FA77581-8	7G11134.D	08/11/20 10:03	OP81485	CS-SB-125
FA77581-9	7G11135.D	08/11/20 10:27	OP81485	CS-25
FA77581-10	7G11136.D	08/11/20 10:50	OP81485	CS-26
ZZZZZZ	7G11137.D	08/11/20 11:14	OP81485	(unrelated sample)
ZZZZZZ	7G11138.D	08/11/20 11:38	OP81485	(unrelated sample)
ZZZZZZ	7G11139.D	08/11/20 12:02	OP81485	(unrelated sample)
ZZZZZZ	7G11140.D	08/11/20 12:26	OP81485	(unrelated sample)
ZZZZZZ	7G11141.D	08/11/20 12:50	OP81485	(unrelated sample)
FA77615-6	7G11142.D	08/11/20 13:14	OP81485	(used for QC only; not part of job FA77581)
OP81485-MS	7G11143.D	08/11/20 13:38	OP81485	Matrix Spike
OP81485-MSD	7G11144.D	08/11/20 14:02	OP81485	Matrix Spike Duplicate
ZZZZZZ	7G11145.D	08/11/20 14:26	OP81485	(unrelated sample)
ZZZZZZ	7G11146.D	08/11/20 14:51	OP81485	(unrelated sample)
ZZZZZZ	7G11147.D	08/11/20 15:15	OP81485	(unrelated sample)
ZZZZZZ	7G11148.D	08/11/20 15:39	OP81485	(unrelated sample)
ZZZZZZ	7G11149.D	08/11/20 16:04	OP81485	(unrelated sample)
ZZZZZZ	7G11150.D	08/11/20 16:28	OP81485	(unrelated sample)
ZZZZZZ	7G11151.D	08/11/20 16:53	OP81485	(unrelated sample)
ZZZZZZ	7G11152.D	08/11/20 17:17	OP81485	(unrelated sample)
ZZZZZZ	7G11153.D	08/11/20 17:41	OP81485	(unrelated sample)
ZZZZZZ	7G11154.D	08/11/20 18:05	OP81485	(unrelated sample)
ZZZZZZ	7G11155.D	08/11/20 18:30	OP81483	(unrelated sample)
ZZZZZZ	7G11156.D	08/11/20 18:54	OP81483	(unrelated sample)
ZZZZZZ	7G11157.D	08/11/20 19:18	OP81483	(unrelated sample)
FA77581-5	7G11158.D	08/11/20 19:42	OP81483	CS-24

Run Sequence Report

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Run ID: SX2918 **Method:** EPA 625.1 **Instrument ID:** GCMSX

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
SX2918-DFTPP	X071355.D	06/23/20 09:47	n/a	DFTPP Tune
SX2918-IC2918	X071356.D	06/23/20 10:04	n/a	Initial cal 1
SX2918-IC2918	X071357.D	06/23/20 10:30	n/a	Initial cal 5
SX2918-IC2918	X071358.D	06/23/20 10:55	n/a	Initial cal 10
SX2918-IC2918	X071359.D	06/23/20 11:21	n/a	Initial cal 25
SX2918-IC2918	X071360.D	06/23/20 11:46	n/a	Initial cal 50
SX2918-IC2918	X071361.D	06/23/20 12:12	n/a	Initial cal 60
SX2918-IC2918	X071362.D	06/23/20 12:37	n/a	Initial cal 75
SX2918-IC2918	X071363.D	06/23/20 13:03	n/a	Initial cal 100
SX2918-IC2918	X071364.D	06/23/20 13:29	n/a	Initial cal 1
SX2918-IC2918	X071365.D	06/23/20 13:54	n/a	Initial cal 5
SX2918-IC2918	X071366.D	06/23/20 14:20	n/a	Initial cal 10
SX2918-IC2918	X071367.D	06/23/20 14:46	n/a	Initial cal 25
SX2918-ICC2918	X071368.D	06/23/20 15:12	n/a	Initial cal 50
SX2918-IC2918	X071369.D	06/23/20 15:39	n/a	Initial cal 60
SX2918-IC2918	X071370.D	06/23/20 16:05	n/a	Initial cal 75
SX2918-IC2918	X071371.D	06/23/20 16:31	n/a	Initial cal 100
SX2918-ICV2918	X071372.D	06/23/20 16:58	n/a	Initial cal verification 50
SX2918-ICV2918	X071373.D	06/23/20 17:25	n/a	Initial cal verification 50
SX2918-ICV2918	X071374.D	06/23/20 17:51	n/a	Initial cal verification 50
SX2918-ICV2918	X071375.D	06/23/20 18:17	n/a	Initial cal verification 50
SX2918-ICV2918	X071376.D	06/23/20 18:43	n/a	Initial cal verification 50
SX2918-DFTPP	X071377.D	06/23/20 19:06	n/a	DFTPP Tune
SX2918-CC2918	X071378.D	06/23/20 19:24	n/a	Continuing cal 50
SX2918-CC2918	X071379.D	06/23/20 19:50	n/a	Continuing cal 50
OP80558-BS	X071380.D	06/23/20 20:15	OP80558	Blank Spike
OP80558-BS2	X071381.D	06/23/20 20:41	OP80558	Blank Spike
OP80558-MB	X071382.D	06/23/20 21:07	OP80558	Method Blank
ZZZZZZ	X071383.D	06/23/20 21:32	OP80558	(unrelated sample)
ZZZZZZ	X071384.D	06/23/20 21:58	OP80558	(unrelated sample)
ZZZZZZ	X071385.D	06/23/20 22:24	OP80558	(unrelated sample)
ZZZZZZ	X071386.D	06/23/20 22:49	OP80558	(unrelated sample)
OP80508-BS	X071387.D	06/23/20 23:15	OP80508	Blank Spike
OP80508-BS2	X071388.D	06/23/20 23:40	OP80508	Blank Spike
OP80508-MB	X071389.D	06/24/20 00:06	OP80508	Method Blank
ZZZZZZ	X071391.D	06/24/20 00:56	OP80508	(unrelated sample)
OP80508-MS	X071393.D	06/24/20 01:47	OP80508	Matrix Spike
OP80508-MSD	X071394.D	06/24/20 02:12	OP80508	Matrix Spike Duplicate
OP80508-MS2	X071396.D	06/24/20 03:03	OP80508	Matrix Spike
OP80508-MSD2	X071397.D	06/24/20 03:28	OP80508	Matrix Spike Duplicate
ZZZZZZ	X071398.D	06/24/20 03:54	OP80508	(unrelated sample)
ZZZZZZ	X071399.D	06/24/20 04:19	OP80508	(unrelated sample)
SX2918-ICV2918	X071416.D	06/24/20 15:22	n/a	Initial cal verification 50

Run Sequence Report

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Run ID: SX2950	**Method:** SW846 8270E	**Instrument ID:** GCMSX

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
SX2950-DFTPP	X072328.D	08/11/20 12:30	n/a	DFTPP Tune
SX2950-CC2918	X072329.D	08/11/20 12:47	n/a	Continuing cal 50
SX2950-CC2918	X072330.D	08/11/20 13:13	n/a	Continuing cal 5
OP81482-BS	X072331.D	08/11/20 13:39	OP81482	Blank Spike
OP81482-MB	X072332.D	08/11/20 14:05	OP81482	Method Blank
ZZZZZZ	X072333.D	08/11/20 14:31	OP81482	(unrelated sample)
ZZZZZZ	X072334.D	08/11/20 14:57	OP81482	(unrelated sample)
ZZZZZZ	X072335.D	08/11/20 15:23	OP81482	(unrelated sample)
ZZZZZZ	X072336.D	08/11/20 15:50	OP81482	(unrelated sample)
ZZZZZZ	X072337.D	08/11/20 16:16	OP81482	(unrelated sample)
ZZZZZZ	X072338.D	08/11/20 16:42	OP81482	(unrelated sample)
ZZZZZZ	X072339.D	08/11/20 17:08	OP81482	(unrelated sample)
ZZZZZZ	X072340.D	08/11/20 17:34	OP81482	(unrelated sample)
ZZZZZZ	X072341.D	08/11/20 18:00	OP81482	(unrelated sample)
ZZZZZZ	X072342.D	08/11/20 18:26	OP81482	(unrelated sample)
ZZZZZZ	X072343.D	08/11/20 18:52	OP81482	(unrelated sample)
ZZZZZZ	X072344.D	08/11/20 19:18	OP81482	(unrelated sample)
ZZZZZZ	X072345.D	08/11/20 19:44	OP81482	(unrelated sample)
ZZZZZZ	X072346.D	08/11/20 20:10	OP81482	(unrelated sample)
FA77581-1	X072347.D	08/11/20 20:35	OP81482	CS-SS-104
FA77581-2	X072348.D	08/11/20 21:01	OP81482	CS-23
FA77581-3	X072349.D	08/11/20 21:27	OP81482	CS-SS-101
FA77581-4	X072350.D	08/11/20 21:52	OP81482	CS-22
FA77581-5	X072351.D	08/11/20 22:18	OP81482	CS-24
OP81482-MS	X072352.D	08/11/20 22:44	OP81482	Matrix Spike
OP81482-MSD	X072353.D	08/11/20 23:09	OP81482	Matrix Spike Duplicate
FA77581-6	X072354.D	08/11/20 23:34	OP81482	CS-RISB-02

Run Sequence Report

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Run ID: SX2951	**Method:** SW846 8270E	**Instrument ID:** GCMSX

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
SX2951-DFTPP	X072356.D	08/12/20 10:07	n/a	DFTPP Tune
SX2951-CC2918	X072357.D	08/12/20 10:24	n/a	Continuing cal 50
SX2951-CC2918	X072358.D	08/12/20 10:49	n/a	Continuing cal 5
ZZZZZZ	X072359.D	08/12/20 11:16	OP81482	(unrelated sample)
ZZZZZZ	X072360.D	08/12/20 11:42	OP81482	(unrelated sample)
ZZZZZZ	X072361.D	08/12/20 12:07	OP81482	(unrelated sample)
ZZZZZZ	X072362.D	08/12/20 12:33	OP81482	(unrelated sample)
ZZZZZZ	X072366.D	08/12/20 14:16	OP81482	(unrelated sample)
ZZZZZZ	X072368.D	08/12/20 15:08	OP81482	(unrelated sample)
ZZZZZZ	X072369.D	08/12/20 15:33	OP81482	(unrelated sample)
FA77581-1	X072371.D	08/12/20 16:25	OP81482	CS-SS-104
FA77581-4	X072373.D	08/12/20 17:17	OP81482	CS-22
FA77581-5	X072374.D	08/12/20 17:43	OP81482	CS-24
ZZZZZZ	X072375.D	08/12/20 18:09	OP81482	(unrelated sample)
FA77581-3	X072376.D	08/12/20 18:34	OP81482	CS-SS-101
ZZZZZZ	X072377.D	08/12/20 19:00	OP81484	(unrelated sample)
ZZZZZZ	X072379.D	08/12/20 19:51	OP81484	(unrelated sample)
ZZZZZZ	X072381.D	08/12/20 20:42	OP81484	(unrelated sample)
ZZZZZZ	X072382.D	08/12/20 21:08	OP81484	(unrelated sample)
ZZZZZZ	X072383.D	08/12/20 21:34	OP81484	(unrelated sample)
ZZZZZZ	X072384.D	08/12/20 21:59	OP81455	(unrelated sample)

MS Semi-volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0811_sx2950\
Data File : x072347.d
Acq On : 11 Aug 2020 8:35 pm
Operator : marthav
Sample : fa77581-1 E Inst : MSBNA05
Misc : op81482,sx2950,30.1,,,1,1,soil
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Aug 12 11:25:03 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	5.665	152	166797	40.00	ppm		0.00
22) Naphthalene-d8	7.088	136	619193	40.00	ppm		0.00
43) Acenaphthene-d10	9.126	164	307423	40.00	ppm		0.00
70) Phenanthrene-d10	10.875	188	531106	40.00	ppm		0.01
92) Chrysene-d12	14.095	240	430408	40.00	ppm		0.03
102) Perylene-d12	16.303	264	354939	40.00	ppm		0.05
110) 1,4-Dichlorobenzene-d4A	5.665	152	166797	40.00	ppm		0.00
120) Naphthalene-d8A	7.088	136	619193	40.00	ppm		0.00
127) Acenaphthene-d10A	9.126	164	307423	40.00	ppm		0.00
136) Phenanthrene-d10A	10.875	188	531106	40.00	ppm		0.01
146) Chrysene-d12A	14.095	240	430408	40.00	ppm		0.03
153) Perylene-d12A	16.303	264	354939	40.00	ppm		0.05
System Monitoring Compounds							
7) 2-Fluorophenol	4.328	112	451396	75.48	ppm		0.02
Spiked Amount 100.000	Range 40 - 102		Recovery = 75.48%				
9) Phenol-d5	5.349	99	565886	79.53	ppm		0.02
Spiked Amount 100.000	Range 41 - 100		Recovery = 79.53%				
23) Nitrobenzene-d5	6.285	82	238265	37.26	ppm		0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 74.52%				
47) 2-Fluorobiphenyl	8.361	172	423709	38.07	ppm		0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 76.14%				
75) 2,4,6-Tribromophenol	10.067	330	88694	77.96	ppm		0.01
Spiked Amount 100.000	Range 42 - 108		Recovery = 77.96%				
95) Terphenyl-d14	12.795	244	439980	38.47	ppm		0.02
Spiked Amount 50.000	Range 45 - 119		Recovery = 76.94%				
Target Compounds							Qvalue
5) Benzaldehyde	5.194	106	2151	0.43	ppm		87
18) Acetophenone	6.120	105	1574	0.18	ppm		85
21) 3&4-Methylphenol	6.189	108	2388	0.38	ppm	#	70
27) 2,4-Dimethylphenol	6.762	107	1907	0.34	ppm		88
30) Benzoic Acid	6.874	105	8471	2.24	ppm		87
34) Naphthalene	7.109	128	12854	0.77	ppm		99
40) 2-Methylnaphthalene	7.917	142	7823	0.70	ppm		98
41) 1-Methylnaphthalene	8.024	142	4782	0.45	ppm		91
48) 1,1'-Biphenyl	8.468	154	2077	0.17	ppm		95
52) Acenaphthylene	8.960	152	240529	15.66	ppm		99
57) Acenaphthene	9.163	153	12139	1.19	ppm		93
60) Dibenzofuran	9.366	168	8693	0.64	ppm		95
65) Fluorene	9.773	166	25689	2.42	ppm		98
83) Pentachlorophenol	10.677	266	575	0.42	ppm		94
84) Phenanthrene	10.896	178	120957	7.54	ppm		99
85) Anthracene	10.960	178	508411	30.40	ppm		98
87) Carbazole	11.174	167	130490	8.84	ppm		99
91) Fluoranthene	12.308	202	1082416	72.69	ppm		98
94) Pyrene	12.575	202	1507662	84.36	ppm		96
99) Benzo[a]anthracene	14.078	228	629310	46.52	ppm		99
100) Chrysene	14.132	228	921683	63.98	ppm		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0811_sx2950\
Data File : x072347.d
Acq On : 11 Aug 2020 8:35 pm
Operator : marthav
Sample : fa77581-1 E Inst : MSBNA05
Misc : op81482,sx2950,30.1,,,1,1,soil
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Aug 12 11:25:03 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

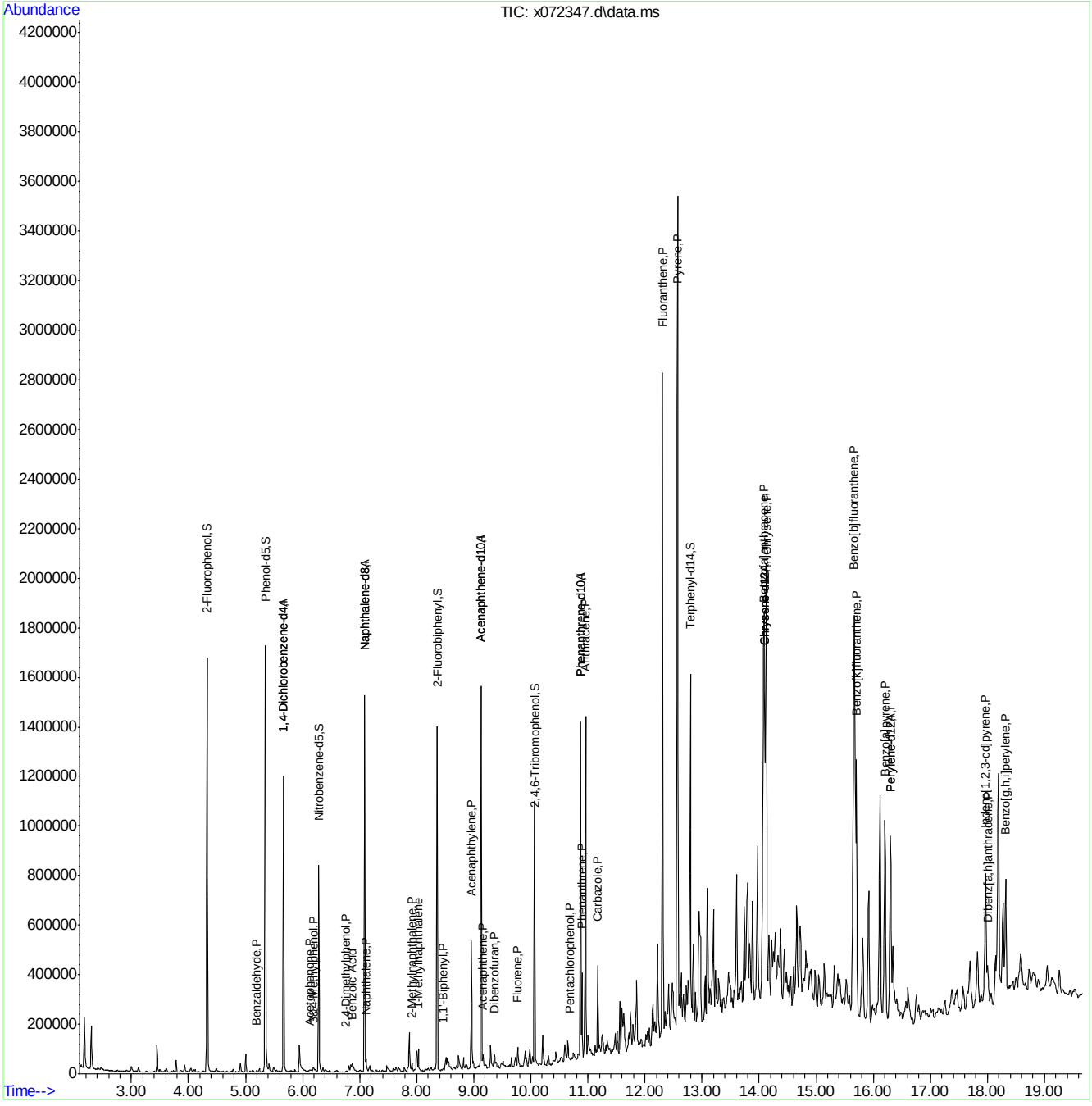
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
104) Benzo[b]fluoranthene	15.667	252	1324481	111.34	ppm	95
105) Benzo[k]fluoranthene	15.704	252	384396	30.51	ppm	98
106) Benzo[a]pyrene	16.207	252	463851	46.24	ppm	96
107) Indeno[1,2,3-cd]pyrene	17.967	276	317065	46.57	ppm	86
108) Dibenz[a,h]anthracene	18.004	278	72082	11.90	ppm	90
109) Benzo[g,h,i]perylene	18.325	276	243927	27.13	ppm	88

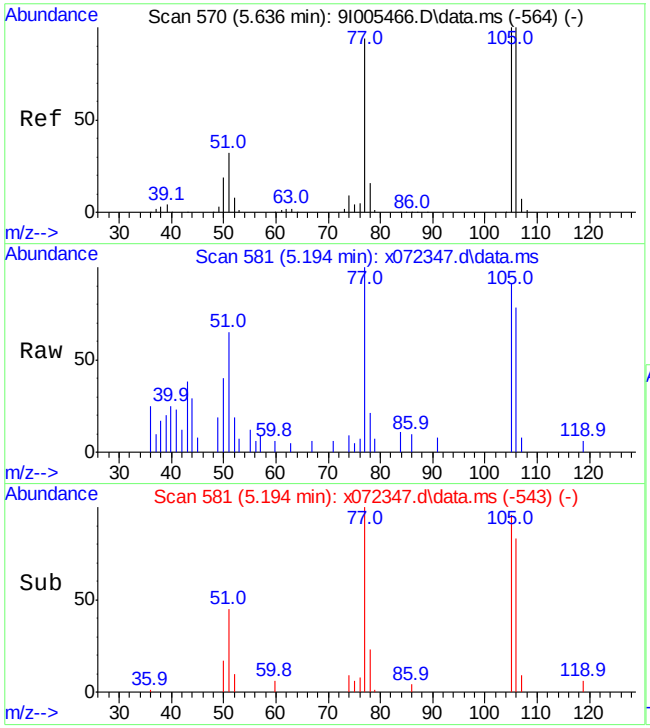
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0811_sx2950\
Data File : x072347.d
Acq On : 11 Aug 2020 8:35 pm
Operator : marthav
Sample : fa77581-1 E Inst : MSBNA05
Misc : op81482,sx2950,30.1,,,1,1,soil
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Aug 12 11:25:03 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

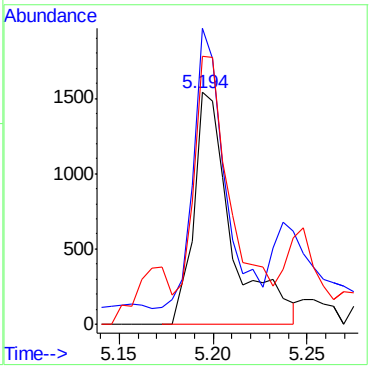


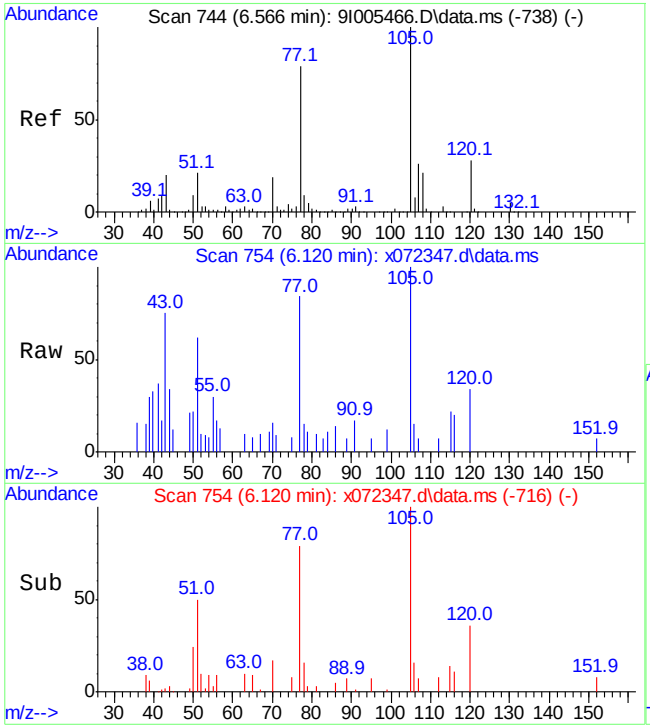


#5
Benzaldehyde
Concen: 0.43 ppm
RT: 5.194 min Scan# 581
Delta R.T. 0.005 min
Lab File: x072347.d
Acq: 11 Aug 2020 8:35 pm

Tgt Ion:106 Resp: 2151

Ion	Ratio	Lower	Upper
106	100		
77	108.8	63.9	123.9
105	88.8	70.0	130.0

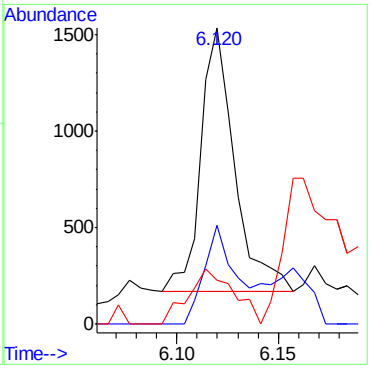


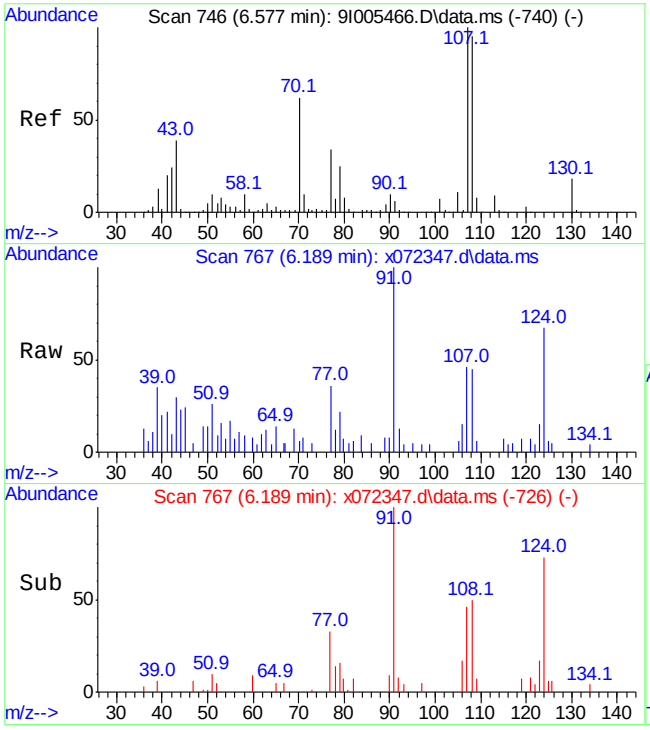


#18
Acetophenone
Concen: 0.18 ppm
RT: 6.120 min Scan# 754
Delta R.T. 0.005 min
Lab File: x072347.d
Acq: 11 Aug 2020 8:35 pm

Tgt Ion:105 Resp: 1574

Ion	Ratio	Lower	Upper
105	100		
120	21.8	0.0	58.3
106	0.0	0.0	38.0

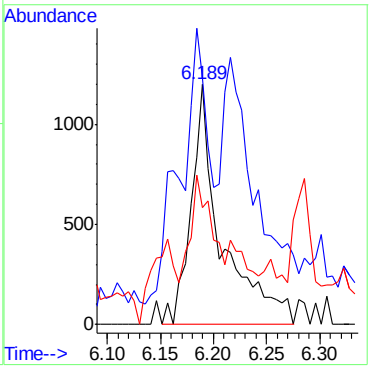


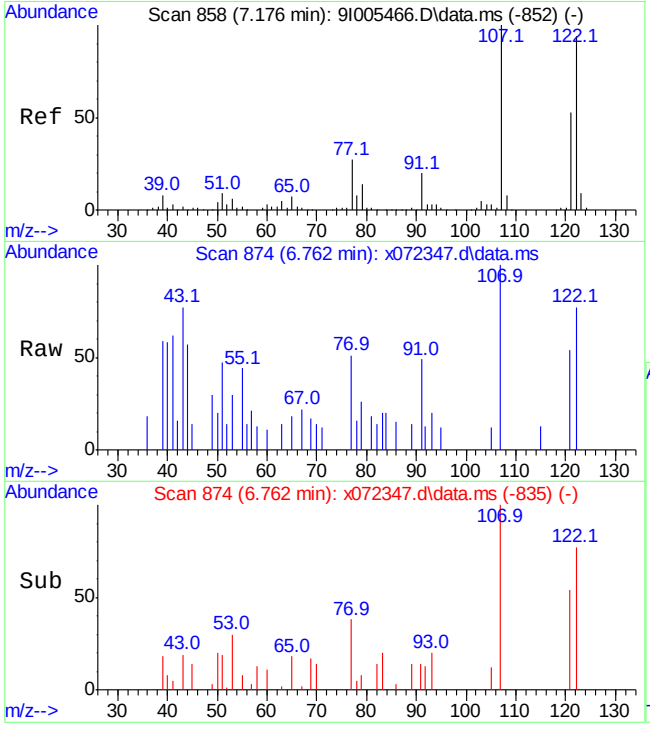


#21
3&4-Methylphenol
Concen: 0.38 ppm
RT: 6.189 min Scan# 767
Delta R.T. 0.021 min
Lab File: x072347.d
Acq: 11 Aug 2020 8:35 pm

Tgt Ion:108 Resp: 2388

Ion	Ratio	Lower	Upper
108	100		
107	73.1	75.4	135.4#
79	12.8	0.0	56.3

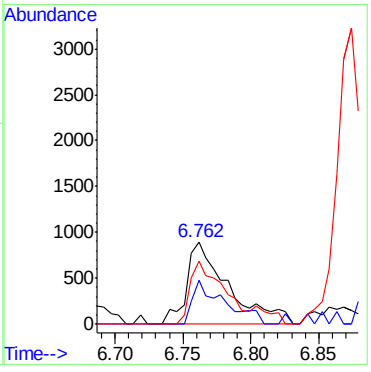


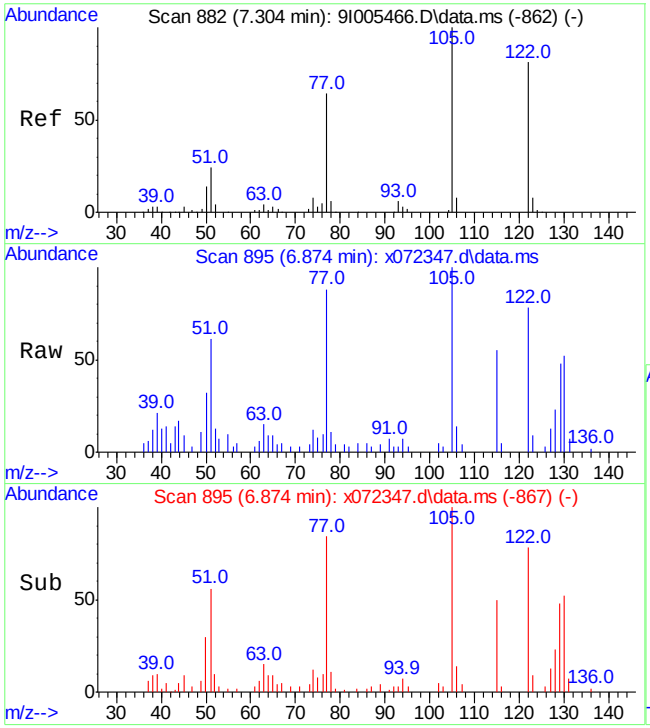


#27
2,4-Dimethylphenol
Concen: 0.34 ppm
RT: 6.762 min Scan# 874
Delta R.T. 0.011 min
Lab File: x072347.d
Acq: 11 Aug 2020 8:35 pm

Tgt Ion:107 Resp: 1907

Ion	Ratio	Lower	Upper
107	100		
121	53.5	23.4	83.4
122	76.6	64.3	124.3

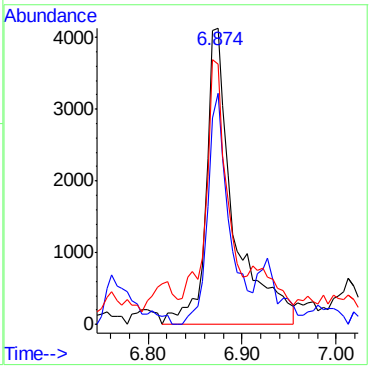


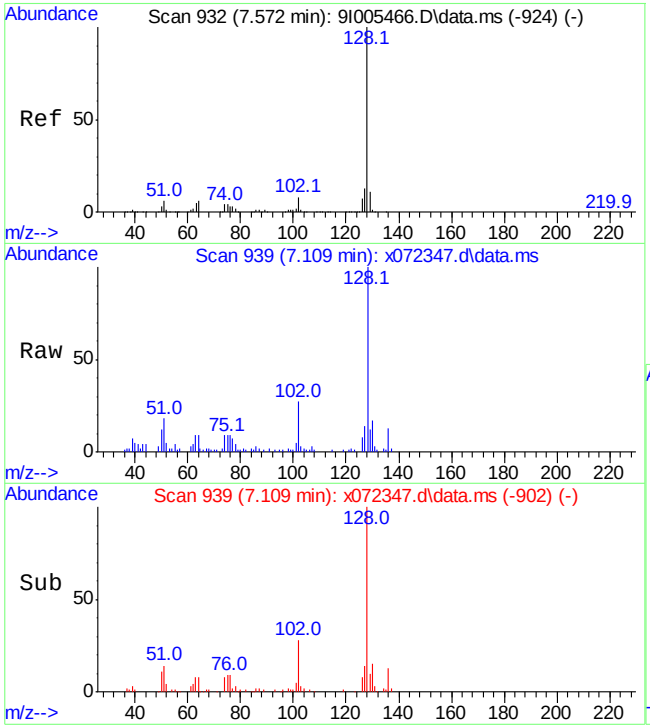


#30
Benzoic Acid
Concen: 2.24 ppm
RT: 6.874 min Scan# 895
Delta R.T. -0.048 min
Lab File: x072347.d
Acq: 11 Aug 2020 8:35 pm

Tgt Ion:105 Resp: 8471

Ion	Ratio	Lower	Upper
105	100		
122	75.9	51.2	111.2
77	80.4	34.1	94.1

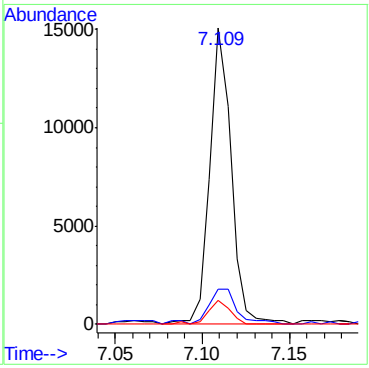


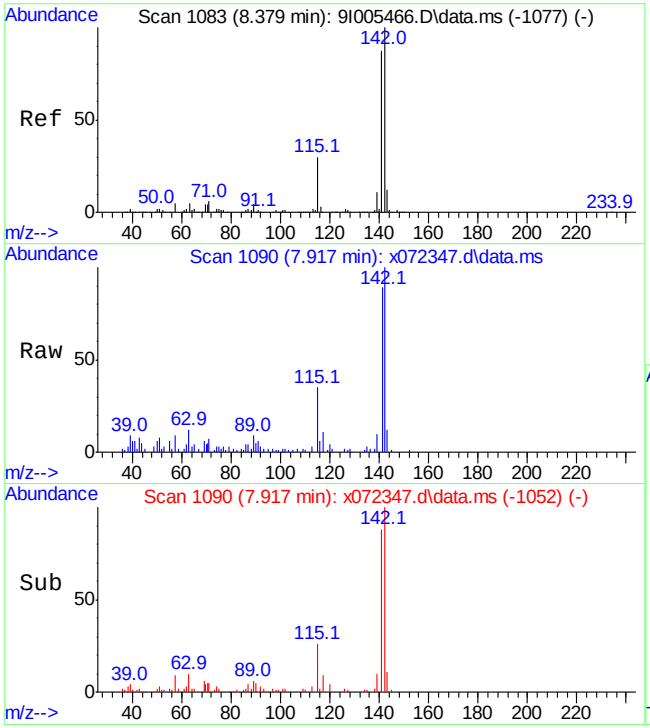


#34
Naphthalene
Concen: 0.77 ppm
RT: 7.109 min Scan# 939
Delta R.T. -0.000 min
Lab File: x072347.d
Acq: 11 Aug 2020 8:35 pm

Tgt Ion:128 Resp: 12854

Ion	Ratio	Lower	Upper
128	100		
129	11.9	0.0	41.4
126	8.0	0.0	37.4

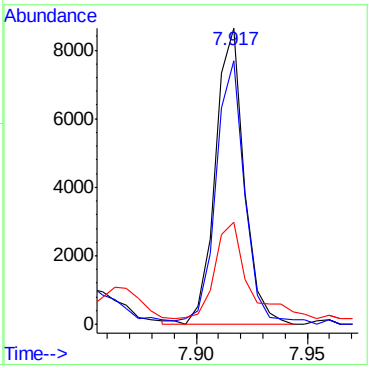


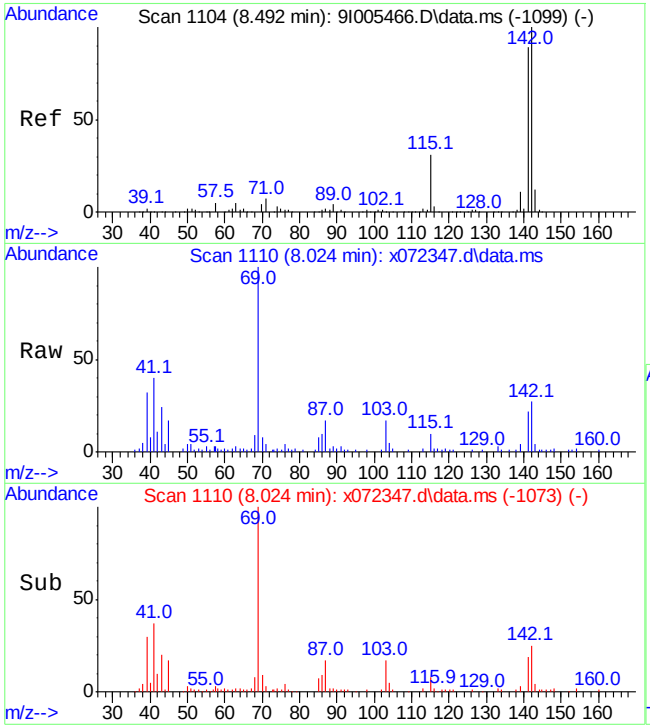


#40
2-Methylnaphthalene
Concen: 0.70 ppm
RT: 7.917 min Scan# 1090
Delta R.T. 0.005 min
Lab File: x072347.d
Acq: 11 Aug 2020 8:35 pm

Tgt Ion:142 Resp: 7823

Ion	Ratio	Lower	Upper
142	100		
141	88.2	56.8	116.8
115	31.5	0.0	60.0

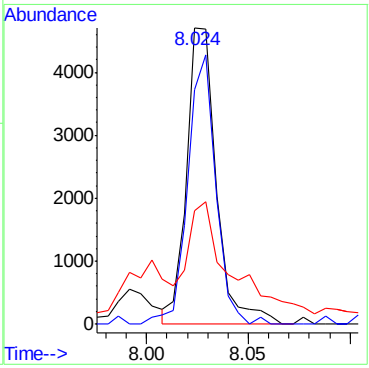


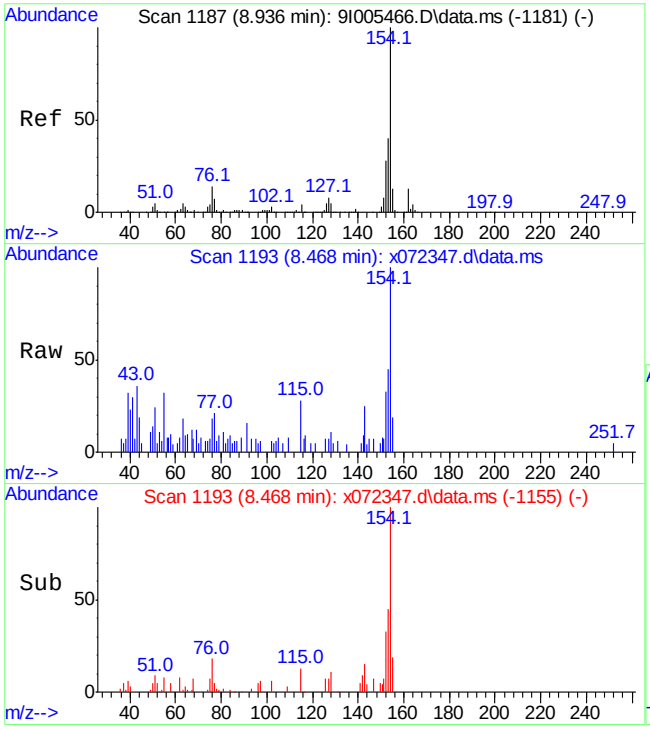


#41
1-Methylnaphthalene
Concen: 0.45 ppm
RT: 8.024 min Scan# 1110
Delta R.T. -0.000 min
Lab File: x072347.d
Acq: 11 Aug 2020 8:35 pm

Tgt Ion:142 Resp: 4782

Ion	Ratio	Lower	Upper
142	100		
141	79.5	59.0	119.0
115	27.8	1.1	61.1

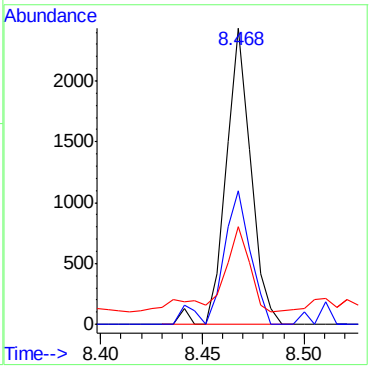


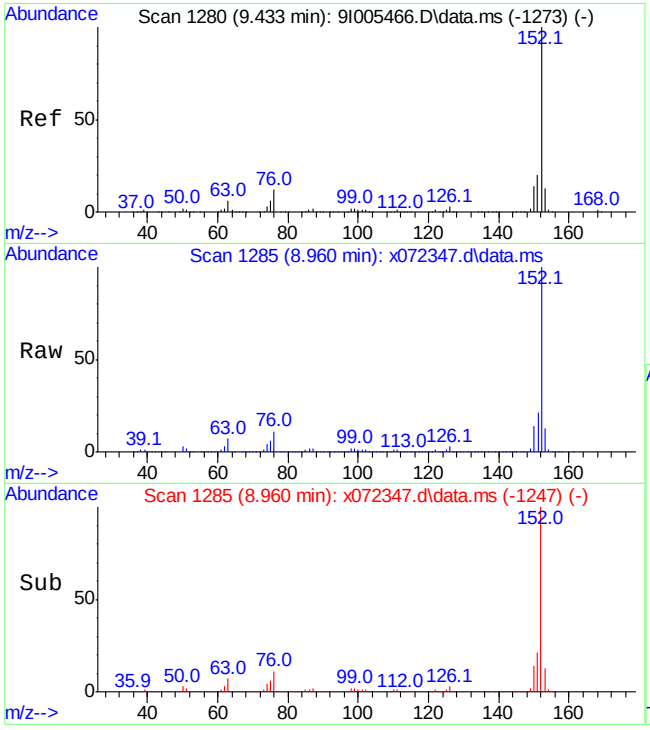


#48
1,1'-Biphenyl
Concen: 0.17 ppm
RT: 8.468 min Scan# 1193
Delta R.T. 0.005 min
Lab File: x072347.d
Acq: 11 Aug 2020 8:35 pm

Tgt Ion:154 Resp: 2077

Ion	Ratio	Lower	Upper
154	100		
153	44.9	10.3	70.3
152	27.7	0.0	58.2

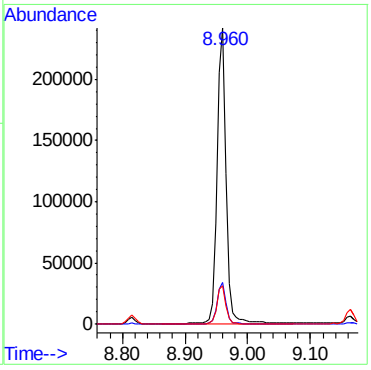


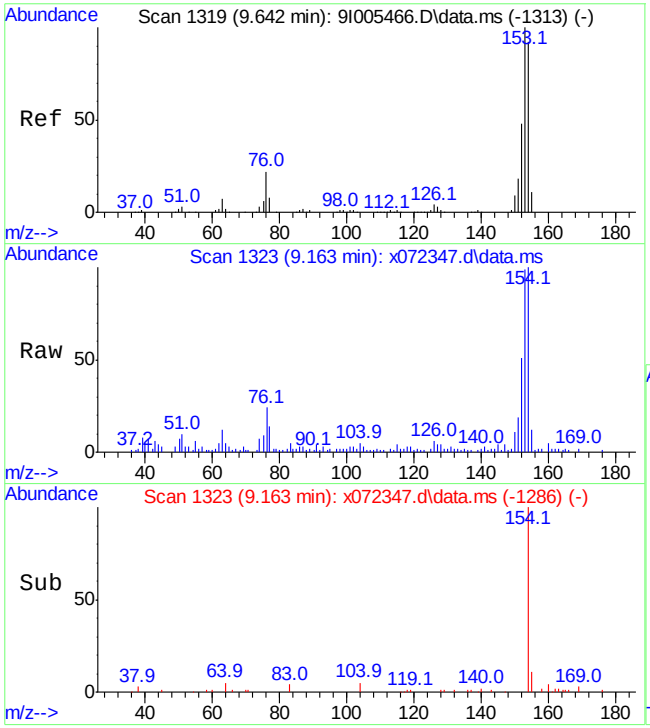


#52
Acenaphthylene
Concen: 15.66 ppm
RT: 8.960 min Scan# 1285
Delta R.T. 0.005 min
Lab File: x072347.d
Acq: 11 Aug 2020 8:35 pm

Tgt Ion:152 Resp: 240529

Ion	Ratio	Lower	Upper
152	100		
150	14.2	0.0	44.3
153	12.8	0.0	43.3

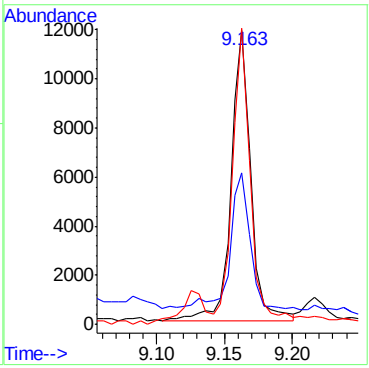


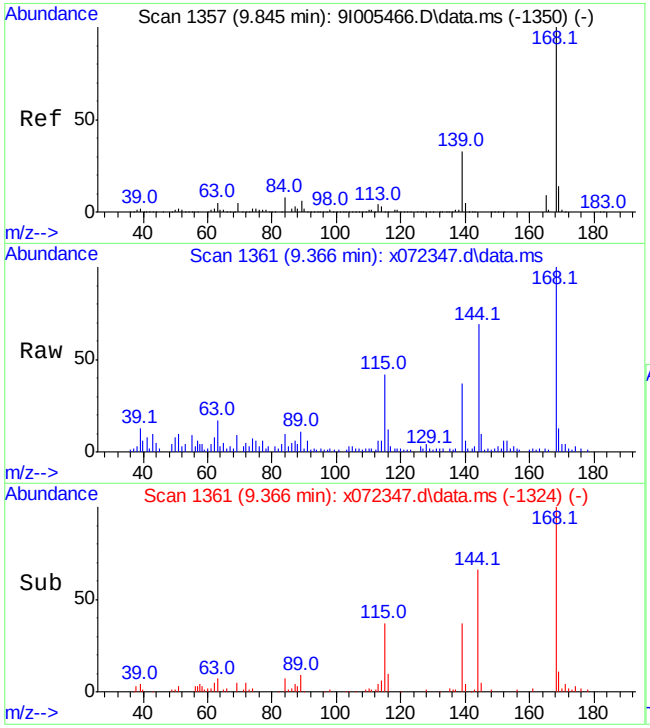


#57
Acenaphthene
Concen: 1.19 ppm
RT: 9.163 min Scan# 1323
Delta R.T. -0.000 min
Lab File: x072347.d
Acq: 11 Aug 2020 8:35 pm

Tgt Ion:153 Resp: 12139

Ion	Ratio	Lower	Upper
153	100		
152	47.3	18.4	78.4
154	101.1	62.4	122.4

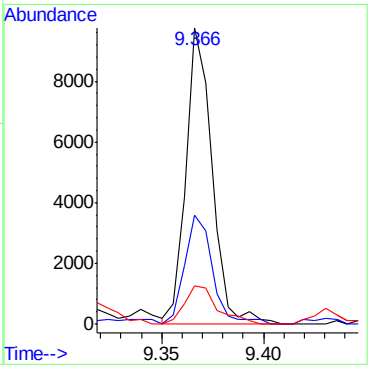


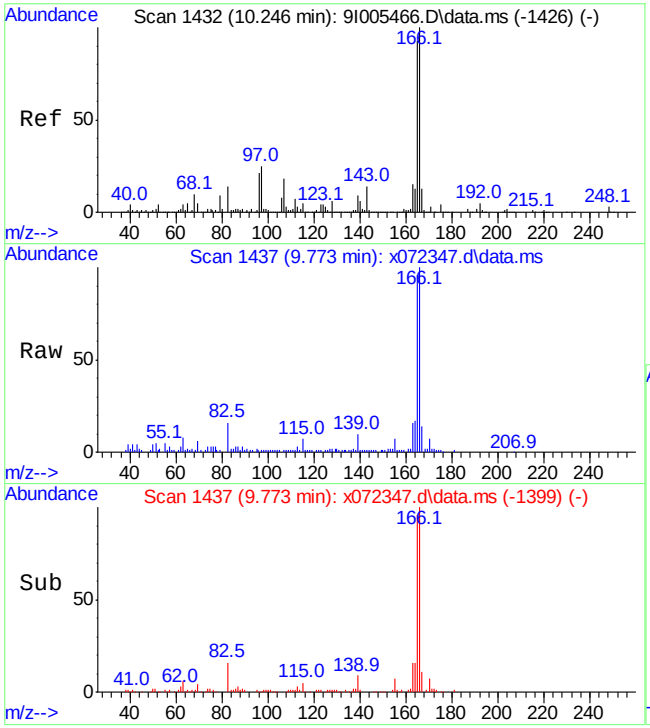


#60
Dibenzofuran
Concen: 0.64 ppm
RT: 9.366 min Scan# 1361
Delta R.T. -0.000 min
Lab File: x072347.d
Acq: 11 Aug 2020 8:35 pm

Tgt Ion:168 Resp: 8693

Ion	Ratio	Lower	Upper
168	100		
139	37.0	3.0	63.0
169	13.1	0.0	43.5

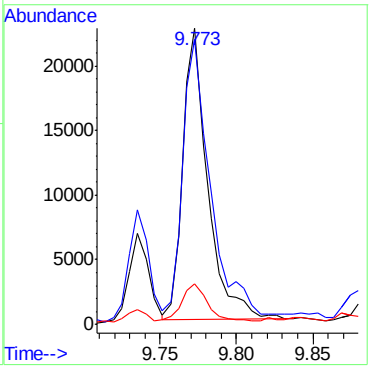


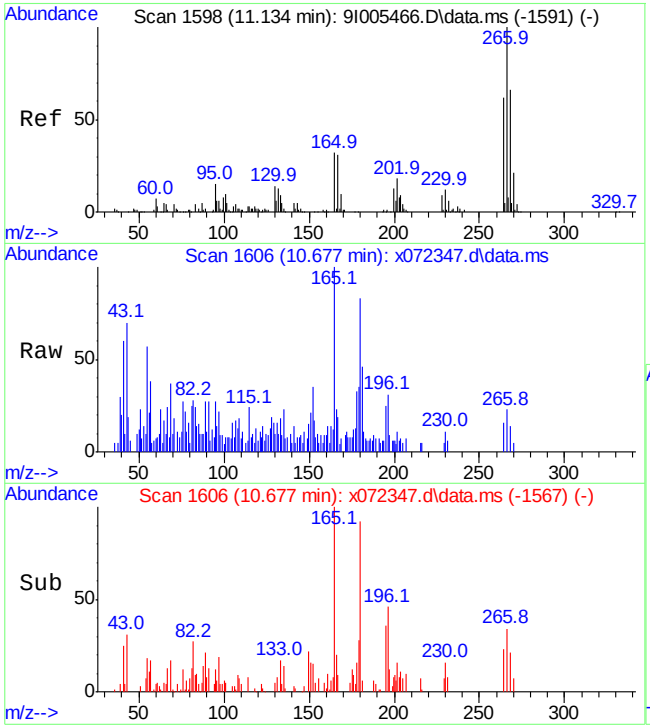


#65
Fluorene
Concen: 2.42 ppm
RT: 9.773 min Scan# 1437
Delta R.T. 0.005 min
Lab File: x072347.d
Acq: 11 Aug 2020 8:35 pm

Tgt Ion:166 Resp: 25689

Ion	Ratio	Lower	Upper
166	100		
165	94.6	62.7	122.7
167	12.1	0.0	43.5

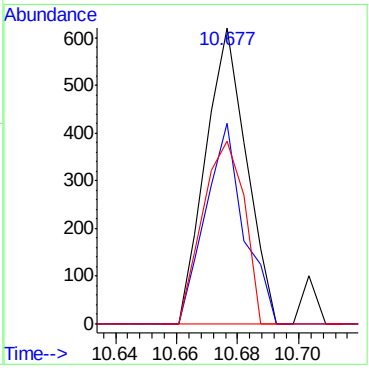


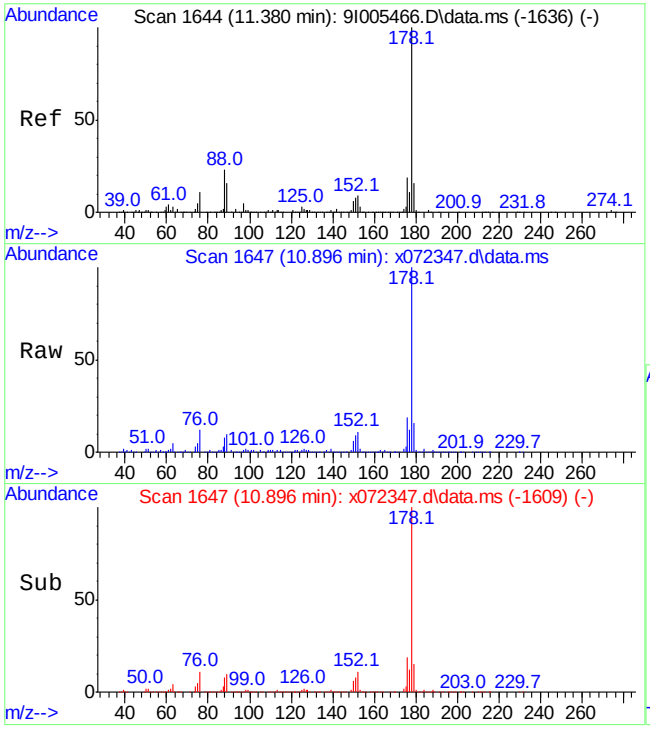


#83
Pentachlorophenol
Concen: 0.42 ppm
RT: 10.677 min Scan# 1606
Delta R.T. 0.011 min
Lab File: x072347.d
Acq: 11 Aug 2020 8:35 pm

Tgt Ion:266 Resp: 575

Ion	Ratio	Lower	Upper
266	100		
264	67.9	31.8	91.8
268	61.6	35.6	95.6

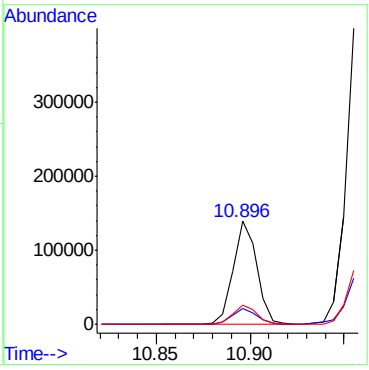


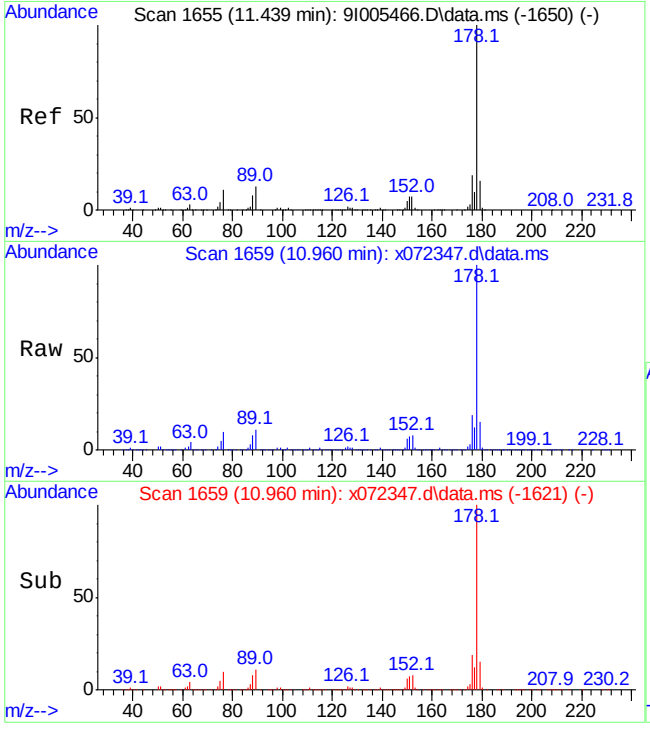


#84
Phenanthrene
Concen: 7.54 ppm
RT: 10.896 min Scan# 1647
Delta R.T. 0.005 min
Lab File: x072347.d
Acq: 11 Aug 2020 8:35 pm

Tgt Ion:178 Resp: 120957

Ion	Ratio	Lower	Upper
178	100		
179	15.5	0.0	45.8
176	18.7	0.0	49.3

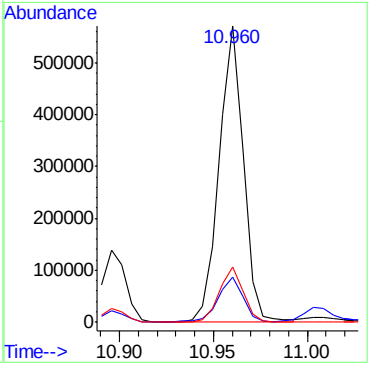


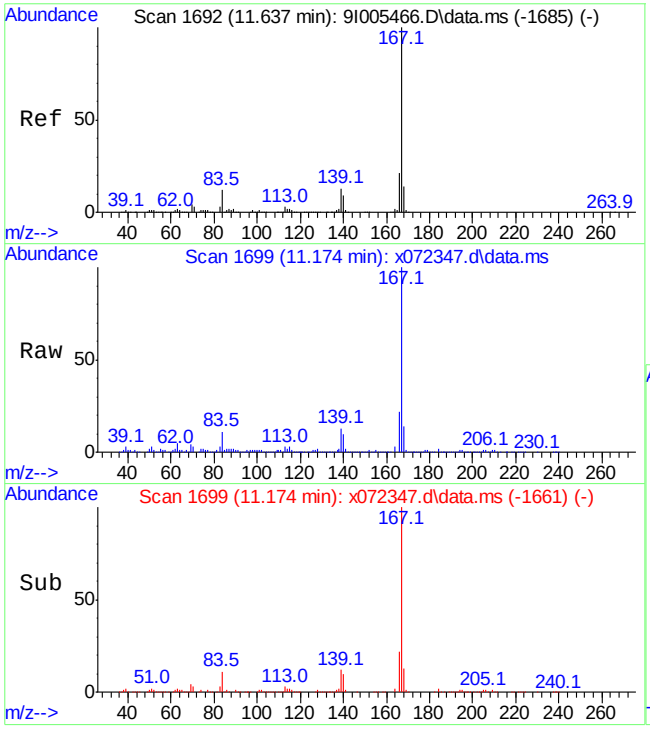


#85
Anthracene
Concen: 30.40 ppm
RT: 10.960 min Scan# 1659
Delta R.T. 0.005 min
Lab File: x072347.d
Acq: 11 Aug 2020 8:35 pm

Tgt Ion:178 Resp: 508411

Ion	Ratio	Lower	Upper
178	100		
179	14.8	0.0	46.0
176	18.5	0.0	49.3

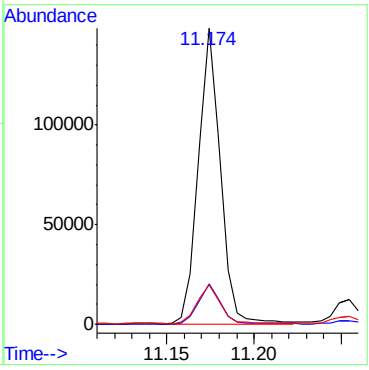


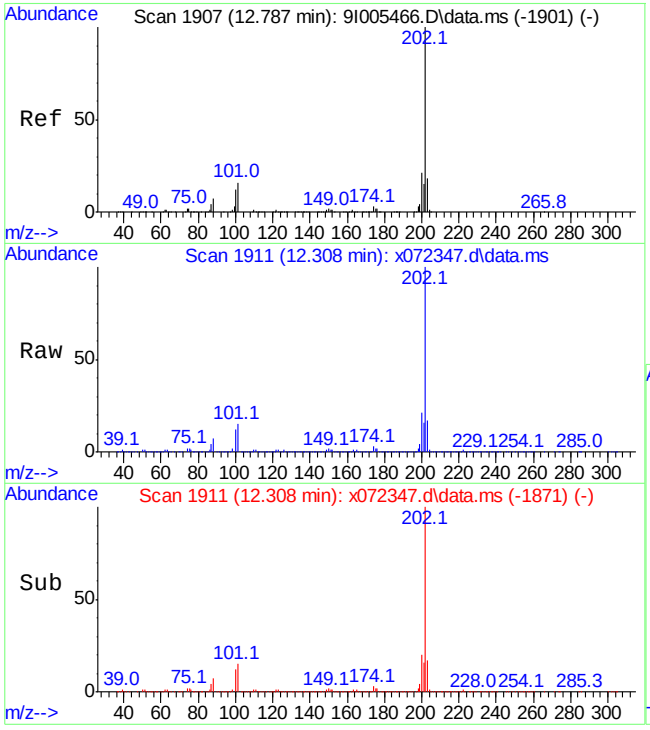


#87
Carbazole
Concen: 8.84 ppm
RT: 11.174 min Scan# 1699
Delta R.T. 0.005 min
Lab File: x072347.d
Acq: 11 Aug 2020 8:35 pm

Tgt Ion:167 Resp: 130490

Ion	Ratio	Lower	Upper
167	100		
168	13.6	0.0	43.9
139	13.0	0.0	42.7

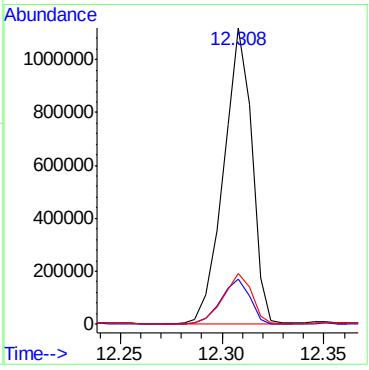


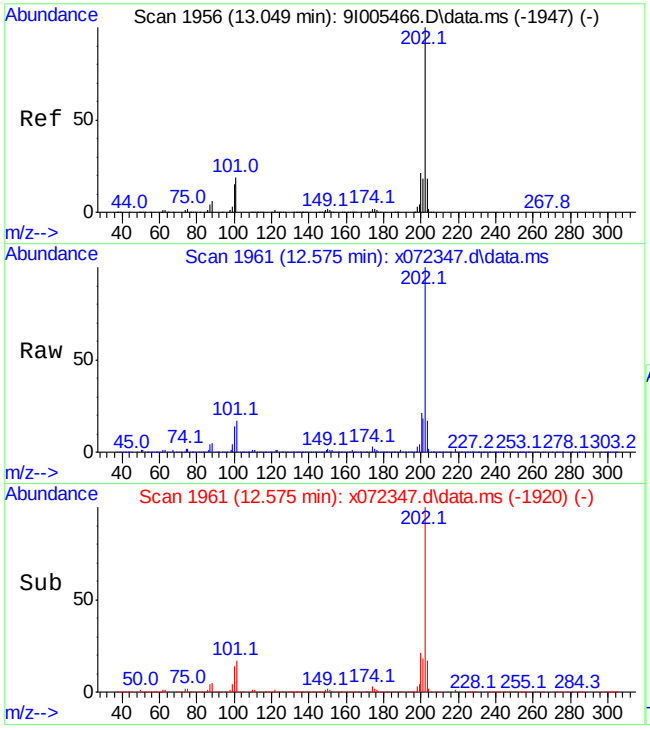


#91
Fluoranthene
Concen: 72.69 ppm
RT: 12.308 min Scan# 1911
Delta R.T. 0.016 min
Lab File: x072347.d
Acq: 11 Aug 2020 8:35 pm

Tgt Ion:202 Resp: 1082416

Ion	Ratio	Lower	Upper
202	100		
101	15.2	0.0	45.8
203	17.1	0.0	48.1

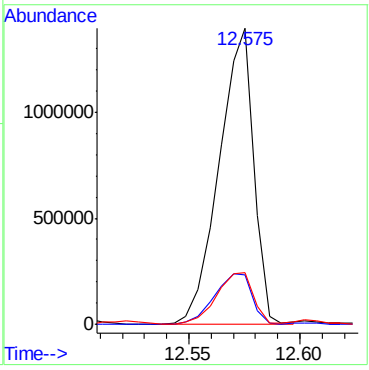


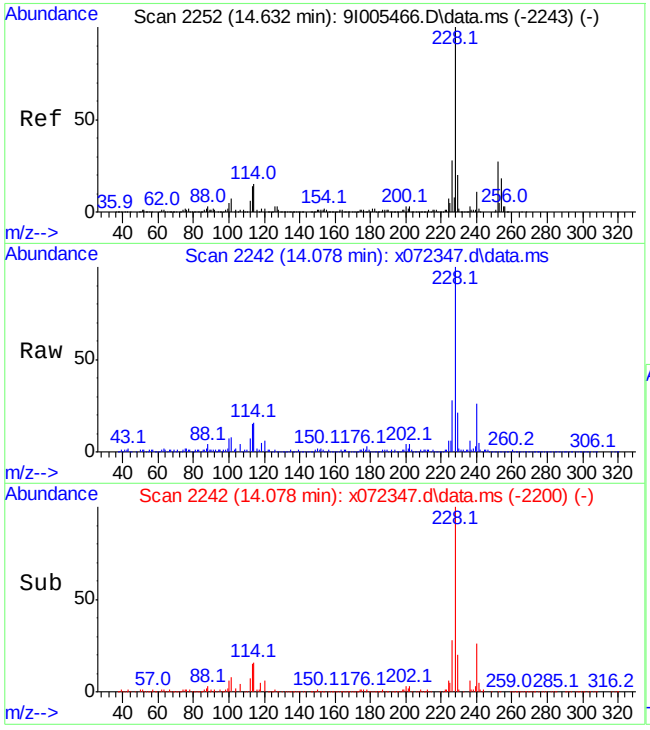


#94
Pyrene
Concen: 84.36 ppm
RT: 12.575 min Scan# 1961
Delta R.T. 0.021 min
Lab File: x072347.d
Acq: 11 Aug 2020 8:35 pm

Tgt Ion:202 Resp: 1507662

Ion	Ratio	Lower	Upper
202	100		
101	16.6	0.0	48.7
203	16.9	0.0	48.4

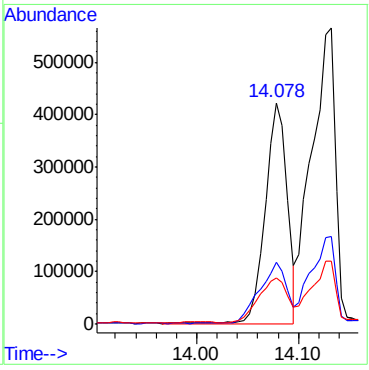


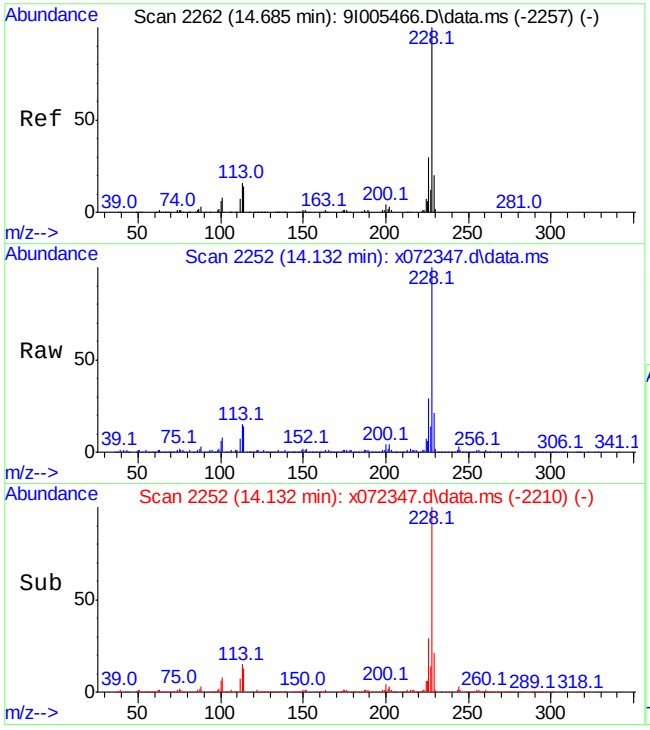


#99
Benzo[a]anthracene
Concen: 46.52 ppm
RT: 14.078 min Scan# 2242
Delta R.T. 0.027 min
Lab File: x072347.d
Acq: 11 Aug 2020 8:35 pm

Tgt Ion:228 Resp: 629310

Ion	Ratio	Lower	Upper
228	100		
226	27.8	0.0	57.5
229	19.6	0.0	49.9

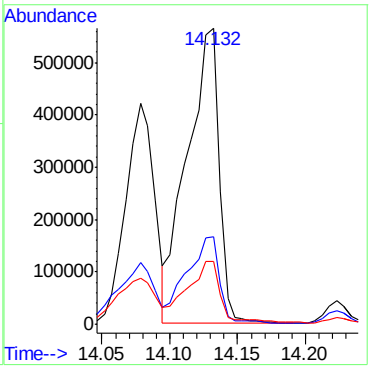


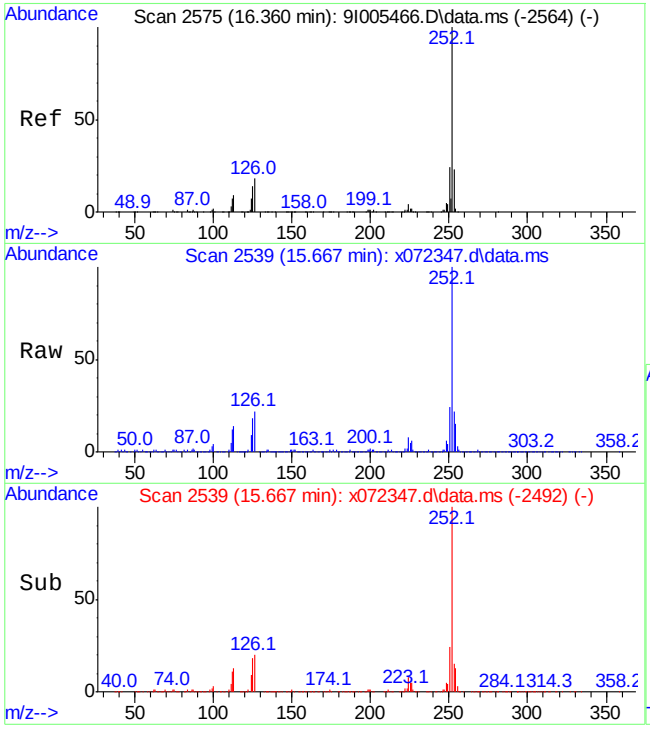


#100
Chrysene
Concen: 63.98 ppm
RT: 14.132 min Scan# 2252
Delta R.T. 0.027 min
Lab File: x072347.d
Acq: 11 Aug 2020 8:35 pm

Tgt Ion:228 Resp: 921683

Ion	Ratio	Lower	Upper
228	100		
226	29.3	0.4	60.4
229	20.2	0.0	50.1

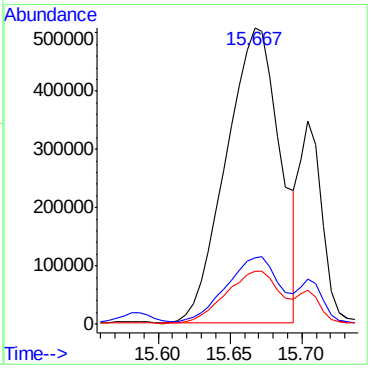


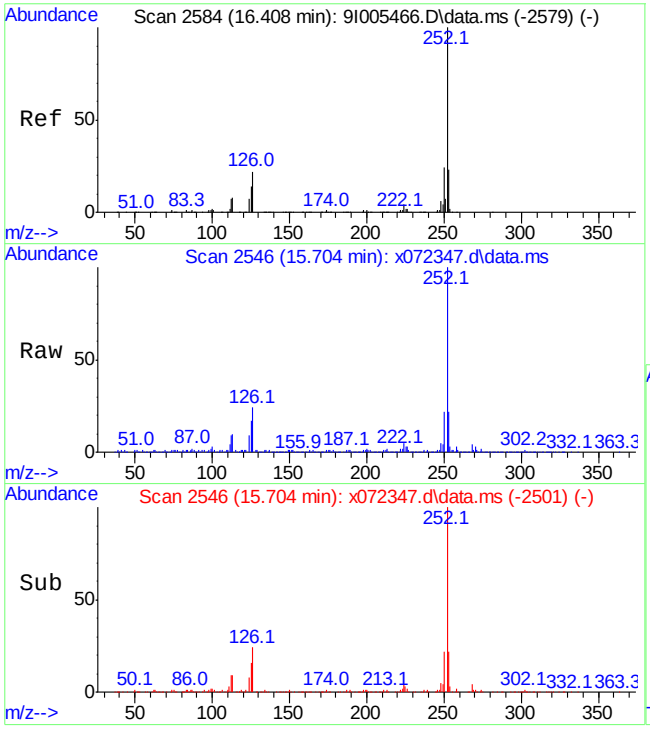


#104
Benzo[b]fluoranthene
Concen: 111.34 ppm
RT: 15.667 min Scan# 2539
Delta R.T. 0.053 min
Lab File: x072347.d
Acq: 11 Aug 2020 8:35 pm

Tgt Ion:252 Resp: 1324481

Ion	Ratio	Lower	Upper
252	100		
253	21.5	0.0	52.5
125	17.8	0.0	44.0

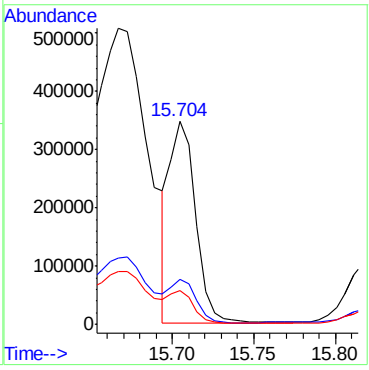


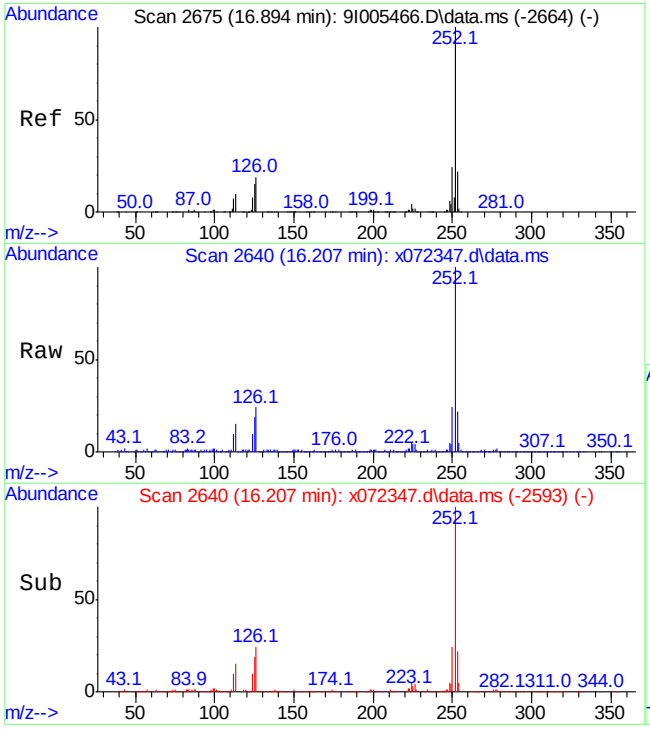


#105
Benzo[k]fluoranthene
Concen: 30.51 ppm
RT: 15.704 min Scan# 2546
Delta R.T. 0.043 min
Lab File: x072347.d
Acq: 11 Aug 2020 8:35 pm

Tgt Ion:252 Resp: 384396

Ion	Ratio	Lower	Upper
252	100		
253	21.5	0.0	52.5
125	15.6	0.0	44.4

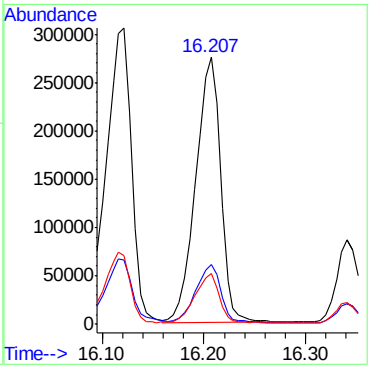


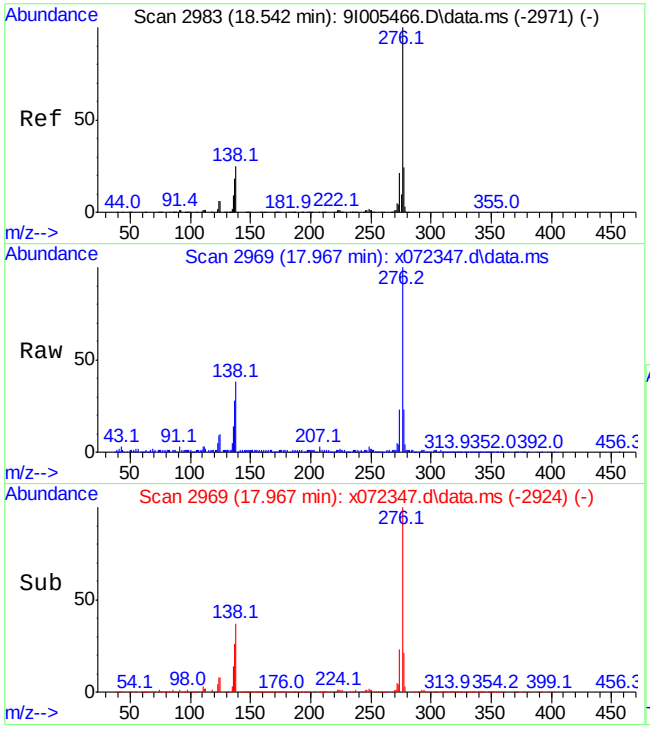


#106
Benzo[a]pyrene
Concen: 46.24 ppm
RT: 16.207 min Scan# 2640
Delta R.T. 0.053 min
Lab File: x072347.d
Acq: 11 Aug 2020 8:35 pm

Tgt Ion:252 Resp: 463851

Ion	Ratio	Lower	Upper
252	100		
253	21.7	0.0	52.3
125	18.6	0.0	44.7

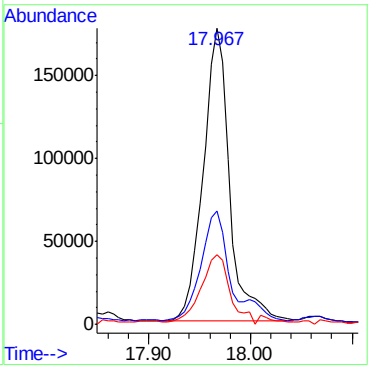


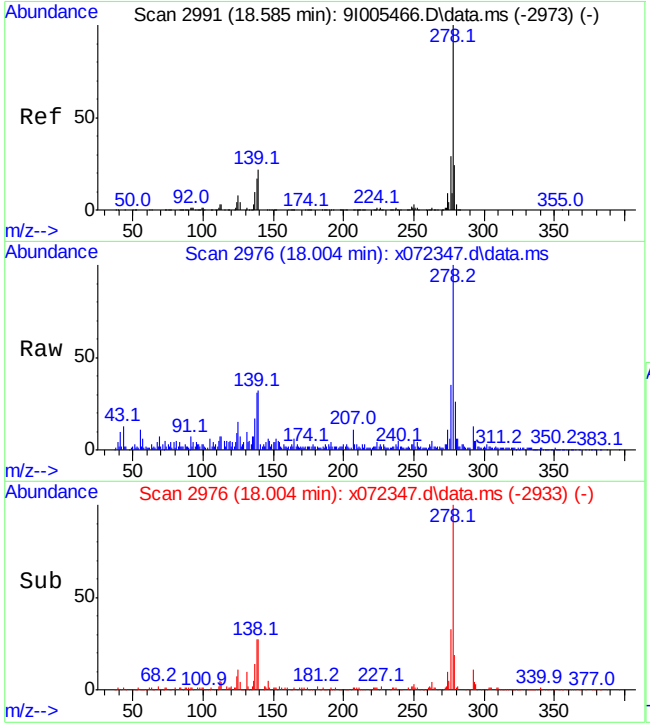


#107
Indeno[1,2,3-cd]pyrene
Concen: 46.57 ppm
RT: 17.967 min Scan# 2969
Delta R.T. 0.043 min
Lab File: x072347.d
Acq: 11 Aug 2020 8:35 pm

Tgt Ion:276 Resp: 317065

Ion	Ratio	Lower	Upper
276	100		
138	37.5	0.0	54.7
277	22.8	0.0	53.8

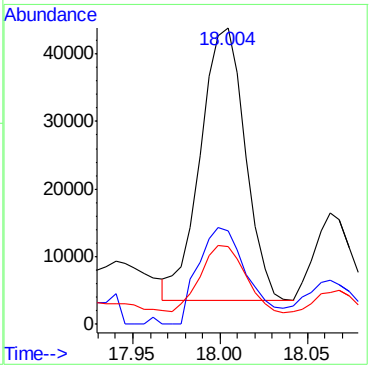


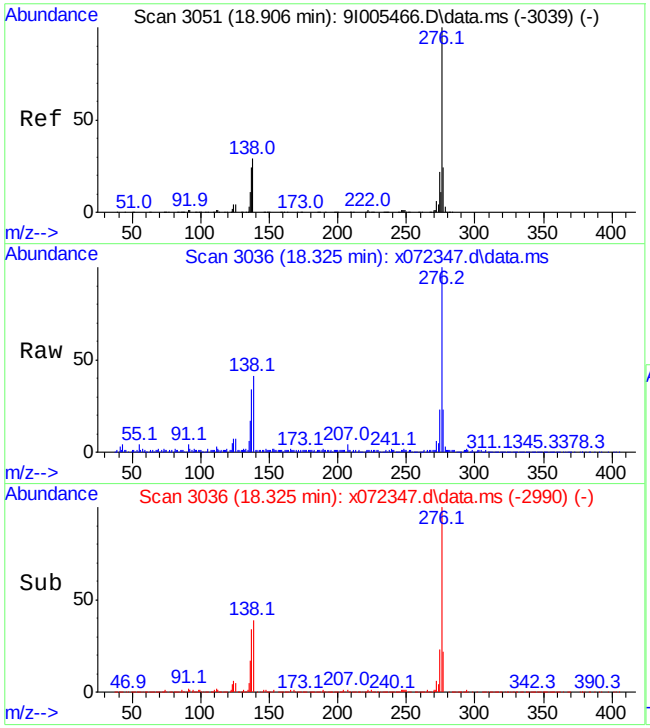


#108
Dibenz[a,h]anthracene
Concen: 11.90 ppm
RT: 18.004 min Scan# 2976
Delta R.T. 0.032 min
Lab File: x072347.d
Acq: 11 Aug 2020 8:35 pm

Tgt Ion:278 Resp: 72082

Ion	Ratio	Lower	Upper
278	100		
139	32.2	0.0	52.4
279	24.7	0.0	54.4

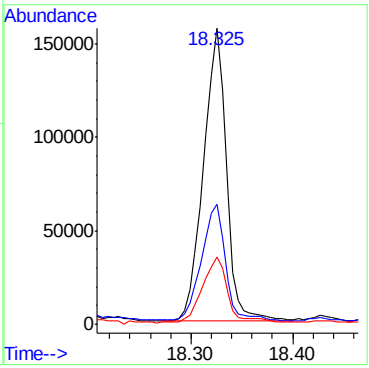




#109
Benzo[g,h,i]perylene
Concen: 27.13 ppm
RT: 18.325 min Scan# 3036
Delta R.T. 0.048 min
Lab File: x072347.d
Acq: 11 Aug 2020 8:35 pm

Tgt Ion:276 Resp: 243927

Ion	Ratio	Lower	Upper
276	100		
138	39.6	0.0	59.4
277	22.4	0.0	54.1



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072371.D
Acq On : 12 Aug 2020 4:25 pm
Operator : marthav
Sample : fa77581-1 E,2 Inst : MSBNA05
Misc : op81482,sx2951,30.1,,,1,2,soil
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Aug 12 17:26:26 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.654	152	161487	40.00	ppm	0.00
22) Naphthalene-d8	7.077	136	577827	40.00	ppm	0.00
43) Acenaphthene-d10	9.115	164	278663	40.00	ppm	0.00
70) Phenanthrene-d10	10.859	188	470342	40.00	ppm	0.00
92) Chrysene-d12	14.073	240	403060	40.00	ppm	0.00
102) Perylene-d12	16.271	264	331354	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	5.654	152	161487	40.00	ppm	0.00
120) Naphthalene-d8A	7.077	136	577827	40.00	ppm	0.00
127) Acenaphthene-d10A	9.115	164	278663	40.00	ppm	0.00
136) Phenanthrene-d10A	10.859	188	470342	40.00	ppm	0.00
146) Chrysene-d12A	14.073	240	403060	40.00	ppm	0.00
153) Perylene-d12A	16.271	264	331354	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	4.312	112	197377	34.09	ppm	0.00
Spiked Amount 100.000	Range 40 - 102		Recovery = 34.09%#			
9) Phenol-d5	5.333	99	239600	34.78	ppm	0.00
Spiked Amount 100.000	Range 41 - 100		Recovery = 34.78%#			
23) Nitrobenzene-d5	6.269	82	101546	17.02	ppm	0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 34.04%#			
47) 2-Fluorobiphenyl	8.345	172	178910	17.74	ppm	0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 35.48%#			
75) 2,4,6-Tribromophenol	10.051	330	34895	37.60	ppm	0.00
Spiked Amount 100.000	Range 42 - 108		Recovery = 37.60%#			
95) Terphenyl-d14	12.779	244	176927	16.52	ppm	0.00
Spiked Amount 50.000	Range 45 - 119		Recovery = 33.04%#			
Target Compounds						Qvalue
34) Naphthalene	7.098	128	5730	0.37	ppm	97
40) 2-Methylnaphthalene	7.901	142	3463	0.33	ppm	95
41) 1-Methylnaphthalene	8.013	142	2076	0.21	ppm	95
52) Acenaphthylene	8.944	152	94225	6.77	ppm	100
57) Acenaphthene	9.152	153	4784	0.52	ppm	95
60) Dibenzofuran	9.356	168	3601	0.29	ppm	93
65) Fluorene	9.757	166	11202	1.16	ppm	94
84) Phenanthrene	10.885	178	49399	3.48	ppm	98
85) Anthracene	10.944	178	178915	12.08	ppm	97
87) Carbazole	11.163	167	50899	3.89	ppm	98
91) Fluoranthene	12.292	202	428599	32.50	ppm	98
94) Pyrene	12.554	202	621198	37.12	ppm	99
99) Benzo[a]anthracene	14.057	228	251187	19.83	ppm	99
100) Chrysene	14.105	228	394251	29.22	ppm	98
104) Benzo[b]fluoranthene	15.635	252	531871	53.63	ppm	96
105) Benzo[k]fluoranthene	15.667	252	171909	14.61	ppm	97
106) Benzo[a]pyrene	16.170	252	190131	21.49	ppm	96
107) Indeno[1,2,3-cd]pyrene	17.935	276	134262	24.30	ppm	87
108) Dibenz[a,h]anthracene	17.972	278	29599	5.52	ppm	88
109) Benzo[g,h,i]perylene	18.293	276	106031	13.38	ppm	88

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072371.D
Acq On : 12 Aug 2020 4:25 pm
Operator : marthav
Sample : fa77581-1 E,2 Inst : MSBNA05
Misc : op81482,sx2951,30.1,,,1,2,soil
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Aug 12 17:26:26 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration

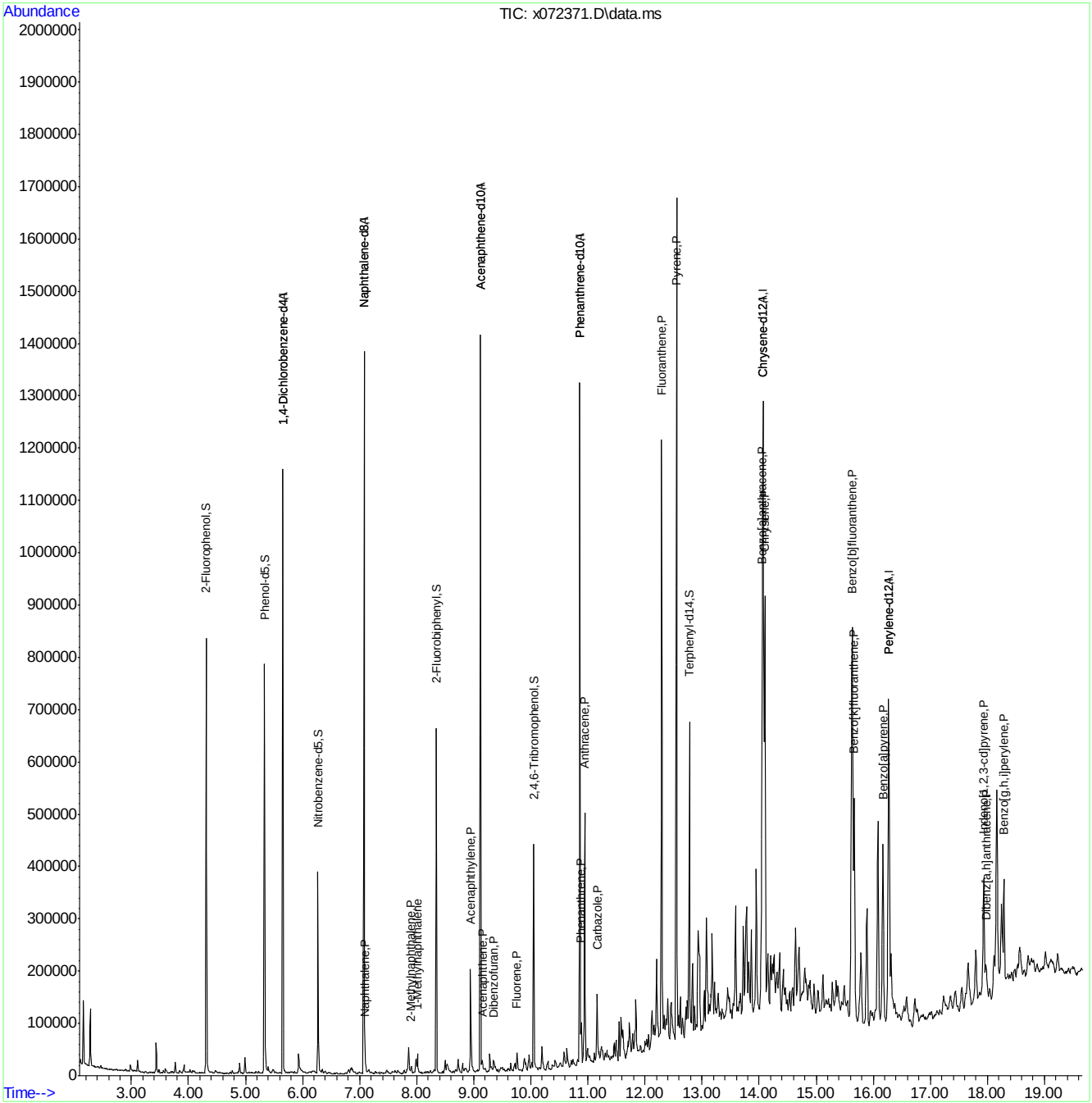
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

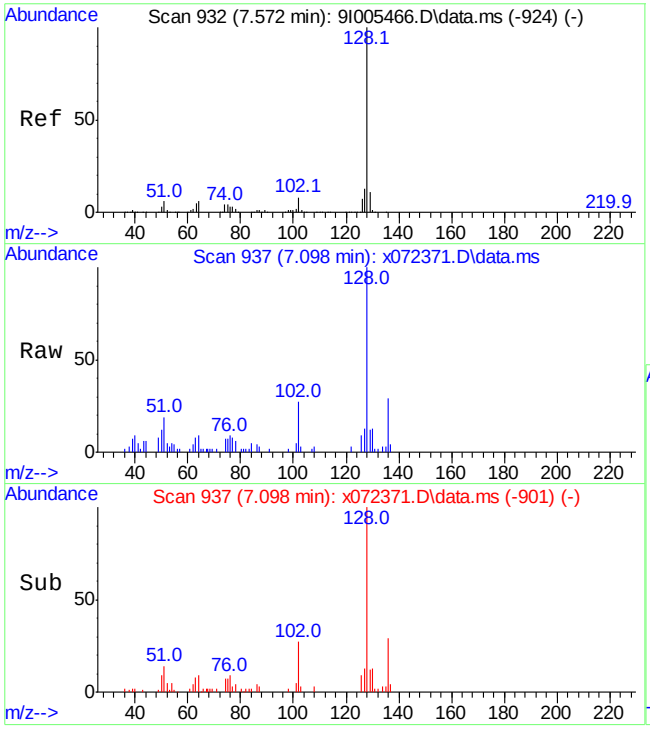
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072371.D
Acq On : 12 Aug 2020 4:25 pm
Operator : marthav
Sample : fa77581-1 E,2 Inst : MSBNA05
Misc : op81482,sx2951,30.1,,,1,2,soil
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Aug 12 17:26:26 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration

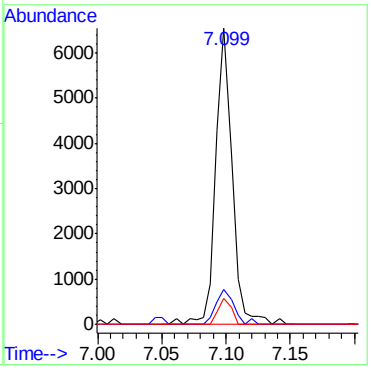


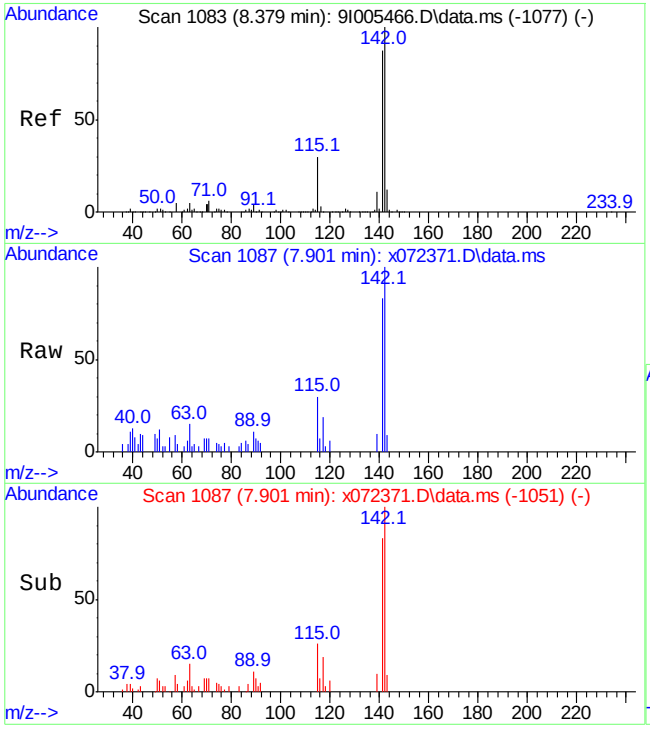


#34
Naphthalene
Concen: 0.37 ppm
RT: 7.098 min Scan# 937
Delta R.T. -0.005 min
Lab File: x072371.D
Acq: 12 Aug 2020 4:25 pm

Tgt Ion:128 Resp: 5730

Ion	Ratio	Lower	Upper
128	100		
129	10.5	0.0	41.4
126	8.6	0.0	37.4

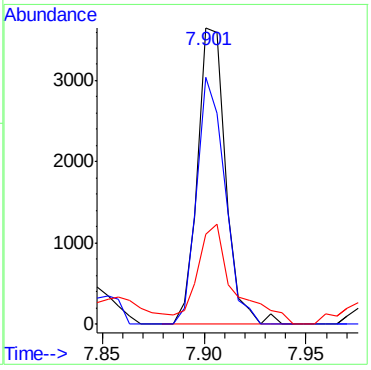


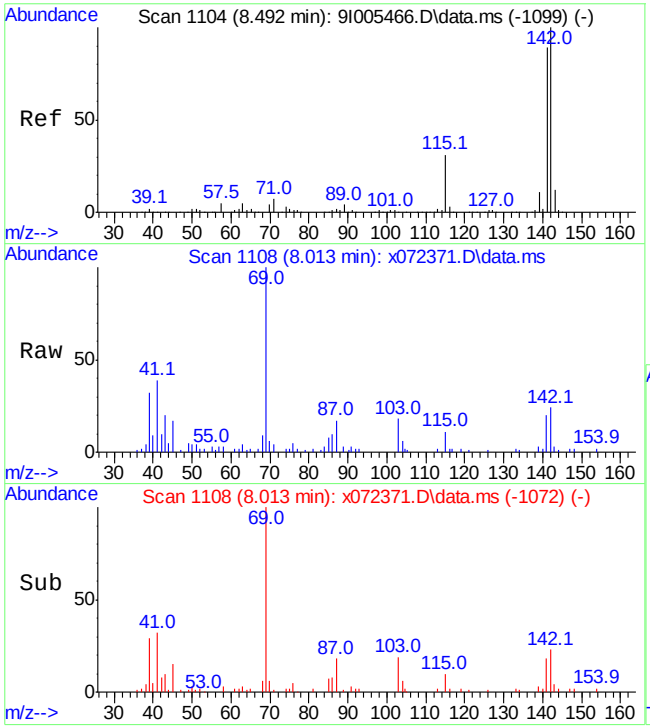


#40
2-Methylnaphthalene
Concen: 0.33 ppm
RT: 7.901 min Scan# 1087
Delta R.T. -0.005 min
Lab File: x072371.D
Acq: 12 Aug 2020 4:25 pm

Tgt Ion:142 Resp: 3463

Ion	Ratio	Lower	Upper
142	100		
141	83.4	56.8	116.8
115	26.1	0.0	60.0

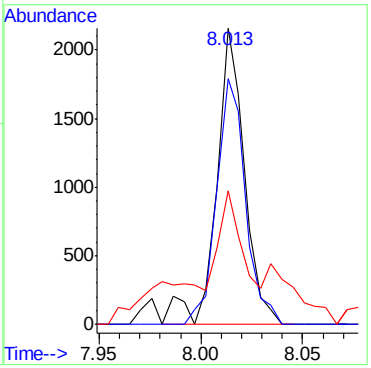


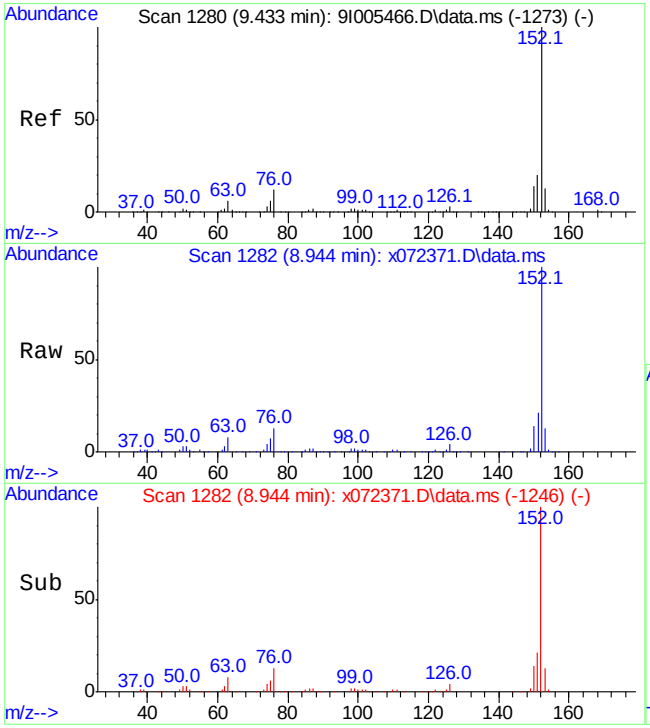


#41
1-Methylnaphthalene
Concen: 0.21 ppm
RT: 8.013 min Scan# 1108
Delta R.T. -0.005 min
Lab File: x072371.D
Acq: 12 Aug 2020 4:25 pm

Tgt Ion:142 Resp: 2076

Ion	Ratio	Lower	Upper
142	100		
141	83.0	59.0	119.0
115	31.6	1.1	61.1

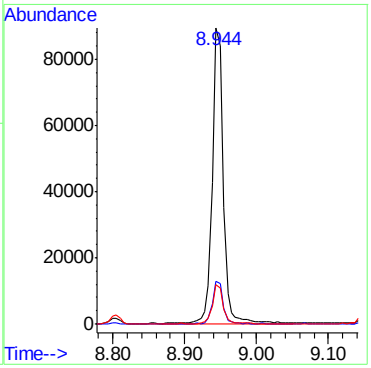


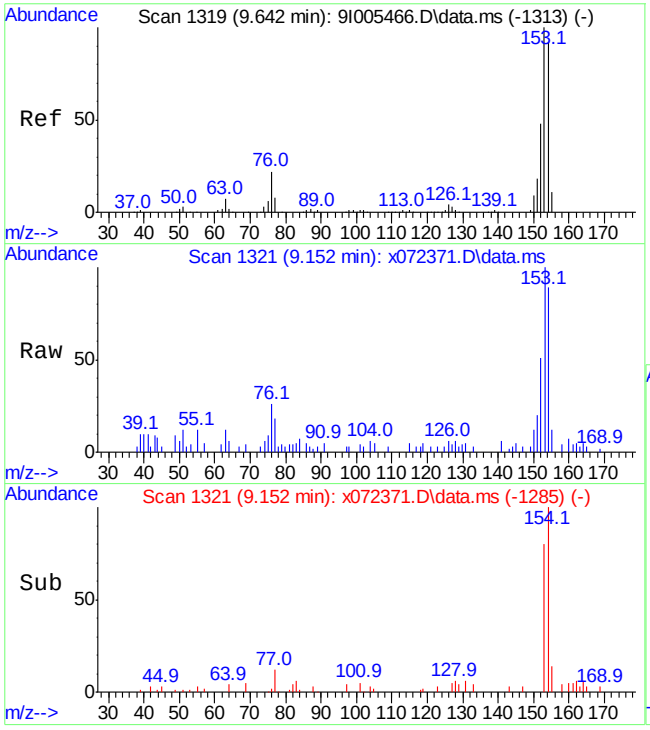


#52
Acenaphthylene
Concen: 6.77 ppm
RT: 8.944 min Scan# 1282
Delta R.T. -0.005 min
Lab File: x072371.D
Acq: 12 Aug 2020 4:25 pm

Tgt Ion:152 Resp: 94225

Ion	Ratio	Lower	Upper
152	100		
150	14.3	0.0	44.3
153	13.2	0.0	43.3

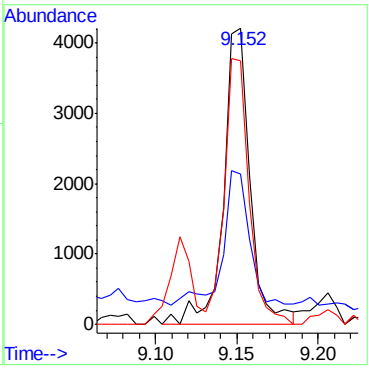


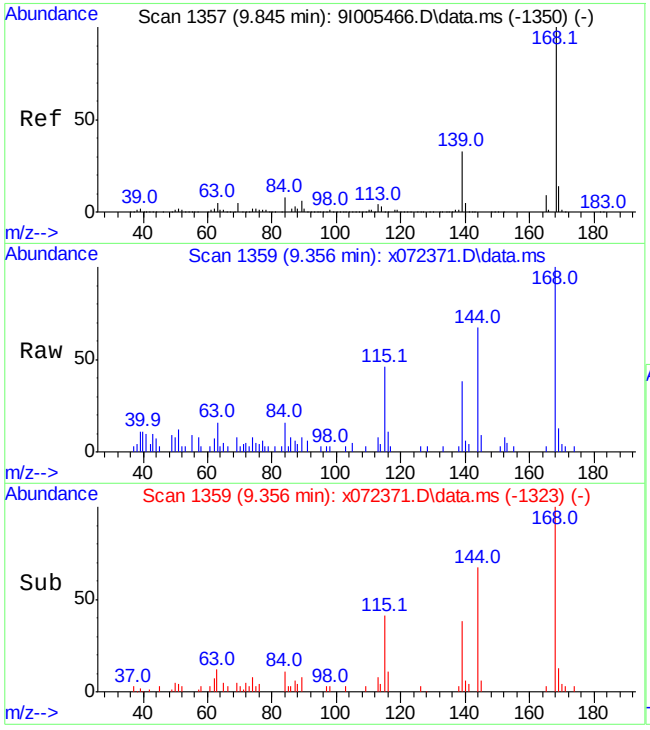


#57
Acenaphthene
Concen: 0.52 ppm
RT: 9.152 min Scan# 1321
Delta R.T. -0.005 min
Lab File: x072371.D
Acq: 12 Aug 2020 4:25 pm

Tgt Ion:153 Resp: 4784

Ion	Ratio	Lower	Upper
153	100		
152	44.4	18.4	78.4
154	87.9	62.4	122.4

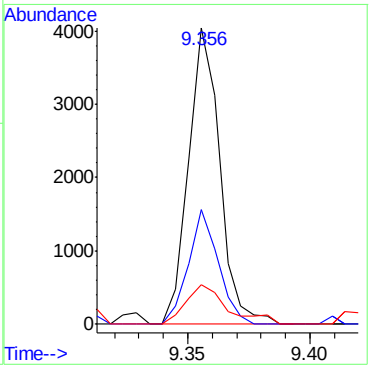


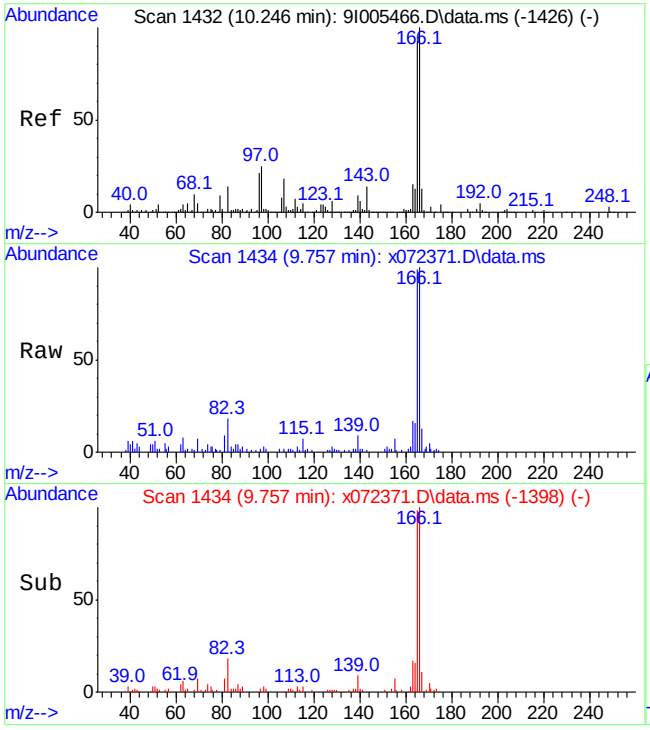


#60
Dibenzofuran
Concen: 0.29 ppm
RT: 9.356 min Scan# 1359
Delta R.T. -0.005 min
Lab File: x072371.D
Acq: 12 Aug 2020 4:25 pm

Tgt Ion:168 Resp: 3601

Ion	Ratio	Lower	Upper
168	100		
139	38.5	3.0	63.0
169	13.4	0.0	43.5

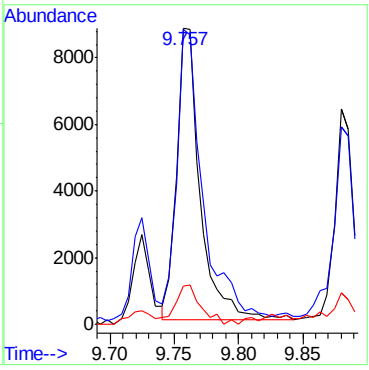


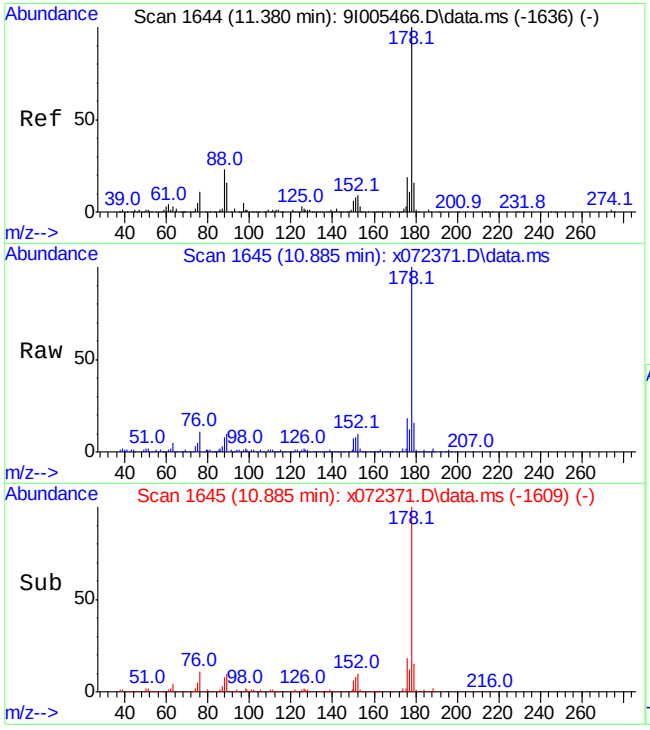


#65
Fluorene
Concen: 1.16 ppm
RT: 9.757 min Scan# 1434
Delta R.T. -0.005 min
Lab File: x072371.D
Acq: 12 Aug 2020 4:25 pm

Tgt Ion:166 Resp: 11202

Ion	Ratio	Lower	Upper
166	100		
165	98.4	62.7	122.7
167	11.4	0.0	43.5

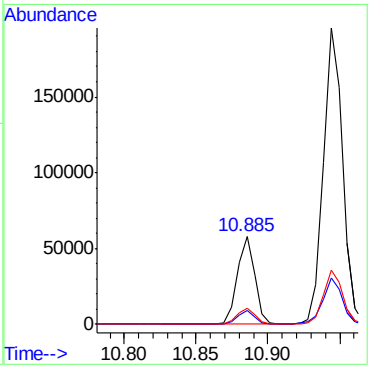


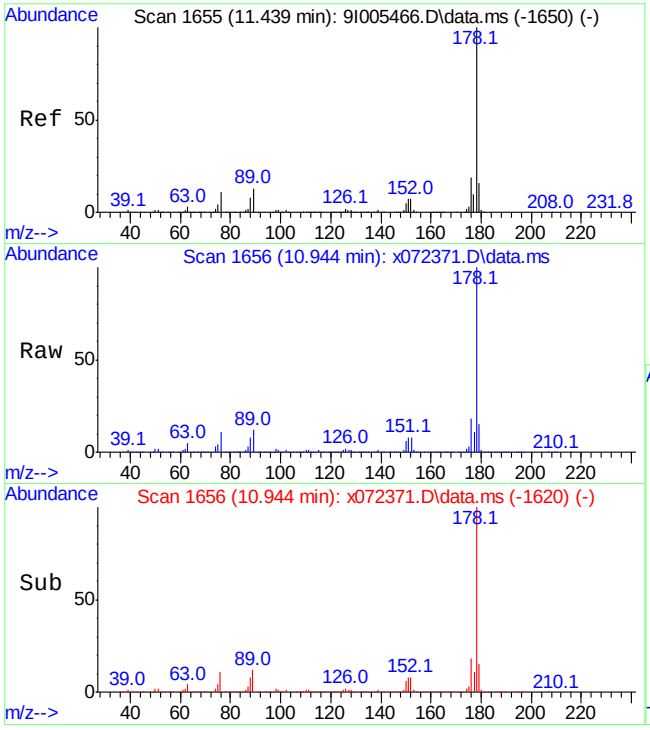


#84
Phenanthrene
Concen: 3.48 ppm
RT: 10.885 min Scan# 1645
Delta R.T. -0.005 min
Lab File: x072371.D
Acq: 12 Aug 2020 4:25 pm

Tgt Ion:178 Resp: 49399

Ion	Ratio	Lower	Upper
178	100		
179	15.1	0.0	45.8
176	18.0	0.0	49.3

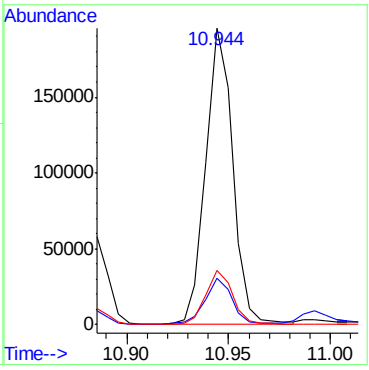


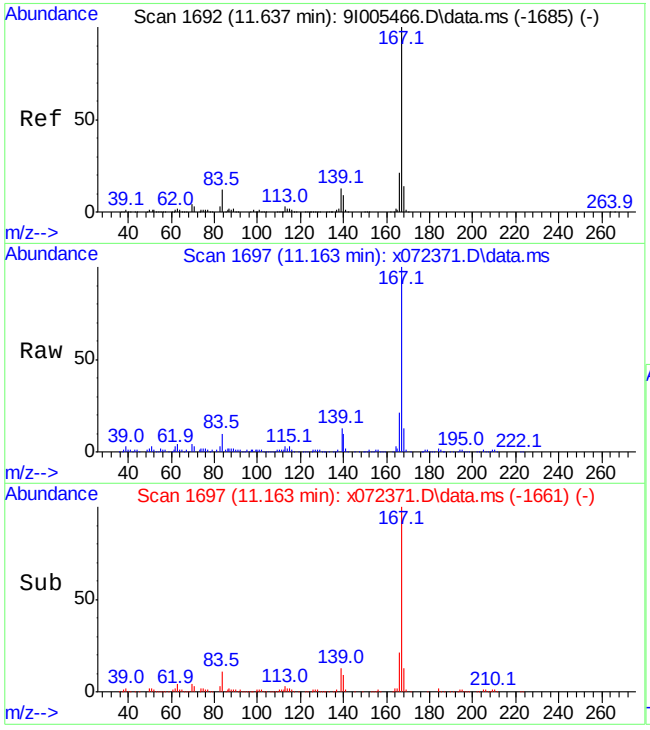


#85
Anthracene
Concen: 12.08 ppm
RT: 10.944 min Scan# 1656
Delta R.T. -0.005 min
Lab File: x072371.D
Acq: 12 Aug 2020 4:25 pm

Tgt Ion:178 Resp: 178915

Ion	Ratio	Lower	Upper
178	100		
179	14.8	0.0	46.0
176	18.1	0.0	49.3

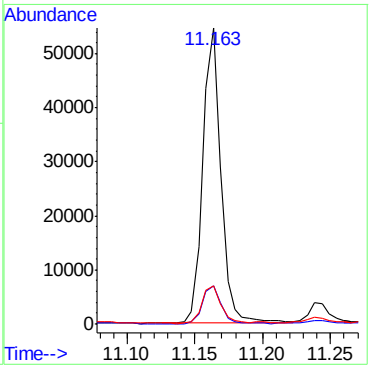


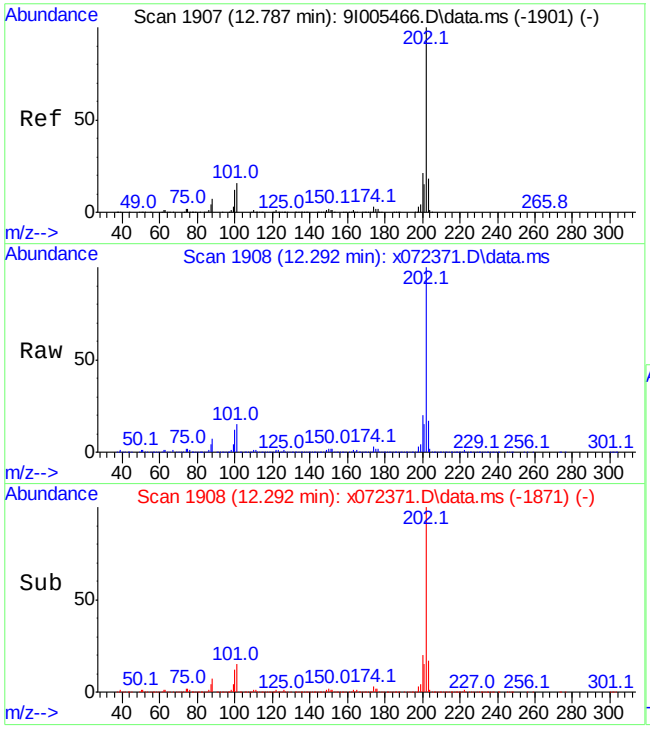


#87
Carbazole
Concen: 3.89 ppm
RT: 11.163 min Scan# 1697
Delta R.T. -0.005 min
Lab File: x072371.D
Acq: 12 Aug 2020 4:25 pm

Tgt Ion:167 Resp: 50899

Ion	Ratio	Lower	Upper
167	100		
168	12.9	0.0	43.9
139	12.2	0.0	42.7

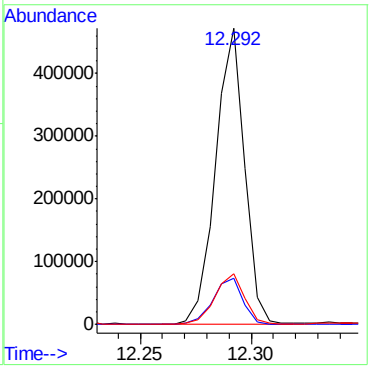


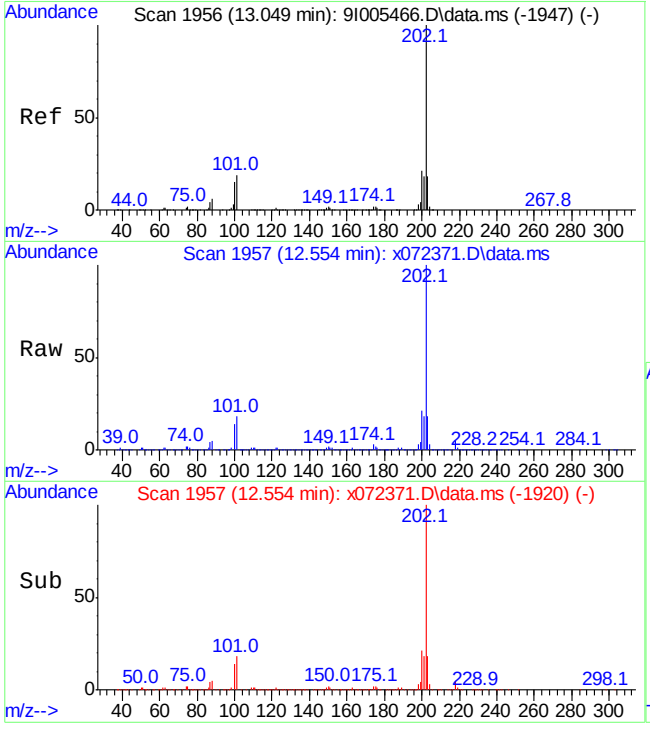


#91
Fluoranthene
Concen: 32.50 ppm
RT: 12.292 min Scan# 1908
Delta R.T. -0.000 min
Lab File: x072371.D
Acq: 12 Aug 2020 4:25 pm

Tgt Ion:202 Resp: 428599

Ion	Ratio	Lower	Upper
202	100		
101	15.4	0.0	45.8
203	17.1	0.0	48.1

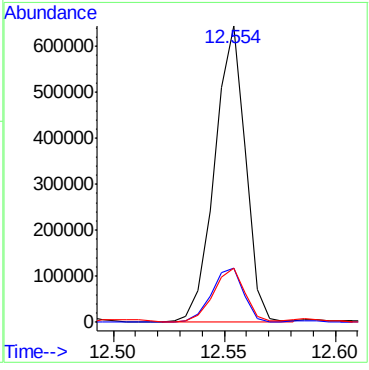


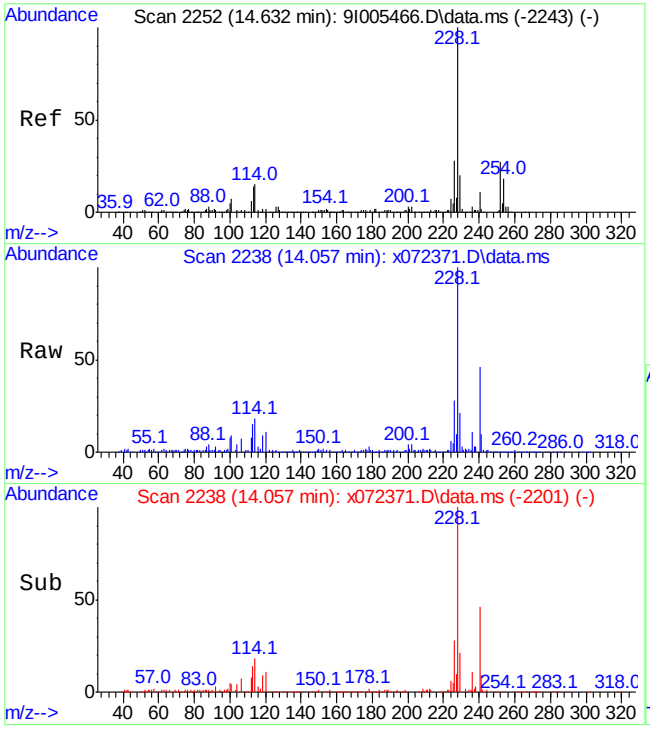


#94
Pyrene
Concen: 37.12 ppm
RT: 12.554 min Scan# 1957
Delta R.T. -0.000 min
Lab File: x072371.D
Acq: 12 Aug 2020 4:25 pm

Tgt Ion:202 Resp: 621198

Ion	Ratio	Lower	Upper
202	100		
101	18.2	0.0	48.7
203	18.0	0.0	48.4

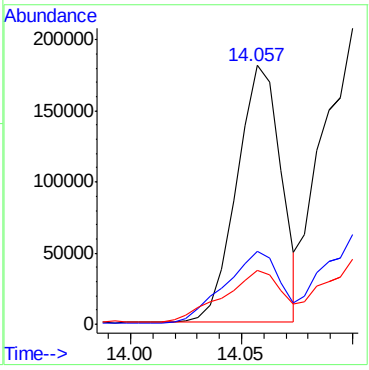


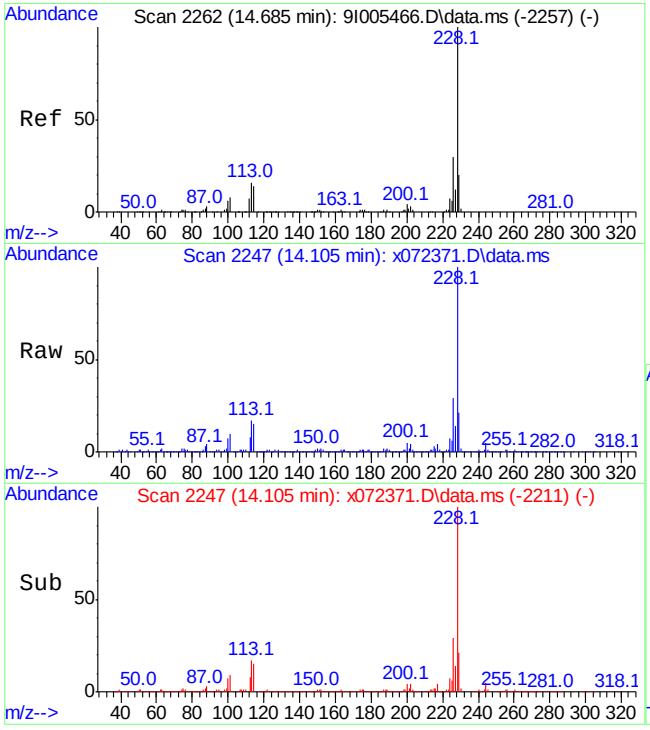


#99
Benzo[a]anthracene
Concen: 19.83 ppm
RT: 14.057 min Scan# 2238
Delta R.T. -0.000 min
Lab File: x072371.D
Acq: 12 Aug 2020 4:25 pm

Tgt Ion:228 Resp: 251187

Ion	Ratio	Lower	Upper
228	100		
226	27.9	0.0	57.5
229	19.0	0.0	49.9

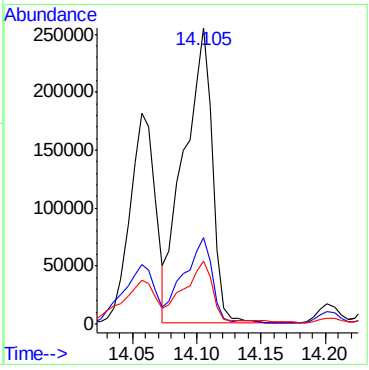


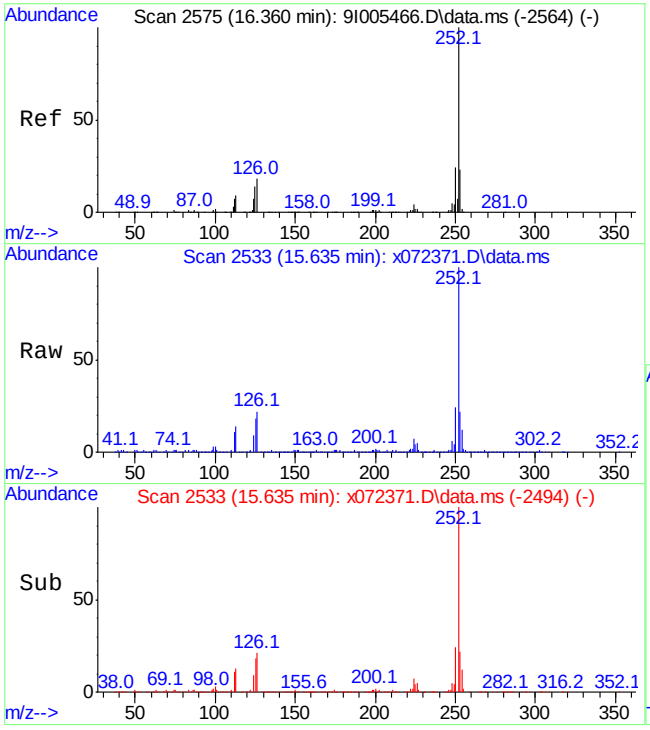


#100
Chrysene
Concen: 29.22 ppm
RT: 14.105 min Scan# 2247
Delta R.T. -0.005 min
Lab File: x072371.D
Acq: 12 Aug 2020 4:25 pm

Tgt Ion:228 Resp: 394251

Ion	Ratio	Lower	Upper
228	100		
226	29.2	0.4	60.4
229	20.4	0.0	50.1

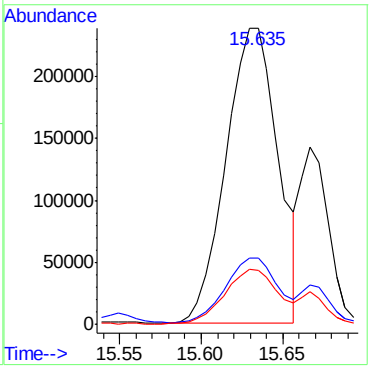


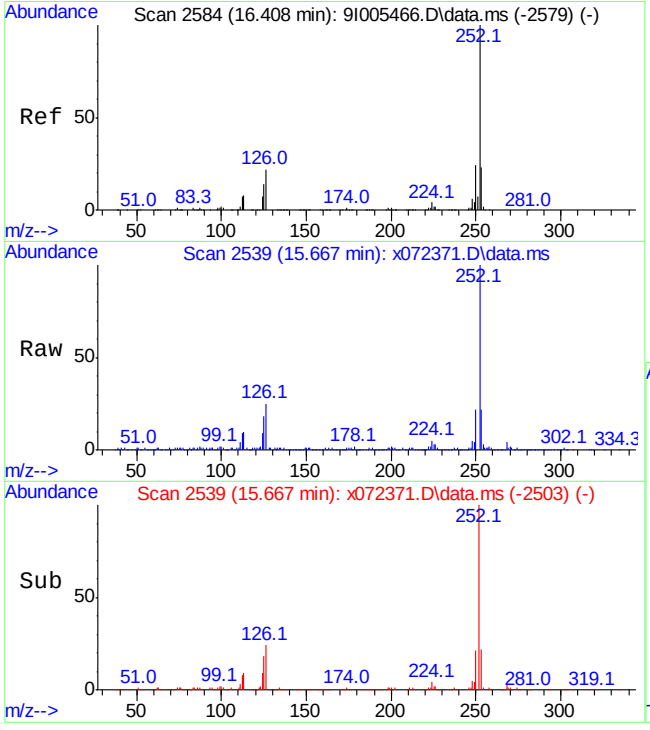


#104
Benzo[b]fluoranthene
Concen: 53.63 ppm
RT: 15.635 min Scan# 2533
Delta R.T. 0.011 min
Lab File: x072371.D
Acq: 12 Aug 2020 4:25 pm

Tgt Ion:252 Resp: 531871

Ion	Ratio	Lower	Upper
252	100		
253	22.1	0.0	52.5
125	17.7	0.0	44.0

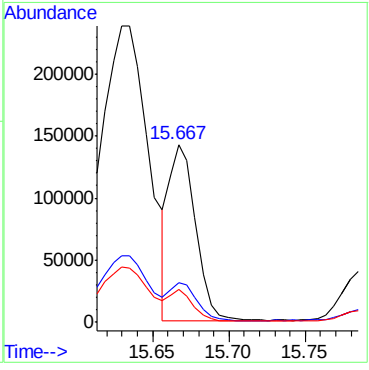


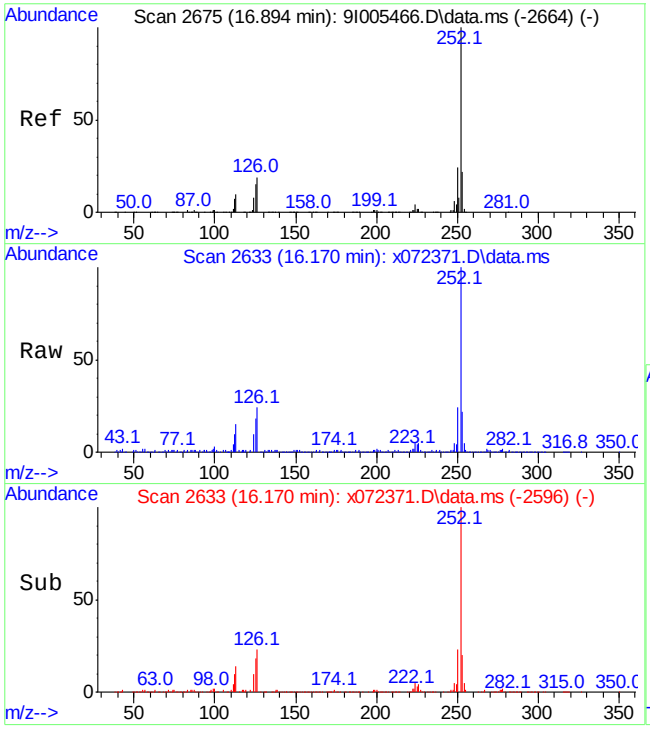


#105
Benzo[k]fluoranthene
Concen: 14.61 ppm
RT: 15.667 min Scan# 2539
Delta R.T. -0.005 min
Lab File: x072371.D
Acq: 12 Aug 2020 4:25 pm

Tgt Ion:252 Resp: 171909

Ion	Ratio	Lower	Upper
252	100		
253	22.0	0.0	52.5
125	16.8	0.0	44.4

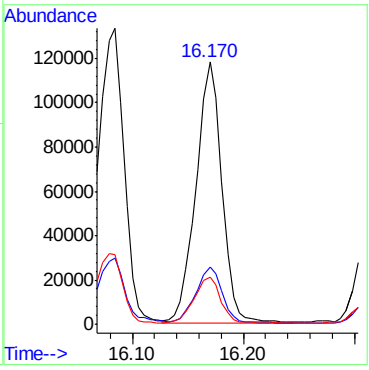


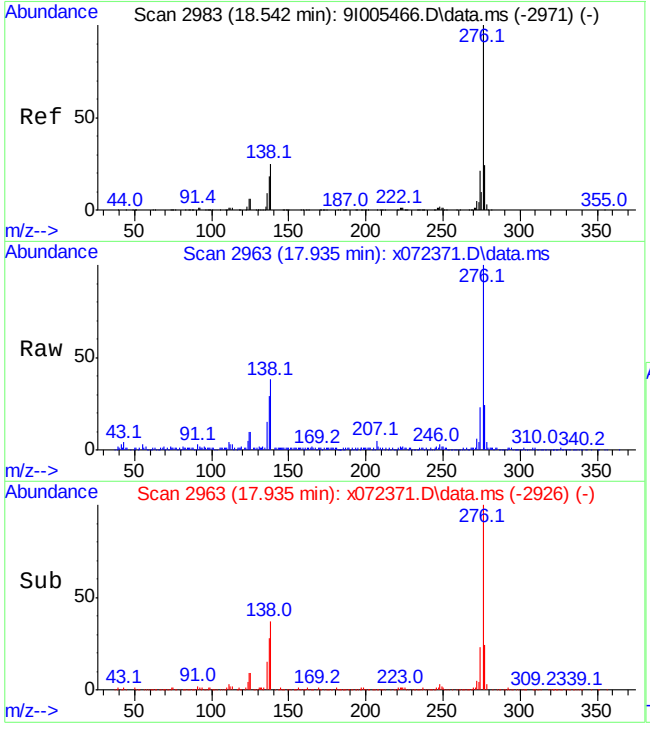


#106
Benzo[a]pyrene
Concen: 21.49 ppm
RT: 16.170 min Scan# 2633
Delta R.T. -0.000 min
Lab File: x072371.D
Acq: 12 Aug 2020 4:25 pm

Tgt Ion:252 Resp: 190131

Ion	Ratio	Lower	Upper
252	100		
253	21.3	0.0	52.3
125	17.7	0.0	44.7

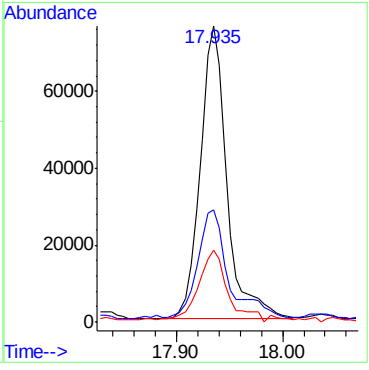


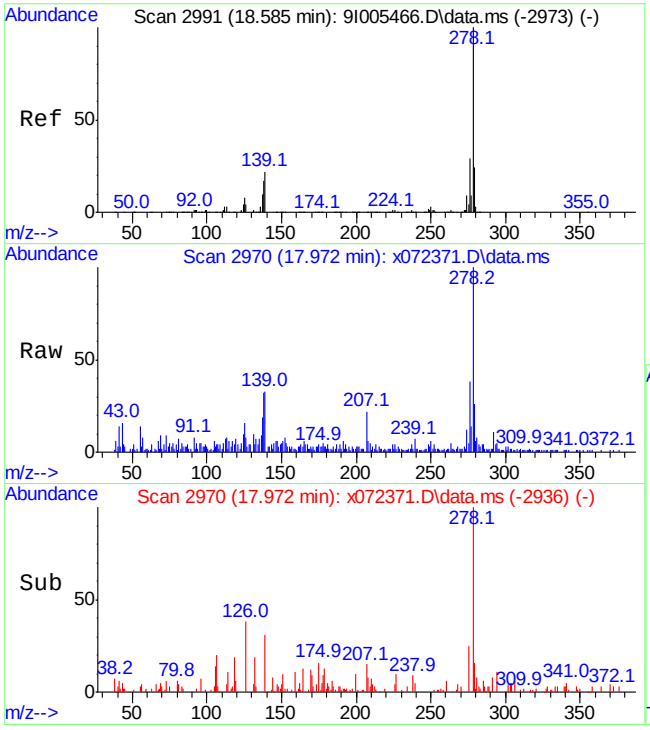


#107
Indeno[1,2,3-cd]pyrene
Concen: 24.30 ppm
RT: 17.935 min Scan# 2963
Delta R.T. -0.000 min
Lab File: x072371.D
Acq: 12 Aug 2020 4:25 pm

Tgt Ion:276 Resp: 134262

Ion	Ratio	Lower	Upper
276	100		
138	36.9	0.0	54.7
277	23.7	0.0	53.8

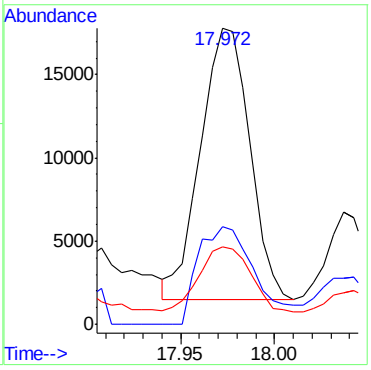


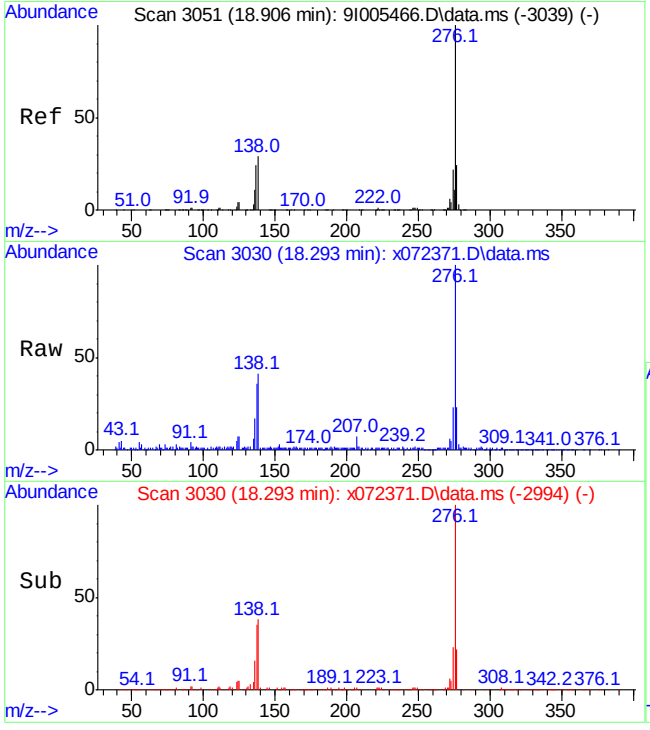


#108
Dibenz[a,h]anthracene
Concen: 5.52 ppm
RT: 17.972 min Scan# 2970
Delta R.T. -0.016 min
Lab File: x072371.D
Acq: 12 Aug 2020 4:25 pm

Tgt Ion:278 Resp: 29599

Ion	Ratio	Lower	Upper
278	100		
139	33.9	0.0	52.4
279	24.7	0.0	54.4

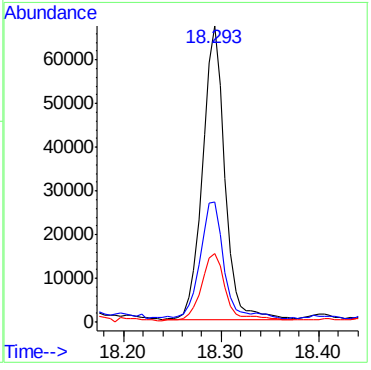




#109
Benzo[g,h,i]perylene
Concen: 13.38 ppm
RT: 18.293 min Scan# 3030
Delta R.T. -0.005 min
Lab File: x072371.D
Acq: 12 Aug 2020 4:25 pm

Tgt Ion:276 Resp: 106031

Ion	Ratio	Lower	Upper
276	100		
138	39.5	0.0	59.4
277	22.7	0.0	54.1



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072348.d
Acq On : 11 Aug 2020 9:01 pm
Operator : marthav
Sample : fa77581-2 E
Misc : op81482,sx2950,30.0,,,1,1,soil
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Aug 12 03:15:21 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	5.665	152	178161	40.00	ppm		0.00
22) Naphthalene-d8	7.088	136	662446	40.00	ppm		0.00
43) Acenaphthene-d10	9.126	164	325937	40.00	ppm		0.00
70) Phenanthrene-d10	10.875	188	552834	40.00	ppm		0.01
92) Chrysene-d12	14.084	240	429188	40.00	ppm		0.02
102) Perylene-d12	16.287	264	341429	40.00	ppm		0.03
110) 1,4-Dichlorobenzene-d4A	5.665	152	178161	40.00	ppm		0.00
120) Naphthalene-d8A	7.088	136	662446	40.00	ppm		0.00
127) Acenaphthene-d10A	9.126	164	325937	40.00	ppm		0.00
136) Phenanthrene-d10A	10.875	188	552834	40.00	ppm		0.01
146) Chrysene-d12A	14.084	240	429188	40.00	ppm		0.02
153) Perylene-d12A	16.287	264	341429	40.00	ppm		0.03
System Monitoring Compounds							
7) 2-Fluorophenol	4.328	112	493213	77.21	ppm		0.02
Spiked Amount 100.000	Range 40 - 102		Recovery = 77.21%				
9) Phenol-d5	5.355	99	618538	81.39	ppm		0.02
Spiked Amount 100.000	Range 41 - 100		Recovery = 81.39%				
23) Nitrobenzene-d5	6.285	82	254895	37.26	ppm		0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 74.52%				
47) 2-Fluorobiphenyl	8.361	172	456797	38.71	ppm		0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 77.42%				
75) 2,4,6-Tribromophenol	10.067	330	94573	79.60	ppm		0.01
Spiked Amount 100.000	Range 42 - 108		Recovery = 79.60%				
95) Terphenyl-d14	12.795	244	447683	39.26	ppm		0.02
Spiked Amount 50.000	Range 45 - 119		Recovery = 78.52%				
Target Compounds							Qvalue
5) Benzaldehyde	5.200	106	1925	0.36	ppm		96
6) Aniline	5.339	93	7754	0.73	ppm		91
18) Acetophenone	6.120	105	1966	0.20	ppm		84
21) 3&4-Methylphenol	6.189	108	851	0.13	ppm	#	40
30) Benzoic Acid	6.879	105	9621	2.37	ppm		87
34) Naphthalene	7.109	128	4247	0.24	ppm		93
40) 2-Methylnaphthalene	7.917	142	2926	0.25	ppm		97
41) 1-Methylnaphthalene	8.029	142	2423	0.21	ppm		96
48) 1,1'-Biphenyl	8.468	154	830	0.06	ppm		94
52) Acenaphthylene	8.960	152	128404	7.89	ppm		99
56) o-Dinitrobenzene	8.960	50	3985	1.53	ppm	#	1
57) Acenaphthene	9.163	153	8692	0.80	ppm		96
60) Dibenzofuran	9.372	168	2542	0.18	ppm		97
65) Fluorene	9.773	166	15042	1.33	ppm		97
84) Phenanthrene	10.896	178	24635	1.47	ppm		99
85) Anthracene	10.960	178	242430	13.92	ppm		98
87) Carbazole	11.174	167	68006	4.43	ppm		99
91) Fluoranthene	12.303	202	246873	15.93	ppm		98
94) Pyrene	12.565	202	325645	18.27	ppm		98
96) Famphur	13.362	218	5854	1.38	ppm		58
99) Benzo[a]anthracene	14.068	228	104439	7.74	ppm		99
100) Chrysene	14.116	228	214339	14.92	ppm		99
104) Benzo[b]fluoranthene	15.640	252	316125	32.37	ppm		96
105) Benzo[k]fluoranthene	15.683	252	102444	8.45	ppm		97
106) Benzo[a]pyrene	16.180	252	92620	10.43	ppm		95
107) Indeno[1,2,3-cd]pyrene	17.951	276	97393	17.88	ppm		87
108) Dibenz[a,h]anthracene	17.988	278	18848	3.48	ppm		83
109) Benzo[g,h,i]perylene	18.304	276	79994	9.95	ppm		85

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072348.d
Acq On : 11 Aug 2020 9:01 pm
Operator : marthav
Sample : fa77581-2 E
Misc : op81482,sx2950,30.0,,,1,1,soil
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Aug 12 03:15:21 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

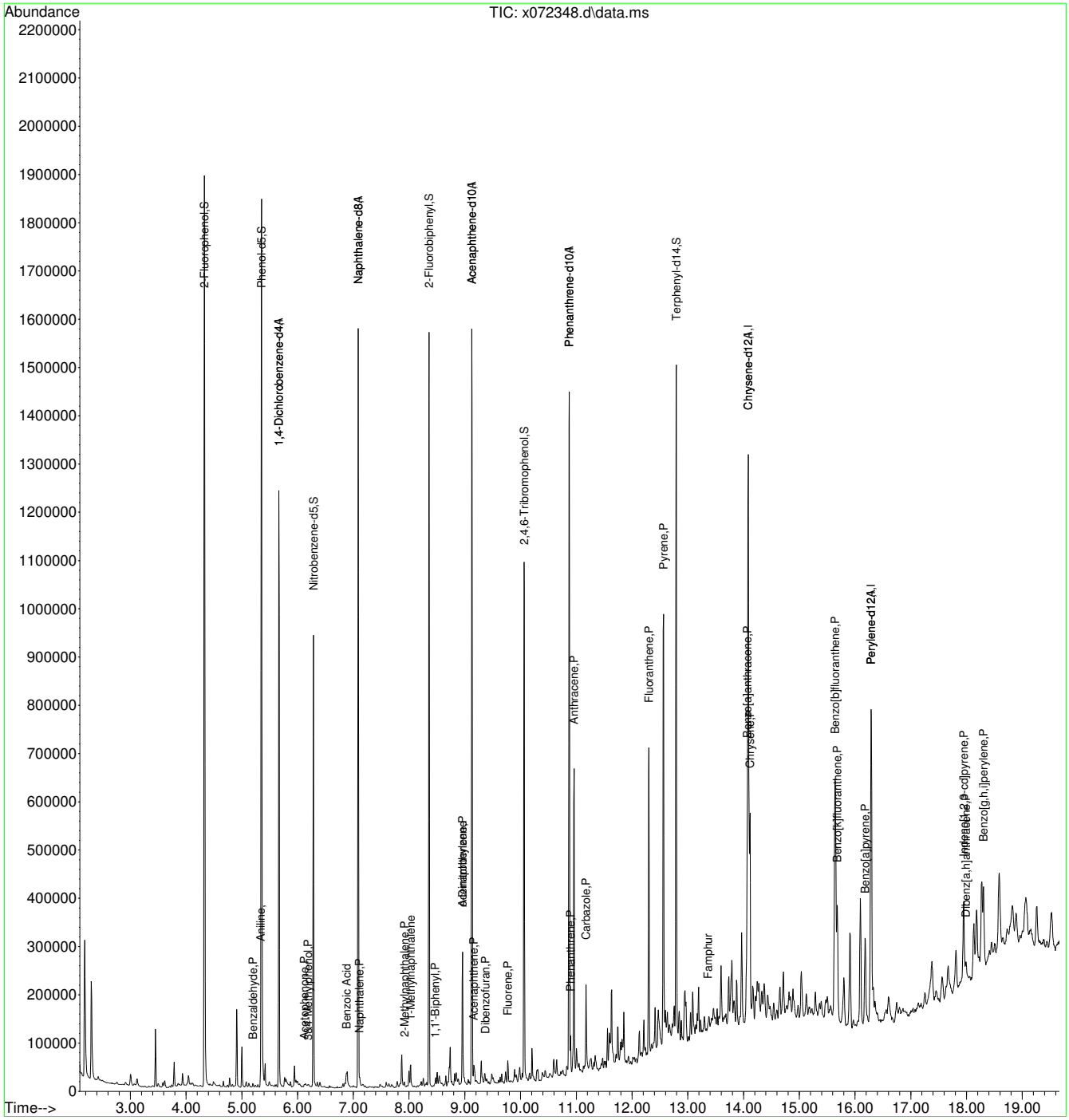
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

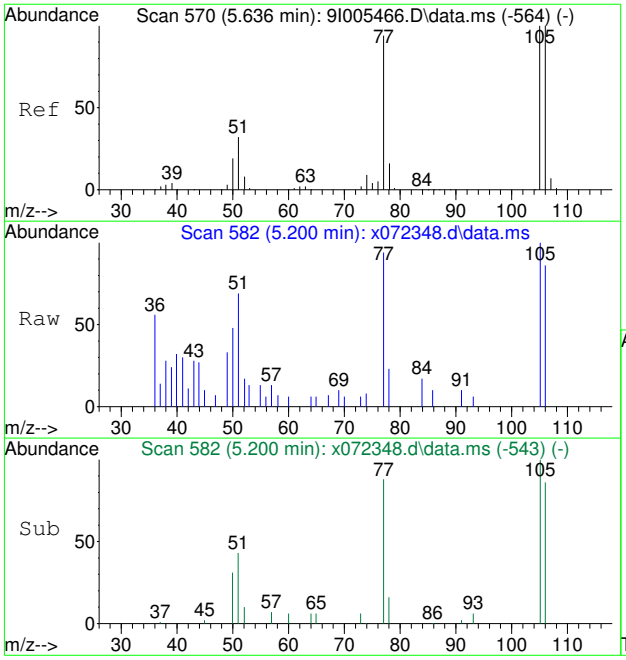
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072348.d
Acq On : 11 Aug 2020 9:01 pm
Operator : marthav
Sample : fa77581-2 E
Misc : op81482,sx2950,30.0,,,1,1,soil
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Aug 12 03:15:21 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

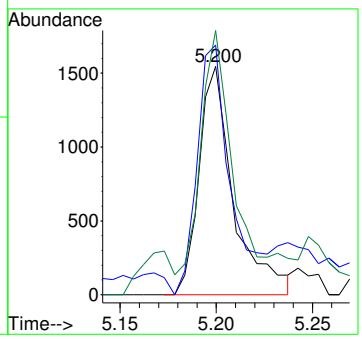


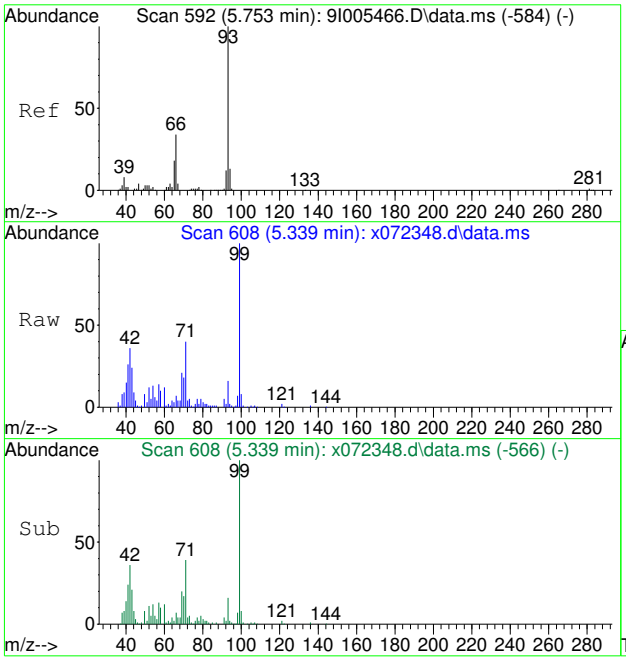


#5
Benzaldehyde
Concen: 0.36 ppm
RT: 5.200 min Scan# 582
Delta R.T. 0.011 min
Lab File: x072348.d
Acq: 11 Aug 2020 9:01 pm

Tgt Ion:106 Resp: 1925

Ion	Ratio	Lower	Upper
106	100		
77	98.3	63.9	123.9
105	102.5	70.0	130.0

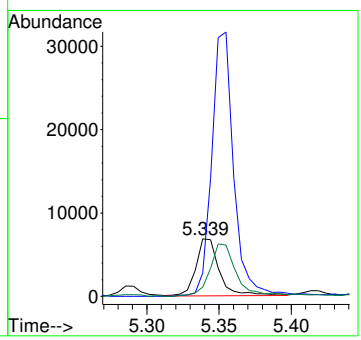


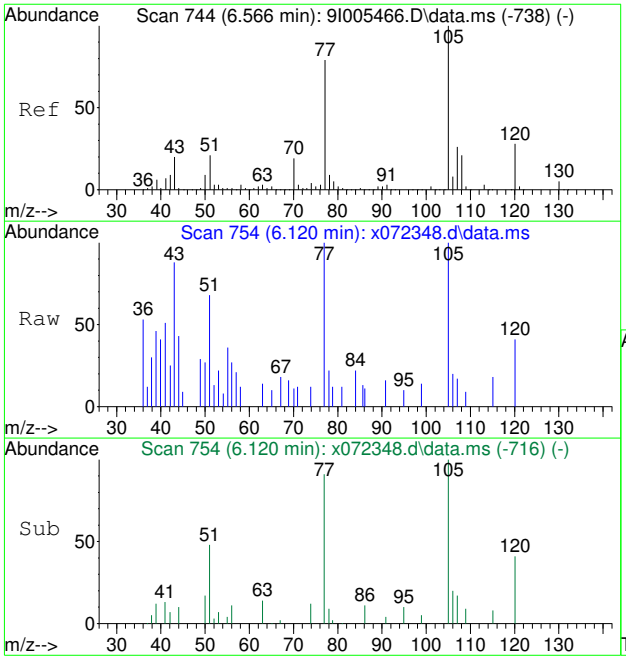


#6
Aniline
Concen: 0.73 ppm
RT: 5.339 min Scan# 608
Delta R.T. 0.027 min
Lab File: x072348.d
Acq: 11 Aug 2020 9:01 pm

Tgt Ion: 93 Resp: 7754

Ion	Ratio	Lower	Upper
93	100		
66	39.2	3.5	63.5
65	15.1	0.0	48.0

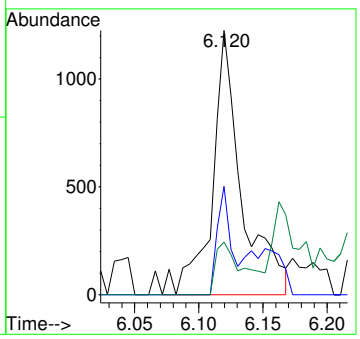


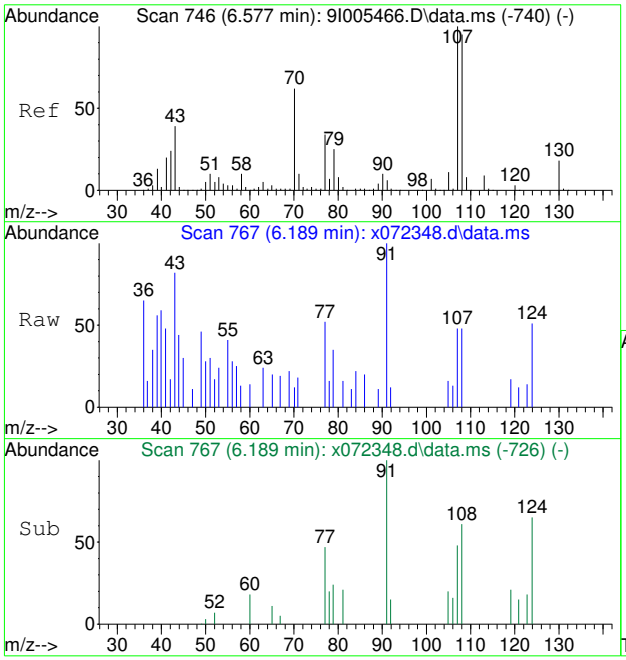


#18
Acetophenone
Concen: 0.20 ppm
RT: 6.120 min Scan# 754
Delta R.T. 0.005 min
Lab File: x072348.d
Acq: 11 Aug 2020 9:01 pm

Tgt Ion:105 Resp: 1966

Ion	Ratio	Lower	Upper
105	100		
120	38.1	0.0	58.3
106	5.0	0.0	38.0

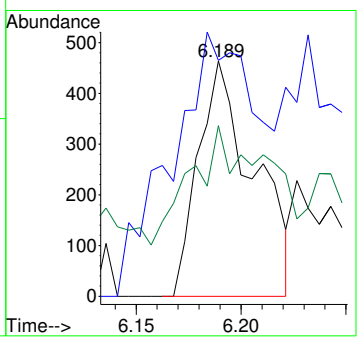


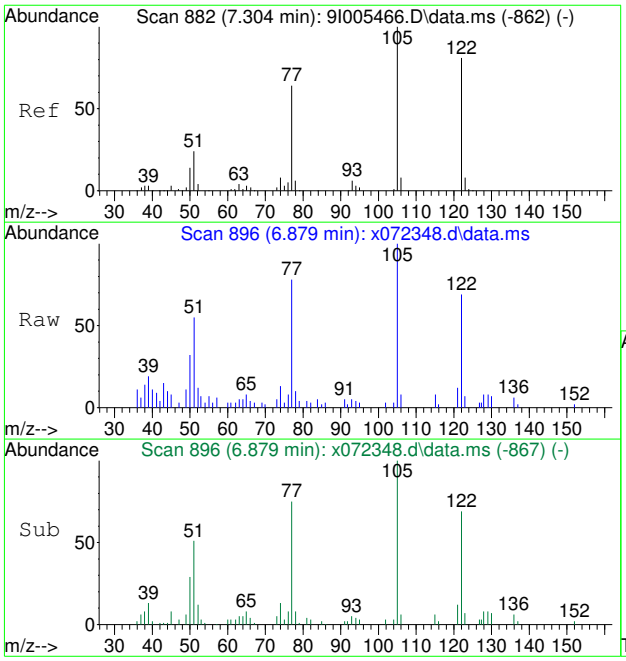


#21
3&4-Methylphenol
Concen: 0.13 ppm
RT: 6.189 min Scan# 767
Delta R.T. 0.021 min
Lab File: x072348.d
Acq: 11 Aug 2020 9:01 pm

Tgt Ion:108 Resp: 851

Ion	Ratio	Lower	Upper
108	100		
107	32.6	75.4	135.4#
79	35.6	0.0	56.3

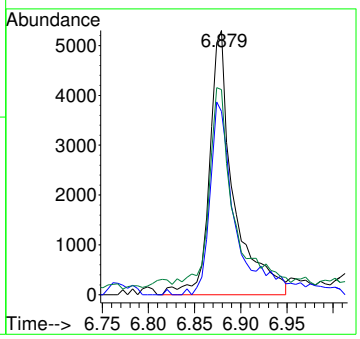


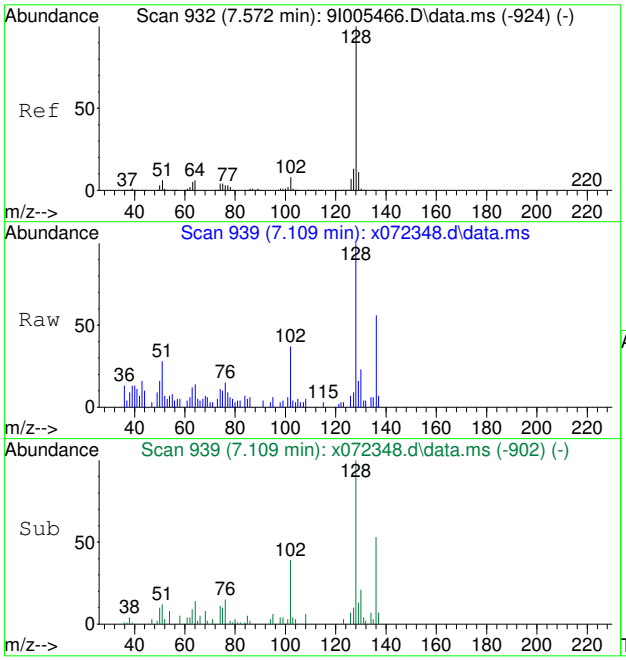


#30
Benzoic Acid
Concen: 2.37 ppm
RT: 6.879 min Scan# 896
Delta R.T. -0.043 min
Lab File: x072348.d
Acq: 11 Aug 2020 9:01 pm

Tgt Ion:105 Resp: 9621

Ion	Ratio	Lower	Upper
105	100		
122	68.8	51.2	111.2
77	73.2	34.1	94.1

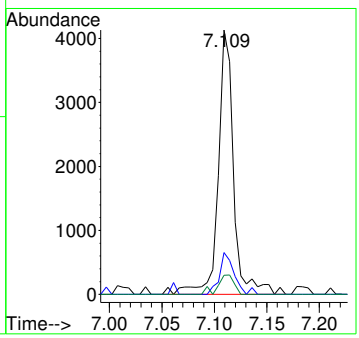


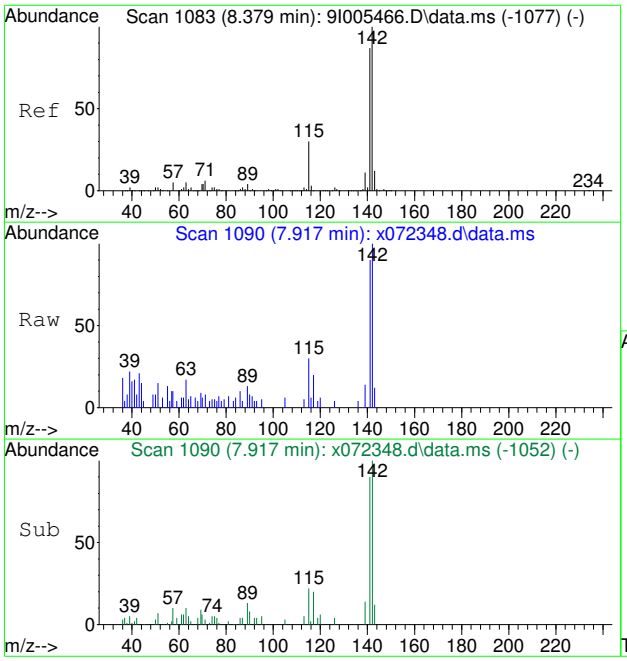


#34
Naphthalene
Concen: 0.24 ppm
RT: 7.109 min Scan# 939
Delta R.T. -0.000 min
Lab File: x072348.d
Acq: 11 Aug 2020 9:01 pm

Tgt Ion:128 Resp: 4247

Ion	Ratio	Lower	Upper
128	100		
129	15.8	0.0	41.4
126	7.2	0.0	37.4

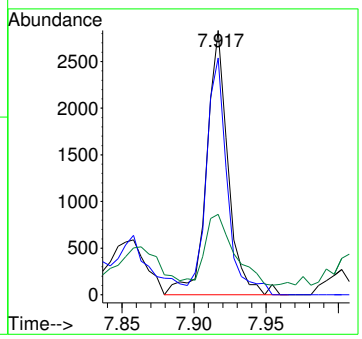


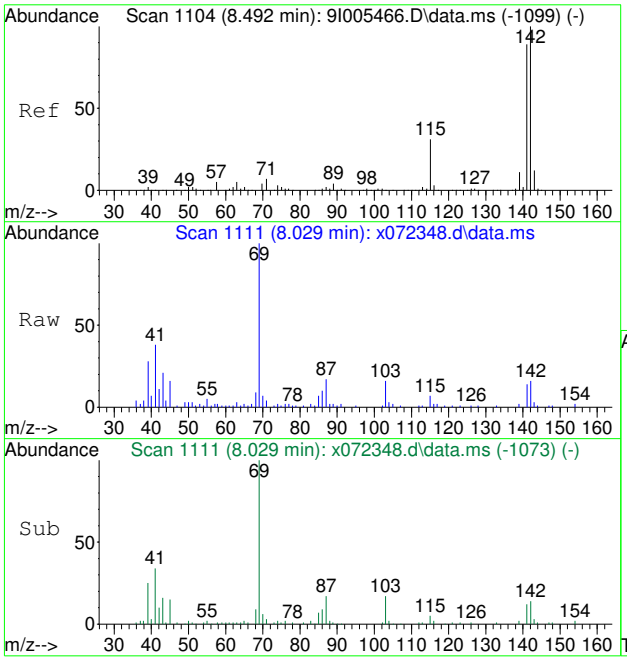


#40
2-Methylnaphthalene
Concen: 0.25 ppm
RT: 7.917 min Scan# 1090
Delta R.T. 0.005 min
Lab File: x072348.d
Acq: 11 Aug 2020 9:01 pm

Tgt Ion:142 Resp: 2926

Ion	Ratio	Lower	Upper
142	100		
141	86.4	56.8	116.8
115	24.4	0.0	60.0

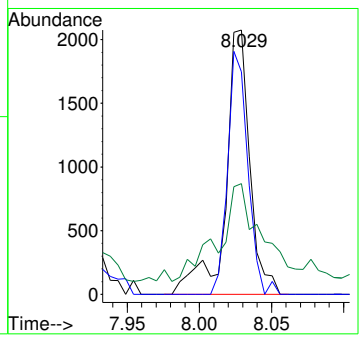


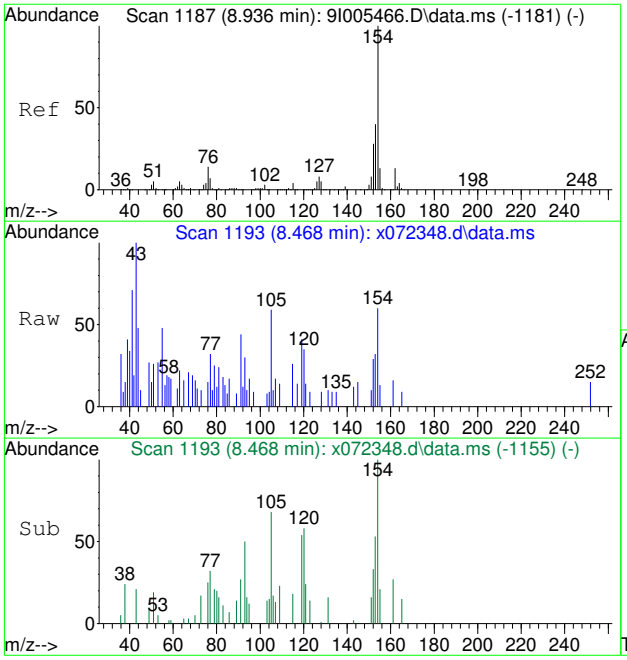


#41
1-Methylnaphthalene
Concen: 0.21 ppm
RT: 8.029 min Scan# 1111
Delta R.T. 0.005 min
Lab File: x072348.d
Acq: 11 Aug 2020 9:01 pm

Tgt Ion:142 Resp: 2423

Ion	Ratio	Lower	Upper
142	100		
141	84.2	59.0	119.0
115	32.0	1.1	61.1

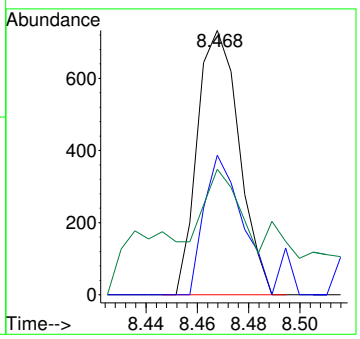


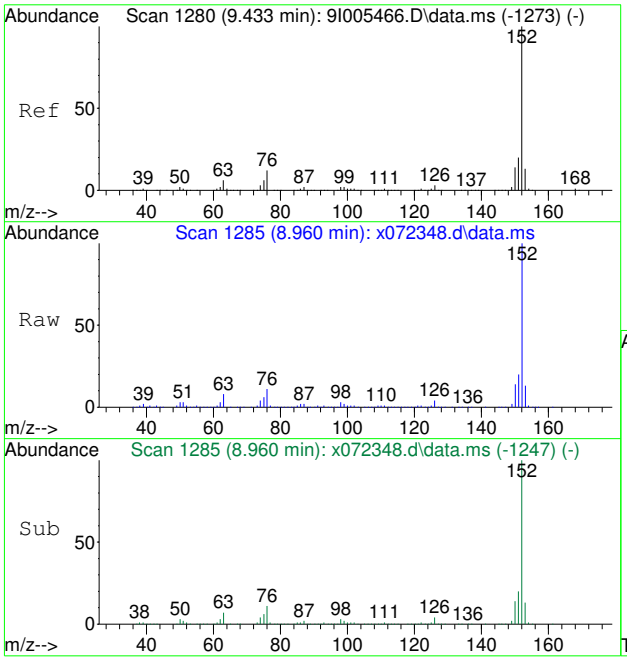


#48
1,1'-Biphenyl
Concen: 0.06 ppm
RT: 8.468 min Scan# 1193
Delta R.T. 0.005 min
Lab File: x072348.d
Acq: 11 Aug 2020 9:01 pm

Tgt Ion:154 Resp: 830

Ion	Ratio	Lower	Upper
154	100		
153	43.9	10.3	70.3
152	25.4	0.0	58.2

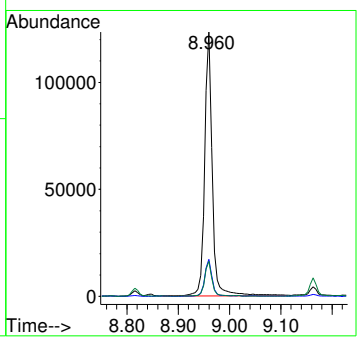


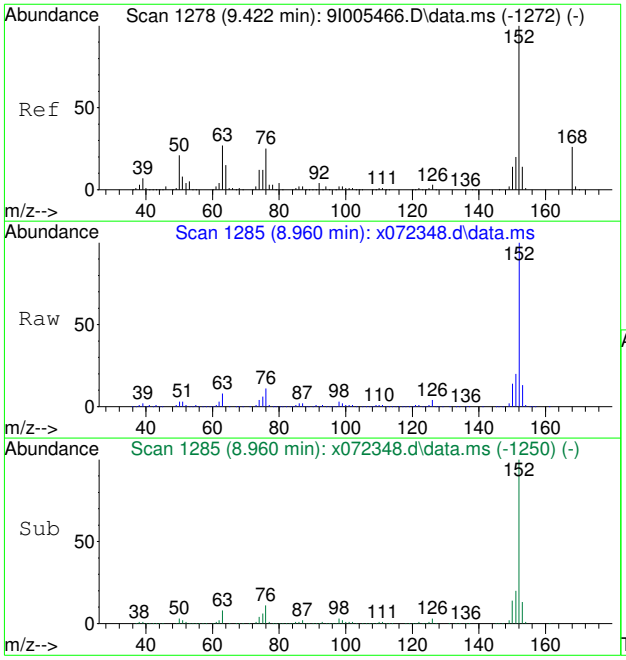


#52
Acenaphthylene
Concen: 7.89 ppm
RT: 8.960 min Scan# 1285
Delta R.T. 0.005 min
Lab File: x072348.d
Acq: 11 Aug 2020 9:01 pm

Tgt Ion:152 Resp: 128404

Ion	Ratio	Lower	Upper
152	100		
150	13.9	0.0	44.3
153	13.1	0.0	43.3

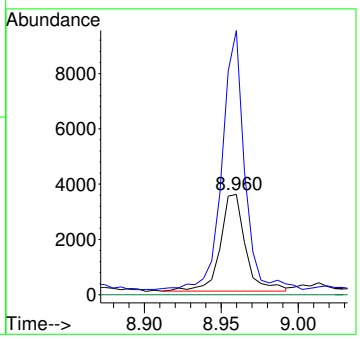


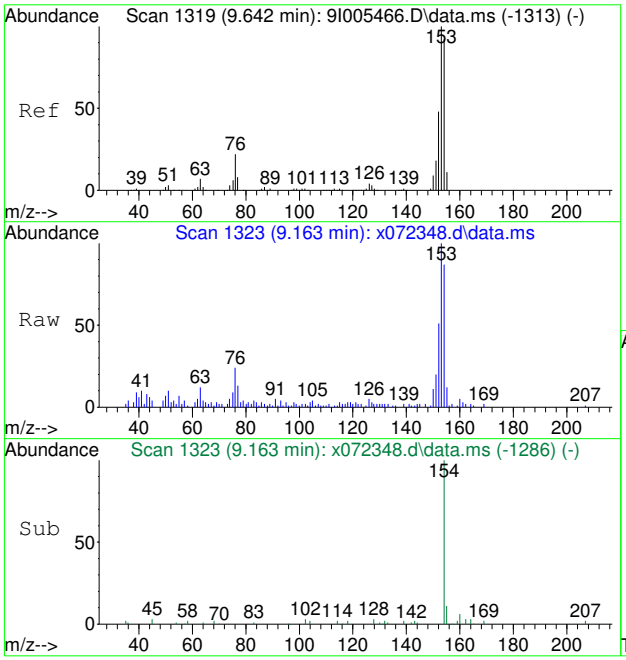


#56
o-Dinitrobenzene
Concen: 1.53 ppm
RT: 8.960 min Scan# 1285
Delta R.T. -0.011 min
Lab File: x072348.d
Acq: 11 Aug 2020 9:01 pm

Tgt Ion: 50 Resp: 3985

Ion	Ratio	Lower	Upper
50	100		
63	269.5	110.3	150.3#
168	0.0	104.0	144.0#

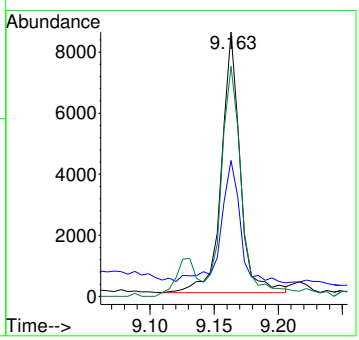


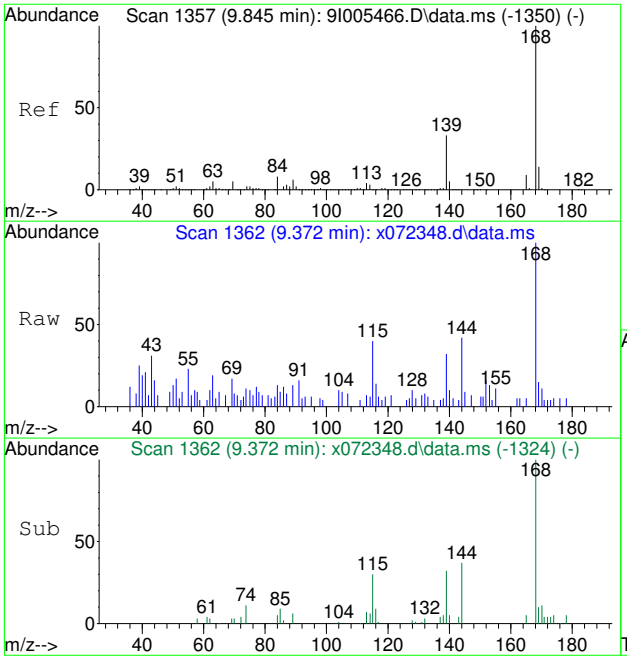


#57
Acenaphthene
Concen: 0.80 ppm
RT: 9.163 min Scan# 1323
Delta R.T. -0.000 min
Lab File: x072348.d
Acq: 11 Aug 2020 9:01 pm

Tgt Ion:153 Resp: 8692

Ion	Ratio	Lower	Upper
153	100		
152	47.0	18.4	78.4
154	87.1	62.4	122.4

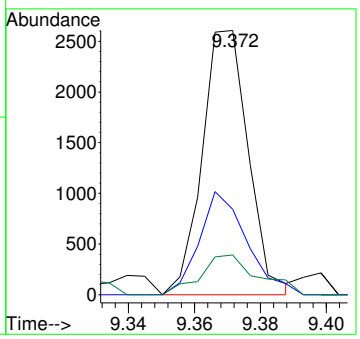


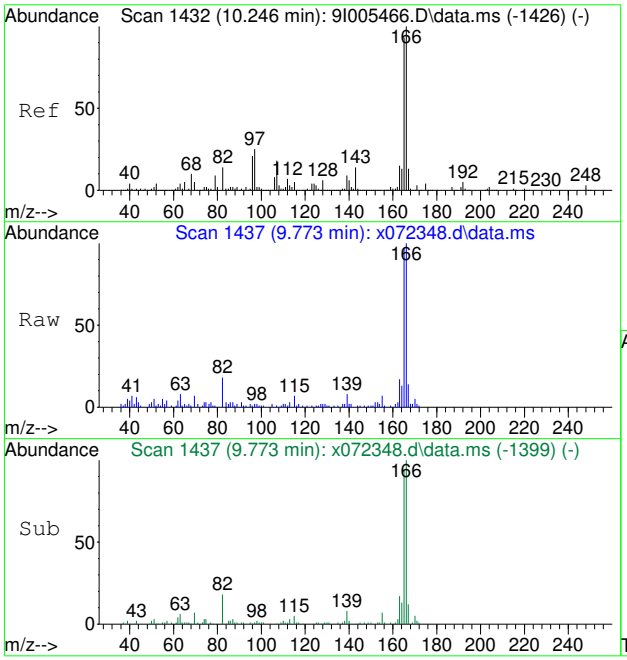


#60
Dibenzofuran
Concen: 0.18 ppm
RT: 9.372 min Scan# 1362
Delta R.T. 0.005 min
Lab File: x072348.d
Acq: 11 Aug 2020 9:01 pm

Tgt Ion:168 Resp: 2542

Ion	Ratio	Lower	Upper
168	100		
139	30.9	3.0	63.0
169	12.6	0.0	43.5

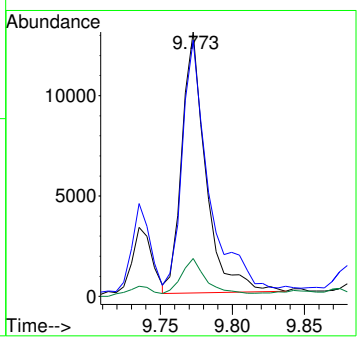


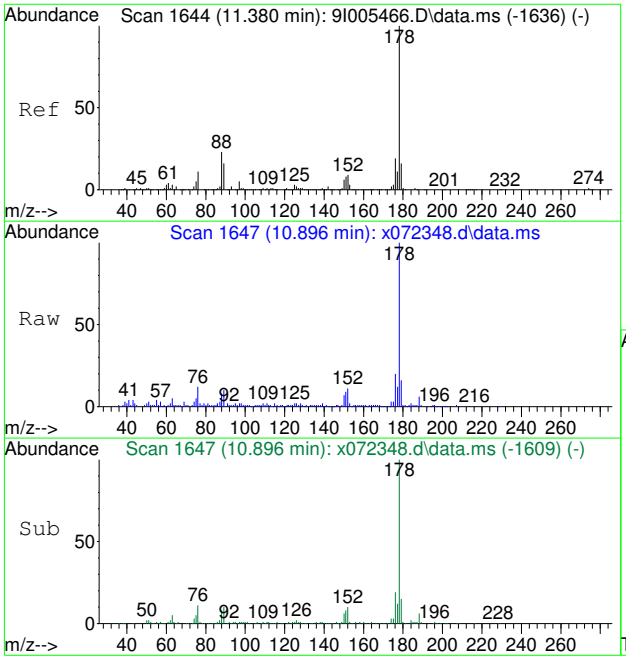


#65
Fluorene
Concen: 1.33 ppm
RT: 9.773 min Scan# 1437
Delta R.T. 0.005 min
Lab File: x072348.d
Acq: 11 Aug 2020 9:01 pm

Tgt Ion:166 Resp: 15042

Ion	Ratio	Lower	Upper
166	100		
165	95.9	62.7	122.7
167	13.4	0.0	43.5

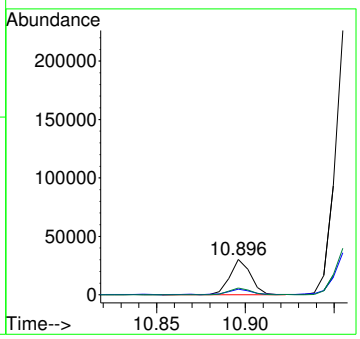


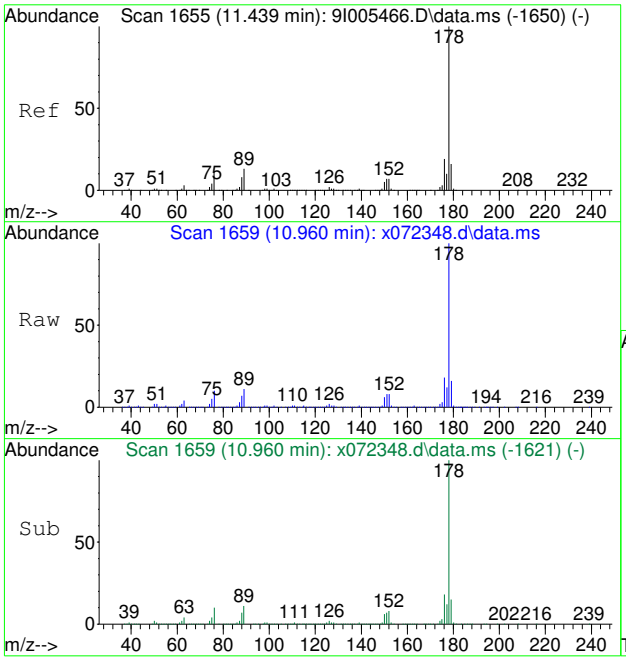


#84
Phenanthrene
Concen: 1.47 ppm
RT: 10.896 min Scan# 1647
Delta R.T. 0.005 min
Lab File: x072348.d
Acq: 11 Aug 2020 9:01 pm

Tgt Ion:178 Resp: 24635

Ion	Ratio	Lower	Upper
178	100		
179	15.1	0.0	45.8
176	19.2	0.0	49.3

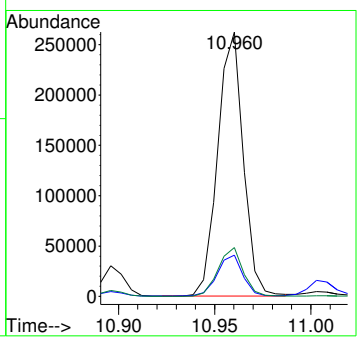


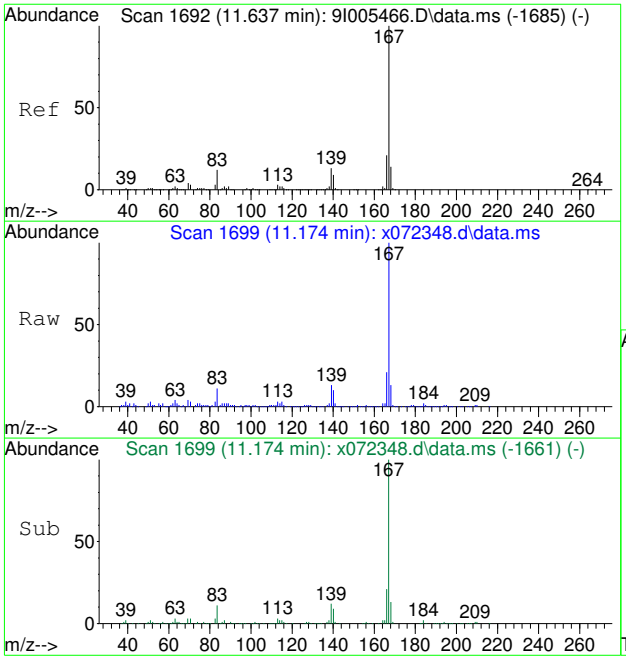


#85
Anthracene
Concen: 13.92 ppm
RT: 10.960 min Scan# 1659
Delta R.T. 0.005 min
Lab File: x072348.d
Acq: 11 Aug 2020 9:01 pm

Tgt Ion:178 Resp: 242430

Ion	Ratio	Lower	Upper
178	100		
179	15.4	0.0	46.0
176	18.4	0.0	49.3

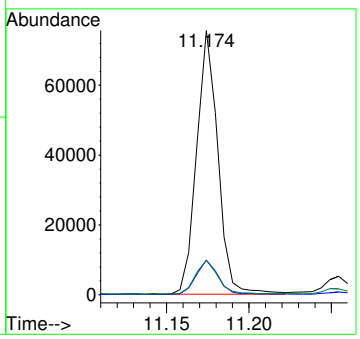


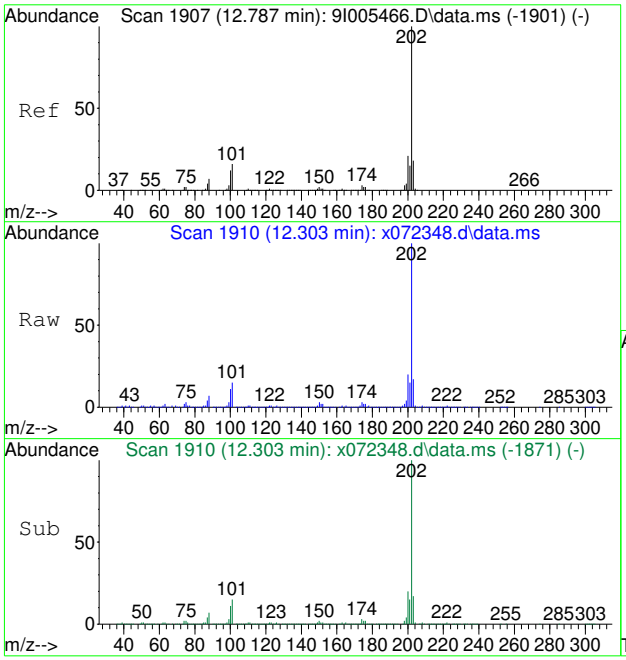


#87
Carbazole
Concen: 4.43 ppm
RT: 11.174 min Scan# 1699
Delta R.T. 0.005 min
Lab File: x072348.d
Acq: 11 Aug 2020 9:01 pm

Tgt Ion:167 Resp: 68006

Ion	Ratio	Lower	Upper
167	100		
168	13.0	0.0	43.9
139	12.7	0.0	42.7

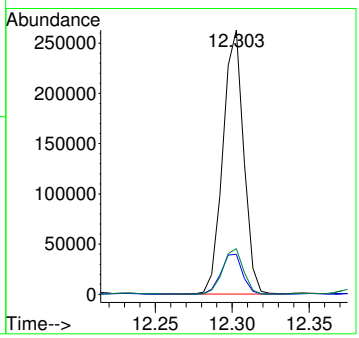


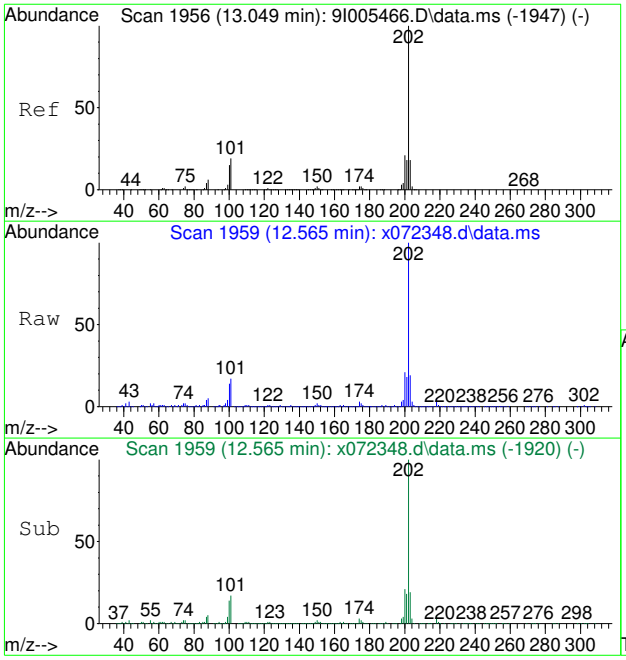


#91
Fluoranthene
Concen: 15.93 ppm
RT: 12.303 min Scan# 1910
Delta R.T. 0.011 min
Lab File: x072348.d
Acq: 11 Aug 2020 9:01 pm

Tgt Ion:202 Resp: 246873

Ion	Ratio	Lower	Upper
202	100		
101	15.1	0.0	45.8
203	17.2	0.0	48.1

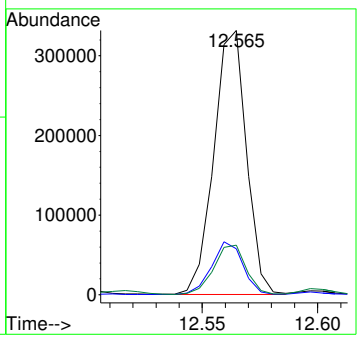


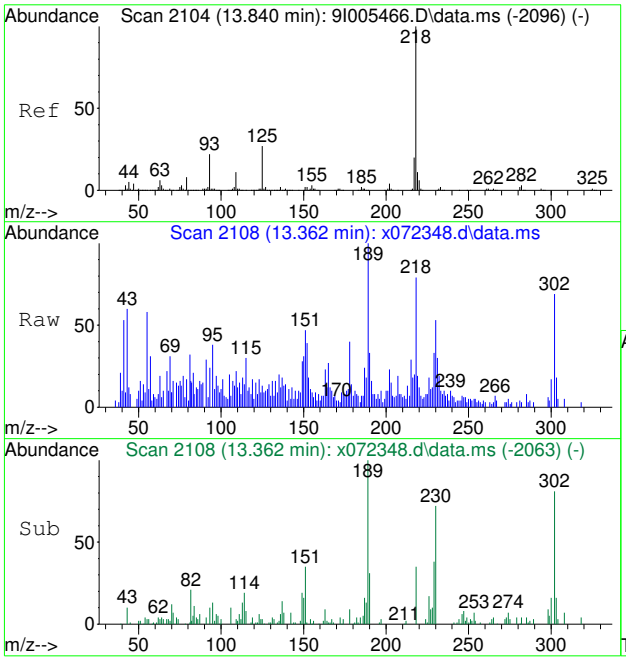


#94
Pyrene
Concen: 18.27 ppm
RT: 12.565 min Scan# 1959
Delta R.T. 0.011 min
Lab File: x072348.d
Acq: 11 Aug 2020 9:01 pm

Tgt Ion:202 Resp: 325645

Ion	Ratio	Lower	Upper
202	100		
101	17.3	0.0	48.7
203	18.5	0.0	48.4

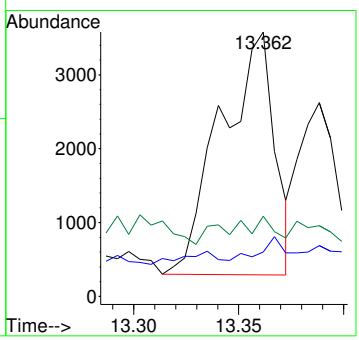


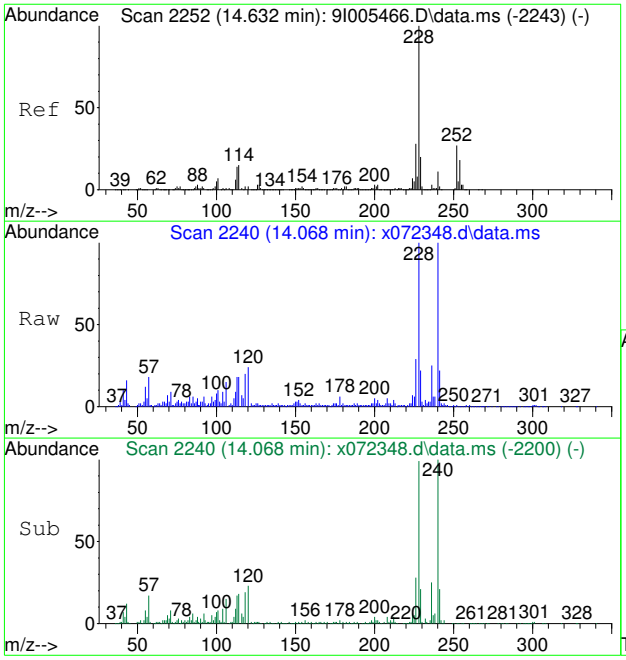


#96
Famphur
Concen: 1.38 ppm
RT: 13.362 min Scan# 2108
Delta R.T. 0.043 min
Lab File: x072348.d
Acq: 11 Aug 2020 9:01 pm

Tgt Ion:218 Resp: 5854

Ion	Ratio	Lower	Upper
218	100		
125	1.8	0.0	57.1
93	6.4	0.0	52.0

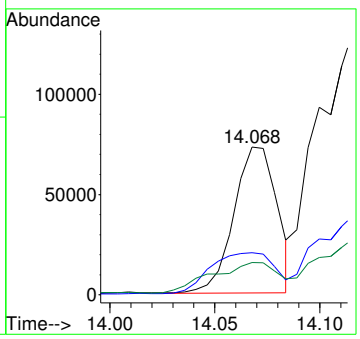


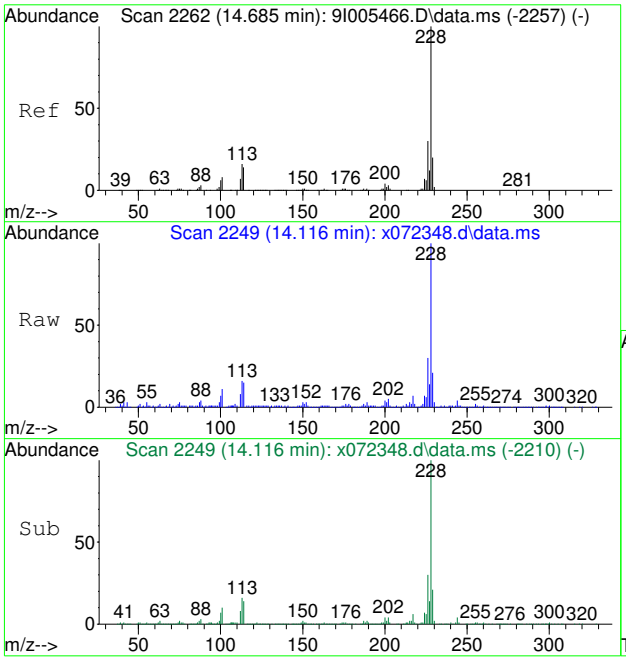


#99
Benzo[a]anthracene
Concen: 7.74 ppm
RT: 14.068 min Scan# 2240
Delta R.T. 0.016 min
Lab File: x072348.d
Acq: 11 Aug 2020 9:01 pm

Tgt Ion:228 Resp: 104439

Ion	Ratio	Lower	Upper
228	100		
226	28.5	0.0	57.5
229	19.6	0.0	49.9

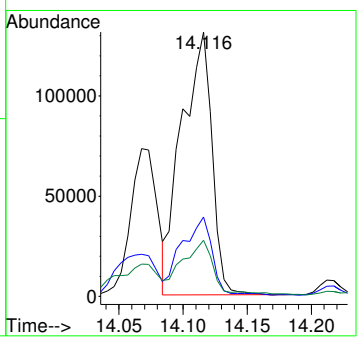


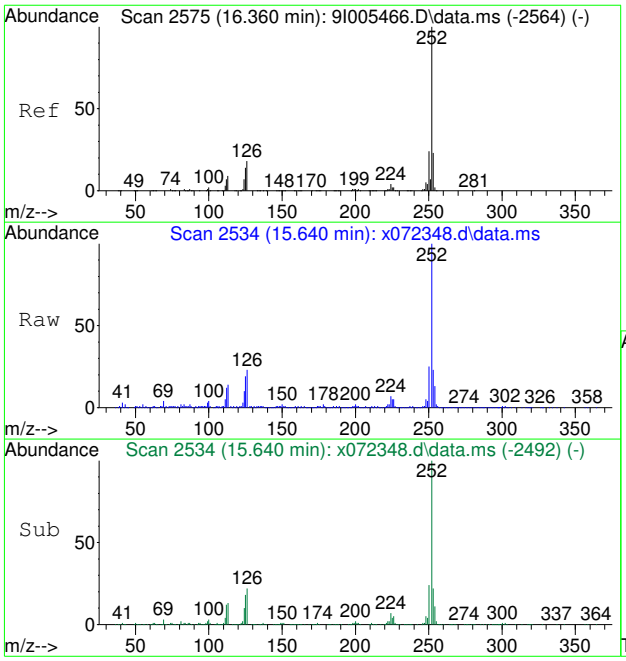


#100
Chrysene
Concen: 14.92 ppm
RT: 14.116 min Scan# 2249
Delta R.T. 0.011 min
Lab File: x072348.d
Acq: 11 Aug 2020 9:01 pm

Tgt Ion:228 Resp: 214339

Ion	Ratio	Lower	Upper
228	100		
226	30.0	0.4	60.4
229	19.8	0.0	50.1

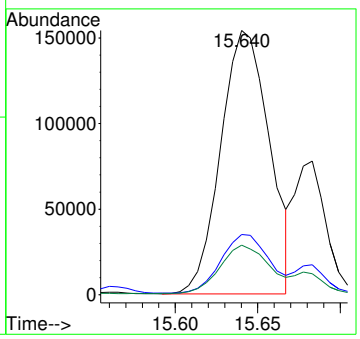


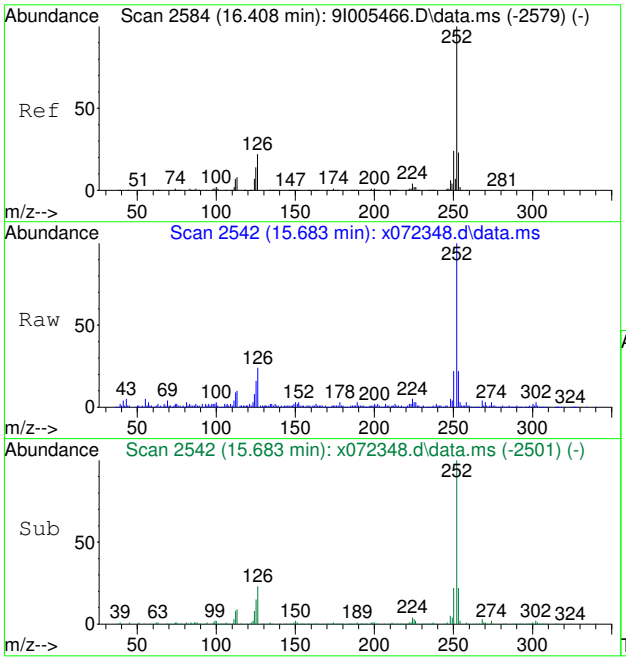


#104
Benzo[b]fluoranthene
Concen: 32.37 ppm
RT: 15.640 min Scan# 2534
Delta R.T. 0.027 min
Lab File: x072348.d
Acq: 11 Aug 2020 9:01 pm

Tgt Ion:252 Resp: 316125

Ion	Ratio	Lower	Upper
252	100		
253	22.5	0.0	52.5
125	18.1	0.0	44.0

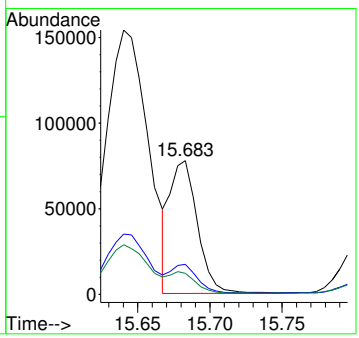


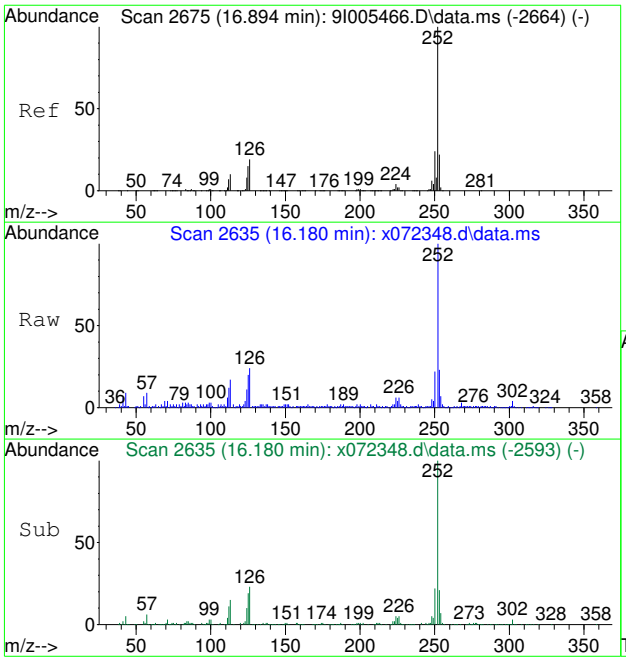


#105
Benzo[k]fluoranthene
Concen: 8.45 ppm
RT: 15.683 min Scan# 2542
Delta R.T. 0.021 min
Lab File: x072348.d
Acq: 11 Aug 2020 9:01 pm

Tgt Ion:252 Resp: 102444

Ion	Ratio	Lower	Upper
252	100		
253	21.4	0.0	52.5
125	12.9	0.0	44.4

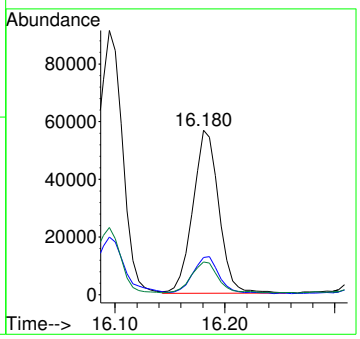


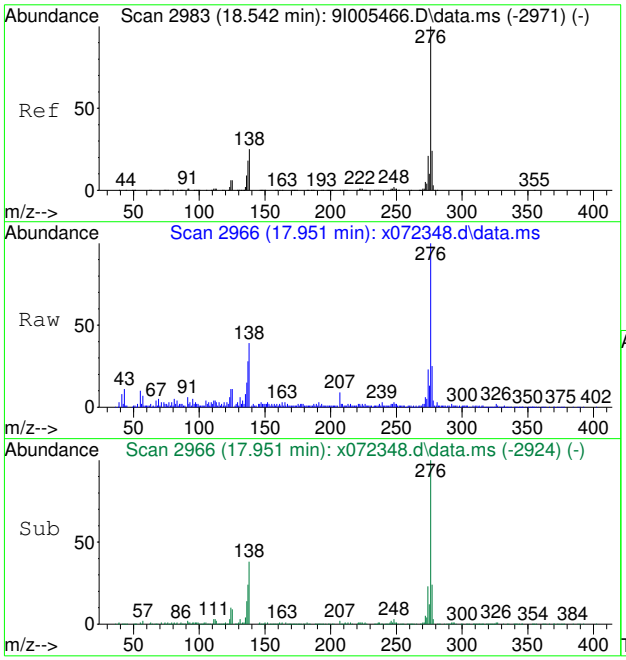


#106
Benzo[a]pyrene
Concen: 10.43 ppm
RT: 16.180 min Scan# 2635
Delta R.T. 0.027 min
Lab File: x072348.d
Acq: 11 Aug 2020 9:01 pm

Tgt Ion:252 Resp: 92620

Ion	Ratio	Lower	Upper
252	100		
253	21.5	0.0	52.3
125	18.8	0.0	44.7

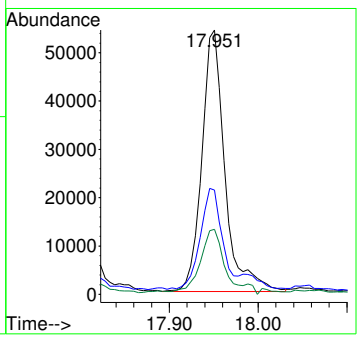


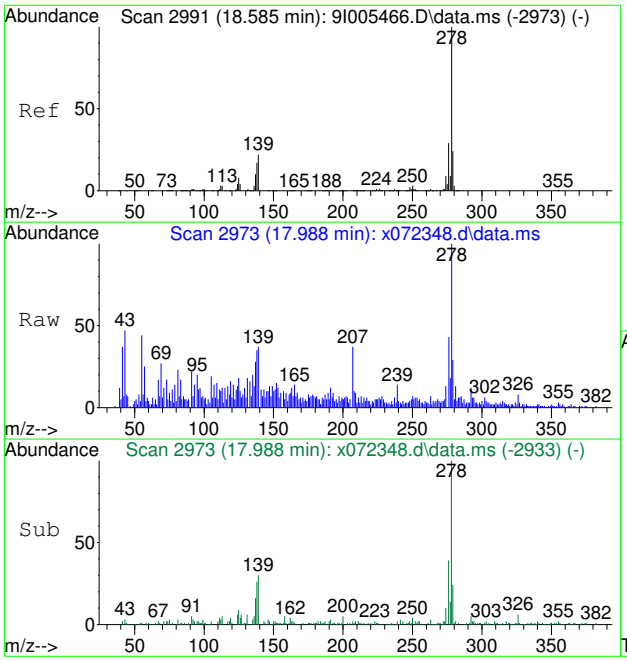


#107
Indeno[1,2,3-cd]pyrene
Concen: 17.88 ppm
RT: 17.951 min Scan# 2966
Delta R.T. 0.027 min
Lab File: x072348.d
Acq: 11 Aug 2020 9:01 pm

Tgt Ion:276 Resp: 97393

Ion	Ratio	Lower	Upper
276	100		
138	37.7	0.0	54.7
277	23.9	0.0	53.8

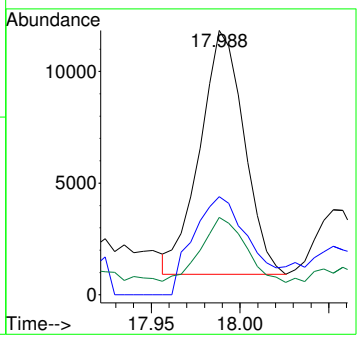


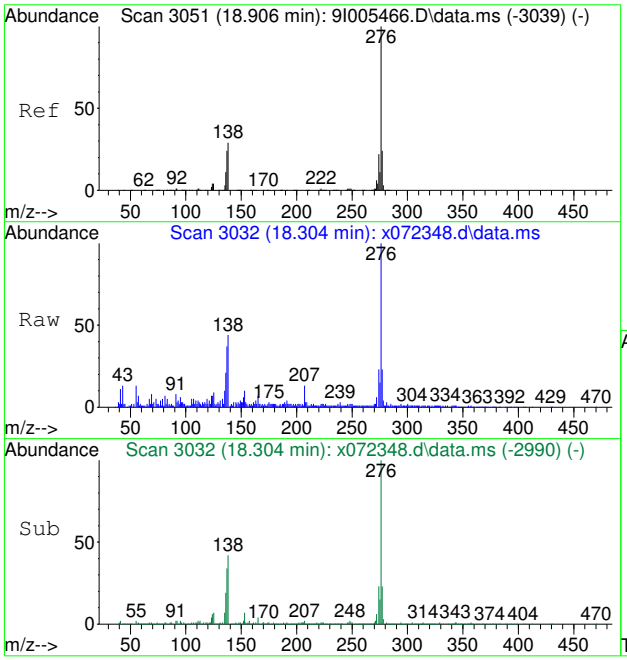


#108
Dibenz[a,h]anthracene
Concen: 3.48 ppm
RT: 17.988 min Scan# 2973
Delta R.T. 0.016 min
Lab File: x072348.d
Acq: 11 Aug 2020 9:01 pm

Tgt Ion:278 Resp: 18848

Ion	Ratio	Lower	Upper
278	100		
139	36.0	0.0	52.4
279	27.6	0.0	54.4

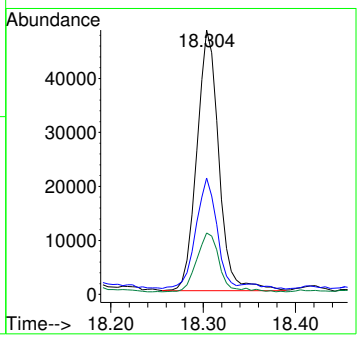




#109
Benzo[g,h,i]perylene
Concen: 9.95 ppm
RT: 18.304 min Scan# 3032
Delta R.T. 0.027 min
Lab File: x072348.d
Acq: 11 Aug 2020 9:01 pm

Tgt Ion:276 Resp: 79994

Ion	Ratio	Lower	Upper
276	100		
138	42.5	0.0	59.4
277	22.7	0.0	54.1



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072349.d
Acq On : 11 Aug 2020 9:27 pm
Operator : marthav
Sample : fa77581-3 E
Misc : op81482,sx2950,30.2,,,1,1,soil
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Aug 12 03:18:51 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.665	152	177668	40.00	ppm	0.00
22) Naphthalene-d8	7.088	136	666706	40.00	ppm	0.00
43) Acenaphthene-d10	9.131	164	331405	40.00	ppm	0.01
70) Phenanthrene-d10	10.875	188	578753	40.00	ppm	0.01
92) Chrysene-d12	14.100	240	472125	40.00	ppm	0.03
102) Perylene-d12	16.314	264	383289	40.00	ppm	0.06
110) 1,4-Dichlorobenzene-d4A	5.665	152	177668	40.00	ppm	0.00
120) Naphthalene-d8A	7.088	136	666706	40.00	ppm	0.00
127) Acenaphthene-d10A	9.131	164	331405	40.00	ppm	0.01
136) Phenanthrene-d10A	10.875	188	578753	40.00	ppm	0.01
146) Chrysene-d12A	14.100	240	472125	40.00	ppm	0.03
153) Perylene-d12A	16.314	264	383289	40.00	ppm	0.06
System Monitoring Compounds						
7) 2-Fluorophenol	4.328	112	448904	70.47	ppm	0.02
Spiked Amount 100.000	Range 40 - 102		Recovery = 70.47%			
9) Phenol-d5	5.349	99	571009	75.34	ppm	0.02
Spiked Amount 100.000	Range 41 - 100		Recovery = 75.34%			
23) Nitrobenzene-d5	6.285	82	237062	34.43	ppm	0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 68.86%			
47) 2-Fluorobiphenyl	8.361	172	433014	36.09	ppm	0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 72.18%			
75) 2,4,6-Tribromophenol	10.067	330	90527	73.64	ppm	0.01
Spiked Amount 100.000	Range 42 - 108		Recovery = 73.64%			
95) Terphenyl-d14	12.795	244	456647	36.40	ppm	0.02
Spiked Amount 50.000	Range 45 - 119		Recovery = 72.80%			
Target Compounds						Qvalue
5) Benzaldehyde	5.200	106	2579	0.49	ppm	98
6) Aniline	5.328	93	6789	0.64	ppm	97
18) Acetophenone	6.120	105	1681	0.18	ppm	87
21) 3&4-Methylphenol	6.189	108	3468	0.52	ppm	88
27) 2,4-Dimethylphenol	6.761	107	2557	0.43	ppm	87
30) Benzoic Acid	6.879	105	8316	2.04	ppm	90
34) Naphthalene	7.109	128	14135	0.78	ppm	99
40) 2-Methylnaphthalene	7.917	142	7133	0.60	ppm	98
41) 1-Methylnaphthalene	8.029	142	4709	0.41	ppm	96
48) 1,1'-Biphenyl	8.468	154	2893	0.21	ppm	96
52) Acenaphthylene	8.960	152	353214	21.34	ppm	99
56) o-Dinitrobenzene	8.960	50	10909	4.13	ppm	# 1
57) Acenaphthene	9.163	153	19970	1.81	ppm	98
60) Dibenzofuran	9.372	168	14376	0.98	ppm	99
65) Fluorene	9.773	166	40293	3.52	ppm	99
84) Phenanthrene	10.901	178	398719	22.80	ppm	98
85) Anthracene	10.966	178	963047	52.84	ppm	98
87) Carbazole	11.179	167	261011	16.23	ppm	99
91) Fluoranthene	12.324	202	2631220	162.16	ppm	97
94) Pyrene	12.586	202	2565443	130.87	ppm	96
99) Benzo[a]anthracene	14.089	228	912390	61.49	ppm	98
100) Chrysene	14.137	228	1354136	85.69	ppm	99
104) Benzo[b]fluoranthene	15.683	252	1601617	122.21	ppm	96
105) Benzo[k]fluoranthene	15.715	252	463367	34.05	ppm	97
106) Benzo[a]pyrene	16.218	252	446002	41.60	ppm	97
107) Indeno[1,2,3-cd]pyrene	17.978	276	345986	46.95	ppm	88
108) Dibenz[a,h]anthracene	18.010	278	72774	11.19	ppm	84
109) Benzo[g,h,i]perylene	18.331	276	259457	26.76	ppm	88

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072349.d
Acq On : 11 Aug 2020 9:27 pm
Operator : marthav
Sample : fa77581-3 E
Misc : op81482,sx2950,30.2,,,1,1,soil
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Aug 12 03:18:51 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

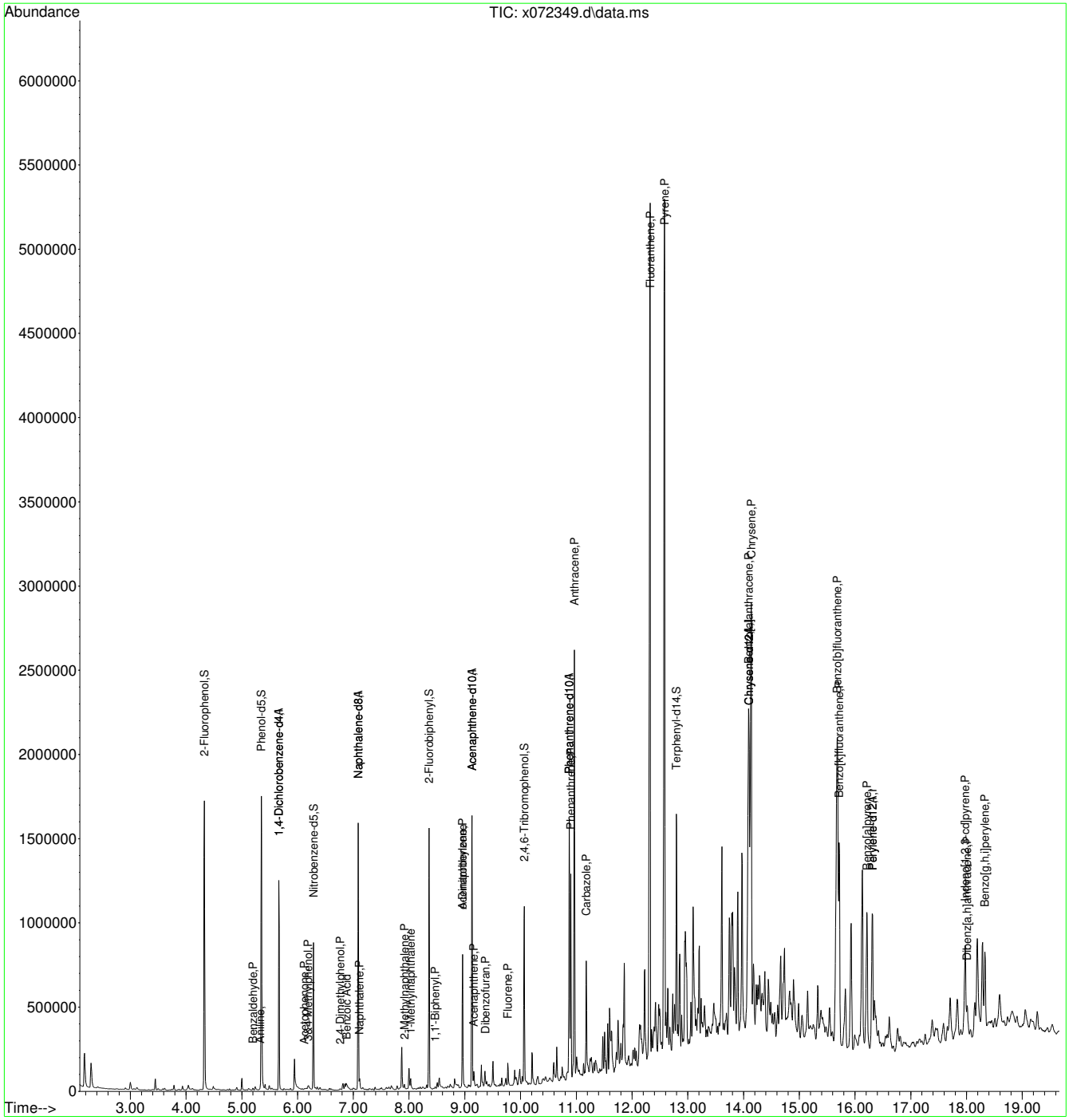
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

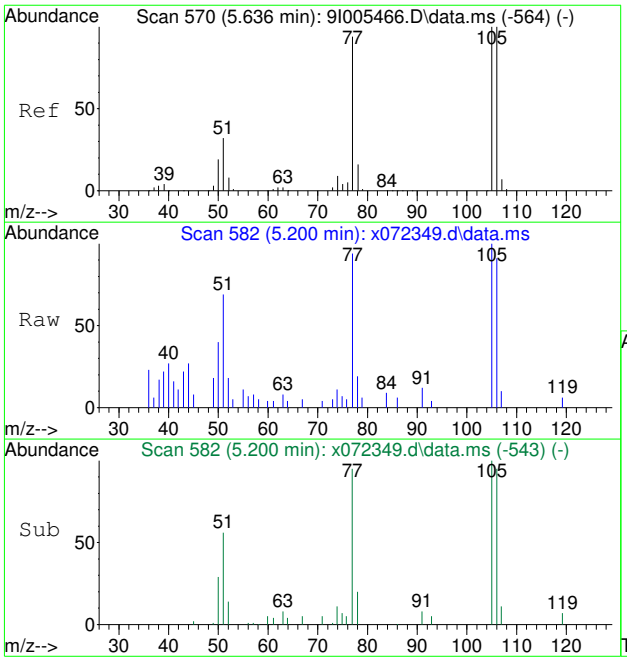
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072349.d
Acq On : 11 Aug 2020 9:27 pm
Operator : marthav
Sample : fa77581-3 E
Misc : op81482,sx2950,30.2,,,1,1,soil
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Aug 12 03:18:51 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

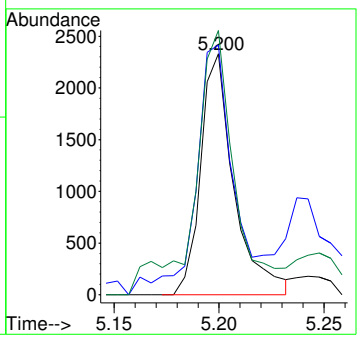


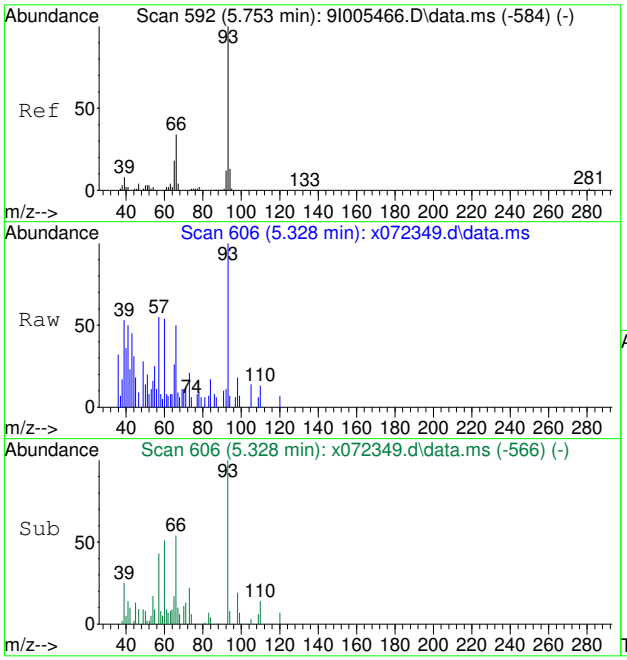


#5
Benzaldehyde
Concen: 0.49 ppm
RT: 5.200 min Scan# 582
Delta R.T. 0.011 min
Lab File: x072349.d
Acq: 11 Aug 2020 9:27 pm

Tgt Ion:106 Resp: 2579

Ion	Ratio	Lower	Upper
106	100		
77	90.9	63.9	123.9
105	101.8	70.0	130.0

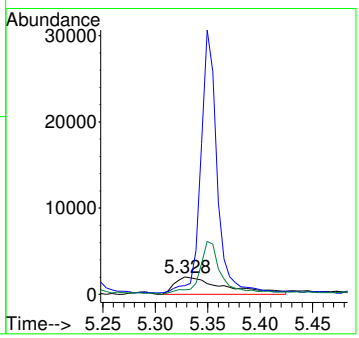


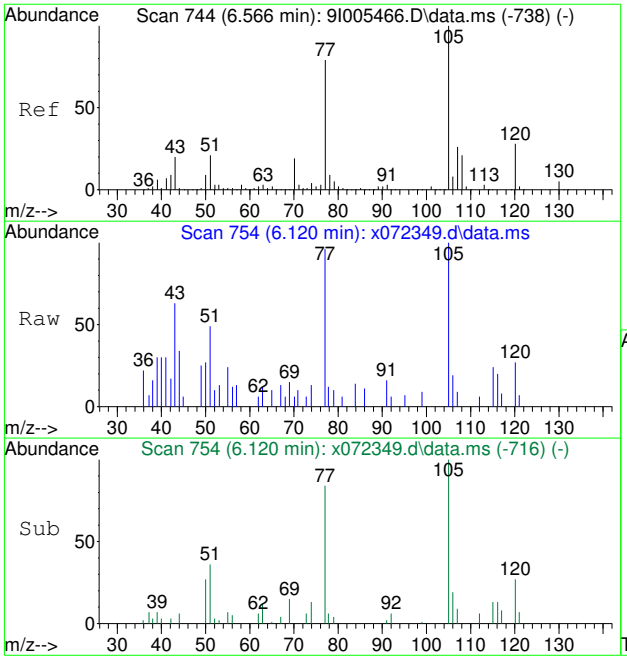


#6
Aniline
Concen: 0.64 ppm
RT: 5.328 min Scan# 606
Delta R.T. 0.016 min
Lab File: x072349.d
Acq: 11 Aug 2020 9:27 pm

Tgt Ion: 93 Resp: 6789

Ion	Ratio	Lower	Upper
93	100		
66	33.1	3.5	63.5
65	21.3	0.0	48.0

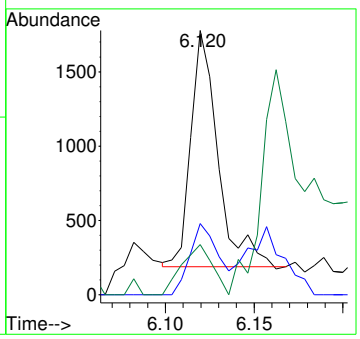


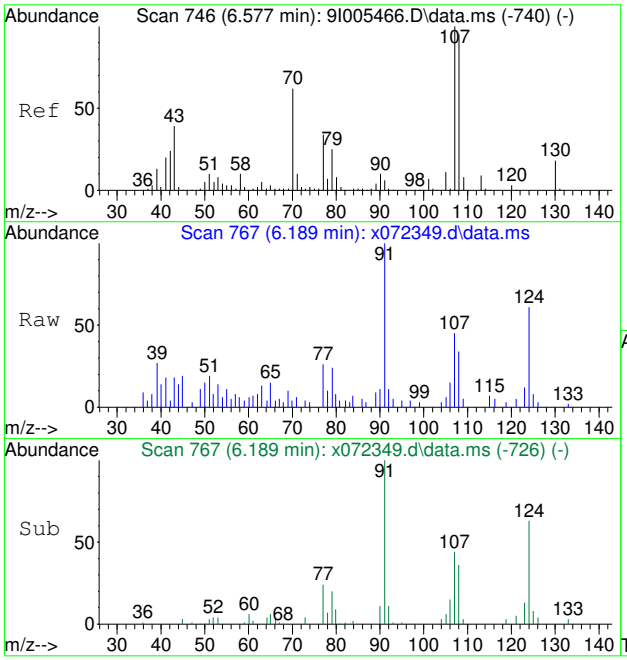


#18
Acetophenone
Concen: 0.18 ppm
RT: 6.120 min Scan# 754
Delta R.T. 0.005 min
Lab File: x072349.d
Acq: 11 Aug 2020 9:27 pm

Tgt Ion:105 Resp: 1681

Ion	Ratio	Lower	Upper
105	100		
120	22.6	0.0	58.3
106	0.0	0.0	38.0

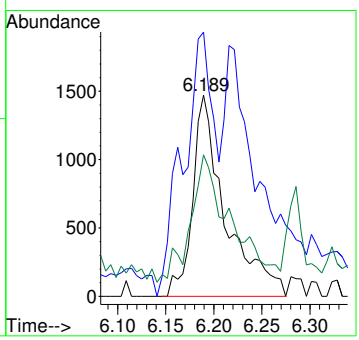


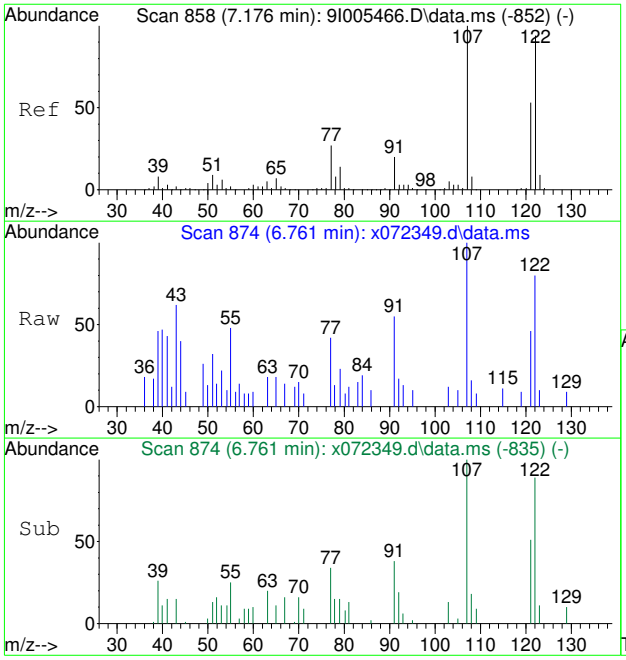


#21
3&4-Methylphenol
Concen: 0.52 ppm
RT: 6.189 min Scan# 767
Delta R.T. 0.021 min
Lab File: x072349.d
Acq: 11 Aug 2020 9:27 pm

Tgt Ion:108 Resp: 3468

Ion	Ratio	Lower	Upper
108	100		
107	108.5	75.4	135.4
79	49.8	0.0	56.3

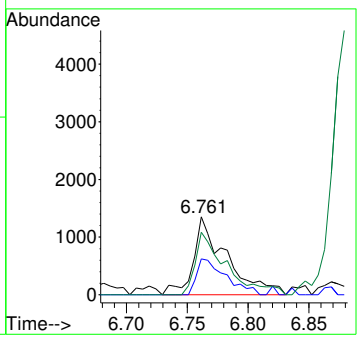


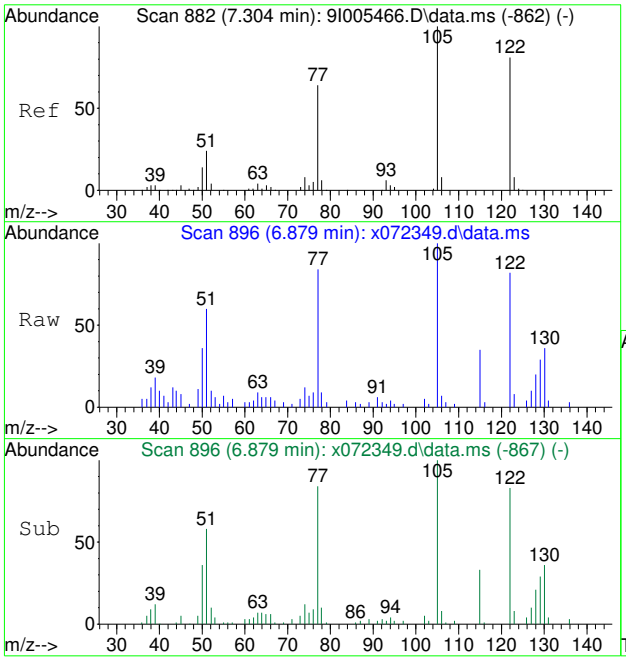


#27
2,4-Dimethylphenol
Concen: 0.43 ppm
RT: 6.761 min Scan# 874
Delta R.T. 0.011 min
Lab File: x072349.d
Acq: 11 Aug 2020 9:27 pm

Tgt Ion:107 Resp: 2557

Ion	Ratio	Lower	Upper
107	100		
121	45.9	23.4	83.4
122	80.0	64.3	124.3

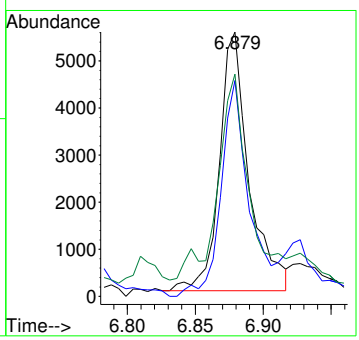


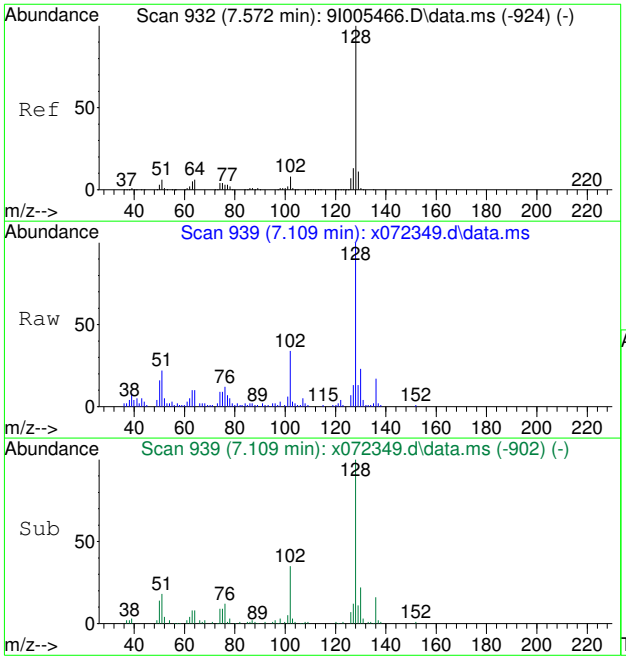


#30
Benzoic Acid
Concen: 2.04 ppm
RT: 6.879 min Scan# 896
Delta R.T. -0.043 min
Lab File: x072349.d
Acq: 11 Aug 2020 9:27 pm

Tgt Ion:105 Resp: 8316

Ion	Ratio	Lower	Upper
105	100		
122	77.4	51.2	111.2
77	78.1	34.1	94.1

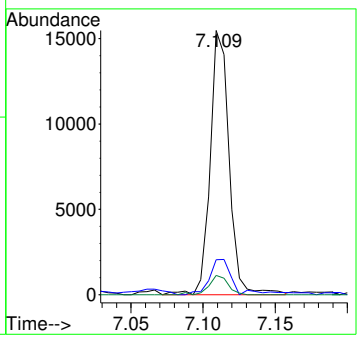


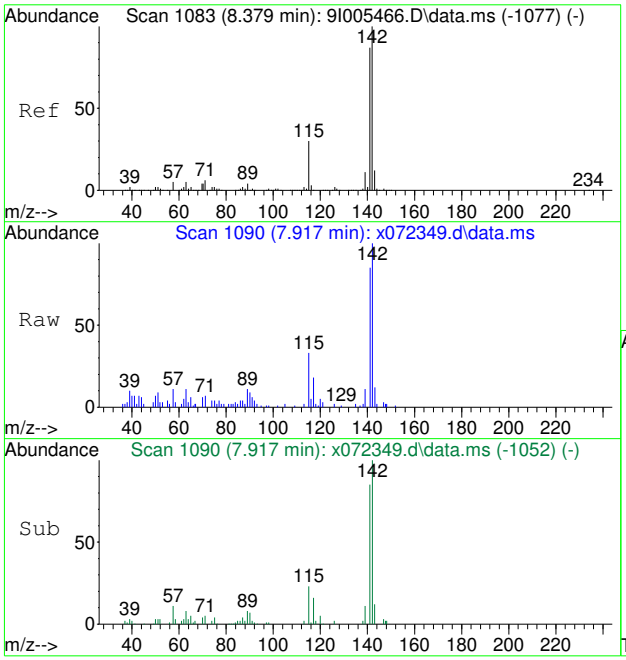


#34
Naphthalene
Concen: 0.78 ppm
RT: 7.109 min Scan# 939
Delta R.T. -0.000 min
Lab File: x072349.d
Acq: 11 Aug 2020 9:27 pm

Tgt Ion:128 Resp: 14135

Ion	Ratio	Lower	Upper
128	100		
129	12.1	0.0	41.4
126	7.3	0.0	37.4

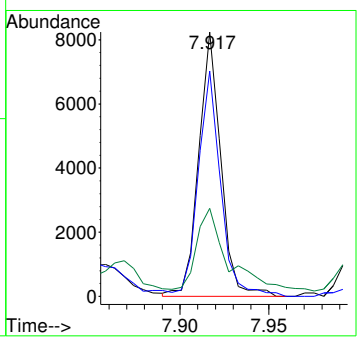


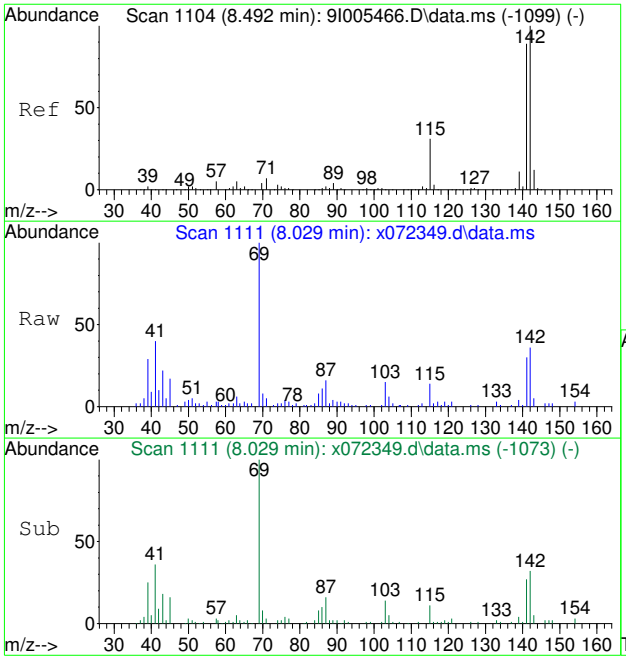


#40
2-Methylnaphthalene
Concen: 0.60 ppm
RT: 7.917 min Scan# 1090
Delta R.T. 0.005 min
Lab File: x072349.d
Acq: 11 Aug 2020 9:27 pm

Tgt Ion:142 Resp: 7133

Ion	Ratio	Lower	Upper
142	100		
141	84.7	56.8	116.8
115	30.3	0.0	60.0

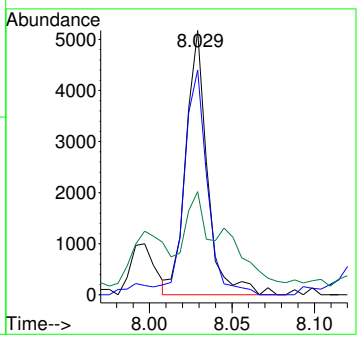


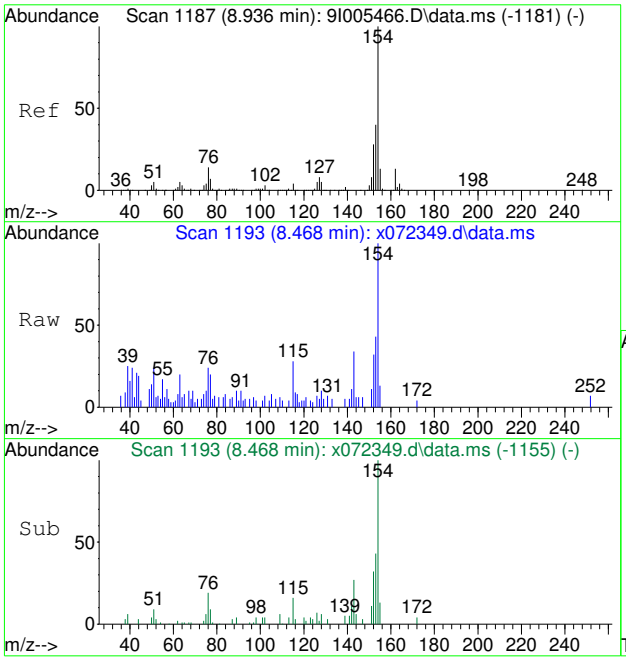


#41
1-Methylnaphthalene
Concen: 0.41 ppm
RT: 8.029 min Scan# 1111
Delta R.T. 0.005 min
Lab File: x072349.d
Acq: 11 Aug 2020 9:27 pm

Tgt Ion:142 Resp: 4709

Ion	Ratio	Lower	Upper
142	100		
141	85.5	59.0	119.0
115	27.5	1.1	61.1

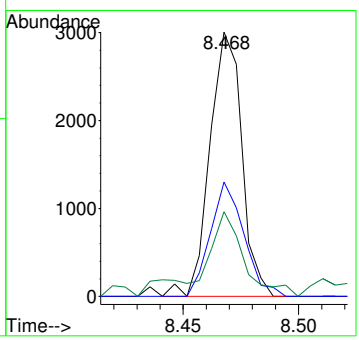


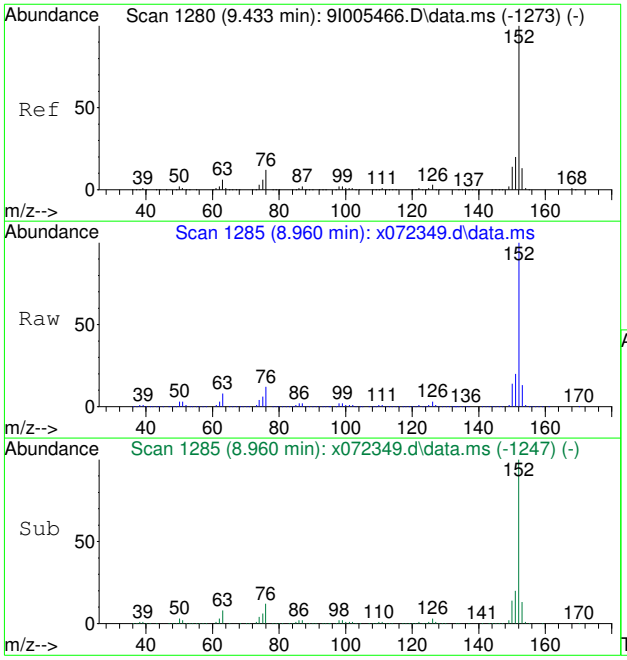


#48
1,1'-Biphenyl
Concen: 0.21 ppm
RT: 8.468 min Scan# 1193
Delta R.T. 0.005 min
Lab File: x072349.d
Acq: 11 Aug 2020 9:27 pm

Tgt Ion:154 Resp: 2893

Ion	Ratio	Lower	Upper
154	100		
153	43.3	10.3	70.3
152	26.7	0.0	58.2

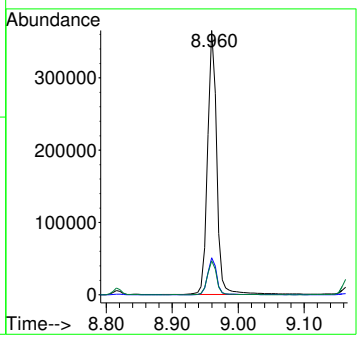


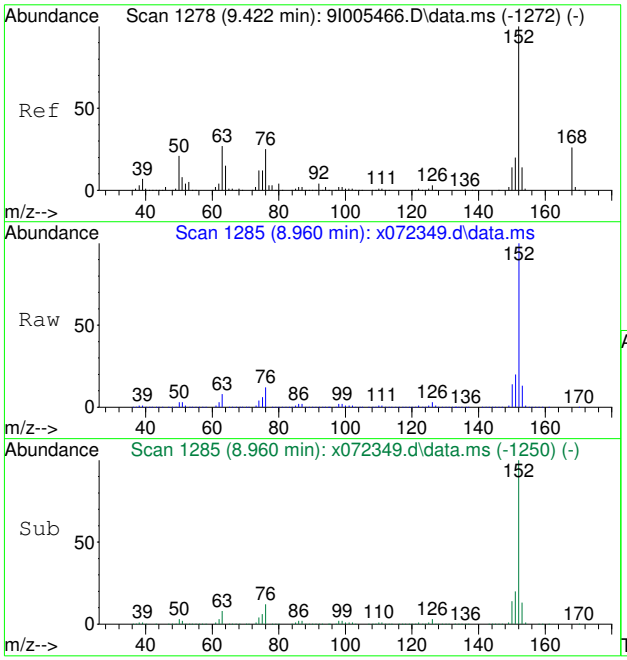


#52
Acenaphthylene
Concen: 21.34 ppm
RT: 8.960 min Scan# 1285
Delta R.T. 0.005 min
Lab File: x072349.d
Acq: 11 Aug 2020 9:27 pm

Tgt Ion:152 Resp: 353214

Ion	Ratio	Lower	Upper
152	100		
150	14.0	0.0	44.3
153	12.8	0.0	43.3

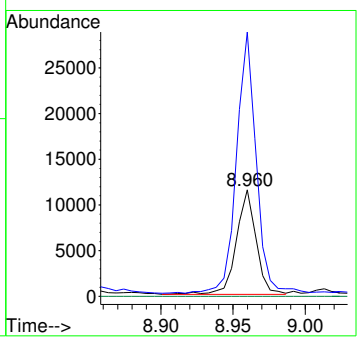


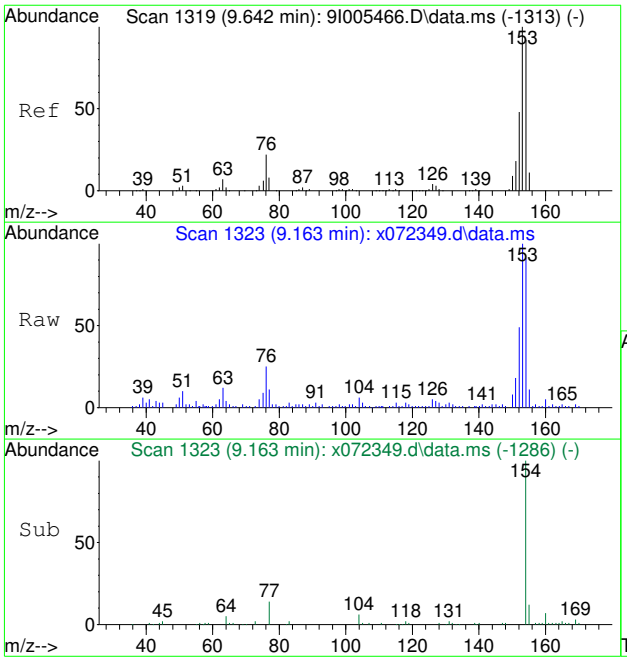


#56
o-Dinitrobenzene
Concen: 4.13 ppm
RT: 8.960 min Scan# 1285
Delta R.T. -0.011 min
Lab File: x072349.d
Acq: 11 Aug 2020 9:27 pm

Tgt Ion: 50 Resp: 10909

Ion	Ratio	Lower	Upper
50	100		
63	249.0	110.3	150.3#
168	0.0	104.0	144.0#

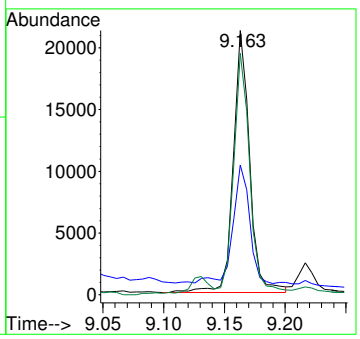


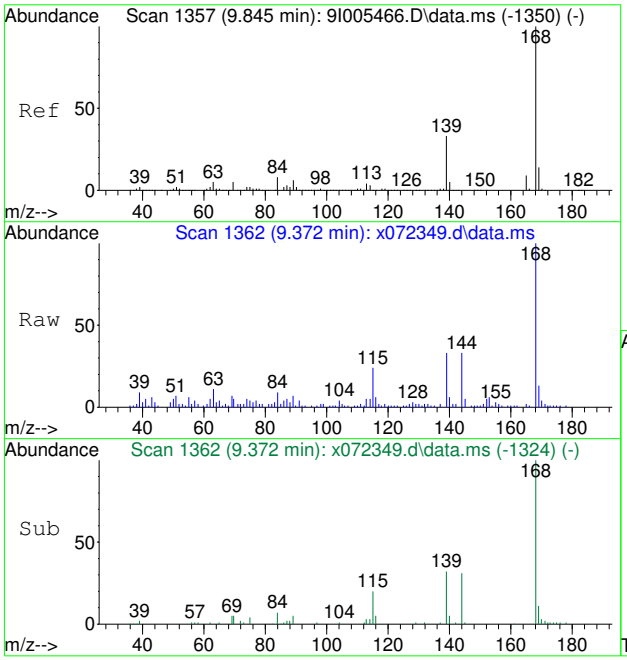


#57
Acenaphthene
Concen: 1.81 ppm
RT: 9.163 min Scan# 1323
Delta R.T. -0.000 min
Lab File: x072349.d
Acq: 11 Aug 2020 9:27 pm

Tgt Ion:153 Resp: 19970

Ion	Ratio	Lower	Upper
153	100		
152	45.1	18.4	78.4
154	91.9	62.4	122.4

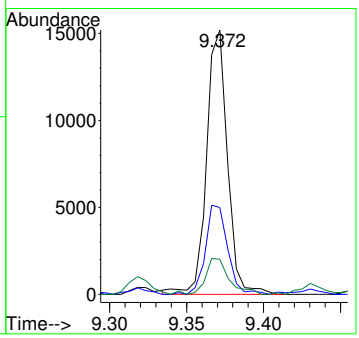


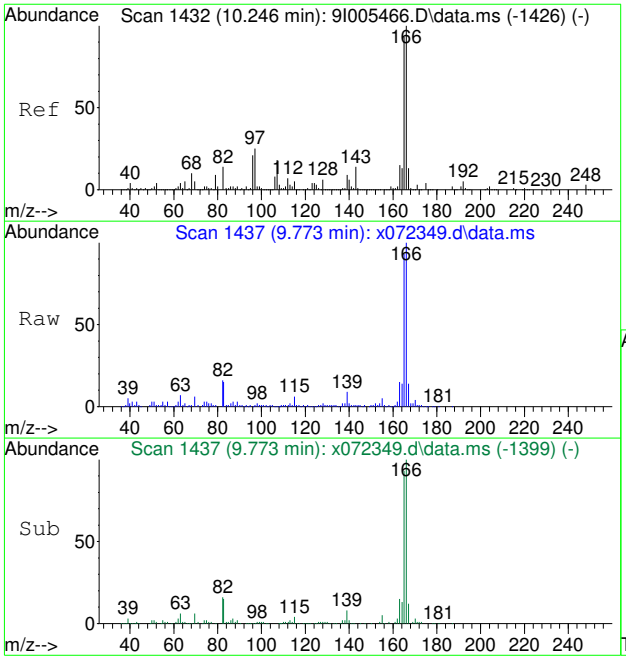


#60
Dibenzofuran
Concen: 0.98 ppm
RT: 9.372 min Scan# 1362
Delta R.T. 0.005 min
Lab File: x072349.d
Acq: 11 Aug 2020 9:27 pm

Tgt Ion:168 Resp: 14376

Ion	Ratio	Lower	Upper
168	100		
139	32.8	3.0	63.0
169	12.9	0.0	43.5

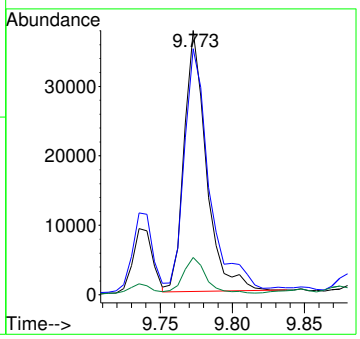


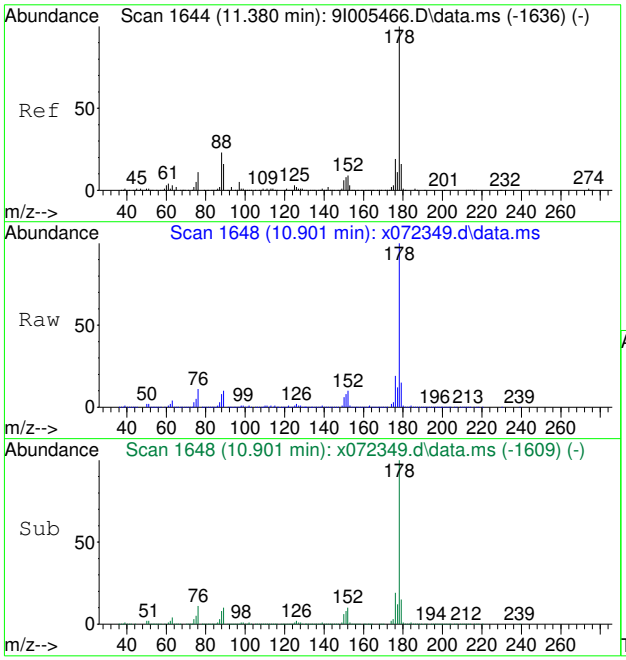


#65
Fluorene
Concen: 3.52 ppm
RT: 9.773 min Scan# 1437
Delta R.T. 0.005 min
Lab File: x072349.d
Acq: 11 Aug 2020 9:27 pm

Tgt Ion:166 Resp: 40293

Ion	Ratio	Lower	Upper
166	100		
165	91.7	62.7	122.7
167	13.1	0.0	43.5

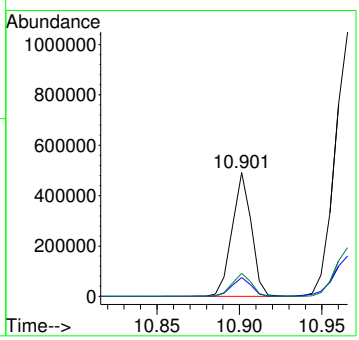


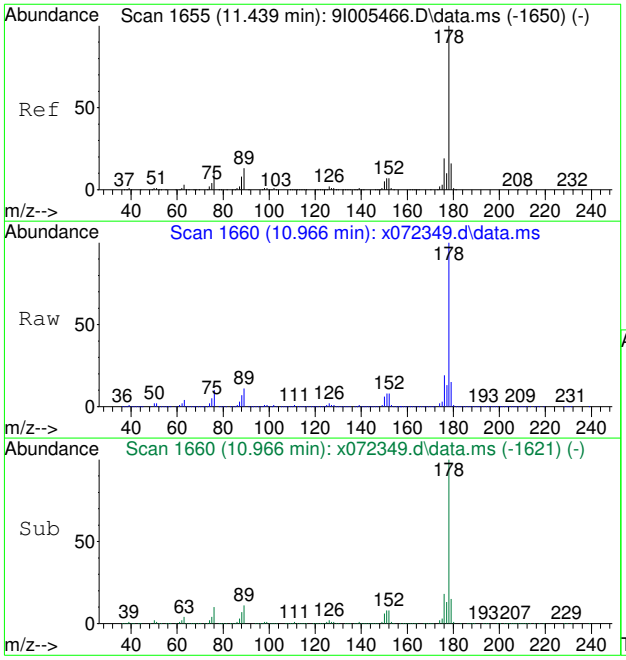


#84
Phenanthrene
Concen: 22.80 ppm
RT: 10.901 min Scan# 1648
Delta R.T. 0.011 min
Lab File: x072349.d
Acq: 11 Aug 2020 9:27 pm

Tgt Ion:178 Resp: 398719

Ion	Ratio	Lower	Upper
178	100		
179	15.2	0.0	45.8
176	18.6	0.0	49.3

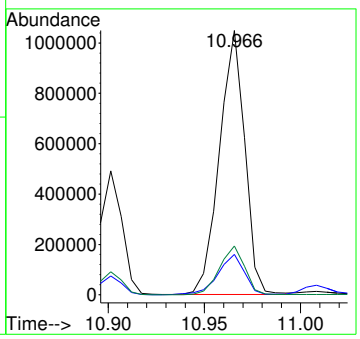


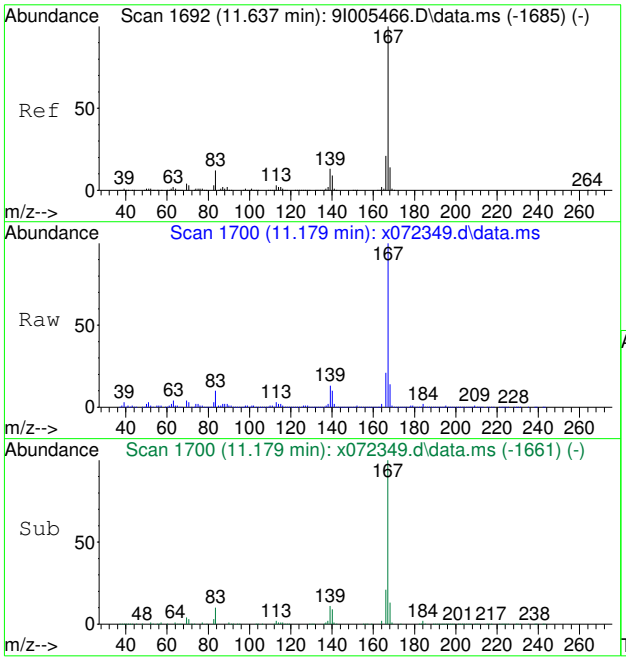


#85
Anthracene
Concen: 52.84 ppm
RT: 10.966 min Scan# 1660
Delta R.T. 0.011 min
Lab File: x072349.d
Acq: 11 Aug 2020 9:27 pm

Tgt Ion:178 Resp: 963047

Ion	Ratio	Lower	Upper
178	100		
179	15.1	0.0	46.0
176	18.5	0.0	49.3

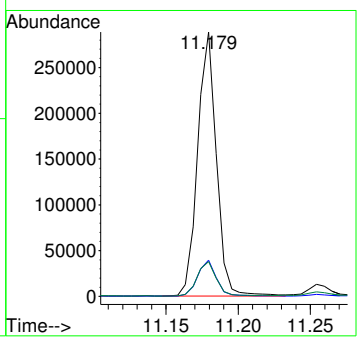


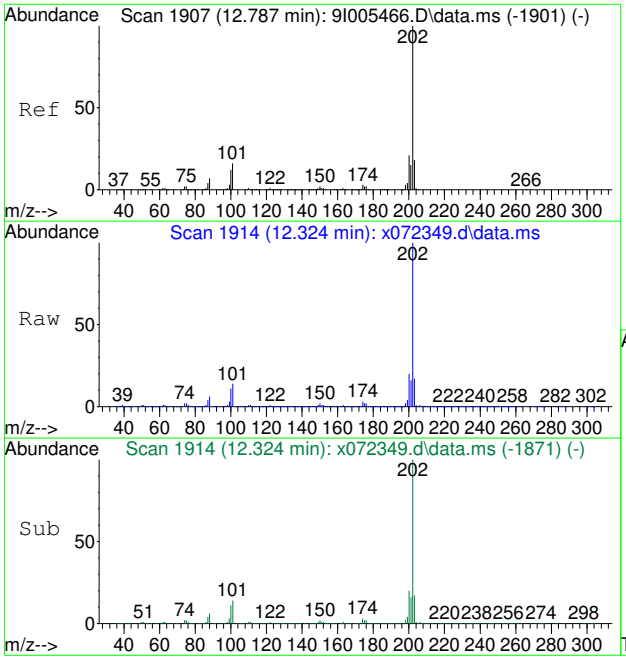


#87
Carbazole
Concen: 16.23 ppm
RT: 11.179 min Scan# 1700
Delta R.T. 0.011 min
Lab File: x072349.d
Acq: 11 Aug 2020 9:27 pm

Tgt Ion:167 Resp: 261011

Ion	Ratio	Lower	Upper
167	100		
168	13.6	0.0	43.9
139	12.9	0.0	42.7

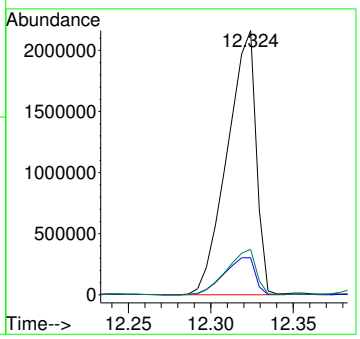


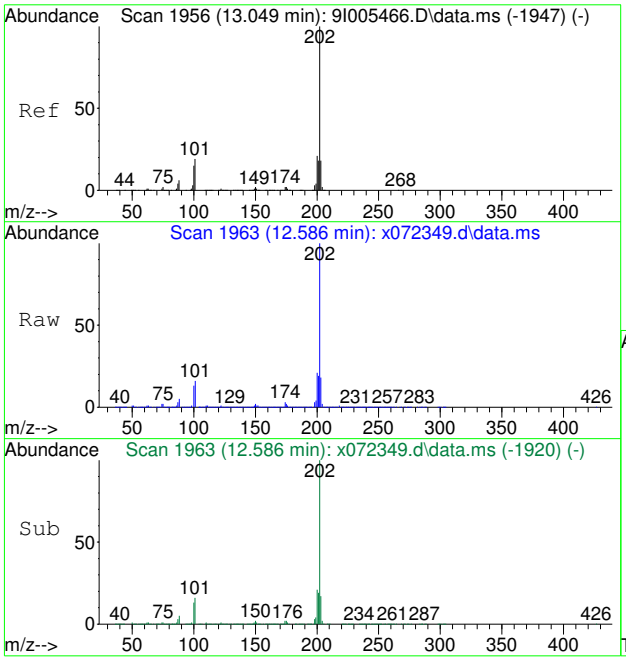


#91
Fluoranthene
Concen: 162.16 ppm
RT: 12.324 min Scan# 1914
Delta R.T. 0.032 min
Lab File: x072349.d
Acq: 11 Aug 2020 9:27 pm

Tgt Ion:202 Resp: 2631220

Ion	Ratio	Lower	Upper
202	100		
101	14.0	0.0	45.8
203	17.2	0.0	48.1

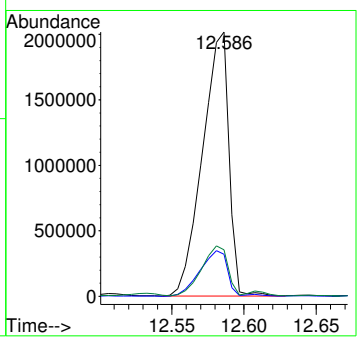


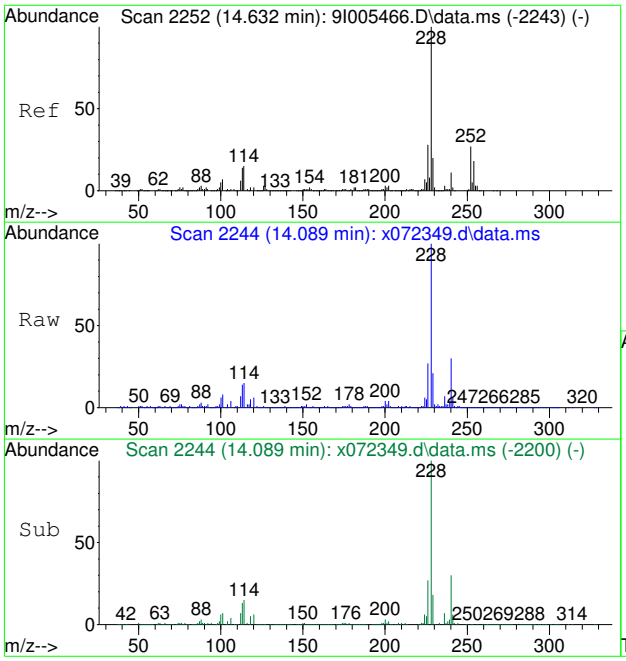


#94
Pyrene
Concen: 130.87 ppm
RT: 12.586 min Scan# 1963
Delta R.T. 0.032 min
Lab File: x072349.d
Acq: 11 Aug 2020 9:27 pm

Tgt Ion:202 Resp: 2565443

Ion	Ratio	Lower	Upper
202	100		
101	15.8	0.0	48.7
203	17.3	0.0	48.4

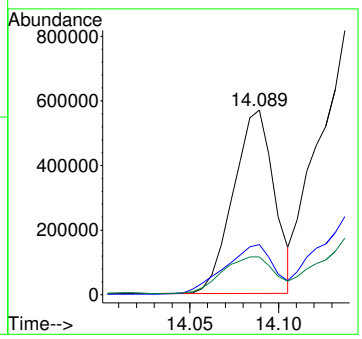


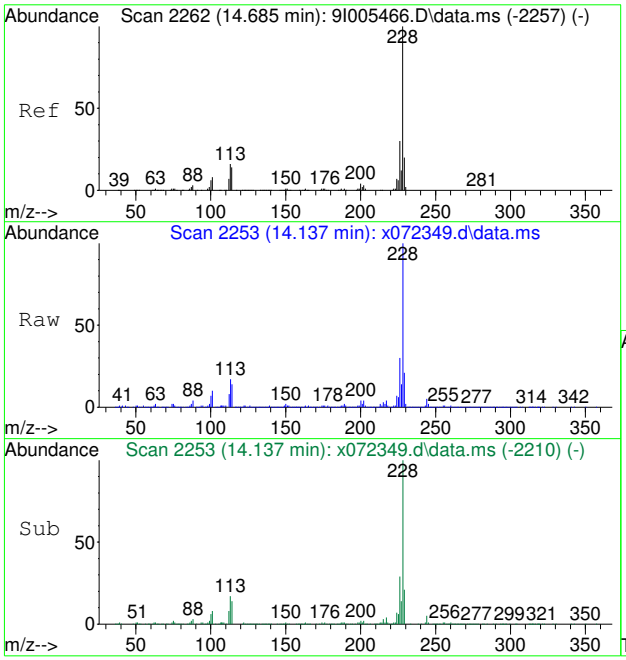


#99
Benzo[a]anthracene
Concen: 61.49 ppm
RT: 14.089 min Scan# 2244
Delta R.T. 0.037 min
Lab File: x072349.d
Acq: 11 Aug 2020 9:27 pm

Tgt Ion:228 Resp: 912390

Ion	Ratio	Lower	Upper
228	100		
226	26.6	0.0	57.5
229	19.1	0.0	49.9

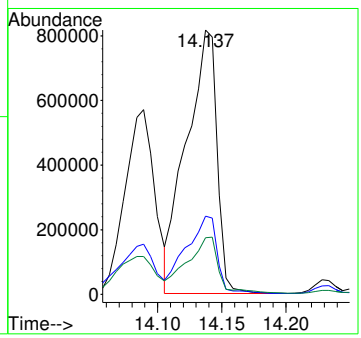


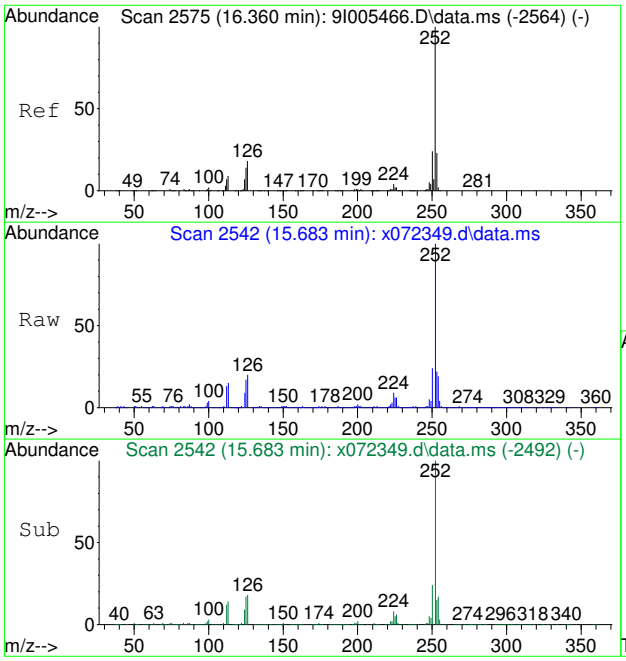


#100
Chrysene
Concen: 85.69 ppm
RT: 14.137 min Scan# 2253
Delta R.T. 0.032 min
Lab File: x072349.d
Acq: 11 Aug 2020 9:27 pm

Tgt Ion:228 Resp: 1354136

Ion	Ratio	Lower	Upper
228	100		
226	29.5	0.4	60.4
229	20.5	0.0	50.1

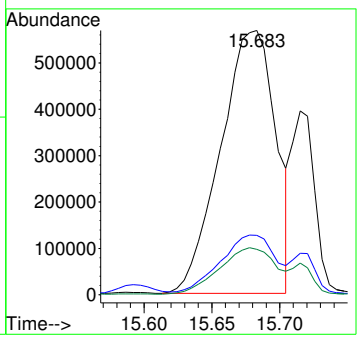


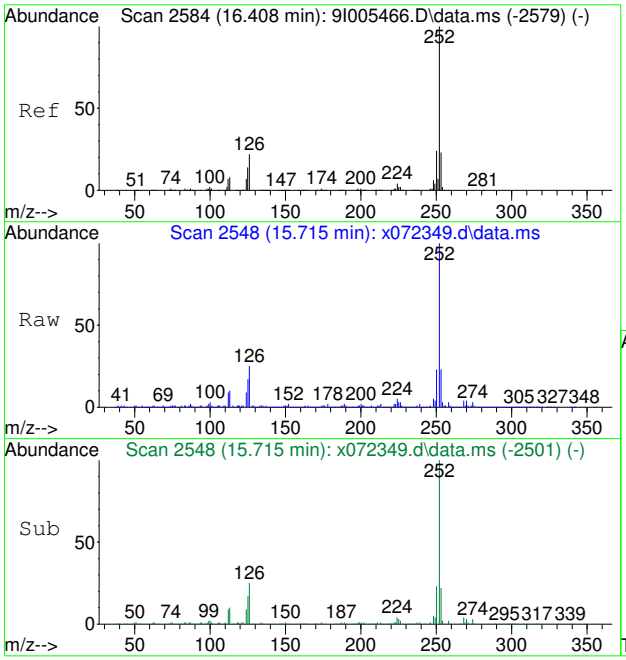


#104
Benzo[b]fluoranthene
Concen: 122.21 ppm
RT: 15.683 min Scan# 2542
Delta R.T. 0.069 min
Lab File: x072349.d
Acq: 11 Aug 2020 9:27 pm

Tgt Ion:252 Resp: 1601617

Ion	Ratio	Lower	Upper
252	100		
253	21.5	0.0	52.5
125	16.7	0.0	44.0

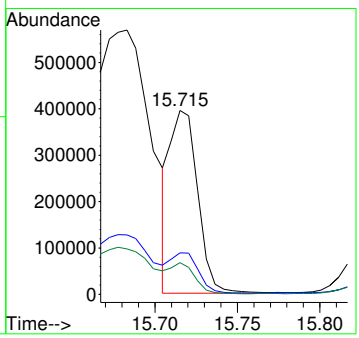


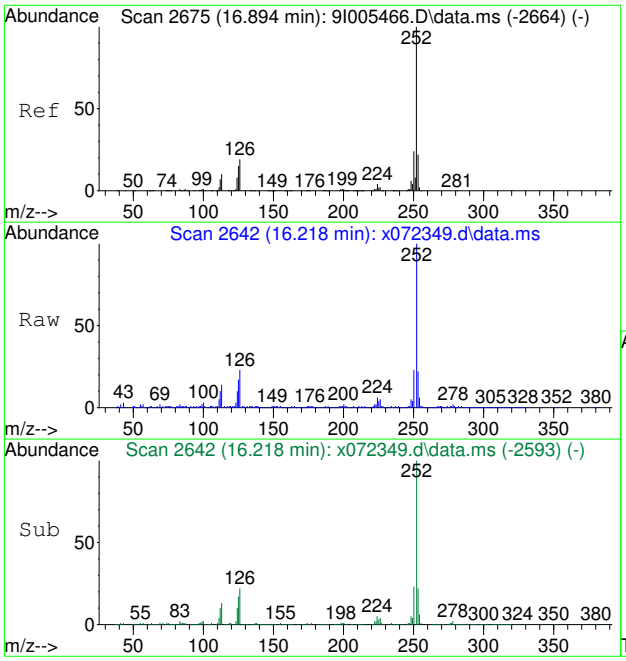


#105
Benzo[k]fluoranthene
Concen: 34.05 ppm
RT: 15.715 min Scan# 2548
Delta R.T. 0.053 min
Lab File: x072349.d
Acq: 11 Aug 2020 9:27 pm

Tgt Ion:252 Resp: 463367

Ion	Ratio	Lower	Upper
252	100		
253	21.7	0.0	52.5
125	16.4	0.0	44.4

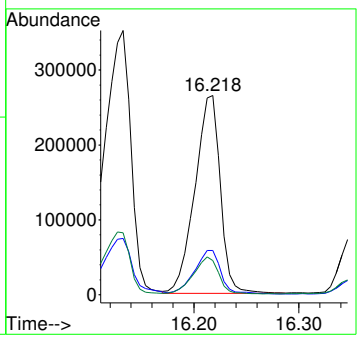


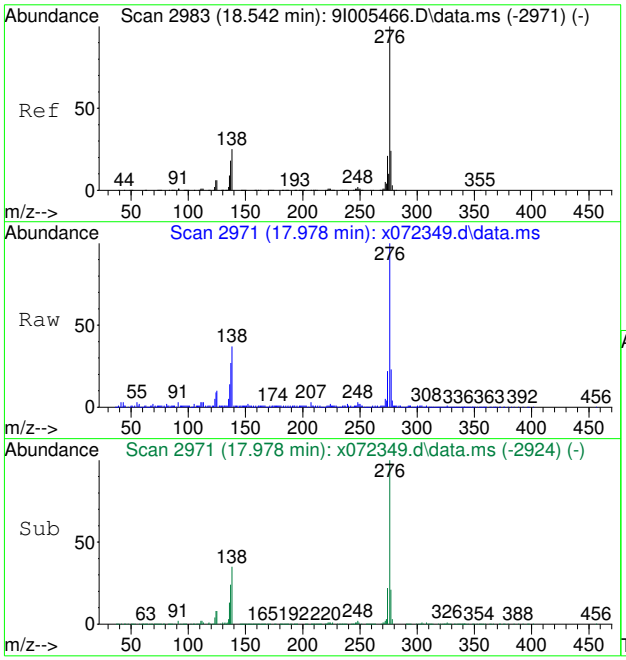


#106
Benzo[a]pyrene
Concen: 41.60 ppm
RT: 16.218 min Scan# 2642
Delta R.T. 0.064 min
Lab File: x072349.d
Acq: 11 Aug 2020 9:27 pm

Tgt Ion:252 Resp: 446002

Ion	Ratio	Lower	Upper
252	100		
253	21.6	0.0	52.3
125	16.8	0.0	44.7

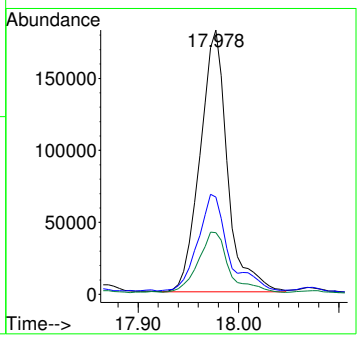


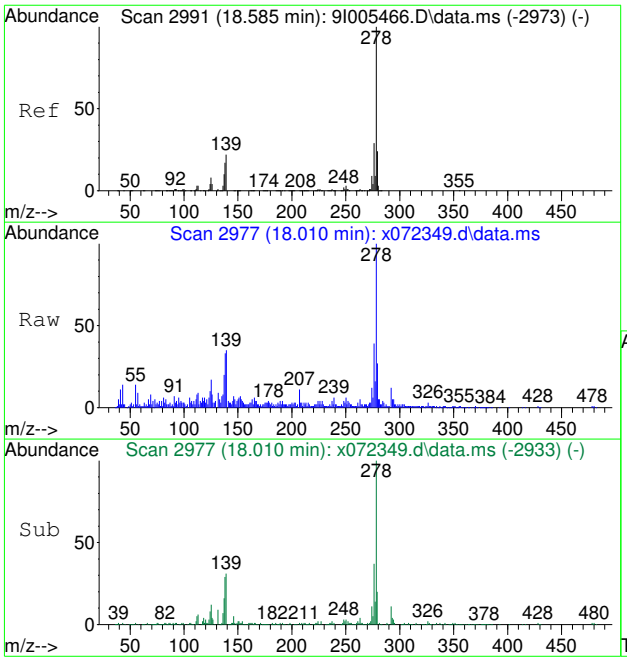


#107
Indeno[1,2,3-cd]pyrene
Concen: 46.95 ppm
RT: 17.978 min Scan# 2971
Delta R.T. 0.053 min
Lab File: x072349.d
Acq: 11 Aug 2020 9:27 pm

Tgt Ion:276 Resp: 345986

Ion	Ratio	Lower	Upper
276	100		
138	35.7	0.0	54.7
277	22.8	0.0	53.8

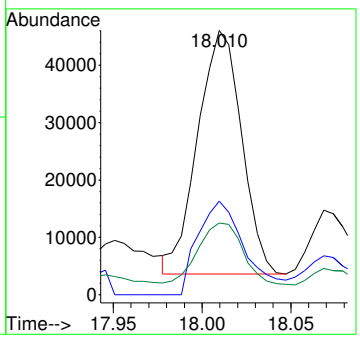


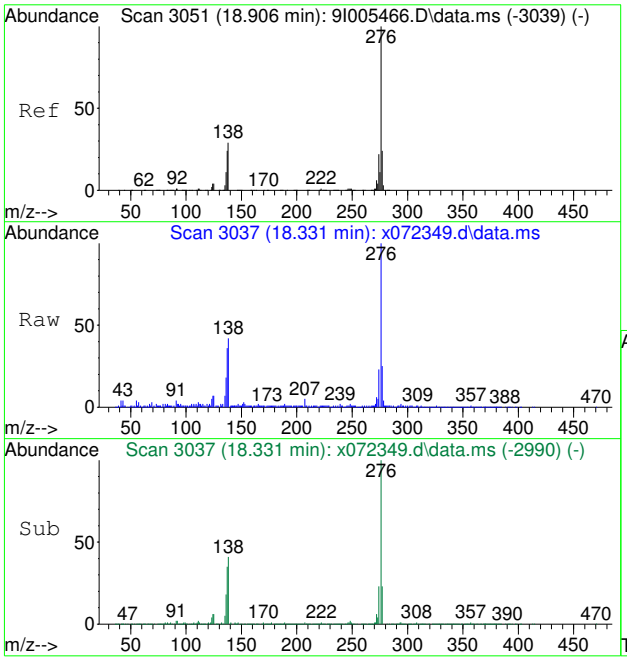


#108
Dibenz[a,h]anthracene
Concen: 11.19 ppm
RT: 18.010 min Scan# 2977
Delta R.T. 0.037 min
Lab File: x072349.d
Acq: 11 Aug 2020 9:27 pm

Tgt Ion:278 Resp: 72774

Ion	Ratio	Lower	Upper
278	100		
139	36.8	0.0	52.4
279	25.8	0.0	54.4

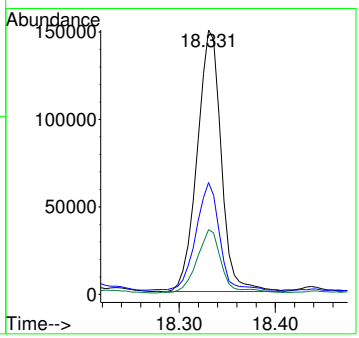




#109
Benzo[g,h,i]perylene
Concen: 26.76 ppm
RT: 18.331 min Scan# 3037
Delta R.T. 0.053 min
Lab File: x072349.d
Acq: 11 Aug 2020 9:27 pm

Tgt Ion:276 Resp: 259457

Ion	Ratio	Lower	Upper
276	100		
138	41.1	0.0	59.4
277	24.0	0.0	54.1



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-13-2020\sx2951\
Data File : x072376.d
Acq On : 12 Aug 2020 6:34 pm
Operator : marthav
Sample : fa77581-3 E,5
Misc : op81482,sx2951,30.2,,,1,5,soil
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 13 03:02:01 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

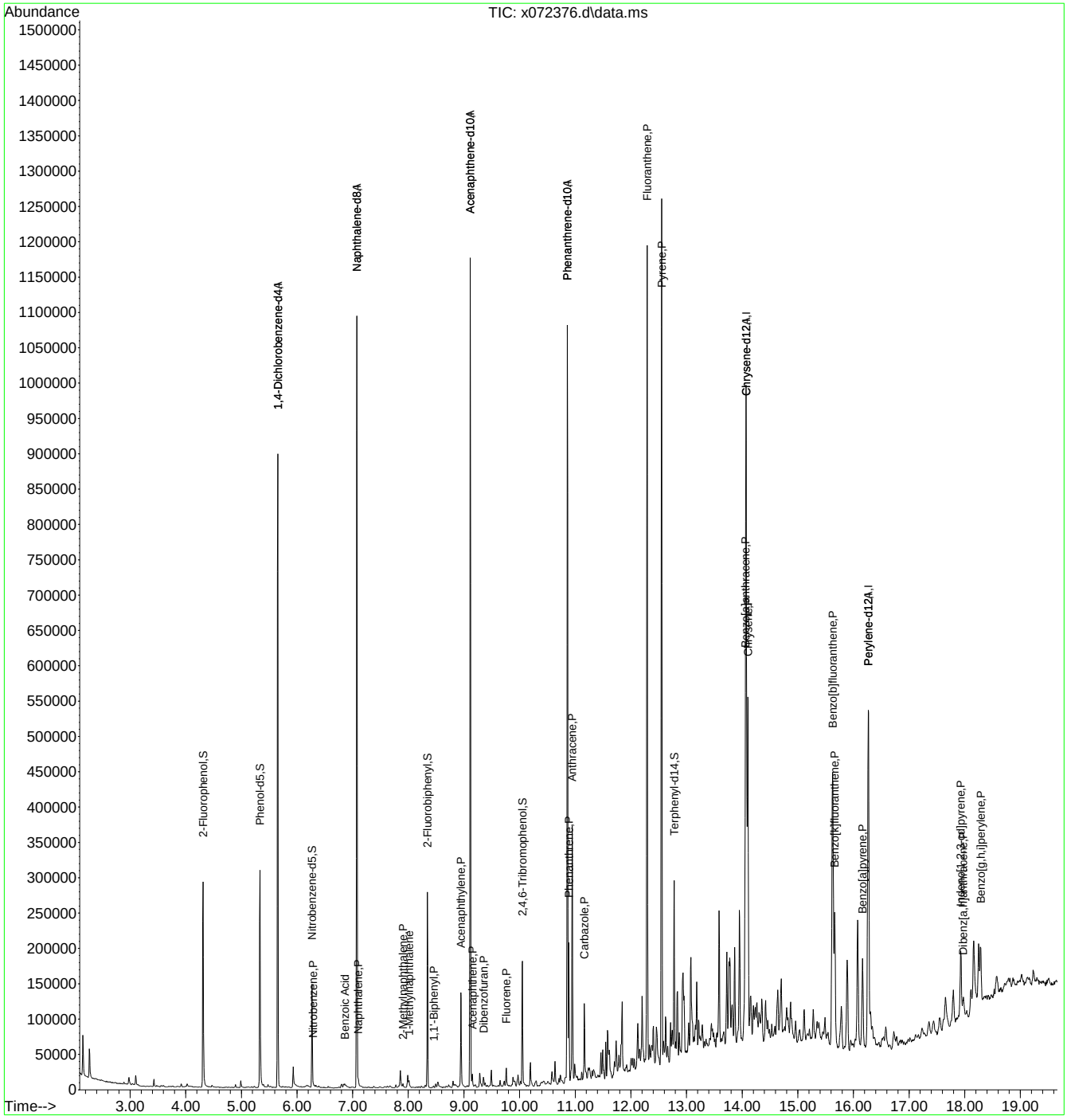
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.654	152	126149	40.00	ppm	0.00
22) Naphthalene-d8	7.077	136	463289	40.00	ppm	0.00
43) Acenaphthene-d10	9.115	164	221908	40.00	ppm	0.00
70) Phenanthrene-d10	10.859	188	382867	40.00	ppm	0.00
92) Chrysene-d12	14.073	240	316510	40.00	ppm	0.00
102) Perylene-d12	16.266	264	243526	40.00	ppm	0.01
110) 1,4-Dichlorobenzene-d4A	5.654	152	126149	40.00	ppm	0.00
120) Naphthalene-d8A	7.077	136	463289	40.00	ppm	0.00
127) Acenaphthene-d10A	9.115	164	221908	40.00	ppm	0.00
136) Phenanthrene-d10A	10.859	188	382867	40.00	ppm	0.00
146) Chrysene-d12A	14.073	240	316510	40.00	ppm	0.00
153) Perylene-d12A	16.266	264	243526	40.00	ppm	0.01
System Monitoring Compounds						
7) 2-Fluorophenol	4.312	112	78697	17.40	ppm	0.00
Spiked Amount 100.000	Range 40 - 102		Recovery = 17.40%#			
9) Phenol-d5	5.333	99	95533	17.75	ppm	0.00
Spiked Amount 100.000	Range 41 - 100		Recovery = 17.75%#			
23) Nitrobenzene-d5	6.269	82	40526	8.47	ppm	-0.01
Spiked Amount 50.000	Range 40 - 105		Recovery = 16.94%#			
47) 2-Fluorobiphenyl	8.345	172	74850	9.32	ppm	-0.01
Spiked Amount 50.000	Range 43 - 107		Recovery = 18.64%#			
75) 2,4,6-Tribromophenol	10.051	330	13836	19.07	ppm	0.00
Spiked Amount 100.000	Range 42 - 108		Recovery = 19.07%#			
95) Terphenyl-d14	12.779	244	75267	8.95	ppm	0.00
Spiked Amount 50.000	Range 45 - 119		Recovery = 17.90%#			
Target Compounds						Qvalue
24) Nitrobenzene	6.291	77	1501	0.32	ppm	65
30) Benzoic Acid	6.858	105	1099	0.39	ppm	84
34) Naphthalene	7.098	128	2559	0.20	ppm	97
40) 2-Methylnaphthalene	7.906	142	1421	0.17	ppm	93
41) 1-Methylnaphthalene	8.013	142	935	0.12	ppm	93
48) 1,1'-Biphenyl	8.457	154	500	0.06	ppm	99
52) Acenaphthylene	8.944	152	67766	6.11	ppm	99
57) Acenaphthene	9.152	153	4417	0.60	ppm	93
60) Dibenzofuran	9.356	168	2466	0.25	ppm	96
65) Fluorene	9.762	166	8440	1.10	ppm	97
84) Phenanthrene	10.885	178	65921	5.70	ppm	97
85) Anthracene	10.944	178	141825	11.76	ppm	97
87) Carbazole	11.163	167	40395	3.80	ppm	100
91) Fluoranthene	12.292	202	442951	41.26	ppm	99
94) Pyrene	12.554	202	444329	33.81	ppm	99
99) Benzo[a]anthracene	14.057	228	144710	14.55	ppm	98
100) Chrysene	14.105	228	233913	22.08	ppm	98
104) Benzo[b]fluoranthene	15.624	252	250188	35.66	ppm	96
105) Benzo[k]fluoranthene	15.662	252	80103	9.27	ppm	96
106) Benzo[a]pyrene	16.164	252	69878	11.02	ppm	95
107) Indeno[1,2,3-cd]pyrene	17.929	276	56710	14.91	ppm	86
108) Dibenz[a,h]anthracene	17.967	278	11158	2.90	ppm	92
109) Benzo[g,h,i]perylene	18.288	276	43986	7.74	ppm	89

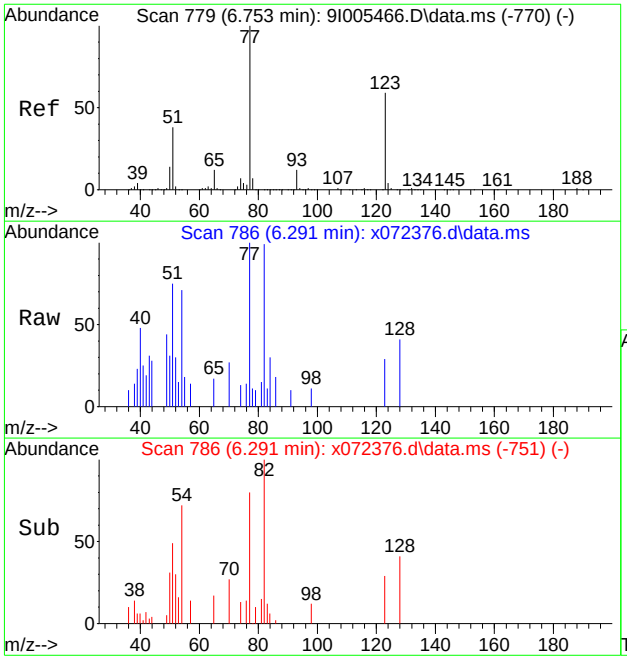
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-13-2020\sx2951\
Data File : x072376.d
Acq On : 12 Aug 2020 6:34 pm
Operator : marthav
Sample : fa77581-3 E,5
Misc : op81482,sx2951,30.2,,,1,5,soil
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 13 03:02:01 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

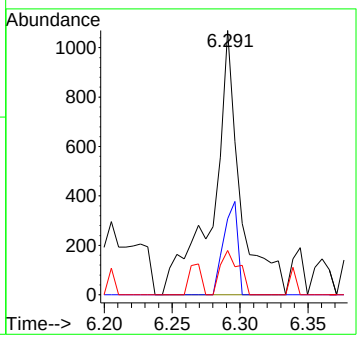


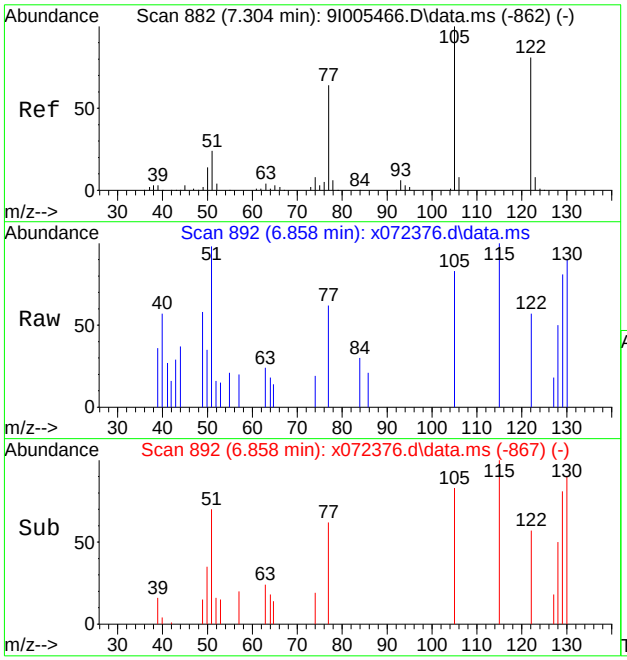


#24
Nitrobenzene
Concen: 0.32 ppm
RT: 6.291 min Scan# 786
Delta R.T. -0.011 min
Lab File: x072376.d
Acq: 12 Aug 2020 6:34 pm

Tgt Ion: 77 Resp: 1501

Ion	Ratio	Lower	Upper
77	100		
123	28.8	28.7	88.7
65	16.7	0.0	42.1

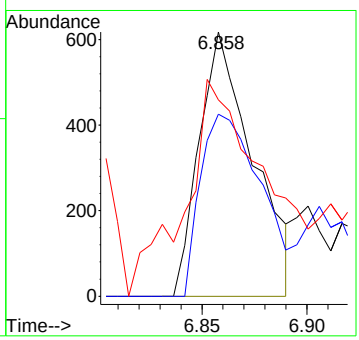


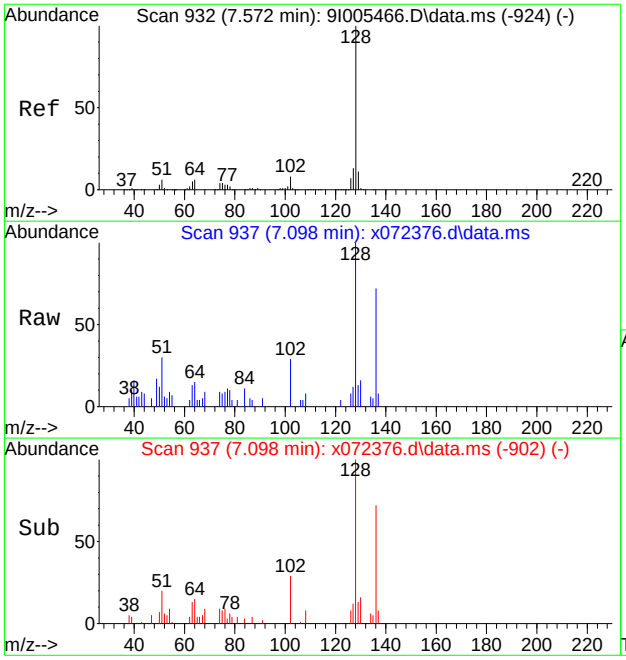


#30
Benzoic Acid
Concen: 0.39 ppm
RT: 6.858 min Scan# 892
Delta R.T. -0.064 min
Lab File: x072376.d
Acq: 12 Aug 2020 6:34 pm

Tgt Ion:105 Resp: 1099

Ion	Ratio	Lower	Upper
105	100		
122	69.7	51.2	111.2
77	48.7	34.1	94.1

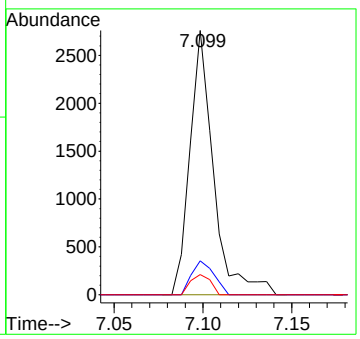


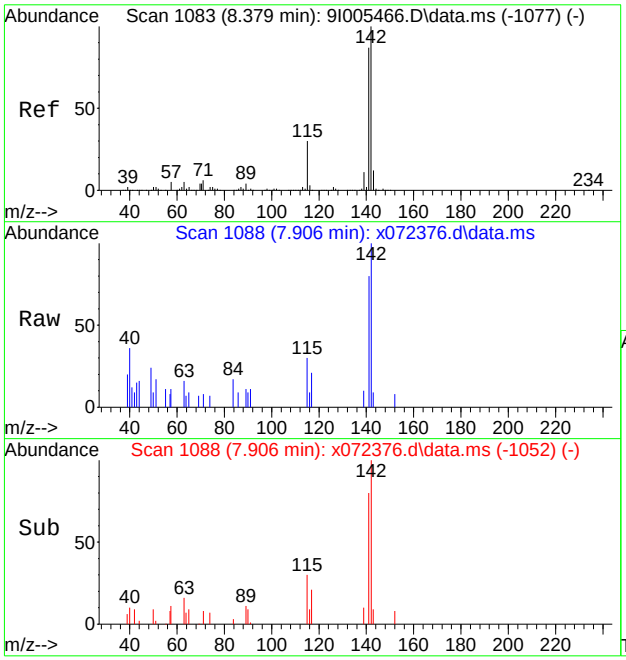


#34
Naphthalene
Concen: 0.20 ppm
RT: 7.098 min Scan# 937
Delta R.T. -0.011 min
Lab File: x072376.d
Acq: 12 Aug 2020 6:34 pm

Tgt Ion:128 Resp: 2559

Ion	Ratio	Lower	Upper
128	100		
129	12.8	0.0	41.4
126	7.6	0.0	37.4

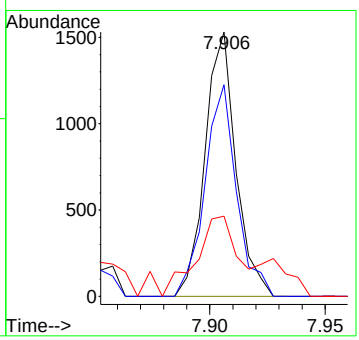


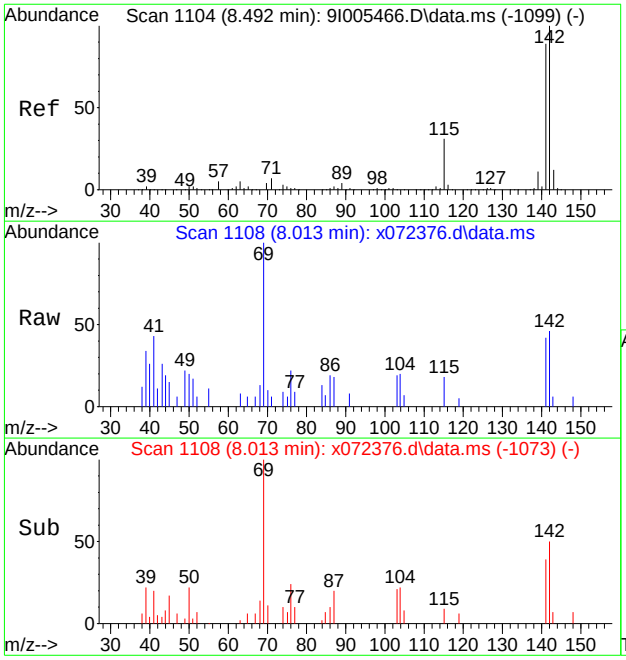


#40
2-Methylnaphthalene
Concen: 0.17 ppm
RT: 7.906 min Scan# 1088
Delta R.T. -0.005 min
Lab File: x072376.d
Acq: 12 Aug 2020 6:34 pm

Tgt Ion:142 Resp: 1421

Ion	Ratio	Lower	Upper
142	100		
141	80.0	56.8	116.8
115	26.1	0.0	60.0

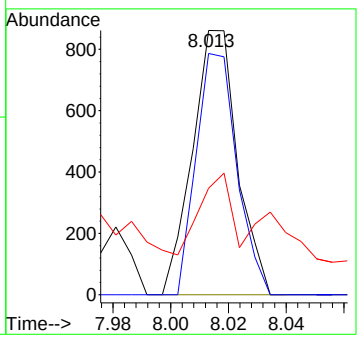


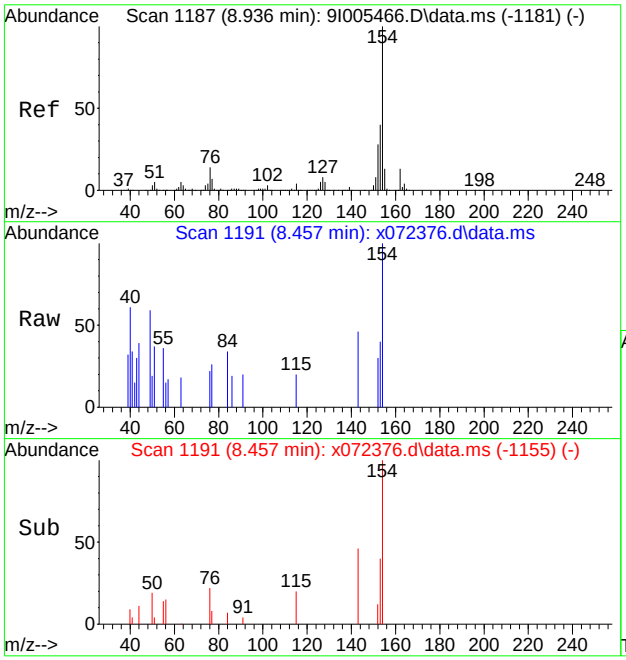


#41
1-Methylnaphthalene
Concen: 0.12 ppm
RT: 8.013 min Scan# 1108
Delta R.T. -0.011 min
Lab File: x072376.d
Acq: 12 Aug 2020 6:34 pm

Tgt Ion:142 Resp: 935

Ion	Ratio	Lower	Upper
142	100		
141	91.3	59.0	119.0
115	20.1	1.1	61.1

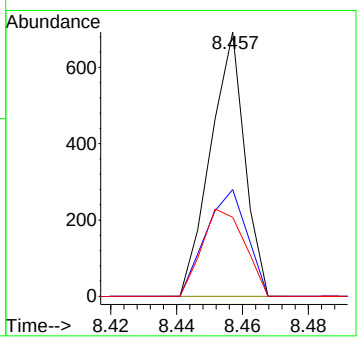


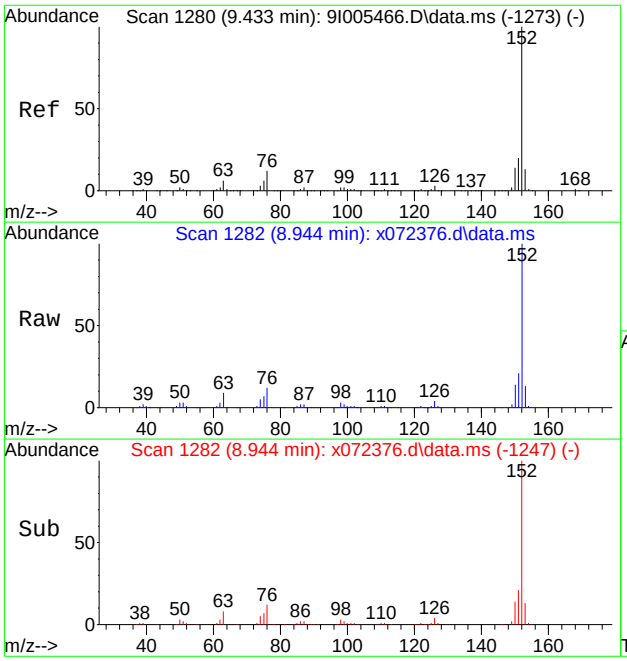


#48
1,1'-Biphenyl
Concen: 0.06 ppm
RT: 8.457 min Scan# 1191
Delta R.T. -0.005 min
Lab File: x072376.d
Acq: 12 Aug 2020 6:34 pm

Tgt Ion:154 Resp: 500

Ion	Ratio	Lower	Upper
154	100		
153	40.4	10.3	70.3
152	29.9	0.0	58.2

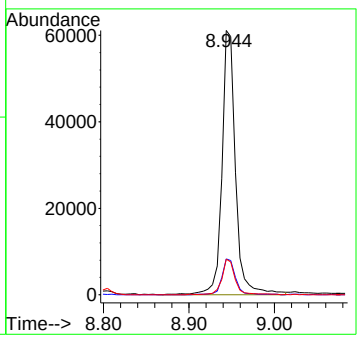


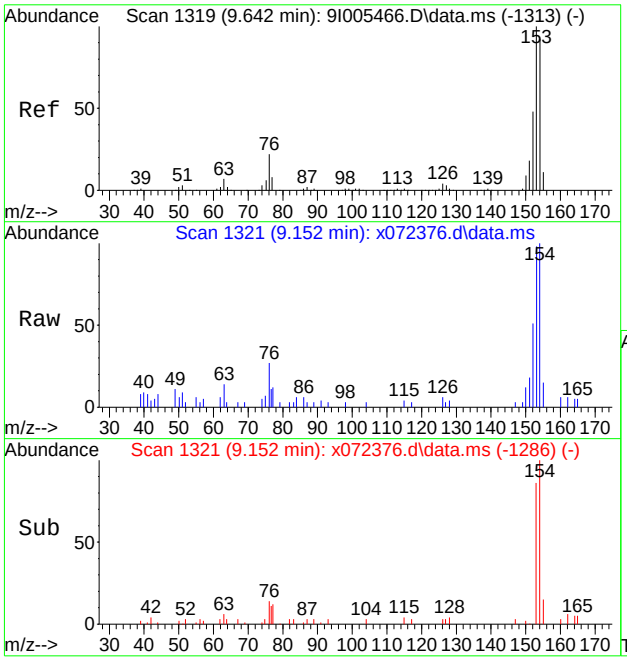


#52
Acenaphthylene
Concen: 6.11 ppm
RT: 8.944 min Scan# 1282
Delta R.T. -0.011 min
Lab File: x072376.d
Acq: 12 Aug 2020 6:34 pm

Tgt Ion:152 Resp: 67766

Ion	Ratio	Lower	Upper
152	100		
150	13.6	0.0	44.3
153	13.4	0.0	43.3

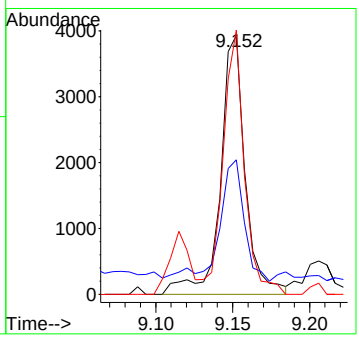


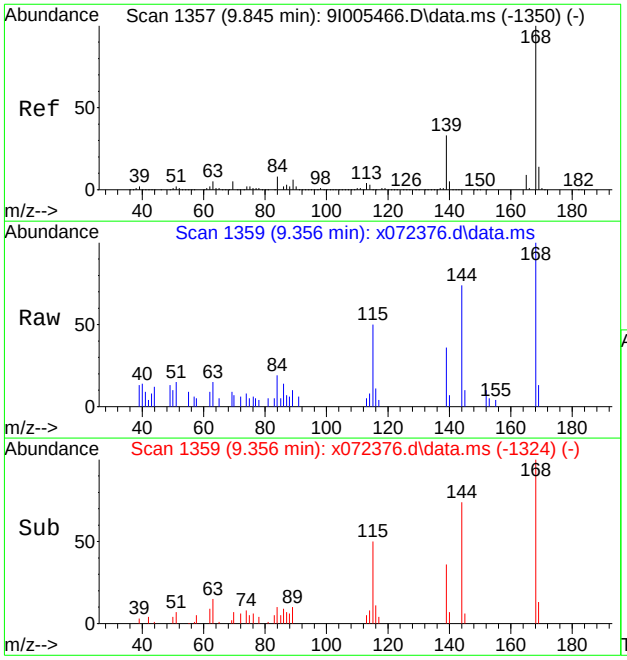


#57
Acenaphthene
Concen: 0.60 ppm
RT: 9.152 min Scan# 1321
Delta R.T. -0.011 min
Lab File: x072376.d
Acq: 12 Aug 2020 6:34 pm

Tgt Ion:153 Resp: 4417

Ion	Ratio	Lower	Upper
153	100		
152	45.1	18.4	78.4
154	100.7	62.4	122.4

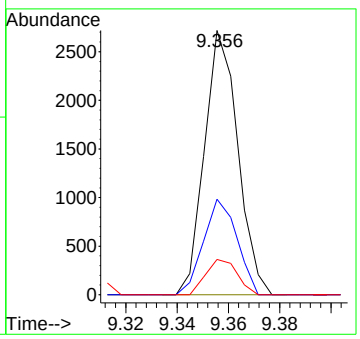


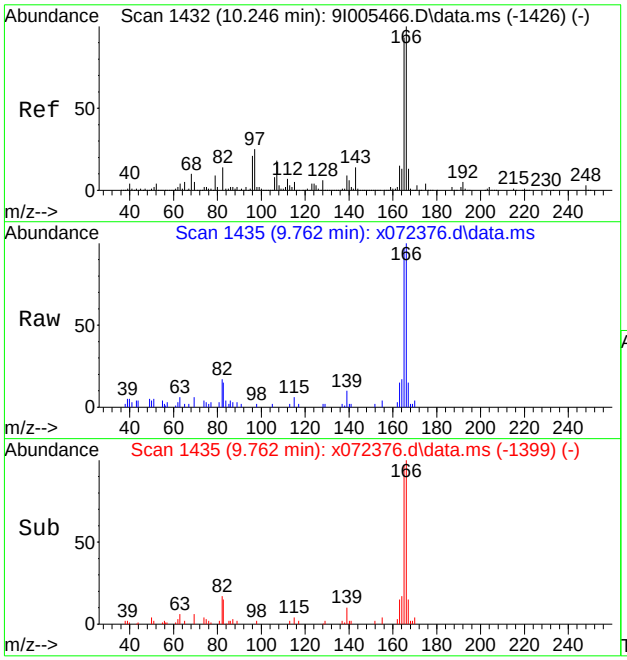


#60
Dibenzofuran
Concen: 0.25 ppm
RT: 9.356 min Scan# 1359
Delta R.T. -0.011 min
Lab File: x072376.d
Acq: 12 Aug 2020 6:34 pm

Tgt Ion:168 Resp: 2466

Ion	Ratio	Lower	Upper
168	100		
139	36.1	3.0	63.0
169	13.3	0.0	43.5

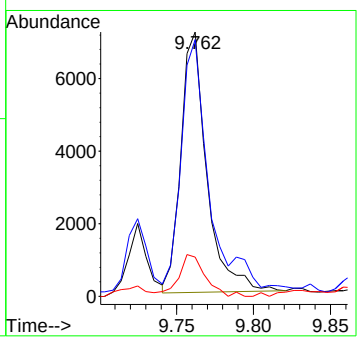


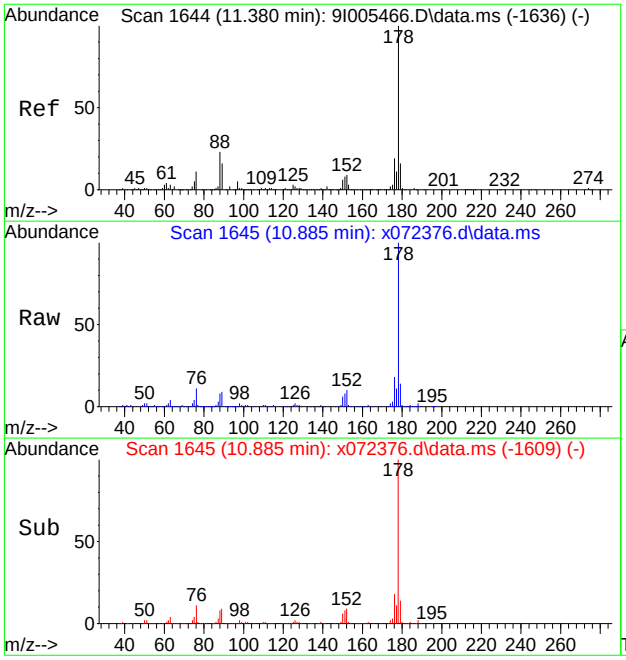


#65
Fluorene
Concen: 1.10 ppm
RT: 9.762 min Scan# 1435
Delta R.T. -0.005 min
Lab File: x072376.d
Acq: 12 Aug 2020 6:34 pm

Tgt Ion:166 Resp: 8440

Ion	Ratio	Lower	Upper
166	100		
165	95.9	62.7	122.7
167	13.6	0.0	43.5

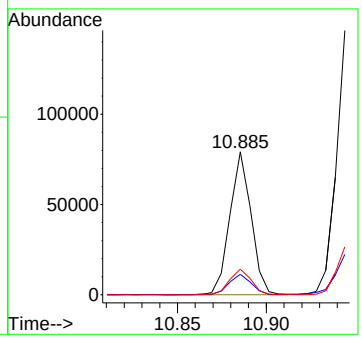


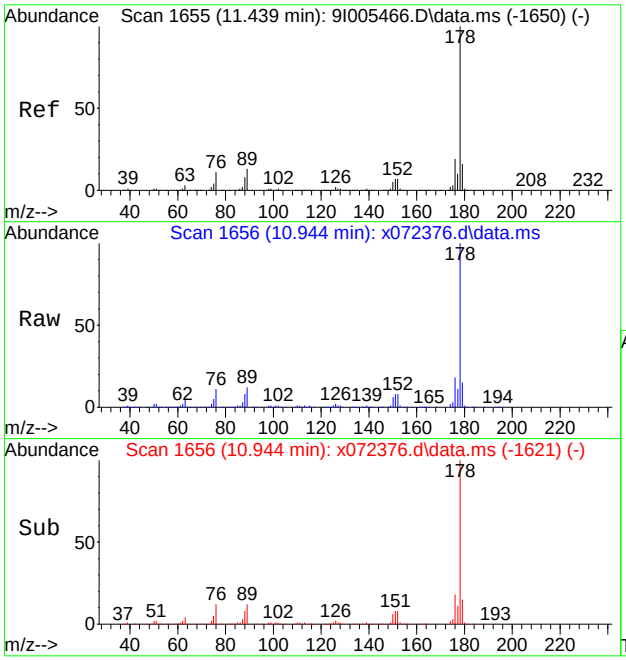


#84
Phenanthrene
Concen: 5.70 ppm
RT: 10.885 min Scan# 1645
Delta R.T. -0.005 min
Lab File: x072376.d
Acq: 12 Aug 2020 6:34 pm

Tgt Ion:178 Resp: 65921

Ion	Ratio	Lower	Upper
178	100		
179	14.3	0.0	45.8
176	17.9	0.0	49.3

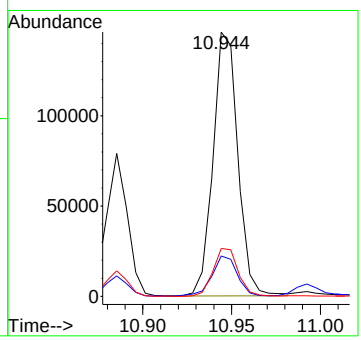


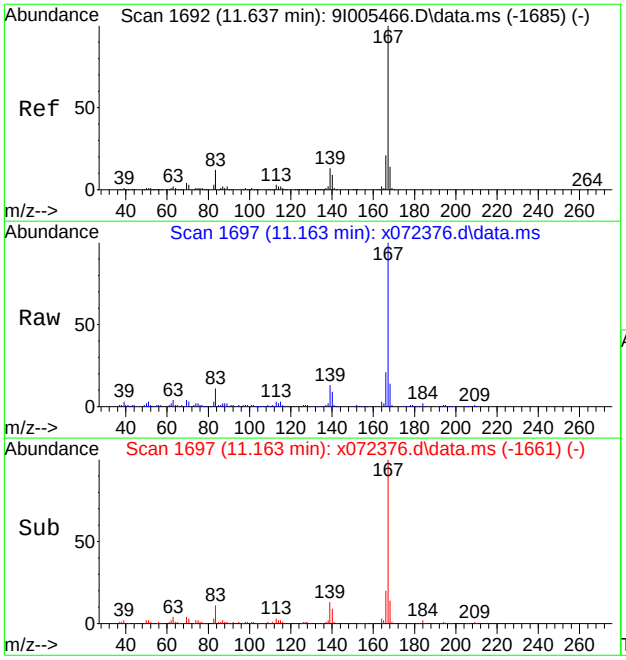


#85
Anthracene
Concen: 11.76 ppm
RT: 10.944 min Scan# 1656
Delta R.T. -0.011 min
Lab File: x072376.d
Acq: 12 Aug 2020 6:34 pm

Tgt Ion:178 Resp: 141825

Ion	Ratio	Lower	Upper
178	100		
179	14.7	0.0	46.0
176	18.1	0.0	49.3

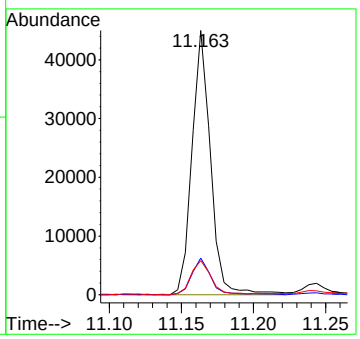


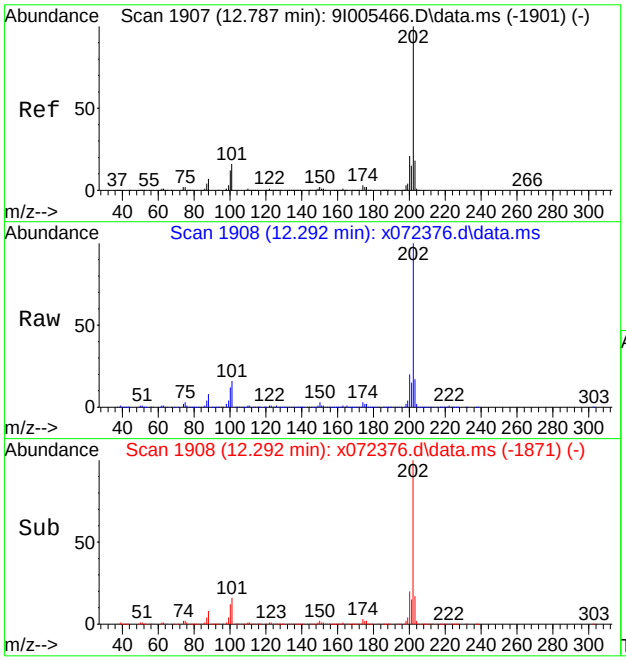


#87
Carbazole
Concen: 3.80 ppm
RT: 11.163 min Scan# 1697
Delta R.T. -0.005 min
Lab File: x072376.d
Acq: 12 Aug 2020 6:34 pm

Tgt Ion:167 Resp: 40395

Ion	Ratio	Lower	Upper
167	100		
168	13.9	0.0	43.9
139	12.6	0.0	42.7

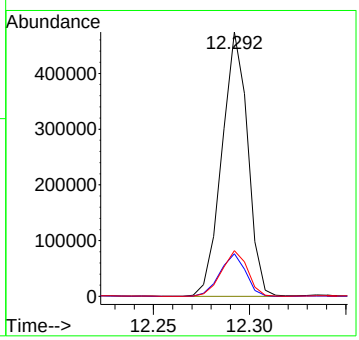


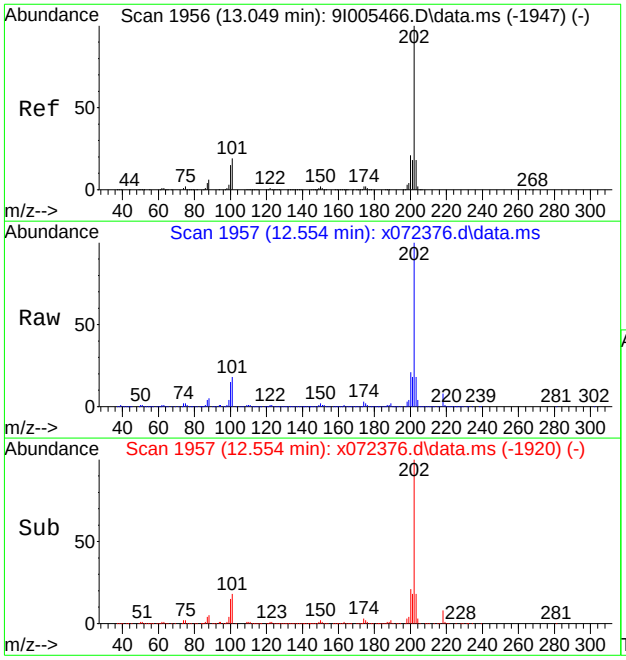


#91
Fluoranthene
Concen: 41.26 ppm
RT: 12.292 min Scan# 1908
Delta R.T. -0.000 min
Lab File: x072376.d
Acq: 12 Aug 2020 6:34 pm

Tgt Ion:202 Resp: 442951

Ion	Ratio	Lower	Upper
202	100		
101	16.1	0.0	45.8
203	17.2	0.0	48.1

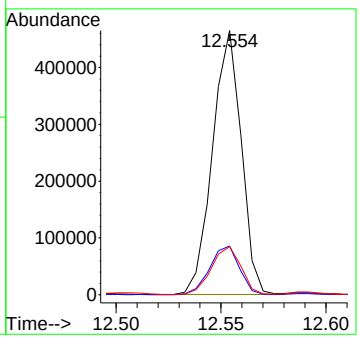


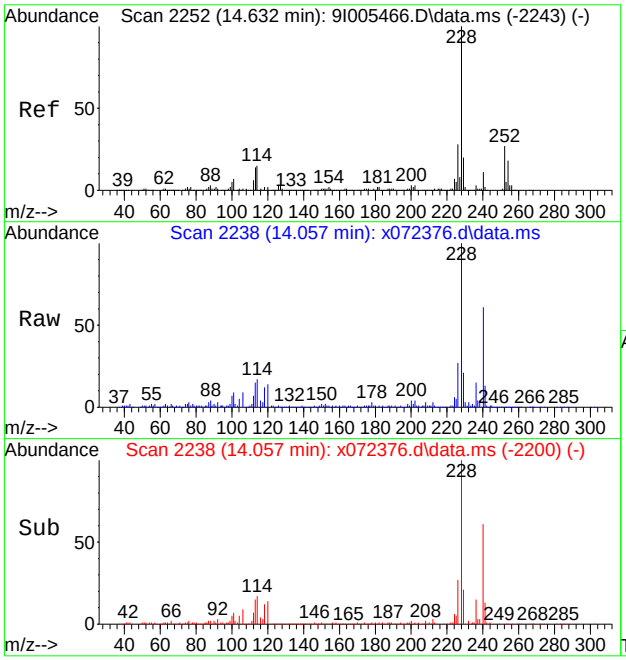


#94
Pyrene
Concen: 33.81 ppm
RT: 12.554 min Scan# 1957
Delta R.T. -0.000 min
Lab File: x072376.d
Acq: 12 Aug 2020 6:34 pm

Tgt Ion:202 Resp: 444329

Ion	Ratio	Lower	Upper
202	100		
101	18.3	0.0	48.7
203	18.0	0.0	48.4

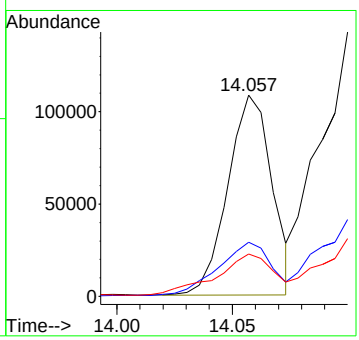


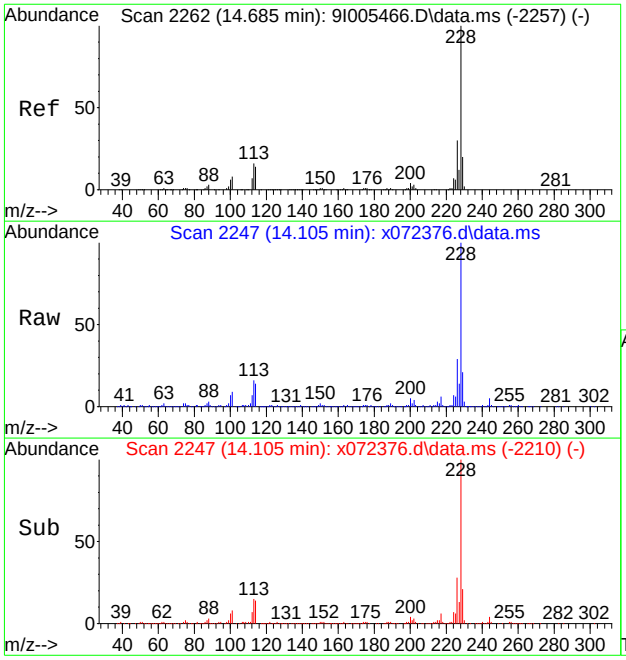


#99
Benzo[a]anthracene
Concen: 14.55 ppm
RT: 14.057 min Scan# 2238
Delta R.T. 0.005 min
Lab File: x072376.d
Acq: 12 Aug 2020 6:34 pm

Tgt Ion:228 Resp: 144710

Ion	Ratio	Lower	Upper
228	100		
226	26.4	0.0	57.5
229	19.1	0.0	49.9

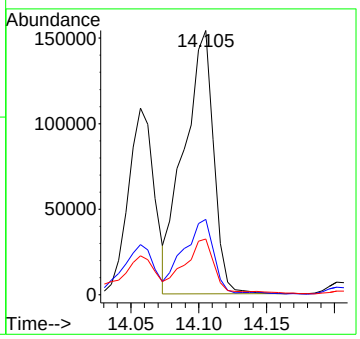


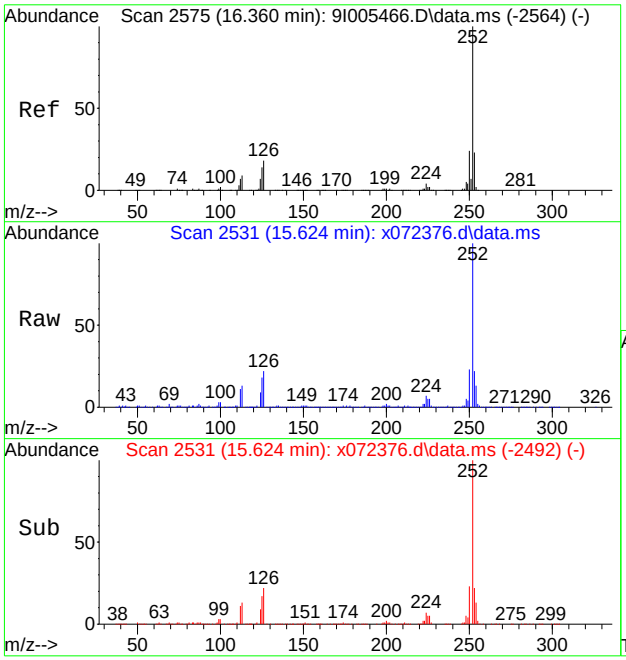


#100
Chrysene
Concen: 22.08 ppm
RT: 14.105 min Scan# 2247
Delta R.T. -0.000 min
Lab File: x072376.d
Acq: 12 Aug 2020 6:34 pm

Tgt Ion:228 Resp: 233913

Ion	Ratio	Lower	Upper
228	100		
226	28.6	0.4	60.4
229	20.1	0.0	50.1

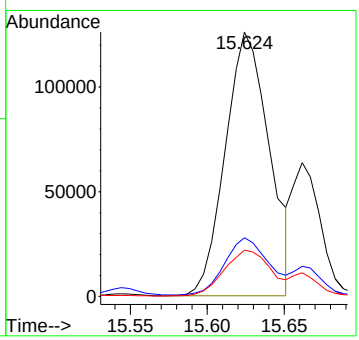


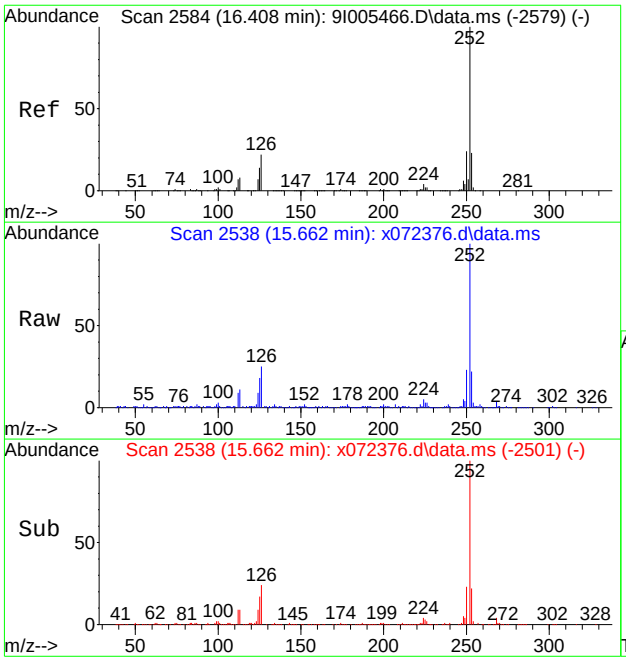


#104
Benzo[b]fluoranthene
Concen: 35.66 ppm
RT: 15.624 min Scan# 2531
Delta R.T. 0.011 min
Lab File: x072376.d
Acq: 12 Aug 2020 6:34 pm

Tgt Ion:252 Resp: 250188

Ion	Ratio	Lower	Upper
252	100		
253	21.5	0.0	52.5
125	17.2	0.0	44.0

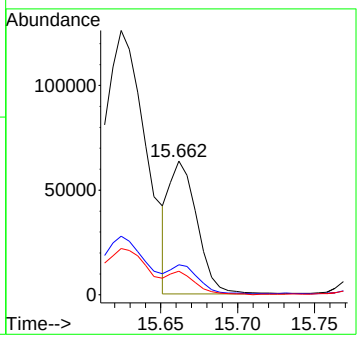


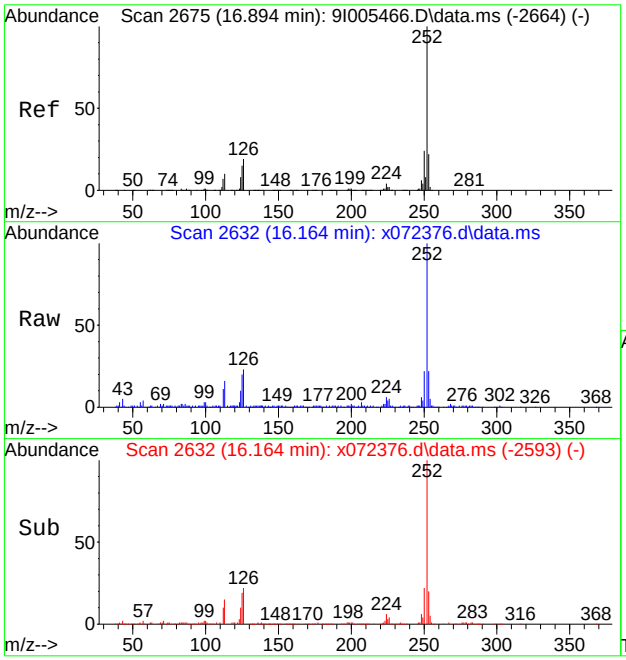


#105
Benzo[k]fluoranthene
Concen: 9.27 ppm
RT: 15.662 min Scan# 2538
Delta R.T. -0.000 min
Lab File: x072376.d
Acq: 12 Aug 2020 6:34 pm

Tgt Ion:252 Resp: 80103

Ion	Ratio	Lower	Upper
252	100		
253	20.9	0.0	52.5
125	16.8	0.0	44.4

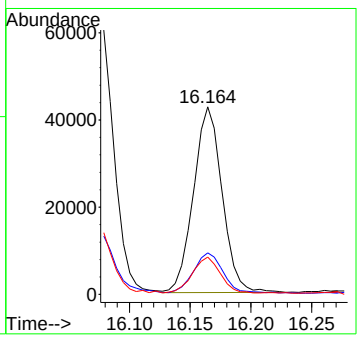


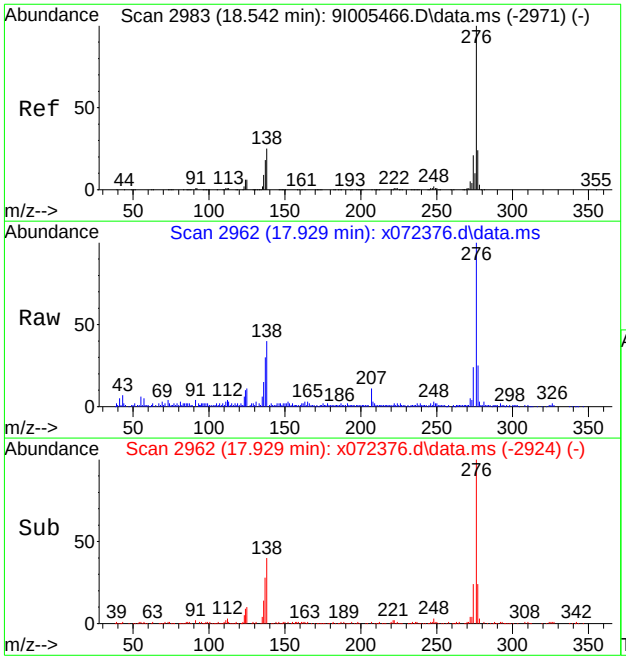


#106
Benzo[a]pyrene
Concen: 11.02 ppm
RT: 16.164 min Scan# 2632
Delta R.T. 0.011 min
Lab File: x072376.d
Acq: 12 Aug 2020 6:34 pm

Tgt Ion:252 Resp: 69878

Ion	Ratio	Lower	Upper
252	100		
253	21.5	0.0	52.3
125	19.3	0.0	44.7

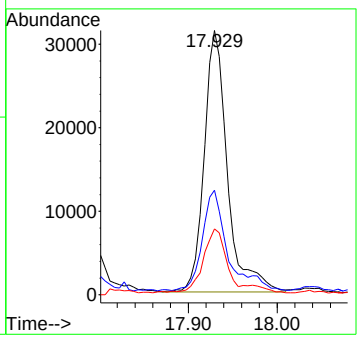


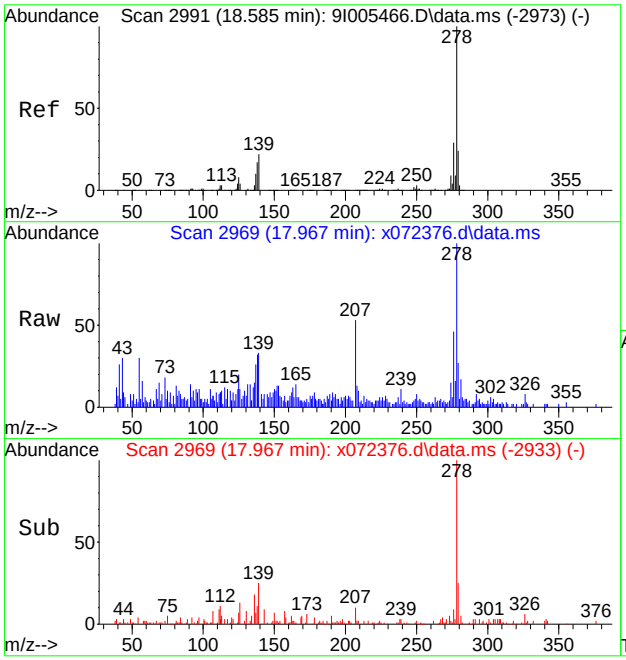


#107
Indeno[1,2,3-cd]pyrene
Concen: 14.91 ppm
RT: 17.929 min Scan# 2962
Delta R.T. 0.005 min
Lab File: x072376.d
Acq: 12 Aug 2020 6:34 pm

Tgt Ion:276 Resp: 56710

Ion	Ratio	Lower	Upper
276	100		
138	38.4	0.0	54.7
277	24.3	0.0	53.8

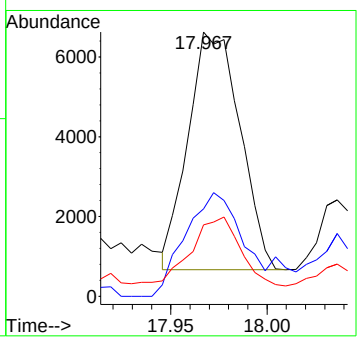


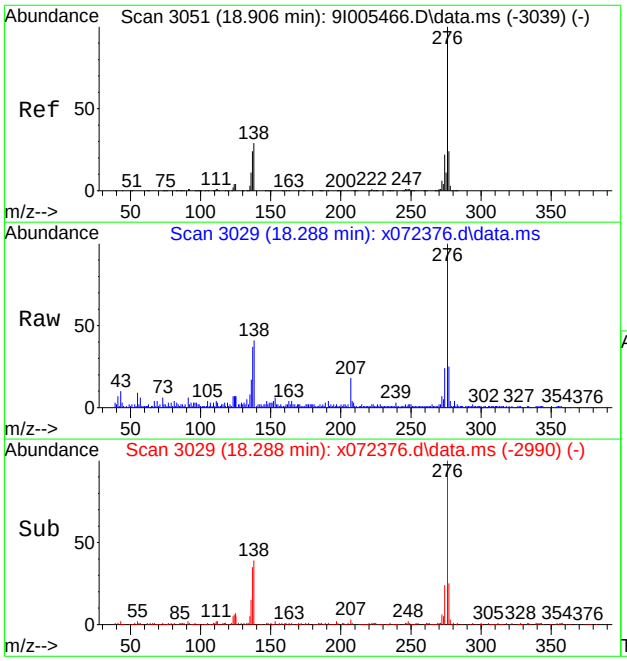


#108
Dibenz[a,h]anthracene
Concen: 2.90 ppm
RT: 17.967 min Scan# 2969
Delta R.T. -0.005 min
Lab File: x072376.d
Acq: 12 Aug 2020 6:34 pm

Tgt Ion:278 Resp: 11158

Ion	Ratio	Lower	Upper
278	100		
139	29.5	0.0	52.4
279	25.6	0.0	54.4

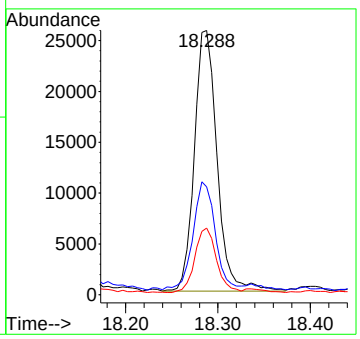




#109
Benzo[g,h,i]perylene
Concen: 7.74 ppm
RT: 18.288 min Scan# 3029
Delta R.T. 0.011 min
Lab File: x072376.d
Acq: 12 Aug 2020 6:34 pm

Tgt Ion:276 Resp: 43986

Ion	Ratio	Lower	Upper
276	100		
138	39.6	0.0	59.4
277	24.7	0.0	54.1



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072350.d
Acq On : 11 Aug 2020 9:52 pm
Operator : marthav
Sample : fa77581-4 E
Misc : op81482,sx2950,30.2,,,1,1,soil
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Aug 12 03:23:24 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	5.665	152	180366	40.00	ppm		0.00
22) Naphthalene-d8	7.088	136	667720	40.00	ppm		0.00
43) Acenaphthene-d10	9.131	164	337538	40.00	ppm		0.01
70) Phenanthrene-d10	10.875	188	577435	40.00	ppm		0.01
92) Chrysene-d12	14.100	240	452483	40.00	ppm		0.03
102) Perylene-d12	16.320	264	368909	40.00	ppm		0.06
110) 1,4-Dichlorobenzene-d4A	5.665	152	180366	40.00	ppm		0.00
120) Naphthalene-d8A	7.088	136	667720	40.00	ppm		0.00
127) Acenaphthene-d10A	9.131	164	337538	40.00	ppm		0.01
136) Phenanthrene-d10A	10.875	188	577435	40.00	ppm		0.01
146) Chrysene-d12A	14.100	240	452483	40.00	ppm		0.03
153) Perylene-d12A	16.320	264	368909	40.00	ppm		0.06
System Monitoring Compounds							
7) 2-Fluorophenol	4.328	112	447198	69.15	ppm		0.02
Spiked Amount 100.000	Range 40 - 102		Recovery = 69.15%				
9) Phenol-d5	5.355	99	564449	73.36	ppm		0.02
Spiked Amount 100.000	Range 41 - 100		Recovery = 73.36%				
23) Nitrobenzene-d5	6.285	82	234055	33.94	ppm		0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 67.88%				
47) 2-Fluorobiphenyl	8.361	172	425612	34.83	ppm		0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 69.66%				
75) 2,4,6-Tribromophenol	10.067	330	86001	70.55	ppm		0.01
Spiked Amount 100.000	Range 42 - 108		Recovery = 70.55%				
95) Terphenyl-d14	12.795	244	426923	35.51	ppm		0.02
Spiked Amount 50.000	Range 45 - 119		Recovery = 71.02%				
Target Compounds							Qvalue
5) Benzaldehyde	5.200	106	1937	0.36	ppm		83
6) Aniline	5.323	93	7826	0.73	ppm		87
10) Phenol	5.371	94	3172	0.35	ppm	#	4
15) Benzyl alcohol	5.847	108	503	0.11	ppm		86
17) 2-Methylphenol	6.007	108	924	0.14	ppm		81
18) Acetophenone	6.120	105	5643	0.58	ppm		90
21) 3&4-Methylphenol	6.189	108	3529	0.52	ppm		90
27) 2,4-Dimethylphenol	6.761	107	2308	0.38	ppm		97
29) bis(2-Chloroethoxy)met...	6.890	93	927	0.13	ppm	#	50
30) Benzoic Acid	6.879	105	9741	2.38	ppm		86
34) Naphthalene	7.109	128	13543	0.75	ppm		96
40) 2-Methylnaphthalene	7.917	142	8013	0.67	ppm		97
41) 1-Methylnaphthalene	8.029	142	4943	0.43	ppm		96
48) 1,1'-Biphenyl	8.468	154	2721	0.20	ppm		94
52) Acenaphthylene	8.960	152	479470	28.44	ppm		99
57) Acenaphthene	9.163	153	22433	2.00	ppm		97
60) Dibenzofuran	9.372	168	14034	0.94	ppm		95
65) Fluorene	9.773	166	49621	4.25	ppm		99
84) Phenanthrene	10.901	178	309574	17.74	ppm		98
85) Anthracene	10.971	178	1383944	76.10	ppm		98
87) Carbazole	11.179	167	271797	16.94	ppm		98
91) Fluoranthene	12.319	202	2015326	124.48	ppm		98
94) Pyrene	12.581	202	2114993	112.57	ppm		98
99) Benzo[a]anthracene	14.084	228	756349	53.18	ppm		98
100) Chrysene	14.137	228	1177076	77.72	ppm		98
101) bis(2-Ethylhexyl)phtha...	14.239	149	7277	0.77	ppm		90
104) Benzo[b]fluoranthene	15.683	252	1775463	137.05	ppm		96
105) Benzo[k]fluoranthene	15.720	252	464150	35.44	ppm		98
106) Benzo[a]pyrene	16.223	252	524254	49.88	ppm		97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072350.d
Acq On : 11 Aug 2020 9:52 pm
Operator : marthav
Sample : fa77581-4 E
Misc : op81482,sx2950,30.2,,,1,1,soil
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Aug 12 03:23:24 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

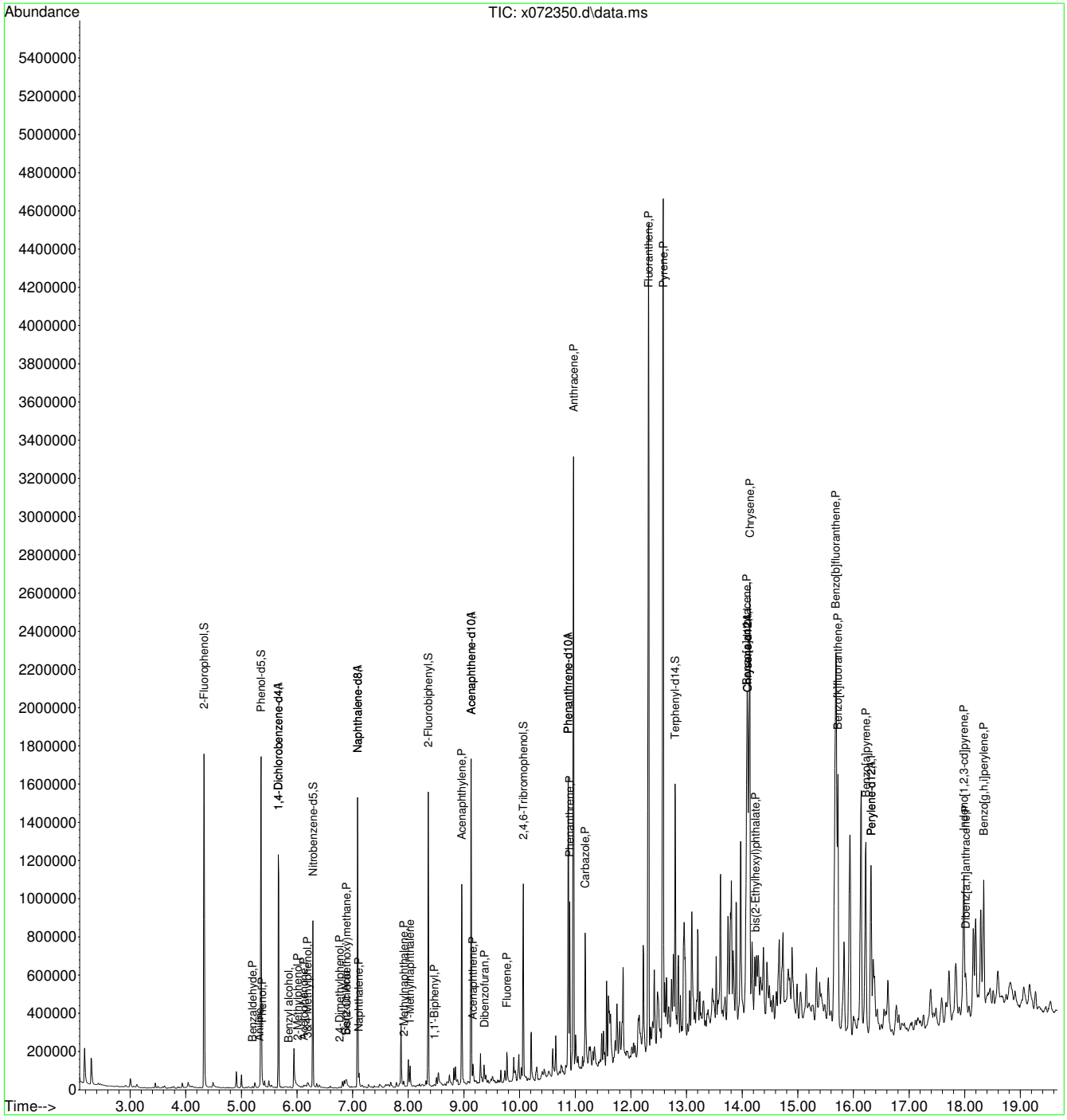
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
107) Indeno[1,2,3-cd]pyrene	17.983	276	476447	61.80	ppm	86
108) Dibenz[a,h]anthracene	18.015	278	98592	15.24	ppm	90
109) Benzo[g,h,i]perylene	18.341	276	368330	37.78	ppm	89

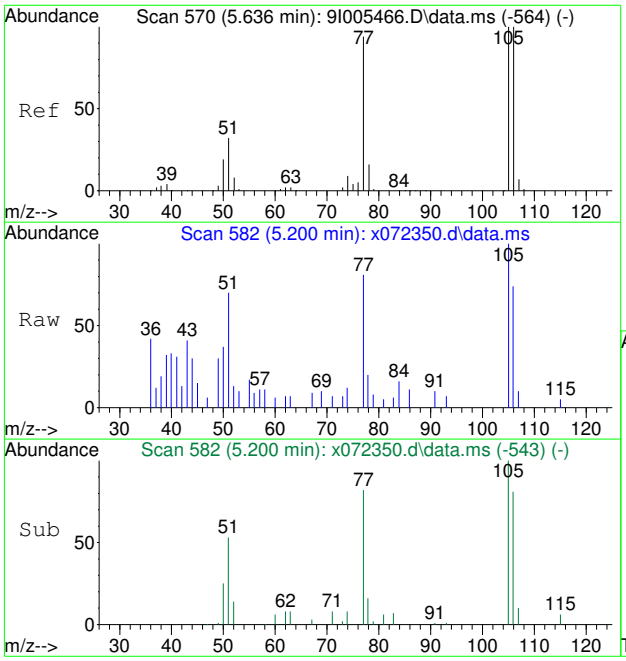
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072350.d
Acq On : 11 Aug 2020 9:52 pm
Operator : marthav
Sample : fa77581-4 E
Misc : op81482,sx2950,30.2,,,1,1,soil
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Aug 12 03:23:24 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

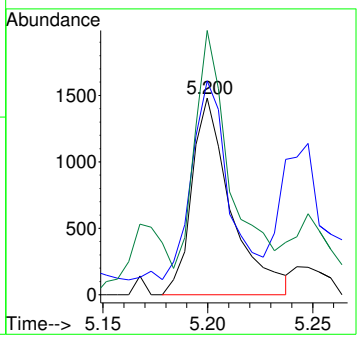


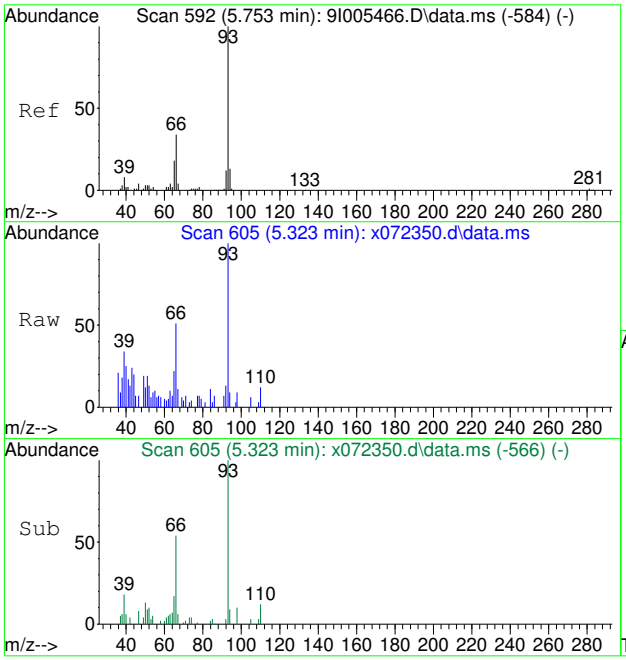


#5
Benzaldehyde
Concen: 0.36 ppm
RT: 5.200 min Scan# 582
Delta R.T. 0.011 min
Lab File: x072350.d
Acq: 11 Aug 2020 9:52 pm

Tgt Ion:106 Resp: 1937

Ion	Ratio	Lower	Upper
106	100		
77	74.1	63.9	123.9
105	113.5	70.0	130.0

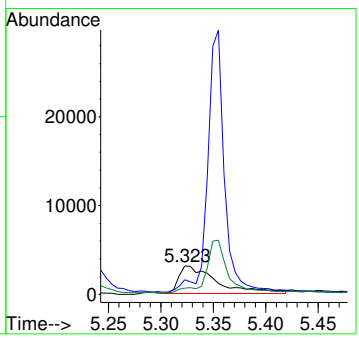


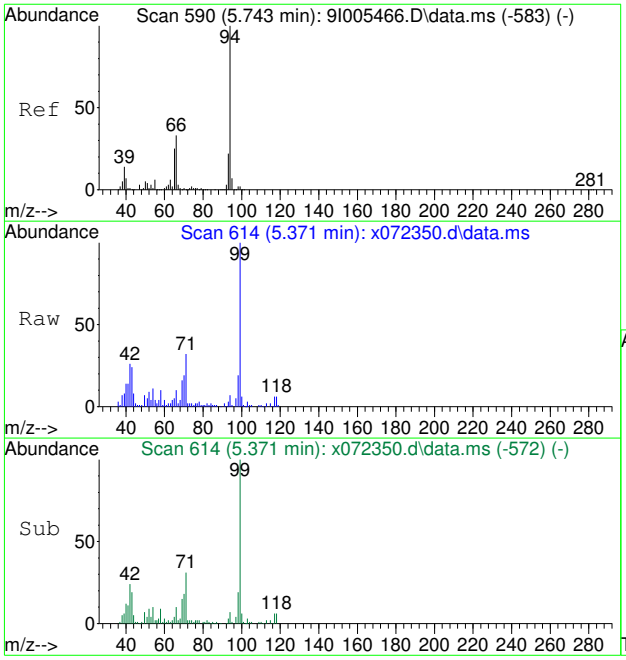


#6
Aniline
Concen: 0.73 ppm
RT: 5.323 min Scan# 605
Delta R.T. 0.011 min
Lab File: x072350.d
Acq: 11 Aug 2020 9:52 pm

Tgt Ion: 93 Resp: 7826

Ion	Ratio	Lower	Upper
93	100		
66	43.2	3.5	63.5
65	15.5	0.0	48.0

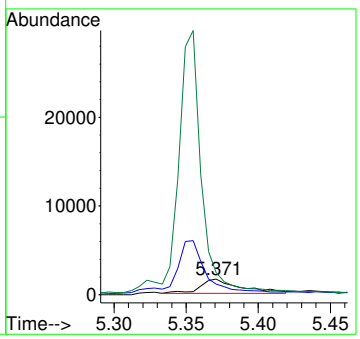


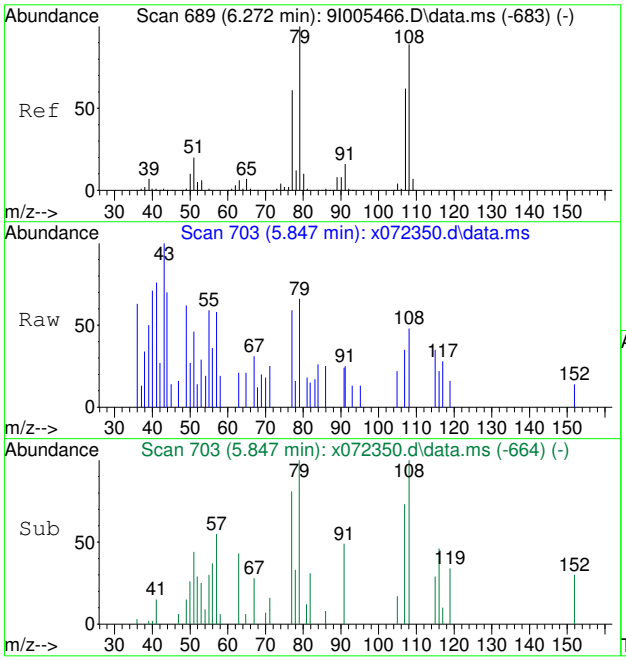


#10
Phenol
Concen: 0.35 ppm
RT: 5.371 min Scan# 614
Delta R.T. 0.027 min
Lab File: x072350.d
Acq: 11 Aug 2020 9:52 pm

Tgt Ion: 94 Resp: 3172

Ion	Ratio	Lower	Upper
94	100		
65	47.2	0.0	54.8
66	108.9	3.0	63.0#

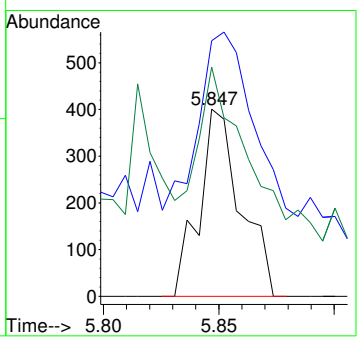


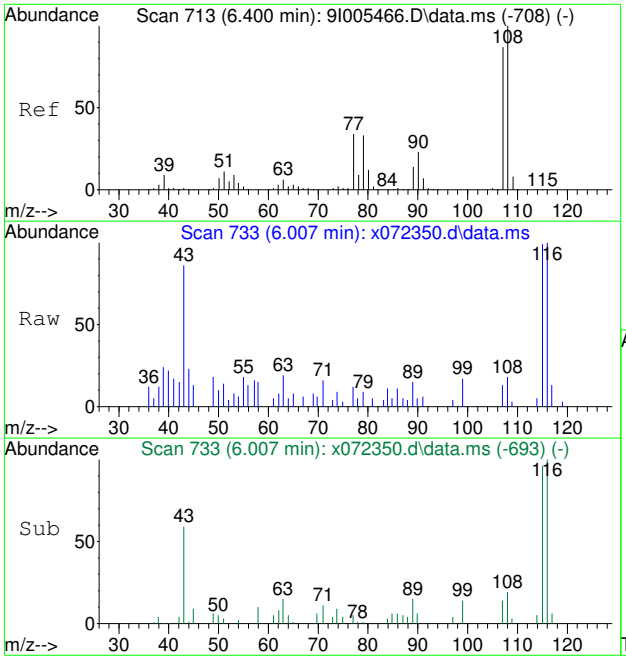


#15
Benzyl alcohol
Concen: 0.11 ppm
RT: 5.847 min Scan# 703
Delta R.T. 0.011 min
Lab File: x072350.d
Acq: 11 Aug 2020 9:52 pm

Tgt Ion:108 Resp: 503

Ion	Ratio	Lower	Upper
108	100		
79	89.9	81.8	141.8
77	70.4	38.6	98.6

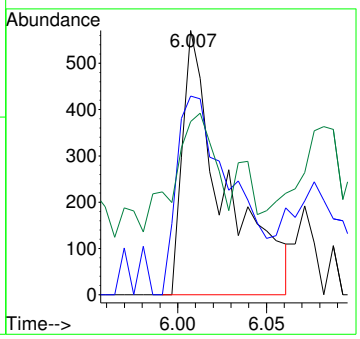


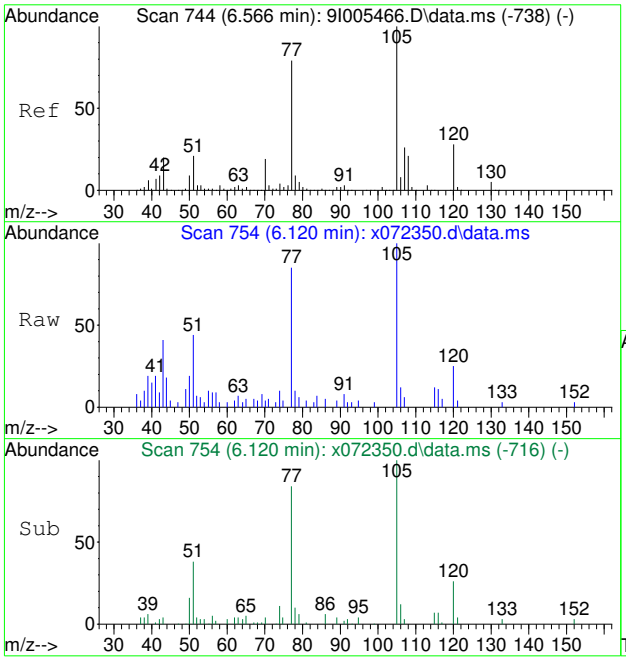


#17
2-Methylphenol
Concen: 0.14 ppm
RT: 6.007 min Scan# 733
Delta R.T. 0.016 min
Lab File: x072350.d
Acq: 11 Aug 2020 9:52 pm

Tgt Ion:108 Resp: 924

Ion	Ratio	Lower	Upper
108	100		
107	64.9	57.2	117.2
77	29.7	3.8	63.8

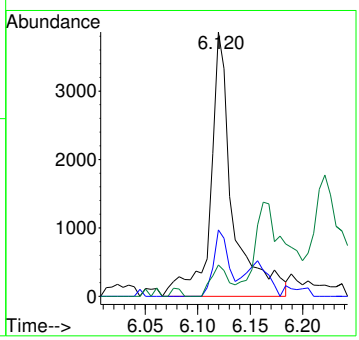


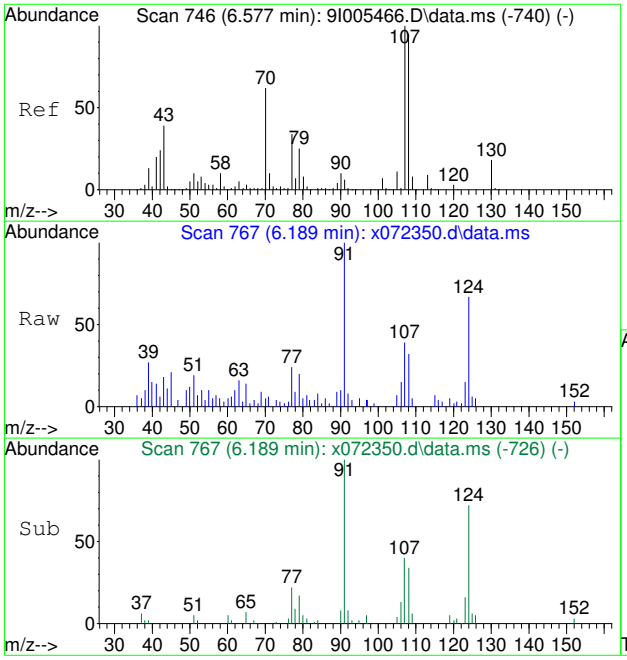


#18
Acetophenone
Concen: 0.58 ppm
RT: 6.120 min Scan# 754
Delta R.T. 0.005 min
Lab File: x072350.d
Acq: 11 Aug 2020 9:52 pm

Tgt Ion:105 Resp: 5643

Ion	Ratio	Lower	Upper
105	100		
120	23.7	0.0	58.3
106	2.0	0.0	38.0

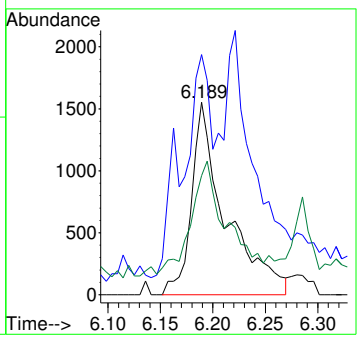


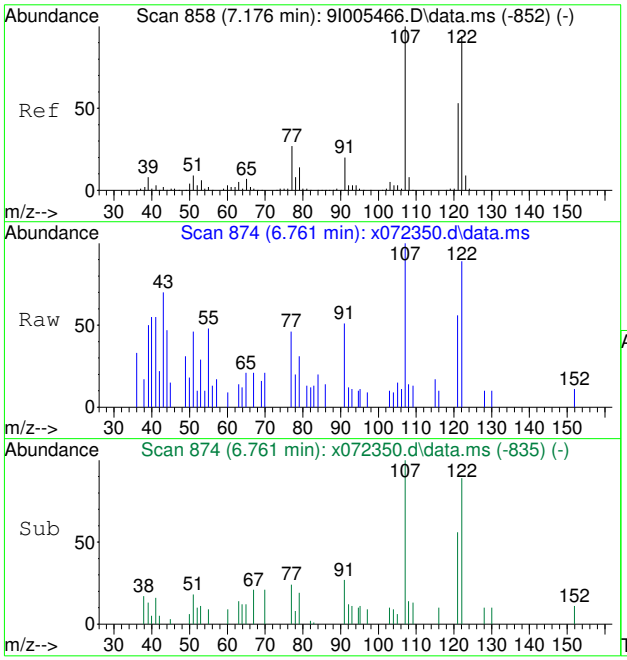


#21
3&4-Methylphenol
Concen: 0.52 ppm
RT: 6.189 min Scan# 767
Delta R.T. 0.021 min
Lab File: x072350.d
Acq: 11 Aug 2020 9:52 pm

Tgt Ion:108 Resp: 3529

Ion	Ratio	Lower	Upper
108	100		
107	102.9	75.4	135.4
79	47.6	0.0	56.3

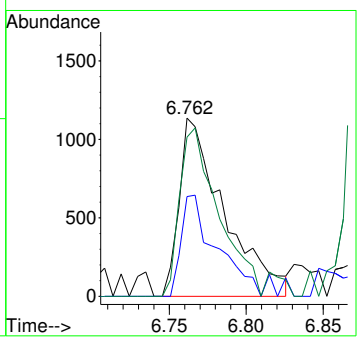


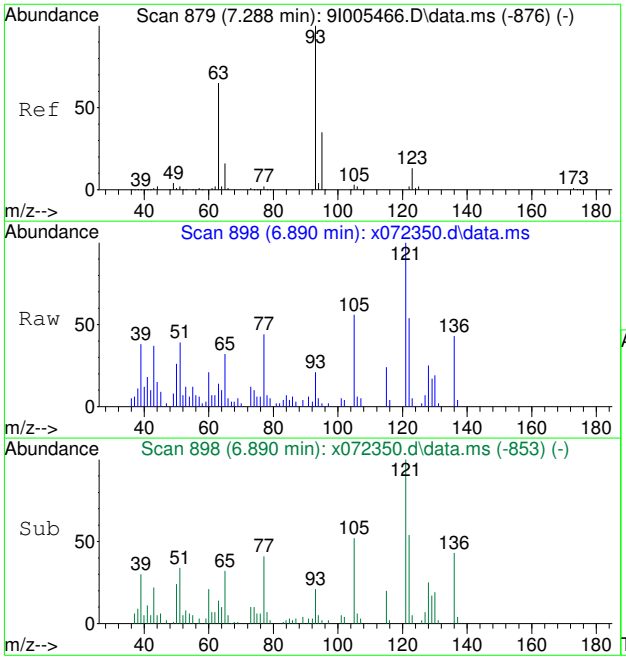


#27
2,4-Dimethylphenol
Concen: 0.38 ppm
RT: 6.761 min Scan# 874
Delta R.T. 0.011 min
Lab File: x072350.d
Acq: 11 Aug 2020 9:52 pm

Tgt Ion:107 Resp: 2308

Ion	Ratio	Lower	Upper
107	100		
121	53.8	23.4	83.4
122	89.7	64.3	124.3

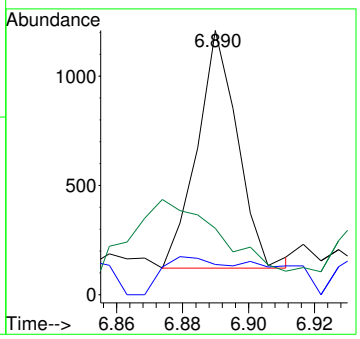


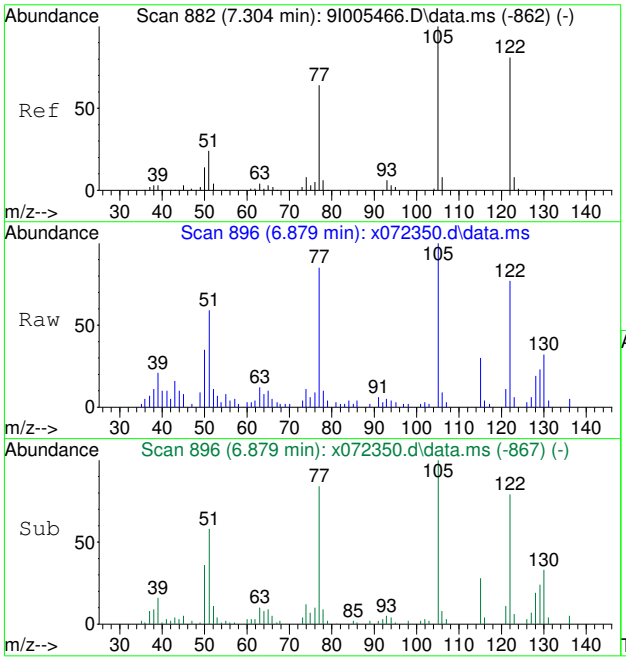


#29
bis(2-Chloroethoxy)methane
Concen: 0.13 ppm
RT: 6.890 min Scan# 898
Delta R.T. 0.043 min
Lab File: x072350.d
Acq: 11 Aug 2020 9:52 pm

Tgt Ion: 93 Resp: 927

Ion	Ratio	Lower	Upper
93	100		
95	0.8	5.1	65.1#
123	3.1	0.0	42.7

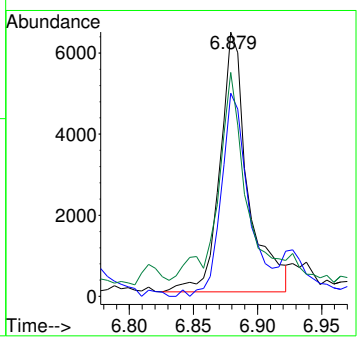


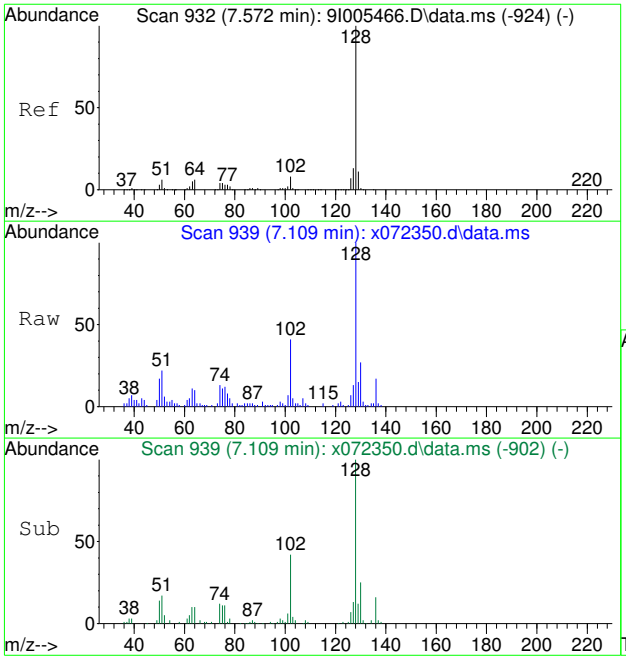


#30
Benzoic Acid
Concen: 2.38 ppm
RT: 6.879 min Scan# 896
Delta R.T. -0.043 min
Lab File: x072350.d
Acq: 11 Aug 2020 9:52 pm

Tgt Ion:105 Resp: 9741

Ion	Ratio	Lower	Upper
105	100		
122	72.4	51.2	111.2
77	79.6	34.1	94.1

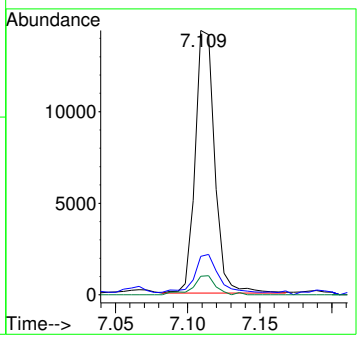


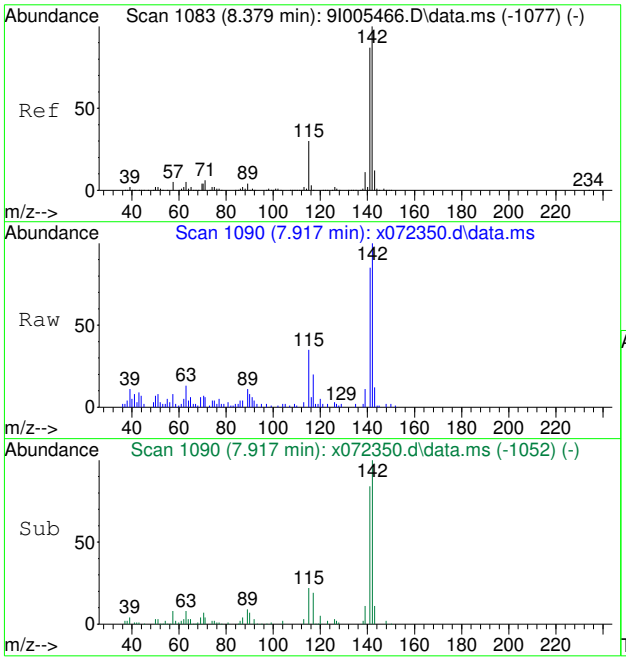


#34
Naphthalene
Concen: 0.75 ppm
RT: 7.109 min Scan# 939
Delta R.T. -0.000 min
Lab File: x072350.d
Acq: 11 Aug 2020 9:52 pm

Tgt Ion:128 Resp: 13543

Ion	Ratio	Lower	Upper
128	100		
129	13.4	0.0	41.4
126	7.0	0.0	37.4

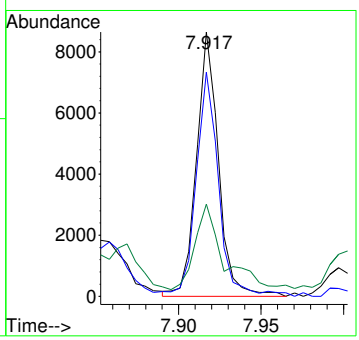


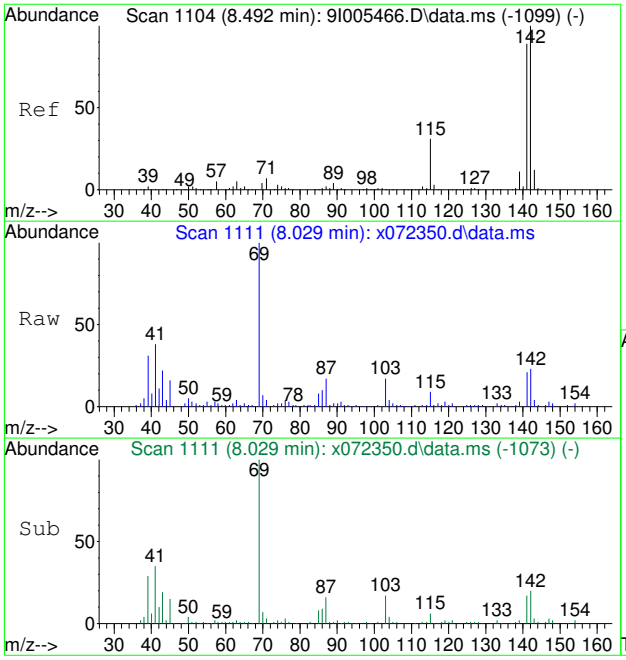


#40
2-Methylnaphthalene
Concen: 0.67 ppm
RT: 7.917 min Scan# 1090
Delta R.T. 0.005 min
Lab File: x072350.d
Acq: 11 Aug 2020 9:52 pm

Tgt Ion:142 Resp: 8013

Ion	Ratio	Lower	Upper
142	100		
141	84.0	56.8	116.8
115	31.3	0.0	60.0

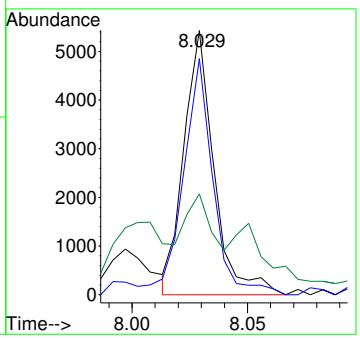


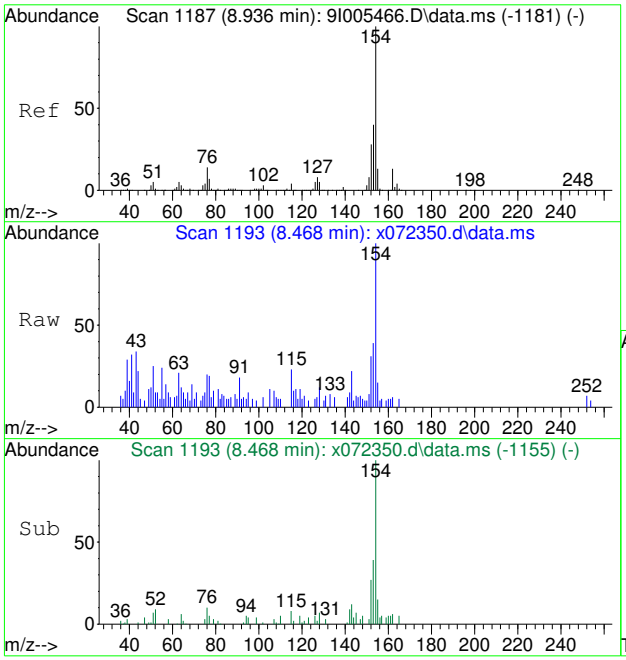


#41
1-Methylnaphthalene
Concen: 0.43 ppm
RT: 8.029 min Scan# 1111
Delta R.T. 0.005 min
Lab File: x072350.d
Acq: 11 Aug 2020 9:52 pm

Tgt Ion:142 Resp: 4943

Ion	Ratio	Lower	Upper
142	100		
141	89.8	59.0	119.0
115	24.0	1.1	61.1

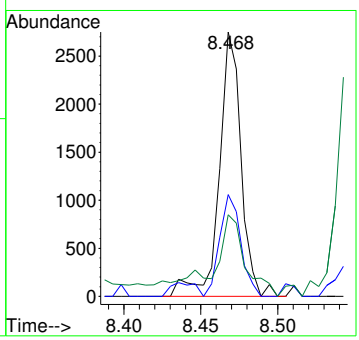


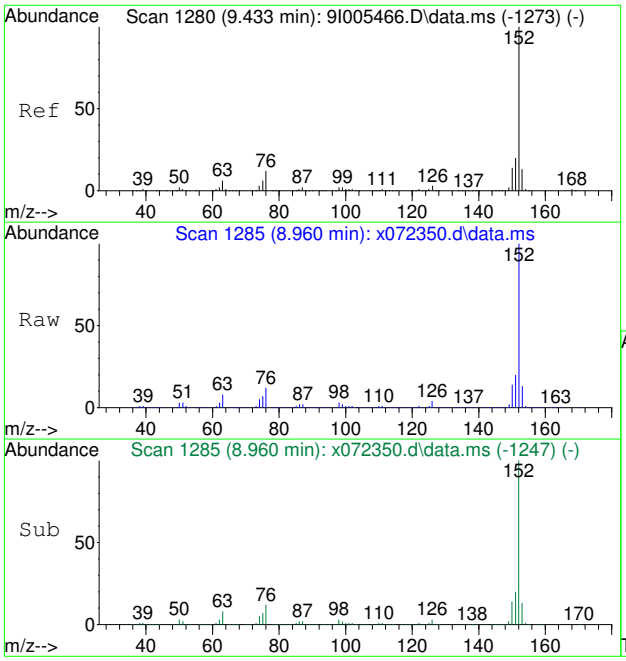


#48
1,1'-Biphenyl
Concen: 0.20 ppm
RT: 8.468 min Scan# 1193
Delta R.T. 0.005 min
Lab File: x072350.d
Acq: 11 Aug 2020 9:52 pm

Tgt Ion:154 Resp: 2721

Ion	Ratio	Lower	Upper
154	100		
153	36.2	10.3	70.3
152	26.0	0.0	58.2

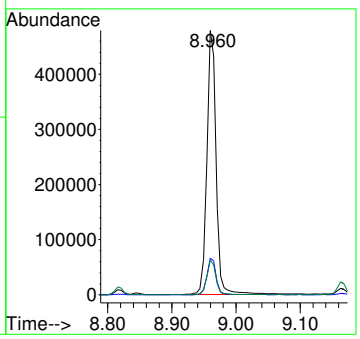


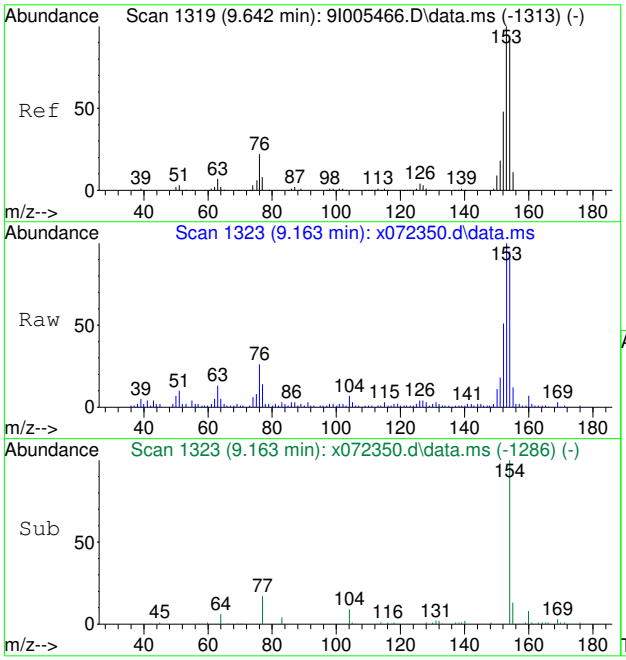


#52
Acenaphthylene
Concen: 28.44 ppm
RT: 8.960 min Scan# 1285
Delta R.T. 0.005 min
Lab File: x072350.d
Acq: 11 Aug 2020 9:52 pm

Tgt Ion:152 Resp: 479470

Ion	Ratio	Lower	Upper
152	100		
150	13.9	0.0	44.3
153	13.2	0.0	43.3

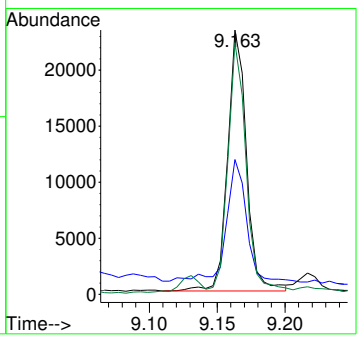


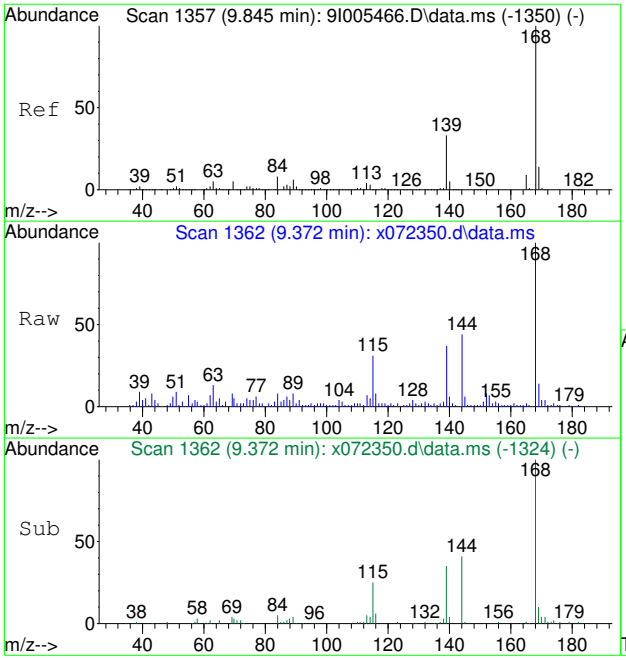


#57
Acenaphthene
Concen: 2.00 ppm
RT: 9.163 min Scan# 1323
Delta R.T. -0.000 min
Lab File: x072350.d
Acq: 11 Aug 2020 9:52 pm

Tgt Ion:153 Resp: 22433

Ion	Ratio	Lower	Upper
153	100		
152	46.9	18.4	78.4
154	95.7	62.4	122.4

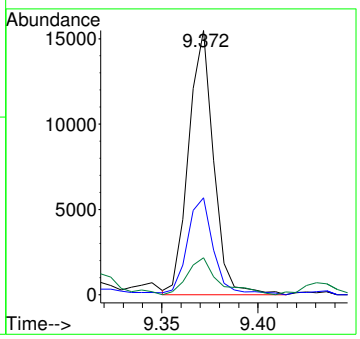


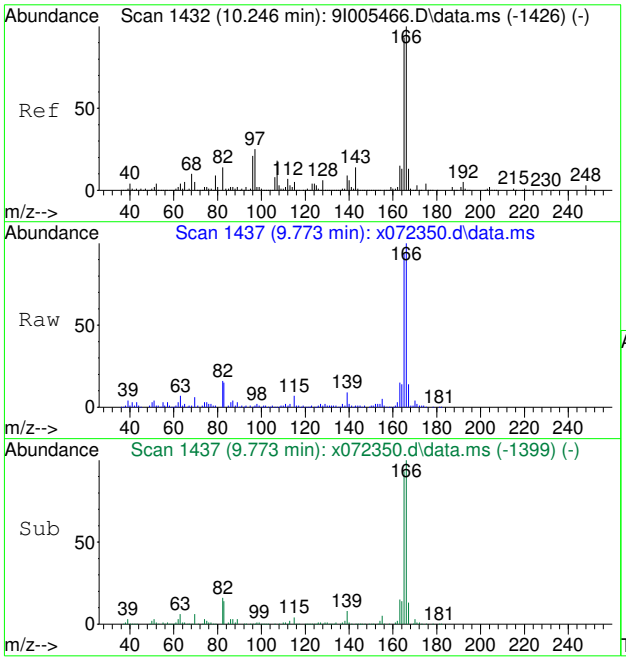


#60
Dibenzofuran
Concen: 0.94 ppm
RT: 9.372 min Scan# 1362
Delta R.T. 0.005 min
Lab File: x072350.d
Acq: 11 Aug 2020 9:52 pm

Tgt Ion:168 Resp: 14034

Ion	Ratio	Lower	Upper
168	100		
139	36.5	3.0	63.0
169	13.6	0.0	43.5

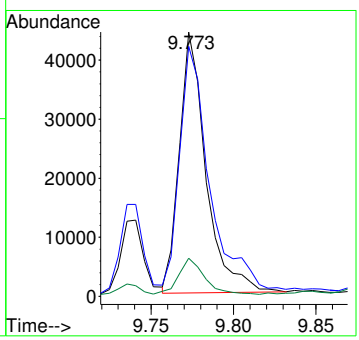


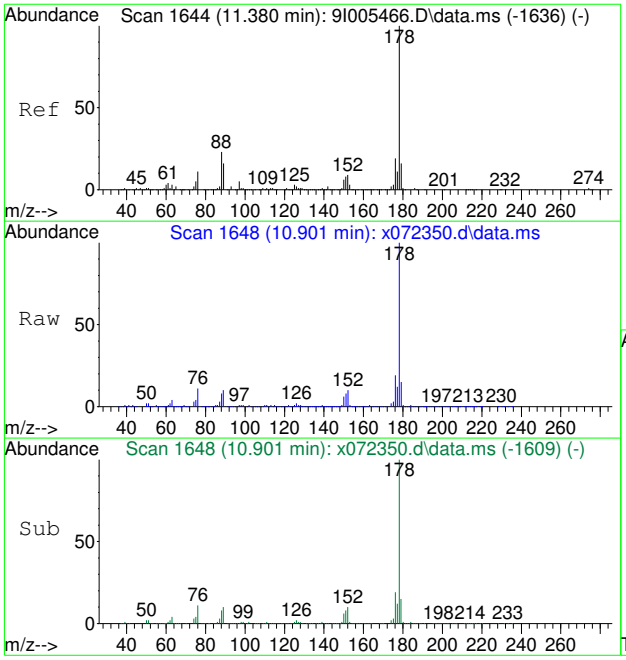


#65
Fluorene
Concen: 4.25 ppm
RT: 9.773 min Scan# 1437
Delta R.T. 0.005 min
Lab File: x072350.d
Acq: 11 Aug 2020 9:52 pm

Tgt Ion:166 Resp: 49621

Ion	Ratio	Lower	Upper
166	100		
165	93.5	62.7	122.7
167	13.3	0.0	43.5

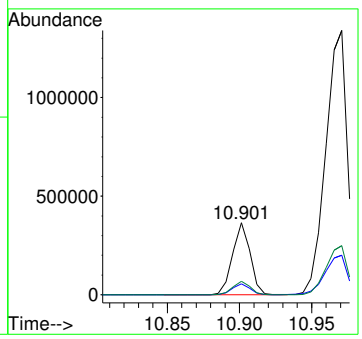


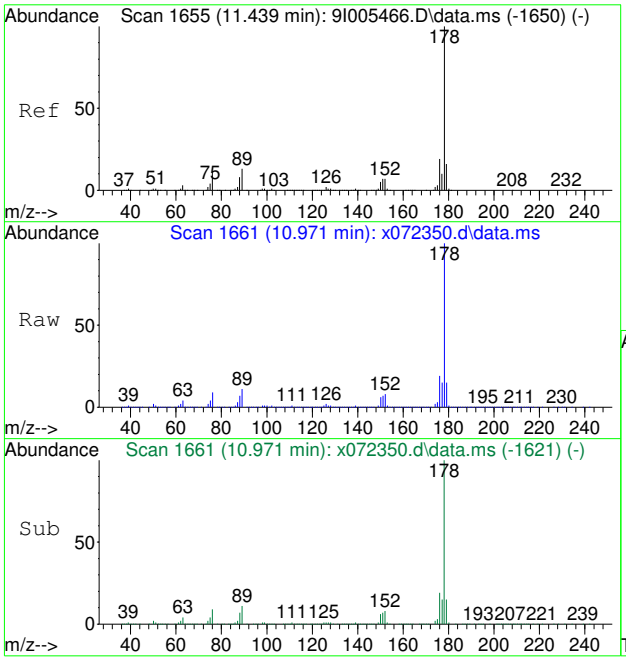


#84
Phenanthrene
Concen: 17.74 ppm
RT: 10.901 min Scan# 1648
Delta R.T. 0.011 min
Lab File: x072350.d
Acq: 11 Aug 2020 9:52 pm

Tgt Ion:178 Resp: 309574

Ion	Ratio	Lower	Upper
178	100		
179	14.8	0.0	45.8
176	18.7	0.0	49.3

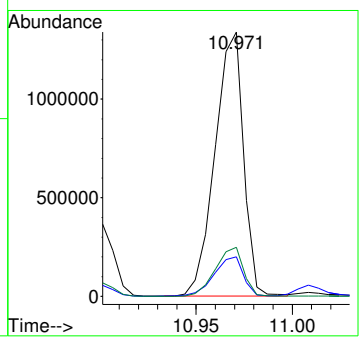


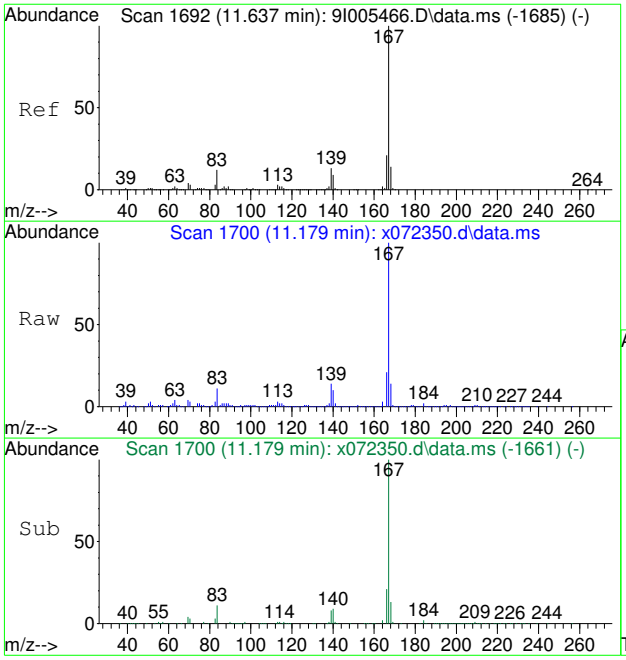


#85
Anthracene
Concen: 76.10 ppm
RT: 10.971 min Scan# 1661
Delta R.T. 0.016 min
Lab File: x072350.d
Acq: 11 Aug 2020 9:52 pm

Tgt Ion:178 Resp: 1383944

Ion	Ratio	Lower	Upper
178	100		
179	14.5	0.0	46.0
176	18.6	0.0	49.3

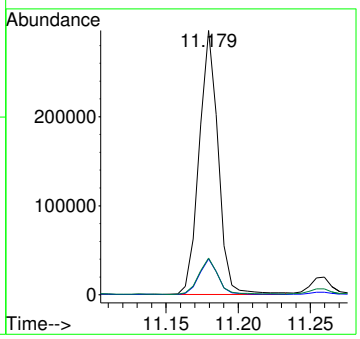


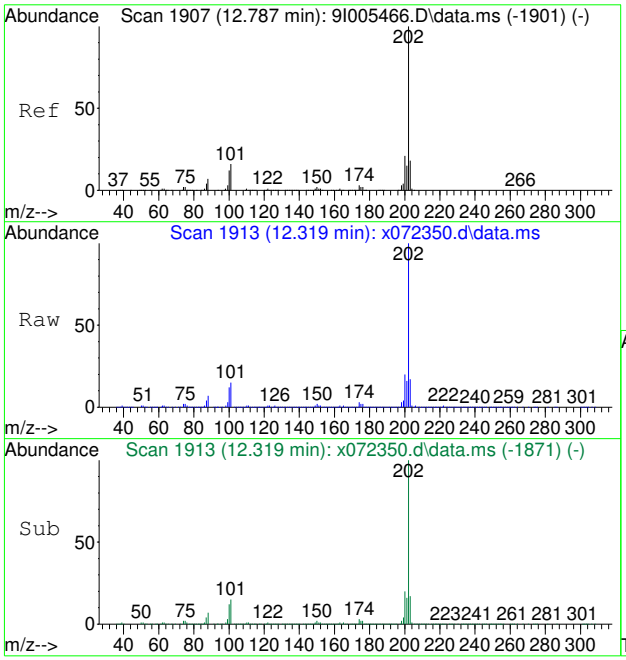


#87
Carbazole
Concen: 16.94 ppm
RT: 11.179 min Scan# 1700
Delta R.T. 0.011 min
Lab File: x072350.d
Acq: 11 Aug 2020 9:52 pm

Tgt Ion:167 Resp: 271797

Ion	Ratio	Lower	Upper
167	100		
168	13.5	0.0	43.9
139	13.7	0.0	42.7

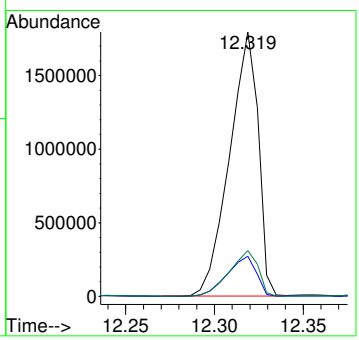


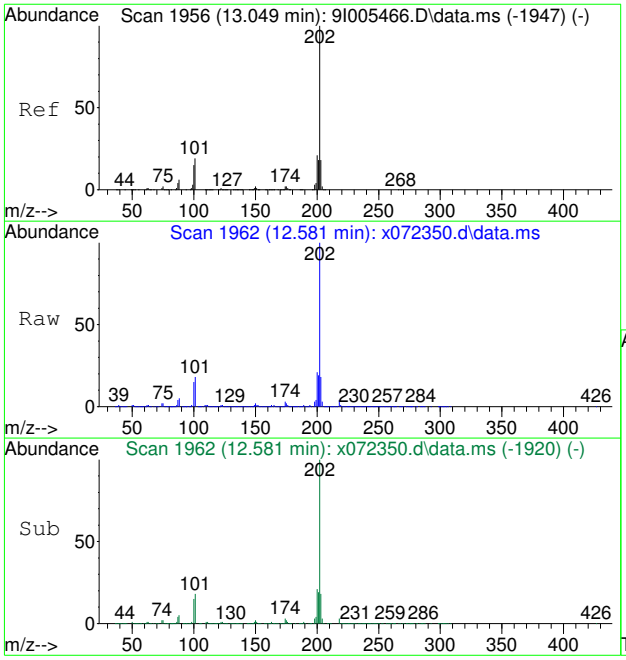


#91
Fluoranthene
Concen: 124.48 ppm
RT: 12.319 min Scan# 1913
Delta R.T. 0.027 min
Lab File: x072350.d
Acq: 11 Aug 2020 9:52 pm

Tgt Ion:202 Resp: 2015326

Ion	Ratio	Lower	Upper
202	100		
101	15.2	0.0	45.8
203	17.3	0.0	48.1

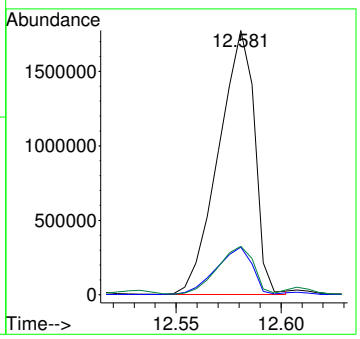


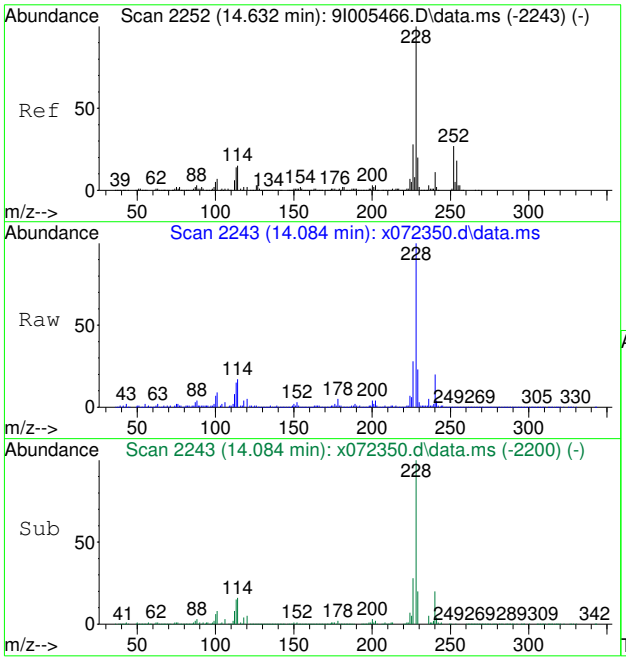


#94
Pyrene
Concen: 112.57 ppm
RT: 12.581 min Scan# 1962
Delta R.T. 0.027 min
Lab File: x072350.d
Acq: 11 Aug 2020 9:52 pm

Tgt Ion:202 Resp: 2114993

Ion	Ratio	Lower	Upper
202	100		
101	17.7	0.0	48.7
203	17.4	0.0	48.4

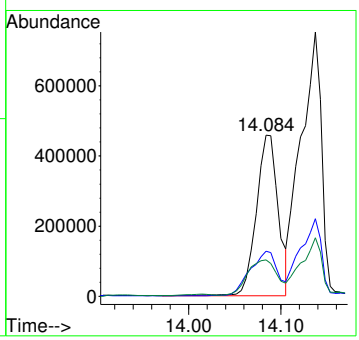


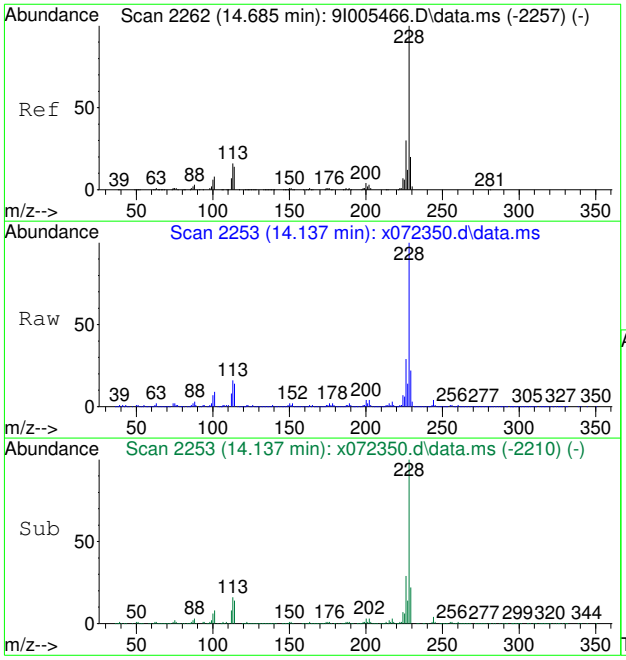


#99
Benzo[a]anthracene
Concen: 53.18 ppm
RT: 14.084 min Scan# 2243
Delta R.T. 0.032 min
Lab File: x072350.d
Acq: 11 Aug 2020 9:52 pm

Tgt Ion:228 Resp: 756349

Ion	Ratio	Lower	Upper
228	100		
226	27.4	0.0	57.5
229	21.5	0.0	49.9

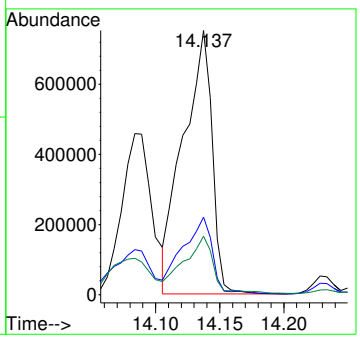


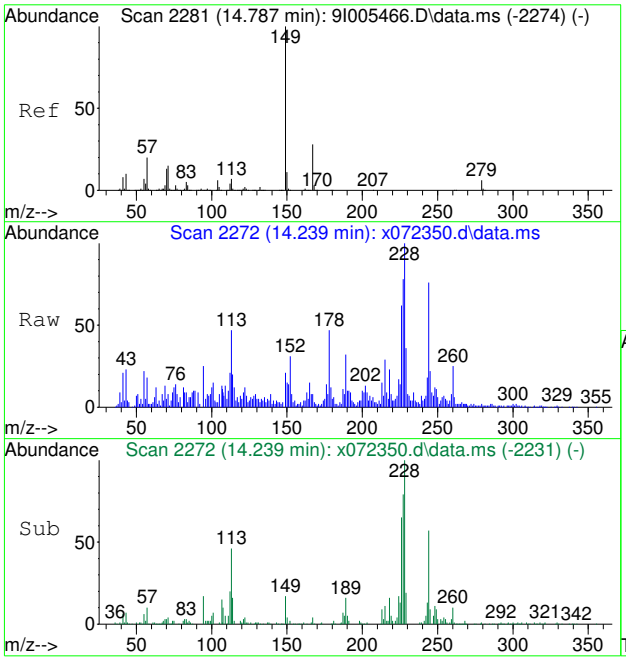


#100
Chrysene
Concen: 77.72 ppm
RT: 14.137 min Scan# 2253
Delta R.T. 0.032 min
Lab File: x072350.d
Acq: 11 Aug 2020 9:52 pm

Tgt Ion:228 Resp: 1177076

Ion	Ratio	Lower	Upper
228	100		
226	29.2	0.4	60.4
229	21.3	0.0	50.1

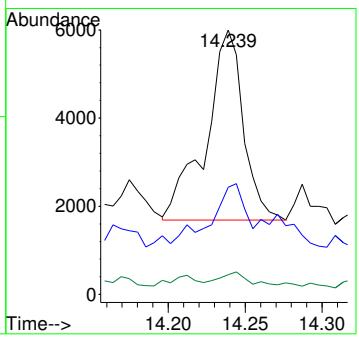


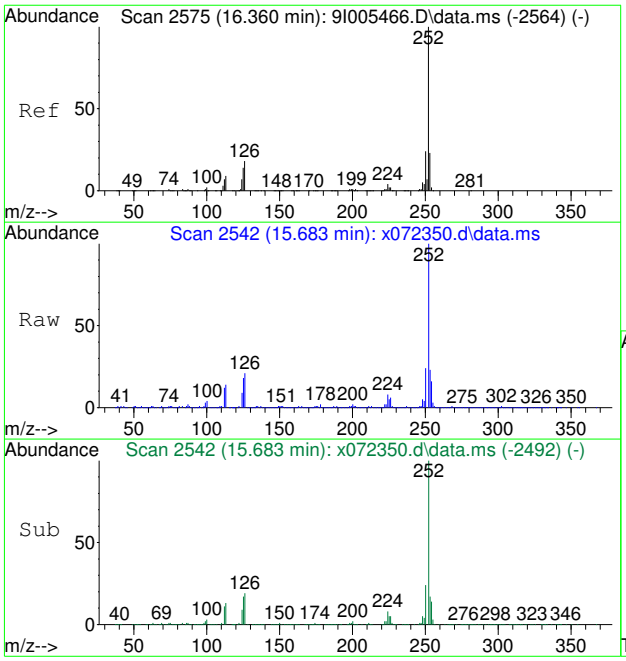


#101
bis(2-Ethylhexyl)phthalate
Concen: 0.77 ppm
RT: 14.239 min Scan# 2272
Delta R.T. 0.021 min
Lab File: x072350.d
Acq: 11 Aug 2020 9:52 pm

Tgt Ion:149 Resp: 7277

Ion	Ratio	Lower	Upper
149	100		
167	23.1	0.0	58.5
279	3.7	0.0	35.7

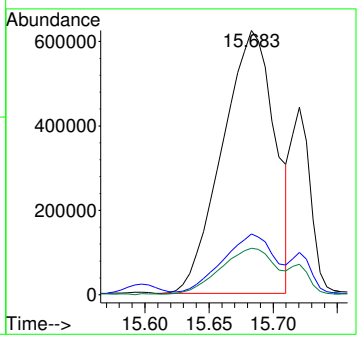


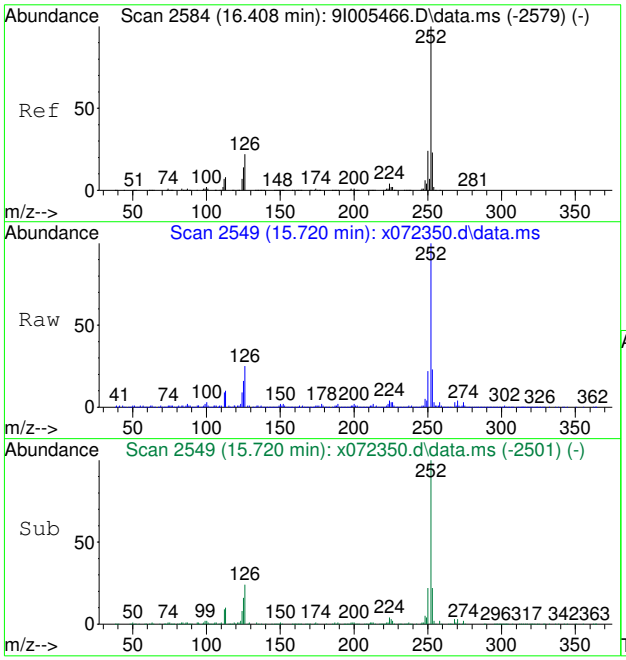


#104
Benzo[b]fluoranthene
Concen: 137.05 ppm
RT: 15.683 min Scan# 2542
Delta R.T. 0.069 min
Lab File: x072350.d
Acq: 11 Aug 2020 9:52 pm

Tgt Ion:252 Resp: 1775463

Ion	Ratio	Lower	Upper
252	100		
253	22.0	0.0	52.5
125	17.2	0.0	44.0

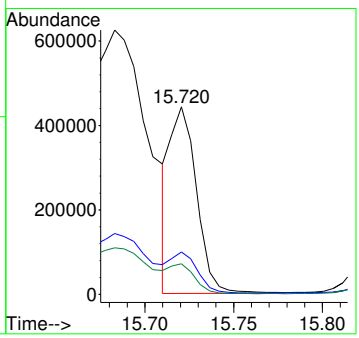


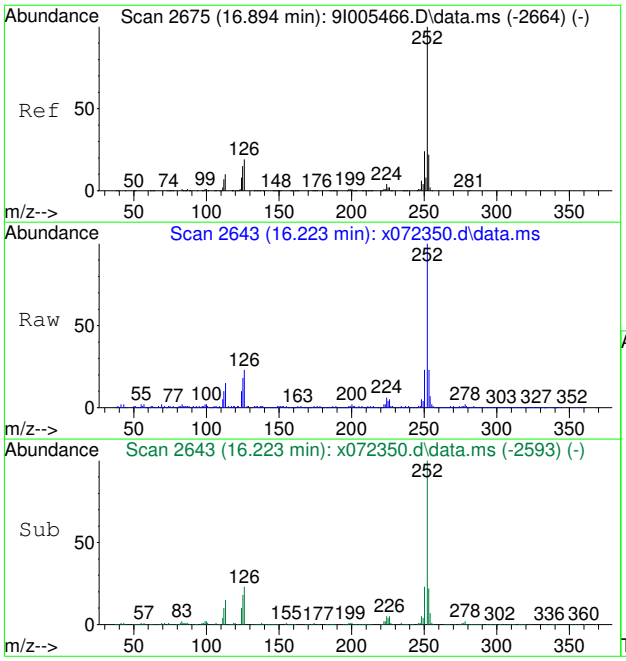


#105
Benzo[k]fluoranthene
Concen: 35.44 ppm
RT: 15.720 min Scan# 2549
Delta R.T. 0.059 min
Lab File: x072350.d
Acq: 11 Aug 2020 9:52 pm

Tgt Ion:252 Resp: 464150

Ion	Ratio	Lower	Upper
252	100		
253	21.8	0.0	52.5
125	15.1	0.0	44.4

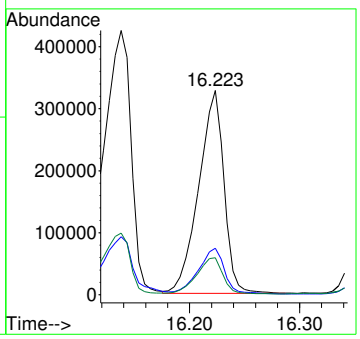


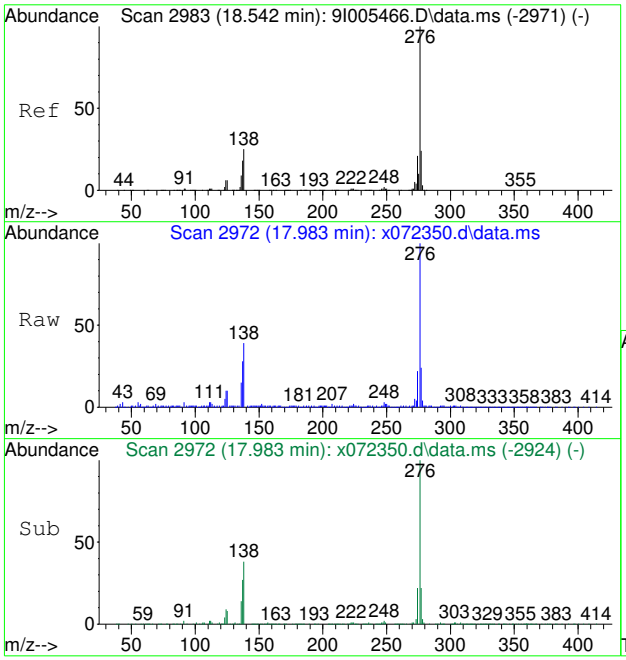


#106
Benzo[a]pyrene
Concen: 49.88 ppm
RT: 16.223 min Scan# 2643
Delta R.T. 0.069 min
Lab File: x072350.d
Acq: 11 Aug 2020 9:52 pm

Tgt Ion:252 Resp: 524254

Ion	Ratio	Lower	Upper
252	100		
253	21.9	0.0	52.3
125	17.6	0.0	44.7

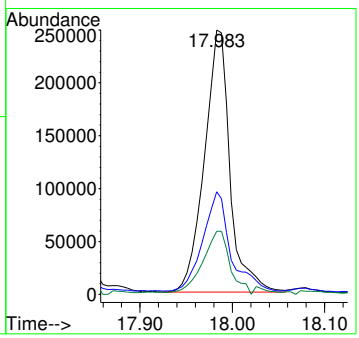


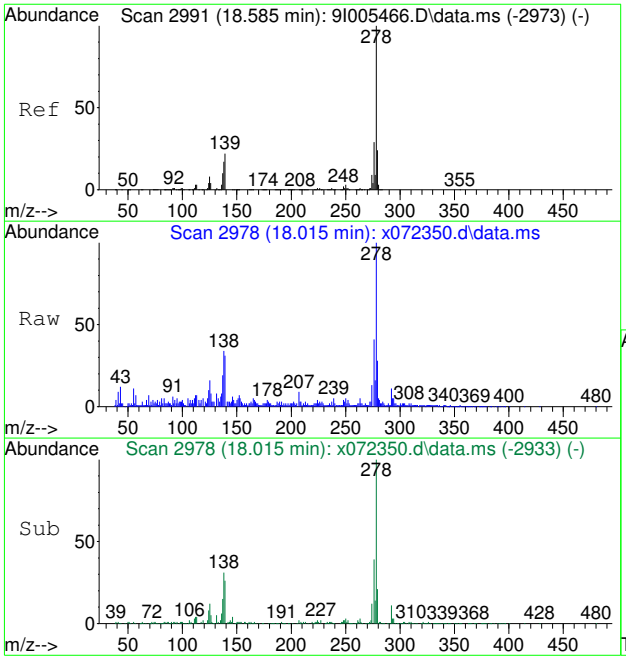


#107
Indeno[1,2,3-cd]pyrene
Concen: 61.80 ppm
RT: 17.983 min Scan# 2972
Delta R.T. 0.059 min
Lab File: x072350.d
Acq: 11 Aug 2020 9:52 pm

Tgt Ion:276 Resp: 476447

Ion	Ratio	Lower	Upper
276	100		
138	37.9	0.0	54.7
277	23.2	0.0	53.8

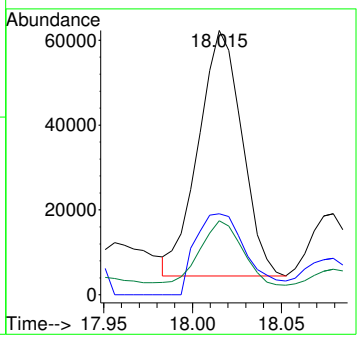


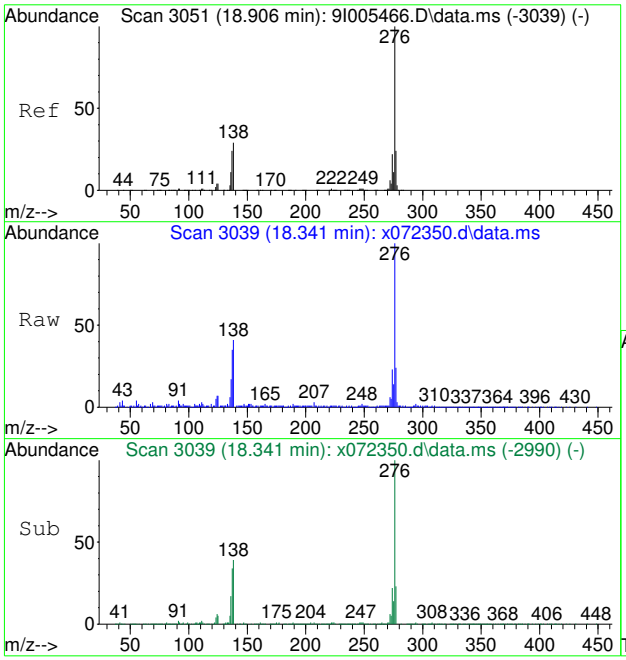


#108
Dibenz[a,h]anthracene
Concen: 15.24 ppm
RT: 18.015 min Scan# 2978
Delta R.T. 0.043 min
Lab File: x072350.d
Acq: 11 Aug 2020 9:52 pm

Tgt Ion:278 Resp: 98592

Ion	Ratio	Lower	Upper
278	100		
139	30.2	0.0	52.4
279	26.8	0.0	54.4

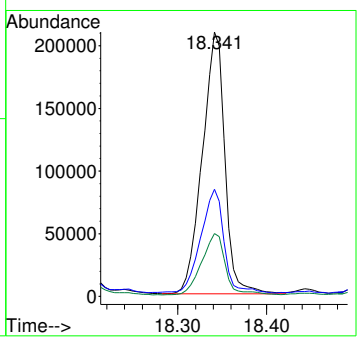




#109
Benzo[g,h,i]perylene
Concen: 37.78 ppm
RT: 18.341 min Scan# 3039
Delta R.T. 0.064 min
Lab File: x072350.d
Acq: 11 Aug 2020 9:52 pm

Tgt Ion:276 Resp: 368330

Ion	Ratio	Lower	Upper
276	100		
138	39.5	0.0	59.4
277	23.3	0.0	54.1



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072373.D
Acq On : 12 Aug 2020 5:17 pm
Operator : marthav
Sample : fa77581-4 E,2 Inst : MSBNA05
Misc : op81482,sx2951,30.2,,,1,2,soil
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 12 17:40:34 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.655	152	134513	40.00	ppm	0.00
22) Naphthalene-d8	7.077	136	483488	40.00	ppm	0.00
43) Acenaphthene-d10	9.115	164	230817	40.00	ppm	0.00
70) Phenanthrene-d10	10.859	188	396866	40.00	ppm	0.00
92) Chrysene-d12	14.073	240	339628	40.00	ppm	0.00
102) Perylene-d12	16.277	264	273941	40.00	ppm	0.01
110) 1,4-Dichlorobenzene-d4A	5.655	152	134513	40.00	ppm	0.00
120) Naphthalene-d8A	7.077	136	483488	40.00	ppm	0.00
127) Acenaphthene-d10A	9.115	164	230817	40.00	ppm	0.00
136) Phenanthrene-d10A	10.859	188	396866	40.00	ppm	0.00
146) Chrysene-d12A	14.073	240	339628	40.00	ppm	0.00
153) Perylene-d12A	16.277	264	273941	40.00	ppm	0.01
System Monitoring Compounds						
7) 2-Fluorophenol	4.312	112	174044	36.09	ppm	0.00
Spiked Amount 100.000	Range 40 - 102		Recovery = 36.09%#			
9) Phenol-d5	5.334	99	211192	36.80	ppm	0.00
Spiked Amount 100.000	Range 41 - 100		Recovery = 36.80%#			
23) Nitrobenzene-d5	6.270	82	88709	17.77	ppm	0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 35.54%#			
47) 2-Fluorobiphenyl	8.345	172	158875	19.01	ppm	0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 38.02%#			
75) 2,4,6-Tribromophenol	10.051	330	30947	39.37	ppm	0.00
Spiked Amount 100.000	Range 42 - 108		Recovery = 39.37%#			
95) Terphenyl-d14	12.779	244	162203	17.97	ppm	0.00
Spiked Amount 50.000	Range 45 - 119		Recovery = 35.94%#			
Target Compounds						Qvalue
30) Benzoic Acid	6.858	105	3371	1.15	ppm	90
34) Naphthalene	7.099	128	5657	0.43	ppm	96
40) 2-Methylnaphthalene	7.906	142	2764	0.32	ppm	92
41) 1-Methylnaphthalene	8.013	142	1977	0.24	ppm	89
52) Acenaphthylene	8.944	152	157172	13.63	ppm	99
57) Acenaphthene	9.147	153	8225	1.07	ppm	94
60) Dibenzofuran	9.356	168	4902	0.48	ppm	94
65) Fluorene	9.762	166	19002	2.38	ppm	99
84) Phenanthrene	10.885	178	97450	8.13	ppm	99
85) Anthracene	10.950	178	403426	32.28	ppm	97
87) Carbazole	11.164	167	90746	8.23	ppm	100
91) Fluoranthene	12.298	202	736599	66.20	ppm	98
94) Pyrene	12.554	202	801790	56.86	ppm	99
99) Benzo[a]anthracene	14.063	228	288936	27.07	ppm	98
100) Chrysene	14.105	228	447448	39.36	ppm	99
104) Benzo[b]fluoranthene	15.635	252	654852	76.28	ppm	96
105) Benzo[k]fluoranthene	15.673	252	200516	20.62	ppm	97
106) Benzo[a]pyrene	16.175	252	203389	27.42	ppm	97
107) Indeno[1,2,3-cd]pyrene	17.940	276	183616	37.02	ppm	85
108) Dibenz[a,h]anthracene	17.978	278	36531	8.07	ppm	87
109) Benzo[g,h,i]perylene	18.299	276	146404	21.59	ppm	87

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072373.D
Acq On : 12 Aug 2020 5:17 pm
Operator : marthav
Sample : fa77581-4 E,2 Inst : MSBNA05
Misc : op81482,sx2951,30.2,,,1,2,soil
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 12 17:40:34 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration

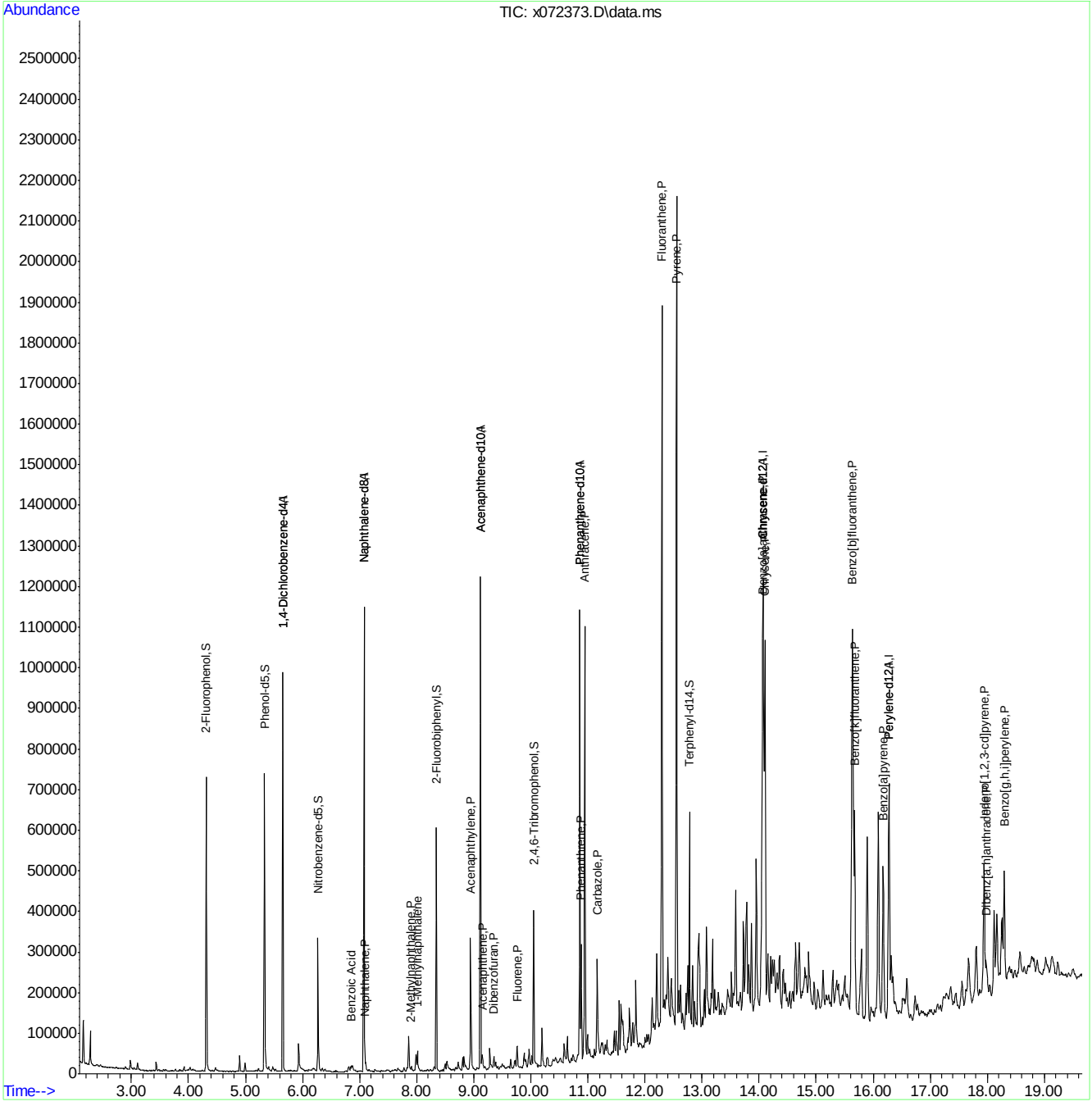
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

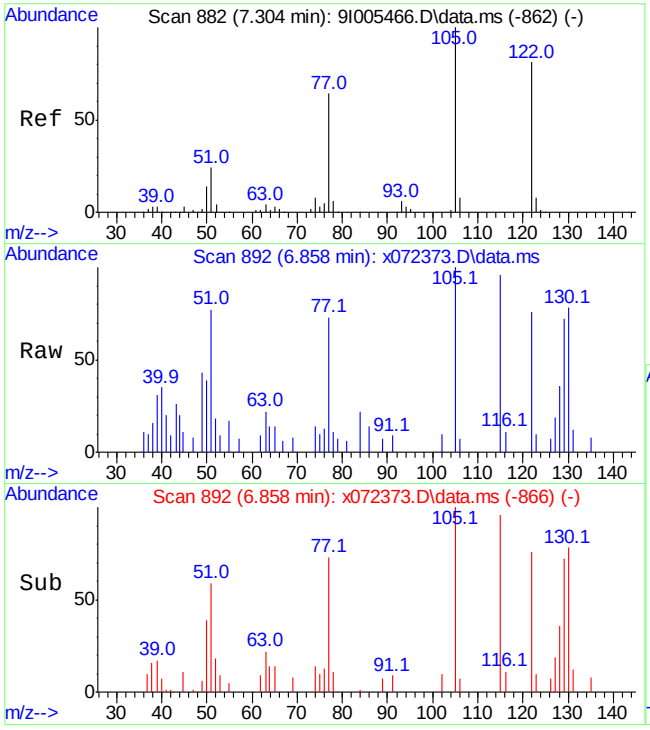
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072373.D
Acq On : 12 Aug 2020 5:17 pm
Operator : marthav
Sample : fa77581-4 E,2 Inst : MSBNA05
Misc : op81482,sx2951,30.2,,,1,2,soil
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 12 17:40:34 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration

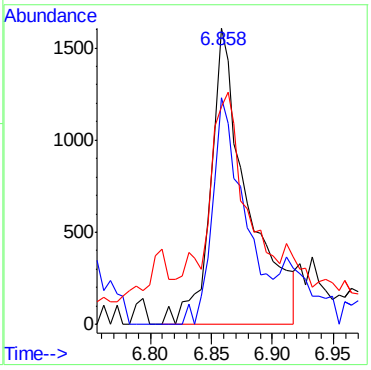


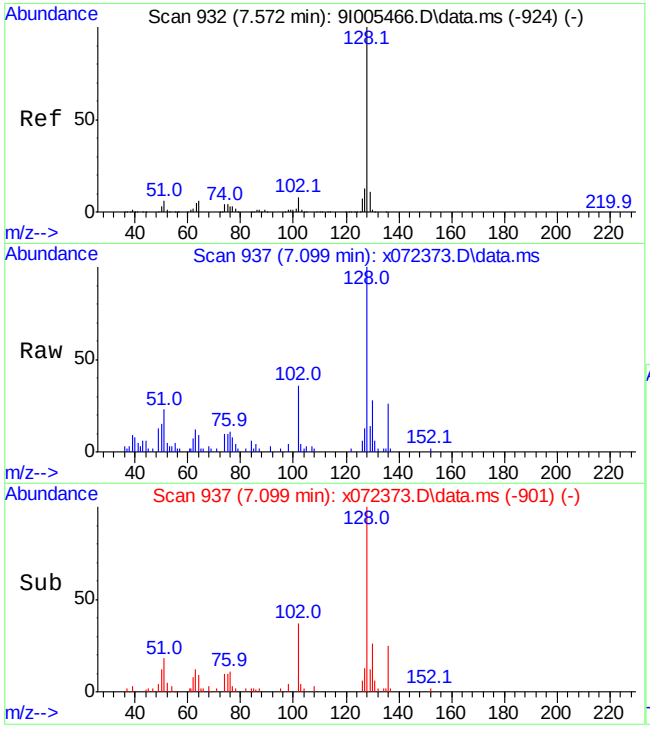


#30
Benzoic Acid
Concen: 1.15 ppm
RT: 6.858 min Scan# 892
Delta R.T. -0.059 min
Lab File: x072373.D
Acq: 12 Aug 2020 5:17 pm

Tgt Ion:105 Resp: 3371

Ion	Ratio	Lower	Upper
105	100		
122	73.5	51.2	111.2
77	54.3	34.1	94.1

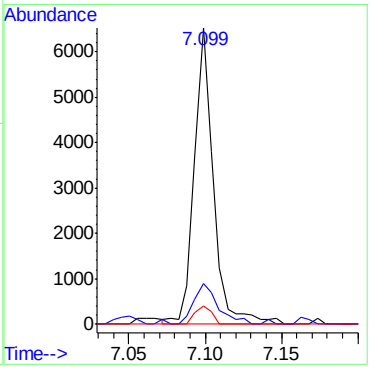


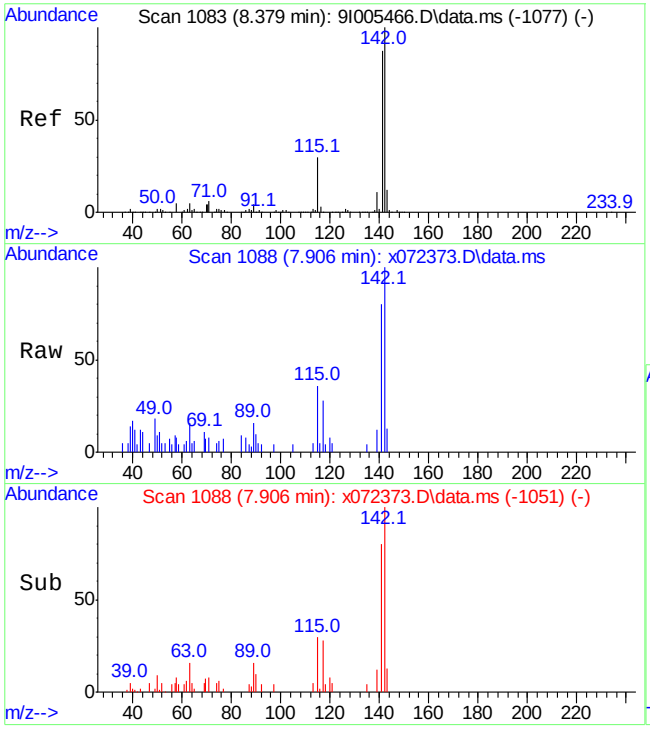


#34
Naphthalene
Concen: 0.43 ppm
RT: 7.099 min Scan# 937
Delta R.T. -0.005 min
Lab File: x072373.D
Acq: 12 Aug 2020 5:17 pm

Tgt Ion:128 Resp: 5657

Ion	Ratio	Lower	Upper
128	100		
129	13.1	0.0	41.4
126	6.1	0.0	37.4

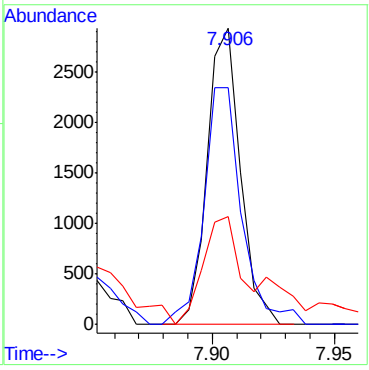


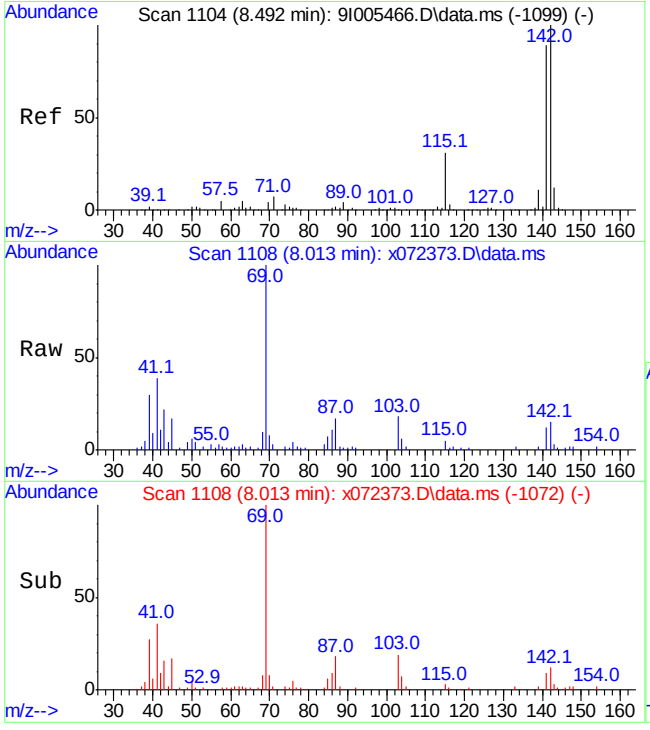


#40
2-Methylnaphthalene
Concen: 0.32 ppm
RT: 7.906 min Scan# 1088
Delta R.T. 0.000 min
Lab File: x072373.D
Acq: 12 Aug 2020 5:17 pm

Tgt Ion:142 Resp: 2764

Ion	Ratio	Lower	Upper
142	100		
141	77.6	56.8	116.8
115	28.4	0.0	60.0

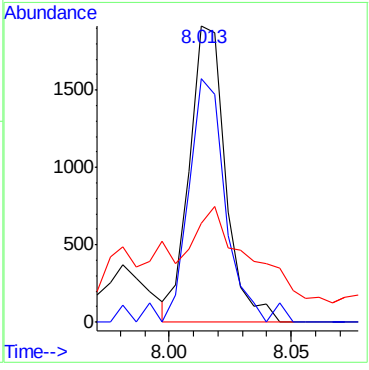


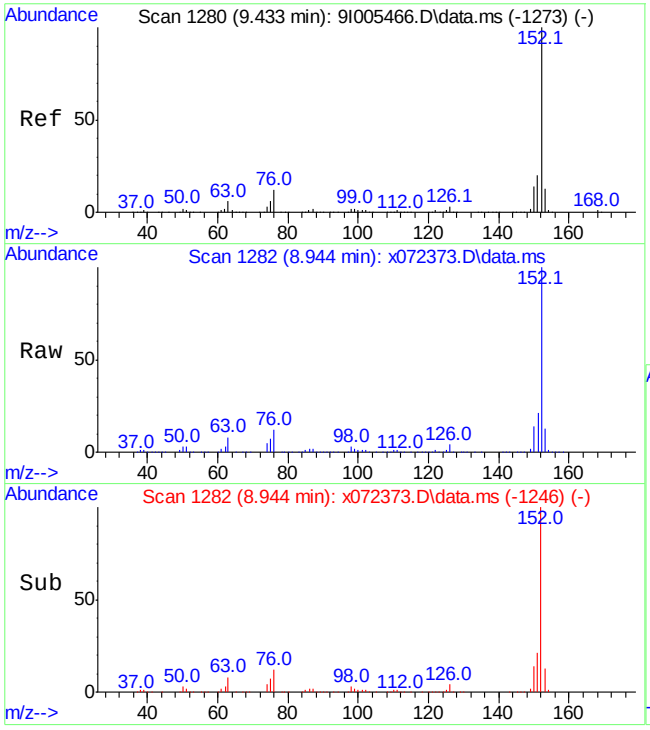


#41
1-Methylnaphthalene
Concen: 0.24 ppm
RT: 8.013 min Scan# 1108
Delta R.T. -0.005 min
Lab File: x072373.D
Acq: 12 Aug 2020 5:17 pm

Tgt Ion:142 Resp: 1977

Ion	Ratio	Lower	Upper
142	100		
141	85.2	59.0	119.0
115	15.0	1.1	61.1

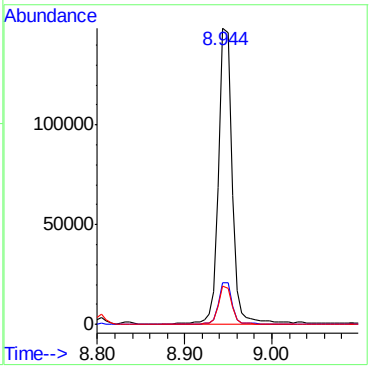


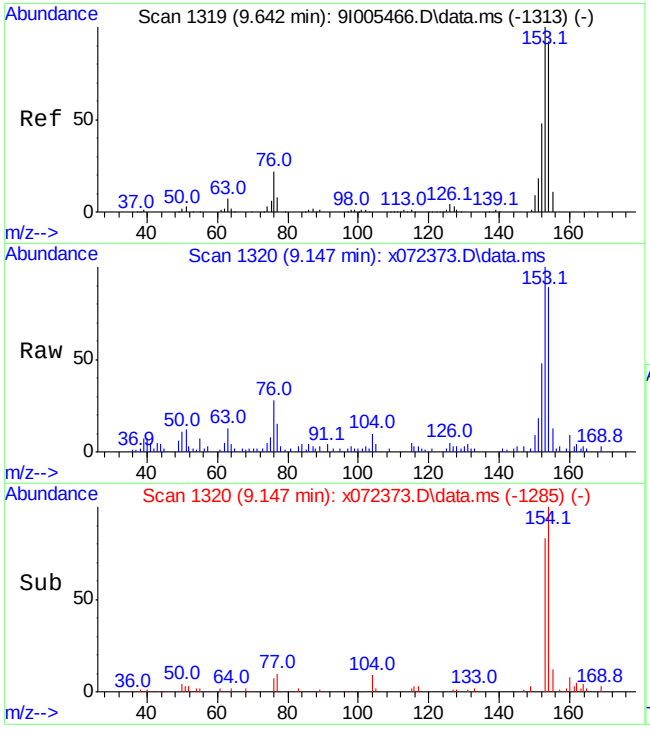


#52
Acenaphthylene
Concen: 13.63 ppm
RT: 8.944 min Scan# 1282
Delta R.T. -0.005 min
Lab File: x072373.D
Acq: 12 Aug 2020 5:17 pm

Tgt Ion:152 Resp: 157172

Ion	Ratio	Lower	Upper
152	100		
150	14.0	0.0	44.3
153	12.9	0.0	43.3

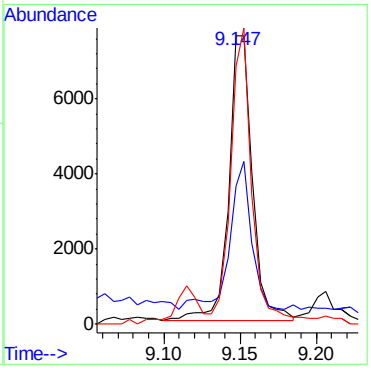


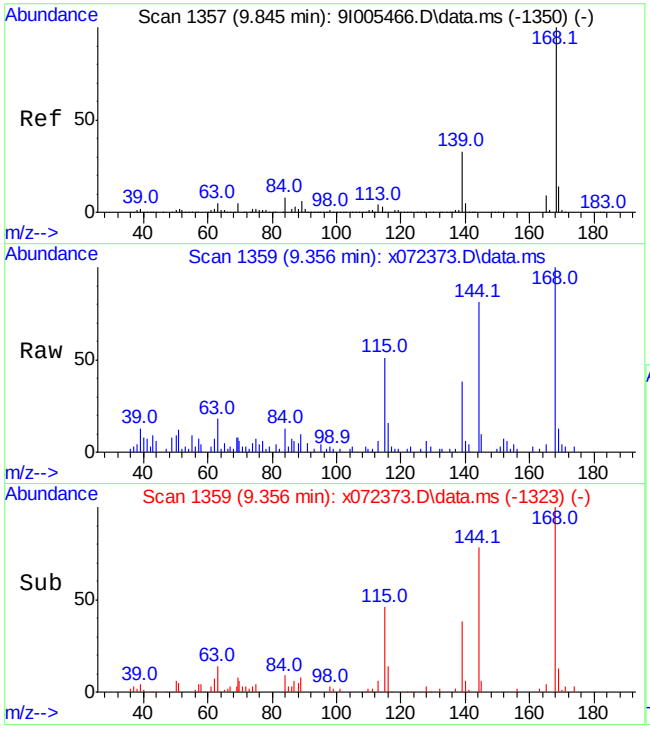


#57
Acenaphthene
Concen: 1.07 ppm
RT: 9.147 min Scan# 1320
Delta R.T. -0.011 min
Lab File: x072373.D
Acq: 12 Aug 2020 5:17 pm

Tgt Ion:153 Resp: 8225

Ion	Ratio	Lower	Upper
153	100		
152	41.6	18.4	78.4
154	89.2	62.4	122.4

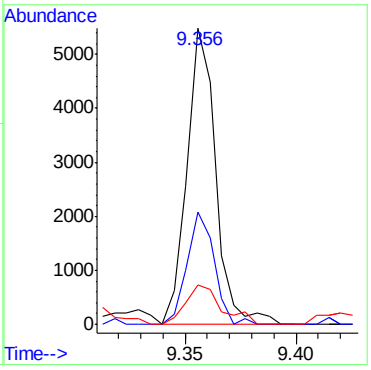


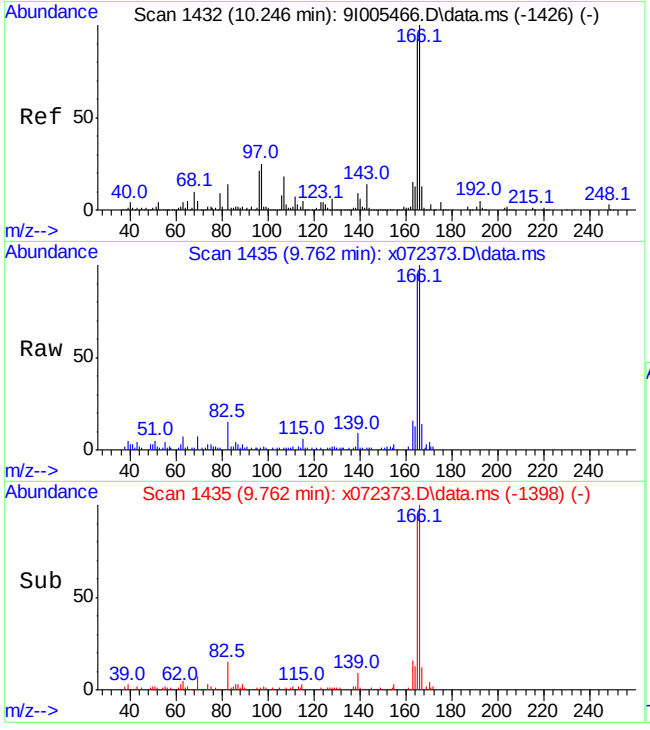


#60
Dibenzofuran
Concen: 0.48 ppm
RT: 9.356 min Scan# 1359
Delta R.T. -0.005 min
Lab File: x072373.D
Acq: 12 Aug 2020 5:17 pm

Tgt Ion:168 Resp: 4902

Ion	Ratio	Lower	Upper
168	100		
139	37.9	3.0	63.0
169	13.5	0.0	43.5

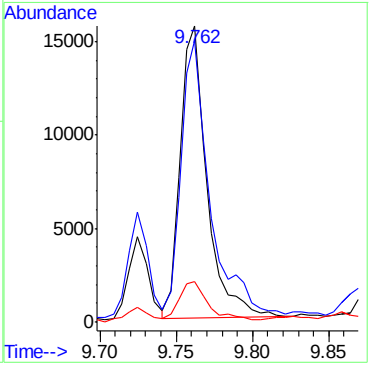


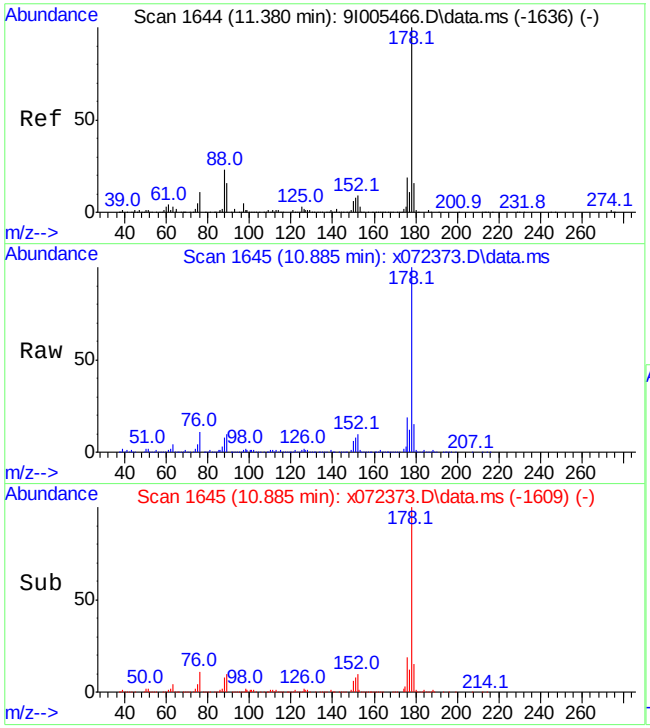


#65
Fluorene
Concen: 2.38 ppm
RT: 9.762 min Scan# 1435
Delta R.T. 0.000 min
Lab File: x072373.D
Acq: 12 Aug 2020 5:17 pm

Tgt Ion:166 Resp: 19002

Ion	Ratio	Lower	Upper
166	100		
165	93.8	62.7	122.7
167	12.6	0.0	43.5

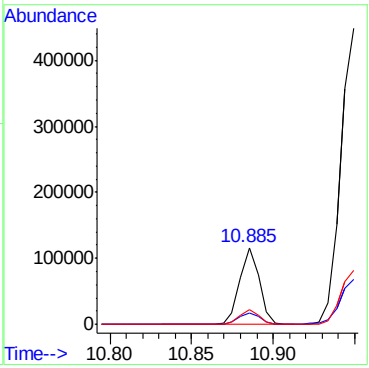


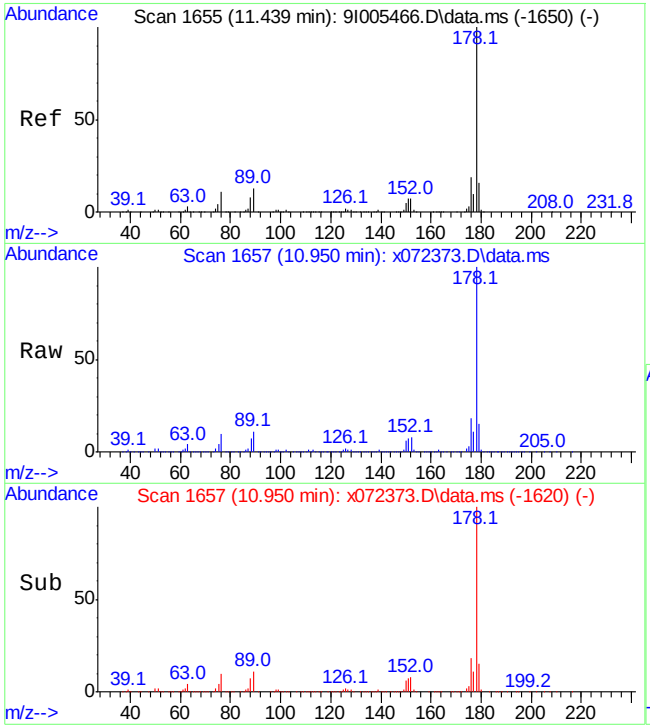


#84
Phenanthrene
Concen: 8.13 ppm
RT: 10.885 min Scan# 1645
Delta R.T. -0.005 min
Lab File: x072373.D
Acq: 12 Aug 2020 5:17 pm

Tgt Ion:178 Resp: 97450

Ion	Ratio	Lower	Upper
178	100		
179	15.0	0.0	45.8
176	19.3	0.0	49.3

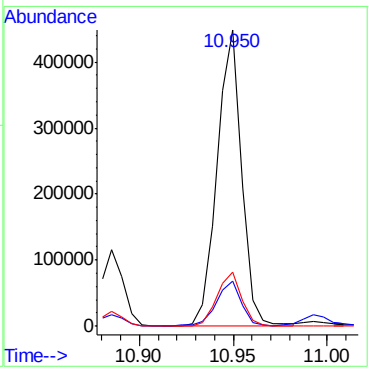


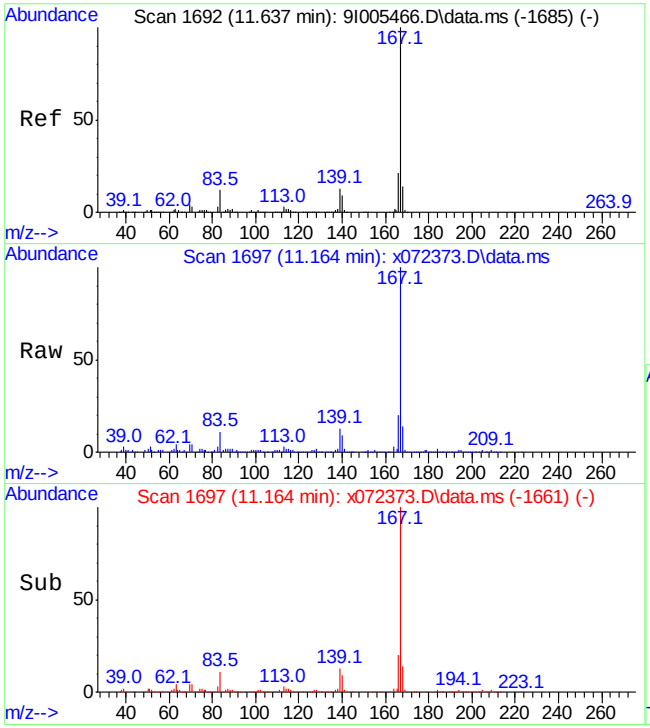


#85
Anthracene
Concen: 32.28 ppm
RT: 10.950 min Scan# 1657
Delta R.T. 0.000 min
Lab File: x072373.D
Acq: 12 Aug 2020 5:17 pm

Tgt Ion:178 Resp: 403426

Ion	Ratio	Lower	Upper
178	100		
179	14.7	0.0	46.0
176	18.1	0.0	49.3

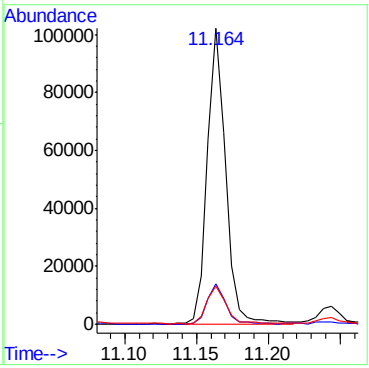


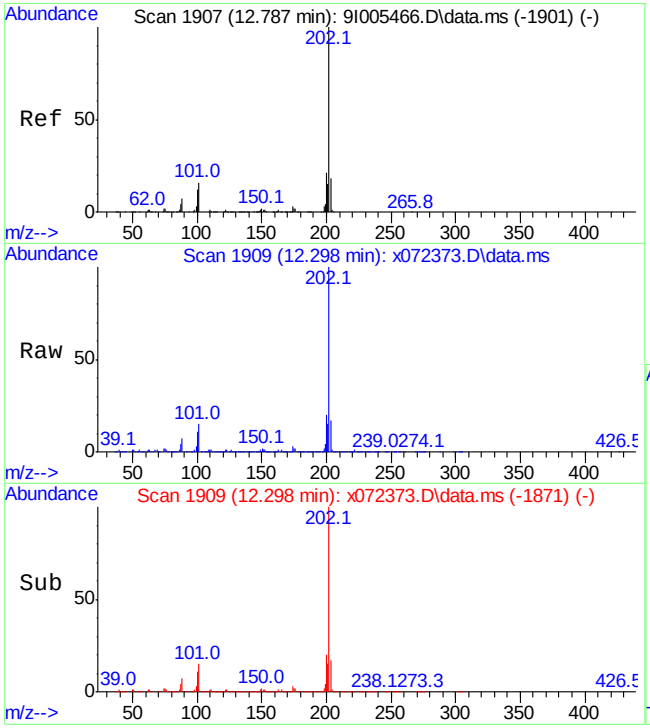


#87
Carbazole
Concen: 8.23 ppm
RT: 11.164 min Scan# 1697
Delta R.T. -0.005 min
Lab File: x072373.D
Acq: 12 Aug 2020 5:17 pm

Tgt Ion:167 Resp: 90746

Ion	Ratio	Lower	Upper
167	100		
168	13.6	0.0	43.9
139	12.7	0.0	42.7

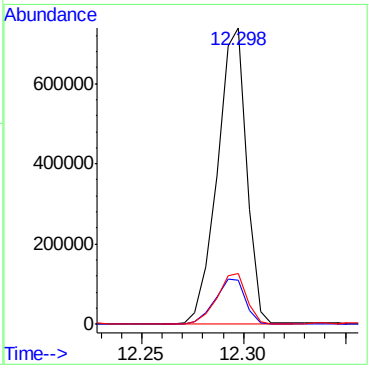


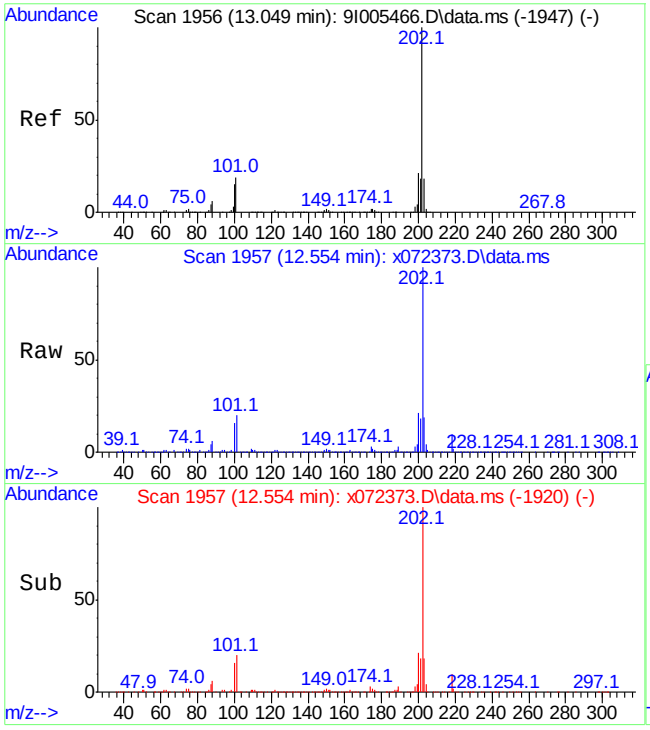


#91
Fluoranthene
Concen: 66.20 ppm
RT: 12.298 min Scan# 1909
Delta R.T. 0.005 min
Lab File: x072373.D
Acq: 12 Aug 2020 5:17 pm

Tgt Ion:202 Resp: 736599

Ion	Ratio	Lower	Upper
202	100		
101	14.7	0.0	45.8
203	17.1	0.0	48.1

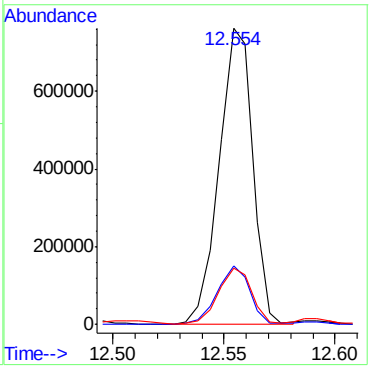


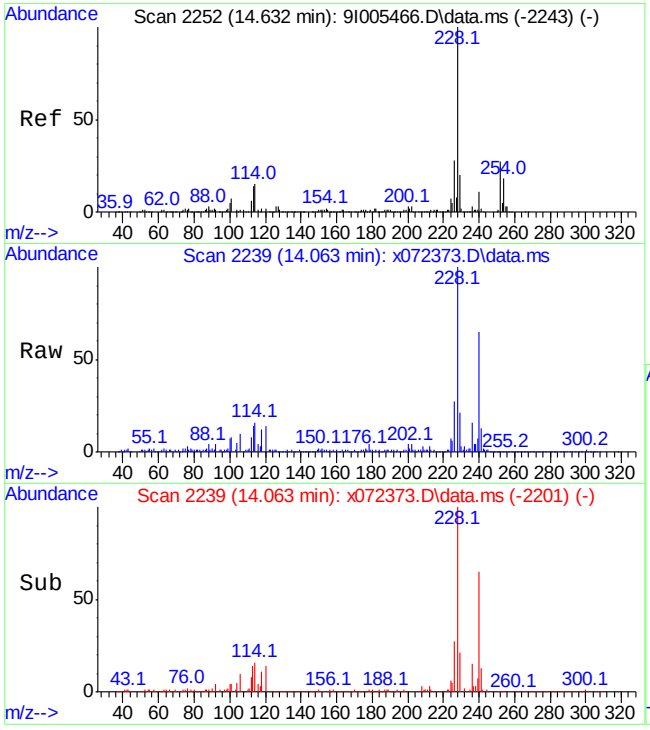


#94
Pyrene
Concen: 56.86 ppm
RT: 12.554 min Scan# 1957
Delta R.T. 0.000 min
Lab File: x072373.D
Acq: 12 Aug 2020 5:17 pm

Tgt Ion:202 Resp: 801790

Ion	Ratio	Lower	Upper
202	100		
101	19.6	0.0	48.7
203	18.4	0.0	48.4

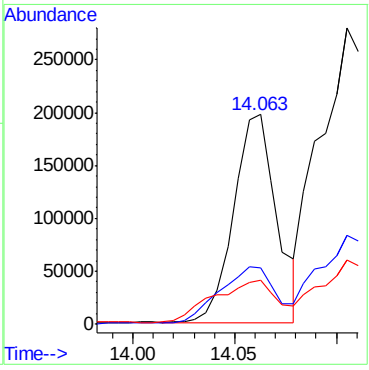


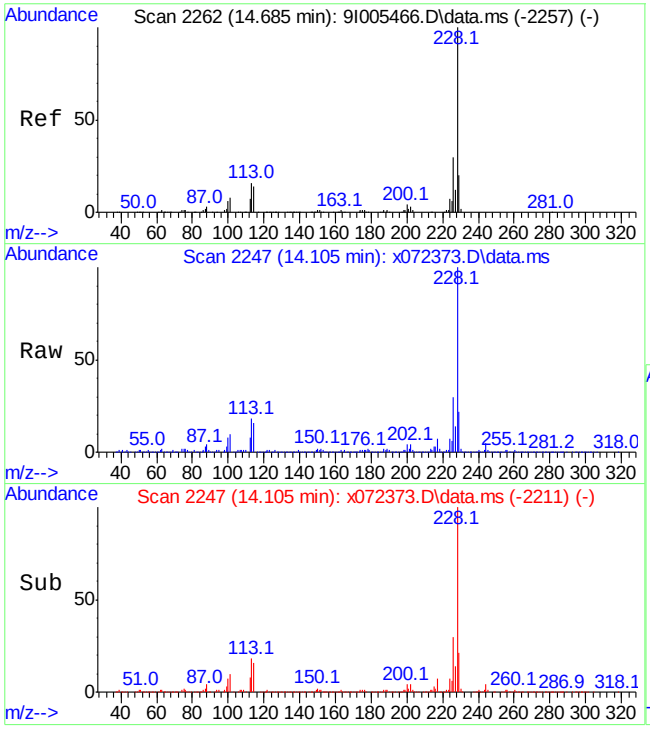


#99
Benzo[a]anthracene
Concen: 27.07 ppm
RT: 14.063 min Scan# 2239
Delta R.T. 0.005 min
Lab File: x072373.D
Acq: 12 Aug 2020 5:17 pm

Tgt Ion:228 Resp: 288936

Ion	Ratio	Lower	Upper
228	100		
226	25.9	0.0	57.5
229	19.1	0.0	49.9

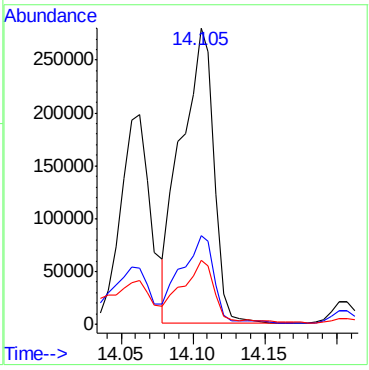


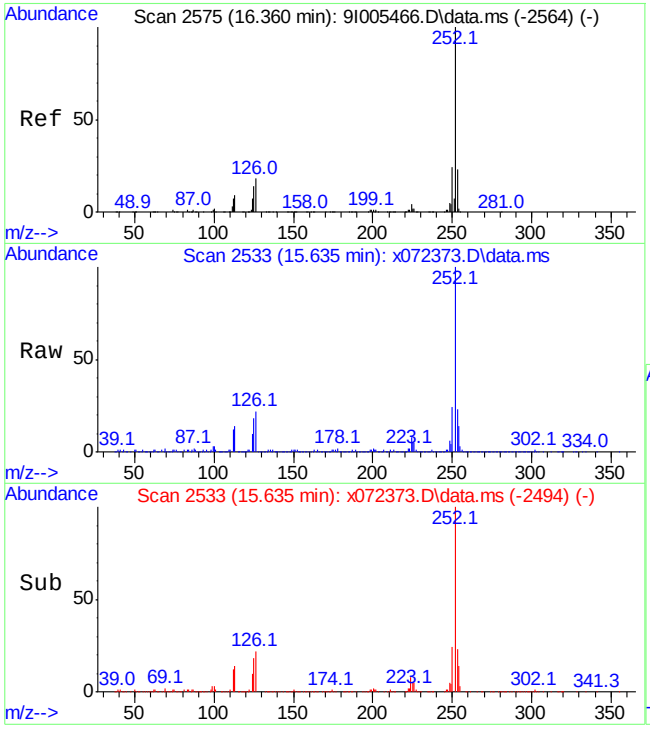


#100
Chrysene
Concen: 39.36 ppm
RT: 14.105 min Scan# 2247
Delta R.T. -0.005 min
Lab File: x072373.D
Acq: 12 Aug 2020 5:17 pm

Tgt Ion:228 Resp: 447448

Ion	Ratio	Lower	Upper
228	100		
226	29.6	0.4	60.4
229	20.5	0.0	50.1

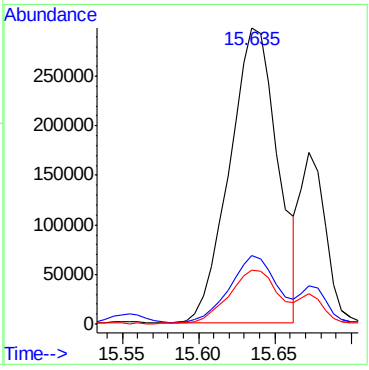


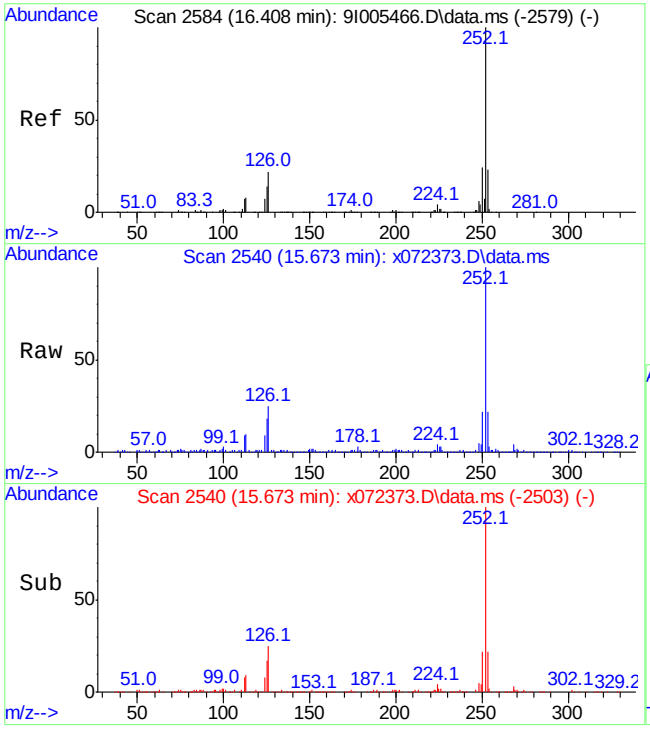


#104
Benzo[b]fluoranthene
Concen: 76.28 ppm
RT: 15.635 min Scan# 2533
Delta R.T. 0.011 min
Lab File: x072373.D
Acq: 12 Aug 2020 5:17 pm

Tgt Ion:252 Resp: 654852

Ion	Ratio	Lower	Upper
252	100		
253	22.6	0.0	52.5
125	17.7	0.0	44.0

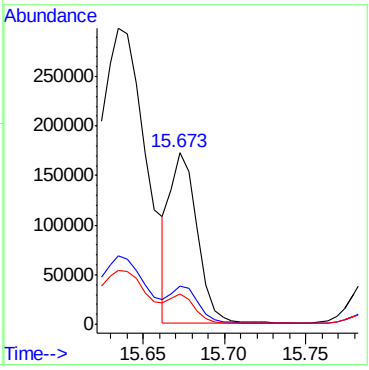


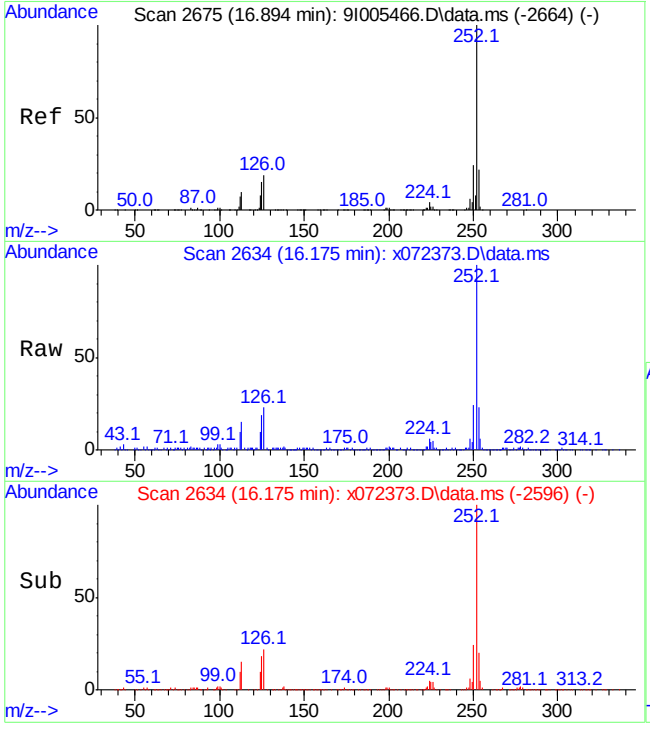


#105
Benzo[k]fluoranthene
Concen: 20.62 ppm
RT: 15.673 min Scan# 2540
Delta R.T. 0.000 min
Lab File: x072373.D
Acq: 12 Aug 2020 5:17 pm

Tgt Ion:252 Resp: 200516

Ion	Ratio	Lower	Upper
252	100		
253	21.2	0.0	52.5
125	16.0	0.0	44.4

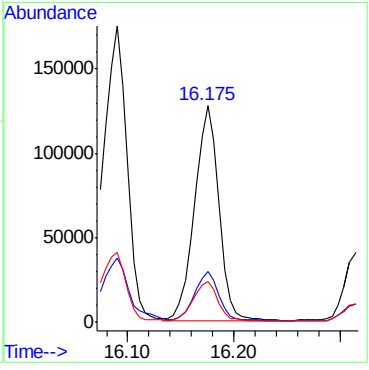


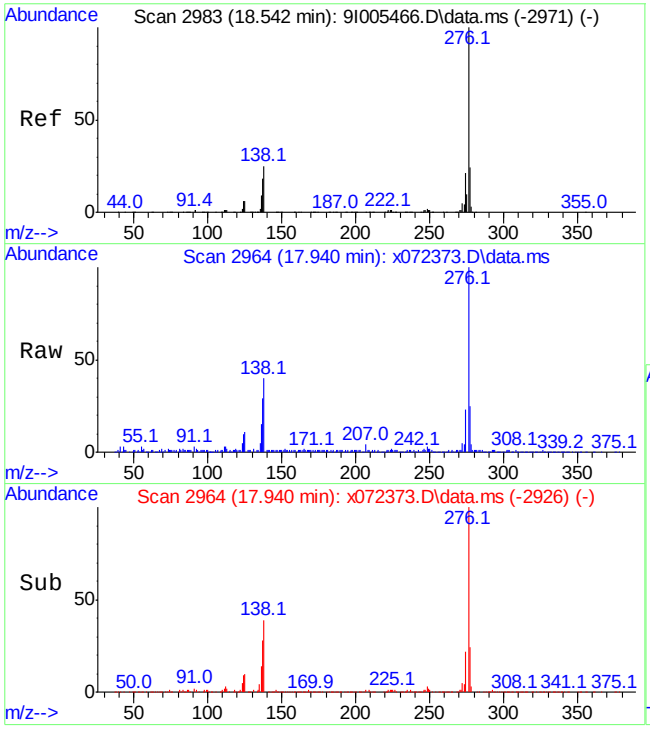


#106
Benzo[a]pyrene
Concen: 27.42 ppm
RT: 16.175 min Scan# 2634
Delta R.T. 0.005 min
Lab File: x072373.D
Acq: 12 Aug 2020 5:17 pm

Tgt Ion:252 Resp: 203389

Ion	Ratio	Lower	Upper
252	100		
253	22.4	0.0	52.3
125	18.1	0.0	44.7

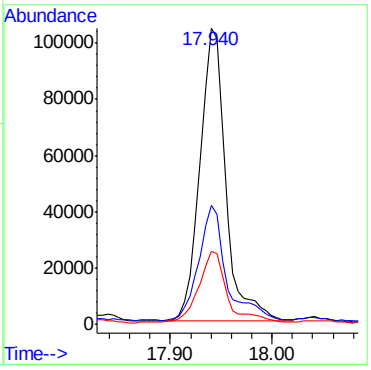


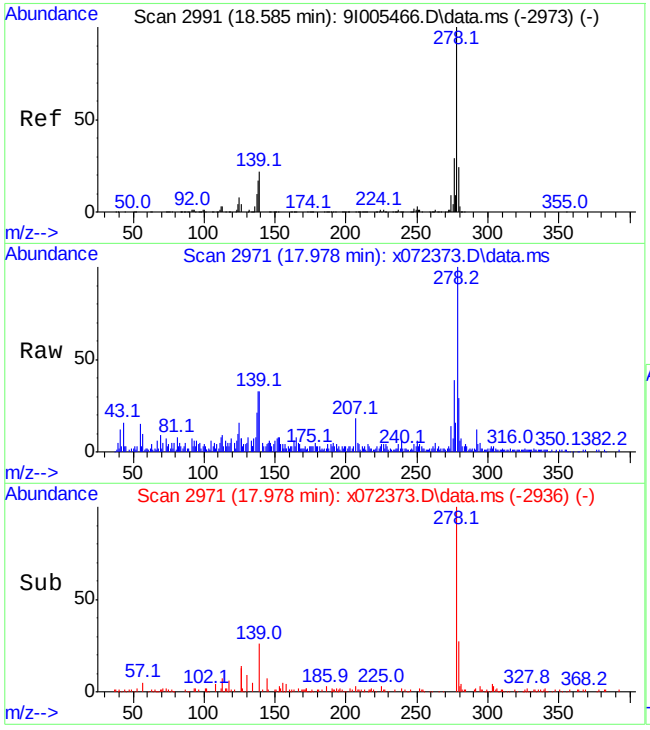


#107
Indeno[1,2,3-cd]pyrene
Concen: 37.02 ppm
RT: 17.940 min Scan# 2964
Delta R.T. 0.005 min
Lab File: x072373.D
Acq: 12 Aug 2020 5:17 pm

Tgt Ion:276 Resp: 183616

Ion	Ratio	Lower	Upper
276	100		
138	39.1	0.0	54.7
277	24.0	0.0	53.8

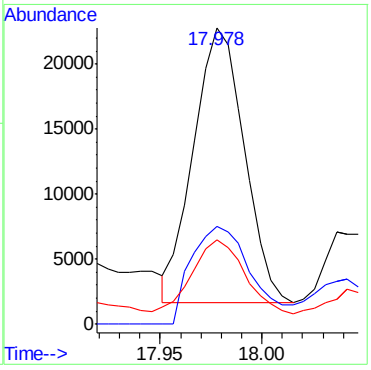


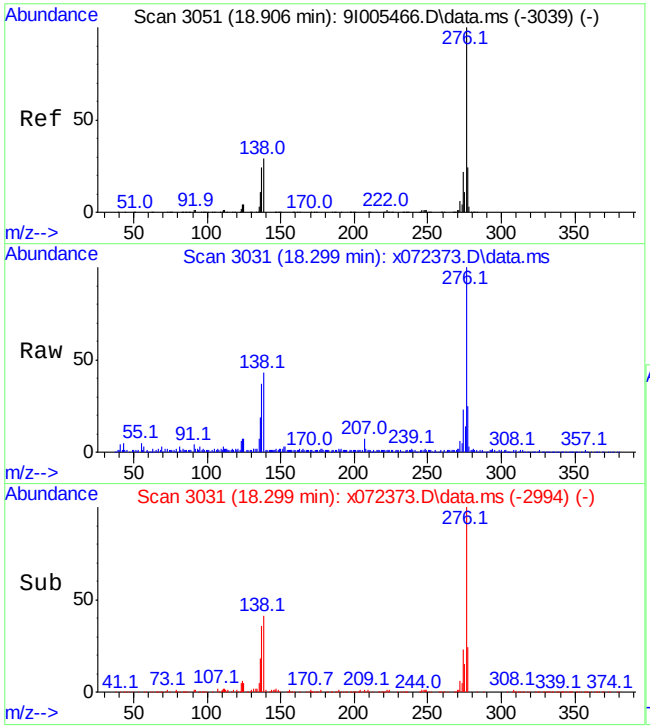


#108
Dibenz[a,h]anthracene
Concen: 8.07 ppm
RT: 17.978 min Scan# 2971
Delta R.T. -0.011 min
Lab File: x072373.D
Acq: 12 Aug 2020 5:17 pm

Tgt Ion:278 Resp: 36531

Ion	Ratio	Lower	Upper
278	100		
139	32.3	0.0	52.4
279	27.2	0.0	54.4

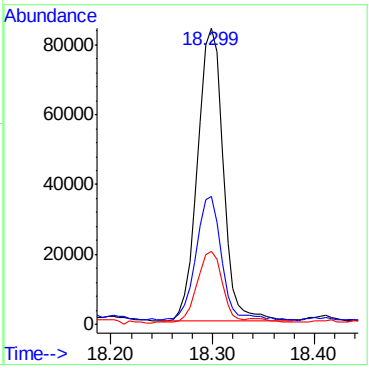




#109
Benzo[g,h,i]perylene
Concen: 21.59 ppm
RT: 18.299 min Scan# 3031
Delta R.T. 0.000 min
Lab File: x072373.D
Acq: 12 Aug 2020 5:17 pm

Tgt Ion:276 Resp: 146404

Ion	Ratio	Lower	Upper
276	100		
138	41.9	0.0	59.4
277	24.1	0.0	54.1



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072351.d
Acq On : 11 Aug 2020 10:18 pm
Operator : marthav
Sample : fa77581-5 E
Misc : op81482,sx2950,30.2,,,1,1,soil
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Aug 12 03:26:12 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	5.665	152	147608	40.00	ppm		0.00
22) Naphthalene-d8	7.088	136	546571	40.00	ppm		0.00
43) Acenaphthene-d10	9.131	164	270607	40.00	ppm		0.01
70) Phenanthrene-d10	10.875	188	460128	40.00	ppm		0.01
92) Chrysene-d12	14.095	240	376298	40.00	ppm		0.03
102) Perylene-d12	16.304	264	311161	40.00	ppm		0.05
110) 1,4-Dichlorobenzene-d4A	5.665	152	147608	40.00	ppm		0.00
120) Naphthalene-d8A	7.088	136	546571	40.00	ppm		0.00
127) Acenaphthene-d10A	9.131	164	270607	40.00	ppm		0.01
136) Phenanthrene-d10A	10.875	188	460128	40.00	ppm		0.01
146) Chrysene-d12A	14.095	240	376298	40.00	ppm		0.03
153) Perylene-d12A	16.304	264	311161	40.00	ppm		0.05
System Monitoring Compounds							
7) 2-Fluorophenol	4.328	112	424138	80.14	ppm		0.02
Spiked Amount 100.000	Range 40 - 102		Recovery = 80.14%				
9) Phenol-d5	5.350	99	528073	83.86	ppm		0.02
Spiked Amount 100.000	Range 41 - 100		Recovery = 83.86%				
23) Nitrobenzene-d5	6.286	82	223354	39.57	ppm		0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 79.14%				
47) 2-Fluorobiphenyl	8.361	172	395611	40.38	ppm		0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 80.76%				
75) 2,4,6-Tribromophenol	10.067	330	79512	80.30	ppm		0.01
Spiked Amount 100.000	Range 42 - 108		Recovery = 80.30%				
95) Terphenyl-d14	12.795	244	401694	40.18	ppm		0.02
Spiked Amount 50.000	Range 45 - 119		Recovery = 80.36%				
Target Compounds							Qvalue
5) Benzaldehyde	5.200	106	914	0.21	ppm		90
6) Aniline	5.323	93	4390	0.50	ppm		80
18) Acetophenone	6.120	105	1683	0.21	ppm		83
21) 3&4-Methylphenol	6.189	108	1980	0.36	ppm		77
27) 2,4-Dimethylphenol	6.767	107	1345	0.27	ppm		80
30) Benzoic Acid	6.879	105	4946	1.48	ppm		90
34) Naphthalene	7.109	128	9915	0.67	ppm		97
40) 2-Methylnaphthalene	7.917	142	5643	0.58	ppm		98
41) 1-Methylnaphthalene	8.029	142	3701	0.39	ppm		89
48) 1,1'-Biphenyl	8.468	154	1741	0.16	ppm		92
52) Acenaphthylene	8.960	152	314160	23.24	ppm		99
56) o-Dinitrobenzene	8.960	50	9297	4.31	ppm	#	1
57) Acenaphthene	9.163	153	18003	2.00	ppm		98
60) Dibenzofuran	9.372	168	8439	0.70	ppm		97
65) Fluorene	9.773	166	37195	3.97	ppm		96
84) Phenanthrene	10.901	178	65107	4.68	ppm		99
85) Anthracene	10.960	178	617574	42.62	ppm		98
86) Disulfoton	10.896	88	5323	0.96	ppm		58
87) Carbazole	11.180	167	123294	9.64	ppm		99
91) Fluoranthene	12.314	202	1033319	80.10	ppm		97
94) Pyrene	12.576	202	1301288	83.29	ppm		98
99) Benzo[a]anthracene	14.084	228	649424	54.91	ppm		99
100) Chrysene	14.132	228	799601	63.49	ppm		98
104) Benzo[b]fluoranthene	15.672	252	1166279	111.75	ppm		96
105) Benzo[k]fluoranthene	15.710	252	360902	32.67	ppm		99
106) Benzo[a]pyrene	16.207	252	469335	52.62	ppm		96
107) Indeno[1,2,3-cd]pyrene	17.972	276	304830	50.05	ppm		88
108) Dibenz[a,h]anthracene	18.004	278	64342	12.10	ppm		81
109) Benzo[g,h,i]perylene	18.325	276	252208	31.45	ppm		88

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072351.d
Acq On : 11 Aug 2020 10:18 pm
Operator : marthav
Sample : fa77581-5 E
Misc : op81482,sx2950,30.2,,,1,1,soil
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Aug 12 03:26:12 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

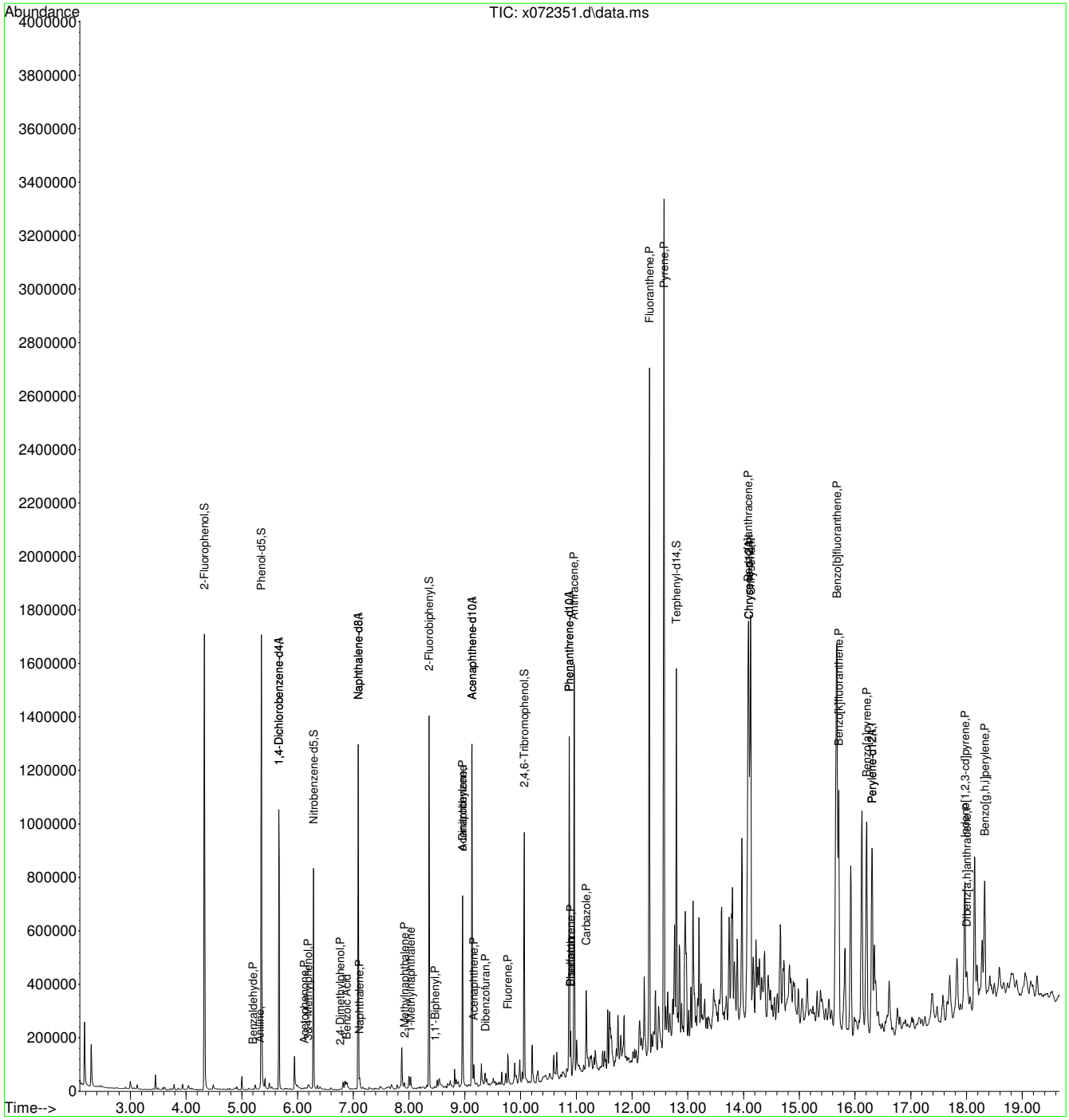
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

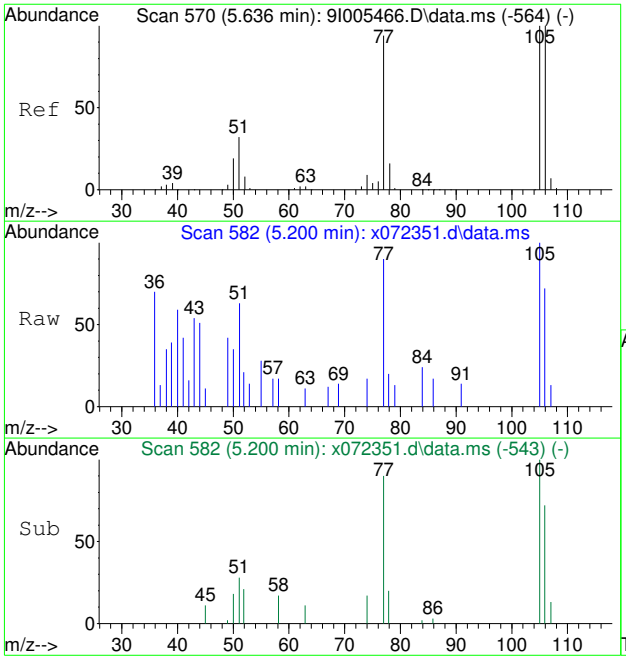
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072351.d
Acq On : 11 Aug 2020 10:18 pm
Operator : marthav
Sample : fa77581-5 E
Misc : op81482,sx2950,30.2,,,1,1,soil
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Aug 12 03:26:12 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

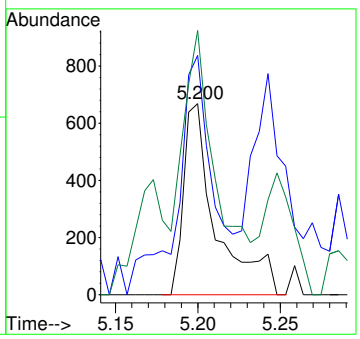


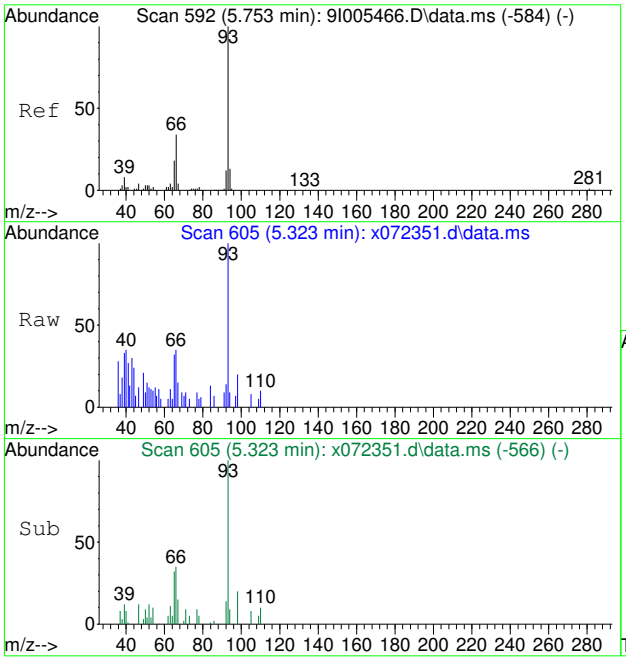


#5
Benzaldehyde
Concen: 0.21 ppm
RT: 5.200 min Scan# 582
Delta R.T. 0.011 min
Lab File: x072351.d
Acq: 11 Aug 2020 10:18 pm

Tgt Ion:106 Resp: 914

Ion	Ratio	Lower	Upper
106	100		
77	80.0	63.9	123.9
105	93.2	70.0	130.0

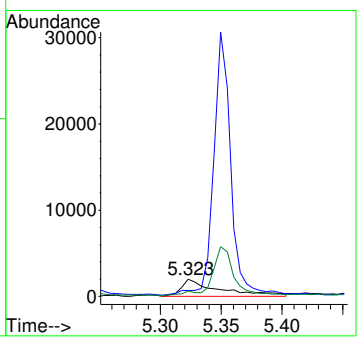


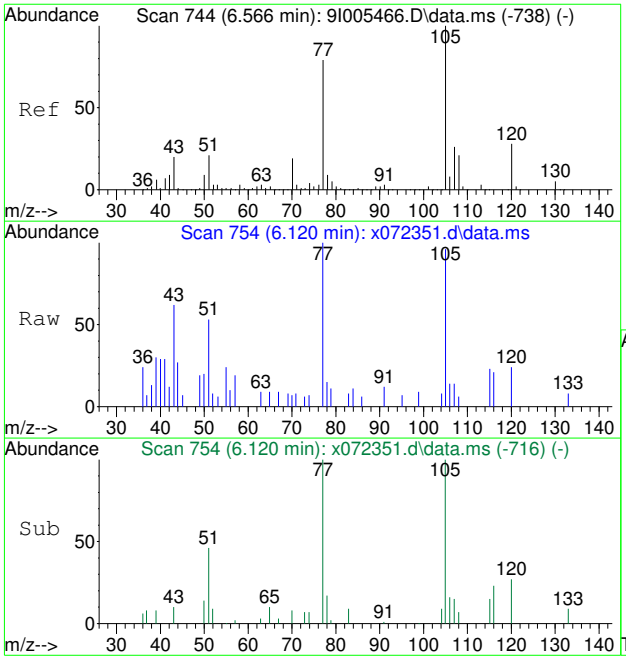


#6
Aniline
Concen: 0.50 ppm
RT: 5.323 min Scan# 605
Delta R.T. 0.011 min
Lab File: x072351.d
Acq: 11 Aug 2020 10:18 pm

Tgt Ion: 93 Resp: 4390

Ion	Ratio	Lower	Upper
93	100		
66	21.5	3.5	63.5
65	26.6	0.0	48.0

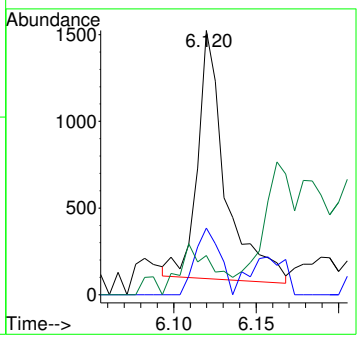


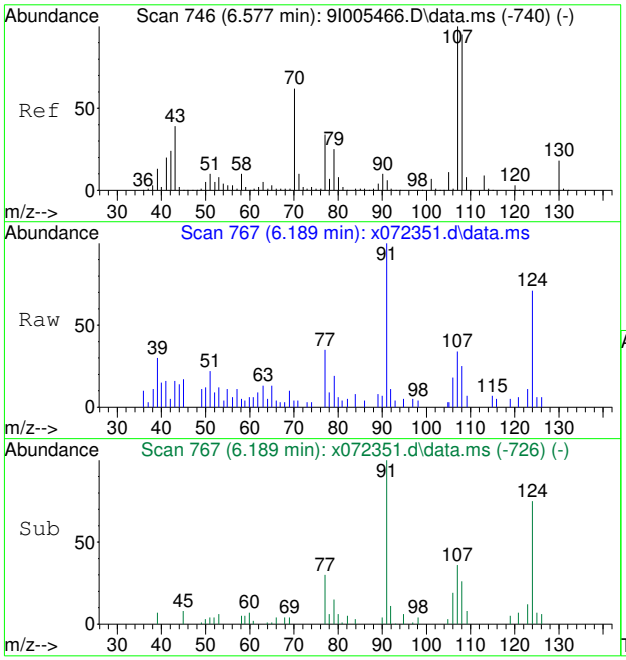


#18
Acetophenone
Concen: 0.21 ppm
RT: 6.120 min Scan# 754
Delta R.T. 0.005 min
Lab File: x072351.d
Acq: 11 Aug 2020 10:18 pm

Tgt Ion:105 Resp: 1683

Ion	Ratio	Lower	Upper
105	100		
120	20.3	0.0	58.3
106	0.0	0.0	38.0

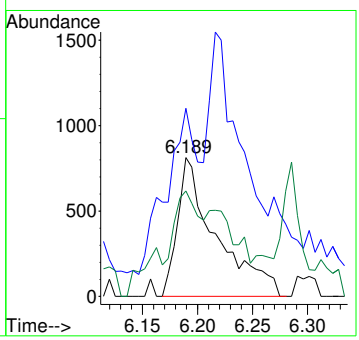


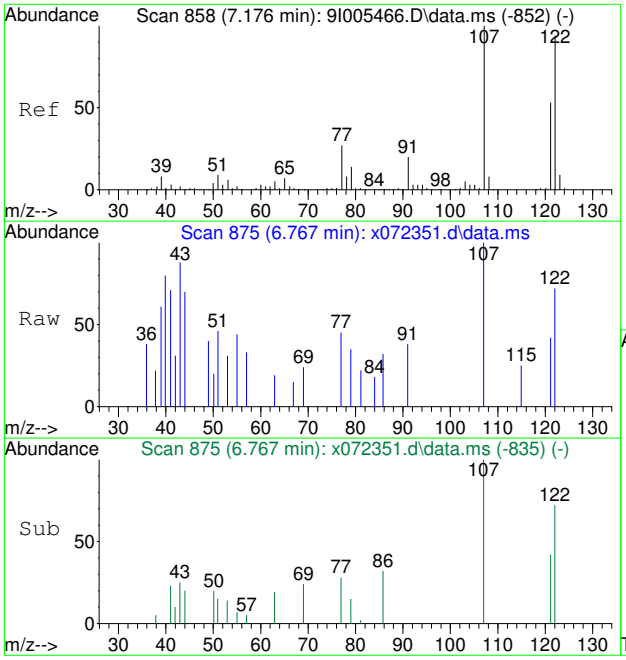


#21
3&4-Methylphenol
Concen: 0.36 ppm
RT: 6.189 min Scan# 767
Delta R.T. 0.021 min
Lab File: x072351.d
Acq: 11 Aug 2020 10:18 pm

Tgt Ion:108 Resp: 1980

Ion	Ratio	Lower	Upper
108	100		
107	75.5	75.4	135.4
79	26.9	0.0	56.3

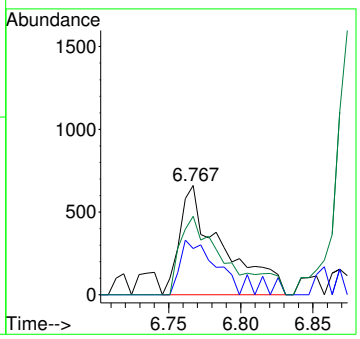


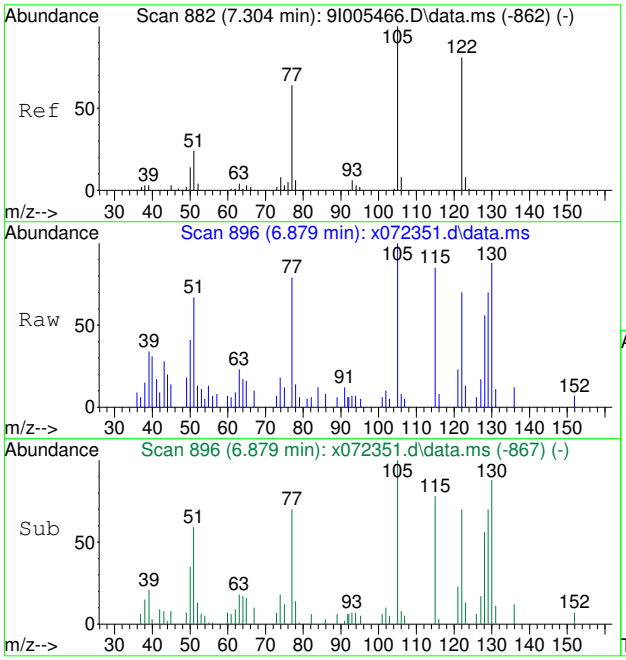


#27
2,4-Dimethylphenol
Concen: 0.27 ppm
RT: 6.767 min Scan# 875
Delta R.T. 0.016 min
Lab File: x072351.d
Acq: 11 Aug 2020 10:18 pm

Tgt Ion:107 Resp: 1345

Ion	Ratio	Lower	Upper
107	100		
121	42.3	23.4	83.4
122	71.8	64.3	124.3

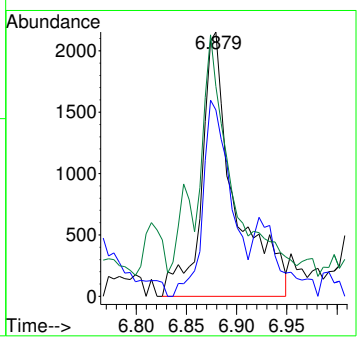


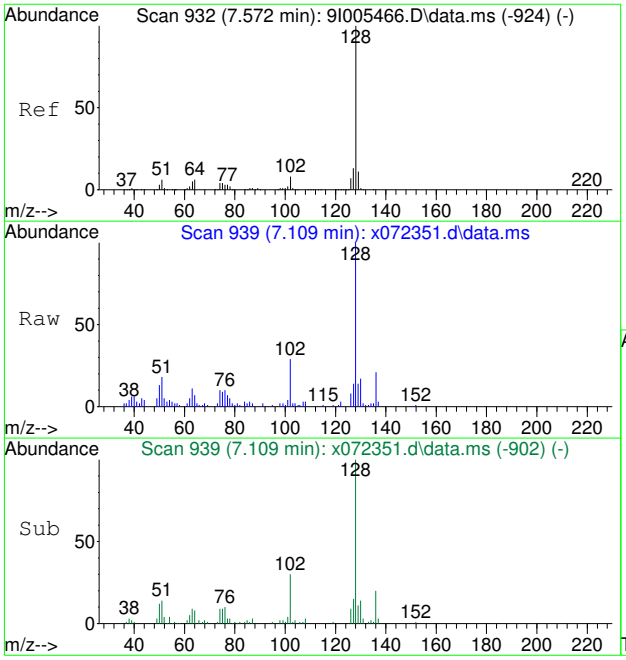


#30
Benzoic Acid
Concen: 1.48 ppm
RT: 6.879 min Scan# 896
Delta R.T. -0.043 min
Lab File: x072351.d
Acq: 11 Aug 2020 10:18 pm

Tgt Ion:105 Resp: 4946

Ion	Ratio	Lower	Upper
105	100		
122	66.2	51.2	111.2
77	63.9	34.1	94.1

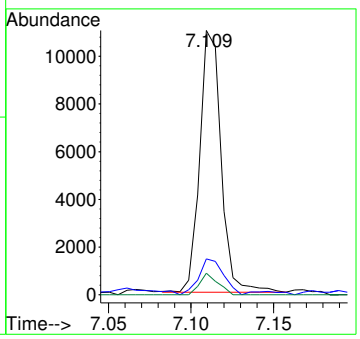


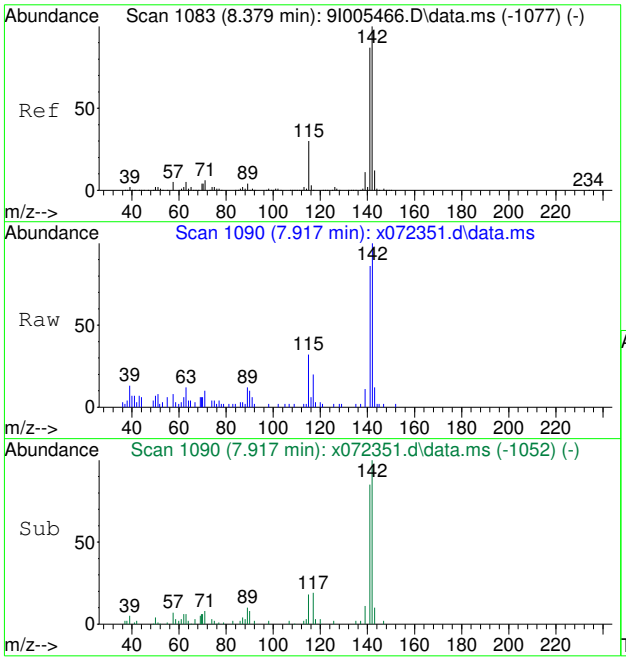


#34
Naphthalene
Concen: 0.67 ppm
RT: 7.109 min Scan# 939
Delta R.T. 0.000 min
Lab File: x072351.d
Acq: 11 Aug 2020 10:18 pm

Tgt Ion:128 Resp: 9915

Ion	Ratio	Lower	Upper
128	100		
129	12.7	0.0	41.4
126	8.3	0.0	37.4

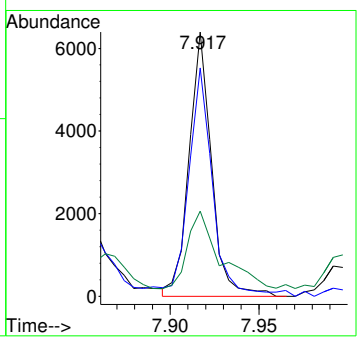


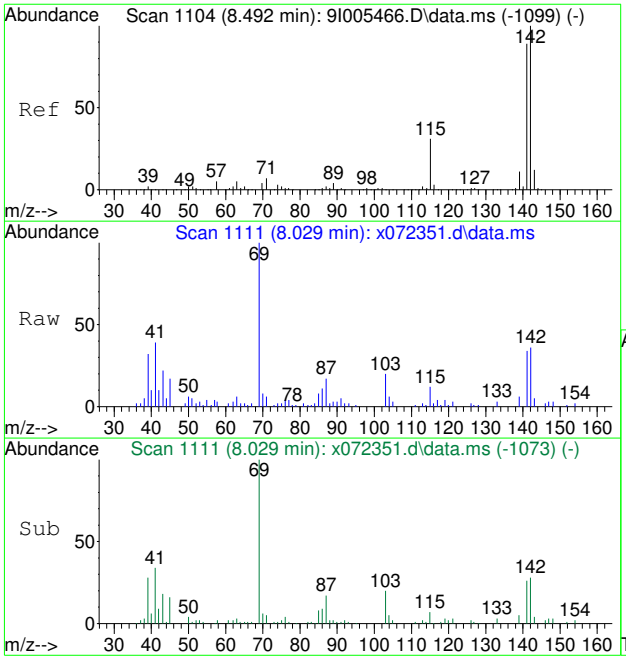


#40
2-Methylnaphthalene
Concen: 0.58 ppm
RT: 7.917 min Scan# 1090
Delta R.T. 0.005 min
Lab File: x072351.d
Acq: 11 Aug 2020 10:18 pm

Tgt Ion:142 Resp: 5643

Ion	Ratio	Lower	Upper
142	100		
141	84.9	56.8	116.8
115	29.0	0.0	60.0

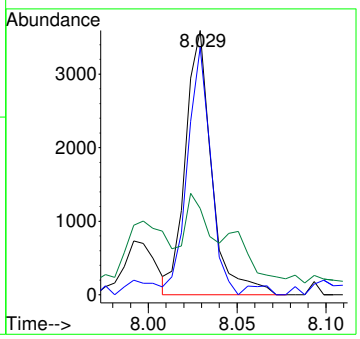


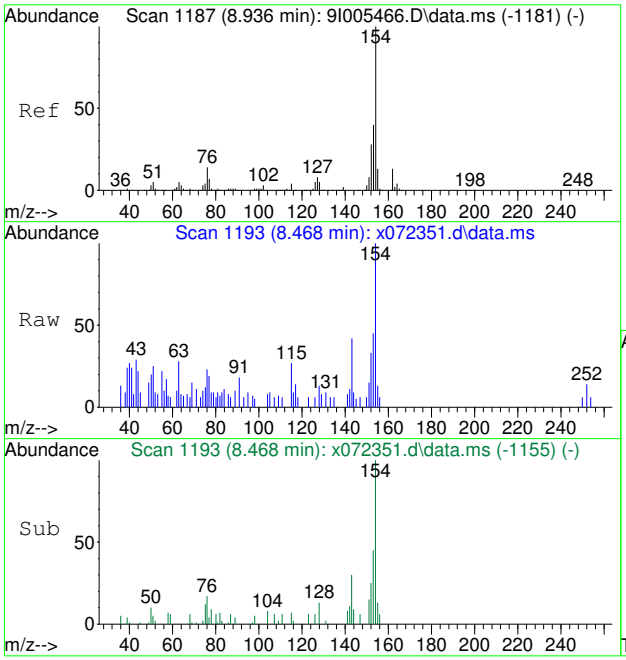


#41
1-Methylnaphthalene
Concen: 0.39 ppm
RT: 8.029 min Scan# 1111
Delta R.T. 0.005 min
Lab File: x072351.d
Acq: 11 Aug 2020 10:18 pm

Tgt Ion:142 Resp: 3701

Ion	Ratio	Lower	Upper
142	100		
141	95.4	59.0	119.0
115	18.2	1.1	61.1

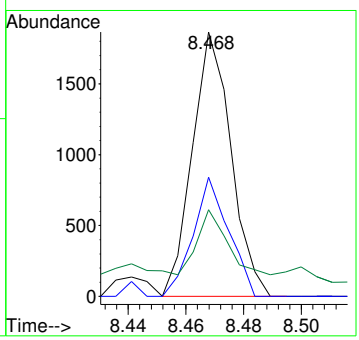


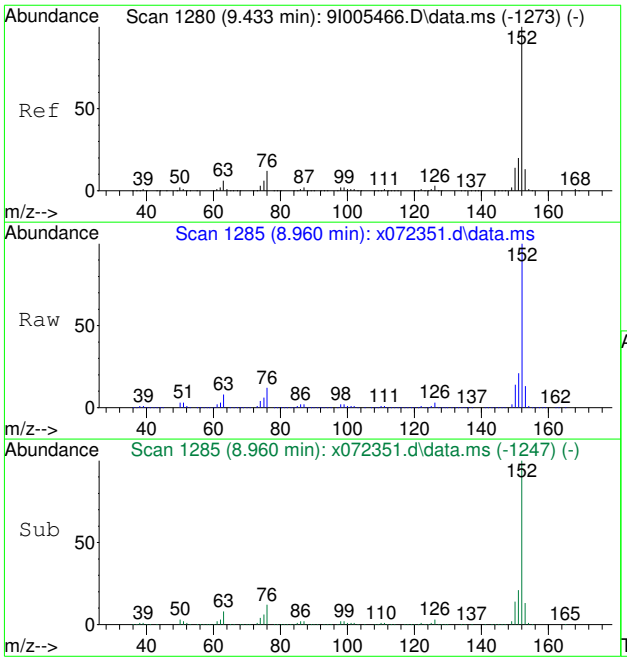


#48
1,1'-Biphenyl
Concen: 0.16 ppm
RT: 8.468 min Scan# 1193
Delta R.T. 0.005 min
Lab File: x072351.d
Acq: 11 Aug 2020 10:18 pm

Tgt Ion:154 Resp: 1741

Ion	Ratio	Lower	Upper
154	100		
153	45.0	10.3	70.3
152	23.3	0.0	58.2

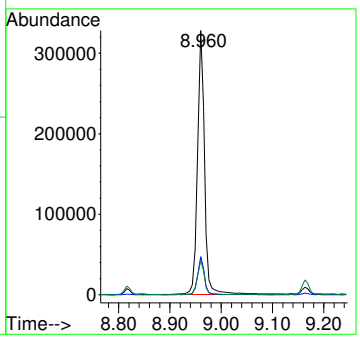


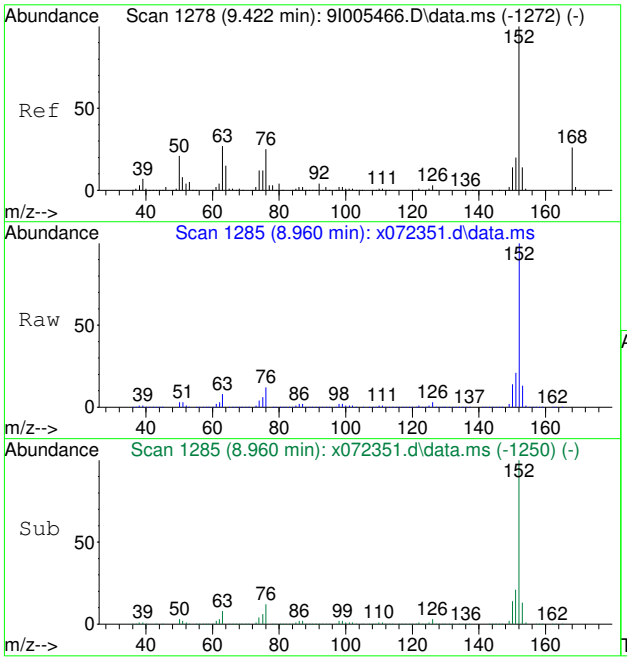


#52
Acenaphthylene
Concen: 23.24 ppm
RT: 8.960 min Scan# 1285
Delta R.T. 0.005 min
Lab File: x072351.d
Acq: 11 Aug 2020 10:18 pm

Tgt Ion:152 Resp: 314160

Ion	Ratio	Lower	Upper
152	100		
150	14.4	0.0	44.3
153	12.9	0.0	43.3

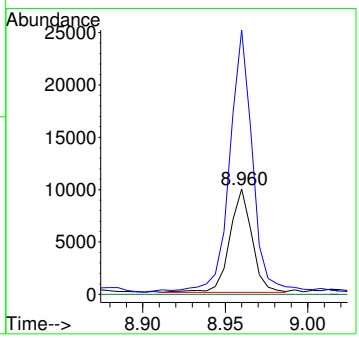


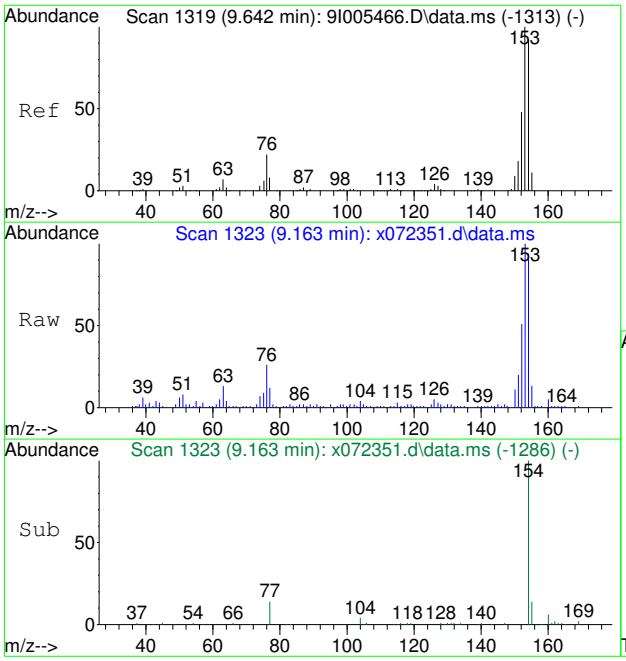


#56
o-Dinitrobenzene
Concen: 4.31 ppm
RT: 8.960 min Scan# 1285
Delta R.T. -0.011 min
Lab File: x072351.d
Acq: 11 Aug 2020 10:18 pm

Tgt Ion: 50 Resp: 9297

Ion	Ratio	Lower	Upper
50	100		
63	250.7	110.3	150.3#
168	0.0	104.0	144.0#

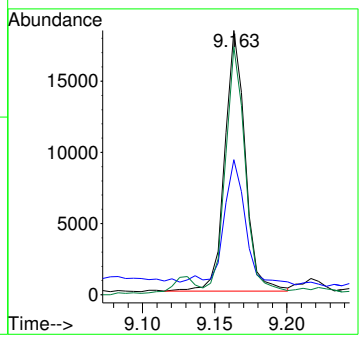


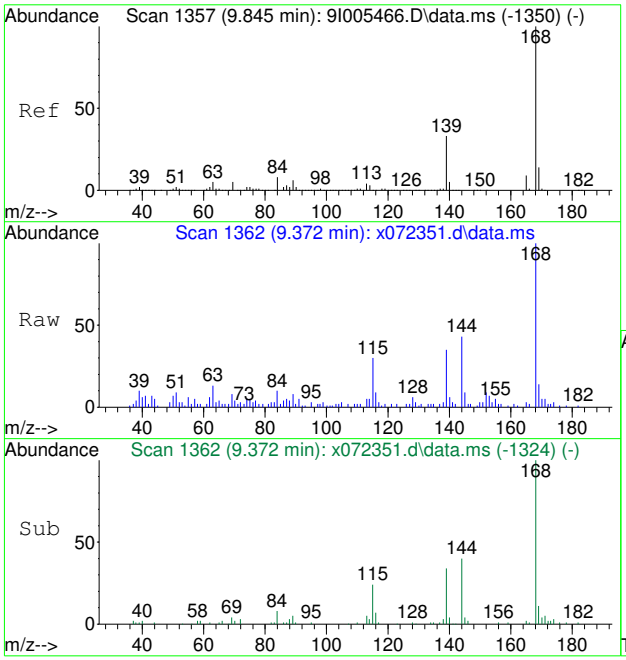


#57
Acenaphthene
Concen: 2.00 ppm
RT: 9.163 min Scan# 1323
Delta R.T. 0.000 min
Lab File: x072351.d
Acq: 11 Aug 2020 10:18 pm

Tgt Ion:153 Resp: 18003

Ion	Ratio	Lower	Upper
153	100		
152	47.0	18.4	78.4
154	94.2	62.4	122.4

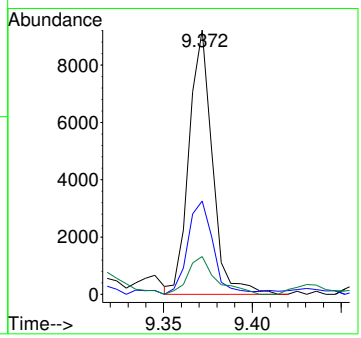


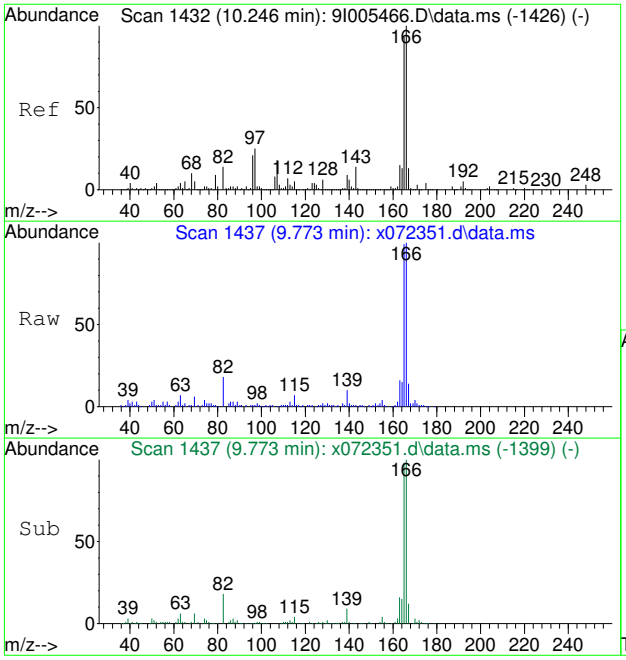


#60
Dibenzofuran
Concen: 0.70 ppm
RT: 9.372 min Scan# 1362
Delta R.T. 0.005 min
Lab File: x072351.d
Acq: 11 Aug 2020 10:18 pm

Tgt Ion:168 Resp: 8439

Ion	Ratio	Lower	Upper
168	100		
139	35.1	3.0	63.0
169	13.6	0.0	43.5

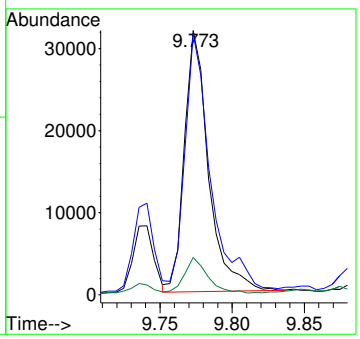


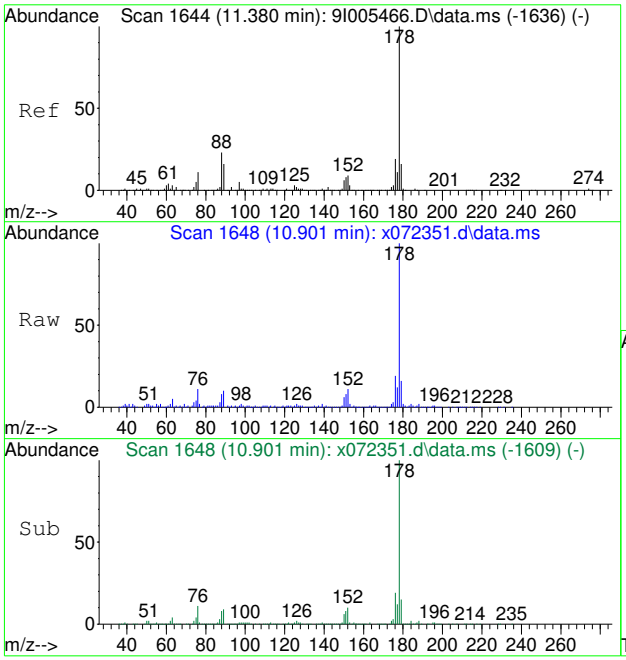


#65
Fluorene
Concen: 3.97 ppm
RT: 9.773 min Scan# 1437
Delta R.T. 0.005 min
Lab File: x072351.d
Acq: 11 Aug 2020 10:18 pm

Tgt Ion:166 Resp: 37195

Ion	Ratio	Lower	Upper
166	100		
165	97.4	62.7	122.7
167	13.3	0.0	43.5

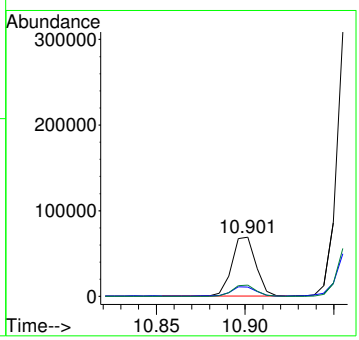


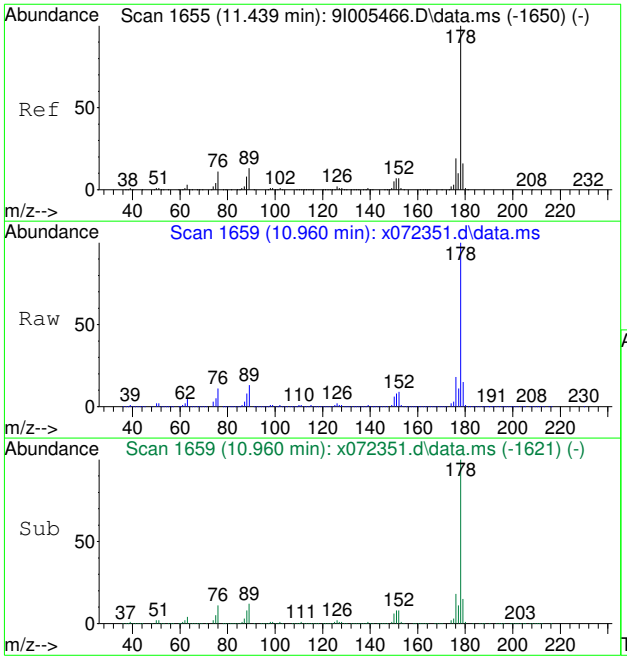


#84
Phenanthrene
Concen: 4.68 ppm
RT: 10.901 min Scan# 1648
Delta R.T. 0.011 min
Lab File: x072351.d
Acq: 11 Aug 2020 10:18 pm

Tgt Ion:178 Resp: 65107

Ion	Ratio	Lower	Upper
178	100		
179	15.4	0.0	45.8
176	19.2	0.0	49.3

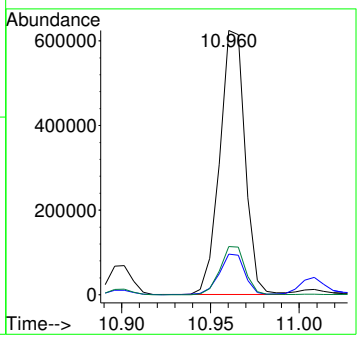


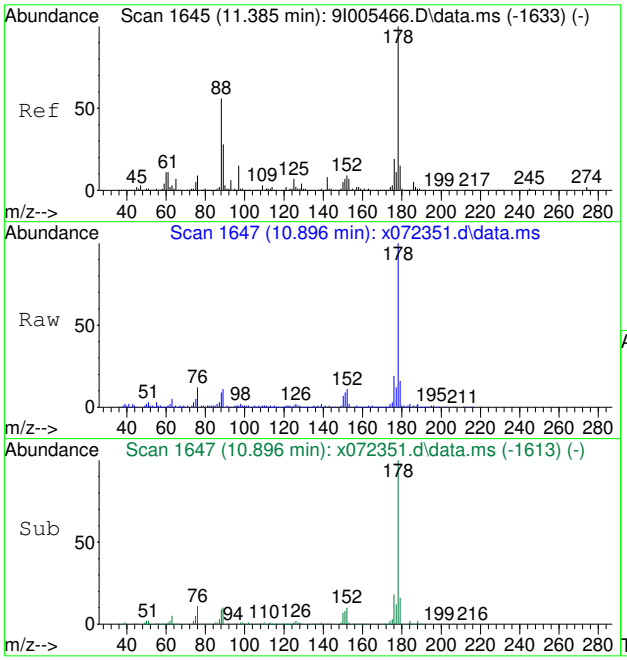


#85
Anthracene
Concen: 42.62 ppm
RT: 10.960 min Scan# 1659
Delta R.T. 0.005 min
Lab File: x072351.d
Acq: 11 Aug 2020 10:18 pm

Tgt Ion:178 Resp: 617574

Ion	Ratio	Lower	Upper
178	100		
179	15.2	0.0	46.0
176	18.2	0.0	49.3

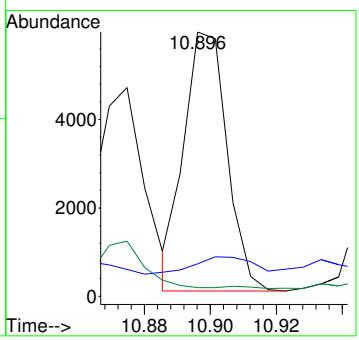


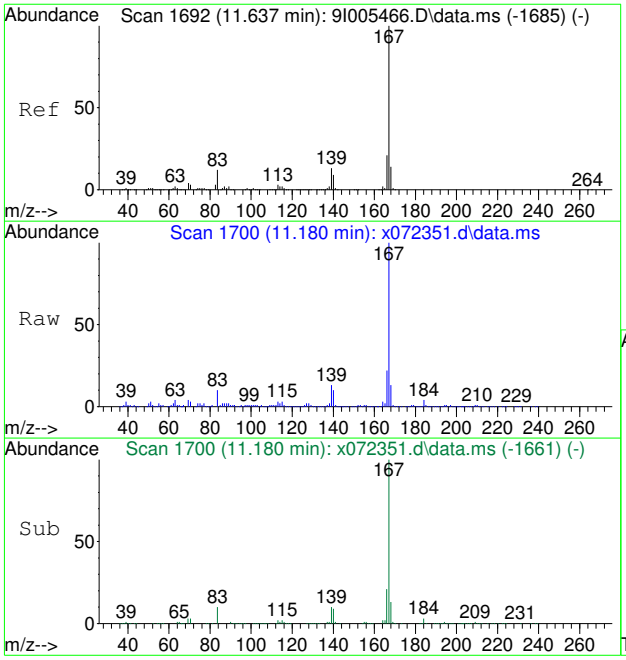


#86
Disulfoton
Concen: 0.96 ppm
RT: 10.896 min Scan# 1647
Delta R.T. -0.016 min
Lab File: x072351.d
Acq: 11 Aug 2020 10:18 pm

Tgt Ion: 88 Resp: 5323

Ion	Ratio	Lower	Upper
88	100		
97	2.9	0.0	56.5
142	0.0	0.0	44.2

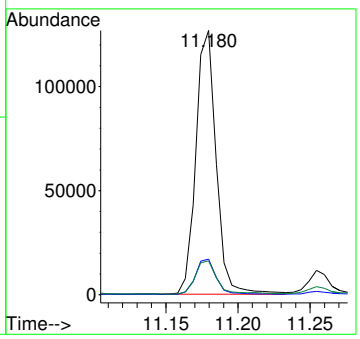


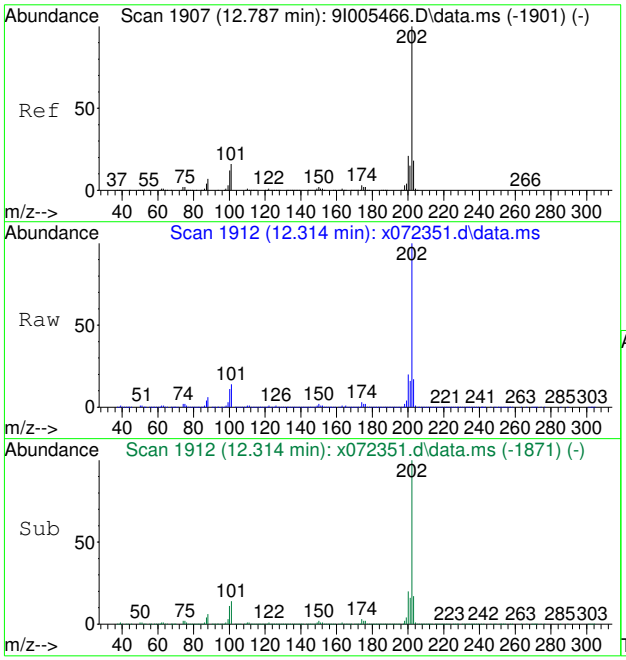


#87
Carbazole
Concen: 9.64 ppm
RT: 11.180 min Scan# 1700
Delta R.T. 0.011 min
Lab File: x072351.d
Acq: 11 Aug 2020 10:18 pm

Tgt Ion:167 Resp: 123294

Ion	Ratio	Lower	Upper
167	100		
168	13.4	0.0	43.9
139	12.5	0.0	42.7

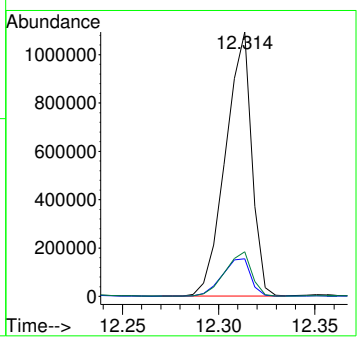


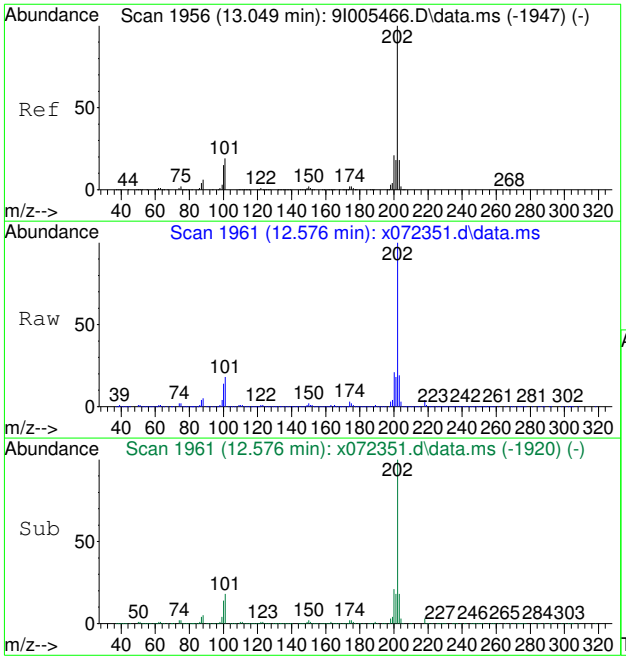


#91
Fluoranthene
Concen: 80.10 ppm
RT: 12.314 min Scan# 1912
Delta R.T. 0.021 min
Lab File: x072351.d
Acq: 11 Aug 2020 10:18 pm

Tgt Ion:202 Resp: 1033319

Ion	Ratio	Lower	Upper
202	100		
101	14.2	0.0	45.8
203	16.8	0.0	48.1

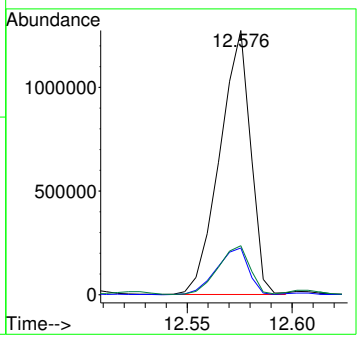


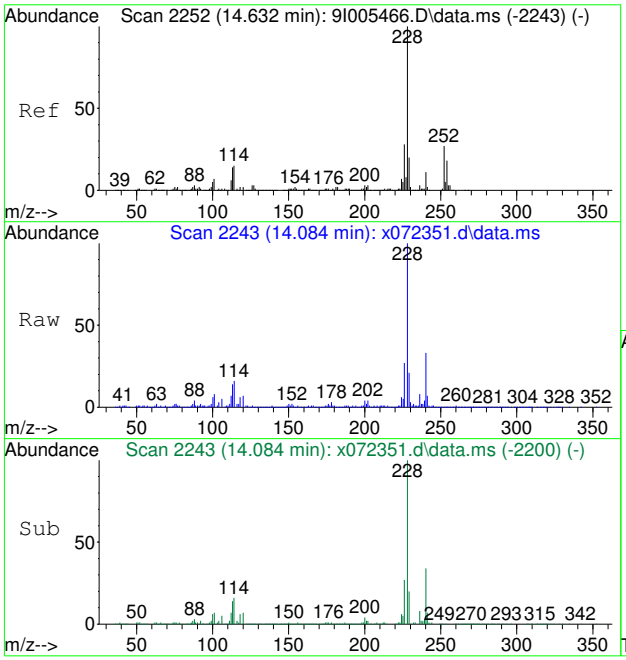


#94
Pyrene
Concen: 83.29 ppm
RT: 12.576 min Scan# 1961
Delta R.T. 0.021 min
Lab File: x072351.d
Acq: 11 Aug 2020 10:18 pm

Tgt Ion:202 Resp: 1301288

Ion	Ratio	Lower	Upper
202	100		
101	17.5	0.0	48.7
203	18.0	0.0	48.4

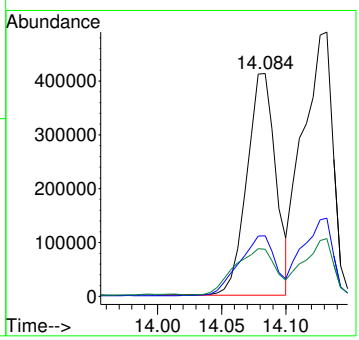


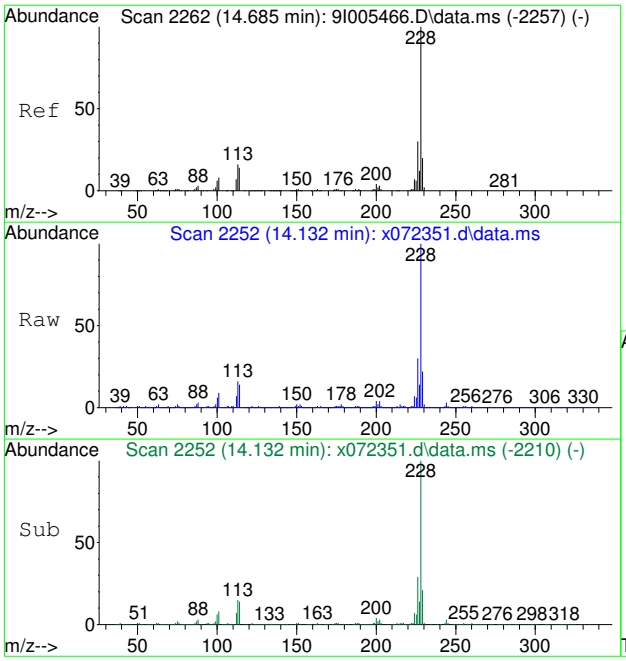


#99
Benzo[a]anthracene
Concen: 54.91 ppm
RT: 14.084 min Scan# 2243
Delta R.T. 0.032 min
Lab File: x072351.d
Acq: 11 Aug 2020 10:18 pm

Tgt Ion:228 Resp: 649424

Ion	Ratio	Lower	Upper
228	100		
226	26.6	0.0	57.5
229	19.6	0.0	49.9

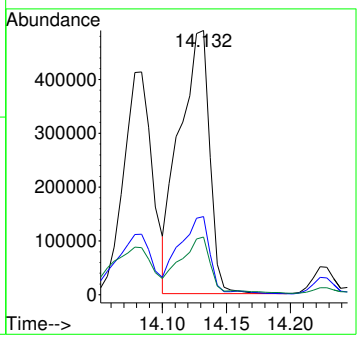


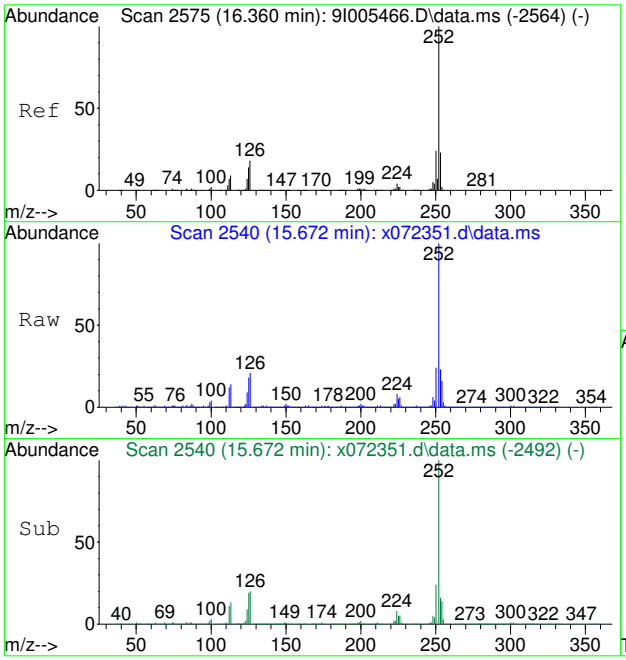


#100
Chrysene
Concen: 63.49 ppm
RT: 14.132 min Scan# 2252
Delta R.T. 0.027 min
Lab File: x072351.d
Acq: 11 Aug 2020 10:18 pm

Tgt Ion:228 Resp: 799601

Ion	Ratio	Lower	Upper
228	100		
226	29.3	0.4	60.4
229	20.7	0.0	50.1

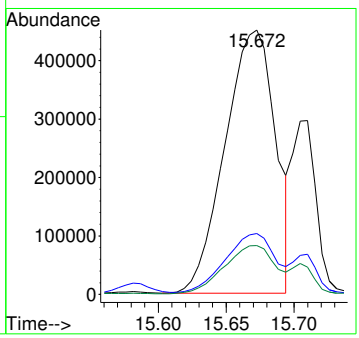


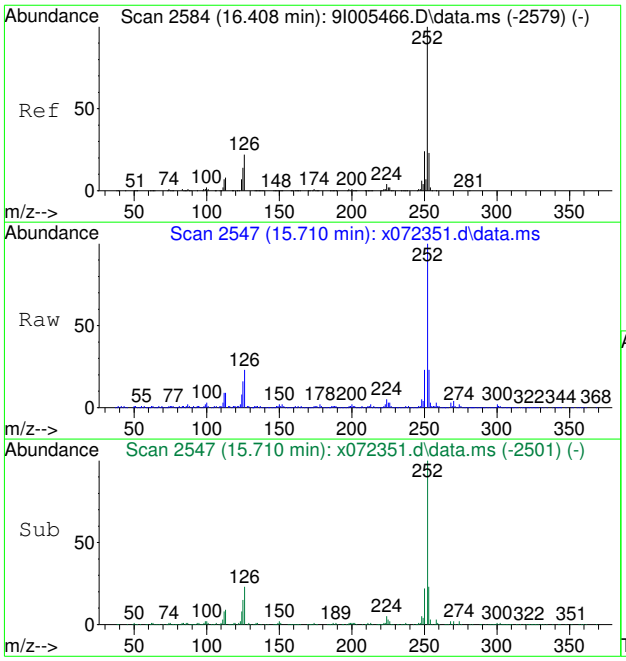


#104
Benzo[b]fluoranthene
Concen: 111.75 ppm
RT: 15.672 min Scan# 2540
Delta R.T. 0.059 min
Lab File: x072351.d
Acq: 11 Aug 2020 10:18 pm

Tgt Ion:252 Resp: 1166279

Ion	Ratio	Lower	Upper
252	100		
253	22.2	0.0	52.5
125	18.3	0.0	44.0

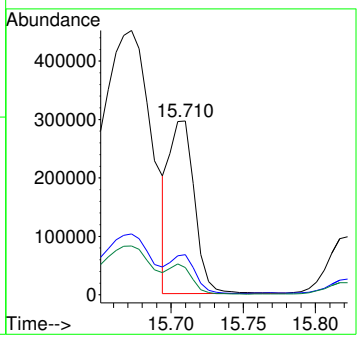


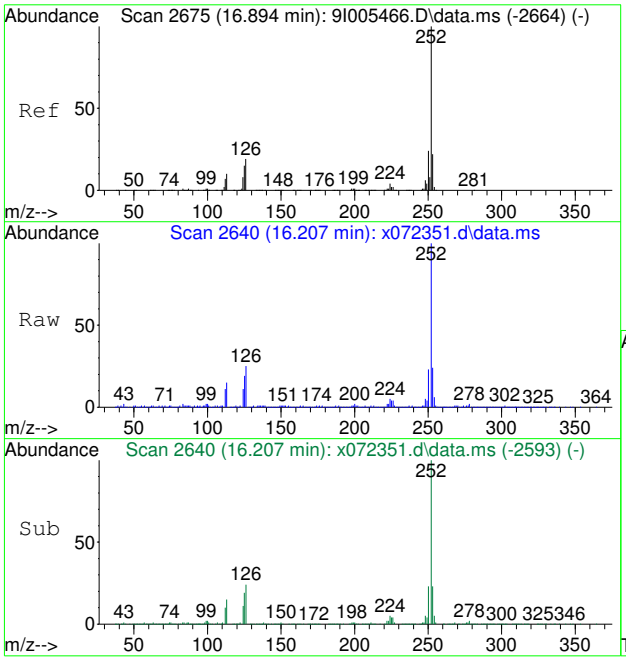


#105
Benzo[k]fluoranthene
Concen: 32.67 ppm
RT: 15.710 min Scan# 2547
Delta R.T. 0.048 min
Lab File: x072351.d
Acq: 11 Aug 2020 10:18 pm

Tgt Ion:252 Resp: 360902

Ion	Ratio	Lower	Upper
252	100		
253	22.4	0.0	52.5
125	13.7	0.0	44.4

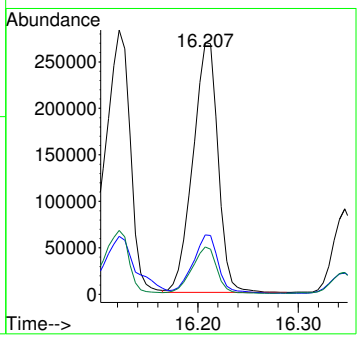


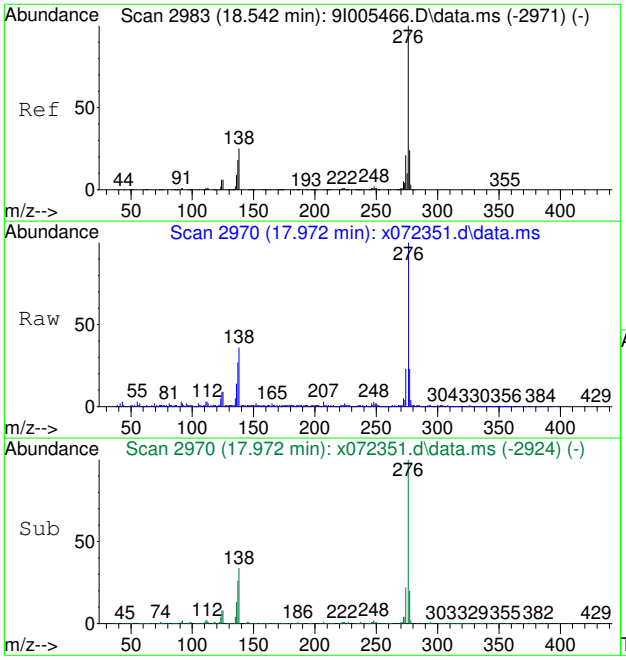


#106
Benzo[a]pyrene
Concen: 52.62 ppm
RT: 16.207 min Scan# 2640
Delta R.T. 0.054 min
Lab File: x072351.d
Acq: 11 Aug 2020 10:18 pm

Tgt Ion:252 Resp: 469335

Ion	Ratio	Lower	Upper
252	100		
253	22.5	0.0	52.3
125	18.5	0.0	44.7

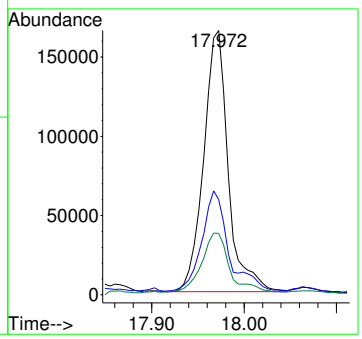


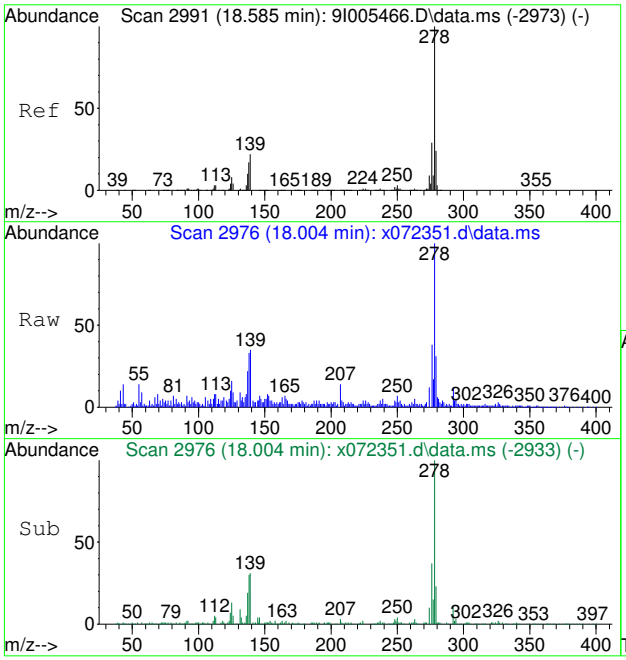


#107
Indeno[1,2,3-cd]pyrene
Concen: 50.05 ppm
RT: 17.972 min Scan# 2970
Delta R.T. 0.048 min
Lab File: x072351.d
Acq: 11 Aug 2020 10:18 pm

Tgt Ion:276 Resp: 304830

Ion	Ratio	Lower	Upper
276	100		
138	34.9	0.0	54.7
277	22.5	0.0	53.8

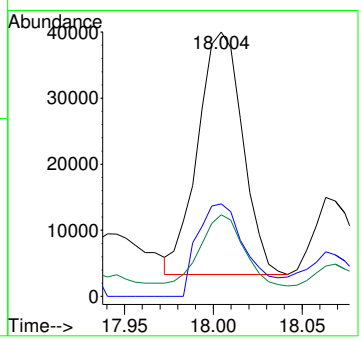


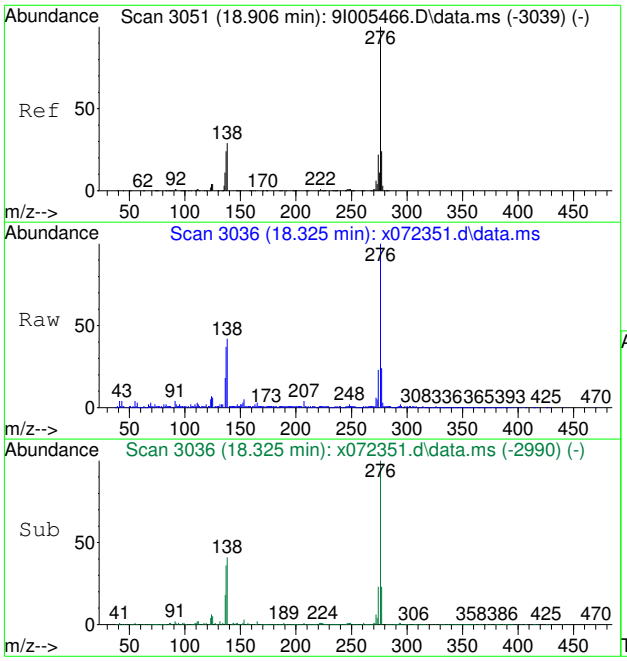


#108
Dibenz[a,h]anthracene
Concen: 12.10 ppm
RT: 18.004 min Scan# 2976
Delta R.T. 0.032 min
Lab File: x072351.d
Acq: 11 Aug 2020 10:18 pm

Tgt Ion:278 Resp: 64342

Ion	Ratio	Lower	Upper
278	100		
139	35.4	0.0	52.4
279	29.9	0.0	54.4

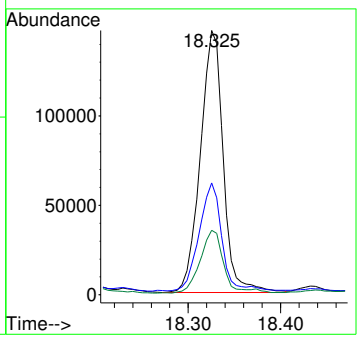




#109
Benzo[g,h,i]perylene
Concen: 31.45 ppm
RT: 18.325 min Scan# 3036
Delta R.T. 0.048 min
Lab File: x072351.d
Acq: 11 Aug 2020 10:18 pm

Tgt Ion:276 Resp: 252208

Ion	Ratio	Lower	Upper
276	100		
138	41.1	0.0	59.4
277	23.9	0.0	54.1



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-13-2020\sx2951\
Data File : x072374.d
Acq On : 12 Aug 2020 5:43 pm
Operator : marthav
Sample : fa77581-5 E,2
Misc : op81482,sx2951,30.2,,,1,2,soil
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 13 02:49:11 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

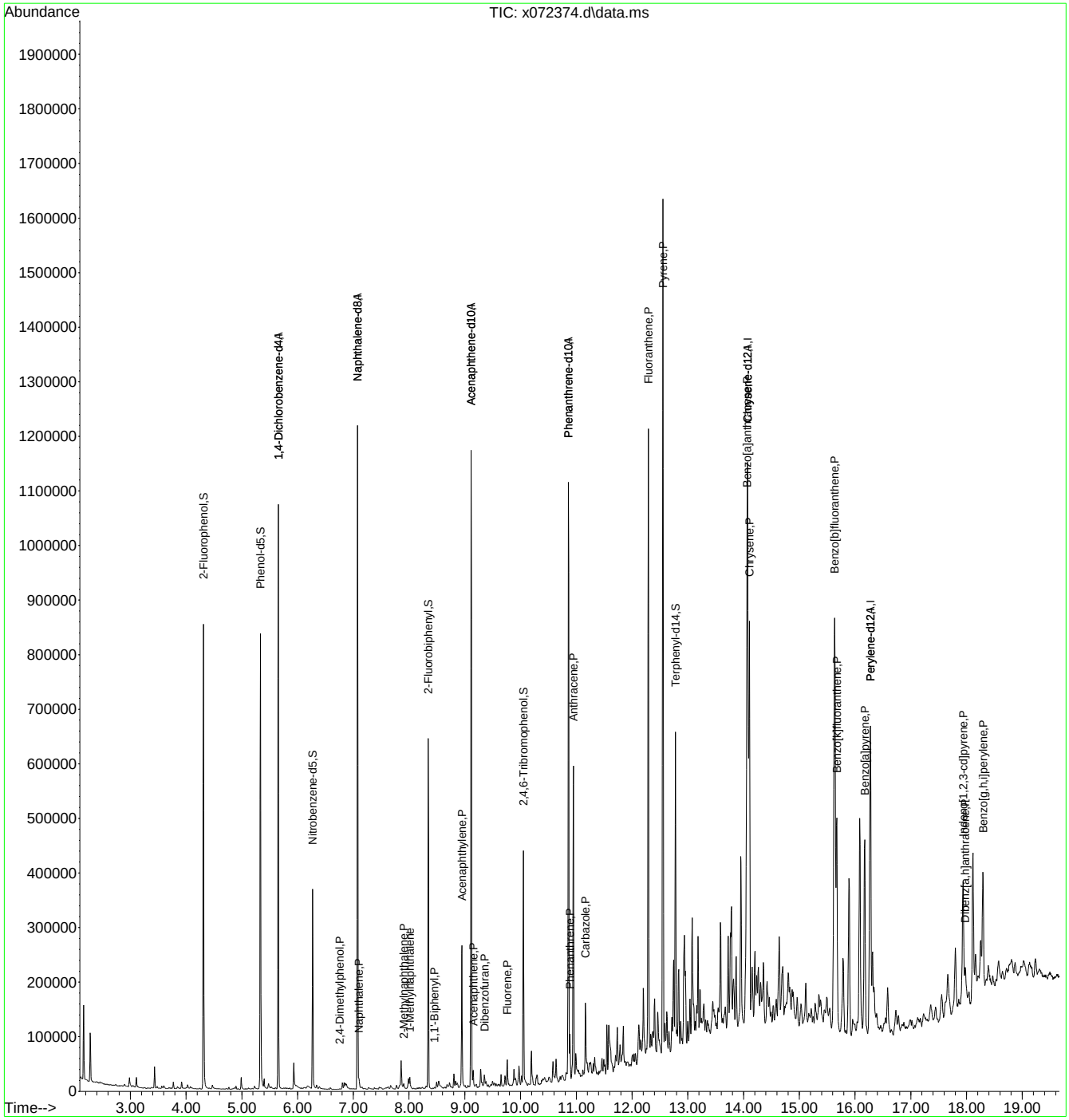
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.654	152	141777	40.00	ppm	0.00
22) Naphthalene-d8	7.077	136	504392	40.00	ppm	0.00
43) Acenaphthene-d10	9.115	164	237075	40.00	ppm	0.00
70) Phenanthrene-d10	10.859	188	395558	40.00	ppm	0.00
92) Chrysene-d12	14.073	240	332612	40.00	ppm	0.00
102) Perylene-d12	16.277	264	276558	40.00	ppm	0.02
110) 1,4-Dichlorobenzene-d4A	5.654	152	141777	40.00	ppm	0.00
120) Naphthalene-d8A	7.077	136	504392	40.00	ppm	0.00
127) Acenaphthene-d10A	9.115	164	237075	40.00	ppm	0.00
136) Phenanthrene-d10A	10.859	188	395558	40.00	ppm	0.00
146) Chrysene-d12A	14.073	240	332612	40.00	ppm	0.00
153) Perylene-d12A	16.277	264	276558	40.00	ppm	0.02
System Monitoring Compounds						
7) 2-Fluorophenol	4.312	112	197411	38.83	ppm	0.00
Spiked Amount 100.000	Range 40 - 102		Recovery = 38.83%#			
9) Phenol-d5	5.333	99	237520	39.27	ppm	0.00
Spiked Amount 100.000	Range 41 - 100		Recovery = 39.27%#			
23) Nitrobenzene-d5	6.270	82	100259	19.25	ppm	-0.01
Spiked Amount 50.000	Range 40 - 105		Recovery = 38.50%#			
47) 2-Fluorobiphenyl	8.345	172	178311	20.78	ppm	-0.01
Spiked Amount 50.000	Range 43 - 107		Recovery = 41.56%#			
75) 2,4,6-Tribromophenol	10.051	330	33189	42.12	ppm	0.00
Spiked Amount 100.000	Range 42 - 108		Recovery = 42.12%			
95) Terphenyl-d14	12.779	244	174262	19.72	ppm	0.00
Spiked Amount 50.000	Range 45 - 119		Recovery = 39.44%#			
Target Compounds						Qvalue
27) 2,4-Dimethylphenol	6.756	107	508	0.11	ppm	# 71
34) Naphthalene	7.099	128	5227	0.38	ppm	96
40) 2-Methylnaphthalene	7.906	142	2457	0.27	ppm	98
41) 1-Methylnaphthalene	8.013	142	1596	0.18	ppm	97
48) 1,1'-Biphenyl	8.452	154	744	0.08	ppm	84
52) Acenaphthylene	8.949	152	125138	10.57	ppm	99
57) Acenaphthene	9.152	153	7229	0.92	ppm	95
60) Dibenzofuran	9.356	168	3944	0.38	ppm	95
65) Fluorene	9.762	166	15274	1.86	ppm	96
84) Phenanthrene	10.885	178	28134	2.35	ppm	99
85) Anthracene	10.950	178	229366	18.41	ppm	97
87) Carbazole	11.164	167	50835	4.62	ppm	98
91) Fluoranthene	12.292	202	434700	39.20	ppm	99
94) Pyrene	12.554	202	573267	41.51	ppm	99
99) Benzo[a]anthracene	14.062	228	285786	27.34	ppm	98
100) Chrysene	14.105	228	358260	32.18	ppm	99
104) Benzo[b]fluoranthene	15.635	252	507395	60.45	ppm	97
105) Benzo[k]fluoranthene	15.672	252	175866	17.91	ppm	98
106) Benzo[a]pyrene	16.175	252	207516	27.70	ppm	97
107) Indeno[1,2,3-cd]pyrene	17.940	276	140446	29.44	ppm	87
108) Dibenz[a,h]anthracene	17.978	278	29254	6.49	ppm	86
109) Benzo[g,h,i]perylene	18.299	276	117762	17.50	ppm	88

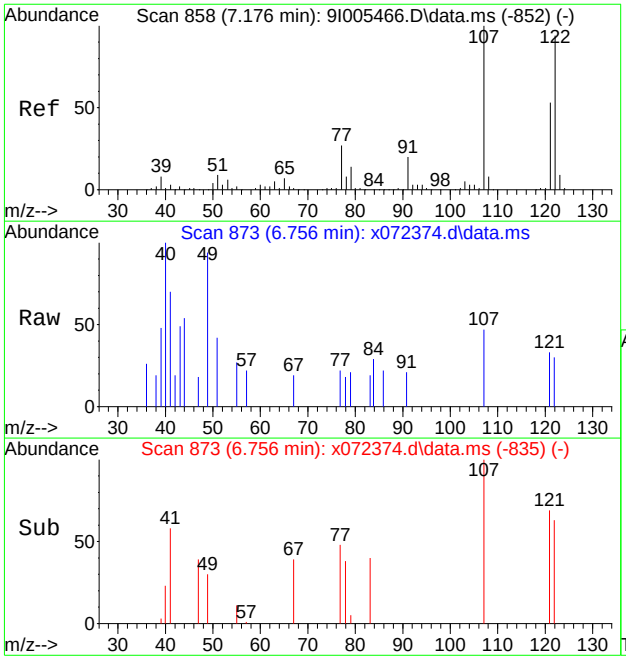
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-13-2020\sx2951\
Data File : x072374.d
Acq On : 12 Aug 2020 5:43 pm
Operator : marthav
Sample : fa77581-5 E,2
Misc : op81482,sx2951,30.2,,,1,2,soil
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 13 02:49:11 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

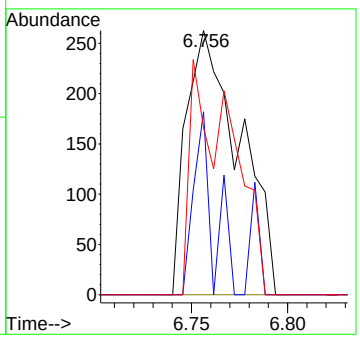


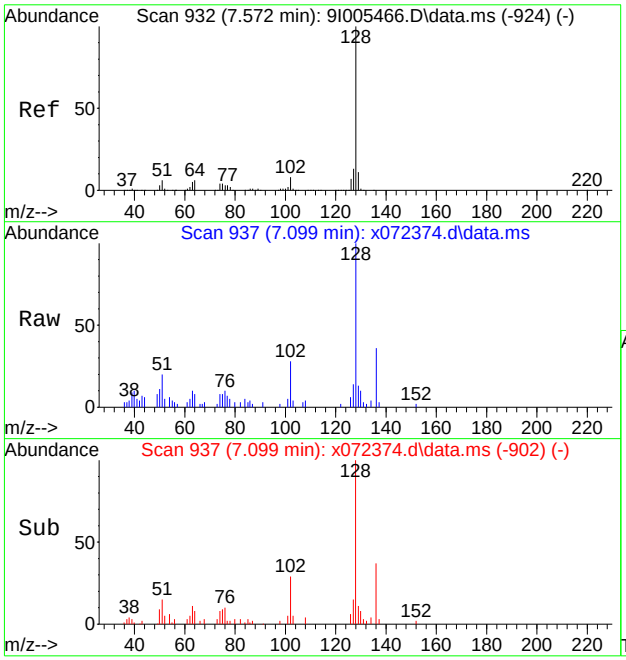


#27
2,4-Dimethylphenol
Concen: 0.11 ppm
RT: 6.756 min Scan# 873
Delta R.T. 0.005 min
Lab File: x072374.d
Acq: 12 Aug 2020 5:43 pm

Tgt Ion:107 Resp: 508

Ion	Ratio	Lower	Upper
107	100		
121	69.2	23.4	83.4
122	63.1	64.3	124.3#

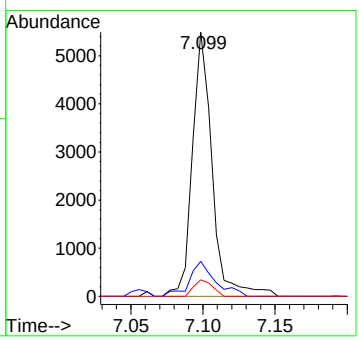


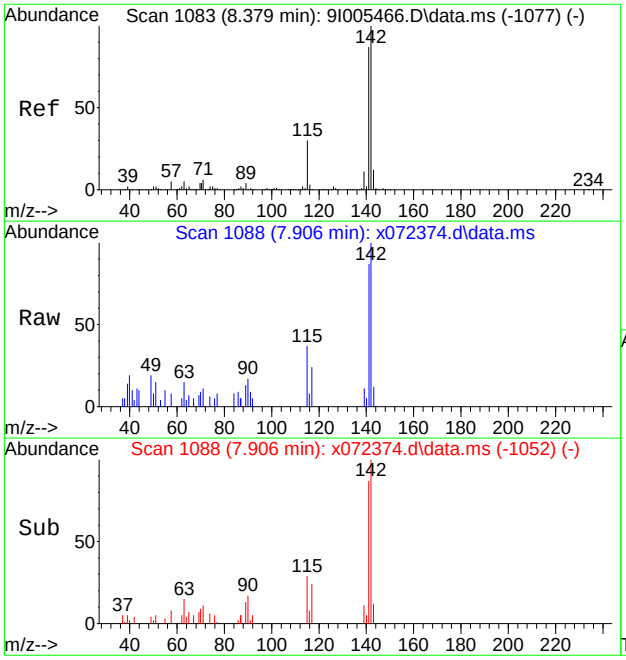


#34
Naphthalene
Concen: 0.38 ppm
RT: 7.099 min Scan# 937
Delta R.T. -0.011 min
Lab File: x072374.d
Acq: 12 Aug 2020 5:43 pm

Tgt Ion:128 Resp: 5227

Ion	Ratio	Lower	Upper
128	100		
129	13.3	0.0	41.4
126	6.2	0.0	37.4

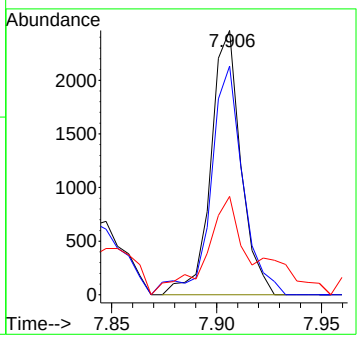


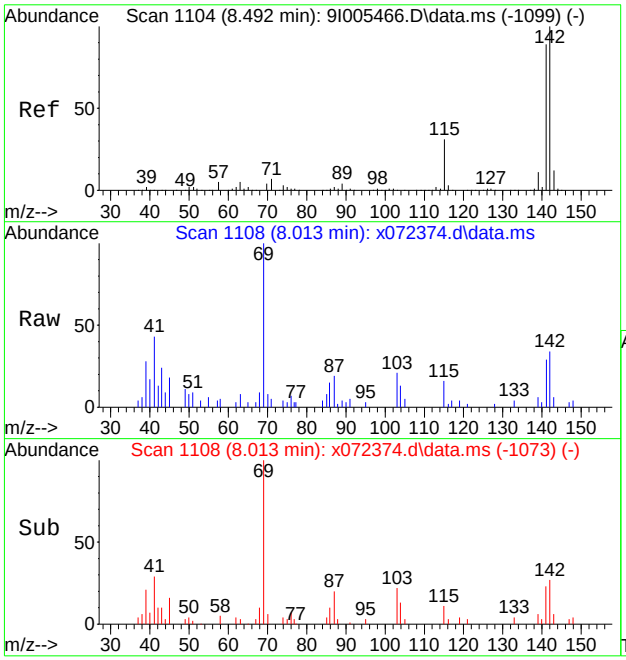


#40
2-Methylnaphthalene
Concen: 0.27 ppm
RT: 7.906 min Scan# 1088
Delta R.T. -0.005 min
Lab File: x072374.d
Acq: 12 Aug 2020 5:43 pm

Tgt Ion:142 Resp: 2457

Ion	Ratio	Lower	Upper
142	100		
141	84.2	56.8	116.8
115	29.3	0.0	60.0

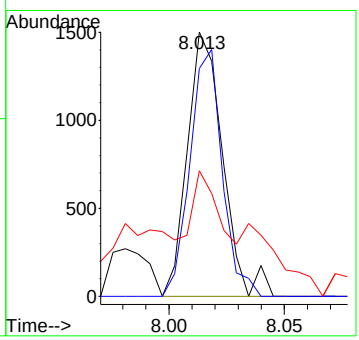


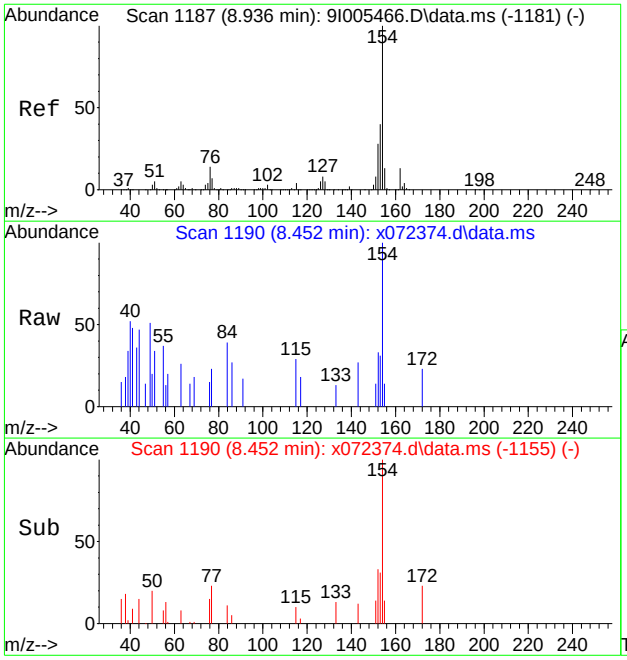


#41
1-Methylnaphthalene
Concen: 0.18 ppm
RT: 8.013 min Scan# 1108
Delta R.T. -0.011 min
Lab File: x072374.d
Acq: 12 Aug 2020 5:43 pm

Tgt Ion:142 Resp: 1596

Ion	Ratio	Lower	Upper
142	100		
141	86.2	59.0	119.0
115	30.3	1.1	61.1

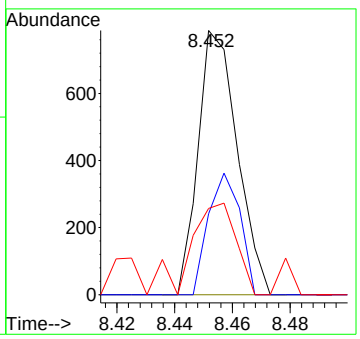


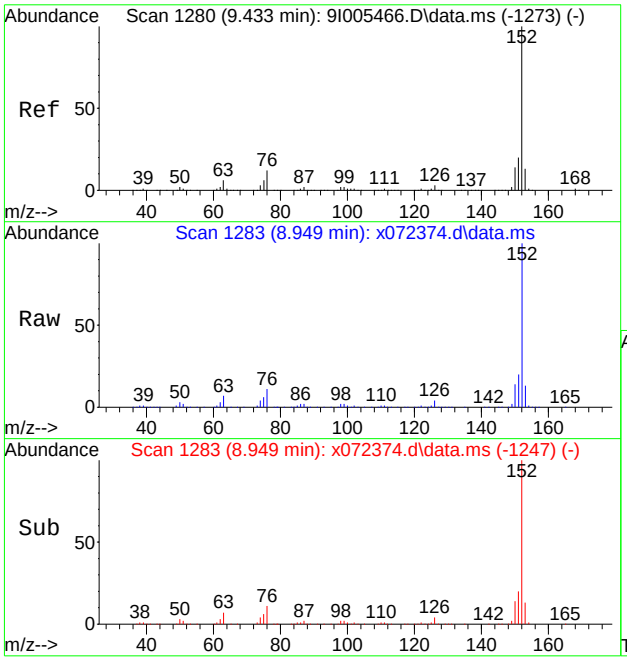


#48
1,1'-Biphenyl
Concen: 0.08 ppm
RT: 8.452 min Scan# 1190
Delta R.T. -0.011 min
Lab File: x072374.d
Acq: 12 Aug 2020 5:43 pm

Tgt Ion:154 Resp: 744

Ion	Ratio	Lower	Upper
154	100		
153	30.6	10.3	70.3
152	19.0	0.0	58.2

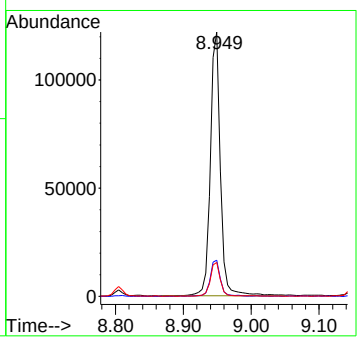


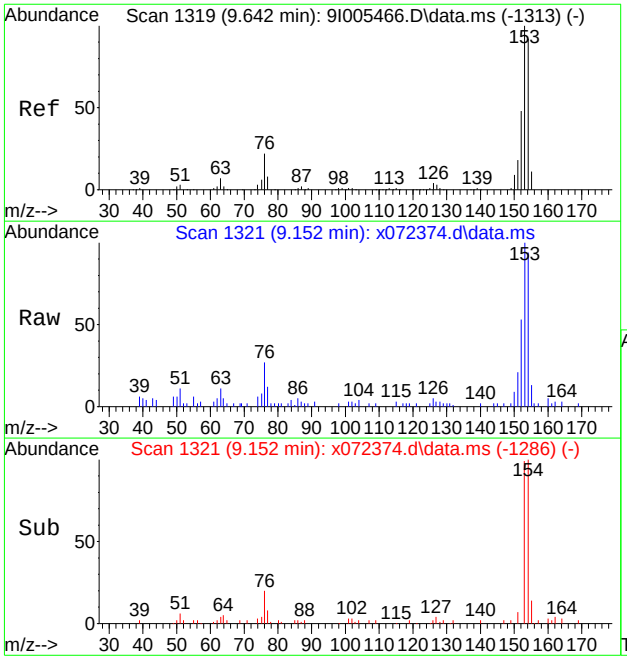


#52
Acenaphthylene
Concen: 10.57 ppm
RT: 8.949 min Scan# 1283
Delta R.T. -0.005 min
Lab File: x072374.d
Acq: 12 Aug 2020 5:43 pm

Tgt Ion:152 Resp: 125138

Ion	Ratio	Lower	Upper
152	100		
150	13.7	0.0	44.3
153	12.9	0.0	43.3

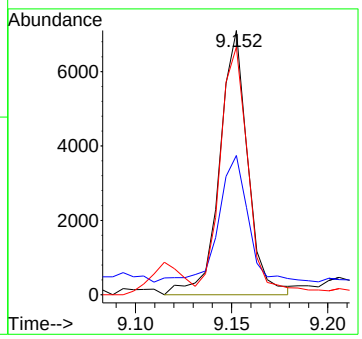


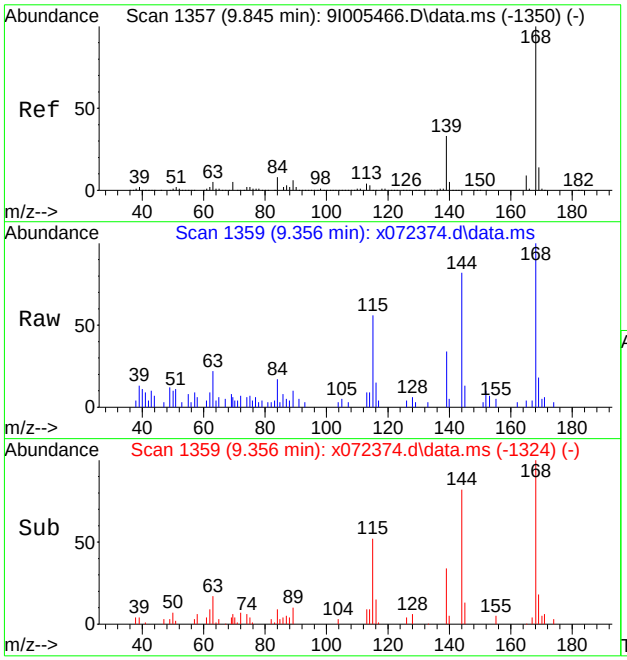


#57
Acenaphthene
Concen: 0.92 ppm
RT: 9.152 min Scan# 1321
Delta R.T. -0.011 min
Lab File: x072374.d
Acq: 12 Aug 2020 5:43 pm

Tgt Ion:153 Resp: 7229

Ion	Ratio	Lower	Upper
153	100		
152	45.5	18.4	78.4
154	87.6	62.4	122.4

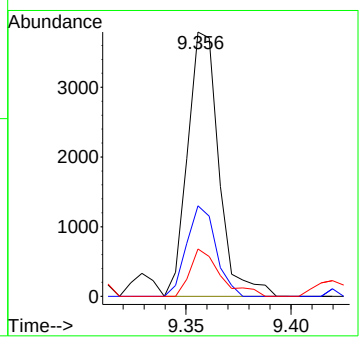


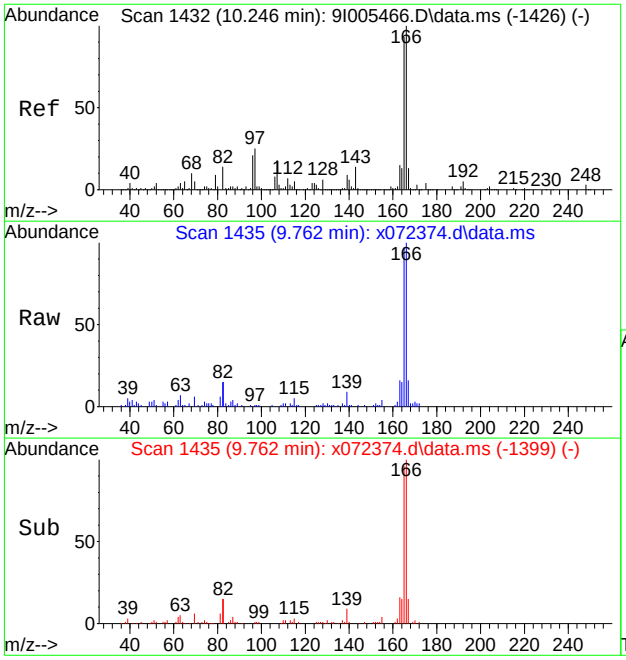


#60
Dibenzofuran
Concen: 0.38 ppm
RT: 9.356 min Scan# 1359
Delta R.T. -0.011 min
Lab File: x072374.d
Acq: 12 Aug 2020 5:43 pm

Tgt Ion:168 Resp: 3944

Ion	Ratio	Lower	Upper
168	100		
139	34.2	3.0	63.0
169	17.9	0.0	43.5

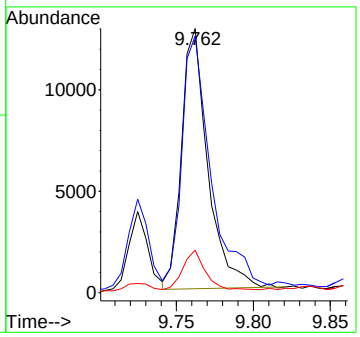


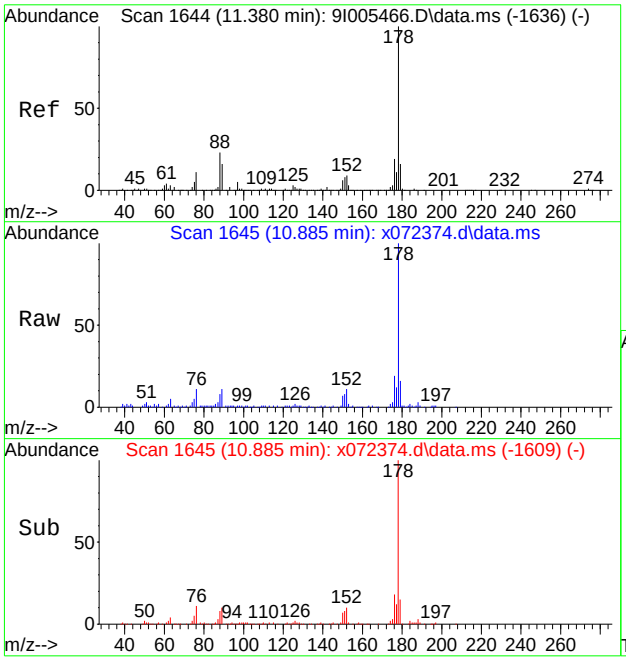


#65
Fluorene
Concen: 1.86 ppm
RT: 9.762 min Scan# 1435
Delta R.T. -0.005 min
Lab File: x072374.d
Acq: 12 Aug 2020 5:43 pm

Tgt Ion:166 Resp: 15274

Ion	Ratio	Lower	Upper
166	100		
165	96.0	62.7	122.7
167	15.2	0.0	43.5

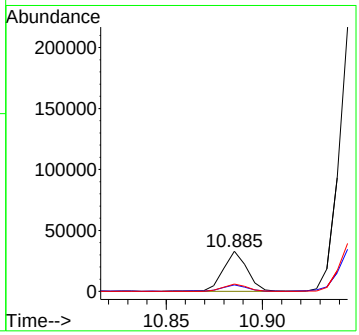


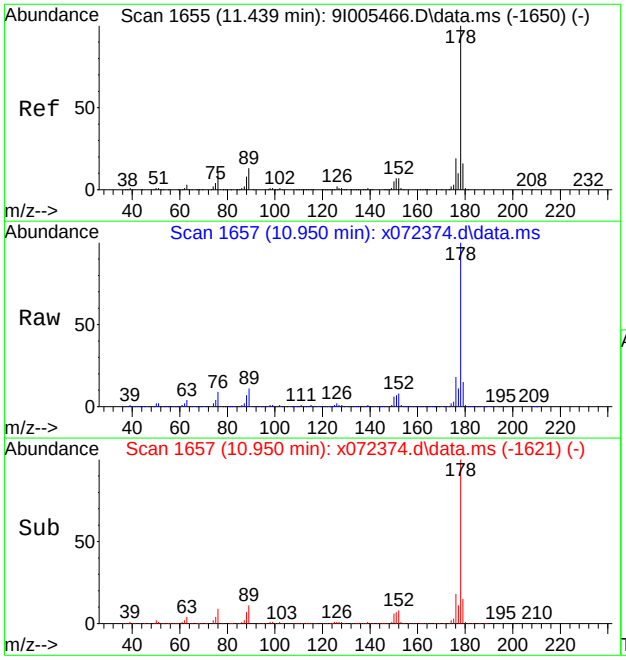


#84
Phenanthrene
Concen: 2.35 ppm
RT: 10.885 min Scan# 1645
Delta R.T. -0.005 min
Lab File: x072374.d
Acq: 12 Aug 2020 5:43 pm

Tgt Ion:178 Resp: 28134

Ion	Ratio	Lower	Upper
178	100		
179	15.8	0.0	45.8
176	18.7	0.0	49.3

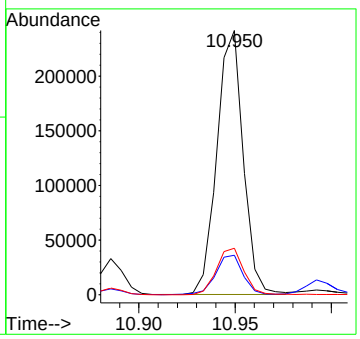


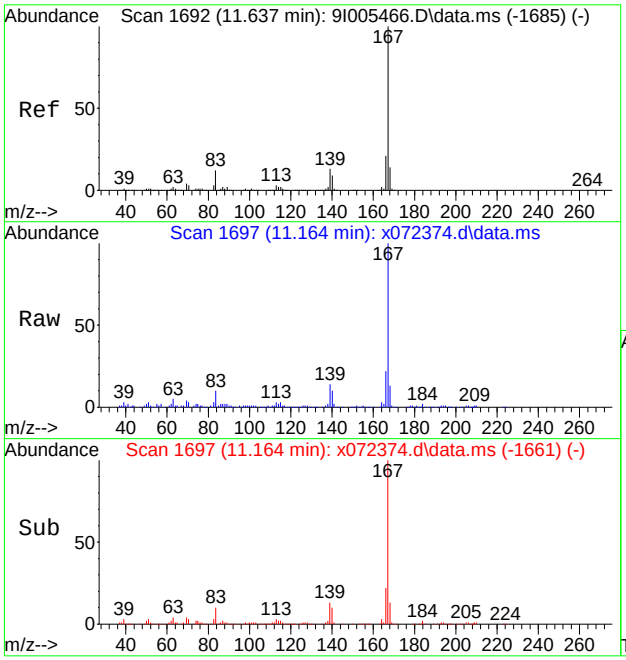


#85
Anthracene
Concen: 18.41 ppm
RT: 10.950 min Scan# 1657
Delta R.T. -0.005 min
Lab File: x072374.d
Acq: 12 Aug 2020 5:43 pm

Tgt Ion:178 Resp: 229366

Ion	Ratio	Lower	Upper
178	100		
179	14.8	0.0	46.0
176	17.6	0.0	49.3

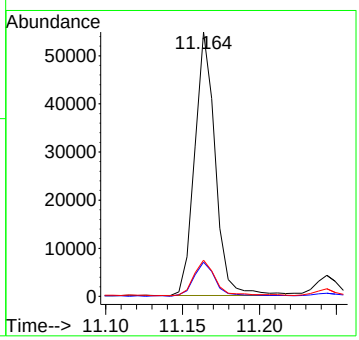


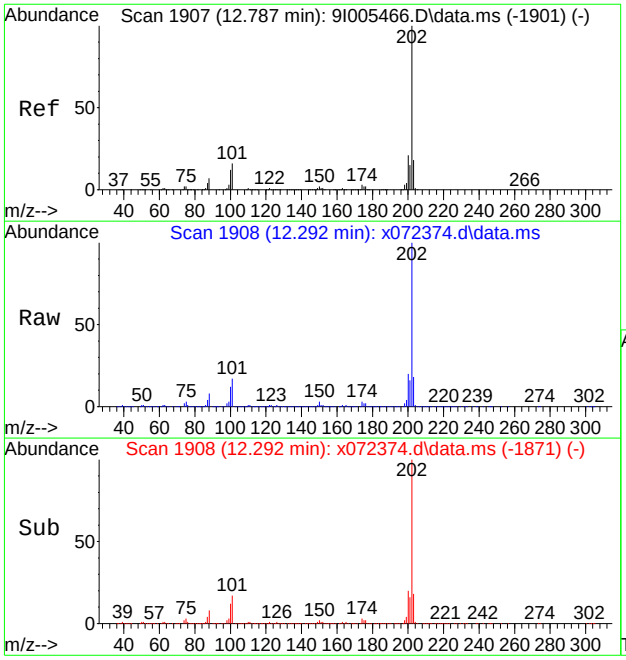


#87
Carbazole
Concen: 4.62 ppm
RT: 11.164 min Scan# 1697
Delta R.T. -0.005 min
Lab File: x072374.d
Acq: 12 Aug 2020 5:43 pm

Tgt Ion:167 Resp: 50835

Ion	Ratio	Lower	Upper
167	100		
168	12.7	0.0	43.9
139	13.4	0.0	42.7

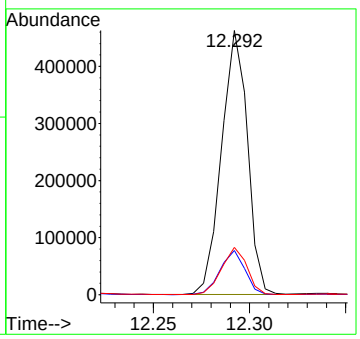


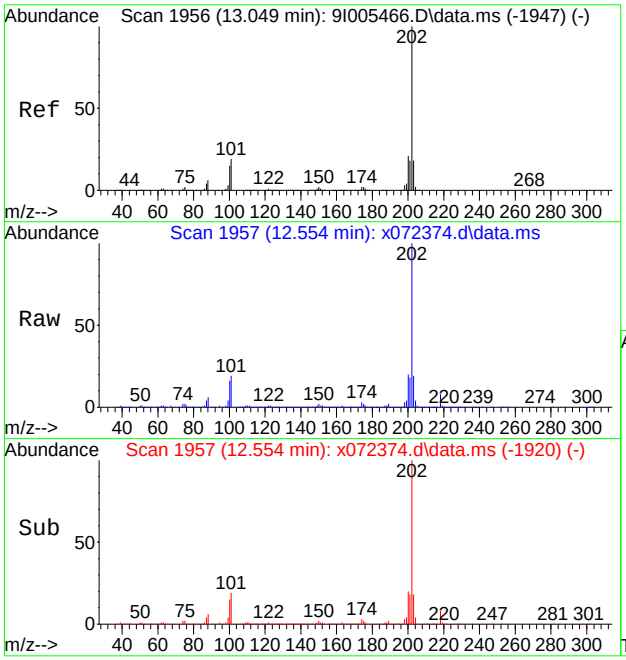


#91
Fluoranthene
Concen: 39.20 ppm
RT: 12.292 min Scan# 1908
Delta R.T. 0.000 min
Lab File: x072374.d
Acq: 12 Aug 2020 5:43 pm

Tgt Ion:202 Resp: 434700

Ion	Ratio	Lower	Upper
202	100		
101	16.7	0.0	45.8
203	17.9	0.0	48.1

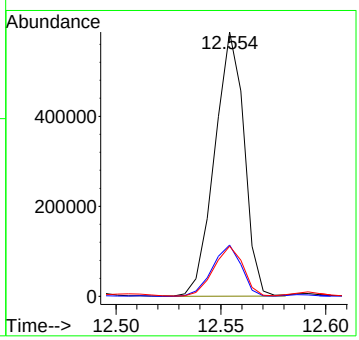


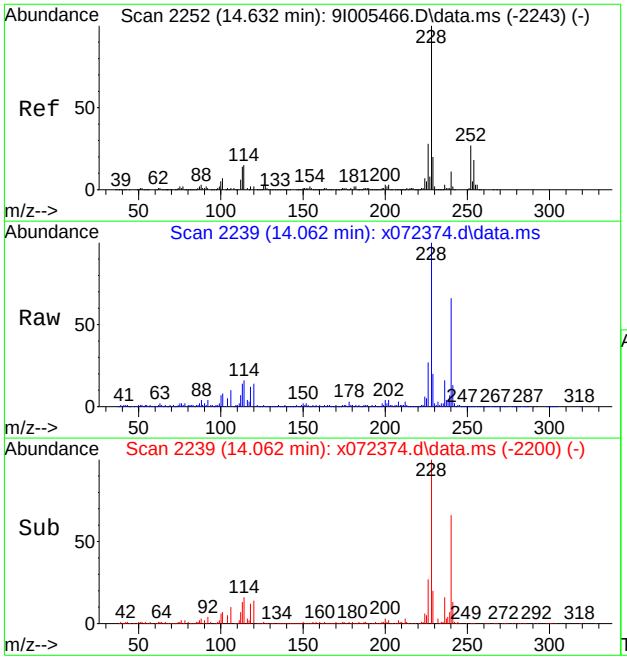


#94
Pyrene
Concen: 41.51 ppm
RT: 12.554 min Scan# 1957
Delta R.T. 0.000 min
Lab File: x072374.d
Acq: 12 Aug 2020 5:43 pm

Tgt Ion:202 Resp: 573267

Ion	Ratio	Lower	Upper
202	100		
101	19.3	0.0	48.7
203	18.6	0.0	48.4

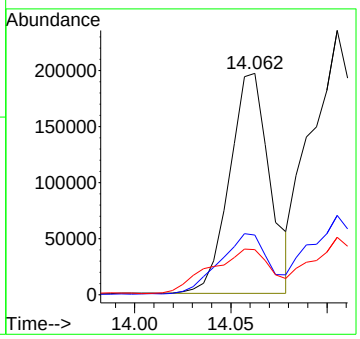


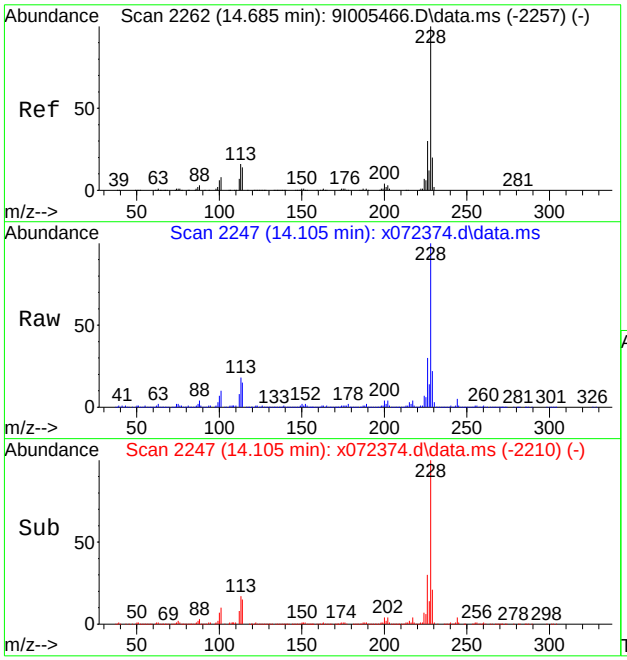


#99
Benzo[a]anthracene
Concen: 27.34 ppm
RT: 14.062 min Scan# 2239
Delta R.T. 0.011 min
Lab File: x072374.d
Acq: 12 Aug 2020 5:43 pm

Tgt Ion:228 Resp: 285786

Ion	Ratio	Lower	Upper
228	100		
226	26.0	0.0	57.5
229	19.0	0.0	49.9

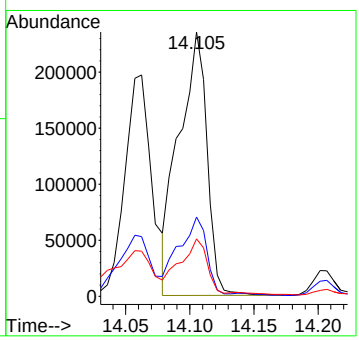


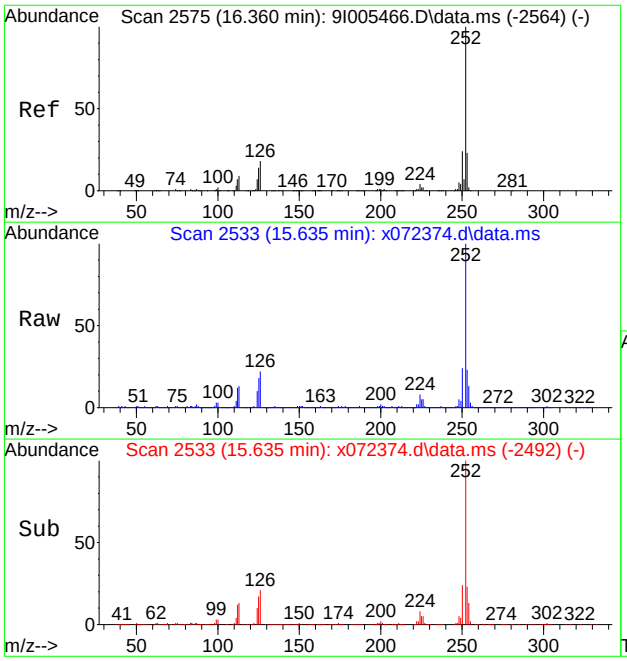


#100
Chrysene
Concen: 32.18 ppm
RT: 14.105 min Scan# 2247
Delta R.T. 0.000 min
Lab File: x072374.d
Acq: 12 Aug 2020 5:43 pm

Tgt Ion:228 Resp: 358260

Ion	Ratio	Lower	Upper
228	100		
226	29.7	0.4	60.4
229	20.8	0.0	50.1

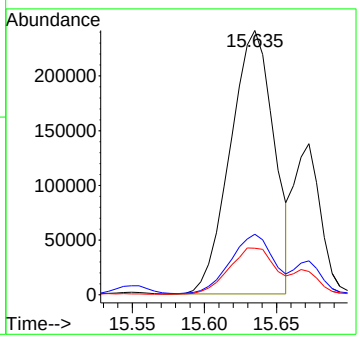


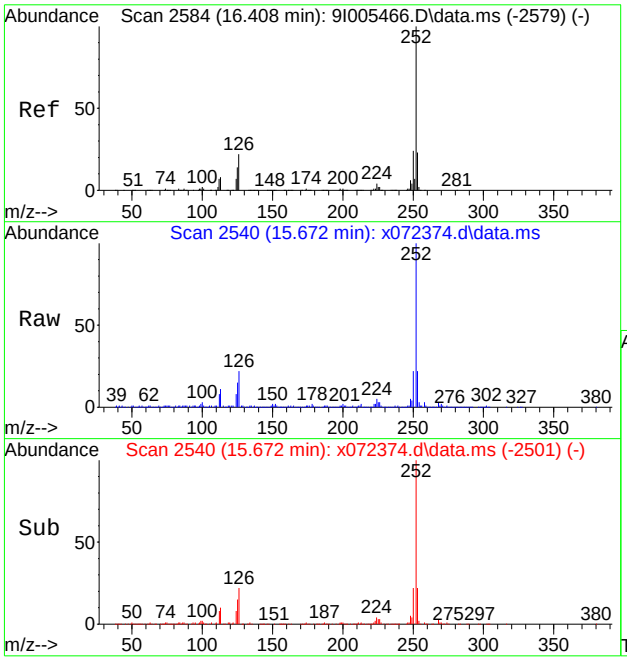


#104
Benzo[b]fluoranthene
Concen: 60.45 ppm
RT: 15.635 min Scan# 2533
Delta R.T. 0.021 min
Lab File: x072374.d
Acq: 12 Aug 2020 5:43 pm

Tgt Ion:252 Resp: 507395

Ion	Ratio	Lower	Upper
252	100		
253	22.6	0.0	52.5
125	16.9	0.0	44.0

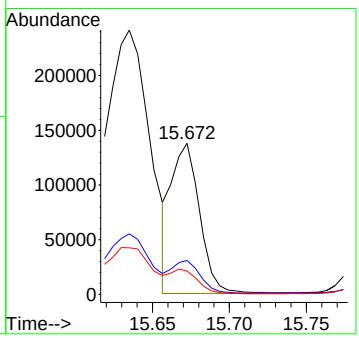


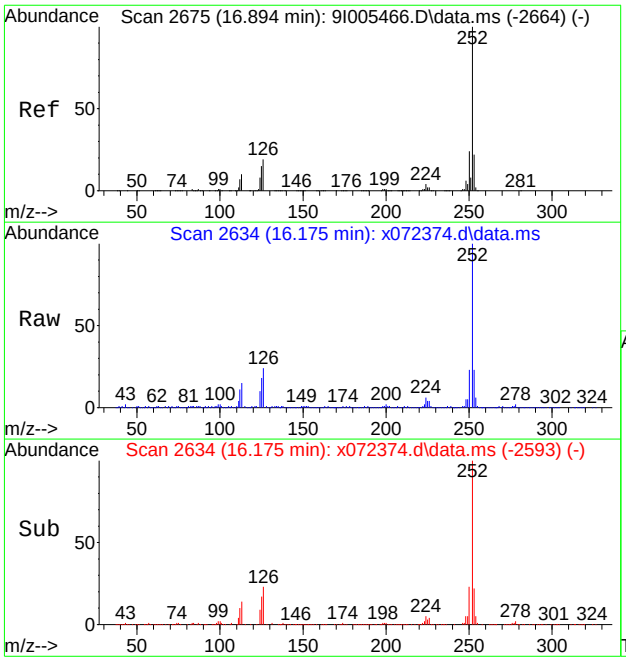


#105
Benzo[k]fluoranthene
Concen: 17.91 ppm
RT: 15.672 min Scan# 2540
Delta R.T. 0.011 min
Lab File: x072374.d
Acq: 12 Aug 2020 5:43 pm

Tgt Ion:252 Resp: 175866

Ion	Ratio	Lower	Upper
252	100		
253	21.8	0.0	52.5
125	13.1	0.0	44.4

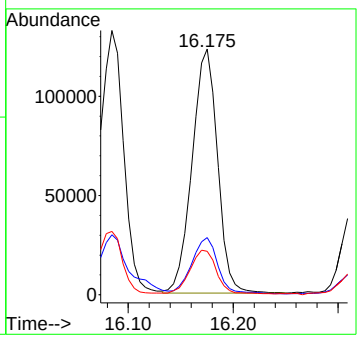


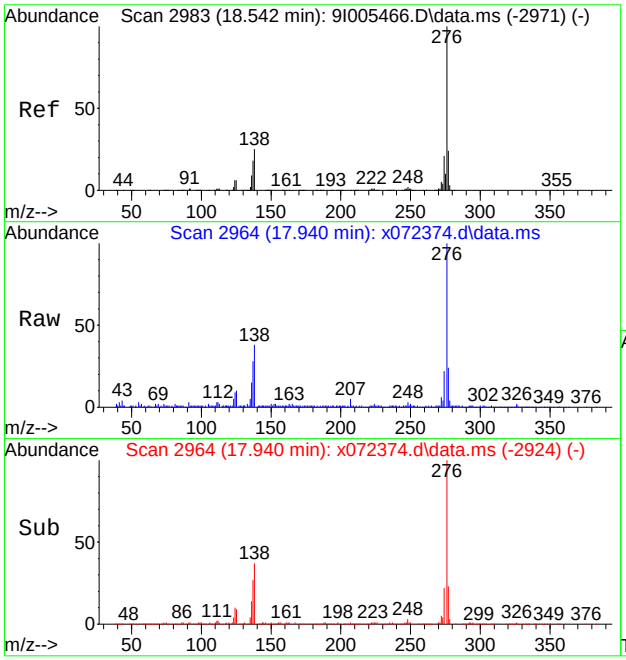


#106
Benzo[a]pyrene
Concen: 27.70 ppm
RT: 16.175 min Scan# 2634
Delta R.T. 0.021 min
Lab File: x072374.d
Acq: 12 Aug 2020 5:43 pm

Tgt Ion:252 Resp: 207516

Ion	Ratio	Lower	Upper
252	100		
253	22.5	0.0	52.3
125	17.3	0.0	44.7

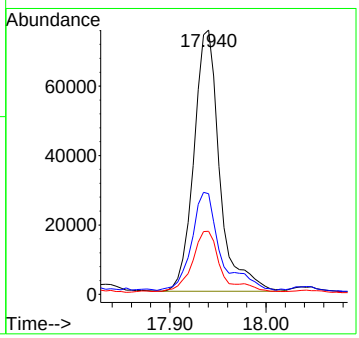


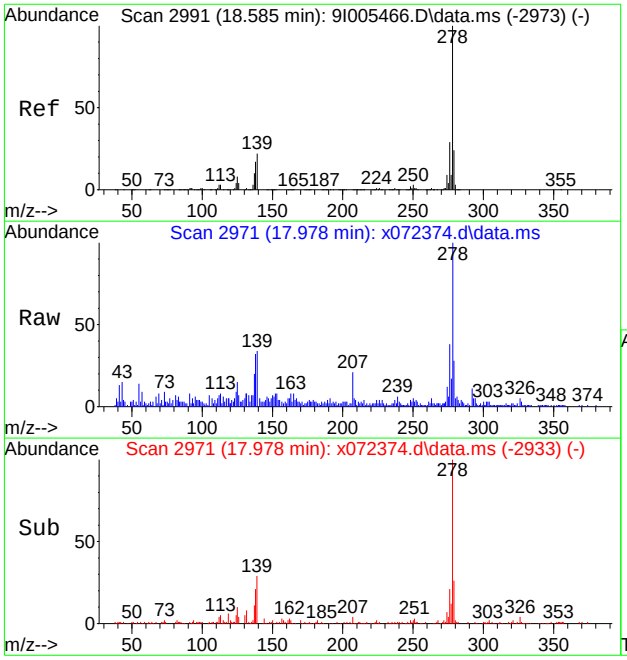


#107
Indeno[1,2,3-cd]pyrene
Concen: 29.44 ppm
RT: 17.940 min Scan# 2964
Delta R.T. 0.016 min
Lab File: x072374.d
Acq: 12 Aug 2020 5:43 pm

Tgt Ion:276 Resp: 140446

Ion	Ratio	Lower	Upper
276	100		
138	36.6	0.0	54.7
277	23.0	0.0	53.8

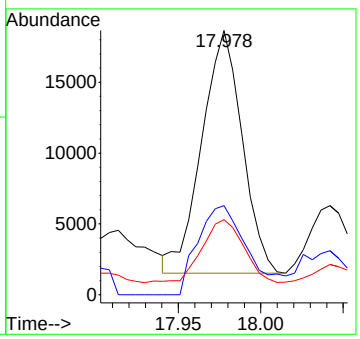


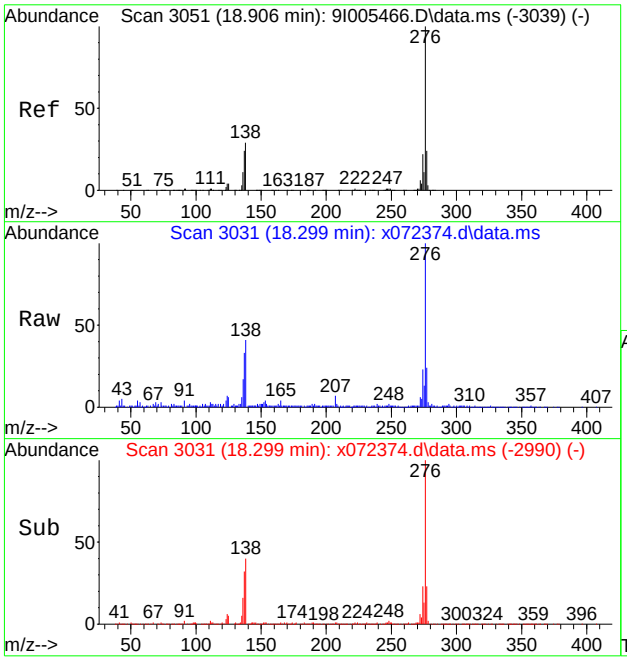


#108
Dibenz[a,h]anthracene
Concen: 6.49 ppm
RT: 17.978 min Scan# 2971
Delta R.T. 0.005 min
Lab File: x072374.d
Acq: 12 Aug 2020 5:43 pm

Tgt Ion:278 Resp: 29254

Ion	Ratio	Lower	Upper
278	100		
139	34.0	0.0	52.4
279	26.4	0.0	54.4

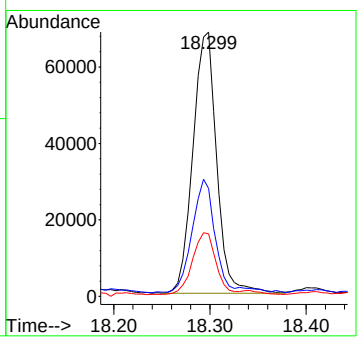




#109
Benzo[g,h,i]perylene
Concen: 17.50 ppm
RT: 18.299 min Scan# 3031
Delta R.T. 0.021 min
Lab File: x072374.d
Acq: 12 Aug 2020 5:43 pm

Tgt Ion:276 Resp: 117762

Ion	Ratio	Lower	Upper
276	100		
138	39.9	0.0	59.4
277	23.2	0.0	54.1



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072354.d
Acq On : 11 Aug 2020 11:34 pm
Operator : marthav
Sample : fa77581-6 E
Misc : op81482,sx2950,30.2,,,1,1,soil
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Aug 12 03:32:46 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

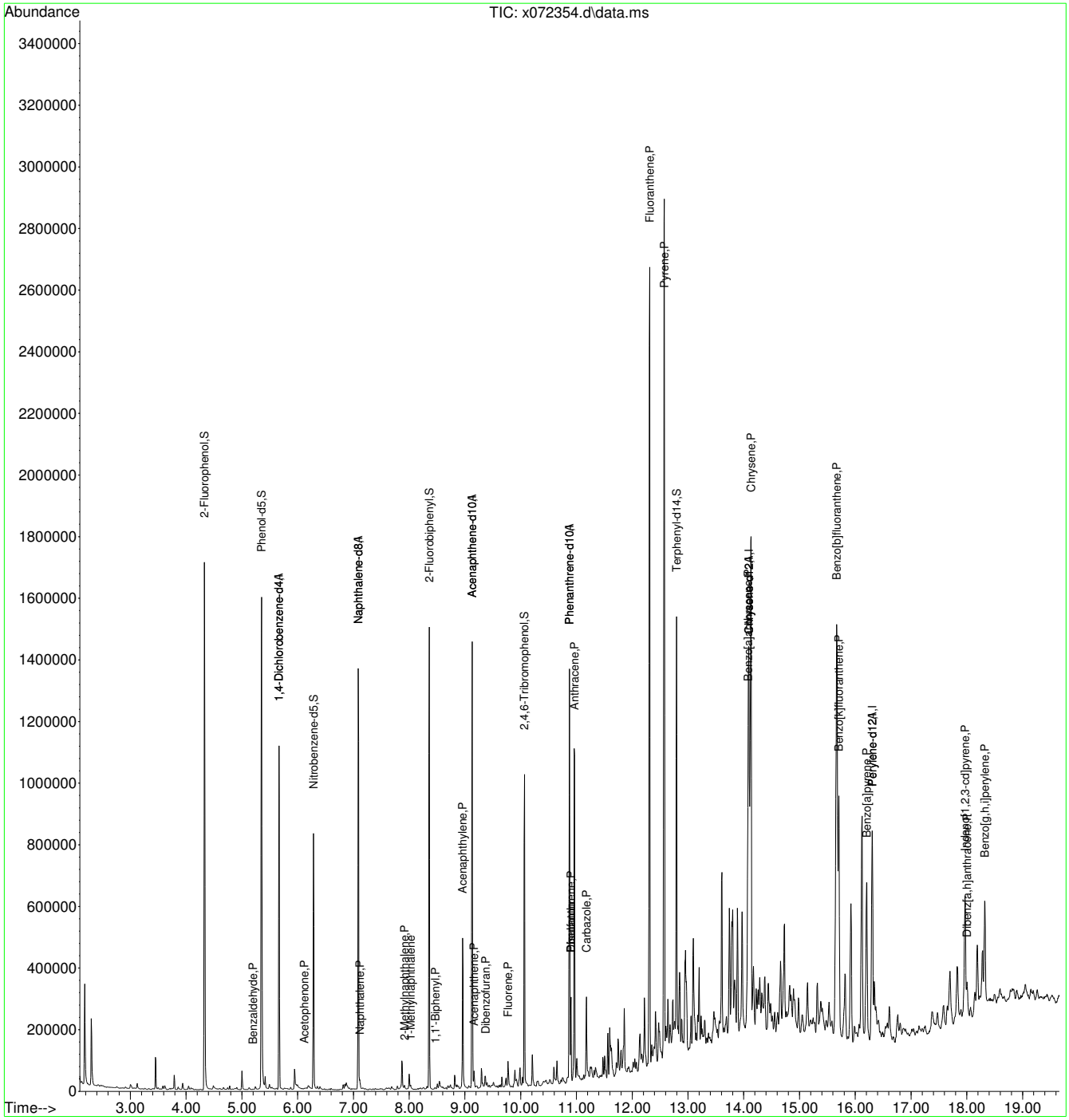
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.665	152	161575	40.00	ppm	0.00
22) Naphthalene-d8	7.088	136	592845	40.00	ppm	0.00
43) Acenaphthene-d10	9.131	164	287769	40.00	ppm	0.01
70) Phenanthrene-d10	10.875	188	486909	40.00	ppm	0.01
92) Chrysene-d12	14.095	240	401327	40.00	ppm	0.03
102) Perylene-d12	16.304	264	325605	40.00	ppm	0.05
110) 1,4-Dichlorobenzene-d4A	5.665	152	161575	40.00	ppm	0.00
120) Naphthalene-d8A	7.088	136	592845	40.00	ppm	0.00
127) Acenaphthene-d10A	9.131	164	287769	40.00	ppm	0.01
136) Phenanthrene-d10A	10.875	188	486909	40.00	ppm	0.01
146) Chrysene-d12A	14.095	240	401327	40.00	ppm	0.03
153) Perylene-d12A	16.304	264	325605	40.00	ppm	0.05
System Monitoring Compounds						
7) 2-Fluorophenol	4.328	112	448210	77.37	ppm	0.02
Spiked Amount 100.000	Range 40 - 102		Recovery = 77.37%			
9) Phenol-d5	5.355	99	563384	81.74	ppm	0.02
Spiked Amount 100.000	Range 41 - 100		Recovery = 81.74%			
23) Nitrobenzene-d5	6.286	82	233993	38.22	ppm	0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 76.44%			
47) 2-Fluorobiphenyl	8.361	172	411704	39.52	ppm	0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 79.04%			
75) 2,4,6-Tribromophenol	10.067	330	82776	79.17	ppm	0.01
Spiked Amount 100.000	Range 42 - 108		Recovery = 79.17%			
95) Terphenyl-d14	12.795	244	415128	38.93	ppm	0.02
Spiked Amount 50.000	Range 45 - 119		Recovery = 77.86%			
Target Compounds						Qvalue
5) Benzaldehyde	5.200	106	567	0.12	ppm	# 69
18) Acetophenone	6.120	105	1397	0.16	ppm	91
34) Naphthalene	7.115	128	7312	0.45	ppm	98
40) 2-Methylnaphthalene	7.917	142	3288	0.31	ppm	90
41) 1-Methylnaphthalene	8.029	142	2169	0.21	ppm	85
48) 1,1'-Biphenyl	8.468	154	1195	0.10	ppm	88
52) Acenaphthylene	8.960	152	228300	15.88	ppm	100
57) Acenaphthene	9.163	153	12551	1.31	ppm	96
60) Dibenzofuran	9.372	168	6106	0.48	ppm	99
65) Fluorene	9.773	166	26207	2.63	ppm	96
84) Phenanthrene	10.901	178	92886	6.31	ppm	99
85) Anthracene	10.966	178	439551	28.66	ppm	98
86) Disulfoton	10.901	88	7377	1.25	ppm	59
87) Carbazole	11.180	167	106375	7.86	ppm	99
91) Fluoranthene	12.314	202	1070349	78.41	ppm	97
94) Pyrene	12.576	202	1148362	68.92	ppm	97
99) Benzo[a]anthracene	14.079	228	386155	30.61	ppm	100
100) Chrysene	14.132	228	816246	60.77	ppm	99
104) Benzo[b]fluoranthene	15.667	252	956919	91.10	ppm	96
105) Benzo[k]fluoranthene	15.705	252	292205	25.28	ppm	98
106) Benzo[a]pyrene	16.202	252	290278	32.54	ppm	95
107) Indeno[1,2,3-cd]pyrene	17.967	276	236204	39.47	ppm	87
108) Dibenz[a,h]anthracene	18.004	278	48420	8.93	ppm	87
109) Benzo[g,h,i]perylene	18.325	276	186399	22.99	ppm	88

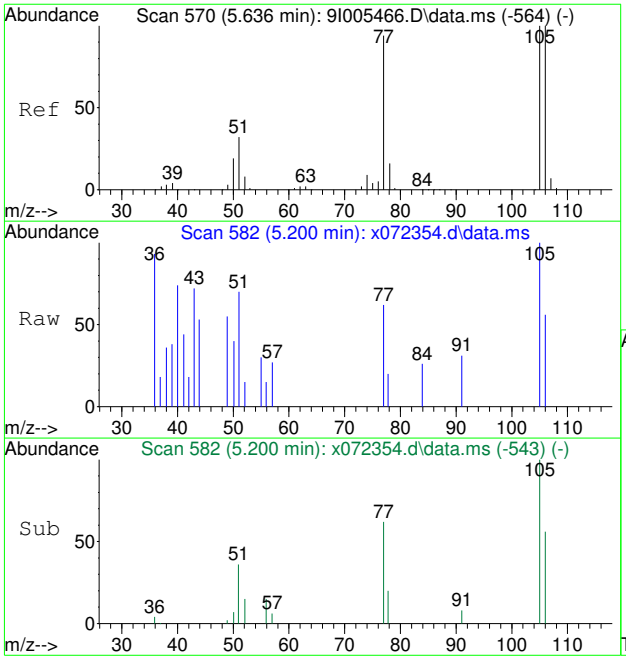
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072354.d
Acq On : 11 Aug 2020 11:34 pm
Operator : marthav
Sample : fa77581-6 E
Misc : op81482,sx2950,30.2,,,1,1,soil
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Aug 12 03:32:46 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

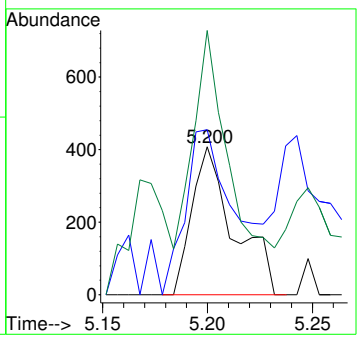


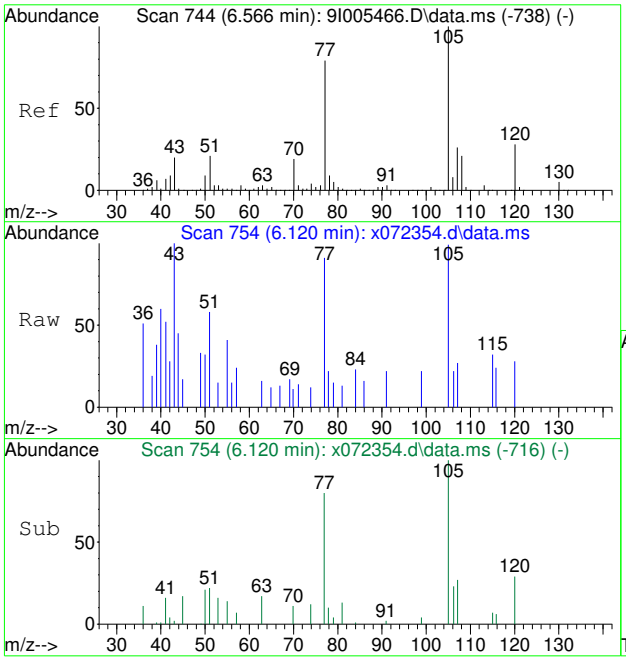


#5
Benzaldehyde
Concen: 0.12 ppm
RT: 5.200 min Scan# 582
Delta R.T. 0.011 min
Lab File: x072354.d
Acq: 11 Aug 2020 11:34 pm

Tgt Ion:106 Resp: 567

Ion	Ratio	Lower	Upper
106	100		
77	61.3	63.9	123.9#
105	128.2	70.0	130.0

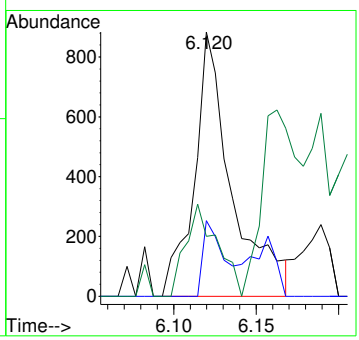


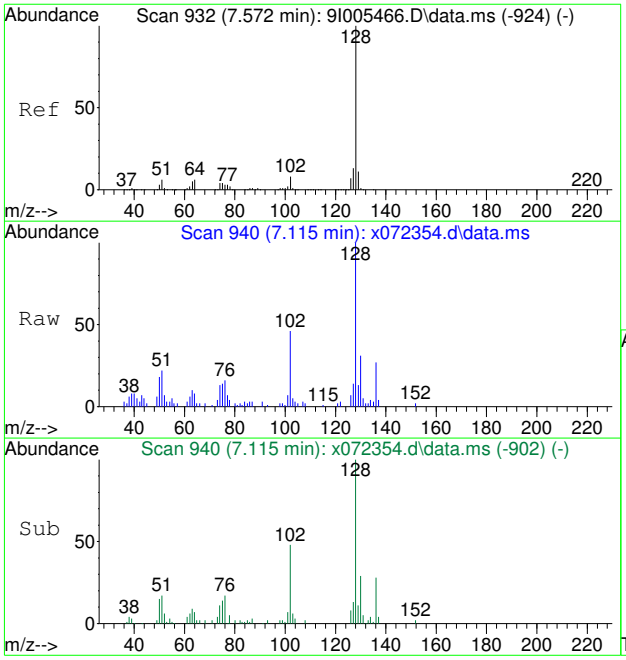


#18
Acetophenone
Concen: 0.16 ppm
RT: 6.120 min Scan# 754
Delta R.T. 0.005 min
Lab File: x072354.d
Acq: 11 Aug 2020 11:34 pm

Tgt Ion:105 Resp: 1397

Ion	Ratio	Lower	Upper
105	100		
120	30.7	0.0	58.3
106	0.0	0.0	38.0

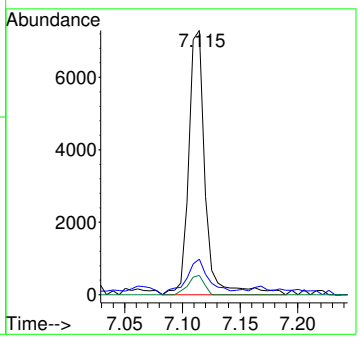


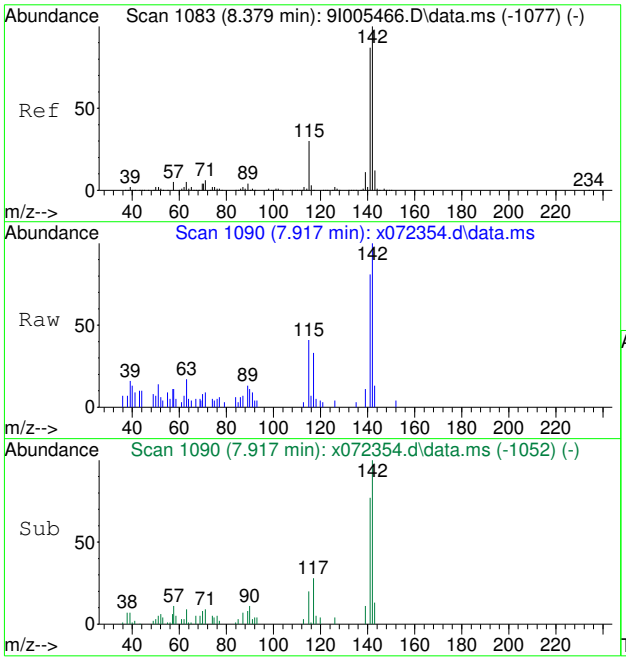


#34
Naphthalene
Concen: 0.45 ppm
RT: 7.115 min Scan# 940
Delta R.T. 0.005 min
Lab File: x072354.d
Acq: 11 Aug 2020 11:34 pm

Tgt Ion:128 Resp: 7312

Ion	Ratio	Lower	Upper
128	100		
129	12.6	0.0	41.4
126	7.4	0.0	37.4

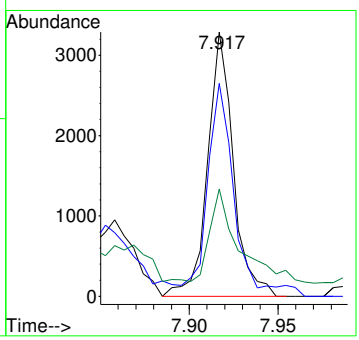


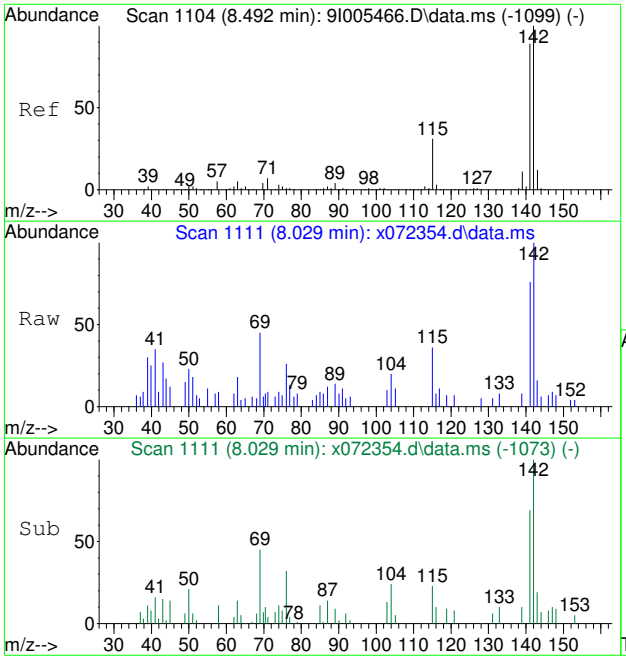


#40
2-Methylnaphthalene
Concen: 0.31 ppm
RT: 7.917 min Scan# 1090
Delta R.T. 0.005 min
Lab File: x072354.d
Acq: 11 Aug 2020 11:34 pm

Tgt Ion:142 Resp: 3288

Ion	Ratio	Lower	Upper
142	100		
141	75.5	56.8	116.8
115	32.9	0.0	60.0

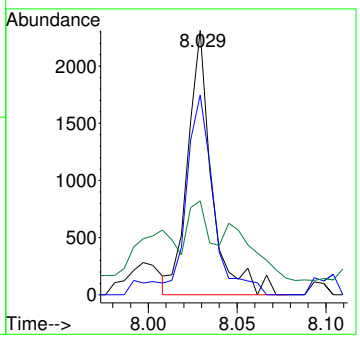


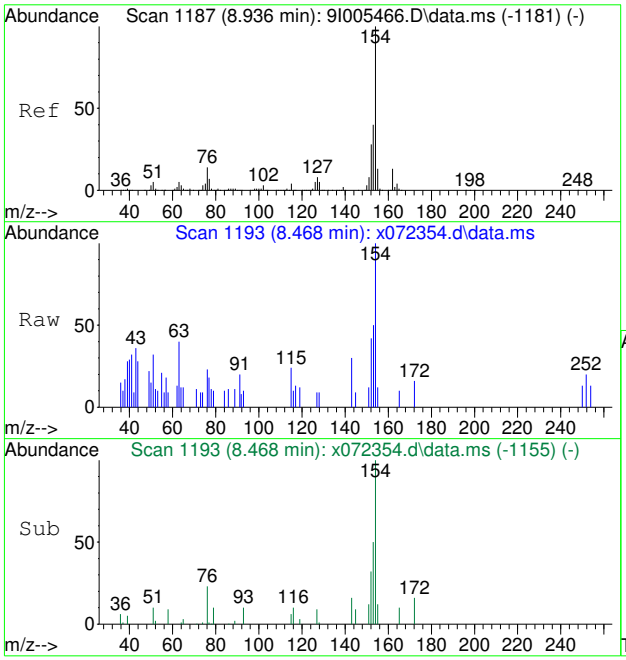


#41
1-Methylnaphthalene
Concen: 0.21 ppm
RT: 8.029 min Scan# 1111
Delta R.T. 0.005 min
Lab File: x072354.d
Acq: 11 Aug 2020 11:34 pm

Tgt Ion:142 Resp: 2169

Ion	Ratio	Lower	Upper
142	100		
141	76.1	59.0	119.0
115	20.8	1.1	61.1

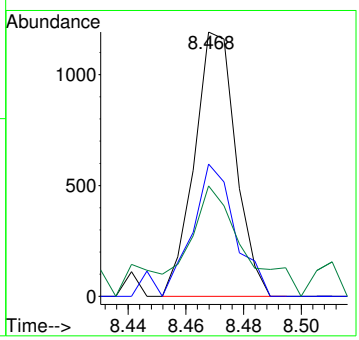


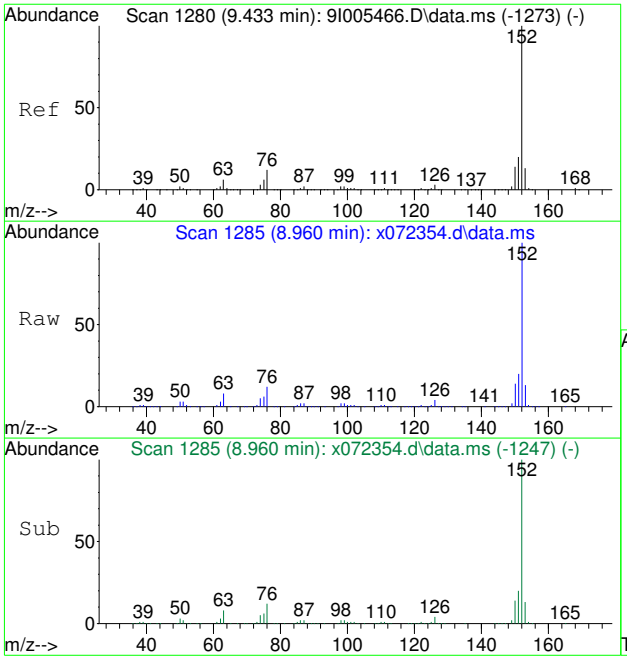


#48
1,1'-Biphenyl
Concen: 0.10 ppm
RT: 8.468 min Scan# 1193
Delta R.T. 0.005 min
Lab File: x072354.d
Acq: 11 Aug 2020 11:34 pm

Tgt Ion:154 Resp: 1195

Ion	Ratio	Lower	Upper
154	100		
153	50.0	10.3	70.3
152	32.1	0.0	58.2

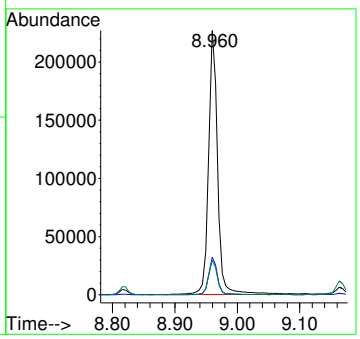


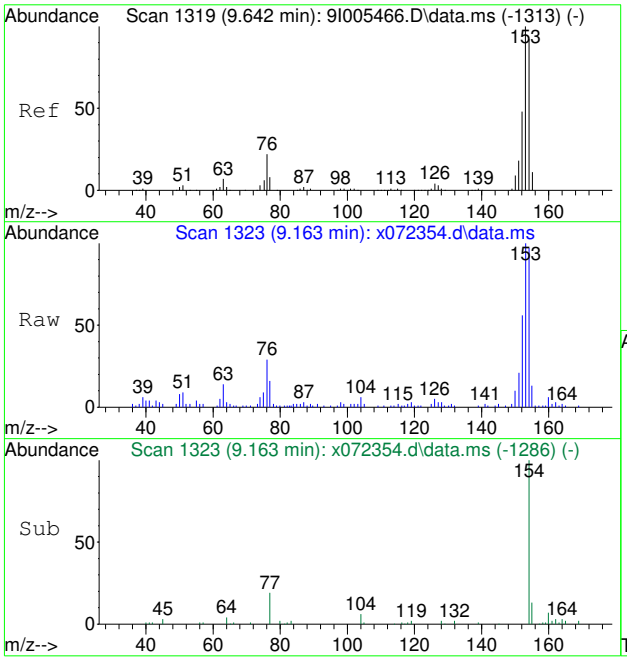


#52
Acenaphthylene
Concen: 15.88 ppm
RT: 8.960 min Scan# 1285
Delta R.T. 0.005 min
Lab File: x072354.d
Acq: 11 Aug 2020 11:34 pm

Tgt Ion:152 Resp: 228300

Ion	Ratio	Lower	Upper
152	100		
150	14.3	0.0	44.3
153	13.0	0.0	43.3

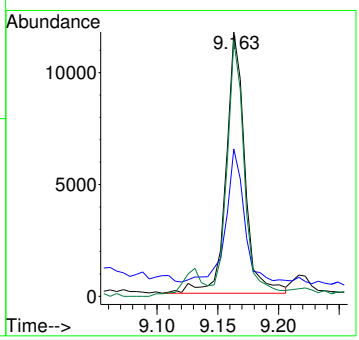


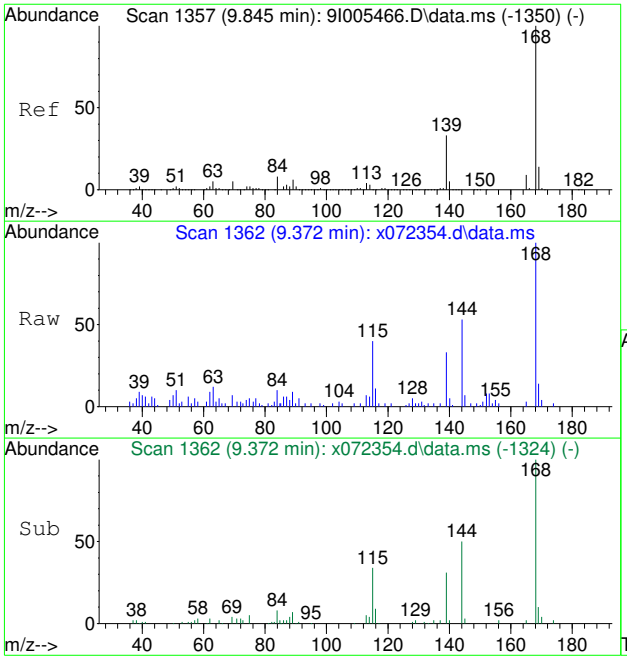


#57
Acenaphthene
Concen: 1.31 ppm
RT: 9.163 min Scan# 1323
Delta R.T. 0.000 min
Lab File: x072354.d
Acq: 11 Aug 2020 11:34 pm

Tgt Ion:153 Resp: 12551

Ion	Ratio	Lower	Upper
153	100		
152	49.3	18.4	78.4
154	97.3	62.4	122.4

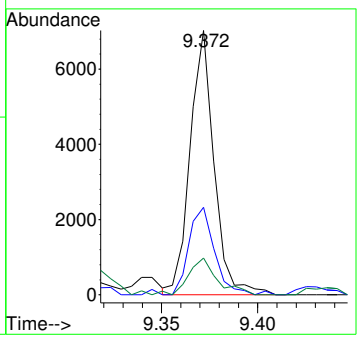


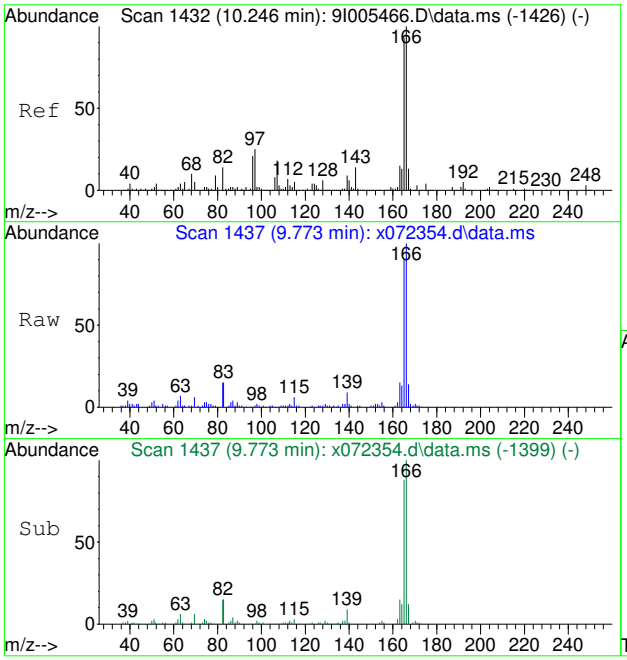


#60
Dibenzofuran
Concen: 0.48 ppm
RT: 9.372 min Scan# 1362
Delta R.T. 0.005 min
Lab File: x072354.d
Acq: 11 Aug 2020 11:34 pm

Tgt Ion:168 Resp: 6106

Ion	Ratio	Lower	Upper
168	100		
139	33.5	3.0	63.0
169	13.4	0.0	43.5

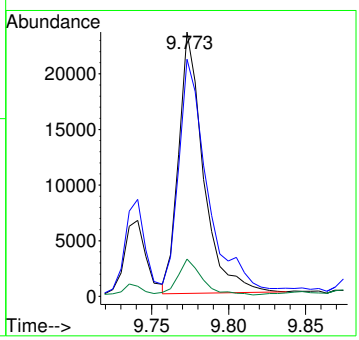


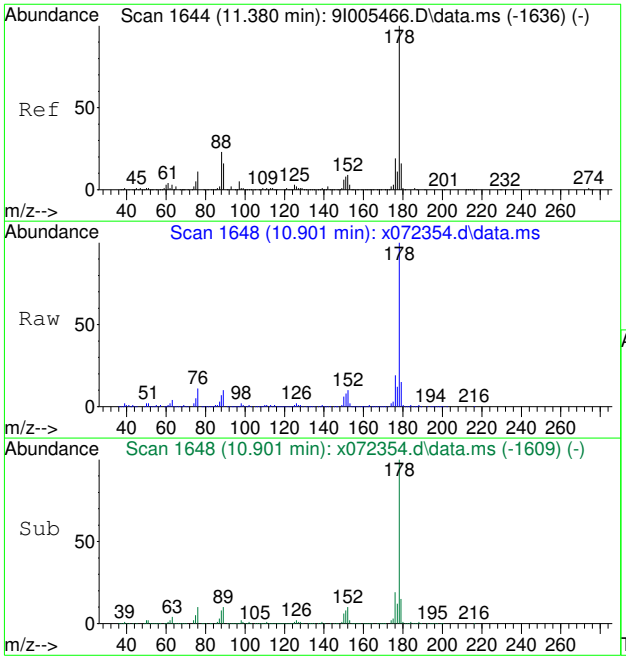


#65
Fluorene
Concen: 2.63 ppm
RT: 9.773 min Scan# 1437
Delta R.T. 0.005 min
Lab File: x072354.d
Acq: 11 Aug 2020 11:34 pm

Tgt Ion:166 Resp: 26207

Ion	Ratio	Lower	Upper
166	100		
165	88.6	62.7	122.7
167	13.2	0.0	43.5

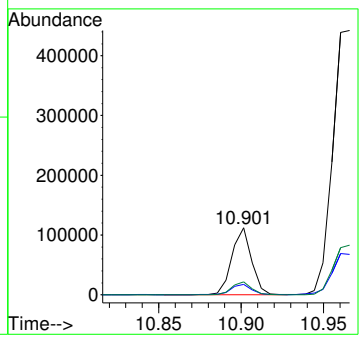


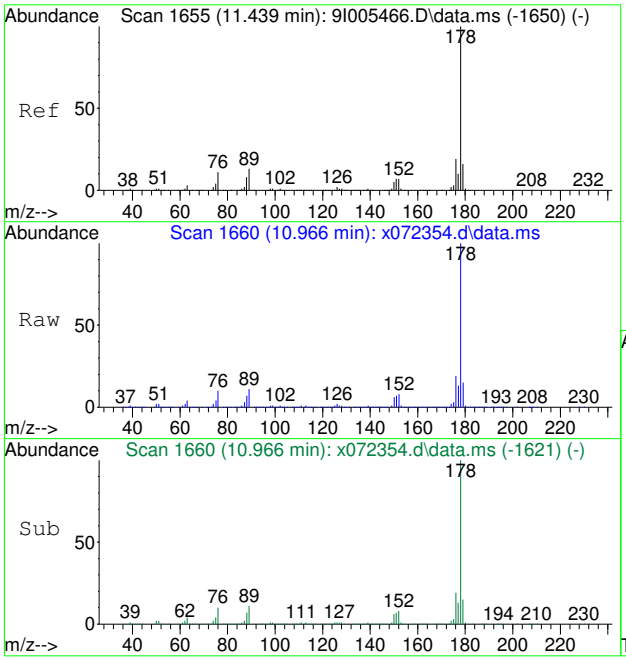


#84
Phenanthrene
Concen: 6.31 ppm
RT: 10.901 min Scan# 1648
Delta R.T. 0.011 min
Lab File: x072354.d
Acq: 11 Aug 2020 11:34 pm

Tgt Ion:178 Resp: 92886

Ion	Ratio	Lower	Upper
178	100		
179	15.2	0.0	45.8
176	19.3	0.0	49.3

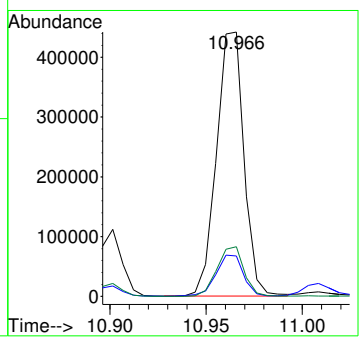


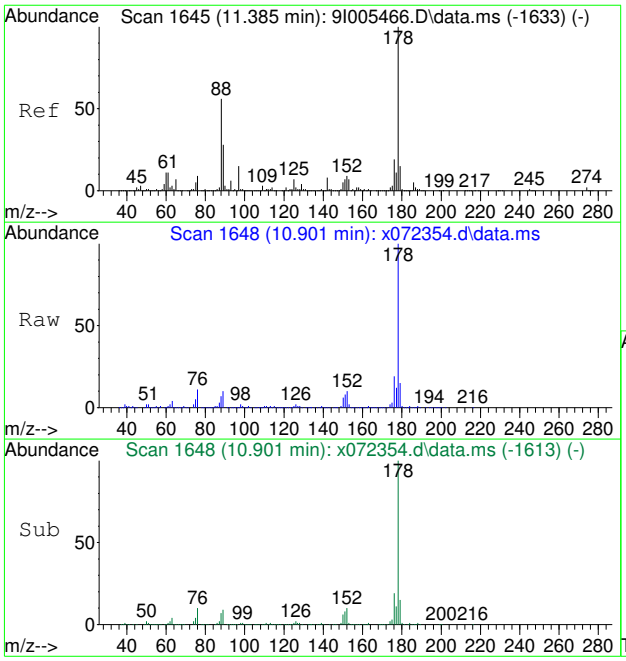


#85
Anthracene
Concen: 28.66 ppm
RT: 10.966 min Scan# 1660
Delta R.T. 0.011 min
Lab File: x072354.d
Acq: 11 Aug 2020 11:34 pm

Tgt Ion:178 Resp: 439551

Ion	Ratio	Lower	Upper
178	100		
179	15.1	0.0	46.0
176	18.7	0.0	49.3

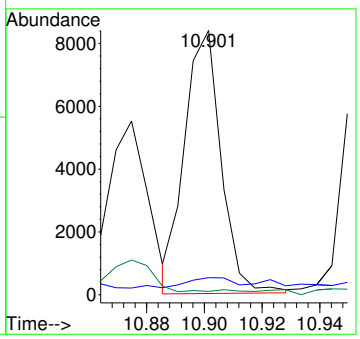


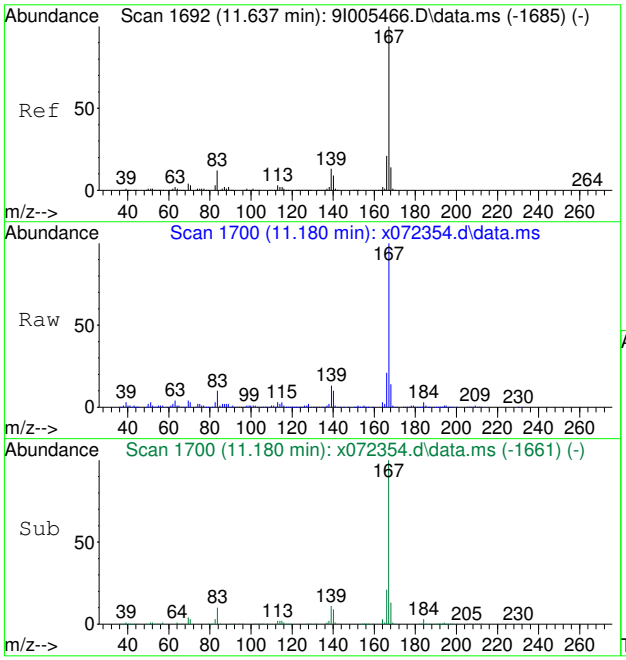


#86
Disulfoton
Concen: 1.25 ppm
RT: 10.901 min Scan# 1648
Delta R.T. -0.011 min
Lab File: x072354.d
Acq: 11 Aug 2020 11:34 pm

Tgt Ion: 88 Resp: 7377

Ion	Ratio	Lower	Upper
88	100		
97	3.7	0.0	56.5
142	0.0	0.0	44.2

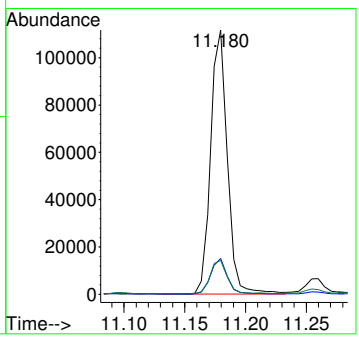


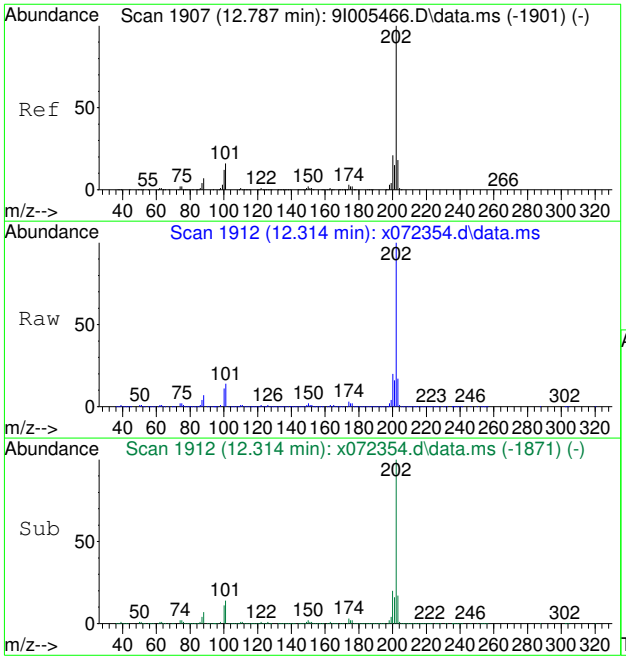


#87
Carbazole
Concen: 7.86 ppm
RT: 11.180 min Scan# 1700
Delta R.T. 0.011 min
Lab File: x072354.d
Acq: 11 Aug 2020 11:34 pm

Tgt Ion:167 Resp: 106375

Ion	Ratio	Lower	Upper
167	100		
168	13.4	0.0	43.9
139	12.5	0.0	42.7

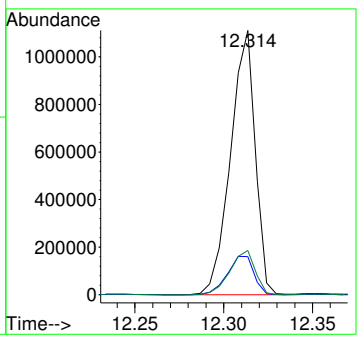


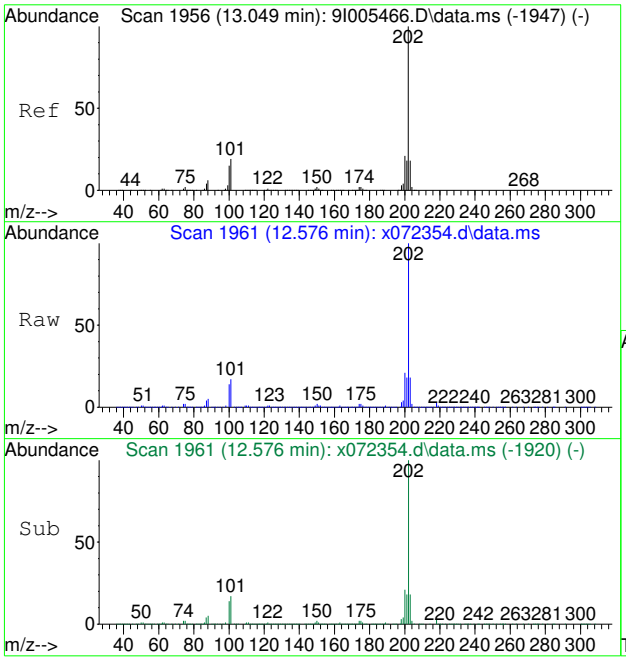


#91
Fluoranthene
Concen: 78.41 ppm
RT: 12.314 min Scan# 1912
Delta R.T. 0.021 min
Lab File: x072354.d
Acq: 11 Aug 2020 11:34 pm

Tgt Ion:202 Resp: 1070349

Ion	Ratio	Lower	Upper
202	100		
101	14.4	0.0	45.8
203	16.7	0.0	48.1

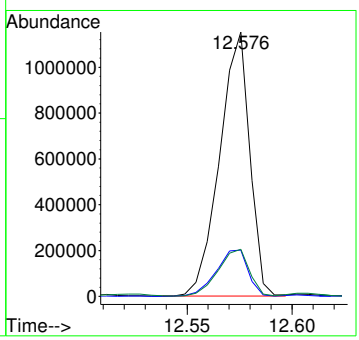


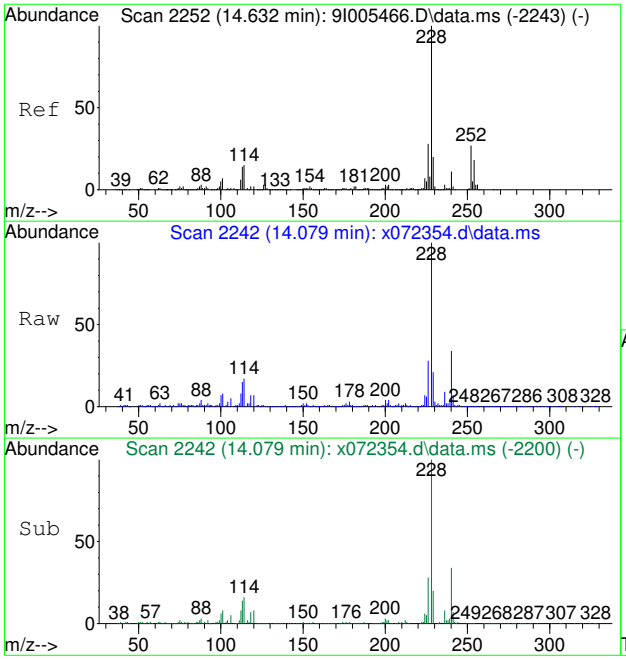


#94
Pyrene
Concen: 68.92 ppm
RT: 12.576 min Scan# 1961
Delta R.T. 0.021 min
Lab File: x072354.d
Acq: 11 Aug 2020 11:34 pm

Tgt Ion:202 Resp: 1148362

Ion	Ratio	Lower	Upper
202	100		
101	17.3	0.0	48.7
203	17.5	0.0	48.4

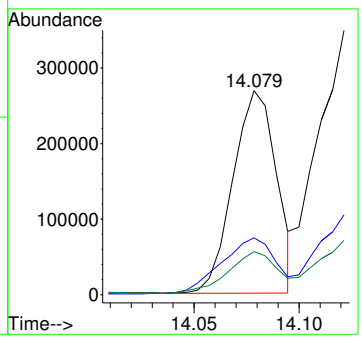


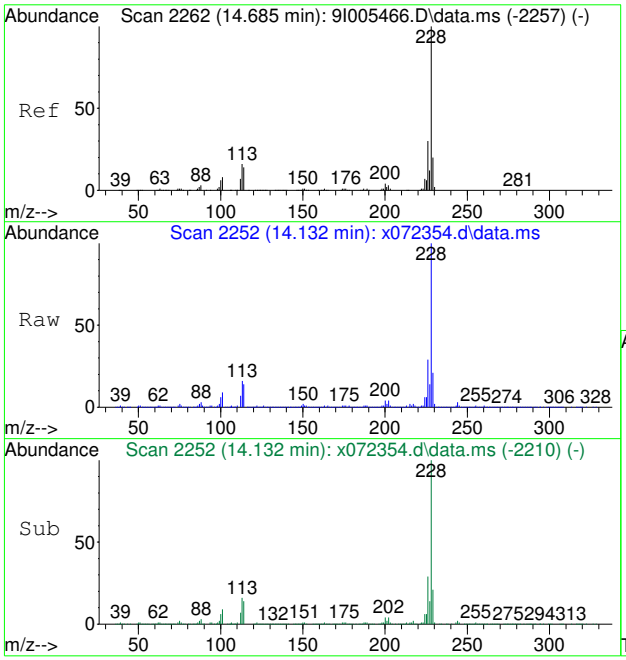


#99
Benzo[a]anthracene
Concen: 30.61 ppm
RT: 14.079 min Scan# 2242
Delta R.T. 0.027 min
Lab File: x072354.d
Acq: 11 Aug 2020 11:34 pm

Tgt Ion:228 Resp: 386155

Ion	Ratio	Lower	Upper
228	100		
226	27.5	0.0	57.5
229	19.8	0.0	49.9

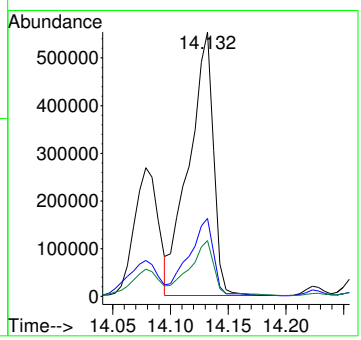


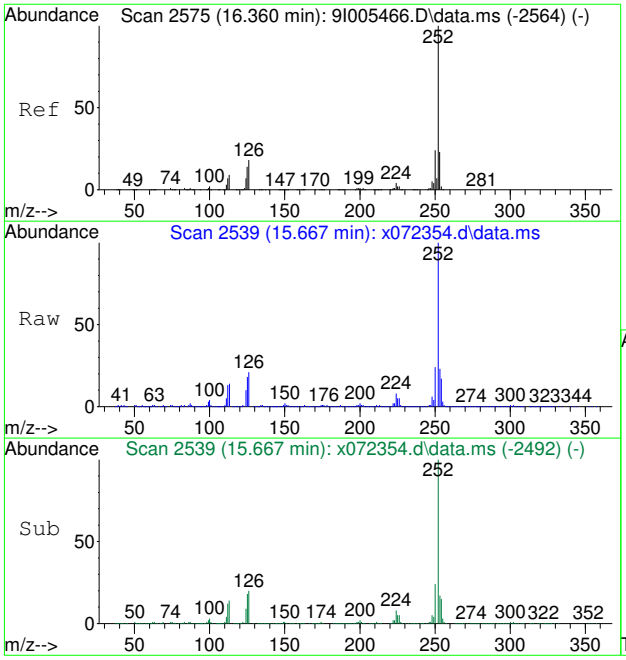


#100
Chrysene
Concen: 60.77 ppm
RT: 14.132 min Scan# 2252
Delta R.T. 0.027 min
Lab File: x072354.d
Acq: 11 Aug 2020 11:34 pm

Tgt Ion:228 Resp: 816246

Ion	Ratio	Lower	Upper
228	100		
226	29.5	0.4	60.4
229	20.6	0.0	50.1

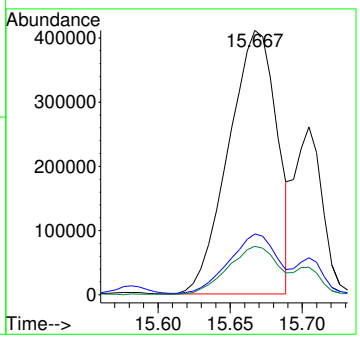


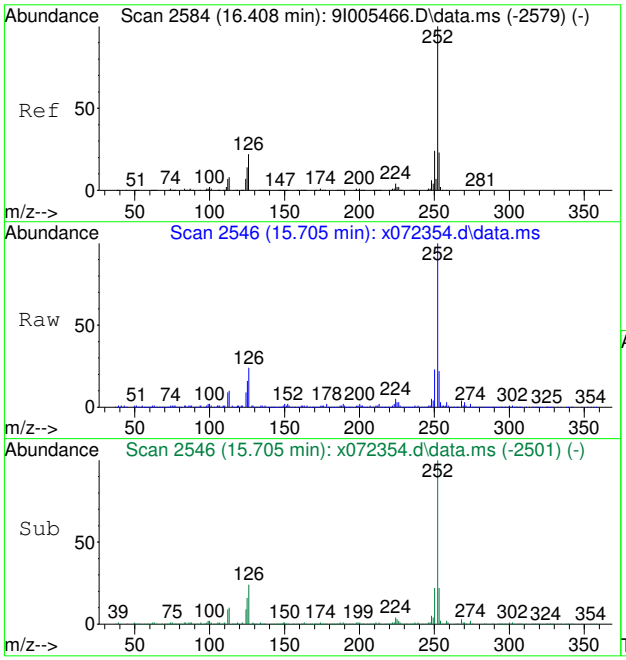


#104
Benzo[b]fluoranthene
Concen: 91.10 ppm
RT: 15.667 min Scan# 2539
Delta R.T. 0.054 min
Lab File: x072354.d
Acq: 11 Aug 2020 11:34 pm

Tgt Ion:252 Resp: 956919

Ion	Ratio	Lower	Upper
252	100		
253	22.8	0.0	52.5
125	18.0	0.0	44.0

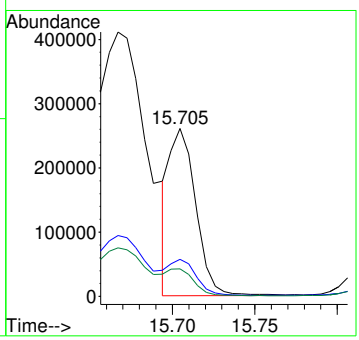


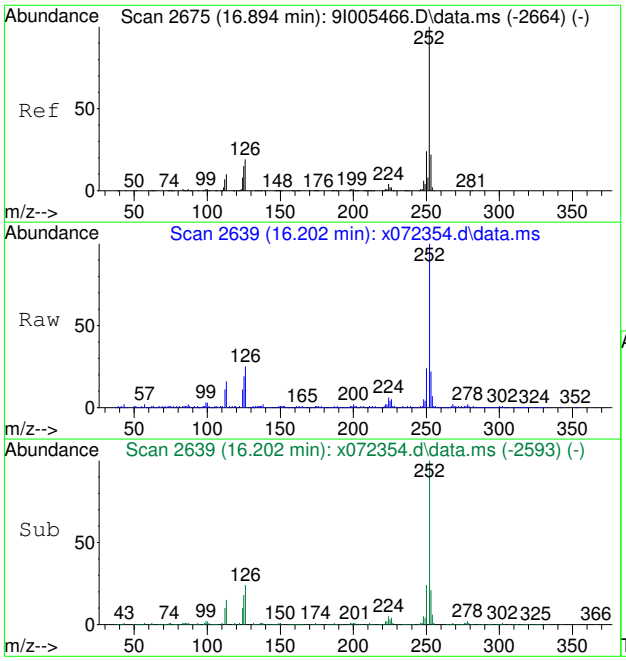


#105
Benzo[k]fluoranthene
Concen: 25.28 ppm
RT: 15.705 min Scan# 2546
Delta R.T. 0.043 min
Lab File: x072354.d
Acq: 11 Aug 2020 11:34 pm

Tgt Ion:252 Resp: 292205

Ion	Ratio	Lower	Upper
252	100		
253	21.3	0.0	52.5
125	14.7	0.0	44.4

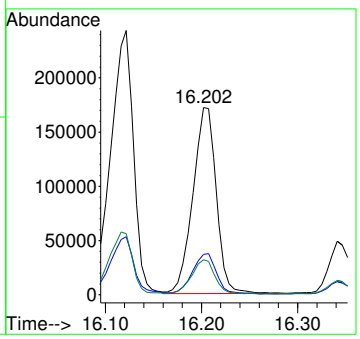


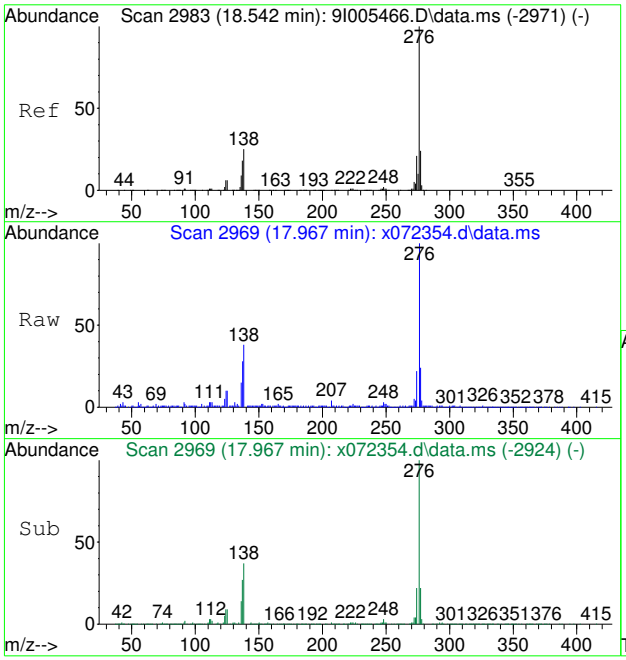


#106
Benzo[a]pyrene
Concen: 32.54 ppm
RT: 16.202 min Scan# 2639
Delta R.T. 0.048 min
Lab File: x072354.d
Acq: 11 Aug 2020 11:34 pm

Tgt Ion:252 Resp: 290278

Ion	Ratio	Lower	Upper
252	100		
253	21.0	0.0	52.3
125	18.2	0.0	44.7

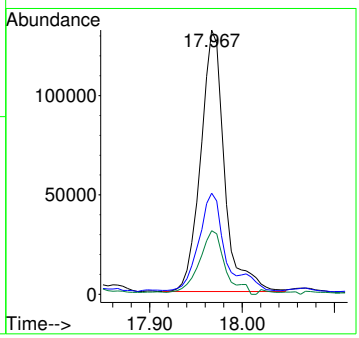


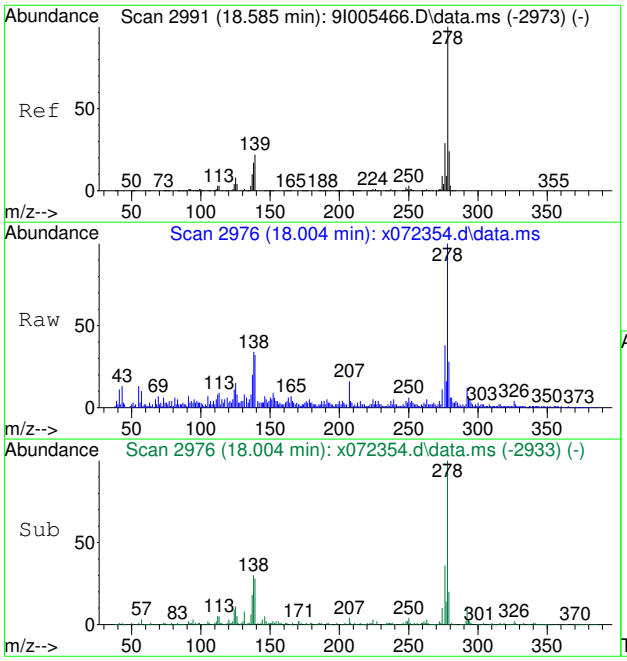


#107
Indeno[1,2,3-cd]pyrene
Concen: 39.47 ppm
RT: 17.967 min Scan# 2969
Delta R.T. 0.043 min
Lab File: x072354.d
Acq: 11 Aug 2020 11:34 pm

Tgt Ion:276 Resp: 236204

Ion	Ratio	Lower	Upper
276	100		
138	37.2	0.0	54.7
277	23.5	0.0	53.8

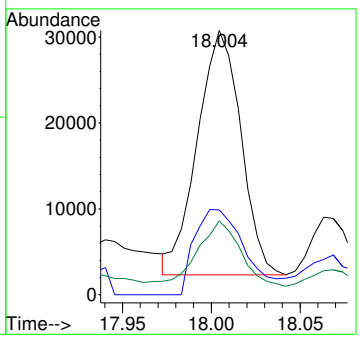


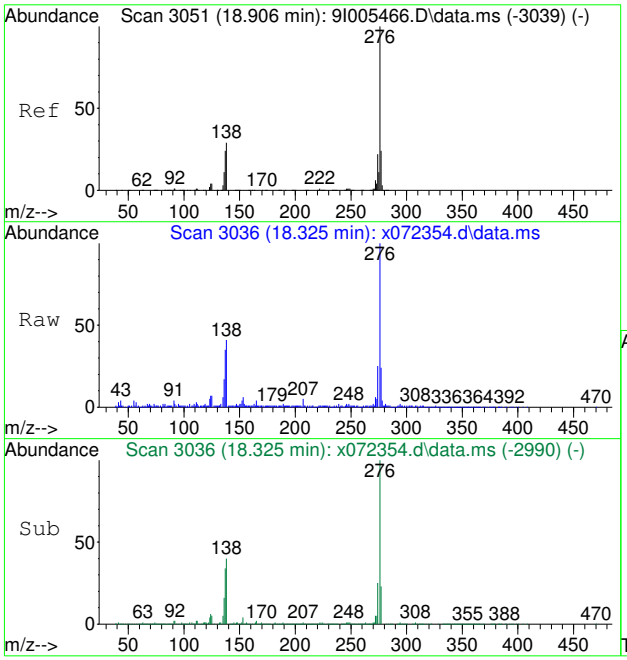


#108
Dibenz[a,h]anthracene
Concen: 8.93 ppm
RT: 18.004 min Scan# 2976
Delta R.T. 0.032 min
Lab File: x072354.d
Acq: 11 Aug 2020 11:34 pm

Tgt Ion:278 Resp: 48420

Ion	Ratio	Lower	Upper
278	100		
139	32.8	0.0	52.4
279	26.9	0.0	54.4

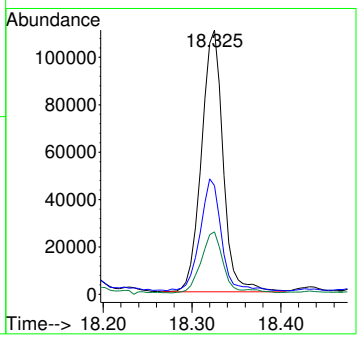




#109
Benzo[g,h,i]perylene
Concen: 22.99 ppm
RT: 18.325 min Scan# 3036
Delta R.T. 0.048 min
Lab File: x072354.d
Acq: 11 Aug 2020 11:34 pm

Tgt Ion:276 Resp: 186399

Ion	Ratio	Lower	Upper
276	100		
138	40.1	0.0	59.4
277	23.1	0.0	54.1



Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F251_081120\6F06489.d
Sample : fa77581-7 E
Misc : op81484,S6F251,30.3,,,1,1,soil
ALS Vial : 5 Sample Multiplier: 1
Acq On : 11 Aug 2020 2:12 pm Operator: marthav

Quant Time: Aug 12 06:06:16 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

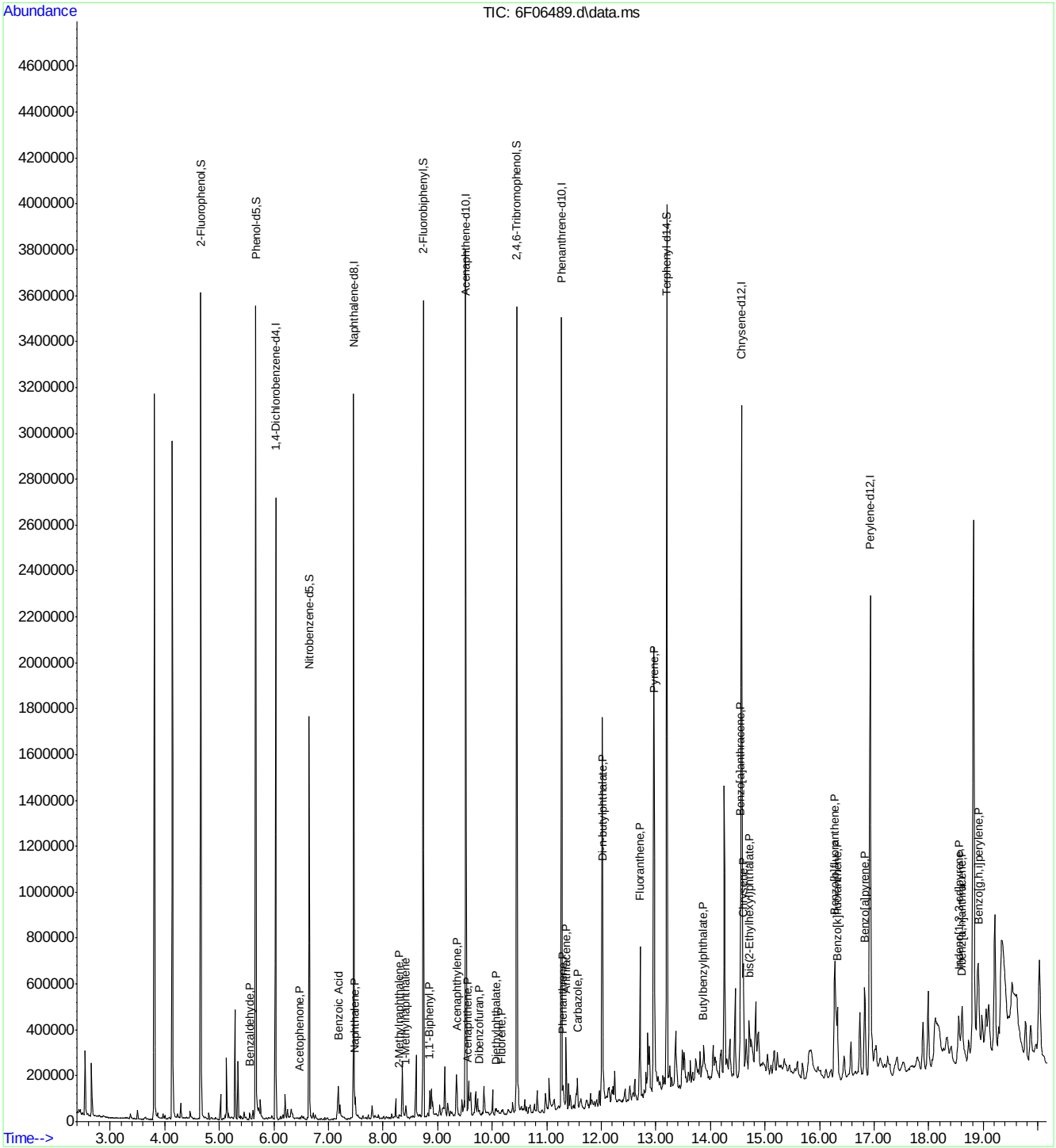
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.035	152	371272	40.00	ppm	0.00
22) Naphthalene-d8	7.463	136	1386651	40.00	ppm	0.00
43) Acenaphthene-d10	9.517	164	744152	40.00	ppm	0.00
70) Phenanthrene-d10	11.276	188	1345757	40.00	ppm	0.00
92) Chrysene-d12	14.571	240	1167562	40.00	ppm	0.00
102) Perylene-d12	16.930	264	1167783	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	4.660	112	947051	67.50	ppm	0.00
Spiked Amount 100.000	Range 40 - 102		Recovery = 67.50%			
9) Phenol-d5	5.671	99	1239721	74.44	ppm	0.00
Spiked Amount 100.000	Range 41 - 100		Recovery = 74.44%			
23) Nitrobenzene-d5	6.650	82	527875	34.70	ppm	0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 69.40%			
47) 2-Fluorobiphenyl	8.741	172	1048138	36.04	ppm	0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 72.08%			
75) 2,4,6-Tribromophenol	10.453	330	379960	83.89	ppm	0.00
Spiked Amount 100.000	Range 42 - 108		Recovery = 83.89%			
95) Terphenyl-d14	13.202	244	1245962	37.96	ppm	0.00
Spiked Amount 50.000	Range 45 - 119		Recovery = 75.92%			
Target Compounds						Qvalue
5) Benzaldehyde	5.559	106	8481	0.746	ppm	93
18) Acetophenone	6.479	105	3021	0.157	ppm	91
30) Benzoic Acid	7.185	105	50058	5.486	ppm	96
34) Naphthalene	7.489	128	6088	0.155	ppm	88
40) 2-Methylnaphthalene	8.297	141	3930	0.171	ppm	97
41) 1-Methylnaphthalene	8.409	142	3475	0.138	ppm	96
48) 1,1'-Biphenyl	8.848	154	1313	0.042	ppm	88
52) Acenaphthylene	9.351	152	60345	1.623	ppm	97
57) Acenaphthene	9.554	153	2763	0.112	ppm	92
60) Dibenzofuran	9.763	168	6427	0.188	ppm	87
65) Fluorene	10.169	166	5145	0.186	ppm	97
67) Diethylphthalate	10.067	149	1295	0.046	ppm	82
84) Phenanthrene	11.298	178	41897	1.040	ppm	97
85) Anthracene	11.362	178	121216	2.960	ppm	99
87) Carbazole	11.565	167	50752	1.375	ppm	97
89) Di-n-butylphthalate	12.025	149	11580	0.249	ppm	94
91) Fluoranthene	12.710	202	261604	6.166	ppm	99
94) Pyrene	12.972	202	369545	8.837	ppm	95
97) Butylbenzylphthalate	13.860	149	6795	0.339	ppm	91
99) Benzo[a]anthracene	14.555	228	180183	4.606	ppm	98
100) Chrysene	14.603	228	249554	6.574	ppm	98
101) bis(2-Ethylhexyl)phtha...	14.715	149	8824	0.315	ppm	92
104) Benzo[b]fluoranthene	16.283	252	386484	10.311	ppm	98
105) Benzo[k]fluoranthene	16.325	252	142999	3.668	ppm	98
106) Benzo[a]pyrene	16.823	252	154960	4.452	ppm	94
107) Indeno[1,2,3-cd]pyrene	18.550	276	103917	3.207	ppm	96
108) Dibenz[a,h]anthracene	18.599	278	20907	0.604	ppm	91
109) Benzo[g,h,i]perylene	18.914	276	84561	2.417	ppm	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

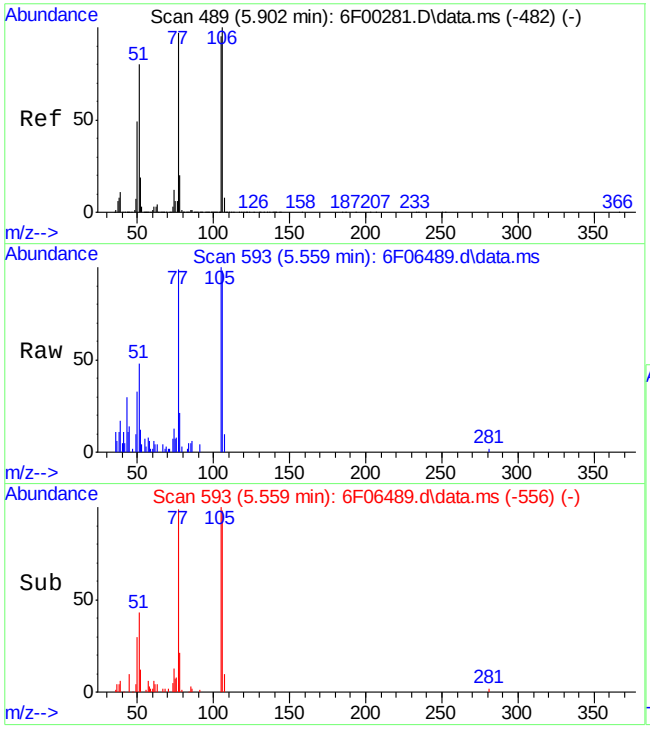
Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F251_081120\6F06489.d
Sample : fa77581-7 E
Misc : op81484,S6F251,30.3,,,1,1,soil
ALS Vial : 5 Sample Multiplier: 1
Acq On : 11 Aug 2020 2:12 pm Operator: marthav

Quant Time: Aug 12 06:06:16 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625



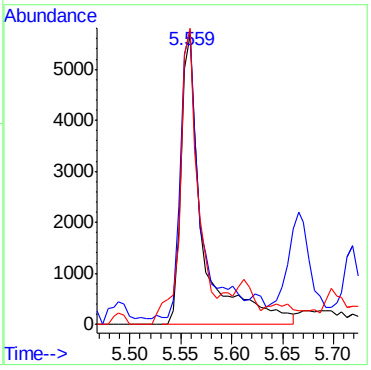
8270D6F072920.m Wed Aug 12 14:47:39 2020 Page: 2

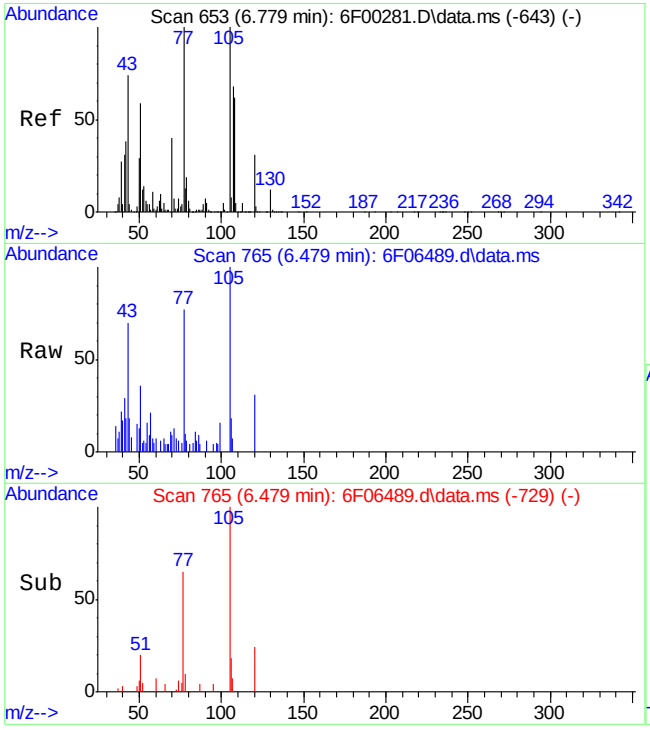


#5
Benzaldehyde
Concen: 0.746 ppm
RT: 5.559 min Scan# 593
Delta R.T. -0.000 min
Lab File: 6F06489.d
Acq: 11 Aug 2020 2:12 pm

Tgt Ion:106 Resp: 8481

Ion	Ratio	Lower	Upper
106	100		
77	85.5	67.1	127.1
105	97.9	65.1	125.1

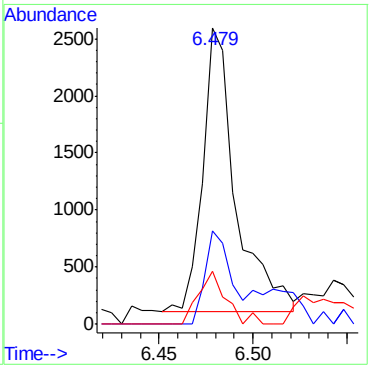


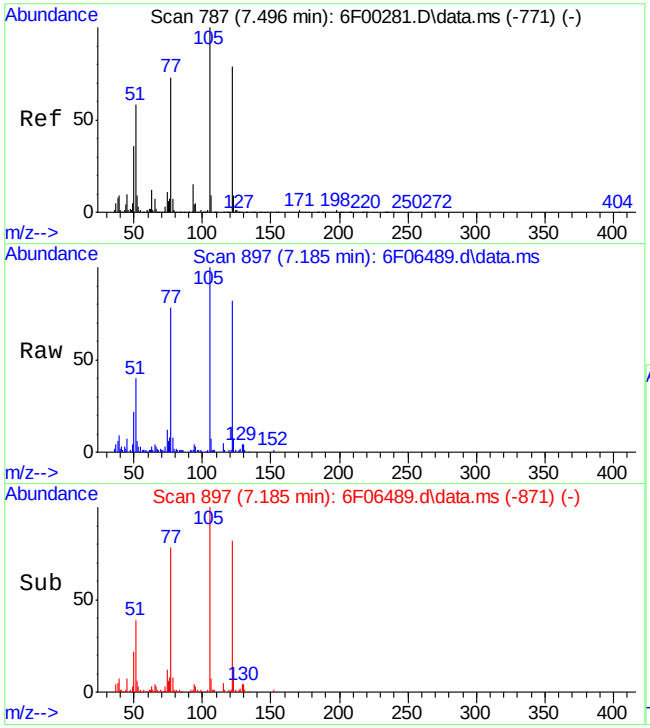


#18
Acetophenone
Concen: 0.157 ppm
RT: 6.479 min Scan# 765
Delta R.T. -0.005 min
Lab File: 6F06489.d
Acq: 11 Aug 2020 2:12 pm

Tgt Ion:105 Resp: 3021

Ion	Ratio	Lower	Upper
105	100		
120	27.7	0.7	60.7
106	16.0	0.0	38.4

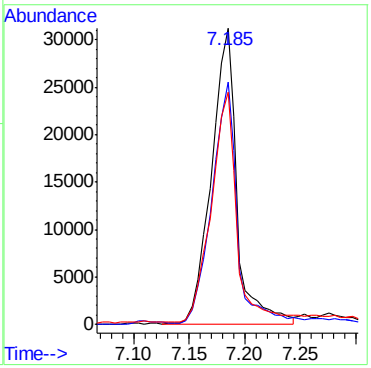


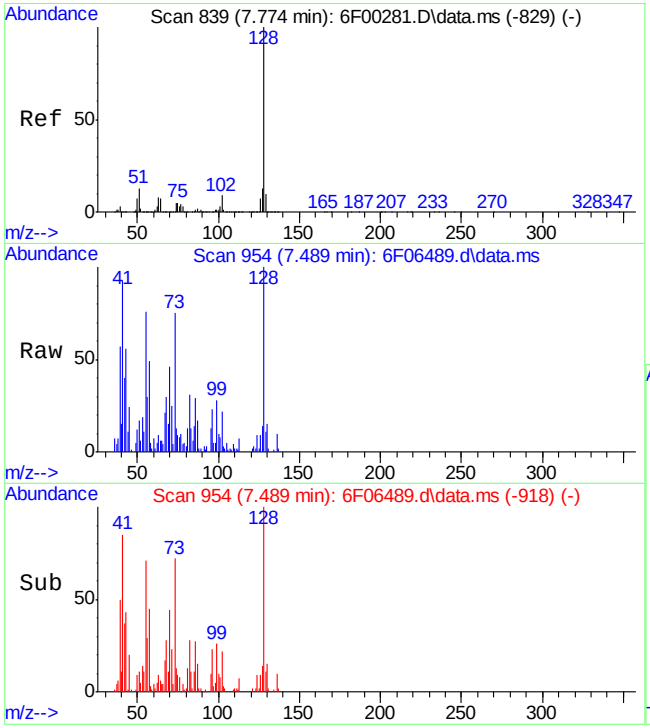


#30
Benzoic Acid
Concen: 5.486 ppm
RT: 7.185 min Scan# 897
Delta R.T. -0.059 min
Lab File: 6F06489.d
Acq: 11 Aug 2020 2:12 pm

Tgt Ion:105 Resp: 50058

Ion	Ratio	Lower	Upper
105	100		
122	81.4	49.5	109.5
77	77.4	43.0	103.0

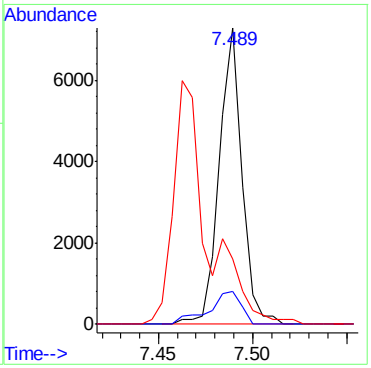


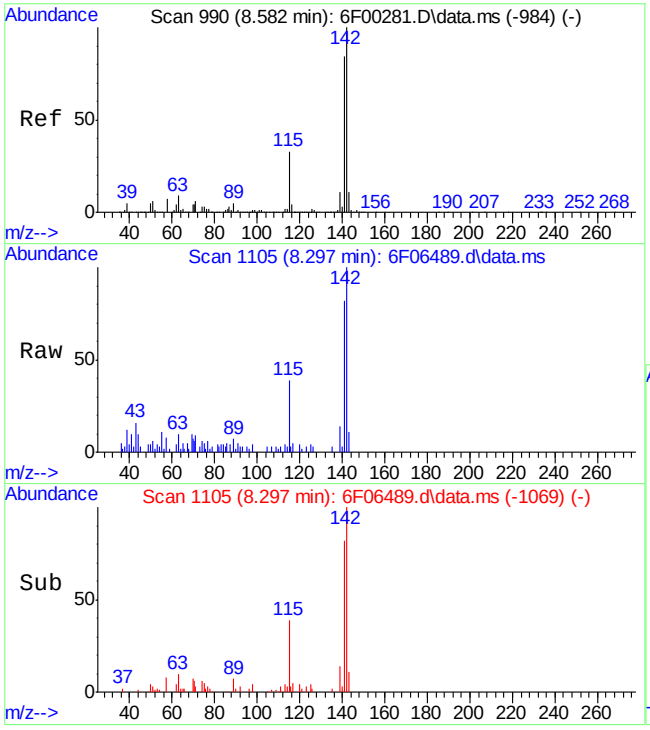


#34
Naphthalene
Concen: 0.155 ppm
RT: 7.489 min Scan# 954
Delta R.T. -0.005 min
Lab File: 6F06489.d
Acq: 11 Aug 2020 2:12 pm

Tgt Ion:128 Resp: 6088

Ion	Ratio	Lower	Upper
128	100		
129	11.1	0.0	40.4
102	17.5	0.0	39.2

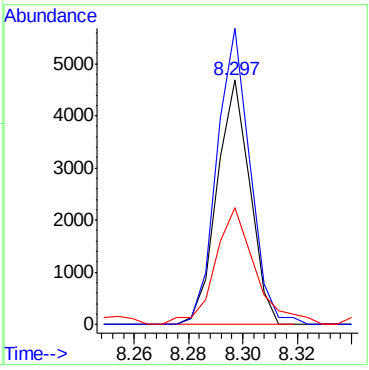


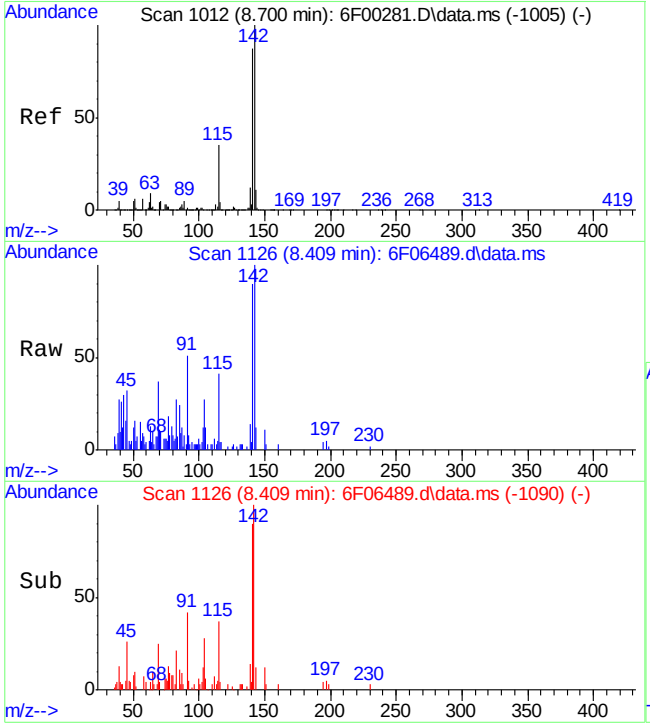


#40
2-Methylnaphthalene
Concen: 0.171 ppm
RT: 8.297 min Scan# 1105
Delta R.T. -0.005 min
Lab File: 6F06489.d
Acq: 11 Aug 2020 2:12 pm

Tgt Ion:141 Resp: 3930

Ion	Ratio	Lower	Upper
141	100		
142	120.0	88.9	148.9
115	45.7	9.7	69.7

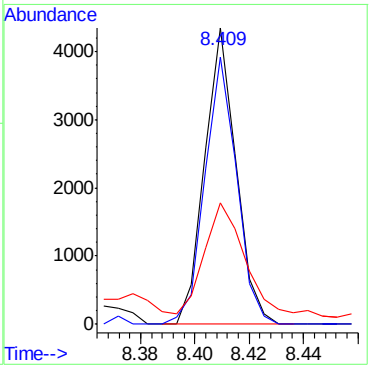


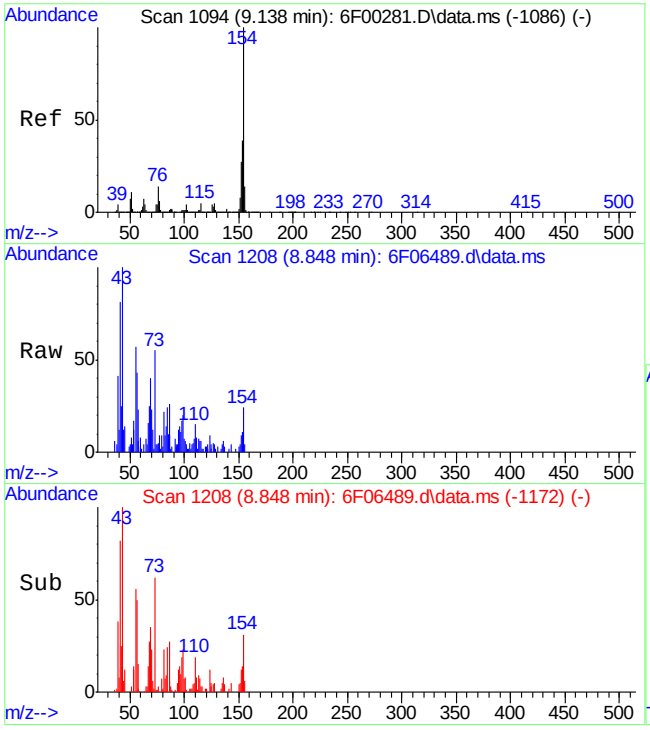


#41
1-Methylnaphthalene
Concen: 0.138 ppm
RT: 8.409 min Scan# 1126
Delta R.T. -0.006 min
Lab File: 6F06489.d
Acq: 11 Aug 2020 2:12 pm

Tgt Ion:142 Resp: 3475

Ion	Ratio	Lower	Upper
142	100		
141	90.3	56.8	116.8
115	36.9	4.7	64.7

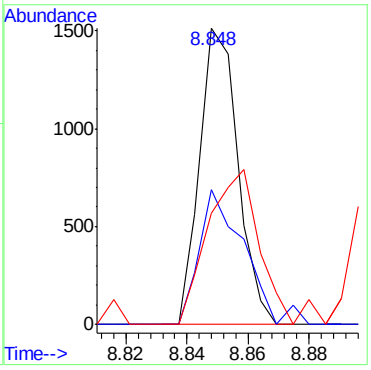


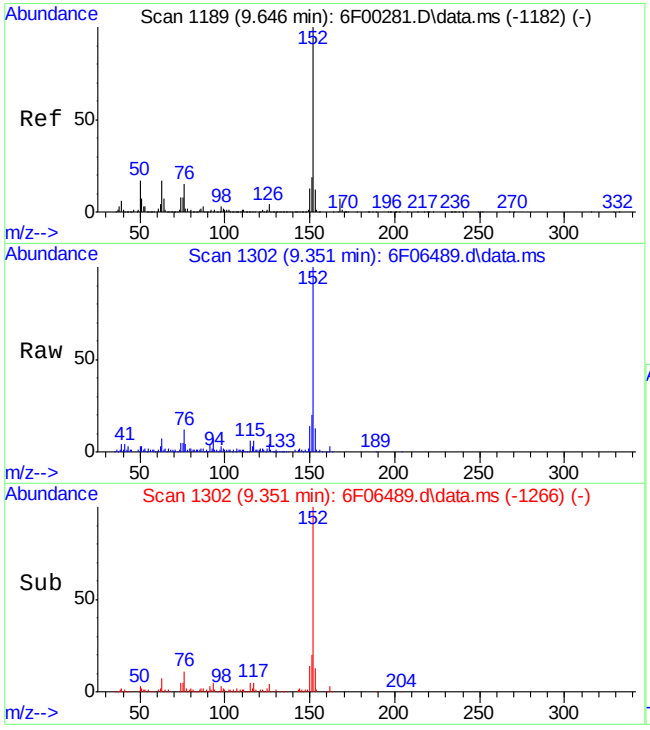


#48
1,1'-Biphenyl
Concen: 0.042 ppm
RT: 8.848 min Scan# 1208
Delta R.T. -0.005 min
Lab File: 6F06489.d
Acq: 11 Aug 2020 2:12 pm

Tgt Ion:154 Resp: 1313

Ion	Ratio	Lower	Upper
154	100		
153	42.2	8.7	68.7
152	37.5	0.0	56.7

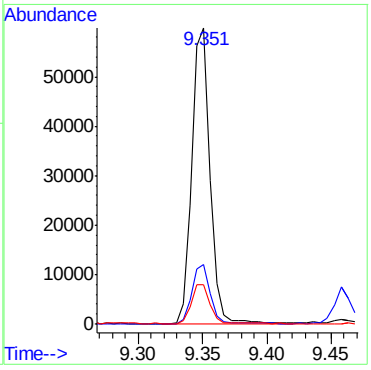


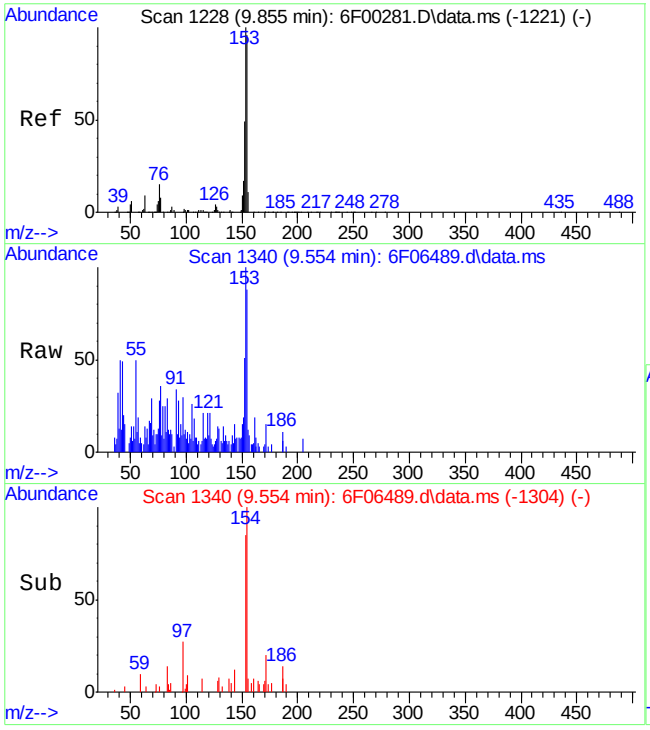


#52
Acenaphthylene
Concen: 1.623 ppm
RT: 9.351 min Scan# 1302
Delta R.T. -0.006 min
Lab File: 6F06489.d
Acq: 11 Aug 2020 2:12 pm

Tgt Ion:152 Resp: 60345

Ion	Ratio	Lower	Upper
152	100		
151	20.2	0.0	48.8
153	13.4	0.0	42.3

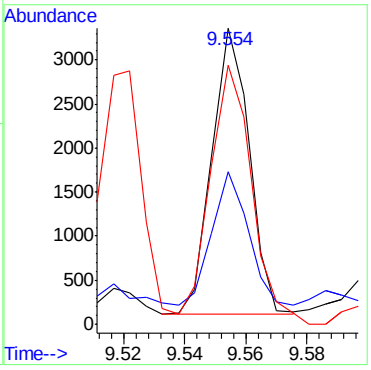


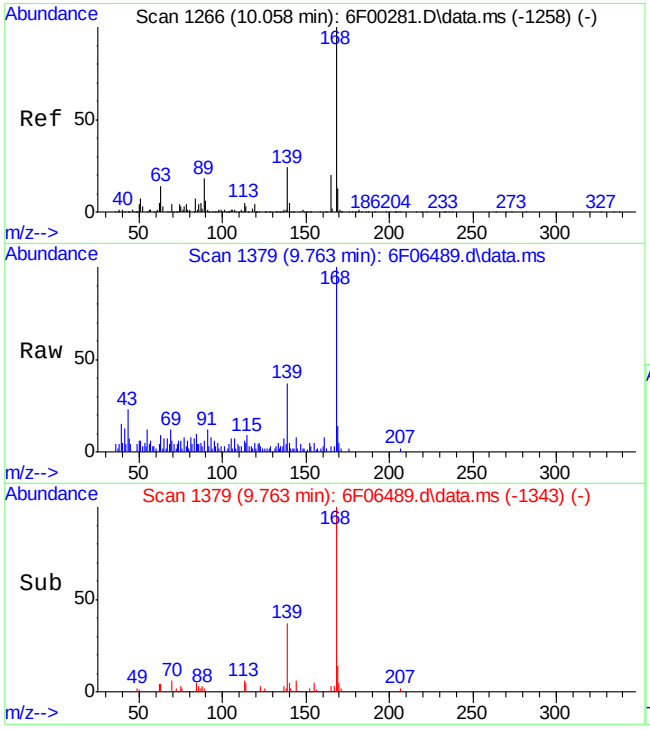


#57
Acenaphthene
Concen: 0.112 ppm
RT: 9.554 min Scan# 1340
Delta R.T. -0.005 min
Lab File: 6F06489.d
Acq: 11 Aug 2020 2:12 pm

Tgt Ion:153 Resp: 2763

Ion	Ratio	Lower	Upper
153	100		
152	46.2	19.4	79.4
154	86.3	65.6	125.6

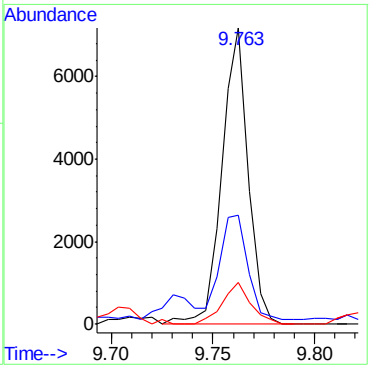


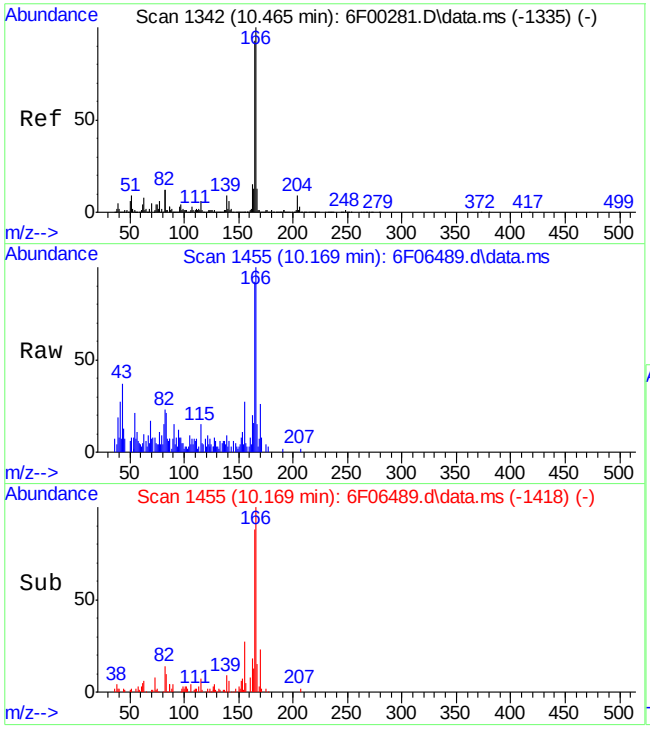


#60
Dibenzofuran
Concen: 0.188 ppm
RT: 9.763 min Scan# 1379
Delta R.T. -0.005 min
Lab File: 6F06489.d
Acq: 11 Aug 2020 2:12 pm

Tgt Ion:168 Resp: 6427

Ion	Ratio	Lower	Upper
168	100		
139	33.2	0.0	53.6
169	13.4	0.0	42.6

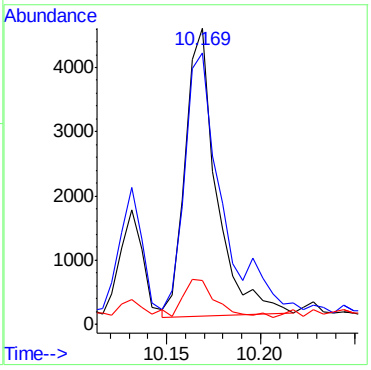


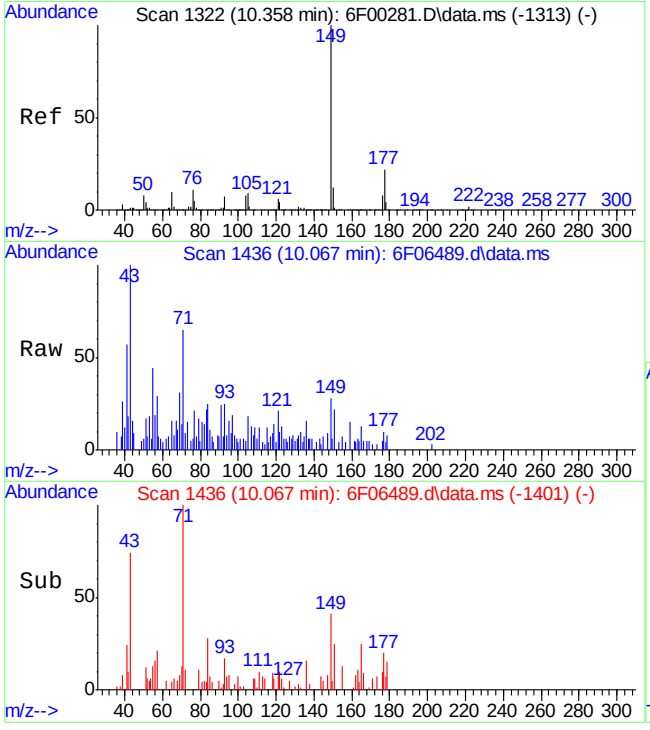


#65
Fluorene
Concen: 0.186 ppm
RT: 10.169 min Scan# 1455
Delta R.T. -0.000 min
Lab File: 6F06489.d
Acq: 11 Aug 2020 2:12 pm

Tgt Ion:166 Resp: 5145

Ion	Ratio	Lower	Upper
166	100		
165	89.6	62.6	122.6
167	13.7	0.0	43.1

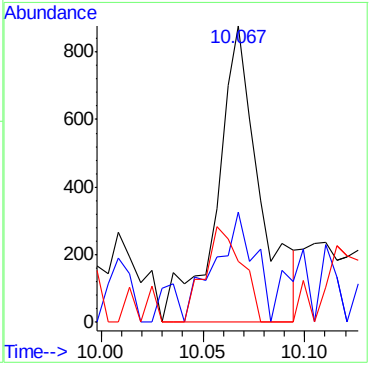


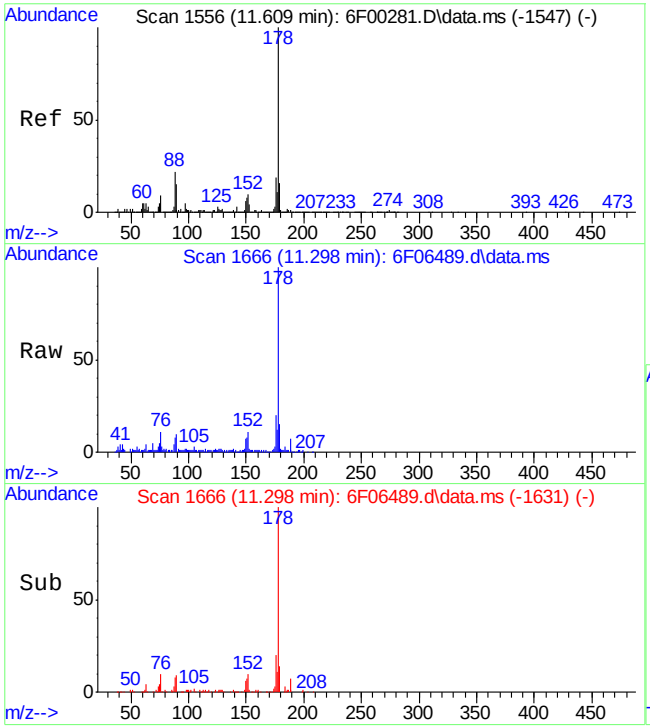


#67
Diethylphthalate
Concen: 0.046 ppm
RT: 10.067 min Scan# 1436
Delta R.T. -0.011 min
Lab File: 6F06489.d
Acq: 11 Aug 2020 2:12 pm

Tgt Ion:149 Resp: 1295

Ion	Ratio	Lower	Upper
149	100		
177	27.8	0.0	52.2
150	23.5	0.0	41.7

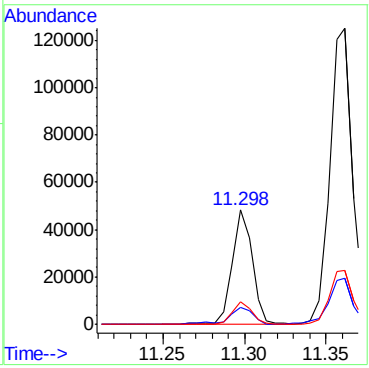


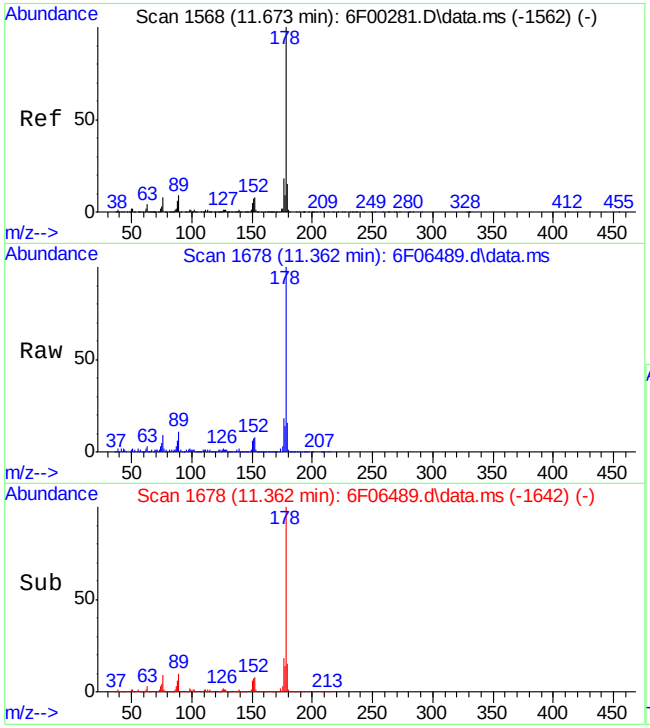


#84
Phenanthrene
Concen: 1.040 ppm
RT: 11.298 min Scan# 1666
Delta R.T. -0.011 min
Lab File: 6F06489.d
Acq: 11 Aug 2020 2:12 pm

Tgt Ion:178 Resp: 41897

Ion	Ratio	Lower	Upper
178	100		
179	14.0	0.0	46.0
176	20.0	0.0	49.0

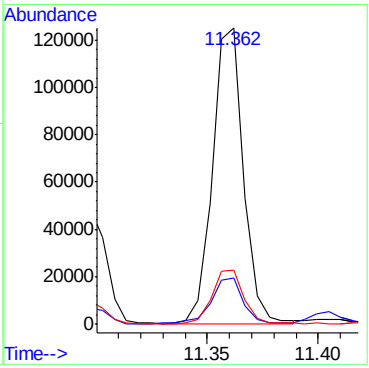


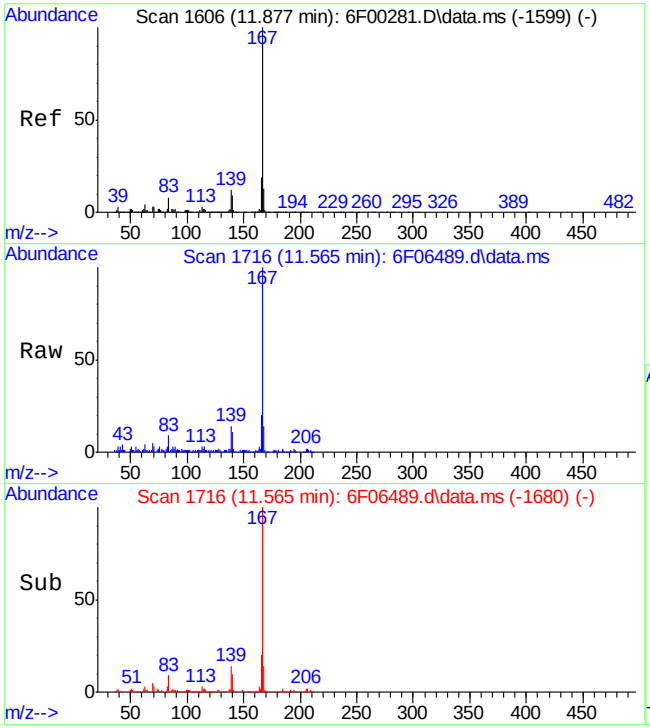


#85
Anthracene
Concen: 2.960 ppm
RT: 11.362 min Scan# 1678
Delta R.T. -0.005 min
Lab File: 6F06489.d
Acq: 11 Aug 2020 2:12 pm

Tgt Ion:178 Resp: 121216

Ion	Ratio	Lower	Upper
178	100		
179	15.3	0.0	45.4
176	18.1	0.0	47.7

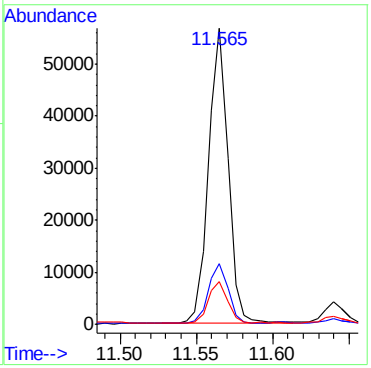


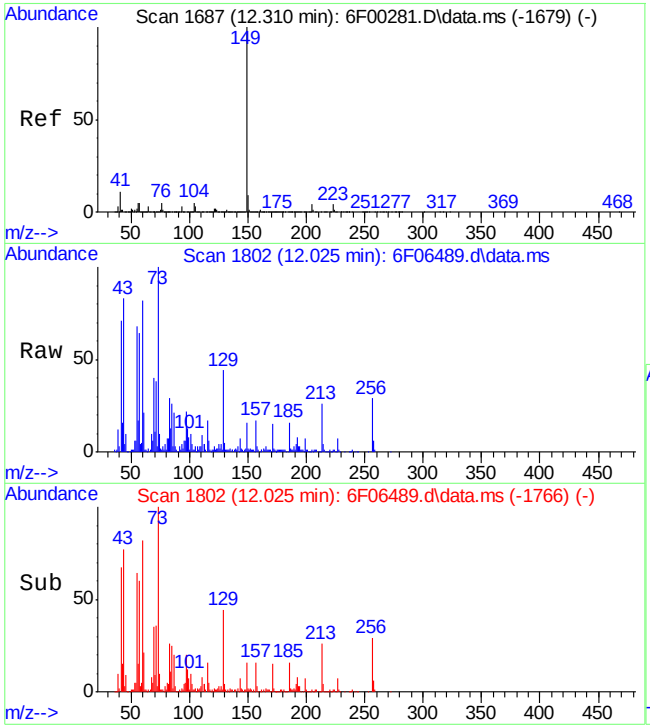


#87
Carbazole
Concen: 1.375 ppm
RT: 11.565 min Scan# 1716
Delta R.T. -0.005 min
Lab File: 6F06489.d
Acq: 11 Aug 2020 2:12 pm

Tgt Ion:167 Resp: 50752

Ion	Ratio	Lower	Upper
167	100		
166	19.9	0.0	49.2
139	13.9	0.0	42.3

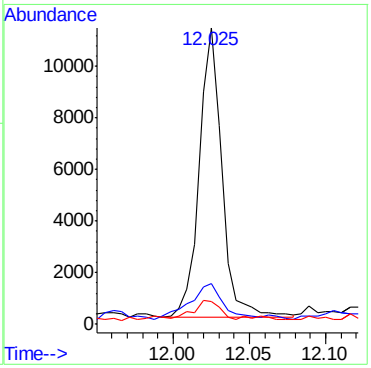


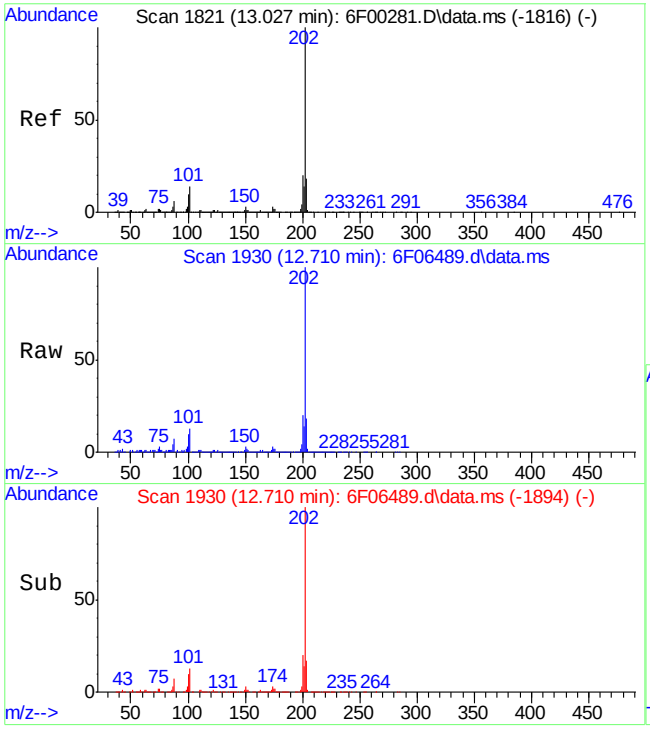


#89
Di-n-butylphthalate
Concen: 0.249 ppm
RT: 12.025 min Scan# 1802
Delta R.T. -0.005 min
Lab File: 6F06489.d
Acq: 11 Aug 2020 2:12 pm

Tgt Ion:149 Resp: 11580

Ion	Ratio	Lower	Upper
149	100		
150	11.7	0.0	38.7
104	6.1	0.0	35.2

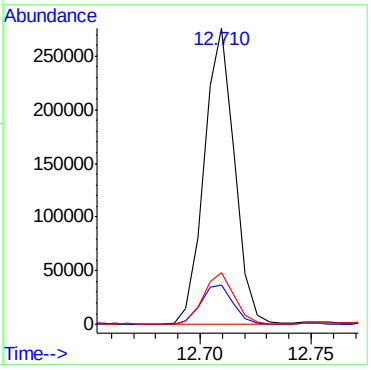


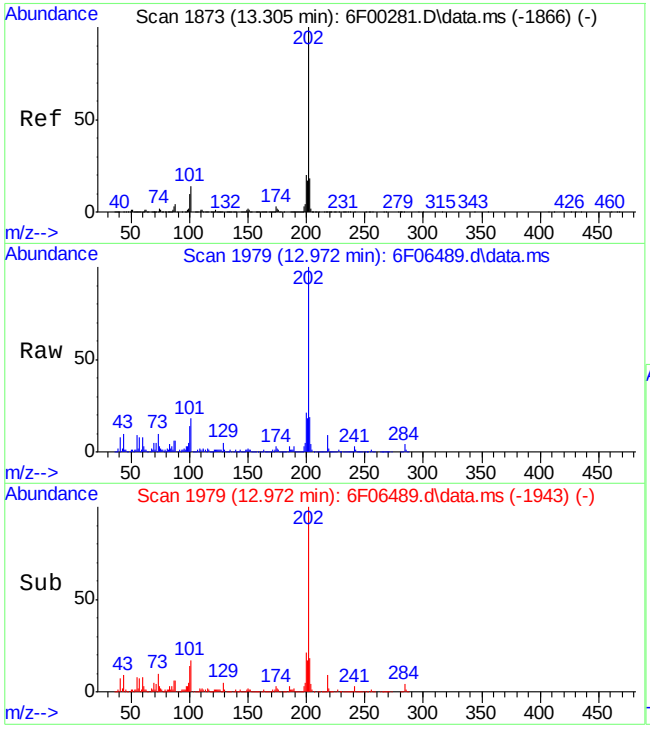


#91
Fluoranthene
Concen: 6.166 ppm
RT: 12.710 min Scan# 1930
Delta R.T. -0.006 min
Lab File: 6F06489.d
Acq: 11 Aug 2020 2:12 pm

Tgt Ion:202 Resp: 261604

Ion	Ratio	Lower	Upper
202	100		
101	13.2	0.0	43.6
203	17.4	0.0	47.7

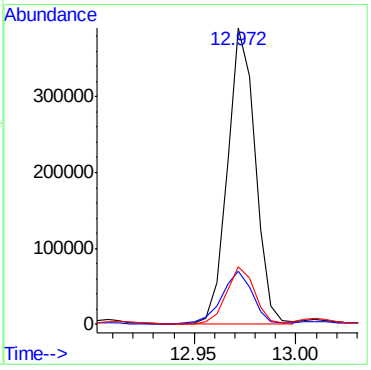


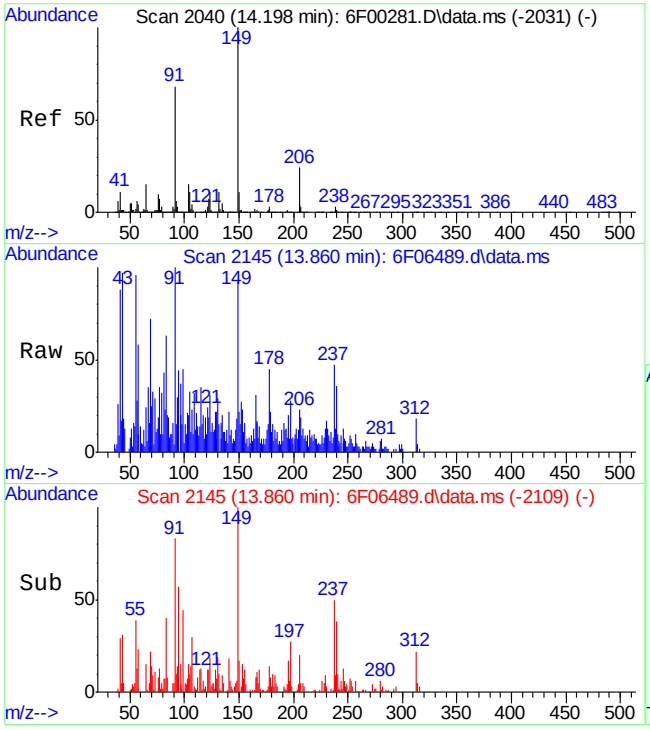


#94
Pyrene
Concen: 8.837 ppm
RT: 12.972 min Scan# 1979
Delta R.T. -0.005 min
Lab File: 6F06489.d
Acq: 11 Aug 2020 2:12 pm

Tgt Ion:202 Resp: 369545

Ion	Ratio	Lower	Upper
202	100		
101	17.4	0.0	43.8
203	18.9	0.0	47.8

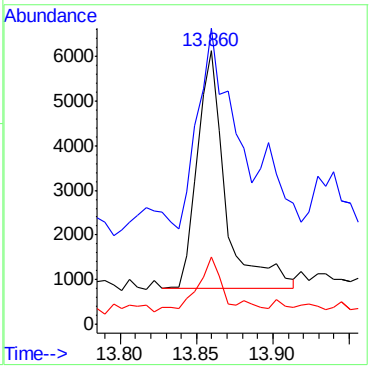


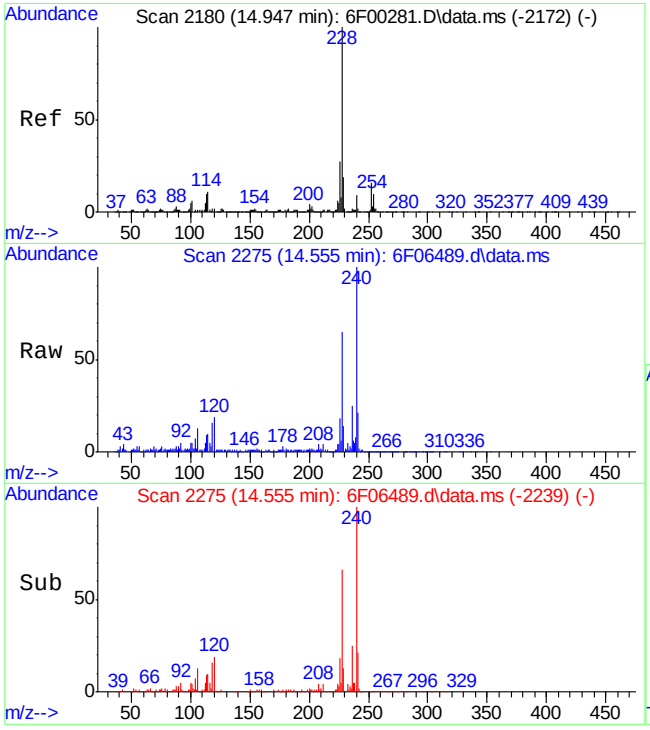


#97
Butylbenzylphthalate
Concen: 0.339 ppm
RT: 13.860 min Scan# 2145
Delta R.T. -0.005 min
Lab File: 6F06489.d
Acq: 11 Aug 2020 2:12 pm

Tgt Ion:149 Resp: 6795

Ion	Ratio	Lower	Upper
149	100		
91	76.9	38.2	98.2
206	21.6	0.0	54.0

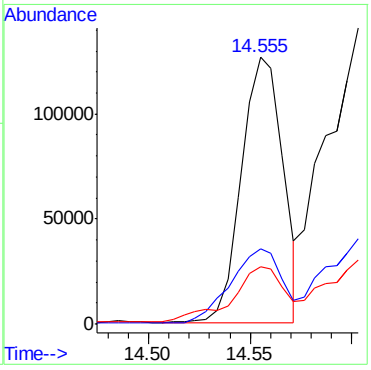


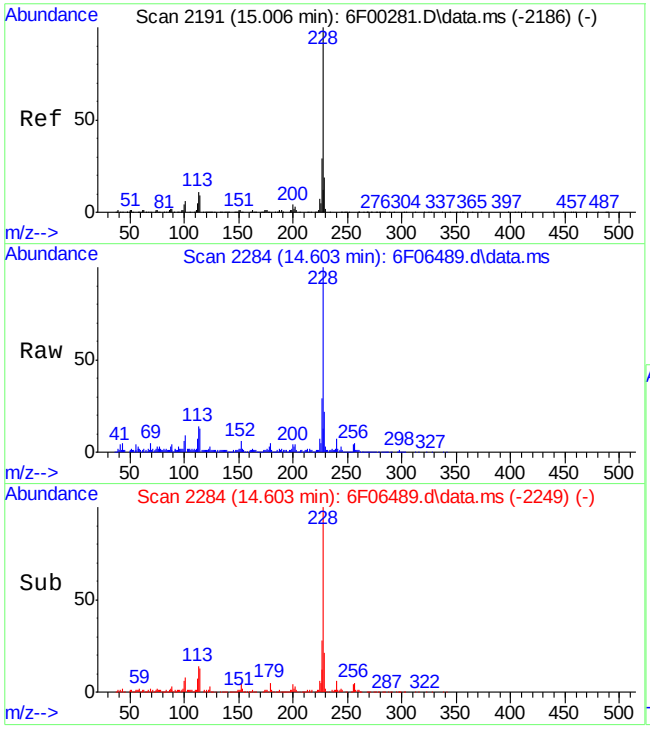


#99
Benzo[a]anthracene
Concen: 4.606 ppm
RT: 14.555 min Scan# 2275
Delta R.T. -0.005 min
Lab File: 6F06489.d
Acq: 11 Aug 2020 2:12 pm

Tgt Ion:228 Resp: 180183

Ion	Ratio	Lower	Upper
228	100		
226	27.9	0.0	56.6
229	19.8	0.0	48.9

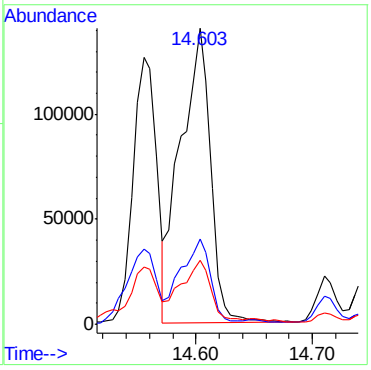


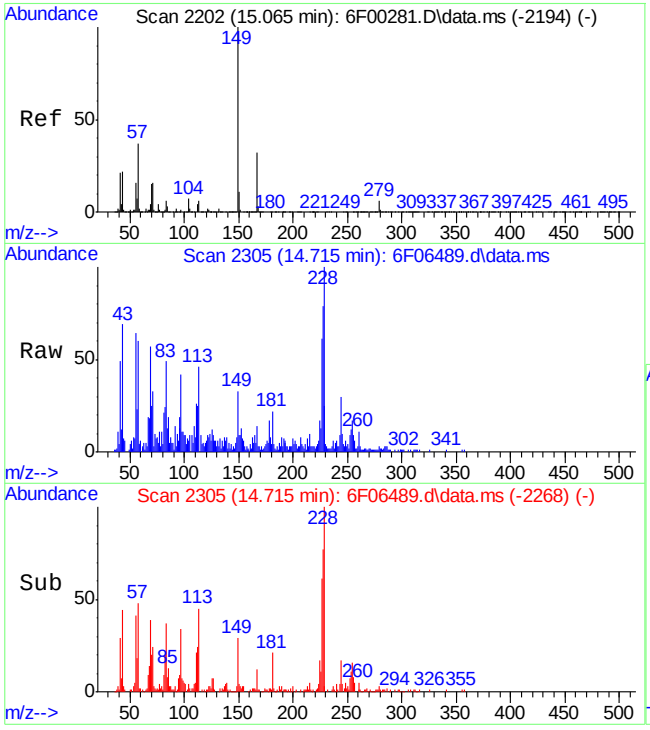


#100
Chrysene
Concen: 6.574 ppm
RT: 14.603 min Scan# 2284
Delta R.T. -0.011 min
Lab File: 6F06489.d
Acq: 11 Aug 2020 2:12 pm

Tgt Ion:228 Resp: 249554

Ion	Ratio	Lower	Upper
228	100		
226	28.5	0.0	58.9
229	20.4	0.0	48.5

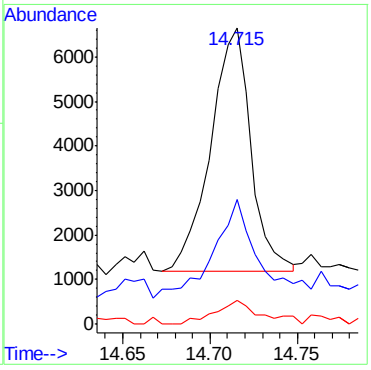


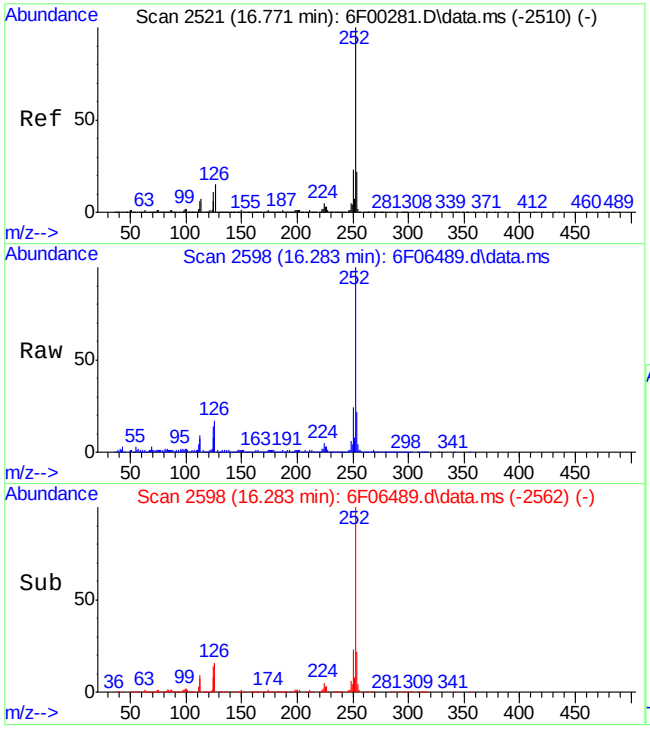


#101
bis(2-Ethylhexyl)phthalate
Concen: 0.315 ppm
RT: 14.715 min Scan# 2305
Delta R.T. -0.000 min
Lab File: 6F06489.d
Acq: 11 Aug 2020 2:12 pm

Tgt Ion:149 Resp: 8824

Ion	Ratio	Lower	Upper
149	100		
167	36.4	1.7	61.7
279	8.2	0.0	35.7

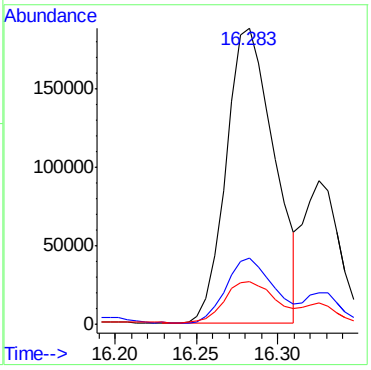


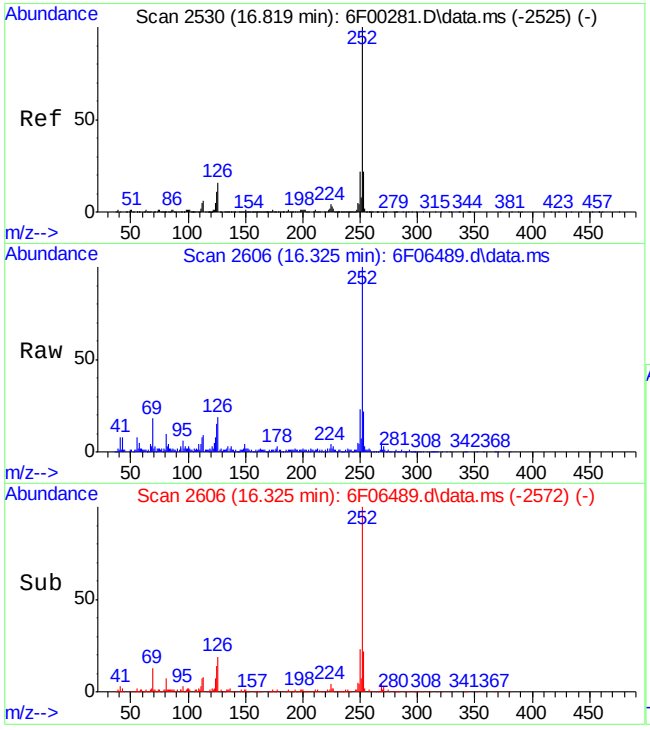


#104
Benzo[b]fluoranthene
Concen: 10.311 ppm
RT: 16.283 min Scan# 2598
Delta R.T. -0.005 min
Lab File: 6F06489.d
Acq: 11 Aug 2020 2:12 pm

Tgt Ion:252 Resp: 386484

Ion	Ratio	Lower	Upper
252	100		
253	22.0	0.0	51.9
125	13.3	0.0	41.3

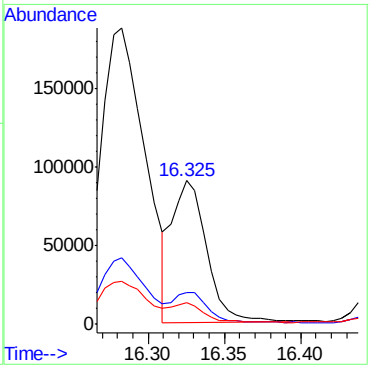


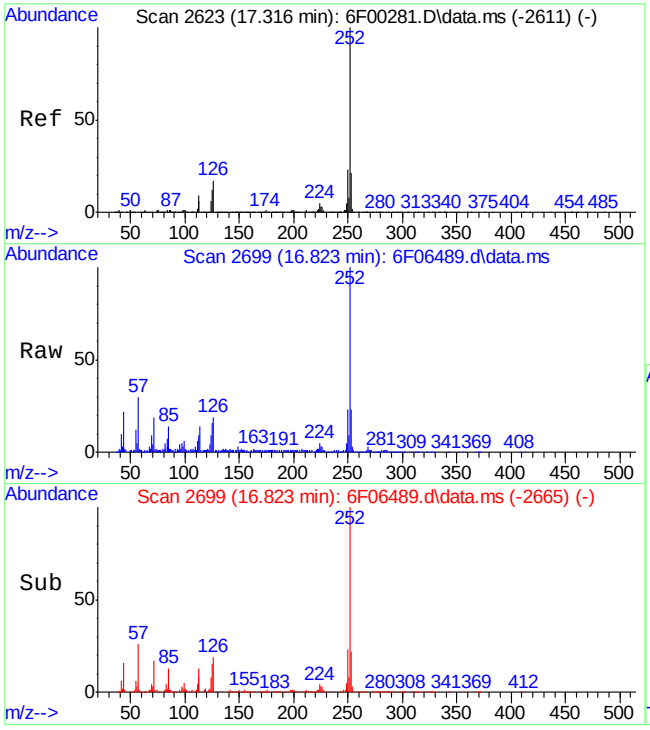


#105
Benzo[k]fluoranthene
Concen: 3.668 ppm
RT: 16.325 min Scan# 2606
Delta R.T. -0.016 min
Lab File: 6F06489.d
Acq: 11 Aug 2020 2:12 pm

Tgt Ion:252 Resp: 142999

Ion	Ratio	Lower	Upper
252	100		
253	21.9	0.0	51.7
125	12.9	0.0	40.7

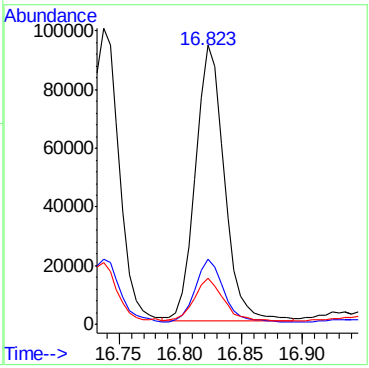


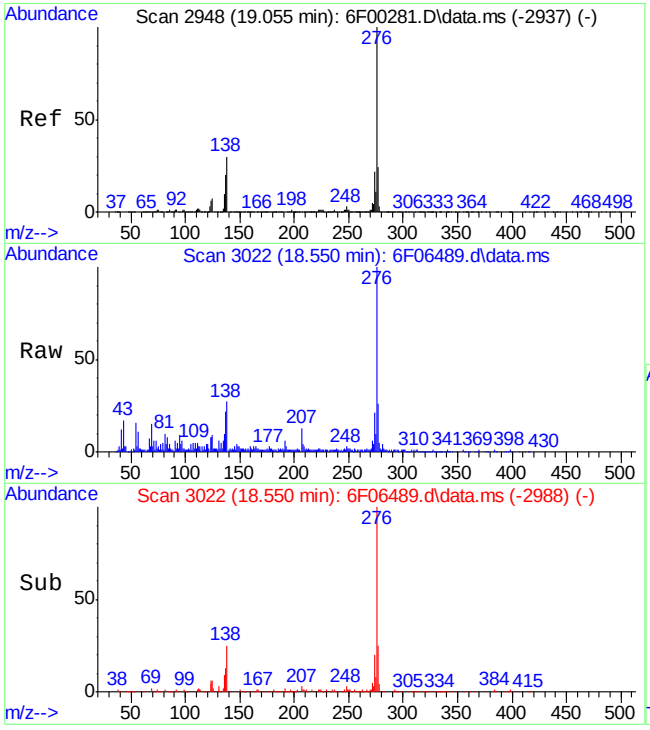


#106
Benzo[a]pyrene
Concen: 4.452 ppm
RT: 16.823 min Scan# 2699
Delta R.T. -0.016 min
Lab File: 6F06489.d
Acq: 11 Aug 2020 2:12 pm

Tgt Ion:252 Resp: 154960

Ion	Ratio	Lower	Upper
252	100		
253	23.1	0.0	51.0
125	15.4	0.0	42.0

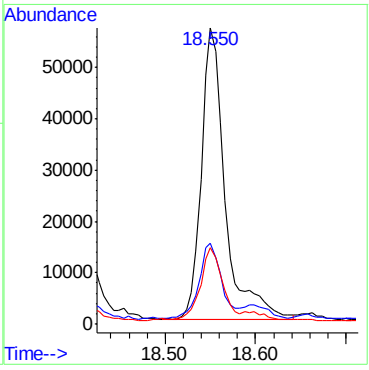


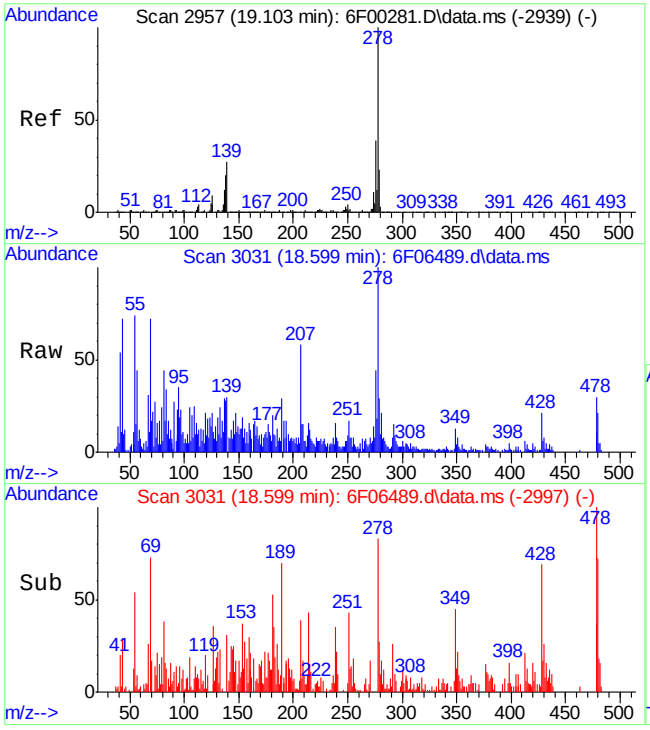


#107
Indeno[1,2,3-cd]pyrene
Concen: 3.207 ppm
RT: 18.550 min Scan# 3022
Delta R.T. -0.016 min
Lab File: 6F06489.d
Acq: 11 Aug 2020 2:12 pm

Tgt Ion:276 Resp: 103917

Ion	Ratio	Lower	Upper
276	100		
138	26.1	0.0	59.6
277	24.5	0.0	54.1

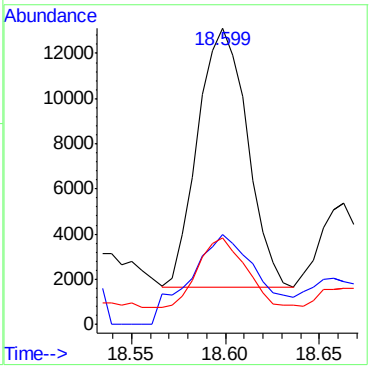


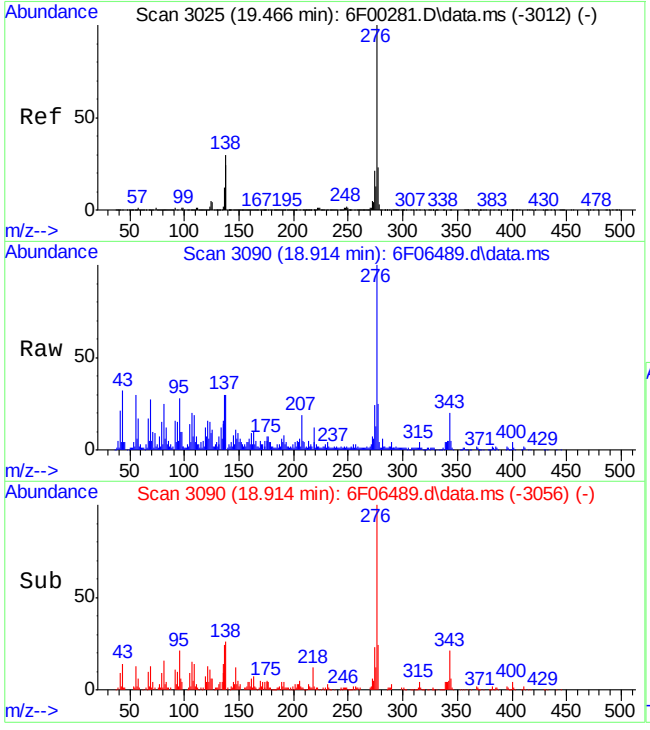


#108
Dibenz[a,h]anthracene
Concen: 0.604 ppm
RT: 18.599 min Scan# 3031
Delta R.T. -0.016 min
Lab File: 6F06489.d
Acq: 11 Aug 2020 2:12 pm

Tgt Ion:278 Resp: 20907

Ion	Ratio	Lower	Upper
278	100		
139	21.9	0.0	56.9
279	26.5	0.0	53.0

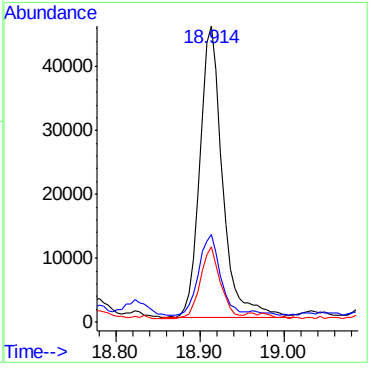




#109
Benzo[g,h,i]perylene
Concen: 2.417 ppm
RT: 18.914 min Scan# 3090
Delta R.T. -0.016 min
Lab File: 6F06489.d
Acq: 11 Aug 2020 2:12 pm

Tgt Ion:276 Resp: 84561

Ion	Ratio	Lower	Upper
276	100		
138	27.5	0.0	59.5
277	24.4	0.0	53.0



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06490.d
Acq On : 11 Aug 2020 2:38 pm
Operator : marthav
Sample : fa77581-8 E Inst : MSBNA10
Misc : op81484,S6F251,30.0,,,1,1,soil
ALS Vial : 6 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Results File: 8270D6F072920.RES
Quant Time: Aug 12 06:08:25 2020
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

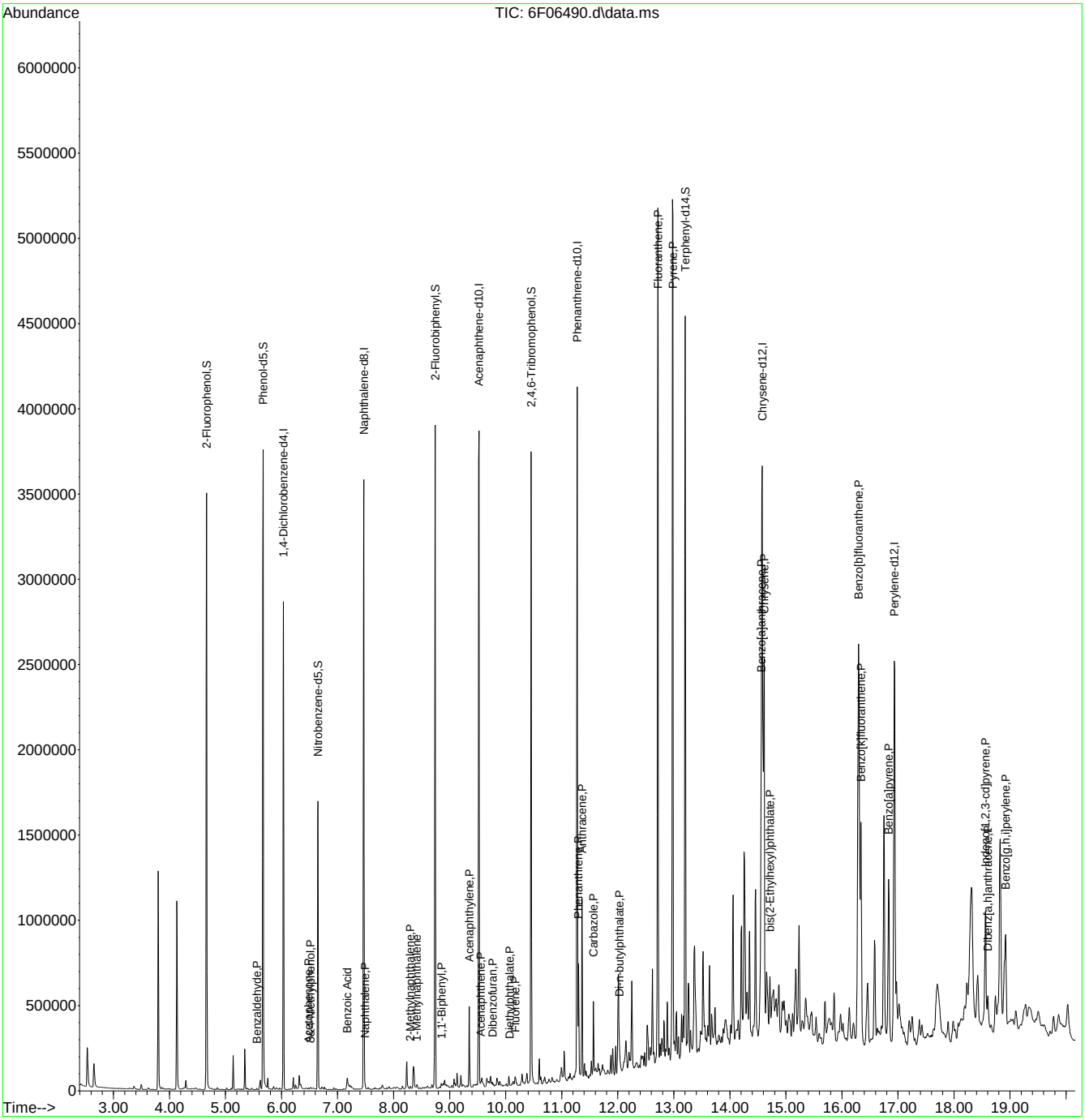
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	6.035	152	399115	40.00	ppm		0.00
22) Naphthalene-d8	7.468	136	1524247	40.00	ppm		0.00
43) Acenaphthene-d10	9.522	164	829257	40.00	ppm		0.00
70) Phenanthrene-d10	11.276	188	1517235	40.00	ppm		0.00
92) Chrysene-d12	14.576	240	1316308	40.00	ppm		0.00
102) Perylene-d12	16.935	264	1252556	40.00	ppm		0.00
System Monitoring Compounds							
7) 2-Fluorophenol	4.660	112	928343	61.56	ppm		0.00
Spiked Amount 100.000	Range 40 - 102		Recovery = 61.56%				
9) Phenol-d5	5.671	99	1275827	71.26	ppm		0.00
Spiked Amount 100.000	Range 41 - 100		Recovery = 71.26%				
23) Nitrobenzene-d5	6.650	82	515576	30.83	ppm		0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 61.66%				
47) 2-Fluorobiphenyl	8.741	172	1097063	33.85	ppm		0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 67.70%				
75) 2,4,6-Tribromophenol	10.453	330	413784	81.03	ppm		0.00
Spiked Amount 100.000	Range 42 - 108		Recovery = 81.03%				
95) Terphenyl-d14	13.202	244	1375645	37.18	ppm		0.00
Spiked Amount 50.000	Range 45 - 119		Recovery = 74.36%				
Target Compounds							Qvalue
5) Benzaldehyde	5.559	106	2071	0.17	ppm		82
18) Acetophenone	6.478	105	2270	0.11	ppm		91
21) 3&4-Methylphenol	6.516	108	2127	0.15	ppm		94
30) Benzoic Acid	7.174	105	22612	2.29	ppm		99
34) Naphthalene	7.489	128	6471	0.15	ppm	#	37
40) 2-Methylnaphthalene	8.297	141	2828	0.11	ppm		95
41) 1-Methylnaphthalene	8.409	142	2604	0.09	ppm		92
48) 1,1'-Biphenyl	8.853	154	1716	0.05	ppm		95
52) Acenaphthylene	9.351	152	195843	4.73	ppm		98
57) Acenaphthene	9.554	153	7293	0.26	ppm		89
60) Dibenzofuran	9.763	168	8756	0.23	ppm		82
65) Fluorene	10.169	166	18935	0.61	ppm		99
67) Diethylphthalate	10.067	149	1374	0.04	ppm		90
84) Phenanthrene	11.298	178	249045	5.48	ppm		99
85) Anthracene	11.362	178	393990	8.53	ppm		98
87) Carbazole	11.565	167	164499	3.95	ppm		96
89) Di-n-butylphthalate	12.025	149	6861	0.13	ppm		82
91) Fluoranthene	12.715	202	2072025	43.32	ppm		98
94) Pyrene	12.982	202	2085860	44.24	ppm		98
99) Benzo[a]anthracene	14.560	228	662040	15.01	ppm		98
100) Chrysene	14.614	228	1233323	28.82	ppm		98
101) bis(2-Ethylhexyl)phtha...	14.715	149	6459	0.20	ppm		89
104) Benzo[b]fluoranthene	16.299	252	1784518	44.39	ppm		98
105) Benzo[k]fluoranthene	16.341	252	580147	13.87	ppm		97
106) Benzo[a]pyrene	16.833	252	510304	13.67	ppm		95
107) Indeno[1,2,3-cd]pyrene	18.561	276	424307	12.21	ppm		95
108) Dibenz[a,h]anthracene	18.604	278	82584	2.23	ppm		93
109) Benzo[g,h,i]perylene	18.919	276	332707	8.87	ppm		99

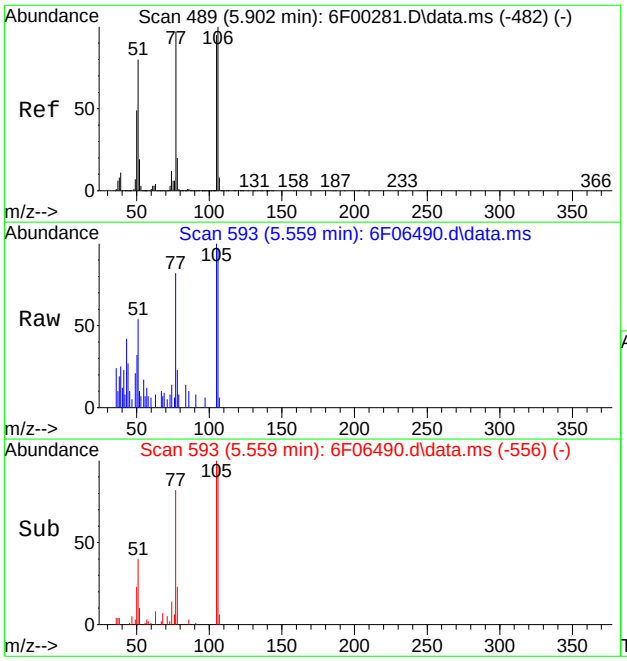
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06490.d
Acq On : 11 Aug 2020 2:38 pm
Operator : marthav
Sample : fa77581-8 E Inst : MSBNA10
Misc : op81484,S6F251,30.0,,,1,1,soil
ALS Vial : 6 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Results File: 8270D6F072920.RES
Quant Time: Aug 12 06:08:25 2020
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

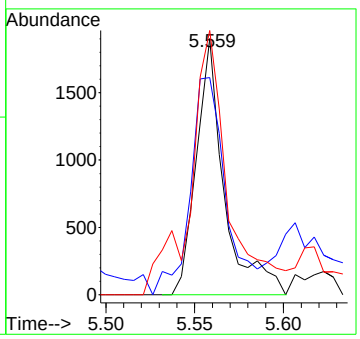


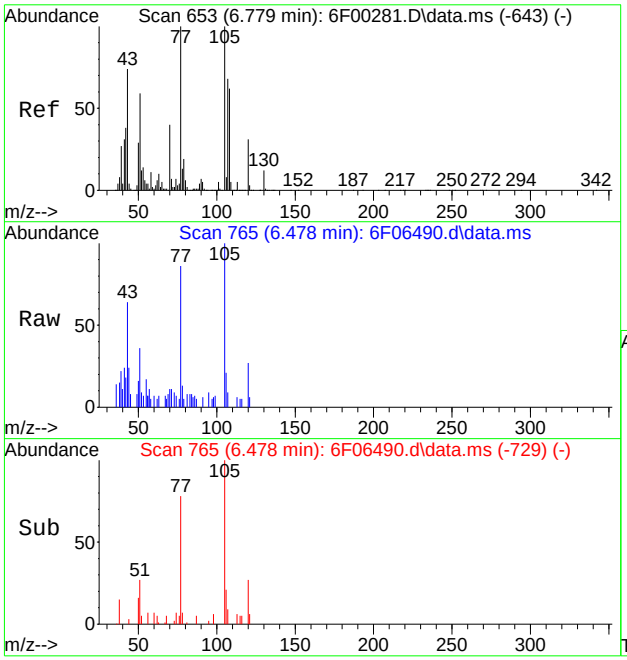


#5
Benzaldehyde
Concen: 0.17 ppm
RT: 5.559 min Scan# 593
Delta R.T. -0.000 min
Lab File: 6F06490.d
Acq: 11 Aug 2020 2:38 pm

Tgt Ion:106 Resp: 2071

Ion	Ratio	Lower	Upper
106	100		
77	68.4	67.1	127.1
105	89.7	65.1	125.1

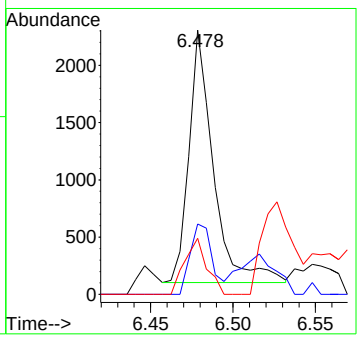


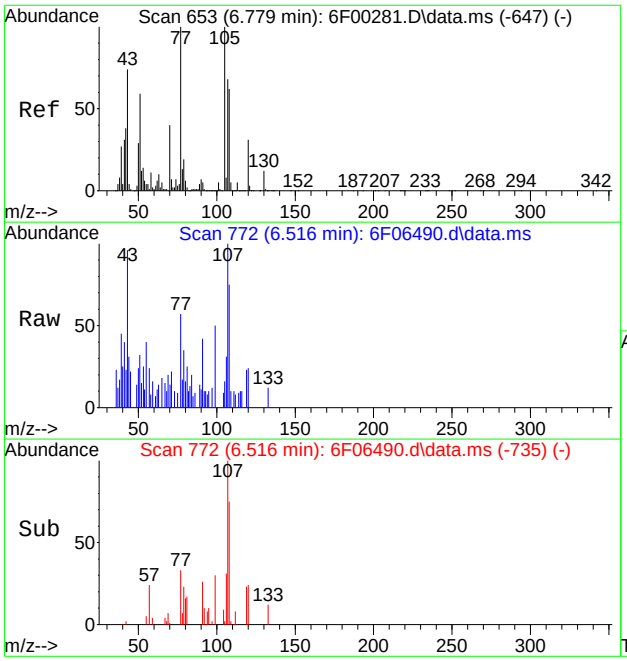


#18
Acetophenone
Concen: 0.11 ppm
RT: 6.478 min Scan# 765
Delta R.T. -0.006 min
Lab File: 6F06490.d
Acq: 11 Aug 2020 2:38 pm

Tgt Ion:105 Resp: 2270

Ion	Ratio	Lower	Upper
105	100		
120	24.6	0.7	60.7
106	8.9	0.0	38.4

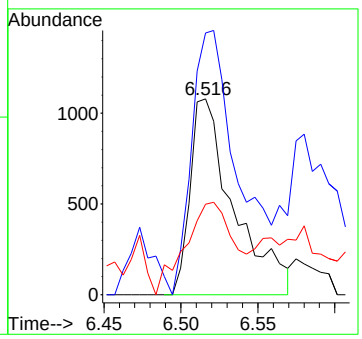


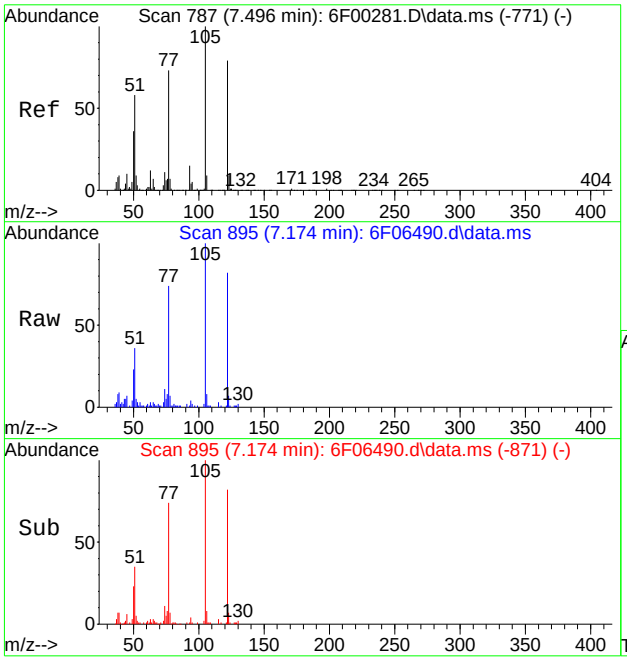


#21
3&4-Methylphenol
Concen: 0.15 ppm
RT: 6.516 min Scan# 772
Delta R.T. -0.000 min
Lab File: 6F06490.d
Acq: 11 Aug 2020 2:38 pm

Tgt Ion:108 Resp: 2127

Ion	Ratio	Lower	Upper
108	100		
107	116.6	80.3	140.3
79	26.1	0.2	60.2

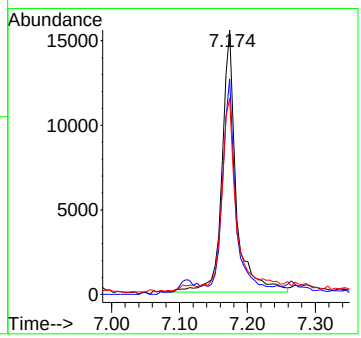


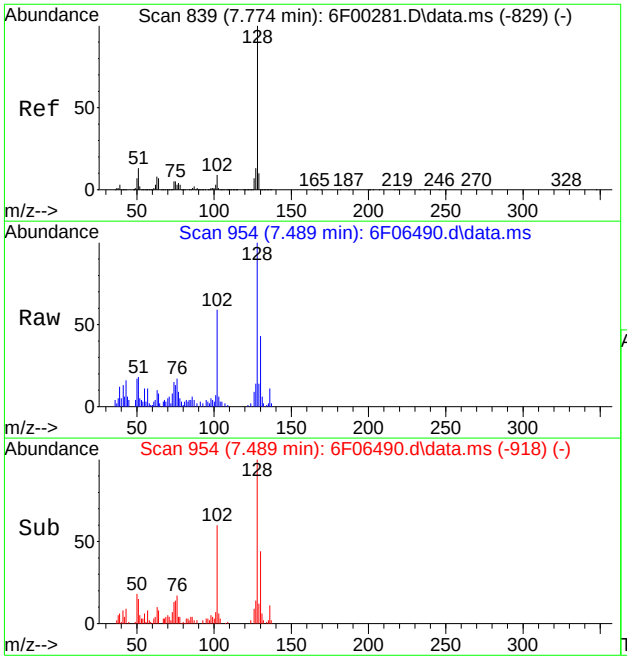


#30
Benzoic Acid
Concen: 2.29 ppm
RT: 7.174 min Scan# 895
Delta R.T. -0.070 min
Lab File: 6F06490.d
Acq: 11 Aug 2020 2:38 pm

Tgt Ion:105 Resp: 22612

Ion	Ratio	Lower	Upper
105	100		
122	80.6	49.5	109.5
77	72.3	43.0	103.0

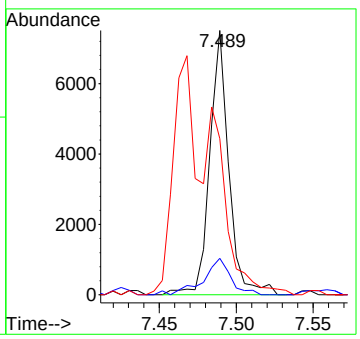


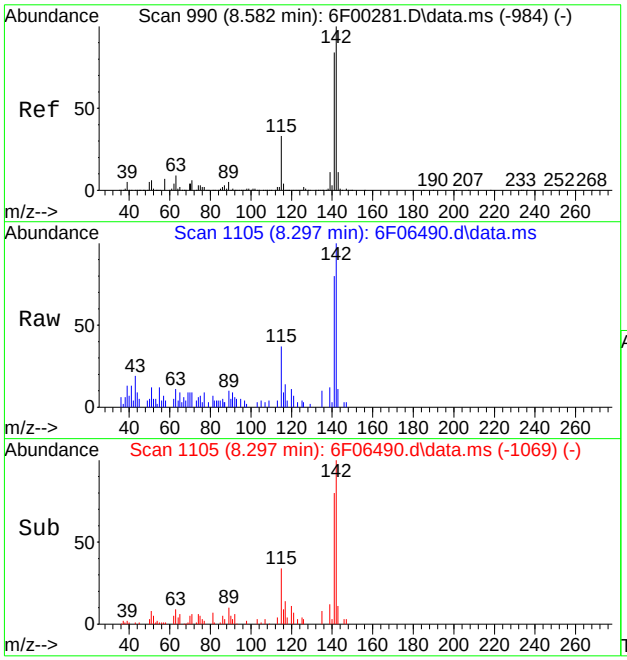


#34
Naphthalene
Concen: 0.15 ppm
RT: 7.489 min Scan# 954
Delta R.T. -0.006 min
Lab File: 6F06490.d
Acq: 11 Aug 2020 2:38 pm

Tgt Ion:128 Resp: 6471

Ion	Ratio	Lower	Upper
128	100		
129	13.1	0.0	40.4
102	55.4	0.0	39.2#

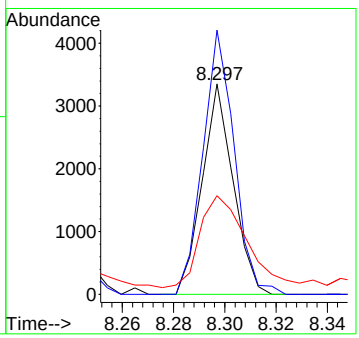


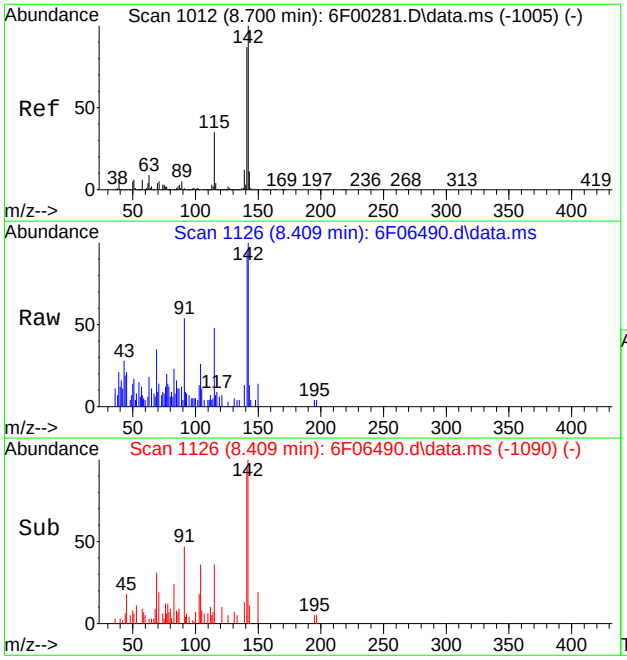


#40
2-Methylnaphthalene
Concen: 0.11 ppm
RT: 8.297 min Scan# 1105
Delta R.T. -0.006 min
Lab File: 6F06490.d
Acq: 11 Aug 2020 2:38 pm

Tgt Ion:141 Resp: 2828

Ion	Ratio	Lower	Upper
141	100		
142	125.6	88.9	148.9
115	41.9	9.7	69.7

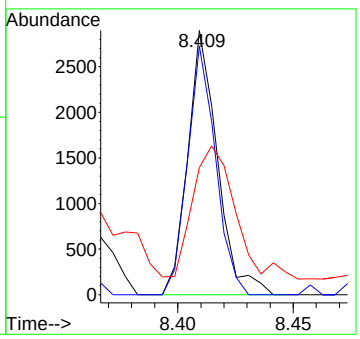


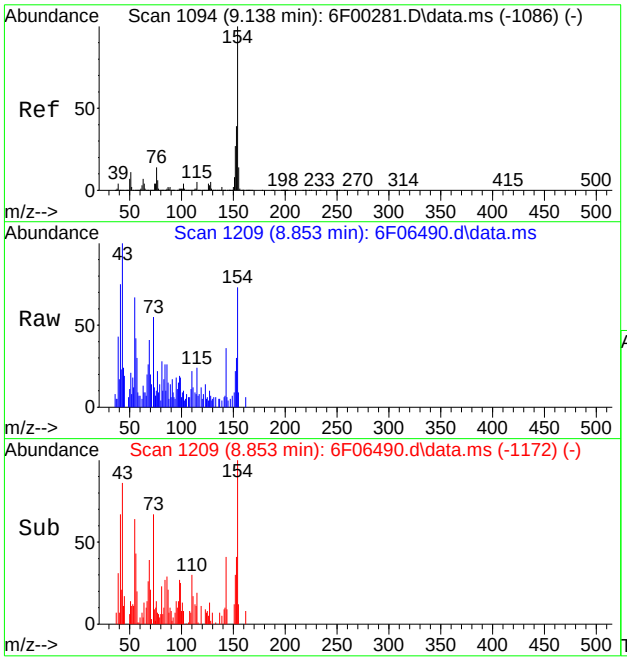


#41
1-Methylnaphthalene
Concen: 0.09 ppm
RT: 8.409 min Scan# 1126
Delta R.T. -0.006 min
Lab File: 6F06490.d
Acq: 11 Aug 2020 2:38 pm

Tgt Ion:142 Resp: 2604

Ion	Ratio	Lower	Upper
142	100		
141	94.1	56.8	116.8
115	40.4	4.7	64.7

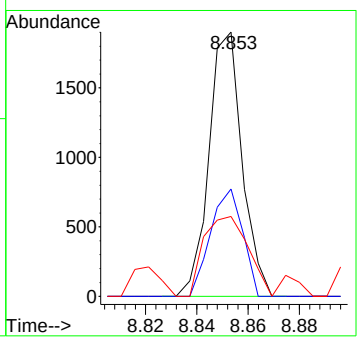


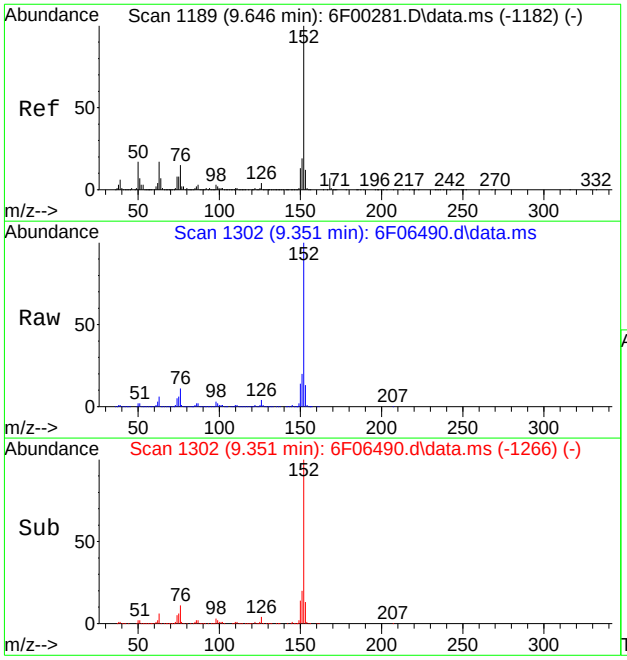


#48
1,1'-Biphenyl
Concen: 0.05 ppm
RT: 8.853 min Scan# 1209
Delta R.T. -0.000 min
Lab File: 6F06490.d
Acq: 11 Aug 2020 2:38 pm

Tgt Ion:154 Resp: 1716

Ion	Ratio	Lower	Upper
154	100		
153	40.6	8.7	68.7
152	23.3	0.0	56.7

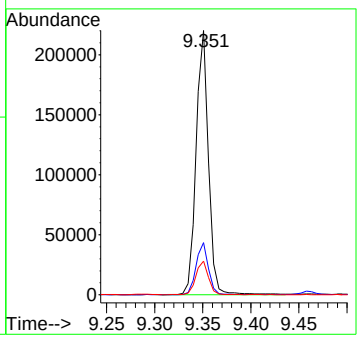


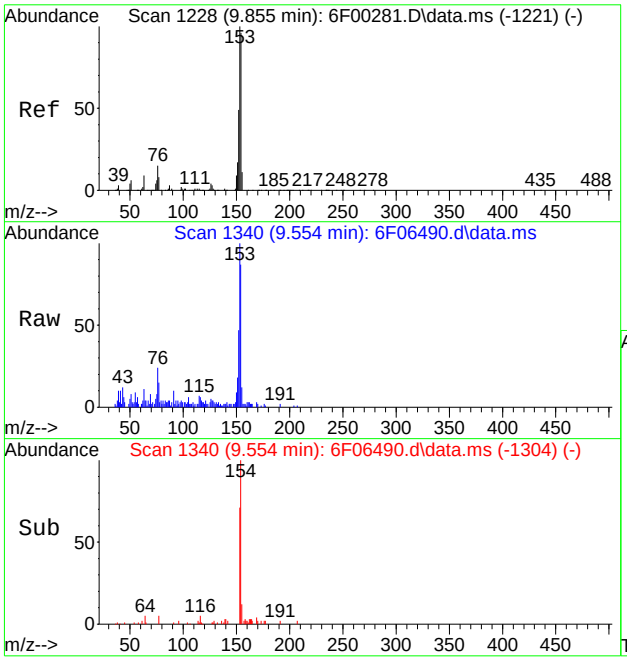


#52
Acenaphthylene
Concen: 4.73 ppm
RT: 9.351 min Scan# 1302
Delta R.T. -0.006 min
Lab File: 6F06490.d
Acq: 11 Aug 2020 2:38 pm

Tgt Ion:152 Resp: 195843

Ion	Ratio	Lower	Upper
152	100		
151	19.7	0.0	48.8
153	12.7	0.0	42.3

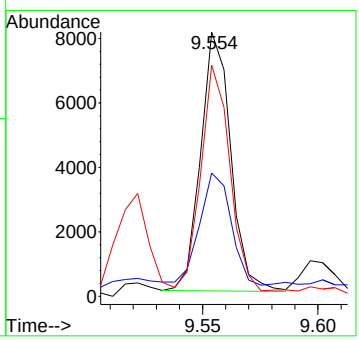


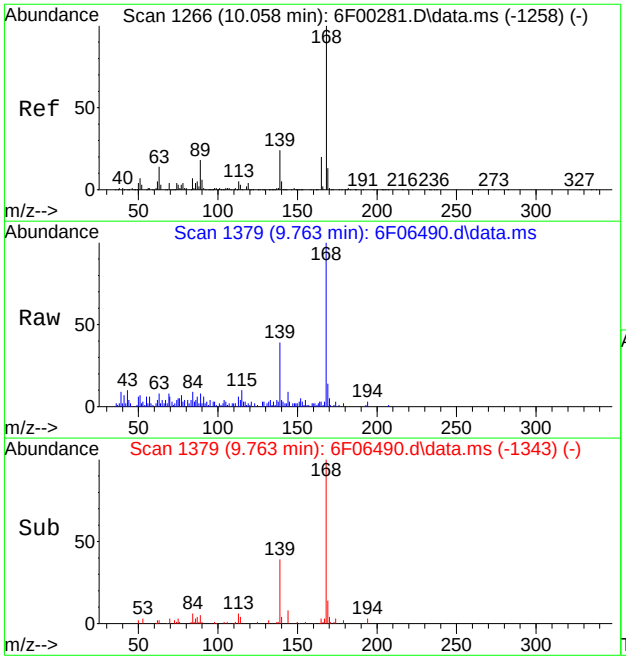


#57
Acenaphthene
Concen: 0.26 ppm
RT: 9.554 min Scan# 1340
Delta R.T. -0.006 min
Lab File: 6F06490.d
Acq: 11 Aug 2020 2:38 pm

Tgt Ion:153 Resp: 7293

Ion	Ratio	Lower	Upper
153	100		
152	42.3	19.4	79.4
154	84.9	65.6	125.6

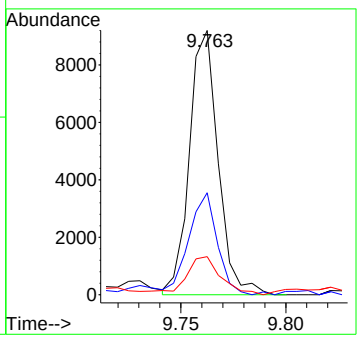


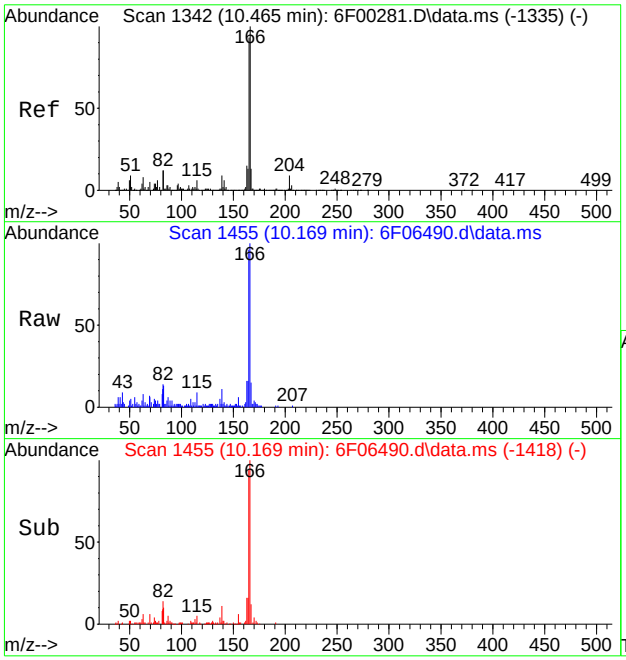


#60
Dibenzofuran
Concen: 0.23 ppm
RT: 9.763 min Scan# 1379
Delta R.T. -0.006 min
Lab File: 6F06490.d
Acq: 11 Aug 2020 2:38 pm

Tgt Ion:168 Resp: 8756

Ion	Ratio	Lower	Upper
168	100		
139	37.3	0.0	53.6
169	12.7	0.0	42.6

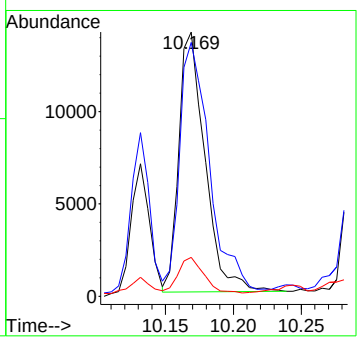


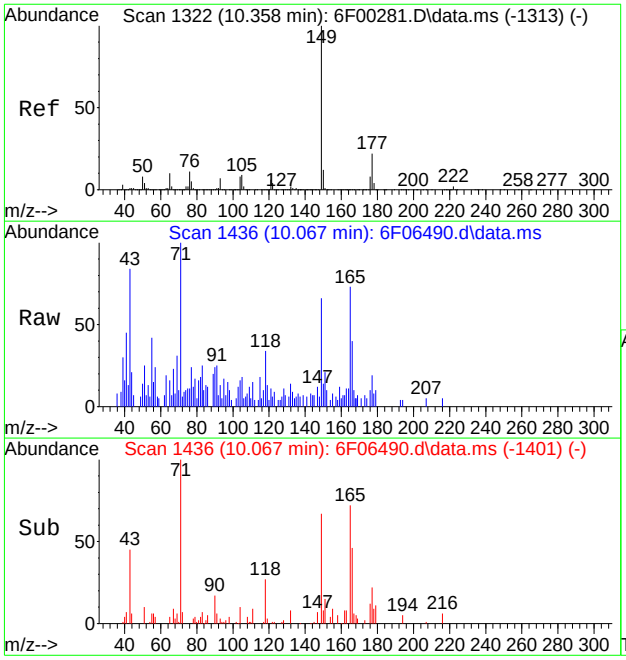


#65
Fluorene
Concen: 0.61 ppm
RT: 10.169 min Scan# 1455
Delta R.T. -0.000 min
Lab File: 6F06490.d
Acq: 11 Aug 2020 2:38 pm

Tgt Ion:166 Resp: 18935

Ion	Ratio	Lower	Upper
166	100		
165	93.5	62.6	122.6
167	12.1	0.0	43.1

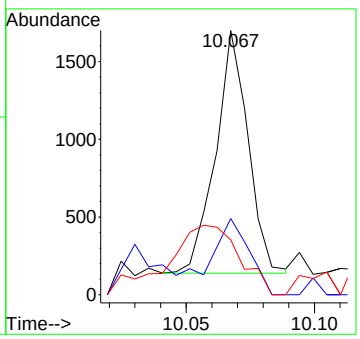


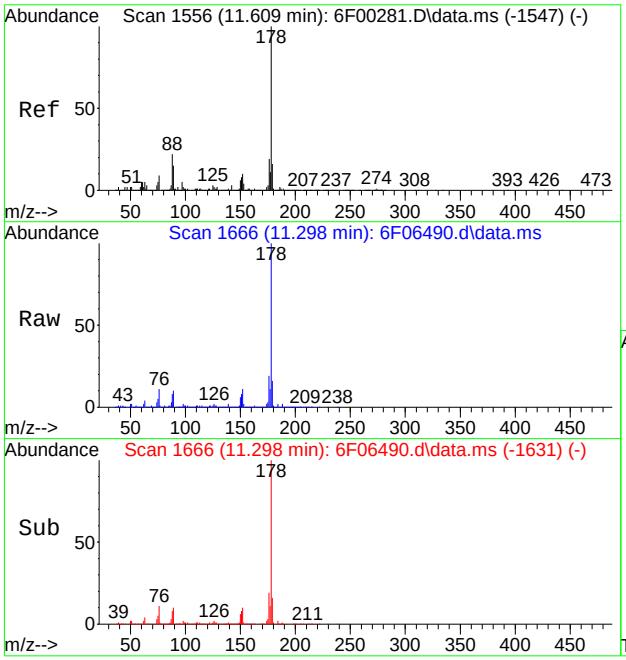


#67
Diethylphthalate
Concen: 0.04 ppm
RT: 10.067 min Scan# 1436
Delta R.T. -0.011 min
Lab File: 6F06490.d
Acq: 11 Aug 2020 2:38 pm

Tgt Ion:149 Resp: 1374

Ion	Ratio	Lower	Upper
149	100		
177	25.5	0.0	52.2
150	18.4	0.0	41.7

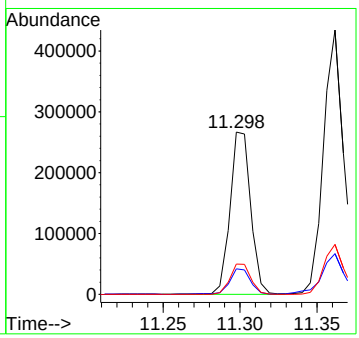


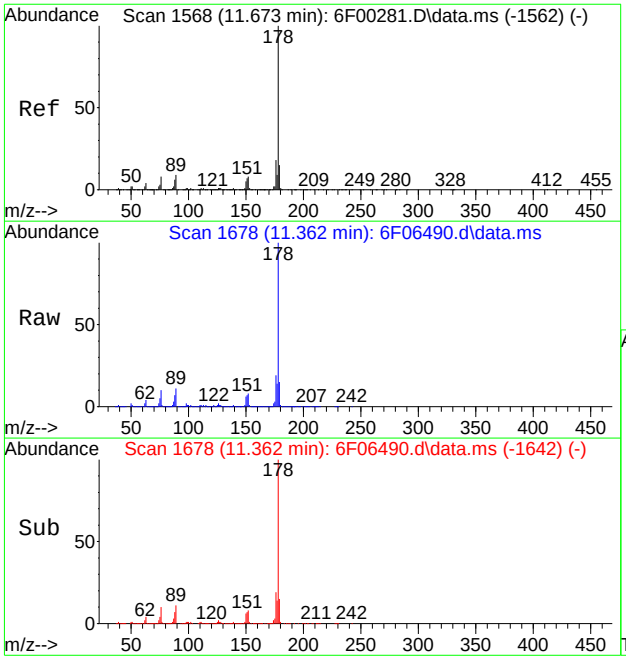


#84
Phenanthrene
Concen: 5.48 ppm
RT: 11.298 min Scan# 1666
Delta R.T. -0.011 min
Lab File: 6F06490.d
Acq: 11 Aug 2020 2:38 pm

Tgt Ion:178 Resp: 249045

Ion	Ratio	Lower	Upper
178	100		
179	15.6	0.0	46.0
176	18.6	0.0	49.0

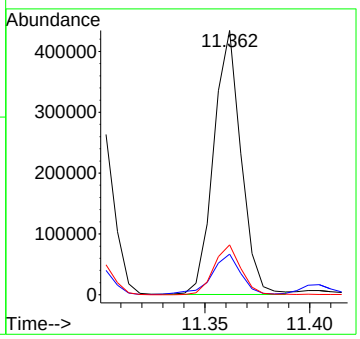


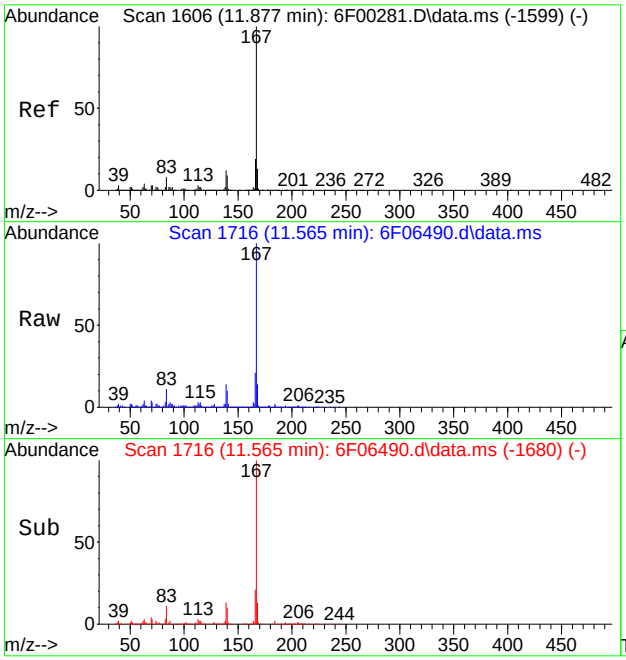


#85
Anthracene
Concen: 8.53 ppm
RT: 11.362 min Scan# 1678
Delta R.T. -0.006 min
Lab File: 6F06490.d
Acq: 11 Aug 2020 2:38 pm

Tgt Ion:178 Resp: 393990

Ion	Ratio	Lower	Upper
178	100		
179	15.1	0.0	45.4
176	18.8	0.0	47.7

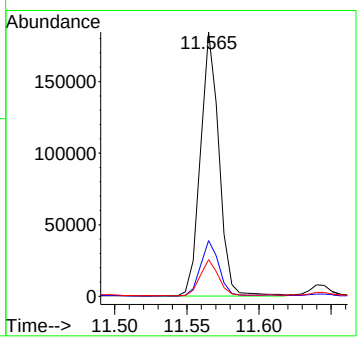


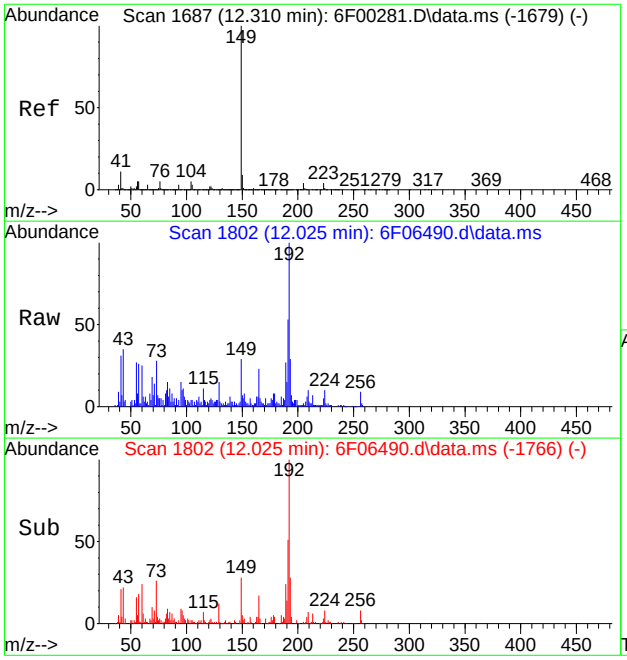


#87
Carbazole
Concen: 3.95 ppm
RT: 11.565 min Scan# 1716
Delta R.T. -0.006 min
Lab File: 6F06490.d
Acq: 11 Aug 2020 2:38 pm

Tgt Ion:167 Resp: 164499

Ion	Ratio	Lower	Upper
167	100		
166	20.9	0.0	49.2
139	13.6	0.0	42.3

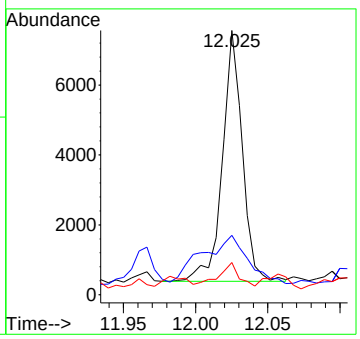


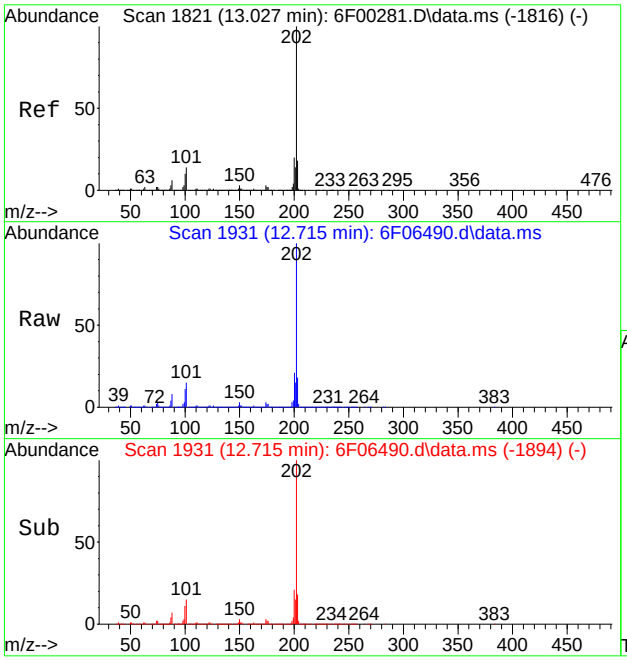


#89
Di-n-butylphthalate
Concen: 0.13 ppm
RT: 12.025 min Scan# 1802
Delta R.T. -0.006 min
Lab File: 6F06490.d
Acq: 11 Aug 2020 2:38 pm

Tgt Ion:149 Resp: 6861

Ion	Ratio	Lower	Upper
149	100		
150	18.4	0.0	38.7
104	6.5	0.0	35.2

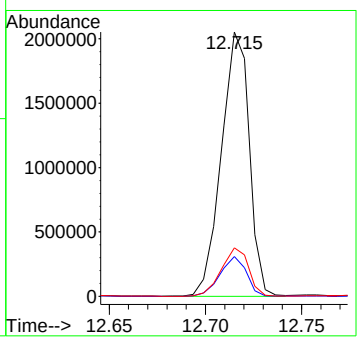


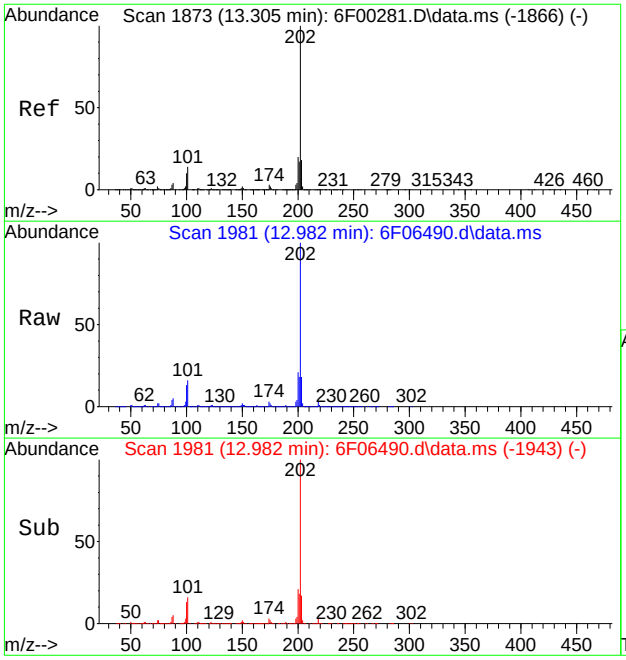


#91
Fluoranthene
Concen: 43.32 ppm
RT: 12.715 min Scan# 1931
Delta R.T. -0.000 min
Lab File: 6F06490.d
Acq: 11 Aug 2020 2:38 pm

Tgt Ion:202 Resp: 2072025

Ion	Ratio	Lower	Upper
202	100		
101	15.1	0.0	43.6
203	18.3	0.0	47.7

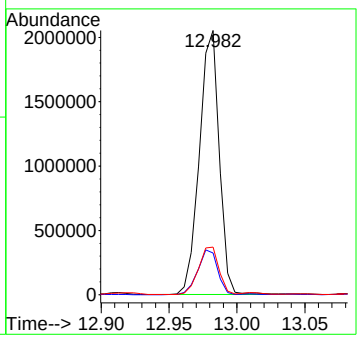


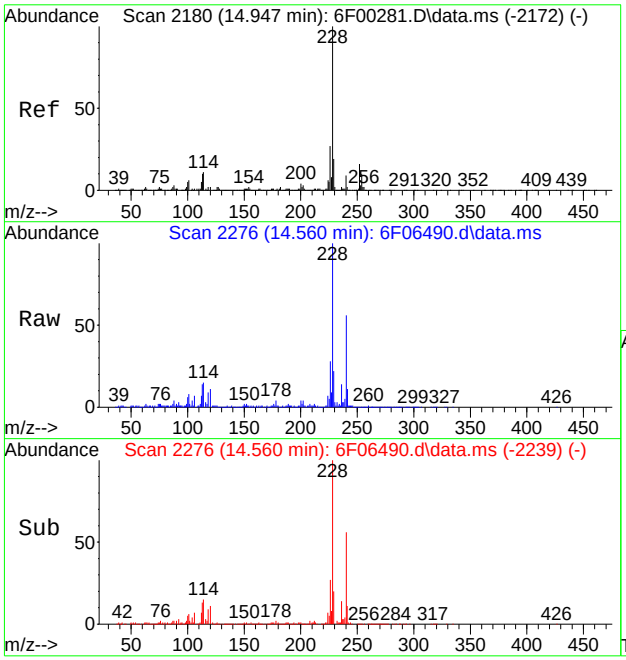


#94
Pyrene
Concen: 44.24 ppm
RT: 12.982 min Scan# 1981
Delta R.T. 0.005 min
Lab File: 6F06490.d
Acq: 11 Aug 2020 2:38 pm

Tgt Ion:202 Resp: 2085860

Ion	Ratio	Lower	Upper
202	100		
101	15.7	0.0	43.8
203	17.9	0.0	47.8

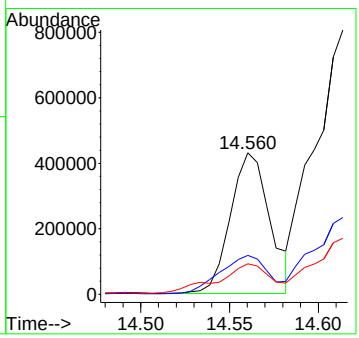


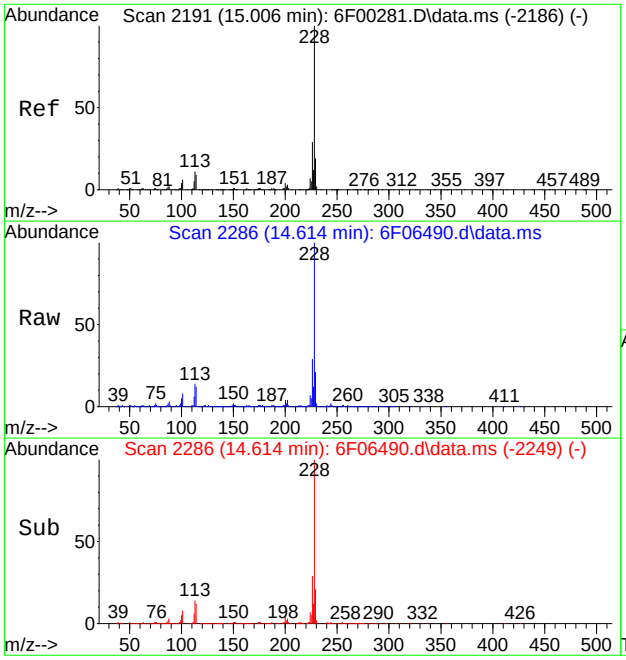


#99
Benzo[a]anthracene
Concen: 15.01 ppm
RT: 14.560 min Scan# 2276
Delta R.T. -0.000 min
Lab File: 6F06490.d
Acq: 11 Aug 2020 2:38 pm

Tgt Ion:228 Resp: 662040

Ion	Ratio	Lower	Upper
228	100		
226	27.0	0.0	56.6
229	20.2	0.0	48.9

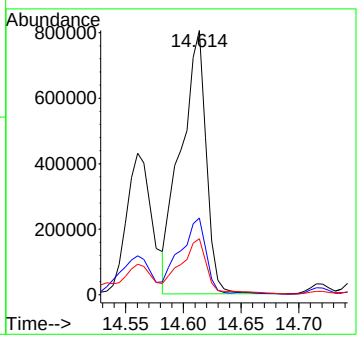


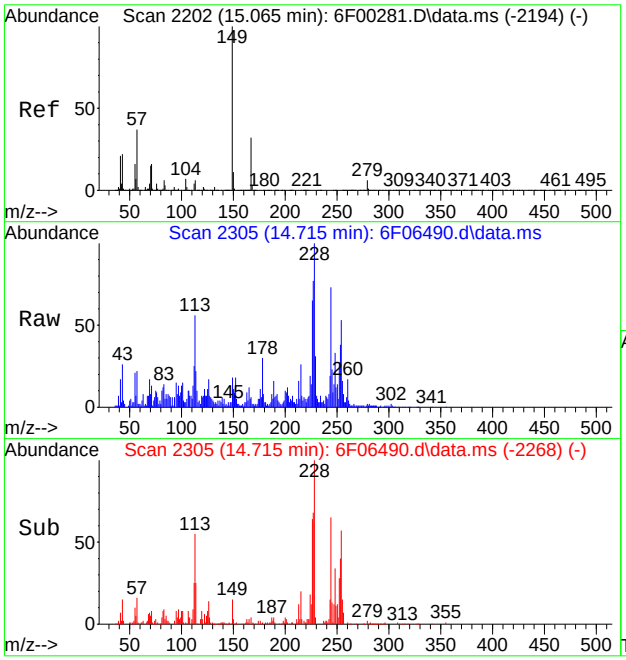


#100
Chrysene
Concen: 28.82 ppm
RT: 14.614 min Scan# 2286
Delta R.T. -0.000 min
Lab File: 6F06490.d
Acq: 11 Aug 2020 2:38 pm

Tgt Ion:228 Resp: 1233323

Ion	Ratio	Lower	Upper
228	100		
226	28.9	0.0	58.9
229	20.7	0.0	48.5

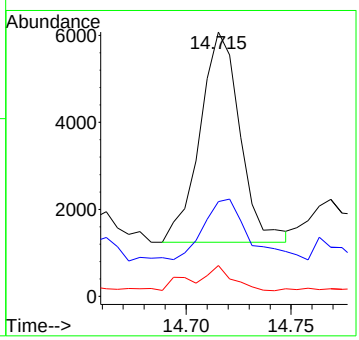


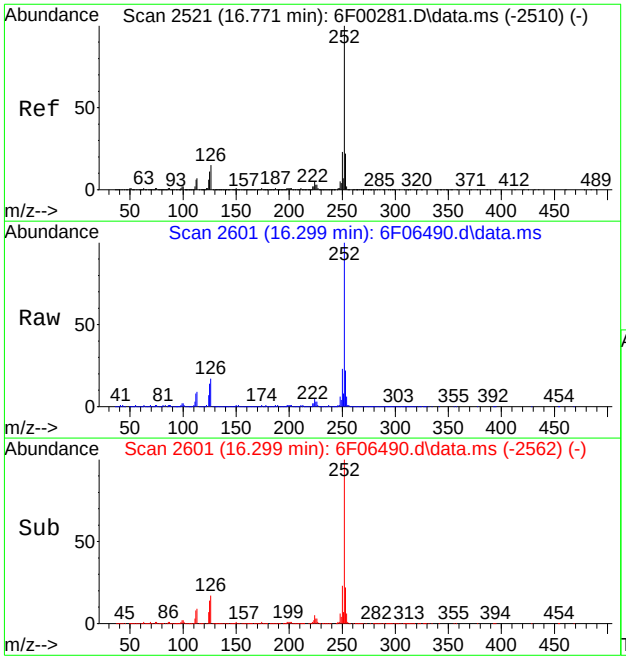


#101
bis(2-Ethylhexyl)phthalate
Concen: 0.20 ppm
RT: 14.715 min Scan# 2305
Delta R.T. -0.000 min
Lab File: 6F06490.d
Acq: 11 Aug 2020 2:38 pm

Tgt Ion:149 Resp: 6459

Ion	Ratio	Lower	Upper
149	100		
167	25.8	1.7	61.7
279	9.4	0.0	35.7

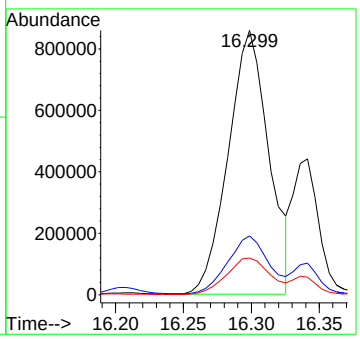


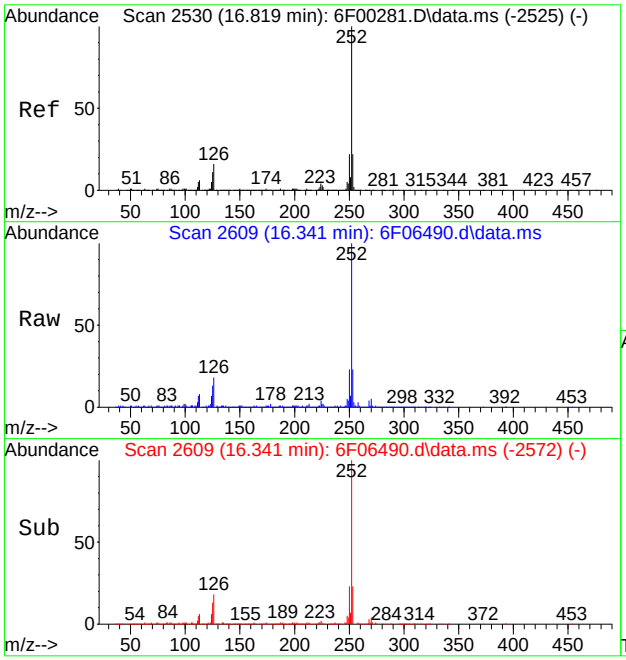


#104
Benzo[b]fluoranthene
Concen: 44.39 ppm
RT: 16.299 min Scan# 2601
Delta R.T. 0.011 min
Lab File: 6F06490.d
Acq: 11 Aug 2020 2:38 pm

Tgt Ion:252 Resp: 1784518

Ion	Ratio	Lower	Upper
252	100		
253	21.8	0.0	51.9
125	13.6	0.0	41.3

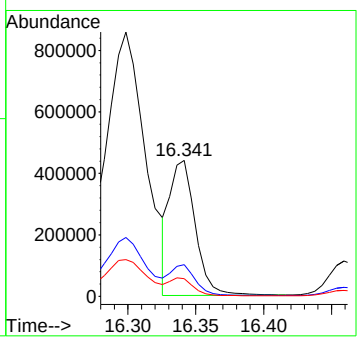


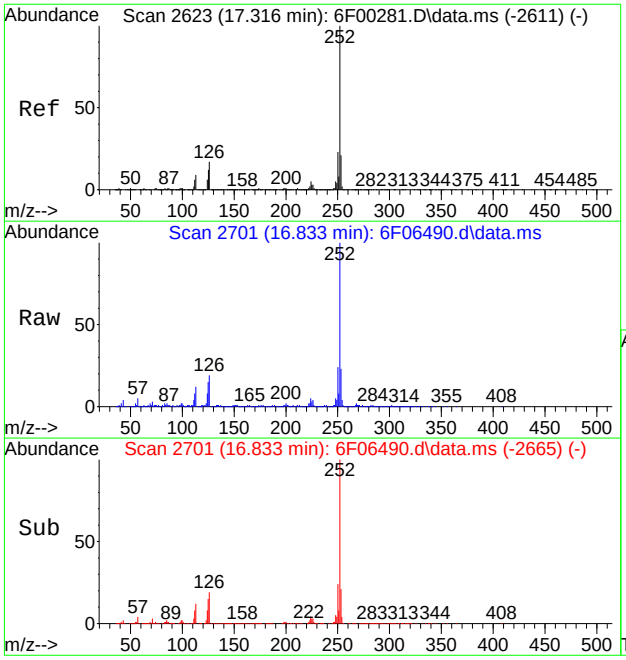


#105
Benzo[k]fluoranthene
Concen: 13.87 ppm
RT: 16.341 min Scan# 2609
Delta R.T. -0.000 min
Lab File: 6F06490.d
Acq: 11 Aug 2020 2:38 pm

Tgt Ion:252 Resp: 580147

Ion	Ratio	Lower	Upper
252	100		
253	23.2	0.0	51.7
125	11.9	0.0	40.7

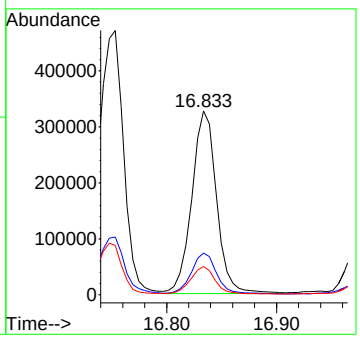


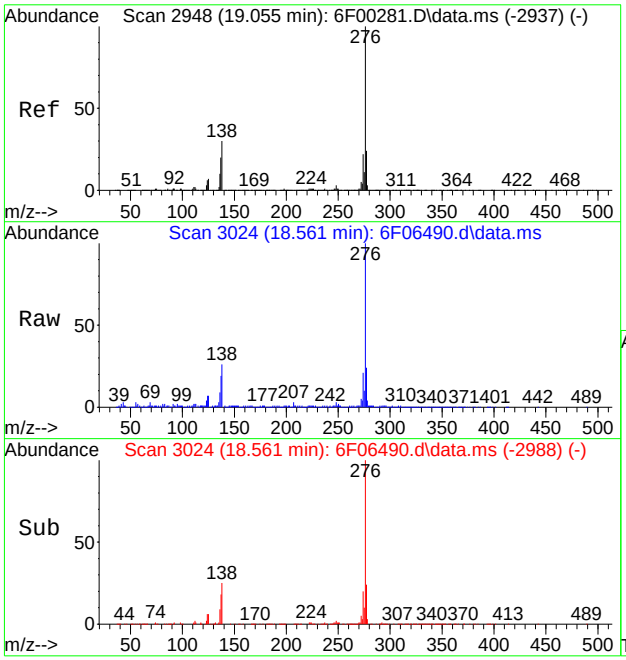


#106
Benzo[a]pyrene
Concen: 13.67 ppm
RT: 16.833 min Scan# 2701
Delta R.T. -0.006 min
Lab File: 6F06490.d
Acq: 11 Aug 2020 2:38 pm

Tgt Ion:252 Resp: 510304

Ion	Ratio	Lower	Upper
252	100		
253	22.4	0.0	51.0
125	15.0	0.0	42.0

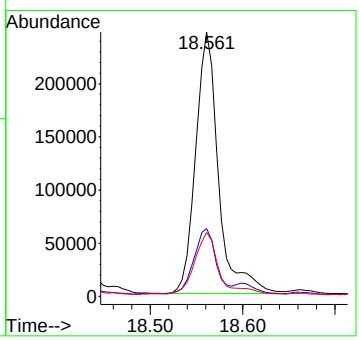


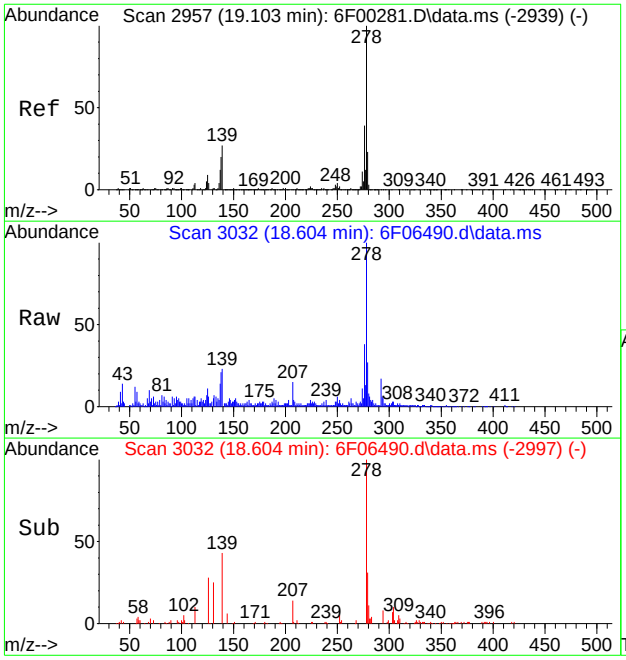


#107
Indeno[1,2,3-cd]pyrene
Concen: 12.21 ppm
RT: 18.561 min Scan# 3024
Delta R.T. -0.006 min
Lab File: 6F06490.d
Acq: 11 Aug 2020 2:38 pm

Tgt Ion:276 Resp: 424307

Ion	Ratio	Lower	Upper
276	100		
138	25.0	0.0	59.6
277	23.6	0.0	54.1

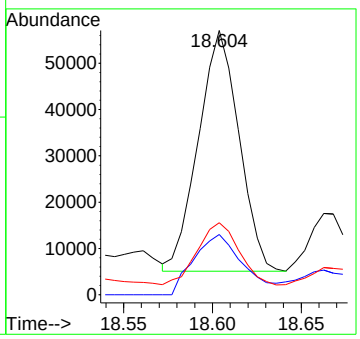


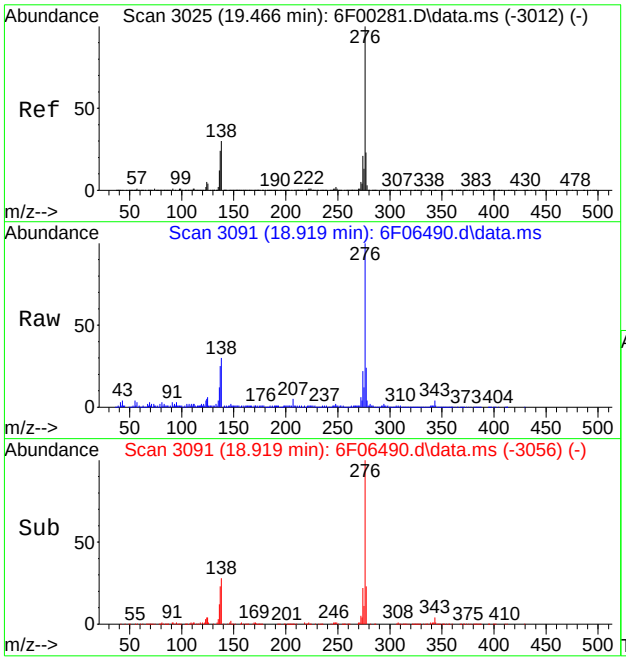


#108
Dibenz[a,h]anthracene
Concen: 2.23 ppm
RT: 18.604 min Scan# 3032
Delta R.T. -0.011 min
Lab File: 6F06490.d
Acq: 11 Aug 2020 2:38 pm

Tgt Ion:278 Resp: 82584

Ion	Ratio	Lower	Upper
278	100		
139	22.6	0.0	56.9
279	26.1	0.0	53.0

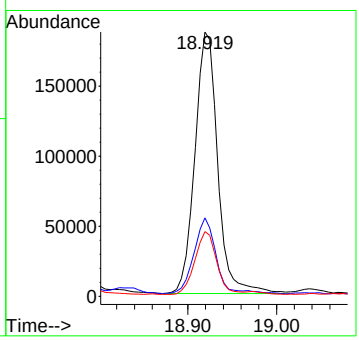




#109
Benzo[g,h,i]perylene
Concen: 8.87 ppm
RT: 18.919 min Scan# 3091
Delta R.T. -0.011 min
Lab File: 6F06490.d
Acq: 11 Aug 2020 2:38 pm

Tgt Ion:276 Resp: 332707

Ion	Ratio	Lower	Upper
276	100		
138	29.1	0.0	59.5
277	24.1	0.0	53.0



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06491.d
Acq On : 11 Aug 2020 3:05 pm
Operator : marthav
Sample : fa77581-9 E Inst : MSBNA10
Misc : op81484,S6F251,30.2,,,1,1,soil
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Results File: 8270D6F072920.RES
Quant Time: Aug 12 06:10:54 2020
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

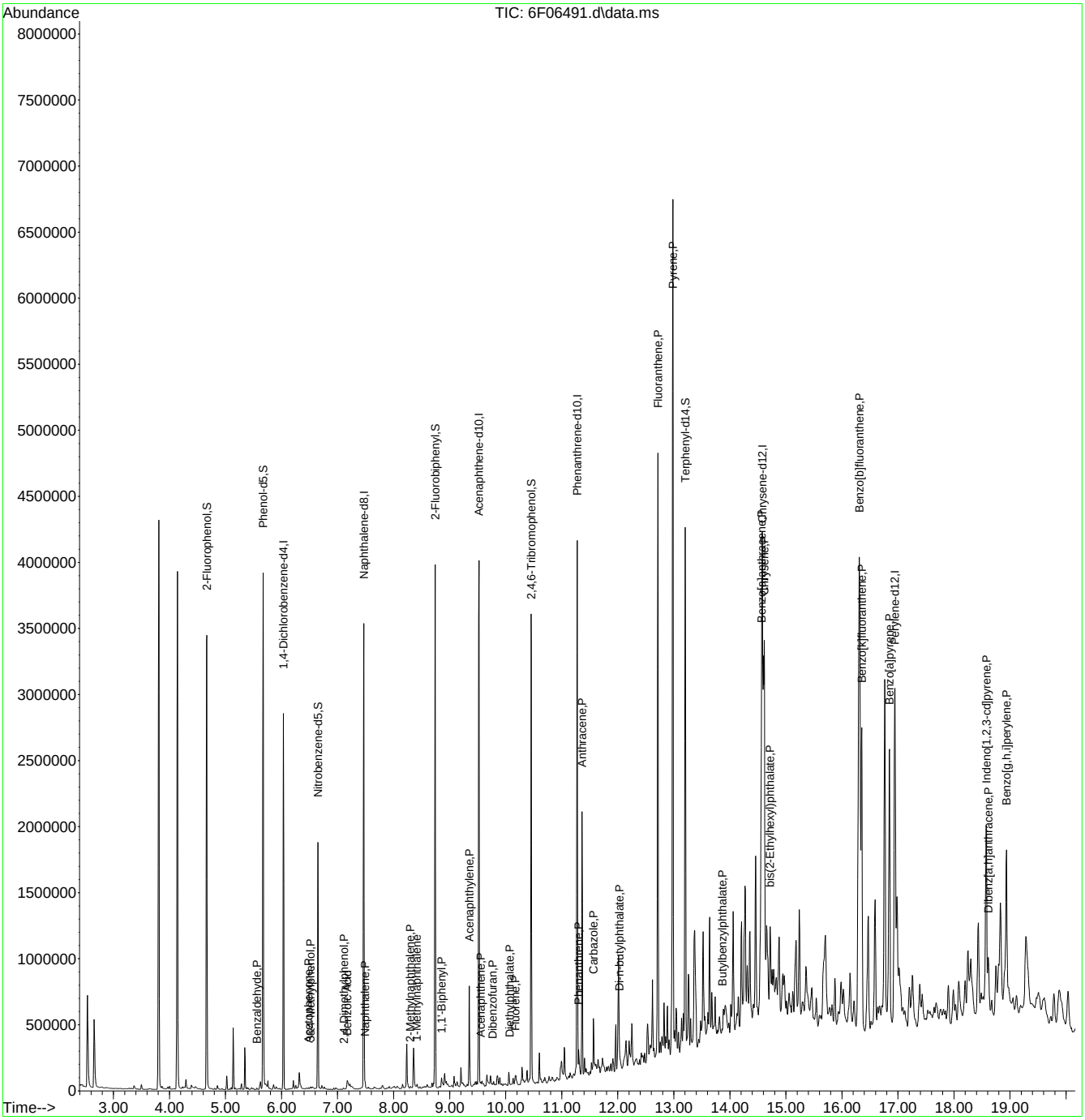
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	6.035	152	388684	40.00	ppm		0.00
22) Naphthalene-d8	7.468	136	1487978	40.00	ppm		0.00
43) Acenaphthene-d10	9.522	164	802996	40.00	ppm		0.00
70) Phenanthrene-d10	11.276	188	1477264	40.00	ppm		0.00
92) Chrysene-d12	14.582	240	1247562	40.00	ppm		0.00
102) Perylene-d12	16.940	264	1216283	40.00	ppm		0.01
System Monitoring Compounds							
7) 2-Fluorophenol	4.665	112	987260	67.22	ppm		0.00
Spiked Amount 100.000	Range 40 - 102		Recovery = 67.22%				
9) Phenol-d5	5.671	99	1307142	74.97	ppm		0.00
Spiked Amount 100.000	Range 41 - 100		Recovery = 74.97%				
23) Nitrobenzene-d5	6.650	82	555238	34.01	ppm		0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 68.02%				
47) 2-Fluorobiphenyl	8.741	172	1109534	35.35	ppm		0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 70.70%				
75) 2,4,6-Tribromophenol	10.458	330	410153	82.50	ppm		0.00
Spiked Amount 100.000	Range 42 - 108		Recovery = 82.50%				
95) Terphenyl-d14	13.202	244	1332005	37.98	ppm		0.00
Spiked Amount 50.000	Range 45 - 119		Recovery = 75.96%				
Target Compounds							Qvalue
5) Benzaldehyde	5.559	106	2576	0.22	ppm		95
18) Acetophenone	6.479	105	3819	0.19	ppm		91
21) 3&4-Methylphenol	6.516	108	2654	0.19	ppm		82
27) 2,4-Dimethylphenol	7.110	107	2522	0.19	ppm	#	44
30) Benzoic Acid	7.174	105	22134	2.30	ppm		94
34) Naphthalene	7.489	128	7672	0.18	ppm	#	1
40) 2-Methylnaphthalene	8.297	141	2880	0.12	ppm		92
41) 1-Methylnaphthalene	8.409	142	2455	0.09	ppm		93
48) 1,1'-Biphenyl	8.853	154	1555	0.05	ppm		80
52) Acenaphthylene	9.351	152	322036	8.02	ppm		98
57) Acenaphthene	9.554	153	6778	0.25	ppm		95
60) Dibenzofuran	9.763	168	6388	0.17	ppm		84
65) Fluorene	10.169	166	27481	0.92	ppm		96
67) Diethylphthalate	10.067	149	1165	0.04	ppm		64
84) Phenanthrene	11.303	178	72727	1.64	ppm		100
85) Anthracene	11.362	178	717018	15.95	ppm		98
87) Carbazole	11.565	167	161695	3.99	ppm		97
89) Di-n-butylphthalate	12.025	149	9792	0.19	ppm		90
91) Fluoranthene	12.715	202	1805881	38.78	ppm		98
94) Pyrene	12.982	202	2664185	59.62	ppm		95
97) Butylbenzylphthalate	13.865	149	5940	0.28	ppm		91
99) Benzo[a]anthracene	14.566	228	931136	22.27	ppm		99
100) Chrysene	14.614	228	1622137	39.99	ppm		98
101) bis(2-Ethylhexyl)phtha...	14.715	149	15048	0.50	ppm		92
104) Benzo[b]fluoranthene	16.309	252	2966425	75.98	ppm		97
105) Benzo[k]fluoranthene	16.352	252	1037720	25.56	ppm		96
106) Benzo[a]pyrene	16.850	252	1144090	31.56	ppm		96
107) Indeno[1,2,3-cd]pyrene	18.577	276	939249	27.83	ppm		94
108) Dibenz[a,h]anthracene	18.615	278	203882	5.66	ppm		92
109) Benzo[g,h,i]perylene	18.936	276	705717	19.37	ppm		97

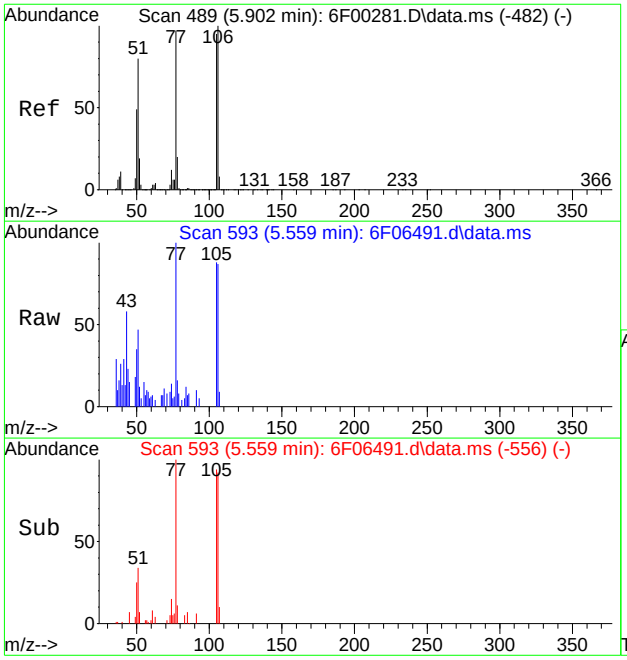
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06491.d
Acq On : 11 Aug 2020 3:05 pm
Operator : marthav
Sample : fa77581-9 E Inst : MSBNA10
Misc : op81484,S6F251,30.2,,,1,1,soil
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Results File: 8270D6F072920.RES
Quant Time: Aug 12 06:10:54 2020
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

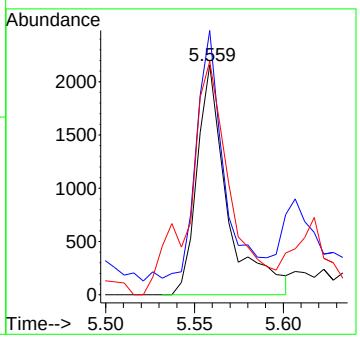


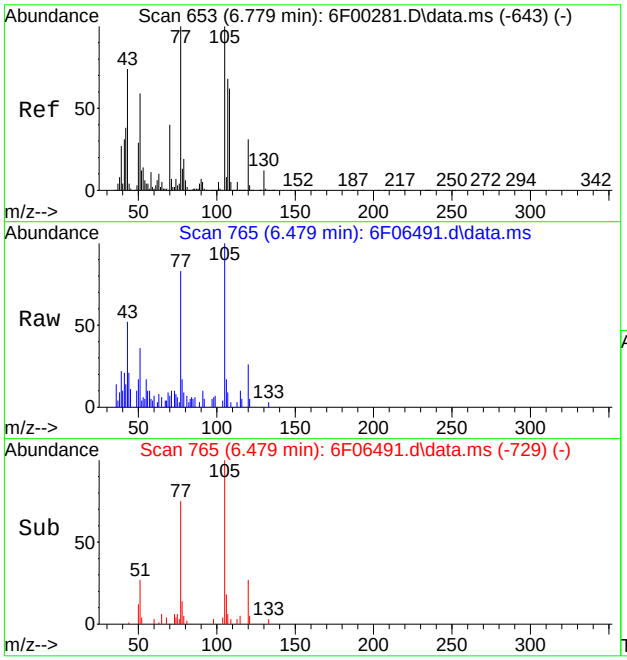


#5
Benzaldehyde
Concen: 0.22 ppm
RT: 5.559 min Scan# 593
Delta R.T. -0.000 min
Lab File: 6F06491.d
Acq: 11 Aug 2020 3:05 pm

Tgt Ion:106 Resp: 2576

Ion	Ratio	Lower	Upper
106	100		
77	98.0	67.1	127.1
105	85.4	65.1	125.1

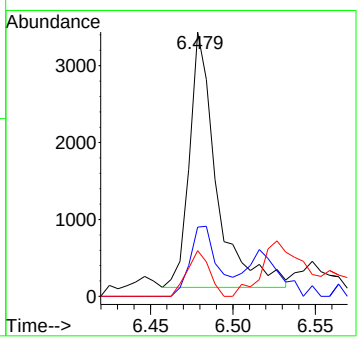


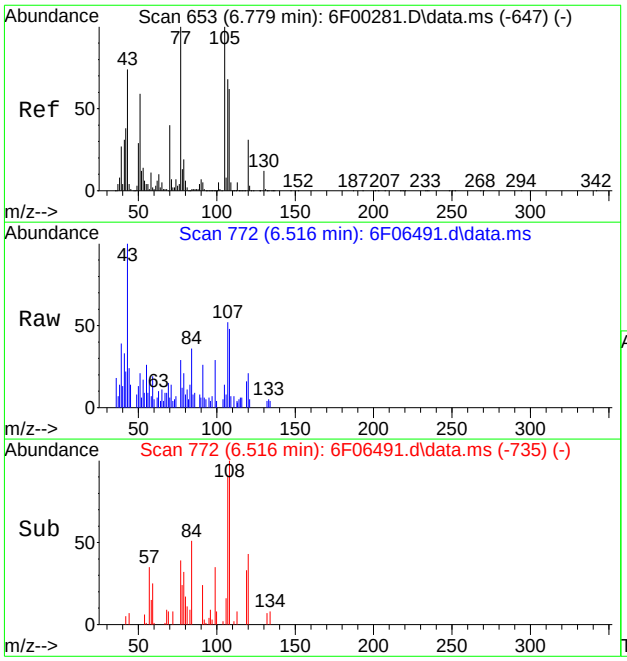


#18
Acetophenone
Concen: 0.19 ppm
RT: 6.479 min Scan# 765
Delta R.T. -0.005 min
Lab File: 6F06491.d
Acq: 11 Aug 2020 3:05 pm

Tgt Ion:105 Resp: 3819

Ion	Ratio	Lower	Upper
105	100		
120	24.7	0.7	60.7
106	9.4	0.0	38.4

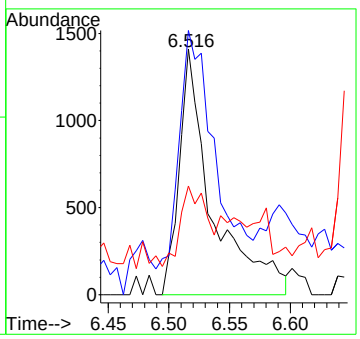


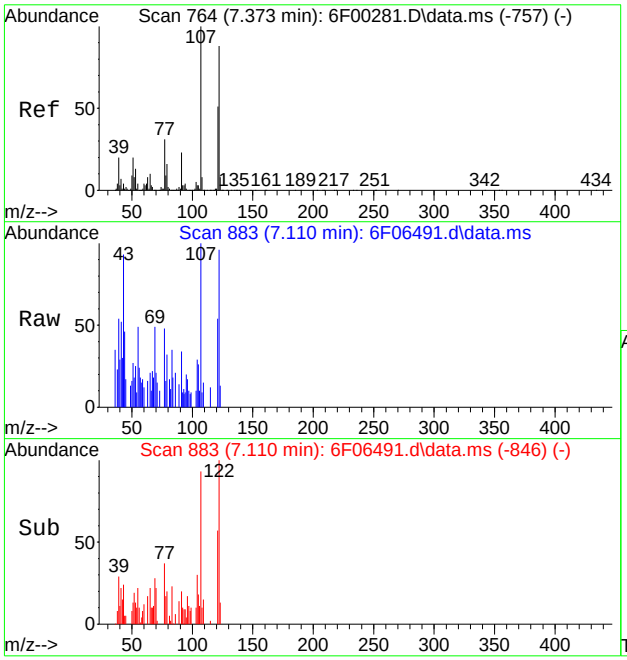


#21
3&4-Methylphenol
Concen: 0.19 ppm
RT: 6.516 min Scan# 772
Delta R.T. -0.000 min
Lab File: 6F06491.d
Acq: 11 Aug 2020 3:05 pm

Tgt Ion:108 Resp: 2654

Ion	Ratio	Lower	Upper
108	100		
107	86.9	80.3	140.3
79	29.9	0.2	60.2

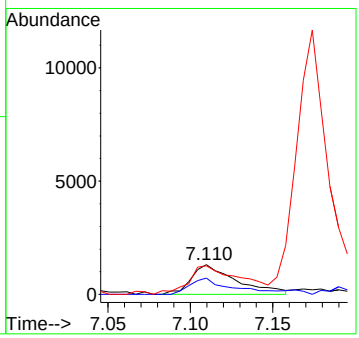


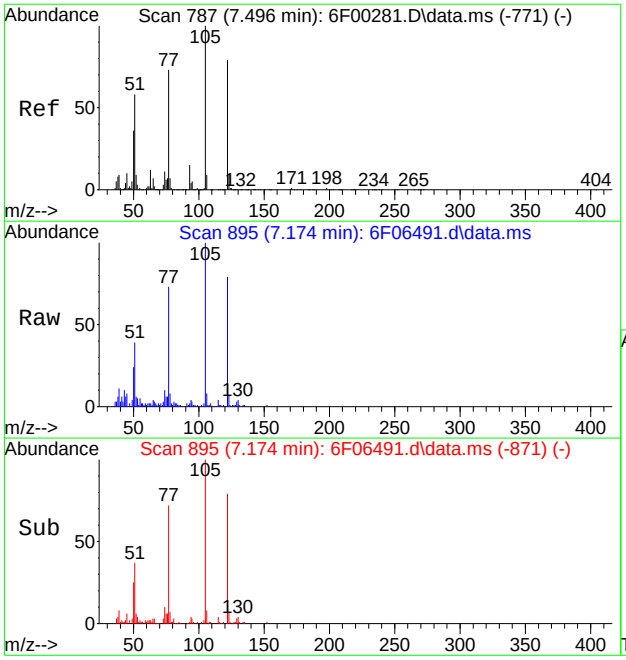


#27
2,4-Dimethylphenol
Concen: 0.19 ppm
RT: 7.110 min Scan# 883
Delta R.T. -0.000 min
Lab File: 6F06491.d
Acq: 11 Aug 2020 3:05 pm

Tgt Ion:107 Resp: 2522

Ion	Ratio	Lower	Upper
107	100		
121	51.9	20.5	80.5
122	8.2	58.5	118.5#

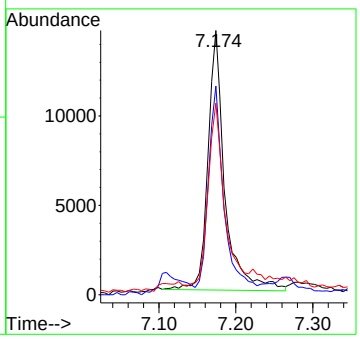


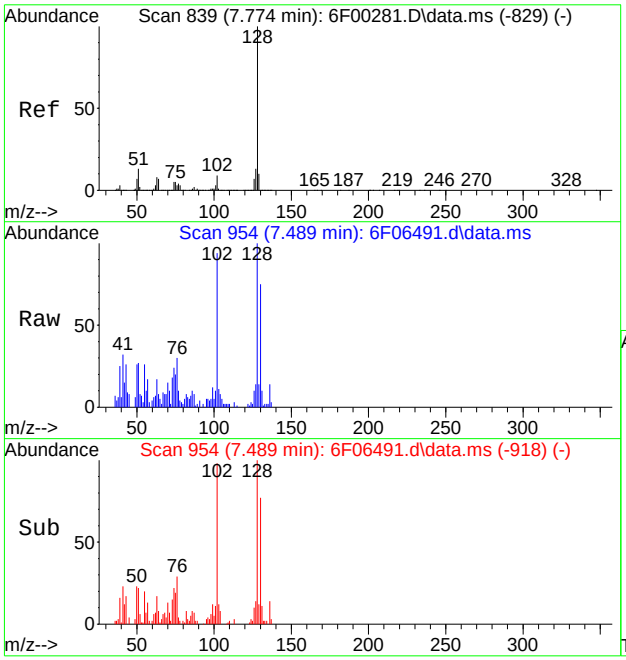


#30
Benzoic Acid
Concen: 2.30 ppm
RT: 7.174 min Scan# 895
Delta R.T. -0.070 min
Lab File: 6F06491.d
Acq: 11 Aug 2020 3:05 pm

Tgt Ion:105 Resp: 22134

Ion	Ratio	Lower	Upper
105	100		
122	73.5	49.5	109.5
77	68.8	43.0	103.0

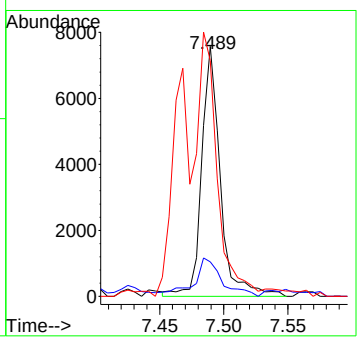


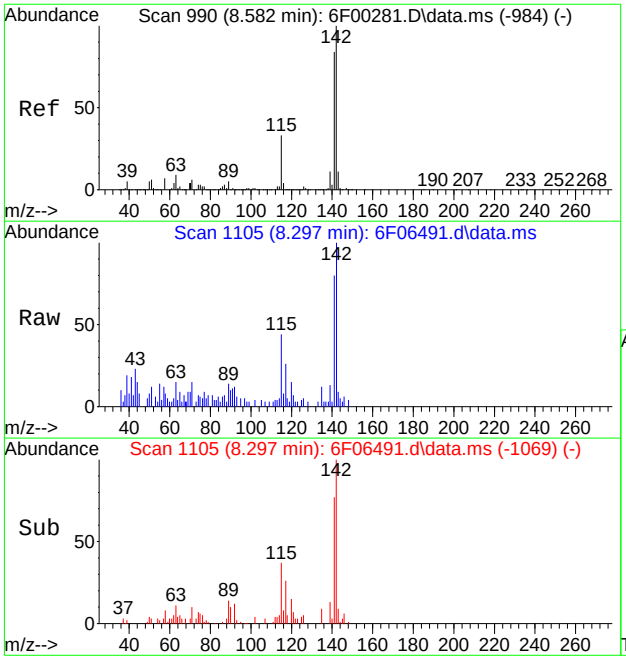


#34
Naphthalene
Concen: 0.18 ppm
RT: 7.489 min Scan# 954
Delta R.T. -0.005 min
Lab File: 6F06491.d
Acq: 11 Aug 2020 3:05 pm

Tgt Ion:128 Resp: 7672

Ion	Ratio	Lower	Upper
128	100		
129	11.7	0.0	40.4
102	90.2	0.0	39.2#

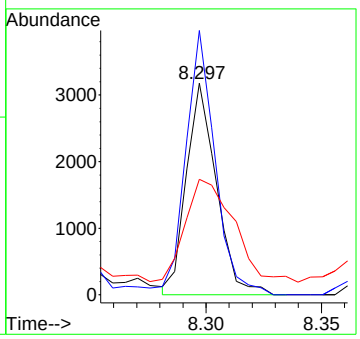


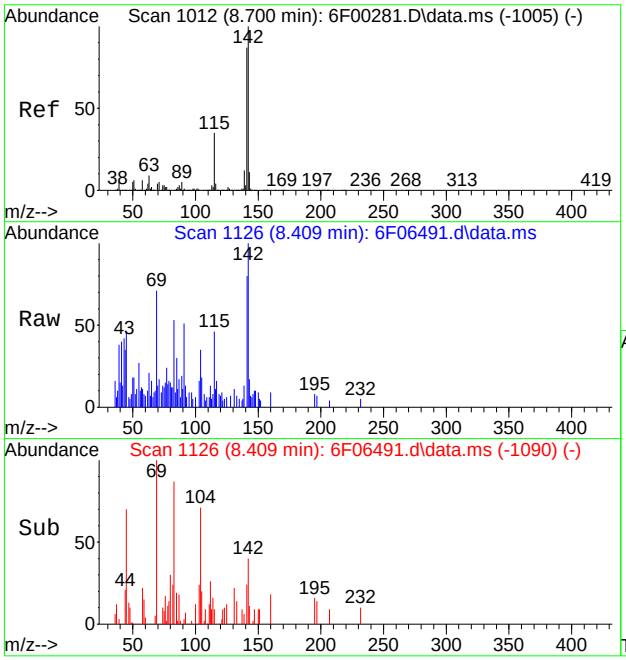


#40
2-Methylnaphthalene
Concen: 0.12 ppm
RT: 8.297 min Scan# 1105
Delta R.T. -0.005 min
Lab File: 6F06491.d
Acq: 11 Aug 2020 3:05 pm

Tgt Ion:141 Resp: 2880

Ion	Ratio	Lower	Upper
141	100		
142	125.4	88.9	148.9
115	47.5	9.7	69.7

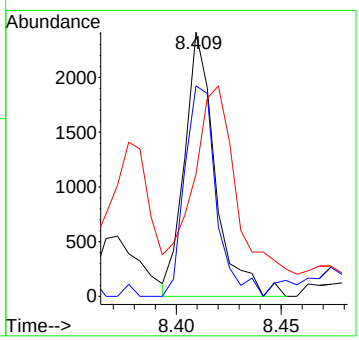


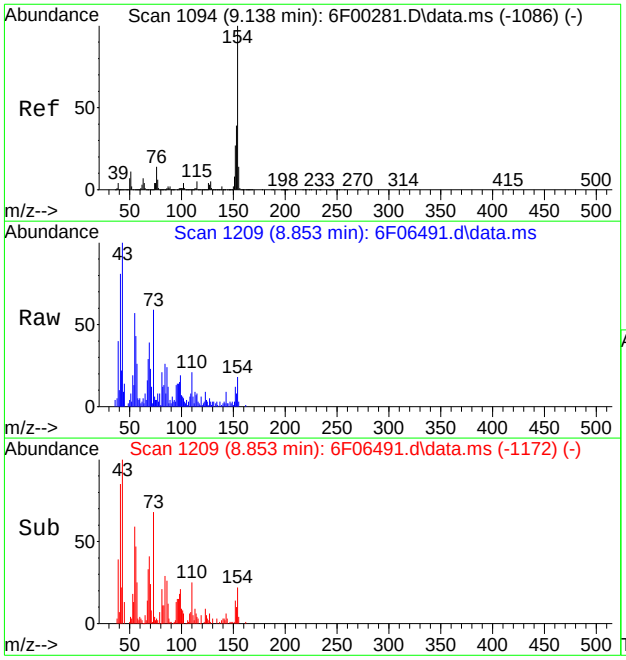


#41
1-Methylnaphthalene
Concen: 0.09 ppm
RT: 8.409 min Scan# 1126
Delta R.T. -0.005 min
Lab File: 6F06491.d
Acq: 11 Aug 2020 3:05 pm

Tgt Ion:142 Resp: 2455

Ion	Ratio	Lower	Upper
142	100		
141	78.4	56.8	116.8
115	34.0	4.7	64.7

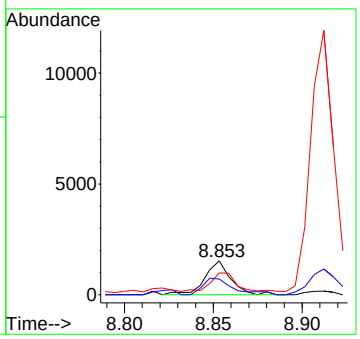


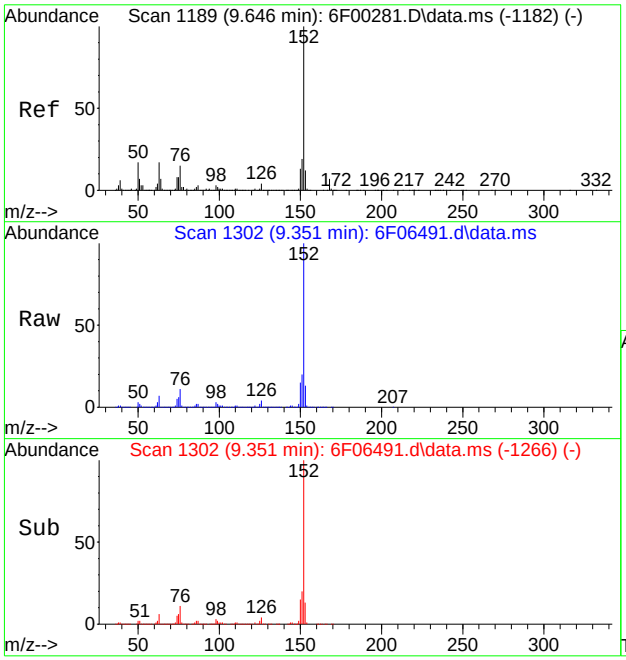


#48
1,1'-Biphenyl
Concen: 0.05 ppm
RT: 8.853 min Scan# 1209
Delta R.T. -0.000 min
Lab File: 6F06491.d
Acq: 11 Aug 2020 3:05 pm

Tgt Ion:154 Resp: 1555

Ion	Ratio	Lower	Upper
154	100		
153	40.3	8.7	68.7
152	50.2	0.0	56.7

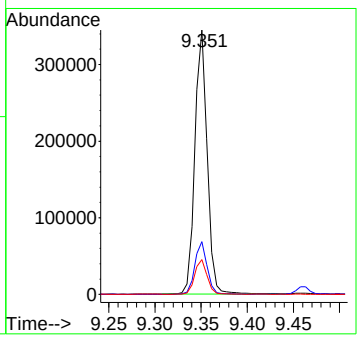


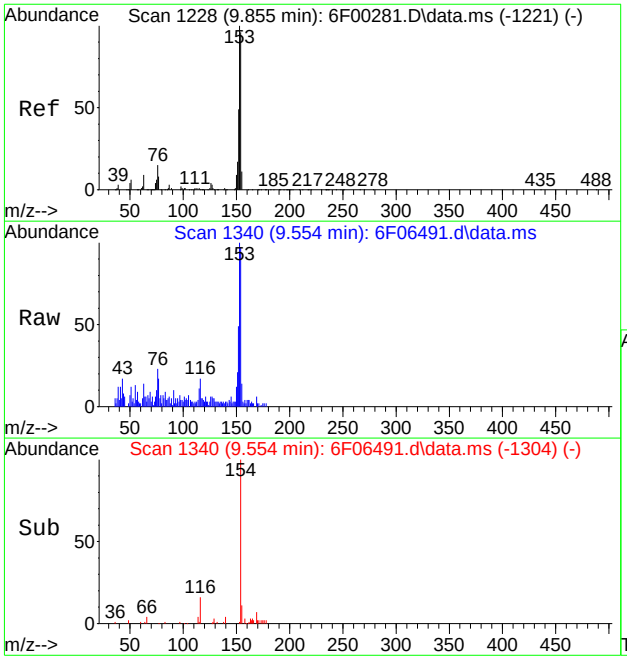


#52
Acenaphthylene
Concen: 8.02 ppm
RT: 9.351 min Scan# 1302
Delta R.T. -0.005 min
Lab File: 6F06491.d
Acq: 11 Aug 2020 3:05 pm

Tgt Ion:152 Resp: 322036

Ion	Ratio	Lower	Upper
152	100		
151	19.9	0.0	48.8
153	13.1	0.0	42.3

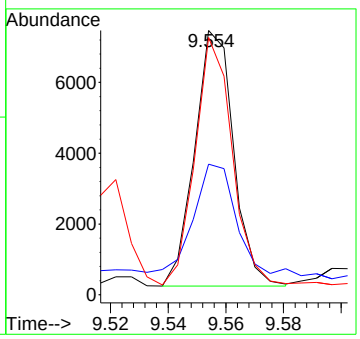


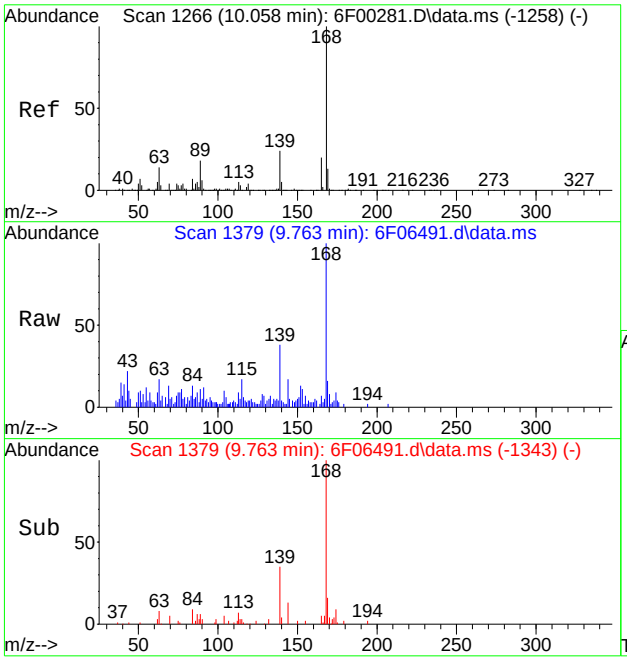


#57
Acenaphthene
Concen: 0.25 ppm
RT: 9.554 min Scan# 1340
Delta R.T. -0.005 min
Lab File: 6F06491.d
Acq: 11 Aug 2020 3:05 pm

Tgt Ion:153 Resp: 6778

Ion	Ratio	Lower	Upper
153	100		
152	42.0	19.4	79.4
154	97.4	65.6	125.6

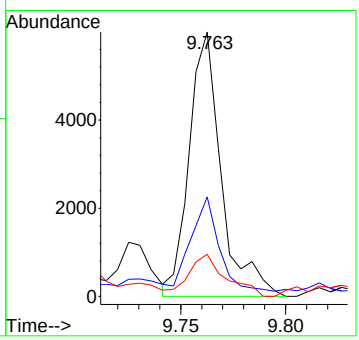


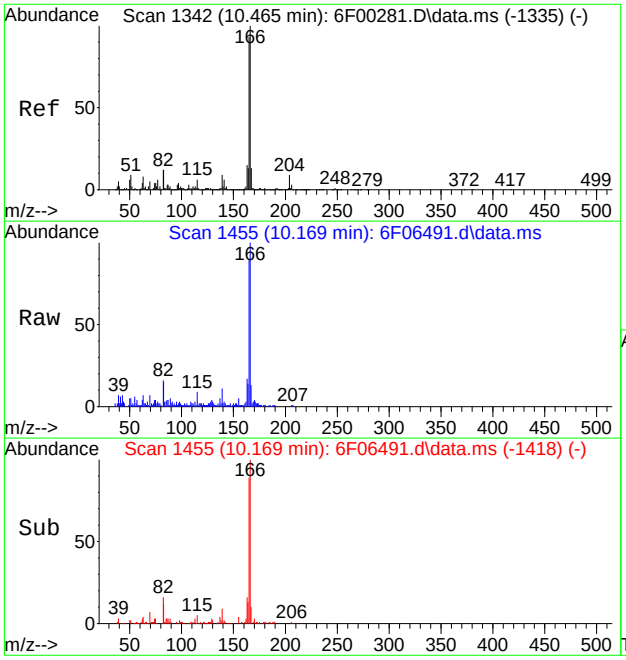


#60
Dibenzofuran
Concen: 0.17 ppm
RT: 9.763 min Scan# 1379
Delta R.T. -0.005 min
Lab File: 6F06491.d
Acq: 11 Aug 2020 3:05 pm

Tgt Ion:168 Resp: 6388

Ion	Ratio	Lower	Upper
168	100		
139	34.8	0.0	53.6
169	13.9	0.0	42.6

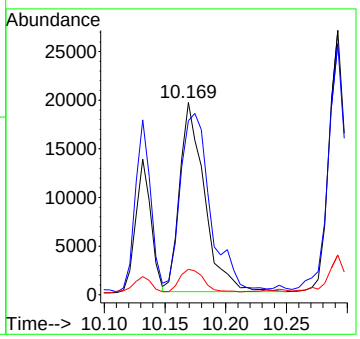


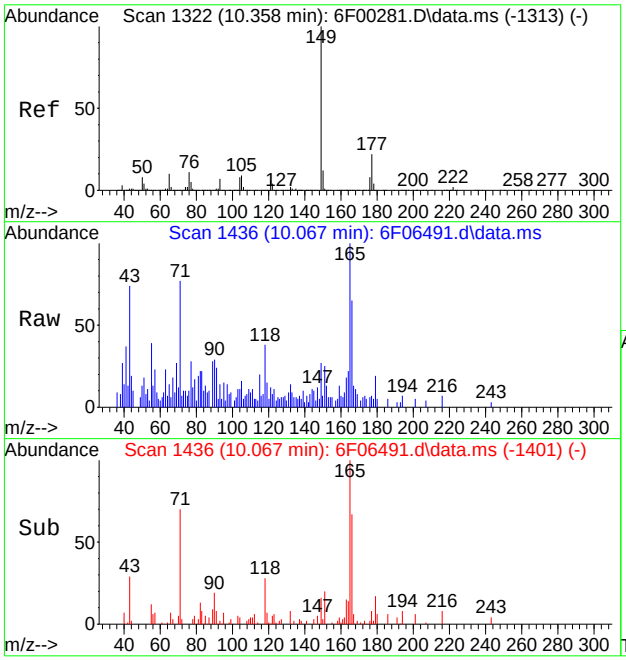


#65
Fluorene
Concen: 0.92 ppm
RT: 10.169 min Scan# 1455
Delta R.T. -0.000 min
Lab File: 6F06491.d
Acq: 11 Aug 2020 3:05 pm

Tgt Ion:166 Resp: 27481

Ion	Ratio	Lower	Upper
166	100		
165	88.4	62.6	122.6
167	11.6	0.0	43.1

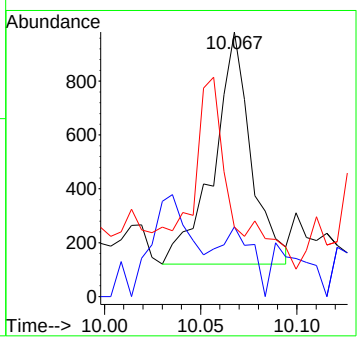


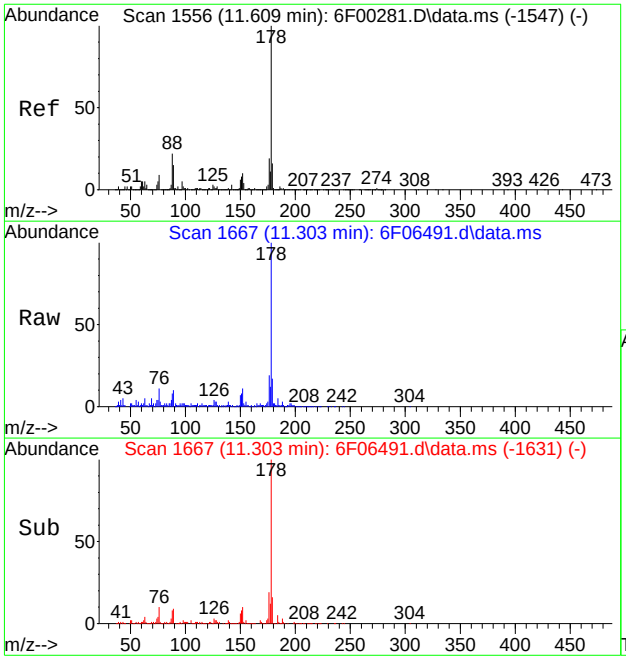


#67
Diethylphthalate
Concen: 0.04 ppm
RT: 10.067 min Scan# 1436
Delta R.T. -0.011 min
Lab File: 6F06491.d
Acq: 11 Aug 2020 3:05 pm

Tgt Ion:149 Resp: 1165

Ion	Ratio	Lower	Upper
149	100		
177	1.0	0.0	52.2
150	4.5	0.0	41.7

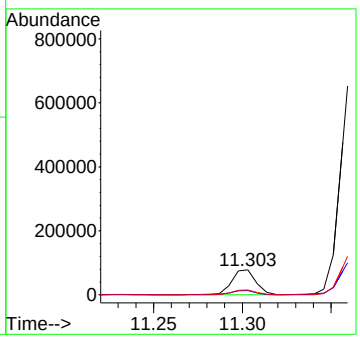


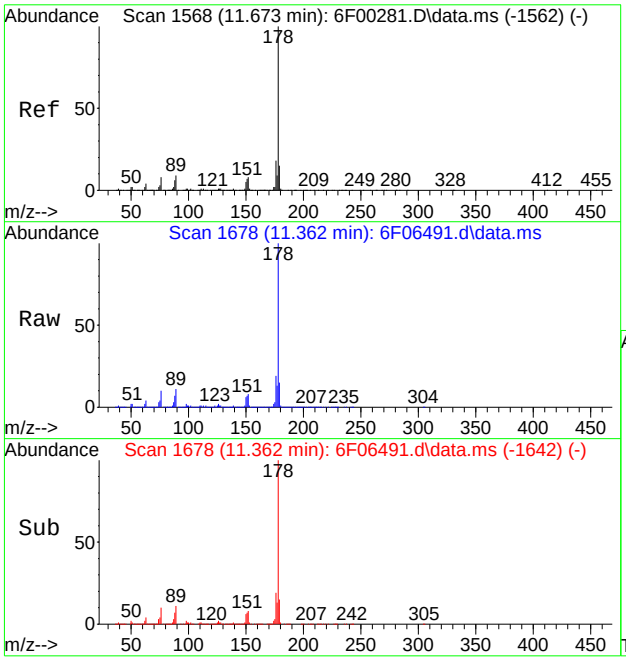


#84
Phenanthrene
Concen: 1.64 ppm
RT: 11.303 min Scan# 1667
Delta R.T. -0.005 min
Lab File: 6F06491.d
Acq: 11 Aug 2020 3:05 pm

Tgt Ion:178 Resp: 72727

Ion	Ratio	Lower	Upper
178	100		
179	16.2	0.0	46.0
176	18.9	0.0	49.0

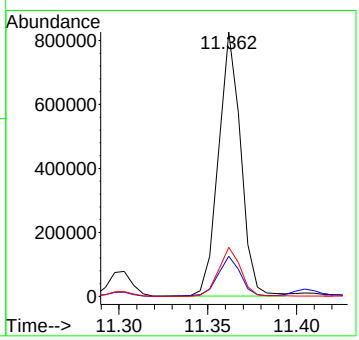


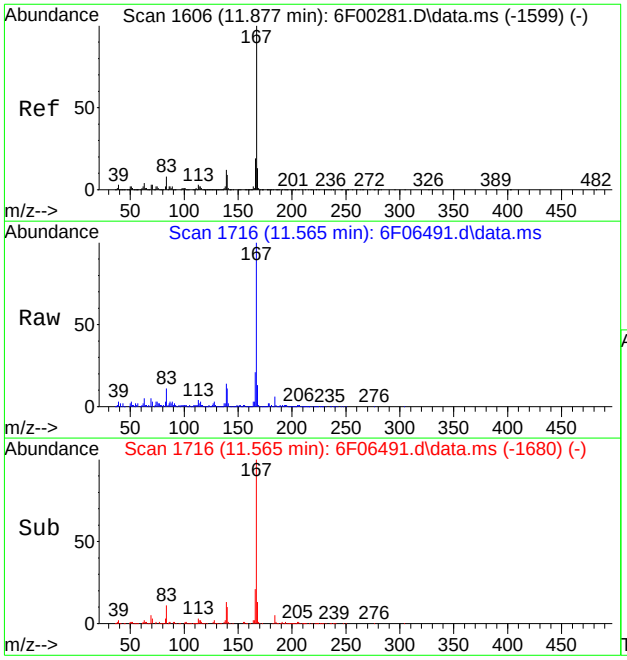


#85
Anthracene
Concen: 15.95 ppm
RT: 11.362 min Scan# 1678
Delta R.T. -0.005 min
Lab File: 6F06491.d
Acq: 11 Aug 2020 3:05 pm

Tgt Ion:178 Resp: 717018

Ion	Ratio	Lower	Upper
178	100		
179	14.9	0.0	45.4
176	18.5	0.0	47.7

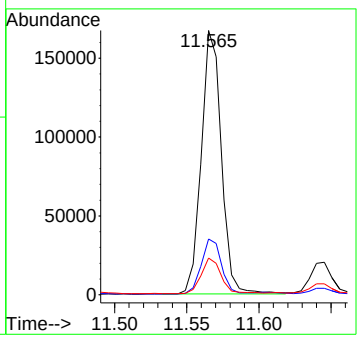


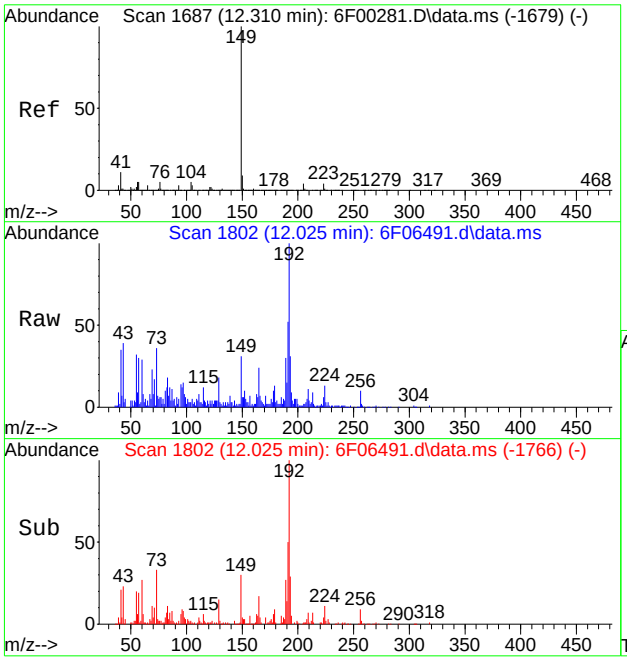


#87
Carbazole
Concen: 3.99 ppm
RT: 11.565 min Scan# 1716
Delta R.T. -0.005 min
Lab File: 6F06491.d
Acq: 11 Aug 2020 3:05 pm

Tgt Ion:167 Resp: 161695

Ion	Ratio	Lower	Upper
167	100		
166	20.8	0.0	49.2
139	13.4	0.0	42.3

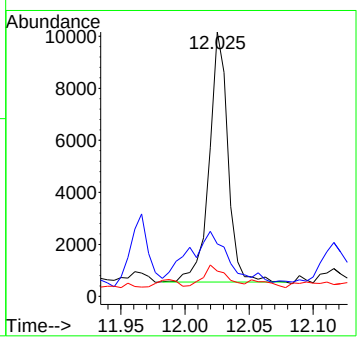


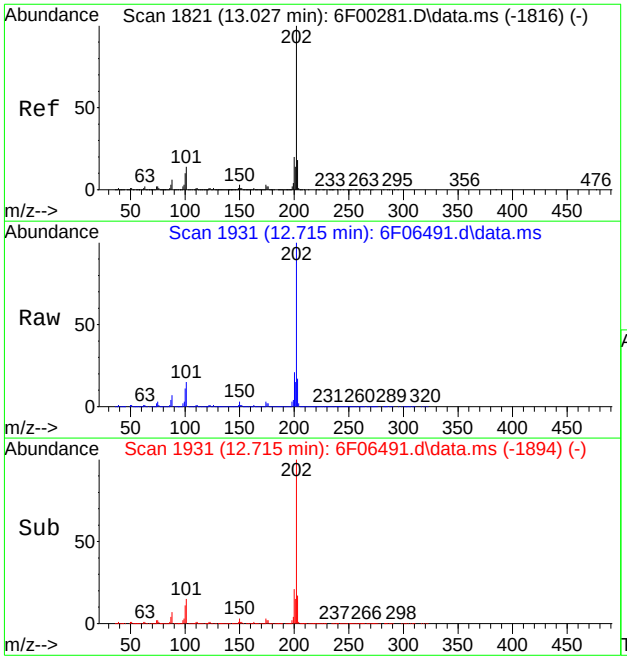


#89
Di-n-butylphthalate
Concen: 0.19 ppm
RT: 12.025 min Scan# 1802
Delta R.T. -0.005 min
Lab File: 6F06491.d
Acq: 11 Aug 2020 3:05 pm

Tgt Ion:149 Resp: 9792

Ion	Ratio	Lower	Upper
149	100		
150	14.3	0.0	38.7
104	5.2	0.0	35.2

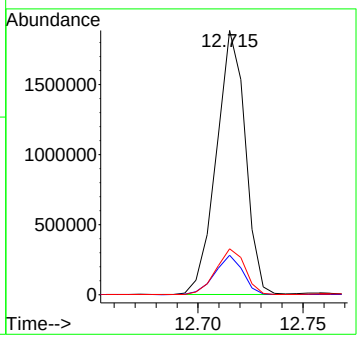


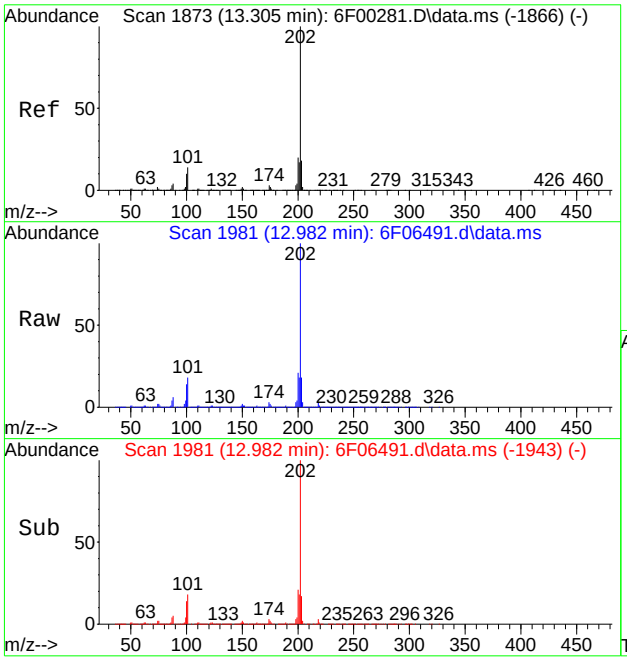


#91
Fluoranthene
Concen: 38.78 ppm
RT: 12.715 min Scan# 1931
Delta R.T. -0.000 min
Lab File: 6F06491.d
Acq: 11 Aug 2020 3:05 pm

Tgt Ion:202 Resp: 1805881

Ion	Ratio	Lower	Upper
202	100		
101	14.9	0.0	43.6
203	17.3	0.0	47.7

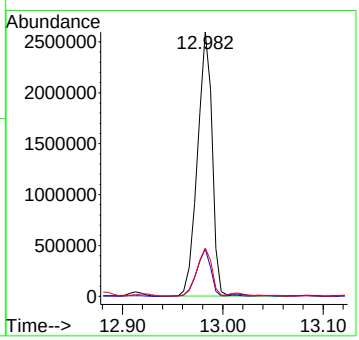


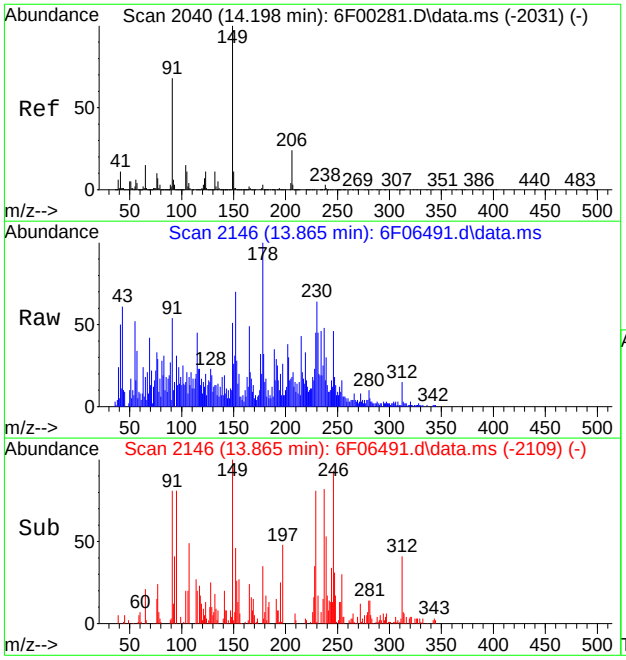


#94
Pyrene
Concen: 59.62 ppm
RT: 12.982 min Scan# 1981
Delta R.T. 0.005 min
Lab File: 6F06491.d
Acq: 11 Aug 2020 3:05 pm

Tgt Ion:202 Resp: 2664185

Ion	Ratio	Lower	Upper
202	100		
101	17.9	0.0	43.8
203	18.1	0.0	47.8

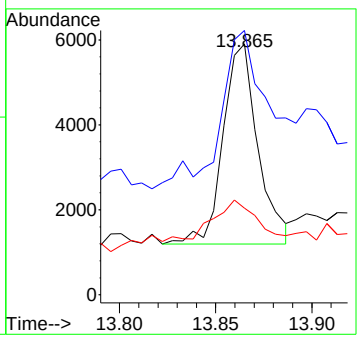


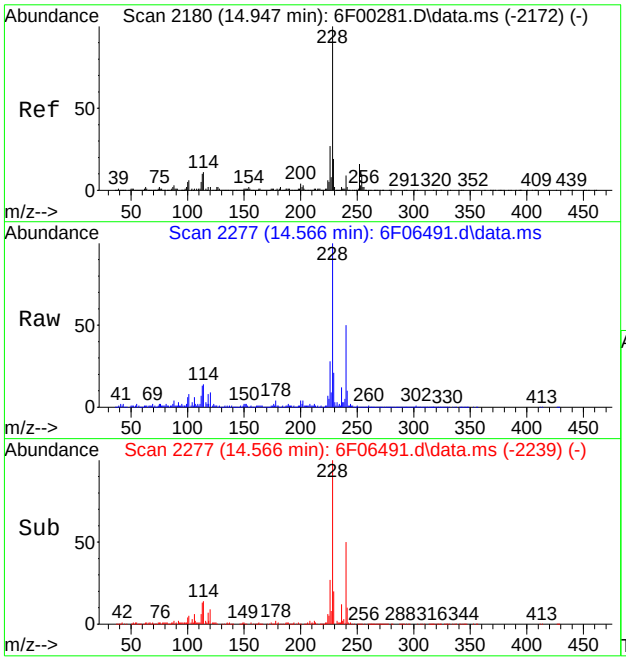


#97
Butylbenzylphthalate
Concen: 0.28 ppm
RT: 13.865 min Scan# 2146
Delta R.T. -0.000 min
Lab File: 6F06491.d
Acq: 11 Aug 2020 3:05 pm

Tgt Ion:149 Resp: 5940

Ion	Ratio	Lower	Upper
149	100		
91	63.2	38.2	98.2
206	16.1	0.0	54.0

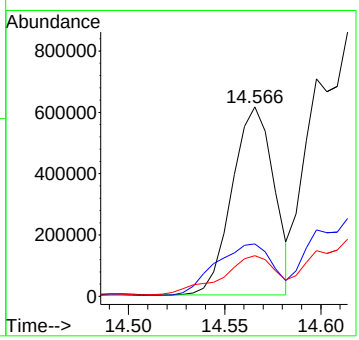


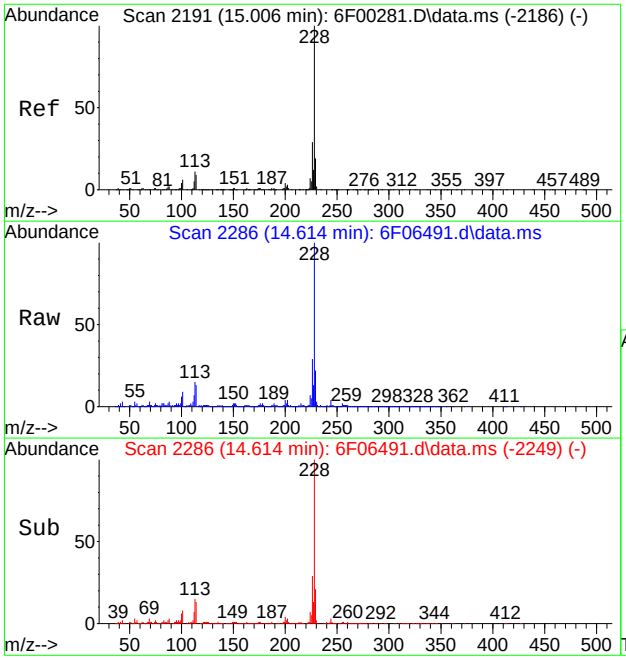


#99
Benzo[a]anthracene
Concen: 22.27 ppm
RT: 14.566 min Scan# 2277
Delta R.T. 0.005 min
Lab File: 6F06491.d
Acq: 11 Aug 2020 3:05 pm

Tgt Ion:228 Resp: 931136

Ion	Ratio	Lower	Upper
228	100		
226	27.3	0.0	56.6
229	19.4	0.0	48.9

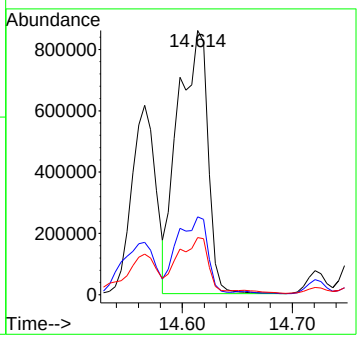


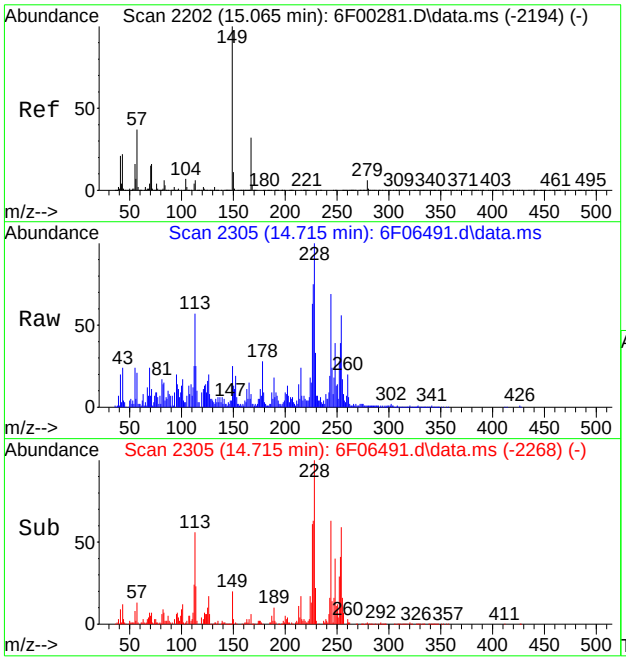


#100
Chrysene
Concen: 39.99 ppm
RT: 14.614 min Scan# 2286
Delta R.T. -0.000 min
Lab File: 6F06491.d
Acq: 11 Aug 2020 3:05 pm

Tgt Ion:228 Resp: 1622137

Ion	Ratio	Lower	Upper
228	100		
226	29.4	0.0	58.9
229	20.5	0.0	48.5

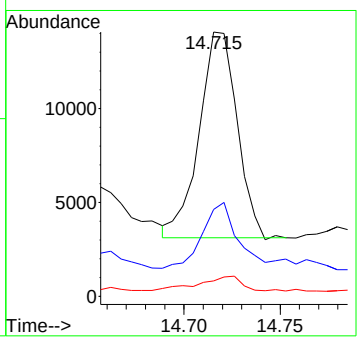


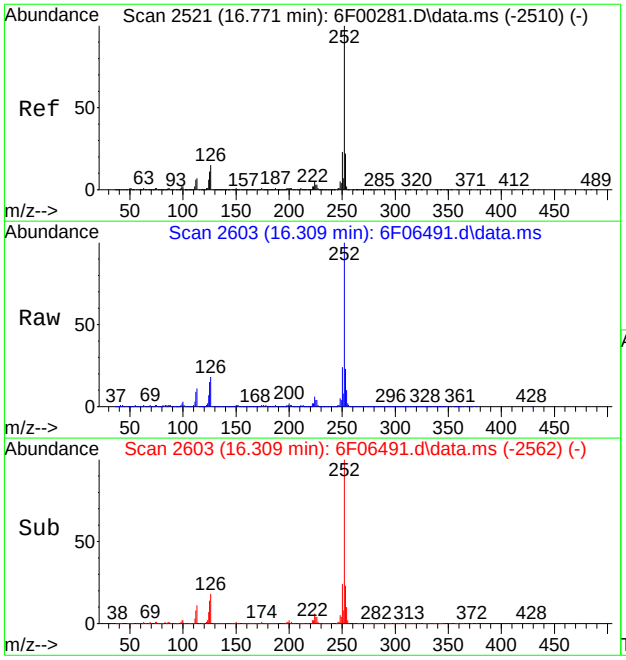


#101
bis(2-Ethylhexyl)phthalate
Concen: 0.50 ppm
RT: 14.715 min Scan# 2305
Delta R.T. -0.000 min
Lab File: 6F06491.d
Acq: 11 Aug 2020 3:05 pm

Tgt Ion:149 Resp: 15048

Ion	Ratio	Lower	Upper
149	100		
167	27.1	1.7	61.7
279	4.5	0.0	35.7

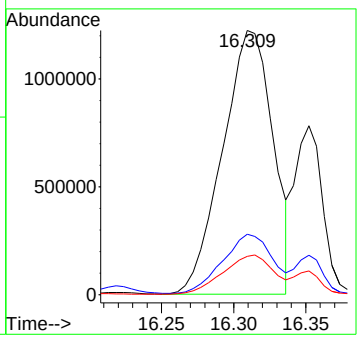


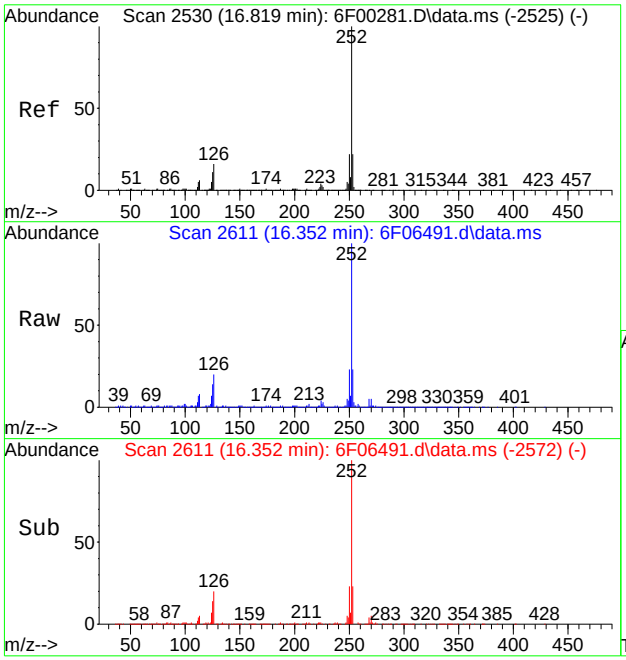


#104
Benzo[b]fluoranthene
Concen: 75.98 ppm
RT: 16.309 min Scan# 2603
Delta R.T. 0.021 min
Lab File: 6F06491.d
Acq: 11 Aug 2020 3:05 pm

Tgt Ion:252 Resp: 2966425

Ion	Ratio	Lower	Upper
252	100		
253	22.5	0.0	51.9
125	14.2	0.0	41.3

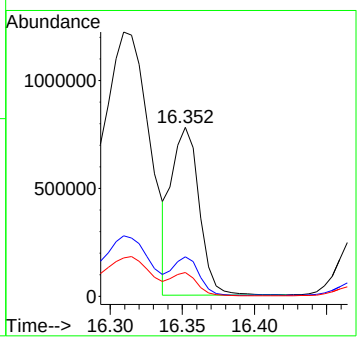


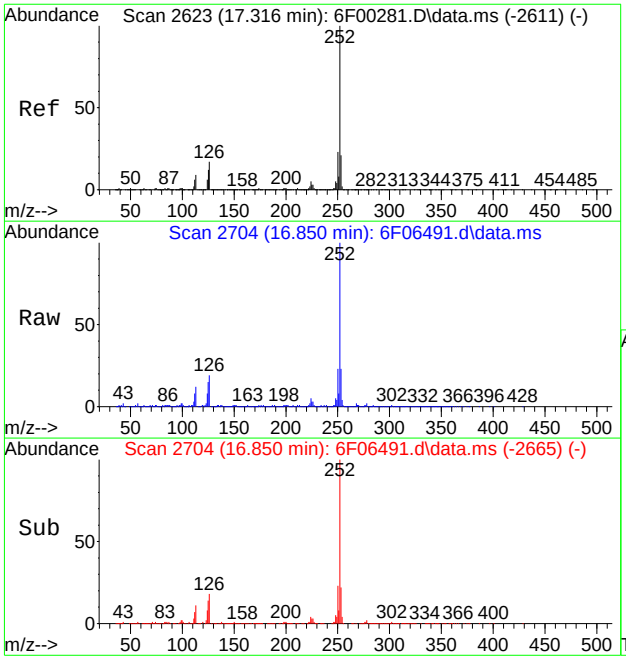


#105
Benzo[k]fluoranthene
Concen: 25.56 ppm
RT: 16.352 min Scan# 2611
Delta R.T. 0.011 min
Lab File: 6F06491.d
Acq: 11 Aug 2020 3:05 pm

Tgt Ion:252 Resp: 1037720

Ion	Ratio	Lower	Upper
252	100		
253	23.2	0.0	51.7
125	13.3	0.0	40.7

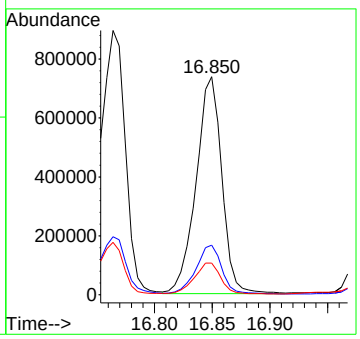


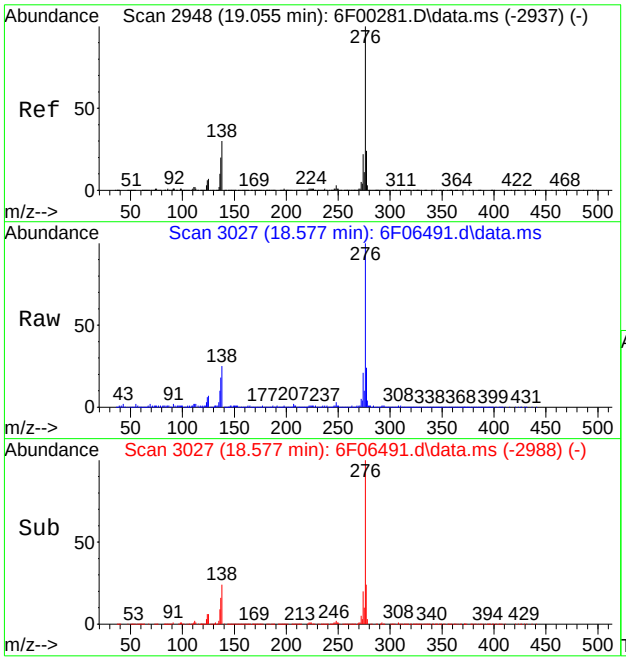


#106
Benzo[a]pyrene
Concen: 31.56 ppm
RT: 16.850 min Scan# 2704
Delta R.T. 0.011 min
Lab File: 6F06491.d
Acq: 11 Aug 2020 3:05 pm

Tgt Ion:252 Resp: 1144090

Ion	Ratio	Lower	Upper
252	100		
253	22.5	0.0	51.0
125	14.2	0.0	42.0

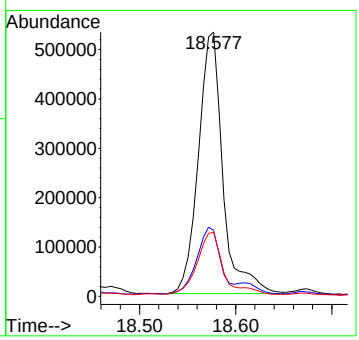


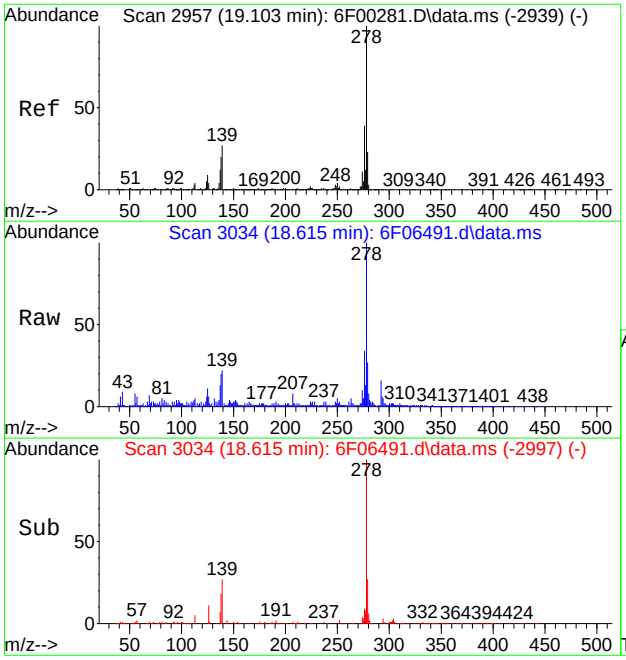


#107
Indeno[1,2,3-cd]pyrene
Concen: 27.83 ppm
RT: 18.577 min Scan# 3027
Delta R.T. 0.011 min
Lab File: 6F06491.d
Acq: 11 Aug 2020 3:05 pm

Tgt Ion:276 Resp: 939249

Ion	Ratio	Lower	Upper
276	100		
138	24.2	0.0	59.6
277	23.6	0.0	54.1

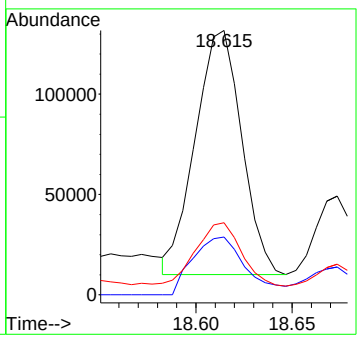


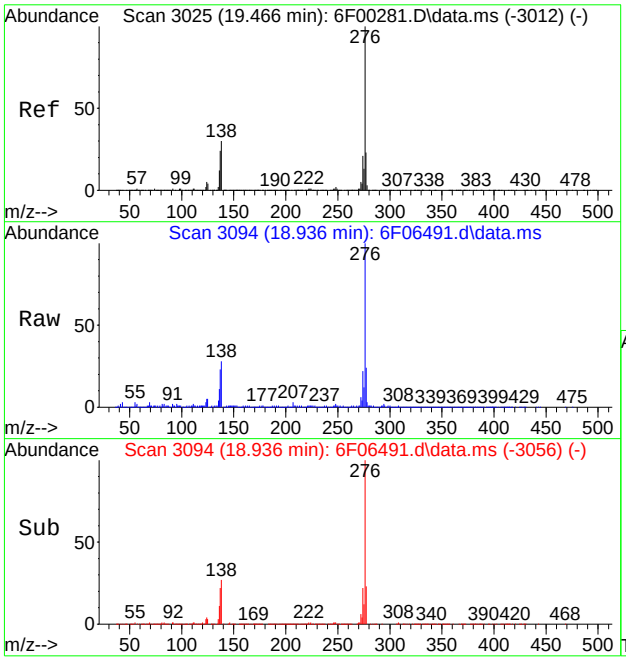


#108
Dibenz[a,h]anthracene
Concen: 5.66 ppm
RT: 18.615 min Scan# 3034
Delta R.T. -0.000 min
Lab File: 6F06491.d
Acq: 11 Aug 2020 3:05 pm

Tgt Ion:278 Resp: 203882

Ion	Ratio	Lower	Upper
278	100		
139	22.7	0.0	56.9
279	26.4	0.0	53.0

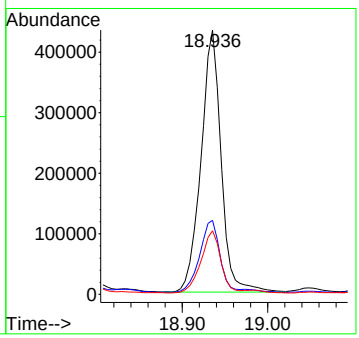




#109
Benzo[g,h,i]perylene
Concen: 19.37 ppm
RT: 18.936 min Scan# 3094
Delta R.T. 0.005 min
Lab File: 6F06491.d
Acq: 11 Aug 2020 3:05 pm

Tgt Ion:276 Resp: 705717

Ion	Ratio	Lower	Upper
276	100		
138	27.5	0.0	59.5
277	23.7	0.0	53.0



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06492.d
Acq On : 11 Aug 2020 3:31 pm
Operator : marthav
Sample : fa77581-10 E Inst : MSBNA10
Misc : op81484,S6F251,30.1,,,1,1,soil
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Results File: 8270D6F072920.RES
Quant Time: Aug 12 06:13:05 2020
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

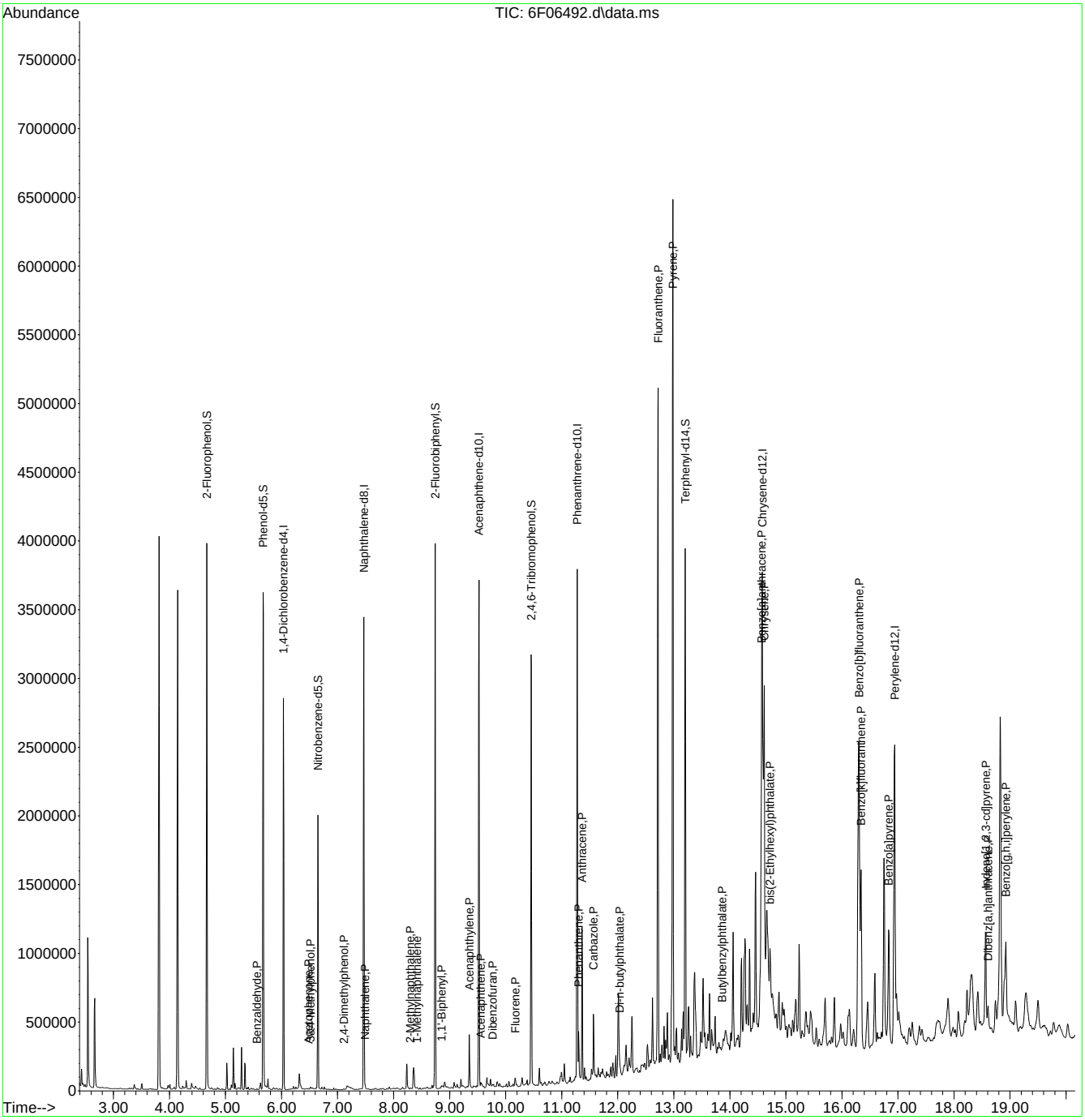
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	6.035	152	386926	40.00	ppm		0.00
22) Naphthalene-d8	7.468	136	1451329	40.00	ppm		0.00
43) Acenaphthene-d10	9.522	164	757234	40.00	ppm		0.00
70) Phenanthrene-d10	11.276	188	1373589	40.00	ppm		0.00
92) Chrysene-d12	14.576	240	1176388	40.00	ppm		0.00
102) Perylene-d12	16.940	264	1159280	40.00	ppm		0.01
System Monitoring Compounds							
7) 2-Fluorophenol	4.665	112	991316	67.80	ppm		0.00
Spiked Amount 100.000	Range 40 - 102		Recovery = 67.80%				
9) Phenol-d5	5.671	99	1287088	74.16	ppm		0.00
Spiked Amount 100.000	Range 41 - 100		Recovery = 74.16%				
23) Nitrobenzene-d5	6.650	82	555534	34.89	ppm		0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 69.78%				
47) 2-Fluorobiphenyl	8.741	172	1073471	36.27	ppm		0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 72.54%				
75) 2,4,6-Tribromophenol	10.458	330	373862	80.87	ppm		0.00
Spiked Amount 100.000	Range 42 - 108		Recovery = 80.87%				
95) Terphenyl-d14	13.202	244	1208131	36.54	ppm		0.00
Spiked Amount 50.000	Range 45 - 119		Recovery = 73.08%				
Target Compounds							Qvalue
5) Benzaldehyde	5.559	106	1588	0.13	ppm		87
18) Acetophenone	6.479	105	1901	0.10	ppm		90
21) 3&4-Methylphenol	6.516	108	1764	0.13	ppm		95
27) 2,4-Dimethylphenol	7.110	107	1419	0.11	ppm		93
34) Naphthalene	7.489	128	5341	0.13	ppm	#	1
40) 2-Methylnaphthalene	8.297	141	1948	0.08	ppm		98
41) 1-Methylnaphthalene	8.415	142	1476	0.06	ppm		95
48) 1,1'-Biphenyl	8.853	154	1436	0.05	ppm		84
52) Acenaphthylene	9.351	152	170550	4.51	ppm		97
57) Acenaphthene	9.554	153	8814	0.35	ppm		96
60) Dibenzofuran	9.763	168	5069	0.15	ppm		71
65) Fluorene	10.169	166	22094	0.79	ppm		93
84) Phenanthrene	11.303	178	121590	2.96	ppm		99
85) Anthracene	11.362	178	411749	9.85	ppm		98
87) Carbazole	11.565	167	184224	4.89	ppm		96
89) Di-n-butylphthalate	12.030	149	8260	0.17	ppm		91
91) Fluoranthene	12.720	202	2169373	50.10	ppm		100
94) Pyrene	12.982	202	2504566	59.44	ppm		95
97) Butylbenzylphthalate	13.860	149	9727	0.48	ppm		91
99) Benzo[a]anthracene	14.566	228	601569	15.26	ppm		99
100) Chrysene	14.614	228	1217133	31.82	ppm		98
101) bis(2-Ethylhexyl)phtha...	14.715	149	11536	0.41	ppm		97
104) Benzo[b]fluoranthene	16.304	252	1735788	46.65	ppm		97
105) Benzo[k]fluoranthene	16.341	252	595103	15.38	ppm		96
106) Benzo[a]pyrene	16.833	252	437970	12.67	ppm		95
107) Indeno[1,2,3-cd]pyrene	18.566	276	439893	13.67	ppm		94
108) Dibenz[a,h]anthracene	18.609	278	81641	2.38	ppm		93
109) Benzo[g,h,i]perylene	18.925	276	332128	9.56	ppm		97

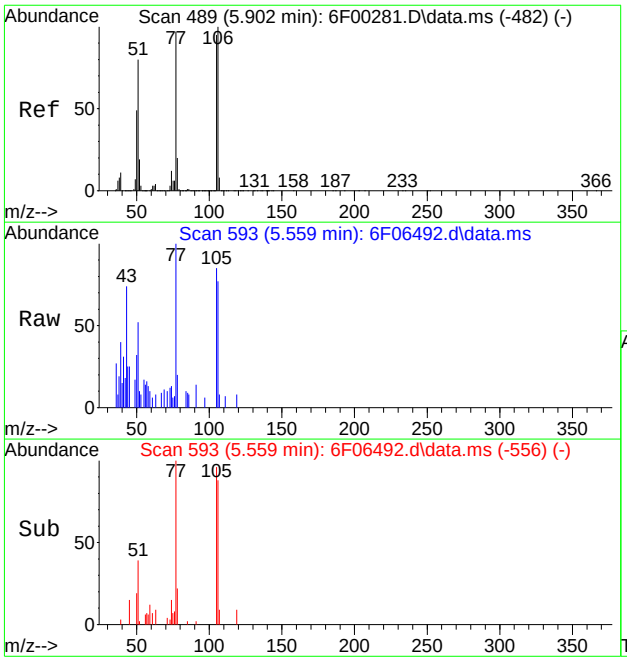
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06492.d
Acq On : 11 Aug 2020 3:31 pm
Operator : marthav
Sample : fa77581-10 E Inst : MSBNA10
Misc : op81484,S6F251,30.1,,,1,1,soil
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Results File: 8270D6F072920.RES
Quant Time: Aug 12 06:13:05 2020
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

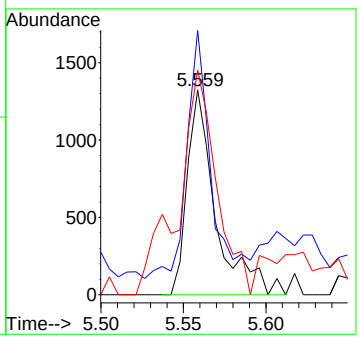


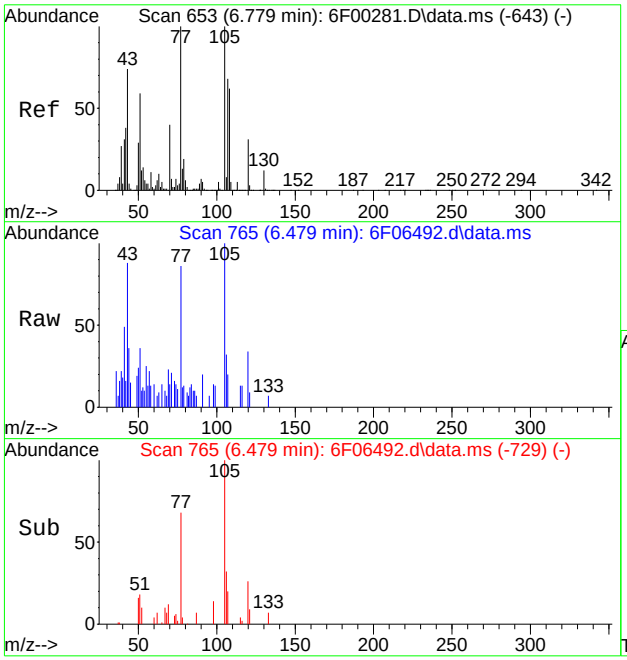


#5
Benzaldehyde
Concen: 0.13 ppm
RT: 5.559 min Scan# 593
Delta R.T. -0.000 min
Lab File: 6F06492.d
Acq: 11 Aug 2020 3:31 pm

Tgt Ion:106 Resp: 1588

Ion	Ratio	Lower	Upper
106	100		
77	108.4	67.1	127.1
105	80.3	65.1	125.1

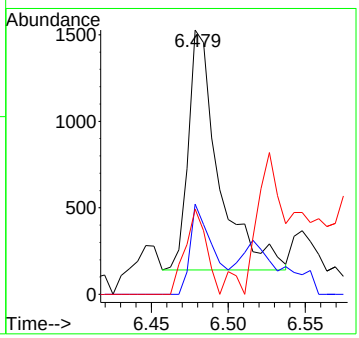


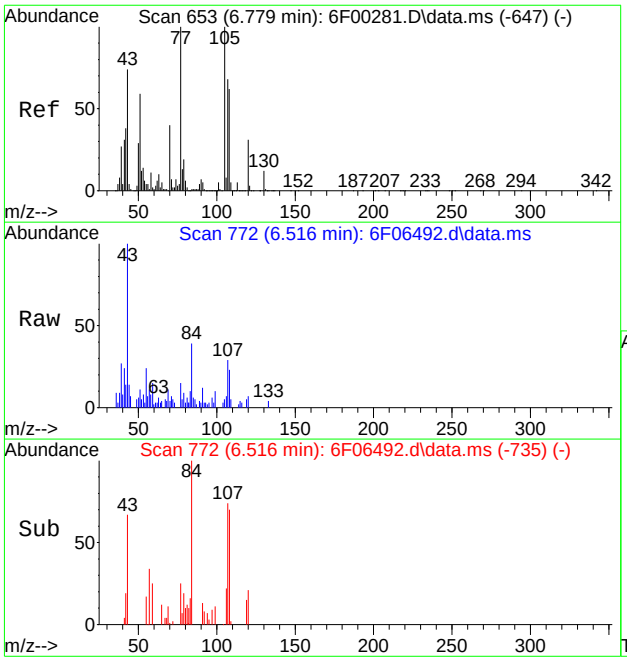


#18
Acetophenone
Concen: 0.10 ppm
RT: 6.479 min Scan# 765
Delta R.T. -0.006 min
Lab File: 6F06492.d
Acq: 11 Aug 2020 3:31 pm

Tgt Ion:105 Resp: 1901

Ion	Ratio	Lower	Upper
105	100		
120	32.2	0.7	60.7
106	21.1	0.0	38.4

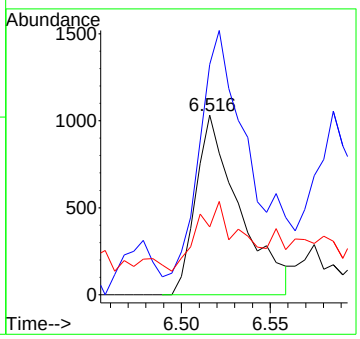


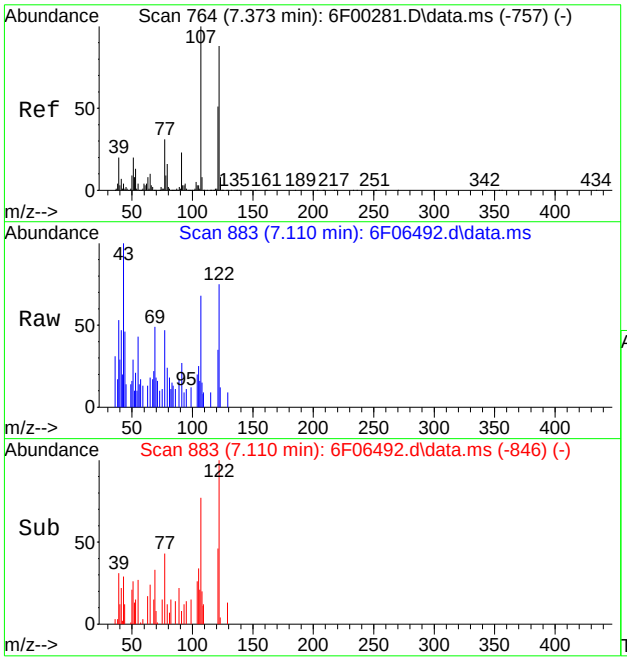


#21
3&4-Methylphenol
Concen: 0.13 ppm
RT: 6.516 min Scan# 772
Delta R.T. -0.000 min
Lab File: 6F06492.d
Acq: 11 Aug 2020 3:31 pm

Tgt Ion:108 Resp: 1764

Ion	Ratio	Lower	Upper
108	100		
107	110.5	80.3	140.3
79	18.4	0.2	60.2

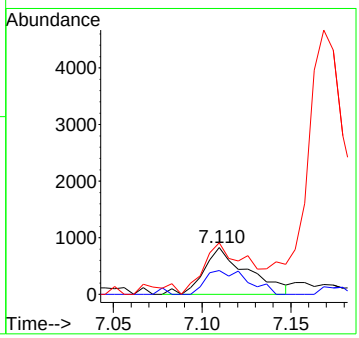


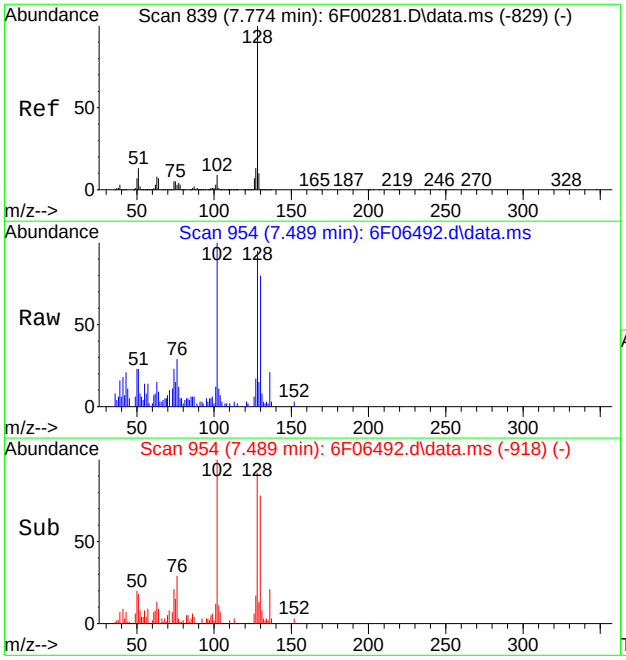


#27
2,4-Dimethylphenol
Concen: 0.11 ppm
RT: 7.110 min Scan# 883
Delta R.T. -0.000 min
Lab File: 6F06492.d
Acq: 11 Aug 2020 3:31 pm

Tgt Ion:107 Resp: 1419

Ion	Ratio	Lower	Upper
107	100		
121	49.2	20.5	80.5
122	79.1	58.5	118.5

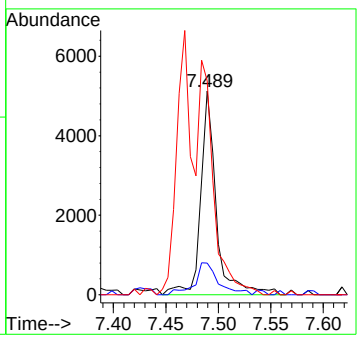


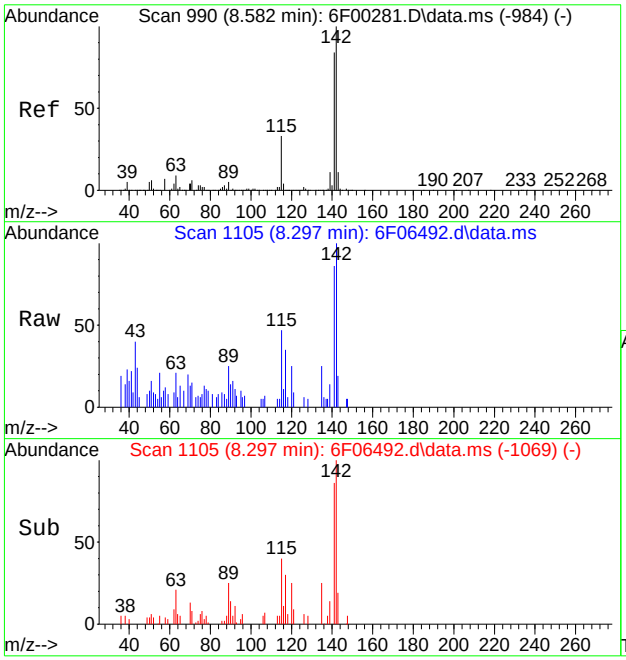


#34
Naphthalene
Concen: 0.13 ppm
RT: 7.489 min Scan# 954
Delta R.T. -0.006 min
Lab File: 6F06492.d
Acq: 11 Aug 2020 3:31 pm

Tgt Ion:128 Resp: 5341

Ion	Ratio	Lower	Upper
128	100		
129	15.6	0.0	40.4
102	103.7	0.0	39.2#

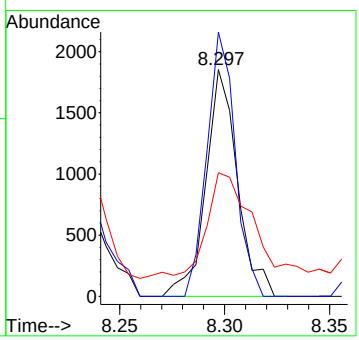


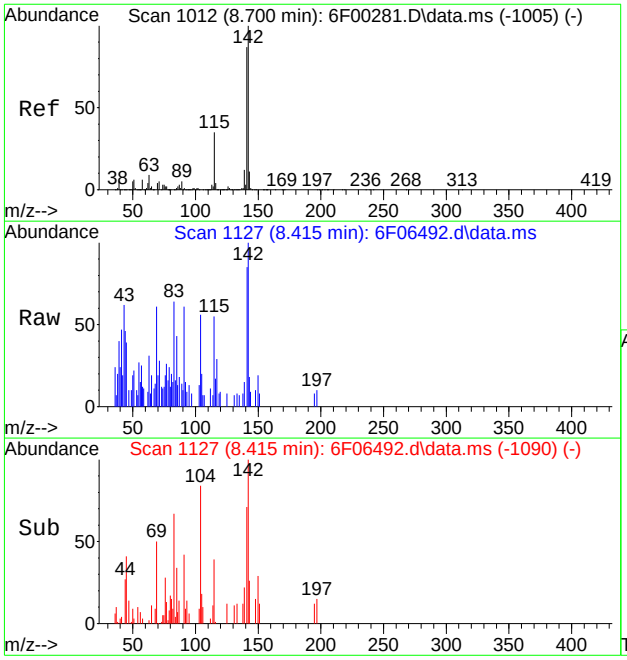


#40
2-Methylnaphthalene
Concen: 0.08 ppm
RT: 8.297 min Scan# 1105
Delta R.T. -0.006 min
Lab File: 6F06492.d
Acq: 11 Aug 2020 3:31 pm

Tgt Ion:141 Resp: 1948

Ion	Ratio	Lower	Upper
141	100		
142	116.7	88.9	148.9
115	42.1	9.7	69.7

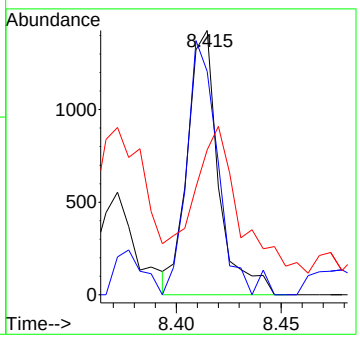


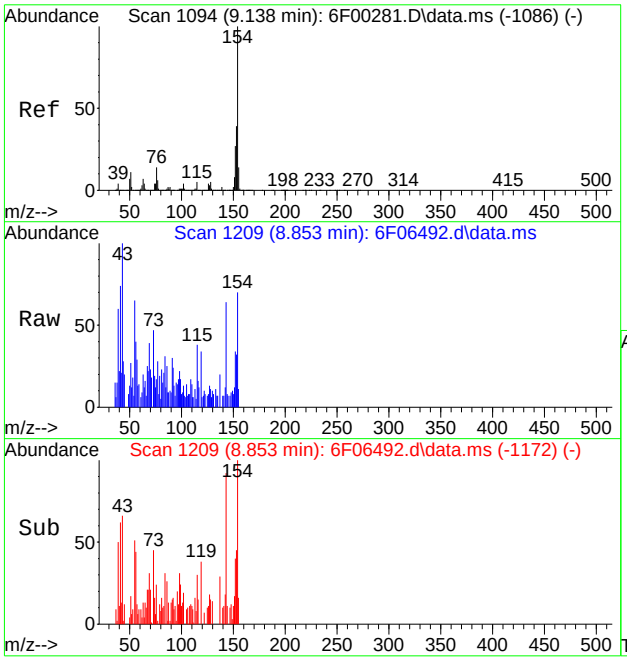


#41
1-Methylnaphthalene
Concen: 0.06 ppm
RT: 8.415 min Scan# 1127
Delta R.T. -0.000 min
Lab File: 6F06492.d
Acq: 11 Aug 2020 3:31 pm

Tgt Ion:142 Resp: 1476

Ion	Ratio	Lower	Upper
142	100		
141	88.4	56.8	116.8
115	41.6	4.7	64.7

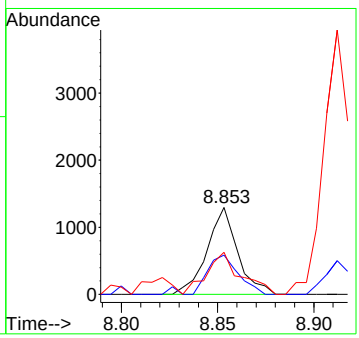


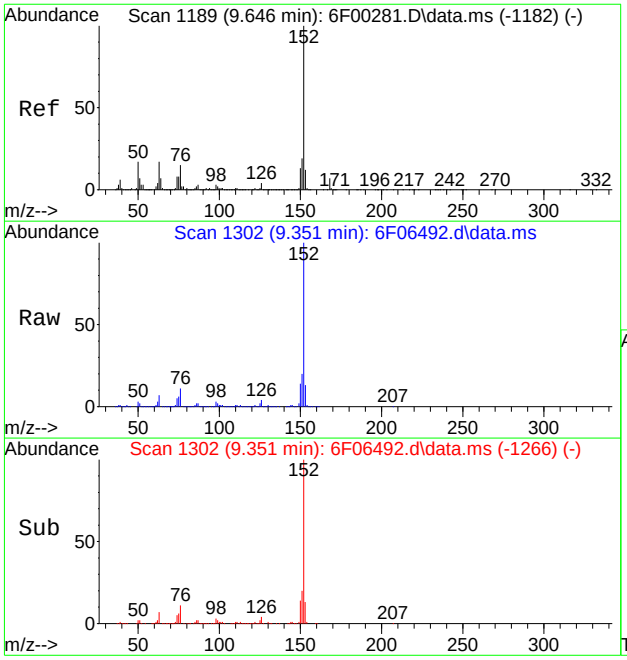


#48
1,1'-Biphenyl
Concen: 0.05 ppm
RT: 8.853 min Scan# 1209
Delta R.T. -0.000 min
Lab File: 6F06492.d
Acq: 11 Aug 2020 3:31 pm

Tgt Ion:154 Resp: 1436

Ion	Ratio	Lower	Upper
154	100		
153	45.3	8.7	68.7
152	38.9	0.0	56.7

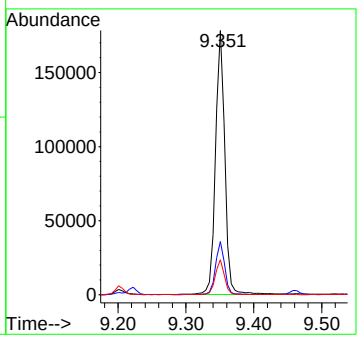


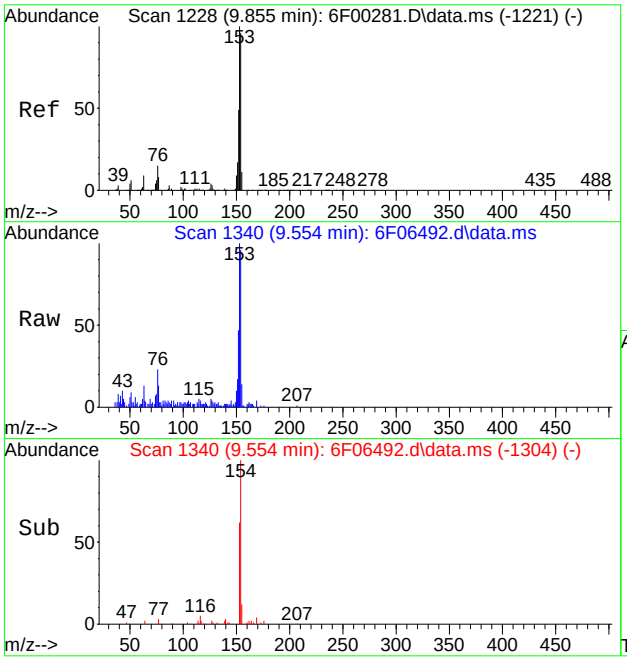


#52
Acenaphthylene
Concen: 4.51 ppm
RT: 9.351 min Scan# 1302
Delta R.T. -0.006 min
Lab File: 6F06492.d
Acq: 11 Aug 2020 3:31 pm

Tgt Ion:152 Resp: 170550

Ion	Ratio	Lower	Upper
152	100		
151	20.0	0.0	48.8
153	13.2	0.0	42.3

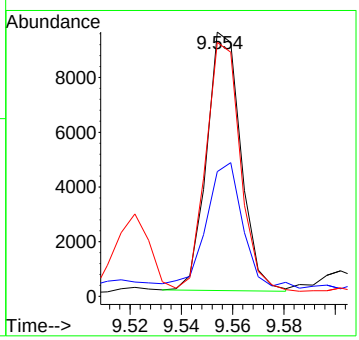


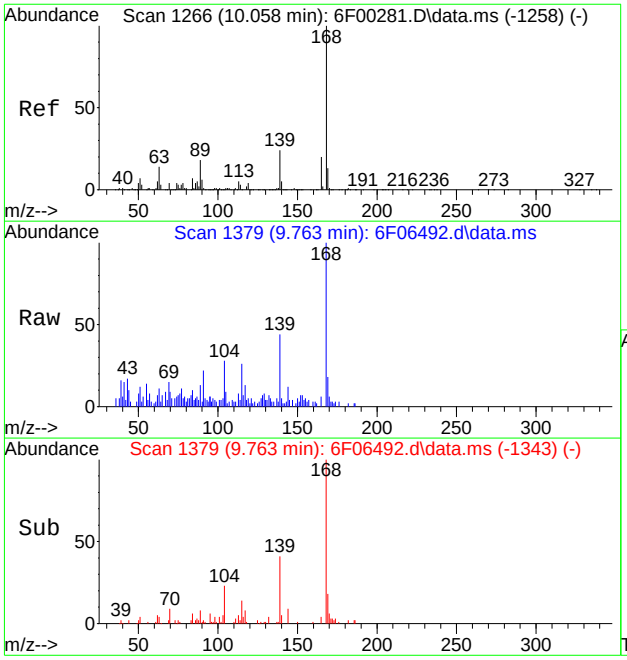


#57
Acenaphthene
Concen: 0.35 ppm
RT: 9.554 min Scan# 1340
Delta R.T. -0.006 min
Lab File: 6F06492.d
Acq: 11 Aug 2020 3:31 pm

Tgt Ion:153 Resp: 8814

Ion	Ratio	Lower	Upper
153	100		
152	43.2	19.4	79.4
154	94.5	65.6	125.6

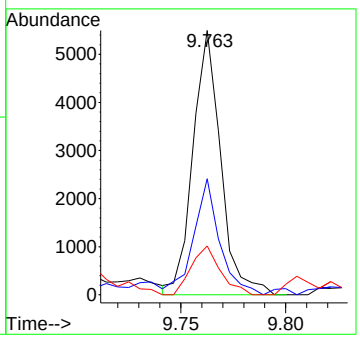


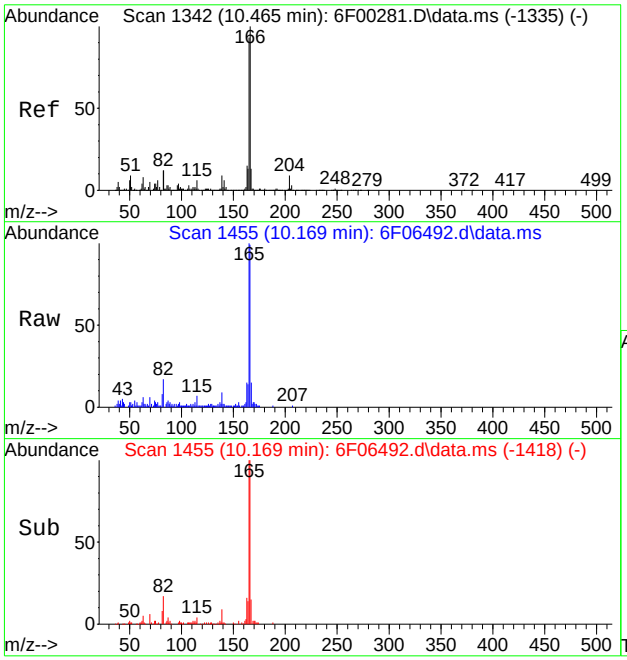


#60
Dibenzofuran
Concen: 0.15 ppm
RT: 9.763 min Scan# 1379
Delta R.T. -0.006 min
Lab File: 6F06492.d
Acq: 11 Aug 2020 3:31 pm

Tgt Ion:168 Resp: 5069

Ion	Ratio	Lower	Upper
168	100		
139	42.3	0.0	53.6
169	16.8	0.0	42.6

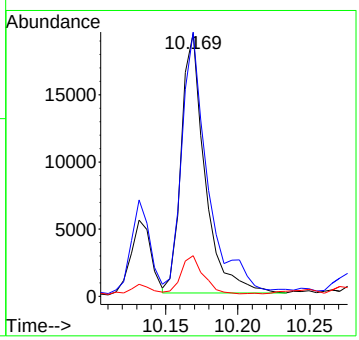


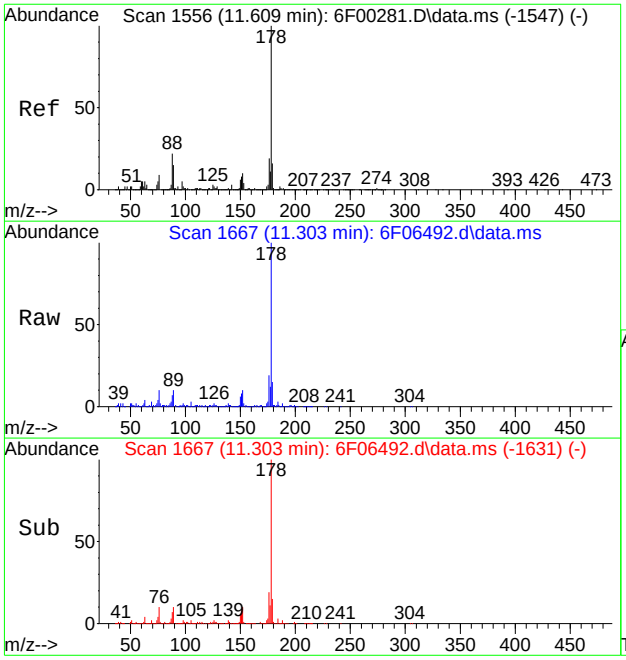


#65
Fluorene
Concen: 0.79 ppm
RT: 10.169 min Scan# 1455
Delta R.T. -0.000 min
Lab File: 6F06492.d
Acq: 11 Aug 2020 3:31 pm

Tgt Ion:166 Resp: 22094

Ion	Ratio	Lower	Upper
166	100		
165	100.1	62.6	122.6
167	14.2	0.0	43.1

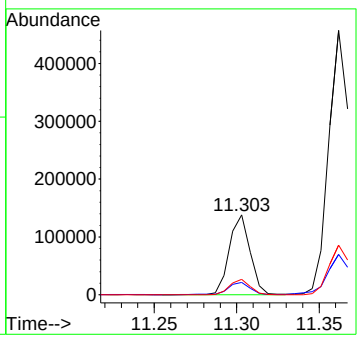


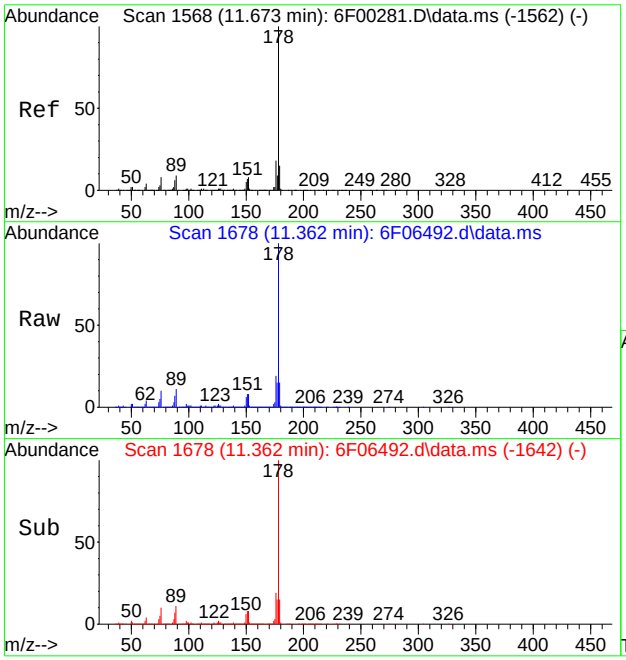


#84
Phenanthrene
Concen: 2.96 ppm
RT: 11.303 min Scan# 1667
Delta R.T. -0.006 min
Lab File: 6F06492.d
Acq: 11 Aug 2020 3:31 pm

Tgt Ion:178 Resp: 121590

Ion	Ratio	Lower	Upper
178	100		
179	15.2	0.0	46.0
176	19.1	0.0	49.0

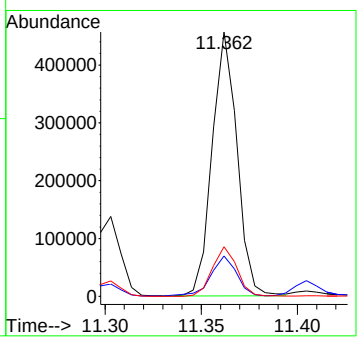


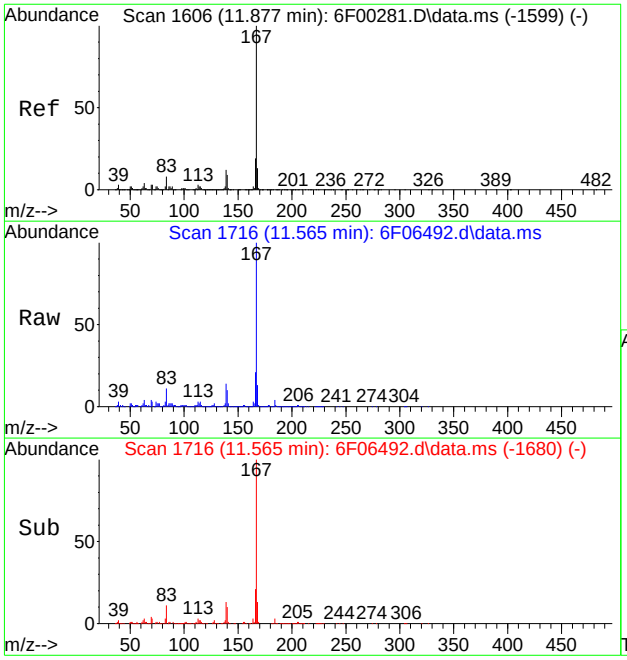


#85
Anthracene
Concen: 9.85 ppm
RT: 11.362 min Scan# 1678
Delta R.T. -0.006 min
Lab File: 6F06492.d
Acq: 11 Aug 2020 3:31 pm

Tgt Ion:178 Resp: 411749

Ion	Ratio	Lower	Upper
178	100		
179	14.6	0.0	45.4
176	18.7	0.0	47.7

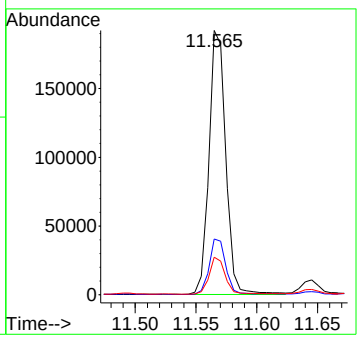


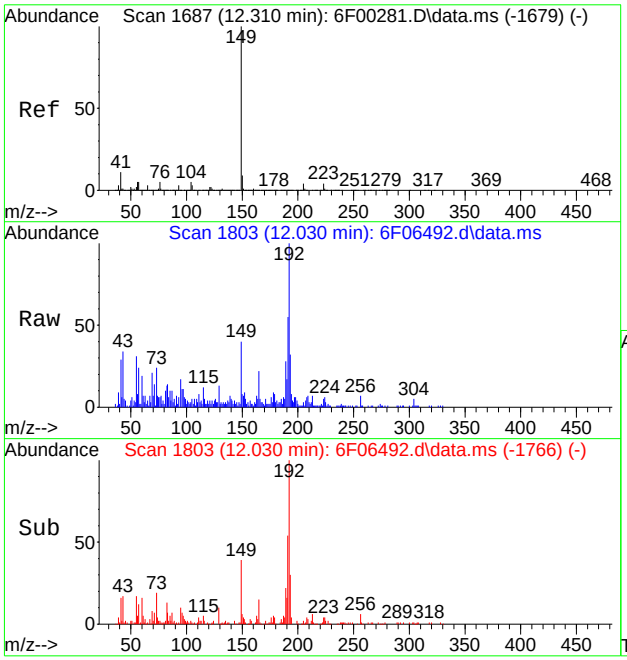


#87
Carbazole
Concen: 4.89 ppm
RT: 11.565 min Scan# 1716
Delta R.T. -0.006 min
Lab File: 6F06492.d
Acq: 11 Aug 2020 3:31 pm

Tgt Ion:167 Resp: 184224

Ion	Ratio	Lower	Upper
167	100		
166	21.0	0.0	49.2
139	13.9	0.0	42.3

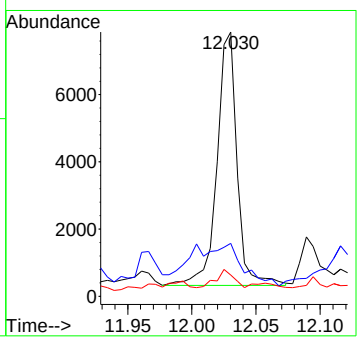


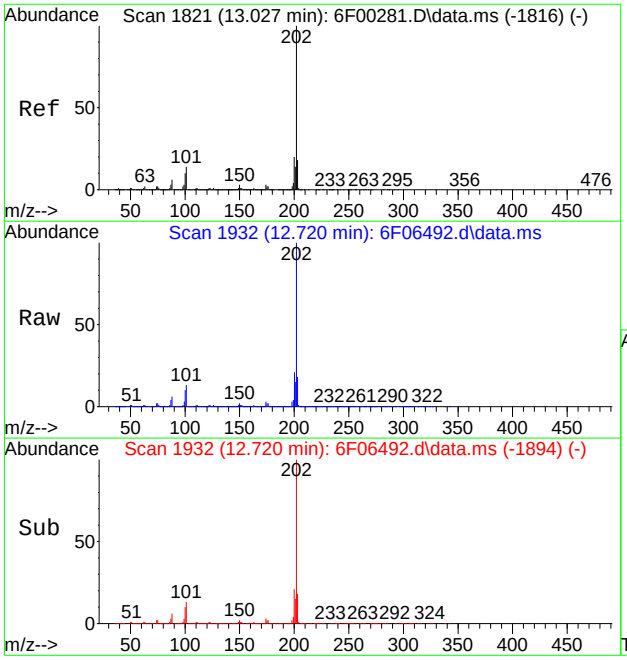


#89
Di-n-butylphthalate
Concen: 0.17 ppm
RT: 12.030 min Scan# 1803
Delta R.T. -0.000 min
Lab File: 6F06492.d
Acq: 11 Aug 2020 3:31 pm

Tgt Ion:149 Resp: 8260

Ion	Ratio	Lower	Upper
149	100		
150	13.7	0.0	38.7
104	4.8	0.0	35.2

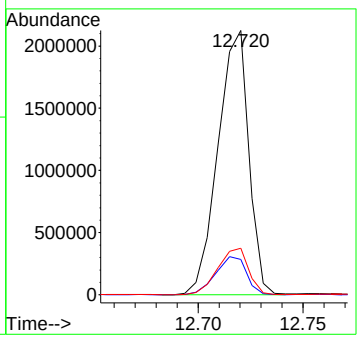


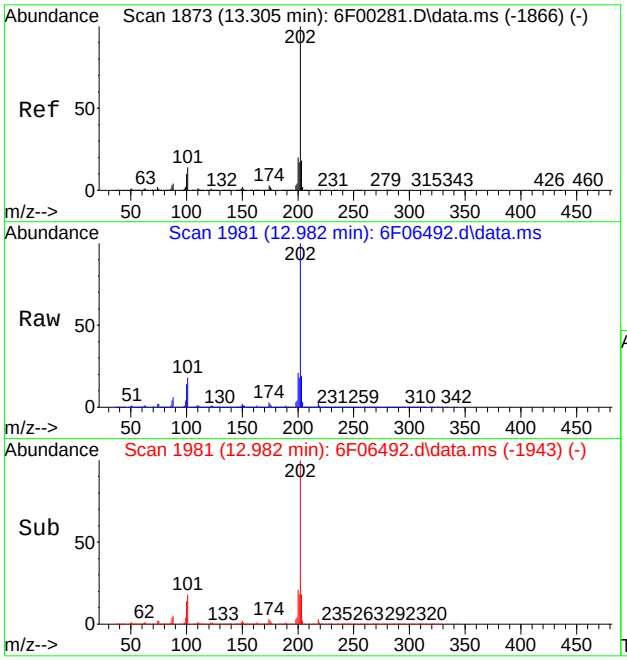


#91
Fluoranthene
Concen: 50.10 ppm
RT: 12.720 min Scan# 1932
Delta R.T. 0.005 min
Lab File: 6F06492.d
Acq: 11 Aug 2020 3:31 pm

Tgt Ion:202 Resp: 2169373

Ion	Ratio	Lower	Upper
202	100		
101	13.3	0.0	43.6
203	17.6	0.0	47.7

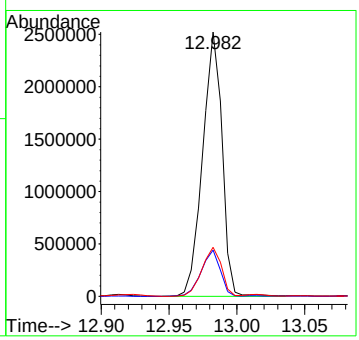


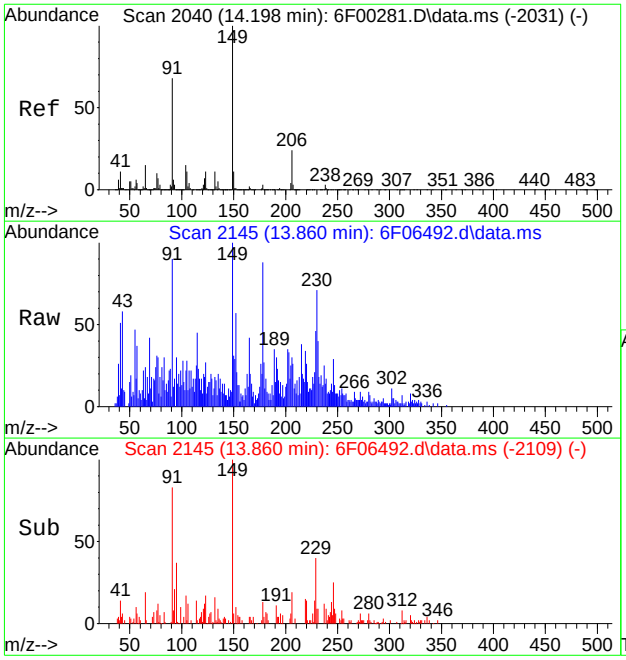


#94
Pyrene
Concen: 59.44 ppm
RT: 12.982 min Scan# 1981
Delta R.T. 0.005 min
Lab File: 6F06492.d
Acq: 11 Aug 2020 3:31 pm

Tgt Ion:202 Resp: 2504566

Ion	Ratio	Lower	Upper
202	100		
101	17.5	0.0	43.8
203	18.5	0.0	47.8

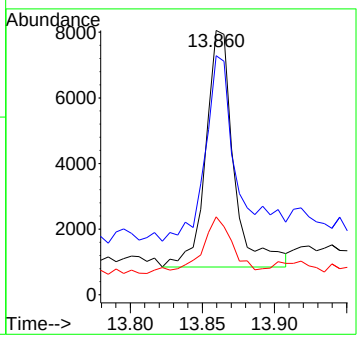


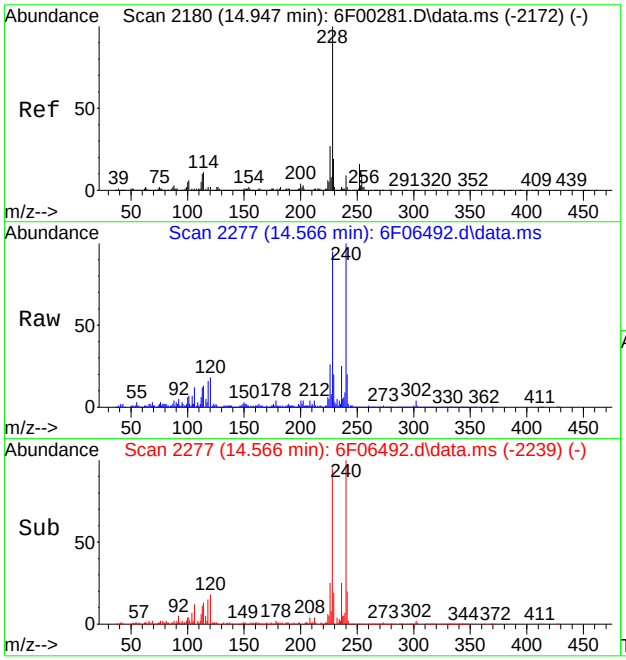


#97
Butylbenzylphthalate
Concen: 0.48 ppm
RT: 13.860 min Scan# 2145
Delta R.T. -0.006 min
Lab File: 6F06492.d
Acq: 11 Aug 2020 3:31 pm

Tgt Ion:149 Resp: 9727

Ion	Ratio	Lower	Upper
149	100		
91	76.5	38.2	98.2
206	21.2	0.0	54.0

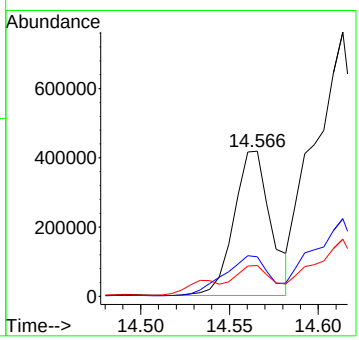


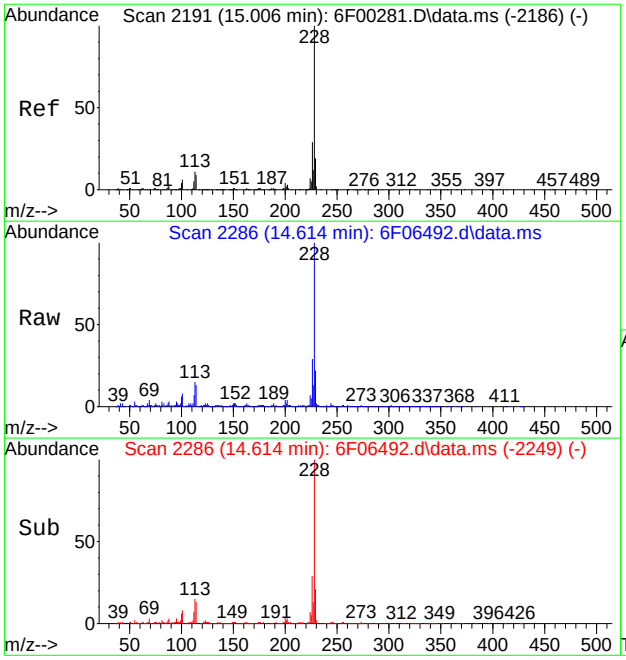


#99
Benzo[a]anthracene
Concen: 15.26 ppm
RT: 14.566 min Scan# 2277
Delta R.T. 0.005 min
Lab File: 6F06492.d
Acq: 11 Aug 2020 3:31 pm

Tgt Ion:228 Resp: 601569

Ion	Ratio	Lower	Upper
228	100		
226	26.5	0.0	56.6
229	19.5	0.0	48.9

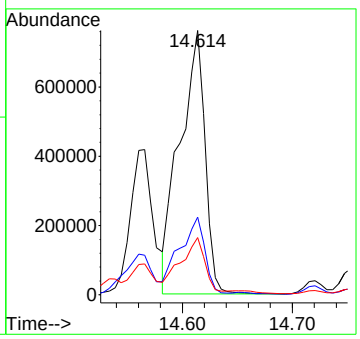


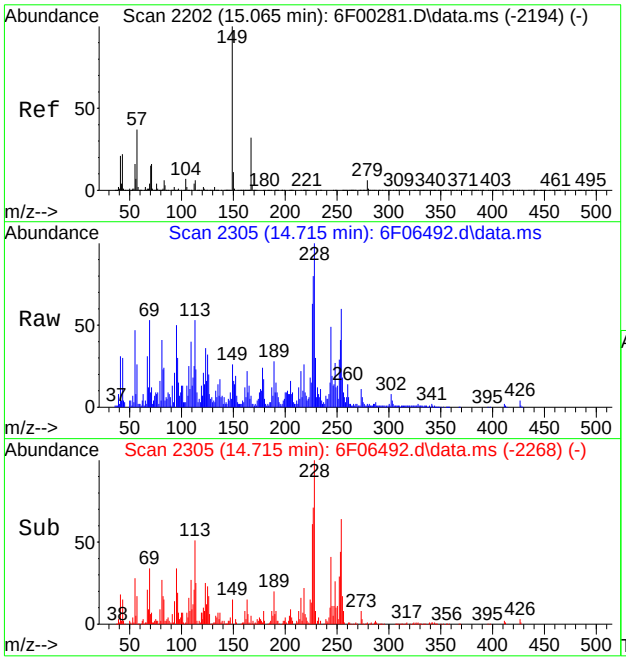


#100
Chrysene
Concen: 31.82 ppm
RT: 14.614 min Scan# 2286
Delta R.T. -0.000 min
Lab File: 6F06492.d
Acq: 11 Aug 2020 3:31 pm

Tgt Ion:228 Resp: 1217133

Ion	Ratio	Lower	Upper
228	100		
226	29.2	0.0	58.9
229	20.8	0.0	48.5

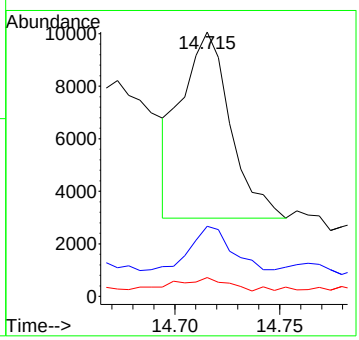


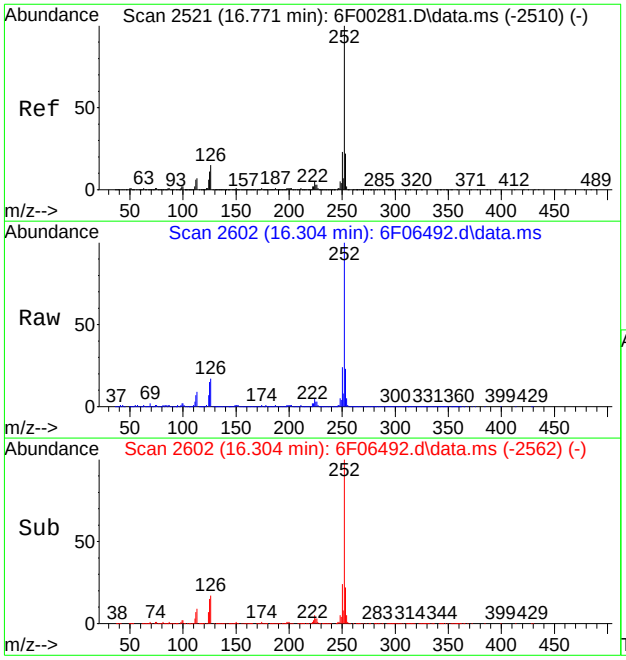


#101
bis(2-Ethylhexyl)phthalate
Concen: 0.41 ppm
RT: 14.715 min Scan# 2305
Delta R.T. -0.000 min
Lab File: 6F06492.d
Acq: 11 Aug 2020 3:31 pm

Tgt Ion:149 Resp: 11536

Ion	Ratio	Lower	Upper
149	100		
167	29.9	1.7	61.7
279	6.9	0.0	35.7

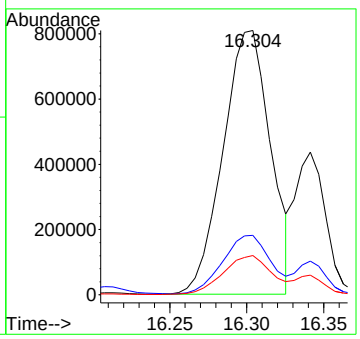


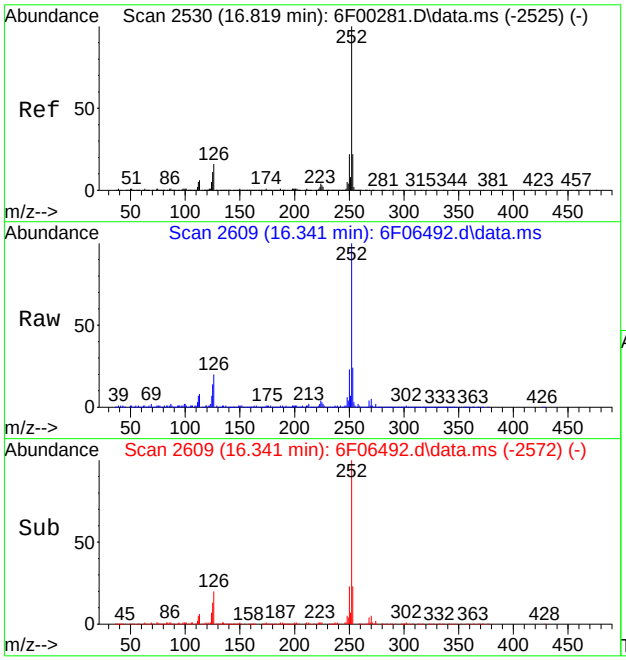


#104
Benzo[b]fluoranthene
Concen: 46.65 ppm
RT: 16.304 min Scan# 2602
Delta R.T. 0.016 min
Lab File: 6F06492.d
Acq: 11 Aug 2020 3:31 pm

Tgt Ion:252 Resp: 1735788

Ion	Ratio	Lower	Upper
252	100		
253	22.2	0.0	51.9
125	14.5	0.0	41.3

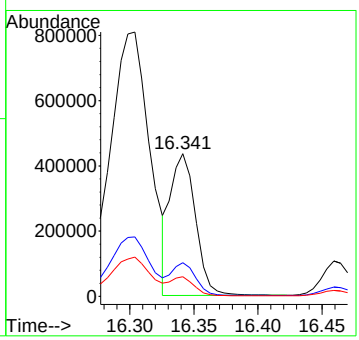


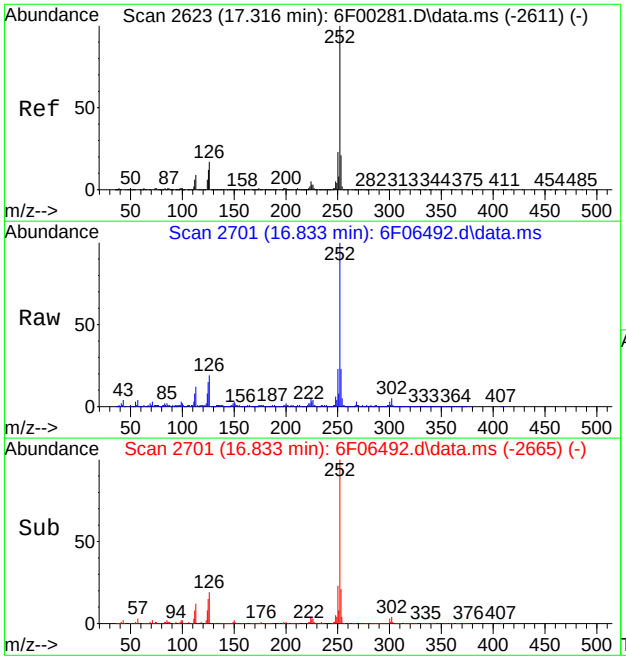


#105
Benzo[k]fluoranthene
Concen: 15.38 ppm
RT: 16.341 min Scan# 2609
Delta R.T. -0.000 min
Lab File: 6F06492.d
Acq: 11 Aug 2020 3:31 pm

Tgt Ion:252 Resp: 595103

Ion	Ratio	Lower	Upper
252	100		
253	23.5	0.0	51.7
125	12.5	0.0	40.7

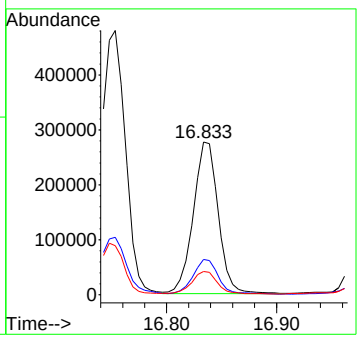


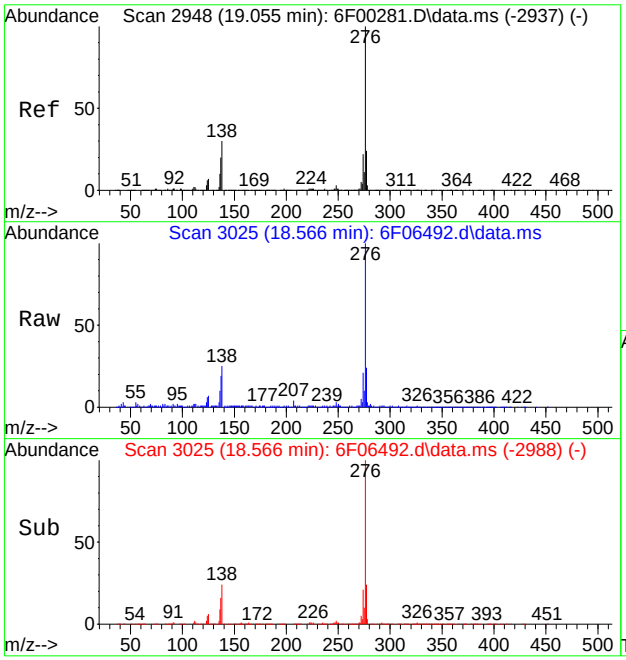


#106
Benzo[a]pyrene
Concen: 12.67 ppm
RT: 16.833 min Scan# 2701
Delta R.T. -0.006 min
Lab File: 6F06492.d
Acq: 11 Aug 2020 3:31 pm

Tgt Ion:252 Resp: 437970

Ion	Ratio	Lower	Upper
252	100		
253	22.6	0.0	51.0
125	14.7	0.0	42.0

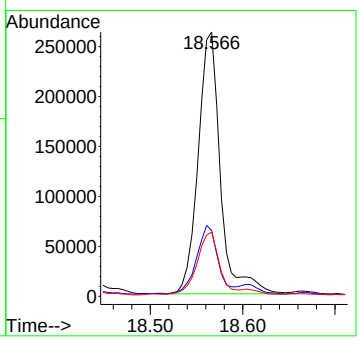


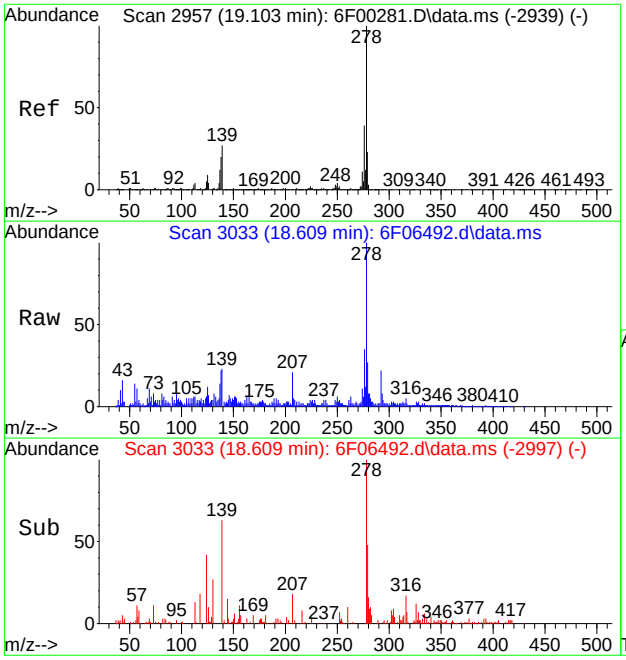


#107
Indeno[1,2,3-cd]pyrene
Concen: 13.67 ppm
RT: 18.566 min Scan# 3025
Delta R.T. -0.000 min
Lab File: 6F06492.d
Acq: 11 Aug 2020 3:31 pm

Tgt Ion:276 Resp: 439893

Ion	Ratio	Lower	Upper
276	100		
138	24.2	0.0	59.6
277	23.7	0.0	54.1

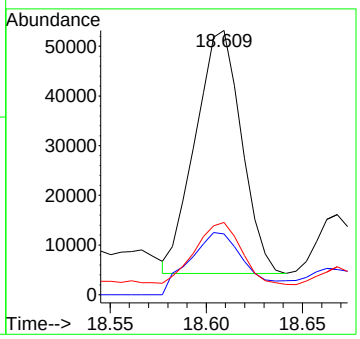


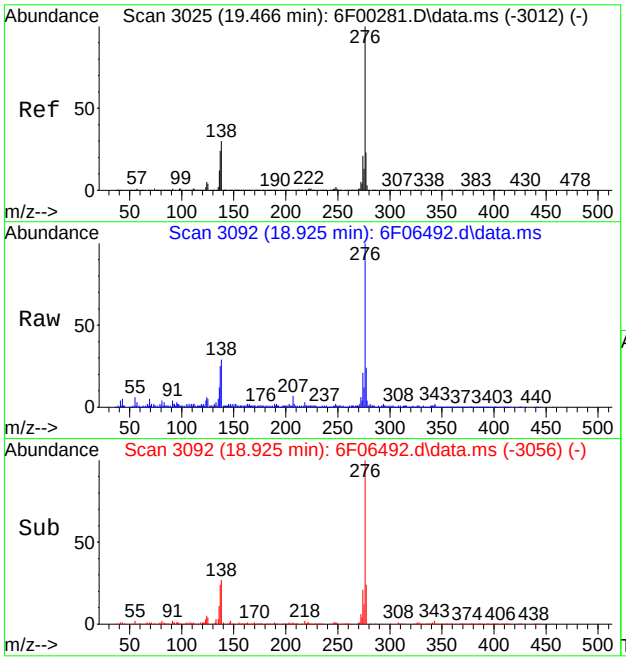


#108
Dibenz[a,h]anthracene
Concen: 2.38 ppm
RT: 18.609 min Scan# 3033
Delta R.T. -0.006 min
Lab File: 6F06492.d
Acq: 11 Aug 2020 3:31 pm

Tgt Ion:278 Resp: 81641

Ion	Ratio	Lower	Upper
278	100		
139	22.7	0.0	56.9
279	25.9	0.0	53.0

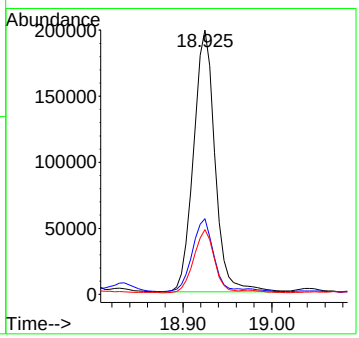




#109
Benzo[g,h,i]perylene
Concen: 9.56 ppm
RT: 18.925 min Scan# 3092
Delta R.T. -0.006 min
Lab File: 6F06492.d
Acq: 11 Aug 2020 3:31 pm

Tgt Ion:276 Resp: 332128

Ion	Ratio	Lower	Upper
276	100		
138	27.8	0.0	59.5
277	24.1	0.0	53.0



Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 08/11/20 12:03

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11117.d
Acq On : 10 Aug 2020 9:26 pm
Operator : FOUADS
Sample : fa77581-1 e
Misc : op81483,S7G482,15.2,,,1,1,soil
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Aug 11 03:22:04 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

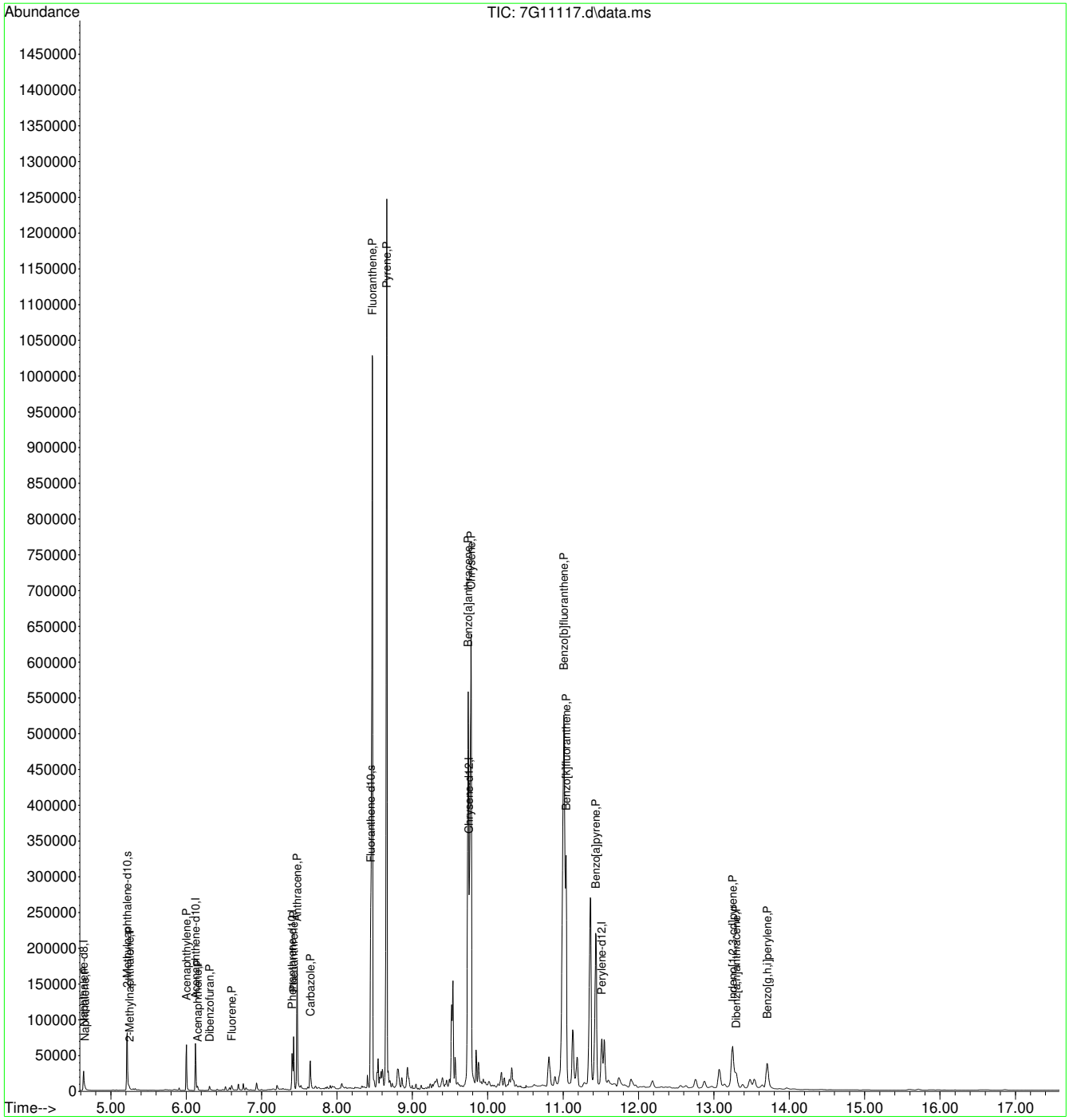
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.640	136	25146	4.00	ppm	0.01
6) Acenaphthene-d10	6.123	164	19369	4.00	ppm	0.00
11) Phenanthrene-d10	7.403	188	37579	4.00	ppm	0.00
18) Chrysene-d12	9.751	240	78019	4.00	ppm	0.03
22) Perylene-d12	11.511	264	63658	4.00	ppm	0.03
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.217	152	33934	9.04	ppm	0.01
Spiked Amount 10.000	Range 50 - 150		Recovery = 90.40%			
17) Fluoranthene-d10	8.448	212	184315	9.39	ppm	0.02
Spiked Amount 10.000	Range 50 - 150		Recovery = 93.90%			
Target Compounds						Qvalue
2) Naphthalene	4.658	128	2867	0.40	ppm	99
3) 2-Methylnaphthalene	5.246	142	1228	0.22	ppm	92
7) Acenaphthylene	6.002	152	38655	3.47	ppm	98
8) Acenaphthene	6.152	153	1674	0.23	ppm	96
9) Dibenzofuran	6.312	168	3800	0.75	ppm	84
10) Fluorene	6.602	166	2970	0.38	ppm	98
13) Phenanthrene	7.424	178	43471	3.50	ppm	97
14) Anthracene	7.473	178	110646	8.69	ppm	99
15) Carbazole	7.647	167	32522	1.45	ppm	95
16) Fluoranthene	8.470	202	701487	28.06	ppm	97
19) Pyrene	8.660	202	863334	26.95	ppm	95
20) Benzo[a]anthracene	9.741	228	372687	14.79	ppm	86
21) Chrysene	9.780	228	582276	21.58	ppm	98
23) Benzo[b]fluoranthene	11.011	252	918187	42.49	ppm	98
24) Benzo[k]fluoranthene	11.040	252	283140m	12.03	ppm	
25) Benzo[a]pyrene	11.433	252	269799	12.81	ppm	98
26) Indeno[1,2,3-cd]pyrene	13.248	276	104345	7.59	ppm	94
27) Dibenz[a,h]anthracene	13.296	278	26128	1.71	ppm	97
28) Benzo[g,h,i]perylene	13.709	276	61388	3.71	ppm	95

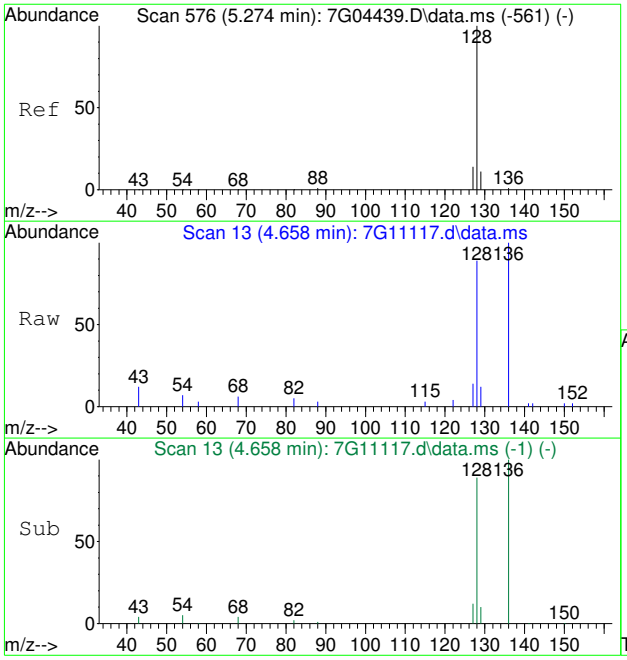
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11117.d
Acq On : 10 Aug 2020 9:26 pm
Operator : FOUADS
Sample : fa77581-1 e
Misc : op81483,S7G482,15.2,,,1,1,soil
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Aug 11 03:22:04 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

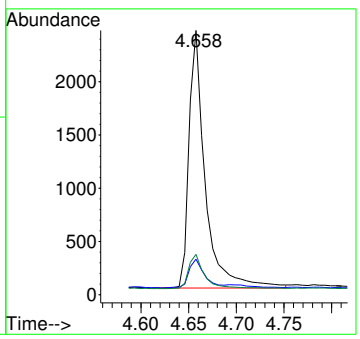


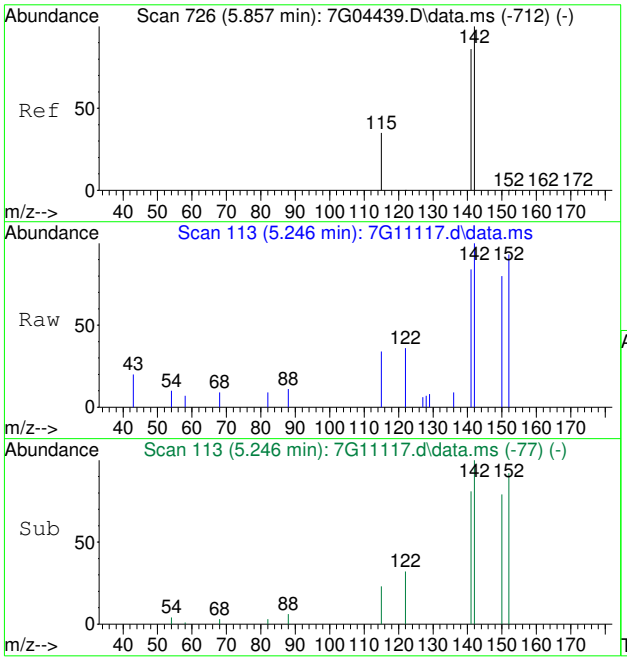


#2
Naphthalene
Concen: 0.40 ppm
RT: 4.658 min Scan# 13
Delta R.T. 0.012 min
Lab File: 7G11117.d
Acq: 10 Aug 2020 9:26 pm

Tgt Ion:128 Resp: 2867

Ion	Ratio	Lower	Upper
128	100		
129	11.1	0.0	40.9
127	13.2	0.0	43.5

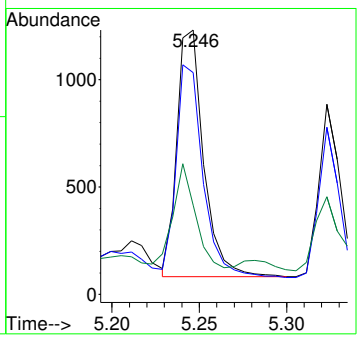


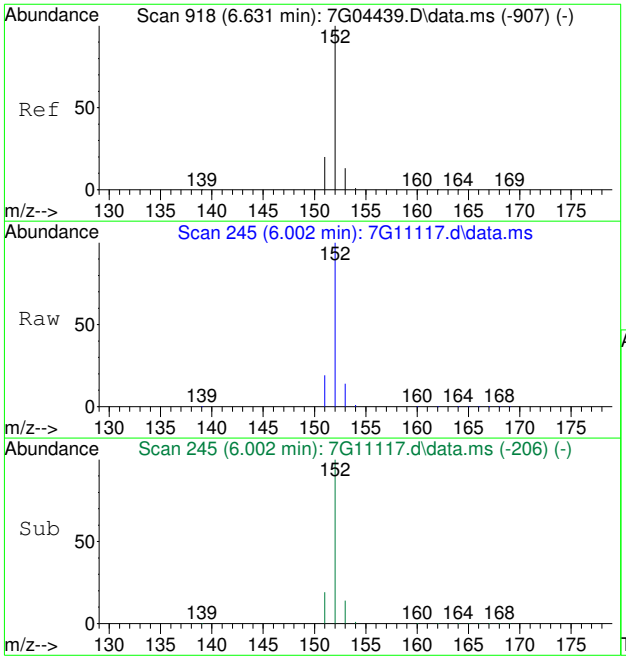


#3
2-Methylnaphthalene
Concen: 0.22 ppm
RT: 5.246 min Scan# 113
Delta R.T. 0.012 min
Lab File: 7G11117.d
Acq: 10 Aug 2020 9:26 pm

Tgt Ion:142 Resp: 1228

Ion	Ratio	Lower	Upper
142	100		
141	82.8	55.7	115.7
115	23.3	5.4	65.4

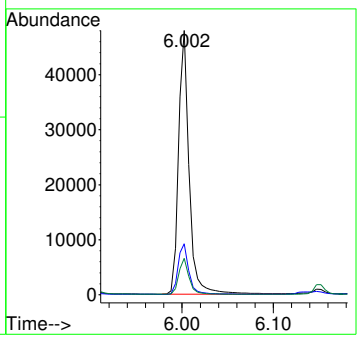


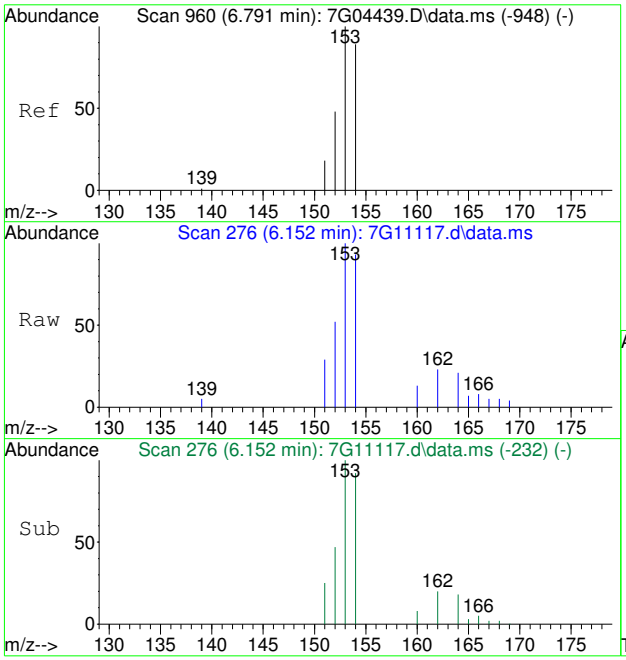


#7
Acenaphthylene
Concen: 3.47 ppm
RT: 6.002 min Scan# 245
Delta R.T. 0.010 min
Lab File: 7G11117.d
Acq: 10 Aug 2020 9:26 pm

Tgt Ion:152 Resp: 38655

Ion	Ratio	Lower	Upper
152	100		
151	19.2	0.0	49.8
153	13.7	0.0	42.8

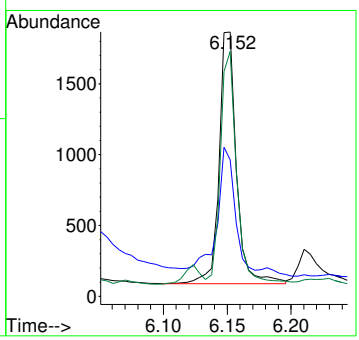


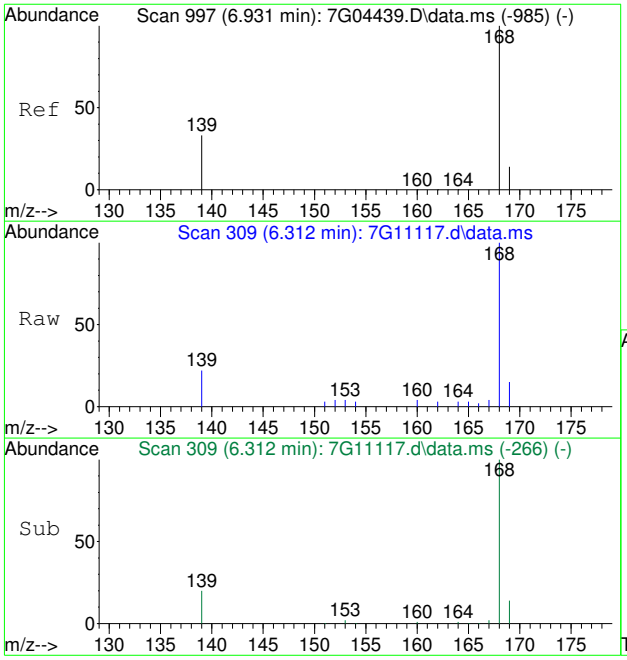


#8
Acenaphthene
Concen: 0.23 ppm
RT: 6.152 min Scan# 276
Delta R.T. 0.015 min
Lab File: 7G11117.d
Acq: 10 Aug 2020 9:26 pm

Tgt Ion:153 Resp: 1674

Ion	Ratio	Lower	Upper
153	100		
152	44.2	18.3	78.3
154	92.4	59.3	119.3

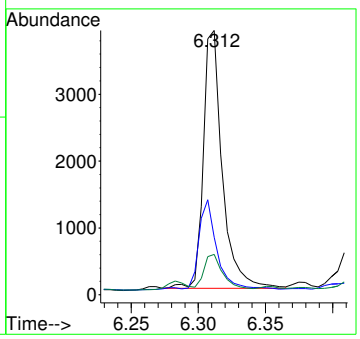


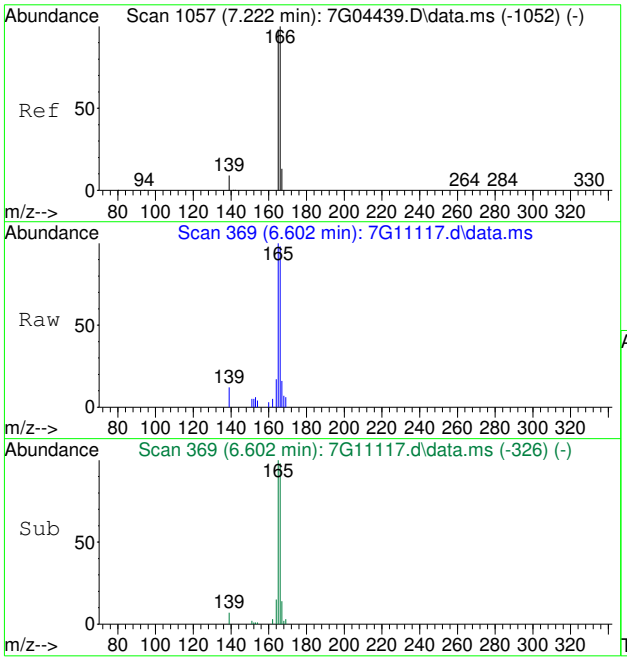


#9
Dibenzofuran
Concen: 0.75 ppm
RT: 6.312 min Scan# 309
Delta R.T. 0.010 min
Lab File: 7G11117.d
Acq: 10 Aug 2020 9:26 pm

Tgt Ion:168 Resp: 3800

Ion	Ratio	Lower	Upper
168	100		
139	20.0	12.6	52.6
169	13.1	0.0	33.8

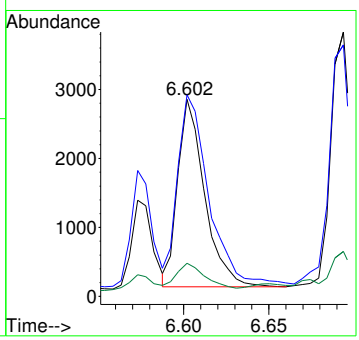


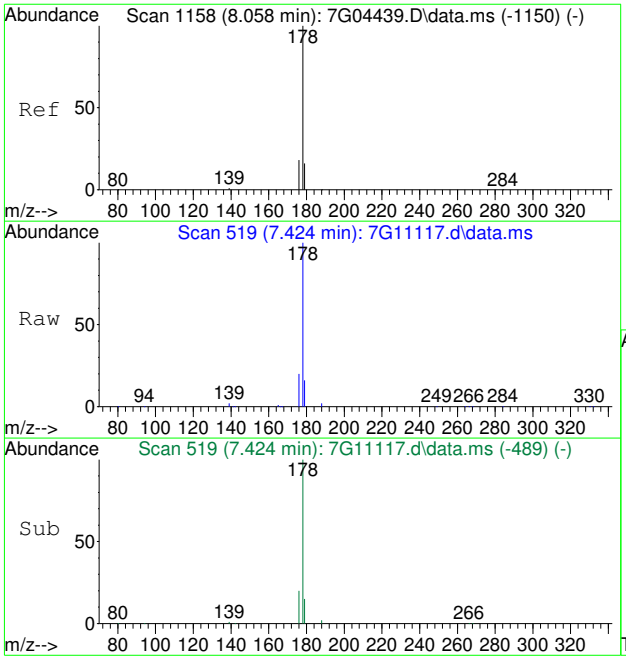


#10
Fluorene
Concen: 0.38 ppm
RT: 6.602 min Scan# 369
Delta R.T. 0.010 min
Lab File: 7G11117.d
Acq: 10 Aug 2020 9:26 pm

Tgt Ion:166 Resp: 2970

Ion	Ratio	Lower	Upper
166	100		
165	99.8	68.2	128.2
167	12.3	0.0	42.9

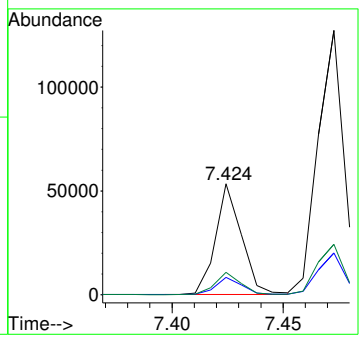


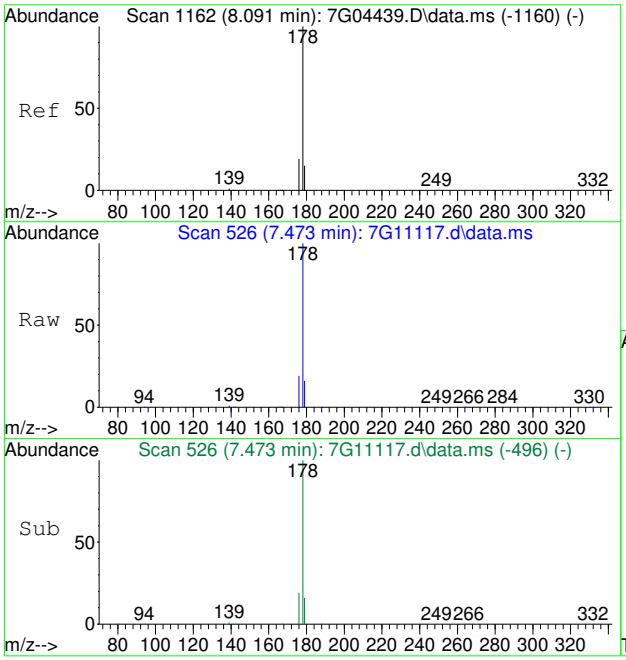


#13
Phenanthrene
Concen: 3.50 ppm
RT: 7.424 min Scan# 519
Delta R.T. 0.007 min
Lab File: 7G11117.d
Acq: 10 Aug 2020 9:26 pm

Tgt Ion:178 Resp: 43471

Ion	Ratio	Lower	Upper
178	100		
179	15.3	0.0	45.7
176	20.1	0.0	48.0

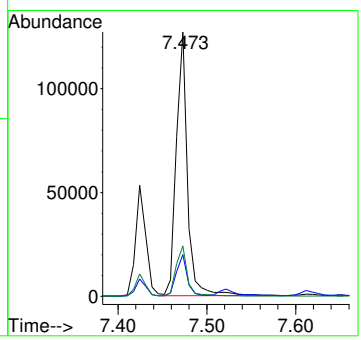


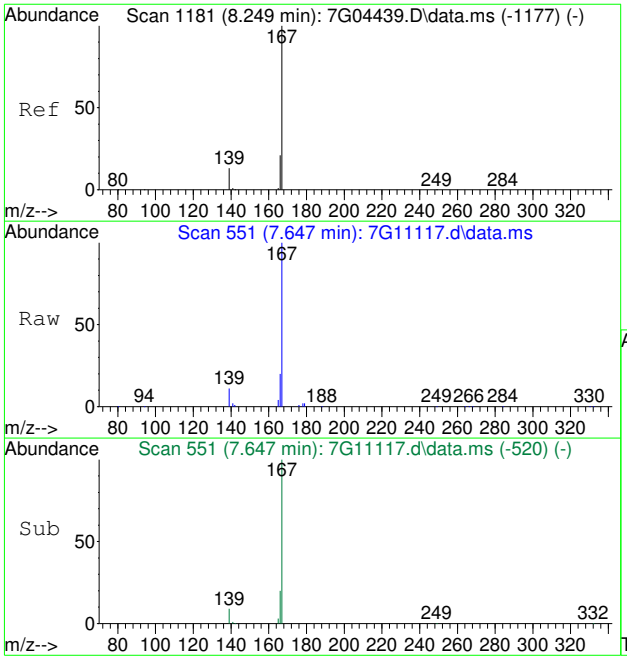


#14
Anthracene
Concen: 8.69 ppm
RT: 7.473 min Scan# 526
Delta R.T. 0.007 min
Lab File: 7G11117.d
Acq: 10 Aug 2020 9:26 pm

Tgt Ion:178 Resp: 110646

Ion	Ratio	Lower	Upper
178	100		
179	15.6	0.0	45.1
176	19.0	0.0	48.8

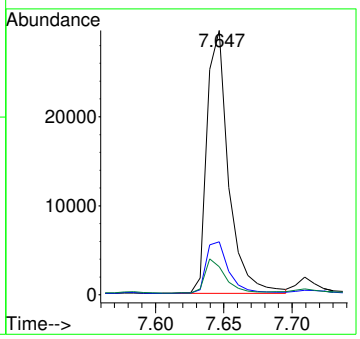


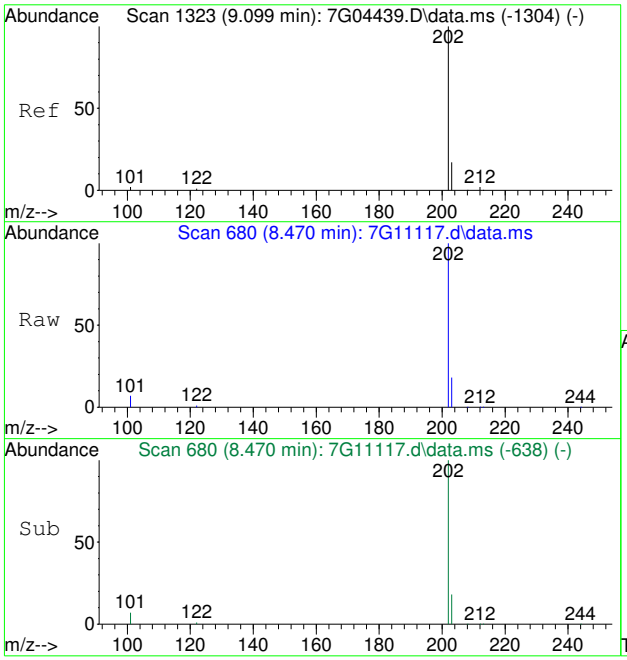


#15
Carbazole
Concen: 1.45 ppm
RT: 7.647 min Scan# 551
Delta R.T. 0.014 min
Lab File: 7G11117.d
Acq: 10 Aug 2020 9:26 pm

Tgt Ion:167 Resp: 32522

Ion	Ratio	Lower	Upper
167	100		
166	19.6	1.2	41.2
139	9.8	0.0	32.8

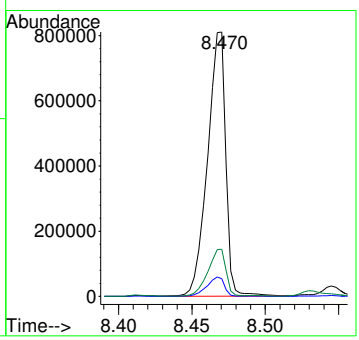


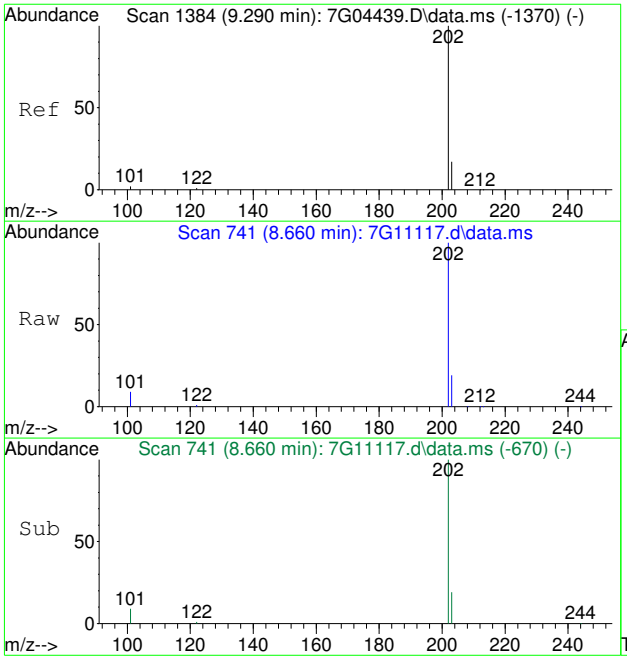


#16
Fluoranthene
Concen: 28.06 ppm
RT: 8.470 min Scan# 680
Delta R.T. 0.022 min
Lab File: 7G11117.d
Acq: 10 Aug 2020 9:26 pm

Tgt Ion:202 Resp: 701487

Ion	Ratio	Lower	Upper
202	100		
101	6.6	0.0	32.2
203	17.8	0.0	47.2

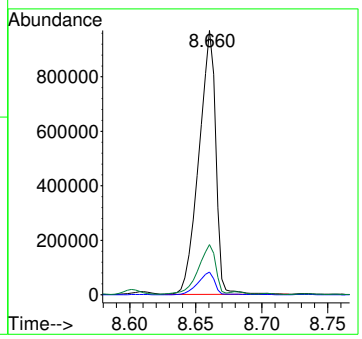


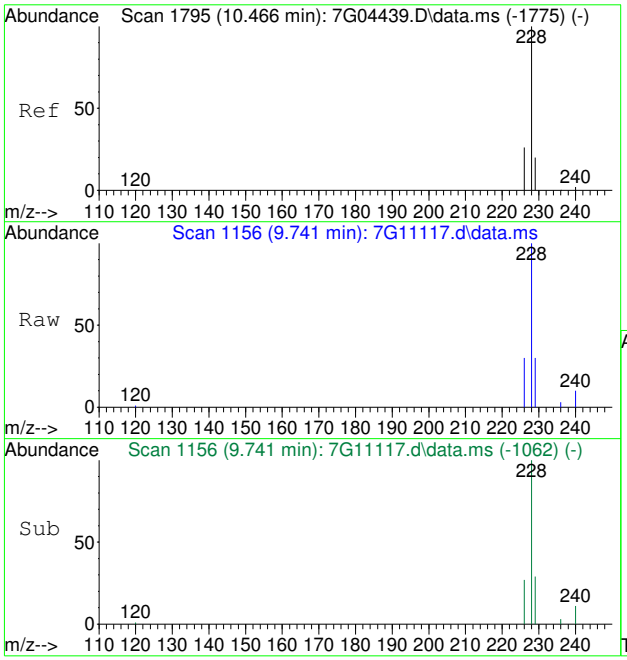


#19
Pyrene
Concen: 26.95 ppm
RT: 8.660 min Scan# 741
Delta R.T. 0.022 min
Lab File: 7G11117.d
Acq: 10 Aug 2020 9:26 pm

Tgt Ion:202 Resp: 863334

Ion	Ratio	Lower	Upper
202	100		
101	8.6	0.0	32.4
203	18.8	0.0	47.4

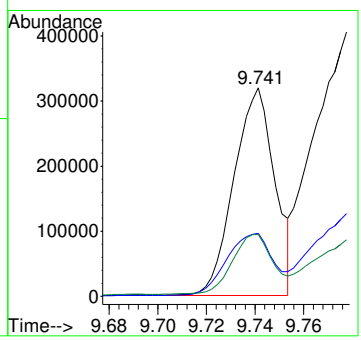


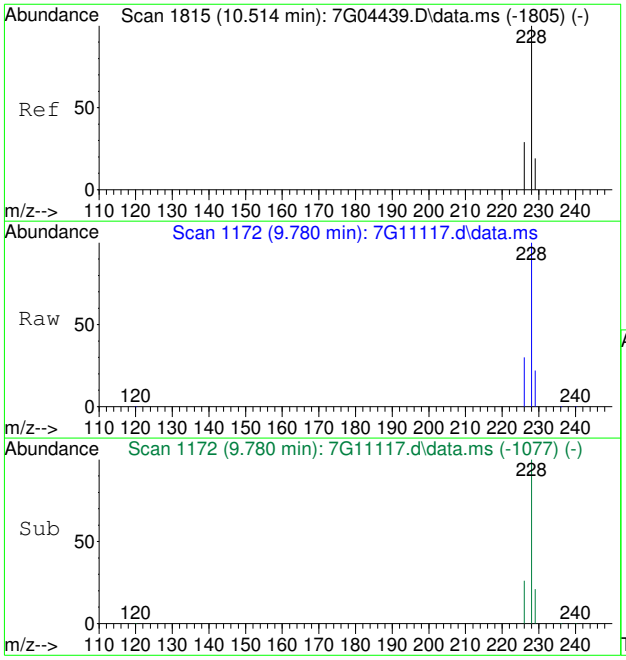


#20
Benzo[a]anthracene
Concen: 14.79 ppm
RT: 9.741 min Scan# 1156
Delta R.T. 0.027 min
Lab File: 7G11117.d
Acq: 10 Aug 2020 9:26 pm

Tgt Ion:228 Resp: 372687

Ion	Ratio	Lower	Upper
228	100		
226	29.8	0.0	56.1
229	30.0	0.0	49.5

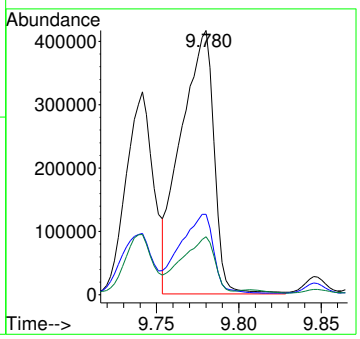


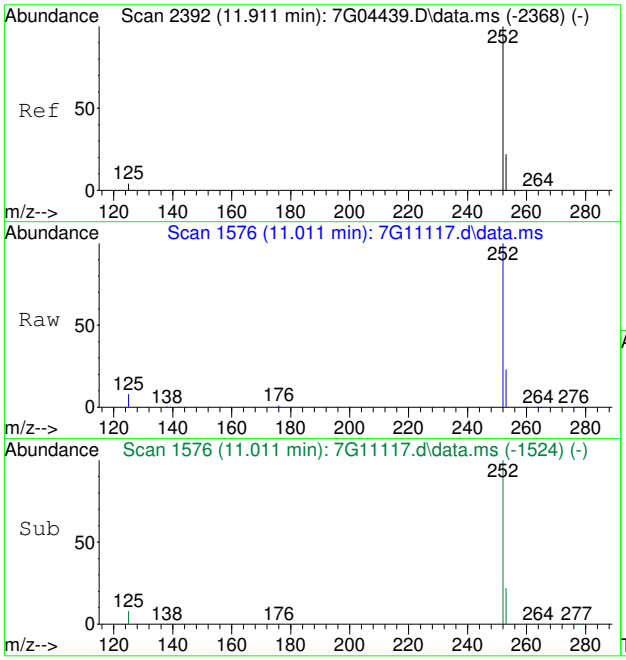


#21
Chrysene
Concen: 21.58 ppm
RT: 9.780 min Scan# 1172
Delta R.T. 0.029 min
Lab File: 7G11117.d
Acq: 10 Aug 2020 9:26 pm

Tgt Ion:228 Resp: 582276

Ion	Ratio	Lower	Upper
228	100		
226	30.0	0.0	58.9
229	21.0	0.0	49.5

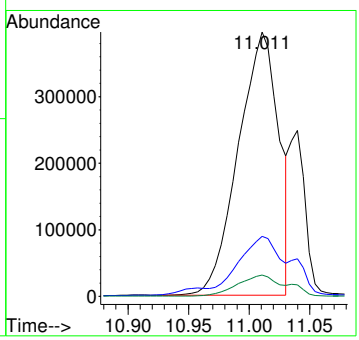


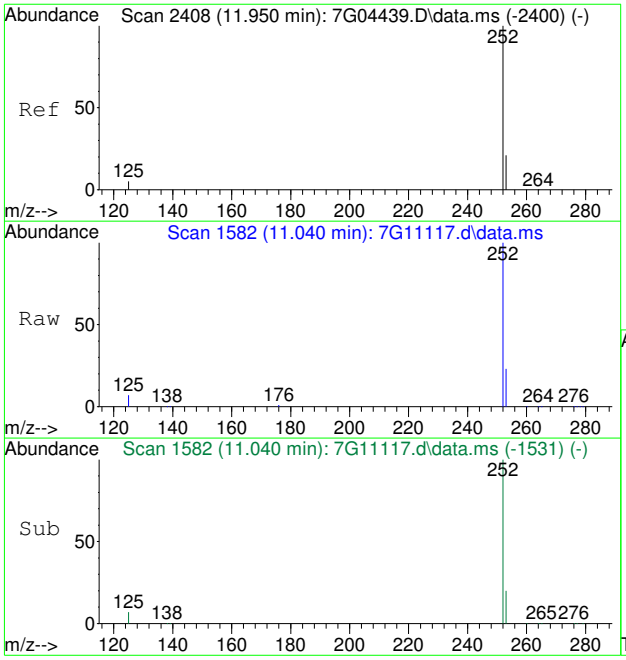


#23
Benzo[b]fluoranthene
Concen: 42.49 ppm
RT: 11.011 min Scan# 1576
Delta R.T. 0.053 min
Lab File: 7G11117.d
Acq: 10 Aug 2020 9:26 pm

Tgt Ion:252 Resp: 918187

Ion	Ratio	Lower	Upper
252	100		
253	21.9	0.0	51.7
125	8.1	0.0	34.5

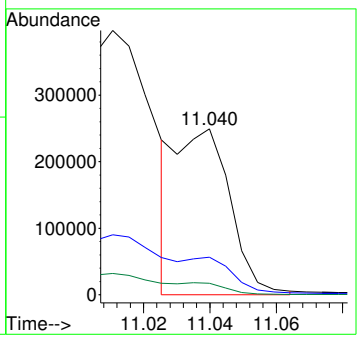


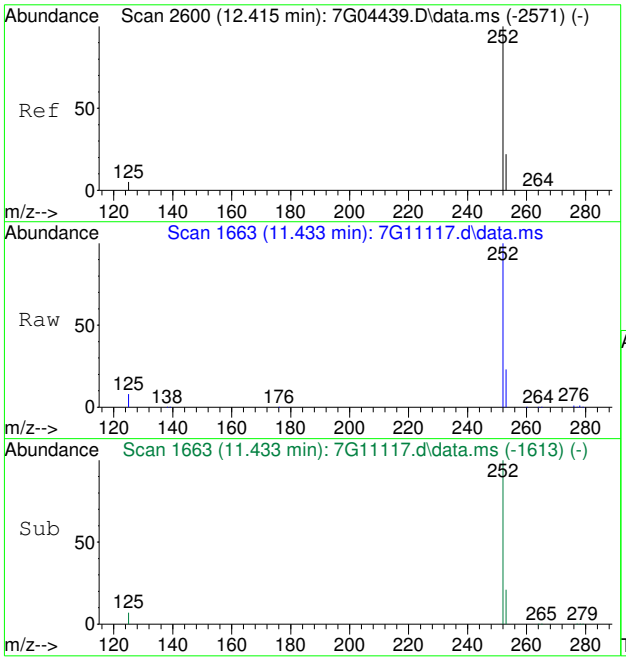


#24
Benzo[k]fluoranthene
Concen: 12.03 ppm m
RT: 11.040 min Scan# 1582
Delta R.T. 0.049 min
Lab File: 7G11117.d
Acq: 10 Aug 2020 9:26 pm

Tgt Ion:252 Resp: 283140

Ion	Ratio	Lower	Upper
252	100		
253	22.7	0.0	51.5
125	6.9	0.0	34.8

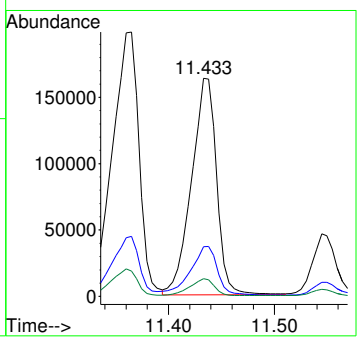


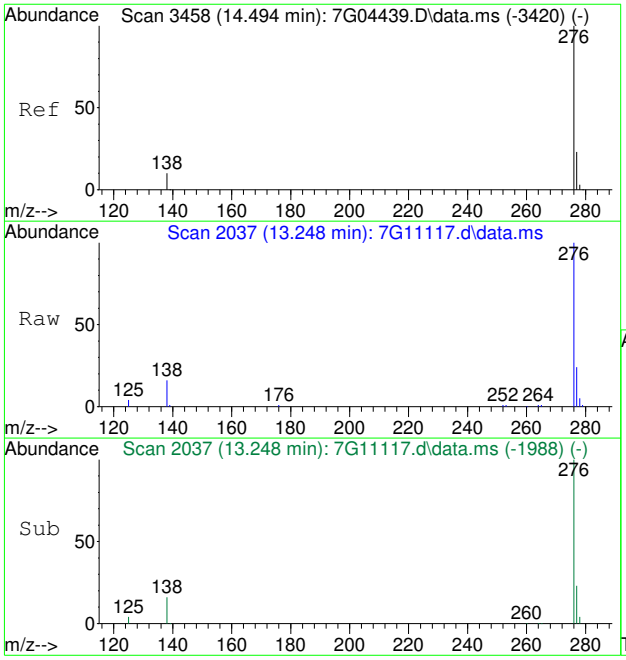


#25
Benzo[a]pyrene
Concen: 12.81 ppm
RT: 11.433 min Scan# 1663
Delta R.T. 0.044 min
Lab File: 7G11117.d
Acq: 10 Aug 2020 9:26 pm

Tgt Ion:252 Resp: 269799

Ion	Ratio	Lower	Upper
252	100		
253	21.7	0.0	51.6
125	7.8	0.0	34.8

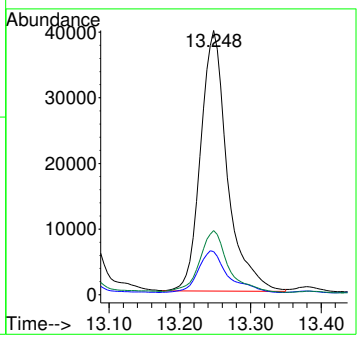


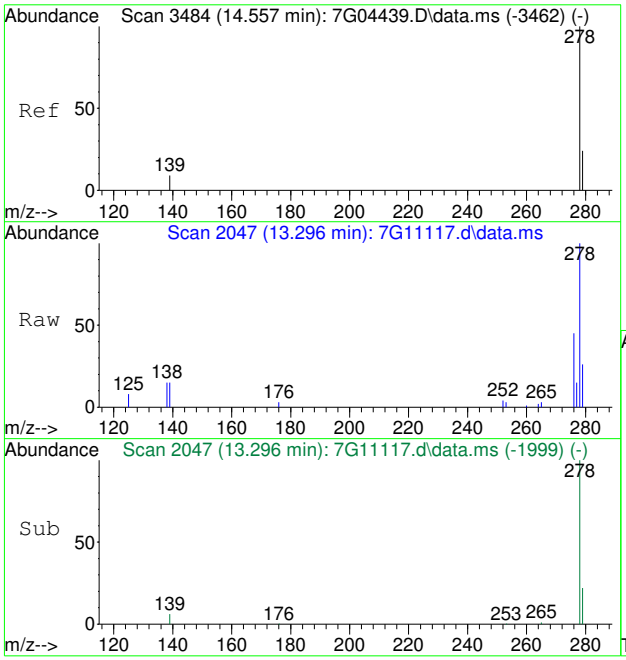


#26
Indeno[1,2,3-cd]pyrene
Concen: 7.59 ppm
RT: 13.248 min Scan# 2037
Delta R.T. 0.039 min
Lab File: 7G11117.d
Acq: 10 Aug 2020 9:26 pm

Tgt Ion:276 Resp: 104345

Ion	Ratio	Lower	Upper
276	100		
138	15.7	0.0	39.6
277	23.6	0.0	53.1

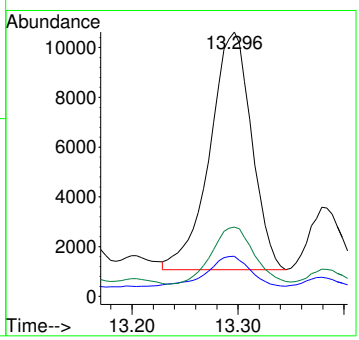


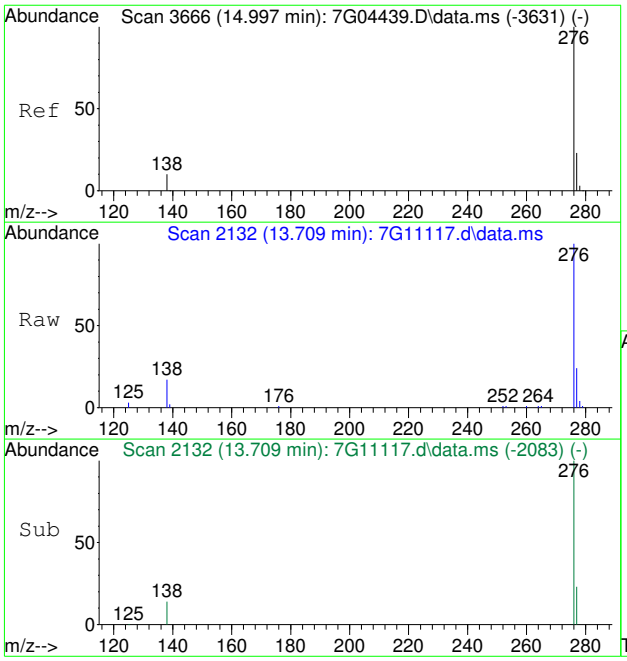


#27
Dibenz[a,h]anthracene
Concen: 1.71 ppm
RT: 13.296 min Scan# 2047
Delta R.T. 0.034 min
Lab File: 7G11117.d
Acq: 10 Aug 2020 9:26 pm

Tgt Ion:278 Resp: 26128

Ion	Ratio	Lower	Upper
278	100		
139	12.5	0.0	38.8
279	23.7	0.0	53.6

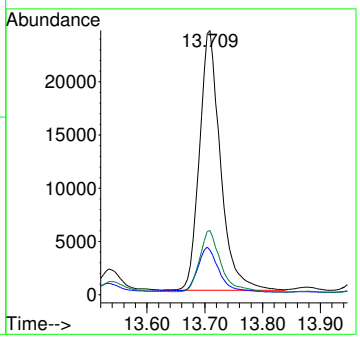




#28
Benzo[g,h,i]perylene
Concen: 3.71 ppm
RT: 13.709 min Scan# 2132
Delta R.T. 0.039 min
Lab File: 7G11117.d
Acq: 10 Aug 2020 9:26 pm

Tgt Ion:276 Resp: 61388

Ion	Ratio	Lower	Upper
276	100		
138	15.9	0.0	40.5
277	23.6	0.0	53.2



Manual Integration Approval Summary

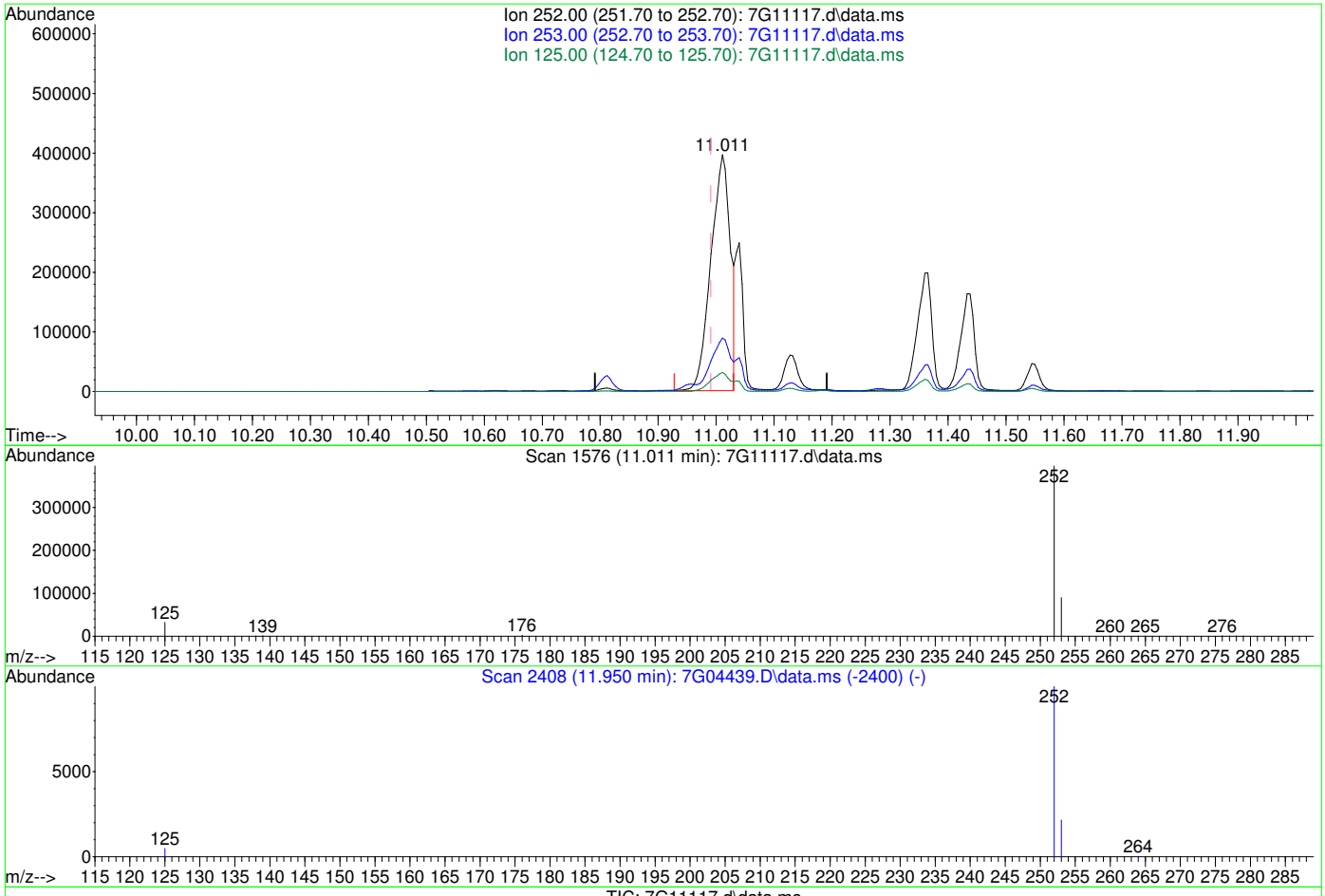
Sample Number: FA77581-1
Lab FileID: 7G11117.D
Injection Time: 08/10/20 21:26
Method: SW846 8270E BY SIM
Analyst approved: 08/11/20 10:52 Fouad Sekkar
Supervisor approved: 08/11/20 12:03 Naresh Jiawan

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(k)fluoranthene	207-08-9		11.04	Missed peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11117.d
Acq On : 10 Aug 2020 9:26 pm
Operator : FOUADS
Sample : fa77581-1 e
Misc : op81483,S7G482,15.2,,,1,1,soil
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Aug 11 02:37:37 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration



TIC: 7G11117.d\data.ms

(24) Benzo[k]fluoranthene (P)

11.011min (+0.019) 36.39ppm

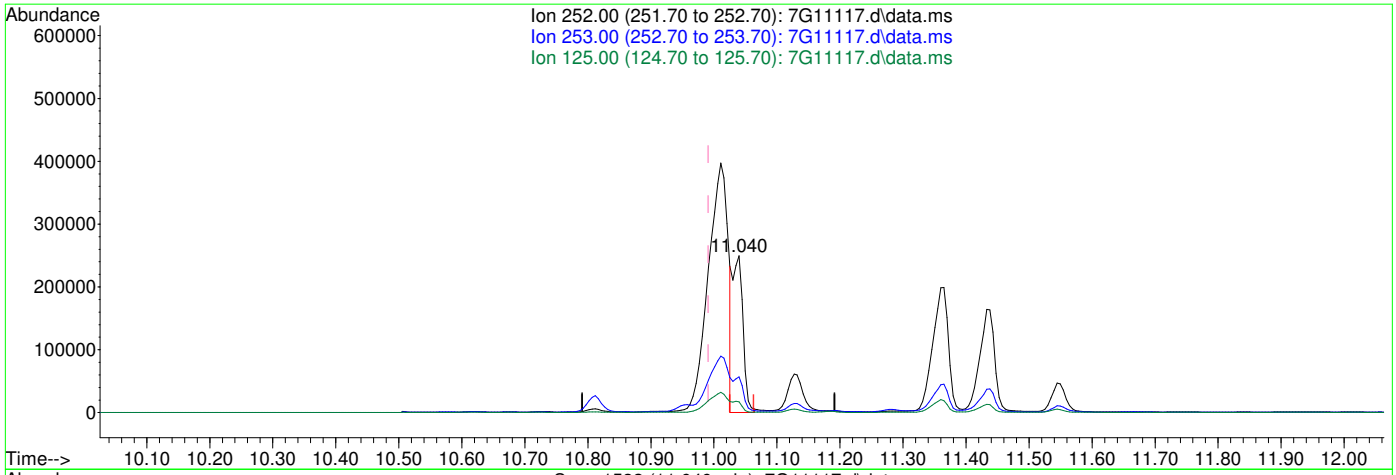
response 918187

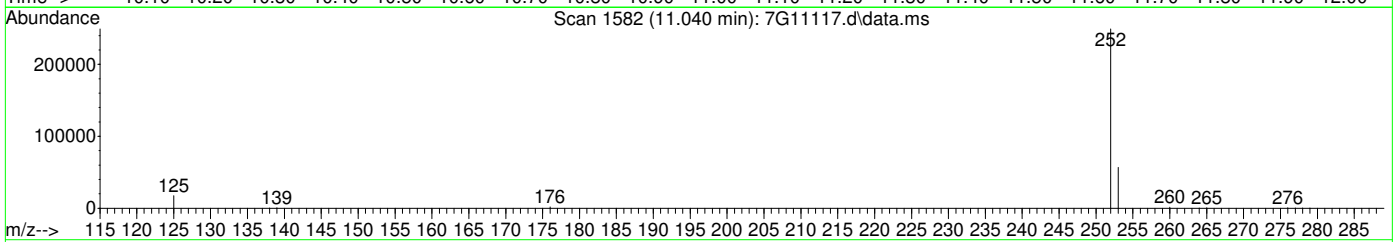
Ion	Exp%	Act%
252.00	100	100
253.00	21.50	21.94
125.00	4.80	8.12
0.00	0.00	0.00

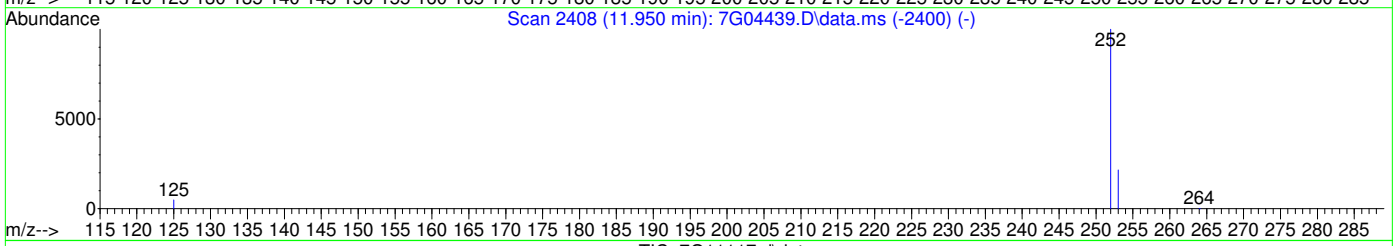
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11117.d
Acq On : 10 Aug 2020 9:26 pm
Operator : FOUADS
Sample : fa77581-1 e
Misc : op81483,S7G482,15.2,,,1,1,soil
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Aug 11 02:37:37 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11117.d\data.ms

(24) Benzo[k]fluoranthene (P)

11.040min (+0.049) 12.03ppm m

response 283140

Ion	Exp%	Act%
252.00	100	100
253.00	21.50	22.72
125.00	4.80	6.90
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan
08/11/20 12:03

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11118.d
Acq On : 10 Aug 2020 9:50 pm
Operator : FOUADS
Sample : fa77581-2 e
Misc : op81483,S7G482,15.4,,,1,1,soil
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Aug 11 03:22:38 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.628	136	23601	4.00	ppm	0.00
6) Acenaphthene-d10	6.113	164	18367	4.00	ppm	0.00
11) Phenanthrene-d10	7.396	188	35759	4.00	ppm	0.00
18) Chrysene-d12	9.732	240	66452	4.00	ppm	0.00
22) Perylene-d12	11.486	264	55322	4.00	ppm	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.205	152	31703	9.00	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 90.00%			
17) Fluoranthene-d10	8.436	212	167533	8.98	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 89.80%			
Target Compounds						Qvalue
7) Acenaphthylene	5.993	152	14134	1.34	ppm	99
10) Fluorene	6.597	166	1098	0.15	ppm	94
13) Phenanthrene	7.417	178	6788	0.58	ppm	97
14) Anthracene	7.459	178	45672	3.82	ppm	99
15) Carbazole	7.640	167	12560	0.59	ppm	97
16) Fluoranthene	8.451	202	147340	6.56	ppm	98
19) Pyrene	8.642	202	193129	7.28	ppm	96
20) Benzo[a]anthracene	9.722	228	68297	3.29	ppm	85
21) Chrysene	9.756	228	133219	5.79	ppm	98
23) Benzo[b]fluoranthene	10.972	252	285806	15.22	ppm	98
24) Benzo[k]fluoranthene	11.001	252	69900m	3.50	ppm	
25) Benzo[a]pyrene	11.404	252	59438	3.25	ppm	97
26) Indeno[1,2,3-cd]pyrene	13.223	276	34530	2.89	ppm	94
27) Dibenz[a,h]anthracene	13.272	278	7641	0.58	ppm	97
28) Benzo[g,h,i]perylene	13.684	276	23021	1.60	ppm	95

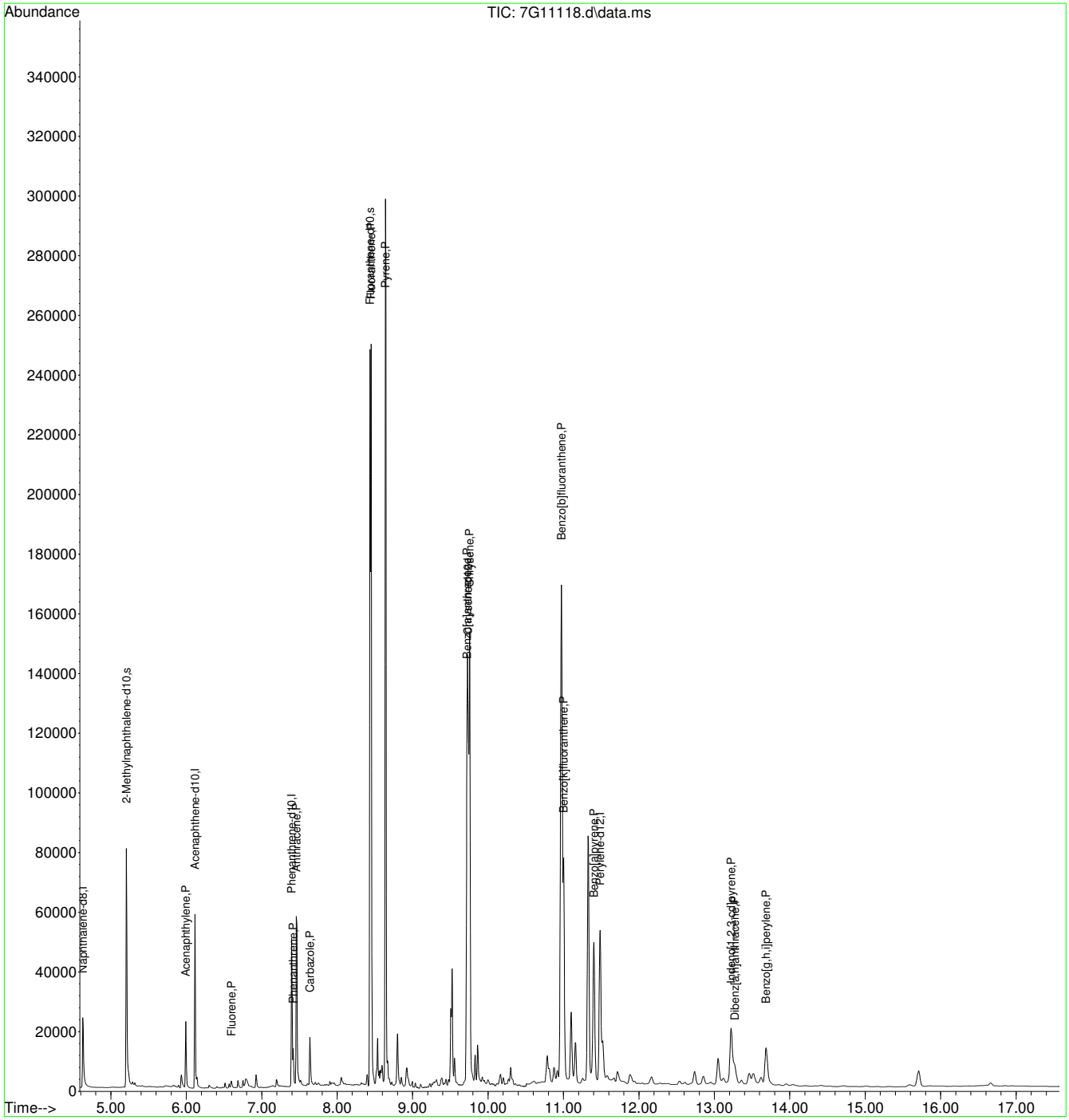
(#) = qualifier out of range (m) = manual integration (+) = signals summed

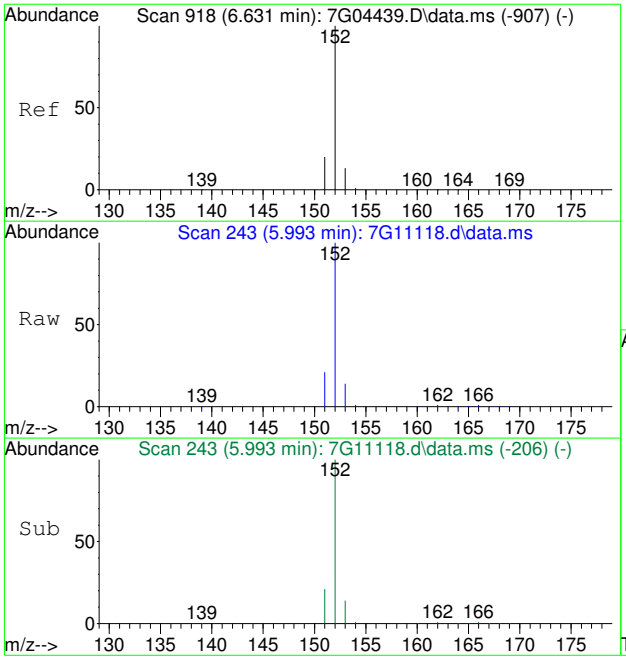
7.1.16
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11118.d
Acq On : 10 Aug 2020 9:50 pm
Operator : FOUADS
Sample : fa77581-2 e
Misc : op81483,S7G482,15.4,,,1,1,soil
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Aug 11 03:22:38 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

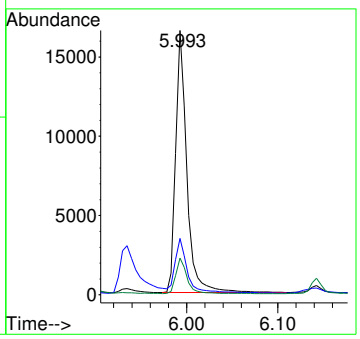


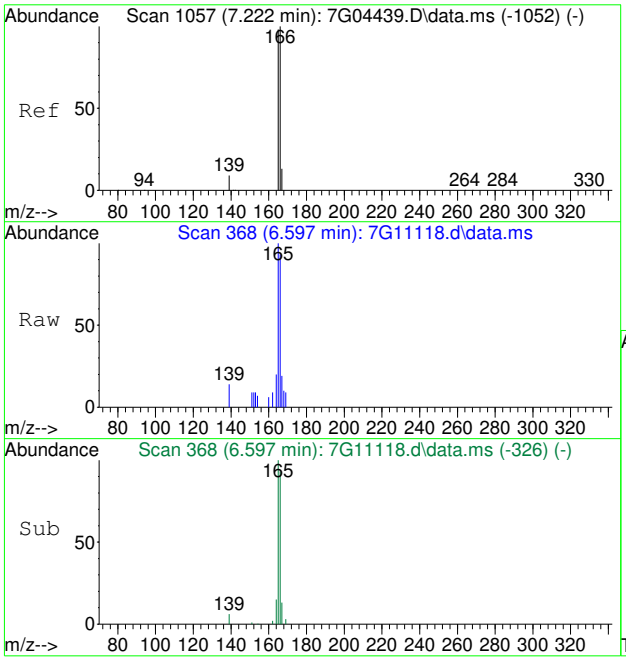


#7
Acenaphthylene
Concen: 1.34 ppm
RT: 5.993 min Scan# 243
Delta R.T. -0.000 min
Lab File: 7G11118.d
Acq: 10 Aug 2020 9:50 pm

Tgt Ion:152 Resp: 14134

Ion	Ratio	Lower	Upper
152	100		
151	19.9	0.0	49.8
153	13.6	0.0	42.8

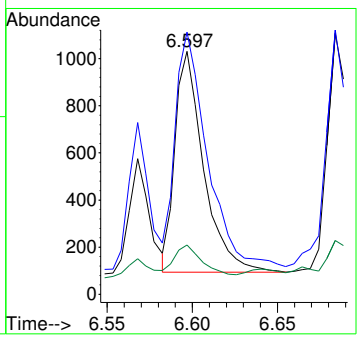


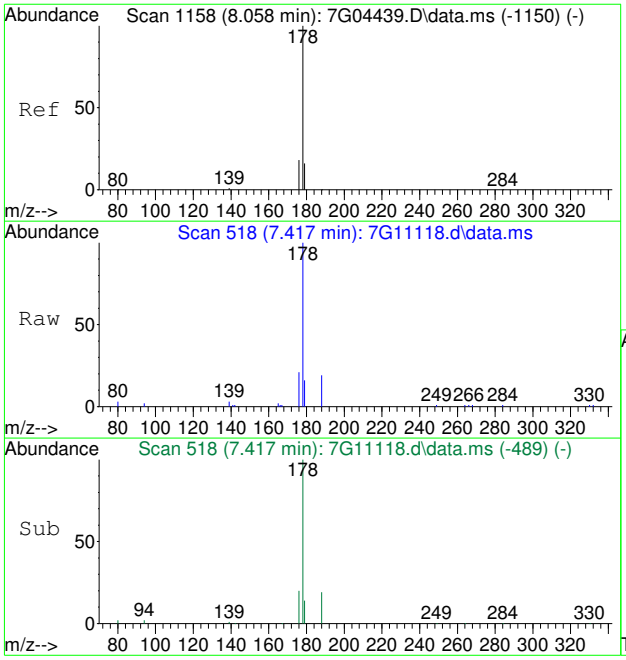


#10
Fluorene
Concen: 0.15 ppm
RT: 6.597 min Scan# 368
Delta R.T. 0.005 min
Lab File: 7G11118.d
Acq: 10 Aug 2020 9:50 pm

Tgt Ion:166 Resp: 1098

Ion	Ratio	Lower	Upper
166	100		
165	105.4	68.2	128.2
167	12.5	0.0	42.9

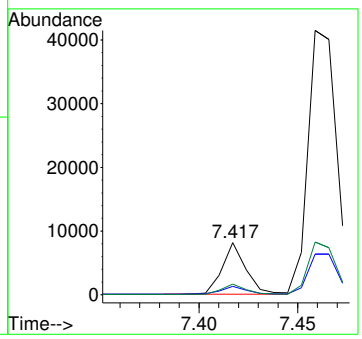


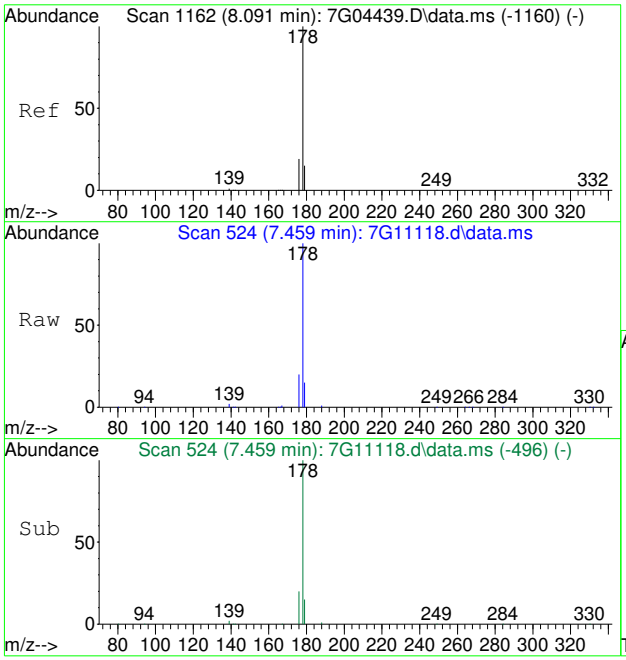


#13
Phenanthrene
Concen: 0.58 ppm
RT: 7.417 min Scan# 518
Delta R.T. -0.000 min
Lab File: 7G11118.d
Acq: 10 Aug 2020 9:50 pm

Tgt Ion:178 Resp: 6788

Ion	Ratio	Lower	Upper
178	100		
179	15.0	0.0	45.7
176	20.1	0.0	48.0

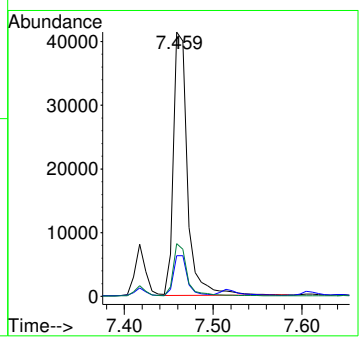


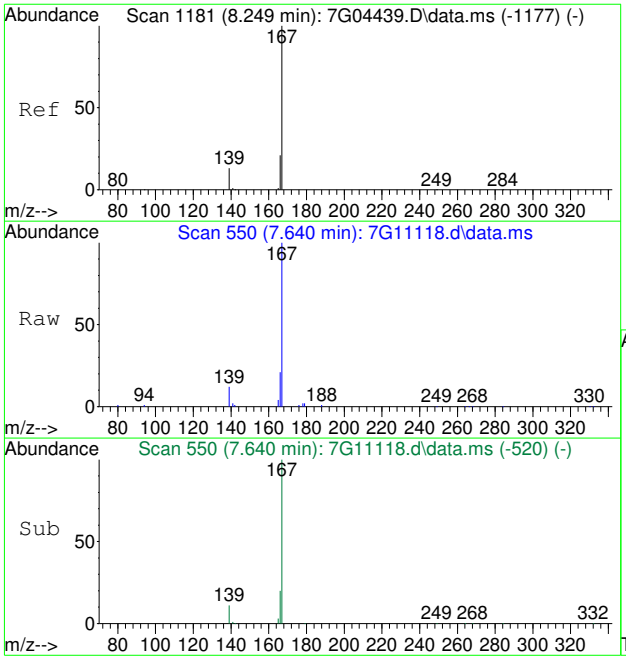


#14
Anthracene
Concen: 3.82 ppm
RT: 7.459 min Scan# 524
Delta R.T. -0.007 min
Lab File: 7G11118.d
Acq: 10 Aug 2020 9:50 pm

Tgt Ion:178 Resp: 45672

Ion	Ratio	Lower	Upper
178	100		
179	15.1	0.0	45.1
176	19.8	0.0	48.8

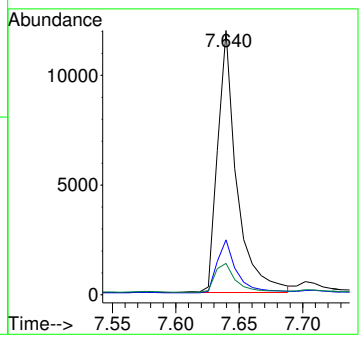


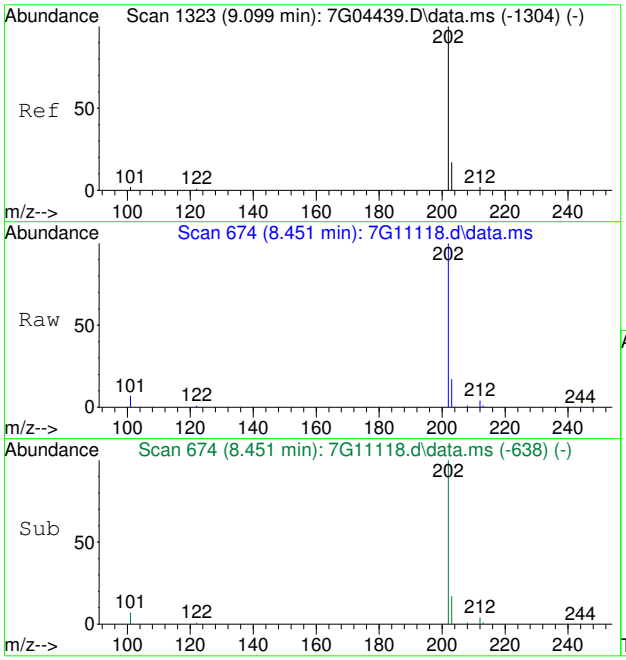


#15
Carbazole
Concen: 0.59 ppm
RT: 7.640 min Scan# 550
Delta R.T. 0.007 min
Lab File: 7G11118.d
Acq: 10 Aug 2020 9:50 pm

Tgt Ion:167 Resp: 12560

Ion	Ratio	Lower	Upper
167	100		
166	20.1	1.2	41.2
139	10.9	0.0	32.8

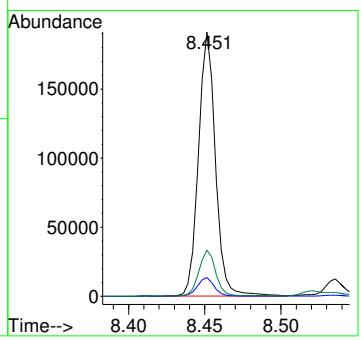


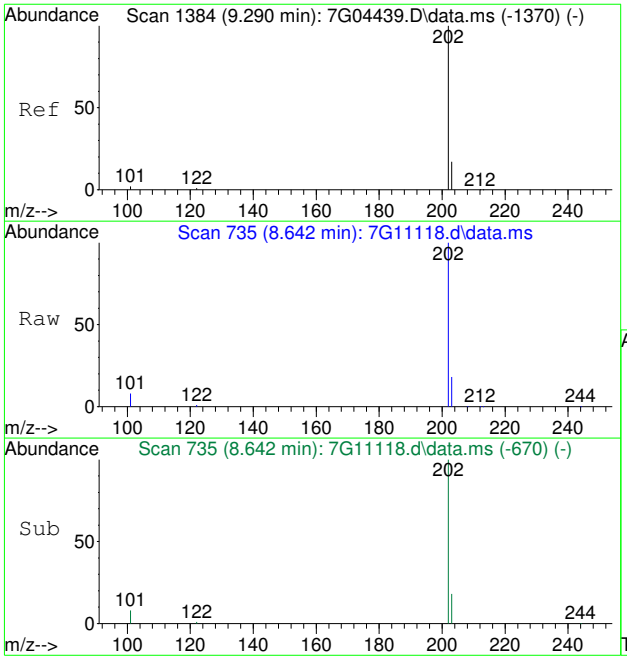


#16
Fluoranthene
Concen: 6.56 ppm
RT: 8.451 min Scan# 674
Delta R.T. 0.003 min
Lab File: 7G11118.d
Acq: 10 Aug 2020 9:50 pm

Tgt Ion:202 Resp: 147340

Ion	Ratio	Lower	Upper
202	100		
101	7.1	0.0	32.2
203	17.4	0.0	47.2

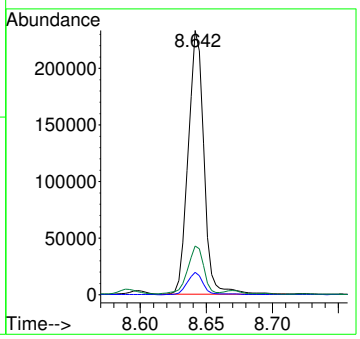


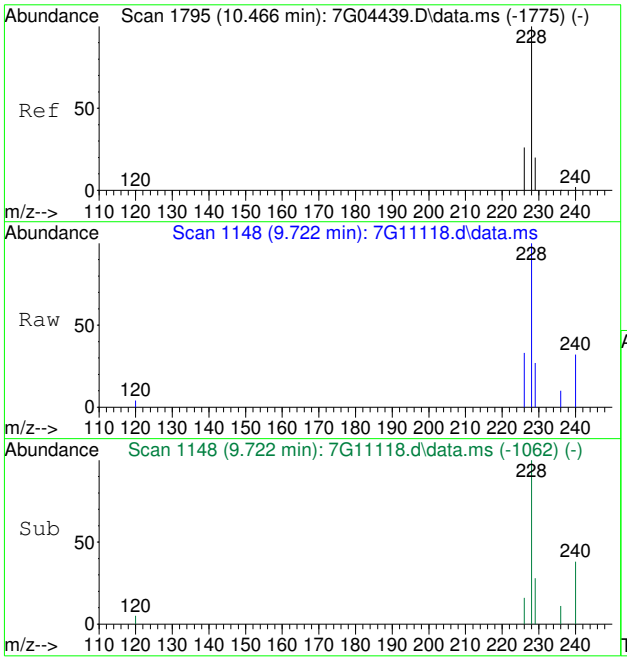


#19
Pyrene
Concen: 7.28 ppm
RT: 8.642 min Scan# 735
Delta R.T. 0.003 min
Lab File: 7G11118.d
Acq: 10 Aug 2020 9:50 pm

Tgt Ion:202 Resp: 193129

Ion	Ratio	Lower	Upper
202	100		
101	8.4	0.0	32.4
203	18.2	0.0	47.4

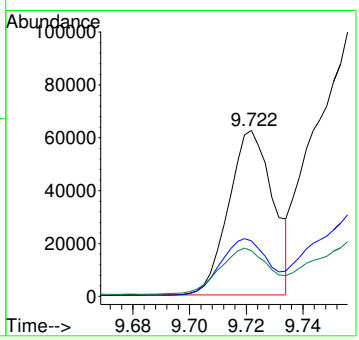


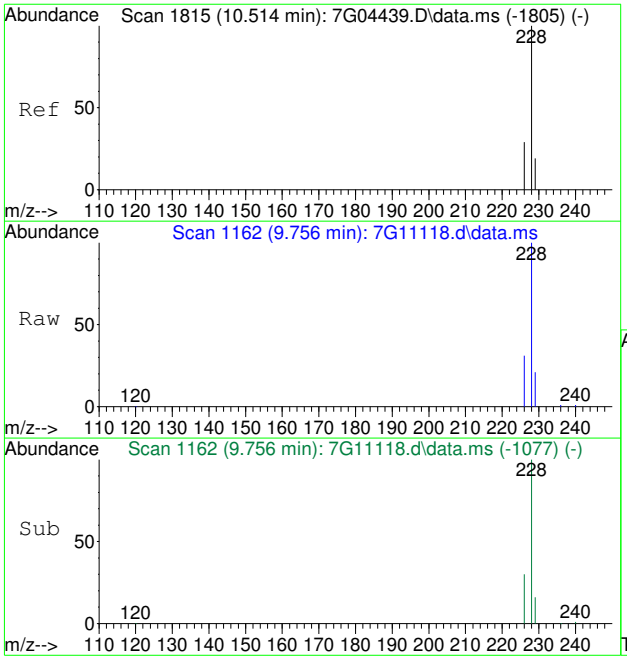


#20
Benzo[a]anthracene
Concen: 3.29 ppm
RT: 9.722 min Scan# 1148
Delta R.T. 0.007 min
Lab File: 7G11118.d
Acq: 10 Aug 2020 9:50 pm

Tgt Ion:228 Resp: 68297

Ion	Ratio	Lower	Upper
228	100		
226	33.5	0.0	56.1
229	26.8	0.0	49.5

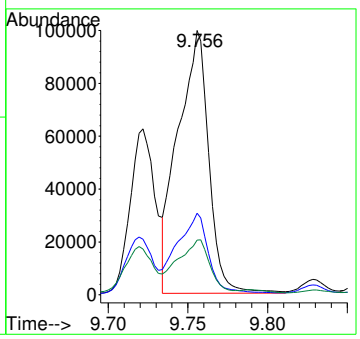


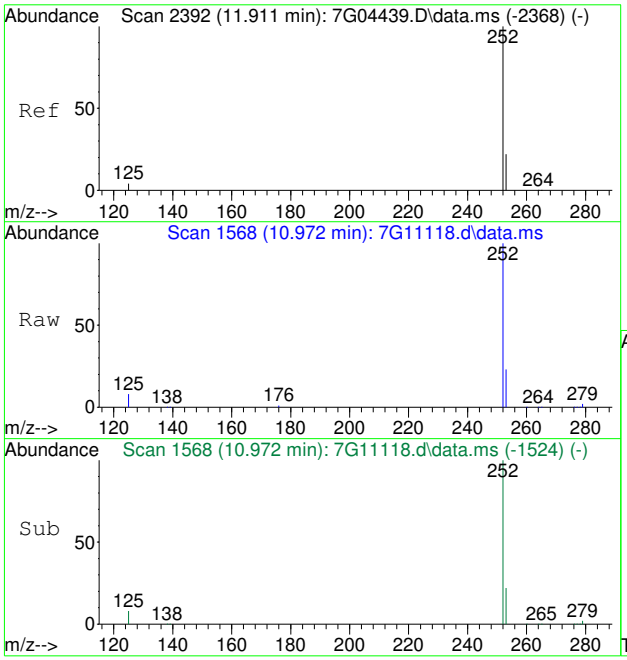


#21
Chrysene
Concen: 5.79 ppm
RT: 9.756 min Scan# 1162
Delta R.T. 0.005 min
Lab File: 7G11118.d
Acq: 10 Aug 2020 9:50 pm

Tgt Ion:228 Resp: 133219

Ion	Ratio	Lower	Upper
228	100		
226	30.3	0.0	58.9
229	19.3	0.0	49.5

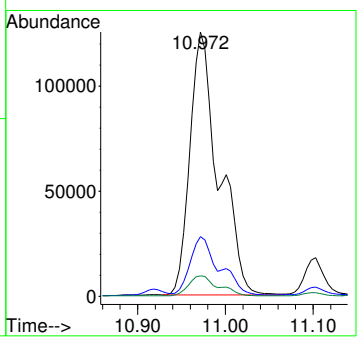


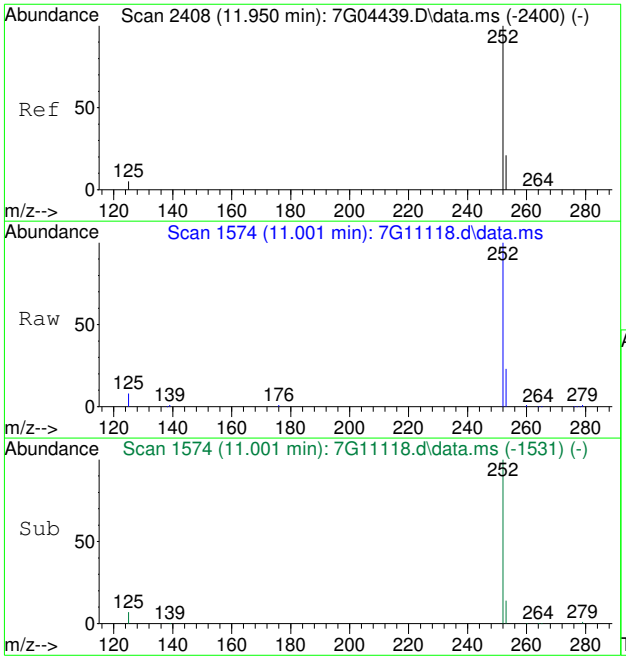


#23
Benzo[b]fluoranthene
Concen: 15.22 ppm
RT: 10.972 min Scan# 1568
Delta R.T. 0.014 min
Lab File: 7G11118.d
Acq: 10 Aug 2020 9:50 pm

Tgt Ion:252 Resp: 285806

Ion	Ratio	Lower	Upper
252	100		
253	21.5	0.0	51.7
125	7.6	0.0	34.5

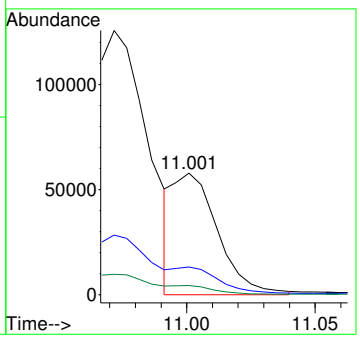


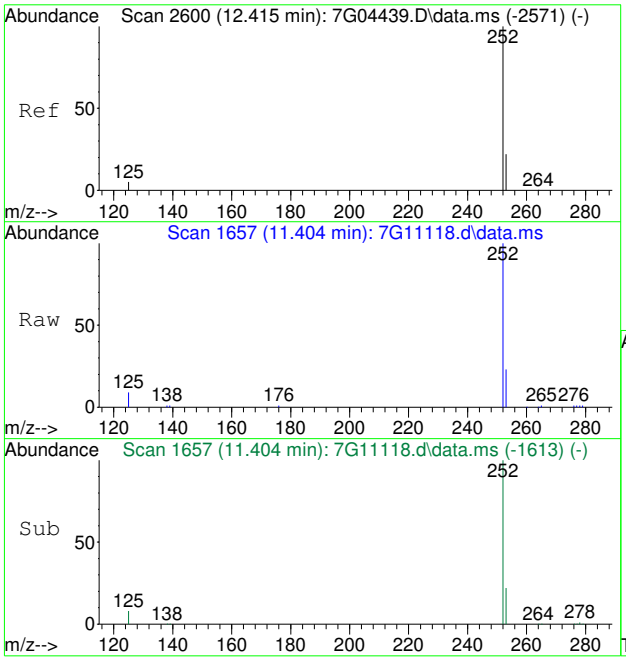


#24
Benzo[k]fluoranthene
Concen: 3.50 ppm m
RT: 11.001 min Scan# 1574
Delta R.T. 0.010 min
Lab File: 7G11118.d
Acq: 10 Aug 2020 9:50 pm

Tgt Ion:252 Resp: 69900

Ion	Ratio	Lower	Upper
252	100		
253	22.9	0.0	51.5
125	7.6	0.0	34.8

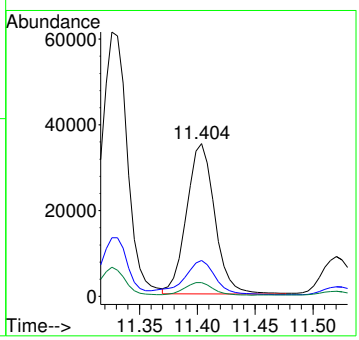


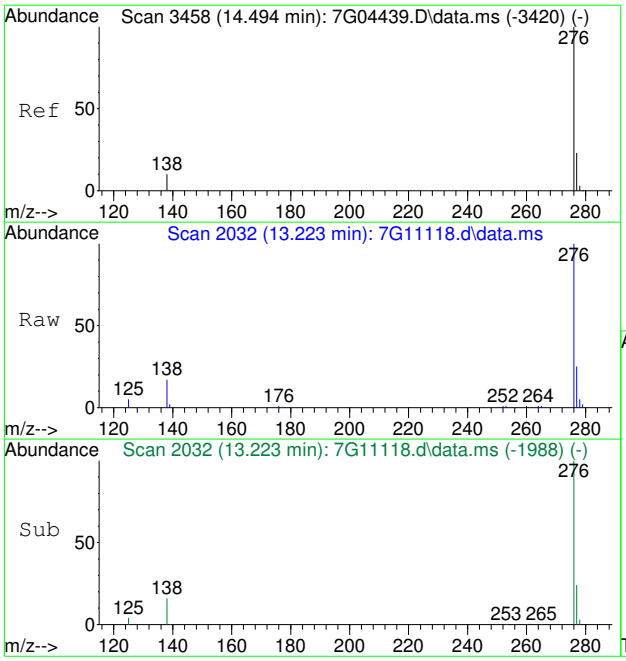


#25
Benzo[a]pyrene
Concen: 3.25 ppm
RT: 11.404 min Scan# 1657
Delta R.T. 0.014 min
Lab File: 7G11118.d
Acq: 10 Aug 2020 9:50 pm

Tgt Ion:252 Resp: 59438

Ion	Ratio	Lower	Upper
252	100		
253	21.2	0.0	51.6
125	8.3	0.0	34.8

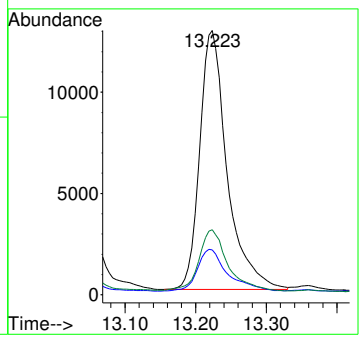


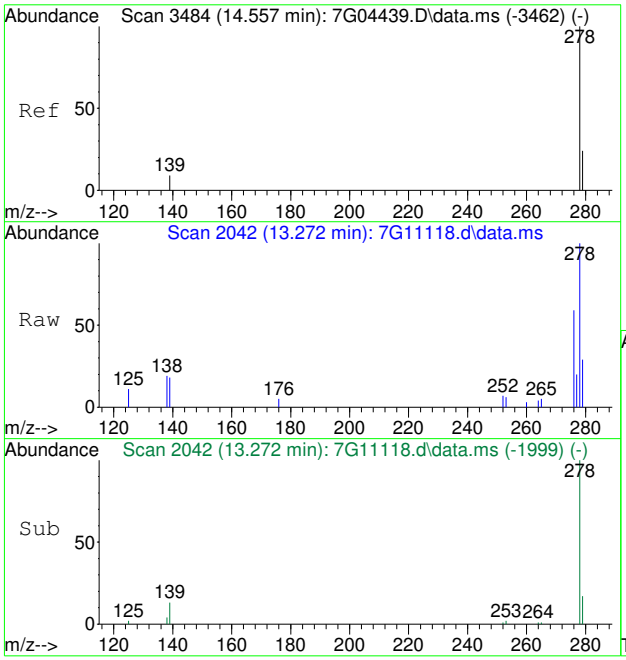


#26
Indeno[1,2,3-cd]pyrene
Concen: 2.89 ppm
RT: 13.223 min Scan# 2032
Delta R.T. 0.014 min
Lab File: 7G11118.d
Acq: 10 Aug 2020 9:50 pm

Tgt Ion:276 Resp: 34530

Ion	Ratio	Lower	Upper
276	100		
138	15.9	0.0	39.6
277	23.6	0.0	53.1

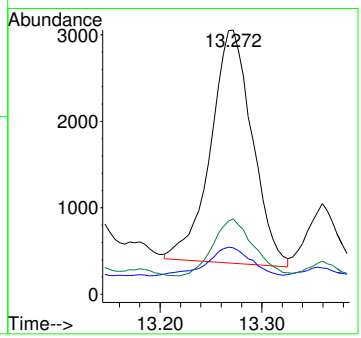


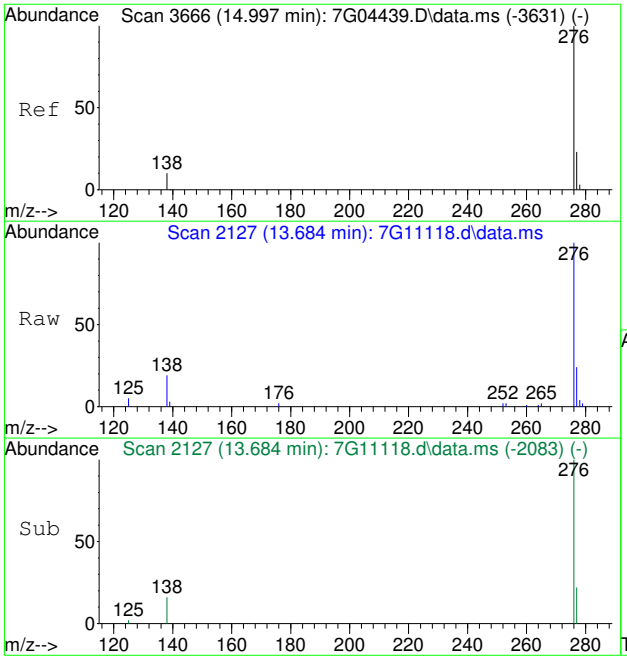


#27
Dibenz[a,h]anthracene
Concen: 0.58 ppm
RT: 13.272 min Scan# 2042
Delta R.T. 0.010 min
Lab File: 7G11118.d
Acq: 10 Aug 2020 9:50 pm

Tgt Ion:278 Resp: 7641

Ion	Ratio	Lower	Upper
278	100		
139	11.7	0.0	38.8
279	24.2	0.0	53.6

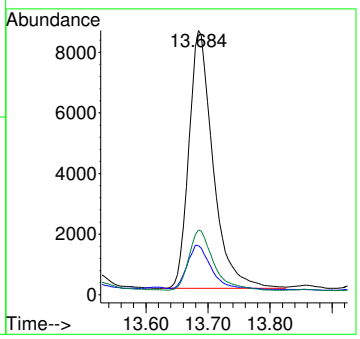




#28
Benzo[g,h,i]perylene
Concen: 1.60 ppm
RT: 13.684 min Scan# 2127
Delta R.T. 0.014 min
Lab File: 7G11118.d
Acq: 10 Aug 2020 9:50 pm

Tgt Ion:276 Resp: 23021

Ion	Ratio	Lower	Upper
276	100		
138	16.6	0.0	40.5
277	23.3	0.0	53.2



Manual Integration Approval Summary

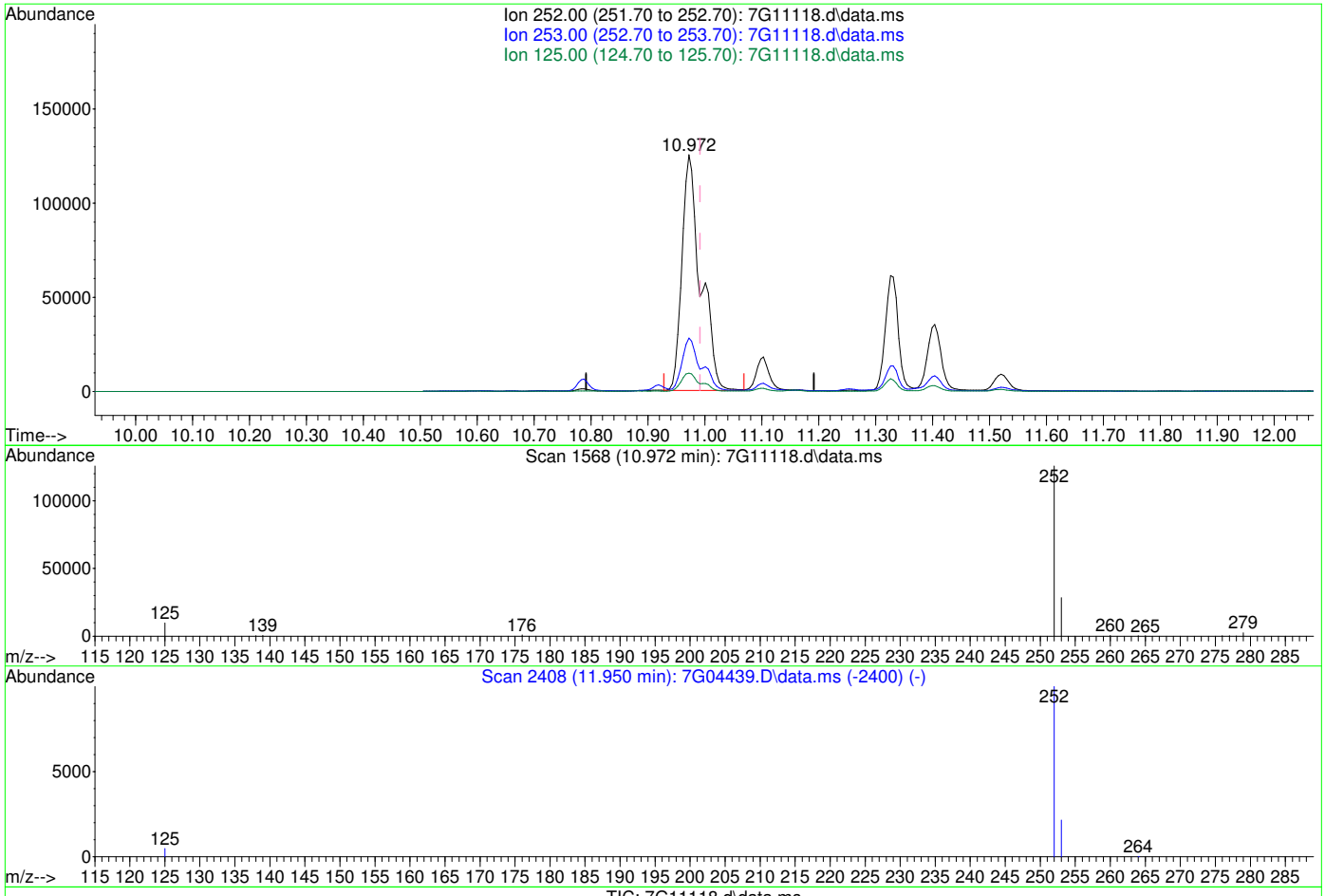
Sample Number:	FA77581-2	**Method:**	SW846 8270E BY SIM
Lab FileID:	7G11118.D	**Analyst approved:**	08/11/20 10:52 Fouad Sekkar
Injection Time:	08/10/20 21:50	**Supervisor approved:**	08/11/20 12:03 Naresh Jiawan

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(k)fluoranthene	207-08-9		11.00	Missed peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11118.d
Acq On : 10 Aug 2020 9:50 pm
Operator : FOUADS
Sample : fa77581-2 e
Misc : op81483,S7G482,15.4,,,1,1,soil
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Aug 11 02:37:40 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration



TIC: 7G11118.d\data.ms

(24) Benzo[k]fluoranthene (P)

10.972min (-0.020) 13.90ppm

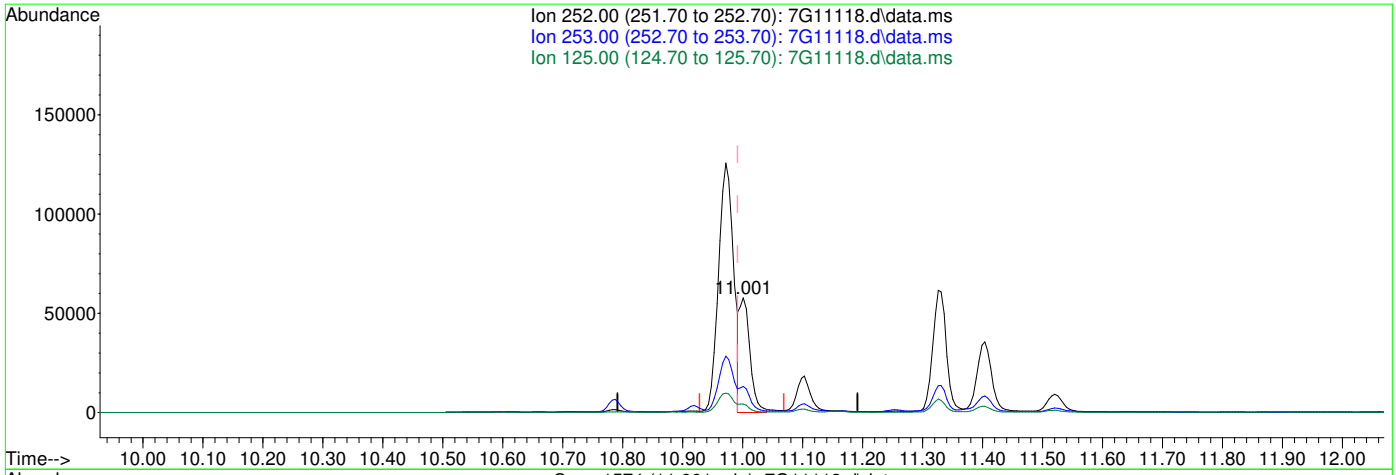
response 286080

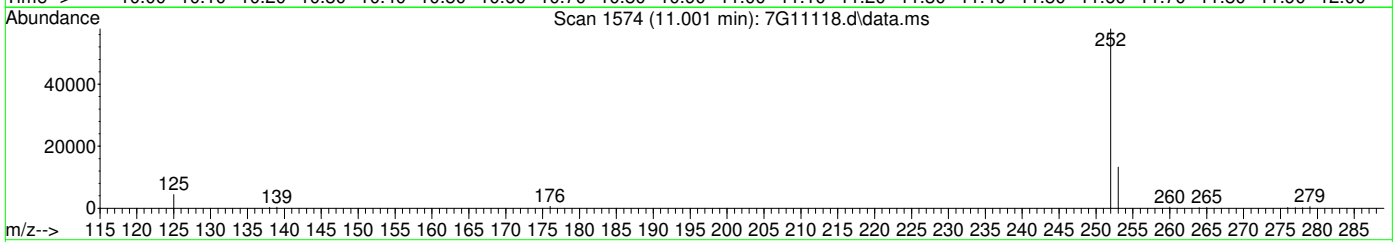
Ion	Exp%	Act%
252.00	100	100
253.00	21.50	21.51
125.00	4.80	7.62
0.00	0.00	0.00

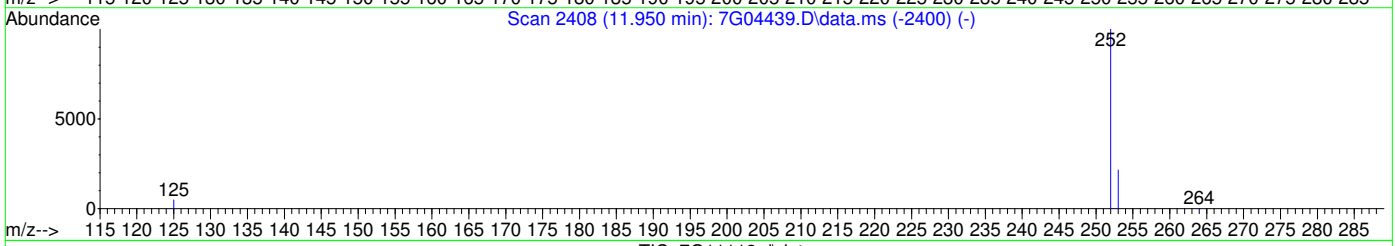
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11118.d
Acq On : 10 Aug 2020 9:50 pm
Operator : FOUADS
Sample : fa77581-2 e
Misc : op81483,S7G482,15.4,,,1,1,soil
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Aug 11 02:37:40 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11118.d\data.ms

(24) Benzo[k]fluoranthene (P)

11.001min (+0.010) 3.50ppm m

response 69900

Ion	Exp%	Act%
252.00	100	100
253.00	21.50	22.87
125.00	4.80	7.55
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 08/11/20 12:03

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11119.d
Acq On : 10 Aug 2020 10:14 pm
Operator : FOUADS
Sample : fa77581-3 e
Misc : op81483,S7G482,14.9,,,1,1,soil
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Aug 11 03:23:18 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.634	136	25511	4.00	ppm	0.00
6) Acenaphthene-d10	6.113	164	20171	4.00	ppm	0.00
11) Phenanthrene-d10	7.396	188	39891	4.00	ppm	0.00
18) Chrysene-d12	9.748	240	84208	4.00	ppm	0.02
22) Perylene-d12	11.510	264	63567	4.00	ppm	0.03
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.205	152	35715	9.36	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 93.60%			
17) Fluoranthene-d10	8.442	212	208869	10.02	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 100.20%			
Target Compounds						Qvalue
2) Naphthalene	4.652	128	1815	0.25	ppm	98
3) 2-Methylnaphthalene	5.234	142	1197	0.21	ppm	98
7) Acenaphthylene	5.993	152	54524	4.68	ppm	99
8) Acenaphthene	6.142	153	2383	0.32	ppm	98
9) Dibenzofuran	6.302	168	3103	0.59	ppm	91
10) Fluorene	6.592	166	4417	0.54	ppm	99
13) Phenanthrene	7.417	178	73373	5.54	ppm	97
14) Anthracene	7.466	178	197637	14.41	ppm	99
15) Carbazole	7.640	167	60240	2.53	ppm	95
16) Fluoranthene	8.467	202	1351610	48.40	ppm	97
19) Pyrene	8.660	202	1385885	39.40	ppm	94
20) Benzo[a]anthracene	9.736	228	564046	20.41	ppm	82
21) Chrysene	9.780	228	874799	30.08	ppm	96
23) Benzo[b]fluoranthene	11.011	252	1453986	67.39	ppm	97
24) Benzo[k]fluoranthene	11.040	252	303502m	12.88	ppm	
25) Benzo[a]pyrene	11.433	252	285447	13.58	ppm	98
26) Indeno[1,2,3-cd]pyrene	13.243	276	102254	7.45	ppm	94
27) Dibenz[a,h]anthracene	13.291	278	24604	1.62	ppm	97
28) Benzo[g,h,i]perylene	13.704	276	55883	3.38	ppm	95

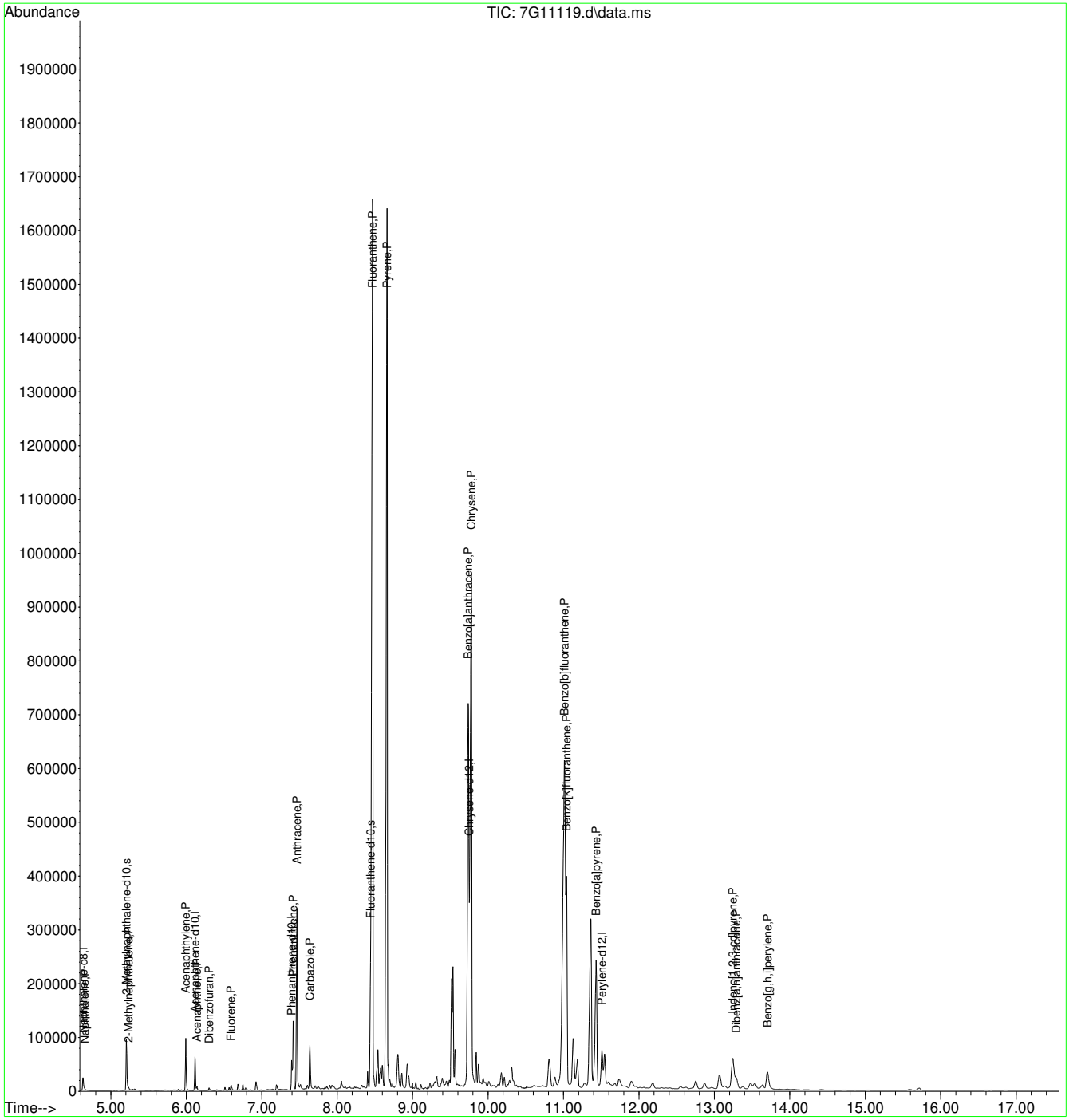
(#) = qualifier out of range (m) = manual integration (+) = signals summed

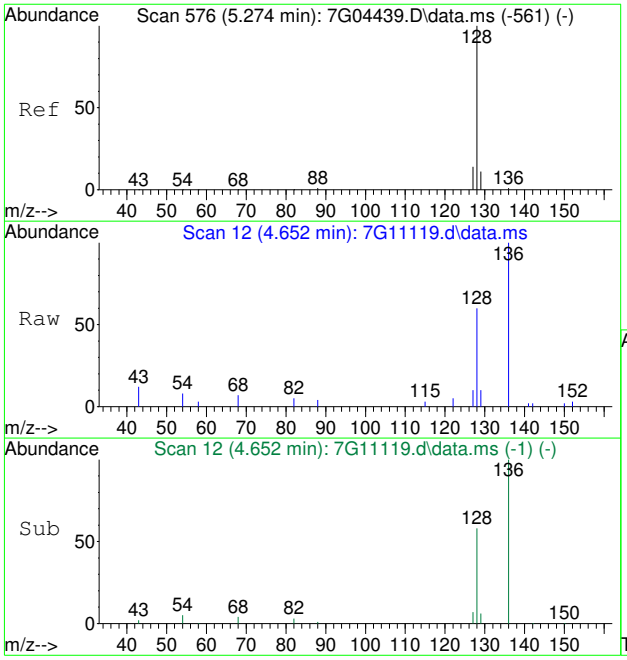
7.1.17
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11119.d
Acq On : 10 Aug 2020 10:14 pm
Operator : FOUADS
Sample : fa77581-3 e
Misc : op81483,S7G482,14.9,,,1,1,soil
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Aug 11 03:23:18 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

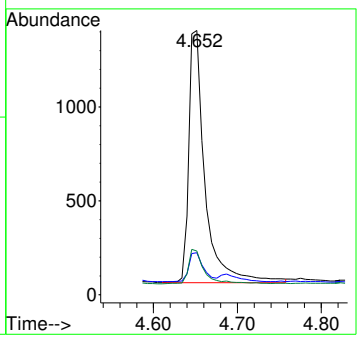


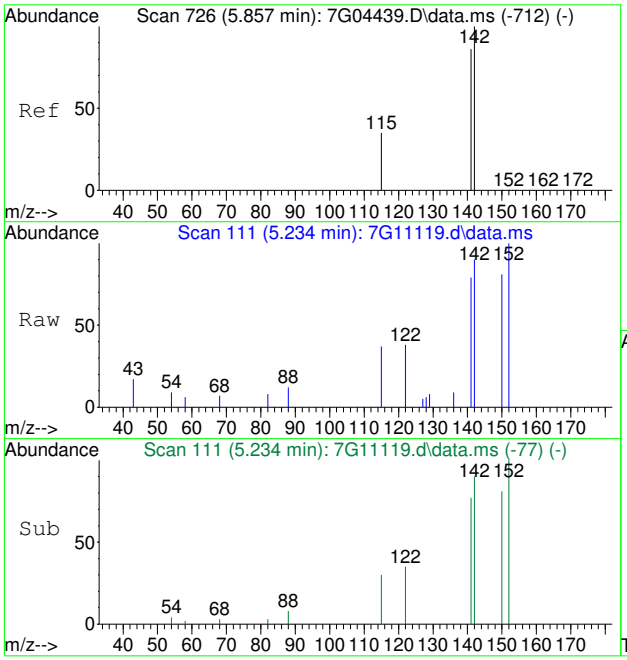


#2
Naphthalene
Concen: 0.25 ppm
RT: 4.652 min Scan# 12
Delta R.T. 0.006 min
Lab File: 7G11119.d
Acq: 10 Aug 2020 10:14 pm

Tgt Ion:128 Resp: 1815

Ion	Ratio	Lower	Upper
128	100		
129	11.6	0.0	40.9
127	13.0	0.0	43.5

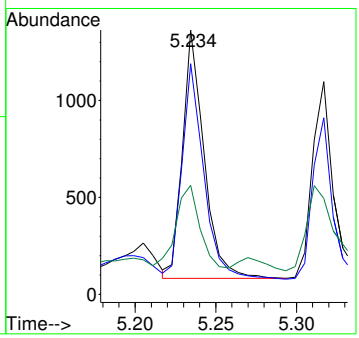


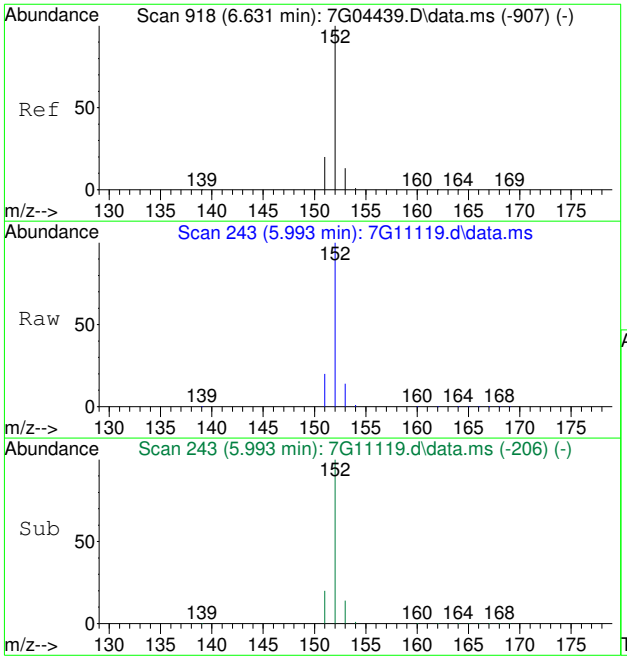


#3
2-Methylnaphthalene
Concen: 0.21 ppm
RT: 5.234 min Scan# 111
Delta R.T. -0.000 min
Lab File: 7G11119.d
Acq: 10 Aug 2020 10:14 pm

Tgt Ion:142 Resp: 1197

Ion	Ratio	Lower	Upper
142	100		
141	87.1	55.7	115.7
115	32.5	5.4	65.4

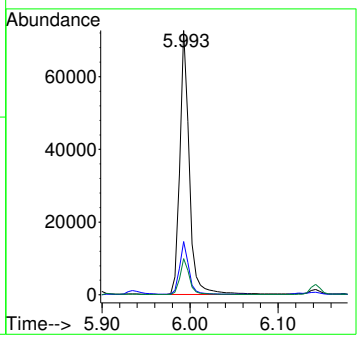


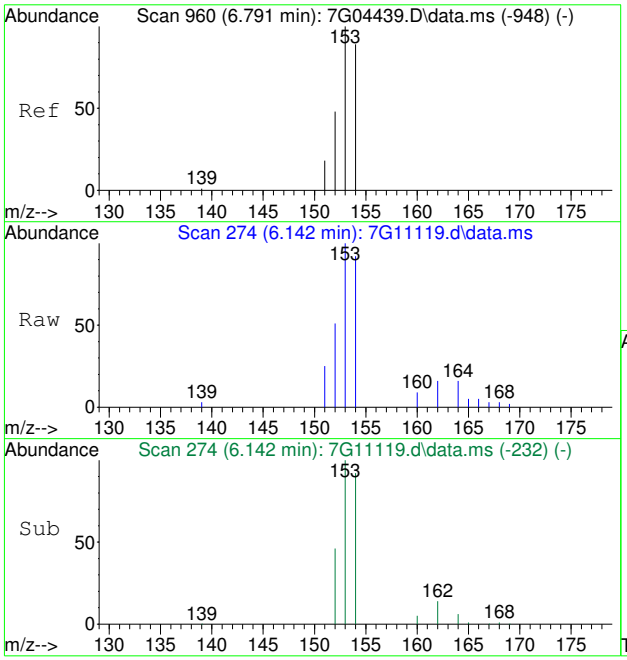


#7
Acenaphthylene
Concen: 4.68 ppm
RT: 5.993 min Scan# 243
Delta R.T. -0.000 min
Lab File: 7G11119.d
Acq: 10 Aug 2020 10:14 pm

Tgt Ion:152 Resp: 54524

Ion	Ratio	Lower	Upper
152	100		
151	20.0	0.0	49.8
153	13.6	0.0	42.8

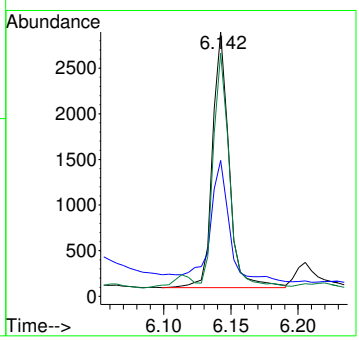


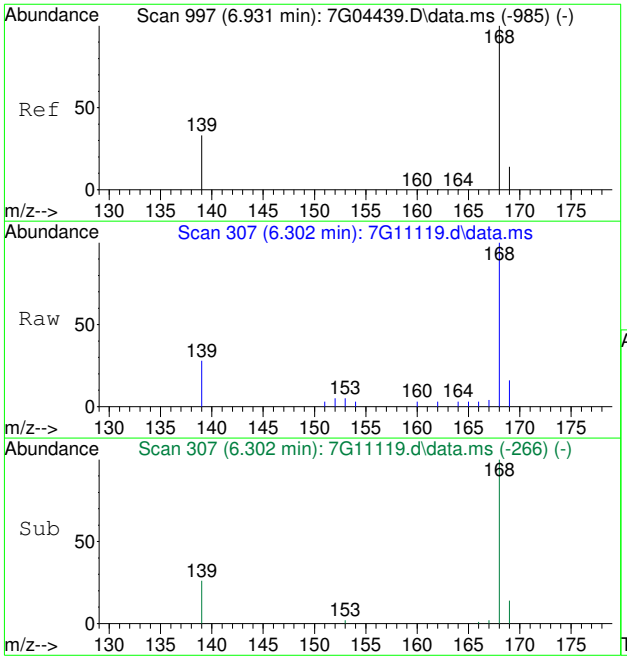


#8
Acenaphthene
Concen: 0.32 ppm
RT: 6.142 min Scan# 274
Delta R.T. 0.005 min
Lab File: 7G11119.d
Acq: 10 Aug 2020 10:14 pm

Tgt Ion:153 Resp: 2383

Ion	Ratio	Lower	Upper
153	100		
152	46.3	18.3	78.3
154	91.4	59.3	119.3

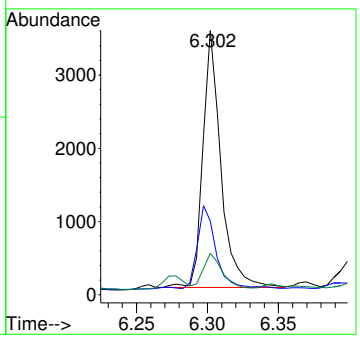


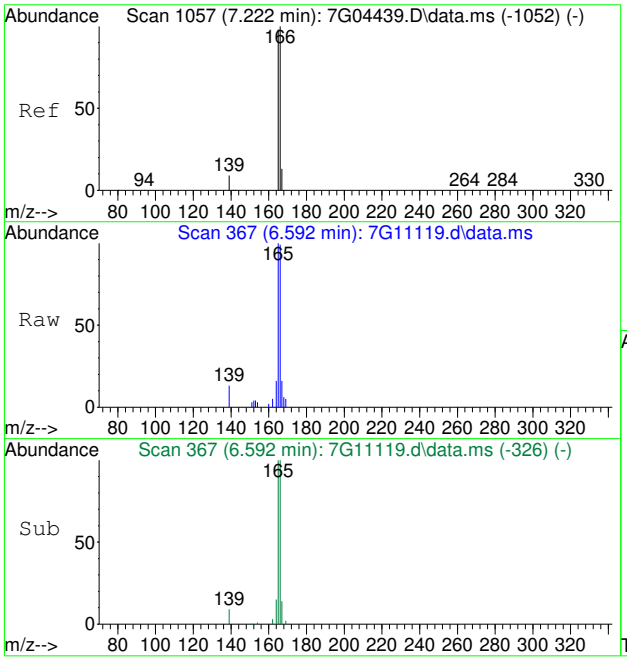


#9
Dibenzofuran
Concen: 0.59 ppm
RT: 6.302 min Scan# 307
Delta R.T. -0.000 min
Lab File: 7G11119.d
Acq: 10 Aug 2020 10:14 pm

Tgt Ion:168 Resp: 3103

Ion	Ratio	Lower	Upper
168	100		
139	26.1	12.6	52.6
169	12.3	0.0	33.8

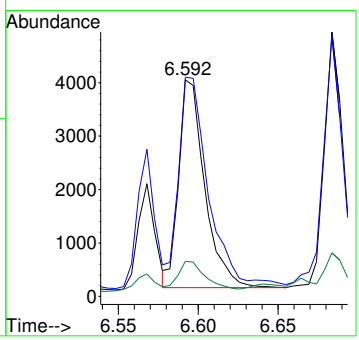


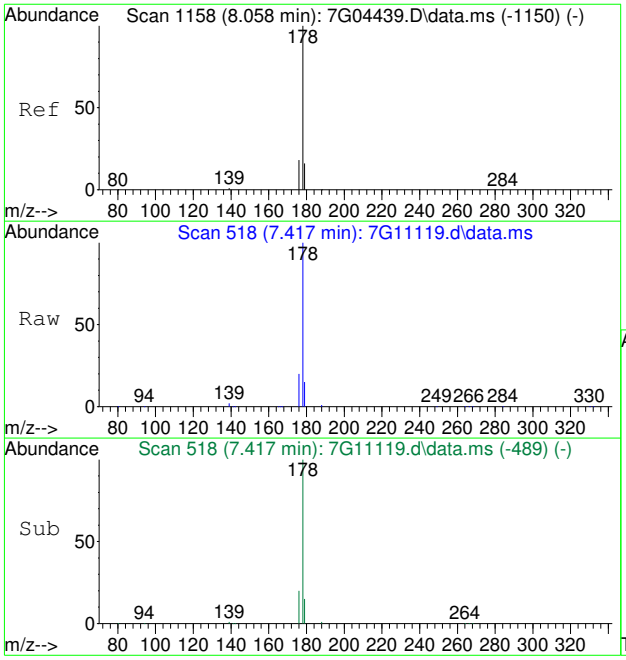


#10
Fluorene
Concen: 0.54 ppm
RT: 6.592 min Scan# 367
Delta R.T. -0.000 min
Lab File: 7G11119.d
Acq: 10 Aug 2020 10:14 pm

Tgt Ion:166 Resp: 4417

Ion	Ratio	Lower	Upper
166	100		
165	99.0	68.2	128.2
167	12.7	0.0	42.9

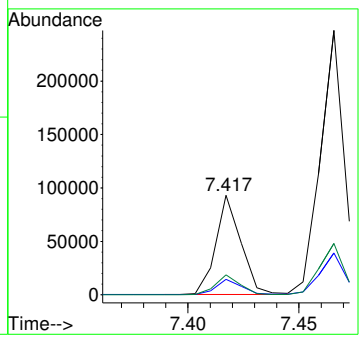


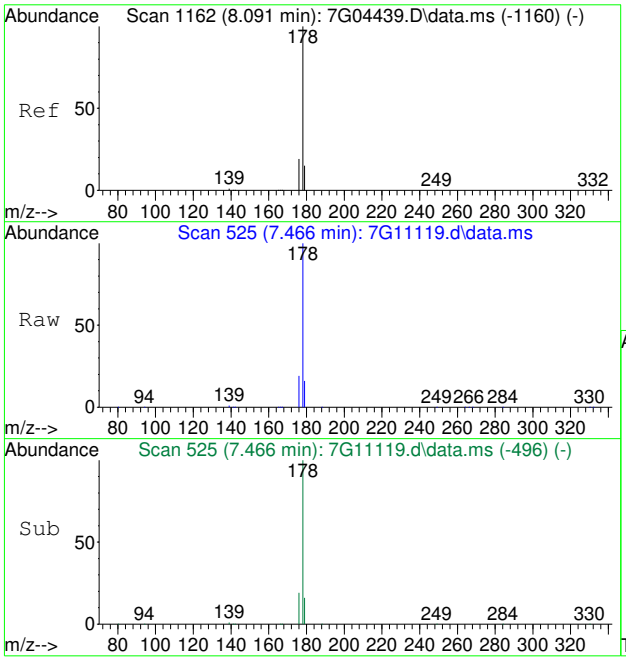


#13
Phenanthrene
Concen: 5.54 ppm
RT: 7.417 min Scan# 518
Delta R.T. -0.000 min
Lab File: 7G11119.d
Acq: 10 Aug 2020 10:14 pm

Tgt Ion:178 Resp: 73373

Ion	Ratio	Lower	Upper
178	100		
179	15.2	0.0	45.7
176	20.0	0.0	48.0

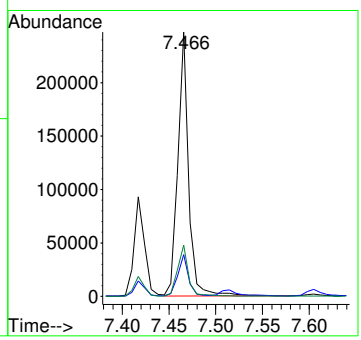


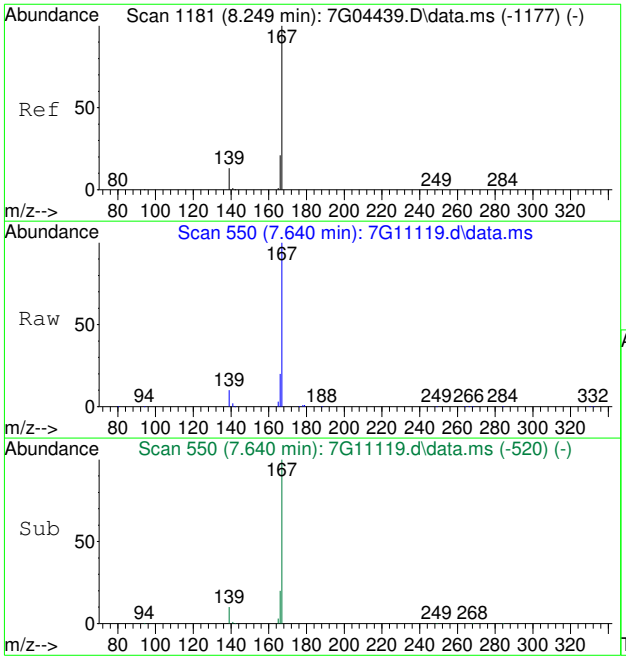


#14
Anthracene
Concen: 14.41 ppm
RT: 7.466 min Scan# 525
Delta R.T. -0.000 min
Lab File: 7G11119.d
Acq: 10 Aug 2020 10:14 pm

Tgt Ion:178 Resp: 197637

Ion	Ratio	Lower	Upper
178	100		
179	15.7	0.0	45.1
176	19.3	0.0	48.8

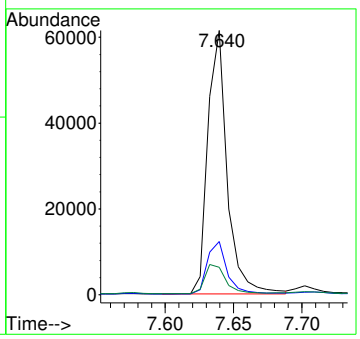


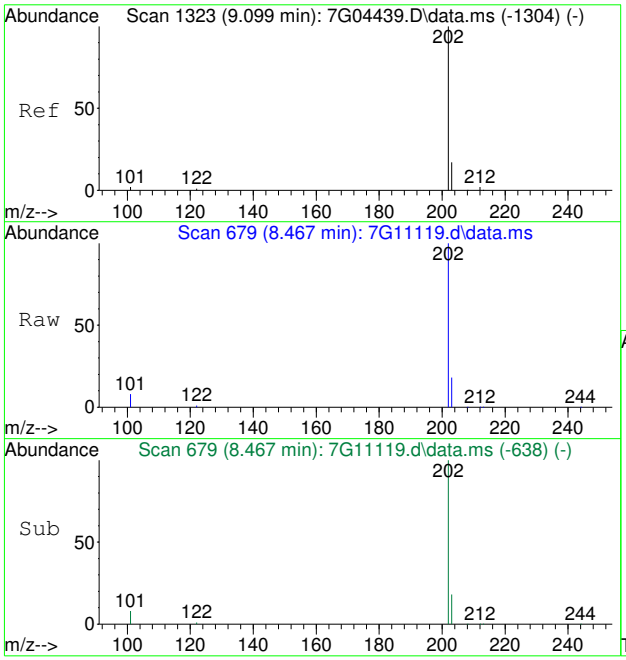


#15
Carbazole
Concen: 2.53 ppm
RT: 7.640 min Scan# 550
Delta R.T. 0.007 min
Lab File: 7G11119.d
Acq: 10 Aug 2020 10:14 pm

Tgt Ion:167 Resp: 60240

Ion	Ratio	Lower	Upper
167	100		
166	19.8	1.2	41.2
139	9.9	0.0	32.8

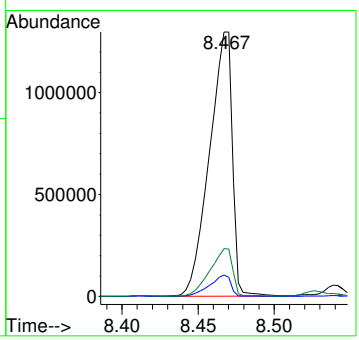


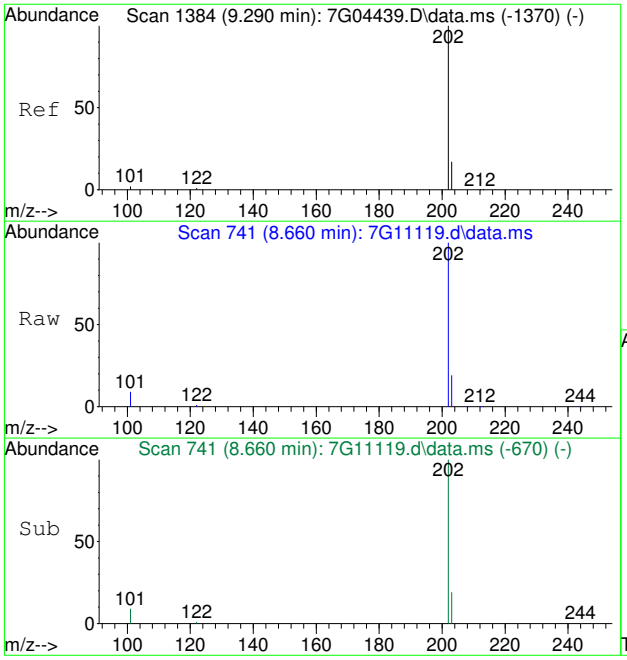


#16
Fluoranthene
Concen: 48.40 ppm
RT: 8.467 min Scan# 679
Delta R.T. 0.019 min
Lab File: 7G11119.d
Acq: 10 Aug 2020 10:14 pm

Tgt Ion:202 Resp: 1351610

Ion	Ratio	Lower	Upper
202	100		
101	8.1	0.0	32.2
203	18.0	0.0	47.2

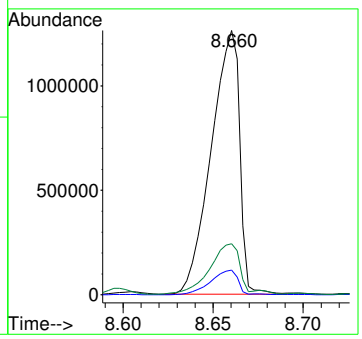


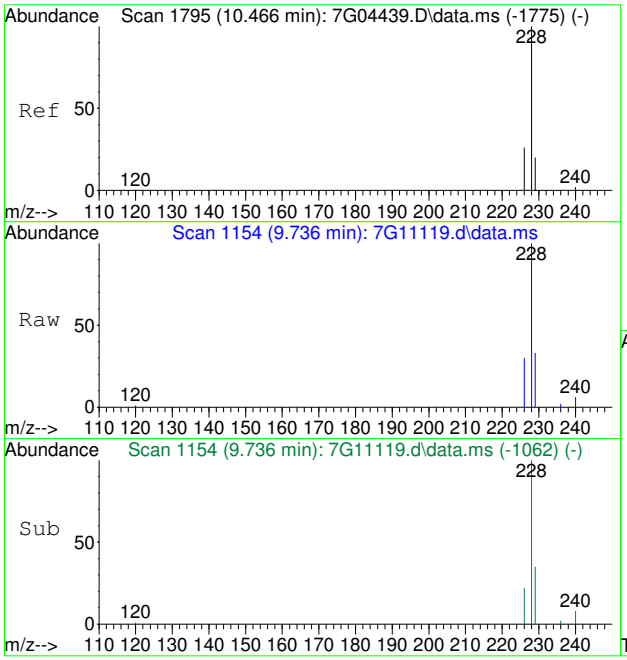


#19
Pyrene
Concen: 39.40 ppm
RT: 8.660 min Scan# 741
Delta R.T. 0.022 min
Lab File: 7G11119.d
Acq: 10 Aug 2020 10:14 pm

Tgt Ion:202 Resp: 1385885

Ion	Ratio	Lower	Upper
202	100		
101	9.3	0.0	32.4
203	19.0	0.0	47.4

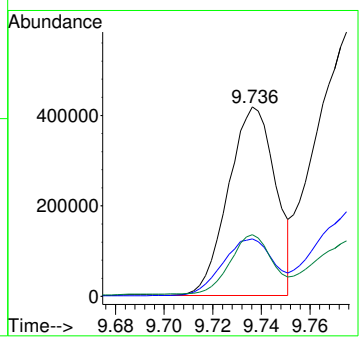


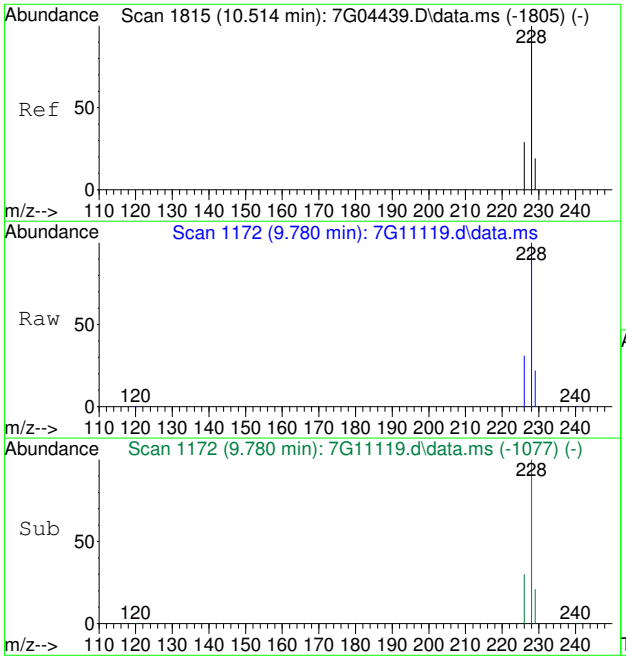


#20
Benzo[a]anthracene
Concen: 20.41 ppm
RT: 9.736 min Scan# 1154
Delta R.T. 0.022 min
Lab File: 7G11119.d
Acq: 10 Aug 2020 10:14 pm

Tgt Ion:228 Resp: 564046

Ion	Ratio	Lower	Upper
228	100		
226	30.2	0.0	56.1
229	33.9	0.0	49.5

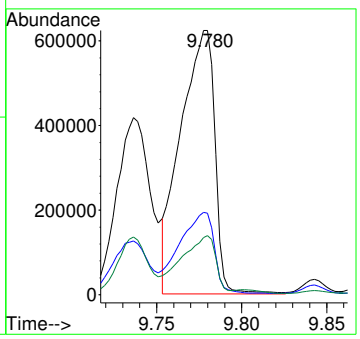


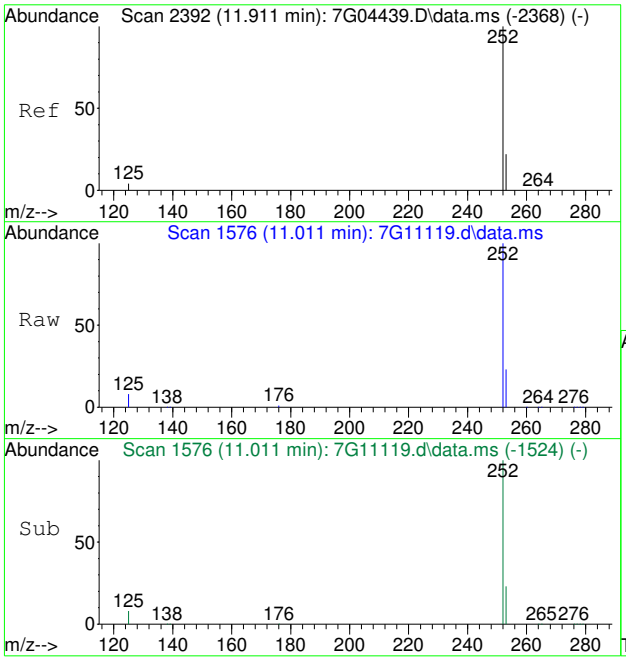


#21
Chrysene
Concen: 30.08 ppm
RT: 9.780 min Scan# 1172
Delta R.T. 0.029 min
Lab File: 7G11119.d
Acq: 10 Aug 2020 10:14 pm

Tgt Ion:228 Resp: 874799

Ion	Ratio	Lower	Upper
228	100		
226	30.4	0.0	58.9
229	21.8	0.0	49.5

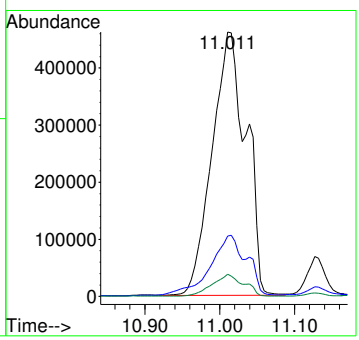


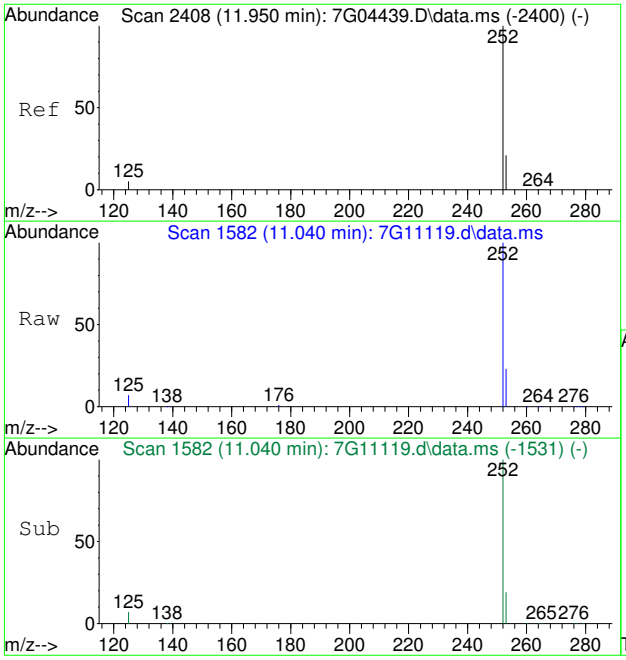


#23
Benzo[b]fluoranthene
Concen: 67.39 ppm
RT: 11.011 min Scan# 1576
Delta R.T. 0.053 min
Lab File: 7G11119.d
Acq: 10 Aug 2020 10:14 pm

Tgt Ion:252 Resp: 1453986

Ion	Ratio	Lower	Upper
252	100		
253	22.2	0.0	51.7
125	8.3	0.0	34.5

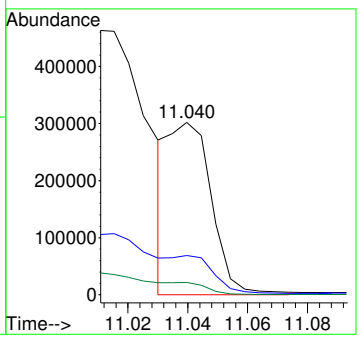


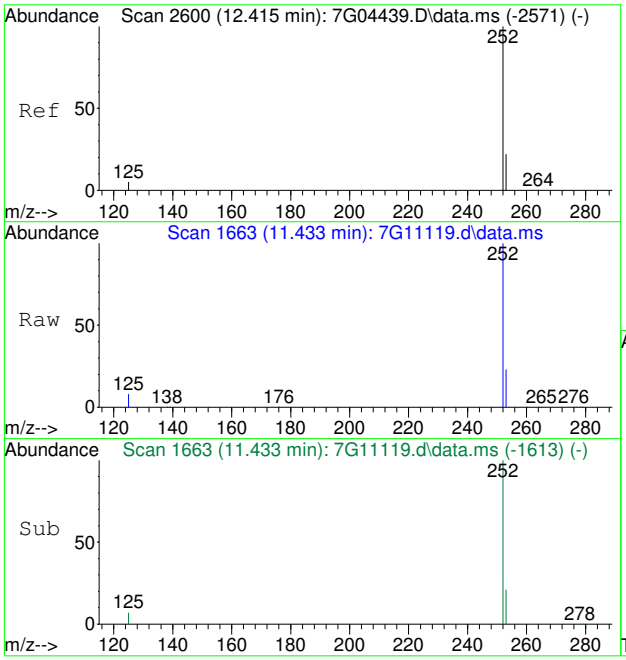


#24
Benzo[k]fluoranthene
Concen: 12.88 ppm m
RT: 11.040 min Scan# 1582
Delta R.T. 0.048 min
Lab File: 7G11119.d
Acq: 10 Aug 2020 10:14 pm

Tgt Ion:252 Resp: 303502

Ion	Ratio	Lower	Upper
252	100		
253	22.7	0.0	51.5
125	7.1	0.0	34.8

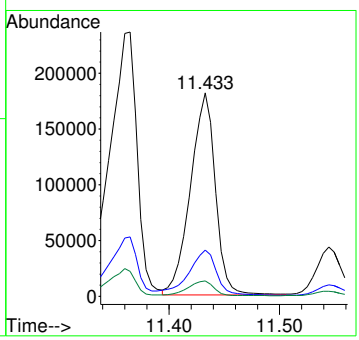


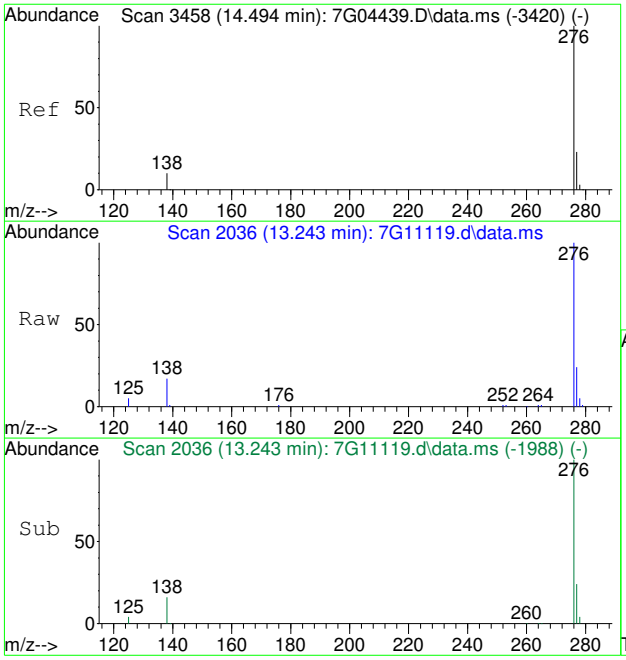


#25
Benzo[a]pyrene
Concen: 13.58 ppm
RT: 11.433 min Scan# 1663
Delta R.T. 0.044 min
Lab File: 7G11119.d
Acq: 10 Aug 2020 10:14 pm

Tgt Ion:252 Resp: 285447

Ion	Ratio	Lower	Upper
252	100		
253	21.4	0.0	51.6
125	7.2	0.0	34.8

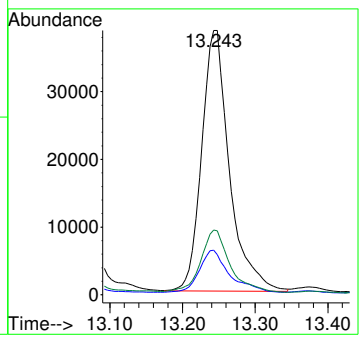


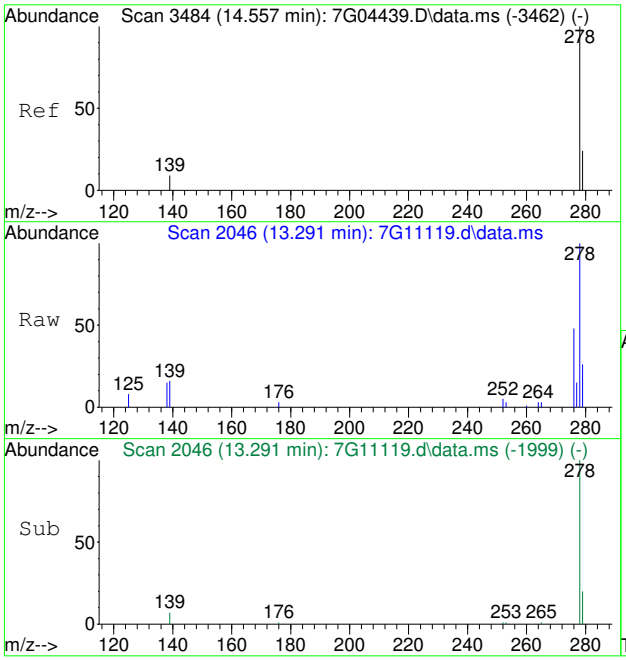


#26
Indeno[1,2,3-cd]pyrene
Concen: 7.45 ppm
RT: 13.243 min Scan# 2036
Delta R.T. 0.034 min
Lab File: 7G11119.d
Acq: 10 Aug 2020 10:14 pm

Tgt Ion:276 Resp: 102254

Ion	Ratio	Lower	Upper
276	100		
138	16.3	0.0	39.6
277	23.8	0.0	53.1

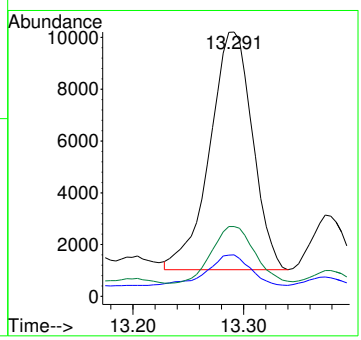


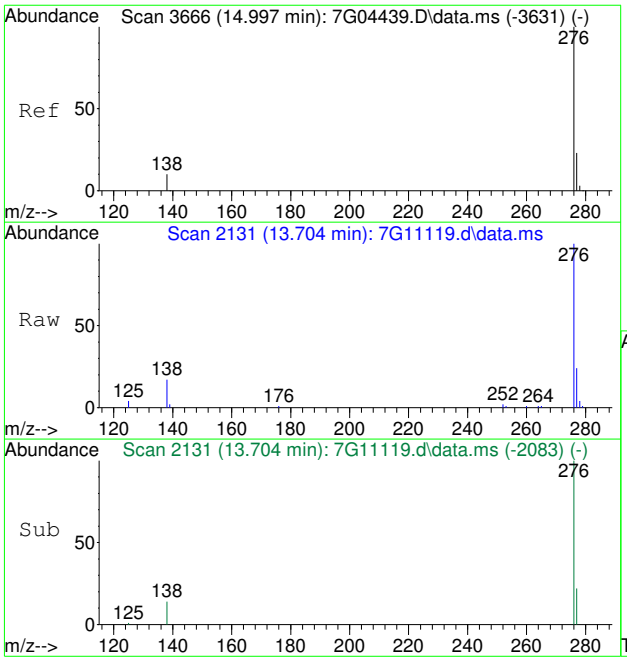


#27
Dibenz[a,h]anthracene
Concen: 1.62 ppm
RT: 13.291 min Scan# 2046
Delta R.T. 0.029 min
Lab File: 7G11119.d
Acq: 10 Aug 2020 10:14 pm

Tgt Ion:278 Resp: 24604

Ion	Ratio	Lower	Upper
278	100		
139	12.7	0.0	38.8
279	23.8	0.0	53.6

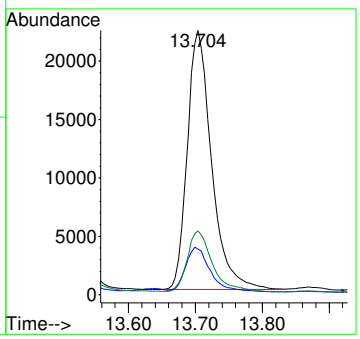




#28
Benzo[g,h,i]perylene
Concen: 3.38 ppm
RT: 13.704 min Scan# 2131
Delta R.T. 0.034 min
Lab File: 7G11119.d
Acq: 10 Aug 2020 10:14 pm

Tgt Ion:276 Resp: 55883

Ion	Ratio	Lower	Upper
276	100		
138	16.0	0.0	40.5
277	23.4	0.0	53.2



Manual Integration Approval Summary

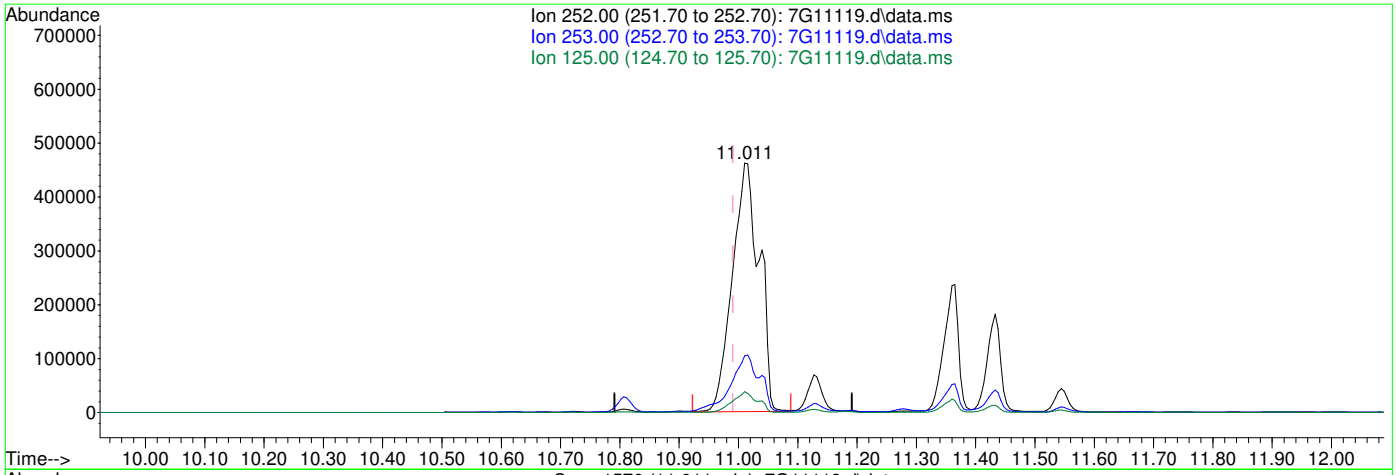
Sample Number:	FA77581-3	**Method:**	SW846 8270E BY SIM
Lab FileID:	7G11119.D	**Analyst approved:**	08/11/20 10:52 Fouad Sekkar
Injection Time:	08/10/20 22:14	**Supervisor approved:**	08/11/20 12:03 Naresh Jiawan

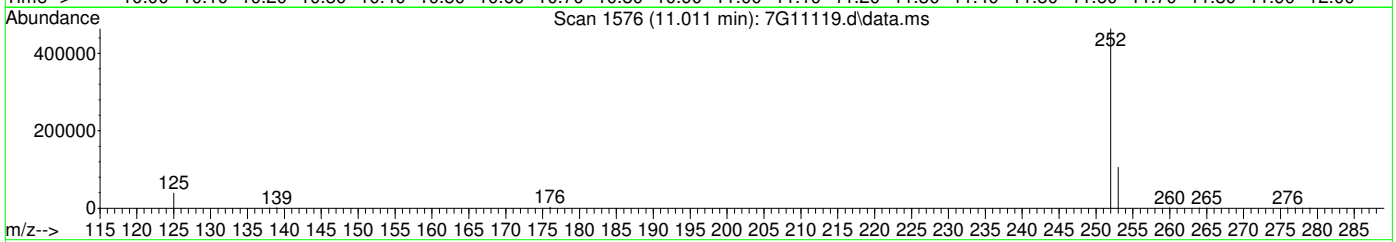
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(k)fluoranthene	207-08-9		11.04	Missed peak

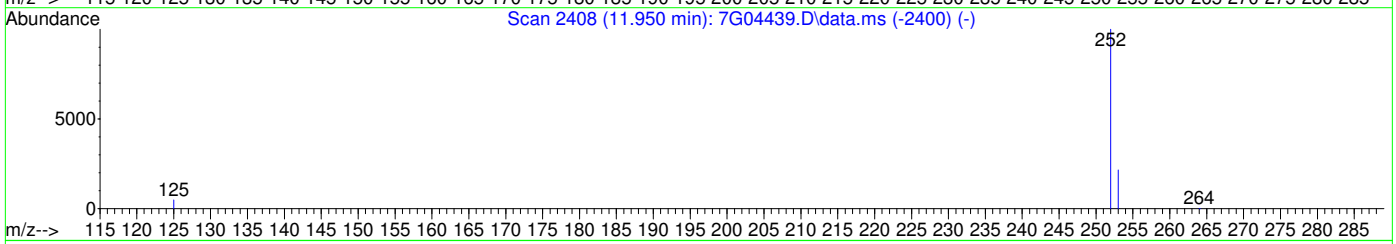
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11119.d
Acq On : 10 Aug 2020 10:14 pm
Operator : FOUADS
Sample : fa77581-3 e
Misc : op81483,S7G482,14.9,,,1,1,soil
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Aug 11 02:37:43 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11119.d\data.ms

(24) Benzo[k]fluoranthene (P)

11.011min (+0.019) 54.98ppm

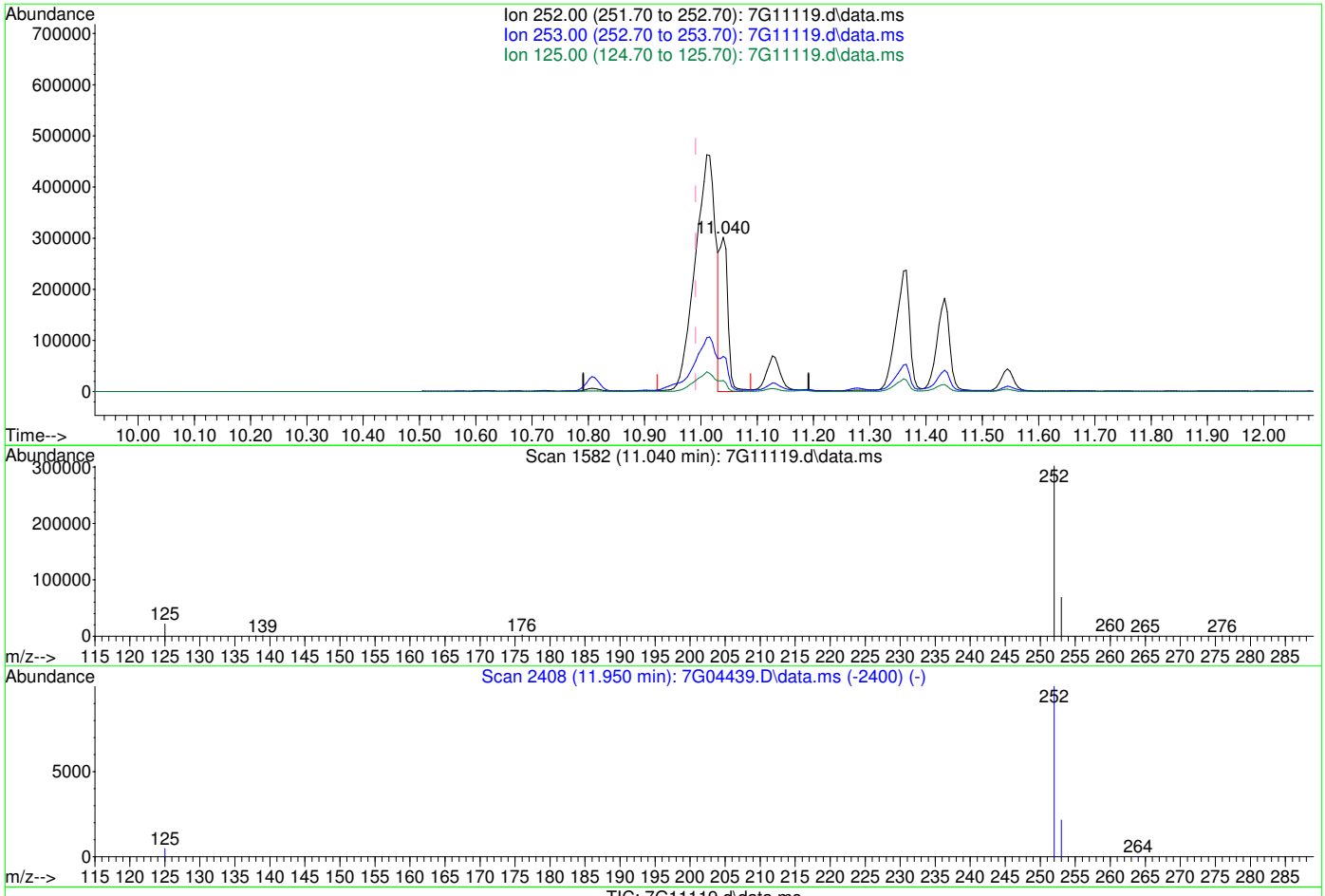
response 1455916

Ion	Exp%	Act%
252.00	100	100
253.00	21.50	22.23
125.00	4.80	8.30
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11119.d
Acq On : 10 Aug 2020 10:14 pm
Operator : FOUADS
Sample : fa77581-3 e
Misc : op81483,S7G482,14.9,,,1,1,soil
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Aug 11 02:37:43 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration



TIC: 7G11119.d\data.ms

(24) Benzo[k]fluoranthene (P)

11.040min (+0.048) 12.88ppm m

response 303502

Ion	Exp%	Act%
252.00	100	100
253.00	21.50	22.73
125.00	4.80	7.13
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 08/11/20 12:03

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11120.d
Acq On : 10 Aug 2020 10:38 pm
Operator : FOUADS
Sample : fa77581-4 e
Misc : op81483,S7G482,15.3,,,1,1,soil
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Aug 11 03:23:48 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.646	136	24455	4.00	ppm	0.02
6) Acenaphthene-d10	6.128	164	19847	4.00	ppm	0.01
11) Phenanthrene-d10	7.410	188	38256	4.00	ppm	0.01
18) Chrysene-d12	9.756	240	79537	4.00	ppm	0.03
22) Perylene-d12	11.525	264	59109	4.00	ppm	0.05
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.223	152	35306	9.64	ppm	0.02
Spiked Amount 10.000	Range 50 - 150		Recovery = 96.40%			
17) Fluoranthene-d10	8.455	212	173491	8.69	ppm	0.02
Spiked Amount 10.000	Range 50 - 150		Recovery = 86.90%			
Target Compounds						Qvalue
2) Naphthalene	4.664	128	2410	0.35	ppm	98
3) 2-Methylnaphthalene	5.246	142	1471	0.27	ppm	97
5) 1-Methylnaphthalene	5.329	142	1042	0.22	ppm	97
7) Acenaphthylene	6.007	152	64791	5.64	ppm	99
8) Acenaphthene	6.157	153	2603	0.35	ppm	95
9) Dibenzofuran	6.317	168	3076	0.59	ppm	85
10) Fluorene	6.607	166	4557	0.57	ppm	97
13) Phenanthrene	7.431	178	31581	2.51	ppm	97
14) Anthracene	7.480	178	247608	18.61	ppm	98
15) Carbazole	7.653	167	49409	2.16	ppm	94
16) Fluoranthene	8.473	202	670819	26.47	ppm	98
19) Pyrene	8.667	202	882050	27.01	ppm	95
20) Benzo[a]anthracene	9.746	228	389250	15.14	ppm	76
21) Chrysene	9.787	228	646240	23.50	ppm	97
23) Benzo[b]fluoranthene	11.025	252	1392819	69.42	ppm	97
24) Benzo[k]fluoranthene	11.049	252	209018m	9.63	ppm	
25) Benzo[a]pyrene	11.447	252	296303	15.16	ppm	99
26) Indeno[1,2,3-cd]pyrene	13.257	276	117234	9.19	ppm	95
27) Dibenz[a,h]anthracene	13.296	278	27224	1.92	ppm	97
28) Benzo[g,h,i]perylene	13.718	276	65639	4.27	ppm	94

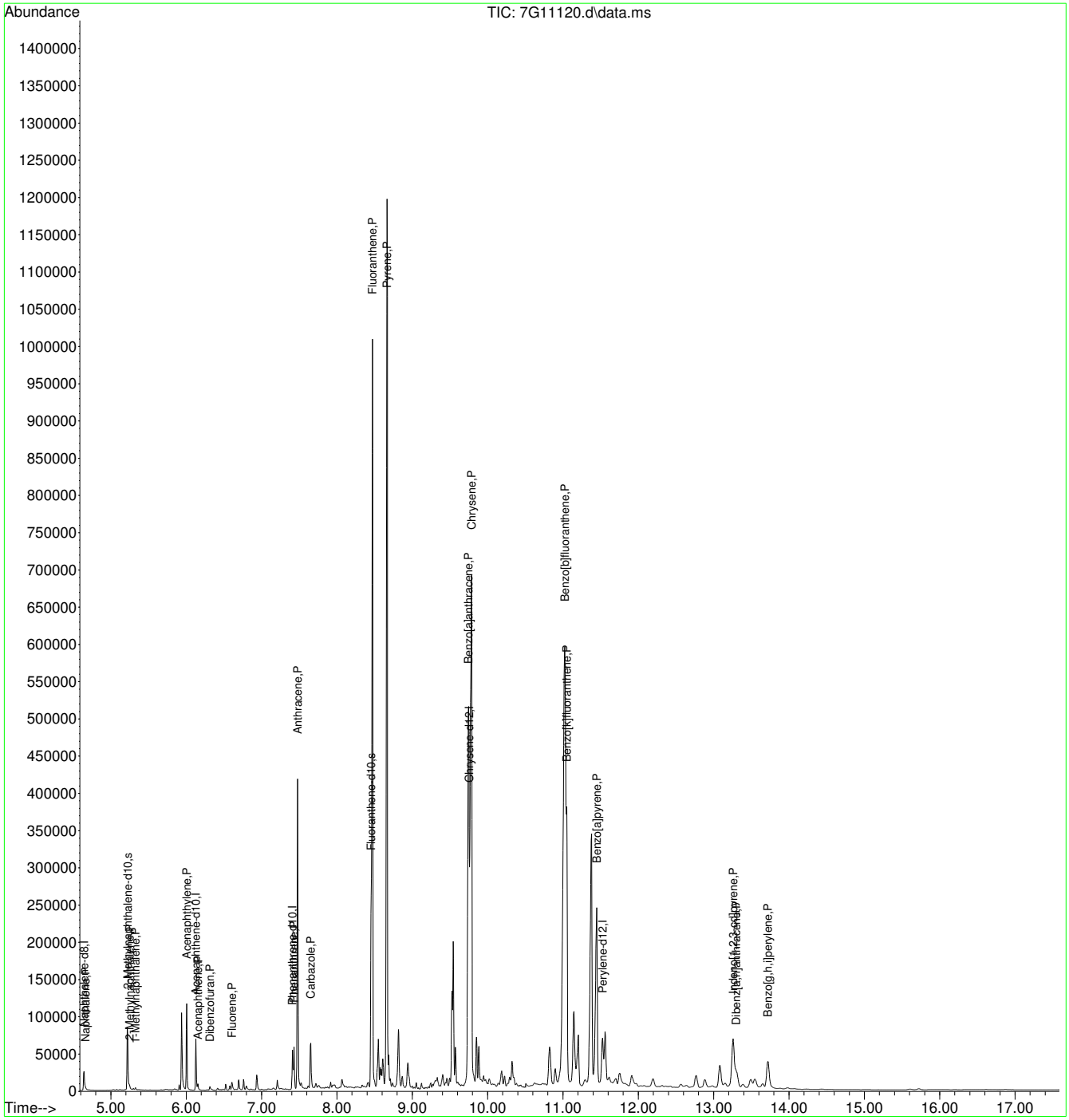
(#) = qualifier out of range (m) = manual integration (+) = signals summed

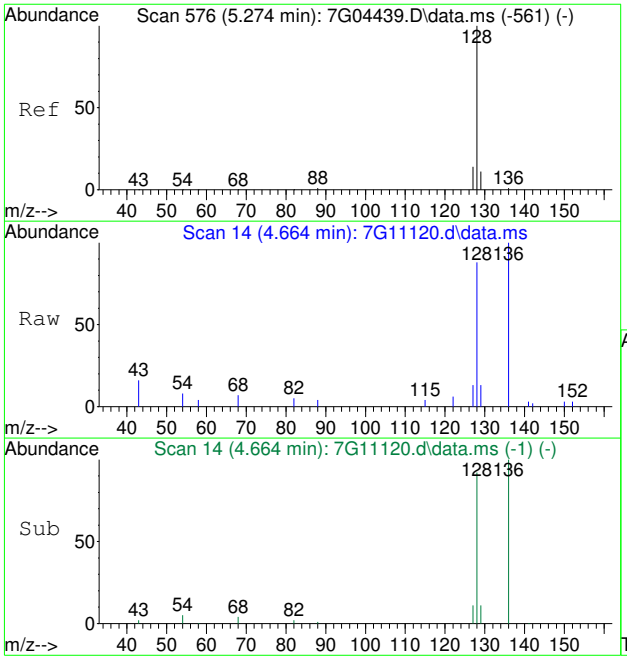
7.1.18
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11120.d
Acq On : 10 Aug 2020 10:38 pm
Operator : FOUADS
Sample : fa77581-4 e
Misc : op81483,S7G482,15.3,,,1,1,soil
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Aug 11 03:23:48 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

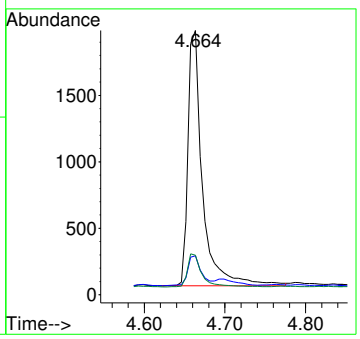


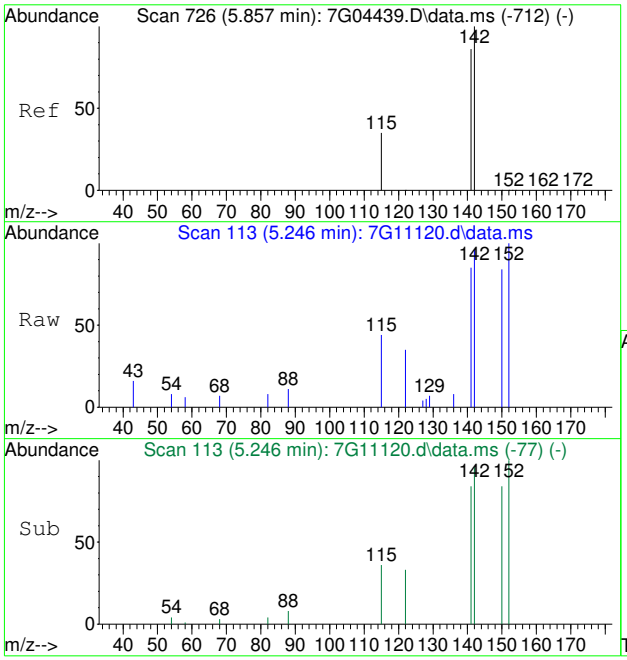


#2
Naphthalene
Concen: 0.35 ppm
RT: 4.664 min Scan# 14
Delta R.T. 0.018 min
Lab File: 7G11120.d
Acq: 10 Aug 2020 10:38 pm

Tgt Ion:128 Resp: 2410

Ion	Ratio	Lower	Upper
128	100		
129	11.6	0.0	40.9
127	12.3	0.0	43.5

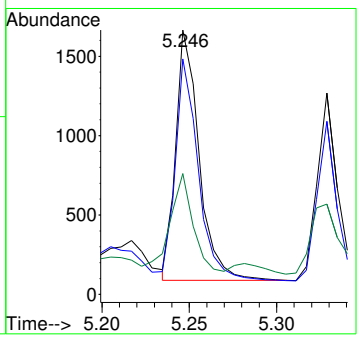


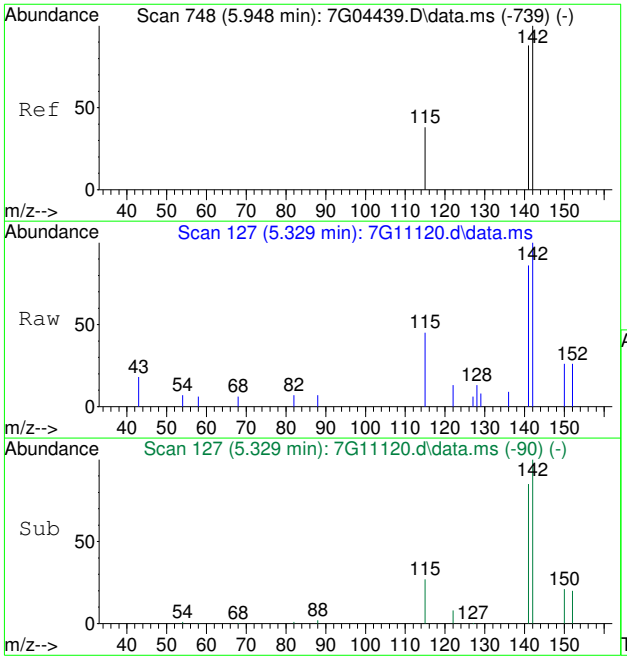


#3
2-Methylnaphthalene
Concen: 0.27 ppm
RT: 5.246 min Scan# 113
Delta R.T. 0.012 min
Lab File: 7G11120.d
Acq: 10 Aug 2020 10:38 pm

Tgt Ion:142 Resp: 1471

Ion	Ratio	Lower	Upper
142	100		
141	88.6	55.7	115.7
115	36.9	5.4	65.4

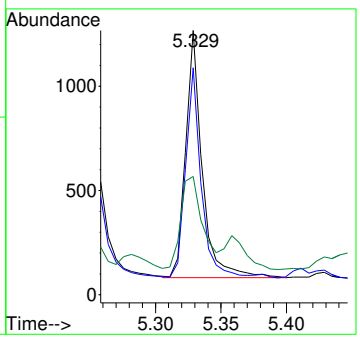


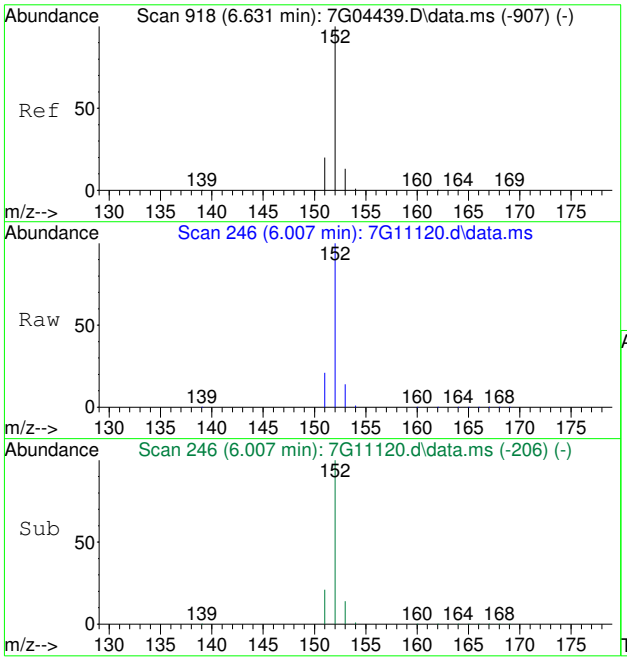


#5
1-Methylnaphthalene
Concen: 0.22 ppm
RT: 5.329 min Scan# 127
Delta R.T. 0.018 min
Lab File: 7G11120.d
Acq: 10 Aug 2020 10:38 pm

Tgt Ion:142 Resp: 1042

Ion	Ratio	Lower	Upper
142	100		
141	84.8	58.1	118.1
115	37.4	7.7	67.7

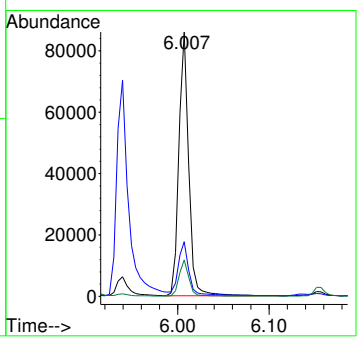


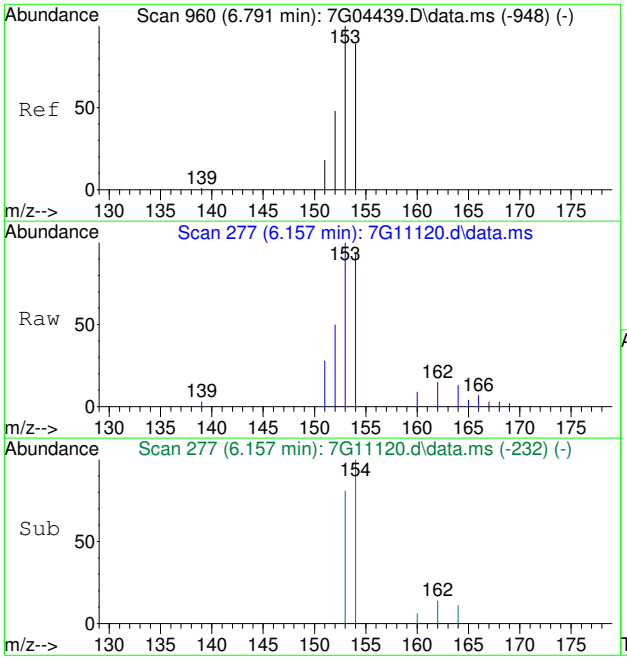


#7
Acenaphthylene
Concen: 5.64 ppm
RT: 6.007 min Scan# 246
Delta R.T. 0.014 min
Lab File: 7G11120.d
Acq: 10 Aug 2020 10:38 pm

Tgt Ion:152 Resp: 64791

Ion	Ratio	Lower	Upper
152	100		
151	19.7	0.0	49.8
153	13.7	0.0	42.8

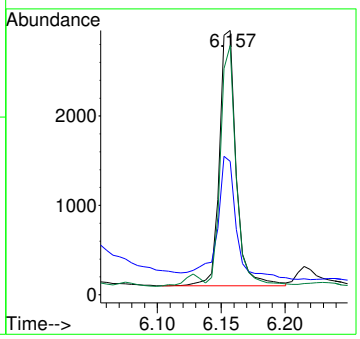


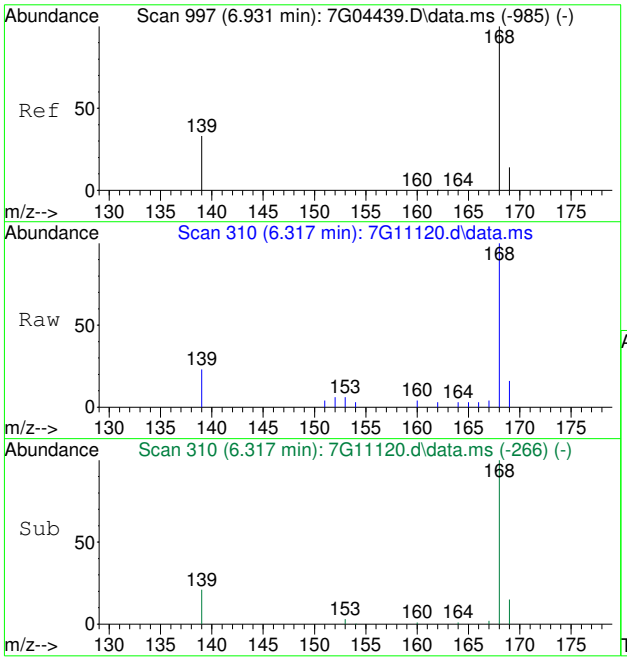


#8
Acenaphthene
Concen: 0.35 ppm
RT: 6.157 min Scan# 277
Delta R.T. 0.019 min
Lab File: 7G11120.d
Acq: 10 Aug 2020 10:38 pm

Tgt Ion:153 Resp: 2603

Ion	Ratio	Lower	Upper
153	100		
152	44.4	18.3	78.3
154	94.1	59.3	119.3

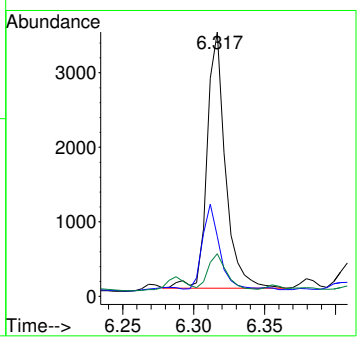


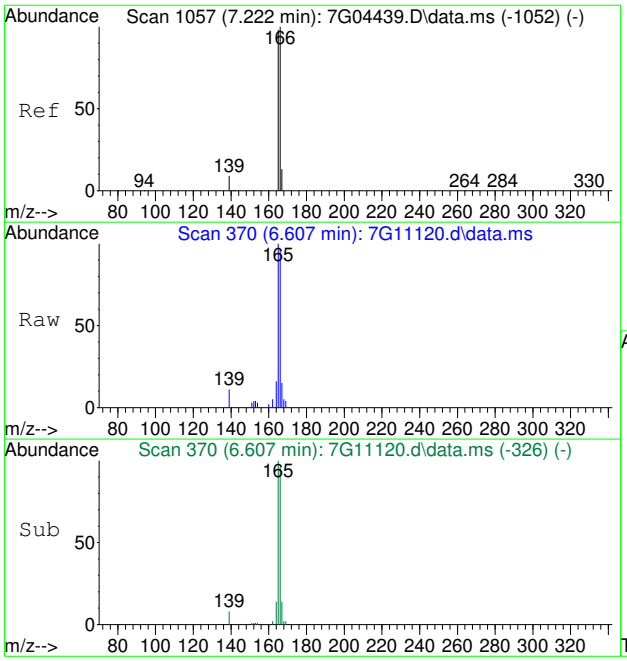


#9
Dibenzofuran
Concen: 0.59 ppm
RT: 6.317 min Scan# 310
Delta R.T. 0.014 min
Lab File: 7G11120.d
Acq: 10 Aug 2020 10:38 pm

Tgt Ion:168 Resp: 3076

Ion	Ratio	Lower	Upper
168	100		
139	20.4	12.6	52.6
169	13.4	0.0	33.8

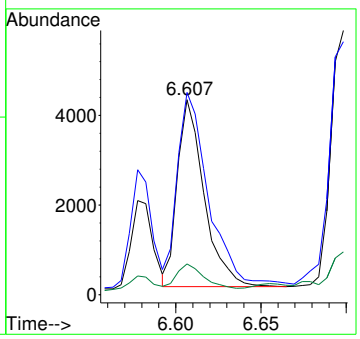


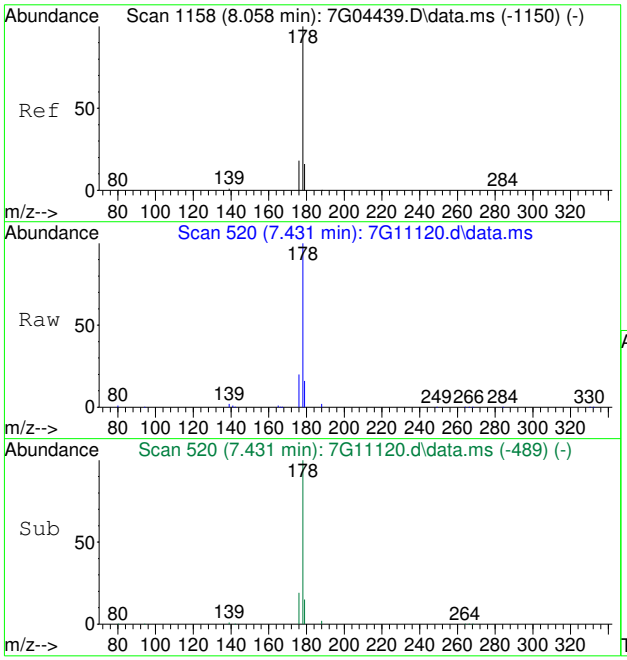


#10
Fluorene
Concen: 0.57 ppm
RT: 6.607 min Scan# 370
Delta R.T. 0.014 min
Lab File: 7G11120.d
Acq: 10 Aug 2020 10:38 pm

Tgt Ion:166 Resp: 4557

Ion	Ratio	Lower	Upper
166	100		
165	101.8	68.2	128.2
167	12.0	0.0	42.9

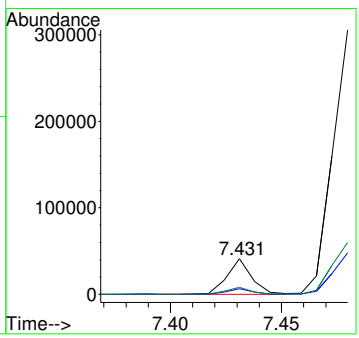


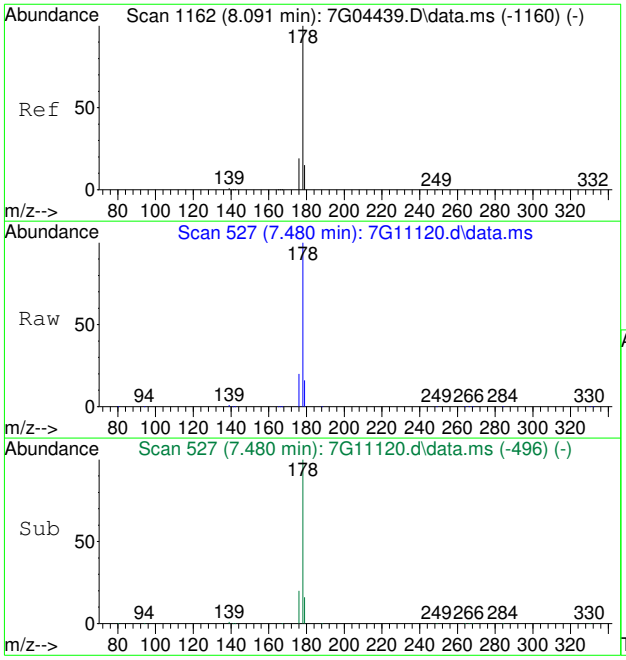


#13
Phenanthrene
Concen: 2.51 ppm
RT: 7.431 min Scan# 520
Delta R.T. 0.014 min
Lab File: 7G11120.d
Acq: 10 Aug 2020 10:38 pm

Tgt Ion:178 Resp: 31581

Ion	Ratio	Lower	Upper
178	100		
179	15.2	0.0	45.7
176	19.6	0.0	48.0

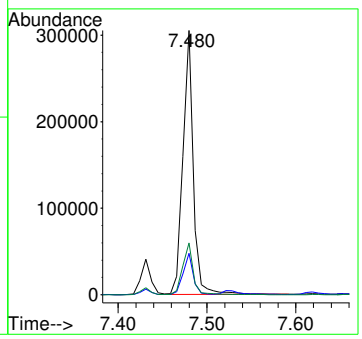


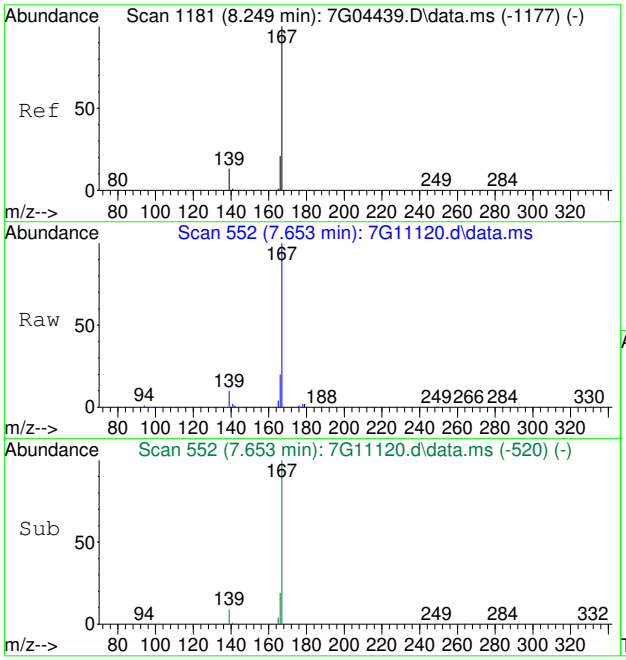


#14
Anthracene
Concen: 18.61 ppm
RT: 7.480 min Scan# 527
Delta R.T. 0.014 min
Lab File: 7G11120.d
Acq: 10 Aug 2020 10:38 pm

Tgt Ion:178 Resp: 247608

Ion	Ratio	Lower	Upper
178	100		
179	15.6	0.0	45.1
176	19.6	0.0	48.8

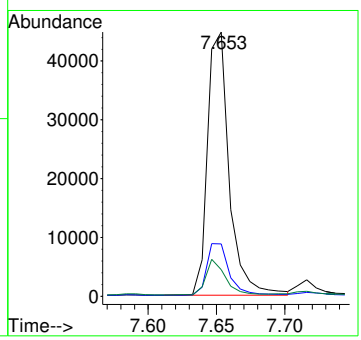


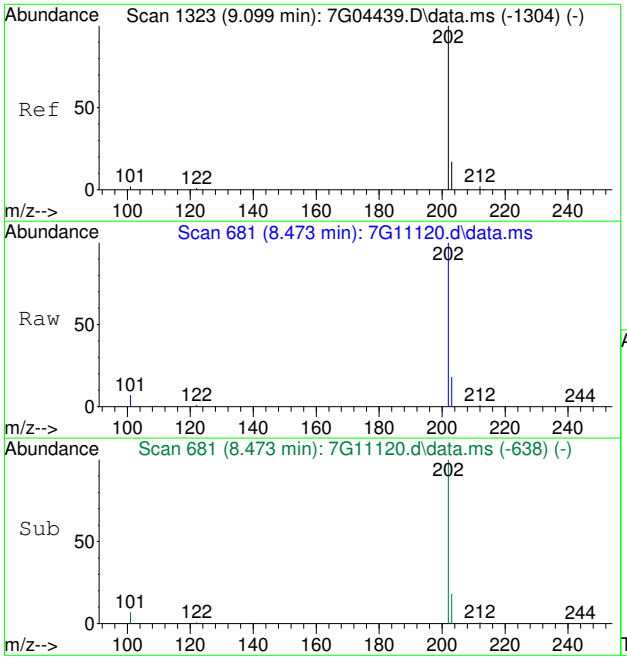


#15
Carbazole
Concen: 2.16 ppm
RT: 7.653 min Scan# 552
Delta R.T. 0.021 min
Lab File: 7G11120.d
Acq: 10 Aug 2020 10:38 pm

Tgt Ion:167 Resp: 49409

Ion	Ratio	Lower	Upper
167	100		
166	19.4	1.2	41.2
139	9.4	0.0	32.8

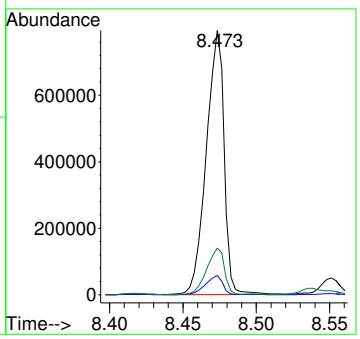


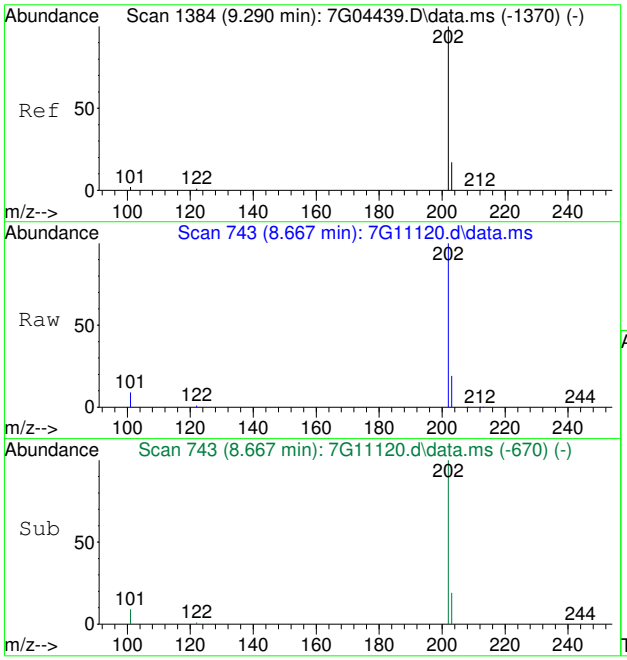


#16
Fluoranthene
Concen: 26.47 ppm
RT: 8.473 min Scan# 681
Delta R.T. 0.025 min
Lab File: 7G11120.d
Acq: 10 Aug 2020 10:38 pm

Tgt Ion:202 Resp: 670819

Ion	Ratio	Lower	Upper
202	100		
101	7.3	0.0	32.2
203	17.6	0.0	47.2

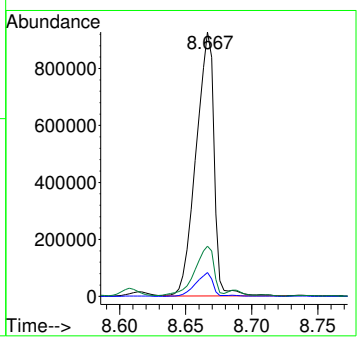


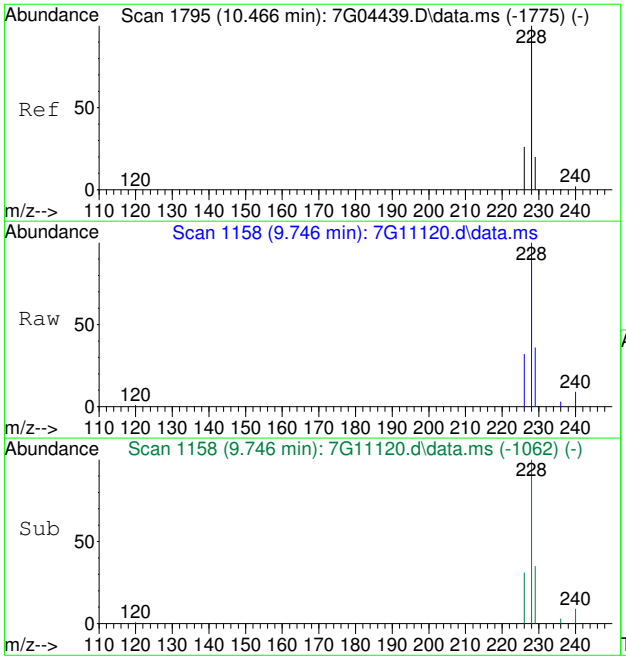


#19
Pyrene
Concen: 27.01 ppm
RT: 8.667 min Scan# 743
Delta R.T. 0.028 min
Lab File: 7G11120.d
Acq: 10 Aug 2020 10:38 pm

Tgt Ion:202 Resp: 882050

Ion	Ratio	Lower	Upper
202	100		
101	9.0	0.0	32.4
203	18.8	0.0	47.4

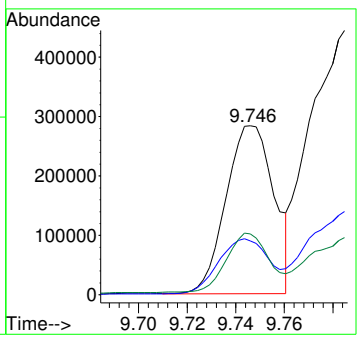


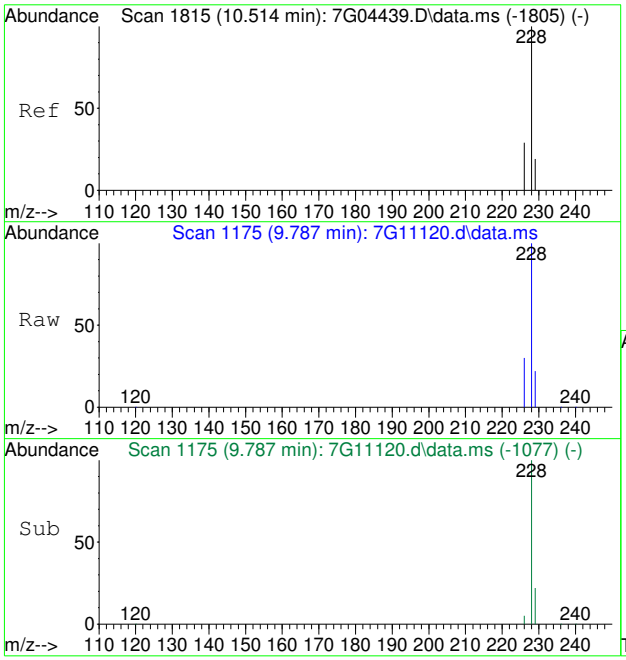


#20
Benzo[a]anthracene
Concen: 15.14 ppm
RT: 9.746 min Scan# 1158
Delta R.T. 0.031 min
Lab File: 7G11120.d
Acq: 10 Aug 2020 10:38 pm

Tgt Ion:228 Resp: 389250

Ion	Ratio	Lower	Upper
228	100		
226	31.6	0.0	56.1
229	38.4	0.0	49.5

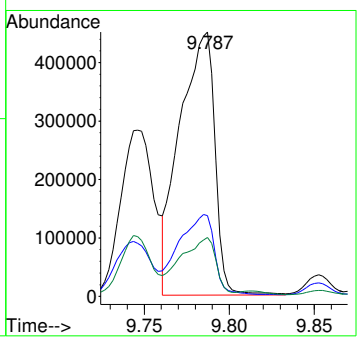


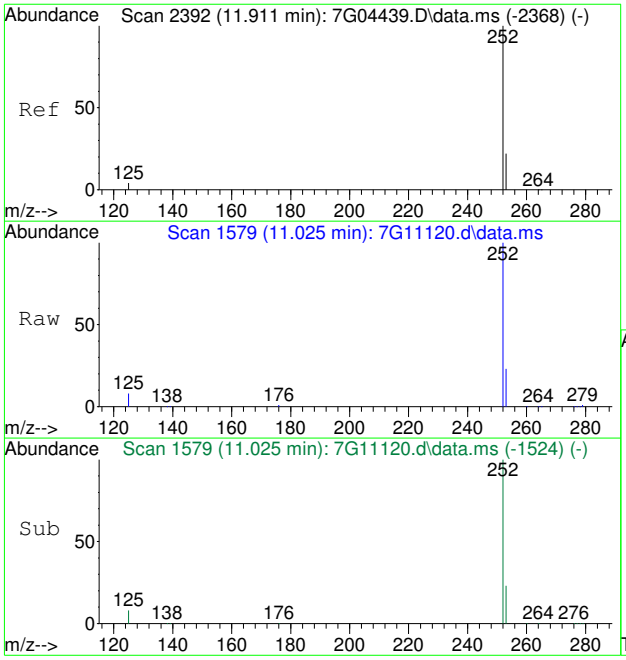


#21
Chrysene
Concen: 23.50 ppm
RT: 9.787 min Scan# 1175
Delta R.T. 0.036 min
Lab File: 7G11120.d
Acq: 10 Aug 2020 10:38 pm

Tgt Ion:228 Resp: 646240

Ion	Ratio	Lower	Upper
228	100		
226	30.0	0.0	58.9
229	21.3	0.0	49.5

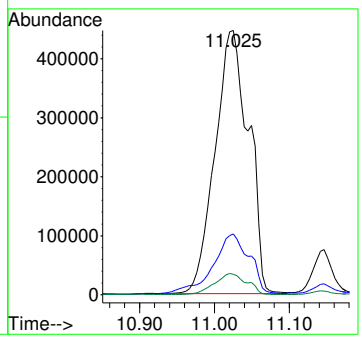


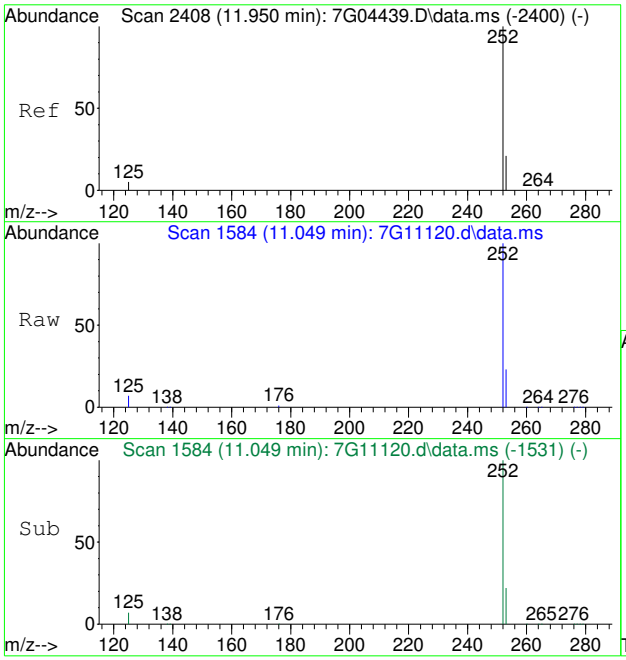


#23
Benzo[b]fluoranthene
Concen: 69.42 ppm
RT: 11.025 min Scan# 1579
Delta R.T. 0.068 min
Lab File: 7G11120.d
Acq: 10 Aug 2020 10:38 pm

Tgt Ion:252 Resp: 1392819

Ion	Ratio	Lower	Upper
252	100		
253	22.5	0.0	51.7
125	7.7	0.0	34.5

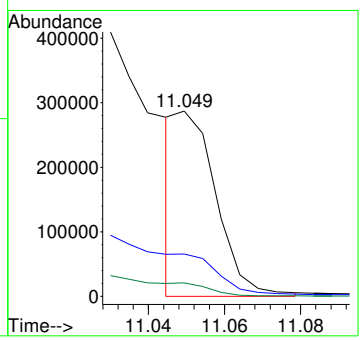


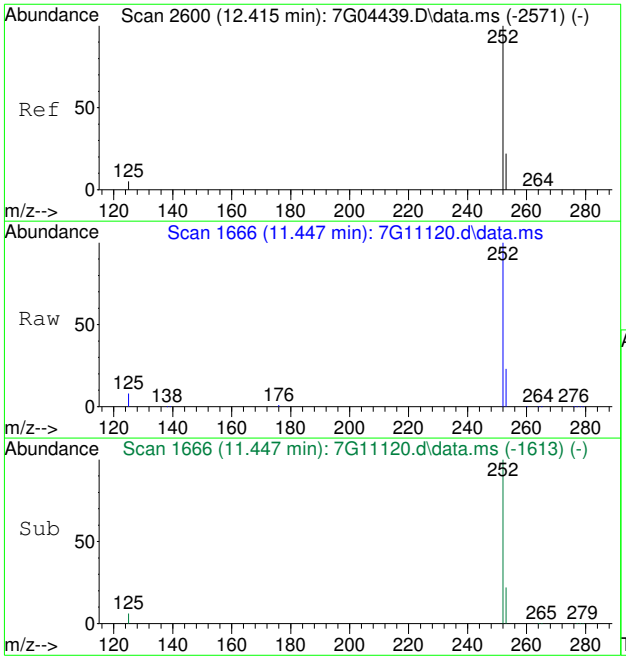


#24
Benzo[k]fluoranthene
Concen: 9.63 ppm m
RT: 11.049 min Scan# 1584
Delta R.T. 0.058 min
Lab File: 7G11120.d
Acq: 10 Aug 2020 10:38 pm

Tgt Ion:252 Resp: 209018

Ion	Ratio	Lower	Upper
252	100		
253	22.8	0.0	51.5
125	7.3	0.0	34.8

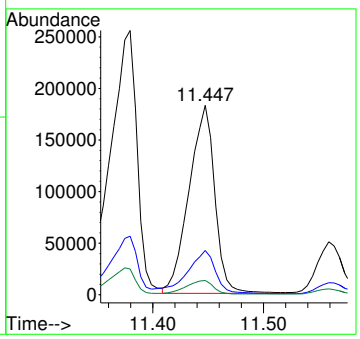


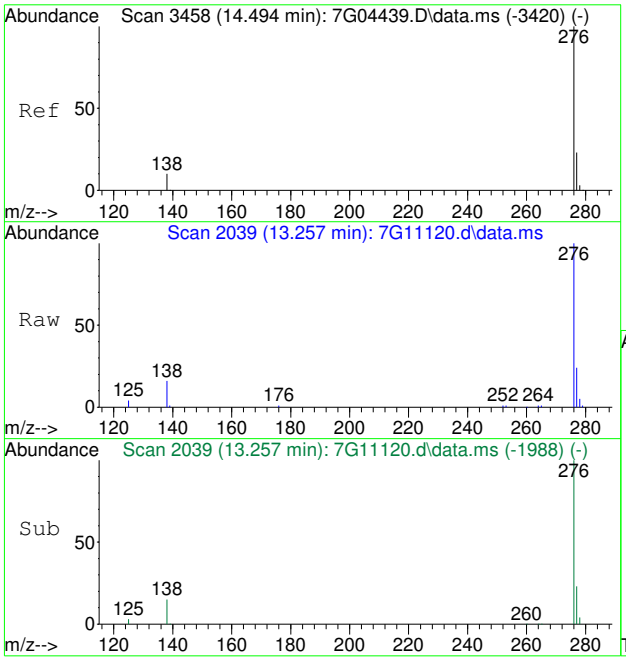


#25
Benzo[a]pyrene
Concen: 15.16 ppm
RT: 11.447 min Scan# 1666
Delta R.T. 0.058 min
Lab File: 7G11120.d
Acq: 10 Aug 2020 10:38 pm

Tgt Ion:252 Resp: 296303

Ion	Ratio	Lower	Upper
252	100		
253	21.7	0.0	51.6
125	7.1	0.0	34.8

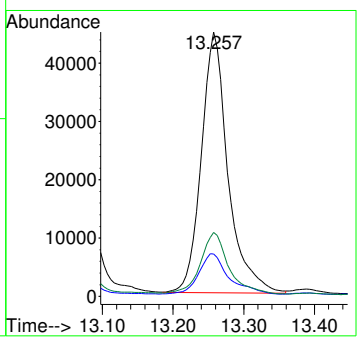


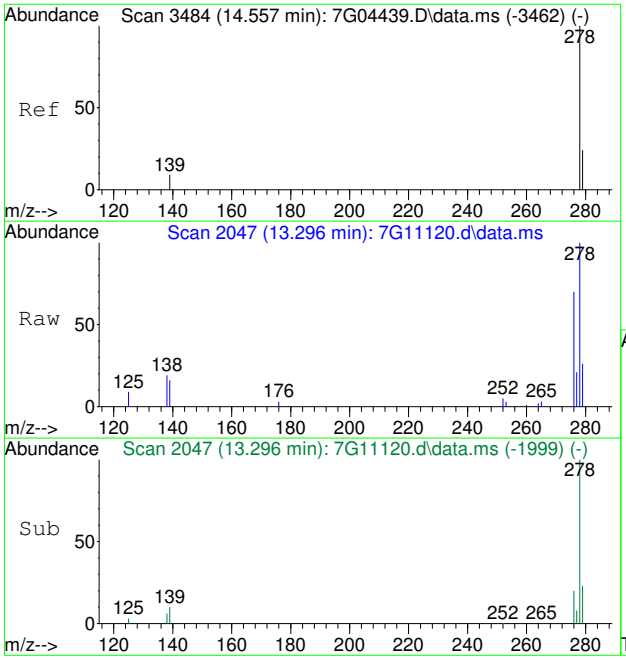


#26
Indeno[1,2,3-cd]pyrene
Concen: 9.19 ppm
RT: 13.257 min Scan# 2039
Delta R.T. 0.048 min
Lab File: 7G11120.d
Acq: 10 Aug 2020 10:38 pm

Tgt Ion:276 Resp: 117234

Ion	Ratio	Lower	Upper
276	100		
138	15.4	0.0	39.6
277	23.6	0.0	53.1

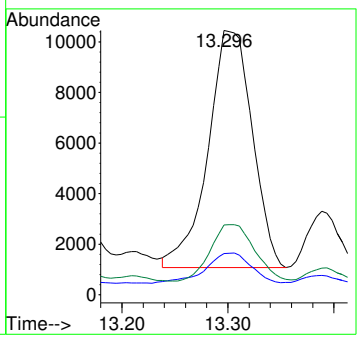


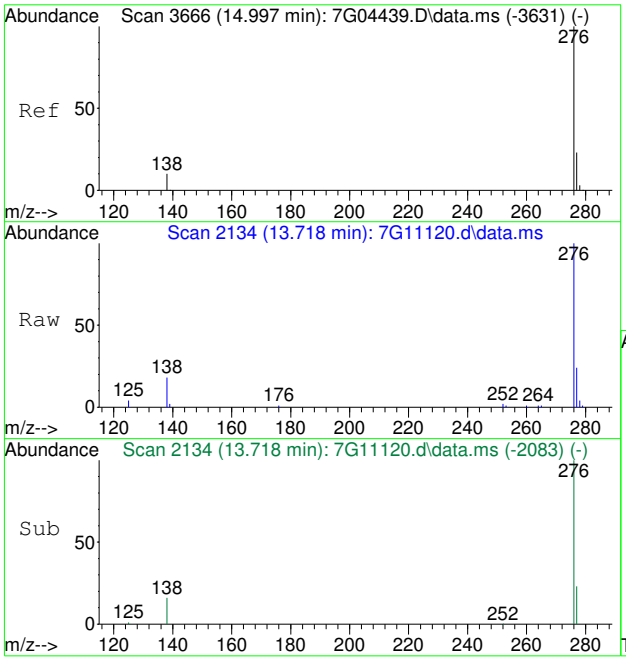


#27
Dibenz[a,h]anthracene
Concen: 1.92 ppm
RT: 13.296 min Scan# 2047
Delta R.T. 0.034 min
Lab File: 7G11120.d
Acq: 10 Aug 2020 10:38 pm

Tgt Ion:278 Resp: 27224

Ion	Ratio	Lower	Upper
278	100		
139	12.2	0.0	38.8
279	23.7	0.0	53.6

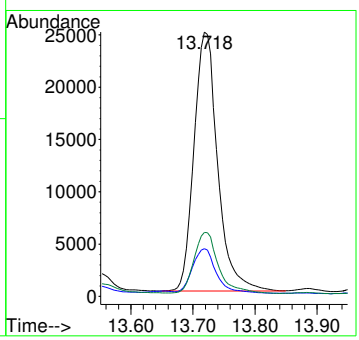




#28
Benzo[g,h,i]perylene
Concen: 4.27 ppm
RT: 13.718 min Scan# 2134
Delta R.T. 0.048 min
Lab File: 7G11120.d
Acq: 10 Aug 2020 10:38 pm

Tgt Ion:276 Resp: 65639

Ion	Ratio	Lower	Upper
276	100		
138	16.8	0.0	40.5
277	23.4	0.0	53.2



Manual Integration Approval Summary

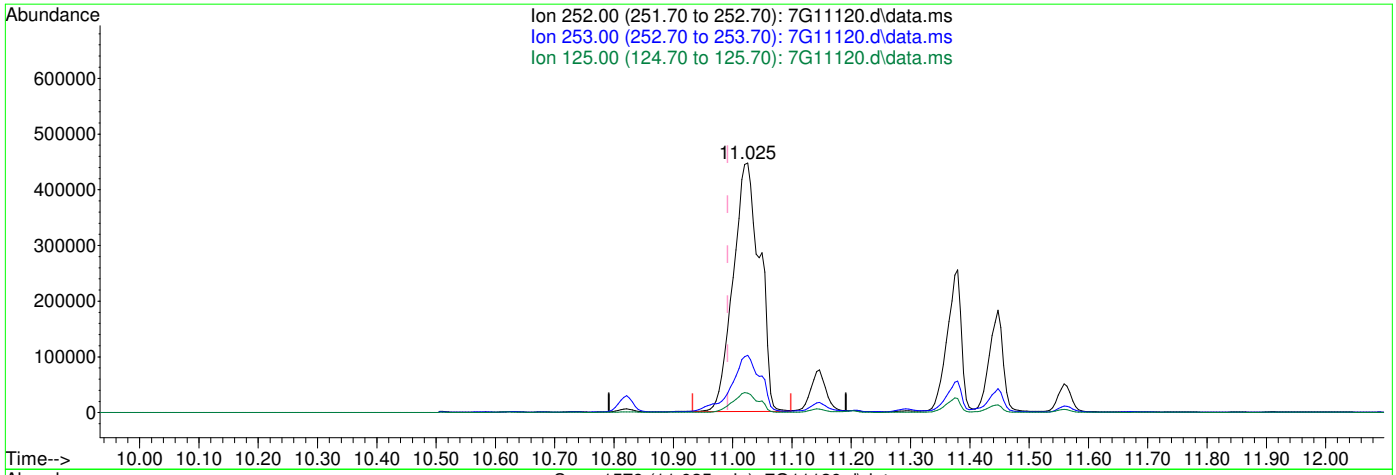
Sample Number: FA77581-4
Lab FileID: 7G11120.D
Injection Time: 08/10/20 22:38
Method: SW846 8270E BY SIM
Analyst approved: 08/11/20 10:52 Fouad Sekkar
Supervisor approved: 08/11/20 12:03 Naresh Jiawan

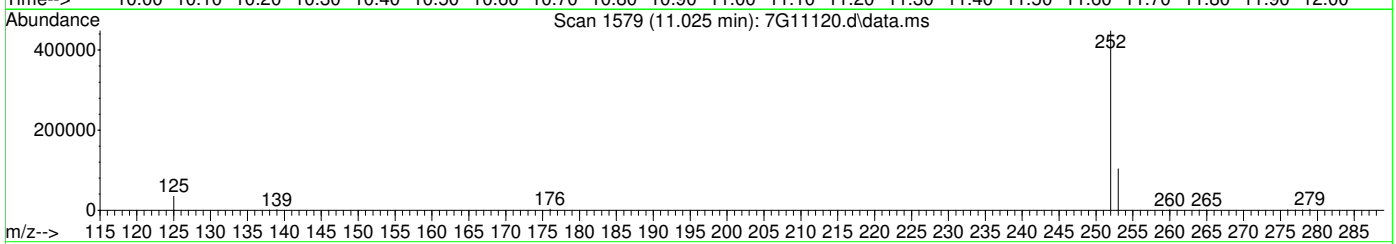
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(k)fluoranthene	207-08-9		11.05	Missed peak

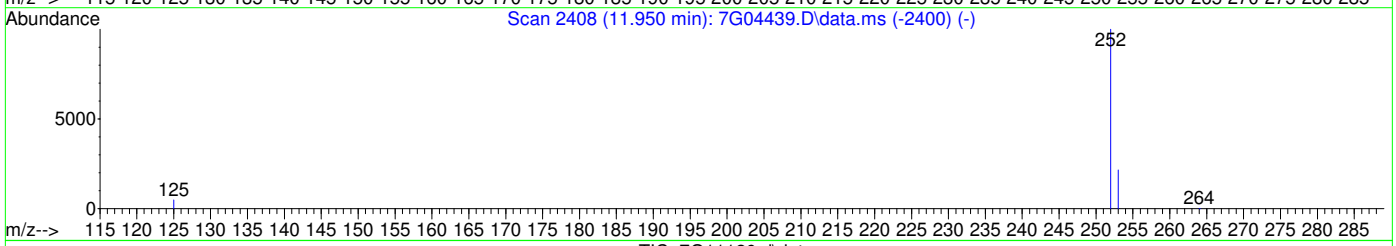
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11120.d
Acq On : 10 Aug 2020 10:38 pm
Operator : FOUADS
Sample : fa77581-4 e
Misc : op81483,S7G482,15.3,,,1,1,soil
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Aug 11 02:37:46 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11120.d\data.ms

(24) Benzo[k]fluoranthene (P)

11.025min (+0.034) 56.44ppm

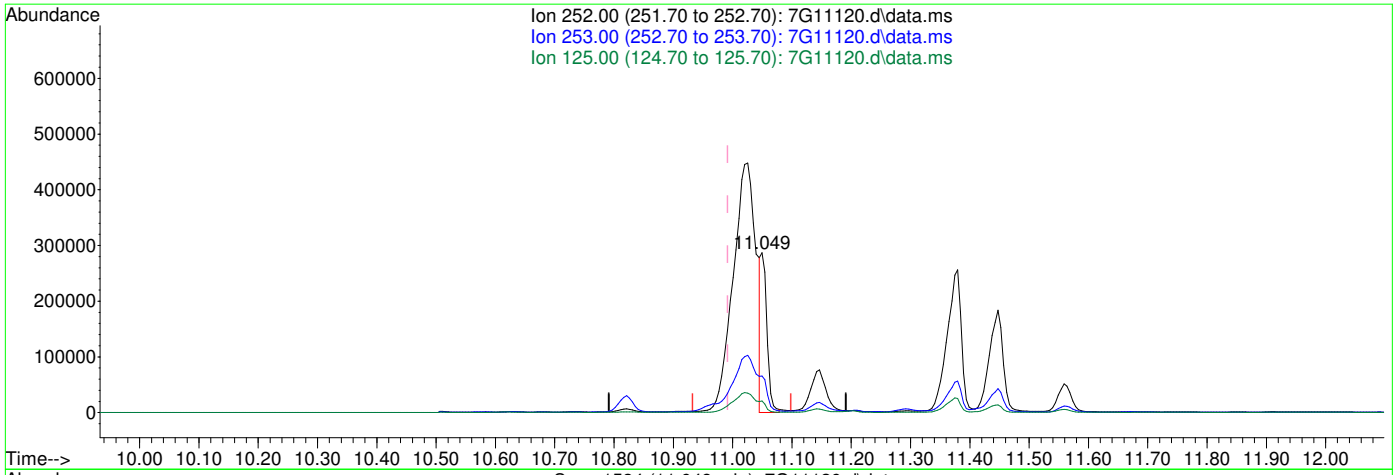
response 1395121

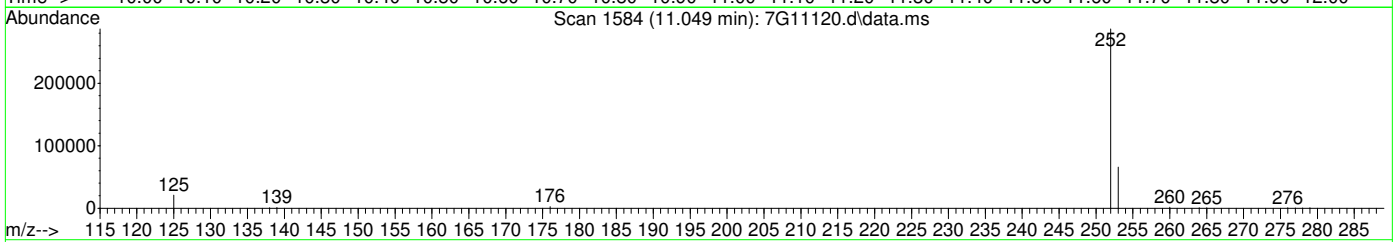
Ion	Exp%	Act%
252.00	100	100
253.00	21.50	22.52
125.00	4.80	7.70
0.00	0.00	0.00

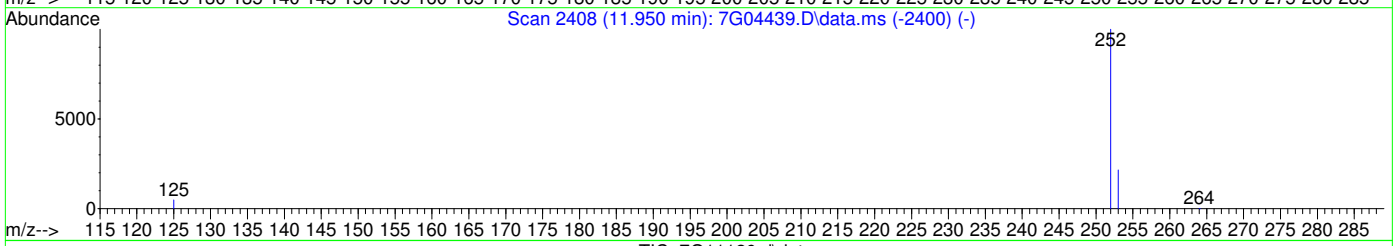
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11120.d
Acq On : 10 Aug 2020 10:38 pm
Operator : FOUADS
Sample : fa77581-4 e
Misc : op81483,S7G482,15.3,,,1,1,soil
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Aug 11 02:37:46 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11120.d\data.ms

(24) Benzo[k]fluoranthene (P)

11.049min (+0.058) 9.63ppm m

response 209018

Ion	Exp%	Act%
252.00	100	100
253.00	21.50	22.83
125.00	4.80	7.26
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 08/12/20 11:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11158.d
Acq On : 11 Aug 2020 7:42 pm
Operator : FOUADS
Sample : fa77581-5 e Inst : MSBNA8
Misc : op81483,S7G483,15.0,,,1,1,soil
ALS Vial : 30 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:57:54 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

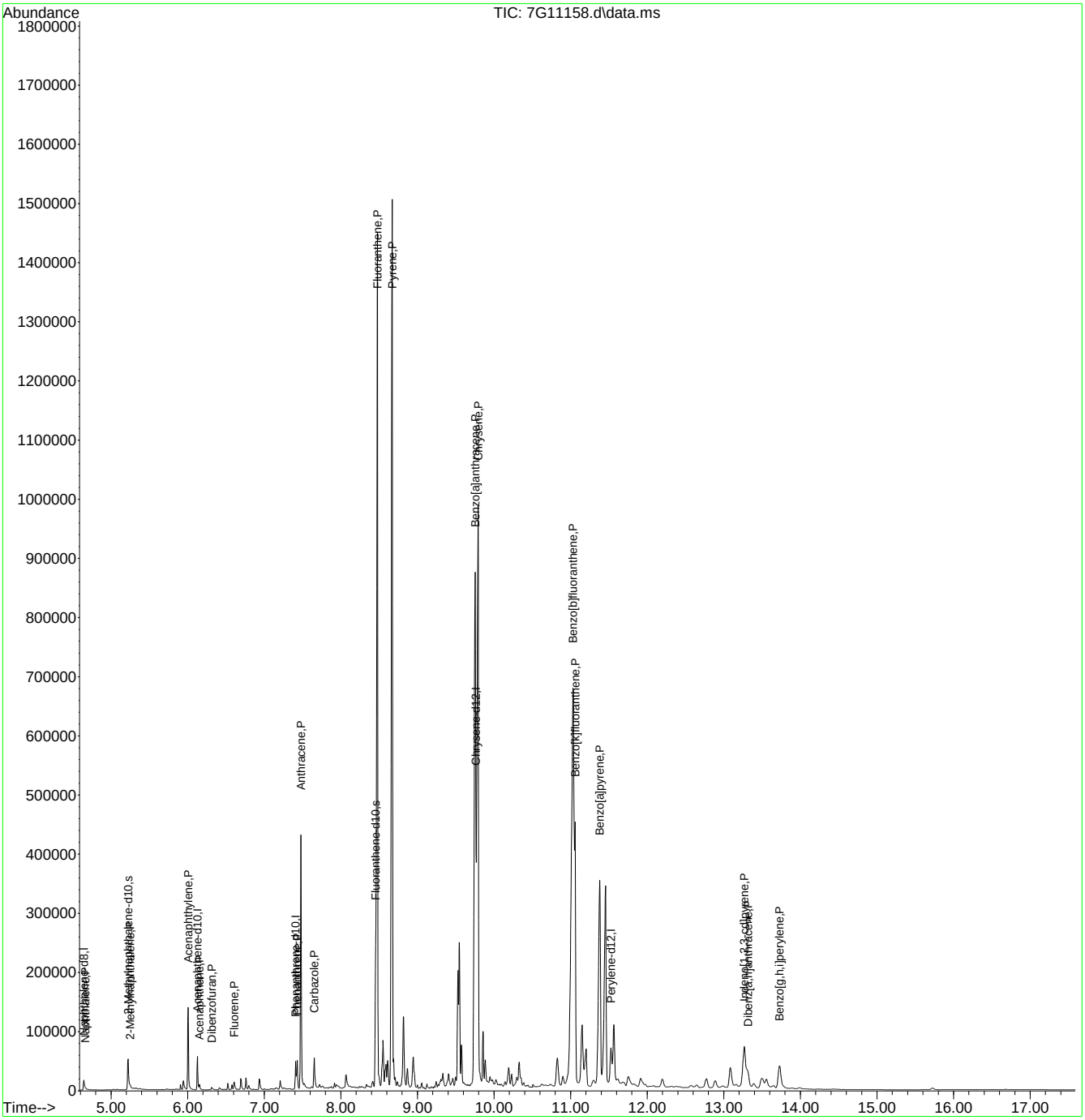
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.646	136	18661	4.00	ppm	0.02
6) Acenaphthene-d10	6.128	164	17313	4.00	ppm	0.01
11) Phenanthrene-d10	7.410	188	34578	4.00	ppm	0.01
18) Chrysene-d12	9.763	240	71591	4.00	ppm	0.04
22) Perylene-d12	11.525	264	56542	4.00	ppm	0.05
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.223	152	27813	9.94	ppm	0.02
Spiked Amount 10.000	Range 50 - 150		Recovery = 99.40%			
17) Fluoranthene-d10	8.455	212	177340	9.82	ppm	0.02
Spiked Amount 10.000	Range 50 - 150		Recovery = 98.20%			
Target Compounds						Qvalue
2) Naphthalene	4.663	128	2077	0.39	ppm	99
3) 2-Methylnaphthalene	5.246	142	1167	0.28	ppm	97
7) Acenaphthylene	6.007	152	87180	8.64	ppm	98
8) Acenaphthene	6.152	153	2808	0.44	ppm	98
9) Dibenzofuran	6.316	168	3160	0.70	ppm	85
10) Fluorene	6.607	166	6267	0.89	ppm	98
13) Phenanthrene	7.431	178	29813	2.62	ppm	98
14) Anthracene	7.480	178	254314	21.01	ppm	99
15) Carbazole	7.653	167	39917	1.93	ppm	97
16) Fluoranthene	8.479	202	1021395	42.78	ppm	97
19) Pyrene	8.673	202	1239946	41.35	ppm	96
20) Benzo[a]anthracene	9.753	228	752672	31.07	ppm	87
21) Chrysene	9.792	228	843276	34.12	ppm	97
23) Benzo[b]fluoranthene	11.030	252	1318008m	68.68	ppm	
24) Benzo[k]fluoranthene	11.059	252	305011m	14.48	ppm	
25) Benzo[a]pyrene	11.379	252	474704m	25.38	ppm	
26) Indeno[1,2,3-cd]pyrene	13.267	276	131153	10.75	ppm	95
27) Dibenz[a,h]anthracene	13.316	278	31972	2.36	ppm	98
28) Benzo[g,h,i]perylene	13.728	276	74630	5.07	ppm	95

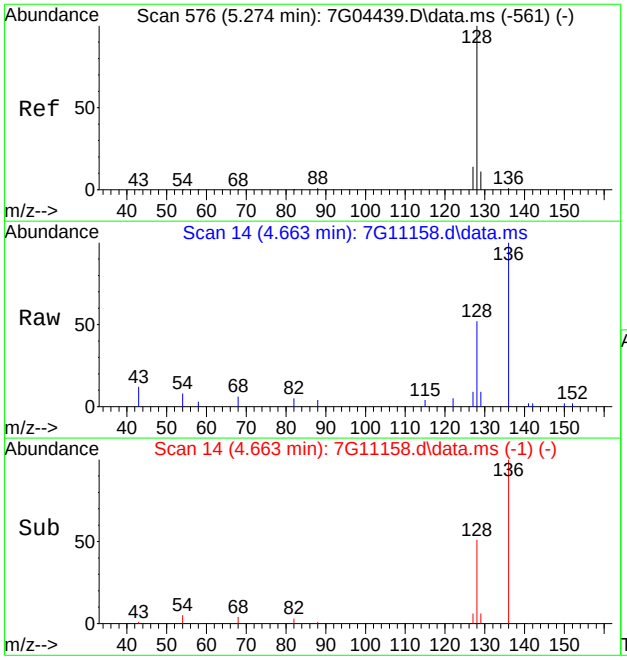
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11158.d
Acq On : 11 Aug 2020 7:42 pm
Operator : FOUADS
Sample : fa77581-5 e Inst : MSBNA8
Misc : op81483,S7G483,15.0,,,1,1,soil
ALS Vial : 30 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:57:54 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

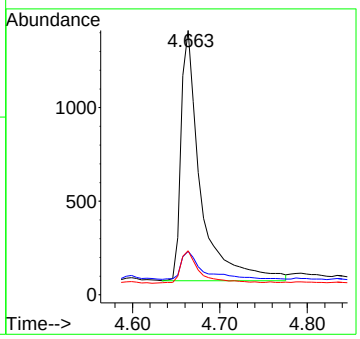


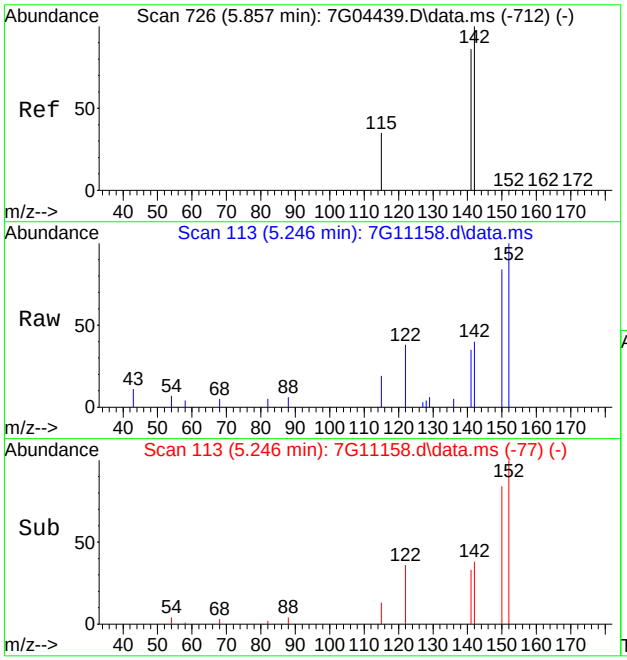


#2
Naphthalene
Concen: 0.39 ppm
RT: 4.663 min Scan# 14
Delta R.T. 0.018 min
Lab File: 7G11158.d
Acq: 11 Aug 2020 7:42 pm

Tgt Ion:128 Resp: 2077

Ion	Ratio	Lower	Upper
128	100		
129	11.3	0.0	40.9
127	12.8	0.0	43.5

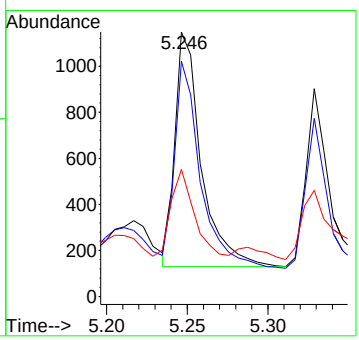


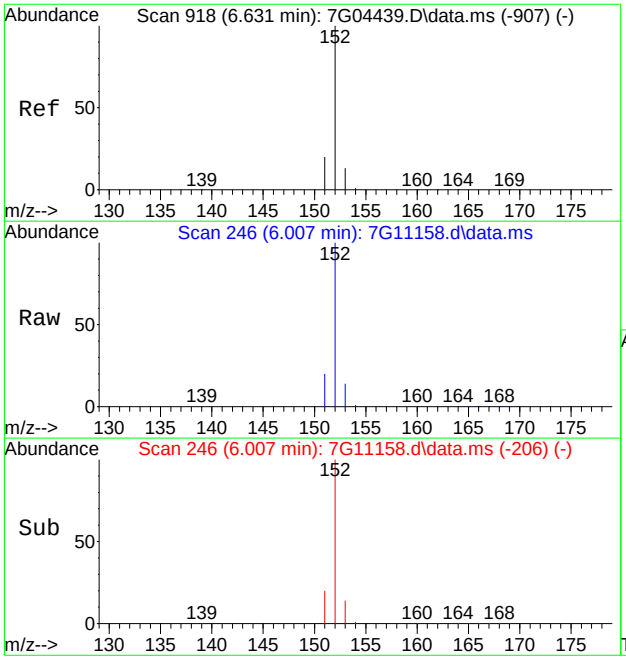


#3
2-Methylnaphthalene
Concen: 0.28 ppm
RT: 5.246 min Scan# 113
Delta R.T. 0.012 min
Lab File: 7G11158.d
Acq: 11 Aug 2020 7:42 pm

Tgt Ion:142 Resp: 1167

Ion	Ratio	Lower	Upper
142	100		
141	88.1	55.7	115.7
115	37.5	5.4	65.4

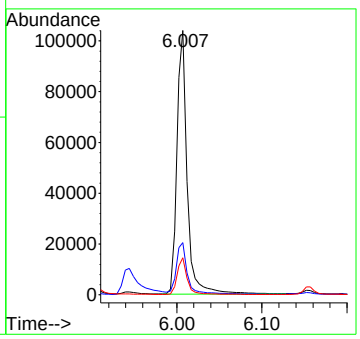


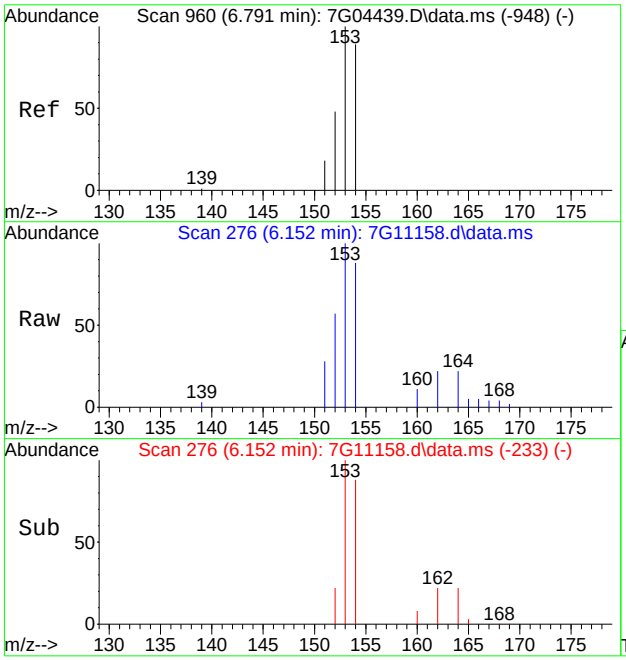


#7
Acenaphthylene
Concen: 8.64 ppm
RT: 6.007 min Scan# 246
Delta R.T. 0.014 min
Lab File: 7G11158.d
Acq: 11 Aug 2020 7:42 pm

Tgt Ion:152 Resp: 87180

Ion	Ratio	Lower	Upper
152	100		
151	19.1	0.0	49.8
153	13.9	0.0	42.8

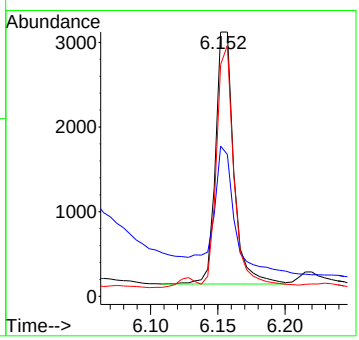


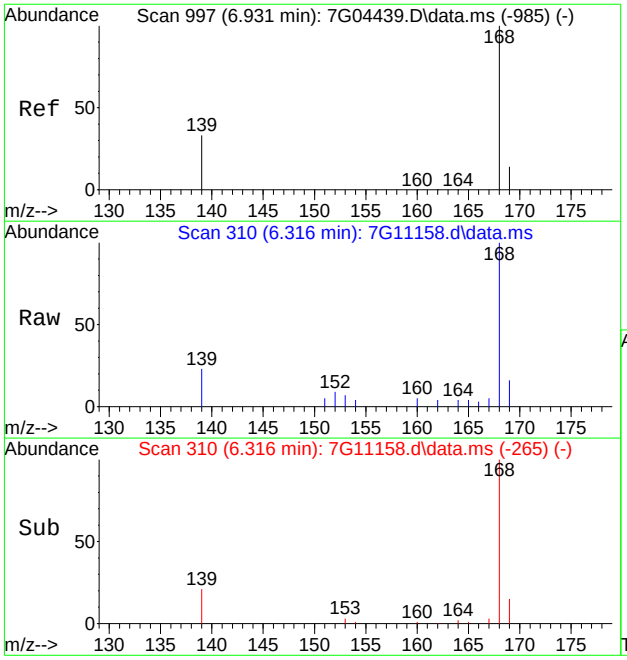


#8
Acenaphthene
Concen: 0.44 ppm
RT: 6.152 min Scan# 276
Delta R.T. 0.010 min
Lab File: 7G11158.d
Acq: 11 Aug 2020 7:42 pm

Tgt Ion:153 Resp: 2808

Ion	Ratio	Lower	Upper
153	100		
152	46.1	18.3	78.3
154	88.0	59.3	119.3

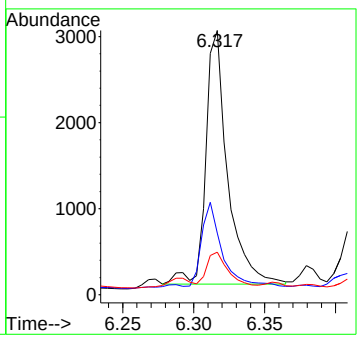


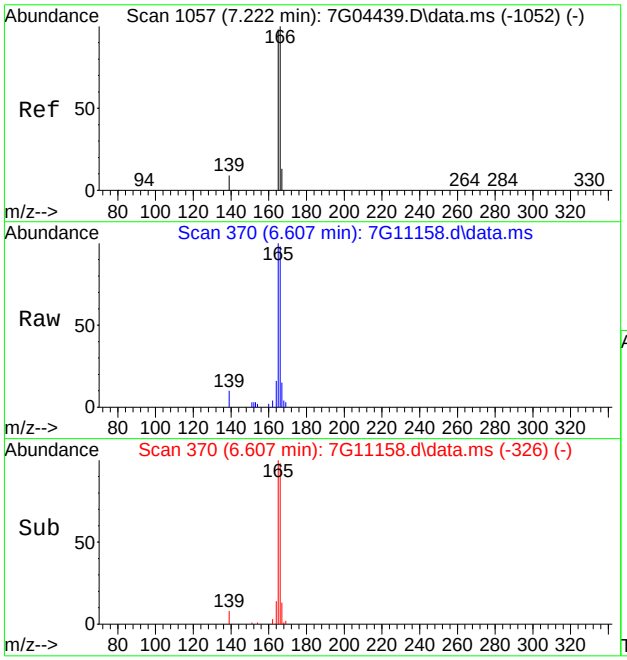


#9
Dibenzofuran
Concen: 0.70 ppm
RT: 6.316 min Scan# 310
Delta R.T. 0.019 min
Lab File: 7G11158.d
Acq: 11 Aug 2020 7:42 pm

Tgt Ion:168 Resp: 3160

Ion	Ratio	Lower	Upper
168	100		
139	21.1	12.6	52.6
169	13.3	0.0	33.8

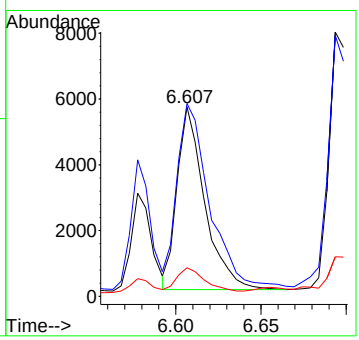


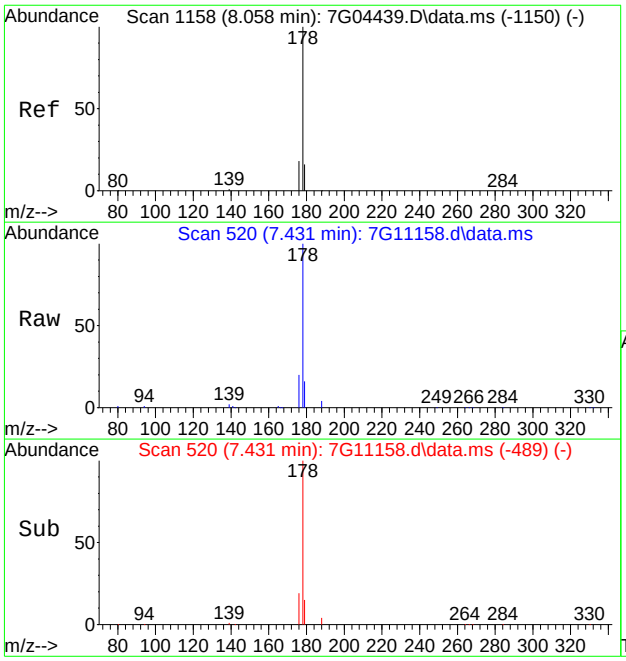


#10
Fluorene
Concen: 0.89 ppm
RT: 6.607 min Scan# 370
Delta R.T. 0.014 min
Lab File: 7G11158.d
Acq: 11 Aug 2020 7:42 pm

Tgt Ion:166 Resp: 6267

Ion	Ratio	Lower	Upper
166	100		
165	99.8	68.2	128.2
167	12.3	0.0	42.9

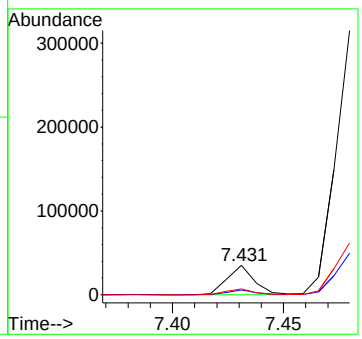


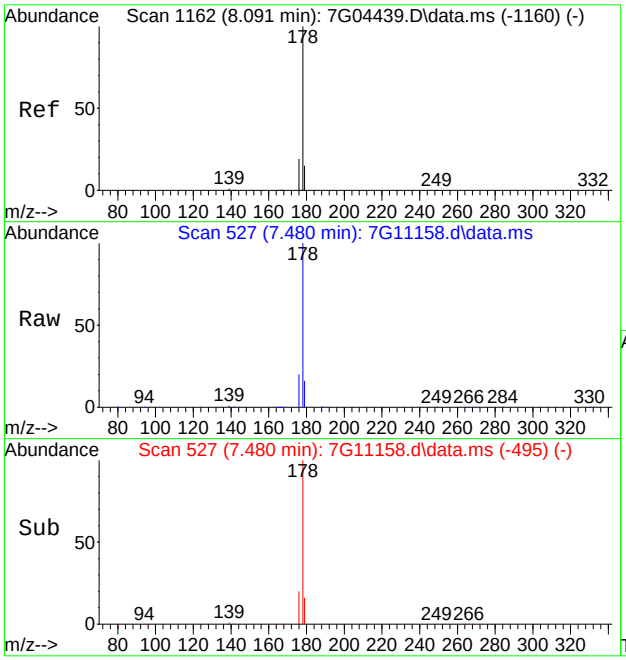


#13
Phenanthrene
Concen: 2.62 ppm
RT: 7.431 min Scan# 520
Delta R.T. 0.014 min
Lab File: 7G11158.d
Acq: 11 Aug 2020 7:42 pm

Tgt Ion:178 Resp: 29813

Ion	Ratio	Lower	Upper
178	100		
179	15.5	0.0	45.7
176	19.6	0.0	48.0

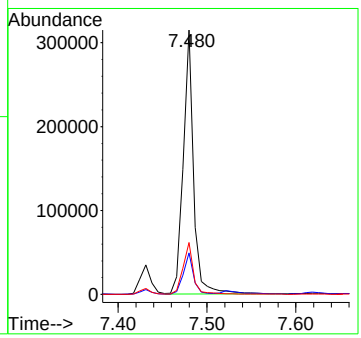


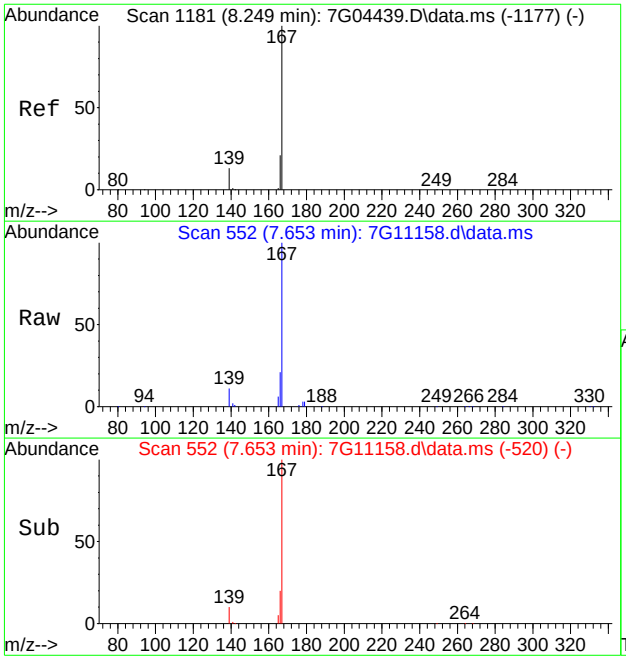


#14
Anthracene
Concen: 21.01 ppm
RT: 7.480 min Scan# 527
Delta R.T. 0.021 min
Lab File: 7G11158.d
Acq: 11 Aug 2020 7:42 pm

Tgt Ion:178 Resp: 254314

Ion	Ratio	Lower	Upper
178	100		
179	15.6	0.0	45.1
176	19.6	0.0	48.8

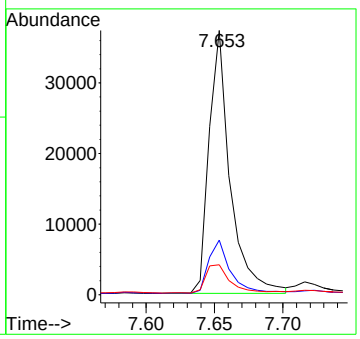


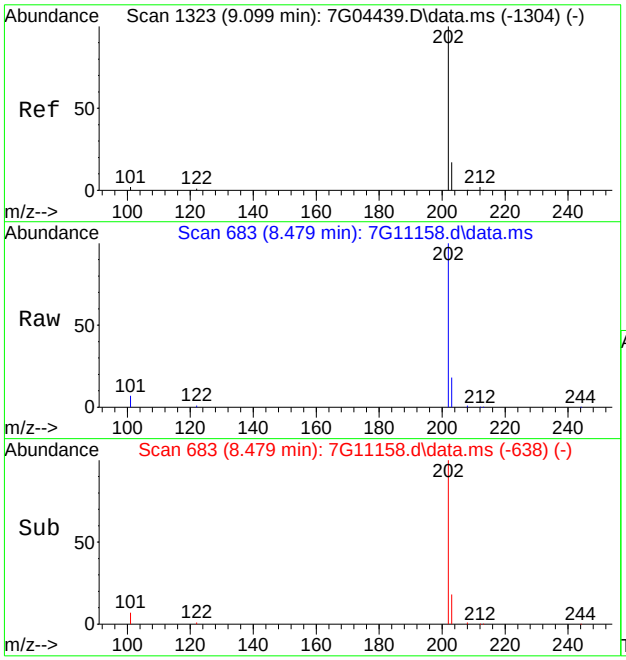


#15
Carbazole
Concen: 1.93 ppm
RT: 7.653 min Scan# 552
Delta R.T. 0.021 min
Lab File: 7G11158.d
Acq: 11 Aug 2020 7:42 pm

Tgt Ion:167 Resp: 39917

Ion	Ratio	Lower	Upper
167	100		
166	20.2	1.2	41.2
139	10.6	0.0	32.8

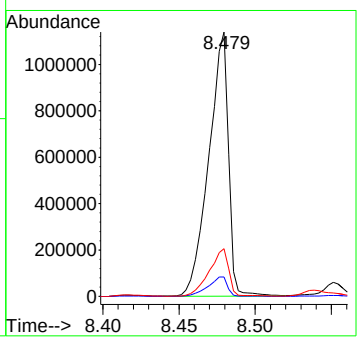


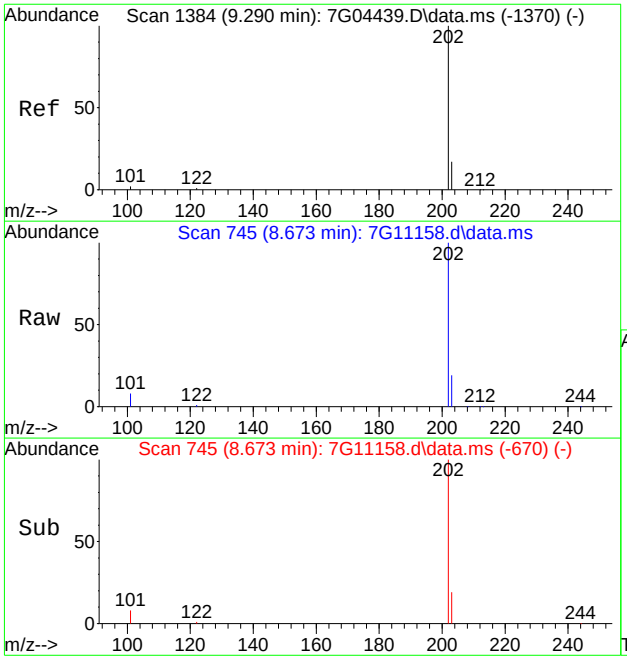


#16
Fluoranthene
Concen: 42.78 ppm
RT: 8.479 min Scan# 683
Delta R.T. 0.031 min
Lab File: 7G11158.d
Acq: 11 Aug 2020 7:42 pm

Tgt Ion:202 Resp: 1021395

Ion	Ratio	Lower	Upper
202	100		
101	7.3	0.0	32.2
203	18.0	0.0	47.2

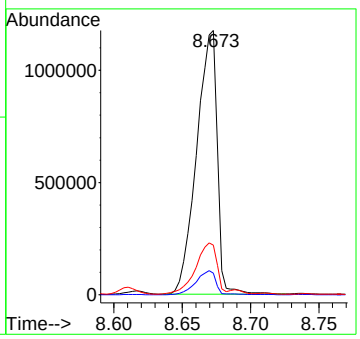


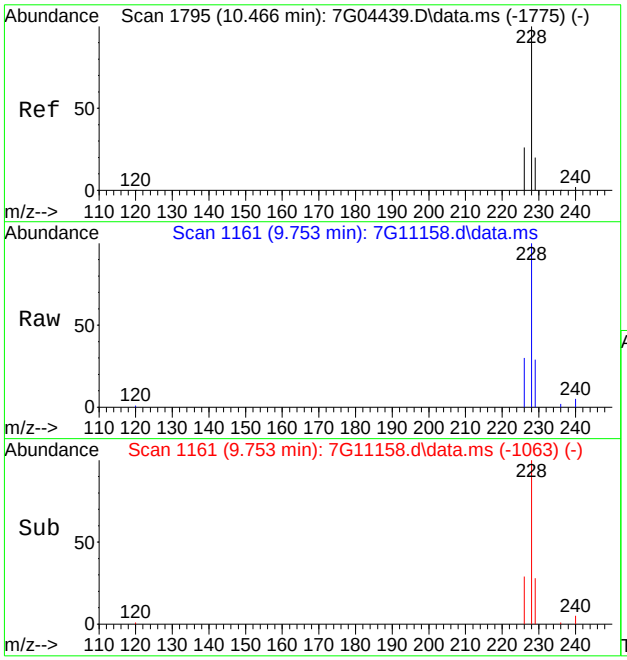


#19
Pyrene
Concen: 41.35 ppm
RT: 8.673 min Scan# 745
Delta R.T. 0.034 min
Lab File: 7G11158.d
Acq: 11 Aug 2020 7:42 pm

Tgt Ion:202 Resp: 1239946

Ion	Ratio	Lower	Upper
202	100		
101	8.1	0.0	32.4
203	18.6	0.0	47.4

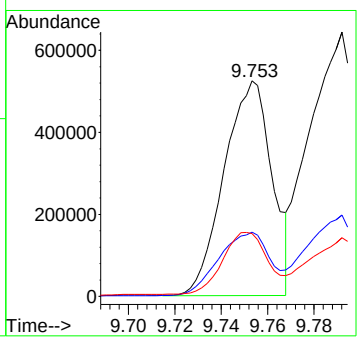


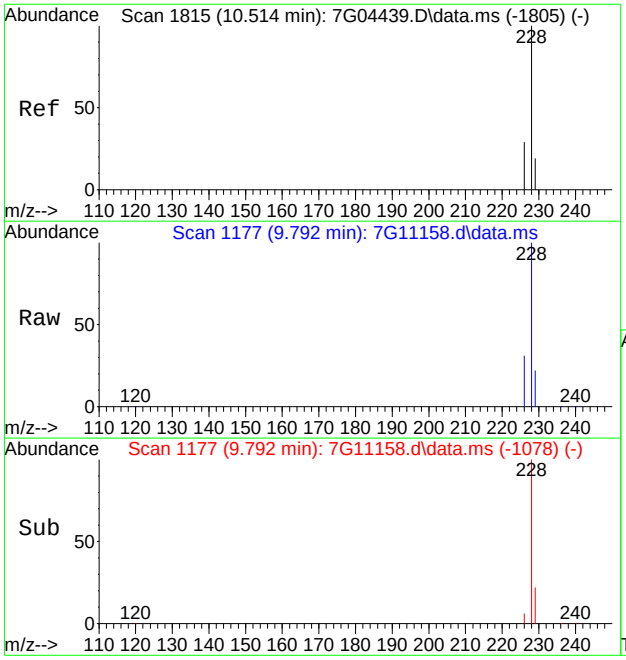


#20
Benzo[a]anthracene
Concen: 31.07 ppm
RT: 9.753 min Scan# 1161
Delta R.T. 0.036 min
Lab File: 7G11158.d
Acq: 11 Aug 2020 7:42 pm

Tgt Ion:228 Resp: 752672

Ion	Ratio	Lower	Upper
228	100		
226	29.2	0.0	56.1
229	29.7	0.0	49.5

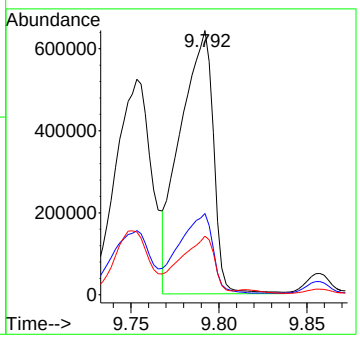


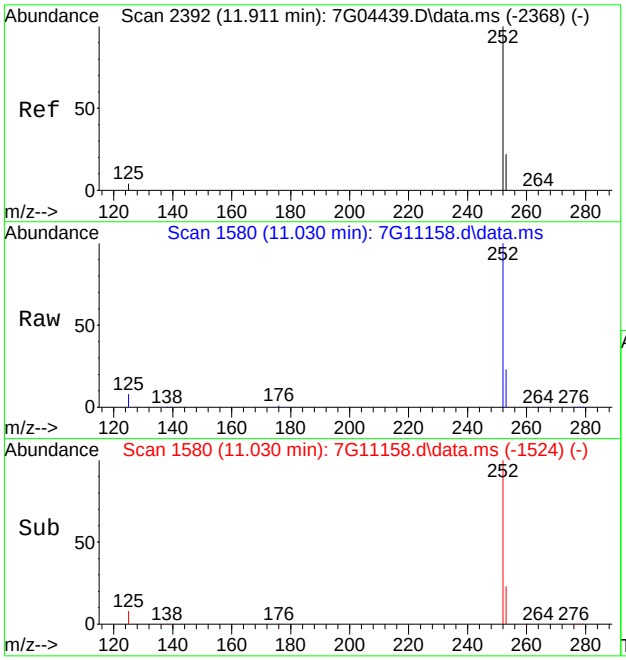


#21
Chrysene
Concen: 34.12 ppm
RT: 9.792 min Scan# 1177
Delta R.T. 0.039 min
Lab File: 7G11158.d
Acq: 11 Aug 2020 7:42 pm

Tgt Ion:228 Resp: 843276

Ion	Ratio	Lower	Upper
228	100		
226	30.4	0.0	58.9
229	21.4	0.0	49.5

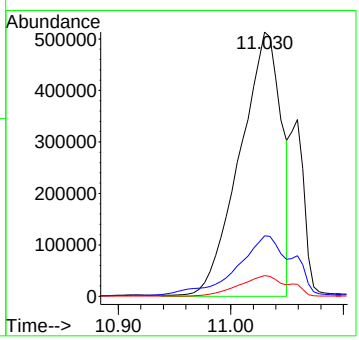


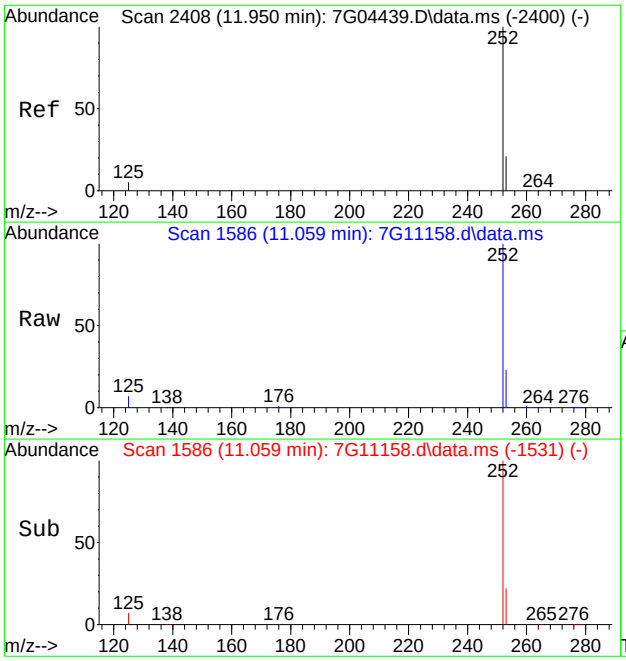


#23
Benzo[b]fluoranthene
Concen: 68.68 ppm m
RT: 11.030 min Scan# 1580
Delta R.T. 0.073 min
Lab File: 7G11158.d
Acq: 11 Aug 2020 7:42 pm

Tgt Ion:252 Resp: 1318008

Ion	Ratio	Lower	Upper
252	100		
253	22.9	0.0	51.7
125	7.9	0.0	34.5

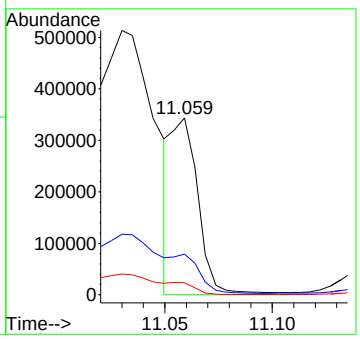


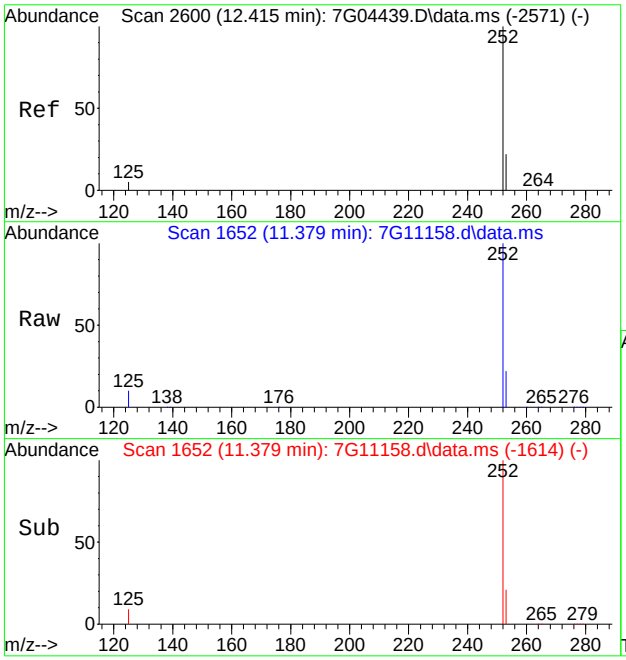


#24
Benzo[k]fluoranthene
Concen: 14.48 ppm m
RT: 11.059 min Scan# 1586
Delta R.T. 0.068 min
Lab File: 7G11158.d
Acq: 11 Aug 2020 7:42 pm

Tgt Ion:252 Resp: 305011

Ion	Ratio	Lower	Upper
252	100		
253	22.9	0.0	51.5
125	6.8	0.0	34.8

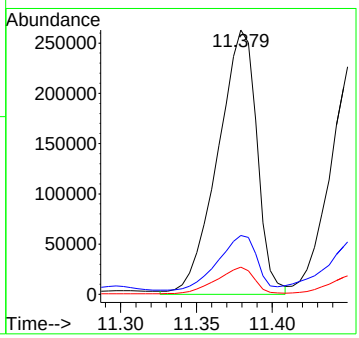


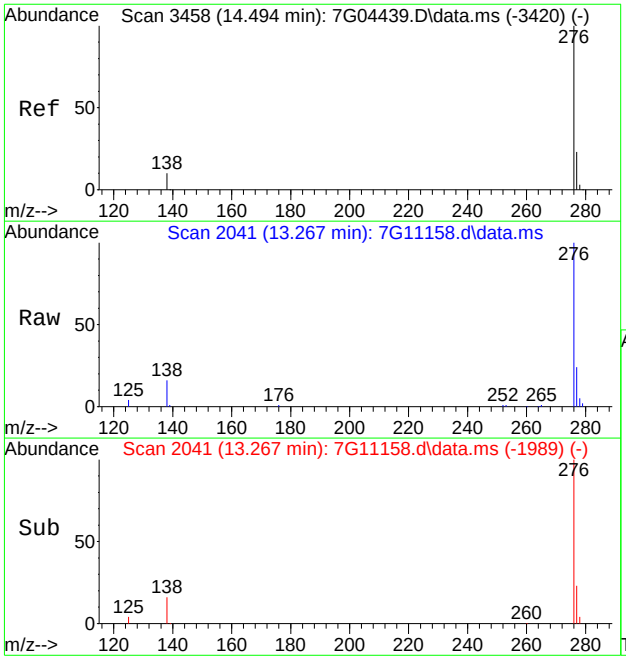


#25
Benzo[a]pyrene
Concen: 25.38 ppm m
RT: 11.379 min Scan# 1652
Delta R.T. -0.015 min
Lab File: 7G11158.d
Acq: 11 Aug 2020 7:42 pm

Tgt Ion:252 Resp: 474704

Ion	Ratio	Lower	Upper
252	100		
253	22.3	0.0	51.6
125	10.3	0.0	34.8

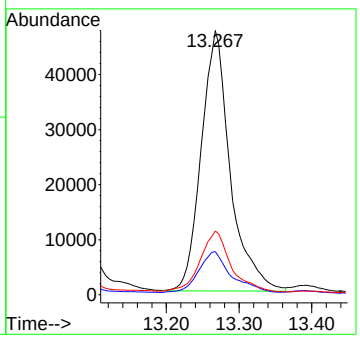


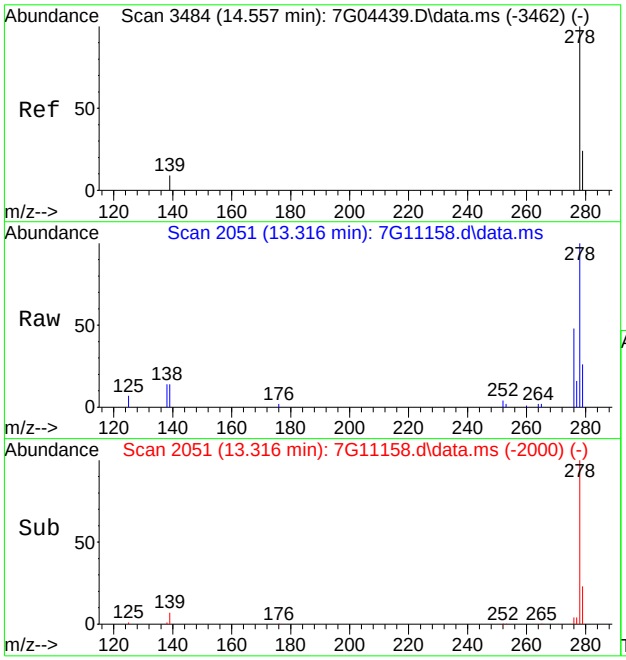


#26
Indeno[1,2,3-cd]pyrene
Concen: 10.75 ppm
RT: 13.267 min Scan# 2041
Delta R.T. 0.053 min
Lab File: 7G11158.d
Acq: 11 Aug 2020 7:42 pm

Tgt Ion:276 Resp: 131153

Ion	Ratio	Lower	Upper
276	100		
138	15.7	0.0	39.6
277	23.5	0.0	53.1

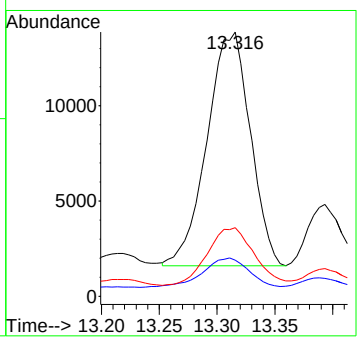


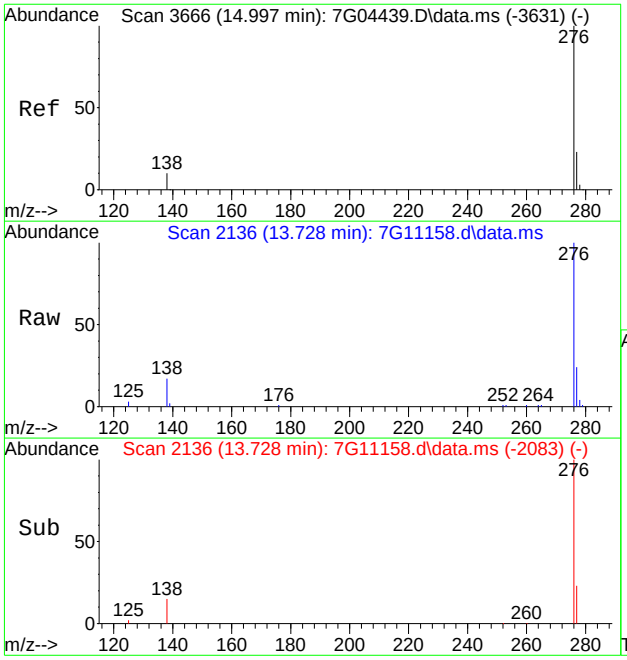


#27
Dibenz[a,h]anthracene
Concen: 2.36 ppm
RT: 13.316 min Scan# 2051
Delta R.T. 0.048 min
Lab File: 7G11158.d
Acq: 11 Aug 2020 7:42 pm

Tgt Ion:278 Resp: 31972

Ion	Ratio	Lower	Upper
278	100		
139	11.1	0.0	38.8
279	23.9	0.0	53.6

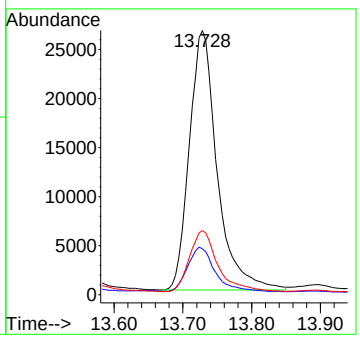




#28
Benzo[g,h,i]perylene
Concen: 5.07 ppm
RT: 13.728 min Scan# 2136
Delta R.T. 0.058 min
Lab File: 7G11158.d
Acq: 11 Aug 2020 7:42 pm

Tgt Ion:276 Resp: 74630

Ion	Ratio	Lower	Upper
276	100		
138	16.5	0.0	40.5
277	23.6	0.0	53.2



Manual Integration Approval Summary

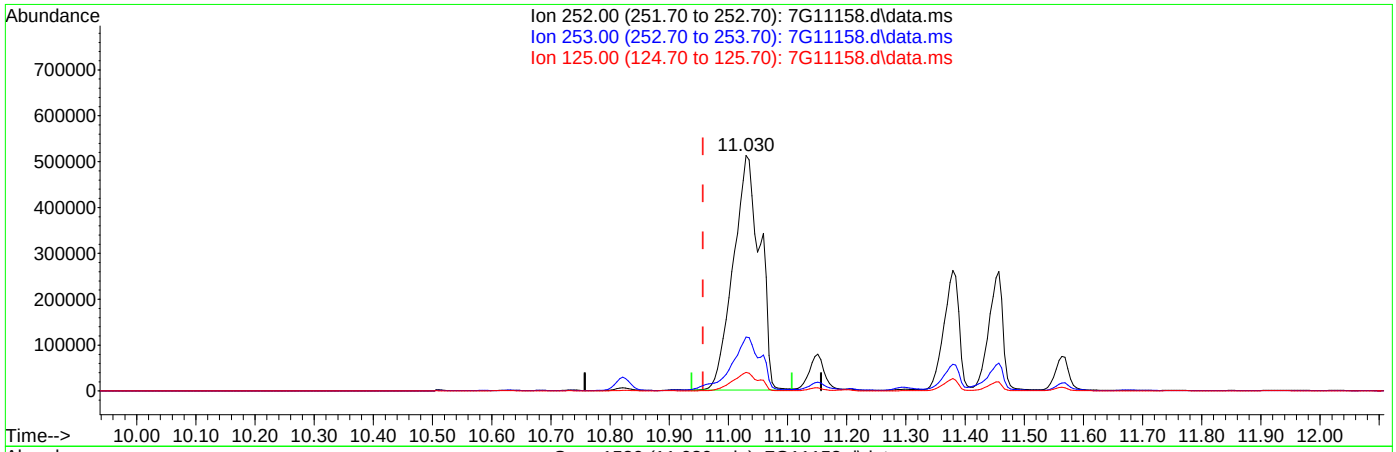
Sample Number: FA77581-5
Lab FileID: 7G11158.D
Injection Time: 08/11/20 19:42
Method: SW846 8270E BY SIM
Analyst approved: 08/12/20 09:33 Fouad Sekkar
Supervisor approved: 08/12/20 11:43 Nicole McCampbell

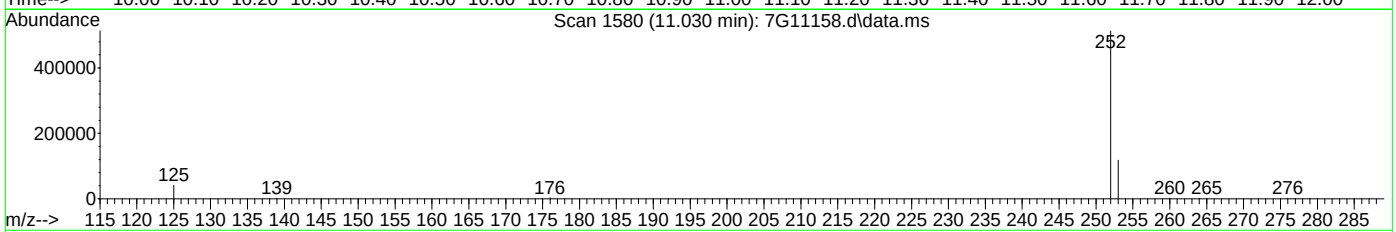
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(b)fluoranthene	205-99-2		11.03	Missed peak
Benzo(k)fluoranthene	207-08-9		11.06	Missed peak
Benzo(a)pyrene	50-32-8		11.38	Missed peak

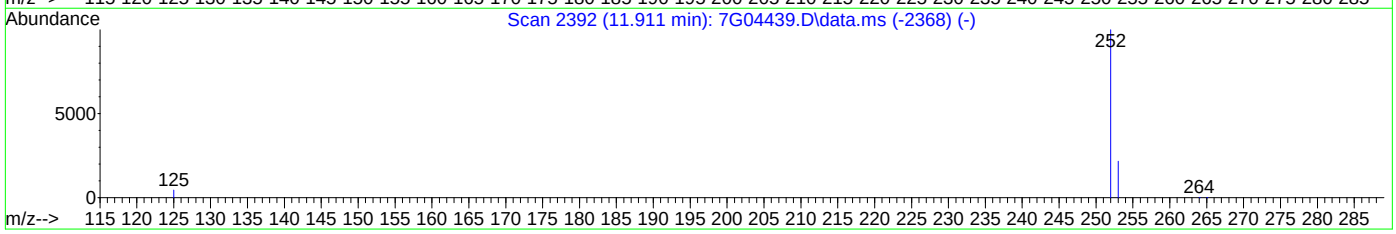
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11158.d
Acq On : 11 Aug 2020 7:42 pm
Operator : FOUADS
Sample : fa77581-5 e Inst : MSBNA8
Misc : op81483,S7G483,15.0,,,1,1,soil
ALS Vial : 30 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:27:33 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11158.d\data.ms

(23) Benzo[b]fluoranthene (P)

11.030min (+0.073) 83.46ppm

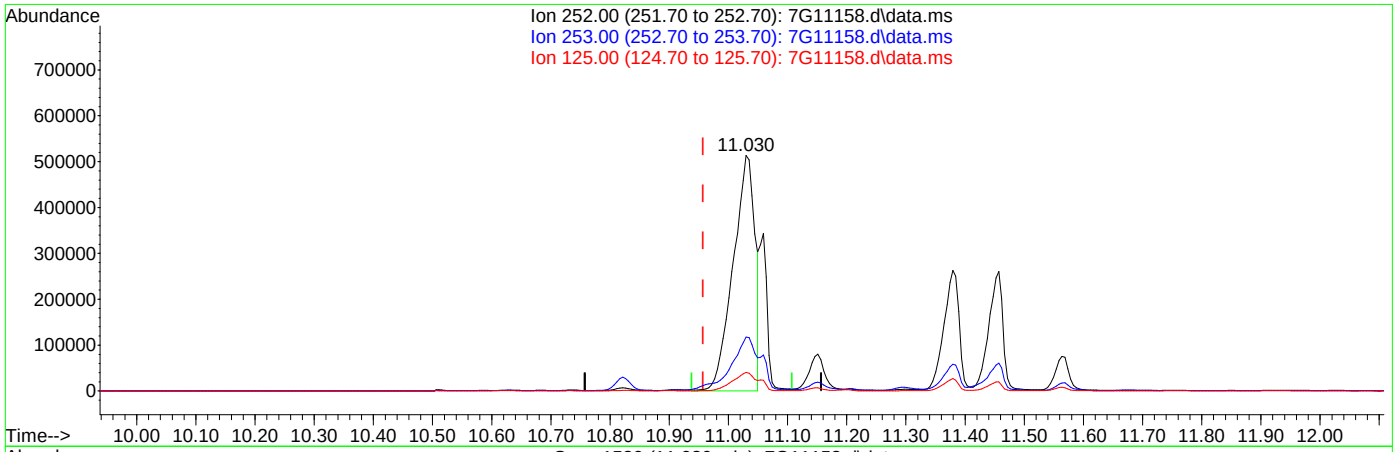
response 1601775

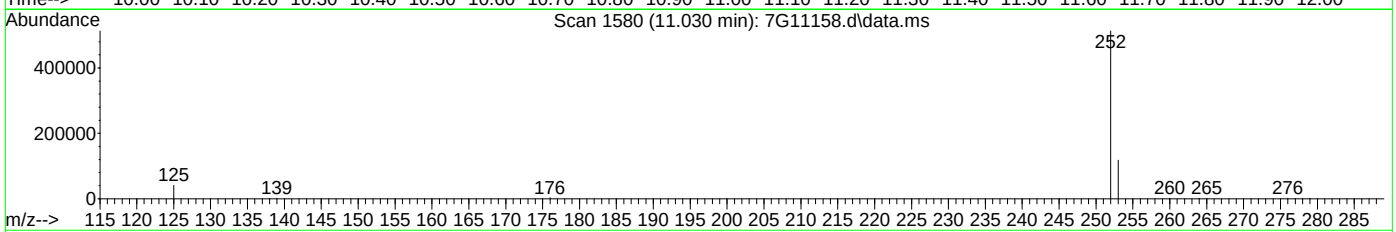
Ion	Exp%	Act%
252.00	100	100
253.00	21.70	22.39
125.00	4.50	7.82
0.00	0.00	0.00

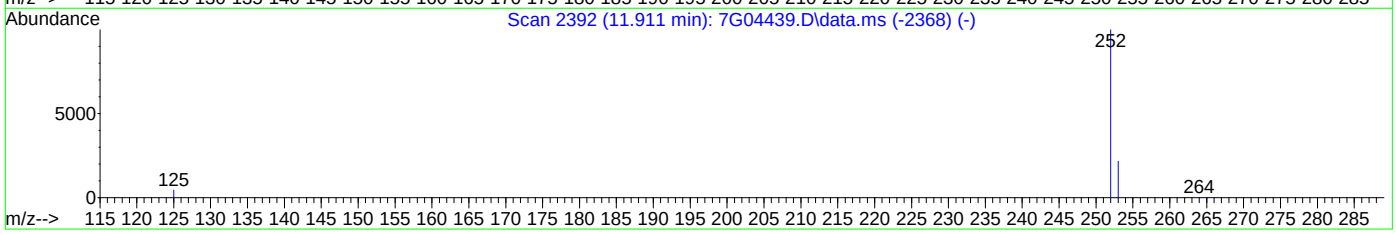
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11158.d
Acq On : 11 Aug 2020 7:42 pm
Operator : FOUADS
Sample : fa77581-5 e Inst : MSBNA8
Misc : op81483,S7G483,15.0,,,1,1,soil
ALS Vial : 30 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:27:33 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11158.d\data.ms

(23) Benzo[b]fluoranthene (P)

11.030min (+0.073) 68.68ppm m

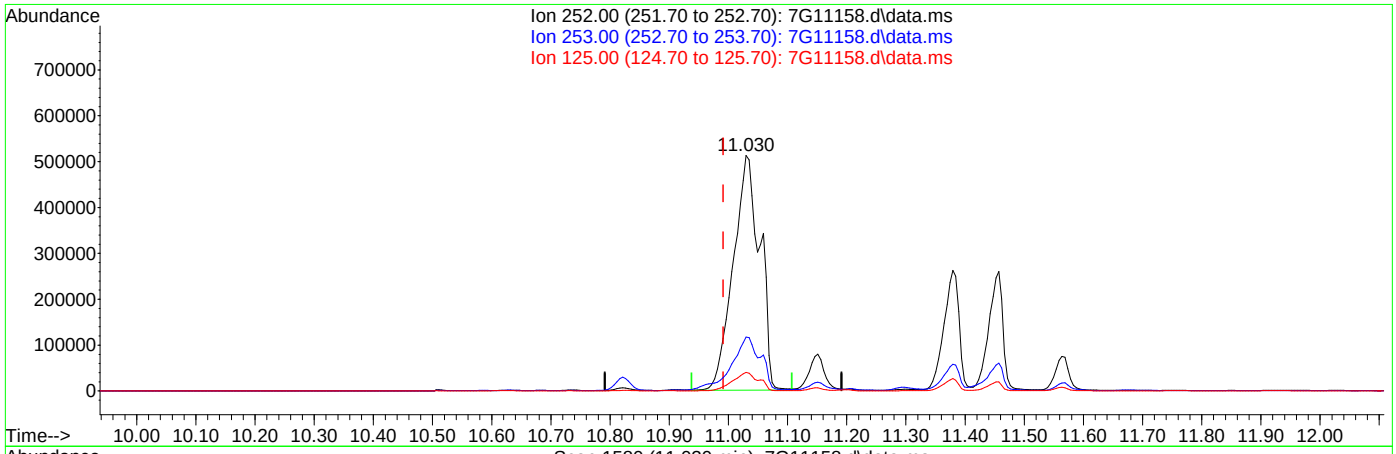
response 1318008

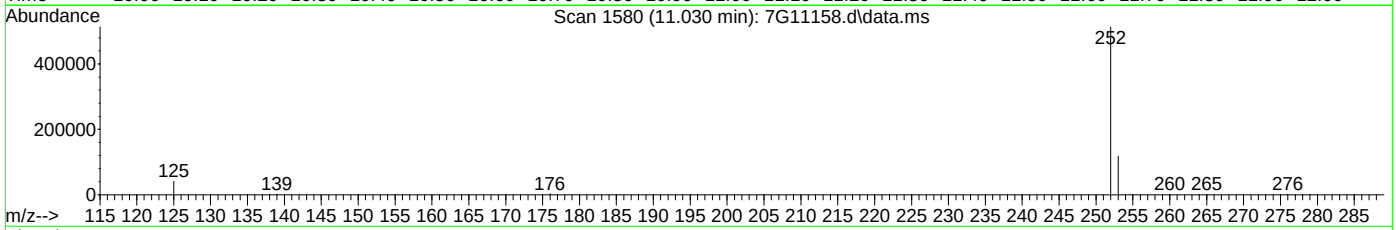
Ion	Exp%	Act%
252.00	100	100
253.00	21.70	22.93
125.00	4.50	7.90
0.00	0.00	0.00

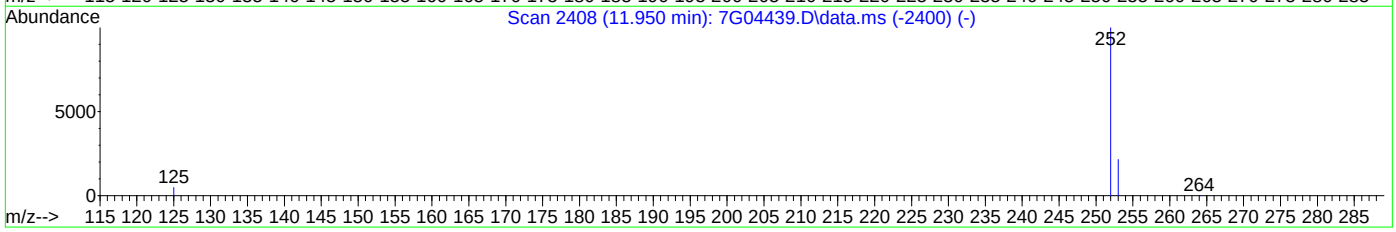
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11158.d
Acq On : 11 Aug 2020 7:42 pm
Operator : FOUADS
Sample : fa77581-5 e Inst : MSBNA8
Misc : op81483,S7G483,15.0,,,1,1,soil
ALS Vial : 30 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:27:33 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11158.d\data.ms

(24) Benzo[k]fluoranthene (P)

11.030min (+0.039) 66.17ppm

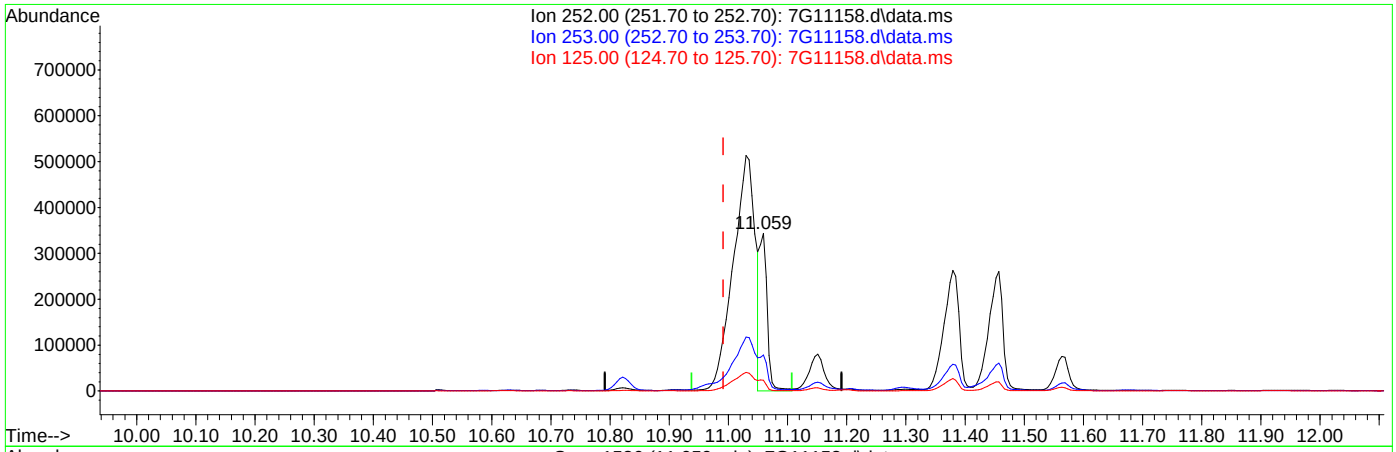
response 1604129

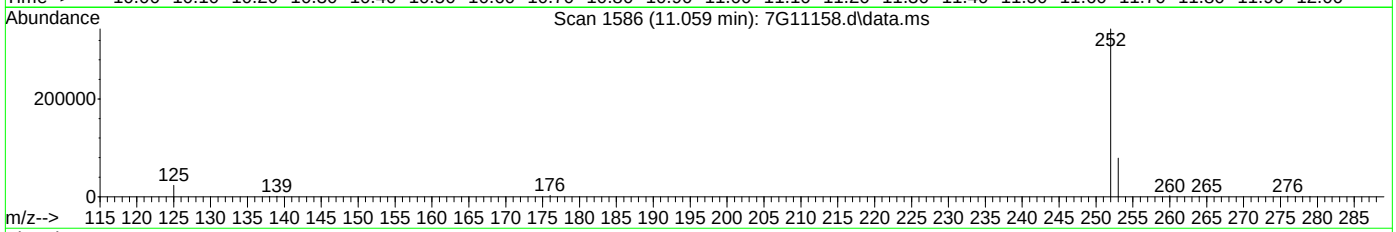
Ion	Exp%	Act%
252.00	100	100
253.00	21.50	22.39
125.00	4.80	7.82
0.00	0.00	0.00

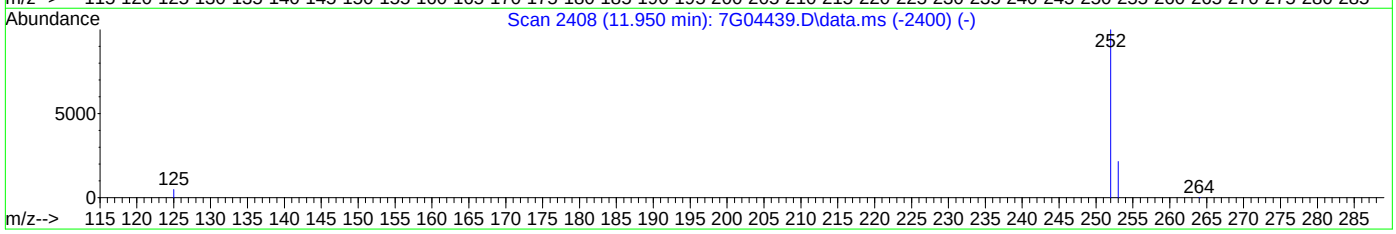
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11158.d
Acq On : 11 Aug 2020 7:42 pm
Operator : FOUADS
Sample : fa77581-5 e Inst : MSBNA8
Misc : op81483,S7G483,15.0,,,1,1,soil
ALS Vial : 30 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:27:33 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11158.d\data.ms

(24) Benzo[k]fluoranthene (P)

11.059min (+0.068) 14.48ppm m

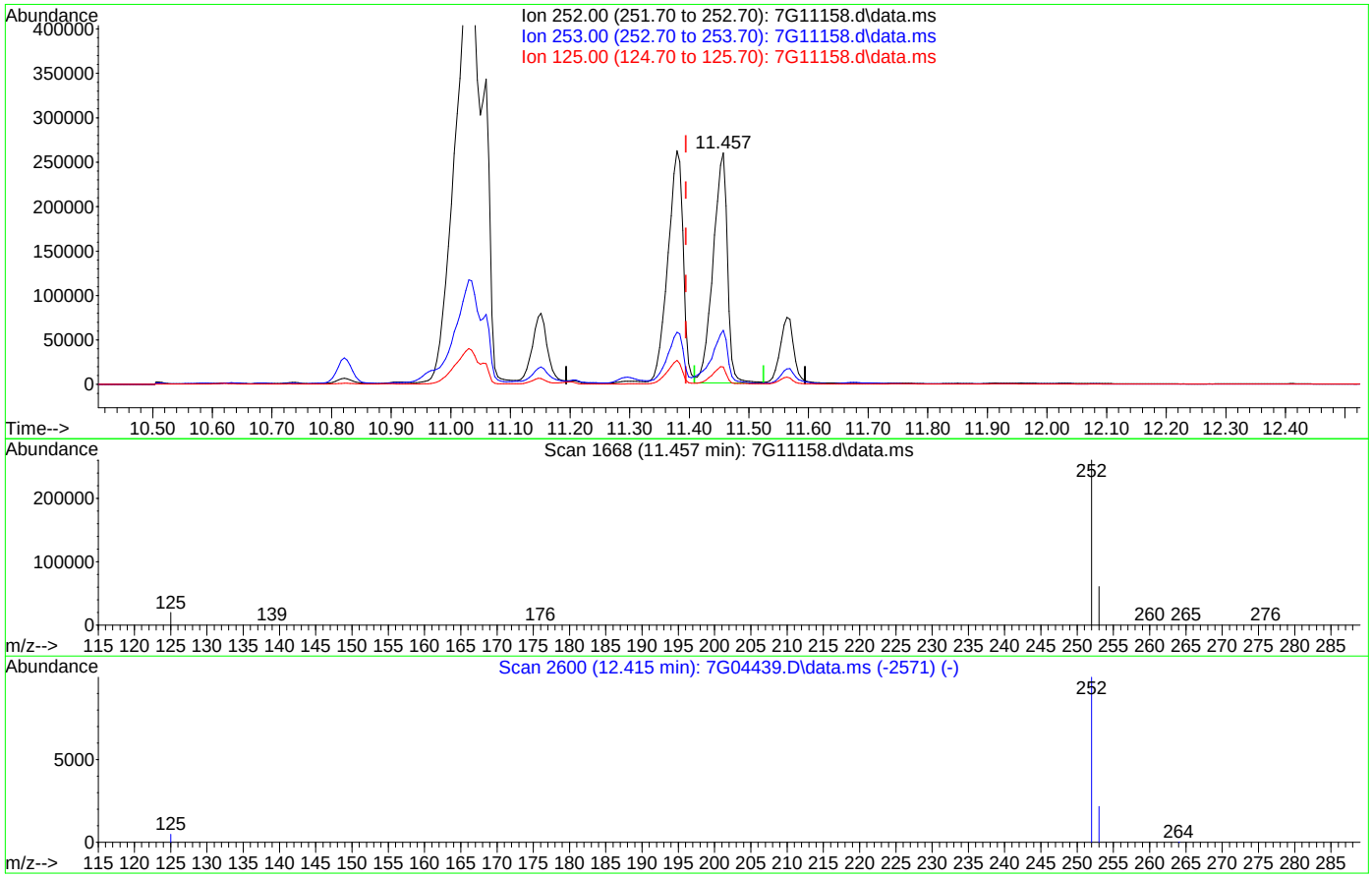
response 305011

Ion	Exp%	Act%
252.00	100	100
253.00	21.50	22.93
125.00	4.80	6.80
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11158.d
Acq On : 11 Aug 2020 7:42 pm
Operator : FOUADS
Sample : fa77581-5 e Inst : MSBNA8
Misc : op81483,S7G483,15.0,,,1,1,soil
ALS Vial : 30 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:27:33 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration



TIC: 7G11158.d\data.ms

(25) Benzo[a]pyrene (P)

11.457min (+0.063) 23.19ppm

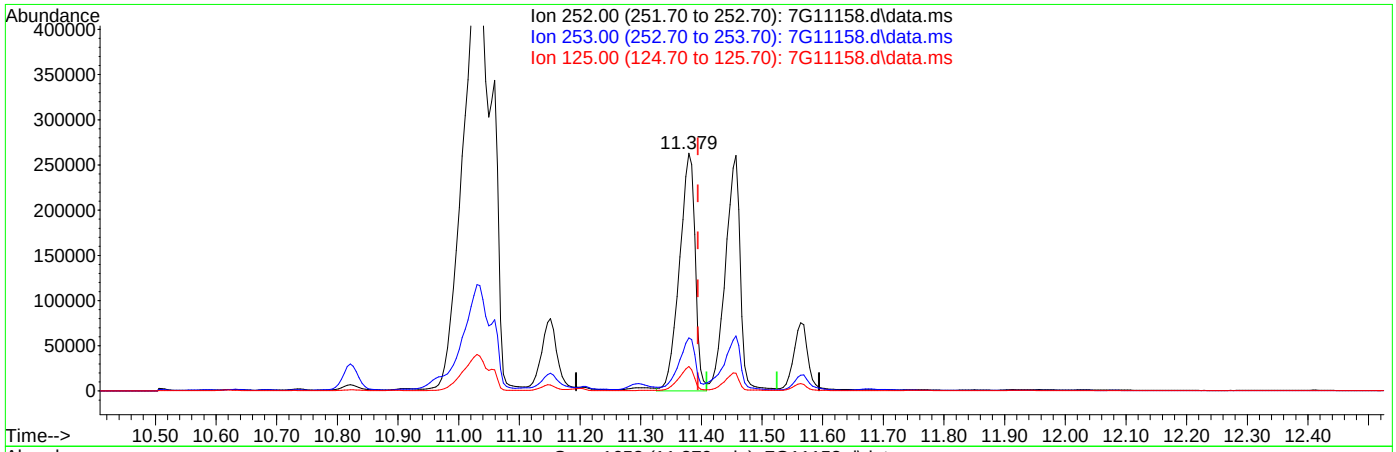
response 433629

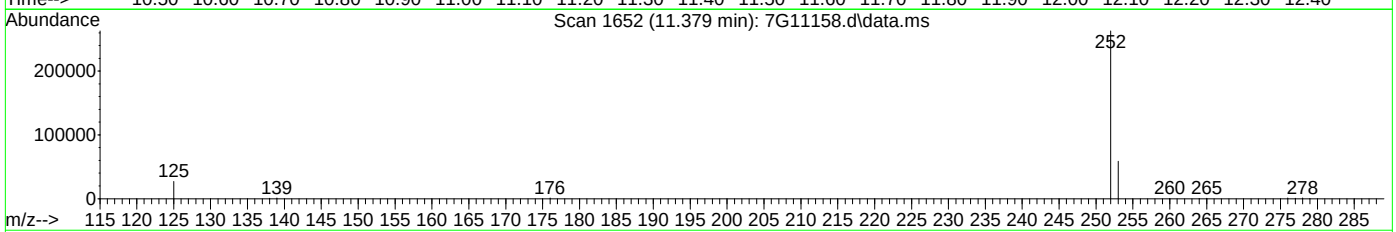
Ion	Exp%	Act%
252.00	100	100
253.00	21.60	21.86
125.00	4.80	7.32
0.00	0.00	0.00

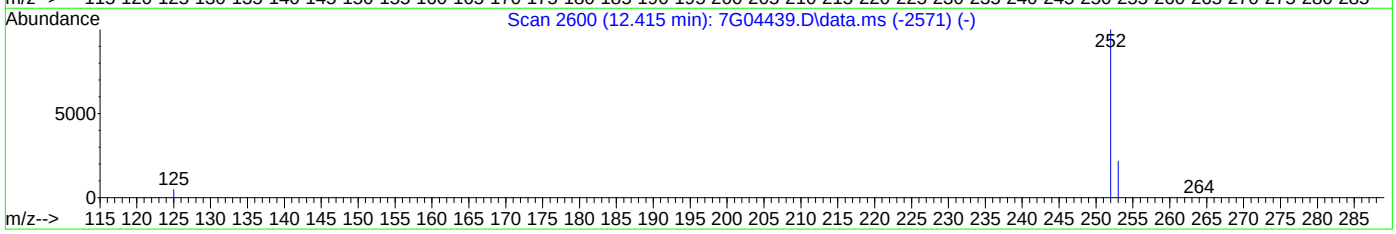
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11158.d
Acq On : 11 Aug 2020 7:42 pm
Operator : FOUADS
Sample : fa77581-5 e Inst : MSBNA8
Misc : op81483,S7G483,15.0,,,1,1,soil
ALS Vial : 30 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:27:33 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11158.d\data.ms

(25) Benzo[a]pyrene (P)

11.379min (-0.015) 25.38ppm m

response 474704

Ion	Exp%	Act%
252.00	100	100
253.00	21.60	22.28
125.00	4.80	10.28
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 08/11/20 12:03

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11124.d
Acq On : 11 Aug 2020 12:12 am
Operator : FOUADS
Sample : fa77581-6 e
Misc : op81483,S7G482,15.0,,,1,1,soil
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Aug 11 03:25:47 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.628	136	21788	4.00	ppm	0.00
6) Acenaphthene-d10	6.114	164	17966	4.00	ppm	0.00
11) Phenanthrene-d10	7.396	188	35112	4.00	ppm	0.00
18) Chrysene-d12	9.734	240	69684	4.00	ppm	0.00
22) Perylene-d12	11.491	264	52409	4.00	ppm	0.01
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.205	152	29844	9.17	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 91.70%			
17) Fluoranthene-d10	8.436	212	180671	9.85	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 98.50%			
Target Compounds						Qvalue
2) Naphthalene	4.646	128	1032	0.17	ppm	99
7) Acenaphthylene	5.993	152	27406	2.65	ppm	99
8) Acenaphthene	6.143	153	1347	0.20	ppm	96
9) Dibenzofuran	6.302	168	1500	0.32	ppm	99
10) Fluorene	6.597	166	2282	0.31	ppm	93
13) Phenanthrene	7.417	178	26210	2.27	ppm	98
14) Anthracene	7.459	178	72860	6.17	ppm	99
15) Carbazole	7.640	167	20059	0.96	ppm	96
16) Fluoranthene	8.458	202	559906	24.21	ppm	97
19) Pyrene	8.648	202	591101	20.84	ppm	96
20) Benzo[a]anthracene	9.724	228	216434	9.76	ppm	90
21) Chrysene	9.763	228	458642	19.03	ppm	97
23) Benzo[b]fluoranthene	10.986	252	573715	32.25	ppm	98
24) Benzo[k]fluoranthene	11.016	252	147453m	7.70	ppm	
25) Benzo[a]pyrene	11.409	252	144960	8.36	ppm	98
26) Indeno[1,2,3-cd]pyrene	13.224	276	63117	5.58	ppm	94
27) Dibenz[a,h]anthracene	13.272	278	14284	1.14	ppm	97
28) Benzo[g,h,i]perylene	13.685	276	40177	2.95	ppm	94

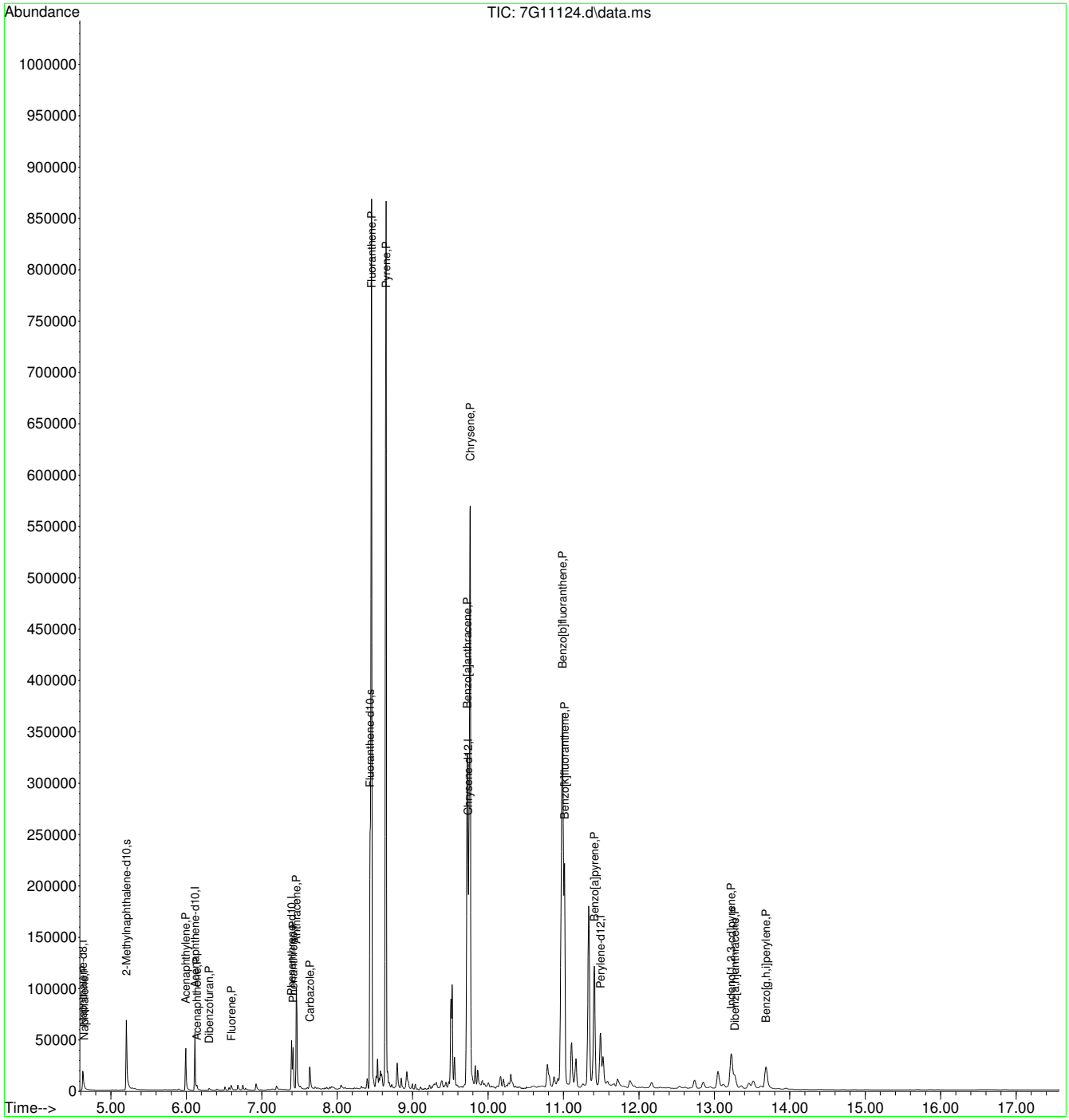
(#) = qualifier out of range (m) = manual integration (+) = signals summed

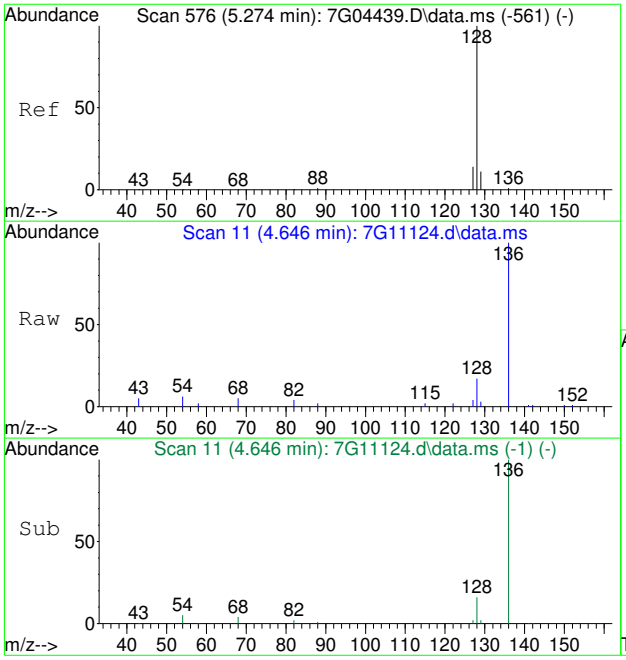
7.1.20
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11124.d
Acq On : 11 Aug 2020 12:12 am
Operator : FOUADS
Sample : fa77581-6 e
Misc : op81483,S7G482,15.0,,,1,1,soil
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Aug 11 03:25:47 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

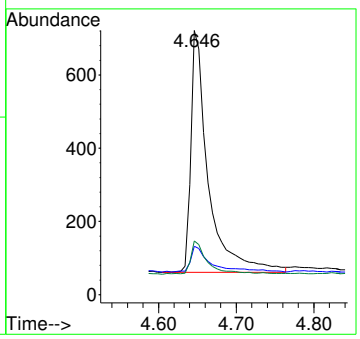


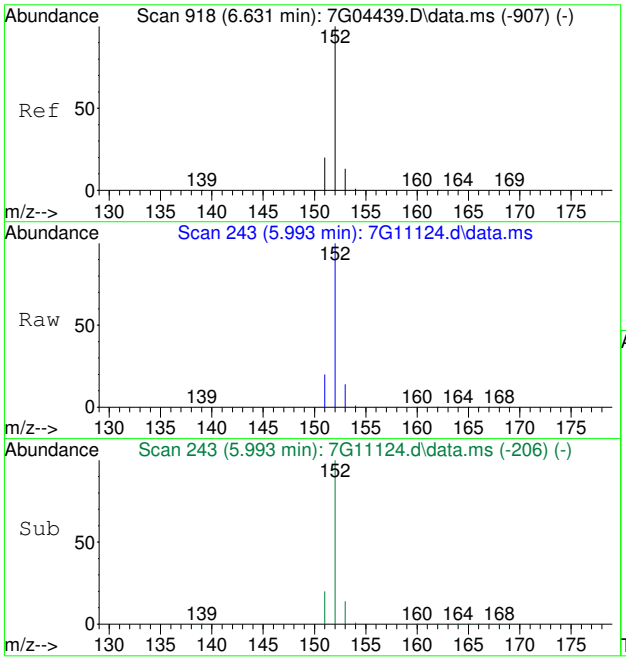


#2
Naphthalene
Concen: 0.17 ppm
RT: 4.646 min Scan# 11
Delta R.T. 0.000 min
Lab File: 7G11124.d
Acq: 11 Aug 2020 12:12 am

Tgt Ion:128 Resp: 1032

Ion	Ratio	Lower	Upper
128	100		
129	10.7	0.0	40.9
127	13.8	0.0	43.5

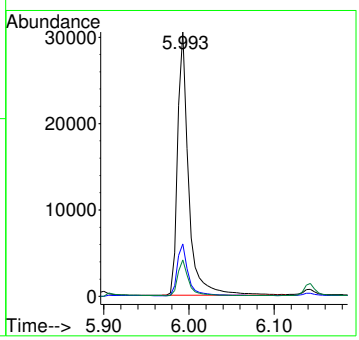


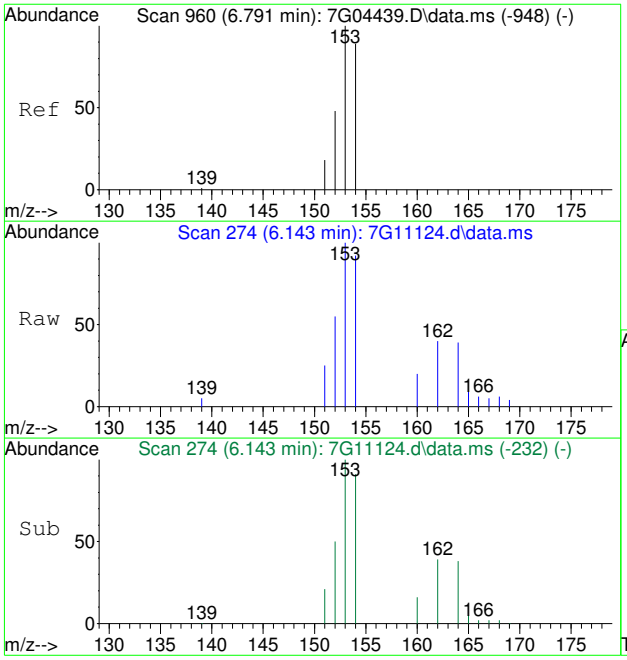


#7
Acenaphthylene
Concen: 2.65 ppm
RT: 5.993 min Scan# 243
Delta R.T. 0.000 min
Lab File: 7G11124.d
Acq: 11 Aug 2020 12:12 am

Tgt Ion:152 Resp: 27406

Ion	Ratio	Lower	Upper
152	100		
151	19.7	0.0	49.8
153	13.6	0.0	42.8

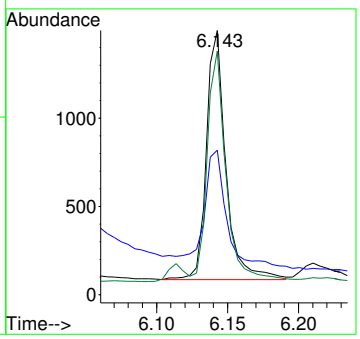


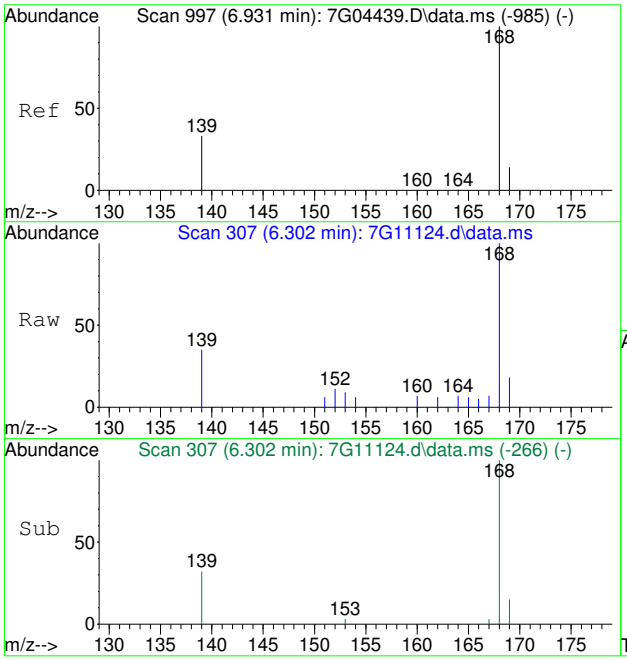


#8
Acenaphthene
Concen: 0.20 ppm
RT: 6.143 min Scan# 274
Delta R.T. 0.005 min
Lab File: 7G11124.d
Acq: 11 Aug 2020 12:12 am

Tgt Ion:153 Resp: 1347

Ion	Ratio	Lower	Upper
153	100		
152	44.8	18.3	78.3
154	92.0	59.3	119.3

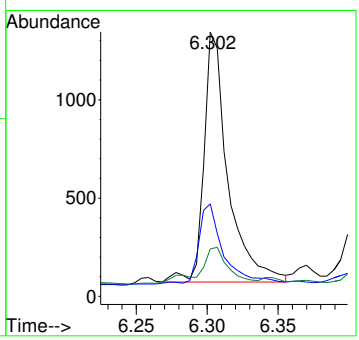


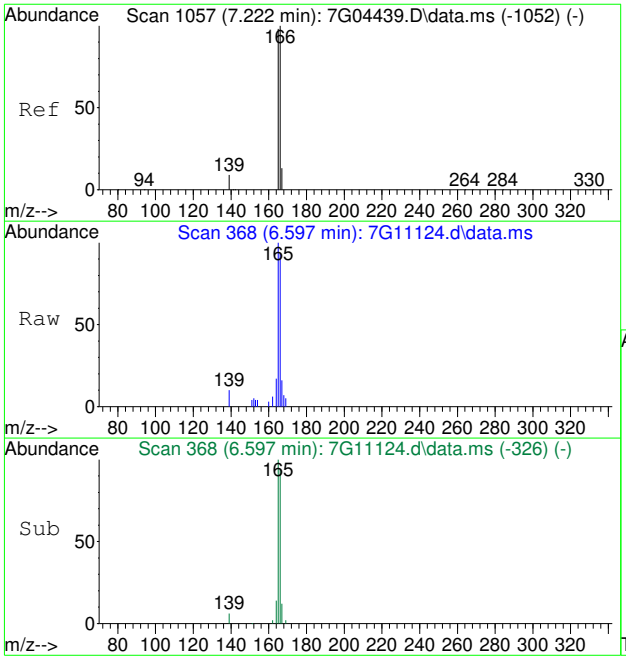


#9
Dibenzofuran
Concen: 0.32 ppm
RT: 6.302 min Scan# 307
Delta R.T. 0.000 min
Lab File: 7G11124.d
Acq: 11 Aug 2020 12:12 am

Tgt Ion:168 Resp: 1500

Ion	Ratio	Lower	Upper
168	100		
139	31.9	12.6	52.6
169	13.4	0.0	33.8

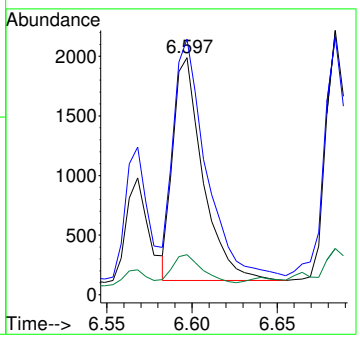


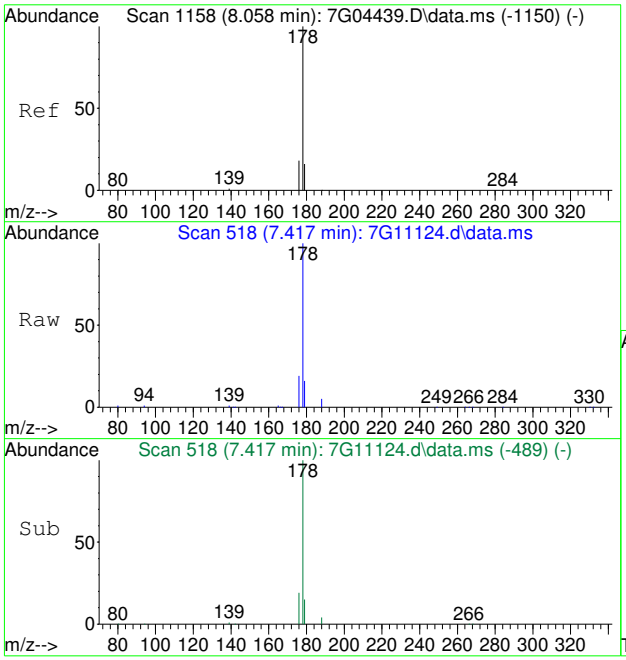


#10
Fluorene
Concen: 0.31 ppm
RT: 6.597 min Scan# 368
Delta R.T. 0.005 min
Lab File: 7G11124.d
Acq: 11 Aug 2020 12:12 am

Tgt Ion:166 Resp: 2282

Ion	Ratio	Lower	Upper
166	100		
165	105.6	68.2	128.2
167	12.0	0.0	42.9

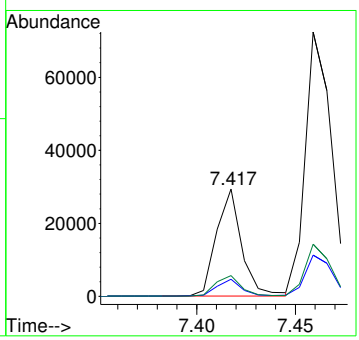


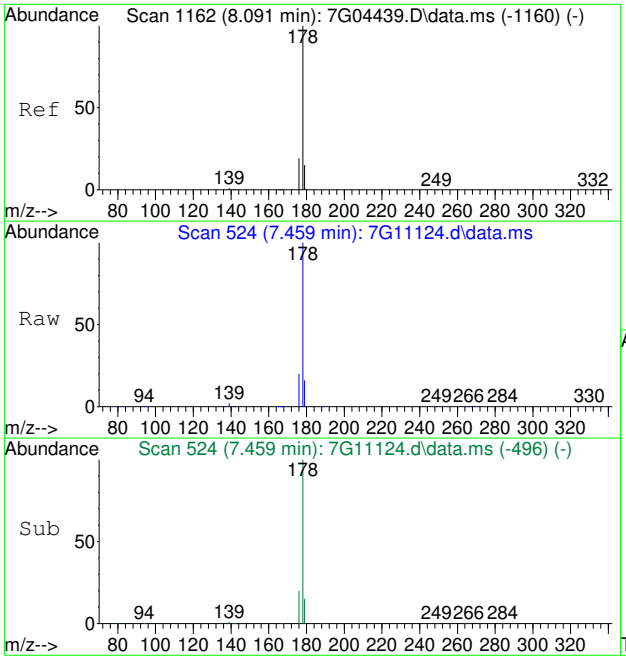


#13
Phenanthrene
Concen: 2.27 ppm
RT: 7.417 min Scan# 518
Delta R.T. 0.000 min
Lab File: 7G11124.d
Acq: 11 Aug 2020 12:12 am

Tgt Ion:178 Resp: 26210

Ion	Ratio	Lower	Upper
178	100		
179	15.5	0.0	45.7
176	19.2	0.0	48.0

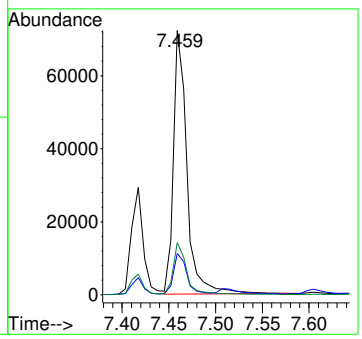


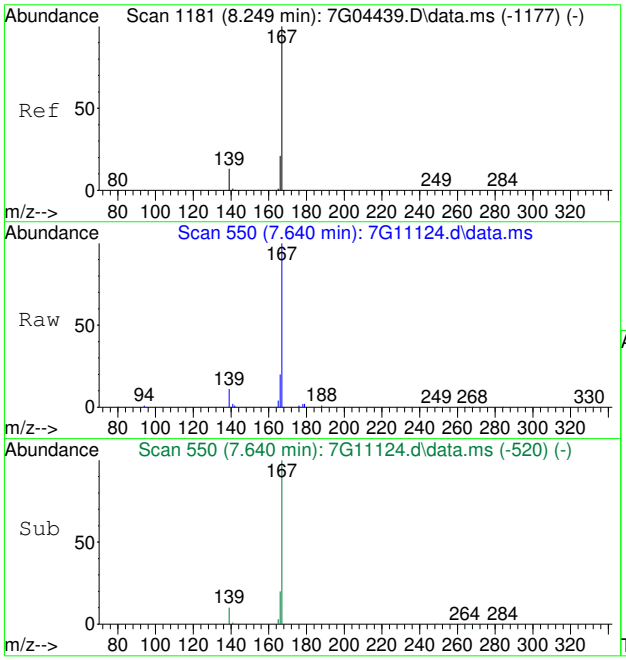


#14
Anthracene
Concen: 6.17 ppm
RT: 7.459 min Scan# 524
Delta R.T. -0.007 min
Lab File: 7G11124.d
Acq: 11 Aug 2020 12:12 am

Tgt Ion:178 Resp: 72860

Ion	Ratio	Lower	Upper
178	100		
179	15.4	0.0	45.1
176	19.7	0.0	48.8

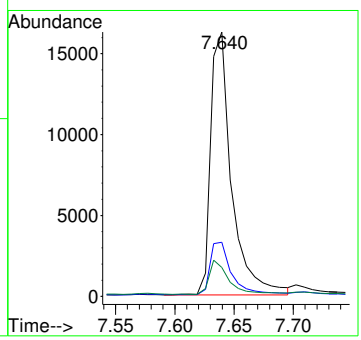


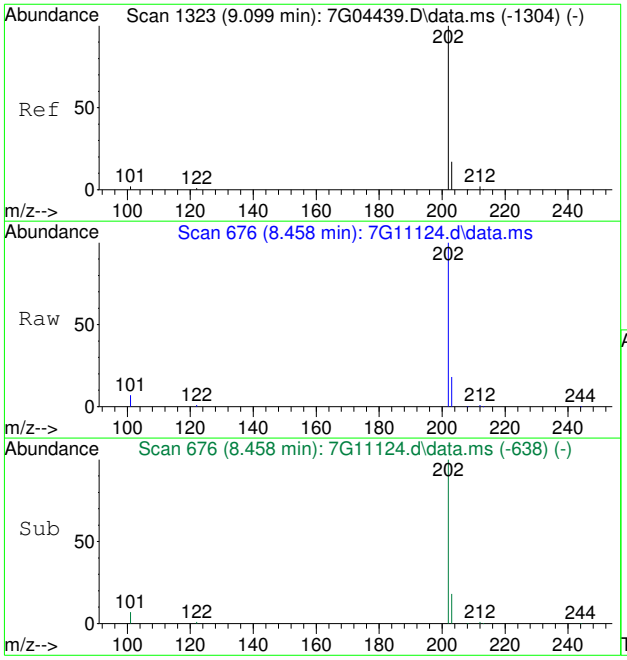


#15
Carbazole
Concen: 0.96 ppm
RT: 7.640 min Scan# 550
Delta R.T. 0.007 min
Lab File: 7G11124.d
Acq: 11 Aug 2020 12:12 am

Tgt Ion:167 Resp: 20059

Ion	Ratio	Lower	Upper
167	100		
166	19.9	1.2	41.2
139	10.1	0.0	32.8

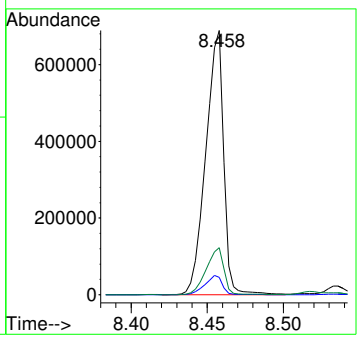


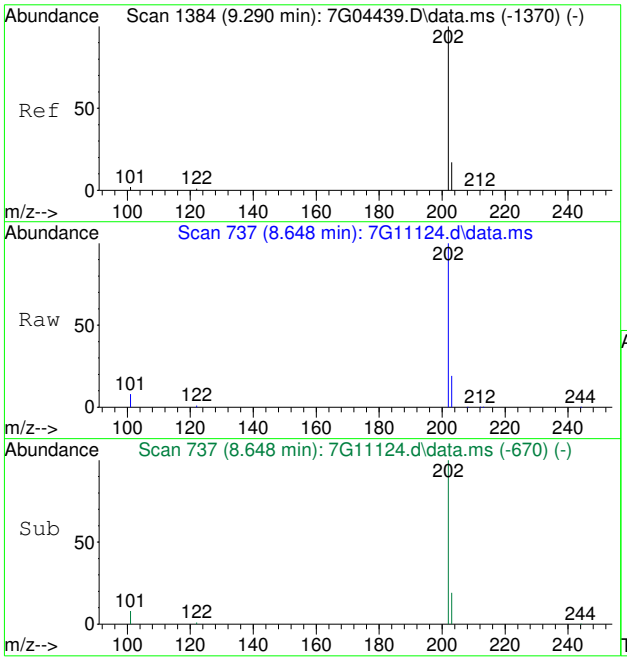


#16
Fluoranthene
Concen: 24.21 ppm
RT: 8.458 min Scan# 676
Delta R.T. 0.009 min
Lab File: 7G11124.d
Acq: 11 Aug 2020 12:12 am

Tgt Ion:202 Resp: 559906

Ion	Ratio	Lower	Upper
202	100		
101	6.6	0.0	32.2
203	17.8	0.0	47.2

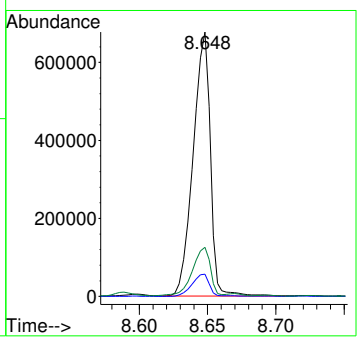


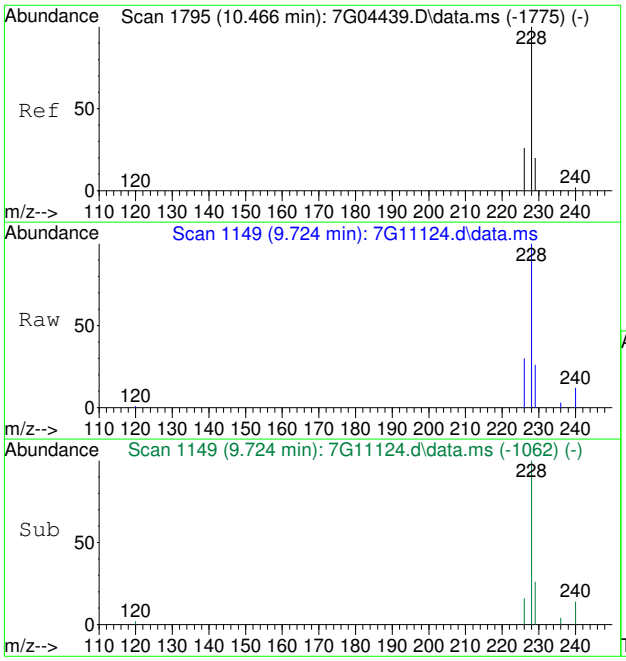


#19
Pyrene
Concen: 20.84 ppm
RT: 8.648 min Scan# 737
Delta R.T. 0.009 min
Lab File: 7G11124.d
Acq: 11 Aug 2020 12:12 am

Tgt Ion:202 Resp: 591101

Ion	Ratio	Lower	Upper
202	100		
101	8.4	0.0	32.4
203	18.3	0.0	47.4

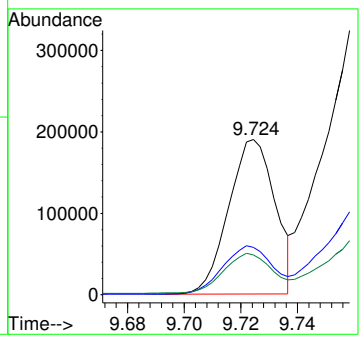


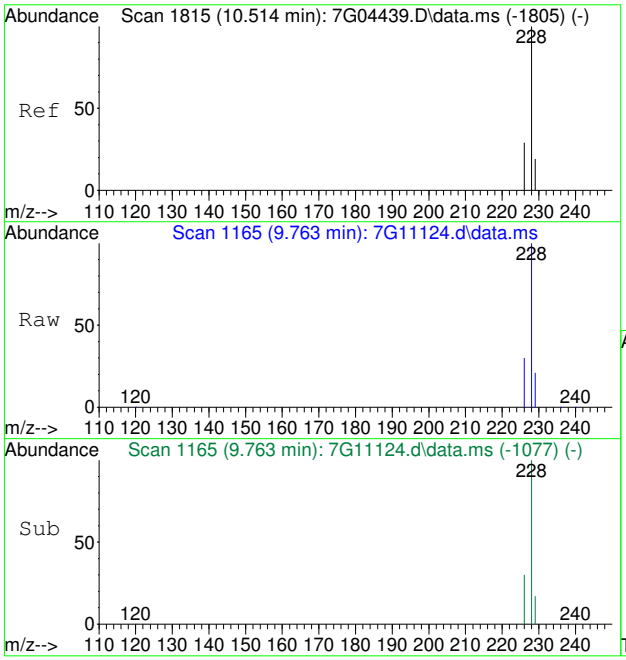


#20
Benzo[a]anthracene
Concen: 9.76 ppm
RT: 9.724 min Scan# 1149
Delta R.T. 0.010 min
Lab File: 7G11124.d
Acq: 11 Aug 2020 12:12 am

Tgt Ion:228 Resp: 216434

Ion	Ratio	Lower	Upper
228	100		
226	30.2	0.0	56.1
229	25.0	0.0	49.5

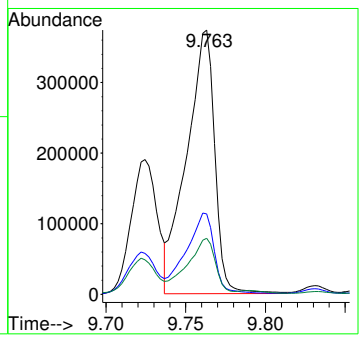


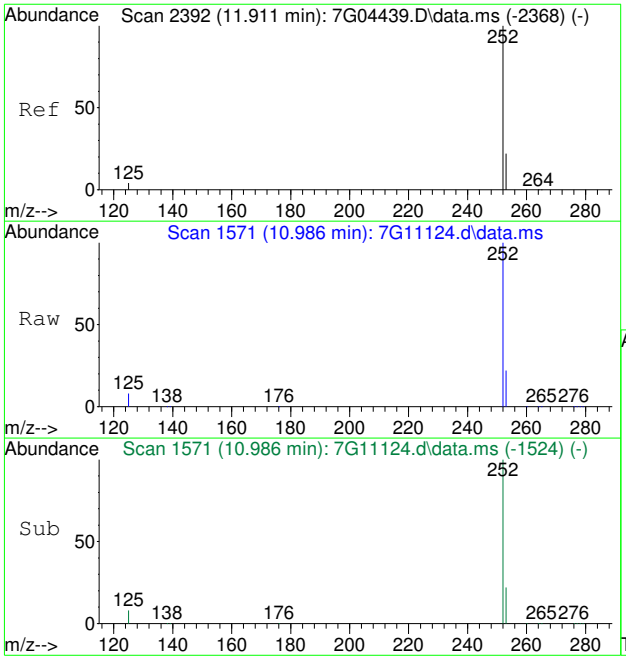


#21
Chrysene
Concen: 19.03 ppm
RT: 9.763 min Scan# 1165
Delta R.T. 0.012 min
Lab File: 7G11124.d
Acq: 11 Aug 2020 12:12 am

Tgt Ion:228 Resp: 458642

Ion	Ratio	Lower	Upper
228	100		
226	30.2	0.0	58.9
229	20.7	0.0	49.5

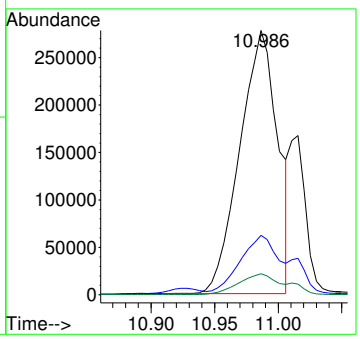


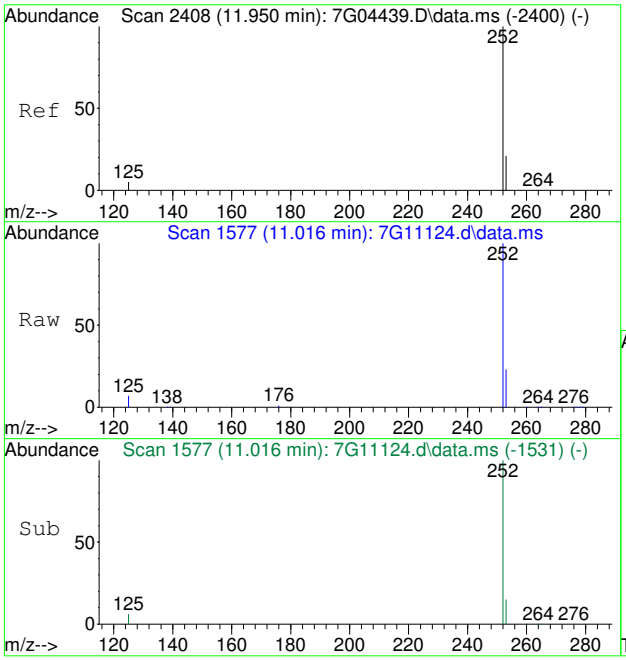


#23
Benzo[b]fluoranthene
Concen: 32.25 ppm
RT: 10.986 min Scan# 1571
Delta R.T. 0.029 min
Lab File: 7G11124.d
Acq: 11 Aug 2020 12:12 am

Tgt Ion:252 Resp: 573715

Ion	Ratio	Lower	Upper
252	100		
253	21.6	0.0	51.7
125	8.0	0.0	34.5

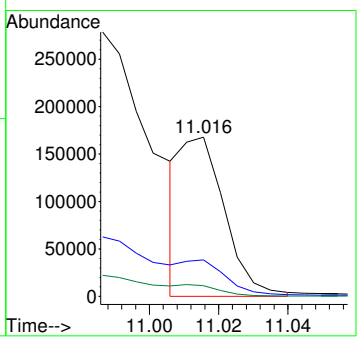


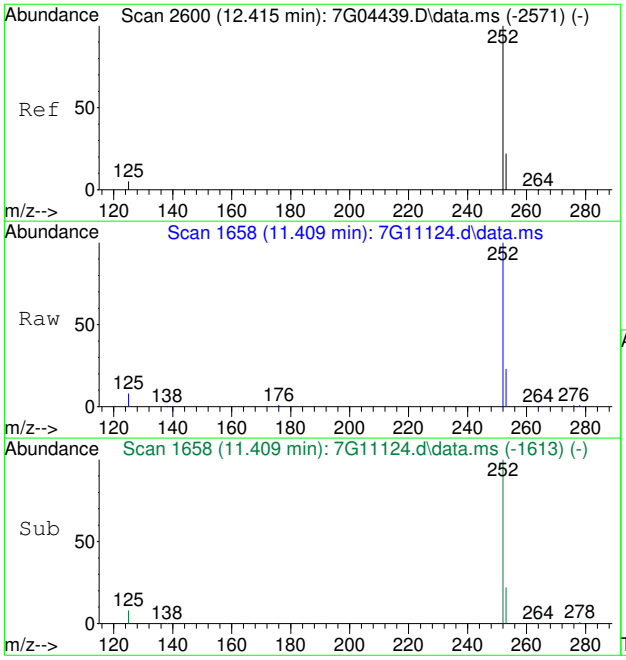


#24
Benzo[k]fluoranthene
Concen: 7.70 ppm m
RT: 11.016 min Scan# 1577
Delta R.T. 0.024 min
Lab File: 7G11124.d
Acq: 11 Aug 2020 12:12 am

Tgt Ion:252 Resp: 147453

Ion	Ratio	Lower	Upper
252	100		
253	23.0	0.0	51.5
125	6.7	0.0	34.8

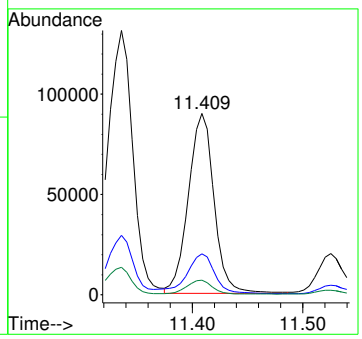


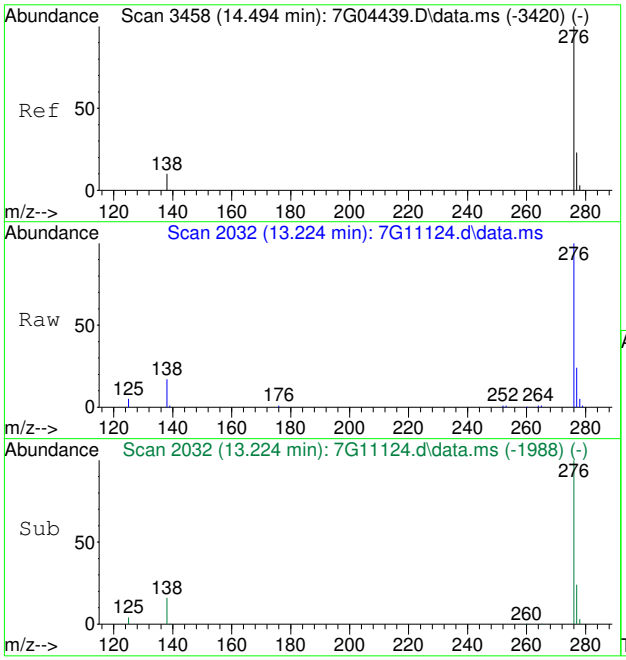


#25
Benzo[a]pyrene
Concen: 8.36 ppm
RT: 11.409 min Scan# 1658
Delta R.T. 0.019 min
Lab File: 7G11124.d
Acq: 11 Aug 2020 12:12 am

Tgt Ion:252 Resp: 144960

Ion	Ratio	Lower	Upper
252	100		
253	21.2	0.0	51.6
125	7.7	0.0	34.8

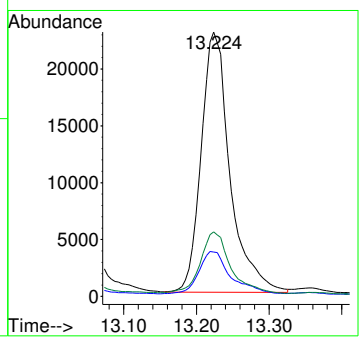


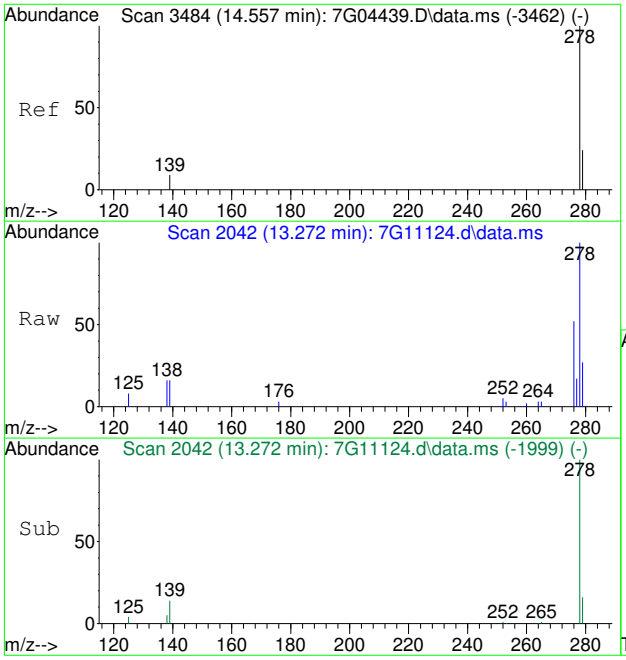


#26
Indeno[1,2,3-cd]pyrene
Concen: 5.58 ppm
RT: 13.224 min Scan# 2032
Delta R.T. 0.015 min
Lab File: 7G11124.d
Acq: 11 Aug 2020 12:12 am

Tgt Ion:276 Resp: 63117

Ion	Ratio	Lower	Upper
276	100		
138	16.0	0.0	39.6
277	23.6	0.0	53.1

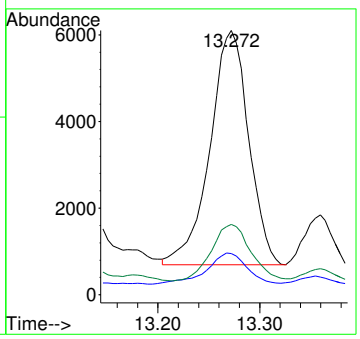


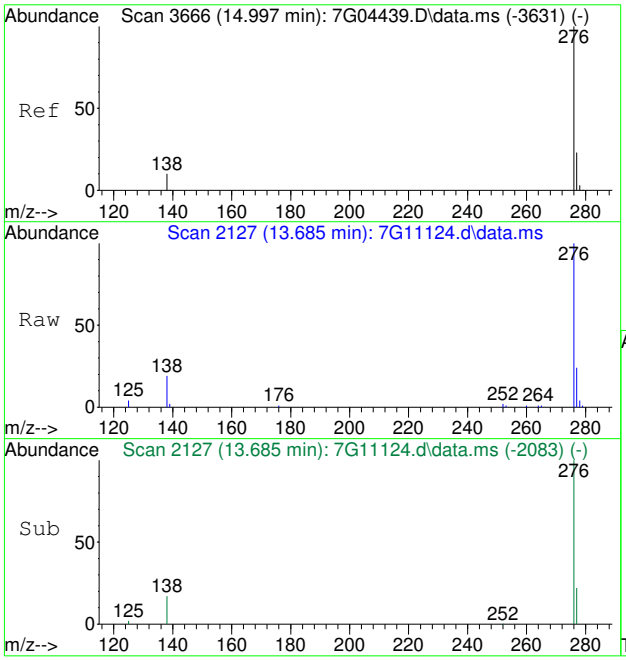


#27
Dibenz[a,h]anthracene
Concen: 1.14 ppm
RT: 13.272 min Scan# 2042
Delta R.T. 0.010 min
Lab File: 7G11124.d
Acq: 11 Aug 2020 12:12 am

Tgt Ion:278 Resp: 14284

Ion	Ratio	Lower	Upper
278	100		
139	12.5	0.0	38.8
279	23.8	0.0	53.6

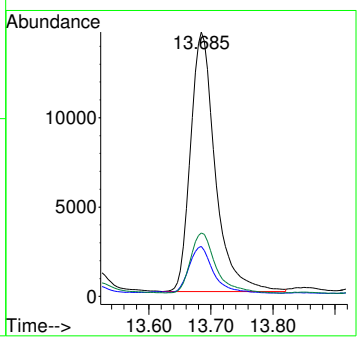




#28
Benzo[g,h,i]perylene
Concen: 2.95 ppm
RT: 13.685 min Scan# 2127
Delta R.T. 0.015 min
Lab File: 7G11124.d
Acq: 11 Aug 2020 12:12 am

Tgt Ion:276 Resp: 40177

Ion	Ratio	Lower	Upper
276	100		
138	17.7	0.0	40.5
277	23.2	0.0	53.2



Manual Integration Approval Summary

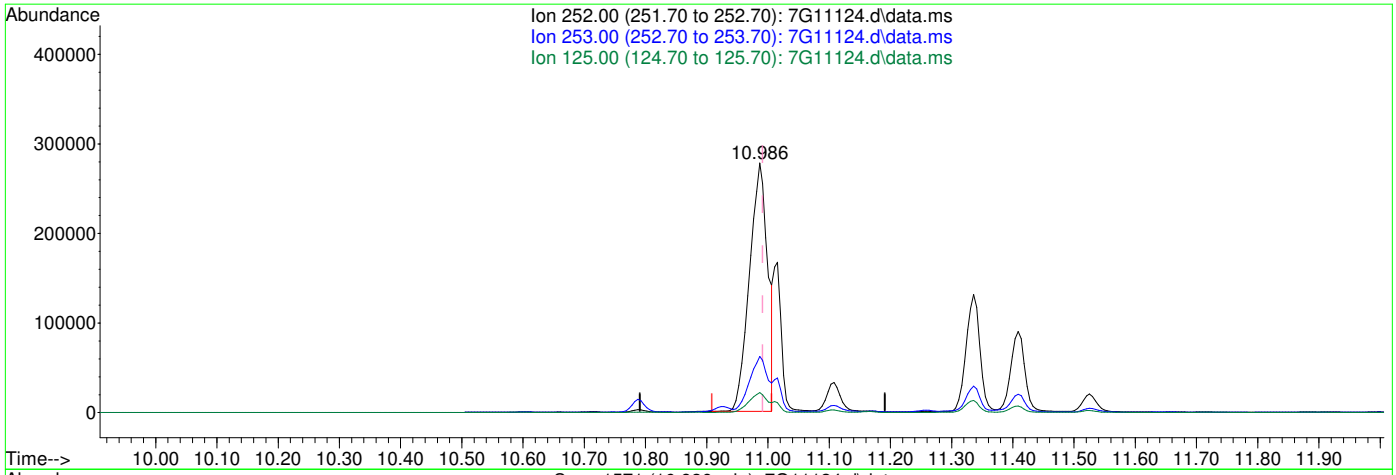
Sample Number: FA77581-6
Lab FileID: 7G11124.D
Injection Time: 08/11/20 00:12
Method: SW846 8270E BY SIM
Analyst approved: 08/11/20 10:52 Fouad Sekkar
Supervisor approved: 08/11/20 12:03 Naresh Jiawan

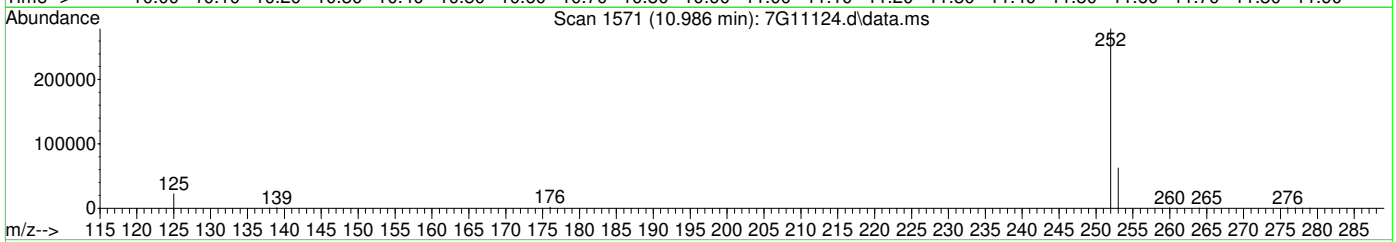
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(k)fluoranthene	207-08-9		11.02	Missed peak

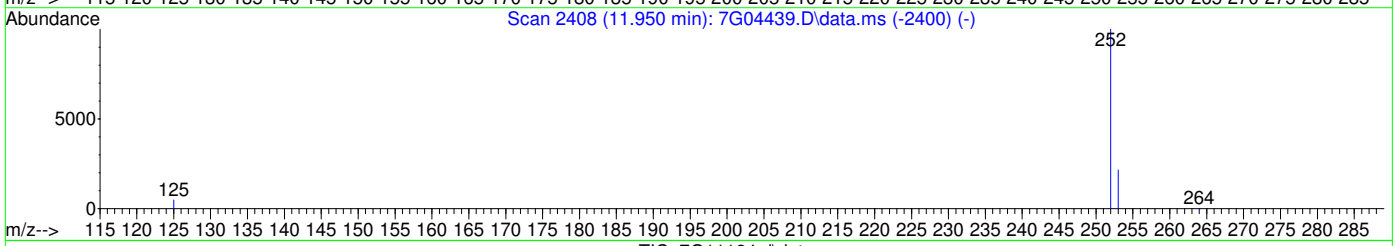
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11124.d
Acq On : 11 Aug 2020 12:12 am
Operator : FOUADS
Sample : fa77581-6 e
Misc : op81483,S7G482,15.0,,,1,1,soil
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Aug 11 02:37:57 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11124.d\data.ms

(24) Benzo[k]fluoranthene (P)

10.986min (-0.005) 28.25ppm

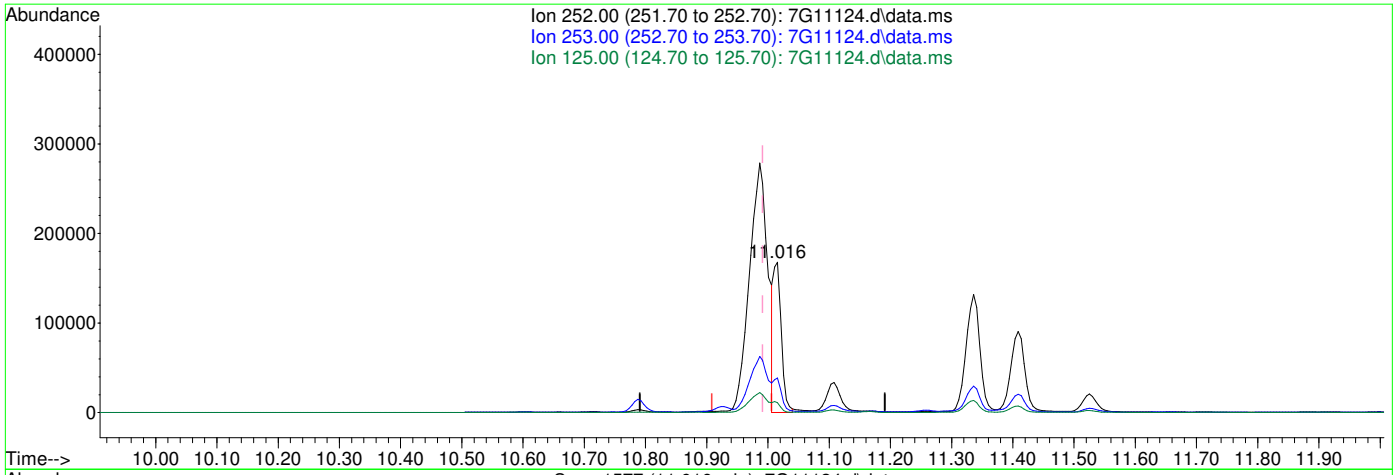
response 573715

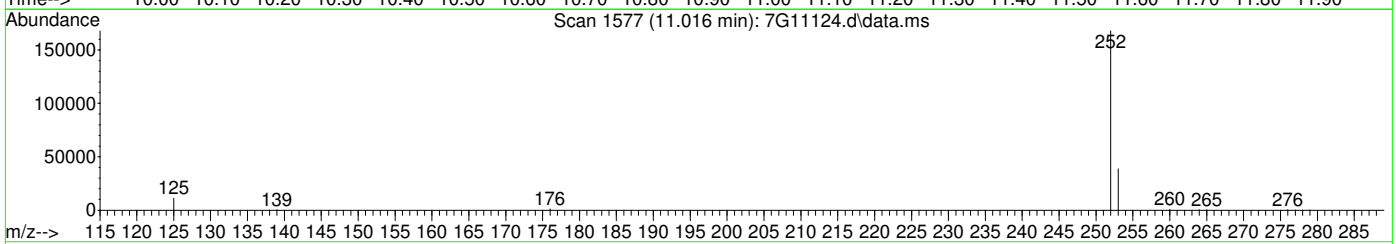
Ion	Exp%	Act%
252.00	100	100
253.00	21.50	21.64
125.00	4.80	8.04
0.00	0.00	0.00

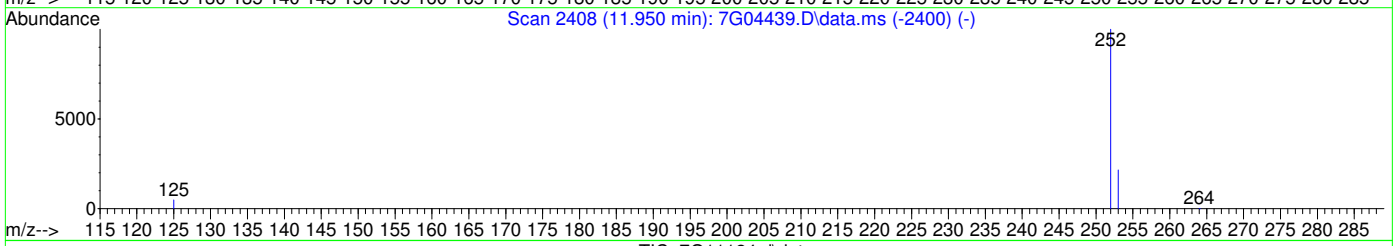
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11124.d
Acq On : 11 Aug 2020 12:12 am
Operator : FOUADS
Sample : fa77581-6 e
Misc : op81483,S7G482,15.0,,,1,1,soil
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Aug 11 02:37:57 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11124.d\data.ms

(24) Benzo[k]fluoranthene (P)

11.016min (+0.024) 7.70ppm m

response 147453

Ion	Exp%	Act%
252.00	100	100
253.00	21.50	22.99
125.00	4.80	6.65
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11133.d
Acq On : 11 Aug 2020 9:39 am
Operator : FOUADS
Sample : fa77581-7 e Inst : MSBNA8
Misc : op81485,S7G483,15.3,,,1,1,soil
ALS Vial : 5 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:29:01 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

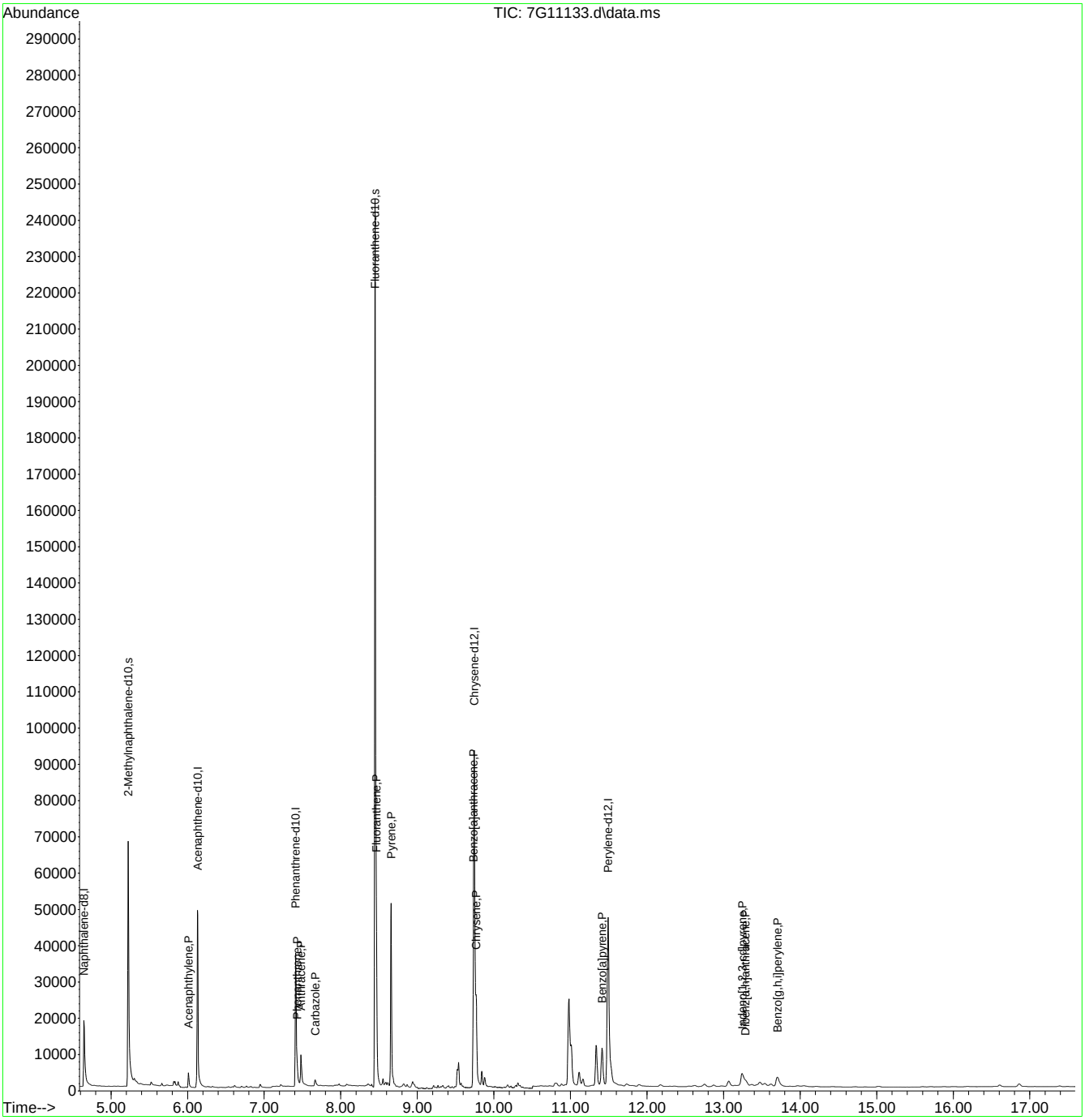
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.646	136	21993	4.00	ppm	0.02
6) Acenaphthene-d10	6.133	164	17751	4.00	ppm	0.02
11) Phenanthrene-d10	7.410	188	34300	4.00	ppm	0.01
18) Chrysene-d12	9.744	240	61199	4.00	ppm	0.02
22) Perylene-d12	11.491	264	56905	4.00	ppm	0.01
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.223	152	30796	9.36	ppm	0.02
Spiked Amount 10.000	Range 50 - 150		Recovery = 93.60%			
17) Fluoranthene-d10	8.448	212	158215	8.84	ppm	0.01
Spiked Amount 10.000	Range 50 - 150		Recovery = 88.40%			
Target Compounds						Qvalue
7) Acenaphthylene	6.012	152	3179	0.31	ppm	99
13) Phenanthrene	7.431	178	1592	0.14	ppm	97
14) Anthracene	7.480	178	7402	0.65	ppm	99
15) Carbazole	7.667	167	2021	0.10	ppm	98
16) Fluoranthene	8.464	202	27006	1.27	ppm	98
19) Pyrene	8.657	202	37215	1.54	ppm	94
20) Benzo[a]anthracene	9.734	228	17896	0.94	ppm	90
21) Chrysene	9.768	228	23720	1.12	ppm	98
25) Benzo[a]pyrene	11.413	252	12974	0.69	ppm	98
26) Indeno[1,2,3-cd]pyrene	13.243	276	7330	0.60	ppm	95
27) Dibenz[a,h]anthracene	13.287	278	1656	0.12	ppm	97
28) Benzo[g,h,i]perylene	13.704	276	5802	0.39	ppm	95

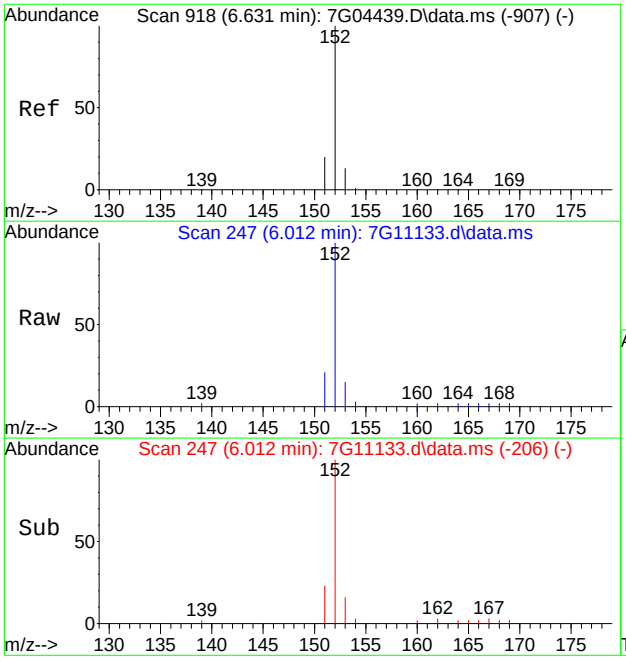
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11133.d
Acq On : 11 Aug 2020 9:39 am
Operator : FOUADS
Sample : fa77581-7 e Inst : MSBNA8
Misc : op81485,S7G483,15.3,,,1,1,soil
ALS Vial : 5 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:29:01 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

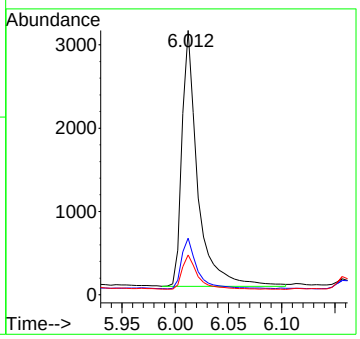


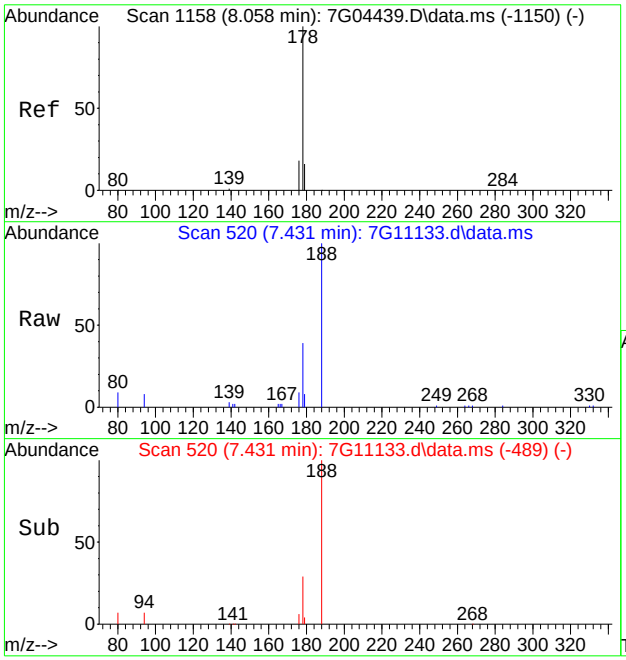


#7
Acenaphthylene
Concen: 0.31 ppm
RT: 6.012 min Scan# 247
Delta R.T. 0.019 min
Lab File: 7G11133.d
Acq: 11 Aug 2020 9:39 am

Tgt Ion:152 Resp: 3179

Ion	Ratio	Lower	Upper
152	100		
151	19.8	0.0	49.8
153	13.4	0.0	42.8

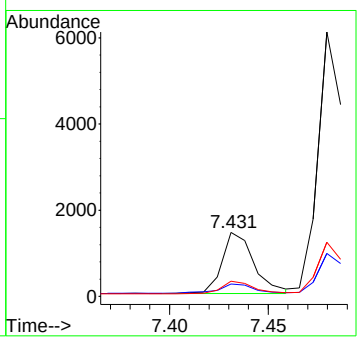


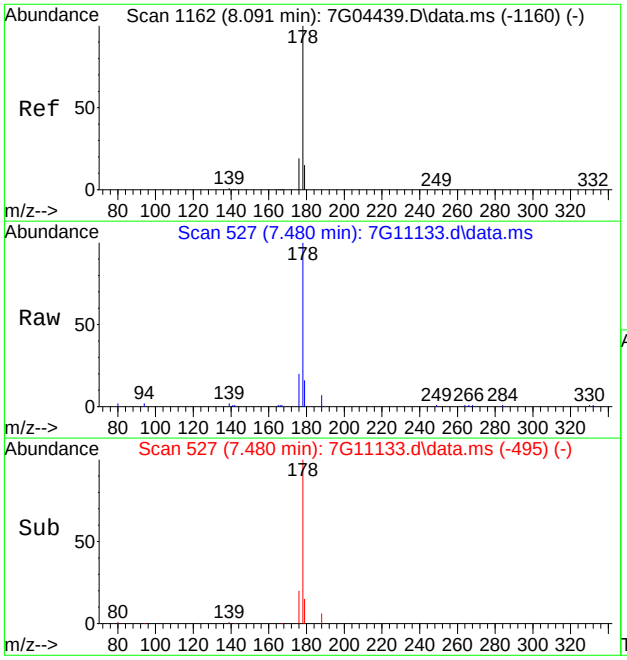


#13
Phenanthrene
Concen: 0.14 ppm
RT: 7.431 min Scan# 520
Delta R.T. 0.014 min
Lab File: 7G11133.d
Acq: 11 Aug 2020 9:39 am

Tgt Ion:178 Resp: 1592

Ion	Ratio	Lower	Upper
178	100		
179	15.5	0.0	45.7
176	20.6	0.0	48.0

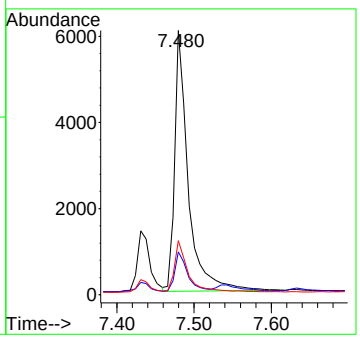


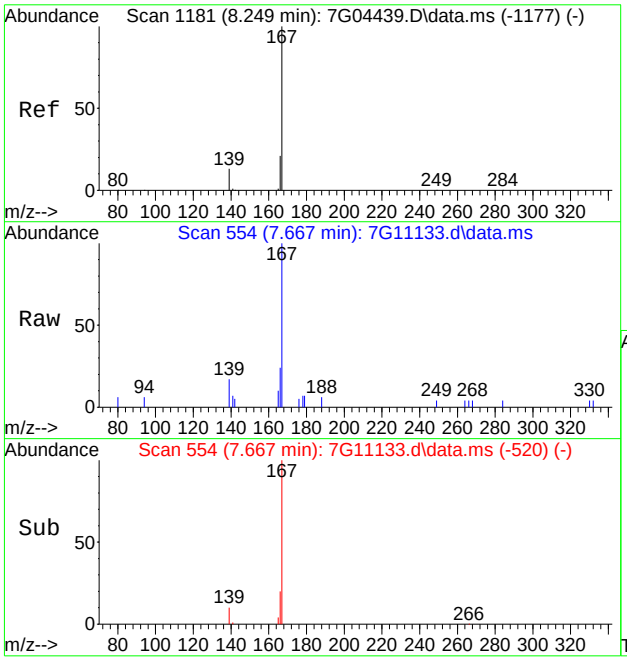


#14
Anthracene
Concen: 0.65 ppm
RT: 7.480 min Scan# 527
Delta R.T. 0.021 min
Lab File: 7G11133.d
Acq: 11 Aug 2020 9:39 am

Tgt Ion:178 Resp: 7402

Ion	Ratio	Lower	Upper
178	100		
179	15.0	0.0	45.1
176	19.6	0.0	48.8

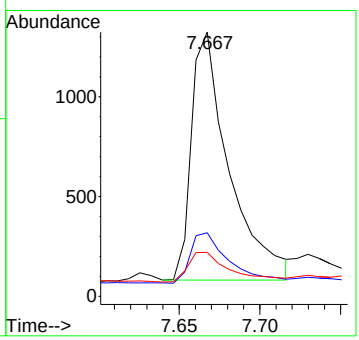


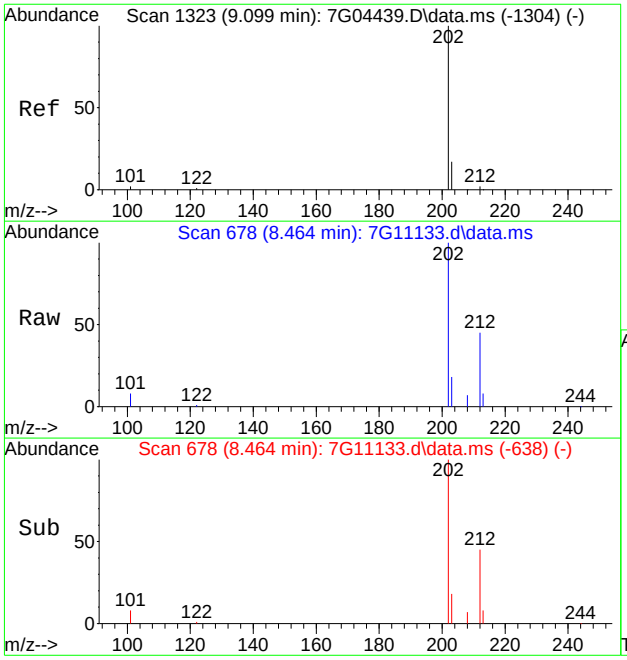


#15
Carbazole
Concen: 0.10 ppm
RT: 7.667 min Scan# 554
Delta R.T. 0.035 min
Lab File: 7G11133.d
Acq: 11 Aug 2020 9:39 am

Tgt Ion:167 Resp: 2021

Ion	Ratio	Lower	Upper
167	100		
166	20.4	1.2	41.2
139	11.7	0.0	32.8

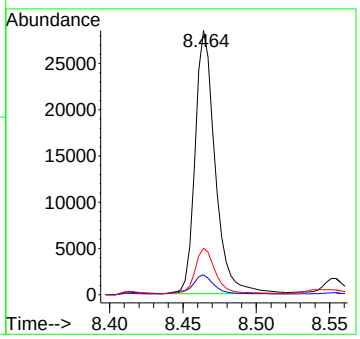


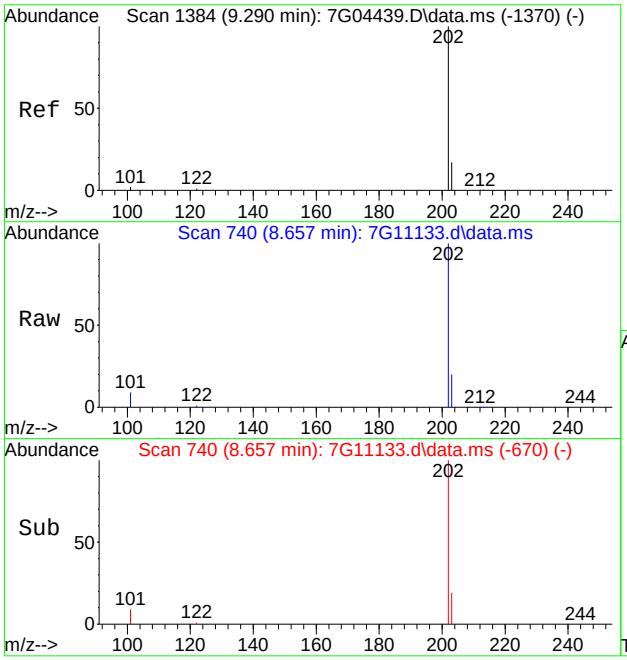


#16
Fluoranthene
Concen: 1.27 ppm
RT: 8.464 min Scan# 678
Delta R.T. 0.015 min
Lab File: 7G11133.d
Acq: 11 Aug 2020 9:39 am

Tgt Ion:202 Resp: 27006

Ion	Ratio	Lower	Upper
202	100		
101	7.2	0.0	32.2
203	17.2	0.0	47.2

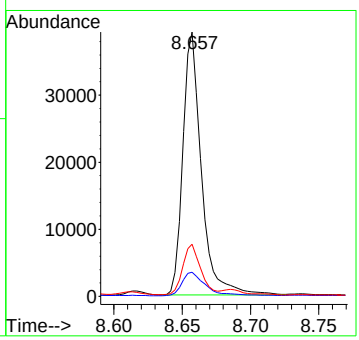


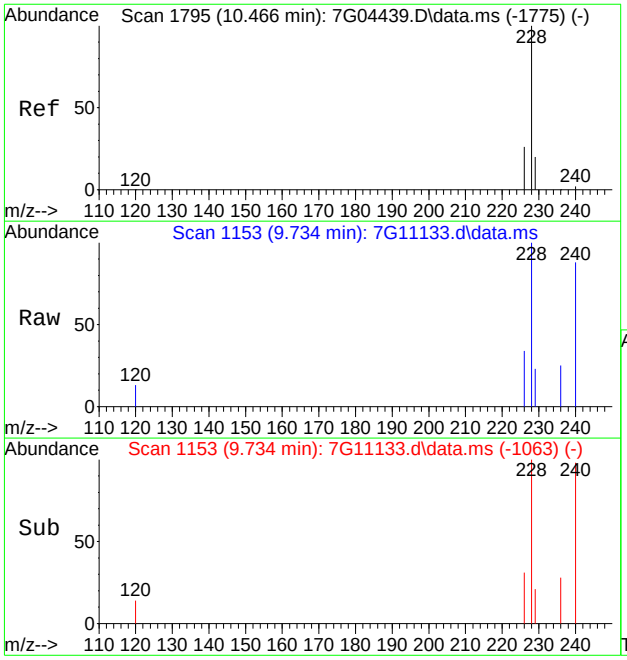


#19
Pyrene
Concen: 1.54 ppm
RT: 8.657 min Scan# 740
Delta R.T. 0.019 min
Lab File: 7G11133.d
Acq: 11 Aug 2020 9:39 am

Tgt Ion:202 Resp: 37215

Ion	Ratio	Lower	Upper
202	100		
101	8.8	0.0	32.4
203	19.2	0.0	47.4

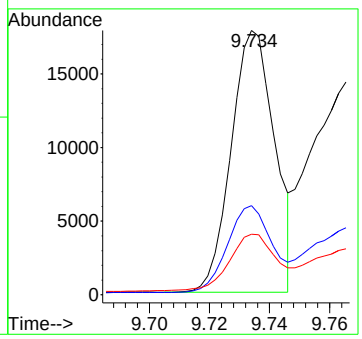


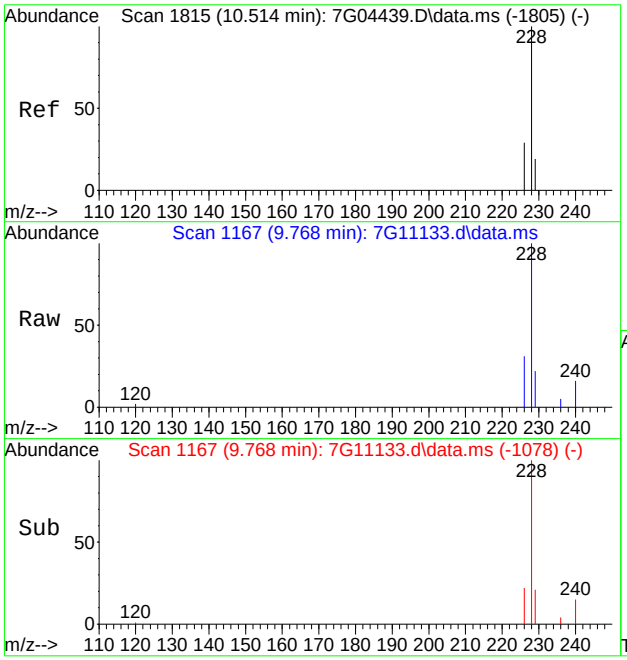


#20
Benzo[a]anthracene
Concen: 0.94 ppm
RT: 9.734 min Scan# 1153
Delta R.T. 0.017 min
Lab File: 7G11133.d
Acq: 11 Aug 2020 9:39 am

Tgt Ion:228 Resp: 17896

Ion	Ratio	Lower	Upper
228	100		
226	33.8	0.0	56.1
229	21.1	0.0	49.5

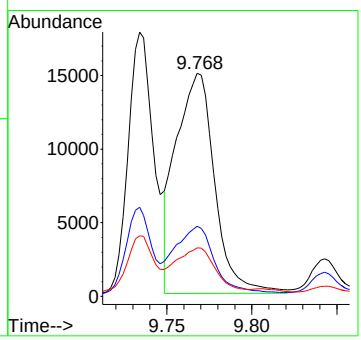


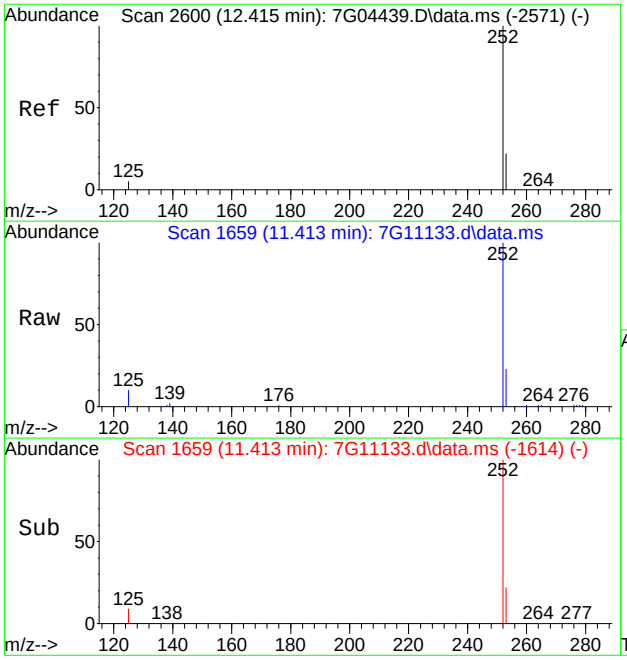


#21
Chrysene
Concen: 1.12 ppm
RT: 9.768 min Scan# 1167
Delta R.T. 0.014 min
Lab File: 7G11133.d
Acq: 11 Aug 2020 9:39 am

Tgt Ion:228 Resp: 23720

Ion	Ratio	Lower	Upper
228	100		
226	30.3	0.0	58.9
229	19.5	0.0	49.5

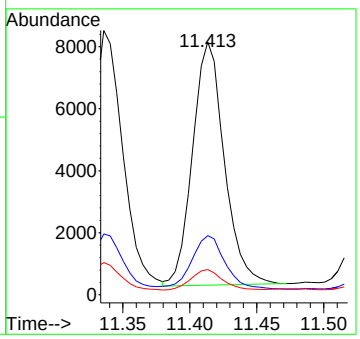


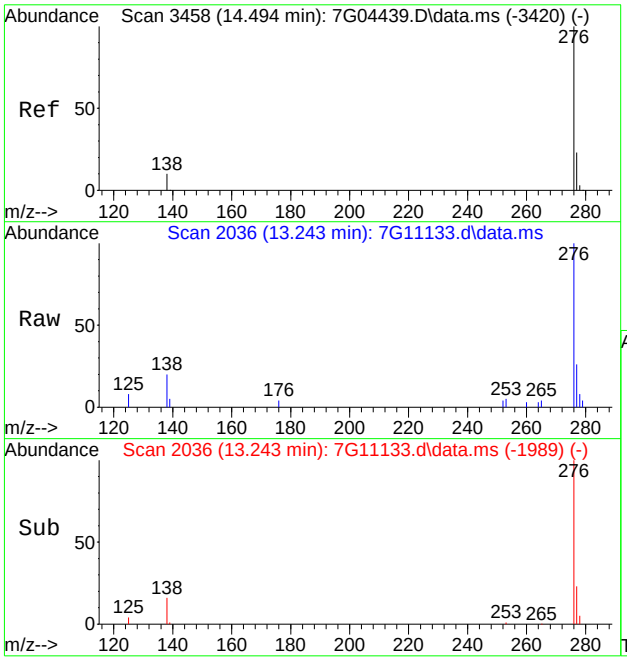


#25
Benzo[a]pyrene
Concen: 0.69 ppm
RT: 11.413 min Scan# 1659
Delta R.T. 0.019 min
Lab File: 7G11133.d
Acq: 11 Aug 2020 9:39 am

Tgt Ion:252 Resp: 12974

Ion	Ratio	Lower	Upper
252	100		
253	21.7	0.0	51.6
125	8.3	0.0	34.8

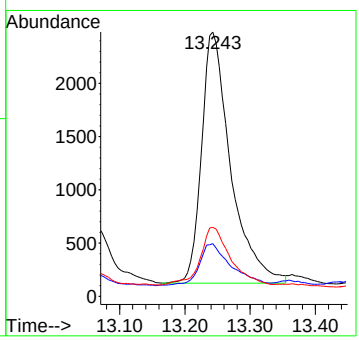


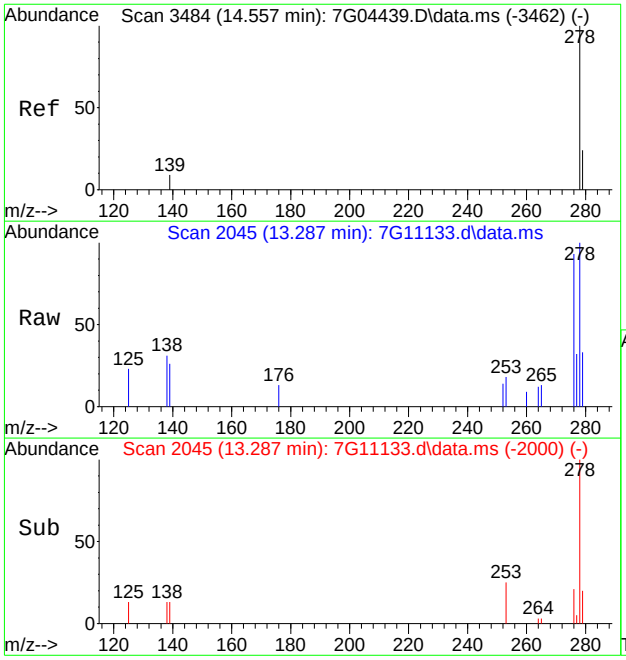


#26
Indeno[1,2,3-cd]pyrene
Concen: 0.60 ppm
RT: 13.243 min Scan# 2036
Delta R.T. 0.029 min
Lab File: 7G11133.d
Acq: 11 Aug 2020 9:39 am

Tgt Ion:276 Resp: 7330

Ion	Ratio	Lower	Upper
276	100		
138	15.9	0.0	39.6
277	23.1	0.0	53.1

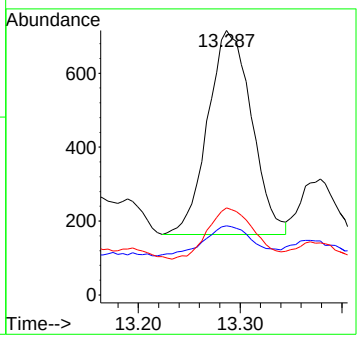


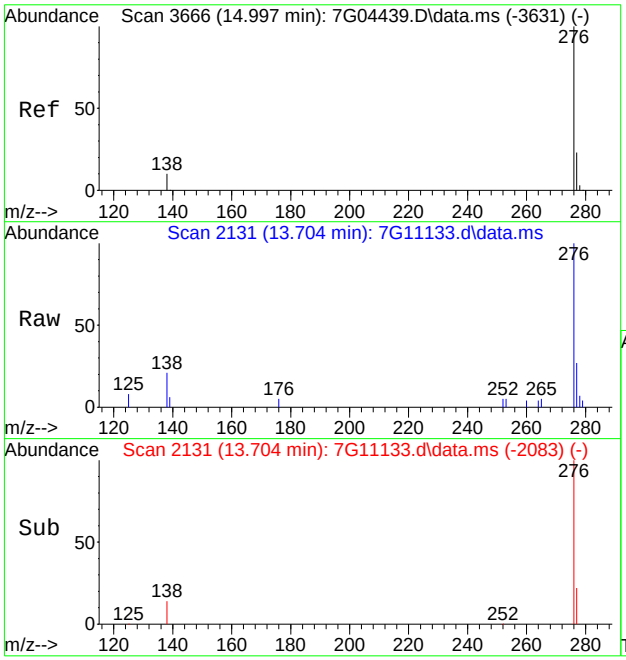


#27
Dibenz[a,h]anthracene
Concen: 0.12 ppm
RT: 13.287 min Scan# 2045
Delta R.T. 0.019 min
Lab File: 7G11133.d
Acq: 11 Aug 2020 9:39 am

Tgt Ion:278 Resp: 1656

Ion	Ratio	Lower	Upper
278	100		
139	12.6	0.0	38.8
279	23.3	0.0	53.6

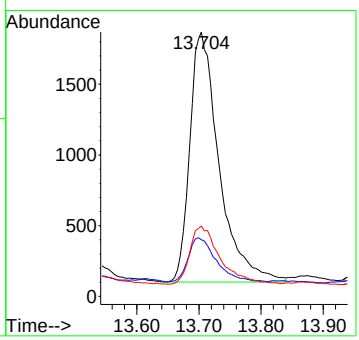




#28
Benzo[g,h,i]perylene
Concen: 0.39 ppm
RT: 13.704 min Scan# 2131
Delta R.T. 0.034 min
Lab File: 7G11133.d
Acq: 11 Aug 2020 9:39 am

Tgt Ion:276 Resp: 5802

Ion	Ratio	Lower	Upper
276	100		
138	16.6	0.0	40.5
277	23.2	0.0	53.2



Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 08/12/20 11:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11134.d
Acq On : 11 Aug 2020 10:03 am
Operator : FOUADS
Sample : fa77581-8 e Inst : MSBNA8
Misc : op81485,S7G483,15.1,,,1,1,soil
ALS Vial : 6 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:29:58 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

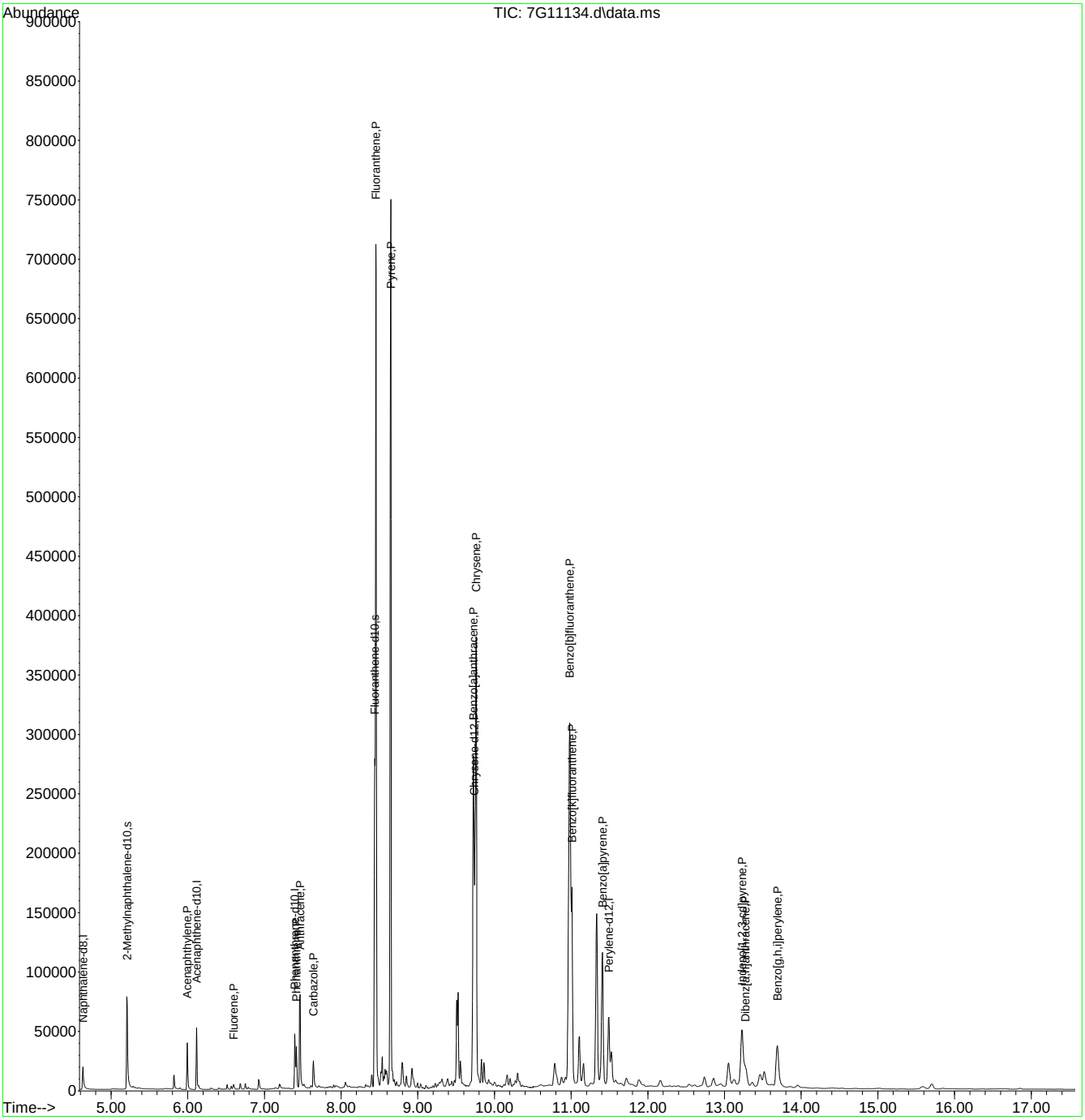
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.634	136	20168	4.00	ppm	0.00
6) Acenaphthene-d10	6.114	164	16497	4.00	ppm	0.00
11) Phenanthrene-d10	7.396	188	32146	4.00	ppm	0.00
18) Chrysene-d12	9.734	240	62432	4.00	ppm	0.00
22) Perylene-d12	11.491	264	59100	4.00	ppm	0.01
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.211	152	35308	11.61	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 116.10%			
17) Fluoranthene-d10	8.439	212	192531	11.43	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 114.30%			
Target Compounds						Qvalue
7) Acenaphthylene	5.993	152	25144	2.65	ppm	99
10) Fluorene	6.597	166	1914	0.29	ppm	93
13) Phenanthrene	7.417	178	21262	2.01	ppm	97
14) Anthracene	7.466	178	63915	5.92	ppm	99
15) Carbazole	7.640	167	19323	1.01	ppm	96
16) Fluoranthene	8.455	202	453984	21.59	ppm	98
19) Pyrene	8.648	202	482973	19.06	ppm	96
20) Benzo[a]anthracene	9.724	228	171030	8.64	ppm	87
21) Chrysene	9.761	228	311021	14.39	ppm	98
23) Benzo[b]fluoranthene	10.981	252	458873	22.88	ppm	98
24) Benzo[k]fluoranthene	11.011	252	128390m	5.98	ppm	
25) Benzo[a]pyrene	11.409	252	131142	6.71	ppm	98
26) Indeno[1,2,3-cd]pyrene	13.228	276	86594	6.79	ppm	94
27) Dibenz[a,h]anthracene	13.272	278	20130	1.42	ppm	97
28) Benzo[g,h,i]perylene	13.689	276	62858	4.09	ppm	94

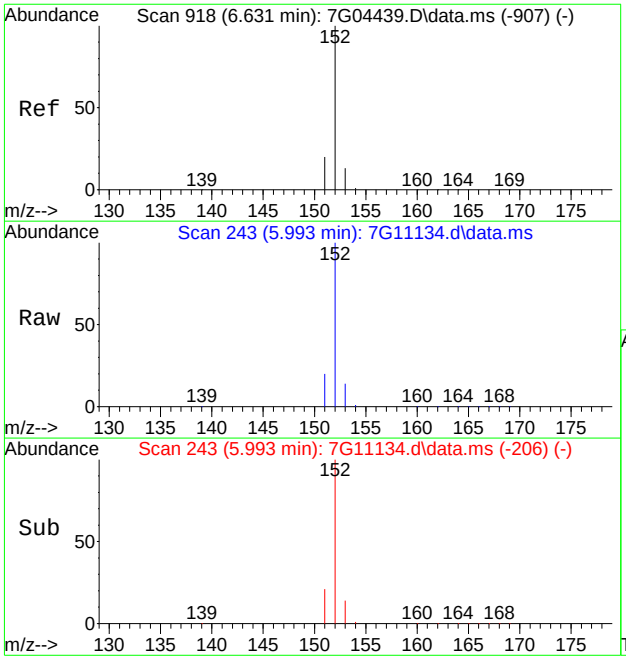
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11134.d
Acq On : 11 Aug 2020 10:03 am
Operator : FOUADS
Sample : fa77581-8 e Inst : MSBNA8
Misc : op81485,S7G483,15.1,,,1,1,soil
ALS Vial : 6 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:29:58 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

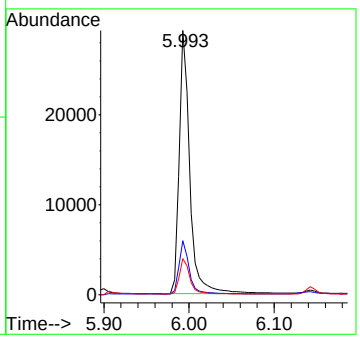


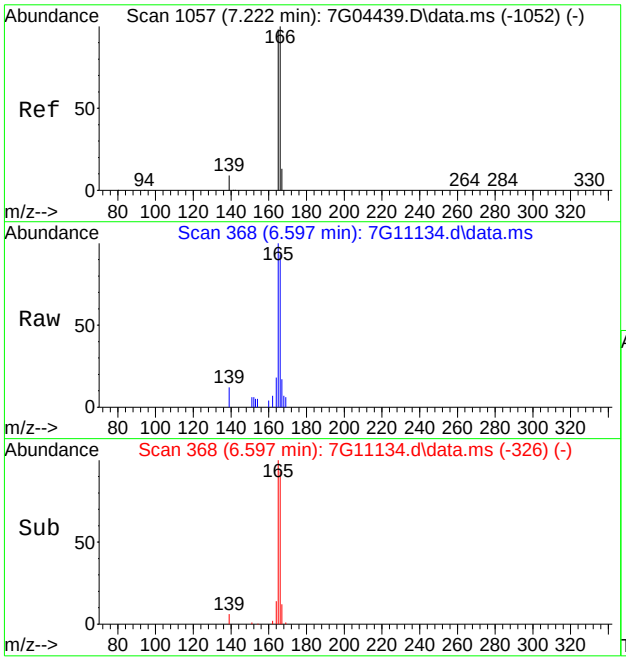


#7
Acenaphthylene
Concen: 2.65 ppm
RT: 5.993 min Scan# 243
Delta R.T. -0.000 min
Lab File: 7G11134.d
Acq: 11 Aug 2020 10:03 am

Tgt Ion:152 Resp: 25144

Ion	Ratio	Lower	Upper
152	100		
151	20.2	0.0	49.8
153	13.4	0.0	42.8

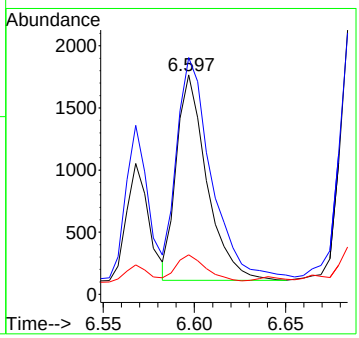


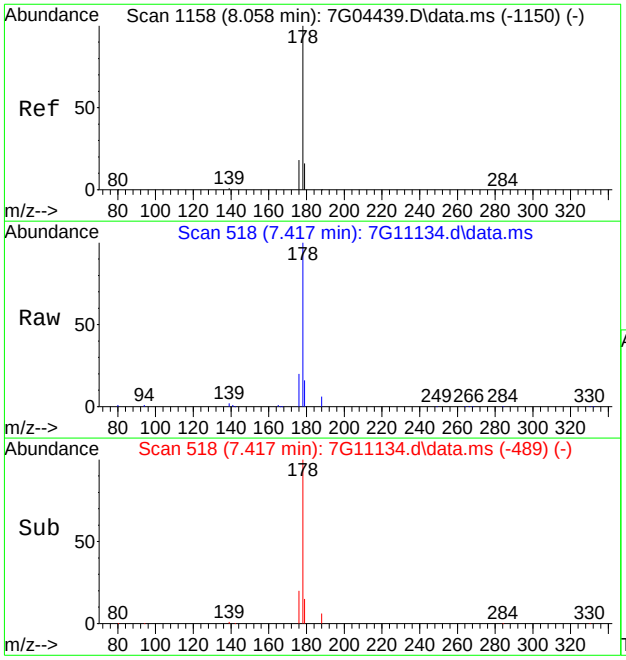


#10
Fluorene
Concen: 0.29 ppm
RT: 6.597 min Scan# 368
Delta R.T. 0.005 min
Lab File: 7G11134.d
Acq: 11 Aug 2020 10:03 am

Tgt Ion:166 Resp: 1914

Ion	Ratio	Lower	Upper
166	100		
165	105.8	68.2	128.2
167	12.1	0.0	42.9

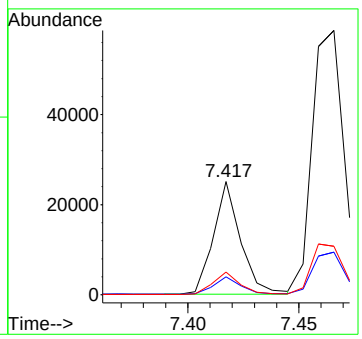


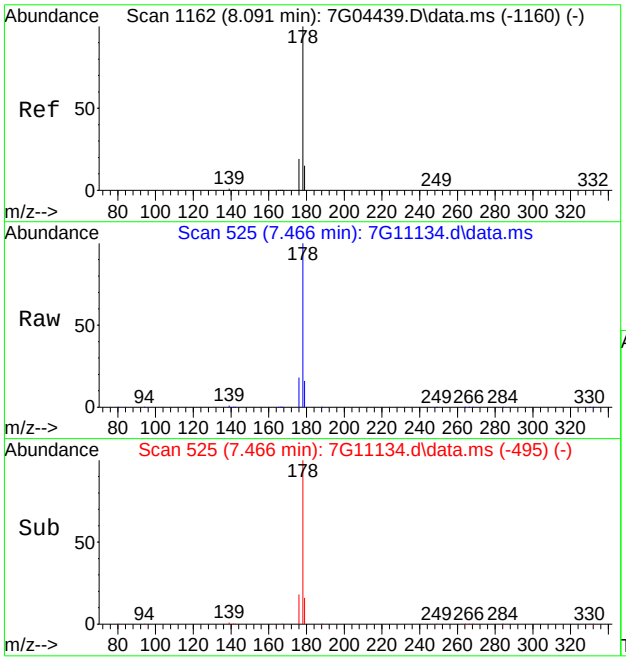


#13
Phenanthrene
Concen: 2.01 ppm
RT: 7.417 min Scan# 518
Delta R.T. -0.000 min
Lab File: 7G11134.d
Acq: 11 Aug 2020 10:03 am

Tgt Ion:178 Resp: 21262

Ion	Ratio	Lower	Upper
178	100		
179	15.3	0.0	45.7
176	19.8	0.0	48.0

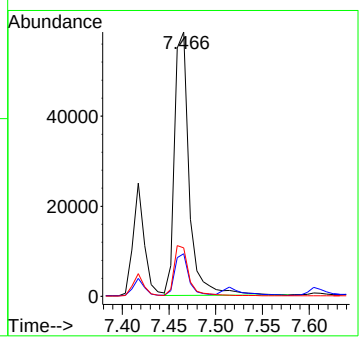


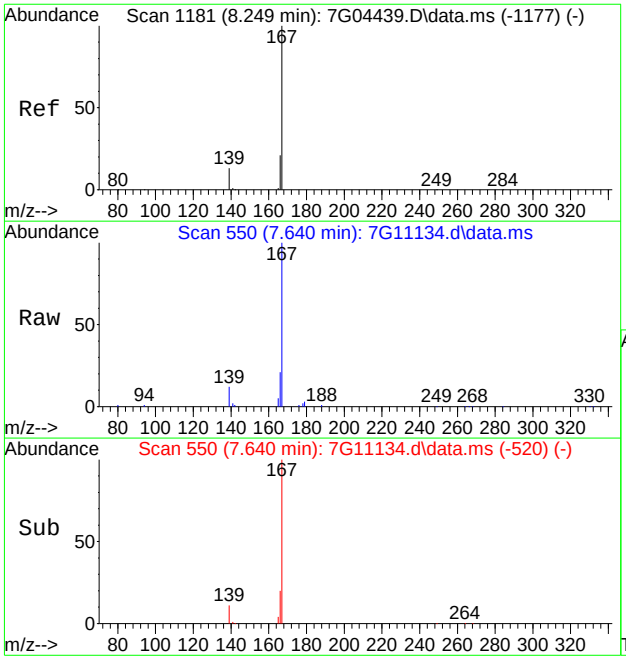


#14
Anthracene
Concen: 5.92 ppm
RT: 7.466 min Scan# 525
Delta R.T. 0.007 min
Lab File: 7G11134.d
Acq: 11 Aug 2020 10:03 am

Tgt Ion:178 Resp: 63915

Ion	Ratio	Lower	Upper
178	100		
179	15.9	0.0	45.1
176	18.3	0.0	48.8

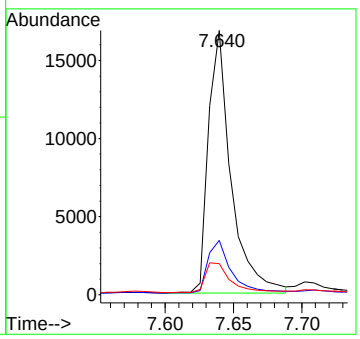


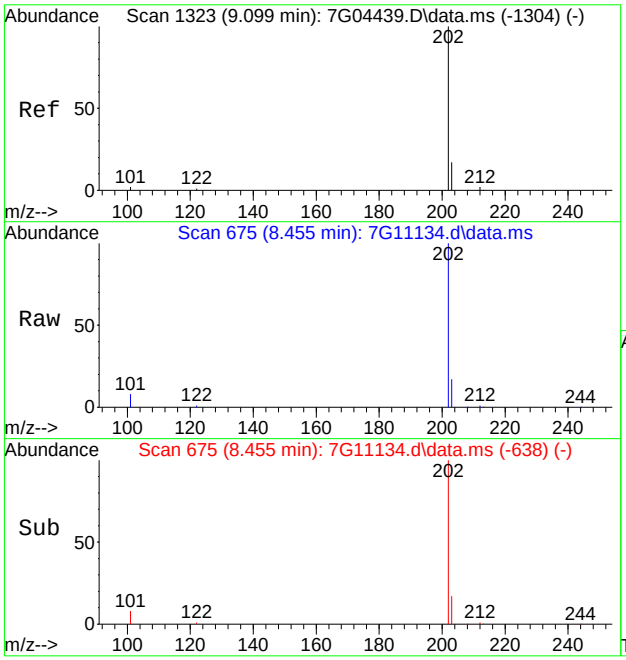


#15
Carbazole
Concen: 1.01 ppm
RT: 7.640 min Scan# 550
Delta R.T. 0.007 min
Lab File: 7G11134.d
Acq: 11 Aug 2020 10:03 am

Tgt Ion:167 Resp: 19323

Ion	Ratio	Lower	Upper
167	100		
166	19.9	1.2	41.2
139	10.9	0.0	32.8

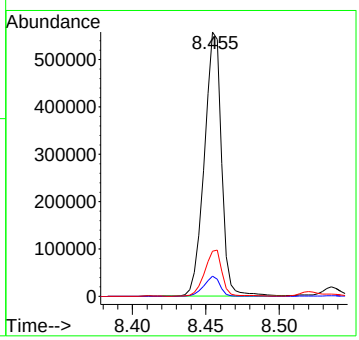


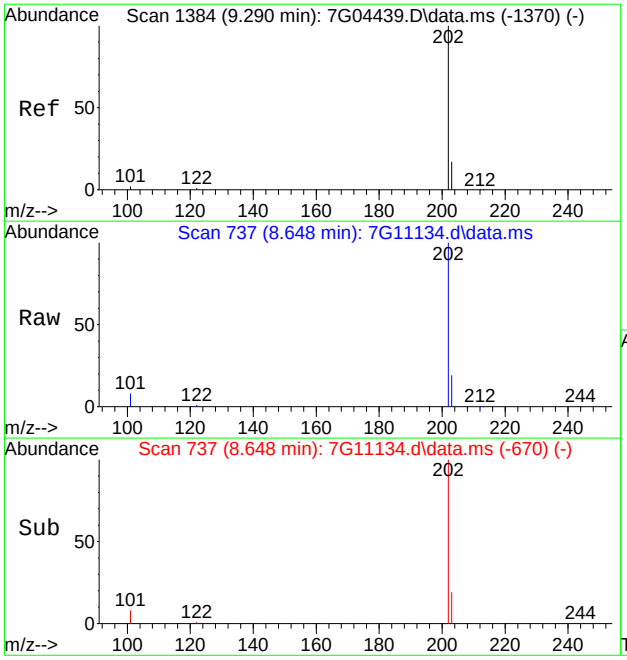


#16
Fluoranthene
Concen: 21.59 ppm
RT: 8.455 min Scan# 675
Delta R.T. 0.006 min
Lab File: 7G11134.d
Acq: 11 Aug 2020 10:03 am

Tgt Ion:202 Resp: 453984

Ion	Ratio	Lower	Upper
202	100		
101	7.6	0.0	32.2
203	17.1	0.0	47.2

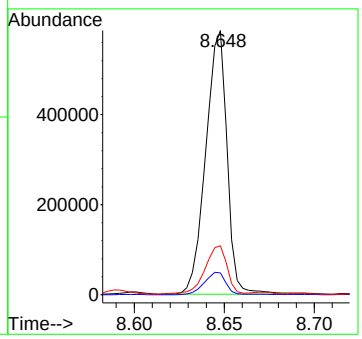


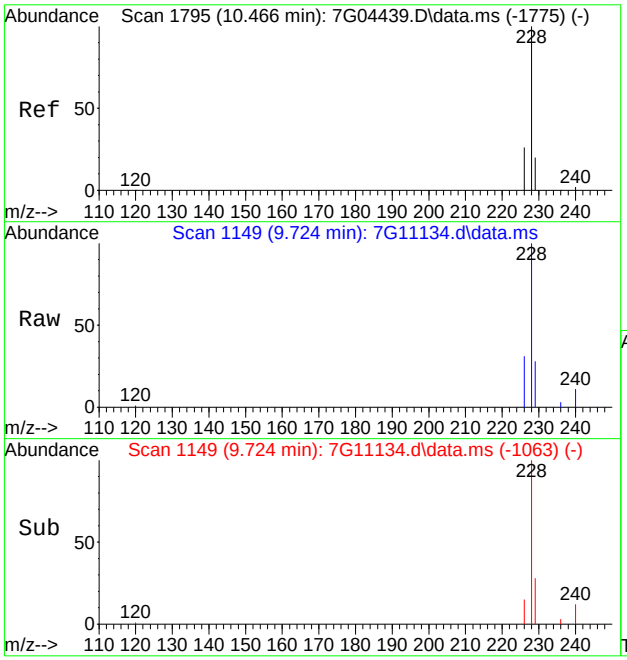


#19
Pyrene
Concen: 19.06 ppm
RT: 8.648 min Scan# 737
Delta R.T. 0.009 min
Lab File: 7G11134.d
Acq: 11 Aug 2020 10:03 am

Tgt Ion:202 Resp: 482973

Ion	Ratio	Lower	Upper
202	100		
101	8.3	0.0	32.4
203	18.3	0.0	47.4

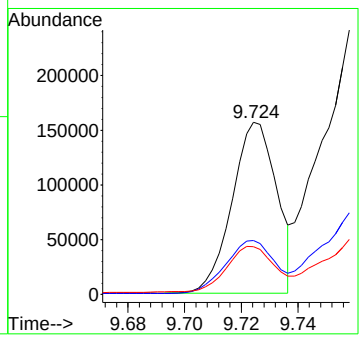


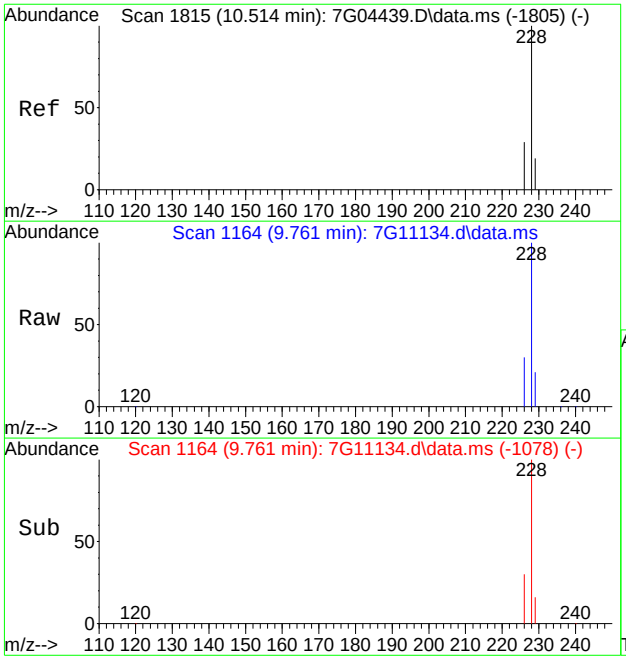


#20
Benzo[a]anthracene
Concen: 8.64 ppm
RT: 9.724 min Scan# 1149
Delta R.T. 0.007 min
Lab File: 7G11134.d
Acq: 11 Aug 2020 10:03 am

Tgt Ion:228 Resp: 171030

Ion	Ratio	Lower	Upper
228	100		
226	31.3	0.0	56.1
229	27.2	0.0	49.5

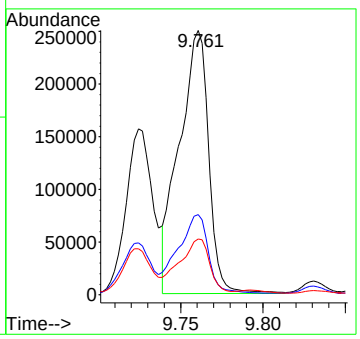


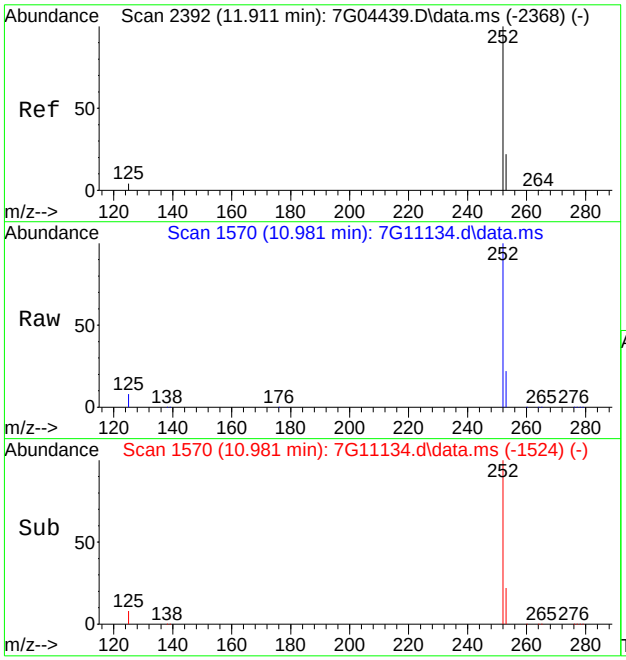


#21
Chrysene
Concen: 14.39 ppm
RT: 9.761 min Scan# 1164
Delta R.T. 0.007 min
Lab File: 7G11134.d
Acq: 11 Aug 2020 10:03 am

Tgt Ion:228 Resp: 311021

Ion	Ratio	Lower	Upper
228	100		
226	29.8	0.0	58.9
229	20.2	0.0	49.5

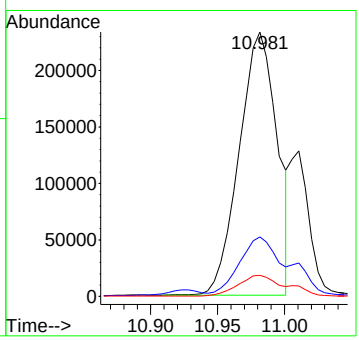


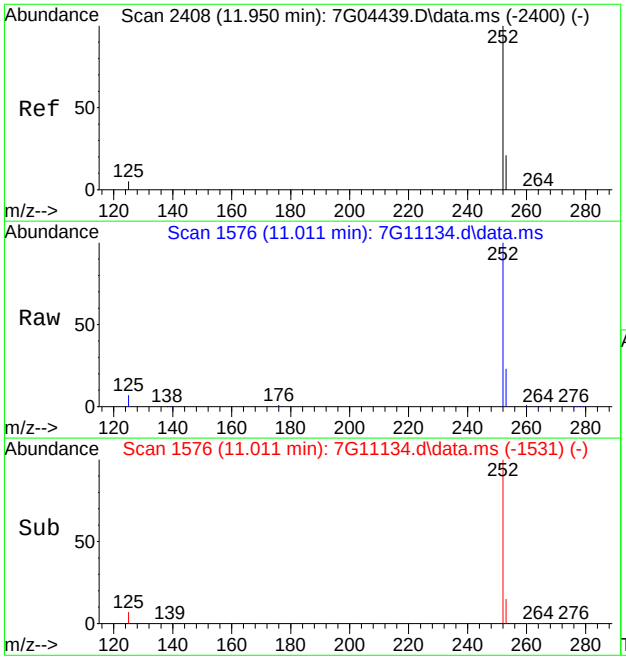


#23
Benzo[b]fluoranthene
Concen: 22.88 ppm
RT: 10.981 min Scan# 1570
Delta R.T. 0.024 min
Lab File: 7G11134.d
Acq: 11 Aug 2020 10:03 am

Tgt Ion:252 Resp: 458873

Ion	Ratio	Lower	Upper
252	100		
253	21.6	0.0	51.7
125	8.0	0.0	34.5

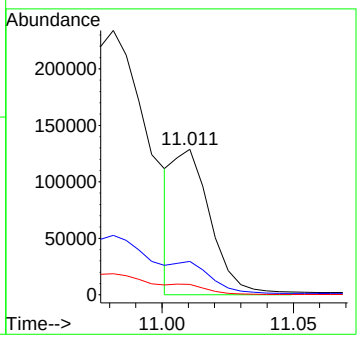


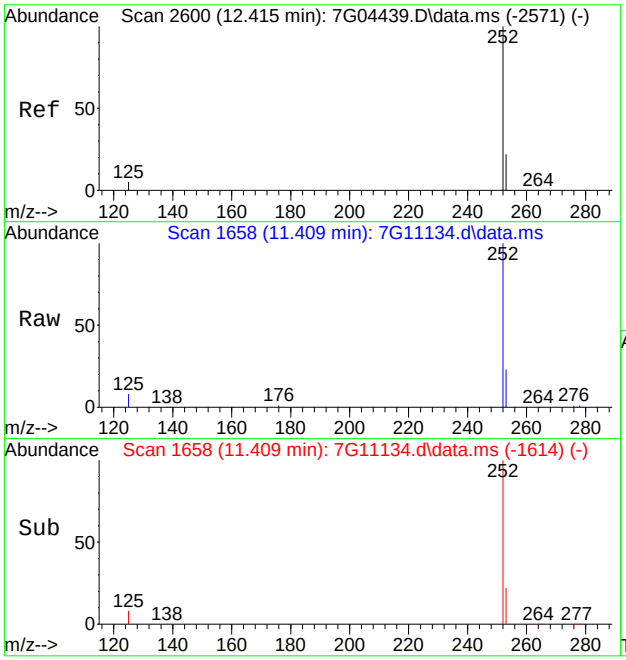


#24
Benzo[k]fluoranthene
Concen: 5.98 ppm m
RT: 11.011 min Scan# 1576
Delta R.T. 0.019 min
Lab File: 7G11134.d
Acq: 11 Aug 2020 10:03 am

Tgt Ion:252 Resp: 128390

Ion	Ratio	Lower	Upper
252	100		
253	22.9	0.0	51.5
125	7.1	0.0	34.8

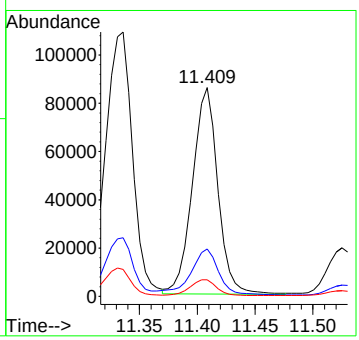


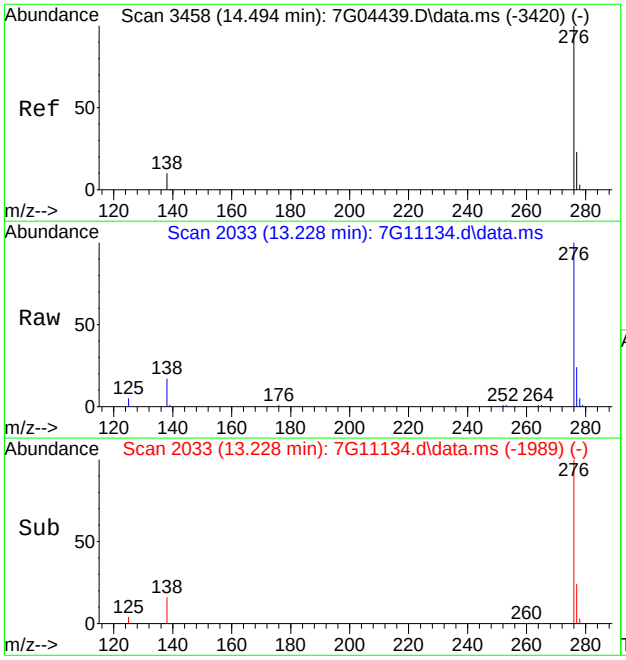


#25
Benzo[a]pyrene
Concen: 6.71 ppm
RT: 11.409 min Scan# 1658
Delta R.T. 0.014 min
Lab File: 7G11134.d
Acq: 11 Aug 2020 10:03 am

Tgt Ion:252 Resp: 131142

Ion	Ratio	Lower	Upper
252	100		
253	21.5	0.0	51.6
125	7.7	0.0	34.8

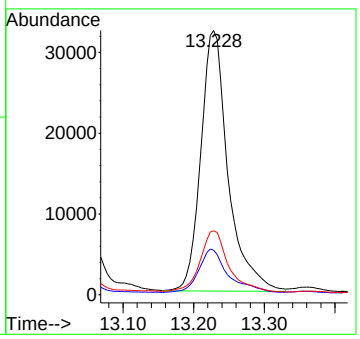


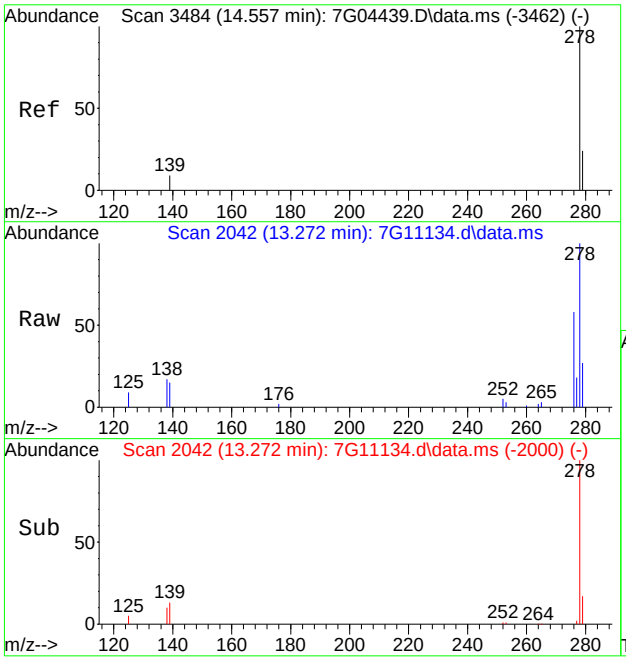


#26
Indeno[1,2,3-cd]pyrene
Concen: 6.79 ppm
RT: 13.228 min Scan# 2033
Delta R.T. 0.014 min
Lab File: 7G11134.d
Acq: 11 Aug 2020 10:03 am

Tgt Ion:276 Resp: 86594

Ion	Ratio	Lower	Upper
276	100		
138	16.2	0.0	39.6
277	23.5	0.0	53.1

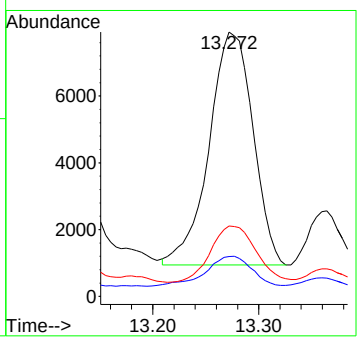


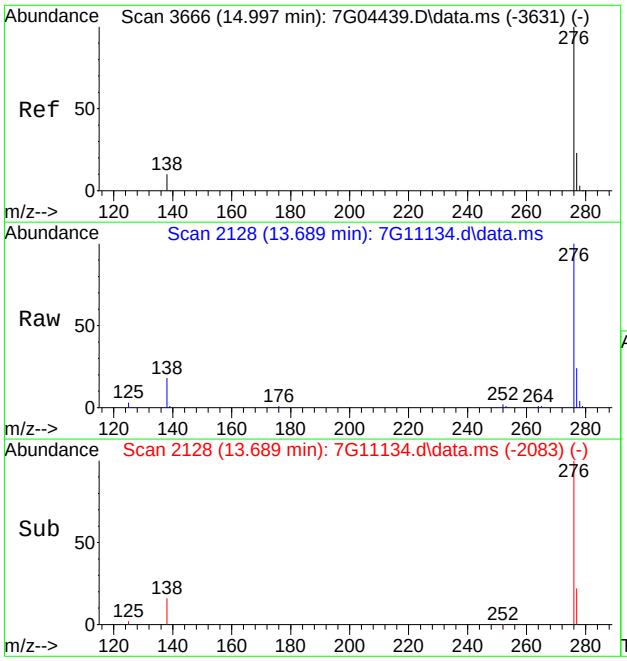


#27
Dibenz[a,h]anthracene
Concen: 1.42 ppm
RT: 13.272 min Scan# 2042
Delta R.T. 0.005 min
Lab File: 7G11134.d
Acq: 11 Aug 2020 10:03 am

Tgt Ion:278 Resp: 20130

Ion	Ratio	Lower	Upper
278	100		
139	12.4	0.0	38.8
279	23.6	0.0	53.6

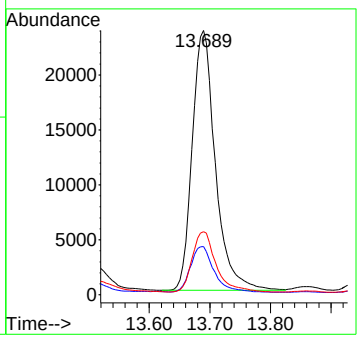




#28
Benzo[g,h,i]perylene
Concen: 4.09 ppm
RT: 13.689 min Scan# 2128
Delta R.T. 0.019 min
Lab File: 7G11134.d
Acq: 11 Aug 2020 10:03 am

Tgt Ion:276 Resp: 62858

Ion	Ratio	Lower	Upper
276	100		
138	17.5	0.0	40.5
277	23.2	0.0	53.2



Manual Integration Approval Summary

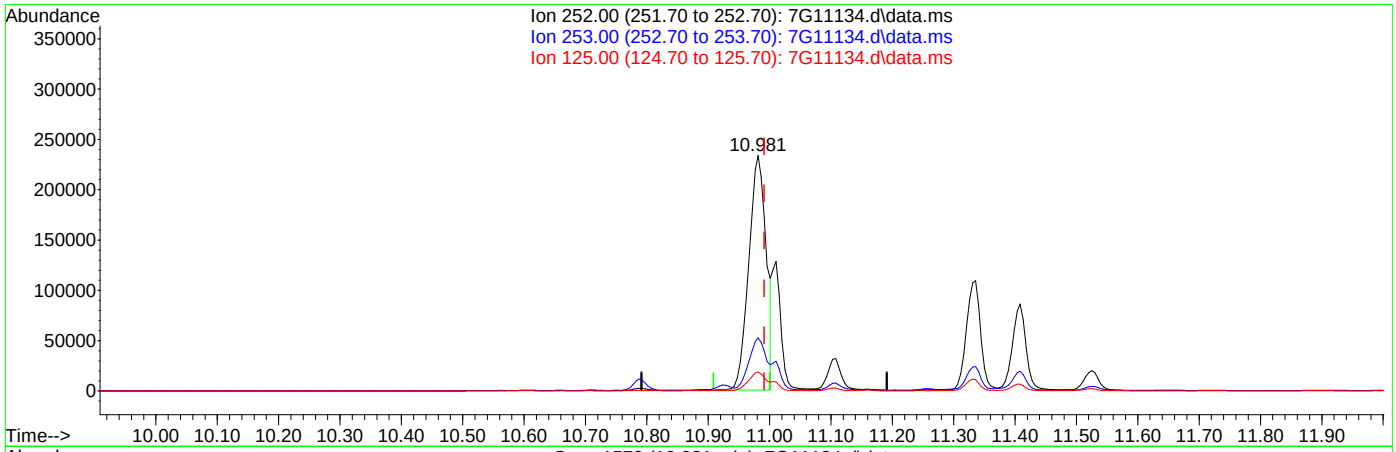
Sample Number: FA77581-8
Lab FileID: 7G11134.D
Injection Time: 08/11/20 10:03
Method: SW846 8270E BY SIM
Analyst approved: 08/12/20 09:33 Fouad Sekkar
Supervisor approved: 08/12/20 11:43 Nicole McCampbell

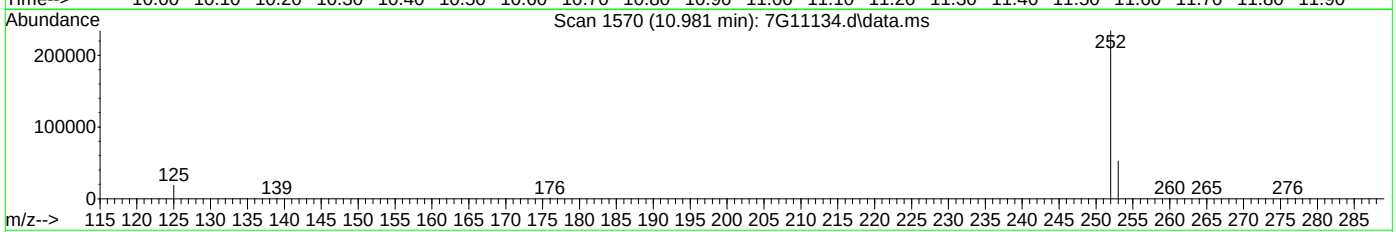
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(k)fluoranthene	207-08-9		11.01	Missed peak

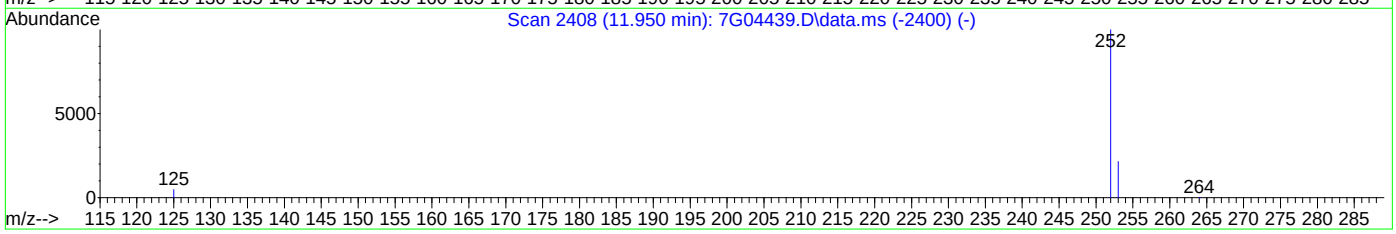
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11134.d
Acq On : 11 Aug 2020 10:03 am
Operator : FOUADS
Sample : fa77581-8 e Inst : MSBNA8
Misc : op81485,S7G483,15.1,,,1,1,soil
ALS Vial : 6 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:26:15 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11134.d\data.ms

(24) Benzo[k]fluoranthene (P)

10.981min (-0.010) 20.48ppm

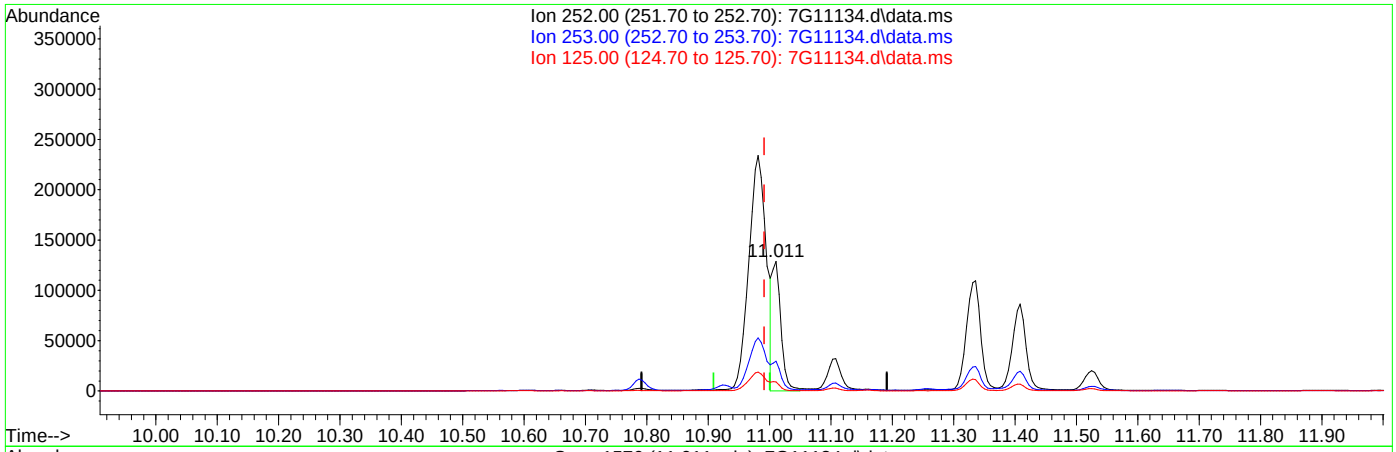
response 458873

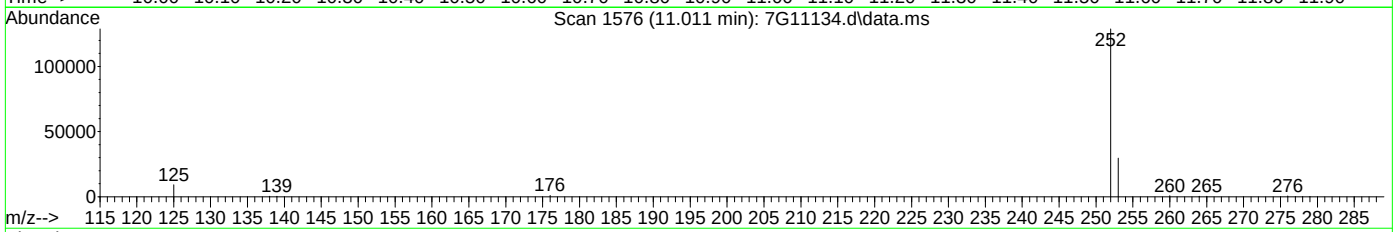
Ion	Exp%	Act%
252.00	100	100
253.00	21.50	21.61
125.00	4.80	7.97
0.00	0.00	0.00

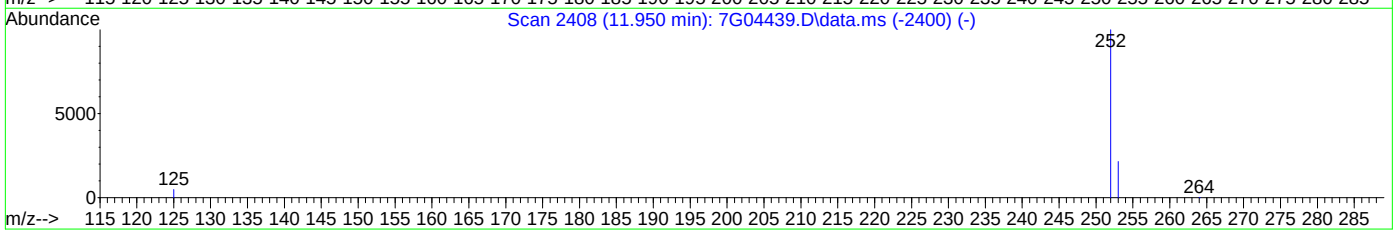
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11134.d
Acq On : 11 Aug 2020 10:03 am
Operator : FOUADS
Sample : fa77581-8 e Inst : MSBNA8
Misc : op81485,S7G483,15.1,,,1,1,soil
ALS Vial : 6 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:26:15 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11134.d\data.ms

(24) Benzo[k]fluoranthene (P)

11.011min (+0.019) 5.98ppm m

response 128390

Ion	Exp%	Act%
252.00	100	100
253.00	21.50	22.92
125.00	4.80	7.10
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 08/12/20 11:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11135.d
Acq On : 11 Aug 2020 10:27 am
Operator : FOUADS
Sample : fa77581-9 e Inst : MSBNA8
Misc : op81485,S7G483,15.3,,,1,1,soil
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:30:51 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

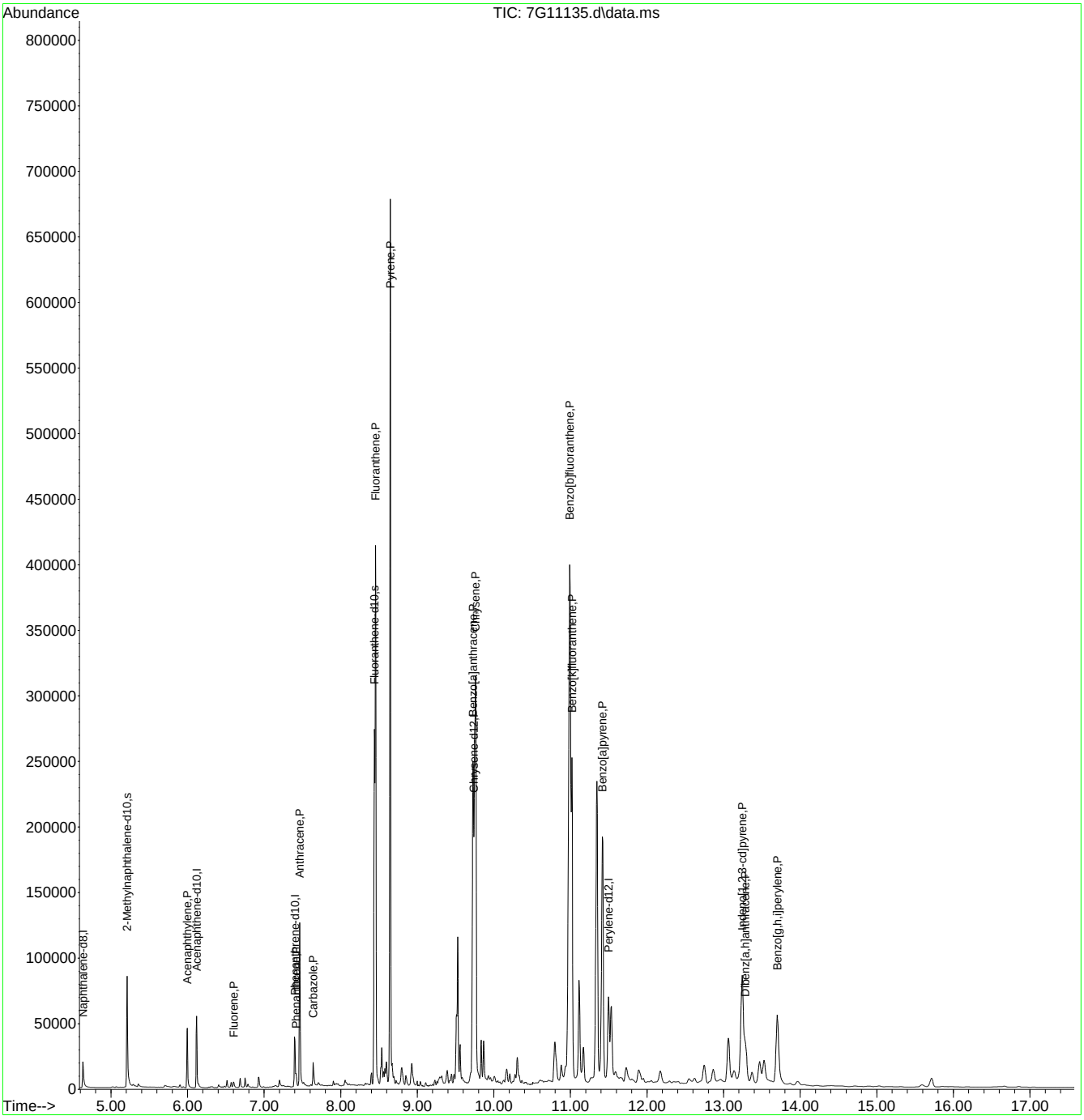
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.634	136	20710	4.00	ppm	0.00
6) Acenaphthene-d10	6.119	164	17089	4.00	ppm	0.00
11) Phenanthrene-d10	7.403	188	33007	4.00	ppm	0.00
18) Chrysene-d12	9.739	240	63976	4.00	ppm	0.01
22) Perylene-d12	11.496	264	62255	4.00	ppm	0.02
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.211	152	33702	10.82	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 108.20%			
17) Fluoranthene-d10	8.439	212	190086	11.00	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 110.00%			
Target Compounds						Qvalue
7) Acenaphthylene	5.998	152	31261	3.18	ppm	98
10) Fluorene	6.602	166	2010	0.29	ppm	76
13) Phenanthrene	7.417	178	5795	0.54	ppm	97
14) Anthracene	7.466	178	80244	7.21	ppm	99
15) Carbazole	7.640	167	13297	0.67	ppm	99
16) Fluoranthene	8.455	202	269135	12.76	ppm	98
19) Pyrene	8.648	202	450339	17.38	ppm	96
20) Benzo[a]anthracene	9.727	228	157059	7.76	ppm	82
21) Chrysene	9.761	228	302829	13.68	ppm	98
23) Benzo[b]fluoranthene	10.991	252	631520	29.89	ppm	98
24) Benzo[k]fluoranthene	11.020	252	184729m	8.12	ppm	
25) Benzo[a]pyrene	11.418	252	232381	11.29	ppm	98
26) Indeno[1,2,3-cd]pyrene	13.243	276	144631	10.76	ppm	95
27) Dibenz[a,h]anthracene	13.282	278	38804	2.60	ppm	97
28) Benzo[g,h,i]perylene	13.699	276	92254	5.69	ppm	93

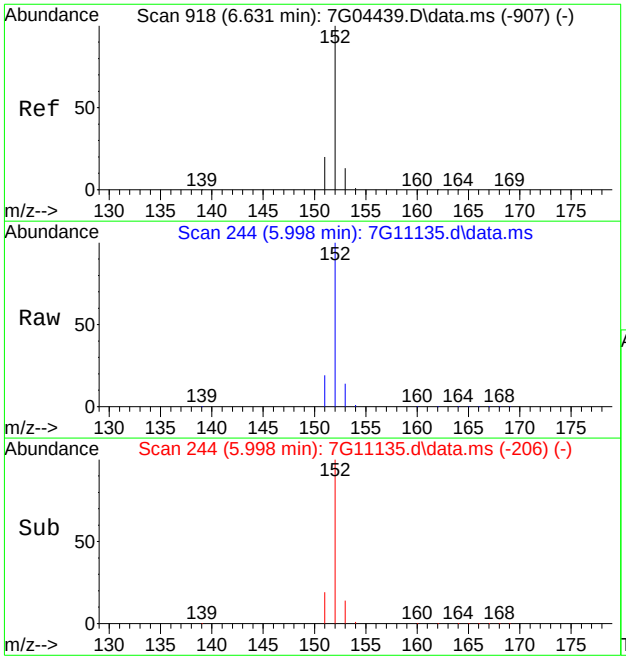
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11135.d
Acq On : 11 Aug 2020 10:27 am
Operator : FOUADS
Sample : fa77581-9 e Inst : MSBNA8
Misc : op81485,S7G483,15.3,,,1,1,soil
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:30:51 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

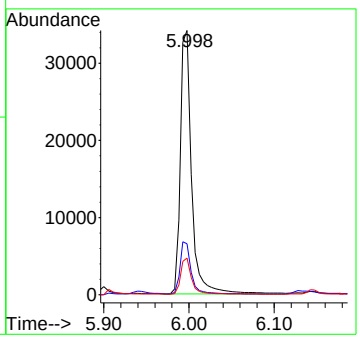


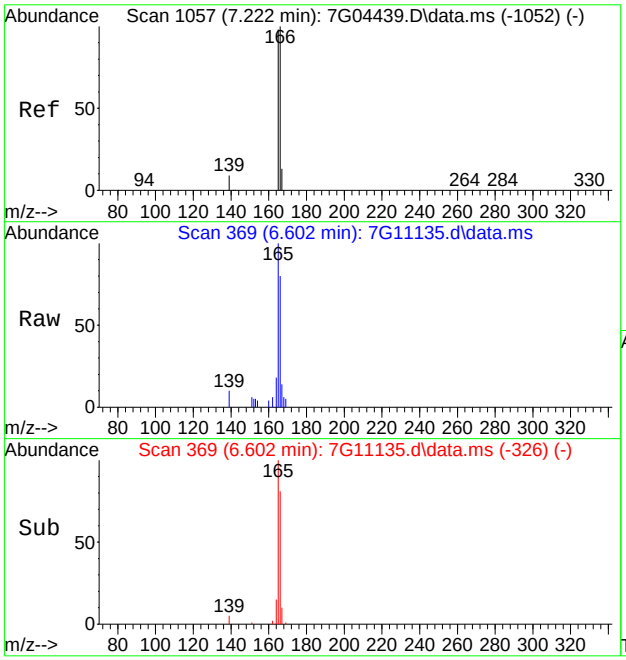


#7
Acenaphthylene
Concen: 3.18 ppm
RT: 5.998 min Scan# 244
Delta R.T. 0.005 min
Lab File: 7G11135.d
Acq: 11 Aug 2020 10:27 am

Tgt Ion:152 Resp: 31261

Ion	Ratio	Lower	Upper
152	100		
151	19.0	0.0	49.8
153	13.7	0.0	42.8

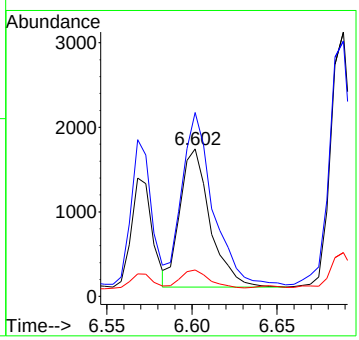


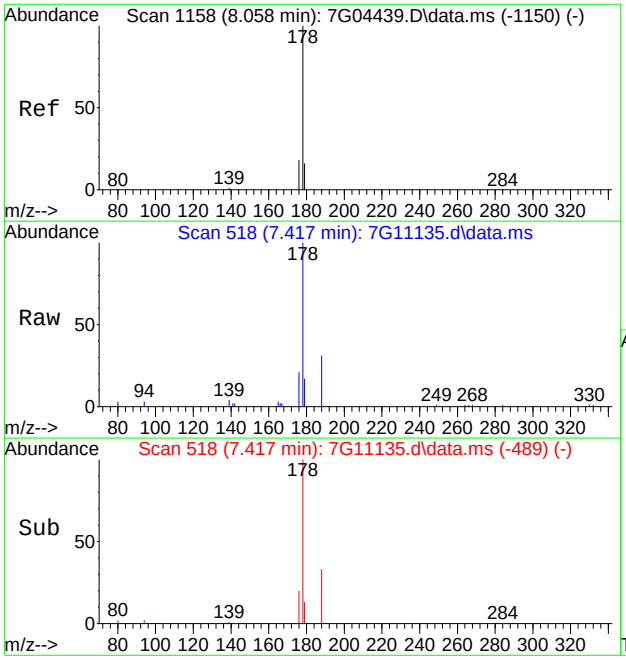


#10
Fluorene
Concen: 0.29 ppm
RT: 6.602 min Scan# 369
Delta R.T. 0.010 min
Lab File: 7G11135.d
Acq: 11 Aug 2020 10:27 am

Tgt Ion:166 Resp: 2010

Ion	Ratio	Lower	Upper
166	100		
165	125.1	68.2	128.2
167	12.8	0.0	42.9

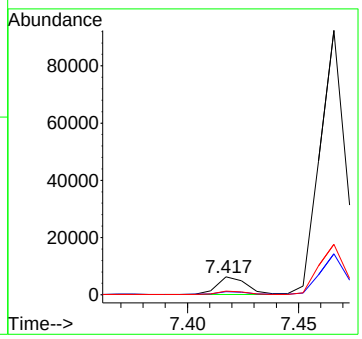


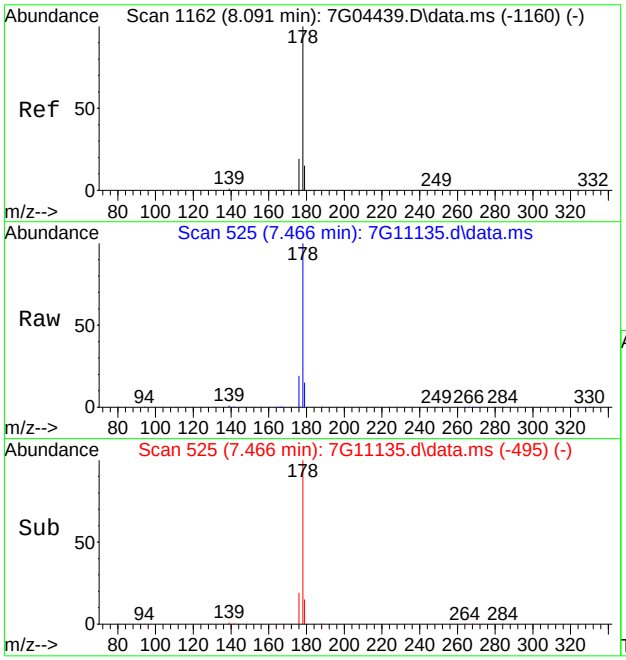


#13
Phenanthrene
Concen: 0.54 ppm
RT: 7.417 min Scan# 518
Delta R.T. 0.000 min
Lab File: 7G11135.d
Acq: 11 Aug 2020 10:27 am

Tgt Ion:178 Resp: 5795

Ion	Ratio	Lower	Upper
178	100		
179	15.3	0.0	45.7
176	20.4	0.0	48.0

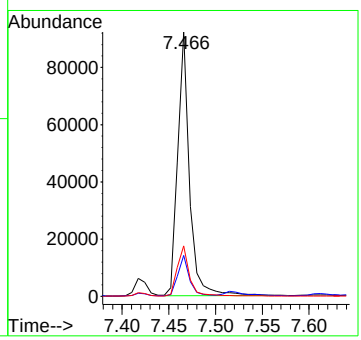


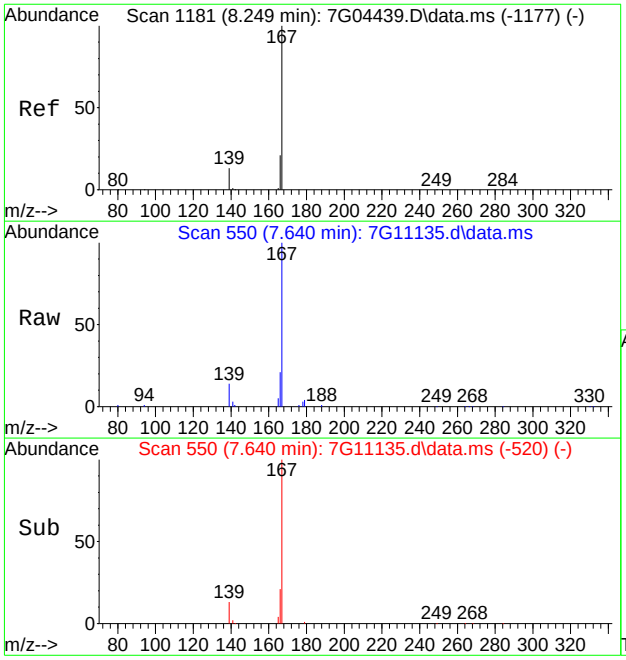


#14
Anthracene
Concen: 7.21 ppm
RT: 7.466 min Scan# 525
Delta R.T. 0.007 min
Lab File: 7G11135.d
Acq: 11 Aug 2020 10:27 am

Tgt Ion:178 Resp: 80244

Ion	Ratio	Lower	Upper
178	100		
179	15.3	0.0	45.1
176	19.1	0.0	48.8

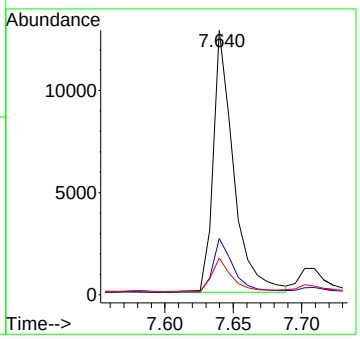


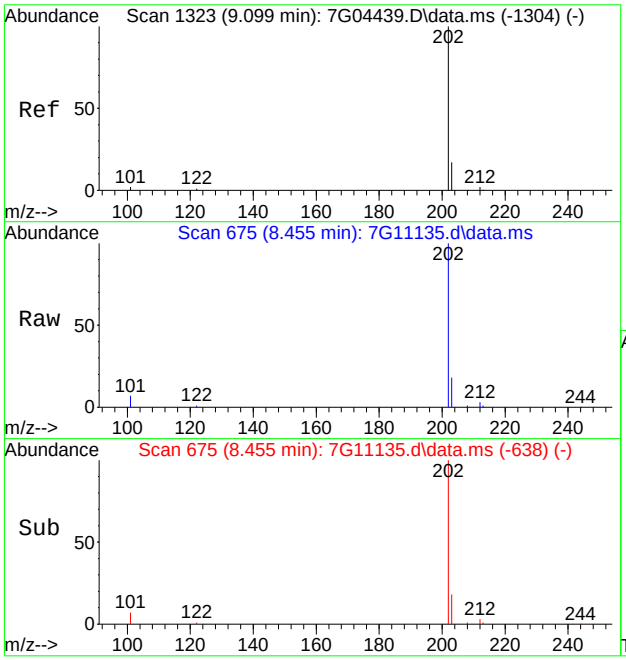


#15
Carbazole
Concen: 0.67 ppm
RT: 7.640 min Scan# 550
Delta R.T. 0.007 min
Lab File: 7G11135.d
Acq: 11 Aug 2020 10:27 am

Tgt Ion:167 Resp: 13297

Ion	Ratio	Lower	Upper
167	100		
166	20.5	1.2	41.2
139	12.6	0.0	32.8

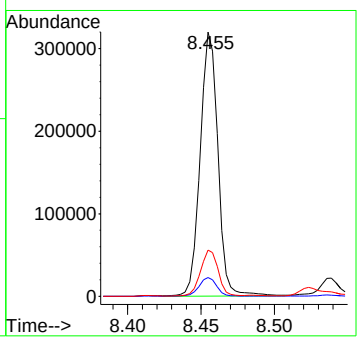


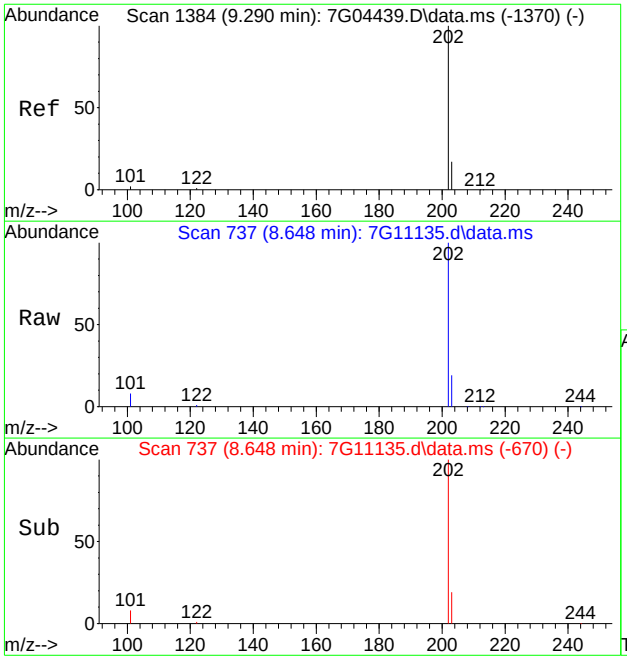


#16
Fluoranthene
Concen: 12.76 ppm
RT: 8.455 min Scan# 675
Delta R.T. 0.006 min
Lab File: 7G11135.d
Acq: 11 Aug 2020 10:27 am

Tgt Ion:202 Resp: 269135

Ion	Ratio	Lower	Upper
202	100		
101	7.1	0.0	32.2
203	17.4	0.0	47.2

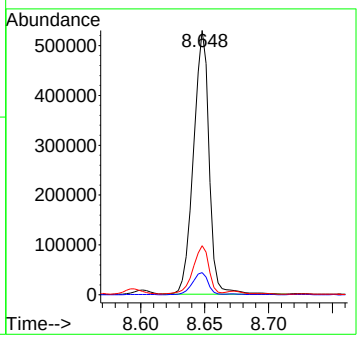


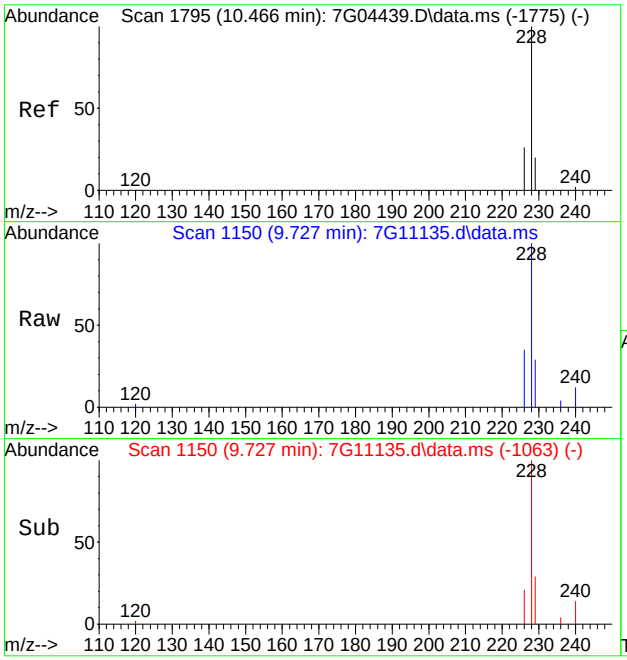


#19
Pyrene
Concen: 17.38 ppm
RT: 8.648 min Scan# 737
Delta R.T. 0.009 min
Lab File: 7G11135.d
Acq: 11 Aug 2020 10:27 am

Tgt Ion:202 Resp: 450339

Ion	Ratio	Lower	Upper
202	100		
101	8.4	0.0	32.4
203	18.4	0.0	47.4

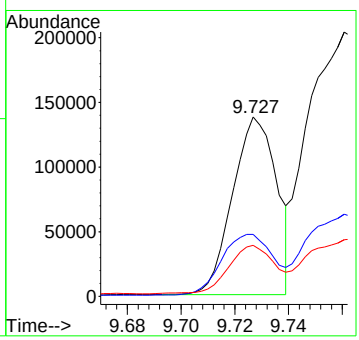


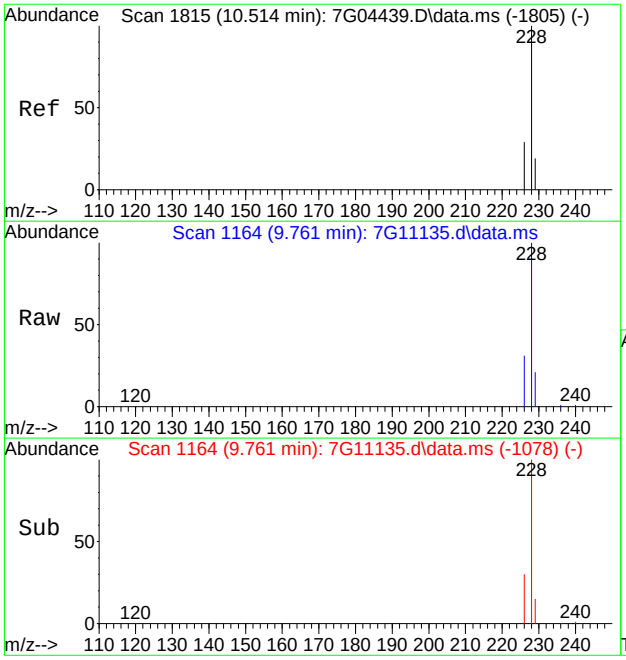


#20
Benzo[a]anthracene
Concen: 7.76 ppm
RT: 9.727 min Scan# 1150
Delta R.T. 0.010 min
Lab File: 7G11135.d
Acq: 11 Aug 2020 10:27 am

Tgt Ion:228 Resp: 157059

Ion	Ratio	Lower	Upper
228	100		
226	35.2	0.0	56.1
229	28.2	0.0	49.5

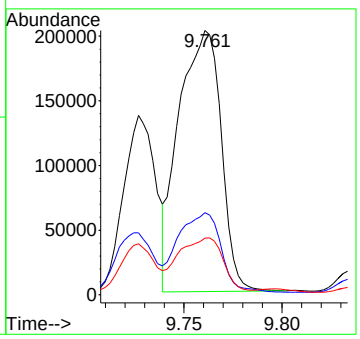


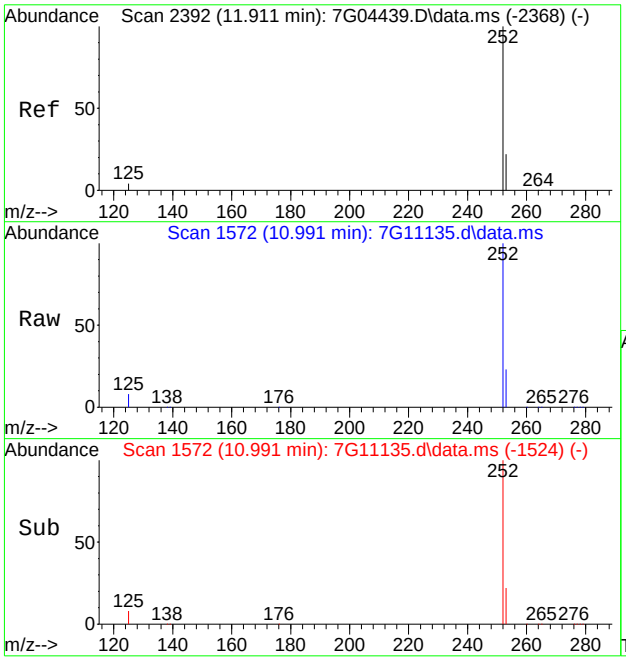


#21
Chrysene
Concen: 13.68 ppm
RT: 9.761 min Scan# 1164
Delta R.T. 0.007 min
Lab File: 7G11135.d
Acq: 11 Aug 2020 10:27 am

Tgt Ion:228 Resp: 302829

Ion	Ratio	Lower	Upper
228	100		
226	30.6	0.0	58.9
229	19.4	0.0	49.5

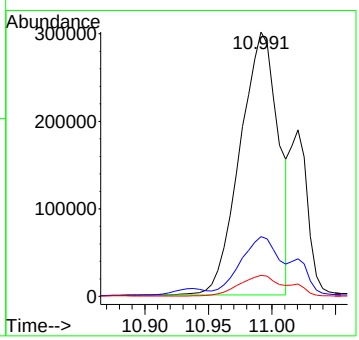


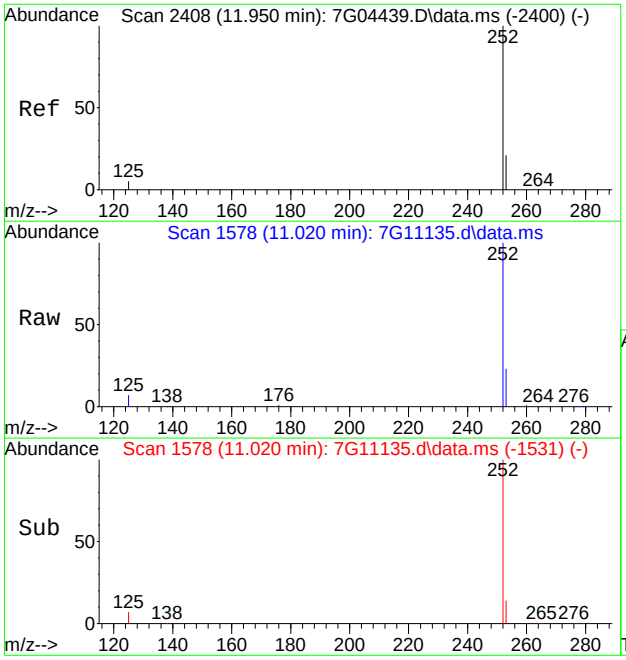


#23
Benzo[b]fluoranthene
Concen: 29.89 ppm
RT: 10.991 min Scan# 1572
Delta R.T. 0.034 min
Lab File: 7G11135.d
Acq: 11 Aug 2020 10:27 am

Tgt Ion:252 Resp: 631520

Ion	Ratio	Lower	Upper
252	100		
253	21.8	0.0	51.7
125	7.9	0.0	34.5

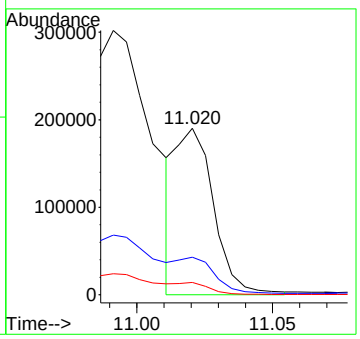


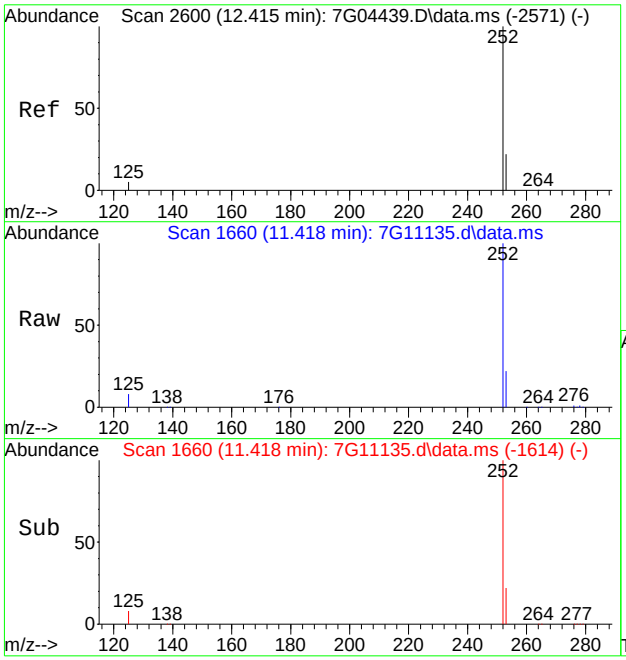


#24
Benzo[k]fluoranthene
Concen: 8.12 ppm m
RT: 11.020 min Scan# 1578
Delta R.T. 0.029 min
Lab File: 7G11135.d
Acq: 11 Aug 2020 10:27 am

Tgt Ion:252 Resp: 184729

Ion	Ratio	Lower	Upper
252	100		
253	22.7	0.0	51.5
125	7.4	0.0	34.8

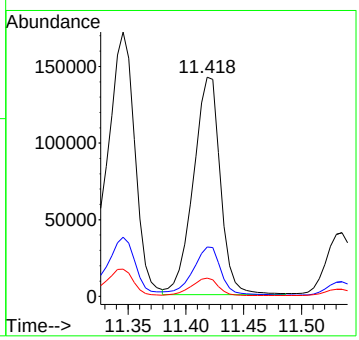


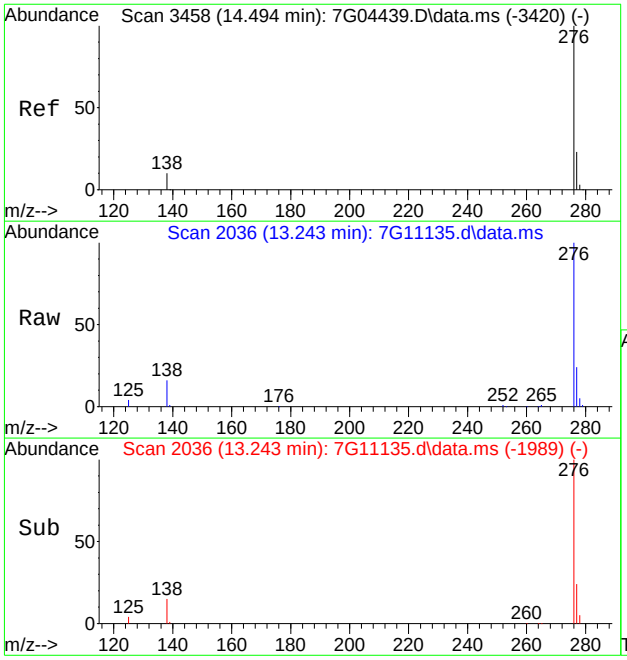


#25
Benzo[a]pyrene
Concen: 11.29 ppm
RT: 11.418 min Scan# 1660
Delta R.T. 0.024 min
Lab File: 7G11135.d
Acq: 11 Aug 2020 10:27 am

Tgt Ion:252 Resp: 232381

Ion	Ratio	Lower	Upper
252	100		
253	21.6	0.0	51.6
125	8.1	0.0	34.8

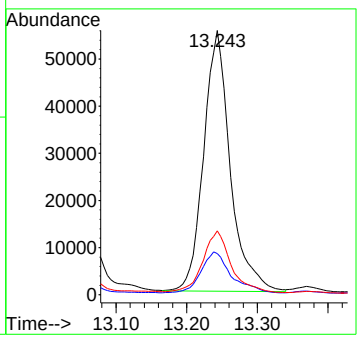


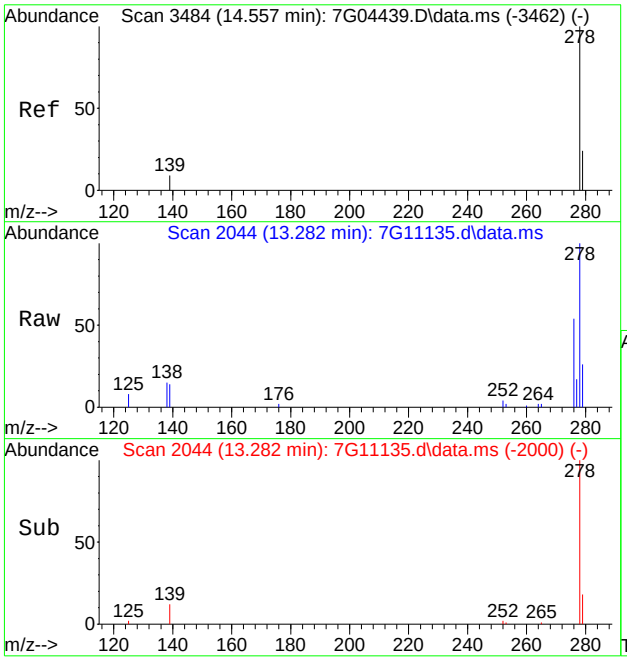


#26
Indeno[1,2,3-cd]pyrene
Concen: 10.76 ppm
RT: 13.243 min Scan# 2036
Delta R.T. 0.029 min
Lab File: 7G11135.d
Acq: 11 Aug 2020 10:27 am

Tgt Ion:276 Resp: 144631

Ion	Ratio	Lower	Upper
276	100		
138	15.1	0.0	39.6
277	23.6	0.0	53.1

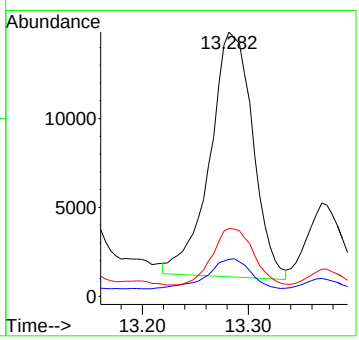


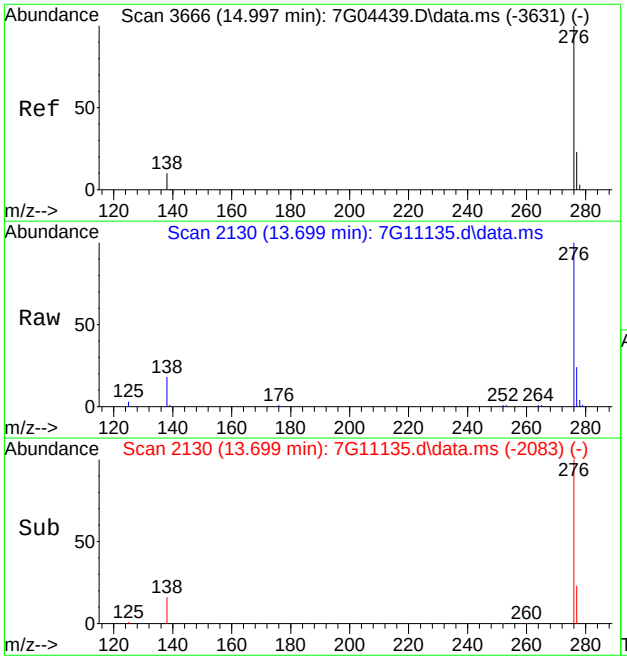


#27
Dibenz[a,h]anthracene
Concen: 2.60 ppm
RT: 13.282 min Scan# 2044
Delta R.T. 0.015 min
Lab File: 7G11135.d
Acq: 11 Aug 2020 10:27 am

Tgt Ion:278 Resp: 38804

Ion	Ratio	Lower	Upper
278	100		
139	12.2	0.0	38.8
279	23.7	0.0	53.6

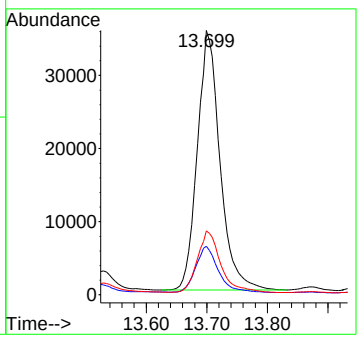




#28
Benzo[g,h,i]perylene
Concen: 5.69 ppm
RT: 13.699 min Scan# 2130
Delta R.T. 0.029 min
Lab File: 7G11135.d
Acq: 11 Aug 2020 10:27 am

Tgt Ion:276 Resp: 92254

Ion	Ratio	Lower	Upper
276	100		
138	17.7	0.0	40.5
277	23.6	0.0	53.2



Manual Integration Approval Summary

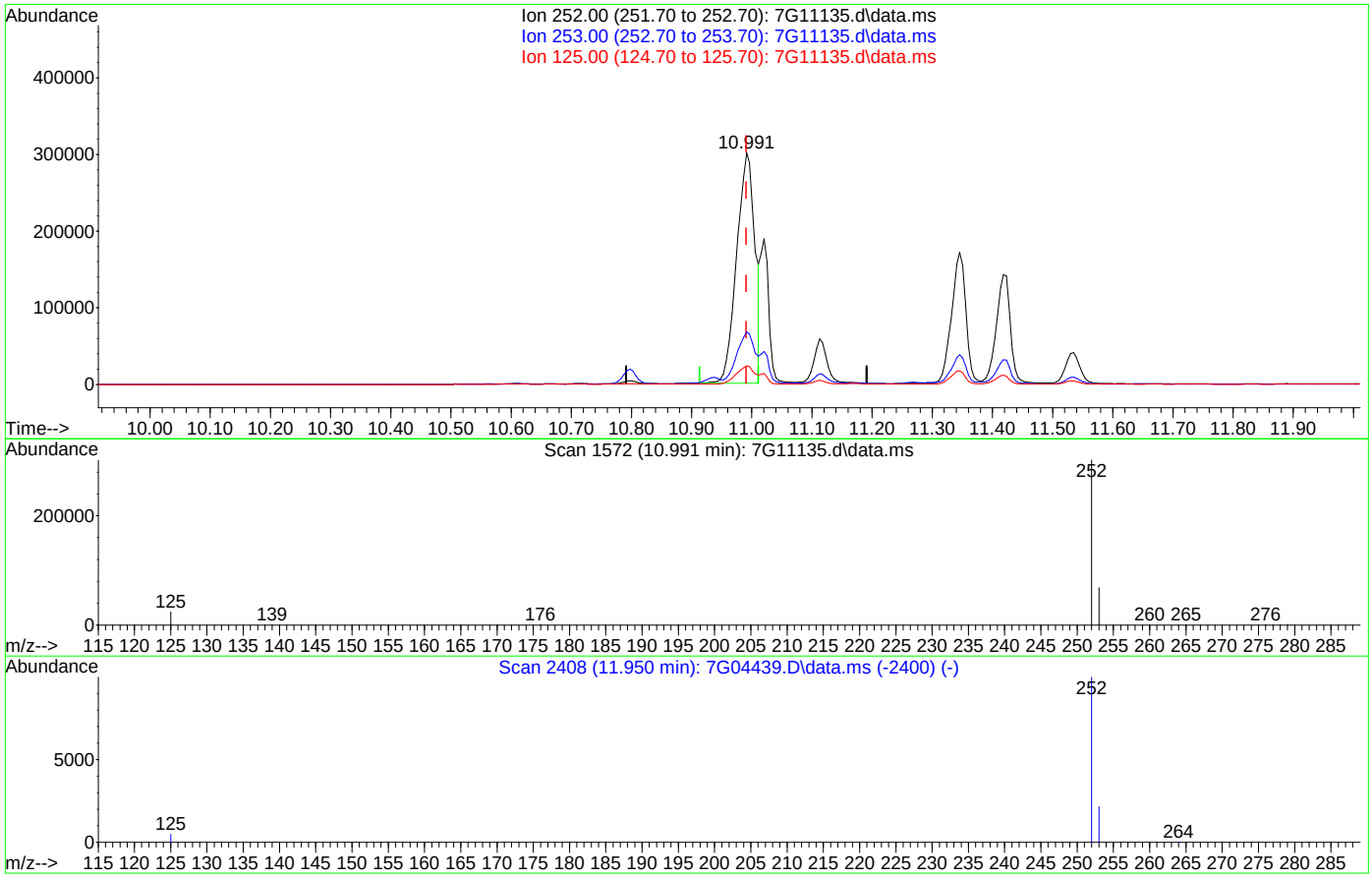
Sample Number: FA77581-9
Lab FileID: 7G11135.D
Injection Time: 08/11/20 10:27
Method: SW846 8270E BY SIM
Analyst approved: 08/12/20 09:33 Fouad Sekkar
Supervisor approved: 08/12/20 11:43 Nicole McCampbell

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(k)fluoranthene	207-08-9		11.02	Missed peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11135.d
Acq On : 11 Aug 2020 10:27 am
Operator : FOUADS
Sample : fa77581-9 e Inst : MSBNA8
Misc : op81485,S7G483,15.3,,,1,1,soil
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:26:18 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration



TIC: 7G11135.d\data.ms

(24) Benzo[k]fluoranthene (P)

10.991min (+0.000) 26.32ppm

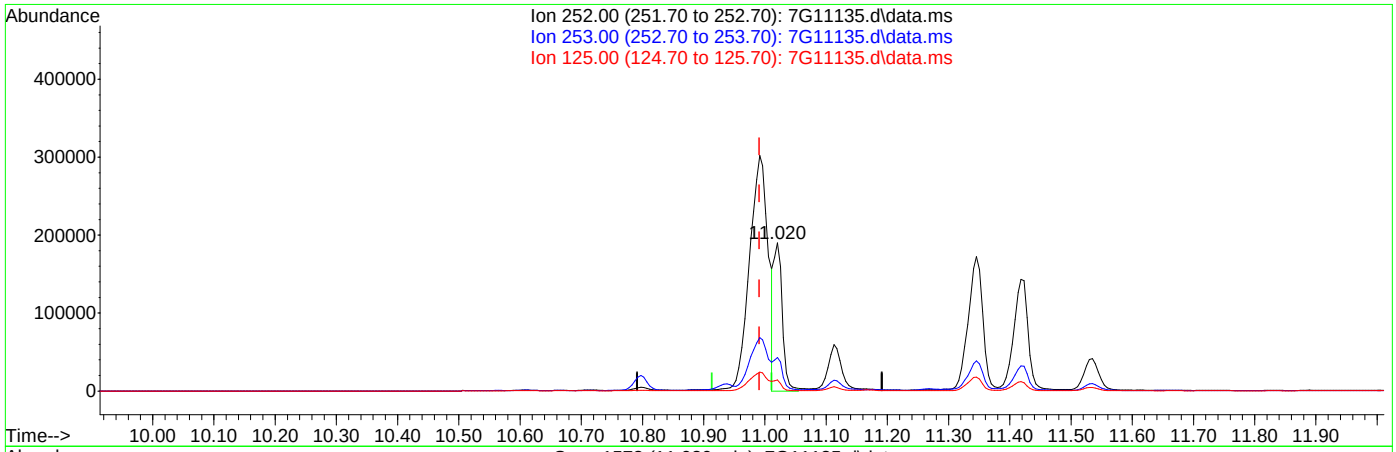
response 631520

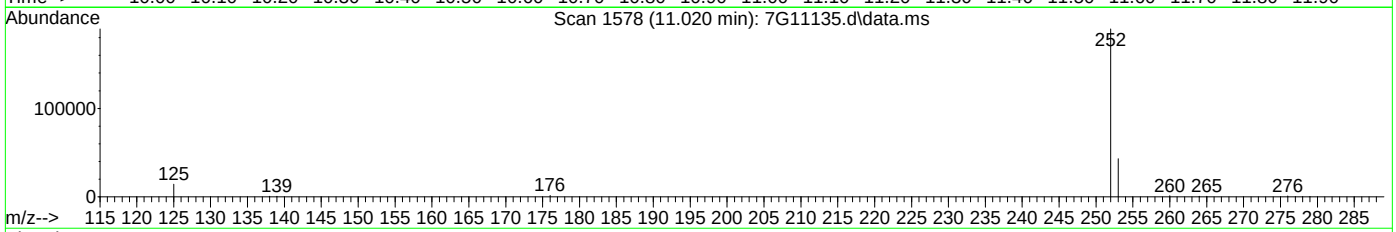
Ion	Exp%	Act%
252.00	100	100
253.00	21.50	21.77
125.00	4.80	7.90
0.00	0.00	0.00

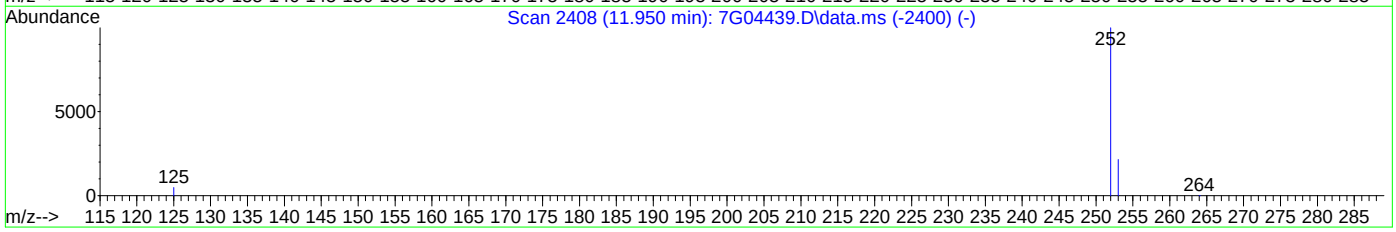
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11135.d
Acq On : 11 Aug 2020 10:27 am
Operator : FOUADS
Sample : fa77581-9 e Inst : MSBNA8
Misc : op81485,S7G483,15.3,,,1,1,soil
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:26:18 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11135.d\data.ms

(24) Benzo[k]fluoranthene (P)

11.020min (+0.029) 8.12ppm m

response 184729

Ion	Exp%	Act%
252.00	100	100
253.00	21.50	22.68
125.00	4.80	7.43
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 08/12/20 11:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11136.d
Acq On : 11 Aug 2020 10:50 am
Operator : FOUADS
Sample : fa77581-10 e Inst : MSBNA8
Misc : op81485,S7G483,15.3,,,1,1,soil
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:31:18 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.646	136	19541	4.00	ppm	0.02
6) Acenaphthene-d10	6.128	164	16538	4.00	ppm	0.01
11) Phenanthrene-d10	7.410	188	32234	4.00	ppm	0.01
18) Chrysene-d12	9.744	240	61692	4.00	ppm	0.02
22) Perylene-d12	11.496	264	57995	4.00	ppm	0.02
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.217	152	32756	11.13	ppm	0.01
Spiked Amount 10.000	Range 50 - 150		Recovery =	111.30%		
17) Fluoranthene-d10	8.448	212	171587	10.18	ppm	0.01
Spiked Amount 10.000	Range 50 - 150		Recovery =	101.80%		
Target Compounds						Qvalue
7) Acenaphthylene	6.007	152	15953	1.68	ppm	98
10) Fluorene	6.607	166	1464	0.22	ppm	98
13) Phenanthrene	7.431	178	12688	1.20	ppm	99
14) Anthracene	7.473	178	48701	4.51	ppm	99
15) Carbazole	7.647	167	15886	0.82	ppm	99
16) Fluoranthene	8.467	202	437242	20.78	ppm	98
19) Pyrene	8.657	202	506085	20.17	ppm	96
20) Benzo[a]anthracene	9.732	228	111746	5.76	ppm	84
21) Chrysene	9.768	228	260071	12.18	ppm	98
23) Benzo[b]fluoranthene	10.986	252	348167	17.69	ppm	98
24) Benzo[k]fluoranthene	11.016	252	110710m	5.27	ppm	
25) Benzo[a]pyrene	11.414	252	82795	4.32	ppm	98
26) Indeno[1,2,3-cd]pyrene	13.228	276	70136	5.60	ppm	94
27) Dibenz[a,h]anthracene	13.287	278	14685	1.06	ppm	96
28) Benzo[g,h,i]perylene	13.694	276	49557	3.28	ppm	94

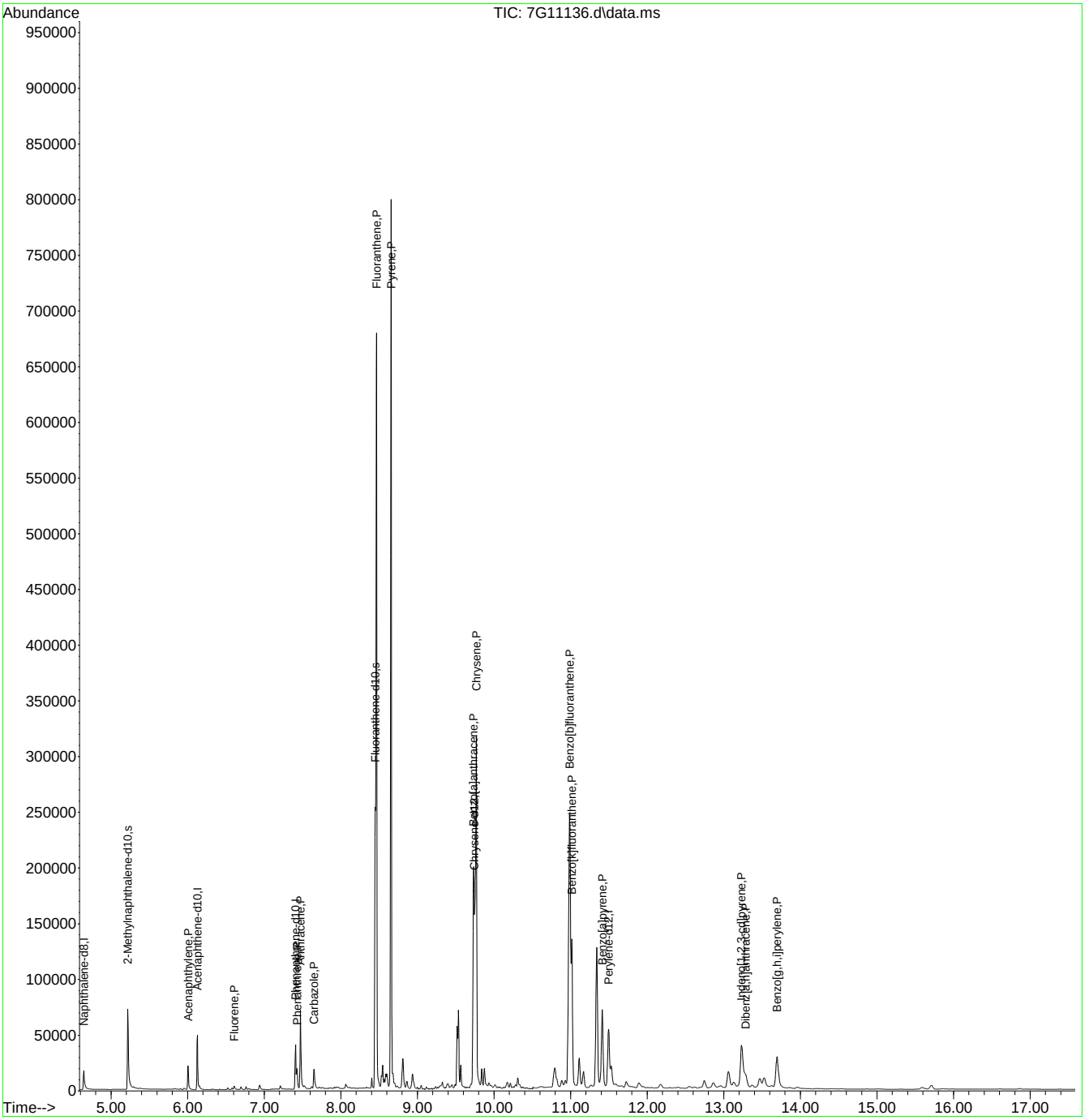
(#) = qualifier out of range (m) = manual integration (+) = signals summed

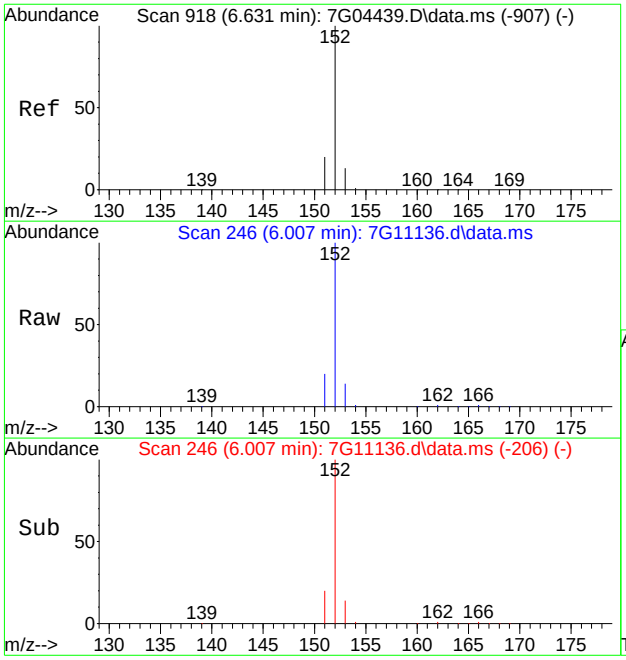
7.1.24
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11136.d
Acq On : 11 Aug 2020 10:50 am
Operator : FOUADS
Sample : fa77581-10 e Inst : MSBNA8
Misc : op81485,S7G483,15.3,,,1,1,soil
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:31:18 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

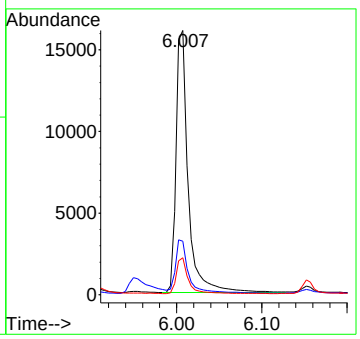


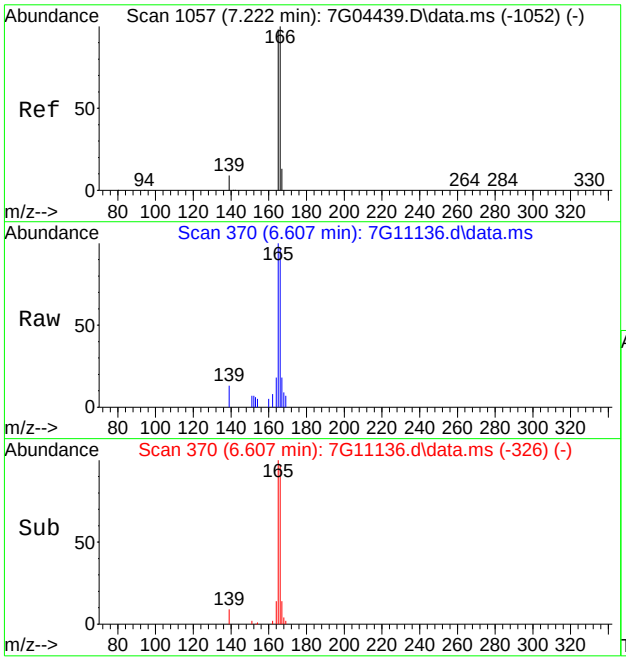


#7
Acenaphthylene
Concen: 1.68 ppm
RT: 6.007 min Scan# 246
Delta R.T. 0.014 min
Lab File: 7G11136.d
Acq: 11 Aug 2020 10:50 am

Tgt Ion:152 Resp: 15953

Ion	Ratio	Lower	Upper
152	100		
151	19.1	0.0	49.8
153	13.7	0.0	42.8

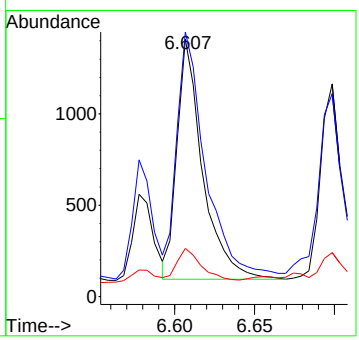


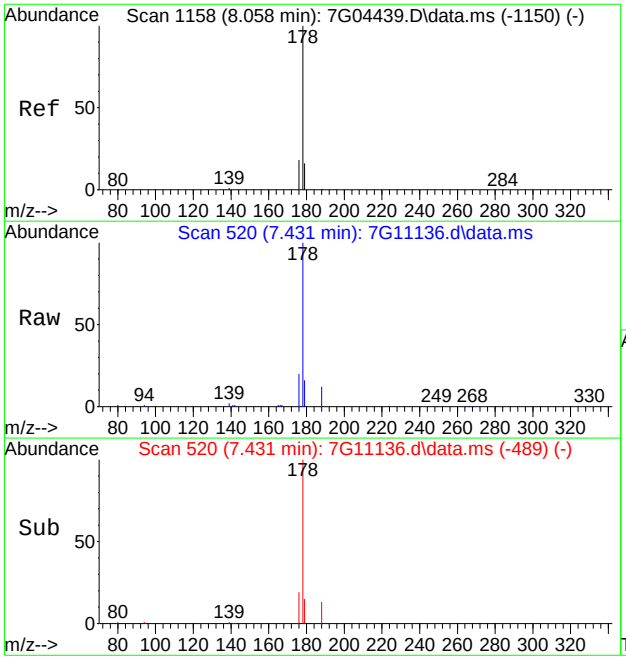


#10
Fluorene
Concen: 0.22 ppm
RT: 6.607 min Scan# 370
Delta R.T. 0.014 min
Lab File: 7G11136.d
Acq: 11 Aug 2020 10:50 am

Tgt Ion:166 Resp: 1464

Ion	Ratio	Lower	Upper
166	100		
165	100.6	68.2	128.2
167	12.6	0.0	42.9

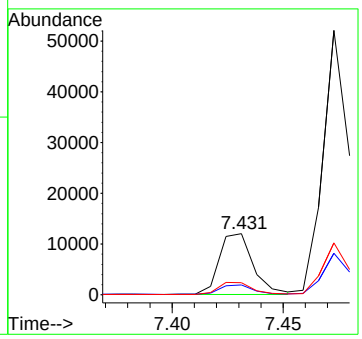


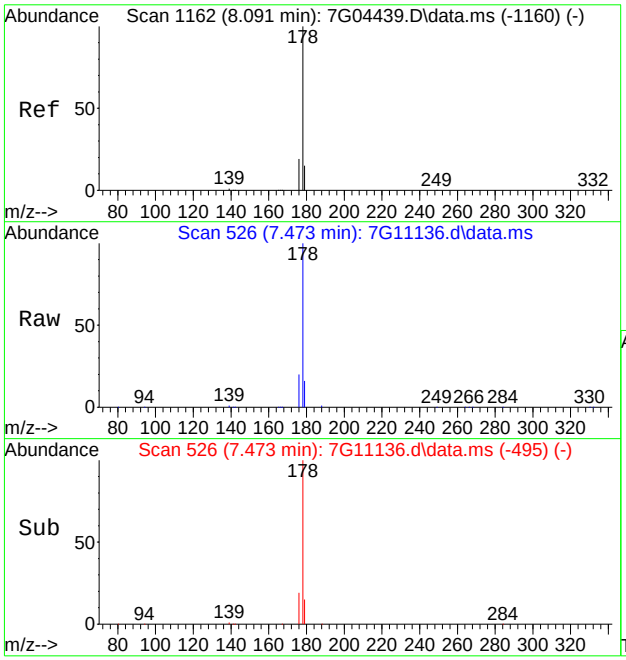


#13
Phenanthrene
Concen: 1.20 ppm
RT: 7.431 min Scan# 520
Delta R.T. 0.014 min
Lab File: 7G11136.d
Acq: 11 Aug 2020 10:50 am

Tgt Ion:178 Resp: 12688

Ion	Ratio	Lower	Upper
178	100		
179	15.7	0.0	45.7
176	19.2	0.0	48.0

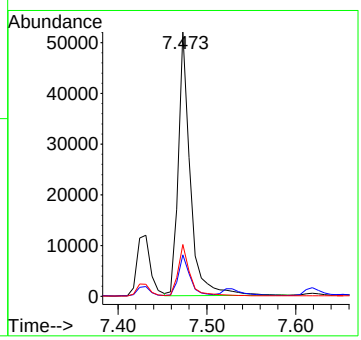


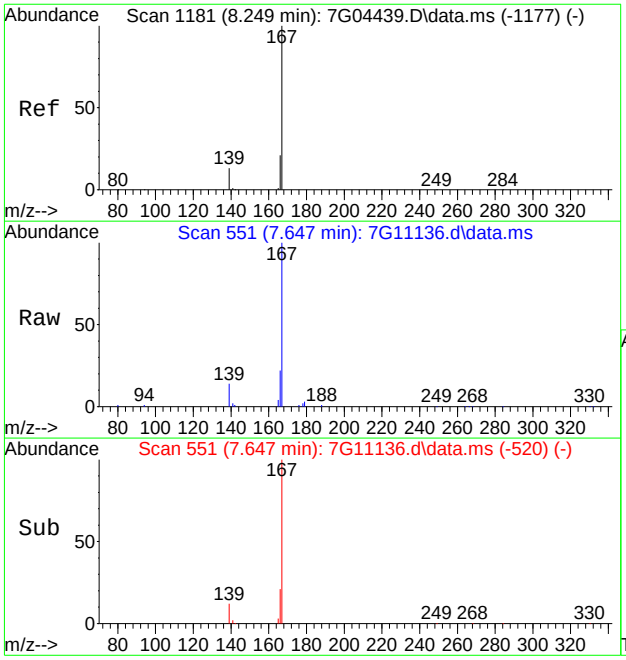


#14
Anthracene
Concen: 4.51 ppm
RT: 7.473 min Scan# 526
Delta R.T. 0.014 min
Lab File: 7G11136.d
Acq: 11 Aug 2020 10:50 am

Tgt Ion:178 Resp: 48701

Ion	Ratio	Lower	Upper
178	100		
179	15.5	0.0	45.1
176	19.5	0.0	48.8

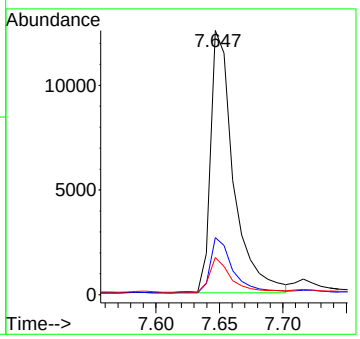


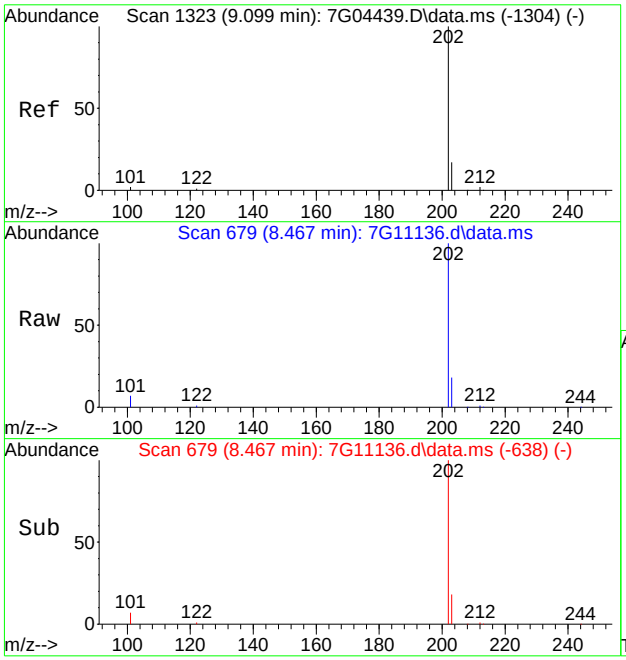


#15
Carbazole
Concen: 0.82 ppm
RT: 7.647 min Scan# 551
Delta R.T. 0.014 min
Lab File: 7G11136.d
Acq: 11 Aug 2020 10:50 am

Tgt Ion:167 Resp: 15886

Ion	Ratio	Lower	Upper
167	100		
166	21.0	1.2	41.2
139	13.2	0.0	32.8

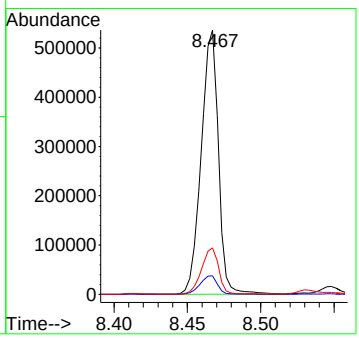


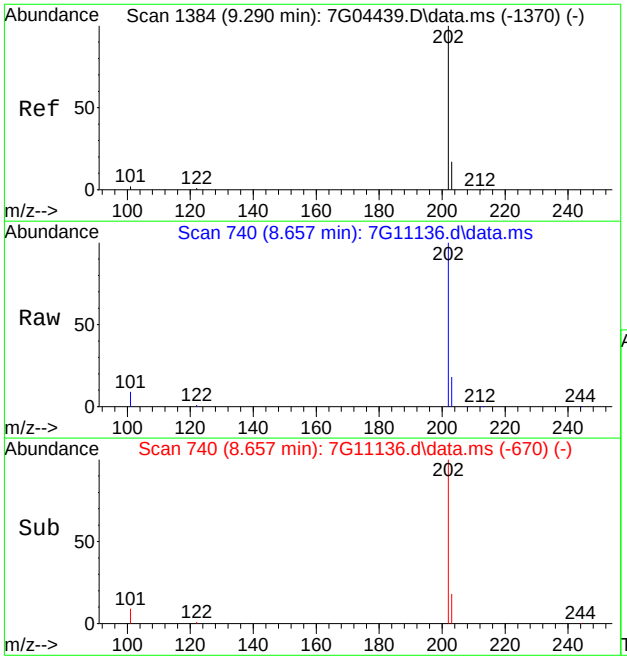


#16
Fluoranthene
Concen: 20.78 ppm
RT: 8.467 min Scan# 679
Delta R.T. 0.019 min
Lab File: 7G11136.d
Acq: 11 Aug 2020 10:50 am

Tgt Ion:202 Resp: 437242

Ion	Ratio	Lower	Upper
202	100		
101	7.0	0.0	32.2
203	17.6	0.0	47.2

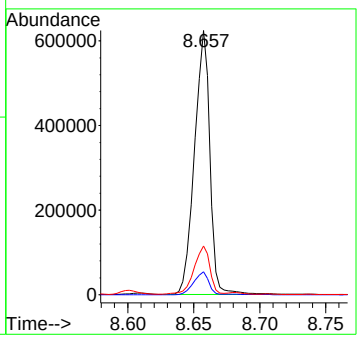


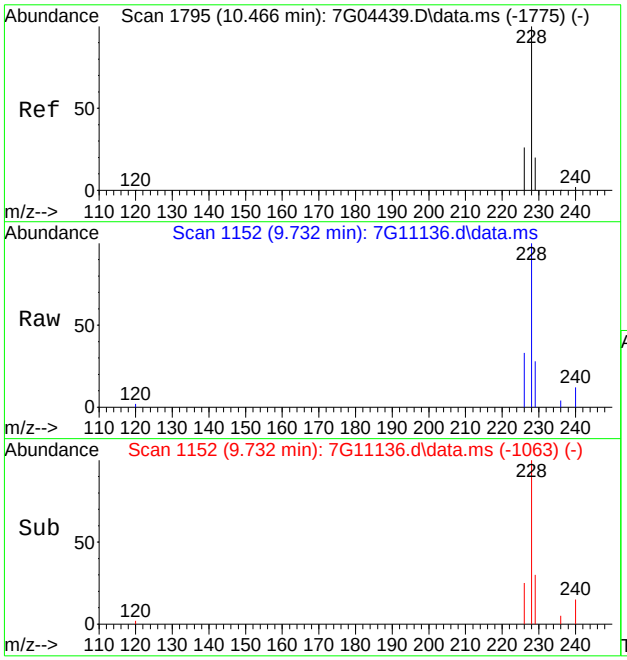


#19
Pyrene
Concen: 20.17 ppm
RT: 8.657 min Scan# 740
Delta R.T. 0.019 min
Lab File: 7G11136.d
Acq: 11 Aug 2020 10:50 am

Tgt Ion:202 Resp: 506085

Ion	Ratio	Lower	Upper
202	100		
101	8.7	0.0	32.4
203	18.3	0.0	47.4

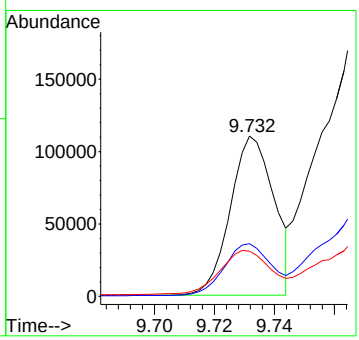


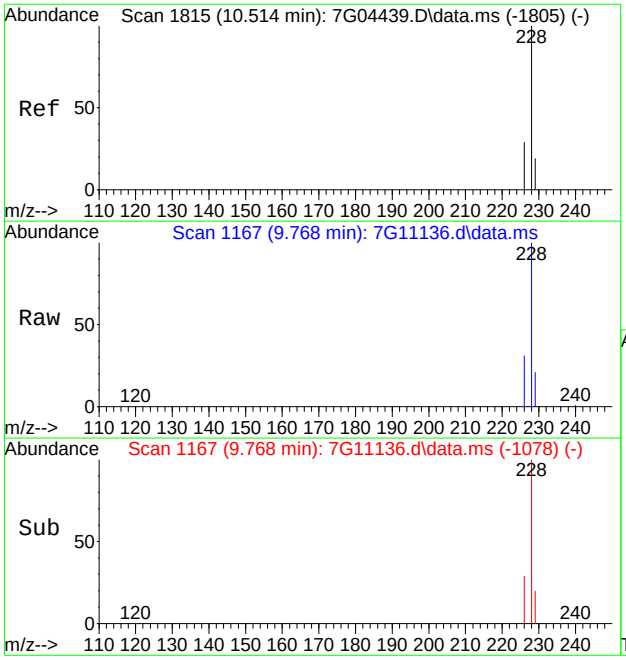


#20
Benzo[a]anthracene
Concen: 5.76 ppm
RT: 9.732 min Scan# 1152
Delta R.T. 0.015 min
Lab File: 7G11136.d
Acq: 11 Aug 2020 10:50 am

Tgt Ion:228 Resp: 111746

Ion	Ratio	Lower	Upper
228	100		
226	33.3	0.0	56.1
229	27.7	0.0	49.5

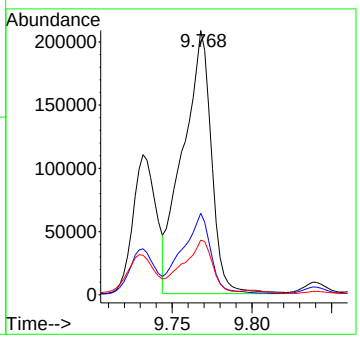


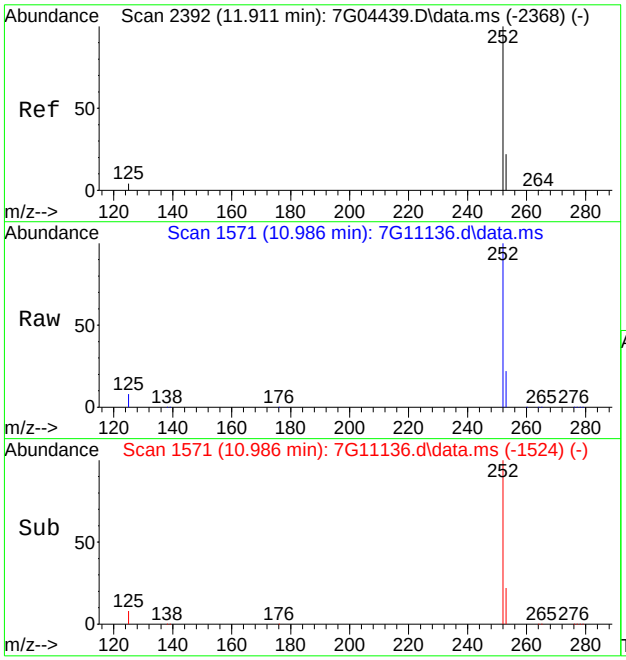


#21
Chrysene
Concen: 12.18 ppm
RT: 9.768 min Scan# 1167
Delta R.T. 0.015 min
Lab File: 7G11136.d
Acq: 11 Aug 2020 10:50 am

Tgt Ion:228 Resp: 260071

Ion	Ratio	Lower	Upper
228	100		
226	30.7	0.0	58.9
229	19.7	0.0	49.5

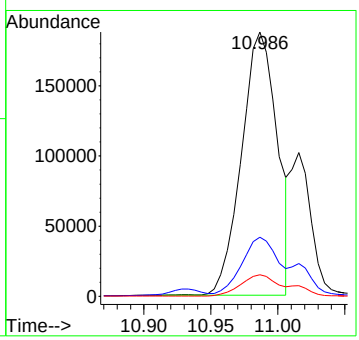


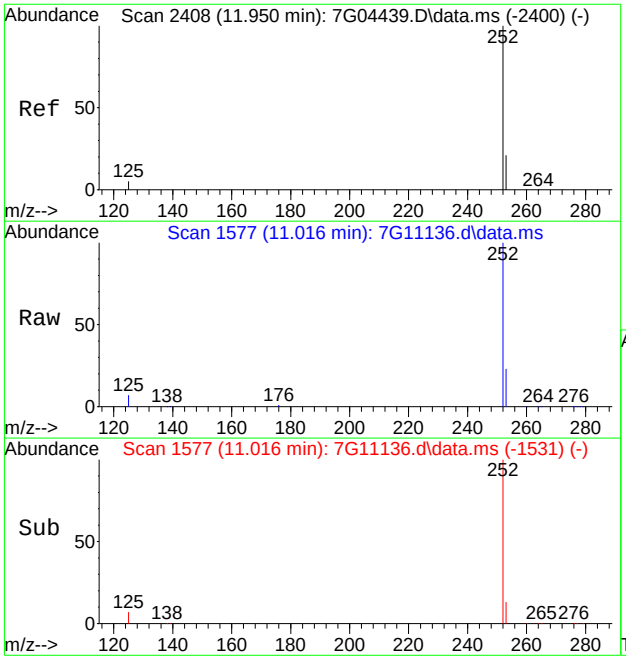


#23
Benzo[b]fluoranthene
Concen: 17.69 ppm
RT: 10.986 min Scan# 1571
Delta R.T. 0.029 min
Lab File: 7G11136.d
Acq: 11 Aug 2020 10:50 am

Tgt Ion:252 Resp: 348167

Ion	Ratio	Lower	Upper
252	100		
253	21.5	0.0	51.7
125	8.1	0.0	34.5

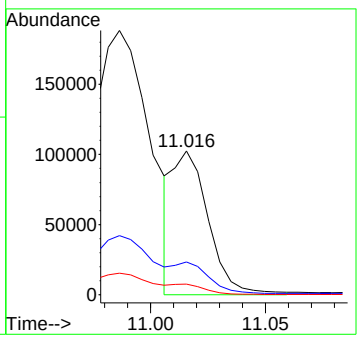


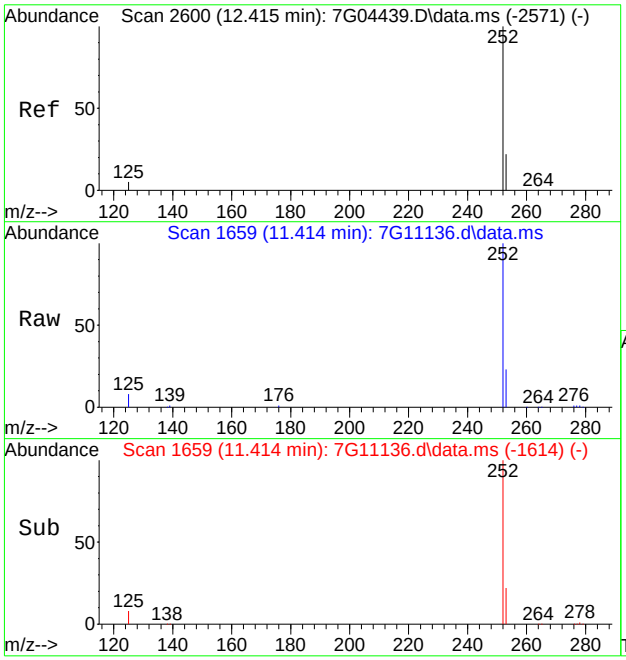


#24
Benzo[k]fluoranthene
Concen: 5.27 ppm m
RT: 11.016 min Scan# 1577
Delta R.T. 0.024 min
Lab File: 7G11136.d
Acq: 11 Aug 2020 10:50 am

Tgt Ion:252 Resp: 110710

Ion	Ratio	Lower	Upper
252	100		
253	22.8	0.0	51.5
125	7.4	0.0	34.8

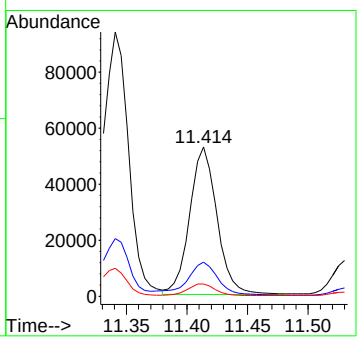


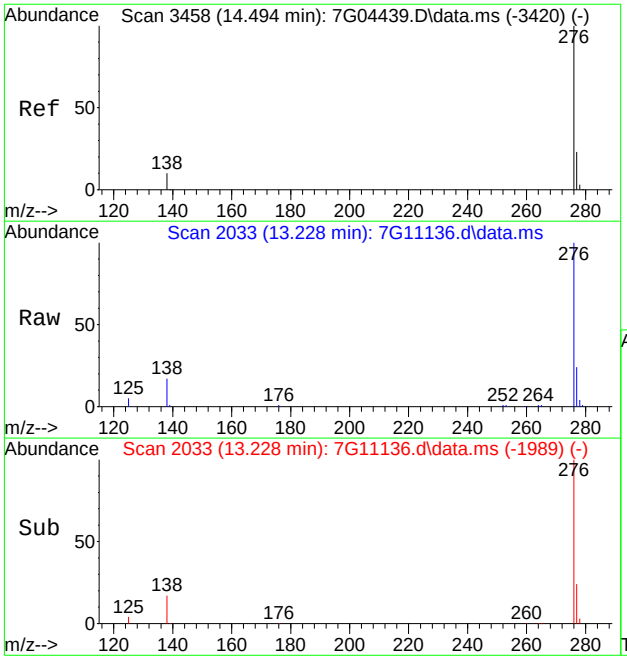


#25
Benzo[a]pyrene
Concen: 4.32 ppm
RT: 11.414 min Scan# 1659
Delta R.T. 0.019 min
Lab File: 7G11136.d
Acq: 11 Aug 2020 10:50 am

Tgt Ion:252 Resp: 82795

Ion	Ratio	Lower	Upper
252	100		
253	21.2	0.0	51.6
125	7.9	0.0	34.8

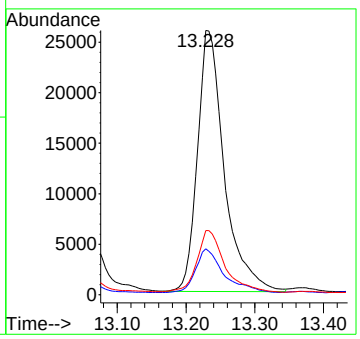


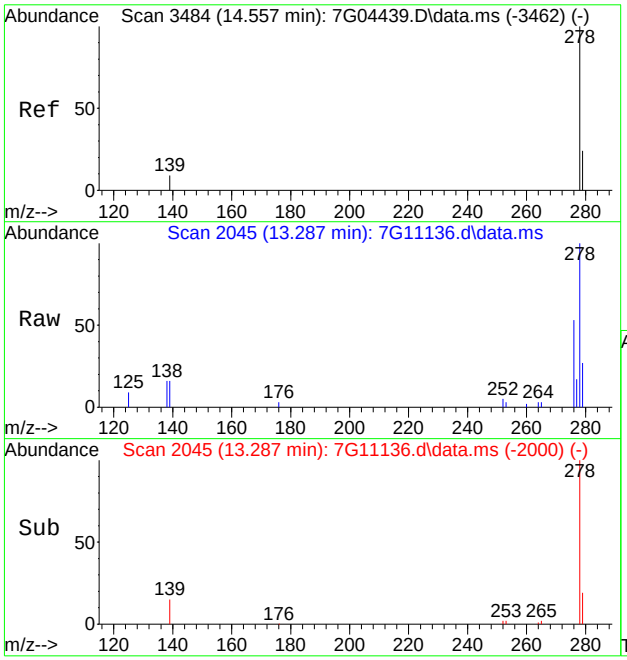


#26
Indeno[1,2,3-cd]pyrene
Concen: 5.60 ppm
RT: 13.228 min Scan# 2033
Delta R.T. 0.015 min
Lab File: 7G11136.d
Acq: 11 Aug 2020 10:50 am

Tgt Ion:276 Resp: 70136

Ion	Ratio	Lower	Upper
276	100		
138	16.8	0.0	39.6
277	23.6	0.0	53.1

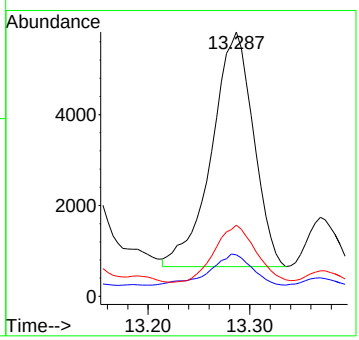


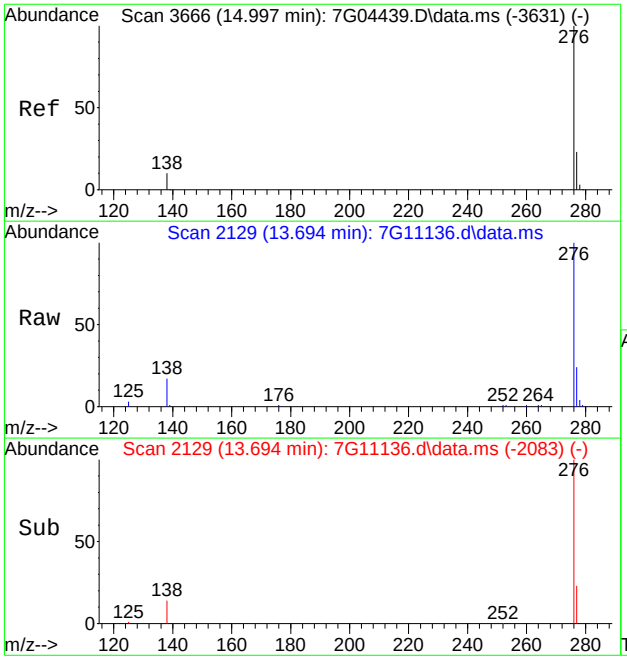


#27
Dibenz[a,h]anthracene
Concen: 1.06 ppm
RT: 13.287 min Scan# 2045
Delta R.T. 0.019 min
Lab File: 7G11136.d
Acq: 11 Aug 2020 10:50 am

Tgt Ion:278 Resp: 14685

Ion	Ratio	Lower	Upper
278	100		
139	12.8	0.0	38.8
279	24.0	0.0	53.6

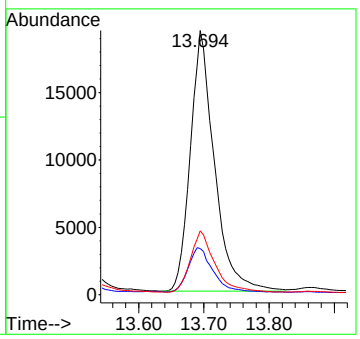




#28
Benzo[g,h,i]perylene
Concen: 3.28 ppm
RT: 13.694 min Scan# 2129
Delta R.T. 0.024 min
Lab File: 7G11136.d
Acq: 11 Aug 2020 10:50 am

Tgt Ion:276 Resp: 49557

Ion	Ratio	Lower	Upper
276	100		
138	16.7	0.0	40.5
277	23.5	0.0	53.2



Manual Integration Approval Summary

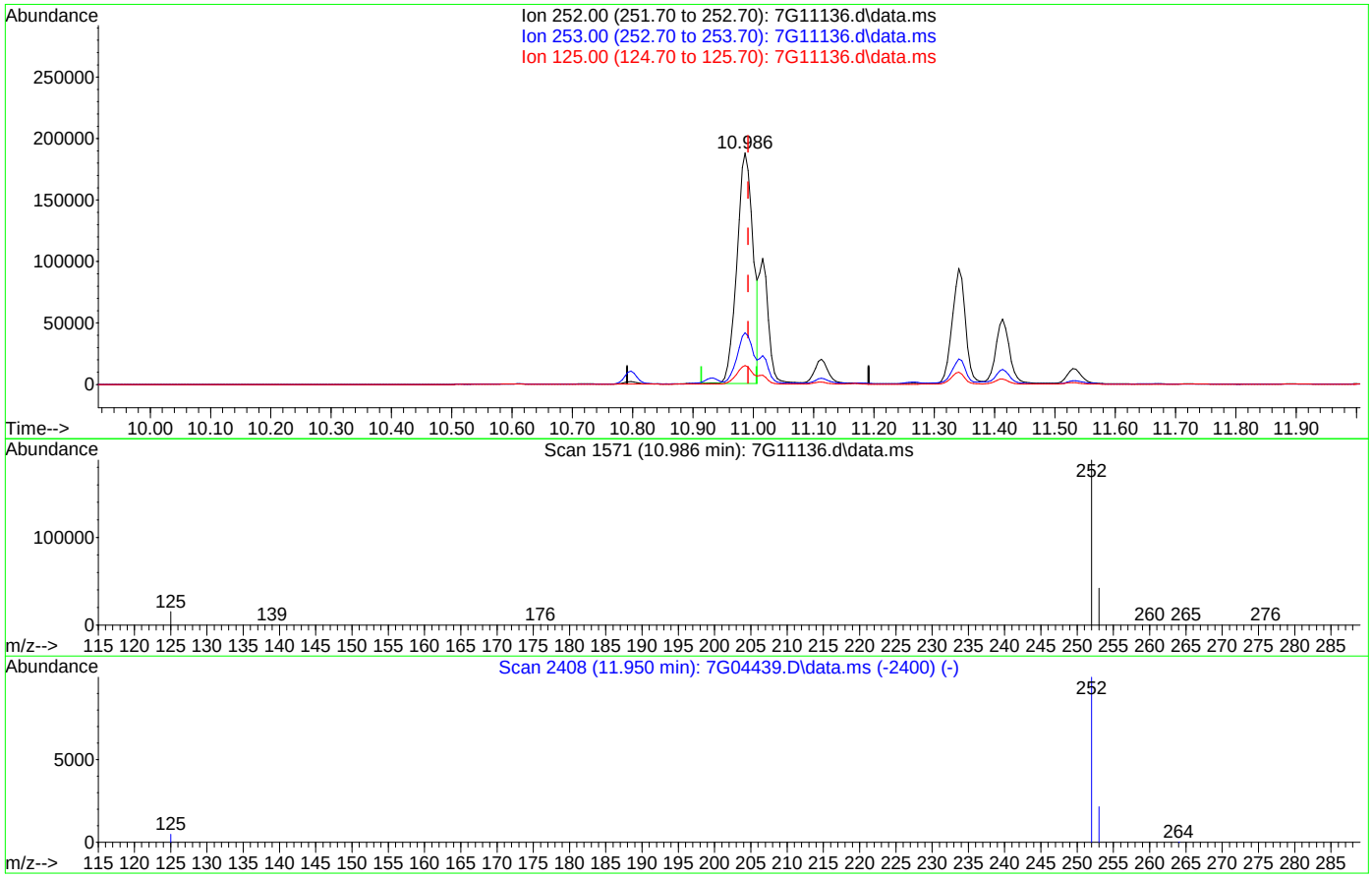
Sample Number: FA77581-10
Lab FileID: 7G11136.D
Injection Time: 08/11/20 10:50
Method: SW846 8270E BY SIM
Analyst approved: 08/12/20 09:33 Fouad Sekkar
Supervisor approved: 08/12/20 11:43 Nicole McCampbell

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(k)fluoranthene	207-08-9		11.02	Missed peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11136.d
Acq On : 11 Aug 2020 10:50 am
Operator : FOUADS
Sample : fa77581-10 e Inst : MSBNA8
Misc : op81485,S7G483,15.3,,,1,1,soil
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:26:21 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration



TIC: 7G11136.d\data.ms

(24) Benzo[k]fluoranthene (P)

10.986min (-0.005) 16.04ppm

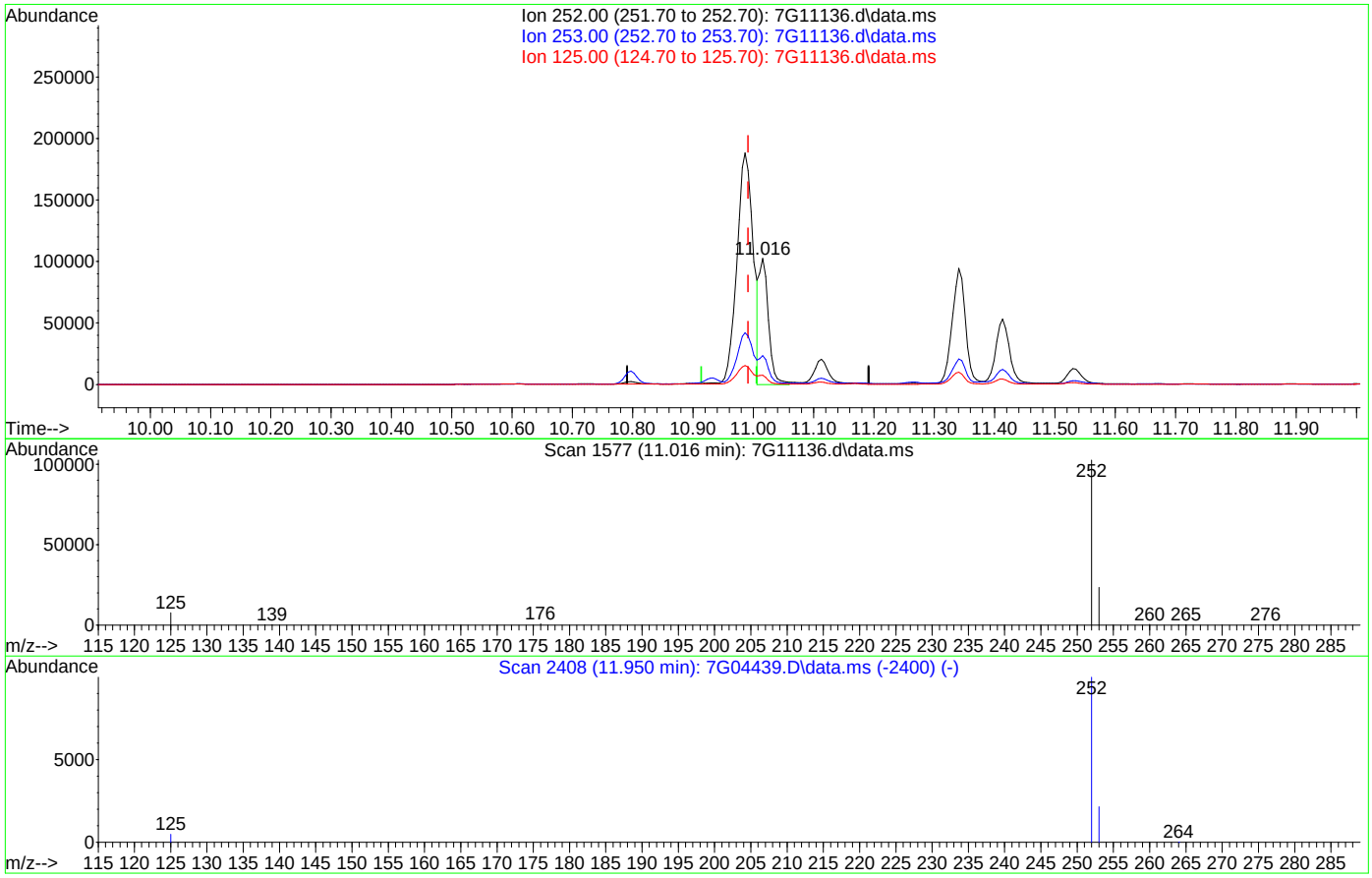
response 348167

Ion	Exp%	Act%
252.00	100	100
253.00	21.50	21.51
125.00	4.80	8.11
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11136.d
Acq On : 11 Aug 2020 10:50 am
Operator : FOUADS
Sample : fa77581-10 e Inst : MSBNA8
Misc : op81485,S7G483,15.3,,,1,1,soil
ALS Vial : 8 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:26:21 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration



TIC: 7G11136.d\data.ms

(24) Benzo[k]fluoranthene (P)

11.016min (+0.024) 5.27ppm m

response 110710

Ion	Exp%	Act%
252.00	100	100
253.00	21.50	22.79
125.00	4.80	7.41
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072332.d
Acq On : 11 Aug 2020 2:05 pm
Operator : marthav
Sample : op81482-mb E
Misc : op81482,sx2950,30.0,,,1,1,soil
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 12 02:02:52 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

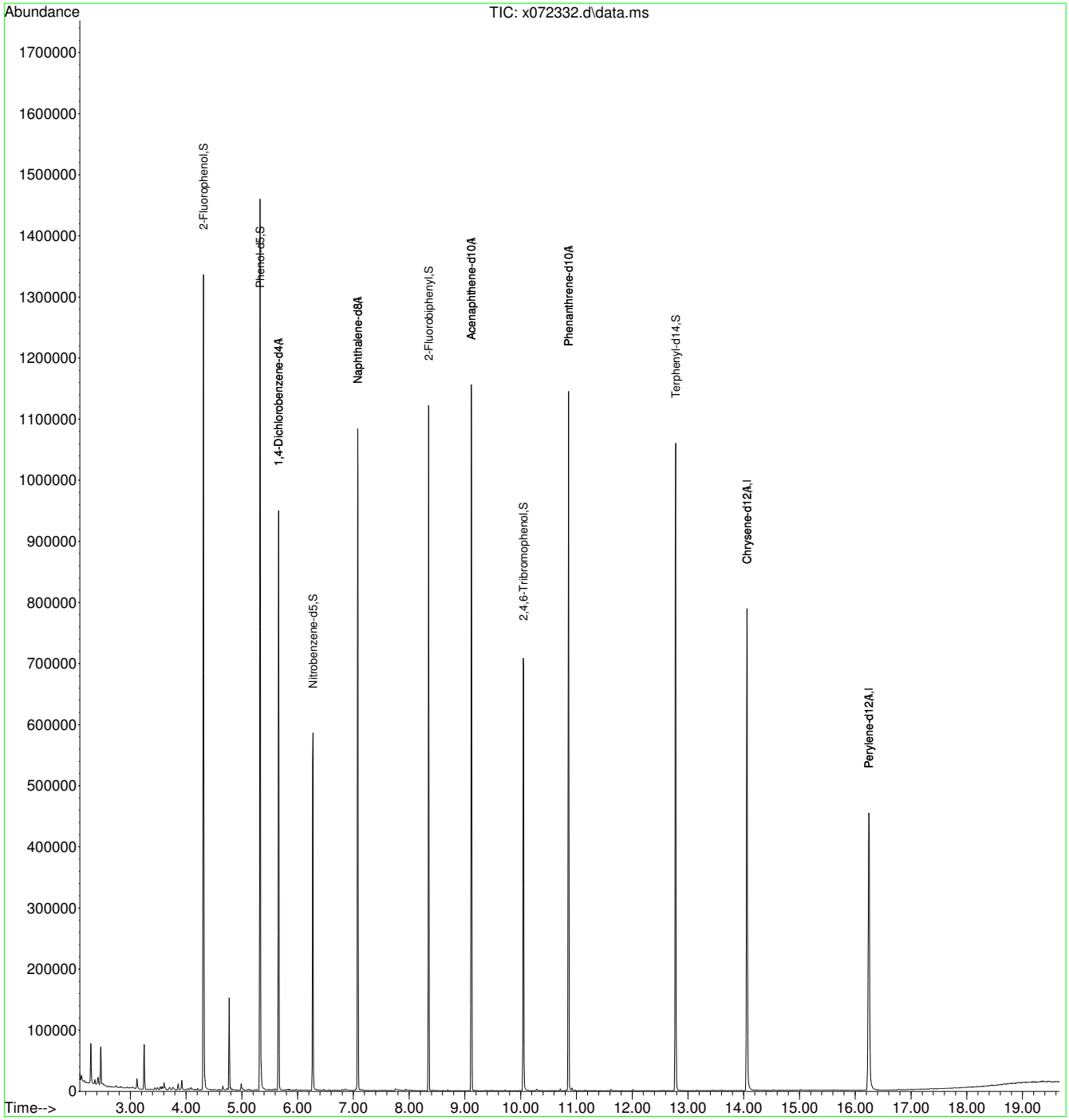
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.660	152	129549	40.00	ppm	0.00
22) Naphthalene-d8	7.077	136	480676	40.00	ppm	0.00
43) Acenaphthene-d10	9.115	164	235184	40.00	ppm	0.00
70) Phenanthrene-d10	10.859	188	406815	40.00	ppm	0.00
92) Chrysene-d12	14.057	240	312428	40.00	ppm	-0.01
102) Perylene-d12	16.245	264	255107	40.00	ppm	-0.01
110) 1,4-Dichlorobenzene-d4A	5.660	152	129549	40.00	ppm	0.00
120) Naphthalene-d8A	7.077	136	480676	40.00	ppm	0.00
127) Acenaphthene-d10A	9.115	164	235184	40.00	ppm	0.00
136) Phenanthrene-d10A	10.859	188	406815	40.00	ppm	0.00
146) Chrysene-d12A	14.057	240	312428	40.00	ppm	-0.01
153) Perylene-d12A	16.245	264	255107	40.00	ppm	-0.01
System Monitoring Compounds						
7) 2-Fluorophenol	4.312	112	328073	70.63	ppm	0.00
Spiked Amount 100.000	Range 40 - 102		Recovery = 70.63%			
9) Phenol-d5	5.328	99	414975	75.09	ppm	0.00
Spiked Amount 100.000	Range 41 - 100		Recovery = 75.09%			
23) Nitrobenzene-d5	6.275	82	170268	34.30	ppm	0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 68.60%			
47) 2-Fluorobiphenyl	8.350	172	305266	35.86	ppm	0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 71.72%			
75) 2,4,6-Tribromophenol	10.051	330	61615	71.59	ppm	0.00
Spiked Amount 100.000	Range 42 - 108		Recovery = 71.59%			
95) Terphenyl-d14	12.779	244	312465	37.64	ppm	0.00
Spiked Amount 50.000	Range 45 - 119		Recovery = 75.28%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072332.d
Acq On : 11 Aug 2020 2:05 pm
Operator : marthav
Sample : op81482-mb E
Misc : op81482,sx2950,30.0,,,1,1,soil
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 12 02:02:52 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06488.d
Acq On : 11 Aug 2020 1:46 pm
Operator : marthav
Sample : op81484-mb E Inst : MSBNA10
Misc : op81484,S6F251,30.0,,,1,1,soil
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Results File: 8270D6F072920.RES
Quant Time: Aug 12 06:04:18 2020
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

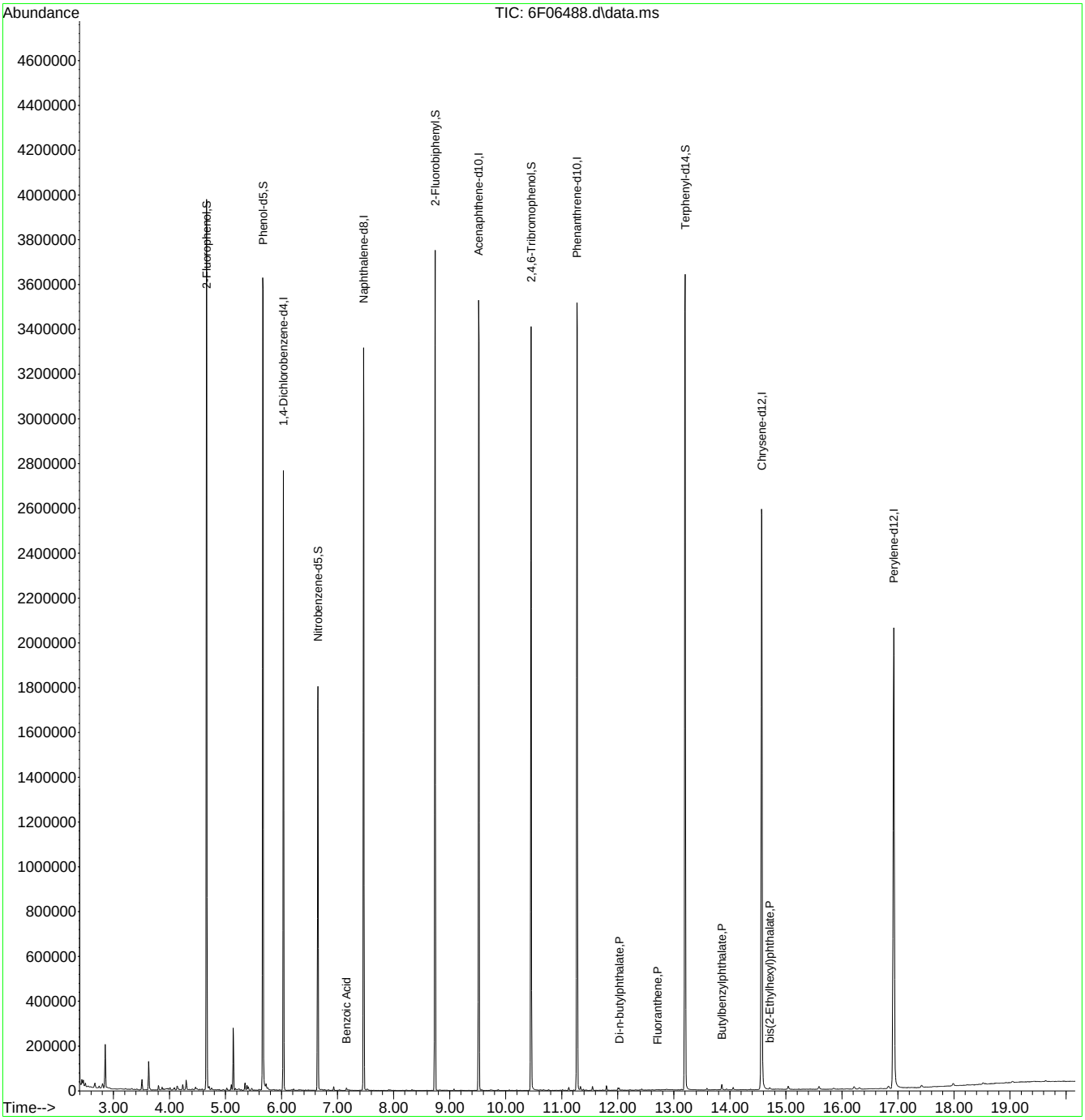
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.035	152	379614	40.00	ppm	0.00
22) Naphthalene-d8	7.463	136	1425462	40.00	ppm	0.00
43) Acenaphthene-d10	9.517	164	760513	40.00	ppm	0.00
70) Phenanthrene-d10	11.271	188	1370889	40.00	ppm	0.00
92) Chrysene-d12	14.571	240	1142281	40.00	ppm	0.00
102) Perylene-d12	16.924	264	1117696	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	4.660	112	996130	69.44	ppm	0.00
Spiked Amount 100.000	Range 40 - 102		Recovery = 69.44%			
9) Phenol-d5	5.671	99	1285478	75.49	ppm	0.00
Spiked Amount 100.000	Range 41 - 100		Recovery = 75.49%			
23) Nitrobenzene-d5	6.650	82	557206	35.63	ppm	0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 71.26%			
47) 2-Fluorobiphenyl	8.741	172	1077696	36.26	ppm	0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 72.52%			
75) 2,4,6-Tribromophenol	10.453	330	361672	78.39	ppm	0.00
Spiked Amount 100.000	Range 42 - 108		Recovery = 78.39%			
95) Terphenyl-d14	13.202	244	1203676	37.49	ppm	0.00
Spiked Amount 50.000	Range 45 - 119		Recovery = 74.98%			
Target Compounds						Qvalue
30) Benzoic Acid	7.158	105	3220	0.35	ppm	89
89) Di-n-butylphthalate	12.025	149	4166	0.09	ppm	95
91) Fluoranthene	12.710	202	1007	0.02	ppm	89
97) Butylbenzylphthalate	13.854	149	6734	0.34	ppm	93
101) bis(2-Ethylhexyl)phtha...	14.710	149	2591	0.09	ppm	94

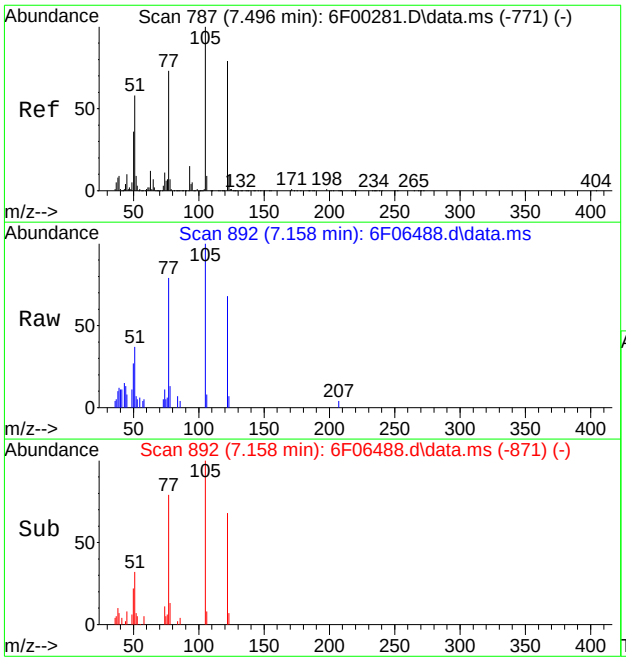
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06488.d
Acq On : 11 Aug 2020 1:46 pm
Operator : marthav
Sample : op81484-mb E Inst : MSBNA10
Misc : op81484,S6F251,30.0,,,1,1,soil
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Results File: 8270D6F072920.RES
Quant Time: Aug 12 06:04:18 2020
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

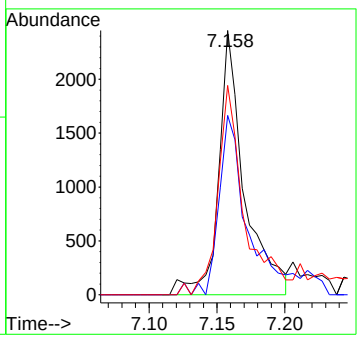


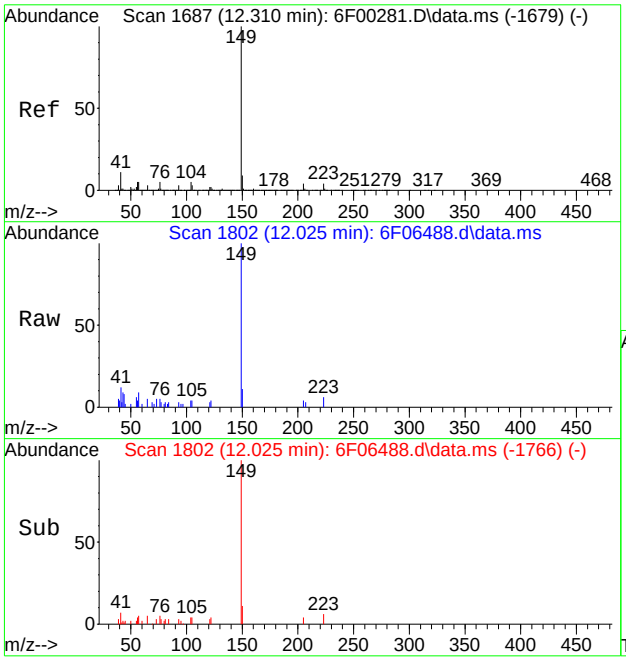


#30
Benzoic Acid
Concen: 0.35 ppm
RT: 7.158 min Scan# 892
Delta R.T. -0.086 min
Lab File: 6F06488.d
Acq: 11 Aug 2020 1:46 pm

Tgt Ion:105 Resp: 3220

Ion	Ratio	Lower	Upper
105	100		
122	66.6	49.5	109.5
77	79.5	43.0	103.0

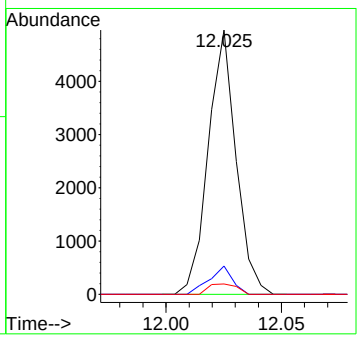


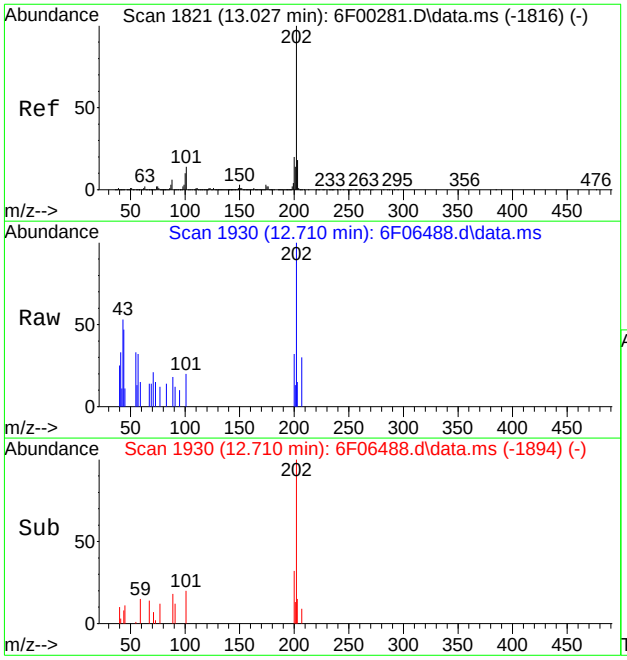


#89
Di-n-butylphthalate
Concen: 0.09 ppm
RT: 12.025 min Scan# 1802
Delta R.T. -0.005 min
Lab File: 6F06488.d
Acq: 11 Aug 2020 1:46 pm

Tgt Ion:149 Resp: 4166

Ion	Ratio	Lower	Upper
149	100		
150	10.7	0.0	38.7
104	4.0	0.0	35.2

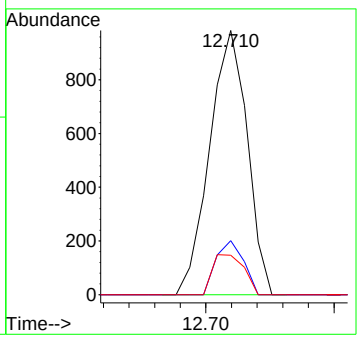


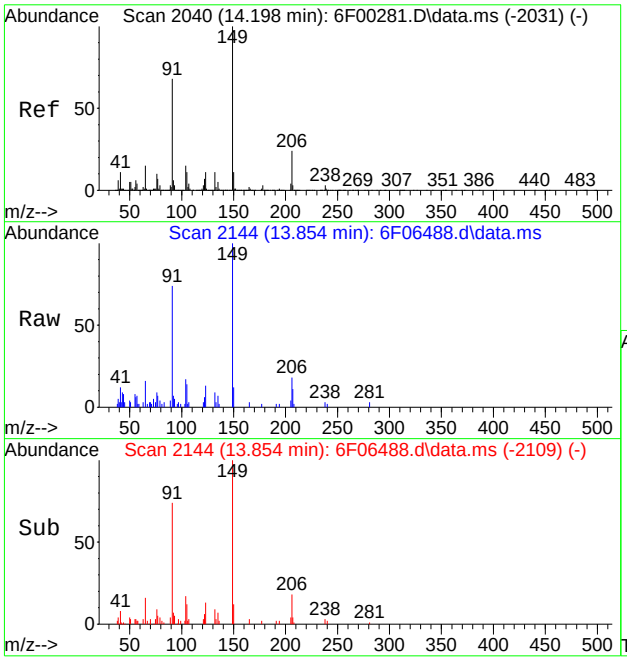


#91
Fluoranthene
Concen: 0.02 ppm
RT: 12.710 min Scan# 1930
Delta R.T. -0.005 min
Lab File: 6F06488.d
Acq: 11 Aug 2020 1:46 pm

Tgt Ion:202 Resp: 1007

Ion	Ratio	Lower	Upper
202	100		
101	17.8	0.0	43.6
203	13.0	0.0	47.7

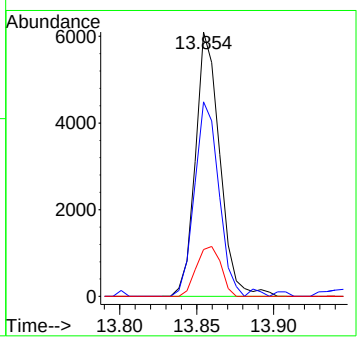


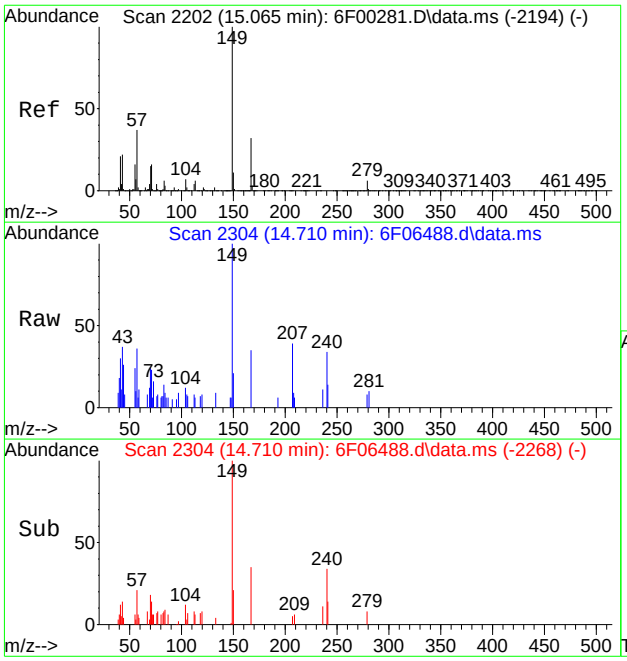


#97
Butylbenzylphthalate
Concen: 0.34 ppm
RT: 13.854 min Scan# 2144
Delta R.T. -0.011 min
Lab File: 6F06488.d
Acq: 11 Aug 2020 1:46 pm

Tgt Ion:149 Resp: 6734

Ion	Ratio	Lower	Upper
149	100		
91	72.7	38.2	98.2
206	17.7	0.0	54.0

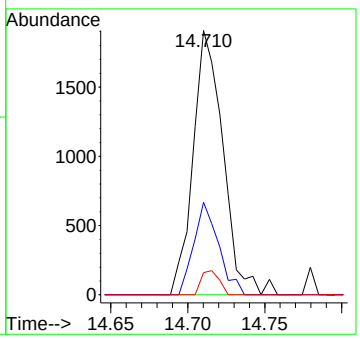




#101
bis(2-Ethylhexyl)phthalate
Concen: 0.09 ppm
RT: 14.710 min Scan# 2304
Delta R.T. -0.005 min
Lab File: 6F06488.d
Acq: 11 Aug 2020 1:46 pm

Tgt Ion:149 Resp: 2591

Ion	Ratio	Lower	Upper
149	100		
167	35.0	1.7	61.7
279	8.4	0.0	35.7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11101.d
Acq On : 10 Aug 2020 2:57 pm
Operator : FOUADS
Sample : op81483-mb e
Misc : op81483,S7G482,15.0,,,1,1,soil
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 11 02:36:58 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

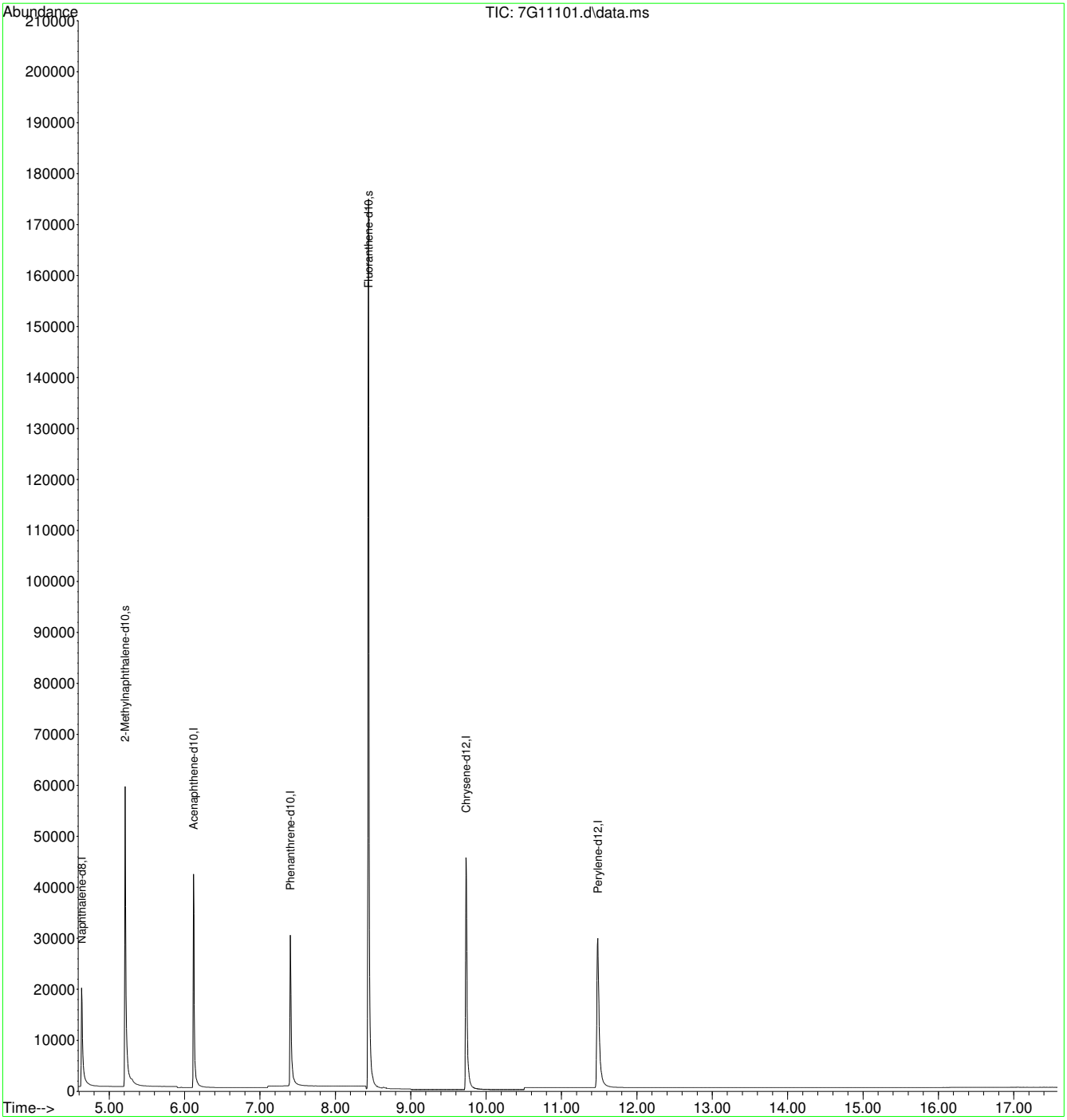
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.634	136	24312	4.00	ppm	0.00
6) Acenaphthene-d10	6.118	164	16384	4.00	ppm	0.00
11) Phenanthrene-d10	7.403	188	31665	4.00	ppm	0.00
18) Chrysene-d12	9.734	240	48325	4.00	ppm	0.00
22) Perylene-d12	11.481	264	44401	4.00	ppm	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.211	152	29841	8.24	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 82.40%			
17) Fluoranthene-d10	8.439	212	136534	8.27	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 82.70%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11101.d
Acq On : 10 Aug 2020 2:57 pm
Operator : FOUADS
Sample : op81483-mb e
Misc : op81483,S7G482,15.0,,,1,1,soil
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 11 02:36:58 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11131.d
Acq On : 11 Aug 2020 8:52 am
Operator : FOUADS
Sample : op81485-mb e Inst : MSBNA8
Misc : op81485,S7G483,15.0,,,1,1,soil
ALS Vial : 3 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:26:06 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

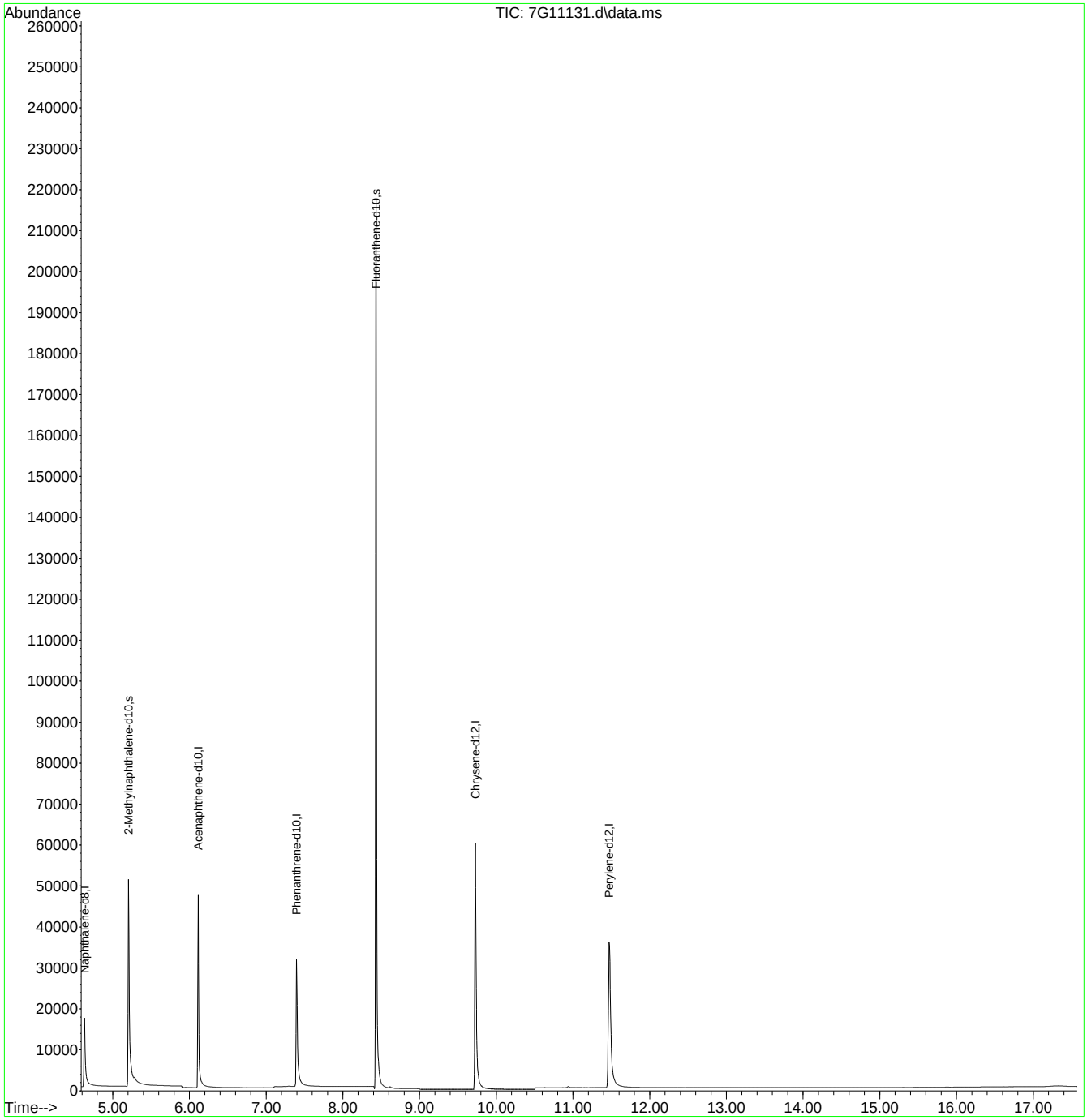
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.634	136	21667	4.00	ppm	0.00
6) Acenaphthene-d10	6.113	164	17417	4.00	ppm	0.00
11) Phenanthrene-d10	7.396	188	34159	4.00	ppm	0.00
18) Chrysene-d12	9.727	240	60313	4.00	ppm	0.00
22) Perylene-d12	11.472	264	54929	4.00	ppm	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.205	152	25388	7.88	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 78.80%			
17) Fluoranthene-d10	8.433	212	161036	9.03	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 90.30%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11131.d
Acq On : 11 Aug 2020 8:52 am
Operator : FOUADS
Sample : op81485-mb e Inst : MSBNA8
Misc : op81485,S7G483,15.0,,,1,1,soil
ALS Vial : 3 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:26:06 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072331.d
Acq On : 11 Aug 2020 1:39 pm
Operator : marthav
Sample : op81482-bs E
Misc : op81482,sx2950,30.0,,,1,1,soil
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 12 02:01:14 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.660	152	148110	40.00	ppm	0.00
22) Naphthalene-d8	7.082	136	595100	40.00	ppm	0.00
43) Acenaphthene-d10	9.120	164	297901	40.00	ppm	0.00
70) Phenanthrene-d10	10.864	188	501986	40.00	ppm	0.00
92) Chrysene-d12	14.068	240	391828	40.00	ppm	0.00
102) Perylene-d12	16.255	264	303605	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	5.660	152	148110	40.00	ppm	0.00
120) Naphthalene-d8A	7.082	136	595100	40.00	ppm	0.00
127) Acenaphthene-d10A	9.120	164	297901	40.00	ppm	0.00
136) Phenanthrene-d10A	10.864	188	501986	40.00	ppm	0.00
146) Chrysene-d12A	14.068	240	391828	40.00	ppm	0.00
153) Perylene-d12A	16.255	264	303605	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	4.312	112	350002	65.91	ppm	0.00
Spiked Amount 100.000	Range 40 - 102		Recovery = 65.91%			
9) Phenol-d5	5.328	99	460169	72.83	ppm	0.00
Spiked Amount 100.000	Range 41 - 100		Recovery = 72.83%			
23) Nitrobenzene-d5	6.275	82	207266	33.72	ppm	0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 67.44%			
47) 2-Fluorobiphenyl	8.355	172	388866	36.06	ppm	0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 72.12%			
75) 2,4,6-Tribromophenol	10.056	330	82454	76.84	ppm	0.00
Spiked Amount 100.000	Range 42 - 108		Recovery = 76.84%			
95) Terphenyl-d14	12.779	244	380351	36.53	ppm	0.00
Spiked Amount 50.000	Range 45 - 119		Recovery = 73.06%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.488	88	63110	24.86	ppm	# 44
3) N-nitrosodimethylamine	2.820	42	122920	27.27	ppm	# 44
4) Pyridine	2.852	79	192300	31.14	ppm	# 42
5) Benzaldehyde	5.189	106	137478	31.14	ppm	95
6) Aniline	5.312	93	227282	25.81	ppm	64
8) bis(2-Chloroethyl)ether	5.392	93	182274	33.54	ppm	81
10) Phenol	5.344	94	247896	33.08	ppm	91
11) 2-Chlorophenol	5.446	128	194548	34.33	ppm	81
12) 1,3-Dichlorobenzene	5.596	146	192413	32.68	ppm	98
13) 1,4-Dichlorobenzene	5.676	146	203187	32.62	ppm	95
14) 1,2-Dichlorobenzene	5.836	146	188261	31.81	ppm	96
15) Benzyl alcohol	5.836	108	135734	34.61	ppm	86
16) 2,2'-Oxybis(1-chloropr...	5.986	45	323585	28.34	ppm	68
17) 2-Methylphenol	5.986	108	180831	33.54	ppm	90
18) Acetophenone	6.114	105	261927	32.83	ppm	96
19) Hexachloroethane	6.211	117	78759	33.67	ppm	94
20) N-Nitroso-di-n-propyla...	6.130	70	147903	35.11	ppm	67
21) 3&4-Methylphenol	6.168	108	414998	74.47	ppm	96
24) Nitrobenzene	6.302	77	212866	35.01	ppm	86
25) Isophorone	6.574	82	382772	35.26	ppm	95
26) 2-Nitrophenol	6.655	139	105063	36.34	ppm	71
27) 2,4-Dimethylphenol	6.751	107	176121	32.81	ppm	94
29) bis(2-Chloroethoxy)met...	6.842	93	224215	35.30	ppm	94
30) Benzoic Acid	6.954	105	332248	68.66	ppm	92
31) 2,4-Dichlorophenol	6.954	162	161444	37.31	ppm	96
32) 1,2,4-Trichlorobenzene	7.024	180	154599	34.96	ppm	98
34) Naphthalene	7.104	128	556504	34.49	ppm	99
35) 4-Chloroaniline	7.195	127	231076	33.91	ppm	92
36) 2,6-Dichlorophenol	7.200	162	161091	36.51	ppm	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072331.d
Acq On : 11 Aug 2020 1:39 pm
Operator : marthav
Sample : op81482-bs E
Misc : op81482,sx2950,30.0,,,1,1,soil
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 12 02:01:14 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

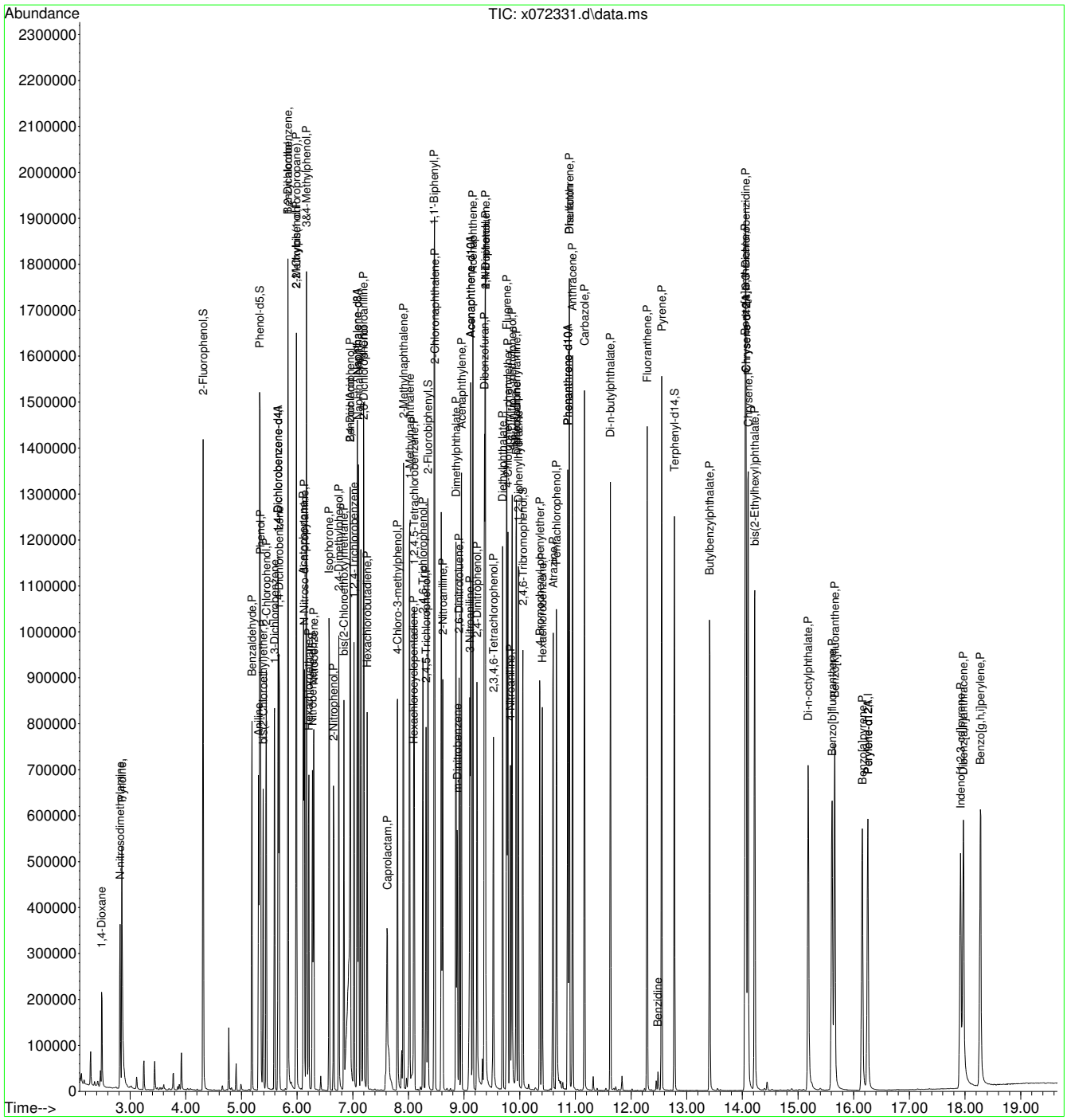
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
37)	Hexachlorobutadiene	7.259	225	78982	36.22	ppm		99
38)	Caprolactam	7.623	113	68662	38.24	ppm	#	65
39)	4-Chloro-3-methylphenol	7.805	107	168886	36.60	ppm		96
40)	2-Methylnaphthalene	7.912	142	363155	34.03	ppm		98
41)	1-Methylnaphthalene	8.024	142	336379	32.92	ppm		98
42)	1,2,4,5-Tetrachloroben...	8.104	216	150791	33.97	ppm		97
44)	Hexachlorocyclopentadiene	8.093	237	59256	26.93	ppm		97
45)	2,4,6-Trichlorophenol	8.259	196	107032	39.14	ppm		99
46)	2,4,5-Trichlorophenol	8.318	196	121399	40.57	ppm		98
48)	1,1'-Biphenyl	8.462	154	436969	35.92	ppm		99
49)	2-Chloronaphthalene	8.473	162	333926	36.57	ppm		94
50)	2-Nitroaniline	8.618	65	162579	48.36	ppm	#	71
52)	Acenaphthylene	8.954	152	602879	40.52	ppm		99
53)	Dimethylphthalate	8.853	163	421656	40.12	ppm		99
54)	m-Dinitrobenzene	8.880	168	71491	40.82	ppm		84
55)	2,6-Dinitrotoluene	8.912	165	99190	39.99	ppm		70
57)	Acenaphthene	9.158	153	374709	37.87	ppm		99
58)	3-Nitroaniline	9.104	138	112153	41.10	ppm		96
59)	2,4-Dinitrophenol	9.233	184	119368	80.40	ppm	#	43
60)	Dibenzofuran	9.366	168	489369	37.05	ppm		93
61)	2,4-Dinitrotoluene	9.382	165	142827	45.16	ppm	#	66
62)	4-Nitrophenol	9.382	109	112651	73.90	ppm	#	65
64)	2,3,4,6-Tetrachlorophenol	9.527	232	87004	37.93	ppm		88
65)	Fluorene	9.767	166	420042	40.76	ppm		97
66)	4-Chlorophenyl-phenyle...	9.789	204	201868	40.59	ppm		92
67)	Diethylphthalate	9.693	149	429122	40.88	ppm		97
69)	4-Nitroaniline	9.832	138	121253	39.94	ppm		86
71)	4,6-Dinitro-2-methylph...	9.864	198	179570	84.96	ppm	#	67
72)	n-Nitrosodiphenylamine	9.939	169	321803	41.25	ppm		94
73)	Diphenylamine	9.939	169	321803	35.15	ppm		94
74)	1,2-Diphenylhydrazine	9.976	77	428374	38.08	ppm		95
78)	4-Bromophenyl-phenylether	10.361	248	95328	39.55	ppm		85
79)	Hexachlorobenzene	10.404	284	93253	38.78	ppm		75
82)	Atrazine	10.602	200	111657	38.10	ppm		89
83)	Pentachlorophenol	10.661	266	107947	64.54	ppm		98
84)	Phenanthrene	10.891	178	616726	40.66	ppm		99
85)	Anthracene	10.950	178	616363	38.99	ppm		98
86)	Disulfoton	10.891	88	55486	9.15	ppm		54
87)	Carbazole	11.163	167	592268	42.45	ppm		99
89)	Di-n-butylphthalate	11.629	149	688406	44.21	ppm		98
91)	Fluoranthene	12.292	202	596174	42.36	ppm		97
93)	Benzidine	12.485	184	17275	2.49	ppm		99
94)	Pyrene	12.549	202	620310	38.13	ppm		99
97)	Butylbenzylphthalate	13.410	149	286981	42.79	ppm		89
98)	3,3'-Dichlorobenzidine	14.057	252	166556	41.17	ppm		97
99)	Benzo[a]anthracene	14.052	228	508689	41.31	ppm		99
100)	Chrysene	14.105	228	572889	43.68	ppm		98
101)	bis(2-Ethylhexyl)phtha...	14.223	149	408817	44.79	ppm		98
103)	Di-n-octylphthalate	15.180	149	569141	47.23	ppm		94
104)	Benzo[b]fluoranthene	15.614	252	419454	46.83	ppm		97
105)	Benzo[k]fluoranthene	15.662	252	450300	41.78	ppm		97
106)	Benzo[a]pyrene	16.154	252	368205	43.21	ppm		96
107)	Indeno[1,2,3-cd]pyrene	17.919	276	311441	51.87	ppm		87
108)	Dibenz[a,h]anthracene	17.972	278	340712	50.06	ppm		90
109)	Benzo[g,h,i]perylene	18.277	276	373851	45.26	ppm		86

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072331.d
Acq On : 11 Aug 2020 1:39 pm
Operator : marthav
Sample : op81482-bs E
Misc : op81482,sx2950,30.0,,,1,1,soil
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 12 02:01:14 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 08/12/20 14:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06487.d
Acq On : 11 Aug 2020 1:20 pm
Operator : marthav
Sample : op81484-bs E Inst : MSBNA10
Misc : op81484,S6F251,30.0,,,1,1,soil
ALS Vial : 3 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Results File: 8270D6F072920.RES
Quant Time: Aug 12 06:03:08 2020
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.035	152	372320	40.00	ppm	0.00
22) Naphthalene-d8	7.468	136	1389543	40.00	ppm	0.00
43) Acenaphthene-d10	9.522	164	731029	40.00	ppm	0.00
70) Phenanthrene-d10	11.276	188	1322211	40.00	ppm	0.00
92) Chrysene-d12	14.576	240	1161496	40.00	ppm	0.00
102) Perylene-d12	16.930	264	1125889	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	4.665	112	978233	69.53	ppm	0.00
Spiked Amount 100.000	Range 40 - 102		Recovery = 69.53%			
9) Phenol-d5	5.671	99	1270651	76.08	ppm	0.00
Spiked Amount 100.000	Range 41 - 100		Recovery = 76.08%			
23) Nitrobenzene-d5	6.650	82	539574	35.39	ppm	0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 70.78%			
47) 2-Fluorobiphenyl	8.741	172	1045674	36.60	ppm	0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 73.20%			
75) 2,4,6-Tribromophenol	10.458	330	368458	82.80	ppm	0.00
Spiked Amount 100.000	Range 42 - 108		Recovery = 82.80%			
95) Terphenyl-d14	13.202	244	1237770	37.91	ppm	0.00
Spiked Amount 50.000	Range 45 - 119		Recovery = 75.82%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.879	88	145404	26.26	ppm	# 67
3) N-nitrosodimethylamine	3.200	42	241908	32.02	ppm	# 61
4) Pyridine	3.243	79	413230	28.98	ppm	# 57
5) Benzaldehyde	5.559	106	370915	32.53	ppm	96
6) Aniline	5.676	93	623641	28.56	ppm	65
8) bis(2-Chloroethyl)ether	5.757	93	508000	35.52	ppm	87
10) Phenol	5.687	94	691288	35.60	ppm	96
11) 2-Chlorophenol	5.810	128	521890	36.20	ppm	90
12) 1,3-Dichlorobenzene	5.971	146	529503	33.96	ppm	98
13) 1,4-Dichlorobenzene	6.056	146	533104	33.73	ppm	97
14) 1,2-Dichlorobenzene	6.217	146	511691	34.31	ppm	99
15) Benzyl alcohol	6.201	108	328618	37.34	ppm	98
16) bis(2-chloroisopropyl)...	6.350	45	651017	36.40	ppm	76
17) 2-Methylphenol	6.340	108	453122	34.90	ppm	96
18) Acetophenone	6.484	105	688983	35.80	ppm	99
19) Hexachloroethane	6.591	117	216048	33.49	ppm	91
20) N-Nitroso-di-n-propyla...	6.495	70	360475	35.28	ppm	# 67
21) 3&4-Methylphenol	6.516	108	983286	72.88	ppm	96
24) Nitrobenzene	6.671	77	538544	36.28	ppm	95
25) Isophorone	6.949	82	1026254	38.47	ppm	100
26) 2-Nitrophenol	7.035	139	283114	38.72	ppm	87
27) 2,4-Dimethylphenol	7.110	107	443512	35.04	ppm	99
29) bis(2-Chloroethoxy)met...	7.211	93	638687	39.10	ppm	98
30) Benzoic Acid	7.286	105	911139	74.79	ppm	98
31) 2,4-Dichlorophenol	7.324	162	429052	38.12	ppm	95
32) 1,2,4-Trichlorobenzene	7.404	180	450883	36.03	ppm	99
34) Naphthalene	7.490	128	1416153	36.03	ppm	98
35) 4-Chloroaniline	7.570	127	528563	30.84	ppm	94
36) 2,6-Dichlorophenol	7.575	162	410587	37.53	ppm	95
37) Hexachlorobutadiene	7.645	225	252390	36.76	ppm	98
38) Caprolactam	7.987	113	179794m	40.94	ppm	
39) 4-Chloro-3-methylphenol	8.158	107	452957	39.04	ppm	97
40) 2-Methylnaphthalene	8.297	141	861790	37.50	ppm	98
41) 1-Methylnaphthalene	8.415	142	909325	36.00	ppm	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06487.d
Acq On : 11 Aug 2020 1:20 pm
Operator : marthav
Sample : op81484-bs E Inst : MSBNA10
Misc : op81484,S6F251,30.0,,,1,1,soil
ALS Vial : 3 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Results File: 8270D6F072920.RES
Quant Time: Aug 12 06:03:08 2020
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

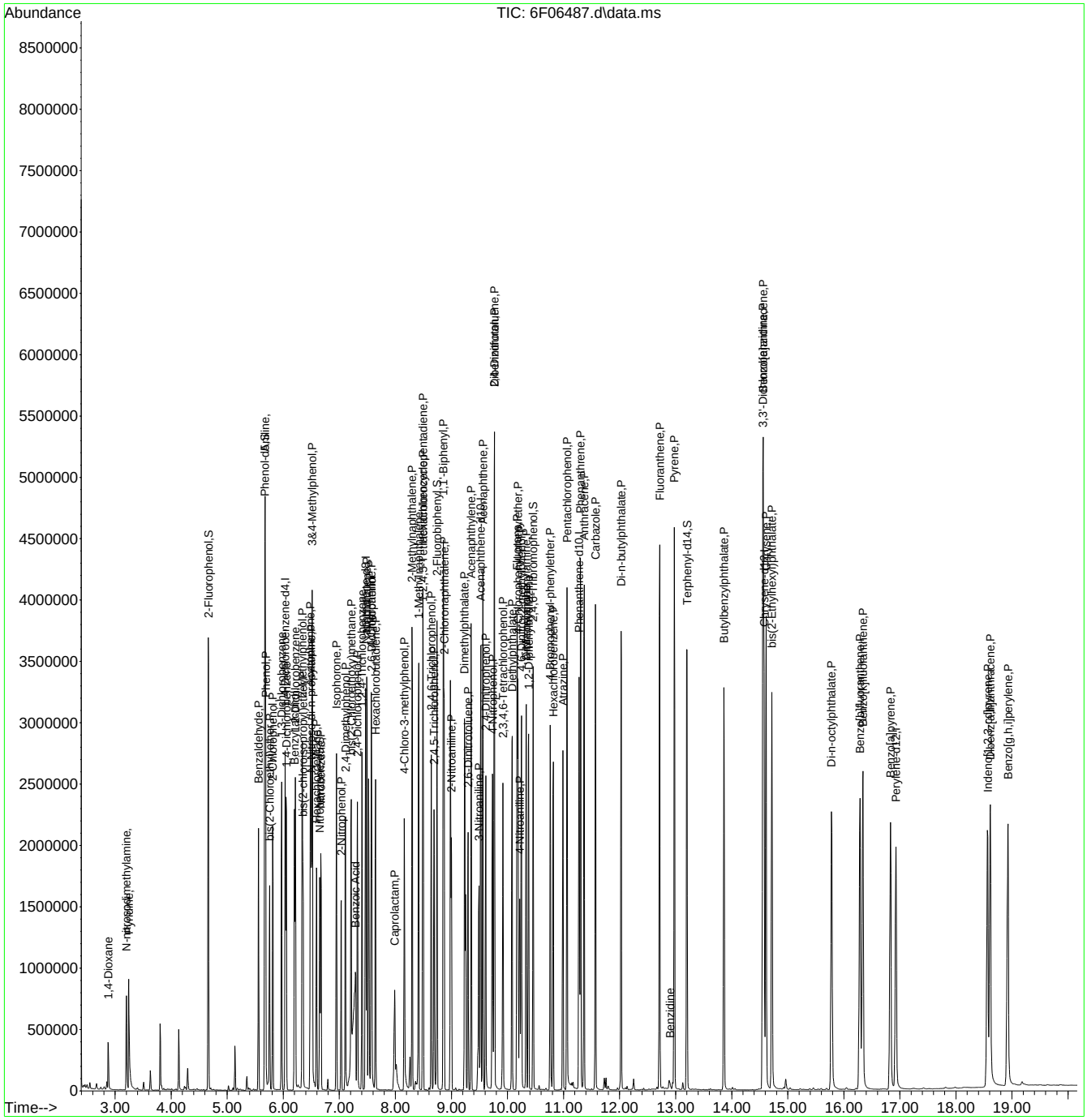
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42) 1,2,4,5-Tetrachloroben...	8.495	216	446086	36.98	ppm		99
44) Hexachlorocyclopentadiene	8.490	237	333374	43.78	ppm		97
45) 2,4,6-Trichlorophenol	8.640	196	325981	40.87	ppm		97
46) 2,4,5-Trichlorophenol	8.688	196	349991	41.17	ppm		98
48) 1,1'-Biphenyl	8.853	154	1166538	38.21	ppm		97
49) 2-Chloronaphthalene	8.869	162	908512	37.83	ppm		97
50) 2-Nitroaniline	8.998	65	387637	51.54	ppm		86
52) Acenaphthylene	9.351	152	1504330	41.18	ppm		97
53) Dimethylphthalate	9.233	163	1138834	41.75	ppm		99
55) 2,6-Dinitrotoluene	9.297	165	263633	41.61	ppm		96
57) Acenaphthene	9.559	153	930843	38.37	ppm		97
58) 3-Nitroaniline	9.490	138	274221	37.52	ppm		99
59) 2,4-Dinitrophenol	9.613	184	355255	79.86	ppm		84
60) Dibenzofuran	9.768	168	1320044	39.36	ppm		98
61) 2,4-Dinitrotoluene	9.768	165	378279	45.34	ppm		86
62) 4-Nitrophenol	9.736	109	351003	83.97	ppm	#	81
64) 2,3,4,6-Tetrachlorophenol	9.918	232	277576	40.48	ppm		97
65) Fluorene	10.169	166	1100684	40.53	ppm		99
66) 4-Chlorophenyl-phenyle...	10.185	204	552164	41.10	ppm		92
67) Diethylphthalate	10.084	149	1180768	42.66	ppm		98
69) 4-Nitroaniline	10.217	138	289820	39.24	ppm		97
71) 4,6-Dinitro-2-methylph...	10.249	198	491187	83.42	ppm	#	73
72) n-Nitrosodiphenylamine	10.335	169	792996	38.59	ppm		97
73) Diphenylamine	10.335	169	792996	34.61	ppm		97
74) 1,2-Diphenylhydrazine	10.378	77	1139605	38.89	ppm		97
78) 4-Bromophenyl-phenylether	10.763	248	333801	43.26	ppm		98
79) Hexachlorobenzene	10.816	284	358214	40.65	ppm		80
82) Atrazine	10.988	200	321509	41.28	ppm		94
83) Pentachlorophenol	11.062	266	470786	82.87	ppm		99
84) Phenanthrene	11.303	178	1617646	40.86	ppm		99
85) Anthracene	11.367	178	1589313	39.50	ppm		99
87) Carbazole	11.571	167	1528029	42.15	ppm		96
89) Di-n-butylphthalate	12.025	149	2019771	44.20	ppm		98
91) Fluoranthene	12.715	202	1746093	41.89	ppm		99
93) Benzidine	12.897	184	20943	0.86	ppm		98
94) Pyrene	12.977	202	1784903	42.90	ppm		97
97) Butylbenzylphthalate	13.860	149	890865	44.69	ppm		94
98) 3,3'-Dichlorobenzidine	14.555	252	567298	37.67	ppm		99
99) Benzo[a]anthracene	14.560	228	1640333	42.15	ppm		97
100) Chrysene	14.614	228	1615662	42.79	ppm		99
101) bis(2-Ethylhexyl)phtha...	14.716	149	1209555	43.45	ppm		97
103) Di-n-octylphthalate	15.780	149	1938916	43.54	ppm		93
104) Benzo[b]fluoranthene	16.288	252	1532046	42.39	ppm		98
105) Benzo[k]fluoranthene	16.342	252	1627372	43.30	ppm		98
106) Benzo[a]pyrene	16.834	252	1412854	42.10	ppm		97
107) Indeno[1,2,3-cd]pyrene	18.567	276	1356182	43.40	ppm		93
108) Dibenz[a,h]anthracene	18.615	278	1442291	43.23	ppm		91
109) Benzo[g,h,i]perylene	18.930	276	1512447	44.85	ppm		95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06487.d
Acq On : 11 Aug 2020 1:20 pm
Operator : marthav
Sample : op81484-bs E Inst : MSBNA10
Misc : op81484,S6F251,30.0,,,1,1,soil
ALS Vial : 3 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Results File: 8270D6F072920.RES
Quant Time: Aug 12 06:03:08 2020
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration



Manual Integration Approval Summary

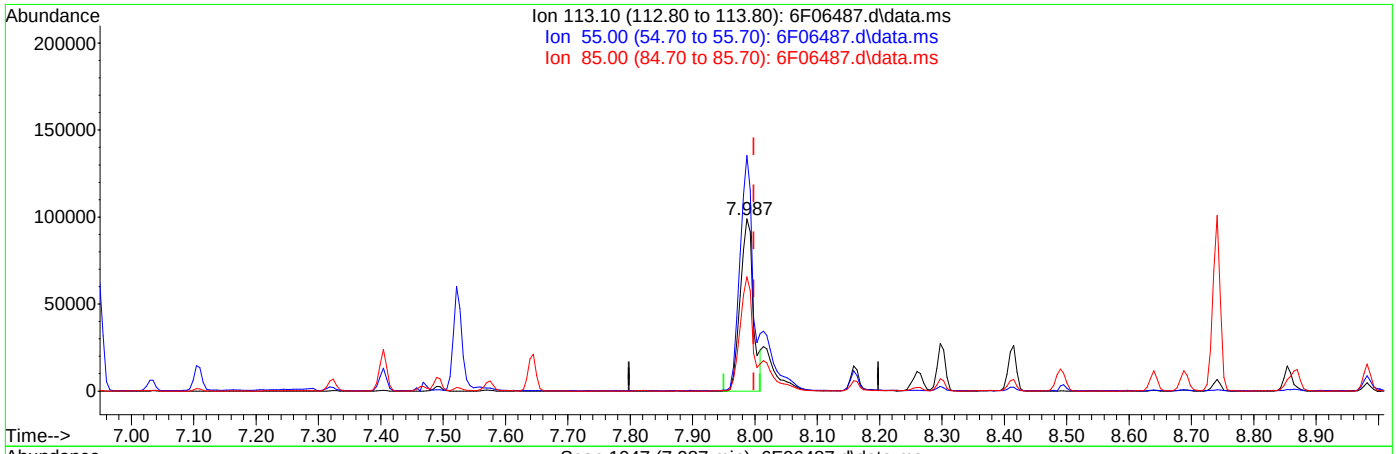
Sample Number: OP81484-BS
Lab FileID: 6F06487.D
Injection Time: 08/11/20 13:20
Method: SW846 8270E
Analyst approved: 08/12/20 07:02 Jennifer Fereira
Supervisor approved: 08/12/20 14:43 Nicole McCampbell

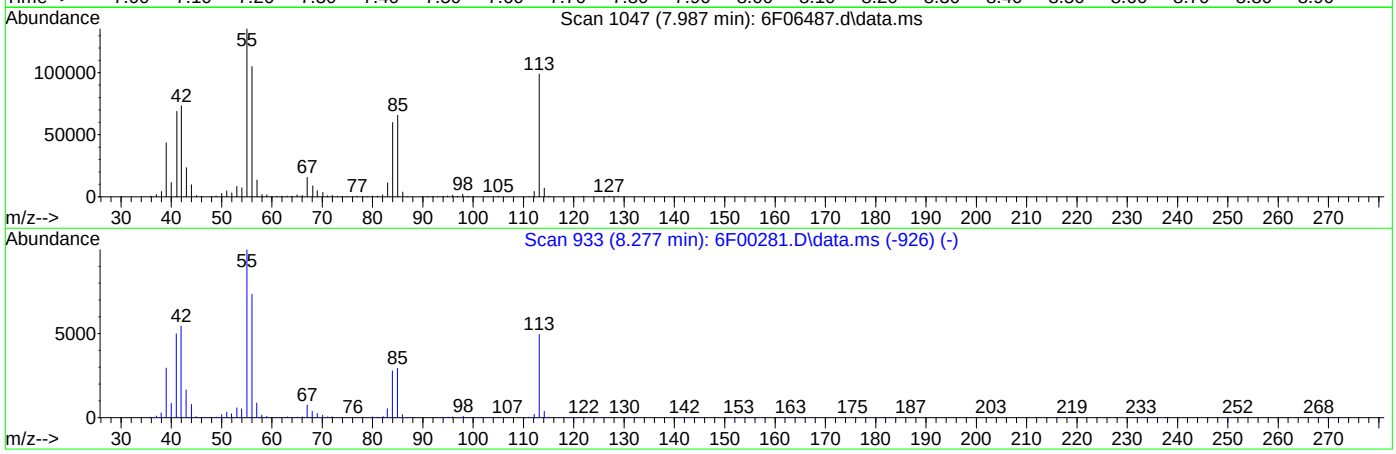
Parameter	CAS	Sig#	R.T. (min.)	Reason
Caprolactam	105-60-2		7.99	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06487.d
Acq On : 11 Aug 2020 1:20 pm
Operator : marthav
Sample : op81484-bs E Inst : MSBNA10
Misc : op81484,S6F251,30.0,,,1,1,soil
ALS Vial : 3 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Results File: 8270D6F072920.RES
Quant Time: Aug 12 05:58:44 2020
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration





TIC: 6F06487.d\data.ms

(38) Caprolactam (P)

7.987min (-0.011) 32.43ppm

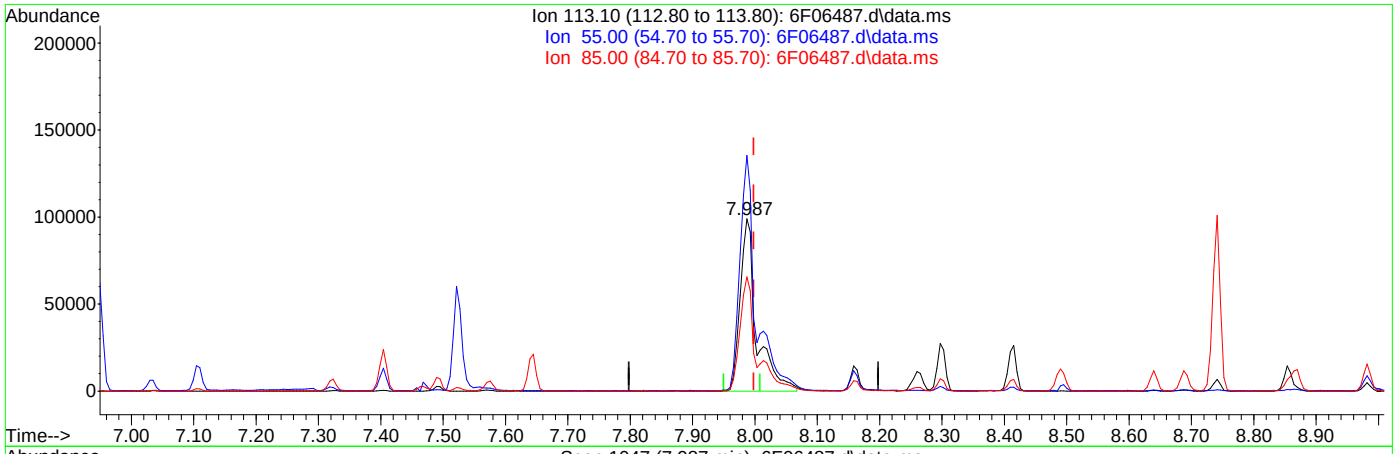
response 142424

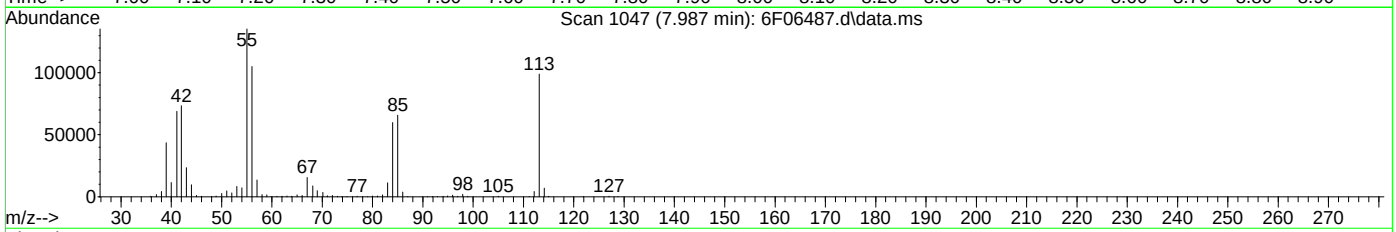
Ion	Exp%	Act%
113.10	100	100
55.00	202.10	136.08#
85.00	59.40	66.35
0.00	0.00	0.00

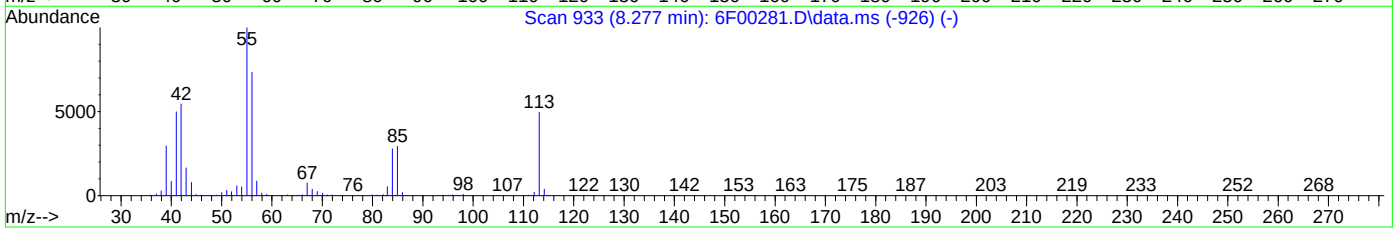
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06487.d
Acq On : 11 Aug 2020 1:20 pm
Operator : marthav
Sample : op81484-bs E Inst : MSBNA10
Misc : op81484,S6F251,30.0,,,1,1,soil
ALS Vial : 3 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Results File: 8270D6F072920.RES
Quant Time: Aug 12 05:58:44 2020
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration







TIC: 6F06487.d\data.ms

(38) Caprolactam (P)

7.987min (-0.011) 40.94ppm m

response 179794

Ion	Exp%	Act%
113.10	100	100
55.00	202.10	136.85#
85.00	59.40	66.39
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11102.d
Acq On : 10 Aug 2020 3:21 pm
Operator : FOUADS
Sample : op81483-bs e
Misc : op81483,S7G482,15.0,,,1,1,soil
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 11 02:37:01 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

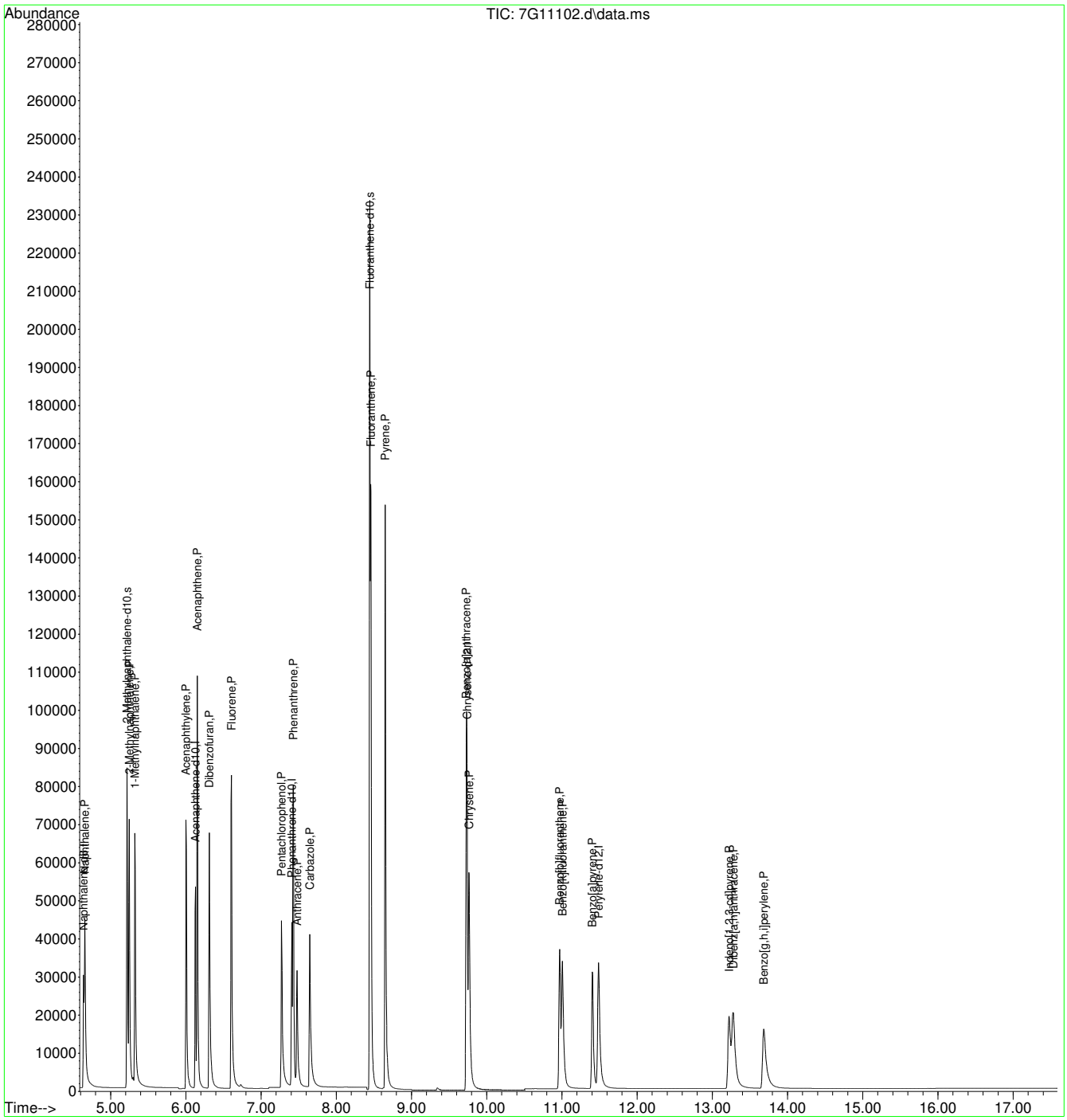
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.640	136	25347	4.00	ppm	0.01
6) Acenaphthene-d10	6.128	164	16910	4.00	ppm	0.01
11) Phenanthrene-d10	7.410	188	32726	4.00	ppm	0.01
18) Chrysene-d12	9.739	240	51832	4.00	ppm	0.01
22) Perylene-d12	11.486	264	48241	4.00	ppm	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.217	152	30918	8.19	ppm	0.01
Spiked Amount 10.000	Range 50 - 150		Recovery = 81.90%			
17) Fluoranthene-d10	8.445	212	144811	8.49	ppm	0.01
Spiked Amount 10.000	Range 50 - 150		Recovery = 84.90%			
Target Compounds						Qvalue
2) Naphthalene	4.658	128	37812	5.22	ppm	99
3) 2-Methylnaphthalene	5.246	142	29606	5.25	ppm	97
5) 1-Methylnaphthalene	5.323	142	31354	6.18	ppm	92
7) Acenaphthylene	6.002	152	50679	5.18	ppm	99
8) Acenaphthene	6.152	153	35325	5.53	ppm	99
9) Dibenzofuran	6.312	168	50362	11.10	ppm	96
10) Fluorene	6.607	166	39665	5.71	ppm	95
12) Pentachlorophenol	7.271	266	17815	14.06	ppm	99
13) Phenanthrene	7.431	178	60290	5.55	ppm	98
14) Anthracene	7.480	178	28806	2.64	ppm	99
15) Carbazole	7.647	167	41442	2.12	ppm	97
16) Fluoranthene	8.461	202	117026	5.70	ppm	98
19) Pyrene	8.651	202	120602	5.84	ppm	97
20) Benzo[a]anthracene	9.729	228	46916	2.90	ppm	99
21) Chrysene	9.765	228	56247	3.13	ppm	99
23) Benzo[b]fluoranthene	10.972	252	41146	2.51	ppm	98
24) Benzo[k]fluoranthene	11.006	252	52321	3.01	ppm	98
25) Benzo[a]pyrene	11.404	252	42005	2.63	ppm	98
26) Indeno[1,2,3-cd]pyrene	13.224	276	44134	4.24	ppm	94
27) Dibenz[a,h]anthracene	13.282	278	33692	2.92	ppm	97
28) Benzo[g,h,i]perylene	13.685	276	37924	3.02	ppm	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11102.d
Acq On : 10 Aug 2020 3:21 pm
Operator : FOUADS
Sample : op81483-bs e
Misc : op81483,S7G482,15.0,,,1,1,soil
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 11 02:37:01 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 08/12/20 11:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11132.d
Acq On : 11 Aug 2020 9:16 am
Operator : FOUADS
Sample : op81485-bs e Inst : MSBNA8
Misc : op81485,S7G483,15.0,,,1,1,soil
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:28:26 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

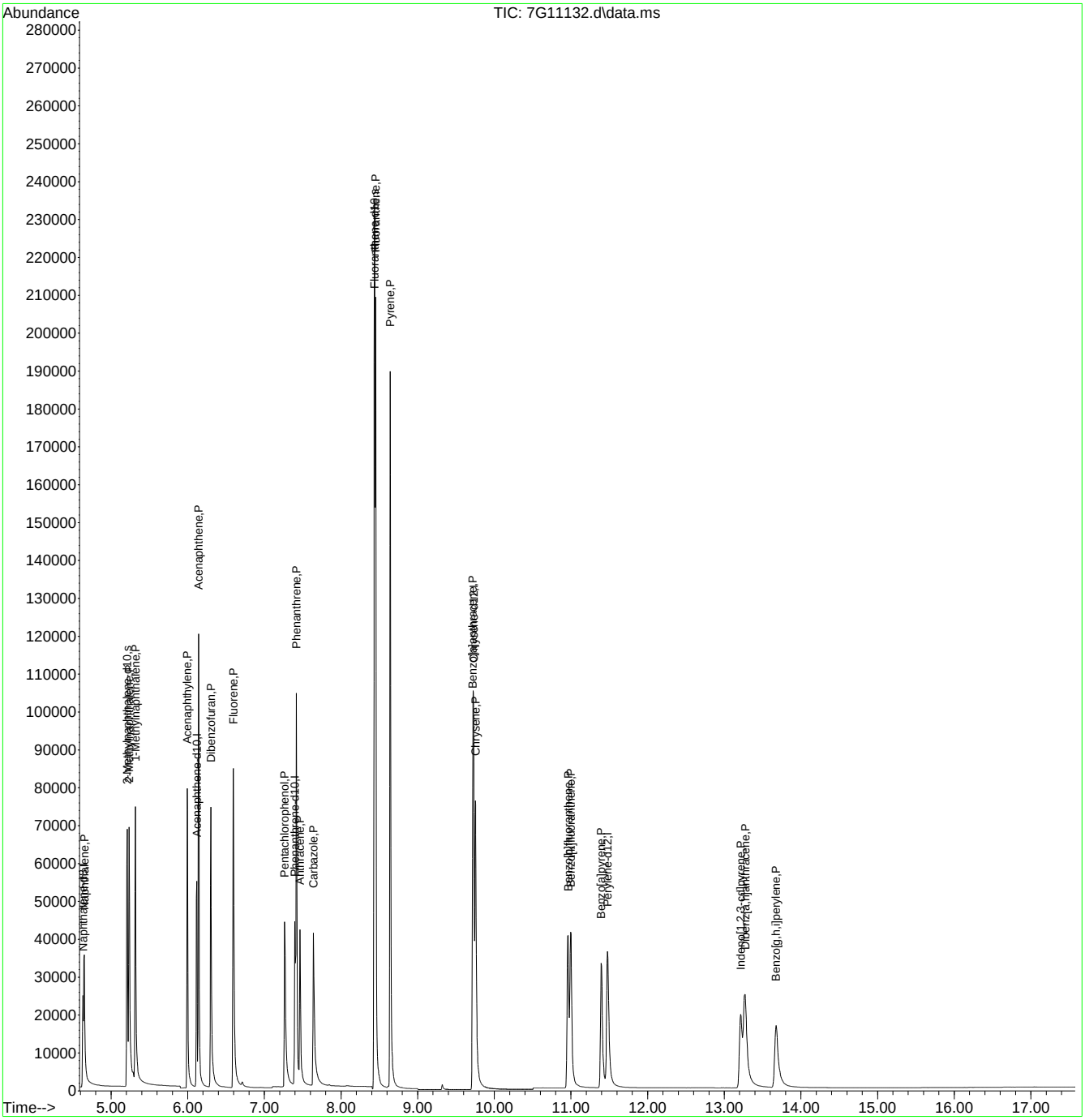
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.634	136	22419	4.00	ppm	0.00
6) Acenaphthene-d10	6.118	164	17721	4.00	ppm	0.00
11) Phenanthrene-d10	7.396	188	35054	4.00	ppm	0.00
18) Chrysene-d12	9.729	240	60725	4.00	ppm	0.00
22) Perylene-d12	11.477	264	55339	4.00	ppm	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.211	152	29576	8.84	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 88.40%			
17) Fluoranthene-d10	8.436	212	164610	9.00	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 90.00%			
Target Compounds						Qvalue
2) Naphthalene	4.652	128	33845	5.28	ppm	98
3) 2-Methylnaphthalene	5.235	142	29074	5.83	ppm	97
5) 1-Methylnaphthalene	5.317	142	32676	7.25	ppm	95
7) Acenaphthylene	5.993	152	55401	5.41	ppm	99
8) Acenaphthene	6.143	153	38067	5.69	ppm	98
9) Dibenzofuran	6.302	168	55169	11.59	ppm	90
10) Fluorene	6.597	166	43755	6.00	ppm	95
12) Pentachlorophenol	7.264	266	19636	14.44	ppm	99
13) Phenanthrene	7.417	178	65210	5.60	ppm	96
14) Anthracene	7.466	178	32656	2.80	ppm	100
15) Carbazole	7.640	167	45989	2.19	ppm	98
16) Fluoranthene	8.452	202	140035	6.36	ppm	98
19) Pyrene	8.642	202	138231	5.72	ppm	96
20) Benzo[a]anthracene	9.720	228	54693	2.89	ppm	99
21) Chrysene	9.753	228	67669	3.22	ppm	99
23) Benzo[b]fluoranthene	10.962	252	48197	2.57	ppm	98
24) Benzo[k]fluoranthene	10.996	252	61199	3.07	ppm	98
25) Benzo[a]pyrene	11.394	252	49703	2.72	ppm	98
26) Indeno[1,2,3-cd]pyrene	13.214	276	35757m	2.99	ppm	
27) Dibenz[a,h]anthracene	13.272	278	42571	3.21	ppm	96
28) Benzo[g,h,i]perylene	13.675	276	40007	2.78	ppm	92

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11132.d
Acq On : 11 Aug 2020 9:16 am
Operator : FOUADS
Sample : op81485-bs e Inst : MSBNA8
Misc : op81485,S7G483,15.0,,,1,1,soil
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:28:26 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration



Manual Integration Approval Summary

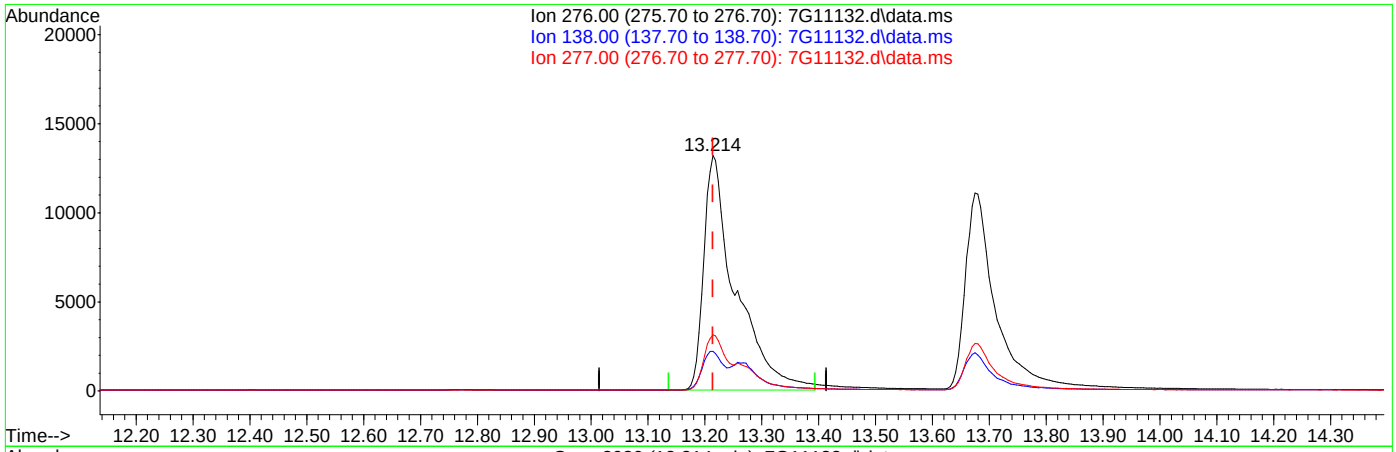
Sample Number: OP81485-BS
Lab FileID: 7G11132.D
Injection Time: 08/11/20 09:16
Method: SW846 8270E BY SIM
Analyst approved: 08/12/20 08:06 Jennifer Fereira
Supervisor approved: 08/12/20 11:43 Nicole McCampbell

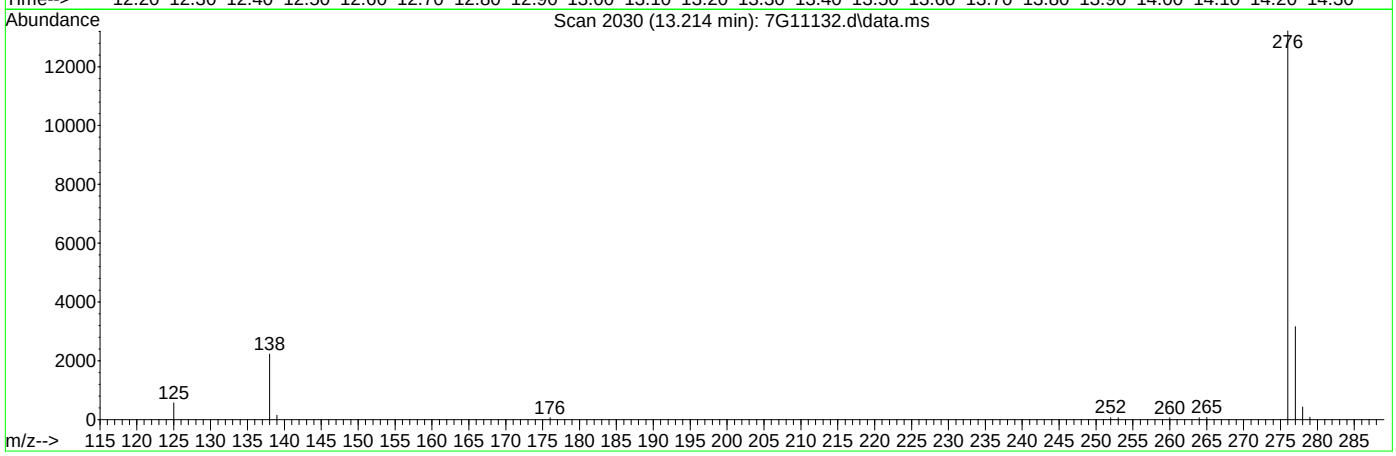
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		13.21	Missed peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11132.d
Acq On : 11 Aug 2020 9:16 am
Operator : FOUADS
Sample : op81485-bs e Inst : MSBNA8
Misc : op81485,S7G483,15.0,,,1,1,soil
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:26:09 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration





TIC: 7G11132.d\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.214min (-0.000) 4.28ppm

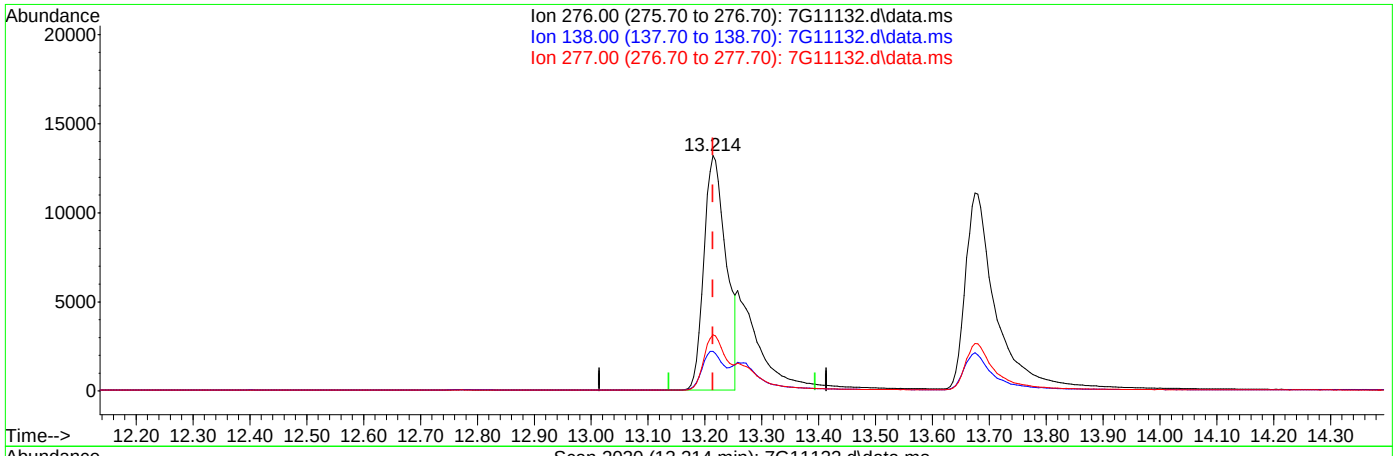
response 51083

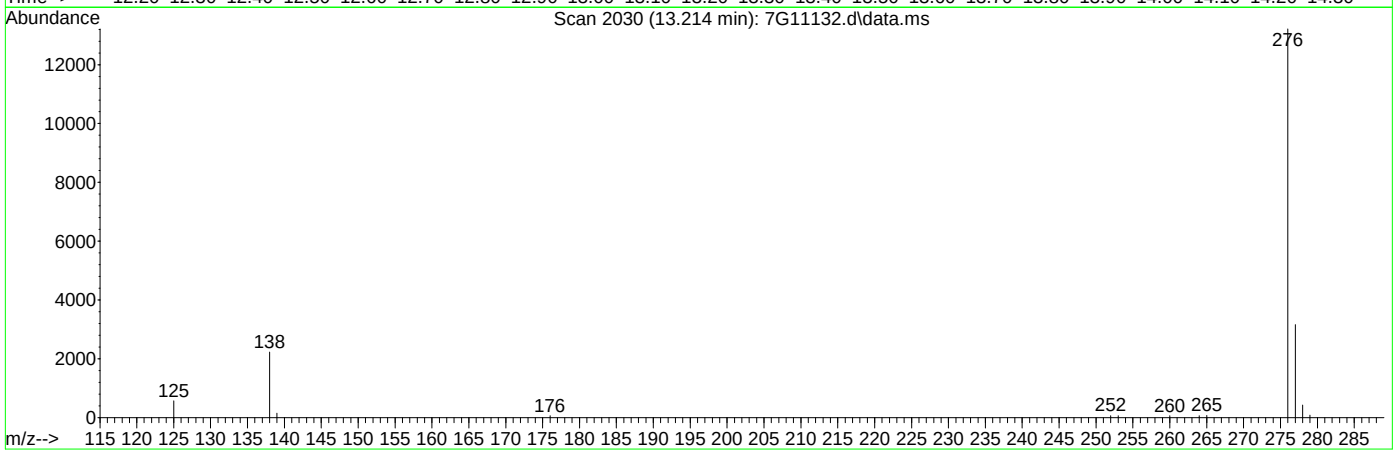
Ion	Exp%	Act%
276.00	100	100
138.00	9.60	16.35
277.00	23.10	23.54
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11132.d
Acq On : 11 Aug 2020 9:16 am
Operator : FOUADS
Sample : op81485-bs e Inst : MSBNA8
Misc : op81485,S7G483,15.0,,,1,1,soil
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:26:09 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration





TIC: 7G11132.d\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.214min (-0.000) 2.99ppm m

response 35757

Ion	Exp%	Act%
276.00	100	100
138.00	9.60	16.84
277.00	23.10	23.90
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072352.d
Acq On : 11 Aug 2020 10:44 pm
Operator : marthav
Sample : op81482-ms E
Misc : op81482,sx2950,30.0,,,1,1,soil
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Aug 12 03:28:19 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.670	152	177475	40.00	ppm	0.01
22) Naphthalene-d8	7.093	136	686382	40.00	ppm	0.01
43) Acenaphthene-d10	9.131	164	329211	40.00	ppm	0.01
70) Phenanthrene-d10	10.880	188	543265	40.00	ppm	0.02
92) Chrysene-d12	14.105	240	406529	40.00	ppm	0.04
102) Perylene-d12	16.314	264	336362	40.00	ppm	0.06
110) 1,4-Dichlorobenzene-d4A	5.670	152	177475	40.00	ppm	0.01
120) Naphthalene-d8A	7.093	136	686382	40.00	ppm	0.01
127) Acenaphthene-d10A	9.131	164	329211	40.00	ppm	0.01
136) Phenanthrene-d10A	10.880	188	543265	40.00	ppm	0.02
146) Chrysene-d12A	14.105	240	406529	40.00	ppm	0.04
153) Perylene-d12A	16.314	264	336362	40.00	ppm	0.06
System Monitoring Compounds						
7) 2-Fluorophenol	4.328	112	456913	71.80	ppm	0.02
Spiked Amount 100.000	Range 40 - 102		Recovery = 71.80%			
9) Phenol-d5	5.355	99	589819	77.91	ppm	0.02
Spiked Amount 100.000	Range 41 - 100		Recovery = 77.91%			
23) Nitrobenzene-d5	6.291	82	268588	37.89	ppm	0.01
Spiked Amount 50.000	Range 40 - 105		Recovery = 75.78%			
47) 2-Fluorobiphenyl	8.361	172	488546	40.99	ppm	0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 81.98%			
75) 2,4,6-Tribromophenol	10.072	330	98049	83.37	ppm	0.02
Spiked Amount 100.000	Range 42 - 108		Recovery = 83.37%			
95) Terphenyl-d14	12.795	244	446336	41.32	ppm	0.02
Spiked Amount 50.000	Range 45 - 119		Recovery = 82.64%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.499	88	79330	26.08	ppm	# 47
3) N-nitrosodimethylamine	2.836	42	163727	30.32	ppm	# 42
4) Pyridine	2.868	79	240611	32.52	ppm	# 36
5) Benzaldehyde	5.200	106	175226	33.12	ppm	93
6) Aniline	5.323	93	251788	23.86	ppm	64
8) bis(2-Chloroethyl)ether	5.403	93	248901	38.23	ppm	81
10) Phenol	5.365	94	330285	36.78	ppm	87
11) 2-Chlorophenol	5.462	128	257333	37.90	ppm	84
12) 1,3-Dichlorobenzene	5.601	146	253214	35.90	ppm	97
13) 1,4-Dichlorobenzene	5.686	146	267485	35.84	ppm	97
14) 1,2-Dichlorobenzene	5.847	146	243098	34.28	ppm	97
15) Benzyl alcohol	5.852	108	169659	36.10	ppm	83
16) 2,2'-Oxybis(1-chloropr...	5.997	45	452473	33.07	ppm	81
17) 2-Methylphenol	6.007	108	233122	36.09	ppm	97
18) Acetophenone	6.125	105	335254	35.07	ppm	95
19) Hexachloroethane	6.216	117	88752	31.67	ppm	91
20) N-Nitroso-di-n-propyla...	6.146	70	179837	35.62	ppm	# 67
21) 3&4-Methylphenol	6.189	108	509677	76.33	ppm	96
24) Nitrobenzene	6.312	77	266581	38.01	ppm	85
25) Isophorone	6.590	82	464828	37.12	ppm	96
26) 2-Nitrophenol	6.671	139	130857	39.25	ppm	80
27) 2,4-Dimethylphenol	6.767	107	225696	36.45	ppm	95
29) bis(2-Chloroethoxy)met...	6.852	93	279724	38.18	ppm	95
30) Benzoic Acid	6.943	105	198353	39.81	ppm	91
31) 2,4-Dichlorophenol	6.970	162	201736	40.42	ppm	96
32) 1,2,4-Trichlorobenzene	7.034	180	198084	38.83	ppm	98
34) Naphthalene	7.114	128	704769	37.87	ppm	99
35) 4-Chloroaniline	7.205	127	234727	29.87	ppm	90
36) 2,6-Dichlorophenol	7.216	162	200992	39.49	ppm	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072352.d
Acq On : 11 Aug 2020 10:44 pm
Operator : marthav
Sample : op81482-ms E
Misc : op81482,sx2950,30.0,,,1,1,soil
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Aug 12 03:28:19 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

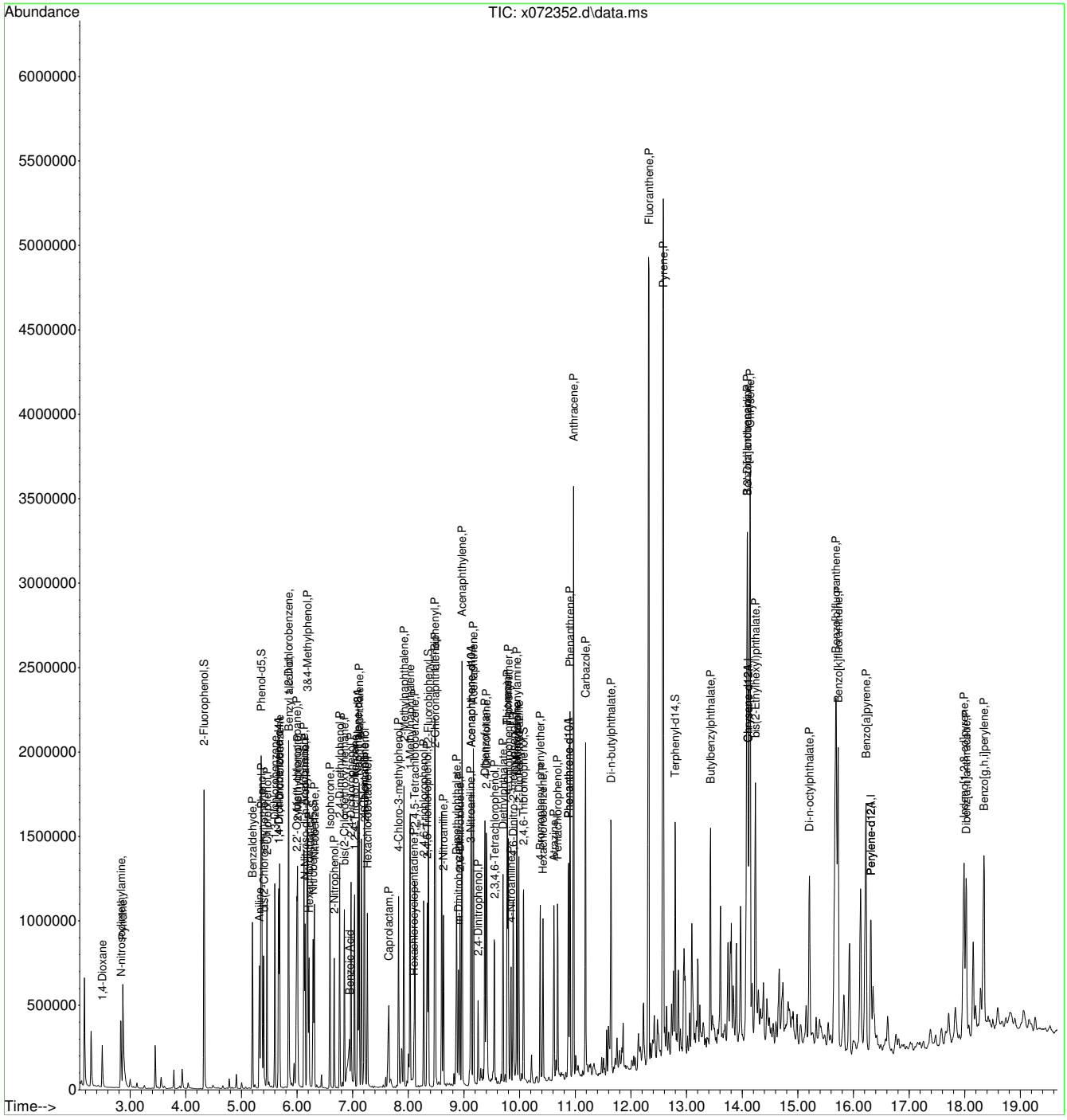
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
37)	Hexachlorobutadiene	7.264	225	100325	39.88	ppm		100
38)	Caprolactam	7.649	113	71321	34.44	ppm	#	48
39)	4-Chloro-3-methylphenol	7.826	107	205755	38.66	ppm		95
40)	2-Methylnaphthalene	7.922	142	466786	37.93	ppm		98
41)	1-Methylnaphthalene	8.034	142	432696	36.72	ppm		99
42)	1,2,4,5-Tetrachloroben...	8.115	216	190428	37.20	ppm		99
44)	Hexachlorocyclopentadiene	8.104	237	31442	13.61	ppm		99
45)	2,4,6-Trichlorophenol	8.275	196	135365	44.80	ppm		97
46)	2,4,5-Trichlorophenol	8.339	196	148369	44.87	ppm		98
48)	1,1'-Biphenyl	8.473	154	539280	40.12	ppm		100
49)	2-Chloronaphthalene	8.484	162	419819	41.61	ppm		96
50)	2-Nitroaniline	8.633	65	167419	45.07	ppm	#	67
52)	Acenaphthylene	8.965	152	1107431	67.35	ppm		99
53)	Dimethylphthalate	8.869	163	486842	41.92	ppm		100
54)	m-Dinitrobenzene	8.901	168	79611	41.13	ppm	#	34
55)	2,6-Dinitrotoluene	8.928	165	110709	40.39	ppm		71
57)	Acenaphthene	9.168	153	466707	42.68	ppm		99
58)	3-Nitroaniline	9.120	138	124948	41.44	ppm		92
59)	2,4-Dinitrophenol	9.254	184	69453	49.27	ppm	#	46
60)	Dibenzofuran	9.377	168	600738	41.16	ppm		96
61)	2,4-Dinitrotoluene	9.404	165	150753	43.14	ppm		82
64)	2,3,4,6-Tetrachlorophenol	9.548	232	103068	40.66	ppm		92
65)	Fluorene	9.778	166	532408	46.76	ppm		98
66)	4-Chlorophenyl-phenyle...	9.799	204	239257	43.53	ppm		93
67)	Diethylphthalate	9.703	149	486267	41.92	ppm		97
68)	Thionazin	9.778	97	1455	0.59	ppm	#	19
69)	4-Nitroaniline	9.848	138	123007	36.66	ppm		86
71)	4,6-Dinitro-2-methylph...	9.885	198	142431	66.78	ppm		82
72)	n-Nitrosodiphenylamine	9.949	169	364488	43.17	ppm		96
73)	Diphenylamine	9.949	169	364488	36.79	ppm		96
74)	1,2-Diphenylhydrazine	9.987	77	485001	39.84	ppm		95
78)	4-Bromophenyl-phenylether	10.372	248	110229	42.26	ppm	#	84
79)	Hexachlorobenzene	10.420	284	106472	40.91	ppm		72
82)	Atrazine	10.618	200	109698	34.58	ppm		80
83)	Pentachlorophenol	10.682	266	113236	62.92	ppm		97
84)	Phenanthrene	10.907	178	760504	46.32	ppm		98
85)	Anthracene	10.971	178	1387784	81.11	ppm		98
87)	Carbazole	11.185	167	785204	52.01	ppm		98
89)	Di-n-butylphthalate	11.645	149	788614	46.80	ppm		99
91)	Fluoranthene	12.324	202	2508173	164.67	ppm		96
94)	Pyrene	12.586	202	2739503	162.30	ppm		97
97)	Butylbenzylphthalate	13.431	149	347255	49.39	ppm		93
98)	3,3'-Dichlorobenzidine	14.089	252	123056	30.12	ppm		97
99)	Benzo[a]anthracene	14.089	228	1497917	117.23	ppm		99
100)	Chrysene	14.143	228	1776964	130.59	ppm		98
101)	bis(2-Ethylhexyl)phtha...	14.239	149	471335	49.26	ppm		97
103)	Di-n-octylphthalate	15.207	149	723076	52.79	ppm		93
104)	Benzo[b]fluoranthene	15.683	252	1932104	157.78	ppm		96
105)	Benzo[k]fluoranthene	15.726	252	908762	76.10	ppm		99
106)	Benzo[a]pyrene	16.229	252	988246	93.94	ppm		97
107)	Indeno[1,2,3-cd]pyrene	17.988	276	752175	92.03	ppm		90
108)	Dibenz[a,h]anthracene	18.026	278	481975	60.13	ppm		90
109)	Benzo[g,h,i]perylene	18.347	276	701504	70.06	ppm		88

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072352.d
Acq On : 11 Aug 2020 10:44 pm
Operator : marthav
Sample : op81482-ms E
Misc : op81482,sx2950,30.0,,,1,1,soil
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Aug 12 03:28:19 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072353.d
Acq On : 11 Aug 2020 11:09 pm
Operator : marthav
Sample : op81482-msd E
Misc : op81482,sx2950,30.0,,,1,1,soil
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Aug 12 03:30:30 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.671	152	176300	40.00	ppm	0.01
22) Naphthalene-d8	7.093	136	694985	40.00	ppm	0.01
43) Acenaphthene-d10	9.131	164	336531	40.00	ppm	0.01
70) Phenanthrene-d10	10.880	188	565950	40.00	ppm	0.02
92) Chrysene-d12	14.105	240	430062	40.00	ppm	0.04
102) Perylene-d12	16.320	264	345207	40.00	ppm	0.06
110) 1,4-Dichlorobenzene-d4A	5.671	152	176300	40.00	ppm	0.01
120) Naphthalene-d8A	7.093	136	694985	40.00	ppm	0.01
127) Acenaphthene-d10A	9.131	164	336531	40.00	ppm	0.01
136) Phenanthrene-d10A	10.880	188	565950	40.00	ppm	0.02
146) Chrysene-d12A	14.105	240	430062	40.00	ppm	0.04
153) Perylene-d12A	16.320	264	345207	40.00	ppm	0.06
System Monitoring Compounds						
7) 2-Fluorophenol	4.328	112	437044	69.14	ppm	0.02
Spiked Amount 100.000	Range 40 - 102		Recovery = 69.14%			
9) Phenol-d5	5.355	99	577619	76.80	ppm	0.02
Spiked Amount 100.000	Range 41 - 100		Recovery = 76.80%			
23) Nitrobenzene-d5	6.291	82	261743	36.47	ppm	0.01
Spiked Amount 50.000	Range 40 - 105		Recovery = 72.94%			
47) 2-Fluorobiphenyl	8.361	172	495301	40.66	ppm	0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 81.32%			
75) 2,4,6-Tribromophenol	10.073	330	103974	84.65	ppm	0.02
Spiked Amount 100.000	Range 42 - 108		Recovery = 84.65%			
95) Terphenyl-d14	12.800	244	491027	42.97	ppm	0.02
Spiked Amount 50.000	Range 45 - 119		Recovery = 85.94%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.493	88	63334	20.96	ppm	# 44
3) N-nitrosodimethylamine	2.830	42	149315	27.83	ppm	# 39
4) Pyridine	2.868	79	208874	28.42	ppm	# 34
5) Benzaldehyde	5.200	106	164699	31.34	ppm	92
6) Aniline	5.323	93	236009	22.52	ppm	60
8) bis(2-Chloroethyl)ether	5.403	93	239534	37.03	ppm	81
10) Phenol	5.366	94	324362	36.36	ppm	87
11) 2-Chlorophenol	5.462	128	250115	37.08	ppm	84
12) 1,3-Dichlorobenzene	5.601	146	236100	33.69	ppm	97
13) 1,4-Dichlorobenzene	5.687	146	251571	33.93	ppm	97
14) 1,2-Dichlorobenzene	5.847	146	227305	32.27	ppm	97
15) Benzyl alcohol	5.852	108	168389	36.07	ppm	88
16) 2,2'-Oxybis(1-chloropr...	5.997	45	438961	32.29	ppm	80
17) 2-Methylphenol	6.008	108	231548	36.09	ppm	97
18) Acetophenone	6.125	105	325956	34.33	ppm	96
19) Hexachloroethane	6.216	117	79671	28.62	ppm	93
20) N-Nitroso-di-n-propyla...	6.147	70	175997	35.09	ppm	# 68
21) 3&4-Methylphenol	6.189	108	514604	77.58	ppm	96
24) Nitrobenzene	6.312	77	259185	36.50	ppm	86
25) Isophorone	6.591	82	467689	36.89	ppm	95
26) 2-Nitrophenol	6.671	139	129488	38.36	ppm	79
27) 2,4-Dimethylphenol	6.767	107	226855	36.18	ppm	94
29) bis(2-Chloroethoxy)met...	6.853	93	276000	37.21	ppm	95
30) Benzoic Acid	6.954	105	228466	44.43	ppm	94
31) 2,4-Dichlorophenol	6.970	162	206577	40.88	ppm	96
32) 1,2,4-Trichlorobenzene	7.034	180	195182	37.79	ppm	98
34) Naphthalene	7.115	128	696687	36.97	ppm	99
35) 4-Chloroaniline	7.206	127	246606	30.99	ppm	89
36) 2,6-Dichlorophenol	7.216	162	202133	39.23	ppm	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072353.d
Acq On : 11 Aug 2020 11:09 pm
Operator : marthav
Sample : op81482-msd E
Misc : op81482,sx2950,30.0,,,1,1,soil
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Aug 12 03:30:30 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

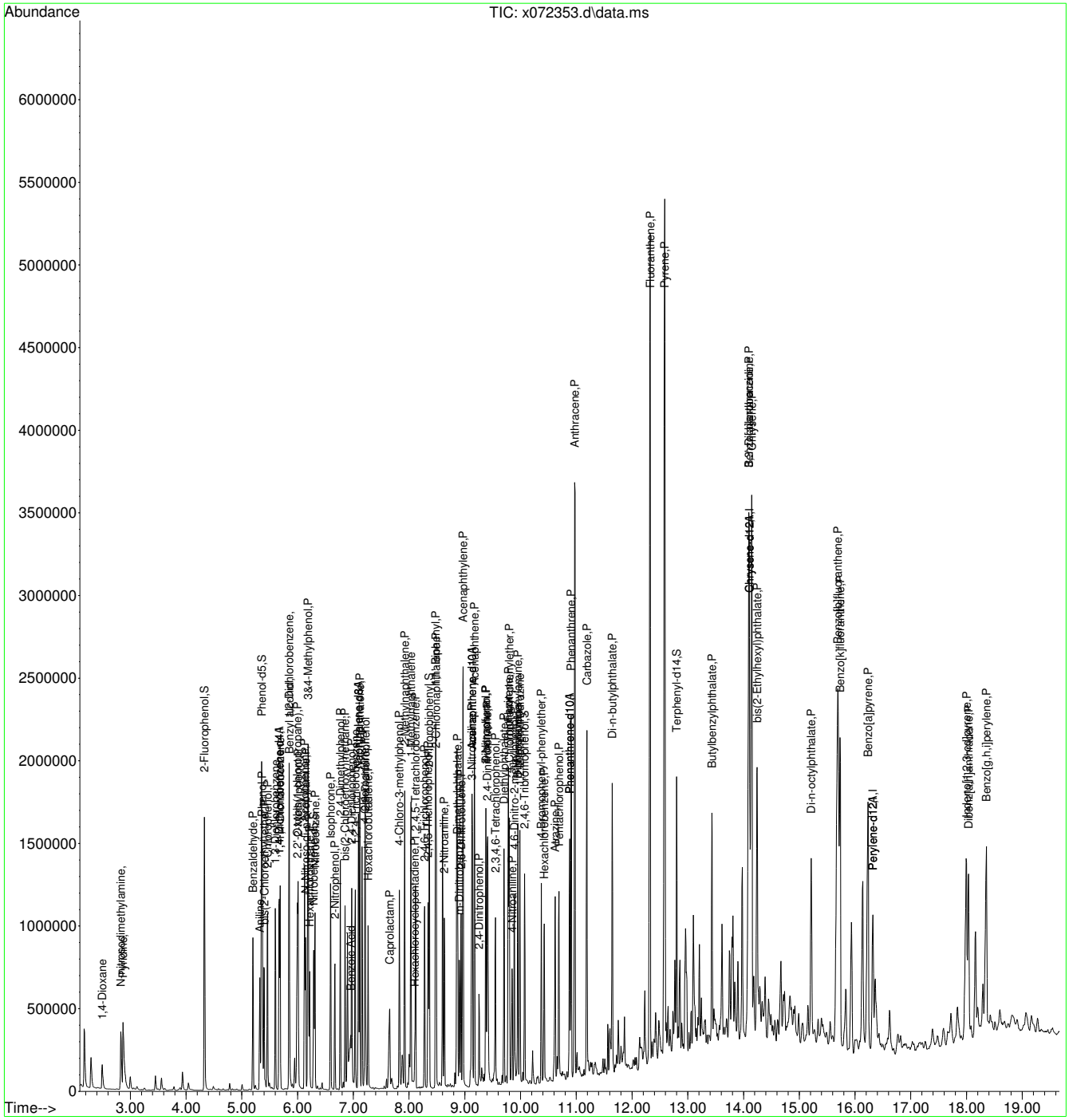
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
37) Hexachlorobutadiene	7.264	225	98325	38.61	ppm		98
38) Caprolactam	7.655	113	73899	35.24	ppm	#	60
39) 4-Chloro-3-methylphenol	7.826	107	214393	39.79	ppm		95
40) 2-Methylnaphthalene	7.922	142	467519	37.52	ppm		98
41) 1-Methylnaphthalene	8.035	142	439782	36.86	ppm		98
42) 1,2,4,5-Tetrachloroben...	8.115	216	193971	37.42	ppm		99
44) Hexachlorocyclopentadiene	8.104	237	27077	11.56	ppm		98
45) 2,4,6-Trichlorophenol	8.281	196	141588	45.84	ppm		100
46) 2,4,5-Trichlorophenol	8.340	196	156545	46.31	ppm		98
48) 1,1'-Biphenyl	8.473	154	550151	40.03	ppm		99
49) 2-Chloronaphthalene	8.484	162	430363	41.72	ppm		95
50) 2-Nitroaniline	8.634	65	176832	46.57	ppm	#	68
52) Acenaphthylene	8.971	152	1196662	71.19	ppm		99
53) Dimethylphthalate	8.869	163	530140	44.65	ppm		99
54) m-Dinitrobenzene	8.901	168	86388	43.67	ppm	#	56
55) 2,6-Dinitrotoluene	8.933	165	119642	42.70	ppm		76
57) Acenaphthene	9.174	153	483848	43.29	ppm		99
58) 3-Nitroaniline	9.126	138	132029	42.83	ppm		99
59) 2,4-Dinitrophenol	9.254	184	78993	53.60	ppm	#	65
60) Dibenzofuran	9.377	168	627048	42.03	ppm		96
61) 2,4-Dinitrotoluene	9.404	165	162433	45.47	ppm		80
62) 4-Nitrophenol	9.377	109	2160	1.25	ppm	#	1
64) 2,3,4,6-Tetrachlorophenol	9.548	232	110438	42.62	ppm		91
65) Fluorene	9.784	166	570090	48.98	ppm		100
66) 4-Chlorophenyl-phenyle...	9.800	204	250116	44.51	ppm		91
67) Diethylphthalate	9.703	149	513719	43.32	ppm		98
68) Thionazin	9.778	97	1793	0.71	ppm	#	17
69) 4-Nitroaniline	9.853	138	134920	39.34	ppm		91
71) 4,6-Dinitro-2-methylph...	9.891	198	154645	68.99	ppm		74
72) n-Nitrosodiphenylamine	9.949	169	387923	44.11	ppm		95
73) Diphenylamine	9.949	169	387923	37.59	ppm		95
74) 1,2-Diphenylhydrazine	9.987	77	504302	39.76	ppm		93
78) 4-Bromophenyl-phenylether	10.372	248	117952	43.41	ppm	#	82
79) Hexachlorobenzene	10.426	284	112832	41.62	ppm		79
82) Atrazine	10.623	200	119239	36.08	ppm		87
83) Pentachlorophenol	10.688	266	125353	66.11	ppm		98
84) Phenanthrene	10.907	178	833922	48.76	ppm		98
85) Anthracene	10.976	178	1574749	88.35	ppm		98
87) Carbazole	11.190	167	876369	55.72	ppm		99
89) Di-n-butylphthalate	11.645	149	861652	49.08	ppm		98
91) Fluoranthene	12.324	202	2492424	157.08	ppm		98
94) Pyrene	12.586	202	2839805	159.03	ppm		98
97) Butylbenzylphthalate	13.431	149	380639	51.04	ppm		88
98) 3,3'-Dichlorobenzidine	14.095	252	134885	31.13	ppm		98
99) Benzo[a]anthracene	14.095	228	1630312	120.61	ppm		99
100) Chrysene	14.148	228	1726453	119.94	ppm		99
101) bis(2-Ethylhexyl)phtha...	14.244	149	514467	50.66	ppm		97
103) Di-n-octylphthalate	15.213	149	798583	55.99	ppm		94
104) Benzo[b]fluoranthene	15.689	252	2186944	170.36	ppm		96
105) Benzo[k]fluoranthene	15.731	252	896224	73.13	ppm		99
106) Benzo[a]pyrene	16.234	252	1061015	97.56	ppm		96
107) Indeno[1,2,3-cd]pyrene	17.999	276	798707	94.25	ppm		92
108) Dibenz[a,h]anthracene	18.037	278	515199	61.96	ppm		92
109) Benzo[g,h,i]perylene	18.358	276	752645	72.60	ppm		89

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072353.d
Acq On : 11 Aug 2020 11:09 pm
Operator : marthav
Sample : op81482-msd E
Misc : op81482,sx2950,30.0,,,1,1,soil
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Aug 12 03:30:30 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06499.d
Acq On : 11 Aug 2020 6:34 pm
Operator : marthav
Sample : op81484-ms E Inst : MSBNA10
Misc : op81484,S6F251,30.0,,,1,1,soil
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Results File: 8270D6F072920.RES
Quant Time: Aug 12 06:26:06 2020
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.035	152	355841	40.00	ppm	0.00
22) Naphthalene-d8	7.468	136	1312698	40.00	ppm	0.00
43) Acenaphthene-d10	9.522	164	687606	40.00	ppm	0.00
70) Phenanthrene-d10	11.282	188	1237189	40.00	ppm	0.00
92) Chrysene-d12	14.582	240	1078087	40.00	ppm	0.00
102) Perylene-d12	16.946	264	1108819	40.00	ppm	0.02
System Monitoring Compounds						
7) 2-Fluorophenol	4.671	112	862563	64.15	ppm	0.01
Spiked Amount 100.000	Range 40 - 102		Recovery = 64.15%			
9) Phenol-d5	5.682	99	1122350	70.32	ppm	0.01
Spiked Amount 100.000	Range 41 - 100		Recovery = 70.32%			
23) Nitrobenzene-d5	6.655	82	474352	32.94	ppm	0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 65.88%			
47) 2-Fluorobiphenyl	8.741	172	928841	34.56	ppm	0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 69.12%			
75) 2,4,6-Tribromophenol	10.463	330	337789	81.12	ppm	0.00
Spiked Amount 100.000	Range 42 - 108		Recovery = 81.12%			
95) Terphenyl-d14	13.202	244	1112268	36.70	ppm	0.00
Spiked Amount 50.000	Range 45 - 119		Recovery = 73.40%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.874	88	123815	23.39	ppm	# 70
3) N-nitrosodimethylamine	3.200	42	216800	30.03	ppm	# 61
4) Pyridine	3.259	79	304168	22.32	ppm	# 58
5) Benzaldehyde	5.559	106	343979	31.56	ppm	93
6) Aniline	5.692	93	363825	17.44	ppm	# 1
8) bis(2-Chloroethyl)ether	5.757	93	479892	35.11	ppm	89
10) Phenol	5.692	94	614460	33.11	ppm	96
11) 2-Chlorophenol	5.815	128	468266	33.98	ppm	91
12) 1,3-Dichlorobenzene	5.970	146	469384	31.50	ppm	98
13) 1,4-Dichlorobenzene	6.056	146	474319	31.40	ppm	97
14) 1,2-Dichlorobenzene	6.217	146	451324	31.66	ppm	98
15) Benzyl alcohol	6.206	108	307032	36.50	ppm	97
16) bis(2-chloroisopropyl)...	6.356	45	608848	35.62	ppm	73
17) 2-Methylphenol	6.345	108	404103	32.57	ppm	94
18) Acetophenone	6.489	105	614740	33.42	ppm	98
19) Hexachloroethane	6.596	117	179613	29.13	ppm	99
20) N-Nitroso-di-n-propyla...	6.500	70	326468	33.43	ppm	# 66
21) 3&4-Methylphenol	6.521	108	894360	69.35	ppm	98
24) Nitrobenzene	6.677	77	478043	34.09	ppm	97
25) Isophorone	6.955	82	941192	37.35	ppm	99
26) 2-Nitrophenol	7.035	139	253890	36.76	ppm	96
27) 2,4-Dimethylphenol	7.115	107	429254	35.90	ppm	99
29) bis(2-Chloroethoxy)met...	7.211	93	568042	36.81	ppm	98
30) Benzoic Acid	7.297	105	885120	76.46	ppm	97
31) 2,4-Dichlorophenol	7.324	162	395175	37.16	ppm	92
32) 1,2,4-Trichlorobenzene	7.409	180	400546	33.89	ppm	99
34) Naphthalene	7.495	128	1294857	34.87	ppm	99
35) 4-Chloroaniline	7.575	127	368530	22.76	ppm	96
36) 2,6-Dichlorophenol	7.580	162	378206	36.59	ppm	97
37) Hexachlorobutadiene	7.645	225	223231	34.42	ppm	99
38) Caprolactam	7.998	113	167716	40.43	ppm	# 66
39) 4-Chloro-3-methylphenol	8.163	107	429705	39.21	ppm	98
40) 2-Methylnaphthalene	8.303	141	772999	35.60	ppm	98
41) 1-Methylnaphthalene	8.415	142	829744	34.77	ppm	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06499.d
Acq On : 11 Aug 2020 6:34 pm
Operator : marthav
Sample : op81484-ms E Inst : MSBNA10
Misc : op81484,S6F251,30.0,,,1,1,soil
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Results File: 8270D6F072920.RES
Quant Time: Aug 12 06:26:06 2020
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

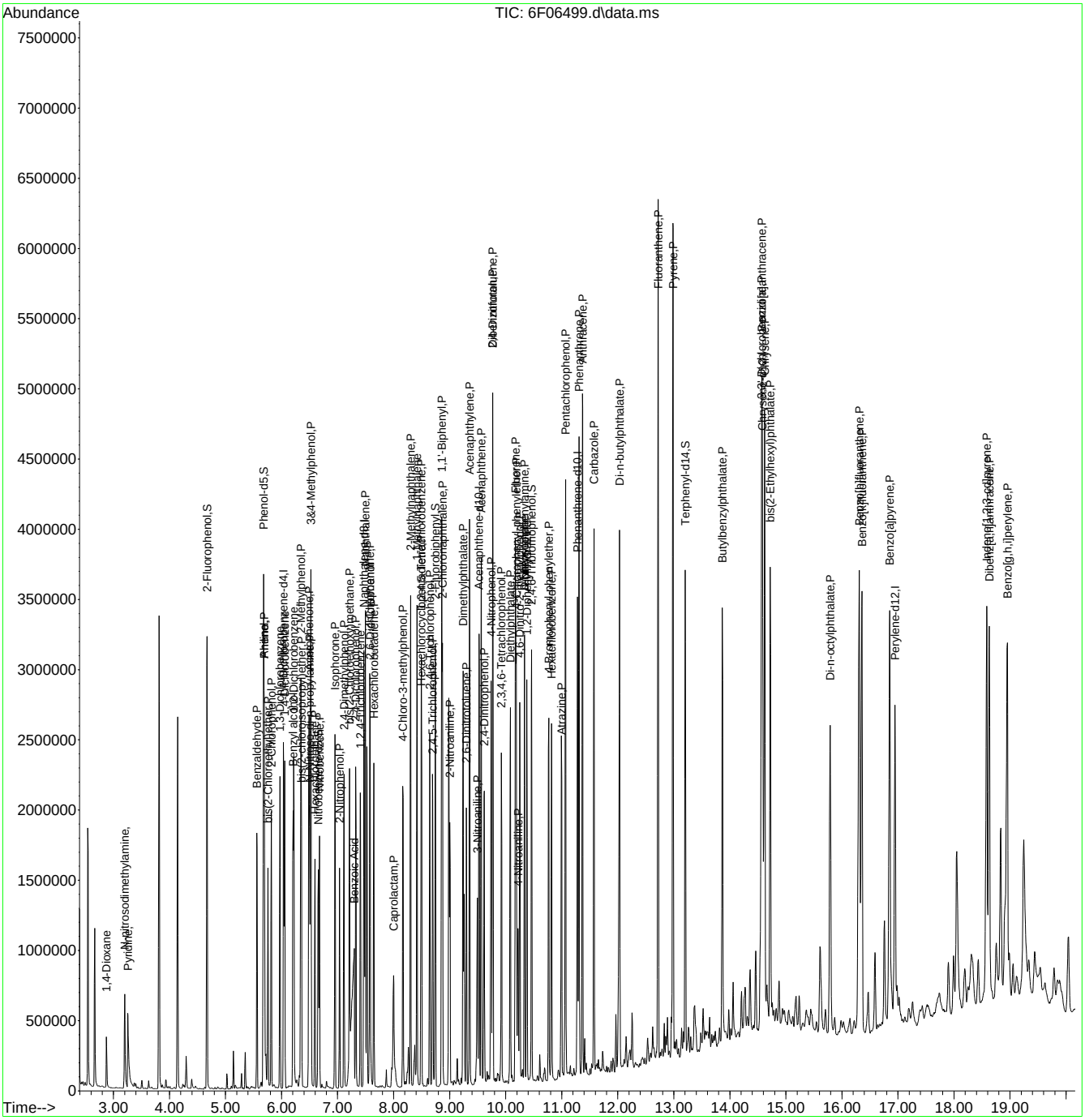
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42) 1,2,4,5-Tetrachloroben...	8.495	216	403298	35.39	ppm		99
44) Hexachlorocyclopentadiene	8.490	237	206531	28.83	ppm		96
45) 2,4,6-Trichlorophenol	8.645	196	306923	40.91	ppm		96
46) 2,4,5-Trichlorophenol	8.698	196	339398	42.45	ppm		97
48) 1,1'-Biphenyl	8.859	154	1058961	36.88	ppm		98
49) 2-Chloronaphthalene	8.869	162	822145	36.39	ppm		96
50) 2-Nitroaniline	9.003	65	357071	50.48	ppm		85
52) Acenaphthylene	9.356	152	1604988	46.71	ppm		97
53) Dimethylphthalate	9.239	163	1045624	40.75	ppm		100
55) 2,6-Dinitrotoluene	9.297	165	241715	40.56	ppm		90
57) Acenaphthene	9.565	153	870912	38.16	ppm		98
58) 3-Nitroaniline	9.495	138	224191	32.61	ppm		99
59) 2,4-Dinitrophenol	9.618	184	317372	77.18	ppm		82
60) Dibenzofuran	9.768	168	1215830	38.54	ppm		82
61) 2,4-Dinitrotoluene	9.768	165	339431	43.26	ppm		84
62) 4-Nitrophenol	9.741	109	312267	79.42	ppm	#	86
64) 2,3,4,6-Tetrachlorophenol	9.923	232	266120	41.26	ppm		96
65) Fluorene	10.175	166	1060388	41.51	ppm		99
66) 4-Chlorophenyl-phenyle...	10.191	204	506413	40.08	ppm		95
67) Diethylphthalate	10.084	149	1080376	41.50	ppm		98
69) 4-Nitroaniline	10.223	138	213252	30.69	ppm		94
71) 4,6-Dinitro-2-methylph...	10.249	198	416427	77.58	ppm		81
72) n-Nitrosodiphenylamine	10.335	169	724838	37.69	ppm		96
73) Diphenylamine	10.335	169	724838	33.80	ppm		96
74) 1,2-Diphenylhydrazine	10.378	77	1055261	38.49	ppm		98
78) 4-Bromophenyl-phenylether	10.768	248	307233	42.55	ppm		96
79) Hexachlorobenzene	10.816	284	328401	39.83	ppm		85
82) Atrazine	10.998	200	275718	37.83	ppm		87
83) Pentachlorophenol	11.068	266	471301	86.93	ppm		100
84) Phenanthrene	11.308	178	1594188	43.03	ppm		99
85) Anthracene	11.373	178	1934665	51.39	ppm		99
87) Carbazole	11.576	167	1505595	44.38	ppm		96
89) Di-n-butylphthalate	12.031	149	1854413	43.37	ppm		99
91) Fluoranthene	12.720	202	2405341	61.67	ppm		99
94) Pyrene	12.988	202	2502674	64.81	ppm		97
97) Butylbenzylphthalate	13.865	149	842834	45.56	ppm		95
98) 3,3'-Dichlorobenzidine	14.566	252	152955	10.94	ppm		98
99) Benzo[a]anthracene	14.571	228	1966411	54.43	ppm		99
100) Chrysene	14.625	228	2020685	57.65	ppm		98
101) bis(2-Ethylhexyl)phtha...	14.721	149	1143403	44.25	ppm		97
103) Di-n-octylphthalate	15.791	149	1876233	42.78	ppm		93
104) Benzo[b]fluoranthene	16.309	252	2408992	67.69	ppm		97
105) Benzo[k]fluoranthene	16.358	252	1781597	48.13	ppm		96
106) Benzo[a]pyrene	16.855	252	1698758	51.40	ppm		97
107) Indeno[1,2,3-cd]pyrene	18.583	276	1800086	58.50	ppm		95
108) Dibenz[a,h]anthracene	18.631	278	1572924	47.87	ppm		92
109) Benzo[g,h,i]perylene	18.952	276	1800689	54.22	ppm		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06499.d
Acq On : 11 Aug 2020 6:34 pm
Operator : marthav
Sample : op81484-ms E Inst : MSBNA10
Misc : op81484,S6F251,30.0,,,1,1,soil
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Results File: 8270D6F072920.RES
Quant Time: Aug 12 06:26:06 2020
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06500.d
Acq On : 11 Aug 2020 7:00 pm
Operator : marthav
Sample : op81484-msd E Inst : MSBNA10
Misc : op81484,S6F251,30.2,,,1,1,soil
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Results File: 8270D6F072920.RES
Quant Time: Aug 12 06:26:58 2020
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.040	152	349551	40.00	ppm	0.00
22) Naphthalene-d8	7.468	136	1288913	40.00	ppm	0.00
43) Acenaphthene-d10	9.527	164	676015	40.00	ppm	0.00
70) Phenanthrene-d10	11.282	188	1217631	40.00	ppm	0.00
92) Chrysene-d12	14.587	240	1067199	40.00	ppm	0.01
102) Perylene-d12	16.946	264	1076080	40.00	ppm	0.02
System Monitoring Compounds						
7) 2-Fluorophenol	4.671	112	902685	68.34	ppm	0.01
Spiked Amount 100.000	Range 40 - 102		Recovery = 68.34%			
9) Phenol-d5	5.682	99	1171644	74.73	ppm	0.01
Spiked Amount 100.000	Range 41 - 100		Recovery = 74.73%			
23) Nitrobenzene-d5	6.655	82	501810	35.49	ppm	0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 70.98%			
47) 2-Fluorobiphenyl	8.741	172	962158	36.42	ppm	0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 72.84%			
75) 2,4,6-Tribromophenol	10.463	330	344324	84.02	ppm	0.00
Spiked Amount 100.000	Range 42 - 108		Recovery = 84.02%			
95) Terphenyl-d14	13.207	244	1122976	37.44	ppm	0.00
Spiked Amount 50.000	Range 45 - 119		Recovery = 74.88%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.879	88	141430	27.20	ppm	# 70
3) N-nitrosodimethylamine	3.200	42	233708	32.95	ppm	# 62
4) Pyridine	3.259	79	347933	25.99	ppm	# 58
5) Benzaldehyde	5.564	106	369151	34.48	ppm	95
6) Aniline	5.692	93	408693	19.94	ppm	# 1
8) bis(2-Chloroethyl)ether	5.756	93	510996	38.06	ppm	89
10) Phenol	5.692	94	648569	35.58	ppm	92
11) 2-Chlorophenol	5.815	128	492141	36.36	ppm	92
12) 1,3-Dichlorobenzene	5.970	146	506452	34.60	ppm	97
13) 1,4-Dichlorobenzene	6.056	146	508649	34.28	ppm	97
14) 1,2-Dichlorobenzene	6.216	146	483208	34.51	ppm	97
15) Benzyl alcohol	6.206	108	330318	39.98	ppm	97
16) bis(2-chloroisopropyl)...	6.355	45	651628	38.81	ppm	74
17) 2-Methylphenol	6.345	108	430317	35.31	ppm	94
18) Acetophenone	6.489	105	654727	36.23	ppm	99
19) Hexachloroethane	6.596	117	189826	31.34	ppm	98
20) N-Nitroso-di-n-propyla...	6.500	70	345120	35.98	ppm	# 66
21) 3&4-Methylphenol	6.521	108	944625	74.57	ppm	99
24) Nitrobenzene	6.676	77	510723	37.09	ppm	96
25) Isophorone	6.955	82	979993	39.61	ppm	98
26) 2-Nitrophenol	7.035	139	272788	40.22	ppm	95
27) 2,4-Dimethylphenol	7.115	107	452514	38.54	ppm	98
29) bis(2-Chloroethoxy)met...	7.211	93	608162	40.14	ppm	98
30) Benzoic Acid	7.297	105	906410	79.02	ppm	98
31) 2,4-Dichlorophenol	7.324	162	414834	39.73	ppm	92
32) 1,2,4-Trichlorobenzene	7.409	180	425373	36.65	ppm	99
34) Naphthalene	7.495	128	1373604	37.67	ppm	98
35) 4-Chloroaniline	7.575	127	387990	24.41	ppm	94
36) 2,6-Dichlorophenol	7.580	162	398466	39.26	ppm	95
37) Hexachlorobutadiene	7.645	225	236552	37.14	ppm	99
38) Caprolactam	8.003	113	170161	41.77	ppm	# 67
39) 4-Chloro-3-methylphenol	8.169	107	444063	41.26	ppm	99
40) 2-Methylnaphthalene	8.302	141	829009	38.88	ppm	99
41) 1-Methylnaphthalene	8.415	142	877878	37.46	ppm	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06500.d
Acq On : 11 Aug 2020 7:00 pm
Operator : marthav
Sample : op81484-msd E Inst : MSBNA10
Misc : op81484,S6F251,30.2,,,1,1,soil
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Results File: 8270D6F072920.RES
Quant Time: Aug 12 06:26:58 2020
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

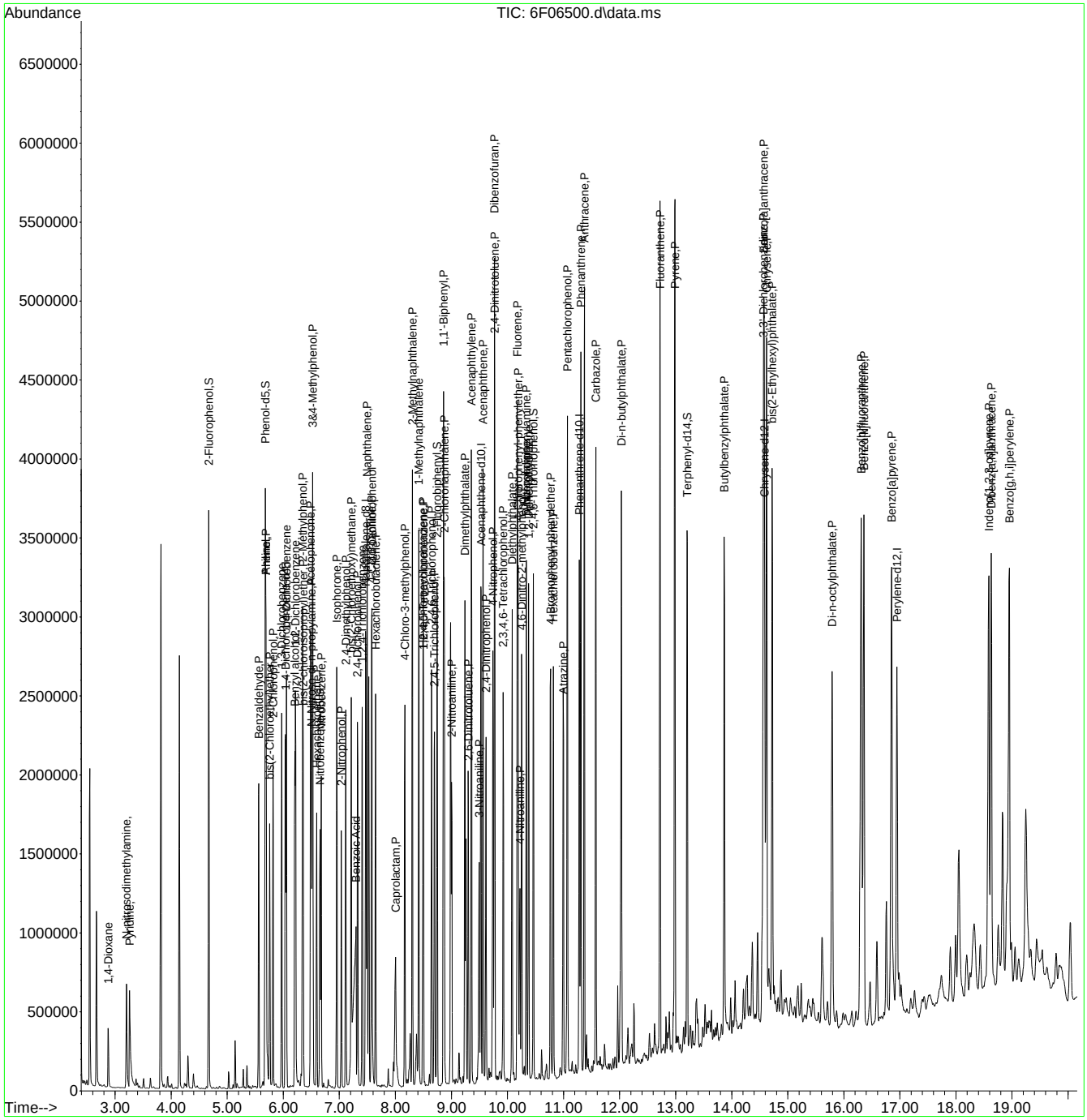
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42)	1,2,4,5-Tetrachloroben...	8.500	216	422811	37.78	ppm		99
44)	Hexachlorocyclopentadiene	8.490	237	208424	29.60	ppm		99
45)	2,4,6-Trichlorophenol	8.645	196	318831	43.22	ppm		97
46)	2,4,5-Trichlorophenol	8.698	196	342568	43.58	ppm		95
48)	1,1'-Biphenyl	8.859	154	1125507	39.86	ppm		98
49)	2-Chloronaphthalene	8.869	162	859641	38.70	ppm		96
50)	2-Nitroaniline	9.003	65	371023	53.35	ppm		85
52)	Acenaphthylene	9.356	152	1662807	49.22	ppm		97
53)	Dimethylphthalate	9.238	163	1076483	42.67	ppm		99
55)	2,6-Dinitrotoluene	9.303	165	246307	42.04	ppm		84
57)	Acenaphthene	9.565	153	909705	40.55	ppm		97
58)	3-Nitroaniline	9.495	138	236182	34.94	ppm		99
59)	2,4-Dinitrophenol	9.618	184	321408	78.71	ppm		84
60)	Dibenzofuran	9.768	168	1291979	41.66	ppm		81
61)	2,4-Dinitrotoluene	9.773	165	343976	44.59	ppm		89
62)	4-Nitrophenol	9.741	109	315099	81.51	ppm	#	87
64)	2,3,4,6-Tetrachlorophenol	9.923	232	271495	42.81	ppm		98
65)	Fluorene	10.174	166	1078673	42.95	ppm		99
66)	4-Chlorophenyl-phenyle...	10.190	204	526744	42.40	ppm		95
67)	Diethylphthalate	10.083	149	1103173	43.10	ppm		98
69)	4-Nitroaniline	10.223	138	231078	33.83	ppm		95
71)	4,6-Dinitro-2-methylph...	10.255	198	426660	79.92	ppm	#	71
72)	n-Nitrosodiphenylamine	10.335	169	735778	38.88	ppm		95
73)	Diphenylamine	10.335	169	735778	34.87	ppm		95
74)	1,2-Diphenylhydrazine	10.378	77	1083444	40.15	ppm		98
78)	4-Bromophenyl-phenylether	10.768	248	313417	44.10	ppm		94
79)	Hexachlorobenzene	10.816	284	333751	41.13	ppm		86
82)	Atrazine	10.998	200	277663	38.71	ppm		88
83)	Pentachlorophenol	11.068	266	473080	88.15	ppm		98
84)	Phenanthrene	11.308	178	1622147	44.49	ppm		99
85)	Anthracene	11.373	178	1953537	52.72	ppm		99
87)	Carbazole	11.576	167	1545491	46.29	ppm		96
89)	Di-n-butylphthalate	12.030	149	1880903	44.70	ppm		99
91)	Fluoranthene	12.720	202	2194922	57.18	ppm		98
94)	Pyrene	12.988	202	2303654	60.27	ppm		97
97)	Butylbenzylphthalate	13.865	149	844919	46.13	ppm		93
98)	3,3'-Dichlorobenzidine	14.566	252	205584	14.86	ppm		99
99)	Benzo[a]anthracene	14.571	228	1901946	53.19	ppm		99
100)	Chrysene	14.624	228	1959557	56.48	ppm		98
101)	bis(2-Ethylhexyl)phtha...	14.721	149	1157171	45.24	ppm		98
103)	Di-n-octylphthalate	15.790	149	1904310	44.74	ppm		93
104)	Benzo[b]fluoranthene	16.309	252	2333802	67.57	ppm		97
105)	Benzo[k]fluoranthene	16.357	252	1782816	49.63	ppm		96
106)	Benzo[a]pyrene	16.855	252	1695037	52.84	ppm		97
107)	Indeno[1,2,3-cd]pyrene	18.588	276	1792404	60.02	ppm		93
108)	Dibenz[a,h]anthracene	18.631	278	1614655	50.64	ppm		92
109)	Benzo[g,h,i]perylene	18.952	276	1798417	55.79	ppm		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06500.d
Acq On : 11 Aug 2020 7:00 pm
Operator : marthav
Sample : op81484-msd E Inst : MSBNA10
Misc : op81484,S6F251,30.2,,,1,1,soil
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Results File: 8270D6F072920.RES
Quant Time: Aug 12 06:26:58 2020
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan
08/13/20 11:23

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11122.d
Acq On : 10 Aug 2020 11:25 pm
Operator : FOUADS
Sample : op81483-ms e,5
Misc : op81483,S7G482,15.4,,,1,5,soil
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Aug 11 03:24:48 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

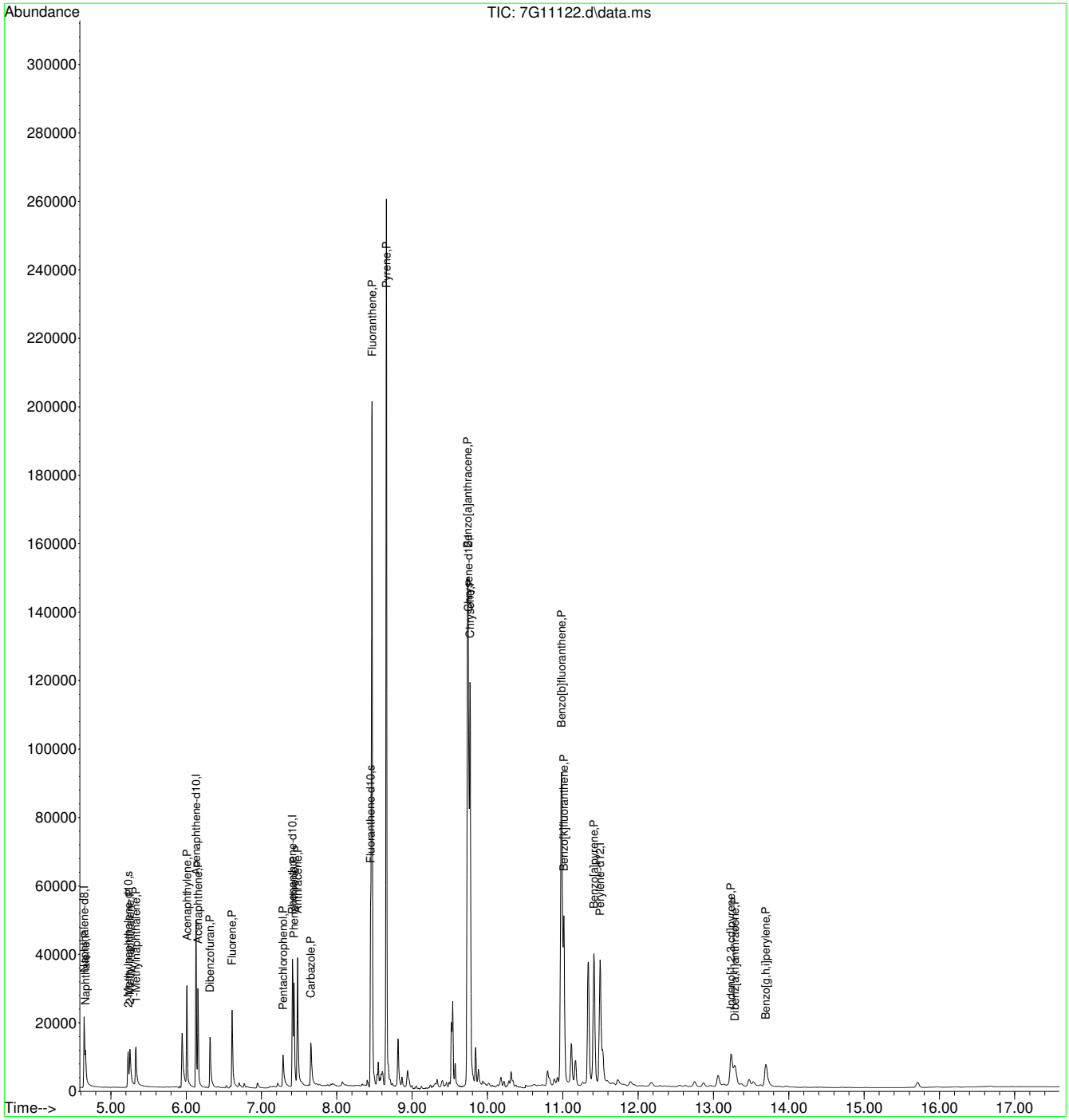
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.646	136	20120	4.00	ppm	0.02
6) Acenaphthene-d10	6.133	164	16826	4.00	ppm	0.02
11) Phenanthrene-d10	7.410	188	32850	4.00	ppm	0.01
18) Chrysene-d12	9.746	240	58735	4.00	ppm	0.02
22) Perylene-d12	11.496	264	41508	4.00	ppm	0.02
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.229	152	5905	2.02	ppm	0.02
Spiked Amount 10.000	Range 50 - 150		Recovery = 20.20%#			
17) Fluoranthene-d10	8.448	212	34225	2.02	ppm	0.02
Spiked Amount 10.000	Range 50 - 150		Recovery = 20.20%#			
Target Compounds						Qvalue
2) Naphthalene	4.664	128	7709	1.35	ppm	100
3) 2-Methylnaphthalene	5.252	142	5925	1.32	ppm	98
5) 1-Methylnaphthalene	5.335	142	7262	1.84	ppm	96
7) Acenaphthylene	6.012	152	20507	2.12	ppm	98
8) Acenaphthene	6.157	153	9125	1.45	ppm	99
9) Dibenzofuran	6.317	168	12486	2.81	ppm	97
10) Fluorene	6.611	166	10563	1.54	ppm	98
12) Pentachlorophenol	7.285	266	4520	3.79	ppm	99
13) Phenanthrene	7.431	178	18630	1.72	ppm	96
14) Anthracene	7.480	178	29339	2.68	ppm	99
15) Carbazole	7.654	167	14199	0.72	ppm	99
16) Fluoranthene	8.467	202	137602	6.66	ppm	97
19) Pyrene	8.657	202	164903	7.04	ppm	95
20) Benzo[a]anthracene	9.736	228	80320	4.37	ppm	94
21) Chrysene	9.768	228	100207	4.92	ppm	98
23) Benzo[b]fluoranthene	10.982	252	128534	9.12	ppm	98
24) Benzo[k]fluoranthene	11.015	252	42227m	2.83	ppm	
25) Benzo[a]pyrene	11.413	252	48908	3.56	ppm	98
26) Indeno[1,2,3-cd]pyrene	13.233	276	19810	2.21	ppm	94
27) Dibenz[a,h]anthracene	13.287	278	7784	0.78	ppm	96
28) Benzo[g,h,i]perylene	13.694	276	13638	1.26	ppm	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11122.d
Acq On : 10 Aug 2020 11:25 pm
Operator : FOUADS
Sample : op81483-ms e,5
Misc : op81483,S7G482,15.4,,,1,5,soil
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Aug 11 03:24:48 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration



Manual Integration Approval Summary

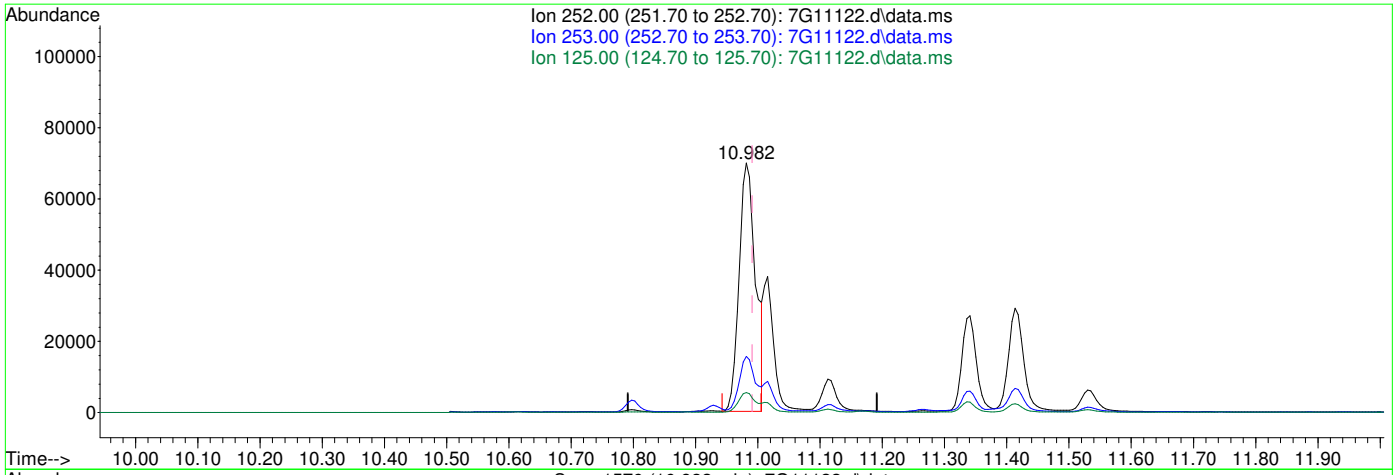
Sample Number:	OP81483-MS	**Method:**	SW846 8270E BY SIM
Lab FileID:	7G11122.D	**Analyst approved:**	08/11/20 10:52 Fouad Sekkar
Injection Time:	08/10/20 23:25	**Supervisor approved:**	08/13/20 11:23 Naresh Jiawan

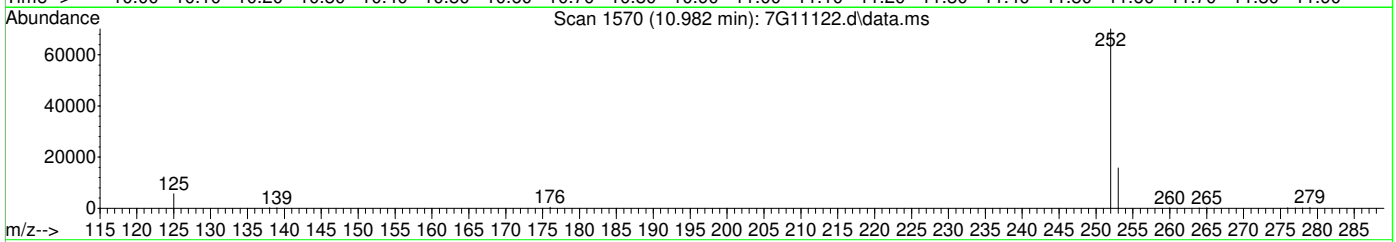
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(k)fluoranthene	207-08-9		11.02	Missed peak

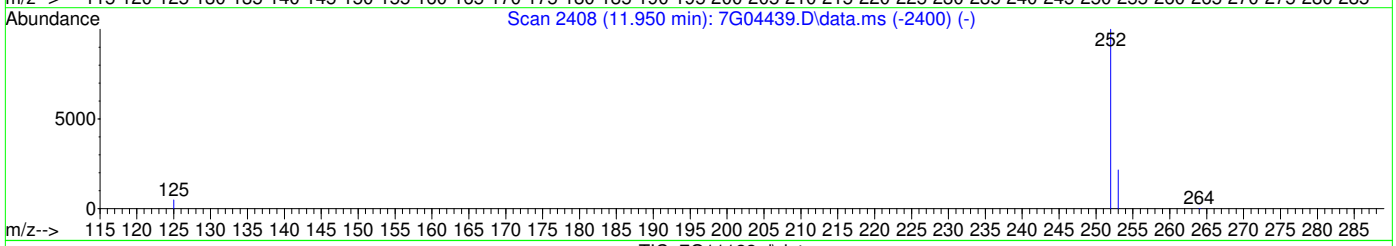
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11122.d
Acq On : 10 Aug 2020 11:25 pm
Operator : FOUADS
Sample : op81483-ms e,5
Misc : op81483,S7G482,15.4,,,1,5,soil
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Aug 11 02:37:51 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11122.d\data.ms

(24) Benzo[k]fluoranthene (P)

10.982min (-0.010) 8.46ppm

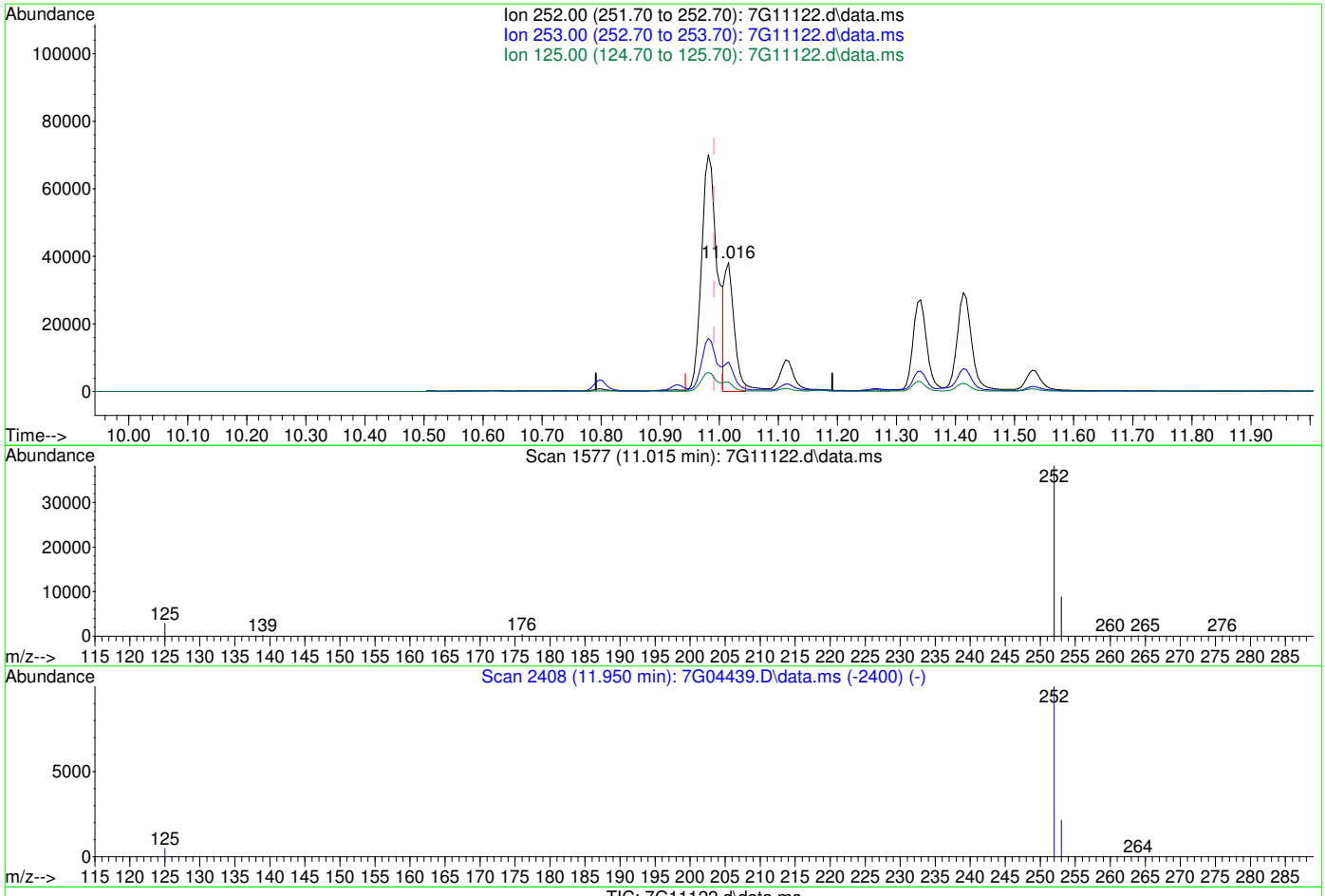
response 128534

Ion	Exp%	Act%
252.00	100	100
253.00	21.50	21.47
125.00	4.80	7.86
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11122.d
Acq On : 10 Aug 2020 11:25 pm
Operator : FOUADS
Sample : op81483-ms e,5
Misc : op81483,S7G482,15.4,,,1,5,soil
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Aug 11 02:37:51 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration



TIC: 7G11122.d\data.ms

(24) Benzo[k]fluoranthene (P)

11.015min (+0.024) 2.83ppm m

response 42227

Ion	Exp%	Act%
252.00	100	100
253.00	21.50	23.02
125.00	4.80	7.38
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan
08/13/20 11:23

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11123.d
Acq On : 10 Aug 2020 11:49 pm
Operator : FOUADS
Sample : op81483-msd e,5
Misc : op81483,S7G482,15.3,,,1,5,soil
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Aug 11 03:25:14 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

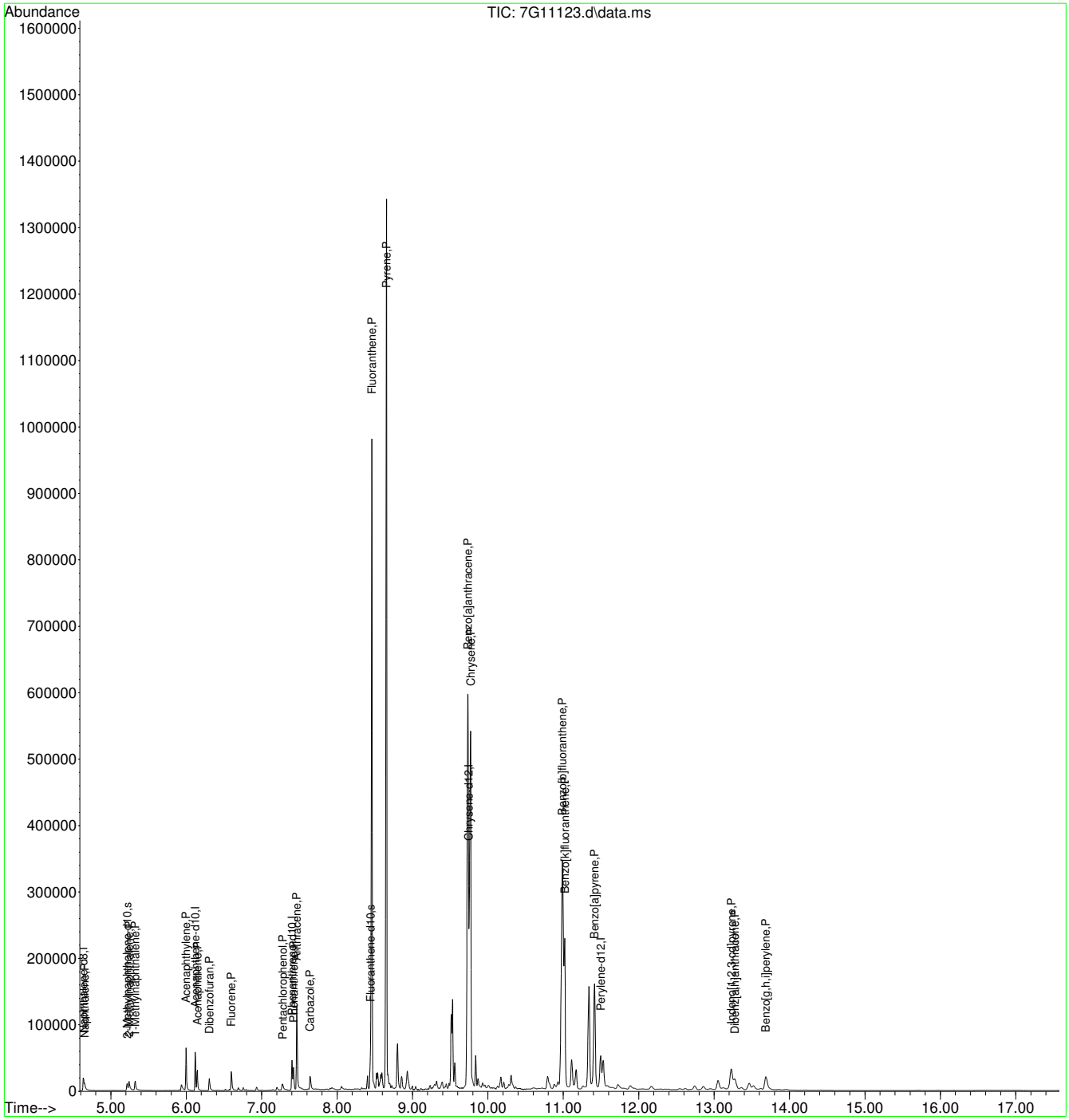
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.634	136	20877	4.00	ppm	0.00
6) Acenaphthene-d10	6.118	164	17525	4.00	ppm	0.00
11) Phenanthrene-d10	7.403	188	34643	4.00	ppm	0.00
18) Chrysene-d12	9.744	240	69789	4.00	ppm	0.02
22) Perylene-d12	11.496	264	49534	4.00	ppm	0.02
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.217	152	6012	1.98	ppm	0.01
Spiked Amount 10.000	Range 50 - 150		Recovery = 19.80%#			
17) Fluoranthene-d10	8.442	212	39464	2.21	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 22.10%#			
Target Compounds						Qvalue
2) Naphthalene	4.652	128	8629	1.46	ppm	100
3) 2-Methylnaphthalene	5.240	142	6909	1.49	ppm	98
5) 1-Methylnaphthalene	5.323	142	8125	1.98	ppm	97
7) Acenaphthylene	5.998	152	39534	3.91	ppm	99
8) Acenaphthene	6.147	153	10323	1.58	ppm	96
9) Dibenzofuran	6.307	168	13986	3.02	ppm	91
10) Fluorene	6.597	166	11598	1.63	ppm	98
12) Pentachlorophenol	7.278	266	4914	3.90	ppm	95
13) Phenanthrene	7.424	178	24130	2.12	ppm	99
14) Anthracene	7.466	178	83106	7.11	ppm	99
15) Carbazole	7.640	167	19961	0.96	ppm	99
16) Fluoranthene	8.461	202	645470	28.01	ppm	98
19) Pyrene	8.657	202	891525	30.94	ppm	95
20) Benzo[a]anthracene	9.734	228	437899	19.18	ppm	94
21) Chrysene	9.770	228	439823	18.22	ppm	97
23) Benzo[b]fluoranthene	10.986	252	515037	30.63	ppm	97
24) Benzo[k]fluoranthene	11.020	252	197738m	10.83	ppm	
25) Benzo[a]pyrene	11.413	252	194902	11.90	ppm	97
26) Indeno[1,2,3-cd]pyrene	13.228	276	58423	5.46	ppm	95
27) Dibenz[a,h]anthracene	13.272	278	18607	1.57	ppm	96
28) Benzo[g,h,i]perylene	13.685	276	38097	2.96	ppm	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11123.d
Acq On : 10 Aug 2020 11:49 pm
Operator : FOUADS
Sample : op81483-msd e,5
Misc : op81483,S7G482,15.3,,,1,5,soil
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Aug 11 03:25:14 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration



Manual Integration Approval Summary

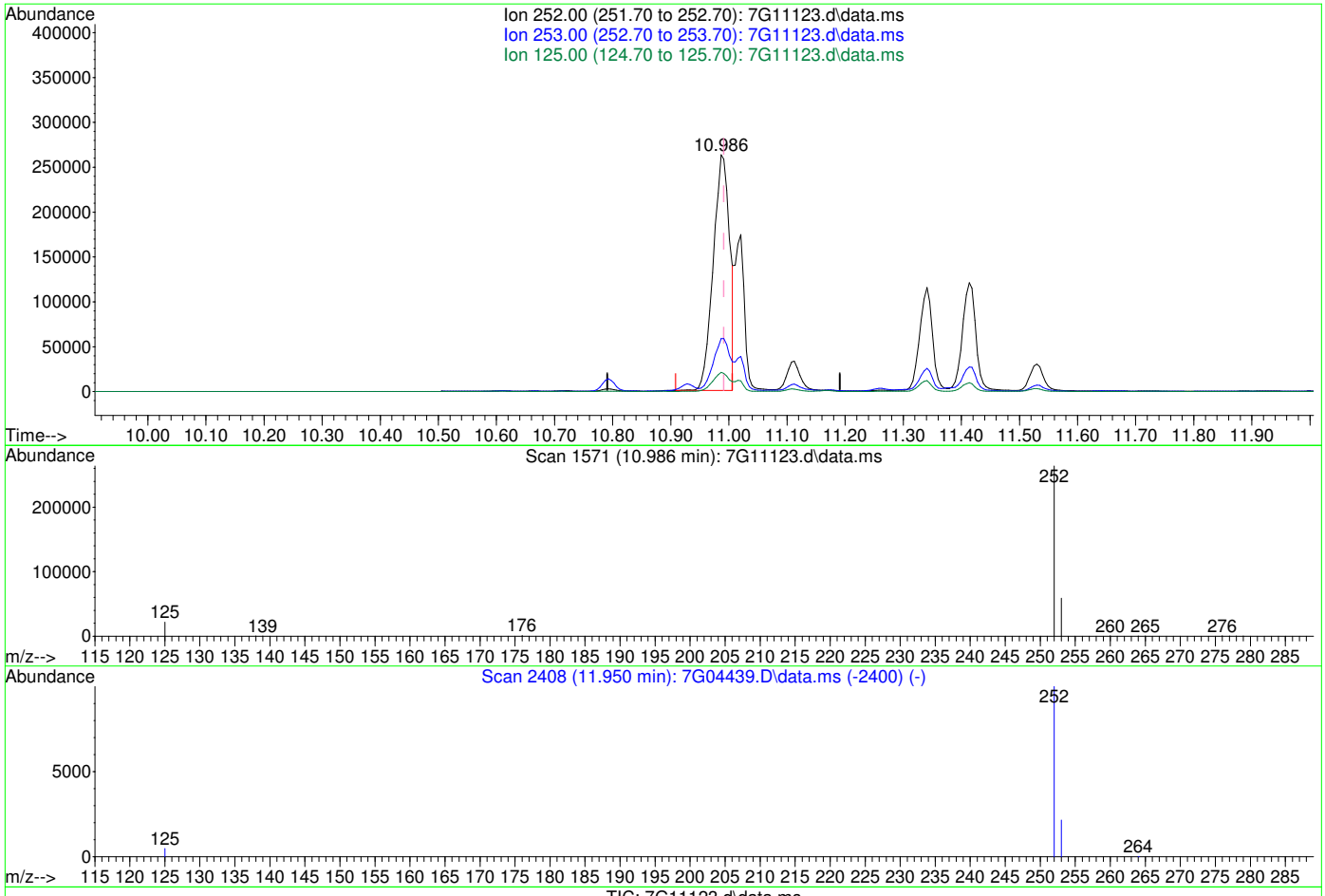
Sample Number:	OP81483-MSD	**Method:**	SW846 8270E BY SIM
Lab FileID:	7G11123.D	**Analyst approved:**	08/11/20 10:52 Fouad Sekkar
Injection Time:	08/10/20 23:49	**Supervisor approved:**	08/13/20 11:23 Naresh Jiawan

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(k)fluoranthene	207-08-9		11.02	Missed peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11123.d
Acq On : 10 Aug 2020 11:49 pm
Operator : FOUADS
Sample : op81483-msd e,5
Misc : op81483,S7G482,15.3,,,1,5,soil
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Aug 11 02:37:54 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration



TIC: 7G11123.d\data.ms

(24) Benzo[k]fluoranthene (P)

10.986min (-0.005) 26.93ppm

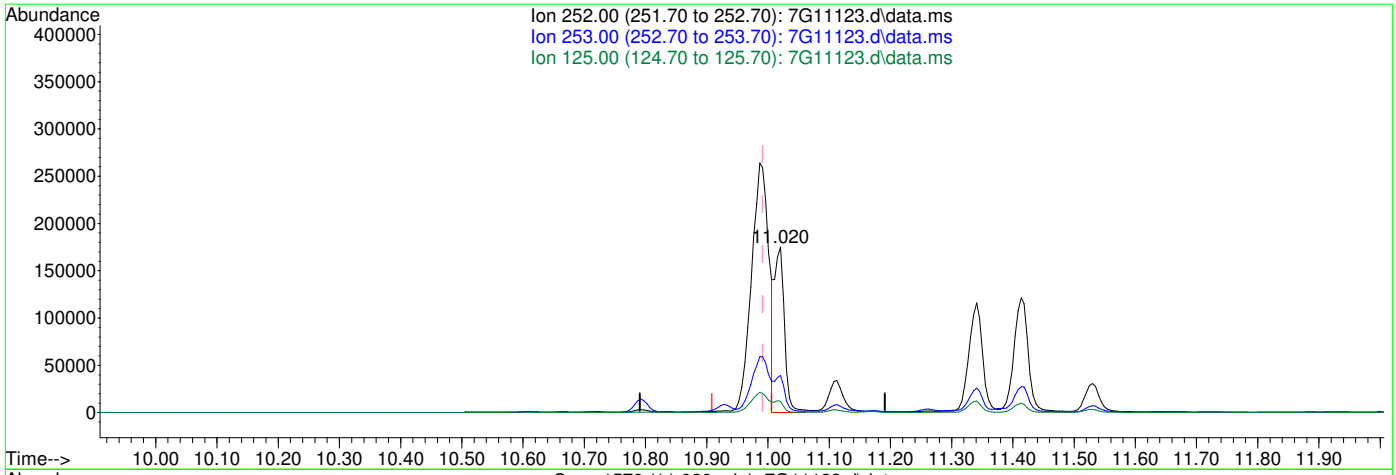
response 515037

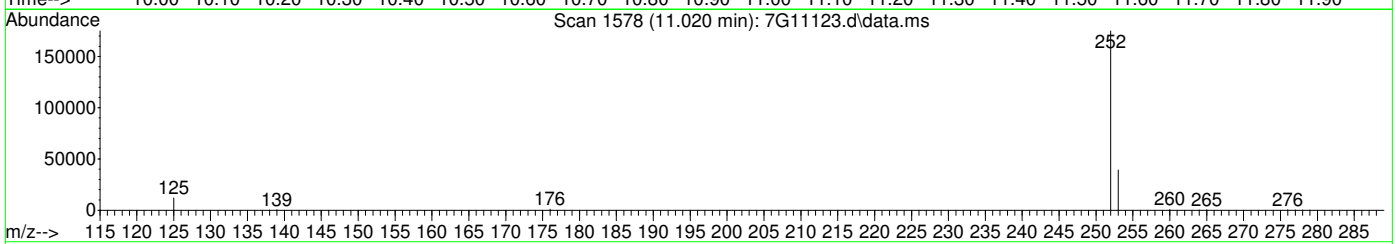
Ion	Exp%	Act%
252.00	100	100
253.00	21.50	21.30
125.00	4.80	8.19
0.00	0.00	0.00

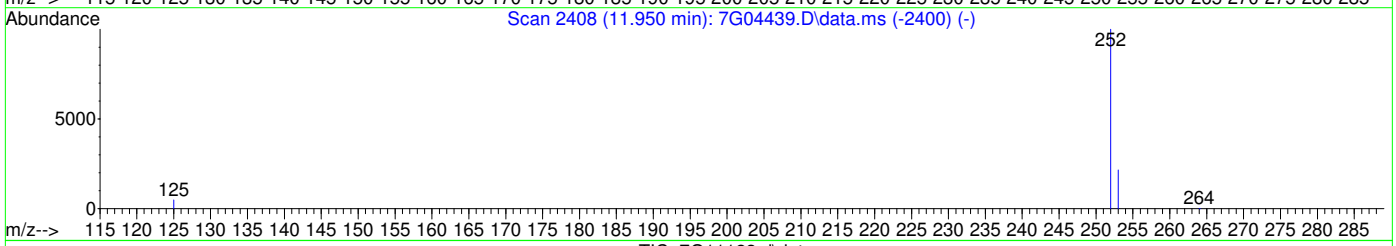
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11123.d
Acq On : 10 Aug 2020 11:49 pm
Operator : FOUADS
Sample : op81483-msd e,5
Misc : op81483,S7G482,15.3,,,1,5,soil
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Aug 11 02:37:54 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11123.d\data.ms

(24) Benzo[k]fluoranthene (P)

11.020min (+0.029) 10.83ppm m

response 197738

Ion	Exp%	Act%
252.00	100	100
253.00	21.50	22.45
125.00	4.80	6.78
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 08/12/20 11:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11143.d
Acq On : 11 Aug 2020 1:38 pm
Operator : FOUADS
Sample : op81485-ms e Inst : MSBNA8
Misc : op81485,S7G483,15.3,,,1,1,soil
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:36:51 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

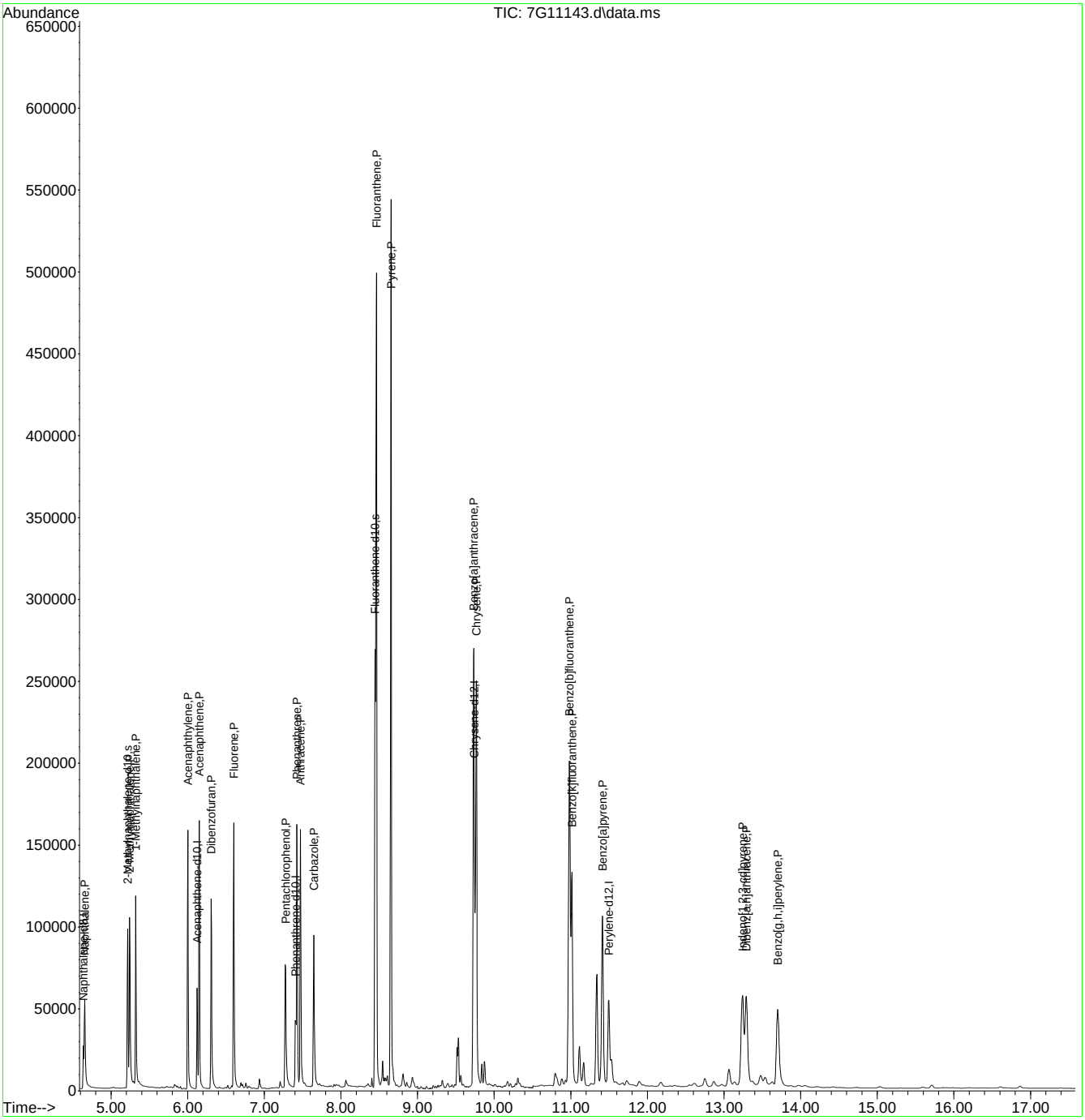
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.640	136	21679	4.00	ppm	0.01
6) Acenaphthene-d10	6.123	164	17776	4.00	ppm	0.00
11) Phenanthrene-d10	7.410	188	35130	4.00	ppm	0.01
18) Chrysene-d12	9.741	240	63709	4.00	ppm	0.01
22) Perylene-d12	11.496	264	59713	4.00	ppm	0.02
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.217	152	36751	11.25	ppm	0.01
Spiked Amount 10.000	Range 50 - 150		Recovery = 112.50%			
17) Fluoranthene-d10	8.445	212	188903	10.28	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 102.80%			
Target Compounds						Qvalue
2) Naphthalene	4.658	128	46591	7.47	ppm	99
3) 2-Methylnaphthalene	5.240	142	41614	8.63	ppm	94
5) 1-Methylnaphthalene	5.323	142	44771	10.15	ppm	97
7) Acenaphthylene	6.002	152	93699	9.04	ppm	99
8) Acenaphthene	6.152	153	50330	7.46	ppm	96
9) Dibenzofuran	6.307	168	73781	15.33	ppm	98
10) Fluorene	6.602	166	58603	7.98	ppm	97
12) Pentachlorophenol	7.278	266	31007	21.80	ppm	95
13) Phenanthrene	7.424	178	99706	8.49	ppm	96
14) Anthracene	7.473	178	101496	8.53	ppm	99
15) Carbazole	7.647	167	74419	3.54	ppm	96
16) Fluoranthene	8.464	202	312764	13.89	ppm	98
19) Pyrene	8.654	202	346673	13.51	ppm	96
20) Benzo[a]anthracene	9.732	228	161141	7.99	ppm	94
21) Chrysene	9.768	228	202186	9.16	ppm	99
23) Benzo[b]fluoranthene	10.982	252	260930	12.87	ppm	98
24) Benzo[k]fluoranthene	11.015	252	132139	6.09	ppm	98
25) Benzo[a]pyrene	11.413	252	129066	6.54	ppm	98
26) Indeno[1,2,3-cd]pyrene	13.243	276	102670m	7.96	ppm	
27) Dibenz[a,h]anthracene	13.291	278	67232	4.70	ppm	97
28) Benzo[g,h,i]perylene	13.699	276	86728	5.58	ppm	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11143.d
Acq On : 11 Aug 2020 1:38 pm
Operator : FOUADS
Sample : op81485-ms e Inst : MSBNA8
Misc : op81485,S7G483,15.3,,,1,1,soil
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:36:51 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration



Manual Integration Approval Summary

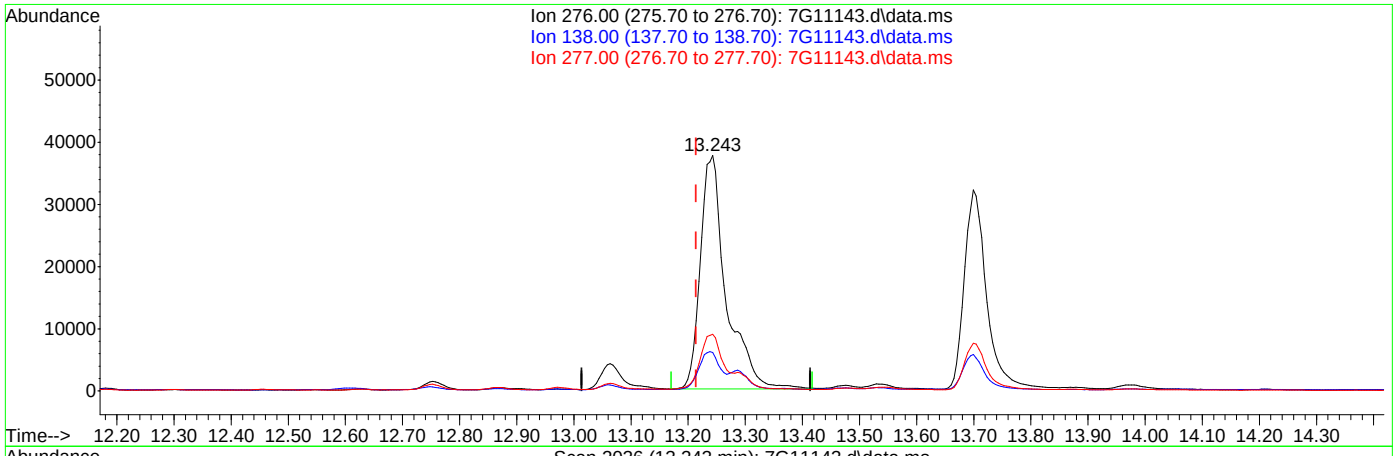
Sample Number: OP81485-MS
Lab FileID: 7G11143.D
Injection Time: 08/11/20 13:38
Method: SW846 8270E BY SIM
Analyst approved: 08/12/20 09:33 Fouad Sekkar
Supervisor approved: 08/12/20 11:43 Nicole McCampbell

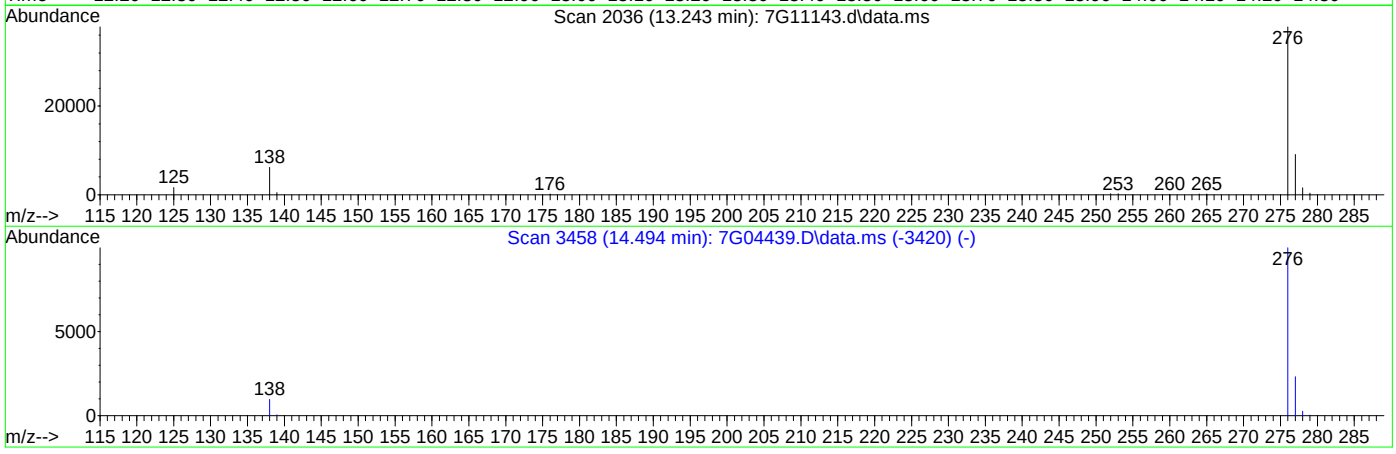
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		13.24	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11143.d
Acq On : 11 Aug 2020 1:38 pm
Operator : FOUADS
Sample : op81485-ms e Inst : MSBNA8
Misc : op81485,S7G483,15.3,,,1,1,soil
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:26:46 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration





TIC: 7G11143.d\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.243min (+0.029) 9.17ppm

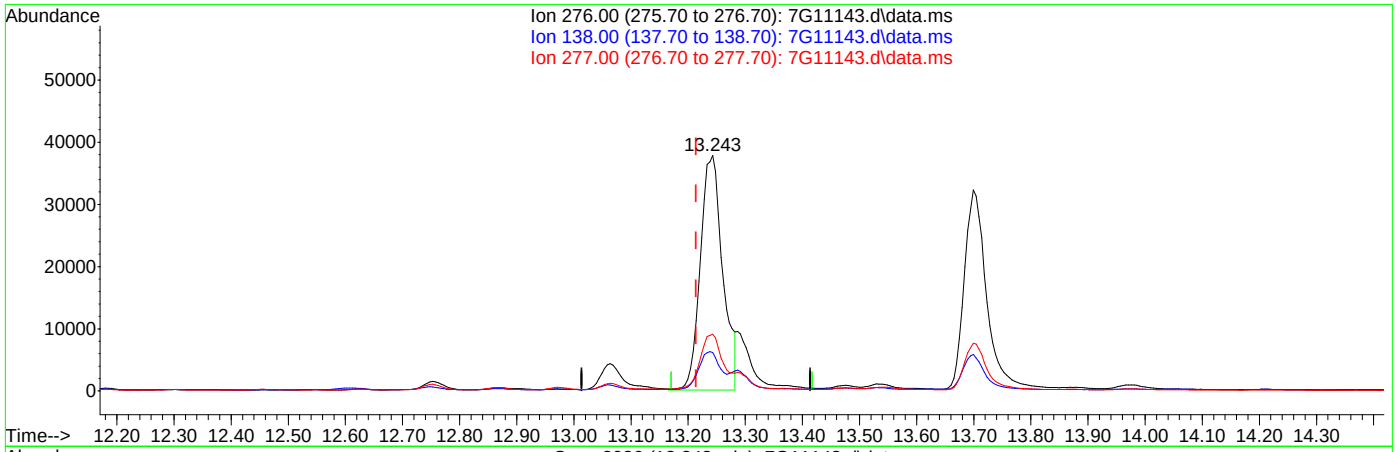
response 118232

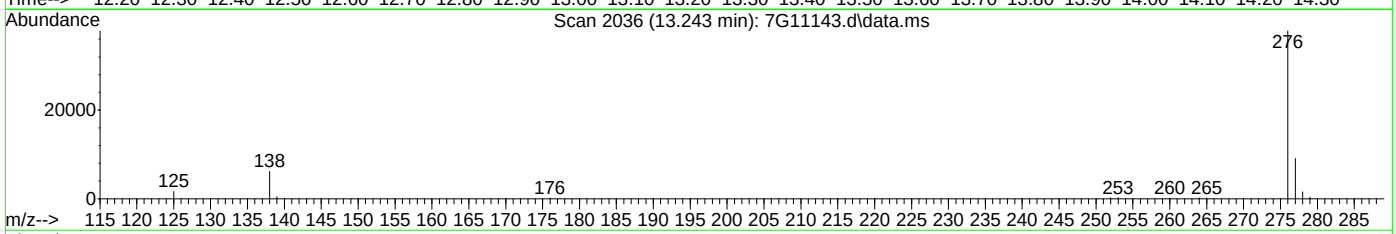
Ion	Exp%	Act%
276.00	100	100
138.00	9.60	15.78
277.00	23.10	23.55
0.00	0.00	0.00

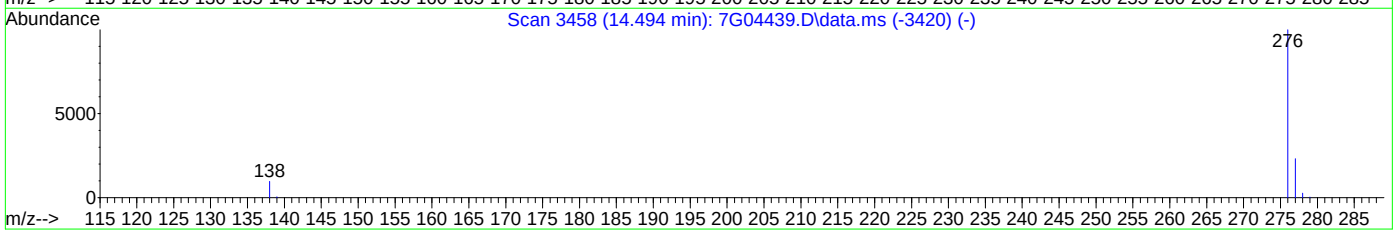
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11143.d
Acq On : 11 Aug 2020 1:38 pm
Operator : FOUADS
Sample : op81485-ms e Inst : MSBNA8
Misc : op81485,S7G483,15.3,,,1,1,soil
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:26:46 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11143.d\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.243min (+0.029) 7.96ppm m

response 102670

Ion	Exp%	Act%
276.00	100	100
138.00	9.60	16.30
277.00	23.10	24.03
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 08/12/20 11:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11144.d
Acq On : 11 Aug 2020 2:02 pm
Operator : FOUADS
Sample : op81485-msd e Inst : MSBNA8
Misc : op81485,S7G483,15.2,,,1,1,soil
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:37:36 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

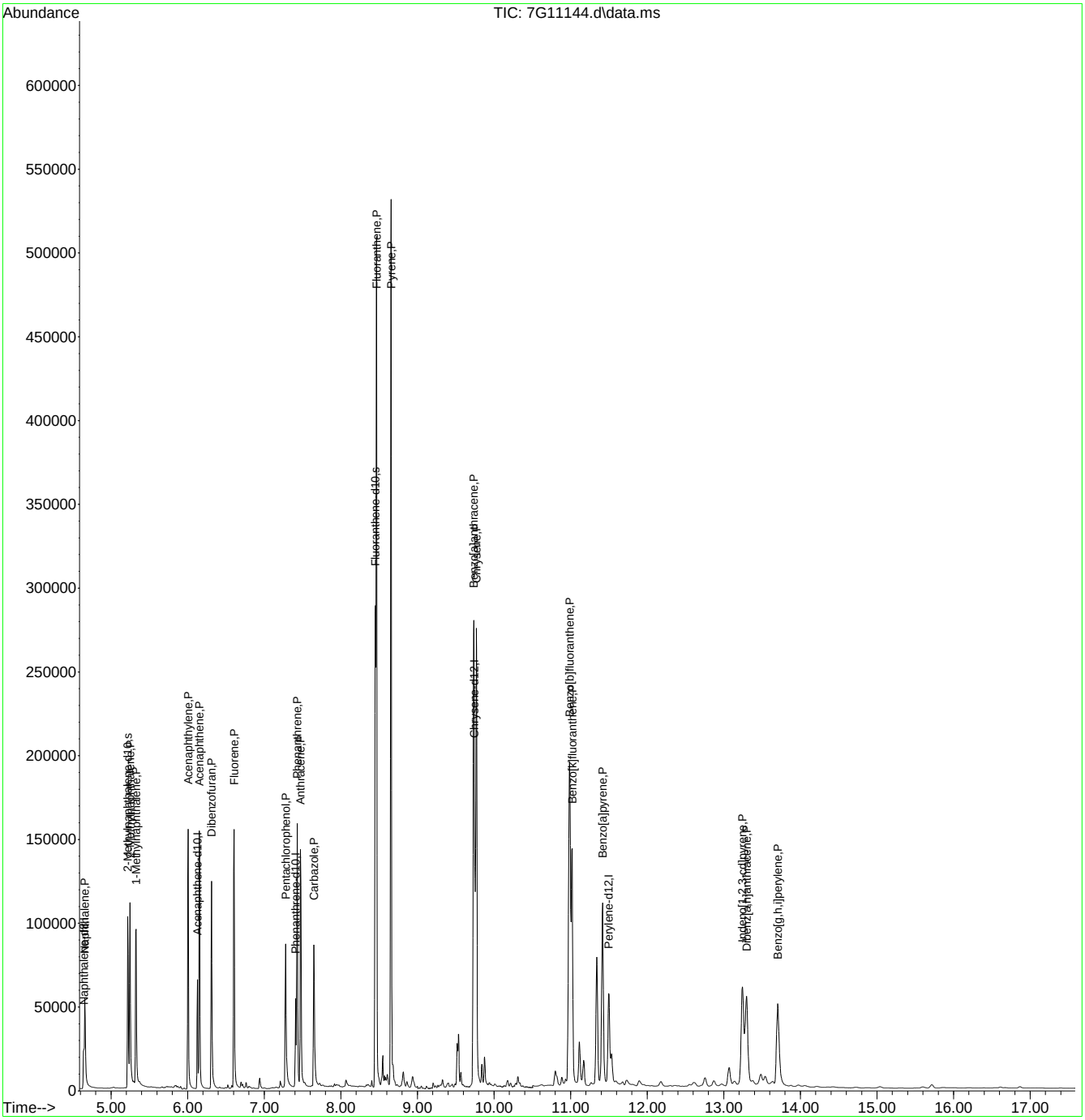
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.646	136	22295	4.00	ppm	0.02
6) Acenaphthene-d10	6.128	164	18278	4.00	ppm	0.01
11) Phenanthrene-d10	7.410	188	36401	4.00	ppm	0.01
18) Chrysene-d12	9.744	240	66697	4.00	ppm	0.02
22) Perylene-d12	11.496	264	61462	4.00	ppm	0.02
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.217	152	40194	11.94	ppm	0.01
Spiked Amount 10.000	Range 50 - 150		Recovery = 119.40%			
17) Fluoranthene-d10	8.449	212	189514	9.96	ppm	0.01
Spiked Amount 10.000	Range 50 - 150		Recovery = 99.60%			
Target Compounds						Qvalue
2) Naphthalene	4.658	128	45588	7.12	ppm	100
3) 2-Methylnaphthalene	5.247	142	40845	8.24	ppm	97
5) 1-Methylnaphthalene	5.329	142	43582	9.63	ppm	93
7) Acenaphthylene	6.007	152	93669	8.79	ppm	98
8) Acenaphthene	6.152	153	49322	7.12	ppm	99
9) Dibenzofuran	6.312	168	72629	14.69	ppm	90
10) Fluorene	6.607	166	57813	7.66	ppm	96
12) Pentachlorophenol	7.278	266	30103	20.57	ppm	98
13) Phenanthrene	7.431	178	92481	7.62	ppm	98
14) Anthracene	7.473	178	104836	8.51	ppm	98
15) Carbazole	7.647	167	71271	3.28	ppm	99
16) Fluoranthene	8.467	202	313301	13.45	ppm	98
19) Pyrene	8.657	202	351395	13.09	ppm	95
20) Benzo[a]anthracene	9.734	228	165554	7.85	ppm	93
21) Chrysene	9.770	228	213153	9.23	ppm	99
23) Benzo[b]fluoranthene	10.987	252	278535	13.35	ppm	98
24) Benzo[k]fluoranthene	11.021	252	134312	6.01	ppm	98
25) Benzo[a]pyrene	11.418	252	133189	6.55	ppm	98
26) Indeno[1,2,3-cd]pyrene	13.243	276	102680m	7.74	ppm	
27) Dibenz[a,h]anthracene	13.296	278	65956	4.48	ppm	96
28) Benzo[g,h,i]perylene	13.704	276	87370	5.46	ppm	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11144.d
Acq On : 11 Aug 2020 2:02 pm
Operator : FOUADS
Sample : op81485-msd e Inst : MSBNA8
Misc : op81485,S7G483,15.2,,,1,1,soil
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:37:36 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration



Manual Integration Approval Summary

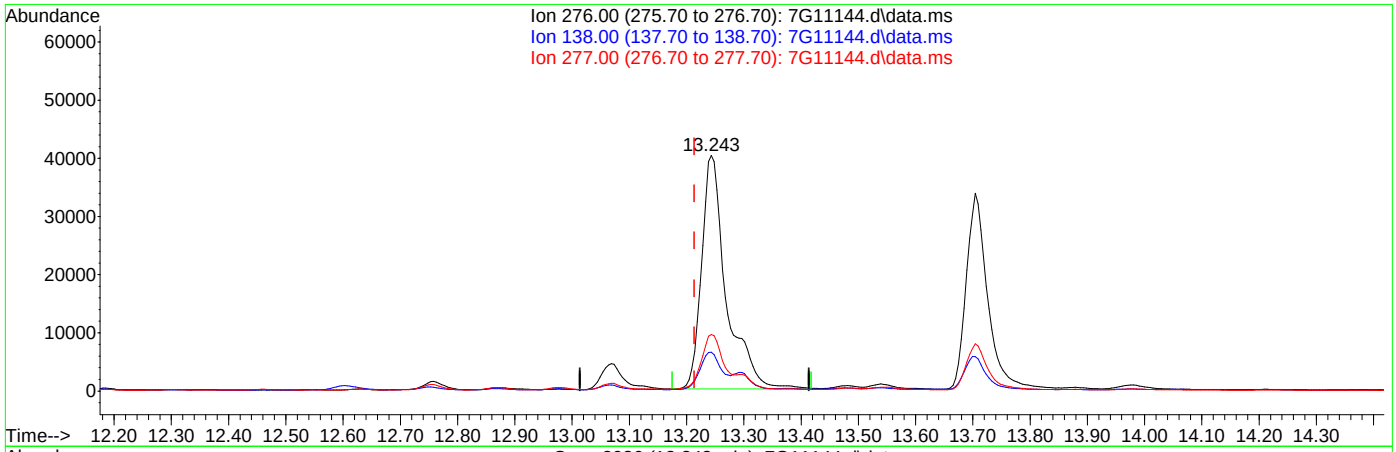
Sample Number: OP81485-MSD
Lab FileID: 7G11144.D
Injection Time: 08/11/20 14:02
Method: SW846 8270E BY SIM
Analyst approved: 08/12/20 09:33 Fouad Sekkar
Supervisor approved: 08/12/20 11:43 Nicole McCampbell

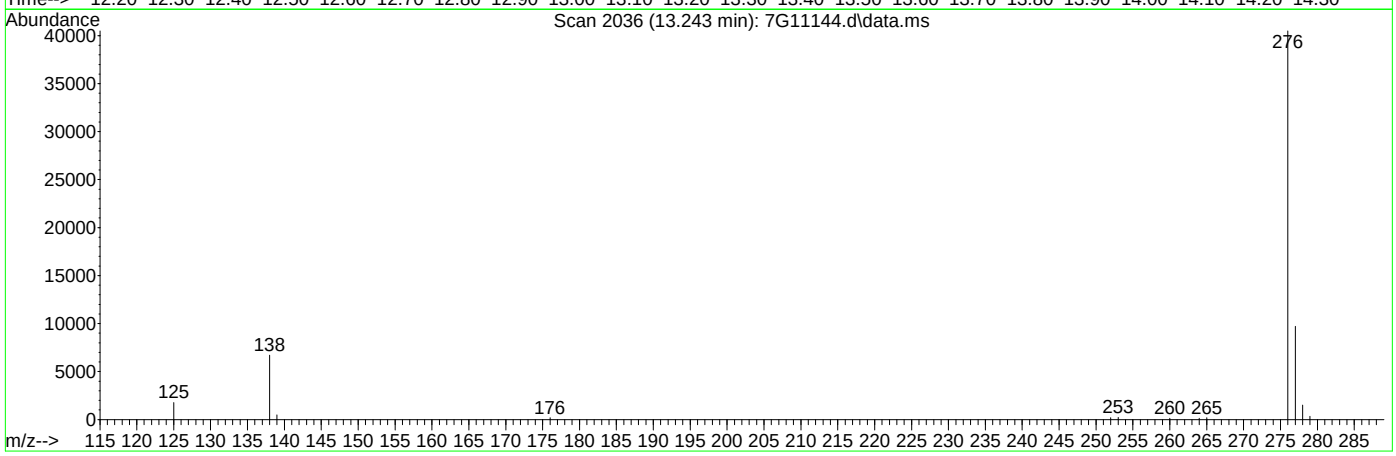
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		13.24	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11144.d
Acq On : 11 Aug 2020 2:02 pm
Operator : FOUADS
Sample : op81485-msd e Inst : MSBNA8
Misc : op81485,S7G483,15.2,,,1,1,soil
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:26:49 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration





TIC: 7G11144.d\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.243min (+0.029) 9.09ppm

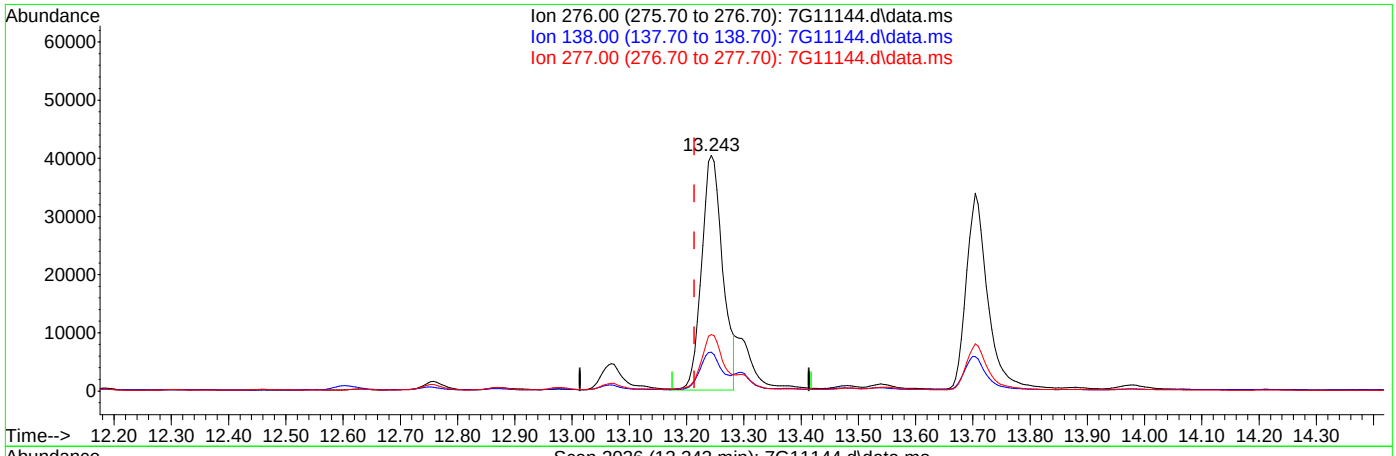
response 120614

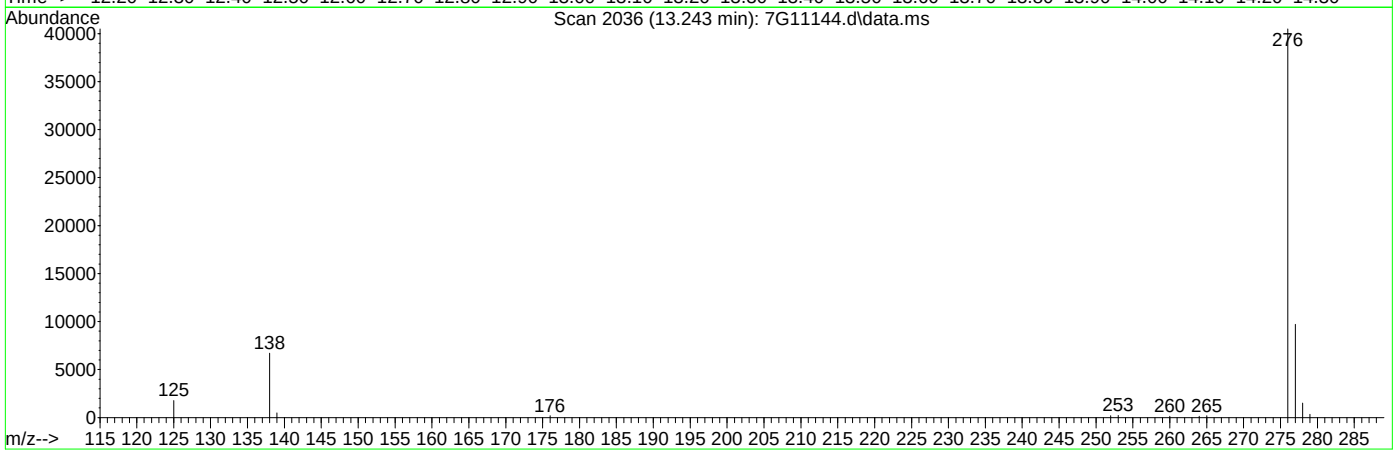
Ion	Exp%	Act%
276.00	100	100
138.00	9.60	16.02
277.00	23.10	23.52
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11144.d
Acq On : 11 Aug 2020 2:02 pm
Operator : FOUADS
Sample : op81485-msd e Inst : MSBNA8
Misc : op81485,S7G483,15.2,,,1,1,soil
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:26:49 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration





TIC: 7G11144.d\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.243min (+0.029) 7.74ppm m

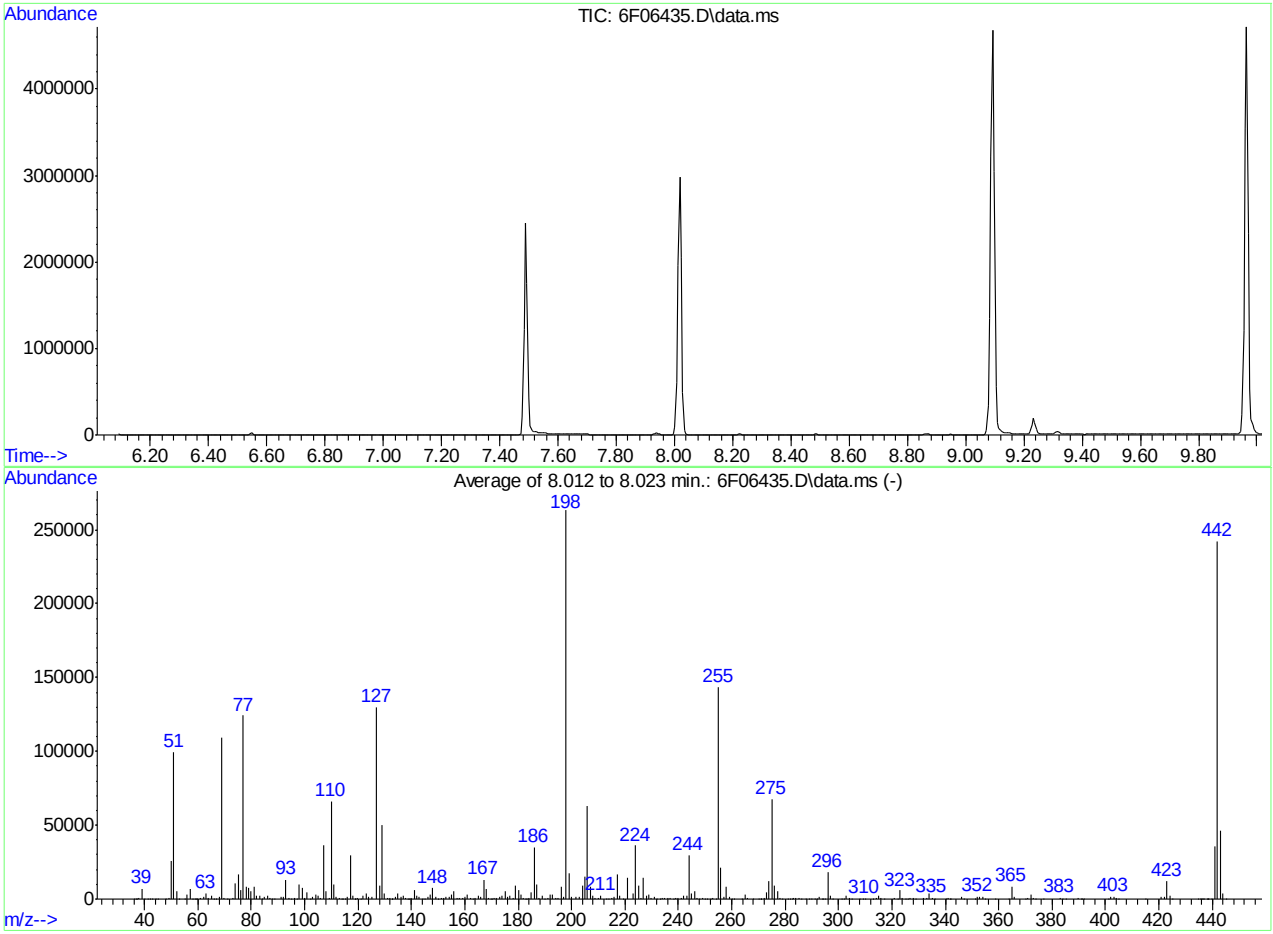
response 102680

Ion	Exp%	Act%
276.00	100	100
138.00	9.60	16.53
277.00	23.10	23.98
0.00	0.00	0.00

SW-846 Method 8270

Data File : C:\msdchem\1\data\S6F248_072920\6F06435.D Vial: 1
Acq On : 29 Jul 2020 12:37 pm Operator: marthav
Sample : DFTPP Inst : MSBNA10
Misc : op81256,S6F248,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\methods\DFTPP.m (RTE Integrator)
Title : Tune Evaluation



AutoFind: Scans 360, 361, 362; Background Corrected with Scan 354

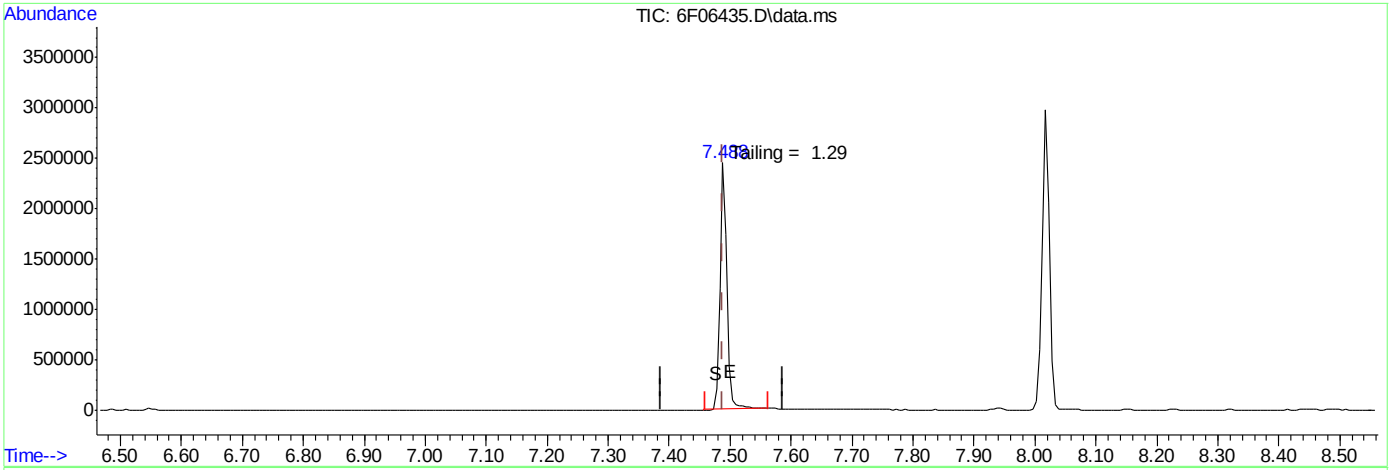
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	37.9	99720	PASS
68	69	0.00	2	1.7	1843	PASS
69	198	0.00	100	41.5	109212	PASS
70	69	0.00	2	0.5	588	PASS
127	198	40	60	49.4	130053	PASS
197	198	0.00	1	0.6	1470	PASS
198	198	100	100	100.0	263083	PASS
199	198	5	9	6.8	17833	PASS
275	198	10	30	25.8	67861	PASS
365	198	1	100	3.2	8361	PASS
441	443	0.01	100	77.9	35832	PASS
442	198	40	100	92.0	242163	PASS
443	442	17	23	19.0	46013	PASS

6F06435.D DFTPP.m Thu Jul 30 13:07:25 2020

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06435.D
Sample : DFTPP
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1
Acq On : 29 Jul 2020 12:37 pm Operator: marthav

Quant Time: Jul 30 13:07:27 2020
Quant Method : C:\msdchem\1\methods\DFTPP.m
Quant Title : Tune Evaluation



TIC: 6F06435.D\data.ms

(1) Pentachlorophenol

7.488min (+0.000) 86.71

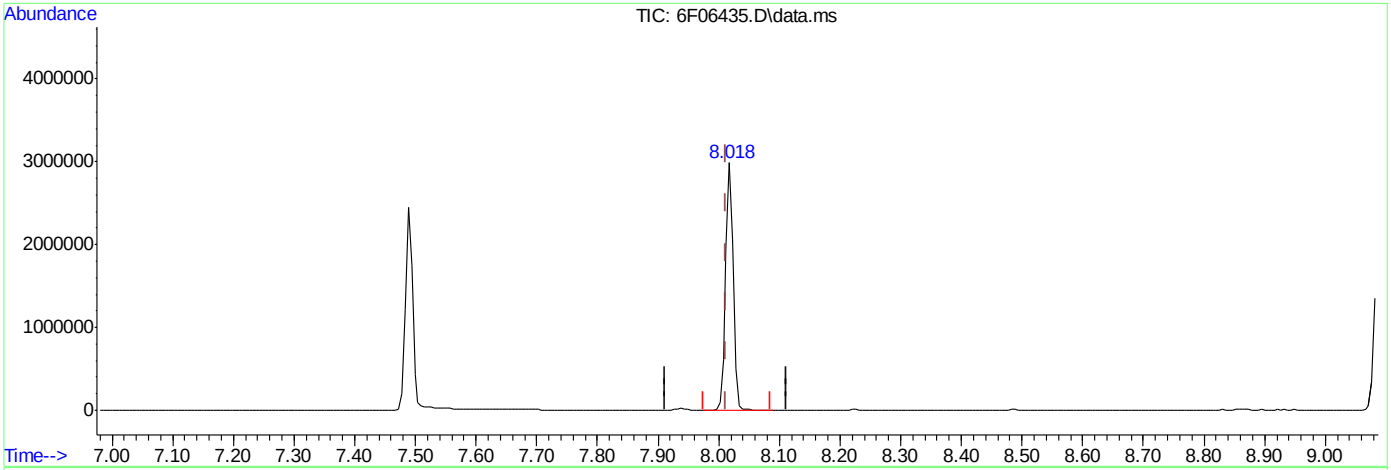
response 2074124

Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06435.D
Sample : DFTPP
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1
Acq On : 29 Jul 2020 12:37 pm Operator: marthav

Quant Time: Jul 30 13:07:27 2020
Quant Method : C:\msdchem\1\methods\DFTPP.m
Quant Title : Tune Evaluation



TIC: 6F06435.D\data.ms

(2) DFTPP

8.018min (+0.005) 93.73

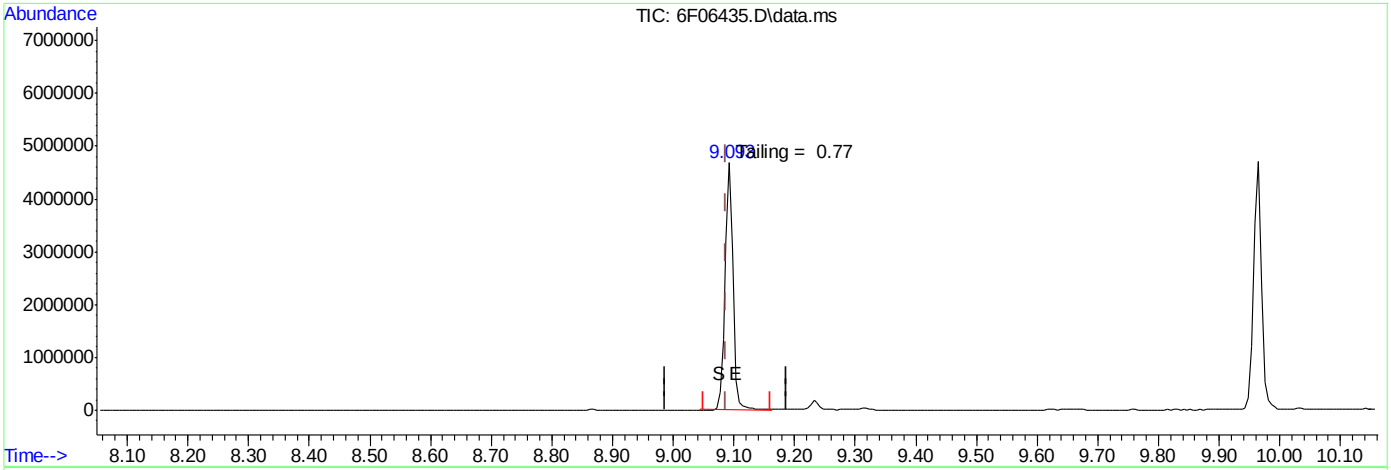
response 2645055

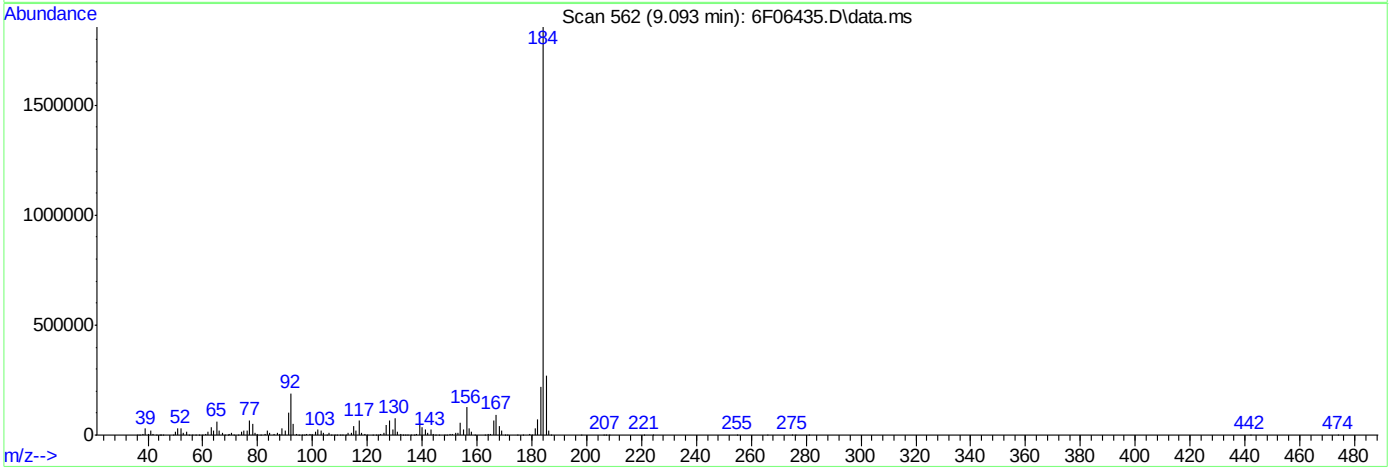
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06435.D
Sample : DFTPP
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1
Acq On : 29 Jul 2020 12:37 pm Operator: marthav

Quant Time: Jul 30 13:07:27 2020
Quant Method : C:\msdchem\1\methods\DFTPP.m
Quant Title : Tune Evaluation





TIC: 6F06435.D\data.ms

(3) Benzidine

9.093min (+0.005) 103.11

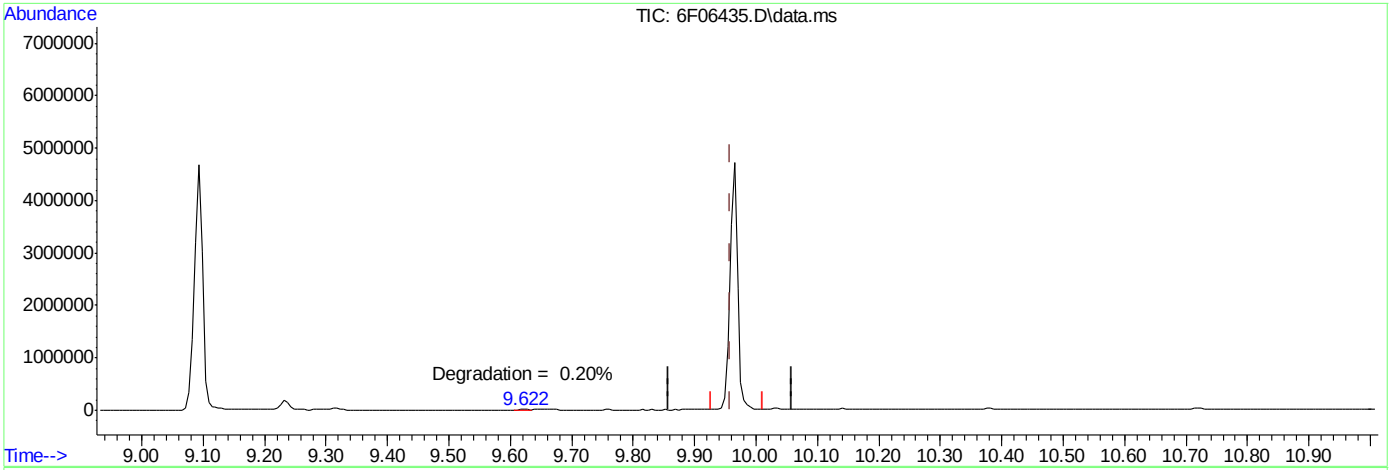
response 4373300

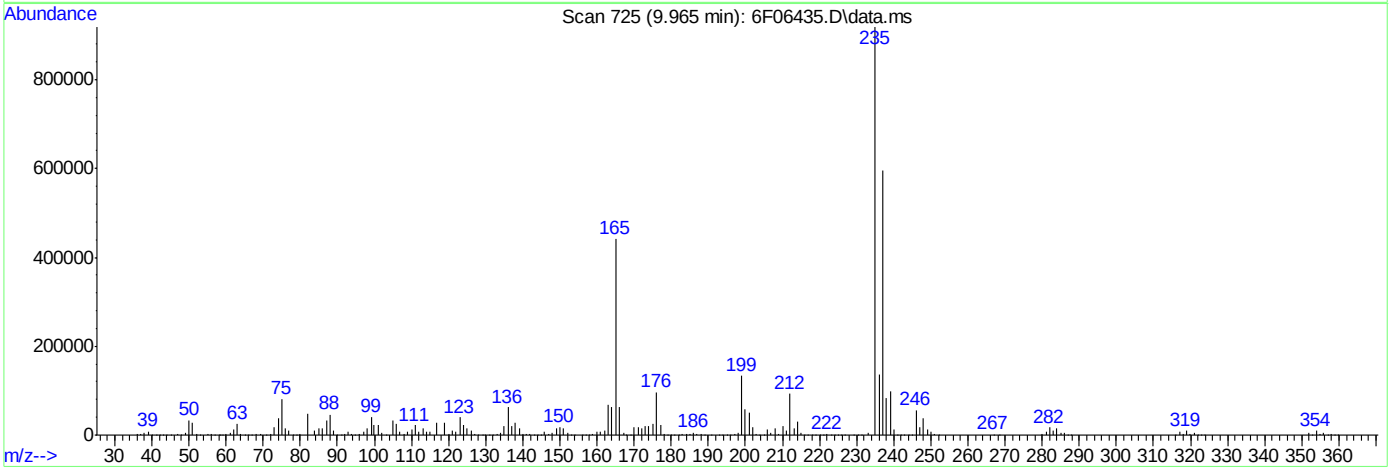
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06435.D
Sample : DFTPP
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1
Acq On : 29 Jul 2020 12:37 pm Operator: marthav

Quant Time: Jul 30 13:07:27 2020
Quant Method : C:\msdchem\1\methods\DFTPP.m
Quant Title : Tune Evaluation





TIC: 6F06435.D\data.ms

(4) DDT

9.965min (+0.005) 118.64

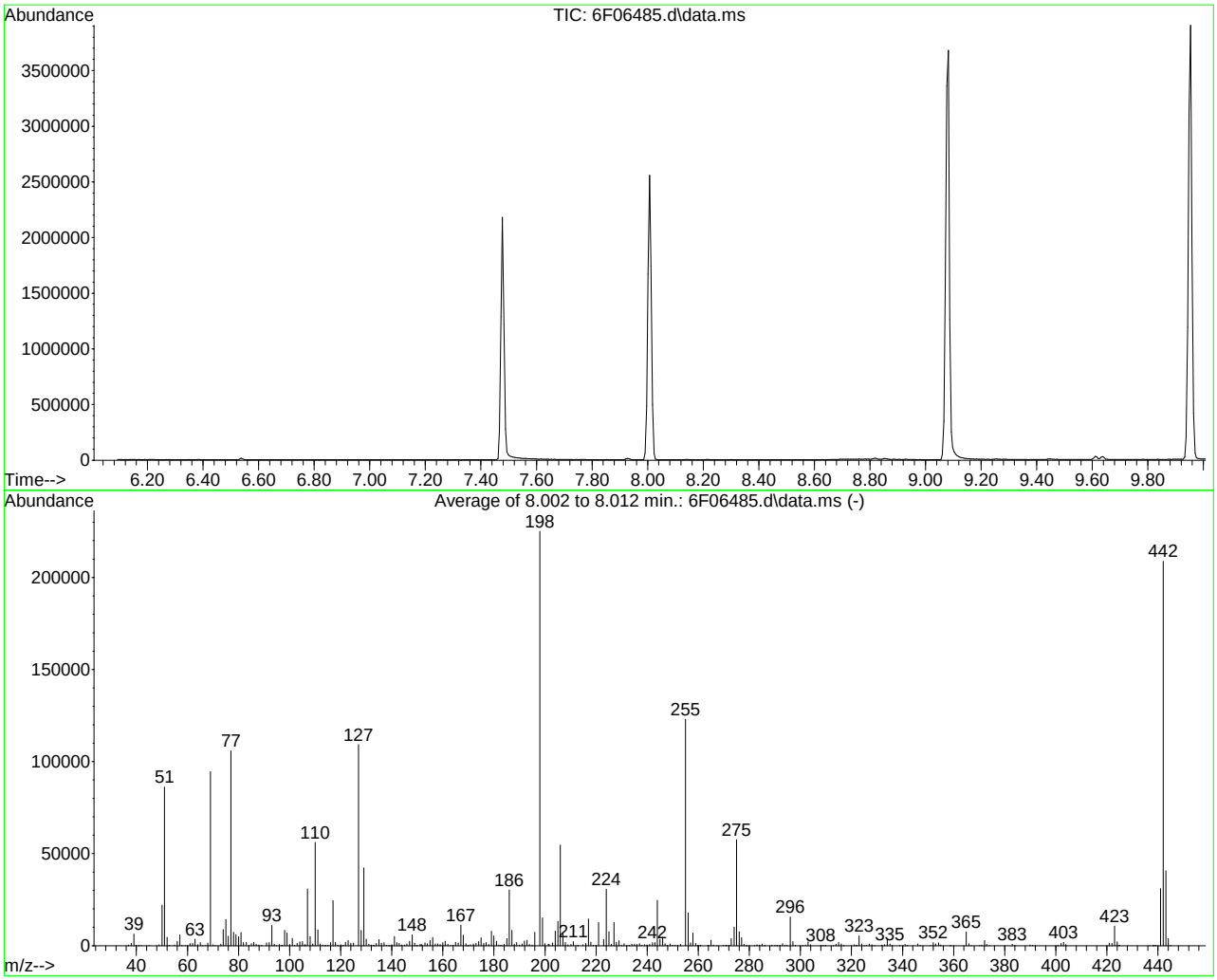
response 4141541

Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

SW-846 Method 8270

Data File : C:\msdchem\1\data\Je...2020\S6F251\6F06485.d Vial: 1
Acq On : 11 Aug 2020 12:38 pm Operator: marthav
Sample : DFTPP Inst : MSBNA10
Misc : op81484,S6F251,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\methods\dftpp.m (RTE Integrator)
Title : Tune Evaluation



AutoFind: Scans 358, 359, 360; Background Corrected with Scan 354

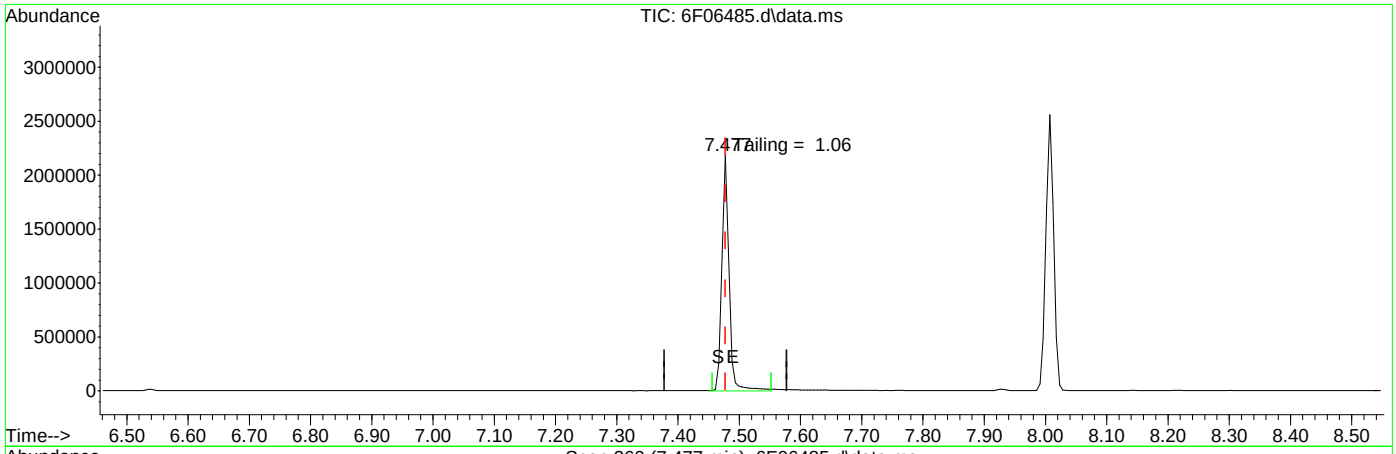
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	38.3	86109	PASS
68	69	0.00	2	1.5	1447	PASS
69	198	0.00	100	42.0	94603	PASS
70	69	0.00	2	0.5	507	PASS
127	198	40	60	48.6	109275	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	225045	PASS
199	198	5	9	6.7	15094	PASS
275	198	10	30	25.6	57523	PASS
365	198	1	100	3.3	7450	PASS
441	443	0.01	100	76.2	30951	PASS
442	198	40	100	92.8	208749	PASS
443	442	17	23	19.5	40608	PASS

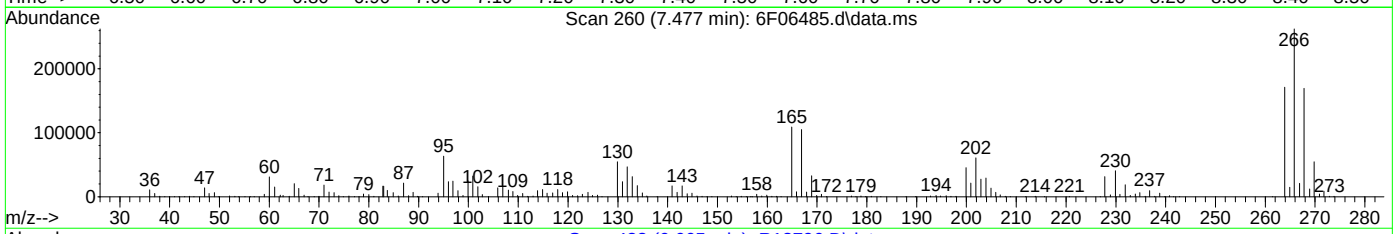
6F06485.d dftpp.m Wed Aug 12 05:36:15 2020

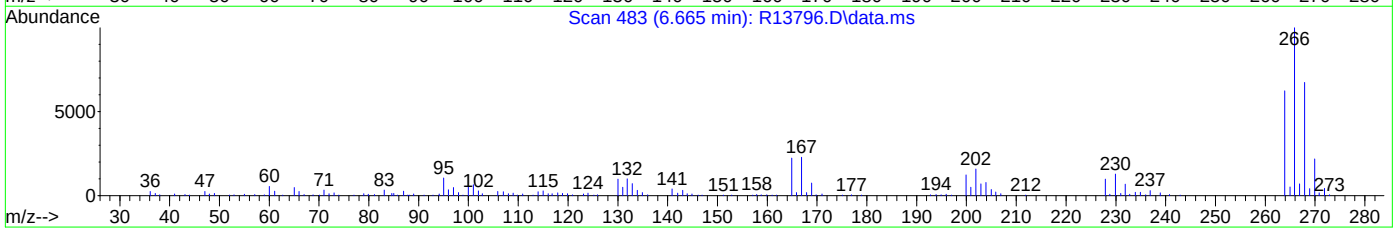
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06485.d
Acq On : 11 Aug 2020 12:38 pm
Operator : marthav
Sample : DFTPP Inst : MSBNA10
Misc : op81484,S6F251,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Results File: dftpp.RES
Quant Time: Aug 12 05:35:30 2020
Quant Title : Tune Evaluation
QLast Update : Wed Aug 12 05:35:27 2020
Response via : Initial Calibration







TIC: 6F06485.d\data.ms

(1) Pentachlorophenol

7.477min (0.000) 74.41

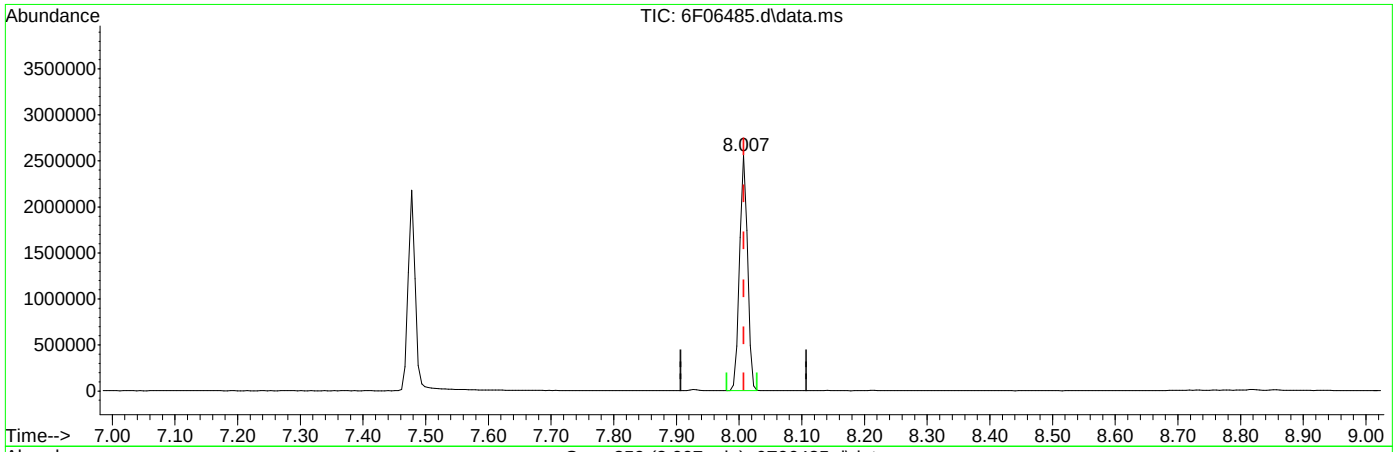
response 1779848

Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06485.d
Acq On : 11 Aug 2020 12:38 pm
Operator : marthav
Sample : DFTPP Inst : MSBNA10
Misc : op81484,S6F251,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Results File: dftpp.RES
Quant Time: Aug 12 05:35:30 2020
Quant Title : Tune Evaluation
QLast Update : Wed Aug 12 05:35:27 2020
Response via : Initial Calibration



TIC: 6F06485.d\data.ms

(2) DFTPP

8.007min (0.000) 80.22

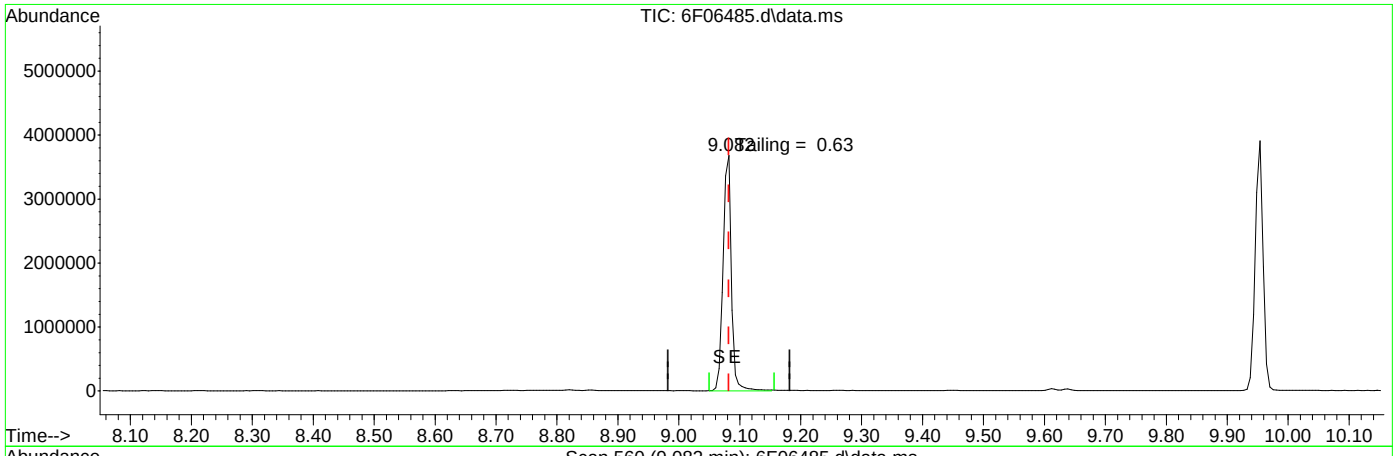
response 2263750

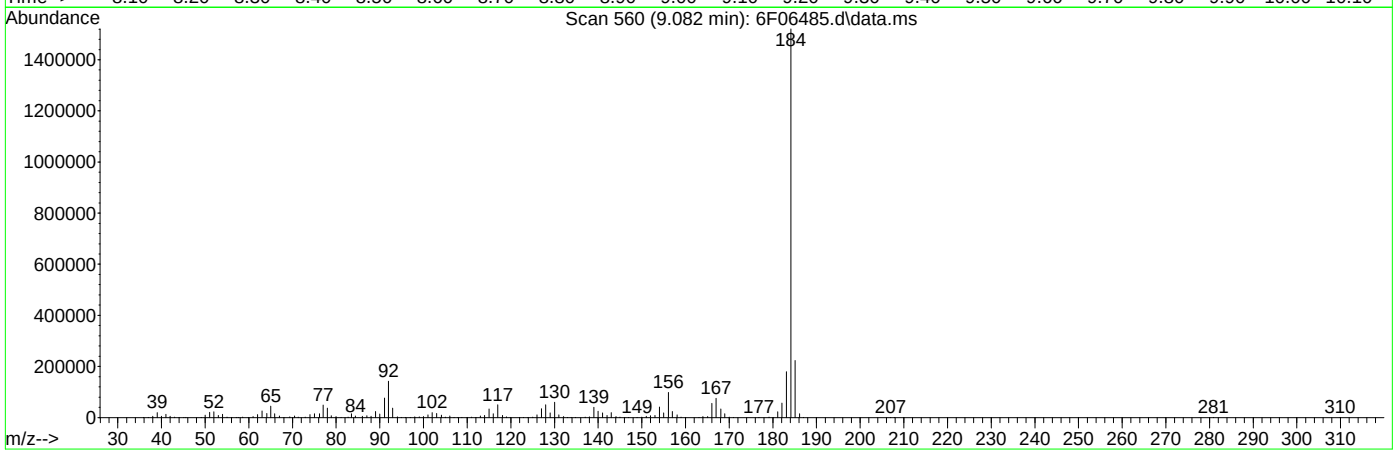
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06485.d
Acq On : 11 Aug 2020 12:38 pm
Operator : marthav
Sample : DFTPP Inst : MSBNA10
Misc : op81484,S6F251,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Results File: dftpp.RES
Quant Time: Aug 12 05:35:30 2020
Quant Title : Tune Evaluation
QLast Update : Wed Aug 12 05:35:27 2020
Response via : Initial Calibration





TIC: 6F06485.d\data.ms

(3) Benzidine

9.082min (0.000) 82.10

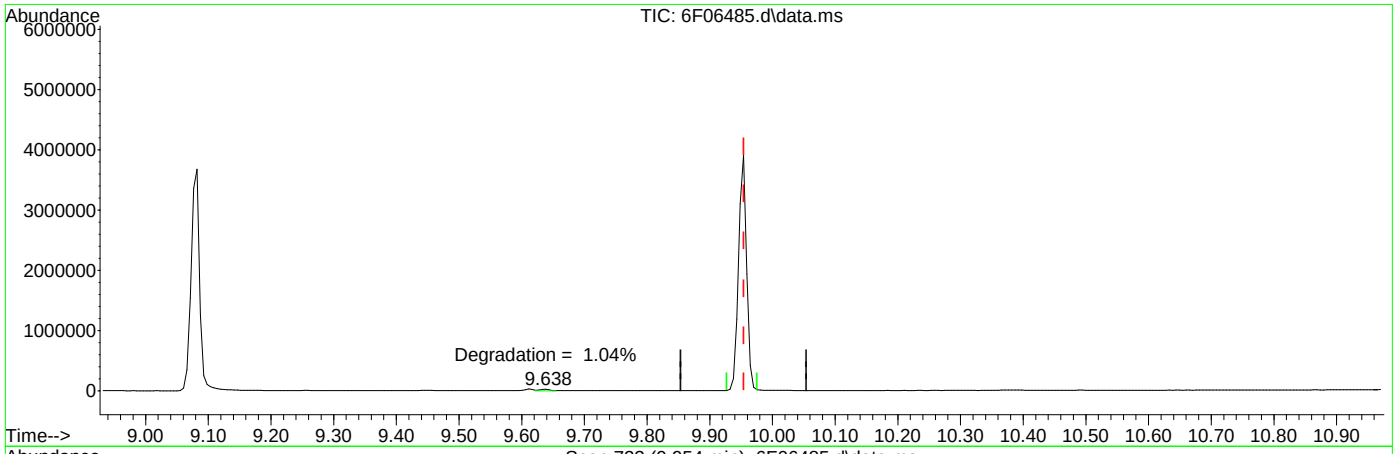
response 3482419

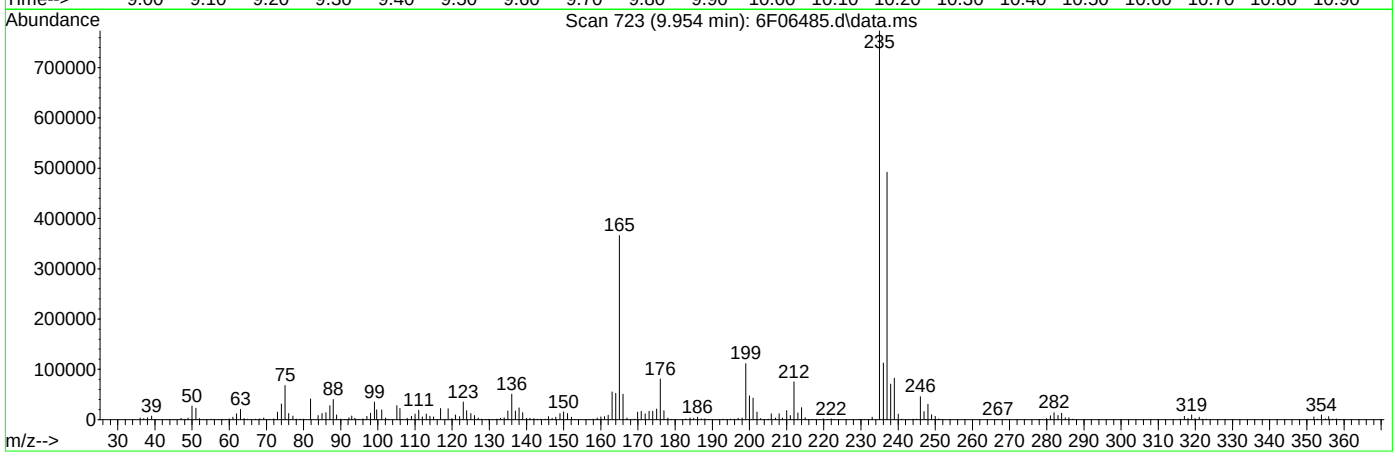
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06485.d
Acq On : 11 Aug 2020 12:38 pm
Operator : marthav
Sample : DFTPP Inst : MSBNA10
Misc : op81484,S6F251,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Results File: dftpp.RES
Quant Time: Aug 12 05:35:30 2020
Quant Title : Tune Evaluation
QLast Update : Wed Aug 12 05:35:27 2020
Response via : Initial Calibration





TIC: 6F06485.d\data.ms

(4) DDT

9.954min (0.000) 99.32

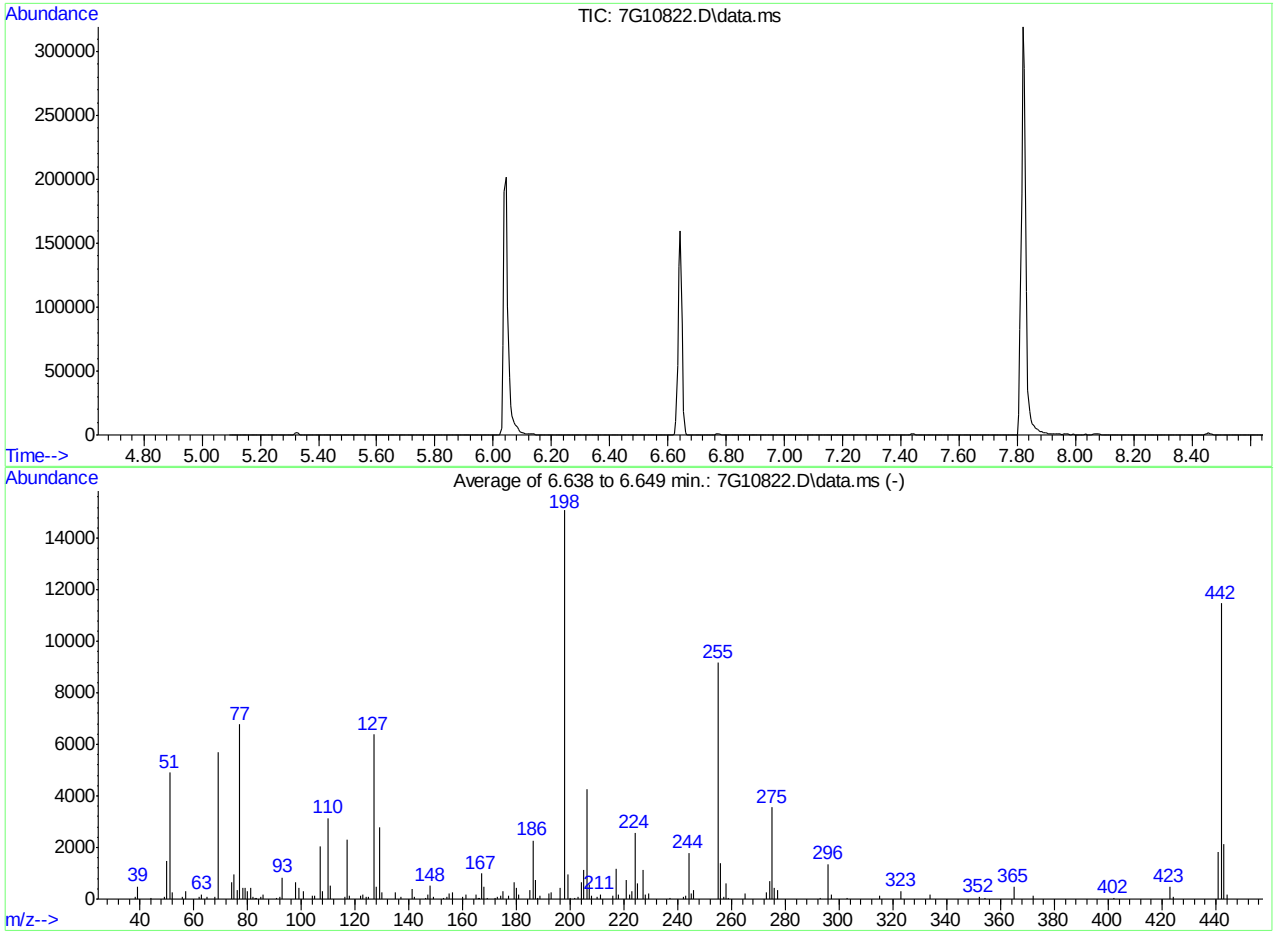
response 3466937

Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

SW-846 Method 8270

Data File : C:\msdchem\1\data\072120_7G472\7G10822.D Vial: 1
Acq On : 21 Jul 2020 8:44 am Operator: fouads
Sample : dftpp Inst : MSBNA8
Misc : op80679,S7G472,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\methods\dftpp.m (RTE Integrator)
Title : Tune Evaluation



AutoFind: Scans 290, 291, 292; Background Corrected with Scan 285

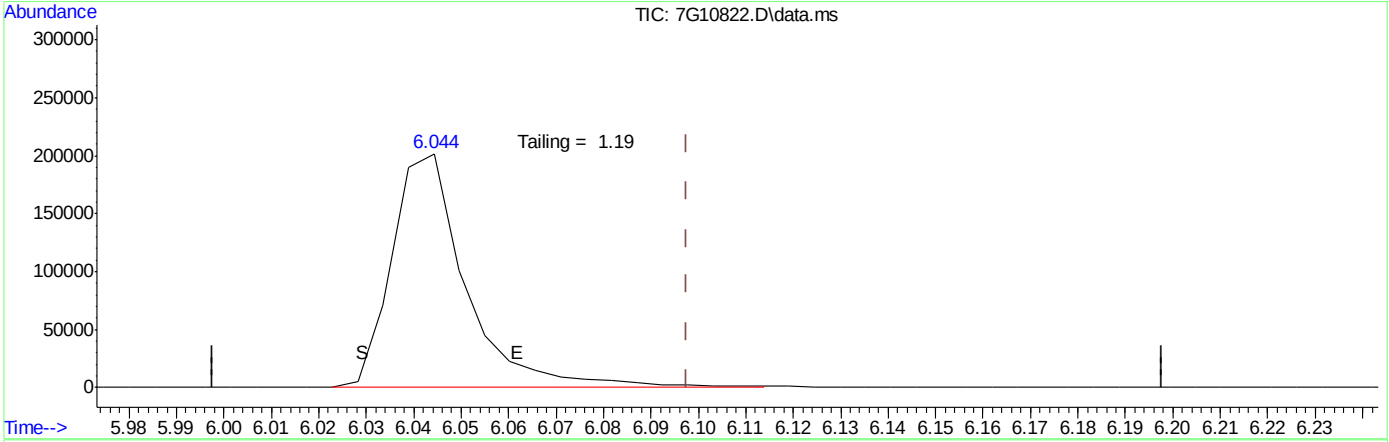
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	32.6	4908	PASS
68	69	0.00	2	1.6	91	PASS
69	198	0.00	100	37.7	5683	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	42.3	6380	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	15078	PASS
199	198	5	9	6.3	953	PASS
275	198	10	30	23.5	3550	PASS
365	198	1	100	3.1	473	PASS
441	443	0.01	100	84.1	1808	PASS
442	198	40	100	76.1	11474	PASS
443	442	17	23	18.7	2149	PASS

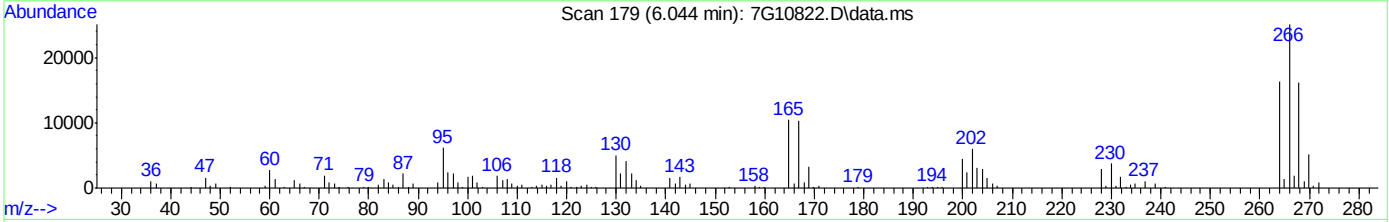
7G10822.D dftpp.m Wed Jul 22 13:20:11 2020

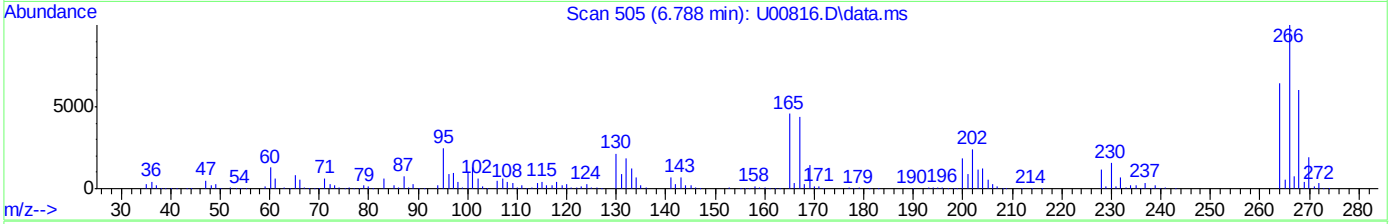
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10822.D
Acq On : 21 Jul 2020 8:44 am
Operator : fouads
Sample : dftpp
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 21 08:58:05 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Tue Jun 23 13:15:39 2020
Response via : Initial Calibration







TIC: 7G10822.D\data.ms

(1) Pentachlorophenol

6.044min (-0.053) 9.28

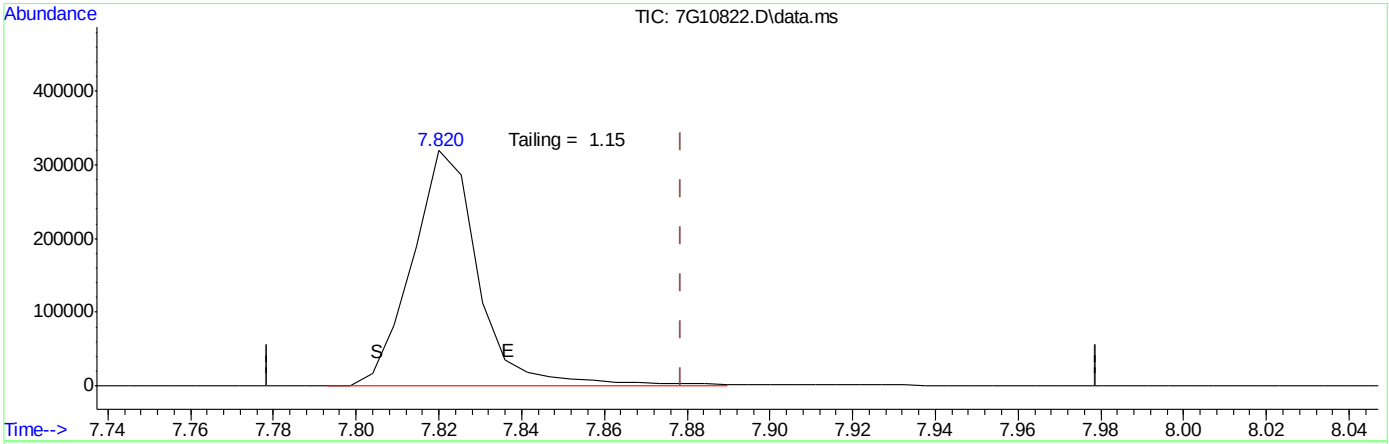
response 221934

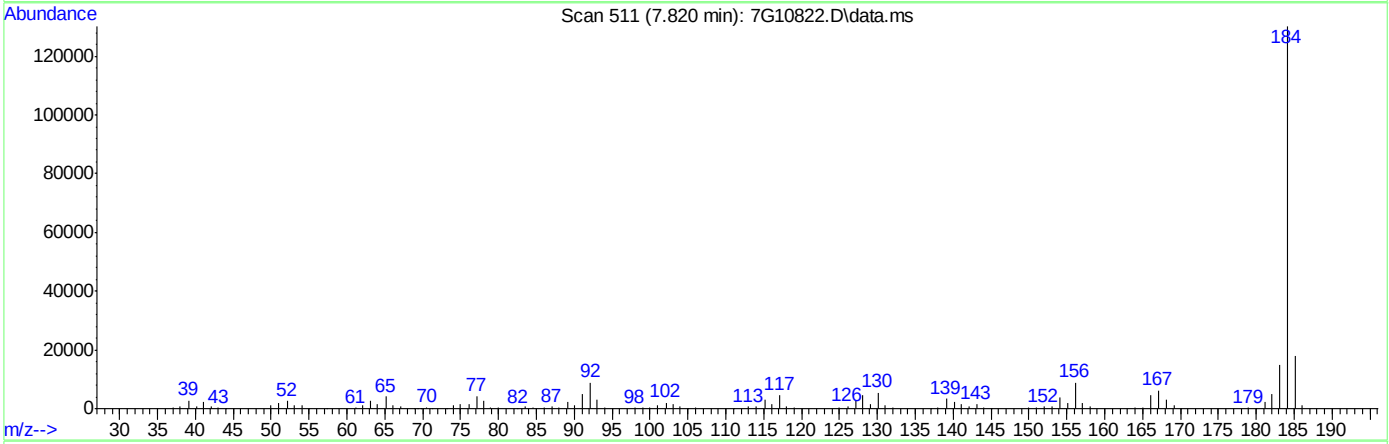
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10822.D
Acq On : 21 Jul 2020 8:44 am
Operator : fouads
Sample : dftpp
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 21 08:58:05 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Tue Jun 23 13:15:39 2020
Response via : Initial Calibration





TIC: 7G10822.D\data.ms

(3) Benzidine

7.820min (-0.059) 8.36

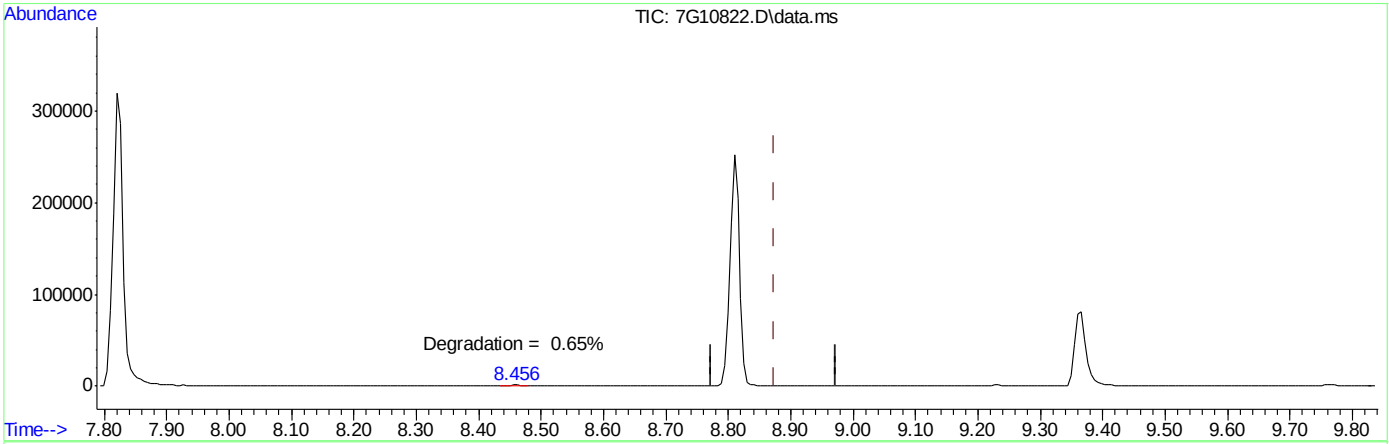
response 354536

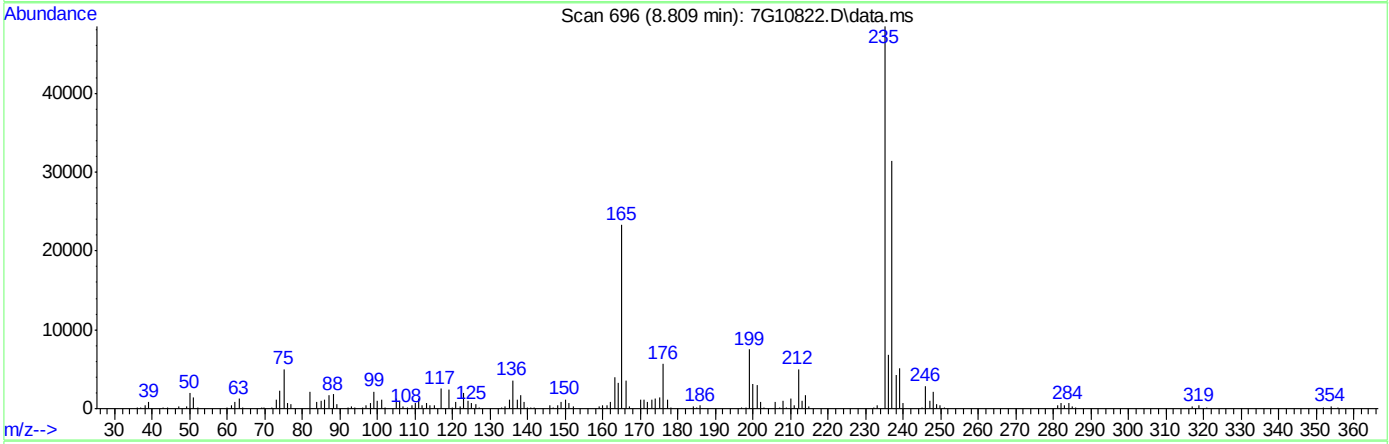
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10822.D
Acq On : 21 Jul 2020 8:44 am
Operator : fouads
Sample : dftpp
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 21 08:58:05 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Tue Jun 23 13:15:39 2020
Response via : Initial Calibration





TIC: 7G10822.D\data.ms

(4) DDT

8.809min (-0.064) 7.86

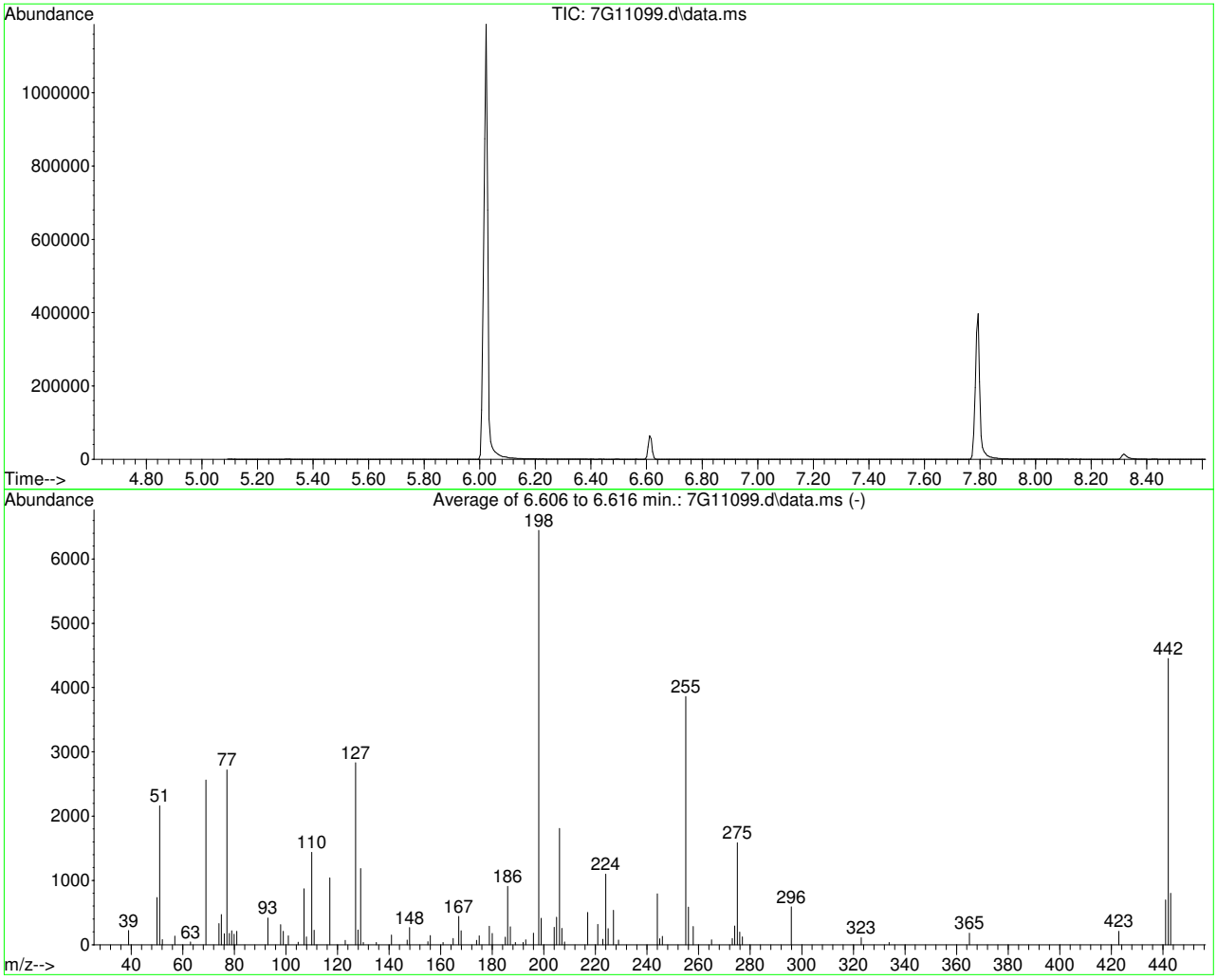
response 274297

Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

SW-846 Method 8270

Data File : C:\msdchem\1\data\jo...2020\s7g482\7G11099.d Vial: 1
Acq On : 10 Aug 2020 2:10 pm Operator: FOUADS
Sample : DFTPP Inst : MSBNA8
Misc : op81342,S7G482,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\methods\dftpp.m (RTE Integrator)
Title : Tune Evaluation



AutoFind: Scans 284, 285, 286; Background Corrected with Scan 280

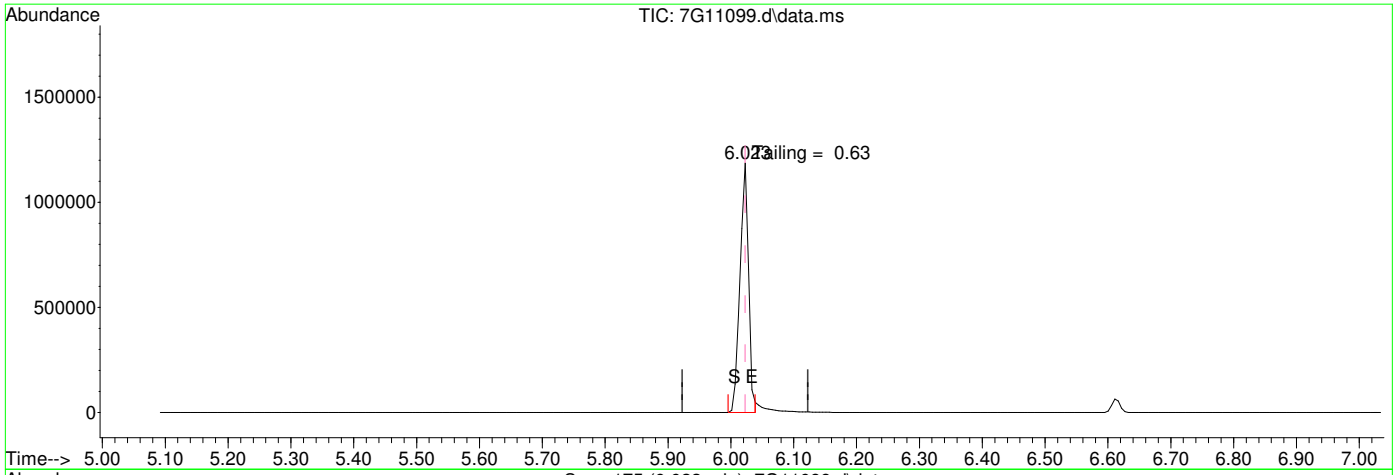
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	33.6	2163	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	39.7	2561	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	43.9	2830	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	6444	PASS
199	198	5	9	6.4	412	PASS
275	198	10	30	24.6	1585	PASS
365	198	1	100	2.8	182	PASS
441	443	0.01	100	87.4	698	PASS
442	198	40	100	69.1	4451	PASS
443	442	17	23	18.0	799	PASS

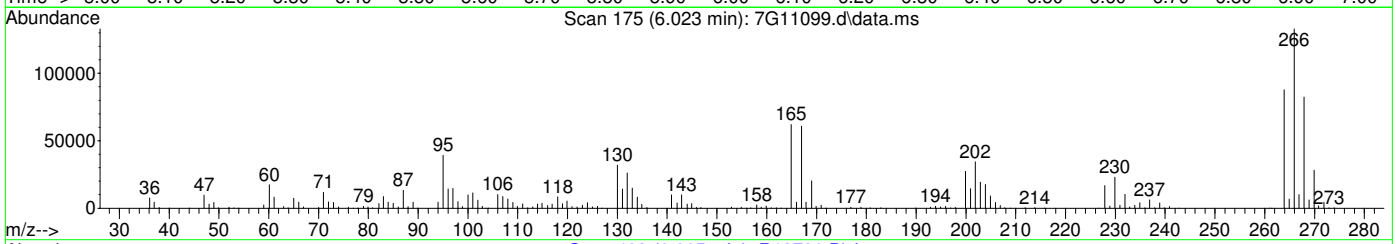
7G11099.d dftpp.m Tue Aug 11 02:33:21 2020

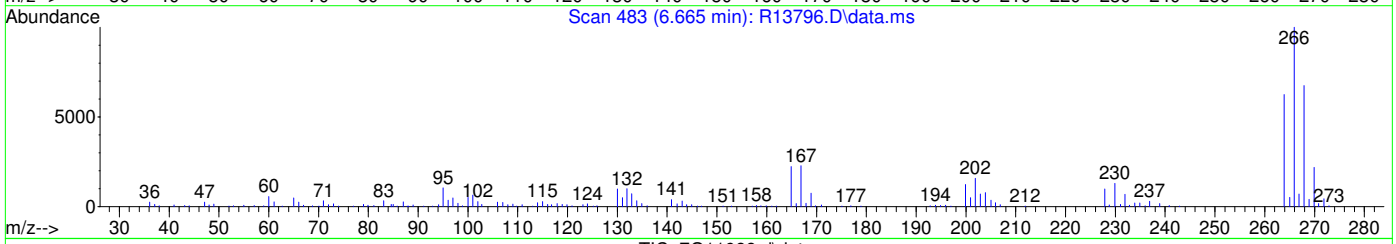
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11099.d
Acq On : 10 Aug 2020 2:10 pm
Operator : FOUADS
Sample : DFTPP
Misc : op81342,S7G482,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 11 02:32:18 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Tue Aug 11 02:32:16 2020
Response via : Initial Calibration







TIC: 7G11099.d\data.ms

(1) Pentachlorophenol

6.023min (0.000) 47.13

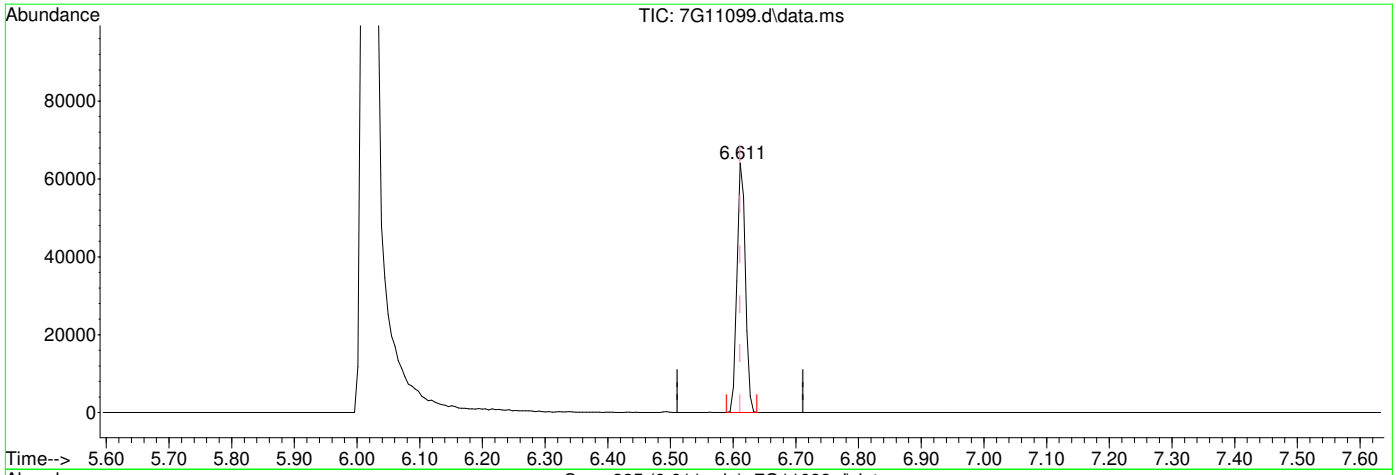
response 1127348

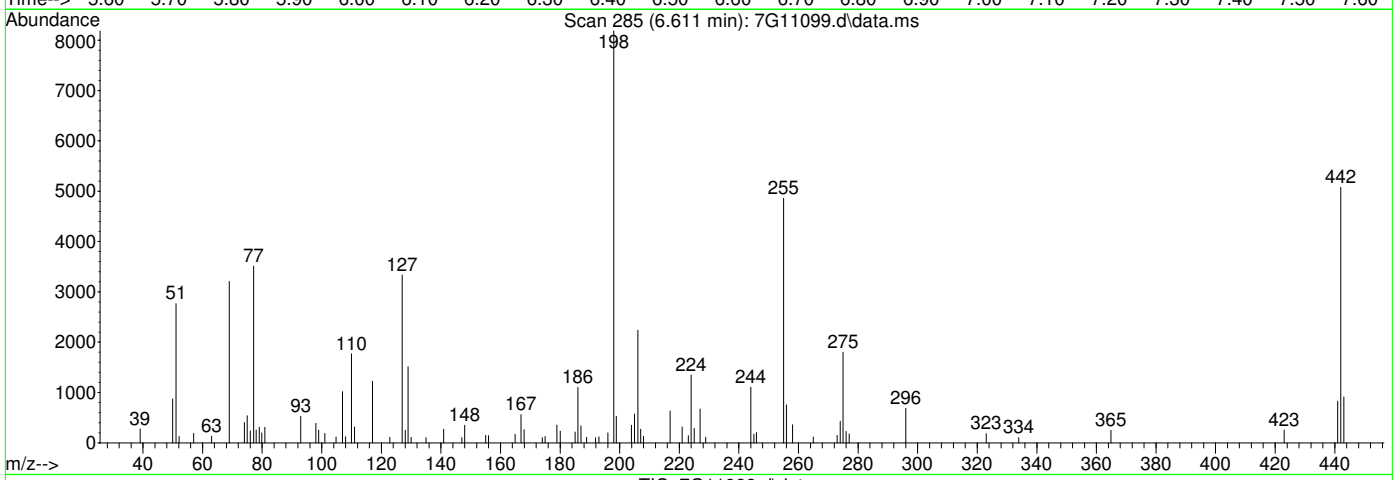
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11099.d
Acq On : 10 Aug 2020 2:10 pm
Operator : FOUADS
Sample : DFTPP
Misc : op81342,S7G482,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 11 02:32:18 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Tue Aug 11 02:32:16 2020
Response via : Initial Calibration





TIC: 7G11099.d\data.ms

(2) DFTPP

6.611min (0.000) 2.11

response 59533

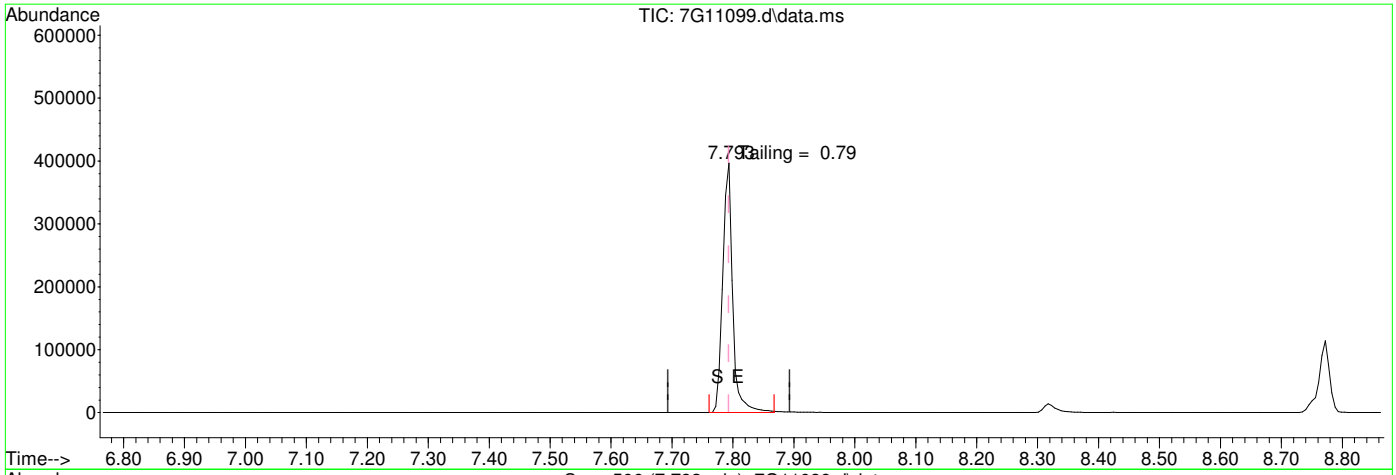
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

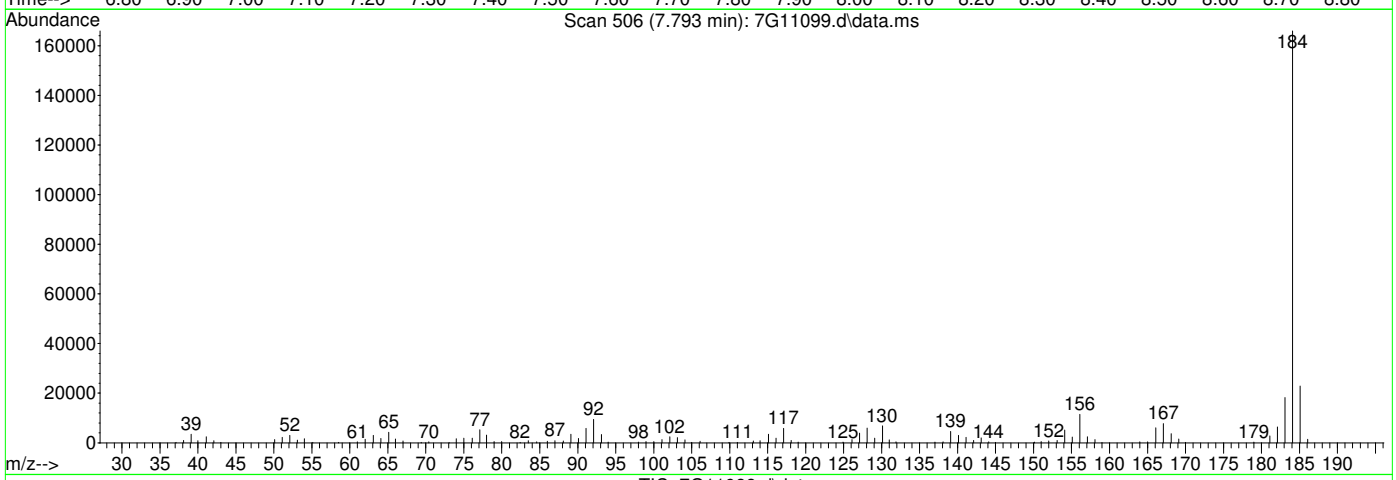
SGS FA77581

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11099.d
Acq On : 10 Aug 2020 2:10 pm
Operator : FOUADS
Sample : DFTPP
Misc : op81342,S7G482,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 11 02:32:18 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Tue Aug 11 02:32:16 2020
Response via : Initial Calibration





TIC: 7G11099.d\data.ms

(3) Benzidine

7.793min (0.000) 10.64

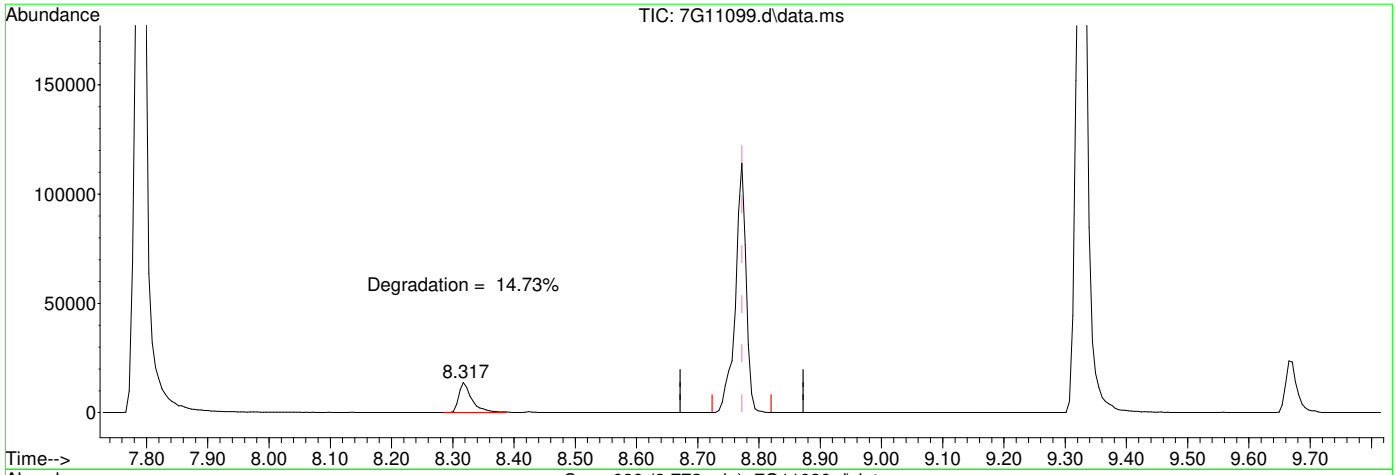
response 451409

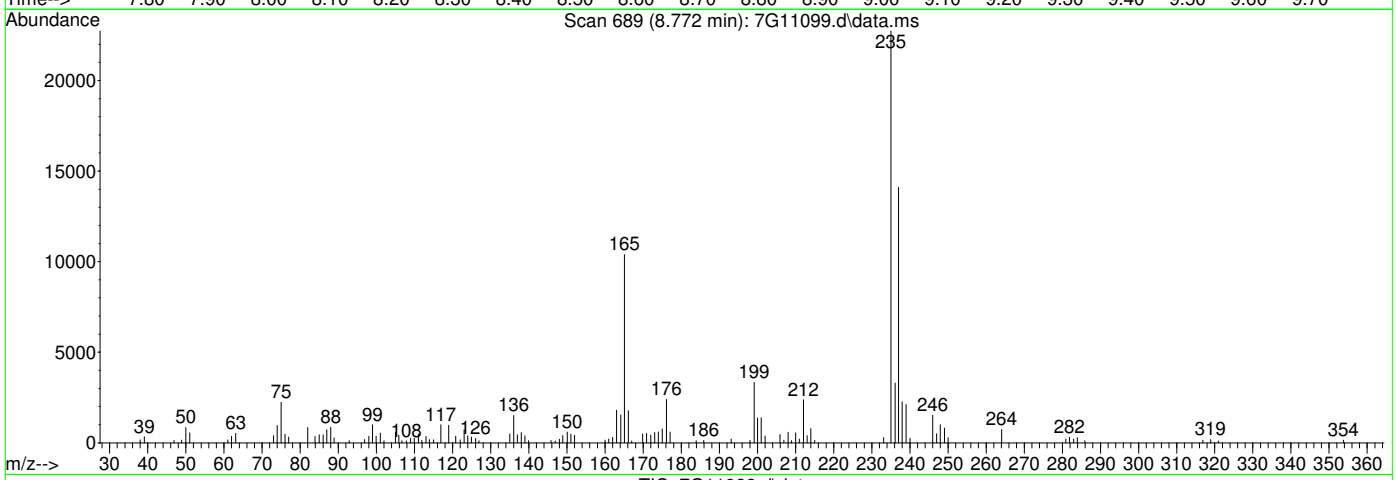
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11099.d
Acq On : 10 Aug 2020 2:10 pm
Operator : FOUADS
Sample : DFTPP
Misc : op81342,S7G482,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 11 02:32:18 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Tue Aug 11 02:32:16 2020
Response via : Initial Calibration





TIC: 7G11099.d\data.ms

(4) DDT

8.772min (0.000) 3.99

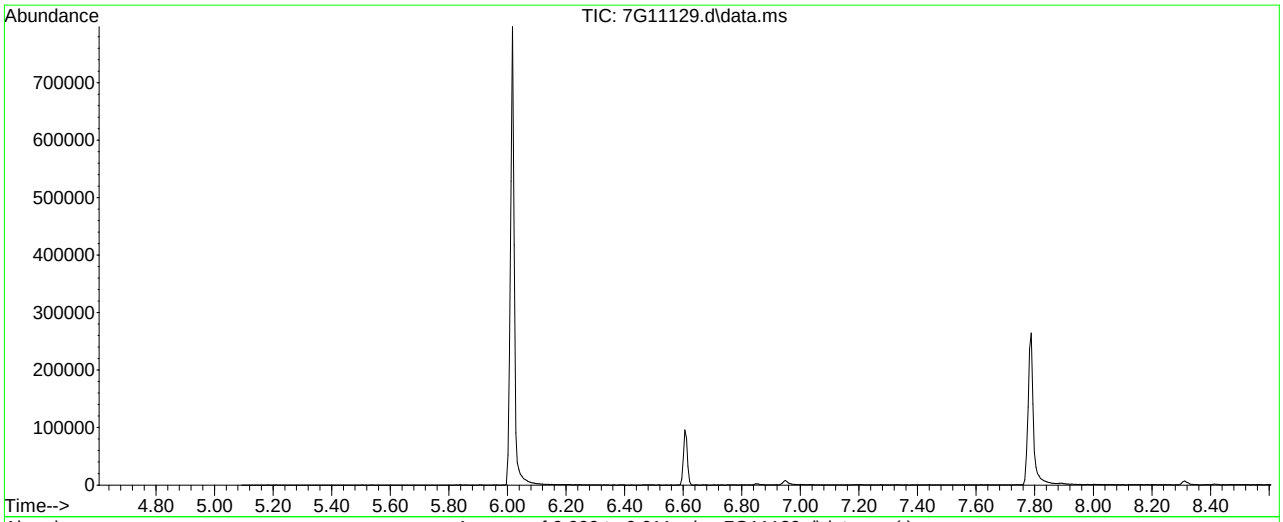
response 139298

Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

SW-846 Method 8270

Data File : C:\msdchem\1\data\Je...2020\S7G483\7G11129.d Vial: 1
Acq On : 11 Aug 2020 8:11 am Operator: FOUADS
Sample : dftpp Inst : MSBNA8
Misc : op81342,S7G483,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\methods\dftpp.m (RTE Integrator)
Title : Tune Evaluation



AutoFind: Scans 283, 284, 285; Background Corrected with Scan 279

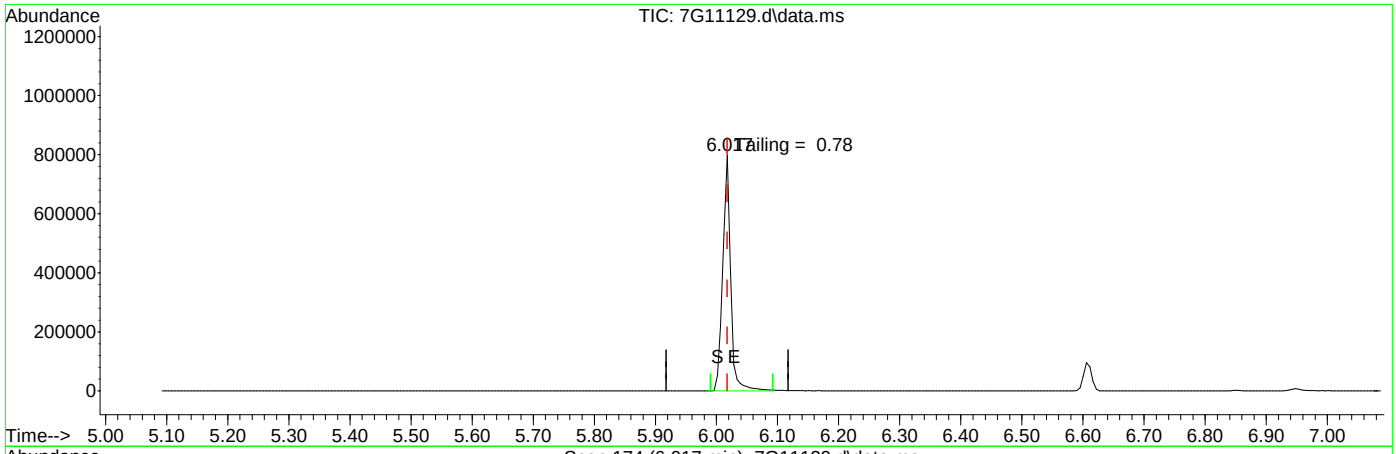
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	35.6	3303	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	41.8	3872	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	43.9	4068	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	9270	PASS
199	198	5	9	6.3	583	PASS
275	198	10	30	23.1	2141	PASS
365	198	1	100	3.5	327	PASS
441	443	0.01	100	86.0	938	PASS
442	198	40	100	66.0	6121	PASS
443	442	17	23	17.8	1091	PASS

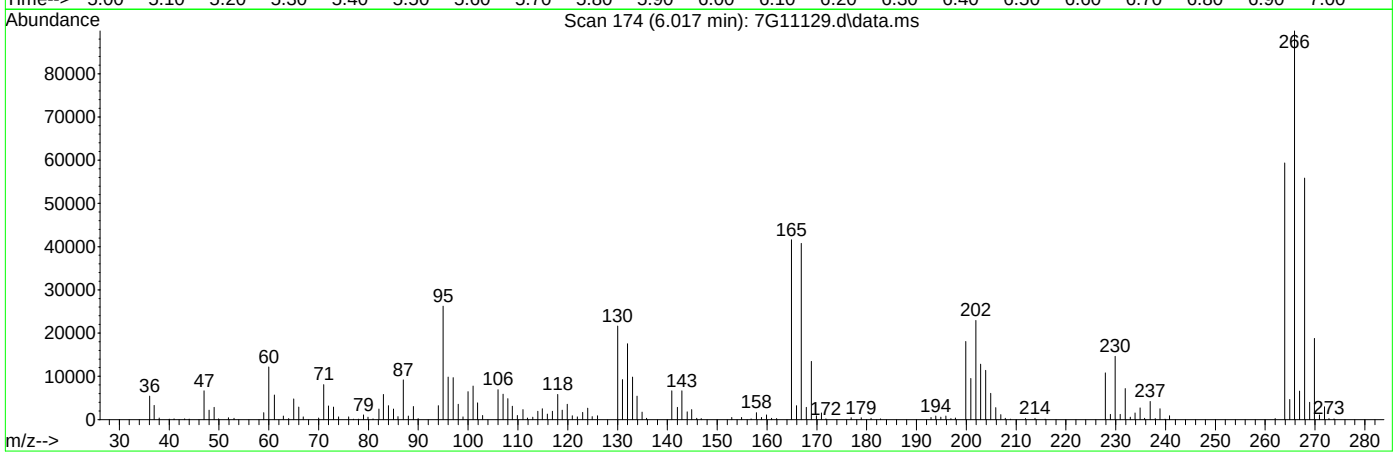
7G11129.d dftpp.m Wed Aug 12 07:16:58 2020

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11129.d
Acq On : 11 Aug 2020 8:11 am
Operator : FOUADS
Sample : dftpp Inst : MSBNA8
Misc : op81342,S7G483,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Results File: dftpp.RES
Quant Time: Aug 12 07:14:47 2020
Quant Title : Tune Evaluation
QLast Update : Wed Aug 12 07:14:44 2020
Response via : Initial Calibration





TIC: 7G11129.d\data.ms

(1) Pentachlorophenol

6.017min (0.000) 30.34

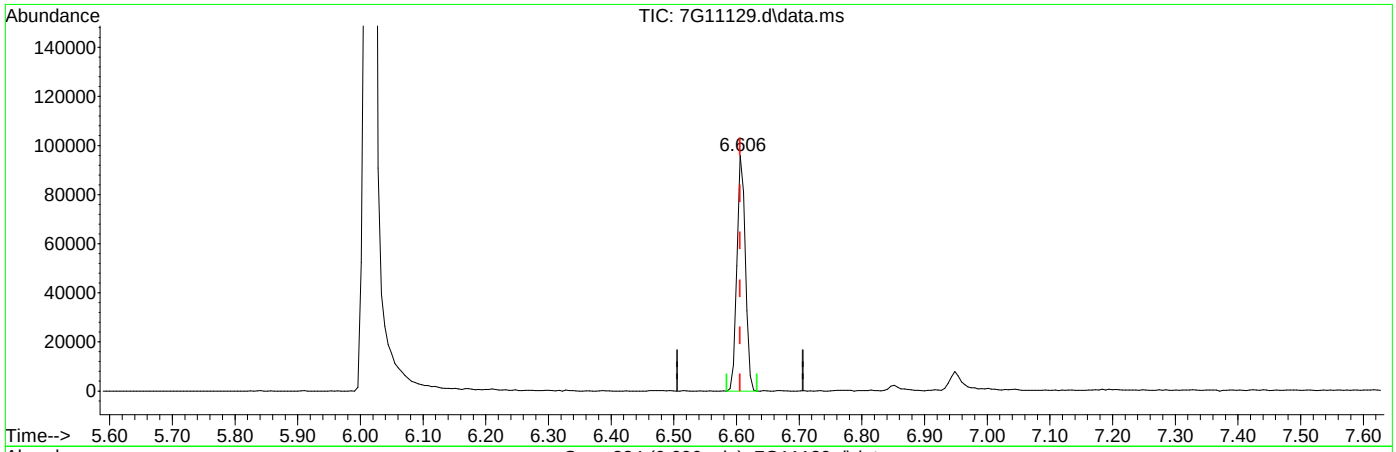
response 725833

Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11129.d
Acq On : 11 Aug 2020 8:11 am
Operator : FOUADS
Sample : dftpp Inst : MSBNA8
Misc : op81342,S7G483,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Results File: dftpp.RES
Quant Time: Aug 12 07:14:47 2020
Quant Title : Tune Evaluation
QLast Update : Wed Aug 12 07:14:44 2020
Response via : Initial Calibration



TIC: 7G11129.d\data.ms

(2) DFTPP

6.606min (0.000) 3.17

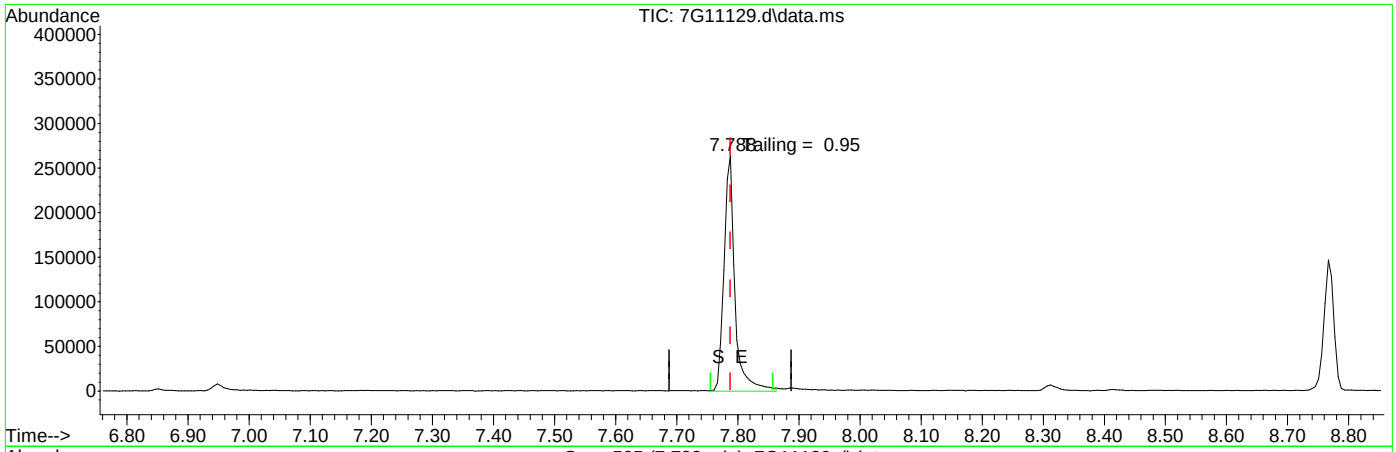
response 89512

Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11129.d
Acq On : 11 Aug 2020 8:11 am
Operator : FOUADS
Sample : dftpp Inst : MSBNA8
Misc : op81342,S7G483,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Results File: dftpp.RES
Quant Time: Aug 12 07:14:47 2020
Quant Title : Tune Evaluation
QLast Update : Wed Aug 12 07:14:44 2020
Response via : Initial Calibration



TIC: 7G11129.d\data.ms

(3) Benzidine

7.788min (0.000) 7.66

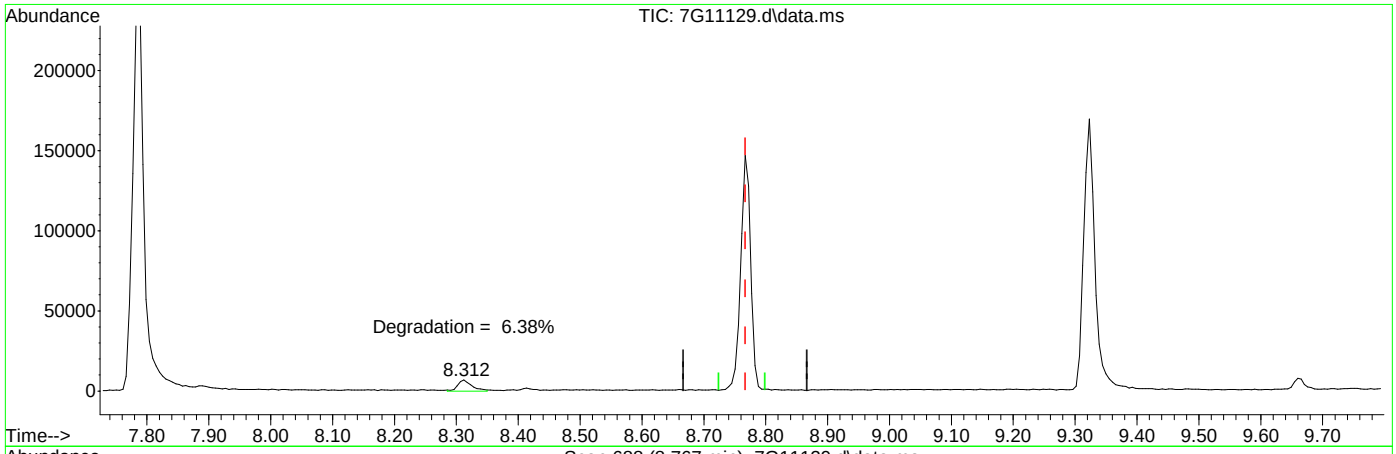
response 324892

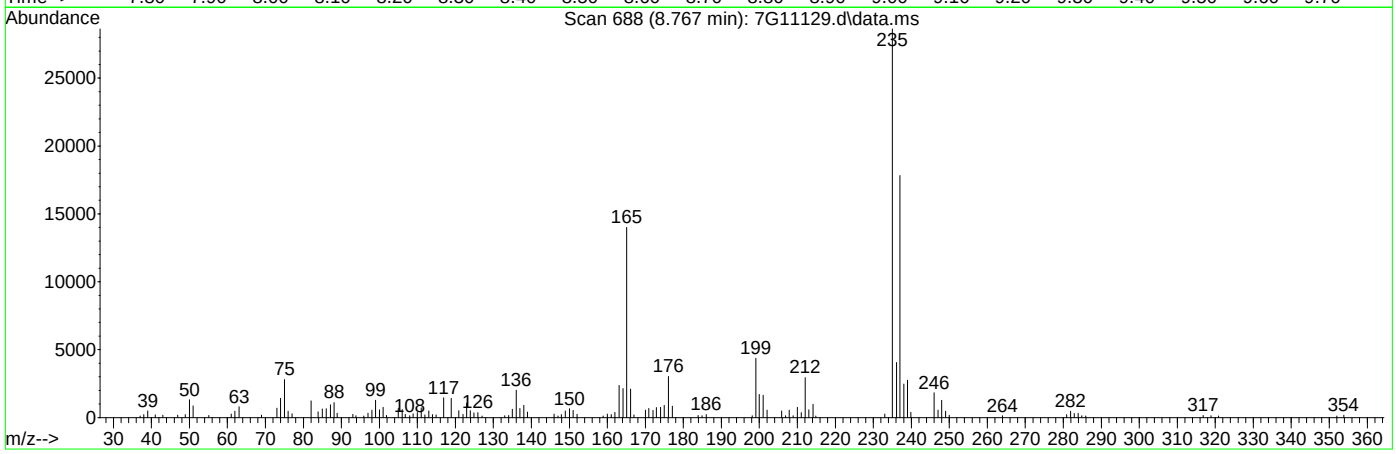
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11129.d
Acq On : 11 Aug 2020 8:11 am
Operator : FOUADS
Sample : dftpp Inst : MSBNA8
Misc : op81342,S7G483,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Results File: dftpp.RES
Quant Time: Aug 12 07:14:47 2020
Quant Title : Tune Evaluation
QLast Update : Wed Aug 12 07:14:44 2020
Response via : Initial Calibration





TIC: 7G11129.d\data.ms

(4) DDT

8.767min (0.000) 4.71

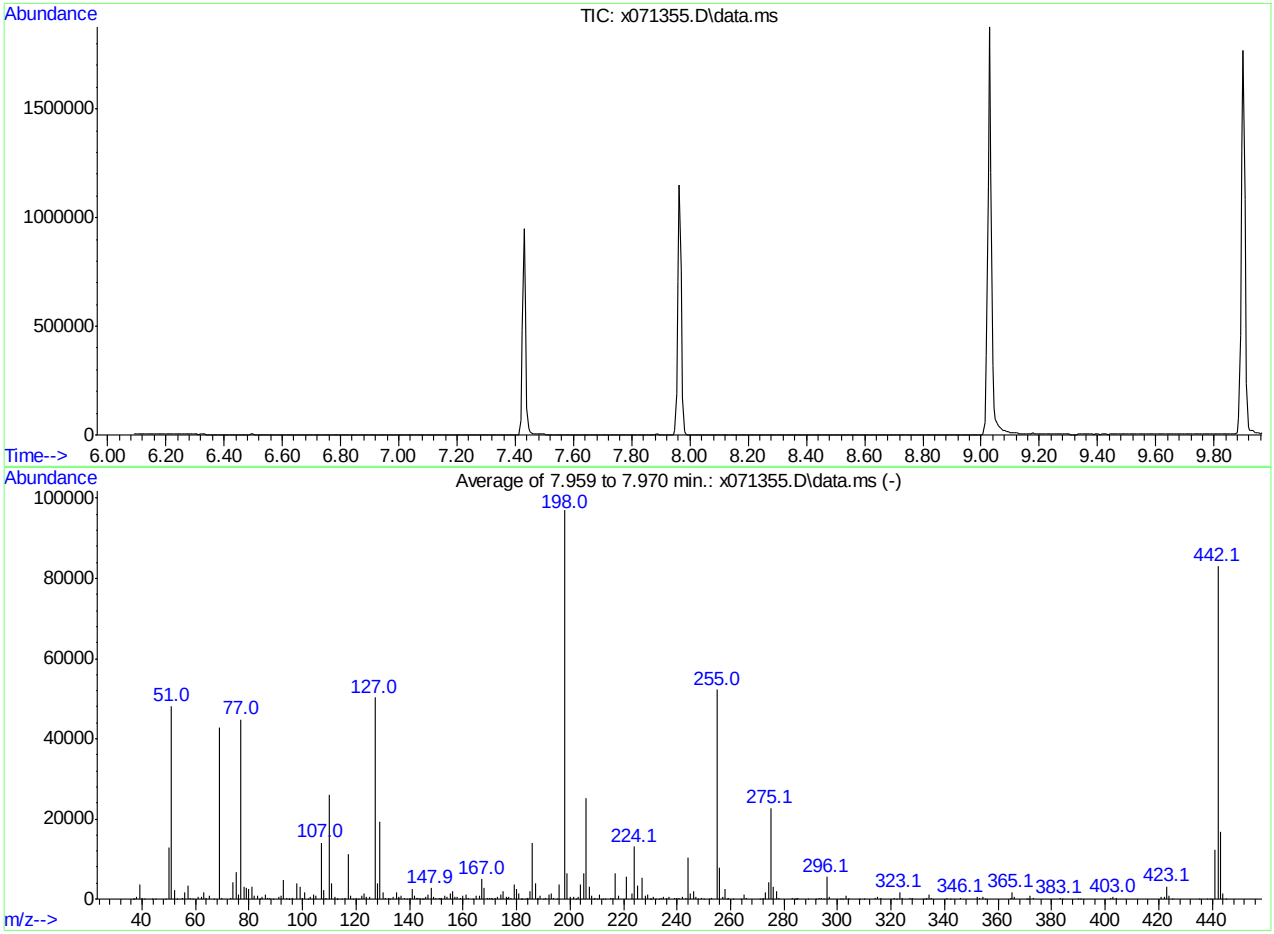
response 164421

Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

SW-846 Method 8270

Data File : C:\msdchem\1\DATA\0623_sx2918\x071355.D Vial: 1
Acq On : 23 Jun 2020 9:47 am Operator: marthav
Sample : dftpp Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\METHODS\dftpp.m (RTE Integrator)
Title : Tune Evaluation



AutoFind: Scans 350, 351, 352; Background Corrected with Scan 344

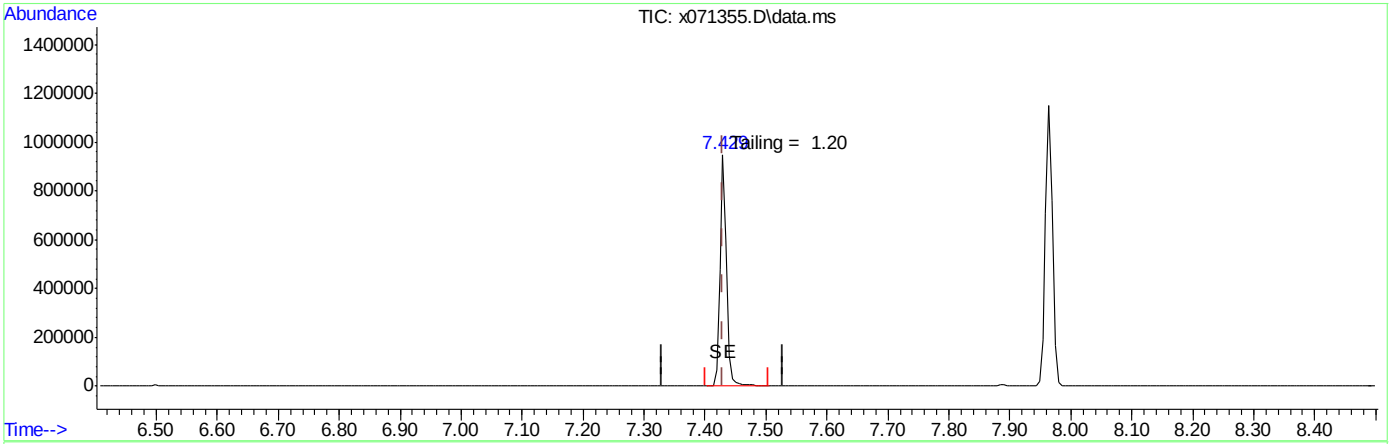
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	49.7	48227	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	44.1	42739	PASS
70	69	0.00	2	0.5	206	PASS
127	198	40	60	51.8	50221	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	96957	PASS
199	198	5	9	6.7	6460	PASS
275	198	10	30	23.4	22665	PASS
365	198	1	100	1.9	1798	PASS
441	443	0.01	100	74.3	12438	PASS
442	198	40	100	85.7	83123	PASS
443	442	17	23	20.1	16733	PASS

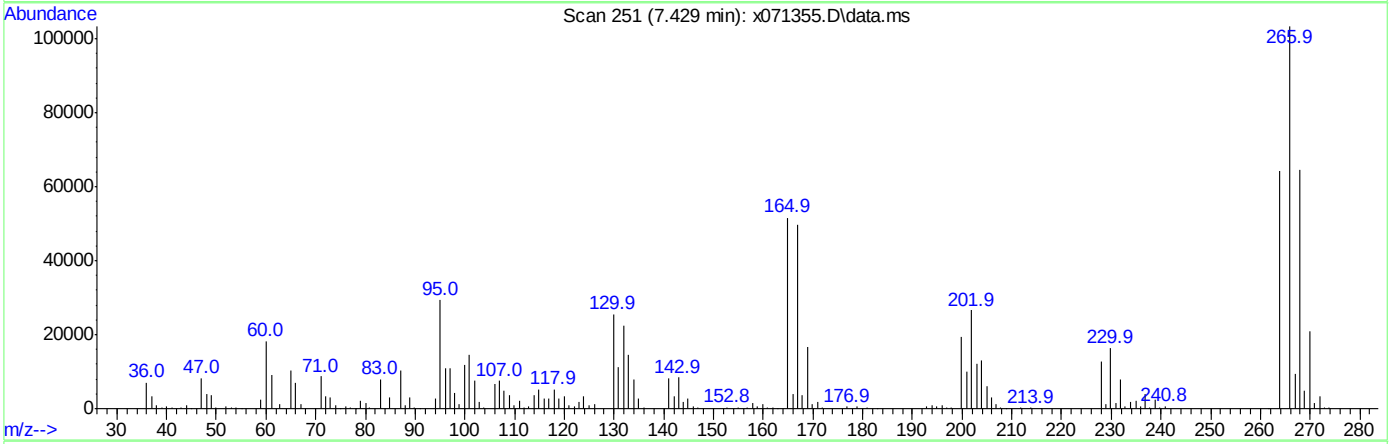
x071355.D dftpp.m Tue Jun 23 16:05:39 2020

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071355.D
Acq On : 23 Jun 2020 9:47 am
Operator : marthav
Sample : dftpp Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 23 16:05:35 2020
Quant Method : C:\msdchem\1\METHODS\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Tue Jun 23 16:05:31 2020
Response via : Initial Calibration





TIC: x071355.D\data.ms

(1) Pentachlorophenol

7.429min (0.000) 30.90

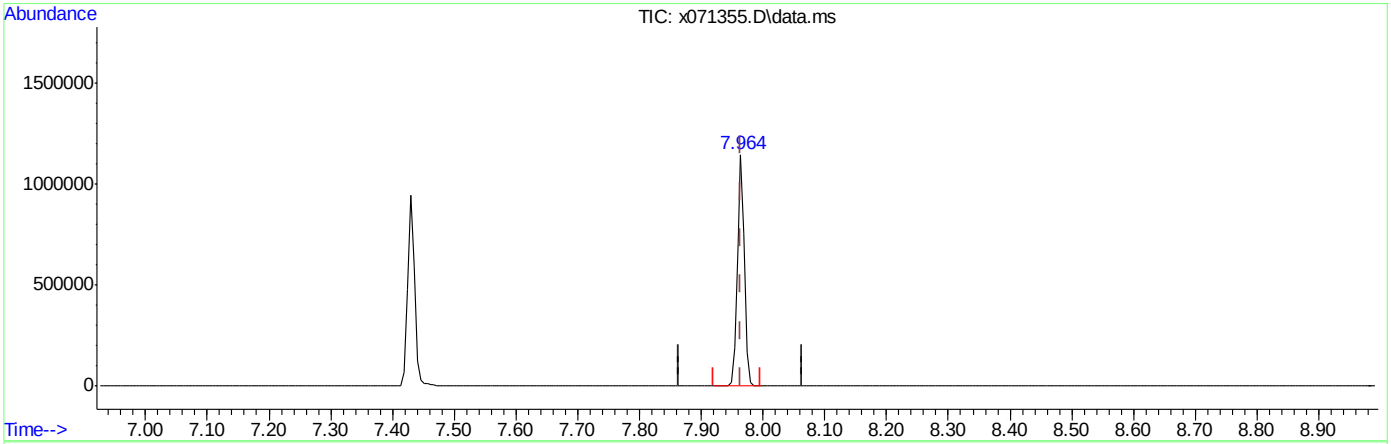
response 739095

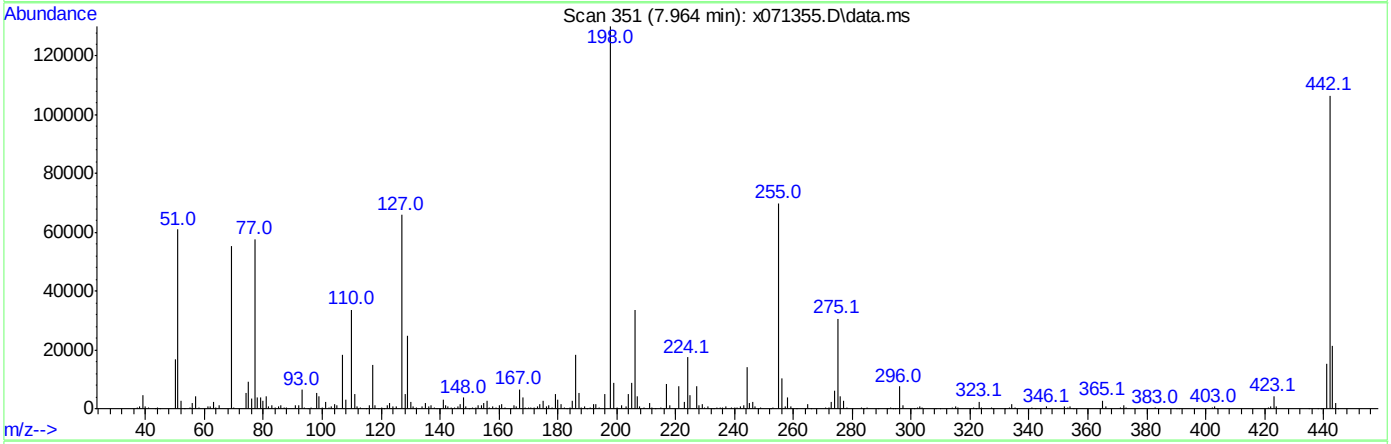
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071355.D
Acq On : 23 Jun 2020 9:47 am
Operator : marthav
Sample : dftpp Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 23 16:05:35 2020
Quant Method : C:\msdchem\1\METHODS\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Tue Jun 23 16:05:31 2020
Response via : Initial Calibration





TIC: x071355.D\data.ms

(2) DFTPP

7.964min (0.000) 34.25

response 966439

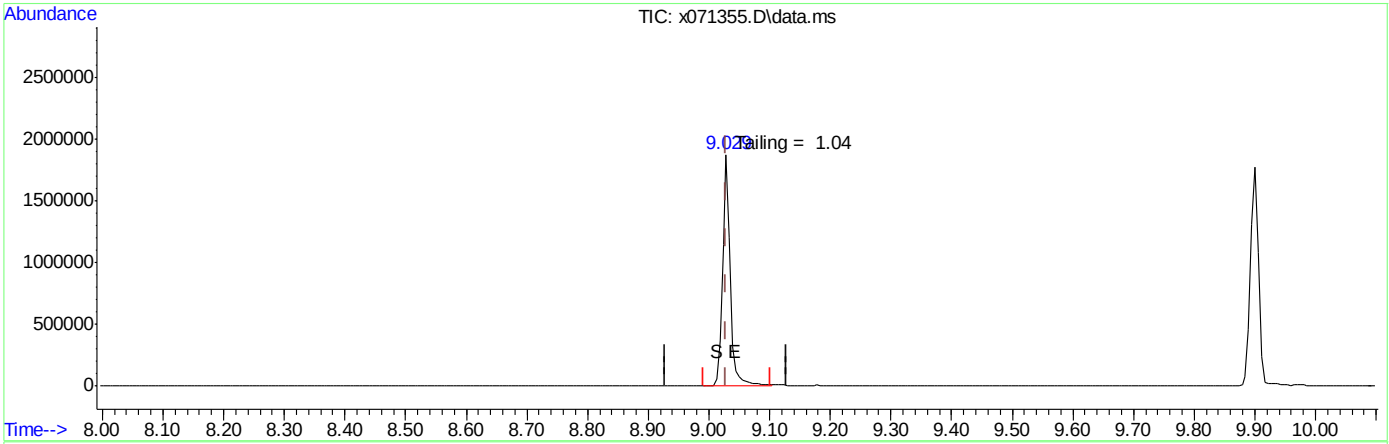
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

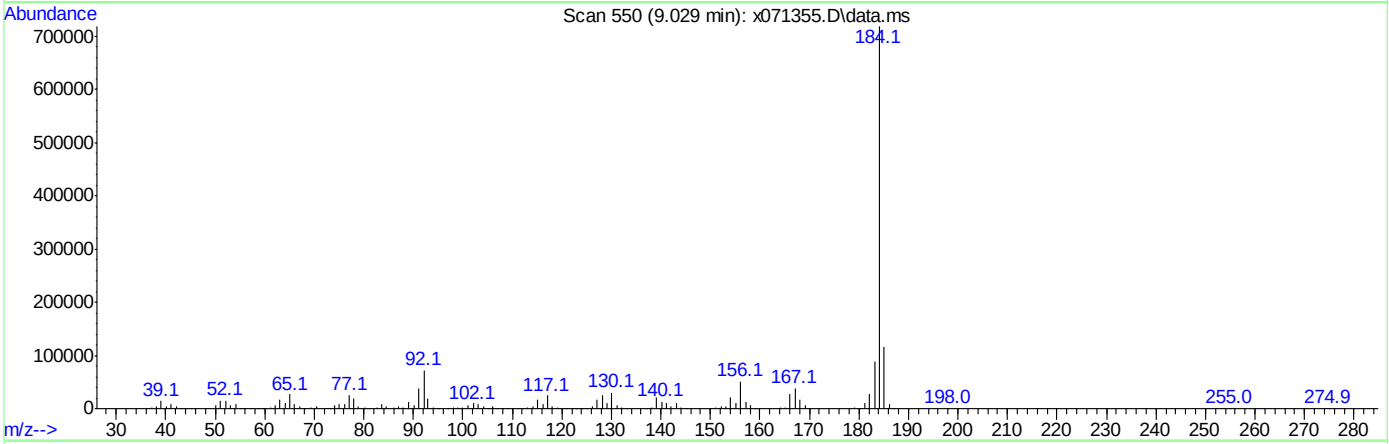
SGS FA77581

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071355.D
Acq On : 23 Jun 2020 9:47 am
Operator : marthav
Sample : dftpp Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 23 16:05:35 2020
Quant Method : C:\msdchem\1\METHODS\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Tue Jun 23 16:05:31 2020
Response via : Initial Calibration





TIC: x071355.D\data.ms

(3) Benzidine

9.029min (0.000) 40.81

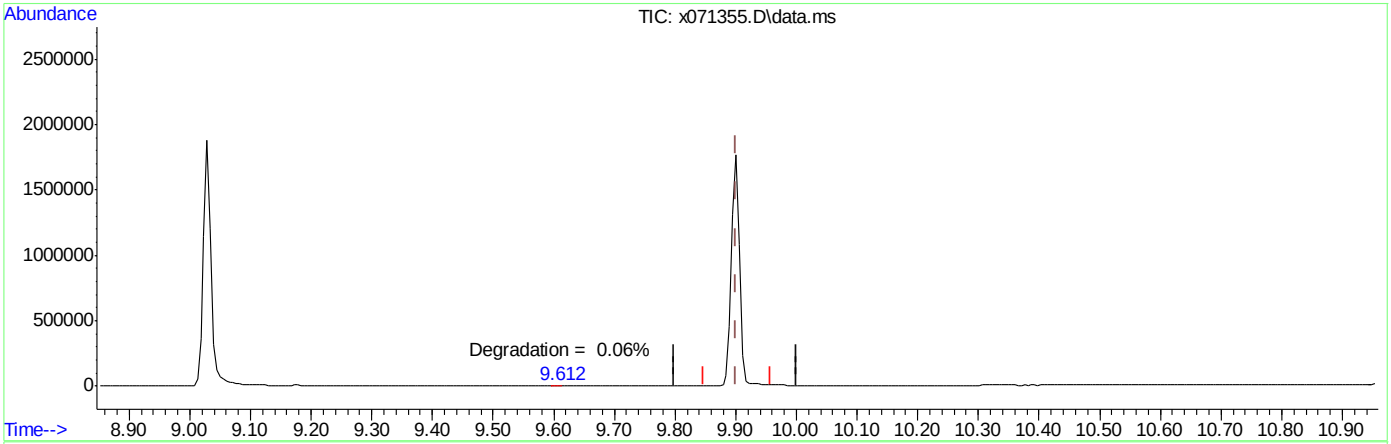
response 1730836

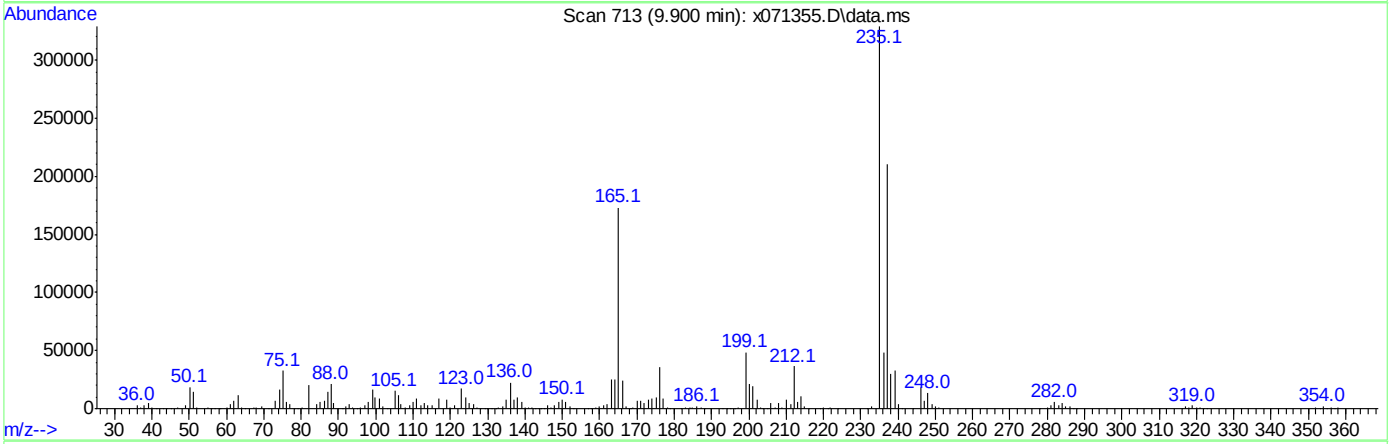
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071355.D
Acq On : 23 Jun 2020 9:47 am
Operator : marthav
Sample : dftpp Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 23 16:05:35 2020
Quant Method : C:\msdchem\1\METHODS\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Tue Jun 23 16:05:31 2020
Response via : Initial Calibration





TIC: x071355.D\data.ms

(4) DDT

9.900min (0.000) 46.28

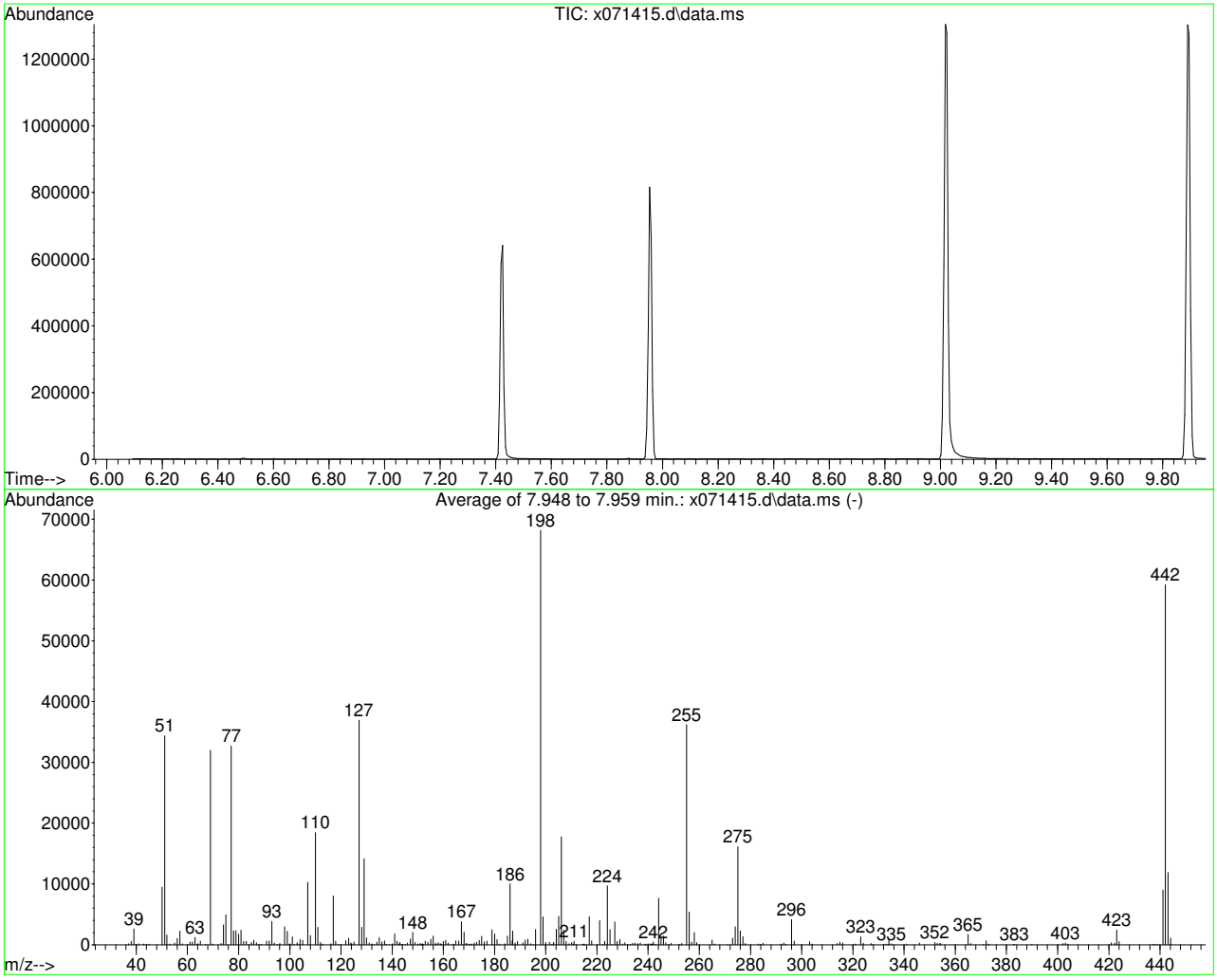
response 1615385

Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

SW-846 Method 8270

Data File : C:\msdchem\1\data\jo...2020\sx2919\x071415.d Vial: 1
Acq On : 24 Jun 2020 3:04 pm Operator: marthav
Sample : dftpp Inst : MSBNA05
Misc : op80508,sx2919,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\methods\dftpp.m (RTE Integrator)
Title : Tune Evaluation



AutoFind: Scans 348, 349, 350; Background Corrected with Scan 344

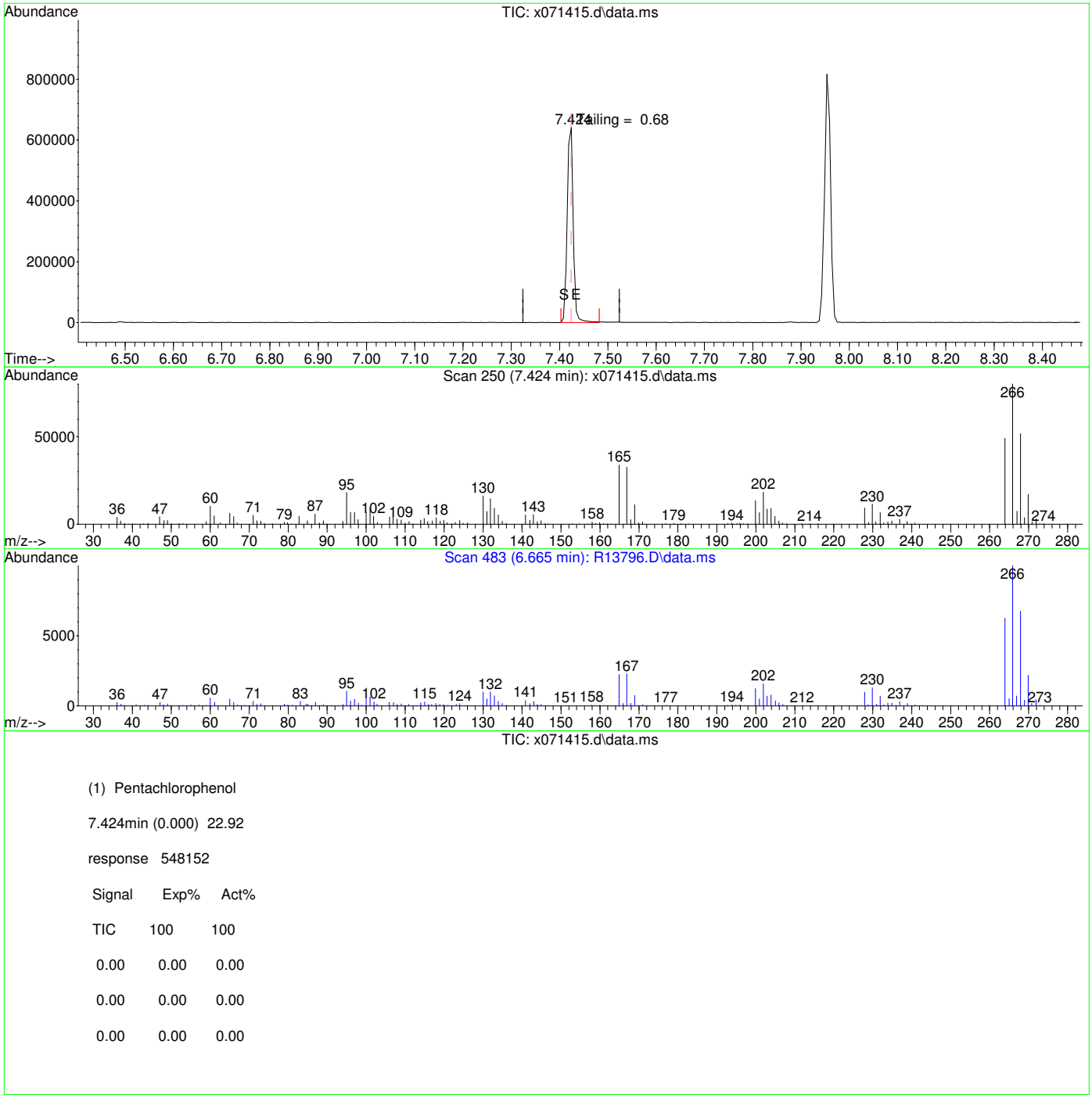
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	50.4	34387	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	47.0	32027	PASS
70	69	0.00	2	0.3	101	PASS
127	198	40	60	54.2	36939	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	68165	PASS
199	198	5	9	6.7	4563	PASS
275	198	10	30	23.7	16125	PASS
365	198	1	100	2.5	1684	PASS
441	443	0.01	100	75.9	9013	PASS
442	198	40	100	86.9	59211	PASS
443	442	17	23	20.0	11869	PASS

x071415.d dftpp.m Thu Jun 25 04:11:49 2020

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\June 2020\06-25-2020\sx2919\
Data File : x071415.d
Acq On : 24 Jun 2020 3:04 pm
Operator : marthav
Sample : dftpp
Misc : op80508,sx2919,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 25 02:42:47 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Thu Jun 25 02:42:45 2020
Response via : Initial Calibration



TIC: x071415.d\data.ms

(1) Pentachlorophenol

7.424min (0.000) 22.92

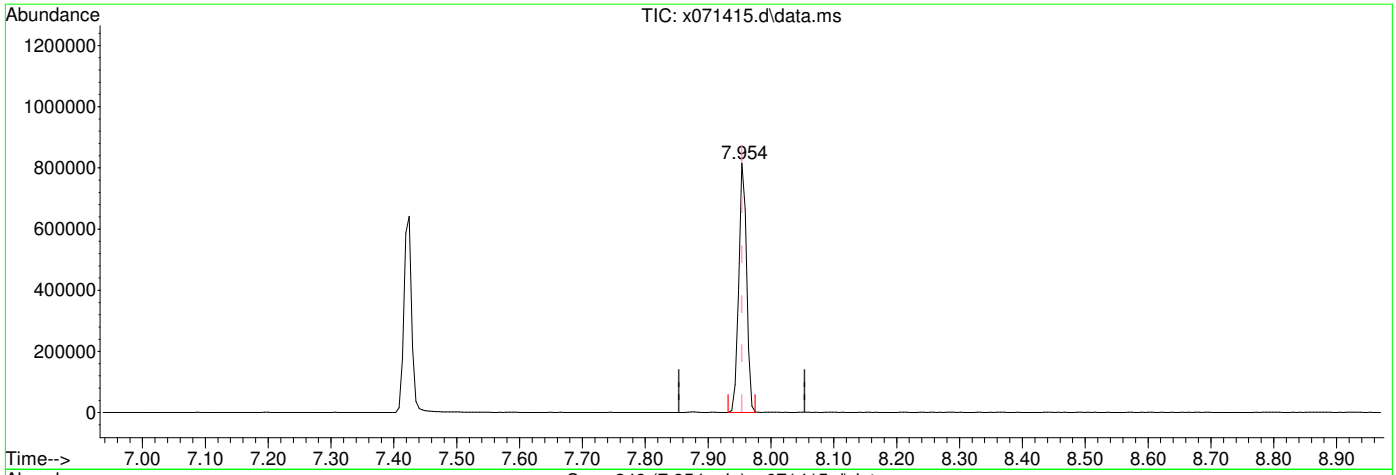
response 548152

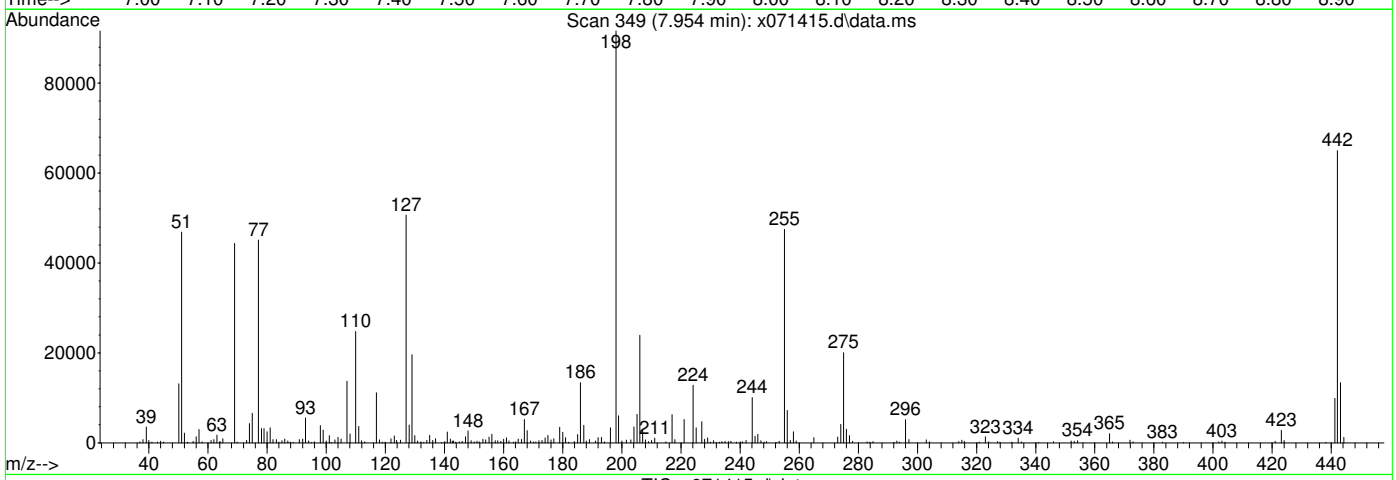
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\June 2020\06-25-2020\sx2919\
Data File : x071415.d
Acq On : 24 Jun 2020 3:04 pm
Operator : marthav
Sample : dftpp
Misc : op80508,sx2919,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 25 02:42:47 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Thu Jun 25 02:42:45 2020
Response via : Initial Calibration





TIC: x071415.d\data.ms

(2) DFTPP

7.954min (0.000) 24.97

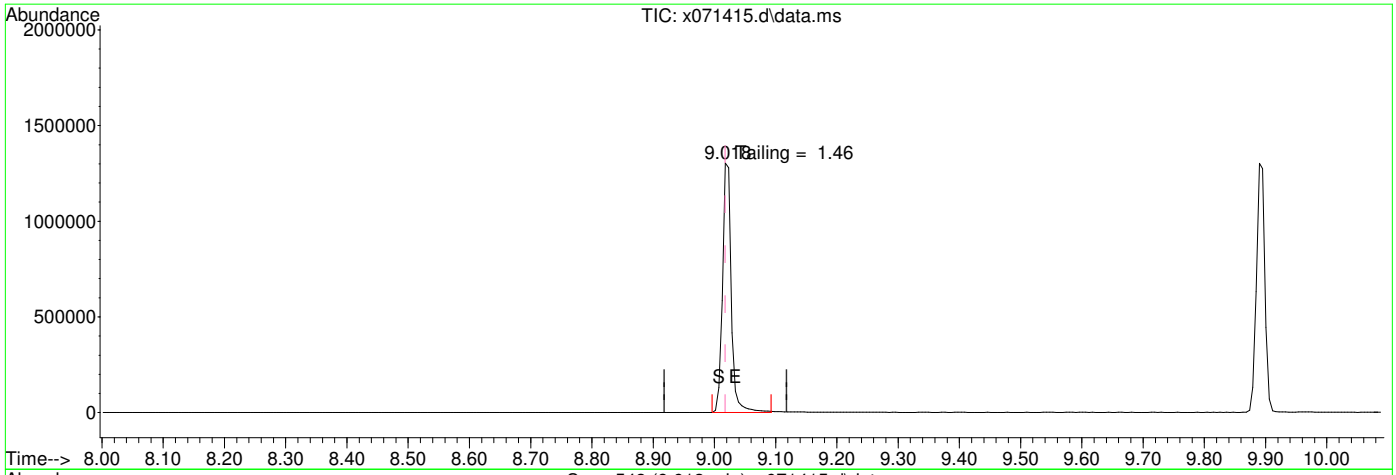
response 704578

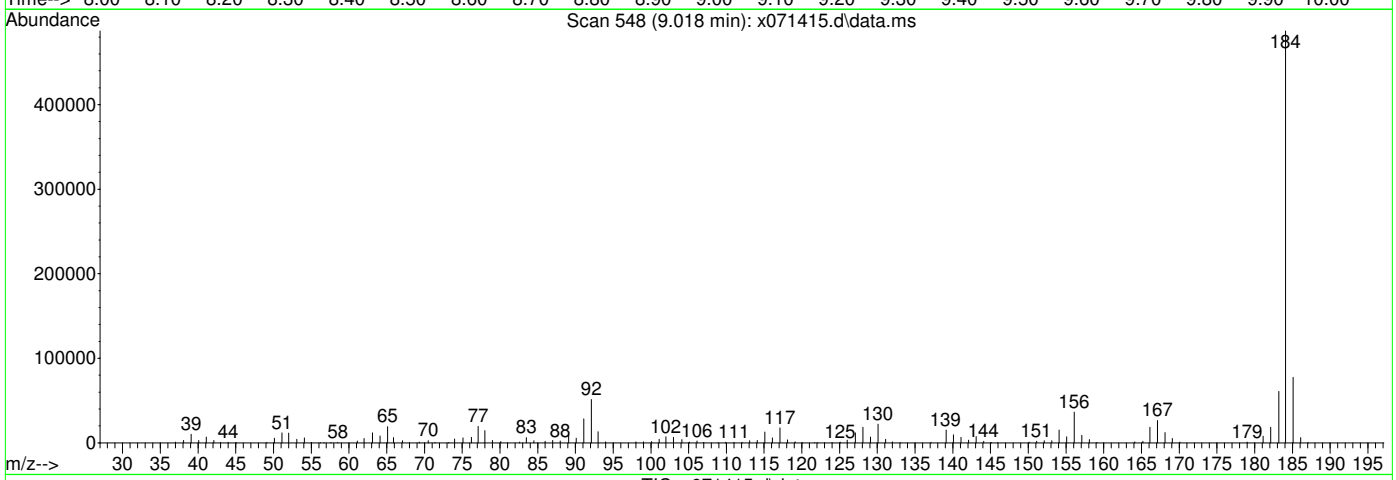
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\June 2020\06-25-2020\sx2919\
Data File : x071415.d
Acq On : 24 Jun 2020 3:04 pm
Operator : marthav
Sample : dftpp
Misc : op80508,sx2919,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 25 02:42:47 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Thu Jun 25 02:42:45 2020
Response via : Initial Calibration





TIC: x071415.d\data.ms

(3) Benzidine

9.018min (0.000) 30.47

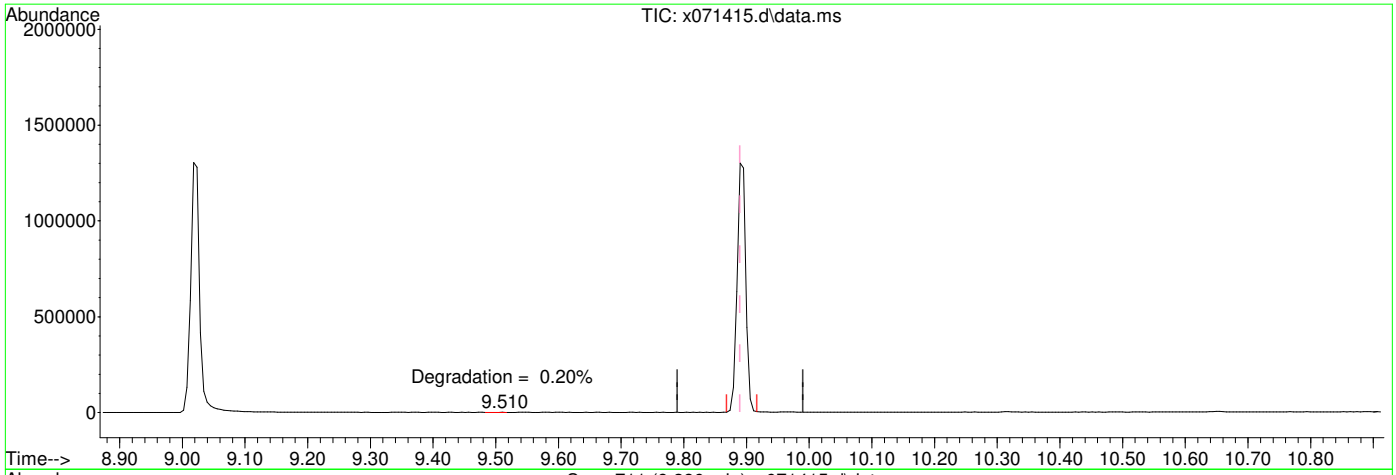
response 1292283

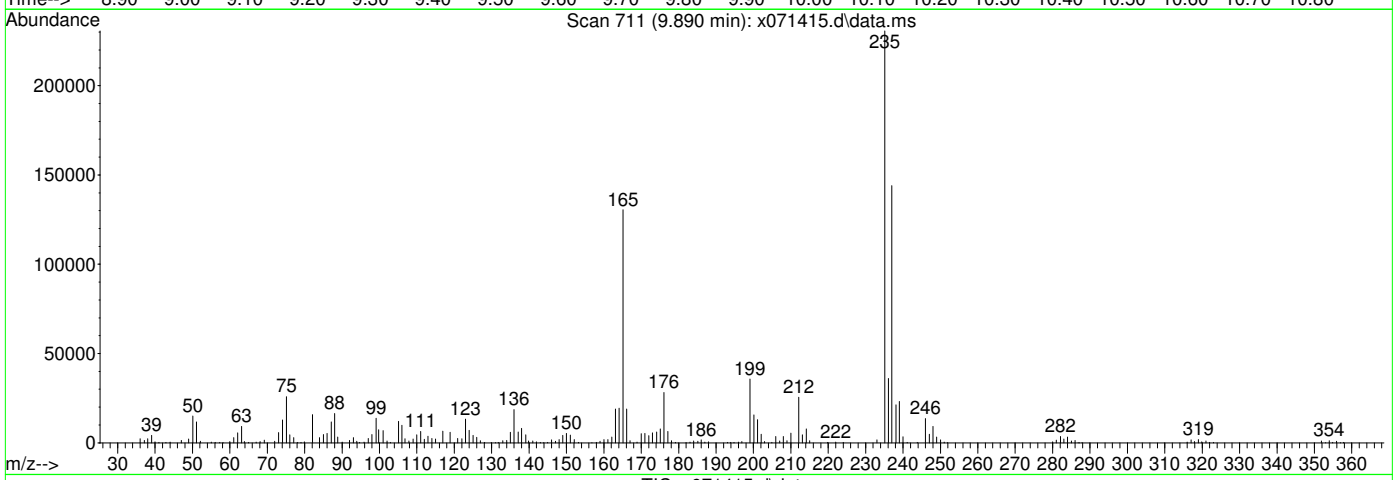
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\June 2020\06-25-2020\sx2919\
Data File : x071415.d
Acq On : 24 Jun 2020 3:04 pm
Operator : marthav
Sample : dftpp
Misc : op80508,sx2919,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 25 02:42:47 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Thu Jun 25 02:42:45 2020
Response via : Initial Calibration





TIC: x071415.d\data.ms

(4) DDT

9.890min (0.000) 35.58

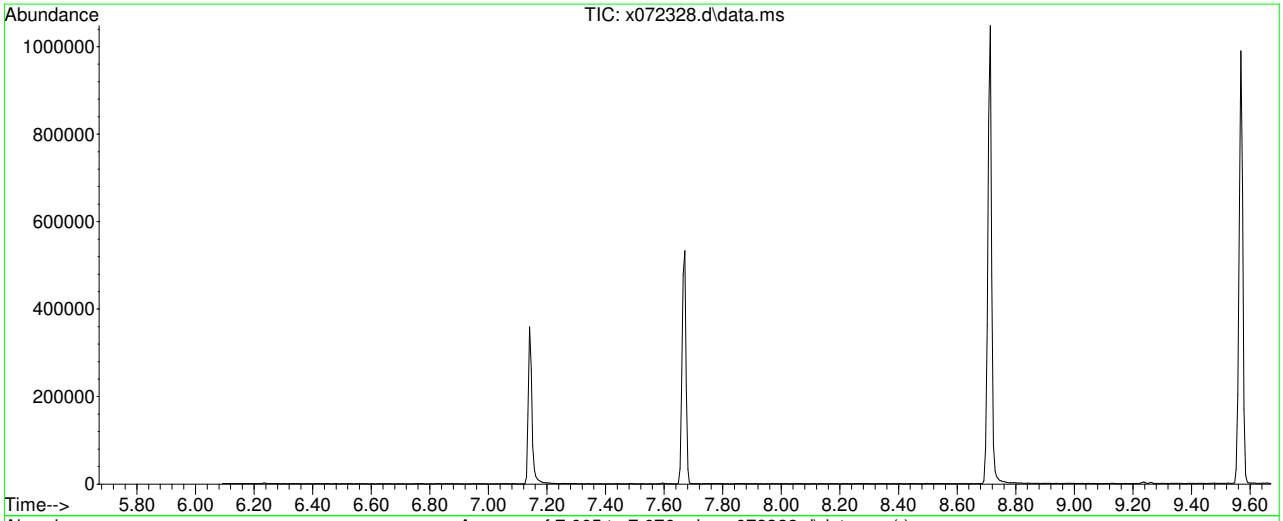
response 1241968

Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

SW-846 Method 8270

Data File : C:\msdchem\1\data\jo...2020\sx2950\x072328.d Vial: 1
Acq On : 11 Aug 2020 12:30 pm Operator: marthav
Sample : dftpp Inst : MSBNA05
Misc : op81484,sx2950,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\methods\dftpp.m (RTE Integrator)
Title : Tune Evaluation



AutoFind: Scans 295, 296, 297; Background Corrected with Scan 290

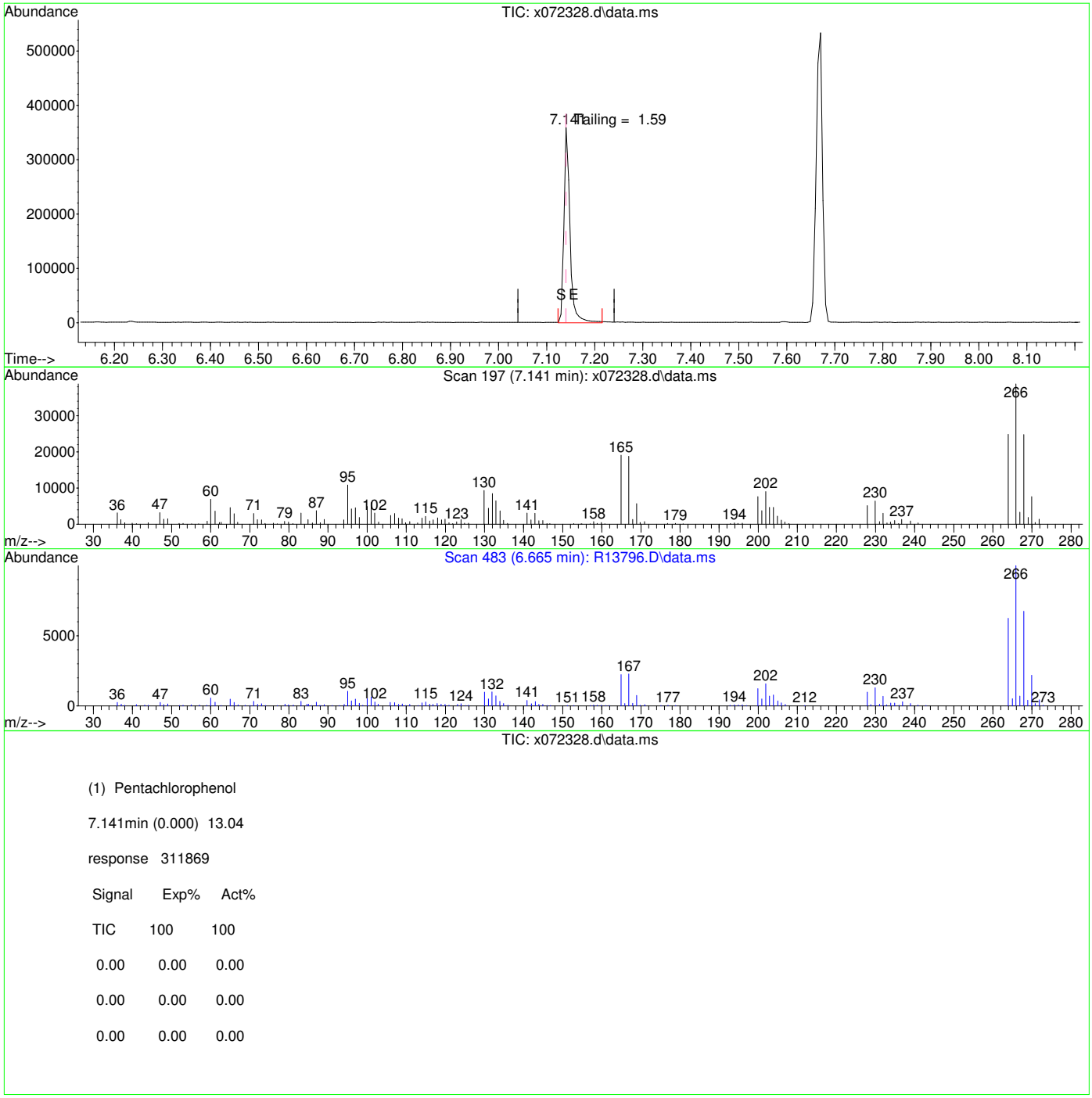
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	49.1	22485	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	45.0	20622	PASS
70	69	0.00	2	0.4	80	PASS
127	198	40	60	51.8	23723	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	45800	PASS
199	198	5	9	6.8	3103	PASS
275	198	10	30	22.5	10316	PASS
365	198	1	100	2.3	1067	PASS
441	443	0.01	100	84.6	6664	PASS
442	198	40	100	88.1	40365	PASS
443	442	17	23	19.5	7879	PASS

x072328.d dftpp.m Wed Aug 12 01:35:16 2020

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072328.d
Acq On : 11 Aug 2020 12:30 pm
Operator : marthav
Sample : dftpp
Misc : op81484,sx2950,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 12 01:34:05 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Wed Aug 12 01:34:04 2020
Response via : Initial Calibration



TIC: x072328.d\data.ms

(1) Pentachlorophenol

7.141min (0.000) 13.04

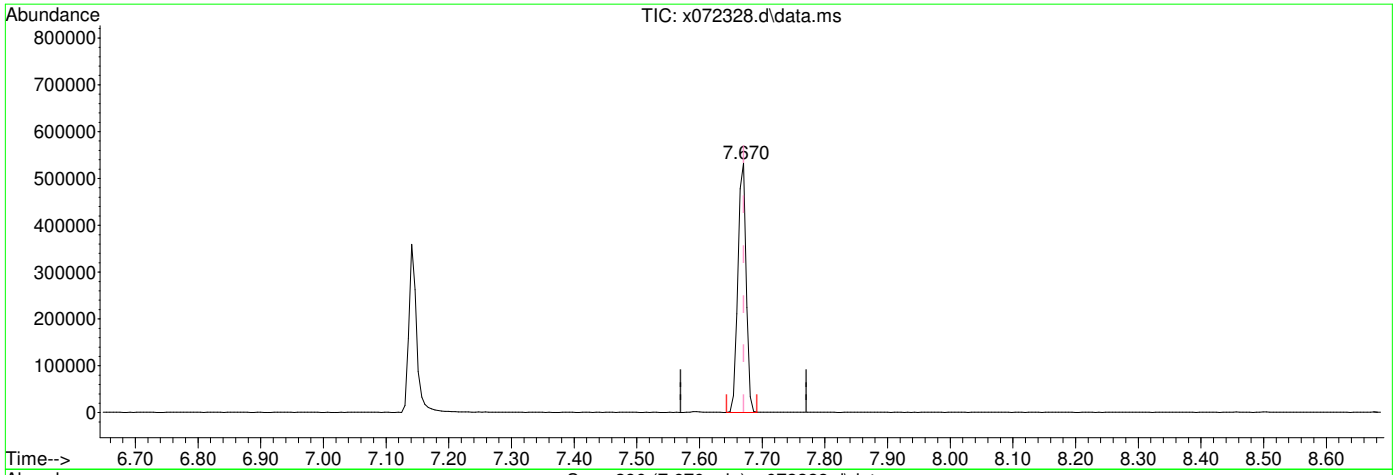
response 311869

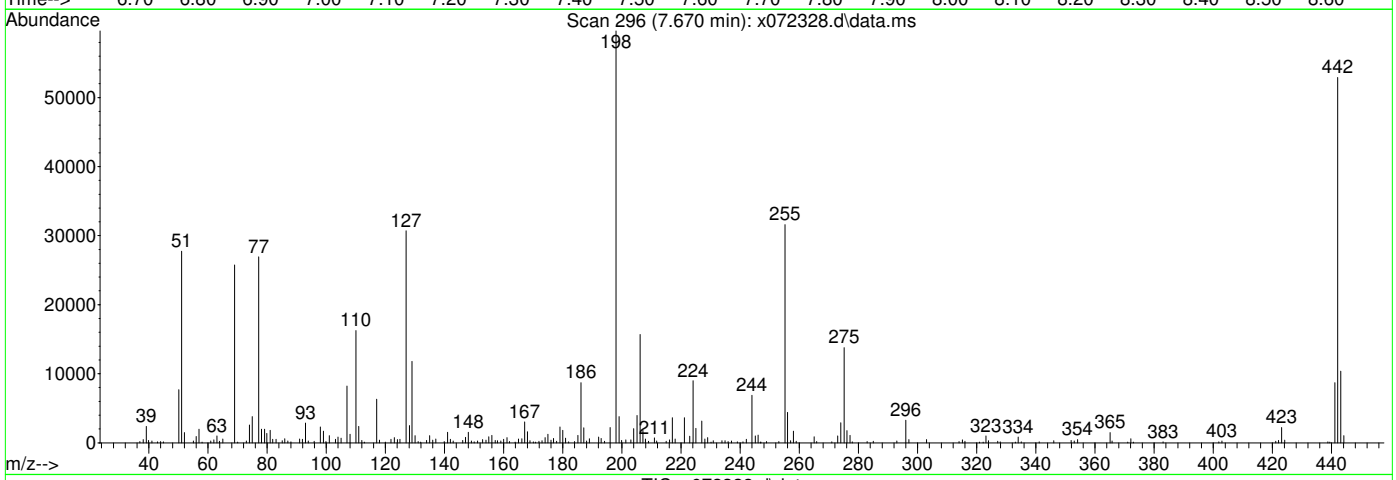
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072328.d
Acq On : 11 Aug 2020 12:30 pm
Operator : marthav
Sample : dftpp
Misc : op81484,sx2950,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 12 01:34:05 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Wed Aug 12 01:34:04 2020
Response via : Initial Calibration





TIC: x072328.d\data.ms

(2) DFTPP

7.670min (0.000) 17.26

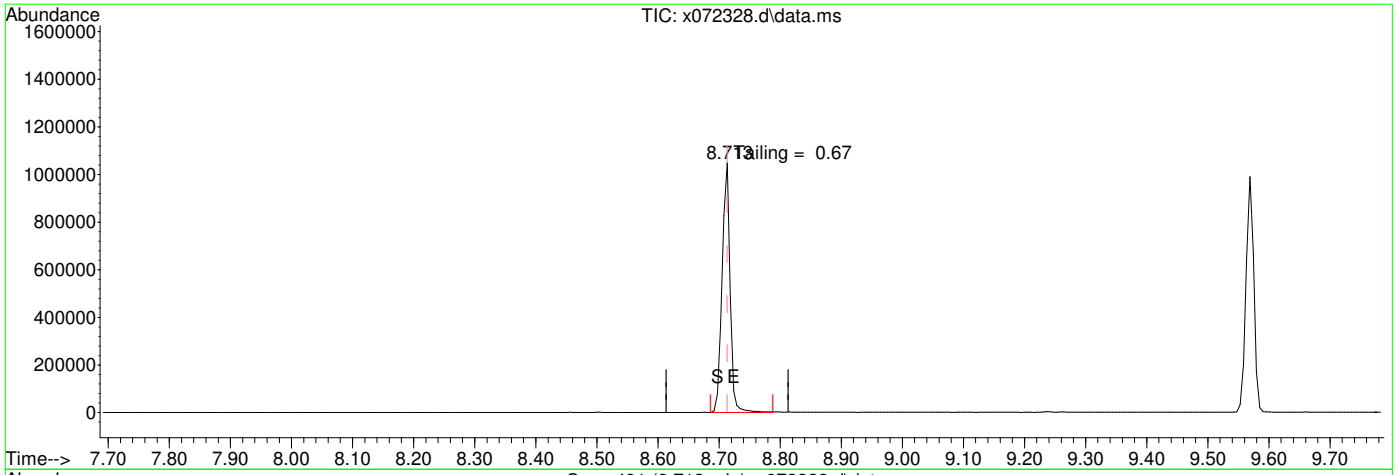
response 486964

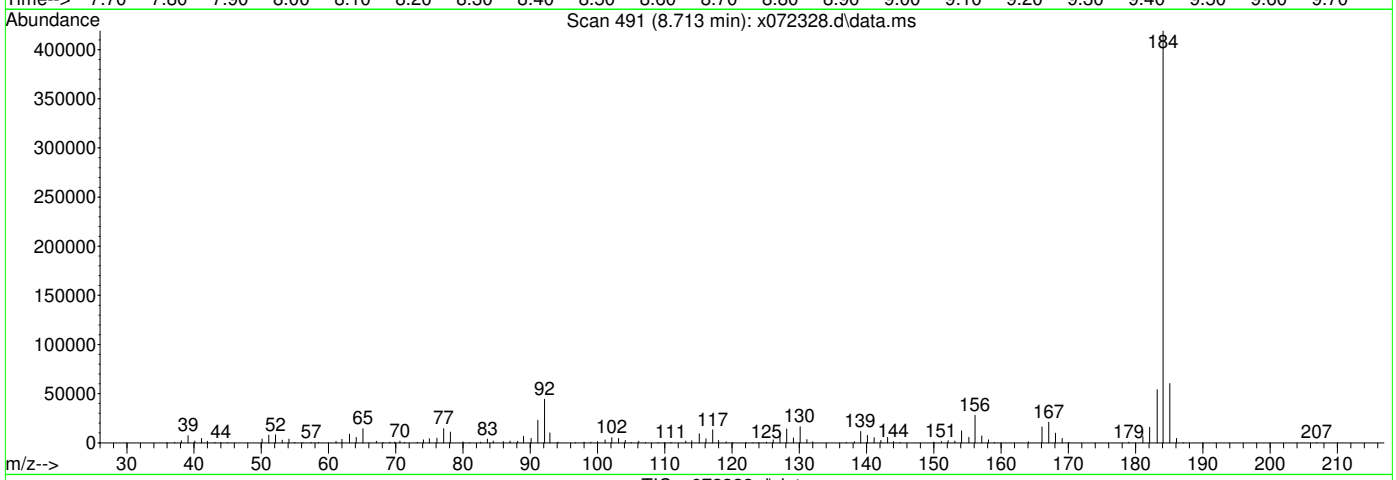
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072328.d
Acq On : 11 Aug 2020 12:30 pm
Operator : marthav
Sample : dftpp
Misc : op81484,sx2950,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 12 01:34:05 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Wed Aug 12 01:34:04 2020
Response via : Initial Calibration





TIC: x072328.d\data.ms

(3) Benzidine

8.713min (0.000) 22.59

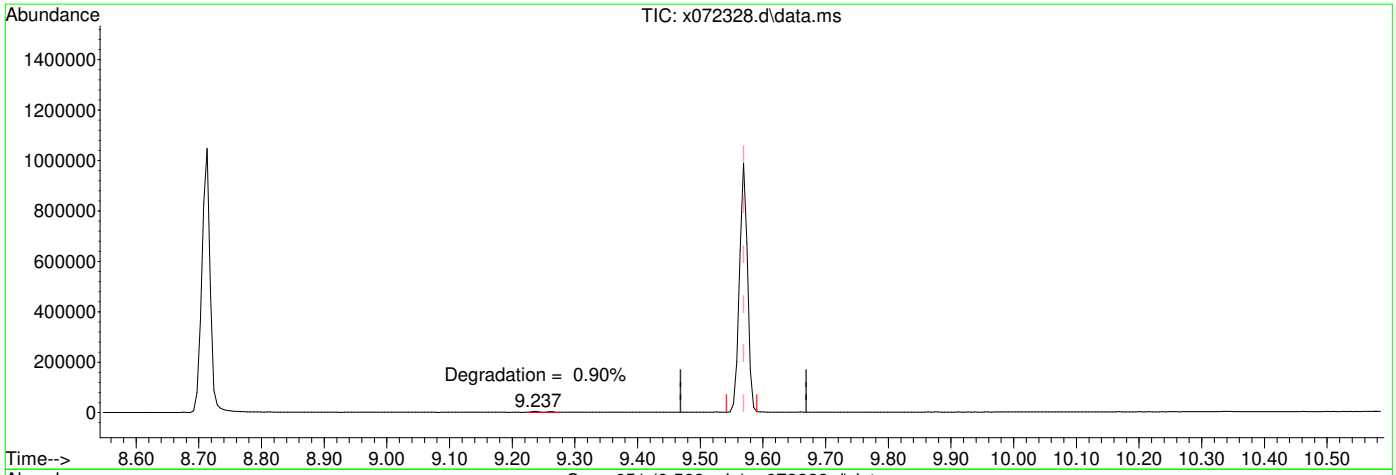
response 958072

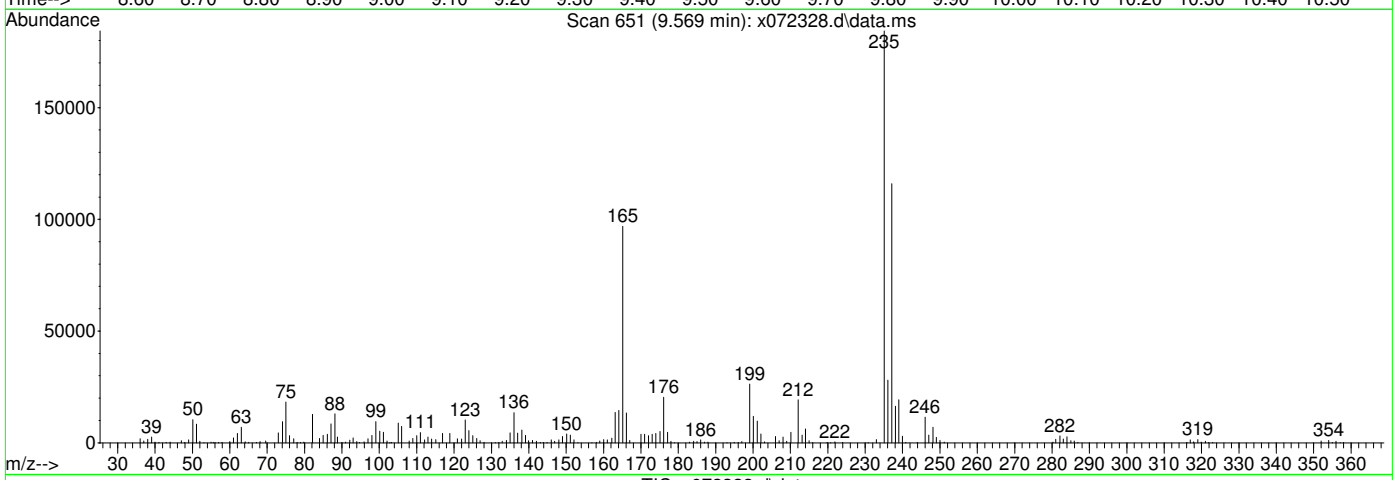
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072328.d
Acq On : 11 Aug 2020 12:30 pm
Operator : marthav
Sample : dftpp
Misc : op81484,sx2950,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 12 01:34:05 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Wed Aug 12 01:34:04 2020
Response via : Initial Calibration





TIC: x072328.d\data.ms

(4) DDT

9.569min (0.000) 25.08

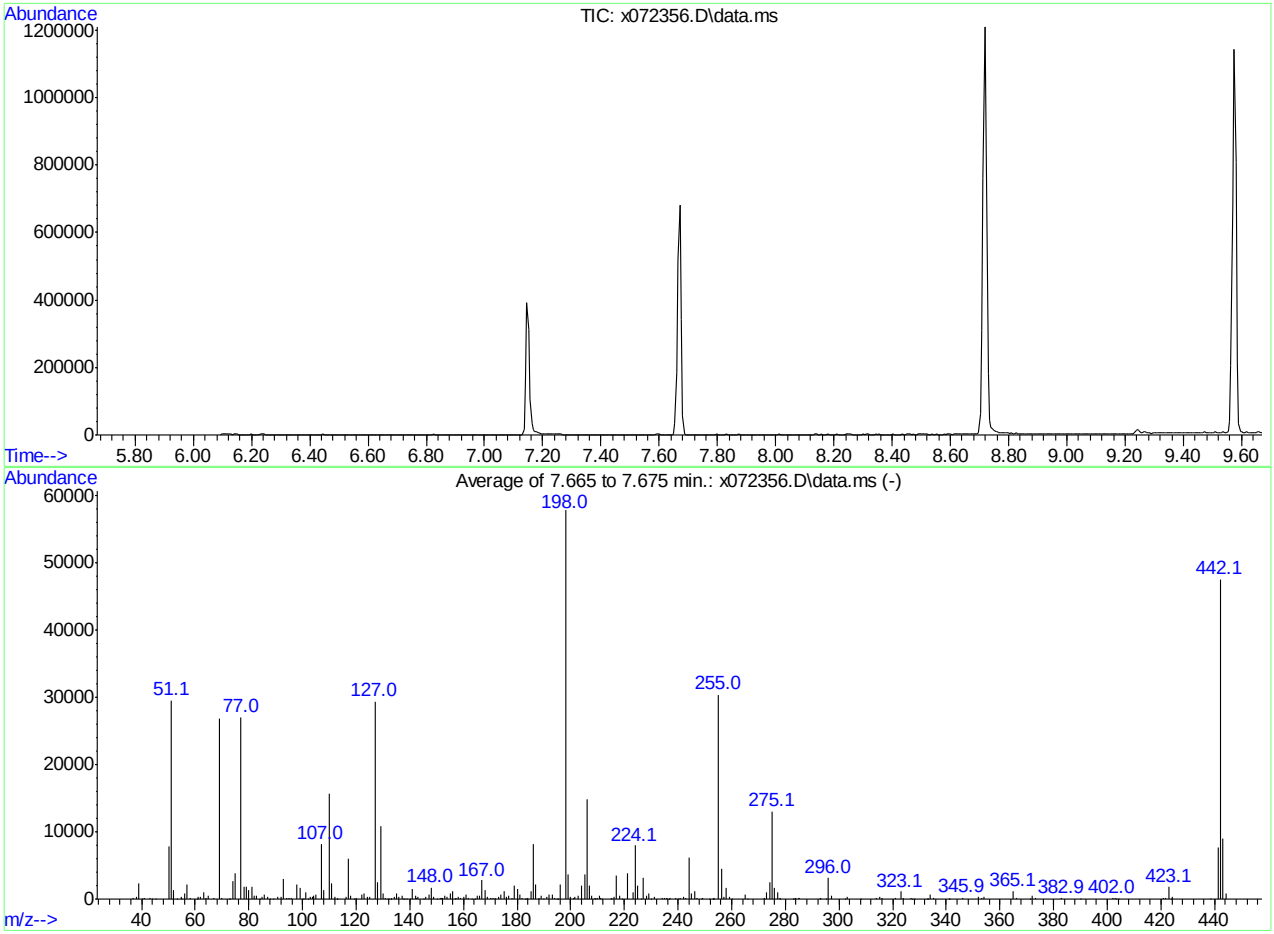
response 875407

Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

SW-846 Method 8270

Data File : C:\msdchem\1\DATA\0812_sx2951\x072356.D Vial: 1
Acq On : 12 Aug 2020 10:07 am Operator: marthav
Sample : dftpp Inst : MSBNA05
Misc : op81484,sx2951,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\METHODS\dftpp.m (RTE Integrator)
Title : Tune Evaluation



AutoFind: Scans 295, 296, 297; Background Corrected with Scan 289

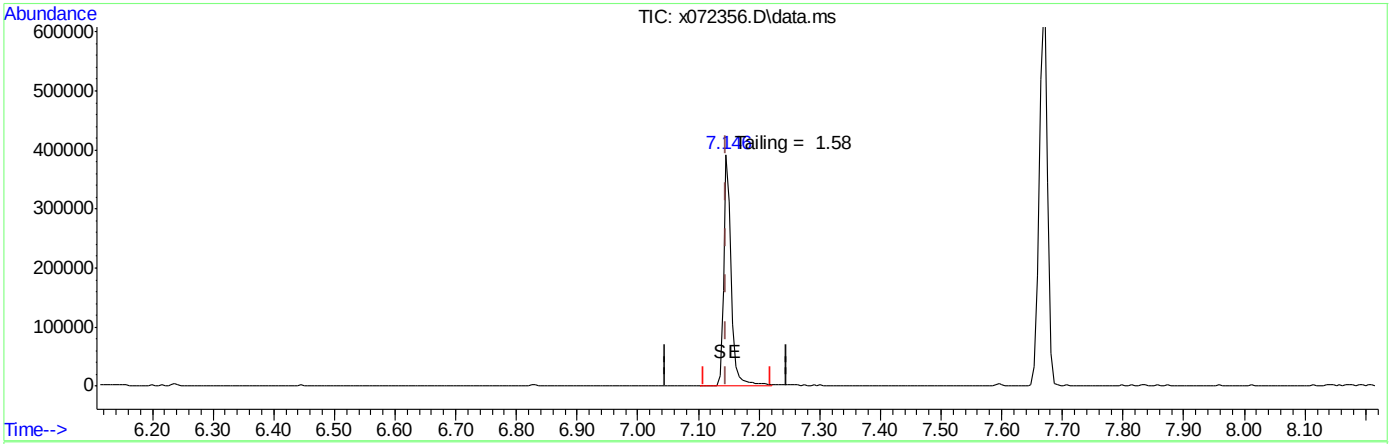
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	51.2	29610	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	46.4	26838	PASS
70	69	0.00	2	0.4	95	PASS
127	198	40	60	50.9	29425	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	57845	PASS
199	198	5	9	6.3	3631	PASS
275	198	10	30	22.6	13046	PASS
365	198	1	100	2.1	1226	PASS
441	443	0.01	100	85.3	7696	PASS
442	198	40	100	82.3	47624	PASS
443	442	17	23	18.9	9017	PASS

x072356.D dftpp.m Wed Aug 12 13:53:52 2020

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072356.D
Acq On : 12 Aug 2020 10:07 am
Operator : marthav
Sample : dftpp Inst : MSBNA05
Misc : op81484,sx2951,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 12 13:53:48 2020
Quant Method : C:\msdchem\1\METHODS\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Wed Aug 12 13:53:46 2020
Response via : Initial Calibration



TIC: x072356.D\data.ms

(1) Pentachlorophenol

7.146min (0.000) 14.49

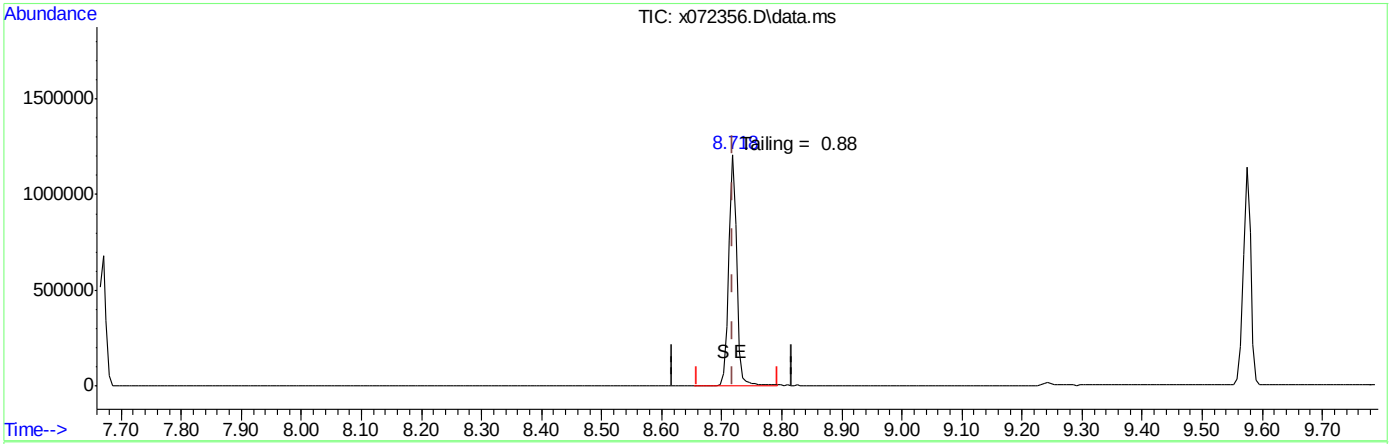
response 346616

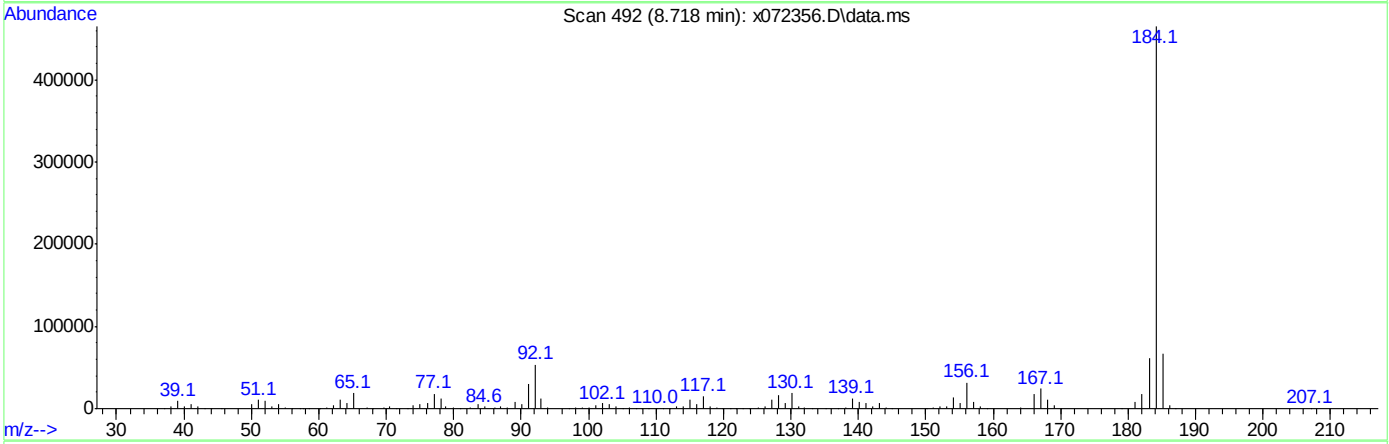
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072356.D
Acq On : 12 Aug 2020 10:07 am
Operator : marthav
Sample : dftpp Inst : MSBNA05
Misc : op81484,sx2951,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 12 13:53:48 2020
Quant Method : C:\msdchem\1\METHODS\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Wed Aug 12 13:53:46 2020
Response via : Initial Calibration





TIC: x072356.D\data.ms

(3) Benzidine

8.718min (0.000) 26.47

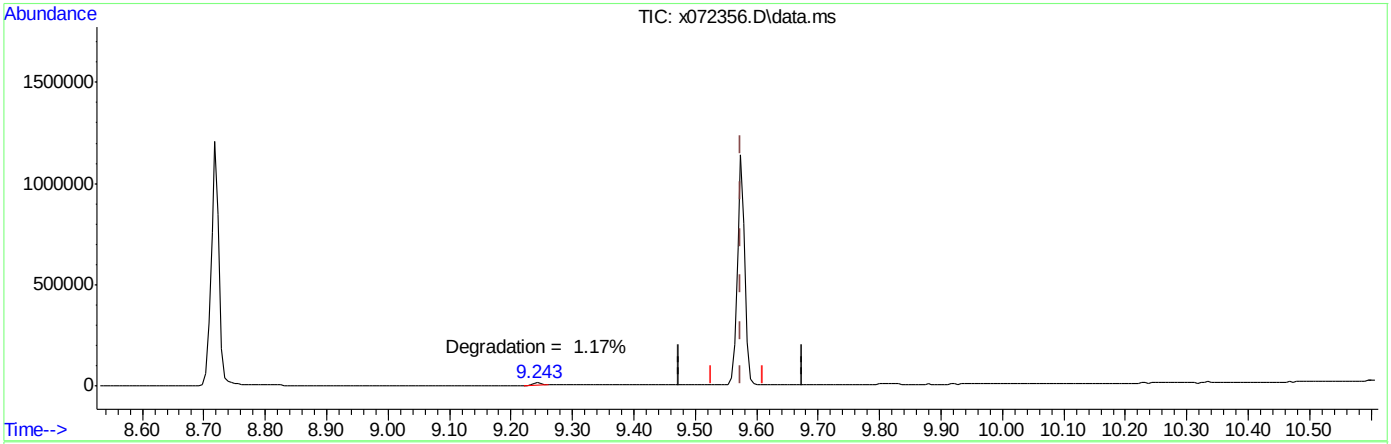
response 1122844

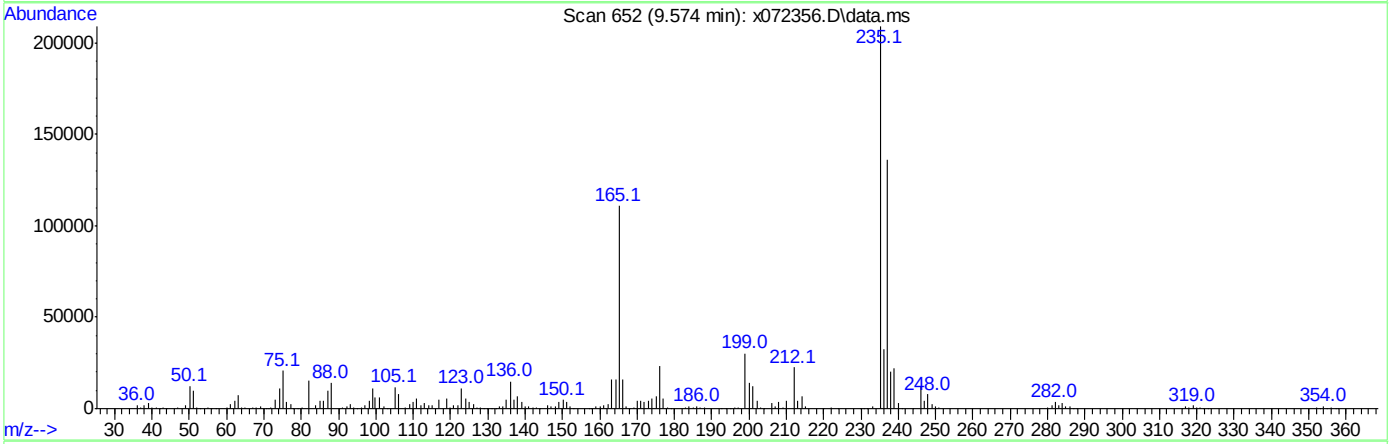
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072356.D
Acq On : 12 Aug 2020 10:07 am
Operator : marthav
Sample : dftpp Inst : MSBNA05
Misc : op81484,sx2951,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 12 13:53:48 2020
Quant Method : C:\msdchem\1\METHODS\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Wed Aug 12 13:53:46 2020
Response via : Initial Calibration





TIC: x072356.D\data.ms

(4) DDT

9.574min (0.000) 28.36

response 990085

Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 07/30/20 14:11

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06436.D
Sample : ic248-1
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1
Acq On : 29 Jul 2020 12:53 pm Operator: marthav

Quant Time: Jul 29 13:54:40 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	6.045	152	339395	40.00	ppm		-0.04
22) Naphthalene-d8	7.473	136	1294127	40.00	ppm		0.00
43) Acenaphthene-d10	9.527	164	688296	40.00	ppm		0.00
70) Phenanthrene-d10	11.282	188	1218446	40.00	ppm		0.00
92) Chrysene-d12	14.582	240	1031190	40.00	ppm		-0.01
102) Perylene-d12	16.946	264	1045930	40.00	ppm		0.00
System Monitoring Compounds							
7) 2-Fluorophenol	4.665	112	22185	1.84	ppm		0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 1.84%#				
9) Phenol-d5	5.676	99	27217	1.97	ppm		-0.01
Spiked Amount 100.000	Range 10 - 50		Recovery = 1.97%#				
23) Nitrobenzene-d5	6.655	82	13248	1.49	ppm		0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 2.98%#				
47) 2-Fluorobiphenyl	8.746	172	27098	1.05	ppm		0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 2.10%#				
75) 2,4,6-Tribromophenol	10.463	330	6975	2.36	ppm		0.00
Spiked Amount 100.000	Range 33 - 118		Recovery = 2.36%#				
95) Terphenyl-d14	13.207	244	28881	1.09	ppm		0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 2.18%#				
Target Compounds							Qvalue
2) 1,4-Dioxane	2.879	88	5162	1.421	ppm		98
3) N-nitrosodimethylamine	3.221	42	6146	0.943	ppm		93
4) Pyridine	3.285	79	11106	0.906	ppm		100
5) Benzaldehyde	5.564	106	10174	1.027	ppm		96
6) Aniline	5.687	93	17993	0.986	ppm		74
8) bis(2-Chloroethyl)ether	5.762	93	12244	0.995	ppm		96
10) Phenol	5.687	94	16224	1.010	ppm	#	58
11) 2-Chlorophenol	5.815	128	11735	0.965	ppm		98
12) 1,3-Dichlorobenzene	5.976	146	13101	0.954	ppm		96
13) 1,4-Dichlorobenzene	6.061	146	13230	0.951	ppm		94
14) 1,2-Dichlorobenzene	6.227	146	12445	0.949	ppm		97
15) Benzyl alcohol	6.206	108	7157	1.228	ppm		93
16) bis(2-chloroisopropyl)...	6.356	45	15773	1.010	ppm	#	66
17) 2-Methylphenol	6.345	108	10936	1.023	ppm		94
18) Acetophenone	6.489	105	16648	1.009	ppm		99
19) Hexachloroethane	6.602	117	5176	0.949	ppm		96
20) N-Nitroso-di-n-propyla...	6.495	70	9104	1.087	ppm		99
21) 3&4-Methylphenol	6.521	108	11630	1.065	ppm		91
24) Nitrobenzene	6.676	77	13177	1.379	ppm		92
25) Isophorone	6.955	82	24175	1.063	ppm		98
26) 2-Nitrophenol	7.040	139	5500	2.738	ppm		92
27) 2,4-Dimethylphenol	7.115	107	11229	1.056	ppm		100
28) O,O,O-Triethylphosphor...	7.185	198	5815	0.999	ppm		93
29) bis(2-Chloroethoxy)met...	7.217	93	14846	1.042	ppm		99
30) Benzoic Acid	7.174	105	4169	3.146	ppm		93
31) 2,4-Dichlorophenol	7.329	162	9727	1.253	ppm		98
32) 1,2,4-Trichlorobenzene	7.415	180	11030	0.968	ppm		94
34) Naphthalene	7.500	128	36157	1.030	ppm		96
35) 4-Chloroaniline	7.575	127	15421	1.051	ppm		97
36) 2,6-Dichlorophenol	7.580	162	9614	1.259	ppm		99
37) Hexachlorobutadiene	7.650	225	6405	0.998	ppm		93

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06436.D
Sample : ic248-1
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1
Acq On : 29 Jul 2020 12:53 pm Operator: marthav

Quant Time: Jul 29 13:54:40 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38)	Caprolactam	7.939	113	3531	1.051	ppm	90
39)	4-Chloro-3-methylphenol	8.163	107	9846	1.033	ppm	96
40)	2-Methylnaphthalene	8.308	141	20379	1.003	ppm	97
41)	1-Methylnaphthalene	8.420	142	22671	1.016	ppm	99
42)	1,2,4,5-Tetrachloroben...	8.500	216	10899	0.997	ppm	97
44)	Hexachlorocyclopentadiene	8.495	237	5524	1.600	ppm	98
45)	2,4,6-Trichlorophenol	8.645	196	6513	1.287	ppm	98
46)	2,4,5-Trichlorophenol	8.693	196	7129	1.239	ppm	94
48)	1,1'-Biphenyl	8.859	154	28432	1.027	ppm	99
49)	2-Chloronaphthalene	8.875	162	22036	1.029	ppm	100
50)	2-Nitroaniline	9.003	65	5875	1.994	ppm	96
51)	p-Dinitrobenzene	9.174	75	3156	1.812	ppm	96
52)	Acenaphthylene	9.356	152	33532	1.042	ppm	99
53)	Dimethylphthalate	9.233	163	25118	1.090	ppm	99
54)	m-Dinitrobenzene	9.260	168	2855m	1.484	ppm	
55)	2,6-Dinitrotoluene	9.297	165	4724	1.443	ppm	97
56)	o-Dinitrobenzene	9.351	50	4097	1.510	ppm	90
57)	Acenaphthene	9.565	153	23009	1.082	ppm	99
58)	3-Nitroaniline	9.490	138	5580	1.221	ppm	91
59)	2,4-Dinitrophenol	9.618	184	278m	4.967	ppm	
60)	Dibenzofuran	9.768	168	31271	1.057	ppm	98
61)	2,4-Dinitrotoluene	9.768	165	5516	1.327	ppm	77
62)	4-Nitrophenol	9.731	109	3271	1.581	ppm	85
63)	2,3,5,6-Tetrachlorophenol	9.875	232	4546	1.231	ppm	90
64)	2,3,4,6-Tetrachlorophenol	9.928	232	5204	1.215	ppm	96
65)	Fluorene	10.175	166	24501	1.037	ppm	99
66)	4-Chlorophenyl-phenyle...	10.191	204	12321	1.033	ppm	98
67)	Diethylphthalate	10.078	149	24651	1.094	ppm	99
68)	Thionazin	10.169	97	5437	1.307	ppm	97
69)	4-Nitroaniline	10.207	138	5502	1.247	ppm	86
71)	4,6-Dinitro-2-methylph...	10.244	198	1446	1.962	ppm	62
72)	n-Nitrosodiphenylamine	10.335	169	20583	1.167	ppm	99
73)	Diphenylamine	10.335	169	20583	1.031	ppm	99
74)	1,2-Diphenylhydrazine	10.378	77	27000	1.104	ppm	99
76)	Sulfotep	10.549	97	4112	1.219	ppm	81
77)	Phorate	10.699	75	12800	1.197	ppm	99
78)	4-Bromophenyl-phenylether	10.768	248	7073	1.034	ppm	94
79)	Hexachlorobenzene	10.822	284	8297	1.045	ppm	96
80)	Dimethoate	10.886	87	8394	1.289	ppm	94
81)	Simazine	10.945	201	3925	1.019	ppm	99
82)	Atrazine	10.988	200	6589	0.990	ppm	97
83)	Pentachlorophenol	11.068	266	880m	0.412	ppm	
84)	Phenanthrene	11.308	178	39097	1.159	ppm	99
85)	Anthracene	11.367	178	36776	1.057	ppm	99
86)	Disulfoton	11.319	88	13894	1.094	ppm	93
87)	Carbazole	11.576	167	32589	1.063	ppm	99
88)	Methyl Parathion	11.758	109	4906	1.301	ppm	91
89)	Di-n-butylphthalate	12.036	149	38905	1.086	ppm	98
90)	Ethyl Parathion	12.228	97	3228	1.631	ppm	93
91)	Fluoranthene	12.720	202	36388	1.029	ppm	99
93)	Benzidine	12.908	184	21124	1.356	ppm	99
94)	Pyrene	12.983	202	37315	1.097	ppm	99
96)	Famphur	13.774	218	11566	1.344	ppm	96
97)	Butylbenzylphthalate	13.870	149	16601	1.463	ppm	94

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06436.D
Sample : ic248-1
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1
Acq On : 29 Jul 2020 12:53 pm Operator: marthav

Quant Time: Jul 29 13:54:40 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
98)	3,3'-Dichlorobenzidine	14.566	252	12155	1.200	ppm	97
99)	Benzo[a]anthracene	14.571	228	35545	1.136	ppm	97
100)	Chrysene	14.614	228	34871	1.125	ppm	100
101)	bis(2-Ethylhexyl)phtha...	14.726	149	24107	1.490	ppm	100
103)	Di-n-octylphthalate	15.791	149	35856	1.561	ppm	97
104)	Benzo[b]fluoranthene	16.293	252	31213	1.114	ppm	99
105)	Benzo[k]fluoranthene	16.341	252	33122m	1.007	ppm	
106)	Benzo[a]pyrene	16.839	252	29481	1.037	ppm	98
107)	Indeno[1,2,3-cd]pyrene	18.561	276	27465	1.267	ppm	98
108)	Dibenz[a,h]anthracene	18.615	278	27903	1.145	ppm	94
109)	Benzo[g,h,i]perylene	18.920	276	31234	1.049	ppm	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

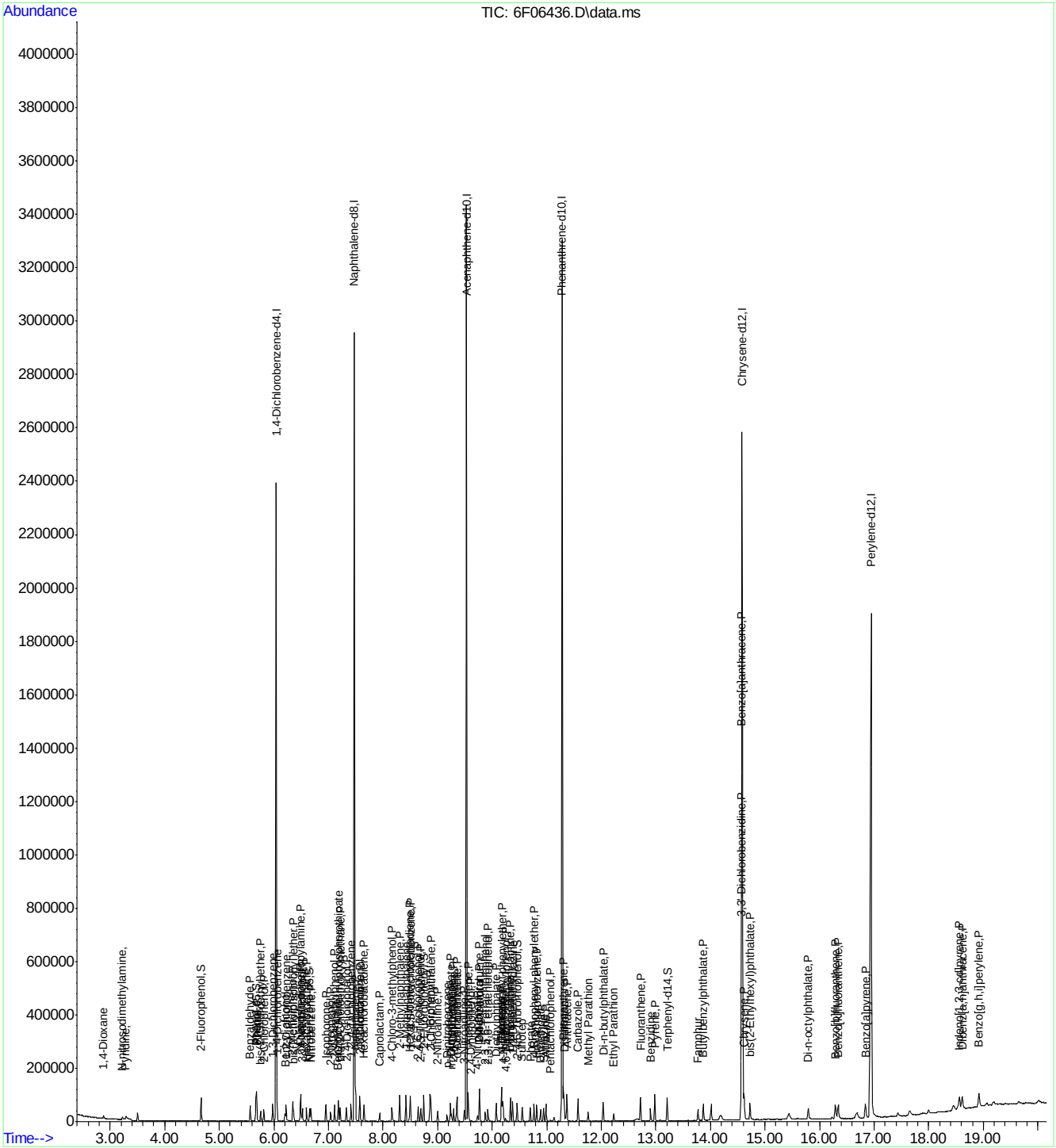
7.6.1

7

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06436.D
Sample : ic248-1
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1
Acq On : 29 Jul 2020 12:53 pm Operator: marthav

Quant Time: Jul 29 13:54:40 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625



8270D6F072920.m Thu Jul 30 12:54:54 2020 Page: 4

Manual Integration Approval Summary

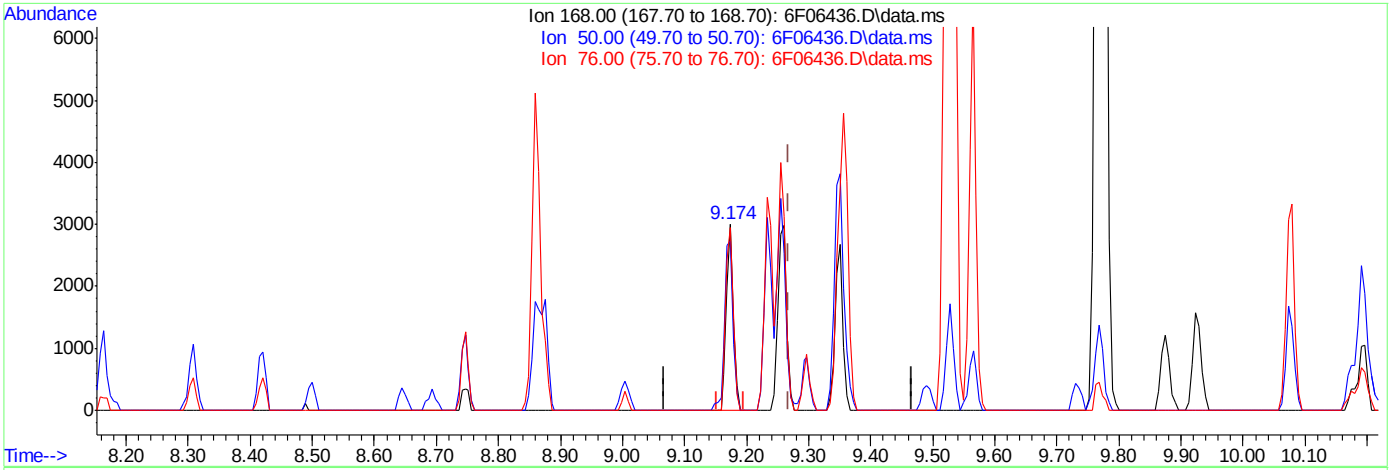
Sample Number: S6F248-IC248
Lab FileID: 6F06436.D
Injection Time: 07/29/20 12:53
Method: SW846 8270D
Analyst approved: 07/30/20 13:11 Martha Valls
Supervisor approved: 07/30/20 14:11 Nicole McCampbell

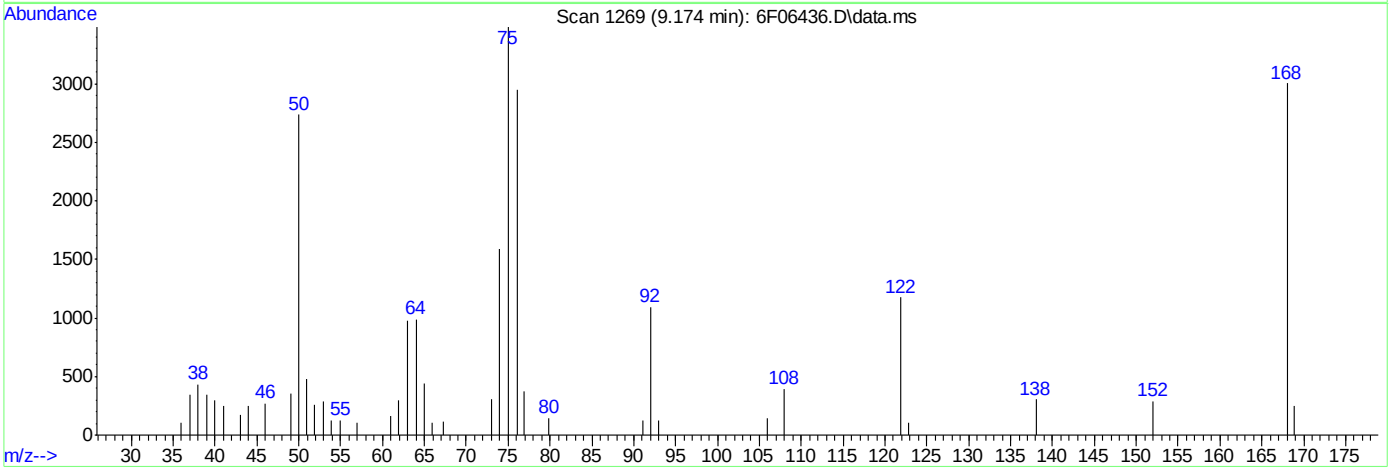
Parameter	CAS	Sig#	R.T. (min.)	Reason
m-Dinitrobenzene	99-65-0		9.26	Missed peak
2,4-Dinitrophenol	51-28-5		9.62	Missed peak
Pentachlorophenol	87-86-5		11.07	Missed peak
Benzo(k)fluoranthene	207-08-9		16.34	Poorly defined baseline

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06436.D
Sample : ic248-1
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1
Acq On : 29 Jul 2020 12:53 pm Operator: marthav

Quant Time: Jul 29 13:51:58 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625





TIC: 6F06436.D\data.ms

(54) m-Dinitrobenzene

9.174min (-0.094) 1.23ppm

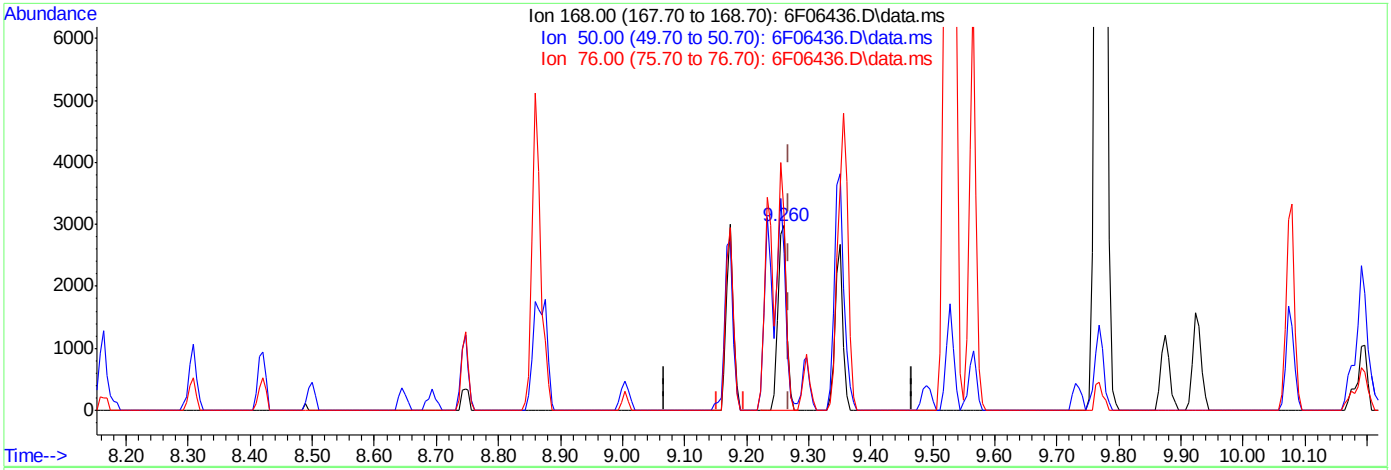
response 2354

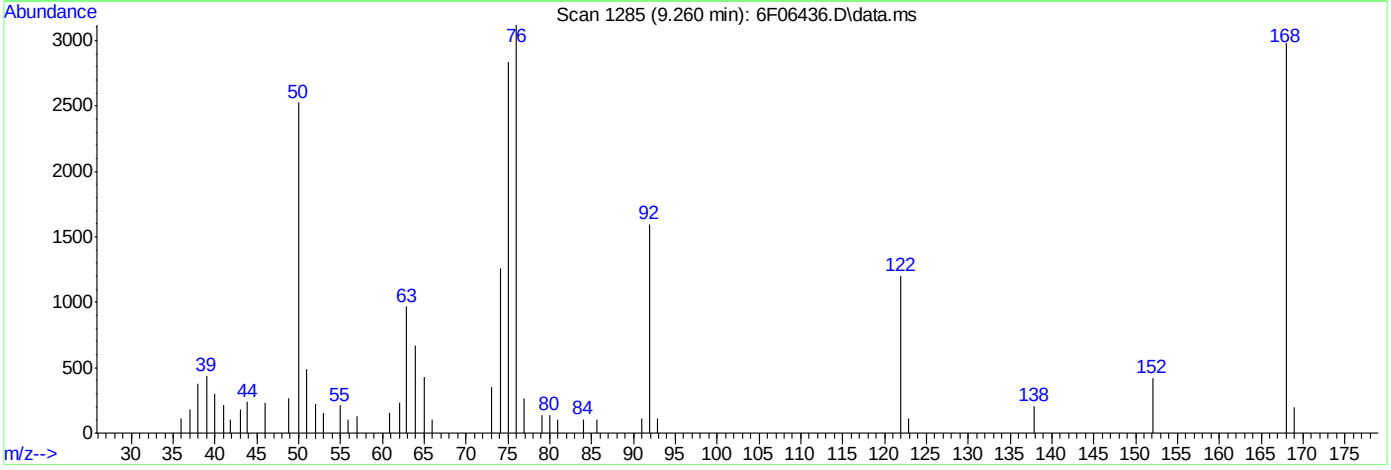
Ion	Exp%	Act%
168.00	100	100
50.00	94.70	88.87
76.00	116.40	98.10
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06436.D
Sample : ic248-1
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1
Acq On : 29 Jul 2020 12:53 pm Operator: marthav

Quant Time: Jul 29 13:51:58 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625





TIC: 6F06436.D\data.ms

(54) m-Dinitrobenzene

9.260min (-0.008) 1.48ppm m

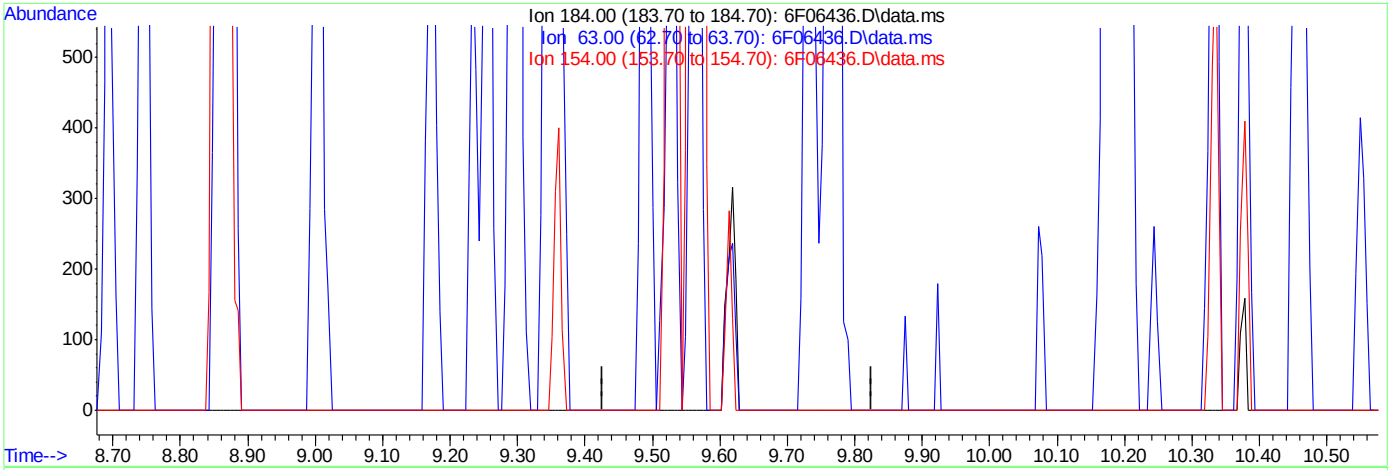
response 2855

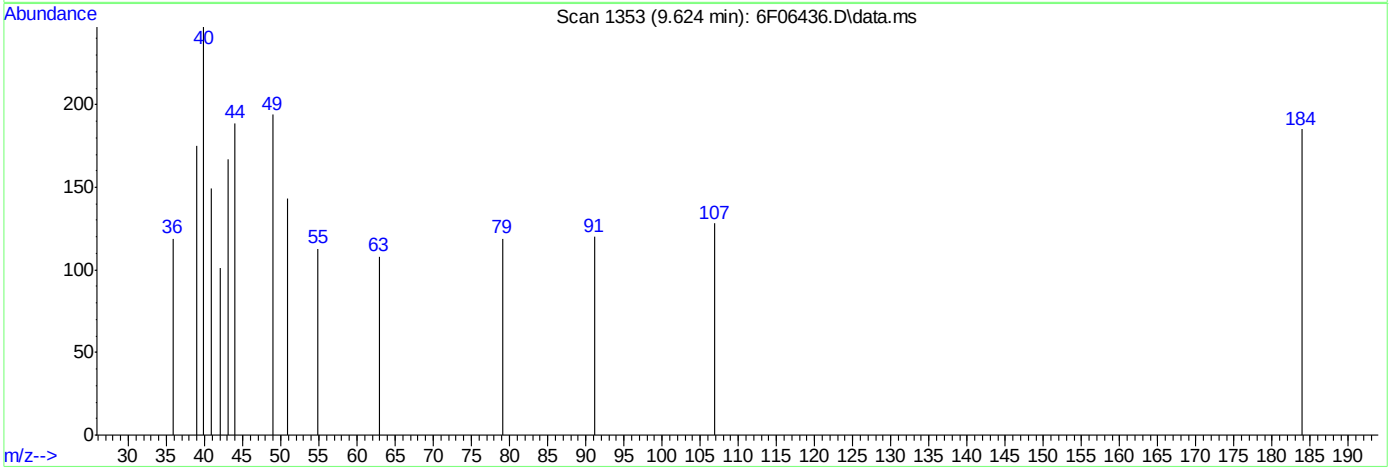
Ion	Exp%	Act%
168.00	100	100
50.00	94.70	84.86
76.00	116.40	104.73
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06436.D
Sample : ic248-1
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1
Acq On : 29 Jul 2020 12:53 pm Operator: marthav

Quant Time: Jul 29 13:51:58 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625





TIC: 6F06436.D\data.ms

(59) 2,4-Dinitrophenol (P)

9.626min (-9.626) 0.00ppm

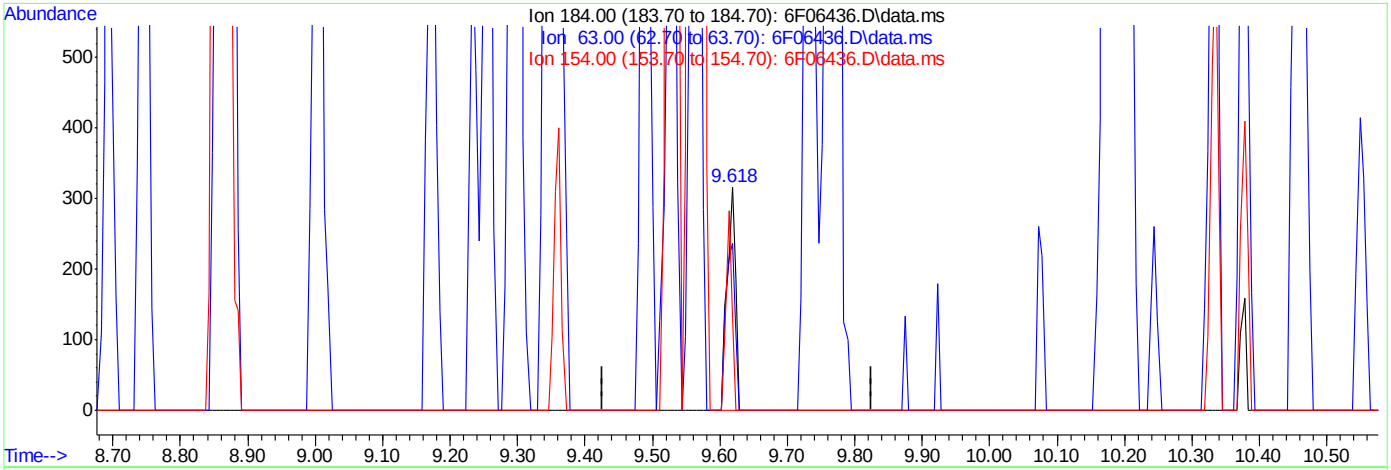
response 0

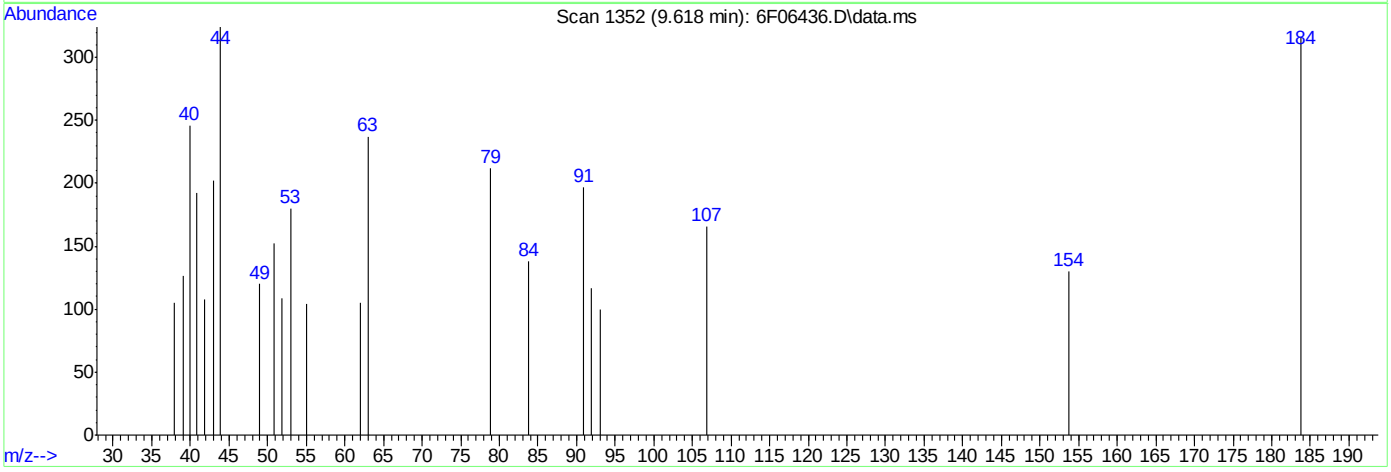
Ion	Exp%	Act%
184.00	100	0.00
63.00	60.50	0.00#
154.00	48.80	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06436.D
Sample : ic248-1
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1
Acq On : 29 Jul 2020 12:53 pm Operator: marthav

Quant Time: Jul 29 13:51:58 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625





TIC: 6F06436.D\data.ms

(59) 2,4-Dinitrophenol (P)

9.618min (-0.008) 4.97ppm m

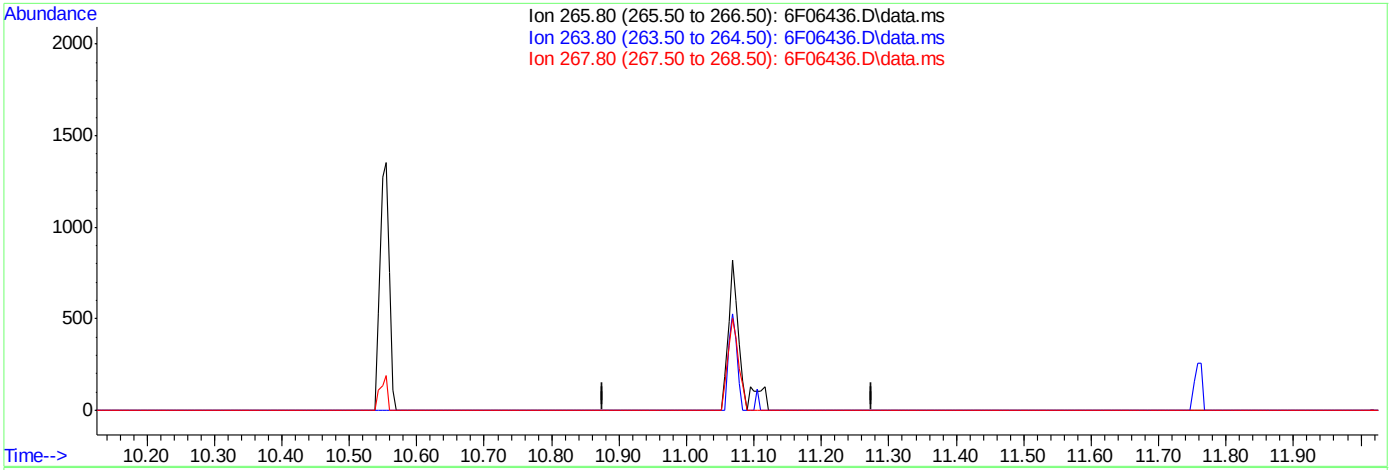
response 278

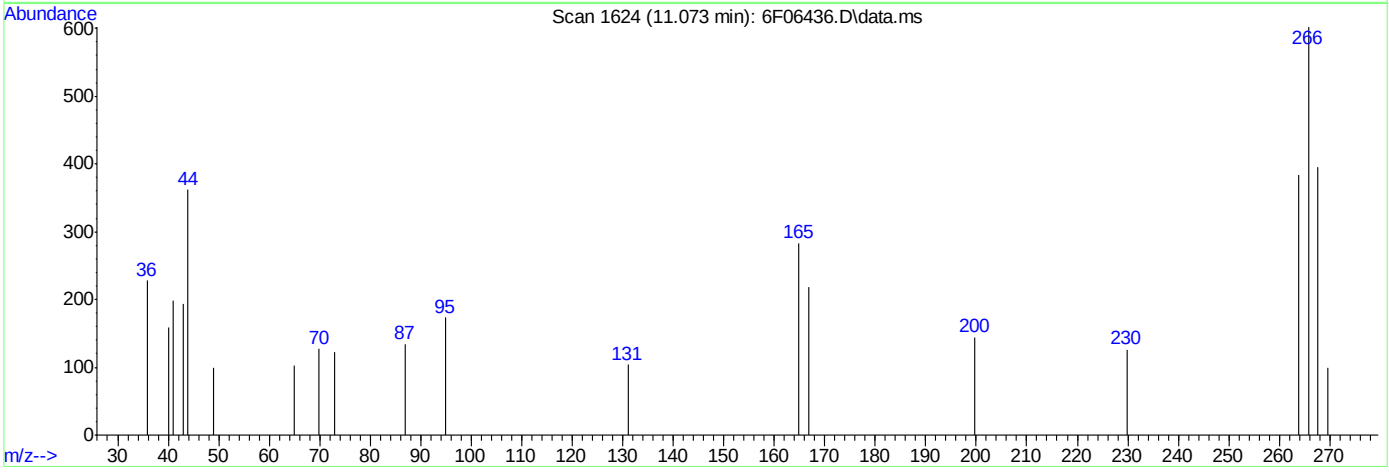
Ion	Exp%	Act%
184.00	100	100
63.00	60.50	75.00
154.00	48.80	41.14
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06436.D
Sample : ic248-1
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1
Acq On : 29 Jul 2020 12:53 pm Operator: marthav

Quant Time: Jul 29 13:51:58 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625





TIC: 6F06436.D\data.ms

(83) Pentachlorophenol (P)

11.076min (-11.076) 0.00ppm

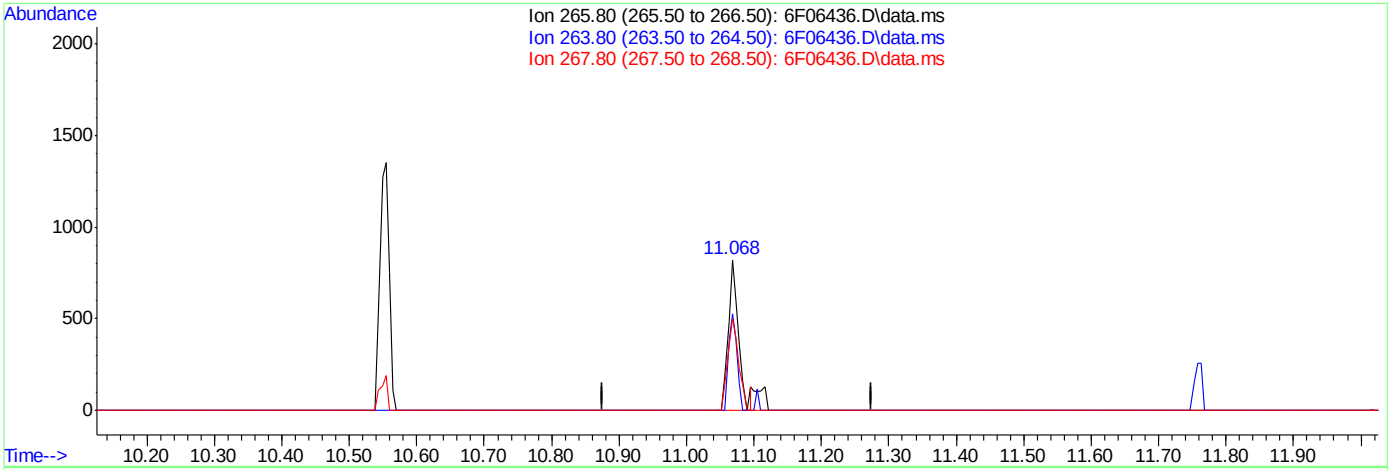
response 0

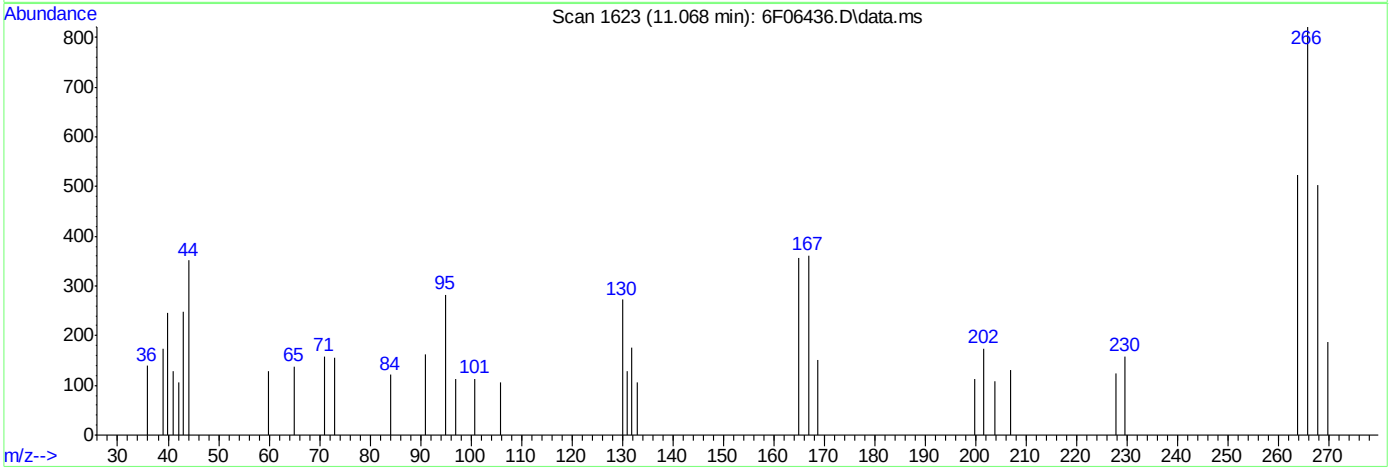
Ion	Exp%	Act%
265.80	100	0.00
263.80	65.00	0.00#
267.80	64.10	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06436.D
Sample : ic248-1
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1
Acq On : 29 Jul 2020 12:53 pm Operator: marthav

Quant Time: Jul 29 13:51:58 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625





TIC: 6F06436.D\data.ms

(83) Pentachlorophenol (P)

11.068min (-0.008) 0.41ppm m

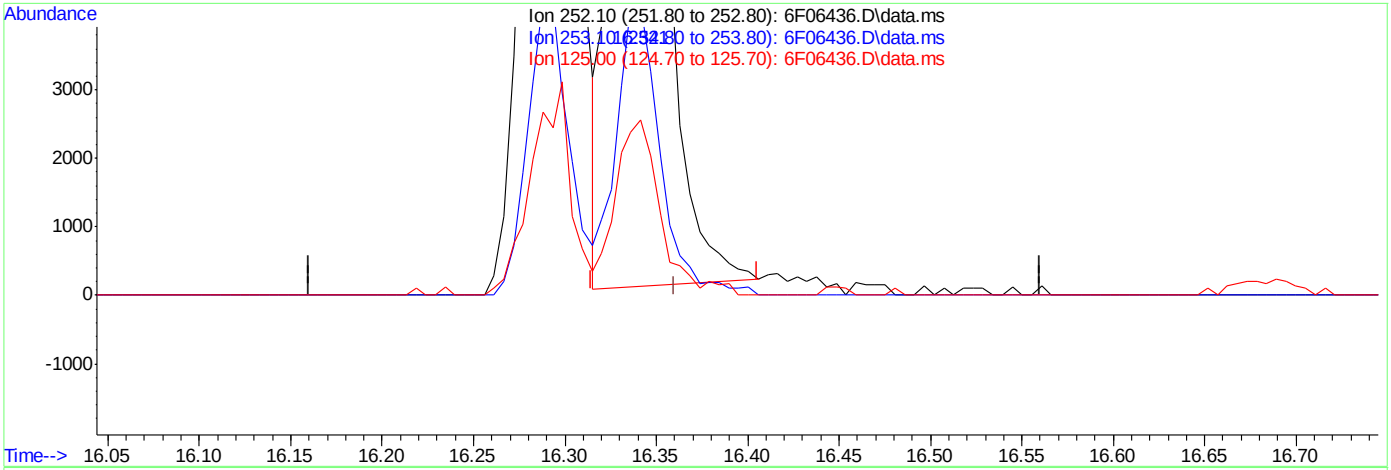
response 880

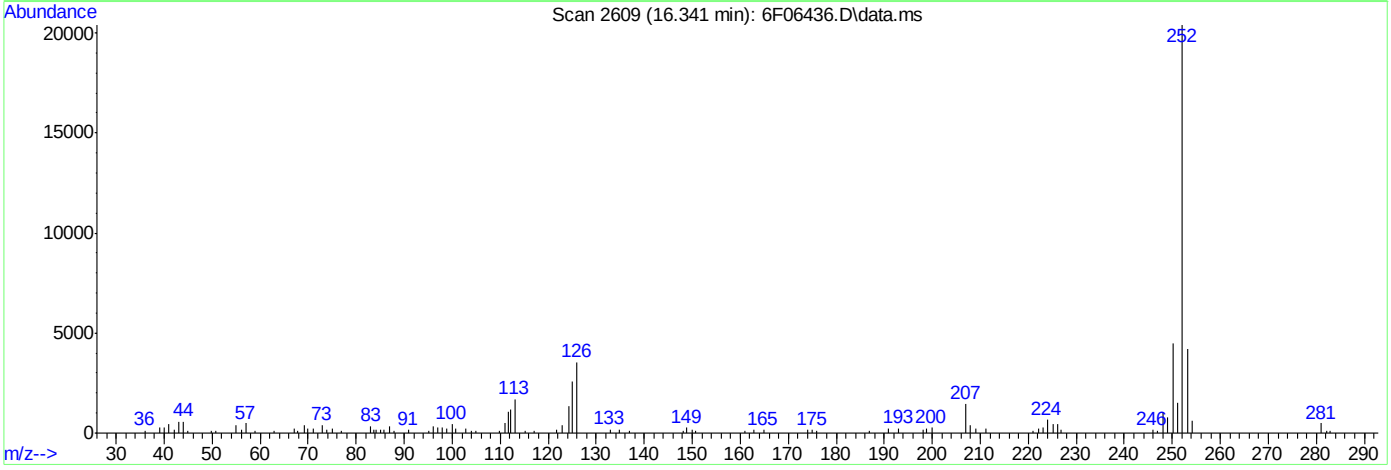
Ion	Exp%	Act%
265.80	100	100
263.80	65.00	63.82
267.80	64.10	61.14
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06436.D
Sample : ic248-1
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1
Acq On : 29 Jul 2020 12:53 pm Operator: marthav

Quant Time: Jul 29 13:51:58 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625





TIC: 6F06436.D\data.ms

(105) Benzo[k]fluoranthene (P)

16.341min (-0.019) 0.98ppm

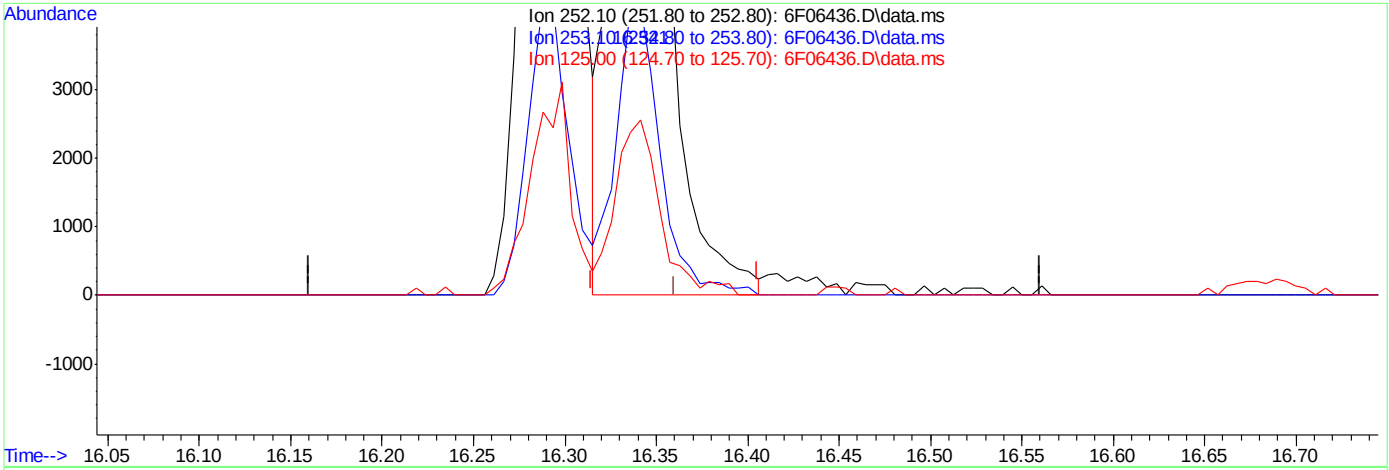
response 32225

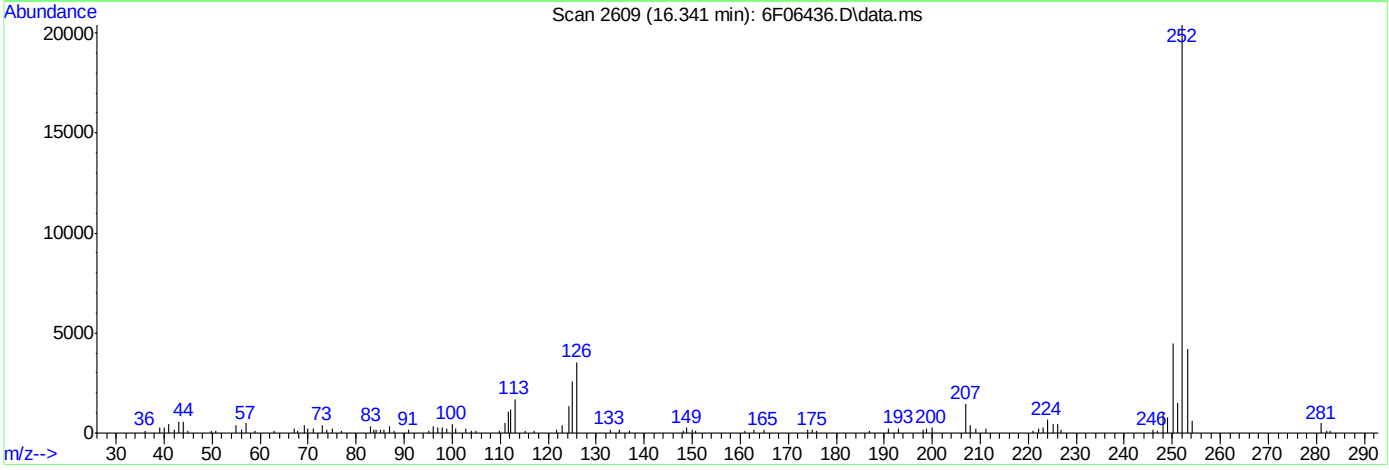
Ion	Exp%	Act%
252.10	100	100
253.10	22.00	20.63
125.00	13.40	12.82
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06436.D
Sample : ic248-1
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1
Acq On : 29 Jul 2020 12:53 pm Operator: marthav

Quant Time: Jul 29 13:51:58 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625





TIC: 6F06436.D\data.ms

(105) Benzo[k]fluoranthene (P)

16.341min (-0.019) 1.01ppm m

response 33122

Ion	Exp%	Act%
252.10	100	100
253.10	22.00	20.70
125.00	13.40	12.60
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 07/30/20 14:11

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06437.D
Sample : ic248-5
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1
Acq On : 29 Jul 2020 1:19 pm Operator: marthav

Quant Time: Jul 29 14:30:48 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.045	152	318455	40.00	ppm	-0.04
22) Naphthalene-d8	7.474	136	1222979	40.00	ppm	0.00
43) Acenaphthene-d10	9.527	164	669440	40.00	ppm	0.00
70) Phenanthrene-d10	11.282	188	1233747	40.00	ppm	0.00
92) Chrysene-d12	14.582	240	1104905	40.00	ppm	-0.01
102) Perylene-d12	16.946	264	1105990	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	4.666	112	114999	10.19	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 10.19%#			
9) Phenol-d5	5.676	99	138610	10.68	ppm	-0.01
Spiked Amount 100.000	Range 10 - 50		Recovery = 10.68%			
23) Nitrobenzene-d5	6.655	82	65442	7.46	ppm	0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 14.92%#			
47) 2-Fluorobiphenyl	8.747	172	130403	5.22	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 10.44%#			
75) 2,4,6-Tribromophenol	10.463	330	38509	12.49	ppm	0.00
Spiked Amount 100.000	Range 33 - 118		Recovery = 12.49%#			
95) Terphenyl-d14	13.207	244	149889	5.28	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 10.56%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.874	88	22885	6.497	ppm	97
3) N-nitrosodimethylamine	3.205	42	31179	5.099	ppm	97
4) Pyridine	3.254	79	58266	5.065	ppm	96
5) Benzaldehyde	5.564	106	48057	5.171	ppm	97
6) Aniline	5.687	93	91490	5.343	ppm	69
8) bis(2-Chloroethyl)ether	5.757	93	60547	5.246	ppm	100
10) Phenol	5.687	94	81309	5.394	ppm	69
11) 2-Chlorophenol	5.816	128	59278	5.197	ppm	99
12) 1,3-Dichlorobenzene	5.976	146	65233	5.062	ppm	98
13) 1,4-Dichlorobenzene	6.062	146	66893	5.122	ppm	99
14) 1,2-Dichlorobenzene	6.222	146	62700	5.095	ppm	98
15) Benzyl alcohol	6.201	108	36420	6.483	ppm	96
16) bis(2-chloroisopropyl)...	6.356	45	76836	5.245	ppm #	68
17) 2-Methylphenol	6.345	108	55458	5.531	ppm	92
18) Acetophenone	6.489	105	80514	5.199	ppm	98
19) Hexachloroethane	6.602	117	27332	5.342	ppm	96
20) N-Nitroso-di-n-propyla...	6.495	70	43676	5.555	ppm	97
21) 3&4-Methylphenol	6.516	108	57450	5.607	ppm	97
24) Nitrobenzene	6.677	77	65006	6.980	ppm	96
25) Isophorone	6.955	82	117360	5.463	ppm	98
26) 2-Nitrophenol	7.040	139	29995	12.423	ppm	95
27) 2,4-Dimethylphenol	7.115	107	55257	5.499	ppm	97
28) O,O,O-Triethylphosphor...	7.185	198	28230	5.130	ppm	91
29) bis(2-Chloroethoxy)met...	7.217	93	72731	5.401	ppm	98
30) Benzoic Acid	7.185	105	36925	15.690	ppm	95
31) 2,4-Dichlorophenol	7.329	162	48759	6.477	ppm	99
32) 1,2,4-Trichlorobenzene	7.415	180	54274	5.039	ppm	98
34) Naphthalene	7.500	128	175592	5.293	ppm	99
35) 4-Chloroaniline	7.575	127	75120	5.418	ppm	99
36) 2,6-Dichlorophenol	7.581	162	47439	6.412	ppm	98
37) Hexachlorobutadiene	7.650	225	29548	4.873	ppm	97

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06437.D
Sample : ic248-5
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1
Acq On : 29 Jul 2020 1:19 pm Operator: marthav

Quant Time: Jul 29 14:30:48 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38)	Caprolactam	7.944	113	18656	5.811	ppm	97
39)	4-Chloro-3-methylphenol	8.164	107	49821	5.530	ppm	99
40)	2-Methylnaphthalene	8.308	141	102000	5.310	ppm	98
41)	1-Methylnaphthalene	8.420	142	111007	5.263	ppm	97
42)	1,2,4,5-Tetrachloroben...	8.501	216	52507	5.082	ppm	99
44)	Hexachlorocyclopentadiene	8.495	237	30184	8.181	ppm	99
45)	2,4,6-Trichlorophenol	8.650	196	34878	6.826	ppm	96
46)	2,4,5-Trichlorophenol	8.693	196	36905	6.408	ppm	96
48)	1,1'-Biphenyl	8.859	154	135983	5.052	ppm	99
49)	2-Chloronaphthalene	8.875	162	109000	5.233	ppm	100
50)	2-Nitroaniline	9.003	65	32288	10.027	ppm	97
51)	p-Dinitrobenzene	9.174	75	18053	9.357	ppm	99
52)	Acenaphthylene	9.356	152	166305	5.314	ppm	99
53)	Dimethylphthalate	9.239	163	124000	5.533	ppm	100
54)	m-Dinitrobenzene	9.255	168	18954m	9.042	ppm	
55)	2,6-Dinitrotoluene	9.297	165	27373	8.042	ppm	95
56)	o-Dinitrobenzene	9.351	50	21528	7.901	ppm	94
57)	Acenaphthene	9.565	153	112210	5.423	ppm	97
58)	3-Nitroaniline	9.490	138	31892	6.949	ppm	97
59)	2,4-Dinitrophenol	9.613	184	6514	16.419	ppm	93
60)	Dibenzofuran	9.774	168	156514	5.437	ppm	96
61)	2,4-Dinitrotoluene	9.768	165	35389	8.132	ppm	91
62)	4-Nitrophenol	9.731	109	17722	8.278	ppm	95
63)	2,3,5,6-Tetrachlorophenol	9.875	232	26572	6.995	ppm	97
64)	2,3,4,6-Tetrachlorophenol	9.923	232	28770	6.626	ppm	92
65)	Fluorene	10.175	166	123147	5.360	ppm	96
66)	4-Chlorophenyl-phenyle...	10.191	204	62136	5.354	ppm	99
67)	Diethylphthalate	10.078	149	125875	5.742	ppm	99
68)	Thionazin	10.169	97	28170	6.830	ppm	97
69)	4-Nitroaniline	10.207	138	31694	7.113	ppm	94
71)	4,6-Dinitro-2-methylph...	10.244	198	13898	11.980	ppm	89
72)	n-Nitrosodiphenylamine	10.335	169	105929	5.929	ppm	100
73)	Diphenylamine	10.335	169	105929	5.241	ppm	100
74)	1,2-Diphenylhydrazine	10.378	77	137796	5.563	ppm	100
76)	Sulfotep	10.549	97	21741	6.287	ppm	88
77)	Phorate	10.699	75	71284	6.450	ppm	99
78)	4-Bromophenyl-phenylether	10.768	248	34734	5.013	ppm	98
79)	Hexachlorobenzene	10.822	284	40699	5.064	ppm	97
80)	Dimethoate	10.886	87	48422	7.124	ppm	97
81)	Simazine	10.945	201	21176	5.427	ppm	98
82)	Atrazine	10.988	200	34790	5.162	ppm	97
83)	Pentachlorophenol	11.068	266	10992	4.749	ppm	98
84)	Phenanthrene	11.309	178	184831	5.412	ppm	99
85)	Anthracene	11.367	178	187257	5.318	ppm	98
86)	Disulfoton	11.319	88	75443	5.805	ppm	97
87)	Carbazole	11.576	167	167513	5.397	ppm	100
88)	Methyl Parathion	11.758	109	34168	8.283	ppm	95
89)	Di-n-butylphthalate	12.036	149	208225	5.740	ppm	98
90)	Ethyl Parathion	12.229	97	21964	9.720	ppm	95
91)	Fluoranthene	12.721	202	189552	5.295	ppm	98
93)	Benzidine	12.902	184	117825	6.952	ppm	97
94)	Pyrene	12.983	202	196154	5.383	ppm	99
96)	Famphur	13.774	218	67743	7.330	ppm	96
97)	Butylbenzylphthalate	13.871	149	90089	7.168	ppm	99

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06437.D
Sample : ic248-5
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1
Acq On : 29 Jul 2020 1:19 pm Operator: marthav

Quant Time: Jul 29 14:30:48 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

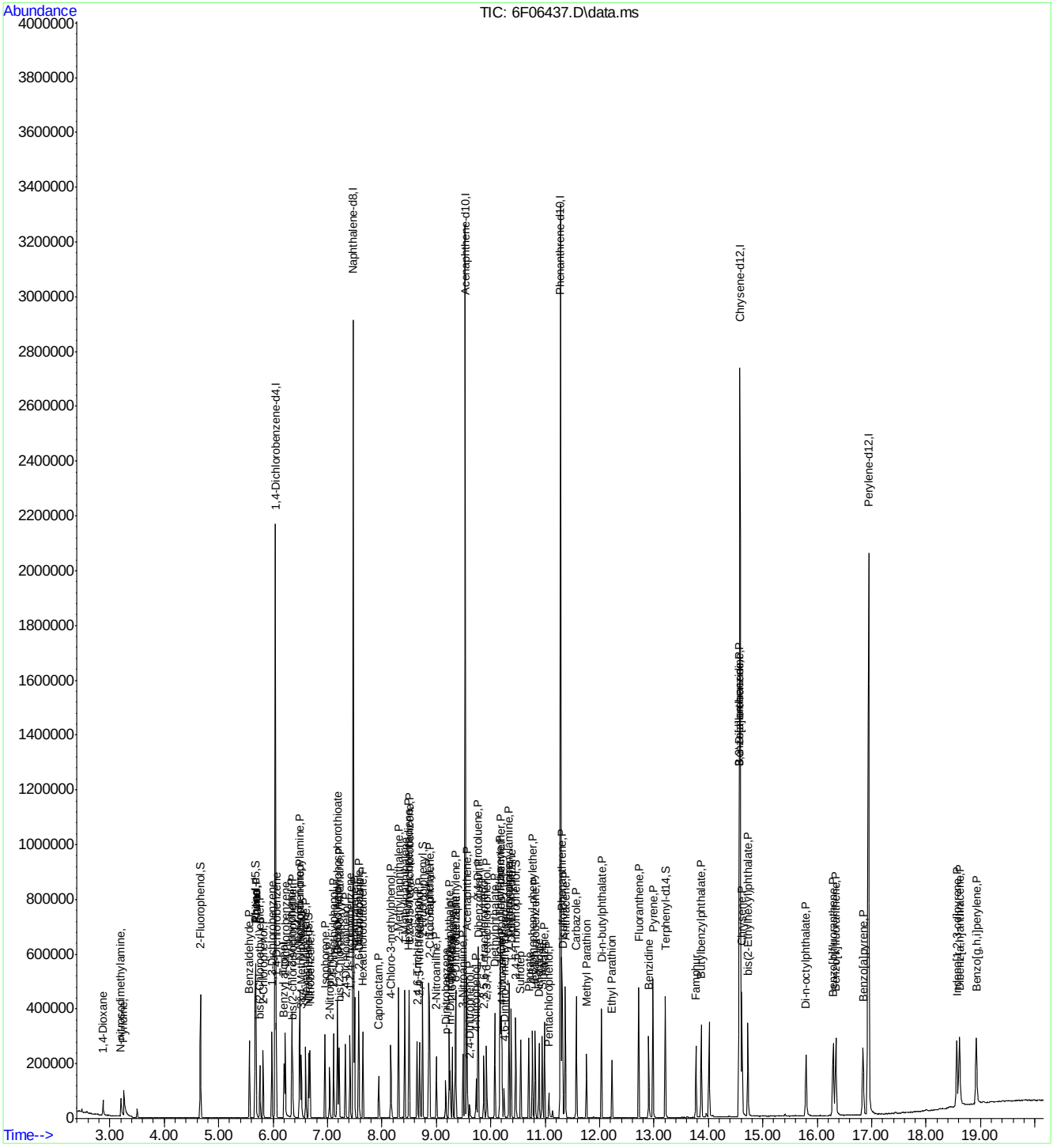
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
98)	3,3'-Dichlorobenzidine	14.566	252	68160	6.172	ppm	100
99)	Benzo[a]anthracene	14.566	228	177388	5.291	ppm	98
100)	Chrysene	14.614	228	180416	5.433	ppm	98
101)	bis(2-Ethylhexyl)phtha...	14.726	149	129395	7.232	ppm	98
103)	Di-n-octylphthalate	15.796	149	198245	7.740	ppm	99
104)	Benzo[b]fluoranthene	16.294	252	165127	5.509	ppm	98
105)	Benzo[k]fluoranthene	16.342	252	179743	5.170	ppm	99
106)	Benzo[a]pyrene	16.839	252	155979	5.189	ppm	99
107)	Indeno[1,2,3-cd]pyrene	18.567	276	145827	6.197	ppm	96
108)	Dibenz[a,h]anthracene	18.615	278	155425	5.903	ppm	97
109)	Benzo[g,h,i]perylene	18.925	276	162812	5.169	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06437.D
Sample : ic248-5
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1
Acq On : 29 Jul 2020 1:19 pm Operator: marthav

Quant Time: Jul 29 14:30:48 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625



Manual Integration Approval Summary

Sample Number: S6F248-IC248
Lab FileID: 6F06437.D
Injection Time: 07/29/20 13:19

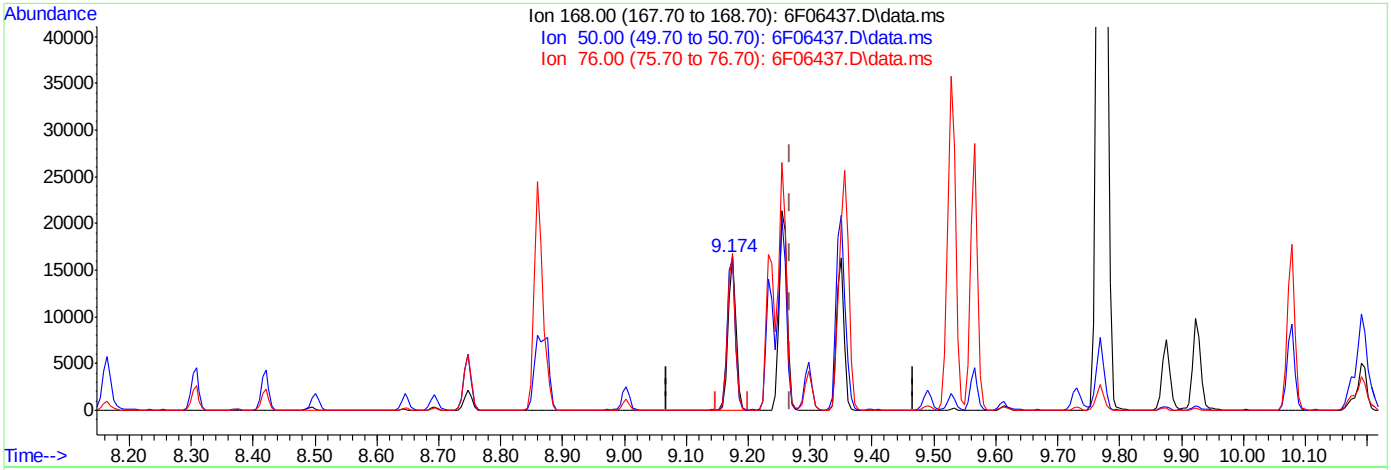
Method: SW846 8270D
Analyst approved: 07/30/20 13:11 Martha Valls
Supervisor approved: 07/30/20 14:11 Nicole McCampbell

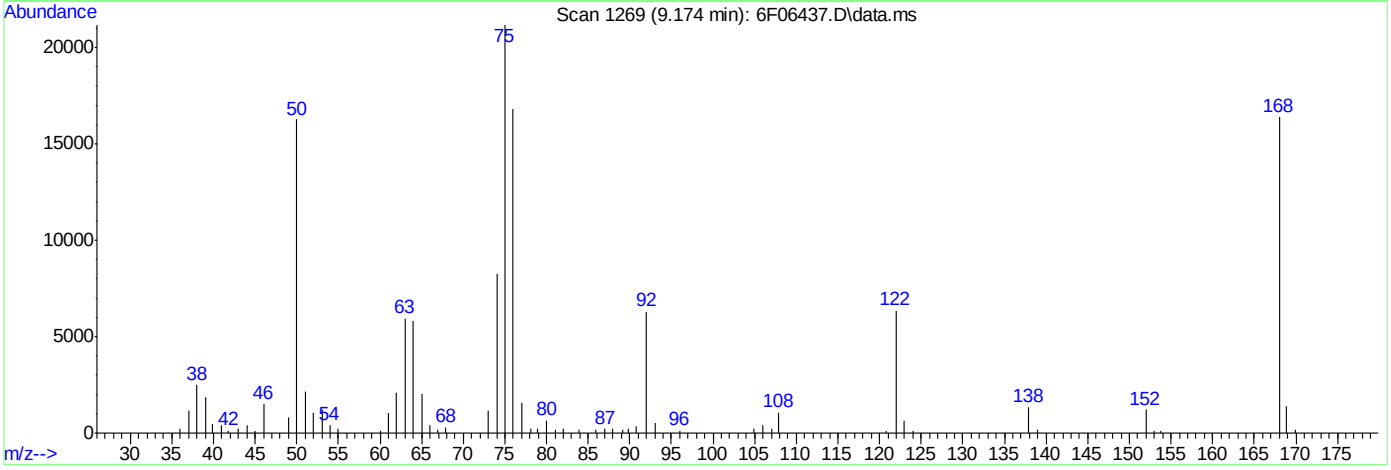
Parameter	CAS	Sig#	R.T. (min.)	Reason
m-Dinitrobenzene	99-65-0		9.25	Missed peak

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06437.D
Sample : ic248-5
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1
Acq On : 29 Jul 2020 1:19 pm Operator: marthav

Quant Time: Jul 29 13:52:01 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625





TIC: 6F06437.D\data.ms

(54) m-Dinitrobenzene

9.174min (-0.093) 6.95ppm

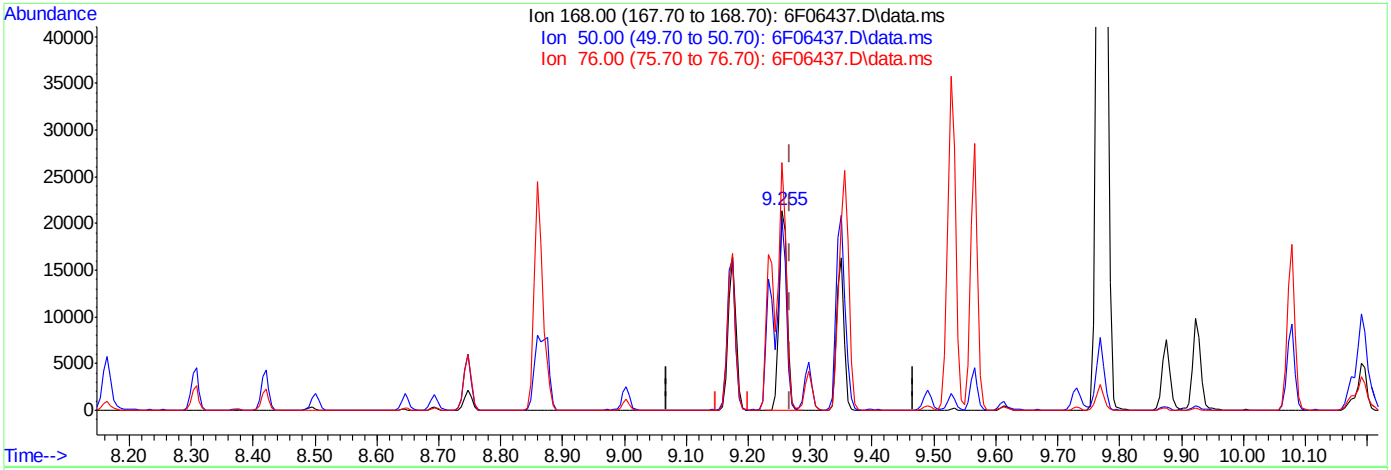
response 14130

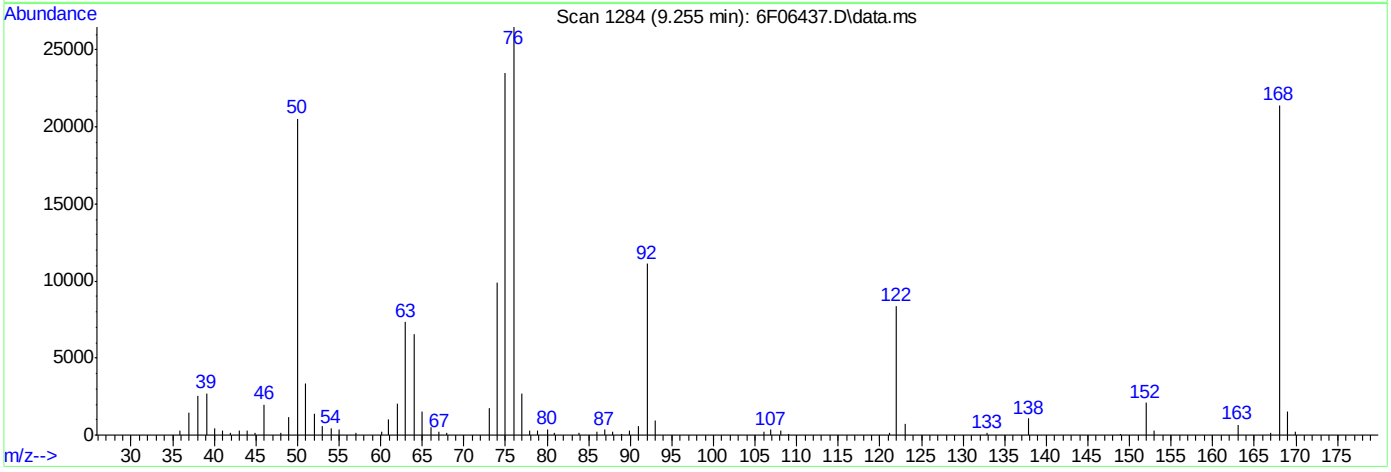
Ion	Exp%	Act%
168.00	100	100
50.00	94.70	99.22
76.00	116.40	102.48
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06437.D
Sample : ic248-5
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1
Acq On : 29 Jul 2020 1:19 pm Operator: marthav

Quant Time: Jul 29 13:52:01 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625





TIC: 6F06437.D\data.ms

(54) m-Dinitrobenzene

9.255min (-0.013) 9.04ppm m

response 18954

Ion	Exp%	Act%
168.00	100	100
50.00	94.70	96.07
76.00	116.40	123.79
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06438.D
Sample : ic248-10
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1
Acq On : 29 Jul 2020 1:45 pm Operator: marthav

Quant Time: Jul 29 14:36:04 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	6.045	152	328143	40.00	ppm		0.00
22) Naphthalene-d8	7.479	136	1282707	40.00	ppm		0.00
43) Acenaphthene-d10	9.533	164	695695	40.00	ppm		0.00
70) Phenanthrene-d10	11.287	188	1269574	40.00	ppm		0.00
92) Chrysene-d12	14.582	240	1134139	40.00	ppm		0.00
102) Perylene-d12	16.946	264	1144729	40.00	ppm		0.00
System Monitoring Compounds							
7) 2-Fluorophenol	4.665	112	239059	20.56	ppm		0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 20.56%				
9) Phenol-d5	5.676	99	285463	21.35	ppm		0.00
Spiked Amount 100.000	Range 10 - 50		Recovery = 21.35%				
23) Nitrobenzene-d5	6.655	82	135148	12.18	ppm		0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 24.36%#				
47) 2-Fluorobiphenyl	8.746	172	262028	10.09	ppm		0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 20.18%#				
75) 2,4,6-Tribromophenol	10.463	330	80435	21.45	ppm		0.00
Spiked Amount 100.000	Range 33 - 118		Recovery = 21.45%#				
95) Terphenyl-d14	13.207	244	307791	10.56	ppm		0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 21.12%#				
Target Compounds							Qvalue
2) 1,4-Dioxane	2.868	88	46153	9.860	ppm		99
3) N-nitrosodimethylamine	3.200	42	65504	10.396	ppm		98
4) Pyridine	3.248	79	124024	10.463	ppm		100
5) Benzaldehyde	5.564	106	98510	10.287	ppm		99
6) Aniline	5.687	93	186463	10.568	ppm	#	38
8) bis(2-Chloroethyl)ether	5.762	93	122731	10.319	ppm		89
10) Phenol	5.687	94	166709	10.733	ppm	#	56
11) 2-Chlorophenol	5.821	128	124160	10.564	ppm		87
12) 1,3-Dichlorobenzene	5.976	146	132981	10.014	ppm		98
13) 1,4-Dichlorobenzene	6.061	146	136087	10.113	ppm		97
14) 1,2-Dichlorobenzene	6.227	146	126782	9.998	ppm		97
15) Benzyl alcohol	6.206	108	73092	10.437	ppm		97
16) bis(2-chloroisopropyl)...	6.356	45	156912	10.395	ppm		74
17) 2-Methylphenol	6.345	108	111196	10.763	ppm		97
18) Acetophenone	6.489	105	167555	10.500	ppm		99
19) Hexachloroethane	6.602	117	55899	10.602	ppm		95
20) N-Nitroso-di-n-propyla...	6.495	70	88424	10.915	ppm	#	70
21) 3&4-Methylphenol	6.521	108	115952	10.982	ppm		95
24) Nitrobenzene	6.677	77	131446	11.441	ppm		96
25) Isophorone	6.955	82	236664	10.504	ppm		99
26) 2-Nitrophenol	7.040	139	62567	14.627	ppm		97
27) 2,4-Dimethylphenol	7.115	107	112441	10.669	ppm		100
28) O,O,O-Triethylphosphor...	7.185	198	57594	9.979	ppm		85
29) bis(2-Chloroethoxy)met...	7.217	93	144973	10.264	ppm		99
30) Benzoic Acid	7.201	105	86511	16.620	ppm		97
31) 2,4-Dichlorophenol	7.329	162	99117	10.590	ppm		99
32) 1,2,4-Trichlorobenzene	7.415	180	109873	9.727	ppm		96
34) Naphthalene	7.500	128	356000	10.232	ppm		99
35) 4-Chloroaniline	7.575	127	153055	10.524	ppm		99
36) 2,6-Dichlorophenol	7.580	162	97270	10.635	ppm		99
37) Hexachlorobutadiene	7.655	225	59857	9.412	ppm		98

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06438.D
Sample : ic248-10
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1
Acq On : 29 Jul 2020 1:45 pm Operator: marthav

Quant Time: Jul 29 14:36:04 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38) Caprolactam	7.949	113	39308	11.830	ppm		98
39) 4-Chloro-3-methylphenol	8.163	107	102298	10.827	ppm		100
40) 2-Methylnaphthalene	8.308	141	206277	10.239	ppm		99
41) 1-Methylnaphthalene	8.420	142	224775	10.160	ppm		98
42) 1,2,4,5-Tetrachloroben...	8.500	216	105843	9.766	ppm		99
44) Hexachlorocyclopentadiene	8.495	237	65993	11.601	ppm		98
45) 2,4,6-Trichlorophenol	8.650	196	72277	11.033	ppm		98
46) 2,4,5-Trichlorophenol	8.693	196	77596	10.817	ppm		98
48) 1,1'-Biphenyl	8.859	154	283510	10.136	ppm		99
49) 2-Chloronaphthalene	8.875	162	221914	10.253	ppm		100
50) 2-Nitroaniline	9.003	65	67789	14.357	ppm		96
51) p-Dinitrobenzene	9.174	75	40563	13.258	ppm		99
52) Acenaphthylene	9.362	152	338693	10.414	ppm		99
53) Dimethylphthalate	9.239	163	249742	10.723	ppm		99
54) m-Dinitrobenzene	9.260	168	41210	13.166	ppm		76
55) 2,6-Dinitrotoluene	9.297	165	57812	12.598	ppm		94
56) o-Dinitrobenzene	9.351	50	45068	13.717	ppm		89
57) Acenaphthene	9.565	153	223048	10.374	ppm		98
58) 3-Nitroaniline	9.490	138	67629	12.570	ppm		100
59) 2,4-Dinitrophenol	9.613	184	19805	14.310	ppm		90
60) Dibenzofuran	9.773	168	311502	10.413	ppm		97
61) 2,4-Dinitrotoluene	9.768	165	75933	12.822	ppm		93
62) 4-Nitrophenol	9.731	109	34740	12.256	ppm	#	78
63) 2,3,5,6-Tetrachlorophenol	9.875	232	57153	11.065	ppm		99
64) 2,3,4,6-Tetrachlorophenol	9.928	232	61665	10.846	ppm		98
65) Fluorene	10.175	166	250963	10.511	ppm		100
66) 4-Chlorophenyl-phenyle...	10.196	204	122569	10.163	ppm		97
67) Diethylphthalate	10.078	149	256201	11.246	ppm		99
68) Thionazin	10.169	97	58897	12.817	ppm		95
69) 4-Nitroaniline	10.212	138	67589	12.313	ppm		100
71) 4,6-Dinitro-2-methylph...	10.244	198	35453	13.808	ppm		93
72) n-Nitrosodiphenylamine	10.335	169	214520	11.668	ppm		99
73) Diphenylamine	10.335	169	214520	10.315	ppm		99
74) 1,2-Diphenylhydrazine	10.378	77	281121	11.028	ppm		98
76) Sulfotep	10.554	97	46219	12.643	ppm		91
77) Phorate	10.699	75	153204	12.594	ppm		100
78) 4-Bromophenyl-phenylether	10.774	248	71386	10.011	ppm		95
79) Hexachlorobenzene	10.822	284	80721	9.760	ppm		99
80) Dimethoate	10.886	87	107034	13.944	ppm		98
81) Simazine	10.950	201	44229	11.016	ppm		98
82) Atrazine	10.993	200	73114	10.543	ppm		94
83) Pentachlorophenol	11.068	266	31791	8.709	ppm		97
84) Phenanthrene	11.308	178	368751	10.493	ppm		99
85) Anthracene	11.373	178	377686	10.423	ppm		98
86) Disulfoton	11.319	88	158988	11.445	ppm		96
87) Carbazole	11.576	167	337900	10.580	ppm		100
88) Methyl Parathion	11.758	109	77633	14.226	ppm		97
89) Di-n-butylphthalate	12.036	149	427585	11.455	ppm		98
90) Ethyl Parathion	12.234	97	50797	15.400	ppm		92
91) Fluoranthene	12.720	202	389163	10.565	ppm		99
93) Benzidine	12.908	184	245451	13.141	ppm		99
94) Pyrene	12.983	202	396885	10.610	ppm		100
96) Famphur	13.774	218	142860	16.082	ppm		98
97) Butylbenzylphthalate	13.870	149	185599	12.629	ppm		99

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06438.D
Sample : ic248-10
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1
Acq On : 29 Jul 2020 1:45 pm Operator: marthav

Quant Time: Jul 29 14:36:04 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

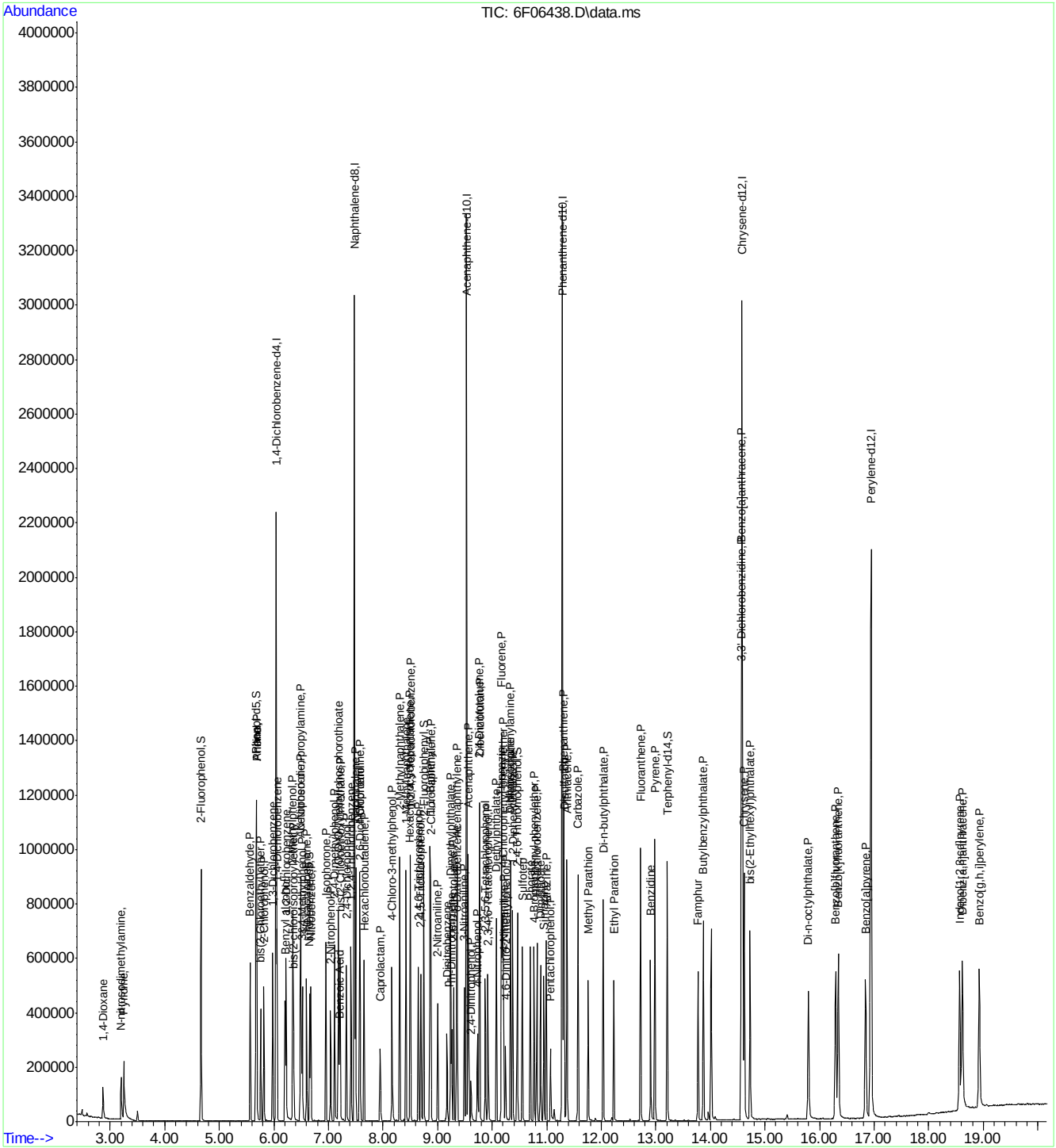
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
98)	3,3'-Dichlorobenzidine	14.566	252	144315	11.475	ppm	98
99)	Benzo[a]anthracene	14.571	228	367572	10.681	ppm	99
100)	Chrysene	14.619	228	360309	10.571	ppm	99
101)	bis(2-Ethylhexyl)phtha...	14.726	149	260224	12.584	ppm	100
103)	Di-n-octylphthalate	15.796	149	419014	12.819	ppm	99
104)	Benzo[b]fluoranthene	16.299	252	341475	10.216	ppm	98
105)	Benzo[k]fluoranthene	16.347	252	364688	10.135	ppm	99
106)	Benzo[a]pyrene	16.844	252	318308	10.232	ppm	100
107)	Indeno[1,2,3-cd]pyrene	18.567	276	302248	10.419	ppm	97
108)	Dibenz[a,h]anthracene	18.615	278	322765	10.183	ppm	98
109)	Benzo[g,h,i]perylene	18.930	276	338780	10.392	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06438.D
Sample : ic248-10
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1
Acq On : 29 Jul 2020 1:45 pm Operator: marthav

Quant Time: Jul 29 14:36:04 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625



Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06439.D
Sample : ic248-25
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1
Acq On : 29 Jul 2020 2:10 pm Operator: marthav

Quant Time: Jul 29 14:38:45 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.045	152	338981	40.00	ppm	0.00
22) Naphthalene-d8	7.479	136	1292284	40.00	ppm	0.00
43) Acenaphthene-d10	9.533	164	685433	40.00	ppm	0.00
70) Phenanthrene-d10	11.287	188	1263350	40.00	ppm	0.00
92) Chrysene-d12	14.587	240	1130091	40.00	ppm	0.00
102) Perylene-d12	16.946	264	1147834	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	4.665	112	617588	51.41	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 51.41%			
9) Phenol-d5	5.676	99	730747	52.90	ppm	0.00
Spiked Amount 100.000	Range 10 - 50		Recovery = 52.90%#			
23) Nitrobenzene-d5	6.660	82	339775	30.39	ppm	0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 60.78%			
47) 2-Fluorobiphenyl	8.752	172	656630	25.66	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 51.32%			
75) 2,4,6-Tribromophenol	10.469	330	208148	55.79	ppm	0.00
Spiked Amount 100.000	Range 33 - 118		Recovery = 55.79%			
95) Terphenyl-d14	13.207	244	769179	26.48	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 52.96%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.868	88	118155	24.436	ppm	100
3) N-nitrosodimethylamine	3.195	42	166240	25.541	ppm	100
4) Pyridine	3.237	79	312237	25.500	ppm	100
5) Benzaldehyde	5.564	106	255705	25.849	ppm	100
6) Aniline	5.687	93	477999	26.225	ppm	52
8) bis(2-Chloroethyl)ether	5.762	93	309583	25.197	ppm	90
10) Phenol	5.692	94	424411	26.452	ppm	79
11) 2-Chlorophenol	5.821	128	314072	25.868	ppm	88
12) 1,3-Dichlorobenzene	5.981	146	341406	24.887	ppm	99
13) 1,4-Dichlorobenzene	6.061	146	345520	24.857	ppm	97
14) 1,2-Dichlorobenzene	6.227	146	328104	25.048	ppm	98
15) Benzyl alcohol	6.206	108	192376	26.592	ppm	98
16) bis(2-chloroisopropyl)...	6.361	45	391954	25.135	ppm	75
17) 2-Methylphenol	6.345	108	280808	26.311	ppm	94
18) Acetophenone	6.495	105	421785	25.587	ppm	98
19) Hexachloroethane	6.602	117	142139	26.097	ppm	92
20) N-Nitroso-di-n-propyla...	6.500	70	218806	26.146	ppm #	71
21) 3&4-Methylphenol	6.521	108	293024	26.865	ppm	97
24) Nitrobenzene	6.682	77	336060	29.034	ppm	98
25) Isophorone	6.955	82	591153	26.042	ppm	100
26) 2-Nitrophenol	7.040	139	165852	38.485	ppm	95
27) 2,4-Dimethylphenol	7.115	107	279420	26.317	ppm	95
28) O,O,O-Triethylphosphor...	7.190	198	147000	25.282	ppm	95
29) bis(2-Chloroethoxy)met...	7.217	93	367516	25.826	ppm	99
30) Benzoic Acid	7.227	105	235467	44.901	ppm	95
31) 2,4-Dichlorophenol	7.329	162	253701	26.904	ppm	99
32) 1,2,4-Trichlorobenzene	7.415	180	279267	24.539	ppm	99
34) Naphthalene	7.500	128	888371	25.344	ppm	100
35) 4-Chloroaniline	7.575	127	383374	26.166	ppm	99
36) 2,6-Dichlorophenol	7.580	162	243517	26.426	ppm	99
37) Hexachlorobutadiene	7.655	225	152699	23.833	ppm	99

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06439.D
Sample : ic248-25
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1
Acq On : 29 Jul 2020 2:10 pm Operator: marthav

Quant Time: Jul 29 14:38:45 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Caprolactam	7.976	113	99057	29.592	ppm	95
39) 4-Chloro-3-methylphenol	8.169	107	259869	27.300	ppm	99
40) 2-Methylnaphthalene	8.308	141	520299	25.635	ppm	100
41) 1-Methylnaphthalene	8.420	142	564290	25.318	ppm	99
42) 1,2,4,5-Tetrachloroben...	8.506	216	264872	24.259	ppm	99
44) Hexachlorocyclopentadiene	8.495	237	177131	31.606	ppm	99
45) 2,4,6-Trichlorophenol	8.650	196	184046	28.515	ppm	98
46) 2,4,5-Trichlorophenol	8.698	196	192337	27.213	ppm	99
48) 1,1'-Biphenyl	8.864	154	708980	25.726	ppm	100
49) 2-Chloronaphthalene	8.875	162	547707	25.684	ppm	99
50) 2-Nitroaniline	9.008	65	175123	37.644	ppm	99
51) p-Dinitrobenzene	9.174	75	109957	36.478	ppm	97
52) Acenaphthylene	9.362	152	840567	26.232	ppm	99
53) Dimethylphthalate	9.244	163	621964	27.104	ppm	100
54) m-Dinitrobenzene	9.260	168	107529	34.869	ppm	96
55) 2,6-Dinitrotoluene	9.303	165	147501	32.623	ppm	97
56) o-Dinitrobenzene	9.356	50	110330	34.084	ppm	93
57) Acenaphthene	9.570	153	550275	25.976	ppm	97
58) 3-Nitroaniline	9.495	138	169701	32.015	ppm	97
59) 2,4-Dinitrophenol	9.618	184	71222	52.230	ppm	91
60) Dibenzofuran	9.773	168	770970	26.159	ppm	96
61) 2,4-Dinitrotoluene	9.773	165	194996	33.421	ppm	98
62) 4-Nitrophenol	9.736	109	91146	32.638	ppm	88
63) 2,3,5,6-Tetrachlorophenol	9.875	232	153420	30.147	ppm	97
64) 2,3,4,6-Tetrachlorophenol	9.928	232	158544	28.303	ppm	96
65) Fluorene	10.180	166	623097	26.487	ppm	99
66) 4-Chlorophenyl-phenyle...	10.196	204	306415	25.788	ppm	98
67) Diethylphthalate	10.084	149	627131	27.941	ppm	99
68) Thionazin	10.175	97	148862	32.880	ppm	97
69) 4-Nitroaniline	10.217	138	174394	32.246	ppm	97
71) 4,6-Dinitro-2-methylph...	10.249	198	108370	42.417	ppm	92
72) n-Nitrosodiphenylamine	10.340	169	528298	28.877	ppm	99
73) Diphenylamine	10.340	169	528298	25.528	ppm	99
74) 1,2-Diphenylhydrazine	10.383	77	685870	27.039	ppm	98
76) Sulfotep	10.554	97	114071	31.357	ppm	98
77) Phorate	10.699	75	385179	31.818	ppm	98
78) 4-Bromophenyl-phenylether	10.774	248	173279	24.420	ppm	97
79) Hexachlorobenzene	10.822	284	199776	24.273	ppm	94
80) Dimethoate	10.891	87	265322	34.737	ppm	98
81) Simazine	10.955	201	109012	27.285	ppm	98
82) Atrazine	10.998	200	180247	26.119	ppm	93
83) Pentachlorophenol	11.073	266	100261	27.602	ppm	98
84) Phenanthrene	11.314	178	905615	25.898	ppm	100
85) Anthracene	11.373	178	933964	25.900	ppm	99
86) Disulfoton	11.324	88	407836	29.503	ppm	96
87) Carbazole	11.581	167	843644	26.544	ppm	100
88) Methyl Parathion	11.763	109	213457	39.308	ppm	95
89) Di-n-butylphthalate	12.036	149	1074462	28.927	ppm	99
90) Ethyl Parathion	12.234	97	136383	41.551	ppm	97
91) Fluoranthene	12.726	202	965906	26.352	ppm	98
93) Benzidine	12.908	184	592731	31.848	ppm	98
94) Pyrene	12.988	202	985310	26.436	ppm	98
96) Famphur	13.779	218	338944	38.293	ppm	94
97) Butylbenzylphthalate	13.870	149	475575	32.476	ppm	99

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06439.D
Sample : ic248-25
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1
Acq On : 29 Jul 2020 2:10 pm Operator: marthav

Quant Time: Jul 29 14:38:45 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

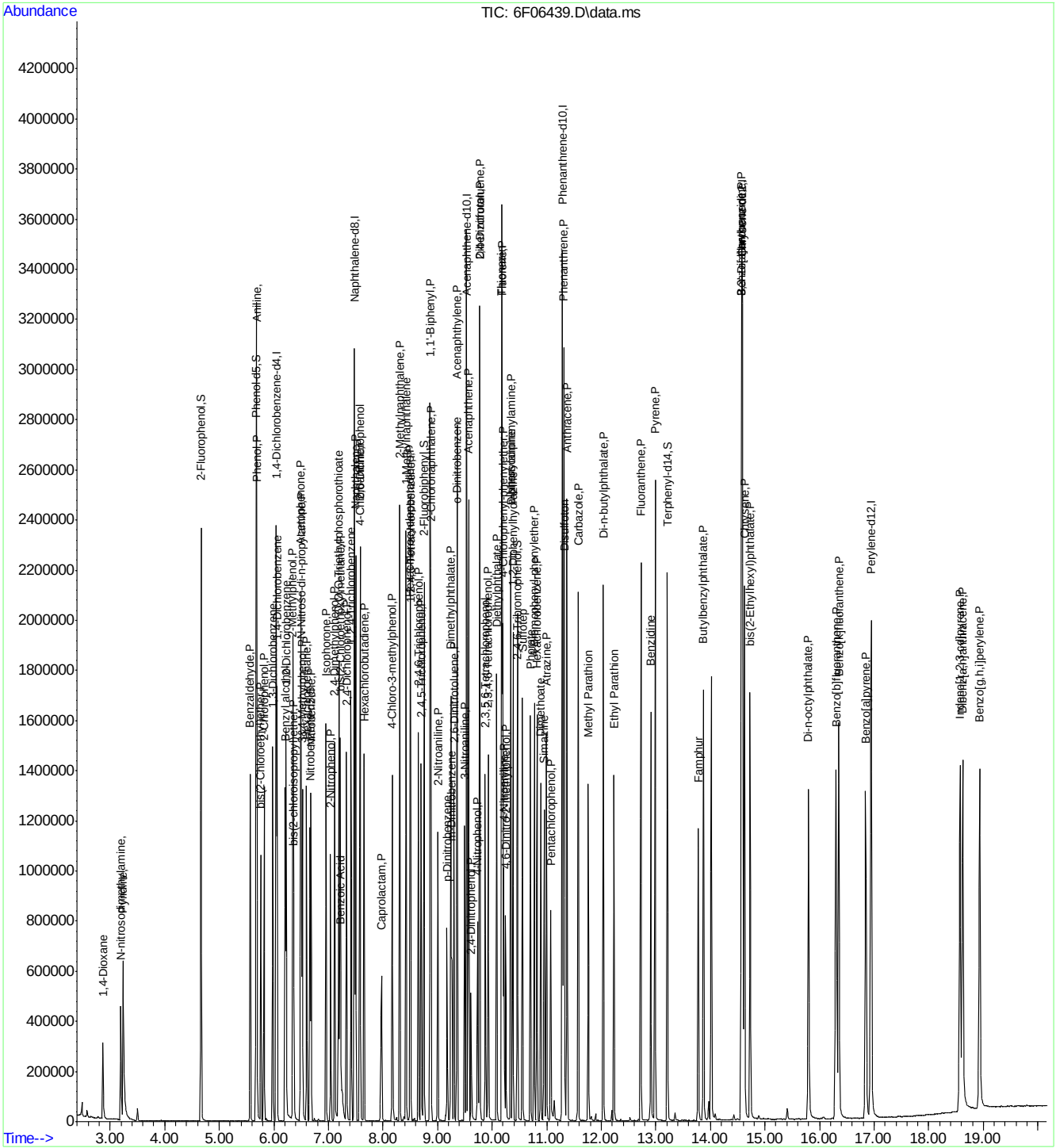
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
98)	3,3'-Dichlorobenzidine	14.571	252	369323	29.471	ppm	99
99)	Benzo[a]anthracene	14.571	228	905609	26.410	ppm	99
100)	Chrysene	14.625	228	884420	26.040	ppm	99
101)	bis(2-Ethylhexyl)phtha...	14.726	149	655979	31.835	ppm	99
103)	Di-n-octylphthalate	15.796	149	1082087	33.016	ppm	100
104)	Benzo[b]fluoranthene	16.304	252	870288	25.967	ppm	98
105)	Benzo[k]fluoranthene	16.352	252	931207	25.809	ppm	99
106)	Benzo[a]pyrene	16.844	252	822487	26.366	ppm	98
107)	Indeno[1,2,3-cd]pyrene	18.572	276	767722	26.392	ppm	99
108)	Dibenz[a,h]anthracene	18.625	278	817093	25.709	ppm	98
109)	Benzo[g,h,i]perylene	18.936	276	837929	25.635	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06439.D
Sample : ic248-25
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1
Acq On : 29 Jul 2020 2:10 pm Operator: marthav

Quant Time: Jul 29 14:38:45 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625



8270D6F072920.m Thu Jul 30 12:55:04 2020 Page: 4

Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 07/30/20 14:11

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06440.D
Sample : icc248-50
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1
Acq On : 29 Jul 2020 2:36 pm Operator: marthav

Quant Time: Jul 29 15:41:07 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.045	152	302884	40.00	ppm	0.00
22) Naphthalene-d8	7.479	136	1170478	40.00	ppm	0.00
43) Acenaphthene-d10	9.533	164	637579	40.00	ppm	0.00
70) Phenanthrene-d10	11.287	188	1169544	40.00	ppm	0.00
92) Chrysene-d12	14.593	240	1074260	40.00	ppm	0.00
102) Perylene-d12	16.951	264	1069323	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	4.671	112	1158365	107.92	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 107.92%#			
9) Phenol-d5	5.682	99	1371442	111.12	ppm	0.00
Spiked Amount 100.000	Range 10 - 50		Recovery = 111.12%#			
23) Nitrobenzene-d5	6.661	82	634627	62.67	ppm	0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 125.34%#			
47) 2-Fluorobiphenyl	8.752	172	1212362	50.92	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 101.84%			
75) 2,4,6-Tribromophenol	10.469	330	396960	114.92	ppm	0.00
Spiked Amount 100.000	Range 33 - 118		Recovery = 114.92%			
95) Terphenyl-d14	13.213	244	1460555	52.89	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 105.78%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.863	88	219459	50.795	ppm	99
3) N-nitrosodimethylamine	3.195	42	308424	53.034	ppm	98
4) Pyridine	3.232	79	584958	53.466	ppm	99
5) Benzaldehyde	5.569	106	481409	54.465	ppm	98
6) Aniline	5.687	93	891958	54.769	ppm	73
8) bis(2-Chloroethyl)ether	5.767	93	576542	52.517	ppm	87
10) Phenol	5.698	94	793480	55.348	ppm	94
11) 2-Chlorophenol	5.821	128	590080	54.392	ppm	90
12) 1,3-Dichlorobenzene	5.981	146	634754	51.784	ppm	99
13) 1,4-Dichlorobenzene	6.061	146	642006	51.690	ppm	96
14) 1,2-Dichlorobenzene	6.227	146	605586	51.741	ppm	100
15) Benzyl alcohol	6.211	108	363729	56.269	ppm	98
16) bis(2-chloroisopropyl)...	6.361	45	716763	51.441	ppm	70
17) 2-Methylphenol	6.350	108	526393	55.199	ppm	98
18) Acetophenone	6.495	105	796504	54.077	ppm	99
19) Hexachloroethane	6.602	117	262937	54.030	ppm	90
20) N-Nitroso-di-n-propyla...	6.505	70	410873	54.949	ppm #	68
21) 3&4-Methylphenol	6.527	108	545880	56.012	ppm	94
24) Nitrobenzene	6.687	77	615441	58.705	ppm	100
25) Isophorone	6.960	82	1097838	53.396	ppm	99
26) 2-Nitrophenol	7.046	139	315749	80.892	ppm	98
27) 2,4-Dimethylphenol	7.120	107	526525	54.752	ppm	98
28) O,O,O-Triethylphosphor...	7.195	198	276548	52.513	ppm	98
29) bis(2-Chloroethoxy)met...	7.222	93	670164	51.995	ppm	99
30) Benzoic Acid	7.249	105	476621m	100.345	ppm	
31) 2,4-Dichlorophenol	7.334	162	472604	55.334	ppm	99
32) 1,2,4-Trichlorobenzene	7.415	180	520718	50.516	ppm	98
34) Naphthalene	7.506	128	1612327	50.785	ppm	100
35) 4-Chloroaniline	7.580	127	716867	54.020	ppm	98
36) 2,6-Dichlorophenol	7.586	162	455458	54.570	ppm	98
37) Hexachlorobutadiene	7.655	225	286188	49.315	ppm	100

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06440.D
Sample : icc248-50
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1
Acq On : 29 Jul 2020 2:36 pm Operator: marthav

Quant Time: Jul 29 15:41:07 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Caprolactam	8.003	113	190019	62.672	ppm	99
39) 4-Chloro-3-methylphenol	8.169	107	491320	56.986	ppm	97
40) 2-Methylnaphthalene	8.313	141	958674	52.148	ppm	98
41) 1-Methylnaphthalene	8.426	142	1047144	51.871	ppm	99
42) 1,2,4,5-Tetrachloroben...	8.506	216	503590	50.923	ppm	99
44) Hexachlorocyclopentadiene	8.500	237	344021	65.991	ppm	99
45) 2,4,6-Trichlorophenol	8.650	196	347603	57.897	ppm	98
46) 2,4,5-Trichlorophenol	8.704	196	369002	56.127	ppm	100
48) 1,1'-Biphenyl	8.864	154	1319141	51.458	ppm	98
49) 2-Chloronaphthalene	8.880	162	1012998	51.068	ppm	99
50) 2-Nitroaniline	9.014	65	332508	76.841	ppm	97
51) p-Dinitrobenzene	9.180	75	216510	77.218	ppm	98
52) Acenaphthylene	9.367	152	1551740	52.061	ppm	99
53) Dimethylphthalate	9.249	163	1158539	54.276	ppm	100
54) m-Dinitrobenzene	9.265	168	210331	73.324	ppm	92
55) 2,6-Dinitrotoluene	9.308	165	282289	67.120	ppm	96
56) o-Dinitrobenzene	9.362	50	200385	66.550	ppm	93
57) Acenaphthene	9.570	153	1017544	51.638	ppm	98
58) 3-Nitroaniline	9.501	138	321096	65.123	ppm	99
59) 2,4-Dinitrophenol	9.618	184	161618	127.417	ppm	91
60) Dibenzofuran	9.779	168	1414469	51.595	ppm	96
61) 2,4-Dinitrotoluene	9.779	165	378169	69.680	ppm	94
62) 4-Nitrophenol	9.741	109	189197	72.834	ppm	97
63) 2,3,5,6-Tetrachlorophenol	9.880	232	296325	62.598	ppm	98
64) 2,3,4,6-Tetrachlorophenol	9.929	232	302727	58.099	ppm	95
65) Fluorene	10.185	166	1155042	52.784	ppm	99
66) 4-Chlorophenyl-phenyle...	10.196	204	563047	50.944	ppm	98
67) Diethylphthalate	10.089	149	1175941	56.325	ppm	100
68) Thionazin	10.185	97	280191	66.532	ppm	99
69) 4-Nitroaniline	10.233	138	325091	64.622	ppm	99
71) 4,6-Dinitro-2-methylph...	10.260	198	226572	95.794	ppm	88
72) n-Nitrosodiphenylamine	10.346	169	989717	58.437	ppm	99
73) Diphenylamine	10.346	169	989717	51.659	ppm	99
74) 1,2-Diphenylhydrazine	10.383	77	1259631	53.641	ppm	100
76) Sulfotep	10.560	97	214064	63.564	ppm	81
77) Phorate	10.704	75	727157	64.886	ppm	99
78) 4-Bromophenyl-phenylether	10.774	248	335268	51.039	ppm	97
79) Hexachlorobenzene	10.827	284	375140	49.236	ppm	100
80) Dimethoate	10.897	87	509961	72.120	ppm	98
81) Simazine	10.966	201	202283	54.692	ppm	98
82) Atrazine	11.004	200	343315	53.739	ppm	97
83) Pentachlorophenol	11.073	266	218237	64.901	ppm	98
84) Phenanthrene	11.319	178	1691143	52.240	ppm	100
85) Anthracene	11.378	178	1744432	52.256	ppm	100
86) Disulfoton	11.325	88	753938	58.914	ppm	98
87) Carbazole	11.581	167	1575784	53.557	ppm	100
88) Methyl Parathion	11.763	109	426294	84.799	ppm	98
89) Di-n-butylphthalate	12.041	149	2030151	59.041	ppm	99
90) Ethyl Parathion	12.234	97	270282	88.949	ppm	99
91) Fluoranthene	12.726	202	1828129	53.875	ppm	100
93) Benzidine	12.913	184	1101962	62.286	ppm	99
94) Pyrene	12.993	202	1863222	52.588	ppm	96
96) Famphur	13.780	218	618110	73.462	ppm	97
97) Butylbenzylphthalate	13.876	149	907704	65.206	ppm	96

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06440.D
Sample : icc248-50
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1
Acq On : 29 Jul 2020 2:36 pm Operator: marthav

Quant Time: Jul 29 15:41:07 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

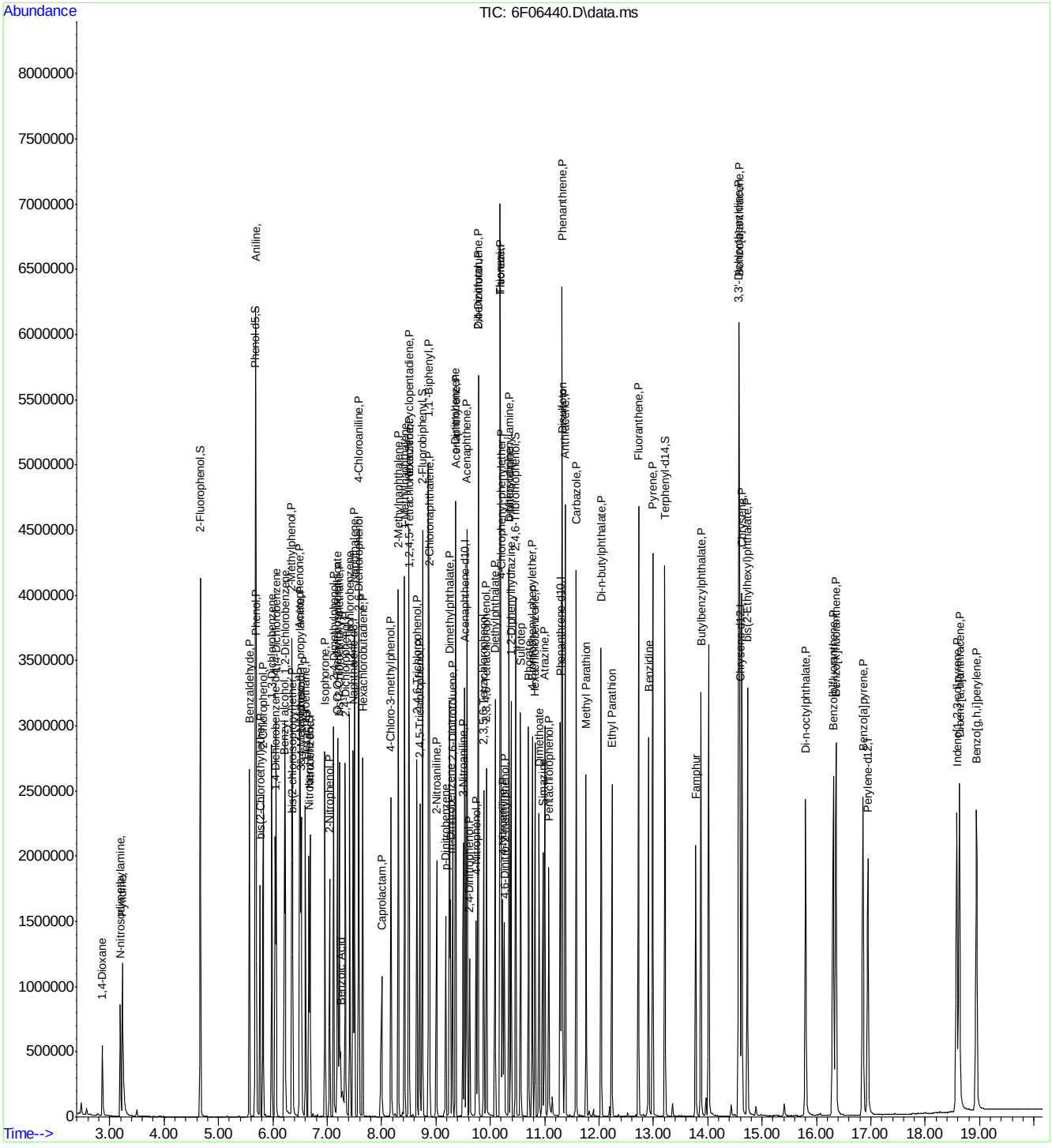
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
98)	3,3'-Dichlorobenzidine	14.571	252	701774	58.910	ppm	99
99)	Benzo[a]anthracene	14.576	228	1749149	53.662	ppm	100
100)	Chrysene	14.630	228	1667303	51.642	ppm	100
101)	bis(2-Ethylhexyl)phtha...	14.732	149	1252787	63.958	ppm	99
103)	Di-n-octylphthalate	15.801	149	2106608	68.994	ppm	99
104)	Benzo[b]fluoranthene	16.309	252	1677650	53.732	ppm	99
105)	Benzo[k]fluoranthene	16.358	252	1760852	52.386	ppm	100
106)	Benzo[a]pyrene	16.855	252	1570308	54.035	ppm	100
107)	Indeno[1,2,3-cd]pyrene	18.583	276	1450692	53.533	ppm	97
108)	Dibenz[a,h]anthracene	18.631	278	1602436	54.121	ppm	99
109)	Benzo[g,h,i]perylene	18.946	276	1559067	51.199	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06440.D
Sample : icc248-50
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1
Acq On : 29 Jul 2020 2:36 pm Operator: marthav

Quant Time: Jul 29 15:41:07 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625



Manual Integration Approval Summary

Sample Number: S6F248-ICC248
Lab FileID: 6F06440.D
Injection Time: 07/29/20 14:36

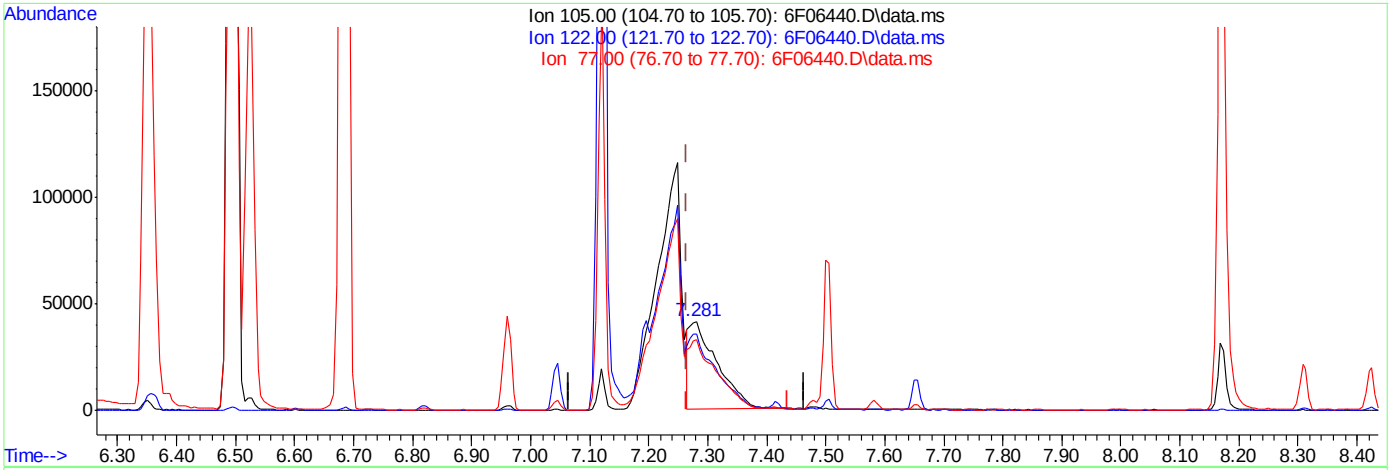
Method: SW846 8270D
Analyst approved: 07/30/20 13:11 Martha Valls
Supervisor approved: 07/30/20 14:11 Nicole McCampbell

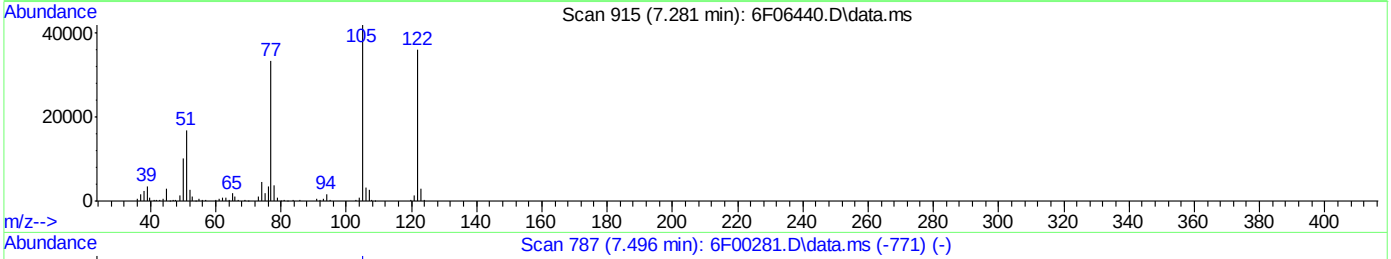
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic Acid	65-85-0		7.25	Split peak

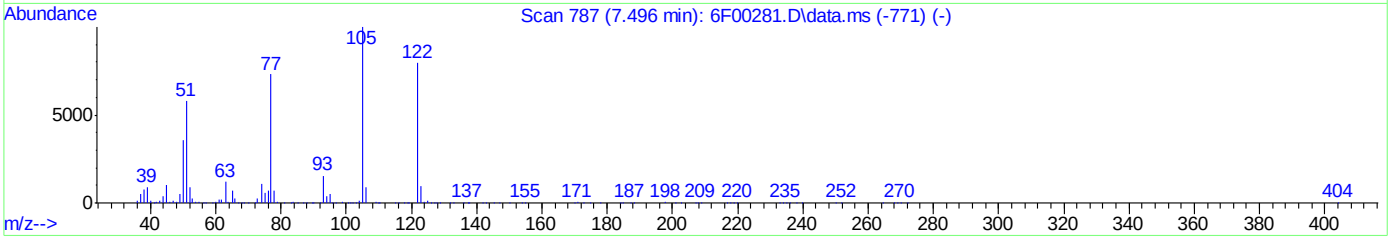
Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06440.D
Sample : icc248-50
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1
Acq On : 29 Jul 2020 2:36 pm Operator: marthav

Quant Time: Jul 29 15:40:25 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625







TIC: 6F06440.D\data.ms

(30) Benzoic Acid

7.281min (+0.016) 28.05ppm

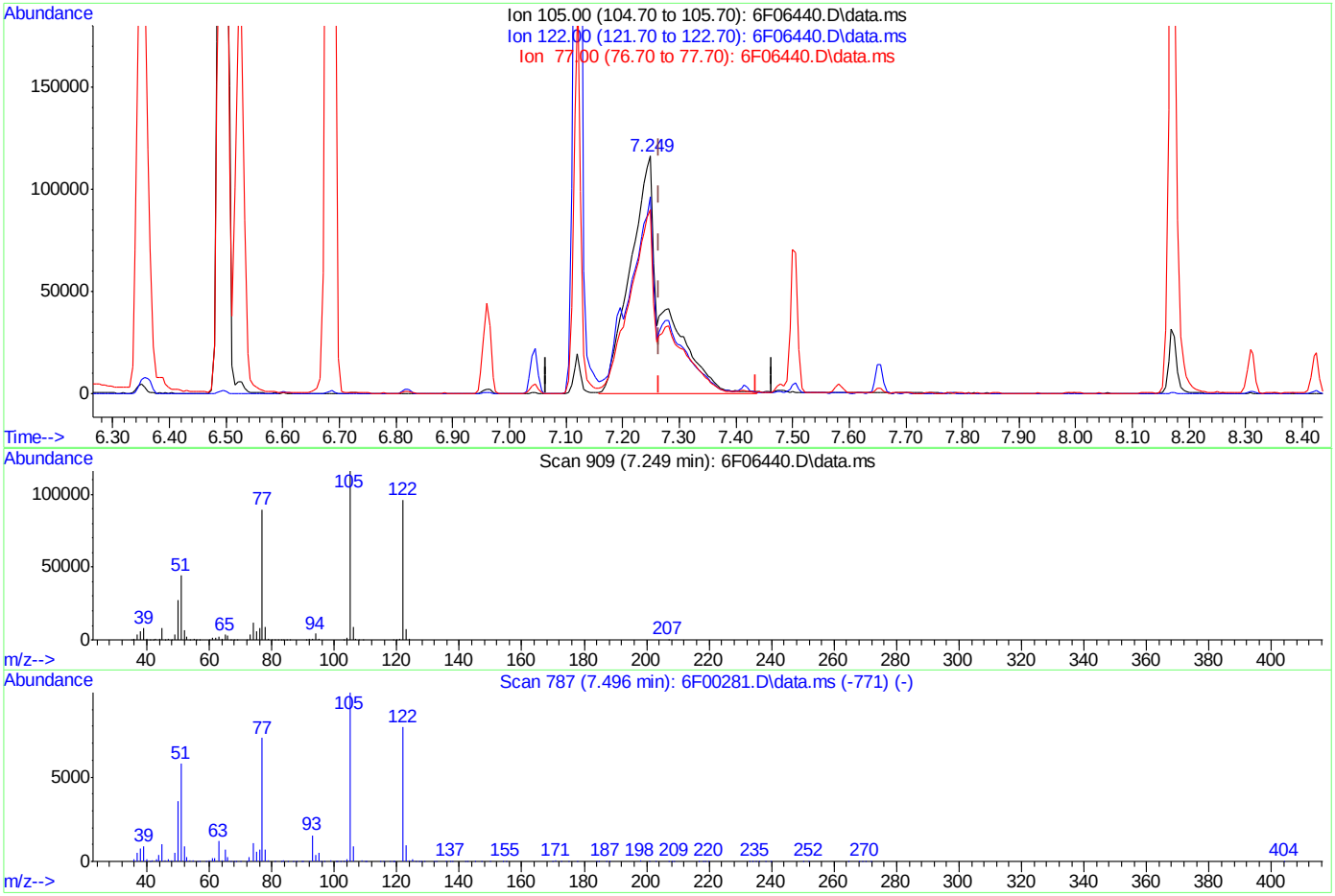
response 133235

Ion	Exp%	Act%
105.00	100	100
122.00	81.90	91.59
77.00	77.70	83.14
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06440.D
Sample : icc248-50
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1
Acq On : 29 Jul 2020 2:36 pm Operator: marthav

Quant Time: Jul 29 15:40:25 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625



TIC: 6F06440.D\data.ms

(30) Benzoic Acid

7.249min (-0.016) 100.35ppm m

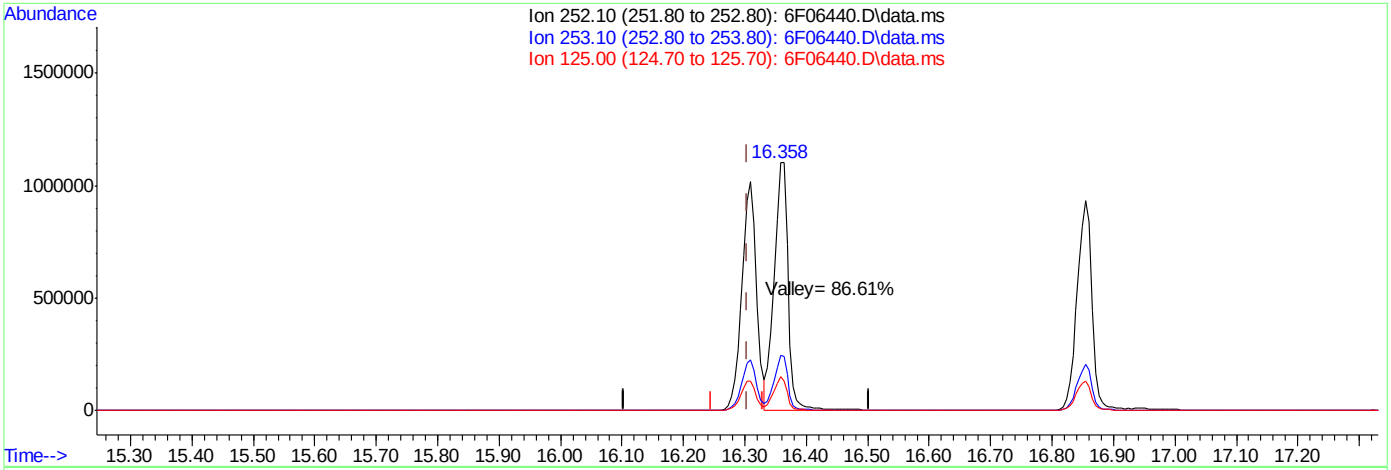
response 476621

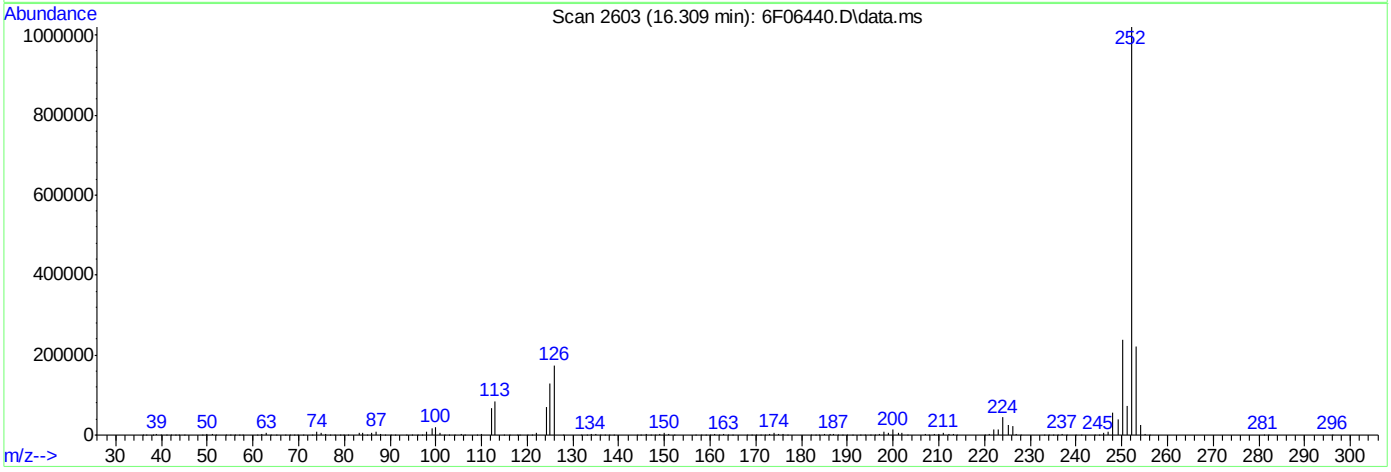
Ion	Exp%	Act%
105.00	100	100
122.00	81.90	83.05
77.00	77.70	77.28
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06440.D
Sample : icc248-50
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1
Acq On : 29 Jul 2020 2:36 pm Operator: marthav

Quant Time: Jul 29 15:41:07 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625





TIC: 6F06440.D\data.ms

(104) Benzo[b]fluoranthene (P)

16.309min (+0.005) 53.73ppm

response 1677650

Ion	Exp%	Act%
252.10	100	100
253.10	22.40	21.80
125.00	13.30	12.80
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 07/30/20 14:11

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06441.D
Sample : ic248-60
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1
Acq On : 29 Jul 2020 3:02 pm Operator: marthav

Quant Time: Jul 29 15:47:41 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	6.045	152	313687	40.00	ppm		0.00
22) Naphthalene-d8	7.479	136	1196299	40.00	ppm		0.00
43) Acenaphthene-d10	9.533	164	638048	40.00	ppm		0.00
70) Phenanthrene-d10	11.287	188	1185294	40.00	ppm		0.00
92) Chrysene-d12	14.593	240	1081339	40.00	ppm		0.00
102) Perylene-d12	16.951	264	1054339	40.00	ppm		0.00
System Monitoring Compounds							
7) 2-Fluorophenol	4.671	112	1467791	132.04	ppm		0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 132.04%#				
9) Phenol-d5	5.687	99	1728253	135.20	ppm		0.01
Spiked Amount 100.000	Range 10 - 50		Recovery = 135.20%#				
23) Nitrobenzene-d5	6.666	82	810432	78.30	ppm		0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 156.60%#				
47) 2-Fluorobiphenyl	8.752	172	1508400	63.31	ppm		0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 126.62%#				
75) 2,4,6-Tribromophenol	10.474	330	507940	145.10	ppm		0.00
Spiked Amount 100.000	Range 33 - 118		Recovery = 145.10%#				
95) Terphenyl-d14	13.213	244	1849036	66.52	ppm		0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 133.04%#				
Target Compounds							Qvalue
2) 1,4-Dioxane	2.863	88	280871	62.771	ppm		99
3) N-nitrosodimethylamine	3.195	42	387788	64.384	ppm		98
4) Pyridine	3.232	79	740510	65.353	ppm		99
5) Benzaldehyde	5.569	106	599187	65.455	ppm		97
6) Aniline	5.692	93	1126658	66.798	ppm		63
8) bis(2-Chloroethyl)ether	5.767	93	733419	64.506	ppm		87
10) Phenol	5.698	94	997274	67.168	ppm		87
11) 2-Chlorophenol	5.821	128	742039	66.044	ppm		91
12) 1,3-Dichlorobenzene	5.981	146	801907	63.168	ppm		99
13) 1,4-Dichlorobenzene	6.067	146	811904	63.118	ppm		97
14) 1,2-Dichlorobenzene	6.227	146	765076	63.116	ppm		99
15) Benzyl alcohol	6.211	108	450660	67.316	ppm		98
16) bis(2-chloroisopropyl)...	6.361	45	900279	62.387	ppm		65
17) 2-Methylphenol	6.350	108	664944	67.327	ppm		97
18) Acetophenone	6.500	105	992920	65.091	ppm		99
19) Hexachloroethane	6.602	117	334507	66.369	ppm		90
20) N-Nitroso-di-n-propyla...	6.511	70	513194	66.269	ppm	#	67
21) 3&4-Methylphenol	6.527	108	679850	67.356	ppm		97
24) Nitrobenzene	6.687	77	775090	72.337	ppm		99
25) Isophorone	6.965	82	1392390	66.260	ppm		98
26) 2-Nitrophenol	7.046	139	400979	100.510	ppm		98
27) 2,4-Dimethylphenol	7.120	107	664303	67.588	ppm		96
28) O,O,O-Triethylphosphor...	7.195	198	345579	64.204	ppm		95
29) bis(2-Chloroethoxy)met...	7.222	93	849093	64.455	ppm		100
30) Benzoic Acid	7.260	105	608998m	125.448	ppm		
31) 2,4-Dichlorophenol	7.334	162	591581	67.769	ppm		99
32) 1,2,4-Trichlorobenzene	7.415	180	661287	62.769	ppm		99
34) Naphthalene	7.506	128	2037624	62.796	ppm		100
35) 4-Chloroaniline	7.580	127	890965	65.690	ppm		99
36) 2,6-Dichlorophenol	7.586	162	575028	67.409	ppm		100
37) Hexachlorobutadiene	7.655	225	359147	60.552	ppm		99

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06441.D
Sample : ic248-60
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1
Acq On : 29 Jul 2020 3:02 pm Operator: marthav

Quant Time: Jul 29 15:47:41 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38)	Caprolactam	8.014	113	239634	77.331	ppm		100
39)	4-Chloro-3-methylphenol	8.174	107	611603	69.406	ppm		99
40)	2-Methylnaphthalene	8.313	141	1192839	63.486	ppm		99
41)	1-Methylnaphthalene	8.426	142	1327232	64.327	ppm		100
42)	1,2,4,5-Tetrachloroben...	8.506	216	632783	62.606	ppm		99
44)	Hexachlorocyclopentadiene	8.500	237	439521	84.248	ppm		99
45)	2,4,6-Trichlorophenol	8.656	196	438334	72.956	ppm		99
46)	2,4,5-Trichlorophenol	8.704	196	467397	71.041	ppm		99
48)	1,1'-Biphenyl	8.870	154	1658775	64.659	ppm		100
49)	2-Chloronaphthalene	8.880	162	1281669	64.565	ppm		99
50)	2-Nitroaniline	9.014	65	419044	96.768	ppm		100
51)	p-Dinitrobenzene	9.185	75	279148	99.485	ppm		93
52)	Acenaphthylene	9.367	152	1947651	65.296	ppm		100
53)	Dimethylphthalate	9.249	163	1455304	68.128	ppm		99
54)	m-Dinitrobenzene	9.271	168	268831	93.648	ppm		84
55)	2,6-Dinitrotoluene	9.308	165	354956	84.336	ppm		94
56)	o-Dinitrobenzene	9.367	50	251112	83.336	ppm		95
57)	Acenaphthene	9.576	153	1279871	64.903	ppm		99
58)	3-Nitroaniline	9.506	138	400686	81.206	ppm		95
59)	2,4-Dinitrophenol	9.624	184	215304	169.618	ppm		98
60)	Dibenzofuran	9.779	168	1765413	64.348	ppm		92
61)	2,4-Dinitrotoluene	9.779	165	477858	87.984	ppm		95
62)	4-Nitrophenol	9.741	109	240560	92.539	ppm		97
63)	2,3,5,6-Tetrachlorophenol	9.880	232	378328	79.862	ppm		99
64)	2,3,4,6-Tetrachlorophenol	9.934	232	388434	74.493	ppm		98
65)	Fluorene	10.185	166	1459593	66.652	ppm		99
66)	4-Chlorophenyl-phenyle...	10.201	204	706497	63.876	ppm		97
67)	Diethylphthalate	10.094	149	1480592	70.865	ppm		99
68)	Thionazin	10.185	97	344882	81.833	ppm		99
69)	4-Nitroaniline	10.239	138	410506	81.541	ppm		99
71)	4,6-Dinitro-2-methylph...	10.260	198	296376	123.642	ppm	#	54
72)	n-Nitrosodiphenylamine	10.346	169	1255183	73.126	ppm		99
73)	Diphenylamine	10.346	169	1255183	64.645	ppm		99
74)	1,2-Diphenylhydrazine	10.389	77	1578337	66.320	ppm		97
76)	Sulfotep	10.560	97	267021	78.235	ppm		89
77)	Phorate	10.704	75	916738	80.716	ppm		99
78)	4-Bromophenyl-phenylether	10.779	248	423125	63.558	ppm		96
79)	Hexachlorobenzene	10.827	284	476331	61.687	ppm		95
80)	Dimethoate	10.902	87	642598	89.671	ppm		98
81)	Simazine	10.972	201	251635	67.131	ppm		99
82)	Atrazine	11.009	200	435589	67.277	ppm		91
83)	Pentachlorophenol	11.078	266	283930	83.315	ppm		99
84)	Phenanthrene	11.319	178	2134541	65.061	ppm		100
85)	Anthracene	11.383	178	2198297	64.977	ppm		99
86)	Disulfoton	11.325	88	949858	73.237	ppm		98
87)	Carbazole	11.587	167	1962659	65.820	ppm		99
88)	Methyl Parathion	11.768	109	537451	105.490	ppm		94
89)	Di-n-butylphthalate	12.041	149	2551480	73.216	ppm		99
90)	Ethyl Parathion	12.239	97	344068	111.727	ppm		94
91)	Fluoranthene	12.731	202	2293584	66.694	ppm		98
93)	Benzidine	12.913	184	1369070	76.878	ppm		98
94)	Pyrene	12.993	202	2335139	65.476	ppm		99
96)	Famphur	13.785	218	733759	86.636	ppm		93
97)	Butylbenzylphthalate	13.876	149	1156661	82.546	ppm		99

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06441.D
Sample : ic248-60
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1
Acq On : 29 Jul 2020 3:02 pm Operator: marthav

Quant Time: Jul 29 15:47:41 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

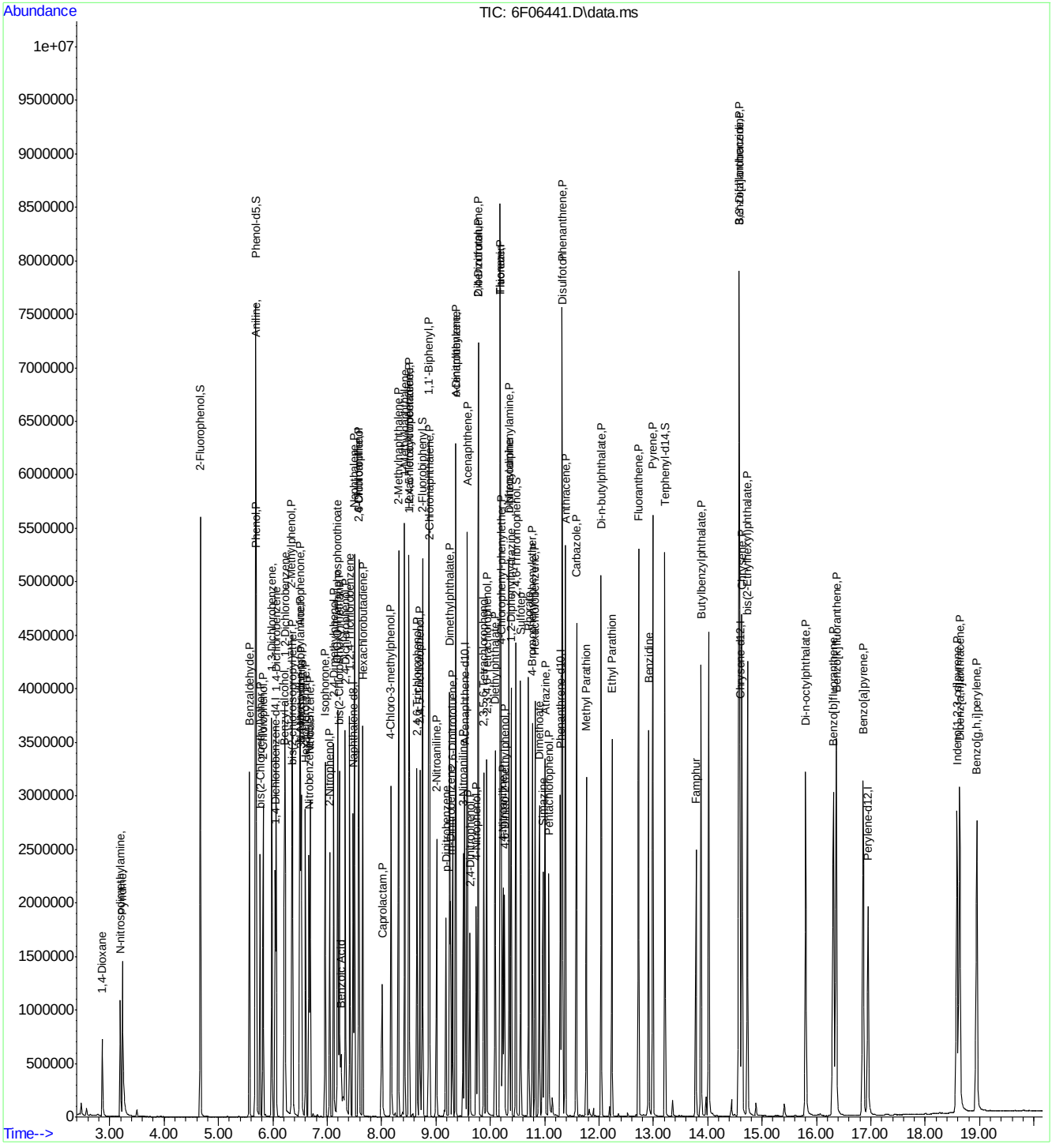
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
98)	3,3'-Dichlorobenzidine	14.576	252	873562	72.850	ppm	100
99)	Benzo[a]anthracene	14.576	228	2212758	67.440	ppm	100
100)	Chrysene	14.635	228	2098961	64.587	ppm	100
101)	bis(2-Ethylhexyl)phtha...	14.732	149	1601480	81.224	ppm	99
103)	Di-n-octylphthalate	15.801	149	2678244	88.963	ppm	99
104)	Benzo[b]fluoranthene	16.315	252	2121346	68.908	ppm	98
105)	Benzo[k]fluoranthene	16.368	252	2178875	65.744	ppm	99
106)	Benzo[a]pyrene	16.860	252	1957739	68.324	ppm	100
107)	Indeno[1,2,3-cd]pyrene	18.588	276	1793215	67.113	ppm	97
108)	Dibenz[a,h]anthracene	18.636	278	1950896	66.826	ppm	98
109)	Benzo[g,h,i]perylene	18.952	276	1884136	62.753	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06441.D
Sample : ic248-60
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1
Acq On : 29 Jul 2020 3:02 pm Operator: marthav

Quant Time: Jul 29 15:47:41 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625



Manual Integration Approval Summary

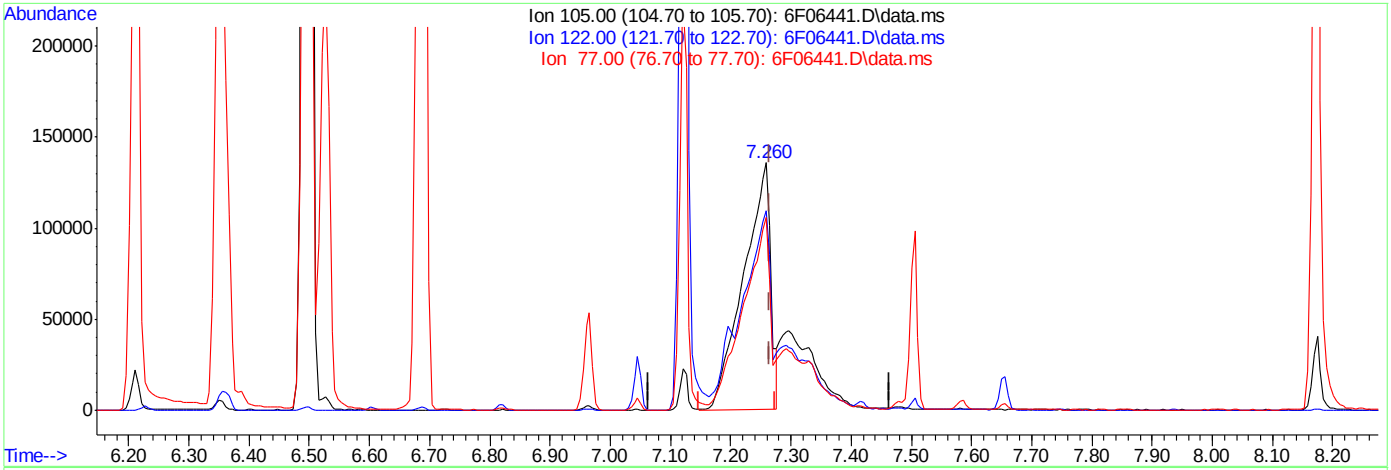
Sample Number:	S6F248-IC248	**Method:**	SW846 8270D
Lab FileID:	6F06441.D	**Analyst approved:**	07/30/20 13:11 Martha Valls
Injection Time:	07/29/20 15:02	**Supervisor approved:**	07/30/20 14:11 Nicole McCampbell

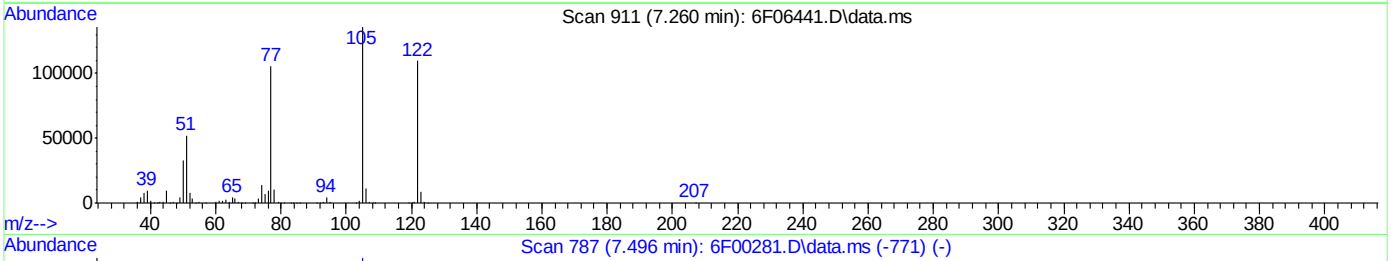
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic Acid	65-85-0		7.26	Split peak

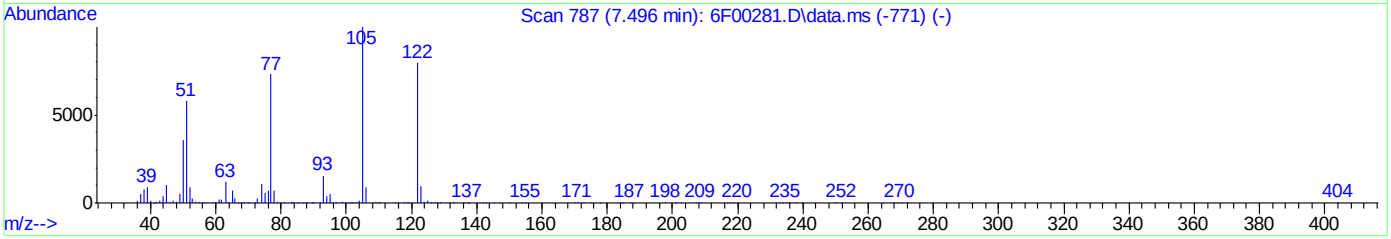
Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06441.D
Sample : ic248-60
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1
Acq On : 29 Jul 2020 3:02 pm Operator: marthav

Quant Time: Jul 29 15:46:07 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625







TIC: 6F06441.D\data.ms

(30) Benzoic Acid

7.260min (-0.005) 87.24ppm

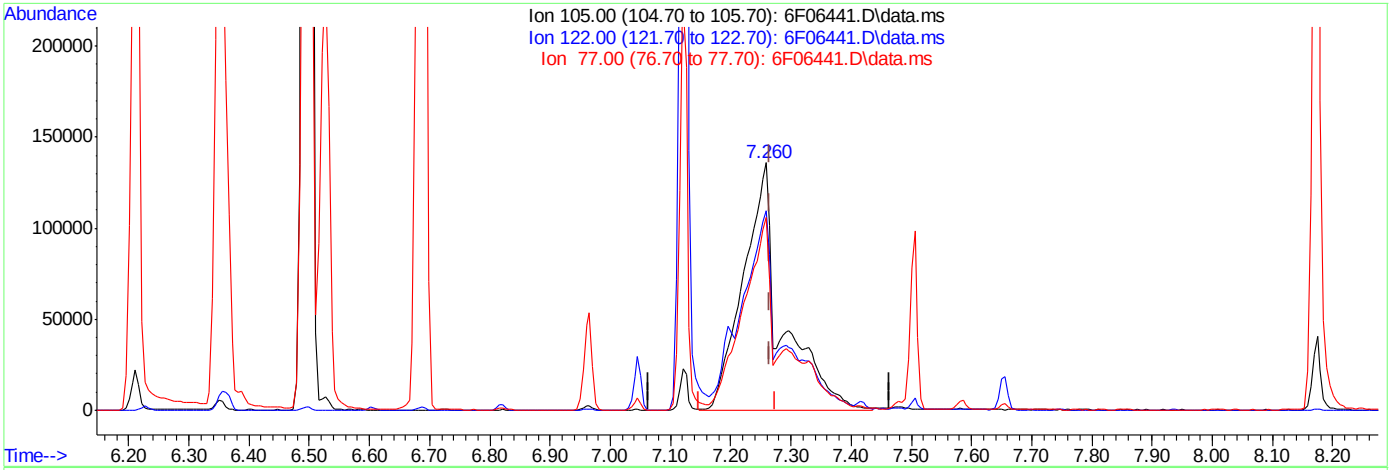
response 423495

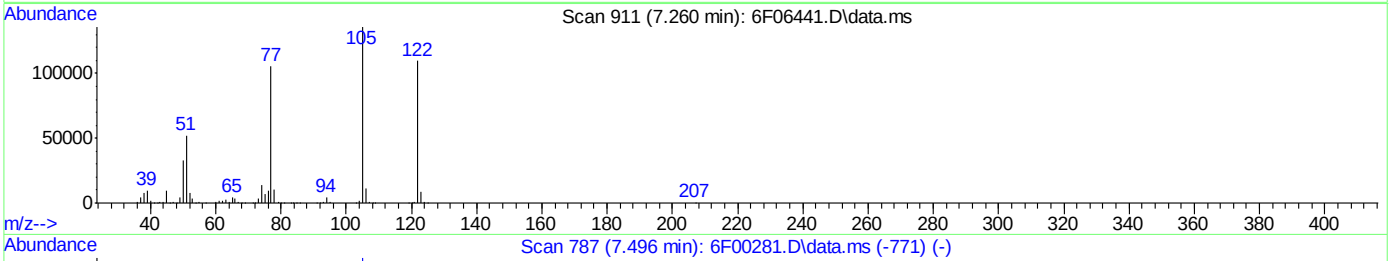
Ion	Exp%	Act%
105.00	100	100
122.00	81.90	73.83
77.00	77.70	75.68
0.00	0.00	0.00

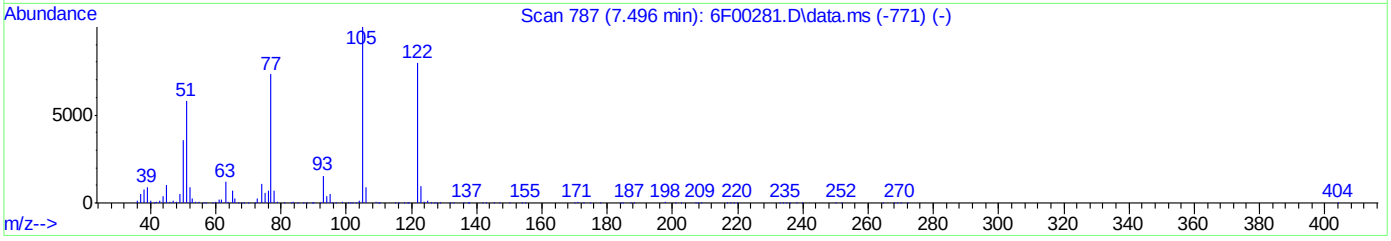
Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06441.D
Sample : ic248-60
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1
Acq On : 29 Jul 2020 3:02 pm Operator: marthav

Quant Time: Jul 29 15:46:07 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625







TIC: 6F06441.D\data.ms

(30) Benzoic Acid

7.260min (-0.005) 125.45ppm m

response 608998

Ion	Exp%	Act%
105.00	100	100
122.00	81.90	80.64
77.00	77.70	77.78
0.00	0.00	0.00

6F06442.D

Manual Integrations APPROVED (compounds with "m" flag)

Nicole McCampbell 07/30/20 14:11

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06442.D
Sample : ic248-75
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1
Acq On : 29 Jul 2020 3:28 pm Operator: marthav

Quant Time: Jul 29 15:50:01 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.045	152	311921	40.00	ppm	0.00
22) Naphthalene-d8	7.479	136	1183929	40.00	ppm	0.00
43) Acenaphthene-d10	9.533	164	634974	40.00	ppm	0.00
70) Phenanthrene-d10	11.292	188	1180183	40.00	ppm	0.00
92) Chrysene-d12	14.598	240	1061055	40.00	ppm	0.01
102) Perylene-d12	16.951	264	1024599	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	4.671	112	1826643	165.25	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 165.25%#			
9) Phenol-d5	5.687	99	2149007	169.07	ppm	0.01
Spiked Amount 100.000	Range 10 - 50		Recovery = 169.07%#			
23) Nitrobenzene-d5	6.666	82	994594	97.10	ppm	0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 194.20%#			
47) 2-Fluorobiphenyl	8.757	172	1851031	78.07	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 156.14%#			
75) 2,4,6-Tribromophenol	10.474	330	629853	180.70	ppm	0.00
Spiked Amount 100.000	Range 33 - 118		Recovery = 180.70%#			
95) Terphenyl-d14	13.212	244	2273959	83.37	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 166.74%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.863	88	349434	78.536	ppm	99
3) N-nitrosodimethylamine	3.200	42	482569	80.574	ppm	96
4) Pyridine	3.232	79	919153	81.578	ppm	99
5) Benzaldehyde	5.569	106	718996	78.988	ppm	99
6) Aniline	5.692	93	1396654	83.274	ppm	73
8) bis(2-Chloroethyl)ether	5.767	93	901081	79.701	ppm	89
10) Phenol	5.703	94	1234356	83.606	ppm	99
11) 2-Chlorophenol	5.826	128	925434	82.833	ppm	88
12) 1,3-Dichlorobenzene	5.981	146	988347	78.295	ppm	99
13) 1,4-Dichlorobenzene	6.067	146	998004	78.025	ppm	98
14) 1,2-Dichlorobenzene	6.227	146	948522	78.693	ppm	98
15) Benzyl alcohol	6.216	108	572549	86.007	ppm	98
16) bis(2-chloroisopropyl)...	6.361	45	1111663	77.471	ppm	59
17) 2-Methylphenol	6.350	108	823864	83.890	ppm	95
18) Acetophenone	6.500	105	1227427	80.920	ppm	99
19) Hexachloroethane	6.607	117	407620	81.334	ppm	98
20) N-Nitroso-di-n-propyla...	6.516	70	638274	82.888	ppm #	65
21) 3&4-Methylphenol	6.527	108	850037	84.694	ppm	99
24) Nitrobenzene	6.687	77	956344	90.186	ppm	98
25) Isophorone	6.965	82	1717350	82.578	ppm	99
26) 2-Nitrophenol	7.045	139	499893	126.613	ppm	96
27) 2,4-Dimethylphenol	7.126	107	822669	84.575	ppm	98
28) O,O,O-Triethylphosphor...	7.195	198	432186	81.134	ppm	91
29) bis(2-Chloroethoxy)met...	7.227	93	1054141	80.857	ppm	99
30) Benzoic Acid	7.270	105	757042m	157.573	ppm	
31) 2,4-Dichlorophenol	7.340	162	735556	85.143	ppm	98
32) 1,2,4-Trichlorobenzene	7.420	180	813186	77.993	ppm	98
34) Naphthalene	7.505	128	2492044	77.602	ppm	99
35) 4-Chloroaniline	7.586	127	1104727	82.301	ppm	98
36) 2,6-Dichlorophenol	7.591	162	714431	84.626	ppm	98
37) Hexachlorobutadiene	7.655	225	445669	75.924	ppm	99

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06442.D
Sample : ic248-75
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1
Acq On : 29 Jul 2020 3:28 pm Operator: marthav

Quant Time: Jul 29 15:50:01 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38)	Caprolactam	8.030	113	295766	96.442	ppm	94
39)	4-Chloro-3-methylphenol	8.174	107	761276	87.294	ppm	98
40)	2-Methylnaphthalene	8.313	141	1475647	79.358	ppm	99
41)	1-Methylnaphthalene	8.425	142	1635977	80.119	ppm	99
42)	1,2,4,5-Tetrachloroben...	8.511	216	785716	78.549	ppm	100
44)	Hexachlorocyclopentadiene	8.500	237	546544	105.269	ppm	98
45)	2,4,6-Trichlorophenol	8.655	196	542140	90.670	ppm	99
46)	2,4,5-Trichlorophenol	8.704	196	577098	88.140	ppm	99
48)	1,1'-Biphenyl	8.869	154	2033706	79.658	ppm	99
49)	2-Chloronaphthalene	8.885	162	1580469	80.002	ppm	99
50)	2-Nitroaniline	9.014	65	518967	120.422	ppm	97
51)	p-Dinitrobenzene	9.185	75	345931	123.883	ppm	98
52)	Acenaphthylene	9.367	152	2381291	80.220	ppm	99
53)	Dimethylphthalate	9.254	163	1796451	84.506	ppm	99
54)	m-Dinitrobenzene	9.271	168	332353	116.337	ppm	89
55)	2,6-Dinitrotoluene	9.313	165	437547	104.462	ppm	92
56)	o-Dinitrobenzene	9.372	50	303517	101.215	ppm	98
57)	Acenaphthene	9.575	153	1577280	80.372	ppm	99
58)	3-Nitroaniline	9.511	138	504585	102.758	ppm	91
59)	2,4-Dinitrophenol	9.629	184	277086	219.347	ppm	95
60)	Dibenzofuran	9.779	168	2167977	79.404	ppm	94
61)	2,4-Dinitrotoluene	9.784	165	596818	110.419	ppm	92
62)	4-Nitrophenol	9.747	109	296797	114.725	ppm	98
63)	2,3,5,6-Tetrachlorophenol	9.886	232	474197	100.584	ppm	97
64)	2,3,4,6-Tetrachlorophenol	9.934	232	476958	91.913	ppm	95
65)	Fluorene	10.185	166	1790175	82.144	ppm	98
66)	4-Chlorophenyl-phenyle...	10.201	204	886142	80.506	ppm	97
67)	Diethylphthalate	10.094	149	1834588	88.233	ppm	100
68)	Thionazin	10.190	97	422507	100.737	ppm	99
69)	4-Nitroaniline	10.244	138	510832	101.960	ppm	99
71)	4,6-Dinitro-2-methylph...	10.265	198	370555	155.258	ppm	77
72)	n-Nitrosodiphenylamine	10.351	169	1537243	89.946	ppm	99
73)	Diphenylamine	10.351	169	1537243	79.515	ppm	99
74)	1,2-Diphenylhydrazine	10.388	77	1927519	81.343	ppm	98
76)	Sulfotep	10.560	97	327321	96.318	ppm	98
77)	Phorate	10.704	75	1135599	100.419	ppm	98
78)	4-Bromophenyl-phenylether	10.779	248	524530	79.132	ppm	97
79)	Hexachlorobenzene	10.832	284	592591	77.075	ppm	98
80)	Dimethoate	10.907	87	775394	108.670	ppm	99
81)	Simazine	10.977	201	309746	82.992	ppm	97
82)	Atrazine	11.009	200	525593	81.530	ppm	99
83)	Pentachlorophenol	11.078	266	353272	104.111	ppm	98
84)	Phenanthrene	11.319	178	2596380	79.481	ppm	100
85)	Anthracene	11.383	178	2663084	79.056	ppm	100
86)	Disulfoton	11.330	88	1164170	90.150	ppm	97
87)	Carbazole	11.586	167	2436518	82.065	ppm	100
88)	Methyl Parathion	11.768	109	655301	129.178	ppm	96
89)	Di-n-butylphthalate	12.041	149	3088931	89.022	ppm	100
90)	Ethyl Parathion	12.239	97	423578	138.142	ppm	98
91)	Fluoranthene	12.731	202	2825696	82.523	ppm	99
93)	Benzidine	12.913	184	1621724	92.806	ppm	98
94)	Pyrene	12.993	202	2821418	80.624	ppm	100
96)	Famphur	13.785	218	835781	100.568	ppm	94
97)	Butylbenzylphthalate	13.876	149	1410454	102.583	ppm	100

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06442.D
Sample : ic248-75
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1
Acq On : 29 Jul 2020 3:28 pm Operator: marthav

Quant Time: Jul 29 15:50:01 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

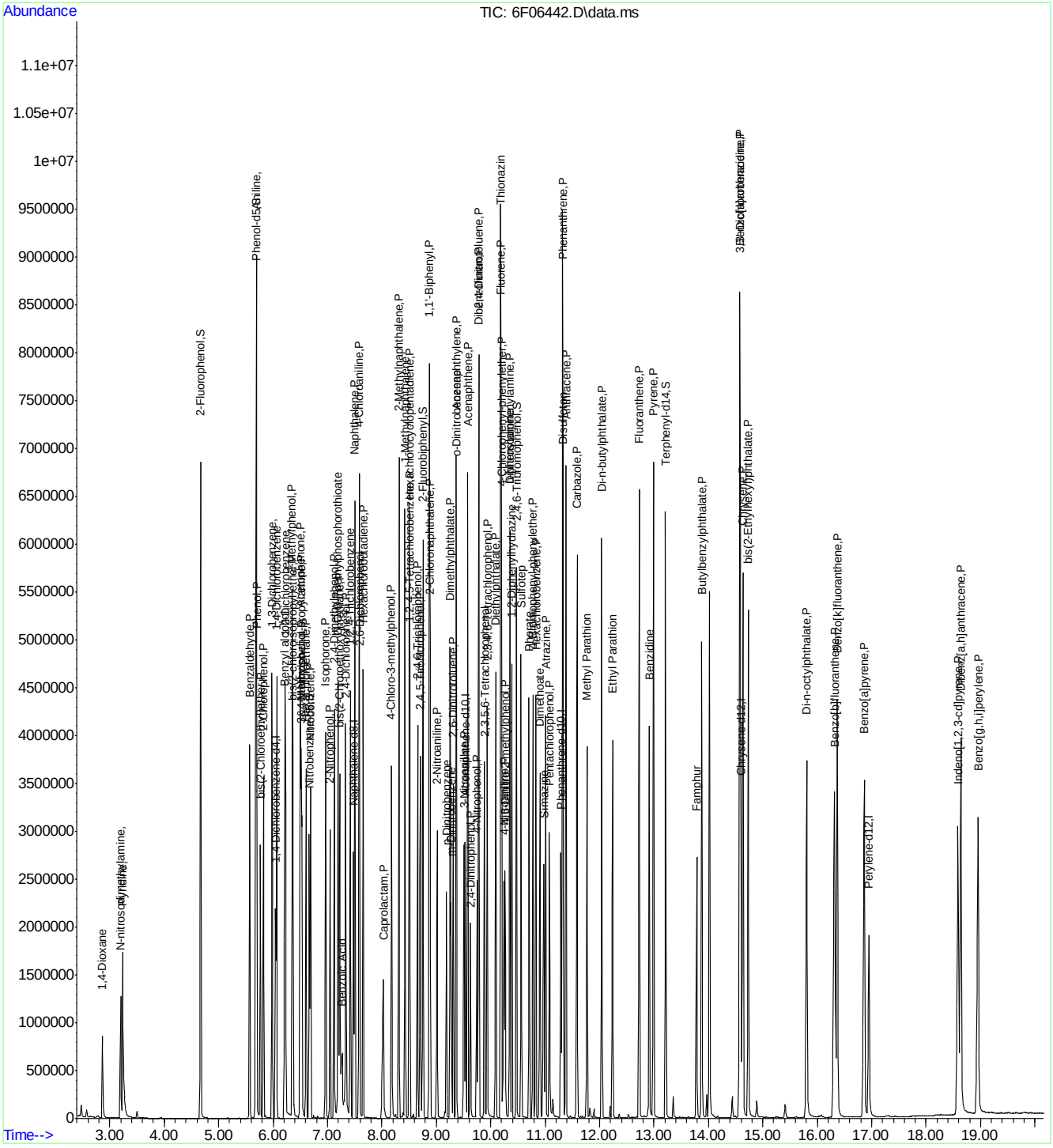
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
98)	3,3'-Dichlorobenzidine	14.576	252	1050616	89.291	ppm	100
99)	Benzo[a]anthracene	14.582	228	2694409	83.690	ppm	100
100)	Chrysene	14.635	228	2561949	80.340	ppm	99
101)	bis(2-Ethylhexyl)phtha...	14.731	149	1939774	100.263	ppm	99
103)	Di-n-octylphthalate	15.807	149	3289205	112.428	ppm	99
104)	Benzo[b]fluoranthene	16.320	252	2623555	87.695	ppm	98
105)	Benzo[k]fluoranthene	16.368	252	2604598	80.870	ppm	99
106)	Benzo[a]pyrene	16.866	252	2383575	85.600	ppm	100
107)	Indeno[1,2,3-cd]pyrene	18.593	276	2200247	84.736	ppm	96
108)	Dibenz[a,h]anthracene	18.641	278	2350737	82.859	ppm	99
109)	Benzo[g,h,i]perylene	18.957	276	2271964	77.867	ppm	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06442.D
Sample : ic248-75
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1
Acq On : 29 Jul 2020 3:28 pm Operator: marthav

Quant Time: Jul 29 15:50:01 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625



Manual Integration Approval Summary

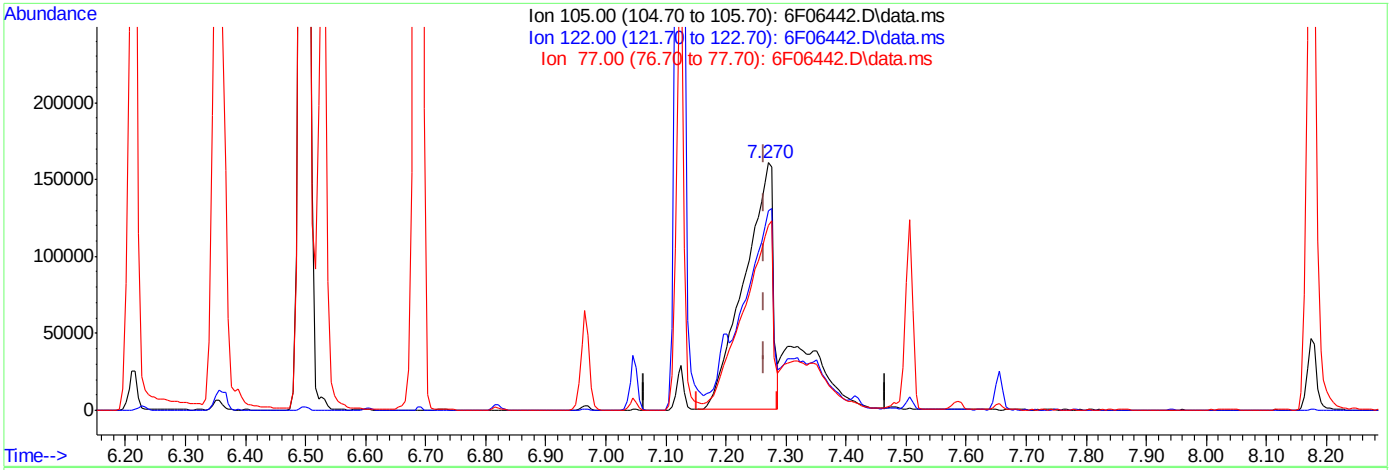
Sample Number:	S6F248-IC248	**Method:**	SW846 8270D
Lab FileID:	6F06442.D	**Analyst approved:**	07/30/20 13:11 Martha Valls
Injection Time:	07/29/20 15:28	**Supervisor approved:**	07/30/20 14:11 Nicole McCampbell

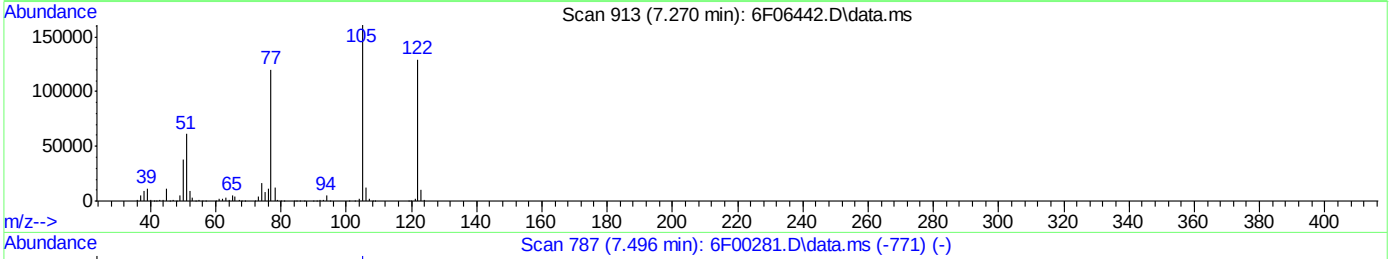
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic Acid	65-85-0		7.27	Split peak

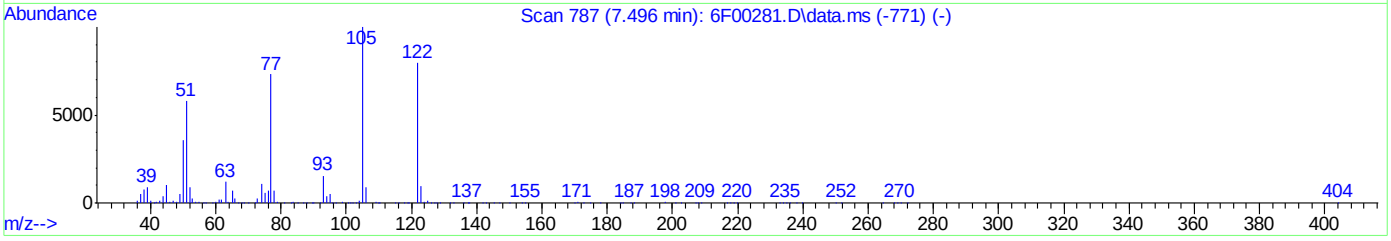
Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06442.D
Sample : ic248-75
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1
Acq On : 29 Jul 2020 3:28 pm Operator: marthav

Quant Time: Jul 29 15:49:07 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625







TIC: 6F06442.D\data.ms

(30) Benzoic Acid

7.270min (+0.005) 111.27ppm

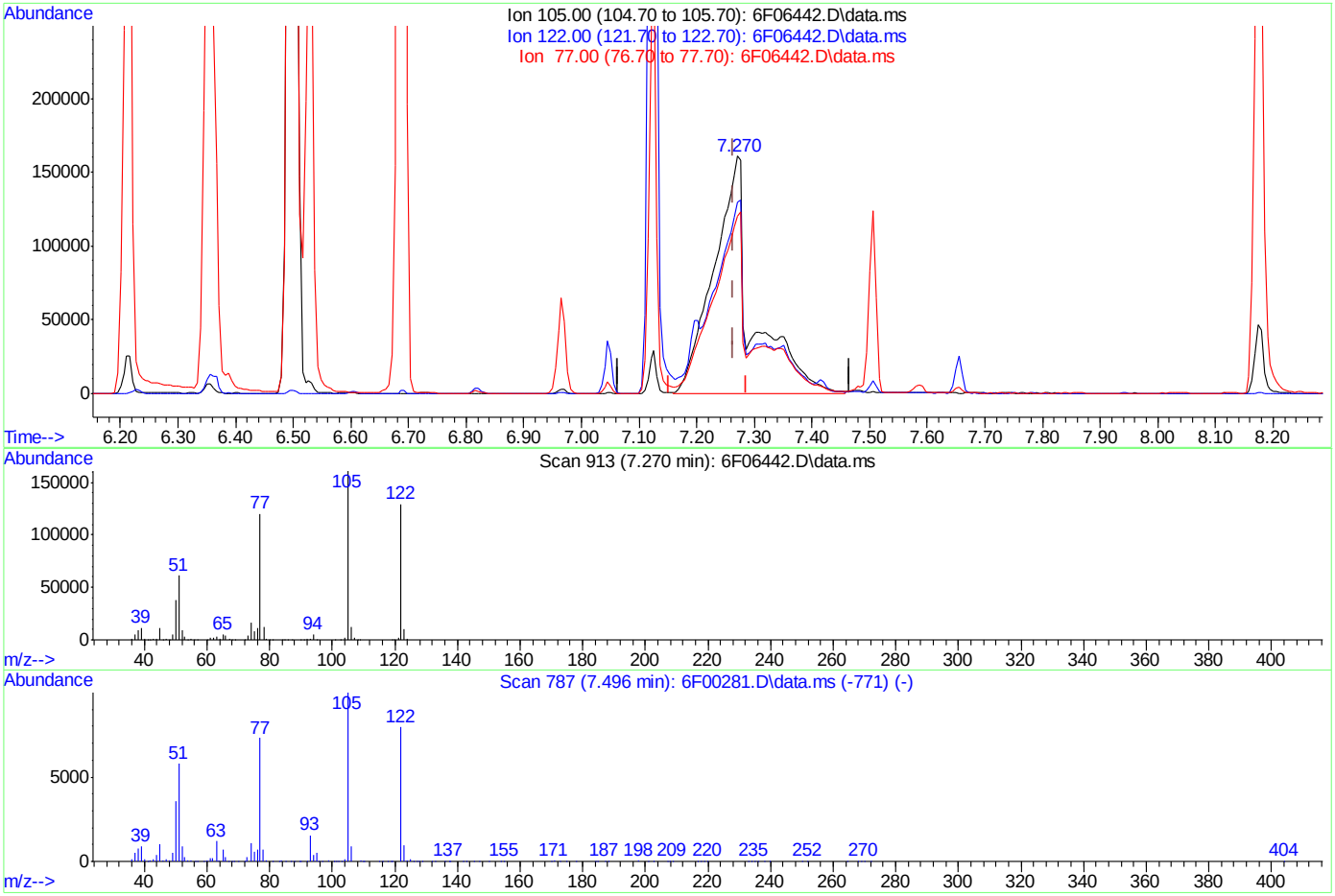
response 534590

Ion	Exp%	Act%
105.00	100	100
122.00	81.90	75.52
77.00	77.70	72.66
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06442.D
Sample : ic248-75
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1
Acq On : 29 Jul 2020 3:28 pm Operator: marthav

Quant Time: Jul 29 15:49:07 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625



TIC: 6F06442.D\data.ms

(30) Benzoic Acid

7.270min (+0.005) 157.57ppm m

response 757042

Ion	Exp%	Act%
105.00	100	100
122.00	81.90	80.55
77.00	77.70	74.77
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 07/30/20 14:11

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06443.D
Sample : ic248-100
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1
Acq On : 29 Jul 2020 3:54 pm Operator: marthav

Quant Time: Jul 29 16:15:52 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.045	152	277100	40.00	ppm	0.00
22) Naphthalene-d8	7.479	136	1078145	40.00	ppm	0.00
43) Acenaphthene-d10	9.538	164	583080	40.00	ppm	0.00
70) Phenanthrene-d10	11.292	188	1080623	40.00	ppm	0.00
92) Chrysene-d12	14.598	240	986480	40.00	ppm	0.01
102) Perylene-d12	16.956	264	938564	40.00	ppm	0.01
System Monitoring Compounds						
7) 2-Fluorophenol	4.676	112	2458510	250.36	ppm	0.01
Spiked Amount 100.000	Range 14 - 67		Recovery = 250.36%#			
9) Phenol-d5	5.692	99	2853599	252.72	ppm	0.02
Spiked Amount 100.000	Range 10 - 50		Recovery = 252.72%#			
23) Nitrobenzene-d5	6.671	82	1341418	143.81	ppm	0.01
Spiked Amount 50.000	Range 42 - 108		Recovery = 287.62%#			
47) 2-Fluorobiphenyl	8.757	172	2452744	112.65	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 225.30%#			
75) 2,4,6-Tribromophenol	10.479	330	854748	267.81	ppm	0.01
Spiked Amount 100.000	Range 33 - 118		Recovery = 267.81%#			
95) Terphenyl-d14	13.218	244	3068288	121.00	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 242.00%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.863	88	472373	119.507	ppm	99
3) N-nitrosodimethylamine	3.200	42	649744	122.120	ppm	98
4) Pyridine	3.232	79	1251468	125.030	ppm	100
5) Benzaldehyde	5.569	106	839334	103.795	ppm	99
6) Aniline	5.692	93	1855874	124.560	ppm	80
8) bis(2-Chloroethyl)ether	5.772	93	1210059	120.480	ppm	87
10) Phenol	5.708	94	1644148	125.357	ppm	95
11) 2-Chlorophenol	5.826	128	1251068	126.051	ppm	89
12) 1,3-Dichlorobenzene	5.981	146	1325268	118.178	ppm	97
13) 1,4-Dichlorobenzene	6.067	146	1334364	117.431	ppm	97
14) 1,2-Dichlorobenzene	6.227	146	1271488	118.743	ppm	98
15) Benzyl alcohol	6.216	108	768317	129.919	ppm	98
16) bis(2-chloroisopropyl)...	6.366	45	1463406	114.800	ppm	64
17) 2-Methylphenol	6.355	108	1096575	125.691	ppm	97
18) Acetophenone	6.505	105	1532532	113.731	ppm	99
19) Hexachloroethane	6.607	117	550110	123.558	ppm	98
20) N-Nitroso-di-n-propyla...	6.516	70	854339	124.888	ppm #	67
21) 3&4-Methylphenol	6.532	108	1140360	127.898	ppm	97
24) Nitrobenzene	6.692	77	1284434	133.010	ppm	99
25) Isophorone	6.971	82	2312721	122.117	ppm	98
26) 2-Nitrophenol	7.051	139	681075	189.428	ppm	98
27) 2,4-Dimethylphenol	7.126	107	1103239	124.548	ppm	97
28) O,O,O-Triethylphosphor...	7.201	198	538749	111.062	ppm	95
29) bis(2-Chloroethoxy)met...	7.227	93	1385727	116.719	ppm	99
30) Benzoic Acid	7.297	105	1034003m	236.337	ppm	
31) 2,4-Dichlorophenol	7.340	162	985036	125.208	ppm	99
32) 1,2,4-Trichlorobenzene	7.420	180	1095436	115.373	ppm	99
34) Naphthalene	7.505	128	3278445	112.108	ppm	98
35) 4-Chloroaniline	7.586	127	1461859	119.593	ppm	99
36) 2,6-Dichlorophenol	7.591	162	953685	124.050	ppm	99
37) Hexachlorobutadiene	7.655	225	586726	109.762	ppm	99

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06443.D
Sample : ic248-100
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1
Acq On : 29 Jul 2020 3:54 pm Operator: marthav

Quant Time: Jul 29 16:15:52 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38)	Caprolactam	8.040	113	372604m	133.418	ppm		
39)	4-Chloro-3-methylphenol	8.179	107	1027372	129.366	ppm		99
40)	2-Methylnaphthalene	8.313	141	1950816	115.205	ppm		98
41)	1-Methylnaphthalene	8.431	142	2153353	115.804	ppm		99
42)	1,2,4,5-Tetrachloroben...	8.511	216	1048649	115.120	ppm		100
44)	Hexachlorocyclopentadiene	8.506	237	741570	155.545	ppm		100
45)	2,4,6-Trichlorophenol	8.655	196	731456	133.219	ppm		98
46)	2,4,5-Trichlorophenol	8.709	196	779129	129.587	ppm		100
48)	1,1'-Biphenyl	8.869	154	2486458	106.060	ppm		98
49)	2-Chloronaphthalene	8.885	162	2096953	115.594	ppm		100
50)	2-Nitroaniline	9.019	65	692782	175.062	ppm		99
51)	p-Dinitrobenzene	9.190	75	472833	184.398	ppm		93
52)	Acenaphthylene	9.372	152	3155426	115.760	ppm		100
53)	Dimethylphthalate	9.260	163	2374541	121.641	ppm		99
54)	m-Dinitrobenzene	9.281	168	451783	172.217	ppm		78
55)	2,6-Dinitrotoluene	9.319	165	586224	152.414	ppm		86
56)	o-Dinitrobenzene	9.377	50	406080	147.469	ppm		90
57)	Acenaphthene	9.581	153	2094156	116.207	ppm		96
58)	3-Nitroaniline	9.511	138	675866	149.889	ppm		97
59)	2,4-Dinitrophenol	9.629	184	394091	339.735	ppm		92
60)	Dibenzofuran	9.784	168	2860476	114.092	ppm		94
61)	2,4-Dinitrotoluene	9.789	165	789277	159.023	ppm		89
62)	4-Nitrophenol	9.752	109	404490	170.268	ppm		100
63)	2,3,5,6-Tetrachlorophenol	9.886	232	636152	146.947	ppm		99
64)	2,3,4,6-Tetrachlorophenol	9.939	232	647944	135.975	ppm		98
65)	Fluorene	10.190	166	2357646	117.811	ppm		99
66)	4-Chlorophenyl-phenyle...	10.201	204	1185514	117.289	ppm		98
67)	Diethylphthalate	10.100	149	2446906	128.155	ppm		100
68)	Thionazin	10.190	97	511146	132.717	ppm		100
69)	4-Nitroaniline	10.255	138	689865	149.949	ppm		99
71)	4,6-Dinitro-2-methylph...	10.276	198	513306	234.883	ppm	#	56
72)	n-Nitrosodiphenylamine	10.356	169	2055283	131.337	ppm		99
73)	Diphenylamine	10.356	169	2055283	116.105	ppm		99
74)	1,2-Diphenylhydrazine	10.394	77	2532777	116.733	ppm		94
76)	Sulfotep	10.565	97	400034	128.560	ppm		78
77)	Phorate	10.709	75	1385515	133.806	ppm		100
78)	4-Bromophenyl-phenylether	10.784	248	706190	116.353	ppm		93
79)	Hexachlorobenzene	10.832	284	801527	113.855	ppm		97
80)	Dimethoate	10.913	87	957831	146.606	ppm		99
81)	Simazine	10.982	201	412316	120.652	ppm		96
82)	Atrazine	11.014	200	721329	122.201	ppm		98
83)	Pentachlorophenol	11.078	266	501324	161.354	ppm		99
84)	Phenanthrene	11.324	178	3405606	113.858	ppm		98
85)	Anthracene	11.389	178	3538648	114.727	ppm		99
86)	Disulfoton	11.330	88	1442831	122.022	ppm		98
87)	Carbazole	11.592	167	3246819	119.432	ppm		99
88)	Methyl Parathion	11.768	109	812740	174.974	ppm		99
89)	Di-n-butylphthalate	12.046	149	4061180	127.825	ppm		99
90)	Ethyl Parathion	12.244	97	525467	187.160	ppm		91
91)	Fluoranthene	12.731	202	3776024	120.437	ppm		98
93)	Benzidine	12.918	184	2032206	125.088	ppm		99
94)	Pyrene	12.998	202	3831594	117.767	ppm		99
96)	Famphur	13.785	218	937459	121.331	ppm		95
97)	Butylbenzylphthalate	13.881	149	1897243	148.418	ppm		97

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06443.D
Sample : ic248-100
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1
Acq On : 29 Jul 2020 3:54 pm Operator: marthav

Quant Time: Jul 29 16:15:52 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
98)	3,3'-Dichlorobenzidine	14.582	252	1387107	126.801	ppm	99
99)	Benzo[a]anthracene	14.587	228	3600138	120.276	ppm	99
100)	Chrysene	14.640	228	3447796	116.293	ppm	98
101)	bis(2-Ethylhexyl)phtha...	14.737	149	2605547	144.856	ppm	97
103)	Di-n-octylphthalate	15.807	149	4454812	166.227	ppm	99
104)	Benzo[b]fluoranthene	16.325	252	3554017	129.686	ppm	100
105)	Benzo[k]fluoranthene	16.379	252	3501782	118.694	ppm	100
106)	Benzo[a]pyrene	16.871	252	3216889	126.116	ppm	99
107)	Indeno[1,2,3-cd]pyrene	18.599	276	3014217	126.725	ppm	96
108)	Dibenz[a,h]anthracene	18.647	278	3209398	123.495	ppm	98
109)	Benzo[g,h,i]perylene	18.968	276	3099442	115.964	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

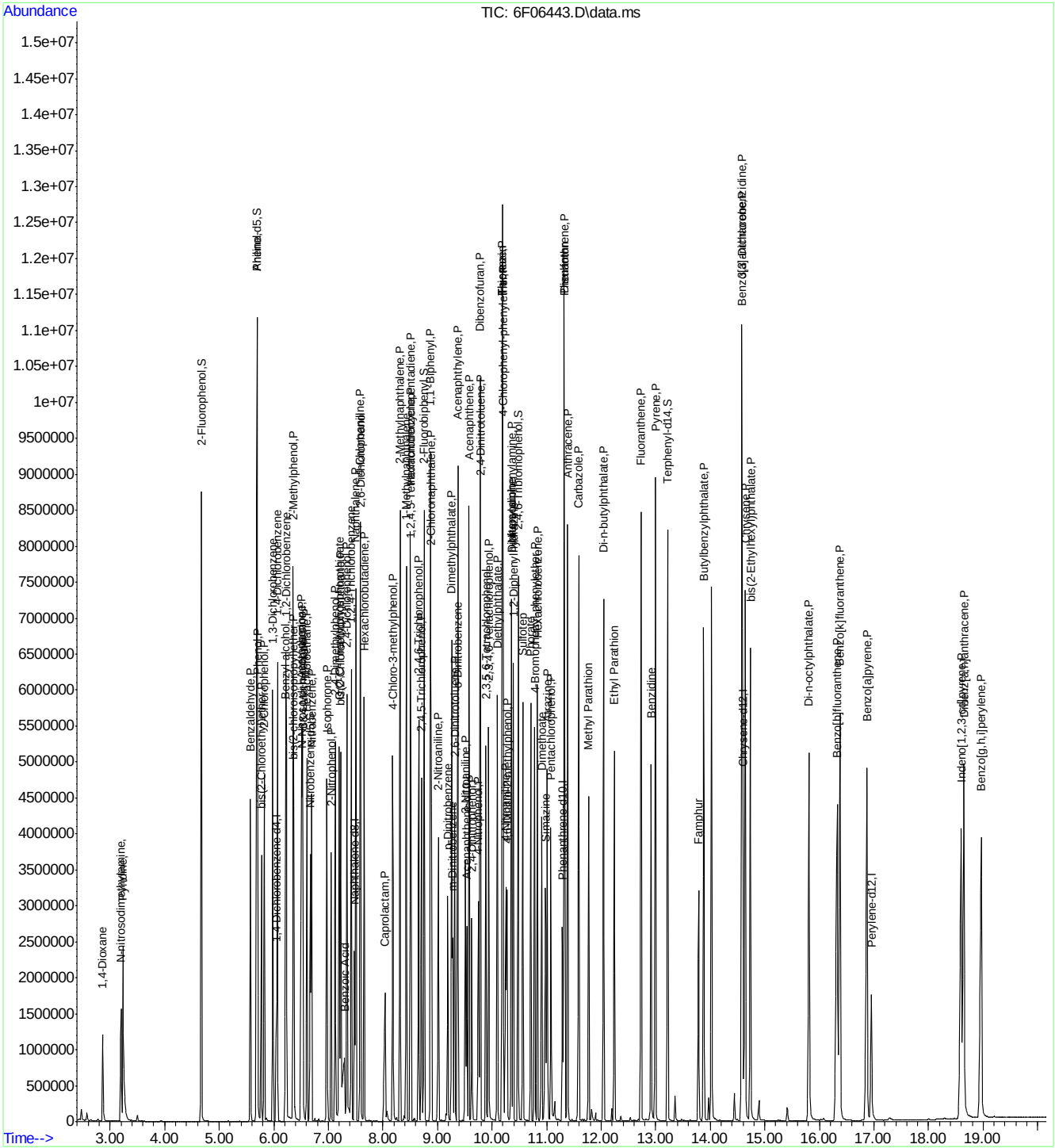
7.6.8

7

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06443.D
Sample : ic248-100
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1
Acq On : 29 Jul 2020 3:54 pm Operator: marthav

Quant Time: Jul 29 16:15:52 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625



Manual Integration Approval Summary

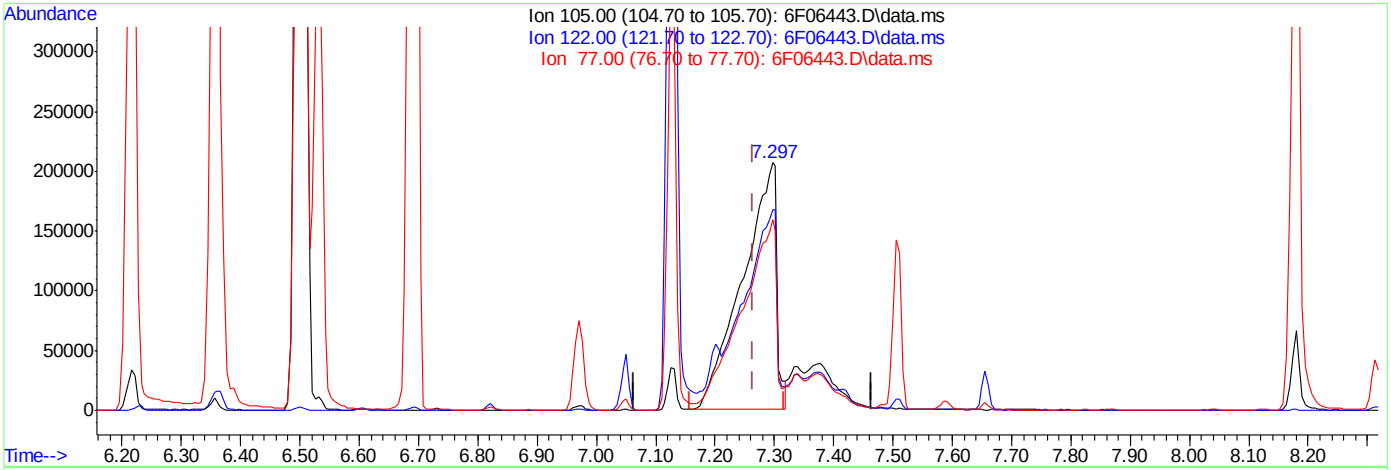
Sample Number:	S6F248-IC248	**Method:**	SW846 8270D
Lab FileID:	6F06443.D	**Analyst approved:**	07/30/20 13:11 Martha Valls
Injection Time:	07/29/20 15:54	**Supervisor approved:**	07/30/20 14:11 Nicole McCampbell

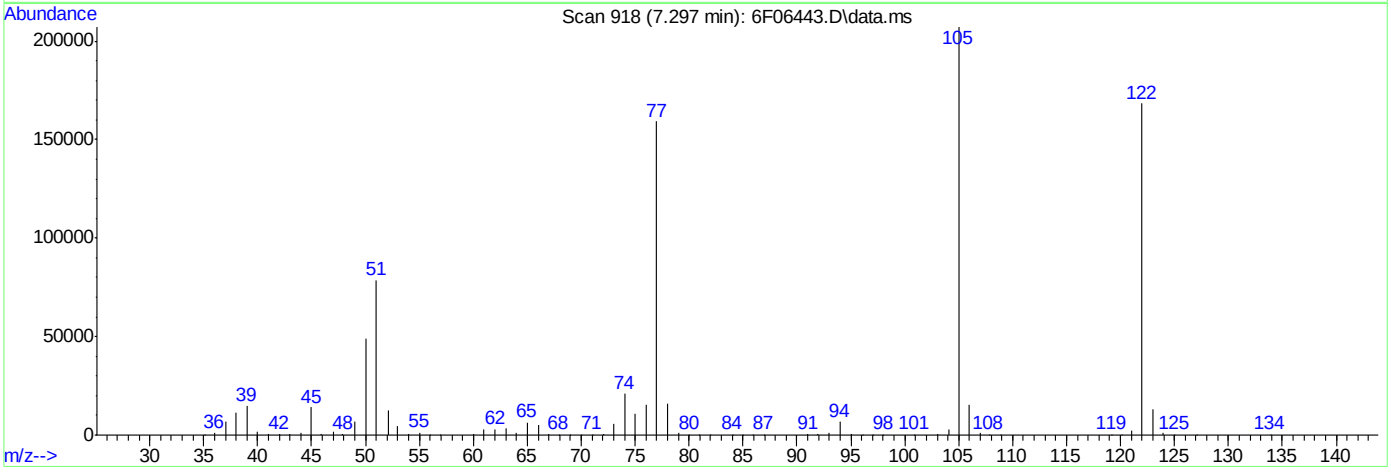
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic Acid	65-85-0		7.30	Split peak
Caprolactam	105-60-2		8.04	Split peak

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06443.D
Sample : ic248-100
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1
Acq On : 29 Jul 2020 3:54 pm Operator: marthav

Quant Time: Jul 29 16:15:19 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625





TIC: 6F06443.D\data.ms

(30) Benzoic Acid

7.297min (+0.032) 190.03ppm

response 831418

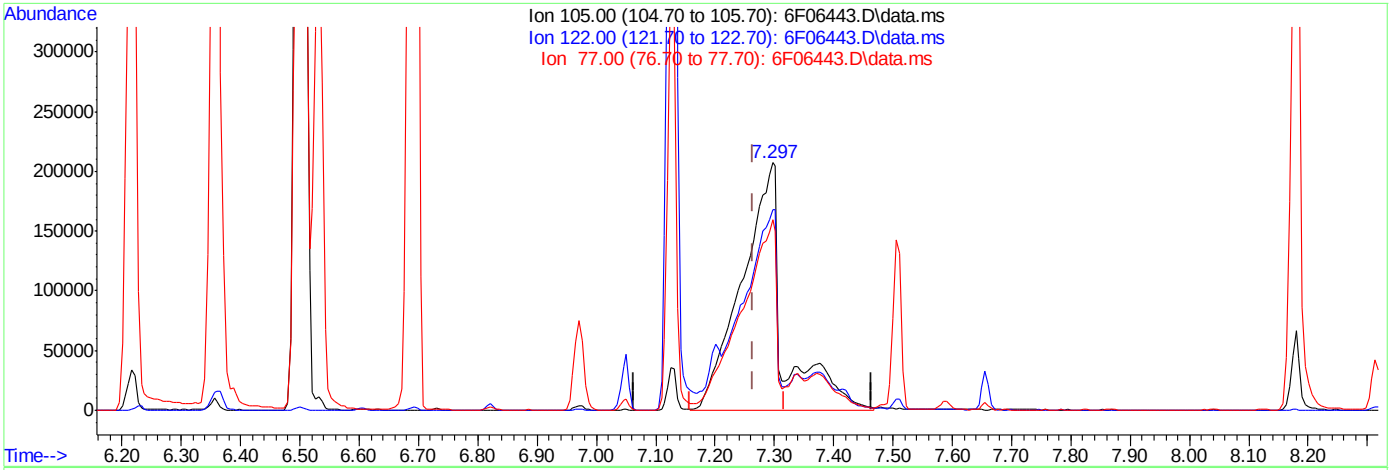
Ion	Exp%	Act%
105.00	100	100
122.00	81.90	77.12
77.00	77.70	75.23
0.00	0.00	0.00

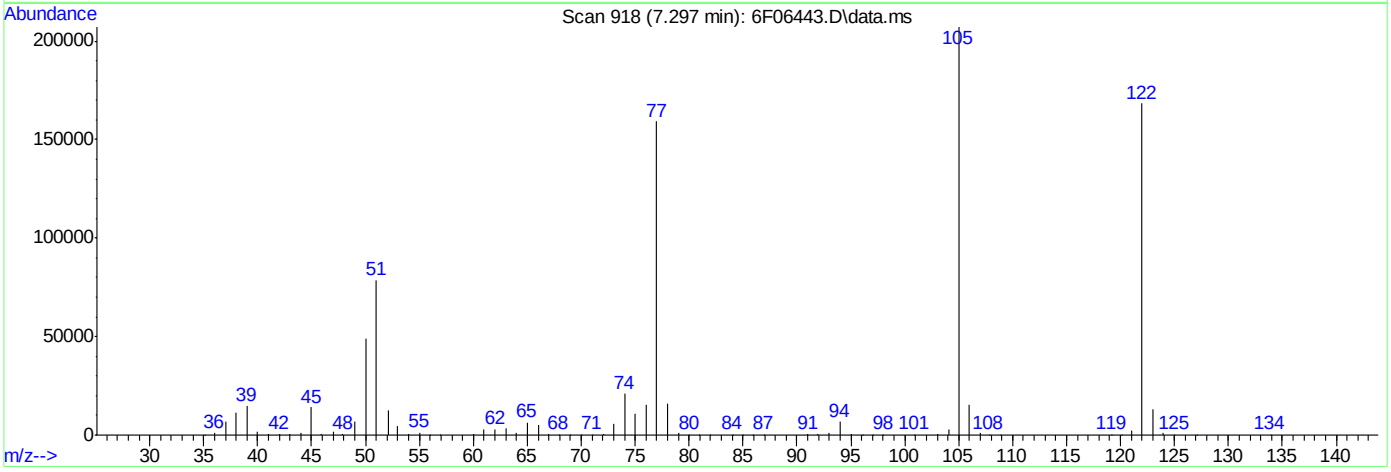
8270D6F072920.m Wed Jul 29 16:15:30 2020 Page: 1

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06443.D
Sample : ic248-100
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1
Acq On : 29 Jul 2020 3:54 pm Operator: marthav

Quant Time: Jul 29 16:15:19 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625





TIC: 6F06443.D\data.ms

(30) Benzoic Acid

7.297min (+0.032) 236.34ppm m

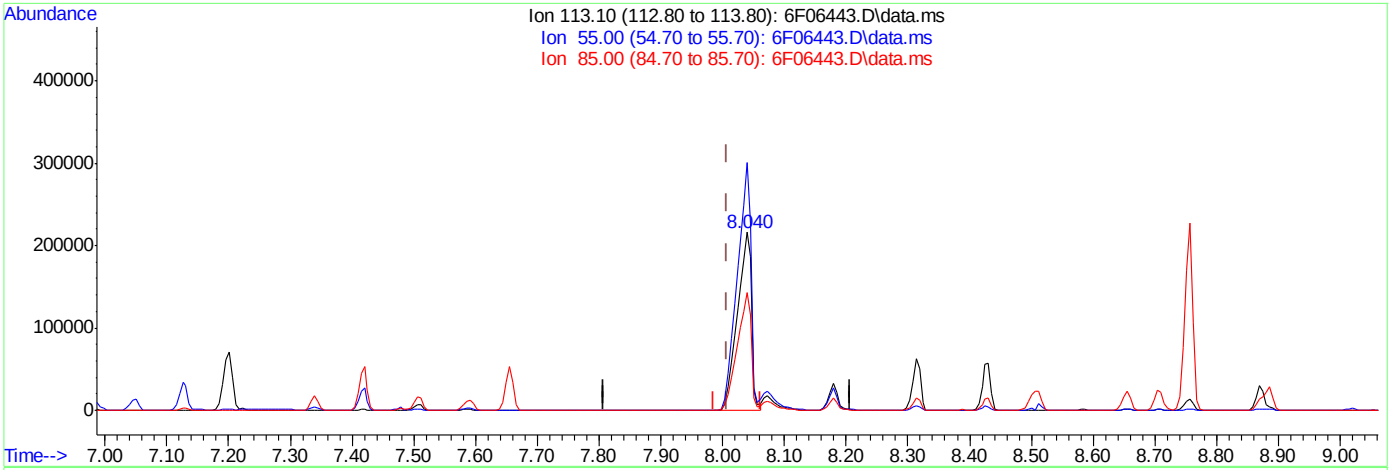
response 1034003

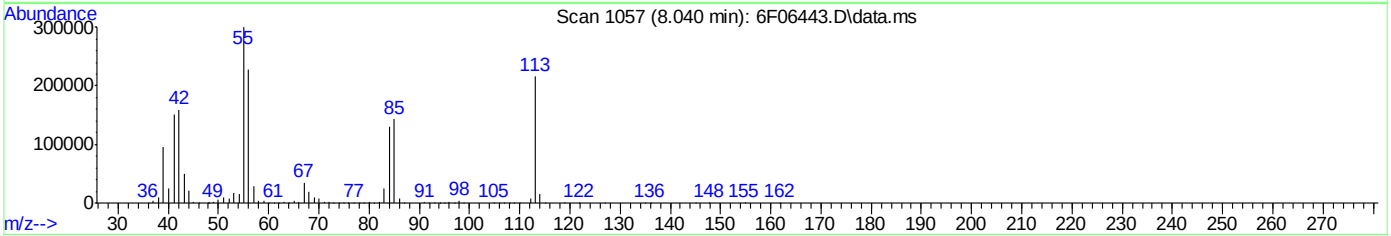
Ion	Exp%	Act%
105.00	100	100
122.00	81.90	81.24
77.00	77.70	76.92
0.00	0.00	0.00

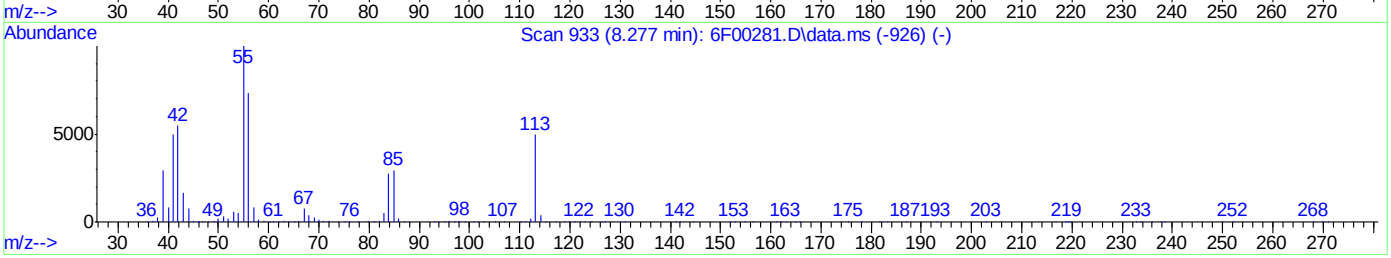
Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06443.D
Sample : ic248-100
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1
Acq On : 29 Jul 2020 3:54 pm Operator: marthav

Quant Time: Jul 29 16:15:19 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625







TIC: 6F06443.D\data.ms

(38) Caprolactam (P)

8.040min (+0.032) 124.79ppm

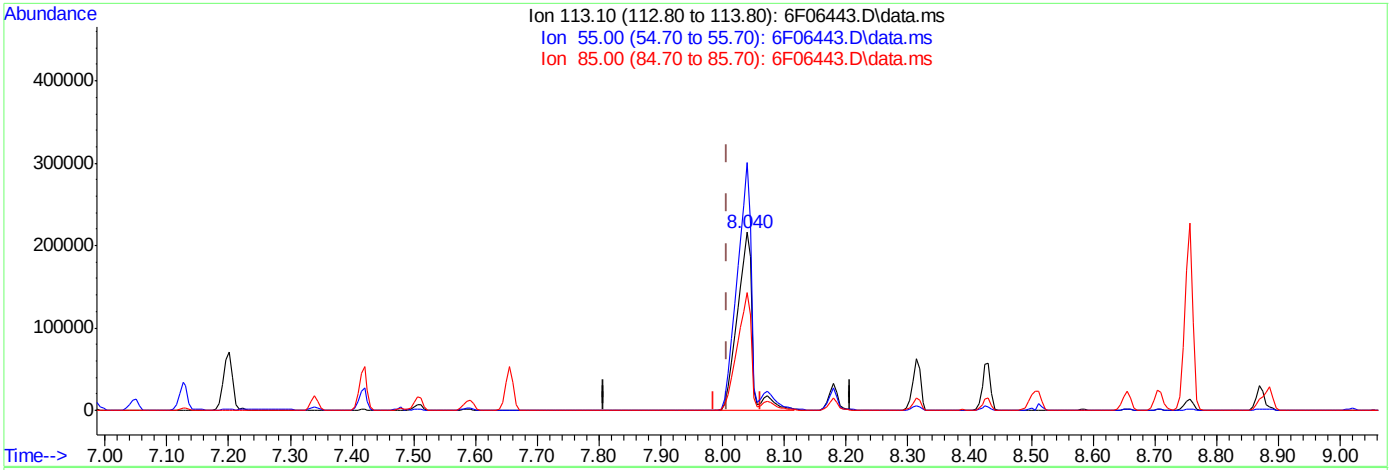
response 348513

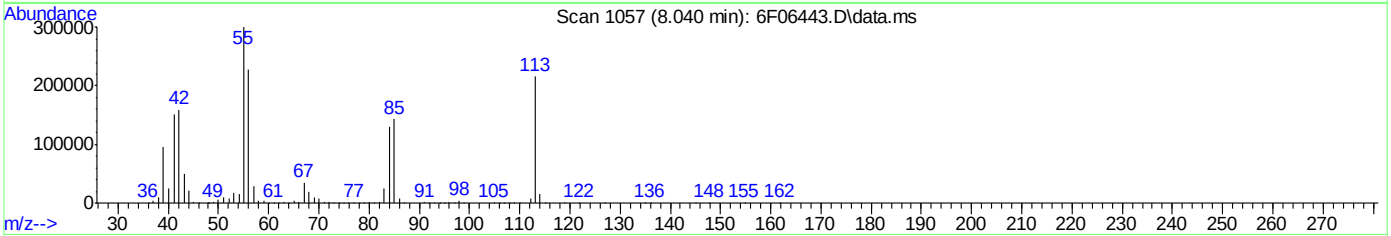
Ion	Exp%	Act%
113.10	100	100
55.00	141.10	138.63
85.00	65.10	65.86
0.00	0.00	0.00

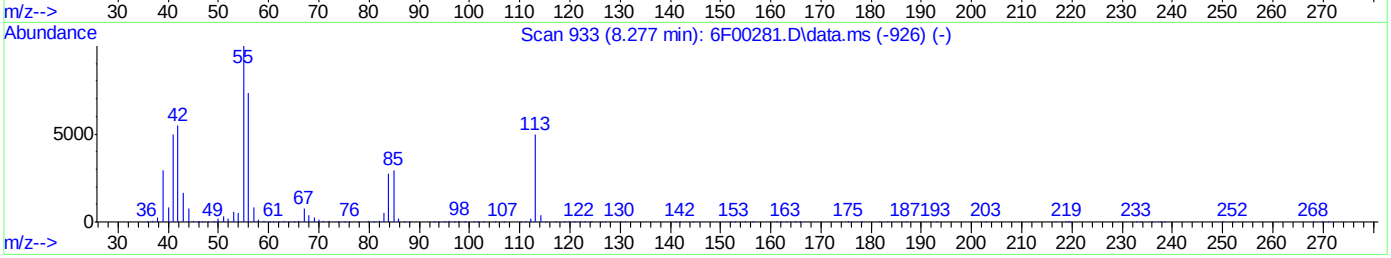
Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06443.D
Sample : ic248-100
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1
Acq On : 29 Jul 2020 3:54 pm Operator: marthav

Quant Time: Jul 29 16:15:19 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625







TIC: 6F06443.D\data.ms

(38) Caprolactam (P)

8.040min (+0.032) 133.42ppm m

response 372604

Ion	Exp%	Act%
113.10	100	100
55.00	141.10	138.93
85.00	65.10	65.96
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06444.D
Sample : icv248-50
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1
Acq On : 29 Jul 2020 4:20 pm Operator: marthav

Quant Time: Jul 30 12:06:54 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.045	152	385259	40.00	ppm	0.00
22) Naphthalene-d8	7.479	136	1416043	40.00	ppm	0.00
43) Acenaphthene-d10	9.533	164	727675	40.00	ppm	0.00
70) Phenanthrene-d10	11.287	188	1272017	40.00	ppm	0.00
92) Chrysene-d12	14.593	240	1051891	40.00	ppm	0.00
102) Perylene-d12	16.951	264	1000077	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#		
9) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#		
23) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#		
47) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#		
75) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#		
95) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#		
Target Compounds						Qvalue
2) 1,4-Dioxane	2.895	88	264826	46.216	ppm	99
3) N-nitrosodimethylamine	3.221	42	343172	43.903	ppm	95
5) Benzaldehyde	5.569	106	528908	44.828	ppm	99
8) bis(2-Chloroethyl)ether	5.767	93	659327	44.559	ppm	98
10) Phenol	5.692	94	795582	39.595	ppm	90
11) 2-Chlorophenol	5.821	128	663471	44.471	ppm	100
12) 1,3-Dichlorobenzene	5.981	146	739739	45.857	ppm	99
13) 1,4-Dichlorobenzene	6.061	146	743039	45.437	ppm	99
14) 1,2-Dichlorobenzene	6.227	146	698868	45.284	ppm	99
16) bis(2-chloroisopropyl)...	6.361	45	829377	44.816	ppm	93
17) 2-Methylphenol	6.350	108	543051	40.425	ppm	94
18) Acetophenone	6.495	105	865293	43.446	ppm	100
19) Hexachloroethane	6.602	117	301391	45.143	ppm	99
20) N-Nitroso-di-n-propyla...	6.505	70	452395	42.791	ppm	99
21) 3&4-Methylphenol	6.527	108	1169763	83.784	ppm	96
24) Nitrobenzene	6.682	77	672844	44.480	ppm	96
25) Isophorone	6.960	82	1239040	45.582	ppm	99
26) 2-Nitrophenol	7.046	139	356008	47.780	ppm	99
27) 2,4-Dimethylphenol	7.120	107	539978	41.860	ppm	97
29) bis(2-Chloroethoxy)met...	7.222	93	711251	42.725	ppm	100
30) Benzoic Acid	7.308	105	1032108	81.252	ppm	97
31) 2,4-Dichlorophenol	7.334	162	515590	44.946	ppm	99
32) 1,2,4-Trichlorobenzene	7.415	180	587915	46.107	ppm	100
34) Naphthalene	7.506	128	1779128	44.412	ppm	100
36) 2,6-Dichlorophenol	7.586	162	494072	44.311	ppm	99
37) Hexachlorobutadiene	7.655	225	335441	47.942	ppm	99
38) Caprolactam	8.003	113	189917	42.439	ppm	98
39) 4-Chloro-3-methylphenol	8.169	107	509473	43.093	ppm	99
41) 1-Methylnaphthalene	8.426	142	1101778	42.797	ppm	99
42) 1,2,4,5-Tetrachloroben...	8.506	216	551642	44.871	ppm	99
44) Hexachlorocyclopentadiene	8.500	237	413366	54.534	ppm	98

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06444.D
Sample : icv248-50
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1
Acq On : 29 Jul 2020 4:20 pm Operator: marthav

Quant Time: Jul 30 12:06:54 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

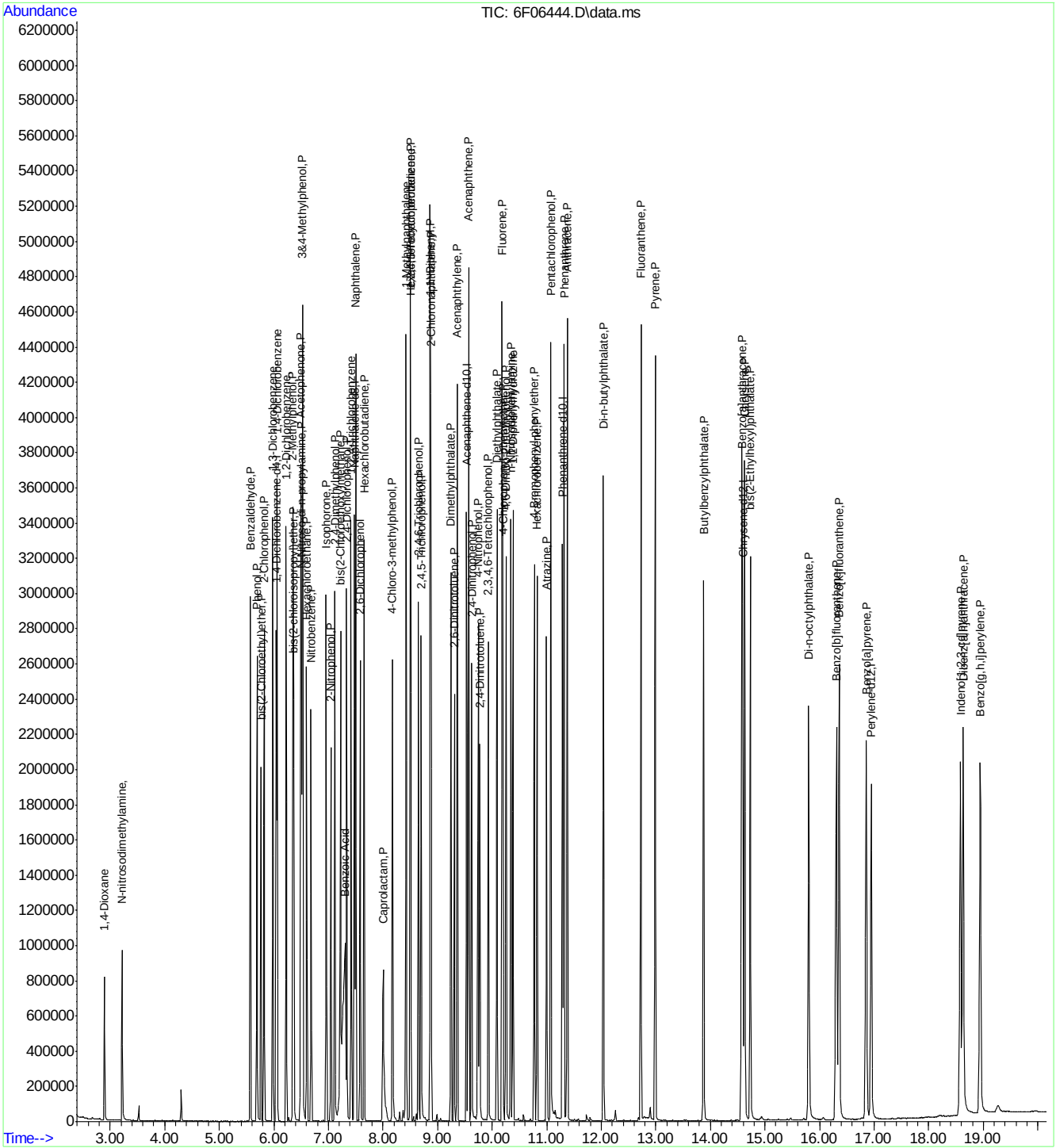
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
45)	2,4,6-Trichlorophenol	8.650	196	375289	47.264	ppm	99
46)	2,4,5-Trichlorophenol	8.698	196	403010	47.628	ppm	98
48)	1,1'-Biphenyl	8.864	154	1390071	45.739	ppm	98
49)	2-Chloronaphthalene	8.880	162	1078516	45.110	ppm	99
52)	Acenaphthylene	9.362	152	1787970	49.165	ppm	99
53)	Dimethylphthalate	9.244	163	1197180	44.087	ppm	100
55)	2,6-Dinitrotoluene	9.308	165	280214	44.436	ppm	99
57)	Acenaphthene	9.570	153	1079664	44.705	ppm	97
59)	2,4-Dinitrophenol	9.624	184	369589	82.230	ppm	90
61)	2,4-Dinitrotoluene	9.779	165	394492	47.506	ppm	84
62)	4-Nitrophenol	9.747	109	365130	87.747	ppm	98
64)	2,3,4,6-Tetrachlorophenol	9.929	232	302640	44.338	ppm	100
65)	Fluorene	10.185	166	1231041	45.537	ppm	99
66)	4-Chlorophenyl-phenyle...	10.201	204	590613	44.165	ppm	93
67)	Diethylphthalate	10.089	149	1228595	44.593	ppm	99
71)	4,6-Dinitro-2-methylph...	10.255	198	515041	88.804	ppm	88
72)	n-Nitrosodiphenylamine	10.340	169	817807	41.363	ppm	98
74)	1,2-Diphenylhydrazine	10.383	77	1265682	44.895	ppm	100
78)	4-Bromophenyl-phenylether	10.774	248	349394	47.065	ppm	98
79)	Hexachlorobenzene	10.827	284	385478	45.472	ppm	99
82)	Atrazine	10.998	200	334511	44.646	ppm	98
83)	Pentachlorophenol	11.073	266	485515	87.054	ppm	98
84)	Phenanthrene	11.319	178	1713954	44.999	ppm	100
85)	Anthracene	11.378	178	1700513	43.934	ppm	100
89)	Di-n-butylphthalate	12.036	149	1992179	45.321	ppm	99
91)	Fluoranthene	12.726	202	1771215	44.168	ppm	100
94)	Pyrene	12.988	202	1822231	48.366	ppm	95
97)	Butylbenzylphthalate	13.876	149	856565	47.452	ppm	99
99)	Benzo[a]anthracene	14.576	228	1614211	45.797	ppm	99
100)	Chrysene	14.630	228	1598280	46.737	ppm	100
101)	bis(2-Ethylhexyl)phtha...	14.732	149	1188674	47.144	ppm	100
103)	Di-n-octylphthalate	15.801	149	1965705	49.690	ppm	100
104)	Benzo[b]fluoranthene	16.309	252	1496383	46.616	ppm	100
105)	Benzo[k]fluoranthene	16.363	252	1589141	47.600	ppm	99
106)	Benzo[a]pyrene	16.855	252	1388867	46.589	ppm	100
107)	Indeno[1,2,3-cd]pyrene	18.583	276	1245848	44.889	ppm	99
108)	Dibenz[a,h]anthracene	18.631	278	1315333	44.387	ppm	99
109)	Benzo[g,h,i]perylene	18.946	276	1342495	44.815	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06444.D
Sample : icv248-50
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1
Acq On : 29 Jul 2020 4:20 pm Operator: marthav

Quant Time: Jul 30 12:06:54 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625



Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06445.D
Sample : icv248-50
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 11 Sample Multiplier: 1
Acq On : 29 Jul 2020 4:46 pm Operator: marthav

Quant Time: Jul 30 12:08:21 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

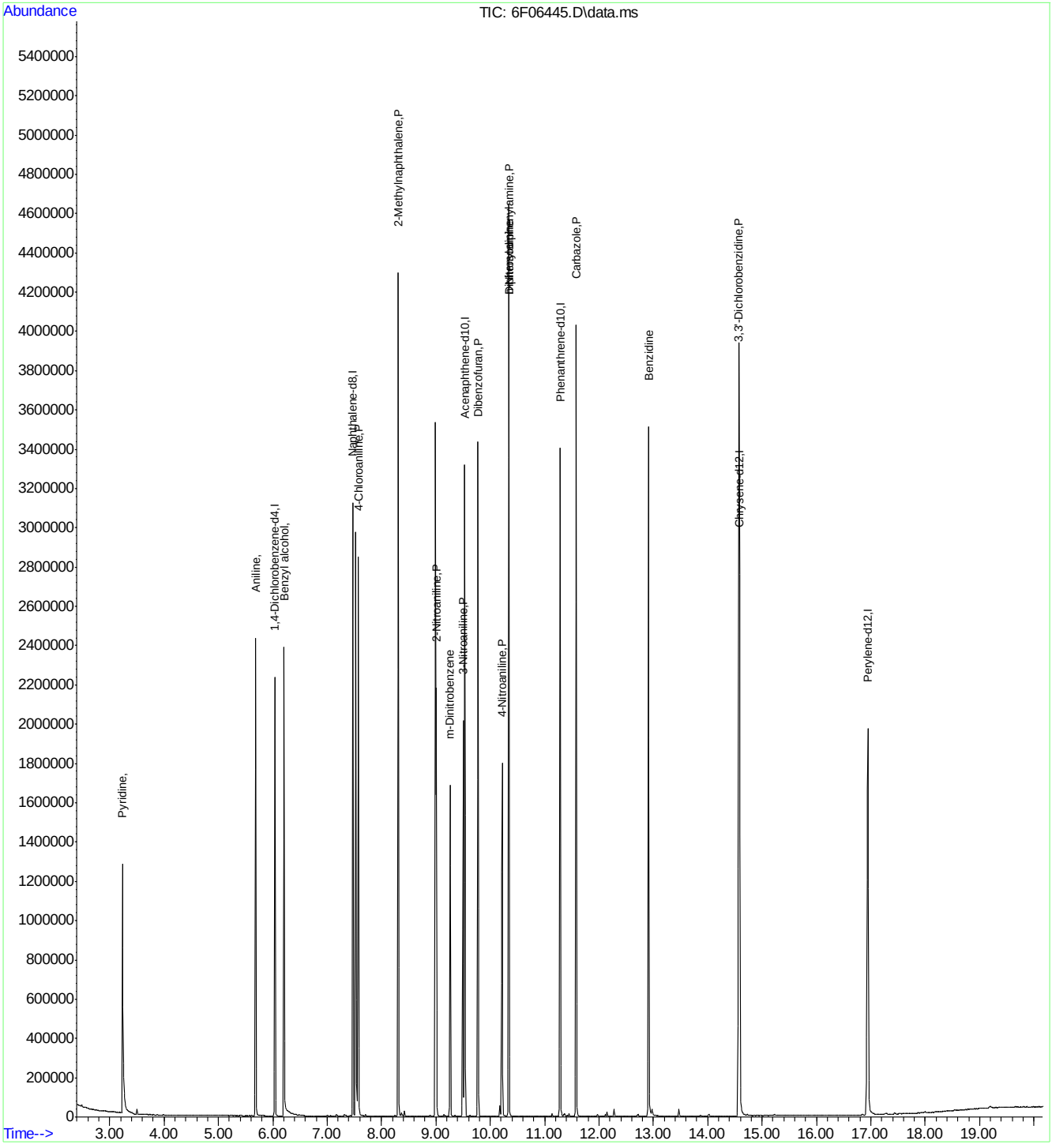
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.040	152	325344	40.00	ppm	0.00
22) Naphthalene-d8	7.473	136	1273253	40.00	ppm	0.00
43) Acenaphthene-d10	9.533	164	685475	40.00	ppm	0.00
70) Phenanthrene-d10	11.287	188	1269859	40.00	ppm	0.00
92) Chrysene-d12	14.587	240	1156122	40.00	ppm	0.00
102) Perylene-d12	16.946	264	1121147	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#		
9) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#		
23) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#		
47) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#		
75) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#		
95) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#		
Target Compounds						Qvalue
4) Pyridine	3.232	79	583055	46.795	ppm	98
6) Aniline	5.687	93	807661	42.333	ppm	83
15) Benzyl alcohol	6.206	108	363715	47.296	ppm	96
35) 4-Chloroaniline	7.575	127	697117	44.395	ppm	98
40) 2-Methylnaphthalene	8.308	141	913152	43.358	ppm	99
50) 2-Nitroaniline	9.008	65	403876	57.272	ppm	92
54) m-Dinitrobenzene	9.260	168	199557	44.477	ppm	92
58) 3-Nitroaniline	9.501	138	324832	47.397	ppm	94
60) Dibenzofuran	9.779	168	1376892	43.783	ppm	95
69) 4-Nitroaniline	10.217	138	319067	46.067	ppm	95
72) n-Nitrosodiphenylamine	10.340	169	1066537	54.035	ppm	99
73) Diphenylamine	10.340	169	1066537	48.461	ppm	99
87) Carbazole	11.581	167	1566082	44.980	ppm	100
93) Benzidine	12.913	184	1315020	54.478	ppm	99
98) 3,3'-Dichlorobenzidine	14.571	252	728427	48.599	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06445.D
Sample : icv248-50
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 11 Sample Multiplier: 1
Acq On : 29 Jul 2020 4:46 pm Operator: marthav

Quant Time: Jul 30 12:08:21 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625



Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 08/12/20 14:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06486.d
Acq On : 11 Aug 2020 12:54 pm
Operator : marthav
Sample : cc248-50 Inst : MSBNA10
Misc : op81484,S6F251,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Results File: 8270D6F072920.RES
Quant Time: Aug 12 05:54:11 2020
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.035	152	320148	40.00	ppm	0.00
22) Naphthalene-d8	7.468	136	1244639	40.00	ppm	0.00
43) Acenaphthene-d10	9.522	164	690499	40.00	ppm	0.00
70) Phenanthrene-d10	11.276	188	1290149	40.00	ppm	0.00
92) Chrysene-d12	14.576	240	1201004	40.00	ppm	0.00
102) Perylene-d12	16.930	264	1198860	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	4.660	112	1199597	99.16	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 99.16%#			
9) Phenol-d5	5.671	99	1431353	99.67	ppm	0.00
Spiked Amount 100.000	Range 10 - 50		Recovery = 99.67%#			
23) Nitrobenzene-d5	6.650	82	666577	48.81	ppm	0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 97.62%			
47) 2-Fluorobiphenyl	8.741	172	1279954	47.43	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 94.86%			
75) 2,4,6-Tribromophenol	10.458	330	443376	102.11	ppm	0.00
Spiked Amount 100.000	Range 33 - 118		Recovery = 102.11%			
95) Terphenyl-d14	13.202	244	1617831	47.92	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 95.84%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.858	88	231715	48.66	ppm	# 70
3) N-nitrosodimethylamine	3.189	42	308322	47.47	ppm	# 60
4) Pyridine	3.227	79	622155	50.74	ppm	# 58
5) Benzaldehyde	5.559	106	468723	47.81	ppm	96
6) Aniline	5.676	93	897984	47.83	ppm	69
8) bis(2-Chloroethyl)ether	5.757	93	599389	48.75	ppm	86
10) Phenol	5.687	94	822742	49.27	ppm	95
11) 2-Chlorophenol	5.810	128	616212	49.70	ppm	90
12) 1,3-Dichlorobenzene	5.971	146	650497	48.53	ppm	98
13) 1,4-Dichlorobenzene	6.051	146	658393	48.45	ppm	96
14) 1,2-Dichlorobenzene	6.217	146	617382	48.14	ppm	98
15) Benzyl alcohol	6.201	108	361279	47.74	ppm	98
16) bis(2-chloroisopropyl)...	6.350	45	734757	47.78	ppm	70
17) 2-Methylphenol	6.340	108	552503	49.49	ppm	# 80
18) Acetophenone	6.484	105	833993	50.39	ppm	99
19) Hexachloroethane	6.591	117	267363	48.19	ppm	91
20) N-Nitroso-di-n-propyla...	6.495	70	430808	49.04	ppm	# 66
21) 3&4-Methylphenol	6.516	108	578515	49.86	ppm	94
24) Nitrobenzene	6.677	77	646926	48.66	ppm	98
25) Isophorone	6.949	82	1174722	49.17	ppm	98
26) 2-Nitrophenol	7.035	139	340569	52.00	ppm	92
27) 2,4-Dimethylphenol	7.110	107	545223	48.09	ppm	99
28) O,O,O-Triethylphosphor...	7.185	198	291235	49.85	ppm	98
29) bis(2-Chloroethoxy)met...	7.211	93	702122	47.99	ppm	98
30) Benzoic Acid	7.244	105	529510m	52.72	ppm	
31) 2,4-Dichlorophenol	7.324	162	499206	49.51	ppm	93
32) 1,2,4-Trichlorobenzene	7.404	180	542357	48.39	ppm	99
34) Naphthalene	7.495	128	1685564	47.87	ppm	99
35) 4-Chloroaniline	7.570	127	725346	47.25	ppm	95
36) 2,6-Dichlorophenol	7.575	162	479848	48.96	ppm	95
37) Hexachlorobutadiene	7.645	225	296595	48.23	ppm	98
38) Caprolactam	7.998	113	207955	52.87	ppm	# 60
39) 4-Chloro-3-methylphenol	8.163	107	530674	51.07	ppm	91
40) 2-Methylnaphthalene	8.303	141	1003999	48.77	ppm	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06486.d
Acq On : 11 Aug 2020 12:54 pm
Operator : marthav
Sample : cc248-50 Inst : MSBNA10
Misc : op81484,S6F251,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Results File: 8270D6F072920.RES
Quant Time: Aug 12 05:54:11 2020
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) 1-Methylnaphthalene	8.415	142	1116278	49.33	ppm		98
42) 1,2,4,5-Tetrachloroben...	8.495	216	533204	49.34	ppm		98
44) Hexachlorocyclopentadiene	8.490	237	366080	50.90	ppm		98
45) 2,4,6-Trichlorophenol	8.640	196	370785	49.21	ppm		97
46) 2,4,5-Trichlorophenol	8.693	196	399727	49.78	ppm		98
48) 1,1'-Biphenyl	8.853	154	1399566	48.53	ppm		97
49) 2-Chloronaphthalene	8.870	162	1081075	47.65	ppm		97
50) 2-Nitroaniline	9.003	65	362039	50.97	ppm		77
51) p-Dinitrobenzene	9.169	75	243847	51.33	ppm	#	69
52) Acenaphthylene	9.356	152	1689491	48.96	ppm		97
53) Dimethylphthalate	9.239	163	1249098	48.48	ppm		100
54) m-Dinitrobenzene	9.255	168	233741	50.72	ppm	#	9
55) 2,6-Dinitrotoluene	9.297	165	307928	51.46	ppm		92
56) o-Dinitrobenzene	9.356	50	212320	47.78	ppm	#	65
57) Acenaphthene	9.559	153	1098896	47.95	ppm		96
58) 3-Nitroaniline	9.490	138	341370	49.45	ppm		93
59) 2,4-Dinitrophenol	9.613	184	192825	54.67	ppm		80
60) Dibenzofuran	9.768	168	1532987	48.39	ppm		91
61) 2,4-Dinitrotoluene	9.768	165	418954	53.17	ppm		91
62) 4-Nitrophenol	9.731	109	205056	51.93	ppm	#	83
63) 2,3,5,6-Tetrachlorophenol	9.870	232	328957	50.51	ppm		99
64) 2,3,4,6-Tetrachlorophenol	9.918	232	335281	51.76	ppm		96
65) Fluorene	10.169	166	1262376	49.21	ppm		99
66) 4-Chlorophenyl-phenyle...	10.185	204	615973	48.54	ppm		93
67) Diethylphthalate	10.078	149	1289010	49.30	ppm		99
68) Thionazin	10.175	97	298167	50.13	ppm		96
69) 4-Nitroaniline	10.223	138	352389	50.51	ppm		96
71) 4,6-Dinitro-2-methylph...	10.249	198	261746	52.71	ppm	#	75
72) n-Nitrosodiphenylamine	10.335	169	1080130	53.86	ppm		96
73) Diphenylamine	10.335	169	1080130	48.31	ppm		96
74) 1,2-Diphenylhydrazine	10.378	77	1340846	46.89	ppm		97
76) Sulfotep	10.549	97	227022	48.60	ppm	#	62
77) Phorate	10.693	75	789009	50.28	ppm		99
78) 4-Bromophenyl-phenylether	10.768	248	366211	48.64	ppm		94
79) Hexachlorobenzene	10.816	284	416937	48.49	ppm		82
80) Dimethoate	10.891	87	554160	51.33	ppm		98
81) Simazine	10.955	201	215453	47.88	ppm		94
82) Atrazine	10.993	200	380662	50.09	ppm		92
83) Pentachlorophenol	11.062	266	253265	53.39	ppm		99
84) Phenanthrene	11.308	178	1863642	48.24	ppm		99
85) Anthracene	11.367	178	1879655	47.88	ppm		98
86) Disulfoton	11.314	88	834493	50.82	ppm		95
87) Carbazole	11.571	167	1722979	48.71	ppm		96
88) Methyl Parathion	11.752	109	465999	50.80	ppm		96
89) Di-n-butylphthalate	12.031	149	2190366	49.13	ppm		99
90) Ethyl Parathion	12.228	97	294563	50.13	ppm		87
91) Fluoranthene	12.715	202	2009337	49.40	ppm		100
93) Benzidine	12.902	184	1009767	40.27	ppm		98
94) Pyrene	12.977	202	2067684	48.07	ppm		95
96) Famphur	13.769	218	622842	45.64	ppm		99
97) Butylbenzylphthalate	13.865	149	993062	48.18	ppm		99
98) 3,3'-Dichlorobenzidine	14.560	252	752353	48.32	ppm		99
99) Benzo[a]anthracene	14.560	228	1923165	47.79	ppm		98
100) Chrysene	14.614	228	1877255	48.08	ppm		98
101) bis(2-Ethylhexyl)phtha...	14.716	149	1380559	47.96	ppm		98
103) Di-n-octylphthalate	15.785	149	2311518	48.74	ppm		93
104) Benzo[b]fluoranthene	16.288	252	1875531	48.74	ppm		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06486.d
Acq On : 11 Aug 2020 12:54 pm
Operator : marthav
Sample : cc248-50 Inst : MSBNA10
Misc : op81484,S6F251,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Results File: 8270D6F072920.RES
Quant Time: Aug 12 05:54:11 2020
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

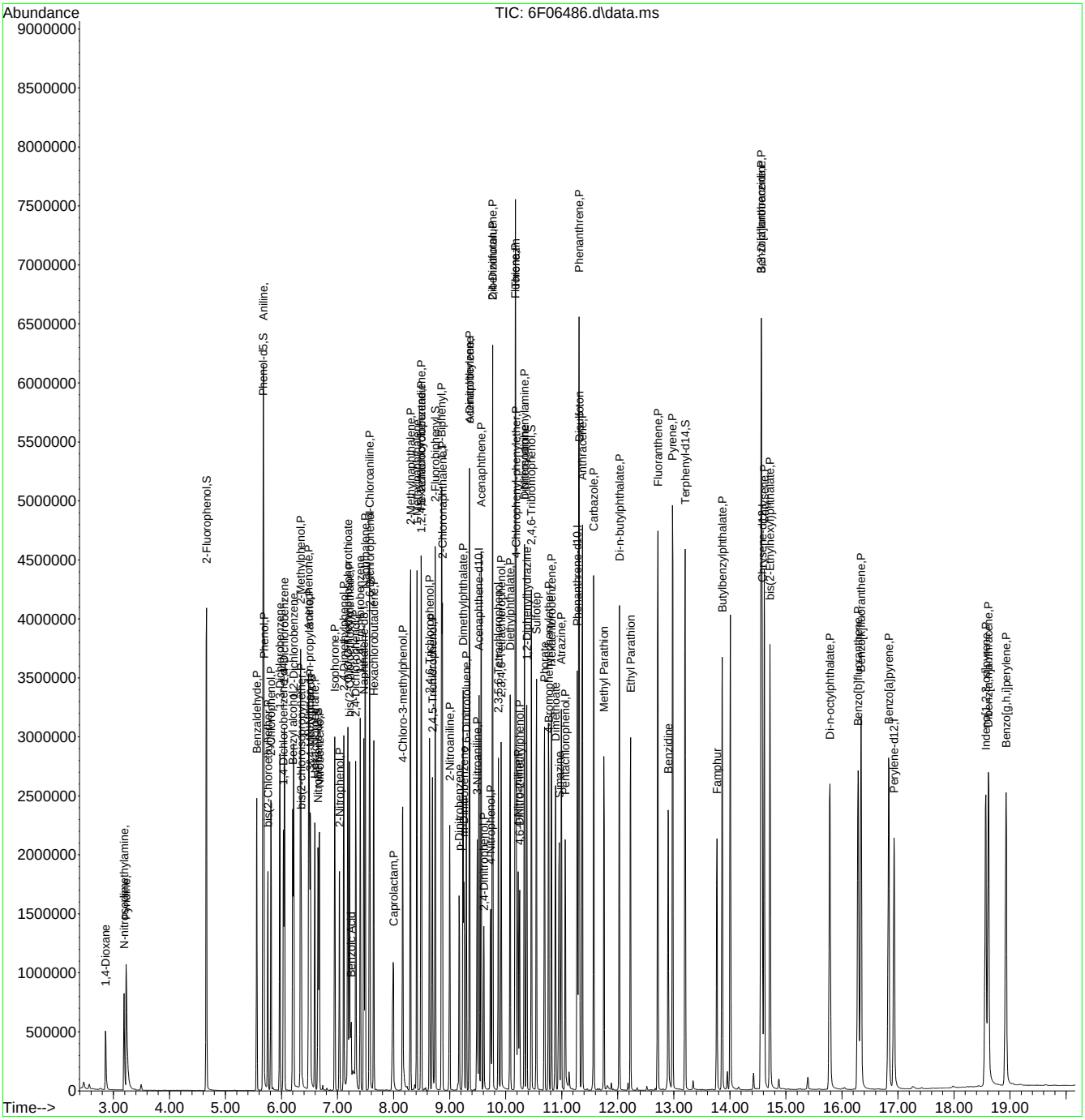
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
105) Benzo[k]fluoranthene	16.342	252	1935386	48.36	ppm	97
106) Benzo[a]pyrene	16.839	252	1744361	48.81	ppm	97
107) Indeno[1,2,3-cd]pyrene	18.567	276	1648635	49.55	ppm	93
108) Dibenz[a,h]anthracene	18.615	278	1780316	50.12	ppm	92
109) Benzo[g,h,i]perylene	18.930	276	1720309	47.91	ppm	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06486.d
Acq On : 11 Aug 2020 12:54 pm
Operator : marthav
Sample : cc248-50 Inst : MSBNA10
Misc : op81484,S6F251,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Results File: 8270D6F072920.RES
Quant Time: Aug 12 05:54:11 2020
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration



FA77581

Manual Integration Approval Summary

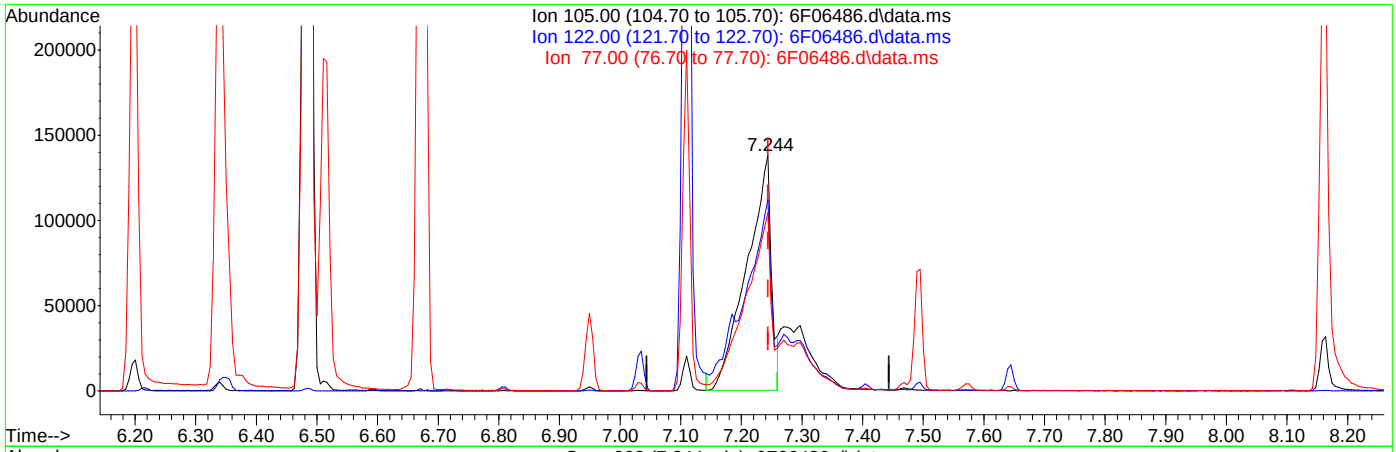
Sample Number: S6F251-CC248
Lab FileID: 6F06486.D
Injection Time: 08/11/20 12:54
Method: SW846 8270D
Analyst approved: 08/12/20 07:02 Jennifer Fereira
Supervisor approved: 08/12/20 14:43 Nicole McCampbell

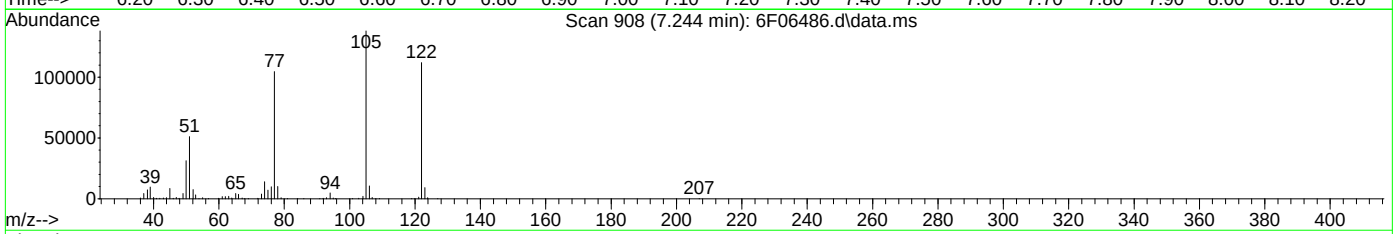
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic Acid	65-85-0		7.24	Split peak

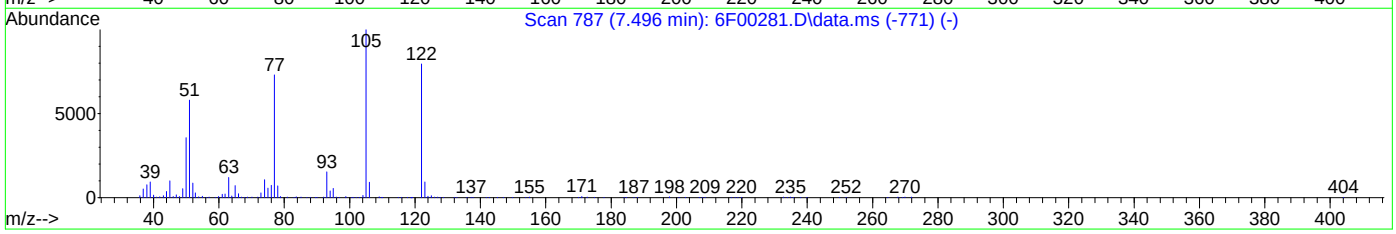
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06486.d
Acq On : 11 Aug 2020 12:54 pm
Operator : marthav
Sample : cc248-50 Inst : MSBNA10
Misc : op81484,S6F251,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Results File: 8270D6F072920.RES
Quant Time: Aug 12 05:52:10 2020
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration







TIC: 6F06486.d\data.ms

(30) Benzoic Acid

7.244min (0.000) 40.42ppm

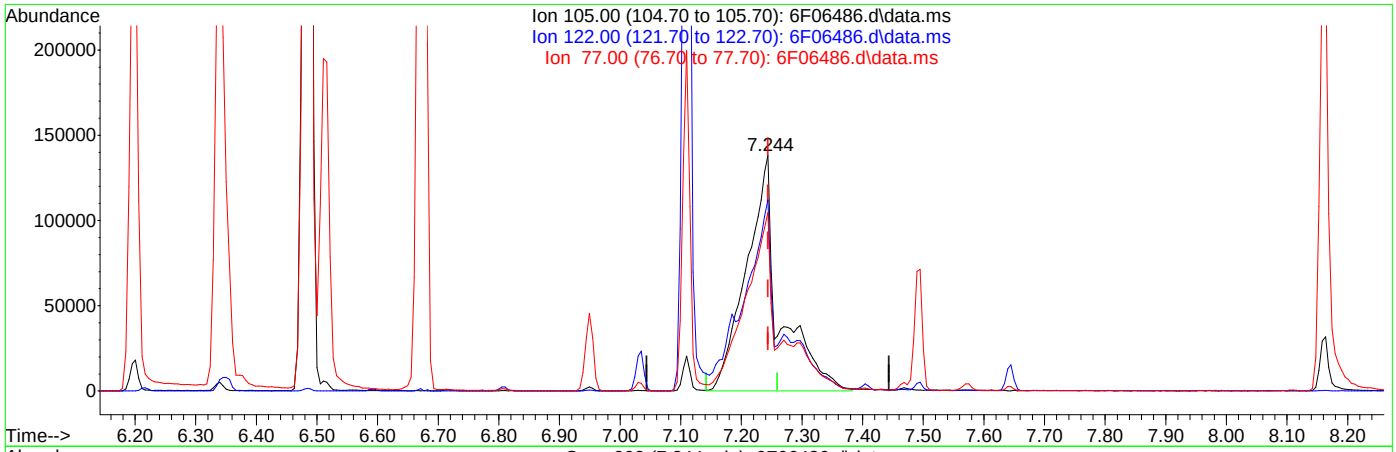
response 386466

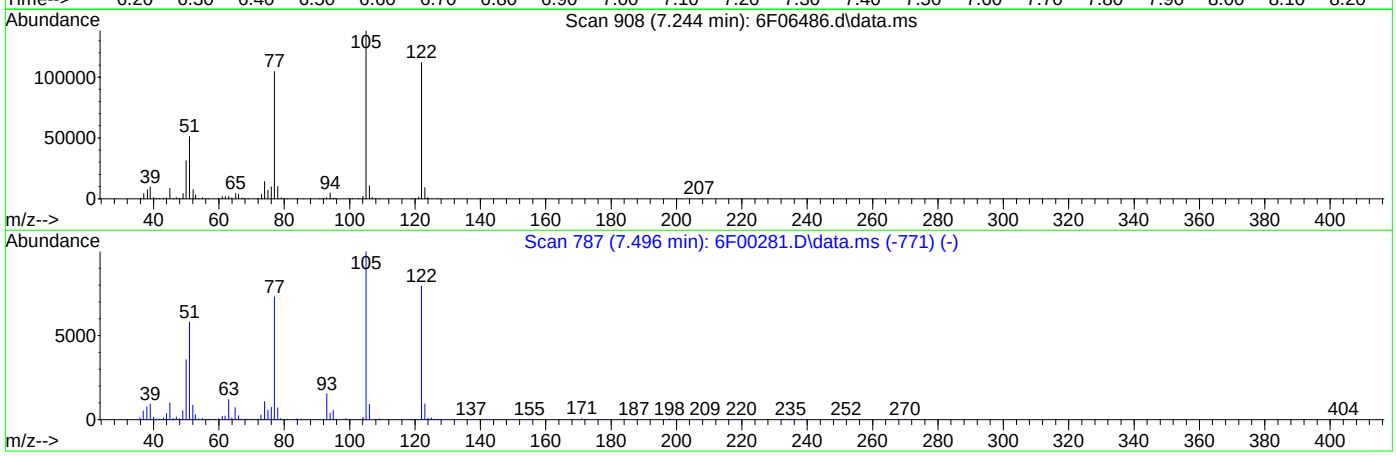
Ion	Exp%	Act%
105.00	100	100
122.00	79.50	76.92
77.00	73.00	73.95
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06486.d
Acq On : 11 Aug 2020 12:54 pm
Operator : marthav
Sample : cc248-50 Inst : MSBNA10
Misc : op81484,S6F251,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Results File: 8270D6F072920.RES
Quant Time: Aug 12 05:52:10 2020
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration





TIC: 6F06486.d\data.ms

(30) Benzoic Acid

7.244min (0.000) 52.72ppm m

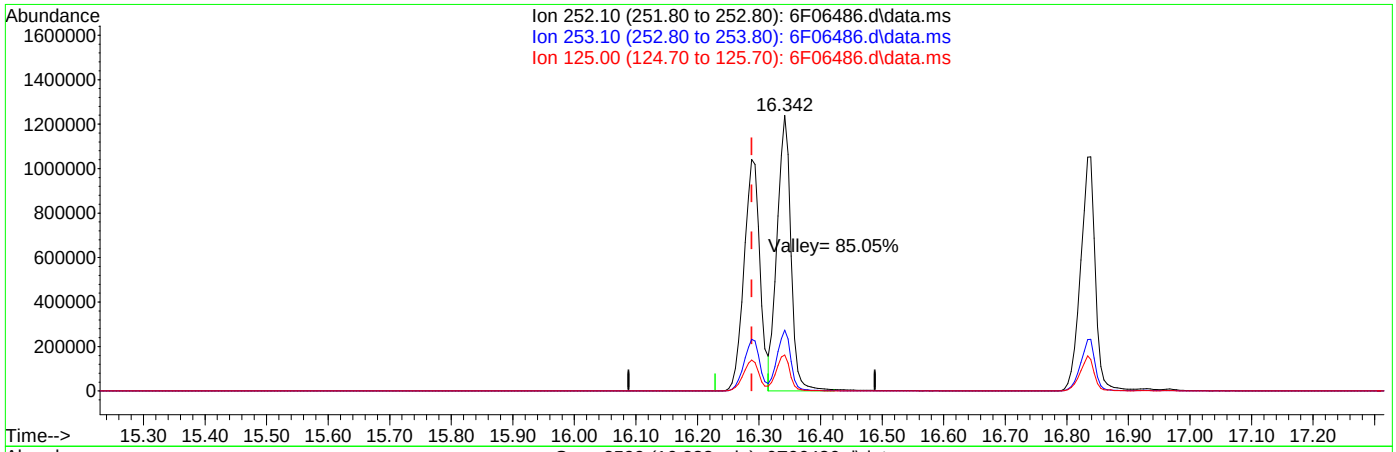
response 529510

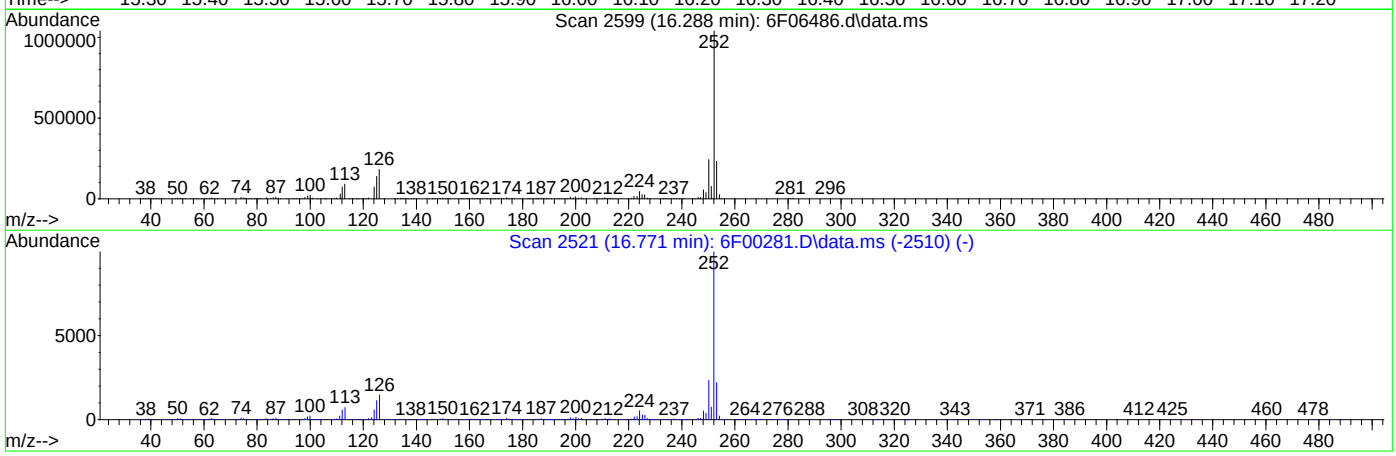
Ion	Exp%	Act%
105.00	100	100
122.00	79.50	81.09
77.00	73.00	75.68
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06486.d
Acq On : 11 Aug 2020 12:54 pm
Operator : marthav
Sample : cc248-50 Inst : MSBNA10
Misc : op81484,S6F251,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Results File: 8270D6F072920.RES
Quant Time: Aug 12 05:54:11 2020
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration





TIC: 6F06486.d\data.ms

(104) Benzo[b]fluoranthene (P)

16.288min (0.000) 48.74ppm

response 1875531

Ion	Exp%	Act%
252.10	100	100
253.10	21.90	22.39
125.00	11.30	13.32
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 07/22/20 17:04

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10833.D
Acq On : 21 Jul 2020 1:31 pm
Operator : fouads
Sample : ic472-1
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 21 16:22:34 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration

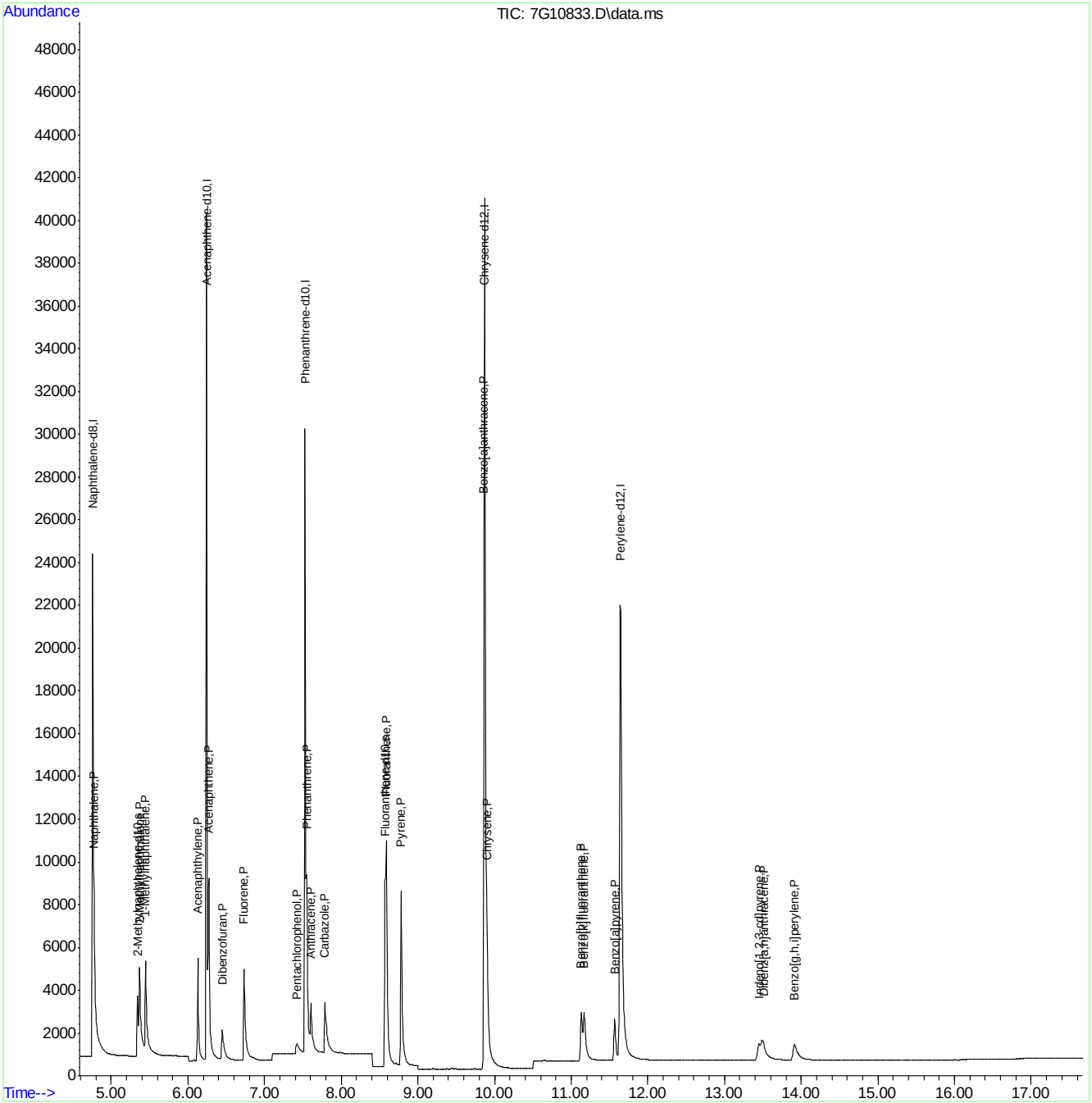
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.758	136	23994	4.00	ppm	-0.01
6) Acenaphthene-d10	6.244	164	13702	4.00	ppm	-0.01
11) Phenanthrene-d10	7.528	188	24543	4.00	ppm	-0.01
18) Chrysene-d12	9.872	240	38114	4.00	ppm	-0.01
22) Perylene-d12	11.639	264	32339	4.00	ppm	-0.02
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.346	152	2098	0.52	ppm	-0.02
Spiked Amount 10.000	Range 50 - 150		Recovery =	5.20%#		
17) Fluoranthene-d10	8.573	212	7444	0.53	ppm	-0.03
Spiked Amount 10.000	Range 50 - 150		Recovery =	5.30%#		
Target Compounds						Qvalue
2) Naphthalene	4.775	128	4289	0.56	ppm	98
3) 2-Methylnaphthalene	5.370	142	2500	0.43	ppm	97
5) 1-Methylnaphthalene	5.447	142	3106	0.56	ppm	91
7) Acenaphthylene	6.128	152	4559	0.52	ppm	99
8) Acenaphthene	6.273	153	3108	0.54	ppm	97
9) Dibenzofuran	6.447	168	2138	0.53	ppm	100
10) Fluorene	6.732	166	3338	0.54	ppm	100
12) Pentachlorophenol	7.424	266	516m	0.70	ppm	
13) Phenanthrene	7.549	178	4926	0.55	ppm	99
14) Anthracene	7.605	178	2668	0.30	ppm	99
15) Carbazole	7.785	167	3902	0.26	ppm	95
16) Fluoranthene	8.588	202	9291	0.54	ppm	99
19) Pyrene	8.782	202	9492	0.53	ppm	100
20) Benzo[a]anthracene	9.862	228	3464	0.26	ppm	98
21) Chrysene	9.898	228	4647	0.32	ppm	100
23) Benzo[b]fluoranthene	11.129	252	2712	0.21	ppm	99
24) Benzo[k]fluoranthene	11.168	252	3873	0.26	ppm	99
25) Benzo[a]pyrene	11.566	252	2679	0.24	ppm	100
26) Indeno[1,2,3-cd]pyrene	13.449	276	1438m	0.29	ppm	
27) Dibenz[a,h]anthracene	13.507	278	1764	0.34	ppm	99
28) Benzo[g,h,i]perylene	13.910	276	2089	0.39	ppm	92

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10833.D
Acq On : 21 Jul 2020 1:31 pm
Operator : fouads
Sample : ic472-1
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 21 16:22:34 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration



Manual Integration Approval Summary

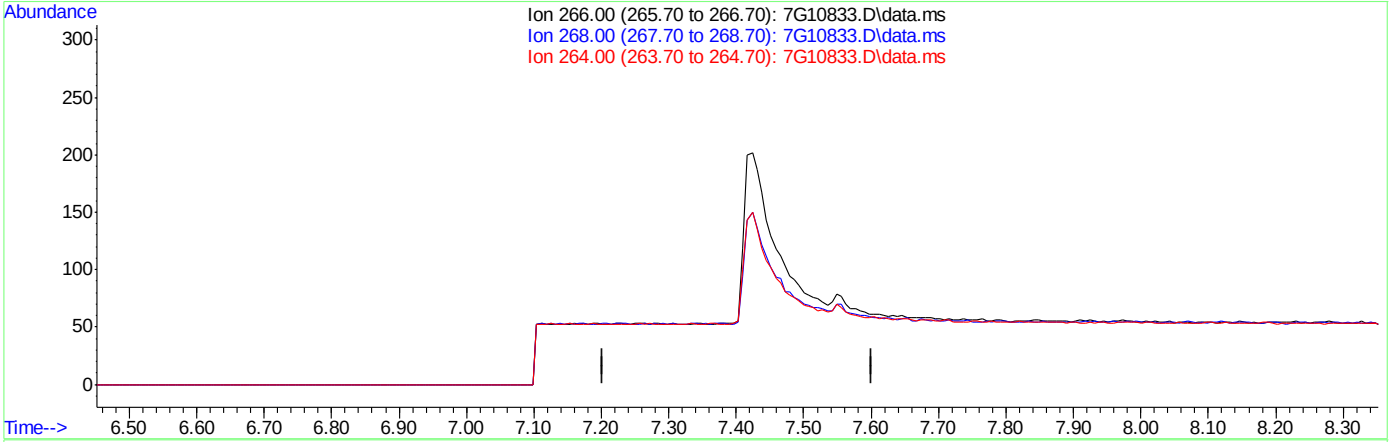
Sample Number: S7G472-IC472
Lab FileID: 7G10833.D
Injection Time: 07/21/20 13:31
Method: SW846 8270D BY SIM
Analyst approved: 07/22/20 13:31 Fouad Sekkar
Supervisor approved: 07/22/20 17:04 Nicole McCampbell

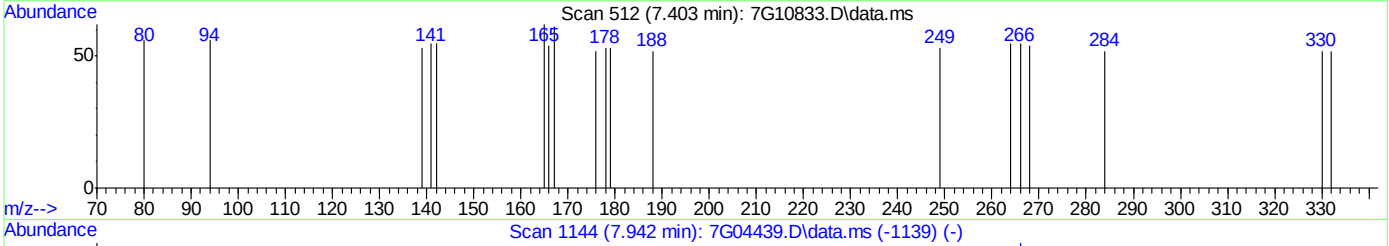
Parameter	CAS	Sig#	R.T. (min.)	Reason
Pentachlorophenol	87-86-5		7.42	Missed peak
Indeno(1,2,3-cd)pyrene	193-39-5		13.45	Missed peak

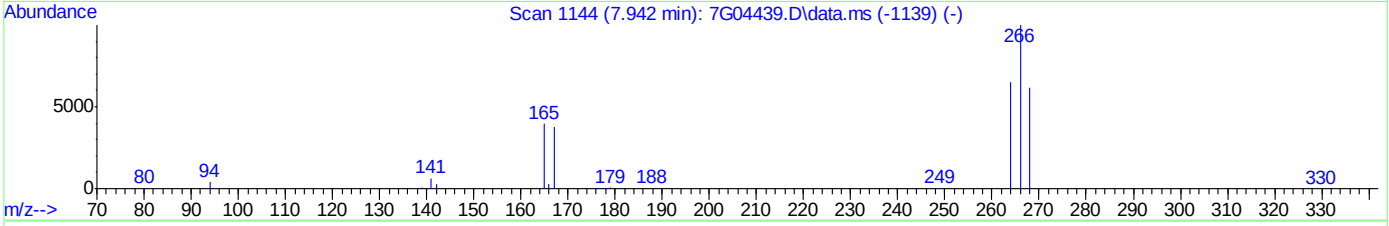
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10833.D
Acq On : 21 Jul 2020 1:31 pm
Operator : fouads
Sample : ic472-1
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 21 16:18:33 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration







TIC: 7G10833.D\data.ms

(12) Pentachlorophenol (P)

7.402min (-7.402) 0.00ppm

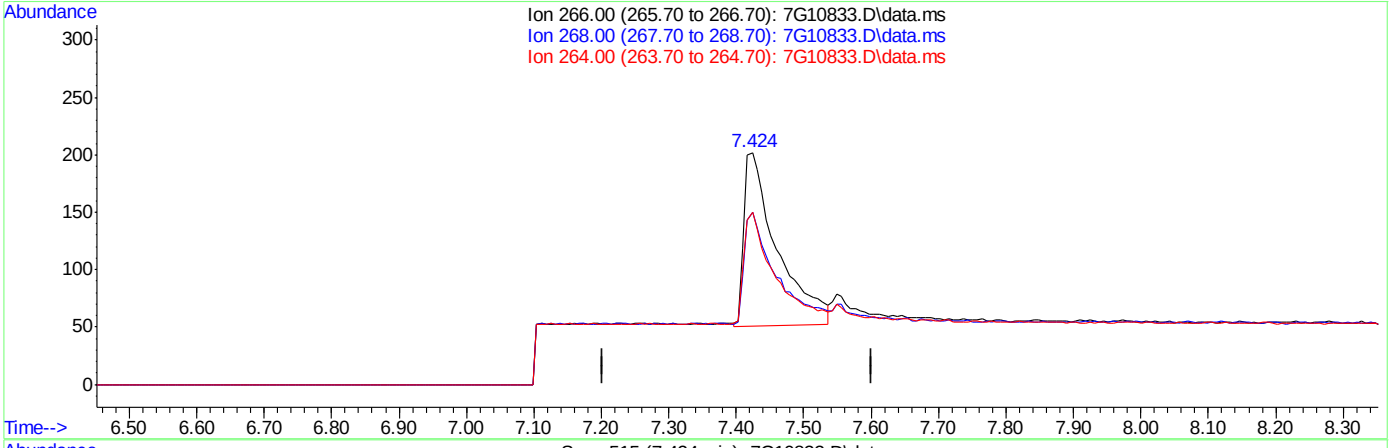
response 0

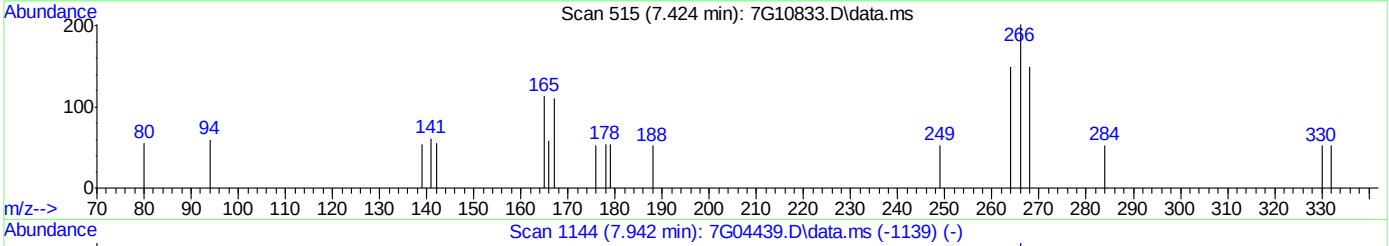
Ion	Exp%	Act%
266.00	100	0.00
268.00	61.80	0.00#
264.00	65.30	0.00#
0.00	0.00	0.00

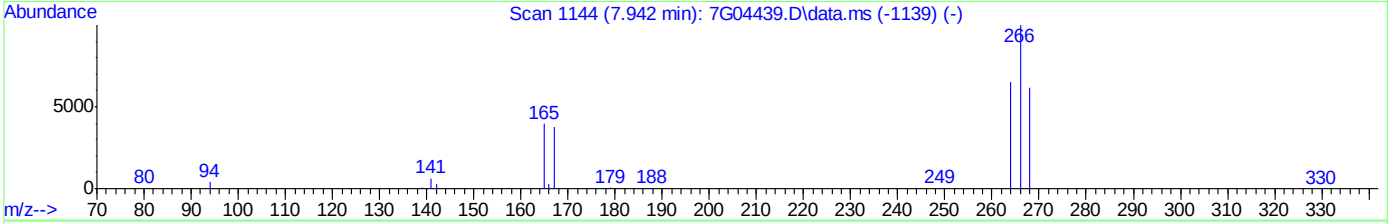
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10833.D
Acq On : 21 Jul 2020 1:31 pm
Operator : fouads
Sample : ic472-1
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 21 16:18:33 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration







TIC: 7G10833.D\data.ms

(12) Pentachlorophenol (P)

7.424min (+0.022) 0.70ppm m

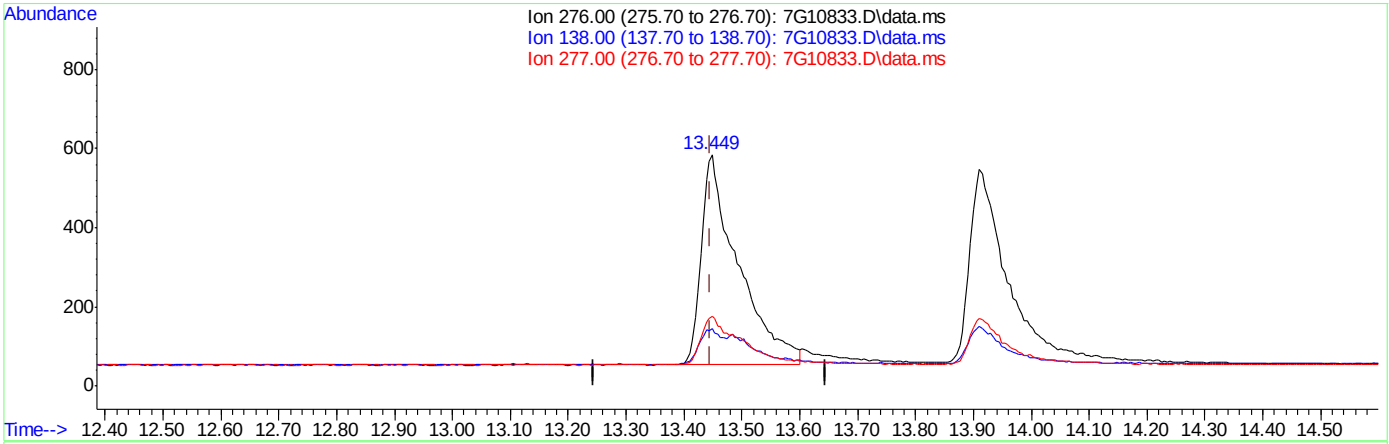
response 516

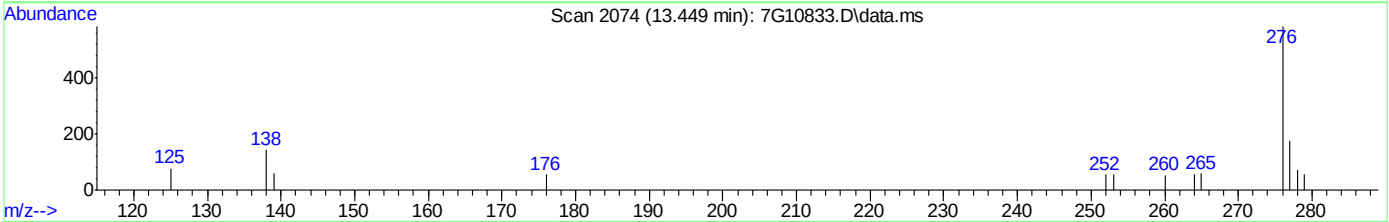
Ion	Exp%	Act%
266.00	100	100
268.00	61.80	74.26
264.00	65.30	74.26
0.00	0.00	0.00

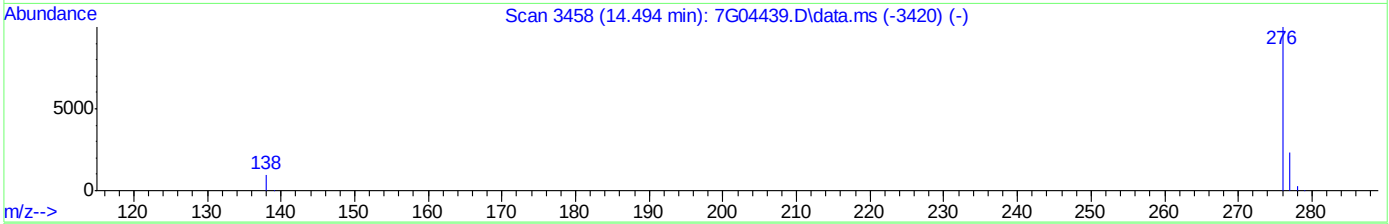
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10833.D
Acq On : 21 Jul 2020 1:31 pm
Operator : fouads
Sample : ic472-1
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 21 16:18:33 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration







TIC: 7G10833.D\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.449min (+0.004) 0.47ppm

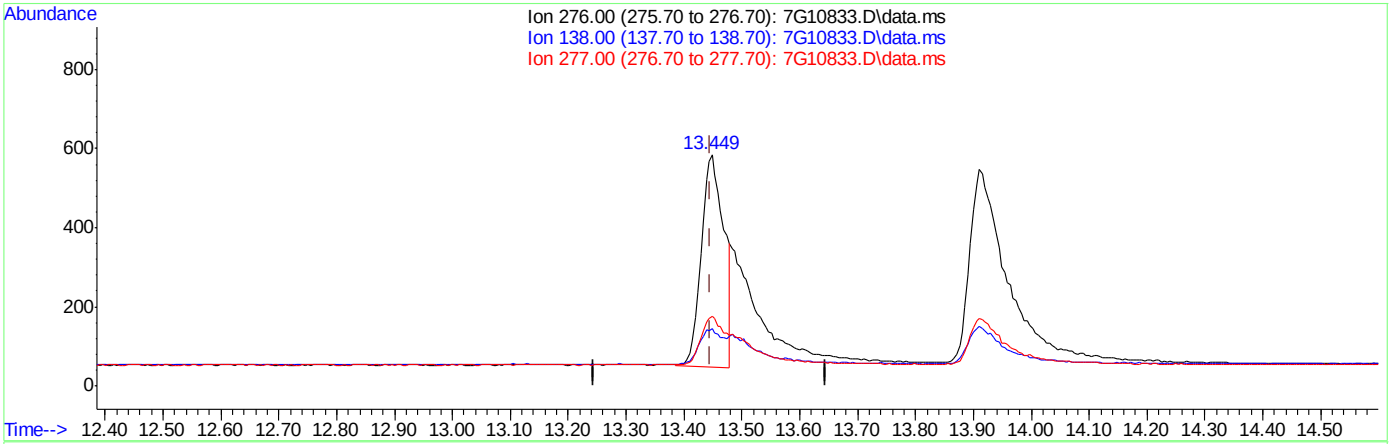
response 2338

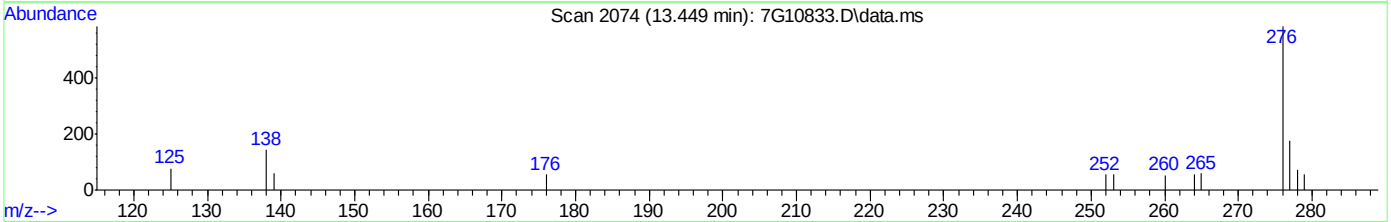
Ion	Exp%	Act%
276.00	100	100
138.00	14.60	16.37
277.00	22.90	23.10
0.00	0.00	0.00

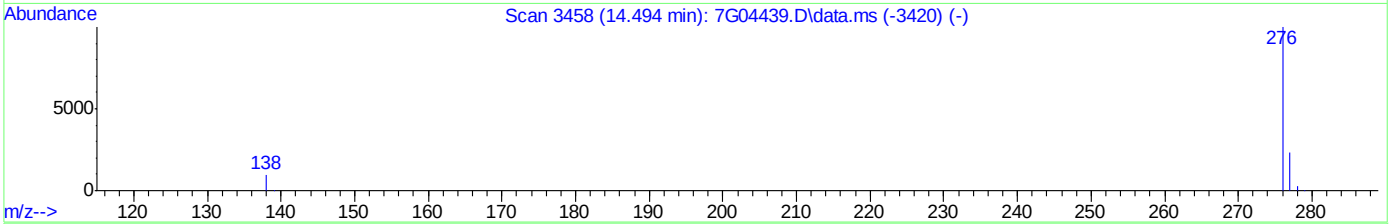
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10833.D
Acq On : 21 Jul 2020 1:31 pm
Operator : fouads
Sample : ic472-1
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 21 16:18:33 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration







TIC: 7G10833.D\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.449min (+0.004) 0.29ppm m

response 1438

Ion	Exp%	Act%
276.00	100	100
138.00	14.60	24.62
277.00	22.90	30.26
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 07/22/20 17:04

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10834.D
Acq On : 21 Jul 2020 1:55 pm
Operator : fouads
Sample : ic472-2
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 21 16:23:38 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration

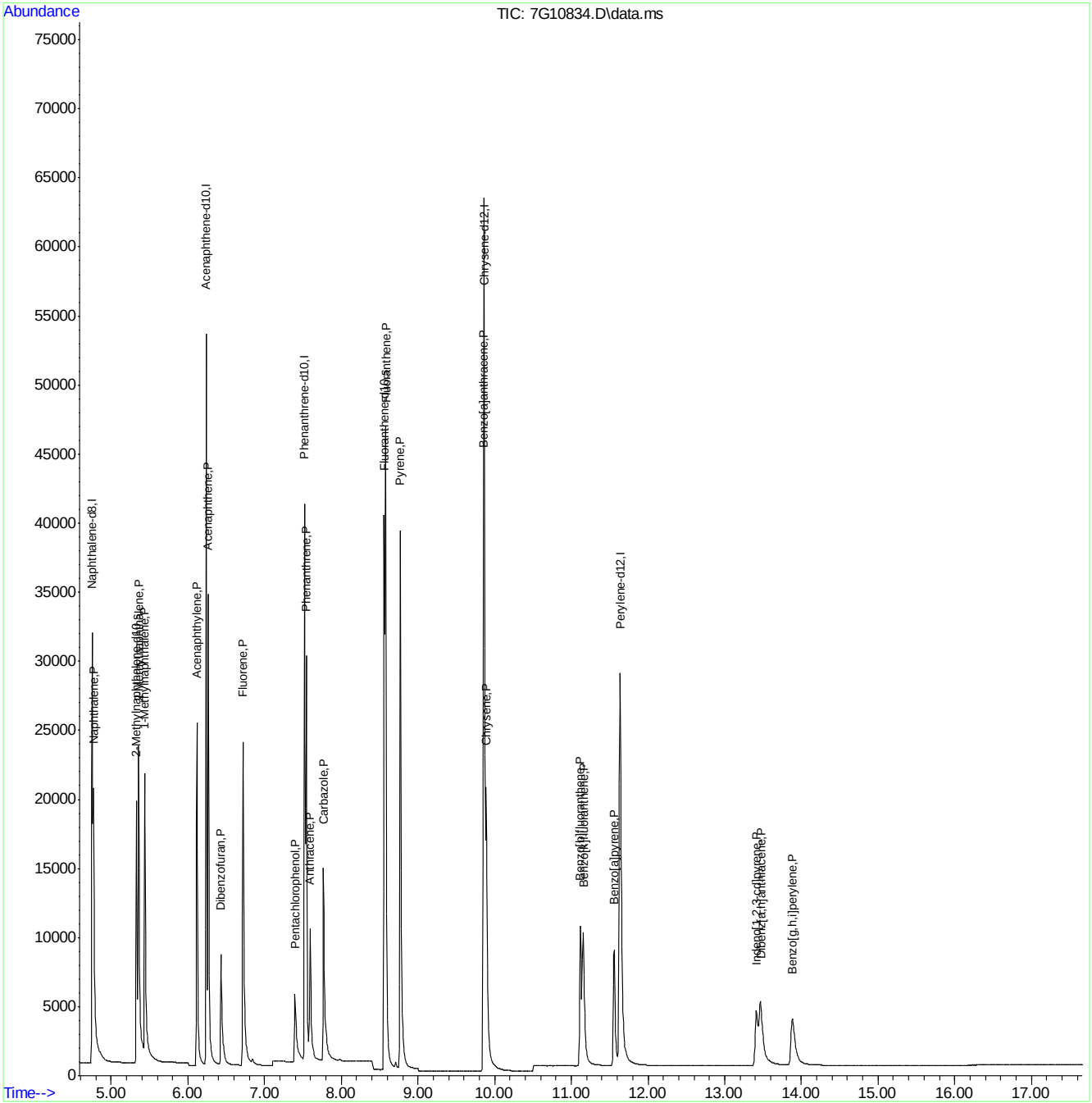
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.752	136	29081	4.00	ppm	-0.02
6) Acenaphthene-d10	6.239	164	16862	4.00	ppm	-0.02
11) Phenanthrene-d10	7.521	188	30203	4.00	ppm	-0.02
18) Chrysene-d12	9.862	240	48257	4.00	ppm	-0.02
22) Perylene-d12	11.636	264	41825	4.00	ppm	-0.03
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.329	152	7918	1.62	ppm	-0.04
Spiked Amount 10.000	Range 50 - 150		Recovery = 16.20%#			
17) Fluoranthene-d10	8.560	212	29862	1.74	ppm	-0.04
Spiked Amount 10.000	Range 50 - 150		Recovery = 17.40%#			
Target Compounds						Qvalue
2) Naphthalene	4.769	128	16703	1.81	ppm	100
3) 2-Methylnaphthalene	5.358	142	11209	1.60	ppm	98
5) 1-Methylnaphthalene	5.435	142	11625	1.74	ppm	84
7) Acenaphthylene	6.118	152	18703	1.74	ppm	99
8) Acenaphthene	6.263	153	12399	1.77	ppm	94
9) Dibenzofuran	6.432	168	8863	1.80	ppm	95
10) Fluorene	6.717	166	13533	1.79	ppm	100
12) Pentachlorophenol	7.396	266	3019	3.31	ppm	98
13) Phenanthrene	7.542	178	19355	1.76	ppm	99
14) Anthracene	7.591	178	10083	0.91	ppm	100
15) Carbazole	7.764	167	16301	0.88	ppm	97
16) Fluoranthene	8.579	202	36358	1.73	ppm	99
19) Pyrene	8.769	202	37461	1.66	ppm	98
20) Benzo[a]anthracene	9.855	228	14421	0.85	ppm	99
21) Chrysene	9.891	228	17593	0.97	ppm	99
23) Benzo[b]fluoranthene	11.117	252	12271	0.74	ppm	99
24) Benzo[k]fluoranthene	11.156	252	15759	0.82	ppm	99
25) Benzo[a]pyrene	11.559	252	12673	0.88	ppm	99
26) Indeno[1,2,3-cd]pyrene	13.412	276	7001m	1.08	ppm	
27) Dibenz[a,h]anthracene	13.471	278	8032	1.18	ppm	100
28) Benzo[g,h,i]perylene	13.883	276	9167	1.33	ppm	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10834.D
Acq On : 21 Jul 2020 1:55 pm
Operator : fouads
Sample : ic472-2
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 21 16:23:38 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration



Manual Integration Approval Summary

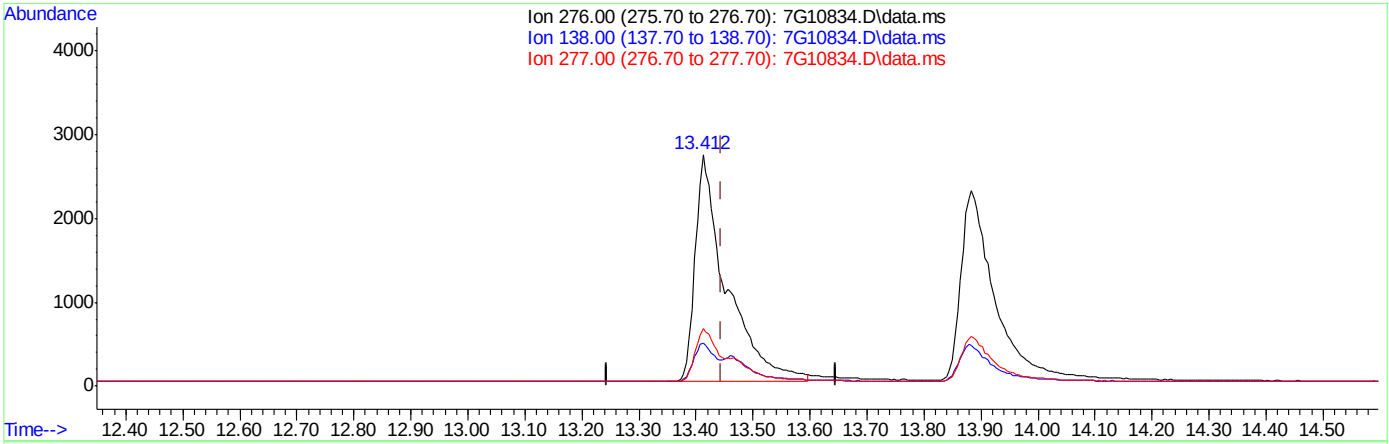
Sample Number: S7G472-IC472
Lab FileID: 7G10834.D
Injection Time: 07/21/20 13:55
Method: SW846 8270D BY SIM
Analyst approved: 07/22/20 13:31 Fouad Sekkar
Supervisor approved: 07/22/20 17:04 Nicole McCampbell

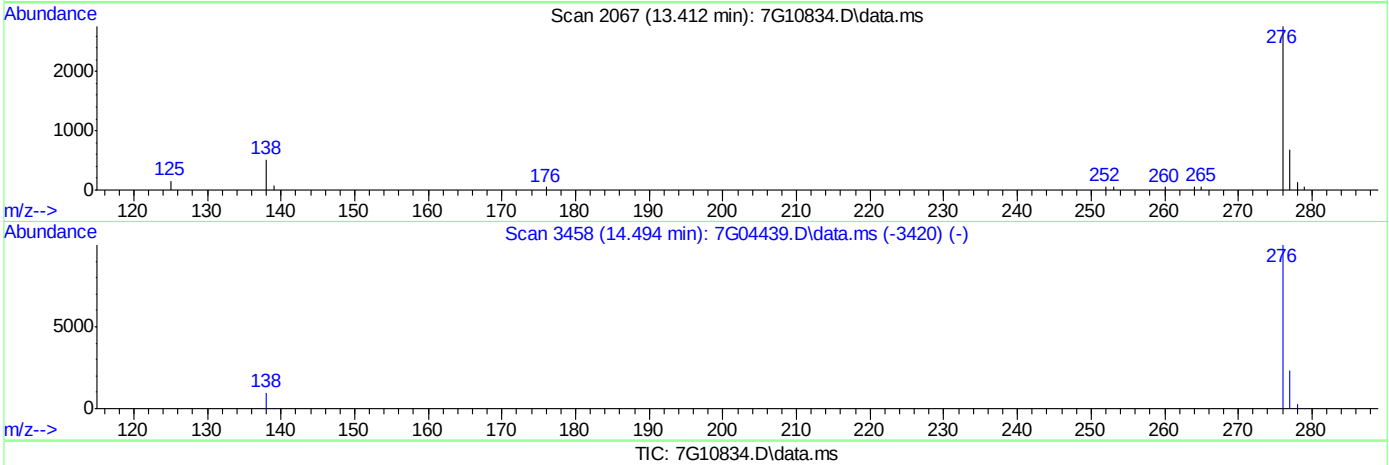
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		13.41	Missed peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10834.D
Acq On : 21 Jul 2020 1:55 pm
Operator : fouads
Sample : ic472-2
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 21 16:18:37 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration





TIC: 7G10834.D\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.412min (-0.033) 1.59ppm

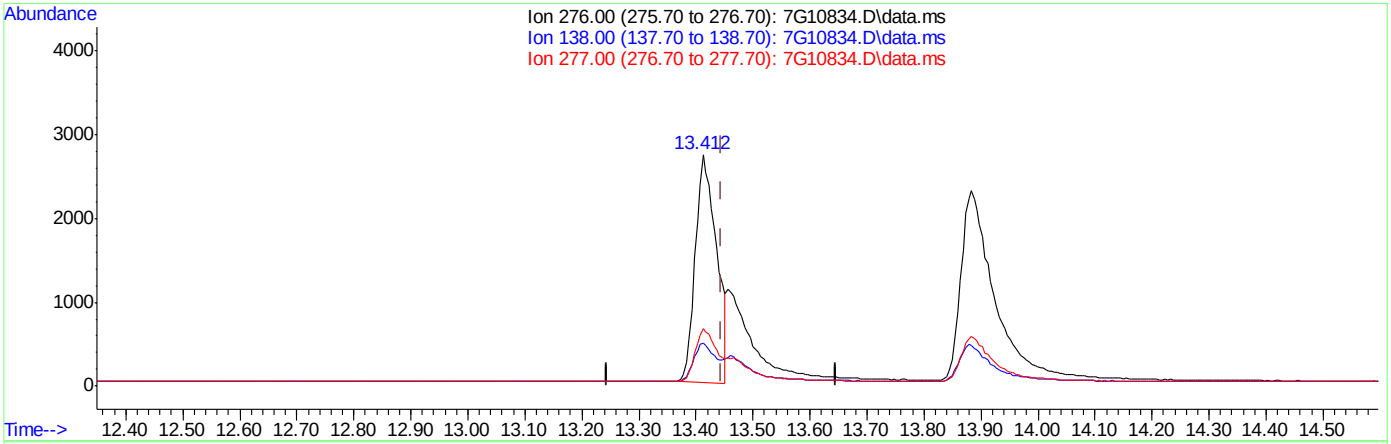
response 10318

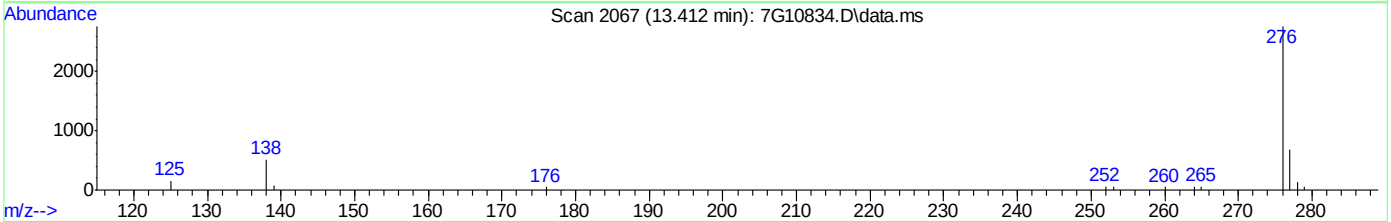
Ion	Exp%	Act%
276.00	100	100
138.00	14.60	16.99
277.00	22.90	23.44
0.00	0.00	0.00

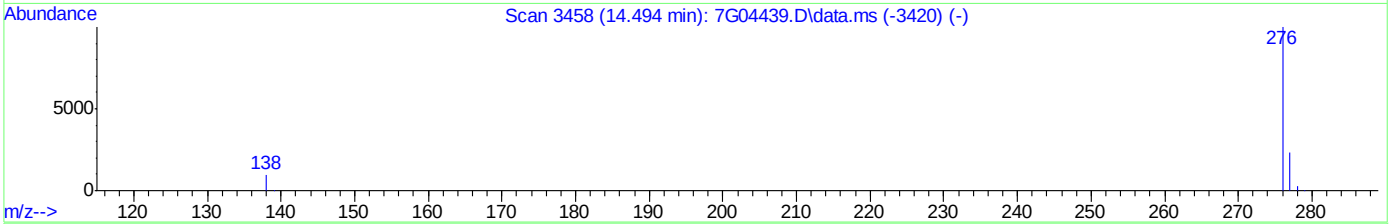
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10834.D
Acq On : 21 Jul 2020 1:55 pm
Operator : fouads
Sample : ic472-2
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 21 16:18:37 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration







TIC: 7G10834.D\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.412min (-0.033) 1.08ppm m

response 7001

Ion	Exp%	Act%
276.00	100	100
138.00	14.60	18.75
277.00	22.90	24.95
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 07/22/20 17:04

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10835.D
Acq On : 21 Jul 2020 2:19 pm
Operator : fouads
Sample : ic472-3
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 21 16:24:24 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration

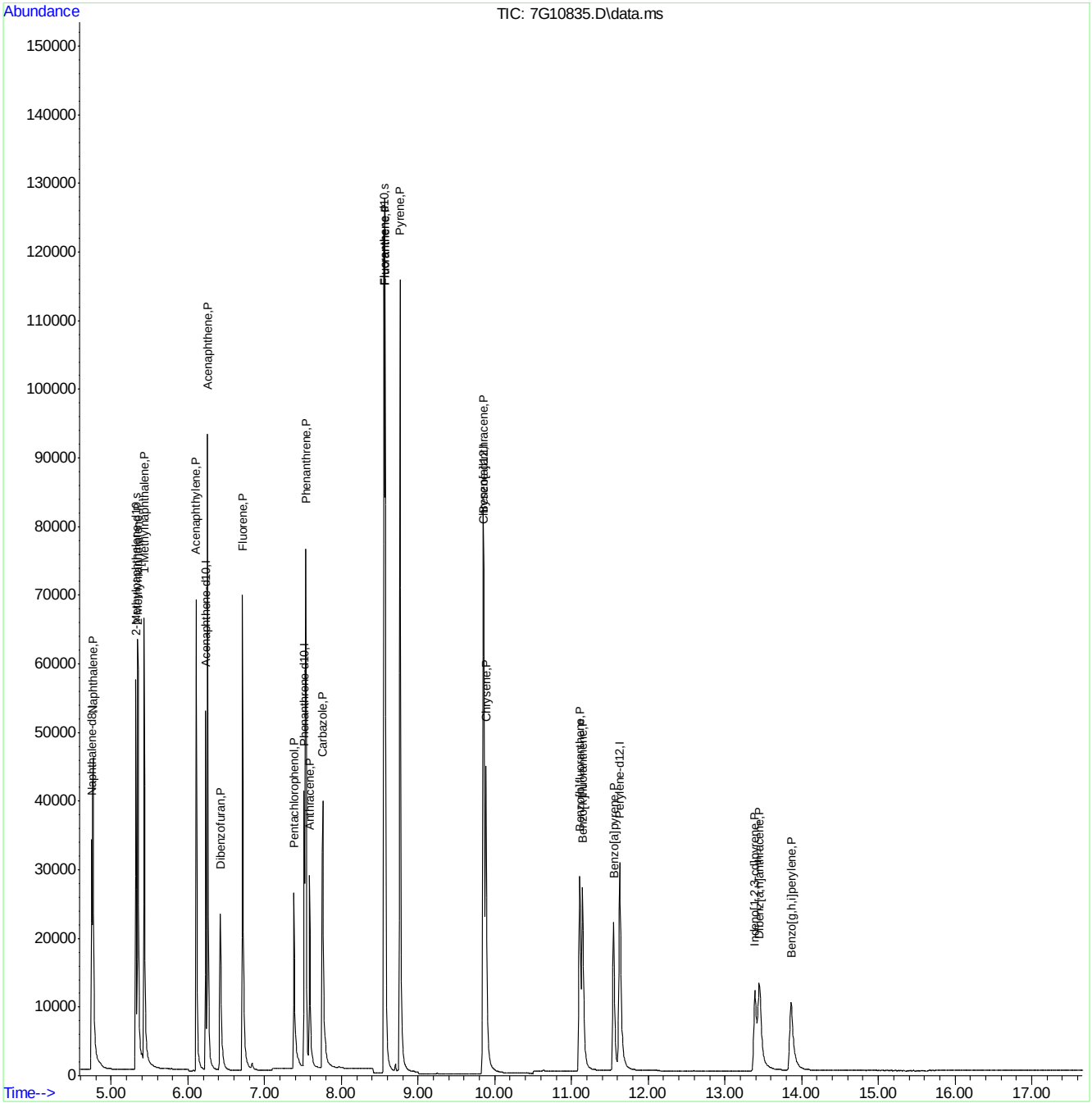
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.746	136	28715	4.00	ppm	-0.02
6) Acenaphthene-d10	6.234	164	16760	4.00	ppm	-0.02
11) Phenanthrene-d10	7.514	188	29264	4.00	ppm	-0.03
18) Chrysene-d12	9.857	240	48140	4.00	ppm	-0.03
22) Perylene-d12	11.627	264	42133	4.00	ppm	-0.04
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.323	152	19987	4.15	ppm	-0.04
Spiked Amount 10.000	Range 50 - 150		Recovery = 41.50%#			
17) Fluoranthene-d10	8.557	212	74078	4.46	ppm	-0.04
Spiked Amount 10.000	Range 50 - 150		Recovery = 44.60%#			
Target Compounds						Qvalue
2) Naphthalene	4.764	128	40296	4.43	ppm	100
3) 2-Methylnaphthalene	5.352	142	28506	4.13	ppm	98
5) 1-Methylnaphthalene	5.429	142	27972	4.23	ppm	89
7) Acenaphthylene	6.108	152	46420	4.35	ppm	98
8) Acenaphthene	6.258	153	30591	4.38	ppm	96
9) Dibenzofuran	6.423	168	21620	4.42	ppm	92
10) Fluorene	6.713	166	32883	4.37	ppm	98
12) Pentachlorophenol	7.382	266	10713	12.12	ppm	97
13) Phenanthrene	7.535	178	47680	4.47	ppm	99
14) Anthracene	7.584	178	23874	2.22	ppm	100
15) Carbazole	7.757	167	40148	2.22	ppm	100
16) Fluoranthene	8.570	202	89721	4.40	ppm	99
19) Pyrene	8.763	202	92682	4.12	ppm	99
20) Benzo[a]anthracene	9.847	228	36400	2.15	ppm	99
21) Chrysene	9.886	228	41406	2.29	ppm	100
23) Benzo[b]fluoranthene	11.107	252	32655	1.96	ppm	99
24) Benzo[k]fluoranthene	11.141	252	37458	1.94	ppm	100
25) Benzo[a]pyrene	11.549	252	31646	2.17	ppm	100
26) Indeno[1,2,3-cd]pyrene	13.393	276	20359m	3.11	ppm	
27) Dibenz[a,h]anthracene	13.446	278	21793	3.19	ppm	99
28) Benzo[g,h,i]perylene	13.864	276	24010	3.45	ppm	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10835.D
Acq On : 21 Jul 2020 2:19 pm
Operator : fouads
Sample : ic472-3
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 21 16:24:24 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration



Manual Integration Approval Summary

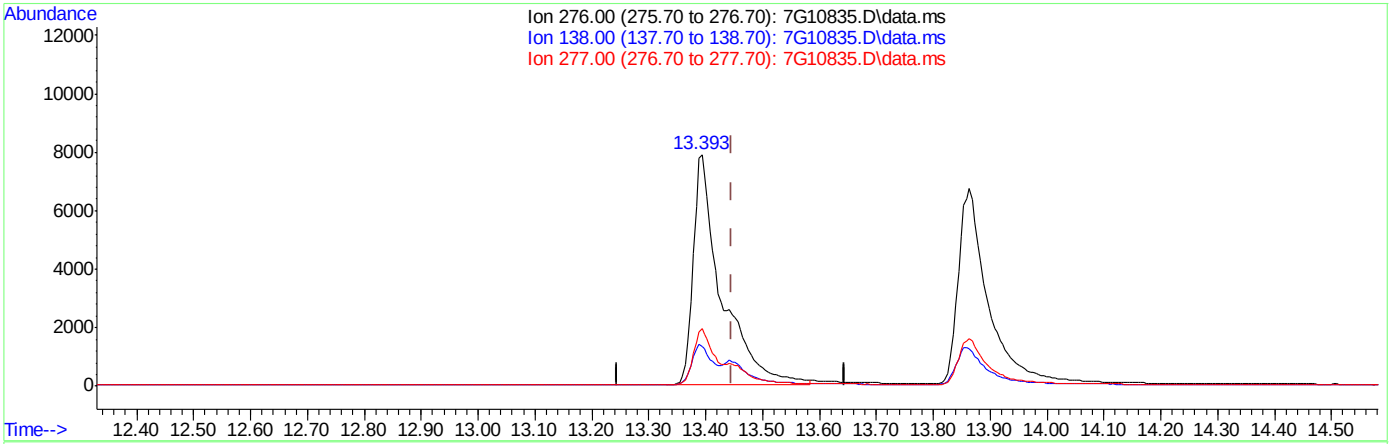
Sample Number: S7G472-IC472
Lab FileID: 7G10835.D
Injection Time: 07/21/20 14:19
Method: SW846 8270D BY SIM
Analyst approved: 07/22/20 13:31 Fouad Sekkar
Supervisor approved: 07/22/20 17:04 Nicole McCampbell

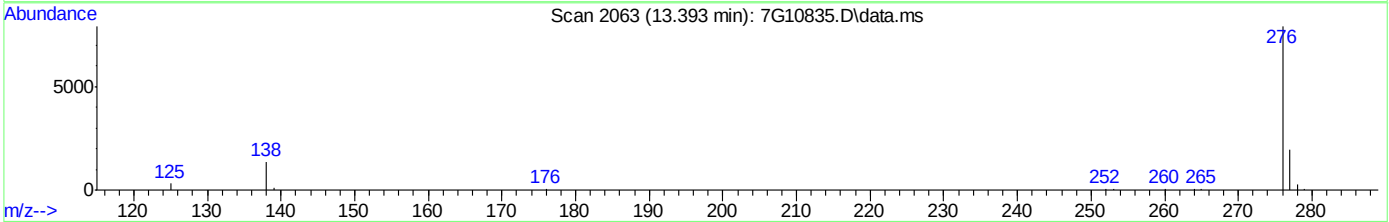
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		13.39	Missed peak

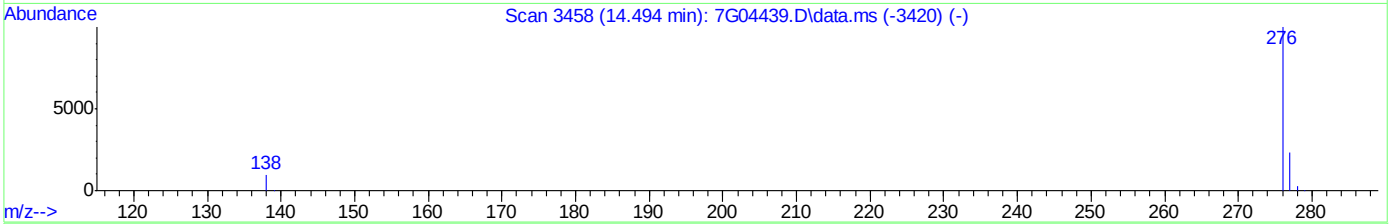
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10835.D
Acq On : 21 Jul 2020 2:19 pm
Operator : fouads
Sample : ic472-3
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 21 16:18:41 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration







TIC: 7G10835.D\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.393min (-0.052) 4.18ppm

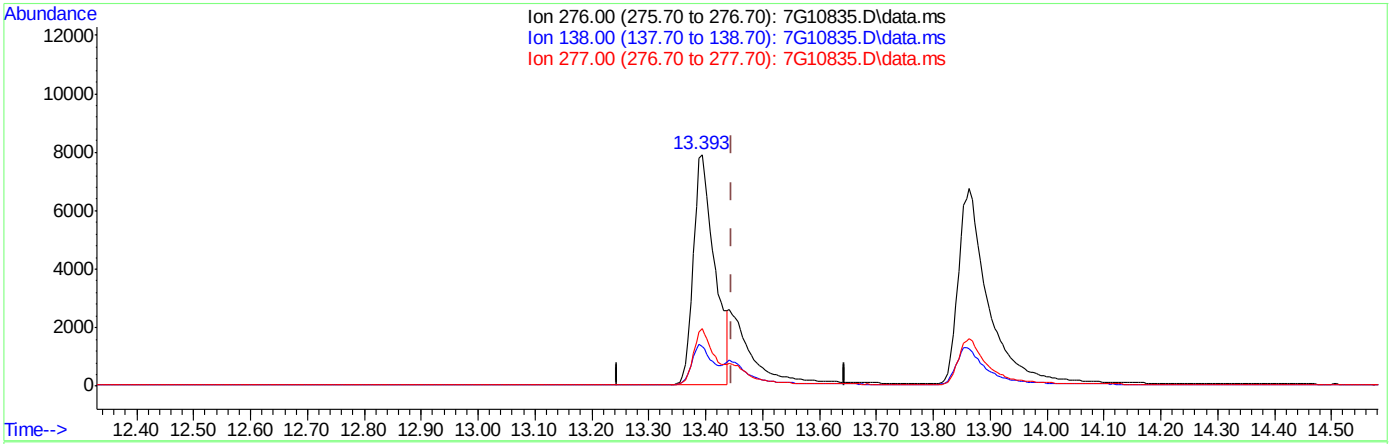
response 27333

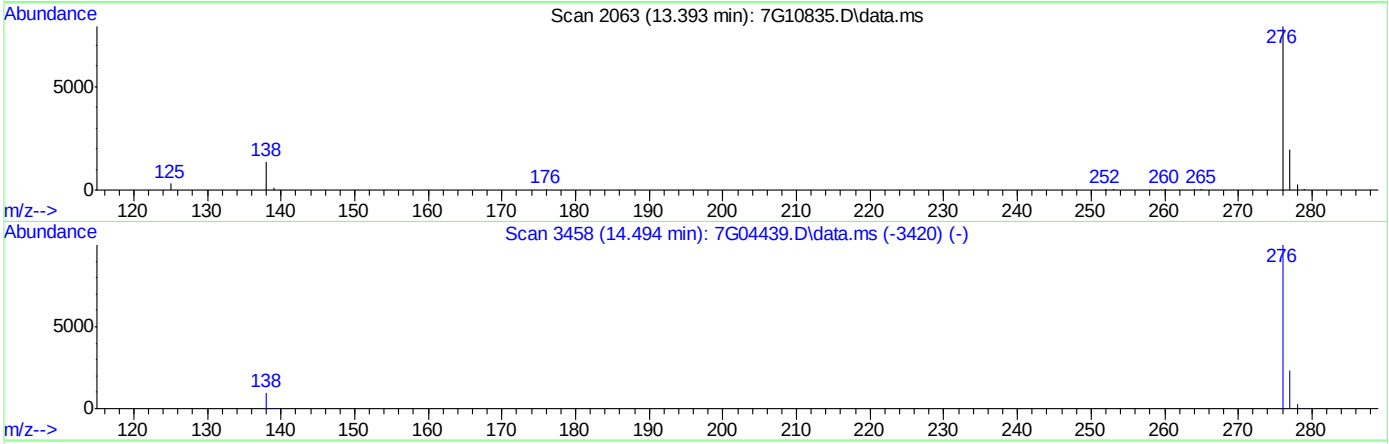
Ion	Exp%	Act%
276.00	100	100
138.00	14.60	16.53
277.00	22.90	24.07
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10835.D
Acq On : 21 Jul 2020 2:19 pm
Operator : fouads
Sample : ic472-3
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 21 16:18:41 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration





TIC: 7G10835.D\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.393min (-0.052) 3.11ppm m

response 20359

Ion	Exp%	Act%
276.00	100	100
138.00	14.60	17.21
277.00	22.90	24.62
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10836.D
Acq On : 21 Jul 2020 2:43 pm
Operator : fouads
Sample : icc472-4
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 21 16:18:45 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration

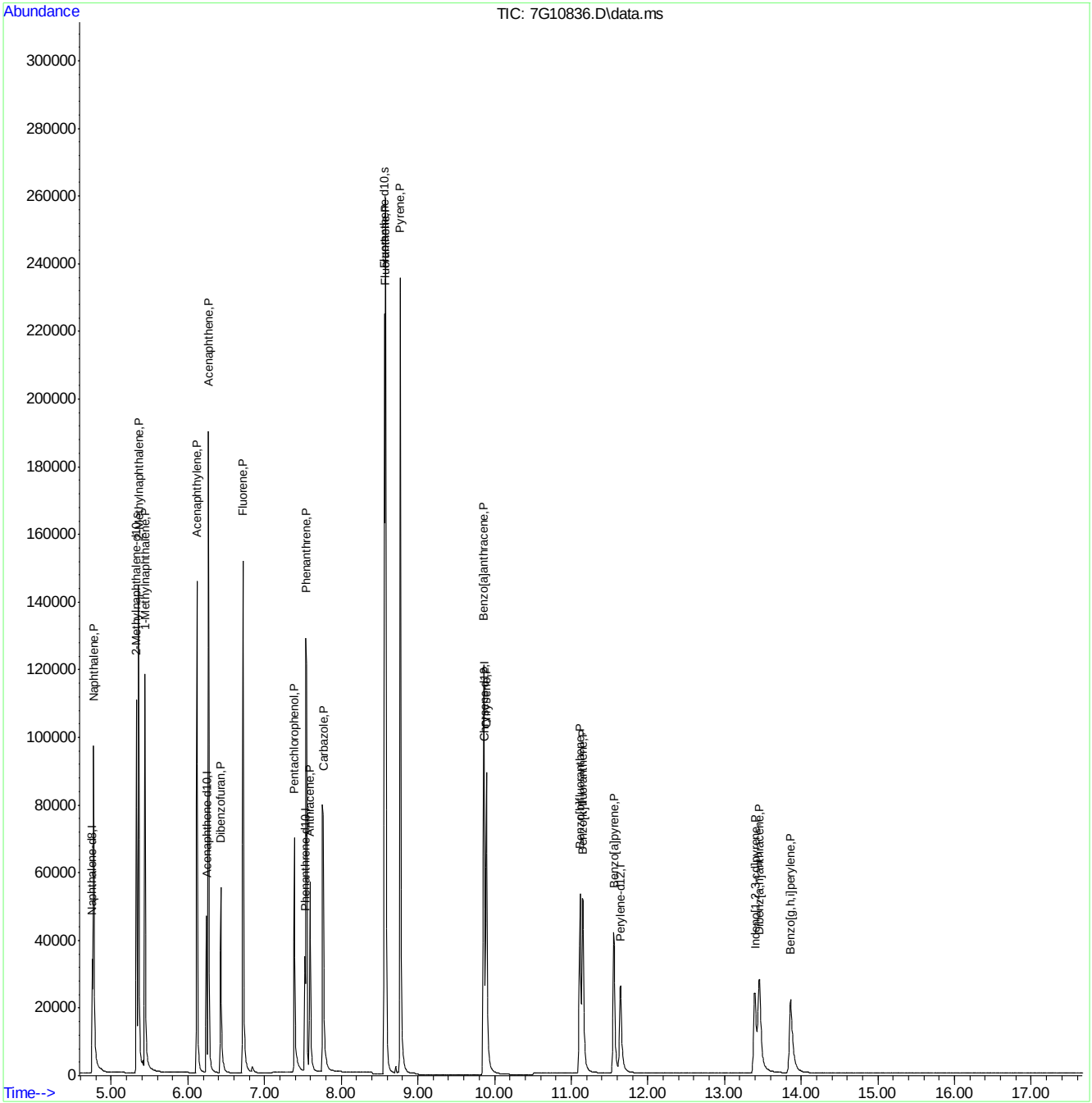
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.752	136	25300	4.00	ppm	-0.02
6) Acenaphthene-d10	6.244	164	14609	4.00	ppm	-0.01
11) Phenanthrene-d10	7.528	188	26093	4.00	ppm	-0.01
18) Chrysene-d12	9.867	240	42851	4.00	ppm	-0.02
22) Perylene-d12	11.644	264	37551	4.00	ppm	-0.02
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.329	152	38049	8.97	ppm	-0.04
Spiked Amount 10.000	Range 50 - 150		Recovery = 89.70%			
17) Fluoranthene-d10	8.567	212	140061	9.46	ppm	-0.03
Spiked Amount 10.000	Range 50 - 150		Recovery = 94.60%			
Target Compounds						Qvalue
2) Naphthalene	4.770	128	74430	9.28	ppm	100
3) 2-Methylnaphthalene	5.358	142	54816	9.01	ppm	99
5) 1-Methylnaphthalene	5.441	142	52432	9.01	ppm	97
7) Acenaphthylene	6.118	152	88343	9.50	ppm	99
8) Acenaphthene	6.268	153	57505	9.45	ppm	98
9) Dibenzofuran	6.428	168	40635	9.53	ppm	95
10) Fluorene	6.718	166	61698	9.42	ppm	98
12) Pentachlorophenol	7.389	266	24644	31.26	ppm	96
13) Phenanthrene	7.542	178	89406	9.41	ppm	98
14) Anthracene	7.591	178	44114	4.59	ppm	100
15) Carbazole	7.764	167	75881	4.72	ppm	100
16) Fluoranthene	8.579	202	169605	9.33	ppm	99
19) Pyrene	8.769	202	173437	8.66	ppm	99
20) Benzo[a]anthracene	9.857	228	68306	4.53	ppm	99
21) Chrysene	9.893	228	77498	4.81	ppm	100
23) Benzo[b]fluoranthene	11.115	252	63976	4.30	ppm	100
24) Benzo[k]fluoranthene	11.149	252	70592	4.10	ppm	99
25) Benzo[a]pyrene	11.556	252	60678	4.68	ppm	100
26) Indeno[1,2,3-cd]pyrene	13.400	276	41853	7.17	ppm	99
27) Dibenz[a,h]anthracene	13.454	278	44122	7.25	ppm	99
28) Benzo[g,h,i]perylene	13.861	276	47313	7.62	ppm	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10836.D
Acq On : 21 Jul 2020 2:43 pm
Operator : fouads
Sample : icc472-4
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

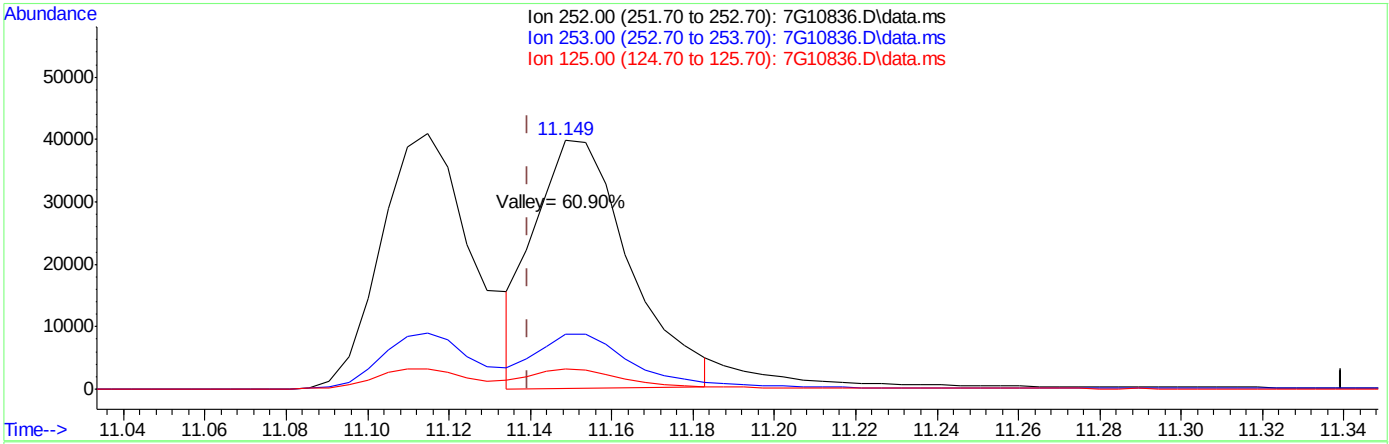
Quant Time: Jul 21 16:18:45 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration

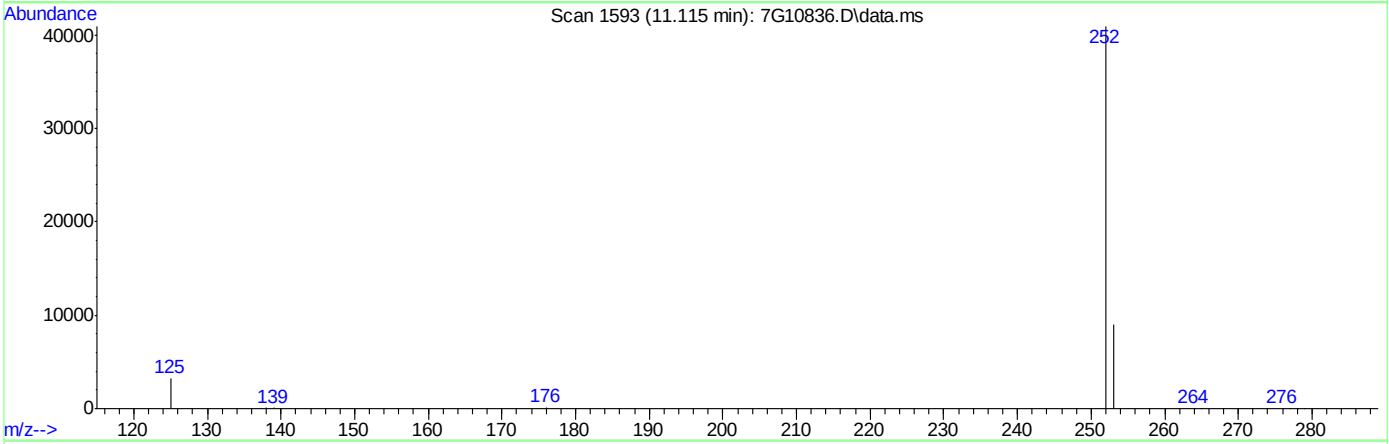


Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10836.D
Acq On : 21 Jul 2020 2:43 pm
Operator : fouads
Sample : icc472-4
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 21 16:18:45 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration





TIC: 7G10836.D\data.ms

(23) Benzo[b]fluoranthene (P)

11.115min (-0.025) 4.30ppm

response 63976

Ion	Exp%	Act%
252.00	100	100
253.00	22.10	22.03
125.00	7.40	7.61
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10837.D
Acq On : 21 Jul 2020 3:07 pm
Operator : fouads
Sample : ic472-5
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 21 16:18:49 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration

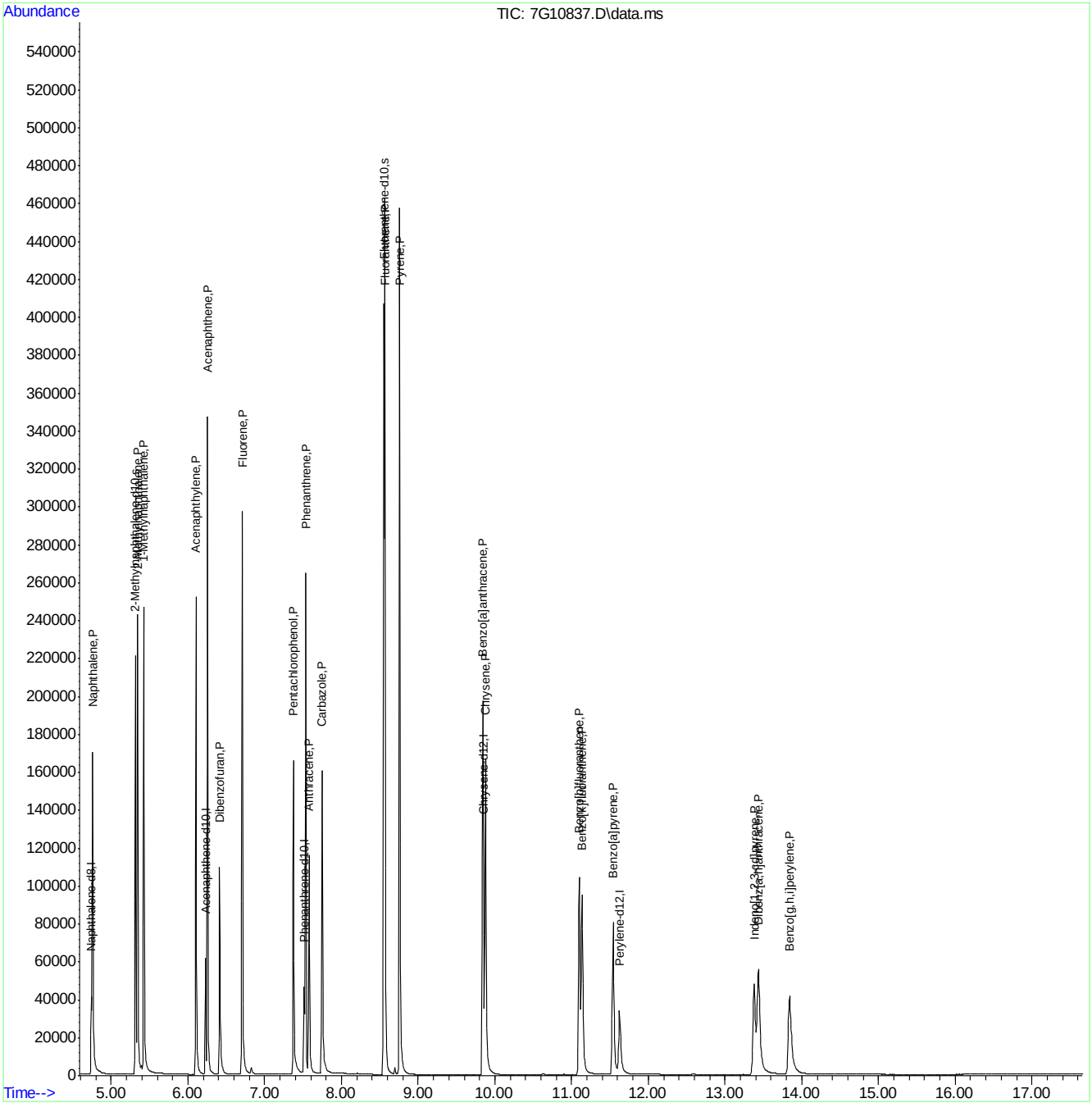
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.740	136	29180	4.00	ppm	-0.03
6) Acenaphthene-d10	6.229	164	17414	4.00	ppm	-0.03
11) Phenanthrene-d10	7.514	188	31347	4.00	ppm	-0.03
18) Chrysene-d12	9.852	240	50970	4.00	ppm	-0.03
22) Perylene-d12	11.624	264	45434	4.00	ppm	-0.04
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.317	152	67210	13.75	ppm	-0.05
Spiked Amount 10.000	Range 50 - 150		Recovery = 137.50%			
17) Fluoranthene-d10	8.554	212	243460	13.69	ppm	-0.04
Spiked Amount 10.000	Range 50 - 150		Recovery = 136.90%			
Target Compounds						Qvalue
2) Naphthalene	4.758	128	128711	13.92	ppm	100
3) 2-Methylnaphthalene	5.347	142	95557	13.62	ppm	97
5) 1-Methylnaphthalene	5.423	142	90151	13.42	ppm	85
7) Acenaphthylene	6.104	152	152885	13.80	ppm	98
8) Acenaphthene	6.253	153	101085	13.94	ppm	95
9) Dibenzofuran	6.413	168	71111	13.99	ppm	91
10) Fluorene	6.708	166	109450	14.01	ppm	97
12) Pentachlorophenol	7.375	266	52326	55.25	ppm	97
13) Phenanthrene	7.535	178	157070	13.76	ppm	99
14) Anthracene	7.577	178	78741	6.82	ppm	100
15) Carbazole	7.744	167	133273	6.89	ppm	93
16) Fluoranthene	8.570	202	298825	13.68	ppm	99
19) Pyrene	8.757	202	307670	12.91	ppm	99
20) Benzo[a]anthracene	9.843	228	121166	6.75	ppm	99
21) Chrysene	9.879	228	131534	6.86	ppm	100
23) Benzo[b]fluoranthene	11.100	252	113926	6.33	ppm	100
24) Benzo[k]fluoranthene	11.134	252	121858	5.85	ppm	98
25) Benzo[a]pyrene	11.542	252	108027	6.88	ppm	100
26) Indeno[1,2,3-cd]pyrene	13.381	276	76251	10.80	ppm	99
27) Dibenz[a,h]anthracene	13.434	278	81827	11.11	ppm	99
28) Benzo[g,h,i]perylene	13.842	276	86286	11.49	ppm	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10837.D
Acq On : 21 Jul 2020 3:07 pm
Operator : fouads
Sample : ic472-5
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 21 16:18:49 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10838.D
Acq On : 21 Jul 2020 3:31 pm
Operator : fouads
Sample : ic472-6
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 21 16:18:53 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration

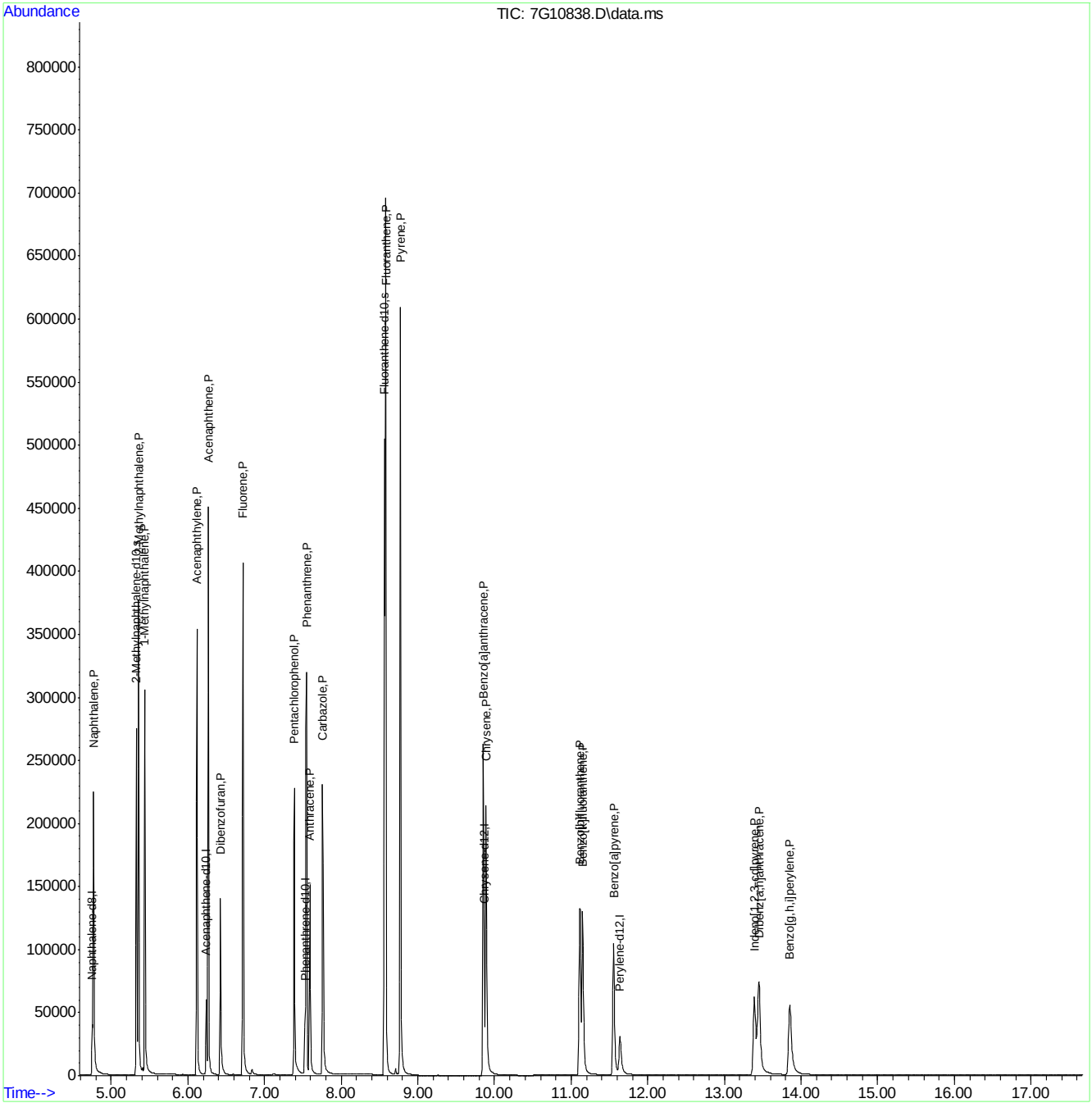
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.752	136	27924	4.00	ppm	-0.02
6) Acenaphthene-d10	6.239	164	16693	4.00	ppm	-0.02
11) Phenanthrene-d10	7.528	188	29642	4.00	ppm	-0.01
18) Chrysene-d12	9.867	240	49529	4.00	ppm	-0.02
22) Perylene-d12	11.636	264	43958	4.00	ppm	-0.03
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.329	152	87127	18.62	ppm	-0.04
Spiked Amount 10.000	Range 50 - 150		Recovery = 186.20%#			
17) Fluoranthene-d10	8.566	212	316580	18.82	ppm	-0.03
Spiked Amount 10.000	Range 50 - 150		Recovery = 188.20%#			
Target Compounds						Qvalue
2) Naphthalene	4.770	128	165015	18.64	ppm	99
3) 2-Methylnaphthalene	5.358	142	126792	18.88	ppm	100
5) 1-Methylnaphthalene	5.435	142	118187	18.39	ppm	82
7) Acenaphthylene	6.118	152	198973	18.73	ppm	99
8) Acenaphthene	6.268	153	129983	18.69	ppm	96
9) Dibenzofuran	6.423	168	89811	18.43	ppm	98
10) Fluorene	6.717	166	141988	18.97	ppm	98
12) Pentachlorophenol	7.389	266	73035	81.55	ppm	95
13) Phenanthrene	7.549	178	204799	18.97	ppm	98
14) Anthracene	7.591	178	101141	9.27	ppm	99
15) Carbazole	7.757	167	170049	9.30	ppm	93
16) Fluoranthene	8.582	202	386576	18.71	ppm	99
19) Pyrene	8.772	202	403389	17.42	ppm	99
20) Benzo[a]anthracene	9.855	228	156963	9.00	ppm	100
21) Chrysene	9.891	228	169372	9.09	ppm	98
23) Benzo[b]fluoranthene	11.112	252	146078	8.39	ppm	99
24) Benzo[k]fluoranthene	11.151	252	161554	8.02	ppm	99
25) Benzo[a]pyrene	11.554	252	141460	9.32	ppm	100
26) Indeno[1,2,3-cd]pyrene	13.393	276	99407	14.56	ppm	98
27) Dibenz[a,h]anthracene	13.451	278	109943	15.42	ppm	99
28) Benzo[g,h,i]perylene	13.854	276	114554	15.76	ppm	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10838.D
Acq On : 21 Jul 2020 3:31 pm
Operator : fouads
Sample : ic472-6
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 21 16:18:53 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10839.D
Acq On : 21 Jul 2020 3:55 pm
Operator : fouads
Sample : ic472-7
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 21 16:18:56 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration

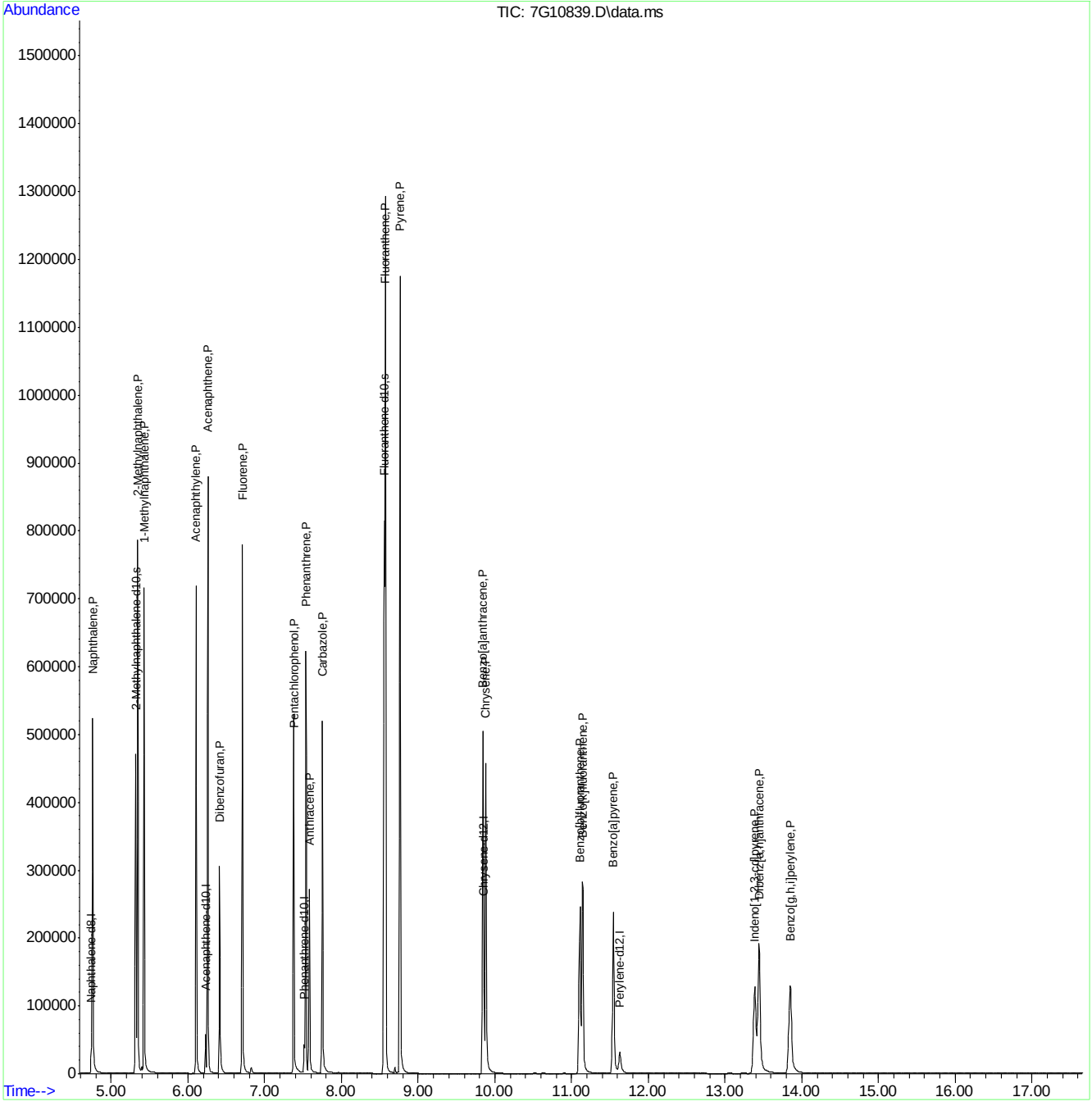
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.740	136	26293	4.00	ppm	-0.03
6) Acenaphthene-d10	6.229	164	15786	4.00	ppm	-0.03
11) Phenanthrene-d10	7.514	188	28087	4.00	ppm	-0.03
18) Chrysene-d12	9.855	240	46860	4.00	ppm	-0.03
22) Perylene-d12	11.629	264	41097	4.00	ppm	-0.03
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.323	152	176001	39.95	ppm	-0.04
Spiked Amount 10.000	Range 50 - 150		Recovery =	399.50%#		
17) Fluoranthene-d10	8.560	212	616116	38.66	ppm	-0.04
Spiked Amount 10.000	Range 50 - 150		Recovery =	386.60%#		
Target Compounds						Qvalue
2) Naphthalene	4.758	128	329242	39.51	ppm	99
3) 2-Methylnaphthalene	5.347	142	255780	40.45	ppm	90
5) 1-Methylnaphthalene	5.429	142	239953	39.66	ppm	92
7) Acenaphthylene	6.108	152	393285	39.15	ppm	98
8) Acenaphthene	6.258	153	260794	39.66	ppm	95
9) Dibenzofuran	6.413	168	179943	39.06	ppm	90
10) Fluorene	6.708	166	280750	39.66	ppm	98
12) Pentachlorophenol	7.382	266	163526	192.69	ppm	92
13) Phenanthrene	7.535	178	404134	39.50	ppm	98
14) Anthracene	7.584	178	196055	18.96	ppm	97
15) Carbazole	7.751	167	325209	18.77	ppm	95
16) Fluoranthene	8.576	202	770477	39.36	ppm	98
19) Pyrene	8.763	202	783512	35.75	ppm	99
20) Benzo[a]anthracene	9.845	228	307361	18.64	ppm	99
21) Chrysene	9.881	228	324523	18.40	ppm	99
23) Benzo[b]fluoranthene	11.110	252	284281	17.47	ppm	99
24) Benzo[k]fluoranthene	11.144	252	311293	16.53	ppm	100
25) Benzo[a]pyrene	11.547	252	275786	19.43	ppm	99
26) Indeno[1,2,3-cd]pyrene	13.391	276	209818	32.86	ppm	99
27) Dibenz[a,h]anthracene	13.444	278	229817	34.49	ppm	99
28) Benzo[g,h,i]perylene	13.852	276	234890	34.57	ppm	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10839.D
Acq On : 21 Jul 2020 3:55 pm
Operator : fouads
Sample : ic472-7
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 21 16:18:56 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration



Manual Integrations APPROVED
(compounds with "m" flag)
Nicole McCampbell
07/22/20 17:04

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10840.D
Acq On : 21 Jul 2020 4:19 pm
Operator : fouads
Sample : icv472-4
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 21 16:47:23 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

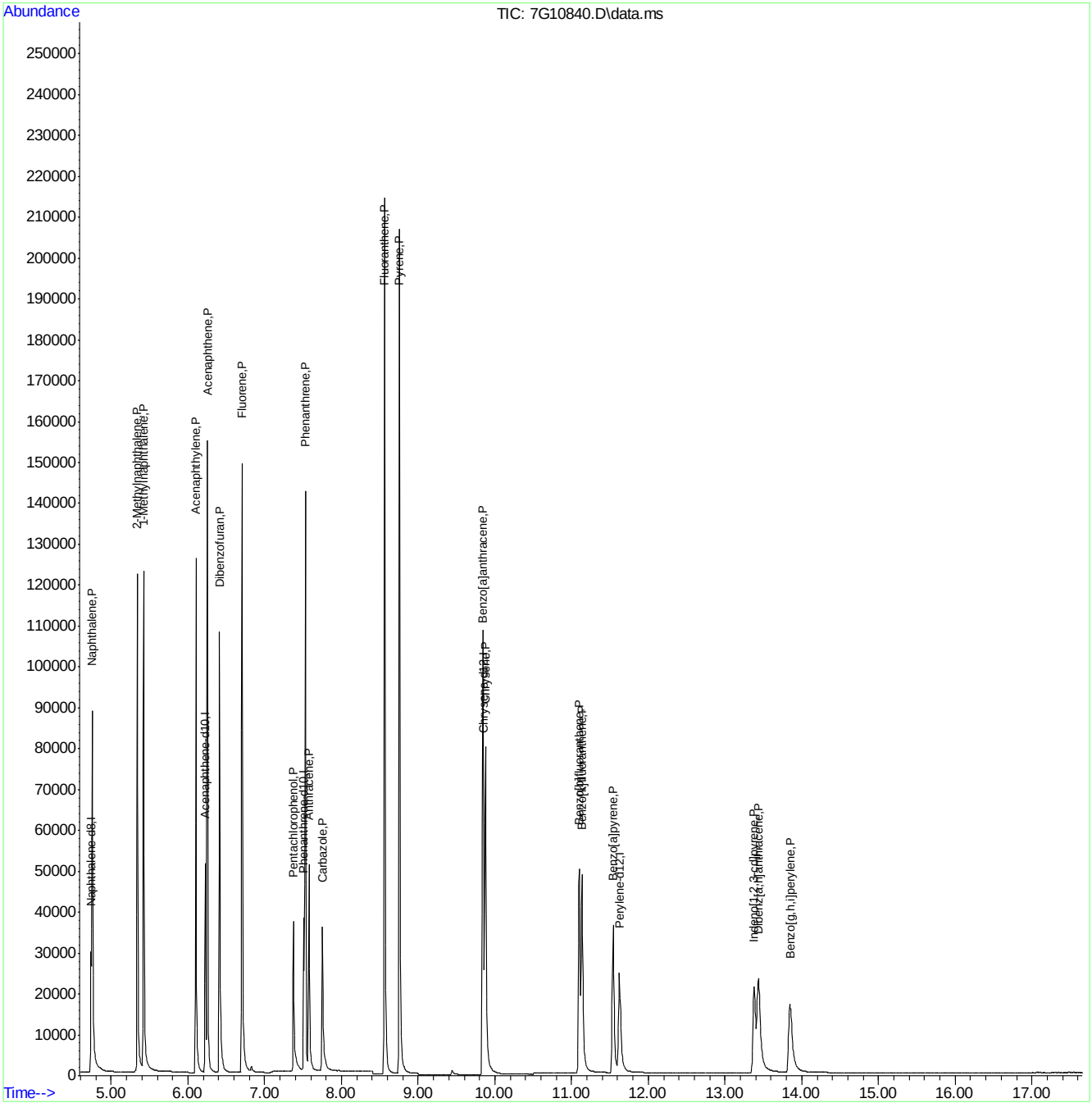
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.734	136	24813	4.00	ppm	0.00
6) Acenaphthene-d10	6.224	164	14478	4.00	ppm	0.00
11) Phenanthrene-d10	7.507	188	26182	4.00	ppm	0.00
18) Chrysene-d12	9.852	240	41612	4.00	ppm	0.00
22) Perylene-d12	11.624	264	36348	4.00	ppm	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	0.000	152	0	0.00	ppm	
Spiked Amount 10.000	Range 50 - 150		Recovery =	0.00%#		
17) Fluoranthene-d10	0.000	212	0d	0.00	ppm	
Spiked Amount 10.000	Range 50 - 150		Recovery =	0.00%#		
Target Compounds						Qvalue
2) Naphthalene	4.752	128	68472	9.54	ppm	99
3) 2-Methylnaphthalene	5.341	142	45097	8.17	ppm	95
5) 1-Methylnaphthalene	5.423	142	49815	9.88	ppm	97
7) Acenaphthylene	6.104	152	76527	9.07	ppm	100
8) Acenaphthene	6.253	153	53203	9.63	ppm	98
9) Dibenzofuran	6.408	168	74284	18.81	ppm	90
10) Fluorene	6.703	166	58318	9.70	ppm	98
12) Pentachlorophenol	7.375	266	15014	14.76	ppm	99
13) Phenanthrene	7.528	178	83170	9.48	ppm	99
14) Anthracene	7.577	178	37274	4.25	ppm	99
15) Carbazole	7.750	167	37176	2.38	ppm	99
16) Fluoranthene	8.563	202	144320	8.72	ppm	100
19) Pyrene	8.753	202	152837	9.18	ppm	99
20) Benzo[a]anthracene	9.840	228	58564	4.49	ppm	99
21) Chrysene	9.879	228	72701	5.04	ppm	100
23) Benzo[b]fluoranthene	11.100	252	57562	4.67	ppm	100
24) Benzo[k]fluoranthene	11.134	252	62383	4.74	ppm	100
25) Benzo[a]pyrene	11.542	252	54221	4.51	ppm	100
26) Indeno[1,2,3-cd]pyrene	13.376	276	34907m	4.45	ppm	
27) Dibenz[a,h]anthracene	13.439	278	38293	4.40	ppm	99
28) Benzo[g,h,i]perylene	13.847	276	40149	4.24	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10840.D
Acq On : 21 Jul 2020 4:19 pm
Operator : fouads
Sample : icv472-4
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 21 16:47:23 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration



Manual Integration Approval Summary

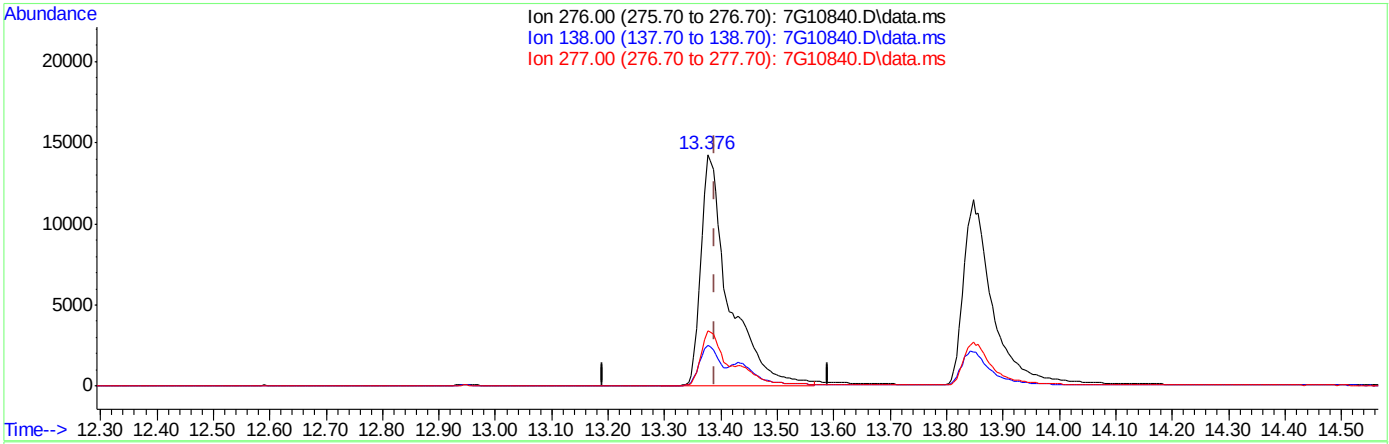
Sample Number: S7G472-ICV472
Lab FileID: 7G10840.D
Injection Time: 07/21/20 16:19
Method: SW846 8270D BY SIM
Analyst approved: 07/22/20 13:31 Fouad Sekkar
Supervisor approved: 07/22/20 17:04 Nicole McCampbell

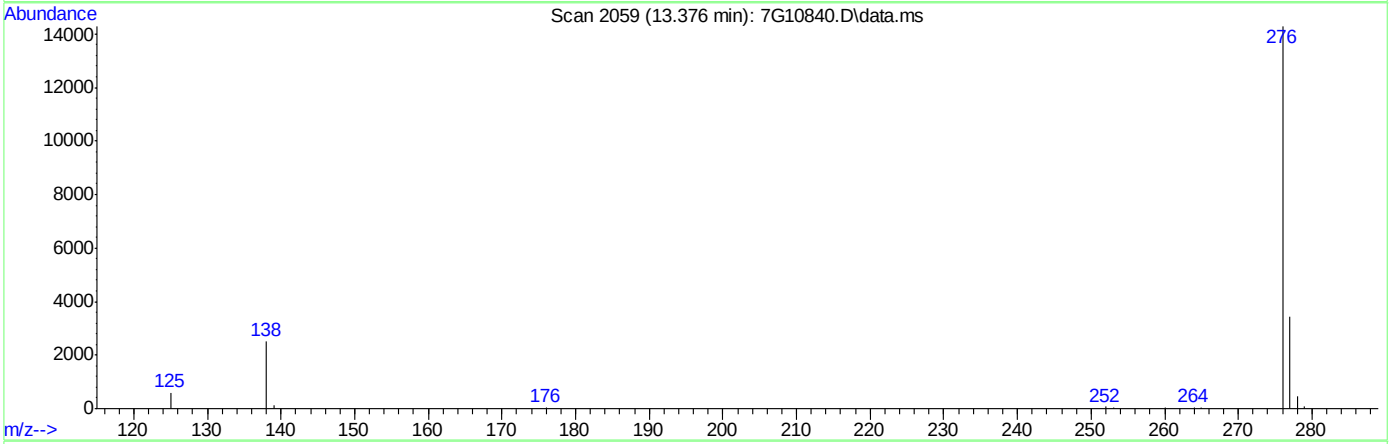
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		13.38	Missed peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10840.D
Acq On : 21 Jul 2020 4:19 pm
Operator : fouads
Sample : icv472-4
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 21 16:46:41 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration





TIC: 7G10840.D\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.376min (-0.015) 6.21ppm

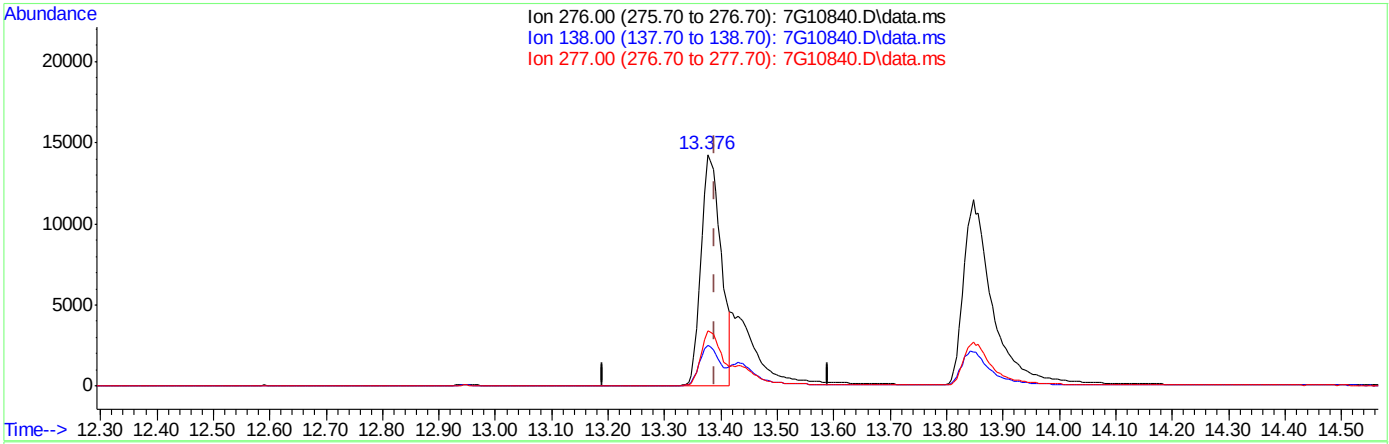
response 48737

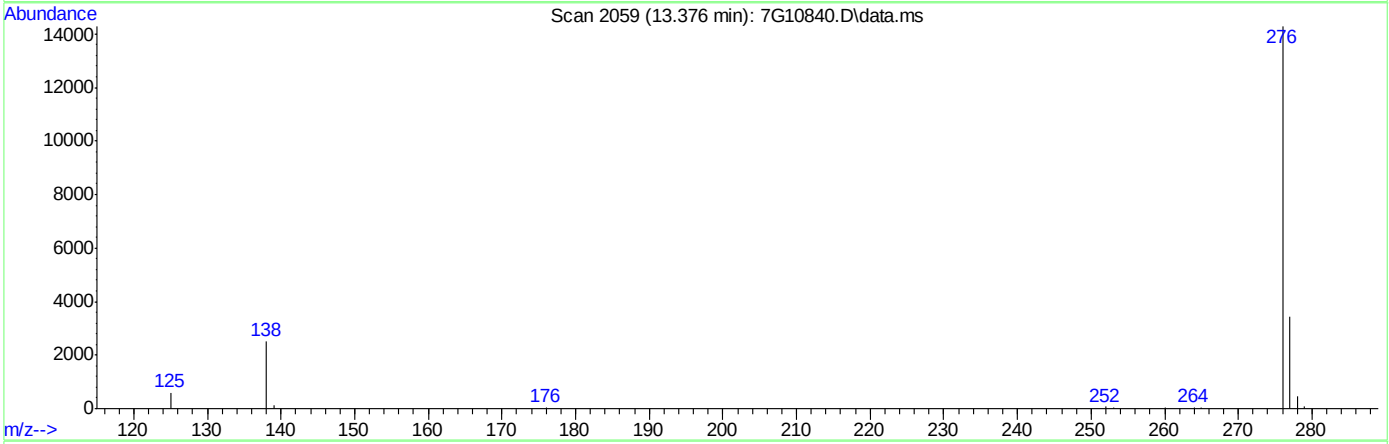
Ion	Exp%	Act%
276.00	100	100
138.00	14.00	17.25
277.00	23.10	23.60
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10840.D
Acq On : 21 Jul 2020 4:19 pm
Operator : fouads
Sample : icv472-4
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 21 16:46:41 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration





TIC: 7G10840.D\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.376min (-0.015) 4.45ppm m

response 34907

Ion	Exp%	Act%
276.00	100	100
138.00	14.00	17.64
277.00	23.10	23.92
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 08/11/20 12:03

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\081020_7G482\
Data File : 7G11100.D
Acq On : 10 Aug 2020 2:28 pm
Operator : FOUADS
Sample : CC472-4
Misc : op81342,S7G482,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 11 10:55:47 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

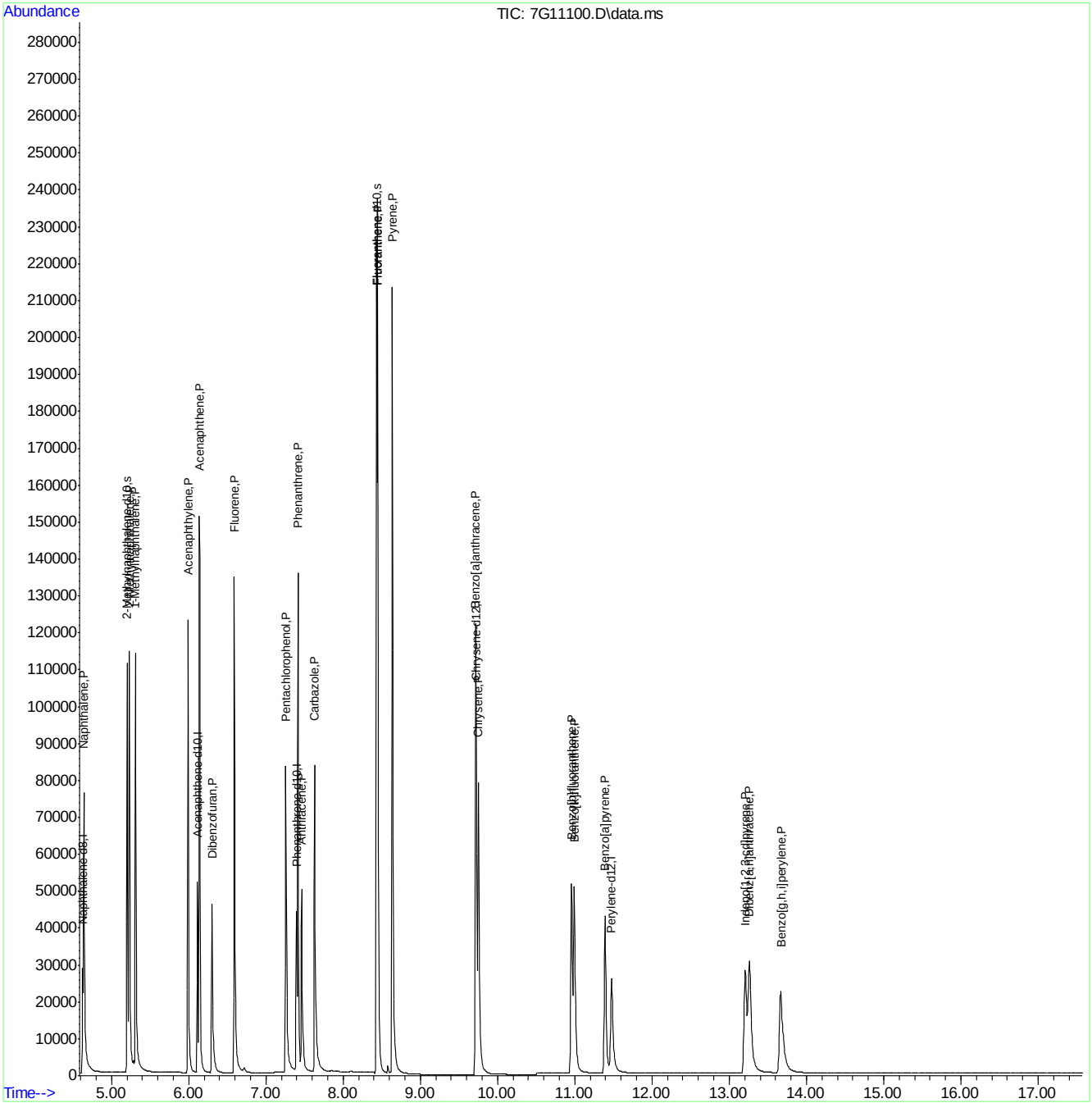
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.628	136	22910	4.00	ppm	0.00
6) Acenaphthene-d10	6.114	164	14625	4.00	ppm	0.00
11) Phenanthrene-d10	7.396	188	27961	4.00	ppm	0.00
18) Chrysene-d12	9.724	240	44464	4.00	ppm	0.00
22) Perylene-d12	11.477	264	38799	4.00	ppm	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.205	152	36026	10.47	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 104.70%			
17) Fluoranthene-d10	8.433	212	142417	9.75	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 97.50%			
Target Compounds						Qvalue
2) Naphthalene	4.646	128	62116	9.38	ppm	99
3) 2-Methylnaphthalene	5.235	142	49645	9.74	ppm	98
5) 1-Methylnaphthalene	5.311	142	47057	10.09	ppm	88
7) Acenaphthylene	5.993	152	80037	9.38	ppm	99
8) Acenaphthene	6.138	153	51526	9.24	ppm	96
9) Dibenzofuran	6.302	168	38761	9.90	ppm	97
10) Fluorene	6.592	166	55324	9.13	ppm	96
12) Pentachlorophenol	7.257	266	29508	25.53	ppm	98
13) Phenanthrene	7.417	178	82670	8.84	ppm	97
14) Anthracene	7.466	178	43838	4.68	ppm	99
15) Carbazole	7.633	167	72628	4.35	ppm	99
16) Fluoranthene	8.448	202	161075	9.10	ppm	98
19) Pyrene	8.639	202	164778	9.26	ppm	97
20) Benzo[a]anthracene	9.715	228	66903	4.80	ppm	99
21) Chrysene	9.751	228	73670	4.78	ppm	99
23) Benzo[b]fluoranthene	10.957	252	62772	4.77	ppm	100
24) Benzo[k]fluoranthene	10.991	252	68920	4.91	ppm	99
25) Benzo[a]pyrene	11.389	252	58943	4.59	ppm	99
26) Indeno[1,2,3-cd]pyrene	13.209	276	47796m	5.71	ppm	
27) Dibenz[a,h]anthracene	13.262	278	48138	5.18	ppm	98
28) Benzo[g,h,i]perylene	13.670	276	53492	5.30	ppm	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\081020_7G482\
Data File : 7G11100.D
Acq On : 10 Aug 2020 2:28 pm
Operator : FOUADS
Sample : CC472-4
Misc : op81342,S7G482,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 11 10:55:47 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration



Manual Integration Approval Summary

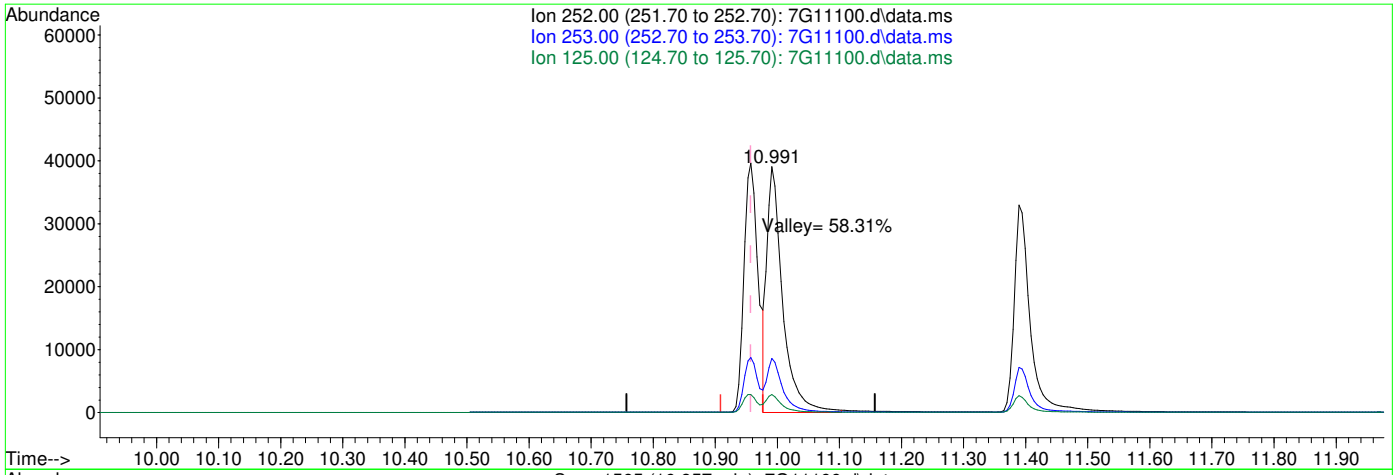
Sample Number: S7G482-CC472
Lab FileID: 7G11100.D
Injection Time: 08/10/20 14:28
Method: SW846 8270D BY SIM
Analyst approved: 08/11/20 11:02 Fouad Sekkar
Supervisor approved: 08/11/20 12:03 Naresh Jiawan

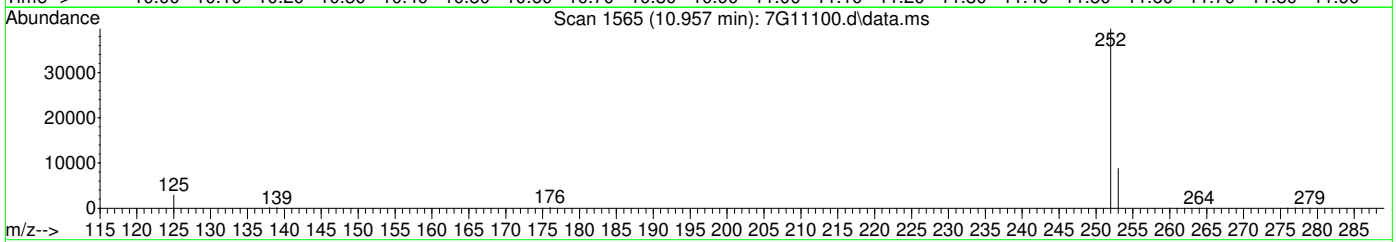
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		13.21	Missed peak

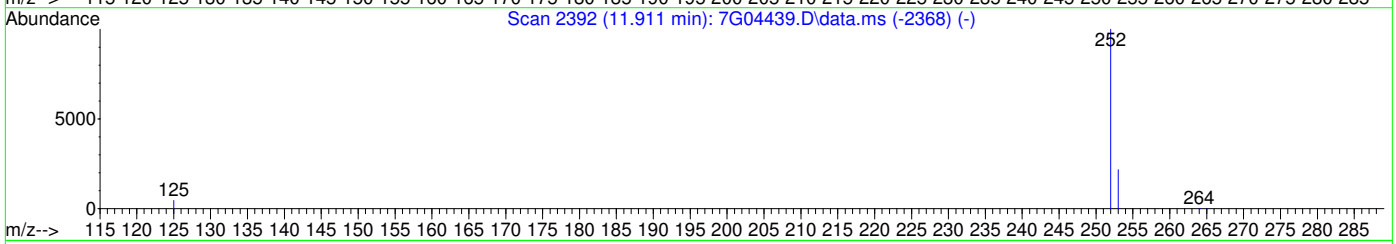
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-11-2020\s7g482\
Data File : 7G11100.d
Acq On : 10 Aug 2020 2:28 pm
Operator : FOUADS
Sample : CC472-4
Misc : op81342,S7G482,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 11 02:36:04 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Aug 11 02:35:57 2020
Response via : Initial Calibration







TIC: 7G11100.d\data.ms

(23) Benzo[b]fluoranthene (P)

10.957min (0.000) 4.76ppm

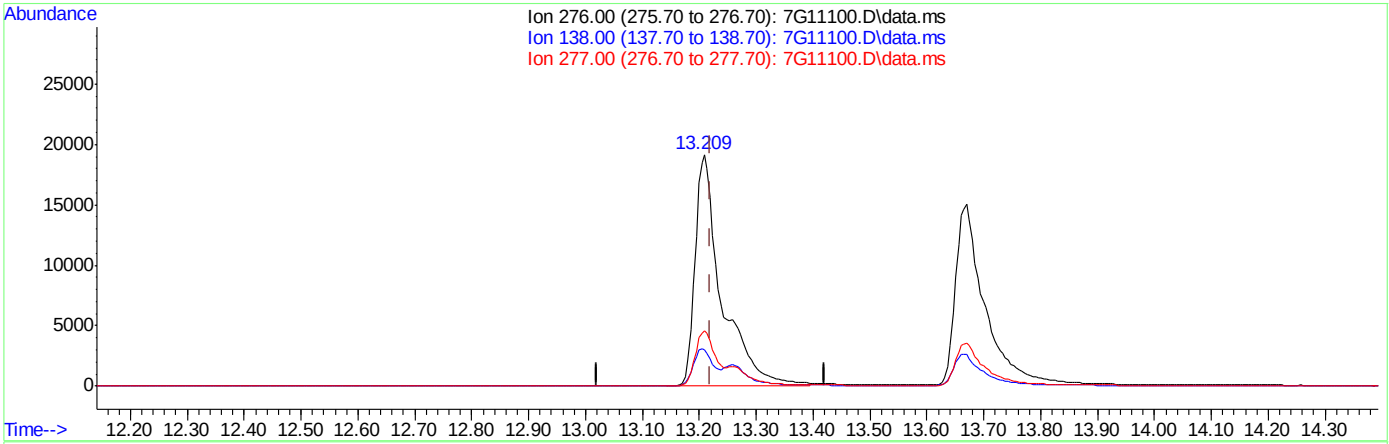
response 62772

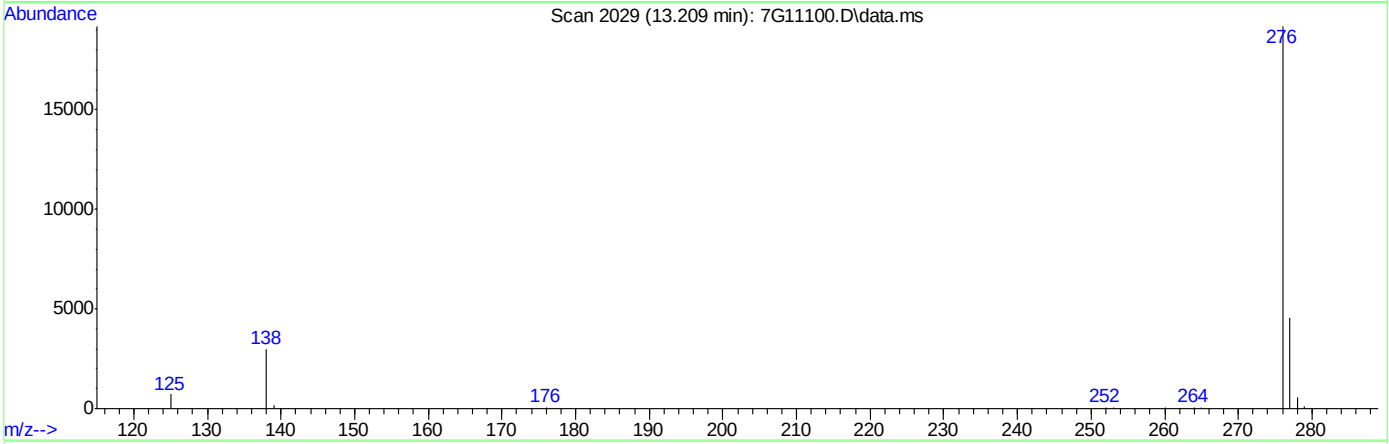
Ion	Exp%	Act%
252.00	100	100
253.00	21.70	22.00
125.00	4.50	7.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\081020_7G482\
Data File : 7G11100.D
Acq On : 10 Aug 2020 2:28 pm
Operator : FOUADS
Sample : CC472-4
Misc : op81342,S7G482,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 10 14:50:52 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration





TIC: 7G11100.D\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.209min (-0.012) 7.41ppm

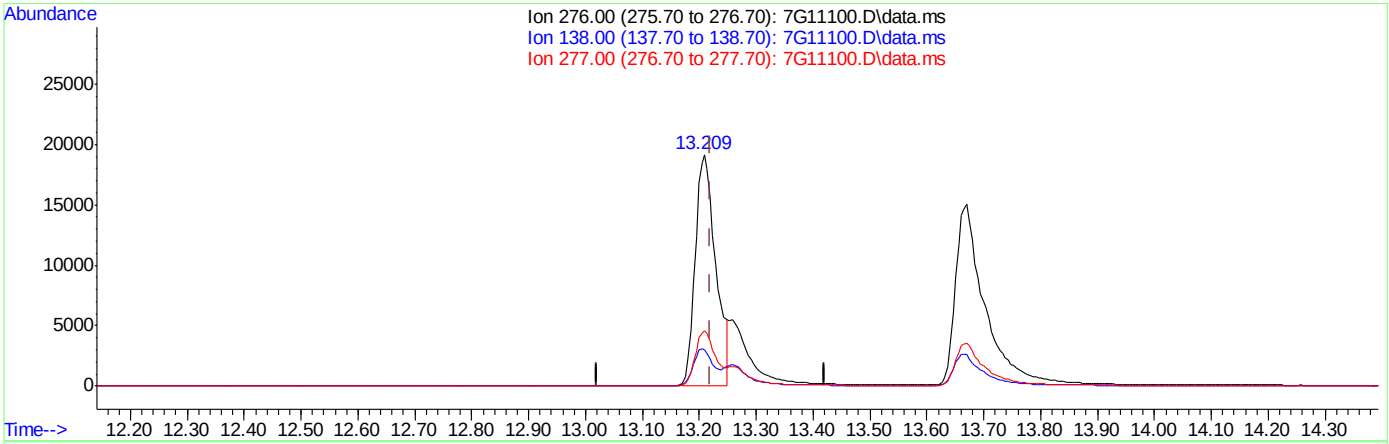
response 62085

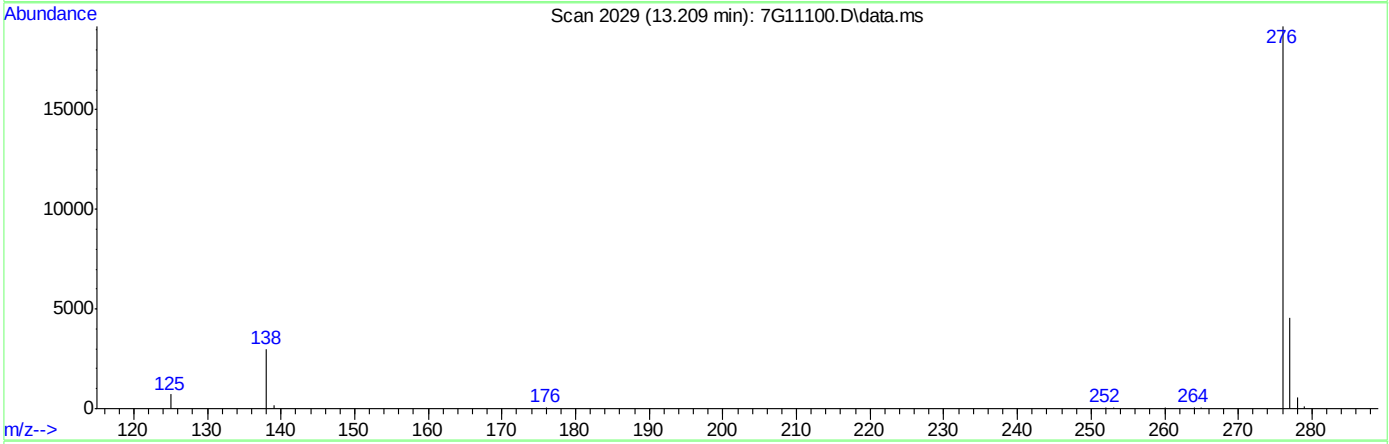
Ion	Exp%	Act%
276.00	100	100
138.00	14.00	15.39
277.00	23.10	23.60
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\081020_7G482\
Data File : 7G11100.D
Acq On : 10 Aug 2020 2:28 pm
Operator : FOUADS
Sample : CC472-4
Misc : op81342,S7G482,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 10 14:50:52 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration





TIC: 7G11100.D\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.209min (-0.012) 5.71ppm m

response 47796

Ion	Exp%	Act%
276.00	100	100
138.00	14.00	15.66
277.00	23.10	23.82
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan
08/11/20 12:03

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\081020_7G482\
Data File : 7G11126.D
Acq On : 11 Aug 2020 1:00 am
Operator : FOUADS
Sample : ecc472-4
Misc : op81483,S7G482,15.0,,,1,1,soil
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 11 10:56:21 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

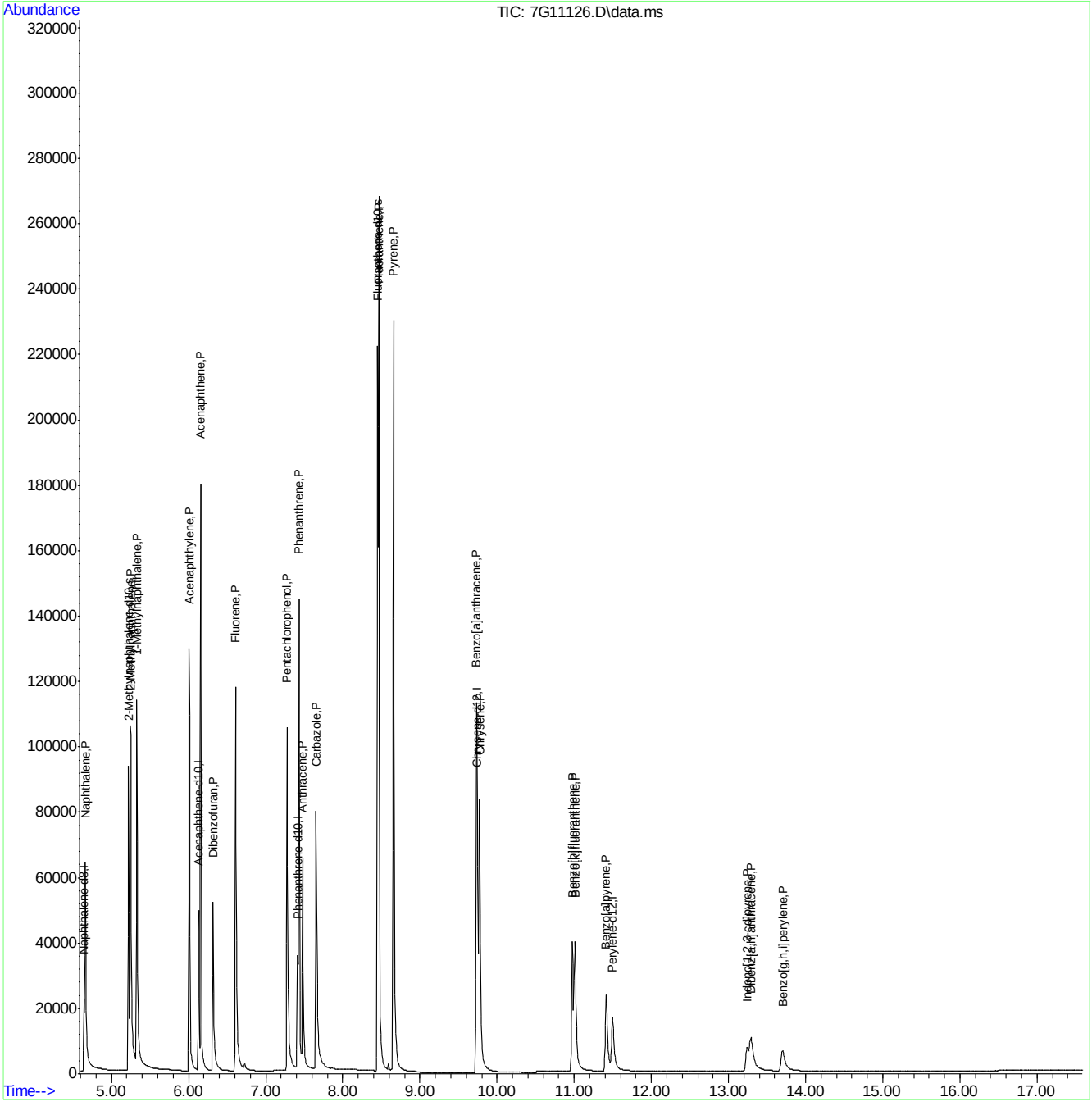
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.646	136	20422	4.00	ppm	0.01
6) Acenaphthene-d10	6.133	164	15731	4.00	ppm	0.01
11) Phenanthrene-d10	7.417	188	30214	4.00	ppm	0.01
18) Chrysene-d12	9.746	240	47844	4.00	ppm	0.01
22) Perylene-d12	11.496	264	26167	4.00	ppm	0.01
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.223	152	34792	11.31	ppm	0.02
Spiked Amount 10.000	Range 50 - 150		Recovery = 113.10%			
17) Fluoranthene-d10	8.452	212	154307	9.77	ppm	0.02
Spiked Amount 10.000	Range 50 - 150		Recovery = 97.70%			
Target Compounds						Qvalue
2) Naphthalene	4.664	128	56119	9.50	ppm	100
3) 2-Methylnaphthalene	5.252	142	49798	10.96	ppm	97
5) 1-Methylnaphthalene	5.329	142	49329	11.79	ppm	92
7) Acenaphthylene	6.007	152	86040	9.37	ppm	98
8) Acenaphthene	6.157	153	56481	9.41	ppm	98
9) Dibenzofuran	6.317	168	42175	10.01	ppm	95
10) Fluorene	6.612	166	61761	9.46	ppm	95
12) Pentachlorophenol	7.278	266	37334	29.28	ppm	98
13) Phenanthrene	7.431	178	92528	9.15	ppm	100
14) Anthracene	7.480	178	48327	4.77	ppm	100
15) Carbazole	7.654	167	82060	4.54	ppm	97
16) Fluoranthene	8.467	202	180701	9.44	ppm	99
19) Pyrene	8.657	202	183127	9.56	ppm	98
20) Benzo[a]anthracene	9.734	228	69359	4.63	ppm	100
21) Chrysene	9.770	228	82223	4.96	ppm	99
23) Benzo[b]fluoranthene	10.977	252	45428	5.11	ppm	99
24) Benzo[k]fluoranthene	11.011	252	60889	6.40	ppm	99
25) Benzo[a]pyrene	11.414	252	40560	4.69	ppm	99
26) Indeno[1,2,3-cd]pyrene	13.243	276	15604m	2.76	ppm	
27) Dibenz[a,h]anthracene	13.296	278	18839	3.01	ppm	98
28) Benzo[g,h,i]perylene	13.704	276	16571	2.43	ppm	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\081020_7G482\
Data File : 7G11126.D
Acq On : 11 Aug 2020 1:00 am
Operator : FOUADS
Sample : ecc472-4
Misc : op81483,S7G482,15.0,,,1,1,soil
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 11 10:56:21 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration



Manual Integration Approval Summary

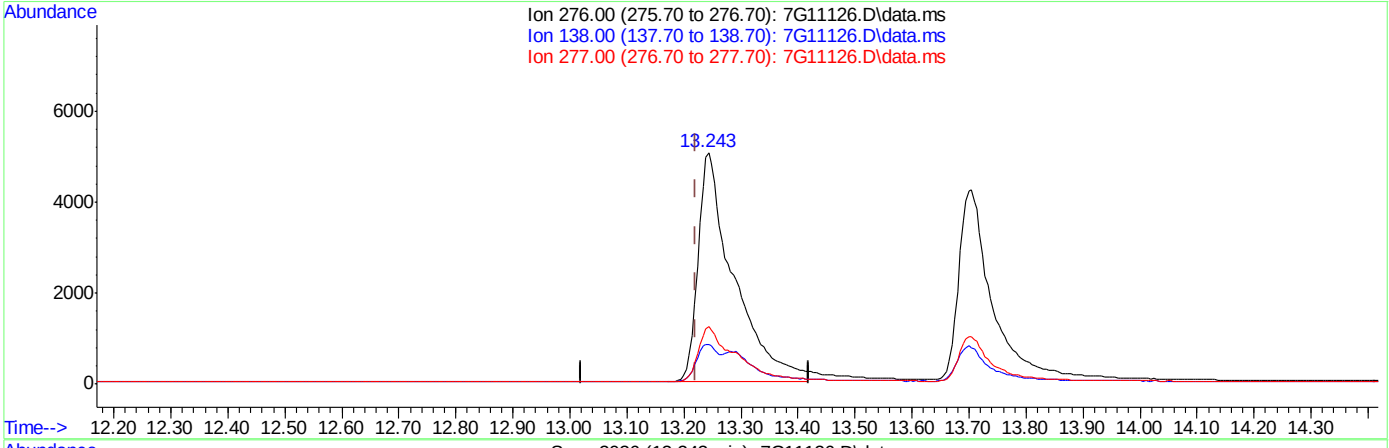
Sample Number: S7G482-ECC472
Lab FileID: 7G11126.D
Injection Time: 08/11/20 01:00
Method: SW846 8270D BY SIM
Analyst approved: 08/11/20 11:02 Fouad Sekkar
Supervisor approved: 08/11/20 12:03 Naresh Jiawan

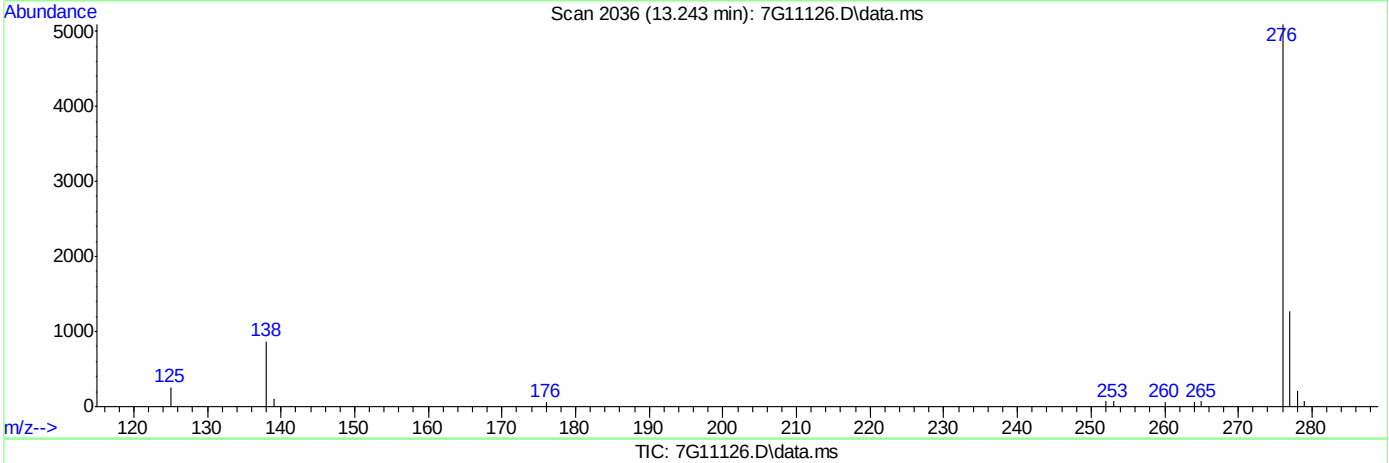
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		13.24	Missed peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\081020_7G482\
Data File : 7G11126.D
Acq On : 11 Aug 2020 1:00 am
Operator : FOUADS
Sample : ecc472-4
Misc : op81483,S7G482,15.0,,,1,1,soil
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 11 06:52:13 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration





TIC: 7G11126.D\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.243min (+0.022) 3.87ppm

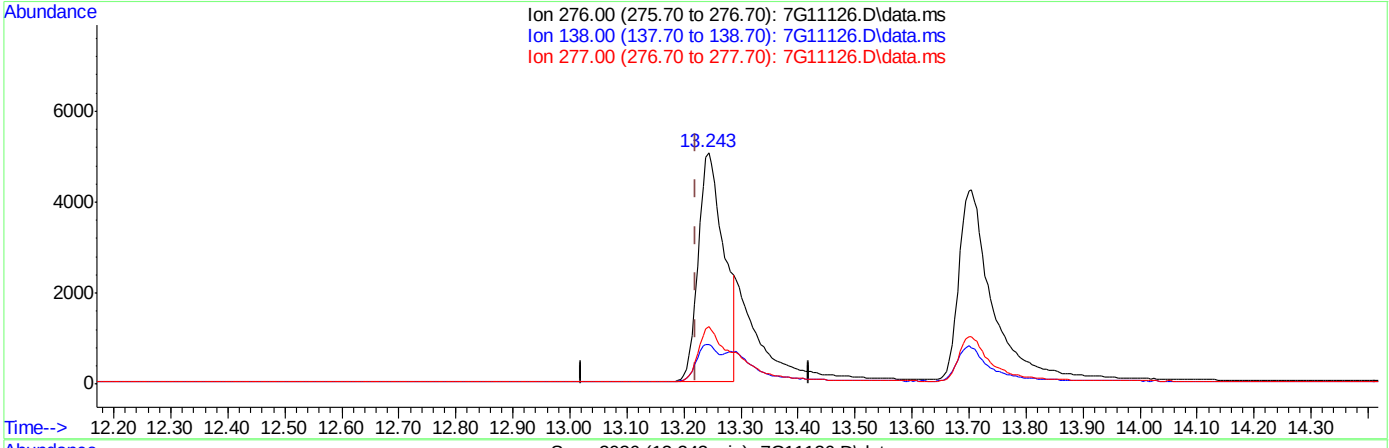
response 21868

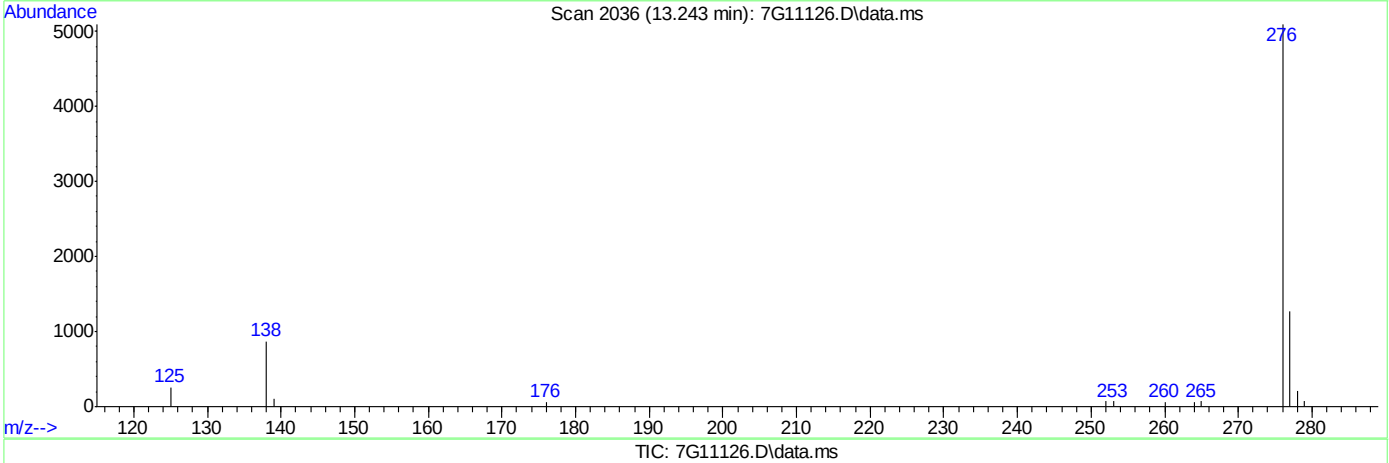
Ion	Exp%	Act%
276.00	100	100
138.00	14.00	15.97
277.00	23.10	23.97
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\081020_7G482\
Data File : 7G11126.D
Acq On : 11 Aug 2020 1:00 am
Operator : FOUADS
Sample : ecc472-4
Misc : op81483,S7G482,15.0,,,1,1,soil
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 11 06:52:13 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration





TIC: 7G11126.D\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.243min (+0.022) 2.76ppm m

response 15604

Ion	Exp%	Act%
276.00	100	100
138.00	14.00	17.15
277.00	23.10	24.89
0.00	0.00	0.00

Manual Integrations APPROVED
(compounds with "m" flag)
Nicole McCampbell
08/12/20 11:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11130.d
Acq On : 11 Aug 2020 8:29 am
Operator : FOUADS
Sample : CC472-4 Inst : MSBNA8
Misc : op81342,S7G483,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:24:22 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Wed Aug 12 07:23:49 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.628	136	23021	4.00	ppm	0.00
6) Acenaphthene-d10	6.114	164	17904	4.00	ppm	0.00
11) Phenanthrene-d10	7.396	188	34538	4.00	ppm	0.00
18) Chrysene-d12	9.727	240	58481	4.00	ppm	0.00
22) Perylene-d12	11.477	264	51783	4.00	ppm	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.205	152	40233	11.59	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery =	115.90%		
17) Fluoranthene-d10	8.436	212	182607	10.11	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery =	101.10%		
Target Compounds						Qvalue
2) Naphthalene	4.646	128	63624	9.56	ppm	99
3) 2-Methylnaphthalene	5.235	142	57650	11.26	ppm	96
5) 1-Methylnaphthalene	5.311	142	56829	12.04	ppm	90
7) Acenaphthylene	5.993	152	100391	9.61	ppm	99
8) Acenaphthene	6.143	153	66186	9.68	ppm	95
9) Dibenzofuran	6.297	168	49385	10.29	ppm	98
10) Fluorene	6.592	166	73249	9.85	ppm	96
12) Pentachlorophenol	7.264	266	35848	25.16	ppm	96
13) Phenanthrene	7.417	178	108455	9.37	ppm	97
14) Anthracene	7.459	178	56294	4.86	ppm	98
15) Carbazole	7.633	167	97922	4.74	ppm	99
16) Fluoranthene	8.448	202	215976	9.86	ppm	98
19) Pyrene	8.639	202	220794	9.43	ppm	97
20) Benzo[a]anthracene	9.717	228	89564	4.88	ppm	98
21) Chrysene	9.753	228	98780	4.87	ppm	99
23) Benzo[b]fluoranthene	10.957	252	82074	4.67	ppm	98
24) Benzo[k]fluoranthene	10.991	252	90262	4.81	ppm	97
25) Benzo[a]pyrene	11.394	252	78638	4.59	ppm	98
26) Indeno[1,2,3-cd]pyrene	13.214	276	59178m	5.29	ppm	
27) Dibenz[a,h]anthracene	13.267	278	69669	5.62	ppm	96
28) Benzo[g,h,i]perylene	13.670	276	68425	5.08	ppm	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

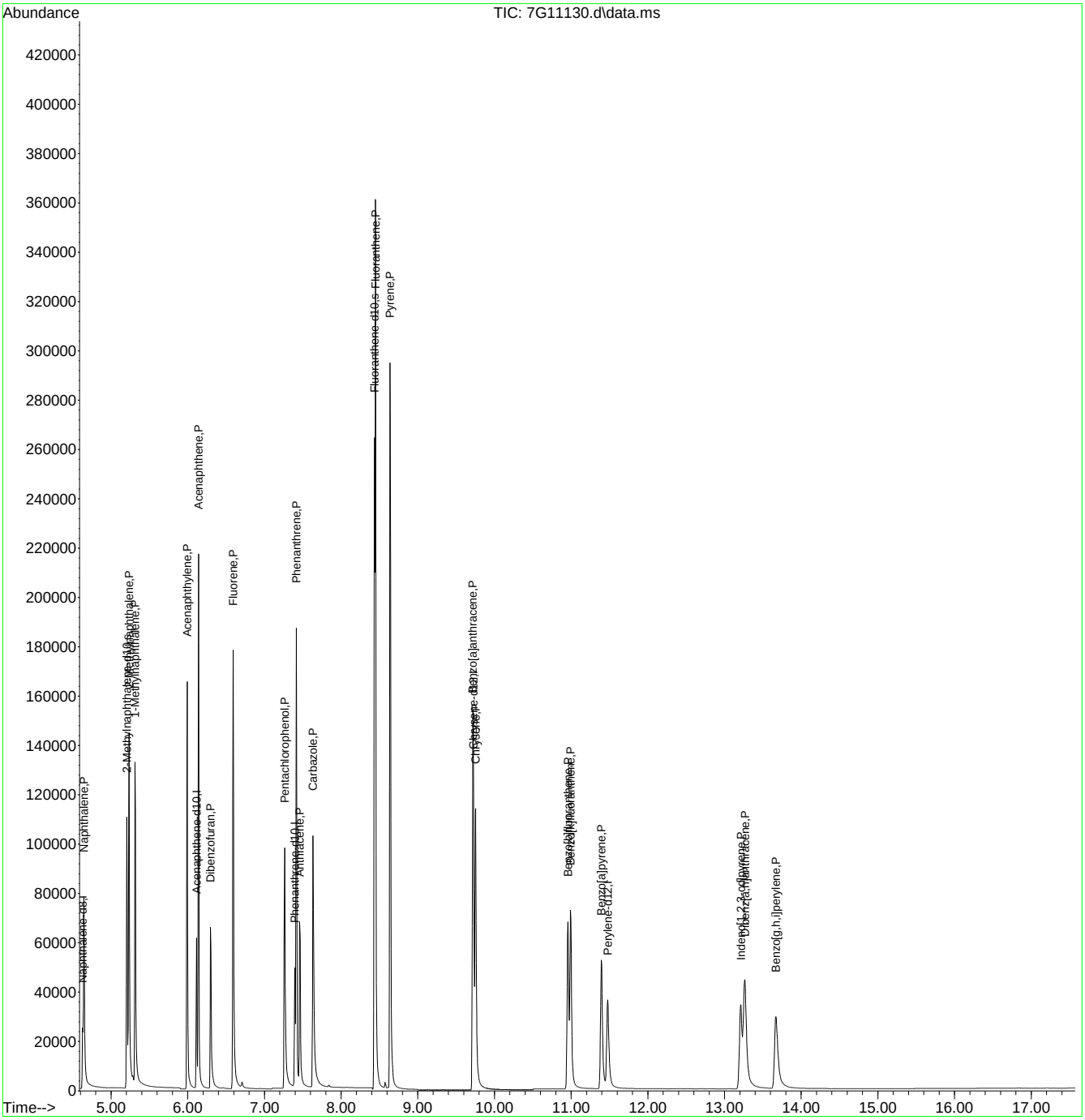
7.6.22

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11130.d
Acq On : 11 Aug 2020 8:29 am
Operator : FOUADS
Sample : CC472-4 Inst : MSBNA8
Misc : op81342,S7G483,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:24:22 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Wed Aug 12 07:23:49 2020
Response via : Initial Calibration



Manual Integration Approval Summary

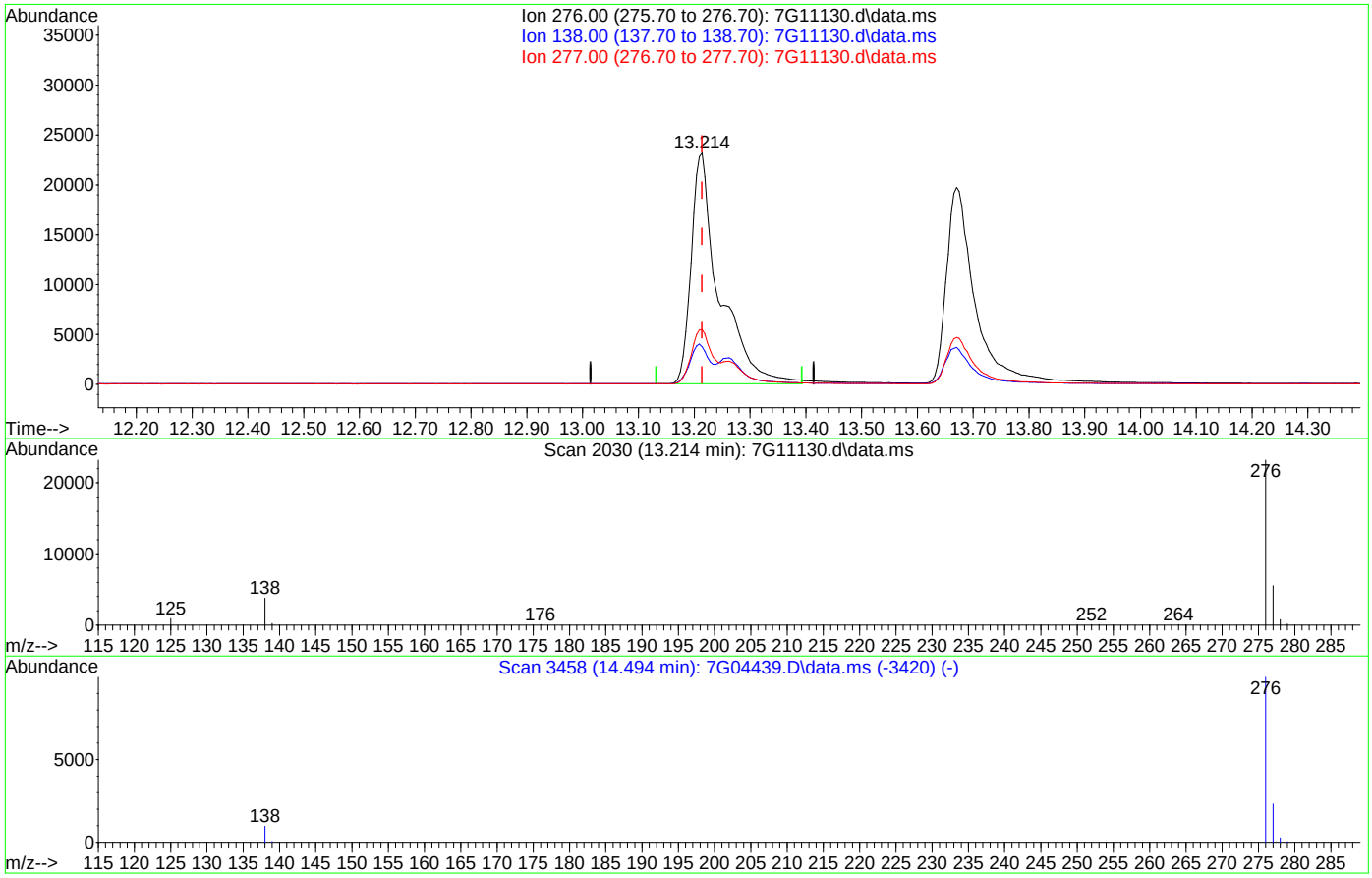
Sample Number: S7G483-CC472
Lab FileID: 7G11130.D
Injection Time: 08/11/20 08:29
Method: SW846 8270D BY SIM
Analyst approved: 08/12/20 08:06 Jennifer Fereira
Supervisor approved: 08/12/20 11:43 Nicole McCampbell

Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		13.21	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11130.d
Acq On : 11 Aug 2020 8:29 am
Operator : FOUADS
Sample : CC472-4 Inst : MSBNA8
Misc : op81342,S7G483,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:23:52 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Wed Aug 12 07:23:49 2020
Response via : Initial Calibration



TIC: 7G11130.d\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.214min (0.000) 7.26ppm

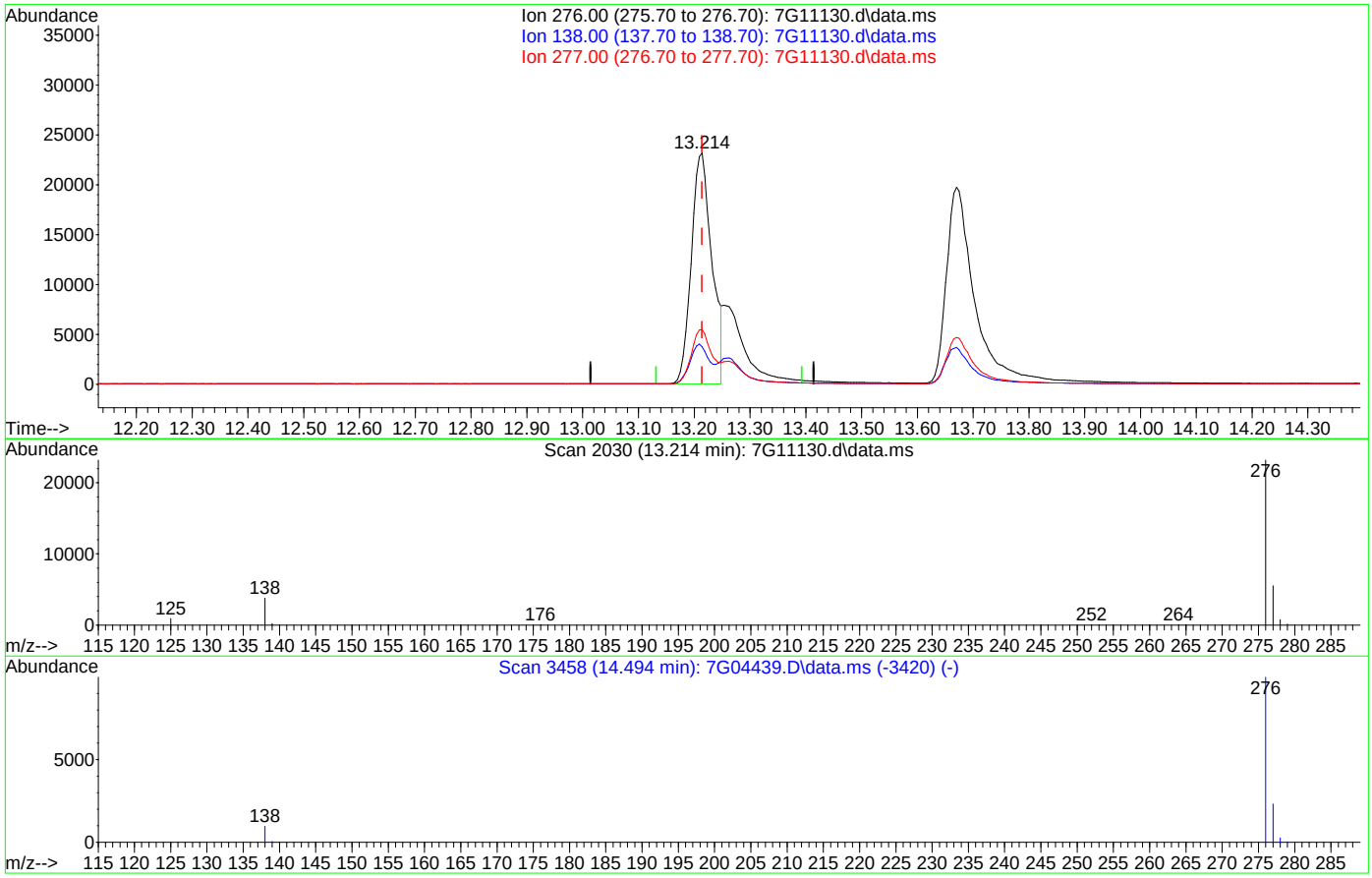
response 81139

Ion	Exp%	Act%
276.00	100	100
138.00	9.60	15.96
277.00	23.10	23.53
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11130.d
Acq On : 11 Aug 2020 8:29 am
Operator : FOUADS
Sample : CC472-4 Inst : MSBNA8
Misc : op81342,S7G483,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:23:52 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Wed Aug 12 07:23:49 2020
Response via : Initial Calibration



TIC: 7G11130.d\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.214min (0.000) 5.29ppm m

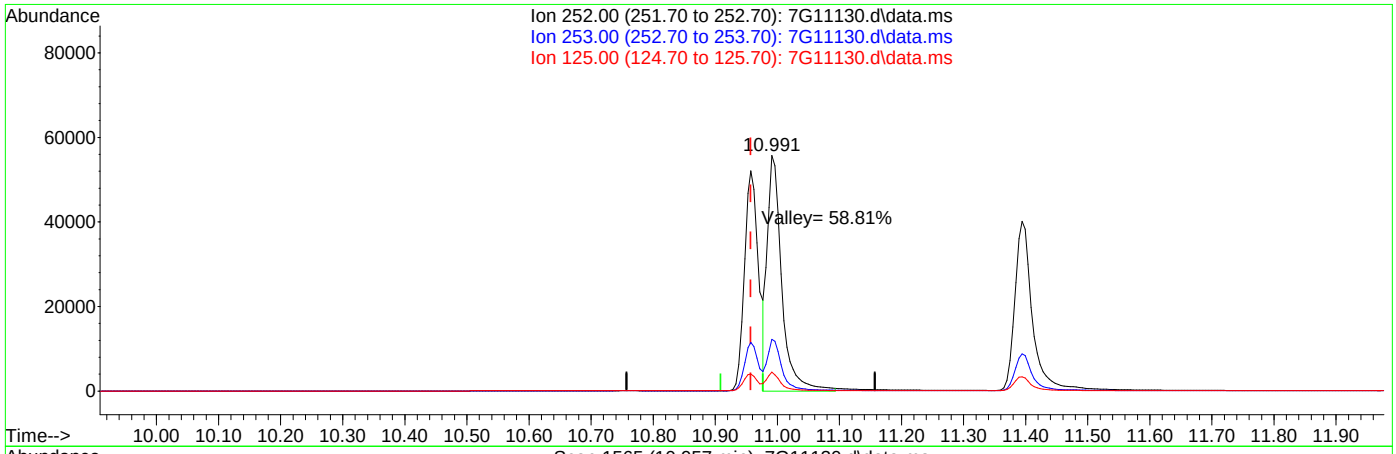
response 59178

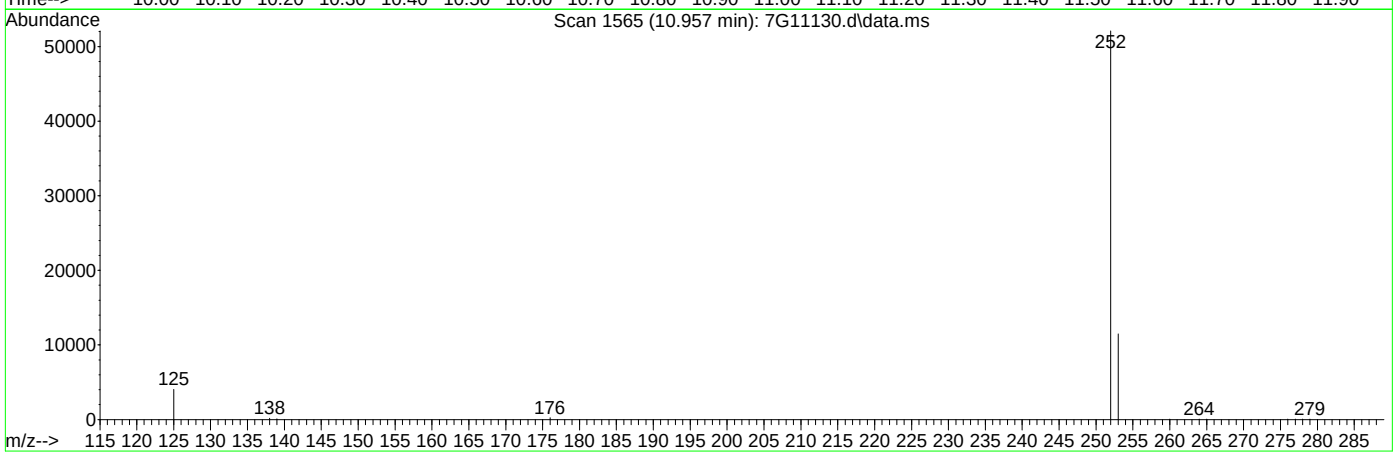
Ion	Exp%	Act%
276.00	100	100
138.00	9.60	16.27
277.00	23.10	23.75
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11130.d
Acq On : 11 Aug 2020 8:29 am
Operator : FOUADS
Sample : CC472-4 Inst : MSBNA8
Misc : op81342,S7G483,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:24:22 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Wed Aug 12 07:23:49 2020
Response via : Initial Calibration





TIC: 7G11130.d\data.ms

(23) Benzo[b]fluoranthene (P)

10.957min (0.000) 4.67ppm

response 82074

Ion	Exp%	Act%
252.00	100	100
253.00	21.70	22.12
125.00	4.50	7.54
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 06/24/20 14:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071356.D
Acq On : 23 Jun 2020 10:04 am
Operator : marthav
Sample : ic2918-1 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 23 16:54:17 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	0.000	152	0m	40.00	ppm		-6.00
22) Naphthalene-d8	0.000	136	0m	40.00	ppm		-7.43
43) Acenaphthene-d10	0.000	164	0m	40.00	ppm		-9.48
70) Phenanthrene-d10	0.000	188	0m	40.00	ppm		-11.22
92) Chrysene-d12	0.000	240	0m	40.00	ppm		-14.49
102) Perylene-d12	0.000	264	0m	40.00	ppm		-16.82
110) 1,4-Dichlorobenzene-d4A	6.005	152	175495	40.00	ppm		0.00
120) Naphthalene-d8A	7.433	136	686765	40.00	ppm		0.00
127) Acenaphthene-d10A	9.476	164	358350	40.00	ppm		0.00
136) Phenanthrene-d10A	11.225	188	643792	40.00	ppm		0.00
146) Chrysene-d12A	14.493	240	465781	40.00	ppm		0.00
153) Perylene-d12A	16.809	264	402255	40.00	ppm		-0.01
System Monitoring Compounds							
7) 2-Fluorophenol	0.000	112	0d	0.00	ppm		
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#			
9) Phenol-d5	0.000	99	0d	0.00	ppm		
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#			
23) Nitrobenzene-d5	0.000	82	0d	0.00	ppm		
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#			
47) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm		
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#			
75) 2,4,6-Tribromophenol	0.000	330	0d	0.00	ppm		
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#			
95) Terphenyl-d14	0.000	244	0d	0.00	ppm		
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#			
Target Compounds							Qvalue
111) 2-Picoline	3.994	93	8256	0.95	ppm		89
112) N-Nitrosomethylethylamine	4.111	42	6507m	2.11	ppm		
113) Methyl methanesulfonate	4.432	80	3965	0.92	ppm		92
114) N-Nitrosodiethylamine	4.849	102	3125	0.90	ppm	#	7
115) Ethyl methanesulfonate	5.176	79	5412	0.89	ppm		96
116) Pentachloroethane	5.700	167	2337	0.94	ppm		92
117) N-Nitrosopyrrolidine	6.417	100	2483	0.70	ppm	#	1
118) N-Nitrosomorpholine	6.470	56	5091	1.38	ppm	#	70
119) O-Toluidine	6.486	106	10147	0.94	ppm		97
121) N-Nitrosopiperidine	6.807	42	6295	1.67	ppm	#	58
122) A,A-Dimethylphenethyla...	7.267	58	20213m	1.12	ppm		
123) Hexachloropropene	7.561	213	2268	0.62	ppm		94
124) N-Nitrosodi-n-butylamine	7.925	84	3931	0.87	ppm	#	20
125) p-Phenylenediamine	7.930	108	5377	0.96	ppm		88
126) Isosafrole	8.171	162	4342	0.97	ppm		87
128) Safrole	8.775	162	4333	0.93	ppm		90
129) 1-Chloronaphthalene	8.845	162	10813	0.97	ppm		97
130) Diphenyl Ether	8.941	170	7575	1.00	ppm		94
131) 1,4-Naphthoquinone	9.032	158	3169	0.65	ppm		76
132) Pentachlorobenzene	9.663	250	4141	0.80	ppm		92
133) 1-Naphthylamine	9.808	143	11709	1.03	ppm		92

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071356.D
Acq On : 23 Jun 2020 10:04 am
Operator : marthav
Sample : ic2918-1 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 23 16:54:17 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
134) 2-Naphthylamine	9.904	143	12300	1.06	ppm		96
135) 5-Nitro-o-toluidine	10.134	152	2552	0.69	ppm	#	68
137) 1,3,5-Trinitrobenzene	10.589	75	1080	0.28	ppm	#	76
138) Diallate	10.631	43	10150m	1.43	ppm		
139) Phenacetin	10.647	108	4577	0.71	ppm		85
140) 4-Aminobiphenyl	11.016	169	12376	1.14	ppm		96
141) Pronamide	11.107	173	3728	0.69	ppm		95
142) Pentachloronitrobenzene	11.016	237	1011	0.62	ppm		84
143) 4-Nitroquinoline 1-Oxide	12.166	190	192m	0.47	ppm		
144) Methapyrilene	12.295	58	2289	0.29	ppm	#	66
145) Isodrin	12.477	193	1891	0.85	ppm		82
147) Aramite	13.247	185	738m	0.42	ppm		
148) p-(Dimethylamine)azobe...	13.316	120	3227	0.58	ppm		77
149) Chlorobenzilate	13.386	139	4146	0.75	ppm	#	59
151) 3,3'-Dimethylbenzidine	13.744	212	5535	0.83	ppm		100
152) 2-Acetylaminofluorene	14.065	181	2599	0.46	ppm		84
154) 7,12-Dimethylbenz(a)an...	16.162	256	4637	0.80	ppm		96
156) 3-Methylcholanthrene	17.306	268	3799	0.74	ppm		95
157) Dibenz(a,j)acridine	18.200	279	3086	0.41	ppm		86

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

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Data File : x071356.D
Acq On : 23 Jun 2020 10:04 am
Operator : marthav
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Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

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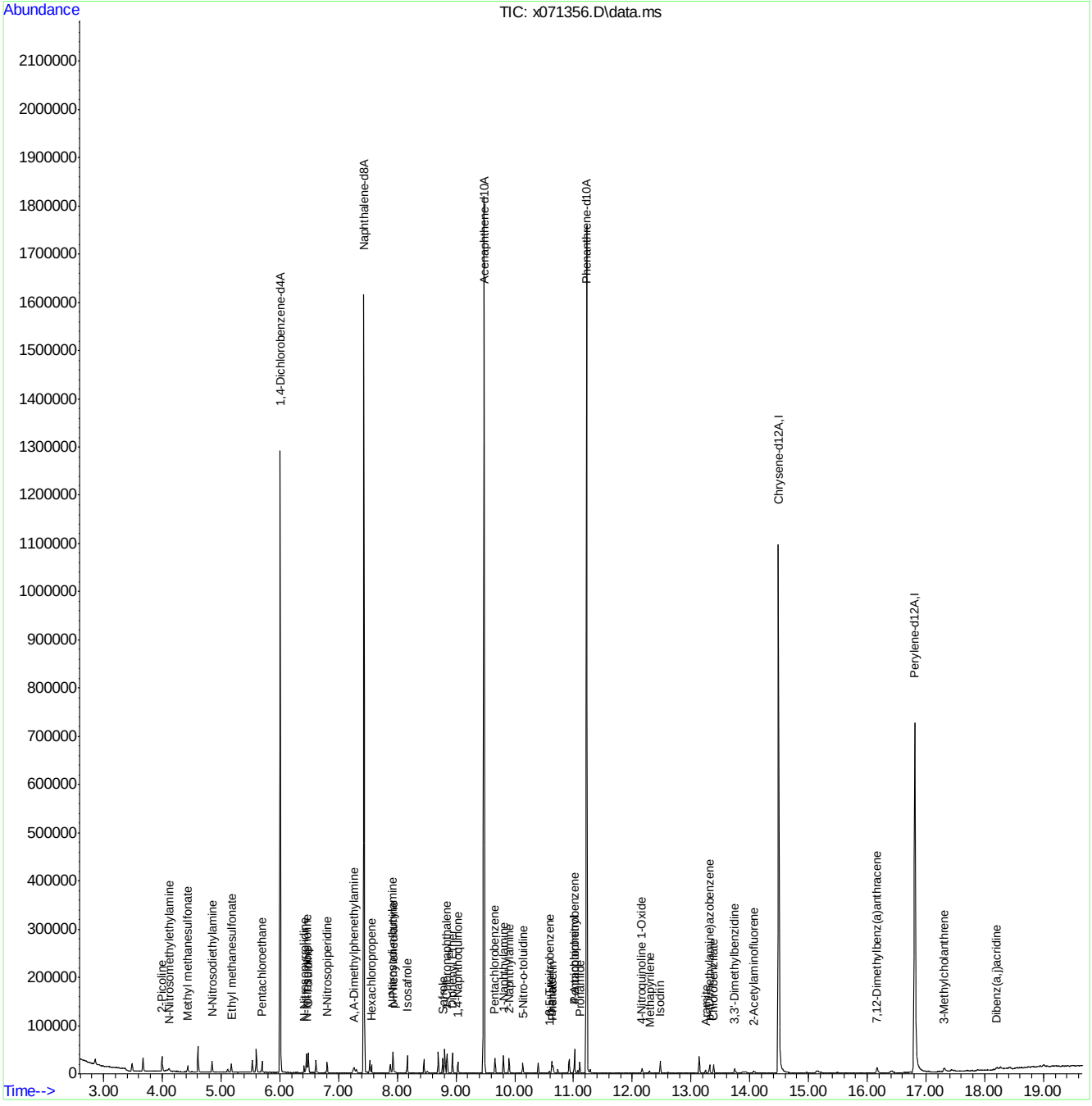
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration



FA77581

Manual Integration Approval Summary

Sample Number: SX2918-IC2918
Lab FileID: X071356.D
Injection Time: 06/23/20 10:04

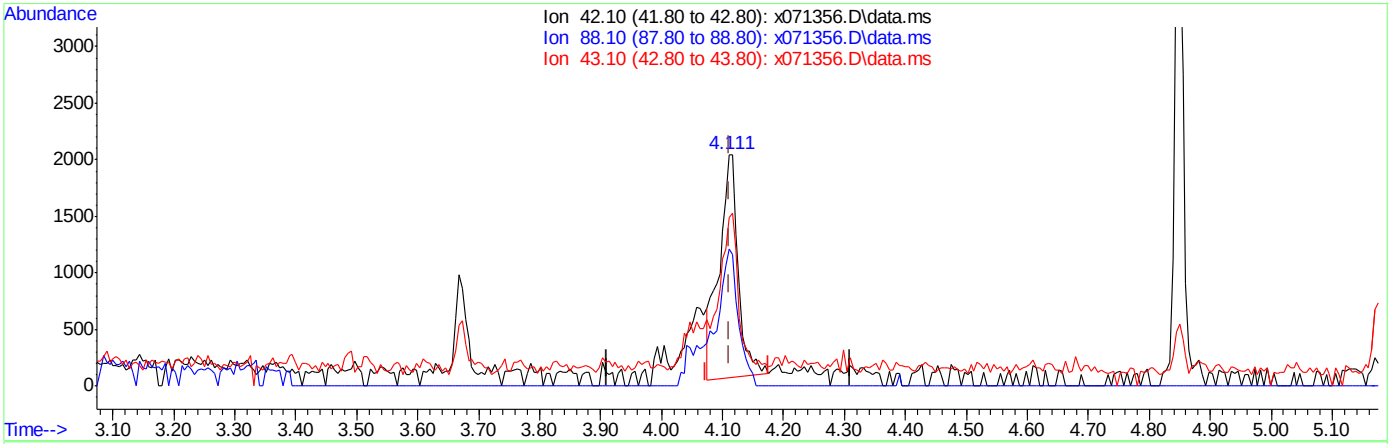
Method: EPA 625.1
Analyst approved: 06/24/20 09:50 Martha Valls
Supervisor approved: 06/24/20 14:07 Naresh Jiawan

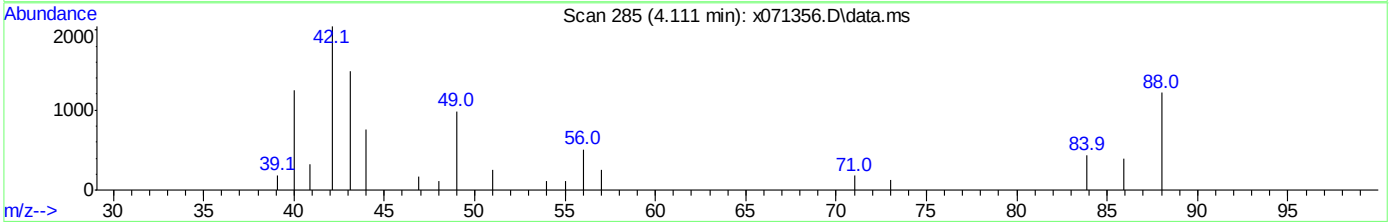
Parameter	CAS	Sig#	R.T. (min.)	Reason
N-Nitrosomethylethylamine	10595-95-6		4.11	Split peak
A,A-Dimethylphenethylamine	122-09-8		7.27	Split peak
Diallate	2303-16-4		10.63	Split peak
4-Nitroquinoline 1-Oxide	56-57-5		12.17	Split peak
Aramite	140-57-8		13.25	Split peak

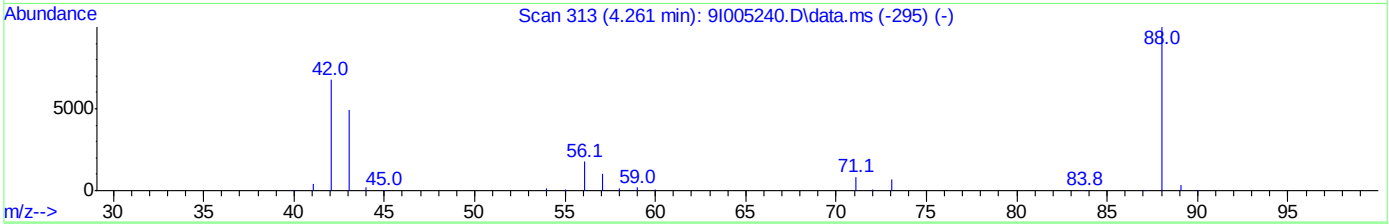
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071356.D
Acq On : 23 Jun 2020 10:04 am
Operator : marthav
Sample : ic2918-1 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 23 14:00:58 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071356.D\data.ms

(112) N-Nitrosomethylethylamine

4.111min (+0.000) 1.40ppm

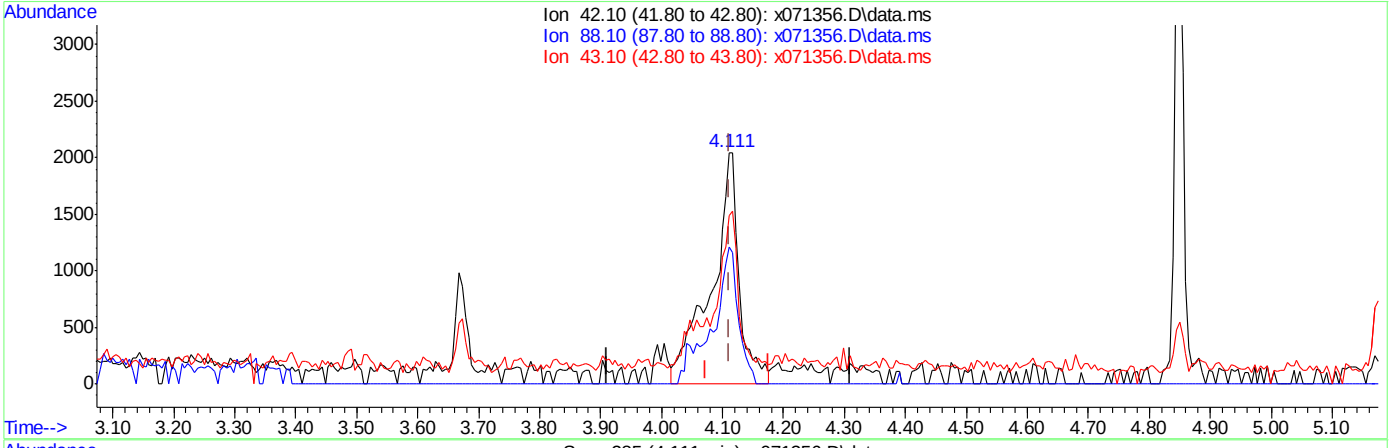
response 4325

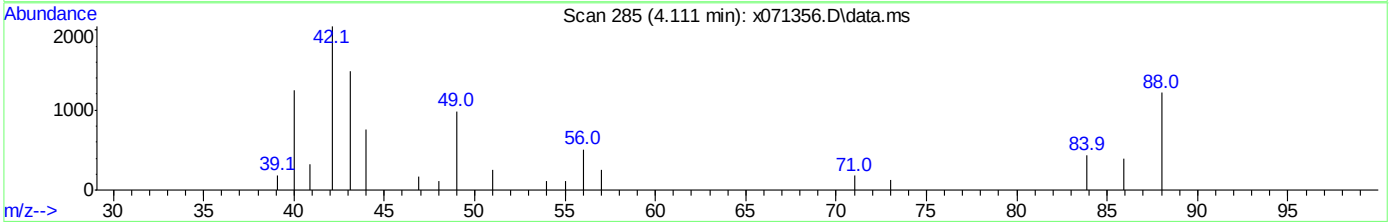
Ion	Exp%	Act%
42.10	100	100
88.10	147.70	62.09#
43.10	72.60	67.64
0.00	0.00	0.00

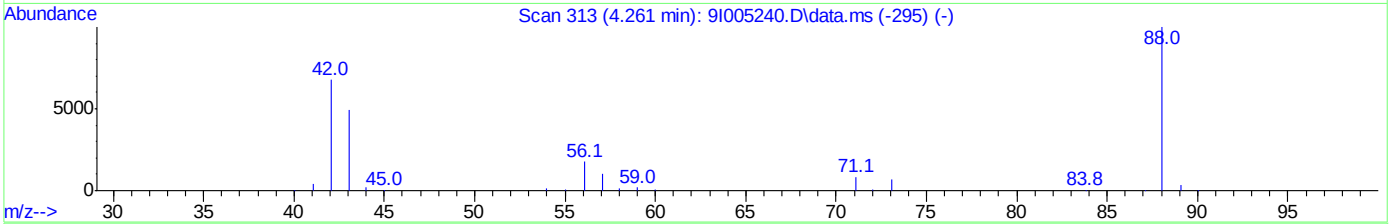
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071356.D
Acq On : 23 Jun 2020 10:04 am
Operator : marthav
Sample : ic2918-1 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 23 14:00:58 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071356.D\data.ms

(112) N-Nitrosomethylethylamine

4.111min (+0.000) 2.11ppm m

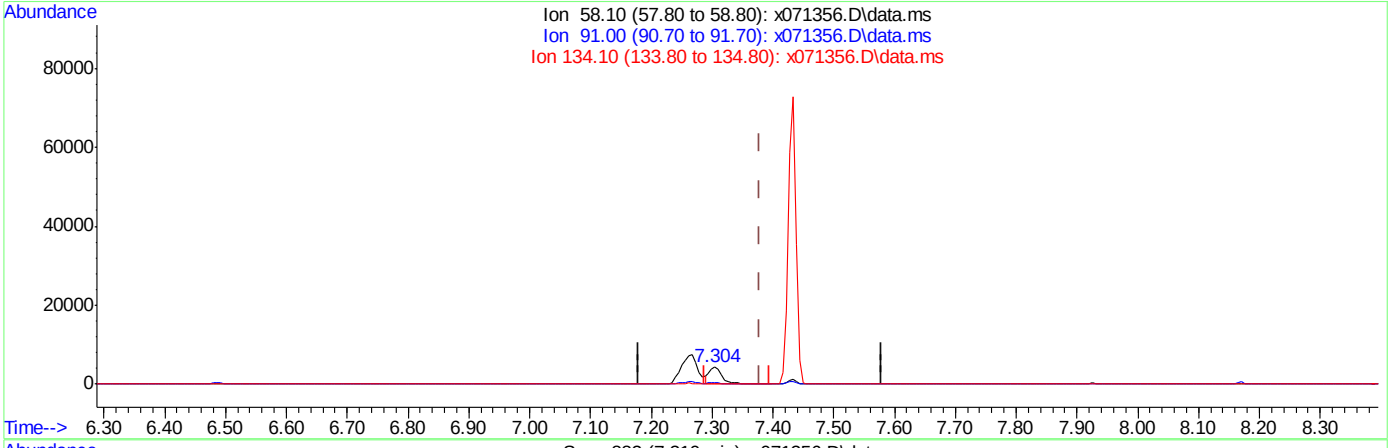
response 6507

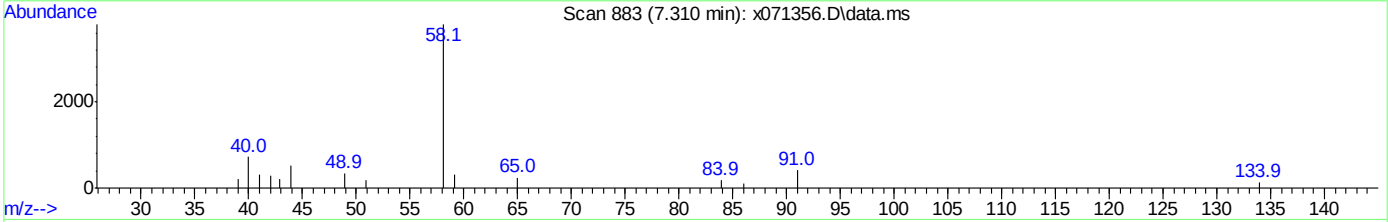
Ion	Exp%	Act%
42.10	100	100
88.10	147.70	59.31#
43.10	72.60	72.84
0.00	0.00	0.00

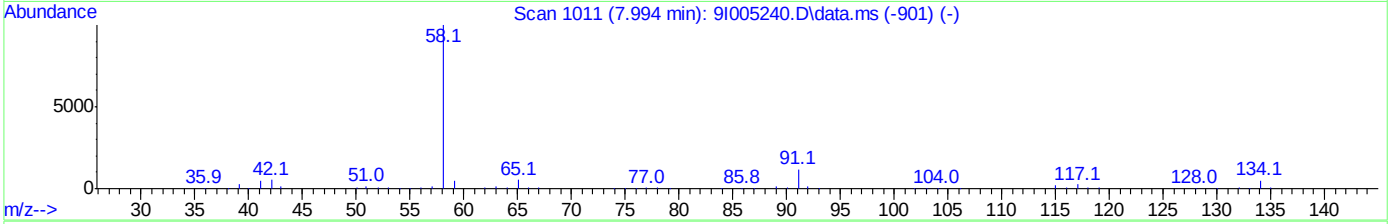
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071356.D
Acq On : 23 Jun 2020 10:04 am
Operator : marthav
Sample : ic2918-1 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 23 14:00:58 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071356.D\data.ms

(122) A,A-Dimethylphenethylamine

7.304min (-0.075) 0.36ppm

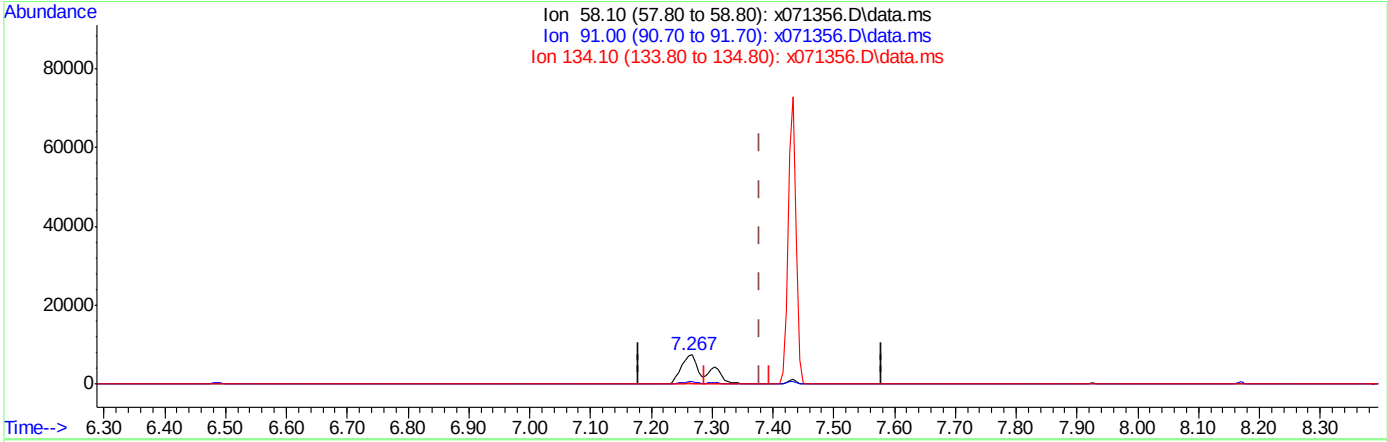
response 6599

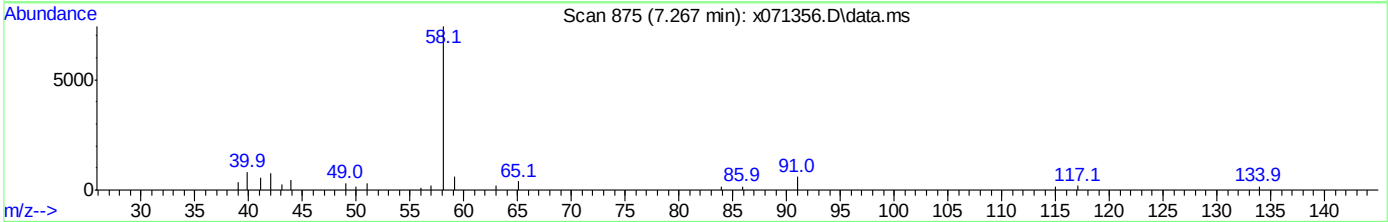
Ion	Exp%	Act%
58.10	100	100
91.00	11.70	9.31
134.10	5.10	4.38
0.00	0.00	0.00

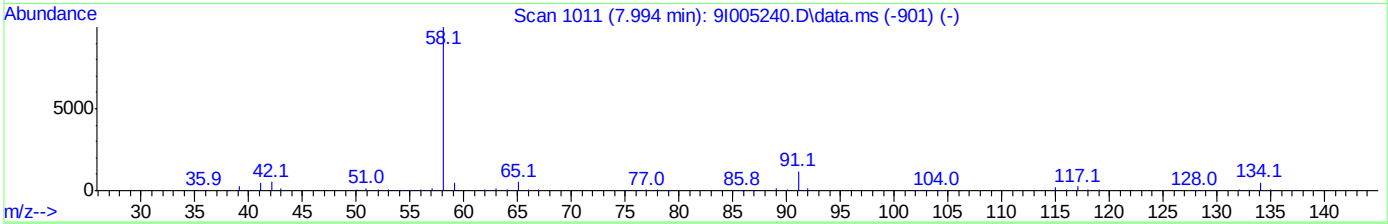
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071356.D
Acq On : 23 Jun 2020 10:04 am
Operator : marthav
Sample : ic2918-1 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 23 14:00:58 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071356.D\data.ms

(122) A,A-Dimethylphenethylamine

7.267min (-0.112) 1.12ppm m

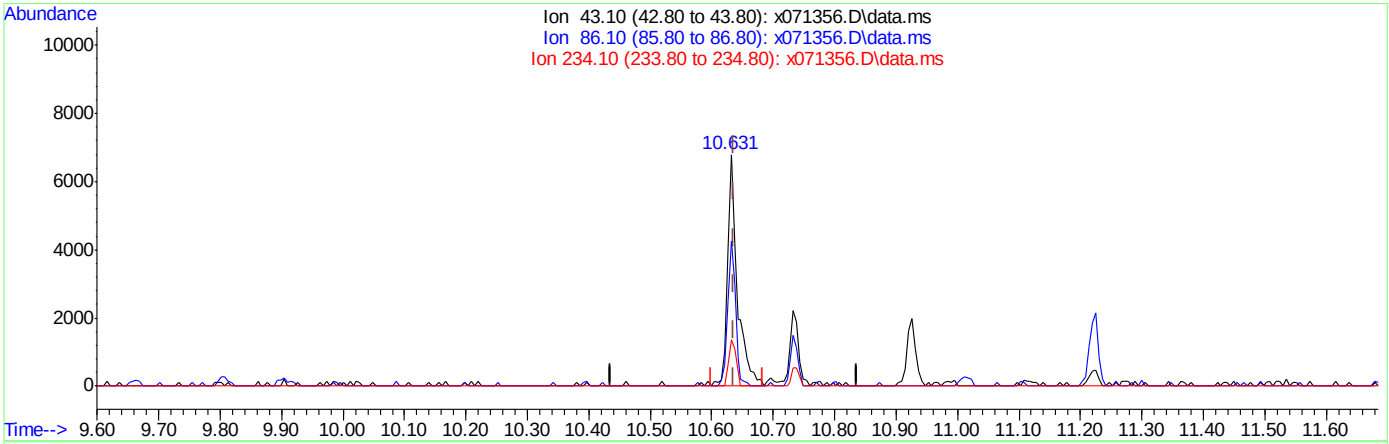
response 20213

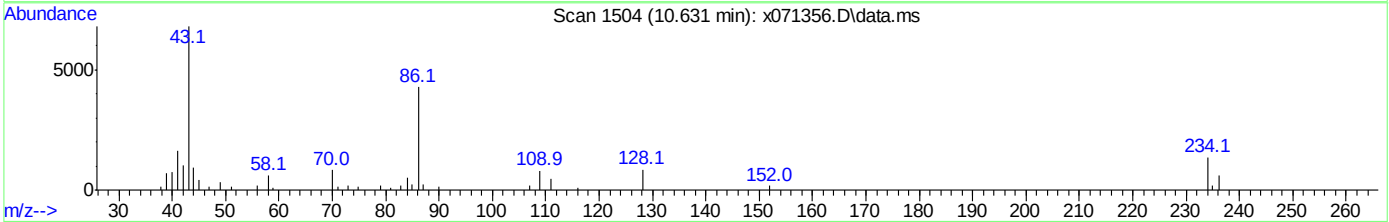
Ion	Exp%	Act%
58.10	100	100
91.00	11.70	8.08
134.10	5.10	2.17
0.00	0.00	0.00

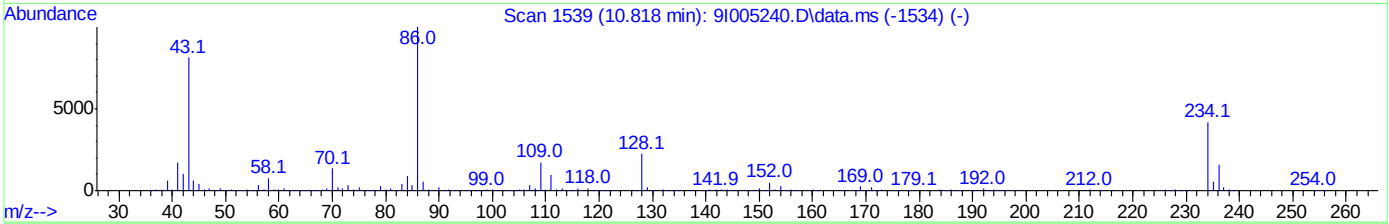
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071356.D
Acq On : 23 Jun 2020 10:04 am
Operator : marthav
Sample : ic2918-1 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 23 14:00:58 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071356.D\data.ms

(138) Diallate

10.631min (-0.005) 1.08ppm

response 7646

Ion	Exp%	Act%
43.10	100	100
86.10	123.10	62.82#
234.10	51.50	20.16#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071356.D
Acq On : 23 Jun 2020 10:04 am
Operator : marthav
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Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
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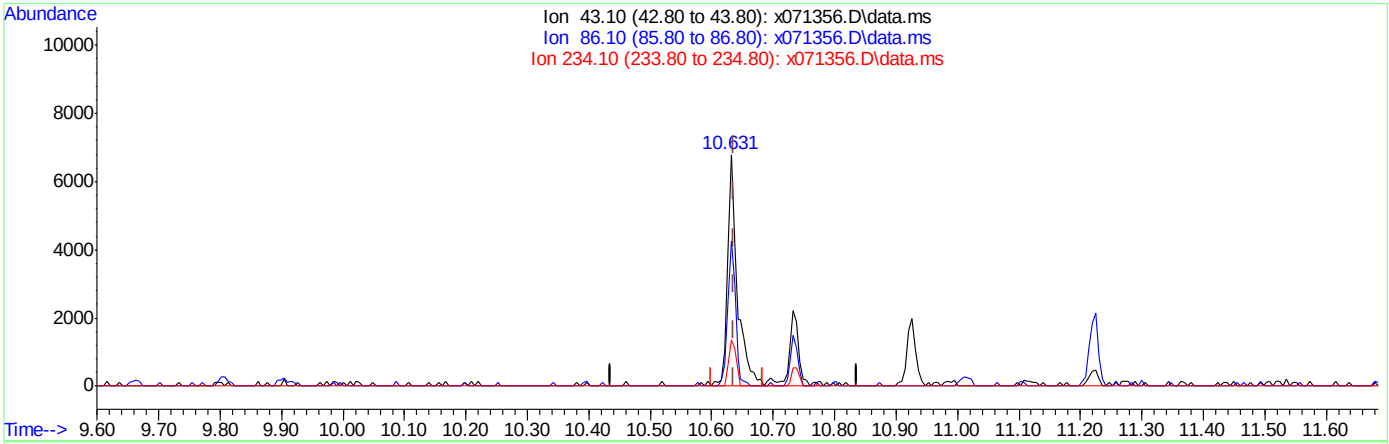

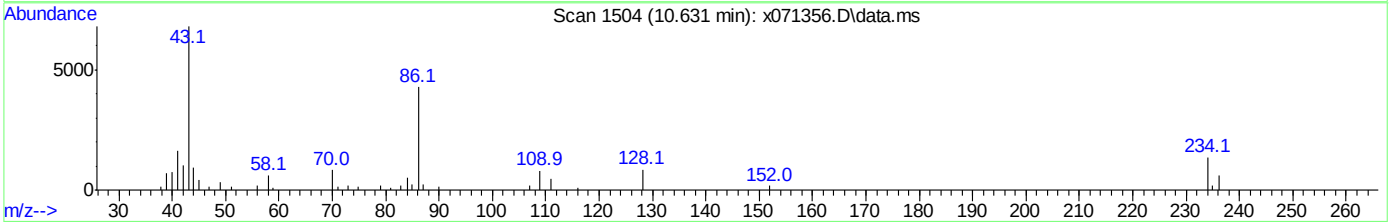

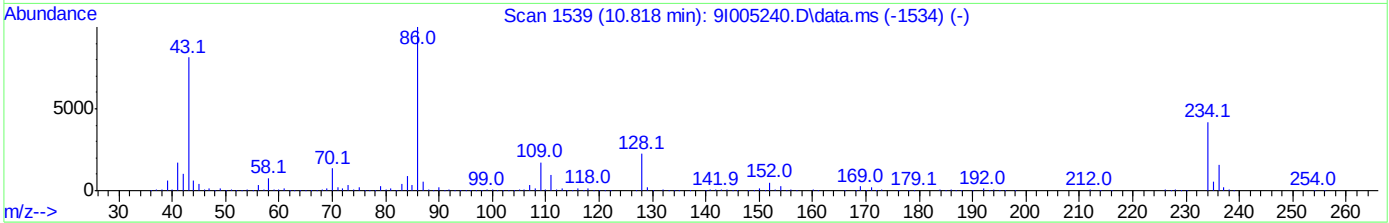

TIC: x071356.D\data.ms

(138) Diallate

10.631min (-0.005) 1.43ppm m

response 10150

Ion	Exp%	Act%
43.10	100	100
86.10	123.10	62.82#
234.10	51.50	20.16#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071356.D
Acq On : 23 Jun 2020 10:04 am
Operator : marthav
Sample : ic2918-1 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 23 14:00:58 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
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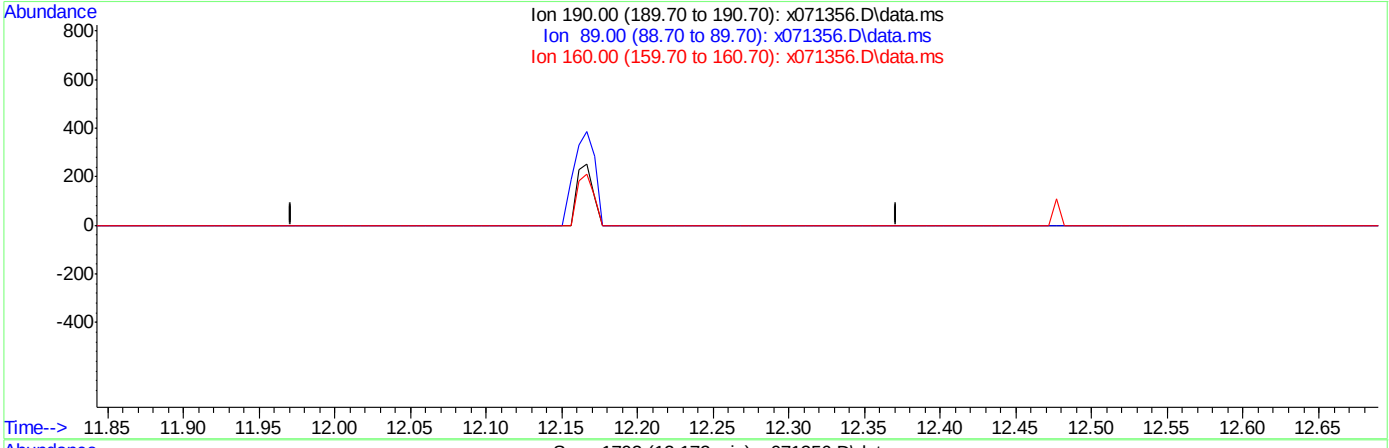
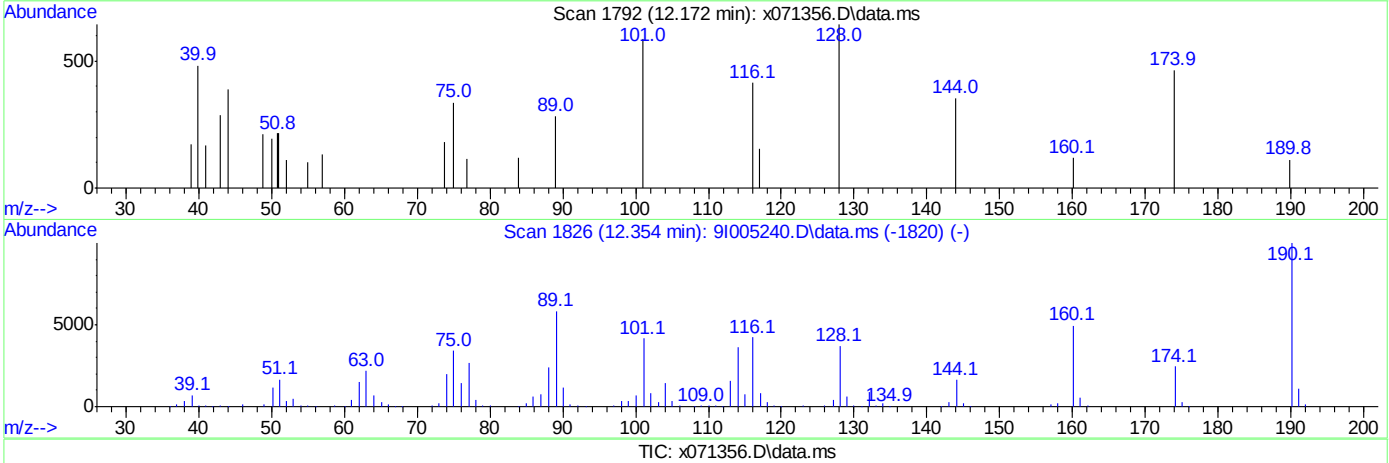
Response via : Initial Calibration





TIC: x071356.D\data.ms

(143) 4-Nitroquinoline 1-Oxide

12.172min (-12.172) 0.00ppm

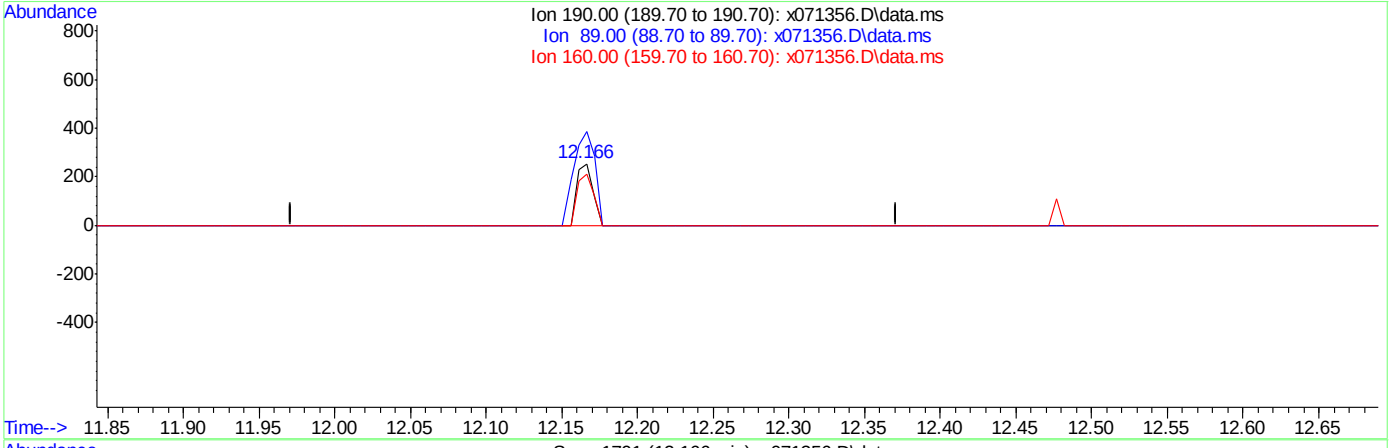
response 0

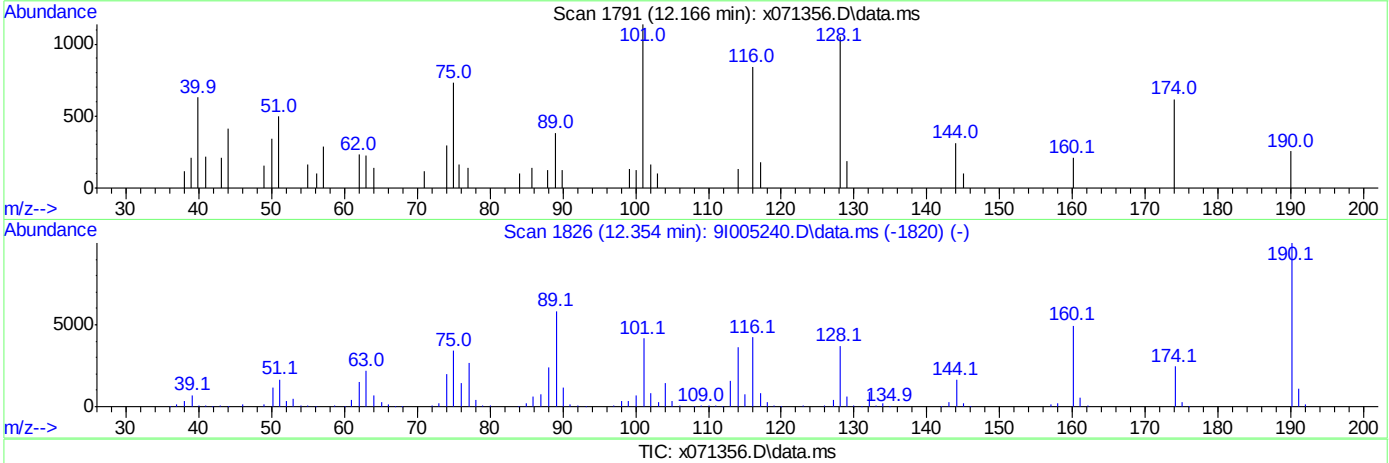
Ion	Exp%	Act%
190.00	100	0.00
89.00	58.20	0.00#
160.00	49.40	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071356.D
Acq On : 23 Jun 2020 10:04 am
Operator : marthav
Sample : ic2918-1 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 23 14:00:58 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration





TIC: x071356.D\data.ms

(143) 4-Nitroquinoline 1-Oxide

12.166min (-0.005) 0.47ppm m

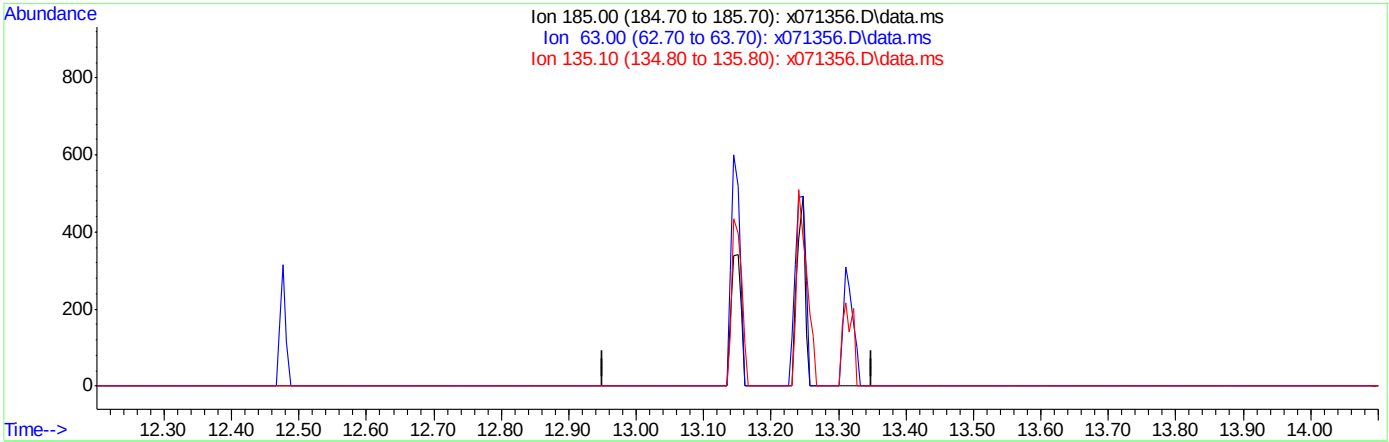
response 192

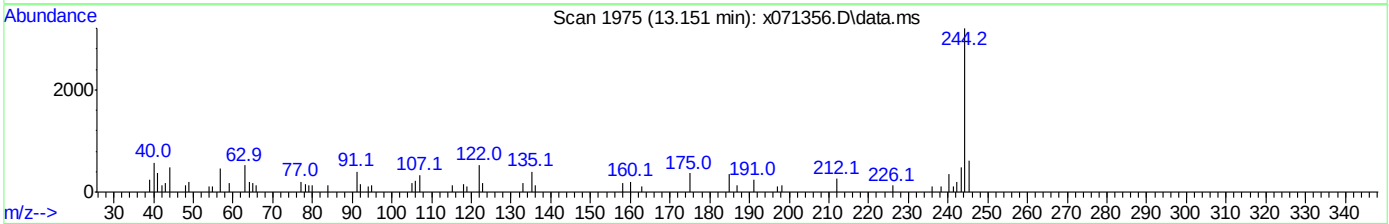
Ion	Exp%	Act%
190.00	100	100
89.00	58.20	150.98#
160.00	49.40	81.96#
0.00	0.00	0.00

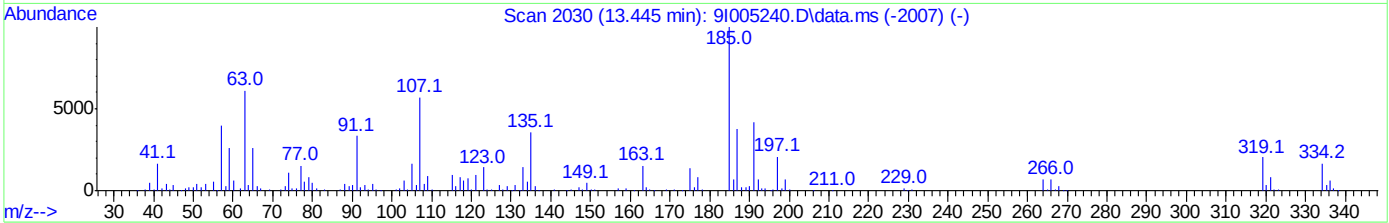
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071356.D
Acq On : 23 Jun 2020 10:04 am
Operator : marthav
Sample : ic2918-1 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 23 14:00:58 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071356.D\data.ms

(147) Aramite

13.150min (-13.150) 0.00ppm

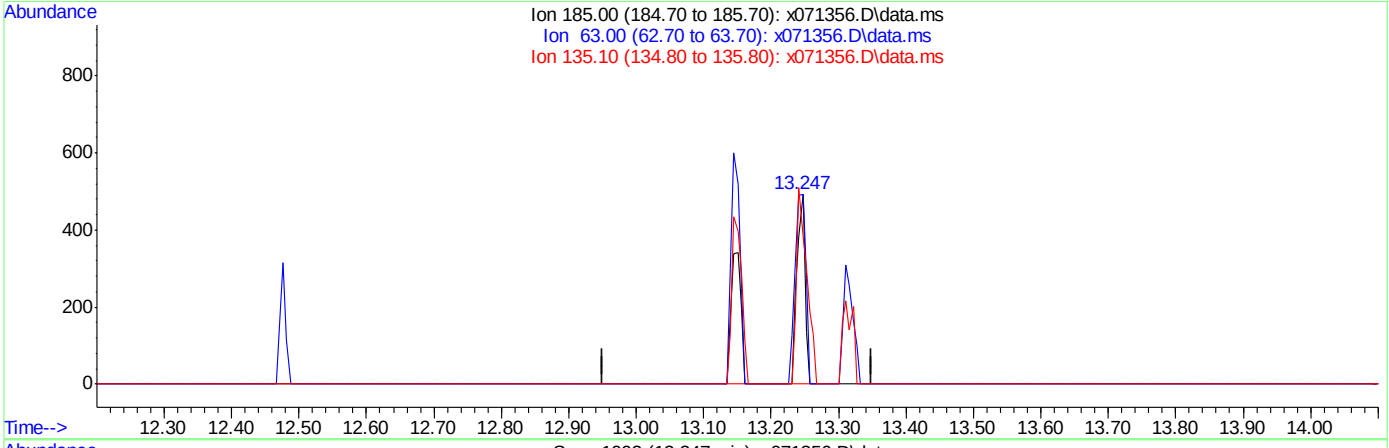
response 0

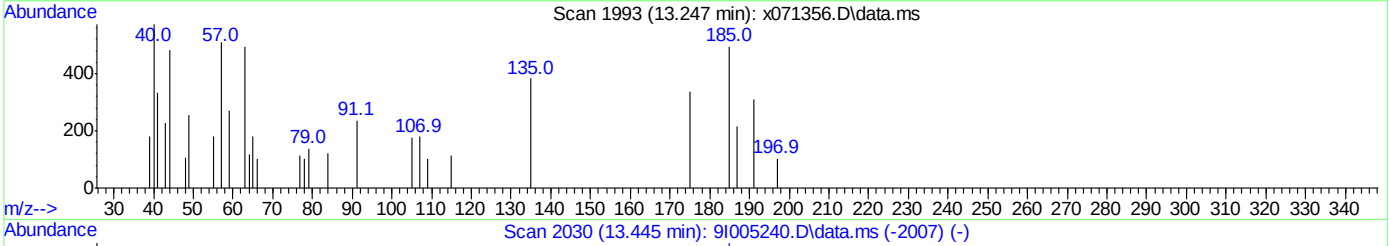
Ion	Exp%	Act%
185.00	100	0.00
63.00	61.10	0.00#
135.10	35.60	0.00#
0.00	0.00	0.00

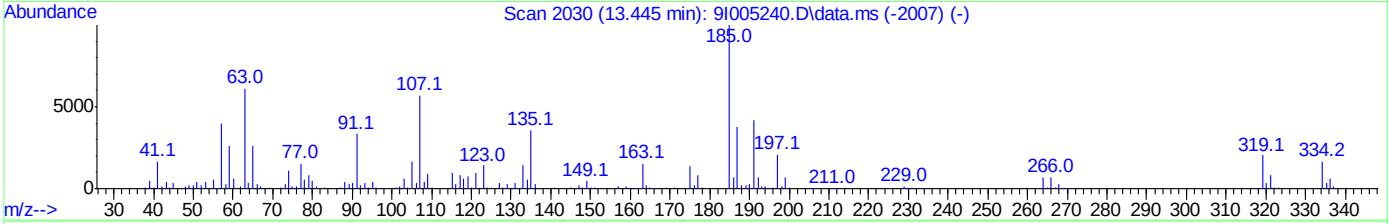
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071356.D
Acq On : 23 Jun 2020 10:04 am
Operator : marthav
Sample : ic2918-1 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 23 14:00:58 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071356.D\data.ms

(147) Aramite

13.247min (+0.096) 0.42ppm m

response 738

Ion	Exp%	Act%
185.00	100	100
63.00	61.10	99.60#
135.10	35.60	77.53#
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 06/24/20 14:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071357.D
Acq On : 23 Jun 2020 10:30 am
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 23 16:54:30 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	0.000	152	0m	40.00	ppm	-6.00
22) Naphthalene-d8	0.000	136	0m	40.00	ppm	-7.43
43) Acenaphthene-d10	0.000	164	0m	40.00	ppm	-9.48
70) Phenanthrene-d10	0.000	188	0m	40.00	ppm	-11.22
92) Chrysene-d12	0.000	240	0m	40.00	ppm	-14.49
102) Perylene-d12	0.000	264	0m	40.00	ppm	-16.82
110) 1,4-Dichlorobenzene-d4A	6.005	152	149418	40.00	ppm	0.00
120) Naphthalene-d8A	7.433	136	609909	40.00	ppm	0.00
127) Acenaphthene-d10A	9.476	164	331998	40.00	ppm	0.00
136) Phenanthrene-d10A	11.219	188	590459	40.00	ppm	0.00
146) Chrysene-d12A	14.487	240	412323	40.00	ppm	0.00
153) Perylene-d12A	16.809	264	356217	40.00	ppm	-0.01
System Monitoring Compounds						
7) 2-Fluorophenol	0.000	112	0d	0.00	ppm	
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#		
9) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#		
23) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#		
47) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#		
75) 2,4,6-Tribromophenol	0.000	330	0d	0.00	ppm	
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#		
95) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#		
Target Compounds						Qvalue
111) 2-Picoline	3.988	93	35007	4.72	ppm	89
112) N-Nitrosomethylethylamine	4.111	42	22841	8.69	ppm #	52
113) Methyl methanesulfonate	4.427	80	16633	4.53	ppm	92
114) N-Nitrosodiethylamine	4.849	102	13558	4.60	ppm #	26
115) Ethyl methanesulfonate	5.175	79	22557	4.34	ppm	99
116) Pentachloroethane	5.700	167	9643	4.56	ppm	96
117) N-Nitrosopyrrolidine	6.416	100	12046	3.99	ppm #	25
118) N-Nitrosomorpholine	6.470	56	22583	7.17	ppm #	66
119) O-Toluidine	6.486	106	45385	4.96	ppm	96
121) N-Nitrosopiperidine	6.807	42	27579	8.25	ppm #	61
122) A,A-Dimethylphenethyla...	7.299	58	109296m	6.74	ppm	
123) Hexachloropropene	7.561	213	10599	3.27	ppm	97
124) N-Nitrosodi-n-butylamine	7.930	84	18823	4.65	ppm #	43
125) p-Phenylenediamine	7.925	108	31553	6.43	ppm	91
126) Isosafrole	8.171	162	19762	4.95	ppm	88
128) Safrole	8.775	162	19808	4.61	ppm	88
129) 1-Chloronaphthalene	8.845	162	47557	4.61	ppm	96
130) Diphenyl Ether	8.941	170	32892	4.70	ppm	93
131) 1,4-Naphthoquinone	9.032	158	17887	3.98	ppm	76
132) Pentachlorobenzene	9.668	250	17118	3.58	ppm	95
133) 1-Naphthylamine	9.807	143	55061	5.20	ppm	93

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071357.D
Acq On : 23 Jun 2020 10:30 am
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 23 16:54:30 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration

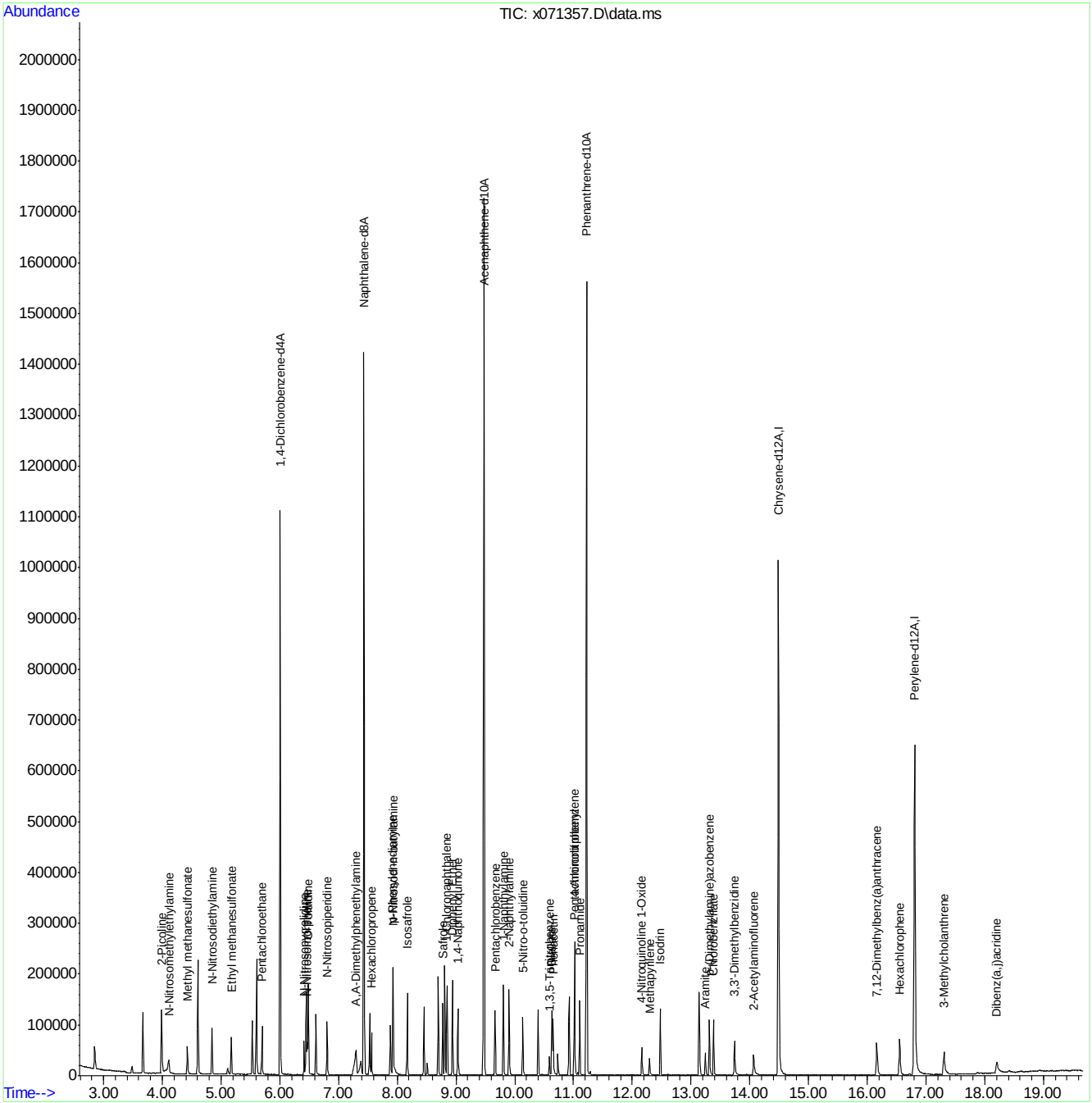
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
134) 2-Naphthylamine	9.904	143	58142	5.40	ppm		99
135) 5-Nitro-o-toluidine	10.134	152	14085	4.07	ppm		71
137) 1,3,5-Trinitrobenzene	10.588	75	6902	1.97	ppm		78
138) Diallate	10.631	43	46068m	7.07	ppm		
139) Phenacetin	10.652	108	25046	4.22	ppm		87
140) 4-Aminobiphenyl	11.016	169	59632	5.99	ppm		96
141) Pronamide	11.107	173	20771	4.18	ppm		96
142) Pentachloronitrobenzene	11.011	237	5479	3.65	ppm		86
143) 4-Nitroquinoline 1-Oxide	12.166	190	1319	3.38	ppm	#	26
144) Methapyrilene	12.294	58	13373	1.83	ppm		71
145) Isodrin	12.476	193	8210	4.01	ppm	#	77
147) Aramite	13.241	185	5359m	3.41	ppm		
148) p-(Dimethylamine)azobe...	13.311	120	18718	3.82	ppm		77
149) Chlorobenzilate	13.386	139	22927	4.66	ppm	#	65
151) 3,3'-Dimethylbenzidine	13.739	212	31071	5.26	ppm		96
152) 2-Acetylaminofluorene	14.065	181	17579	3.50	ppm		88
154) 7,12-Dimethylbenz(a)an...	16.162	256	21270	4.16	ppm		95
155) Hexachlorophene	16.552	196	7994	119.27	ppm		97
156) 3-Methylcholanthrene	17.306	268	17684	3.87	ppm		91
157) Dibenz(a,j)acridine	18.205	279	24909m	3.73	ppm		

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071357.D
Acq On : 23 Jun 2020 10:30 am
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 23 16:54:30 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: SX2918-IC2918
Lab FileID: X071357.D
Injection Time: 06/23/20 10:30

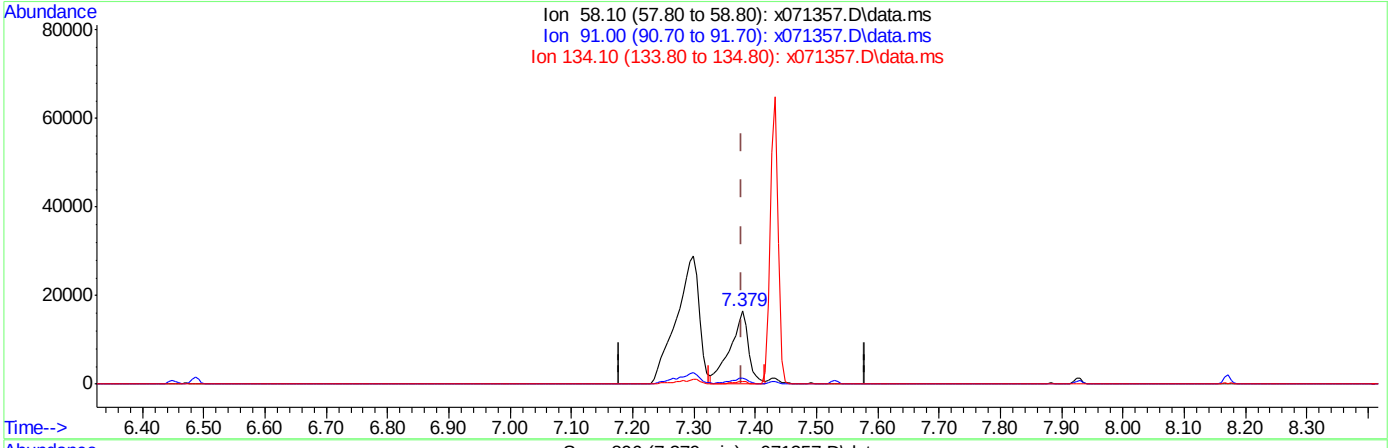
Method: EPA 625.1
Analyst approved: 06/24/20 09:50 Martha Valls
Supervisor approved: 06/24/20 14:07 Naresh Jiawan

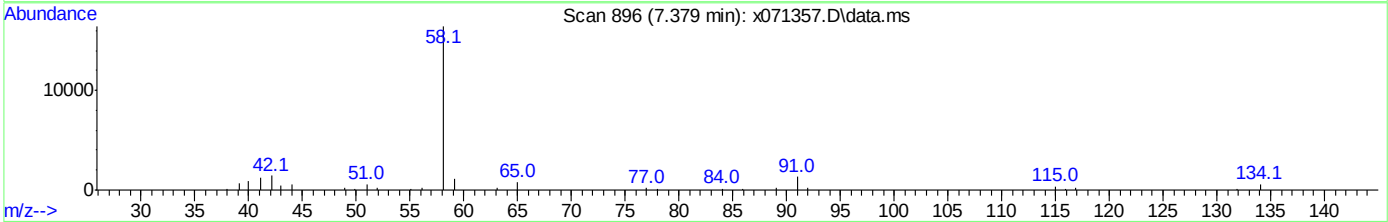
Parameter	CAS	Sig#	R.T. (min.)	Reason
A,A-Dimethylphenethylamine	122-09-8		7.30	Split peak
Diallate	2303-16-4		10.63	Split peak
Aramite	140-57-8		13.24	Split peak
Dibenz(a,j)acridine	224-42-0		18.20	Split peak

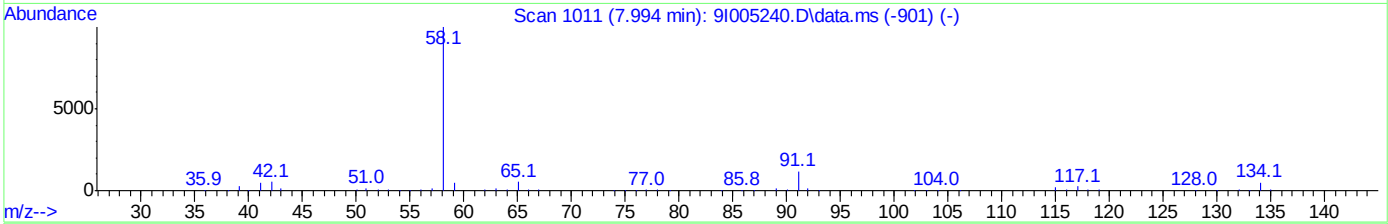
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071357.D
Acq On : 23 Jun 2020 10:30 am
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 23 14:01:00 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071357.D\data.ms

(122) A,A-Dimethylphenethylamine

7.379min (-0.000) 2.08ppm

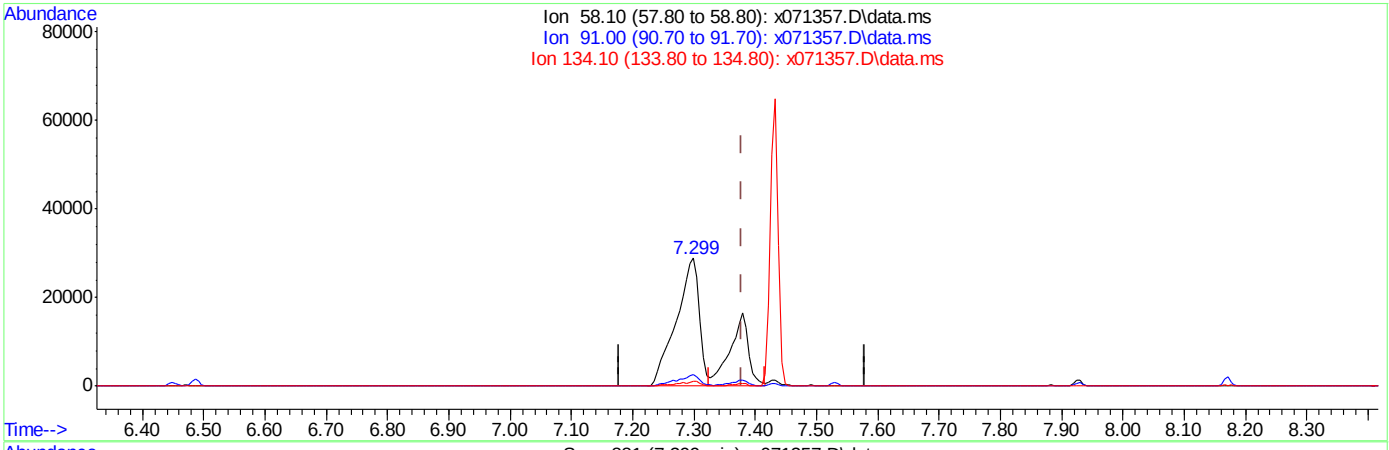
response 33554

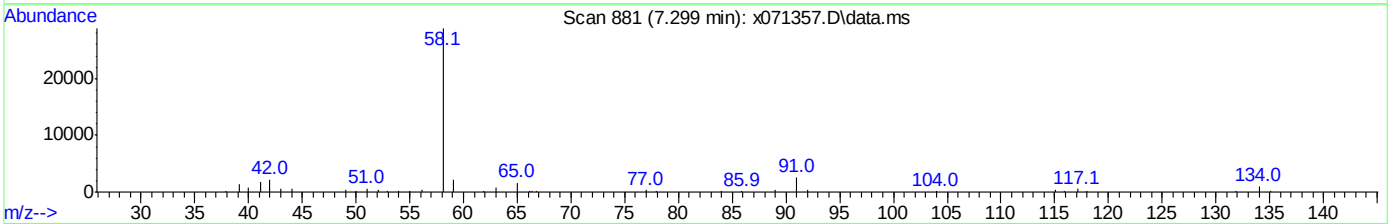
Ion	Exp%	Act%
58.10	100	100
91.00	11.70	7.51
134.10	5.10	0.00
0.00	0.00	0.00

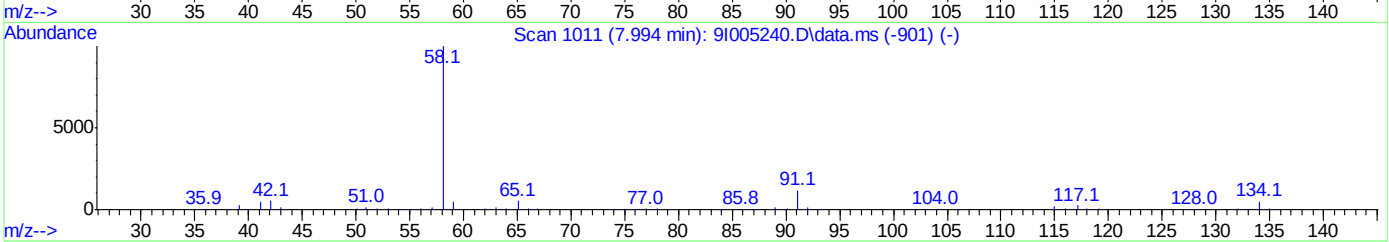
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071357.D
Acq On : 23 Jun 2020 10:30 am
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 23 14:01:00 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071357.D\data.ms

(122) A,A-Dimethylphenethylamine

7.299min (-0.080) 6.74ppm m

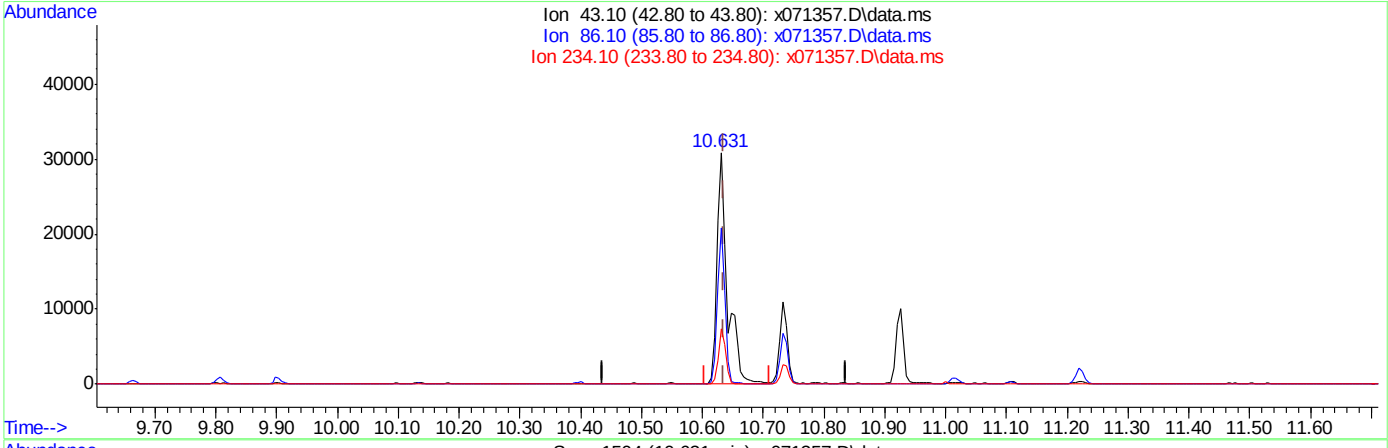
response 109296

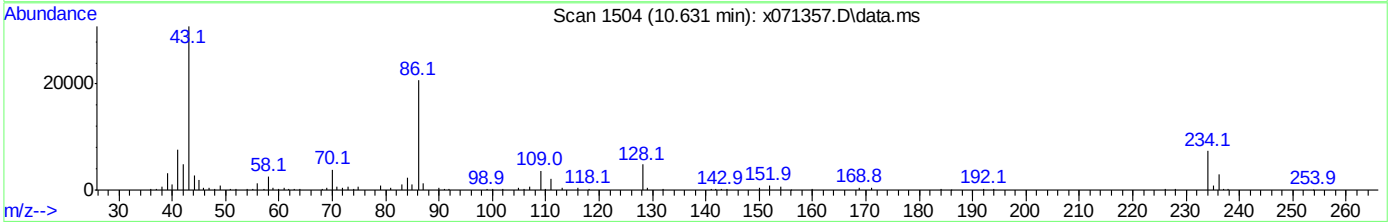
Ion	Exp%	Act%
58.10	100	100
91.00	11.70	8.96
134.10	5.10	3.54
0.00	0.00	0.00

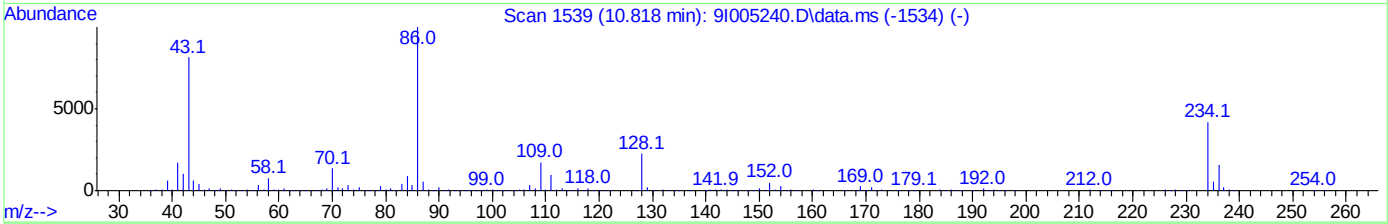
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071357.D
Acq On : 23 Jun 2020 10:30 am
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 23 14:01:00 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071357.D\data.ms

(138) Diallate

10.631min (-0.005) 5.62ppm

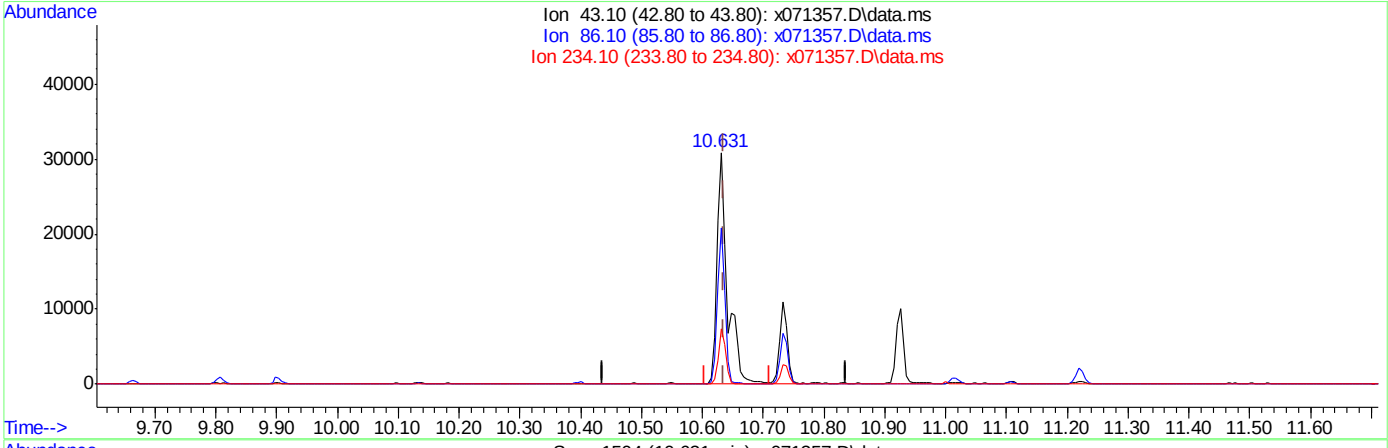
response 36663

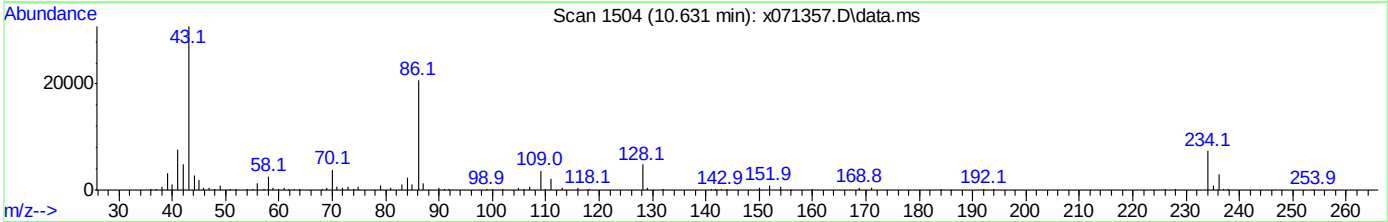
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	67.74#
234.10	51.50	24.04
0.00	0.00	0.00

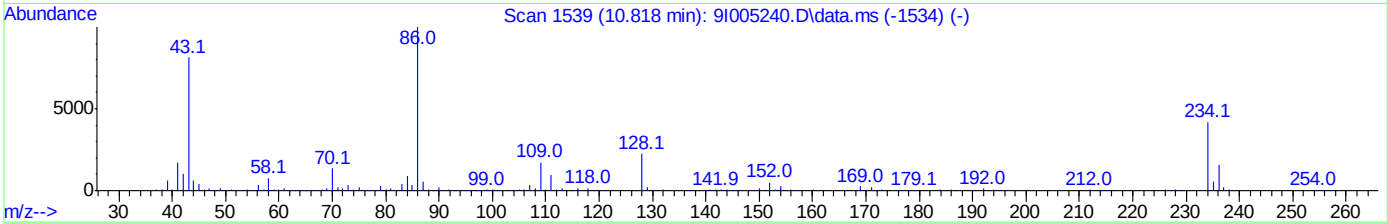
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071357.D
Acq On : 23 Jun 2020 10:30 am
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 23 14:01:00 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071357.D\data.ms

(138) Diallate

10.631min (-0.005) 7.07ppm m

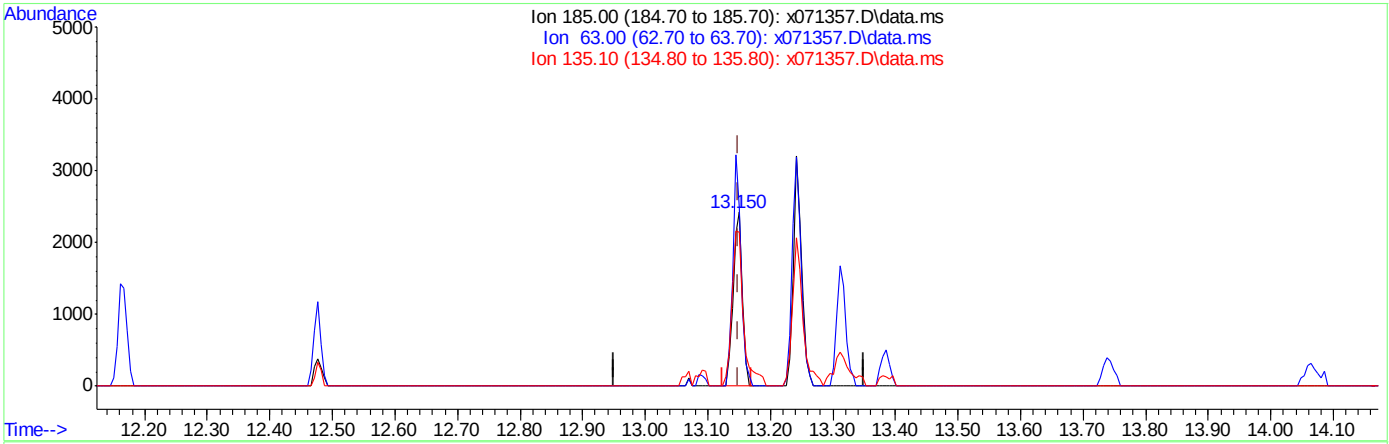
response 46068

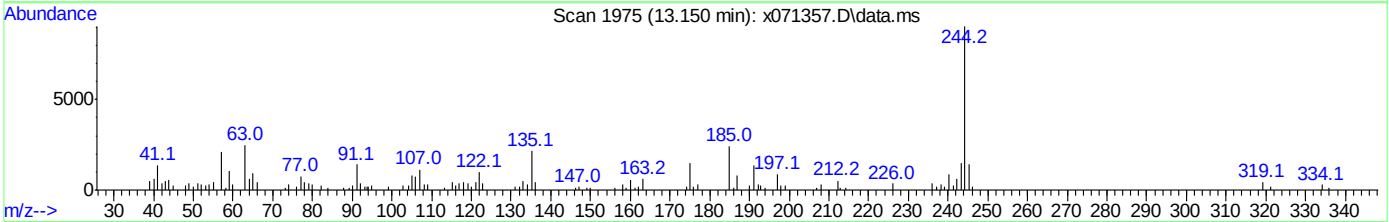
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	67.49#
234.10	51.50	23.95
0.00	0.00	0.00

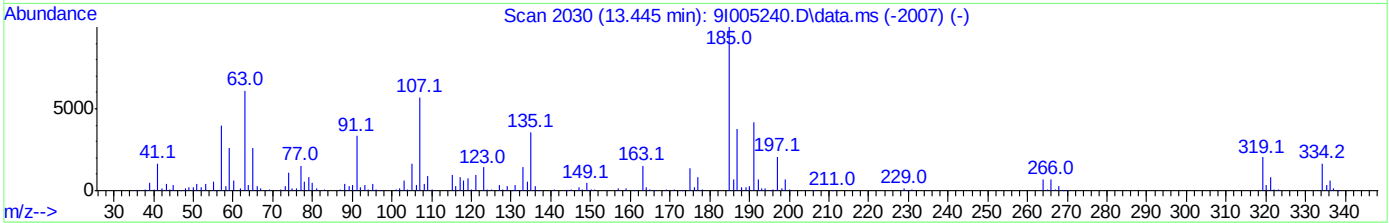
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071357.D
Acq On : 23 Jun 2020 10:30 am
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 23 14:01:00 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071357.D\data.ms

(147) Aramite

13.150min (-0.000) 1.55ppm

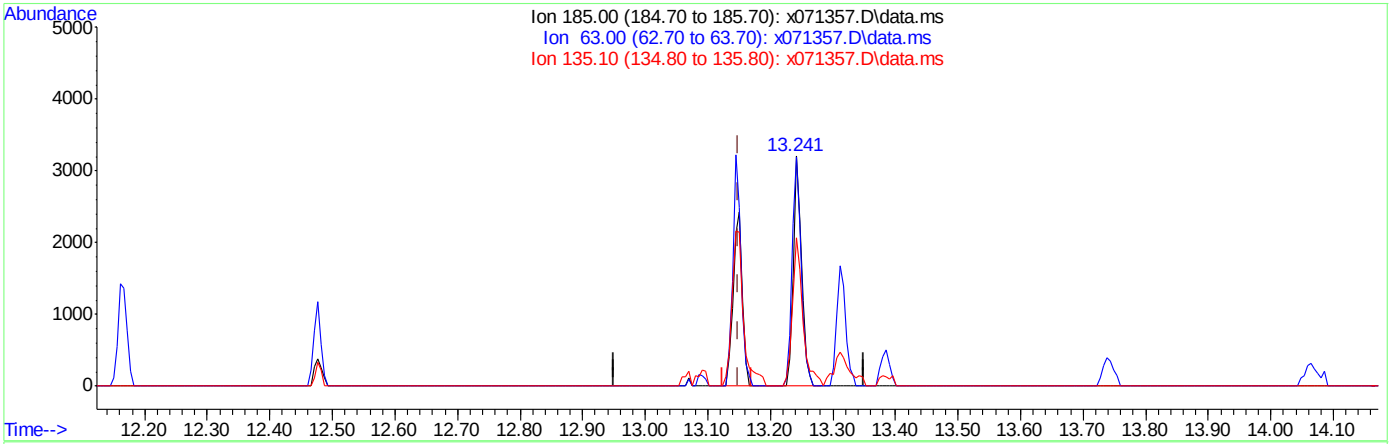
response 2431

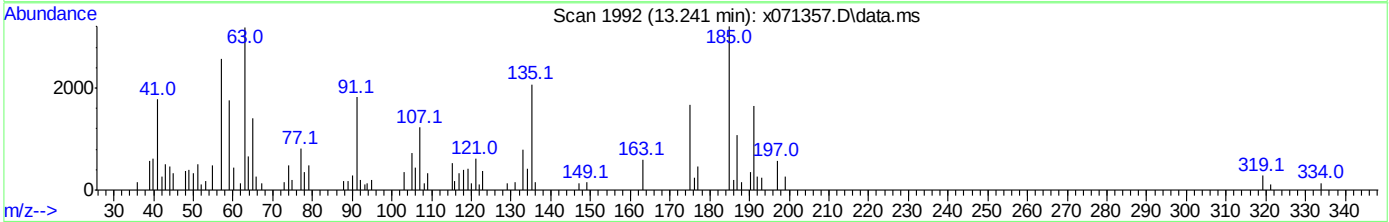
Ion	Exp%	Act%
185.00	100	100
63.00	61.10	102.64#
135.10	35.60	84.51#
0.00	0.00	0.00

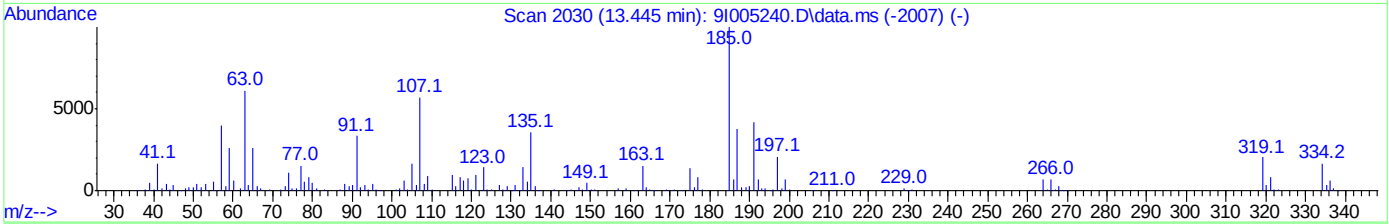
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071357.D
Acq On : 23 Jun 2020 10:30 am
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 23 14:01:00 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071357.D\data.ms

(147) Aramite

13.241min (+0.091) 3.41ppm m

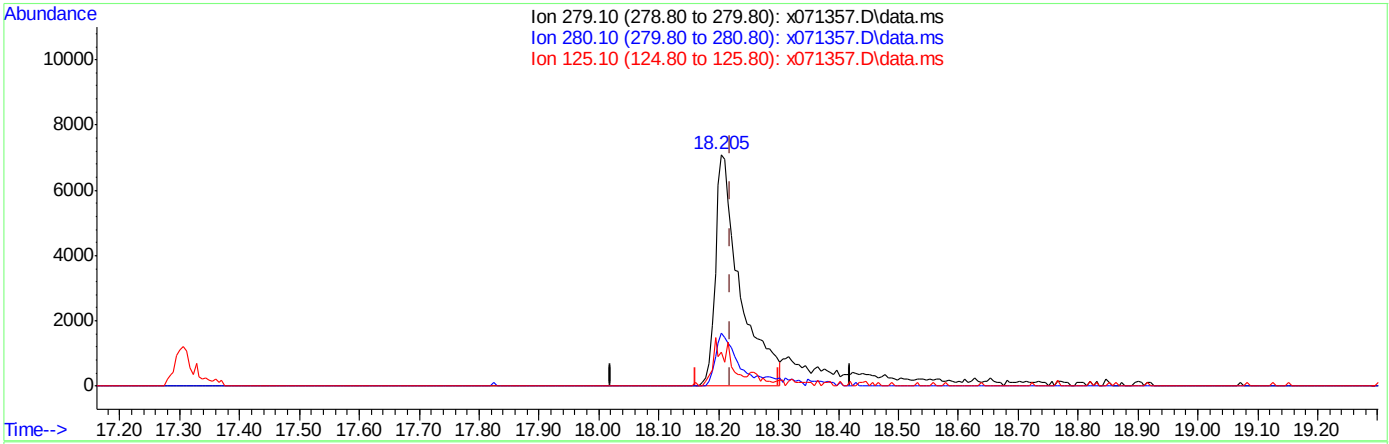
response 5359

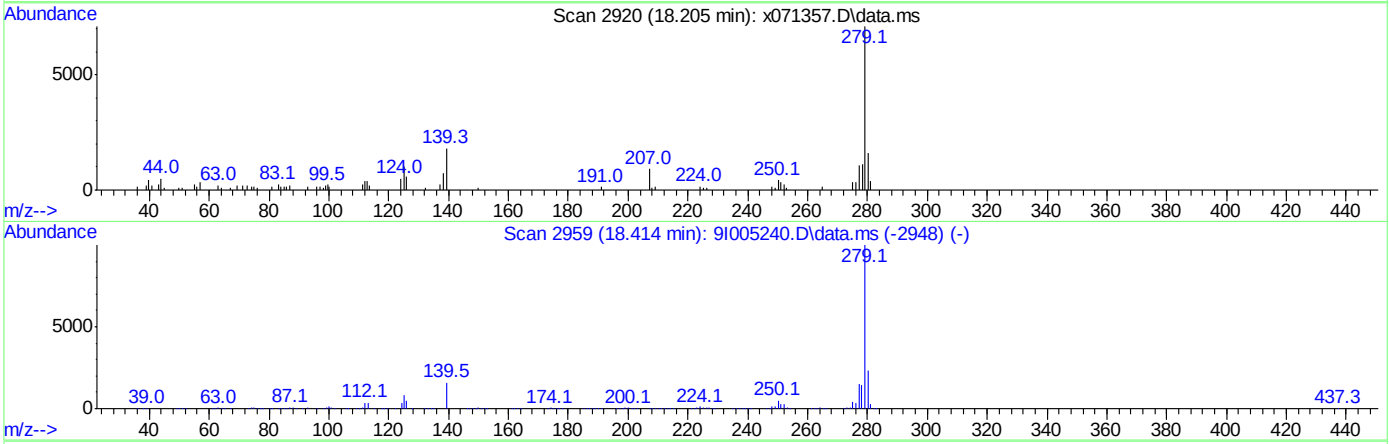
Ion	Exp%	Act%
185.00	100	100
63.00	61.10	99.63#
135.10	35.60	64.66
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071357.D
Acq On : 23 Jun 2020 10:30 am
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 23 14:01:00 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration





TIC: x071357.D\data.ms

(157) Dibenz(a,j)acridine

18.205min (-0.016) 3.05ppm

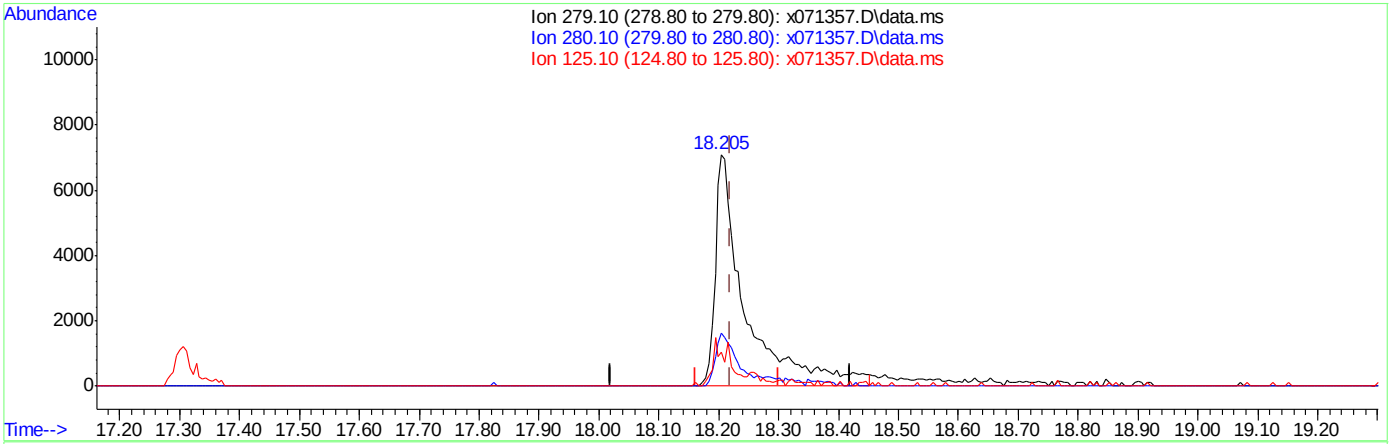
response 20312

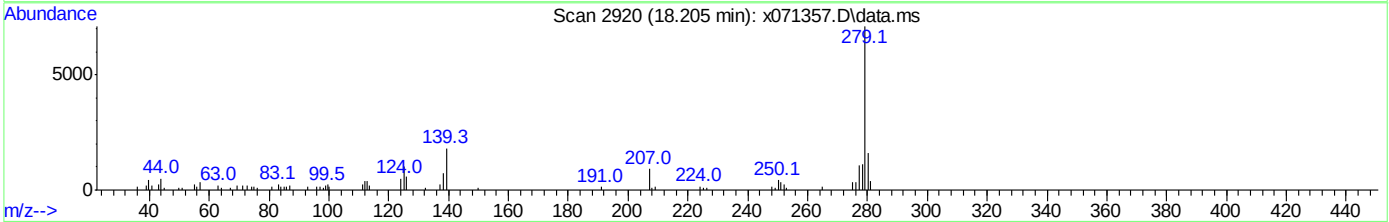
Ion	Exp%	Act%
279.10	100	100
280.10	23.20	22.27
125.10	8.60	13.11
0.00	0.00	0.00

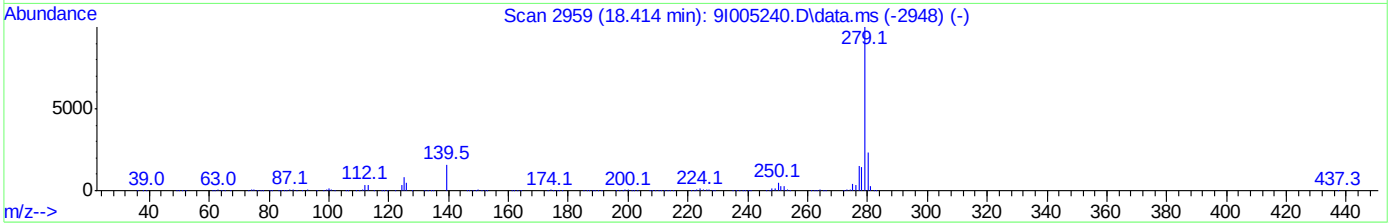
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071357.D
Acq On : 23 Jun 2020 10:30 am
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 23 14:01:00 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071357.D\data.ms

(157) Dibenz(a,j)acridine

18.205min (-0.016) 3.73ppm m

response 24909

Ion	Exp%	Act%
279.10	100	100
280.10	23.20	22.95
125.10	8.60	14.56
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 06/24/20 14:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071358.D
Acq On : 23 Jun 2020 10:55 am
Operator : marthav
Sample : ic2918-10 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 23 16:54:45 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	0.000	152	0m	40.00	ppm	-6.00
22) Naphthalene-d8	0.000	136	0m	40.00	ppm	-7.43
43) Acenaphthene-d10	0.000	164	0m	40.00	ppm	-9.48
70) Phenanthrene-d10	0.000	188	0m	40.00	ppm	-11.22
92) Chrysene-d12	0.000	240	0m	40.00	ppm	-14.49
102) Perylene-d12	0.000	264	0m	40.00	ppm	-16.82
110) 1,4-Dichlorobenzene-d4A	6.005	152	156922	40.00	ppm	0.00
120) Naphthalene-d8A	7.433	136	643577	40.00	ppm	0.00
127) Acenaphthene-d10A	9.476	164	345206	40.00	ppm	0.00
136) Phenanthrene-d10A	11.225	188	622990	40.00	ppm	0.00
146) Chrysene-d12A	14.488	240	421200	40.00	ppm	0.00
153) Perylene-d12A	16.809	264	365416	40.00	ppm	-0.01
System Monitoring Compounds						
7) 2-Fluorophenol	0.000	112	0d	0.00	ppm	
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#		
9) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#		
23) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#		
47) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#		
75) 2,4,6-Tribromophenol	0.000	330	0d	0.00	ppm	
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#		
95) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#		
Target Compounds						Qvalue
111) 2-Picoline	3.983	93	74366	9.54	ppm	87
112) N-Nitrosomethylethylamine	4.106	42	49731	18.02	ppm #	53
113) Methyl methanesulfonate	4.427	80	35567	9.23	ppm	90
114) N-Nitrosodiethylamine	4.849	102	29289	9.46	ppm #	24
115) Ethyl methanesulfonate	5.176	79	48879	8.96	ppm	98
116) Pentachloroethane	5.700	167	20367	9.18	ppm	94
117) N-Nitrosopyrrolidine	6.417	100	26896	8.48	ppm #	19
118) N-Nitrosomorpholine	6.470	56	48542	14.67	ppm #	66
119) O-Toluidine	6.486	106	97569	10.14	ppm	99
121) N-Nitrosopiperidine	6.807	42	59493	16.87	ppm #	59
122) A,A-Dimethylphenethyla...	7.326	58	235966m	13.68	ppm	
123) Hexachloropropene	7.561	213	24561	7.17	ppm	98
124) N-Nitrosodi-n-butylamine	7.930	84	40055	9.28	ppm #	44
125) p-Phenylenediamine	7.925	108	66930	13.14	ppm	92
126) Isosafrole	8.171	162	42968	10.20	ppm	83
128) Safrole	8.775	162	43049	9.64	ppm	89
129) 1-Chloronaphthalene	8.845	162	102922	9.60	ppm	97
130) Diphenyl Ether	8.941	170	73174	10.05	ppm	93
131) 1,4-Naphthoquinone	9.032	158	42030	9.17	ppm	78
132) Pentachlorobenzene	9.669	250	36760	7.39	ppm	98
133) 1-Naphthylamine	9.808	143	118101	10.74	ppm	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071358.D
Acq On : 23 Jun 2020 10:55 am
Operator : marthav
Sample : ic2918-10 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 23 16:54:45 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration

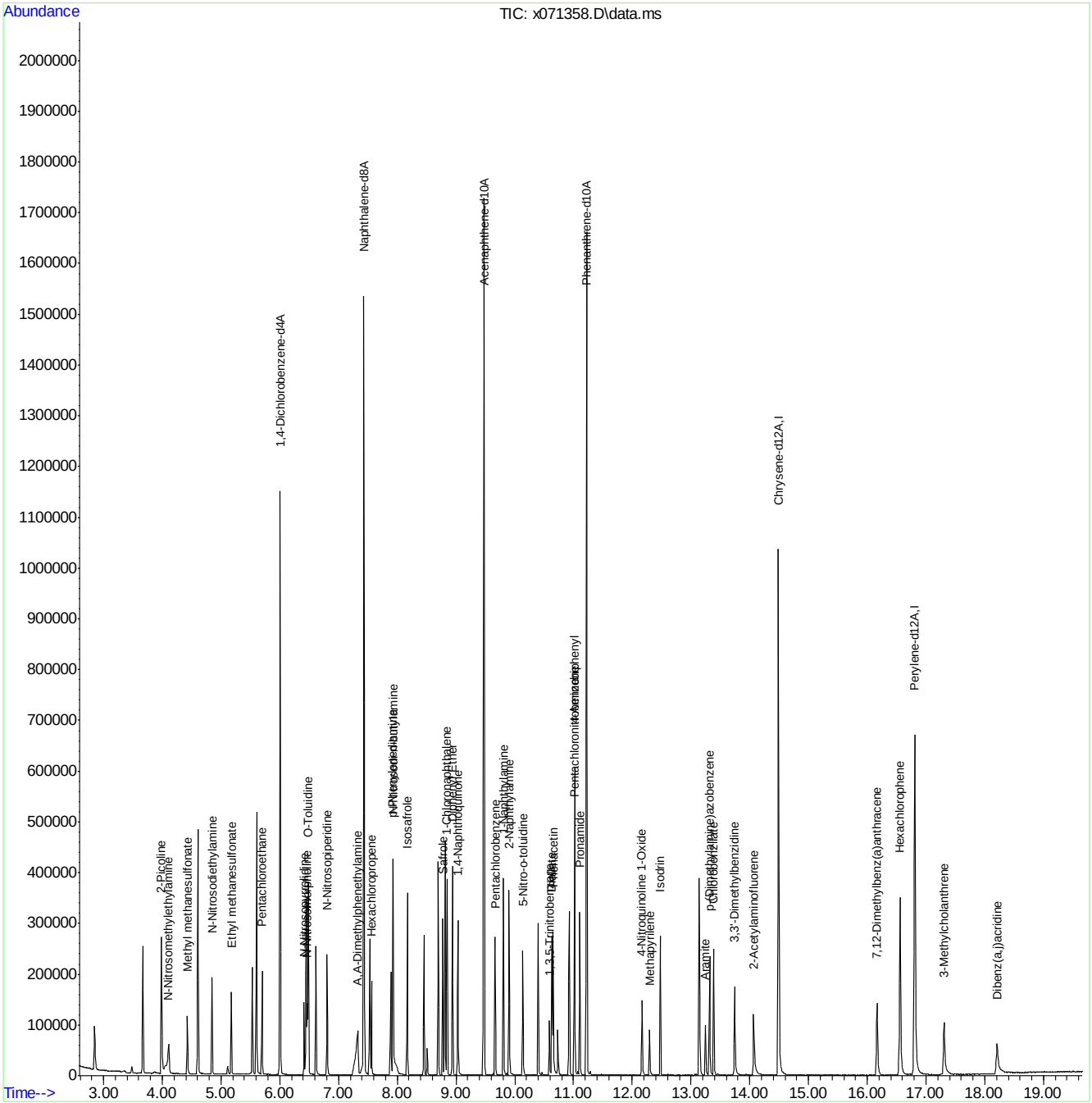
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
134) 2-Naphthylamine	9.904	143	127640	11.39	ppm		98
135) 5-Nitro-o-toluidine	10.134	152	32916	9.09	ppm	#	70
137) 1,3,5-Trinitrobenzene	10.589	75	20814	5.61	ppm		80
138) Diallate	10.631	43	99125m	14.41	ppm		
139) Phenacetin	10.653	108	56928	9.03	ppm		94
140) 4-Aminobiphenyl	11.016	169	131145	12.49	ppm		97
141) Pronamide	11.107	173	48051	9.12	ppm		96
142) Pentachloronitrobenzene	11.011	237	11641	7.34	ppm		86
143) 4-Nitroquinoline 1-Oxide	12.166	190	4741	10.73	ppm	#	62
144) Methapyrilene	12.295	58	33362	4.33	ppm		72
145) Isodrin	12.477	193	17893	8.28	ppm	#	76
147) Aramite	13.241	185	13073m	8.08	ppm		
148) p-(Dimethylamine)azobe...	13.316	120	44838	9.01	ppm		87
149) Chlorobenzilate	13.386	139	50891	10.08	ppm	#	67
151) 3,3'-Dimethylbenzidine	13.744	212	72156	11.91	ppm		98
152) 2-Acetylaminofluorene	14.065	181	46047	8.83	ppm		91
154) 7,12-Dimethylbenz(a)an...	16.167	256	46557	8.85	ppm		94
155) Hexachlorophene	16.558	196	41927	186.26	ppm		96
156) 3-Methylcholanthrene	17.306	268	41211	8.77	ppm		94
157) Dibenz(a,j)acridine	18.210	279	51661	7.45	ppm		89

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071358.D
Acq On : 23 Jun 2020 10:55 am
Operator : marthav
Sample : ic2918-10 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 23 16:54:45 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: SX2918-IC2918
Lab FileID: X071358.D
Injection Time: 06/23/20 10:55

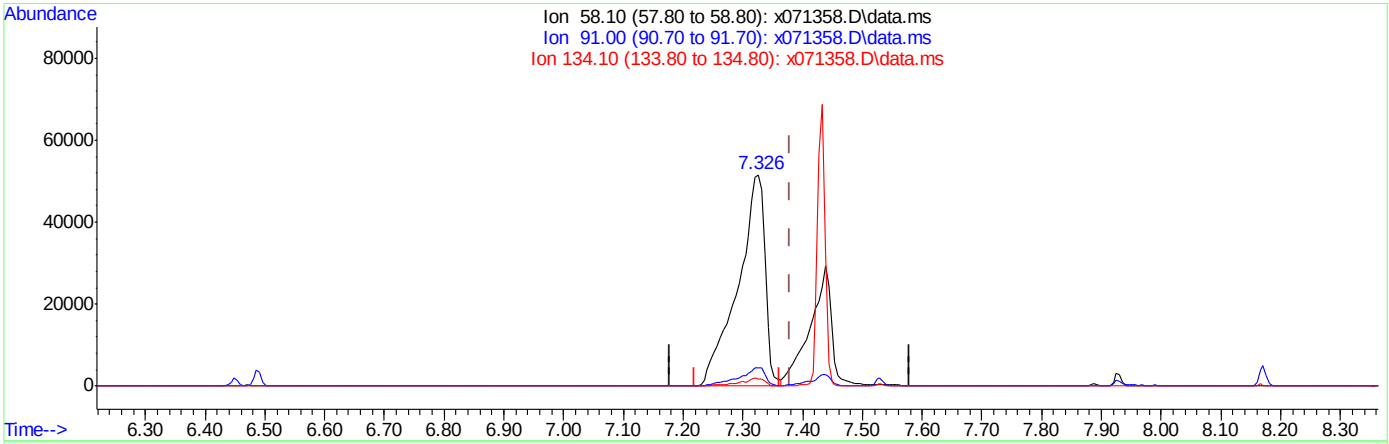
Method: EPA 625.1
Analyst approved: 06/24/20 09:50 Martha Valls
Supervisor approved: 06/24/20 14:07 Naresh Jiawan

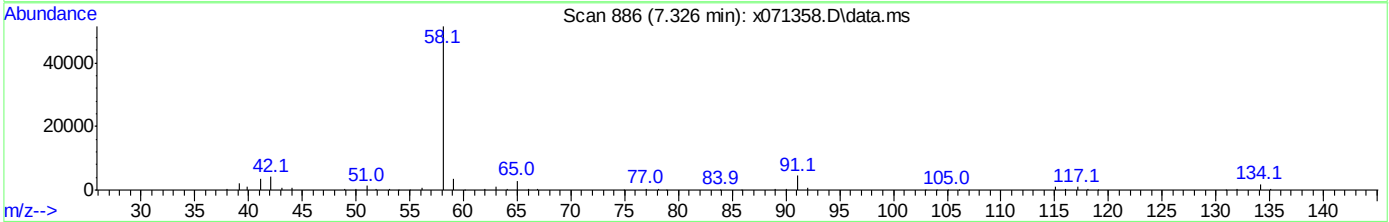
Parameter	CAS	Sig#	R.T. (min.)	Reason
A,A-Dimethylphenethylamine	122-09-8		7.33	Split peak
Diallate	2303-16-4		10.63	Split peak
Aramite	140-57-8		13.24	Split peak

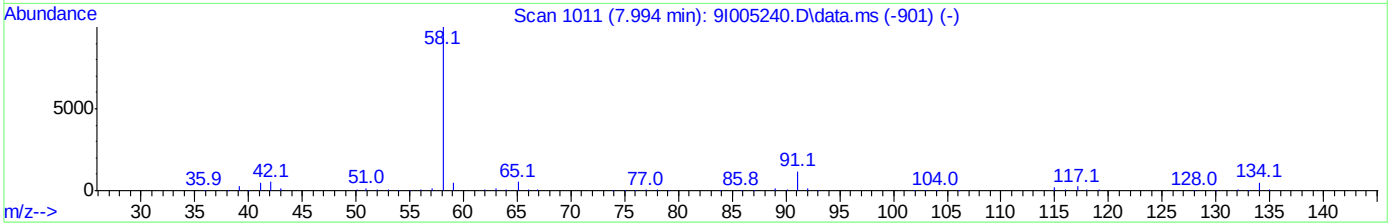
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071358.D
Acq On : 23 Jun 2020 10:55 am
Operator : marthav
Sample : ic2918-10 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 23 14:01:02 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071358.D\data.ms

(122) A,A-Dimethylphenethylamine

7.326min (-0.053) 9.43ppm

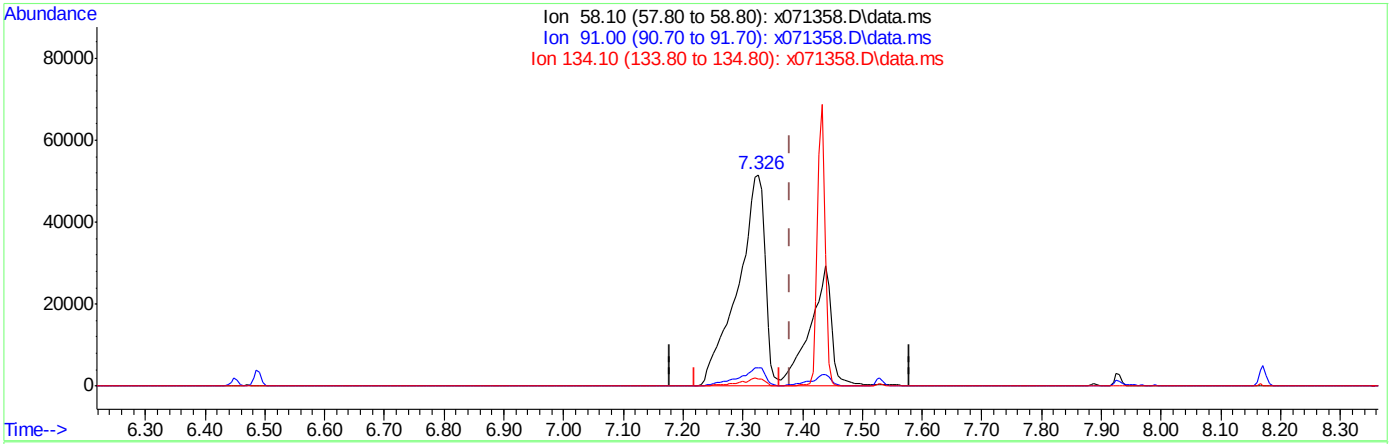
response 161765

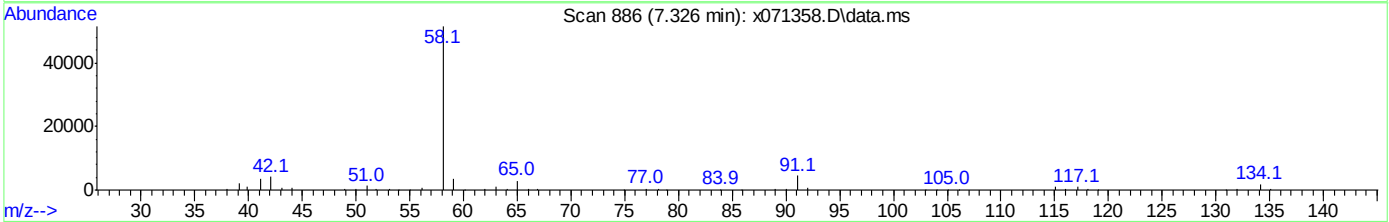
Ion	Exp%	Act%
58.10	100	100
91.00	11.70	8.75
134.10	5.10	3.52
0.00	0.00	0.00

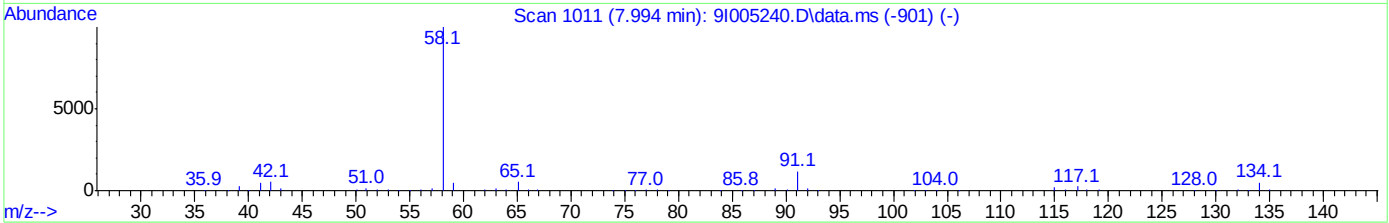
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071358.D
Acq On : 23 Jun 2020 10:55 am
Operator : marthav
Sample : ic2918-10 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 23 14:01:02 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071358.D\data.ms

(122) A,A-Dimethylphenethylamine

7.326min (-0.053) 13.68ppm m

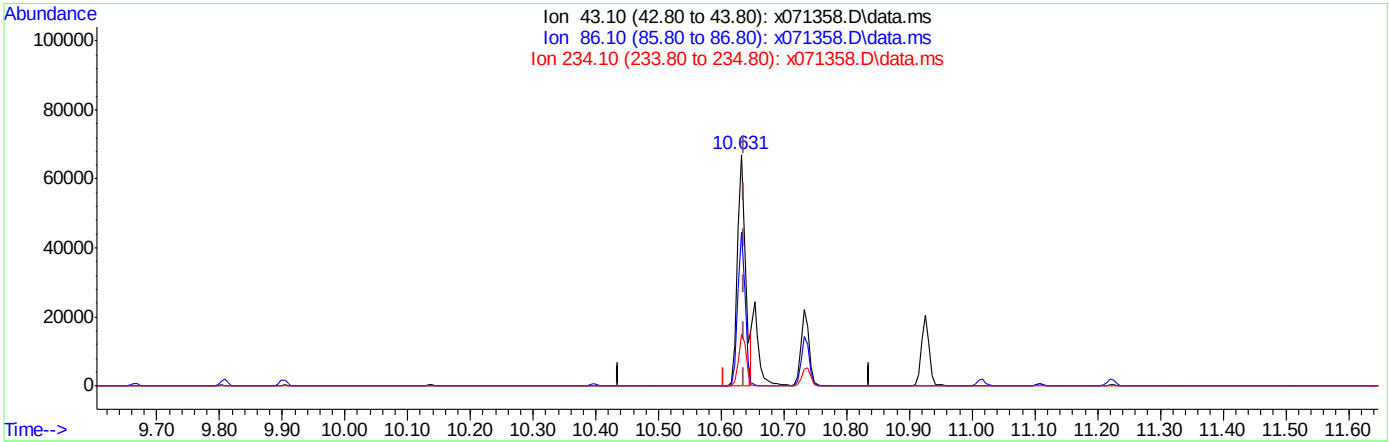
response 235966

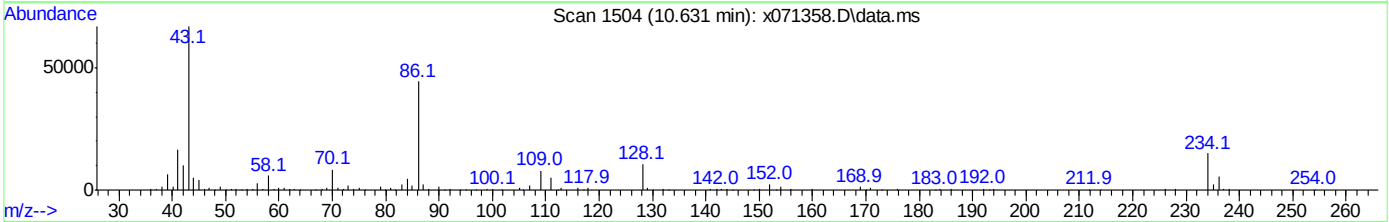
Ion	Exp%	Act%
58.10	100	100
91.00	11.70	8.82
134.10	5.10	3.47
0.00	0.00	0.00

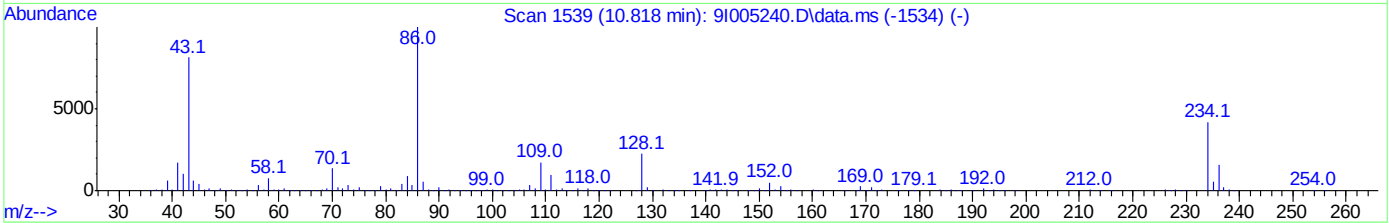
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071358.D
Acq On : 23 Jun 2020 10:55 am
Operator : marthav
Sample : ic2918-10 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 23 14:01:02 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071358.D\data.ms

(138) Diallate

10.631min (-0.005) 9.05ppm

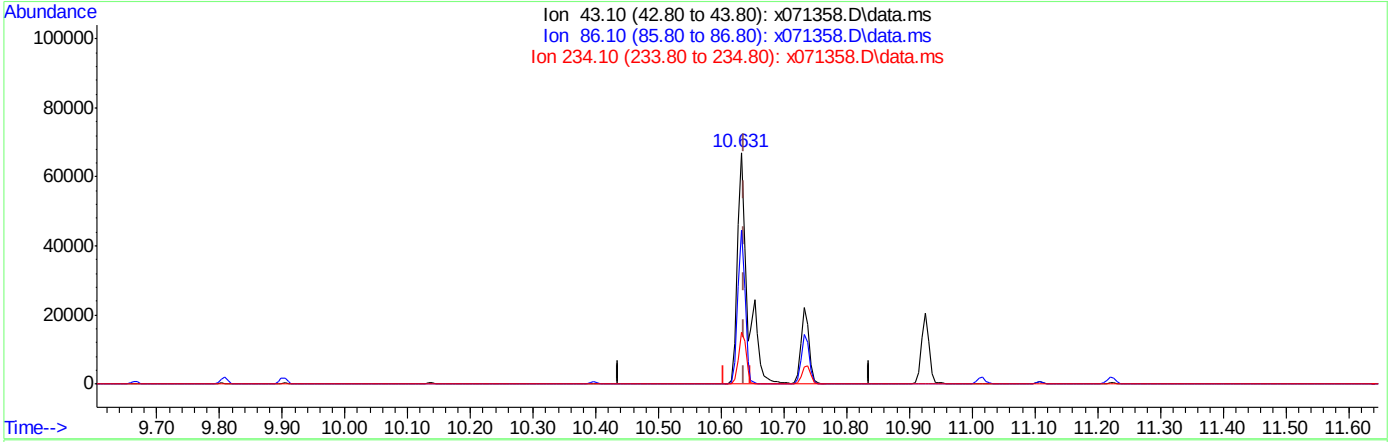
response 62255

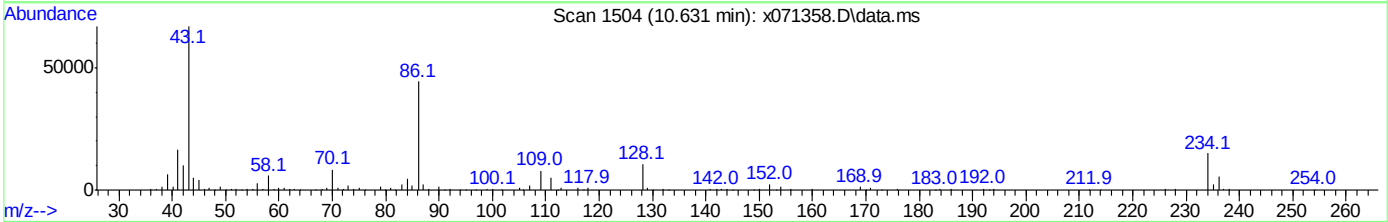
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	74.38#
234.10	51.50	24.76
0.00	0.00	0.00

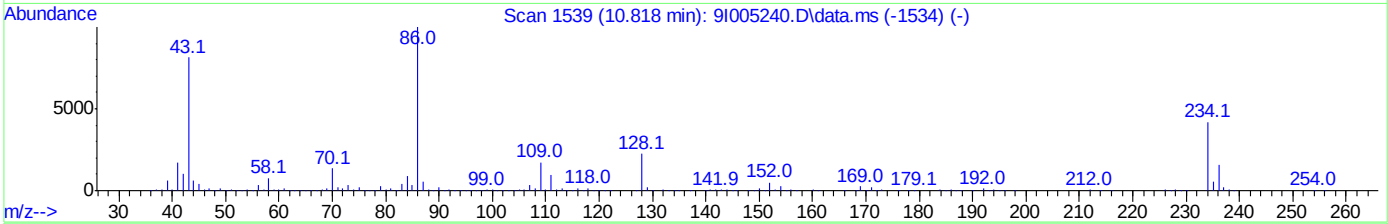
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071358.D
Acq On : 23 Jun 2020 10:55 am
Operator : marthav
Sample : ic2918-10 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 23 14:01:02 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071358.D\data.ms

(138) Diallate

10.631min (-0.005) 14.41ppm m

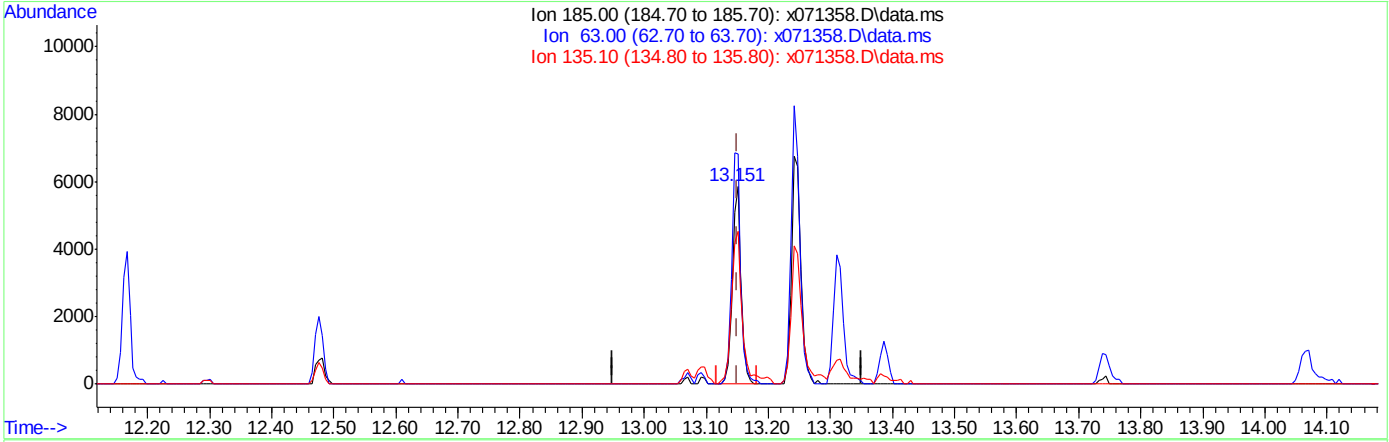
response 99125

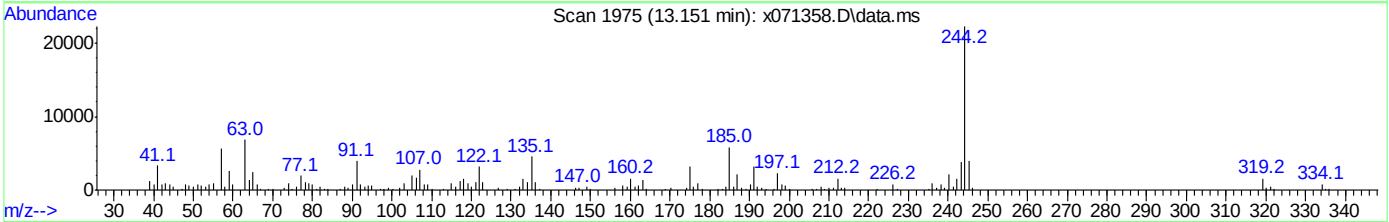
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	66.38#
234.10	51.50	22.30
0.00	0.00	0.00

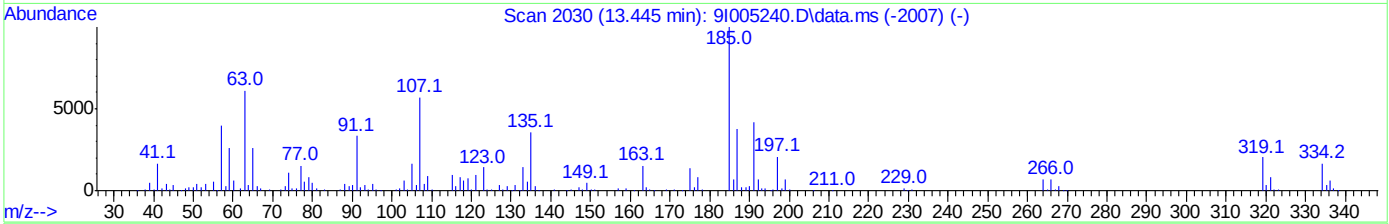
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071358.D
Acq On : 23 Jun 2020 10:55 am
Operator : marthav
Sample : ic2918-10 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 23 14:08:36 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071358.D\data.ms

(147) Aramite

13.151min (+0.000) 3.78ppm

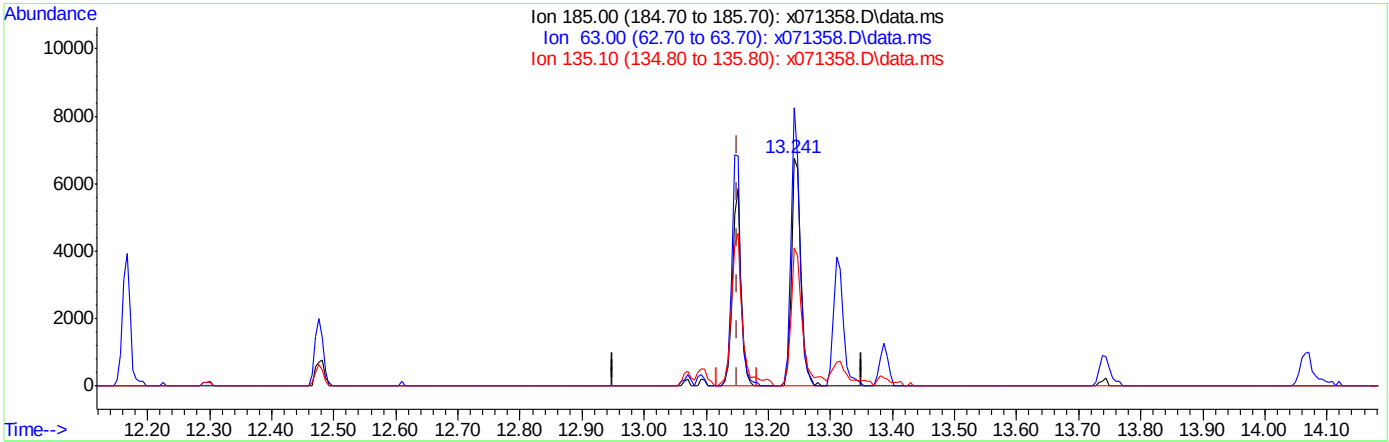
response 6080

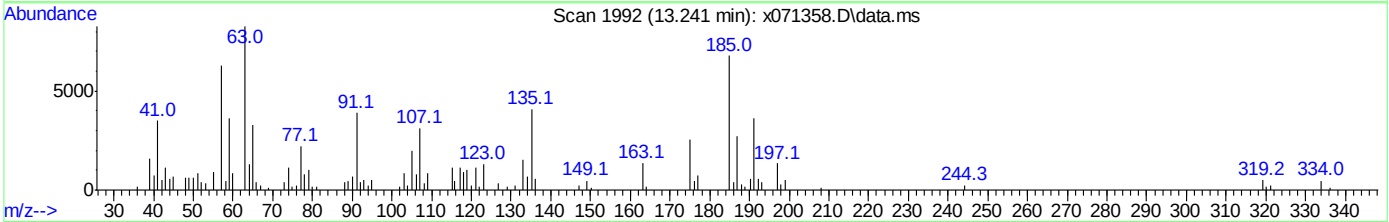
Ion	Exp%	Act%
185.00	100	100
63.00	61.10	115.07#
135.10	35.60	74.78#
0.00	0.00	0.00

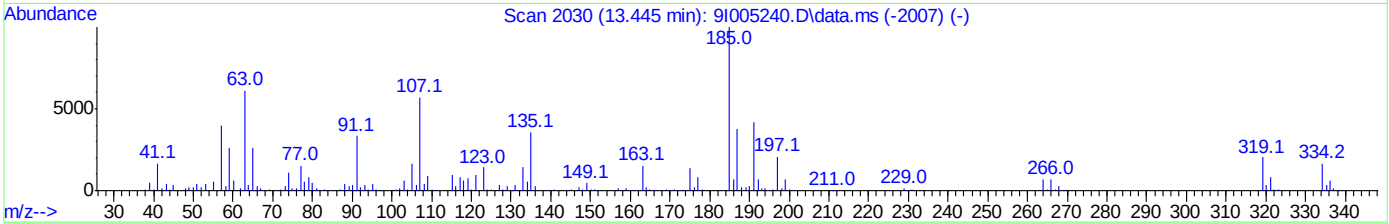
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071358.D
Acq On : 23 Jun 2020 10:55 am
Operator : marthav
Sample : ic2918-10 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 23 14:08:36 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071358.D\data.ms

(147) Aramite

13.241min (+0.091) 8.08ppm m

response 13073

Ion	Exp%	Act%
185.00	100	100
63.00	61.10	122.06#
135.10	35.60	60.55
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 06/24/20 14:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071359.D
Acq On : 23 Jun 2020 11:21 am
Operator : marthav
Sample : ic2918-25 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 23 16:54:59 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	0.000	152	0m	40.00	ppm	-6.00
22) Naphthalene-d8	0.000	136	0m	40.00	ppm	-7.43
43) Acenaphthene-d10	0.000	164	0m	40.00	ppm	-9.48
70) Phenanthrene-d10	0.000	188	0m	40.00	ppm	-11.22
92) Chrysene-d12	0.000	240	0m	40.00	ppm	-14.49
102) Perylene-d12	0.000	264	0m	40.00	ppm	-16.82
110) 1,4-Dichlorobenzene-d4A	6.005	152	158676	40.00	ppm	0.00
120) Naphthalene-d8A	7.433	136	654937	40.00	ppm	0.00
127) Acenaphthene-d10A	9.476	164	355001	40.00	ppm	0.00
136) Phenanthrene-d10A	11.225	188	638763	40.00	ppm	0.00
146) Chrysene-d12A	14.487	240	425269	40.00	ppm	0.00
153) Perylene-d12A	16.814	264	360527	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	0.000	112	0d	0.00	ppm	
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#		
9) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#		
23) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#		
47) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#		
75) 2,4,6-Tribromophenol	0.000	330	0d	0.00	ppm	
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#		
95) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#		
Target Compounds						Qvalue
111) 2-Picoline	3.983	93	185422	23.53	ppm	87
112) N-Nitrosomethylethylamine	4.106	42	124718	44.70	ppm #	53
113) Methyl methanesulfonate	4.432	80	89970	23.09	ppm	91
114) N-Nitrosodiethylamine	4.849	102	74730	23.86	ppm #	18
115) Ethyl methanesulfonate	5.176	79	123287	22.35	ppm	93
116) Pentachloroethane	5.700	167	52204	23.27	ppm	97
117) N-Nitrosopyrrolidine	6.422	100	68904	21.49	ppm #	26
118) N-Nitrosomorpholine	6.475	56	125871	37.61	ppm #	67
119) O-Toluidine	6.491	106	251000	25.81	ppm	98
121) N-Nitrosopiperidine	6.807	42	150841	42.04	ppm #	57
122) A,A-Dimethylphenethyla...	7.352	58	614390m	34.13	ppm	
123) Hexachloropropene	7.561	213	68332	19.62	ppm	100
124) N-Nitrosodi-n-butylamine	7.930	84	101921	22.53	ppm #	41
125) p-Phenylenediamine	7.930	108	173372m	35.56	ppm	
126) Isosafrole	8.171	162	110395	25.75	ppm	81
128) Safrole	8.775	162	112129	24.41	ppm	85
129) 1-Chloronaphthalene	8.850	162	269339	24.44	ppm	98
130) Diphenyl Ether	8.941	170	190986	25.51	ppm	92
131) 1,4-Naphthoquinone	9.037	158	118609	26.87	ppm	87
132) Pentachlorobenzene	9.668	250	94218	18.43	ppm	100
133) 1-Naphthylamine	9.807	143	302346	26.73	ppm	92

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071359.D
Acq On : 23 Jun 2020 11:21 am
Operator : marthav
Sample : ic2918-25 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 23 16:54:59 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration

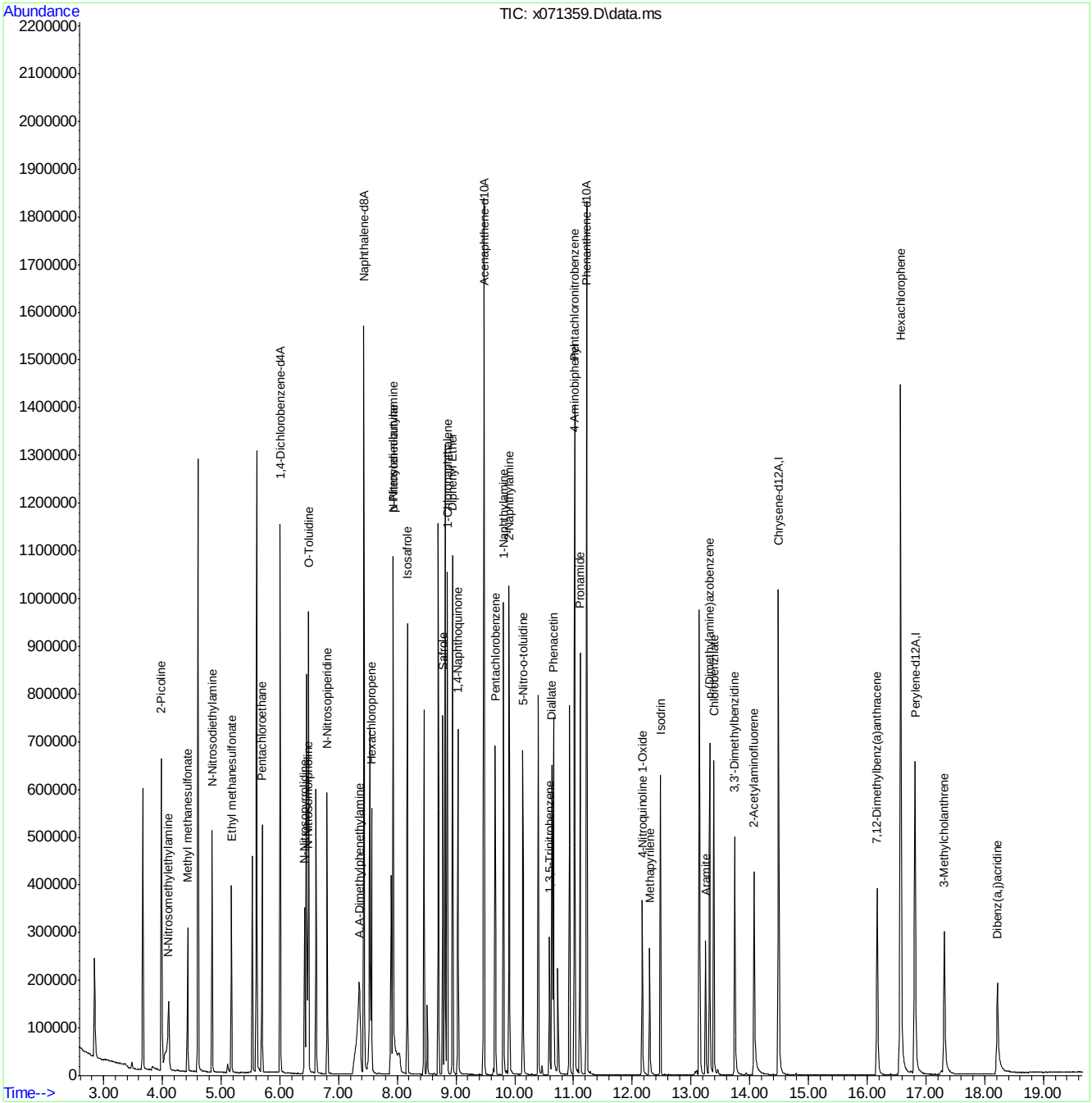
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
134) 2-Naphthylamine	9.904	143	327376	28.41	ppm		96
135) 5-Nitro-o-toluidine	10.139	152	91941	24.27	ppm		80
137) 1,3,5-Trinitrobenzene	10.588	75	67291	17.44	ppm		84
138) Diallate	10.631	43	252842m	35.85	ppm		
139) Phenacetin	10.658	108	154829	23.52	ppm		91
140) 4-Aminobiphenyl	11.022	169	342587	31.81	ppm		98
141) Pronamide	11.112	173	128388	23.47	ppm		98
142) Pentachloronitrobenzene	11.016	237	31448	19.34	ppm		90
143) 4-Nitroquinoline 1-Oxide	12.172	190	21069	37.18	ppm		72
144) Methapyrilene	12.295	58	93392	11.77	ppm	#	70
145) Isodrin	12.482	193	43906	19.81	ppm		85
147) Aramite	13.247	185	39644m	23.75	ppm		
148) p-(Dimethylamine)azobe...	13.316	120	121096	24.52	ppm		82
149) Chlorobenzilate	13.391	139	138411	26.77	ppm		74
151) 3,3'-Dimethylbenzidine	13.744	212	185725	30.03	ppm		99
152) 2-Acetylaminofluorene	14.070	181	141745	25.52	ppm		91
154) 7,12-Dimethylbenz(a)an...	16.167	256	123384	23.57	ppm		95
155) Hexachlorophene	16.568	196	189721	433.83	ppm		99
156) 3-Methylcholanthrene	17.312	268	110629	23.67	ppm		91
157) Dibenz(a,j)acridine	18.215	279	142603	19.95	ppm		97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071359.D
Acq On : 23 Jun 2020 11:21 am
Operator : marthav
Sample : ic2918-25 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 23 16:54:59 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: SX2918-IC2918
Lab FileID: X071359.D
Injection Time: 06/23/20 11:21

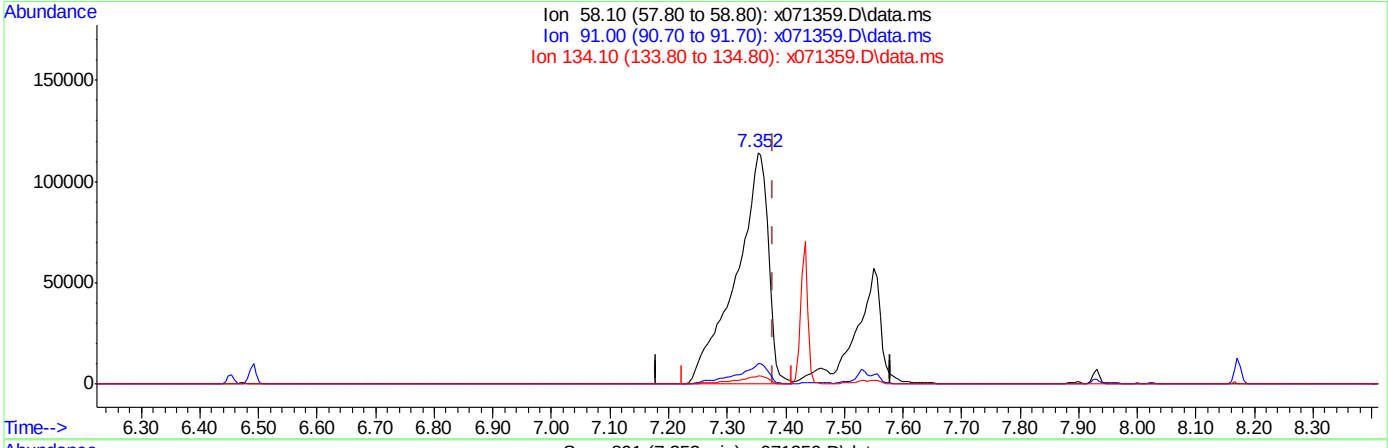
Method: EPA 625.1
Analyst approved: 06/24/20 09:50 Martha Valls
Supervisor approved: 06/24/20 14:07 Naresh Jiawan

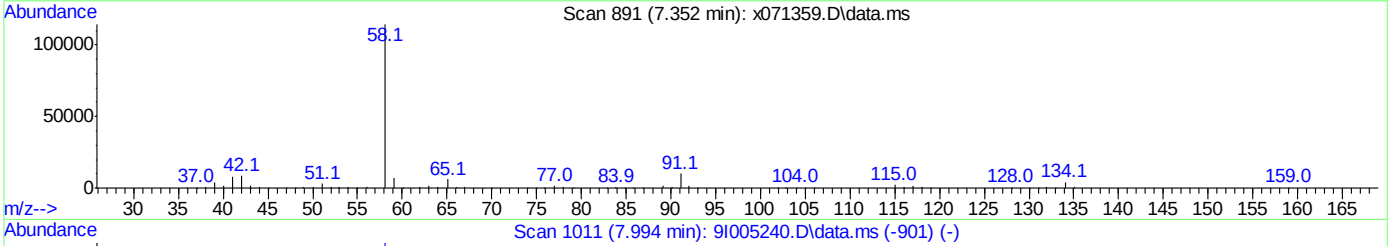
Parameter	CAS	Sig#	R.T. (min.)	Reason
A,A-Dimethylphenethylamine	122-09-8		7.35	Split peak
p-Phenylenediamine	106-50-3		7.93	Split peak
Diallate	2303-16-4		10.63	Split peak
Aramite	140-57-8		13.25	Split peak

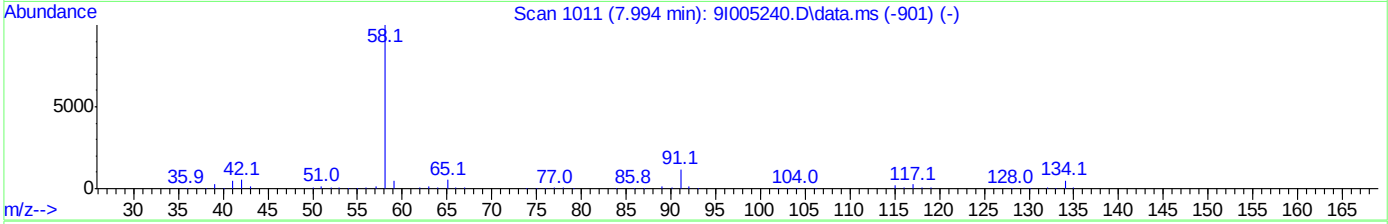
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071359.D
Acq On : 23 Jun 2020 11:21 am
Operator : marthav
Sample : ic2918-25 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 23 14:01:04 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071359.D\data.ms

(122) A,A-Dimethylphenethylamine

7.352min (-0.027) 24.61ppm

response 437927

Ion	Exp%	Act%
58.10	100	100
91.00	11.70	8.67
134.10	5.10	3.64
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071359.D
Acq On : 23 Jun 2020 11:21 am
Operator : marthav
Sample : ic2918-25 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 23 14:01:04 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
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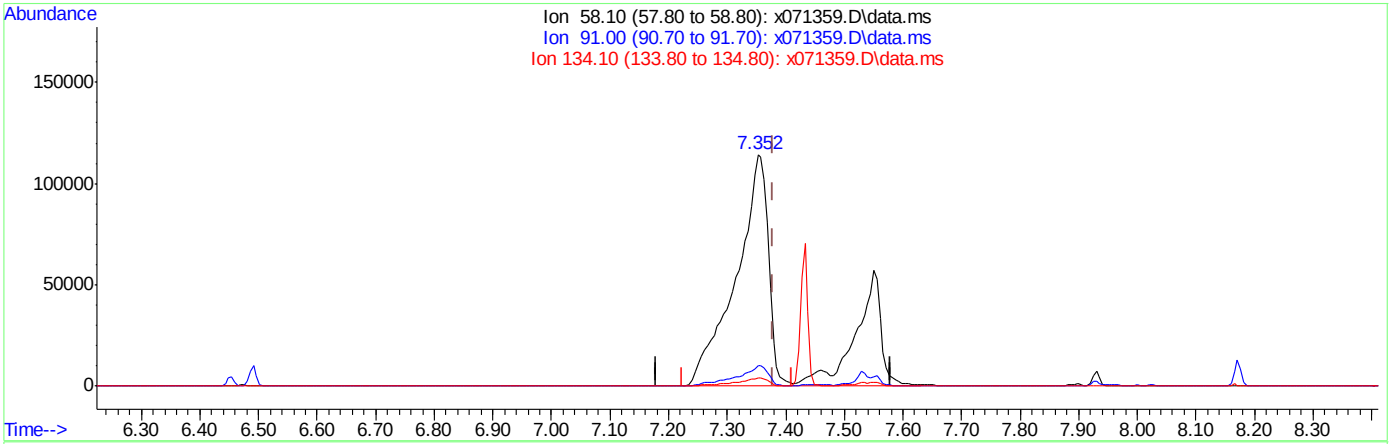
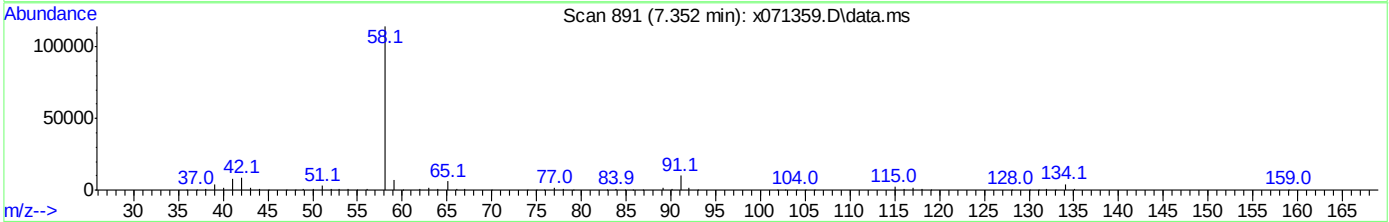
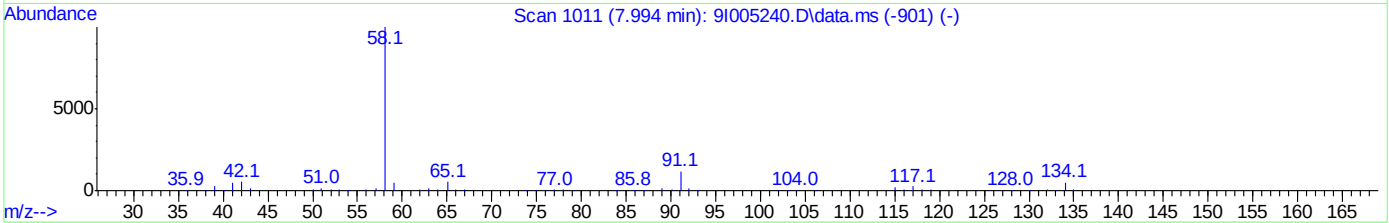






TIC: x071359.D\data.ms

(122) A,A-Dimethylphenethylamine

7.352min (-0.027) 34.13ppm m

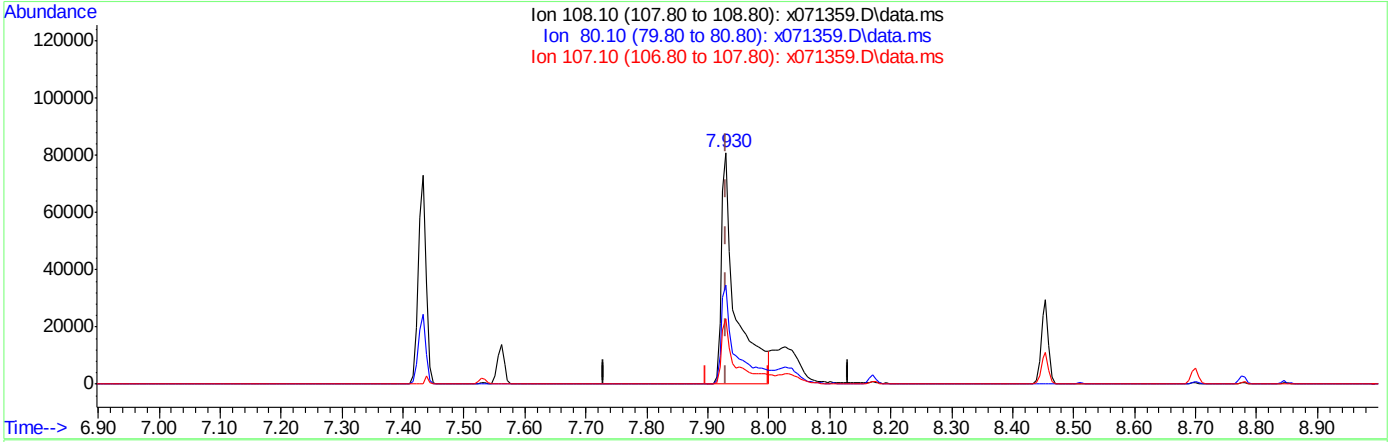
response 614390

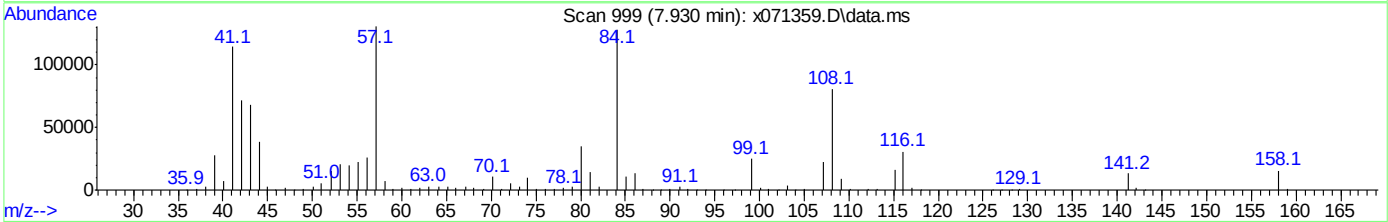
Ion	Exp%	Act%
58.10	100	100
91.00	11.70	8.72
134.10	5.10	3.70
0.00	0.00	0.00

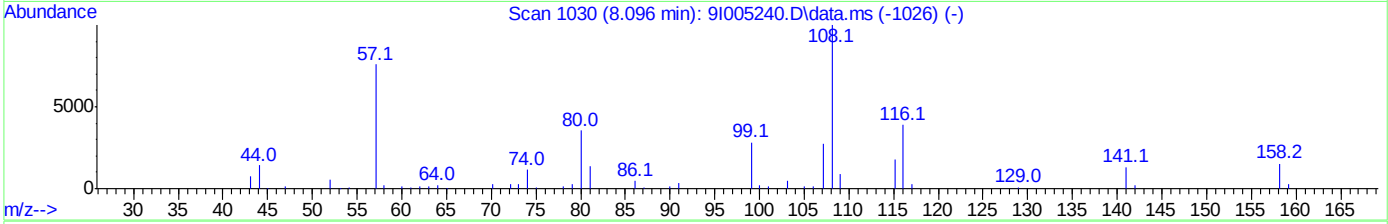
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071359.D
Acq On : 23 Jun 2020 11:21 am
Operator : marthav
Sample : ic2918-25 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 23 14:01:04 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071359.D\data.ms

(125) p-Phenylenediamine

7.930min (0.000) 26.70ppm

response 133387

Ion	Exp%	Act%
108.10	100	100
80.10	35.50	42.72
107.10	27.70	28.16
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071359.D
Acq On : 23 Jun 2020 11:21 am
Operator : marthav
Sample : ic2918-25 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 23 14:01:04 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
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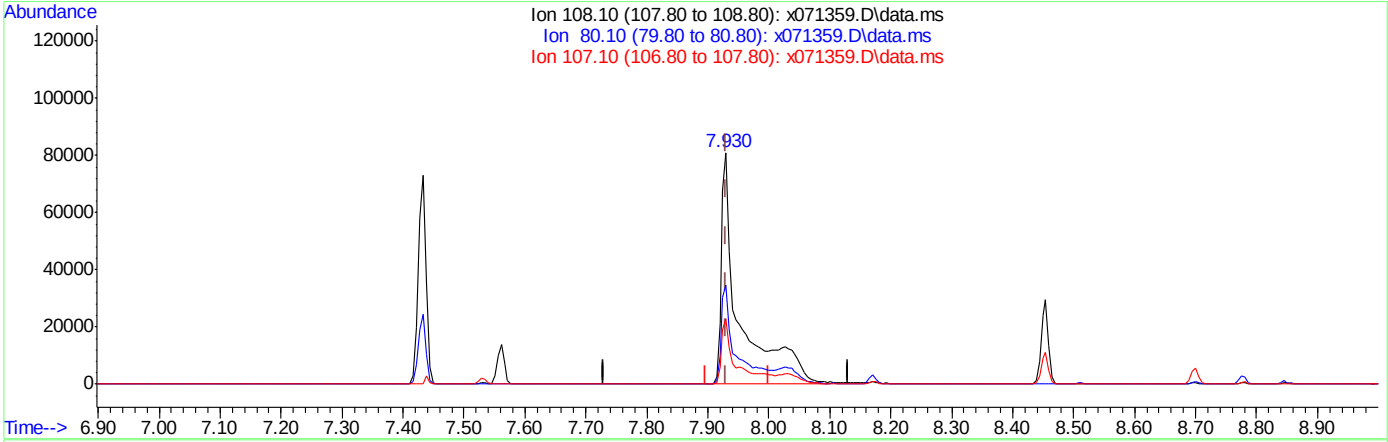

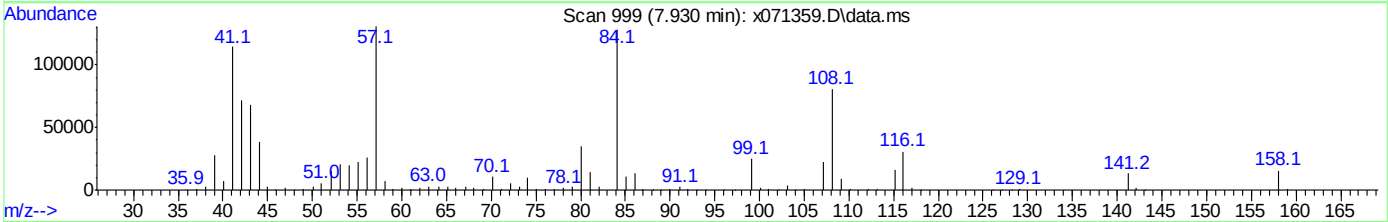

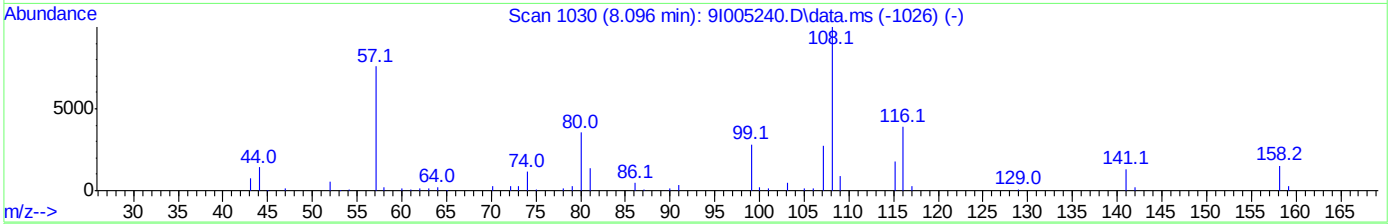

TIC: x071359.D\data.ms

(125) p-Phenylenediamine

7.930min (0.000) 35.56ppm m

response 173372

Ion	Exp%	Act%
108.10	100	100
80.10	35.50	42.92
107.10	27.70	28.19
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071359.D
Acq On : 23 Jun 2020 11:21 am
Operator : marthav
Sample : ic2918-25 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
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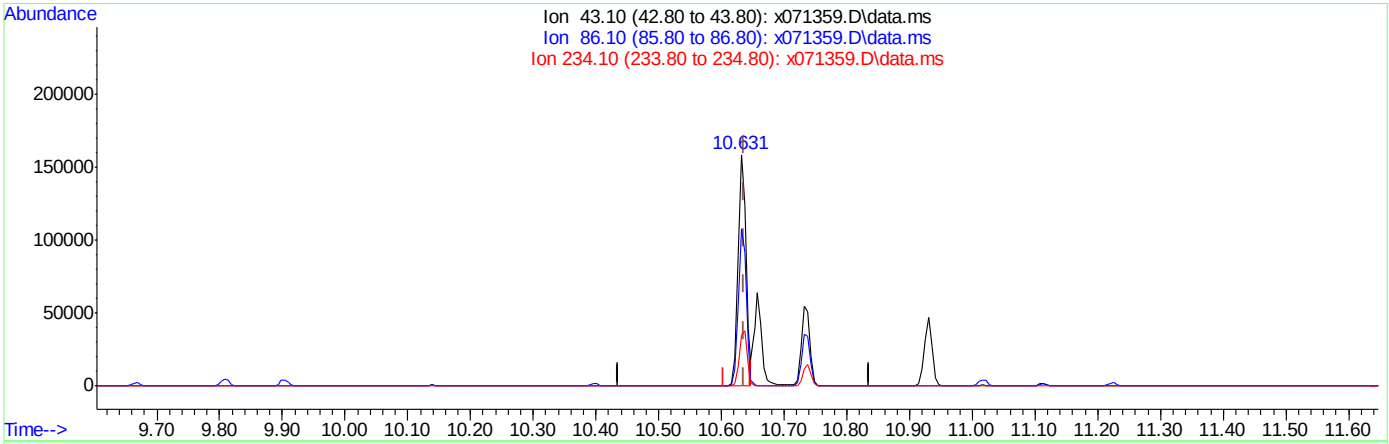
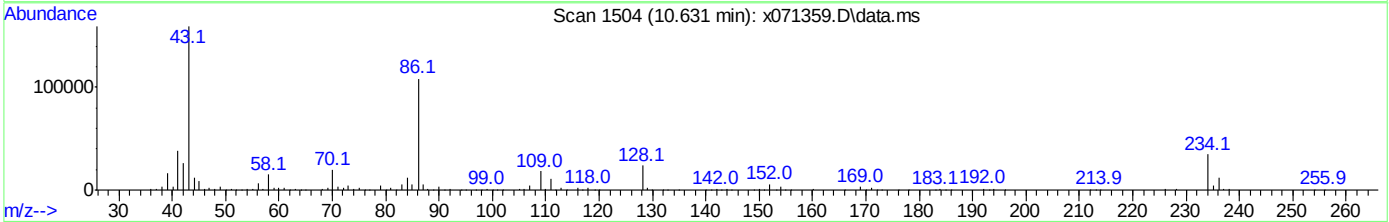
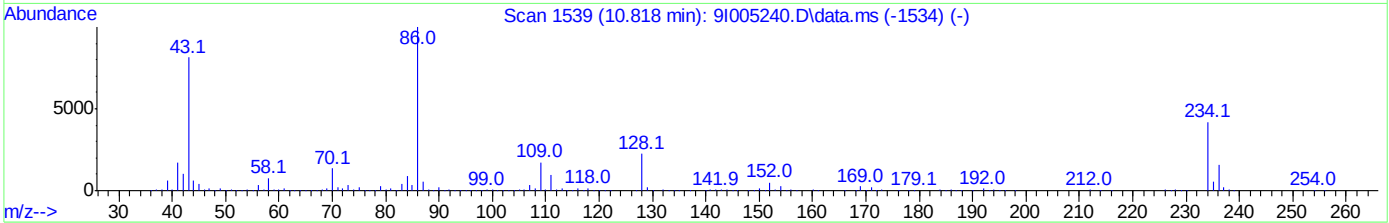
Quant Time: Jun 23 14:01:04 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071359.D\data.ms

(138) Diallate

10.631min (-0.005) 20.55ppm

response 144925

Ion	Exp%	Act%
43.10	100	100
86.10	123.10	70.53#
234.10	51.50	22.40
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071359.D
Acq On : 23 Jun 2020 11:21 am
Operator : marthav
Sample : ic2918-25 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

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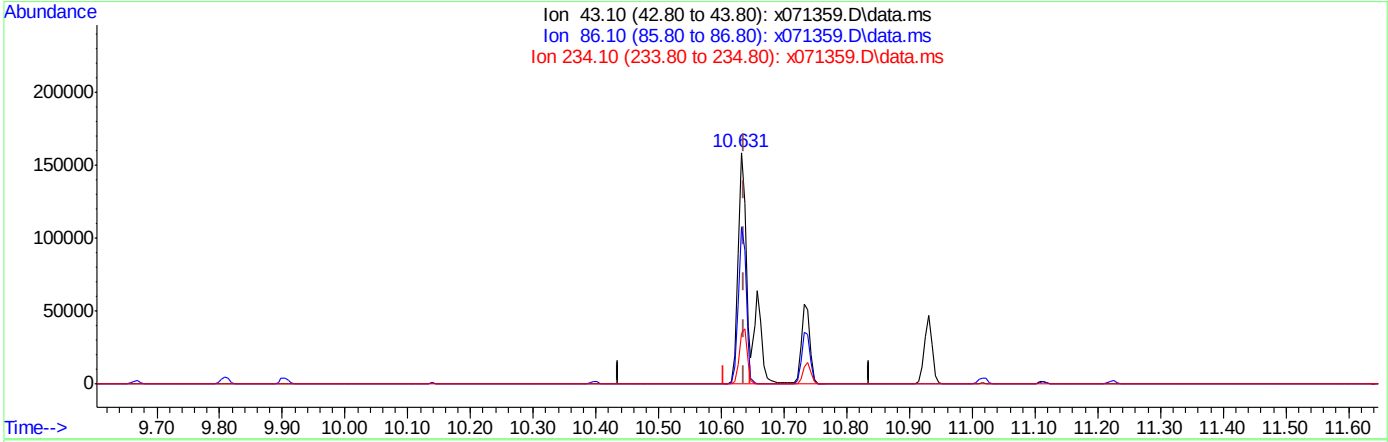
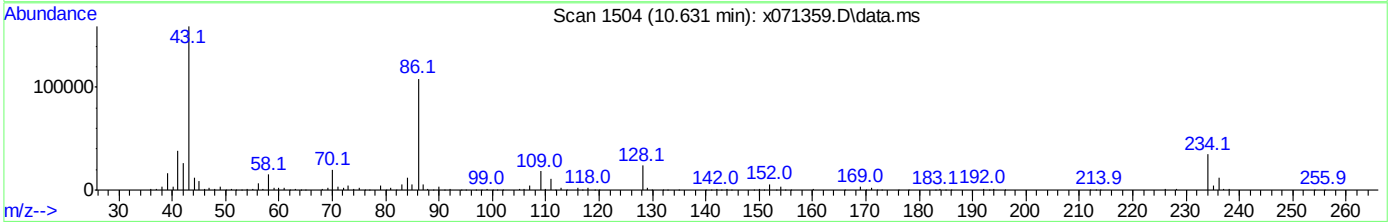
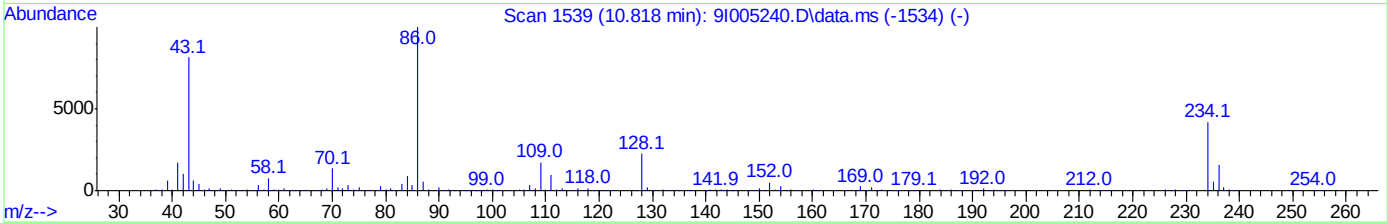
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071359.D\data.ms

(138) Diallate

10.631min (-0.005) 35.85ppm m

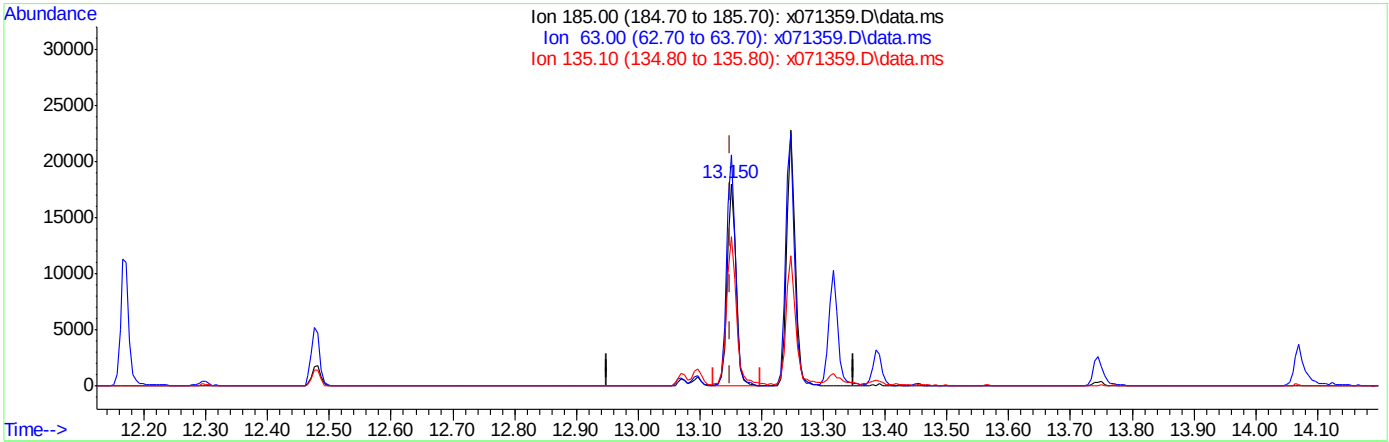
response 252842

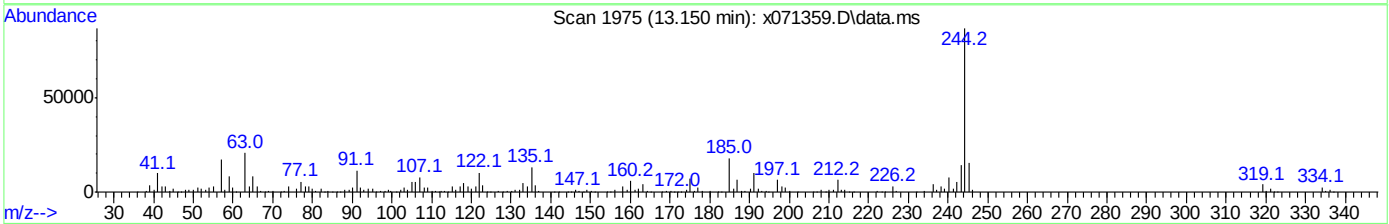
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	67.84#
234.10	51.50	21.87
0.00	0.00	0.00

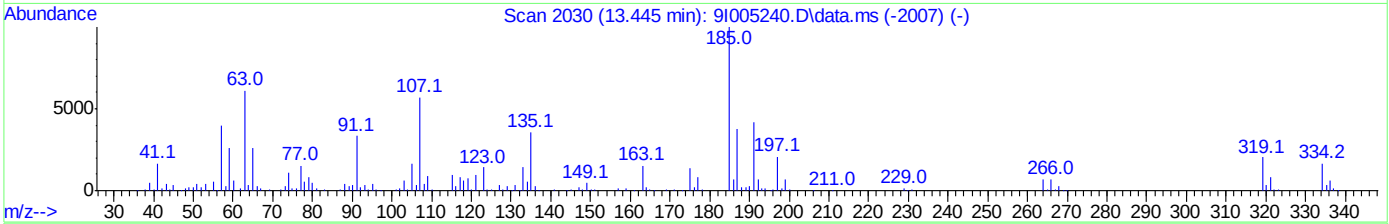
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071359.D
Acq On : 23 Jun 2020 11:21 am
Operator : marthav
Sample : ic2918-25 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 23 14:01:04 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071359.D\data.ms

(147) Aramite

13.150min (0.000) 10.97ppm

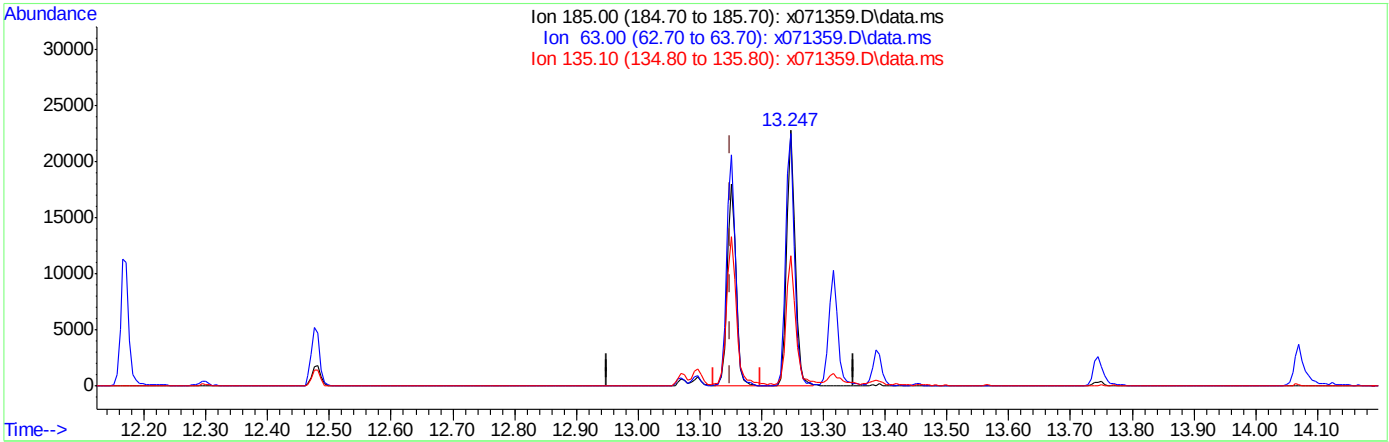
response 17983

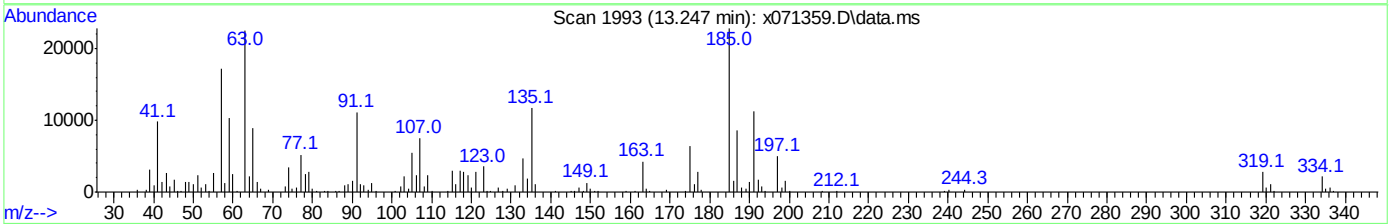
Ion	Exp%	Act%
185.00	100	100
63.00	61.10	114.08#
135.10	35.60	72.34#
0.00	0.00	0.00

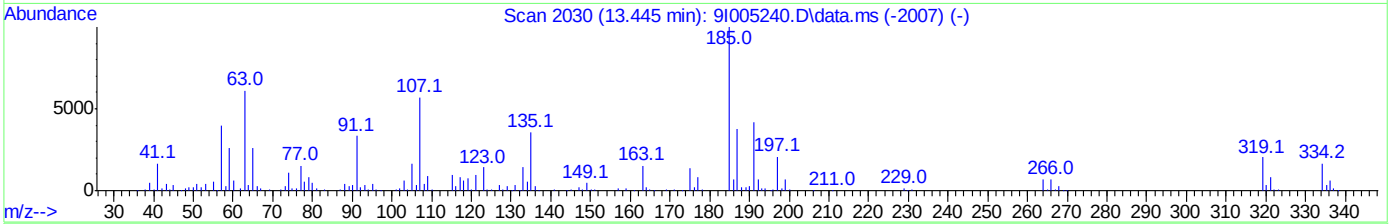
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071359.D
Acq On : 23 Jun 2020 11:21 am
Operator : marthav
Sample : ic2918-25 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 23 14:01:04 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071359.D\data.ms

(147) Aramite

13.247min (+0.096) 23.72ppm m

response 39594

Ion	Exp%	Act%
185.00	100	100
63.00	61.10	98.70#
135.10	35.60	51.18
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 06/24/20 14:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071360.D
Acq On : 23 Jun 2020 11:46 am
Operator : marthav
Sample : ic2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 23 16:55:12 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	0.000	152	0m	40.00	ppm		-6.00
22) Naphthalene-d8	0.000	136	0m	40.00	ppm		-7.43
43) Acenaphthene-d10	0.000	164	0m	40.00	ppm		-9.48
70) Phenanthrene-d10	0.000	188	0m	40.00	ppm		-11.22
92) Chrysene-d12	0.000	240	0m	40.00	ppm		-14.49
102) Perylene-d12	0.000	264	0m	40.00	ppm		-16.82
110) 1,4-Dichlorobenzene-d4A	6.005	152	151564	40.00	ppm		0.00
120) Naphthalene-d8A	7.433	136	655182	40.00	ppm		0.00
127) Acenaphthene-d10A	9.476	164	349855	40.00	ppm		0.00
136) Phenanthrene-d10A	11.225	188	638196	40.00	ppm		0.00
146) Chrysene-d12A	14.487	240	407074	40.00	ppm		0.00
153) Perylene-d12A	16.819	264	338302	40.00	ppm		0.00
System Monitoring Compounds							
7) 2-Fluorophenol	0.000	112	0d	0.00	ppm		
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#			
9) Phenol-d5	0.000	99	0d	0.00	ppm		
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#			
23) Nitrobenzene-d5	0.000	82	0d	0.00	ppm		
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#			
47) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm		
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#			
75) 2,4,6-Tribromophenol	0.000	330	0d	0.00	ppm		
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#			
95) Terphenyl-d14	0.000	244	0d	0.00	ppm		
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#			
Target Compounds							Qvalue
111) 2-Picoline	3.983	93	378323	50.26	ppm		88
112) N-Nitrosomethylethylamine	4.111	42	260501	97.75	ppm	#	52
113) Methyl methanesulfonate	4.437	80	187573	50.40	ppm		91
114) N-Nitrosodiethylamine	4.855	102	158519	52.99	ppm	#	28
115) Ethyl methanesulfonate	5.181	79	259741	49.29	ppm		97
116) Pentachloroethane	5.700	167	109705	51.19	ppm		93
117) N-Nitrosopyrrolidine	6.432	100	147319	48.12	ppm	#	36
118) N-Nitrosomorpholine	6.481	56	265918	83.18	ppm	#	67
119) O-Toluidine	6.497	106	549182	59.12	ppm		98
121) N-Nitrosopiperidine	6.812	42	316635	88.22	ppm	#	58
122) A,A-Dimethylphenethyla...	7.379	58	1293311m	68.93	ppm		
123) Hexachloropropene	7.561	213	155362	44.58	ppm		100
124) N-Nitrosodi-n-butylamine	7.935	84	281690	57.84	ppm	#	52
125) p-Phenylenediamine	7.930	108	342749m	80.37	ppm		
126) Isosafrole	8.176	162	237534	55.38	ppm		84
128) Safrole	8.780	162	246210	54.39	ppm		89
129) 1-Chloronaphthalene	8.850	162	588257	54.17	ppm		96
130) Diphenyl Ether	8.941	170	409072	55.45	ppm		90
131) 1,4-Naphthoquinone	9.037	158	244539	66.13	ppm		80
132) Pentachlorobenzene	9.668	250	198634	39.42	ppm		100
133) 1-Naphthylamine	9.813	143	634517	56.92	ppm		95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071360.D
Acq On : 23 Jun 2020 11:46 am
Operator : marthav
Sample : ic2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 23 16:55:12 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
134) 2-Naphthylamine	9.904	143	686741	60.48	ppm	95
135) 5-Nitro-o-toluidine	10.144	152	201942	52.44	ppm	78
137) 1,3,5-Trinitrobenzene	10.594	75	166805	42.00	ppm	87
138) Diallate	10.636	43	519071m	73.66	ppm	
139) Phenacetin	10.669	108	343358	50.50	ppm	92
140) 4-Aminobiphenyl	11.022	169	699848	65.04	ppm	99
141) Pronamide	11.118	173	280696	50.21	ppm	98
142) Pentachloronitrobenzene	11.016	237	68116	41.94	ppm	93
143) 4-Nitroquinoline 1-Oxide	12.172	190	60083	80.11	ppm	73
144) Methapyrilene	12.295	58	185003m	23.18	ppm	
145) Isodrin	12.482	193	93557	42.24	ppm	87
147) Aramite	13.247	185	90482m	54.36	ppm	
148) p-(Dimethylamine)azobe...	13.321	120	263027	57.86	ppm	88
149) Chlorobenzilate	13.391	139	302437	59.53	ppm	74
150) Kepone	13.771	272	673	0.46	ppm	86
151) 3,3'-Dimethylbenzidine	13.749	212	377447	62.52	ppm	96
152) 2-Acetylaminofluorene	14.076	181	315144	54.38	ppm	90
154) 7,12-Dimethylbenz(a)an...	16.172	256	259627	51.97	ppm	96
155) Hexachlorophene	16.584	196	479639	831.02	ppm	97
156) 3-Methylcholanthrene	17.322	268	235721	52.86	ppm	95
157) Dibenz(a,j)acridine	18.221	279	319323	44.00	ppm	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071360.D
Acq On : 23 Jun 2020 11:46 am
Operator : marthav
Sample : ic2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
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Quant Time: Jun 23 16:55:12 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
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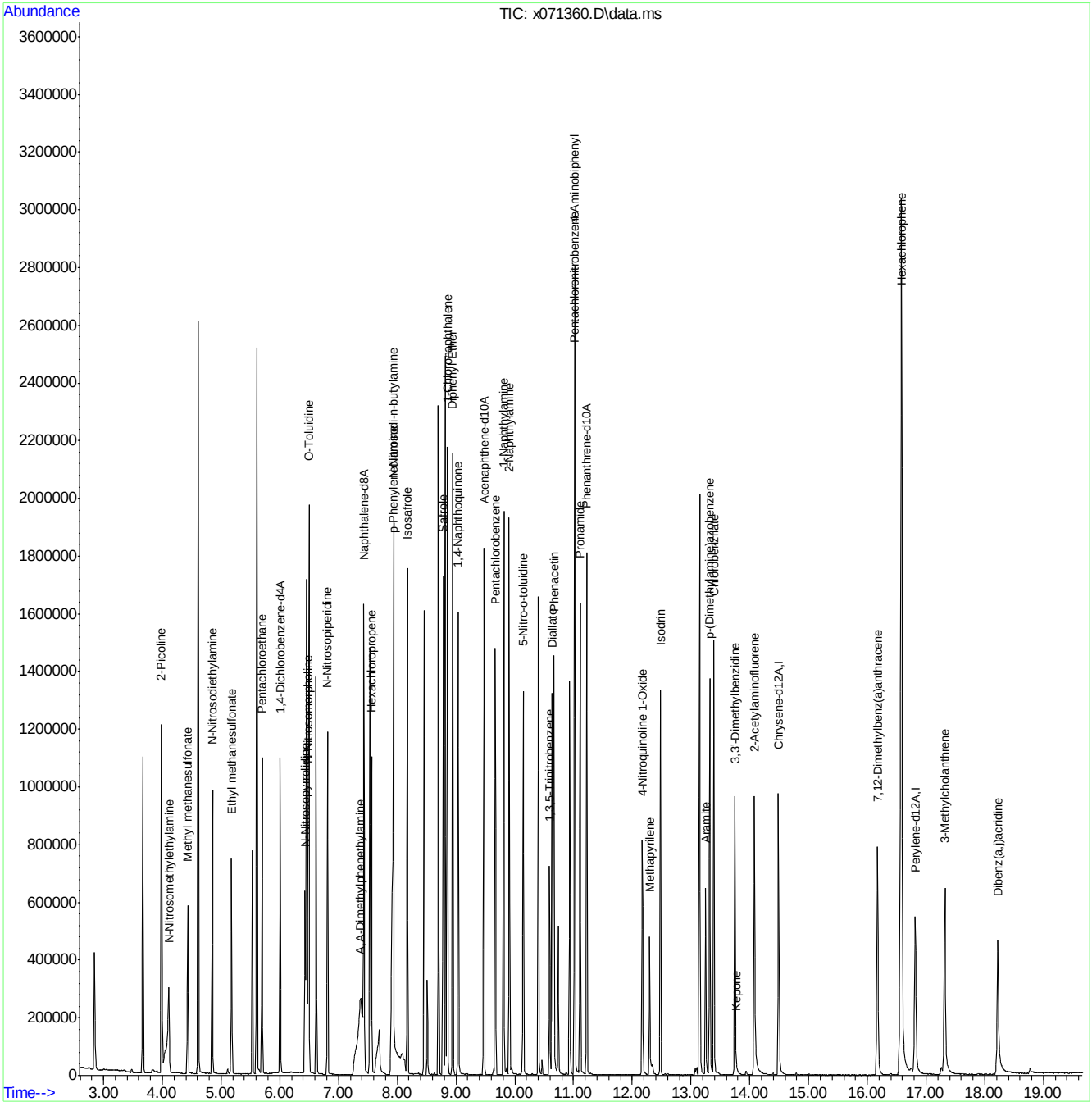


Manual Integration Approval Summary

Sample Number: SX2918-IC2918
Lab FileID: X071360.D
Injection Time: 06/23/20 11:46

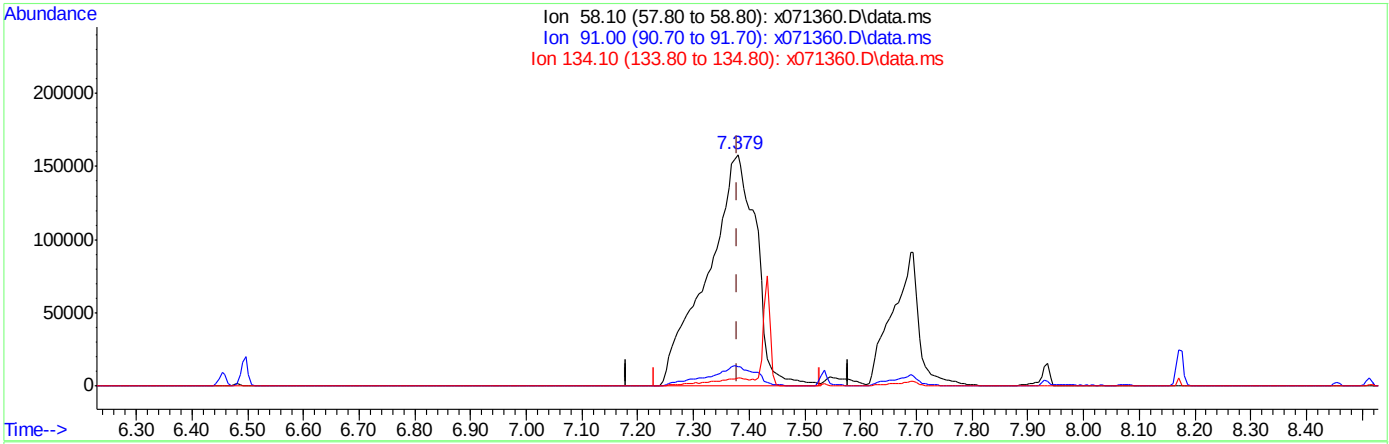
Method: EPA 625.1
Analyst approved: 06/24/20 09:50 Martha Valls
Supervisor approved: 06/24/20 14:07 Naresh Jiawan

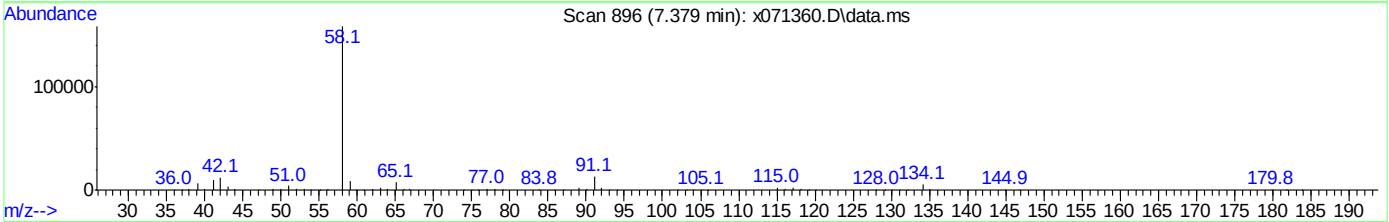
Parameter	CAS	Sig#	R.T. (min.)	Reason
A,A-Dimethylphenethylamine	122-09-8		7.38	Split peak
p-Phenylenediamine	106-50-3		7.93	Split peak
Diallate	2303-16-4		10.64	Split peak
Methapyrilene	91-80-5		12.29	Split peak
Aramite	140-57-8		13.25	Split peak

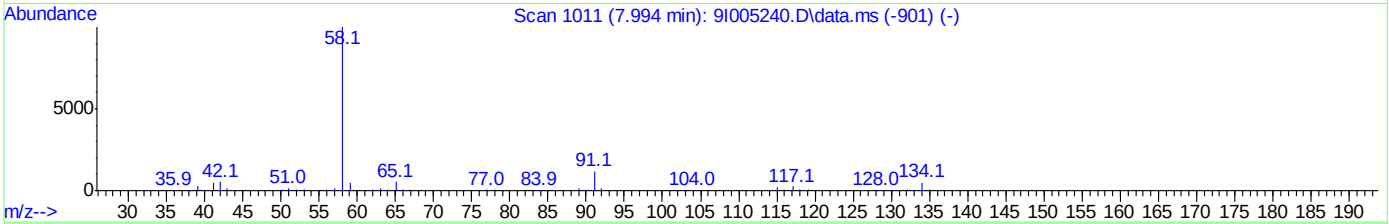
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071360.D
Acq On : 23 Jun 2020 11:46 am
Operator : marthav
Sample : ic2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 23 14:01:06 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071360.D\data.ms

(122) A,A-Dimethylphenethylamine

7.379min (0.000) 52.39ppm

response 964162

Ion	Exp%	Act%
58.10	100	100
91.00	11.70	6.05
134.10	5.10	3.27
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071360.D
Acq On : 23 Jun 2020 11:46 am
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Sample : ic2918-50 Inst : MSBNA05
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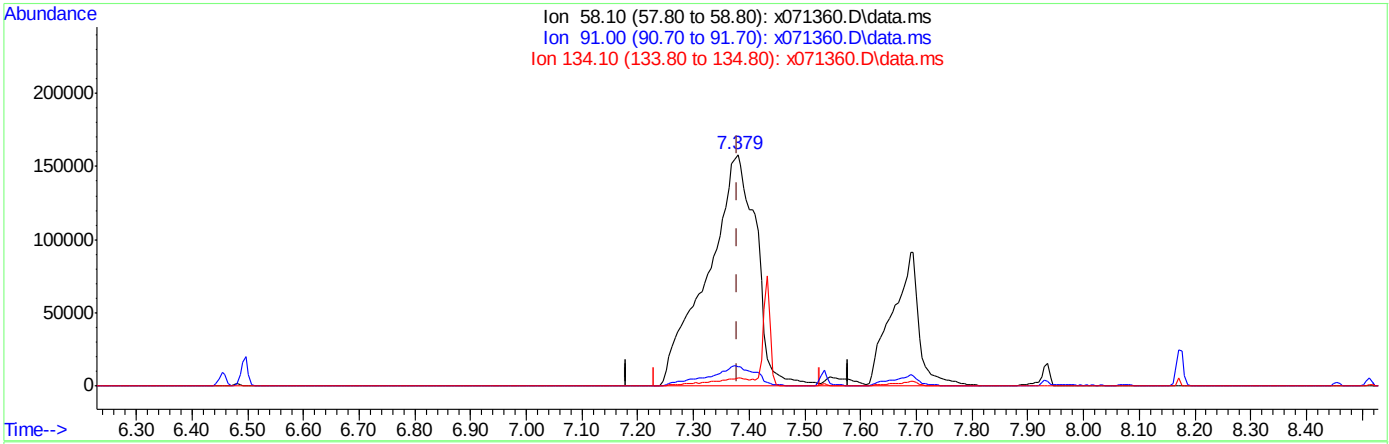

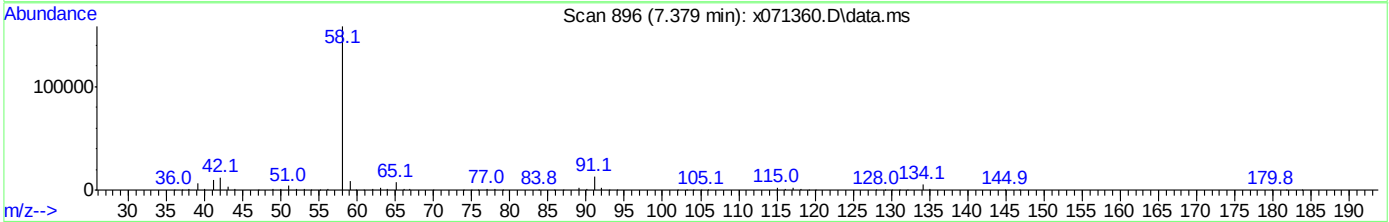

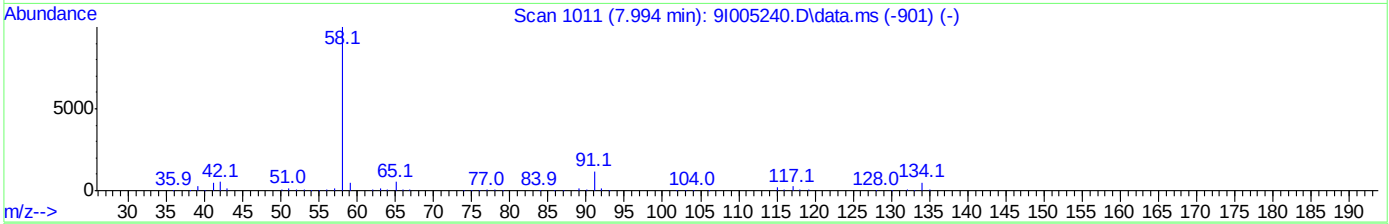

TIC: x071360.D\data.ms

(122) A,A-Dimethylphenethylamine

7.379min (0.000) 68.93ppm m

response 1293311

Ion	Exp%	Act%
58.10	100	100
91.00	11.70	8.30
134.10	5.10	3.68
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071360.D
Acq On : 23 Jun 2020 11:46 am
Operator : marthav
Sample : ic2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 23 14:01:06 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
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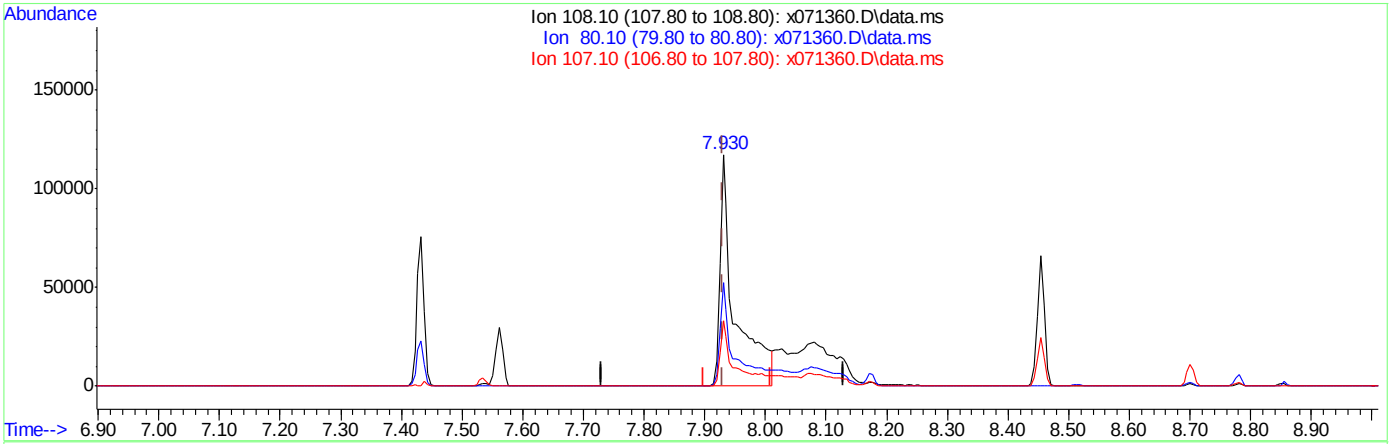

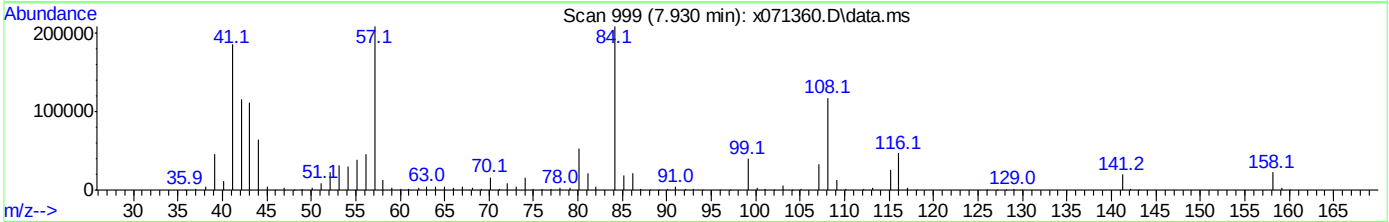

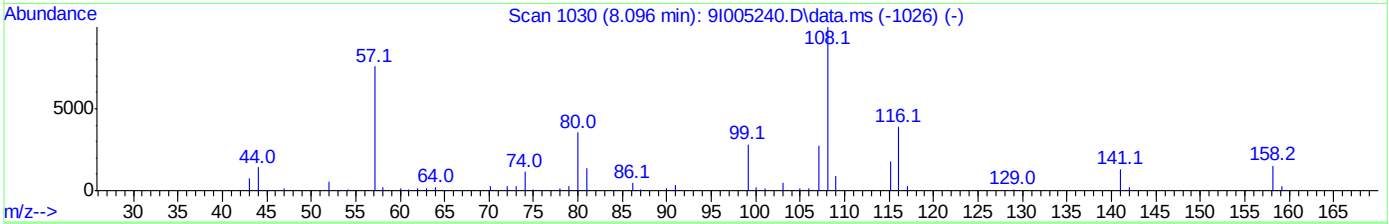

TIC: x071360.D\data.ms

(125) p-Phenylenediamine

7.930min (0.000) 43.42ppm

response 207105

Ion	Exp%	Act%
108.10	100	100
80.10	35.50	44.36
107.10	27.70	28.19
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071360.D
Acq On : 23 Jun 2020 11:46 am
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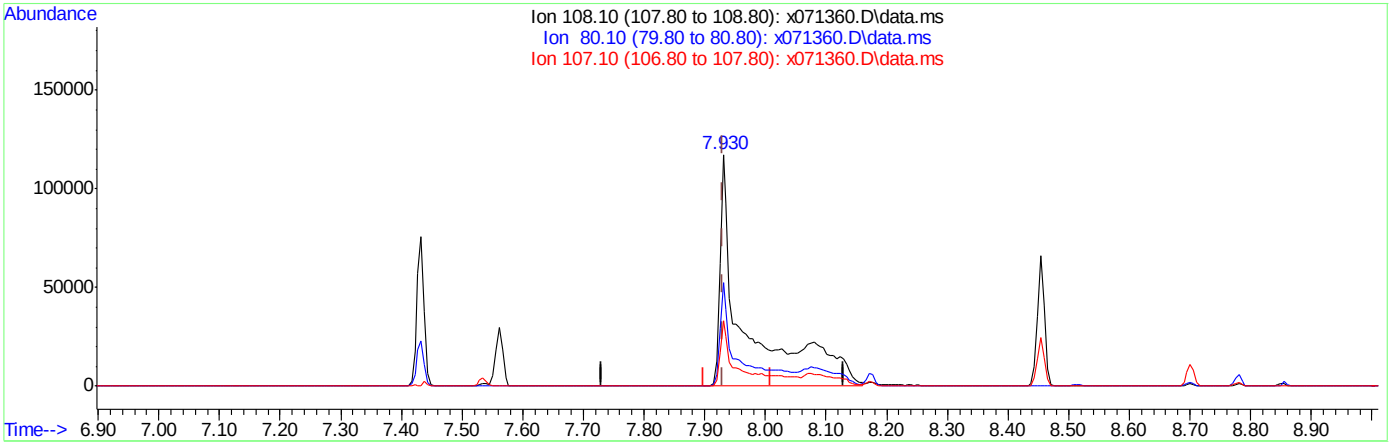

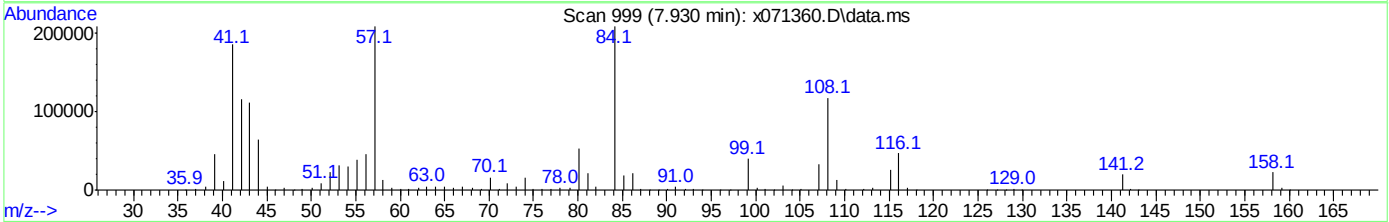

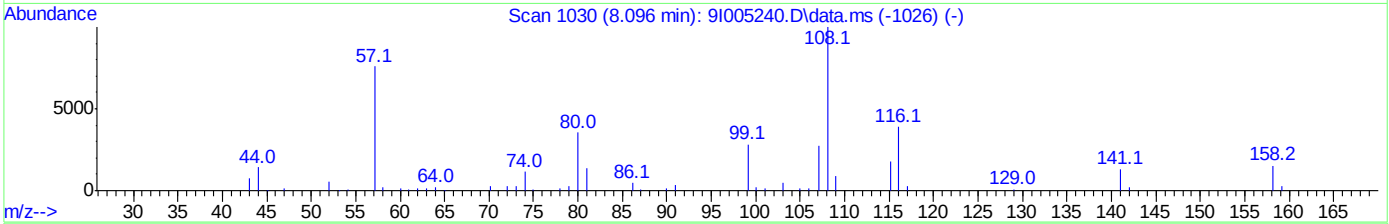

TIC: x071360.D\data.ms

(125) p-Phenylenediamine

7.930min (0.000) 80.37ppm m

response 342749

Ion	Exp%	Act%
108.10	100	100
80.10	35.50	44.57
107.10	27.70	28.29
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071360.D
Acq On : 23 Jun 2020 11:46 am
Operator : marthav
Sample : ic2918-50 Inst : MSBNA05
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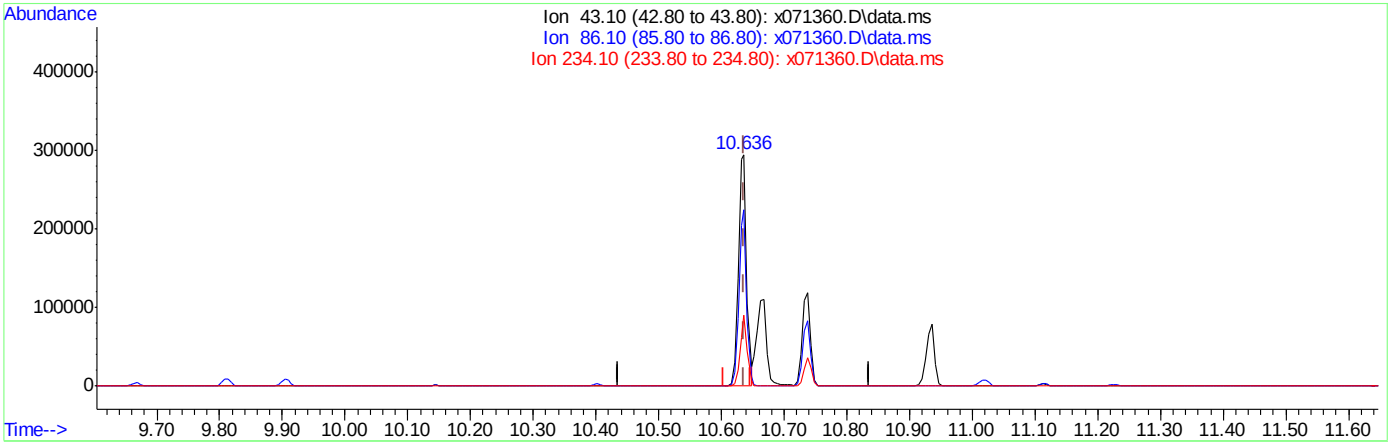
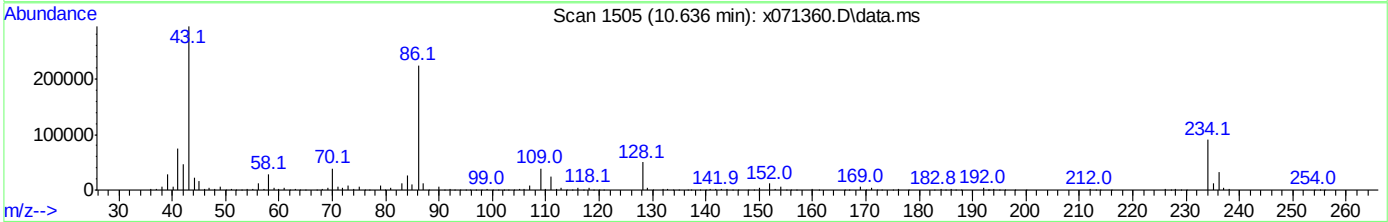
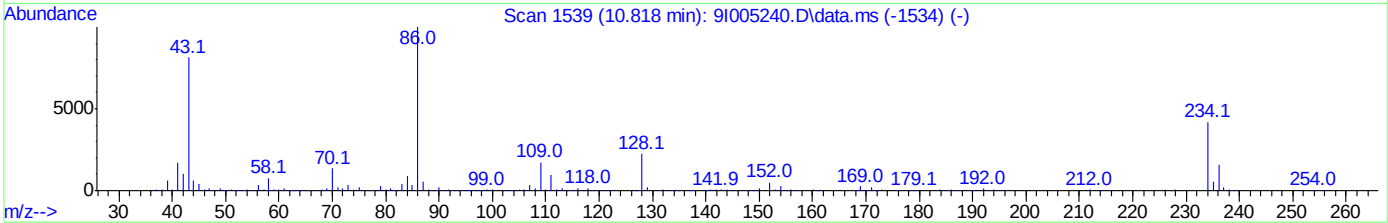
Response via : Initial Calibration







TIC: x071360.D\data.ms

(138) Diallate

10.636min (0.000) 40.34ppm

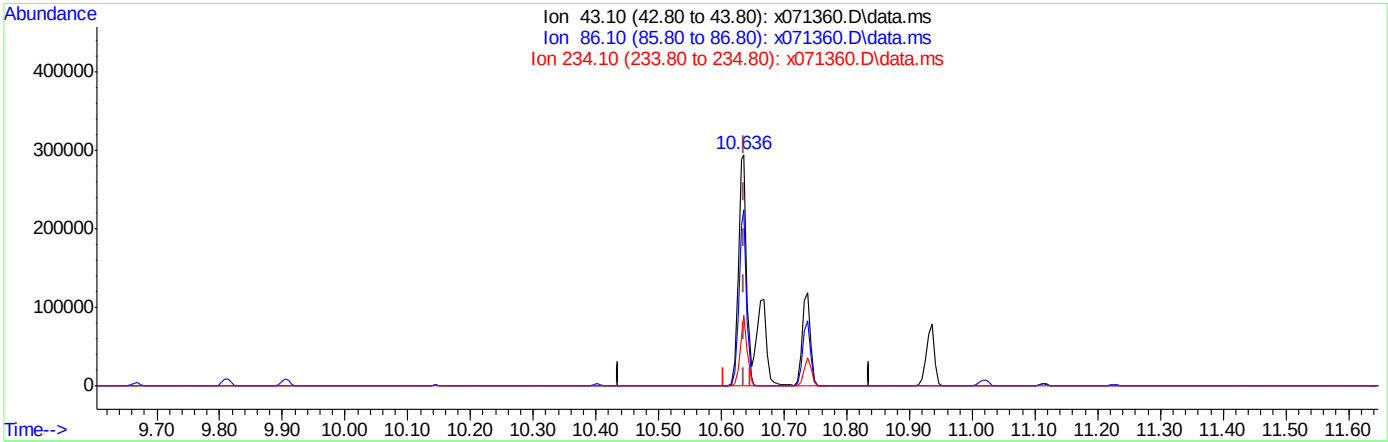
response 284269

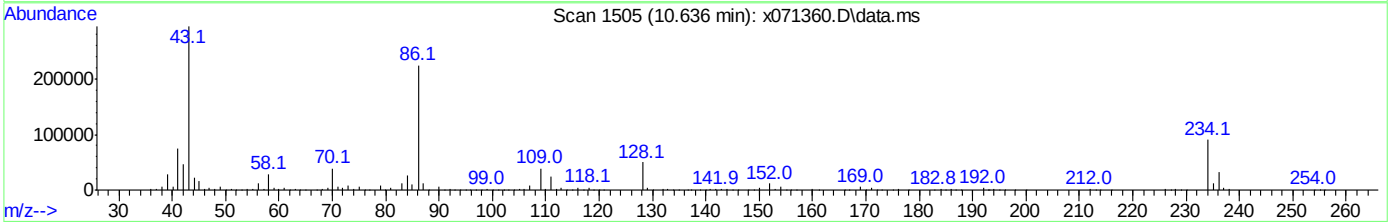
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	77.18#
234.10	51.50	30.56
0.00	0.00	0.00

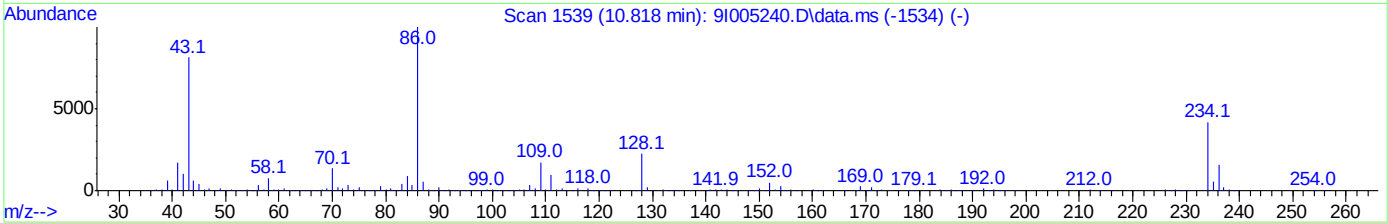
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071360.D
Acq On : 23 Jun 2020 11:46 am
Operator : marthav
Sample : ic2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 23 14:01:06 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071360.D\data.ms

(138) Diallate

10.636min (0.000) 73.66ppm m

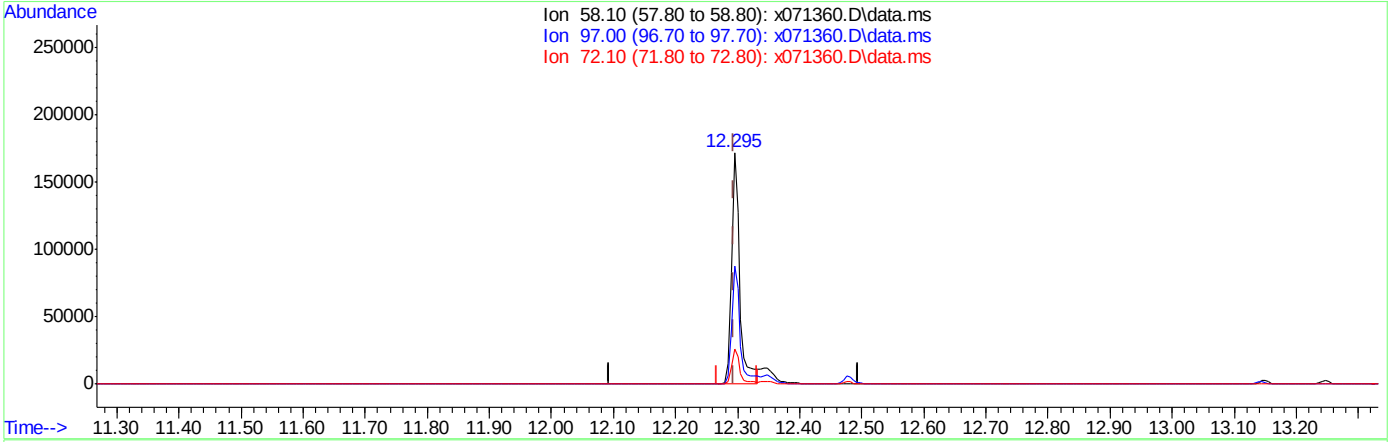
response 519071

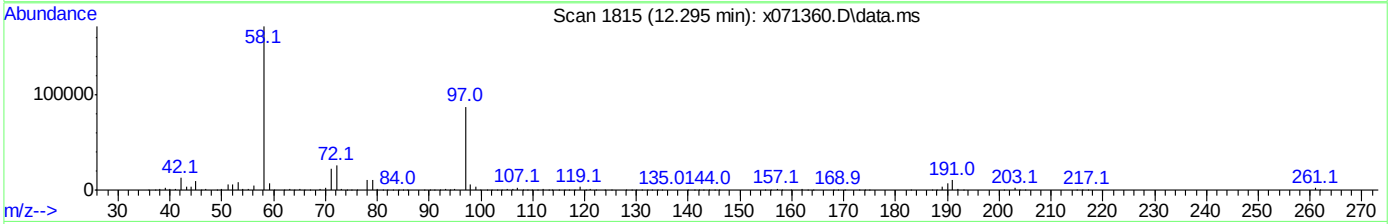
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	76.03#
234.10	51.50	30.57
0.00	0.00	0.00

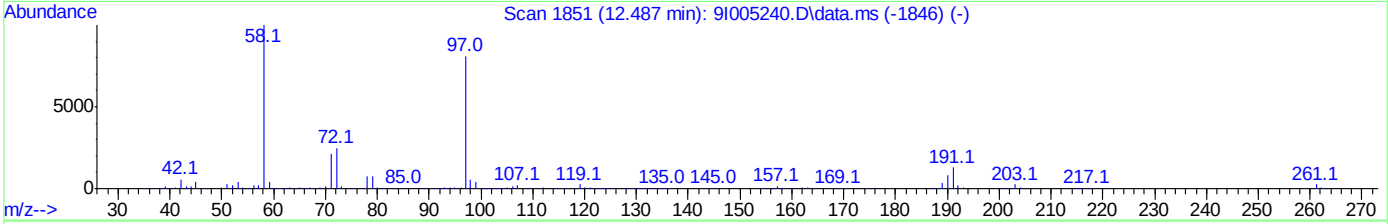
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071360.D
Acq On : 23 Jun 2020 11:46 am
Operator : marthav
Sample : ic2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 23 14:01:06 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071360.D\data.ms

(144) Methapyrilene

12.295min (0.000) 20.65ppm

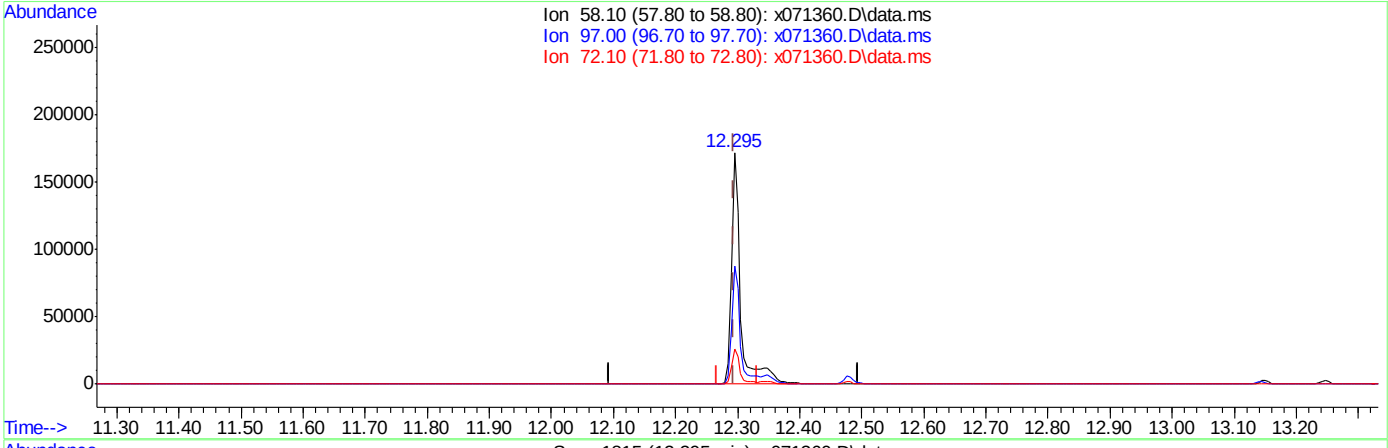
response 164618

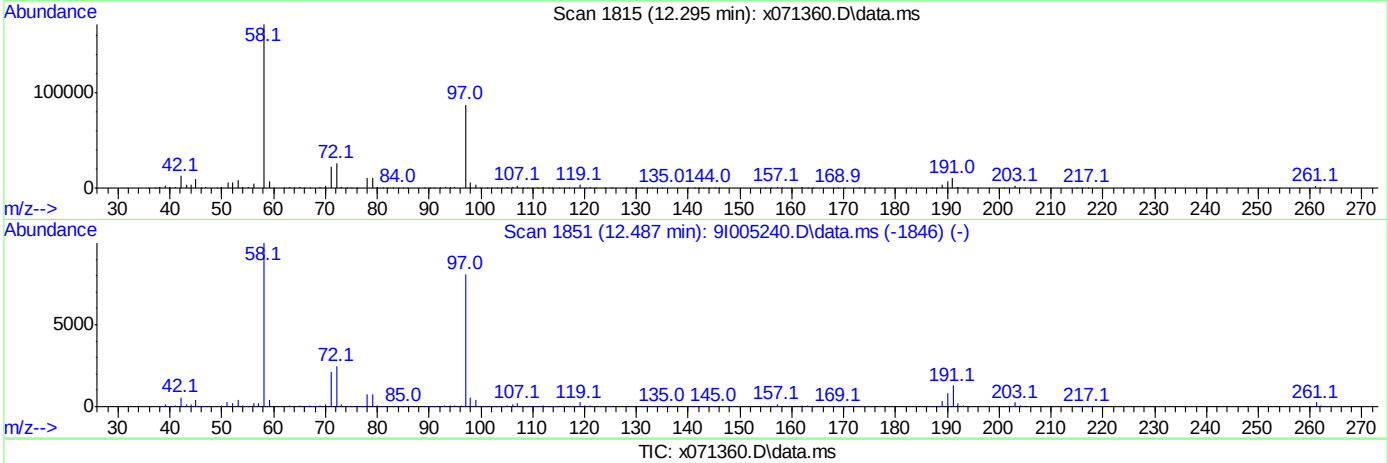
Ion	Exp%	Act%
58.10	100	100
97.00	80.90	50.84#
72.10	24.80	15.37
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071360.D
Acq On : 23 Jun 2020 11:46 am
Operator : marthav
Sample : ic2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 23 14:01:06 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration





TIC: x071360.D\data.ms

(144) Methapyrilene

12.295min (0.000) 23.18ppm m

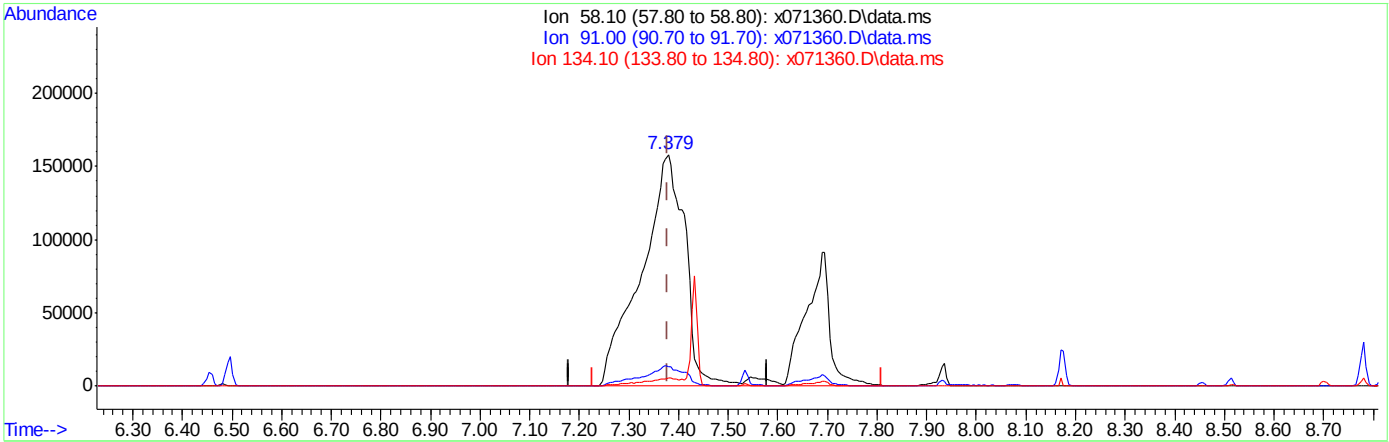
response 185003

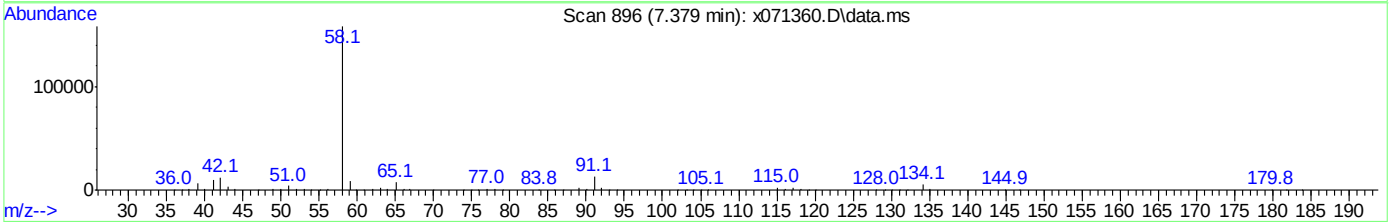
Ion	Exp%	Act%
58.10	100	100
97.00	80.90	51.00
72.10	24.80	15.30
0.00	0.00	0.00

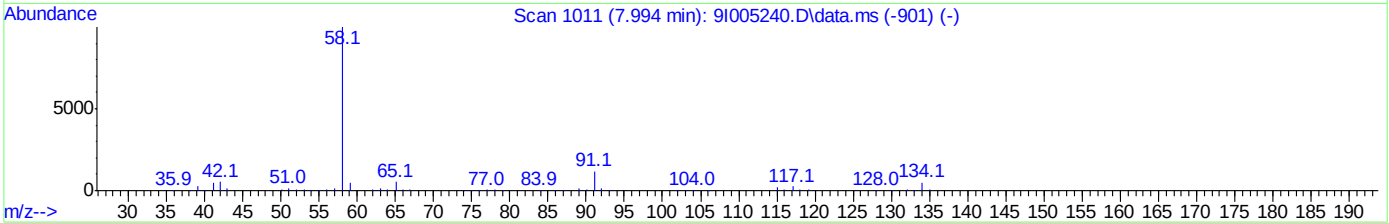
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071360.D
Acq On : 23 Jun 2020 11:46 am
Operator : marthav
Sample : ic2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 23 14:01:06 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071360.D\data.ms

(122) A,A-Dimethylphenethylamine

7.379min (0.000) 68.93ppm m

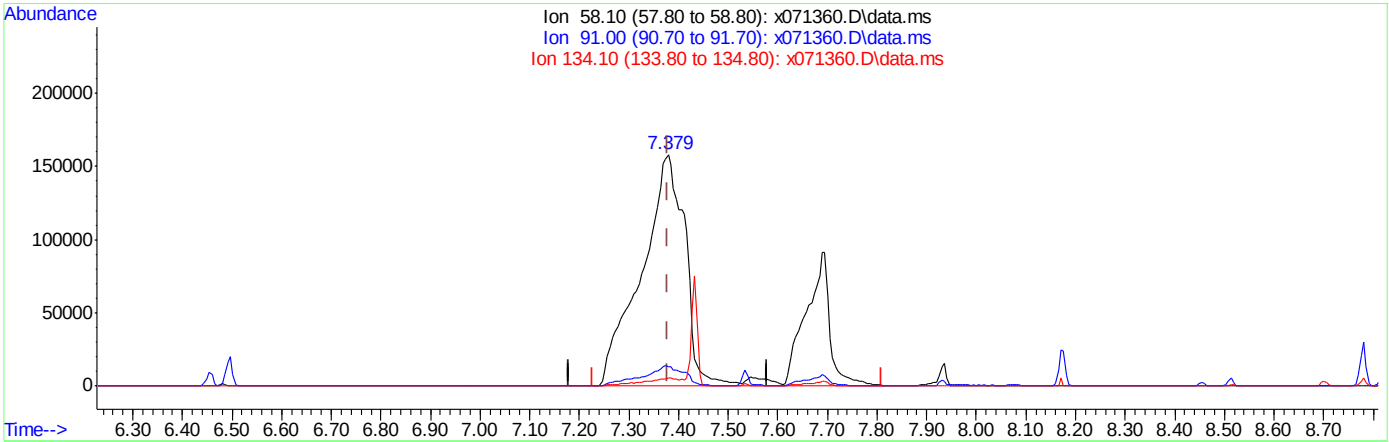
response 1293311

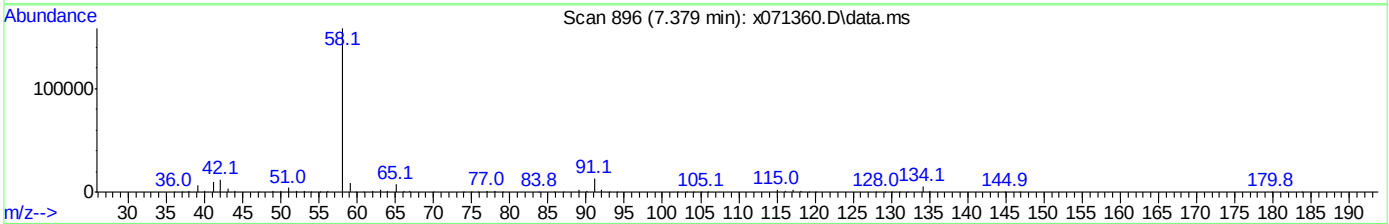
Ion	Exp%	Act%
58.10	100	100
91.00	11.70	8.30
134.10	5.10	3.68
0.00	0.00	0.00

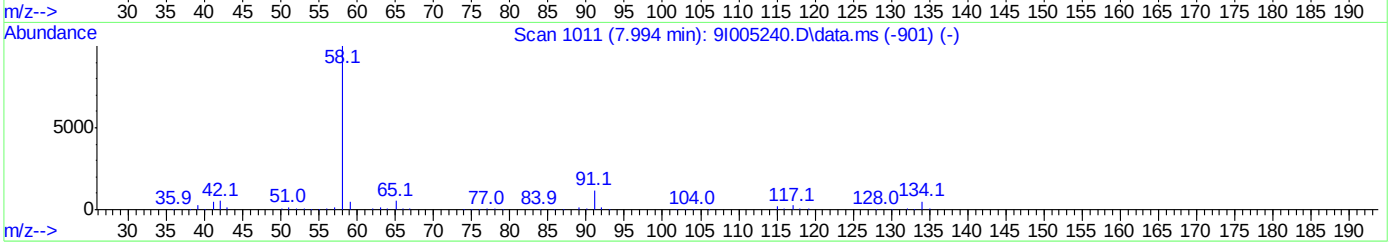
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071360.D
Acq On : 23 Jun 2020 11:46 am
Operator : marthav
Sample : ic2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 23 14:01:06 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071360.D\data.ms

(122) A,A-Dimethylphenethylamine

7.379min (0.000) 68.93ppm m

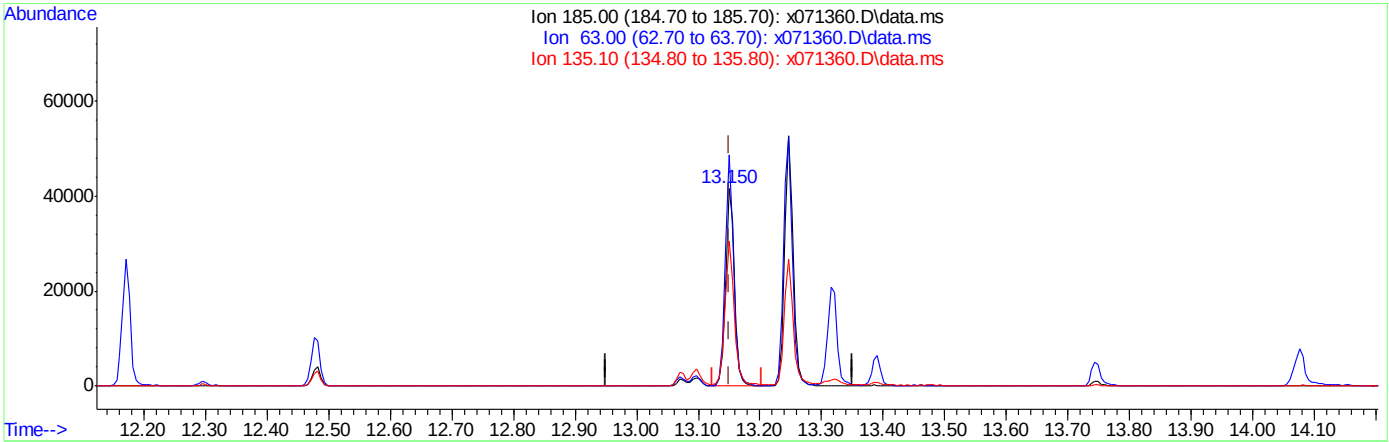
response 1293311

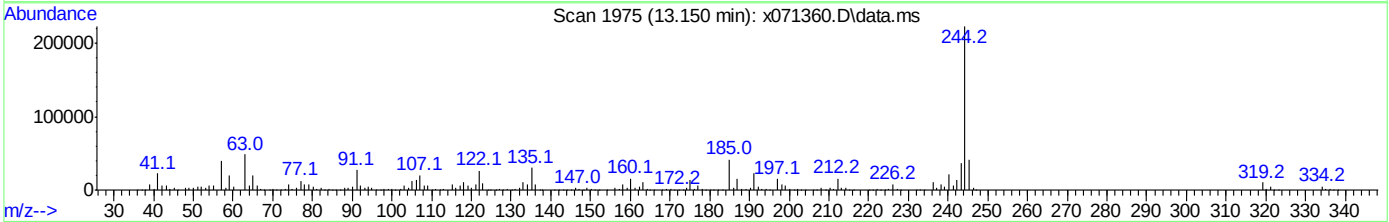
Ion	Exp%	Act%
58.10	100	100
91.00	11.70	8.30
134.10	5.10	3.68
0.00	0.00	0.00

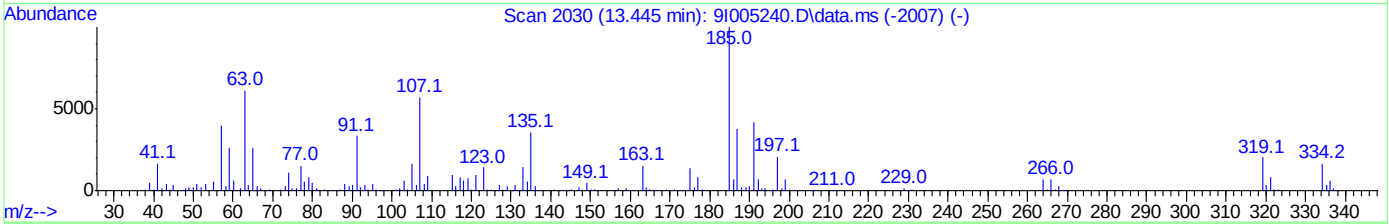
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071360.D
Acq On : 23 Jun 2020 11:46 am
Operator : marthav
Sample : ic2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 23 14:16:35 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071360.D\data.ms

(147) Aramite

13.150min (0.000) 25.40ppm

response 40679

Ion	Exp%	Act%
185.00	100	100
63.00	61.10	116.81#
135.10	35.60	72.41#
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 06/24/20 14:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071361.D
Acq On : 23 Jun 2020 12:12 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 23 16:55:26 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	0.000	152	0m	40.00	ppm	-6.00
22) Naphthalene-d8	0.000	136	0m	40.00	ppm	-7.43
43) Acenaphthene-d10	0.000	164	0m	40.00	ppm	-9.48
70) Phenanthrene-d10	0.000	188	0m	40.00	ppm	-11.22
92) Chrysene-d12	0.000	240	0m	40.00	ppm	-14.49
102) Perylene-d12	0.000	264	0m	40.00	ppm	-16.82
110) 1,4-Dichlorobenzene-d4A	6.005	152	164144	40.00	ppm	0.00
120) Naphthalene-d8A	7.433	136	698026	40.00	ppm	0.00
127) Acenaphthene-d10A	9.476	164	366185	40.00	ppm	0.00
136) Phenanthrene-d10A	11.225	188	677538	40.00	ppm	0.00
146) Chrysene-d12A	14.493	240	429861	40.00	ppm	0.00
153) Perylene-d12A	16.820	264	357481	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	0.000	112	0d	0.00	ppm	
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#		
9) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#		
23) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#		
47) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#		
75) 2,4,6-Tribromophenol	0.000	330	0d	0.00	ppm	
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#		
95) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#		
Target Compounds						Qvalue
111) 2-Picoline	3.983	93	482356	59.18	ppm	88
112) N-Nitrosomethylethylamine	4.111	42	335860	116.37	ppm #	53
113) Methyl methanesulfonate	4.438	80	237961	59.04	ppm	90
114) N-Nitrosodiethylamine	4.855	102	201274	62.12	ppm #	22
115) Ethyl methanesulfonate	5.186	79	330136	57.85	ppm	96
116) Pentachloroethane	5.700	167	140826	60.68	ppm	94
117) N-Nitrosopyrrolidine	6.438	100	185562	55.98	ppm #	47
118) N-Nitrosomorpholine	6.481	56	332467	96.03	ppm #	66
119) O-Toluidine	6.497	106	694865	69.07	ppm	99
121) N-Nitrosopiperidine	6.818	42	391759	102.45	ppm #	62
122) A,A-Dimethylphenethyla...	7.401	58	1613562m	79.73	ppm	
123) Hexachloropropene	7.561	213	198594	53.49	ppm	99
124) N-Nitrosodi-n-butylamine	7.936	84	354651	67.10	ppm #	53
125) p-Phenylenediamine	7.930	108	407415m	93.67	ppm	
126) Isosafrole	8.176	162	302122	66.11	ppm	83
128) Safrole	8.781	162	308936	65.20	ppm	87
129) 1-Chloronaphthalene	8.856	162	735524	64.70	ppm	98
130) Diphenyl Ether	8.946	170	509112	65.94	ppm	92
131) 1,4-Naphthoquinone	9.037	158	305070	86.96	ppm	79
132) Pentachlorobenzene	9.669	250	245692	46.59	ppm	99
133) 1-Naphthylamine	9.813	143	798365	68.42	ppm	94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071361.D
Acq On : 23 Jun 2020 12:12 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 23 16:55:26 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration

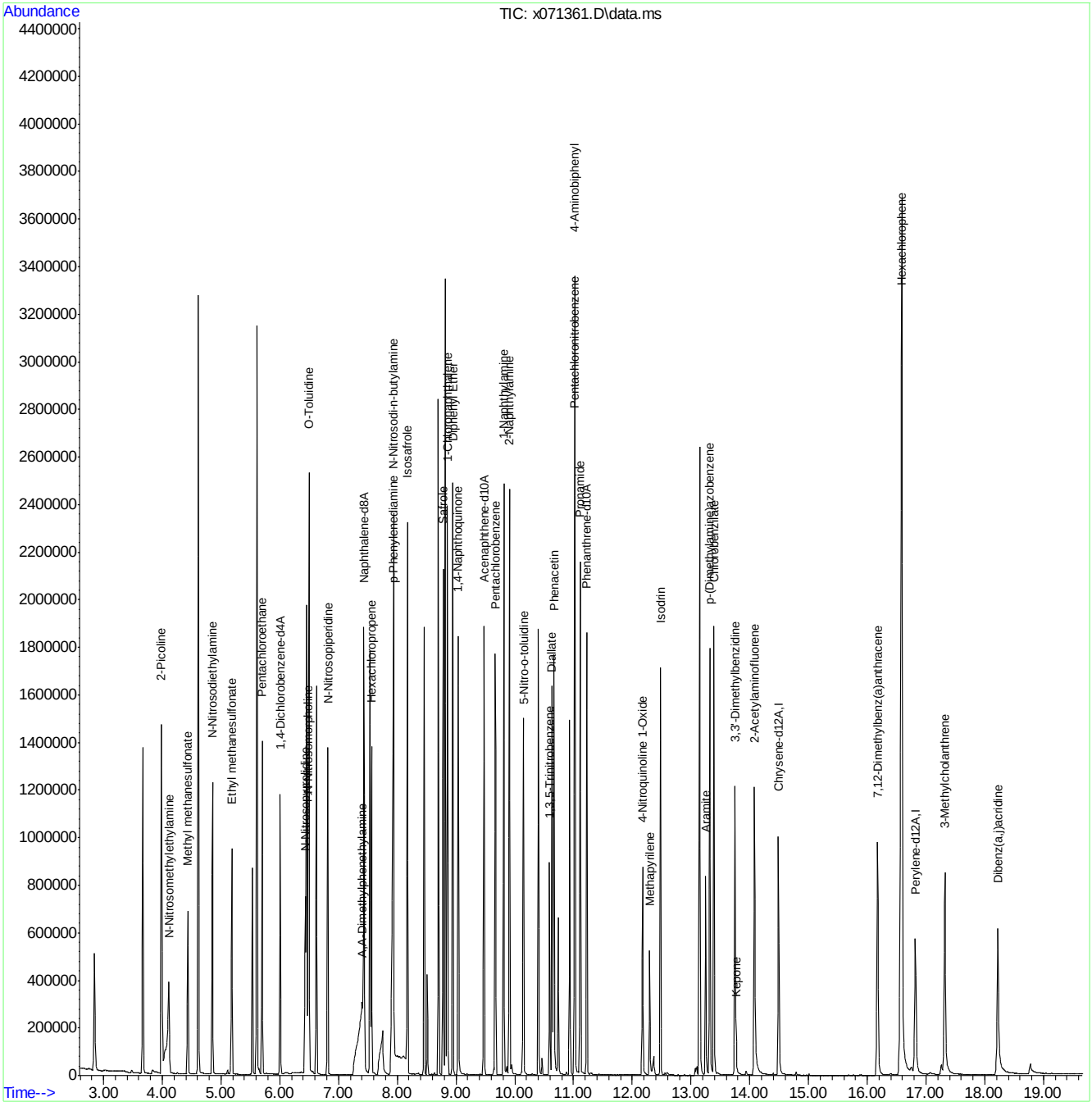
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
134) 2-Naphthylamine	9.909	143	845717	71.16	ppm		96
135) 5-Nitro-o-toluidine	10.150	152	253152	62.16	ppm		86
137) 1,3,5-Trinitrobenzene	10.594	75	217752	51.09	ppm		86
138) Diallate	10.631	43	644225m	86.11	ppm		
139) Phenacetin	10.669	108	433725	59.44	ppm		91
140) 4-Aminobiphenyl	11.022	169	833196	72.94	ppm		99
141) Pronamide	11.118	173	353013	59.04	ppm		98
142) Pentachloronitrobenzene	11.016	237	83820	48.61	ppm		90
143) 4-Nitroquinoline 1-Oxide	12.177	190	77483	91.41	ppm		83
144) Methapyrilene	12.295	58	227166m	26.75	ppm		
145) Isodrin	12.482	193	115911	49.30	ppm		87
147) Aramite	13.247	185	116692m	65.43	ppm		
148) p-(Dimethylamine)azobe...	13.322	120	333830	70.62	ppm		86
149) Chlorobenzilate	13.391	139	386556	71.38	ppm	#	72
150) Kepone	13.771	272	3034	1.98	ppm		87
151) 3,3'-Dimethylbenzidine	13.750	212	456299	71.20	ppm		97
152) 2-Acetylaminofluorene	14.081	181	404560	64.28	ppm		93
154) 7,12-Dimethylbenz(a)an...	16.178	256	327919	61.76	ppm		97
155) Hexachlorophene	16.590	196	614267	942.16	ppm		99
156) 3-Methylcholanthrene	17.322	268	302821	63.88	ppm		94
157) Dibenz(a,j)acridine	18.221	279	416799	52.87	ppm		97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071361.D
Acq On : 23 Jun 2020 12:12 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 23 16:55:26 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: SX2918-IC2918
Lab FileID: X071361.D
Injection Time: 06/23/20 12:12

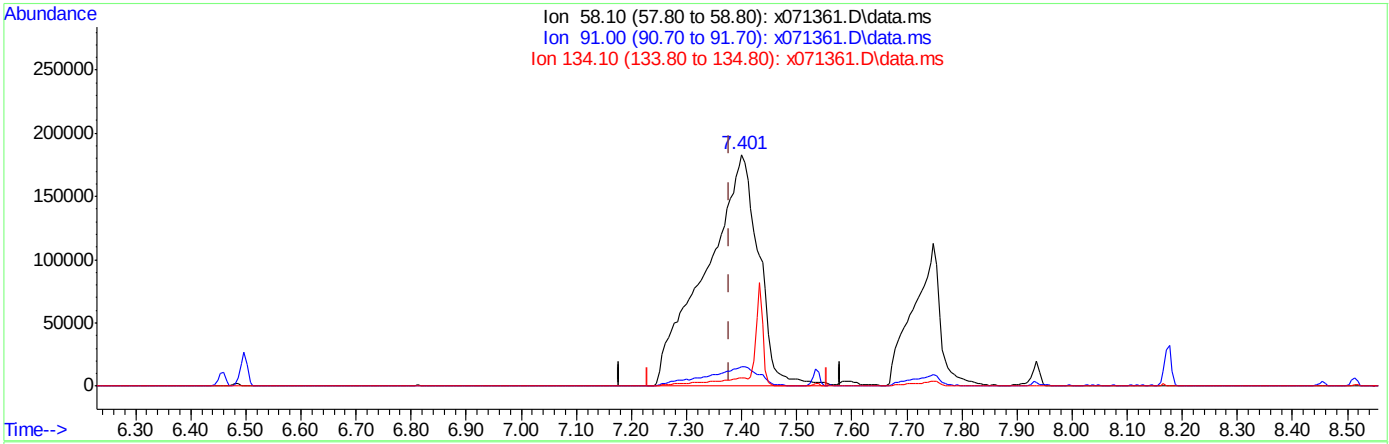
Method: EPA 625.1
Analyst approved: 06/24/20 09:50 Martha Valls
Supervisor approved: 06/24/20 14:07 Naresh Jiawan

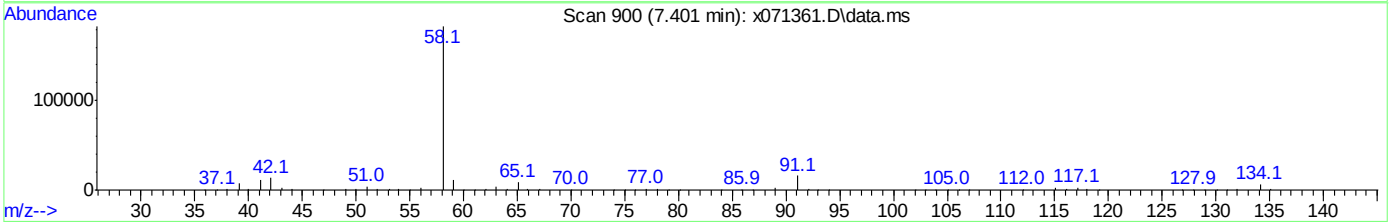
Parameter	CAS	Sig#	R.T. (min.)	Reason
A,A-Dimethylphenethylamine	122-09-8		7.40	Split peak
p-Phenylenediamine	106-50-3		7.93	Split peak
Diallate	2303-16-4		10.63	Split peak
Methapyrilene	91-80-5		12.29	Split peak
Aramite	140-57-8		13.25	Split peak

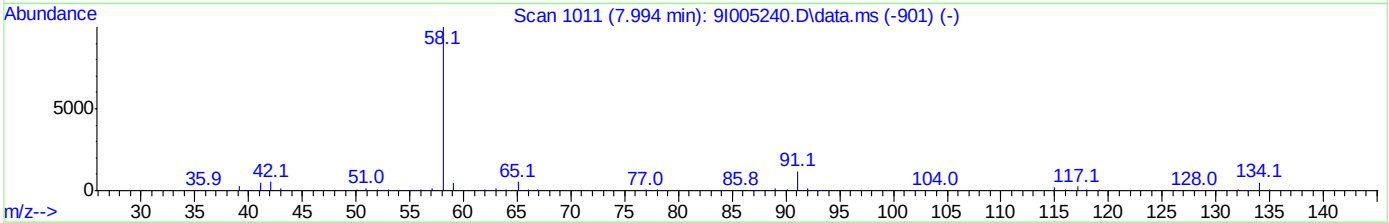
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071361.D
Acq On : 23 Jun 2020 12:12 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 23 14:01:08 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071361.D\data.ms

(122) A,A-Dimethylphenethylamine

7.401min (+0.022) 61.38ppm

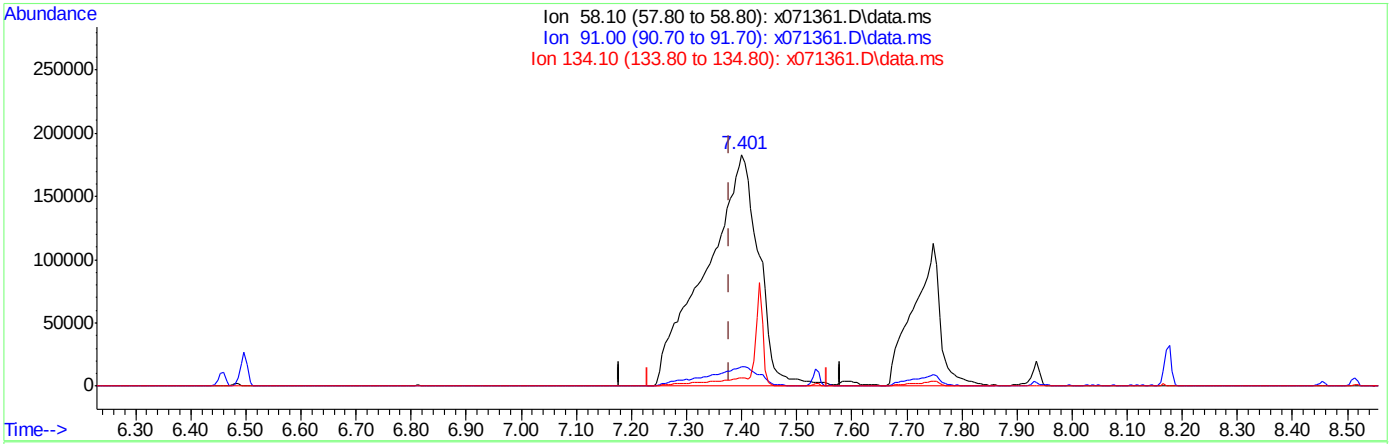
response 1216131

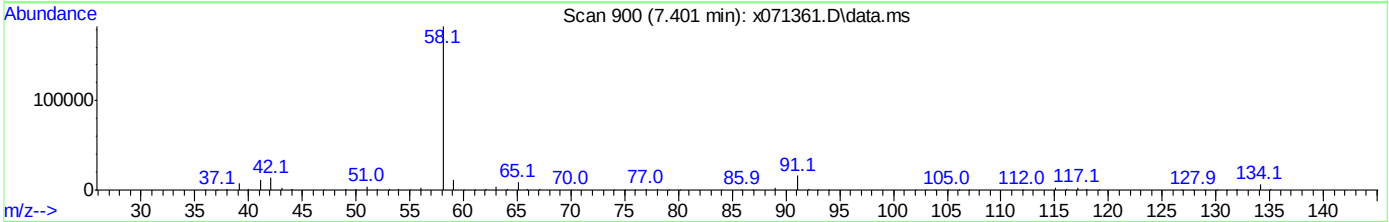
Ion	Exp%	Act%
58.10	100	100
91.00	11.70	8.50
134.10	5.10	3.64
0.00	0.00	0.00

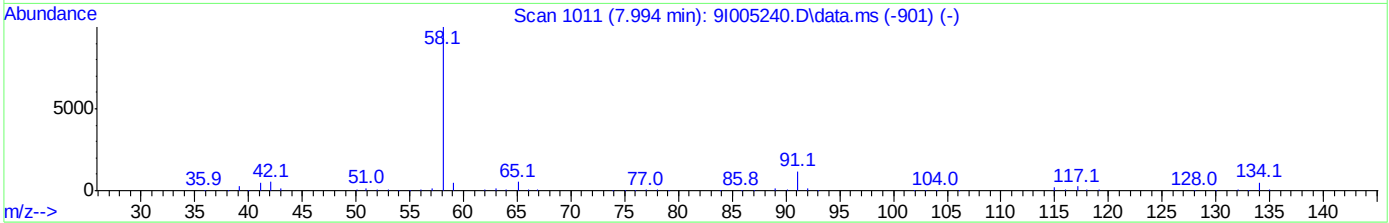
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071361.D
Acq On : 23 Jun 2020 12:12 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 23 14:01:08 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071361.D\data.ms

(122) A,A-Dimethylphenethylamine

7.401min (+0.022) 79.73ppm m

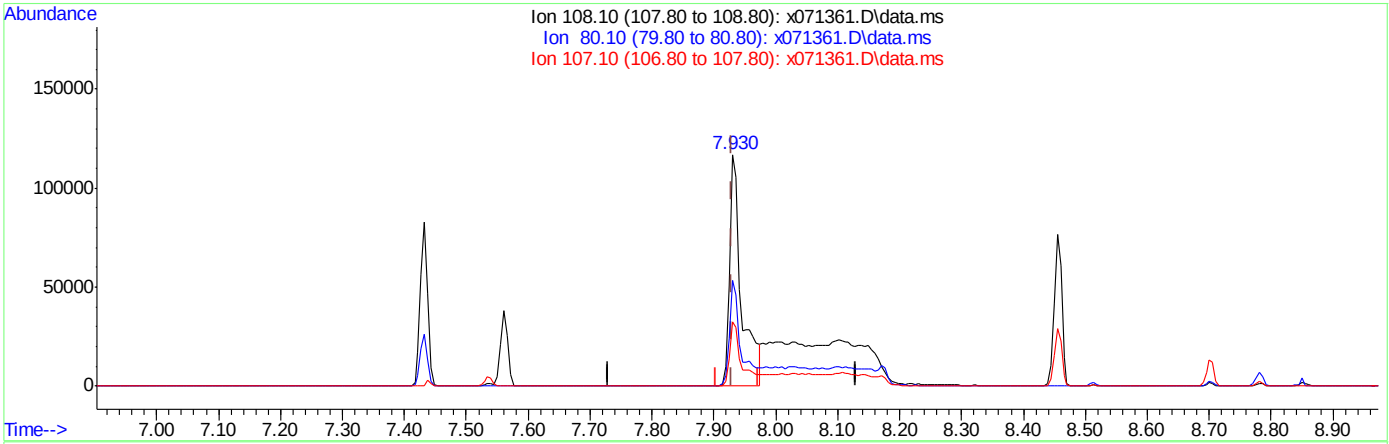
response 1613562

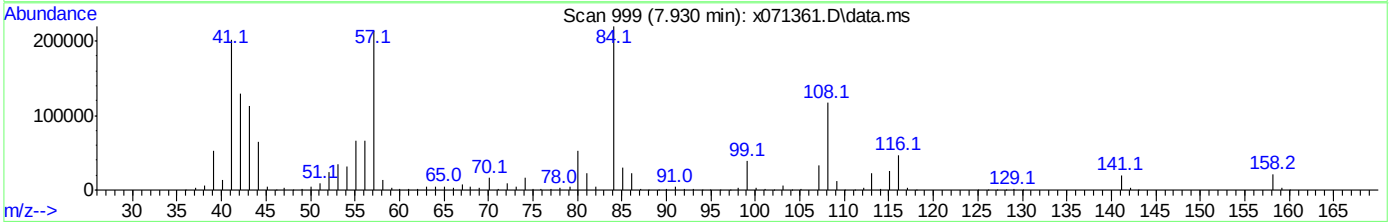
Ion	Exp%	Act%
58.10	100	100
91.00	11.70	8.62
134.10	5.10	3.71
0.00	0.00	0.00

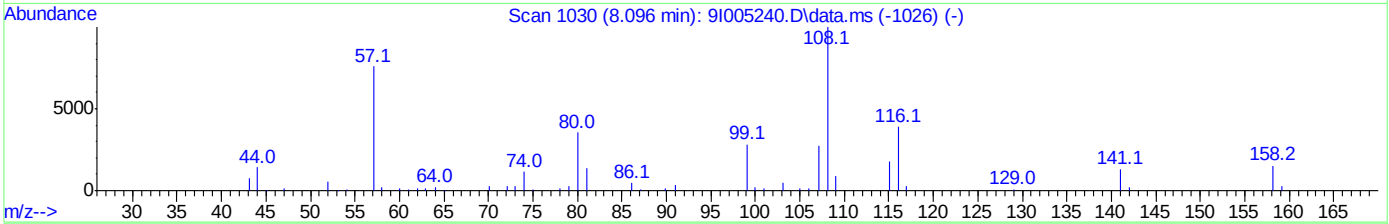
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071361.D
Acq On : 23 Jun 2020 12:12 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 23 14:01:08 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071361.D\data.ms

(125) p-Phenylenediamine

7.930min (+0.000) 29.55ppm

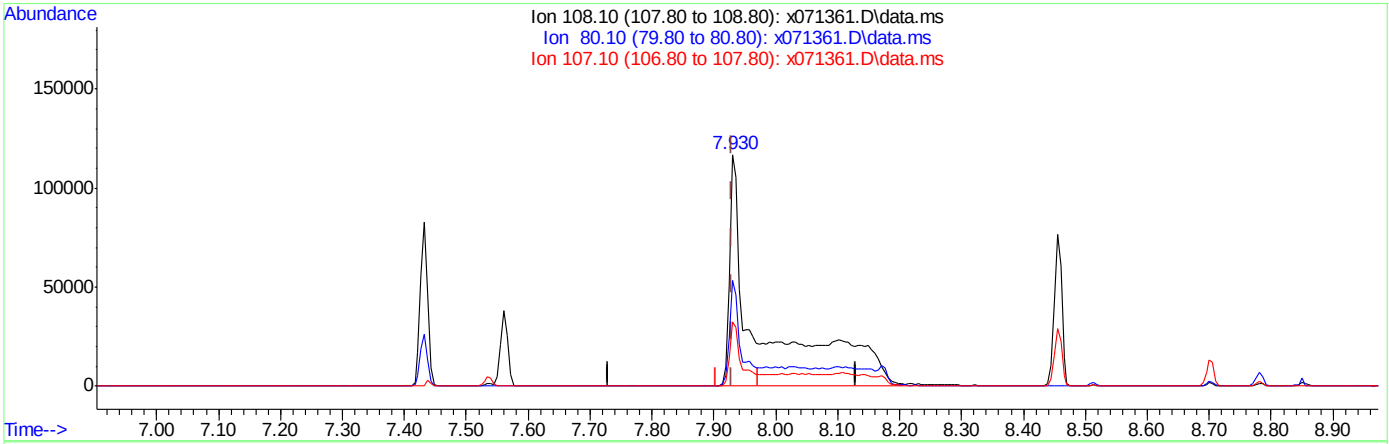
response 156113

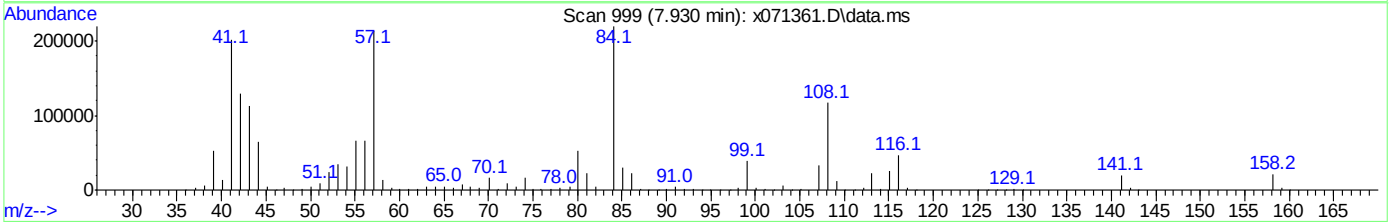
Ion	Exp%	Act%
108.10	100	100
80.10	35.50	45.74
107.10	27.70	27.90
0.00	0.00	0.00

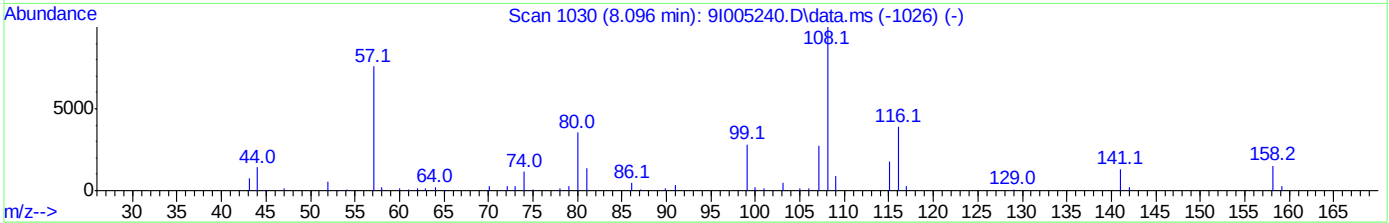
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071361.D
Acq On : 23 Jun 2020 12:12 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 23 14:01:08 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071361.D\data.ms

(125) p-Phenylenediamine

7.930min (+0.000) 93.67ppm m

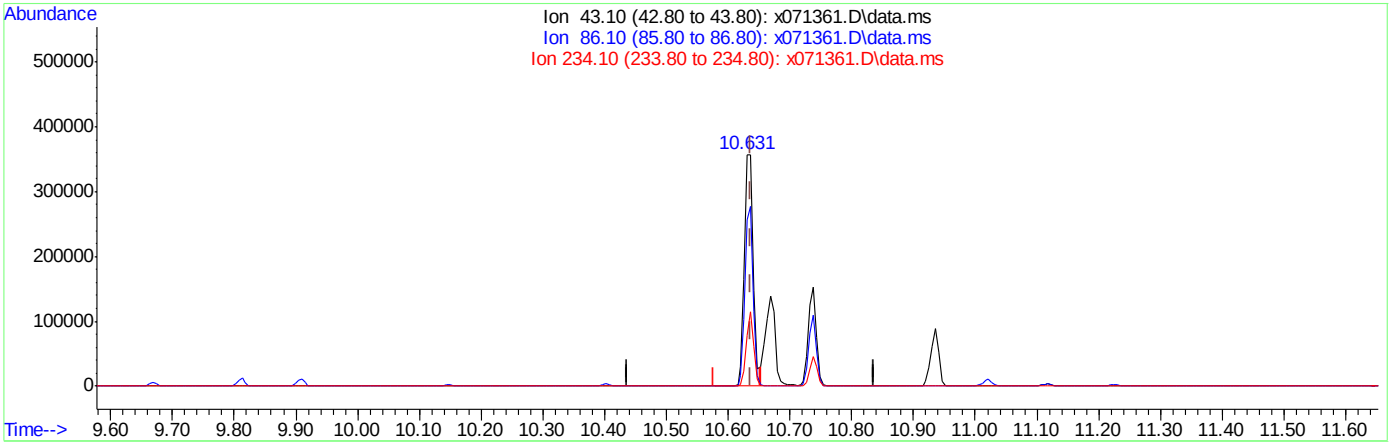
response 407415

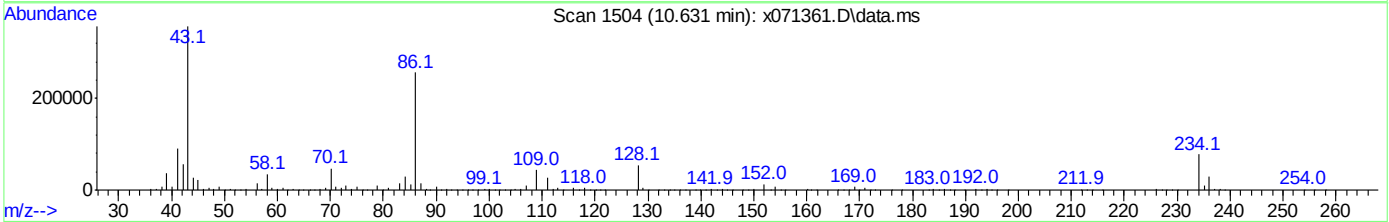
Ion	Exp%	Act%
108.10	100	100
80.10	35.50	45.61
107.10	27.70	27.91
0.00	0.00	0.00

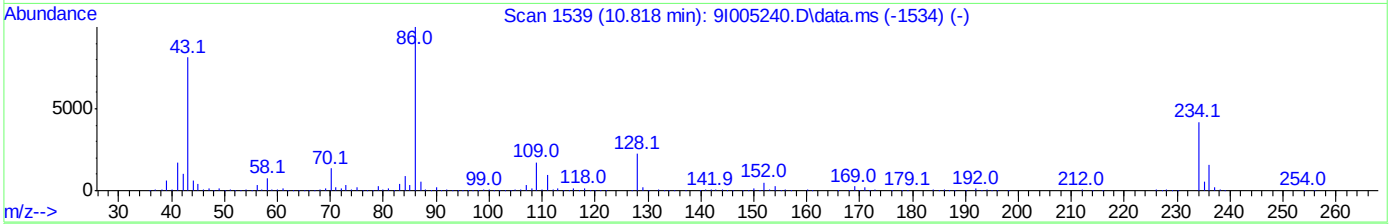
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071361.D
Acq On : 23 Jun 2020 12:12 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 23 14:01:08 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071361.D\data.ms

(138) Diallate

10.631min (-0.005) 47.83ppm

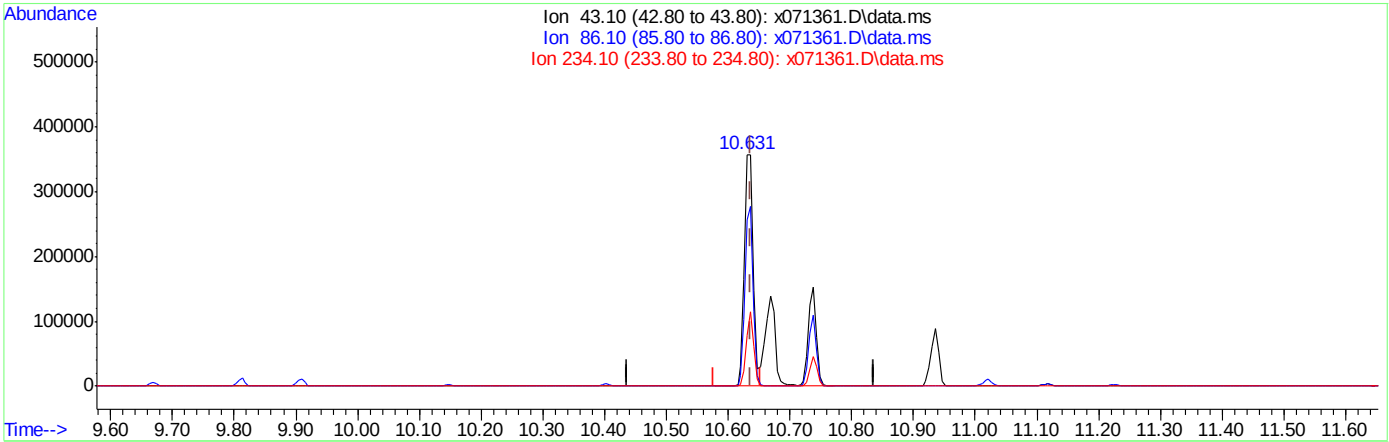
response 357785

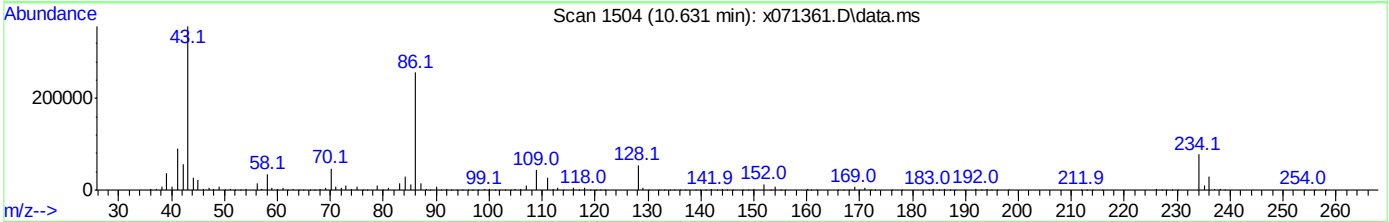
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	74.60#
234.10	51.50	22.72
0.00	0.00	0.00

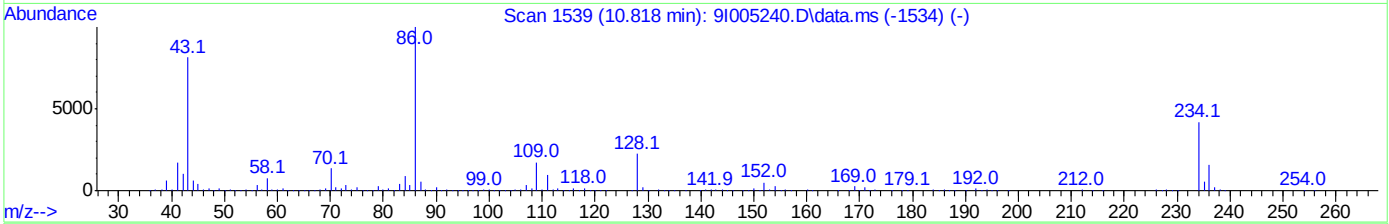
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071361.D
Acq On : 23 Jun 2020 12:12 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 23 14:01:08 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071361.D\data.ms

(138) Diallate

10.631min (-0.005) 86.11ppm m

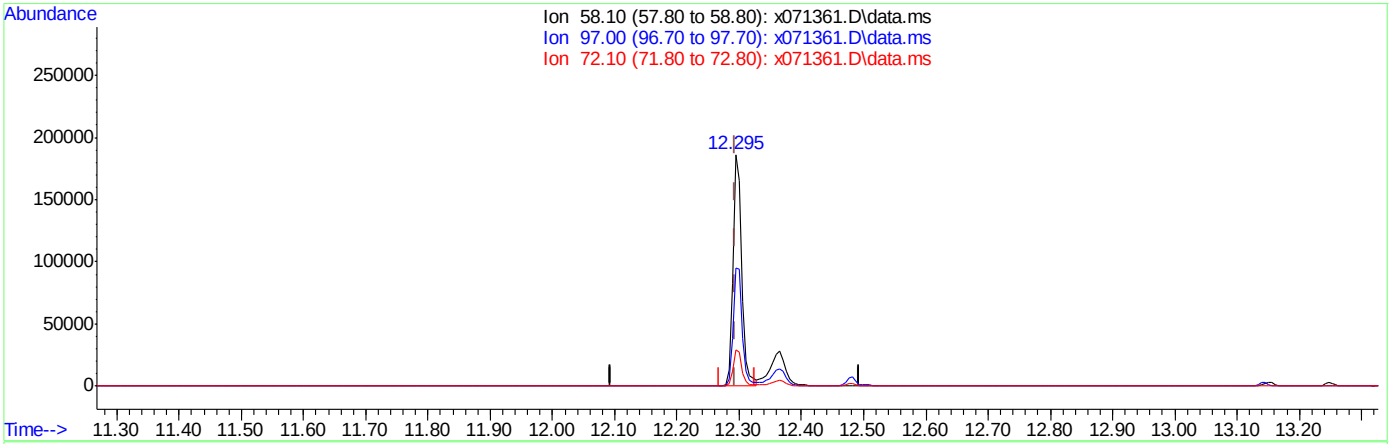
response 644225

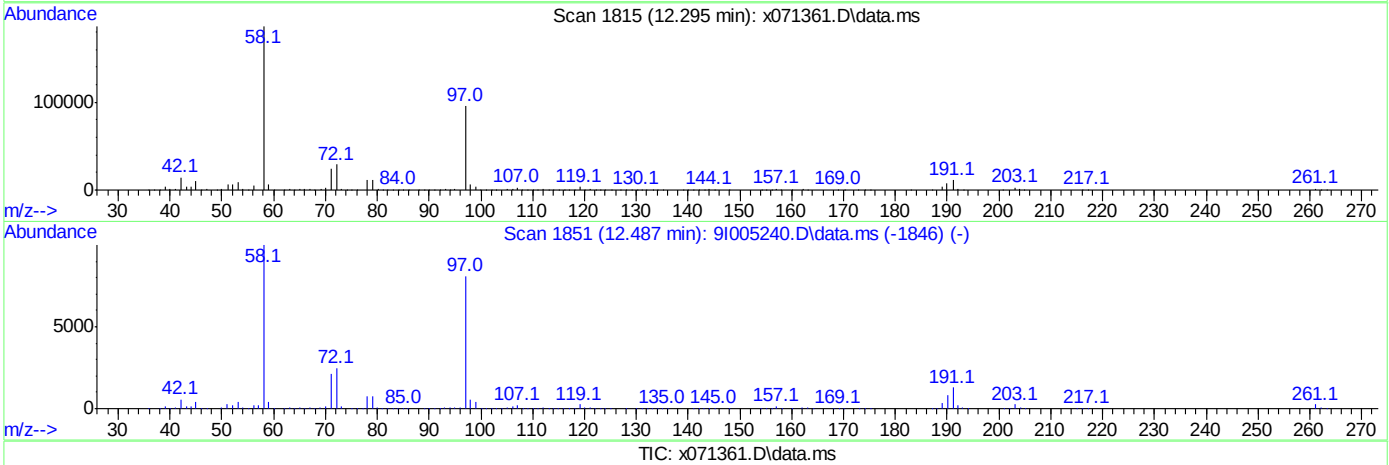
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	71.83#
234.10	51.50	21.85
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071361.D
Acq On : 23 Jun 2020 12:12 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 23 14:01:08 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration





TIC: x071361.D\data.ms

(144) Methapyrilene

12.295min (+0.000) 21.05ppm

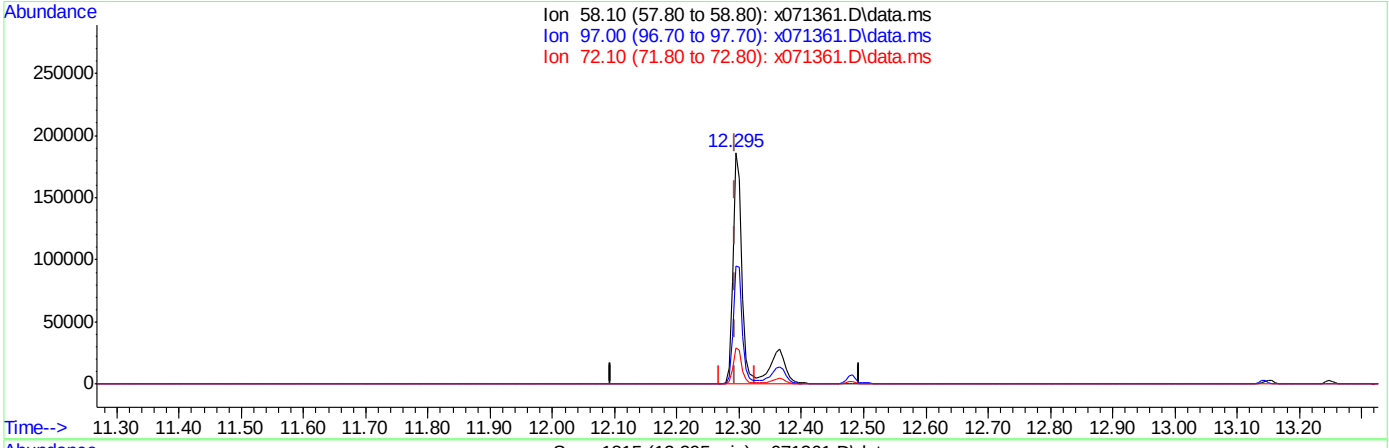
response 178201

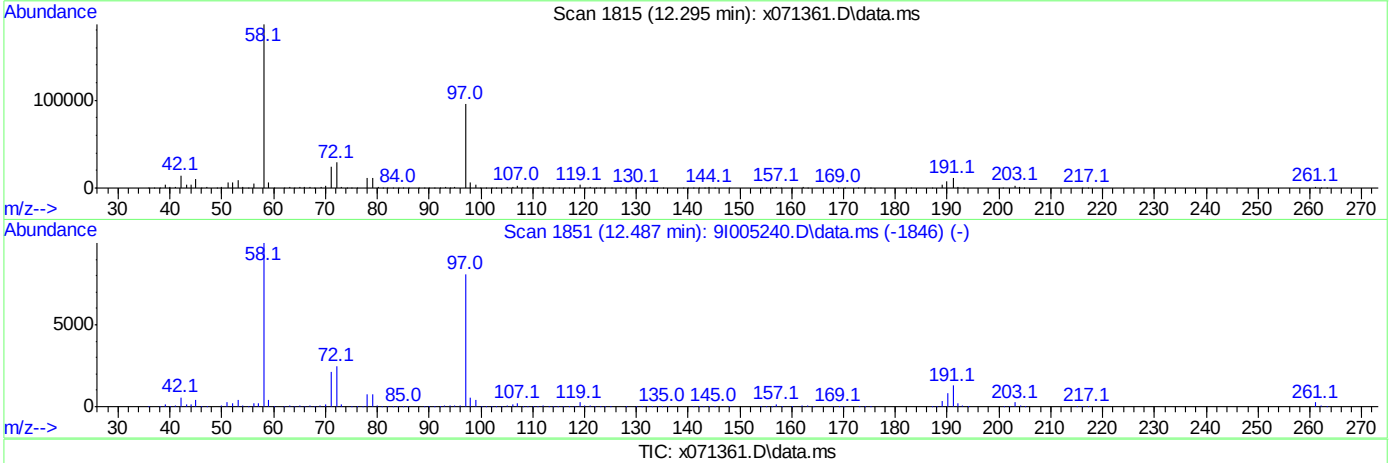
Ion	Exp%	Act%
58.10	100	100
97.00	80.90	51.08
72.10	24.80	15.54
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071361.D
Acq On : 23 Jun 2020 12:12 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 23 14:01:08 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration





TIC: x071361.D\data.ms

(144) Methapyrilene

12.295min (+0.000) 26.75ppm m

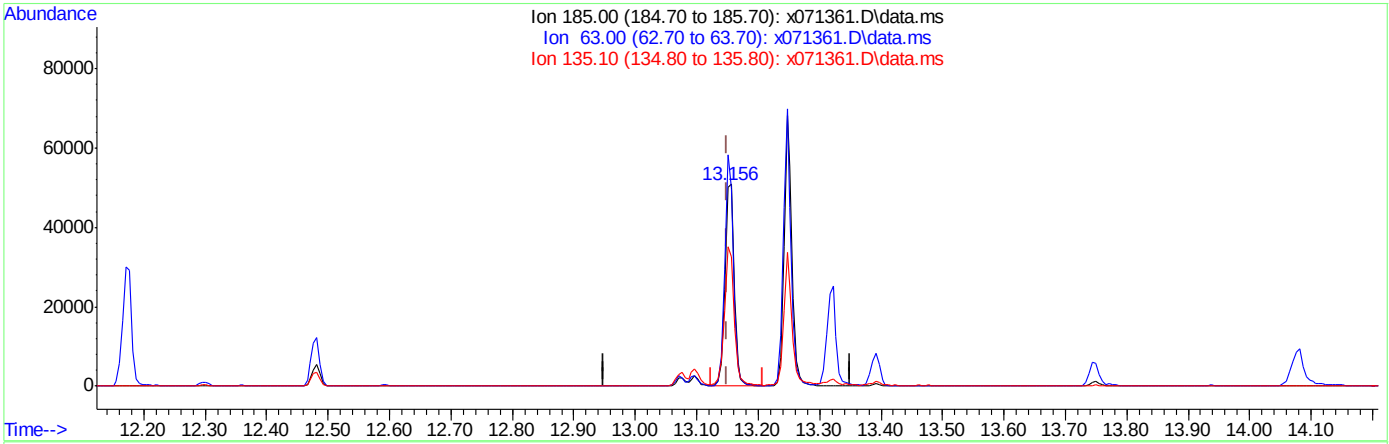
response 227166

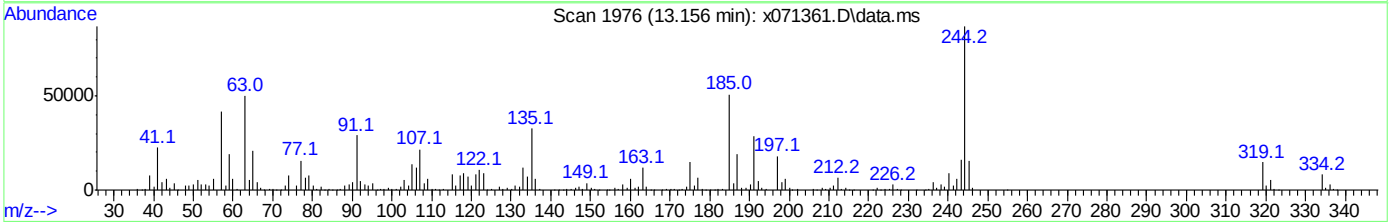
Ion	Exp%	Act%
58.10	100	100
97.00	80.90	51.12
72.10	24.80	15.55
0.00	0.00	0.00

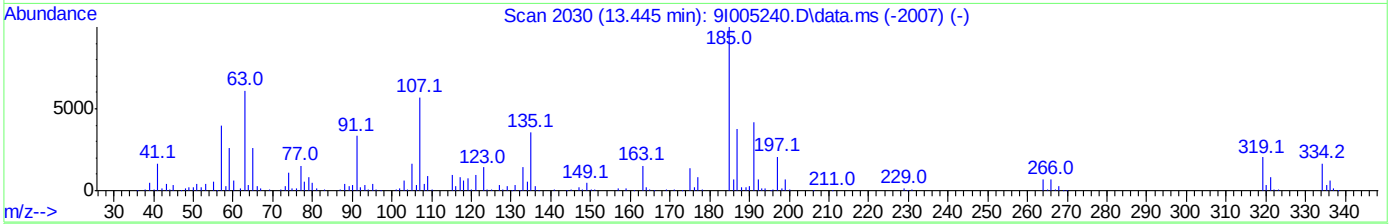
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071361.D
Acq On : 23 Jun 2020 12:12 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 23 14:01:08 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071361.D\data.ms

(147) Aramite

13.156min (+0.006) 30.90ppm

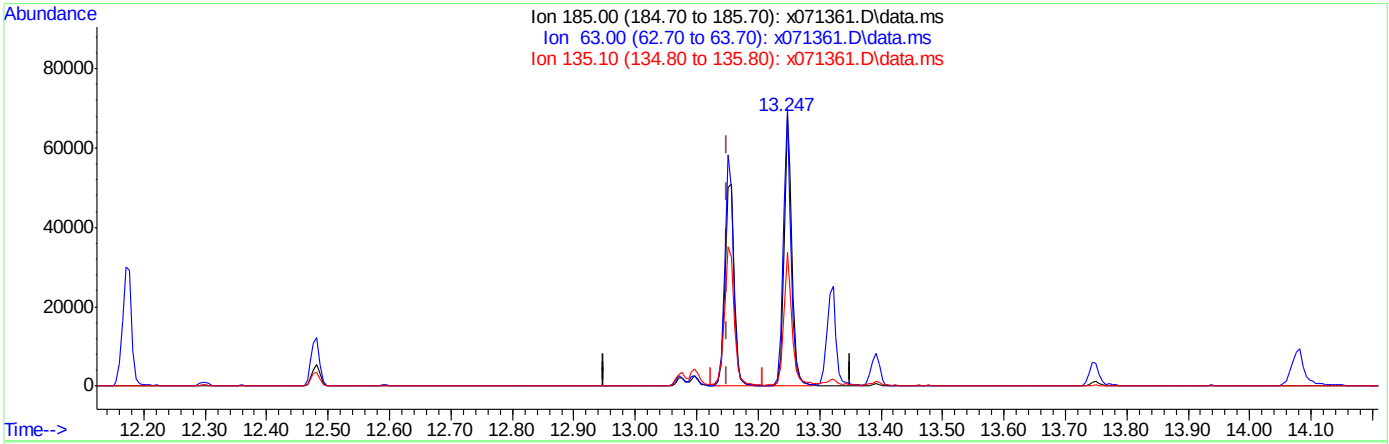
response 52639

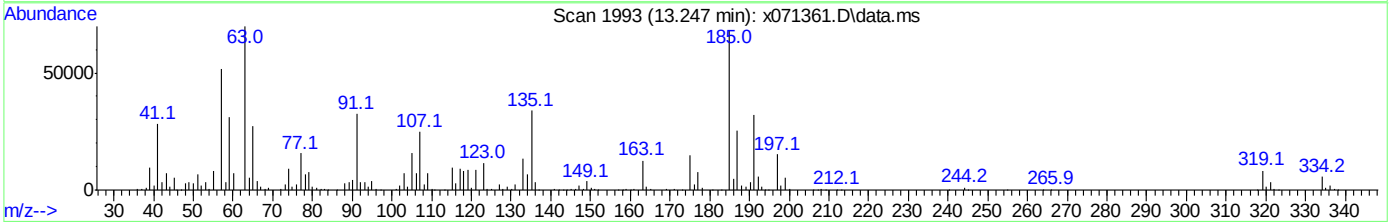
Ion	Exp%	Act%
185.00	100	100
63.00	61.10	97.59#
135.10	35.60	63.72
0.00	0.00	0.00

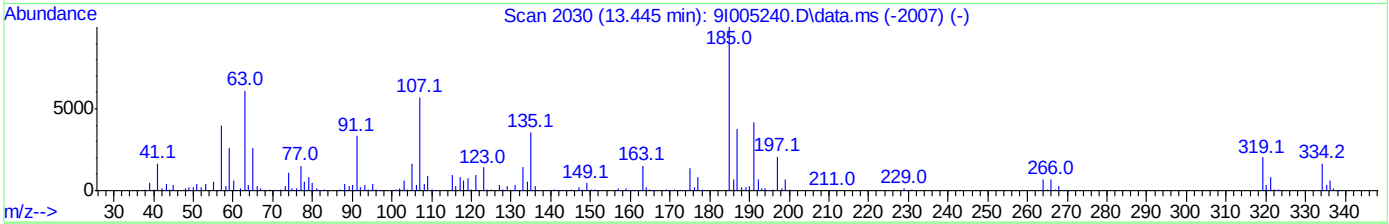
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071361.D
Acq On : 23 Jun 2020 12:12 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 23 14:01:08 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071361.D\data.ms

(147) Aramite

13.247min (+0.096) 65.43ppm m

response 116692

Ion	Exp%	Act%
185.00	100	100
63.00	61.10	102.56#
135.10	35.60	49.62
0.00	0.00	0.00

X071362.D

Manual Integrations APPROVED (compounds with "m" flag)

Naresh Jiawan 06/24/20 14:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071362.D
Acq On : 23 Jun 2020 12:37 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 23 16:55:40 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	0.000	152	0m	40.00	ppm	-6.00
22) Naphthalene-d8	0.000	136	0m	40.00	ppm	-7.43
43) Acenaphthene-d10	0.000	164	0m	40.00	ppm	-9.48
70) Phenanthrene-d10	0.000	188	0m	40.00	ppm	-11.22
92) Chrysene-d12	0.000	240	0m	40.00	ppm	-14.49
102) Perylene-d12	0.000	264	0m	40.00	ppm	-16.82
110) 1,4-Dichlorobenzene-d4A	6.005	152	162385	40.00	ppm	0.00
120) Naphthalene-d8A	7.433	136	698390	40.00	ppm	0.00
127) Acenaphthene-d10A	9.476	164	364024	40.00	ppm	0.00
136) Phenanthrene-d10A	11.225	188	682783	40.00	ppm	0.00
146) Chrysene-d12A	14.493	240	432572	40.00	ppm	0.00
153) Perylene-d12A	16.825	264	357392	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	0.000	112	0d	0.00	ppm	
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#		
9) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#		
23) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#		
47) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#		
75) 2,4,6-Tribromophenol	0.000	330	0d	0.00	ppm	
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#		
95) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#		
Target Compounds						Qvalue
111) 2-Picoline	3.983	93	578839	71.78	ppm	86
112) N-Nitrosomethylethylamine	4.111	42	403837	141.44	ppm #	54
113) Methyl methanesulfonate	4.443	80	288958	72.47	ppm	90
114) N-Nitrosodiethylamine	4.860	102	247345	77.17	ppm #	36
115) Ethyl methanesulfonate	5.186	79	400843	71.00	ppm	95
116) Pentachloroethane	5.700	167	171923	74.88	ppm	93
117) N-Nitrosopyrrolidine	6.438	100	228116	69.58	ppm #	20
118) N-Nitrosomorpholine	6.486	56	407544	118.99	ppm #	70
119) O-Toluidine	6.497	106	848373	85.24	ppm	99
121) N-Nitrosopiperidine	6.818	42	477710	124.86	ppm #	59
122) A,A-Dimethylphenethyla...	7.417	58	1993287m	96.58	ppm	
123) Hexachloropropene	7.561	213	245225	66.01	ppm	99
124) N-Nitrosodi-n-butylamine	7.935	84	428055	79.08	ppm #	53
125) p-Phenylenediamine	7.930	108	467834m	116.33	ppm	
126) Isosafrole	8.176	162	367589	80.39	ppm	83
128) Safrole	8.781	162	384141	81.55	ppm	86
129) 1-Chloronaphthalene	8.855	162	898137	79.48	ppm	97
130) Diphenyl Ether	8.946	170	623653	81.25	ppm	93
131) 1,4-Naphthoquinone	9.043	158	347003	116.71	ppm	85
132) Pentachlorobenzene	9.668	250	309864	59.10	ppm	98
133) 1-Naphthylamine	9.813	143	976524	84.19	ppm	92

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071362.D
Acq On : 23 Jun 2020 12:37 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 23 16:55:40 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration

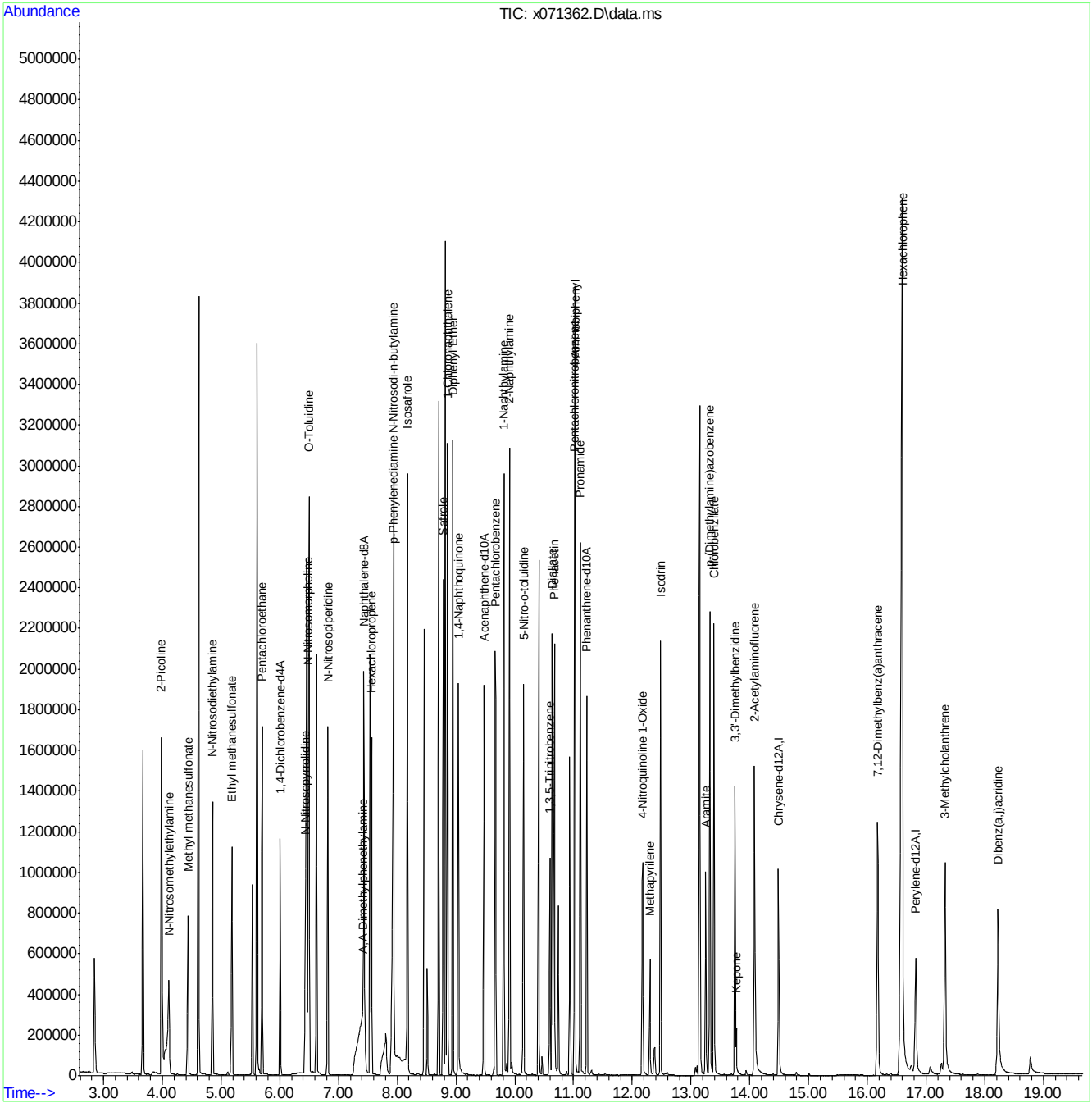
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
134) 2-Naphthylamine	9.909	143	1057229	89.49	ppm	96
135) 5-Nitro-o-toluidine	10.150	152	315750	76.78	ppm	82
137) 1,3,5-Trinitrobenzene	10.599	75	274775	63.07	ppm	90
138) Diallate	10.637	43	784030m	104.00	ppm	
139) Phenacetin	10.674	108	541870	72.54	ppm	90
140) 4-Aminobiphenyl	11.027	169	1005962	87.39	ppm	99
141) Pronamide	11.118	173	434232	71.34	ppm	98
142) Pentachloronitrobenzene	11.016	237	105065	60.46	ppm	91
143) 4-Nitroquinoline 1-Oxide	12.177	190	94011	103.40	ppm	82
144) Methapyrilene	12.295	58	273027m	31.81	ppm	
145) Isodrin	12.482	193	143445	60.54	ppm	87
147) Aramite	13.247	185	149117m	81.41	ppm	
148) p-(Dimethylamine)azobe...	13.322	120	418081	90.01	ppm	84
149) Chlorobenzilate	13.391	139	482994	87.52	ppm	72
150) Kepone	13.776	272	9074	5.86	ppm	93
151) 3,3'-Dimethylbenzidine	13.749	212	533573	82.19	ppm	98
152) 2-Acetylaminofluorene	14.081	181	512353	77.94	ppm	91
154) 7,12-Dimethylbenz(a)an...	16.178	256	409390	76.47	ppm	96
155) Hexachlorophene	16.595	196	808908	1125.67	ppm	100
156) 3-Methylcholanthrene	17.328	268	385313	80.55	ppm	92
157) Dibenz(a,j)acridine	18.226	279	538705	65.75	ppm	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071362.D
Acq On : 23 Jun 2020 12:37 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 23 16:55:40 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration



Manual Integration Approval Summary

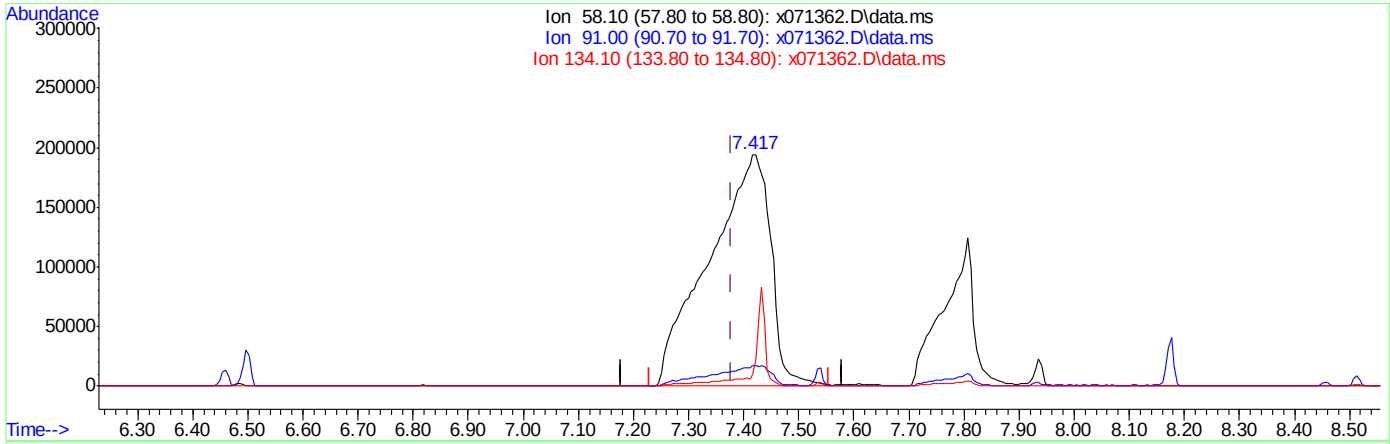
Sample Number: SX2918-IC2918
Lab FileID: X071362.D
Injection Time: 06/23/20 12:37
Method: EPA 625.1
Analyst approved: 06/24/20 09:50 Martha Valls
Supervisor approved: 06/24/20 14:07 Naresh Jiawan

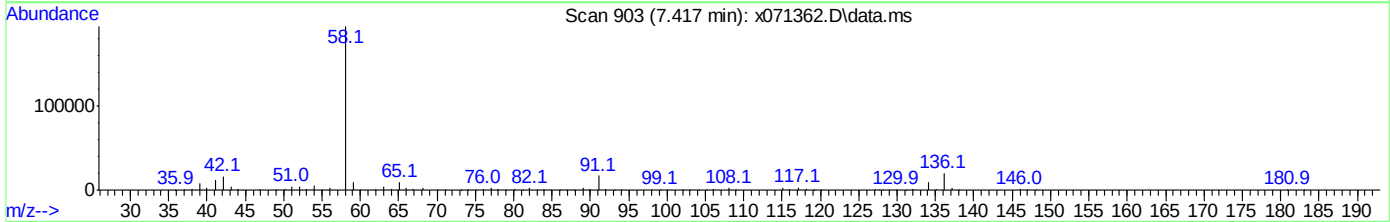
Parameter	CAS	Sig#	R.T. (min.)	Reason
A,A-Dimethylphenethylamine	122-09-8		7.42	Split peak
p-Phenylenediamine	106-50-3		7.93	Split peak
Diallate	2303-16-4		10.64	Split peak
Methapyrilene	91-80-5		12.29	Split peak
Aramite	140-57-8		13.25	Split peak

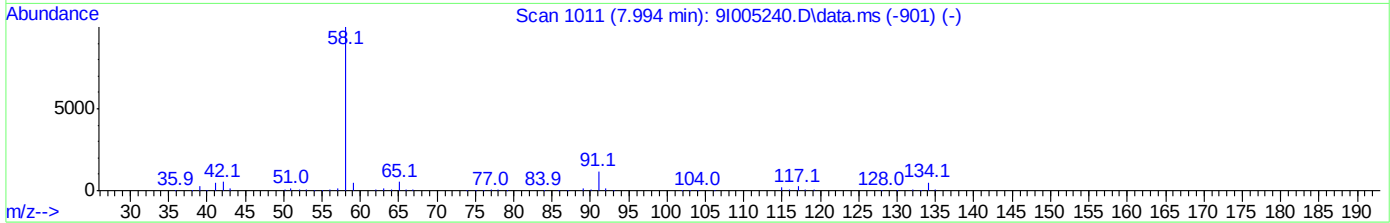
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071362.D
Acq On : 23 Jun 2020 12:37 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 23 14:01:10 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071362.D\data.ms

(122) A,A-Dimethylphenethylamine

7.417min (+0.037) 74.94ppm

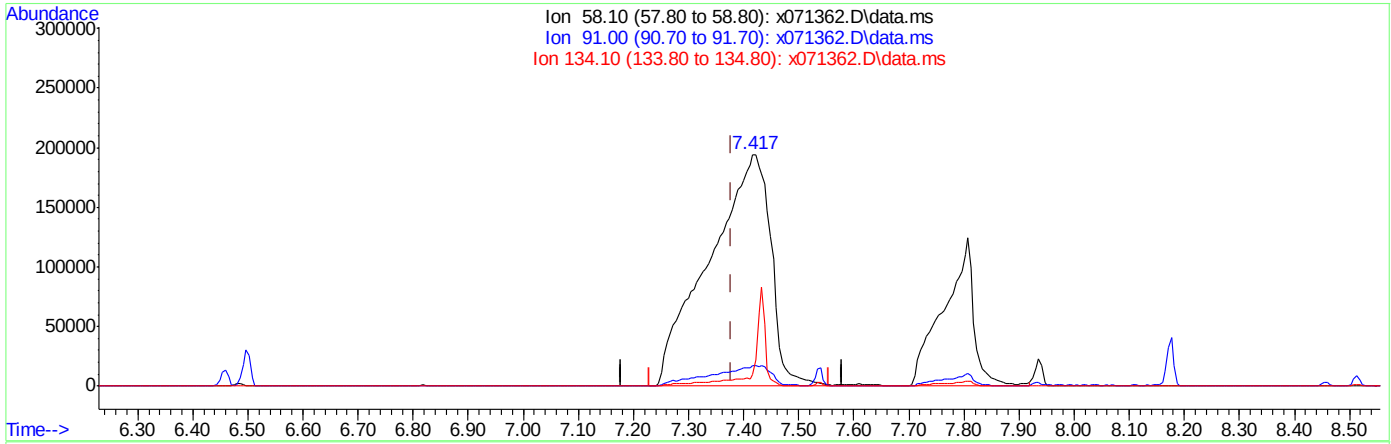
response 1509105

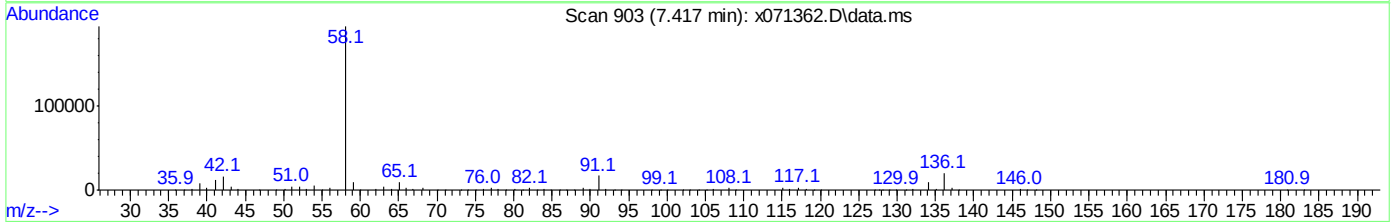
Ion	Exp%	Act%
58.10	100	100
91.00	11.70	8.64
134.10	5.10	4.79
0.00	0.00	0.00

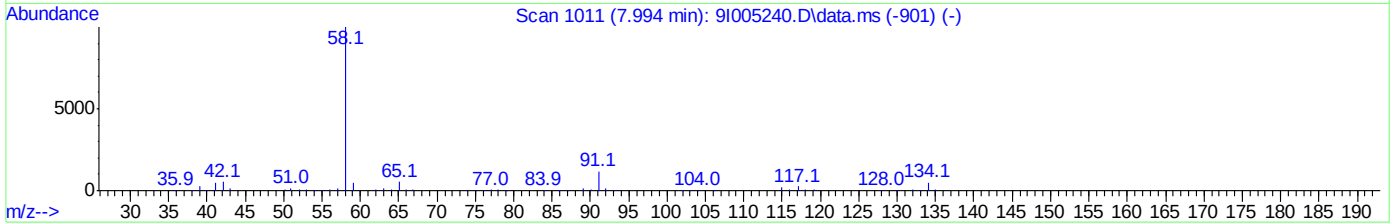
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071362.D
Acq On : 23 Jun 2020 12:37 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 23 14:01:10 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071362.D\data.ms

(122) A,A-Dimethylphenethylamine

7.417min (+0.037) 96.58ppm m

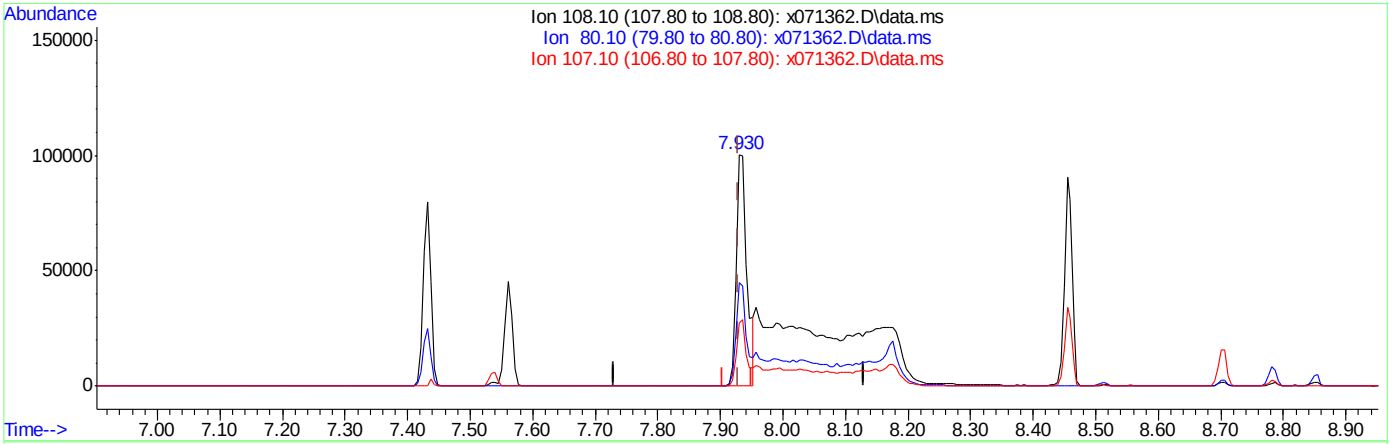
response 1993287

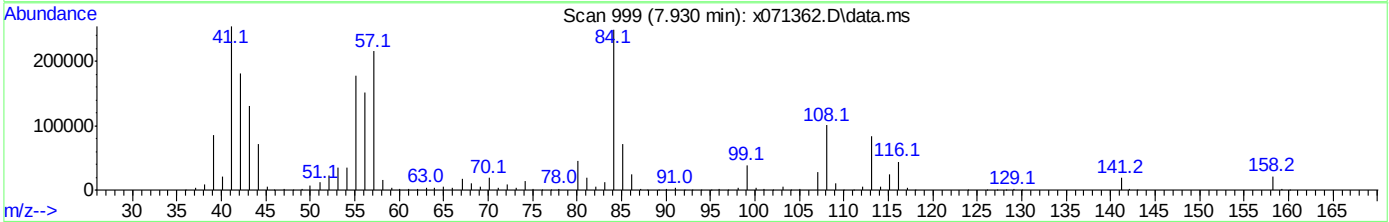
Ion	Exp%	Act%
58.10	100	100
91.00	11.70	8.75
134.10	5.10	4.81
0.00	0.00	0.00

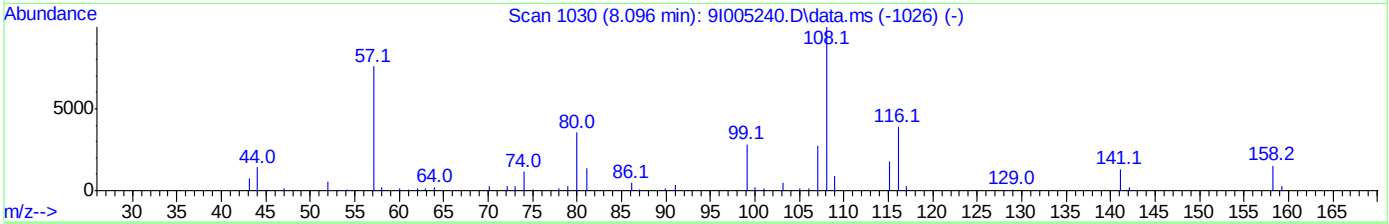
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071362.D
Acq On : 23 Jun 2020 12:37 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 23 14:01:10 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071362.D\data.ms

(125) p-Phenylenediamine

7.930min (+0.000) 21.84ppm

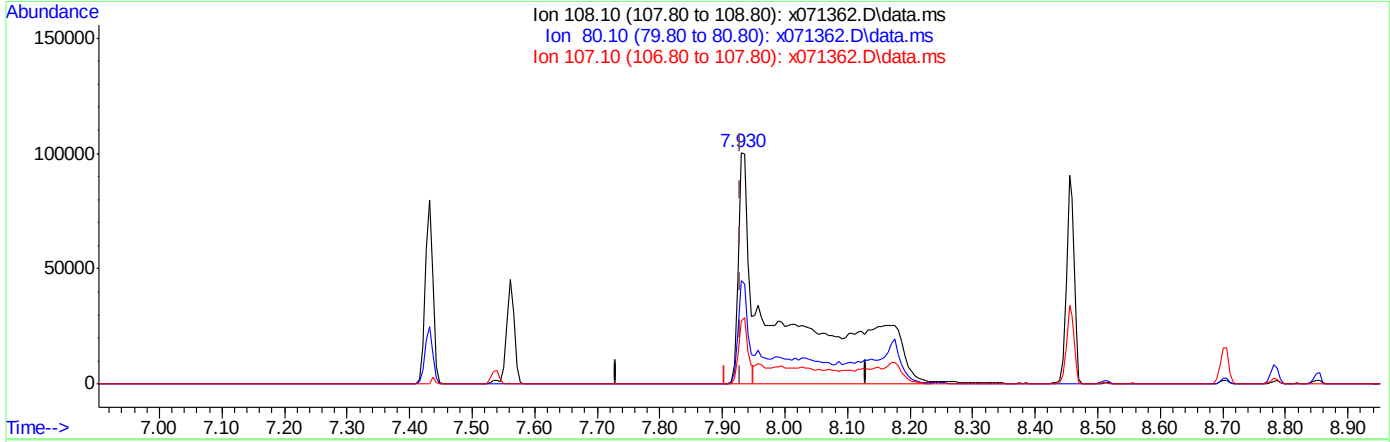
response 117920

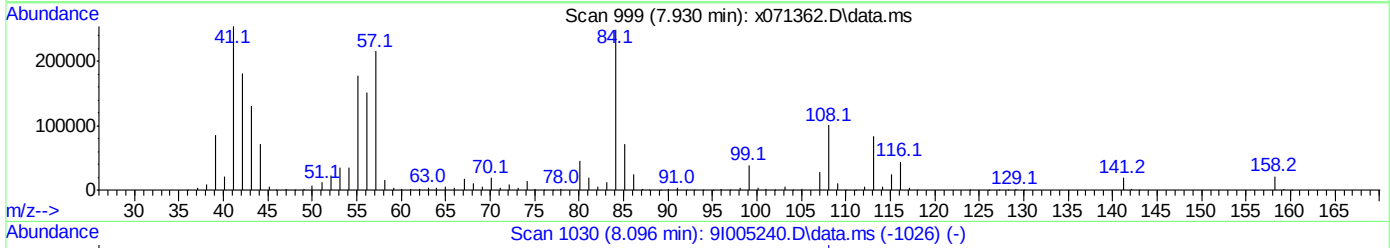
Ion	Exp%	Act%
108.10	100	100
80.10	35.50	45.05
107.10	27.70	27.34
0.00	0.00	0.00

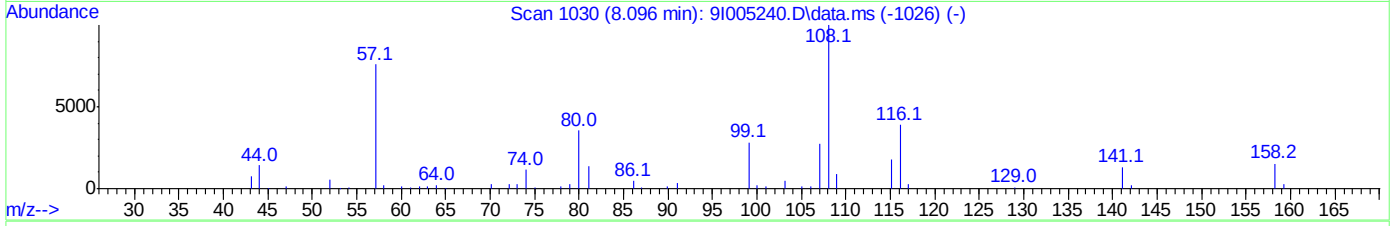
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071362.D
Acq On : 23 Jun 2020 12:37 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 23 14:01:10 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071362.D\data.ms

(125) p-Phenylenediamine

7.930min (+0.000) 116.33ppm m

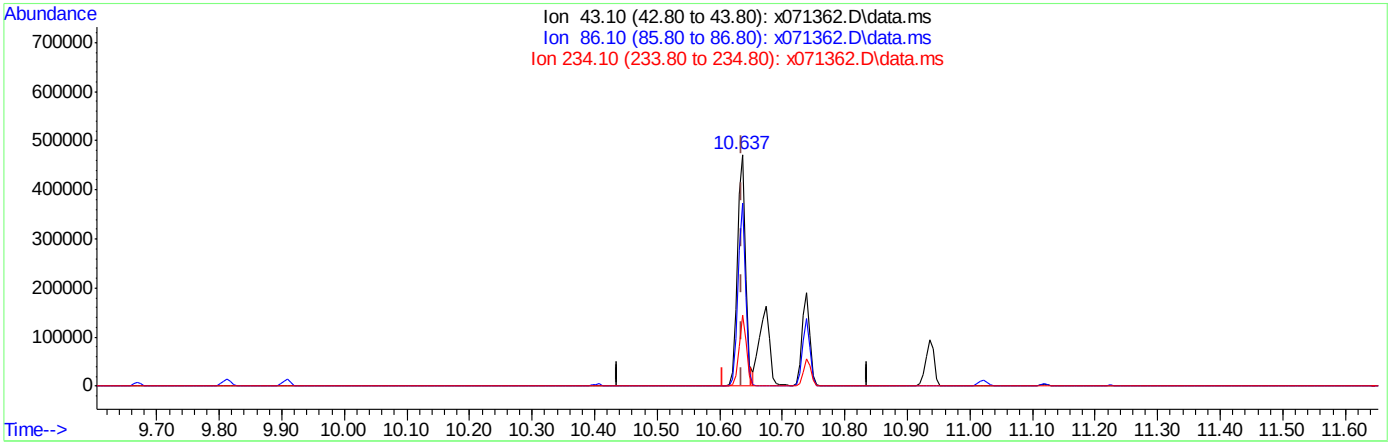
response 467834

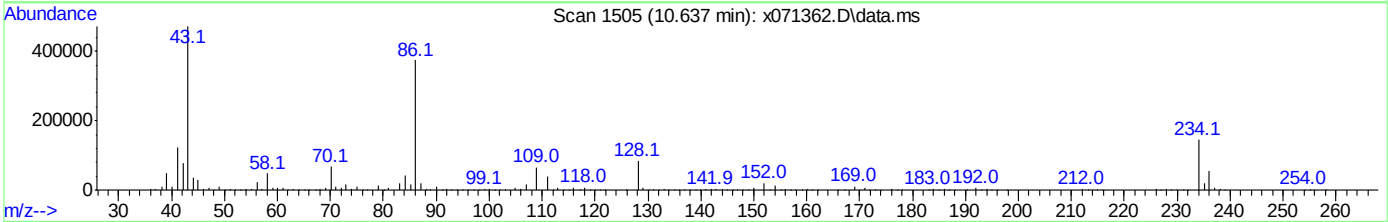
Ion	Exp%	Act%
108.10	100	100
80.10	35.50	44.62
107.10	27.70	27.32
0.00	0.00	0.00

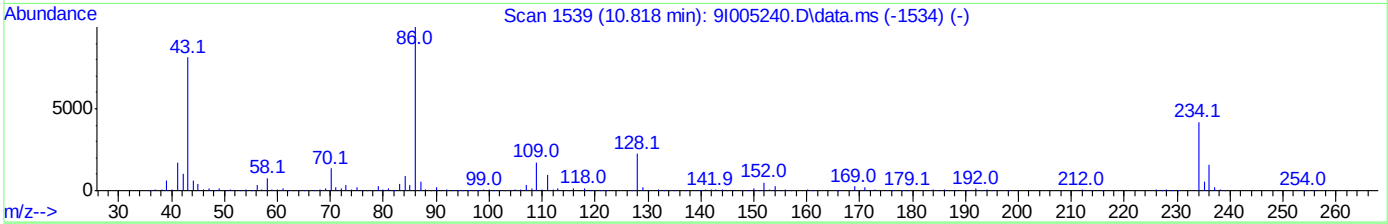
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071362.D
Acq On : 23 Jun 2020 12:37 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 23 14:01:10 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071362.D\data.ms

(138) Diallate

10.637min (+0.000) 56.94ppm

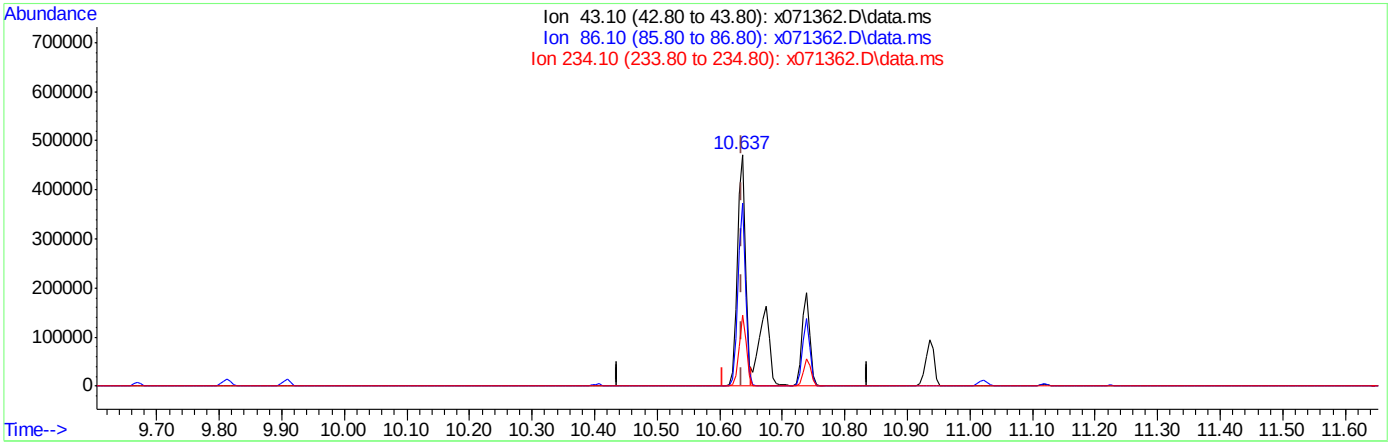
response 429265

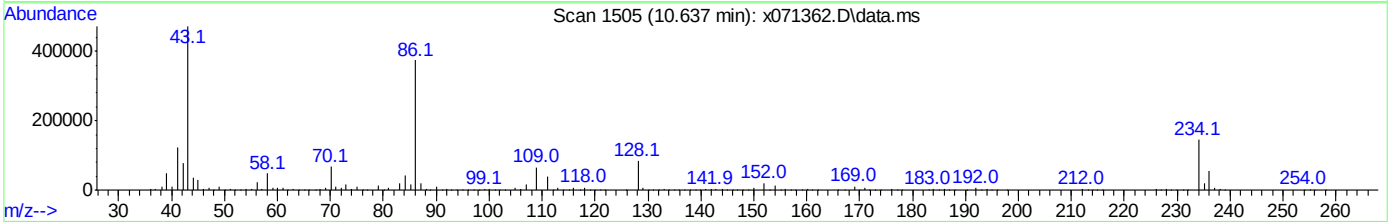
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	81.31#
234.10	51.50	31.39
0.00	0.00	0.00

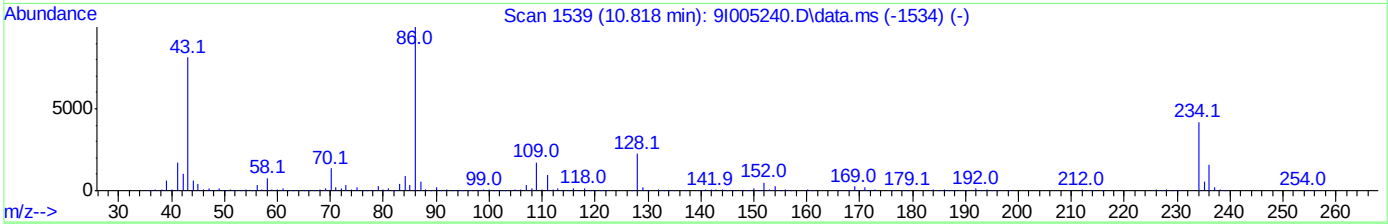
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071362.D
Acq On : 23 Jun 2020 12:37 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 23 14:01:10 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071362.D\data.ms

(138) Diallate

10.637min (+0.000) 104.00ppm m

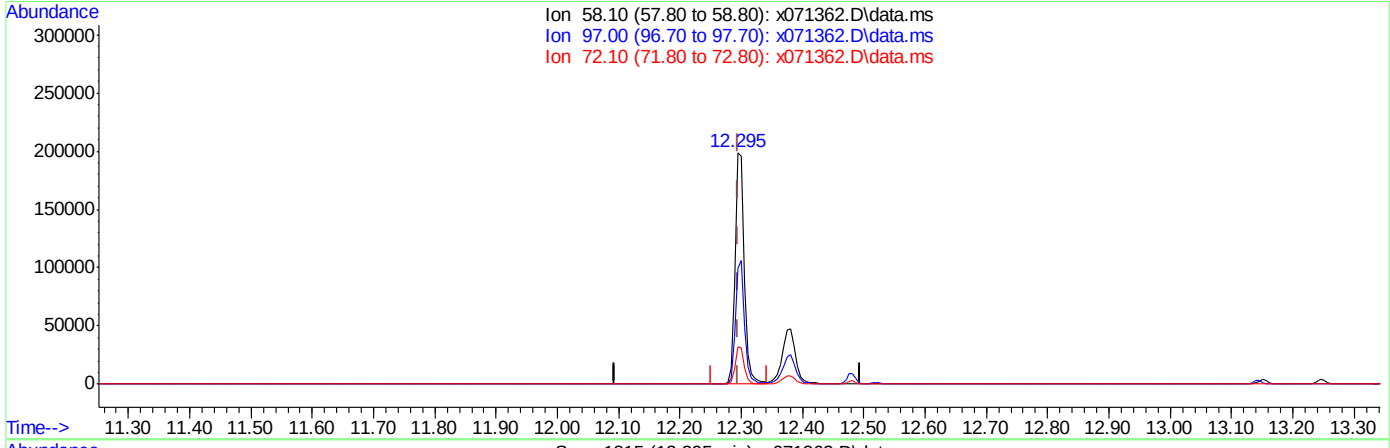
response 784030

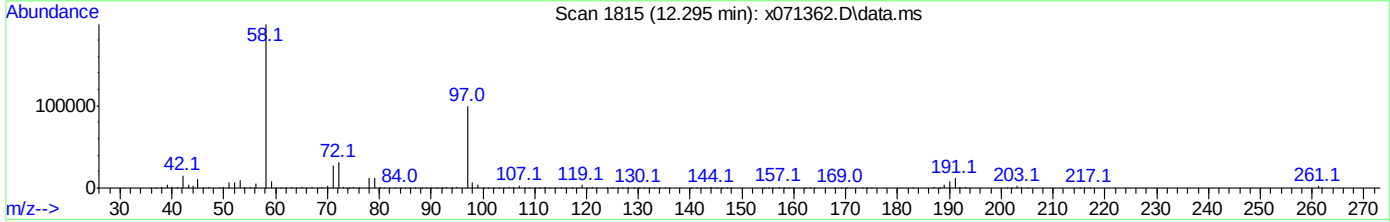
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	79.23#
234.10	51.50	30.56
0.00	0.00	0.00

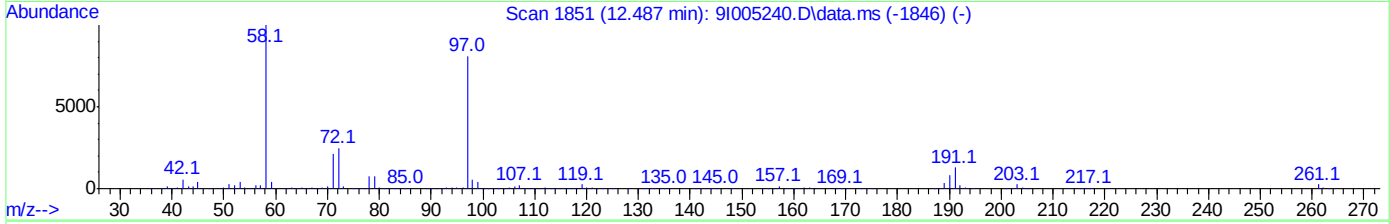
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071362.D
Acq On : 23 Jun 2020 12:37 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 23 14:01:10 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071362.D\data.ms

(144) Methapyrilene

12.295min (+0.000) 23.54ppm

response 201112

Ion	Exp%	Act%
58.10	100	100
97.00	80.90	50.07#
72.10	24.80	15.89
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071362.D
Acq On : 23 Jun 2020 12:37 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 23 14:01:10 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
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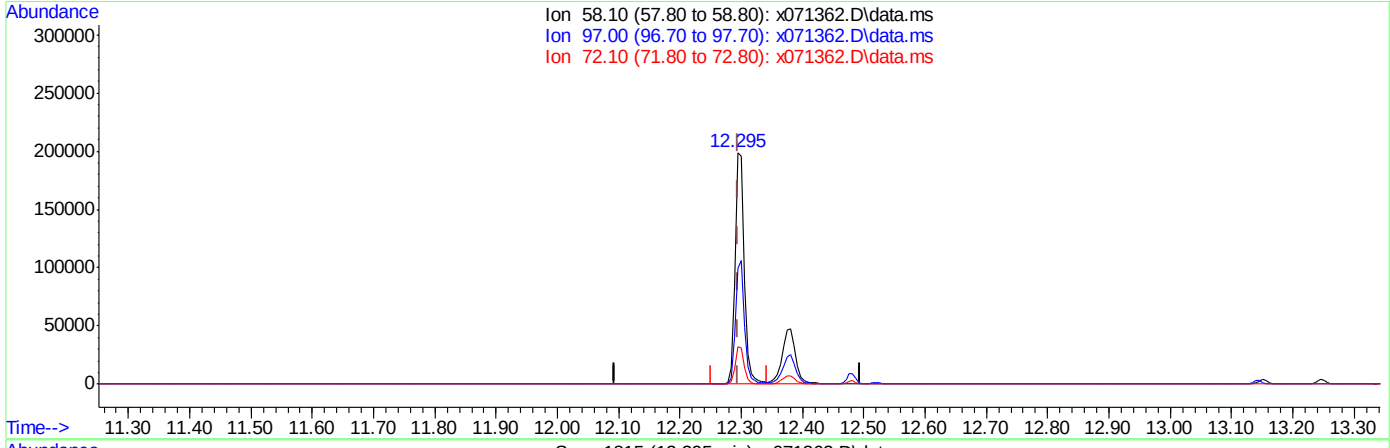

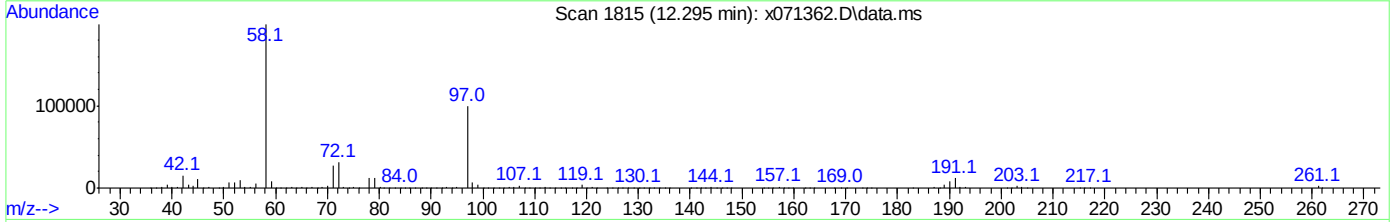

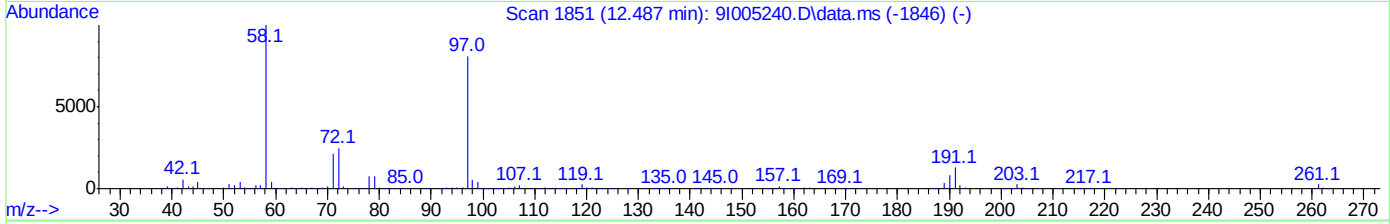

TIC: x071362.D\data.ms

(144) Methapyrilene

12.295min (+0.000) 31.81ppm m

response 273027

Ion	Exp%	Act%
58.10	100	100
97.00	80.90	50.10#
72.10	24.80	15.93
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071362.D
Acq On : 23 Jun 2020 12:37 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 23 14:01:10 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
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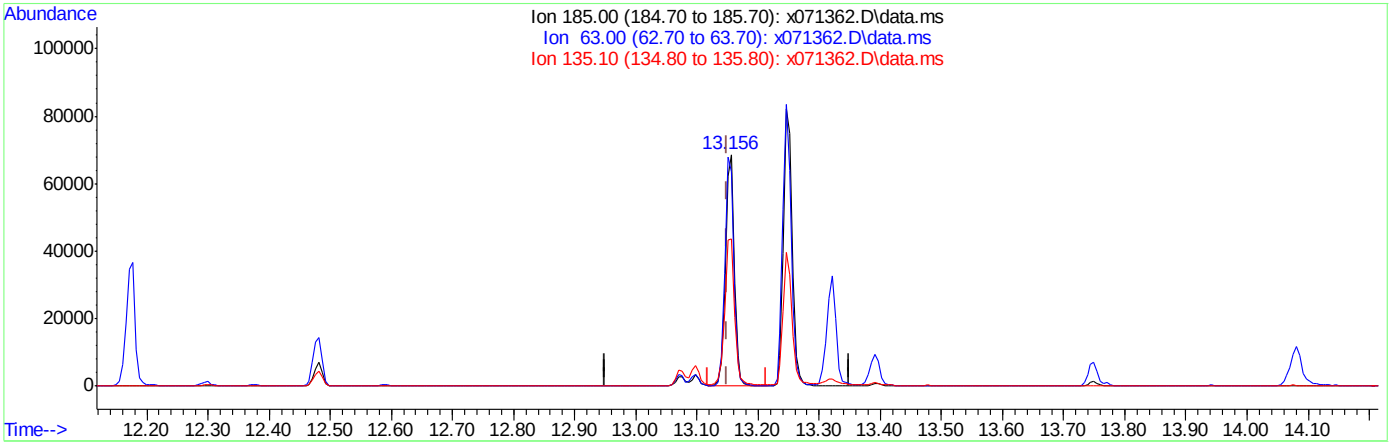
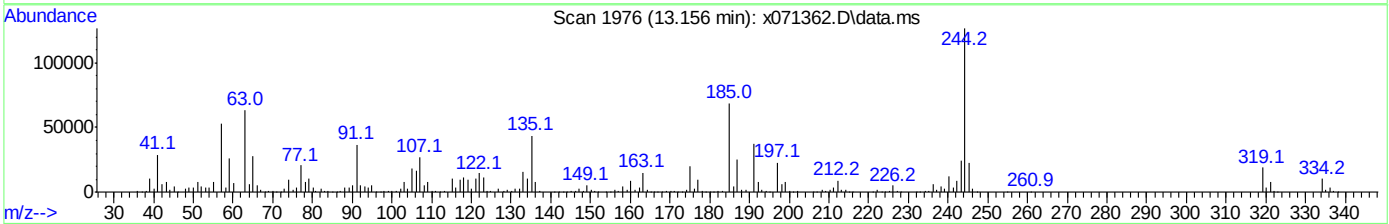
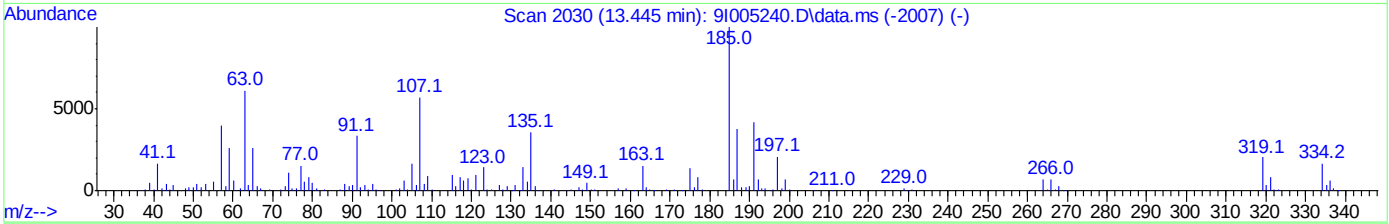






TIC: x071362.D\data.ms

(147) Aramite

13.156min (+0.005) 39.17ppm

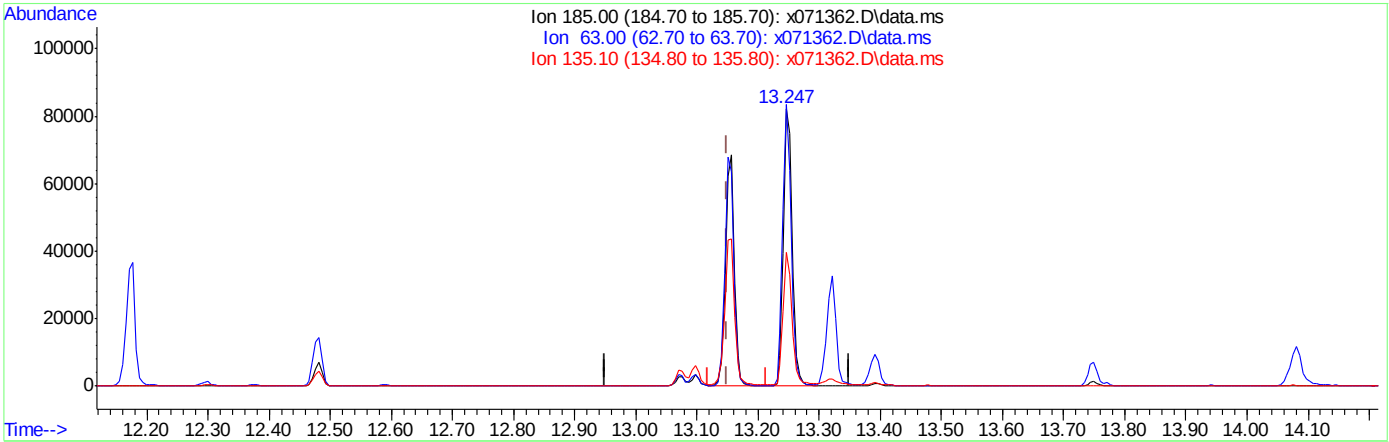
response 67896

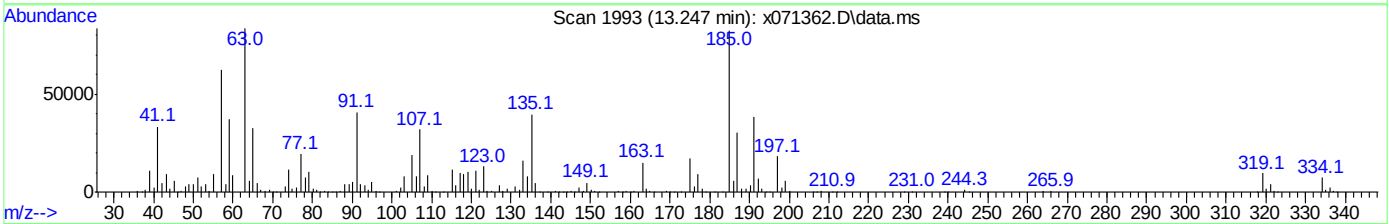
Ion	Exp%	Act%
185.00	100	100
63.00	61.10	92.71#
135.10	35.60	63.15
0.00	0.00	0.00

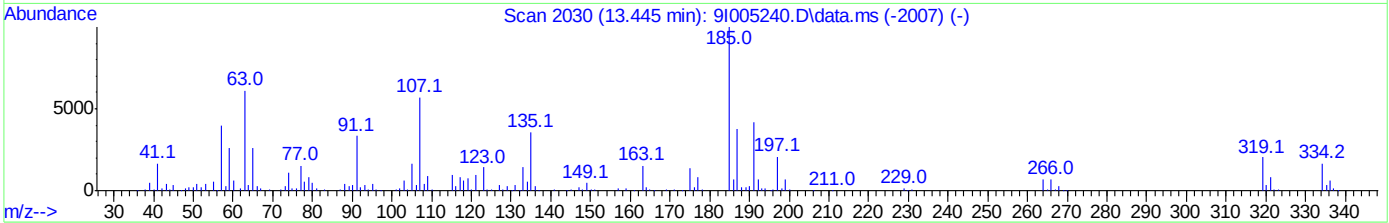
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071362.D
Acq On : 23 Jun 2020 12:37 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 23 14:01:10 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071362.D\data.ms

(147) Aramite

13.247min (+0.096) 81.41ppm m

response 149117

Ion	Exp%	Act%
185.00	100	100
63.00	61.10	101.63#
135.10	35.60	48.30
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 06/24/20 14:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071363.D
Acq On : 23 Jun 2020 1:03 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 23 17:10:52 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	0.000	152	0m	40.00	ppm		-6.00
22) Naphthalene-d8	0.000	136	0m	40.00	ppm		-7.43
43) Acenaphthene-d10	0.000	164	0m	40.00	ppm		-9.48
70) Phenanthrene-d10	0.000	188	0m	40.00	ppm		-11.22
92) Chrysene-d12	0.000	240	0m	40.00	ppm		-14.49
102) Perylene-d12	0.000	264	0m	40.00	ppm		-16.82
110) 1,4-Dichlorobenzene-d4A	6.005	152	163786	40.00	ppm		0.00
120) Naphthalene-d8A	7.433	136	700883	40.00	ppm		0.00
127) Acenaphthene-d10A	9.476	164	365750	40.00	ppm		0.00
136) Phenanthrene-d10A	11.225	188	688047	40.00	ppm		0.00
146) Chrysene-d12A	14.488	240	434561	40.00	ppm		0.00
153) Perylene-d12A	16.836	264	355855	40.00	ppm		0.02
System Monitoring Compounds							
7) 2-Fluorophenol	0.000	112	0d	0.00	ppm		
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#			
9) Phenol-d5	0.000	99	0d	0.00	ppm		
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#			
23) Nitrobenzene-d5	0.000	82	0d	0.00	ppm		
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#			
47) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm		
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#			
75) 2,4,6-Tribromophenol	0.000	330	0d	0.00	ppm		
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#			
95) Terphenyl-d14	0.000	244	0d	0.00	ppm		
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#			
Target Compounds							Qvalue
111) 2-Picoline	3.983	93	770885	94.78	ppm		88
112) N-Nitrosomethylethylamine	4.111	42	538567	187.02	ppm	#	54
113) Methyl methanesulfonate	4.443	80	379784	94.44	ppm		91
114) N-Nitrosodiethylamine	4.860	102	325074	100.55	ppm	#	26
115) Ethyl methanesulfonate	5.192	79	529425	92.97	ppm		96
116) Pentachloroethane	5.700	167	227433	98.21	ppm		94
117) N-Nitrosopyrrolidine	6.449	100	300078	90.78	ppm	#	51
118) N-Nitrosomorpholine	6.491	56	515740	149.30	ppm	#	72
119) O-Toluidine	6.502	106	1097953	109.37	ppm		99
121) N-Nitrosopiperidine	6.818	42	615840	160.39	ppm	#	58
122) A,A-Dimethylphenethyla...	7.449	58	2657015m	124.39	ppm		
123) Hexachloropropene	7.561	213	325540	87.32	ppm		99
124) N-Nitrosodi-n-butylamine	7.941	84	552594	98.13	ppm	#	61
125) p-Phenylenediamine	7.930	108	534166m	152.00	ppm		
126) Isosafrole	8.176	162	476964	103.94	ppm		80
128) Safrole	8.786	162	507081	107.15	ppm		90
129) 1-Chloronaphthalene	8.856	162	1155136	101.74	ppm		97
130) Diphenyl Ether	8.946	170	802823	104.10	ppm		92
131) 1,4-Naphthoquinone	9.043	158	340836m	109.51	ppm		
132) Pentachlorobenzene	9.674	250	407827	77.42	ppm		99
133) 1-Naphthylamine	9.818	143	1293951	111.03	ppm		95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071363.D
Acq On : 23 Jun 2020 1:03 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 23 17:10:52 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
134) 2-Naphthylamine	9.915	143	1364529	114.95	ppm	98
135) 5-Nitro-o-toluidine	10.155	152	423615	100.08	ppm	87
137) 1,3,5-Trinitrobenzene	10.599	75	371047	82.63	ppm	87
138) Diallate	10.637	43	1020639m	134.35	ppm	
139) Phenacetin	10.679	108	727692	94.25	ppm	89
140) 4-Aminobiphenyl	11.027	169	1255640	108.24	ppm	99
141) Pronamide	11.123	173	570411	91.47	ppm	98
142) Pentachloronitrobenzene	11.022	237	137647	78.60	ppm	92
143) 4-Nitroquinoline 1-Oxide	12.177	190	117036	118.63	ppm	82
144) Methapyrilene	12.300	58	346867m	39.90	ppm	
145) Isodrin	12.482	193	190850	79.93	ppm	85
147) Aramite	13.252	185	197374m	104.24	ppm	
148) p-(Dimethylamine)azobe...	13.322	120	548044	122.37	ppm	84
149) Chlorobenzilate	13.391	139	629934	111.55	ppm	72
150) Kepone	13.776	272	19564	12.50	ppm	93
151) 3,3'-Dimethylbenzidine	13.750	212	651285	98.88	ppm	98
152) 2-Acetylaminofluorene	14.087	181	686507	98.52	ppm	92
154) 7,12-Dimethylbenz(a)an...	16.183	256	539852	99.92	ppm	95
155) Hexachlorophene	16.600	196	1092597	1366.31	ppm	98
156) 3-Methylcholanthrene	17.333	268	523043	108.16	ppm	94
157) Dibenz(a,j)acridine	18.232	279	769588	88.43	ppm	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
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Acq On : 23 Jun 2020 1:03 pm
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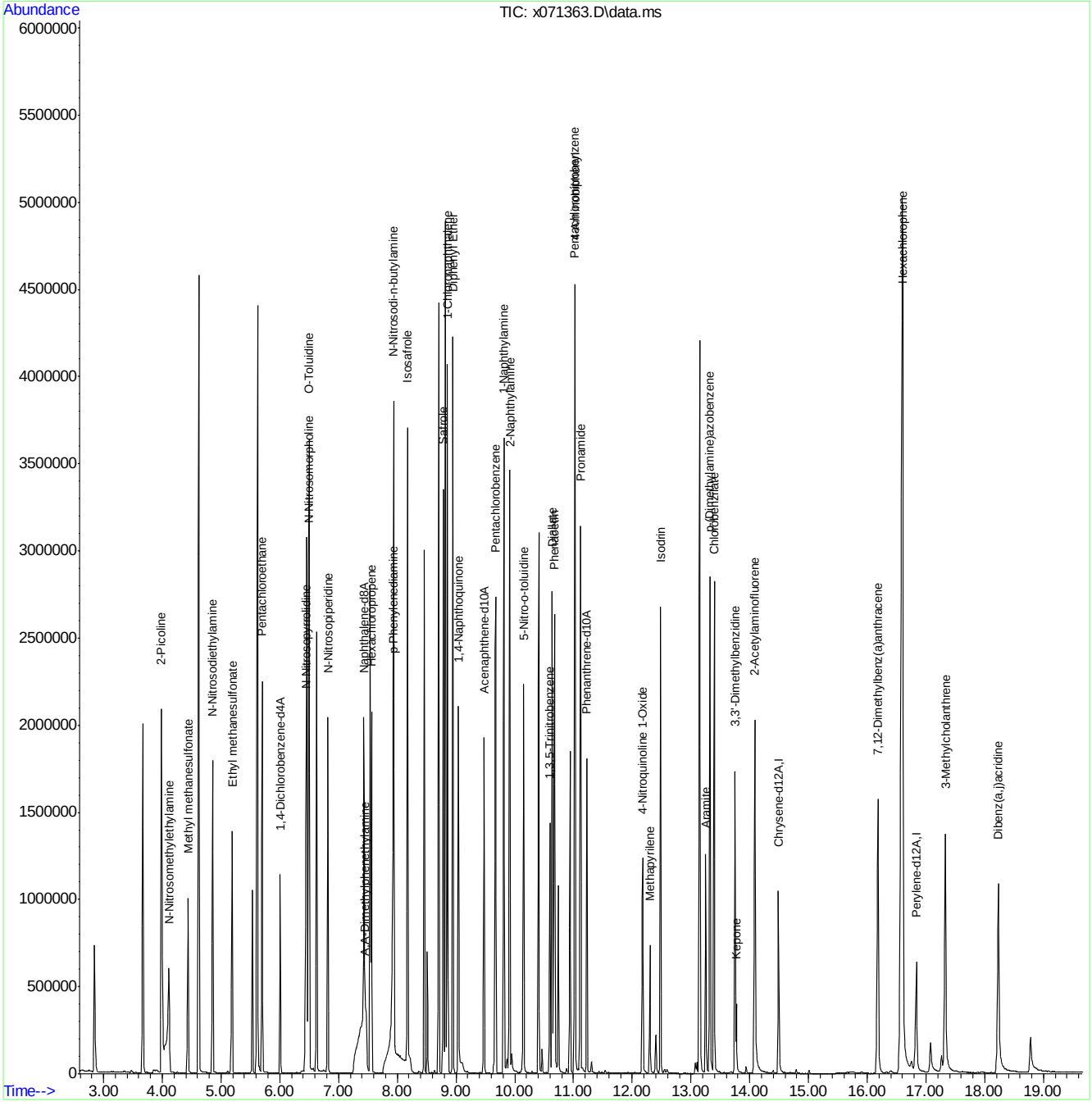


Manual Integration Approval Summary

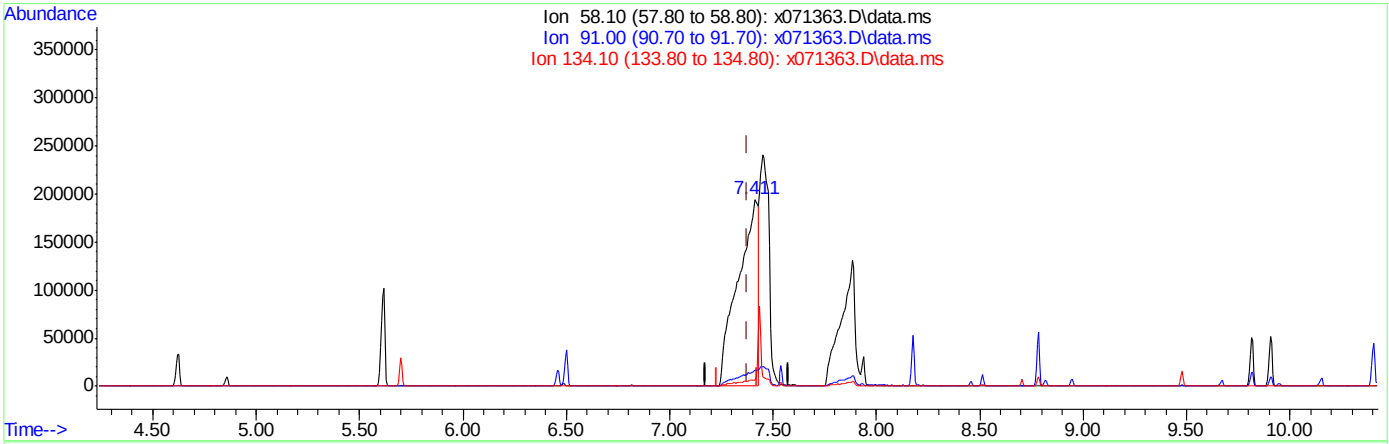
Sample Number: SX2918-IC2918 **Method:** EPA 625.1
Lab FileID: X071363.D **Analyst approved:** 06/24/20 09:50 Martha Valls
Injection Time: 06/23/20 13:03 **Supervisor approved:** 06/24/20 14:07 Naresh Jiawan

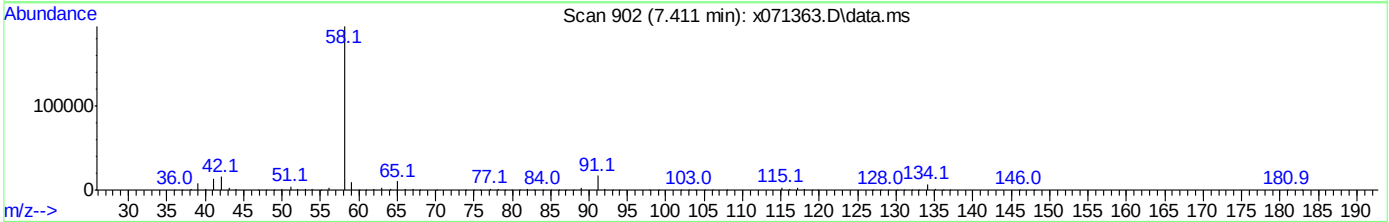
Parameter	CAS	Sig#	R.T. (min.)	Reason
A,A-Dimethylphenethylamine	122-09-8		7.45	Split peak
p-Phenylenediamine	106-50-3		7.93	Split peak
Diallate	2303-16-4		10.64	Split peak
Methapyrilene	91-80-5		12.30	Split peak
Aramite	140-57-8		13.25	Split peak

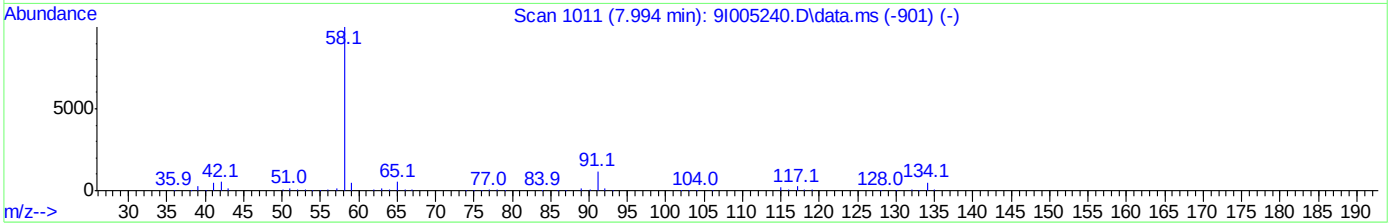
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071363.D
Acq On : 23 Jun 2020 1:03 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 23 14:01:12 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071363.D\data.ms

(122) A,A-Dimethylphenethylamine

7.411min (+0.032) 64.09ppm

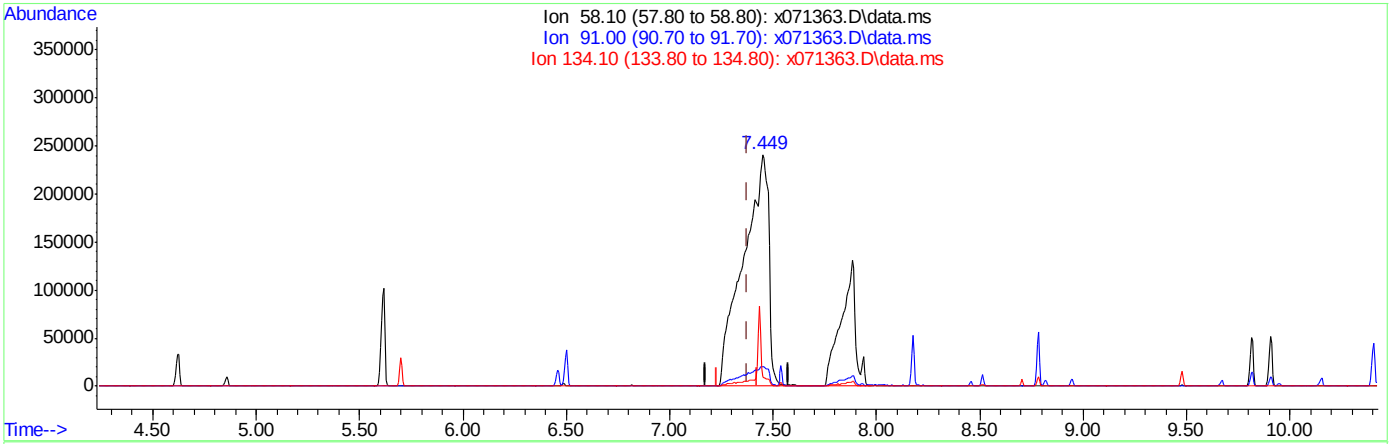
response 1279100

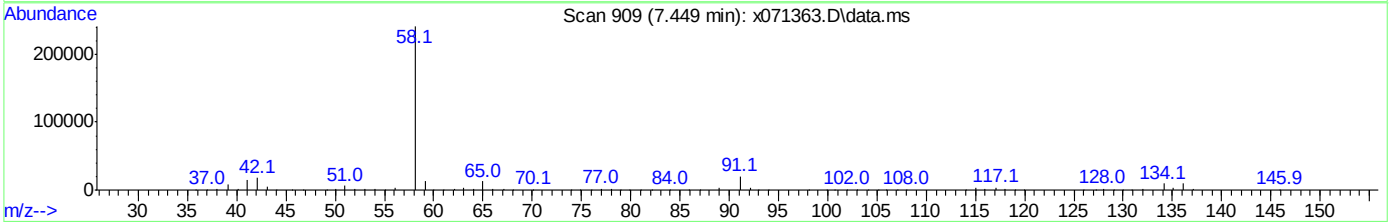
Ion	Exp%	Act%
58.10	100	100
91.00	11.70	8.33
134.10	5.10	0.00
0.00	0.00	0.00

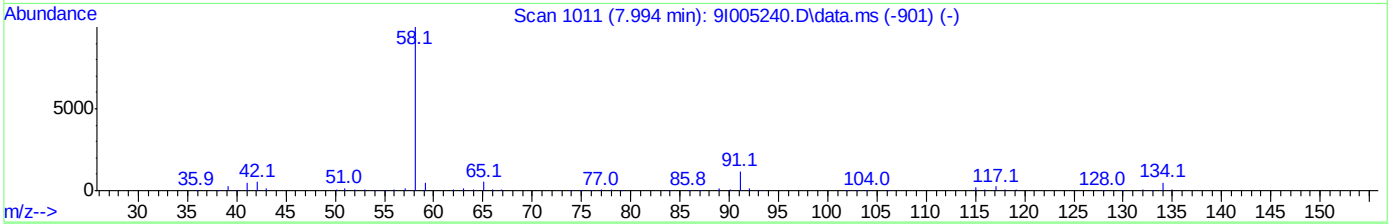
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071363.D
Acq On : 23 Jun 2020 1:03 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 23 14:01:12 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071363.D\data.ms

(122) A,A-Dimethylphenethylamine

7.449min (+0.070) 124.39ppm m

response 2657015

Ion	Exp%	Act%
58.10	100	100
91.00	11.70	8.26
134.10	5.10	4.07
0.00	0.00	0.00

FA77581

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071363.D
Acq On : 23 Jun 2020 1:03 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 23 14:01:12 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
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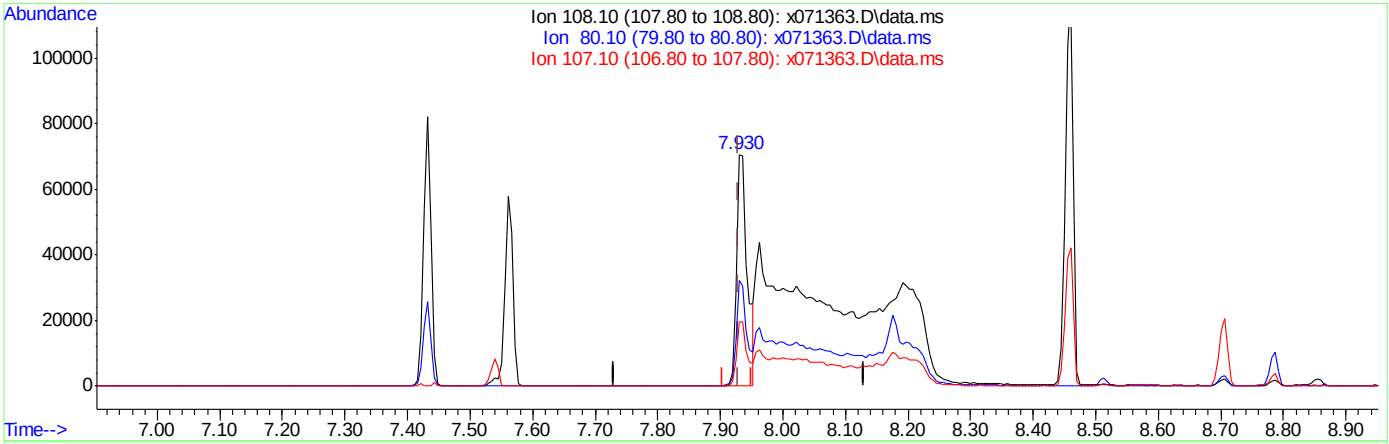
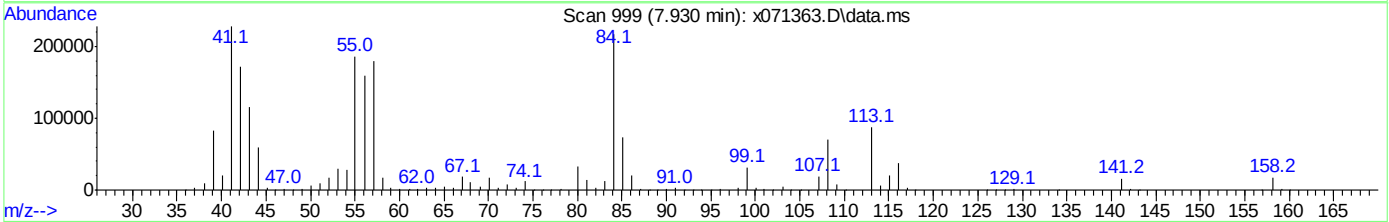
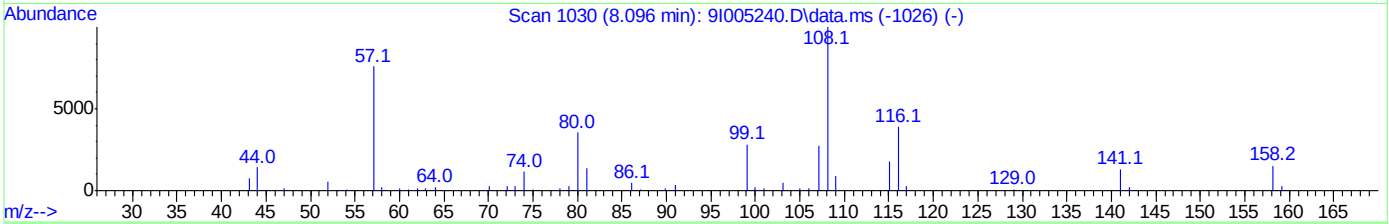






TIC: x071363.D\data.ms

(125) p-Phenylenediamine

7.930min (+0.000) 15.16ppm

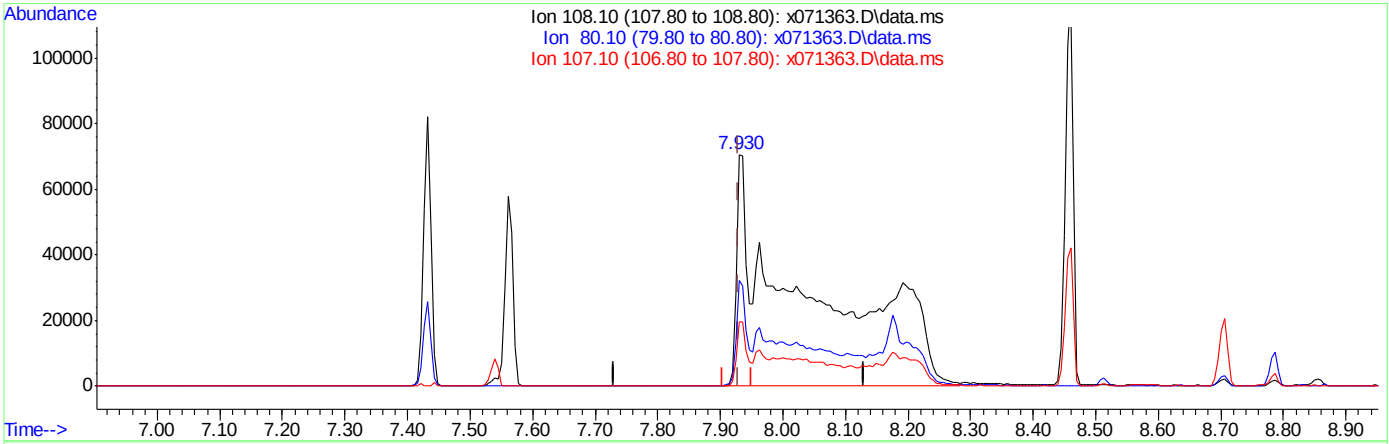
response 83601

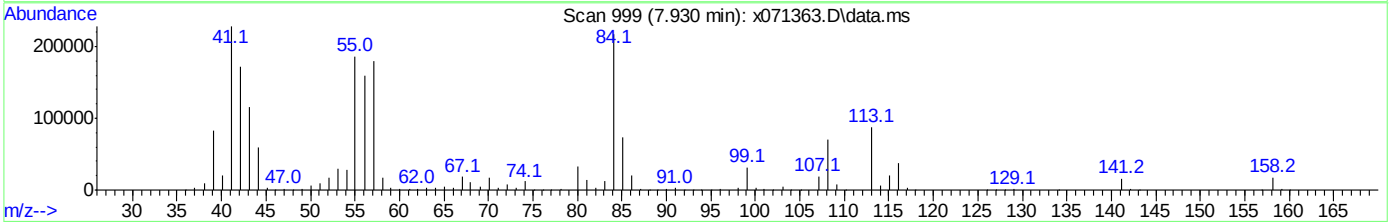
Ion	Exp%	Act%
108.10	100	100
80.10	35.50	46.00
107.10	27.70	27.66
0.00	0.00	0.00

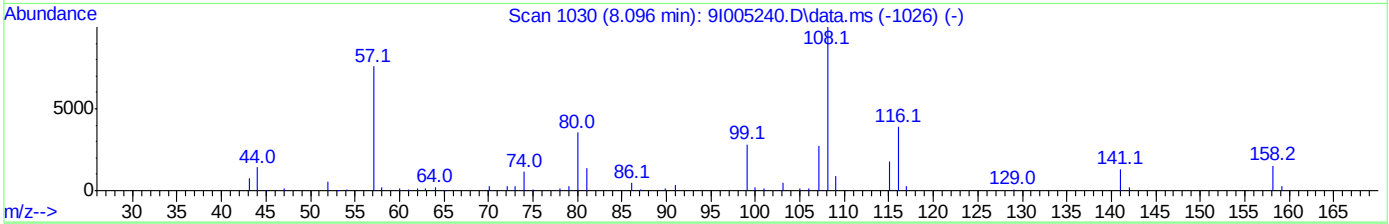
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071363.D
Acq On : 23 Jun 2020 1:03 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 23 14:01:12 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071363.D\data.ms

(125) p-Phenylenediamine

7.930min (+0.000) 152.00ppm m

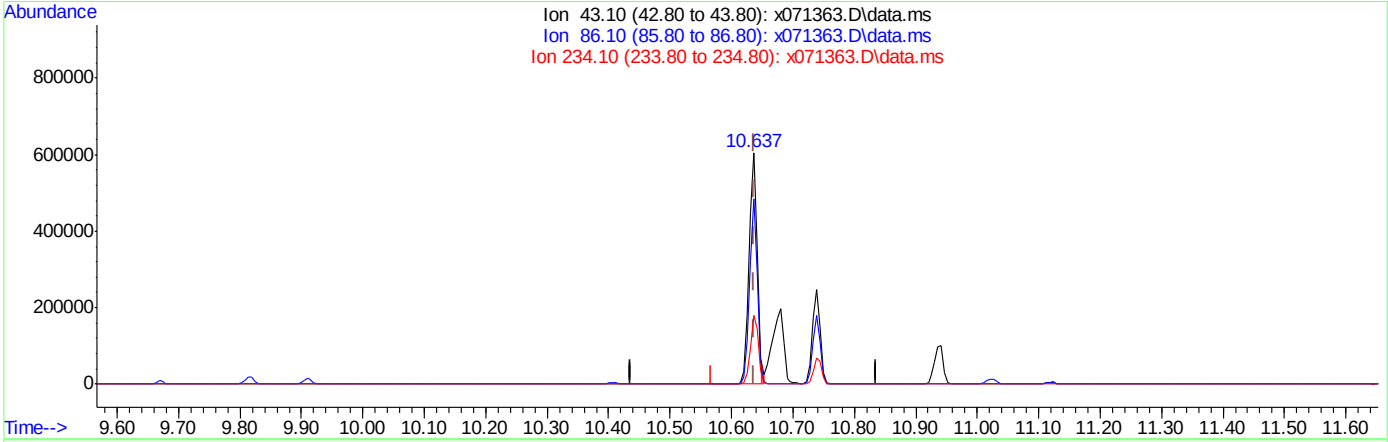
response 534166

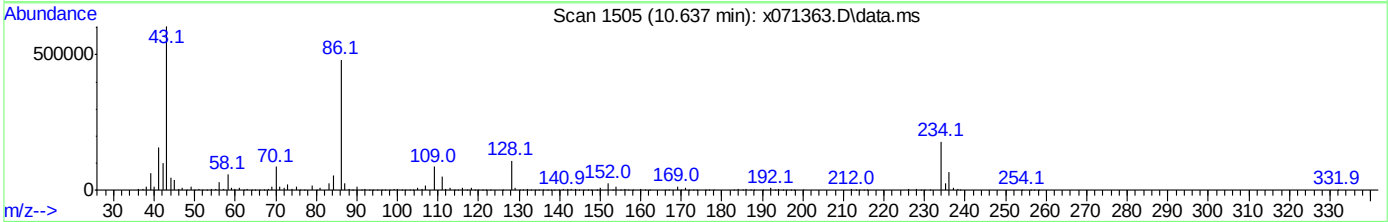
Ion	Exp%	Act%
108.10	100	100
80.10	35.50	45.66
107.10	27.70	27.59
0.00	0.00	0.00

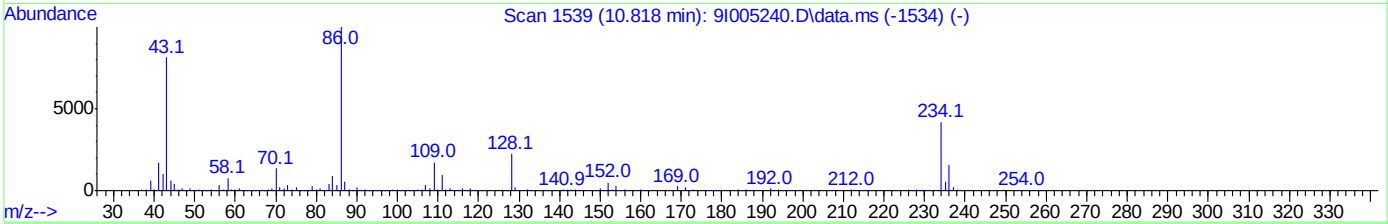
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071363.D
Acq On : 23 Jun 2020 1:03 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 23 14:01:12 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071363.D\data.ms

(138) Diallate

10.637min (+0.000) 72.84ppm

response 553405

Ion	Exp%	Act%
43.10	100	100
86.10	123.10	80.94#
234.10	51.50	29.93
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071363.D
Acq On : 23 Jun 2020 1:03 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
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QLast Update : Wed May 13 14:15:42 2020
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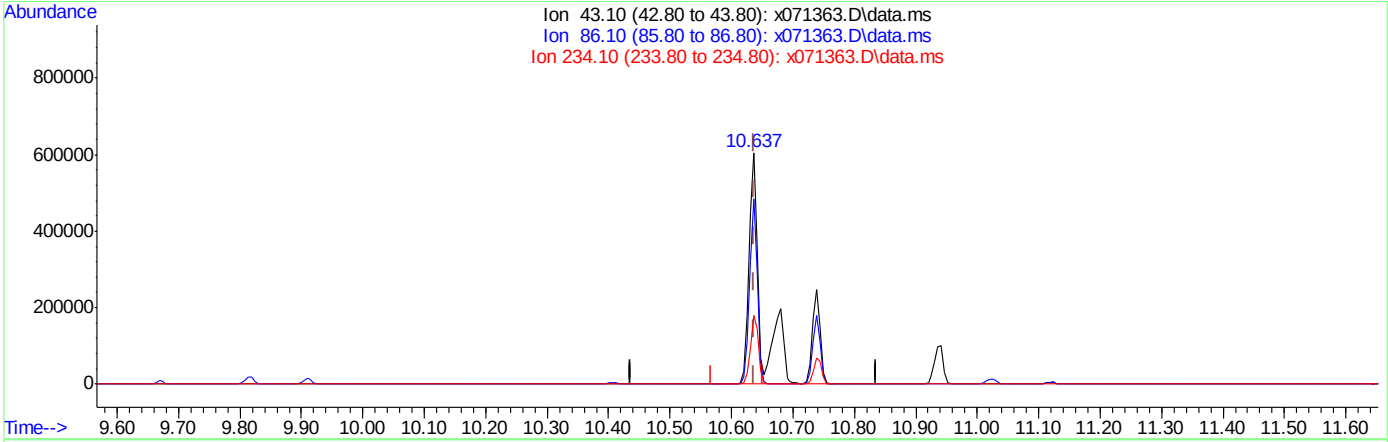

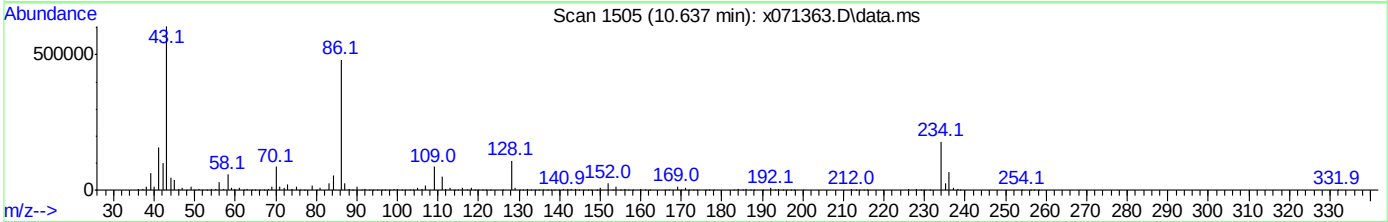

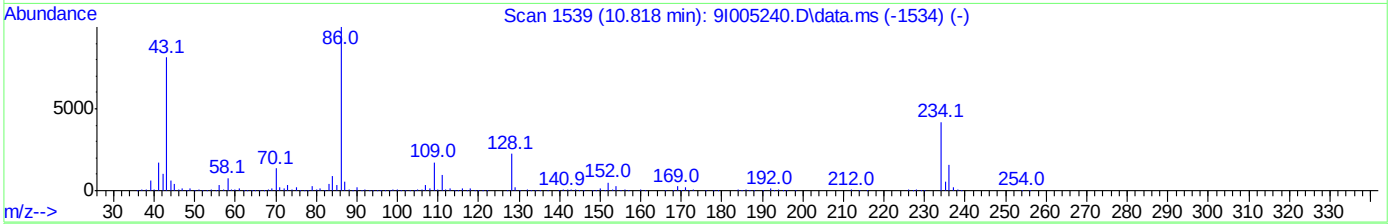

TIC: x071363.D\data.ms

(138) Diallate

10.637min (+0.000) 134.35ppm m

response 1020639

Ion	Exp%	Act%
43.10	100	100
86.10	123.10	79.79#
234.10	51.50	29.55
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071363.D
Acq On : 23 Jun 2020 1:03 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
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Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
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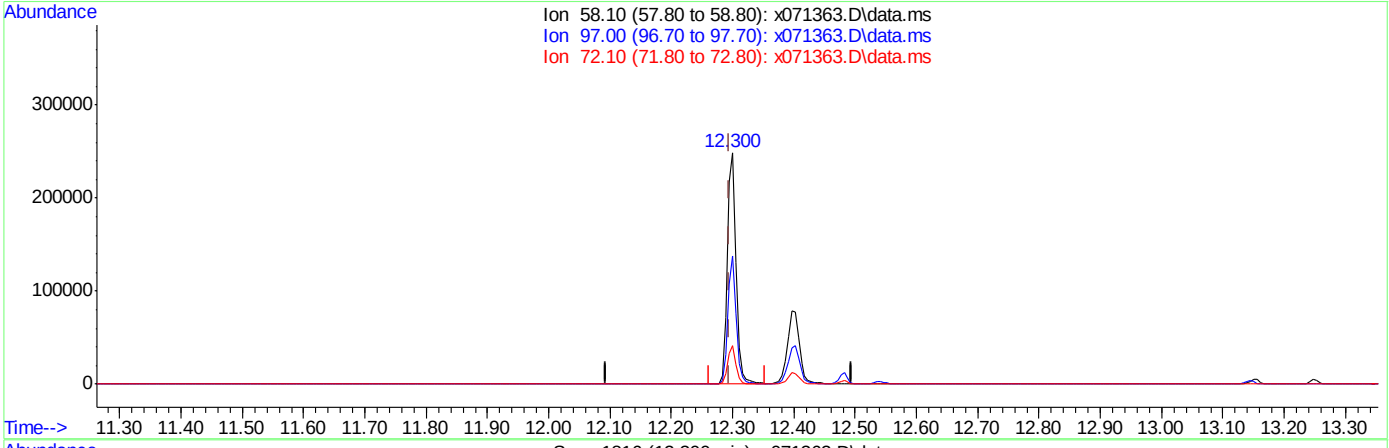
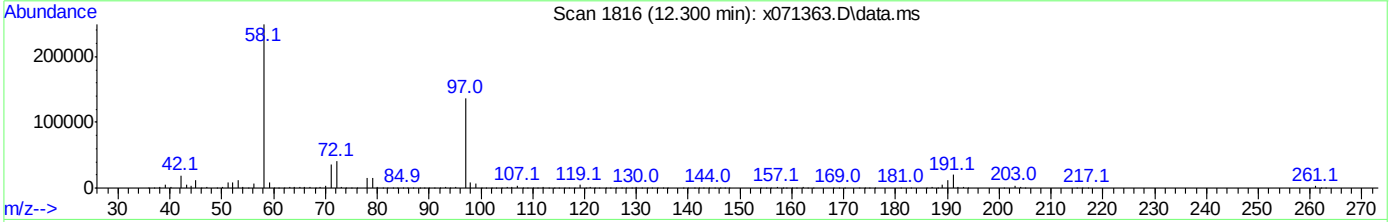
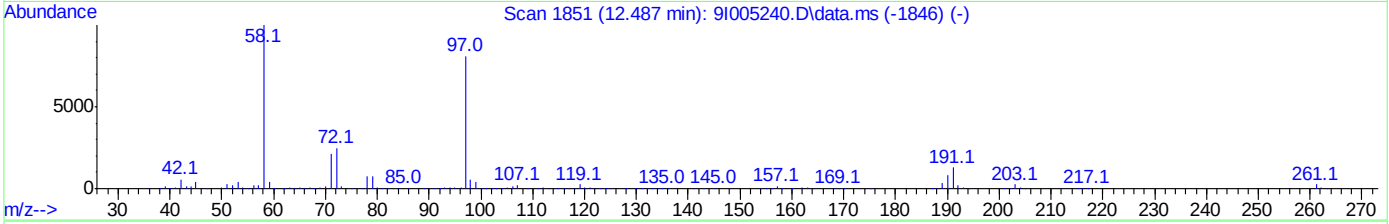
Response via : Initial Calibration







TIC: x071363.D\data.ms

(144) Methapyrilene

12.300min (+0.006) 27.74ppm

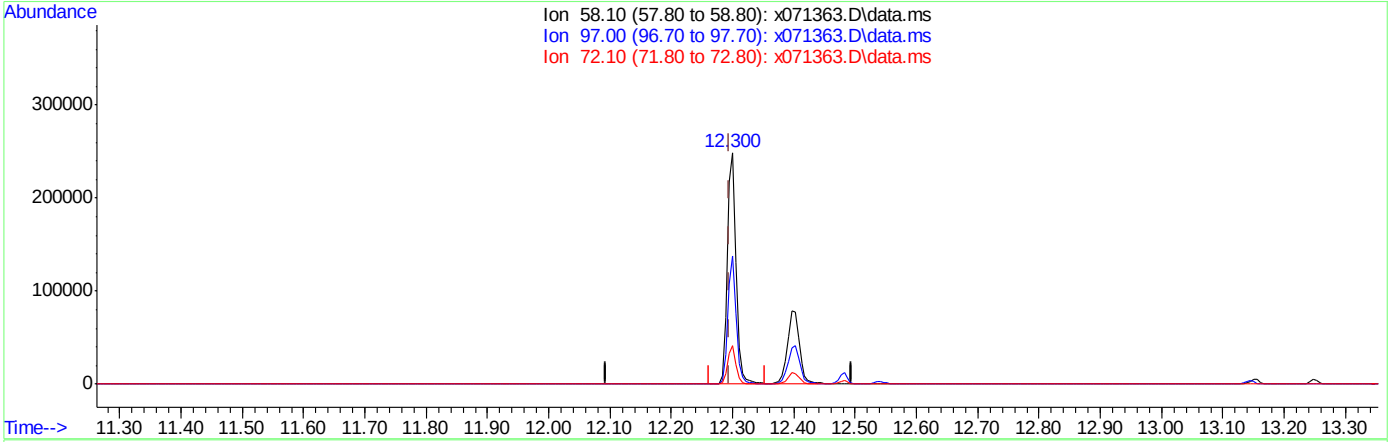
response 239390

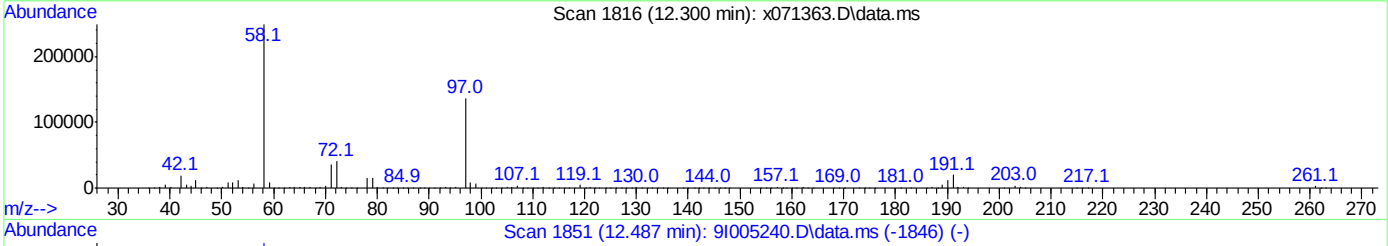
Ion	Exp%	Act%
58.10	100	100
97.00	80.90	55.12
72.10	24.80	16.74
0.00	0.00	0.00

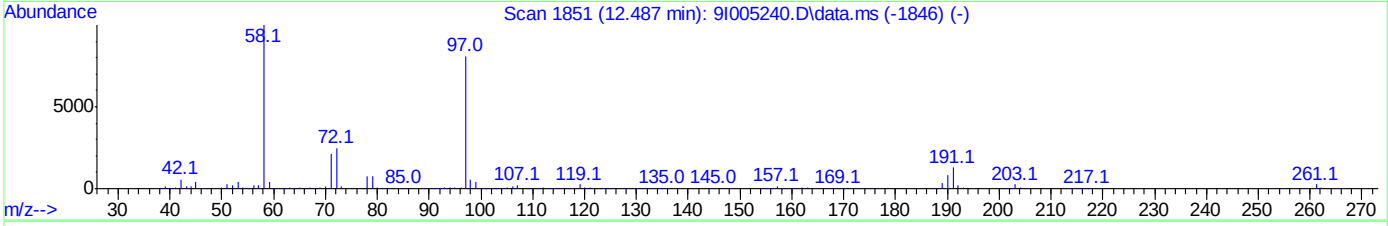
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071363.D
Acq On : 23 Jun 2020 1:03 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 23 14:01:12 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071363.D\data.ms

(144) Methapyrilene

12.300min (+0.006) 39.90ppm m

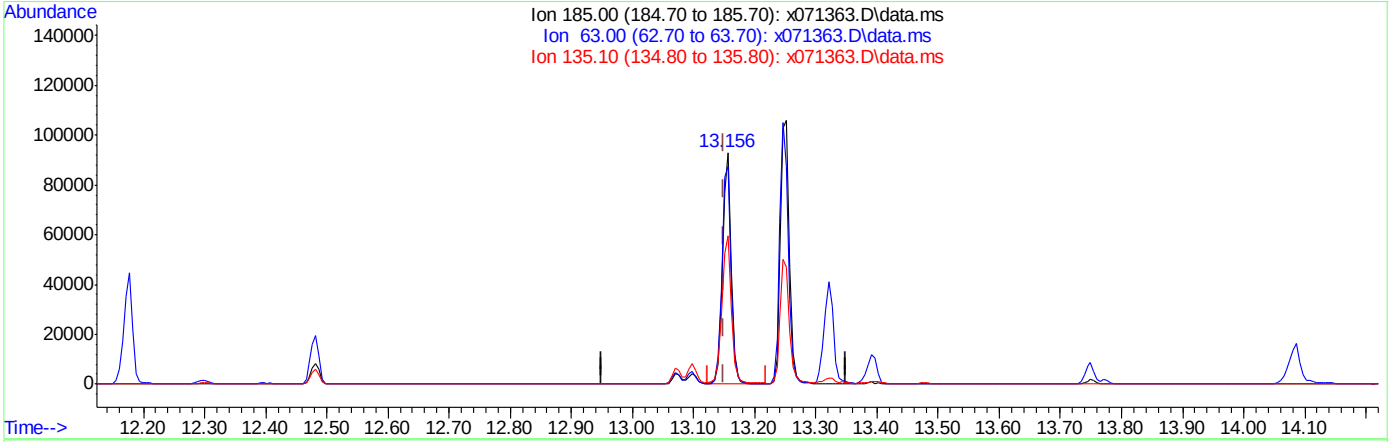
response 346867

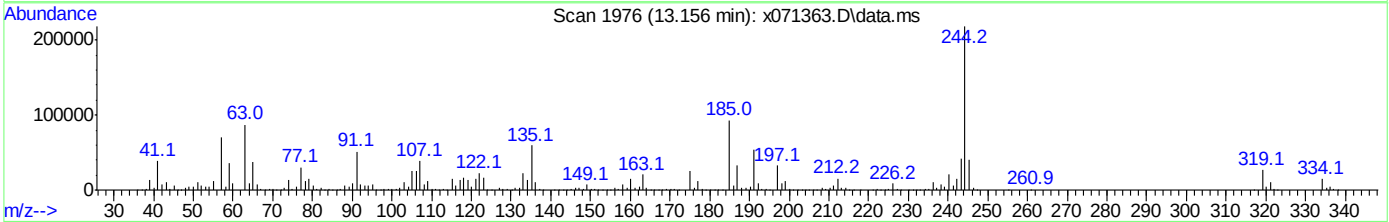
Ion	Exp%	Act%
58.10	100	100
97.00	80.90	55.14
72.10	24.80	16.74
0.00	0.00	0.00

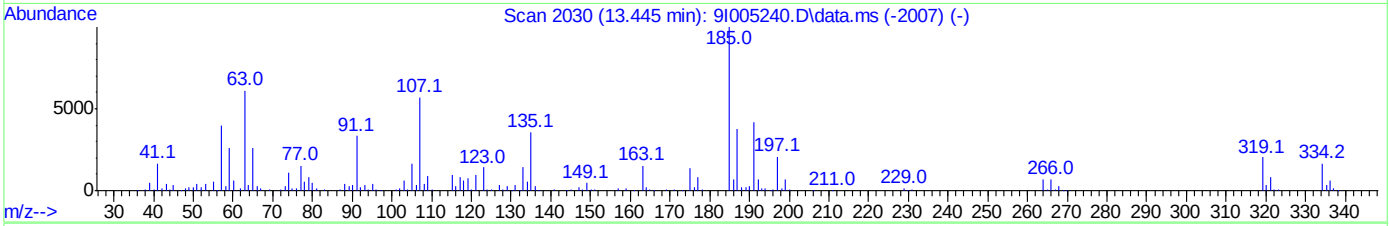
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071363.D
Acq On : 23 Jun 2020 1:03 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 23 14:25:07 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071363.D\data.ms

(147) Aramite

13.156min (+0.006) 50.24ppm

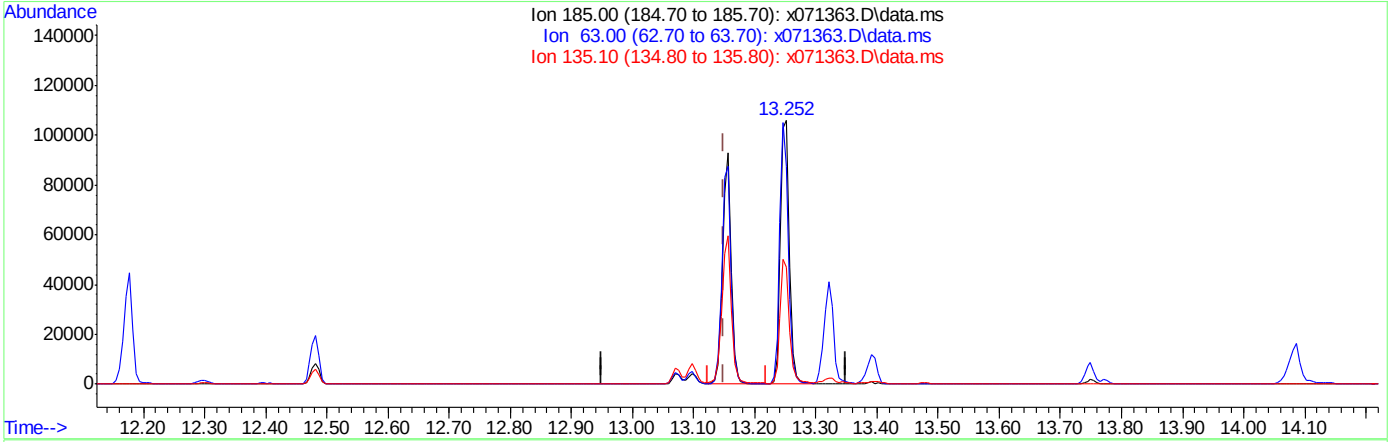
response 88801

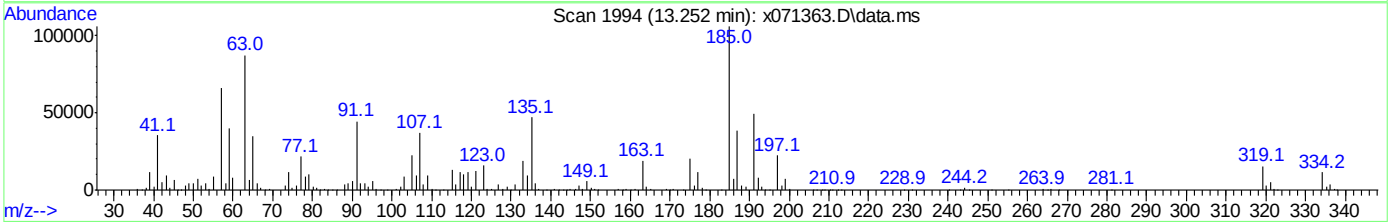
Ion	Exp%	Act%
185.00	100	100
63.00	61.10	93.92#
135.10	35.60	63.61
0.00	0.00	0.00

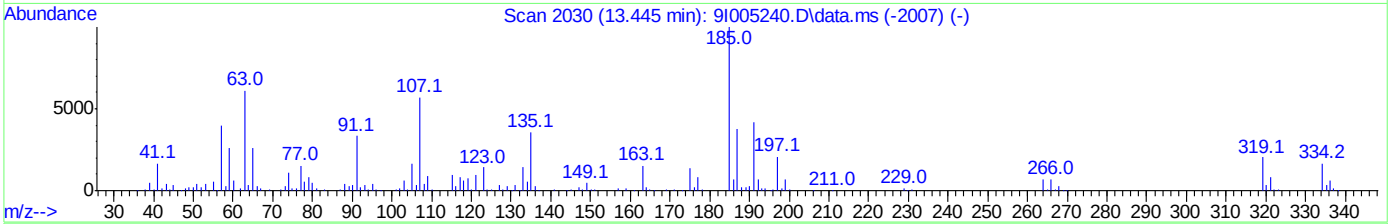
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071363.D
Acq On : 23 Jun 2020 1:03 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 23 14:25:07 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071363.D\data.ms

(147) Aramite

13.252min (+0.102) 104.24ppm m

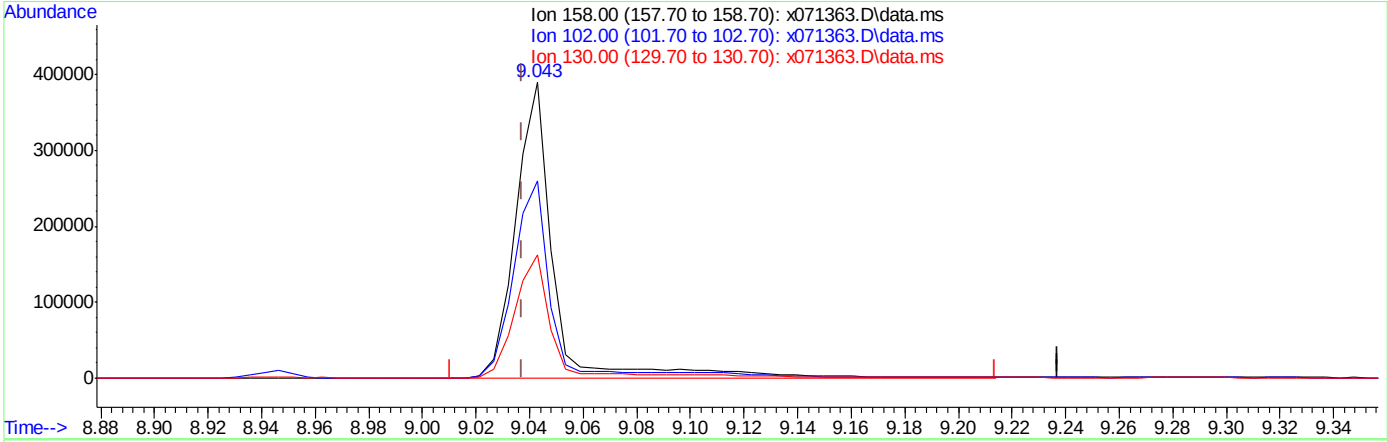
response 197374

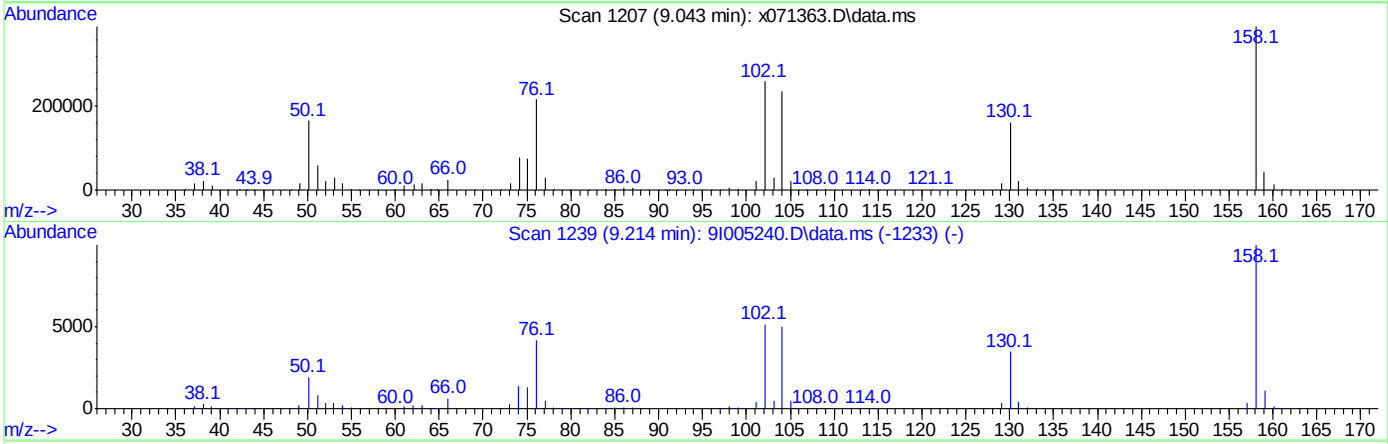
Ion	Exp%	Act%
185.00	100	100
63.00	61.10	82.44
135.10	35.60	44.38
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071363.D
Acq On : 23 Jun 2020 1:03 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 23 16:55:54 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration





TIC: x071363.D\data.ms

(131) 1,4-Naphthoquinone

9.043min (+0.006) -40.00ppm

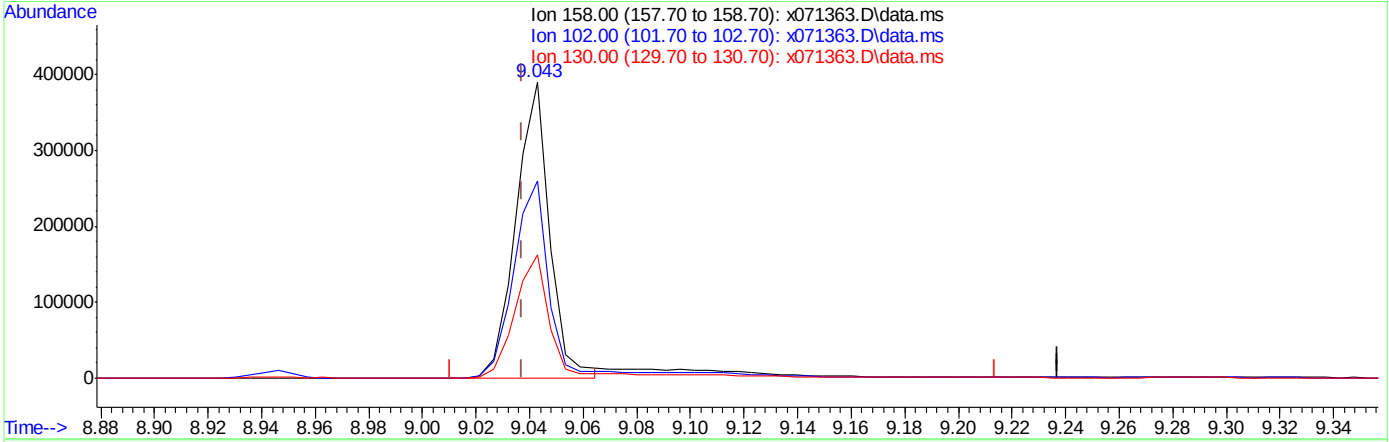
response 385634

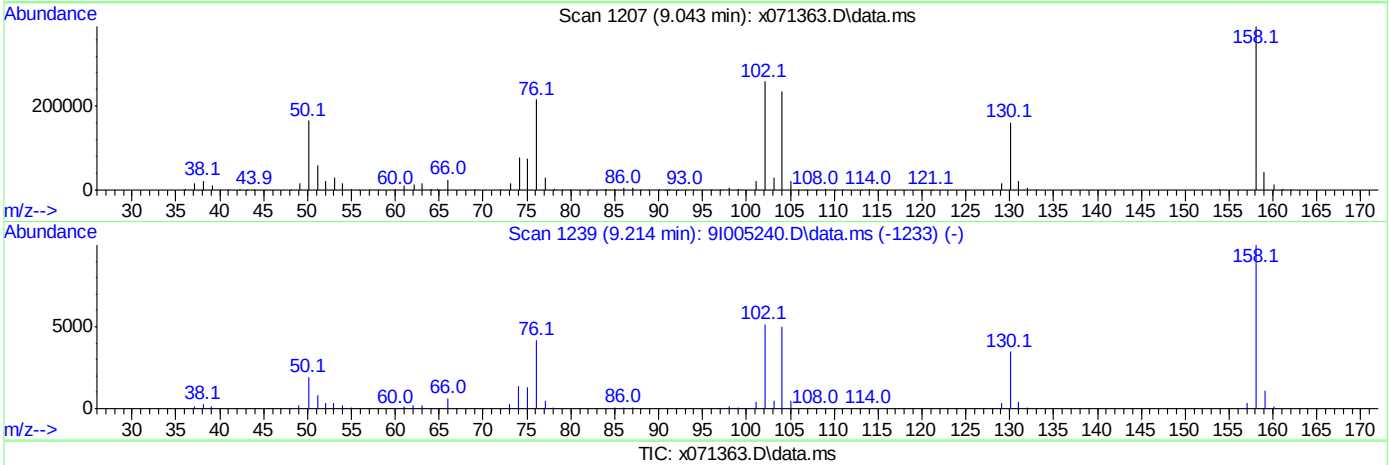
Ion	Exp%	Act%
158.00	100	100
102.00	51.70	66.40
130.00	34.90	41.35
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071363.D
Acq On : 23 Jun 2020 1:03 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 23 16:55:54 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration





TIC: x071363.D\data.ms

(131) 1,4-Naphthoquinone

9.043min (+0.006) 109.51ppm m

response 340836

Ion	Exp%	Act%
158.00	100	100
102.00	51.70	66.40
130.00	34.90	41.34
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 06/24/20 14:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071364.D
Acq On : 23 Jun 2020 1:29 pm
Operator : marthav
Sample : ic2918-1 8270 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 23 16:56:07 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 15:18:55 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.005	152	144015	40.00	ppm	0.00
22) Naphthalene-d8	7.433	136	575045	40.00	ppm	0.00
43) Acenaphthene-d10	9.476	164	313667	40.00	ppm	0.00
70) Phenanthrene-d10	11.219	188	566431	40.00	ppm	0.00
92) Chrysene-d12	14.487	240	391149	40.00	ppm	0.00
102) Perylene-d12	16.809	264	333880	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	0.000	152	0m	40.00	ppm	-6.00
120) Naphthalene-d8A	0.000	136	0m	40.00	ppm	-7.43
127) Acenaphthene-d10A	0.000	164	0m	40.00	ppm	-9.48
136) Phenanthrene-d10A	0.000	188	0m	40.00	ppm	-11.22
146) Chrysene-d12A	0.000	240	0m	40.00	ppm	-14.49
153) Perylene-d12A	0.000	264	0m	40.00	ppm	-16.82
System Monitoring Compounds						
7) 2-Fluorophenol	4.609	112	10582	4.26	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery =	4.26%#		
9) Phenol-d5	5.603	99	11874	4.44	ppm	0.00
Spiked Amount 100.000	Range 10 - 50		Recovery =	4.44%#		
23) Nitrobenzene-d5	6.614	82	5896	2.14	ppm	0.00
Spiked Amount 50.000	Range 42 - 108		Recovery =	4.28%#		
47) 2-Fluorobiphenyl	8.695	172	11323	2.40	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery =	4.80%#		
75) 2,4,6-Tribromophenol	10.401	330	1785	2.38	ppm	0.00
Spiked Amount 100.000	Range 33 - 118		Recovery =	2.38%#		
95) Terphenyl-d14	13.140	244	9017	1.72	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery =	3.44%#		
Target Compounds						Qvalue
2) 1,4-Dioxane	2.849	88	2730	2.27	ppm	# 18
3) N-nitrosodimethylamine	3.180	42	4556	4.29	ppm	# 30
4) Pyridine	3.229	79	5659	2.25	ppm	# 27
5) Benzaldehyde	5.528	106	3940	1.89	ppm	92
6) Aniline	5.641	93	7747	2.05	ppm	96
8) bis(2-Chloroethyl)ether	5.721	93	5283	2.01	ppm	# 69
10) Phenol	5.614	94	6535	1.92	ppm	91
11) 2-Chlorophenol	5.769	128	4992	2.04	ppm	81
12) 1,3-Dichlorobenzene	5.940	146	5811	2.32	ppm	94
13) 1,4-Dichlorobenzene	6.026	146	6113	2.39	ppm	91
14) 1,2-Dichlorobenzene	6.186	146	5638	2.36	ppm	97
15) Benzyl alcohol	6.154	108	3389	2.10	ppm	83
16) 2,2'-Oxybis(1-chloropr...	6.320	45	11659	3.71	ppm	71
17) 2-Methylphenol	6.283	108	4611	2.10	ppm	99
18) Acetophenone	6.448	105	6688	1.93	ppm	95
19) Hexachloroethane	6.566	117	2216	2.04	ppm	91
20) N-Nitroso-di-n-propyla...	6.454	70	3871	2.17	ppm	# 48
21) 3&4-Methylphenol	6.454	108	4803	2.11	ppm	95
24) Nitrobenzene	6.636	77	5746	2.20	ppm	84
25) Isophorone	6.908	82	10485	2.20	ppm	90
26) 2-Nitrophenol	6.999	139	2481	1.97	ppm	75

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071364.D
Acq On : 23 Jun 2020 1:29 pm
Operator : marthav
Sample : ic2918-1 8270 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 23 16:56:07 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 15:18:55 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
27) 2,4-Dimethylphenol	7.053	107	4687	2.16	ppm		90
28) O,O,O-Triethylphosphor...	7.144	198	2001	1.99	ppm		71
29) bis(2-Chloroethoxy)met...	7.170	93	6233	2.09	ppm		95
30) Benzoic Acid	7.090	105	1123	0.69	ppm	#	78
31) 2,4-Dichlorophenol	7.267	162	3672	2.12	ppm		92
32) 1,2,4-Trichlorobenzene	7.368	180	4440	2.27	ppm		95
34) Naphthalene	7.454	128	15939	2.46	ppm		98
35) 4-Chloroaniline	7.524	127	6467	2.38	ppm		88
36) 2,6-Dichlorophenol	7.529	162	4127	2.33	ppm		93
37) Hexachlorobutadiene	7.609	225	2132	1.96	ppm		95
38) Caprolactam	7.882	113	1341	1.86	ppm	#	36
39) 4-Chloro-3-methylphenol	8.090	107	3984	2.11	ppm		97
40) 2-Methylnaphthalene	8.256	142	10437	2.49	ppm		93
41) 1-Methylnaphthalene	8.374	142	10027	2.55	ppm		96
42) 1,2,4,5-Tetrachloroben...	8.454	216	4309	2.12	ppm		96
44) Hexachlorocyclopentadiene	8.449	237	1709	1.59	ppm		82
45) 2,4,6-Trichlorophenol	8.588	196	2542	1.98	ppm		93
46) 2,4,5-Trichlorophenol	8.625	196	2702	1.97	ppm		97
48) 1,1'-Biphenyl	8.813	154	11390	2.20	ppm		97
49) 2-Chloronaphthalene	8.823	162	9331	2.33	ppm		95
50) 2-Nitroaniline	8.946	65	3109	2.38	ppm	#	62
51) p-Dinitrobenzene	9.117	75	1540	1.61	ppm	#	53
52) Acenaphthylene	9.305	152	14844	2.42	ppm		99
53) Dimethylphthalate	9.182	163	11507	2.50	ppm		99
54) m-Dinitrobenzene	9.198	168	1329	1.66	ppm	#	70
55) 2,6-Dinitrotoluene	9.240	165	2299	2.06	ppm	#	52
56) o-Dinitrobenzene	9.289	50	2701	4.08	ppm	#	40
57) Acenaphthene	9.513	153	10744	2.65	ppm		100
58) 3-Nitroaniline	9.428	138	2290	1.91	ppm		94
59) 2,4-Dinitrophenol	9.556	184	160m	0.30	ppm		
60) Dibenzofuran	9.716	168	14854	2.67	ppm		95
61) 2,4-Dinitrotoluene	9.711	165	2798	1.98	ppm	#	55
62) 4-Nitrophenol	9.636	109	987	1.74	ppm	#	61
63) 2,3,5,6-Tetrachlorophenol	9.813	232	1704	1.61	ppm	#	73
64) 2,3,4,6-Tetrachlorophenol	9.861	232	2151	1.90	ppm		84
65) Fluorene	10.118	166	10994	2.53	ppm		100
66) 4-Chlorophenyl-phenyle...	10.139	204	5190	2.38	ppm		88
67) Diethylphthalate	10.021	149	10638	2.32	ppm		98
68) Thionazin	10.112	97	2096	1.94	ppm		89
69) 4-Nitroaniline	10.139	138	2736	2.23	ppm		73
71) 4,6-Dinitro-2-methylph...	10.182	198	604	0.77	ppm	#	55
72) n-Nitrosodiphenylamine	10.273	169	9328	2.99	ppm		88
73) Diphenylamine	10.273	169	9328	2.56	ppm		88
74) 1,2-Diphenylhydrazine	10.321	77	11835	2.32	ppm		89
76) Sulfotep	10.497	97	1291	1.62	ppm	#	67
77) Phorate	10.642	75	4229	1.50	ppm		99
78) 4-Bromophenyl-phenylether	10.711	248	2321	1.78	ppm	#	67
79) Hexachlorobenzene	10.759	284	2860	1.92	ppm		83
80) Dimethoate	10.824	87	2766	1.64	ppm		91
81) Simazine	10.882	201	1601	2.51	ppm		91

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071364.D
Acq On : 23 Jun 2020 1:29 pm
Operator : marthav
Sample : ic2918-1 8270 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 23 16:56:07 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 15:18:55 2020
Response via : Initial Calibration

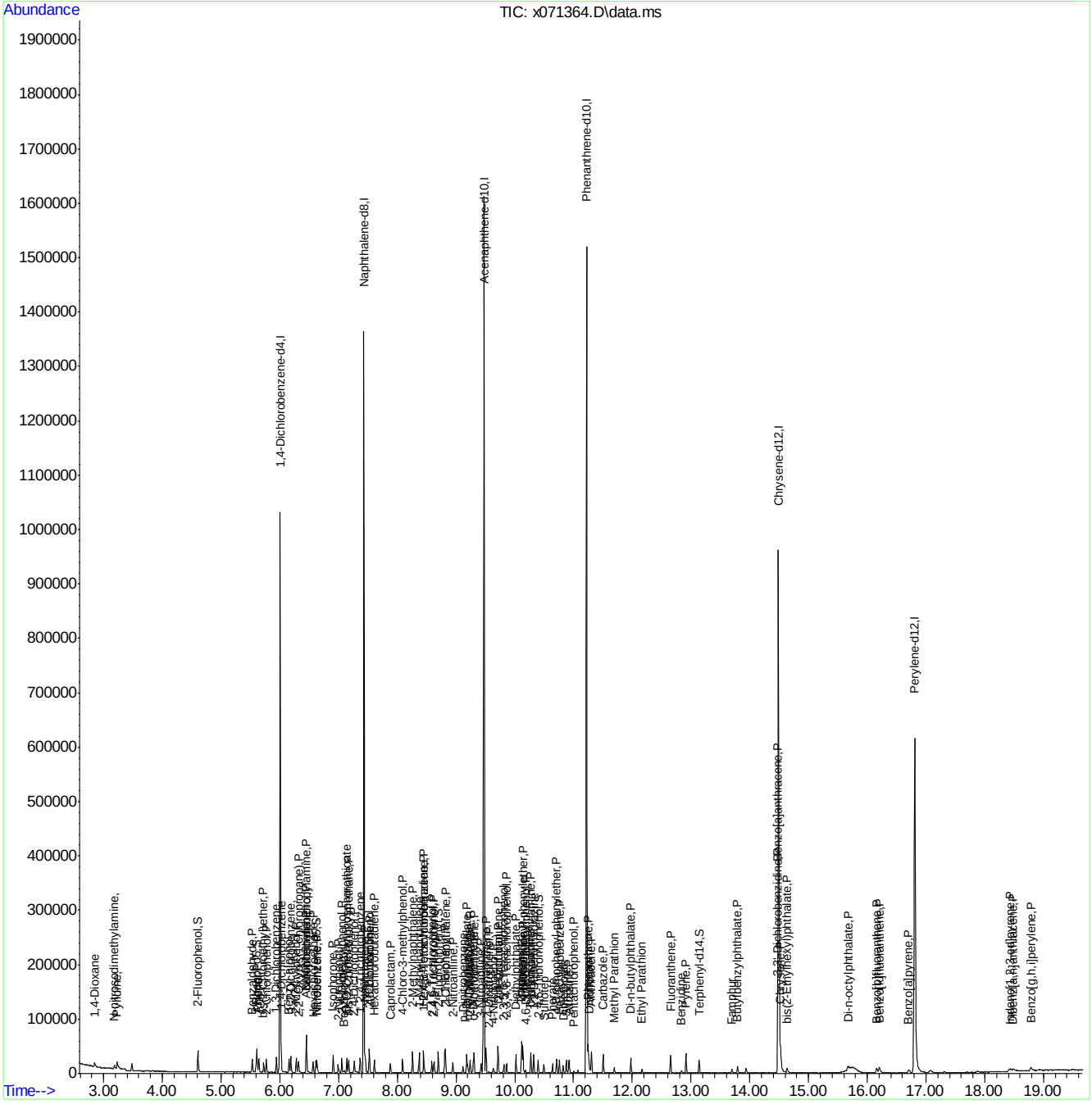
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
82) Atrazine	10.925	200	2395	1.93	ppm	#	73
83) Pentachlorophenol	11.000	266	529	0.71	ppm		99
84) Phenanthrene	11.246	178	17522	2.81	ppm		99
85) Anthracene	11.305	178	16450	2.58	ppm		96
86) Disulfoton	11.262	88	5104	1.76	ppm		75
87) Carbazole	11.508	167	14422	2.54	ppm		98
88) Methyl Parathion	11.695	109	1825	1.28	ppm	#	75
89) Di-n-butylphthalate	11.974	149	12697	1.75	ppm		96
90) Ethyl Parathion	12.166	97	941	1.00	ppm	#	74
91) Fluoranthene	12.653	202	13932	2.10	ppm		96
93) Benzidine	12.835	184	3039	1.29	ppm		99
94) Pyrene	12.915	202	14445	2.04	ppm		96
96) Famphur	13.696	218	2070	1.55	ppm		77
97) Butylbenzylphthalate	13.792	149	3749	1.21	ppm		91
98) 3,3'-Dichlorobenzidine	14.471	252	2309	1.24	ppm		94
99) Benzo[a]anthracene	14.477	228	11906	2.04	ppm		99
100) Chrysene	14.525	228	13100	2.26	ppm		95
101) bis(2-Ethylhexyl)phtha...	14.637	149	3571	0.89	ppm		91
103) Di-n-octylphthalate	15.675	149	9858m	1.57	ppm		
104) Benzo[b]fluoranthene	16.156	252	6565	1.34	ppm		88
105) Benzo[k]fluoranthene	16.210	252	11113m	2.06	ppm		
106) Benzo[a]pyrene	16.702	252	5647	1.15	ppm		93
107) Indeno[1,2,3-cd]pyrene	18.429	276	2595	0.61	ppm		88
108) Dibenz[a,h]anthracene	18.483	278	4110m	0.89	ppm		
109) Benzo[g,h,i]perylene	18.788	276	6615m	1.35	ppm		

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071364.D
Acq On : 23 Jun 2020 1:29 pm
Operator : marthav
Sample : ic2918-1 8270 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 23 16:56:07 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 15:18:55 2020
Response via : Initial Calibration



SGS FA77581

Manual Integration Approval Summary

Sample Number: SX2918-IC2918
Lab FileID: X071364.D
Injection Time: 06/23/20 13:29

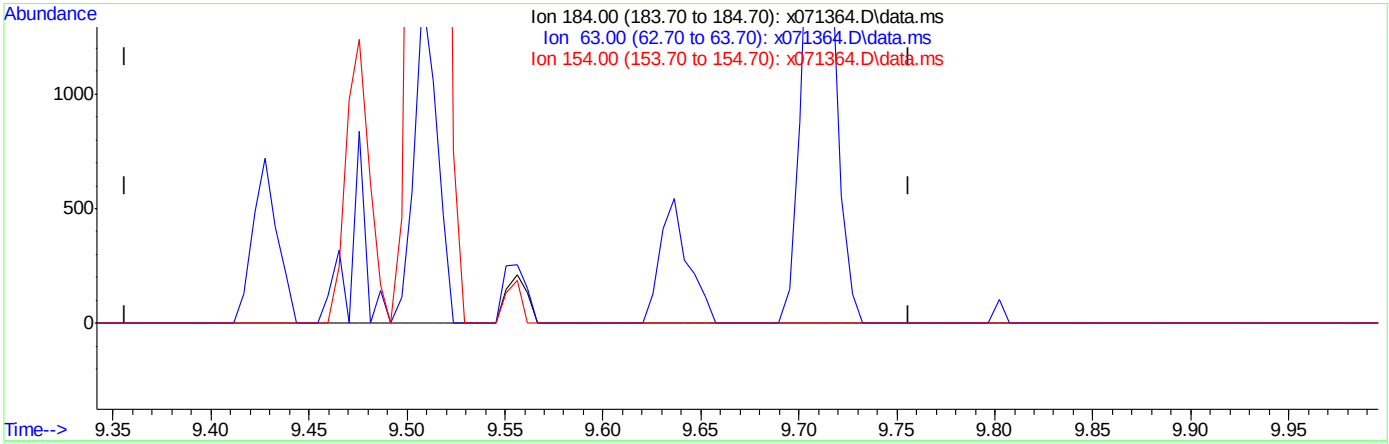
Method: EPA 625.1
Analyst approved: 06/24/20 09:50 Martha Valls
Supervisor approved: 06/24/20 14:07 Naresh Jiawan

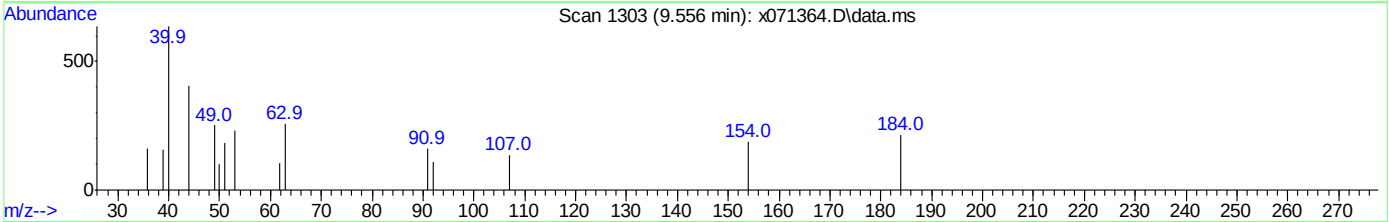
Parameter	CAS	Sig#	R.T. (min.)	Reason
2,4-Dinitrophenol	51-28-5		9.56	Split peak
Di-n-octyl Phthalate	117-84-0		15.67	Split peak
Benzo(k)fluoranthene	207-08-9		16.21	Split peak
Dibenzo(a,h)anthracene	53-70-3		18.48	Split peak
Benzo(g,h,i)perylene	191-24-2		18.79	Split peak

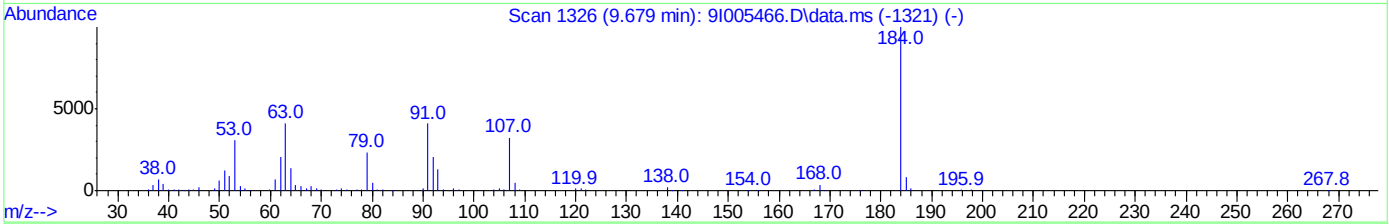
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071364.D
Acq On : 23 Jun 2020 1:29 pm
Operator : marthav
Sample : ic2918-1 8270 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 23 15:19:07 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 15:18:55 2020
Response via : Initial Calibration







TIC: x071364.D\data.ms

(59) 2,4-Dinitrophenol (P)

9.556min (-9.556) 0.00ppm

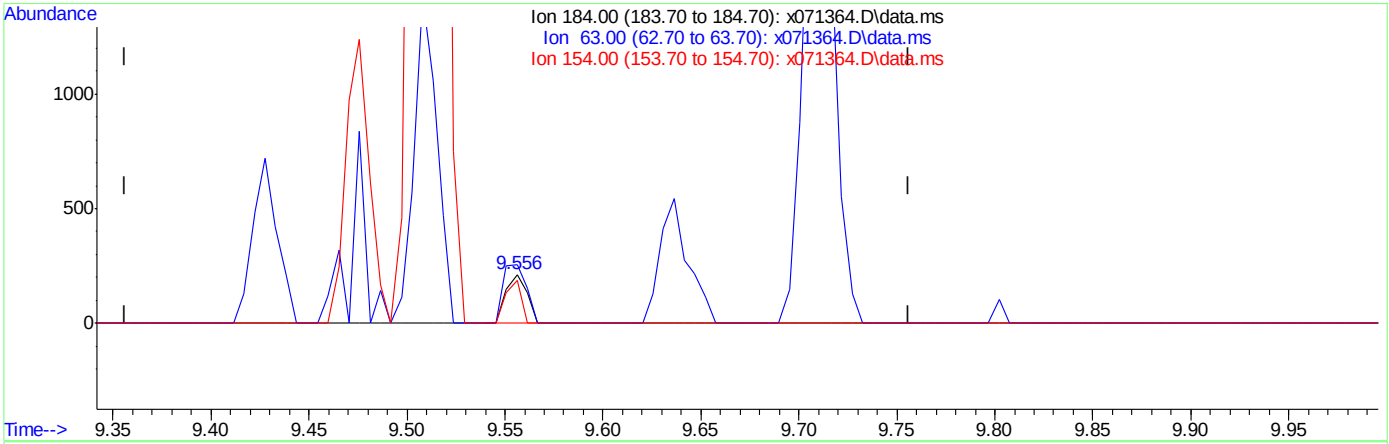
response 0

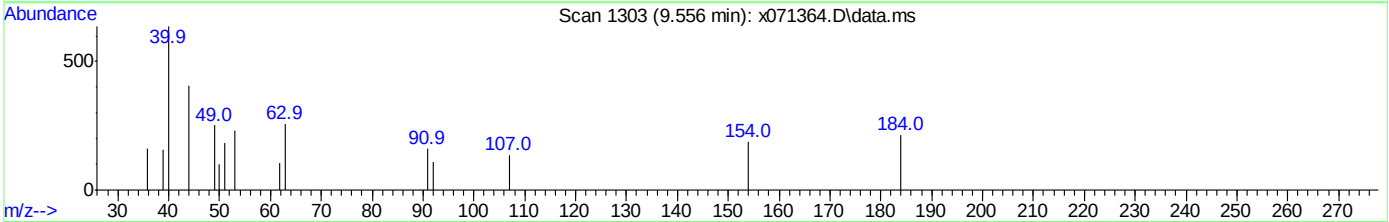
Ion	Exp%	Act%
184.00	100	0.00
63.00	41.30	0.00#
154.00	0.30	0.00
0.00	0.00	0.00

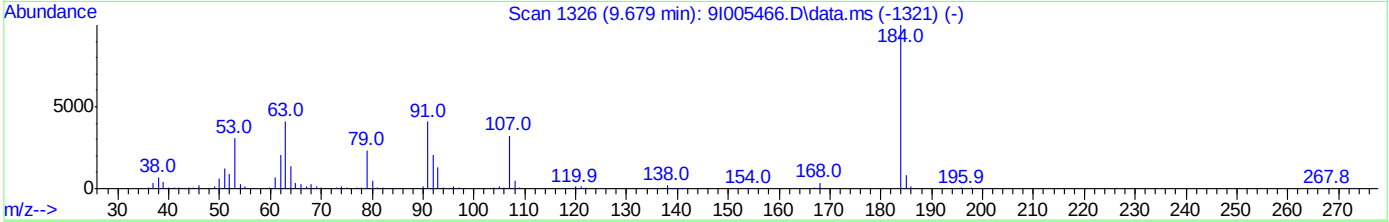
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071364.D
Acq On : 23 Jun 2020 1:29 pm
Operator : marthav
Sample : ic2918-1 8270 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 23 15:19:07 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 15:18:55 2020
Response via : Initial Calibration







TIC: x071364.D\data.ms

(59) 2,4-Dinitrophenol (P)

9.556min (-0.000) 0.30ppm m

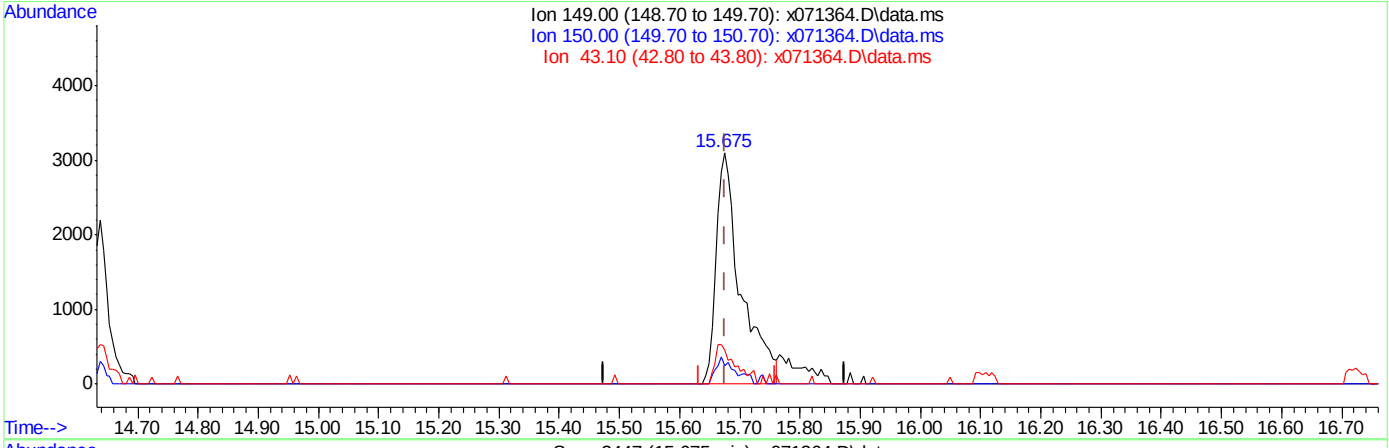
response 160

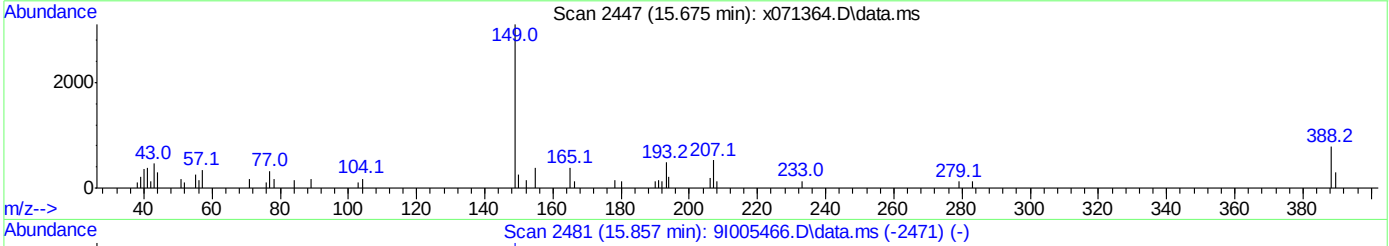
Ion	Exp%	Act%
184.00	100	100
63.00	41.30	119.63#
154.00	0.30	87.38#
0.00	0.00	0.00

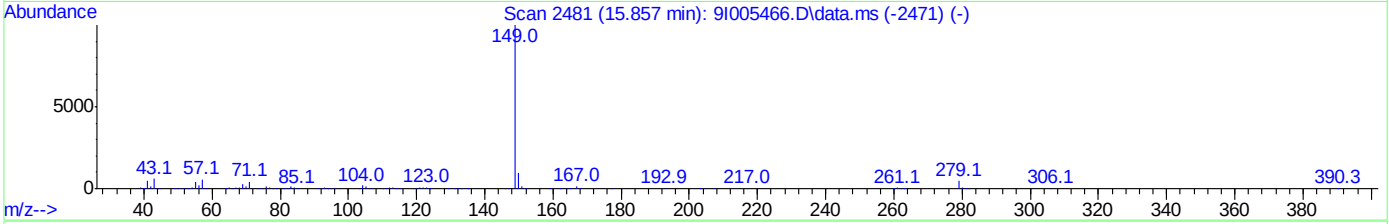
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071364.D
Acq On : 23 Jun 2020 1:29 pm
Operator : marthav
Sample : ic2918-1 8270 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 23 15:19:07 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 15:18:55 2020
Response via : Initial Calibration







TIC: x071364.D\data.ms

(103) Di-n-octylphthalate (P)

15.675min (-0.000) 1.39ppm

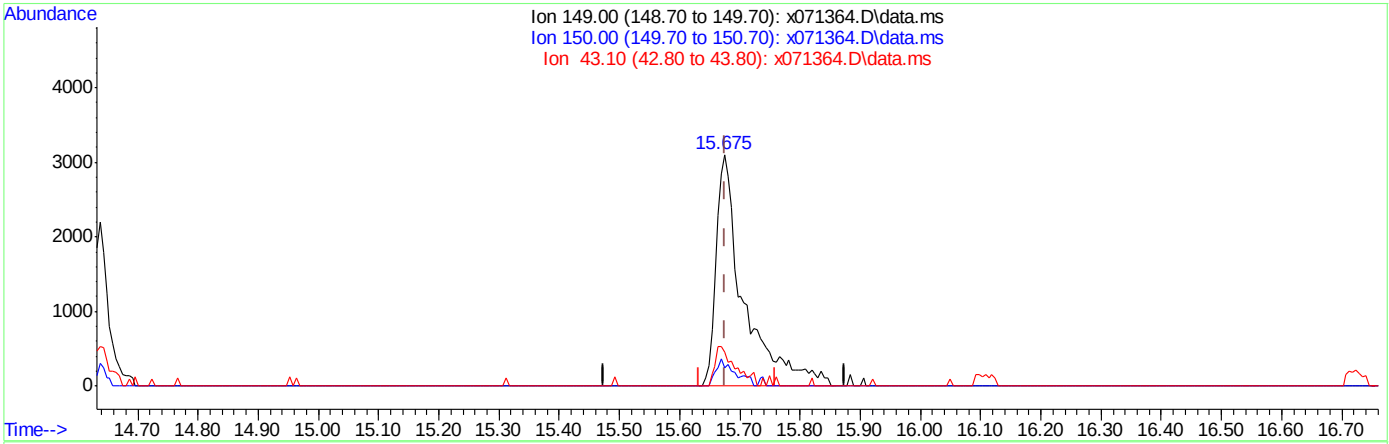
response 8731

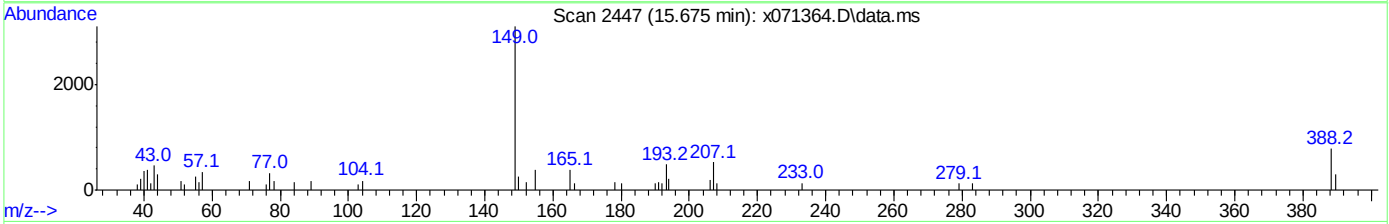
Ion	Exp%	Act%
149.00	100	100
150.00	9.90	8.50
43.10	6.00	13.64
0.00	0.00	0.00

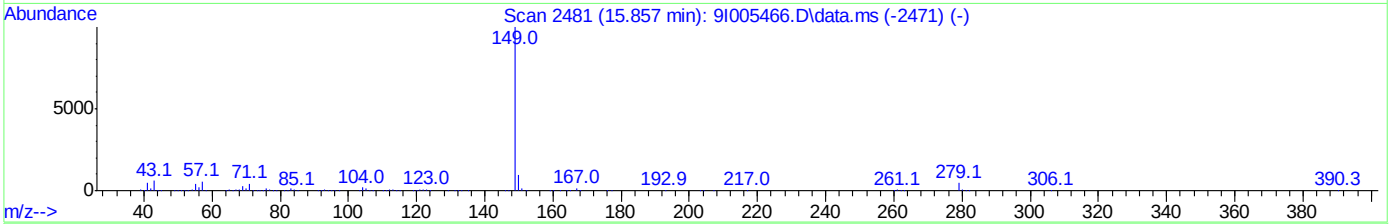
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071364.D
Acq On : 23 Jun 2020 1:29 pm
Operator : marthav
Sample : ic2918-1 8270 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 23 15:19:07 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 15:18:55 2020
Response via : Initial Calibration







TIC: x071364.D\data.ms

(103) Di-n-octylphthalate (P)

15.675min (-0.000) 1.57ppm m

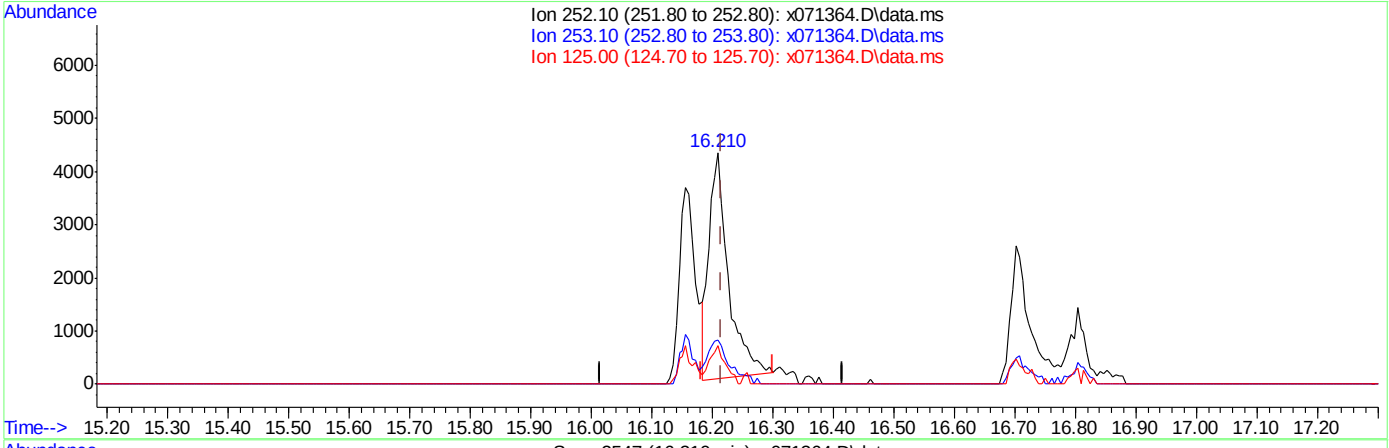
response 9858

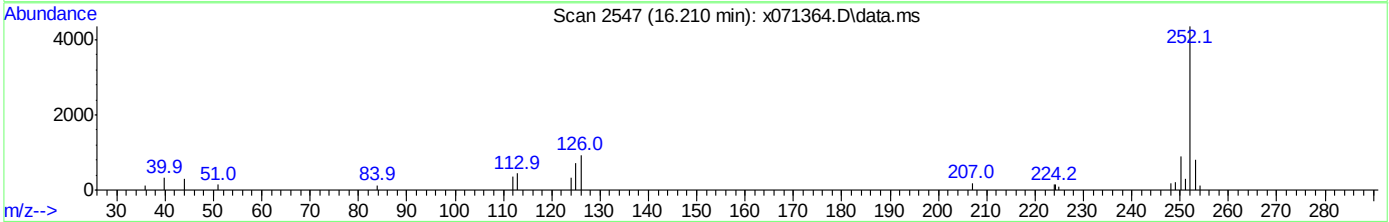
Ion	Exp%	Act%
149.00	100	100
150.00	9.90	8.05
43.10	6.00	14.87
0.00	0.00	0.00

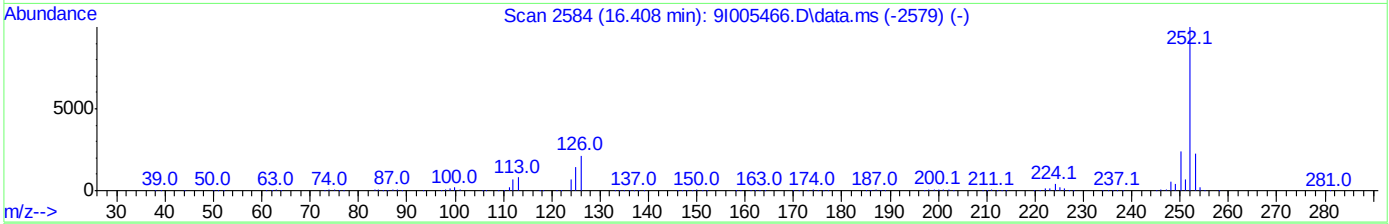
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071364.D
Acq On : 23 Jun 2020 1:29 pm
Operator : marthav
Sample : ic2918-1 8270 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 23 15:19:07 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 15:18:55 2020
Response via : Initial Calibration







TIC: x071364.D\data.ms

(105) Benzo[k]fluoranthene (P)

16.210min (-0.005) 1.77ppm

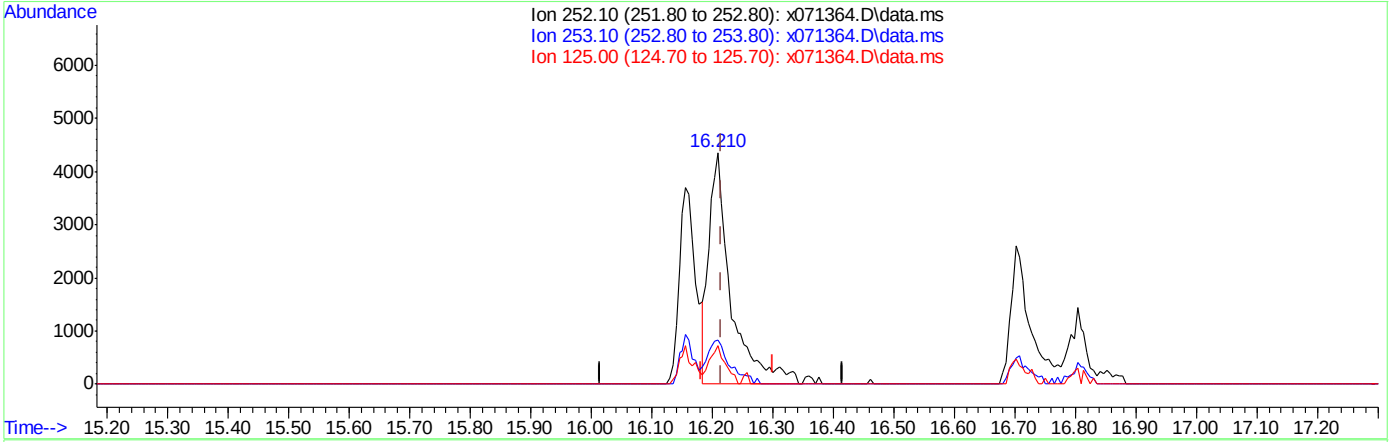
response 9543

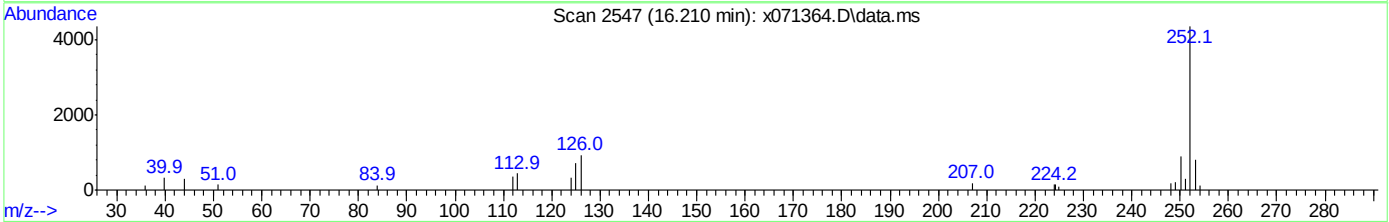
Ion	Exp%	Act%
252.10	100	100
253.10	22.50	19.11
125.00	14.40	17.92
0.00	0.00	0.00

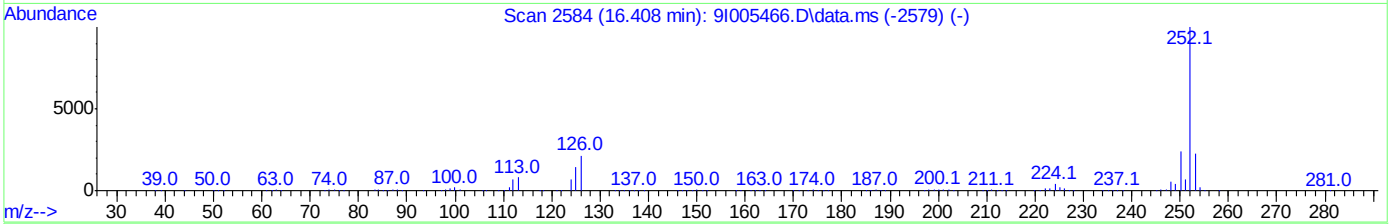
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071364.D
Acq On : 23 Jun 2020 1:29 pm
Operator : marthav
Sample : ic2918-1 8270 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 23 15:19:07 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 15:18:55 2020
Response via : Initial Calibration







TIC: x071364.D\data.ms

(105) Benzo[k]fluoranthene (P)

16.210min (-0.005) 2.06ppm m

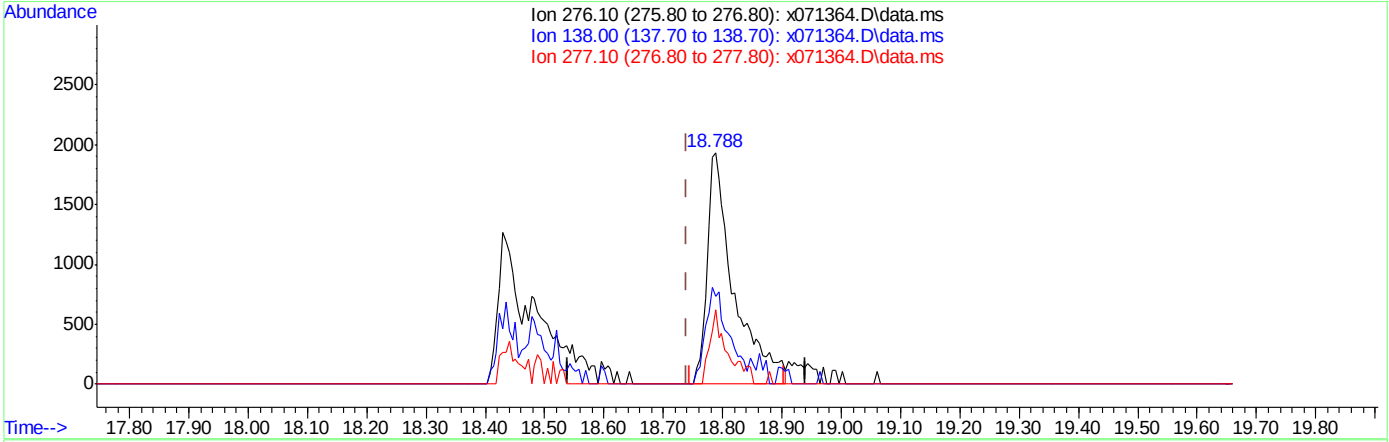
response 11113

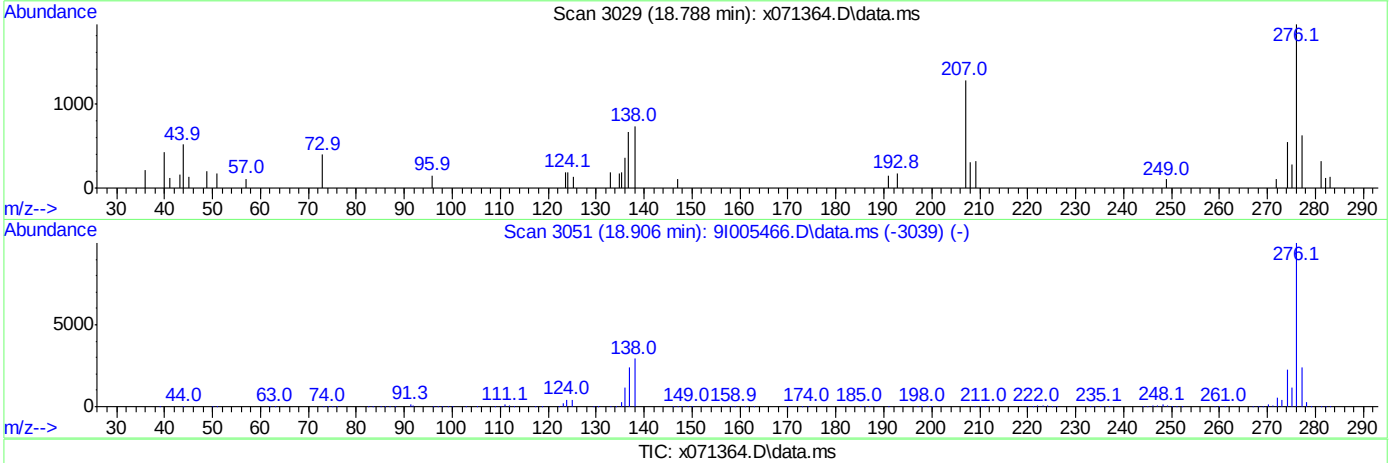
Ion	Exp%	Act%
252.10	100	100
253.10	22.50	18.85
125.00	14.40	16.42
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071364.D
Acq On : 23 Jun 2020 1:29 pm
Operator : marthav
Sample : ic2918-1 8270 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 23 15:19:07 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 15:18:55 2020
Response via : Initial Calibration





TIC: x071364.D\data.ms

(109) Benzo[g,h,i]perylene (P)

18.788min (+0.048) 1.23ppm

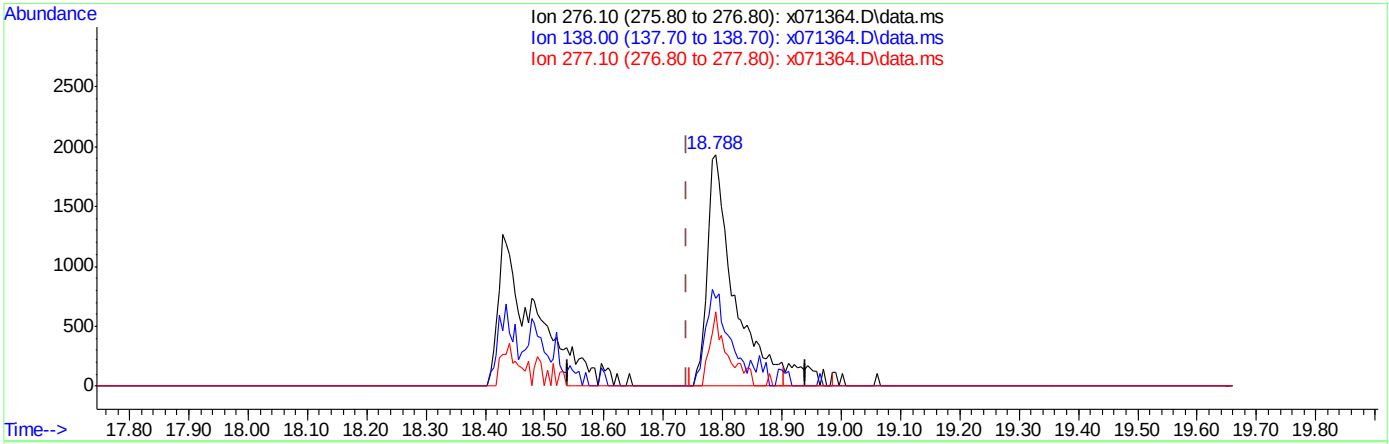
response 6037

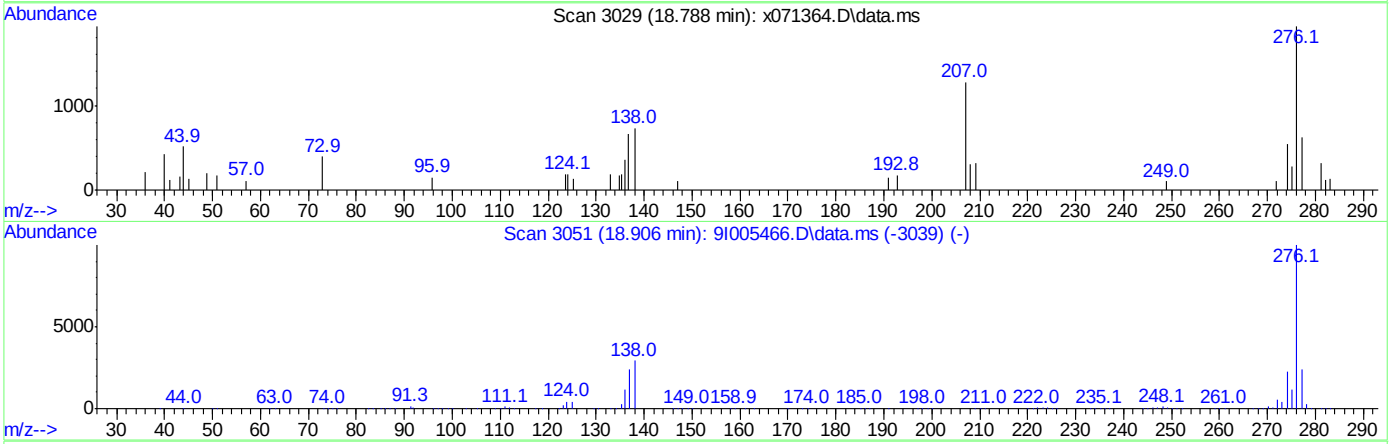
Ion	Exp%	Act%
276.10	100	100
138.00	31.00	36.21
277.10	23.90	33.12
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071364.D
Acq On : 23 Jun 2020 1:29 pm
Operator : marthav
Sample : ic2918-1 8270 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 23 15:19:07 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 15:18:55 2020
Response via : Initial Calibration





TIC: x071364.D\data.ms

(109) Benzo[g,h,i]perylene (P)

18.788min (+0.048) 1.35ppm m

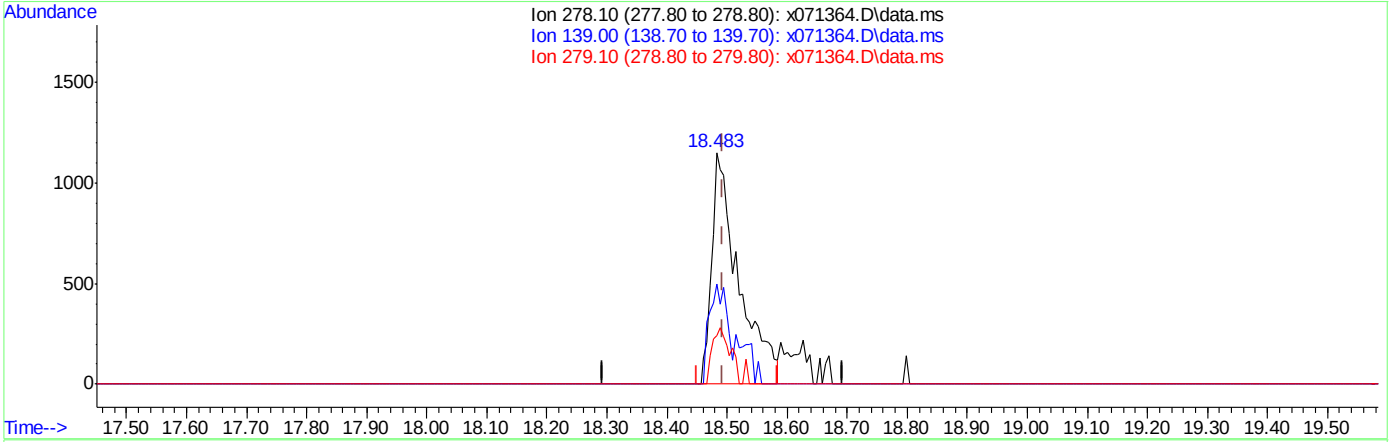
response 6615

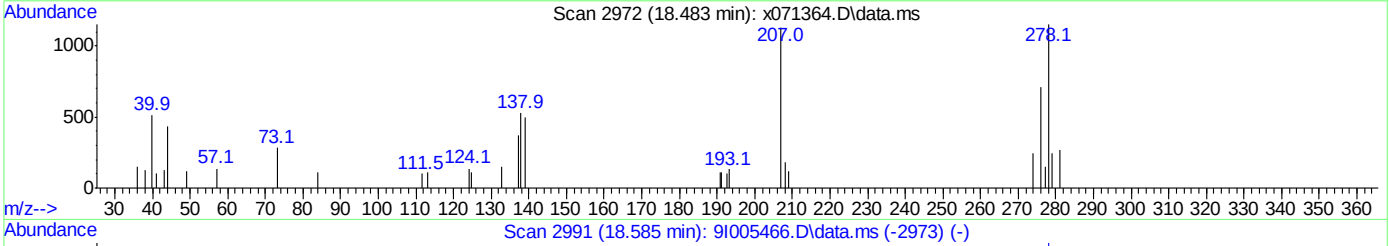
Ion	Exp%	Act%
276.10	100	100
138.00	31.00	37.98
277.10	23.90	32.14
0.00	0.00	0.00

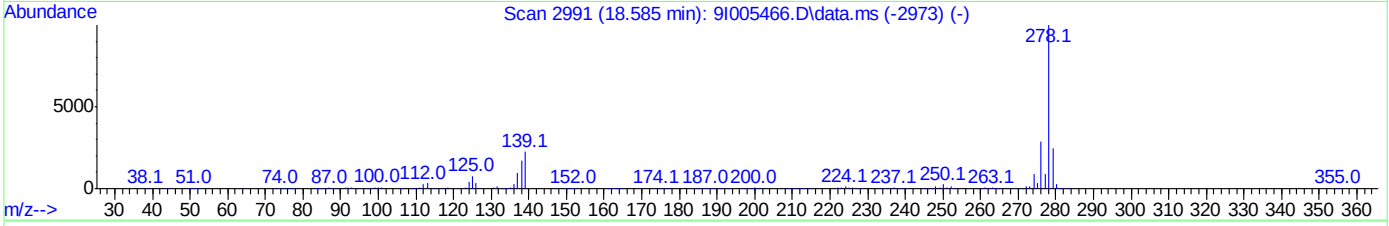
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071364.D
Acq On : 23 Jun 2020 1:29 pm
Operator : marthav
Sample : ic2918-1 8270 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 23 15:19:07 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 15:18:55 2020
Response via : Initial Calibration







TIC: x071364.D\data.ms

(108) Dibenz[a,h]anthracene (P)

18.483min (-0.011) 0.78ppm

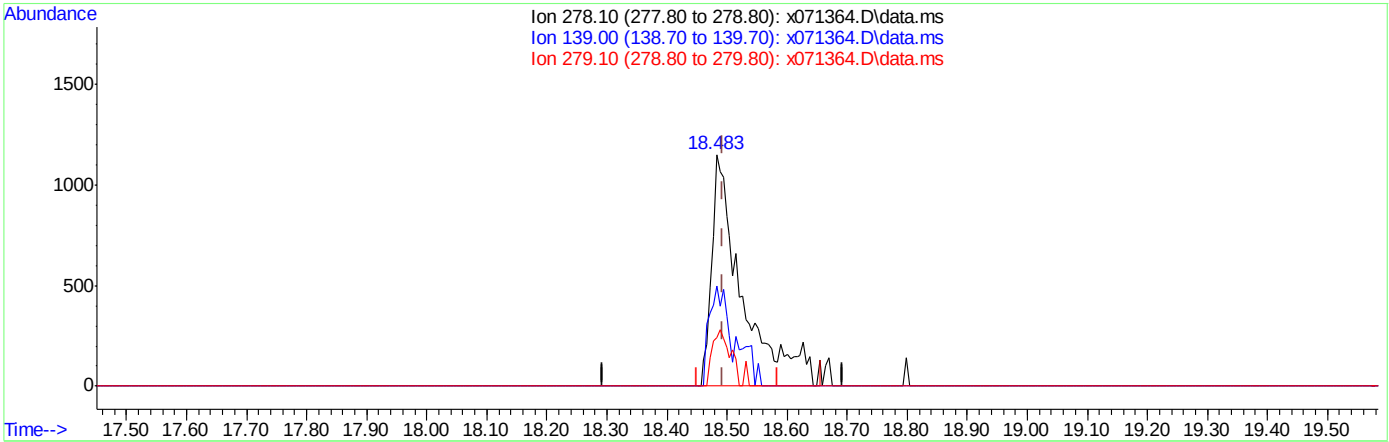
response 3566

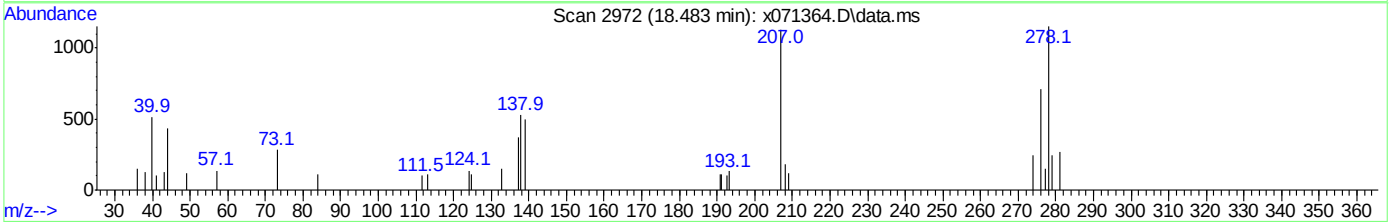
Ion	Exp%	Act%
278.10	100	100
139.00	22.40	45.54
279.10	24.40	22.22
0.00	0.00	0.00

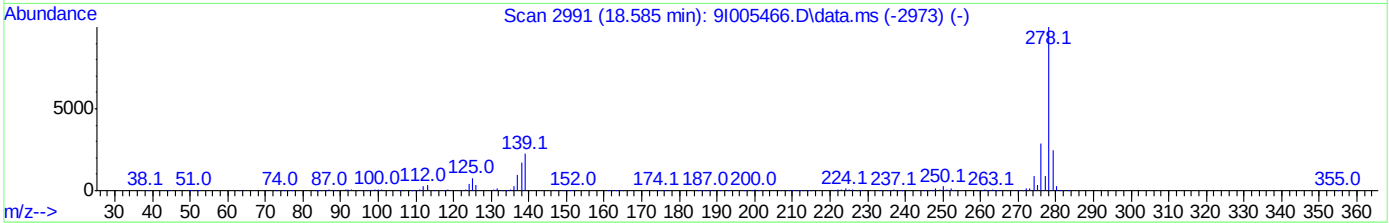
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071364.D
Acq On : 23 Jun 2020 1:29 pm
Operator : marthav
Sample : ic2918-1 8270 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 23 15:19:07 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 15:18:55 2020
Response via : Initial Calibration







TIC: x071364.D\data.ms

(108) Dibenz[a,h]anthracene (P)

18.483min (-0.011) 0.89ppm m

response 4110

Ion	Exp%	Act%
278.10	100	100
139.00	22.40	43.23
279.10	24.40	21.09
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071365.D
Acq On : 23 Jun 2020 1:54 pm
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 24 12:53:43 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.005	152	153213	40.00	ppm	0.00
22) Naphthalene-d8	7.433	136	638047	40.00	ppm	0.00
43) Acenaphthene-d10	9.476	164	345272	40.00	ppm	0.00
70) Phenanthrene-d10	11.225	188	604959	40.00	ppm	0.00
92) Chrysene-d12	14.488	240	419398	40.00	ppm	0.00
102) Perylene-d12	16.809	264	355811	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	0.000	152	0m	40.00	ppm	-6.00
120) Naphthalene-d8A	0.000	136	0m	40.00	ppm	-7.43
127) Acenaphthene-d10A	0.000	164	0m	40.00	ppm	-9.48
136) Phenanthrene-d10A	0.000	188	0m	40.00	ppm	-11.22
146) Chrysene-d12A	0.000	240	0m	40.00	ppm	-14.49
153) Perylene-d12A	0.000	264	0m	40.00	ppm	-16.82
System Monitoring Compounds						
7) 2-Fluorophenol	4.609	112	54506	20.64	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 20.64%			
9) Phenol-d5	5.604	99	62273	21.90	ppm	0.00
Spiked Amount 100.000	Range 10 - 50		Recovery = 21.90%			
23) Nitrobenzene-d5	6.614	82	30954	10.10	ppm	0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 20.20%#			
47) 2-Fluorobiphenyl	8.700	172	59356	11.43	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 22.86%#			
75) 2,4,6-Tribromophenol	10.401	330	10209	12.76	ppm	0.00
Spiked Amount 100.000	Range 33 - 118		Recovery = 12.76%#			
95) Terphenyl-d14	13.140	244	51464	9.16	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 18.32%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.849	88	13616	10.62	ppm	# 33
3) N-nitrosodimethylamine	3.170	42	22798	20.20	ppm	# 34
4) Pyridine	3.213	79	30208	11.30	ppm	# 17
5) Benzaldehyde	5.529	106	23984	10.83	ppm	91
6) Aniline	5.646	93	41928	10.44	ppm	89
8) bis(2-Chloroethyl)ether	5.727	93	26138	9.35	ppm	75
10) Phenol	5.614	94	33511	9.23	ppm	93
11) 2-Chlorophenol	5.769	128	25959	9.97	ppm	77
12) 1,3-Dichlorobenzene	5.940	146	28900	10.83	ppm	96
13) 1,4-Dichlorobenzene	6.026	146	30913	11.34	ppm	97
14) 1,2-Dichlorobenzene	6.187	146	28675	11.28	ppm	97
15) Benzyl alcohol	6.154	108	18012	10.50	ppm	81
16) 2,2'-Oxybis(1-chloropr...	6.315	45	59027	17.67	ppm	72
17) 2-Methylphenol	6.283	108	26103	11.20	ppm	96
18) Acetophenone	6.449	105	42629	11.58	ppm	95
19) Hexachloroethane	6.566	117	11399	9.87	ppm	84
20) N-Nitroso-di-n-propyla...	6.454	70	21567	11.37	ppm	# 52
21) 3&4-Methylphenol	6.454	108	27468	11.32	ppm	94
24) Nitrobenzene	6.636	77	31070	10.71	ppm	83
25) Isophorone	6.909	82	56848	10.73	ppm	95
26) 2-Nitrophenol	7.000	139	13250	9.48	ppm	85

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071365.D
Acq On : 23 Jun 2020 1:54 pm
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 24 12:53:43 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
27)	2,4-Dimethylphenol	7.058	107	27475	11.43	ppm		88
28)	O,O,O-Triethylphosphor...	7.144	198	11974	10.72	ppm		74
29)	bis(2-Chloroethoxy)met...	7.171	93	32252	9.76	ppm		98
30)	Benzoic Acid	7.112	105	11853	6.54	ppm		93
31)	2,4-Dichlorophenol	7.267	162	21072	10.94	ppm		95
32)	1,2,4-Trichlorobenzene	7.369	180	22305	10.29	ppm		96
34)	Naphthalene	7.454	128	83411	11.60	ppm		99
35)	4-Chloroaniline	7.524	127	35261	11.69	ppm		89
36)	2,6-Dichlorophenol	7.529	162	22234	11.31	ppm		97
37)	Hexachlorobutadiene	7.609	225	10837	8.96	ppm		99
38)	Caprolactam	7.893	113	9906	12.39	ppm	#	56
39)	4-Chloro-3-methylphenol	8.091	107	23324	11.14	ppm		93
40)	2-Methylnaphthalene	8.262	142	56022	12.05	ppm		97
41)	1-Methylnaphthalene	8.374	142	53213	12.21	ppm		97
42)	1,2,4,5-Tetrachloroben...	8.454	216	22402	9.94	ppm		100
44)	Hexachlorocyclopentadiene	8.449	237	9902	8.37	ppm		97
45)	2,4,6-Trichlorophenol	8.588	196	14307	10.11	ppm		98
46)	2,4,5-Trichlorophenol	8.625	196	15337m	10.15	ppm		
48)	1,1'-Biphenyl	8.813	154	73891	12.99	ppm		98
49)	2-Chloronaphthalene	8.823	162	50082	11.35	ppm		96
50)	2-Nitroaniline	8.946	65	18263	12.69	ppm	#	66
51)	p-Dinitrobenzene	9.118	75	9297	8.81	ppm	#	59
52)	Acenaphthylene	9.305	152	81401	12.05	ppm		100
53)	Dimethylphthalate	9.187	163	59459	11.72	ppm		99
54)	m-Dinitrobenzene	9.203	168	9085	10.31	ppm	#	72
55)	2,6-Dinitrotoluene	9.246	165	13549	11.04	ppm	#	64
56)	o-Dinitrobenzene	9.294	50	13934	19.10	ppm	#	53
57)	Acenaphthene	9.513	153	55757	12.48	ppm		100
58)	3-Nitroaniline	9.428	138	14873	11.26	ppm		94
59)	2,4-Dinitrophenol	9.556	184	3149	5.37	ppm	#	35
60)	Dibenzofuran	9.717	168	74600	12.18	ppm		92
61)	2,4-Dinitrotoluene	9.711	165	17732	11.40	ppm		70
62)	4-Nitrophenol	9.636	109	7265	11.63	ppm	#	65
63)	2,3,5,6-Tetrachlorophenol	9.813	232	10983	9.40	ppm	#	84
64)	2,3,4,6-Tetrachlorophenol	9.861	232	11983m	9.61	ppm		
65)	Fluorene	10.118	166	58317	12.20	ppm		98
66)	4-Chlorophenyl-phenyle...	10.139	204	27722	11.56	ppm		85
67)	Diethylphthalate	10.021	149	57887	11.48	ppm		96
68)	Thionazin	10.112	97	13361	11.25	ppm		99
69)	4-Nitroaniline	10.139	138	16256	12.02	ppm		83
71)	4,6-Dinitro-2-methylph...	10.187	198	6121	7.31	ppm	#	64
72)	n-Nitrosodiphenylamine	10.273	169	51304	15.42	ppm		95
73)	Diphenylamine	10.273	169	51304	13.16	ppm		95
74)	1,2-Diphenylhydrazine	10.321	77	64320	11.81	ppm		91
76)	Sulfotep	10.498	97	9868	11.58	ppm	#	64
77)	Phorate	10.642	75	33799	11.21	ppm		99
78)	4-Bromophenyl-phenylether	10.711	248	13131	9.44	ppm	#	76
79)	Hexachlorobenzene	10.760	284	12669	7.97	ppm	#	61
80)	Dimethoate	10.824	87	21744	12.09	ppm		94
81)	Simazine	10.883	201	9688	14.23	ppm		95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071365.D
Acq On : 23 Jun 2020 1:54 pm
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 24 12:53:43 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration

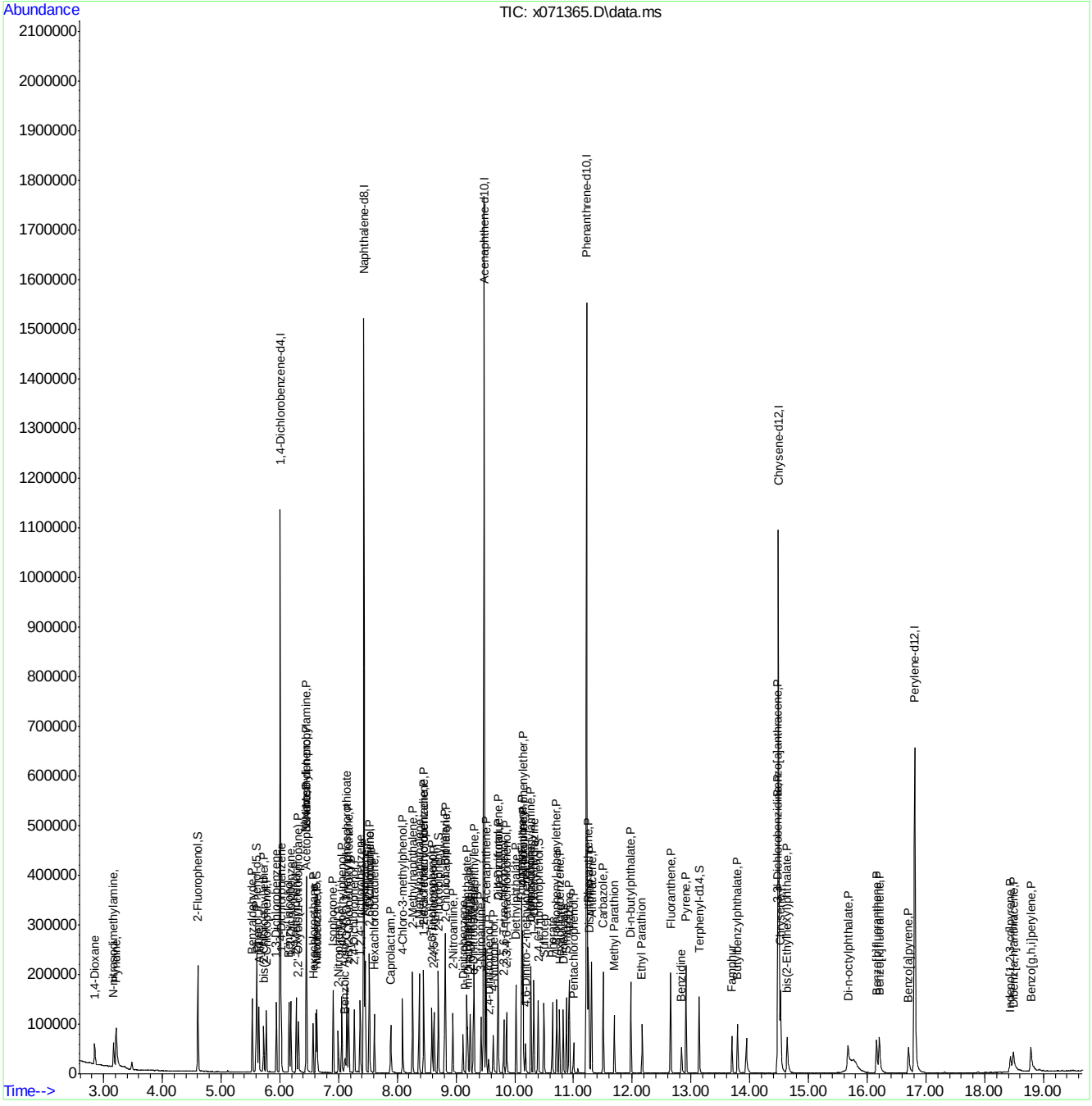
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
82) Atrazine	10.925	200	16977	12.83	ppm	#	74
83) Pentachlorophenol	11.000	266	5568	7.00	ppm		95
84) Phenanthrene	11.246	178	89391	13.41	ppm		99
85) Anthracene	11.310	178	89678	13.17	ppm		97
86) Disulfoton	11.262	88	36118	11.68	ppm		91
87) Carbazole	11.508	167	78812	12.97	ppm		98
88) Methyl Parathion	11.696	109	17952	11.83	ppm	#	82
89) Di-n-butylphthalate	11.974	149	85133	11.01	ppm		98
90) Ethyl Parathion	12.166	97	9653	9.58	ppm		78
91) Fluoranthene	12.653	202	78579	11.09	ppm		97
93) Benzidine	12.835	184	25116	9.97	ppm		93
94) Pyrene	12.915	202	83933	11.06	ppm		98
96) Famphur	13.696	218	20230	14.14	ppm		89
97) Butylbenzylphthalate	13.792	149	29273	8.79	ppm		88
98) 3,3'-Dichlorobenzidine	14.472	252	16143	8.07	ppm		97
99) Benzo[a]anthracene	14.477	228	61251	9.80	ppm		100
100) Chrysene	14.525	228	65072	10.46	ppm		95
101) bis(2-Ethylhexyl)phtha...	14.637	149	33892	7.85	ppm		93
103) Di-n-octylphthalate	15.675	149	59386	8.88	ppm		93
104) Benzo[b]fluoranthene	16.156	252	43287	8.28	ppm		99
105) Benzo[k]fluoranthene	16.210	252	56428	9.80	ppm		98
106) Benzo[a]pyrene	16.702	252	38337	7.31	ppm		94
107) Indeno[1,2,3-cd]pyrene	18.435	276	22408	4.94	ppm		96
108) Dibenz[a,h]anthracene	18.488	278	23664	4.83	ppm		91
109) Benzo[g,h,i]perylene	18.788	276	37051	7.11	ppm		90

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071365.D
Acq On : 23 Jun 2020 1:54 pm
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 11 Sample Multiplier: 1

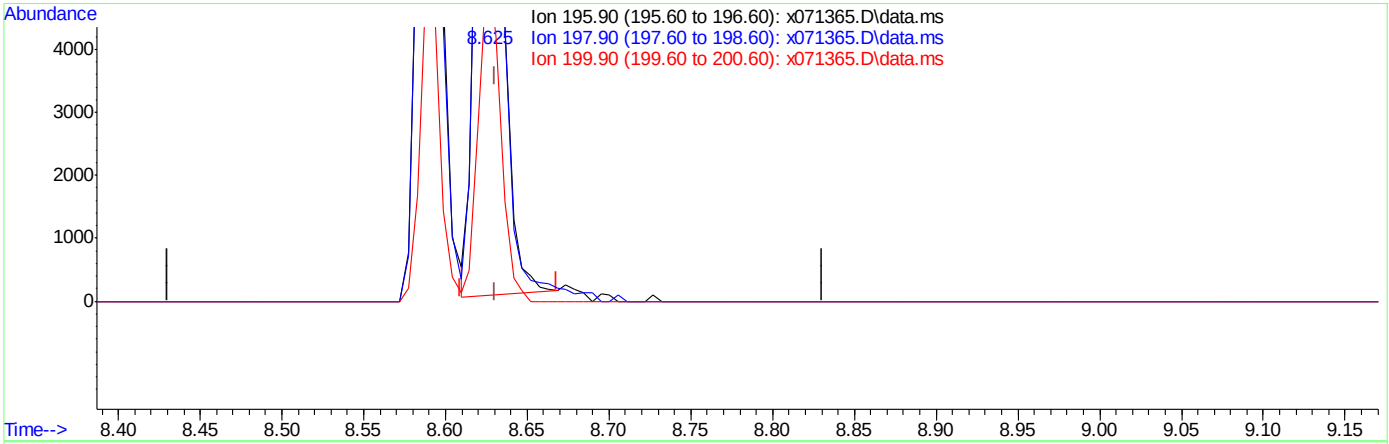
Quant Time: Jun 24 12:53:43 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration

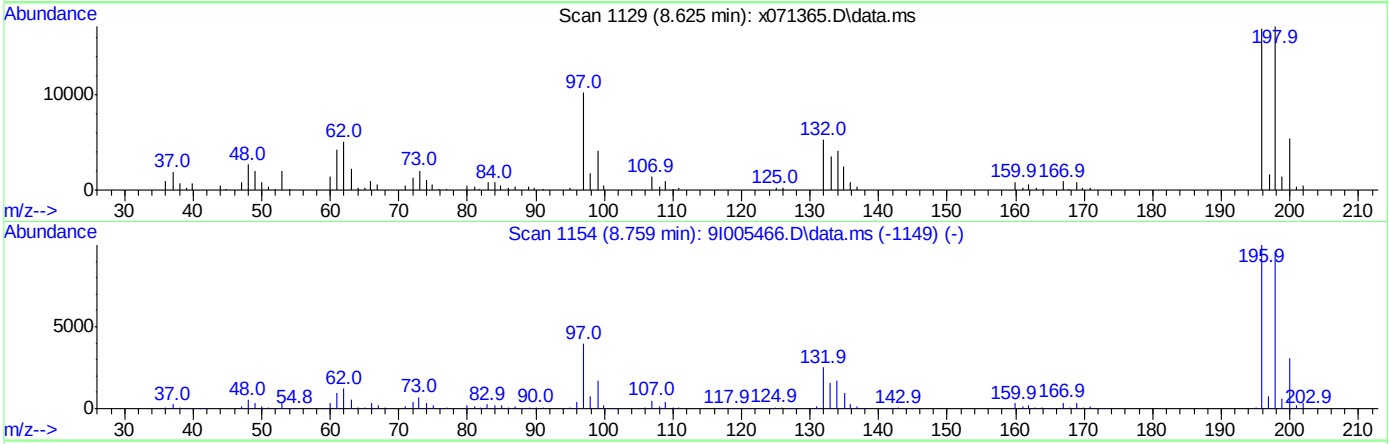


Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071365.D
Acq On : 23 Jun 2020 1:54 pm
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 23 16:56:20 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration





TIC: x071365.D\data.ms

(46) 2,4,5-Trichlorophenol (P)

8.625min (-0.005) 9.87ppm

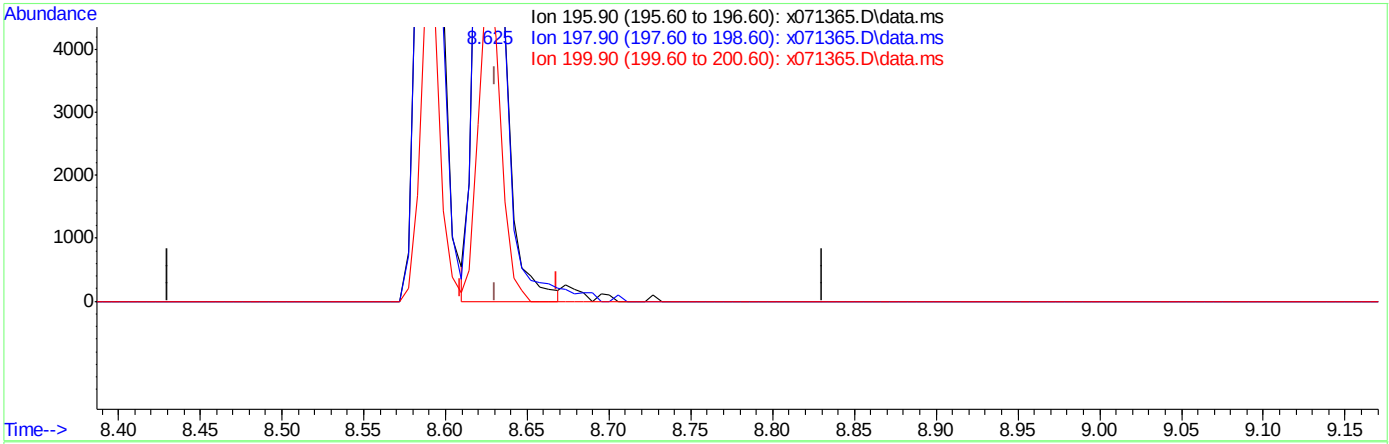
response 14908

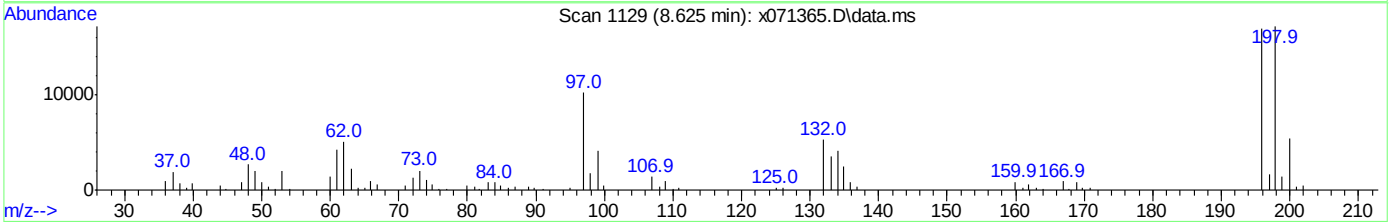
Ion	Exp%	Act%
195.90	100	100
197.90	96.00	101.59
199.90	30.90	32.14
0.00	0.00	0.00

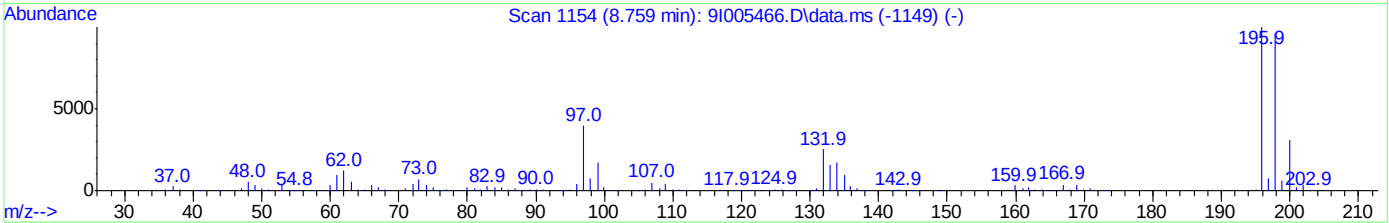
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071365.D
Acq On : 23 Jun 2020 1:54 pm
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 23 16:56:20 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration







TIC: x071365.D\data.ms

(46) 2,4,5-Trichlorophenol (P)

8.625min (-0.005) 10.15ppm m

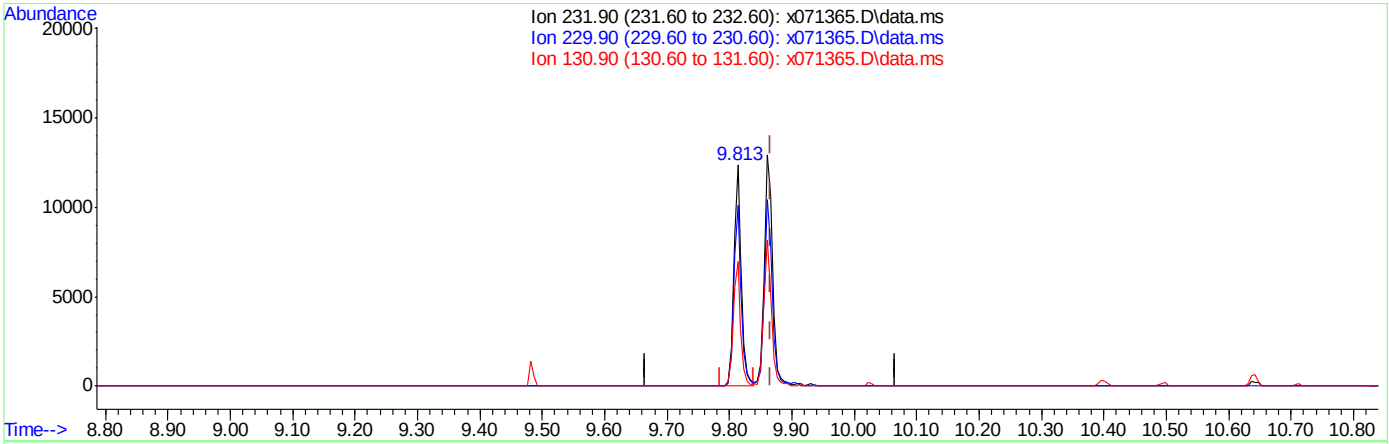
response 15337

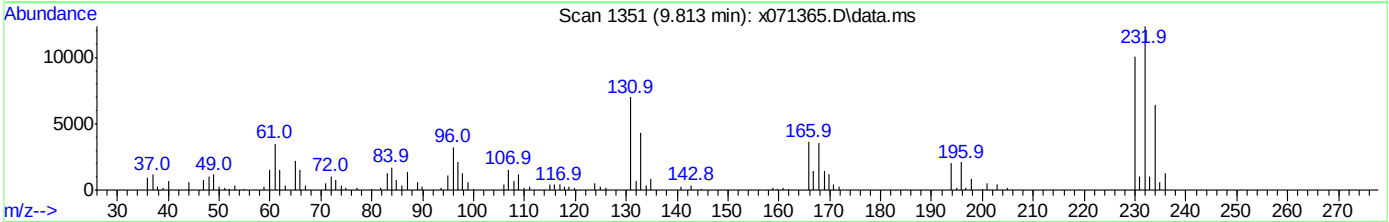
Ion	Exp%	Act%
195.90	100	100
197.90	96.00	101.08
199.90	30.90	31.85
0.00	0.00	0.00

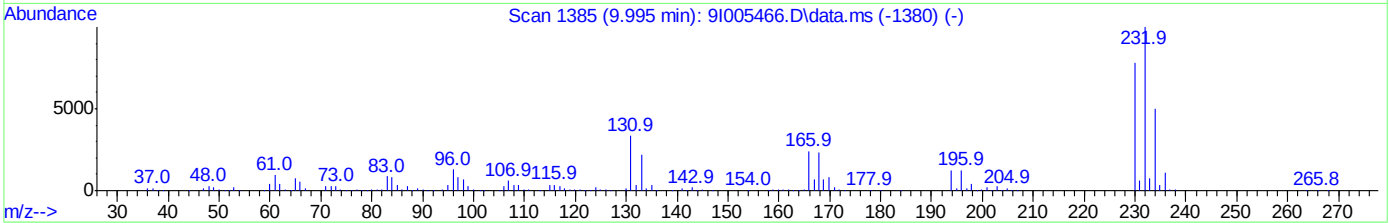
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071365.D
Acq On : 23 Jun 2020 1:54 pm
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 24 12:53:06 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration







TIC: x071365.D\data.ms

(64) 2,3,4,6-Tetrachlorophenol (P)

9.813min (-0.053) 8.81ppm

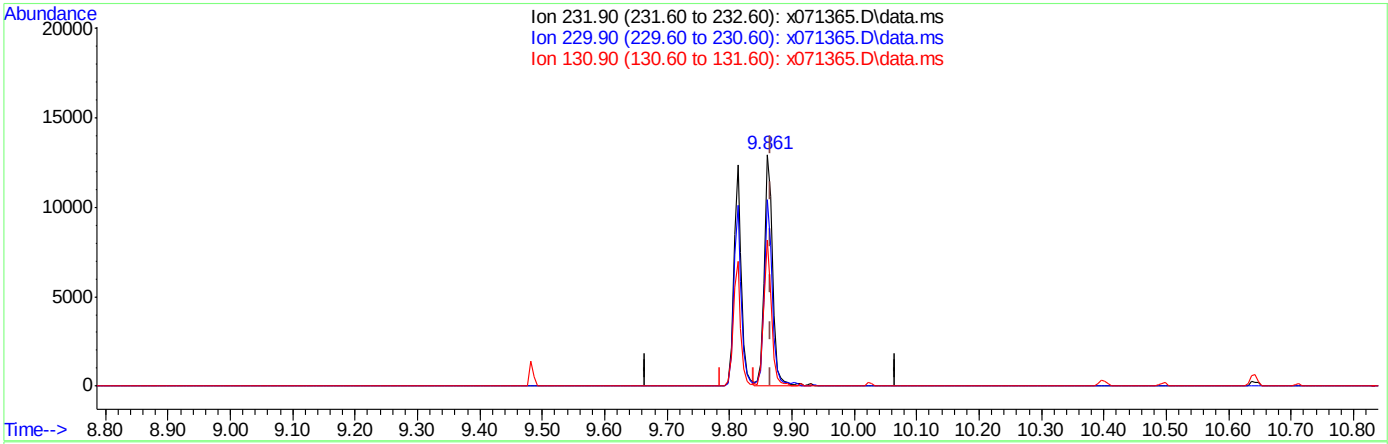
response 10983

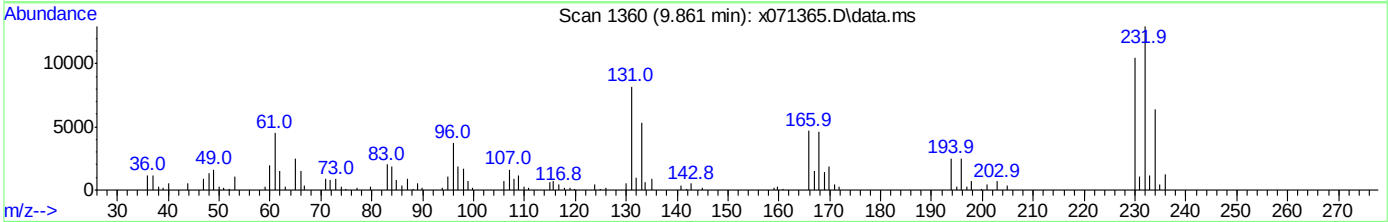
Ion	Exp%	Act%
231.90	100	100
229.90	78.40	81.93
130.90	33.30	56.61
0.00	0.00	0.00

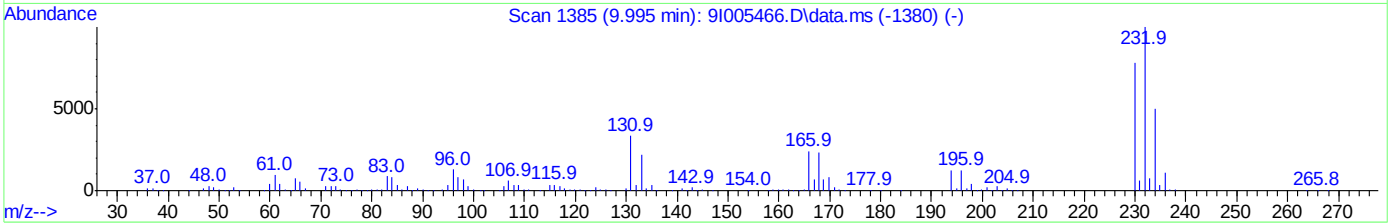
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071365.D
Acq On : 23 Jun 2020 1:54 pm
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 24 12:53:06 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration







TIC: x071365.D\data.ms

(64) 2,3,4,6-Tetrachlorophenol (P)

9.861min (-0.005) 9.61ppm m

response 11983

Ion	Exp%	Act%
231.90	100	100
229.90	78.40	80.64
130.90	33.30	63.25
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071366.D
Acq On : 23 Jun 2020 2:20 pm
Operator : marthav
Sample : ic2918-10 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 23 16:56:48 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.005	152	155496	40.00	ppm	0.00
22) Naphthalene-d8	7.433	136	654391	40.00	ppm	0.00
43) Acenaphthene-d10	9.476	164	353292	40.00	ppm	0.00
70) Phenanthrene-d10	11.225	188	615230	40.00	ppm	0.00
92) Chrysene-d12	14.493	240	423636	40.00	ppm	0.00
102) Perylene-d12	16.809	264	348672	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	0.000	152	0m	40.00	ppm	-6.00
120) Naphthalene-d8A	0.000	136	0m	40.00	ppm	-7.43
127) Acenaphthene-d10A	0.000	164	0m	40.00	ppm	-9.48
136) Phenanthrene-d10A	0.000	188	0m	40.00	ppm	-11.22
146) Chrysene-d12A	0.000	240	0m	40.00	ppm	-14.49
153) Perylene-d12A	0.000	264	0m	40.00	ppm	-16.82
System Monitoring Compounds						
7) 2-Fluorophenol	4.609	112	114758	42.82	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 42.82%			
9) Phenol-d5	5.603	99	134134	46.48	ppm	0.00
Spiked Amount 100.000	Range 10 - 50		Recovery = 46.48%			
23) Nitrobenzene-d5	6.614	82	66899	21.29	ppm	0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 42.58%			
47) 2-Fluorobiphenyl	8.700	172	125790	23.68	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 47.36%			
75) 2,4,6-Tribromophenol	10.401	330	23184	28.48	ppm	0.00
Spiked Amount 100.000	Range 33 - 118		Recovery = 28.48%#			
95) Terphenyl-d14	13.140	244	110276	19.43	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 38.86%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.849	88	28140	21.62	ppm	# 32
3) N-nitrosodimethylamine	3.170	42	49226	42.97	ppm	# 35
4) Pyridine	3.207	79	66089	24.35	ppm	# 15
5) Benzaldehyde	5.528	106	49405	21.98	ppm	93
6) Aniline	5.646	93	88588	21.73	ppm	86
8) bis(2-Chloroethyl)ether	5.726	93	56030	19.74	ppm	# 74
10) Phenol	5.614	94	74149	20.13	ppm	96
11) 2-Chlorophenol	5.769	128	57618	21.81	ppm	79
12) 1,3-Dichlorobenzene	5.940	146	61108	22.57	ppm	97
13) 1,4-Dichlorobenzene	6.026	146	64641	23.36	ppm	99
14) 1,2-Dichlorobenzene	6.186	146	60961	23.63	ppm	96
15) Benzyl alcohol	6.154	108	39919	22.93	ppm	79
16) 2,2'-Oxybis(1-chloropr...	6.315	45	123847	36.53	ppm	75
17) 2-Methylphenol	6.283	108	56254	23.78	ppm	97
18) Acetophenone	6.448	105	88063	23.58	ppm	96
19) Hexachloroethane	6.566	117	24344	20.77	ppm	89
20) N-Nitroso-di-n-propyla...	6.459	70	45135	23.44	ppm	# 55
21) 3&4-Methylphenol	6.454	108	59928	24.33	ppm	97
24) Nitrobenzene	6.636	77	66335	22.29	ppm	82
25) Isophorone	6.914	82	122821	22.61	ppm	98
26) 2-Nitrophenol	6.999	139	30272	21.13	ppm	86

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071366.D
Acq On : 23 Jun 2020 2:20 pm
Operator : marthav
Sample : ic2918-10 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 23 16:56:48 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
27)	2,4-Dimethylphenol	7.058	107	60041	24.36	ppm		96
28)	O,O,O-Triethylphosphor...	7.144	198	25587	22.34	ppm		67
29)	bis(2-Chloroethoxy)met...	7.176	93	69341	20.45	ppm		97
30)	Benzoic Acid	7.128	105	36022	19.37	ppm		89
31)	2,4-Dichlorophenol	7.272	162	47127	23.86	ppm		98
32)	1,2,4-Trichlorobenzene	7.368	180	47830	21.52	ppm		97
34)	Naphthalene	7.454	128	180087	24.41	ppm		99
35)	4-Chloroaniline	7.524	127	76278	24.65	ppm		89
36)	2,6-Dichlorophenol	7.529	162	49400	24.50	ppm		96
37)	Hexachlorobutadiene	7.609	225	23667	19.08	ppm		99
38)	Caprolactam	7.898	113	21367	26.05	ppm	#	44
39)	4-Chloro-3-methylphenol	8.090	107	52723	24.56	ppm		90
40)	2-Methylnaphthalene	8.262	142	120867	25.34	ppm		97
41)	1-Methylnaphthalene	8.374	142	114860	25.70	ppm		98
42)	1,2,4,5-Tetrachloroben...	8.454	216	47554	20.57	ppm		99
44)	Hexachlorocyclopentadiene	8.449	237	22969	18.98	ppm		98
45)	2,4,6-Trichlorophenol	8.593	196	31015	21.41	ppm		99
46)	2,4,5-Trichlorophenol	8.625	196	34887	22.57	ppm		98
48)	1,1'-Biphenyl	8.813	154	149463	25.69	ppm		99
49)	2-Chloronaphthalene	8.823	162	107769	23.86	ppm		95
50)	2-Nitroaniline	8.946	65	40476	27.48	ppm	#	66
51)	p-Dinitrobenzene	9.117	75	21846	20.22	ppm	#	57
52)	Acenaphthylene	9.305	152	178166	25.78	ppm		100
53)	Dimethylphthalate	9.187	163	125366	24.15	ppm		99
54)	m-Dinitrobenzene	9.203	168	20257	22.47	ppm	#	47
55)	2,6-Dinitrotoluene	9.246	165	28857	22.98	ppm	#	63
56)	o-Dinitrobenzene	9.294	50	30312	40.61	ppm	#	47
57)	Acenaphthene	9.513	153	118768	25.98	ppm		99
58)	3-Nitroaniline	9.433	138	32061	23.73	ppm		98
59)	2,4-Dinitrophenol	9.556	184	9607	16.00	ppm	#	32
60)	Dibenzofuran	9.716	168	158964	25.37	ppm		91
61)	2,4-Dinitrotoluene	9.711	165	37895	23.81	ppm	#	64
62)	4-Nitrophenol	9.636	109	16992	26.57	ppm	#	65
63)	2,3,5,6-Tetrachlorophenol	9.813	232	25132	21.02	ppm		90
64)	2,3,4,6-Tetrachlorophenol	9.861	232	26671	20.90	ppm		83
65)	Fluorene	10.118	166	126410	25.84	ppm		99
66)	4-Chlorophenyl-phenyle...	10.139	204	59056	24.08	ppm		86
67)	Diethylphthalate	10.027	149	126377	24.50	ppm		98
68)	Thionazin	10.118	97	28910	23.78	ppm		98
69)	4-Nitroaniline	10.144	138	35972	26.00	ppm		82
71)	4,6-Dinitro-2-methylph...	10.187	198	16902	19.85	ppm	#	62
72)	n-Nitrosodiphenylamine	10.278	169	109884	32.48	ppm		97
73)	Diphenylamine	10.278	169	109884	27.73	ppm		97
74)	1,2-Diphenylhydrazine	10.321	77	138419	24.99	ppm		89
76)	Sulfotep	10.497	97	21074	24.32	ppm	#	63
77)	Phorate	10.642	75	73892	24.09	ppm		97
78)	4-Bromophenyl-phenylether	10.711	248	28119	19.88	ppm	#	73
79)	Hexachlorobenzene	10.759	284	27000	16.69	ppm	#	61
80)	Dimethoate	10.824	87	47659	26.05	ppm		92
81)	Simazine	10.888	201	21012	30.35	ppm		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071366.D
Acq On : 23 Jun 2020 2:20 pm
Operator : marthav
Sample : ic2918-10 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 23 16:56:48 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration

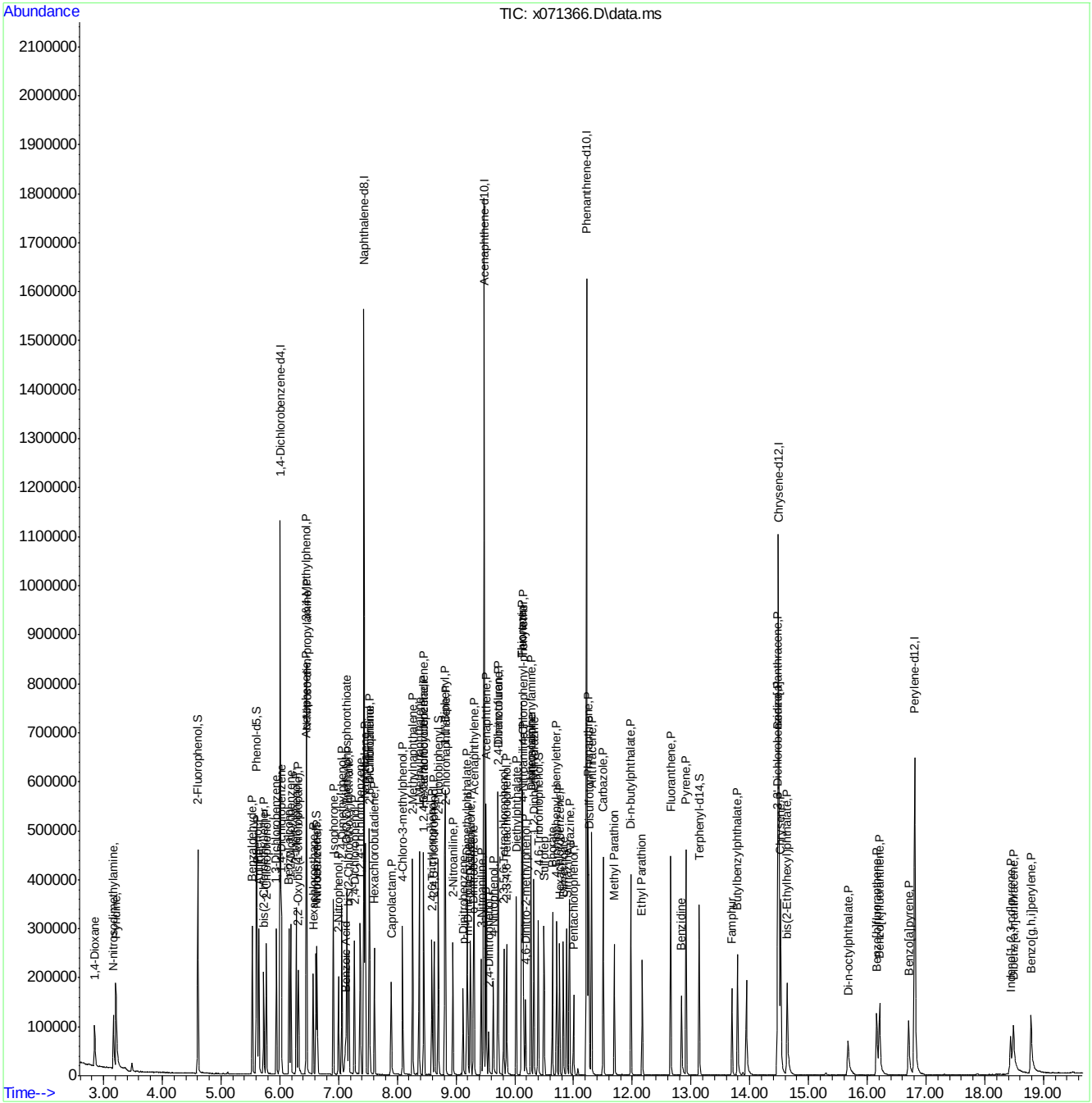
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
82) Atrazine	10.931	200	35344	26.26	ppm		84
83) Pentachlorophenol	11.000	266	15136	18.71	ppm		95
84) Phenanthrene	11.246	178	184650	27.24	ppm		99
85) Anthracene	11.310	178	191041	27.59	ppm		98
86) Disulfoton	11.262	88	77727	24.73	ppm		91
87) Carbazole	11.508	167	170347	27.57	ppm		99
88) Methyl Parathion	11.695	109	41081	26.63	ppm	#	85
89) Di-n-butylphthalate	11.974	149	191605	24.36	ppm		99
90) Ethyl Parathion	12.166	97	22244	21.70	ppm		84
91) Fluoranthene	12.653	202	169848	23.58	ppm		97
93) Benzidine	12.835	184	68168	26.79	ppm		95
94) Pyrene	12.915	202	178407	23.26	ppm		97
96) Famphur	13.696	218	45272	31.33	ppm		85
97) Butylbenzylphthalate	13.792	149	68441	20.35	ppm		87
98) 3,3'-Dichlorobenzidine	14.471	252	38018	18.83	ppm		95
99) Benzo[a]anthracene	14.477	228	130952	20.74	ppm		100
100) Chrysene	14.525	228	140095	22.28	ppm		98
101) bis(2-Ethylhexyl)phtha...	14.637	149	84382	19.34	ppm		96
103) Di-n-octylphthalate	15.675	149	86621	13.22	ppm		93
104) Benzo[b]fluoranthene	16.162	252	79954	15.61	ppm		97
105) Benzo[k]fluoranthene	16.210	252	114793	20.34	ppm		100
106) Benzo[a]pyrene	16.707	252	78804	15.33	ppm		99
107) Indeno[1,2,3-cd]pyrene	18.440	276	47837	10.76	ppm		93
108) Dibenz[a,h]anthracene	18.488	278	62126	12.94	ppm		89
109) Benzo[g,h,i]perylene	18.793	276	83957	16.44	ppm		94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071366.D
Acq On : 23 Jun 2020 2:20 pm
Operator : marthav
Sample : ic2918-10 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 23 16:56:48 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 06/24/20 14:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071367.D
Acq On : 23 Jun 2020 2:46 pm
Operator : marthav
Sample : ic2918-25 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 23 16:57:01 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.010	152	167074	40.00	ppm	0.00
22) Naphthalene-d8	7.433	136	718312	40.00	ppm	0.00
43) Acenaphthene-d10	9.476	164	380711	40.00	ppm	0.00
70) Phenanthrene-d10	11.225	188	643412	40.00	ppm	0.00
92) Chrysene-d12	14.493	240	456853	40.00	ppm	0.00
102) Perylene-d12	16.809	264	354803	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	0.000	152	0m	40.00	ppm	-6.00
120) Naphthalene-d8A	0.000	136	0m	40.00	ppm	-7.43
127) Acenaphthene-d10A	0.000	164	0m	40.00	ppm	-9.48
136) Phenanthrene-d10A	0.000	188	0m	40.00	ppm	-11.22
146) Chrysene-d12A	0.000	240	0m	40.00	ppm	-14.49
153) Perylene-d12A	0.000	264	0m	40.00	ppm	-16.82
System Monitoring Compounds						
7) 2-Fluorophenol	4.609	112	296188	102.86	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 102.86%#			
9) Phenol-d5	5.609	99	352148	113.56	ppm	0.00
Spiked Amount 100.000	Range 10 - 50		Recovery = 113.56%#			
23) Nitrobenzene-d5	6.620	82	184362	53.45	ppm	0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 106.90%			
47) 2-Fluorobiphenyl	8.700	172	337040	58.87	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 117.74%#			
75) 2,4,6-Tribromophenol	10.401	330	66539	78.17	ppm	0.00
Spiked Amount 100.000	Range 33 - 118		Recovery = 78.17%			
95) Terphenyl-d14	13.140	244	305446	49.89	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 99.78%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.844	88	71707	51.29	ppm	# 25
3) N-nitrosodimethylamine	3.164	42	127558	103.64	ppm	# 36
4) Pyridine	3.202	79	176874	60.66	ppm	# 18
5) Benzaldehyde	5.534	106	125669	52.05	ppm	96
6) Aniline	5.646	93	240316	54.85	ppm	84
8) bis(2-Chloroethyl)ether	5.726	93	150380	49.31	ppm	# 74
10) Phenol	5.619	94	202082	51.07	ppm	91
11) 2-Chlorophenol	5.769	128	156153	55.01	ppm	78
12) 1,3-Dichlorobenzene	5.940	146	162398	55.82	ppm	96
13) 1,4-Dichlorobenzene	6.026	146	172045	57.87	ppm	97
14) 1,2-Dichlorobenzene	6.186	146	162906	58.76	ppm	96
15) Benzyl alcohol	6.160	108	109579	58.57	ppm	81
16) 2,2'-Oxybis(1-chloropr...	6.320	45	329775	90.53	ppm	75
17) 2-Methylphenol	6.283	108	153153	60.25	ppm	95
18) Acetophenone	6.454	105	231507	57.68	ppm	97
19) Hexachloroethane	6.566	117	66075	52.47	ppm	90
20) N-Nitroso-di-n-propyla...	6.459	70	123252	59.57	ppm	# 57
21) 3&4-Methylphenol	6.459	108	164224	62.06	ppm	97
24) Nitrobenzene	6.641	77	184755	56.55	ppm	85
25) Isophorone	6.914	82	328957	55.17	ppm	95
26) 2-Nitrophenol	6.999	139	88328	56.16	ppm	74

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071367.D
Acq On : 23 Jun 2020 2:46 pm
Operator : marthav
Sample : ic2918-25 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 23 16:57:01 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
27) 2,4-Dimethylphenol	7.058	107	161238	59.61	ppm		92
28) O,O,O-Triethylphosphor...	7.149	198	68176	54.22	ppm		81
29) bis(2-Chloroethoxy)met...	7.176	93	194366	52.22	ppm		95
30) Benzoic Acid	7.155	105	123126m	60.30	ppm		
31) 2,4-Dichlorophenol	7.272	162	129306	59.63	ppm		97
32) 1,2,4-Trichlorobenzene	7.368	180	130434	53.46	ppm		96
34) Naphthalene	7.459	128	487020	60.15	ppm		99
35) 4-Chloroaniline	7.524	127	209742	61.76	ppm		89
36) 2,6-Dichlorophenol	7.534	162	134562	60.79	ppm		98
37) Hexachlorobutadiene	7.609	225	63913	46.95	ppm		99
38) Caprolactam	7.925	113	55078	61.17	ppm	#	49
39) 4-Chloro-3-methylphenol	8.096	107	140174	59.48	ppm		92
40) 2-Methylnaphthalene	8.262	142	316307	60.41	ppm		97
41) 1-Methylnaphthalene	8.374	142	301274	61.42	ppm		97
42) 1,2,4,5-Tetrachloroben...	8.454	216	130158	51.29	ppm		98
44) Hexachlorocyclopentadiene	8.449	237	70261	53.87	ppm		96
45) 2,4,6-Trichlorophenol	8.593	196	87035	55.75	ppm		99
46) 2,4,5-Trichlorophenol	8.631	196	95733	57.47	ppm		98
48) 1,1'-Biphenyl	8.813	154	386811	61.69	ppm		100
49) 2-Chloronaphthalene	8.823	162	292275	60.05	ppm		94
50) 2-Nitroaniline	8.946	65	110868	69.86	ppm	#	61
51) p-Dinitrobenzene	9.123	75	62645	53.81	ppm	#	68
52) Acenaphthylene	9.310	152	478876	64.29	ppm		99
53) Dimethylphthalate	9.192	163	330261	59.04	ppm		99
54) m-Dinitrobenzene	9.203	168	58044	59.74	ppm	#	22
55) 2,6-Dinitrotoluene	9.246	165	78532	58.04	ppm	#	52
56) o-Dinitrobenzene	9.299	50	77948	96.90	ppm	#	53
57) Acenaphthene	9.513	153	314387	63.82	ppm		99
58) 3-Nitroaniline	9.433	138	89750	61.64	ppm		91
59) 2,4-Dinitrophenol	9.556	184	35846	55.41	ppm	#	25
60) Dibenzofuran	9.722	168	422234	62.52	ppm		94
61) 2,4-Dinitrotoluene	9.717	165	103282	60.23	ppm	#	64
62) 4-Nitrophenol	9.642	109	49624	72.02	ppm	#	69
63) 2,3,5,6-Tetrachlorophenol	9.813	232	72401	56.20	ppm		89
64) 2,3,4,6-Tetrachlorophenol	9.866	232	73940	53.77	ppm		88
65) Fluorene	10.123	166	329261	62.46	ppm		99
66) 4-Chlorophenyl-phenyle...	10.139	204	158495	59.96	ppm		85
67) Diethylphthalate	10.032	149	335780	60.42	ppm		97
68) Thionazin	10.118	97	73744	56.30	ppm		100
69) 4-Nitroaniline	10.150	138	101280	67.94	ppm		78
71) 4,6-Dinitro-2-methylph...	10.187	198	54403	61.11	ppm	#	56
72) n-Nitrosodiphenylamine	10.278	169	296377	83.76	ppm		97
73) Diphenylamine	10.278	169	296377	71.50	ppm		97
74) 1,2-Diphenylhydrazine	10.326	77	365382	63.08	ppm		92
76) Sulfotep	10.497	97	54825	60.50	ppm	#	58
77) Phorate	10.642	75	195293	60.89	ppm		97
78) 4-Bromophenyl-phenylether	10.717	248	76134	51.48	ppm		83
79) Hexachlorobenzene	10.765	284	71650	42.36	ppm		72
80) Dimethoate	10.829	87	128904	67.38	ppm		94
81) Simazine	10.893	201	55700	76.94	ppm		94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071367.D
Acq On : 23 Jun 2020 2:46 pm
Operator : marthav
Sample : ic2918-25 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 23 16:57:01 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration

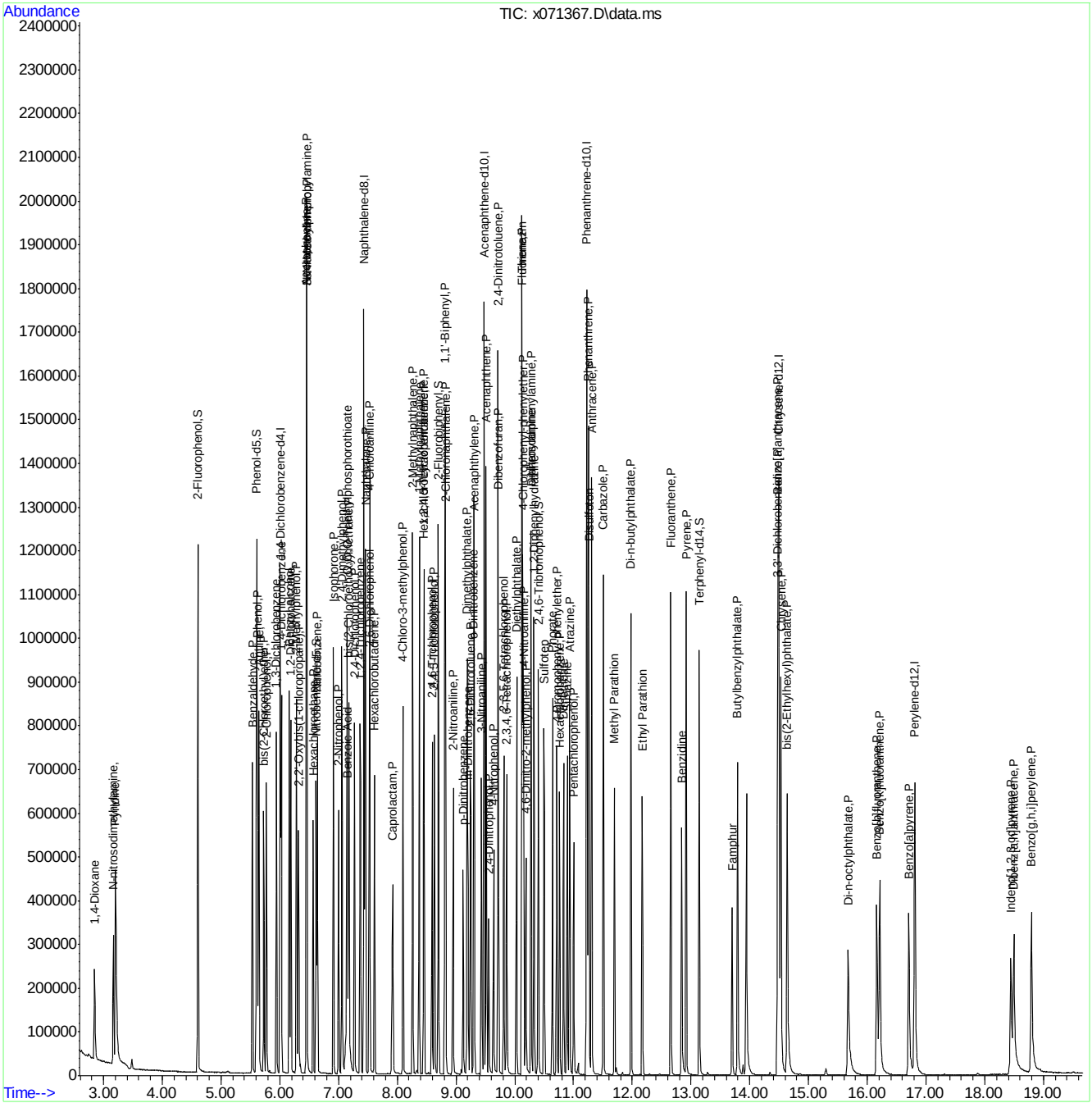
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
82) Atrazine	10.936	200	93870	66.68	ppm		87
83) Pentachlorophenol	11.000	266	45957	54.31	ppm		96
84) Phenanthrene	11.252	178	482902	68.13	ppm		99
85) Anthracene	11.310	178	509170	70.32	ppm		98
86) Disulfoton	11.262	88	206671	62.87	ppm		92
87) Carbazole	11.508	167	451343	69.84	ppm		98
88) Methyl Parathion	11.696	109	111405	69.05	ppm	#	83
89) Di-n-butylphthalate	11.974	149	519074	63.12	ppm		98
90) Ethyl Parathion	12.172	97	62808	58.60	ppm		88
91) Fluoranthene	12.653	202	447785	59.44	ppm		99
93) Benzidine	12.840	184	219352	79.93	ppm		96
94) Pyrene	12.920	202	475210	57.46	ppm		95
96) Famphur	13.701	218	106685	68.46	ppm		93
97) Butylbenzylphthalate	13.792	149	198022	54.61	ppm		88
98) 3,3'-Dichlorobenzidine	14.471	252	115753	53.15	ppm		96
99) Benzo[a]anthracene	14.477	228	354729	52.10	ppm		99
100) Chrysene	14.530	228	378801	55.87	ppm		98
101) bis(2-Ethylhexyl)phtha...	14.637	149	263880	56.09	ppm		95
103) Di-n-octylphthalate	15.675	149	309620	46.43	ppm		92
104) Benzo[b]fluoranthene	16.162	252	243405	46.69	ppm		98
105) Benzo[k]fluoranthene	16.215	252	310730	54.11	ppm		100
106) Benzo[a]pyrene	16.713	252	239153	45.73	ppm		98
107) Indeno[1,2,3-cd]pyrene	18.440	276	157709	34.86	ppm		92
108) Dibenz[a,h]anthracene	18.494	278	181799	37.20	ppm		92
109) Benzo[g,h,i]perylene	18.799	276	230159	44.30	ppm		94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071367.D
Acq On : 23 Jun 2020 2:46 pm
Operator : marthav
Sample : ic2918-25 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 23 16:57:01 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration



Manual Integration Approval Summary

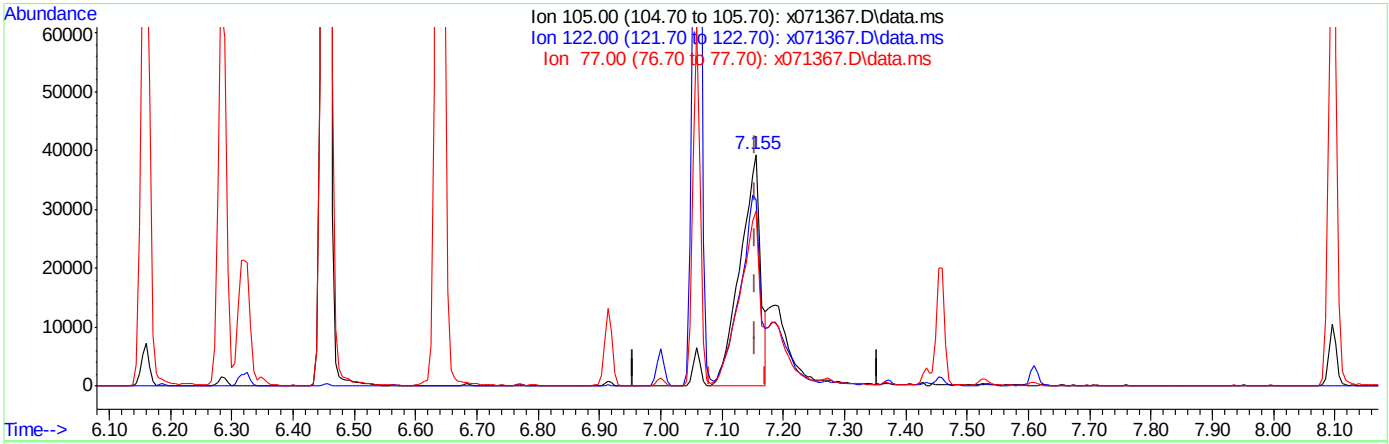
Sample Number:	SX2918-IC2918	**Method:**	EPA 625.1
Lab FileID:	X071367.D	**Analyst approved:**	06/24/20 09:50 Martha Valls
Injection Time:	06/23/20 14:46	**Supervisor approved:**	06/24/20 14:07 Naresh Jiawan

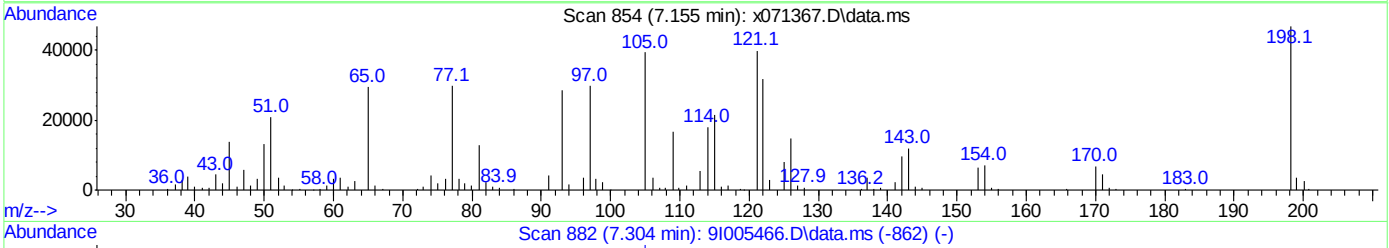
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic Acid	65-85-0		7.15	Split peak

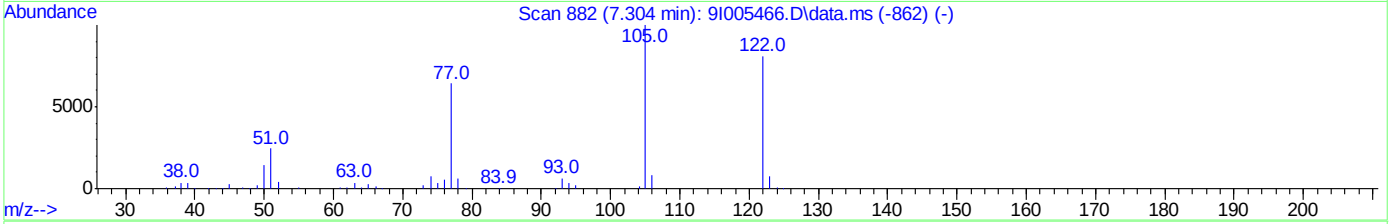
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071367.D
Acq On : 23 Jun 2020 2:46 pm
Operator : marthav
Sample : ic2918-25 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 23 15:19:13 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration







TIC: x071367.D\data.ms

(30) Benzoic Acid

7.155min (0.000) 43.78ppm

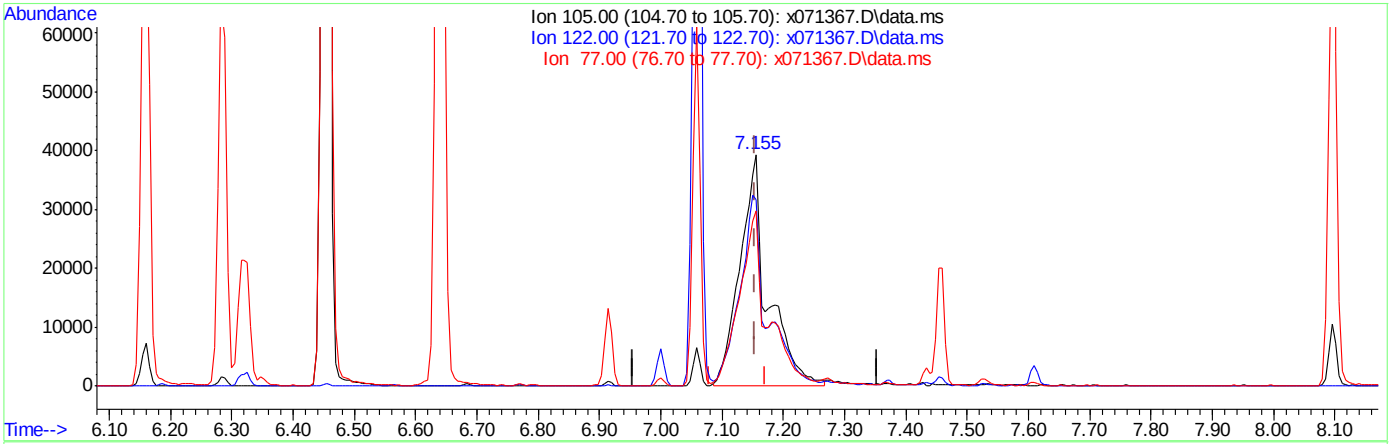
response 89388

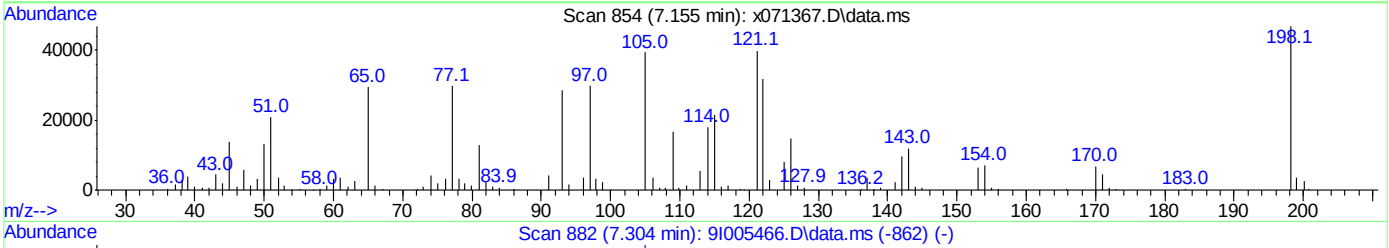
Ion	Exp%	Act%
105.00	100	100
122.00	81.20	79.14
77.00	64.10	74.62
0.00	0.00	0.00

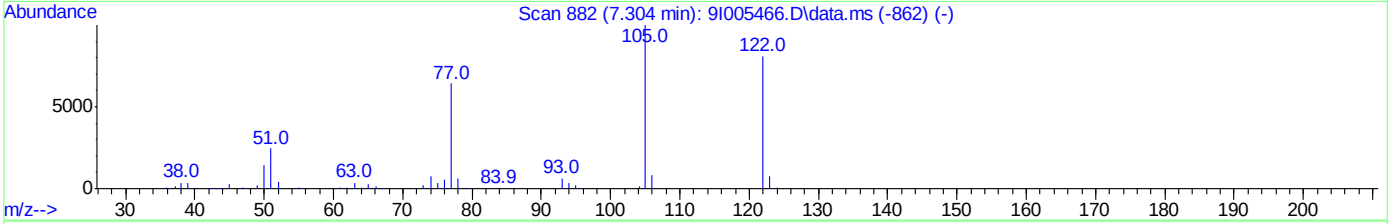
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071367.D
Acq On : 23 Jun 2020 2:46 pm
Operator : marthav
Sample : ic2918-25 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 23 15:19:13 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration







TIC: x071367.D\data.ms

(30) Benzoic Acid

7.155min (0.000) 60.30ppm m

response 123126

Ion	Exp%	Act%
105.00	100	100
122.00	81.20	80.35
77.00	64.10	75.61
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 06/24/20 14:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071368.D
Acq On : 23 Jun 2020 3:12 pm
Operator : marthav
Sample : icc2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 23 16:57:37 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.010	152	170190	40.00	ppm	0.00
22) Naphthalene-d8	7.433	136	730199	40.00	ppm	0.00
43) Acenaphthene-d10	9.481	164	379384	40.00	ppm	0.00
70) Phenanthrene-d10	11.225	188	636433	40.00	ppm	0.00
92) Chrysene-d12	14.498	240	474373	40.00	ppm	0.00
102) Perylene-d12	16.809	264	348798	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	0.000	152	0m	40.00	ppm	-6.00
120) Naphthalene-d8A	0.000	136	0m	40.00	ppm	-7.43
127) Acenaphthene-d10A	0.000	164	0m	40.00	ppm	-9.48
136) Phenanthrene-d10A	0.000	188	0m	40.00	ppm	-11.22
146) Chrysene-d12A	0.000	240	0m	40.00	ppm	-14.49
153) Perylene-d12A	0.000	264	0m	40.00	ppm	-16.82
System Monitoring Compounds						
7) 2-Fluorophenol	4.609	112	581541	198.25	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 198.25%#			
9) Phenol-d5	5.614	99	702165	222.29	ppm	0.00
Spiked Amount 100.000	Range 10 - 50		Recovery = 222.29%#			
23) Nitrobenzene-d5	6.620	82	371628	105.99	ppm	0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 211.98%#			
47) 2-Fluorobiphenyl	8.700	172	687481	120.50	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 241.00%#			
75) 2,4,6-Tribromophenol	10.407	330	141075	167.55	ppm	0.00
Spiked Amount 100.000	Range 33 - 118		Recovery = 167.55%#			
95) Terphenyl-d14	13.140	244	632272	99.47	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 198.94%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.844	88	135258	94.97	ppm	# 29
3) N-nitrosodimethylamine	3.165	42	247597	197.49	ppm	# 34
4) Pyridine	3.202	79	347463	116.98	ppm	# 20
5) Benzaldehyde	5.534	106	244610	99.45	ppm	94
6) Aniline	5.652	93	517495	115.96	ppm	91
8) bis(2-Chloroethyl)ether	5.732	93	310263	99.87	ppm	75
10) Phenol	5.625	94	447918	111.12	ppm	84
11) 2-Chlorophenol	5.775	128	331118	114.52	ppm	81
12) 1,3-Dichlorobenzene	5.941	146	332239	112.10	ppm	96
13) 1,4-Dichlorobenzene	6.026	146	355012	117.23	ppm	97
14) 1,2-Dichlorobenzene	6.187	146	338462	119.85	ppm	95
15) Benzyl alcohol	6.165	108	225749	118.46	ppm	84
16) 2,2'-Oxybis(1-chloropr...	6.326	45	647052	174.37	ppm	77
17) 2-Methylphenol	6.288	108	316556	122.24	ppm	96
18) Acetophenone	6.459	105	458751	112.21	ppm	97
19) Hexachloroethane	6.566	117	133396	104.00	ppm	86
20) N-Nitroso-di-n-propyla...	6.470	70	245638	116.54	ppm	# 66
21) 3&4-Methylphenol	6.465	108	325992	120.95	ppm	97
24) Nitrobenzene	6.647	77	370334	111.50	ppm	86
25) Isophorone	6.919	82	648108	106.92	ppm	96
26) 2-Nitrophenol	7.000	139	179002	111.96	ppm	81

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071368.D
Acq On : 23 Jun 2020 3:12 pm
Operator : marthav
Sample : icc2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 23 16:57:37 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
27)	2,4-Dimethylphenol	7.064	107	328379	119.42	ppm		93
28)	O,O,O-Triethylphosphor...	7.155	198	137643	107.68	ppm		88
29)	bis(2-Chloroethoxy)met...	7.181	93	384175	101.55	ppm		96
30)	Benzoic Acid	7.176	105	281742m	135.74	ppm		
31)	2,4-Dichlorophenol	7.278	162	269208	122.13	ppm		97
32)	1,2,4-Trichlorobenzene	7.374	180	263849	106.37	ppm		97
34)	Naphthalene	7.460	128	978658	118.90	ppm		99
35)	4-Chloroaniline	7.529	127	417641	120.97	ppm		91
36)	2,6-Dichlorophenol	7.534	162	269840	119.92	ppm		97
37)	Hexachlorobutadiene	7.609	225	130690	94.44	ppm		99
38)	Caprolactam	7.952	113	108415	118.45	ppm	#	53
39)	4-Chloro-3-methylphenol	8.101	107	280801	117.22	ppm		93
40)	2-Methylnaphthalene	8.262	142	638104	119.89	ppm		98
41)	1-Methylnaphthalene	8.374	142	612512	122.84	ppm		97
42)	1,2,4,5-Tetrachloroben...	8.460	216	270199	104.75	ppm		97
44)	Hexachlorocyclopentadiene	8.449	237	154031	118.51	ppm		98
45)	2,4,6-Trichlorophenol	8.593	196	180184	115.82	ppm		97
46)	2,4,5-Trichlorophenol	8.636	196	195993	118.08	ppm		99
48)	1,1'-Biphenyl	8.813	154	774415	123.94	ppm		99
49)	2-Chloronaphthalene	8.829	162	587674	121.17	ppm		96
50)	2-Nitroaniline	8.952	65	217159	137.31	ppm	#	65
51)	p-Dinitrobenzene	9.123	75	126328	108.90	ppm	#	60
52)	Acenaphthylene	9.310	152	963028	129.74	ppm		99
53)	Dimethylphthalate	9.198	163	651563	116.88	ppm		99
54)	m-Dinitrobenzene	9.209	168	117437	121.30	ppm	#	25
55)	2,6-Dinitrotoluene	9.251	165	162115	120.23	ppm		76
56)	o-Dinitrobenzene	9.310	50	147548	184.06	ppm	#	63
57)	Acenaphthene	9.519	153	622009	126.70	ppm		98
58)	3-Nitroaniline	9.439	138	180019	124.06	ppm		89
59)	2,4-Dinitrophenol	9.562	184	83541	129.58	ppm	#	41
60)	Dibenzofuran	9.722	168	822372	122.20	ppm		93
61)	2,4-Dinitrotoluene	9.722	165	205436	120.22	ppm	#	67
62)	4-Nitrophenol	9.647	109	98995	144.17	ppm	#	66
63)	2,3,5,6-Tetrachlorophenol	9.818	232	149105	116.15	ppm		93
64)	2,3,4,6-Tetrachlorophenol	9.866	232	150195	109.60	ppm		85
65)	Fluorene	10.123	166	646099	122.99	ppm		98
66)	4-Chlorophenyl-phenyle...	10.145	204	316481	120.15	ppm		92
67)	Diethylphthalate	10.038	149	662960	119.71	ppm		98
68)	Thionazin	10.129	97	142705	109.33	ppm		97
69)	4-Nitroaniline	10.166	138	196264	132.11	ppm		85
71)	4,6-Dinitro-2-methylph...	10.198	198	118222	134.24	ppm		89
72)	n-Nitrosodiphenylamine	10.284	169	584050	166.87	ppm		97
73)	Diphenylamine	10.284	169	584050	142.45	ppm		97
74)	1,2-Diphenylhydrazine	10.326	77	718418	125.39	ppm		91
76)	Sulfotep	10.503	97	109712	122.40	ppm	#	73
77)	Phorate	10.642	75	385046	121.36	ppm		96
78)	4-Bromophenyl-phenylether	10.717	248	152873	104.50	ppm	#	81
79)	Hexachlorobenzene	10.765	284	150881	90.19	ppm		69
80)	Dimethoate	10.835	87	254067	134.25	ppm		94
81)	Simazine	10.904	201	110243	153.95	ppm		95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071368.D
Acq On : 23 Jun 2020 3:12 pm
Operator : marthav
Sample : icc2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 23 16:57:37 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration

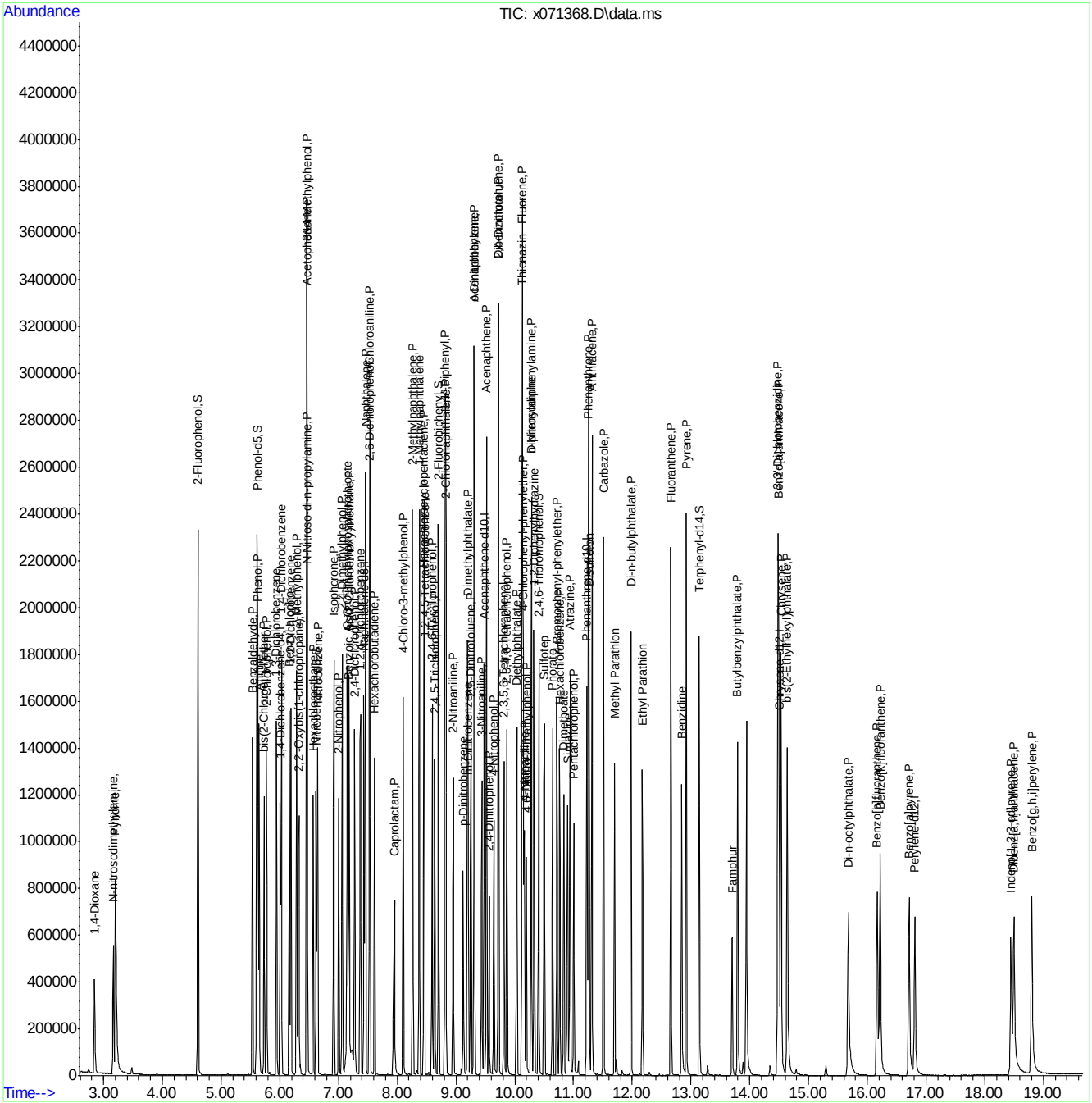
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
82) Atrazine	10.941	200	186308	133.80	ppm		88
83) Pentachlorophenol	11.006	266	102560	122.54	ppm		98
84) Phenanthrene	11.252	178	955958	136.34	ppm		99
85) Anthracene	11.316	178	1017200	142.02	ppm		98
86) Disulfoton	11.268	88	401616	123.51	ppm		90
87) Carbazole	11.514	167	882727	138.09	ppm		98
88) Methyl Parathion	11.701	109	218419	136.86	ppm	#	88
89) Di-n-butylphthalate	11.979	149	1036569	127.42	ppm		98
90) Ethyl Parathion	12.172	97	126325	119.15	ppm		87
91) Fluoranthene	12.658	202	894676	120.07	ppm		97
93) Benzidine	12.840	184	473506	166.17	ppm		98
94) Pyrene	12.920	202	967727	112.69	ppm		97
96) Famphur	13.701	218	170704	105.50	ppm		92
97) Butylbenzylphthalate	13.792	149	404219	107.36	ppm		87
98) 3,3'-Dichlorobenzidine	14.477	252	252309	111.58	ppm		97
99) Benzo[a]anthracene	14.482	228	739664	104.62	ppm		99
100) Chrysene	14.536	228	782608	111.17	ppm		99
101) bis(2-Ethylhexyl)phtha...	14.637	149	568149	116.31	ppm		96
103) Di-n-octylphthalate	15.680	149	709158	108.17	ppm		93
104) Benzo[b]fluoranthene	16.167	252	507571	99.05	ppm		99
105) Benzo[k]fluoranthene	16.221	252	615358	109.00	ppm		99
106) Benzo[a]pyrene	16.718	252	488606	95.04	ppm		99
107) Indeno[1,2,3-cd]pyrene	18.446	276	334683	75.26	ppm		90
108) Dibenz[a,h]anthracene	18.499	278	380638	79.23	ppm		93
109) Benzo[g,h,i]perylene	18.804	276	470714	92.15	ppm		94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071368.D
Acq On : 23 Jun 2020 3:12 pm
Operator : marthav
Sample : icc2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 23 16:57:37 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: SX2918-ICC2918
Lab FileID: X071368.D
Injection Time: 06/23/20 15:12

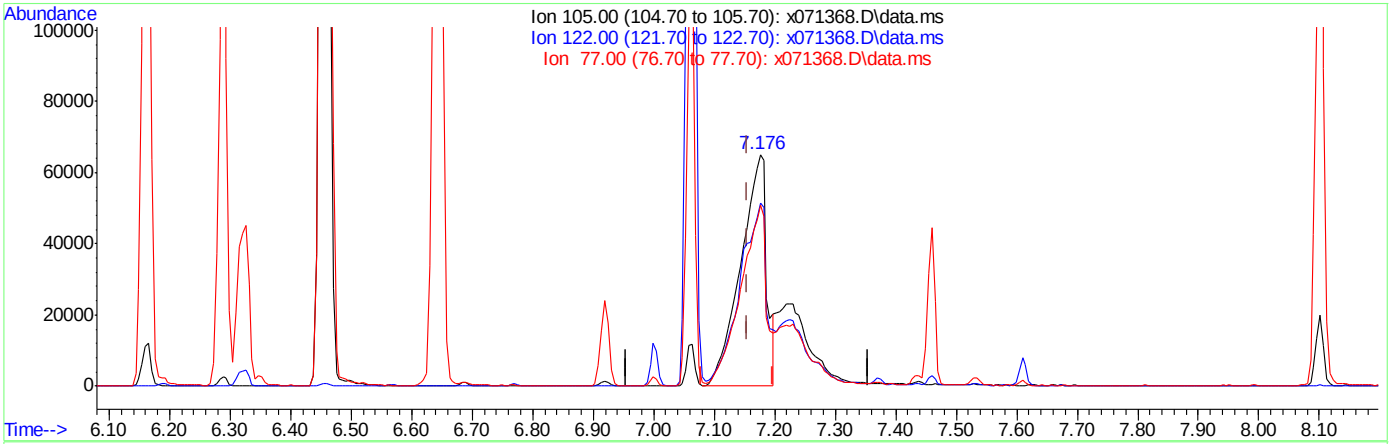
Method: EPA 625.1
Analyst approved: 06/24/20 09:50 Martha Valls
Supervisor approved: 06/24/20 14:07 Naresh Jiawan

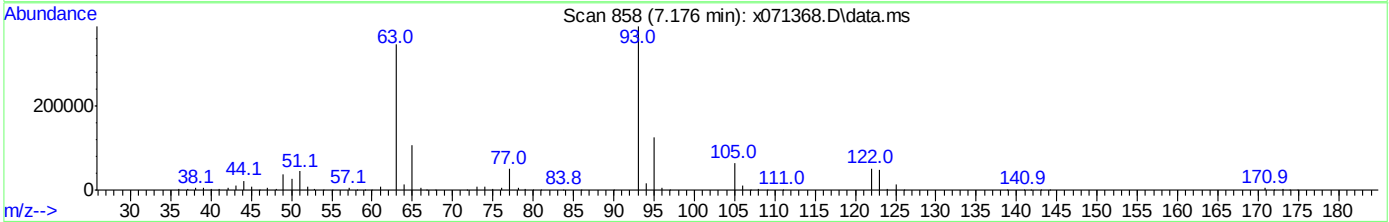
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic Acid	65-85-0		7.18	Split peak

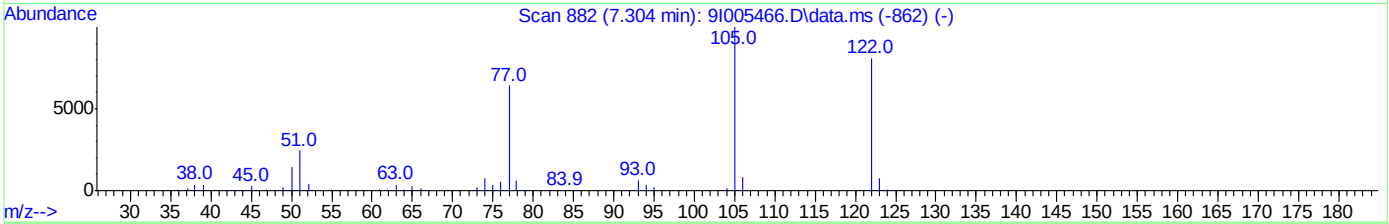
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071368.D
Acq On : 23 Jun 2020 3:12 pm
Operator : marthav
Sample : icc2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 23 15:47:06 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration







TIC: x071368.D\data.ms

(30) Benzoic Acid

7.176min (+0.022) 92.98ppm

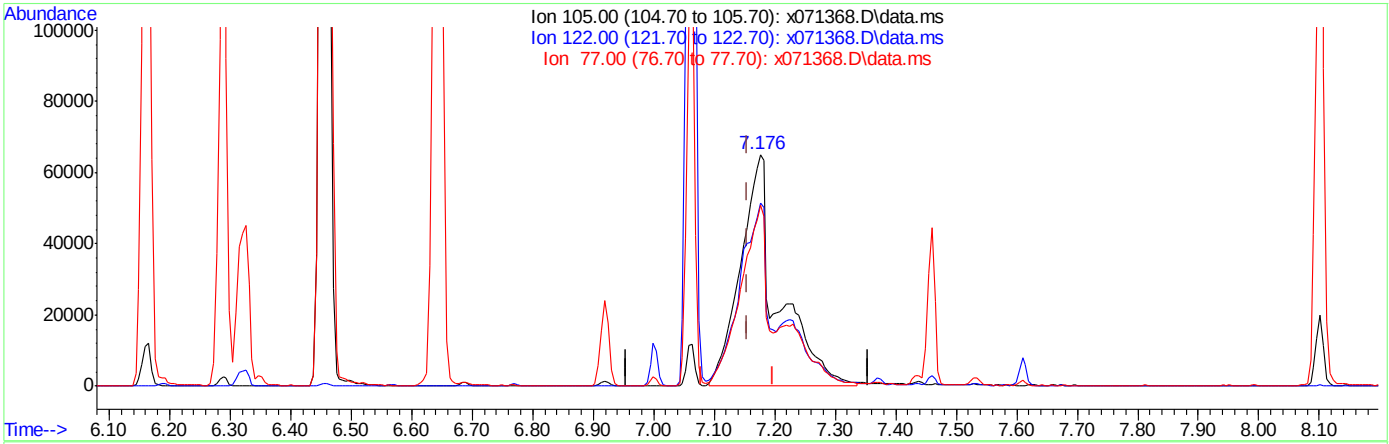
response 192977

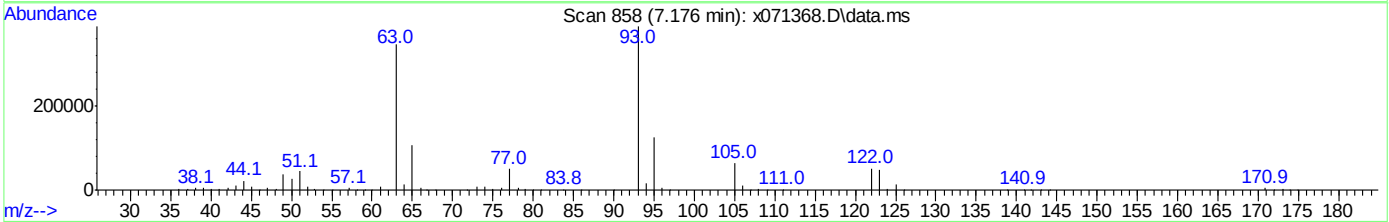
Ion	Exp%	Act%
105.00	100	100
122.00	81.20	77.04
77.00	64.10	77.97
0.00	0.00	0.00

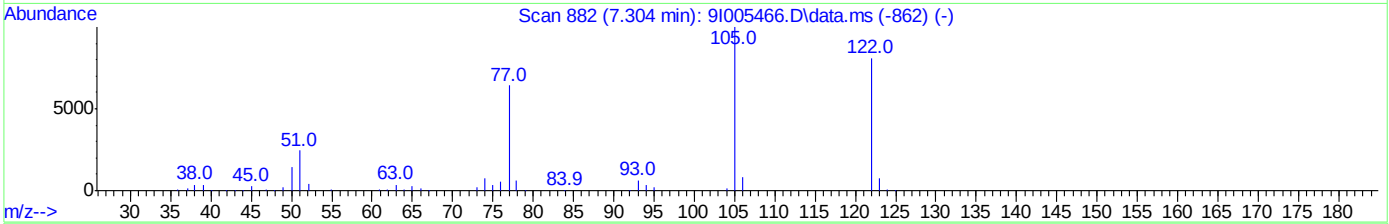
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071368.D
Acq On : 23 Jun 2020 3:12 pm
Operator : marthav
Sample : icc2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 23 15:47:06 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration







TIC: x071368.D\data.ms

(30) Benzoic Acid

7.176min (+0.022) 135.74ppm m

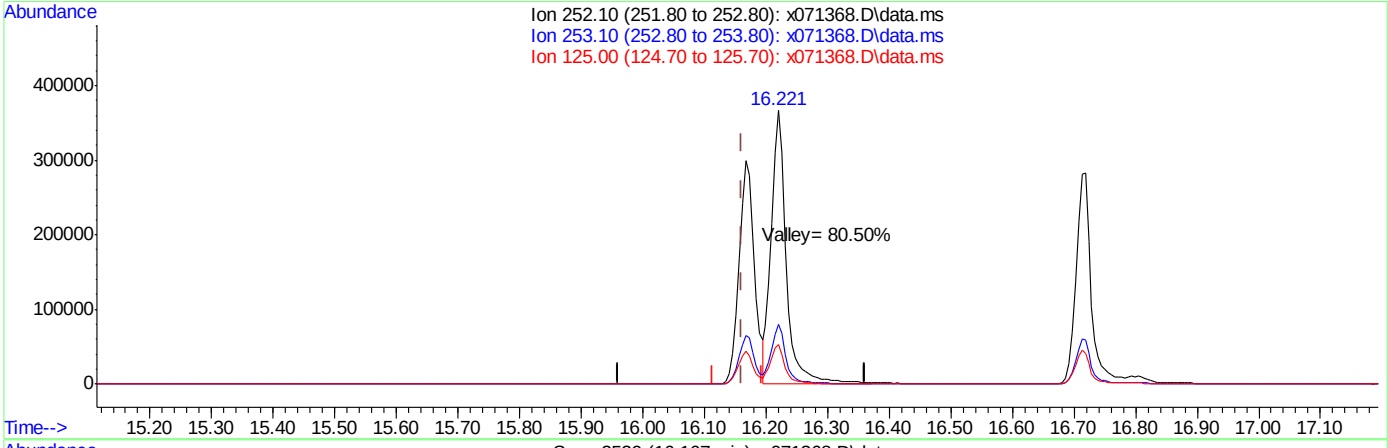
response 281742

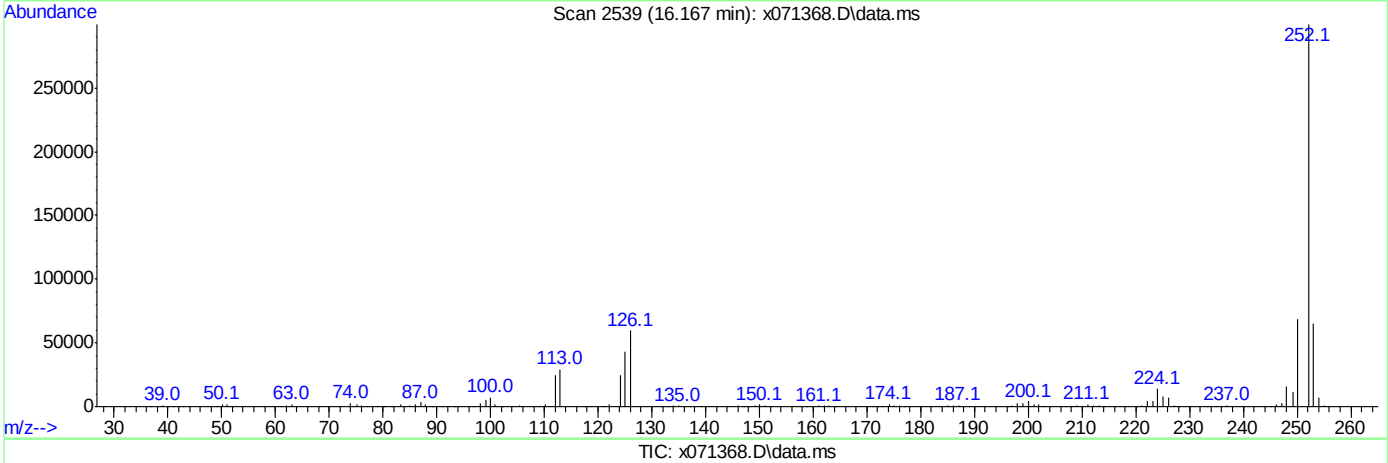
Ion	Exp%	Act%
105.00	100	100
122.00	81.20	79.16
77.00	64.10	77.84
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071368.D
Acq On : 23 Jun 2020 3:12 pm
Operator : marthav
Sample : icc2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 23 16:57:37 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration





TIC: x071368.D\data.ms

(104) Benzo[b]fluoranthene (P)

16.167min (+0.005) 99.05ppm

response 507571

Ion	Exp%	Act%
252.10	100	100
253.10	22.50	21.85
125.00	14.00	14.47
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 06/24/20 14:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071369.D
Acq On : 23 Jun 2020 3:39 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 23 16:57:50 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.010	152	174295	40.00	ppm	0.00
22) Naphthalene-d8	7.438	136	737140	40.00	ppm	0.00
43) Acenaphthene-d10	9.481	164	387286	40.00	ppm	0.00
70) Phenanthrene-d10	11.225	188	649330	40.00	ppm	0.00
92) Chrysene-d12	14.498	240	486162	40.00	ppm	0.00
102) Perylene-d12	16.814	264	350182	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	0.000	152	0m	40.00	ppm	-6.00
120) Naphthalene-d8A	0.000	136	0m	40.00	ppm	-7.43
127) Acenaphthene-d10A	0.000	164	0m	40.00	ppm	-9.48
136) Phenanthrene-d10A	0.000	188	0m	40.00	ppm	-11.22
146) Chrysene-d12A	0.000	240	0m	40.00	ppm	-14.49
153) Perylene-d12A	0.000	264	0m	40.00	ppm	-16.82
System Monitoring Compounds						
7) 2-Fluorophenol	4.608	112	736130	245.04	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 245.04%#			
9) Phenol-d5	5.614	99	889040	274.83	ppm	0.00
Spiked Amount 100.000	Range 10 - 50		Recovery = 274.83%#			
23) Nitrobenzene-d5	6.625	82	467597	132.10	ppm	0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 264.20%#			
47) 2-Fluorobiphenyl	8.705	172	862858	148.15	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 296.30%#			
75) 2,4,6-Tribromophenol	10.412	330	183053	213.09	ppm	0.01
Spiked Amount 100.000	Range 33 - 118		Recovery = 213.09%#			
95) Terphenyl-d14	13.145	244	807081	123.89	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 247.78%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.843	88	168471	115.50	ppm	# 32
3) N-nitrosodimethylamine	3.170	42	314954	245.30	ppm	# 36
4) Pyridine	3.202	79	431489	141.85	ppm	# 17
5) Benzaldehyde	5.534	106	306979	121.87	ppm	93
6) Aniline	5.651	93	653163	142.91	ppm	86
8) bis(2-Chloroethyl)ether	5.732	93	391334	123.00	ppm	75
10) Phenol	5.630	94	570547	138.21	ppm	86
11) 2-Chlorophenol	5.774	128	418524	141.34	ppm	81
12) 1,3-Dichlorobenzene	5.946	146	419455	138.20	ppm	98
13) 1,4-Dichlorobenzene	6.026	146	443073	142.87	ppm	97
14) 1,2-Dichlorobenzene	6.192	146	426380	147.42	ppm	98
15) Benzyl alcohol	6.165	108	283907	145.47	ppm	81
16) 2,2'-Oxybis(1-chloropr...	6.325	45	790430	207.99	ppm	77
17) 2-Methylphenol	6.288	108	392943	148.17	ppm	96
18) Acetophenone	6.459	105	565958	135.17	ppm	96
19) Hexachloroethane	6.566	117	166318	126.61	ppm	86
20) N-Nitroso-di-n-propyla...	6.470	70	299849	138.91	ppm	# 64
21) 3&4-Methylphenol	6.464	108	405941	147.06	ppm	95
24) Nitrobenzene	6.646	77	463119	138.12	ppm	84
25) Isophorone	6.924	82	810323	132.42	ppm	97
26) 2-Nitrophenol	7.005	139	228478	141.56	ppm	76

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071369.D
Acq On : 23 Jun 2020 3:39 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 23 16:57:50 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
27)	2,4-Dimethylphenol	7.063	107	416013	149.86	ppm		92
28)	O,O,O-Triethylphosphor...	7.154	198	173675	134.58	ppm		79
29)	bis(2-Chloroethoxy)met...	7.181	93	482396	126.31	ppm		96
30)	Benzoic Acid	7.192	105	368165m	175.71	ppm		
31)	2,4-Dichlorophenol	7.277	162	341207	153.34	ppm		96
32)	1,2,4-Trichlorobenzene	7.374	180	334150	133.45	ppm		98
34)	Naphthalene	7.459	128	1209565	145.57	ppm		99
35)	4-Chloroaniline	7.529	127	517431	148.46	ppm		89
36)	2,6-Dichlorophenol	7.534	162	336531	148.15	ppm		96
37)	Hexachlorobutadiene	7.614	225	166131	118.92	ppm		99
38)	Caprolactam	7.962	113	138158	149.52	ppm	#	52
39)	4-Chloro-3-methylphenol	8.101	107	354807	146.72	ppm		93
40)	2-Methylnaphthalene	8.262	142	793056	147.60	ppm		98
41)	1-Methylnaphthalene	8.379	142	771536	153.27	ppm		98
42)	1,2,4,5-Tetrachloroben...	8.459	216	337842	129.74	ppm		99
44)	Hexachlorocyclopentadiene	8.454	237	196644	148.21	ppm		98
45)	2,4,6-Trichlorophenol	8.593	196	226012	142.32	ppm		97
46)	2,4,5-Trichlorophenol	8.636	196	250094	147.60	ppm		99
48)	1,1'-Biphenyl	8.818	154	970793	152.20	ppm		99
49)	2-Chloronaphthalene	8.829	162	734690	148.39	ppm		95
50)	2-Nitroaniline	8.957	65	273674	169.52	ppm	#	71
51)	p-Dinitrobenzene	9.128	75	161352	136.26	ppm	#	67
52)	Acenaphthylene	9.315	152	1199982	158.37	ppm		99
53)	Dimethylphthalate	9.198	163	828709	145.62	ppm		99
54)	m-Dinitrobenzene	9.214	168	148275	150.03	ppm	#	40
55)	2,6-Dinitrotoluene	9.256	165	202871	147.39	ppm		78
56)	o-Dinitrobenzene	9.310	50	181502	221.80	ppm	#	59
57)	Acenaphthene	9.518	153	781995	156.04	ppm		98
58)	3-Nitroaniline	9.444	138	226359	152.81	ppm		94
59)	2,4-Dinitrophenol	9.561	184	111911	170.04	ppm	#	26
60)	Dibenzofuran	9.722	168	1035619	150.74	ppm		92
61)	2,4-Dinitrotoluene	9.722	165	259054	148.50	ppm	#	63
62)	4-Nitrophenol	9.652	109	127212	181.48	ppm	#	68
63)	2,3,5,6-Tetrachlorophenol	9.818	232	191147	145.87	ppm		91
64)	2,3,4,6-Tetrachlorophenol	9.871	232	192270	137.44	ppm		90
65)	Fluorene	10.128	166	807040	150.50	ppm		99
66)	4-Chlorophenyl-phenyle...	10.144	204	401786	149.43	ppm		91
67)	Diethylphthalate	10.037	149	842703	149.06	ppm		97
68)	Thionazin	10.134	97	179844	134.97	ppm		97
69)	4-Nitroaniline	10.171	138	251396	165.77	ppm		84
71)	4,6-Dinitro-2-methylph...	10.198	198	155251	172.79	ppm		64
72)	n-Nitrosodiphenylamine	10.289	169	740920	207.48	ppm		97
73)	Diphenylamine	10.289	169	740920	177.13	ppm		97
74)	1,2-Diphenylhydrazine	10.331	77	901177	154.16	ppm		94
76)	Sulfotep	10.503	97	138038	150.95	ppm	#	68
77)	Phorate	10.647	75	488040	150.77	ppm		98
78)	4-Bromophenyl-phenylether	10.717	248	198083	132.71	ppm	#	80
79)	Hexachlorobenzene	10.770	284	192411	112.73	ppm		78
80)	Dimethoate	10.840	87	324379	168.00	ppm		93
81)	Simazine	10.909	201	141563	193.75	ppm		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071369.D
Acq On : 23 Jun 2020 3:39 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 23 16:57:50 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration

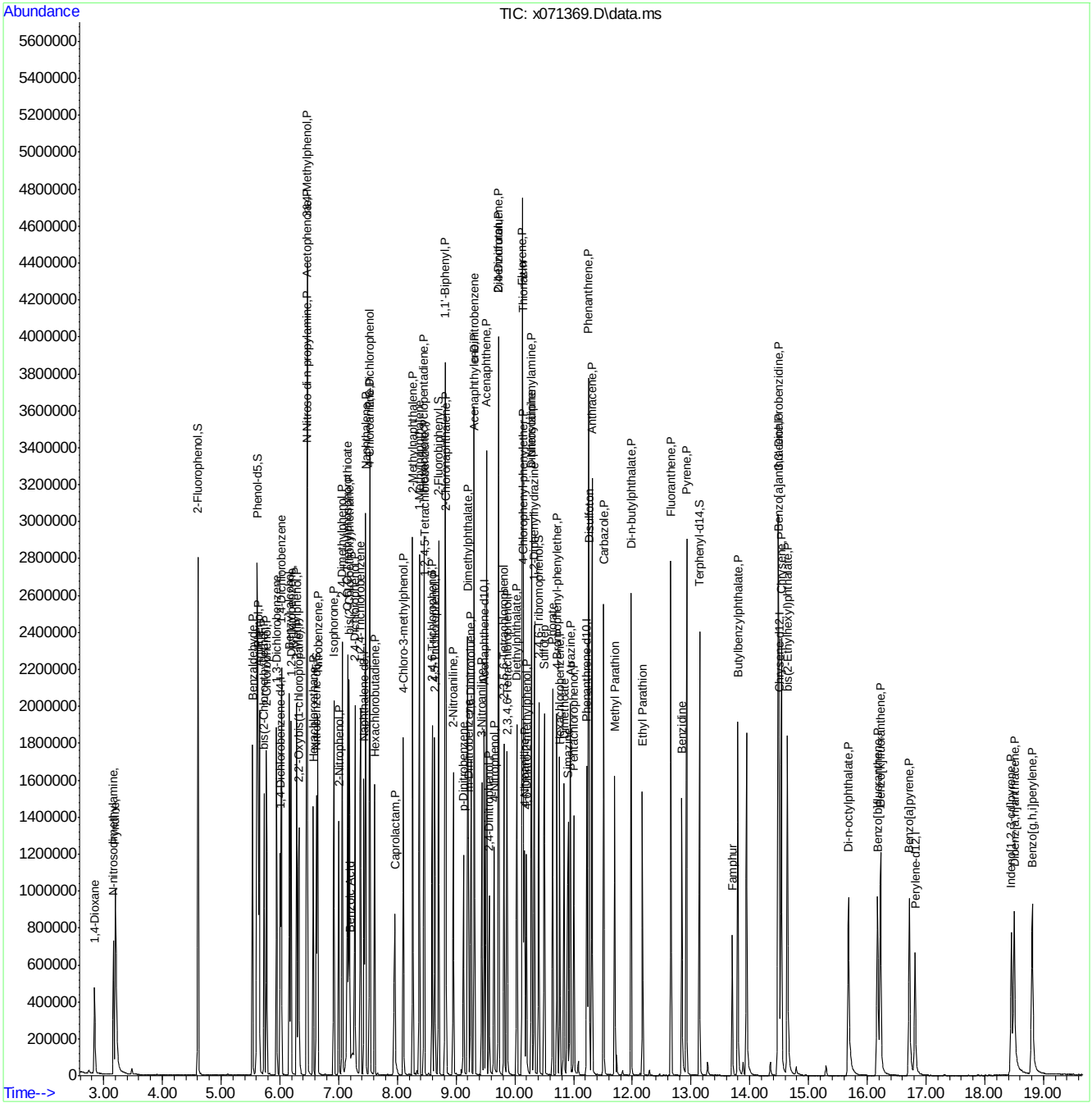
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
82) Atrazine	10.947	200	241370	169.90	ppm		93
83) Pentachlorophenol	11.005	266	132964	155.71	ppm		98
84) Phenanthrene	11.257	178	1187834	166.05	ppm		99
85) Anthracene	11.316	178	1278417	174.94	ppm		98
86) Disulfoton	11.267	88	504419	152.04	ppm		91
87) Carbazole	11.519	167	1125795	172.62	ppm		98
88) Methyl Parathion	11.701	109	277600	170.49	ppm	#	87
89) Di-n-butylphthalate	11.979	149	1311478	158.01	ppm		98
90) Ethyl Parathion	12.171	97	165428	152.93	ppm		86
91) Fluoranthene	12.658	202	1151897	151.51	ppm		98
93) Benzidine	12.845	184	611414	209.37	ppm		98
94) Pyrene	12.926	202	1254185	142.51	ppm		94
96) Famphur	13.701	218	199377	120.23	ppm		86
97) Butylbenzylphthalate	13.797	149	525040	136.07	ppm		92
98) 3,3'-Dichlorobenzidine	14.482	252	323705	139.68	ppm		96
99) Benzo[a]anthracene	14.487	228	942720	130.11	ppm		99
100) Chrysene	14.536	228	1006458	139.50	ppm		98
101) bis(2-Ethylhexyl)phtha...	14.642	149	730142	145.85	ppm		96
103) Di-n-octylphthalate	15.680	149	926997	140.84	ppm		94
104) Benzo[b]fluoranthene	16.172	252	652829	126.89	ppm		98
105) Benzo[k]fluoranthene	16.226	252	789311	139.26	ppm		99
106) Benzo[a]pyrene	16.718	252	624413	120.97	ppm		97
107) Indeno[1,2,3-cd]pyrene	18.451	276	443513	99.33	ppm		91
108) Dibenz[a,h]anthracene	18.504	278	504897	104.68	ppm		93
109) Benzo[g,h,i]perylene	18.814	276	611844	119.31	ppm		96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071369.D
Acq On : 23 Jun 2020 3:39 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 23 16:57:50 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: SX2918-IC2918
Lab FileID: X071369.D
Injection Time: 06/23/20 15:39

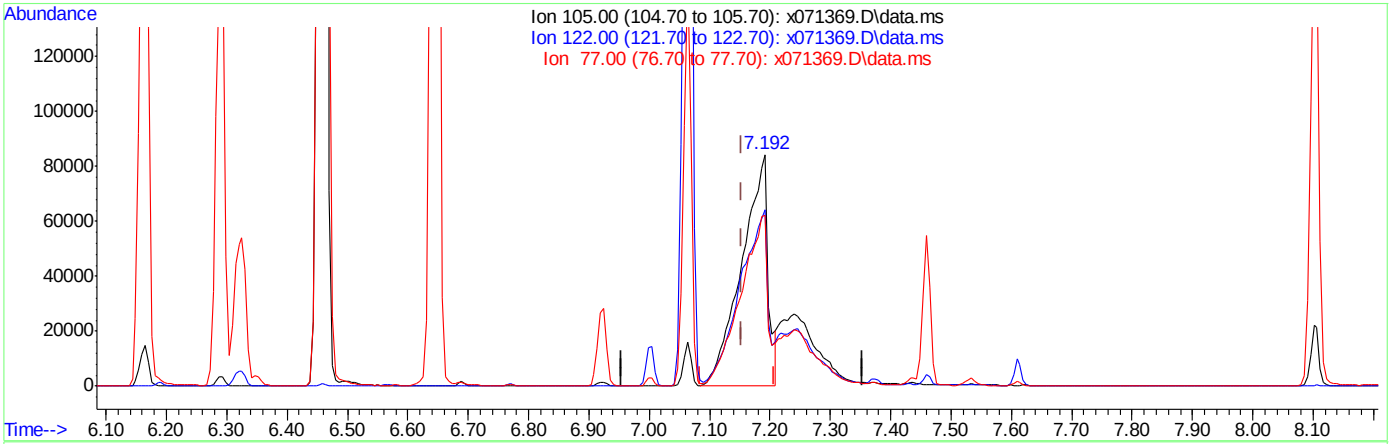
Method: EPA 625.1
Analyst approved: 06/24/20 09:50 Martha Valls
Supervisor approved: 06/24/20 14:07 Naresh Jiawan

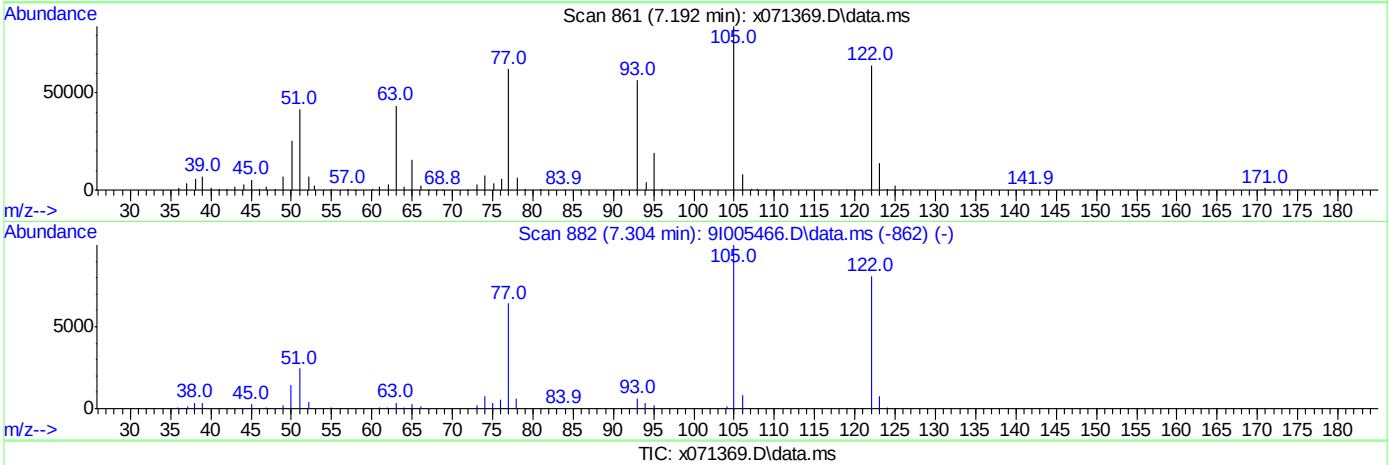
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic Acid	65-85-0		7.19	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071369.D
Acq On : 23 Jun 2020 3:39 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 23 16:03:31 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration





TIC: x071369.D\data.ms

(30) Benzoic Acid

7.192min (+0.037) 120.63ppm

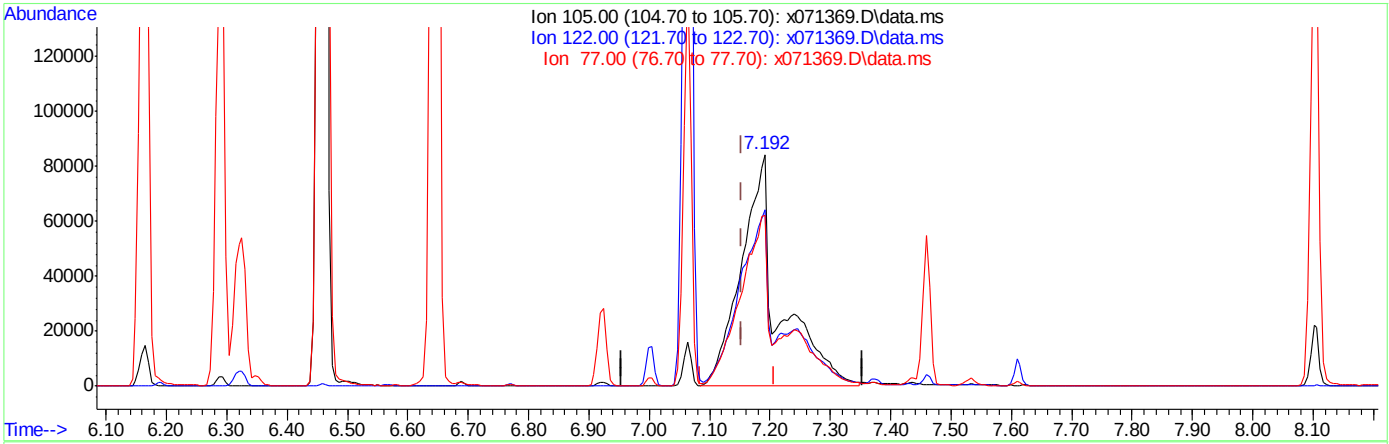
response 252754

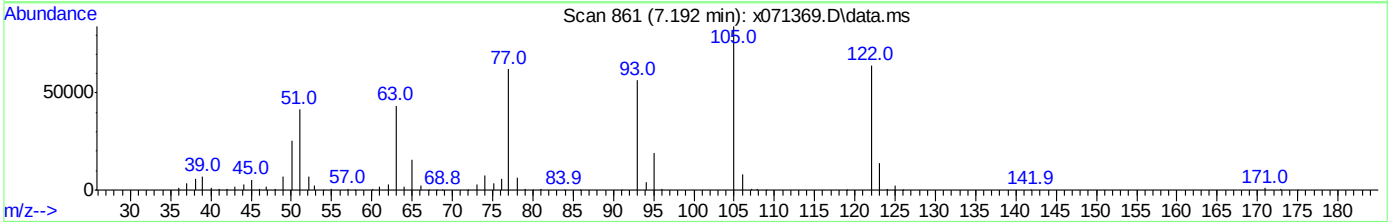
Ion	Exp%	Act%
105.00	100	100
122.00	81.20	74.21
77.00	64.10	72.76
0.00	0.00	0.00

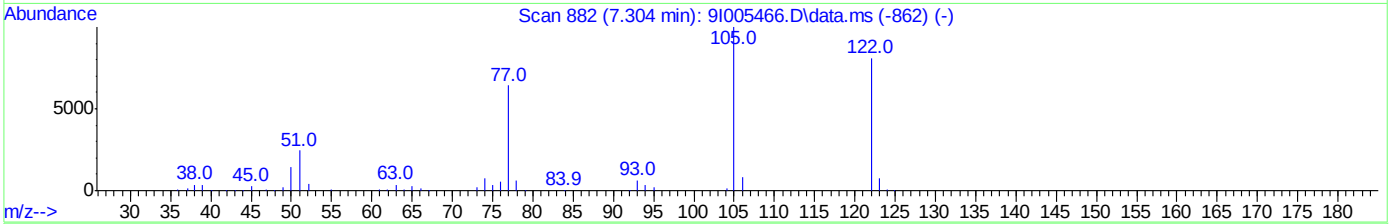
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071369.D
Acq On : 23 Jun 2020 3:39 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 23 16:03:31 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration







TIC: x071369.D\data.ms

(30) Benzoic Acid

7.192min (+0.037) 175.71ppm m

response 368165

Ion	Exp%	Act%
105.00	100	100
122.00	81.20	76.12
77.00	64.10	73.68
0.00	0.00	0.00

X071370.D

Manual Integrations APPROVED (compounds with "m" flag)

Naresh Jiawan 06/24/20 14:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071370.D
Acq On : 23 Jun 2020 4:05 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jun 23 16:58:06 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:33:00 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.010	152	184182	40.00	ppm	0.00
22) Naphthalene-d8	7.438	136	795596	40.00	ppm	0.00
43) Acenaphthene-d10	9.481	164	415197	40.00	ppm	0.00
70) Phenanthrene-d10	11.225	188	687369	40.00	ppm	0.00
92) Chrysene-d12	14.498	240	513475	40.00	ppm	0.00
102) Perylene-d12	16.814	264	367168	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	0.000	152	0m	40.00	ppm	-6.00
120) Naphthalene-d8A	0.000	136	0m	40.00	ppm	-7.43
127) Acenaphthene-d10A	0.000	164	0m	40.00	ppm	-9.48
136) Phenanthrene-d10A	0.000	188	0m	40.00	ppm	-11.22
146) Chrysene-d12A	0.000	240	0m	40.00	ppm	-14.49
153) Perylene-d12A	0.000	264	0m	40.00	ppm	-16.82
System Monitoring Compounds						
7) 2-Fluorophenol	4.614	112	993932	313.10	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 313.10%#			
9) Phenol-d5	5.620	99	1229702	359.73	ppm	0.01
Spiked Amount 100.000	Range 10 - 50		Recovery = 359.73%#			
23) Nitrobenzene-d5	6.625	82	632075	165.45	ppm	0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 330.90%#			
47) 2-Fluorobiphenyl	8.706	172	1167244	186.94	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 373.88%#			
75) 2,4,6-Tribromophenol	10.412	330	252496	277.66	ppm	0.01
Spiked Amount 100.000	Range 33 - 118		Recovery = 277.66%#			
95) Terphenyl-d14	13.145	244	1091853	158.69	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 317.38%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.844	88	228596	148.31	ppm	# 30
3) N-nitrosodimethylamine	3.170	42	414509	305.50	ppm	# 37
4) Pyridine	3.202	79	596326	185.52	ppm	# 19
5) Benzaldehyde	5.534	106	412817	155.09	ppm	93
6) Aniline	5.652	93	890215	184.32	ppm	97
8) bis(2-Chloroethyl)ether	5.737	93	528529	157.21	ppm	78
10) Phenol	5.630	94	781504	179.15	ppm	82
11) 2-Chlorophenol	5.775	128	577643	184.61	ppm	80
12) 1,3-Dichlorobenzene	5.946	146	566579	176.65	ppm	97
13) 1,4-Dichlorobenzene	6.026	146	597968	182.46	ppm	96
14) 1,2-Dichlorobenzene	6.192	146	579586	189.64	ppm	98
15) Benzyl alcohol	6.165	108	386231	187.27	ppm	78
16) 2,2'-Oxybis(1-chloropr...	6.326	45	1048750	261.15	ppm	78
17) 2-Methylphenol	6.293	108	530008	189.13	ppm	96
18) Acetophenone	6.459	105	750263	169.57	ppm	96
19) Hexachloroethane	6.566	117	225072	162.14	ppm	87
20) N-Nitroso-di-n-propyla...	6.475	70	392032	171.87	ppm	# 67
21) 3&4-Methylphenol	6.470	108	534960	183.40	ppm	97
24) Nitrobenzene	6.646	77	622089	171.90	ppm	83
25) Isophorone	6.925	82	1086778	164.55	ppm	95
26) 2-Nitrophenol	7.005	139	315215	180.94	ppm	84

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071370.D
Acq On : 23 Jun 2020 4:05 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jun 23 16:58:06 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:33:00 2020
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
27)	2,4-Dimethylphenol	7.069	107	558703	186.47	ppm		94
28)	O,O,O-Triethylphosphor...	7.160	198	234536	168.39	ppm		90
29)	bis(2-Chloroethoxy)met...	7.181	93	650917	157.91	ppm		97
30)	Benzoic Acid	7.208	105	509248m	225.18	ppm		
31)	2,4-Dichlorophenol	7.278	162	462509	192.58	ppm		94
32)	1,2,4-Trichlorobenzene	7.374	180	451987	167.24	ppm		97
34)	Naphthalene	7.459	128	1617864	180.41	ppm		99
35)	4-Chloroaniline	7.534	127	687303	182.71	ppm		92
36)	2,6-Dichlorophenol	7.540	162	449742	183.45	ppm		97
37)	Hexachlorobutadiene	7.609	225	226837	150.44	ppm		98
38)	Caprolactam	7.978	113	184819	185.32	ppm	#	57
39)	4-Chloro-3-methylphenol	8.107	107	478341	183.27	ppm		95
40)	2-Methylnaphthalene	8.267	142	1076778	185.68	ppm		98
41)	1-Methylnaphthalene	8.379	142	1032928	190.13	ppm		98
42)	1,2,4,5-Tetrachloroben...	8.460	216	465425	165.60	ppm		98
44)	Hexachlorocyclopentadiene	8.454	237	276347	194.28	ppm		99
45)	2,4,6-Trichlorophenol	8.599	196	307240	180.46	ppm		100
46)	2,4,5-Trichlorophenol	8.636	196	340155	187.25	ppm		99
48)	1,1'-Biphenyl	8.818	154	1288409	188.41	ppm		99
49)	2-Chloronaphthalene	8.829	162	985180	185.60	ppm		94
50)	2-Nitroaniline	8.957	65	366840	211.95	ppm	#	68
51)	p-Dinitrobenzene	9.128	75	214772	169.17	ppm	#	64
52)	Acenaphthylene	9.315	152	1607770	197.92	ppm		99
53)	Dimethylphthalate	9.203	163	1105697	181.24	ppm		99
54)	m-Dinitrobenzene	9.214	168	204112	192.64	ppm	#	30
55)	2,6-Dinitrotoluene	9.257	165	276132	187.13	ppm		70
56)	o-Dinitrobenzene	9.315	50	233849	266.56	ppm	#	61
57)	Acenaphthene	9.519	153	1037545	193.12	ppm		98
58)	3-Nitroaniline	9.449	138	306081	192.74	ppm		100
59)	2,4-Dinitrophenol	9.567	184	155926	220.99	ppm	#	45
60)	Dibenzofuran	9.727	168	1364487	185.26	ppm		95
61)	2,4-Dinitrotoluene	9.727	165	344922	184.43	ppm		74
62)	4-Nitrophenol	9.652	109	169451	225.48	ppm	#	64
63)	2,3,5,6-Tetrachlorophenol	9.818	232	260523	185.44	ppm		90
64)	2,3,4,6-Tetrachlorophenol	9.872	232	260254	173.53	ppm		89
65)	Fluorene	10.128	166	1087568	189.18	ppm		100
66)	4-Chlorophenyl-phenyle...	10.145	204	529204	183.59	ppm		91
67)	Diethylphthalate	10.038	149	1125649	185.72	ppm		97
68)	Thionazin	10.134	97	226094	158.27	ppm		97
69)	4-Nitroaniline	10.177	138	335101	206.12	ppm		85
71)	4,6-Dinitro-2-methylph...	10.209	198	213402	224.37	ppm		81
72)	n-Nitrosodiphenylamine	10.289	169	988849	261.59	ppm		97
73)	Diphenylamine	10.289	169	988849	223.32	ppm		97
74)	1,2-Diphenylhydrazine	10.332	77	1192123	192.65	ppm		93
76)	Sulfotep	10.503	97	180883	186.85	ppm	#	70
77)	Phorate	10.647	75	639802	186.72	ppm		98
78)	4-Bromophenyl-phenylether	10.722	248	272545	172.50	ppm		86
79)	Hexachlorobenzene	10.770	284	264744	146.52	ppm		79
80)	Dimethoate	10.845	87	422017	206.47	ppm		92
81)	Simazine	10.915	201	190208	245.93	ppm		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071370.D
Acq On : 23 Jun 2020 4:05 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jun 23 16:58:06 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:33:00 2020
Response via : Initial Calibration

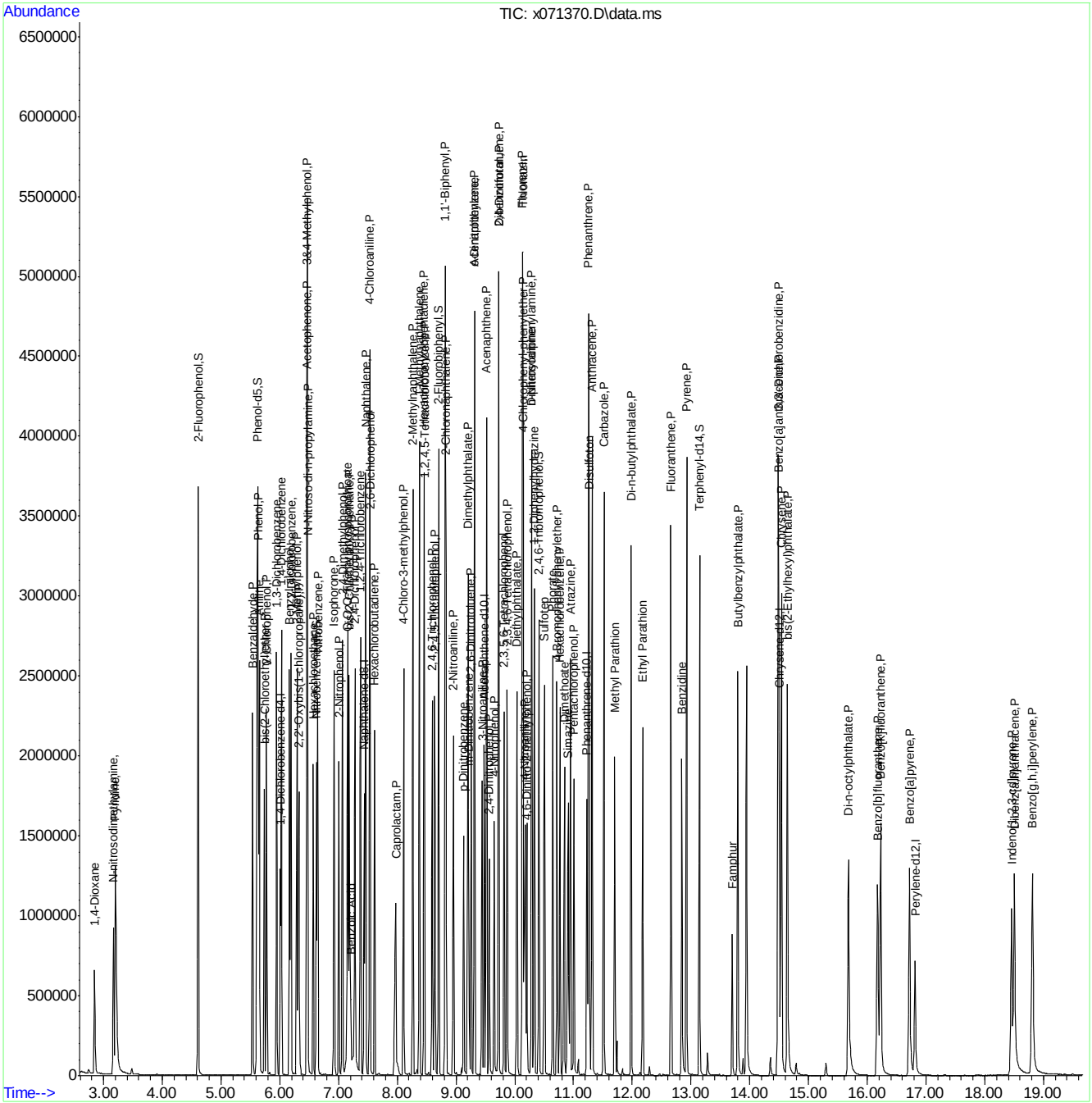
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
82)	Atrazine	10.947	200	320374	213.03	ppm		86
83)	Pentachlorophenol	11.006	266	181453	200.73	ppm		97
84)	Phenanthrene	11.257	178	1573875	207.84	ppm		99
85)	Anthracene	11.321	178	1704703	220.37	ppm		98
86)	Disulfoton	11.268	88	650007	185.08	ppm		90
87)	Carbazole	11.519	167	1494706	216.50	ppm		98
88)	Methyl Parathion	11.701	109	362465	210.29	ppm	#	85
89)	Di-n-butylphthalate	11.979	149	1744713	198.58	ppm		98
90)	Ethyl Parathion	12.177	97	218449	190.77	ppm		91
91)	Fluoranthene	12.664	202	1544086	191.86	ppm		95
93)	Benzidine	12.846	184	805812	261.26	ppm		97
94)	Pyrene	12.926	202	1665026	179.13	ppm		95
96)	Famphur	13.701	218	239023	136.47	ppm		91
97)	Butylbenzylphthalate	13.798	149	694470	170.40	ppm		91
98)	3,3'-Dichlorobenzidine	14.482	252	436466	178.31	ppm		99
99)	Benzo[a]anthracene	14.488	228	1267054	165.57	ppm		99
100)	Chrysene	14.541	228	1324468	173.81	ppm		98
101)	bis(2-Ethylhexyl)phtha...	14.643	149	961974	181.94	ppm		98
103)	Di-n-octylphthalate	15.680	149	1260410	182.63	ppm		94
104)	Benzo[b]fluoranthene	16.178	252	869683	161.22	ppm		99
105)	Benzo[k]fluoranthene	16.231	252	1058843	178.17	ppm		97
106)	Benzo[a]pyrene	16.723	252	831194	153.59	ppm		98
107)	Indeno[1,2,3-cd]pyrene	18.456	276	627476	134.03	ppm		94
108)	Dibenz[a,h]anthracene	18.504	278	694066	137.24	ppm		91
109)	Benzo[g,h,i]perylene	18.815	276	832318	154.79	ppm		94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071370.D
Acq On : 23 Jun 2020 4:05 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jun 23 16:58:06 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:33:00 2020
Response via : Initial Calibration



Manual Integration Approval Summary

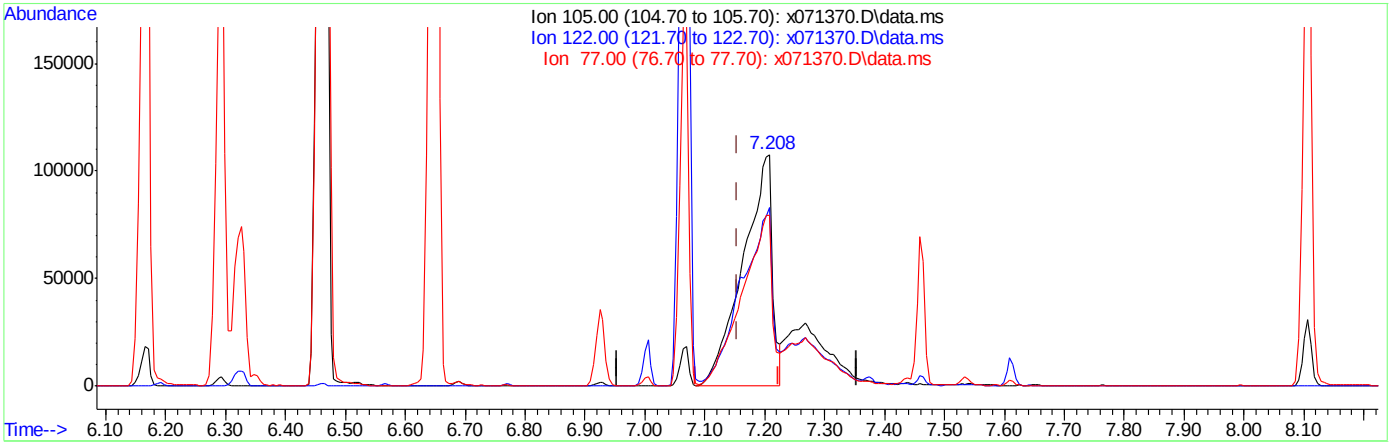
Sample Number:	SX2918-IC2918	**Method:**	EPA 625.1
Lab FileID:	X071370.D	**Analyst approved:**	06/24/20 09:50 Martha Valls
Injection Time:	06/23/20 16:05	**Supervisor approved:**	06/24/20 14:07 Naresh Jiawan

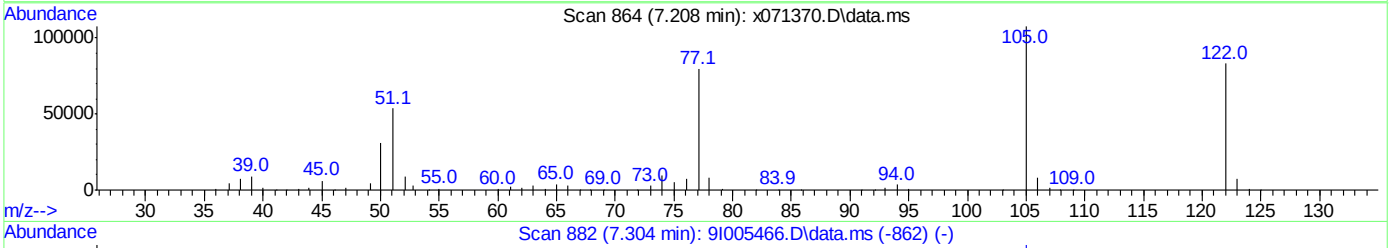
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic Acid	65-85-0		7.21	Split peak

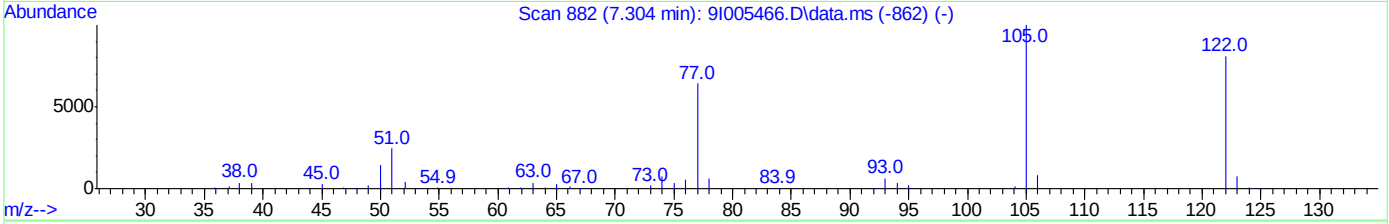
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071370.D
Acq On : 23 Jun 2020 4:05 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jun 23 16:34:49 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:33:00 2020
Response via : Initial Calibration







TIC: x071370.D\data.ms

(30) Benzoic Acid

7.208min (+0.054) 160.19ppm

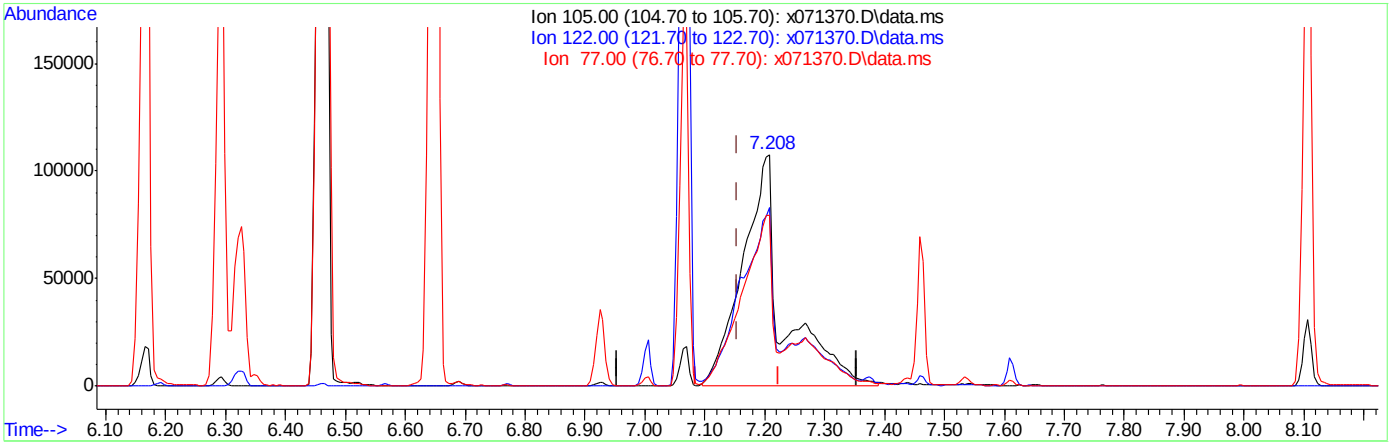
response 362267

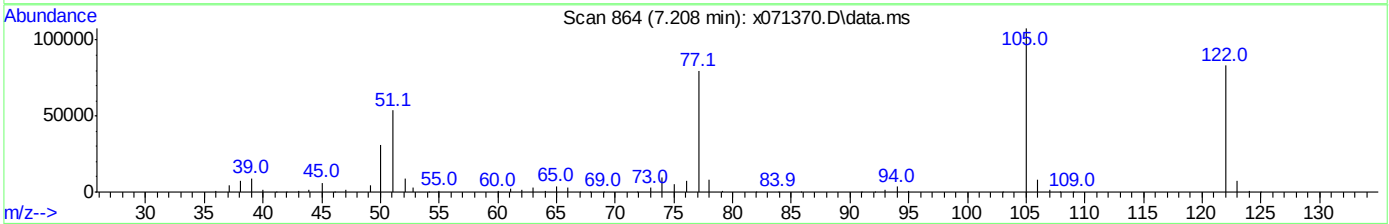
Ion	Exp%	Act%
105.00	100	100
122.00	81.20	75.13
77.00	64.10	72.53
0.00	0.00	0.00

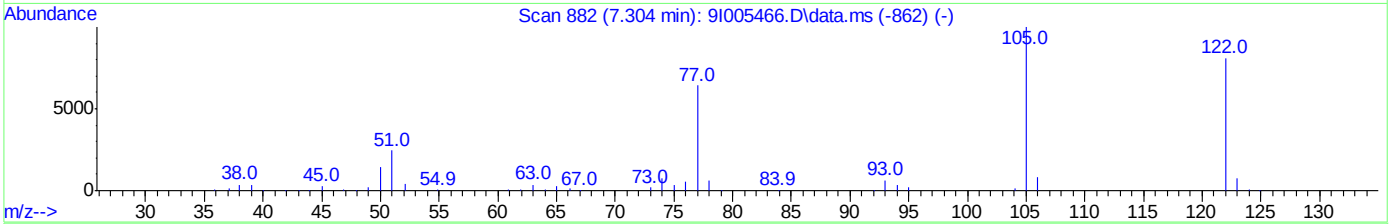
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071370.D
Acq On : 23 Jun 2020 4:05 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jun 23 16:34:49 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:33:00 2020
Response via : Initial Calibration







TIC: x071370.D\data.ms

(30) Benzoic Acid

7.208min (+0.054) 225.18ppm m

response 509248

Ion	Exp%	Act%
105.00	100	100
122.00	81.20	77.24
77.00	64.10	73.76
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 06/24/20 14:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071371.D
Acq On : 23 Jun 2020 4:31 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jun 23 16:58:19 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:33:00 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.010	152	196466	40.00	ppm	0.00
22) Naphthalene-d8	7.438	136	851386	40.00	ppm	0.00
43) Acenaphthene-d10	9.481	164	445105	40.00	ppm	0.00
70) Phenanthrene-d10	11.230	188	723575	40.00	ppm	0.00
92) Chrysene-d12	14.504	240	534252	40.00	ppm	0.01
102) Perylene-d12	16.820	264	385695	40.00	ppm	0.01
110) 1,4-Dichlorobenzene-d4A	0.000	152	0m	40.00	ppm	-6.00
120) Naphthalene-d8A	0.000	136	0m	40.00	ppm	-7.43
127) Acenaphthene-d10A	0.000	164	0m	40.00	ppm	-9.48
136) Phenanthrene-d10A	0.000	188	0m	40.00	ppm	-11.22
146) Chrysene-d12A	0.000	240	0m	40.00	ppm	-14.49
153) Perylene-d12A	0.000	264	0m	40.00	ppm	-16.82
System Monitoring Compounds						
7) 2-Fluorophenol	4.614	112	1447342	427.42	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 427.42%#			
9) Phenol-d5	5.625	99	1801216	493.97	ppm	0.02
Spiked Amount 100.000	Range 10 - 50		Recovery = 493.97%#			
23) Nitrobenzene-d5	6.631	82	922012	225.52	ppm	0.01
Spiked Amount 50.000	Range 42 - 108		Recovery = 451.04%#			
47) 2-Fluorobiphenyl	8.706	172	1657926	247.68	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 495.36%#			
75) 2,4,6-Tribromophenol	10.417	330	382386	399.45	ppm	0.02
Spiked Amount 100.000	Range 33 - 118		Recovery = 399.45%#			
95) Terphenyl-d14	13.151	244	1577008	220.28	ppm	0.01
Spiked Amount 50.000	Range 39 - 121		Recovery = 440.56%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.844	88	325295	197.85	ppm	# 34
3) N-nitrosodimethylamine	3.175	42	601707	415.75	ppm	# 38
4) Pyridine	3.202	79	878586	256.24	ppm	# 23
5) Benzaldehyde	5.539	106	588752	207.36	ppm	94
6) Aniline	5.657	93	1274273	247.34	ppm	99
8) bis(2-Chloroethyl)ether	5.737	93	756907	211.06	ppm	77
10) Phenol	5.641	94	1097312	235.81	ppm	73
11) 2-Chlorophenol	5.780	128	831993	249.27	ppm	85
12) 1,3-Dichlorobenzene	5.946	146	816430	238.63	ppm	96
13) 1,4-Dichlorobenzene	6.031	146	854881	244.55	ppm	98
14) 1,2-Dichlorobenzene	6.192	146	831789	255.14	ppm	97
15) Benzyl alcohol	6.171	108	555751	252.62	ppm	79
16) 2,2'-Oxybis(1-chloropr...	6.331	45	1427748	333.30	ppm	80
17) 2-Methylphenol	6.294	108	768068	256.94	ppm	96
18) Acetophenone	6.465	105	1068591	226.42	ppm	97
19) Hexachloroethane	6.566	117	328380	221.77	ppm	86
20) N-Nitroso-di-n-propyla...	6.481	70	551620	226.71	ppm	# 68
21) 3&4-Methylphenol	6.475	108	747847	240.35	ppm	97
24) Nitrobenzene	6.652	77	897664	231.79	ppm	85
25) Isophorone	6.930	82	1576566	223.07	ppm	95
26) 2-Nitrophenol	7.005	139	468000	251.04	ppm	80

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071371.D
Acq On : 23 Jun 2020 4:31 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jun 23 16:58:19 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:33:00 2020
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
27)	2,4-Dimethylphenol	7.074	107	807736	251.93	ppm		93
28)	O,O,O-Triethylphosphor...	7.165	198	345847	232.04	ppm		94
29)	bis(2-Chloroethoxy)met...	7.187	93	909033	206.07	ppm		97
30)	Benzoic Acid	7.230	105	746921m	308.64	ppm		
31)	2,4-Dichlorophenol	7.283	162	676134	263.08	ppm		95
32)	1,2,4-Trichlorobenzene	7.374	180	664863	229.89	ppm		96
34)	Naphthalene	7.465	128	2311700	240.88	ppm		99
35)	4-Chloroaniline	7.540	127	963011	239.23	ppm		94
36)	2,6-Dichlorophenol	7.545	162	646414	246.39	ppm		98
37)	Hexachlorobutadiene	7.615	225	332067	205.80	ppm		99
38)	Caprolactam	8.000	113	270490m	253.45	ppm		
39)	4-Chloro-3-methylphenol	8.112	107	697931	249.88	ppm		93
40)	2-Methylnaphthalene	8.267	142	1549268	249.65	ppm		98
41)	1-Methylnaphthalene	8.380	142	1478955	254.39	ppm		98
42)	1,2,4,5-Tetrachloroben...	8.465	216	664043	220.79	ppm		98
44)	Hexachlorocyclopentadiene	8.454	237	411690	269.98	ppm		99
45)	2,4,6-Trichlorophenol	8.599	196	446173	244.45	ppm		97
46)	2,4,5-Trichlorophenol	8.642	196	496266	254.84	ppm		98
48)	1,1'-Biphenyl	8.823	154	1808755	246.74	ppm		99
49)	2-Chloronaphthalene	8.834	162	1379237	242.38	ppm		95
50)	2-Nitroaniline	8.963	65	519455	279.96	ppm	#	71
51)	p-Dinitrobenzene	9.134	75	313814	230.58	ppm	#	68
52)	Acenaphthylene	9.316	152	2239279	257.14	ppm		100
53)	Dimethylphthalate	9.209	163	1575597	240.91	ppm		99
54)	m-Dinitrobenzene	9.225	168	292540	257.54	ppm	#	46
55)	2,6-Dinitrotoluene	9.262	165	394575	249.43	ppm		71
56)	o-Dinitrobenzene	9.321	50	322363	342.76	ppm	#	60
57)	Acenaphthene	9.524	153	1457637	253.08	ppm		97
58)	3-Nitroaniline	9.455	138	435862	256.02	ppm		97
59)	2,4-Dinitrophenol	9.572	184	232415	307.26	ppm	#	57
60)	Dibenzofuran	9.727	168	1913807	242.39	ppm		93
61)	2,4-Dinitrotoluene	9.733	165	494120	246.45	ppm		78
62)	4-Nitrophenol	9.663	109	242809	301.39	ppm	#	67
63)	2,3,5,6-Tetrachlorophenol	9.824	232	377511	250.66	ppm		93
64)	2,3,4,6-Tetrachlorophenol	9.877	232	379105	235.79	ppm		92
65)	Fluorene	10.134	166	1503962	244.03	ppm		99
66)	4-Chlorophenyl-phenyle...	10.145	204	740272	239.55	ppm		91
67)	Diethylphthalate	10.043	149	1603423	246.77	ppm		97
68)	Thionazin	10.139	97	311496	203.40	ppm		98
69)	4-Nitroaniline	10.193	138	473902	271.90	ppm		85
71)	4,6-Dinitro-2-methylph...	10.214	198	312932	312.55	ppm		89
72)	n-Nitrosodiphenylamine	10.294	169	1419678	356.77	ppm		96
73)	Diphenylamine	10.294	169	1419678	304.57	ppm		96
74)	1,2-Diphenylhydrazine	10.337	77	1669778	256.34	ppm		96
76)	Sulfotep	10.508	97	252251	247.54	ppm	#	81
77)	Phorate	10.653	75	905489	251.03	ppm		99
78)	4-Bromophenyl-phenylether	10.722	248	397568	239.04	ppm	#	82
79)	Hexachlorobenzene	10.776	284	392614	206.42	ppm		82
80)	Dimethoate	10.851	87	595879	276.95	ppm		94
81)	Simazine	10.925	201	275623	338.53	ppm		92

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071371.D
Acq On : 23 Jun 2020 4:31 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jun 23 16:58:19 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:33:00 2020
Response via : Initial Calibration

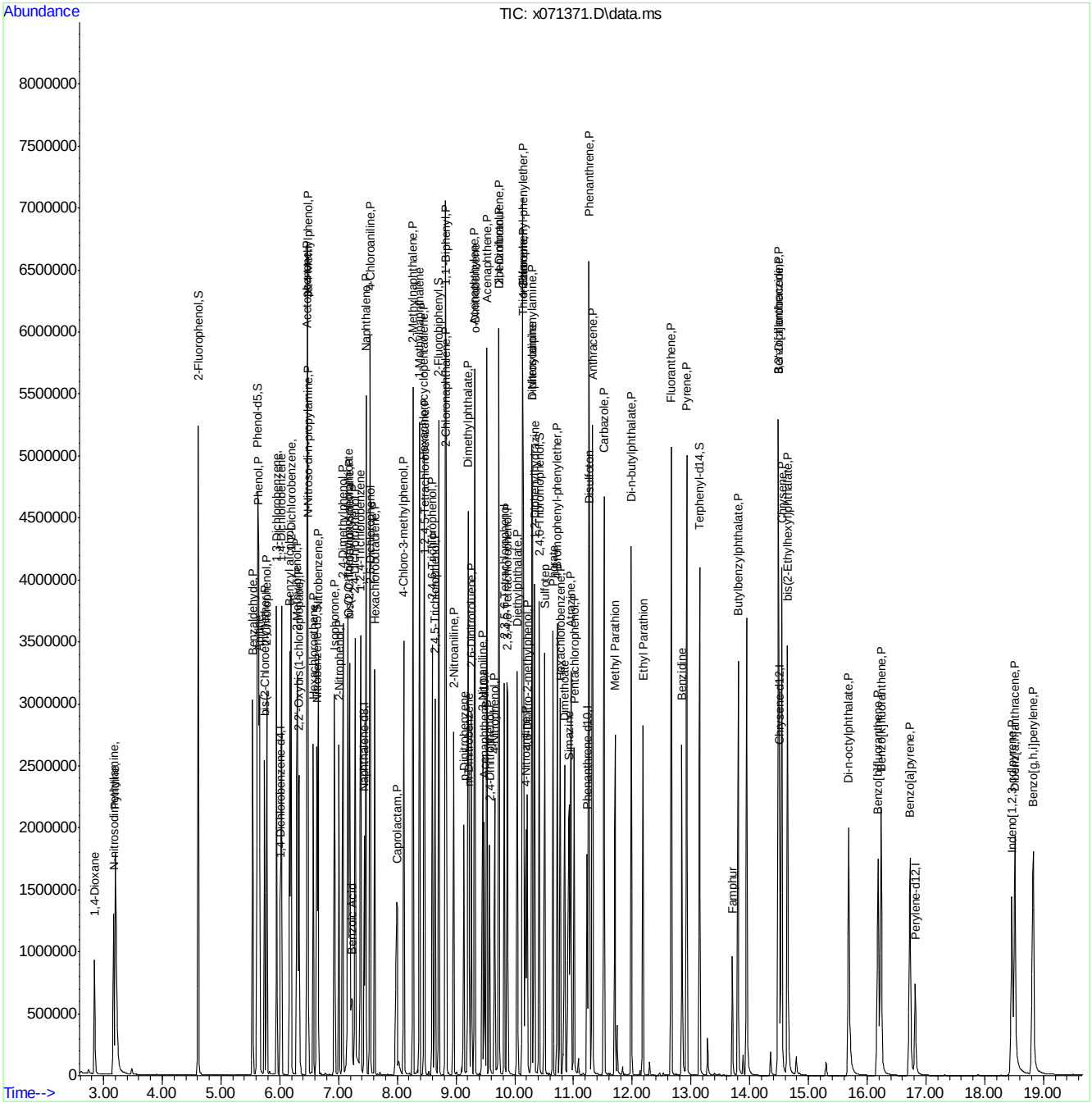
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
82) Atrazine	10.958	200	508273	321.06	ppm		93
83) Pentachlorophenol	11.011	266	264451	277.91	ppm		98
84) Phenanthrene	11.262	178	2183315	273.89	ppm		99
85) Anthracene	11.327	178	2366894	290.66	ppm		98
86) Disulfoton	11.273	88	870469	235.45	ppm		90
87) Carbazole	11.525	167	2129541	293.02	ppm		98
88) Methyl Parathion	11.706	109	508609	280.32	ppm	#	88
89) Di-n-butylphthalate	11.985	149	2467839	266.82	ppm		98
90) Ethyl Parathion	12.182	97	314399	260.82	ppm		93
91) Fluoranthene	12.664	202	2217272	261.72	ppm		97
93) Benzidine	12.846	184	1108204	345.33	ppm		99
94) Pyrene	12.931	202	2375247	245.60	ppm		95
96) Famphur	13.707	218	284954	156.37	ppm		95
97) Butylbenzylphthalate	13.803	149	989049	233.25	ppm		95
98) 3,3'-Dichlorobenzidine	14.488	252	617680	242.53	ppm		97
99) Benzo[a]anthracene	14.488	228	1785259	224.22	ppm		100
100) Chrysene	14.547	228	1876003	236.62	ppm		98
101) bis(2-Ethylhexyl)phtha...	14.643	149	1377435	250.38	ppm		98
103) Di-n-octylphthalate	15.686	149	1860855	256.69	ppm		94
104) Benzo[b]fluoranthene	16.183	252	1257505	221.92	ppm		98
105) Benzo[k]fluoranthene	16.242	252	1533403	245.63	ppm		97
106) Benzo[a]pyrene	16.734	252	1216893	214.05	ppm		99
107) Indeno[1,2,3-cd]pyrene	18.467	276	959240	195.06	ppm		95
108) Dibenz[a,h]anthracene	18.515	278	1148615	216.21	ppm		94
109) Benzo[g,h,i]perylene	18.825	276	1267870	224.47	ppm		96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071371.D
Acq On : 23 Jun 2020 4:31 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jun 23 16:58:19 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:33:00 2020
Response via : Initial Calibration



Manual Integration Approval Summary

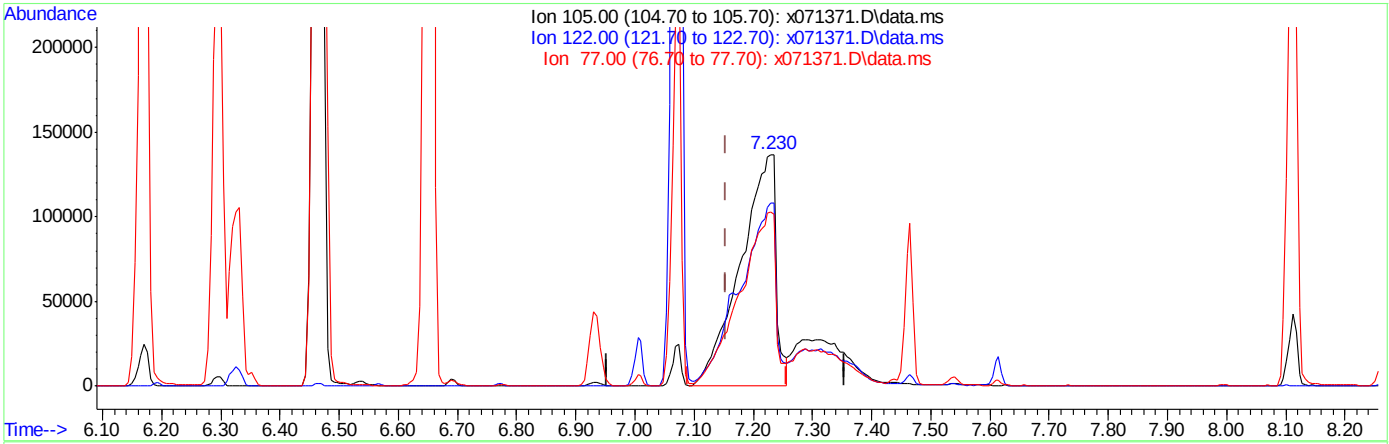
Sample Number:	SX2918-IC2918	**Method:**	EPA 625.1
Lab FileID:	X071371.D	**Analyst approved:**	06/24/20 09:50 Martha Valls
Injection Time:	06/23/20 16:31	**Supervisor approved:**	06/24/20 14:07 Naresh Jiawan

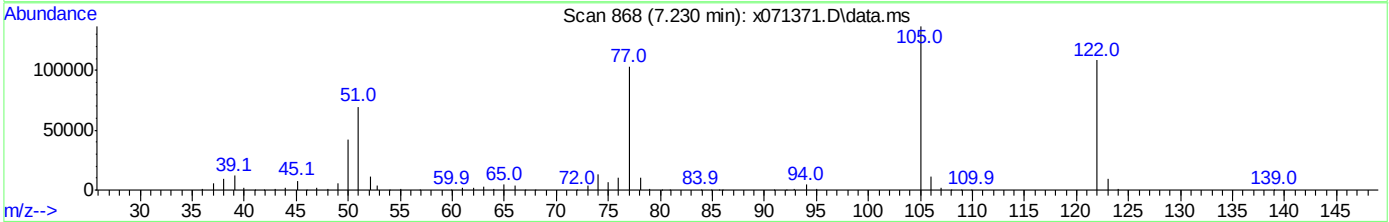
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic Acid	65-85-0		7.23	Split peak
Caprolactam	105-60-2		8.00	Split peak

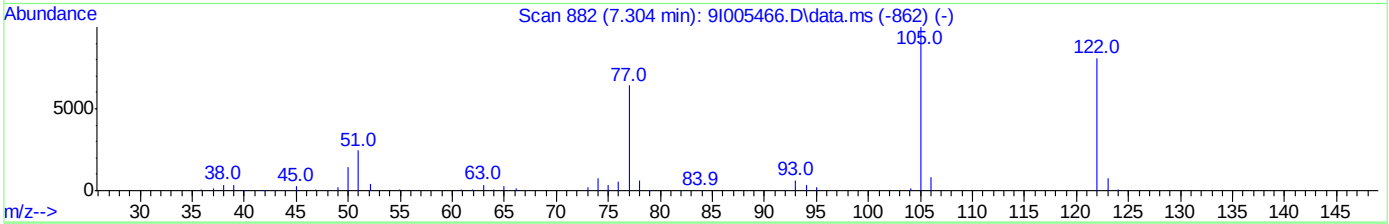
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071371.D
Acq On : 23 Jun 2020 4:31 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jun 23 16:51:36 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:33:00 2020
Response via : Initial Calibration







TIC: x071371.D\data.ms

(30) Benzoic Acid

7.230min (+0.075) 234.38ppm

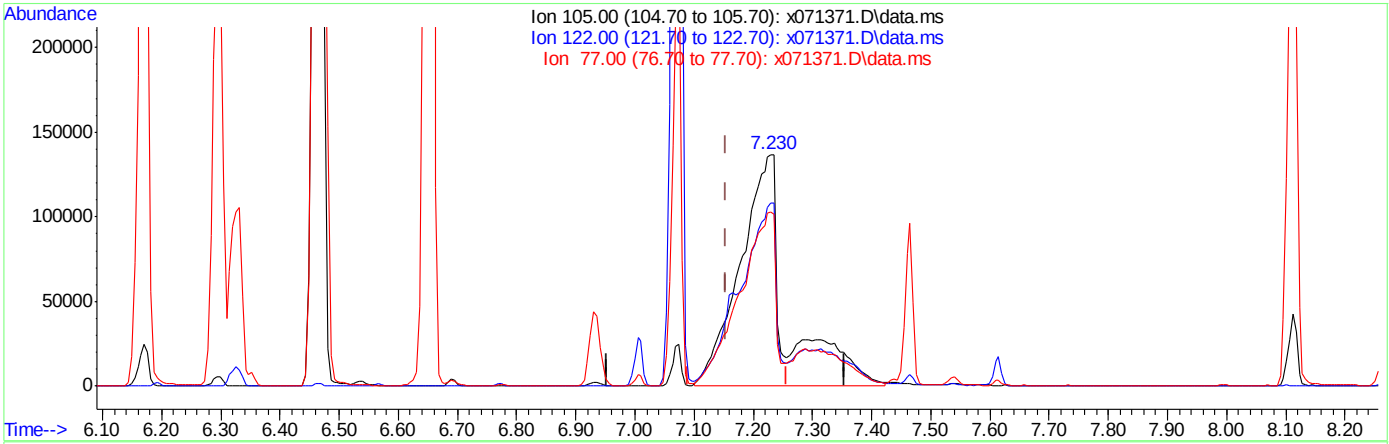
response 567202

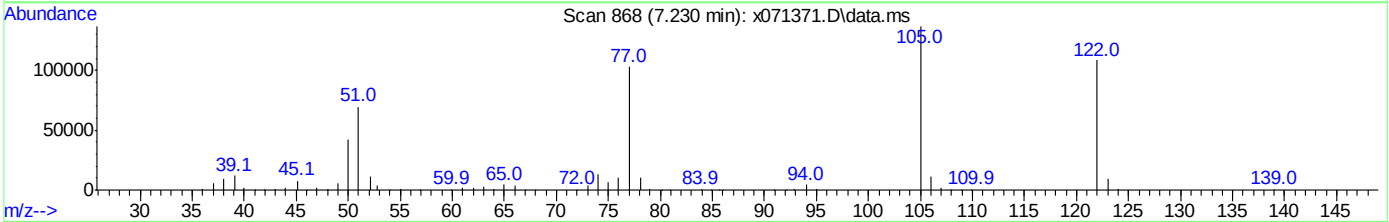
Ion	Exp%	Act%
105.00	100	100
122.00	81.20	77.79
77.00	64.10	74.35
0.00	0.00	0.00

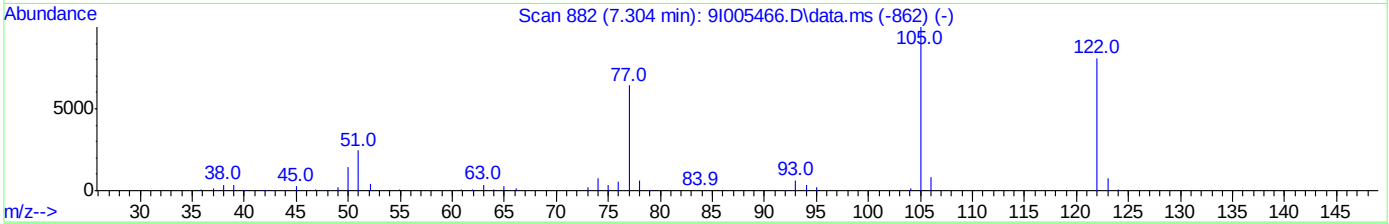
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071371.D
Acq On : 23 Jun 2020 4:31 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jun 23 16:51:36 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:33:00 2020
Response via : Initial Calibration







TIC: x071371.D\data.ms

(30) Benzoic Acid

7.230min (+0.075) 308.64ppm m

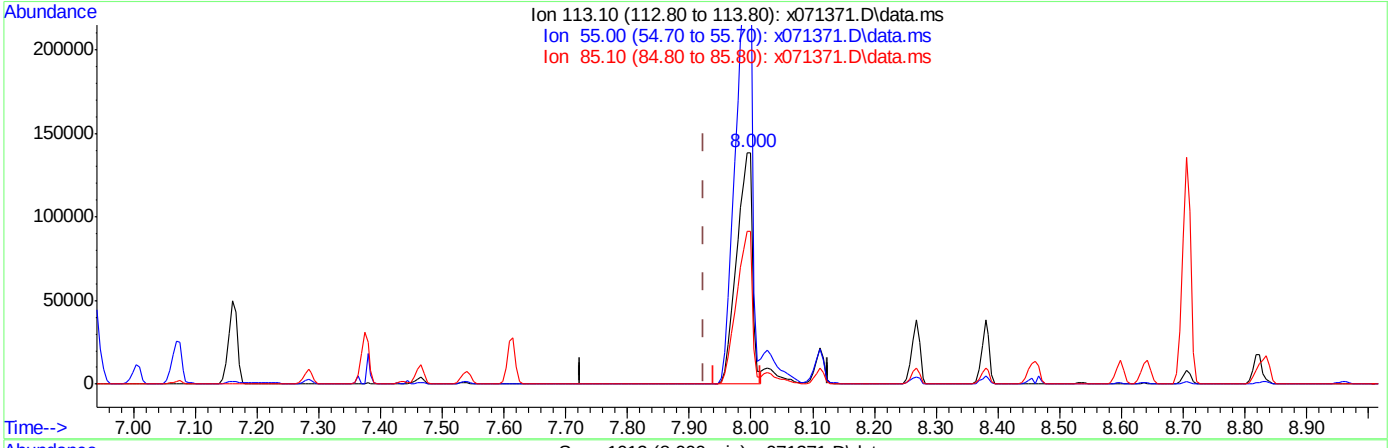
response 746921

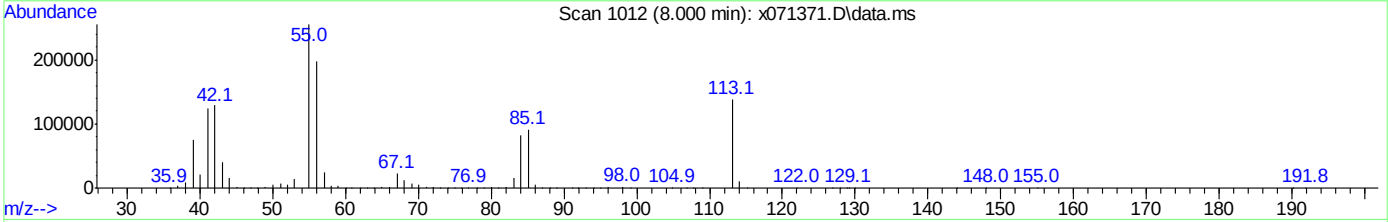
Ion	Exp%	Act%
105.00	100	100
122.00	81.20	79.27
77.00	64.10	75.09
0.00	0.00	0.00

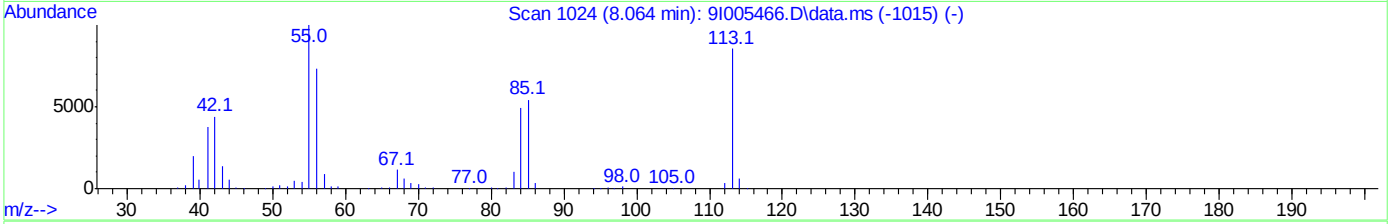
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071371.D
Acq On : 23 Jun 2020 4:31 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jun 23 16:51:36 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:33:00 2020
Response via : Initial Calibration







TIC: x071371.D\data.ms

(38) Caprolactam (P)

8.000min (+0.075) 235.97ppm

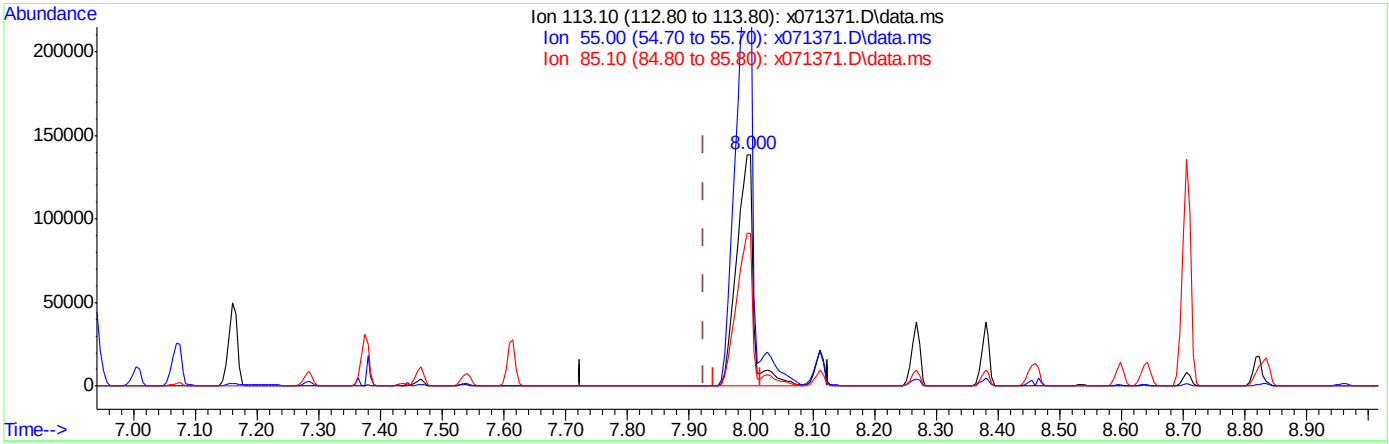
response 251829

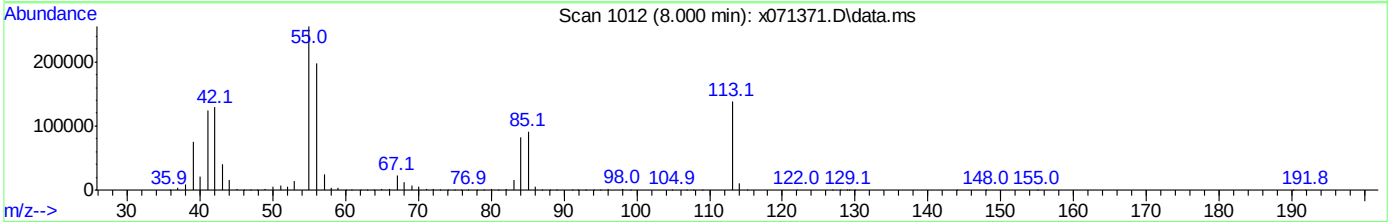
Ion	Exp%	Act%
113.10	100	100
55.00	117.00	183.66#
85.10	63.40	66.16
0.00	0.00	0.00

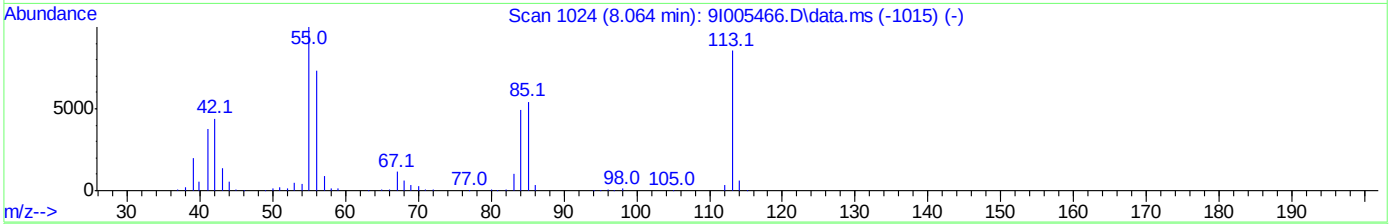
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071371.D
Acq On : 23 Jun 2020 4:31 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jun 23 16:51:36 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:33:00 2020
Response via : Initial Calibration







TIC: x071371.D\data.ms

(38) Caprolactam (P)

8.000min (+0.075) 253.45ppm m

response 270490

Ion	Exp%	Act%
113.10	100	100
55.00	117.00	184.25#
85.10	63.40	66.06
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071372.D
Acq On : 23 Jun 2020 4:58 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jun 24 13:02:09 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.010	152	183379	40.00	ppm	0.00
22) Naphthalene-d8	7.433	136	761641	40.00	ppm	0.00
43) Acenaphthene-d10	9.476	164	366243	40.00	ppm	0.00
70) Phenanthrene-d10	11.225	188	590804	40.00	ppm	0.00
92) Chrysene-d12	14.493	240	381234	40.00	ppm	0.00
102) Perylene-d12	16.809	264	308770	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	6.010	152	183379	40.00	ppm	0.00
120) Naphthalene-d8A	7.433	136	761641	40.00	ppm	0.00
127) Acenaphthene-d10A	9.476	164	366243	40.00	ppm	0.00
136) Phenanthrene-d10A	11.225	188	590804	40.00	ppm	0.00
146) Chrysene-d12A	14.493	240	381234	40.00	ppm	0.00
153) Perylene-d12A	16.809	264	309063	40.00	ppm	-0.02
System Monitoring Compounds						
7) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#		
9) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#		
23) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#		
47) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#		
75) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#		
95) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#		
Target Compounds						Qvalue
2) 1,4-Dioxane	2.854	88	149489	47.57	ppm	98
3) N-nitrosodimethylamine	3.175	42	258160	46.26	ppm	96
5) Benzaldehyde	5.534	106	205047	37.51	ppm	98
8) bis(2-Chloroethyl)ether	5.727	93	288499	42.88	ppm	97
10) Phenol	5.625	94	378450	40.78	ppm	97
11) 2-Chlorophenol	5.775	128	317439	45.24	ppm	98
12) 1,3-Dichlorobenzene	5.946	146	347468	47.67	ppm	98
13) 1,4-Dichlorobenzene	6.026	146	369369	47.89	ppm	99
14) 1,2-Dichlorobenzene	6.187	146	341657	46.63	ppm	99
16) 2,2'-Oxybis(1-chloropr...	6.326	45	661107	46.76	ppm	99
17) 2-Methylphenol	6.288	108	296147	44.37	ppm	99
18) Acetophenone	6.454	105	448943	45.45	ppm	99
19) Hexachloroethane	6.566	117	144318	49.84	ppm	98
20) N-Nitroso-di-n-propyla...	6.465	70	236671	45.37	ppm	98
21) 3&4-Methylphenol	6.465	108	640525	92.84	ppm	98
24) Nitrobenzene	6.641	77	359823	46.24	ppm	98
25) Isophorone	6.919	82	588290	42.34	ppm	99
26) 2-Nitrophenol	7.000	139	177715	48.03	ppm	93
27) 2,4-Dimethylphenol	7.064	107	297230	43.26	ppm	99
29) bis(2-Chloroethoxy)met...	7.176	93	377117	46.39	ppm	100
30) Benzoic Acid	7.235	105	562871	85.51	ppm	94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071372.D
Acq On : 23 Jun 2020 4:58 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jun 24 13:02:09 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration

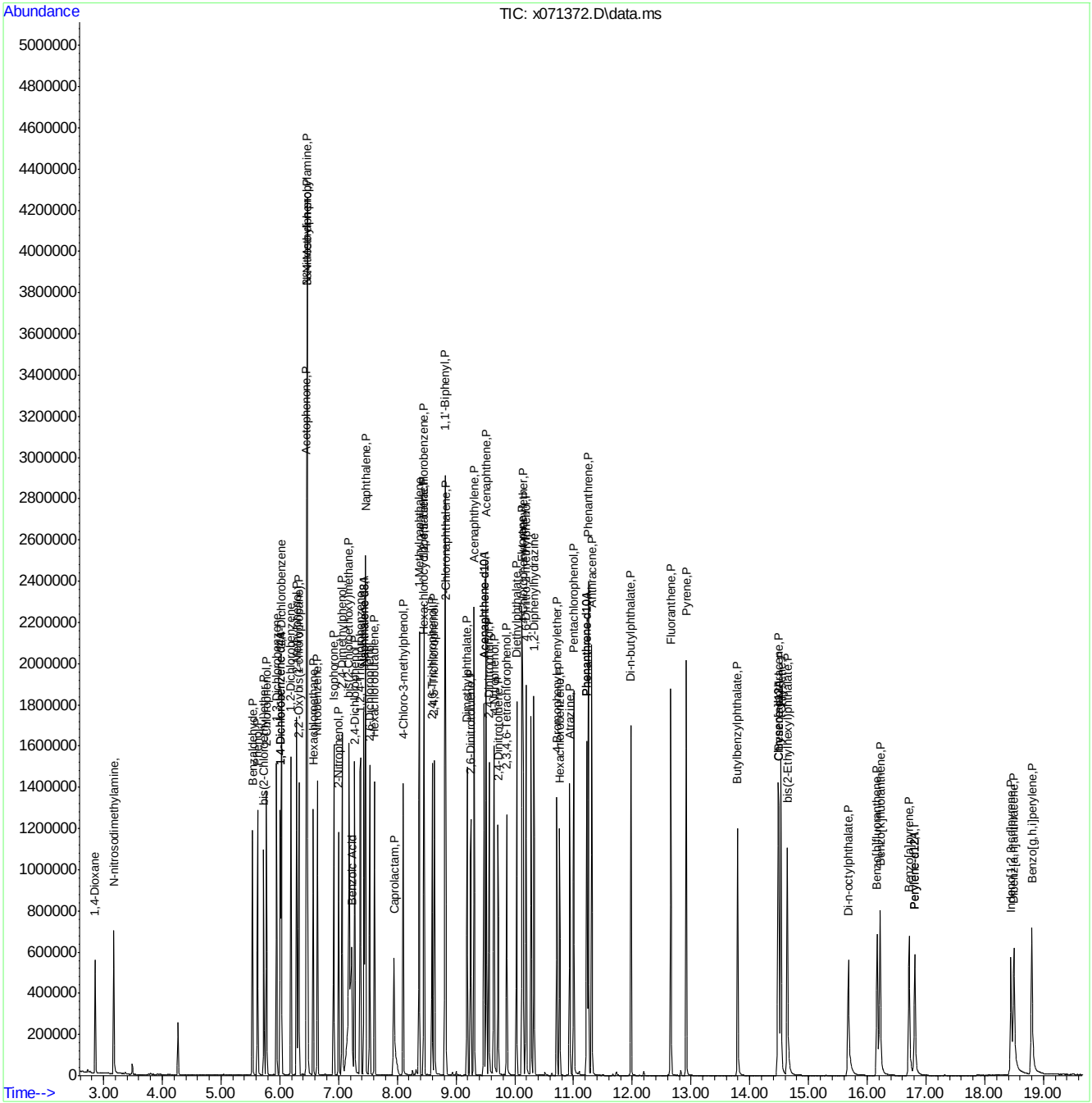
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
31)	2,4-Dichlorophenol	7.278	162	269185	48.60	ppm	98
32)	1,2,4-Trichlorobenzene	7.374	180	272003	48.06	ppm	97
34)	Naphthalene	7.460	128	959832	46.48	ppm	100
36)	2,6-Dichlorophenol	7.534	162	263049	46.58	ppm	98
37)	Hexachlorobutadiene	7.609	225	137064	49.11	ppm	98
38)	Caprolactam	7.946	113	96386	41.94	ppm	98
39)	4-Chloro-3-methylphenol	8.101	107	257540	43.61	ppm	97
41)	1-Methylnaphthalene	8.374	142	543287	41.55	ppm	98
42)	1,2,4,5-Tetrachloroben...	8.454	216	249473	43.92	ppm	98
44)	Hexachlorocyclopentadiene	8.449	237	140580	48.13	ppm	99
45)	2,4,6-Trichlorophenol	8.593	196	172067	51.18	ppm	100
46)	2,4,5-Trichlorophenol	8.631	196	193062	52.32	ppm	98
48)	1,1'-Biphenyl	8.813	154	703618	47.05	ppm	100
49)	2-Chloronaphthalene	8.829	162	568344	50.63	ppm	99
52)	Acenaphthylene	9.310	152	937291	51.24	ppm	99
53)	Dimethylphthalate	9.193	163	607393	47.01	ppm	100
55)	2,6-Dinitrotoluene	9.251	165	137746	45.17	ppm	93
57)	Acenaphthene	9.513	153	574692	47.24	ppm	98
59)	2,4-Dinitrophenol	9.562	184	180349	93.33	ppm	98
61)	2,4-Dinitrotoluene	9.717	165	191936	49.37	ppm	86
62)	4-Nitrophenol	9.652	109	180279	96.19	ppm	93
64)	2,3,4,6-Tetrachlorophenol	9.866	232	128385	45.10	ppm	95
65)	Fluorene	10.123	166	615161	48.56	ppm	99
66)	4-Chlorophenyl-phenyle...	10.139	204	303003	49.55	ppm	93
67)	Diethylphthalate	10.032	149	616706	47.79	ppm	99
71)	4,6-Dinitro-2-methylph...	10.193	198	241924	94.07	ppm	80
74)	1,2-Diphenylhydrazine	10.326	77	633167	47.82	ppm	98
78)	4-Bromophenyl-phenylether	10.717	248	140300	49.46	ppm	97
79)	Hexachlorobenzene	10.765	284	129727	45.84	ppm	97
82)	Atrazine	10.936	200	149174	43.24	ppm	96
83)	Pentachlorophenol	11.006	266	190511	89.05	ppm	99
84)	Phenanthrene	11.252	178	850710	47.65	ppm	99
85)	Anthracene	11.316	178	870452	46.78	ppm	100
89)	Di-n-butylphthalate	11.974	149	903668	49.31	ppm	99
91)	Fluoranthene	12.658	202	758618	45.80	ppm	100
94)	Pyrene	12.921	202	791178	49.98	ppm	99
97)	Butylbenzylphthalate	13.792	149	336762	50.95	ppm	98
99)	Benzo[a]anthracene	14.482	228	569609	47.54	ppm	99
100)	Chrysene	14.530	228	626698	49.11	ppm	99
101)	bis(2-Ethylhexyl)phtha...	14.643	149	456979	50.76	ppm	98
103)	Di-n-octylphthalate	15.680	149	563435	46.20	ppm	99
104)	Benzo[b]fluoranthene	16.167	252	436889	47.85	ppm	99
105)	Benzo[k]fluoranthene	16.221	252	523305	47.74	ppm	99
106)	Benzo[a]pyrene	16.713	252	423489	48.31	ppm	99
107)	Indeno[1,2,3-cd]pyrene	18.446	276	310730	51.10	ppm	99
108)	Dibenz[a,h]anthracene	18.499	278	352524	50.72	ppm	100
109)	Benzo[g,h,i]perylene	18.804	276	446029	51.81	ppm	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071372.D
Acq On : 23 Jun 2020 4:58 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jun 24 13:02:09 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071373.D
Acq On : 23 Jun 2020 5:25 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jun 23 19:01:20 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

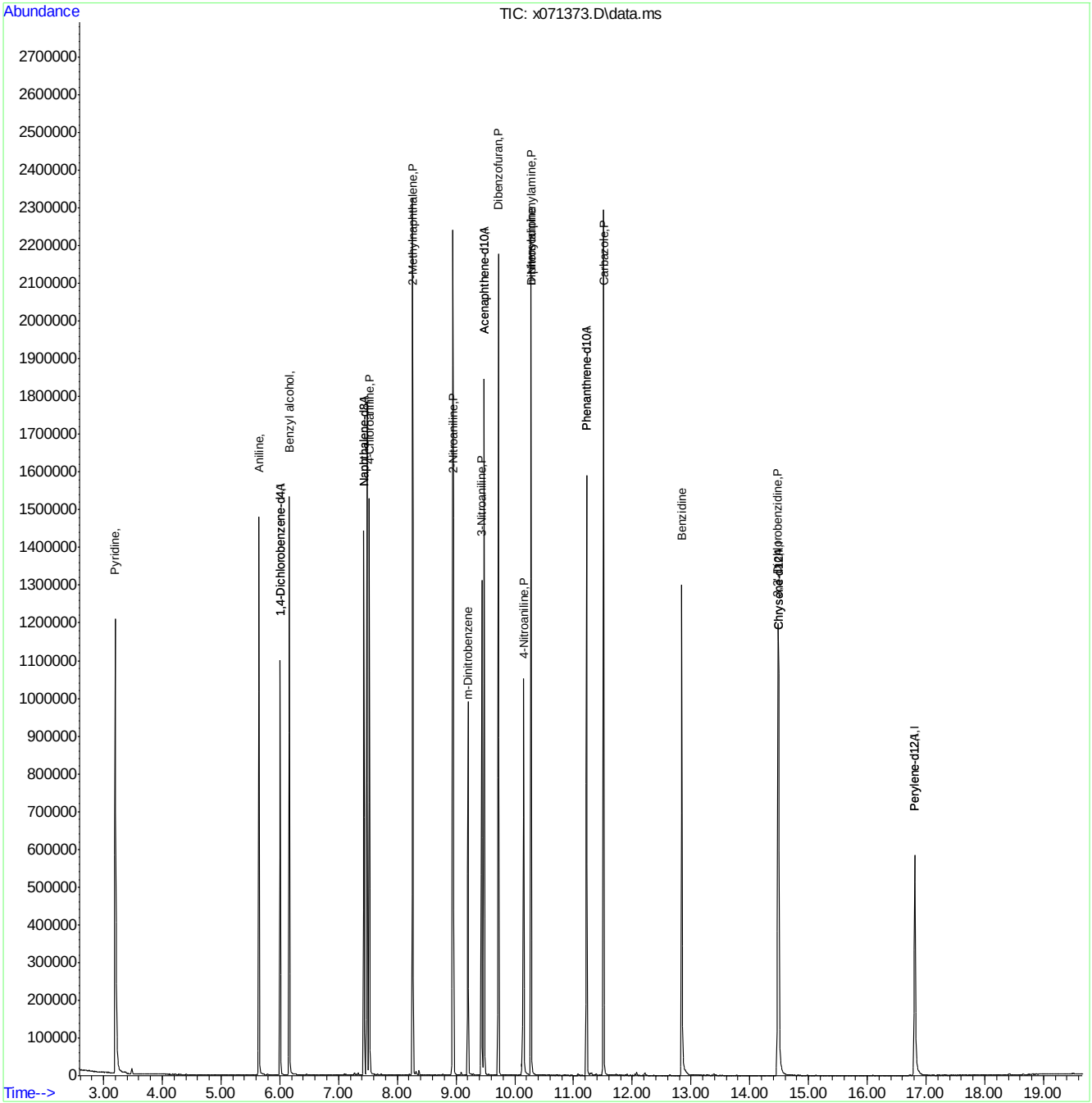
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.005	152	150227	40.00	ppm	0.00
22) Naphthalene-d8	7.433	136	615206	40.00	ppm	0.00
43) Acenaphthene-d10	9.476	164	365093	40.00	ppm	0.00
70) Phenanthrene-d10	11.219	188	599891	40.00	ppm	0.00
92) Chrysene-d12	14.493	240	424744	40.00	ppm	0.00
102) Perylene-d12	16.809	264	319412	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	6.005	152	150227	40.00	ppm	0.00
120) Naphthalene-d8A	7.433	136	615206	40.00	ppm	0.00
127) Acenaphthene-d10A	9.476	164	365093	40.00	ppm	0.00
136) Phenanthrene-d10A	11.219	188	599891	40.00	ppm	0.00
146) Chrysene-d12A	14.493	240	424744	40.00	ppm	0.00
153) Perylene-d12A	16.809	264	319412	40.00	ppm	-0.02
System Monitoring Compounds						
7) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#		
9) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#		
23) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#		
47) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#		
75) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#		
95) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#		
Target Compounds						Qvalue
4) Pyridine	3.196	79	390264	62.31	ppm	99
6) Aniline	5.646	93	431423	48.31	ppm	74
15) Benzyl alcohol	6.160	108	207097	52.06	ppm	94
35) 4-Chloroaniline	7.529	127	402810	57.18	ppm	98
40) 2-Methylnaphthalene	8.262	142	597160	54.13	ppm	99
50) 2-Nitroaniline	8.957	65	257908	62.60	ppm	94
54) m-Dinitrobenzene	9.208	168	111952	52.16	ppm	84
58) 3-Nitroaniline	9.438	138	189950	56.80	ppm	95
60) Dibenzofuran	9.722	168	826121	51.04	ppm	99
69) 4-Nitroaniline	10.155	138	182518	49.05	ppm	97
72) n-Nitrosodiphenylamine	10.278	169	512961	55.03	ppm	99
73) Diphenylamine	10.278	169	512961	46.89	ppm	99
87) Carbazole	11.514	167	881162	52.85	ppm	99
93) Benzidine	12.840	184	485848	57.66	ppm	98
98) 3,3'-Dichlorobenzidine	14.477	252	205960	46.38	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071373.D
Acq On : 23 Jun 2020 5:25 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jun 23 19:01:20 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071374.D
Acq On : 23 Jun 2020 5:51 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jun 24 09:47:41 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 09:47:01 2020
Response via : Initial Calibration

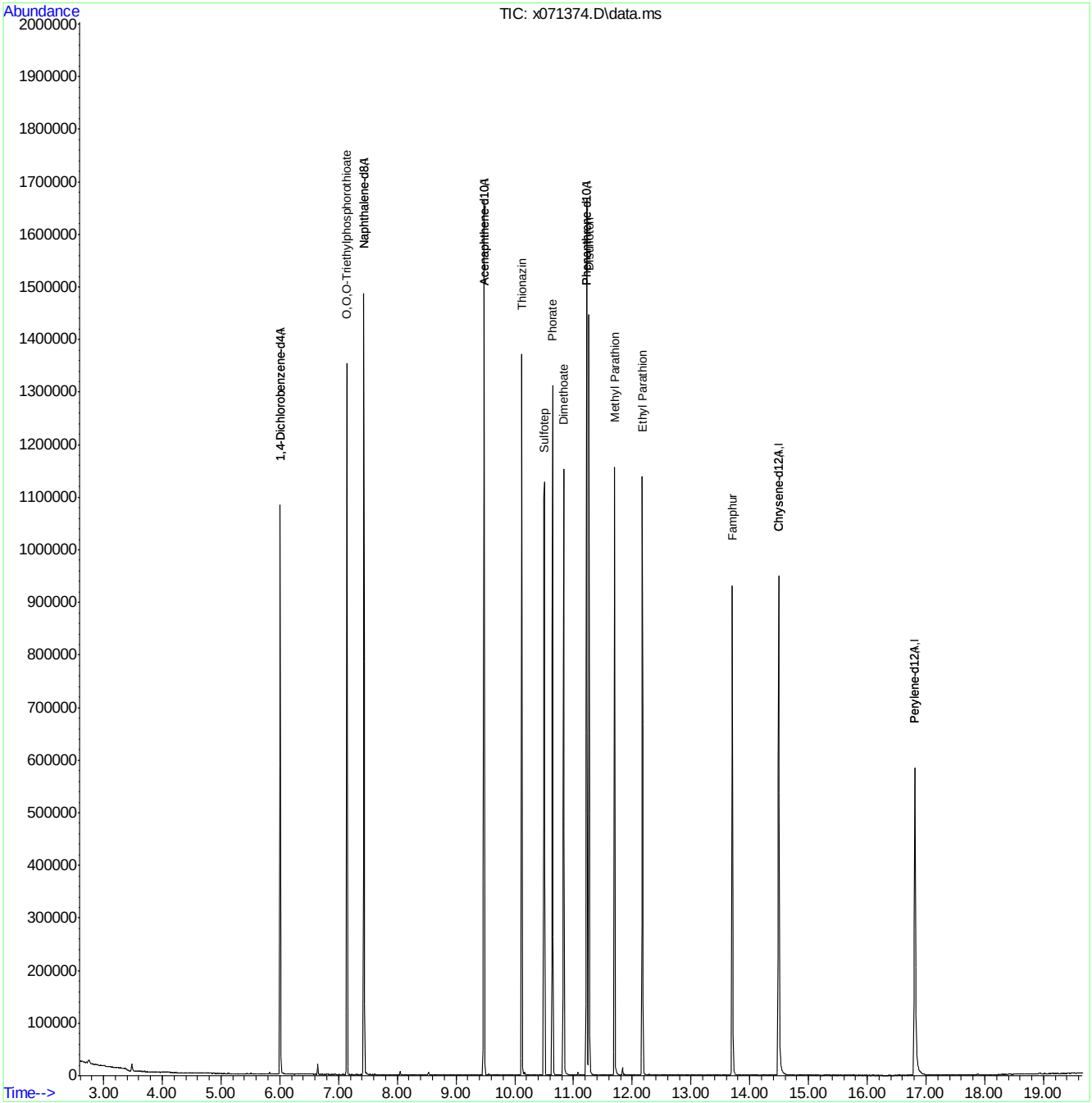
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.005	152	148473	40.00	ppm	0.00
22) Naphthalene-d8	7.433	136	622145	40.00	ppm	0.00
43) Acenaphthene-d10	9.476	164	318777	40.00	ppm	0.00
70) Phenanthrene-d10	11.225	188	611399	40.00	ppm	0.00
92) Chrysene-d12	14.493	240	410353	40.00	ppm	0.00
102) Perylene-d12	16.809	264	324234	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	6.005	152	148473	40.00	ppm	0.00
120) Naphthalene-d8A	7.433	136	622145	40.00	ppm	0.00
127) Acenaphthene-d10A	9.476	164	318777	40.00	ppm	0.00
136) Phenanthrene-d10A	11.225	188	611399	40.00	ppm	0.00
146) Chrysene-d12A	14.493	240	410353	40.00	ppm	0.00
153) Perylene-d12A	16.809	264	324958	40.00	ppm	-0.02
System Monitoring Compounds						
7) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#		
9) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#		
23) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#		
47) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#		
75) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#		
95) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#		
Target Compounds						Qvalue
28) O,O,O-Triethylphosphor...	7.144	198	105879	44.45	ppm	83
68) Thionazin	10.118	97	120853	50.65	ppm	97
76) Sulfotep	10.498	97	86642	43.01	ppm	81
77) Phorate	10.642	75	319548	45.28	ppm	100
80) Dimethoate	10.835	87	214899	43.90	ppm	97
86) Disulfoton	11.262	88	274405	37.15	ppm	98
88) Methyl Parathion	11.701	109	189499	45.13	ppm	99
90) Ethyl Parathion	12.172	97	110890	45.60	ppm	99
96) Famphur	13.701	218	254343	81.91	ppm	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071374.D
Acq On : 23 Jun 2020 5:51 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jun 24 09:47:41 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 09:47:01 2020
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 06/24/20 14:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071375.D
Acq On : 23 Jun 2020 6:17 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jun 23 19:09:37 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.005	152	172015	40.00	ppm	0.00
22) Naphthalene-d8	7.433	136	793987	40.00	ppm	0.00
43) Acenaphthene-d10	9.476	164	393550	40.00	ppm	0.00
70) Phenanthrene-d10	11.225	188	731895	40.00	ppm	0.00
92) Chrysene-d12	14.493	240	462942	40.00	ppm	0.00
102) Perylene-d12	16.825	264	392896	40.00	ppm	0.01
110) 1,4-Dichlorobenzene-d4A	6.005	152	172015	40.00	ppm	0.00
120) Naphthalene-d8A	7.433	136	793987	40.00	ppm	0.00
127) Acenaphthene-d10A	9.476	164	393550	40.00	ppm	0.00
136) Phenanthrene-d10A	11.225	188	731895	40.00	ppm	0.00
146) Chrysene-d12A	14.493	240	462942	40.00	ppm	0.00
153) Perylene-d12A	16.825	264	392896	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#		
9) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#		
23) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#		
47) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#		
75) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#		
95) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#		
Target Compounds						Qvalue
111) 2-Picoline	3.983	93	342381	41.74	ppm	98
112) N-Nitrosomethylethylamine	4.111	42	225307	39.50	ppm	98
113) Methyl methanesulfonate	4.438	80	168971	42.24	ppm	99
114) N-Nitrosodiethylamine	4.855	102	139040	41.73	ppm	97
115) Ethyl methanesulfonate	5.181	79	220292	39.97	ppm	99
116) Pentachloroethane	5.700	167	91780	39.11	ppm	98
117) N-Nitrosopyrrolidine	6.427	100	132223	43.89	ppm	89
118) N-Nitrosomorpholine	6.481	56	229903	41.82	ppm	97
119) O-Toluidine	6.497	106	485556	43.12	ppm	98
121) N-Nitrosopiperidine	6.812	42	267559	36.63	ppm	99
122) A,A-Dimethylphenethyla...	7.347	58	1119809m	38.45	ppm	
123) Hexachloropropene	7.561	213	157157	47.16	ppm	98
124) N-Nitrosodi-n-butylamine	7.936	84	192456	32.17	ppm	98
125) p-Phenylenediamine	7.930	108	311107	41.30	ppm	99
126) Isosafrole	8.176	162	205499	37.99	ppm	99
128) Safrole	8.781	162	242204	46.80	ppm	99
129) 1-Chloronaphthalene	8.850	162	563217	45.69	ppm	99
131) 1,4-Naphthoquinone	9.037	158	155250m	29.96	ppm	
132) Pentachlorobenzene	9.668	250	183989	42.42	ppm	99
133) 1-Naphthylamine	9.813	143	566555	41.45	ppm	98
134) 2-Naphthylamine	9.909	143	621752	42.56	ppm	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071375.D
Acq On : 23 Jun 2020 6:17 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jun 23 19:09:37 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

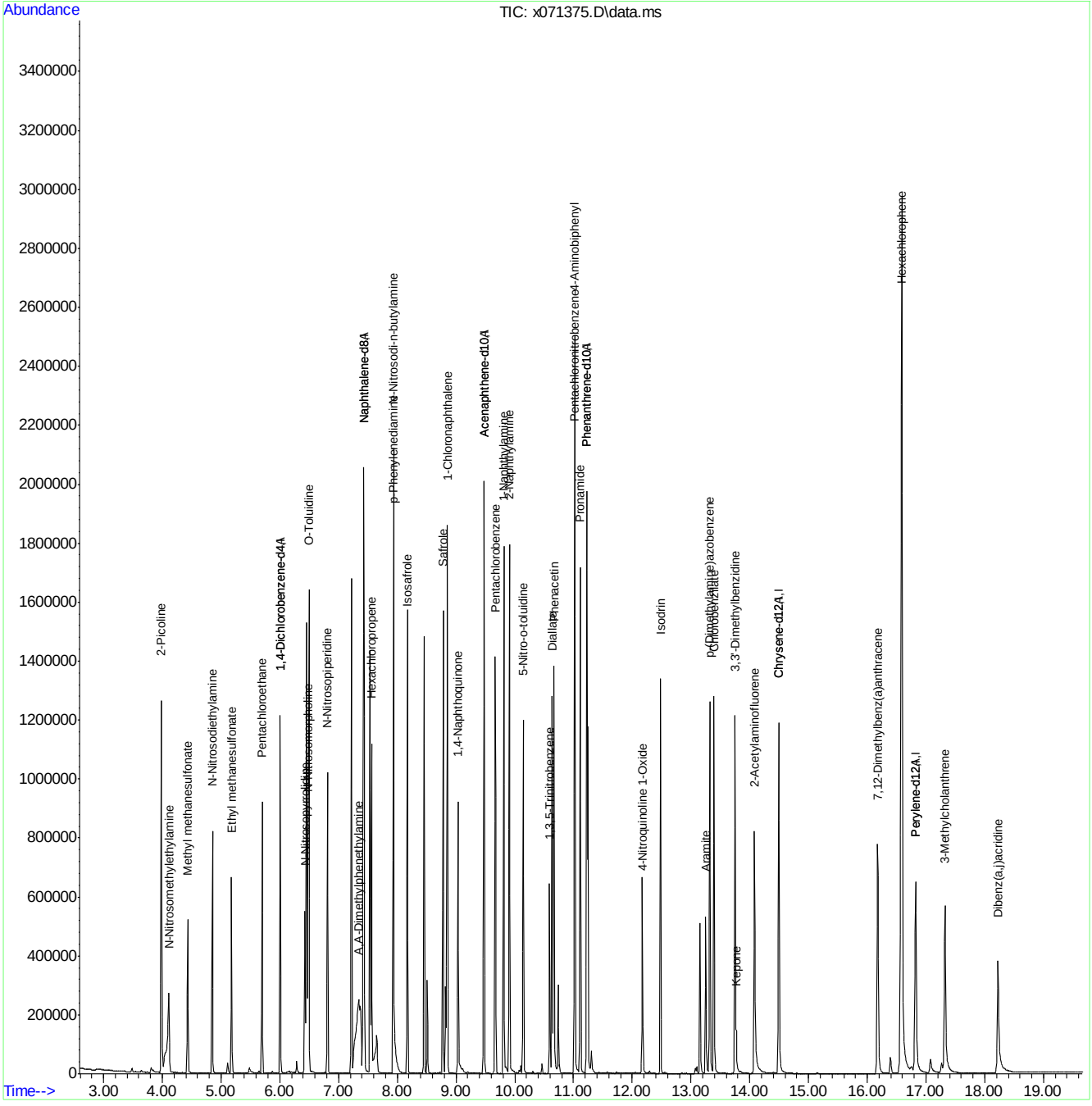
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
135) 5-Nitro-o-toluidine	10.145	152	175241	40.97	ppm	100
137) 1,3,5-Trinitrobenzene	10.594	75	152873	44.22	ppm	97
138) Diallate	10.637	43	439408m	38.31	ppm	
139) Phenacetin	10.669	108	309981	44.00	ppm	100
140) 4-Aminobiphenyl	11.022	169	600349	40.45	ppm	99
141) Pronamide	11.118	173	257415	44.78	ppm	99
142) Pentachloronitrobenzene	11.016	237	59311	41.79	ppm	97
143) 4-Nitroquinoline 1-Oxide	12.177	190	48279	36.49	ppm	90
145) Isodrin	12.482	193	85930	41.38	ppm	95
147) Aramite	13.247	185	78750m	41.76	ppm	
148) p-(Dimethylamine)azobe...	13.322	120	235287	40.07	ppm	96
149) Chlorobenzilate	13.391	139	267455	41.31	ppm	92
150) Kepone	13.776	272	4803	23.05	ppm	90
151) 3,3'-Dimethylbenzidine	13.749	212	450468	60.24	ppm	97
152) 2-Acetylaminofluorene	14.081	181	275835	41.97	ppm	98
154) 7,12-Dimethylbenz(a)an...	16.178	256	253624	46.53	ppm	99
155) Hexachlorophene	16.590	196	456808	469.07	ppm	97
156) 3-Methylcholanthrene	17.328	268	211601	39.83	ppm	98
157) Dibenz(a,j)acridine	18.226	279	276905	40.35	ppm	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071375.D
Acq On : 23 Jun 2020 6:17 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jun 23 19:09:37 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration



8270DApp9SX-062320.m Tue Jun 23 19:10:51 2020 Page: 3

Manual Integration Approval Summary

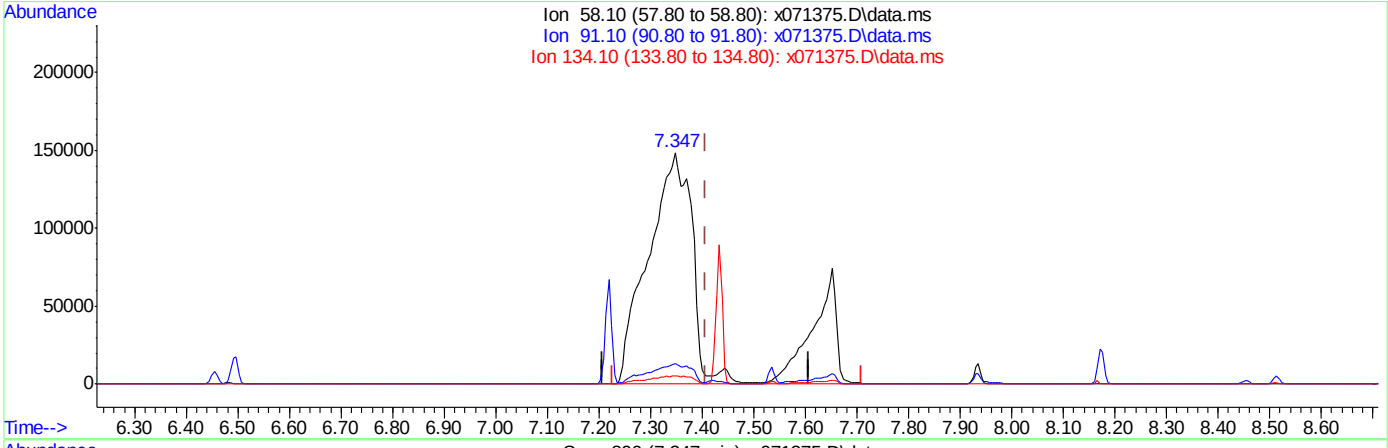
Sample Number: SX2918-ICV2918 **Method:** EPA 625.1
Lab FileID: X071375.D **Analyst approved:** 06/24/20 09:50 Martha Valls
Injection Time: 06/23/20 18:17 **Supervisor approved:** 06/24/20 14:07 Naresh Jiawan

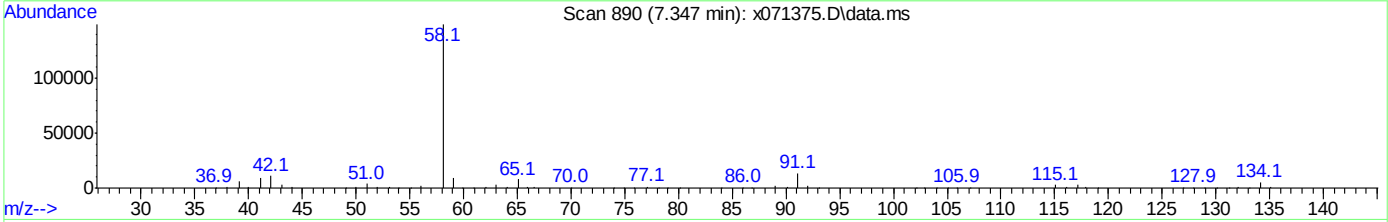
Parameter	CAS	Sig#	R.T. (min.)	Reason
A,A-Dimethylphenethylamine	122-09-8		7.35	Split peak
1,4-Naphthoquinone	130-15-4		9.04	Split peak
Diallate	2303-16-4		10.64	Split peak
Aramite	140-57-8		13.25	Split peak

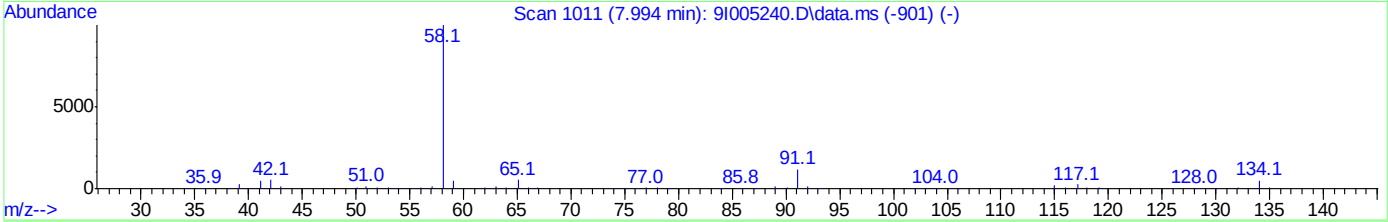
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071375.D
Acq On : 23 Jun 2020 6:17 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jun 23 19:02:41 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration







TIC: x071375.D\data.ms

(122) A,A-Dimethylphenethylamine

7.347min (-0.061) 38.45ppm m

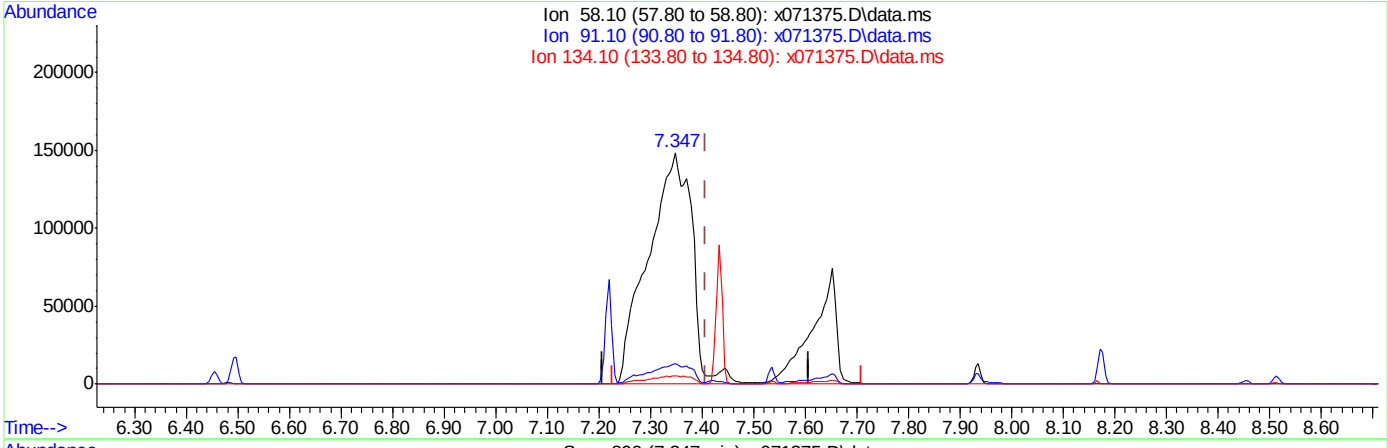
response 1119854

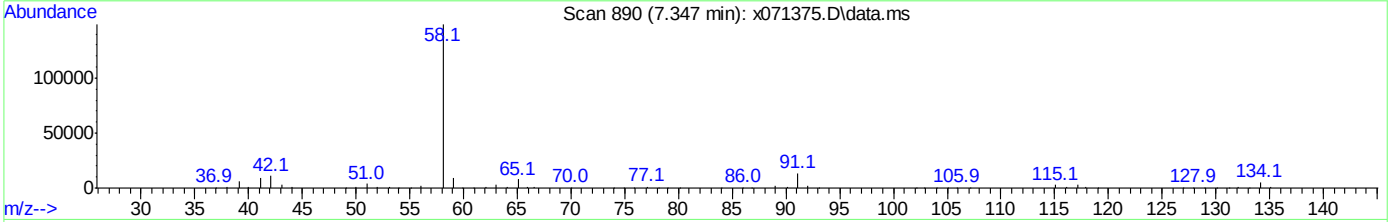
Ion	Exp%	Act%
58.10	100	100
91.10	8.30	9.03
134.10	3.70	3.76
0.00	0.00	0.00

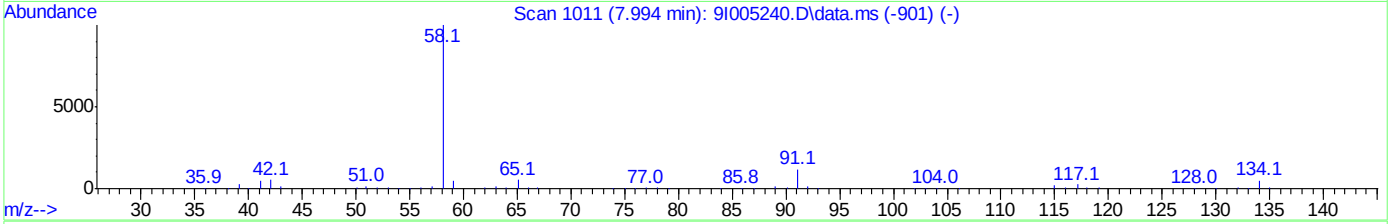
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071375.D
Acq On : 23 Jun 2020 6:17 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jun 23 19:02:41 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration







TIC: x071375.D\data.ms

(122) A,A-Dimethylphenethylamine

7.347min (-0.061) 38.45ppm m

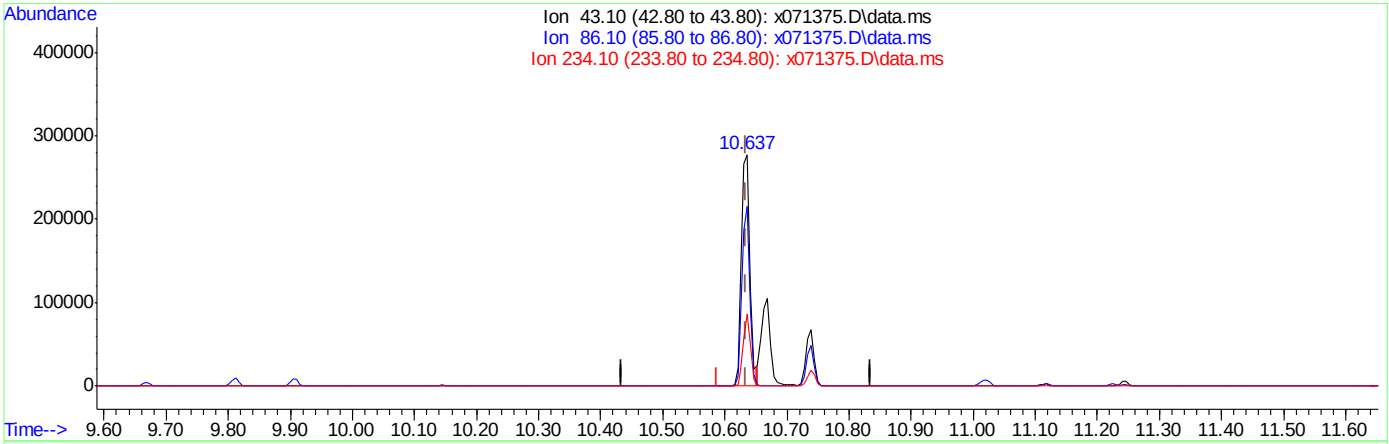
response 1119809

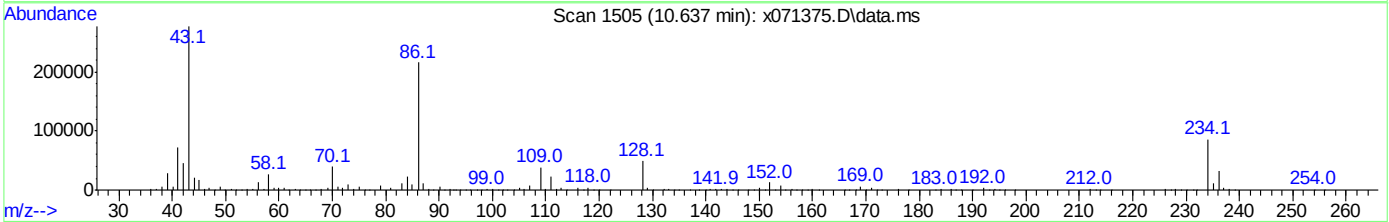
Ion	Exp%	Act%
58.10	100	100
91.10	8.30	9.03
134.10	3.70	3.76
0.00	0.00	0.00

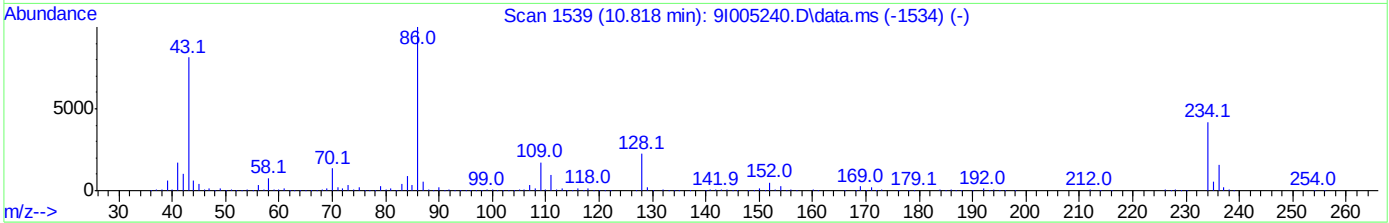
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071375.D
Acq On : 23 Jun 2020 6:17 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jun 23 19:02:41 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration







TIC: x071375.D\data.ms

(138) Diallate

10.637min (+0.002) 23.83ppm

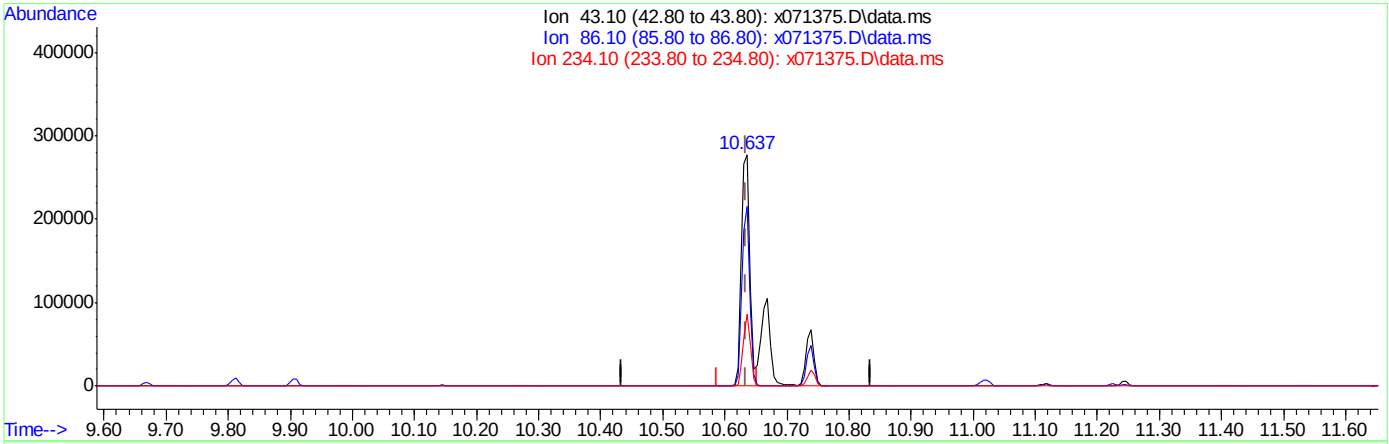
response 273290

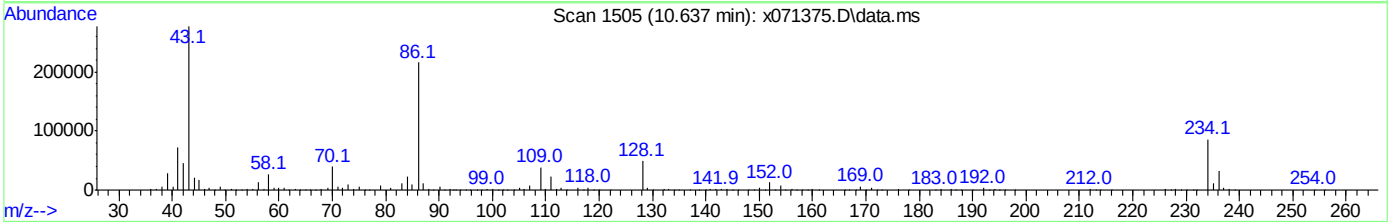
Ion	Exp%	Act%
43.10	100	100
86.10	76.00	80.95
234.10	30.60	32.24
0.00	0.00	0.00

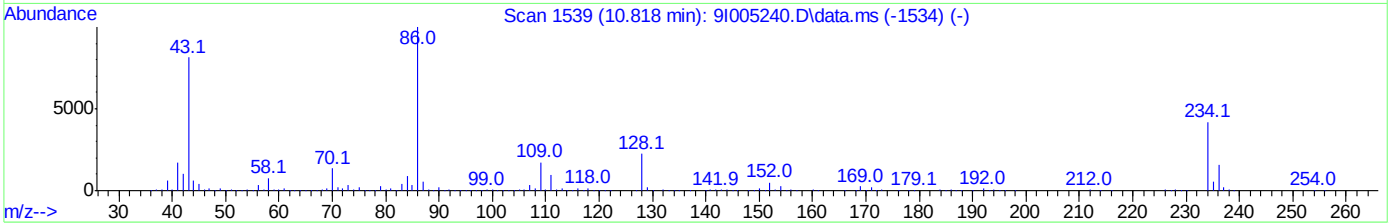
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071375.D
Acq On : 23 Jun 2020 6:17 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jun 23 19:02:41 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration







TIC: x071375.D\data.ms

(138) Diallate

10.637min (+0.002) 38.31ppm m

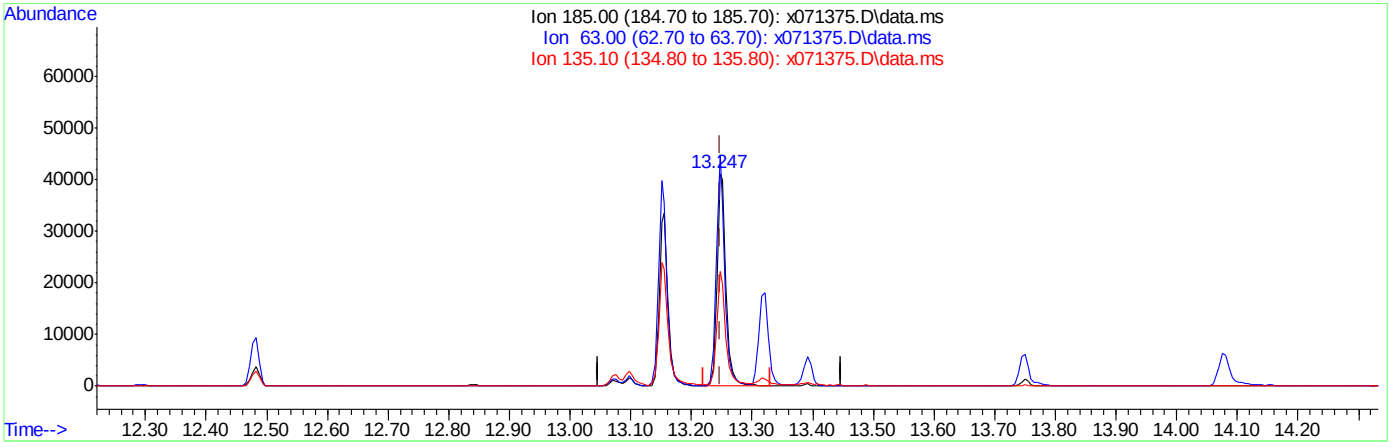
response 439408

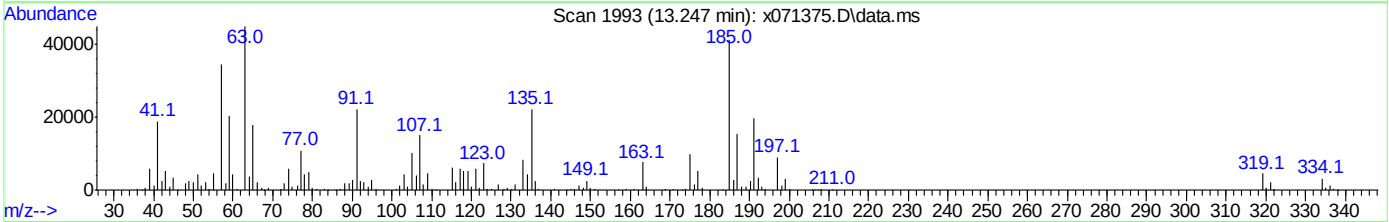
Ion	Exp%	Act%
43.10	100	100
86.10	76.00	77.78
234.10	30.60	31.05
0.00	0.00	0.00

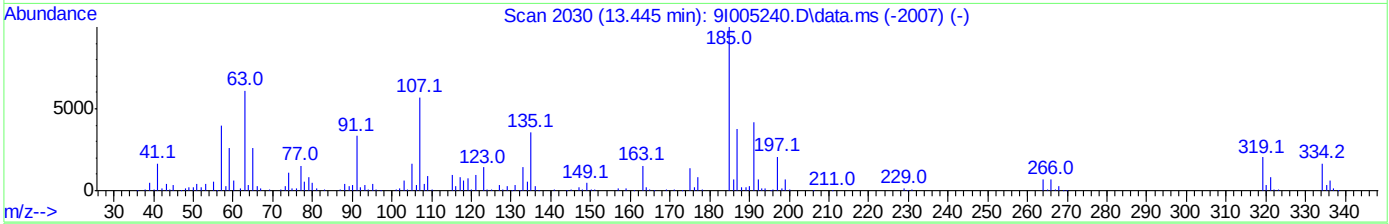
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071375.D
Acq On : 23 Jun 2020 6:17 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jun 23 19:07:08 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration







TIC: x071375.D\data.ms

(147) Aramite

13.247min (-0.001) 24.60ppm

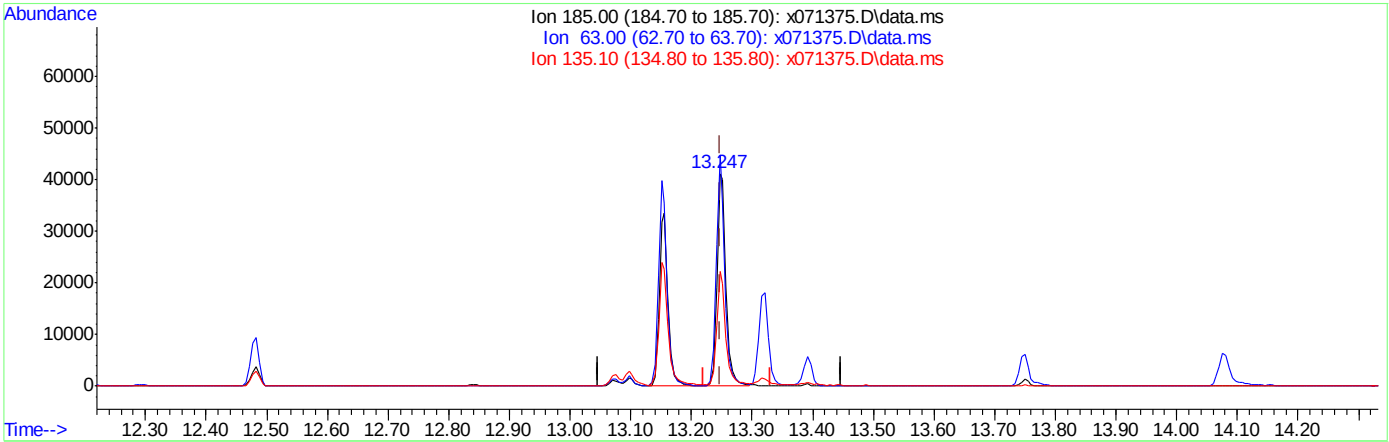
response 44104

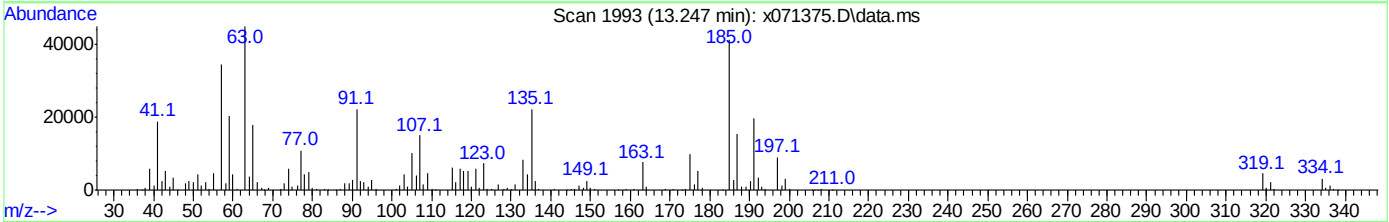
Ion	Exp%	Act%
185.00	100	100
63.00	99.40	105.13
135.10	50.50	53.08
0.00	0.00	0.00

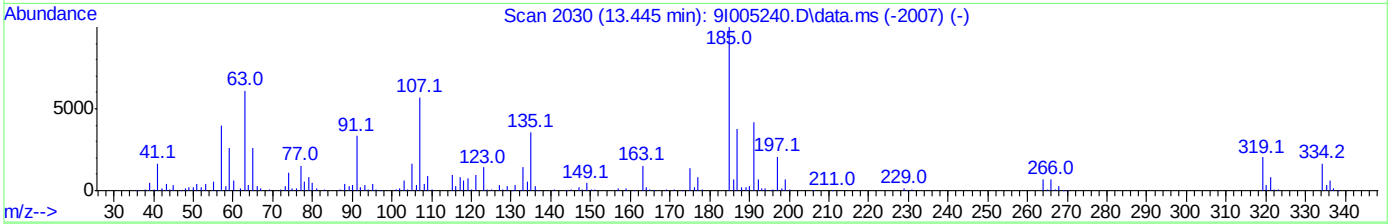
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071375.D
Acq On : 23 Jun 2020 6:17 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jun 23 19:07:08 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration







TIC: x071375.D\data.ms

(147) Aramite

13.247min (-0.001) 41.76ppm m

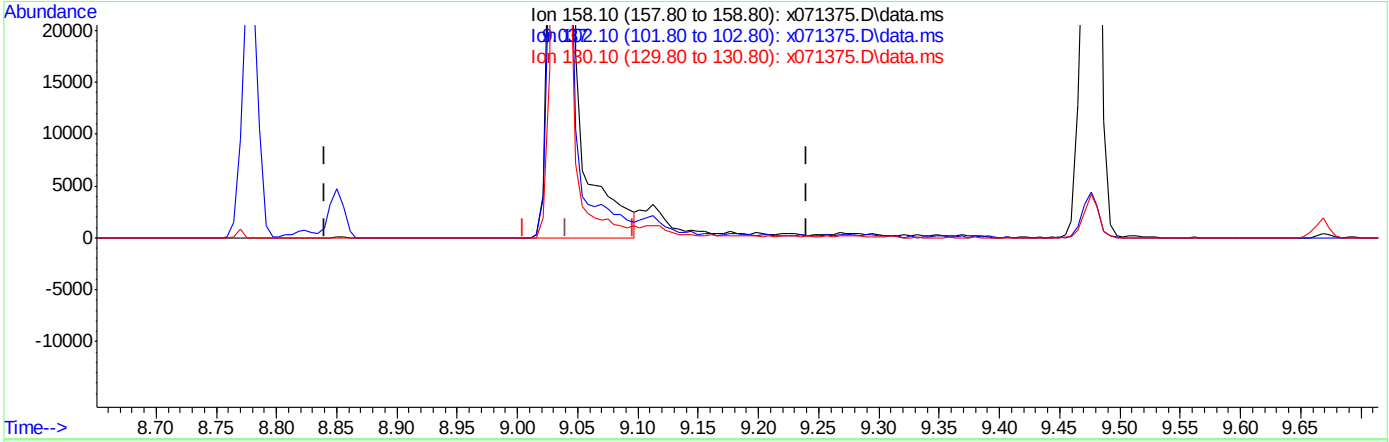
response 78750

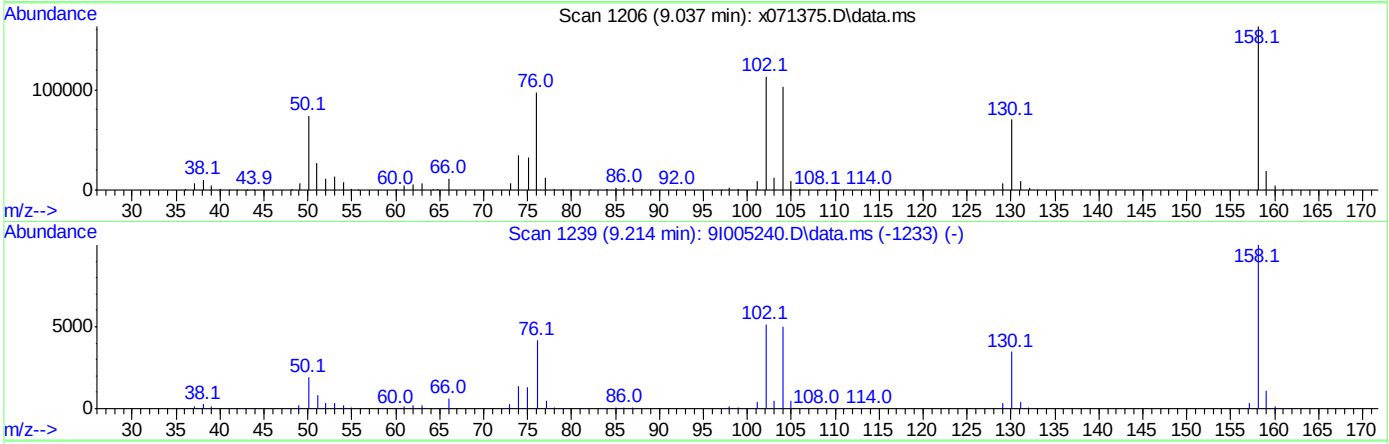
Ion	Exp%	Act%
185.00	100	100
63.00	99.40	108.99
135.10	50.50	54.14
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071375.D
Acq On : 23 Jun 2020 6:17 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jun 23 19:07:08 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration





TIC: x071375.D\data.ms

(131) 1,4-Naphthoquinone

9.037min (-0.003) 28.96ppm

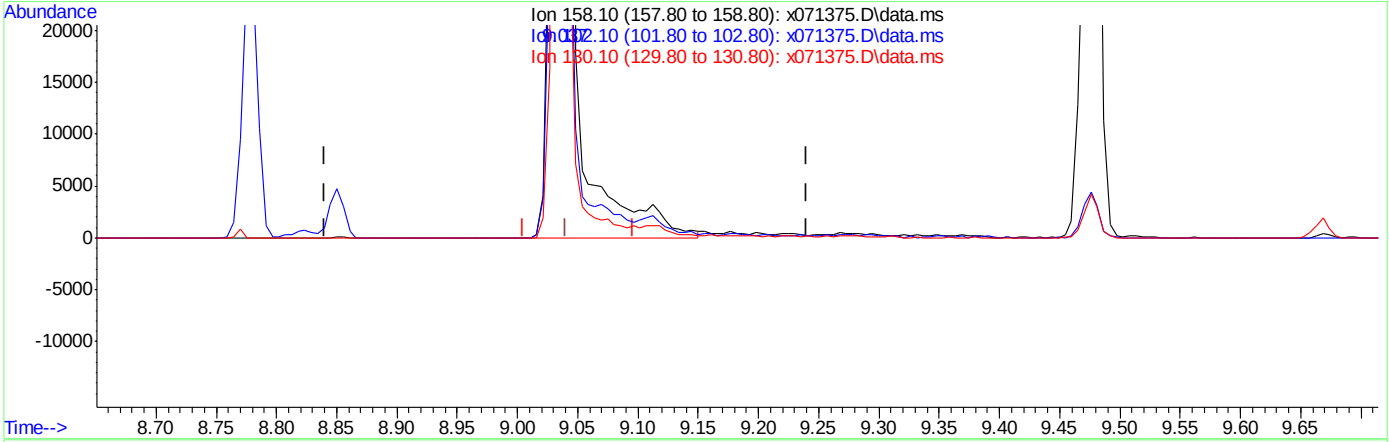
response 149991

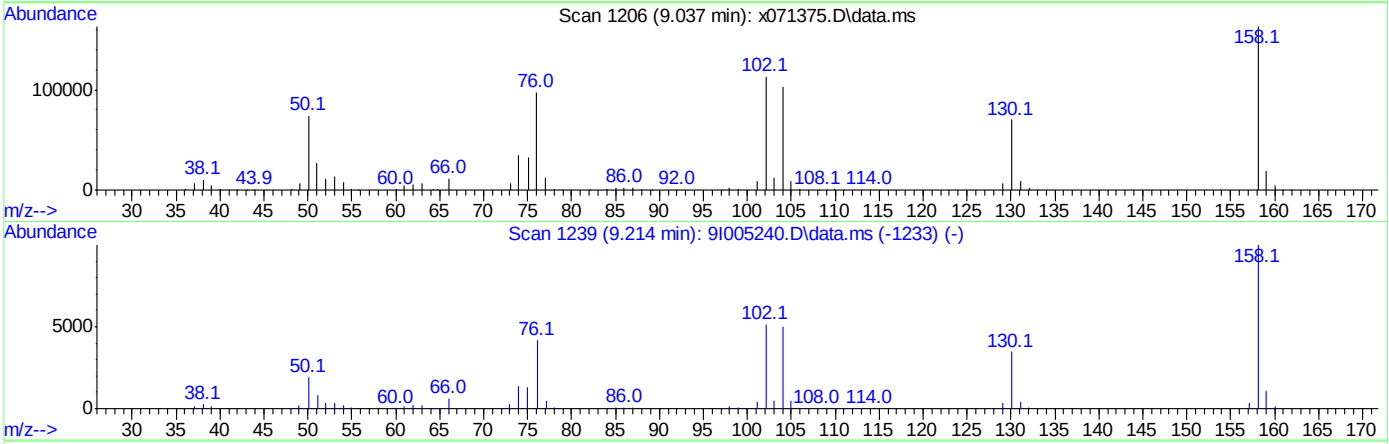
Ion	Exp%	Act%
158.10	100	100
102.10	69.70	69.26
130.10	42.30	43.02
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071375.D
Acq On : 23 Jun 2020 6:17 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jun 23 19:07:08 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration





TIC: x071375.D\data.ms

(131) 1,4-Naphthoquinone

9.037min (-0.003) 29.96ppm m

response 155250

Ion	Exp%	Act%
158.10	100	100
102.10	69.70	69.18
130.10	42.30	43.05
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071376.D
Acq On : 23 Jun 2020 6:43 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jun 23 19:07:50 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

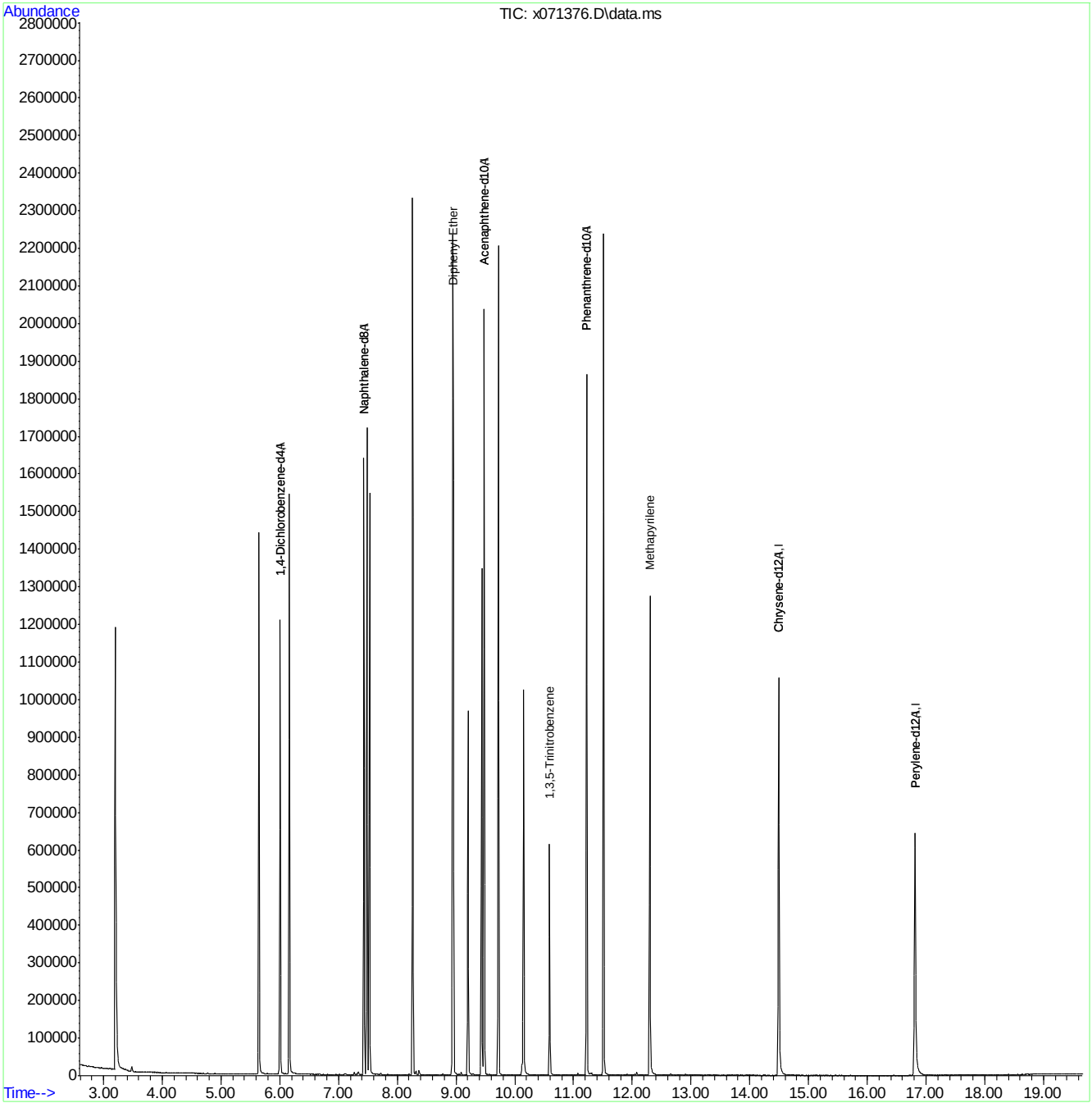
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.005	152	162946	40.00	ppm	0.00
22) Naphthalene-d8	7.433	136	686954	40.00	ppm	0.00
43) Acenaphthene-d10	9.476	164	413885	40.00	ppm	0.00
70) Phenanthrene-d10	11.225	188	667116	40.00	ppm	0.00
92) Chrysene-d12	14.493	240	441735	40.00	ppm	0.00
102) Perylene-d12	16.814	264	357783	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	6.005	152	162946	40.00	ppm	0.00
120) Naphthalene-d8A	7.433	136	686954	40.00	ppm	0.00
127) Acenaphthene-d10A	9.476	164	413885	40.00	ppm	0.00
136) Phenanthrene-d10A	11.225	188	667116	40.00	ppm	0.00
146) Chrysene-d12A	14.493	240	441735	40.00	ppm	0.00
153) Perylene-d12A	16.814	264	358466	40.00	ppm	-0.01
System Monitoring Compounds						
7) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#		
9) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#		
23) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#		
47) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#		
75) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#		
95) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#		
Target Compounds						Qvalue
130) Diphenyl Ether	8.946	170	374652	41.38	ppm	98
137) 1,3,5-Trinitrobenzene	10.594	75	141558	44.82	ppm	97
144) Methapyrilene	12.295	58	438223	128.03	ppm	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071376.D
Acq On : 23 Jun 2020 6:43 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jun 23 19:07:50 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan
06/25/20 15:55

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\June 2020\06-25-2020\sx2919\
Data File : x071416.d
Acq On : 24 Jun 2020 3:22 pm
Operator : marthav
Sample : icv2918-50 app9
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 25 02:53:35 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Thu Jun 25 02:50:18 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.994	152	159488	40.00	ppm	0.00
22) Naphthalene-d8	7.422	136	675368	40.00	ppm	0.00
43) Acenaphthene-d10	9.465	164	316836	40.00	ppm	0.00
70) Phenanthrene-d10	11.214	188	574623	40.00	ppm	0.00
92) Chrysene-d12	14.477	240	403905	40.00	ppm	0.00
102) Perylene-d12	16.803	264	385155	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	5.994	152	159488	40.00	ppm	0.00
120) Naphthalene-d8A	7.422	136	675368	40.00	ppm	0.00
127) Acenaphthene-d10A	9.465	164	316836	40.00	ppm	0.00
136) Phenanthrene-d10A	11.214	188	574623	40.00	ppm	0.00
146) Chrysene-d12A	14.477	240	403905	40.00	ppm	0.00
153) Perylene-d12A	16.803	264	385155	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#		
9) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#		
23) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#		
47) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#		
75) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#		
95) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#		
Target Compounds						Qvalue
111) 2-Picoline	3.967	93	395982	52.06	ppm	87
112) N-Nitrosomethylethylamine	4.095	42	260669	49.28	ppm #	56
113) Methyl methanesulfonate	4.421	80	176859	47.69	ppm	90
114) N-Nitrosodiethylamine	4.839	102	158768	51.39	ppm #	30
115) Ethyl methanesulfonate	5.170	79	224922	44.02	ppm	96
116) Pentachloroethane	5.684	167	101460	46.63	ppm	91
117) N-Nitrosopyrrolidine	6.416	100	143191	51.26	ppm #	20
118) N-Nitrosomorpholine	6.465	56	245205	48.10	ppm #	66
119) O-Toluidine	6.481	106	538729	51.60	ppm	99
121) N-Nitrosopiperidine	6.801	42	281884	45.37	ppm #	60
122) A,A-Dimethylphenethyla...	7.315	58	951947	38.43	ppm	87
123) Hexachloropropene	7.550	213	167883	59.22	ppm	100
124) N-Nitrosodi-n-butylamine	7.925	84	203432	39.53	ppm #	54
125) p-Phenylenediamine	7.925	108	336165	52.46	ppm	93
126) Isosafrole	8.160	162	200621	43.60	ppm	78
128) Safrole	8.770	162	232090	55.71	ppm	92
129) 1-Chloronaphthalene	8.839	162	544498	54.87	ppm	97
131) 1,4-Naphthoquinone	9.027	158	126951	30.43	ppm	82
132) Pentachlorobenzene	9.658	250	174738	50.04	ppm	99
133) 1-Naphthylamine	9.802	143	587293	53.36	ppm	94
134) 2-Naphthylamine	9.898	143	619160	52.64	ppm	98
135) 5-Nitro-o-toluidine	10.134	152	180970	51.69	ppm	80
137) 1,3,5-Trinitrobenzene	10.588	75	146886	52.54	ppm	90
138) Diallate	10.620	43	416437m	46.24	ppm	
139) Phenacetin	10.658	108	305531	55.23	ppm	91
140) 4-Aminobiphenyl	11.011	169	619883	53.19	ppm	99
141) Pronamide	11.107	173	248936	55.16	ppm	98
142) Pentachloronitrobenzene	11.006	237	55950	50.21	ppm	91
143) 4-Nitroquinoline 1-Oxide	12.166	190	51977	50.37	ppm	88

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\June 2020\06-25-2020\sx2919\
Data File : x071416.d
Acq On : 24 Jun 2020 3:22 pm
Operator : marthav
Sample : icv2918-50 app9
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 25 02:53:35 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Thu Jun 25 02:50:18 2020
Response via : Initial Calibration

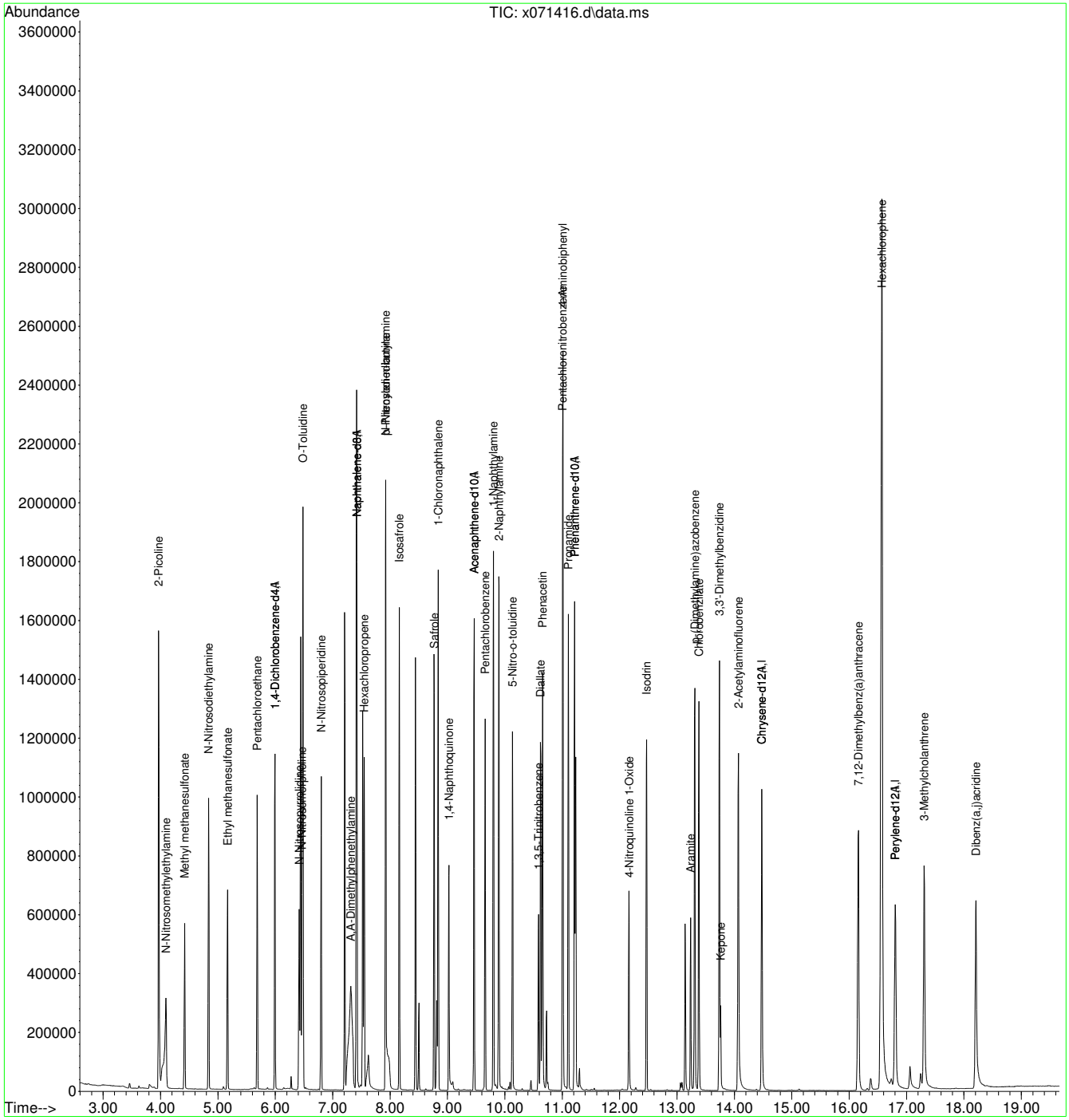
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
145) Isodrin	12.471	193	82017	50.31	ppm	87
147) Aramite	13.236	185	83620m	49.69	ppm	
148) p-(Dimethylamine)azobe...	13.311	120	253632	49.47	ppm	86
149) Chlorobenzilate	13.380	139	264506	46.52	ppm	74
150) Kepone	13.760	272	14639	80.51	ppm	90
151) 3,3'-Dimethylbenzidine	13.739	212	540574	82.86	ppm	97
152) 2-Acetylaminofluorene	14.070	181	352354	58.75	ppm	91
154) 7,12-Dimethylbenz(a)an...	16.162	256	287086	53.73	ppm	96
155) Hexachlorophene	16.568	196	511787	520.12	ppm	99
156) 3-Methylcholanthrene	17.306	268	265370	50.15	ppm	93
157) Dibenz(a,j)acridine	18.210	279	404847	56.31	ppm	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\June 2020\06-25-2020\sx2919\
Data File : x071416.d
Acq On : 24 Jun 2020 3:22 pm
Operator : marthav
Sample : icv2918-50 app9
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 25 02:53:35 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Thu Jun 25 02:50:18 2020
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: SX2918-ICV2918
Lab FileID: X071416.D
Injection Time: 06/24/20 15:22

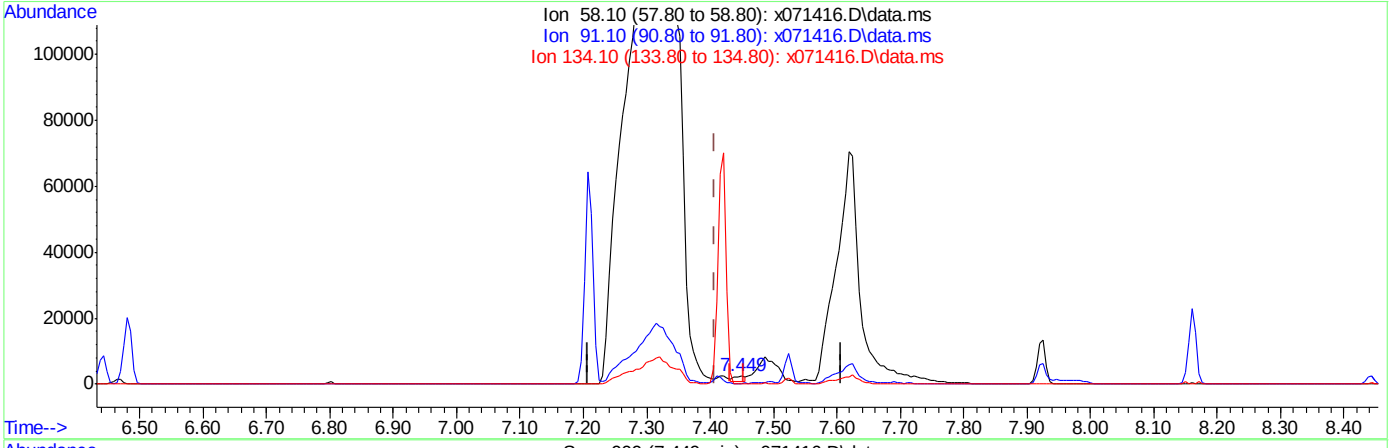
Method: EPA 625.1
Analyst approved: 06/25/20 15:55 Naresh Jiawan
Supervisor approved: 06/25/20 15:55 Naresh Jiawan

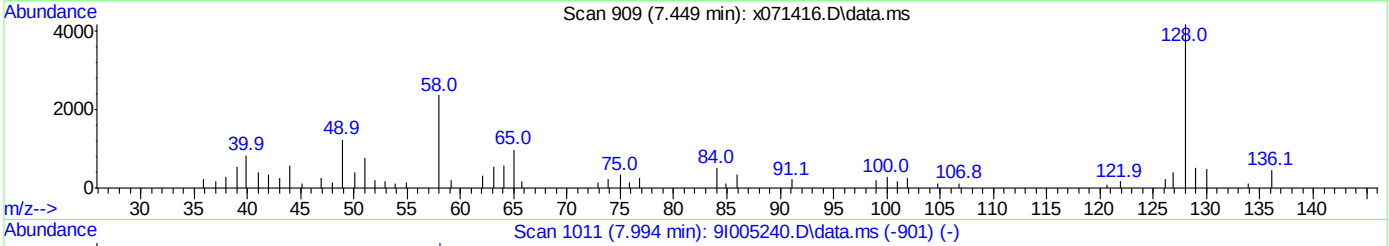
Parameter	CAS	Sig#	R.T. (min.)	Reason
Diallate	2303-16-4		10.62	Split peak
Aramite	140-57-8		13.24	Split peak

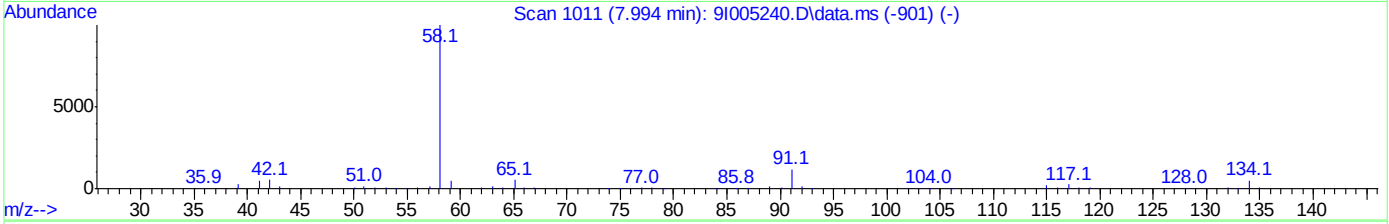
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0624_sx2919\
Data File : x071416.D
Acq On : 24 Jun 2020 3:22 pm
Operator : marthav
Sample : icv2918-50 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 24 15:43:42 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration







TIC: x071416.D\data.ms

(122) A,A-Dimethylphenethylamine

7.449min (+0.041) 0.08ppm

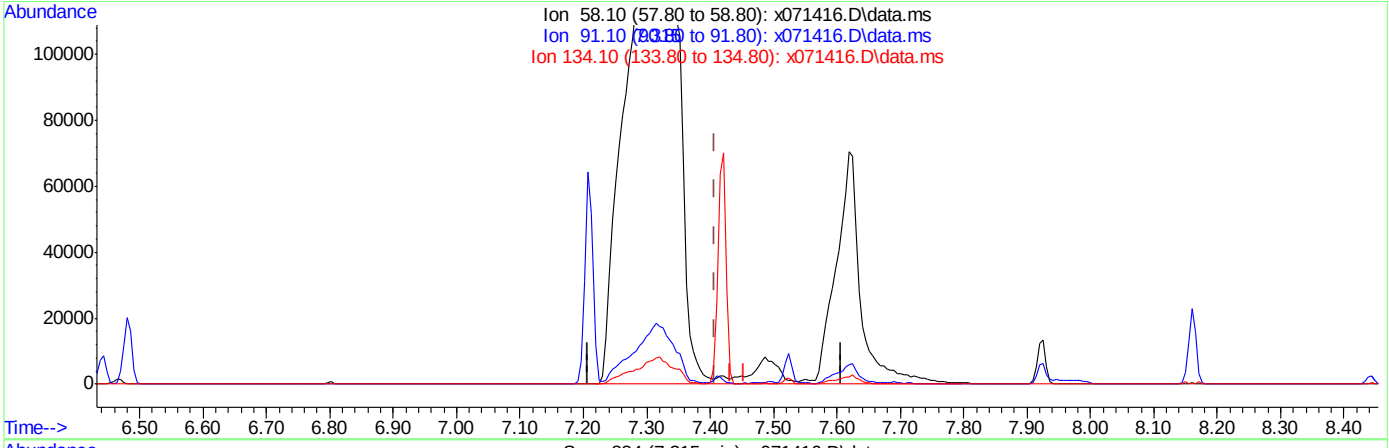
response 1956

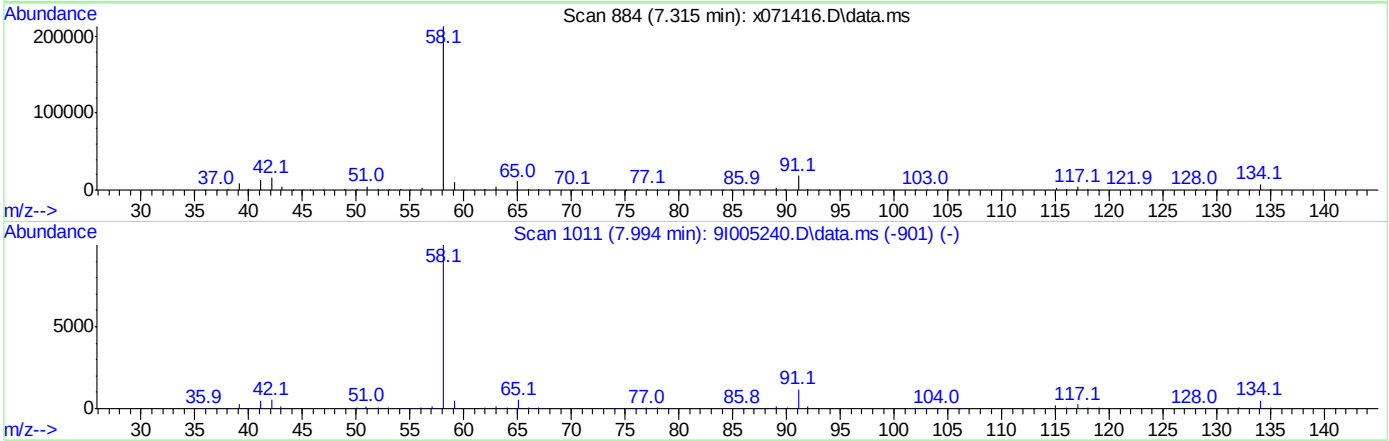
Ion	Exp%	Act%
58.10	100	100
91.10	8.30	0.00
134.10	3.70	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0624_sx2919\
Data File : x071416.D
Acq On : 24 Jun 2020 3:22 pm
Operator : marthav
Sample : icv2918-50 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 24 15:43:42 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration





TIC: x071416.D\data.ms

(122) A,A-Dimethylphenethylamine

7.315min (-0.093) 47.29ppm m

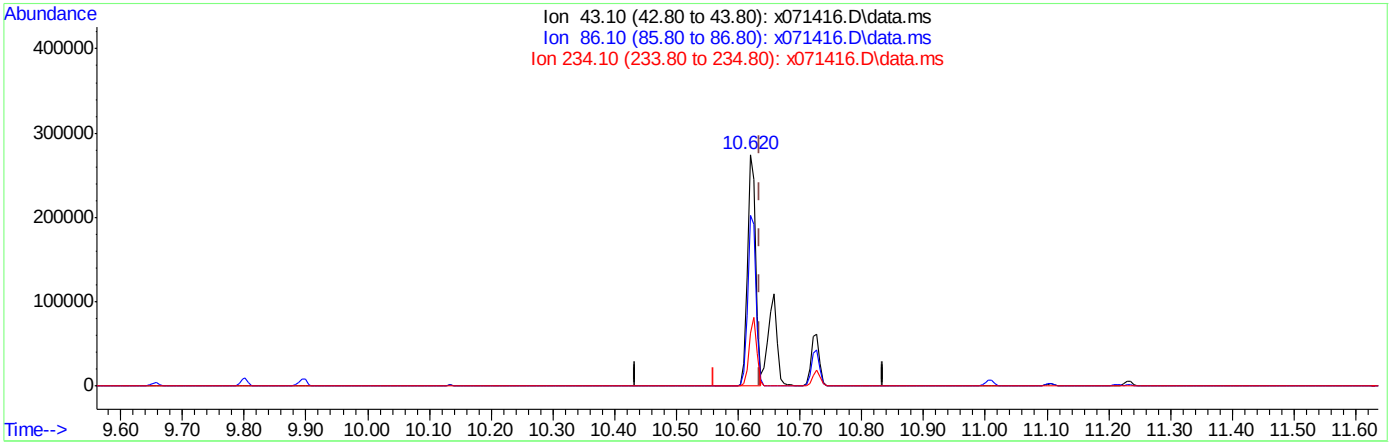
response 1171334

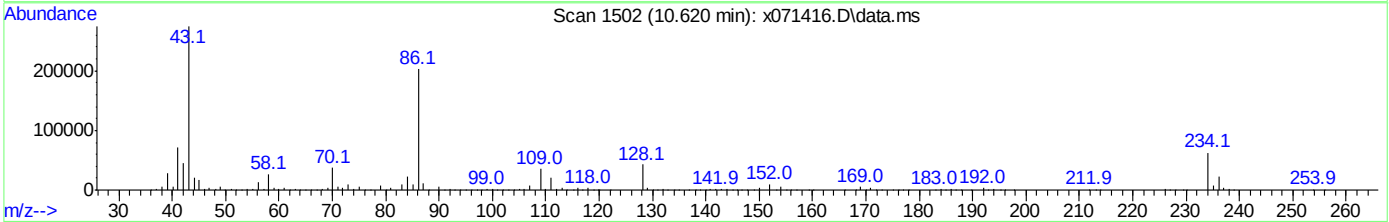
Ion	Exp%	Act%
58.10	100	100
91.10	8.30	8.67
134.10	3.70	3.66
0.00	0.00	0.00

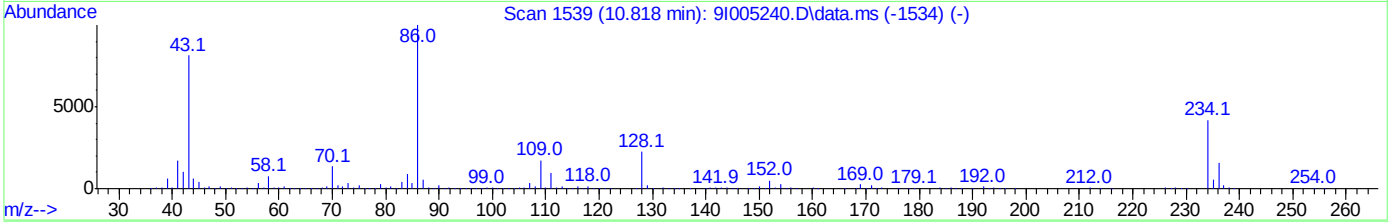
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0624_sx2919\
Data File : x071416.D
Acq On : 24 Jun 2020 3:22 pm
Operator : marthav
Sample : icv2918-50 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 24 15:43:42 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration







TIC: x071416.D\data.ms

(138) Diallate

10.620min (-0.014) 27.71ppm

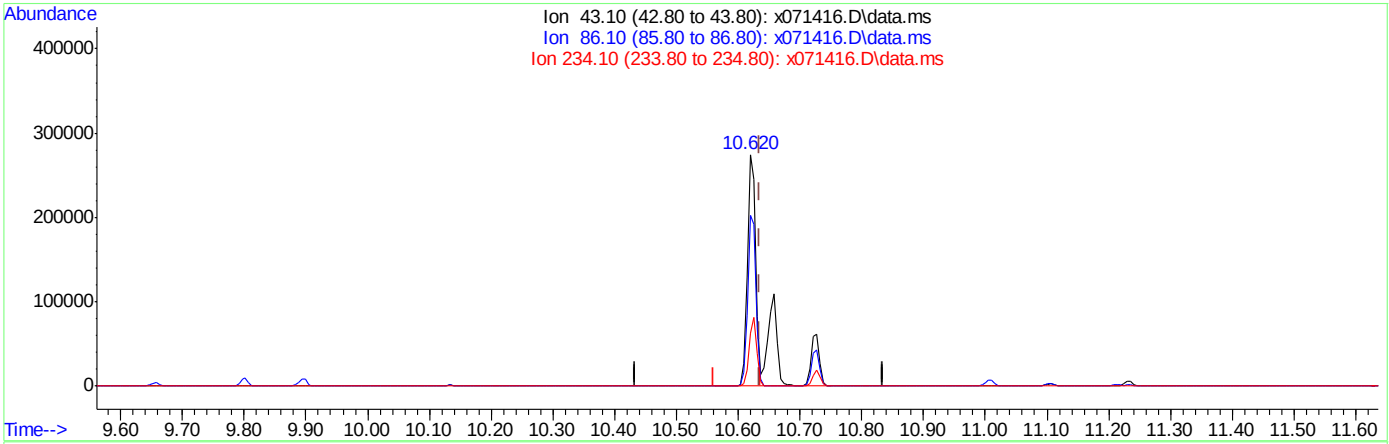
response 249556

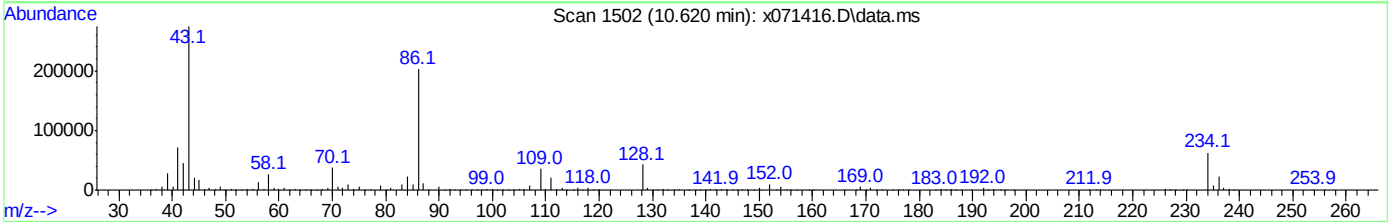
Ion	Exp%	Act%
43.10	100	100
86.10	76.00	74.00
234.10	30.60	22.32
0.00	0.00	0.00

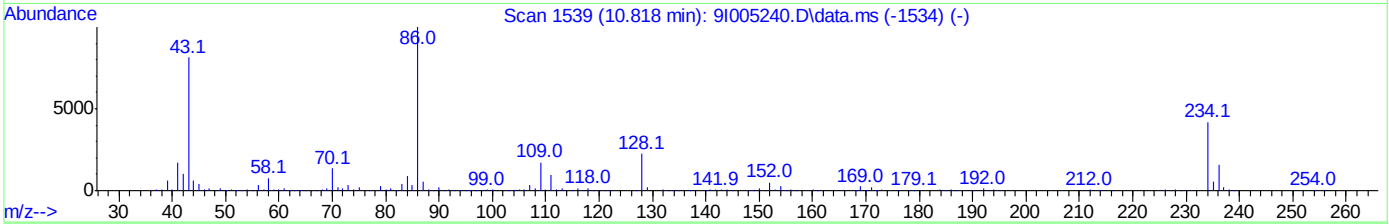
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0624_sx2919\
Data File : x071416.D
Acq On : 24 Jun 2020 3:22 pm
Operator : marthav
Sample : icv2918-50 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 24 15:43:42 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration







TIC: x071416.D\data.ms

(138) Diallate

10.620min (-0.014) 46.24ppm m

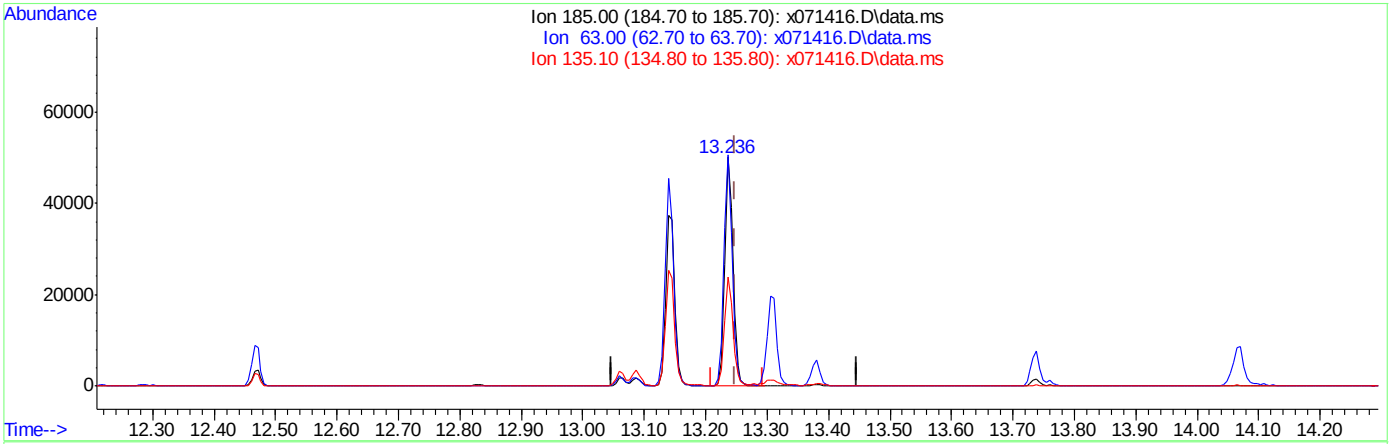
response 416360

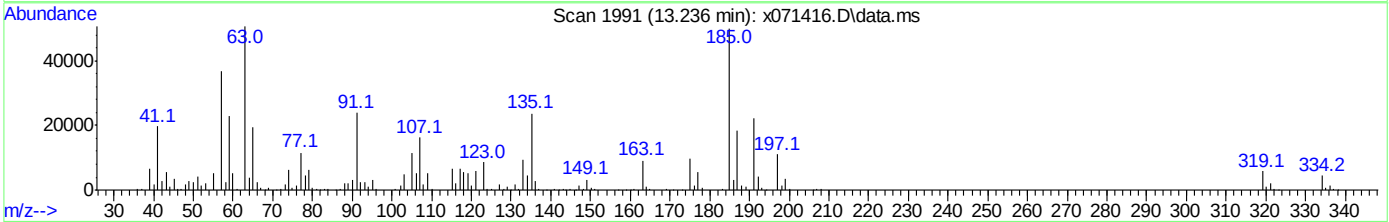
Ion	Exp%	Act%
43.10	100	100
86.10	76.00	73.74
234.10	30.60	22.86
0.00	0.00	0.00

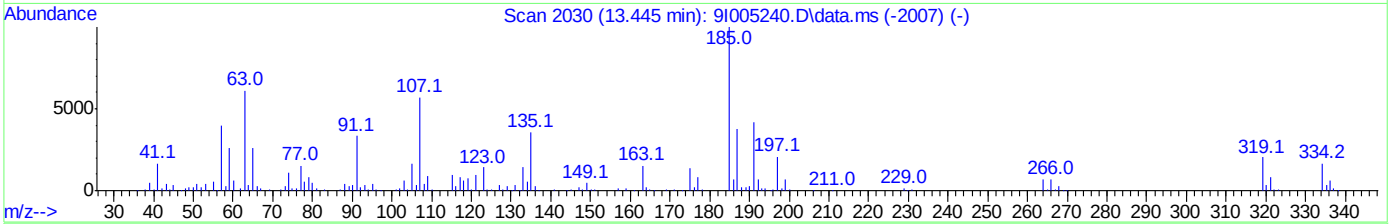
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0624_sx2919\
Data File : x071416.D
Acq On : 24 Jun 2020 3:22 pm
Operator : marthav
Sample : icv2918-50 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 24 15:43:42 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration







TIC: x071416.D\data.ms

(147) Aramite

13.236min (-0.012) 29.24ppm

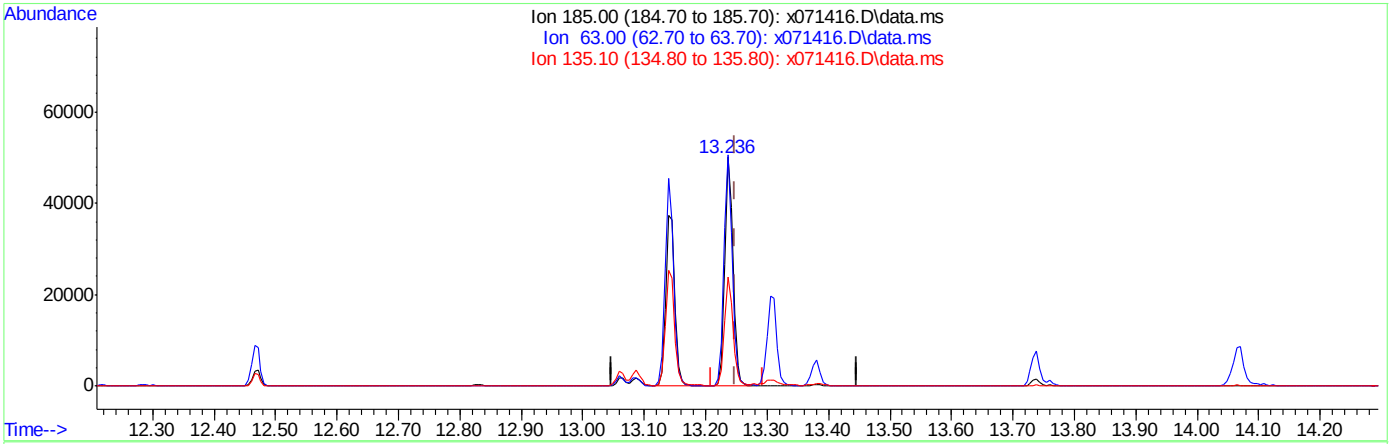
response 46379

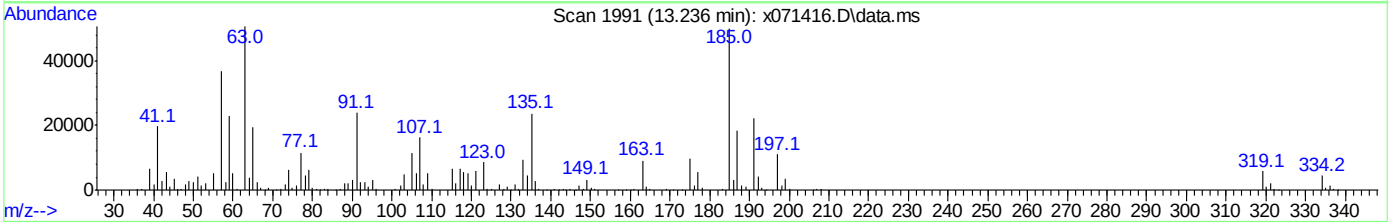
Ion	Exp%	Act%
185.00	100	100
63.00	99.40	97.60
135.10	50.50	46.70
0.00	0.00	0.00

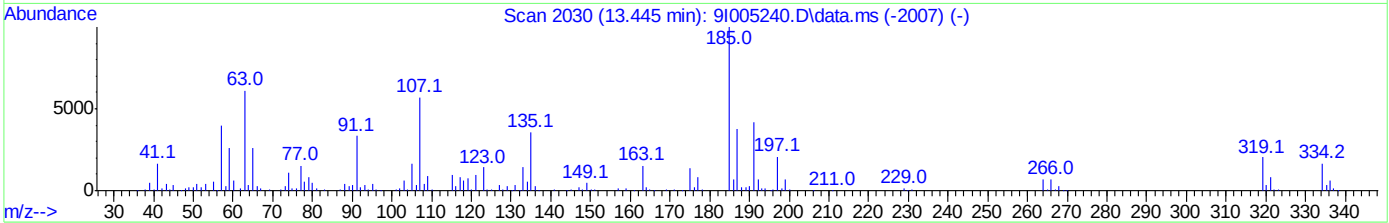
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0624_sx2919\
Data File : x071416.D
Acq On : 24 Jun 2020 3:22 pm
Operator : marthav
Sample : icv2918-50 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 24 15:43:42 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration







TIC: x071416.D\data.ms

(147) Aramite

13.236min (-0.012) 49.65ppm m

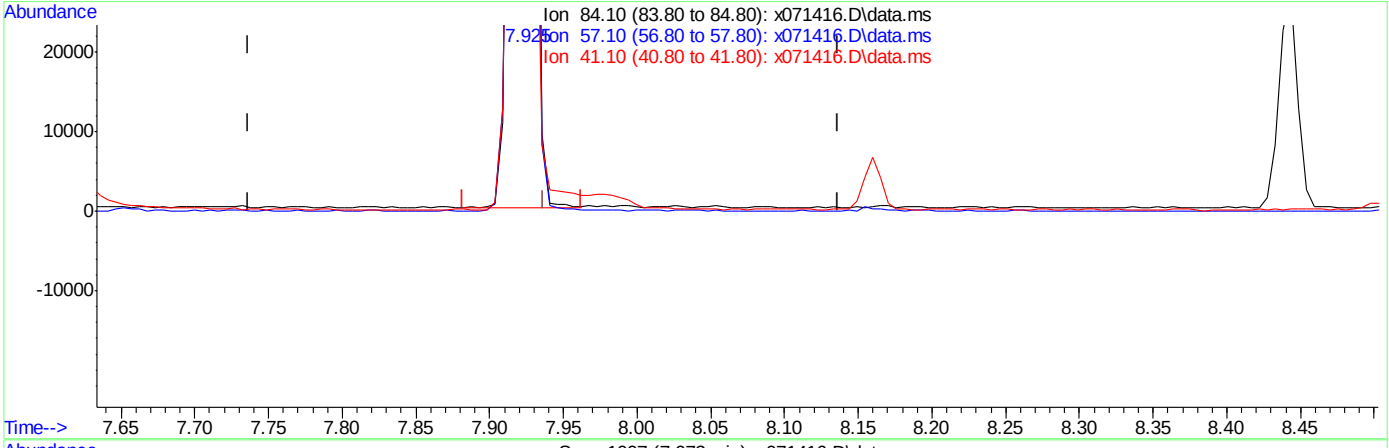
response 83540

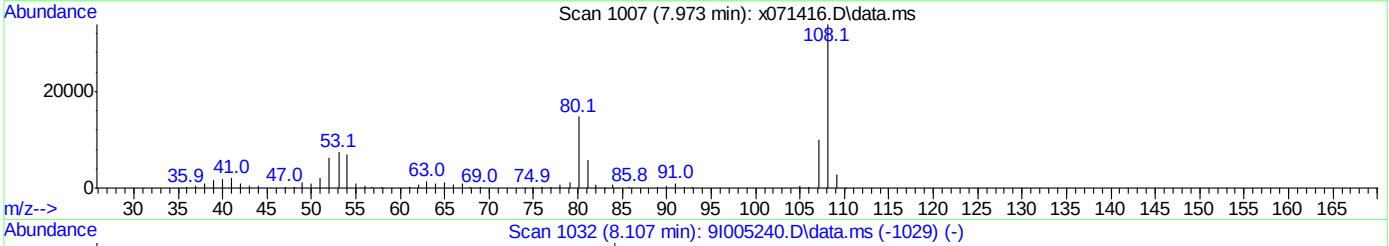
Ion	Exp%	Act%
185.00	100	100
63.00	99.40	101.34
135.10	50.50	47.53
0.00	0.00	0.00

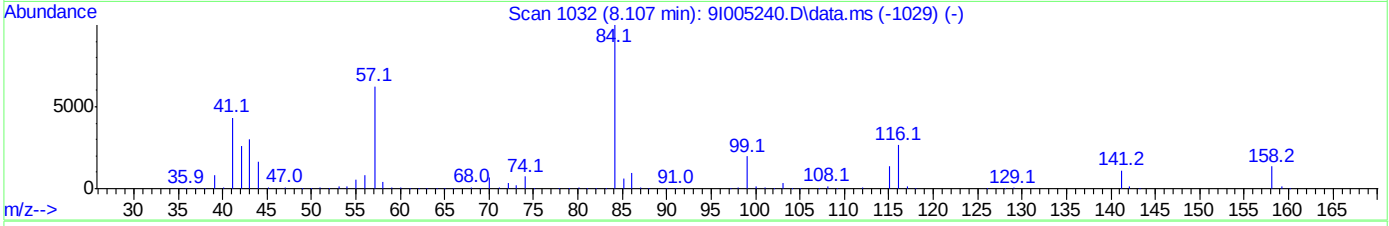
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0624_sx2919\
Data File : x071416.D
Acq On : 24 Jun 2020 3:22 pm
Operator : marthav
Sample : icv2918-50 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 24 15:45:01 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration







TIC: x071416.D\data.ms

(124) N-Nitrosodi-n-butylamine

7.925min (-0.012) 39.53ppm

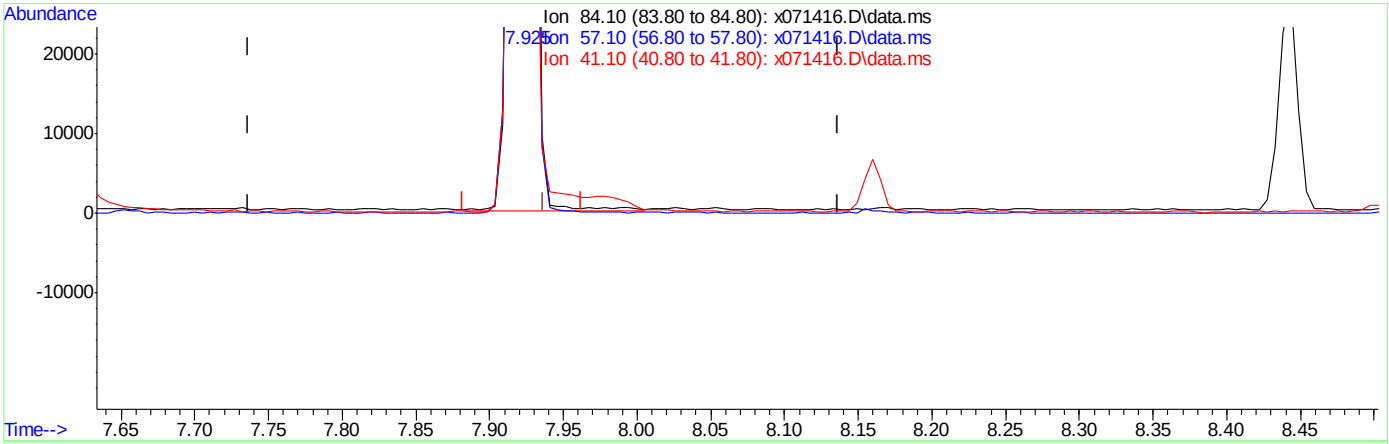
response 203432

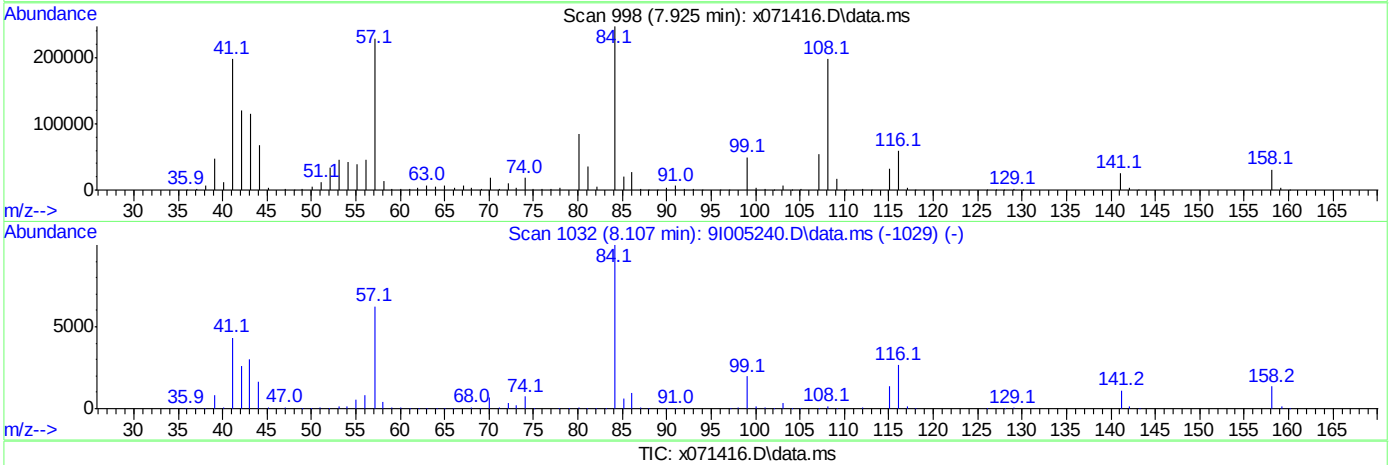
Ion	Exp%	Act%
84.10	100	100
57.10	94.40	92.34
41.10	81.30	79.76
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0624_sx2919\
Data File : x071416.D
Acq On : 24 Jun 2020 3:22 pm
Operator : marthav
Sample : icv2918-50 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 24 15:45:01 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration





TIC: x071416.D\data.ms

(124) N-Nitrosodi-n-butylamine

7.925min (-0.012) 39.74ppm m

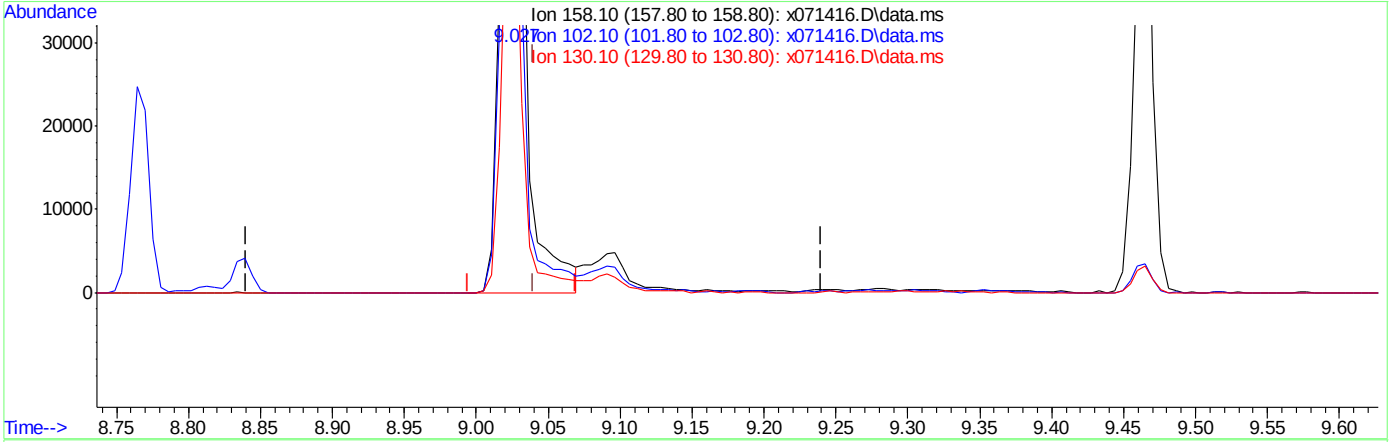
response 204562

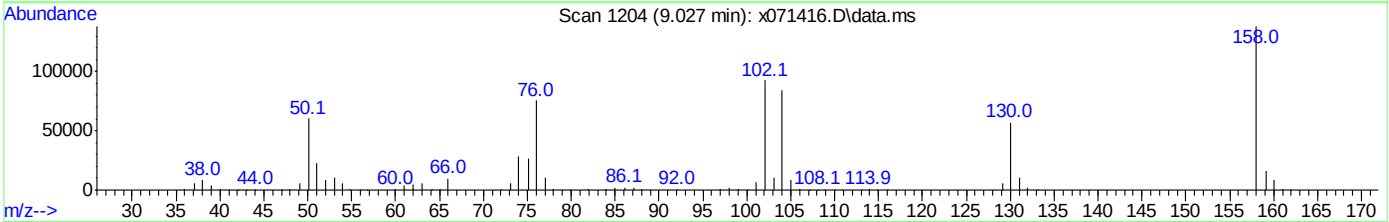
Ion	Exp%	Act%
84.10	100	100
57.10	94.40	92.19
41.10	81.30	80.06
0.00	0.00	0.00

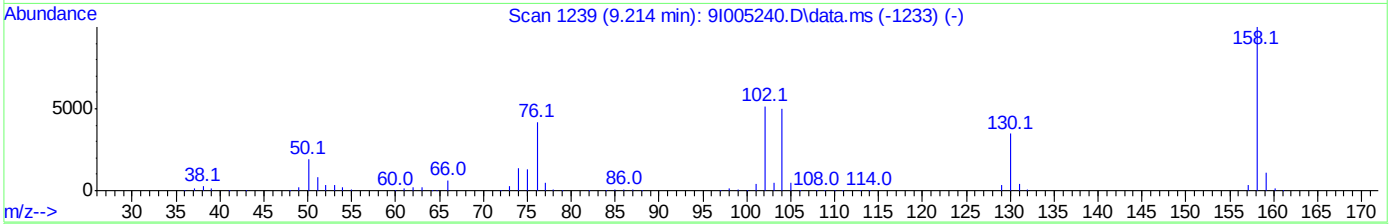
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0624_sx2919\
Data File : x071416.D
Acq On : 24 Jun 2020 3:22 pm
Operator : marthav
Sample : icv2918-50 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 24 15:45:01 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration







TIC: x071416.D\data.ms

(131) 1,4-Naphthoquinone

9.027min (-0.013) 30.43ppm

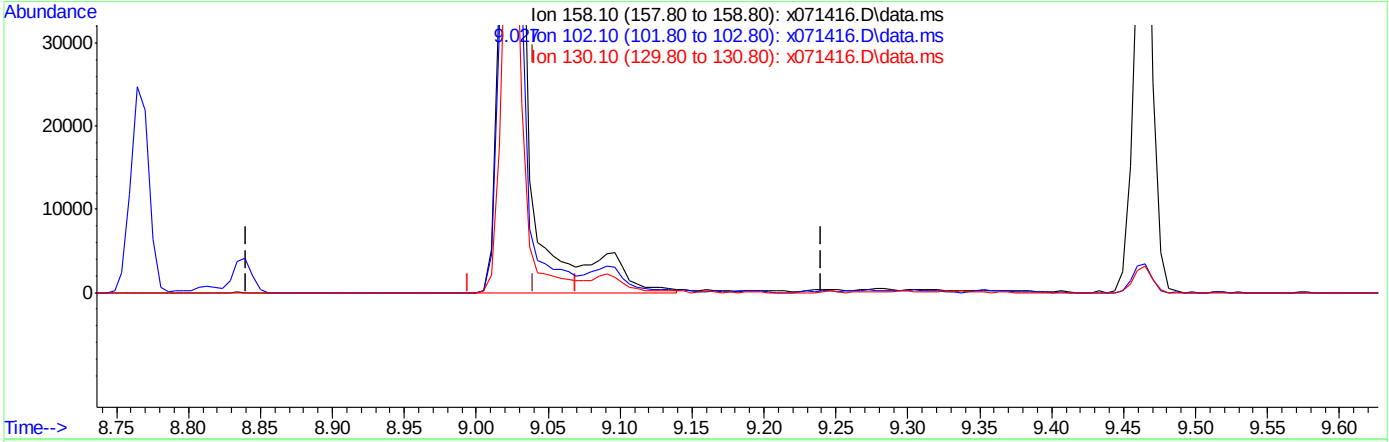
response 126951

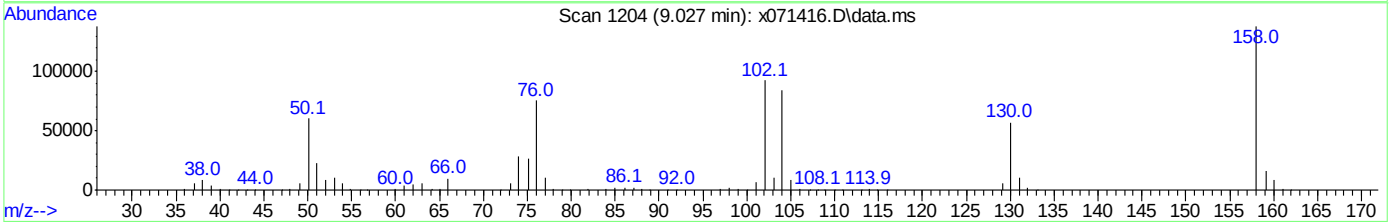
Ion	Exp%	Act%
158.10	100	100
102.10	69.70	67.02
130.10	42.30	41.38
0.00	0.00	0.00

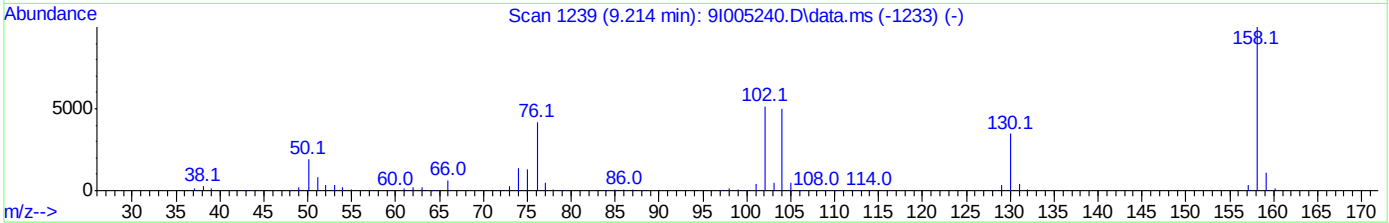
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0624_sx2919\
Data File : x071416.D
Acq On : 24 Jun 2020 3:22 pm
Operator : marthav
Sample : icv2918-50 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 24 15:45:01 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration







TIC: x071416.D\data.ms

(131) 1,4-Naphthoquinone

9.027min (-0.013) 32.56ppm m

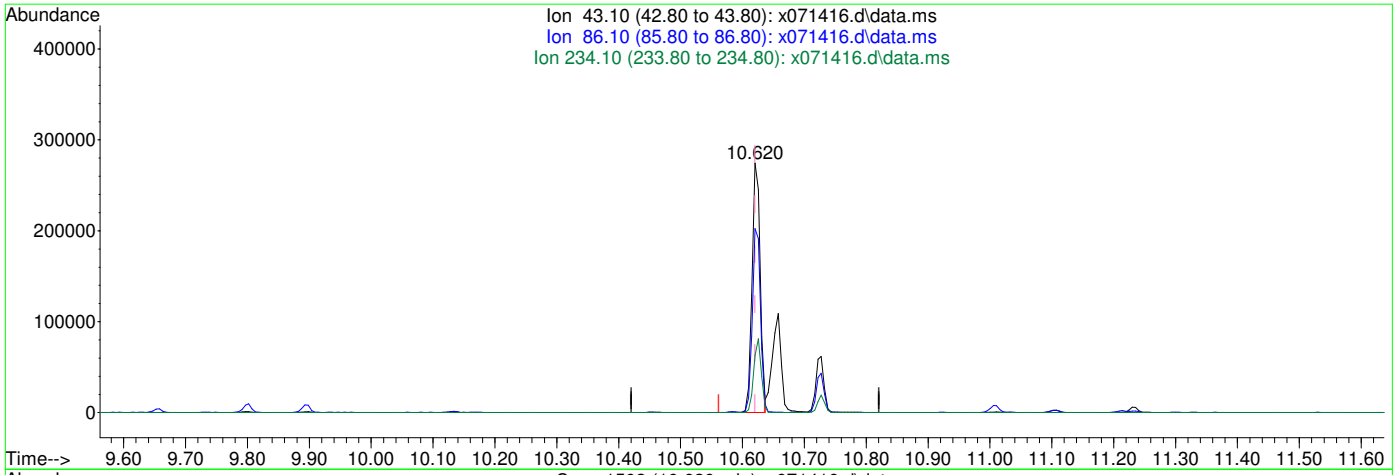
response 135960

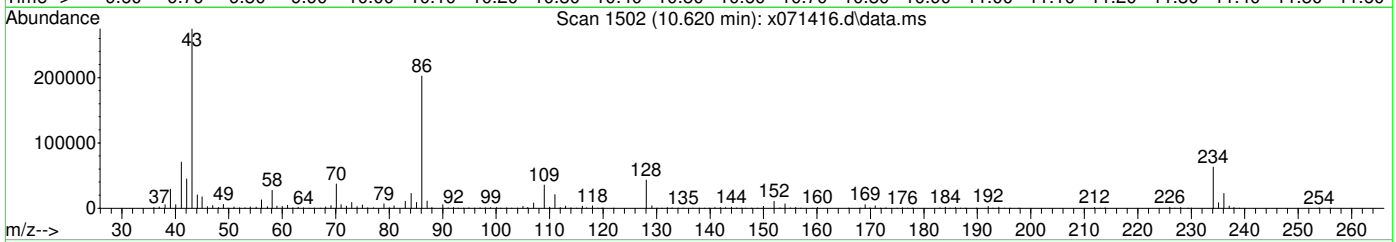
Ion	Exp%	Act%
158.10	100	100
102.10	69.70	67.02
130.10	42.30	41.45
0.00	0.00	0.00

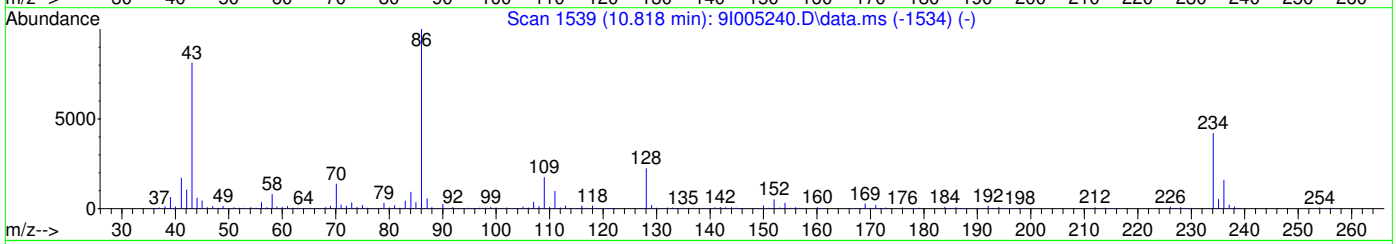
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\June 2020\06-25-2020\sx2919\
Data File : x071416.d
Acq On : 24 Jun 2020 3:22 pm
Operator : marthav
Sample : icv2918-50 app9
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 25 02:50:38 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Thu Jun 25 02:50:18 2020
Response via : Initial Calibration







TIC: x071416.d\data.ms

(138) Diallate

10.620min (0.000) 27.71ppm

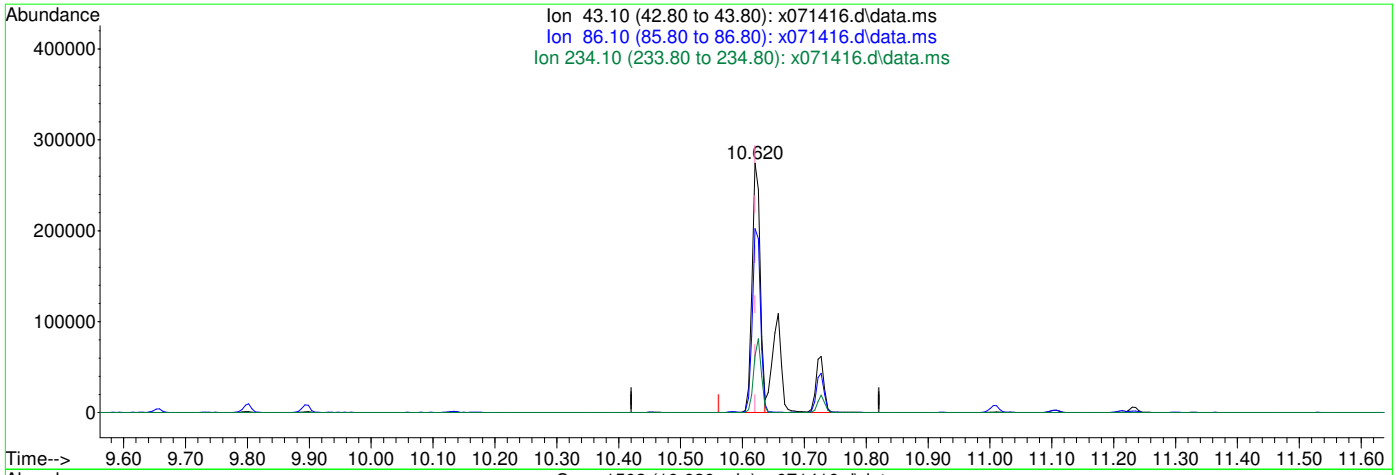
response 249556

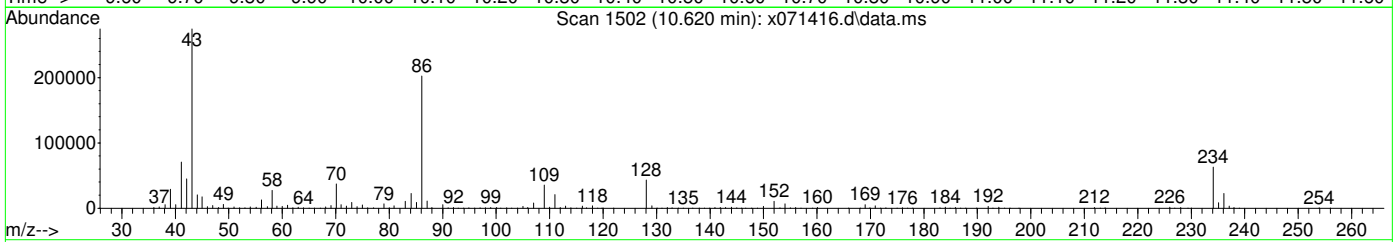
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	74.00#
234.10	51.50	22.32
0.00	0.00	0.00

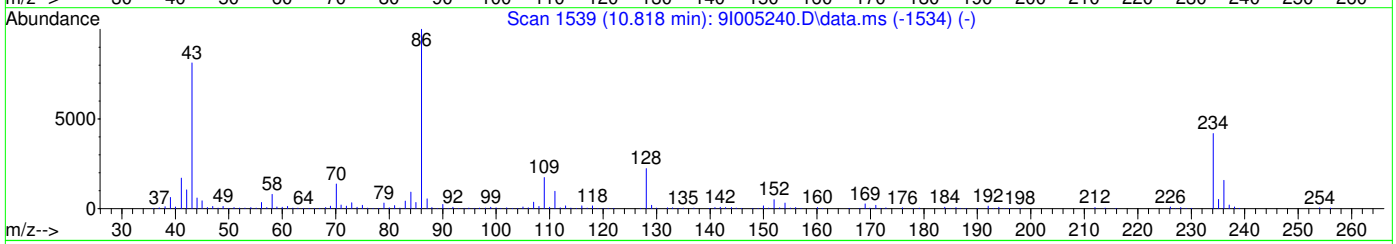
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\June 2020\06-25-2020\sx2919\
Data File : x071416.d
Acq On : 24 Jun 2020 3:22 pm
Operator : marthav
Sample : icv2918-50 app9
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 25 02:50:38 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Thu Jun 25 02:50:18 2020
Response via : Initial Calibration







TIC: x071416.d\data.ms

(138) Diallate

10.620min (0.000) 46.24ppm m

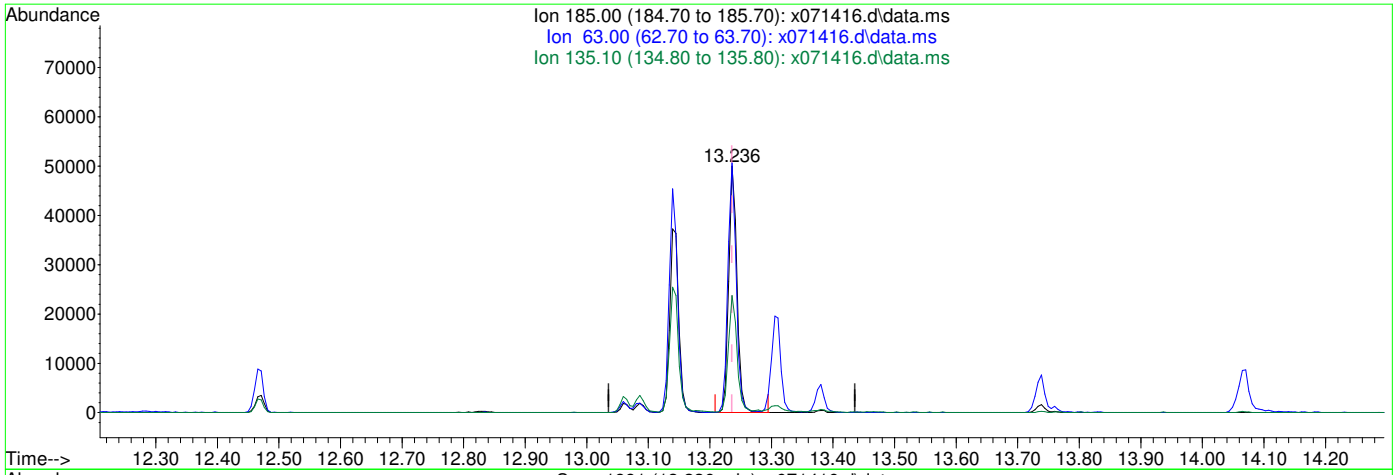
response 416437

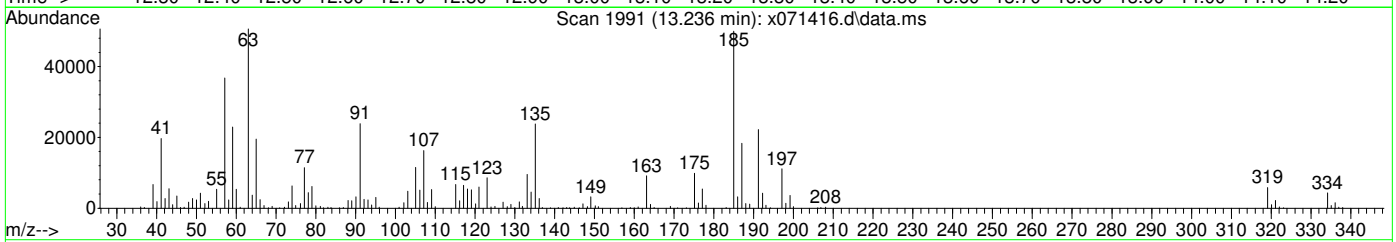
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	73.74#
234.10	51.50	22.86
0.00	0.00	0.00

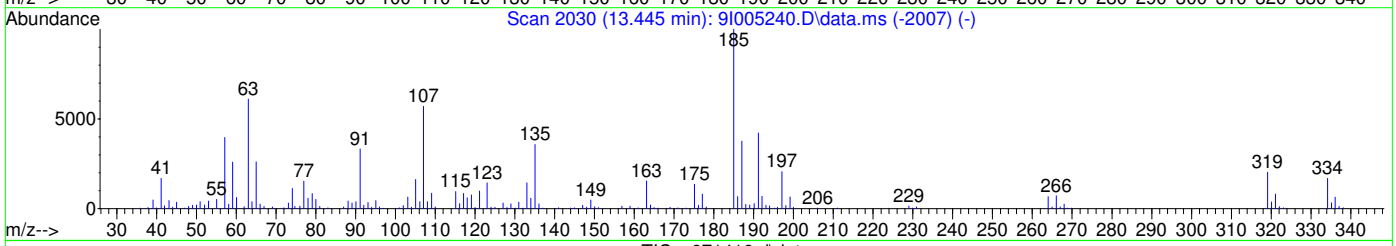
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\June 2020\06-25-2020\sx2919\
Data File : x071416.d
Acq On : 24 Jun 2020 3:22 pm
Operator : marthav
Sample : icv2918-50 app9
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 25 02:50:38 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Thu Jun 25 02:50:18 2020
Response via : Initial Calibration







TIC: x071416.d\data.ms

(147) Aramite

13.236min (0.000) 29.24ppm

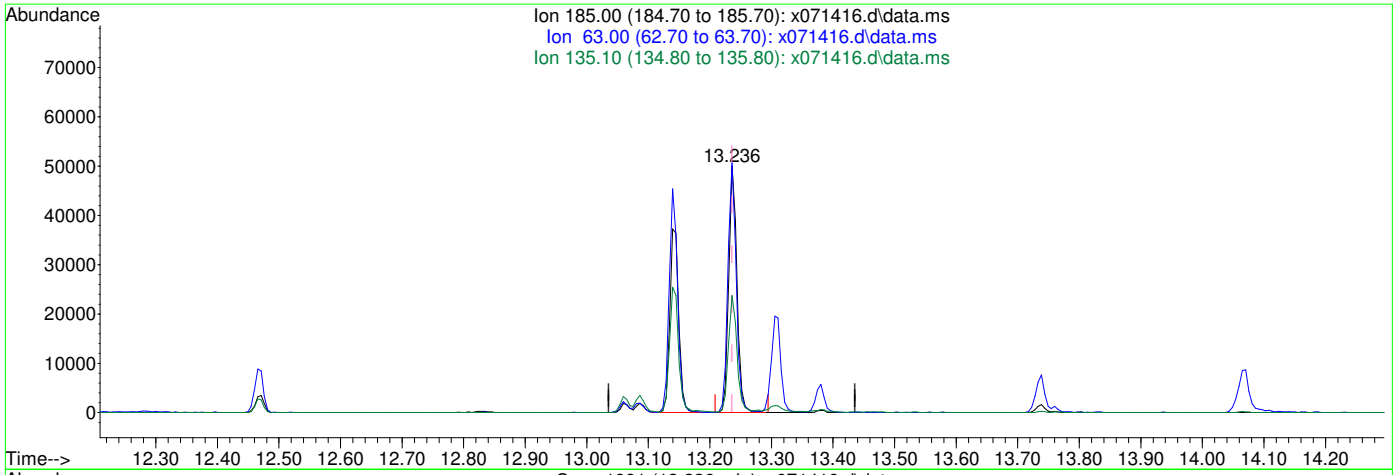
response 46379

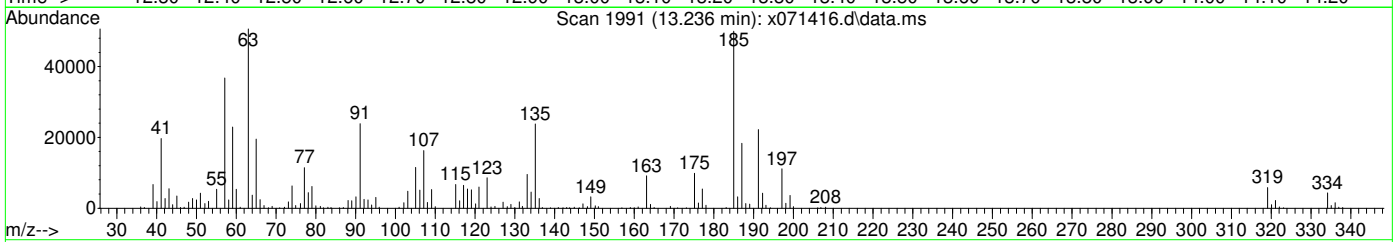
Ion	Exp%	Act%
185.00	100	100
63.00	61.10	97.60#
135.10	35.60	46.70
0.00	0.00	0.00

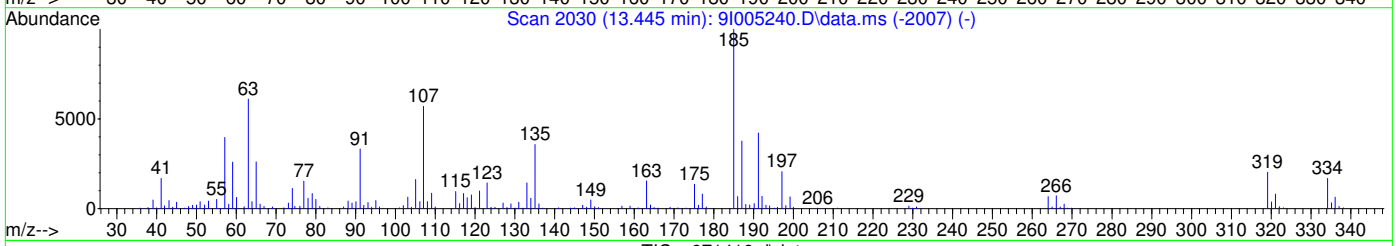
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\June 2020\06-25-2020\sx2919\
Data File : x071416.d
Acq On : 24 Jun 2020 3:22 pm
Operator : marthav
Sample : icv2918-50 app9
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 25 02:50:38 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Thu Jun 25 02:50:18 2020
Response via : Initial Calibration







TIC: x071416.d\data.ms

(147) Aramite

13.236min (0.000) 49.69ppm m

response 83620

Ion	Exp%	Act%
185.00	100	100
63.00	61.10	101.34#
135.10	35.60	47.53
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan
08/12/20 11:57

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072329.d
Acq On : 11 Aug 2020 12:47 pm
Operator : marthav
Sample : cc2918-50 8270
Misc : op81484,sx2950,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 12 01:45:18 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Aug 12 01:44:14 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.660	152	166366	40.00	ppm	0.00
22) Naphthalene-d8	7.082	136	662768	40.00	ppm	0.00
43) Acenaphthene-d10	9.120	164	340989	40.00	ppm	0.00
70) Phenanthrene-d10	10.864	188	587050	40.00	ppm	0.00
92) Chrysene-d12	14.068	240	485410	40.00	ppm	0.00
102) Perylene-d12	16.255	264	371635	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	5.660	152	166366	40.00	ppm	0.00
120) Naphthalene-d8A	7.082	136	662768	40.00	ppm	0.00
127) Acenaphthene-d10A	9.120	164	340989	40.00	ppm	0.00
136) Phenanthrene-d10A	10.864	188	587050	40.00	ppm	0.00
146) Chrysene-d12A	14.068	240	485410	40.00	ppm	0.00
153) Perylene-d12A	16.255	264	371635	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	4.307	112	576200	96.59	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 96.59%#			
9) Phenol-d5	5.333	99	697618	98.30	ppm	0.00
Spiked Amount 100.000	Range 10 - 50		Recovery = 98.30%#			
23) Nitrobenzene-d5	6.280	82	342201	50.00	ppm	0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 100.00%			
47) 2-Fluorobiphenyl	8.355	172	619430	50.18	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 100.36%			
75) 2,4,6-Tribromophenol	10.056	330	128073	98.00	ppm	0.00
Spiked Amount 100.000	Range 33 - 118		Recovery = 98.00%			
95) Terphenyl-d14	12.779	244	618640	47.97	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 95.94%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.483	88	128599	45.10	ppm	# 49
3) N-nitrosodimethylamine	2.814	42	208823	41.25	ppm	# 41
4) Pyridine	2.846	79	368115	53.07	ppm	# 41
5) Benzaldehyde	5.189	106	214170	43.19	ppm	93
6) Aniline	5.312	93	426637	43.14	ppm	75
8) bis(2-Chloroethyl)ether	5.392	93	295436	48.40	ppm	77
10) Phenol	5.344	94	400261	47.55	ppm	90
11) 2-Chlorophenol	5.446	128	318888	50.10	ppm	82
12) 1,3-Dichlorobenzene	5.596	146	325263	49.19	ppm	97
13) 1,4-Dichlorobenzene	5.681	146	343721	49.13	ppm	99
14) 1,2-Dichlorobenzene	5.836	146	310868	46.77	ppm	96
15) Benzyl alcohol	5.836	108	201251	45.69	ppm	84
16) 2,2'-Oxybis(1-chloropr...	5.986	45	489257	38.14	ppm	67
17) 2-Methylphenol	5.991	108	288920	47.71	ppm	98
18) Acetophenone	6.114	105	415156	46.33	ppm	97
19) Hexachloroethane	6.211	117	128129	48.77	ppm	96
20) N-Nitroso-di-n-propyla...	6.136	70	226250	47.81	ppm	# 67
21) 3&4-Methylphenol	6.168	108	314084	50.18	ppm	97
24) Nitrobenzene	6.302	77	337981	49.91	ppm	85
25) Isophorone	6.580	82	558467	46.19	ppm	95
26) 2-Nitrophenol	6.660	139	166950	51.86	ppm	79
27) 2,4-Dimethylphenol	6.751	107	275067	46.01	ppm	95
28) O,O,O-Triethylphosphor...	6.820	198	121073	47.71	ppm	92
29) bis(2-Chloroethoxy)met...	6.847	93	343367	48.54	ppm	97
30) Benzoic Acid	6.922	105	241525m	48.46	ppm	
31) 2,4-Dichlorophenol	6.954	162	247274	51.31	ppm	95
32) 1,2,4-Trichlorobenzene	7.024	180	245741	49.89	ppm	98
34) Naphthalene	7.109	128	878615	48.89	ppm	99
35) 4-Chloroaniline	7.195	127	369452	48.68	ppm	91

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072329.d
Acq On : 11 Aug 2020 12:47 pm
Operator : marthav
Sample : cc2918-50 8270
Misc : op81484,sx2950,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 12 01:45:18 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Aug 12 01:44:14 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
36) 2,6-Dichlorophenol	7.200	162	238229	48.48	ppm		96
37) Hexachlorobutadiene	7.259	225	122374	50.38	ppm		98
38) Caprolactam	7.639	113	95517	47.77	ppm	#	63
39) 4-Chloro-3-methylphenol	7.805	107	247701	48.20	ppm	#	69
40) 2-Methylnaphthalene	7.912	142	563802	47.44	ppm		99
41) 1-Methylnaphthalene	8.024	142	540293	47.48	ppm		98
42) 1,2,4,5-Tetrachloroben...	8.109	216	239704	48.49	ppm		98
44) Hexachlorocyclopentadiene	8.099	237	94936	36.39	ppm		98
45) 2,4,6-Trichlorophenol	8.265	196	157363	50.28	ppm		99
46) 2,4,5-Trichlorophenol	8.318	196	174280	50.89	ppm		98
48) 1,1'-Biphenyl	8.462	154	666539	47.87	ppm		99
49) 2-Chloronaphthalene	8.473	162	510830	48.88	ppm		95
50) 2-Nitroaniline	8.618	65	192113	49.93	ppm	#	68
51) p-Dinitrobenzene	8.794	75	111020	51.46	ppm	#	67
52) Acenaphthylene	8.955	152	839186	49.27	ppm		99
53) Dimethylphthalate	8.858	163	576521	47.93	ppm		99
54) m-Dinitrobenzene	8.880	168	106352	53.05	ppm	#	61
55) 2,6-Dinitrotoluene	8.917	165	143051	50.39	ppm		92
56) o-Dinitrobenzene	8.971	50	135027	49.66	ppm	#	50
57) Acenaphthene	9.163	153	550117	48.57	ppm		99
58) 3-Nitroaniline	9.110	138	166849	53.42	ppm		95
59) 2,4-Dinitrophenol	9.233	184	78998	53.05	ppm	#	44
60) Dibenzofuran	9.366	168	714929	47.29	ppm		94
61) 2,4-Dinitrotoluene	9.388	165	191676	52.95	ppm		88
62) 4-Nitrophenol	9.382	109	80120	45.91	ppm	#	58
63) 2,3,5,6-Tetrachlorophenol	9.479	232	126884	50.07	ppm		93
64) 2,3,4,6-Tetrachlorophenol	9.527	232	137540	52.38	ppm		89
65) Fluorene	9.768	166	587110	49.78	ppm		99
66) 4-Chlorophenyl-phenyle...	9.789	204	279477	49.09	ppm		93
67) Diethylphthalate	9.693	149	566585	47.16	ppm		97
68) Thionazin	9.784	97	130940	51.31	ppm		99
69) 4-Nitroaniline	9.837	138	177649	51.12	ppm		87
71) 4,6-Dinitro-2-methylph...	9.869	198	116068	53.23	ppm		77
72) n-Nitrosodiphenylamine	9.939	169	525534	57.61	ppm		96
73) Diphenylamine	9.939	169	525534	49.09	ppm		96
74) 1,2-Diphenylhydrazine	9.976	77	628363	47.76	ppm		94
76) Sulfotep	10.158	97	92683	47.91	ppm	#	68
77) Phorate	10.292	75	336893	49.72	ppm		95
78) 4-Bromophenyl-phenylether	10.361	248	138729	49.22	ppm		82
79) Hexachlorobenzene	10.409	284	139586	49.64	ppm		82
80) Dimethoate	10.495	87	240505	50.92	ppm		96
81) Simazine	10.570	201	94909	45.86	ppm		97
82) Atrazine	10.607	200	166829	48.67	ppm		90
83) Pentachlorophenol	10.666	266	73358	40.92	ppm		99
84) Phenanthrene	10.891	178	857540	48.34	ppm		99
85) Anthracene	10.955	178	906748	49.04	ppm		99
86) Disulfoton	10.912	88	370583	52.26	ppm		92
87) Carbazole	11.169	167	799624	49.01	ppm		98
88) Methyl Parathion	11.351	109	198630	49.14	ppm	#	87
89) Di-n-butylphthalate	11.629	149	921704	50.61	ppm		98
90) Ethyl Parathion	11.821	97	116550	49.53	ppm		87
91) Fluoranthene	12.292	202	832675	50.59	ppm		98
93) Benzidine	12.490	184	440974	46.78	ppm		95
94) Pyrene	12.554	202	894248	44.37	ppm		96
96) Famphur	13.319	218	211856	63.11	ppm		89
97) Butylbenzylphthalate	13.410	149	385159	46.11	ppm		89
98) 3,3'-Dichlorobenzidine	14.062	252	257997	50.36	ppm		98
99) Benzo[a]anthracene	14.052	228	711882	46.66	ppm		100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072329.d
Acq On : 11 Aug 2020 12:47 pm
Operator : marthav
Sample : cc2918-50 8270
Misc : op81484,sx2950,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 12 01:45:18 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Aug 12 01:44:14 2020
Response via : Initial Calibration

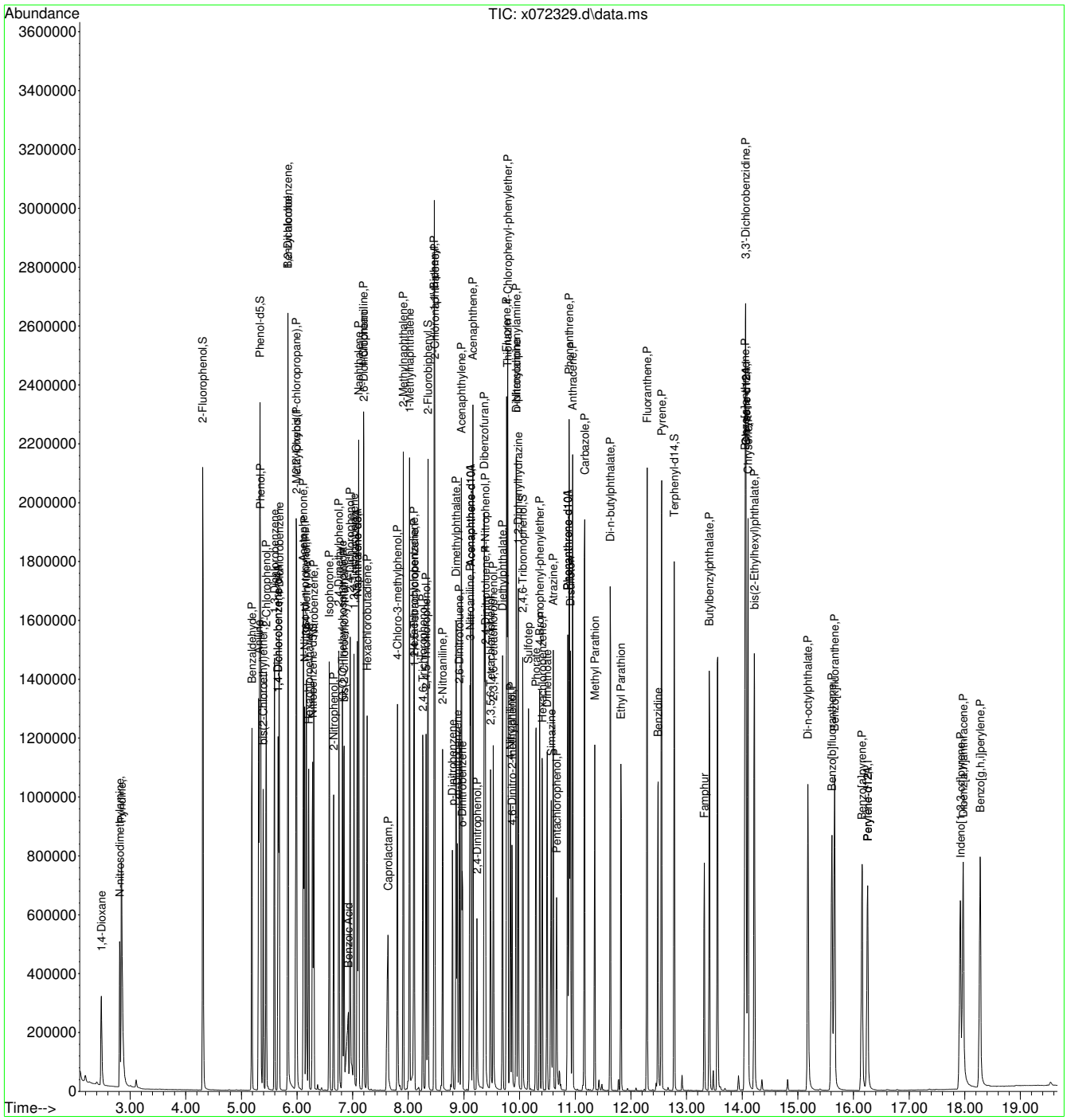
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
100) Chrysene	14.105	228	781765	48.12	ppm	98
101) bis(2-Ethylhexyl)phtha...	14.218	149	550022	48.25	ppm	96
103) Di-n-octylphthalate	15.180	149	786741	52.14	ppm	94
104) Benzo[b]fluoranthene	15.614	252	570599	51.53	ppm	97
105) Benzo[k]fluoranthene	15.662	252	620601	47.04	ppm	97
106) Benzo[a]pyrene	16.154	252	512360	48.53	ppm	96
107) Indeno[1,2,3-cd]pyrene	17.924	276	413385	55.20	ppm	91
108) Dibenz[a,h]anthracene	17.972	278	478583	55.54	ppm	91
109) Benzo[g,h,i]perylene	18.277	276	480221	47.16	ppm	87

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072329.d
Acq On : 11 Aug 2020 12:47 pm
Operator : marthav
Sample : cc2918-50 8270
Misc : op81484,sx2950,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 12 01:45:18 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Aug 12 01:44:14 2020
Response via : Initial Calibration



Manual Integration Approval Summary

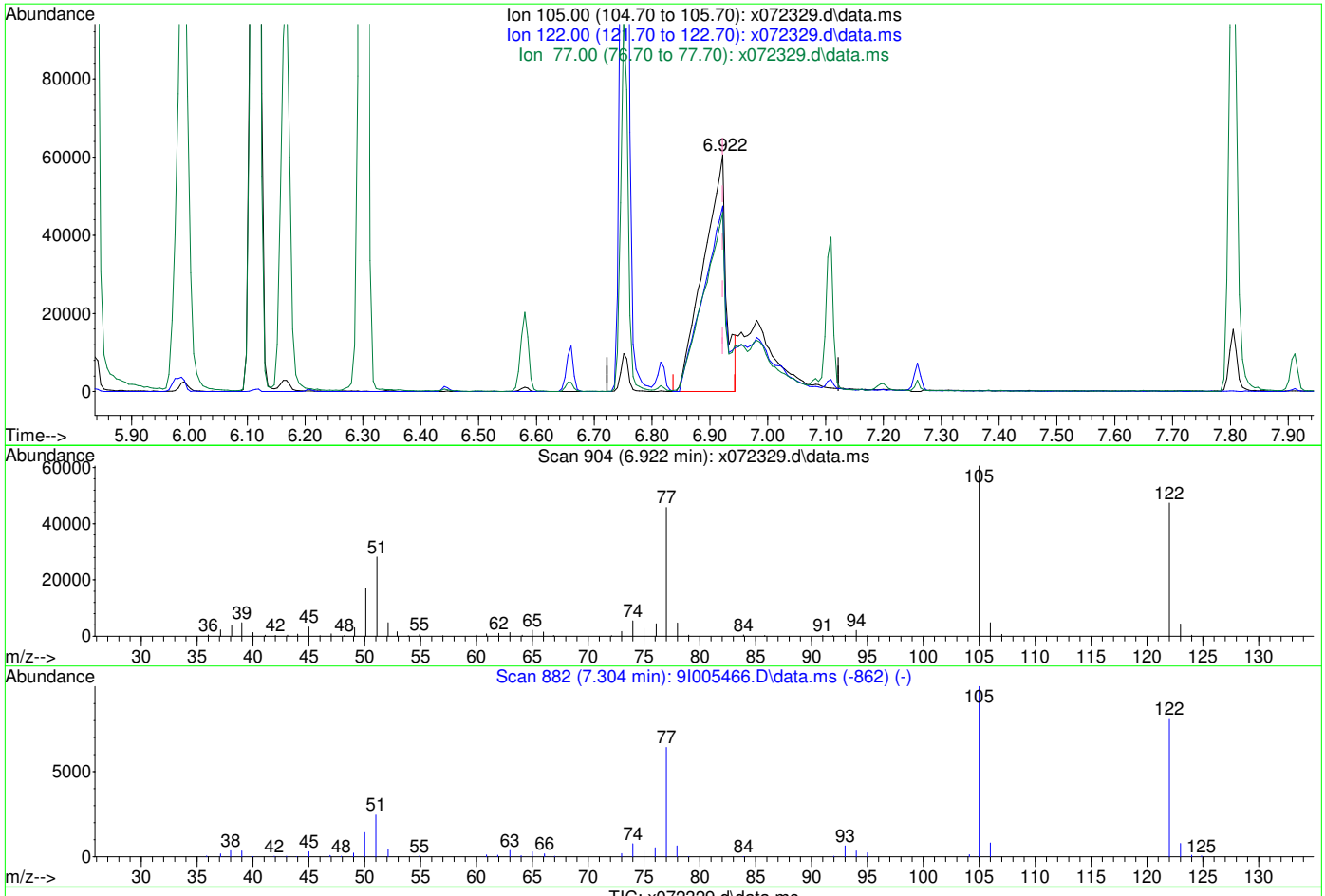
Sample Number: SX2950-CC2918
Lab FileID: X072329.D
Injection Time: 08/11/20 12:47
Method: SW846 8270D
Analyst approved: 08/12/20 04:02 John Matthew de Guzman
Supervisor approved: 08/12/20 11:57 Naresh Jiawan

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic Acid	65-85-0		6.92	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072329.d
Acq On : 11 Aug 2020 12:47 pm
Operator : marthav
Sample : cc2918-50 8270
Misc : op81484,sx2950,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 12 01:44:20 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Aug 12 01:44:14 2020
Response via : Initial Calibration



TIC: x072329.d\data.ms

(30) Benzoic Acid

6.922min (0.000) 34.99ppm

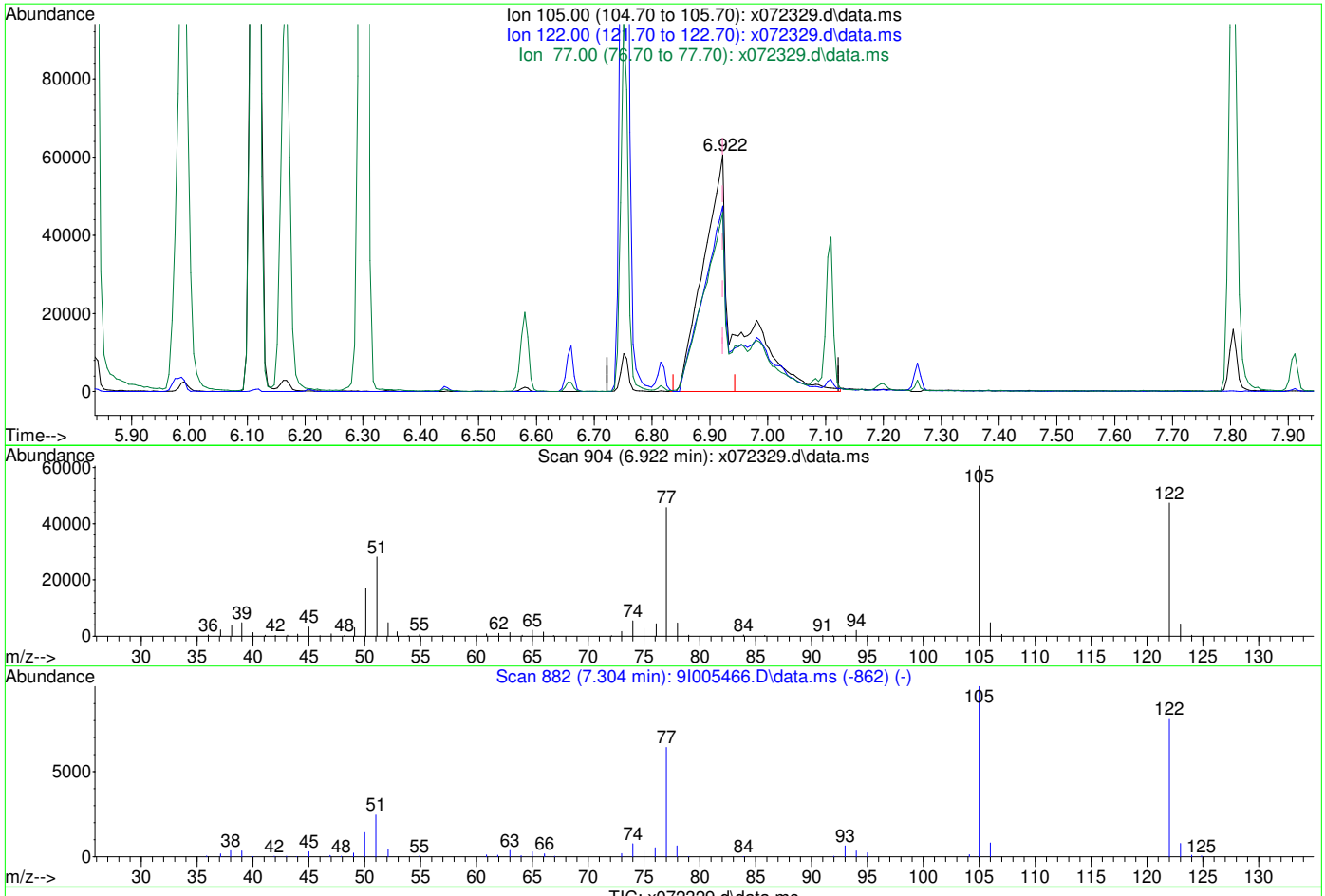
response 164956

Ion	Exp%	Act%
105.00	100	100
122.00	81.20	78.37
77.00	64.10	74.51
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072329.d
Acq On : 11 Aug 2020 12:47 pm
Operator : marthav
Sample : cc2918-50 8270
Misc : op81484,sx2950,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 12 01:44:20 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Aug 12 01:44:14 2020
Response via : Initial Calibration



TIC: x072329.d\data.ms

(30) Benzoic Acid

6.922min (0.000) 48.46ppm m

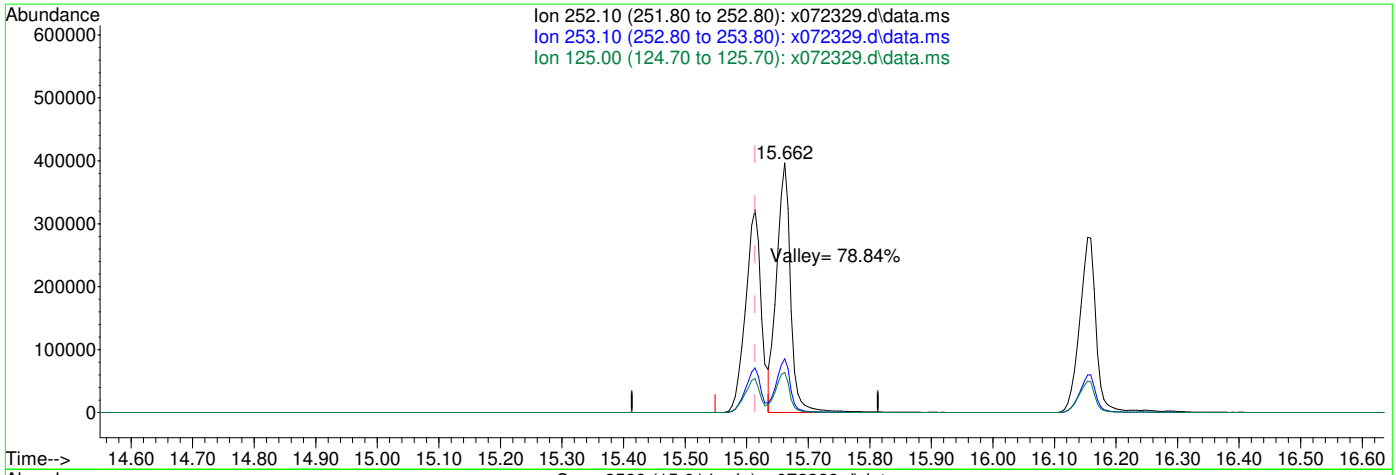
response 241525

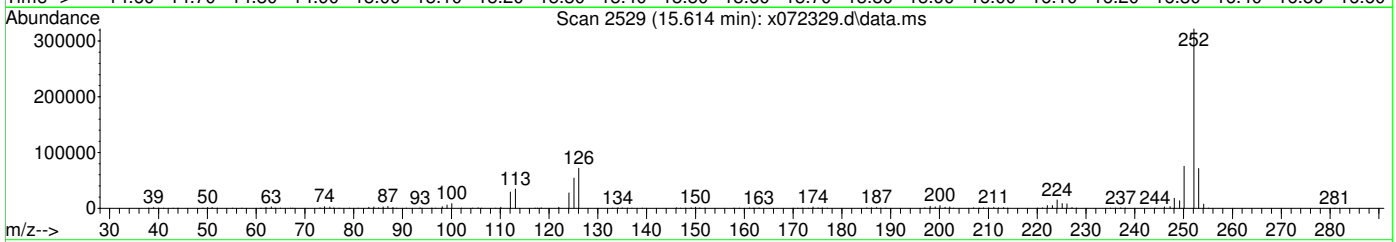
Ion	Exp%	Act%
105.00	100	100
122.00	81.20	78.25
77.00	64.10	75.55
0.00	0.00	0.00

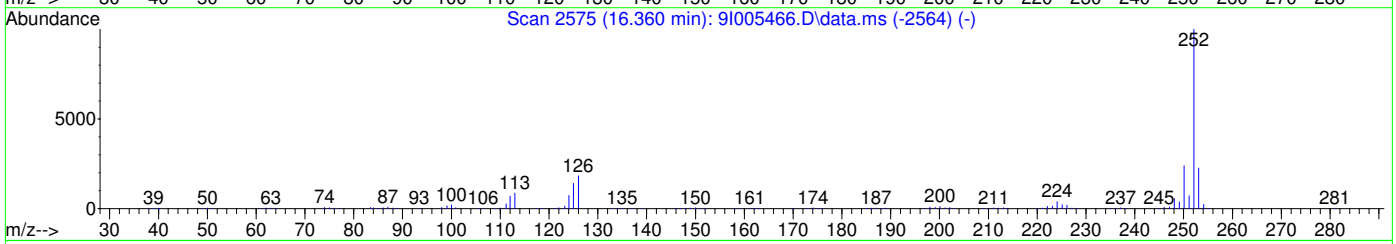
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072329.d
Acq On : 11 Aug 2020 12:47 pm
Operator : marthav
Sample : cc2918-50 8270
Misc : op81484,sx2950,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 12 01:45:18 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Aug 12 01:44:14 2020
Response via : Initial Calibration







TIC: x072329.d\data.ms

(104) Benzo[b]fluoranthene (P)

15.614min (0.000) 51.53ppm

response 570599

Ion	Exp%	Act%
252.10	100	100
253.10	22.50	21.98
125.00	14.00	16.56
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072330.d
Acq On : 11 Aug 2020 1:13 pm
Operator : marthav
Sample : cc2918-5 8270
Misc : op81484,sx2950,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 12 01:57:04 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.660	152	123854	40.00	ppm	0.00
22) Naphthalene-d8	7.082	136	486509	40.00	ppm	0.00
43) Acenaphthene-d10	9.120	164	250696	40.00	ppm	0.00
70) Phenanthrene-d10	10.859	188	443966	40.00	ppm	0.00
92) Chrysene-d12	14.062	240	352829	40.00	ppm	0.00
102) Perylene-d12	16.250	264	289664	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	5.660	152	123854	40.00	ppm	0.00
120) Naphthalene-d8A	7.082	136	486509	40.00	ppm	0.00
127) Acenaphthene-d10A	9.120	164	250696	40.00	ppm	0.00
136) Phenanthrene-d10A	10.859	188	443966	40.00	ppm	0.00
146) Chrysene-d12A	14.062	240	352829	40.00	ppm	0.00
153) Perylene-d12A	16.250	264	289664	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	4.312	112	45337	10.21	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 10.21%#			
9) Phenol-d5	5.328	99	51815	9.81	ppm	0.00
Spiked Amount 100.000	Range 10 - 50		Recovery = 9.81%#			
23) Nitrobenzene-d5	6.270	82	24780	4.93	ppm	-0.01
Spiked Amount 50.000	Range 42 - 108		Recovery = 9.86%#			
47) 2-Fluorobiphenyl	8.350	172	45659	5.03	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 10.06%#			
75) 2,4,6-Tribromophenol	10.051	330	7837	9.51	ppm	0.00
Spiked Amount 100.000	Range 33 - 118		Recovery = 9.51%#			
95) Terphenyl-d14	12.773	244	44376	4.73	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 9.46%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.488	88	11423	5.38	ppm	# 40
3) N-nitrosodimethylamine	2.820	42	17526	4.65	ppm	# 43
4) Pyridine	2.862	79	26940	5.22	ppm	# 31
5) Benzaldehyde	5.184	106	19213	5.20	ppm	92
6) Aniline	5.307	93	33517	4.55	ppm	90
8) bis(2-Chloroethyl)ether	5.387	93	21288	4.68	ppm	77
10) Phenol	5.339	94	27975	4.46	ppm	94
11) 2-Chlorophenol	5.446	128	22442	4.74	ppm	85
12) 1,3-Dichlorobenzene	5.590	146	24385	4.95	ppm	97
13) 1,4-Dichlorobenzene	5.676	146	25624	4.92	ppm	98
14) 1,2-Dichlorobenzene	5.836	146	23549	4.76	ppm	96
15) Benzyl alcohol	5.831	108	14163	4.32	ppm	85
16) 2,2'-Oxybis(1-chloropr...	5.981	45	39489	4.14	ppm	65
17) 2-Methylphenol	5.986	108	20644	4.58	ppm	92
18) Acetophenone	6.109	105	31875	4.78	ppm	95
19) Hexachloroethane	6.205	117	9484	4.85	ppm	86
20) N-Nitroso-di-n-propyla...	6.120	70	16586	4.71	ppm	# 64
21) 3&4-Methylphenol	6.163	108	21469	4.61	ppm	96
24) Nitrobenzene	6.291	77	25458	5.12	ppm	82
25) Isophorone	6.569	82	42299	4.77	ppm	95
26) 2-Nitrophenol	6.655	139	11735	4.97	ppm	76
27) 2,4-Dimethylphenol	6.746	107	19923	4.54	ppm	94
28) O,O,O-Triethylphosphor...	6.810	198	9313	5.00	ppm	88
29) bis(2-Chloroethoxy)met...	6.836	93	25088	4.83	ppm	96
30) Benzoic Acid	6.863	105	11729	3.91	ppm	95
31) 2,4-Dichlorophenol	6.954	162	16836	4.76	ppm	95
32) 1,2,4-Trichlorobenzene	7.018	180	17555	4.86	ppm	96
34) Naphthalene	7.104	128	65948	5.00	ppm	99
35) 4-Chloroaniline	7.189	127	26709	4.79	ppm	91

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072330.d
Acq On : 11 Aug 2020 1:13 pm
Operator : marthav
Sample : cc2918-5 8270
Misc : op81484,sx2950,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 12 01:57:04 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
36)	2,6-Dichlorophenol	7.195	162	16791	4.65	ppm		97
37)	Hexachlorobutadiene	7.259	225	9137	5.12	ppm		98
38)	Caprolactam	7.564	113	7291	4.97	ppm	#	55
39)	4-Chloro-3-methylphenol	7.799	107	18194	4.82	ppm		97
40)	2-Methylnaphthalene	7.906	142	43427	4.98	ppm		97
41)	1-Methylnaphthalene	8.019	142	40322	4.83	ppm		98
42)	1,2,4,5-Tetrachloroben...	8.104	216	16901	4.66	ppm		99
44)	Hexachlorocyclopentadiene	8.093	237	2406	1.44	ppm		94
45)	2,4,6-Trichlorophenol	8.259	196	10982	4.77	ppm		96
46)	2,4,5-Trichlorophenol	8.318	196	11848	4.71	ppm		97
48)	1,1'-Biphenyl	8.457	154	51810	5.06	ppm		98
49)	2-Chloronaphthalene	8.468	162	37391	4.87	ppm		96
50)	2-Nitroaniline	8.607	65	13551	4.79	ppm	#	63
51)	p-Dinitrobenzene	8.789	75	7340	4.63	ppm	#	70
52)	Acenaphthylene	8.949	152	58784	4.69	ppm		99
53)	Dimethylphthalate	8.842	163	43048	4.87	ppm		99
54)	m-Dinitrobenzene	8.869	168	6941	4.71	ppm	#	75
55)	2,6-Dinitrotoluene	8.906	165	10139	4.86	ppm		69
56)	o-Dinitrobenzene	8.955	50	9791	4.90	ppm	#	54
57)	Acenaphthene	9.152	153	41412	4.97	ppm		99
58)	3-Nitroaniline	9.094	138	11763	5.12	ppm		91
59)	2,4-Dinitrophenol	9.233	184	1145	1.43	ppm	#	66
60)	Dibenzofuran	9.361	168	54209	4.88	ppm		95
61)	2,4-Dinitrotoluene	9.377	165	13149	4.94	ppm		89
62)	4-Nitrophenol	9.382	109	4944	3.85	ppm	#	55
63)	2,3,5,6-Tetrachlorophenol	9.473	232	7565	4.06	ppm		89
64)	2,3,4,6-Tetrachlorophenol	9.527	232	8902	4.61	ppm		88
65)	Fluorene	9.762	166	43353	5.00	ppm		98
66)	4-Chlorophenyl-phenyle...	9.784	204	20075	4.80	ppm		88
67)	Diethylphthalate	9.682	149	43461	4.92	ppm		97
68)	Thionazin	9.768	97	9832	5.24	ppm		99
69)	4-Nitroaniline	9.810	138	11938	4.67	ppm		93
71)	4,6-Dinitro-2-methylph...	9.853	198	4616	3.54	ppm	#	64
72)	n-Nitrosodiphenylamine	9.928	169	37688	5.46	ppm		96
73)	Diphenylamine	9.928	169	37688	4.66	ppm		96
74)	1,2-Diphenylhydrazine	9.965	77	46139	4.64	ppm		89
76)	Sulfotep	10.153	97	7183	4.91	ppm	#	59
77)	Phorate	10.286	75	25496	4.98	ppm		95
78)	4-Bromophenyl-phenylether	10.356	248	9702	4.55	ppm	#	79
79)	Hexachlorobenzene	10.399	284	9959	4.68	ppm		68
80)	Dimethoate	10.479	87	17121	4.95	ppm		94
81)	Simazine	10.548	201	6729	4.30	ppm		99
82)	Atrazine	10.591	200	12417	4.79	ppm		88
83)	Pentachlorophenol	10.661	266	1975	1.72	ppm		87
84)	Phenanthrene	10.885	178	65200	4.86	ppm		98
85)	Anthracene	10.944	178	66155	4.73	ppm		97
86)	Disulfoton	10.907	88	21356	3.98	ppm		93
87)	Carbazole	11.158	167	59919	4.86	ppm		98
88)	Methyl Parathion	11.345	109	13518	4.55	ppm	#	88
89)	Di-n-butylphthalate	11.629	149	67839	4.93	ppm		98
90)	Ethyl Parathion	11.816	97	8122	5.00	ppm		86
91)	Fluoranthene	12.287	202	63813	5.13	ppm		97
93)	Benzidine	12.485	184	31364	4.99	ppm		95
94)	Pyrene	12.543	202	66078	4.51	ppm		100
96)	Famphur	13.314	218	19621	5.74	ppm		85
97)	Butylbenzylphthalate	13.405	149	27392	4.82	ppm		85
98)	3,3'-Dichlorobenzidine	14.052	252	17476	5.25	ppm		96
99)	Benzo[a]anthracene	14.046	228	53134	4.79	ppm		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072330.d
Acq On : 11 Aug 2020 1:13 pm
Operator : marthav
Sample : cc2918-5 8270
Misc : op81484,sx2950,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 12 01:57:04 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

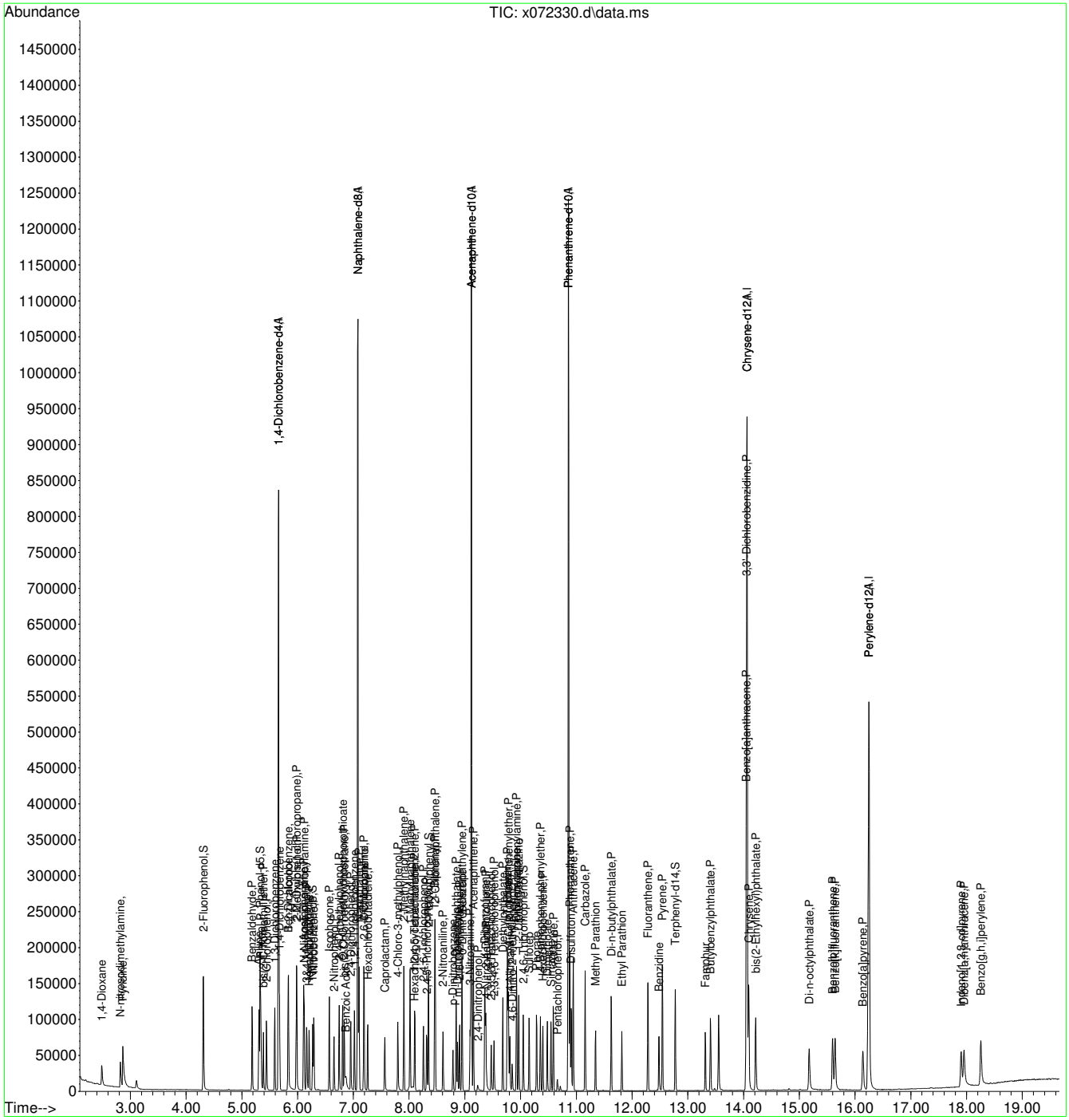
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
100) Chrysene	14.095	228	57802	4.89	ppm	95
101) bis(2-Ethylhexyl)phtha...	14.218	149	34757	4.66	ppm	97
103) Di-n-octylphthalate	15.175	149	47934	5.19	ppm	92
104) Benzo[b]fluoranthene	15.598	252	40248	5.16	ppm	98
105) Benzo[k]fluoranthene	15.640	252	46762	4.55	ppm	96
106) Benzo[a]pyrene	16.138	252	36453	4.91	ppm	94
107) Indeno[1,2,3-cd]pyrene	17.903	276	29261	6.87	ppm	87
108) Dibenz[a,h]anthracene	17.956	278	32779	6.91	ppm	90
109) Benzo[g,h,i]perylene	18.256	276	39191	5.85	ppm	85

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-12-2020\sx2950\
Data File : x072330.d
Acq On : 11 Aug 2020 1:13 pm
Operator : marthav
Sample : cc2918-5 8270
Misc : op81484,sx2950,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 12 01:57:04 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan
08/12/20 16:38

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072357.D
Acq On : 12 Aug 2020 10:24 am
Operator : marthav
Sample : cc2918-50 8270 Inst : MSBNA05
Misc : op81484,sx2951,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 12 14:04:41 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Aug 12 14:02:37 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.654	152	163781	40.00	ppm	0.00
22) Naphthalene-d8	7.077	136	635873	40.00	ppm	0.00
43) Acenaphthene-d10	9.115	164	311303	40.00	ppm	0.00
70) Phenanthrene-d10	10.859	188	516972	40.00	ppm	0.00
92) Chrysene-d12	14.073	240	400284	40.00	ppm	0.00
102) Perylene-d12	16.266	264	293676	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	5.654	152	163781	40.00	ppm	0.00
120) Naphthalene-d8A	7.077	136	635873	40.00	ppm	0.00
127) Acenaphthene-d10A	9.115	164	311303	40.00	ppm	0.00
136) Phenanthrene-d10A	10.859	188	516972	40.00	ppm	0.00
146) Chrysene-d12A	14.073	240	400284	40.00	ppm	0.00
153) Perylene-d12A	16.266	264	293676	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	4.307	112	592760	100.94	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 100.94%#			
9) Phenol-d5	5.334	99	714039	102.20	ppm	0.00
Spiked Amount 100.000	Range 10 - 50		Recovery = 102.20%#			
23) Nitrobenzene-d5	6.275	82	351199	53.48	ppm	0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 106.96%			
47) 2-Fluorobiphenyl	8.350	172	625223	55.48	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 110.96%#			
75) 2,4,6-Tribromophenol	10.056	330	121276	104.17	ppm	0.00
Spiked Amount 100.000	Range 33 - 118		Recovery = 104.17%			
95) Terphenyl-d14	12.779	244	573536	53.93	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 107.86%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.467	88	128978	45.95	ppm	# 45
3) N-nitrosodimethylamine	2.809	42	215855	43.31	ppm	# 41
4) Pyridine	2.836	79	368282	53.93	ppm	# 35
5) Benzaldehyde	5.184	106	234014	47.93	ppm	94
6) Aniline	5.307	93	431203	44.29	ppm	82
8) bis(2-Chloroethyl)ether	5.387	93	307785	51.22	ppm	78
10) Phenol	5.350	94	404362	48.79	ppm	92
11) 2-Chlorophenol	5.440	128	328467	52.42	ppm	79
12) 1,3-Dichlorobenzene	5.585	146	337226	51.80	ppm	96
13) 1,4-Dichlorobenzene	5.670	146	353449	51.31	ppm	97
14) 1,2-Dichlorobenzene	5.831	146	316716	48.40	ppm	97
15) Benzyl alcohol	5.836	108	207502	47.85	ppm	88
16) 2,2'-Oxybis(1-chloropr...	5.975	45	545480	43.20	ppm	79
17) 2-Methylphenol	5.991	108	294066	49.33	ppm	96
18) Acetophenone	6.109	105	420398	47.66	ppm	96
19) Hexachloroethane	6.200	117	136346	52.72	ppm	88
20) N-Nitroso-di-n-propyla...	6.130	70	227402	48.81	ppm	# 67
21) 3&4-Methylphenol	6.168	108	314576	51.05	ppm	97
24) Nitrobenzene	6.296	77	342947	52.79	ppm	84
25) Isophorone	6.574	82	561636	48.42	ppm	94
26) 2-Nitrophenol	6.655	139	171457	55.51	ppm	76

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072357.D
Acq On : 12 Aug 2020 10:24 am
Operator : marthav
Sample : cc2918-50 8270 Inst : MSBNA05
Misc : op81484,sx2951,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 12 14:04:41 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Aug 12 14:02:37 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
27) 2,4-Dimethylphenol	6.751	107	272949	47.58	ppm		95
28) O,O,O-Triethylphosphor...	6.810	198	123659	50.79	ppm		80
29) bis(2-Chloroethoxy)met...	6.836	93	345910	50.97	ppm		96
30) Benzoic Acid	6.917	105	210919m	44.77	ppm		
31) 2,4-Dichlorophenol	6.954	162	242314	52.40	ppm		97
32) 1,2,4-Trichlorobenzene	7.018	180	252165	53.36	ppm		97
34) Naphthalene	7.104	128	887333	51.46	ppm		99
35) 4-Chloroaniline	7.189	127	358866	49.29	ppm		88
36) 2,6-Dichlorophenol	7.200	162	237128	50.29	ppm		99
37) Hexachlorobutadiene	7.248	225	127572	54.74	ppm		99
38) Caprolactam	7.639	113	92107	48.01	ppm	#	60
39) 4-Chloro-3-methylphenol	7.810	107	242298	49.14	ppm	#	72
40) 2-Methylnaphthalene	7.906	142	567792	49.80	ppm		99
41) 1-Methylnaphthalene	8.019	142	544627	49.89	ppm		98
42) 1,2,4,5-Tetrachloroben...	8.104	216	238867	50.36	ppm		99
44) Hexachlorocyclopentadiene	8.088	237	86891	36.48	ppm		99
45) 2,4,6-Trichlorophenol	8.259	196	157484	55.11	ppm		98
46) 2,4,5-Trichlorophenol	8.323	196	172817	55.10	ppm		100
48) 1,1'-Biphenyl	8.457	154	667012	52.47	ppm		99
49) 2-Chloronaphthalene	8.473	162	514756	53.95	ppm		98
50) 2-Nitroaniline	8.618	65	190569	54.25	ppm	#	68
51) p-Dinitrobenzene	8.799	75	108973	55.33	ppm	#	72
52) Acenaphthylene	8.949	152	829146	53.33	ppm		99
53) Dimethylphthalate	8.858	163	562893	51.25	ppm		99
54) m-Dinitrobenzene	8.885	168	102567	56.04	ppm	#	59
55) 2,6-Dinitrotoluene	8.917	165	139001	53.63	ppm		84
56) o-Dinitrobenzene	8.971	50	133955	53.96	ppm	#	50
57) Acenaphthene	9.158	153	538498	52.08	ppm		99
58) 3-Nitroaniline	9.110	138	159083	55.79	ppm		95
59) 2,4-Dinitrophenol	9.238	184	68103	50.71	ppm	#	83
60) Dibenzofuran	9.361	168	700276	50.74	ppm		94
61) 2,4-Dinitrotoluene	9.388	165	184292	55.77	ppm		73
62) 4-Nitrophenol	9.393	109	67427	42.33	ppm	#	44
63) 2,3,5,6-Tetrachlorophenol	9.479	232	118472	51.21	ppm		91
64) 2,3,4,6-Tetrachlorophenol	9.532	232	125961	52.06	ppm		92
65) Fluorene	9.762	166	572740	53.19	ppm		98
66) 4-Chlorophenyl-phenyle...	9.784	204	274145	52.74	ppm		91
67) Diethylphthalate	9.687	149	556583	50.74	ppm		97
68) Thionazin	9.778	97	127497	54.72	ppm		97
69) 4-Nitroaniline	9.837	138	167730	52.87	ppm		89
71) 4,6-Dinitro-2-methylph...	9.874	198	104721	54.29	ppm		83
72) n-Nitrosodiphenylamine	9.939	169	505118	62.88	ppm		96
73) Diphenylamine	9.939	169	505118	53.58	ppm		96
74) 1,2-Diphenylhydrazine	9.971	77	612491	52.87	ppm		93
76) Sulfotep	10.153	97	91855	53.92	ppm	#	65
77) Phorate	10.286	75	334816	56.11	ppm		94
78) 4-Bromophenyl-phenylether	10.356	248	130683	52.65	ppm	#	85
79) Hexachlorobenzene	10.404	284	132859	53.65	ppm		73
80) Dimethoate	10.495	87	231881	55.58	ppm		96
81) Simazine	10.570	201	88581	48.60	ppm		96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072357.D
Acq On : 12 Aug 2020 10:24 am
Operator : marthav
Sample : cc2918-50 8270 Inst : MSBNA05
Misc : op81484,sx2951,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 12 14:04:41 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Aug 12 14:02:37 2020
Response via : Initial Calibration

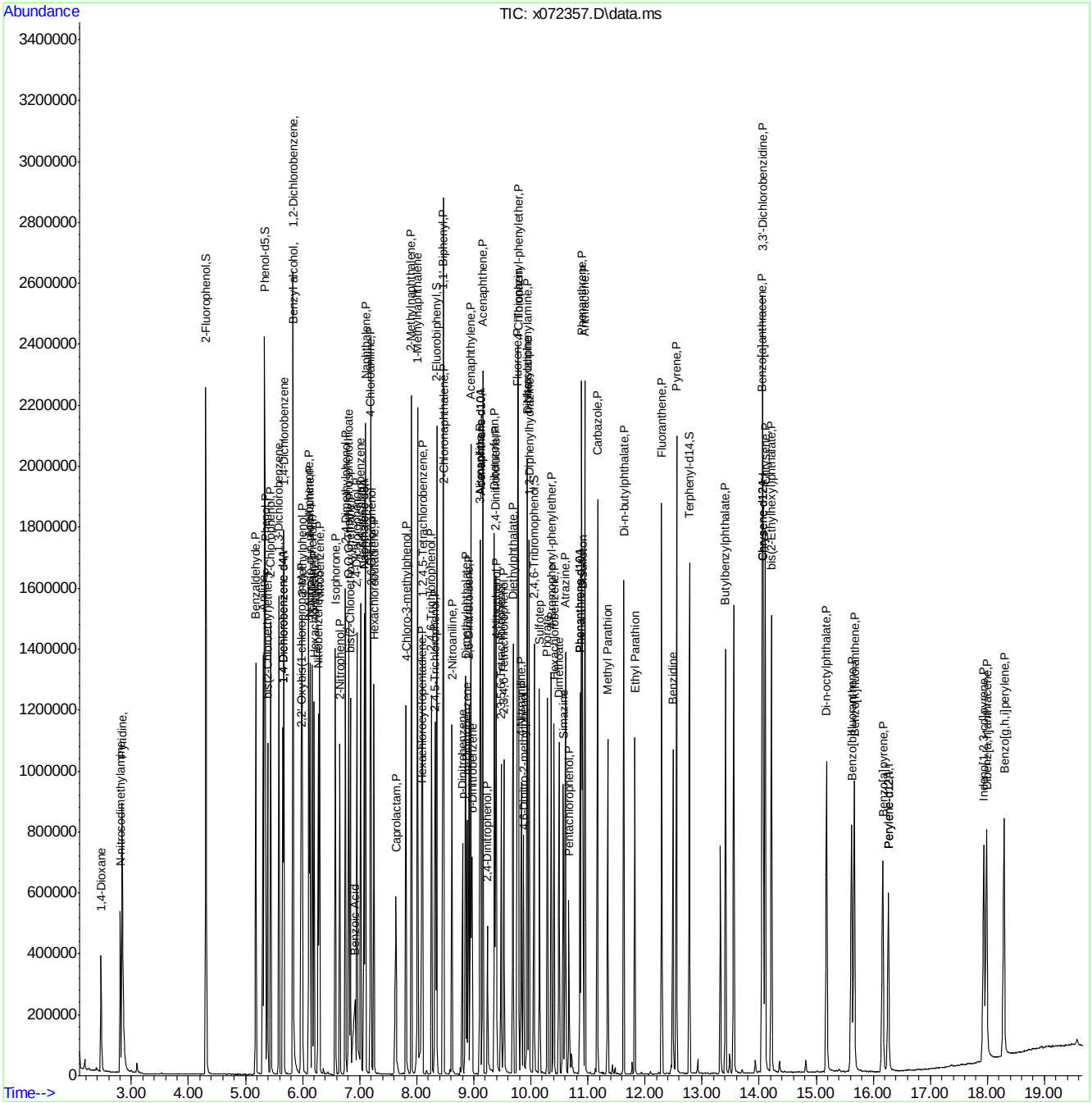
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
82) Atrazine	10.607	200	157747	52.26	ppm	87
83) Pentachlorophenol	10.666	266	58786	37.70	ppm	97
84) Phenanthrene	10.891	178	812429	52.00	ppm	99
85) Anthracene	10.950	178	863778	53.05	ppm	99
86) Disulfoton	10.907	88	276711m	44.31	ppm	
87) Carbazole	11.169	167	758862	52.82	ppm	98
88) Methyl Parathion	11.351	109	192066	53.79	ppm	89
89) Di-n-butylphthalate	11.629	149	875439	54.59	ppm	98
90) Ethyl Parathion	11.821	97	112854	53.98	ppm	89
91) Fluoranthene	12.292	202	778551	53.71	ppm	99
93) Benzidine	12.490	184	403212	51.40	ppm	96
94) Pyrene	12.554	202	829934	49.94	ppm	99
97) Butylbenzylphthalate	13.410	149	361195	51.96	ppm	89
98) 3,3'-Dichlorobenzidine	14.062	252	233526	54.72	ppm	97
99) Benzo[a]anthracene	14.057	228	653024	51.91	ppm	99
100) Chrysene	14.111	228	698491	52.14	ppm	98
101) bis(2-Ethylhexyl)phtha...	14.218	149	513106	53.89	ppm	97
103) Di-n-octylphthalate	15.180	149	761823	61.31	ppm	93
104) Benzo[b]fluoranthene	15.624	252	510521	57.61	ppm	96
105) Benzo[k]fluoranthene	15.672	252	555619	53.29	ppm	97
106) Benzo[a]pyrene	16.170	252	461880	54.63	ppm	97
107) Indeno[1,2,3-cd]pyrene	17.935	276	418817	66.55	ppm	88
108) Dibenz[a,h]anthracene	17.988	278	464950	64.70	ppm	92
109) Benzo[g,h,i]perylene	18.299	276	451918	54.62	ppm	90

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072357.D
Acq On : 12 Aug 2020 10:24 am
Operator : marthav
Sample : cc2918-50 8270 Inst : MSBNA05
Misc : op81484,sx2951,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 12 14:04:41 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Aug 12 14:02:37 2020
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: SX2951-CC2918
Lab FileID: X072357.D
Injection Time: 08/12/20 10:24

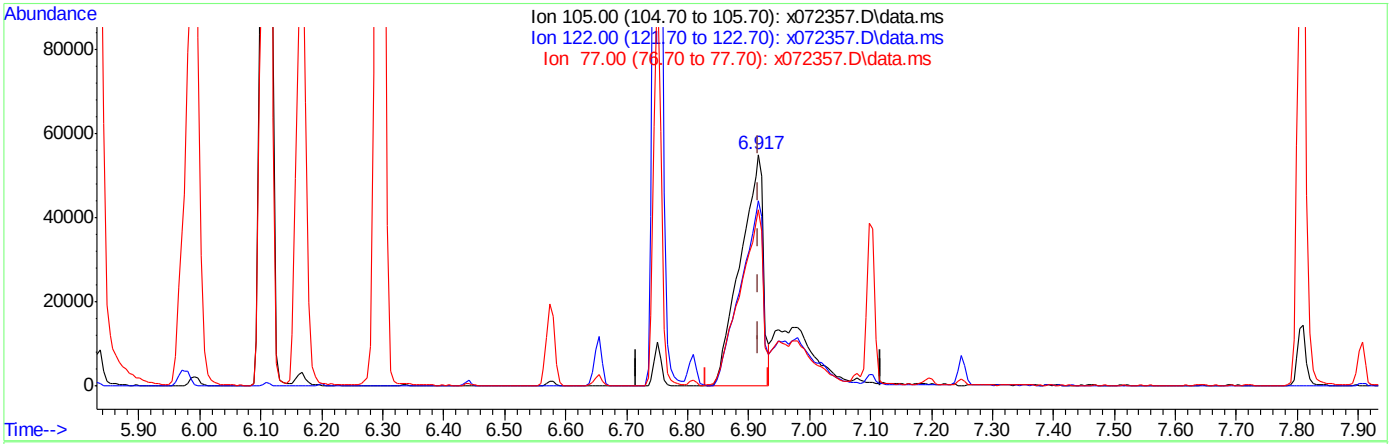
Method: SW846 8270D
Analyst approved: 08/12/20 15:54 Martha Valls
Supervisor approved: 08/12/20 16:38 Naresh Jiawan

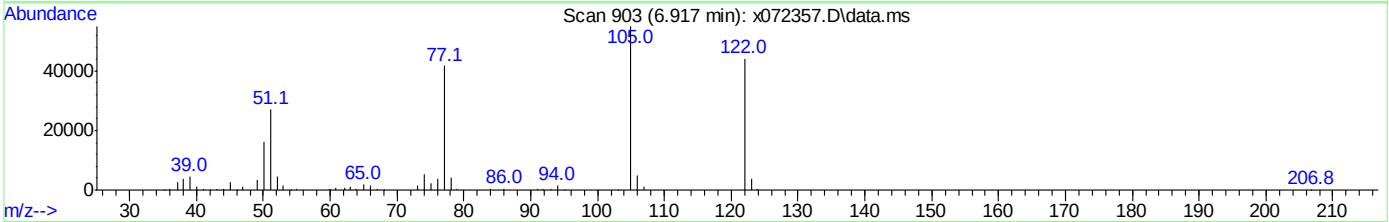
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic Acid	65-85-0		6.92	Split peak
Disulfoton	298-04-4		10.91	Split peak

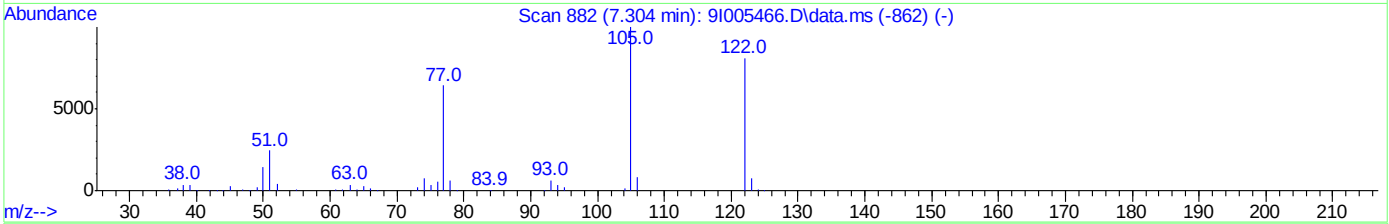
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072357.D
Acq On : 12 Aug 2020 10:24 am
Operator : marthav
Sample : cc2918-50 8270 Inst : MSBNA05
Misc : op81484,sx2951,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 12 14:03:15 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Aug 12 14:02:37 2020
Response via : Initial Calibration







TIC: x072357.D\data.ms

(30) Benzoic Acid

6.917min (0.000) 32.55ppm

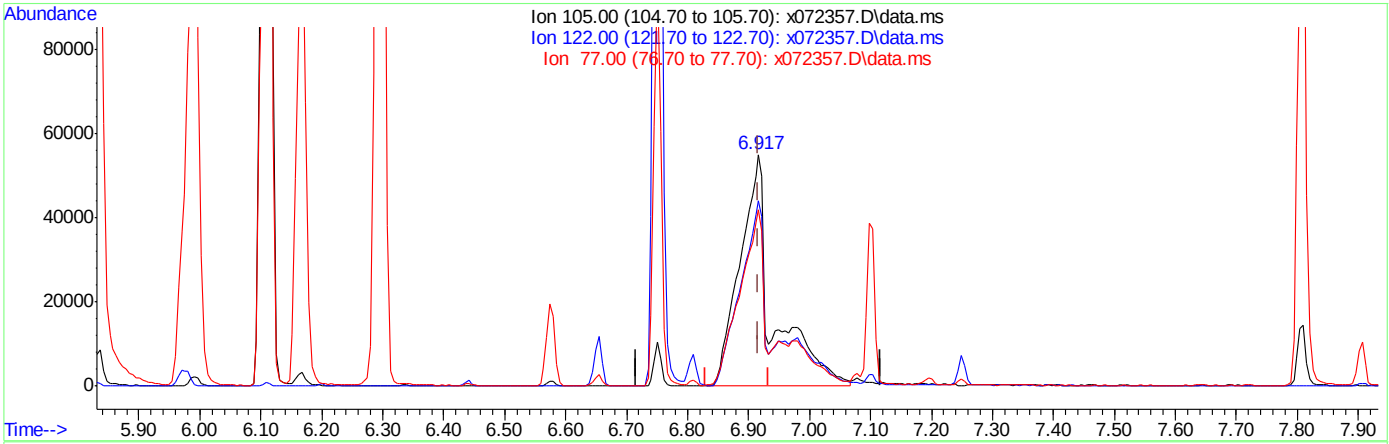
response 145700

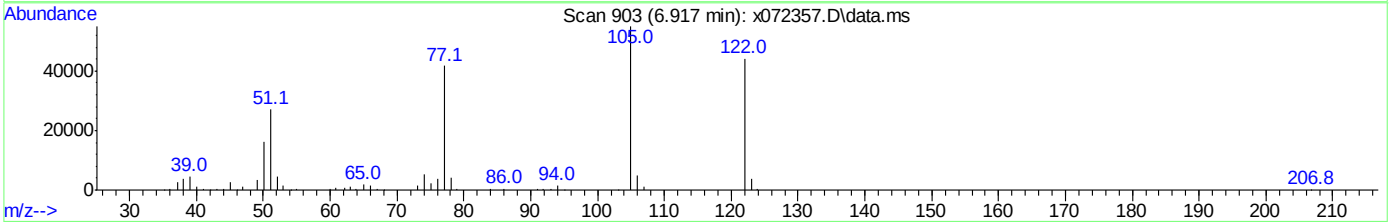
Ion	Exp%	Act%
105.00	100	100
122.00	81.20	80.80
77.00	64.10	75.55
0.00	0.00	0.00

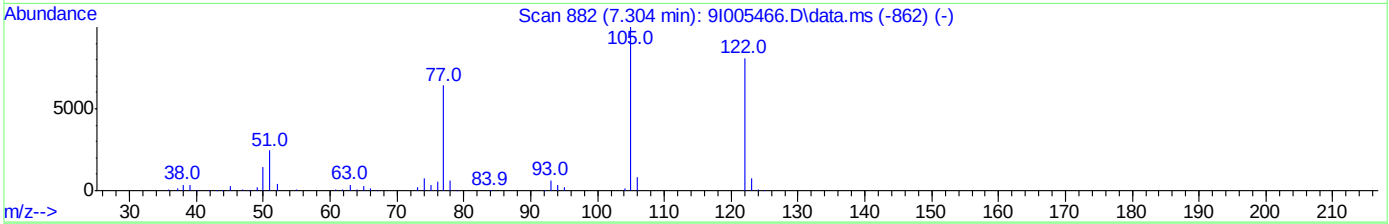
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072357.D
Acq On : 12 Aug 2020 10:24 am
Operator : marthav
Sample : cc2918-50 8270 Inst : MSBNA05
Misc : op81484,sx2951,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 12 14:03:15 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Aug 12 14:02:37 2020
Response via : Initial Calibration







TIC: x072357.D\data.ms

(30) Benzoic Acid

6.917min (0.000) 44.77ppm m

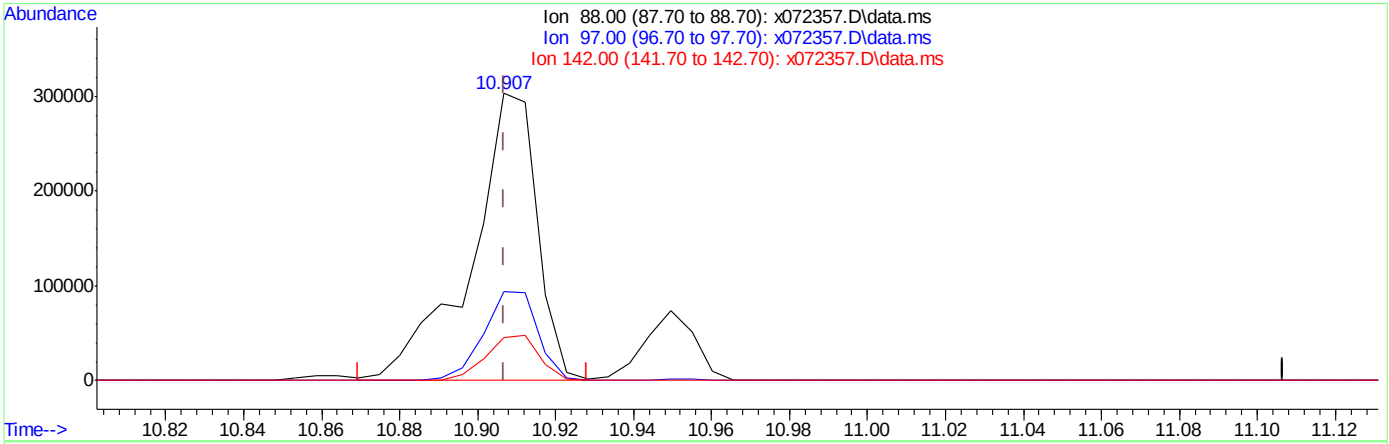
response 210919

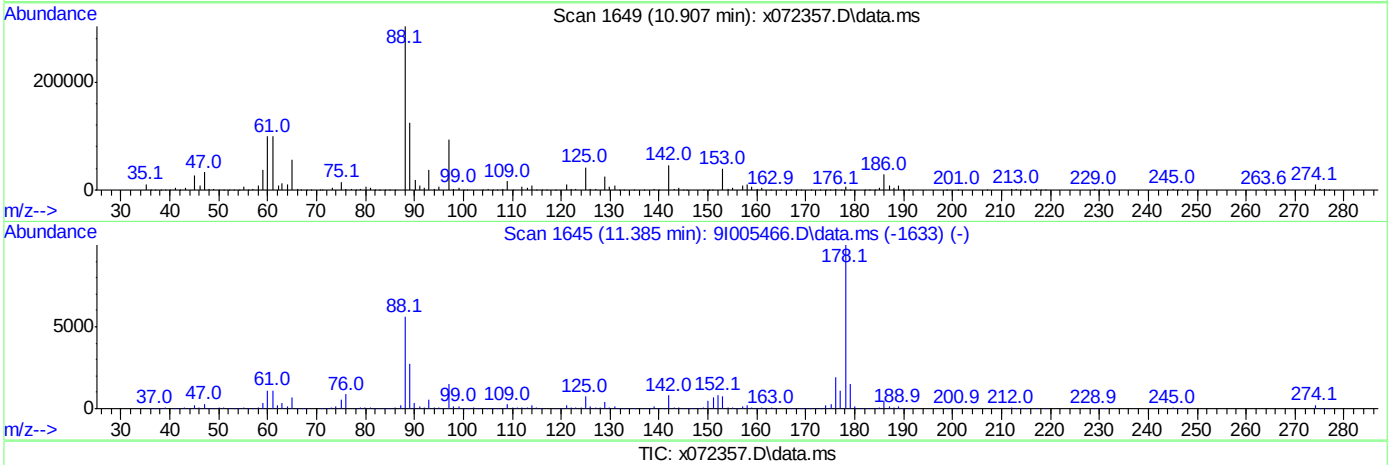
Ion	Exp%	Act%
105.00	100	100
122.00	81.20	80.22
77.00	64.10	75.96
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072357.D
Acq On : 12 Aug 2020 10:24 am
Operator : marthav
Sample : cc2918-50 8270 Inst : MSBNA05
Misc : op81484,sx2951,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 12 14:03:15 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Aug 12 14:02:37 2020
Response via : Initial Calibration





TIC: x072357.D\data.ms

(86) Disulfoton

10.907min (0.000) 57.27ppm

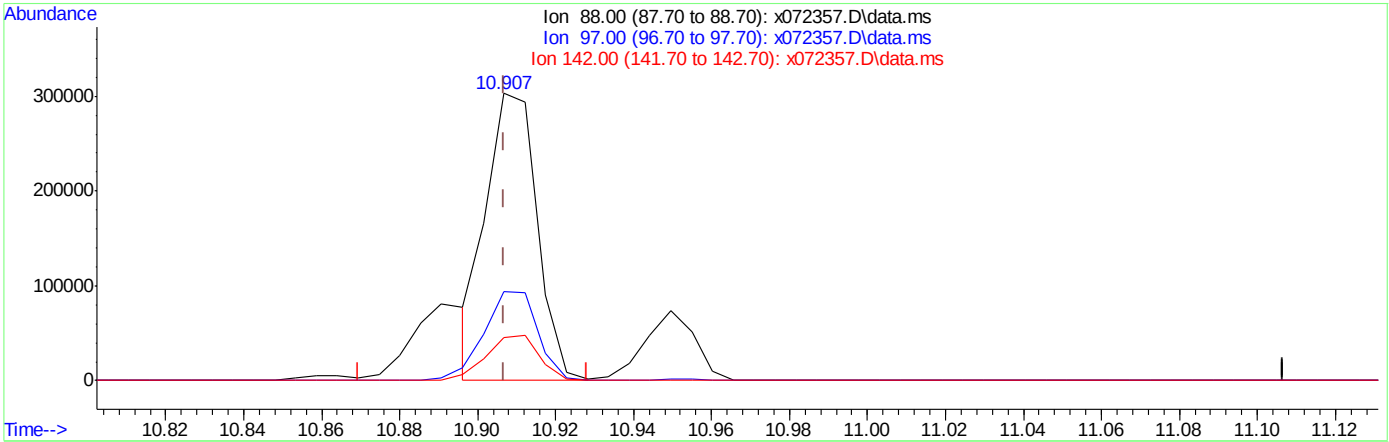
response 357632

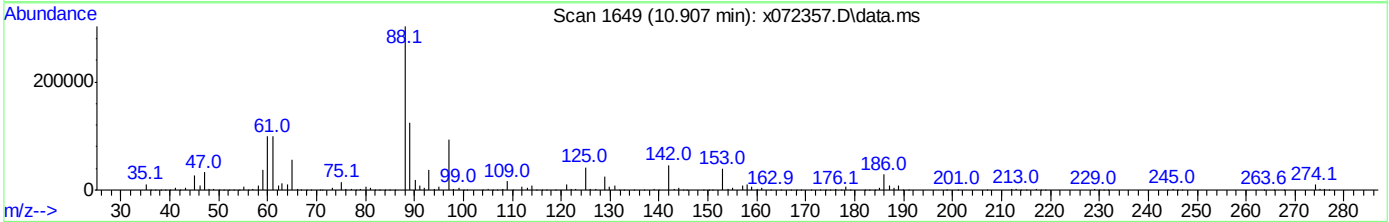
Ion	Exp%	Act%
88.00	100	100
97.00	26.50	31.01
142.00	14.20	15.14
0.00	0.00	0.00

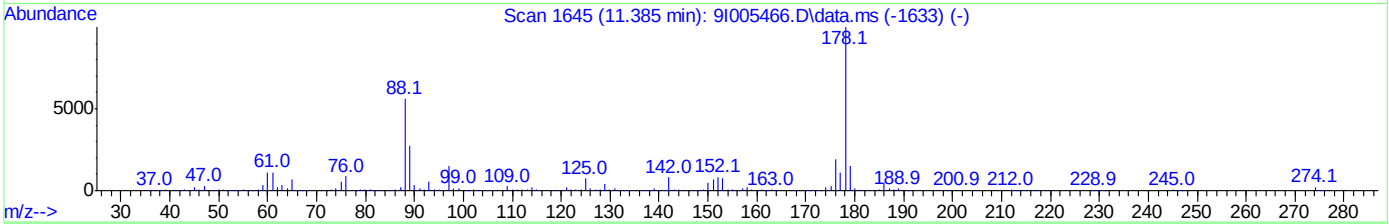
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072357.D
Acq On : 12 Aug 2020 10:24 am
Operator : marthav
Sample : cc2918-50 8270 Inst : MSBNA05
Misc : op81484,sx2951,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 12 14:03:15 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Aug 12 14:02:37 2020
Response via : Initial Calibration







TIC: x072357.D\data.ms

(86) Disulfoton

10.907min (0.000) 44.31ppm m

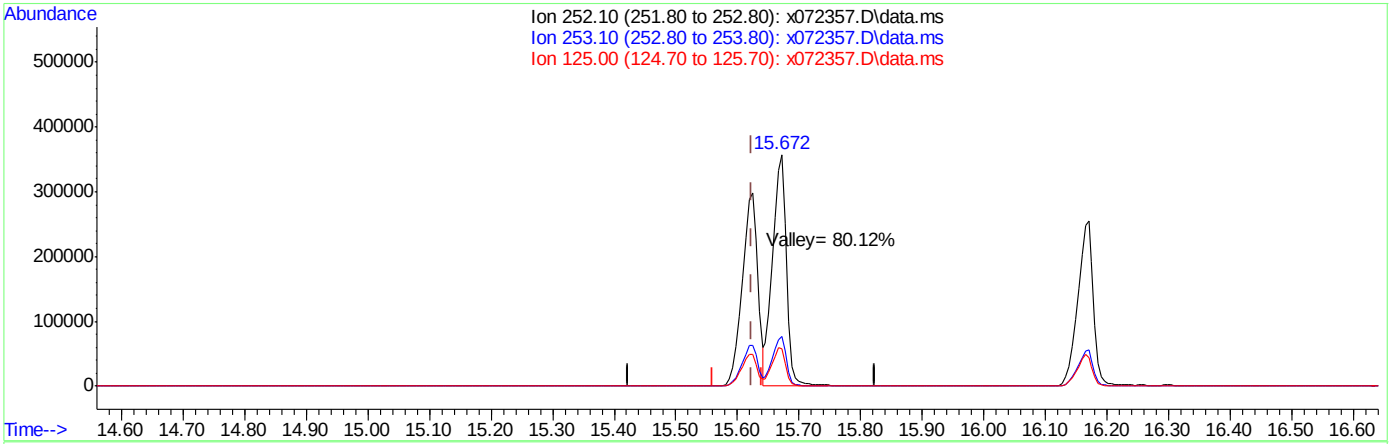
response 276711

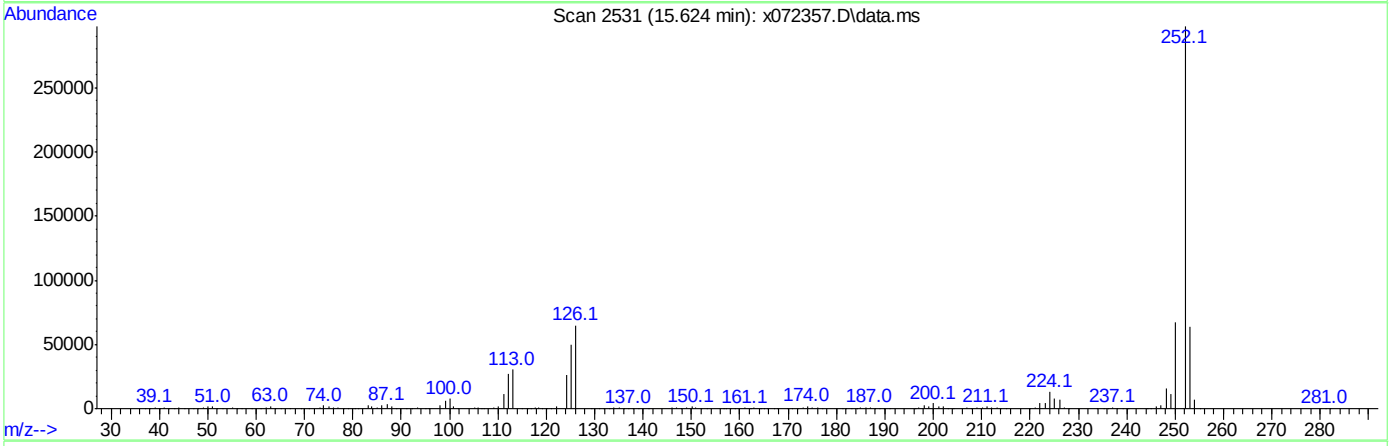
Ion	Exp%	Act%
88.00	100	100
97.00	26.50	30.86
142.00	14.20	15.17
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072357.D
Acq On : 12 Aug 2020 10:24 am
Operator : marthav
Sample : cc2918-50 8270 Inst : MSBNA05
Misc : op81484,sx2951,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 12 14:04:41 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Aug 12 14:02:37 2020
Response via : Initial Calibration





TIC: x072357.D\data.ms

(104) Benzo[b]fluoranthene (P)

15.624min (0.000) 57.61ppm

response 510521

Ion	Exp%	Act%
252.10	100	100
253.10	22.50	21.21
125.00	14.00	16.63
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072358.D
Acq On : 12 Aug 2020 10:49 am
Operator : marthav
Sample : cc2918-5 8270 Inst : MSBNA05
Misc : op81484,sx2951,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 12 14:05:17 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.649	152	167506	40.00	ppm	0.00
22) Naphthalene-d8	7.077	136	643671	40.00	ppm	0.00
43) Acenaphthene-d10	9.115	164	325538	40.00	ppm	0.00
70) Phenanthrene-d10	10.858	188	548983	40.00	ppm	0.00
92) Chrysene-d12	14.062	240	412046	40.00	ppm	-0.01
102) Perylene-d12	16.261	264	349424	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	5.649	152	167506	40.00	ppm	0.00
120) Naphthalene-d8A	7.077	136	643671	40.00	ppm	0.00
127) Acenaphthene-d10A	9.115	164	325538	40.00	ppm	0.00
136) Phenanthrene-d10A	10.858	188	548983	40.00	ppm	0.00
146) Chrysene-d12A	14.062	240	412046	40.00	ppm	-0.01
153) Perylene-d12A	16.261	264	349424	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	4.306	112	62578	10.42	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 10.42%#			
9) Phenol-d5	5.328	99	69489	9.72	ppm	0.00
Spiked Amount 100.000	Range 10 - 50		Recovery = 9.72%#			
23) Nitrobenzene-d5	6.269	82	33686	5.07	ppm	0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 10.14%#			
47) 2-Fluorobiphenyl	8.345	172	57380	4.87	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 9.74%#			
75) 2,4,6-Tribromophenol	10.046	330	9980	9.79	ppm	-0.01
Spiked Amount 100.000	Range 33 - 118		Recovery = 9.79%#			
95) Terphenyl-d14	12.773	244	50807	4.64	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 9.28%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.477	88	13647	4.75	ppm	# 43
3) N-nitrosodimethylamine	2.814	42	22247	4.36	ppm	# 41
4) Pyridine	2.857	79	37488	5.37	ppm	# 33
5) Benzaldehyde	5.178	106	24741	4.95	ppm	94
6) Aniline	5.301	93	43426	4.36	ppm	87
8) bis(2-Chloroethyl)ether	5.381	93	28448	4.63	ppm	74
10) Phenol	5.344	94	37222	4.39	ppm	96
11) 2-Chlorophenol	5.440	128	29998	4.68	ppm	85
12) 1,3-Dichlorobenzene	5.585	146	32329	4.86	ppm	94
13) 1,4-Dichlorobenzene	5.670	146	33973	4.82	ppm	99
14) 1,2-Dichlorobenzene	5.831	146	31879	4.76	ppm	97
15) Benzyl alcohol	5.825	108	19098	4.31	ppm	86
16) 2,2'-Oxybis(1-chloropr...	5.970	45	55985	4.33	ppm	77
17) 2-Methylphenol	5.981	108	27552	4.52	ppm	90
18) Acetophenone	6.104	105	40603	4.50	ppm	96
19) Hexachloroethane	6.200	117	12738	4.82	ppm	96
20) N-Nitroso-di-n-propyla...	6.114	70	21070	4.42	ppm	# 60
21) 3&4-Methylphenol	6.162	108	28557	4.53	ppm	97
24) Nitrobenzene	6.285	77	33521	5.10	ppm	82
25) Isophorone	6.564	82	54665	4.66	ppm	95
26) 2-Nitrophenol	6.649	139	15591	4.99	ppm	76

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072358.D
Acq On : 12 Aug 2020 10:49 am
Operator : marthav
Sample : cc2918-5 8270 Inst : MSBNA05
Misc : op81484,sx2951,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 12 14:05:17 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
27) 2,4-Dimethylphenol	6.745	107	26534	4.57	ppm		94
28) O,O,O-Triethylphosphor...	6.804	198	11584	4.70	ppm		88
29) bis(2-Chloroethoxy)met...	6.831	93	32309	4.70	ppm		95
30) Benzoic Acid	6.858	105	14049	3.54	ppm		93
31) 2,4-Dichlorophenol	6.949	162	22597	4.83	ppm		97
32) 1,2,4-Trichlorobenzene	7.013	180	23693	4.95	ppm		97
34) Naphthalene	7.098	128	86837	4.98	ppm		98
35) 4-Chloroaniline	7.184	127	34989	4.75	ppm		89
36) 2,6-Dichlorophenol	7.189	162	23116	4.84	ppm		97
37) Hexachlorobutadiene	7.248	225	12502	5.30	ppm		97
38) Caprolactam	7.569	113	8954	4.61	ppm	#	45
39) 4-Chloro-3-methylphenol	7.799	107	23363	4.68	ppm		95
40) 2-Methylnaphthalene	7.901	142	55695	4.83	ppm		99
41) 1-Methylnaphthalene	8.013	142	52311	4.73	ppm		98
42) 1,2,4,5-Tetrachloroben...	8.099	216	22437	4.67	ppm		97
44) Hexachlorocyclopentadiene	8.083	237	2943	1.35	ppm		93
45) 2,4,6-Trichlorophenol	8.254	196	14434	4.83	ppm		94
46) 2,4,5-Trichlorophenol	8.313	196	15051	4.59	ppm		95
48) 1,1'-Biphenyl	8.452	154	64132	4.82	ppm		98
49) 2-Chloronaphthalene	8.462	162	47928	4.80	ppm		95
50) 2-Nitroaniline	8.607	65	17823	4.85	ppm	#	63
51) p-Dinitrobenzene	8.789	75	9240	4.49	ppm	#	65
52) Acenaphthylene	8.944	152	73929	4.55	ppm		98
53) Dimethylphthalate	8.842	163	52583	4.58	ppm		99
54) m-Dinitrobenzene	8.874	168	8711	4.55	ppm	#	59
55) 2,6-Dinitrotoluene	8.906	165	12466	4.60	ppm		82
56) o-Dinitrobenzene	8.954	50	12647	4.87	ppm	#	47
57) Acenaphthene	9.147	153	51818	4.79	ppm		99
58) 3-Nitroaniline	9.093	138	14412	4.83	ppm		89
59) 2,4-Dinitrophenol	9.238	184	1511	1.45	ppm	#	82
60) Dibenzofuran	9.356	168	67274	4.66	ppm		95
61) 2,4-Dinitrotoluene	9.377	165	16202	4.69	ppm		93
62) 4-Nitrophenol	9.393	109	5395	3.24	ppm	#	73
63) 2,3,5,6-Tetrachlorophenol	9.473	232	9364	3.87	ppm		87
64) 2,3,4,6-Tetrachlorophenol	9.527	232	10771	4.26	ppm		91
65) Fluorene	9.757	166	53357	4.74	ppm		98
66) 4-Chlorophenyl-phenyle...	9.778	204	24483	4.50	ppm		88
67) Diethylphthalate	9.676	149	51647	4.50	ppm		96
68) Thionazin	9.767	97	12000	4.93	ppm		99
69) 4-Nitroaniline	9.810	138	14417	4.35	ppm		86
71) 4,6-Dinitro-2-methylph...	9.858	198	5341	3.32	ppm	#	61
72) n-Nitrosodiphenylamine	9.928	169	45910	5.38	ppm		97
73) Diphenylamine	9.928	169	45910	4.59	ppm		97
74) 1,2-Diphenylhydrazine	9.965	77	54857	4.46	ppm		93
76) Sulfotep	10.147	97	8375	4.63	ppm	#	61
77) Phorate	10.281	75	30633	4.83	ppm		93
78) 4-Bromophenyl-phenylether	10.350	248	11948	4.53	ppm	#	82
79) Hexachlorobenzene	10.399	284	11860	4.51	ppm		73
80) Dimethoate	10.479	87	20383	4.76	ppm		95
81) Simazine	10.548	201	7999	4.13	ppm		96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072358.D
Acq On : 12 Aug 2020 10:49 am
Operator : marthav
Sample : cc2918-5 8270 Inst : MSBNA05
Misc : op81484,sx2951,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 12 14:05:17 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration

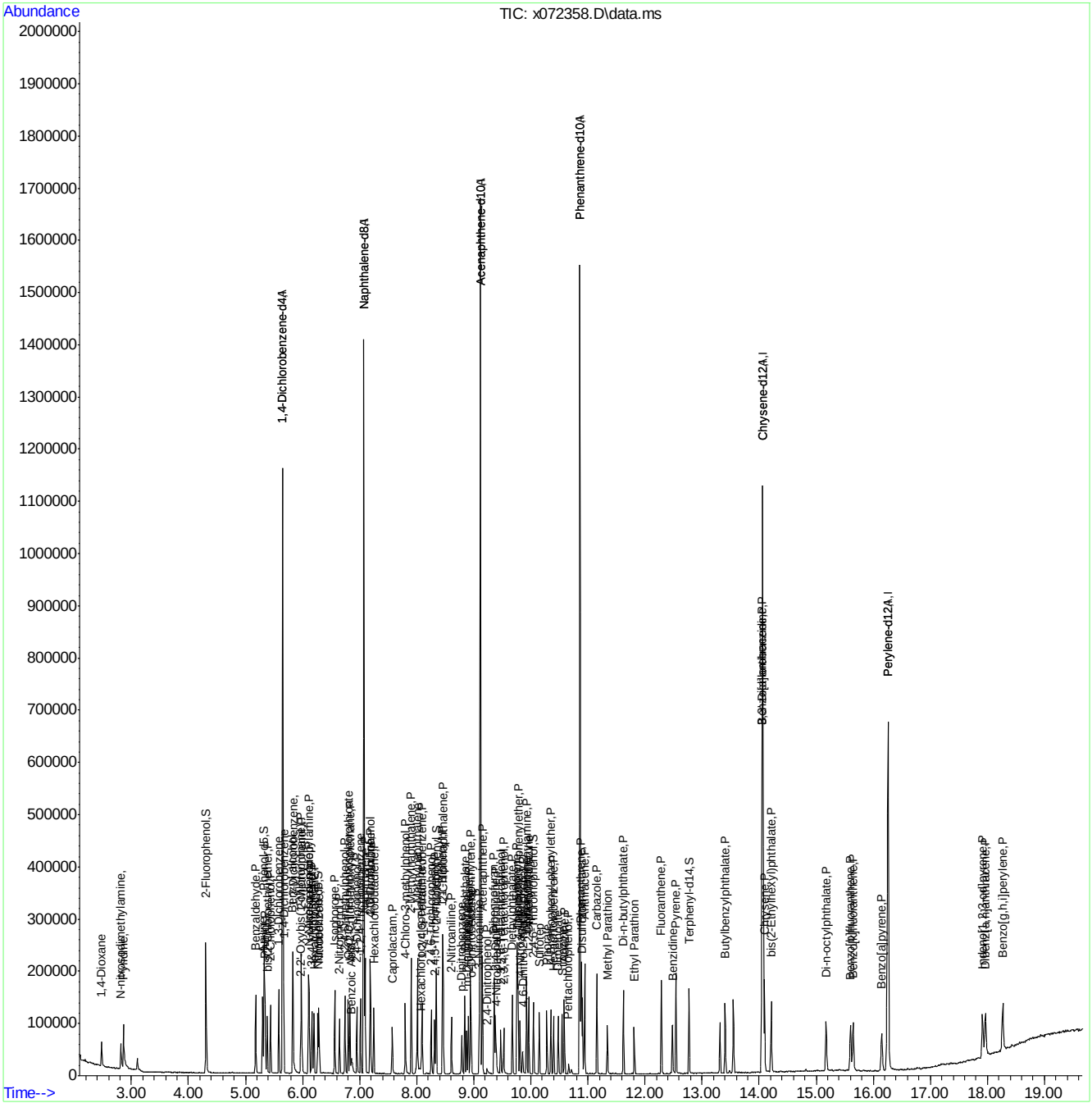
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
82) Atrazine	10.591	200	13611	4.25	ppm		87
83) Pentachlorophenol	10.661	266	2112	1.49	ppm		91
84) Phenanthrene	10.885	178	76795	4.63	ppm		98
85) Anthracene	10.944	178	79388	4.59	ppm		97
86) Disulfoton	10.901	88	32475	4.90	ppm		94
87) Carbazole	11.158	167	70398	4.61	ppm		98
88) Methyl Parathion	11.340	109	16804	4.58	ppm	#	83
89) Di-n-butylphthalate	11.623	149	80870	4.75	ppm		99
90) Ethyl Parathion	11.811	97	9517	4.75	ppm		85
91) Fluoranthene	12.287	202	72748	4.73	ppm		98
93) Benzidine	12.484	184	39546	5.38	ppm		96
94) Pyrene	12.543	202	74545	4.36	ppm		98
97) Butylbenzylphthalate	13.404	149	33390	5.03	ppm		93
98) 3,3'-Dichlorobenzidine	14.052	252	20901	5.38	ppm		93
99) Benzo[a]anthracene	14.052	228	60020	4.63	ppm		98
100) Chrysene	14.094	228	62727	4.55	ppm		98
101) bis(2-Ethylhexyl)phtha...	14.212	149	43601	5.00	ppm		97
103) Di-n-octylphthalate	15.169	149	68079	6.08	ppm		92
104) Benzo[b]fluoranthene	15.603	252	48644	5.17	ppm		97
105) Benzo[k]fluoranthene	15.646	252	51049	4.12	ppm		95
106) Benzo[a]pyrene	16.148	252	44652	4.98	ppm		96
107) Indeno[1,2,3-cd]pyrene	17.913	276	43843	8.43	ppm		89
108) Dibenz[a,h]anthracene	17.967	278	45145	7.83	ppm		91
109) Benzo[g,h,i]perylene	18.272	276	49002	6.06	ppm		86

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072358.D
Acq On : 12 Aug 2020 10:49 am
Operator : marthav
Sample : cc2918-5 8270 Inst : MSBNA05
Misc : op81484,sx2951,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 12 14:05:17 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration



SGS-ORLANDO **MS BNA05-X** **ANALYSIS LOG**

DATE	7/29/2020	**METHODS**	8270D	**IC/ICC STD LOT**	**S6418/S6417**
COLUMN TYPE	DB-5MS	**ACQ. METHOD**	ACQ-BNA	**ICV STD LOT**	**10204A**
AMOUNT INJ	1	**PROC. METHOD**	8270D6F072920	**DFTPP**	**S6384**
INSTRUMENT	MS-6F	**CALIB. DATE**	7/29/2020	**EM VOLTAGE**	**1471V**
ANALYST	M.Valls	**RUN BATCH**	S6F248	**ISTD LOT**	**10132J**

ICV(1) 10204A ICV(2) 9809D + 9782 + 10072D ICV(3) (OP) 9934A

DATA FILE	ALS	SAMPLE NAME	METHOD	DF	MISC. INFO	COMMENTS
6F06431	41	Cond Std	8270	""""""""""""""	op81256,S6F248,1000,,,1,1,water	Conditioning
6F06432	1	DFTPP	DFTPP	1x	op81256,S6F248,1000,,,1,1,water	Pass
6F06433	2	ic248-1	8270	2+2/400	op81256,S6F248,1000,,,1,1,water	ok
6F06434	3	ic248-5	8270	10+10/400	op81256,S6F248,1000,,,1,1,water	rr, lost time
6F06435	1	DFTPP	DFTPP	1x	op81256,S6F248,1000,,,1,1,water	Pass
6F06436	2	ic248-1	8270	2+2/400	op81256,S6F248,1000,,,1,1,water	Level 1 Response fail for PCP, Curve Pass
6F06437	3	ic248-5	8270	10+10/400	op81256,S6F248,1000,,,1,1,water	Curve Pass, Pass DOD
6F06438	4	ic248-10	8270	20+20/400	op81256,S6F248,1000,,,1,1,water	Curve Pass, Pass DOD
6F06439	5	ic248-25	8270	50+50/400	op81256,S6F248,1000,,,1,1,water	Curve Pass, Pass DOD
6F06440	6	icc248-50	8270	100+100/400	op81256,S6F248,1000,,,1,1,water	Curve Pass, Pass DOD
6F06441	7	ic248-60	8270	120+120/400	op81256,S6F248,1000,,,1,1,water	Curve Pass, Pass DOD
6F06442	8	ic248-75	8270	150+150/400	op81256,S6F248,1000,,,1,1,water	Curve Pass, Pass DOD
6F06443	9	ic248-100	8270	200+200	op81256,S6F248,1000,,,1,1,water	Curve Pass, Pass DOD
6F06444	10	icv248-50	8270	2x	op81256,S6F248,1000,,,1,1,water	Pass, Phenol low dod
6F06445	11	icv248-50	8270	20+20+10/400	op81256,S6F248,1000,,,1,1,water	Pass

SGS-ORLANDO **MS BNA05-X** **ANALYSIS LOG**

DATE	8/11/2020	**METHODS**	8270D	**IC/ICC STD LOT**	**S6418/S6417**
COLUMN TYPE	DB-5MS	**ACQ. METHOD**	ACQ-BNA	**ICV STD LOT**	**10204A**
AMOUNT INJ	1	**PROC. METHOD**	8270D6F072920	**DFTPP**	**S6384**
INSTRUMENT	MS-6F	**CALIB. DATE**	7/29/2020	**EM VOLTAGE**	**1471V**
ANALYST	M.Valls	**RUN BATCH**	S6F251	**ISTD LOT**	**10194B**

ICV(1) 10204A ICV(2) 9809D + 9782 + 10072D ICV(3) (OP) 9934A

DATA FILE	ALS	SAMPLE NAME	METHOD	DF	MISC. INFO	COMMENTS
6F06484	41	Cond Std	8270	""""""""	op81484,S6F251,1000,,,1,1,water	Conditioning
6F06485	1	DFTPP	DFTPP	1X	op81484,S6F251,1000,,,1,1,water	Passed (Response: 2263750)
6F06486	2	cc248-50	8270	100+100/400	op81484,S6F251,1000,,,1,1,water	Passed
6F06487	3	op81484-bs E	8270	1X	op81484,S6F251,30.0,,,1,1,soil	#38(SP);Passed
6F06488	4	op81484-mb E	8270	1X	op81484,S6F251,30.0,,,1,1,soil	ND
6F06489	5	fa77581-7 E	8270	1X	op81484,S6F251,30.3,,,1,1,soil	Ok
6F06490	6	fa77581-8 E	8270	1X	op81484,S6F251,30.0,,,1,1,soil	Ok
6F06491	7	fa77581-9 E	8270	1X	op81484,S6F251,30.2,,,1,1,soil	Ok
6F06492	8	fa77581-10 E	8270	1X	op81484,S6F251,30.1,,,1,1,soil	Ok
6F06493	9	fa77615-1 E	8270	1X	op81484,S6F251,30.3,,,1,1,soil	Ok
6F06494	10	fa77615-2 E	8270	1X	op81484,S6F251,30.3,,,1,1,soil	Ok
6F06495	11	fa77615-3 E	8270	1X	op81484,S6F251,30.3,,,1,1,soil	**Ok + RR2x**
6F06496	12	fa77615-4 E	8270	1X	op81484,S6F251,30.4,,,1,1,soil	Ok
6F06497	13	fa77615-5 E	8270	1X	op81484,S6F251,30.0,,,1,1,soil	Ok
6F06498	14	fa77615-6 E	8270	1X	op81484,S6F251,30.2,,,1,1,soil	Ok
6F06499	15	op81484-ms E	8270	1X	op81484,S6F251,30.0,,,1,1,soil	Passed
6F06500	16	op81484-msd E	8270	1X	op81484,S6F251,30.2,,,1,1,soil	Passed
6F06501	17	fa77615-7 E	8270	1X	op81484,S6F251,30.0,,,1,1,soil	Ok
6F06502	18	fa77615-8 E	8270	1X	op81484,S6F251,30.1,,,1,1,soil	Ok
6F06503	19	fa77615-9 E	8270	1X	op81484,S6F251,30.0,,,1,1,soil	Ok
6F06504	20	fa77615-10 E	8270	1X	op81484,S6F251,30.3,,,1,1,soil	**RR10x**
6F06505	21	fa77615-11 E	8270	1X	op81484,S6F251,30.2,,,1,1,soil	**RR1x carryover**
6F06506	22	fa77615-12 E	8270	1X	op81484,S6F251,30.0,,,1,1,soil	**RR5x**

6F06507	23	fa77615-13 E	8270	1X	op81484,S6F251,30.0,,,1,1,soil	**SS Fail RR1x**
6F06508	24	fa77616-1 E	8270	1X	op81484,S6F251,30.2,,,1,1,soil	Ok
6F06509	25	fa77616-2 E	8270	1X	op81484,S6F251,30.2,,,1,1,soil	**RR5x**
6F06510	26	fa77616-3 E	8270	1X	op81484,S6F251,30.2,,,1,1,soil	**RR2x**

DATE	7/21/2020	METHODS	8270D Simpah	IC/ICC STD LOT	s6349
COLUMN TYPE	ZB5-MS	ACQ. METHOD	FASTPAH	ICV STD LOT	E6624
AMOUNT INJ	1ul	PROC. METHOD	SIMPAHF7GD072120.M	DFTPP	s6313
INSTRUMENT	MSBNA-S7G	CALIB. DATE	7/21/2020	EM VOLTAGE	ev1376
ANALYST	fouads	RUN BATCH	S7G472	ISTD LOT	s6358

DATA FILE	ALS	SAMPLE NAME	METHOD	DF	MISC. INFO	COMMENTS
7G10821	1	dftpp	DFTPP	1	op80679,S7G472,1000,,,1,1,water	
7G10822	1	dftpp	DFTPP	1	op80679,S7G472,1000,,,1,1,water	tune passed, response(148973)
7G10823	2	cc470-4	FASTPAH	100/400	op80679,S7G472,1000,,,1,1,water	failed
7G10824	3	ic472-1	FASTPAH	na	op80679,S7G472,1000,,,1,1,water	
7G10825	4	ic472-2	FASTPAH	na	op80679,S7G472,1000,,,1,1,water	
7G10826	5	ic472-3	FASTPAH	na	op80679,S7G472,1000,,,1,1,water	
7G10827	6	icc472-4	FASTPAH	na	op80679,S7G472,1000,,,1,1,water	na
7G10828	7	ic472-5	FASTPAH	na	op80679,S7G472,1000,,,1,1,water	
7G10829	8	ic472-6	FASTPAH	na	op80679,S7G472,1000,,,1,1,water	
7G10830	9	ic472-7	FASTPAH	na	op80679,S7G472,1000,,,1,1,water	
7G10831	10	ic472-4	FASTPAH	na	op80679,S7G472,1000,,,1,1,water	
7G10832	2	cc472-1	FASTPAH	na	op80679,S7G472,1000,,,1,1,water	na
7G10833	3	ic472-1	FASTPAH	5+495	op80679,S7G472,1000,,,1,1,water	
7G10834	4	ic472-2	FASTPAH	20+380	op80679,S7G472,1000,,,1,1,water	
7G10835	5	ic472-3	FASTPAH	50+350	op80679,S7G472,1000,,,1,1,water	
7G10836	6	icc472-4	FASTPAH	100+300	op80679,S7G472,1000,,,1,1,water	curve passed
7G10837	7	ic472-5	FASTPAH	150+250	op80679,S7G472,1000,,,1,1,water	
7G10838	8	ic472-6	FASTPAH	200+200	op80679,S7G472,1000,,,1,1,water	
7G10839	9	ic472-7	FASTPAH	1X	op80679,S7G472,1000,,,1,1,water	
7G10840	10	icV472-4	FASTPAH	2X SPK	op80679,S7G472,1000,,,1,1,water	passed dibenzo high,carbz low ,pcp less30%
7G10841	1	dftpp	DFTPP	1	op80679,S7G472,1000,,,1,1,water	tune passed
7G10842	2	cc472-4	FASTPAH	100+300	op81126-,s7G472,1000,,,1,1,water	ccv passed
7G10843	3	op71120-mb	FASTPAH	1	op81120,s7G472,1000,,,1,1,water	nd
7G10844	4	op71120-bs	FASTPAH	1	op81120,s7G472,1000,,,1,1,water	8270 spk used rr@1x
7G10845	5	op71126-mb	FASTPAH	1	op81126,s7G472,15.0,,,1,1,soil	nd
7G10846	6	op71126-bs	FASTPAH	1	op81126,s7G472,15.0,,,1,1,soil	ok
7G10847	7	fa76888-1	FASTPAH	1	op81120,s7G472,1050,,,1,1,water	nd
7G10848	8	fa76888-2	FASTPAH	1	op81120,s7G472,1050,,,1,1,water	nd
7G10849	9	fa76888-3	FASTPAH	1	op81120,s7G472,1050,,,1,1,water	nd
7G10850	10	fa76888-4	FASTPAH	1	op81120,s7G472,1050,,,1,1,water	nd
7G10851	11	fa76888-5	FASTPAH	1	op81120,s7G472,1050,,,1,1,water	nd
7G10852	12	fa76888-6	FASTPAH	1	op81120,s7G472,1050,,,1,1,water	nd
7G10853	13	op81120-ms	FASTPAH	1	op81120,s7G472,520,,,1,1,water	ok
7G10854	14	op81120-msd	FASTPAH	1	op81120,s7G472,520,,,1,1,water	ok
7G10855	15	fa76853-2	FASTPAH	1	op81126,s7G472,15.0,,,1,1,soil	ok
7G10856	16	fa76854-2	FASTPAH	1	op81126,s7G472,15.0,,,1,1,soil	ok
7G10857	17	fa76825-1a,5	FASTPAH	5	op81126,s7G472,15.3,,,1,5,soil	ok,dl req matrix viscous
7G10858	18	fa76878-1	FASTPAH	1	op81126,s7G472,15.1,,,1,1,soil	ok
7G10859	19	op81126-ms	FASTPAH	1	op81126,s7G472,15.2,,,1,1,soil	ok
7G10860	20	op81126-msd	FASTPAH	1	op81126,s7G472,14.9,,,1,1,soil	ok
7G10861	21	fa76878-2	FASTPAH	1	op81126,s7G472,14.9,,,1,1,soil	ok
7G10862	22	fa76878-3	FASTPAH	1	op81126,s7G472,15.2,,,1,1,soil	ok
7G10863	23	fa76886-1,5	FASTPAH	5	op81126,s7G472,15.2,,,1,1,soil	ok,dl req matrix viscous
7G10864	24	fa76886-2,5	FASTPAH	5	op81126,s7G472,15.0,,,2,5,soil	ok,dl req matrix viscous
7G10865	25	fa76886-3,5	FASTPAH	5	op81126,s7G472,15.4,,,1,5,soil	ok,dl req matrix viscous
7G10866	26	fa76886-4,5	FASTPAH	5	op81126,s7G472,15.1,,,1,5,soil	surrg low rr@5x
7G10867	27	fa76886-5,5	FASTPAH	5	op81126,s7G472,15.2,,,1,5,soil	ok.dl req matrix viscous
7G10868	28	fa76886-6	FASTPAH	1	op81126,s7G472,15.3,,,1,1,soil	ok
7G10869	3	blk	FASTPAH	1	op81126,s7G472,15.3,,,1,1,soil	na

DATE	8/10/2020	**METHODS**	8270D Simpah	**IC/ICC STD LOT**	**s6420**
COLUMN TYPE	ZB5-MS	**ACQ. METHOD**	FASTPAH	**ICV STD LOT**	**E6750**
AMOUNT INJ	1ul	**PROC. METHOD**	SIMPAHF7GD0072120.M	**DFTPP**	**s6313**
INSTRUMENT	MSBNA-S7G	**CALIB. DATE**	7/21/2020	**EM VOLTAGE**	**ev1376**
ANALYST	nj	**RUN BATCH**	S7G482	**ISTD LOT**	**s6415**

DATA FILE	ALS	SAMPLE NAME	METHOD	DF	MISC. INFO	COMMENTS
7G11098	1	dftpp	DFTPP	1	op81342,S7G482,1000,,,1,1,water	
7G11099	1	DFTPP	DFTPP	1	op81342,S7G482,1000,,,1,1,water	Pass (Response: 59533)
7G11100	2	CC472-4	8270	100/400	op81342,S7G482,1000,,,1,1,water	Ok
7G11101	3	op81483-mb e	8270	1	op81483,S7G482,15.0,,,1,1,soil	ND
7G11102	4	op81483-bs e	8270	1	op81483,S7G482,15.0,,,1,1,soil	Ok
7G11103	5	fa77576-1 e,5	8270	5	op81483,S7G482,15.0,,,1,5,soil	#24(MP) dl req matrix viscous
7G11104	6	fa77576-2 e	8270	1	op81483,S7G482,15.4,,,1,1,soil	#24(MP) ND
7G11105	7	fa77576-3 e	8270	1	op81483,S7G482,15.2,,,1,1,soil	#24(MP) ND
7G11106	8	fa77576-4 e	8270	1	op81483,S7G482,15.5,,,1,1,soil	#24(MP) ND
7G11107	9	fa77576-5 e,5	8270	5	op81483,S7G482,15.3,,,1,5,soil	#24(MP) ND,dl req matrix viscous
7G11108	10	fa77576-6 e	8270	1	op81483,S7G482,15.5,,,1,1,soil	#24(MP) ND
7G11109	11	fa77576-7 e	8270	1	op81483,S7G482,15.5,,,1,1,soil	#24(MP) ND
7G11110	12	fa77576-8 e,5	8270	5	op81483,S7G482,15.3,,,1,5,soil	#24(MP) ,dl req matrix viscous
7G11111	13	fa77576-9 e	8270	1	op81483,S7G482,15.2,,,1,1,soil	#24(MP) ND
7G11112	14	fa77576-10 e	8270	1	op81483,S7G482,15.1,,,1,1,soil	#24(MP) ND
7G11113	15	fa77576-11 e	8270	1	op81483,S7G482,14.9,,,1,1,soil	#24(MP) ND
7G11114	16	fa77576-12 e	8270	1	op81483,S7G482,15.5,,,1,1,soil	#24(MP) ND
7G11115	17	fa77576-13 e	8270	1	op81483,S7G482,15.3,,,1,1,soil	ND
7G11116	18	fa77576-14 e	8270	1	op81483,S7G482,14.9,,,1,1,soil	#24(MP) ND
7G11117	19	fa77581-1 e	8270	1	op81483,S7G482,15.2,,,1,1,soil	#24(MP) ND
7G11118	20	fa77581-2 e	8270	1	op81483,S7G482,15.4,,,1,1,soil	#24(MP) ND
7G11119	21	fa77581-3 e	8270	1	op81483,S7G482,14.9,,,1,1,soil	#24(MP) ND
7G11120	22	fa77581-4 e	8270	1	op81483,S7G482,15.3,,,1,1,soil	#24(MP) ND
7G11121	23	fa77581-5 e,5	8270	5	op81483,S7G482,15.0,,,1,5,soil	ND,dl req matrix viscous
7G11122	24	op81483-ms e,5	8270	5	op81483,S7G482,15.4,,,1,5,soil	#24(MP) Ok,dl req matrix viscous
7G11123	25	op81483-msd e,5	8270	5	op81483,S7G482,15.3,,,1,5,soil	#24(MP) Ok
7G11124	26	fa77581-6 e	8270	1	op81483,S7G482,15.0,,,1,1,soil	#24(MP) ND
7G11125	3	blk	8270	1	op81483,S7G482,15.0,,,1,1,soil	na
7G11126	2	ecc472-4	8270	100/400	op81483,S7G482,15.0,,,1,1,soil	ok for pcp=na

DATE	8/11/2020	**METHODS**	8270D Simpah	**IC/ICC STD LOT**	**s6420**
COLUMN TYPE	ZB5-MS	**ACQ. METHOD**	FASTPAH	**ICV STD LOT**	**E6750**
AMOUNT INJ	1ul	**PROC. METHOD**	SIMPAHF7GD0072120.M	**DFTPP**	**s6313**
INSTRUMENT	MSBNA-S7G	**CALIB. DATE**	7/21/2020	**EM VOLTAGE**	**ev1376**
ANALYST	fouads	**RUN BATCH**	S7G483	**ISTD LOT**	**s6415**

DATA FILE	ALS	SAMPLE NAME	METHOD	DF	MISC. INFO	COMMENTS
7G11127	1	dftpp	DFTPP	1	op81342,S7G483,1000,,,1,1,water	-
7G11128	1	DFTPP	DFTPP	1	op81342,S7G483,1000,,,1,1,water	-
7G11129	1	dftpp	DFTPP	1	op81342,S7G483,1000,,,1,1,water	Passed (Response: 89512)
7G11130	2	CC472-4	8270	1	op81342,S7G483,1000,,,1,1,water	1MNap high, #26(OP)
7G11131	3	op81485-mb e	8270	1	op81485,S7G483,15.0,,,1,1,soil	ND
7G11132	4	op81485-bs e	8270	1	op81485,S7G483,15.0,,,1,1,soil	#26(OP); Passed
7G11133	5	fa77581-7 e	8270	1	op81485,S7G483,15.3,,,1,1,soil	Ok
7G11134	6	fa77581-8 e	8270	1	op81485,S7G483,15.1,,,1,1,soil	#24(MP), Ok
7G11135	7	fa77581-9 e	8270	1	op81485,S7G483,15.3,,,1,1,soil	#24(MP), Ok
7G11136	8	fa77581-10 e	8270	1	op81485,S7G483,15.3,,,1,1,soil	#24(MP), Ok
7G11137	9	fa77615-1 e	8270	1	op81485,S7G483,15.4,,,1,1,soil	Ok
7G11138	10	fa77615-2 e	8270	1	op81485,S7G483,15.4,,,1,1,soil	#24(MP), Ok
7G11139	11	fa77615-3 e	8270	1	op81485,S7G483,15.1,,,1,1,soil	#23,24(OP),Ok
7G11140	12	fa77615-4 e	8270	1	op81485,S7G483,15.4,,,1,1,soil	Ok
7G11141	13	fa77615-5 e	8270	1	op81485,S7G483,15.2,,,1,1,soil	#24(MP), Ok
7G11142	14	fa77615-6 e	8270	1	op81485,S7G483,15.2,,,1,1,soil	#24(MP), Ok
7G11143	15	op81485-ms e	8270	1	op81485,S7G483,15.3,,,1,1,soil	#26(OP), Ok
7G11144	16	op81485-msd e	8270	1	op81485,S7G483,15.2,,,1,1,soil	#26(OP), Ok
7G11145	17	fa77615-7 e	8270	1	op81485,S7G483,15.0,,,1,1,soil	#24(MP), Ok
7G11146	18	fa77615-8 e	8270	1	op81485,S7G483,15.4,,,1,1,soil	#24(MP), Ok
7G11147	19	fa77615-9 e	8270	1	op81485,S7G483,15.2,,,1,1,soil	#24(MP), Ok
7G11148	20	fa77615-10 e	8270	1	op81485,S7G483,15.3,,,1,1,soil	#23,24(OP) #25(MP), Ok
7G11149	21	fa77615-11 e	8270	1	op81485,S7G483,15.1,,,1,1,soil	Ok
7G11150	22	fa77615-12 e	8270	1	op81485,S7G483,15.0,,,1,1,soil	#23,24(OP) #25(MP), Ok
7G11151	23	fa77615-13 e	8270	1	op81485,S7G483,15.3,,,1,1,soil	#23,24(OP)
7G11152	24	fa77616-1 e	8270	1	op81485,S7G483,15.2,,,1,1,soil	#24(MP), Ok
7G11153	25	fa77616-2 e	8270	1	op81485,S7G483,15.3,,,1,1,soil	#5,20,21(MP) #23,24(OP), Ok
7G11154	26	fa77616-3 e	8270	1	op81485,S7G483,15.0,,,1,1,soil	#24(MP), Ok
7G11155	27	fa77576-1 e	8270	1	op81483,S7G483,15.0,,,1,1,soil	#23,24(OP) #25(MP), Ok
7G11156	28	fa77576-5 e	8270	1	op81483,S7G483,15.3,,,1,1,soil	#23,24(OP) #25(MP), Ok
7G11157	29	fa77576-8 e	8270	1	op81483,S7G483,15.3,,,1,1,soil	#23,24(OP) #25(MP), Ok
7G11158	30	fa77581-5 e	8270	1	op81483,S7G483,15.0,,,1,1,soil	Ok
7G11159	31	blk	8270	1	op81483,S7G483,15.0,,,1,1,soil	-

SGS-ORLANDO **MS BNA05-X** **ANALYSIS LOG**

DATE	6/23/2020	**METHODS**	8270D	**IC/ICC STD LOT**	**S6387/S6388**
COLUMN TYPE	DB-5MS	**ACQ. METHOD**	ACQ-BNA	**ICV STD LOT**	**9821D**
AMOUNT INJ	2	**PROC. METHOD**	8270DAPP9SX-062320	**DFTPP**	**S6384**
INSTRUMENT	MS-SX	**CALIB. DATE**	6/23/2020	**EM VOLTAGE**	**1000V**
ANALYST	MV	**RUN BATCH**	SX2918	**ISTD LOT**	**1011OE**

ICV(1) 9821HD ICV(2) 9809A + 9782 + 10072D ICV(3) (OP) 9934A

DATA FILE	ALS	SAMPLE NAME	METHOD	DF	MISC. INFO	COMMENTS
x071355	1	dftpp	DFTPP	1x	op80734,sx2918,1000,,,1,1,water	Pass
x071356	2	ic2918-1 app9	8270	2/400	op80734,sx2918,1000,,,1,1,water	Curve Pass, no Kepone
x071357	3	ic2918-5	8270	10+4/400	op80734,sx2918,1000,,,1,1,water	Curve Pass, no Kepone
x071358	4	ic2918-10	8270	20+8/400	op80734,sx2918,1000,,,1,1,water	Curve Pass, no Kepone
x071359	5	ic2918-25	8270	50+20/400	op80734,sx2918,1000,,,1,1,water	Curve Pass, no Kepone
x071360	6	ic2918-50	8270	100+40/400	op80734,sx2918,1000,,,1,1,water	Curve Pass, no Kepone
x071361	7	ic2918-60	8270	120+48/400	op80734,sx2918,1000,,,1,1,water	Curve Pass, no Kepone
x071362	8	ic2918-75	8270	150+60/400	op80734,sx2918,1000,,,1,1,water	Curve Pass, no Kepone
x071363	9	ic2918-100	8270	200+80/400	op80734,sx2918,1000,,,1,1,water	Curve Pass, no Kepone
x071364	10	ic2918-1 8270	8270	2+2/400	op80734,sx2918,1000,,,1,1,water	Curve Pass
x071365	11	ic2918-5	8270	10+10/400	op80734,sx2918,1000,,,1,1,water	Curve Pass
x071366	12	ic2918-10	8270	20+20/400	op80734,sx2918,1000,,,1,1,water	Curve Pass
x071367	13	ic2918-25	8270	50+50/400	op80734,sx2918,1000,,,1,1,water	Curve Pass
x071368	14	icc2918-50	8270	100+100/400	op80734,sx2918,1000,,,1,1,water	Curve Pass
x071369	15	ic2918-60	8270	120+120/400	op80734,sx2918,1000,,,1,1,water	Curve Pass
x071370	16	ic2918-75	8270	150+150/400	op80734,sx2918,1000,,,1,1,water	Curve Pass
x071371	17	ic2918-100	8270	200+200	op80734,sx2918,1000,,,1,1,water	Curve Pass
x071372	18	icv2918-50	8270	200/400	op80734,sx2918,1000,,,1,1,water	Benzaldehyde low dod
x071373	19	icv2918-50	8270	20+20+10/400	op80734,sx2918,1000,,,1,1,water	Pyridine, 2-Nitroaniline high dod
x071374	20	icv2918-50	8270	10/400	op80734,sx2918,1000,,,1,1,water	Disulfoton low dod, Famphur fail high
x071375	21	icv2918-50	8270	10+20+100/400	op80734,sx2918,1000,,,1,1,water	Low for dod, RR for DOD
x071376	22	icv2918-50	8270	20+20+20/400	op80734,sx2918,1000,,,1,1,water	Methapyr fail high
x071377	1	dftpp	DFTPP	1x	op80734,sx2918,1000,,,1,1,water	Passed (Response: 777585)

x071378	6	cc2918-50 app9	8270	100+40/400	op80734,sx2918,1000,,,1,1,water	Pass, #122,138,147(SP) #125(PII);
x071379	14	cc2918-50 8270	8270	100+100/400	op80734,sx2918,1000,,,1,1,water	#30(SP); Passed
x071380	23	op80558-bs	8270	1x	op80558,sx2918,1000,,,1,1,water	OP compounds fail high
x071381	24	op80558-bs2	8270	1x	op80558,sx2918,1000,,,1,1,water	#122,138,147(SP) #125(PII)
x071382	25	op80558-mb	8270	1x	op80558,sx2918,1000,,,1,1,water	ND
x071383	26	fa75495-7	8270	1x	op80558,sx2918,960,,,1,1,water	**ND, surr high**
x071384	27	fa75495-8	8270	1x	op80558,sx2918,980,,,1,1,water	Ok
x071385	28	fa75495-9	8270	1x	op80558,sx2918,1000,,,1,1,water	Ok
x071386	29	fa75495-10	8270	1x	op80558,sx2918,1000,,,1,1,water	Ok
x071387	30	op80508-bs	8270	1x	op80508,sx2918,1000,,,1,1,water	Fail high
x071388	31	op80508-bs2	8270	1x	op80508,sx2918,1000,,,1,1,water	Fail high, #122,138,147(SP)
x071389	32	op80508-mb	8270	1x	op80508,sx2918,1000,,,1,1,water	ND, 2-Fluorobiphenyl high
x071390	33	fa75495-1	8270	1x	op80508,sx2918,1000,,,1,1,water	**IS,SS Fail RR@1x**
x071391	34	fa75495-2	8270	1x	op80508,sx2918,1000,,,1,1,water	**SS Fail RR@1x**
x071392	35	fa75495-3	8270	1x	op80508,sx2918,1000,,,1,1,water	**SS Fail RR@1x**
x071393	36	op80508-ms	8270	1x	op80508,sx2918,500,,,1,1,water	rr
x071394	37	op80508-msd	8270	1x	op80508,sx2918,500,,,1,1,water	rr
x071395	38	fa75495-4	8270	1x	op80508,sx2918,1000,,,1,1,water	**SS Fail RR@1x**
x071396	39	op80508-ms2	8270	1x	op80508,sx2918,500,,,1,1,water	#122,138,147(SP) #150(PII);rr
x071397	40	op80508-msd2	8270	1x	op80508,sx2918,500,,,1,1,water	#122,138,147(SP); rr
x071398	41	fa75495-5	8270	1x	op80508,sx2918,1000,,,1,1,water	**SS Fail RR@1x**
x071399	42	fa75495-6	8270	1x	op80508,sx2918,1000,,,1,1,water	**SS Fail RR@1x**
x071400	1	dftpp	DFTPP	1x	op80789,sx2918,1000,,,1,1,water	Tune fail
x071401	6	cc2918-50 app9	8270	100+40/400	op80789,sx2918,1000,,,1,1,water	Screen run
x071402	14	cc2918-50 8270	8270	100+100/400	op80789,sx2918,1000,,,1,1,water	Screen run
x071403	60	op80804-bs1	8270	1x	op80804,sx2918,30.0,,,1,1,soil	RR 1x
x071404	61	op80804-bs2	8270	1x	op80804,sx2918,30.0,,,1,1,soil	RR 1x
x071405	62	op80804-mb	8270	1x	op80804,sx2918,30.0,,,1,1,soil	RR 1x
x071406	63	fa76166-5,4	8270	100/400	op80804,sx2918,29.8,,,1,4,soil	RR 1x

x071407	64	fa76166-6,4	8270	100/400	op80804,sx2918,30.4,,,1,4,soil	RR 1x
x071408	65	fa75873-1,10	8270	50/500	op80804,sx2918,30.2,,,1,10,soil	RR 1x
x071409	66	fa75873-32,4	8270	100/400	op80804,sx2918,30.0,,,1,4,soil	RR 1x
x071410	67	fa76070-4,20	8270	25/500	op80804,sx2918,3.7,,,1,1,soil	RR 20x
x071411	68	fa76100-1	8270	1x	op80804,sx2918,3.7,,,1,1,soil	RR 1x
x071412	6	ecc2918-50 app9	8270	100+40/400	op80734,sx2918,1000,,,1,1,water	RR 1x
x071413	14	ecc2918-50 8270	8270	100+100/400	op80734,sx2918,1000,,,1,1,water	RR 1x

SGS-ORLANDO **MS BNA05-X** **ANALYSIS LOG**

DATE	8/11/2020	**METHODS**	8270D	**IC/ICC STD LOT**	**S6387/S6388**
COLUMN TYPE	DB-5MS	**ACQ. METHOD**	ACQ-BNA	**ICV STD LOT**	**9821D**
AMOUNT INJ	2	**PROC. METHOD**	8270DAPP9SX-062320	**DFTPP**	**S6384**
INSTRUMENT	MS-SX	**CALIB. DATE**	6/23/2020	**EM VOLTAGE**	**1000V**
ANALYST	MV	**RUN BATCH**	SX2950	**ISTD LOT**	**10132J**

ICV(1) 9821HD ICV(2) 9809A + 9782 + 10072D ICV(3) (OP) 9934A

DATA FILE	ALS	SAMPLE NAME	METHOD	DF	MISC. INFO	COMMENTS
x072327	100	Cond Std	8270	""""""""""	op81484,sx2950,1000,,,1,1,water	Conditioning
x072328	1	dftpp	DFTPP	1X	op81484,sx2950,1000,,,1,1,water	Pass (Response: 486964)
x072329	2	cc2918-50 8270	8270	100+100/400	op81484,sx2950,1000,,,1,1,water	#30(PII) 2,2'-Oxybis, Hccp low
x072330	3	cc2918-5 8270	8270	10+10/400	op81484,sx2950,1000,,,1,1,water	Peaks present
x072331	4	op81482-bs E	8270	1X	op81482,sx2950,30.0,,,1,1,soil	Pass
x072332	5	op81482-mb E	8270	1X	op81482,sx2950,30.0,,,1,1,soil	ND
x072333	6	fa77576-1 E	8270	1X	op81482,sx2950,30.3,,,1,1,soil	**#105(MP) ok + RR5x**
x072334	7	fa77576-2 E	8270	1X	op81482,sx2950,30.3,,,1,1,soil	Ok
x072335	8	fa77576-3 E	8270	1X	op81482,sx2950,30.2,,,1,1,soil	**ok + RR2x**
x072336	9	fa77576-4 E	8270	1X	op81482,sx2950,30.3,,,1,1,soil	**#105(MP) ok + RR5x**
x072337	10	fa77576-5 E	8270	1X	op81482,sx2950,30.1,,,1,1,soil	**matrix, RR5x**
x072338	11	fa77576-6 E	8270	1X	op81482,sx2950,30.2,,,1,1,soil	Ok
x072339	12	fa77576-7 E	8270	1X	op81482,sx2950,30.3,,,1,1,soil	**#105(MP) ok + RR5x**
x072340	13	fa77576-8 E	8270	1X	op81482,sx2950,30.0,,,1,1,soil	**RR5x**
x072341	14	fa77576-9 E	8270	1X	op81482,sx2950,30.2,,,1,1,soil	Ok
x072342	15	fa77576-10 E	8270	1X	op81482,sx2950,30.1,,,1,1,soil	OK
x072343	16	fa77576-11 E	8270	1X	op81482,sx2950,30.0,,,1,1,soil	**#105(MP) ok + RR2x**
x072344	17	fa77576-12 E	8270	1X	op81482,sx2950,30.2,,,1,1,soil	Ok
x072345	18	fa77576-13 E	8270	1X	op81482,sx2950,30.0,,,1,1,soil	Ok
x072346	19	fa77576-14 E	8270	1X	op81482,sx2950,30.3,,,1,1,soil	**RR2x**
x072347	20	fa77581-1 E	8270	1X	op81482,sx2950,30.1,,,1,1,soil	**RR2x**
x072348	21	fa77581-2 E	8270	1X	op81482,sx2950,30.0,,,1,1,soil	Ok
x072349	22	fa77581-3 E	8270	1X	op81482,sx2950,30.2,,,1,1,soil	**RR2x**

SGS-ORLANDO **MS BNA05-X** **ANALYSIS LOG**

x072350	23	fa77581-4 E	8270	1X	op81482,sx2950,30.2,,,1,1,soil	**RR2x**
x072351	24	fa77581-5 E	8270	1X	op81482,sx2950,30.2,,,1,1,soil	**RR2x**
x072352	25	op81482-ms E	8270	1X	op81482,sx2950,30.0,,,1,1,soil	Ok
x072353	26	op81482-msd E	8270	1X	op81482,sx2950,30.0,,,1,1,soil	Ok
x072354	27	fa77581-6 E	8270	1X	op81482,sx2950,30.2,,,1,1,soil	Ok

SGS-ORLANDO **MS BNA05-X** **ANALYSIS LOG**

DATE	8/12/2020	**METHODS**	8270D	**IC/ICC STD LOT**	**S6387/S6388**
COLUMN TYPE	DB-5MS	**ACQ. METHOD**	ACQ-BNA	**ICV STD LOT**	**9821D**
AMOUNT INJ	2	**PROC. METHOD**	8270DAPP9SX-062320	**DFTPP**	**S6384**
INSTRUMENT	MS-SX	**CALIB. DATE**	6/23/2020	**EM VOLTAGE**	**1000V**
ANALYST	MV	**RUN BATCH**	SX2951	**ISTD LOT**	**10132J**

ICV(1) 9821HD ICV(2) 9809A + 9782 + 10072D ICV(3) (OP) 9934A

DATA FILE	ALS	SAMPLE NAME	METHOD	DF	MISC. INFO	COMMENTS
x072355	100	Cond Std	8270	""""""""""	op81484,sx2951,1000,,,1,1,water	Conditioning
x072356	1	dftpp	DFTPP	1X	op81484,sx2951,1000,,,1,1,water	Pass (response:
x072357	2	cc2918-50 8270	8270	100+100/400	op81484,sx2951,1000,,,1,1,water	#30 (SP) Hccp, PCP low Di-n-octp,Indeno,Dz[a,h]anc high
x072358	3	cc2918-5 8270	8270	10+10/400	op81484,sx2951,1000,,,1,1,water	Peaks Present
x072359	4	fa77576-1 E,5	8270	100/500	op81482,sx2951,30.3,,,1,5,soil	ok, E combined
x072360	5	fa77576-3 E,2	8270	200/400	op81482,sx2951,30.2,,,1,2,soil	ok, E combined
x072361	6	fa77576-4 E,5	8270	100/500	op81482,sx2951,30.3,,,1,5,soil	ok, E combined
x072362	7	fa77576-5 E,5	8270	100/500	op81482,sx2951,30.1,,,1,5,soil	ok, E combined
x072363	8	fa77576-7 E,5	8270	100/500	op81482,sx2951,30.3,,,1,5,soil	wrong preparation, RR 5x
x072364	9	fa77576-8 E,5	8270	100/500	op81482,sx2951,30.0,,,1,5,soil	wrong preparation, RR 5x
x072365	10	fa77576-11 E,2	8270	200/400	op81482,sx2951,30.0,,,1,2,soil	wrong preparation, RR 2x
x072366	11	fa77576-14 E	8270	1x	op81482,sx2951,30.3,,,1,1,soil	ok, E combined
x072367	12	fa77581-1 E,2	8270	200/400	op81482,sx2951,30.1,,,1,2,soil	wrong preparation, RR 2x
x072368	29	fa77576-7 E,5	8270	100/500	op81482,sx2951,30.3,,,1,5,soil	ok, E combined
x072369	30	fa77576-8 E,5	8270	100/500	op81482,sx2951,30.0,,,1,5,soil	ok, E combined
x072370	31	fa77576-11 E,2	8270	200/400	op81482,sx2951,30.0,,,1,2,soil	rr 5X
x072371	33	fa77581-1 E,2	8270	200/400	op81482,sx2951,30.1,,,1,2,soil	ok, E combined
x072372	13	fa77581-3 E,5	8270	100/500	op81482,sx2951,30.2,,,1,5,soil	wrong preparation, RR 5x
x072373	14	fa77581-4 E,2	8270	200/400	op81482,sx2951,30.2,,,1,2,soil	ok, E combined
x072374	15	fa77581-5 E,2	8270	200/400	op81482,sx2951,30.2,,,1,2,soil	E-combine
x072375	34	fa77576-11 E,5	8270	100/500	op81482,sx2951,30.0,,,1,5,soil	E-combine #105(PII)
x072376	13	fa77581-3 E,5	8270	100/500	op81482,sx2951,30.2,,,1,5,soil	E-combine

x072377	16	fa77615-3 E,2	8270	200/400	op81484,sx2951,30.3,,,1,2,soil	E-combine
x072378	17	fa77615-10 E,5	8270	100/500	op81484,sx2951,30.3,,,1,5,soil	RR5x CCV hits #105(PII)
x072379	18	fa77615-12 E,5	8270	100/500	op81484,sx2951,30.0,,,1,5,soil	E-combine
x072380	19	fa77615-13 E	8270	200/400	op81484,sx2951,30.0,,,1,1,soil	R-ext surr↓
x072381	20	fa77612-2 E,5	8270	100/500	op81484,sx2951,30.2,,,1,5,soil	E-combine #6(MP)
x072382	21	fa77612-3 E,2	8270	200/400	op81484,sx2951,30.2,,,1,2,soil	E-combine #6(MP)
x072383	22	fa77615-11 E	8270	1X	op81484,sx2951,30.2,,,1,1,soil	OK
x072384	23	fa77384-1	8270	1X	op81455,sx2951,1000,,,1,1,water	surr↓, CFS
x072385	24	op81455-ms,5	8270	100/500	op81455,sx2951,500,,,1,5,water	RR5x Out of tune #30,62(MP)
x072386	25	op81455-ms,5	8270	100/500	op81455,sx2951,500,,,1,5,water	RR5x Out of tune #30,62(MP)

SGS - ORLANDO

SOLID SAMPLE PREP REPORT

Date/Time Started: 08/10/2020 08:30 {mm/dd/yy 24:00}

Date/Time Finished: 8/10/2020 15:20 {mm/dd/yy 24:00}

Prep Method: _____ 3550C _____ 3580A

Analytical Method: 8270

Batch No: OP81482

Ext. By: AF/JM Conc. By: EA Vialed By: AN Balance ID: NAVS

Sample ID	Bottle Number	Amount Extracted (g)	Surrogate Amount	Spike Amount	Final Volume (ml)	Comments
OP81482-MB	-	30.0	0.5		1ml	
OP81482-BS	-	30.0	0.5	0.5 + 0.5		
FA77576-1	1	30.3				
FA77576-2	1	30.3				
FA77576-3	1	30.2				
FA77576-4	1	30.3				
FA77576-5	1	30.1				
FA77576-6	1	30.2				
FA77576-7	1	30.3				
FA77576-8	1	30.0				
FA77576-9	1	30.2				
FA77576-10	1	30.1				
FA77576-11	1	30.0				
FA77576-12	1	30.2				
FA77576-13	1	30.0				
FA77576-14	1	30.3				
FA77581-1	1	30.1				
FA77581-2	1	30.0				
FA77581-3	1	30.2				
FA77581-4	1	30.2				
FA77581-5	1	30.2				
FA77581-6	1	30.2				
FA77581-5-MS	1	30.0	0.5	0.5 + 0.5		
FA77581-5-MSD	1	30.0	0.5	0.5 + 0.5		
DUP						

Comments:

Surr ID: E6743E Conc: 100/200 PPM Exp. Date: 12/30/20 Inj. By: AF Ver. By: JM

Spk ID: 101270 Conc: Varied Exp. Date: 12/31/20 Inj. By: AF Ver. By: JM

Spk ID2: E6746 Conc: 100 PPM Exp. Date: 01/01/21 Inj. By: AF Ver. By: JM

Initial Bath Temp (Therm ID): TH3.1 Exchange Bath/N-Evap Temp (Therm ID): —

Observed Temp °C: 45°C Observed Temp °C: — Corr. Temp °C: —

CH_2Cl_2 Lot#	201444	Hexane Lot #	X	Na_2SO_4 Lot#	SS2551
CH_3CN Lot #	X	Methanol Lot #	X	Acetone Lot#	197447
Filter Paper Lot#	231019	pH Paper #	X	Reagent #	X

Copper Lot # X If Sulfur Cleaning is performed in Extractions (3660B)

Relinquished By: JM Date: 8/10/2020

Accepted By: SH Date: 8/10/20

NF 02/16

SGS ORLANDO

SOLID SAMPLE PREP REPORT

Date/Time Started: 8/10/20 10:22 (mm/dd/yy 24:00)

Date/Time Finished: 8/10/2020 14:00 (mm/dd/yy 24:00)

Prep Method: 3546 Analytical Method: SIMPCP

Microwave ID: MARS3 Program: SIMPCP

Batch#: OP81483 Balance ID: Advpro 8

Ext. By: JMAr Conc. By: EA Vialed By: AN

Sample ID	Bottle Number	Amount Extracted (g)	Surrogate Amount	Spike Amount	Final Volume (ml)	MW Pos	Comments
OP81483-MB	-	15.0	0.1		1 ML	17	
OP81483-BS	-	15.0	0.1	0.5		18	
FA77576-1	1	15.0				19	
FA77576-2	1	15.4				20	
FA77576-3	1	15.2				21	
FA77576-4	1	15.5				22	
FA77576-5	1	15.3				23	
FA77576-6	1	15.5				24	
FA77576-7	1	15.5				25	
FA77576-8	1	15.3				26	
FA77576-9	1	15.2				27	
FA77576-10	1	15.1				28	
FA77576-11	1	14.9				29	
FA77576-12	1	15.5				30	
FA77576-13	1	15.3				31	
FA77576-14	1	14.9				32	
FA77581-1	1	15.2				33	
FA77581-2	1	15.4				34	
FA77581-3	1	14.9				35	
FA77581-4	1	15.3				36	
FA77581-5	1	15.0				37	
FA77581-6	1	15.0	2			38	
FA77581-5-MS	1	15.4	0.1	0.5		39	
FA77581-5-MSD	1	15.3	0.1	0.5		40	
DUP							

Comments:

Surr ID: R66649 Conc: 100 PPM Exp. Date: 10/2020 Inj. By: JM Ver. By: AF

Spk ID: R66750 Conc: 20/10 PPM Exp. Date: 1/4/21 Inj. By: JM Ver. By: AF

Initial Bath Temp (Therm ID): _____ Exchange Bath/N-Evap Temp (Therm ID): _____

Observed Temp °C: _____ Observed Temp °C: _____ Corr. Temp °C: _____

CH2CL2 Lot# 201444 Hexane Lot # X Na2SO4 Lot# SS2551

CH3CN Lot # X Methanol Lot # X Acetone Lot# 29110

Filter Paper Lot# 231019 pH Paper # X Reagent # X

Copper Lot # X If Sulfur Cleaning is performed in Extractions (3660B)

Relinquished By: _____ Date: 8/10/2020

Accepted By: _____ Date: 08/10/20

NF 02/16

7.8.2

7

SGS - ORLANDO

SOLID SAMPLE PREP REPORT

Date/Time Started: 8/10/20 13:00 {mm/dd/yy 24:00}

Date/Time Finished: 8/11/2020 10:00 {mm/dd/yy 24:00}

Prep Method: _____ 3550C _____ 3580A

Analytical Method: 8270

Batch No: OP81484

Ext. By: AF JM Conc. By: EA Vialed By: AN Balance ID: NAVS

Sample ID	Bottle Number	Amount Extracted (g)	Surrogate Amount	Spike Amount	Final Volume (ml)	Comments
OP81484-MB	-	30.0	0.5		1 ml	
OP81484-BS	-	30.0	0.5	0.5 + 0.5		
FA77581-7	1	30.3				
FA77581-8	1	30.0				
FA77581-9	1	30.2				
FA77581-10	1	30.1				
FA77615-1	1	30.3				
FA77615-2	1	30.3				
FA77615-3	1	30.3				
FA77615-4	1	30.4				
FA77615-5	1	30.0				
FA77615-6	1	30.2				
FA77615-7	1	30.0				
FA77615-8	1	30.1				
FA77615-9	1	30.0				
FA77615-10	1	30.3				
FA77615-11	1	30.2				
FA77615-12	1	30.0				
FA77615-13	1	30.0				
FA77616-1	1	30.2				
FA77616-2	1	30.2				
FA77616-3	1	30.2				
FA77615-6-MS	1	30.0	0.5	0.5 + 0.5		
FA77615-6-MSD	1	30.2	0.5	0.5 + 0.5		
DUP						

Comments:

Surr ID: _____ Conc: 100/200 PPM Exp. Date: _____ Inj. By: _____ Ver. By: _____

Spk ID: 10127-1 Conc: Varied Exp. Date: 12/31/20 Inj. By: _____ Ver. By: _____

Spk ID2: E6746 Conc: 100 PPM Exp. Date: 01/01/21 Inj. By: _____ Ver. By: _____

Initial Bath Temp (Therm ID): TH#3.4 Exchange Bath/N-Evap Temp (Therm ID): —

Observed Temp °C: 45° Observed Temp °C: — Corr. Temp °C: —

CH_2Cl_2 Lot#	201444	Hexane Lot #	X	Na_2SO_4 Lot#	SS2551
CH_3CN Lot #	X	Methanol Lot #	X	Acetone Lot#	197447
Filter Paper Lot#	231019	pH Paper #	X	Reagent #	X

Copper Lot # X If Sulfur Cleaning is performed in Extractions (3660B)

Relinquished By: JM Date: 8/11/2020

Accepted By: _____ Date: _____

NF 02/16

SGS ORLANDO **SOLID SAMPLE PREP REPORT**

Date/Time: 08/10/2020 12:00 {mm/dd/yy 24:00} Started: Prep Method: 3546 Analytical Method: SIMPCP

Date/Time: 8/10/2020 14:00 {mm/dd/yy 24:00} Finished: Microwave ID: NAV5 Program: SIMPCP

Batch#: OP81485 Balance ID: Advpro 8

Ext. By: AF, JM Conc. By: EA Vialed By: AM

Sample ID	Bottle Number	Amount Extracted (g)	Surrogate Amount	Spike Amount	Final Volume (ml)	MW Pos	Comments
OP81485-MB	-	15.0	0.1		1.0ml	1	
OP81485-BS	-	15.0	0.1	0.5		2	
FA77581-7	1	15.3				5	
FA77581-8	1	15.1				6	
FA77581-9	1	15.3				7	
FA77581-10	1	15.3				8	
FA77615-1	1	15.4				9	
FA77615-2	1	15.4				10	
FA77615-3	1	15.1				11	
FA77615-4	1	15.4				12	
FA77615-5	1	15.2				13	
FA77615-6	1	15.2				14	
FA77615-7	1	15.0				15	
FA77615-8	1	15.4				16	
FA77615-9	1	15.2				17	
FA77615-10	1	15.3				18	
FA77615-11	1	15.1				19	
FA77615-12	1	15.0				20	
FA77615-13	1	15.3				21	
FA77616-1	1	15.2				22	
FA77616-2	1	15.3				23	
FA77616-3	1	15.0				24	
FA77615-6-MS	1	15.3	0.1	0.5		3	
FA77615-6-MSD	1	15.2	0.1	0.5		4	
DUP							

Comments:

Surr ID: E66990 Conc: 100 PPM Exp. Date: 10/02/20 Inj. By: AF Ver. By: JM

Spk ID: E67506 Conc: 20/10 PPM Exp. Date: 01/09/20 Inj. By: AF Ver. By: JM

Initial Bath Temp (Therm ID): TH#3,4 Observed Temp °C: 45c Exchange Bath/N-Evap Temp (Therm ID): — Observed Temp °C: — Corr. Temp °C: —

CH2CL2 Lot#	201444	Hexane Lot #	X	Na2SO4 Lot#	SS2551
CH3CN Lot #	X	Methanol Lot #	X	Acetone Lot#	29110
Filter Paper Lot#	231019	pH Paper #	X	Reagent #	X
Copper Lot #	X	If Sulfur Cleaning is performed in Extractions (3660B)			

Relinquished By: AM Date: 8/10/2020

Accepted By: Fouad T Date: 08/10/20

NF 02/16

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Percent Solids Raw Data Summary

Percent Solids Raw Data Summary

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: FA77581-1 **Analyzed:** 08-AUG-20 by JB **Method:** SM19 2540G
ClientID: CS-SS-104

Wet Weight (Total)	15.35	g
Tare Weight	2.56	g
Dry Weight (Total)	13.67	g
Solids, Percent	86.9	%
Moisture, Percent	13.1	%

Sample: FA77581-1 **Analyzed:** 08-AUG-20 by JB **Method:** SM19 2540G
ClientID: CS-SS-104

Wet Weight (Total)	15.35	g
Tare Weight	2.56	g
Dry Weight (Total)	13.67	g
Solids, Percent	86.9	%
Moisture, Percent	13.1	%

Sample: FA77581-2 **Analyzed:** 08-AUG-20 by JB **Method:** SM19 2540G
ClientID: CS-23

Wet Weight (Total)	12.57	g
Tare Weight	2.52	g
Dry Weight (Total)	11.85	g
Solids, Percent	92.8	%
Moisture, Percent	7.2	%

Sample: FA77581-2 **Analyzed:** 08-AUG-20 by JB **Method:** SM19 2540G
ClientID: CS-23

Wet Weight (Total)	12.57	g
Tare Weight	2.52	g
Dry Weight (Total)	11.85	g
Solids, Percent	92.8	%
Moisture, Percent	7.2	%

Sample: FA77581-3 **Analyzed:** 08-AUG-20 by JB **Method:** SM19 2540G
ClientID: CS-SS-101

Wet Weight (Total)	13.24	g
Tare Weight	2.54	g
Dry Weight (Total)	12.33	g
Solids, Percent	91.5	%
Moisture, Percent	8.5	%

Percent Solids Raw Data Summary

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: FA77581-3 **Analyzed:** 08-AUG-20 by JB **Method:** SM19 2540G
ClientID: CS-SS-101

Wet Weight (Total)	13.24	g
Tare Weight	2.54	g
Dry Weight (Total)	12.33	g
Solids, Percent	91.5	%
Moisture, Percent	8.5	%

Sample: FA77581-4 **Analyzed:** 08-AUG-20 by JB **Method:** SM19 2540G
ClientID: CS-22

Wet Weight (Total)	13.2	g
Tare Weight	2.56	g
Dry Weight (Total)	12.13	g
Solids, Percent	89.9	%
Moisture, Percent	10.1	%

Sample: FA77581-4 **Analyzed:** 08-AUG-20 by JB **Method:** SM19 2540G
ClientID: CS-22

Wet Weight (Total)	13.2	g
Tare Weight	2.56	g
Dry Weight (Total)	12.13	g
Solids, Percent	89.9	%
Moisture, Percent	10.1	%

Sample: FA77581-5 **Analyzed:** 08-AUG-20 by JB **Method:** SM19 2540G
ClientID: CS-24

Wet Weight (Total)	14.22	g
Tare Weight	2.53	g
Dry Weight (Total)	12.85	g
Solids, Percent	88.3	%
Moisture, Percent	11.7	%

Sample: FA77581-5 **Analyzed:** 08-AUG-20 by JB **Method:** SM19 2540G
ClientID: CS-24

Wet Weight (Total)	14.22	g
Tare Weight	2.53	g
Dry Weight (Total)	12.85	g
Solids, Percent	88.3	%
Moisture, Percent	11.7	%

Percent Solids Raw Data Summary

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: FA77581-6 **Analyzed:** 08-AUG-20 by JB **Method:** SM19 2540G
ClientID: CS-RISB-02

Wet Weight (Total)	13.03	g
Tare Weight	2.55	g
Dry Weight (Total)	12.12	g
Solids, Percent	91.3	%
Moisture, Percent	8.7	%

Sample: FA77581-6 **Analyzed:** 08-AUG-20 by JB **Method:** SM19 2540G
ClientID: CS-RISB-02

Wet Weight (Total)	13.03	g
Tare Weight	2.55	g
Dry Weight (Total)	12.12	g
Solids, Percent	91.3	%
Moisture, Percent	8.7	%

Sample: FA77581-7 **Analyzed:** 08-AUG-20 by JB **Method:** SM19 2540G
ClientID: SS-108-D

Wet Weight (Total)	12.58	g
Tare Weight	2.57	g
Dry Weight (Total)	10.6	g
Solids, Percent	80.2	%
Moisture, Percent	19.8	%

Sample: FA77581-7 **Analyzed:** 08-AUG-20 by JB **Method:** SM19 2540G
ClientID: SS-108-D

Wet Weight (Total)	12.58	g
Tare Weight	2.57	g
Dry Weight (Total)	10.6	g
Solids, Percent	80.2	%
Moisture, Percent	19.8	%

Sample: FA77581-8 **Analyzed:** 08-AUG-20 by JB **Method:** SM19 2540G
ClientID: CS-SB-125

Wet Weight (Total)	13.36	g
Tare Weight	2.62	g
Dry Weight (Total)	12.47	g
Solids, Percent	91.7	%
Moisture, Percent	8.3	%

Percent Solids Raw Data Summary

Job Number: FA77581
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: FA77581-8 **Analyzed:** 08-AUG-20 by JB **Method:** SM19 2540G
ClientID: CS-SB-125

Wet Weight (Total)	13.36	g
Tare Weight	2.62	g
Dry Weight (Total)	12.47	g
Solids, Percent	91.7	%
Moisture, Percent	8.3	%

Sample: FA77581-9 **Analyzed:** 08-AUG-20 by JB **Method:** SM19 2540G
ClientID: CS-25

Wet Weight (Total)	12.97	g
Tare Weight	2.58	g
Dry Weight (Total)	11.79	g
Solids, Percent	88.6	%
Moisture, Percent	11.4	%

Sample: FA77581-9 **Analyzed:** 08-AUG-20 by JB **Method:** SM19 2540G
ClientID: CS-25

Wet Weight (Total)	12.97	g
Tare Weight	2.58	g
Dry Weight (Total)	11.79	g
Solids, Percent	88.6	%
Moisture, Percent	11.4	%

Sample: FA77581-10 **Analyzed:** 08-AUG-20 by JB **Method:** SM19 2540G
ClientID: CS-26

Wet Weight (Total)	13.09	g
Tare Weight	2.58	g
Dry Weight (Total)	12.35	g
Solids, Percent	93	%
Moisture, Percent	7	%

Sample: FA77581-10 **Analyzed:** 08-AUG-20 by JB **Method:** SM19 2540G
ClientID: CS-26

Wet Weight (Total)	13.09	g
Tare Weight	2.58	g
Dry Weight (Total)	12.35	g
Solids, Percent	93	%
Moisture, Percent	7	%

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

EarthCon Consultants, Inc

KMCC Navassa Site; 120 Quality Dr, Navassa, NC

02.20200007.00

SGS Job Number: FA77615

Sampling Dates: 08/06/20 - 08/07/20



Report to:

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ATTN: Mary Ann Brookshire

Total number of pages in report: **1115**

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Caitlin Brice, M.S.
General Manager

Client Service contact: Muna Mohammed 407-425-6700

Certifications: FL(E83510), LA(03051), KS(E-10327), IL(200063), NC(573), NJ(FL002), NY(12022), SC(96038001) DoD ELAP(ANAB L2229), AZ(AZ0806), CA(2937), TX(T104704404), PA(68-03573), VA(460177), AK, AR, IA, KY, MA, MS, ND, NH, NV, OK, OR, UT, WA, WV

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SGS North America Inc.

Sample Summary

EarthCon Consultants, Inc

Job No: FA77615

KMCC Navassa Site; 120 Quality Dr, Navassa, NC
Project No: 02.20200007.00

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA77615-1	08/06/20	14:45	STCT	08/08/20	SO	Soil	CS-29
FA77615-2	08/06/20	14:20	STCT	08/08/20	SO	Soil	CS-30
FA77615-3	08/06/20	15:10	STCT	08/08/20	SO	Soil	CS-31
FA77615-4	08/06/20	00:00	STCT	08/08/20	SO	Soil	DUP-01
FA77615-5	08/07/20	08:40	STCT	08/08/20	SO	Soil	CS-40
FA77615-6	08/07/20	09:11	STCT	08/08/20	SO	Soil	CS-41
FA77615-6D	08/07/20	09:11	STCT	08/08/20	SO	Soil Dup/MSD	CS-41
FA77615-6S	08/07/20	09:11	STCT	08/08/20	SO	Soil Matrix Spike	CS-41
FA77615-7	08/07/20	09:45	STCT	08/08/20	SO	Soil	CS-42
FA77615-8	08/07/20	10:10	STCT	08/08/20	SO	Soil	CS-43
FA77615-9	08/07/20	10:45	STCT	08/08/20	SO	Soil	CS-44
FA77615-10	08/07/20	11:30	STCT	08/08/20	SO	Soil	CS-45

This report contains results reported as ND = Not detected. The following applies:
Organics ND = Not detected above the MDL

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Sample Summary
(continued)

EarthCon Consultants, Inc

Job No: FA77615

KMCC Navassa Site; 120 Quality Dr, Navassa, NC
Project No: 02.20200007.00

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
FA77615-11	08/07/20	11:50	STCT	08/08/20	SO	Soil	CS-54
FA77615-12	08/07/20	12:12	STCT	08/08/20	SO	Soil	CS-46
FA77615-13	08/07/20	12:42	STCT	08/08/20	SO	Soil	CS-47

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: EarthCon Consultants, Inc **Job No:** FA77615

Site: KMCC Navassa Site; 120 Quality Dr, Navassa, NC **Report Date** 8/17/2020 12:58:24

13 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were collected on between 08/06/2020 and 08/07/2020 and were received at SGS North America Inc - Orlando on 08/08/2020 properly preserved, at 3.4 Deg. C and intact. These Samples received an SGS Orlando job number of FA77615. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section. Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

MS Semi-volatiles By Method SW846 8270E

Matrix: SO **Batch ID:** OP81484

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

Sample(s) FA77615-6MS, FA77615-6MSD were used as the QC samples indicated.

All method blanks for this batch meet method specific criteria.

Matrix: SO **Batch ID:** OP81538

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

OP81538-MS for Benzo(b)fluoranthene: Outside control limits due to high level in sample relative to spike amount.

OP81538-MS for Pyrene: Outside control limits due to high level in sample relative to spike amount.

MS Semi-volatiles By Method SW846 8270E BY SIM

Matrix: SO **Batch ID:** OP81485

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

Sample(s) FA77615-6MS, FA77615-6MSD were used as the QC samples indicated.

All method blanks for this batch meet method specific criteria.

General Chemistry By Method SM19 2540G

Matrix: SO **Batch ID:** GN85881

Sample(s) FA77615-6DUP were used as the QC samples for Solids, Percent.

SGS Orlando certifies that this report meets the project requirements for analytical data produced for the samples as received at SGS Orlando and as stated on the COC. SGS Orlando certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the SGS Orlando Quality Manual except as noted above. This report is to be used in its entirety. SGS Orlando is not responsible for any assumptions of data quality if partial data packages are used.

Narrative prepared by:

_____

Ariel Hartney, Client Services *(Signature on file)*

Summary of Hits

Job Number: FA77615
Account: EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC
Collected: 08/06/20 thru 08/07/20

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FA77615-1	**CS-29**					
Acenaphthylene		41.7 J	180	18	ug/kg	SW846 8270E
Anthracene		62.2 J	180	20	ug/kg	SW846 8270E
Benzo(a)anthracene		51.8 J	180	18	ug/kg	SW846 8270E
Benzo(a)pyrene		43.0 J	180	21	ug/kg	SW846 8270E
Benzo(b)fluoranthene		137 J	180	20	ug/kg	SW846 8270E
Benzo(g,h,i)perylene		30.6 J	180	19	ug/kg	SW846 8270E
Benzo(k)fluoranthene		51.2 J	180	23	ug/kg	SW846 8270E
Chrysene		88.6 J	180	18	ug/kg	SW846 8270E
Fluoranthene		91.5 J	180	18	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene		48.5 J	180	22	ug/kg	SW846 8270E
Pyrene		152 J	180	21	ug/kg	SW846 8270E
FA77615-2	**CS-30**					
Acenaphthylene		56.4 J	190	19	ug/kg	SW846 8270E
Anthracene		102 J	190	21	ug/kg	SW846 8270E
Benzo(a)anthracene		134 J	190	19	ug/kg	SW846 8270E
Benzo(a)pyrene		156 J	190	22	ug/kg	SW846 8270E
Benzo(b)fluoranthene		439	190	20	ug/kg	SW846 8270E
Benzo(g,h,i)perylene		105 J	190	19	ug/kg	SW846 8270E
Benzo(k)fluoranthene		144 J	190	24	ug/kg	SW846 8270E
Chrysene		237	190	19	ug/kg	SW846 8270E
Dibenzo(a,h)anthracene		28.9 J	190	23	ug/kg	SW846 8270E
Fluoranthene		228	190	19	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene		139 J	190	23	ug/kg	SW846 8270E
Pyrene		311	190	21	ug/kg	SW846 8270E
FA77615-3	**CS-31**					
Acenaphthene		36.1 J	180	19	ug/kg	SW846 8270E
Acenaphthylene		445	180	18	ug/kg	SW846 8270E
Anthracene		1240	180	20	ug/kg	SW846 8270E
Benzo(a)anthracene		909	180	18	ug/kg	SW846 8270E
Benzo(a)pyrene		1110	180	22	ug/kg	SW846 8270E
Benzo(b)fluoranthene		2570	180	20	ug/kg	SW846 8270E
Benzo(g,h,i)perylene		758	180	19	ug/kg	SW846 8270E
Benzo(k)fluoranthene		852	180	24	ug/kg	SW846 8270E
Chrysene		1520	180	19	ug/kg	SW846 8270E
Dibenzo(a,h)anthracene		197	180	23	ug/kg	SW846 8270E
Fluoranthene		2060	180	18	ug/kg	SW846 8270E
Fluorene		61.0 J	180	20	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene		957	180	22	ug/kg	SW846 8270E
Phenanthrene		118 J	180	18	ug/kg	SW846 8270E

Summary of Hits

Job Number: FA77615
Account: EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC
Collected: 08/06/20 thru 08/07/20

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Pyrene		3490	370	42	ug/kg	SW846 8270E
FA77615-4	**DUP-01**					
Acenaphthylene		70.9 J	210	21	ug/kg	SW846 8270E
Anthracene		73.1 J	210	24	ug/kg	SW846 8270E
Benzo(a)anthracene		39.9 J	210	21	ug/kg	SW846 8270E
Benzo(a)pyrene		36.1 J	210	25	ug/kg	SW846 8270E
Benzo(b)fluoranthene		119 J	210	23	ug/kg	SW846 8270E
Benzo(g,h,i)perylene		26.4 J	210	22	ug/kg	SW846 8270E
Benzo(k)fluoranthene		38.1 J	210	28	ug/kg	SW846 8270E
Chrysene		72.8 J	210	22	ug/kg	SW846 8270E
Fluoranthene		86.3 J	210	21	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene		41.8 J	210	26	ug/kg	SW846 8270E
Pyrene		143 J	210	24	ug/kg	SW846 8270E
FA77615-5	**CS-40**					
Acenaphthene		29.3 J	180	20	ug/kg	SW846 8270E
Acenaphthylene		361	180	18	ug/kg	SW846 8270E
Anthracene		653	180	21	ug/kg	SW846 8270E
Benzo(a)anthracene		986	180	18	ug/kg	SW846 8270E
Benzo(a)pyrene		1570	180	22	ug/kg	SW846 8270E
Benzo(b)fluoranthene		3670	180	20	ug/kg	SW846 8270E
Benzo(g,h,i)perylene		894	180	19	ug/kg	SW846 8270E
Benzo(k)fluoranthene		1230	180	24	ug/kg	SW846 8270E
Chrysene		1680	180	19	ug/kg	SW846 8270E
Dibenzo(a,h)anthracene		285	180	23	ug/kg	SW846 8270E
Fluoranthene		1410	180	18	ug/kg	SW846 8270E
Fluorene		50.2 J	180	20	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene		1330	180	22	ug/kg	SW846 8270E
Phenanthrene		81.9 J	180	18	ug/kg	SW846 8270E
Pyrene		2270	180	21	ug/kg	SW846 8270E
FA77615-6	**CS-41**					
Acenaphthylene		247	190	19	ug/kg	SW846 8270E
Anthracene		472	190	21	ug/kg	SW846 8270E
Benzo(a)anthracene		379	190	19	ug/kg	SW846 8270E
Benzo(a)pyrene		351	190	22	ug/kg	SW846 8270E
Benzo(b)fluoranthene		946	190	20	ug/kg	SW846 8270E
Benzo(g,h,i)perylene		293	190	19	ug/kg	SW846 8270E
Benzo(k)fluoranthene		276	190	25	ug/kg	SW846 8270E
Chrysene		538	190	19	ug/kg	SW846 8270E
Dibenzo(a,h)anthracene		72.0 J	190	23	ug/kg	SW846 8270E

Summary of Hits

Job Number: FA77615
Account: EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC
Collected: 08/06/20 thru 08/07/20

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Fluoranthene		539	190	19	ug/kg	SW846 8270E
Fluorene		42.1 J	190	20	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene		379	190	23	ug/kg	SW846 8270E
1-Methylnaphthalene		21.4 J	190	19	ug/kg	SW846 8270E
2-Methylnaphthalene		29.3 J	190	19	ug/kg	SW846 8270E
Naphthalene		25.7 J	190	19	ug/kg	SW846 8270E
Phenanthrene		95.1 J	190	19	ug/kg	SW846 8270E
Pyrene		672	190	22	ug/kg	SW846 8270E
FA77615-7	**CS-42**					
Acenaphthylene		200	200	20	ug/kg	SW846 8270E
Anthracene		333	200	22	ug/kg	SW846 8270E
Benzo(a)anthracene		382	200	20	ug/kg	SW846 8270E
Benzo(a)pyrene		377	200	23	ug/kg	SW846 8270E
Benzo(b)fluoranthene		968	200	21	ug/kg	SW846 8270E
Benzo(g,h,i)perylene		251	200	20	ug/kg	SW846 8270E
Benzo(k)fluoranthene		316	200	26	ug/kg	SW846 8270E
Chrysene		588	200	20	ug/kg	SW846 8270E
Dibenzo(a,h)anthracene		69.8 J	200	25	ug/kg	SW846 8270E
Fluoranthene		720	200	20	ug/kg	SW846 8270E
Fluorene		38.2 J	200	21	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene		347	200	24	ug/kg	SW846 8270E
2-Methylnaphthalene		24.2 J	200	20	ug/kg	SW846 8270E
Naphthalene		20.4 J	200	20	ug/kg	SW846 8270E
Phenanthrene		103 J	200	20	ug/kg	SW846 8270E
Pyrene		830	200	23	ug/kg	SW846 8270E
FA77615-8	**CS-43**					
Acenaphthylene		266	190	19	ug/kg	SW846 8270E
Anthracene		472	190	21	ug/kg	SW846 8270E
Benzo(a)anthracene		708	190	19	ug/kg	SW846 8270E
Benzo(a)pyrene		725	190	22	ug/kg	SW846 8270E
Benzo(b)fluoranthene		1880	190	20	ug/kg	SW846 8270E
Benzo(g,h,i)perylene		488	190	19	ug/kg	SW846 8270E
Benzo(k)fluoranthene		601	190	24	ug/kg	SW846 8270E
Chrysene		1100	190	19	ug/kg	SW846 8270E
Dibenzo(a,h)anthracene		133 J	190	23	ug/kg	SW846 8270E
Fluoranthene		836	190	19	ug/kg	SW846 8270E
Fluorene		41.2 J	190	20	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene		650	190	23	ug/kg	SW846 8270E
Phenanthrene		70.8 J	190	19	ug/kg	SW846 8270E
Pyrene		1140	190	21	ug/kg	SW846 8270E

Summary of Hits

Job Number: FA77615
Account: EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC
Collected: 08/06/20 thru 08/07/20

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FA77615-9	**CS-44**					
Acenaphthylene		276	190	19	ug/kg	SW846 8270E
Anthracene		501	190	21	ug/kg	SW846 8270E
Benzo(a)anthracene		679	190	19	ug/kg	SW846 8270E
Benzo(a)pyrene		604	190	23	ug/kg	SW846 8270E
Benzo(b)fluoranthene		1530	190	21	ug/kg	SW846 8270E
Benzo(g,h,i)perylene		356	190	20	ug/kg	SW846 8270E
Benzo(k)fluoranthene		518	190	25	ug/kg	SW846 8270E
Chrysene		1070	190	20	ug/kg	SW846 8270E
Dibenzo(a,h)anthracene		93.6 J	190	24	ug/kg	SW846 8270E
Fluoranthene		1330	190	19	ug/kg	SW846 8270E
Fluorene		43.1 J	190	21	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene		474	190	23	ug/kg	SW846 8270E
Phenanthrene		82.0 J	190	19	ug/kg	SW846 8270E
Pyrene		1650	190	22	ug/kg	SW846 8270E
FA77615-10	**CS-45**					
Acenaphthene		159 J	180	19	ug/kg	SW846 8270E
Acenaphthylene		1860	180	18	ug/kg	SW846 8270E
Anthracene		3180	910	100	ug/kg	SW846 8270E
Benzo(a)anthracene		4730	910	91	ug/kg	SW846 8270E
Benzo(a)pyrene		5030	910	110	ug/kg	SW846 8270E
Benzo(b)fluoranthene		12900	910	99	ug/kg	SW846 8270E
Benzo(g,h,i)perylene		3020	180	19	ug/kg	SW846 8270E
Benzo(k)fluoranthene		2640	180	24	ug/kg	SW846 8270E
Chrysene		8340	910	92	ug/kg	SW846 8270E
Dibenzo(a,h)anthracene		919	180	23	ug/kg	SW846 8270E
Fluoranthene		14900	910	91	ug/kg	SW846 8270E
Fluorene		303	180	19	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene		5690	910	110	ug/kg	SW846 8270E
1-Methylnaphthalene		52.4 J	180	18	ug/kg	SW846 8270E
2-Methylnaphthalene		54.9 J	180	18	ug/kg	SW846 8270E
Naphthalene		61.4 J	180	18	ug/kg	SW846 8270E
Phenanthrene		2600	180	18	ug/kg	SW846 8270E
Pyrene		13700	910	100	ug/kg	SW846 8270E
FA77615-11	**CS-54**					
Acenaphthylene		112 J	190	19	ug/kg	SW846 8270E
Anthracene		219	190	21	ug/kg	SW846 8270E
Benzo(a)anthracene		69.0 J	190	19	ug/kg	SW846 8270E
Benzo(a)pyrene		85.0 J	190	22	ug/kg	SW846 8270E
Benzo(b)fluoranthene		335	190	21	ug/kg	SW846 8270E

Summary of Hits

Job Number: FA77615
Account: EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC
Collected: 08/06/20 thru 08/07/20

Lab Sample ID / Client Sample ID / Analyte	Result/ Qual	RL	MDL	Units	Method
Benzo(g,h,i)perylene	94.6 J	190	19	ug/kg	SW846 8270E
Benzo(k)fluoranthene	84.2 J	190	25	ug/kg	SW846 8270E
Chrysene	133 J	190	19	ug/kg	SW846 8270E
Fluoranthene	107 J	190	19	ug/kg	SW846 8270E
Fluorene	28.8 J	190	20	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene	91.8 J	190	23	ug/kg	SW846 8270E
Phenanthrene	27.3 J	190	19	ug/kg	SW846 8270E
Pyrene	132 J	190	22	ug/kg	SW846 8270E
FA77615-12 CS-46					
Acenaphthene	82.1 J	200	21	ug/kg	SW846 8270E
Acenaphthylene	946	200	20	ug/kg	SW846 8270E
Anthracene	2520	200	22	ug/kg	SW846 8270E
Benzo(a)anthracene	3730	200	20	ug/kg	SW846 8270E
Benzo(a)pyrene	2610	200	23	ug/kg	SW846 8270E
Benzo(b)fluoranthene	7080	980	110	ug/kg	SW846 8270E
Benzo(g,h,i)perylene	1420	200	20	ug/kg	SW846 8270E
Benzo(k)fluoranthene	2120	200	26	ug/kg	SW846 8270E
Chrysene	4330	980	100	ug/kg	SW846 8270E
Dibenzo(a,h)anthracene	457	200	24	ug/kg	SW846 8270E
Fluoranthene	5980	980	98	ug/kg	SW846 8270E
Fluorene	163 J	200	21	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene	2130	200	24	ug/kg	SW846 8270E
Phenanthrene	537	200	20	ug/kg	SW846 8270E
Pyrene	9600	980	110	ug/kg	SW846 8270E
Pentachlorophenol	67.9 J	160	20	ug/kg	SW846 8270E BY SIM
FA77615-13 CS-47					
Acenaphthene	24.0 J	190	21	ug/kg	SW846 8270D
Acenaphthylene	242	190	19	ug/kg	SW846 8270D
Anthracene	756	190	22	ug/kg	SW846 8270D
Benzo(a)anthracene	420	190	19	ug/kg	SW846 8270D
Benzo(a)pyrene	547	190	23	ug/kg	SW846 8270D
Benzo(b)fluoranthene	1690	190	21	ug/kg	SW846 8270D
Benzo(g,h,i)perylene	450	190	20	ug/kg	SW846 8270D
Benzo(k)fluoranthene	577	190	26	ug/kg	SW846 8270D
Chrysene	761	190	20	ug/kg	SW846 8270D
Dibenzo(a,h)anthracene	131 J	190	24	ug/kg	SW846 8270D
Fluoranthene	501	190	19	ug/kg	SW846 8270D
Fluorene	36.2 J	190	21	ug/kg	SW846 8270D
Indeno(1,2,3-cd)pyrene	687	190	24	ug/kg	SW846 8270D
Phenanthrene	88.4 J	190	19	ug/kg	SW846 8270D
Pyrene	1210	190	22	ug/kg	SW846 8270D

Sample Results

Report of Analysis

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-29		
Lab Sample ID:	FA77615-1	**Date Sampled:**	08/06/20
Matrix:	SO - Soil	**Date Received:**	08/08/20
Method:	SW846 8270E SW846 3550C	**Percent Solids:**	92.2
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6F06493.D	1	08/11/20 15:57	MV	08/10/20 13:00	OP81484	S6F251
Run #2							

	Initial Weight	Final Volume
Run #1	30.3 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	180	19	ug/kg	
208-96-8	Acenaphthylene	41.7	180	18	ug/kg	J
120-12-7	Anthracene	62.2	180	20	ug/kg	J
56-55-3	Benzo(a)anthracene	51.8	180	18	ug/kg	J
50-32-8	Benzo(a)pyrene	43.0	180	21	ug/kg	J
205-99-2	Benzo(b)fluoranthene	137	180	20	ug/kg	J
191-24-2	Benzo(g,h,i)perylene	30.6	180	19	ug/kg	J
207-08-9	Benzo(k)fluoranthene	51.2	180	23	ug/kg	J
218-01-9	Chrysene	88.6	180	18	ug/kg	J
53-70-3	Dibenzo(a,h)anthracene	ND	180	22	ug/kg	
206-44-0	Fluoranthene	91.5	180	18	ug/kg	J
86-73-7	Fluorene	ND	180	19	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	48.5	180	22	ug/kg	J
90-12-0	1-Methylnaphthalene	ND	180	18	ug/kg	
91-57-6	2-Methylnaphthalene	ND	180	18	ug/kg	
91-20-3	Naphthalene	ND	180	18	ug/kg	
85-01-8	Phenanthrene	ND	180	18	ug/kg	
129-00-0	Pyrene	152	180	21	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	72%		40-105%
321-60-8	2-Fluorobiphenyl	74%		43-107%
1718-51-0	Terphenyl-d14	76%		45-119%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID: CS-29
Lab Sample ID: FA77615-1
Matrix: SO - Soil
Method: SW846 8270E BY SIM SW846 3546
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Date Sampled: 08/06/20
Date Received: 08/08/20
Percent Solids: 92.2

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7G11137.D	1	08/11/20 11:14	FS	08/10/20 12:00	OP81485	S7G483
Run #2							

	Initial Weight	Final Volume
Run #1	15.4 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	140	18	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
7297-45-2	2-Methylnaphthalene-d10	104%		50-150%
93951-69-0	Fluoranthene-d10	99%		50-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-30		
Lab Sample ID:	FA77615-2	**Date Sampled:**	08/06/20
Matrix:	SO - Soil	**Date Received:**	08/08/20
Method:	SW846 8270E SW846 3550C	**Percent Solids:**	89.0
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6F06494.D	1	08/11/20 16:24	MV	08/10/20 13:00	OP81484	S6F251
Run #2							

	Initial Weight	Final Volume
Run #1	30.3 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	190	20	ug/kg	
208-96-8	Acenaphthylene	56.4	190	19	ug/kg	J
120-12-7	Anthracene	102	190	21	ug/kg	J
56-55-3	Benzo(a)anthracene	134	190	19	ug/kg	J
50-32-8	Benzo(a)pyrene	156	190	22	ug/kg	J
205-99-2	Benzo(b)fluoranthene	439	190	20	ug/kg	
191-24-2	Benzo(g,h,i)perylene	105	190	19	ug/kg	J
207-08-9	Benzo(k)fluoranthene	144	190	24	ug/kg	J
218-01-9	Chrysene	237	190	19	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	28.9	190	23	ug/kg	J
206-44-0	Fluoranthene	228	190	19	ug/kg	
86-73-7	Fluorene	ND	190	20	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	139	190	23	ug/kg	J
90-12-0	1-Methylnaphthalene	ND	190	19	ug/kg	
91-57-6	2-Methylnaphthalene	ND	190	19	ug/kg	
91-20-3	Naphthalene	ND	190	19	ug/kg	
85-01-8	Phenanthrene	ND	190	19	ug/kg	
129-00-0	Pyrene	311	190	21	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	65%		40-105%
321-60-8	2-Fluorobiphenyl	68%		43-107%
1718-51-0	Terphenyl-d14	70%		45-119%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-30		
Lab Sample ID:	FA77615-2	**Date Sampled:**	08/06/20
Matrix:	SO - Soil	**Date Received:**	08/08/20
Method:	SW846 8270E BY SIM SW846 3546	**Percent Solids:**	89.0
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7G11138.D	1	08/11/20 11:38	FS	08/10/20 12:00	OP81485	S7G483
Run #2							

	Initial Weight	Final Volume
Run #1	15.4 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	150	18	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
7297-45-2	2-Methylnaphthalene-d10	100%		50-150%
93951-69-0	Fluoranthene-d10	96%		50-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-31		
Lab Sample ID:	FA77615-3	**Date Sampled:**	08/06/20
Matrix:	SO - Soil	**Date Received:**	08/08/20
Method:	SW846 8270E SW846 3550C	**Percent Solids:**	90.4
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6F06495.D	1	08/11/20 16:50	MV	08/10/20 13:00	OP81484	S6F251
Run #2	X072377.D	2	08/12/20 19:00	MV	08/10/20 13:00	OP81484	SX2951

	Initial Weight	Final Volume
Run #1	30.3 g	1.0 ml
Run #2	30.3 g	1.0 ml

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	36.1	180	19	ug/kg	J
208-96-8	Acenaphthylene	445	180	18	ug/kg	
120-12-7	Anthracene	1240	180	20	ug/kg	
56-55-3	Benzo(a)anthracene	909	180	18	ug/kg	
50-32-8	Benzo(a)pyrene	1110	180	22	ug/kg	
205-99-2	Benzo(b)fluoranthene	2570	180	20	ug/kg	
191-24-2	Benzo(g,h,i)perylene	758	180	19	ug/kg	
207-08-9	Benzo(k)fluoranthene	852	180	24	ug/kg	
218-01-9	Chrysene	1520	180	19	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	197	180	23	ug/kg	
206-44-0	Fluoranthene	2060	180	18	ug/kg	
86-73-7	Fluorene	61.0	180	20	ug/kg	J
193-39-5	Indeno(1,2,3-cd)pyrene	957	180	22	ug/kg	
90-12-0	1-Methylnaphthalene	ND	180	18	ug/kg	
91-57-6	2-Methylnaphthalene	ND	180	18	ug/kg	
91-20-3	Naphthalene	ND	180	18	ug/kg	
85-01-8	Phenanthrene	118	180	18	ug/kg	J
129-00-0	Pyrene	3490 [a]	370	42	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	69%	66%	40-105%
321-60-8	2-Fluorobiphenyl	70%	69%	43-107%
1718-51-0	Terphenyl-d14	70%	65%	45-119%

(a) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID: CS-31
Lab Sample ID: FA77615-3
Matrix: SO - Soil
Method: SW846 8270E BY SIM SW846 3546
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Date Sampled: 08/06/20
Date Received: 08/08/20
Percent Solids: 90.4

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7G11139.D	1	08/11/20 12:02	FS	08/10/20 12:00	OP81485	S7G483
Run #2							

	Initial Weight	Final Volume
Run #1	15.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	150	18	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
7297-45-2	2-Methylnaphthalene-d10	113%		50-150%
93951-69-0	Fluoranthene-d10	115%		50-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	DUP-01		
Lab Sample ID:	FA77615-4	**Date Sampled:**	08/06/20
Matrix:	SO - Soil	**Date Received:**	08/08/20
Method:	SW846 8270E SW846 3550C	**Percent Solids:**	77.7
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6F06496.D	1	08/11/20 17:16	MV	08/10/20 13:00	OP81484	S6F251
Run #2							

	Initial Weight	Final Volume
Run #1	30.4 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	210	22	ug/kg	
208-96-8	Acenaphthylene	70.9	210	21	ug/kg	J
120-12-7	Anthracene	73.1	210	24	ug/kg	J
56-55-3	Benzo(a)anthracene	39.9	210	21	ug/kg	J
50-32-8	Benzo(a)pyrene	36.1	210	25	ug/kg	J
205-99-2	Benzo(b)fluoranthene	119	210	23	ug/kg	J
191-24-2	Benzo(g,h,i)perylene	26.4	210	22	ug/kg	J
207-08-9	Benzo(k)fluoranthene	38.1	210	28	ug/kg	J
218-01-9	Chrysene	72.8	210	22	ug/kg	J
53-70-3	Dibenzo(a,h)anthracene	ND	210	27	ug/kg	
206-44-0	Fluoranthene	86.3	210	21	ug/kg	J
86-73-7	Fluorene	ND	210	23	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	41.8	210	26	ug/kg	J
90-12-0	1-Methylnaphthalene	ND	210	21	ug/kg	
91-57-6	2-Methylnaphthalene	ND	210	21	ug/kg	
91-20-3	Naphthalene	ND	210	21	ug/kg	
85-01-8	Phenanthrene	ND	210	21	ug/kg	
129-00-0	Pyrene	143	210	24	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	63%		40-105%
321-60-8	2-Fluorobiphenyl	65%		43-107%
1718-51-0	Terphenyl-d14	68%		45-119%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	DUP-01		
Lab Sample ID:	FA77615-4	**Date Sampled:**	08/06/20
Matrix:	SO - Soil	**Date Received:**	08/08/20
Method:	SW846 8270E BY SIM SW846 3546	**Percent Solids:**	77.7
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7G11140.D	1	08/11/20 12:26	FS	08/10/20 12:00	OP81485	S7G483
Run #2							

	Initial Weight	Final Volume
Run #1	15.4 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	170	21	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
7297-45-2	2-Methylnaphthalene-d10	101%		50-150%
93951-69-0	Fluoranthene-d10	101%		50-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-40		
Lab Sample ID:	FA77615-5	**Date Sampled:**	08/07/20
Matrix:	SO - Soil	**Date Received:**	08/08/20
Method:	SW846 8270E SW846 3550C	**Percent Solids:**	90.7
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6F06497.D	1	08/11/20 17:42	MV	08/10/20 13:00	OP81484	S6F251
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	29.3	180	20	ug/kg	J
208-96-8	Acenaphthylene	361	180	18	ug/kg	
120-12-7	Anthracene	653	180	21	ug/kg	
56-55-3	Benzo(a)anthracene	986	180	18	ug/kg	
50-32-8	Benzo(a)pyrene	1570	180	22	ug/kg	
205-99-2	Benzo(b)fluoranthene	3670	180	20	ug/kg	
191-24-2	Benzo(g,h,i)perylene	894	180	19	ug/kg	
207-08-9	Benzo(k)fluoranthene	1230	180	24	ug/kg	
218-01-9	Chrysene	1680	180	19	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	285	180	23	ug/kg	
206-44-0	Fluoranthene	1410	180	18	ug/kg	
86-73-7	Fluorene	50.2	180	20	ug/kg	J
193-39-5	Indeno(1,2,3-cd)pyrene	1330	180	22	ug/kg	
90-12-0	1-Methylnaphthalene	ND	180	18	ug/kg	
91-57-6	2-Methylnaphthalene	ND	180	18	ug/kg	
91-20-3	Naphthalene	ND	180	18	ug/kg	
85-01-8	Phenanthrene	81.9	180	18	ug/kg	J
129-00-0	Pyrene	2270	180	21	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	73%		40-105%
321-60-8	2-Fluorobiphenyl	77%		43-107%
1718-51-0	Terphenyl-d14	79%		45-119%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-40		
Lab Sample ID:	FA77615-5	**Date Sampled:**	08/07/20
Matrix:	SO - Soil	**Date Received:**	08/08/20
Method:	SW846 8270E BY SIM SW846 3546	**Percent Solids:**	90.7
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7G11141.D	1	08/11/20 12:50	FS	08/10/20 12:00	OP81485	S7G483
Run #2							

	Initial Weight	Final Volume
Run #1	15.2 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	150	18	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
7297-45-2	2-Methylnaphthalene-d10	108%		50-150%
93951-69-0	Fluoranthene-d10	108%		50-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-41		
Lab Sample ID:	FA77615-6	**Date Sampled:**	08/07/20
Matrix:	SO - Soil	**Date Received:**	08/08/20
Method:	SW846 8270E SW846 3550C	**Percent Solids:**	88.6
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6F06498.D	1	08/11/20 18:08	MV	08/10/20 13:00	OP81484	S6F251
Run #2							

	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	190	20	ug/kg	
208-96-8	Acenaphthylene	247	190	19	ug/kg	
120-12-7	Anthracene	472	190	21	ug/kg	
56-55-3	Benzo(a)anthracene	379	190	19	ug/kg	
50-32-8	Benzo(a)pyrene	351	190	22	ug/kg	
205-99-2	Benzo(b)fluoranthene	946	190	20	ug/kg	
191-24-2	Benzo(g,h,i)perylene	293	190	19	ug/kg	
207-08-9	Benzo(k)fluoranthene	276	190	25	ug/kg	
218-01-9	Chrysene	538	190	19	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	72.0	190	23	ug/kg	J
206-44-0	Fluoranthene	539	190	19	ug/kg	
86-73-7	Fluorene	42.1	190	20	ug/kg	J
193-39-5	Indeno(1,2,3-cd)pyrene	379	190	23	ug/kg	
90-12-0	1-Methylnaphthalene	21.4	190	19	ug/kg	J
91-57-6	2-Methylnaphthalene	29.3	190	19	ug/kg	J
91-20-3	Naphthalene	25.7	190	19	ug/kg	J
85-01-8	Phenanthrene	95.1	190	19	ug/kg	J
129-00-0	Pyrene	672	190	22	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	73%		40-105%
321-60-8	2-Fluorobiphenyl	75%		43-107%
1718-51-0	Terphenyl-d14	74%		45-119%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-41		
Lab Sample ID:	FA77615-6	**Date Sampled:**	08/07/20
Matrix:	SO - Soil	**Date Received:**	08/08/20
Method:	SW846 8270E BY SIM SW846 3546	**Percent Solids:**	88.6
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7G11142.D	1	08/11/20 13:14	FS	08/10/20 12:00	OP81485	S7G483
Run #2							

	Initial Weight	Final Volume
Run #1	15.2 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	150	19	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
7297-45-2	2-Methylnaphthalene-d10	107%		50-150%
93951-69-0	Fluoranthene-d10	103%		50-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-42		
Lab Sample ID:	FA77615-7	**Date Sampled:**	08/07/20
Matrix:	SO - Soil	**Date Received:**	08/08/20
Method:	SW846 8270E SW846 3550C	**Percent Solids:**	85.0
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6F06501.D	1	08/11/20 19:26	MV	08/10/20 13:00	OP81484	S6F251
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	200	21	ug/kg	
208-96-8	Acenaphthylene	200	200	20	ug/kg	
120-12-7	Anthracene	333	200	22	ug/kg	
56-55-3	Benzo(a)anthracene	382	200	20	ug/kg	
50-32-8	Benzo(a)pyrene	377	200	23	ug/kg	
205-99-2	Benzo(b)fluoranthene	968	200	21	ug/kg	
191-24-2	Benzo(g,h,i)perylene	251	200	20	ug/kg	
207-08-9	Benzo(k)fluoranthene	316	200	26	ug/kg	
218-01-9	Chrysene	588	200	20	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	69.8	200	25	ug/kg	J
206-44-0	Fluoranthene	720	200	20	ug/kg	
86-73-7	Fluorene	38.2	200	21	ug/kg	J
193-39-5	Indeno(1,2,3-cd)pyrene	347	200	24	ug/kg	
90-12-0	1-Methylnaphthalene	ND	200	20	ug/kg	
91-57-6	2-Methylnaphthalene	24.2	200	20	ug/kg	J
91-20-3	Naphthalene	20.4	200	20	ug/kg	J
85-01-8	Phenanthrene	103	200	20	ug/kg	J
129-00-0	Pyrene	830	200	23	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	67%		40-105%
321-60-8	2-Fluorobiphenyl	70%		43-107%
1718-51-0	Terphenyl-d14	72%		45-119%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-42		
Lab Sample ID:	FA77615-7	**Date Sampled:**	08/07/20
Matrix:	SO - Soil	**Date Received:**	08/08/20
Method:	SW846 8270E BY SIM SW846 3546	**Percent Solids:**	85.0
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7G11145.D	1	08/11/20 14:26	FS	08/10/20 12:00	OP81485	S7G483
Run #2							

	Initial Weight	Final Volume
Run #1	15.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	160	20	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
7297-45-2	2-Methylnaphthalene-d10	111%		50-150%
93951-69-0	Fluoranthene-d10	105%		50-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-43		
Lab Sample ID:	FA77615-8	**Date Sampled:**	08/07/20
Matrix:	SO - Soil	**Date Received:**	08/08/20
Method:	SW846 8270E SW846 3550C	**Percent Solids:**	89.4
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6F06502.D	1	08/11/20 19:52	MV	08/10/20 13:00	OP81484	S6F251
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	190	20	ug/kg	
208-96-8	Acenaphthylene	266	190	19	ug/kg	
120-12-7	Anthracene	472	190	21	ug/kg	
56-55-3	Benzo(a)anthracene	708	190	19	ug/kg	
50-32-8	Benzo(a)pyrene	725	190	22	ug/kg	
205-99-2	Benzo(b)fluoranthene	1880	190	20	ug/kg	
191-24-2	Benzo(g,h,i)perylene	488	190	19	ug/kg	
207-08-9	Benzo(k)fluoranthene	601	190	24	ug/kg	
218-01-9	Chrysene	1100	190	19	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	133	190	23	ug/kg	J
206-44-0	Fluoranthene	836	190	19	ug/kg	
86-73-7	Fluorene	41.2	190	20	ug/kg	J
193-39-5	Indeno(1,2,3-cd)pyrene	650	190	23	ug/kg	
90-12-0	1-Methylnaphthalene	ND	190	19	ug/kg	
91-57-6	2-Methylnaphthalene	ND	190	19	ug/kg	
91-20-3	Naphthalene	ND	190	19	ug/kg	
85-01-8	Phenanthrene	70.8	190	19	ug/kg	J
129-00-0	Pyrene	1140	190	21	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	72%		40-105%
321-60-8	2-Fluorobiphenyl	74%		43-107%
1718-51-0	Terphenyl-d14	72%		45-119%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID: CS-43
Lab Sample ID: FA77615-8
Matrix: SO - Soil
Method: SW846 8270E BY SIM SW846 3546
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Date Sampled: 08/07/20
Date Received: 08/08/20
Percent Solids: 89.4

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7G11146.D	1	08/11/20 14:51	FS	08/10/20 12:00	OP81485	S7G483
Run #2							

	Initial Weight	Final Volume
Run #1	15.4 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	150	18	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
7297-45-2	2-Methylnaphthalene-d10	113%		50-150%
93951-69-0	Fluoranthene-d10	107%		50-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-44		
Lab Sample ID:	FA77615-9	**Date Sampled:**	08/07/20
Matrix:	SO - Soil	**Date Received:**	08/08/20
Method:	SW846 8270E SW846 3550C	**Percent Solids:**	87.1
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6F06503.D	1	08/11/20 20:18	MV	08/10/20 13:00	OP81484	S6F251
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	190	20	ug/kg	
208-96-8	Acenaphthylene	276	190	19	ug/kg	
120-12-7	Anthracene	501	190	21	ug/kg	
56-55-3	Benzo(a)anthracene	679	190	19	ug/kg	
50-32-8	Benzo(a)pyrene	604	190	23	ug/kg	
205-99-2	Benzo(b)fluoranthene	1530	190	21	ug/kg	
191-24-2	Benzo(g,h,i)perylene	356	190	20	ug/kg	
207-08-9	Benzo(k)fluoranthene	518	190	25	ug/kg	
218-01-9	Chrysene	1070	190	20	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	93.6	190	24	ug/kg	J
206-44-0	Fluoranthene	1330	190	19	ug/kg	
86-73-7	Fluorene	43.1	190	21	ug/kg	J
193-39-5	Indeno(1,2,3-cd)pyrene	474	190	23	ug/kg	
90-12-0	1-Methylnaphthalene	ND	190	19	ug/kg	
91-57-6	2-Methylnaphthalene	ND	190	19	ug/kg	
91-20-3	Naphthalene	ND	190	19	ug/kg	
85-01-8	Phenanthrene	82.0	190	19	ug/kg	J
129-00-0	Pyrene	1650	190	22	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	64%		40-105%
321-60-8	2-Fluorobiphenyl	67%		43-107%
1718-51-0	Terphenyl-d14	73%		45-119%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-44		
Lab Sample ID:	FA77615-9	**Date Sampled:**	08/07/20
Matrix:	SO - Soil	**Date Received:**	08/08/20
Method:	SW846 8270E BY SIM SW846 3546	**Percent Solids:**	87.1
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7G11147.D	1	08/11/20 15:15	FS	08/10/20 12:00	OP81485	S7G483
Run #2							

	Initial Weight	Final Volume
Run #1	15.2 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	150	19	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
7297-45-2	2-Methylnaphthalene-d10	105%		50-150%
93951-69-0	Fluoranthene-d10	101%		50-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-45		
Lab Sample ID:	FA77615-10	**Date Sampled:**	08/07/20
Matrix:	SO - Soil	**Date Received:**	08/08/20
Method:	SW846 8270E SW846 3550C	**Percent Solids:**	91.0
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6F06504.D	1	08/11/20 20:44	MV	08/10/20 13:00	OP81484	S6F251
Run #2	X072399.D	5	08/13/20 17:56	MV	08/10/20 13:00	OP81484	SX2952

	Initial Weight	Final Volume
Run #1	30.3 g	1.0 ml
Run #2	30.3 g	1.0 ml

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	159	180	19	ug/kg	J
208-96-8	Acenaphthylene	1860	180	18	ug/kg	
120-12-7	Anthracene	3180 [a]	910	100	ug/kg	
56-55-3	Benzo(a)anthracene	4730 [a]	910	91	ug/kg	
50-32-8	Benzo(a)pyrene	5030 [a]	910	110	ug/kg	
205-99-2	Benzo(b)fluoranthene	12900 [a]	910	99	ug/kg	
191-24-2	Benzo(g,h,i)perylene	3020	180	19	ug/kg	
207-08-9	Benzo(k)fluoranthene	2640	180	24	ug/kg	
218-01-9	Chrysene	8340 [a]	910	92	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	919	180	23	ug/kg	
206-44-0	Fluoranthene	14900 [a]	910	91	ug/kg	
86-73-7	Fluorene	303	180	19	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	5690 [a]	910	110	ug/kg	
90-12-0	1-Methylnaphthalene	52.4	180	18	ug/kg	J
91-57-6	2-Methylnaphthalene	54.9	180	18	ug/kg	J
91-20-3	Naphthalene	61.4	180	18	ug/kg	J
85-01-8	Phenanthrene	2600	180	18	ug/kg	
129-00-0	Pyrene	13700 [a]	910	100	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	74%	67%	40-105%
321-60-8	2-Fluorobiphenyl	76%	73%	43-107%
1718-51-0	Terphenyl-d14	82%	72%	45-119%

(a) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-45		
Lab Sample ID:	FA77615-10	**Date Sampled:**	08/07/20
Matrix:	SO - Soil	**Date Received:**	08/08/20
Method:	SW846 8270E BY SIM SW846 3546	**Percent Solids:**	91.0
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7G11148.D	1	08/11/20 15:39	FS	08/10/20 12:00	OP81485	S7G483
Run #2							

	Initial Weight	Final Volume
Run #1	15.3 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	140	18	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
7297-45-2	2-Methylnaphthalene-d10	109%		50-150%
93951-69-0	Fluoranthene-d10	116%		50-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-54		
Lab Sample ID:	FA77615-11	**Date Sampled:**	08/07/20
Matrix:	SO - Soil	**Date Received:**	08/08/20
Method:	SW846 8270E SW846 3550C	**Percent Solids:**	88.5
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X072383.D	1	08/12/20 21:34	MV	08/10/20 13:00	OP81484	SX2951
Run #2	6F06505.D	1	08/11/20 21:10	MV	08/10/20 13:00	OP81484	S6F251

	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2	30.2 g	1.0 ml

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	190	20	ug/kg	
208-96-8	Acenaphthylene	112	190	19	ug/kg	J
120-12-7	Anthracene	219	190	21	ug/kg	
56-55-3	Benzo(a)anthracene	69.0	190	19	ug/kg	J
50-32-8	Benzo(a)pyrene	85.0	190	22	ug/kg	J
205-99-2	Benzo(b)fluoranthene	335	190	21	ug/kg	
191-24-2	Benzo(g,h,i)perylene	94.6	190	19	ug/kg	J
207-08-9	Benzo(k)fluoranthene	84.2	190	25	ug/kg	J
218-01-9	Chrysene	133	190	19	ug/kg	J
53-70-3	Dibenzo(a,h)anthracene	ND [a]	190	23	ug/kg	
206-44-0	Fluoranthene	107	190	19	ug/kg	J
86-73-7	Fluorene	28.8	190	20	ug/kg	J
193-39-5	Indeno(1,2,3-cd)pyrene	91.8 [a]	190	23	ug/kg	J
90-12-0	1-Methylnaphthalene	ND	190	19	ug/kg	
91-57-6	2-Methylnaphthalene	ND	190	19	ug/kg	
91-20-3	Naphthalene	ND	190	19	ug/kg	
85-01-8	Phenanthrene	27.3	190	19	ug/kg	J
129-00-0	Pyrene	132	190	22	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	66%	63%	40-105%
321-60-8	2-Fluorobiphenyl	72%	66%	43-107%
1718-51-0	Terphenyl-d14	70%	70%	45-119%

(a) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID: CS-54
Lab Sample ID: FA77615-11
Matrix: SO - Soil
Method: SW846 8270E BY SIM SW846 3546
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Date Sampled: 08/07/20
Date Received: 08/08/20
Percent Solids: 88.5

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7G11149.D	1	08/11/20 16:04	FS	08/10/20 12:00	OP81485	S7G483
Run #2							

	Initial Weight	Final Volume
Run #1	15.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	150	19	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
7297-45-2	2-Methylnaphthalene-d10	115%		50-150%
93951-69-0	Fluoranthene-d10	104%		50-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-46		
Lab Sample ID:	FA77615-12	**Date Sampled:**	08/07/20
Matrix:	SO - Soil	**Date Received:**	08/08/20
Method:	SW846 8270E SW846 3550C	**Percent Solids:**	85.4
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6F06506.D	1	08/11/20 21:35	MV	08/10/20 13:00	OP81484	S6F251
Run #2	X072379.D	5	08/12/20 19:51	MV	08/10/20 13:00	OP81484	SX2951

	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2	30.0 g	1.0 ml

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	82.1	200	21	ug/kg	J
208-96-8	Acenaphthylene	946	200	20	ug/kg	
120-12-7	Anthracene	2520	200	22	ug/kg	
56-55-3	Benzo(a)anthracene	3730	200	20	ug/kg	
50-32-8	Benzo(a)pyrene	2610	200	23	ug/kg	
205-99-2	Benzo(b)fluoranthene	7080 [a]	980	110	ug/kg	
191-24-2	Benzo(g,h,i)perylene	1420	200	20	ug/kg	
207-08-9	Benzo(k)fluoranthene	2120	200	26	ug/kg	
218-01-9	Chrysene	4330 [a]	980	100	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	457	200	24	ug/kg	
206-44-0	Fluoranthene	5980 [a]	980	98	ug/kg	
86-73-7	Fluorene	163	200	21	ug/kg	J
193-39-5	Indeno(1,2,3-cd)pyrene	2130	200	24	ug/kg	
90-12-0	1-Methylnaphthalene	ND	200	20	ug/kg	
91-57-6	2-Methylnaphthalene	ND	200	20	ug/kg	
91-20-3	Naphthalene	ND	200	20	ug/kg	
85-01-8	Phenanthrene	537	200	20	ug/kg	
129-00-0	Pyrene	9600 [a]	980	110	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	76%	61%	40-105%
321-60-8	2-Fluorobiphenyl	77%	66%	43-107%
1718-51-0	Terphenyl-d14	80%	65%	45-119%

(a) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-46		
Lab Sample ID:	FA77615-12	**Date Sampled:**	08/07/20
Matrix:	SO - Soil	**Date Received:**	08/08/20
Method:	SW846 8270E BY SIM SW846 3546	**Percent Solids:**	85.4
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7G11150.D	1	08/11/20 16:28	FS	08/10/20 12:00	OP81485	S7G483
Run #2							

	Initial Weight	Final Volume
Run #1	15.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	67.9	160	20	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
7297-45-2	2-Methylnaphthalene-d10	109%		50-150%
93951-69-0	Fluoranthene-d10	94%		50-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-47		
Lab Sample ID:	FA77615-13	**Date Sampled:**	08/07/20
Matrix:	SO - Soil	**Date Received:**	08/08/20
Method:	SW846 8270D SW846 3550C	**Percent Solids:**	85.4
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6F06579.D	1	08/14/20 15:22	MV	08/13/20 08:00	OP81538	S6F254
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	24.0	190	21	ug/kg	J
208-96-8	Acenaphthylene	242	190	19	ug/kg	
120-12-7	Anthracene	756	190	22	ug/kg	
56-55-3	Benzo(a)anthracene	420	190	19	ug/kg	
50-32-8	Benzo(a)pyrene	547	190	23	ug/kg	
205-99-2	Benzo(b)fluoranthene	1690	190	21	ug/kg	
191-24-2	Benzo(g,h,i)perylene	450	190	20	ug/kg	
207-08-9	Benzo(k)fluoranthene	577	190	26	ug/kg	
218-01-9	Chrysene	761	190	20	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	131	190	24	ug/kg	J
206-44-0	Fluoranthene	501	190	19	ug/kg	
86-73-7	Fluorene	36.2	190	21	ug/kg	J
193-39-5	Indeno(1,2,3-cd)pyrene	687	190	24	ug/kg	
90-12-0	1-Methylnaphthalene	ND	190	19	ug/kg	
91-57-6	2-Methylnaphthalene	ND	190	19	ug/kg	
91-20-3	Naphthalene	ND	190	19	ug/kg	
85-01-8	Phenanthrene	88.4	190	19	ug/kg	J
129-00-0	Pyrene	1210	190	22	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	57%		40-105%
321-60-8	2-Fluorobiphenyl	71%		43-107%
1718-51-0	Terphenyl-d14	78%		45-119%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-47		
Lab Sample ID:	FA77615-13	**Date Sampled:**	08/07/20
Matrix:	SO - Soil	**Date Received:**	08/08/20
Method:	SW846 8270E BY SIM SW846 3546	**Percent Solids:**	85.4
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7G11151.D	1	08/11/20 16:53	FS	08/10/20 12:00	OP81485	S7G483
Run #2							

	Initial Weight	Final Volume
Run #1	15.3 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	150	19	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
7297-45-2	2-Methylnaphthalene-d10	109%		50-150%
93951-69-0	Fluoranthene-d10	100%		50-150%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

Rush 3day TAT
out

SGS North America Inc - Orlando
Chain of Custody

FA77615

SGS - ORLANDO JOB # : PAGE 1 OF 2

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 FAX: 407-425-0707
www.sgs.com

SGS - ORLANDO Quote # | SKIFF #

Client / Reporting Information

Company Name: EarthCon
Address: 1880 W. Oak Pkwy
City: Marietta State: GA Zip: 30062
Project Contact: M. Brookshire Email: mbrookshire@earthcon.com
Phone #: 404-317-7748
Sampler(s) Name(s) (Printed)
Sampler 1: S. Tyler Sampler 2: C. Thibault

Project Information

Project Name: KMCC Navassa
Street: 120 Quality Dr
City: Navassa State: NC
Project #: 02.20200007.00
Fax #:
Client Purchase Order #:

Analytical Information

PAHs (8270) + PCP (8270 SIM)

Matrix Codes
DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid

SGS Orlando Sample #	Field ID / Point of Collection	COLLECTION DATE	TIME	SAMPLED BY:	MATRIX	TOTAL # OF BOTTLES	OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NAOH+ZNA	DI WATER	MEOH	PAHs (8270) + PCP (8270 SIM)	LAB USE ONLY
1	CS-29	8/6/20	1445	ST	SO	1	1									1	
2	CS-30	8/6/20	1420	ST	SO	1	1									1	
3	CS-31	8/6/20	1510	CT	SO	1	1									1	
4	DUP-01	8/6/20	—	ST	SO	1	1									1	
5	CS-40	8/7/20	0840	ST	SO	1	1									1	
6	CS-41	8/7/20	0911	ST	SO	1	1									1	
6	CS-41 MS	8/7/20	0911	ST	SO	1	1									1	
6	CS-41 MSD	8/7/20	0911	ST	SO	1	1									1	
7	CS-42	8/7/20	0945	ST	SO	1	1									1	
8	CS-43	8/7/20	1010	ST	SO	1	1									1	
9	CS-44	8/7/20	1045	ST	SO	1	1									1	
10	CS-45	8/7/20	1130	ST	SO	1	1									1	

Turnaround Time (Business days)

10 Day (Business) Approved By: / Date:
7 Day
5 Day
3 Day RUSH
2 Day RUSH
1 Day RUSH
Other
Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- [ ] COMMERCIAL "A" (RESULTS ONLY)
- [ ] COMMERCIAL "B" (RESULTS PLUS QC)
- [ ] REDT1 (EPA LEVEL 3)
- [ ] FULLT1 (EPA LEVEL 4)
- [ ] EDD'S

Comments / Remarks

Rush - 3 day TAT
INITIALASESSMENT BG
LABELVERIFICATION

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
1 [signature]	8/7/20 1515	2 Ashley Owens SGS-TCM 1.8°	3 Ashley Owens	8/7/20 16:30	4 FX
Relinquished by/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
5 FX		6 [signature] 8/8/20 1115	7		8

Lab Use Only : Cooler Temperature (s) Celsius (corrected): 3.4

http://www.sgs.com/en/terms-and-conditions

ORLD-SMT-0001-03-FORM-COC (4).xls Rev 031318

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FA77615: Chain of Custody
Page 1 of 3

FA77615 Rush 3 DAY TAT OUI

SGS North America Inc - Orlando
Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 FAX: 407-425-0707
www.sgs.com

SGS - ORLANDO JOB # : PAGE 2 OF 2

SGS - ORLANDO Quote # | SKIFF #

Client / Reporting Information

Company Name: EarthCon
Address: 1880 W. Oak Pkwy
City: Marietta State: GA Zip: 30062
Project Contact: M. Brookshire Email: mbrookshire@earthcon.com
Phone #: 404-317-7748
Sampler(s) Name(s) (Printed)
Sampler 1: S. Tyler Sampler 2:

Project Information

Project Name: KMCC Navassa
Street 120 Quality Dr
City Navassa State NC
Project # 02.20200007.00
Fax #
Client Purchase Order #

Analytical Information

PAHs (8270) + PCP (8270SIM)

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid

SGS Orlando Sample #	Field ID / Point of Collection	COLLECTION DATE	TIME	SAMPLED BY:	MATRIX	TOTAL # OF BOTTLES	OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NAOH+ZNA	DI WATER	MEOH	PAHs (8270) + PCP (8270SIM)	LAB USE ONLY
11	CS-54	8/7/20	1150	ST	SO	1	1									1	
12	CS-46	8/7/20	1212	ST	SO	1	1									1	
13	CS-47	8/7/20	1242	ST	SO	1	1									1	

Turnaround Time (Business days)

10 Day (Business) Approved By: / Date:
7 Day
5 Day
3 Day RUSH
2 Day RUSH
1 Day RUSH
Other
Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- [ ] COMMERCIAL "A" (RESULTS ONLY)
- [ ] COMMERCIAL "B" (RESULTS PLUS QC)
- [ ] REDT1 (EPA LEVEL 3)
- [ ] FULLT1 (EPA LEVEL 4)
- [ ] EDD'S

Comments / Remarks

Rush 3 day TAT

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
1 Marie A. Brooks	8/7/20 1515	2 Ashley Owens SGS-LIM 1.8°	3 Ashley Owens	8/7/20 16:30	4 FX
Relinquished by/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
5 FX		6 [signature] 8/8/20 1115	7		8

Lab Use Only : Cooler Temperature (s) Celsius (corrected):

http://www.sgs.com/en/terms-and-conditions

ORLD-SMT-0001-03-FORM-COC (4).xls Rev 031318

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FA77615: Chain of Custody
Page 2 of 3

SGS Sample Receipt Summary

Job Number: FA77615 **Client:** EARTHCON **Project:** KMCC NAVASSA

Date / Time Received: 8/8/2020 11:15:00 AM **Delivery Method:** FX **Airbill #'s:** 9004 3372 3567

Therm ID: IR 1; **Therm CF:** -0.2; **# of Coolers:** 1

Cooler Temps (Raw Measured) °C: Cooler 1: (3.6);

Cooler Temps (Corrected) °C: Cooler 1: (3.4);

Cooler Information	Y	N
1. Custody Seals Present	☑	☐
2. Custody Seals Intact	☑	☐
3. Temp criteria achieved	☑	☐
4. Cooler temp verification	IR Gun	
5. Cooler media	Ice (Bag)	

Trip Blank Information	Y	N	N/A
1. Trip Blank present / cooler	☐	☐	☑
2. Trip Blank listed on COC	☐	☐	☑

	W	S	N/A
3. Type Of TB Received	☐	☐	☑

Sample Information	Y	N	N/A
1. Sample labels present on bottles	☑	☐	
2. Samples preserved properly	☑	☐	
3. Sufficient volume/containers recvd for analysis:	☑	☐	
4. Condition of sample	Intact		
5. Sample recvd within HT	☑	☐	
6. Dates/Times/IDs on COC match Sample Label	☑	☐	
7. VOCs have headspace	☐	☐	☑
8. Bottles received for unspecified tests	☐	☑	
9. Compositing instructions clear	☐	☐	☑
10. Voa Soil Kits/Jars received past 48hrs?	☐	☐	☑
11. % Solids Jar received?	☐	☐	☑
12. Residual Chlorine Present?	☐	☐	☑

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____ Number of 5035 Field Kits: _____ Number of Lab Filtered Metals: _____

Test Strip Lot #s: pH 0-3 230315 pH 10-12 219813A Other: (Specify) _____ _____

Residual Chlorine Test Strip Lot #: _____

Comments

SM001
Rev. Date 05/24/17

Technician: PETERH Date: 8/8/2020 11:15:00 AM Reviewer: _____ Date: _____

MS Semi-volatiles

6

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (DFTPP)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries
- Run Sequence Reports

Method Blank Summary

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP81484-MB	6F06488.D	1	08/11/20	MV	08/10/20	OP81484	S6F251

The QC reported here applies to the following samples: **Method:** SW846 8270E

FA77615-1, FA77615-2, FA77615-3, FA77615-4, FA77615-5, FA77615-6, FA77615-7, FA77615-8, FA77615-9, FA77615-10, FA77615-11, FA77615-12

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	170	18	ug/kg	
208-96-8	Acenaphthylene	ND	170	17	ug/kg	
120-12-7	Anthracene	ND	170	19	ug/kg	
56-55-3	Benzo(a)anthracene	ND	170	17	ug/kg	
50-32-8	Benzo(a)pyrene	ND	170	20	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	170	18	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	170	17	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	170	22	ug/kg	
218-01-9	Chrysene	ND	170	17	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	170	21	ug/kg	
206-44-0	Fluoranthene	ND	170	17	ug/kg	
86-73-7	Fluorene	ND	170	18	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	170	20	ug/kg	
90-12-0	1-Methylnaphthalene	ND	170	17	ug/kg	
91-57-6	2-Methylnaphthalene	ND	170	17	ug/kg	
91-20-3	Naphthalene	ND	170	17	ug/kg	
85-01-8	Phenanthrene	ND	170	17	ug/kg	
129-00-0	Pyrene	ND	170	19	ug/kg	

CAS No.	Surrogate Recoveries		Limits
4165-60-0	Nitrobenzene-d5	71%	40-105%
321-60-8	2-Fluorobiphenyl	73%	43-107%
1718-51-0	Terphenyl-d14	75%	45-119%

Method Blank Summary

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP81538-MB	6F06546.D	1	08/13/20	MV	08/13/20	OP81538	S6F253

The QC reported here applies to the following samples: **Method:** SW846 8270E

FA77615-13

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	170	18	ug/kg	
208-96-8	Acenaphthylene	ND	170	17	ug/kg	
120-12-7	Anthracene	ND	170	19	ug/kg	
56-55-3	Benzo(a)anthracene	ND	170	17	ug/kg	
50-32-8	Benzo(a)pyrene	ND	170	20	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	170	18	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	170	17	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	170	22	ug/kg	
218-01-9	Chrysene	ND	170	17	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	170	21	ug/kg	
206-44-0	Fluoranthene	ND	170	17	ug/kg	
86-73-7	Fluorene	ND	170	18	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	170	20	ug/kg	
90-12-0	1-Methylnaphthalene	ND	170	17	ug/kg	
91-57-6	2-Methylnaphthalene	ND	170	17	ug/kg	
91-20-3	Naphthalene	ND	170	17	ug/kg	
85-01-8	Phenanthrene	ND	170	17	ug/kg	
129-00-0	Pyrene	ND	170	19	ug/kg	

CAS No.	Surrogate Recoveries		Limits
4165-60-0	Nitrobenzene-d5	53%	40-105%
321-60-8	2-Fluorobiphenyl	58%	43-107%
1718-51-0	Terphenyl-d14	71%	45-119%

Method Blank Summary

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP81485-MB	7G11131.D	1	08/11/20	FS	08/10/20	OP81485	S7G483

The QC reported here applies to the following samples: **Method:** SW846 8270E BY SIM

FA77615-1, FA77615-2, FA77615-3, FA77615-4, FA77615-5, FA77615-6, FA77615-7, FA77615-8, FA77615-9, FA77615-10, FA77615-11, FA77615-12, FA77615-13

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	130	17	ug/kg	

CAS No.	Surrogate Recoveries		Limits
7297-45-2	2-Methylnaphthalene-d10	79%	50-150%
93951-69-0	Fluoranthene-d10	90%	50-150%

Blank Spike Summary

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP81484-BS	6F06487.D	1	08/11/20	MV	08/10/20	OP81484	S6F251

The QC reported here applies to the following samples: **Method:** SW846 8270E

FA77615-1, FA77615-2, FA77615-3, FA77615-4, FA77615-5, FA77615-6, FA77615-7, FA77615-8, FA77615-9, FA77615-10, FA77615-11, FA77615-12

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
83-32-9	Acenaphthene	1670	1280	77	56-109
208-96-8	Acenaphthylene	1670	1370	82	56-106
120-12-7	Anthracene	1670	1320	79	61-110
56-55-3	Benzo(a)anthracene	1670	1400	84	66-111
50-32-8	Benzo(a)pyrene	1670	1400	84	59-104
205-99-2	Benzo(b)fluoranthene	1670	1410	85	67-113
191-24-2	Benzo(g,h,i)perylene	1670	1490	89	67-113
207-08-9	Benzo(k)fluoranthene	1670	1440	86	67-114
218-01-9	Chrysene	1670	1430	86	65-112
53-70-3	Dibenzo(a,h)anthracene	1670	1440	86	68-115
206-44-0	Fluoranthene	1670	1400	84	60-108
86-73-7	Fluorene	1670	1350	81	58-109
193-39-5	Indeno(1,2,3-cd)pyrene	1670	1450	87	66-116
90-12-0	1-Methylnaphthalene	1670	1200	72	49-106
91-57-6	2-Methylnaphthalene	1670	1250	75	47-106
91-20-3	Naphthalene	1670	1200	72	44-104
85-01-8	Phenanthrene	1670	1360	82	63-111
129-00-0	Pyrene	1670	1430	86	65-115

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	71%	40-105%
321-60-8	2-Fluorobiphenyl	73%	43-107%
1718-51-0	Terphenyl-d14	76%	45-119%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP81538-BS	6F06545.D	1	08/13/20	MV	08/13/20	OP81538	S6F253

The QC reported here applies to the following samples: **Method:** SW846 8270E

FA77615-13

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
83-32-9	Acenaphthene	1670	1240	74	56-109
208-96-8	Acenaphthylene	1670	1370	82	56-106
120-12-7	Anthracene	1670	1260	76	61-110
56-55-3	Benzo(a)anthracene	1670	1320	79	66-111
50-32-8	Benzo(a)pyrene	1670	1340	80	59-104
205-99-2	Benzo(b)fluoranthene	1670	1330	80	67-113
191-24-2	Benzo(g,h,i)perylene	1670	1600	96	67-113
207-08-9	Benzo(k)fluoranthene	1670	1320	79	67-114
218-01-9	Chrysene	1670	1380	83	65-112
53-70-3	Dibenzo(a,h)anthracene	1670	1500	90	68-115
206-44-0	Fluoranthene	1670	1260	76	60-108
86-73-7	Fluorene	1670	1280	77	58-109
193-39-5	Indeno(1,2,3-cd)pyrene	1670	1580	95	66-116
90-12-0	1-Methylnaphthalene	1670	1130	68	49-106
91-57-6	2-Methylnaphthalene	1670	1190	71	47-106
91-20-3	Naphthalene	1670	1170	70	44-104
85-01-8	Phenanthrene	1670	1290	77	63-111
129-00-0	Pyrene	1670	1470	88	65-115

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	65%	40-105%
321-60-8	2-Fluorobiphenyl	73%	43-107%
1718-51-0	Terphenyl-d14	77%	45-119%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP81485-BS	7G11132.D	1	08/11/20	FS	08/10/20	OP81485	S7G483

The QC reported here applies to the following samples: **Method:** SW846 8270E BY SIM

FA77615-1, FA77615-2, FA77615-3, FA77615-4, FA77615-5, FA77615-6, FA77615-7, FA77615-8, FA77615-9, FA77615-10, FA77615-11, FA77615-12, FA77615-13

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
87-86-5	Pentachlorophenol	1330	963	72	46-135

CAS No.	Surrogate Recoveries	BSP	Limits
7297-45-2	2-Methylnaphthalene-d10	88%	50-150%
93951-69-0	Fluoranthene-d10	90%	50-150%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP81484-MS	6F06499.D	1	08/11/20	MV	08/10/20	OP81484	S6F251
OP81484-MSD	6F06500.D	1	08/11/20	MV	08/10/20	OP81484	S6F251
FA77615-6	6F06498.D	1	08/11/20	MV	08/10/20	OP81484	S6F251

The QC reported here applies to the following samples: **Method:** SW846 8270E

FA77615-1, FA77615-2, FA77615-3, FA77615-4, FA77615-5, FA77615-6, FA77615-7, FA77615-8, FA77615-9, FA77615-10, FA77615-11, FA77615-12

CAS No.	Compound	FA77615-6 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	ND		1880	1440	77	1870	1520	81	5	56-109/23
208-96-8	Acenaphthylene	247		1880	1760	80	1870	1840	85	4	56-106/23
120-12-7	Anthracene	472		1880	1930	78	1870	1970	80	2	61-110/21
56-55-3	Benzo(a)anthracene	379		1880	2050	89	1870	1990	86	3	66-111/23
50-32-8	Benzo(a)pyrene	351		1880	1930	84	1870	1970	87	2	59-104/23
205-99-2	Benzo(b)fluoranthene	946		1880	2550	85	1870	2530	85	1	67-113/24
191-24-2	Benzo(g,h,i)perylene	293		1880	2040	93	1870	2090	96	2	67-113/21
207-08-9	Benzo(k)fluoranthene	276		1880	1810	82	1870	1850	84	2	67-114/22
218-01-9	Chrysene	538		1880	2170	87	1870	2110	84	3	65-112/25
53-70-3	Dibenzo(a,h)anthracene	72.0	J	1880	1800	92	1870	1890	97	5	68-115/23
206-44-0	Fluoranthene	539		1880	2320	95	1870	2140	86	8	60-108/25
86-73-7	Fluorene	42.1	J	1880	1560	81	1870	1610	84	3	58-109/21
193-39-5	Indeno(1,2,3-cd)pyrene	379		1880	2200	97	1870	2240	100	2	66-116/22
90-12-0	1-Methylnaphthalene	21.4	J	1880	1310	69	1870	1400	74	7	49-106/26
91-57-6	2-Methylnaphthalene	29.3	J	1880	1340	70	1870	1450	76	8	47-106/27
91-20-3	Naphthalene	25.7	J	1880	1310	68	1870	1410	74	7	44-104/27
85-01-8	Phenanthrene	95.1	J	1880	1620	81	1870	1660	84	2	63-111/22
129-00-0	Pyrene	672		1880	2440	94	1870	2250	84	8	65-115/25

CAS No.	Surrogate Recoveries	MS	MSD	FA77615-6	Limits
4165-60-0	Nitrobenzene-d5	66%	71%	73%	40-105%
321-60-8	2-Fluorobiphenyl	69%	73%	75%	43-107%
1718-51-0	Terphenyl-d14	73%	75%	74%	45-119%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP81538-MS	6F06589.D	5	08/14/20	MV	08/13/20	OP81538	S6F254
OP81538-MSD	6F06590.D	5	08/14/20	MV	08/13/20	OP81538	S6F254
FA77698-5	6F06550.D	1	08/13/20	MV	08/13/20	OP81538	S6F253
FA77698-5	6F06588.D	5	08/14/20	MV	08/13/20	OP81538	S6F254

The QC reported here applies to the following samples: **Method:** SW846 8270E

FA77615-13

CAS No.	Compound	FA77698-5 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	45.9	J	2050	1490	70	2060	884	41*	51*	56-109/23
208-96-8	Acenaphthylene	761		2050	2060	63	2060	1310	27*	45*	56-106/23
120-12-7	Anthracene	1970		2050	2220	12*	2060	1480	-24*	40*	61-110/21
56-55-3	Benzo(a)anthracene	2740		2050	3490	37*	2060	2410	-16*	37*	66-111/23
50-32-8	Benzo(a)pyrene	2510		2050	3180	33*	2060	2070	-21*	42*	59-104/23
205-99-2	Benzo(b)fluoranthene	5650 [b]		2050	6100	22* [a]	2060	3940	-83* [a]	43*	67-113/24
191-24-2	Benzo(g,h,i)perylene	1320		2050	2660	65*	2060	1640	16*	47*	67-113/21
207-08-9	Benzo(k)fluoranthene	2000		2050	2860	42*	2060	1890	-5*	41*	67-114/22
218-01-9	Chrysene	3810		2050	4170	18*	2060	2850	-47*	38*	65-112/25
53-70-3	Dibenzo(a,h)anthracene	437		2050	1860	69	2060	1110	33*	51*	68-115/23
206-44-0	Fluoranthene	3390		2050	4120	36*	2060	3010	-18*	31*	60-108/25
86-73-7	Fluorene	157	J	2050	1580	69	2060	968	39*	48*	58-109/21
193-39-5	Indeno(1,2,3-cd)pyrene	1840		2050	2990	56*	2060	1880	2*	46*	66-116/22
90-12-0	1-Methylnaphthalene	ND		2050	1330	65	2060	795	39*	50*	49-106/26
91-57-6	2-Methylnaphthalene	ND		2050	1370	67	2060	819	40*	50*	47-106/27
91-20-3	Naphthalene	ND		2050	1380	67	2060	834	40*	49*	44-104/27
85-01-8	Phenanthrene	405		2050	1670	62*	2060	1050	31*	46*	63-111/22
129-00-0	Pyrene	6160 [b]		2050	6640	23* [a]	2060	4660	-73* [a]	35*	65-115/25

CAS No.	Surrogate Recoveries	MS	MSD	FA77698-5	FA77698-5	Limits
4165-60-0	Nitrobenzene-d5	59%	36%*	66%	57%	40-105%
321-60-8	2-Fluorobiphenyl	67%	40%*	76%	65%	43-107%
1718-51-0	Terphenyl-d14	69%	43%*	85%	71%	45-119%

(a) Outside control limits due to high level in sample relative to spike amount.
(b) Result is from Run #2.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP81485-MS	7G11143.D	1	08/11/20	FS	08/10/20	OP81485	S7G483
OP81485-MSD	7G11144.D	1	08/11/20	FS	08/10/20	OP81485	S7G483
FA77615-6	7G11142.D	1	08/11/20	FS	08/10/20	OP81485	S7G483

The QC reported here applies to the following samples: **Method:** SW846 8270E BY SIM

FA77615-1, FA77615-2, FA77615-3, FA77615-4, FA77615-5, FA77615-6, FA77615-7, FA77615-8, FA77615-9, FA77615-10, FA77615-11, FA77615-12, FA77615-13

CAS No.	Compound	FA77615-6 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
87-86-5	Pentachlorophenol	ND		1480	1610	109	1490	1530	103	5	46-135/30

CAS No.	Surrogate Recoveries	MS	MSD	FA77615-6	Limits
7297-45-2	2-Methylnaphthalene-d10	113%	119%	107%	50-150%
93951-69-0	Fluoranthene-d10	103%	100%	103%	50-150%

* = Outside of Control Limits.

Instrument Performance Check (DFTPP)

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: S6F248-DFTPP
Lab File ID: 6F06435.D
Instrument ID: GCMS6F
Injection Date: 07/29/20
Injection Time: 12:37

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	99720	37.9		Pass
68	Less than 2.0% of mass 69	1843	0.70	(1.69) [a]	Pass
69	Mass 69 relative abundance	109212	41.5		Pass
70	Less than 2.0% of mass 69	588	0.22	(0.54) [a]	Pass
127	40.0 - 60.0% of mass 198	130053	49.4		Pass
197	Less than 1.0% of mass 198	1470	0.56		Pass
198	Base peak, 100% relative abundance	263083	100.0		Pass
199	5.0 - 9.0% of mass 198	17833	6.78		Pass
275	10.0 - 30.0% of mass 198	67861	25.8		Pass
365	1.0 - 100.0% of mass 198	8361	3.18		Pass
441	Present, but less than mass 443	35832	13.6	(77.9) [b]	Pass
442	40.0 - 100.0% of mass 198	242163	92.0		Pass
443	17.0 - 23.0% of mass 442	46013	17.5	(19.0) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
S6F248-IC248	6F06436.D	07/29/20	12:53	00:16	Initial cal 1
S6F248-IC248	6F06437.D	07/29/20	13:19	00:42	Initial cal 5
S6F248-IC248	6F06438.D	07/29/20	13:45	01:08	Initial cal 10
S6F248-IC248	6F06439.D	07/29/20	14:10	01:33	Initial cal 25
S6F248-ICC248	6F06440.D	07/29/20	14:36	01:59	Initial cal 50
S6F248-IC248	6F06441.D	07/29/20	15:02	02:25	Initial cal 60
S6F248-IC248	6F06442.D	07/29/20	15:28	02:51	Initial cal 75
S6F248-IC248	6F06443.D	07/29/20	15:54	03:17	Initial cal 100
S6F248-ICV248	6F06444.D	07/29/20	16:20	03:43	Initial cal verification 50
S6F248-ICV248	6F06445.D	07/29/20	16:46	04:09	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: S6F251-DFTPP
Lab File ID: 6F06485.D
Instrument ID: GCMS6F
Injection Date: 08/11/20
Injection Time: 12:38

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	86109	38.3		Pass
68	Less than 2.0% of mass 69	1447	0.64	(1.53) [a]	Pass
69	Mass 69 relative abundance	94603	42.0		Pass
70	Less than 2.0% of mass 69	507	0.23	(0.54) [a]	Pass
127	40.0 - 60.0% of mass 198	109275	48.6		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	225045	100.0		Pass
199	5.0 - 9.0% of mass 198	15094	6.71		Pass
275	10.0 - 30.0% of mass 198	57523	25.6		Pass
365	1.0 - 100.0% of mass 198	7450	3.31		Pass
441	Present, but less than mass 443	30951	13.8	(76.2) [b]	Pass
442	40.0 - 100.0% of mass 198	208749	92.8		Pass
443	17.0 - 23.0% of mass 442	40608	18.0	(19.5) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
S6F251-CC248	6F06486.D	08/11/20	12:54	00:16	Continuing cal 50
OP81484-BS	6F06487.D	08/11/20	13:20	00:42	Blank Spike
OP81484-MB	6F06488.D	08/11/20	13:46	01:08	Method Blank
ZZZZZZ	6F06489.D	08/11/20	14:12	01:34	(unrelated sample)
ZZZZZZ	6F06490.D	08/11/20	14:38	02:00	(unrelated sample)
ZZZZZZ	6F06491.D	08/11/20	15:05	02:27	(unrelated sample)
ZZZZZZ	6F06492.D	08/11/20	15:31	02:53	(unrelated sample)
FA77615-1	6F06493.D	08/11/20	15:57	03:19	CS-29
FA77615-2	6F06494.D	08/11/20	16:24	03:46	CS-30
FA77615-3	6F06495.D	08/11/20	16:50	04:12	CS-31
FA77615-4	6F06496.D	08/11/20	17:16	04:38	DUP-01
FA77615-5	6F06497.D	08/11/20	17:42	05:04	CS-40
FA77615-6	6F06498.D	08/11/20	18:08	05:30	CS-41
OP81484-MS	6F06499.D	08/11/20	18:34	05:56	Matrix Spike
OP81484-MSD	6F06500.D	08/11/20	19:00	06:22	Matrix Spike Duplicate
FA77615-7	6F06501.D	08/11/20	19:26	06:48	CS-42
FA77615-8	6F06502.D	08/11/20	19:52	07:14	CS-43
FA77615-9	6F06503.D	08/11/20	20:18	07:40	CS-44
FA77615-10	6F06504.D	08/11/20	20:44	08:06	CS-45

Instrument Performance Check (DFTPP)

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample:	S6F251-DFTPP	**Injection Date:**	08/11/20
Lab File ID:	6F06485.D	**Injection Time:**	12:38
Instrument ID:	GCMS6F		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
FA77615-11	6F06505.D	08/11/20	21:10	08:32	CS-54
FA77615-12	6F06506.D	08/11/20	21:35	08:57	CS-46
ZZZZZZ	6F06508.D	08/11/20	22:27	09:49	(unrelated sample)
ZZZZZZ	6F06509.D	08/11/20	22:52	10:14	(unrelated sample)
ZZZZZZ	6F06510.D	08/11/20	23:18	10:40	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: S6F253-DFTPP
Lab File ID: 6F06540.D
Instrument ID: GCMS6F
Injection Date: 08/13/20
Injection Time: 13:09

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	117285	38.4		Pass
68	Less than 2.0% of mass 69	2405	0.79	(1.82) [a]	Pass
69	Mass 69 relative abundance	132213	43.3		Pass
70	Less than 2.0% of mass 69	629	0.21	(0.48) [a]	Pass
127	40.0 - 60.0% of mass 198	154155	50.5		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	305280	100.0		Pass
199	5.0 - 9.0% of mass 198	21102	6.91		Pass
275	10.0 - 30.0% of mass 198	78245	25.6		Pass
365	1.0 - 100.0% of mass 198	9775	3.20		Pass
441	Present, but less than mass 443	39182	12.8	(78.0) [b]	Pass
442	40.0 - 100.0% of mass 198	258819	84.8		Pass
443	17.0 - 23.0% of mass 442	50251	16.5	(19.4) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
S6F253-CC248	6F06541.D	08/13/20	13:25	00:16	Continuing cal 50
OP81540-BS	6F06542.D	08/13/20	13:51	00:42	Blank Spike
OP81540-MB	6F06543.D	08/13/20	14:16	01:07	Method Blank
ZZZZZZ	6F06544.D	08/13/20	14:42	01:33	(unrelated sample)
OP81538-BS	6F06545.D	08/13/20	15:08	01:59	Blank Spike
OP81538-MB	6F06546.D	08/13/20	15:34	02:25	Method Blank
FA77698-11	6F06547.D	08/13/20	16:00	02:51	(used for QC only; not part of job FA77615)
FA77698-5	6F06550.D	08/13/20	17:18	04:09	(used for QC only; not part of job FA77615)
ZZZZZZ	6F06553.D	08/13/20	18:36	05:27	(unrelated sample)
ZZZZZZ	6F06554.D	08/13/20	19:02	05:53	(unrelated sample)
ZZZZZZ	6F06555.D	08/13/20	19:28	06:19	(unrelated sample)
ZZZZZZ	6F06556.D	08/13/20	19:54	06:45	(unrelated sample)
ZZZZZZ	6F06557.D	08/13/20	20:20	07:11	(unrelated sample)
ZZZZZZ	6F06559.D	08/13/20	21:12	08:03	(unrelated sample)
ZZZZZZ	6F06560.D	08/13/20	21:37	08:28	(unrelated sample)
ZZZZZZ	6F06561.D	08/13/20	22:03	08:54	(unrelated sample)
ZZZZZZ	6F06562.D	08/13/20	22:29	09:20	(unrelated sample)
ZZZZZZ	6F06563.D	08/13/20	22:54	09:45	(unrelated sample)
ZZZZZZ	6F06564.D	08/13/20	23:20	10:11	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample:	S6F253-DFTPP	**Injection Date:**	08/13/20
Lab File ID:	6F06540.D	**Injection Time:**	13:09
Instrument ID:	GCMS6F		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	6F06565.D	08/13/20	23:46	10:37	(unrelated sample)
ZZZZZZ	6F06566.D	08/14/20	00:11	11:02	(unrelated sample)
ZZZZZZ	6F06567.D	08/14/20	00:36	11:27	(unrelated sample)
ZZZZZZ	6F06568.D	08/14/20	01:02	11:53	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: S6F254-DFTPP
Lab File ID: 6F06572.D
Instrument ID: GCMS6F
Injection Date: 08/14/20
Injection Time: 12:30

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	59315	33.8		Pass
68	Less than 2.0% of mass 69	399	0.23	(0.56) [a]	Pass
69	Mass 69 relative abundance	71416	40.7		Pass
70	Less than 2.0% of mass 69	405	0.23	(0.57) [a]	Pass
127	40.0 - 60.0% of mass 198	86805	49.5		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	175488	100.0		Pass
199	5.0 - 9.0% of mass 198	11627	6.63		Pass
275	10.0 - 30.0% of mass 198	48077	27.4		Pass
365	1.0 - 100.0% of mass 198	6195	3.53		Pass
441	Present, but less than mass 443	25833	14.7	(78.8) [b]	Pass
442	40.0 - 100.0% of mass 198	169416	96.5		Pass
443	17.0 - 23.0% of mass 442	32768	18.7	(19.3) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
S6F254-CC248	6F06573.D	08/14/20	12:47	00:17	Continuing cal 50
ZZZZZZ	6F06574.D	08/14/20	13:13	00:43	(unrelated sample)
ZZZZZZ	6F06575.D	08/14/20	13:38	01:08	(unrelated sample)
FA77512-1	6F06576.D	08/14/20	14:04	01:34	(used for QC only; not part of job FA77615)
ZZZZZZ	6F06577.D	08/14/20	14:30	02:00	(unrelated sample)
ZZZZZZ	6F06578.D	08/14/20	14:56	02:26	(unrelated sample)
FA77615-13	6F06579.D	08/14/20	15:22	02:52	CS-47
ZZZZZZ	6F06580.D	08/14/20	15:48	03:18	(unrelated sample)
FA77698-11	6F06581.D	08/14/20	16:14	03:44	(used for QC only; not part of job FA77615)
OP81540-MS	6F06582.D	08/14/20	16:40	04:10	Matrix Spike
OP81540-MSD	6F06583.D	08/14/20	17:06	04:36	Matrix Spike Duplicate
ZZZZZZ	6F06584.D	08/14/20	17:33	05:03	(unrelated sample)
ZZZZZZ	6F06585.D	08/14/20	17:58	05:28	(unrelated sample)
ZZZZZZ	6F06586.D	08/14/20	18:25	05:55	(unrelated sample)
ZZZZZZ	6F06587.D	08/14/20	18:50	06:20	(unrelated sample)
FA77698-5	6F06588.D	08/14/20	19:16	06:46	(used for QC only; not part of job FA77615)
OP81538-MS	6F06589.D	08/14/20	19:42	07:12	Matrix Spike
OP81538-MSD	6F06590.D	08/14/20	20:08	07:38	Matrix Spike Duplicate

Instrument Performance Check (DFTPP)

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: S7G472-DFTPP
Lab File ID: 7G10822.D
Instrument ID: GCMS7G
Injection Date: 07/21/20
Injection Time: 08:44

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	4908	32.6		Pass
68	Less than 2.0% of mass 69	91	0.60	(1.60) [a]	Pass
69	Mass 69 relative abundance	5683	37.7		Pass
70	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
127	40.0 - 60.0% of mass 198	6380	42.3		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	15078	100.0		Pass
199	5.0 - 9.0% of mass 198	953	6.32		Pass
275	10.0 - 30.0% of mass 198	3550	23.5		Pass
365	1.0 - 100.0% of mass 198	473	3.14		Pass
441	Present, but less than mass 443	1808	12.0	(84.1) [b]	Pass
442	40.0 - 100.0% of mass 198	11474	76.1		Pass
443	17.0 - 23.0% of mass 442	2149	14.3	(18.7) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
S7G472-IC472	7G10833.D	07/21/20	13:31	04:47	Initial cal 1
S7G472-IC472	7G10834.D	07/21/20	13:55	05:11	Initial cal 2
S7G472-IC472	7G10835.D	07/21/20	14:19	05:35	Initial cal 3
S7G472-ICC472	7G10836.D	07/21/20	14:43	05:59	Initial cal 4
S7G472-IC472	7G10837.D	07/21/20	15:07	06:23	Initial cal 5
S7G472-IC472	7G10838.D	07/21/20	15:31	06:47	Initial cal 6
S7G472-IC472	7G10839.D	07/21/20	15:55	07:11	Initial cal 7
S7G472-ICV472	7G10840.D	07/21/20	16:19	07:35	Initial cal verification 4

Instrument Performance Check (DFTPP)

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: S7G483-DFTPP
Lab File ID: 7G11129.D
Instrument ID: GCMS7G
Injection Date: 08/11/20
Injection Time: 08:11

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	3303	35.6		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	3872	41.8		Pass
70	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
127	40.0 - 60.0% of mass 198	4068	43.9		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	9270	100.0		Pass
199	5.0 - 9.0% of mass 198	583	6.29		Pass
275	10.0 - 30.0% of mass 198	2141	23.1		Pass
365	1.0 - 100.0% of mass 198	327	3.53		Pass
441	Present, but less than mass 443	938	10.1	(86.0) [b]	Pass
442	40.0 - 100.0% of mass 198	6121	66.0		Pass
443	17.0 - 23.0% of mass 442	1091	11.8	(17.8) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
S7G483-CC472	7G11130.D	08/11/20	08:29	00:18	Continuing cal 4
OP81485-MB	7G11131.D	08/11/20	08:52	00:41	Method Blank
OP81485-BS	7G11132.D	08/11/20	09:16	01:05	Blank Spike
ZZZZZZ	7G11133.D	08/11/20	09:39	01:28	(unrelated sample)
ZZZZZZ	7G11134.D	08/11/20	10:03	01:52	(unrelated sample)
ZZZZZZ	7G11135.D	08/11/20	10:27	02:16	(unrelated sample)
ZZZZZZ	7G11136.D	08/11/20	10:50	02:39	(unrelated sample)
FA77615-1	7G11137.D	08/11/20	11:14	03:03	CS-29
FA77615-2	7G11138.D	08/11/20	11:38	03:27	CS-30
FA77615-3	7G11139.D	08/11/20	12:02	03:51	CS-31
FA77615-4	7G11140.D	08/11/20	12:26	04:15	DUP-01
FA77615-5	7G11141.D	08/11/20	12:50	04:39	CS-40
FA77615-6	7G11142.D	08/11/20	13:14	05:03	CS-41
OP81485-MS	7G11143.D	08/11/20	13:38	05:27	Matrix Spike
OP81485-MSD	7G11144.D	08/11/20	14:02	05:51	Matrix Spike Duplicate
FA77615-7	7G11145.D	08/11/20	14:26	06:15	CS-42
FA77615-8	7G11146.D	08/11/20	14:51	06:40	CS-43
FA77615-9	7G11147.D	08/11/20	15:15	07:04	CS-44
FA77615-10	7G11148.D	08/11/20	15:39	07:28	CS-45

Instrument Performance Check (DFTPP)

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample:	S7G483-DFTPP	**Injection Date:**	08/11/20
Lab File ID:	7G11129.D	**Injection Time:**	08:11
Instrument ID:	GCMS7G		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
FA77615-11	7G11149.D	08/11/20	16:04	07:53	CS-54
FA77615-12	7G11150.D	08/11/20	16:28	08:17	CS-46
FA77615-13	7G11151.D	08/11/20	16:53	08:42	CS-47
ZZZZZZ	7G11152.D	08/11/20	17:17	09:06	(unrelated sample)
ZZZZZZ	7G11153.D	08/11/20	17:41	09:30	(unrelated sample)
ZZZZZZ	7G11154.D	08/11/20	18:05	09:54	(unrelated sample)
ZZZZZZ	7G11155.D	08/11/20	18:30	10:19	(unrelated sample)
ZZZZZZ	7G11156.D	08/11/20	18:54	10:43	(unrelated sample)
ZZZZZZ	7G11157.D	08/11/20	19:18	11:07	(unrelated sample)
FA77581-5	7G11158.D	08/11/20	19:42	11:31	(used for QC only; not part of job FA77615)

Instrument Performance Check (DFTPP)

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-DFTPP
Lab File ID: X071355.D
Instrument ID: GCMSX
Injection Date: 06/23/20
Injection Time: 09:47

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	48227	49.7		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	42739	44.1		Pass
70	Less than 2.0% of mass 69	206	0.21	(0.48) [a]	Pass
127	40.0 - 60.0% of mass 198	50221	51.8		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	96957	100.0		Pass
199	5.0 - 9.0% of mass 198	6460	6.66		Pass
275	10.0 - 30.0% of mass 198	22665	23.4		Pass
365	1.0 - 100.0% of mass 198	1798	1.85		Pass
441	Present, but less than mass 443	12438	12.8	(74.3) [b]	Pass
442	40.0 - 100.0% of mass 198	83123	85.7		Pass
443	17.0 - 23.0% of mass 442	16733	17.3	(20.1) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
SX2918-IC2918	X071356.D	06/23/20	10:04	00:17	Initial cal 1
SX2918-IC2918	X071357.D	06/23/20	10:30	00:43	Initial cal 5
SX2918-IC2918	X071358.D	06/23/20	10:55	01:08	Initial cal 10
SX2918-IC2918	X071359.D	06/23/20	11:21	01:34	Initial cal 25
SX2918-IC2918	X071360.D	06/23/20	11:46	01:59	Initial cal 50
SX2918-IC2918	X071361.D	06/23/20	12:12	02:25	Initial cal 60
SX2918-IC2918	X071362.D	06/23/20	12:37	02:50	Initial cal 75
SX2918-IC2918	X071363.D	06/23/20	13:03	03:16	Initial cal 100
SX2918-IC2918	X071364.D	06/23/20	13:29	03:42	Initial cal 1
SX2918-IC2918	X071365.D	06/23/20	13:54	04:07	Initial cal 5
SX2918-IC2918	X071366.D	06/23/20	14:20	04:33	Initial cal 10
SX2918-IC2918	X071367.D	06/23/20	14:46	04:59	Initial cal 25
SX2918-ICC2918	X071368.D	06/23/20	15:12	05:25	Initial cal 50
SX2918-IC2918	X071369.D	06/23/20	15:39	05:52	Initial cal 60
SX2918-IC2918	X071370.D	06/23/20	16:05	06:18	Initial cal 75
SX2918-IC2918	X071371.D	06/23/20	16:31	06:44	Initial cal 100
SX2918-ICV2918	X071372.D	06/23/20	16:58	07:11	Initial cal verification 50
SX2918-ICV2918	X071373.D	06/23/20	17:25	07:38	Initial cal verification 50
SX2918-ICV2918	X071374.D	06/23/20	17:51	08:04	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample:	SX2918-DFTPP	**Injection Date:**	06/23/20
Lab File ID:	X071355.D	**Injection Time:**	09:47
Instrument ID:	GCMSX		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
SX2918-ICV2918	X071375.D	06/23/20	18:17	08:30	Initial cal verification 50
SX2918-ICV2918	X071376.D	06/23/20	18:43	08:56	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2919-DFTPP
Lab File ID: X071415.D
Instrument ID: GCMSX
Injection Date: 06/24/20
Injection Time: 15:04

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	34387	50.4		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	32027	47.0		Pass
70	Less than 2.0% of mass 69	101	0.15	(0.32) [a]	Pass
127	40.0 - 60.0% of mass 198	36939	54.2		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	68165	100.0		Pass
199	5.0 - 9.0% of mass 198	4563	6.69		Pass
275	10.0 - 30.0% of mass 198	16125	23.7		Pass
365	1.0 - 100.0% of mass 198	1684	2.47		Pass
441	Present, but less than mass 443	9013	13.2	(75.9) [b]	Pass
442	40.0 - 100.0% of mass 198	59211	86.9		Pass
443	17.0 - 23.0% of mass 442	11869	17.4	(20.0) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
SX2918-ICV2918	X071416.D	06/24/20	15:22	00:18	Initial cal verification 50
SX2919-CC2918	X071417.D	06/24/20	15:48	00:44	Continuing cal 50
SX2919-CC2918	X071418.D	06/24/20	16:15	01:11	Continuing cal 50
OP80770-BS	X071419.D	06/24/20	16:41	01:37	Blank Spike
OP80770-MB	X071420.D	06/24/20	17:08	02:04	Method Blank
OP80804-BS1	X071421.D	06/24/20	17:34	02:30	Blank Spike
OP80804-BS2	X071422.D	06/24/20	18:00	02:56	Blank Spike
ZZZZZZ	X071424.D	06/24/20	18:53	03:49	(unrelated sample)
FA75495-3	X071425.D	06/24/20	19:19	04:15	(used for QC only; not part of job FA77615)
FA75495-4	X071426.D	06/24/20	19:45	04:41	(used for QC only; not part of job FA77615)
FA76058-1	X071427.D	06/24/20	20:11	05:07	(used for QC only; not part of job FA77615)
ZZZZZZ	X071428.D	06/24/20	20:37	05:33	(unrelated sample)
ZZZZZZ	X071429.D	06/24/20	21:02	05:58	(unrelated sample)
ZZZZZZ	X071430.D	06/24/20	21:28	06:24	(unrelated sample)
OP80770-MS	X071432.D	06/24/20	22:19	07:15	Matrix Spike
OP80770-MSD	X071433.D	06/24/20	22:45	07:41	Matrix Spike Duplicate
ZZZZZZ	X071434.D	06/24/20	23:10	08:06	(unrelated sample)
ZZZZZZ	X071435.D	06/24/20	23:36	08:32	(unrelated sample)
ZZZZZZ	X071436.D	06/25/20	00:01	08:57	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample:	SX2919-DFTPP	**Injection Date:**	06/24/20
Lab File ID:	X071415.D	**Injection Time:**	15:04
Instrument ID:	GCMSX		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	X071437.D	06/25/20	00:26	09:22	(unrelated sample)
ZZZZZZ	X071438.D	06/25/20	00:52	09:48	(unrelated sample)
SX2919-ECC2918	X071440.D	06/25/20	01:43	10:39	Ending cal 50
SX2919-ECC2918	X071441.D	06/25/20	02:08	11:04	Ending cal 50

Instrument Performance Check (DFTPP)

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2951-DFTPP
Lab File ID: X072356.D
Instrument ID: GCMSX
Injection Date: 08/12/20
Injection Time: 10:07

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	29610	51.2		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	26838	46.4		Pass
70	Less than 2.0% of mass 69	95	0.16	(0.35) [a]	Pass
127	40.0 - 60.0% of mass 198	29425	50.9		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	57845	100.0		Pass
199	5.0 - 9.0% of mass 198	3631	6.28		Pass
275	10.0 - 30.0% of mass 198	13046	22.6		Pass
365	1.0 - 100.0% of mass 198	1226	2.12		Pass
441	Present, but less than mass 443	7696	13.3	(85.3) [b]	Pass
442	40.0 - 100.0% of mass 198	47624	82.3		Pass
443	17.0 - 23.0% of mass 442	9017	15.6	(18.9) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
SX2951-CC2918	X072357.D	08/12/20	10:24	00:17	Continuing cal 50
SX2951-CC2918	X072358.D	08/12/20	10:49	00:42	Continuing cal 5
ZZZZZZ	X072359.D	08/12/20	11:16	01:09	(unrelated sample)
ZZZZZZ	X072360.D	08/12/20	11:42	01:35	(unrelated sample)
ZZZZZZ	X072361.D	08/12/20	12:07	02:00	(unrelated sample)
ZZZZZZ	X072362.D	08/12/20	12:33	02:26	(unrelated sample)
ZZZZZZ	X072366.D	08/12/20	14:16	04:09	(unrelated sample)
ZZZZZZ	X072368.D	08/12/20	15:08	05:01	(unrelated sample)
ZZZZZZ	X072369.D	08/12/20	15:33	05:26	(unrelated sample)
ZZZZZZ	X072371.D	08/12/20	16:25	06:18	(unrelated sample)
ZZZZZZ	X072373.D	08/12/20	17:17	07:10	(unrelated sample)
FA77581-5	X072374.D	08/12/20	17:43	07:36	(used for QC only; not part of job FA77615)
ZZZZZZ	X072375.D	08/12/20	18:09	08:02	(unrelated sample)
ZZZZZZ	X072376.D	08/12/20	18:34	08:27	(unrelated sample)
FA77615-3	X072377.D	08/12/20	19:00	08:53	CS-31
FA77615-12	X072379.D	08/12/20	19:51	09:44	CS-46
ZZZZZZ	X072381.D	08/12/20	20:42	10:35	(unrelated sample)
ZZZZZZ	X072382.D	08/12/20	21:08	11:01	(unrelated sample)
FA77615-11	X072383.D	08/12/20	21:34	11:27	CS-54

Instrument Performance Check (DFTPP)

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample:	SX2951-DFTPP	**Injection Date:**	08/12/20
Lab File ID:	X072356.D	**Injection Time:**	10:07
Instrument ID:	GCMSX		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	X072384.D	08/12/20	21:59	11:52	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2952-DFTPP
Lab File ID: X072388.D
Instrument ID: GCMSX
Injection Date: 08/13/20
Injection Time: 13:21

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	24905	47.7		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	22939	43.9		Pass
70	Less than 2.0% of mass 69	111	0.21	(0.48) [a]	Pass
127	40.0 - 60.0% of mass 198	25242	48.3		Pass
197	Less than 1.0% of mass 198	109	0.21		Pass
198	Base peak, 100% relative abundance	52253	100.0		Pass
199	5.0 - 9.0% of mass 198	3476	6.65		Pass
275	10.0 - 30.0% of mass 198	12102	23.2		Pass
365	1.0 - 100.0% of mass 198	1098	2.10		Pass
441	Present, but less than mass 443	7270	13.9	(84.6) [b]	Pass
442	40.0 - 100.0% of mass 198	44123	84.4		Pass
443	17.0 - 23.0% of mass 442	8592	16.4	(19.5) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
SX2952-CC2918	X072389.D	08/13/20	13:38	00:17	Continuing cal 50
SX2952-CC2918	X072390.D	08/13/20	14:03	00:42	Continuing cal 5
OP81519-BS	X072391.D	08/13/20	14:29	01:08	Blank Spike
OP81519-MB	X072392.D	08/13/20	14:55	01:34	Method Blank
FA77503-1	X072393.D	08/13/20	15:21	02:00	(used for QC only; not part of job FA77615)
OP81519-MS	X072394.D	08/13/20	15:47	02:26	Matrix Spike
OP81519-MSD	X072395.D	08/13/20	16:13	02:52	Matrix Spike Duplicate
OP81516-BS	X072396.D	08/13/20	16:39	03:18	Blank Spike
OP81516-MB	X072397.D	08/13/20	17:05	03:44	Method Blank
ZZZZZZ	X072398.D	08/13/20	17:31	04:10	(unrelated sample)
FA77615-10	X072399.D	08/13/20	17:56	04:35	CS-45
OP81455-MS	X072400.D	08/13/20	18:22	05:01	Matrix Spike
OP81455-MSD	X072401.D	08/13/20	18:48	05:27	Matrix Spike Duplicate
ZZZZZZ	X072403.D	08/13/20	19:40	06:19	(unrelated sample)
OP81545-BS	X072409.D	08/13/20	22:14	08:53	Blank Spike
OP81545-MB	X072410.D	08/13/20	22:39	09:18	Method Blank
ZZZZZZ	X072411.D	08/13/20	23:05	09:44	(unrelated sample)
ZZZZZZ	X072412.D	08/13/20	23:30	10:09	(unrelated sample)
ZZZZZZ	X072413.D	08/13/20	23:56	10:35	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample:	SX2952-DFTPP	**Injection Date:**	08/13/20
Lab File ID:	X072388.D	**Injection Time:**	13:21
Instrument ID:	GCMSX		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	X072414.D	08/14/20	00:21	11:00	(unrelated sample)
ZZZZZZ	X072415.D	08/14/20	00:46	11:25	(unrelated sample)
ZZZZZZ	X072416.D	08/14/20	01:12	11:51	(unrelated sample)

Internal Standard Area Summary

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Check Std:	S6F251-CC248	**Injection Date:**	08/11/20
Lab File ID:	6F06486.D	**Injection Time:**	12:54
Instrument ID:	GCMS6F	**Method:**	SW846 8270E

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Initial Cal [a]	302884	6.05	1170478	7.48	637579	9.53	1169544	11.29	1074260	14.59	1069323	16.95
Check Std [b]	320148	6.03	1244639	7.47	690499	9.52	1290149	11.28	1201004	14.58	1198860	16.93
Upper Limit [c]	640296	6.20	2489278	7.64	1380998	9.69	2580298	11.45	2402008	14.75	2397720	17.10
Lower Limit [d]	160074	5.86	622320	7.30	345250	9.35	645075	11.11	600502	14.41	599430	16.76

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP81484-BS	372320	6.03	1389543	7.47	731029	9.52	1322211	11.28	1161496	14.58	1125889	16.93
OP81484-MB	379614	6.03	1425462	7.46	760513	9.52	1370889	11.27	1142281	14.57	1117696	16.92
ZZZZZZ	371272	6.03	1386651	7.46	744152	9.52	1345757	11.28	1167562	14.57	1167783	16.93
ZZZZZZ	399115	6.03	1524247	7.47	829257	9.52	1517235	11.28	1316308	14.58	1252556	16.94
ZZZZZZ	388684	6.03	1487978	7.47	802996	9.52	1477264	11.28	1247562	14.58	1216283	16.94
ZZZZZZ	386926	6.03	1451329	7.47	757234	9.52	1373589	11.28	1176388	14.58	1159280	16.94
FA77615-1	376698	6.03	1389148	7.47	730822	9.52	1296535	11.28	1131159	14.57	1143949	16.93
FA77615-2	378731	6.03	1424753	7.47	745735	9.52	1338107	11.28	1171725	14.57	1170347	16.94
FA77615-3	381124	6.03	1412026	7.47	741775	9.52	1331566	11.28	1140619	14.58	1165331	16.95
FA77615-4	381333	6.03	1402351	7.47	727957	9.52	1293248	11.28	1102297	14.58	1150621	16.94
FA77615-5	360704	6.03	1367223	7.47	720277	9.52	1299540	11.28	1111358	14.58	1104378	16.95
FA77615-6	357490	6.03	1308447	7.47	684334	9.52	1224243	11.28	1063944	14.58	1099990	16.94
OP81484-MS	355841	6.03	1312698	7.47	687606	9.52	1237189	11.28	1078087	14.58	1108819	16.95
OP81484-MSD	349551	6.04	1288913	7.47	676015	9.53	1217631	11.28	1067199	14.59	1076080	16.95
FA77615-7	345535	6.03	1287704	7.47	675724	9.52	1201776	11.28	1071811	14.58	1105614	16.95
FA77615-8	365068	6.03	1346935	7.47	703545	9.52	1258184	11.28	1102573	14.58	1134044	16.95
FA77615-9	371245	6.03	1408625	7.47	759203	9.52	1396299	11.28	1170612	14.58	1155992	16.95
FA77615-10	378653	6.03	1415003	7.47	755254	9.52	1352234	11.28	1085577	14.61	1169120	17.00
FA77615-11	362583	6.04	1344236	7.47	715905	9.53	1294458	11.28	1120594	14.58	1164635	16.95
FA77615-12	361523	6.04	1352547	7.47	716437	9.53	1301320	11.28	1085653	14.60	1137038	16.97
ZZZZZZ	357359	6.04	1317070	7.47	692725	9.53	1245507	11.28	1083937	14.59	1125655	16.96
ZZZZZZ	324276	6.04	1201862	7.47	637791	9.53	1160927	11.28	974706	14.61	1038243	16.99
ZZZZZZ	340202	6.04	1268070	7.47	674004	9.53	1221594	11.28	1062925	14.59	1101284	16.97

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Initial Cal is: S6F248-ICC248 6F06440.D 07/29/20 14:36
(b) Check Std Limit = -50 to + 100% of initial cal area.

Internal Standard Area Summary

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Check Std:	S6F251-CC248	**Injection Date:**	08/11/20
Lab File ID:	6F06486.D	**Injection Time:**	12:54
Instrument ID:	GCMS6F	**Method:**	SW846 8270E

Lab	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
Sample ID	**AREA**	**RT**	**AREA**	**RT**	**AREA**	**RT**	**AREA**	**RT**	**AREA**	**RT**	**AREA**	**RT**

(c) Upper Limit = + 100% of check standard area; Retention time + 0.167 minutes.
(d) Lower Limit = -50% of check standard area; Retention time -0.167 minutes.

Internal Standard Area Summary

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Check Std:	S6F253-CC248	**Injection Date:**	08/13/20
Lab File ID:	6F06541.D	**Injection Time:**	13:25
Instrument ID:	GCMS6F	**Method:**	SW846 8270E

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Initial Cal [a]	302884	6.05	1170478	7.48	637579	9.53	1169544	11.29	1074260	14.59	1069323	16.95
Check Std [b]	402551	6.02	1382487	7.46	667405	9.52	1057047	11.27	984775	14.57	963172	16.92
Upper Limit [c]	805102	6.19	2764974	7.63	1334810	9.69	2114094	11.44	1969550	14.74	1926344	17.09
Lower Limit [d]	201276	5.85	691244	7.29	333703	9.35	528524	11.10	492388	14.40	481586	16.75

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP81540-BS	442622	6.02	1369761	7.46	733620	9.51	1058435	11.27	785374	14.57	731464	16.92
OP81540-MB	369451	6.02	1467872	7.46	630787	9.51	1053724	11.27	792488	14.56	894019	16.92
ZZZZZZ	386086	6.02	1338048	7.46	641857	9.51	1065669	11.27	807931	14.56	907306	16.92
OP81538-BS	397644	6.02	1244035	7.46	598082	9.51	1013646	11.27	771358	14.57	709104	16.92
OP81538-MB	365153	6.02	1289751	7.46	642644	9.51	1049060	11.27	799614	14.56	754550	16.91
FA77698-11	363576	6.02	1310781	7.46	663113	9.51	1127398	11.27	653634	14.60	717244	16.98
FA77698-5	257258	6.03	968259	7.46	504858	9.52	878596	11.27	617725	14.59	609689	16.96
ZZZZZZ	264843	6.03	979169	7.46	516161	9.52	925478	11.27	694763	14.58	653630	16.94
ZZZZZZ	274459	6.03	996955	7.46	527527	9.52	946010	11.27	714595	14.58	679713	16.94
ZZZZZZ	267213	6.03	978322	7.46	514255	9.52	920530	11.27	692495	14.58	665889	16.94
ZZZZZZ	279097	6.03	1019450	7.46	532857	9.52	941082	11.28	672089	14.59	658683	16.96
ZZZZZZ	279152	6.03	1026302	7.46	529481	9.52	931173	11.27	669122	14.59	660164	16.96
ZZZZZZ	272051	6.03	992787	7.46	512218	9.52	897814	11.28	675509	14.58	856505	16.95
ZZZZZZ	275670	6.03	1017445	7.46	672572	9.52	949077	11.27	706093	14.58	688681	16.95
ZZZZZZ	293628	6.03	1067582	7.46	538572	9.52	985069	11.27	739308	14.58	715682	16.95
ZZZZZZ	280855	6.03	1031060	7.46	529715	9.52	948450	11.28	669836	14.59	673312	16.96
ZZZZZZ	283748	6.03	1034292	7.46	537481	9.52	950544	11.28	709392	14.58	887860	16.95
ZZZZZZ	263766	6.03	961756	7.46	509408	9.52	904470	11.28	633909	14.59	639713	16.96
ZZZZZZ	275195	6.03	1008744	7.46	528183	9.52	940068	11.28	733139	14.58	704806	16.94
ZZZZZZ	278901	6.03	1012455	7.46	521644	9.52	923210	11.28	688302	14.59	672001	16.96
ZZZZZZ	285288	6.03	1040216	7.46	532515	9.52	936850	11.28	674537	14.59	678470	16.96
ZZZZZZ	276610	6.03	1017139	7.46	532811	9.52	940002	11.28	703656	14.58	689676	16.95

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Initial Cal is: S6F248-ICC248 6F06440.D 07/29/20 14:36
(b) Check Std Limit = -50 to + 100% of initial cal area.
(c) Upper Limit = + 100% of check standard area; Retention time + 0.167 minutes.

Internal Standard Area Summary

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Check Std:	S6F253-CC248	**Injection Date:**	08/13/20
Lab File ID:	6F06541.D	**Injection Time:**	13:25
Instrument ID:	GCMS6F	**Method:**	SW846 8270E

Lab	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
Sample ID	**AREA**	**RT**	**AREA**	**RT**	**AREA**	**RT**	**AREA**	**RT**	**AREA**	**RT**	**AREA**	**RT**

(d) Lower Limit = -50% of check standard area; Retention time -0.167 minutes.

Internal Standard Area Summary

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Check Std:	S6F254-CC248	**Injection Date:**	08/14/20
Lab File ID:	6F06573.D	**Injection Time:**	12:47
Instrument ID:	GCMS6F	**Method:**	SW846 8270D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Initial Cal [a]	302884	6.05	1170478	7.48	637579	9.53	1169544	11.29	1074260	14.59	1069323	16.95
Check Std [b]	244618	6.01	888239	7.45	463309	9.51	829636	11.26	660438	14.57	640184	16.92
Upper Limit [c]	489236	6.18	1776478	7.62	926618	9.68	1659272	11.43	1320876	14.74	1280368	17.09
Lower Limit [d]	122309	5.84	444120	7.28	231655	9.34	414818	11.09	330219	14.40	320092	16.75
Lab Sample ID	**IS 1 AREA**	**RT**	**IS 2 AREA**	**RT**	**IS 3 AREA**	**RT**	**IS 4 AREA**	**RT**	**IS 5 AREA**	**RT**	**IS 6 AREA**	**RT**
ZZZZZZ	337839	6.01	1230296	7.45	615684	9.50	1041875	11.26	798198	14.56	747280	16.92
ZZZZZZ	332312	6.01	1229337	7.45	612545	9.50	1069686	11.26	839627	14.56	795852	16.92
FA77512-1	299427	6.01	1068705	7.45	551877	9.50	973190	11.26	771740	14.55	720551	16.92
ZZZZZZ	305178	6.01	1129911	7.45	587969	9.50	1061134	11.26	868510	14.56	807718	16.92
ZZZZZZ	308639	6.01	1134468	7.45	592007	9.50	1055470	11.26	836259	14.56	772706	16.92
FA77615-13	375456	6.01	1298657	7.45	599262	9.50	950099	11.26	607805	14.56	584576	16.92
ZZZZZZ	377718	6.01	1323850	7.45	646922	9.50	1140110	11.26	892884	14.56	854760	16.92
FA77698-11	296225	6.01	1054519	7.45	520334	9.50	909234	11.26	697399	14.56	665458	16.92
OP81540-MS	295597	6.01	1040059	7.45	523643	9.50	913729	11.26	681188	14.57	664638	16.92
OP81540-MSD	310269	6.01	1097762	7.45	546552	9.50	945092	11.26	731440	14.56	707907	16.92
ZZZZZZ	311734	6.01	1102213	7.45	564961	9.50	993110	11.26	760247	14.56	724631	16.92
ZZZZZZ	306432	6.01	1101312	7.45	560786	9.50	982155	11.26	725421	14.57	706404	16.93
ZZZZZZ	299075	6.01	1054952	7.45	542645	9.50	953035	11.26	709485	14.56	683865	16.92
ZZZZZZ	296956	6.01	1065323	7.45	539572	9.50	947826	11.26	729352	14.56	692952	16.92
FA77698-5	302050	6.01	1103730	7.45	571539	9.50	996142	11.26	765005	14.56	726271	16.92
OP81538-MS	311335	6.01	1100775	7.45	561116	9.50	999992	11.26	767400	14.56	735911	16.92
OP81538-MSD	319223	6.01	1092575	7.45	552231	9.50	959718	11.26	757400	14.56	733755	16.92

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Initial Cal is: S6F248-ICC248 6F06440.D 07/29/20 14:36
(b) Check Std Limit = -50 to + 100% of initial cal area.
(c) Upper Limit = + 100% of check standard area; Retention time + 0.167 minutes.
(d) Lower Limit = -50% of check standard area; Retention time -0.167 minutes.

Internal Standard Area Summary

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Check Std:	S7G483-CC472	**Injection Date:**	08/11/20
Lab File ID:	7G11130.D	**Injection Time:**	08:29
Instrument ID:	GCMS7G	**Method:**	SW846 8270E BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Initial Cal [a]	25300	4.75	14609	6.24	26093	7.53	42851	9.87	37551	11.64
Check Std [b]	23021	4.63	17904	6.11	34538	7.40	58481	9.73	51783	11.48
Upper Limit [c]	46042	4.80	35808	6.28	69076	7.57	116962	9.90	103566	11.65
Lower Limit [d]	11511	4.46	8952	5.94	17269	7.23	29241	9.56	25892	11.31

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
OP81485-MB	21667	4.63	17417	6.11	34159	7.40	60313	9.73	54929	11.47
OP81485-BS	22419	4.63	17721	6.12	35054	7.40	60725	9.73	55339	11.48
ZZZZZZ	21993	4.65	17751	6.13	34300	7.41	61199	9.74	56905	11.49
ZZZZZZ	20168	4.63	16497	6.11	32146	7.40	62432	9.73	59100	11.49
ZZZZZZ	20710	4.63	17089	6.12	33007	7.40	63976	9.74	62255	11.50
ZZZZZZ	19541	4.65	16538	6.13	32234	7.41	61692	9.74	57995	11.50
FA77615-1	19176	4.65	16041	6.13	31644	7.41	55090	9.74	53000	11.49
FA77615-2	20337	4.65	17240	6.13	33719	7.41	60041	9.74	58801	11.49
FA77615-3	20371	4.64	16941	6.12	32802	7.40	65875	9.75	62002	11.51
FA77615-4	19156	4.63	15860	6.11	31122	7.40	54619	9.73	52212	11.47
FA77615-5	20891	4.64	17140	6.12	33466	7.41	65680	9.74	63725	11.51
FA77615-6	20762	4.63	16997	6.11	32867	7.40	62212	9.73	58980	11.49
OP81485-MS	21679	4.64	17776	6.12	35130	7.41	63709	9.74	59713	11.50
OP81485-MSD	22295	4.65	18278	6.13	36401	7.41	66697	9.74	61462	11.50
FA77615-7	20600	4.63	17101	6.11	33516	7.40	60935	9.73	57729	11.49
FA77615-8	21624	4.64	17811	6.12	34710	7.40	65043	9.74	61378	11.50
FA77615-9	20528	4.64	17614	6.12	34676	7.40	64840	9.74	59121	11.49
FA77615-10	22511	4.64	18710	6.12	37890	7.41	95046	9.78	52199	11.55
FA77615-11	20947	4.63	18088	6.11	35722	7.40	62374	9.73	56624	11.48
FA77615-12	20517	4.65	18471	6.13	36375	7.41	75424	9.76	62403	11.53
FA77615-13	20299	4.63	18312	6.11	35117	7.40	65101	9.73	57852	11.49
ZZZZZZ	19792	4.63	18162	6.11	36276	7.40	67435	9.73	58097	11.49
ZZZZZZ	20730	4.63	18630	6.11	36508	7.40	80223	9.75	63857	11.52
ZZZZZZ	19006	4.64	17600	6.12	34496	7.40	64777	9.74	56828	11.50
ZZZZZZ	23412	4.63	21177	6.11	41713	7.40	87234	9.76	60316	11.54
ZZZZZZ	19939	4.65	18574	6.13	36812	7.41	95748	9.79	51358	11.56
ZZZZZZ	19555	4.65	18327	6.13	36349	7.41	85919	9.78	55818	11.55
FA77581-5	18661	4.65	17313	6.13	34578	7.41	71591	9.76	56542	11.52

IS 1 = Naphthalene-d8
IS 2 = Acenaphthene-d10
IS 3 = Phenanthrene-d10
IS 4 = Chrysene-d12

Internal Standard Area Summary

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Check Std:	S7G483-CC472	**Injection Date:**	08/11/20
Lab File ID:	7G11130.D	**Injection Time:**	08:29
Instrument ID:	GCMS7G	**Method:**	SW846 8270E BY SIM

Lab Sample ID	IS 1 AREA	IS 1 RT	IS 2 AREA	IS 2 RT	IS 3 AREA	IS 3 RT	IS 4 AREA	IS 4 RT	IS 5 AREA	IS 5 RT

IS 5 = Perylene-d12

(a) Initial Cal is: S7G472-ICC472 7G10836.D 07/21/20 14:43
(b) Check Std Limit = -50 to + 100% of initial cal area.
(c) Upper Limit = + 100% of check standard area; Retention time + 0.167 minutes.
(d) Lower Limit = -50% of check standard area; Retention time -0.167 minutes.

Internal Standard Area Summary

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Check Std:	SX2951-CC2918	**Injection Date:**	08/12/20
Lab File ID:	X072357.D	**Injection Time:**	10:24
Instrument ID:	GCMSX	**Method:**	SW846 8270E

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Initial Cal [a]	170190	6.01	730199	7.43	379384	9.48	636433	11.22	474373	14.50	348798	16.81
Check Std [b]	163781	5.65	635873	7.08	311303	9.12	516972	10.86	400284	14.07	293676	16.27
Upper Limit [c]	327562	5.82	1271746	7.25	622606	9.29	1033944	11.03	800568	14.24	587352	16.44
Lower Limit [d]	81891	5.48	317937	6.91	155652	8.95	258486	10.69	200142	13.90	146838	16.10

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
ZZZZZZ	218136	5.65	810959	7.07	391709	9.11	662062	10.86	535598	14.07	417625	16.27
ZZZZZZ	176303	5.65	649197	7.08	305905	9.11	500197	10.86	394851	14.07	314921	16.27
ZZZZZZ	161302	5.65	614464	7.07	296208	9.12	511357	10.86	430440	14.07	327737	16.27
ZZZZZZ	182933	5.65	657427	7.08	310084	9.11	524672	10.86	428249	14.07	343608	16.28
ZZZZZZ	181771	5.65	641174	7.08	304582	9.12	513802	10.86	409295	14.07	349024	16.28
ZZZZZZ	196243	5.65	758444	7.08	369807	9.11	653011	10.86	554493	14.07	423056	16.28
ZZZZZZ	137435	5.65	499201	7.08	241962	9.11	418598	10.86	357671	14.07	282742	16.27
ZZZZZZ	161487	5.65	577827	7.08	278663	9.11	470342	10.86	403060	14.07	331354	16.27
ZZZZZZ	134513	5.65	483488	7.08	230817	9.12	396866	10.86	339628	14.07	273941	16.28
FA77581-5	141777	5.65	504392	7.08	237075	9.11	395558	10.86	332612	14.07	276558	16.28
ZZZZZZ	168839	5.65	622102	7.08	300831	9.12	515565	10.86	420124	14.07	329022	16.27
ZZZZZZ	126149	5.65	463289	7.08	221908	9.11	382867	10.86	316510	14.07	243526	16.27
FA77615-3	162640	5.65	591331	7.08	282884	9.11	479581	10.86	392317	14.07	316082	16.28
FA77615-12	172906	5.65	647699	7.08	316920	9.11	541722	10.86	452184	14.07	350415	16.27
ZZZZZZ	178537	5.65	655727	7.08	321143	9.11	552823	10.86	467385	14.07	367333	16.28
ZZZZZZ	188109	5.65	679562	7.08	331283	9.11	559907	10.86	465953	14.08	378757	16.28
FA77615-11	161914	5.65	574279	7.08	278406	9.12	458553	10.86	362449	14.07	291793	16.27
ZZZZZZ	161048	5.65	614812	7.08	304170	9.12	518000	10.86	382263	14.07	308707	16.27

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Initial Cal is: SX2918-ICC2918 X071368.D 06/23/20 15:12
(b) Check Std Limit = -50 to + 100% of initial cal area.
(c) Upper Limit = + 100% of check standard area; Retention time + 0.167 minutes.
(d) Lower Limit = -50% of check standard area; Retention time -0.167 minutes.

Internal Standard Area Summary

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Check Std:	SX2952-CC2918	**Injection Date:**	08/13/20
Lab File ID:	X072389.D	**Injection Time:**	13:38
Instrument ID:	GCMSX	**Method:**	SW846 8270D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Initial Cal [a]	170190	6.01	730199	7.43	379384	9.48	636433	11.22	474373	14.50	348798	16.81
Check Std [b]	166017	5.63	649488	7.06	321937	9.10	541016	10.84	424734	14.05	307492	16.23
Upper Limit [c]	332034	5.80	1298976	7.23	643874	9.27	1082032	11.01	849468	14.22	614984	16.40
Lower Limit [d]	83009	5.46	324744	6.89	160969	8.93	270508	10.67	212367	13.88	153746	16.06
Lab Sample ID	**IS 1 AREA**	**RT**	**IS 2 AREA**	**RT**	**IS 3 AREA**	**RT**	**IS 4 AREA**	**RT**	**IS 5 AREA**	**RT**	**IS 6 AREA**	**RT**
OP81519-BS	175432	5.64	654400	7.06	300231	9.10	473800	10.84	326837	14.05	247554	16.23
OP81519-MB	159116	5.63	590401	7.06	283664	9.09	490525	10.84	371475	14.04	297758	16.22
FA77503-1	141042	5.63	524209	7.06	254355	9.09	433145	10.84	322334	14.04	258828	16.23
OP81519-MS	158773	5.63	599216	7.06	277284	9.10	424421	10.84	291907	14.04	226137	16.22
OP81519-MSD	165364	5.64	613940	7.06	284426	9.09	445241	10.84	305305	14.04	236114	16.22
OP81516-BS	140651	5.63	529815	7.06	251693	9.09	414465	10.84	297958	14.04	234857	16.22
OP81516-MB	138899	5.63	528027	7.06	258101	9.09	438063	10.84	318987	14.04	255304	16.22
ZZZZZZ	149993	5.63	565813	7.07	320851	9.10	547669	10.85	400981	14.05	274204	16.23
FA77615-10	181397	5.63	668212	7.06	319808	9.09	539420	10.84	453390	14.05	345642	16.24
OP81455-MS	208718	5.64	781570	7.06	393214	9.10	629576	10.84	467310	14.05	333299	16.23
OP81455-MSD	214202	5.64	755432	7.06	393703	9.10	630760	10.84	458611	14.05	337985	16.23
ZZZZZZ	174962	5.63	636553	7.06	305213	9.10	512044	10.84	399759	14.05	305600	16.23
OP81545-BS	188273	5.64	707991	7.06	324729	9.10	510866	10.84	362980	14.05	291500	16.23
OP81545-MB	187920	5.64	678437	7.06	322407	9.10	547185	10.84	389648	14.04	297201	16.23
ZZZZZZ	173592	5.63	639006	7.06	304520	9.10	515585	10.84	369873	14.04	283019	16.23
ZZZZZZ	191311	5.63	698131	7.06	330287	9.10	554328	10.84	392555	14.05	300707	16.23
ZZZZZZ	172392	5.63	628426	7.06	296405	9.09	497625	10.84	351352	14.04	270896	16.23
ZZZZZZ	169939	5.63	624564	7.06	296460	9.09	493857	10.84	348076	14.04	263936	16.23
ZZZZZZ	193480	5.63	706781	7.06	332503	9.09	553329	10.84	396254	14.04	299172	16.23
ZZZZZZ	186727	5.63	685234	7.06	321310	9.09	537977	10.84	387695	14.04	292544	16.23

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Initial Cal is: SX2918-ICC2918 X071368.D 06/23/20 15:12
(b) Check Std Limit = -50 to + 100% of initial cal area.
(c) Upper Limit = + 100% of check standard area; Retention time + 0.167 minutes.
(d) Lower Limit = -50% of check standard area; Retention time -0.167 minutes.

Surrogate Recovery Summary

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Method: SW846 8270D **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
FA77615-13	6F06579.D	57	71	78

Surrogate Compounds	Recovery Limits
S1 = Nitrobenzene-d5	40-105%
S2 = 2-Fluorobiphenyl	43-107%
S3 = Terphenyl-d14	45-119%

Surrogate Recovery Summary

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Method: SW846 8270E **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
FA77615-1	6F06493.D	72	74	76
FA77615-2	6F06494.D	65	68	70
FA77615-3	X072377.D	66	69	65
FA77615-3	6F06495.D	69	70	70
FA77615-4	6F06496.D	63	65	68
FA77615-5	6F06497.D	73	77	79
FA77615-6	6F06498.D	73	75	74
FA77615-7	6F06501.D	67	70	72
FA77615-8	6F06502.D	72	74	72
FA77615-9	6F06503.D	64	67	73
FA77615-10	X072399.D	67	73	72
FA77615-10	6F06504.D	74	76	82
FA77615-11	X072383.D	66	72	70
FA77615-11	6F06505.D	63	66	70
FA77615-12	X072379.D	61	66	65
FA77615-12	6F06506.D	76	77	80
OP81484-BS	6F06487.D	71	73	76
OP81484-MB	6F06488.D	71	73	75
OP81484-MS	6F06499.D	66	69	73
OP81484-MSD	6F06500.D	71	73	75

Surrogate Compounds	Recovery Limits
S1 = Nitrobenzene-d5	40-105%
S2 = 2-Fluorobiphenyl	43-107%
S3 = Terphenyl-d14	45-119%

Surrogate Recovery Summary

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Method: SW846 8270E BY SIM **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2
FA77615-1	7G11137.D	104	99
FA77615-2	7G11138.D	100	96
FA77615-3	7G11139.D	113	115
FA77615-4	7G11140.D	101	101
FA77615-5	7G11141.D	108	108
FA77615-6	7G11142.D	107	103
FA77615-7	7G11145.D	111	105
FA77615-8	7G11146.D	113	107
FA77615-9	7G11147.D	105	101
FA77615-10	7G11148.D	109	116
FA77615-11	7G11149.D	115	104
FA77615-12	7G11150.D	109	94
FA77615-13	7G11151.D	109	100
OP81485-BS	7G11132.D	88	90
OP81485-MB	7G11131.D	79	90
OP81485-MS	7G11143.D	113	103
OP81485-MSD	7G11144.D	119	100

Surrogate Compounds	Recovery Limits
S1 = 2-Methylnaphthalene-d10	50-150%
S2 = Fluoranthene-d10	50-150%

Initial Calibration Summary

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: S6F248-ICC248
Lab FileID: 6F06440.D

Response Factor Report MSBNA10

Method : C:\msdchem\1\met...\8270D6F072920.m (RTE Integrator)
Title : SW846 8270D OR EPA 625
Last Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

Calibration Files
5 =6F06437.D 10 =6F06438.D 25 =6F06439.D 50 =6F06440.D
60 =6F06441.D 75 =6F06442.D 100 =6F06443.D 1 =6F06436.D

Compound	5	10	25	50	60	75	100	1	Avg	%RSD
1) I 1,4-Dichlorobenzene-d	ISTD									
2) 1,4-Dioxane	0.575	0.563	0.558	0.580	0.597	0.597	0.682	0.608	0.595	6.61
3) N-nitrosodim	0.783	0.798	0.785	0.815	0.824	0.825	0.938	0.724	0.812	7.45
4) Pyridine	1.464	1.512	1.474	1.545	1.574	1.572	1.807	1.309	1.532	9.13
5) Benzaldehyde	1.207	1.201	1.207	1.272	1.273	1.229	1.212	1.199	1.225	2.51
6) Aniline	2.298	2.273	2.256	2.356	2.394	2.388	2.679	2.121	2.346	6.87
7) 2-Fluorophen	1.444	1.457	1.458	1.530	1.560	1.562	1.774	1.307	1.511	8.89
8) bis(2-Chloro	1.521	1.496	1.461	1.523	1.559	1.541	1.747	1.443	1.536	6.09
9) Phenol-d5	1.741	1.740	1.725	1.811	1.836	1.837	2.060	1.604	1.794	7.33
10) Phenol	2.043	2.032	2.003	2.096	2.119	2.111	2.373	1.912	2.086	6.44
11) 2-Chlorophen	1.489	1.513	1.482	1.559	1.577	1.582	1.806	1.383	1.549	7.90
12) 1,3-Dichloro	1.639	1.621	1.611	1.677	1.704	1.690	1.913	1.544	1.675	6.51
13) 1,4-Dichloro	1.680	1.659	1.631	1.696	1.726	1.706	1.926	1.559	1.698	6.24
14) 1,2-Dichloro	1.575	1.545	1.549	1.600	1.626	1.622	1.835	1.467	1.602	6.69
15) Benzyl alcoh	0.915	0.891	0.908	0.961	0.958	0.979	1.109	0.844	0.945	8.38
16) bis(2-chloro	1.930	1.913	1.850	1.893	1.913	1.901	2.112	1.859	1.921	4.26
17) 2-Methylphen	1.393	1.355	1.325	1.390	1.413	1.409	1.583	1.289	1.395	6.27
18) Acetophenone	2.023	2.042	1.991	2.104	2.110	2.099	2.212	1.962	2.068	3.86
19) Hexachloroet	0.687	0.681	0.671	0.694	0.711	0.697	0.794	0.610	0.693	7.34
20) N-Nitroso-di	1.097	1.078	1.033	1.085	1.091	1.091	1.233	1.073	1.098	5.32
21) 3&4-Methylph	1.443	1.413	1.383	1.442	1.445	1.453	1.646	1.371	1.450	5.87
22) I Naphthalene-d8	ISTD									
23) Nitrobenzene	0.428	0.421	0.421	0.434	0.452	0.448	0.498	0.409	0.439	6.30
24) Nitrobenzene	0.425	0.410	0.416	0.421	0.432	0.431	0.477	0.407	0.427	5.11
25) Isophorone	0.768	0.738	0.732	0.750	0.776	0.774	0.858	0.747	0.768	5.20
26) 2-Nitropheno	0.196	0.195	0.205	0.216	0.223	0.225	0.253	0.170	0.210	11.77
27) 2,4-Dimethyl	0.361	0.351	0.346	0.360	0.370	0.371	0.409	0.347	0.364	5.63
28) O,O,O-Trieth	0.185	0.180	0.182	0.189	0.193	0.195	0.200	0.180	0.188	3.99
29) bis(2-Chloro	0.476	0.452	0.455	0.458	0.473	0.475	0.514	0.459	0.470	4.27
30) Benzoic Acid	0.242	0.270	0.292	0.326	0.339	0.341	0.384	0.129	0.290	27.26
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9995										
Response Ratio = 0.00000 + 0.25630 *A + 0.05047 *A^2										
31) 2,4-Dichloro	0.319	0.309	0.314	0.323	0.330	0.331	0.365	0.301	0.324	6.06
32) 1,2,4-Trichl	0.355	0.343	0.346	0.356	0.369	0.366	0.406	0.341	0.360	5.91
33) alpha-Terpin									0.000	-1.00
34) Naphthalene	1.149	1.110	1.100	1.102	1.136	1.123	1.216	1.118	1.132	3.36
35) 4-Chloroanil	0.491	0.477	0.475	0.490	0.497	0.498	0.542	0.477	0.493	4.42
36) 2,6-Dichloro	0.310	0.303	0.302	0.311	0.320	0.322	0.354	0.297	0.315	5.70
37) Hexachlorobu	0.193	0.187	0.189	0.196	0.200	0.201	0.218	0.198	0.198	4.82
38) Caprolactam	0.122	0.123	0.123	0.130	0.134	0.133	0.138	0.109	0.126	7.30
39) 4-Chloro-3-m	0.326	0.319	0.322	0.336	0.341	0.343	0.381	0.304	0.334	6.86
40) 2-Methylnaph	0.667	0.643	0.644	0.655	0.665	0.665	0.724	0.630	0.662	4.28
41) 1-Methylnaph	0.726	0.701	0.699	0.716	0.740	0.737	0.799	0.701	0.727	4.57
42) 1,2,4,5-Tetr	0.343	0.330	0.328	0.344	0.353	0.354	0.389	0.337	0.347	5.57

Initial Calibration Summary

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: S6F248-ICC248
Lab FileID: 6F06440.D

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43) I   Acenaphthene-d10      ----------------ISTD--------------------
44) Hexachlorocy 0.361 0.379 0.413 0.432 0.459 0.459 0.509 0.321 0.417  14.62
45) 2,4,6-Trichl 0.417 0.416 0.430 0.436 0.458 0.455 0.502 0.378 0.436   8.36
46) 2,4,5-Trichl 0.441 0.446 0.449 0.463 0.488 0.485 0.534 0.414 0.465   7.93
47) 2-Fluorobiph 1.558 1.507 1.533 1.521 1.576 1.555 1.683 1.575 1.563   3.47
48) 1,1'-Bipheny 1.625 1.630 1.655 1.655 1.733 1.708 1.706 1.652 1.671   2.38
49) 2-Chloronaph 1.303 1.276 1.279 1.271 1.339 1.327 1.439 1.281 1.314   4.28
50) 2-Nitroanili 0.386 0.390 0.409 0.417 0.438 0.436 0.475 0.341 0.412   9.82
51) p-Dinitroben 0.216 0.233 0.257 0.272 0.292 0.291 0.324 0.183 0.258  17.76
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9996
              Response Ratio = 0.00000 + 0.22511 *A + 0.03904 *A^2

52) Acenaphthyle 1.987 1.947 1.962 1.947 2.035 2.000 2.165 1.949 1.999   3.69
53) Dimethylphth 1.482 1.436 1.452 1.454 1.521 1.509 1.629 1.460 1.493   4.18
54) m-Dinitroben 0.227 0.237 0.251 0.264 0.281 0.279 0.310 0.166 0.252  17.35
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9996
              Response Ratio = 0.00000 + 0.22519 *A + 0.03294 *A^2

55) 2,6-Dinitrot 0.327 0.332 0.344 0.354 0.371 0.368 0.402 0.275 0.347  10.88
56) o-Dinitroben 0.257 0.259 0.258 0.251 0.262 0.255 0.279 0.238 0.257   4.38
57) Acenaphthene 1.341 1.282 1.285 1.277 1.337 1.325 1.437 1.337 1.328   3.90
58) 3-Nitroanili 0.381 0.389 0.396 0.403 0.419 0.424 0.464 0.324 0.400  10.00
59) 2,4-Dinitrop 0.078 0.114 0.166 0.203 0.225 0.233 0.270 0.016 0.163  53.37
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9985
              Response Ratio = 0.00000 + 0.11955 *A + 0.06203 *A^2

60) Dibenzofuran 1.870 1.791 1.800 1.775 1.845 1.821 1.962 1.817 1.835   3.25
61) 2,4-Dinitrot 0.423 0.437 0.455 0.475 0.499 0.501 0.541 0.321 0.456  14.67
62) 4-Nitropheno 0.212 0.200 0.213 0.237 0.251 0.249 0.277 0.190 0.229  13.08
63) 2,3,5,6-Tetr 0.318 0.329 0.358 0.372 0.395 0.398 0.436 0.264 0.359  15.14
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9997
              Response Ratio = 0.00000 + 0.31902 *A + 0.04612 *A^2

64) 2,3,4,6-Tetr 0.344 0.355 0.370 0.380 0.406 0.401 0.444 0.302 0.375  11.55
65) Fluorene     1.472 1.443 1.454 1.449 1.525 1.504 1.617 1.424 1.486   4.21
66) 4-Chlorophen 0.743 0.705 0.715 0.706 0.738 0.744 0.813 0.716 0.735   4.81
67) Diethylphtha 1.504 1.473 1.464 1.476 1.547 1.541 1.679 1.433 1.514   5.07
68) Thionazin    0.337 0.339 0.347 0.352 0.360 0.355 0.351 0.316 0.345   4.05
69) 4-Nitroanili 0.379 0.389 0.407 0.408 0.429 0.429 0.473 0.320 0.404  11.08

70) I   Phenanthrene-d10      ----------------ISTD--------------------
71) 4,6-Dinitro- 0.090 0.112 0.137 0.155 0.167 0.167 0.190 0.047 0.133  35.53
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9991
              Response Ratio = 0.00000 + 0.11243 *A + 0.03151 *A^2

72) n-Nitrosodip 0.572 0.563 0.558 0.677 0.588 0.579 0.761 0.676 0.622  11.89
73) Diphenylamin 0.687 0.676 0.669 0.677 0.706 0.695 0.761 0.676 0.693   4.30
74) 1,2-Diphenyl 0.894 0.886 0.869 0.862 0.888 0.871 0.938 0.886 0.887   2.64
75) 2,4,6-Tribro 0.125 0.127 0.132 0.136 0.143 0.142 0.158 0.114 0.135   9.95
76) Sulfotep     0.141 0.146 0.144 0.146 0.150 0.148 0.148 0.135 0.145   3.34
77) Phorate      0.462 0.483 0.488 0.497 0.516 0.513 0.513 0.420 0.487   6.67
78) 4-Bromopheny 0.225 0.225 0.219 0.229 0.238 0.237 0.261 0.232 0.233   5.54
79) Hexachlorobe 0.264 0.254 0.253 0.257 0.268 0.268 0.297 0.272 0.267   5.28
80) Dimethoate   0.314 0.337 0.336 0.349 0.361 0.350 0.355 0.276 0.335   8.37
81) Simazine     0.137 0.139 0.138 0.138 0.142 0.140 0.153 0.129 0.140   4.68
82) Atrazine     0.226 0.230 0.228 0.235 0.245 0.238 0.267 0.216 0.236   6.48
83) Pentachlorop 0.071 0.100 0.127 0.149 0.160 0.160 0.186       0.136  28.94
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9984
              Response Ratio = 0.00000 + 0.10221 *A + 0.03362 *A^2
```

Initial Calibration Summary

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: S6F248-ICC248
Lab FileID: 6F06440.D

```
 84) Phenanthrene 1.199 1.162 1.147 1.157 1.201 1.173 1.261 1.284 1.198   4.17
 85) Anthracene   1.214 1.190 1.183 1.193 1.236 1.203 1.310 1.207 1.217   3.37
 86) Disulfoton   0.489 0.501 0.517 0.516 0.534 0.526 0.534 0.456 0.509   5.20
 87) Carbazole    1.086 1.065 1.068 1.078 1.104 1.101 1.202 1.070 1.097   4.10
 88) Methyl Parat 0.222 0.245 0.270 0.292 0.302 0.296 0.301 0.161 0.261  19.08
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9991
               Response Ratio = 0.00000 + 0.26072 *A + 0.01867 *A^2

 89) Di-n-butylph 1.350 1.347 1.361 1.389 1.435 1.396 1.503 1.277 1.382   4.85
 90) Ethyl Parath 0.142 0.160 0.173 0.185 0.194 0.191 0.195 0.106 0.168  18.50
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9993
               Response Ratio = 0.00000 + 0.16581 *A + 0.01307 *A^2

 91) Fluoranthene 1.229 1.226 1.223 1.250 1.290 1.277 1.398 1.195 1.261   5.01

 92) I   Chrysene-d12          ----------------ISTD--------------------
 93) Benzidine    0.853 0.866 0.839 0.821 0.844 0.815 0.824 0.819 0.835   2.19
 94) Pyrene       1.420 1.400 1.395 1.388 1.440 1.418 1.554 1.447 1.433   3.71
 95) Terphenyl-d1 1.085 1.086 1.089 1.088 1.140 1.143 1.244 1.120 1.124   4.82
 96) Famphur      0.490 0.504 0.480 0.460 0.452 0.420 0.380 0.449 0.454   8.79
 97) Butylbenzylp 0.652 0.655 0.673 0.676 0.713 0.709 0.769 0.644 0.686   6.12
 98) 3,3'-Dichlor 0.494 0.509 0.523 0.523 0.539 0.528 0.562 0.471 0.519   5.35
 99) Benzo[a]anth 1.284 1.296 1.282 1.303 1.364 1.354 1.460 1.379 1.340   4.58
100) Chrysene     1.306 1.271 1.252 1.242 1.294 1.288 1.398 1.353 1.300   4.02
101) bis(2-Ethylh 0.937 0.918 0.929 0.933 0.987 0.975 1.057 0.935 0.959   4.82

102) I   Perylene-d12          ----------------ISTD--------------------
103) Di-n-octylph 1.434 1.464 1.508 1.576 1.693 1.712 1.899 1.371 1.582  11.08
104) Benzo[b]fluo 1.194 1.193 1.213 1.255 1.341 1.366 1.515 1.194 1.284   9.00
105) Benzo[k]fluo 1.300 1.274 1.298 1.317 1.378 1.356 1.492 1.267 1.335   5.54
106) Benzo[a]pyre 1.128 1.112 1.146 1.175 1.238 1.241 1.371 1.127 1.192   7.33
107) Indeno[1,2,3 1.055 1.056 1.070 1.085 1.134 1.145 1.285 1.050 1.110   7.14
108) Dibenz[a,h]a 1.124 1.128 1.139 1.199 1.234 1.224 1.368 1.067 1.185   7.84
109) Benzo[g,h,i] 1.178 1.184 1.168 1.166 1.191 1.183 1.321 1.194 1.198   4.22
 ----------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

           8270D6F072920.m        Thu Jul 30 12:56:54 2020
```

Initial Calibration Verification

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: S6F248-ICV248
Lab FileID: 6F06444.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\S6F248_072920\6F06444.D Vial: 10
Acq On : 29 Jul 2020 4:20 pm Operator: marthav
Sample : icv248-50 Inst : MSBNA10
Misc : op81256,S6F248,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\msdchem\1\met...\8270D6F072920.m (RTE Integrator)
Title : SW846 8270D OR EPA 625
Last Update : Wed Jul 29 16:22:51 2020
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	127	0.00	6.05
2		1,4-Dioxane	50.000	46.216	7.6	121	0.03	2.90
3		N-nitrosodimethylamine	50.000	43.903	12.2	111	0.02	3.22
4		Pyridine		----------NA----------				
5	P	Benzaldehyde	50.000	44.828	10.3	110	0.00	5.57
6		Aniline		----------NA----------				
7	S	2-Fluorophenol		----------NA----------				
8	P	bis(2-Chloroethyl)ether	50.000	44.559	10.9	114	0.00	5.77
9	S	Phenol-d5		----------NA----------				
10	P	Phenol	50.000	39.595	20.8#	100	0.00	5.69
11	P	2-Chlorophenol	50.000	44.471	11.1	112	0.00	5.82
12		1,3-Dichlorobenzene	50.000	45.857	8.3	117	0.00	5.98
13		1,4-Dichlorobenzene	50.000	45.437	9.1	116	0.00	6.06
14		1,2-Dichlorobenzene	50.000	45.284	9.4	115	0.00	6.23
15		Benzyl alcohol		----------NA----------				
16	P	bis(2-chloroisopropyl)eth	50.000	44.816	10.4	116	0.00	6.36
17	P	2-Methylphenol	50.000	40.425	19.2	103	0.00	6.35
18	P	Acetophenone	50.000	43.446	13.1	109	0.00	6.49
19	P	Hexachloroethane	50.000	45.143	9.7	115	0.00	6.60
20	P	N-Nitroso-di-n-propylamin	50.000	42.791	14.4	110	0.00	6.51
21	P	3&4-Methylphenol	100.000	83.784	16.2	103	0.00	6.53
22	I	Naphthalene-d8	40.000	40.000	0.0	121	0.00	7.48
23	S	Nitrobenzene-d5		----------NA----------				
24	P	Nitrobenzene	50.000	44.480	11.0	109	0.00	6.68
25	P	Isophorone	50.000	45.582	8.8	113	0.00	6.96
26	P	2-Nitrophenol	50.000	47.780	4.4	113	0.00	7.05
27	P	2,4-Dimethylphenol	50.000	41.860	16.3	103	0.00	7.12
28		O,O,O-Triethylphosphoroth		----------NA----------				
29	P	bis(2-Chloroethoxy)methan	50.000	42.725	14.5	106	0.00	7.22
		----------	Amount	Calc.	%Drift	----------		
30		Benzoic Acid	100.000	81.252	18.7	100	0.05	7.31
		----------	Amount	Calc.	%Drift	----------		
31	P	2,4-Dichlorophenol	50.000	44.946	10.1	109	0.00	7.33
32		1,2,4-Trichlorobenzene	50.000	46.107	7.8	113	0.00	7.41
33		alpha-Terpineol		----------NA----------				
34	P	Naphthalene	50.000	44.412	11.2	110	0.00	7.51
35	P	4-Chloroaniline		----------NA----------				
36		2,6-Dichlorophenol	50.000	44.311	11.4	108	0.00	7.59
37	P	Hexachlorobutadiene	50.000	47.942	4.1	117	0.00	7.66

Initial Calibration Verification

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: S6F248-ICV248
Lab FileID: 6F06444.D

38	P	Caprolactam	50.000	42.439	15.1	100	0.00	8.00
39	P	4-Chloro-3-methylphenol	50.000	43.093	13.8	104	0.00	8.17
40	P	2-Methylnaphthalene		----------NA----------				
41		1-Methylnaphthalene	50.000	42.797	14.4	105	0.00	8.43
42	P	1,2,4,5-Tetrachlorobenzen	50.000	44.871	10.3	110	0.00	8.51
43	I	Acenaphthene-d10	40.000	40.000	0.0	114	0.00	9.53
44	P	Hexachlorocyclopentadiene	50.000	54.534	-9.1	120	0.00	8.50
45	P	2,4,6-Trichlorophenol	50.000	47.264	5.5	108	0.00	8.65
46	P	2,4,5-Trichlorophenol	50.000	47.628	4.7	109	0.00	8.70
47	S	2-Fluorobiphenyl		----------NA----------				
48	P	1,1'-Biphenyl	50.000	45.739	8.5	105	0.00	8.86
49	P	2-Chloronaphthalene	50.000	45.110	9.8	106	0.00	8.88
50	P	2-Nitroaniline		----------NA----------				

			Amount	Calc.	%Drift			
51		p-Dinitrobenzene		----------NA----------				

			Amount	Calc.	%Drift			
52	P	Acenaphthylene	50.000	49.165	1.7	115	0.00	9.36
53	P	Dimethylphthalate	50.000	44.087	11.8	103	0.00	9.24

			Amount	Calc.	%Drift			
54		m-Dinitrobenzene		----------NA----------				

			Amount	Calc.	%Drift			
55	P	2,6-Dinitrotoluene	50.000	44.436	11.1	99	0.00	9.31
56		o-Dinitrobenzene		----------NA----------				
57	P	Acenaphthene	50.000	44.705	10.6	106	0.00	9.57
58	P	3-Nitroaniline		----------NA----------				

			Amount	Calc.	%Drift			
59	P	2,4-Dinitrophenol	100.000	82.230	17.8	94	0.00	9.62

			Amount	Calc.	%Drift			
60	P	Dibenzofuran		----------NA----------				
61	P	2,4-Dinitrotoluene	50.000	47.506	5.0	104	0.00	9.78
62	P	4-Nitrophenol	100.000	87.747	12.3	90	0.00	9.75

			Amount	Calc.	%Drift			
63		2,3,5,6-Tetrachlorophenol		----------NA----------				

			Amount	Calc.	%Drift			
64	P	2,3,4,6-Tetrachlorophenol	50.000	44.338	11.3	100	0.00	9.93
65	P	Fluorene	50.000	45.537	8.9	107	0.00	10.19
66	P	4-Chlorophenyl-phenylethe	50.000	44.165	11.7	105	0.00	10.20
67	P	Diethylphthalate	50.000	44.593	10.8	104	0.00	10.09
68		Thionazin		----------NA----------				
69	P	4-Nitroaniline		----------NA----------				
70	I	Phenanthrene-d10	40.000	40.000	0.0	109	0.00	11.29

			Amount	Calc.	%Drift			
71	P	4,6-Dinitro-2-methylpheno	100.000	88.804	11.2	100	0.00	10.25

			Amount	Calc.	%Drift			
72	P	n-Nitrosodiphenylamine	50.000	41.363	17.3	83	0.00	10.34
73		Diphenylamine		----------NA----------				
74		1,2-Diphenylhydrazine	50.000	44.895	10.2	100	0.00	10.38
75	S	2,4,6-Tribromophenol		----------NA----------				

Initial Calibration Verification

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: S6F248-ICV248
Lab FileID: 6F06444.D

76		Sulfotep		----------NA----------					
77		Phorate		----------NA----------					
78	P	4-Bromophenyl-phenylether	50.000	47.065	5.9	104	0.00	10.77
79	P	Hexachlorobenzene	50.000	45.472	9.1	103	0.00	10.83
80		Dimethoate		----------NA----------					
81		Simazine		----------NA----------					
82	P	Atrazine	50.000	44.646	10.7	97	0.00	11.00
		----------	Amount	Calc.	%Drift		----------		
83	P	Pentachlorophenol	100.000	87.054	12.9	97	0.00	11.07
		----------	Amount	Calc.	%Drift		----------		
84	P	Phenanthrene	50.000	44.999	10.0	101	0.00	11.32
85	P	Anthracene	50.000	43.934	12.1	97	0.00	11.38
86		Disulfoton		----------NA----------					
87	P	Carbazole		----------NA----------					
		----------	Amount	Calc.	%Drift		----------		
88		Methyl Parathion		----------NA----------					
		----------	Amount	Calc.	%Drift		----------		
89	P	Di-n-butylphthalate	50.000	45.321	9.4	98	0.00	12.04
		----------	Amount	Calc.	%Drift		----------		
90		Ethyl Parathion		----------NA----------					
		----------	Amount	Calc.	%Drift		----------		
91	P	Fluoranthene	50.000	44.168	11.7	97	0.00	12.73
92	I	Chrysene-d12	40.000	40.000	0.0	98	0.00	14.59
93		Benzidine		----------NA----------					
94	P	Pyrene	50.000	48.366	3.3	98	0.00	12.99
95	S	Terphenyl-d14		----------NA----------					
96		Famphur		----------NA----------					
97	P	Butylbenzylphthalate	50.000	47.452	5.1	94	0.00	13.88
98	P	3,3'-Dichlorobenzidine		----------NA----------					
99	P	Benzo[a]anthracene	50.000	45.797	8.4	92	0.00	14.58
100	P	Chrysene	50.000	46.737	6.5	96	0.00	14.63
101	P	bis(2-Ethylhexyl)phthalat	50.000	47.144	5.7	95	0.00	14.73
102	I	Perylene-d12	40.000	40.000	0.0	94	0.00	16.95
103	P	Di-n-octylphthalate	50.000	49.690	0.6	93	0.00	15.80
104	P	Benzo[b]fluoranthene	50.000	46.616	6.8	89	0.00	16.31
105	P	Benzo[k]fluoranthene	50.000	47.600	4.8	90	0.00	16.36
106	P	Benzo[a]pyrene	50.000	46.589	6.8	88	0.00	16.86
107	P	Indeno[1,2,3-cd]pyrene	50.000	44.889	10.2	86	0.00	18.58
108	P	Dibenz[a,h]anthracene	50.000	44.387	11.2	82	0.00	18.63
109	P	Benzo[g,h,i]perylene	50.000	44.815	10.4	86	0.00	18.95

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6F06440.D 8270D6F072920.m Thu Jul 30 12:08:40 2020

Initial Calibration Verification

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: S6F248-ICV248
Lab FileID: 6F06445.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\S6F248_072920\6F06445.D Vial: 11
Acq On : 29 Jul 2020 4:46 pm Operator: marthav
Sample : icv248-50 Inst : MSBNA10
Misc : op81256,S6F248,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\msdchem\1\met...\8270D6F072920.m (RTE Integrator)
Title : SW846 8270D OR EPA 625
Last Update : Wed Jul 29 16:22:51 2020
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	107	0.00	6.04
2		1,4-Dioxane		----------NA----------				
3		N-nitrosodimethylamine		----------NA----------				
4		Pyridine	50.000	46.795	6.4	100	0.00	3.23
5	P	Benzaldehyde		----------NA----------				
6		Aniline	50.000	42.333	15.3	91	0.00	5.69
7	S	2-Fluorophenol		----------NA----------				
8	P	bis(2-Chloroethyl)ether		----------NA----------				
9	S	Phenol-d5		----------NA----------				
10	P	Phenol		----------NA----------				
11	P	2-Chlorophenol		----------NA----------				
12		1,3-Dichlorobenzene		----------NA----------				
13		1,4-Dichlorobenzene		----------NA----------				
14		1,2-Dichlorobenzene		----------NA----------				
15		Benzyl alcohol	50.000	47.296	5.4	100	0.00	6.21
16	P	bis(2-chloroisopropyl)eth		----------NA----------				
17	P	2-Methylphenol		----------NA----------				
18	P	Acetophenone		----------NA----------				
19	P	Hexachloroethane		----------NA----------				
20	P	N-Nitroso-di-n-propylamin		----------NA----------				
21	P	3&4-Methylphenol		----------NA----------				
22	I	Naphthalene-d8	40.000	40.000	0.0	109	0.00	7.47
23	S	Nitrobenzene-d5		----------NA----------				
24	P	Nitrobenzene		----------NA----------				
25	P	Isophorone		----------NA----------				
26	P	2-Nitrophenol		----------NA----------				
27	P	2,4-Dimethylphenol		----------NA----------				
28		O,O,O-Triethylphosphoroth		----------NA----------				
29	P	bis(2-Chloroethoxy)methan		----------NA----------				
		----------	Amount	Calc.	%Drift		----------	
30		Benzoic Acid		----------NA----------				
		----------	Amount	Calc.	%Drift		----------	
31	P	2,4-Dichlorophenol		----------NA----------				
32		1,2,4-Trichlorobenzene		----------NA----------				
33		alpha-Terpineol		----------NA----------				
34	P	Naphthalene		----------NA----------				
35	P	4-Chloroaniline	50.000	44.395	11.2	97	0.00	7.58
36		2,6-Dichlorophenol		----------NA----------				
37	P	Hexachlorobutadiene		----------NA----------				

Initial Calibration Verification

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: S6F248-ICV248
Lab FileID: 6F06445.D

38	P	Caprolactam		----------NA----------					
39	P	4-Chloro-3-methylphenol		----------NA----------					
40	P	2-Methylnaphthalene	50.000	43.358	13.3	95	0.00	8.31	
41		1-Methylnaphthalene		----------NA----------					
42	P	1,2,4,5-Tetrachlorobenzen		----------NA----------					
43	I	Acenaphthene-d10	40.000	40.000	0.0	108	0.00	9.53	
44	P	Hexachlorocyclopentadiene		----------NA----------					
45	P	2,4,6-Trichlorophenol		----------NA----------					
46	P	2,4,5-Trichlorophenol		----------NA----------					
47	S	2-Fluorobiphenyl		----------NA----------					
48	P	1,1'-Biphenyl		----------NA----------					
49	P	2-Chloronaphthalene		----------NA----------					
50	P	2-Nitroaniline	50.000	57.272	-14.5	121	0.00	9.01	
		---------- Amount	Calc.	%Drift	----------				
51		p-Dinitrobenzene		----------NA----------					
		---------- Amount	Calc.	%Drift	----------				
52	P	Acenaphthylene		----------NA----------					
53	P	Dimethylphthalate		----------NA----------					
		---------- Amount	Calc.	%Drift	----------				
54		m-Dinitrobenzene	50.000	44.477	11.0	95	-0.01	9.26	
		---------- Amount	Calc.	%Drift	----------				
55	P	2,6-Dinitrotoluene		----------NA----------					
56		o-Dinitrobenzene		----------NA----------					
57	P	Acenaphthene		----------NA----------					
58	P	3-Nitroaniline	50.000	47.397	5.2	101	0.00	9.50	
		---------- Amount	Calc.	%Drift	----------				
59	P	2,4-Dinitrophenol		----------NA----------					
		---------- Amount	Calc.	%Drift	----------				
60	P	Dibenzofuran	50.000	43.783	12.4	97	0.00	9.78	
61	P	2,4-Dinitrotoluene		----------NA----------					
62	P	4-Nitrophenol		----------NA----------					
		---------- Amount	Calc.	%Drift	----------				
63		2,3,5,6-Tetrachlorophenol		----------NA----------					
		---------- Amount	Calc.	%Drift	----------				
64	P	2,3,4,6-Tetrachlorophenol		----------NA----------					
65	P	Fluorene		----------NA----------					
66	P	4-Chlorophenyl-phenylethe		----------NA----------					
67	P	Diethylphthalate		----------NA----------					
68		Thionazin		----------NA----------					
69	P	4-Nitroaniline	50.000	46.067	7.9	98	-0.02	10.22	
70	I	Phenanthrene-d10	40.000	40.000	0.0	109	0.00	11.29	
		---------- Amount	Calc.	%Drift	----------				
71	P	4,6-Dinitro-2-methylpheno		----------NA----------					
		---------- Amount	Calc.	%Drift	----------				
72	P	n-Nitrosodiphenylamine	50.000	54.035	-8.1	108	0.00	10.34	
73		Diphenylamine	50.000	48.461	3.1	108	0.00	10.34	
74		1,2-Diphenylhydrazine		----------NA----------					
75	S	2,4,6-Tribromophenol		----------NA----------					

Initial Calibration Verification

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: S6F248-ICV248
Lab FileID: 6F06445.D

			Amount	Calc.	%Drift			
76		Sulfotep		NA				
77		Phorate		NA				
78	P	4-Bromophenyl-phenylether		NA				
79	P	Hexachlorobenzene		NA				
80		Dimethoate		NA				
81		Simazine		NA				
82	P	Atrazine		NA				
			Amount	Calc.	%Drift			
83	P	Pentachlorophenol		NA				
			Amount	Calc.	%Drift			
84	P	Phenanthrene		NA				
85	P	Anthracene		NA				
86		Disulfoton		NA				
87	P	Carbazole	50.000	44.980	10.0	99	0.00	11.58
			Amount	Calc.	%Drift			
88		Methyl Parathion		NA				
			Amount	Calc.	%Drift			
89	P	Di-n-butylphthalate		NA				
			Amount	Calc.	%Drift			
90		Ethyl Parathion		NA				
			Amount	Calc.	%Drift			
91	P	Fluoranthene		NA				
92	I	Chrysene-d12	40.000	40.000	0.0	108	0.00	14.59
93		Benzidine	50.000	54.478	-9.0	119	0.00	12.91
94	P	Pyrene		NA				
95	S	Terphenyl-d14		NA				
96		Famphur		NA				
97	P	Butylbenzylphthalate		NA				
98	P	3,3'-Dichlorobenzidine	50.000	48.599	2.8	104	0.00	14.57
99	P	Benzo[a]anthracene		NA				
100	P	Chrysene		NA				
101	P	bis(2-Ethylhexyl)phthalat		NA				
102	I	Perylene-d12	40.000	40.000	0.0	105	0.00	16.95
103	P	Di-n-octylphthalate		NA				
104	P	Benzo[b]fluoranthene		NA				
105	P	Benzo[k]fluoranthene		NA				
106	P	Benzo[a]pyrene		NA				
107	P	Indeno[1,2,3-cd]pyrene		NA				
108	P	Dibenz[a,h]anthracene		NA				
109	P	Benzo[g,h,i]perylene		NA				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6F06440.D 8270D6F072920.m Thu Jul 30 12:08:42 2020

Continuing Calibration Summary

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: S6F251-CC248
Lab FileID: 6F06486.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\Je...2020\S6F251\6F06486.d Vial: 2
Acq On : 11 Aug 2020 12:54 pm Operator: marthav
Sample : cc248-50 Inst : MSBNA10
Misc : op81484,S6F251,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\msdchem\1\met...\8270D6F072920.m (RTE Integrator)
Title : SW846 8270D OR EPA 625
Last Update : Wed Jul 29 16:22:51 2020
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	106	0.00	6.03
2		1,4-Dioxane	0.595	0.579	2.7	106	0.00	2.86
3		N-nitrosodimethylamine	0.812	0.770	5.2	100	0.00	3.19
4		Pyridine	1.532	1.555	-1.5	106	0.00	3.23
5	P	Benzaldehyde	1.225	1.171	4.4	97	0.00	5.56
6		Aniline	2.346	2.244	4.3	101	0.00	5.68
7	S	2-Fluorophenol	1.511	1.499	0.8	104	0.00	4.66
8	P	bis(2-Chloroethyl)ether	1.536	1.498	2.5	104	0.00	5.76
9	S	Phenol-d5	1.794	1.788	0.3	104	0.00	5.67
10	P	Phenol	2.086	2.056	1.4	104	0.00	5.69
11	P	2-Chlorophenol	1.549	1.540	0.6	104	0.00	5.81
12		1,3-Dichlorobenzene	1.675	1.625	3.0	102	0.00	5.97
13		1,4-Dichlorobenzene	1.698	1.645	3.1	103	0.00	6.05
14		1,2-Dichlorobenzene	1.602	1.543	3.7	102	0.00	6.22
15		Benzyl alcohol	0.945	0.903	4.4	99	0.00	6.20
16	P	bis(2-chloroisopropyl)eth	1.921	1.836	4.4	103	0.00	6.35
17	P	2-Methylphenol	1.395	1.381	1.0	105	0.00	6.34
18	P	Acetophenone	2.068	2.084	-0.8	105	0.00	6.48
19	P	Hexachloroethane	0.693	0.668	3.6	102	0.00	6.59
20	P	N-Nitroso-di-n-propylamin	1.098	1.077	1.9	105	0.00	6.49
21	P	3&4-Methylphenol	1.450	1.446	0.3	106	0.00	6.52
22	I	Naphthalene-d8	1.000	1.000	0.0	106	0.00	7.47
23	S	Nitrobenzene-d5	0.439	0.428	2.5	105	0.00	6.65
24	P	Nitrobenzene	0.427	0.416	2.6	105	0.00	6.68
25	P	Isophorone	0.768	0.755	1.7	107	0.00	6.95
26	P	2-Nitrophenol	0.210	0.219	-4.3	108	0.00	7.03
27	P	2,4-Dimethylphenol	0.364	0.350	3.8	104	0.00	7.11
28		O,O,O-Triethylphosphoroth	0.188	0.187	0.5	105	0.00	7.18
29	P	bis(2-Chloroethoxy)methan	0.470	0.451	4.0	105	0.00	7.21
		----------	True	Calc.	% Drift	----------		
30		Benzoic Acid	50.000	52.715	-5.4	111	0.00	7.24
		----------	AvgRF	CCRF	% Dev	----------		
31	P	2,4-Dichlorophenol	0.324	0.321	0.9	106	0.00	7.32
32		1,2,4-Trichlorobenzene	0.360	0.349	3.1	104	0.00	7.40
33		alpha-Terpineol		----------NA----------				
34	P	Naphthalene	1.132	1.083	4.3	105	0.00	7.49
35	P	4-Chloroaniline	0.493	0.466	5.5	101	0.00	7.57
36		2,6-Dichlorophenol	0.315	0.308	2.2	105	0.00	7.58
37	P	Hexachlorobutadiene	0.198	0.191	3.5	104	0.00	7.64

Continuing Calibration Summary

Job Number: FA77615 **Sample:** S6F251-CC248
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** 6F06486.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

38	P	Caprolactam	0.126	0.134	-6.3	109	0.00	8.00
39	P	4-Chloro-3-methylphenol	0.334	0.341	-2.1	108	0.00	8.16
40	P	2-Methylnaphthalene	0.662	0.645	2.6	105	0.00	8.30
41		1-Methylnaphthalene	0.727	0.717	1.4	107	0.00	8.41
42	P	1,2,4,5-Tetrachlorobenzen	0.347	0.343	1.2	106	0.00	8.50
43	I	Acenaphthene-d10	1.000	1.000	0.0	108	0.00	9.52
44	P	Hexachlorocyclopentadiene	0.417	0.424	-1.7	106	0.00	8.49
45	P	2,4,6-Trichlorophenol	0.436	0.430	1.4	107	0.00	8.64
46	P	2,4,5-Trichlorophenol	0.465	0.463	0.4	108	0.00	8.69
47	S	2-Fluorobiphenyl	1.563	1.483	5.1	106	0.00	8.74
48	P	1,1'-Biphenyl	1.671	1.622	2.9	106	0.00	8.85
49	P	2-Chloronaphthalene	1.314	1.253	4.6	107	0.00	8.87
50	P	2-Nitroaniline	0.412	0.419	-1.7	109	0.00	9.00
		----------	True	Calc.	% Drift	----------		
51		p-Dinitrobenzene	50.000	51.328	-2.7	113	0.00	9.17
		----------	AvgRF	CCRF	% Dev	----------		
52	P	Acenaphthylene	1.999	1.957	2.1	109	0.00	9.36
53	P	Dimethylphthalate	1.493	1.447	3.1	108	0.00	9.24
		----------	True	Calc.	% Drift	----------		
54		m-Dinitrobenzene	50.000	50.721	-1.4	111	0.00	9.25
		----------	AvgRF	CCRF	% Dev	----------		
55	P	2,6-Dinitrotoluene	0.347	0.357	-2.9	109	0.00	9.30
56		o-Dinitrobenzene	0.257	0.246	4.3	106	0.00	9.36
57	P	Acenaphthene	1.328	1.273	4.1	108	0.00	9.56
58	P	3-Nitroaniline	0.400	0.396	1.0	106	0.00	9.49
		----------	True	Calc.	% Drift	----------		
59	P	2,4-Dinitrophenol	50.000	54.668	-9.3	119	0.00	9.61
		----------	AvgRF	CCRF	% Dev	----------		
60	P	Dibenzofuran	1.835	1.776	3.2	108	0.00	9.77
61	P	2,4-Dinitrotoluene	0.456	0.485	-6.4	111	0.00	9.77
62	P	4-Nitrophenol	0.229	0.238	-3.9	108	0.00	9.73
		----------	True	Calc.	% Drift	----------		
63		2,3,5,6-Tetrachlorophenol	50.000	50.513	-1.0	111	0.00	9.87
		----------	AvgRF	CCRF	% Dev	----------		
64	P	2,3,4,6-Tetrachlorophenol	0.375	0.388	-3.5	111	0.00	9.92
65	P	Fluorene	1.486	1.463	1.5	109	0.00	10.17
66	P	4-Chlorophenyl-phenylethe	0.735	0.714	2.9	109	0.00	10.19
67	P	Diethylphthalate	1.514	1.493	1.4	110	0.00	10.08
68		Thionazin	0.345	0.345	0.0	106	0.00	10.17
69	P	4-Nitroaniline	0.404	0.408	-1.0	108	0.00	10.22
70	I	Phenanthrene-d10	1.000	1.000	0.0	110	0.00	11.28
		----------	True	Calc.	% Drift	----------		
71	P	4,6-Dinitro-2-methylpheno	50.000	52.712	-5.4	116	0.00	10.25
		----------	AvgRF	CCRF	% Dev	----------		
72	P	n-Nitrosodiphenylamine	0.622	0.670	-7.7	109	0.00	10.34
73		Diphenylamine	0.693	0.670	3.3	109	0.00	10.34
74		1,2-Diphenylhydrazine	0.887	0.831	6.3	106	0.00	10.38
75	S	2,4,6-Tribromophenol	0.135	0.137	-1.5	112	0.00	10.46

Continuing Calibration Summary

Job Number: FA77615 **Sample:** S6F251-CC248
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** 6F06486.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

76		Sulfotep	0.145	0.141	2.8	106	0.00	10.55
77		Phorate	0.487	0.489	-0.4	109	0.00	10.69
78	P	4-Bromophenyl-phenylether	0.233	0.227	2.6	109	0.00	10.77
79	P	Hexachlorobenzene	0.267	0.259	3.0	111	0.00	10.82
80		Dimethoate	0.335	0.344	-2.7	109	0.00	10.89
81		Simazine	0.140	0.134	4.3	107	0.00	10.96
82	P	Atrazine	0.236	0.236	0.0	111	0.00	10.99
		----------	True	Calc.	% Drift	----------		
83	P	Pentachlorophenol	50.000	53.387	-6.8	116	0.00	11.06
		----------	AvgRF	CCRF	% Dev	----------		
84	P	Phenanthrene	1.198	1.156	3.5	110	0.00	11.31
85	P	Anthracene	1.217	1.166	4.2	108	0.00	11.37
86		Disulfoton	0.509	0.517	-1.6	111	0.00	11.31
87	P	Carbazole	1.097	1.068	2.6	109	0.00	11.57
		----------	True	Calc.	% Drift	----------		
88		Methyl Parathion	50.000	50.796	-1.6	109	0.00	11.75
		----------	AvgRF	CCRF	% Dev	----------		
89	P	Di-n-butylphthalate	1.382	1.358	1.7	108	0.00	12.03
		----------	True	Calc.	% Drift	----------		
90		Ethyl Parathion	50.000	50.127	-0.3	109	0.00	12.23
		----------	AvgRF	CCRF	% Dev	----------		
91	P	Fluoranthene	1.261	1.246	1.2	110	0.00	12.72
92	I	Chrysene-d12	1.000	1.000	0.0	112	0.00	14.58
93		Benzidine	0.835	0.673	19.4	92	0.00	12.90
94	P	Pyrene	1.433	1.377	3.9	111	0.00	12.98
95	S	Terphenyl-d14	1.124	1.078	4.1	111	0.00	13.20
96		Famphur	0.454	0.415	8.6	101	0.00	13.77
97	P	Butylbenzylphthalate	0.686	0.661	3.6	109	0.00	13.87
98	P	3,3'-Dichlorobenzidine	0.519	0.501	3.5	107	0.00	14.56
99	P	Benzo[a]anthracene	1.340	1.281	4.4	110	0.00	14.56
100	P	Chrysene	1.300	1.250	3.8	113	0.00	14.61
101	P	bis(2-Ethylhexyl)phthalat	0.959	0.920	4.1	110	0.00	14.72
102	I	Perylene-d12	1.000	1.000	0.0	112	0.00	16.93
103	P	Di-n-octylphthalate	1.582	1.542	2.5	110	0.00	15.79
104	P	Benzo[b]fluoranthene	1.284	1.252	2.5	112	0.00	16.29
105	P	Benzo[k]fluoranthene	1.335	1.291	3.3	110	0.00	16.34
106	P	Benzo[a]pyrene	1.192	1.164	2.3	111	0.00	16.84
107	P	Indeno[1,2,3-cd]pyrene	1.110	1.100	0.9	114	0.00	18.57
108	P	Dibenz[a,h]anthracene	1.185	1.188	-0.3	111	0.00	18.61
109	P	Benzo[g,h,i]perylene	1.198	1.148	4.2	110	0.00	18.93

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6F06440.D 8270D6F072920.m Wed Aug 12 05:55:21 2020

Continuing Calibration Summary

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: S6F253-CC248
Lab FileID: 6F06541.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\ed...2020\s6f253\6F06541.d Vial: 2
Acq On : 13 Aug 2020 1:25 pm Operator: marthav
Sample : cc248-50 Inst : MSBNA10
Misc : op81484,S6F253,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\msdchem\1\met...\8270D6F072920.m (RTE Integrator)
Title : SW846 8270D OR EPA 625
Last Update : Wed Jul 29 16:22:51 2020
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	133	0.00	6.02
2		1,4-Dioxane	0.595	0.641	-7.7	147	0.00	2.85
3		N-nitrosodimethylamine	0.812	0.657	19.1	107	0.00	3.18
4		Pyridine	1.532	1.610	-5.1	139	0.00	3.22
5	P	Benzaldehyde	1.225	1.125	8.2	118	0.00	5.55
6		Aniline	2.346	2.108	10.1	119	0.00	5.67
7	S	2-Fluorophenol	1.511	1.497	0.9	130	0.00	4.65
8	P	bis(2-Chloroethyl)ether	1.536	1.464	4.7	128	0.00	5.75
9	S	Phenol-d5	1.794	1.629	9.2	120	0.00	5.67
10	P	Phenol	2.086	1.883	9.7	119	0.00	5.68
11	P	2-Chlorophenol	1.549	1.497	3.4	128	0.00	5.80
12		1,3-Dichlorobenzene	1.675	1.652	1.4	131	0.00	5.96
13		1,4-Dichlorobenzene	1.698	1.661	2.2	130	0.00	6.05
14		1,2-Dichlorobenzene	1.602	1.562	2.5	130	0.00	6.21
15		Benzyl alcohol	0.945	0.880	6.9	122	0.00	6.19
16	P	bis(2-chloroisopropyl)eth	1.921	1.803	6.1	127	0.00	6.34
17	P	2-Methylphenol	1.395	1.259	9.7	120	0.00	6.33
18	P	Acetophenone	2.068	1.860	10.1	118	0.00	6.48
19	P	Hexachloroethane	0.693	0.665	4.0	127	0.00	6.59
20	P	N-Nitroso-di-n-propylamin	1.098	0.962	12.4	118	0.00	6.49
21	P	3&4-Methylphenol	1.450	1.286	11.3	119	0.00	6.51
22	I	Naphthalene-d8	1.000	1.000	0.0	118	0.00	7.46
23	S	Nitrobenzene-d5	0.439	0.438	0.2	119	0.00	6.64
24	P	Nitrobenzene	0.427	0.424	0.7	119	0.00	6.67
25	P	Isophorone	0.768	0.743	3.3	117	0.00	6.94
26	P	2-Nitrophenol	0.210	0.231	-10.0	127	0.00	7.02
27	P	2,4-Dimethylphenol	0.364	0.354	2.7	116	0.00	7.10
28		O,O,O-Triethylphosphoroth	0.188	0.195	-3.7	122	0.00	7.17
29	P	bis(2-Chloroethoxy)methan	0.470	0.469	0.2	121	0.00	7.21
			True	Calc.	% Drift			
30		Benzoic Acid	50.000	42.174	15.7	95	0.00	7.23
			AvgRF	CCRF	% Dev			
31	P	2,4-Dichlorophenol	0.324	0.317	2.2	116	0.00	7.32
32		1,2,4-Trichlorobenzene	0.360	0.370	-2.8	123	0.00	7.40
33		alpha-Terpineol		----------NA----------				
34	P	Naphthalene	1.132	1.121	1.0	120	0.00	7.48
35	P	4-Chloroaniline	0.493	0.457	7.3	110	0.00	7.56
36		2,6-Dichlorophenol	0.315	0.306	2.9	116	0.00	7.57
37	P	Hexachlorobutadiene	0.198	0.204	-3.0	123	0.00	7.63

Continuing Calibration Summary

Job Number: FA77615 **Sample:** S6F253-CC248
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** 6F06541.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

38	P	Caprolactam	0.126	0.118	6.3	107	0.00	7.99
39	P	4-Chloro-3-methylphenol	0.334	0.306	8.4	108	0.00	8.15
40	P	2-Methylnaphthalene	0.662	0.635	4.1	115	0.00	8.29
41		1-Methylnaphthalene	0.727	0.687	5.5	113	0.00	8.40
42	P	1,2,4,5-Tetrachlorobenzen	0.347	0.336	3.2	115	0.00	8.49
43	I	Acenaphthene-d10	1.000	1.000	0.0	105	0.00	9.52
44	P	Hexachlorocyclopentadiene	0.417	0.453	-8.6	110	0.00	8.48
45	P	2,4,6-Trichlorophenol	0.436	0.462	-6.0	111	0.00	8.63
46	P	2,4,5-Trichlorophenol	0.465	0.480	-3.2	108	0.00	8.68
47	S	2-Fluorobiphenyl	1.563	1.634	-4.5	112	0.00	8.74
48	P	1,1'-Biphenyl	1.671	1.729	-3.5	109	0.00	8.85
49	P	2-Chloronaphthalene	1.314	1.347	-2.5	111	0.00	8.86
50	P	2-Nitroaniline	0.412	0.386	6.3	97	0.00	8.99
		----------	True	Calc.	% Drift	----------		
51		p-Dinitrobenzene	50.000	49.491	1.0	104	0.00	9.16
		----------	AvgRF	CCRF	% Dev	----------		
52	P	Acenaphthylene	1.999	2.014	-0.8	108	0.00	9.35
53	P	Dimethylphthalate	1.493	1.474	1.3	106	0.00	9.23
		----------	True	Calc.	% Drift	----------		
54		m-Dinitrobenzene	50.000	51.072	-2.1	108	0.00	9.25
		----------	AvgRF	CCRF	% Dev	----------		
55	P	2,6-Dinitrotoluene	0.347	0.361	-4.0	107	0.00	9.29
56		o-Dinitrobenzene	0.257	0.214	16.7	89	0.00	9.35
57	P	Acenaphthene	1.328	1.310	1.4	107	0.00	9.55
58	P	3-Nitroaniline	0.400	0.390	2.5	101	0.00	9.48
		----------	True	Calc.	% Drift	----------		
59	P	2,4-Dinitrophenol	50.000	42.420	15.2	81	0.00	9.60
		----------	AvgRF	CCRF	% Dev	----------		
60	P	Dibenzofuran	1.835	1.640	10.6	97	0.00	9.76
61	P	2,4-Dinitrotoluene	0.456	0.417	8.6	92	0.00	9.76
62	P	4-Nitrophenol	0.229	0.176	23.1#	78	0.00	9.73
		----------	True	Calc.	% Drift	----------		
63		2,3,5,6-Tetrachlorophenol	50.000	47.689	4.6	100	0.00	9.86
		----------	AvgRF	CCRF	% Dev	----------		
64	P	2,3,4,6-Tetrachlorophenol	0.375	0.365	2.7	101	0.00	9.91
65	P	Fluorene	1.486	1.286	13.5	93	0.00	10.16
66	P	4-Chlorophenyl-phenylethe	0.735	0.663	9.8	98	0.00	10.18
67	P	Diethylphthalate	1.514	1.302	14.0	92	0.00	10.07
68		Thionazin	0.345	0.282	18.3	84	0.00	10.16
69	P	4-Nitroaniline	0.404	0.361	10.6	93	0.00	10.21
70	I	Phenanthrene-d10	1.000	1.000	0.0	90	0.00	11.27
		----------	True	Calc.	% Drift	----------		
71	P	4,6-Dinitro-2-methylpheno	50.000	50.526	-1.1	90	0.00	10.24
		----------	AvgRF	CCRF	% Dev	----------		
72	P	n-Nitrosodiphenylamine	0.622	0.718	-15.4	96	0.00	10.32
73		Diphenylamine	0.693	0.718	-3.6	96	0.00	10.32
74		1,2-Diphenylhydrazine	0.887	0.817	7.9	86	0.00	10.37
75	S	2,4,6-Tribromophenol	0.135	0.145	-7.4	97	0.00	10.45

Continuing Calibration Summary

Job Number: FA77615 **Sample:** S6F253-CC248
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** 6F06541.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

76		Sulfotep	0.145	0.135	6.9	83	0.00	10.54
77		Phorate	0.487	0.486	0.2	88	0.00	10.68
78	P	4-Bromophenyl-phenylether	0.233	0.246	-5.6	97	0.00	10.76
79	P	Hexachlorobenzene	0.267	0.279	-4.5	98	0.00	10.81
80		Dimethoate	0.335	0.328	2.1	85	0.00	10.88
81		Simazine	0.140	0.142	-1.4	93	0.00	10.94
82	P	Atrazine	0.236	0.239	-1.3	92	0.00	10.99
		----------	True	Calc.	% Drift	----------		
83	P	Pentachlorophenol	50.000	56.182	-12.4	102	0.00	11.06
		----------	AvgRF	CCRF	% Dev	----------		
84	P	Phenanthrene	1.198	1.145	4.4	89	0.00	11.30
85	P	Anthracene	1.217	1.201	1.3	91	0.00	11.36
86		Disulfoton	0.509	0.503	1.2	88	0.00	11.31
87	P	Carbazole	1.097	1.055	3.8	88	0.00	11.57
		----------	True	Calc.	% Drift	----------		
88		Methyl Parathion	50.000	48.706	2.6	86	0.00	11.75
		----------	AvgRF	CCRF	% Dev	----------		
89	P	Di-n-butylphthalate	1.382	1.325	4.1	86	0.00	12.02
		----------	True	Calc.	% Drift	----------		
90		Ethyl Parathion	50.000	51.276	-2.6	92	0.00	12.22
		----------	AvgRF	CCRF	% Dev	----------		
91	P	Fluoranthene	1.261	1.217	3.5	88	0.00	12.71
92	I	Chrysene-d12	1.000	1.000	0.0	92	0.00	14.57
93		Benzidine	0.835	0.695	16.8	78	0.00	12.89
94	P	Pyrene	1.433	1.351	5.7	89	0.00	12.97
95	S	Terphenyl-d14	1.124	1.034	8.0	87	0.00	13.20
96		Famphur	0.454	0.399	12.1	79	0.00	13.76
97	P	Butylbenzylphthalate	0.686	0.592	13.7	80	0.00	13.85
98	P	3,3'-Dichlorobenzidine	0.519	0.525	-1.2	92	0.00	14.55
99	P	Benzo[a]anthracene	1.340	1.334	0.4	94	0.00	14.55
100	P	Chrysene	1.300	1.303	-0.2	96	0.00	14.61
101	P	bis(2-Ethylhexyl)phthalat	0.959	0.954	0.5	94	0.00	14.70
102	I	Perylene-d12	1.000	1.000	0.0	90	0.00	16.92
103	P	Di-n-octylphthalate	1.582	1.601	-1.2	92	0.00	15.77
104	P	Benzo[b]fluoranthene	1.284	1.251	2.6	90	0.00	16.28
105	P	Benzo[k]fluoranthene	1.335	1.303	2.4	89	0.00	16.34
106	P	Benzo[a]pyrene	1.192	1.199	-0.6	92	0.00	16.83
107	P	Indeno[1,2,3-cd]pyrene	1.110	1.195	-7.7	99	0.00	18.56
108	P	Dibenz[a,h]anthracene	1.185	1.252	-5.7	94	0.00	18.61
109	P	Benzo[g,h,i]perylene	1.198	1.289	-7.6	100	0.00	18.92

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6F06440.D 8270D6F072920.m Fri Aug 14 04:41:16 2020

Continuing Calibration Summary

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: S6F254-CC248
Lab FileID: 6F06573.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\S6F254_081420\6F06573.D Vial: 2
Acq On : 14 Aug 2020 12:47 pm Operator: marthav
Sample : cc248-50 Inst : MSBNA10
Misc : op81484,S6F254,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\msdchem\1\met...\8270D6F072920.m (RTE Integrator)
Title : SW846 8270D OR EPA 625
Last Update : Wed Jul 29 16:22:51 2020
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	81	0.00	6.01
2		1,4-Dioxane	0.595	0.606	-1.8	84	-0.02	2.83
3		N-nitrosodimethylamine	0.812	0.591	27.2#	59	-0.01	3.17
4		Pyridine	1.532	1.564	-2.1	82	-0.01	3.21
5	P	Benzaldehyde	1.225	1.251	-2.1	79	0.00	5.54
6		Aniline	2.346	2.214	5.6	76	0.00	5.66
7	S	2-Fluorophenol	1.511	1.566	-3.6	83	0.00	4.64
8	P	bis(2-Chloroethyl)ether	1.536	1.529	0.5	81	0.00	5.74
9	S	Phenol-d5	1.794	1.731	3.5	77	0.00	5.66
10	P	Phenol	2.086	2.018	3.3	78	0.00	5.68
11	P	2-Chlorophenol	1.549	1.604	-3.6	83	0.00	5.79
12		1,3-Dichlorobenzene	1.675	1.723	-2.9	83	0.00	5.95
13		1,4-Dichlorobenzene	1.698	1.732	-2.0	82	0.00	6.03
14		1,2-Dichlorobenzene	1.602	1.634	-2.0	83	0.00	6.20
15		Benzyl alcohol	0.945	0.983	-4.0	83	0.00	6.18
16	P	bis(2-chloroisopropyl)eth	1.921	1.612	16.1	69	0.00	6.33
17	P	2-Methylphenol	1.395	1.331	4.6	77	0.01	6.33
18	P	Acetophenone	2.068	1.992	3.7	76	0.00	6.47
19	P	Hexachloroethane	0.693	0.668	3.6	78	0.00	6.57
20	P	N-Nitroso-di-n-propylamin	1.098	0.997	9.2	74	0.00	6.48
21	P	3&4-Methylphenol	1.450	1.416	2.3	79	0.01	6.51
22	I	Naphthalene-d8	1.000	1.000	0.0	76	0.00	7.45
23	S	Nitrobenzene-d5	0.439	0.435	0.9	76	0.00	6.63
24	P	Nitrobenzene	0.427	0.414	3.0	75	0.00	6.66
25	P	Isophorone	0.768	0.749	2.5	76	0.00	6.93
26	P	2-Nitrophenol	0.210	0.242	-15.2	85	0.00	7.02
27	P	2,4-Dimethylphenol	0.364	0.374	-2.7	79	0.00	7.10
28		O,O,O-Triethylphosphoroth	0.188	0.199	-5.9	80	0.00	7.16
29	P	bis(2-Chloroethoxy)methan	0.470	0.472	-0.4	78	0.00	7.20
		----------	Amount	Calc.	%Drift		----------	
30		Benzoic Acid	50.000	49.110	1.8	73	0.00	7.23
		----------	AvgRF	CCRF	%Dev		----------	
31	P	2,4-Dichlorophenol	0.324	0.341	-5.2	80	0.00	7.31
32		1,2,4-Trichlorobenzene	0.360	0.380	-5.6	81	0.00	7.39
33		alpha-Terpineol		----------NA----------				
34	P	Naphthalene	1.132	1.148	-1.4	79	0.00	7.47
35	P	4-Chloroaniline	0.493	0.494	-0.2	77	0.00	7.55
36		2,6-Dichlorophenol	0.315	0.325	-3.2	79	0.00	7.56
37	P	Hexachlorobutadiene	0.198	0.214	-8.1	83	0.00	7.62

Continuing Calibration Summary

Job Number: FA77615 **Sample:** S6F254-CC248
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** 6F06573.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

38	P	Caprolactam	0.126	0.131	-4.0	77	0.00	7.99
39	P	4-Chloro-3-methylphenol	0.334	0.347	-3.9	78	0.00	8.15
40	P	2-Methylnaphthalene	0.662	0.675	-2.0	78	0.00	8.28
41		1-Methylnaphthalene	0.727	0.736	-1.2	78	0.00	8.40
42	P	1,2,4,5-Tetrachlorobenzen	0.347	0.361	-4.0	80	0.00	8.48
43	I	Acenaphthene-d10	1.000	1.000	0.0	73	0.00	9.51
44	P	Hexachlorocyclopentadiene	0.417	0.491	-17.7	83	0.00	8.47
45	P	2,4,6-Trichlorophenol	0.436	0.483	-10.8	80	0.00	8.63
46	P	2,4,5-Trichlorophenol	0.465	0.511	-9.9	80	0.00	8.68
47	S	2-Fluorobiphenyl	1.563	1.631	-4.4	78	0.00	8.73
48	P	1,1'-Biphenyl	1.671	1.719	-2.9	75	0.00	8.84
49	P	2-Chloronaphthalene	1.314	1.357	-3.3	78	0.00	8.85
50	P	2-Nitroaniline	0.412	0.396	3.9	69	0.00	8.99
			Amount	Calc.	%Drift			
51		p-Dinitrobenzene	50.000	50.704	-1.4	74	0.00	9.16
			AvgRF	CCRF	%Dev			
52	P	Acenaphthylene	1.999	2.056	-2.9	77	0.00	9.33
53	P	Dimethylphthalate	1.493	1.565	-4.8	78	0.00	9.22
			Amount	Calc.	%Drift			
54		m-Dinitrobenzene	50.000	54.420	-8.8	81	0.00	9.24
			AvgRF	CCRF	%Dev			
55	P	2,6-Dinitrotoluene	0.347	0.390	-12.4	80	0.00	9.28
56		o-Dinitrobenzene	0.257	0.207	19.5	60	0.00	9.34
57	P	Acenaphthene	1.328	1.349	-1.6	77	0.00	9.54
58	P	3-Nitroaniline	0.400	0.426	-6.5	77	0.00	9.48
			Amount	Calc.	%Drift			
59	P	2,4-Dinitrophenol	50.000	58.877	-17.8	89	0.00	9.60
			AvgRF	CCRF	%Dev			
60	P	Dibenzofuran	1.835	1.850	-0.8	76	0.00	9.75
61	P	2,4-Dinitrotoluene	0.456	0.497	-9.0	76	0.00	9.76
62	P	4-Nitrophenol	0.229	0.219	4.4	67	0.00	9.73
			Amount	Calc.	%Drift			
63		2,3,5,6-Tetrachlorophenol	50.000	54.477	-9.0	81	0.00	9.85
			AvgRF	CCRF	%Dev			
64	P	2,3,4,6-Tetrachlorophenol	0.375	0.422	-12.5	81	0.00	9.91
65	P	Fluorene	1.486	1.472	0.9	74	0.00	10.15
66	P	4-Chlorophenyl-phenylethe	0.735	0.754	-2.6	78	0.00	10.17
67	P	Diethylphthalate	1.514	1.571	-3.8	77	0.00	10.06
68		Thionazin	0.345	0.329	4.6	68	0.00	10.15
69	P	4-Nitroaniline	0.404	0.429	-6.2	76	0.00	10.21
70	I	Phenanthrene-d10	1.000	1.000	0.0	71	0.00	11.26
			Amount	Calc.	%Drift			
71	P	4,6-Dinitro-2-methylpheno	50.000	58.044	-16.1	84	0.00	10.24
			AvgRF	CCRF	%Dev			
72	P	n-Nitrosodiphenylamine	0.622	0.732	-17.7	77	0.00	10.32
73		Diphenylamine	0.693	0.732	-5.6	77	0.00	10.32
74		1,2-Diphenylhydrazine	0.887	0.818	7.8	67	0.00	10.36
75	S	2,4,6-Tribromophenol	0.135	0.151	-11.9	79	0.00	10.45

Continuing Calibration Summary

Job Number: FA77615 **Sample:** S6F254-CC248
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** 6F06573.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

76		Sulfotep	0.145	0.137	5.5	66	0.00	10.53
77		Phorate	0.487	0.483	0.8	69	0.00	10.67
78	P	4-Bromophenyl-phenylether	0.233	0.253	-8.6	78	0.00	10.75
79	P	Hexachlorobenzene	0.267	0.287	-7.5	79	0.00	10.80
80		Dimethoate	0.335	0.341	-1.8	69	0.00	10.88
81		Simazine	0.140	0.147	-5.0	75	0.00	10.94
82	P	Atrazine	0.236	0.248	-5.1	75	0.00	10.98
		----------	Amount	Calc.	%Drift	----------		
83	P	Pentachlorophenol	50.000	56.133	-12.3	80	0.00	11.05
		----------	AvgRF	CCRF	%Dev	----------		
84	P	Phenanthrene	1.198	1.179	1.6	72	0.00	11.29
85	P	Anthracene	1.217	1.246	-2.4	74	0.00	11.35
86		Disulfoton	0.509	0.508	0.2	70	0.00	11.30
87	P	Carbazole	1.097	1.114	-1.5	73	0.00	11.56
		----------	Amount	Calc.	%Drift	----------		
88		Methyl Parathion	50.000	51.731	-3.5	72	0.00	11.74
		----------	AvgRF	CCRF	%Dev	----------		
89	P	Di-n-butylphthalate	1.382	1.418	-2.6	72	0.00	12.01
		----------	Amount	Calc.	%Drift	----------		
90		Ethyl Parathion	50.000	48.604	2.8	68	0.00	12.21
		----------	AvgRF	CCRF	%Dev	----------		
91	P	Fluoranthene	1.261	1.294	-2.6	73	0.00	12.70
92	I	Chrysene-d12	1.000	1.000	0.0	61	0.00	14.57
93		Benzidine	0.835	0.898	-7.5	67	0.00	12.89
94	P	Pyrene	1.433	1.609	-12.3	71	0.00	12.97
95	S	Terphenyl-d14	1.124	1.292	-14.9	73	0.00	13.19
96		Famphur	0.454	0.492	-8.4	66	0.00	13.75
97	P	Butylbenzylphthalate	0.686	0.762	-11.1	69	0.00	13.84
98	P	3,3'-Dichlorobenzidine	0.519	0.558	-7.5	66	0.00	14.54
99	P	Benzo[a]anthracene	1.340	1.396	-4.2	66	0.00	14.55
100	P	Chrysene	1.300	1.354	-4.2	67	0.00	14.60
101	P	bis(2-Ethylhexyl)phthalat	0.959	1.016	-5.9	67	0.00	14.70
102	I	Perylene-d12	1.000	1.000	0.0	60	0.00	16.92
103	P	Di-n-octylphthalate	1.582	1.747	-10.4	66	-0.01	15.76
104	P	Benzo[b]fluoranthene	1.284	1.347	-4.9	64	0.00	16.28
105	P	Benzo[k]fluoranthene	1.335	1.356	-1.6	62	0.00	16.33
106	P	Benzo[a]pyrene	1.192	1.268	-6.4	65	0.00	16.82
107	P	Indeno[1,2,3-cd]pyrene	1.110	1.317	-18.6	73	0.01	18.56
108	P	Dibenz[a,h]anthracene	1.185	1.363	-15.0	68	0.00	18.61
109	P	Benzo[g,h,i]perylene	1.198	1.325	-10.6	68	0.00	18.92

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6F06440.D 8270D6F072920.m Fri Aug 14 14:25:48 2020

Initial Calibration Summary

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: S7G472-ICC472
Lab FileID: 7G10836.D

Response Factor Report MSBNA8

Method : C:\msdchem\1\met...pahf7gD0072120.m (RTE Integrator)
Title : PAH's by 8270 SIM
Last Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

Calibration Files
L1 =7G10833.D L2 =7G10834.D L3 =7G10835.D L4 =7G10836.D
L5 =7G10837.D L6 =7G10838.D L7 =7G10839.D

Compound	L1	L2	L3	L4	L5	L6	L7	Avg	%RSD
1) I Naphthalene-d8	ISTD								
2)P Naphthalene	1.788	1.149	1.123	1.177	1.176	1.182	1.252	1.264	18.55
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9999									
Response Ratio = 0.00000 + 1.12694 *A + 0.01247 *A^2									
3)P 2-Methylnaphthale	1.042	0.771	0.794	0.867	0.873	0.908	0.973	0.890	10.71
4)s 2-Methylnaphthale	0.874	0.545	0.557	0.602	0.614	0.624	0.669	0.641	17.36
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9999									
Response Ratio = 0.00000 + 0.57628 *A + 0.00934 *A^2									
5)P 1-Methylnaphthale	1.294	0.799	0.779	0.829	0.824	0.846	0.913	0.898	20.03
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9999									
Response Ratio = 0.00000 + 0.78065 *A + 0.01318 *A^2									
6) I Acenaphthene-d10	ISTD								
7)P Acenaphthylene	3.327	2.218	2.216	2.419	2.341	2.384	2.491	2.485	15.48
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9998									
Response Ratio = 0.00000 + 2.28588 *A + 0.02049 *A^2									
8)P Acenaphthene	2.268	1.471	1.460	1.575	1.548	1.557	1.652	1.647	17.08
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9999									
Response Ratio = 0.00000 + 1.48716 *A + 0.01640 *A^2									
9)P Dibenzofuran	1.560	1.051	1.032	1.113	1.089	1.076	1.140	1.152	15.96
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9998									
Response Ratio = 0.00000 + 1.04854 *A + 0.00901 *A^2									
10)P Fluorene	2.436	1.605	1.570	1.689	1.676	1.701	1.778	1.779	16.71
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9999									
Response Ratio = 0.00000 + 1.62233 *A + 0.01563 *A^2									
11) I Phenanthrene-d10	ISTD								
12)P Pentachlorophenol	0.084	0.080	0.117	0.151	0.178	0.197	0.233	0.149	39.03
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9987									
Response Ratio = 0.00000 + 0.14189 *A + 0.00368 *A^2									
13)P Phenanthrene	2.007	1.282	1.303	1.371	1.336	1.382	1.439	1.446	17.50
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9999									
Response Ratio = 0.00000 + 1.30979 *A + 0.01292 *A^2									
14)P Anthracene	2.174	1.335	1.305	1.353	1.340	1.365	1.396	1.467	21.35
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9999									
Response Ratio = 0.00000 + 1.32278 *A + 0.01470 *A^2									

Initial Calibration Summary

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: S7G472-ICC472
Lab FileID: 7G10836.D

```
15)P Carbazole          3.180 2.159 2.195 2.326 2.267 2.295 2.316 2.391  14.77
16)P Fluoranthene       3.786 2.408 2.453 2.600 2.542 2.608 2.743 2.734  17.43
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9999
              Response Ratio = 0.00000 + 2.46832 *A + 0.02745 *A^2

17)s Fluoranthene-d10  3.033 1.977 2.025 2.147 2.071 2.136 2.194 2.226  16.33
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9998
              Response Ratio = 0.00000 + 2.05640 *A + 0.01374 *A^2


18) I   Chrysene-d12           ----------------ISTD---------------------
19)P Pyrene             2.490 1.553 1.540 1.619 1.610 1.629 1.672 1.730  19.54
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9999
              Response Ratio = 0.00000 + 1.57982 *A + 0.00925 *A^2

20)P Benzo[a]anthracen 1.818 1.195 1.210 1.275 1.268 1.268 1.312 1.335  16.22
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9999
              Response Ratio = 0.00000 + 1.23579 *A + 0.01515 *A^2

21)P Chrysene           2.438 1.458 1.376 1.447 1.376 1.368 1.385 1.550  25.39
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9997
              Response Ratio = 0.00000 + 1.38698 *A + -0.00072 *A^2


22) I   Perylene-d12           ----------------ISTD---------------------
23)P Benzo[b]fluoranth 1.677 1.174 1.240 1.363 1.337 1.329 1.383 1.358  11.71
24)P Benzo[k]fluoranth 2.395 1.507 1.422 1.504 1.430 1.470 1.515 1.606  21.78
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9998
              Response Ratio = 0.00000 + 1.42711 *A + 0.01741 *A^2

25)P Benzo[a]pyrene     1.657 1.212 1.202 1.293 1.268 1.287 1.342 1.323  11.71
26)P Indeno[1,2,3-cd]p 0.889 0.670 0.773 0.892 0.895 0.905 1.021 0.863  12.93
27)P Dibenz[a,h]anthra 1.091 0.768 0.828 0.940 0.961 1.000 1.118 0.958  13.38
28)P Benzo[g,h,i]peryl 1.292 0.877 0.912 1.008 1.013 1.042 1.143 1.041  13.53
----------------------------------------------------------------------------
(#) = Out of Range

          simpahf7gD0072120.m       Wed Jul 22 13:15:14 2020
```

Initial Calibration Verification

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: S7G472-ICV472
Lab FileID: 7G10840.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\072120_7G472\7G10840.D Vial: 10
Acq On : 21 Jul 2020 4:19 pm Operator: fouads
Sample : icv472-4 Inst : MSBNA8
Misc : op80679,S7G472,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\met...pahf7gD0072120.m (RTE Integrator)
Title : PAH's by 8270 SIM
Last Update : Tue Jul 21 16:46:17 2020
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	R.T.
1	I	Naphthalene-d8	4.000	4.000	0.0	98	0.00	4.73
			Amount	Calc.	%Drift			
2	P	Naphthalene	10.000	9.543	4.6	92	0.00	4.75
			Amount	Calc.	%Drift			
3	P	2-Methylnaphthalene	10.000	8.171	18.3	82	0.00	5.34
			Amount	Calc.	%Drift			
4	s	2-Methylnaphthalene-d10			NA			
5	P	1-Methylnaphthalene	10.000	9.875	1.3	95	0.00	5.42
			Amount	Calc.	%Drift			
6	I	Acenaphthene-d10	4.000	4.000	0.0	99	0.00	6.22
			Amount	Calc.	%Drift			
7	P	Acenaphthylene	10.000	9.065	9.4	87	0.00	6.10
8	P	Acenaphthene	10.000	9.628	3.7	93	0.00	6.25
9	P	Dibenzofuran	10.000	18.813	-88.1#	183	0.00	6.41
10	P	Fluorene	10.000	9.705	2.9	95	0.00	6.70
			Amount	Calc.	%Drift			
11	I	Phenanthrene-d10	4.000	4.000	0.0	100	0.00	7.51
			Amount	Calc.	%Drift			
12	P	Pentachlorophenol	20.000	14.755	26.2#	61	0.00	7.38
13	P	Phenanthrene	10.000	9.479	5.2	93	0.00	7.53
14	P	Anthracene	5.000	4.255	14.9	84	0.00	7.58
			Amount	Calc.	%Drift			
15	P	Carbazole	5.000	2.375	52.5#	49	0.00	7.75
			Amount	Calc.	%Drift			
16	P	Fluoranthene	10.000	8.721	12.8	85	-0.01	8.56
17	s	Fluoranthene-d10			NA			
			Amount	Calc.	%Drift			
18	I	Chrysene-d12	4.000	4.000	0.0	97	0.00	9.85

Initial Calibration Verification

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: S7G472-ICV472
Lab FileID: 7G10840.D

			Amount	Calc.	%Drift			
19	P	Pyrene	10.000	9.176	8.2	88	0.00	8.75
20	P	Benzo[a]anthracene	5.000	4.494	10.1	86	0.00	9.84
21	P	Chrysene	5.000	5.042	-0.8	94	0.00	9.88

			Amount	Calc.	%Drift			
22	I	Perylene-d12	4.000	4.000	0.0	97	0.00	11.62
23	P	Benzo[b]fluoranthene	5.000	4.666	6.7	90	0.00	11.10

			Amount	Calc.	%Drift			
24	P	Benzo[k]fluoranthene	5.000	4.742	5.2	88	0.00	11.13

			Amount	Calc.	%Drift			
25	P	Benzo[a]pyrene	5.000	4.510	9.8	89	0.00	11.54
26	P	Indeno[1,2,3-cd]pyrene	5.000	4.449	11.0	83	-0.01	13.38
27	P	Dibenz[a,h]anthracene	5.000	4.399	12.0	87	0.00	13.44
28	P	Benzo[g,h,i]perylene	5.000	4.244	15.1	85	0.00	13.85

(#) = Out of Range SPCC's out = 0 CCC's out = 0
7G10836.D simpahf7gD0072120.m Wed Jul 22 13:16:09 2020

Continuing Calibration Summary

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: S7G483-CC472
Lab FileID: 7G11130.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\Je...2020\S7G483\7G11130.d Vial: 2
Acq On : 11 Aug 2020 8:29 am Operator: FOUADS
Sample : CC472-4 Inst : MSBNA8
Misc : op81342,S7G483,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\met...pahf7gD0072120.m (RTE Integrator)
Title : PAH's by 8270 SIM
Last Update : Tue Jul 21 16:46:17 2020
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Naphthalene-d8	1.000	1.000	0.0	91	0.00	4.63
		---------- True	Calc.	% Drift	----------			
2	P	Naphthalene	10.000	9.557	4.4	85	0.00	4.65
		---------- AvgRF	CCRF	% Dev	----------			
3	P	2-Methylnaphthalene	0.890	1.002	-12.6	105	0.00	5.23
		---------- True	Calc.	% Drift	----------			
4	s	2-Methylnaphthalene-d10	10.000	11.587	-15.9	106	0.00	5.21
5	P	1-Methylnaphthalene	10.000	12.037	-20.4#	108	0.00	5.31
		---------- AvgRF	CCRF	% Dev	----------			
6	I	Acenaphthene-d10	1.000	1.000	0.0	123	0.00	6.11
		---------- True	Calc.	% Drift	----------			
7	P	Acenaphthylene	10.000	9.605	3.9	114	0.00	5.99
8	P	Acenaphthene	10.000	9.684	3.2	115	0.00	6.14
9	P	Dibenzofuran	10.000	10.295	-2.9	122	0.00	6.30
10	P	Fluorene	10.000	9.853	1.5	119	0.00	6.59
		---------- AvgRF	CCRF	% Dev	----------			
11	I	Phenanthrene-d10	1.000	1.000	0.0	132	0.00	7.40
		---------- True	Calc.	% Drift	----------			
12	P	Pentachlorophenol	25.000	25.159	-0.6	145	0.00	7.26
13	P	Phenanthrene	10.000	9.373	6.3	121	0.00	7.42
14	P	Anthracene	5.000	4.863	2.7	128	0.00	7.46
		---------- AvgRF	CCRF	% Dev	----------			
15	P	Carbazole	2.391	2.268	5.1	129	0.00	7.63
		---------- True	Calc.	% Drift	----------			
16	P	Fluoranthene	10.000	9.863	1.4	127	0.00	8.45
17	s	Fluoranthene-d10	10.000	10.113	-1.1	130	0.00	8.44
		---------- AvgRF	CCRF	% Dev	----------			
18	I	Chrysene-d12	1.000	1.000	0.0	136	0.00	9.73

Continuing Calibration Summary

Job Number: FA77615 **Sample:** S7G483-CC472
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** 7G11130.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

			True	Calc.	% Drift			
19	P	Pyrene	10.000	9.429	5.7	127	0.00	8.64
20	P	Benzo[a]anthracene	5.000	4.884	2.3	131	0.00	9.72
21	P	Chrysene	5.000	4.874	2.5	127	0.00	9.75
			AvgRF	CCRF	% Dev			
22	I	Perylene-d12	1.000	1.000	0.0	138	0.00	11.48
23	P	Benzo[b]fluoranthene	1.358	1.268	6.6	128	0.00	10.96
			True	Calc.	% Drift			
24	P	Benzo[k]fluoranthene	5.000	4.815	3.7	128	0.00	10.99
			AvgRF	CCRF	% Dev			
25	P	Benzo[a]pyrene	1.323	1.215	8.2	130	0.00	11.39
26	P	Indeno[1,2,3-cd]pyrene	0.863	0.914	-5.9	141	0.00	13.21
27	P	Dibenz[a,h]anthracene	0.958	1.076	-12.3	158	0.00	13.27
28	P	Benzo[g,h,i]perylene	1.041	1.057	-1.5	145	0.00	13.67

(#) = Out of Range SPCC's out = 0 CCC's out = 0
7G10836.D simpahf7gD0072120.m Wed Aug 12 07:25:19 2020

Initial Calibration Summary

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICC2918
Lab FileID: X071368.D

Response Factor Report MSBNA05

Method : C:\msdchem\1\MET...DApp9SX-062320.m (RTE Integrator)
Title : SW846 8270D OR EPA 625
Last Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration

Calibration Files
5 =x071365.D 10 =x071366.D 25 =x071367.D 50 =x071368.D
60 =x071369.D 75 =x071370.D 100 =x071363.D 1 =x071364.D

Compound	5	10	25	50	60	75	100	1	Avg	%RSD
1) I 1,4-Dichlorobenzene-d	ISTD									
2) 1,4-Dioxane	0.711	0.724	0.687	0.636	0.644	0.662	0.662	0.758	0.686	6.21
3) N-nitrosodim	1.190	1.266	1.222	1.164	1.205	1.200	1.225	1.265	1.217	2.92
4) Pyridine	1.577	1.700	1.694	1.633	1.650	1.727	1.789	1.572	1.668	4.46
5) Benzaldehyde	1.252	1.271	1.203	1.150	1.174	1.195	1.199	1.094	1.192	4.67
6) Aniline	2.189	2.279	2.301	2.433	2.498	2.578	2.594	2.152	2.378	7.23
7) 2-Fluorophen	1.423	1.476	1.418	1.367	1.408	1.439	1.473	1.470	1.434	2.66
8) bis(2-Chloro	1.365	1.441	1.440	1.458	1.497	1.530	1.541	1.467	1.468	3.85
9) Phenol-d5	1.626	1.725	1.686	1.650	1.700	1.780	1.834	1.649	1.706	4.17
10) Phenol	1.750	1.907	1.935	2.105	2.182	2.263	2.234	1.815	2.024	9.76
11) 2-Chlorophen	1.355	1.482	1.495	1.556	1.601	1.673	1.694	1.387	1.530	8.10
12) 1,3-Dichloro	1.509	1.572	1.555	1.562	1.604	1.641	1.662	1.614	1.590	3.14
13) 1,4-Dichloro	1.614	1.663	1.648	1.669	1.695	1.732	1.741	1.698	1.682	2.52
14) 1,2-Dichloro	1.497	1.568	1.560	1.591	1.631	1.678	1.694	1.566	1.598	4.11
15) Benzyl alcoh	0.940	1.027	1.049	1.061	1.086	1.118	1.131		1.059	6.06
16) 2,2'-Oxybis(	3.082	3.186	3.158	3.042	3.023	3.037	2.907	3.238	3.084	3.44
17) 2-Methylphen	1.363	1.447	1.467	1.488	1.503	1.535	1.564	1.281	1.456	6.39
18) Acetophenone	2.226	2.265	2.217	2.156	2.165	2.173	2.176	1.858	2.154	5.83
19) Hexachloroet	0.595	0.626	0.633	0.627	0.636	0.652	0.669	0.615	0.632	3.50
20) N-Nitroso-di	1.126	1.161	1.180	1.155	1.147	1.135	1.123	1.075	1.138	2.78
21) 3&4-Methylph	1.434	1.542	1.573	1.532	1.553	1.549	1.523	1.334	1.505	5.35
22) I Naphthalene-d8	ISTD									
23) Nitrobenzene	0.388	0.409	0.411	0.407	0.423	0.424	0.433	0.410	0.413	3.30
24) Nitrobenzene	0.390	0.405	0.412	0.406	0.419	0.417	0.422	0.400	0.409	2.64
25) Isophorone	0.713	0.751	0.733	0.710	0.733	0.729	0.741	0.729	0.730	1.84
26) 2-Nitropheno	0.166	0.185	0.197	0.196	0.207	0.211	0.220	0.173	0.194	9.64
27) 2,4-Dimethyl	0.344	0.367	0.359	0.360	0.376	0.375	0.379	0.326	0.361	5.02
28) O,O,O-Trieth	0.150	0.156	0.152	0.151	0.157	0.157	0.162	0.139	0.153	4.56
29) bis(2-Chloro	0.404	0.424	0.433	0.421	0.436	0.436	0.427	0.434	0.427	2.52
30) Benzoic Acid	0.149	0.220	0.274	0.309	0.333	0.341	0.351		0.282	26.36
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9977										
Response Ratio = 0.00000 + 0.24212 *A + 0.04845 *A^2										
31) 2,4-Dichloro	0.264	0.288	0.288	0.295	0.309	0.310	0.318	0.255	0.291	7.58
32) 1,2,4-Trichl	0.280	0.292	0.291	0.289	0.302	0.303	0.312	0.309	0.297	3.74
33) alpha-Terpin									0.000	-1.00
34) Naphthalene	1.046	1.101	1.085	1.072	1.094	1.085	1.086	1.109	1.085	1.77
35) 4-Chloroanil	0.442	0.466	0.467	0.458	0.468	0.461	0.452	0.450	0.458	2.04
36) 2,6-Dichloro	0.279	0.302	0.300	0.296	0.304	0.301	0.304	0.287	0.297	3.08
37) Hexachlorobu	0.136	0.145	0.142	0.143	0.150	0.152	0.156	0.148	0.147	4.34
38) Caprolactam	0.124	0.131	0.123	0.119	0.125	0.124	0.127	0.093	0.121	9.60
39) 4-Chloro-3-m	0.292	0.322	0.312	0.308	0.321	0.321	0.328	0.277	0.310	5.59
40) 2-Methylnaph	0.702	0.739	0.705	0.699	0.717	0.722	0.728	0.726	0.717	1.96
41) 1-Methylnaph	0.667	0.702	0.671	0.671	0.698	0.692	0.695	0.697	0.687	2.09
42) 1,2,4,5-Tetr	0.281	0.291	0.290	0.296	0.306	0.312	0.312	0.300	0.298	3.73

Initial Calibration Summary

Job Number: FA77615 **Sample:** SX2918-ICC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X071368.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

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43) I   Acenaphthene-d10      ----------------ISTD--------------------
44) Hexachlorocy 0.229 0.260 0.295 0.325 0.338 0.355 0.370 0.218 0.299  19.32
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9995
              Response Ratio = 0.00000 + 0.26566 *A + 0.04434 *A^2

45) 2,4,6-Trichl 0.331 0.351 0.366 0.380 0.389 0.395 0.401 0.324 0.367   7.92
46) 2,4,5-Trichl 0.355 0.395 0.402 0.413 0.431 0.437 0.446 0.345 0.403   9.19
47) 2-Fluorobiph 1.375 1.424 1.416 1.450 1.485 1.499 1.490 1.444 1.448   2.94
48) 1,1'-Bipheny 1.712 1.692 1.626 1.633 1.671 1.655 1.625 1.452 1.633   4.88
49) 2-Chloronaph 1.160 1.220 1.228 1.239 1.265 1.265 1.239 1.190 1.226   2.93
50) 2-Nitroanili 0.423 0.458 0.466 0.458 0.471 0.471 0.467 0.396 0.451   6.00
51) p-Dinitroben 0.215 0.247 0.263 0.266 0.278 0.276 0.282 0.196 0.253  12.42
52) Acenaphthyle 1.886 2.017 2.013 2.031 2.066 2.065 2.012 1.893 1.998   3.51
53) Dimethylphth 1.378 1.419 1.388 1.374 1.427 1.420 1.416 1.467 1.411   2.18
54) m-Dinitroben 0.211 0.229 0.244 0.248 0.255 0.262 0.263 0.169 0.235  13.54
55) 2,6-Dinitrot 0.314 0.327 0.330 0.342 0.349 0.355 0.355 0.293 0.333   6.50
56) o-Dinitroben 0.323 0.343 0.328 0.311 0.312 0.300 0.290 0.344 0.319   6.08
57) Acenaphthene 1.292 1.345 1.321 1.312 1.346 1.333 1.310 1.370 1.329   1.88
58) 3-Nitroanili 0.345 0.363 0.377 0.380 0.390 0.393 0.392 0.292 0.366   9.34
59) 2,4-Dinitrop 0.073 0.109 0.151 0.176 0.193 0.200 0.209       0.159  32.16
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9971
              Response Ratio = 0.00000 + 0.12676 *A + 0.03612 *A^2

60) Dibenzofuran 1.728 1.800 1.775 1.734 1.783 1.753 1.720 1.894 1.773   3.18
61) 2,4-Dinitrot 0.411 0.429 0.434 0.433 0.446 0.443 0.444 0.357 0.425   6.98
62) 4-Nitropheno 0.168 0.192 0.209 0.209 0.219 0.218 0.218       0.205   9.05
63) 2,3,5,6-Tetr 0.254 0.285 0.304 0.314 0.329 0.335 0.339 0.217 0.297  14.44
64) 2,3,4,6-Tetr 0.278 0.302 0.311 0.317 0.331 0.334 0.341 0.274 0.311   8.06
65) Fluorene     1.351 1.431 1.384 1.362 1.389 1.397 1.352 1.402 1.384   2.00
66) 4-Chlorophen 0.642 0.669 0.666 0.667 0.692 0.680 0.665 0.662 0.668   2.12
67) Diethylphtha 1.341 1.431 1.411 1.398 1.451 1.446 1.441 1.357 1.409   2.94
68) Thionazin    0.310 0.327 0.310 0.301 0.310 0.290 0.280 0.267 0.299   6.43
69) 4-Nitroanili 0.377 0.407 0.426 0.414 0.433 0.430 0.426 0.349 0.408   7.33

70) I   Phenanthrene-d10      ----------------ISTD--------------------
71) 4,6-Dinitro- 0.081 0.110 0.135 0.149 0.159 0.166 0.173 0.043 0.127  36.13
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9986
              Response Ratio = 0.00000 + 0.11526 *A + 0.02503 *A^2

72) n-Nitrosodip 0.565 0.595 0.614 0.612 0.634 0.639 0.654 0.659 0.622   5.05
73) Diphenylamin 0.678 0.714 0.737 0.734 0.761 0.767 0.785 0.659 0.729   5.99
74) 1,2-Diphenyl 0.851 0.900 0.909 0.903 0.925 0.925 0.923 0.836 0.896   3.85
75) 2,4,6-Tribro 0.068 0.075 0.083 0.089 0.094 0.098 0.106 0.063 0.084  17.77
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9999
              Response Ratio = 0.00000 + 0.07262 *A + 0.00671 *A^2

76) Sulfotep     0.130 0.137 0.136 0.138 0.142 0.140 0.139 0.091 0.132  12.72
77) Phorate      0.447 0.480 0.486 0.484 0.501 0.496 0.501 0.299 0.462  14.76
78) 4-Bromopheny 0.174 0.183 0.189 0.192 0.203 0.211 0.220 0.164 0.192   9.84
79) Hexachlorobe 0.168 0.176 0.178 0.190 0.198 0.205 0.217 0.202 0.192   8.83
80) Dimethoate   0.288 0.310 0.321 0.319 0.333 0.327 0.329 0.195 0.303  15.11
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9997
              Response Ratio = 0.00000 + 0.31064 *A + 0.00877 *A^2

81) Simazine     0.128 0.137 0.139 0.139 0.145 0.148 0.152       0.141   5.71
82) Atrazine     0.225 0.230 0.233 0.234 0.248 0.249 0.281 0.169 0.234  13.47
83) Pentachlorop 0.074 0.098 0.114 0.129 0.137 0.141 0.146       0.120  21.87
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9987
              Response Ratio = 0.00000 + 0.10286 *A + 0.01886 *A^2
```

Job Number: FA77615 **Sample:** SX2918-ICC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X071368.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

```
 84) Phenanthrene 1.182 1.201 1.201 1.202 1.220 1.221 1.207 1.237 1.209   1.39
 85) Anthracene   1.186 1.242 1.266 1.279 1.313 1.323 1.308 1.162 1.260   4.73
 86) Disulfoton   0.478 0.505 0.514 0.505 0.518 0.504 0.481 0.360 0.483  10.69
 87) Carbazole    1.042 1.108 1.122 1.110 1.156 1.160 1.177 1.018 1.112   5.07
 88) Methyl Parat 0.237 0.267 0.277 0.275 0.285 0.281 0.281 0.129 0.254  20.77
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9996
               Response Ratio = 0.00000 + 0.26658 *A + 0.00720 *A^2

 89) Di-n-butylph 1.126 1.246 1.291 1.303 1.346 1.354 1.364 0.897 1.241  12.82
 90) Ethyl Parath 0.128 0.145 0.156 0.159 0.170 0.169 0.174 0.066 0.146  24.35
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9995
               Response Ratio = 0.00000 + 0.14462 *A + 0.01269 *A^2

 91) Fluoranthene 1.039 1.104 1.114 1.125 1.183 1.198 1.226 0.984 1.121   7.27

 92) I   Chrysene-d12          ----------------ISTD--------------------
 93) Benzidine    0.479 0.644 0.768 0.799 0.838 0.837 0.830 0.311 0.688  28.62
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9980
               Response Ratio = 0.00000 + 0.70508 *A + 0.06135 *A^2

 94) Pyrene       1.601 1.685 1.664 1.632 1.720 1.729 1.778 1.477 1.661   5.61
 95) Terphenyl-d1 0.982 1.041 1.070 1.066 1.107 1.134 1.181 0.922 1.063   7.78
 96) Famphur      0.386 0.427 0.374 0.288 0.273 0.248 0.213 0.212 0.303  27.31
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9960
               Response Ratio = 0.00000 + 0.39855 *A + -0.07727 *A^2

 97) Butylbenzylp 0.558 0.646 0.694 0.682 0.720 0.721 0.741 0.383 0.643  18.60
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9995
               Response Ratio = 0.00000 + 0.63866 *A + 0.04308 *A^2

 98) 3,3'-Dichlor 0.308 0.359 0.405 0.426 0.444 0.453 0.462 0.236 0.387  20.72
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9994
               Response Ratio = 0.00000 + 0.37193 *A + 0.03988 *A^2

 99) Benzo[a]anth 1.168 1.236 1.242 1.247 1.293 1.316 1.337 1.218 1.257   4.38
100) Chrysene     1.241 1.323 1.327 1.320 1.380 1.376 1.405 1.340 1.339   3.75
101) bis(2-Ethylh 0.646 0.797 0.924 0.958 1.001 0.999 1.031 0.365 0.840  27.50
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9991
               Response Ratio = 0.00000 + 0.83541 *A + 0.08609 *A^2


102) I   Perylene-d12          ----------------ISTD--------------------
103) Di-n-octylph 1.335 0.994 1.396 1.627 1.765 1.831 1.930 1.181 1.507  22.09
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9981
               Response Ratio = 0.00000 + 1.23657 *A + 0.29737 *A^2

104) Benzo[b]fluo 0.973 0.917 1.098 1.164 1.243 1.263 1.304 0.787 1.094  16.94
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9995
               Response Ratio = 0.00000 + 1.06371 *A + 0.09950 *A^2

105) Benzo[k]fluo 1.269 1.317 1.401 1.411 1.503 1.538 1.590 1.331 1.420   8.05
106) Benzo[a]pyre 0.862 0.904 1.078 1.121 1.189 1.207 1.262 0.677 1.037  19.61
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9997
               Response Ratio = 0.00000 + 1.01363 *A + 0.10108 *A^2

107) Indeno[1,2,3 0.504 0.549 0.711 0.768 0.844 0.911 0.995 0.311 0.699  32.88
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9994
               Response Ratio = 0.00000 + 0.55750 *A + 0.18016 *A^2
```

Initial Calibration Summary

Job Number: FA77615 **Sample:** SX2918-ICC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X071368.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

```
108) Dibenz[a,h]a 0.532 0.713 0.820 0.873 0.961 1.008 1.191 0.492 0.824  28.93
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9991
               Response Ratio = 0.00000 + 0.61590 *A + 0.22433 *A^2

109) Benzo[g,h,i] 0.833 0.963 1.038 1.080 1.165 1.209 1.315 0.793 1.049  17.29
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9998
               Response Ratio = 0.00000 + 0.90101 *A + 0.16537 *A^2


110)     1,4-Dichlorobenzene-d ----------------ISTD---------------------
111) 2-Picoline   1.874 1.896 1.870 1.997 1.959 1.901 1.883 1.882 1.908   2.40
112) N-Nitrosomet 1.223 1.268 1.258 1.375 1.364 1.326 1.315 1.483 1.327   6.20
113) Methyl metha 0.891 0.907 0.907 0.990 0.966 0.949 0.928 0.904 0.930   3.77
114) N-Nitrosodie 0.726 0.747 0.754 0.837 0.817 0.812 0.794 0.712 0.775   5.97
115) Ethyl methan 1.208 1.246 1.243 1.371 1.341 1.317 1.293 1.234 1.281   4.51
116) Pentachloroe 0.516 0.519 0.526 0.579 0.572 0.565 0.555 0.533 0.546   4.58
117) N-Nitrosopyr 0.645 0.686 0.695 0.778 0.754 0.749 0.733 0.566 0.701   9.89
118) N-Nitrosomor 1.209 1.237 1.269 1.404 1.350 1.339 1.260 1.160 1.279   6.29
119) O-Toluidine  2.430 2.487 2.531 2.899 2.822 2.786 2.681 2.313 2.619   7.99

120)     Naphthalene-d8A       ----------------ISTD---------------------
121) N-Nitrosopip 0.362 0.370 0.369 0.387 0.374 0.365 0.351 0.367 0.368   2.74
122) A,A-Dimethyl 1.434 1.467 1.501 1.579 1.541 1.522 1.516 1.177 1.467   8.53
123) Hexachloropr 0.139 0.153 0.167 0.190 0.190 0.187 0.186 0.132 0.168  14.23
124) N-Nitrosodi- 0.247 0.249 0.249 0.344 0.339 0.327 0.315 0.229 0.287  16.73
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9932
               Response Ratio = 0.00000 + 0.28665 *A + 0.01834 *A^2

125) p-Phenylened 0.414 0.416 0.424 0.419 0.389 0.357 0.305 0.313 0.380  12.80
126) Isosafrole   0.259 0.267 0.270 0.290 0.289 0.281 0.272 0.253 0.273   4.87

127)     Acenaphthene-d10A     ----------------ISTD---------------------
128) Safrole      0.477 0.499 0.505 0.563 0.562 0.563 0.555 0.484 0.526   7.26
129) 1-Chloronaph 1.146 1.193 1.214 1.345 1.339 1.316 1.263 1.207 1.253   5.94
130) Diphenyl Eth 0.793 0.848 0.861 0.935 0.927 0.914 0.878 0.846 0.875   5.54
131) 1,4-Naphthoq 0.431 0.487 0.535 0.559 0.555 0.508       0.354 0.490  15.24
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9972
               Response Ratio = 0.00000 + 0.52072 *A + 0.00793 *A^2

132) Pentachlorob 0.412 0.426 0.425 0.454 0.447 0.454 0.446 0.462 0.441   3.99
133) 1-Naphthylam 1.327 1.368 1.363 1.451 1.453 1.431 1.415 1.307 1.389   4.05
134) 2-Naphthylam 1.401 1.479 1.475 1.570 1.540 1.549 1.492 1.373 1.485   4.70
135) 5-Nitro-o-to 0.339 0.381 0.414 0.462 0.461 0.463 0.463 0.285 0.409  16.64
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9989
               Response Ratio = 0.00000 + 0.40695 *A + 0.02715 *A^2


136)     Phenanthrene-d10A     ----------------ISTD---------------------
137) 1,3,5-Trinit 0.094 0.134 0.169 0.209 0.214 0.215 0.216 0.067 0.165  36.38
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9954
               Response Ratio = 0.00000 + 0.15899 *A + 0.02711 *A^2

138) Diallate     0.624 0.636 0.633 0.651 0.634 0.612 0.593 0.631 0.627   2.76
139) Phenacetin   0.339 0.366 0.388 0.430 0.427 0.423 0.423 0.284 0.385  13.64
140) 4-Aminobiphe 0.808 0.842 0.858 0.877 0.820 0.786 0.730 0.769 0.811   6.01
141) Pronamide    0.281 0.309 0.322 0.352 0.347 0.339 0.332 0.232 0.314  12.86
142) Pentachloron 0.074 0.075 0.079 0.085 0.082 0.082 0.080 0.063 0.078   9.11
143) 4-Nitroquino 0.018 0.030 0.053 0.075 0.076 0.073 0.068 0.012 0.051  53.03
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9905
               Response Ratio = 0.00000 + 0.07354 *A + -0.00135 *A^2
```

Initial Calibration Summary

Job Number: FA77615 **Sample:** SX2918-ICC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X071368.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

```
144) Methapyrilen 0.181 0.214 0.234 0.232 0.224 0.213 0.202 0.142 0.205  14.93
145) Isodrin      0.111 0.115 0.110 0.117 0.114 0.112 0.111 0.117 0.113   2.55

146) I   Chrysene-d12A         ----------------ISTD--------------------
147) Aramite      0.104 0.124 0.149 0.178 0.181 0.184 0.182 0.063 0.146  30.73
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9970
               Response Ratio = 0.00000 + 0.14341 *A + 0.01870 *A^2

148) p-(Dimethyla 0.363 0.426 0.456 0.517 0.518 0.515 0.504 0.277 0.447  19.70
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9989
               Response Ratio = 0.00000 + 0.50583 *A + 0.00152 *A^2

149) Chlorobenzil 0.445 0.483 0.521 0.594 0.600 0.596 0.580 0.356 0.522  16.99
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9981
               Response Ratio = 0.00000 + 0.53019 *A + 0.02834 *A^2

150) Kepone                                              0.018       0.018   0.00
151) 3,3'-Dimethy 0.603 0.685 0.699 0.742 0.708 0.658 0.599 0.475 0.646  13.16
152) 2-Acetylamin 0.341 0.437 0.533 0.619 0.627 0.632 0.632 0.223 0.506  30.99
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9971
               Response Ratio = 0.00000 + 0.50255 *A + 0.06226 *A^2


153) I   Perylene-d12A         ----------------ISTD--------------------
154) 7,12-Dimethy 0.478 0.510 0.548 0.614 0.612 0.611 0.607 0.461 0.555  11.68
155) Hexachloroph 0.018 0.046 0.084 0.113 0.115 0.121 0.123       0.089  46.87
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9919
               Response Ratio = 0.00000 + 0.07118 *A + 0.00238 *A^2

156) 3-Methylchol 0.397 0.451 0.491 0.557 0.565 0.575 0.588 0.378 0.500  16.70
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9995
               Response Ratio = 0.00000 + 0.50722 *A + 0.03377 *A^2

157) Dibenz(a,j)a 0.559 0.566 0.633 0.755 0.777 0.804 0.865 0.307 0.658  27.54
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9995
               Response Ratio = 0.00000 + 0.57753 *A + 0.12012 *A^2

 ------------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

           8270DApp9SX-062320.m        Wed Jun 24 13:09:08 2020
```

Initial Calibration Verification

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071372.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\0623_sx2918\x071372.D Vial: 18
Acq On : 23 Jun 2020 4:58 pm Operator: marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\MET...DApp9SX-062320.m (RTE Integrator)
Title : SW846 8270D OR EPA 625
Last Update : Wed Jun 24 12:54:05 2020
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	108	0.00	6.01
2		1,4-Dioxane	50.000	47.566	4.9	111	0.01	2.85
3		N-nitrosodimethylamine	50.000	46.264	7.5	104	0.00	3.18
4		Pyridine		----------NA----------				
5	P	Benzaldehyde	50.000	37.510	25.0#	84	0.00	5.53
6		Aniline		----------NA----------				
7	S	2-Fluorophenol		----------NA----------				
8	P	bis(2-Chloroethyl)ether	50.000	42.881	14.2	93	0.00	5.73
9	S	Phenol-d5		----------NA----------				
10	P	Phenol	50.000	40.785	18.4	84	0.00	5.62
11	P	2-Chlorophenol	50.000	45.244	9.5	96	0.00	5.77
12		1,3-Dichlorobenzene	50.000	47.671	4.7	105	0.00	5.95
13		1,4-Dichlorobenzene	50.000	47.894	4.2	104	0.00	6.03
14		1,2-Dichlorobenzene	50.000	46.632	6.7	101	0.00	6.19
15		Benzyl alcohol		----------NA----------				
16	P	2,2'-Oxybis(1-chloropropa	50.000	46.757	6.5	102	0.00	6.33
17	P	2-Methylphenol	50.000	44.371	11.3	94	0.00	6.29
18	P	Acetophenone	50.000	45.454	9.1	98	0.00	6.45
19	P	Hexachloroethane	50.000	49.837	0.3	108	0.00	6.57
20	P	N-Nitroso-di-n-propylamin	50.000	45.372	9.3	96	0.00	6.46
21	P	3&4-Methylphenol	100.000	92.840	7.2	86	0.00	6.46
22	I	Naphthalene-d8	40.000	40.000	0.0	104	0.00	7.43
23	S	Nitrobenzene-d5		----------NA----------				
24	P	Nitrobenzene	50.000	46.237	7.5	97	0.00	6.64
25	P	Isophorone	50.000	42.340	15.3	91	0.00	6.92
26	P	2-Nitrophenol	50.000	48.035	3.9	99	0.00	7.00
27	P	2,4-Dimethylphenol	50.000	43.260	13.5	91	0.00	7.06
28		O,O,O-Triethylphosphoroth		----------NA----------				
29	P	bis(2-Chloroethoxy)methan	50.000	46.392	7.2	98	0.00	7.18
		----------	Amount	Calc.	%Drift	----------		
30		Benzoic Acid	100.000	85.627	14.4	75	0.05	7.23
		----------	Amount	Calc.	%Drift	----------		
31	P	2,4-Dichlorophenol	50.000	48.603	2.8	100	0.00	7.28
32		1,2,4-Trichlorobenzene	50.000	48.057	3.9	103	0.00	7.37
33		alpha-Terpineol		----------NA----------				
34	P	Naphthalene	50.000	46.476	7.0	98	0.00	7.46
35	P	4-Chloroaniline		----------NA----------				
36		2,6-Dichlorophenol	50.000	46.579	6.8	97	0.00	7.53
37	P	Hexachlorobutadiene	50.000	49.106	1.8	105	0.00	7.61

Initial Calibration Verification

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071372.D

38	P	Caprolactam	50.000	41.944	16.1	89	-0.01	7.95
39	P	4-Chloro-3-methylphenol	50.000	43.610	12.8	92	0.00	8.10
40	P	2-Methylnaphthalene		----------NA----------				
41		1-Methylnaphthalene	50.000	41.547	16.9	89	0.00	8.37
42	P	1,2,4,5-Tetrachlorobenzen	50.000	43.915	12.2	92	0.00	8.45
43	I	Acenaphthene-d10	40.000	40.000	0.0	97	0.00	9.48
		----------	Amount	Calc.	%Drift		----------	
44	P	Hexachlorocyclopentadiene	50.000	48.130	3.7	91	0.00	8.45
		----------	Amount	Calc.	%Drift		----------	
45	P	2,4,6-Trichlorophenol	50.000	51.185	-2.4	95	0.00	8.59
46	P	2,4,5-Trichlorophenol	50.000	52.484	-5.0	99	0.00	8.63
47	S	2-Fluorobiphenyl		----------NA----------				
48	P	1,1'-Biphenyl	50.000	47.048	5.9	91	0.00	8.81
49	P	2-Chloronaphthalene	50.000	50.632	-1.3	97	0.00	8.83
50	P	2-Nitroaniline		----------NA----------				
51		p-Dinitrobenzene		----------NA----------				
52	P	Acenaphthylene	50.000	51.239	-2.5	97	0.00	9.31
53	P	Dimethylphthalate	50.000	47.010	6.0	93	0.00	9.19
54		m-Dinitrobenzene		----------NA----------				
55	P	2,6-Dinitrotoluene	50.000	45.174	9.7	85	0.00	9.25
56		o-Dinitrobenzene		----------NA----------				
57	P	Acenaphthene	50.000	47.244	5.5	92	0.00	9.51
58	P	3-Nitroaniline		----------NA----------				
		----------	Amount	Calc.	%Drift		----------	
59	P	2,4-Dinitrophenol	100.000	93.332	6.7	78	0.00	9.56
		----------	Amount	Calc.	%Drift		----------	
60	P	Dibenzofuran		----------NA----------				
61	P	2,4-Dinitrotoluene	50.000	49.367	1.3	93	0.00	9.72
62	P	4-Nitrophenol	100.000	96.190	3.8	74	0.00	9.65
63		2,3,5,6-Tetrachlorophenol		----------NA----------				
64	P	2,3,4,6-Tetrachlorophenol	50.000	45.098	9.8	85	0.00	9.87
65	P	Fluorene	50.000	48.561	2.9	95	0.00	10.12
66	P	4-Chlorophenyl-phenylethe	50.000	49.551	0.9	96	0.00	10.14
67	P	Diethylphthalate	50.000	47.789	4.4	93	0.00	10.03
68		Thionazin		----------NA----------				
69	P	4-Nitroaniline		----------NA----------				
70	I	Phenanthrene-d10	40.000	40.000	0.0	93	0.00	11.22
		----------	Amount	Calc.	%Drift		----------	
71	P	4,6-Dinitro-2-methylpheno	100.000	94.066	5.9	77	0.00	10.19
		----------	Amount	Calc.	%Drift		----------	
72	P	n-Nitrosodiphenylamine		----------NA----------				
73		Diphenylamine		----------NA----------				
74		1,2-Diphenylhydrazine	50.000	47.822	4.4	88	0.00	10.33
		----------	Amount	Calc.	%Drift		----------	
75	S	2,4,6-Tribromophenol		----------NA----------				
		----------	Amount	Calc.	%Drift		----------	
76		Sulfotep		----------NA----------				
77		Phorate		----------NA----------				
78	P	4-Bromophenyl-phenylether	50.000	49.458	1.1	92	0.00	10.72
79	P	Hexachlorobenzene	50.000	45.838	8.3	86	0.00	10.77

Initial Calibration Verification

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071372.D

			Amount	Calc.	%Drift			
80		Dimethoate		NA				
81		Simazine		NA				
82	P	Atrazine	50.000	43.244	13.5	80	0.00	10.94
83	P	Pentachlorophenol	100.000	89.053	10.9	72	0.00	11.01
84	P	Phenanthrene	50.000	47.649	4.7	89	0.00	11.25
85	P	Anthracene	50.000	46.781	6.4	86	0.00	11.32
86		Disulfoton		NA				
87	P	Carbazole		NA				
88		Methyl Parathion		NA				
89	P	Di-n-butylphthalate	50.000	49.309	1.4	87	0.00	11.97
90		Ethyl Parathion		NA				
91	P	Fluoranthene	50.000	45.798	8.4	85	0.00	12.66
92	I	Chrysene-d12	40.000	40.000	0.0	80	0.00	14.49
93		Benzidine		NA				
94	P	Pyrene	50.000	49.982	0.0	82	0.00	12.92
95	S	Terphenyl-d14		NA				
96		Famphur		NA				
97	P	Butylbenzylphthalate	50.000	50.948	-1.9	83	0.00	13.79
98	P	3,3'-Dichlorobenzidine		NA				
99	P	Benzo[a]anthracene	50.000	47.538	4.9	77	0.00	14.48
100	P	Chrysene	50.000	49.114	1.8	80	0.00	14.53
101	P	bis(2-Ethylhexyl)phthalat	50.000	50.757	-1.5	80	0.00	14.64
102	I	Perylene-d12	40.000	40.000	0.0	89	0.00	16.81
103	P	Di-n-octylphthalate	50.000	46.197	7.6	79	0.00	15.68
104	P	Benzo[b]fluoranthene	50.000	47.853	4.3	86	0.00	16.17
105	P	Benzo[k]fluoranthene	50.000	47.749	4.5	85	0.00	16.22

Initial Calibration Verification

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071372.D

			Amount	Calc.	%Drift			
106	P	Benzo[a]pyrene	50.000	48.306	3.4	87	0.00	16.71
107	P	Indeno[1,2,3-cd]pyrene	50.000	51.104	-2.2	93	0.00	18.45
108	P	Dibenz[a,h]anthracene	50.000	50.722	-1.4	93	0.00	18.50
109	P	Benzo[g,h,i]perylene	50.000	51.848	-3.7	95	0.00	18.80

		Amount	Calc.	%Drift			
110	1,4-Dichlorobenzene-d4A	40.000	40.000	0.0	121	0.00	6.01
111	2-Picoline		NA				
112	N-Nitrosomethylethylamine		NA				
113	Methyl methanesulfonate		NA				
114	N-Nitrosodiethylamine		NA				
115	Ethyl methanesulfonate		NA				
116	Pentachloroethane		NA				
117	N-Nitrosopyrrolidine		NA				
118	N-Nitrosomorpholine		NA				
119	O-Toluidine		NA				
120	Naphthalene-d8A	40.000	40.000	0.0	116	0.00	7.43
121	N-Nitrosopiperidine		NA				
122	A,A-Dimethylphenethylamin		NA				
123	Hexachloropropene		NA				

		Amount	Calc.	%Drift
124	N-Nitrosodi-n-butylamine		NA	

		Amount	Calc.	%Drift
125	p-Phenylenediamine		NA	
126	Isosafrole		NA	
127	Acenaphthene-d10A	40.000	40.000	0.0
128	Safrole		NA	
129	1-Chloronaphthalene		NA	
130	Diphenyl Ether		NA	

		Amount	Calc.	%Drift
131	1,4-Naphthoquinone		NA	

		Amount	Calc.	%Drift
132	Pentachlorobenzene		NA	
133	1-Naphthylamine		NA	
134	2-Naphthylamine		NA	

		Amount	Calc.	%Drift
135	5-Nitro-o-toluidine		NA	

		Amount	Calc.	%Drift			
136	Phenanthrene-d10A	40.000	40.000	0.0	93	0.00	11.22

		Amount	Calc.	%Drift
137	1,3,5-Trinitrobenzene		NA	

		Amount	Calc.	%Drift
138	Diallate		NA	
139	Phenacetin		NA	
140	4-Aminobiphenyl		NA	
141	Pronamide		NA	

Initial Calibration Verification

Job Number: FA77615 **Sample:** SX2918-ICV2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X071372.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

142		Pentachloronitrobenzene		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
143		4-Nitroquinoline 1-Oxide		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
144		Methapyrilene		----------NA----------				
145		Isodrin		----------NA----------				
146	I	Chrysene-d12A	40.000	40.000	0.0	94	0.00	14.49
		---------- Amount	Calc.	%Drift	----------			
147		Aramite		----------NA----------				
148		p-(Dimethylamine)azobenze		----------NA----------				
149		Chlorobenzilate		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
150		Kepone		----------NA----------				
151		3,3'-Dimethylbenzidine		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
152		2-Acetylaminofluorene		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
153	I	Perylene-d12A	40.000	40.000	0.0	91	-0.02	16.81
154		7,12-Dimethylbenz(a)anthr		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
155		Hexachlorophene		----------NA----------				
156		3-Methylcholanthrene		----------NA----------				
157		Dibenz(a,j)acridine		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
x071368.D 8270DApp9SX-062320.m Wed Jun 24 13:03:01 2020

Initial Calibration Verification

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071373.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\0623_sx2918\x071373.D Vial: 19
Acq On : 23 Jun 2020 5:25 pm Operator: marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\MET...DApp9SX-062320.m (RTE Integrator)
Title : SW846 8270D OR EPA 625
Last Update : Tue Jun 23 17:15:34 2020
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	88	0.00	6.00
2		1,4-Dioxane		----------NA----------				
3		N-nitrosodimethylamine		----------NA----------				
4		Pyridine	50.000	62.306	-24.6#	112	0.00	3.20
5	P	Benzaldehyde		----------NA----------				
6		Aniline	50.000	48.306	3.4	83	0.00	5.65
7	S	2-Fluorophenol		----------NA----------				
8	P	bis(2-Chloroethyl)ether		----------NA----------				
9	S	Phenol-d5		----------NA----------				
10	P	Phenol		----------NA----------				
11	P	2-Chlorophenol		----------NA----------				
12		1,3-Dichlorobenzene		----------NA----------				
13		1,4-Dichlorobenzene		----------NA----------				
14		1,2-Dichlorobenzene		----------NA----------				
15		Benzyl alcohol	50.000	52.065	-4.1	92	0.00	6.16
16	P	2,2'-Oxybis(1-chloropropa		----------NA----------				
17	P	2-Methylphenol		----------NA----------				
18	P	Acetophenone		----------NA----------				
19	P	Hexachloroethane		----------NA----------				
20	P	N-Nitroso-di-n-propylamin		----------NA----------				
21	P	3&4-Methylphenol		----------NA----------				
22	I	Naphthalene-d8	40.000	40.000	0.0	84	0.00	7.43
23	S	Nitrobenzene-d5		----------NA----------				
24	P	Nitrobenzene		----------NA----------				
25	P	Isophorone		----------NA----------				
26	P	2-Nitrophenol		----------NA----------				
27	P	2,4-Dimethylphenol		----------NA----------				
28		O,O,O-Triethylphosphoroth		----------NA----------				
29	P	bis(2-Chloroethoxy)methan		----------NA----------				
		----------	Amount	Calc.	%Drift		----------	
30		Benzoic Acid		----------NA----------				
		----------	Amount	Calc.	%Drift		----------	
31	P	2,4-Dichlorophenol		----------NA----------				
32		1,2,4-Trichlorobenzene		----------NA----------				
33		alpha-Terpineol		----------NA----------				
34	P	Naphthalene		----------NA----------				
35	P	4-Chloroaniline	50.000	57.182	-14.4	96	0.00	7.53
36		2,6-Dichlorophenol		----------NA----------				
37	P	Hexachlorobutadiene		----------NA----------				

Initial Calibration Verification

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071373.D

38	P	Caprolactam		----------NA----------				
39	P	4-Chloro-3-methylphenol		----------NA----------				
40	P	2-Methylnaphthalene	50.000	54.134	-8.3	94	0.00	8.26
41		1-Methylnaphthalene		----------NA----------				
42	P	1,2,4,5-Tetrachlorobenzen		----------NA----------				
43	I	Acenaphthene-d10	40.000	40.000	0.0	96	0.00	9.48
		---------- Amount	Calc.	%Drift	----------			
44	P	Hexachlorocyclopentadiene		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
45	P	2,4,6-Trichlorophenol		----------NA----------				
46	P	2,4,5-Trichlorophenol		----------NA----------				
47	S	2-Fluorobiphenyl		----------NA----------				
48	P	1,1'-Biphenyl		----------NA----------				
49	P	2-Chloronaphthalene		----------NA----------				
50	P	2-Nitroaniline	50.000	62.603	-25.2#	119	0.00	8.96
51		p-Dinitrobenzene		----------NA----------				
52	P	Acenaphthylene		----------NA----------				
53	P	Dimethylphthalate		----------NA----------				
54		m-Dinitrobenzene	50.000	52.160	-4.3	95	0.00	9.21
55	P	2,6-Dinitrotoluene		----------NA----------				
56		o-Dinitrobenzene		----------NA----------				
57	P	Acenaphthene		----------NA----------				
58	P	3-Nitroaniline	50.000	56.804	-13.6	106	0.00	9.44
		---------- Amount	Calc.	%Drift	----------			
59	P	2,4-Dinitrophenol		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
60	P	Dibenzofuran	50.000	51.041	-2.1	100	0.00	9.72
61	P	2,4-Dinitrotoluene		----------NA----------				
62	P	4-Nitrophenol		----------NA----------				
63		2,3,5,6-Tetrachlorophenol		----------NA----------				
64	P	2,3,4,6-Tetrachlorophenol		----------NA----------				
65	P	Fluorene		----------NA----------				
66	P	4-Chlorophenyl-phenylethe		----------NA----------				
67	P	Diethylphthalate		----------NA----------				
68		Thionazin		----------NA----------				
69	P	4-Nitroaniline	50.000	49.051	1.9	93	-0.01	10.16
70	I	Phenanthrene-d10	40.000	40.000	0.0	94	0.00	11.22
		---------- Amount	Calc.	%Drift	----------			
71	P	4,6-Dinitro-2-methylpheno		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
72	P	n-Nitrosodiphenylamine	60.000	55.026	8.3	88	0.00	10.28
73		Diphenylamine	50.000	46.890	6.2	88	0.00	10.28
74		1,2-Diphenylhydrazine		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
75	S	2,4,6-Tribromophenol		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
76		Sulfotep		----------NA----------				
77		Phorate		----------NA----------				
78	P	4-Bromophenyl-phenylether		----------NA----------				
79	P	Hexachlorobenzene		----------NA----------				

Initial Calibration Verification

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071373.D

			Amount	Calc.	%Drift			
80		Dimethoate		NA				
81		Simazine		NA				
82	P	Atrazine		NA				
83	P	Pentachlorophenol		NA				
84	P	Phenanthrene		NA				
85	P	Anthracene		NA				
86		Disulfoton		NA				
87	P	Carbazole	50.000	52.855	-5.7	100	0.00	11.51
88		Methyl Parathion		NA				
89	P	Di-n-butylphthalate		NA				
90		Ethyl Parathion		NA				
91	P	Fluoranthene		NA				
92	I	Chrysene-d12	40.000	40.000	0.0	90	0.00	14.49
93		Benzidine	50.000	57.661	-15.3	103	0.00	12.84
94	P	Pyrene		NA				
95	S	Terphenyl-d14		NA				
96		Famphur		NA				
97	P	Butylbenzylphthalate		NA				
98	P	3,3'-Dichlorobenzidine	50.000	46.383	7.2	82	0.00	14.48
99	P	Benzo[a]anthracene		NA				
100	P	Chrysene		NA				
101	P	bis(2-Ethylhexyl)phthalat		NA				
102	I	Perylene-d12	40.000	40.000	0.0	92	0.00	16.81
103	P	Di-n-octylphthalate		NA				
104	P	Benzo[b]fluoranthene		NA				
105	P	Benzo[k]fluoranthene		NA				

Initial Calibration Verification

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071373.D

			Amount	Calc.	%Drift			
106	P	Benzo[a]pyrene		----------NA----------				
107	P	Indeno[1,2,3-cd]pyrene		----------NA----------				
108	P	Dibenz[a,h]anthracene		----------NA----------				
109	P	Benzo[g,h,i]perylene		----------NA----------				

		Amount	Calc.	%Drift			
110	1,4-Dichlorobenzene-d4A	40.000	40.000	0.0	99	0.00	6.00
111	2-Picoline		----------NA----------				
112	N-Nitrosomethylethylamine		----------NA----------				
113	Methyl methanesulfonate		----------NA----------				
114	N-Nitrosodiethylamine		----------NA----------				
115	Ethyl methanesulfonate		----------NA----------				
116	Pentachloroethane		----------NA----------				
117	N-Nitrosopyrrolidine		----------NA----------				
118	N-Nitrosomorpholine		----------NA----------				
119	O-Toluidine		----------NA----------				
120	Naphthalene-d8A	40.000	40.000	0.0	94	0.00	7.43
121	N-Nitrosopiperidine		----------NA----------				
122	A,A-Dimethylphenethylamin		----------NA----------				
123	Hexachloropropene		----------NA----------				

		Amount	Calc.	%Drift
124	N-Nitrosodi-n-butylamine		----------NA----------	

		Amount	Calc.	%Drift
125	p-Phenylenediamine		----------NA----------	
126	Isosafrole		----------NA----------	
127	Acenaphthene-d10A	40.000	40.000	0.0 104 0.00 9.48
128	Safrole		----------NA----------	
129	1-Chloronaphthalene		----------NA----------	
130	Diphenyl Ether		----------NA----------	

		Amount	Calc.	%Drift
131	1,4-Naphthoquinone		----------NA----------	

		Amount	Calc.	%Drift
132	Pentachlorobenzene		----------NA----------	
133	1-Naphthylamine		----------NA----------	
134	2-Naphthylamine		----------NA----------	

		Amount	Calc.	%Drift
135	5-Nitro-o-toluidine		----------NA----------	

		Amount	Calc.	%Drift			
136	Phenanthrene-d10A	40.000	40.000	0.0	94	0.00	11.22

		Amount	Calc.	%Drift
137	1,3,5-Trinitrobenzene		----------NA----------	

		Amount	Calc.	%Drift
138	Diallate		----------NA----------	
139	Phenacetin		----------NA----------	
140	4-Aminobiphenyl		----------NA----------	
141	Pronamide		----------NA----------	

Initial Calibration Verification

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071373.D

			Amount	Calc.	%Drift			
142		Pentachloronitrobenzene		----------NA----------				
			Amount	Calc.	%Drift			
143		4-Nitroquinoline 1-Oxide		----------NA----------				
			Amount	Calc.	%Drift			
144		Methapyrilene		----------NA----------				
145		Isodrin		----------NA----------				
146	I	Chrysene-d12A	40.000	40.000	0.0	104	0.00	14.49
			Amount	Calc.	%Drift			
147		Aramite		----------NA----------				
148		p-(Dimethylamine)azobenze		----------NA----------				
149		Chlorobenzilate		----------NA----------				
			Amount	Calc.	%Drift			
150		Kepone		----------NA----------				
151		3,3'-Dimethylbenzidine		----------NA----------				
			Amount	Calc.	%Drift			
152		2-Acetylaminofluorene		----------NA----------				
			Amount	Calc.	%Drift			
153	I	Perylene-d12A	40.000	40.000	0.0	94	-0.02	16.81
154		7,12-Dimethylbenz(a)anthr		----------NA----------				
			Amount	Calc.	%Drift			
155		Hexachlorophene		----------NA----------				
156		3-Methylcholanthrene		----------NA----------				
157		Dibenz(a,j)acridine		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
x071368.D 8270DApp9SX-062320.m Tue Jun 23 19:08:22 2020

Initial Calibration Verification

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071374.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\0623_sx2918\x071374.D Vial: 20
Acq On : 23 Jun 2020 5:51 pm Operator: marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\MET...DApp9SX-062320.m (RTE Integrator)
Title : SW846 8270D OR EPA 625
Last Update : Wed Jun 24 09:47:58 2020
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	87	0.00	6.00
2		1,4-Dioxane		----------NA----------				
3		N-nitrosodimethylamine		----------NA----------				
4		Pyridine		----------NA----------				
5	P	Benzaldehyde		----------NA----------				
6		Aniline		----------NA----------				
7	S	2-Fluorophenol		----------NA----------				
8	P	bis(2-Chloroethyl)ether		----------NA----------				
9	S	Phenol-d5		----------NA----------				
10	P	Phenol		----------NA----------				
11	P	2-Chlorophenol		----------NA----------				
12		1,3-Dichlorobenzene		----------NA----------				
13		1,4-Dichlorobenzene		----------NA----------				
14		1,2-Dichlorobenzene		----------NA----------				
15		Benzyl alcohol		----------NA----------				
16	P	2,2'-Oxybis(1-chloropropa		----------NA----------				
17	P	2-Methylphenol		----------NA----------				
18	P	Acetophenone		----------NA----------				
19	P	Hexachloroethane		----------NA----------				
20	P	N-Nitroso-di-n-propylamin		----------NA----------				
21	P	3&4-Methylphenol		----------NA----------				
22	I	Naphthalene-d8	40.000	40.000	0.0	85	0.00	7.43
23	S	Nitrobenzene-d5		----------NA----------				
24	P	Nitrobenzene		----------NA----------				
25	P	Isophorone		----------NA----------				
26	P	2-Nitrophenol		----------NA----------				
27	P	2,4-Dimethylphenol		----------NA----------				
28		O,O,O-Triethylphosphoroth	50.000	44.450	11.1	77	-0.01	7.14
29	P	bis(2-Chloroethoxy)methan		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
30		Benzoic Acid		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
31	P	2,4-Dichlorophenol		----------NA----------				
32		1,2,4-Trichlorobenzene		----------NA----------				
33		alpha-Terpineol		----------NA----------				
34	P	Naphthalene		----------NA----------				
35	P	4-Chloroaniline		----------NA----------				
36		2,6-Dichlorophenol		----------NA----------				
37	P	Hexachlorobutadiene		----------NA----------				

Initial Calibration Verification

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071374.D

38	P	Caprolactam		----------NA----------				
39	P	4-Chloro-3-methylphenol		----------NA----------				
40	P	2-Methylnaphthalene		----------NA----------				
41		1-Methylnaphthalene		----------NA----------				
42	P	1,2,4,5-Tetrachlorobenzen		----------NA----------				
43	I	Acenaphthene-d10	40.000	40.000	0.0	84	0.00	9.48
		---------- Amount	Calc.	%Drift	----------			
44	P	Hexachlorocyclopentadiene		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
45	P	2,4,6-Trichlorophenol		----------NA----------				
46	P	2,4,5-Trichlorophenol		----------NA----------				
47	S	2-Fluorobiphenyl		----------NA----------				
48	P	1,1'-Biphenyl		----------NA----------				
49	P	2-Chloronaphthalene		----------NA----------				
50	P	2-Nitroaniline		----------NA----------				
51		p-Dinitrobenzene		----------NA----------				
52	P	Acenaphthylene		----------NA----------				
53	P	Dimethylphthalate		----------NA----------				
54		m-Dinitrobenzene		----------NA----------				
55	P	2,6-Dinitrotoluene		----------NA----------				
56		o-Dinitrobenzene		----------NA----------				
57	P	Acenaphthene		----------NA----------				
58	P	3-Nitroaniline		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
59	P	2,4-Dinitrophenol		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
60	P	Dibenzofuran		----------NA----------				
61	P	2,4-Dinitrotoluene		----------NA----------				
62	P	4-Nitrophenol		----------NA----------				
63		2,3,5,6-Tetrachlorophenol		----------NA----------				
64	P	2,3,4,6-Tetrachlorophenol		----------NA----------				
65	P	Fluorene		----------NA----------				
66	P	4-Chlorophenyl-phenylethe		----------NA----------				
67	P	Diethylphthalate		----------NA----------				
68		Thionazin	50.000	50.655	-1.3	85	-0.01	10.12
69	P	4-Nitroaniline		----------NA----------				
70	I	Phenanthrene-d10	40.000	40.000	0.0	96	0.00	11.22
		---------- Amount	Calc.	%Drift	----------			
71	P	4,6-Dinitro-2-methylpheno		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
72	P	n-Nitrosodiphenylamine		----------NA----------				
73		Diphenylamine		----------NA----------				
74		1,2-Diphenylhydrazine		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
75	S	2,4,6-Tribromophenol		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
76		Sulfotep	50.000	43.006	14.0	79	0.00	10.50
77		Phorate	50.000	45.279	9.4	83	0.00	10.64
78	P	4-Bromophenyl-phenylether		----------NA----------				
79	P	Hexachlorobenzene		----------NA----------				

Initial Calibration Verification

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071374.D

			Amount	Calc.	%Drift			
80		Dimethoate	50.000	43.900	12.2	85	0.00	10.83
81		Simazine		NA				
82	P	Atrazine		NA				
83	P	Pentachlorophenol		NA				
84	P	Phenanthrene		NA				
85	P	Anthracene		NA				
86		Disulfoton	50.000	37.153	25.7#	68	0.00	11.26
87	P	Carbazole		NA				
88		Methyl Parathion	50.000	45.131	9.7	87	0.00	11.70
89	P	Di-n-butylphthalate		NA				
90		Ethyl Parathion	50.000	45.602	8.8	88	0.00	12.17
91	P	Fluoranthene		NA				
92	I	Chrysene-d12	40.000	40.000	0.0	87	0.00	14.49
93		Benzidine		NA				
94	P	Pyrene		NA				
95	S	Terphenyl-d14		NA				
96		Famphur	50.000	81.906	-63.8#	149	0.00	13.70
97	P	Butylbenzylphthalate		NA				
98	P	3,3'-Dichlorobenzidine		NA				
99	P	Benzo[a]anthracene		NA				
100	P	Chrysene		NA				
101	P	bis(2-Ethylhexyl)phthalat		NA				
102	I	Perylene-d12	40.000	40.000	0.0	93	0.00	16.81
103	P	Di-n-octylphthalate		NA				
104	P	Benzo[b]fluoranthene		NA				
105	P	Benzo[k]fluoranthene		NA				

Initial Calibration Verification

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071374.D

			Amount	Calc.	%Drift			
106	P	Benzo[a]pyrene		----------NA----------				
107	P	Indeno[1,2,3-cd]pyrene		----------NA----------				
108	P	Dibenz[a,h]anthracene		----------NA----------				
109	P	Benzo[g,h,i]perylene		----------NA----------				

		Amount	Calc.	%Drift			
110	1,4-Dichlorobenzene-d4A	40.000	40.000	0.0	98	0.00	6.00
111	2-Picoline		----------NA----------				
112	N-Nitrosomethylethylamine		----------NA----------				
113	Methyl methanesulfonate		----------NA----------				
114	N-Nitrosodiethylamine		----------NA----------				
115	Ethyl methanesulfonate		----------NA----------				
116	Pentachloroethane		----------NA----------				
117	N-Nitrosopyrrolidine		----------NA----------				
118	N-Nitrosomorpholine		----------NA----------				
119	O-Toluidine		----------NA----------				
120	Naphthalene-d8A	40.000	40.000	0.0	95	0.00	7.43
121	N-Nitrosopiperidine		----------NA----------				
122	A,A-Dimethylphenethylamin		----------NA----------				
123	Hexachloropropene		----------NA----------				

		Amount	Calc.	%Drift
124	N-Nitrosodi-n-butylamine		----------NA----------	

		Amount	Calc.	%Drift
125	p-Phenylenediamine		----------NA----------	
126	Isosafrole		----------NA----------	
127	Acenaphthene-d10A	40.000	40.000	0.0	91	0.00	9.48
128	Safrole		----------NA----------				
129	1-Chloronaphthalene		----------NA----------				
130	Diphenyl Ether		----------NA----------				

		Amount	Calc.	%Drift
131	1,4-Naphthoquinone		----------NA----------	

		Amount	Calc.	%Drift
132	Pentachlorobenzene		----------NA----------	
133	1-Naphthylamine		----------NA----------	
134	2-Naphthylamine		----------NA----------	

		Amount	Calc.	%Drift
135	5-Nitro-o-toluidine		----------NA----------	

		Amount	Calc.	%Drift			
136	Phenanthrene-d10A	40.000	40.000	0.0	96	0.00	11.22

		Amount	Calc.	%Drift
137	1,3,5-Trinitrobenzene		----------NA----------	

		Amount	Calc.	%Drift
138	Diallate		----------NA----------	
139	Phenacetin		----------NA----------	
140	4-Aminobiphenyl		----------NA----------	
141	Pronamide		----------NA----------	

Initial Calibration Verification

Job Number: FA77615 **Sample:** SX2918-ICV2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X071374.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

142		Pentachloronitrobenzene		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
143		4-Nitroquinoline 1-Oxide		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
144		Methapyrilene		----------NA----------				
145		Isodrin		----------NA----------				
146	I	Chrysene-d12A	40.000	40.000	0.0	101	0.00	14.49
		---------- Amount	Calc.	%Drift	----------			
147		Aramite		----------NA----------				
148		p-(Dimethylamine)azobenze		----------NA----------				
149		Chlorobenzilate		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
150		Kepone		----------NA----------				
151		3,3'-Dimethylbenzidine		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
152		2-Acetylaminofluorene		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
153	I	Perylene-d12A	40.000	40.000	0.0	96	-0.02	16.81
154		7,12-Dimethylbenz(a)anthr		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
155		Hexachlorophene		----------NA----------				
156		3-Methylcholanthrene		----------NA----------				
157		Dibenz(a,j)acridine		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
x071368.D 8270DApp9SX-062320.m Wed Jun 24 09:48:26 2020

Initial Calibration Verification

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071375.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\0623_sx2918\x071375.D Vial: 21
Acq On : 23 Jun 2020 6:17 pm Operator: marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\MET...DApp9SX-062320.m (RTE Integrator)
Title : SW846 8270D OR EPA 625
Last Update : Tue Jun 23 17:15:34 2020
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	101	0.00	6.00
2		1,4-Dioxane		----------	NA	----------		
3		N-nitrosodimethylamine		----------	NA	----------		
4		Pyridine		----------	NA	----------		
5	P	Benzaldehyde		----------	NA	----------		
6		Aniline		----------	NA	----------		
7	S	2-Fluorophenol		----------	NA	----------		
8	P	bis(2-Chloroethyl)ether		----------	NA	----------		
9	S	Phenol-d5		----------	NA	----------		
10	P	Phenol		----------	NA	----------		
11	P	2-Chlorophenol		----------	NA	----------		
12		1,3-Dichlorobenzene		----------	NA	----------		
13		1,4-Dichlorobenzene		----------	NA	----------		
14		1,2-Dichlorobenzene		----------	NA	----------		
15		Benzyl alcohol		----------	NA	----------		
16	P	2,2'-Oxybis(1-chloropropa		----------	NA	----------		
17	P	2-Methylphenol		----------	NA	----------		
18	P	Acetophenone		----------	NA	----------		
19	P	Hexachloroethane		----------	NA	----------		
20	P	N-Nitroso-di-n-propylamin		----------	NA	----------		
21	P	3&4-Methylphenol		----------	NA	----------		
22	I	Naphthalene-d8	40.000	40.000	0.0	109	0.00	7.43
23	S	Nitrobenzene-d5		----------	NA	----------		
24	P	Nitrobenzene		----------	NA	----------		
25	P	Isophorone		----------	NA	----------		
26	P	2-Nitrophenol		----------	NA	----------		
27	P	2,4-Dimethylphenol		----------	NA	----------		
28		O,O,O-Triethylphosphoroth		----------	NA	----------		
29	P	bis(2-Chloroethoxy)methan		----------	NA	----------		
		----------	Amount	Calc.	%Drift	----------		
30		Benzoic Acid		----------	NA	----------		
		----------	Amount	Calc.	%Drift	----------		
31	P	2,4-Dichlorophenol		----------	NA	----------		
32		1,2,4-Trichlorobenzene		----------	NA	----------		
33		alpha-Terpineol		----------	NA	----------		
34	P	Naphthalene		----------	NA	----------		
35	P	4-Chloroaniline		----------	NA	----------		
36		2,6-Dichlorophenol		----------	NA	----------		
37	P	Hexachlorobutadiene		----------	NA	----------		

Initial Calibration Verification

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071375.D

38	P	Caprolactam			NA				
39	P	4-Chloro-3-methylphenol			NA				
40	P	2-Methylnaphthalene			NA				
41		1-Methylnaphthalene			NA				
42	P	1,2,4,5-Tetrachlorobenzen			NA				
43	I	Acenaphthene-d10	40.000	40.000	0.0	104	0.00	9.48	
			Amount	Calc.	%Drift				
44	P	Hexachlorocyclopentadiene			NA				
			Amount	Calc.	%Drift				
45	P	2,4,6-Trichlorophenol			NA				
46	P	2,4,5-Trichlorophenol			NA				
47	S	2-Fluorobiphenyl			NA				
48	P	1,1'-Biphenyl			NA				
49	P	2-Chloronaphthalene			NA				
50	P	2-Nitroaniline			NA				
51		p-Dinitrobenzene			NA				
52	P	Acenaphthylene			NA				
53	P	Dimethylphthalate			NA				
54		m-Dinitrobenzene			NA				
55	P	2,6-Dinitrotoluene			NA				
56		o-Dinitrobenzene			NA				
57	P	Acenaphthene			NA				
58	P	3-Nitroaniline			NA				
			Amount	Calc.	%Drift				
59	P	2,4-Dinitrophenol			NA				
			Amount	Calc.	%Drift				
60	P	Dibenzofuran			NA				
61	P	2,4-Dinitrotoluene			NA				
62	P	4-Nitrophenol			NA				
63		2,3,5,6-Tetrachlorophenol			NA				
64	P	2,3,4,6-Tetrachlorophenol			NA				
65	P	Fluorene			NA				
66	P	4-Chlorophenyl-phenylethe			NA				
67	P	Diethylphthalate			NA				
68		Thionazin			NA				
69	P	4-Nitroaniline			NA				
70	I	Phenanthrene-d10	40.000	40.000	0.0	115	0.00	11.22	
			Amount	Calc.	%Drift				
71	P	4,6-Dinitro-2-methylpheno			NA				
			Amount	Calc.	%Drift				
72	P	n-Nitrosodiphenylamine			NA				
73		Diphenylamine			NA				
74		1,2-Diphenylhydrazine			NA				
			Amount	Calc.	%Drift				
75	S	2,4,6-Tribromophenol			NA				
			Amount	Calc.	%Drift				
76		Sulfotep			NA				
77		Phorate			NA				
78	P	4-Bromophenyl-phenylether			NA				
79	P	Hexachlorobenzene			NA				

Initial Calibration Verification

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071375.D

			Amount	Calc.	%Drift			
80		Dimethoate		NA				
81		Simazine		NA				
82	P	Atrazine		NA				
83	P	Pentachlorophenol		NA				
84	P	Phenanthrene		NA				
85	P	Anthracene		NA				
86		Disulfoton		NA				
87	P	Carbazole		NA				
88		Methyl Parathion		NA				
89	P	Di-n-butylphthalate		NA				
90		Ethyl Parathion		NA				
91	P	Fluoranthene		NA				
92	I	Chrysene-d12	40.000	40.000	0.0	98	0.00	14.49
93		Benzidine		NA				
94	P	Pyrene		NA				
95	S	Terphenyl-d14		NA				
96		Famphur		NA				
97	P	Butylbenzylphthalate		NA				
98	P	3,3'-Dichlorobenzidine		NA				
99	P	Benzo[a]anthracene		NA				
100	P	Chrysene		NA				
101	P	bis(2-Ethylhexyl)phthalat		NA				
102	I	Perylene-d12	40.000	40.000	0.0	113	0.01	16.82
103	P	Di-n-octylphthalate		NA				
104	P	Benzo[b]fluoranthene		NA				
105	P	Benzo[k]fluoranthene		NA				

Initial Calibration Verification

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071375.D

			Amount	Calc.	%Drift			
106	P	Benzo[a]pyrene		----------NA----------				
107	P	Indeno[1,2,3-cd]pyrene		----------NA----------				
108	P	Dibenz[a,h]anthracene		----------NA----------				
109	P	Benzo[g,h,i]perylene		----------NA----------				

		Amount	Calc.	%Drift			
110	1,4-Dichlorobenzene-d4A	40.000	40.000	0.0	113	0.00	6.00
111	2-Picoline	50.000	41.736	16.5	90	0.00	3.98
112	N-Nitrosomethylethylamine	50.000	39.497	21.0#	86	0.00	4.11
113	Methyl methanesulfonate	50.000	42.243	15.5	90	0.00	4.44
114	N-Nitrosodiethylamine	50.000	41.727	16.5	88	0.00	4.85
115	Ethyl methanesulfonate	50.000	39.975	20.0#	85	0.00	5.18
116	Pentachloroethane	50.000	39.110	21.8#	84	0.00	5.70
117	N-Nitrosopyrrolidine	50.000	43.888	12.2	90	-0.01	6.43
118	N-Nitrosomorpholine	50.000	41.815	16.4	86	0.00	6.48
119	O-Toluidine	50.000	43.117	13.8	88	0.00	6.50
120	Naphthalene-d8A	40.000	40.000	0.0	121	0.00	7.43
121	N-Nitrosopiperidine	50.000	36.632	26.7#	85	0.00	6.81
122	A,A-Dimethylphenethylamin	50.000	38.452	23.1#	87	-0.06	7.35
123	Hexachloropropene	50.000	47.157	5.7	101	0.00	7.56

		Amount	Calc.	%Drift			
124	N-Nitrosodi-n-butylamine	50.000	32.169	35.7#	68	0.00	7.94

		Amount	Calc.	%Drift			
125	p-Phenylenediamine	50.000	41.295	17.4	91	0.00	7.93
126	Isosafrole	50.000	37.985	24.0#	87	0.00	8.18
127	Acenaphthene-d10A	40.000	40.000	0.0	112	0.00	9.48
128	Safrole	50.000	46.801	6.4	98	0.00	8.78
129	1-Chloronaphthalene	50.000	45.691	8.6	96	0.00	8.85
130	Diphenyl Ether		----------NA----------				

		Amount	Calc.	%Drift			
131	1,4-Naphthoquinone	50.000	29.961	40.1#	63	0.00	9.04

		Amount	Calc.	%Drift			
132	Pentachlorobenzene	50.000	42.419	15.2	93	0.00	9.67
133	1-Naphthylamine	50.000	41.445	17.1	89	0.00	9.81
134	2-Naphthylamine	50.000	42.556	14.9	91	0.00	9.91

		Amount	Calc.	%Drift			
135	5-Nitro-o-toluidine	50.000	40.969	18.1	87	0.00	10.14

		Amount	Calc.	%Drift			
136	Phenanthrene-d10A	40.000	40.000	0.0	115	0.00	11.22

		Amount	Calc.	%Drift			
137	1,3,5-Trinitrobenzene	50.000	44.216	11.6	92	0.00	10.59

		Amount	Calc.	%Drift			
138	Diallate	50.000	38.309	23.4#	85	0.00	10.64
139	Phenacetin	50.000	43.996	12.0	90	0.00	10.67
140	4-Aminobiphenyl	50.000	40.445	19.1	86	0.00	11.02
141	Pronamide	50.000	44.783	10.4	92	0.00	11.12

Initial Calibration Verification

Job Number: FA77615 **Sample:** SX2918-ICV2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X071375.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

			Amount	Calc.	%Drift			
142		Pentachloronitrobenzene	50.000	41.791	16.4	87	0.00	11.02
			Amount	Calc.	%Drift			
143		4-Nitroquinoline 1-Oxide	50.000	36.493	27.0#	80	0.00	12.18
			Amount	Calc.	%Drift			
144		Methapyrilene			NA			
145		Isodrin	50.000	41.381	17.2	92	0.00	12.48
146	I	Chrysene-d12A	40.000	40.000	0.0	114	0.00	14.49
			Amount	Calc.	%Drift			
147		Aramite	50.000	41.761	16.5	87	0.00	13.25
148		p-(Dimethylamine)azobenze	50.000	40.070	19.9	89	0.00	13.32
149		Chlorobenzilate	50.000	41.307	17.4	88	0.00	13.39
			Amount	Calc.	%Drift			
150		Kepone	50.000	23.045	53.9#	0	0.00	13.78
151		3,3'-Dimethylbenzidine	50.000	60.240	-20.5#	119	0.00	13.75
			Amount	Calc.	%Drift			
152		2-Acetylaminofluorene	50.000	41.969	16.1	88	0.00	14.08
			Amount	Calc.	%Drift			
153	I	Perylene-d12A	40.000	40.000	0.0	116	0.00	16.82
154		7,12-Dimethylbenz(a)anthr	50.000	46.532	6.9	98	0.00	16.18
			Amount	Calc.	%Drift			
155		Hexachlorophene	500.000	469.073	6.2	95	0.00	16.59
156		3-Methylcholanthrene	50.000	39.832	20.3#	90	0.00	17.33
157		Dibenz(a,j)acridine	50.000	40.348	19.3	87	0.00	18.23

(#) = Out of Range SPCC's out = 0 CCC's out = 0
x071368.D 8270DApp9SX-062320.m Tue Jun 23 19:09:56 2020

Initial Calibration Verification

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071376.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\0623_sx2918\x071376.D Vial: 22
Acq On : 23 Jun 2020 6:43 pm Operator: marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\MET...DApp9SX-062320.m (RTE Integrator)
Title : SW846 8270D OR EPA 625
Last Update : Tue Jun 23 17:15:34 2020
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	96	0.00	6.00
2		1,4-Dioxane		----------	NA	----------		
3		N-nitrosodimethylamine		----------	NA	----------		
4		Pyridine		----------	NA	----------		
5	P	Benzaldehyde		----------	NA	----------		
6		Aniline		----------	NA	----------		
7	S	2-Fluorophenol		----------	NA	----------		
8	P	bis(2-Chloroethyl)ether		----------	NA	----------		
9	S	Phenol-d5		----------	NA	----------		
10	P	Phenol		----------	NA	----------		
11	P	2-Chlorophenol		----------	NA	----------		
12		1,3-Dichlorobenzene		----------	NA	----------		
13		1,4-Dichlorobenzene		----------	NA	----------		
14		1,2-Dichlorobenzene		----------	NA	----------		
15		Benzyl alcohol		----------	NA	----------		
16	P	2,2'-Oxybis(1-chloropropa		----------	NA	----------		
17	P	2-Methylphenol		----------	NA	----------		
18	P	Acetophenone		----------	NA	----------		
19	P	Hexachloroethane		----------	NA	----------		
20	P	N-Nitroso-di-n-propylamin		----------	NA	----------		
21	P	3&4-Methylphenol		----------	NA	----------		
22	I	Naphthalene-d8	40.000	40.000	0.0	94	0.00	7.43
23	S	Nitrobenzene-d5		----------	NA	----------		
24	P	Nitrobenzene		----------	NA	----------		
25	P	Isophorone		----------	NA	----------		
26	P	2-Nitrophenol		----------	NA	----------		
27	P	2,4-Dimethylphenol		----------	NA	----------		
28		O,O,O-Triethylphosphoroth		----------	NA	----------		
29	P	bis(2-Chloroethoxy)methan		----------	NA	----------		
		----------	Amount	Calc.	%Drift	----------		
30		Benzoic Acid		----------	NA	----------		
		----------	Amount	Calc.	%Drift	----------		
31	P	2,4-Dichlorophenol		----------	NA	----------		
32		1,2,4-Trichlorobenzene		----------	NA	----------		
33		alpha-Terpineol		----------	NA	----------		
34	P	Naphthalene		----------	NA	----------		
35	P	4-Chloroaniline		----------	NA	----------		
36		2,6-Dichlorophenol		----------	NA	----------		
37	P	Hexachlorobutadiene		----------	NA	----------		

Initial Calibration Verification

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071376.D

38	P	Caprolactam			NA				
39	P	4-Chloro-3-methylphenol			NA				
40	P	2-Methylnaphthalene			NA				
41		1-Methylnaphthalene			NA				
42	P	1,2,4,5-Tetrachlorobenzen			NA				
43	I	Acenaphthene-d10	40.000	40.000	0.0	109	0.00	9.48	
		Amount	Calc.	%Drift					
44	P	Hexachlorocyclopentadiene			NA				
		Amount	Calc.	%Drift					
45	P	2,4,6-Trichlorophenol			NA				
46	P	2,4,5-Trichlorophenol			NA				
47	S	2-Fluorobiphenyl			NA				
48	P	1,1'-Biphenyl			NA				
49	P	2-Chloronaphthalene			NA				
50	P	2-Nitroaniline			NA				
51		p-Dinitrobenzene			NA				
52	P	Acenaphthylene			NA				
53	P	Dimethylphthalate			NA				
54		m-Dinitrobenzene			NA				
55	P	2,6-Dinitrotoluene			NA				
56		o-Dinitrobenzene			NA				
57	P	Acenaphthene			NA				
58	P	3-Nitroaniline			NA				
		Amount	Calc.	%Drift					
59	P	2,4-Dinitrophenol			NA				
		Amount	Calc.	%Drift					
60	P	Dibenzofuran			NA				
61	P	2,4-Dinitrotoluene			NA				
62	P	4-Nitrophenol			NA				
63		2,3,5,6-Tetrachlorophenol			NA				
64	P	2,3,4,6-Tetrachlorophenol			NA				
65	P	Fluorene			NA				
66	P	4-Chlorophenyl-phenylethe			NA				
67	P	Diethylphthalate			NA				
68		Thionazin			NA				
69	P	4-Nitroaniline			NA				
70	I	Phenanthrene-d10	40.000	40.000	0.0	105	0.00	11.22	
		Amount	Calc.	%Drift					
71	P	4,6-Dinitro-2-methylpheno			NA				
		Amount	Calc.	%Drift					
72	P	n-Nitrosodiphenylamine			NA				
73		Diphenylamine			NA				
74		1,2-Diphenylhydrazine			NA				
		Amount	Calc.	%Drift					
75	S	2,4,6-Tribromophenol			NA				
		Amount	Calc.	%Drift					
76		Sulfotep			NA				
77		Phorate			NA				
78	P	4-Bromophenyl-phenylether			NA				
79	P	Hexachlorobenzene			NA				

Initial Calibration Verification

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071376.D

			Amount	Calc.	%Drift			
80		Dimethoate		NA				
81		Simazine		NA				
82	P	Atrazine		NA				
83	P	Pentachlorophenol		NA				
84	P	Phenanthrene		NA				
85	P	Anthracene		NA				
86		Disulfoton		NA				
87	P	Carbazole		NA				
88		Methyl Parathion		NA				
89	P	Di-n-butylphthalate		NA				
90		Ethyl Parathion		NA				
91	P	Fluoranthene		NA				
92	I	Chrysene-d12	40.000	40.000	0.0	93	0.00	14.49
93		Benzidine		NA				
94	P	Pyrene		NA				
95	S	Terphenyl-d14		NA				
96		Famphur		NA				
97	P	Butylbenzylphthalate		NA				
98	P	3,3'-Dichlorobenzidine		NA				
99	P	Benzo[a]anthracene		NA				
100	P	Chrysene		NA				
101	P	bis(2-Ethylhexyl)phthalat		NA				
102	I	Perylene-d12	40.000	40.000	0.0	103	0.00	16.81
103	P	Di-n-octylphthalate		NA				
104	P	Benzo[b]fluoranthene		NA				
105	P	Benzo[k]fluoranthene		NA				

Initial Calibration Verification

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071376.D

			Amount	Calc.	%Drift			
106	P	Benzo[a]pyrene		NA				
107	P	Indeno[1,2,3-cd]pyrene		NA				
108	P	Dibenz[a,h]anthracene		NA				
109	P	Benzo[g,h,i]perylene		NA				

		Amount	Calc.	%Drift			
110	1,4-Dichlorobenzene-d4A	40.000	40.000	0.0	108	0.00	6.00
111	2-Picoline		NA				
112	N-Nitrosomethylethylamine		NA				
113	Methyl methanesulfonate		NA				
114	N-Nitrosodiethylamine		NA				
115	Ethyl methanesulfonate		NA				
116	Pentachloroethane		NA				
117	N-Nitrosopyrrolidine		NA				
118	N-Nitrosomorpholine		NA				
119	O-Toluidine		NA				
120	Naphthalene-d8A	40.000	40.000	0.0	105	0.00	7.43
121	N-Nitrosopiperidine		NA				
122	A,A-Dimethylphenethylamin		NA				
123	Hexachloropropene		NA				

		Amount	Calc.	%Drift			
124	N-Nitrosodi-n-butylamine		NA				

		Amount	Calc.	%Drift			
125	p-Phenylenediamine		NA				
126	Isosafrole		NA				
127	Acenaphthene-d10A	40.000	40.000	0.0	118	0.00	9.48
128	Safrole		NA				
129	1-Chloronaphthalene		NA				
130	Diphenyl Ether	50.000	41.376	17.2	92	0.00	8.95

		Amount	Calc.	%Drift			
131	1,4-Naphthoquinone		NA				

		Amount	Calc.	%Drift			
132	Pentachlorobenzene		NA				
133	1-Naphthylamine		NA				
134	2-Naphthylamine		NA				

		Amount	Calc.	%Drift			
135	5-Nitro-o-toluidine		NA				

		Amount	Calc.	%Drift			
136	Phenanthrene-d10A	40.000	40.000	0.0	105	0.00	11.22

		Amount	Calc.	%Drift			
137	1,3,5-Trinitrobenzene	50.000	44.822	10.4	85	0.00	10.59

		Amount	Calc.	%Drift			
138	Diallate		NA				
139	Phenacetin		NA				
140	4-Aminobiphenyl		NA				
141	Pronamide		NA				

Initial Calibration Verification

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071376.D

142		Pentachloronitrobenzene			NA				
			Amount	Calc.	%Drift				
143		4-Nitroquinoline 1-Oxide			NA				
			Amount	Calc.	%Drift				
144		Methapyrilene	50.000	128.026	-156.1#	237	0.00	12.29	
145		Isodrin			NA				
146	I	Chrysene-d12A	40.000	40.000	0.0	109	0.00	14.49	
			Amount	Calc.	%Drift				
147		Aramite			NA				
148		p-(Dimethylamine)azobenze			NA				
149		Chlorobenzilate			NA				
			Amount	Calc.	%Drift				
150		Kepone			NA				
151		3,3'-Dimethylbenzidine			NA				
			Amount	Calc.	%Drift				
152		2-Acetylaminofluorene			NA				
			Amount	Calc.	%Drift				
153	I	Perylene-d12A	40.000	40.000	0.0	106	-0.01	16.81	
154		7,12-Dimethylbenz(a)anthr			NA				
			Amount	Calc.	%Drift				
155		Hexachlorophene			NA				
156		3-Methylcholanthrene			NA				
157		Dibenz(a,j)acridine			NA				

(#) = Out of Range SPCC's out = 0 CCC's out = 0

x071368.D 8270DApp9SX-062320.m Tue Jun 23 19:08:29 2020

Initial Calibration Verification

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071416.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\jo...2020\sx2919\x071416.d Vial: 2
Acq On : 24 Jun 2020 3:22 pm Operator: marthav
Sample : icv2918-50 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\met...DApp9SX-062320.m (RTE Integrator)
Title : SW846 8270D OR EPA 625
Last Update : Tue Jun 23 17:15:34 2020
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	94	0.00	5.99
2		1,4-Dioxane		----------	NA	----------		
3		N-nitrosodimethylamine		----------	NA	----------		
4		Pyridine		----------	NA	----------		
5	P	Benzaldehyde		----------	NA	----------		
6		Aniline		----------	NA	----------		
7	S	2-Fluorophenol		----------	NA	----------		
8	P	bis(2-Chloroethyl)ether		----------	NA	----------		
9	S	Phenol-d5		----------	NA	----------		
10	P	Phenol		----------	NA	----------		
11	P	2-Chlorophenol		----------	NA	----------		
12		1,3-Dichlorobenzene		----------	NA	----------		
13		1,4-Dichlorobenzene		----------	NA	----------		
14		1,2-Dichlorobenzene		----------	NA	----------		
15		Benzyl alcohol		----------	NA	----------		
16	P	2,2'-Oxybis(1-chloropropa		----------	NA	----------		
17	P	2-Methylphenol		----------	NA	----------		
18	P	Acetophenone		----------	NA	----------		
19	P	Hexachloroethane		----------	NA	----------		
20	P	N-Nitroso-di-n-propylamin		----------	NA	----------		
21	P	3&4-Methylphenol		----------	NA	----------		
22	I	Naphthalene-d8	1.000	1.000	0.0	92	0.00	7.42
23	S	Nitrobenzene-d5		----------	NA	----------		
24	P	Nitrobenzene		----------	NA	----------		
25	P	Isophorone		----------	NA	----------		
26	P	2-Nitrophenol		----------	NA	----------		
27	P	2,4-Dimethylphenol		----------	NA	----------		
28		O,O,O-Triethylphosphoroth		----------	NA	----------		
29	P	bis(2-Chloroethoxy)methan		----------	NA	----------		
		----------	True	Calc.	% Drift	----------		
30		Benzoic Acid		----------	NA	----------		
		----------	AvgRF	CCRF	% Dev	----------		
31	P	2,4-Dichlorophenol		----------	NA	----------		
32		1,2,4-Trichlorobenzene		----------	NA	----------		
33		alpha-Terpineol		----------	NA	----------		
34	P	Naphthalene		----------	NA	----------		
35	P	4-Chloroaniline		----------	NA	----------		
36		2,6-Dichlorophenol		----------	NA	----------		
37	P	Hexachlorobutadiene		----------	NA	----------		

Initial Calibration Verification

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071416.D

38	P	Caprolactam		----------NA----------				
39	P	4-Chloro-3-methylphenol		----------NA----------				
40	P	2-Methylnaphthalene		----------NA----------				
41		1-Methylnaphthalene		----------NA----------				
42	P	1,2,4,5-Tetrachlorobenzen		----------NA----------				
43	I	Acenaphthene-d10	1.000	1.000	0.0	84	0.00	9.47
		----------	True	Calc.	% Drift	----------		
44	P	Hexachlorocyclopentadiene		----------NA----------				
		----------	AvgRF	CCRF	% Dev	----------		
45	P	2,4,6-Trichlorophenol		----------NA----------				
46	P	2,4,5-Trichlorophenol		----------NA----------				
47	S	2-Fluorobiphenyl		----------NA----------				
48	P	1,1'-Biphenyl		----------NA----------				
49	P	2-Chloronaphthalene		----------NA----------				
50	P	2-Nitroaniline		----------NA----------				
51		p-Dinitrobenzene		----------NA----------				
52	P	Acenaphthylene		----------NA----------				
53	P	Dimethylphthalate		----------NA----------				
54		m-Dinitrobenzene		----------NA----------				
55	P	2,6-Dinitrotoluene		----------NA----------				
56		o-Dinitrobenzene		----------NA----------				
57	P	Acenaphthene		----------NA----------				
58	P	3-Nitroaniline		----------NA----------				
		----------	True	Calc.	% Drift	----------		
59	P	2,4-Dinitrophenol		----------NA----------				
		----------	AvgRF	CCRF	% Dev	----------		
60	P	Dibenzofuran		----------NA----------				
61	P	2,4-Dinitrotoluene		----------NA----------				
62	P	4-Nitrophenol		----------NA----------				
63		2,3,5,6-Tetrachlorophenol		----------NA----------				
64	P	2,3,4,6-Tetrachlorophenol		----------NA----------				
65	P	Fluorene		----------NA----------				
66	P	4-Chlorophenyl-phenylethe		----------NA----------				
67	P	Diethylphthalate		----------NA----------				
68		Thionazin		----------NA----------				
69	P	4-Nitroaniline		----------NA----------				
70	I	Phenanthrene-d10	1.000	1.000	0.0	90	0.00	11.21
		----------	True	Calc.	% Drift	----------		
71	P	4,6-Dinitro-2-methylpheno		----------NA----------				
		----------	AvgRF	CCRF	% Dev	----------		
72	P	n-Nitrosodiphenylamine		----------NA----------				
73		Diphenylamine		----------NA----------				
74		1,2-Diphenylhydrazine		----------NA----------				
		----------	True	Calc.	% Drift	----------		
75	S	2,4,6-Tribromophenol		----------NA----------				
		----------	AvgRF	CCRF	% Dev	----------		
76		Sulfotep		----------NA----------				
77		Phorate		----------NA----------				
78	P	4-Bromophenyl-phenylether		----------NA----------				
79	P	Hexachlorobenzene		----------NA----------				

		----------	True	Calc.	% Drift	----------			
80		Dimethoate		----------NA----------					
		----------	AvgRF	CCRF	% Dev	----------			
81		Simazine		----------NA----------					
82	P	Atrazine		----------NA----------					
		----------	True	Calc.	% Drift	----------			
83	P	Pentachlorophenol		----------NA----------					
		----------	AvgRF	CCRF	% Dev	----------			
84	P	Phenanthrene		----------NA----------					
85	P	Anthracene		----------NA----------					
86		Disulfoton		----------NA----------					
87	P	Carbazole		----------NA----------					
		----------	True	Calc.	% Drift	----------			
88		Methyl Parathion		----------NA----------					
		----------	AvgRF	CCRF	% Dev	----------			
89	P	Di-n-butylphthalate		----------NA----------					
		----------	True	Calc.	% Drift	----------			
90		Ethyl Parathion		----------NA----------					
		----------	AvgRF	CCRF	% Dev	----------			
91	P	Fluoranthene		----------NA----------					
92	I	Chrysene-d12	1.000	1.000	0.0	85	0.00	14.48	
		----------	True	Calc.	% Drift	----------			
93		Benzidine		----------NA----------					
		----------	AvgRF	CCRF	% Dev	----------			
94	P	Pyrene		----------NA----------					
95	S	Terphenyl-d14		----------NA----------					
		----------	True	Calc.	% Drift	----------			
96		Famphur		----------NA----------					
97	P	Butylbenzylphthalate		----------NA----------					
98	P	3,3'-Dichlorobenzidine		----------NA----------					
		----------	AvgRF	CCRF	% Dev	----------			
99	P	Benzo[a]anthracene		----------NA----------					
100	P	Chrysene		----------NA----------					
		----------	True	Calc.	% Drift	----------			
101	P	bis(2-Ethylhexyl)phthalat		----------NA----------					
		----------	AvgRF	CCRF	% Dev	----------			
102	I	Perylene-d12	1.000	1.000	0.0	110	0.00	16.80	
		----------	True	Calc.	% Drift	----------			
103	P	Di-n-octylphthalate		----------NA----------					
104	P	Benzo[b]fluoranthene		----------NA----------					
		----------	AvgRF	CCRF	% Dev	----------			
105	P	Benzo[k]fluoranthene		----------NA----------					

Initial Calibration Verification

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071416.D

			True	Calc.	% Drift			
106	P	Benzo[a]pyrene		----------NA----------				
107	P	Indeno[1,2,3-cd]pyrene		----------NA----------				
108	P	Dibenz[a,h]anthracene		----------NA----------				
109	P	Benzo[g,h,i]perylene		----------NA----------				

		AvgRF	CCRF	% Dev			
110	1,4-Dichlorobenzene-d4A	1.000	1.000	0.0	105	0.00	5.99
111	2-Picoline	1.908	1.986	-4.1	105	0.00	3.97
112	N-Nitrosomethylethylamine	1.327	1.308	1.4	100	0.00	4.10
113	Methyl methanesulfonate	0.930	0.887	4.6	94	0.00	4.42
114	N-Nitrosodiethylamine	0.775	0.796	-2.7	100	0.00	4.84
115	Ethyl methanesulfonate	1.281	1.128	11.9	87	0.00	5.17
116	Pentachloroethane	0.546	0.509	6.8	92	0.00	5.68
117	N-Nitrosopyrrolidine	0.701	0.718	-2.4	97	0.00	6.42
118	N-Nitrosomorpholine	1.279	1.230	3.8	92	0.00	6.46
119	O-Toluidine	2.619	2.702	-3.2	98	0.00	6.48
120	Naphthalene-d8A	1.000	1.000	0.0	103	0.00	7.42
121	N-Nitrosopiperidine	0.368	0.334	9.2	89	0.00	6.80
122	A,A-Dimethylphenethylamin	1.467	1.128	23.1#	74	-0.01	7.31
123	Hexachloropropene	0.168	0.199	-18.5	108	0.00	7.55

		True	Calc.	% Drift			
124	N-Nitrosodi-n-butylamine	50.000	39.533	20.9#	72	0.00	7.92

		AvgRF	CCRF	% Dev			
125	p-Phenylenediamine	0.380	0.398	-4.7	98	0.00	7.92
126	Isosafrole	0.273	0.238	12.8	84	0.00	8.16
127	Acenaphthene-d10A	1.000	1.000	0.0	91	0.00	9.47
128	Safrole	0.526	0.586	-11.4	94	0.00	8.77
129	1-Chloronaphthalene	1.253	1.375	-9.7	93	0.00	8.84
130	Diphenyl Ether		----------NA----------				

		True	Calc.	% Drift			
131	1,4-Naphthoquinone	50.000	30.427	39.1#	52	0.00	9.03

		AvgRF	CCRF	% Dev			
132	Pentachlorobenzene	0.441	0.441	0.0	88	0.00	9.66
133	1-Naphthylamine	1.389	1.483	-6.8	93	0.00	9.80
134	2-Naphthylamine	1.485	1.563	-5.3	90	0.00	9.90

		True	Calc.	% Drift			
135	5-Nitro-o-toluidine	50.000	51.687	-3.4	90	0.00	10.13

		AvgRF	CCRF	% Dev			
136	Phenanthrene-d10A	1.000	1.000	0.0	90	0.00	11.21

		True	Calc.	% Drift			
137	1,3,5-Trinitrobenzene	50.000	52.543	-5.1	88	0.00	10.59

		AvgRF	CCRF	% Dev			
138	Diallate	0.627	0.580	7.5	80	0.00	10.62
139	Phenacetin	0.385	0.425	-10.4	89	0.00	10.66
140	4-Aminobiphenyl	0.811	0.863	-6.4	89	0.00	11.01
141	Pronamide	0.314	0.347	-10.5	89	0.00	11.11

Initial Calibration Verification

Job Number: FA77615 **Sample:** SX2918-ICV2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X071416.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

142	Pentachloronitrobenzene	0.078	0.078	0.0	82	0.00	11.01
	----------	True	Calc.	% Drift	----------		
143	4-Nitroquinoline 1-Oxide	50.000	50.367	-0.7	87	0.00	12.17
	----------	AvgRF	CCRF	% Dev	----------		
144	Methapyrilene		----------NA----------				
145	Isodrin	0.113	0.114	-0.9	88	0.00	12.47
146 I	Chrysene-d12A	1.000	1.000	0.0	99	0.00	14.48
	----------	True	Calc.	% Drift	----------		
147	Aramite	50.000	49.694	0.6	92	0.00	13.24
148	p-(Dimethylamine)azobenze	50.000	49.472	1.1	96	0.00	13.31
149	Chlorobenzilate	50.000	46.515	7.0	87	0.00	13.38
	----------	AvgRF	CCRF	% Dev	----------		
150	Kepone	0.018	0.029	-61.1#	0#	0.00	13.76
151	3,3'-Dimethylbenzidine	0.646	1.071	-65.8#	143	0.00	13.74
	----------	True	Calc.	% Drift	----------		
152	2-Acetylaminofluorene	50.000	58.747	-17.5	112	0.00	14.07
	----------	AvgRF	CCRF	% Dev	----------		
153 I	Perylene-d12A	1.000	1.000	0.0	114	0.00	16.80
154	7,12-Dimethylbenz(a)anthr	0.555	0.596	-7.4	111	0.00	16.16
	----------	True	Calc.	% Drift	----------		
155	Hexachlorophene	500.000	520.124	-4.0	107	0.00	16.57
156	3-Methylcholanthrene	50.000	50.150	-0.3	113	0.00	17.31
157	Dibenz(a,j)acridine	50.000	56.312	-12.6	127	0.00	18.21

(#) = Out of Range SPCC's out = 54 CCC's out = 0
x071368.D 8270DApp9SX-062320.m Thu Jun 25 03:53:12 2020

Continuing Calibration Summary

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2951-CC2918
Lab FileID: X072357.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\0812_sx2951\x072357.D Vial: 2
Acq On : 12 Aug 2020 10:24 am Operator: marthav
Sample : cc2918-50 8270 Inst : MSBNA05
Misc : op81484,sx2951,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\MET...DApp9SX-062320.m (RTE Integrator)
Title : SW846 8270D OR EPA 625
Last Update : Wed Jun 24 12:54:05 2020
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	96	0.00	5.65
2		1,4-Dioxane	0.686	0.630	8.2	95	0.00	2.47
3		N-nitrosodimethylamine	1.217	1.054	13.4	87	0.00	2.81
4		Pyridine	1.668	1.799	-7.9	106	0.00	2.84
5	P	Benzaldehyde	1.192	1.143	4.1	96	0.00	5.18
6		Aniline	2.378	2.106	11.4	83	0.00	5.31
7	S	2-Fluorophenol	1.434	1.448	-1.0	102	0.00	4.31
8	P	bis(2-Chloroethyl)ether	1.468	1.503	-2.4	99	0.00	5.39
9	S	Phenol-d5	1.706	1.744	-2.2	102	0.00	5.33
10	P	Phenol	2.024	1.975	2.4	90	0.00	5.35
11	P	2-Chlorophenol	1.530	1.604	-4.8	99	0.00	5.44
12		1,3-Dichlorobenzene	1.590	1.647	-3.6	102	0.00	5.58
13		1,4-Dichlorobenzene	1.682	1.726	-2.6	100	0.00	5.67
14		1,2-Dichlorobenzene	1.598	1.547	3.2	94	0.00	5.83
15		Benzyl alcohol	1.059	1.014	4.2	92	0.00	5.84
16	P	2,2'-Oxybis(1-chloropropa	3.084	2.664	13.6	84	0.00	5.98
17	P	2-Methylphenol	1.456	1.436	1.4	93	0.00	5.99
18	P	Acetophenone	2.154	2.053	4.7	92	0.00	6.11
19	P	Hexachloroethane	0.632	0.666	-5.4	102	0.00	6.20
20	P	N-Nitroso-di-n-propylamin	1.138	1.111	2.4	93	0.00	6.13
21	P	3&4-Methylphenol	1.505	1.537	-2.1	96	0.00	6.17
22	I	Naphthalene-d8	1.000	1.000	0.0	87	0.00	7.08
23	S	Nitrobenzene-d5	0.413	0.442	-7.0	95	0.00	6.27
24	P	Nitrobenzene	0.409	0.431	-5.4	93	0.00	6.30
25	P	Isophorone	0.730	0.707	3.2	87	0.00	6.57
26	P	2-Nitrophenol	0.194	0.216	-11.3	96	0.00	6.65
27	P	2,4-Dimethylphenol	0.361	0.343	5.0	83	0.00	6.75
28		O,O,O-Triethylphosphoroth	0.153	0.156	-2.0	90	0.00	6.81
29	P	bis(2-Chloroethoxy)methan	0.427	0.435	-1.9	90	0.00	6.84
		----------	Amount	Calc.	%Drift	----------		
30		Benzoic Acid	50.000	44.773	10.5	75	0.00	6.92
		----------	AvgRF	CCRF	%Dev	----------		
31	P	2,4-Dichlorophenol	0.291	0.305	-4.8	90	0.00	6.95
32		1,2,4-Trichlorobenzene	0.297	0.317	-6.7	96	0.00	7.02
33		alpha-Terpineol		----------NA----------				
34	P	Naphthalene	1.085	1.116	-2.9	91	0.00	7.10
35	P	4-Chloroaniline	0.458	0.451	1.5	86	0.00	7.19
36		2,6-Dichlorophenol	0.297	0.298	-0.3	88	0.00	7.20
37	P	Hexachlorobutadiene	0.147	0.160	-8.8	98	0.00	7.25

Continuing Calibration Summary

Job Number: FA77615 **Sample:** SX2951-CC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072357.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

38	P	Caprolactam	0.121	0.116	4.1	85	0.00	7.64
39	P	4-Chloro-3-methylphenol	0.310	0.305	1.6	86	0.00	7.81
40	P	2-Methylnaphthalene	0.717	0.714	0.4	89	0.00	7.91
41		1-Methylnaphthalene	0.687	0.685	0.3	89	0.00	8.02
42	P	1,2,4,5-Tetrachlorobenzen	0.298	0.301	-1.0	88	0.00	8.10
43	I	Acenaphthene-d10	1.000	1.000	0.0	82	0.00	9.12
		----------	Amount	Calc.	%Drift	----------		
44	P	Hexachlorocyclopentadiene	50.000	36.476	27.0#	56	0.00	8.09
		----------	AvgRF	CCRF	%Dev	----------		
45	P	2,4,6-Trichlorophenol	0.367	0.405	-10.4	87	0.00	8.26
46	P	2,4,5-Trichlorophenol	0.403	0.444	-10.2	88	0.00	8.32
47	S	2-Fluorobiphenyl	1.448	1.607	-11.0	91	0.00	8.35
48	P	1,1'-Biphenyl	1.633	1.714	-5.0	86	0.00	8.46
49	P	2-Chloronaphthalene	1.226	1.323	-7.9	88	0.00	8.47
50	P	2-Nitroaniline	0.451	0.490	-8.6	88	0.00	8.62
51		p-Dinitrobenzene	0.253	0.280	-10.7	86	0.00	8.80
52	P	Acenaphthylene	1.998	2.131	-6.7	86	0.00	8.95
53	P	Dimethylphthalate	1.411	1.447	-2.6	86	0.00	8.86
54		m-Dinitrobenzene	0.235	0.264	-12.3	87	0.00	8.89
55	P	2,6-Dinitrotoluene	0.333	0.357	-7.2	86	0.00	8.92
56		o-Dinitrobenzene	0.319	0.344	-7.8	91	0.00	8.97
57	P	Acenaphthene	1.329	1.384	-4.1	87	0.00	9.16
58	P	3-Nitroaniline	0.366	0.409	-11.7	88	0.00	9.11
		----------	Amount	Calc.	%Drift	----------		
59	P	2,4-Dinitrophenol	50.000	50.712	-1.4	82	0.00	9.24
		----------	AvgRF	CCRF	%Dev	----------		
60	P	Dibenzofuran	1.773	1.800	-1.5	85	0.00	9.36
61	P	2,4-Dinitrotoluene	0.425	0.474	-11.5	90	0.00	9.39
62	P	4-Nitrophenol	0.205	0.173	15.6	68	0.00	9.39
63		2,3,5,6-Tetrachlorophenol	0.297	0.304	-2.4	79	0.00	9.48
64	P	2,3,4,6-Tetrachlorophenol	0.311	0.324	-4.2	84	0.00	9.53
65	P	Fluorene	1.384	1.472	-6.4	89	0.00	9.76
66	P	4-Chlorophenyl-phenylethe	0.668	0.705	-5.5	87	0.00	9.78
67	P	Diethylphthalate	1.409	1.430	-1.5	84	0.00	9.69
68		Thionazin	0.299	0.328	-9.7	89	0.00	9.78
69	P	4-Nitroaniline	0.408	0.431	-5.6	85	0.00	9.84
70	I	Phenanthrene-d10	1.000	1.000	0.0	81	0.00	10.86
		----------	Amount	Calc.	%Drift	----------		
71	P	4,6-Dinitro-2-methylpheno	50.000	54.294	-8.6	89	0.00	9.87
		----------	AvgRF	CCRF	%Dev	----------		
72	P	n-Nitrosodiphenylamine	0.622	0.651	-4.7	86	0.00	9.94
73		Diphenylamine	0.729	0.782	-7.3	86	0.00	9.94
74		1,2-Diphenylhydrazine	0.896	0.948	-5.8	85	0.00	9.97
		----------	Amount	Calc.	%Drift	----------		
75	S	2,4,6-Tribromophenol	100.000	104.165	-4.2	86	0.00	10.06
		----------	AvgRF	CCRF	%Dev	----------		
76		Sulfotep	0.132	0.142	-7.6	84	0.00	10.15
77		Phorate	0.462	0.518	-12.1	87	0.00	10.29
78	P	4-Bromophenyl-phenylether	0.192	0.202	-5.2	85	0.00	10.36
79	P	Hexachlorobenzene	0.192	0.206	-7.3	88	0.00	10.40

Continuing Calibration Summary

Job Number: FA77615 **Sample:** SX2951-CC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072357.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

			Amount	Calc.	%Drift			
80		Dimethoate	50.000	55.577	-11.2	91	0.00	10.49
			AvgRF	CCRF	%Dev			
81		Simazine	0.141	0.137	2.8	80	0.00	10.57
82	P	Atrazine	0.234	0.244	-4.3	85	0.00	10.61
			Amount	Calc.	%Drift			
83	P	Pentachlorophenol	50.000	37.705	24.6#	57	0.00	10.67
			AvgRF	CCRF	%Dev			
84	P	Phenanthrene	1.209	1.257	-4.0	85	0.00	10.89
85	P	Anthracene	1.260	1.337	-6.1	85	0.00	10.95
86		Disulfoton	0.483	0.428	11.4	69	0.00	10.91
87	P	Carbazole	1.112	1.174	-5.6	86	0.00	11.17
			Amount	Calc.	%Drift			
88		Methyl Parathion	50.000	53.793	-7.6	88	0.00	11.35
			AvgRF	CCRF	%Dev			
89	P	Di-n-butylphthalate	1.241	1.355	-9.2	84	0.00	11.63
			Amount	Calc.	%Drift			
90		Ethyl Parathion	50.000	53.984	-8.0	89	0.00	11.82
			AvgRF	CCRF	%Dev			
91	P	Fluoranthene	1.121	1.205	-7.5	87	0.00	12.29
92	I	Chrysene-d12	1.000	1.000	0.0	84	0.00	14.07
			Amount	Calc.	%Drift			
93		Benzidine	50.000	51.400	-2.8	85	0.00	12.49
			AvgRF	CCRF	%Dev			
94	P	Pyrene	1.661	1.659	0.1	86	0.00	12.55
95	S	Terphenyl-d14	1.063	1.146	-7.8	91	0.00	12.78
			Amount	Calc.	%Drift			
96		Famphur		----------NA----------				
97	P	Butylbenzylphthalate	50.000	51.962	-3.9	89	0.00	13.41
98	P	3,3'-Dichlorobenzidine	50.000	54.718	-9.4	93	0.00	14.06
			AvgRF	CCRF	%Dev			
99	P	Benzo[a]anthracene	1.257	1.305	-3.8	88	0.00	14.06
100	P	Chrysene	1.339	1.396	-4.3	89	0.00	14.11
			Amount	Calc.	%Drift			
101	P	bis(2-Ethylhexyl)phthalat	50.000	53.893	-7.8	90	0.00	14.22
			AvgRF	CCRF	%Dev			
102	I	Perylene-d12	1.000	1.000	0.0	84	0.00	16.27
			Amount	Calc.	%Drift			
103	P	Di-n-octylphthalate	50.000	61.312	-22.6#	107	0.00	15.18
104	P	Benzo[b]fluoranthene	50.000	57.609	-15.2	101	0.00	15.62
			AvgRF	CCRF	%Dev			
105	P	Benzo[k]fluoranthene	1.420	1.514	-6.6	90	0.00	15.67

Continuing Calibration Summary

Job Number: FA77615 **Sample:** SX2951-CC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072357.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

			Amount	Calc.	%Drift			
106	P	Benzo[a]pyrene	50.000	54.625	-9.3	95	0.00	16.17
107	P	Indeno[1,2,3-cd]pyrene	50.000	66.545	-33.1#	125	0.00	17.93
108	P	Dibenz[a,h]anthracene	50.000	64.702	-29.4#	122	0.00	17.99
109	P	Benzo[g,h,i]perylene	50.000	54.625	-9.3	96	0.00	18.30

		AvgRF	CCRF	%Dev			
110	1,4-Dichlorobenzene-d4A	1.000	1.000	0.0	108	0.00	5.65
111	2-Picoline		----------NA----------				
112	N-Nitrosomethylethylamine		----------NA----------				
113	Methyl methanesulfonate		----------NA----------				
114	N-Nitrosodiethylamine		----------NA----------				
115	Ethyl methanesulfonate		----------NA----------				
116	Pentachloroethane		----------NA----------				
117	N-Nitrosopyrrolidine		----------NA----------				
118	N-Nitrosomorpholine		----------NA----------				
119	O-Toluidine		----------NA----------				
120	Naphthalene-d8A	1.000	1.000	0.0	97	0.00	7.08
121	N-Nitrosopiperidine		----------NA----------				
122	A,A-Dimethylphenethylamin		----------NA----------				
123	Hexachloropropene		----------NA----------				

		Amount	Calc.	%Drift
124	N-Nitrosodi-n-butylamine		----------NA----------	

		AvgRF	CCRF	%Dev			
125	p-Phenylenediamine		----------NA----------				
126	Isosafrole		----------NA----------				
127	Acenaphthene-d10A	1.000	1.000	0.0	89	0.00	9.12
128	Safrole		----------NA----------				
129	1-Chloronaphthalene		----------NA----------				
130	Diphenyl Ether		----------NA----------				

		Amount	Calc.	%Drift
131	1,4-Naphthoquinone		----------NA----------	

		AvgRF	CCRF	%Dev			
132	Pentachlorobenzene		----------NA----------				
133	1-Naphthylamine		----------NA----------				
134	2-Naphthylamine		----------NA----------				

		Amount	Calc.	%Drift
135	5-Nitro-o-toluidine		----------NA----------	

		AvgRF	CCRF	%Dev			
136	Phenanthrene-d10A	1.000	1.000	0.0	81	0.00	10.86

		Amount	Calc.	%Drift
137	1,3,5-Trinitrobenzene		----------NA----------	

		AvgRF	CCRF	%Dev
138	Diallate		----------NA----------	
139	Phenacetin		----------NA----------	
140	4-Aminobiphenyl		----------NA----------	
141	Pronamide		----------NA----------	

Continuing Calibration Summary

Job Number: FA77615 **Sample:** SX2951-CC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072357.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

142		Pentachloronitrobenzene		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
143		4-Nitroquinoline 1-Oxide		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
144		Methapyrilene		----------NA----------				
145		Isodrin		----------NA----------				
146	I	Chrysene-d12A	1.000	1.000	0.0	98	0.00	14.07
		----------	Amount	Calc.	%Drift	----------		
147		Aramite		----------NA----------				
148		p-(Dimethylamine)azobenze		----------NA----------				
149		Chlorobenzilate		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
150		Kepone		----------NA----------				
151		3,3'-Dimethylbenzidine		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
152		2-Acetylaminofluorene		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
153	I	Perylene-d12A	1.000	1.000	0.0	87	0.00	16.27
154		7,12-Dimethylbenz(a)anthr		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
155		Hexachlorophene		----------NA----------				
156		3-Methylcholanthrene		----------NA----------				
157		Dibenz(a,j)acridine		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
x071368.D 8270DApp9SX-062320.m Wed Aug 12 15:21:44 2020

Continuing Calibration Summary

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2951-CC2918
Lab FileID: X072358.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\0812_sx2951\x072358.D Vial: 3
Acq On : 12 Aug 2020 10:49 am Operator: marthav
Sample : cc2918-5 8270 Inst : MSBNA05
Misc : op81484,sx2951,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\MET...DApp9SX-062320.m (RTE Integrator)
Title : SW846 8270D OR EPA 625
Last Update : Wed Jun 24 12:54:05 2020
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	109	0.00	5.65
2		1,4-Dioxane	0.686	0.652	5.0	100	0.01	2.48
3		N-nitrosodimethylamine	1.217	1.063	12.7	98	0.00	2.81
4		Pyridine	1.668	1.790	-7.3	124	0.02	2.86
5	P	Benzaldehyde	1.192	1.182	0.8	103	0.00	5.18
6		Aniline	2.378	2.074	12.8	104	0.00	5.30
7	S	2-Fluorophenol	1.434	1.494	-4.2	115	0.00	4.31
8	P	bis(2-Chloroethyl)ether	1.468	1.359	7.4	109	0.00	5.38
9	S	Phenol-d5	1.706	1.659	2.8	112	0.00	5.33
10	P	Phenol	2.024	1.778	12.2	111	0.00	5.34
11	P	2-Chlorophenol	1.530	1.433	6.3	116	0.00	5.44
12		1,3-Dichlorobenzene	1.590	1.544	2.9	112	0.00	5.58
13		1,4-Dichlorobenzene	1.682	1.623	3.5	110	0.00	5.67
14		1,2-Dichlorobenzene	1.598	1.523	4.7	111	0.00	5.83
15		Benzyl alcohol	1.059	0.912	13.9	106	-0.01	5.83
16	P	2,2'-Oxybis(1-chloropropa	3.084	2.674	13.3	95	0.00	5.97
17	P	2-Methylphenol	1.456	1.316	9.6	106	-0.01	5.98
18	P	Acetophenone	2.154	1.939	10.0	95	0.00	6.10
19	P	Hexachloroethane	0.632	0.608	3.8	112	0.00	6.20
20	P	N-Nitroso-di-n-propylamin	1.138	1.006	11.6	98	-0.02	6.11
21	P	3&4-Methylphenol	1.505	1.364	9.4	104	0.00	6.16
22	I	Naphthalene-d8	1.000	1.000	0.0	101	0.00	7.08
23	S	Nitrobenzene-d5	0.413	0.419	-1.5	109	0.00	6.27
24	P	Nitrobenzene	0.409	0.417	-2.0	108	-0.01	6.29
25	P	Isophorone	0.730	0.679	7.0	96	-0.01	6.56
26	P	2-Nitrophenol	0.194	0.194	0.0	118	0.00	6.65
27	P	2,4-Dimethylphenol	0.361	0.330	8.6	97	0.00	6.75
28		O,O,O-Triethylphosphoroth	0.153	0.144	5.9	97	0.00	6.80
29	P	bis(2-Chloroethoxy)methan	0.427	0.402	5.9	100	0.00	6.83
		----------	Amount	Calc.	%Drift		----------	
30		Benzoic Acid	5.000	3.543	29.1#	119	-0.06	6.86
		----------	AvgRF	CCRF	%Dev		----------	
31	P	2,4-Dichlorophenol	0.291	0.281	3.4	107	0.00	6.95
32		1,2,4-Trichlorobenzene	0.297	0.294	1.0	106	0.00	7.01
33		alpha-Terpineol		----------NA----------				
34	P	Naphthalene	1.085	1.079	0.6	104	0.00	7.10
35	P	4-Chloroaniline	0.458	0.435	5.0	99	0.00	7.18
36		2,6-Dichlorophenol	0.297	0.287	3.4	104	-0.01	7.19
37	P	Hexachlorobutadiene	0.147	0.155	-5.4	115	0.00	7.25

Continuing Calibration Summary

Job Number: FA77615 **Sample:** SX2951-CC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072358.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

38	P	Caprolactam	0.121	0.111	8.3	90	-0.07	7.57
39	P	4-Chloro-3-methylphenol	0.310	0.290	6.5	100	-0.01	7.80
40	P	2-Methylnaphthalene	0.717	0.692	3.5	99	0.00	7.90
41		1-Methylnaphthalene	0.687	0.650	5.4	98	0.00	8.01
42	P	1,2,4,5-Tetrachlorobenzen	0.298	0.279	6.4	100	0.00	8.10
43	I	Acenaphthene-d10	1.000	1.000	0.0	94	0.00	9.11
		----------	Amount	Calc.	%Drift	----------		
44	P	Hexachlorocyclopentadiene	5.000	1.354	72.9#	30	0.00	8.08
		----------	AvgRF	CCRF	%Dev	----------		
45	P	2,4,6-Trichlorophenol	0.367	0.355	3.3	101	0.00	8.25
46	P	2,4,5-Trichlorophenol	0.403	0.370	8.2	98	-0.01	8.31
47	S	2-Fluorobiphenyl	1.448	1.410	2.6	97	0.00	8.34
48	P	1,1'-Biphenyl	1.633	1.576	3.5	87	0.00	8.45
49	P	2-Chloronaphthalene	1.226	1.178	3.9	96	-0.01	8.46
50	P	2-Nitroaniline	0.451	0.438	2.9	98	-0.01	8.61
51		p-Dinitrobenzene	0.253	0.227	10.3	99	-0.01	8.79
52	P	Acenaphthylene	1.998	1.817	9.1	91	0.00	8.94
53	P	Dimethylphthalate	1.411	1.292	8.4	88	-0.02	8.84
54		m-Dinitrobenzene	0.235	0.214	8.9	96	-0.01	8.87
55	P	2,6-Dinitrotoluene	0.333	0.306	8.1	92	-0.01	8.91
56		o-Dinitrobenzene	0.319	0.311	2.5	91	-0.02	8.95
57	P	Acenaphthene	1.329	1.273	4.2	93	-0.01	9.15
58	P	3-Nitroaniline	0.366	0.354	3.3	97	-0.02	9.09
		----------	Amount	Calc.	%Drift	----------		
59	P	2,4-Dinitrophenol	5.000	1.450	71.0#	48	0.00	9.24
		----------	AvgRF	CCRF	%Dev	----------		
60	P	Dibenzofuran	1.773	1.653	6.8	90	0.00	9.36
61	P	2,4-Dinitrotoluene	0.425	0.398	6.4	91	-0.01	9.38
62	P	4-Nitrophenol	0.205	0.133	35.1#	74	0.00	9.39
63		2,3,5,6-Tetrachlorophenol	0.297	0.230	22.6#	85	0.00	9.47
64	P	2,3,4,6-Tetrachlorophenol	0.311	0.265	14.8	90	0.00	9.53
65	P	Fluorene	1.384	1.311	5.3	91	0.00	9.76
66	P	4-Chlorophenyl-phenylethe	0.668	0.602	9.9	88	0.00	9.78
67	P	Diethylphthalate	1.409	1.269	9.9	89	-0.01	9.68
68		Thionazin	0.299	0.295	1.3	90	-0.01	9.77
69	P	4-Nitroaniline	0.408	0.354	13.2	89	-0.03	9.81
70	I	Phenanthrene-d10	1.000	1.000	0.0	91	0.00	10.86
		----------	Amount	Calc.	%Drift	----------		
71	P	4,6-Dinitro-2-methylpheno	5.000	3.317	33.7#	87	-0.02	9.86
		----------	AvgRF	CCRF	%Dev	----------		
72	P	n-Nitrosodiphenylamine	0.622	0.558	10.3	89	-0.01	9.93
73		Diphenylamine	0.729	0.669	8.2	89	-0.01	9.93
74		1,2-Diphenylhydrazine	0.896	0.799	10.8	85	0.00	9.97
		----------	Amount	Calc.	%Drift	----------		
75	S	2,4,6-Tribromophenol	10.000	9.792	2.1	98	-0.01	10.05
		----------	AvgRF	CCRF	%Dev	----------		
76		Sulfotep	0.132	0.122	7.6	85	0.00	10.15
77		Phorate	0.462	0.446	3.5	91	0.00	10.28
78	P	4-Bromophenyl-phenylether	0.192	0.174	9.4	91	0.00	10.35
79	P	Hexachlorobenzene	0.192	0.173	9.9	94	0.00	10.40

Continuing Calibration Summary

Job Number: FA77615 **Sample:** SX2951-CC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072358.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

			Amount	Calc.	%Drift			
80		Dimethoate	5.000	4.765	4.7	94	-0.02	10.48
			AvgRF	CCRF	%Dev			
81		Simazine	0.141	0.117	17.0	83	-0.02	10.55
82	P	Atrazine	0.234	0.198	15.4	80	-0.02	10.59
			Amount	Calc.	%Drift			
83	P	Pentachlorophenol	5.000	1.486	70.3#	38	0.00	10.66
			AvgRF	CCRF	%Dev			
84	P	Phenanthrene	1.209	1.119	7.4	86	0.00	10.89
85	P	Anthracene	1.260	1.157	8.2	89	0.00	10.94
86		Disulfoton	0.483	0.473	2.1	90	0.00	10.90
87	P	Carbazole	1.112	1.026	7.7	89	-0.01	11.16
			Amount	Calc.	%Drift			
88		Methyl Parathion	5.000	4.579	8.4	94	-0.01	11.34
			AvgRF	CCRF	%Dev			
89	P	Di-n-butylphthalate	1.241	1.178	5.1	95	0.00	11.62
			Amount	Calc.	%Drift			
90		Ethyl Parathion	5.000	4.745	5.1	99	-0.01	11.81
			AvgRF	CCRF	%Dev			
91	P	Fluoranthene	1.121	1.060	5.4	93	0.00	12.29
92	I	Chrysene-d12	1.000	1.000	0.0	98	-0.01	14.06
			Amount	Calc.	%Drift			
93		Benzidine	5.000	5.382	-7.6	157	0.00	12.48
			AvgRF	CCRF	%Dev			
94	P	Pyrene	1.661	1.447	12.9	89	-0.01	12.54
95	S	Terphenyl-d14	1.063	0.986	7.2	99	0.00	12.77
			Amount	Calc.	%Drift			
96		Famphur		----------	NA ----------			
97	P	Butylbenzylphthalate	5.000	5.033	-0.7	114	0.00	13.40
98	P	3,3'-Dichlorobenzidine	5.000	5.378	-7.6	129	-0.01	14.05
			AvgRF	CCRF	%Dev			
99	P	Benzo[a]anthracene	1.257	1.165	7.3	98	0.00	14.05
100	P	Chrysene	1.339	1.218	9.0	96	-0.02	14.09
			Amount	Calc.	%Drift			
101	P	bis(2-Ethylhexyl)phthalat	5.000	5.002	-0.0	129	0.00	14.21
			AvgRF	CCRF	%Dev			
102	I	Perylene-d12	1.000	1.000	0.0	98	0.00	16.26
			Amount	Calc.	%Drift			
103	P	Di-n-octylphthalate	5.000	6.080	-21.6#	115	-0.01	15.17
104	P	Benzo[b]fluoranthene	5.000	5.172	-3.4	112	-0.02	15.60
			AvgRF	CCRF	%Dev			
105	P	Benzo[k]fluoranthene	1.420	1.169	17.7	90	-0.03	15.65

Continuing Calibration Summary

Job Number: FA77615 **Sample:** SX2951-CC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072358.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

			Amount	Calc.	%Drift			
106	P	Benzo[a]pyrene	5.000	4.981	0.4	116	-0.02	16.15
107	P	Indeno[1,2,3-cd]pyrene	5.000	8.429	-68.6#	196	-0.02	17.91
108	P	Dibenz[a,h]anthracene	5.000	7.832	-56.6#	191	-0.02	17.97
109	P	Benzo[g,h,i]perylene	5.000	6.057	-21.1#	132	-0.03	18.27

		AvgRF	CCRF	%Dev			
110	1,4-Dichlorobenzene-d4A	1.000	1.000	0.0	112	0.00	5.65
111	2-Picoline		NA				
112	N-Nitrosomethylethylamine		NA				
113	Methyl methanesulfonate		NA				
114	N-Nitrosodiethylamine		NA				
115	Ethyl methanesulfonate		NA				
116	Pentachloroethane		NA				
117	N-Nitrosopyrrolidine		NA				
118	N-Nitrosomorpholine		NA				
119	O-Toluidine		NA				
120	Naphthalene-d8A	1.000	1.000	0.0	106	0.00	7.08
121	N-Nitrosopiperidine		NA				
122	A,A-Dimethylphenethylamin		NA				
123	Hexachloropropene		NA				

		Amount	Calc.	%Drift
124	N-Nitrosodi-n-butylamine		NA	

		AvgRF	CCRF	%Dev			
125	p-Phenylenediamine		NA				
126	Isosafrole		NA				
127	Acenaphthene-d10A	1.000	1.000	0.0	98	0.00	9.11
128	Safrole		NA				
129	1-Chloronaphthalene		NA				
130	Diphenyl Ether		NA				

		Amount	Calc.	%Drift
131	1,4-Naphthoquinone		NA	

		AvgRF	CCRF	%Dev			
132	Pentachlorobenzene		NA				
133	1-Naphthylamine		NA				
134	2-Naphthylamine		NA				

		Amount	Calc.	%Drift
135	5-Nitro-o-toluidine		NA	

		AvgRF	CCRF	%Dev			
136	Phenanthrene-d10A	1.000	1.000	0.0	93	0.00	10.86

		Amount	Calc.	%Drift
137	1,3,5-Trinitrobenzene		NA	

		AvgRF	CCRF	%Dev
138	Diallate		NA	
139	Phenacetin		NA	
140	4-Aminobiphenyl		NA	
141	Pronamide		NA	

Continuing Calibration Summary

Job Number: FA77615 **Sample:** SX2951-CC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072358.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

142		Pentachloronitrobenzene		NA				
		----------	Amount	Calc.	%Drift	----------		
143		4-Nitroquinoline 1-Oxide		NA				
		----------	AvgRF	CCRF	%Dev	----------		
144		Methapyrilene		NA				
145		Isodrin		NA				
146	I	Chrysene-d12A	1.000	1.000	0.0	100	-0.01	14.06
		----------	Amount	Calc.	%Drift	----------		
147		Aramite		NA				
148		p-(Dimethylamine)azobenze		NA				
149		Chlorobenzilate		NA				
		----------	AvgRF	CCRF	%Dev	----------		
150		Kepone		NA				
151		3,3'-Dimethylbenzidine		NA				
		----------	Amount	Calc.	%Drift	----------		
152		2-Acetylaminofluorene		NA				
		----------	AvgRF	CCRF	%Dev	----------		
153	I	Perylene-d12A	1.000	1.000	0.0	98	0.00	16.26
154		7,12-Dimethylbenz(a)anthr		NA				
		----------	Amount	Calc.	%Drift	----------		
155		Hexachlorophene		NA				
156		3-Methylcholanthrene		NA				
157		Dibenz(a,j)acridine		NA				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
x071365.D 8270DApp9SX-062320.m Wed Aug 12 15:45:20 2020

Continuing Calibration Summary

Job Number: FA77615 **Sample:** SX2952-CC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072389.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\Je...2020\SX2952\x072389.d Vial: 2
Acq On : 13 Aug 2020 1:38 pm Operator: marthav
Sample : cc2918-50 8270 Inst : MSBNA05
Misc : op81484,sx2952,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\met...DApp9SX-062320.m (RTE Integrator)
Title : SW846 8270D OR EPA 625
Last Update : Tue Jun 23 17:15:34 2020
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	98	0.00	5.63
2		1,4-Dioxane	0.686	0.617	10.1	95	0.00	2.45
3		N-nitrosodimethylamine	1.217	0.994	18.3	83	0.00	2.79
4		Pyridine	1.668	1.705	-2.2	102	0.00	2.82
5	P	Benzaldehyde	1.192	1.096	8.1	93	0.00	5.17
6		Aniline	2.378	2.019	15.1	81	0.00	5.29
7	S	2-Fluorophenol	1.434	1.396	2.6	100	0.00	4.29
8	P	bis(2-Chloroethyl)ether	1.468	1.440	1.9	96	0.00	5.37
9	S	Phenol-d5	1.706	1.674	1.9	99	0.00	5.32
10	P	Phenol	2.024	1.903	6.0	88	0.00	5.33
11	P	2-Chlorophenol	1.530	1.565	-2.3	98	0.00	5.42
12		1,3-Dichlorobenzene	1.590	1.592	-0.1	99	0.00	5.57
13		1,4-Dichlorobenzene	1.682	1.677	0.3	98	0.00	5.65
14		1,2-Dichlorobenzene	1.598	1.504	5.9	92	0.00	5.81
15		Benzyl alcohol	1.059	0.975	7.9	90	0.00	5.82
16	P	2,2'-Oxybis(1-chloropropa	3.084	2.526	18.1	81	0.00	5.96
17	P	2-Methylphenol	1.456	1.384	4.9	91	0.00	5.98
18	P	Acetophenone	2.154	1.987	7.8	90	0.00	6.09
19	P	Hexachloroethane	0.632	0.631	0.2	98	0.00	6.18
20	P	N-Nitroso-di-n-propylamin	1.138	1.068	6.2	90	0.00	6.11
21	P	3&4-Methylphenol	1.505	1.466	2.6	93	0.00	6.15
22	I	Naphthalene-d8	1.000	1.000	0.0	89	0.00	7.06
23	S	Nitrobenzene-d5	0.413	0.419	-1.5	91	0.00	6.26
24	P	Nitrobenzene	0.409	0.406	0.7	89	0.00	6.28
25	P	Isophorone	0.730	0.670	8.2	84	0.00	6.56
26	P	2-Nitrophenol	0.194	0.206	-6.2	94	0.00	6.64
27	P	2,4-Dimethylphenol	0.361	0.326	9.7	81	0.00	6.73
28		O,O,O-Triethylphosphoroth	0.153	0.151	1.3	89	0.00	6.79
29	P	bis(2-Chloroethoxy)methan	0.427	0.416	2.6	88	0.00	6.82
		----------	True	Calc.	% Drift	----------		
30		Benzoic Acid	50.000	42.929	14.1	73	0.00	6.90
		----------	AvgRF	CCRF	% Dev	----------		
31	P	2,4-Dichlorophenol	0.291	0.294	-1.0	89	0.00	6.94
32		1,2,4-Trichlorobenzene	0.297	0.305	-2.7	94	0.00	7.00
33		alpha-Terpineol		----------NA----------				
34	P	Naphthalene	1.085	1.069	1.5	89	0.00	7.08
35	P	4-Chloroaniline	0.458	0.441	3.7	86	0.00	7.17
36		2,6-Dichlorophenol	0.297	0.287	3.4	86	0.00	7.18
37	P	Hexachlorobutadiene	0.147	0.153	-4.1	95	0.00	7.23

Continuing Calibration Summary

Job Number: FA77615 **Sample:** SX2952-CC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072389.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

38	P	Caprolactam	0.121	0.113	6.6	85	0.00	7.62
39	P	4-Chloro-3-methylphenol	0.310	0.291	6.1	84	0.00	7.79
40	P	2-Methylnaphthalene	0.717	0.685	4.5	87	0.00	7.89
41		1-Methylnaphthalene	0.687	0.666	3.1	88	0.00	8.00
42	P	1,2,4,5-Tetrachlorobenzen	0.298	0.292	2.0	88	0.00	8.08
43	I	Acenaphthene-d10	1.000	1.000	0.0	85	0.00	9.10
		----------	True	Calc.	% Drift	----------		
44	P	Hexachlorocyclopentadiene	50.000	33.216	33.6#	52	0.00	8.07
		----------	AvgRF	CCRF	% Dev	----------		
45	P	2,4,6-Trichlorophenol	0.367	0.389	-6.0	87	0.00	8.24
46	P	2,4,5-Trichlorophenol	0.402	0.417	-3.7	86	0.00	8.31
47	S	2-Fluorobiphenyl	1.448	1.532	-5.8	90	0.00	8.33
48	P	1,1'-Biphenyl	1.633	1.632	0.1	85	0.00	8.44
49	P	2-Chloronaphthalene	1.226	1.252	-2.1	86	0.00	8.45
50	P	2-Nitroaniline	0.451	0.450	0.2	83	0.00	8.60
51		p-Dinitrobenzene	0.253	0.263	-4.0	84	0.00	8.78
52	P	Acenaphthylene	1.998	2.040	-2.1	85	0.00	8.93
53	P	Dimethylphthalate	1.411	1.383	2.0	85	0.00	8.84
54		m-Dinitrobenzene	0.235	0.253	-7.7	87	0.00	8.87
55	P	2,6-Dinitrotoluene	0.333	0.343	-3.0	85	0.00	8.90
56		o-Dinitrobenzene	0.319	0.317	0.6	86	0.00	8.95
57	P	Acenaphthene	1.329	1.339	-0.8	87	0.00	9.14
58	P	3-Nitroaniline	0.366	0.390	-6.6	87	0.00	9.09
		----------	True	Calc.	% Drift	----------		
59	P	2,4-Dinitrophenol	50.000	51.672	-3.3	86	0.00	9.22
		----------	AvgRF	CCRF	% Dev	----------		
60	P	Dibenzofuran	1.773	1.731	2.4	85	0.00	9.35
61	P	2,4-Dinitrotoluene	0.425	0.453	-6.6	89	0.00	9.37
62	P	4-Nitrophenol	0.205	0.160	22.0#	65	0.00	9.38
63		2,3,5,6-Tetrachlorophenol	0.297	0.285	4.0	77	0.00	9.46
64	P	2,3,4,6-Tetrachlorophenol	0.308	0.313	-1.6	84	0.00	9.51
65	P	Fluorene	1.384	1.402	-1.3	87	0.00	9.75
66	P	4-Chlorophenyl-phenylethe	0.668	0.674	-0.9	86	0.00	9.77
67	P	Diethylphthalate	1.409	1.351	4.1	82	0.00	9.67
68		Thionazin	0.299	0.310	-3.7	87	0.00	9.76
69	P	4-Nitroaniline	0.408	0.414	-1.5	85	0.00	9.82
70	I	Phenanthrene-d10	1.000	1.000	0.0	85	0.00	10.84
		----------	True	Calc.	% Drift	----------		
71	P	4,6-Dinitro-2-methylpheno	50.000	53.671	-7.3	91	0.00	9.85
		----------	AvgRF	CCRF	% Dev	----------		
72	P	n-Nitrosodiphenylamine	0.622	0.618	0.6	86	0.00	9.92
73		Diphenylamine	0.729	0.741	-1.6	86	0.00	9.92
74		1,2-Diphenylhydrazine	0.896	0.891	0.6	84	0.00	9.95
		----------	True	Calc.	% Drift	----------		
75	S	2,4,6-Tribromophenol	100.000	99.871	0.1	86	0.00	10.04
		----------	AvgRF	CCRF	% Dev	----------		
76		Sulfotep	0.132	0.133	-0.8	82	0.00	10.14
77		Phorate	0.462	0.487	-5.4	86	0.00	10.27
78	P	4-Bromophenyl-phenylether	0.192	0.195	-1.6	86	0.00	10.34
79	P	Hexachlorobenzene	0.192	0.198	-3.1	89	0.00	10.39

Continuing Calibration Summary

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2952-CC2918
Lab FileID: X072389.D

			True	Calc.	% Drift			
80		Dimethoate	50.000	52.905	-5.8	91	0.00	10.48
			AvgRF	CCRF	% Dev			
81		Simazine	0.141	0.134	5.0	82	0.00	10.55
82	P	Atrazine	0.234	0.237	-1.3	86	0.00	10.59
			True	Calc.	% Drift			
83	P	Pentachlorophenol	50.000	35.044	29.9#	55	0.00	10.65
			AvgRF	CCRF	% Dev			
84	P	Phenanthrene	1.209	1.200	0.7	85	0.00	10.87
85	P	Anthracene	1.260	1.280	-1.6	85	0.00	10.93
86		Disulfoton	0.483	0.536	-11.0	90	0.00	10.89
87	P	Carbazole	1.112	1.123	-1.0	86	0.00	11.15
			True	Calc.	% Drift			
88		Methyl Parathion	50.000	51.227	-2.5	87	0.00	11.33
			AvgRF	CCRF	% Dev			
89	P	Di-n-butylphthalate	1.241	1.290	-3.9	84	0.00	11.61
			True	Calc.	% Drift			
90		Ethyl Parathion	50.000	51.065	-2.1	88	0.00	11.80
			AvgRF	CCRF	% Dev			
91	P	Fluoranthene	1.121	1.155	-3.0	87	0.00	12.28
92	I	Chrysene-d12	1.000	1.000	0.0	90	0.00	14.05
			True	Calc.	% Drift			
93		Benzidine	50.000	51.923	-3.8	91	0.00	12.47
			AvgRF	CCRF	% Dev			
94	P	Pyrene	1.661	1.585	4.6	87	0.00	12.53
95	S	Terphenyl-d14	1.063	1.082	-1.8	91	0.00	12.76
			True	Calc.	% Drift			
96		Famphur	50.000	75.382	-50.8#	119	0.00	13.30
97	P	Butylbenzylphthalate	50.000	49.053	1.9	89	0.00	13.39
98	P	3,3'-Dichlorobenzidine	50.000	51.982	-4.0	93	0.00	14.04
			AvgRF	CCRF	% Dev			
99	P	Benzo[a]anthracene	1.257	1.236	1.7	89	0.00	14.04
100	P	Chrysene	1.339	1.350	-0.8	92	0.00	14.08
			True	Calc.	% Drift			
101	P	bis(2-Ethylhexyl)phthalat	50.000	51.130	-2.3	90	0.00	14.20
			AvgRF	CCRF	% Dev			
102	I	Perylene-d12	1.000	1.000	0.0	88	0.00	16.23
			True	Calc.	% Drift			
103	P	Di-n-octylphthalate	50.000	58.216	-16.4	105	0.00	15.15
104	P	Benzo[b]fluoranthene	50.000	56.691	-13.4	103	0.00	15.59
			AvgRF	CCRF	% Dev			
105	P	Benzo[k]fluoranthene	1.420	1.430	-0.7	89	0.00	15.64

6.7.19
6

Continuing Calibration Summary

Job Number: FA77615 **Sample:** SX2952-CC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072389.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

			True	Calc.	% Drift			
106	P	Benzo[a]pyrene	50.000	52.137	-4.3	94	0.00	16.14
107	P	Indeno[1,2,3-cd]pyrene	50.000	59.640	-19.3	113	0.00	17.91
108	P	Dibenz[a,h]anthracene	50.000	60.081	-20.2#	116	0.00	17.96
109	P	Benzo[g,h,i]perylene	50.000	50.690	-1.4	92	0.00	18.27

		AvgRF	CCRF	% Dev			
110	1,4-Dichlorobenzene-d4A	1.000	1.000	0.0	110	0.00	5.63
111	2-Picoline		NA				
112	N-Nitrosomethylethylamine		NA				
113	Methyl methanesulfonate		NA				
114	N-Nitrosodiethylamine		NA				
115	Ethyl methanesulfonate		NA				
116	Pentachloroethane		NA				
117	N-Nitrosopyrrolidine		NA				
118	N-Nitrosomorpholine		NA				
119	O-Toluidine		NA				
120	Naphthalene-d8A	1.000	1.000	0.0	99	0.00	7.06
121	N-Nitrosopiperidine		NA				
122	A,A-Dimethylphenethylamin		NA				
123	Hexachloropropene		NA				

		True	Calc.	% Drift			
124	N-Nitrosodi-n-butylamine		NA				

		AvgRF	CCRF	% Dev			
125	p-Phenylenediamine		NA				
126	Isosafrole		NA				
127	Acenaphthene-d10A	1.000	1.000	0.0	92	0.00	9.10
128	Safrole		NA				
129	1-Chloronaphthalene		NA				
130	Diphenyl Ether		NA				

		True	Calc.	% Drift			
131	1,4-Naphthoquinone		NA				

		AvgRF	CCRF	% Dev			
132	Pentachlorobenzene		NA				
133	1-Naphthylamine		NA				
134	2-Naphthylamine		NA				

		True	Calc.	% Drift			
135	5-Nitro-o-toluidine		NA				

		AvgRF	CCRF	% Dev			
136	Phenanthrene-d10A	1.000	1.000	0.0	85	0.00	10.84

		True	Calc.	% Drift			
137	1,3,5-Trinitrobenzene		NA				

		AvgRF	CCRF	% Dev			
138	Diallate		NA				
139	Phenacetin		NA				
140	4-Aminobiphenyl		NA				
141	Pronamide		NA				

Continuing Calibration Summary

Job Number: FA77615 **Sample:** SX2952-CC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072389.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

142		Pentachloronitrobenzene		----------NA----------				
		----------	True	Calc.	% Drift	----------		
143		4-Nitroquinoline 1-Oxide		----------NA----------				
		----------	AvgRF	CCRF	% Dev	----------		
144		Methapyrilene		----------NA----------				
145		Isodrin		----------NA----------				
146	I	Chrysene-d12A	1.000	1.000	0.0	104	0.00	14.05
		----------	True	Calc.	% Drift	----------		
147		Aramite		----------NA----------				
148		p-(Dimethylamine)azobenze		----------NA----------				
149		Chlorobenzilate		----------NA----------				
		----------	AvgRF	CCRF	% Dev	----------		
150		Kepone		----------NA----------				
151		3,3'-Dimethylbenzidine		----------NA----------				
		----------	True	Calc.	% Drift	----------		
152		2-Acetylaminofluorene		----------NA----------				
		----------	AvgRF	CCRF	% Dev	----------		
153	I	Perylene-d12A	1.000	1.000	0.0	91	0.00	16.23
154		7,12-Dimethylbenz(a)anthr		----------NA----------				
		----------	True	Calc.	% Drift	----------		
155		Hexachlorophene		----------NA----------				
156		3-Methylcholanthrene		----------NA----------				
157		Dibenz(a,j)acridine		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
x071368.D 8270DApp9SX-062320.m Fri Aug 14 02:18:26 2020

Continuing Calibration Summary

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2952-CC2918
Lab FileID: X072390.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\Je...2020\SX2952\x072390.d Vial: 3
Acq On : 13 Aug 2020 2:03 pm Operator: marthav
Sample : cc2918-5 8270 Inst : MSBNA05
Misc : op81484,sx2952,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\met...DApp9SX-062320.m (RTE Integrator)
Title : SW846 8270D OR EPA 625
Last Update : Tue Jun 23 17:15:34 2020
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	106	0.00	5.63
2		1,4-Dioxane	0.686	0.675	1.6	101	0.00	2.46
3		N-nitrosodimethylamine	1.217	1.032	15.2	92	0.00	2.79
4		Pyridine	1.668	1.741	-4.4	117	0.01	2.83
5	P	Benzaldehyde	1.192	1.176	1.3	100	0.00	5.16
6		Aniline	2.378	2.060	13.4	100	0.00	5.29
7	S	2-Fluorophenol	1.434	1.455	-1.5	109	0.00	4.29
8	P	bis(2-Chloroethyl)ether	1.468	1.354	7.8	106	0.00	5.37
9	S	Phenol-d5	1.706	1.650	3.3	108	0.00	5.32
10	P	Phenol	2.024	1.803	10.9	110	0.00	5.33
11	P	2-Chlorophenol	1.530	1.431	6.5	112	0.00	5.42
12		1,3-Dichlorobenzene	1.590	1.578	0.8	111	0.00	5.57
13		1,4-Dichlorobenzene	1.682	1.628	3.2	107	0.00	5.65
14		1,2-Dichlorobenzene	1.598	1.494	6.5	106	0.00	5.81
15		Benzyl alcohol	1.059	0.899	15.1	102	-0.01	5.81
16	P	2,2'-Oxybis(1-chloropropa	3.084	2.617	15.1	90	0.00	5.96
17	P	2-Methylphenol	1.456	1.313	9.8	103	0.00	5.97
18	P	Acetophenone	2.154	1.931	10.4	92	0.00	6.09
19	P	Hexachloroethane	0.632	0.617	2.4	110	0.00	6.18
20	P	N-Nitroso-di-n-propylamin	1.138	1.027	9.8	97	-0.02	6.10
21	P	3&4-Methylphenol	1.505	1.379	8.4	102	0.00	6.15
22	I	Naphthalene-d8	1.000	1.000	0.0	99	0.00	7.06
23	S	Nitrobenzene-d5	0.413	0.409	1.0	104	0.00	6.25
24	P	Nitrobenzene	0.409	0.404	1.2	102	-0.01	6.27
25	P	Isophorone	0.730	0.683	6.4	95	-0.01	6.55
26	P	2-Nitrophenol	0.194	0.200	-3.1	119	0.00	6.63
27	P	2,4-Dimethylphenol	0.361	0.327	9.4	94	0.00	6.73
28		O,O,O-Triethylphosphoroth	0.153	0.143	6.5	94	-0.01	6.78
29	P	bis(2-Chloroethoxy)methan	0.427	0.405	5.2	99	0.00	6.81
		----------	True	Calc.	% Drift	----------		
30		Benzoic Acid	5.000	3.408	31.8#	111	-0.06	6.84
		----------	AvgRF	CCRF	% Dev	----------		
31	P	2,4-Dichlorophenol	0.291	0.278	4.5	104	0.00	6.94
32		1,2,4-Trichlorobenzene	0.297	0.299	-0.7	105	0.00	7.00
33		alpha-Terpineol		----------NA----------				
34	P	Naphthalene	1.085	1.071	1.3	101	0.00	7.08
35	P	4-Chloroaniline	0.458	0.437	4.6	98	0.00	7.17
36		2,6-Dichlorophenol	0.297	0.282	5.1	100	-0.01	7.17
37	P	Hexachlorobutadiene	0.147	0.152	-3.4	110	0.00	7.23

Continuing Calibration Summary

Job Number: FA77615 **Sample:** SX2952-CC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072390.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

38	P	Caprolactam	0.121	0.110	9.1	87	-0.07	7.55
39	P	4-Chloro-3-methylphenol	0.310	0.291	6.1	98	0.00	7.79
40	P	2-Methylnaphthalene	0.717	0.696	2.9	98	0.00	7.88
41		1-Methylnaphthalene	0.687	0.659	4.1	97	0.00	8.00
42	P	1,2,4,5-Tetrachlorobenzen	0.298	0.275	7.7	97	0.00	8.08
43	I	Acenaphthene-d10	1.000	1.000	0.0	95	0.00	9.10
		----------	True	Calc.	% Drift	----------		
44	P	Hexachlorocyclopentadiene	5.000	1.039	79.2#	23	0.00	8.07
		----------	AvgRF	CCRF	% Dev	----------		
45	P	2,4,6-Trichlorophenol	0.367	0.352	4.1	101	0.00	8.24
46	P	2,4,5-Trichlorophenol	0.402	0.368	8.5	101	0.00	8.30
47	S	2-Fluorobiphenyl	1.448	1.406	2.9	97	0.00	8.33
48	P	1,1'-Biphenyl	1.633	1.554	4.8	86	0.00	8.44
49	P	2-Chloronaphthalene	1.226	1.161	5.3	95	0.00	8.45
50	P	2-Nitroaniline	0.451	0.412	8.6	93	-0.01	8.59
51		p-Dinitrobenzene	0.253	0.232	8.3	102	-0.01	8.77
52	P	Acenaphthylene	1.998	1.811	9.4	91	0.00	8.93
53	P	Dimethylphthalate	1.411	1.290	8.6	89	-0.01	8.83
54		m-Dinitrobenzene	0.235	0.217	7.7	98	-0.01	8.86
55	P	2,6-Dinitrotoluene	0.333	0.307	7.8	93	-0.01	8.89
56		o-Dinitrobenzene	0.319	0.289	9.4	85	-0.02	8.94
57	P	Acenaphthene	1.329	1.248	6.1	92	0.00	9.13
58	P	3-Nitroaniline	0.366	0.354	3.3	98	-0.01	9.08
		----------	True	Calc.	% Drift	----------		
59	P	2,4-Dinitrophenol	5.000	1.770	64.6#	59	0.00	9.22
		----------	AvgRF	CCRF	% Dev	----------		
60	P	Dibenzofuran	1.773	1.674	5.6	92	0.00	9.34
61	P	2,4-Dinitrotoluene	0.425	0.398	6.4	92	-0.01	9.36
62	P	4-Nitrophenol	0.205	0.124	39.5#	70	0.00	9.38
63		2,3,5,6-Tetrachlorophenol	0.297	0.228	23.2#	85	0.00	9.46
64	P	2,3,4,6-Tetrachlorophenol	0.308	0.245	20.5#	92	0.00	9.51
65	P	Fluorene	1.384	1.321	4.6	93	0.00	9.74
66	P	4-Chlorophenyl-phenylethe	0.668	0.608	9.0	90	0.00	9.76
67	P	Diethylphthalate	1.409	1.266	10.1	90	-0.01	9.66
68		Thionazin	0.299	0.284	5.0	87	-0.01	9.75
69	P	4-Nitroaniline	0.408	0.357	12.5	90	-0.03	9.79
70	I	Phenanthrene-d10	1.000	1.000	0.0	93	0.00	10.84
		----------	True	Calc.	% Drift	----------		
71	P	4,6-Dinitro-2-methylpheno	5.000	3.541	29.2#	96	-0.01	9.84
		----------	AvgRF	CCRF	% Dev	----------		
72	P	n-Nitrosodiphenylamine	0.622	0.557	10.5	92	-0.01	9.91
73		Diphenylamine	0.729	0.669	8.2	92	-0.01	9.91
74		1,2-Diphenylhydrazine	0.896	0.795	11.3	87	-0.01	9.94
		----------	True	Calc.	% Drift	----------		
75	S	2,4,6-Tribromophenol	10.000	9.500	5.0	97	-0.01	10.03
		----------	AvgRF	CCRF	% Dev	----------		
76		Sulfotep	0.132	0.122	7.6	87	0.00	10.13
77		Phorate	0.462	0.435	5.8	91	0.00	10.26
78	P	4-Bromophenyl-phenylether	0.192	0.174	9.4	93	0.00	10.33
79	P	Hexachlorobenzene	0.192	0.168	12.5	93	0.00	10.38

Continuing Calibration Summary

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2952-CC2918
Lab FileID: X072390.D

			True	Calc.	% Drift			
80		Dimethoate	5.000	4.746	5.1	96	-0.02	10.46
			AvgRF	CCRF	% Dev			
81		Simazine	0.141	0.117	17.0	85	-0.03	10.53
82	P	Atrazine	0.234	0.206	12.0	86	-0.02	10.57
			True	Calc.	% Drift			
83	P	Pentachlorophenol	5.000	1.257	74.9#	33	0.00	10.64
			AvgRF	CCRF	% Dev			
84	P	Phenanthrene	1.209	1.117	7.6	88	-0.01	10.86
85	P	Anthracene	1.260	1.143	9.3	90	-0.01	10.92
86		Disulfoton	0.483	0.453	6.2	88	0.00	10.89
87	P	Carbazole	1.112	1.038	6.7	93	-0.01	11.14
			True	Calc.	% Drift			
88		Methyl Parathion	5.000	4.405	11.9	92	0.00	11.32
			AvgRF	CCRF	% Dev			
89	P	Di-n-butylphthalate	1.241	1.175	5.3	97	0.00	11.61
			True	Calc.	% Drift			
90		Ethyl Parathion	5.000	4.798	4.0	102	0.00	11.79
			AvgRF	CCRF	% Dev			
91	P	Fluoranthene	1.121	1.069	4.6	96	-0.01	12.27
92	I	Chrysene-d12	1.000	1.000	0.0	101	0.00	14.05
			True	Calc.	% Drift			
93		Benzidine	5.000	5.008	-0.2	150	0.00	12.46
			AvgRF	CCRF	% Dev			
94	P	Pyrene	1.661	1.464	11.9	92	0.00	12.53
95	S	Terphenyl-d14	1.063	0.995	6.4	102	0.00	12.76
			True	Calc.	% Drift			
96		Famphur	5.000	5.761	-15.2	117	0.00	13.30
97	P	Butylbenzylphthalate	5.000	4.828	3.4	112	0.00	13.39
98	P	3,3'-Dichlorobenzidine	5.000	5.197	-3.9	128	0.00	14.04
			AvgRF	CCRF	% Dev			
99	P	Benzo[a]anthracene	1.257	1.156	8.0	100	0.00	14.03
100	P	Chrysene	1.339	1.218	9.0	99	-0.01	14.07
			True	Calc.	% Drift			
101	P	bis(2-Ethylhexyl)phthalat	5.000	4.964	0.7	131	0.00	14.19
			AvgRF	CCRF	% Dev			
102	I	Perylene-d12	1.000	1.000	0.0	98	0.00	16.23
			True	Calc.	% Drift			
103	P	Di-n-octylphthalate	5.000	5.794	-15.9	109	0.00	15.15
104	P	Benzo[b]fluoranthene	5.000	5.134	-2.7	111	-0.02	15.58
			AvgRF	CCRF	% Dev			
105	P	Benzo[k]fluoranthene	1.420	1.202	15.4	93	-0.02	15.62

Continuing Calibration Summary

Job Number: FA77615 **Sample:** SX2952-CC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072390.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

			True	Calc.	% Drift			
106	P	Benzo[a]pyrene	5.000	4.818	3.6	112	-0.02	16.12
107	P	Indeno[1,2,3-cd]pyrene	5.000	7.627	-52.5#	176	-0.02	17.89
108	P	Dibenz[a,h]anthracene	5.000	6.970	-39.4#	168	-0.02	17.94
109	P	Benzo[g,h,i]perylene	5.000	5.754	-15.1	125	-0.02	18.24

		AvgRF	CCRF	% Dev			
110	1,4-Dichlorobenzene-d4A	1.000	1.000	0.0	109	0.00	5.63
111	2-Picoline		NA				
112	N-Nitrosomethylethylamine		NA				
113	Methyl methanesulfonate		NA				
114	N-Nitrosodiethylamine		NA				
115	Ethyl methanesulfonate		NA				
116	Pentachloroethane		NA				
117	N-Nitrosopyrrolidine		NA				
118	N-Nitrosomorpholine		NA				
119	O-Toluidine		NA				
120	Naphthalene-d8A	1.000	1.000	0.0	103	0.00	7.06
121	N-Nitrosopiperidine		NA				
122	A,A-Dimethylphenethylamin		NA				
123	Hexachloropropene		NA				

		True	Calc.	% Drift
124	N-Nitrosodi-n-butylamine		NA	

		AvgRF	CCRF	% Dev			
125	p-Phenylenediamine		NA				
126	Isosafrole		NA				
127	Acenaphthene-d10A	1.000	1.000	0.0	99	0.00	9.10
128	Safrole		NA				
129	1-Chloronaphthalene		NA				
130	Diphenyl Ether		NA				

		True	Calc.	% Drift
131	1,4-Naphthoquinone		NA	

		AvgRF	CCRF	% Dev			
132	Pentachlorobenzene		NA				
133	1-Naphthylamine		NA				
134	2-Naphthylamine		NA				

		True	Calc.	% Drift
135	5-Nitro-o-toluidine		NA	

		AvgRF	CCRF	% Dev			
136	Phenanthrene-d10A	1.000	1.000	0.0	95	0.00	10.84

		True	Calc.	% Drift
137	1,3,5-Trinitrobenzene		NA	

		AvgRF	CCRF	% Dev
138	Diallate		NA	
139	Phenacetin		NA	
140	4-Aminobiphenyl		NA	
141	Pronamide		NA	

Continuing Calibration Summary

Job Number: FA77615 **Sample:** SX2952-CC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072390.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

142		Pentachloronitrobenzene		----------NA----------				
		---------- True	Calc.	% Drift	----------			
143		4-Nitroquinoline 1-Oxide		----------NA----------				
		---------- AvgRF	CCRF	% Dev	----------			
144		Methapyrilene		----------NA----------				
145		Isodrin		----------NA----------				
146	I	Chrysene-d12A	1.000	1.000	0.0	103	0.00	14.05
		---------- True	Calc.	% Drift	----------			
147		Aramite		----------NA----------				
148		p-(Dimethylamine)azobenze		----------NA----------				
149		Chlorobenzilate		----------NA----------				
		---------- AvgRF	CCRF	% Dev	----------			
150		Kepone		----------NA----------				
151		3,3'-Dimethylbenzidine		----------NA----------				
		---------- True	Calc.	% Drift	----------			
152		2-Acetylaminofluorene		----------NA----------				
		---------- AvgRF	CCRF	% Dev	----------			
153	I	Perylene-d12A	1.000	1.000	0.0	98	0.00	16.23
154		7,12-Dimethylbenz(a)anthr		----------NA----------				
		---------- True	Calc.	% Drift	----------			
155		Hexachlorophene		----------NA----------				
156		3-Methylcholanthrene		----------NA----------				
157		Dibenz(a,j)acridine		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
x071365.D 8270DApp9SX-062320.m Fri Aug 14 02:21:43 2020

Run Sequence Report

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Run ID: S6F248	**Method:** SW846 8270D	**Instrument ID:** GCMS6F

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
S6F248-DFTPP	6F06435.D	07/29/20 12:37	n/a	DFTPP Tune
S6F248-IC248	6F06436.D	07/29/20 12:53	n/a	Initial cal 1
S6F248-IC248	6F06437.D	07/29/20 13:19	n/a	Initial cal 5
S6F248-IC248	6F06438.D	07/29/20 13:45	n/a	Initial cal 10
S6F248-IC248	6F06439.D	07/29/20 14:10	n/a	Initial cal 25
S6F248-ICC248	6F06440.D	07/29/20 14:36	n/a	Initial cal 50
S6F248-IC248	6F06441.D	07/29/20 15:02	n/a	Initial cal 60
S6F248-IC248	6F06442.D	07/29/20 15:28	n/a	Initial cal 75
S6F248-IC248	6F06443.D	07/29/20 15:54	n/a	Initial cal 100
S6F248-ICV248	6F06444.D	07/29/20 16:20	n/a	Initial cal verification 50
S6F248-ICV248	6F06445.D	07/29/20 16:46	n/a	Initial cal verification 50

Run Sequence Report

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Run ID: S6F251	**Method:** SW846 8270E	**Instrument ID:** GCMS6F

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
S6F251-DFTPP	6F06485.D	08/11/20 12:38	n/a	DFTPP Tune
S6F251-CC248	6F06486.D	08/11/20 12:54	n/a	Continuing cal 50
OP81484-BS	6F06487.D	08/11/20 13:20	OP81484	Blank Spike
OP81484-MB	6F06488.D	08/11/20 13:46	OP81484	Method Blank
ZZZZZZ	6F06489.D	08/11/20 14:12	OP81484	(unrelated sample)
ZZZZZZ	6F06490.D	08/11/20 14:38	OP81484	(unrelated sample)
ZZZZZZ	6F06491.D	08/11/20 15:05	OP81484	(unrelated sample)
ZZZZZZ	6F06492.D	08/11/20 15:31	OP81484	(unrelated sample)
FA77615-1	6F06493.D	08/11/20 15:57	OP81484	CS-29
FA77615-2	6F06494.D	08/11/20 16:24	OP81484	CS-30
FA77615-3	6F06495.D	08/11/20 16:50	OP81484	CS-31
FA77615-4	6F06496.D	08/11/20 17:16	OP81484	DUP-01
FA77615-5	6F06497.D	08/11/20 17:42	OP81484	CS-40
FA77615-6	6F06498.D	08/11/20 18:08	OP81484	CS-41
OP81484-MS	6F06499.D	08/11/20 18:34	OP81484	Matrix Spike
OP81484-MSD	6F06500.D	08/11/20 19:00	OP81484	Matrix Spike Duplicate
FA77615-7	6F06501.D	08/11/20 19:26	OP81484	CS-42
FA77615-8	6F06502.D	08/11/20 19:52	OP81484	CS-43
FA77615-9	6F06503.D	08/11/20 20:18	OP81484	CS-44
FA77615-10	6F06504.D	08/11/20 20:44	OP81484	CS-45
FA77615-11	6F06505.D	08/11/20 21:10	OP81484	CS-54
FA77615-12	6F06506.D	08/11/20 21:35	OP81484	CS-46
ZZZZZZ	6F06508.D	08/11/20 22:27	OP81484	(unrelated sample)
ZZZZZZ	6F06509.D	08/11/20 22:52	OP81484	(unrelated sample)
ZZZZZZ	6F06510.D	08/11/20 23:18	OP81484	(unrelated sample)

Run Sequence Report

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Run ID: S6F253	**Method:** SW846 8270E	**Instrument ID:** GCMS6F

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
S6F253-DFTPP	6F06540.D	08/13/20 13:09	n/a	DFTPP Tune
S6F253-CC248	6F06541.D	08/13/20 13:25	n/a	Continuing cal 50
OP81540-BS	6F06542.D	08/13/20 13:51	OP81540	Blank Spike
OP81540-MB	6F06543.D	08/13/20 14:16	OP81540	Method Blank
ZZZZZZ	6F06544.D	08/13/20 14:42	OP81540	(unrelated sample)
OP81538-BS	6F06545.D	08/13/20 15:08	OP81538	Blank Spike
OP81538-MB	6F06546.D	08/13/20 15:34	OP81538	Method Blank
FA77698-11	6F06547.D	08/13/20 16:00	OP81540	(used for QC only; not part of job FA77615)
FA77698-5	6F06550.D	08/13/20 17:18	OP81538	(used for QC only; not part of job FA77615)
ZZZZZZ	6F06553.D	08/13/20 18:36	OP81540	(unrelated sample)
ZZZZZZ	6F06554.D	08/13/20 19:02	OP81540	(unrelated sample)
ZZZZZZ	6F06555.D	08/13/20 19:28	OP81540	(unrelated sample)
ZZZZZZ	6F06556.D	08/13/20 19:54	OP81540	(unrelated sample)
ZZZZZZ	6F06557.D	08/13/20 20:20	OP81540	(unrelated sample)
ZZZZZZ	6F06559.D	08/13/20 21:12	OP81538	(unrelated sample)
ZZZZZZ	6F06560.D	08/13/20 21:37	OP81538	(unrelated sample)
ZZZZZZ	6F06561.D	08/13/20 22:03	OP81538	(unrelated sample)
ZZZZZZ	6F06562.D	08/13/20 22:29	OP81538	(unrelated sample)
ZZZZZZ	6F06563.D	08/13/20 22:54	OP81538	(unrelated sample)
ZZZZZZ	6F06564.D	08/13/20 23:20	OP81538	(unrelated sample)
ZZZZZZ	6F06565.D	08/13/20 23:46	OP81538	(unrelated sample)
ZZZZZZ	6F06566.D	08/14/20 00:11	OP81538	(unrelated sample)
ZZZZZZ	6F06567.D	08/14/20 00:36	OP81538	(unrelated sample)
ZZZZZZ	6F06568.D	08/14/20 01:02	OP81538	(unrelated sample)

Run Sequence Report

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Run ID: S6F254	**Method:** SW846 8270E	**Instrument ID:** GCMS6F

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
S6F254-DFTPP	6F06572.D	08/14/20 12:30	n/a	DFTPP Tune
S6F254-CC248	6F06573.D	08/14/20 12:47	n/a	Continuing cal 50
ZZZZZZ	6F06574.D	08/14/20 13:13	OP81538	(unrelated sample)
ZZZZZZ	6F06575.D	08/14/20 13:38	OP81538	(unrelated sample)
FA77512-1	6F06576.D	08/14/20 14:04	OP81455	(used for QC only; not part of job FA77615)
ZZZZZZ	6F06577.D	08/14/20 14:30	OP81538	(unrelated sample)
ZZZZZZ	6F06578.D	08/14/20 14:56	OP81538	(unrelated sample)
FA77615-13	6F06579.D	08/14/20 15:22	OP81538	CS-47
ZZZZZZ	6F06580.D	08/14/20 15:48	OP81545	(unrelated sample)
FA77698-11	6F06581.D	08/14/20 16:14	OP81540	(used for QC only; not part of job FA77615)
OP81540-MS	6F06582.D	08/14/20 16:40	OP81540	Matrix Spike
OP81540-MSD	6F06583.D	08/14/20 17:06	OP81540	Matrix Spike Duplicate
ZZZZZZ	6F06584.D	08/14/20 17:33	OP81540	(unrelated sample)
ZZZZZZ	6F06585.D	08/14/20 17:58	OP81540	(unrelated sample)
ZZZZZZ	6F06586.D	08/14/20 18:25	OP81540	(unrelated sample)
ZZZZZZ	6F06587.D	08/14/20 18:50	OP81538	(unrelated sample)
FA77698-5	6F06588.D	08/14/20 19:16	OP81538	(used for QC only; not part of job FA77615)
OP81538-MS	6F06589.D	08/14/20 19:42	OP81538	Matrix Spike
OP81538-MSD	6F06590.D	08/14/20 20:08	OP81538	Matrix Spike Duplicate

Run Sequence Report

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Run ID: S7G472 **Method:** SW846 8270D BY SIM **Instrument ID:** GCMS7G

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
S7G472-DFTPP	7G10822.D	07/21/20 08:44	n/a	DFTPP Tune
S7G472-IC472	7G10833.D	07/21/20 13:31	n/a	Initial cal 1
S7G472-IC472	7G10834.D	07/21/20 13:55	n/a	Initial cal 2
S7G472-IC472	7G10835.D	07/21/20 14:19	n/a	Initial cal 3
S7G472-ICC472	7G10836.D	07/21/20 14:43	n/a	Initial cal 4
S7G472-IC472	7G10837.D	07/21/20 15:07	n/a	Initial cal 5
S7G472-IC472	7G10838.D	07/21/20 15:31	n/a	Initial cal 6
S7G472-IC472	7G10839.D	07/21/20 15:55	n/a	Initial cal 7
S7G472-ICV472	7G10840.D	07/21/20 16:19	n/a	Initial cal verification 4
S7G472-DFTPP	7G10841.D	07/21/20 16:43	n/a	DFTPP Tune
S7G472-CC472	7G10842.D	07/21/20 17:01	n/a	Continuing cal 4
OP81120-MB	7G10843.D	07/21/20 17:25	OP81120	Method Blank
OP81126-MB	7G10845.D	07/21/20 18:13	OP81126	Method Blank
OP81126-BS	7G10846.D	07/21/20 18:38	OP81126	Blank Spike
ZZZZZZ	7G10847.D	07/21/20 19:02	OP81120	(unrelated sample)
ZZZZZZ	7G10848.D	07/21/20 19:26	OP81120	(unrelated sample)
ZZZZZZ	7G10849.D	07/21/20 19:50	OP81120	(unrelated sample)
ZZZZZZ	7G10850.D	07/21/20 20:14	OP81120	(unrelated sample)
ZZZZZZ	7G10851.D	07/21/20 20:37	OP81120	(unrelated sample)
FA76888-6	7G10852.D	07/21/20 21:01	OP81120	(used for QC only; not part of job FA77615)
OP81120-MS	7G10853.D	07/21/20 21:25	OP81120	Matrix Spike
OP81120-MSD	7G10854.D	07/21/20 21:48	OP81120	Matrix Spike Duplicate
ZZZZZZ	7G10855.D	07/21/20 22:12	OP81126	(unrelated sample)
ZZZZZZ	7G10856.D	07/21/20 22:35	OP81126	(unrelated sample)
ZZZZZZ	7G10857.D	07/21/20 22:59	OP81126	(unrelated sample)
FA76878-1	7G10858.D	07/21/20 23:23	OP81126	(used for QC only; not part of job FA77615)
OP81126-MS	7G10859.D	07/21/20 23:47	OP81126	Matrix Spike
OP81126-MSD	7G10860.D	07/22/20 00:10	OP81126	Matrix Spike Duplicate
ZZZZZZ	7G10861.D	07/22/20 00:34	OP81126	(unrelated sample)
ZZZZZZ	7G10862.D	07/22/20 00:58	OP81126	(unrelated sample)
ZZZZZZ	7G10863.D	07/22/20 01:22	OP81126	(unrelated sample)
ZZZZZZ	7G10864.D	07/22/20 01:45	OP81126	(unrelated sample)
ZZZZZZ	7G10865.D	07/22/20 02:09	OP81126	(unrelated sample)
ZZZZZZ	7G10867.D	07/22/20 02:56	OP81126	(unrelated sample)
ZZZZZZ	7G10868.D	07/22/20 03:20	OP81126	(unrelated sample)

Run Sequence Report

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Run ID: S7G483 **Method:** SW846 8270E BY SIM **Instrument ID:** GCMS7G

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
S7G483-DFTPP	7G11129.D	08/11/20 08:11	n/a	DFTPP Tune
S7G483-CC472	7G11130.D	08/11/20 08:29	n/a	Continuing cal 4
OP81485-MB	7G11131.D	08/11/20 08:52	OP81485	Method Blank
OP81485-BS	7G11132.D	08/11/20 09:16	OP81485	Blank Spike
ZZZZZZ	7G11133.D	08/11/20 09:39	OP81485	(unrelated sample)
ZZZZZZ	7G11134.D	08/11/20 10:03	OP81485	(unrelated sample)
ZZZZZZ	7G11135.D	08/11/20 10:27	OP81485	(unrelated sample)
ZZZZZZ	7G11136.D	08/11/20 10:50	OP81485	(unrelated sample)
FA77615-1	7G11137.D	08/11/20 11:14	OP81485	CS-29
FA77615-2	7G11138.D	08/11/20 11:38	OP81485	CS-30
FA77615-3	7G11139.D	08/11/20 12:02	OP81485	CS-31
FA77615-4	7G11140.D	08/11/20 12:26	OP81485	DUP-01
FA77615-5	7G11141.D	08/11/20 12:50	OP81485	CS-40
FA77615-6	7G11142.D	08/11/20 13:14	OP81485	CS-41
OP81485-MS	7G11143.D	08/11/20 13:38	OP81485	Matrix Spike
OP81485-MSD	7G11144.D	08/11/20 14:02	OP81485	Matrix Spike Duplicate
FA77615-7	7G11145.D	08/11/20 14:26	OP81485	CS-42
FA77615-8	7G11146.D	08/11/20 14:51	OP81485	CS-43
FA77615-9	7G11147.D	08/11/20 15:15	OP81485	CS-44
FA77615-10	7G11148.D	08/11/20 15:39	OP81485	CS-45
FA77615-11	7G11149.D	08/11/20 16:04	OP81485	CS-54
FA77615-12	7G11150.D	08/11/20 16:28	OP81485	CS-46
FA77615-13	7G11151.D	08/11/20 16:53	OP81485	CS-47
ZZZZZZ	7G11152.D	08/11/20 17:17	OP81485	(unrelated sample)
ZZZZZZ	7G11153.D	08/11/20 17:41	OP81485	(unrelated sample)
ZZZZZZ	7G11154.D	08/11/20 18:05	OP81485	(unrelated sample)
ZZZZZZ	7G11155.D	08/11/20 18:30	OP81483	(unrelated sample)
ZZZZZZ	7G11156.D	08/11/20 18:54	OP81483	(unrelated sample)
ZZZZZZ	7G11157.D	08/11/20 19:18	OP81483	(unrelated sample)
FA77581-5	7G11158.D	08/11/20 19:42	OP81483	(used for QC only; not part of job FA77615)

Run Sequence Report

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Run ID: SX2918 **Method:** EPA 625.1 **Instrument ID:** GCMSX

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
SX2918-DFTPP	X071355.D	06/23/20 09:47	n/a	DFTPP Tune
SX2918-IC2918	X071356.D	06/23/20 10:04	n/a	Initial cal 1
SX2918-IC2918	X071357.D	06/23/20 10:30	n/a	Initial cal 5
SX2918-IC2918	X071358.D	06/23/20 10:55	n/a	Initial cal 10
SX2918-IC2918	X071359.D	06/23/20 11:21	n/a	Initial cal 25
SX2918-IC2918	X071360.D	06/23/20 11:46	n/a	Initial cal 50
SX2918-IC2918	X071361.D	06/23/20 12:12	n/a	Initial cal 60
SX2918-IC2918	X071362.D	06/23/20 12:37	n/a	Initial cal 75
SX2918-IC2918	X071363.D	06/23/20 13:03	n/a	Initial cal 100
SX2918-IC2918	X071364.D	06/23/20 13:29	n/a	Initial cal 1
SX2918-IC2918	X071365.D	06/23/20 13:54	n/a	Initial cal 5
SX2918-IC2918	X071366.D	06/23/20 14:20	n/a	Initial cal 10
SX2918-IC2918	X071367.D	06/23/20 14:46	n/a	Initial cal 25
SX2918-ICC2918	X071368.D	06/23/20 15:12	n/a	Initial cal 50
SX2918-IC2918	X071369.D	06/23/20 15:39	n/a	Initial cal 60
SX2918-IC2918	X071370.D	06/23/20 16:05	n/a	Initial cal 75
SX2918-IC2918	X071371.D	06/23/20 16:31	n/a	Initial cal 100
SX2918-ICV2918	X071372.D	06/23/20 16:58	n/a	Initial cal verification 50
SX2918-ICV2918	X071373.D	06/23/20 17:25	n/a	Initial cal verification 50
SX2918-ICV2918	X071374.D	06/23/20 17:51	n/a	Initial cal verification 50
SX2918-ICV2918	X071375.D	06/23/20 18:17	n/a	Initial cal verification 50
SX2918-ICV2918	X071376.D	06/23/20 18:43	n/a	Initial cal verification 50
SX2918-DFTPP	X071377.D	06/23/20 19:06	n/a	DFTPP Tune
SX2918-CC2918	X071378.D	06/23/20 19:24	n/a	Continuing cal 50
SX2918-CC2918	X071379.D	06/23/20 19:50	n/a	Continuing cal 50
OP80558-BS	X071380.D	06/23/20 20:15	OP80558	Blank Spike
OP80558-BS2	X071381.D	06/23/20 20:41	OP80558	Blank Spike
OP80558-MB	X071382.D	06/23/20 21:07	OP80558	Method Blank
ZZZZZZ	X071383.D	06/23/20 21:32	OP80558	(unrelated sample)
ZZZZZZ	X071384.D	06/23/20 21:58	OP80558	(unrelated sample)
ZZZZZZ	X071385.D	06/23/20 22:24	OP80558	(unrelated sample)
ZZZZZZ	X071386.D	06/23/20 22:49	OP80558	(unrelated sample)
OP80508-BS	X071387.D	06/23/20 23:15	OP80508	Blank Spike
OP80508-BS2	X071388.D	06/23/20 23:40	OP80508	Blank Spike
OP80508-MB	X071389.D	06/24/20 00:06	OP80508	Method Blank
ZZZZZZ	X071391.D	06/24/20 00:56	OP80508	(unrelated sample)
OP80508-MS	X071393.D	06/24/20 01:47	OP80508	Matrix Spike
OP80508-MSD	X071394.D	06/24/20 02:12	OP80508	Matrix Spike Duplicate
OP80508-MS2	X071396.D	06/24/20 03:03	OP80508	Matrix Spike
OP80508-MSD2	X071397.D	06/24/20 03:28	OP80508	Matrix Spike Duplicate
ZZZZZZ	X071398.D	06/24/20 03:54	OP80508	(unrelated sample)
ZZZZZZ	X071399.D	06/24/20 04:19	OP80508	(unrelated sample)
SX2918-ICV2918	X071416.D	06/24/20 15:22	n/a	Initial cal verification 50

Run Sequence Report

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Run ID: SX2951 **Method:** SW846 8270E **Instrument ID:** GCMSX

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
SX2951-DFTPP	X072356.D	08/12/20 10:07	n/a	DFTPP Tune
SX2951-CC2918	X072357.D	08/12/20 10:24	n/a	Continuing cal 50
SX2951-CC2918	X072358.D	08/12/20 10:49	n/a	Continuing cal 5
ZZZZZZ	X072359.D	08/12/20 11:16	OP81482	(unrelated sample)
ZZZZZZ	X072360.D	08/12/20 11:42	OP81482	(unrelated sample)
ZZZZZZ	X072361.D	08/12/20 12:07	OP81482	(unrelated sample)
ZZZZZZ	X072362.D	08/12/20 12:33	OP81482	(unrelated sample)
ZZZZZZ	X072366.D	08/12/20 14:16	OP81482	(unrelated sample)
ZZZZZZ	X072368.D	08/12/20 15:08	OP81482	(unrelated sample)
ZZZZZZ	X072369.D	08/12/20 15:33	OP81482	(unrelated sample)
ZZZZZZ	X072371.D	08/12/20 16:25	OP81482	(unrelated sample)
ZZZZZZ	X072373.D	08/12/20 17:17	OP81482	(unrelated sample)
FA77581-5	X072374.D	08/12/20 17:43	OP81482	(used for QC only; not part of job FA77615)
ZZZZZZ	X072375.D	08/12/20 18:09	OP81482	(unrelated sample)
ZZZZZZ	X072376.D	08/12/20 18:34	OP81482	(unrelated sample)
FA77615-3	X072377.D	08/12/20 19:00	OP81484	CS-31
FA77615-12	X072379.D	08/12/20 19:51	OP81484	CS-46
ZZZZZZ	X072381.D	08/12/20 20:42	OP81484	(unrelated sample)
ZZZZZZ	X072382.D	08/12/20 21:08	OP81484	(unrelated sample)
FA77615-11	X072383.D	08/12/20 21:34	OP81484	CS-54
ZZZZZZ	X072384.D	08/12/20 21:59	OP81455	(unrelated sample)

Run Sequence Report

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Run ID: SX2952 **Method:** SW846 8270E **Instrument ID:** GCMSX

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
SX2952-DFTPP	X072388.D	08/13/20 13:21	n/a	DFTPP Tune
SX2952-CC2918	X072389.D	08/13/20 13:38	n/a	Continuing cal 50
SX2952-CC2918	X072390.D	08/13/20 14:03	n/a	Continuing cal 5
OP81519-BS	X072391.D	08/13/20 14:29	OP81519	Blank Spike
OP81519-MB	X072392.D	08/13/20 14:55	OP81519	Method Blank
FA77503-1	X072393.D	08/13/20 15:21	OP81519	(used for QC only; not part of job FA77615)
OP81519-MS	X072394.D	08/13/20 15:47	OP81519	Matrix Spike
OP81519-MSD	X072395.D	08/13/20 16:13	OP81519	Matrix Spike Duplicate
OP81516-BS	X072396.D	08/13/20 16:39	OP81516	Blank Spike
OP81516-MB	X072397.D	08/13/20 17:05	OP81516	Method Blank
ZZZZZZ	X072398.D	08/13/20 17:31	OP81516	(unrelated sample)
FA77615-10	X072399.D	08/13/20 17:56	OP81484	CS-45
OP81455-MS	X072400.D	08/13/20 18:22	OP81455	Matrix Spike
OP81455-MSD	X072401.D	08/13/20 18:48	OP81455	Matrix Spike Duplicate
ZZZZZZ	X072403.D	08/13/20 19:40	OP81538	(unrelated sample)
OP81545-BS	X072409.D	08/13/20 22:14	OP81545	Blank Spike
OP81545-MB	X072410.D	08/13/20 22:39	OP81545	Method Blank
ZZZZZZ	X072411.D	08/13/20 23:05	OP81545	(unrelated sample)
ZZZZZZ	X072412.D	08/13/20 23:30	OP81545	(unrelated sample)
ZZZZZZ	X072413.D	08/13/20 23:56	OP81545	(unrelated sample)
ZZZZZZ	X072414.D	08/14/20 00:21	OP81545	(unrelated sample)
ZZZZZZ	X072415.D	08/14/20 00:46	OP81545	(unrelated sample)
ZZZZZZ	X072416.D	08/14/20 01:12	OP81545	(unrelated sample)

MS Semi-volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F254_081420\6F06579.D
Sample : fa77615-13
Misc : op81538,S6F254,30.1,,,1,1,soil
ALS Vial : 15 Sample Multiplier: 1
Acq On : 14 Aug 2020 3:22 pm Operator: marthav

Quant Time: Aug 14 15:51:54 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

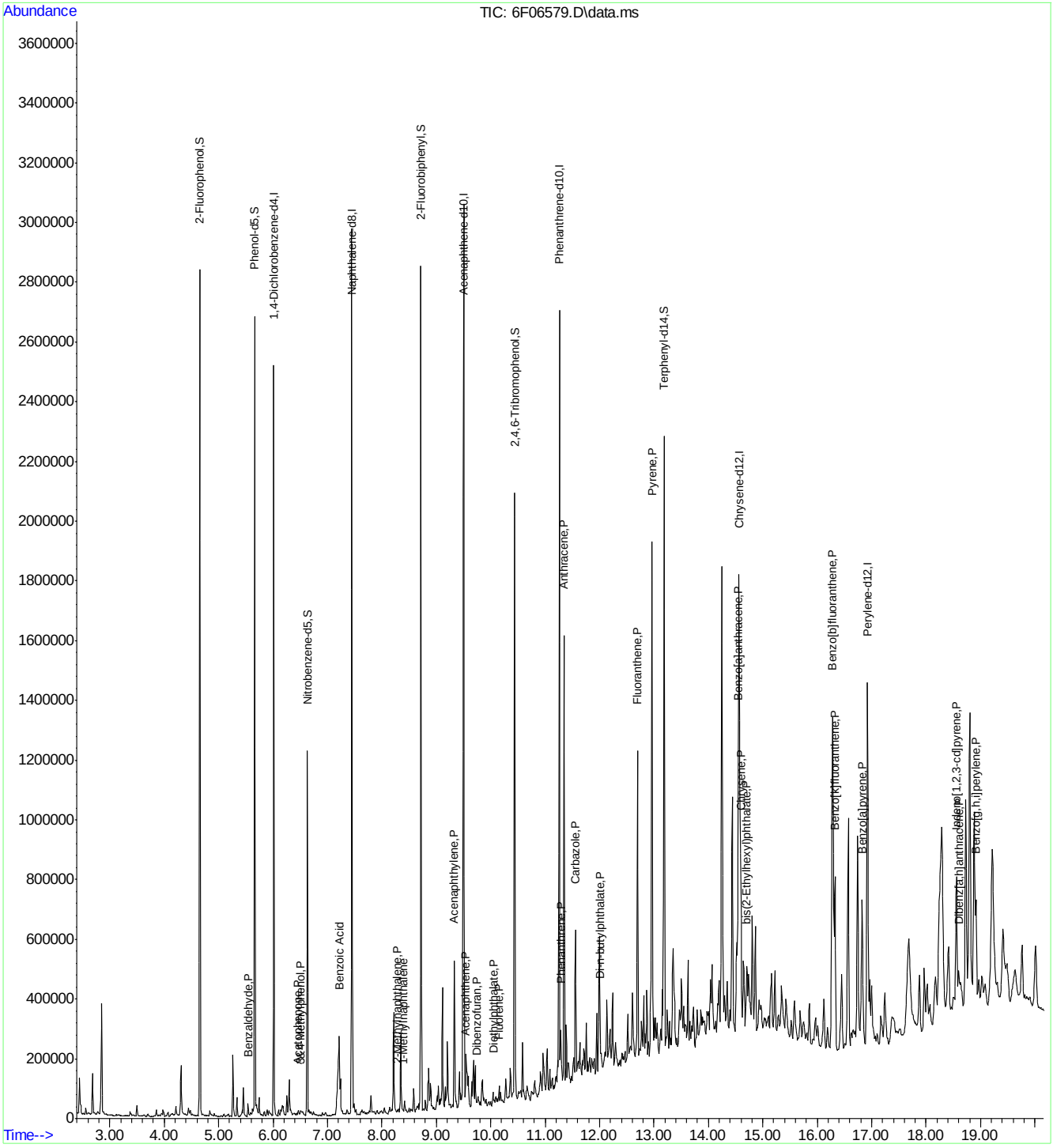
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.013	152	375456	40.00	ppm	0.00
22) Naphthalene-d8	7.447	136	1298657	40.00	ppm	0.00
43) Acenaphthene-d10	9.500	164	599262	40.00	ppm	0.00
70) Phenanthrene-d10	11.260	188	950099	40.00	ppm	0.00
92) Chrysene-d12	14.560	240	607805	40.00	ppm	0.00
102) Perylene-d12	16.924	264	584576	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	4.655	112	780725	55.03	ppm	0.00
Spiked Amount 100.000	Range 40 - 102		Recovery = 55.03%			
9) Phenol-d5	5.665	99	971865	57.71	ppm	0.01
Spiked Amount 100.000	Range 41 - 100		Recovery = 57.71%			
23) Nitrobenzene-d5	6.634	82	403252	28.30	ppm	0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 56.60%			
47) 2-Fluorobiphenyl	8.720	172	825958	35.26	ppm	0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 70.52%			
75) 2,4,6-Tribromophenol	10.442	330	251165	78.55	ppm	0.00
Spiked Amount 100.000	Range 42 - 108		Recovery = 78.55%			
95) Terphenyl-d14	13.186	244	664298	38.88	ppm	0.00
Spiked Amount 50.000	Range 45 - 119		Recovery = 77.76%			
Target Compounds						Qvalue
5) Benzaldehyde	5.537	106	12397	1.078	ppm	97
18) Acetophenone	6.462	105	5976	0.308	ppm	95
21) 3&4-Methylphenol	6.505	108	2353	0.173	ppm	94
30) Benzoic Acid	7.217	105	137045	15.315	ppm	95
40) 2-Methylnaphthalene	8.281	141	1817	0.085	ppm	94
41) 1-Methylnaphthalene	8.393	142	1779	0.075	ppm	86
52) Acenaphthylene	9.329	152	186240	6.219	ppm	99
57) Acenaphthene	9.538	153	12274	0.617	ppm	96
60) Dibenzofuran	9.741	168	3895	0.142	ppm	98
65) Fluorene	10.153	166	20697	0.930	ppm	95
67) Diethylphthalate	10.051	149	7715	0.340	ppm	89
84) Phenanthrene	11.287	178	64658	2.273	ppm	99
85) Anthracene	11.346	178	561614	19.426	ppm	99
87) Carbazole	11.554	167	173967	6.678	ppm	98
89) Di-n-butylphthalate	12.009	149	4278	0.130	ppm	86
91) Fluoranthene	12.699	202	385544	12.872	ppm	98
94) Pyrene	12.966	202	678308	31.158	ppm	99
99) Benzo[a]anthracene	14.550	228	219997	10.802	ppm	99
100) Chrysene	14.598	228	386469	19.558	ppm	98
101) bis(2-Ethylhexyl)phtha...	14.699	149	8620	0.592	ppm	88
104) Benzo[b]fluoranthene	16.282	252	816012	43.490	ppm	98
105) Benzo[k]fluoranthene	16.325	252	289377	14.829	ppm	97
106) Benzo[a]pyrene	16.823	252	245128	14.067	ppm	99
107) Indeno[1,2,3-cd]pyrene	18.556	276	286511	17.661	ppm	99
108) Dibenz[a,h]anthracene	18.598	278	58350	3.369	ppm	95
109) Benzo[g,h,i]perylene	18.919	276	202598	11.570	ppm	96

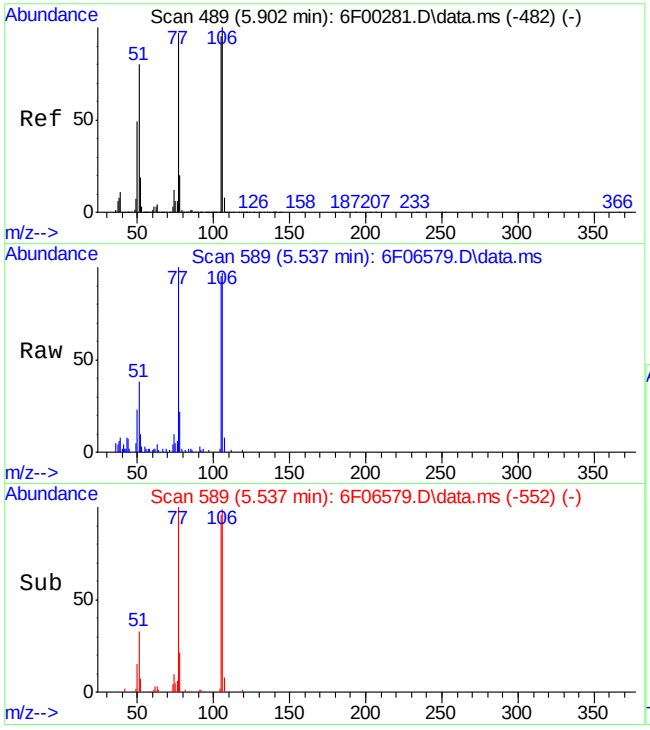
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F254_081420\6F06579.D
Sample : fa77615-13
Misc : op81538,S6F254,30.1,,,1,1,soil
ALS Vial : 15 Sample Multiplier: 1
Acq On : 14 Aug 2020 3:22 pm Operator: marthav

Quant Time: Aug 14 15:51:54 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

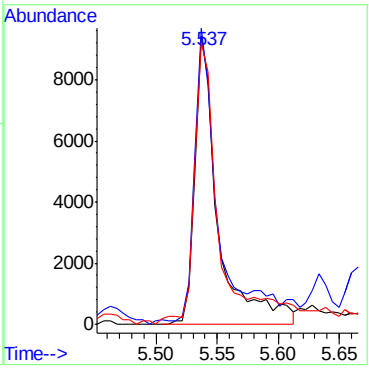


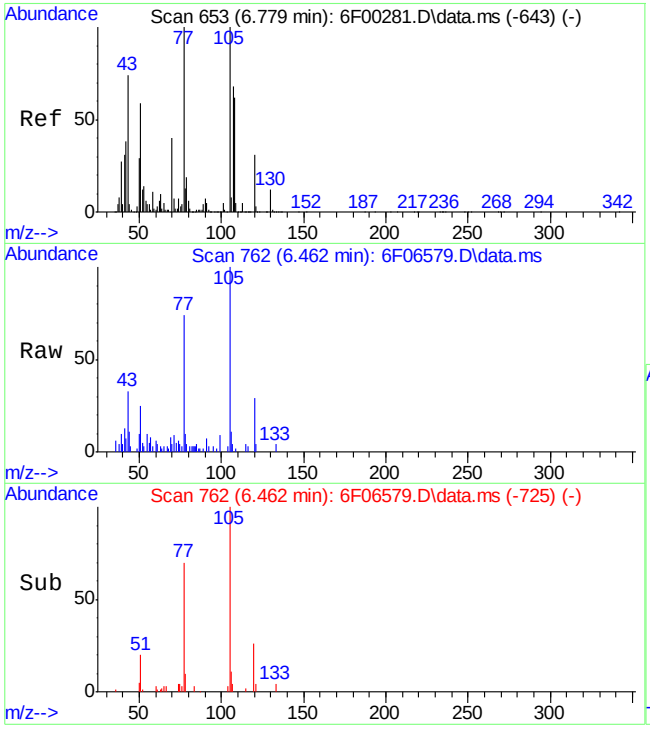


#5
Benzaldehyde
Concen: 1.078 ppm
RT: 5.537 min Scan# 589
Delta R.T. -0.002 min
Lab File: 6F06579.D
Acq: 14 Aug 2020 3:22 pm

Tgt Ion:106 Resp: 12397

Ion	Ratio	Lower	Upper
106	100		
77	99.6	72.6	132.6
105	95.2	68.9	128.9

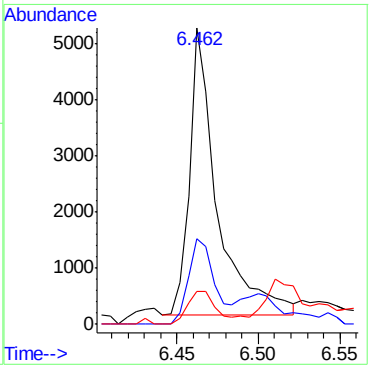


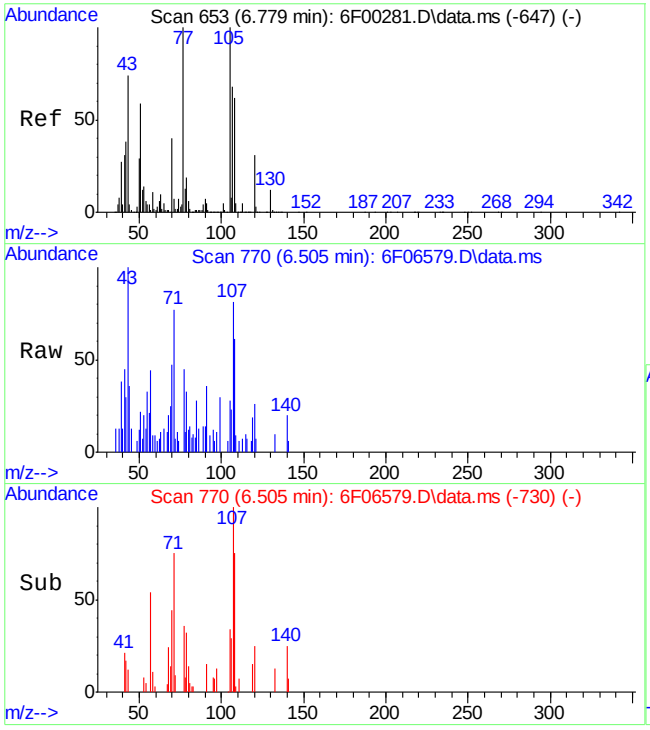


#18
Acetophenone
Concen: 0.308 ppm
RT: 6.462 min Scan# 762
Delta R.T. -0.002 min
Lab File: 6F06579.D
Acq: 14 Aug 2020 3:22 pm

Tgt Ion:105 Resp: 5976

Ion	Ratio	Lower	Upper
105	100		
120	28.3	0.2	60.2
106	4.7	0.0	37.9

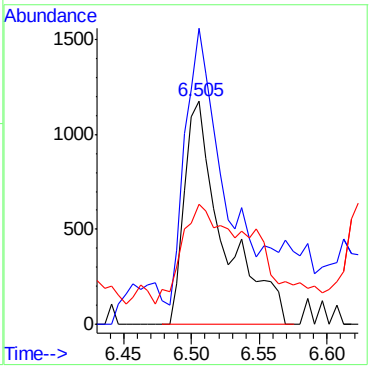


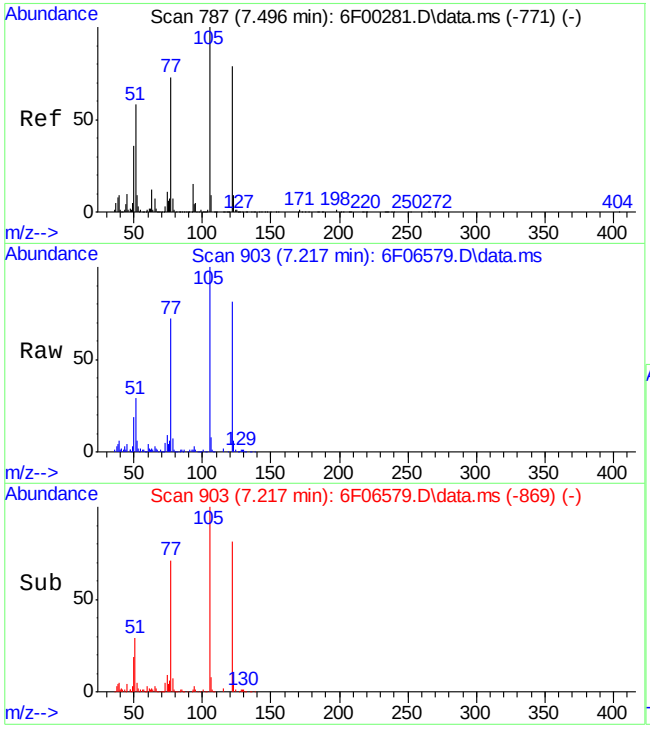


#21
3&4-Methylphenol
Concen: 0.173 ppm
RT: 6.505 min Scan# 770
Delta R.T. 0.013 min
Lab File: 6F06579.D
Acq: 14 Aug 2020 3:22 pm

Tgt Ion:108 Resp: 2353

Ion	Ratio	Lower	Upper
108	100		
107	110.9	74.3	134.3
79	37.1	3.6	63.6

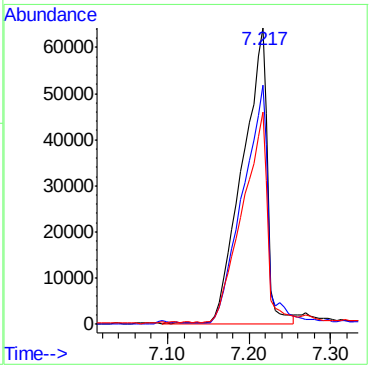


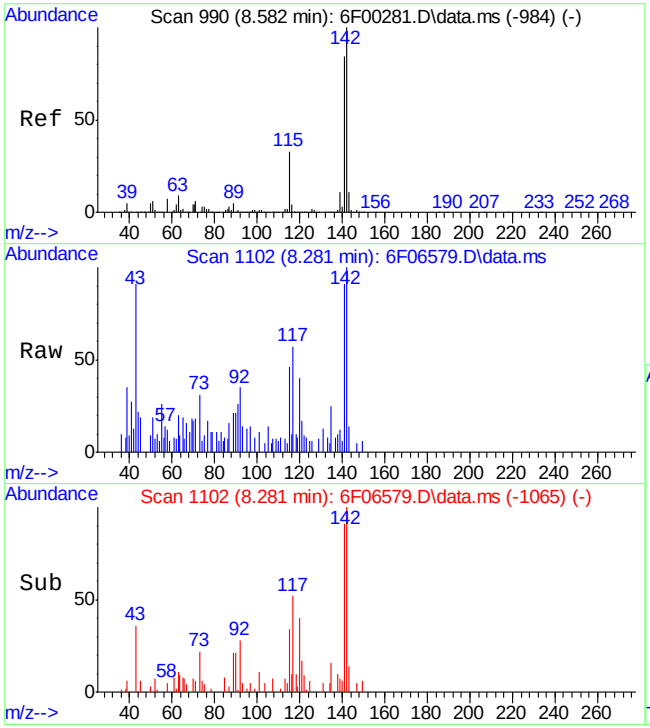


#30
Benzoic Acid
Concen: 15.315 ppm
RT: 7.217 min Scan# 903
Delta R.T. -0.018 min
Lab File: 6F06579.D
Acq: 14 Aug 2020 3:22 pm

Tgt Ion:105 Resp: 137045

Ion	Ratio	Lower	Upper
105	100		
122	80.1	53.1	113.1
77	71.1	47.3	107.3

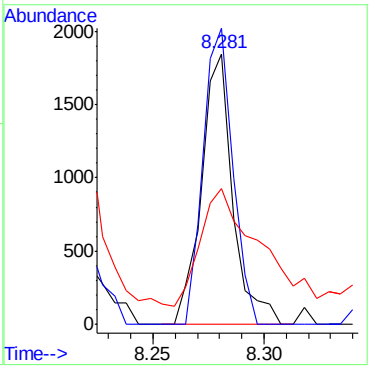


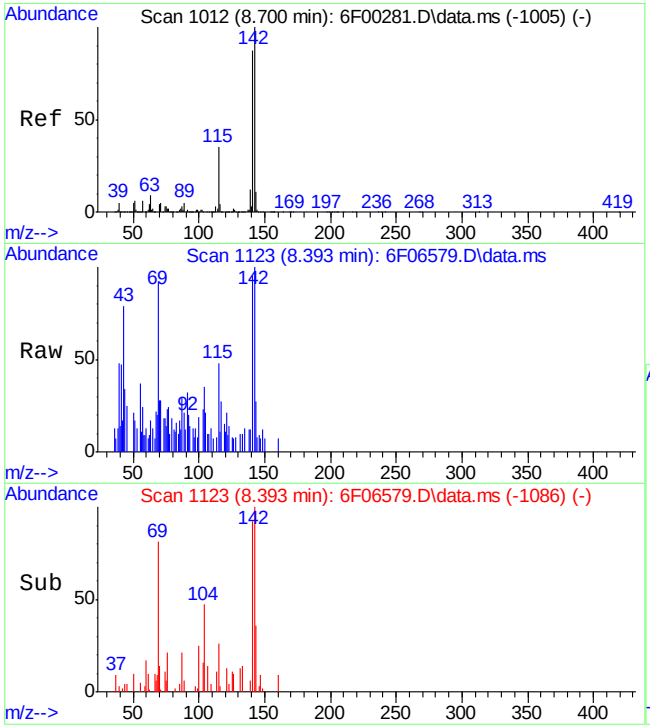


#40
2-Methylnaphthalene
Concen: 0.085 ppm
RT: 8.281 min Scan# 1102
Delta R.T. -0.000 min
Lab File: 6F06579.D
Acq: 14 Aug 2020 3:22 pm

Tgt Ion:141 Resp: 1817

Ion	Ratio	Lower	Upper
141	100		
142	109.4	88.1	148.1
115	39.6	10.2	70.2

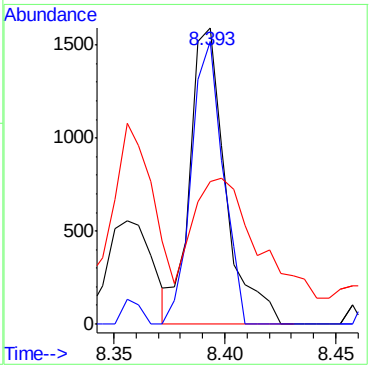


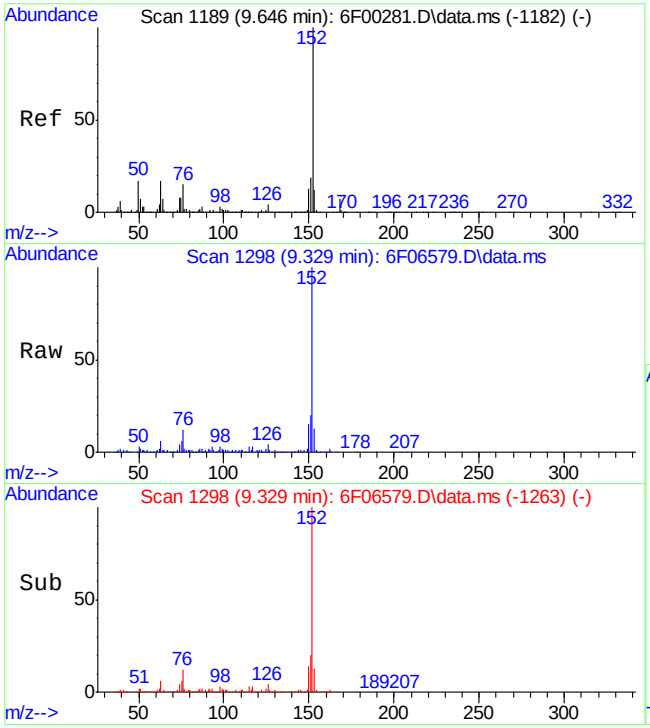


#41
1-Methylnaphthalene
Concen: 0.075 ppm
RT: 8.393 min Scan# 1123
Delta R.T. -0.002 min
Lab File: 6F06579.D
Acq: 14 Aug 2020 3:22 pm

Tgt Ion:142 Resp: 1779

Ion	Ratio	Lower	Upper
142	100		
141	101.6	59.2	119.2
115	27.5	6.2	66.2

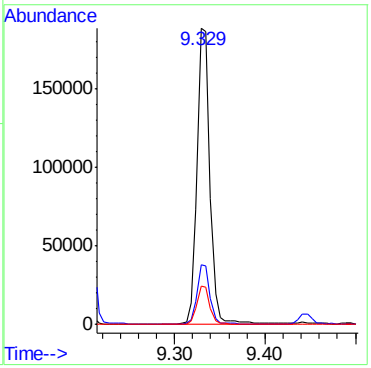


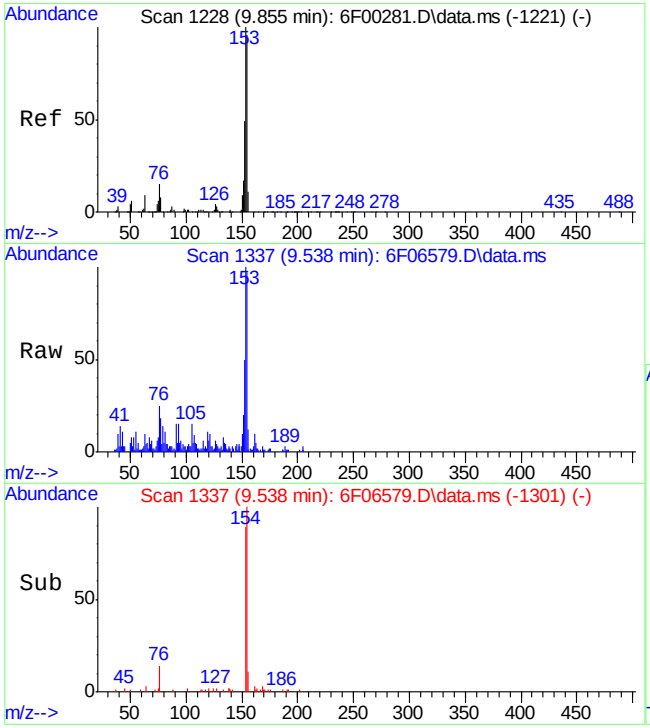


#52
Acenaphthylene
Concen: 6.219 ppm
RT: 9.329 min Scan# 1298
Delta R.T. -0.010 min
Lab File: 6F06579.D
Acq: 14 Aug 2020 3:22 pm

Tgt Ion:152 Resp: 186240

Ion	Ratio	Lower	Upper
152	100		
151	19.8	0.0	50.3
153	13.0	0.0	43.1

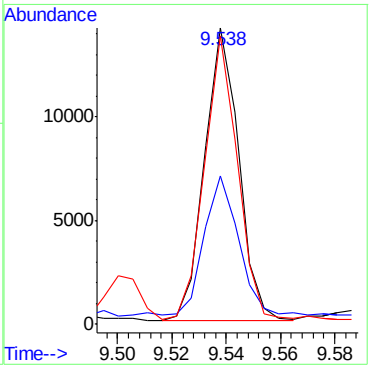


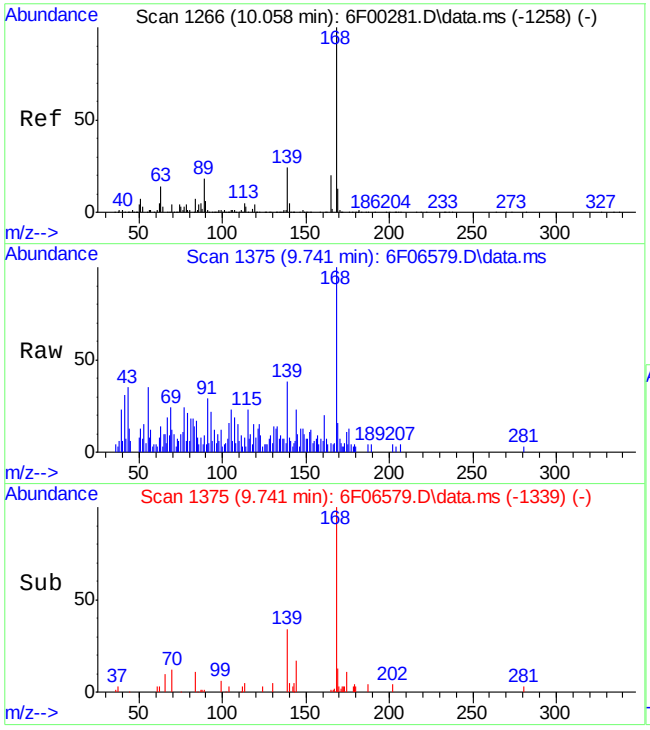


#57
Acenaphthene
Concen: 0.617 ppm
RT: 9.538 min Scan# 1337
Delta R.T. -0.008 min
Lab File: 6F06579.D
Acq: 14 Aug 2020 3:22 pm

Tgt Ion:153 Resp: 12274

Ion	Ratio	Lower	Upper
153	100		
152	47.2	18.2	78.2
154	96.9	61.3	121.3

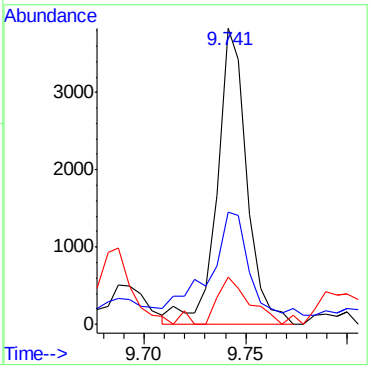


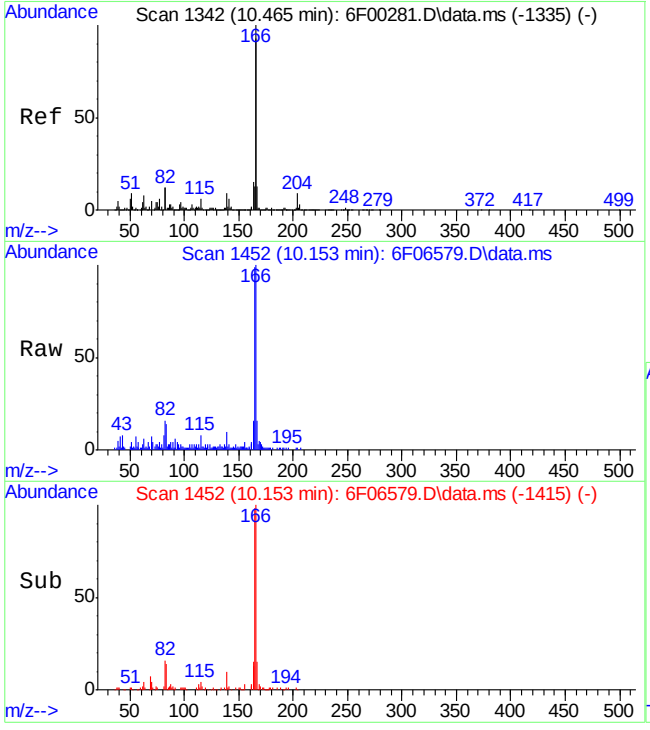


#60
Dibenzofuran
Concen: 0.142 ppm
RT: 9.741 min Scan# 1375
Delta R.T. -0.009 min
Lab File: 6F06579.D
Acq: 14 Aug 2020 3:22 pm

Tgt Ion:168 Resp: 3895

Ion	Ratio	Lower	Upper
168	100		
139	33.1	4.4	64.4
169	13.4	0.0	43.6

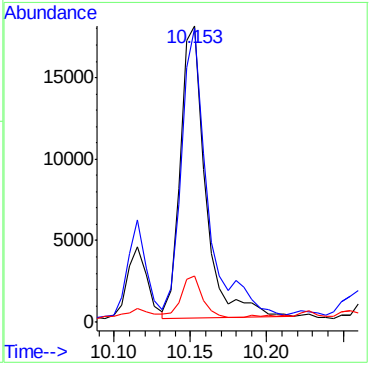


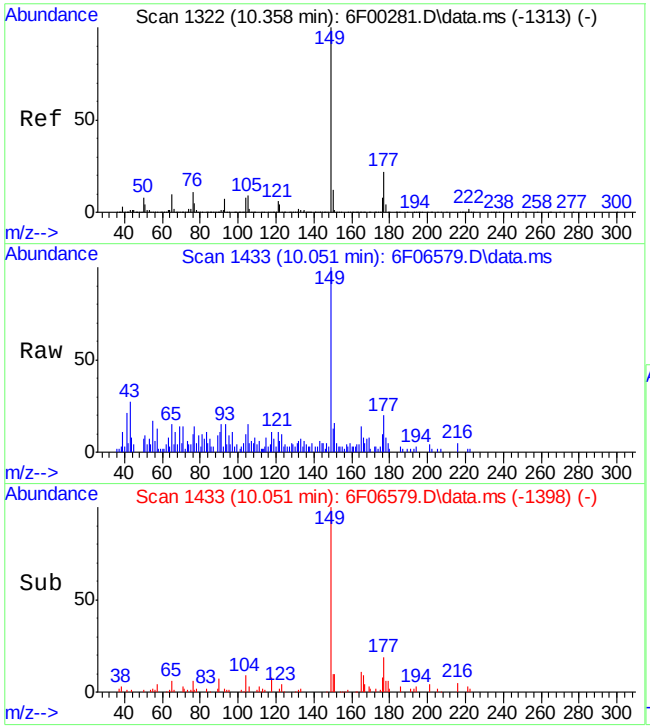


#65
Fluorene
Concen: 0.930 ppm
RT: 10.153 min Scan# 1452
Delta R.T. -0.002 min
Lab File: 6F06579.D
Acq: 14 Aug 2020 3:22 pm

Tgt Ion:166 Resp: 20697

Ion	Ratio	Lower	Upper
166	100		
165	98.2	62.6	122.6
167	13.7	0.0	43.1

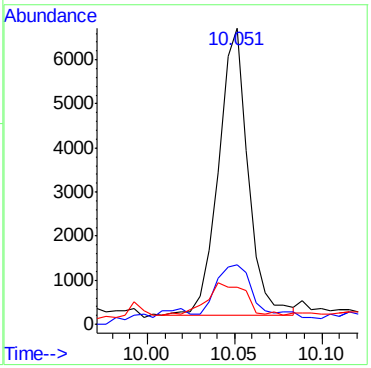


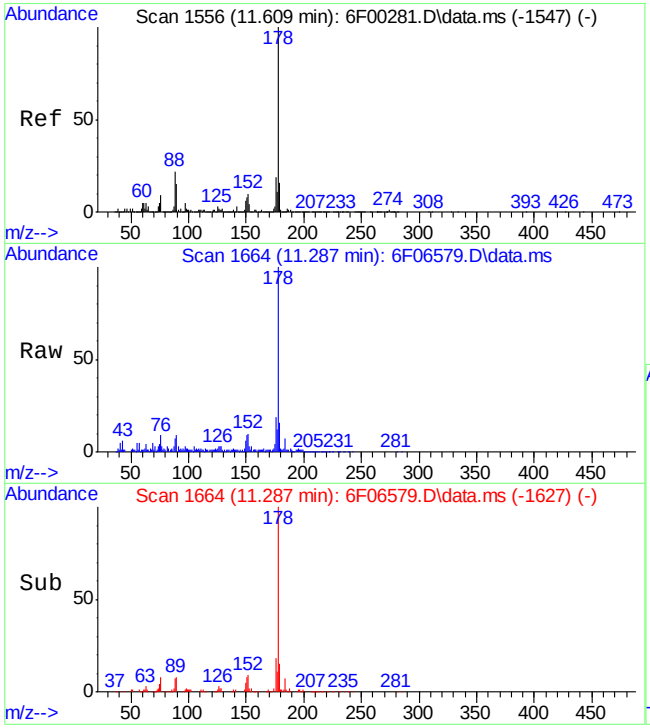


#67
Diethylphthalate
Concen: 0.340 ppm
RT: 10.051 min Scan# 1433
Delta R.T. -0.011 min
Lab File: 6F06579.D
Acq: 14 Aug 2020 3:22 pm

Tgt Ion:149 Resp: 7715

Ion	Ratio	Lower	Upper
149	100		
177	16.3	0.0	52.6
150	9.6	0.0	42.4

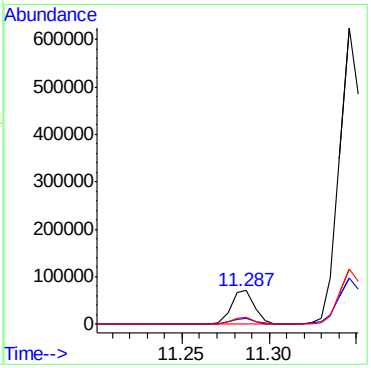


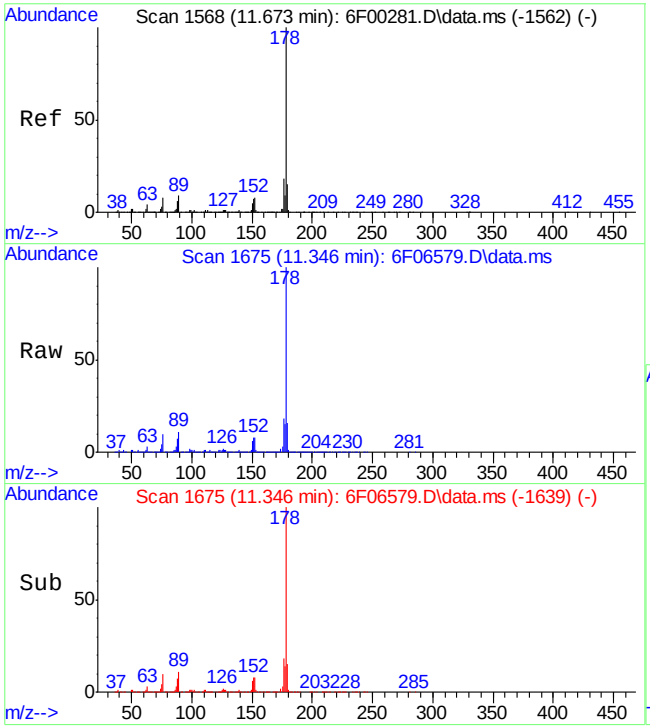


#84
Phenanthrene
Concen: 2.273 ppm
RT: 11.287 min Scan# 1664
Delta R.T. -0.003 min
Lab File: 6F06579.D
Acq: 14 Aug 2020 3:22 pm

Tgt Ion:178 Resp: 64658

Ion	Ratio	Lower	Upper
178	100		
179	15.2	0.0	45.3
176	18.7	0.0	49.4

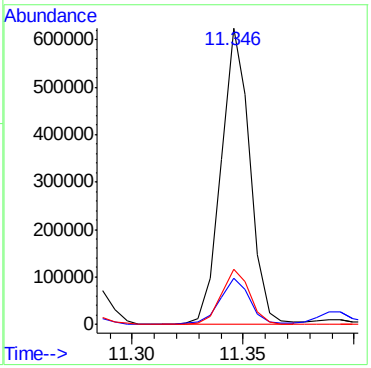


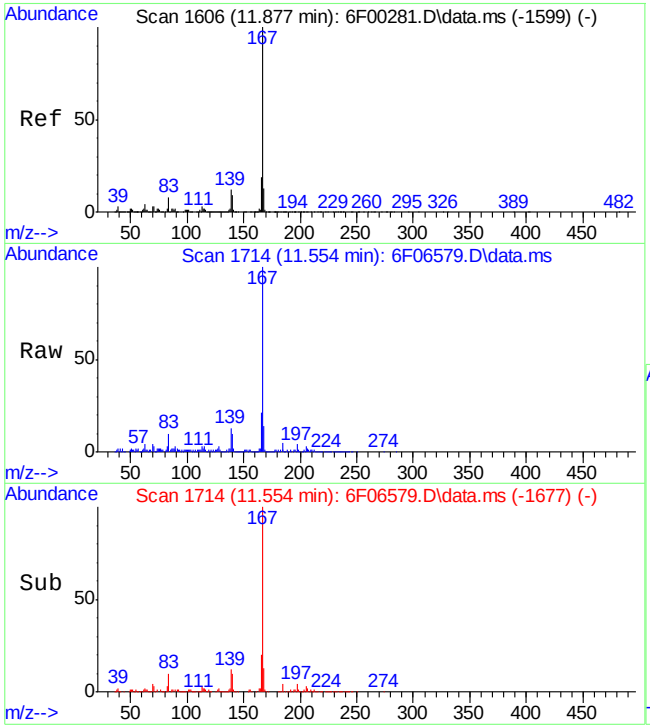


#85
Anthracene
Concen: 19.426 ppm
RT: 11.346 min Scan# 1675
Delta R.T. -0.006 min
Lab File: 6F06579.D
Acq: 14 Aug 2020 3:22 pm

Tgt Ion:178 Resp: 561614

Ion	Ratio	Lower	Upper
178	100		
179	15.4	0.0	45.7
176	18.4	0.0	48.9

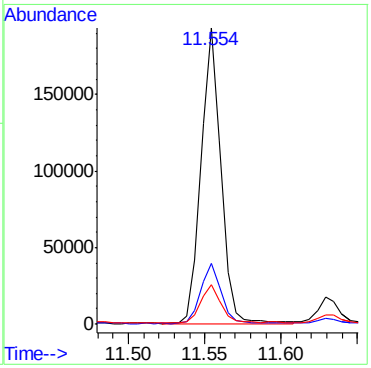


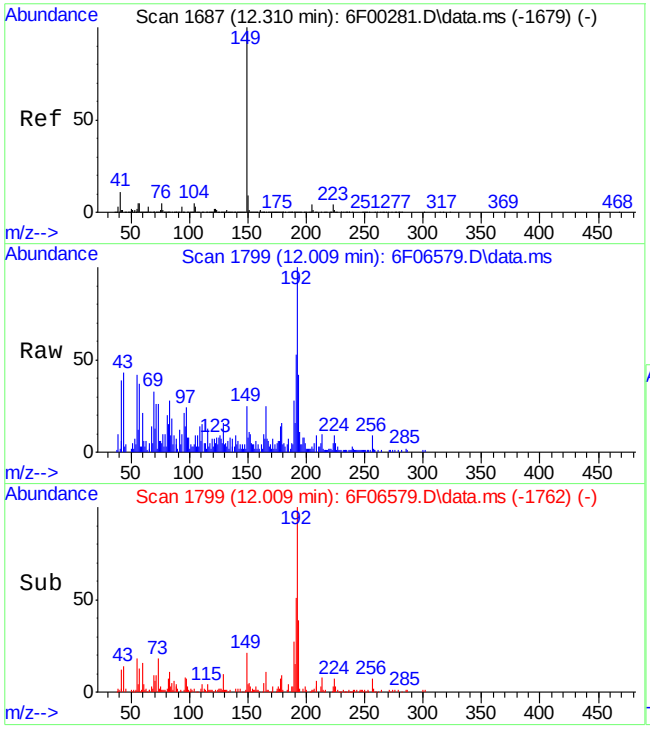


#87
Carbazole
Concen: 6.678 ppm
RT: 11.554 min Scan# 1714
Delta R.T. -0.001 min
Lab File: 6F06579.D
Acq: 14 Aug 2020 3:22 pm

Tgt Ion:167 Resp: 173967

Ion	Ratio	Lower	Upper
167	100		
166	20.4	0.0	51.1
139	12.9	0.0	43.8

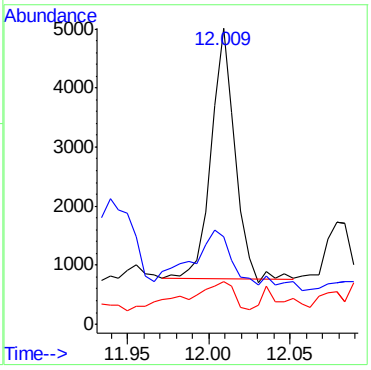


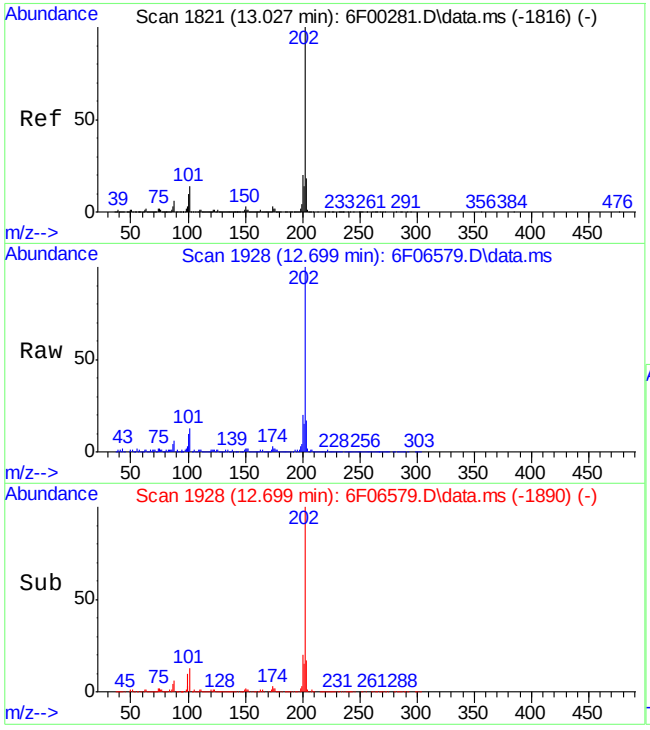


#89
Di-n-butylphthalate
Concen: 0.130 ppm
RT: 12.009 min Scan# 1799
Delta R.T. -0.001 min
Lab File: 6F06579.D
Acq: 14 Aug 2020 3:22 pm

Tgt Ion:149 Resp: 4278

Ion	Ratio	Lower	Upper
149	100		
150	15.8	0.0	39.3
104	7.0	0.0	35.0

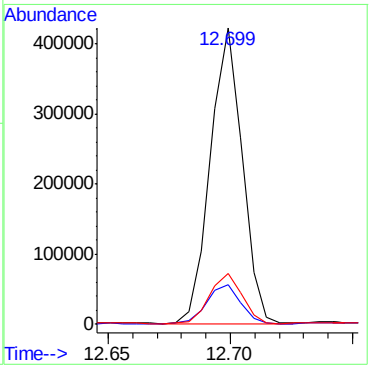


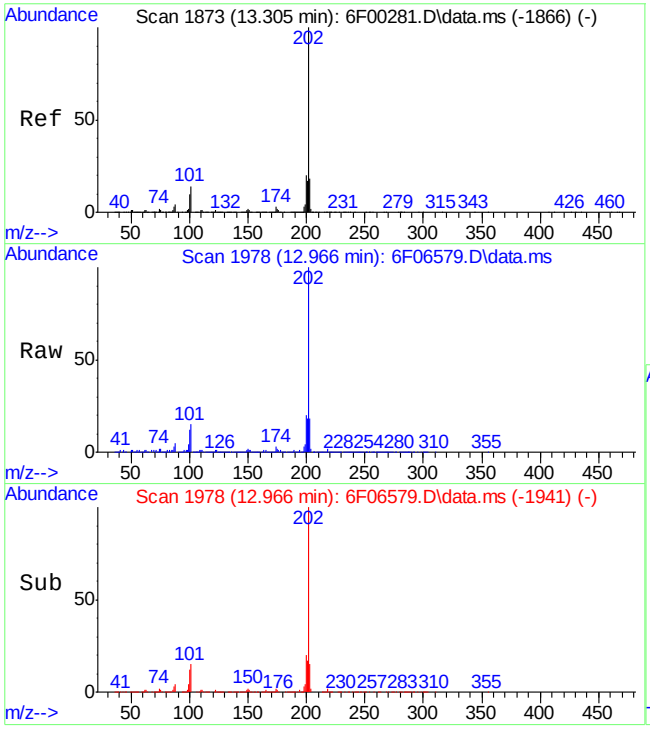


#91
Fluoranthene
Concen: 12.872 ppm
RT: 12.699 min Scan# 1928
Delta R.T. 0.003 min
Lab File: 6F06579.D
Acq: 14 Aug 2020 3:22 pm

Tgt Ion:202 Resp: 385544

Ion	Ratio	Lower	Upper
202	100		
101	13.2	0.0	44.1
203	17.1	0.0	47.9

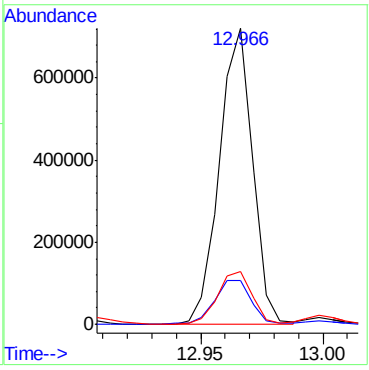


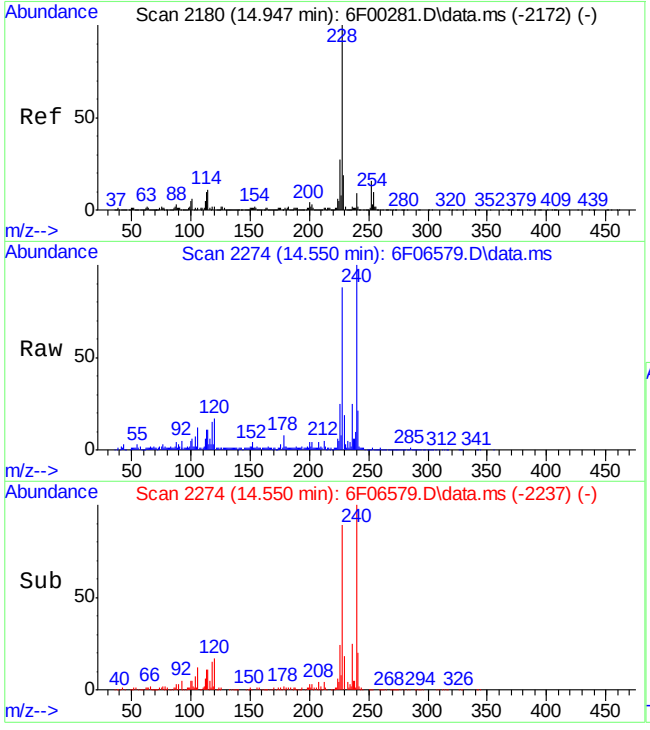


#94
Pyrene
Concen: 31.158 ppm
RT: 12.966 min Scan# 1978
Delta R.T. -0.001 min
Lab File: 6F06579.D
Acq: 14 Aug 2020 3:22 pm

Tgt Ion:202 Resp: 678308

Ion	Ratio	Lower	Upper
202	100		
101	14.6	0.0	44.1
203	17.4	0.0	47.8

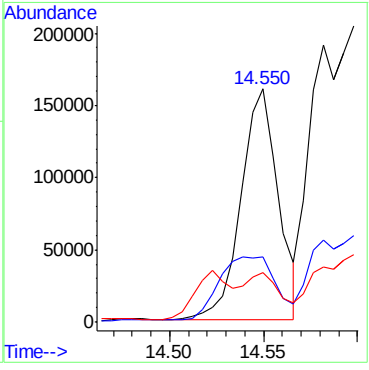


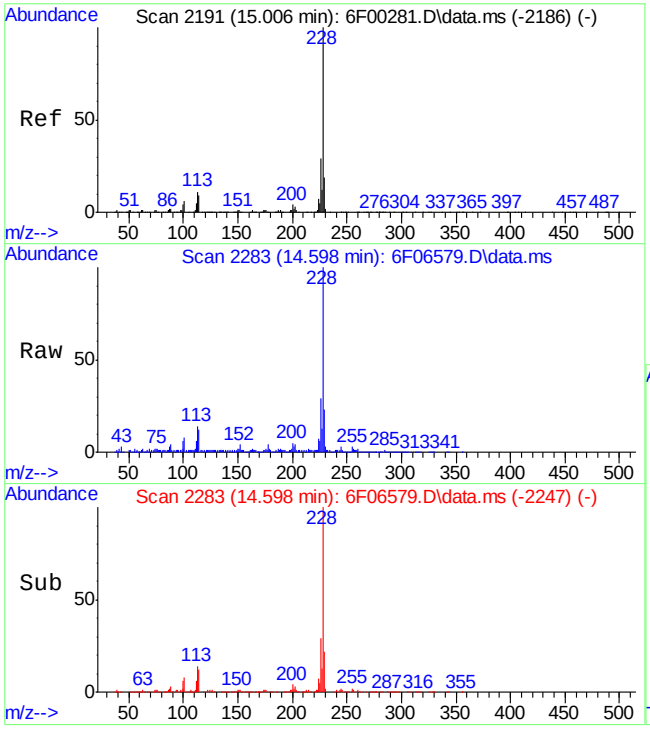


#99
Benzo[a]anthracene
Concen: 10.802 ppm
RT: 14.550 min Scan# 2274
Delta R.T. -0.000 min
Lab File: 6F06579.D
Acq: 14 Aug 2020 3:22 pm

Tgt Ion:228 Resp: 219997

Ion	Ratio	Lower	Upper
228	100		
226	27.1	0.0	57.8
229	19.1	0.0	49.8

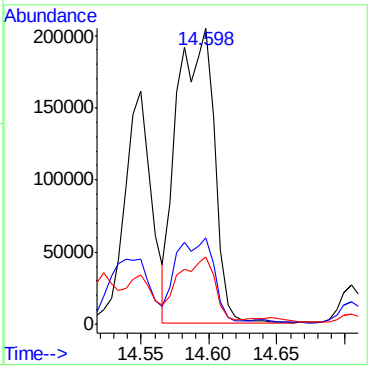


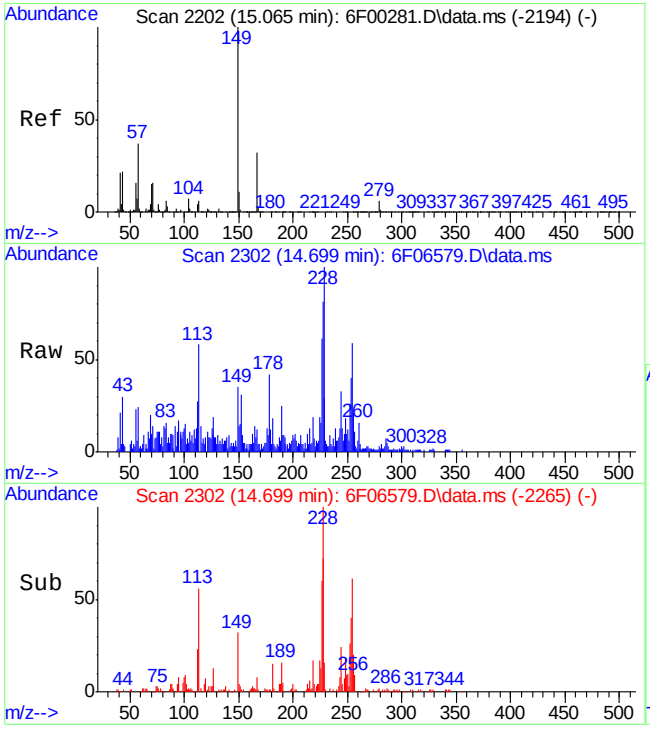


#100
Chrysene
Concen: 19.558 ppm
RT: 14.598 min Scan# 2283
Delta R.T. -0.007 min
Lab File: 6F06579.D
Acq: 14 Aug 2020 3:22 pm

Tgt Ion:228 Resp: 386469

Ion	Ratio	Lower	Upper
228	100		
226	28.6	0.0	59.8
229	21.1	0.0	49.9

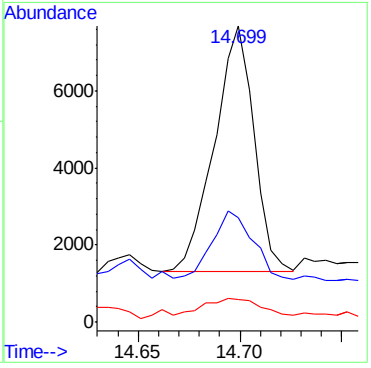


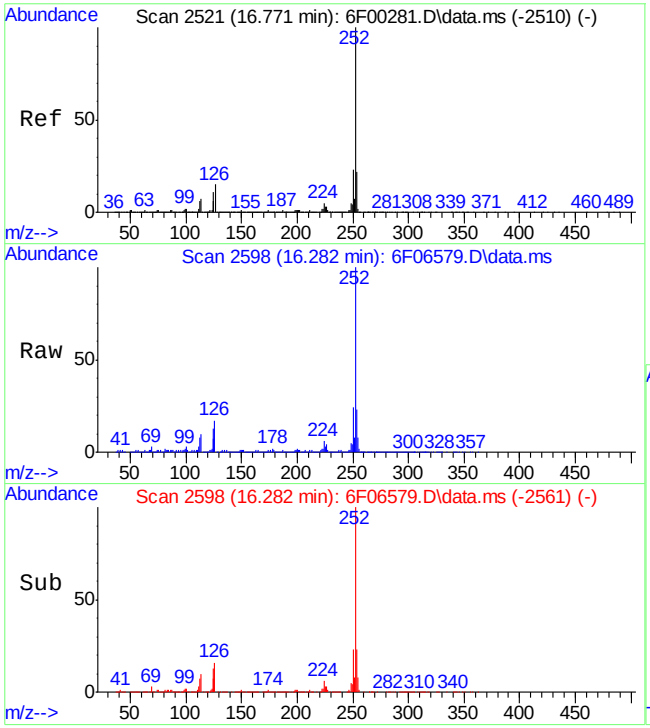


#101
bis(2-Ethylhexyl)phthalate
Concen: 0.592 ppm
RT: 14.699 min Scan# 2302
Delta R.T. -0.003 min
Lab File: 6F06579.D
Acq: 14 Aug 2020 3:22 pm

Tgt Ion:149 Resp: 8620

Ion	Ratio	Lower	Upper
149	100		
167	23.5	0.7	60.7
279	5.4	0.0	37.5

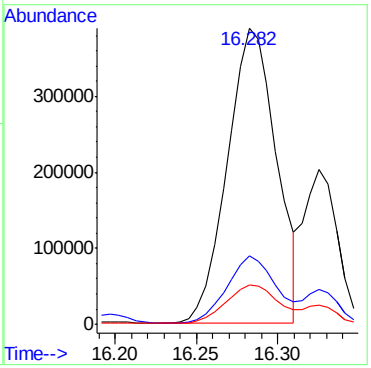


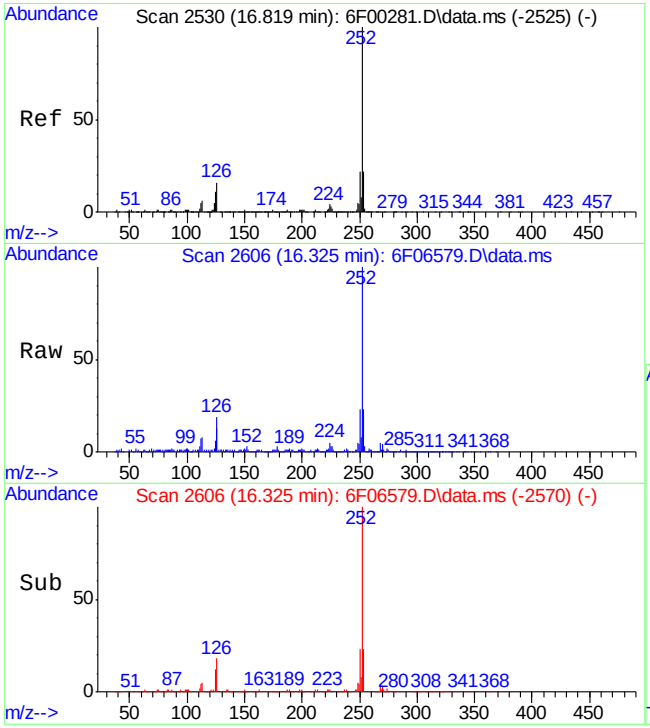


#104
Benzo[b]fluoranthene
Concen: 43.490 ppm
RT: 16.282 min Scan# 2598
Delta R.T. -0.001 min
Lab File: 6F06579.D
Acq: 14 Aug 2020 3:22 pm

Tgt Ion:252 Resp: 816012

Ion	Ratio	Lower	Upper
252	100		
253	22.9	0.0	51.8
125	12.7	0.0	42.8

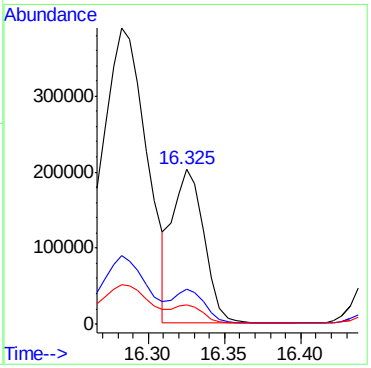


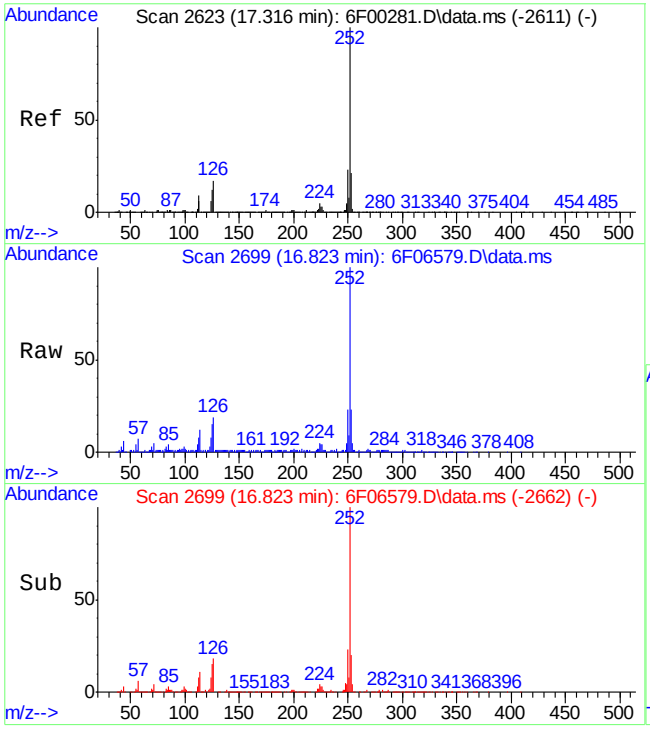


#105
Benzo[k]fluoranthene
Concen: 14.829 ppm
RT: 16.325 min Scan# 2606
Delta R.T. -0.009 min
Lab File: 6F06579.D
Acq: 14 Aug 2020 3:22 pm

Tgt Ion:252 Resp: 289377

Ion	Ratio	Lower	Upper
252	100		
253	21.7	0.0	52.0
125	11.0	0.0	43.8

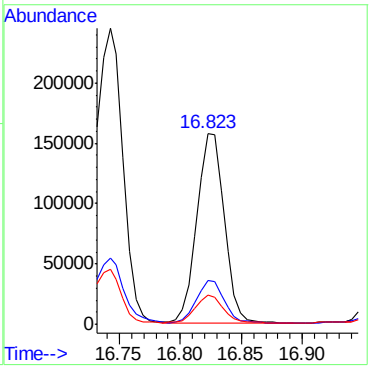


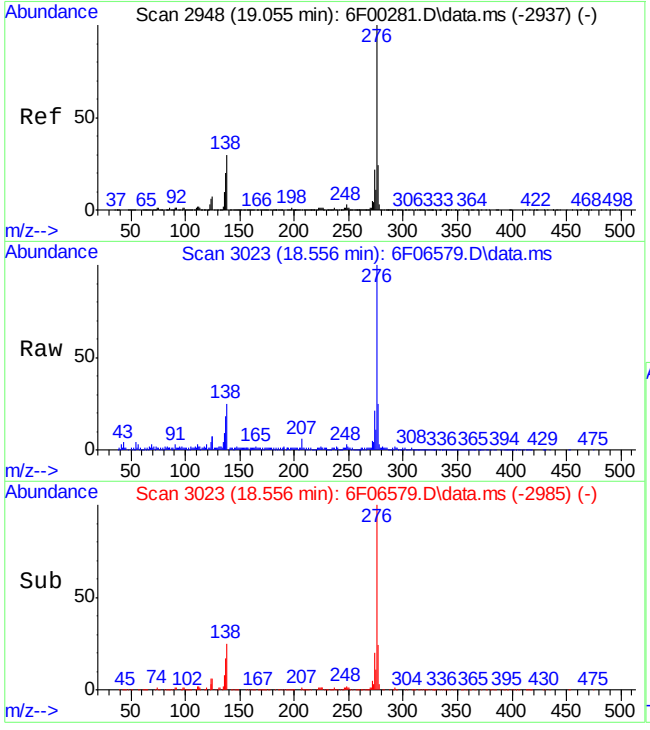


#106
Benzo[a]pyrene
Concen: 14.067 ppm
RT: 16.823 min Scan# 2699
Delta R.T. -0.005 min
Lab File: 6F06579.D
Acq: 14 Aug 2020 3:22 pm

Tgt Ion:252 Resp: 245128

Ion	Ratio	Lower	Upper
252	100		
253	22.3	0.0	51.9
125	14.6	0.0	43.8

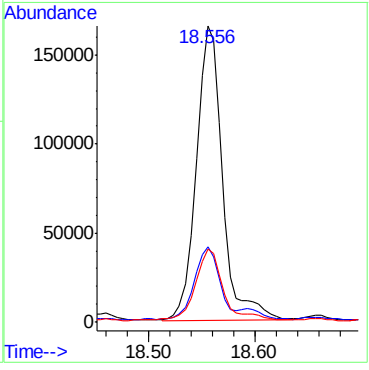


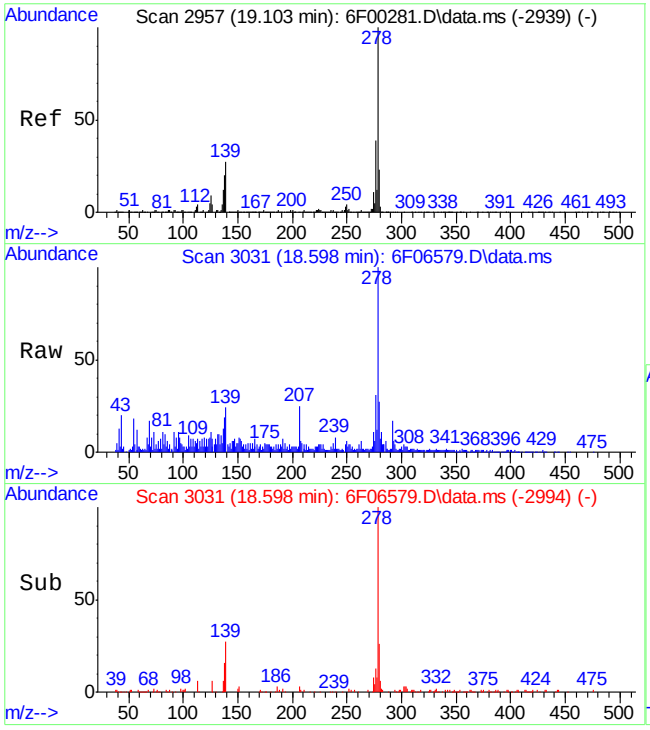


#107
Indeno[1,2,3-cd]pyrene
Concen: 17.661 ppm
RT: 18.556 min Scan# 3023
Delta R.T. 0.005 min
Lab File: 6F06579.D
Acq: 14 Aug 2020 3:22 pm

Tgt Ion:276 Resp: 286511

Ion	Ratio	Lower	Upper
276	100		
138	24.6	0.0	54.0
277	24.0	0.0	54.0

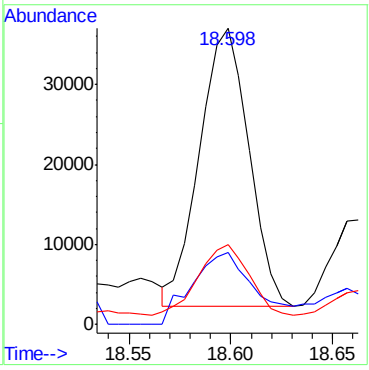


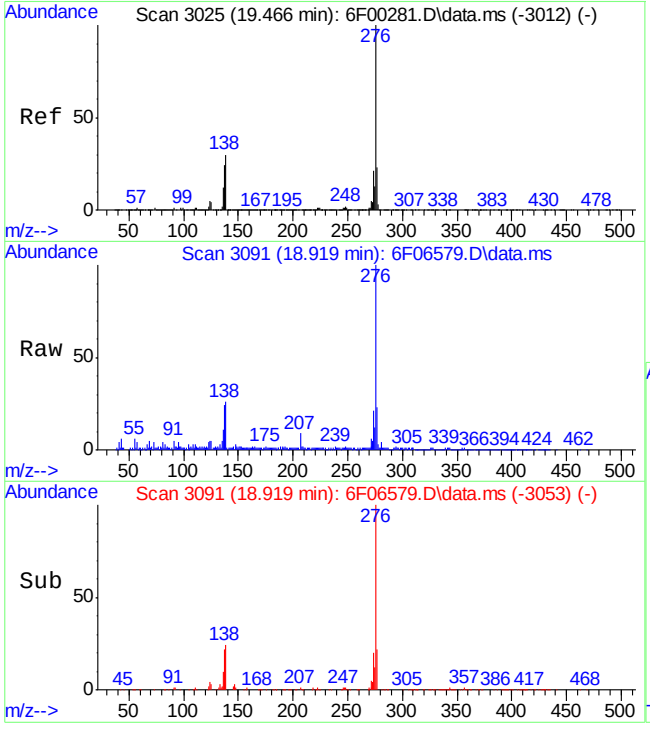


#108
Dibenz[a,h]anthracene
Concen: 3.369 ppm
RT: 18.598 min Scan# 3031
Delta R.T. -0.002 min
Lab File: 6F06579.D
Acq: 14 Aug 2020 3:22 pm

Tgt Ion:278 Resp: 58350

Ion	Ratio	Lower	Upper
278	100		
139	23.6	0.0	50.2
279	25.5	0.0	54.2

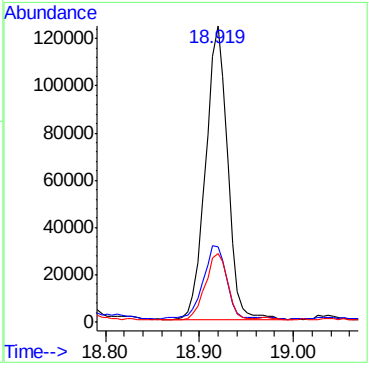




#109
Benzo[g,h,i]perylene
Concen: 11.570 ppm
RT: 18.919 min Scan# 3091
Delta R.T. 0.003 min
Lab File: 6F06579.D
Acq: 14 Aug 2020 3:22 pm

Tgt Ion:276 Resp: 202598

Ion	Ratio	Lower	Upper
276	100		
138	24.6	0.0	57.8
277	22.5	0.0	53.8



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06493.d
Acq On : 11 Aug 2020 3:57 pm
Operator : marthav
Sample : fa77615-1 E Inst : MSBNA10
Misc : op81484,S6F251,30.3,,,1,1,soil
ALS Vial : 9 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Results File: 8270D6F072920.RES
Quant Time: Aug 12 06:14:27 2020
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

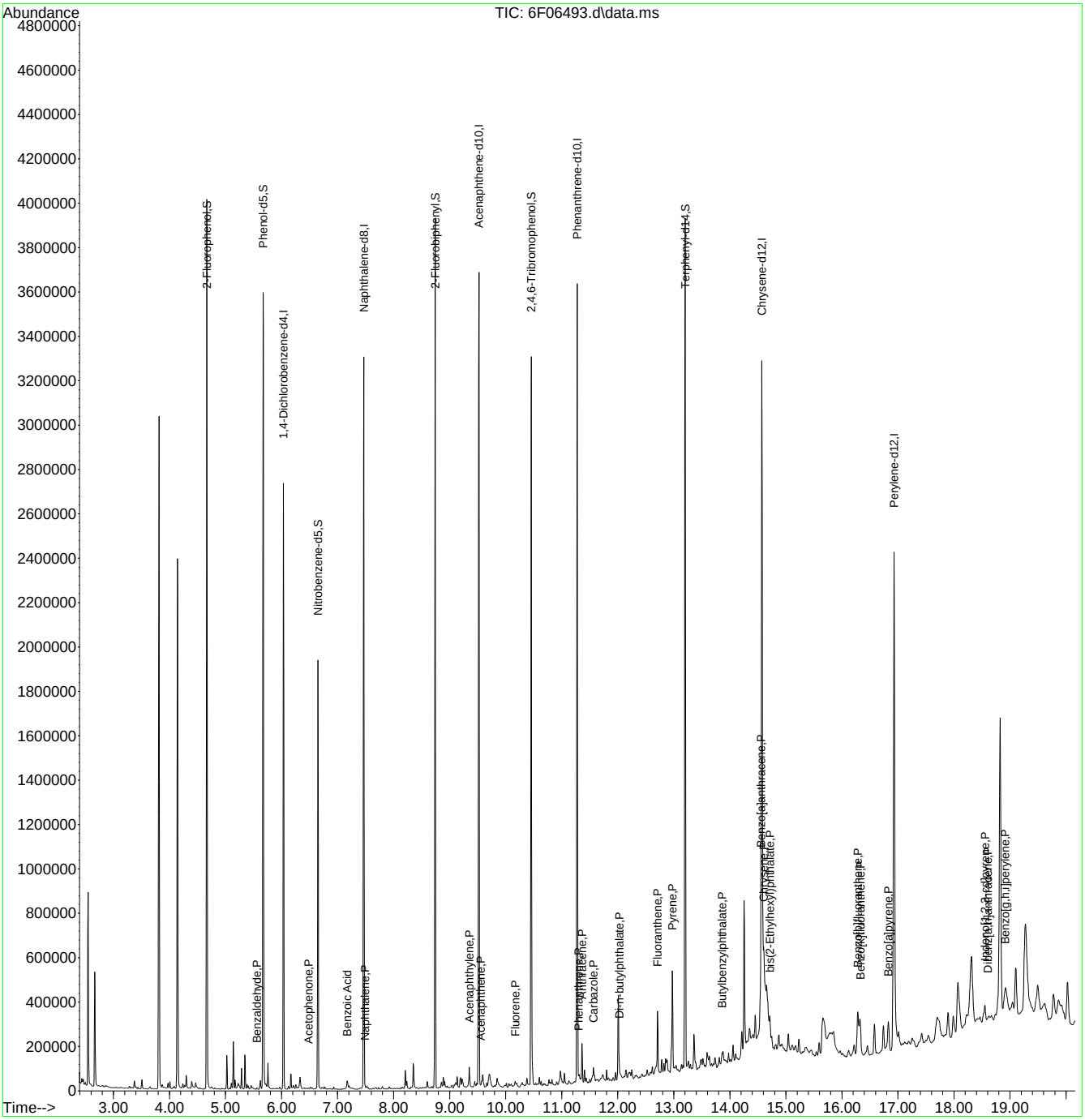
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.035	152	376698	40.00	ppm	0.00
22) Naphthalene-d8	7.468	136	1389148	40.00	ppm	0.00
43) Acenaphthene-d10	9.522	164	730822	40.00	ppm	0.00
70) Phenanthrene-d10	11.276	188	1296535	40.00	ppm	0.00
92) Chrysene-d12	14.571	240	1131159	40.00	ppm	0.00
102) Perylene-d12	16.930	264	1143949	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	4.665	112	995962	69.97	ppm	0.00
Spiked Amount 100.000	Range 40 - 102		Recovery = 69.97%			
9) Phenol-d5	5.671	99	1284522	76.02	ppm	0.00
Spiked Amount 100.000	Range 41 - 100		Recovery = 76.02%			
23) Nitrobenzene-d5	6.650	82	547306	35.91	ppm	0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 71.82%			
47) 2-Fluorobiphenyl	8.741	172	1062597	37.20	ppm	0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 74.40%			
75) 2,4,6-Tribromophenol	10.458	330	374855	85.91	ppm	0.00
Spiked Amount 100.000	Range 42 - 108		Recovery = 85.91%			
95) Terphenyl-d14	13.202	244	1202355	37.81	ppm	0.00
Spiked Amount 50.000	Range 45 - 119		Recovery = 75.62%			
Target Compounds						Qvalue
5) Benzaldehyde	5.559	106	1677	0.15	ppm	85
18) Acetophenone	6.484	105	1272	0.07	ppm	87
30) Benzoic Acid	7.169	105	12367	1.38	ppm	95
34) Naphthalene	7.490	128	1257	0.03	ppm	73
52) Acenaphthylene	9.351	152	42502	1.16	ppm	98
57) Acenaphthene	9.554	153	1942	0.08	ppm	80
65) Fluorene	10.169	166	8398	0.31	ppm	94
84) Phenanthrene	11.303	178	5135	0.13	ppm	99
85) Anthracene	11.362	178	68605	1.74	ppm	97
87) Carbazole	11.565	167	27162	0.76	ppm	96
89) Di-n-butylphthalate	12.025	149	5953	0.13	ppm	97
91) Fluoranthene	12.710	202	104446	2.56	ppm	99
94) Pyrene	12.977	202	172542	4.26	ppm	98
97) Butylbenzylphthalate	13.860	149	10058	0.52	ppm	94
99) Benzo[a]anthracene	14.555	228	54839	1.45	ppm	98
100) Chrysene	14.603	228	91037	2.48	ppm	97
101) bis(2-Ethylhexyl)phtha...	14.716	149	8335	0.31	ppm	98
104) Benzo[b]fluoranthene	16.283	252	140545	3.83	ppm	97
105) Benzo[k]fluoranthene	16.331	252	54606	1.43	ppm	99
106) Benzo[a]pyrene	16.828	252	40921	1.20	ppm	99
107) Indeno[1,2,3-cd]pyrene	18.551	276	43048	1.36	ppm	97
108) Dibenz[a,h]anthracene	18.604	278	8834	0.26	ppm	89
109) Benzo[g,h,i]perylene	18.914	276	29274	0.85	ppm	96

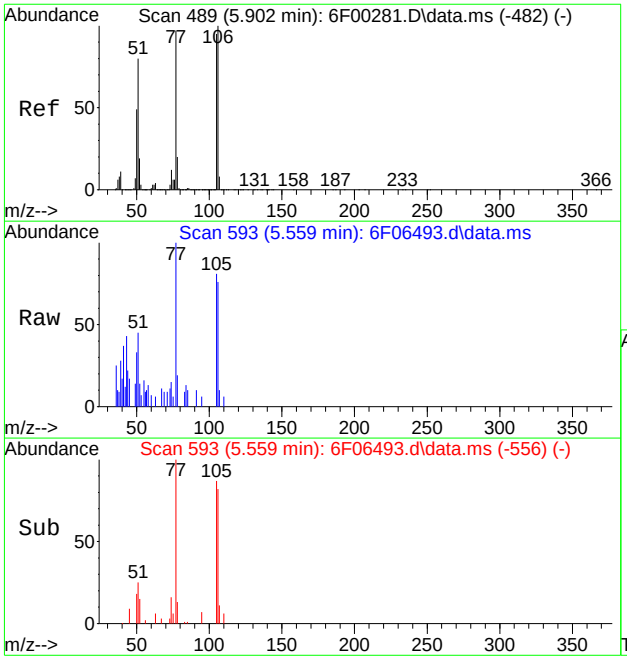
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06493.d
Acq On : 11 Aug 2020 3:57 pm
Operator : marthav
Sample : fa77615-1 E Inst : MSBNA10
Misc : op81484,S6F251,30.3,,,1,1,soil
ALS Vial : 9 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Results File: 8270D6F072920.RES
Quant Time: Aug 12 06:14:27 2020
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

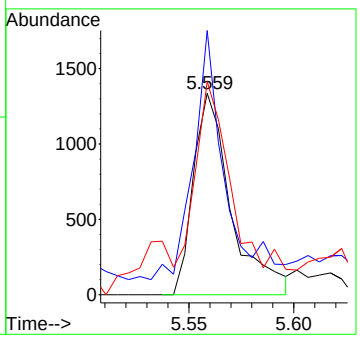


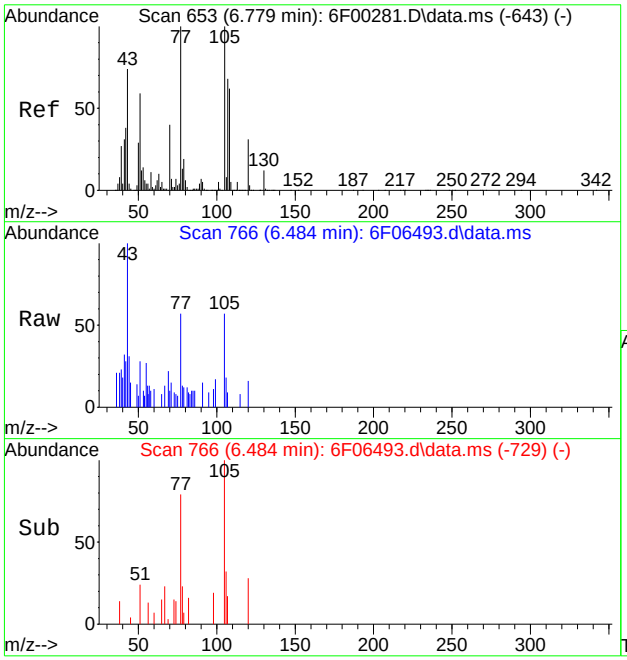


#5
Benzaldehyde
Concen: 0.15 ppm
RT: 5.559 min Scan# 593
Delta R.T. -0.000 min
Lab File: 6F06493.d
Acq: 11 Aug 2020 3:57 pm

Tgt Ion:106 Resp: 1677

Ion	Ratio	Lower	Upper
106	100		
77	121.6	67.1	127.1
105	90.3	65.1	125.1

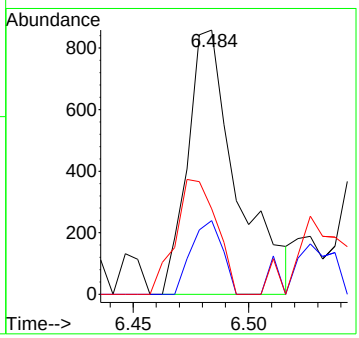


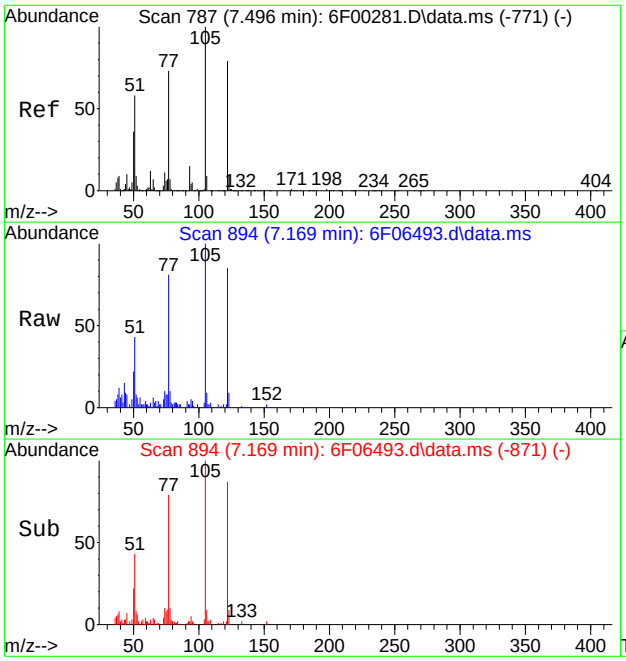


#18
Acetophenone
Concen: 0.07 ppm
RT: 6.484 min Scan# 766
Delta R.T. -0.000 min
Lab File: 6F06493.d
Acq: 11 Aug 2020 3:57 pm

Tgt Ion:105 Resp: 1272

Ion	Ratio	Lower	Upper
105	100		
120	30.6	0.7	60.7
106	28.9	0.0	38.4

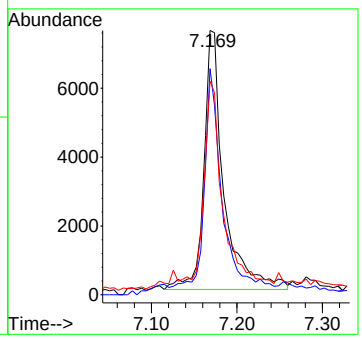


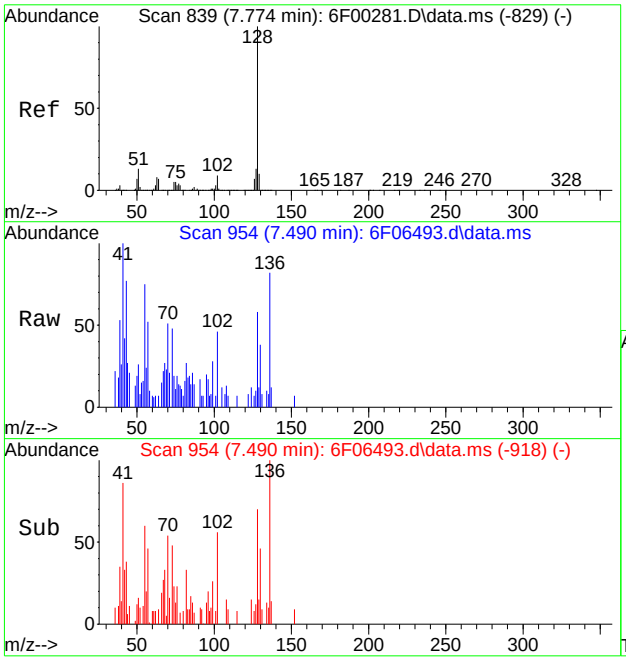


#30
Benzoic Acid
Concen: 1.38 ppm
RT: 7.169 min Scan# 894
Delta R.T. -0.075 min
Lab File: 6F06493.d
Acq: 11 Aug 2020 3:57 pm

Tgt Ion:105 Resp: 12367

Ion	Ratio	Lower	Upper
105	100		
122	83.6	49.5	109.5
77	78.3	43.0	103.0

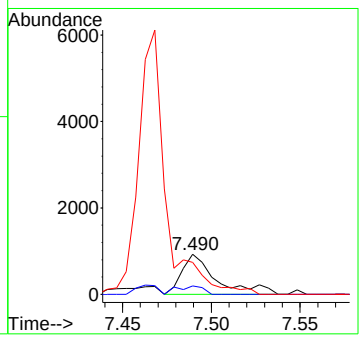


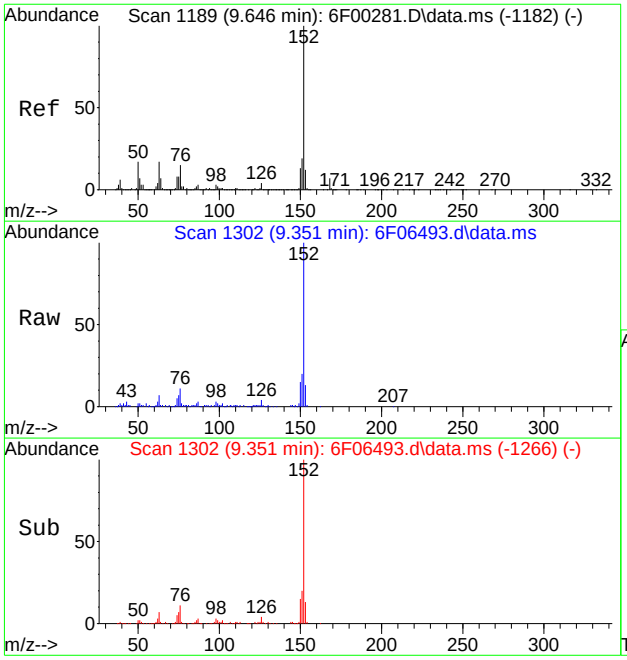


#34
Naphthalene
Concen: 0.03 ppm
RT: 7.490 min Scan# 954
Delta R.T. -0.005 min
Lab File: 6F06493.d
Acq: 11 Aug 2020 3:57 pm

Tgt Ion:128 Resp: 1257

Ion	Ratio	Lower	Upper
128	100		
129	20.8	0.0	40.4
102	0.0	0.0	39.2

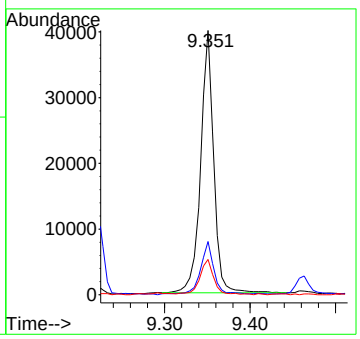


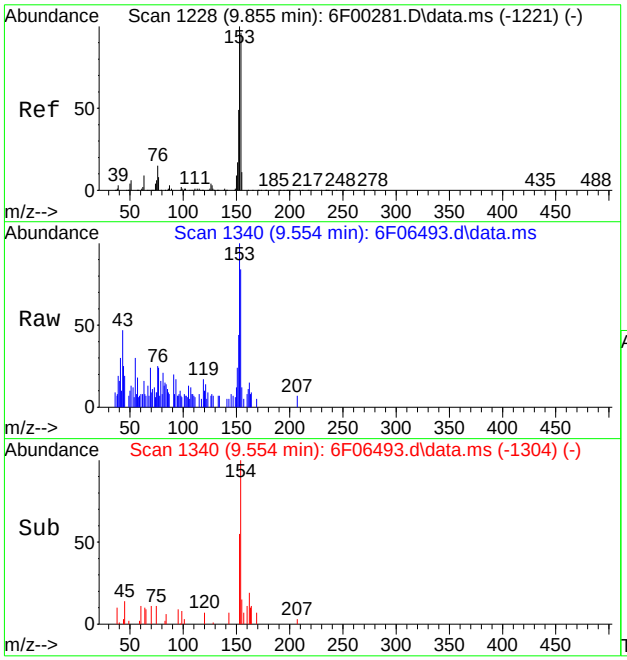


#52
Acenaphthylene
Concen: 1.16 ppm
RT: 9.351 min Scan# 1302
Delta R.T. -0.005 min
Lab File: 6F06493.d
Acq: 11 Aug 2020 3:57 pm

Tgt Ion:152 Resp: 42502

Ion	Ratio	Lower	Upper
152	100		
151	19.8	0.0	48.8
153	13.1	0.0	42.3

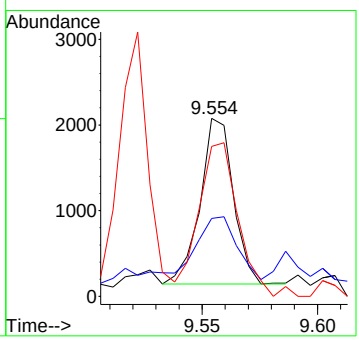


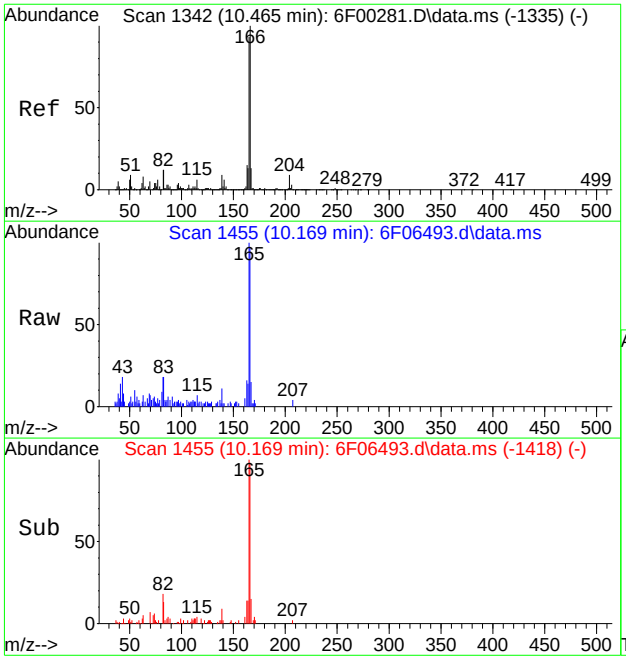


#57
Acenaphthene
Concen: 0.08 ppm
RT: 9.554 min Scan# 1340
Delta R.T. -0.005 min
Lab File: 6F06493.d
Acq: 11 Aug 2020 3:57 pm

Tgt Ion:153 Resp: 1942

Ion	Ratio	Lower	Upper
153	100		
152	27.2	19.4	79.4
154	82.7	65.6	125.6

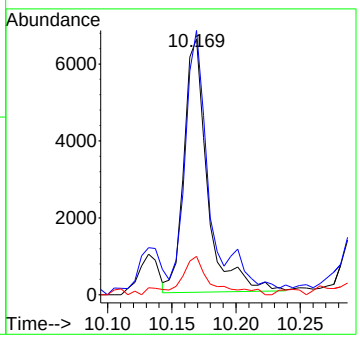


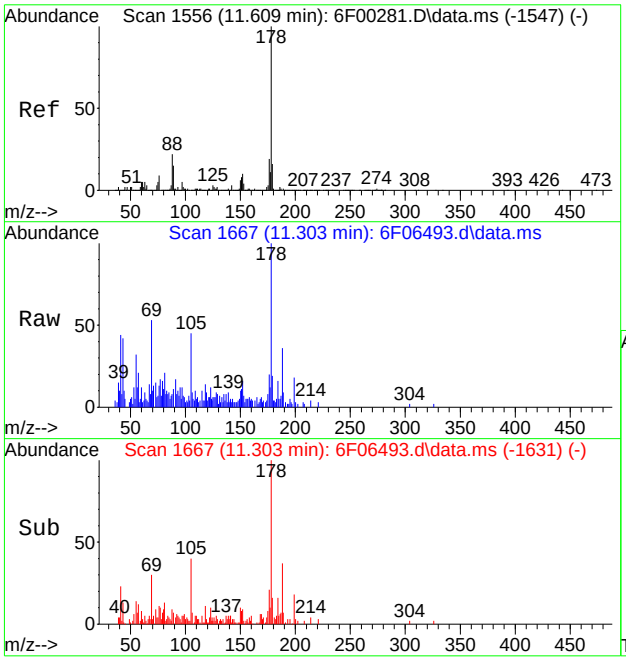


#65
Fluorene
Concen: 0.31 ppm
RT: 10.169 min Scan# 1455
Delta R.T. -0.000 min
Lab File: 6F06493.d
Acq: 11 Aug 2020 3:57 pm

Tgt Ion:166 Resp: 8398

Ion	Ratio	Lower	Upper
166	100		
165	98.7	62.6	122.6
167	12.2	0.0	43.1

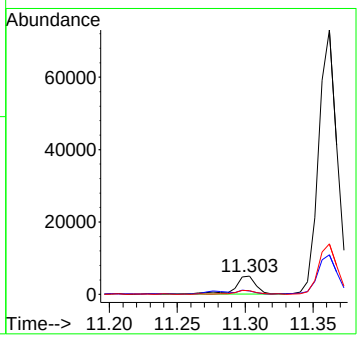


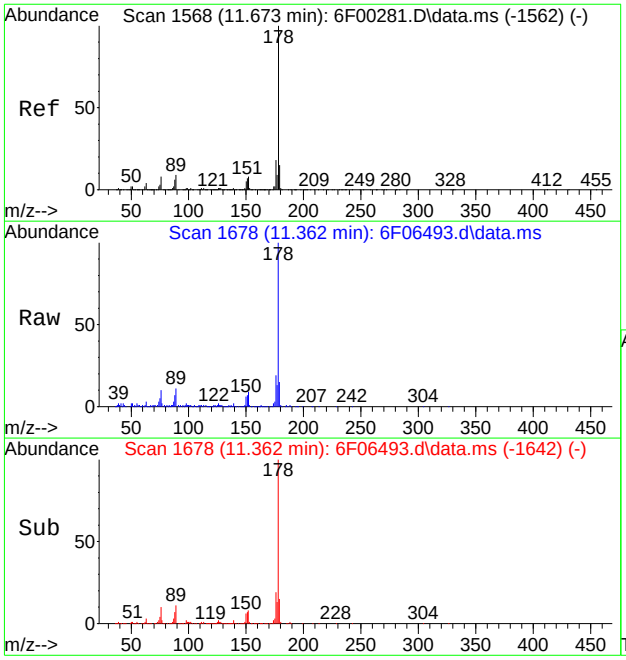


#84
Phenanthrene
Concen: 0.13 ppm
RT: 11.303 min Scan# 1667
Delta R.T. -0.005 min
Lab File: 6F06493.d
Acq: 11 Aug 2020 3:57 pm

Tgt Ion:178 Resp: 5135

Ion	Ratio	Lower	Upper
178	100		
179	16.1	0.0	46.0
176	19.4	0.0	49.0

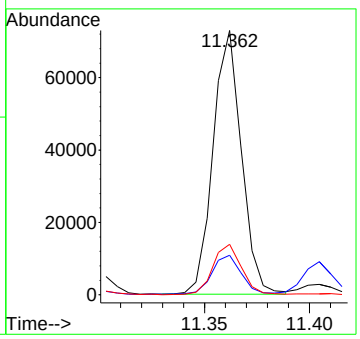


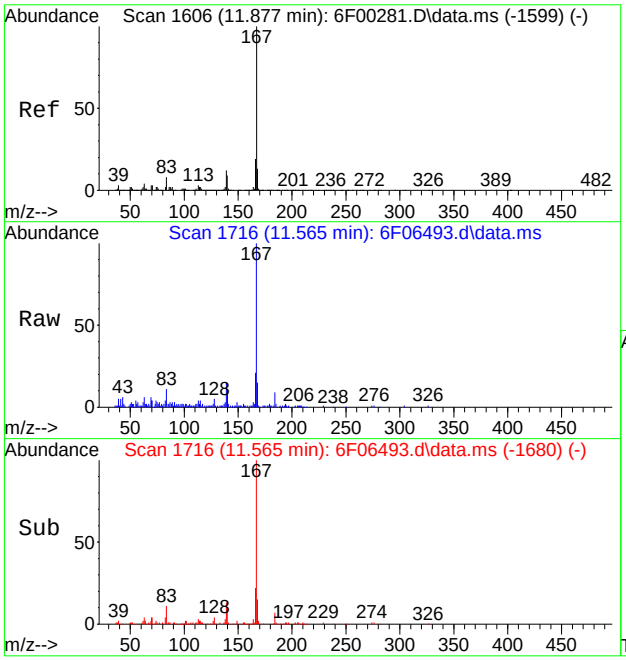


#85
Anthracene
Concen: 1.74 ppm
RT: 11.362 min Scan# 1678
Delta R.T. -0.005 min
Lab File: 6F06493.d
Acq: 11 Aug 2020 3:57 pm

Tgt Ion:178 Resp: 68605

Ion	Ratio	Lower	Upper
178	100		
179	14.4	0.0	45.4
176	19.2	0.0	47.7

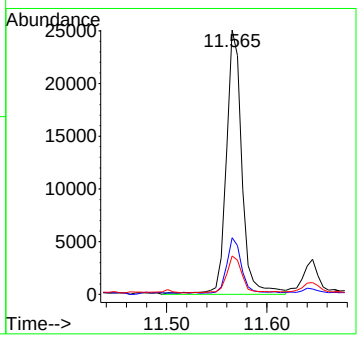


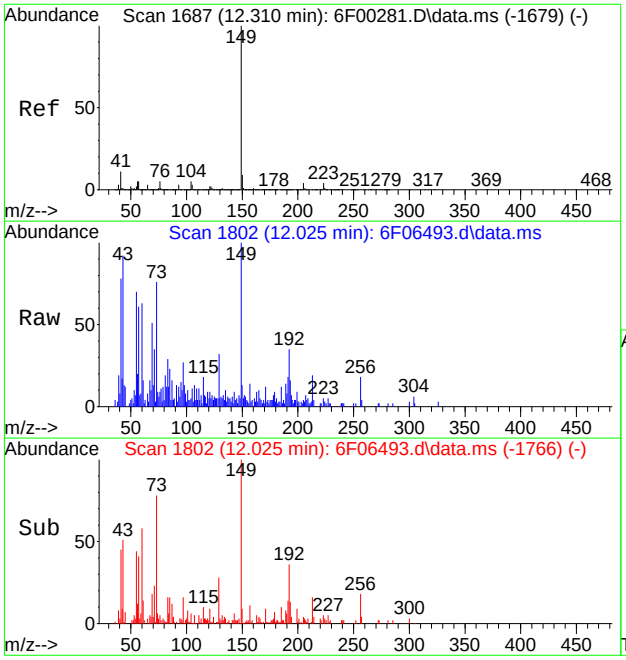


#87
Carbazole
Concen: 0.76 ppm
RT: 11.565 min Scan# 1716
Delta R.T. -0.005 min
Lab File: 6F06493.d
Acq: 11 Aug 2020 3:57 pm

Tgt Ion:167 Resp: 27162

Ion	Ratio	Lower	Upper
167	100		
166	20.9	0.0	49.2
139	13.6	0.0	42.3

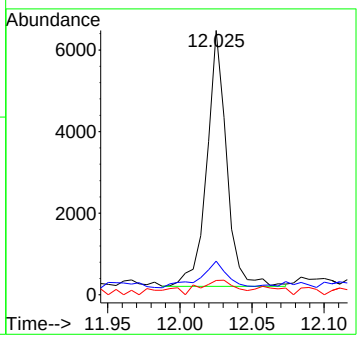


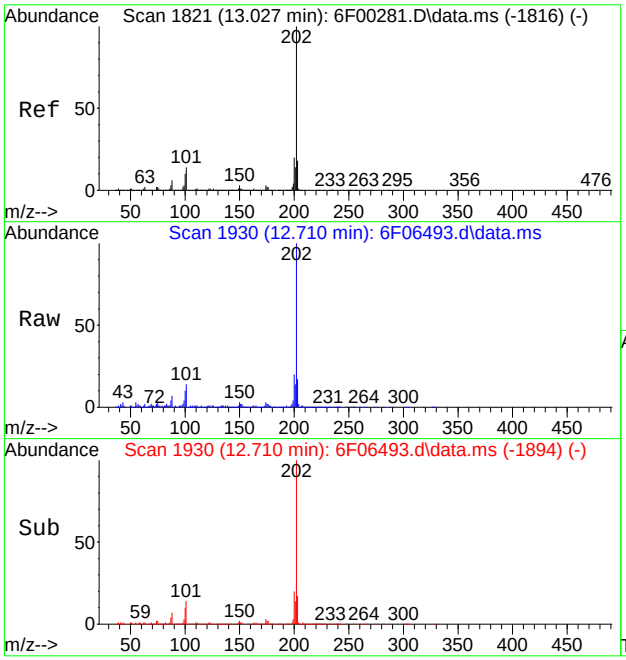


#89
Di-n-butylphthalate
Concen: 0.13 ppm
RT: 12.025 min Scan# 1802
Delta R.T. -0.005 min
Lab File: 6F06493.d
Acq: 11 Aug 2020 3:57 pm

Tgt Ion:149 Resp: 5953

Ion	Ratio	Lower	Upper
149	100		
150	9.2	0.0	38.7
104	3.5	0.0	35.2

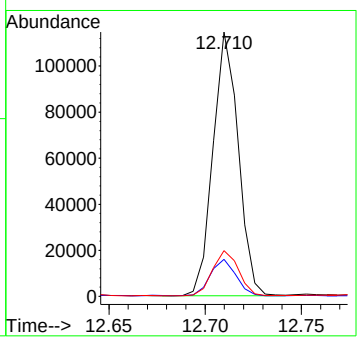


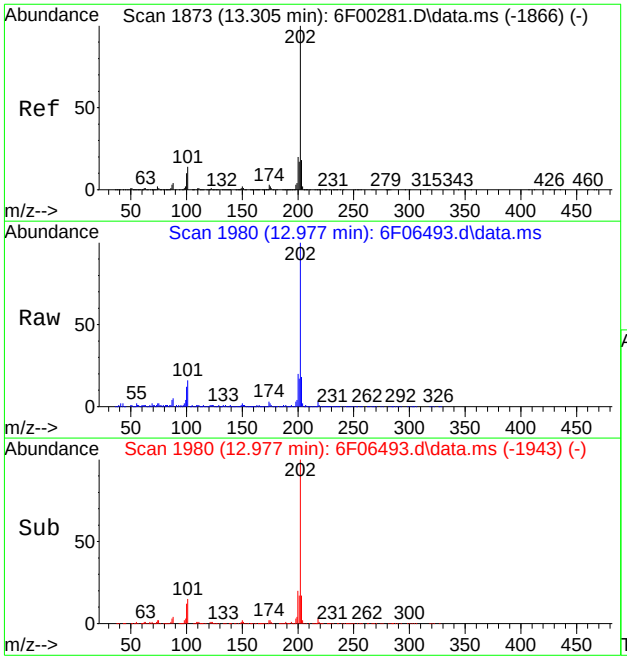


#91
Fluoranthene
Concen: 2.56 ppm
RT: 12.710 min Scan# 1930
Delta R.T. -0.005 min
Lab File: 6F06493.d
Acq: 11 Aug 2020 3:57 pm

Tgt Ion:202 Resp: 104446

Ion	Ratio	Lower	Upper
202	100		
101	13.8	0.0	43.6
203	17.0	0.0	47.7

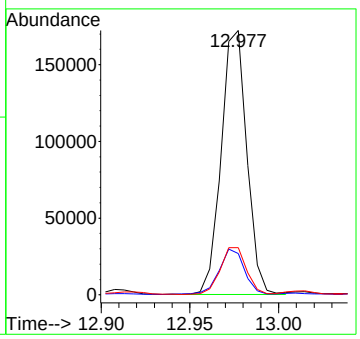


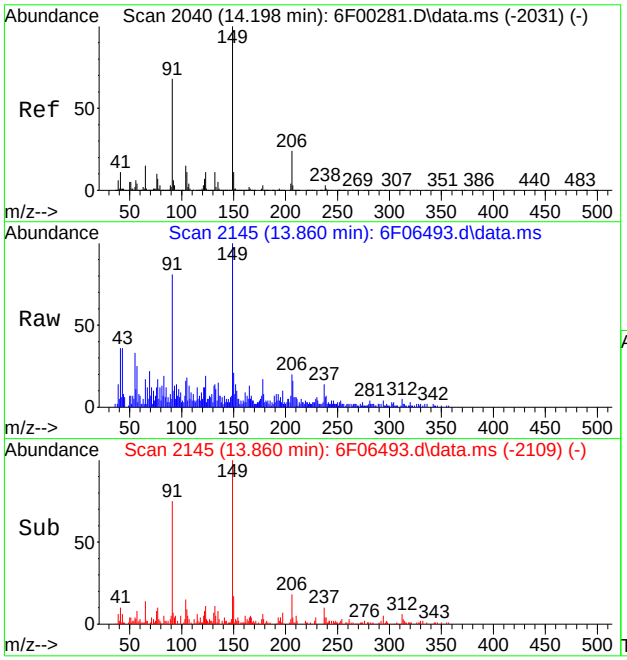


#94
Pyrene
Concen: 4.26 ppm
RT: 12.977 min Scan# 1980
Delta R.T. -0.000 min
Lab File: 6F06493.d
Acq: 11 Aug 2020 3:57 pm

Tgt Ion:202 Resp: 172542

Ion	Ratio	Lower	Upper
202	100		
101	15.4	0.0	43.8
203	17.3	0.0	47.8

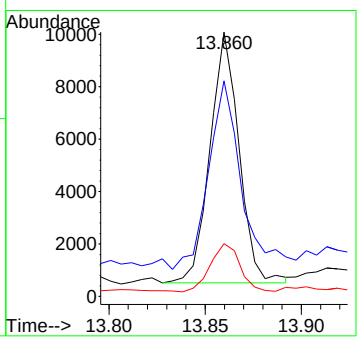


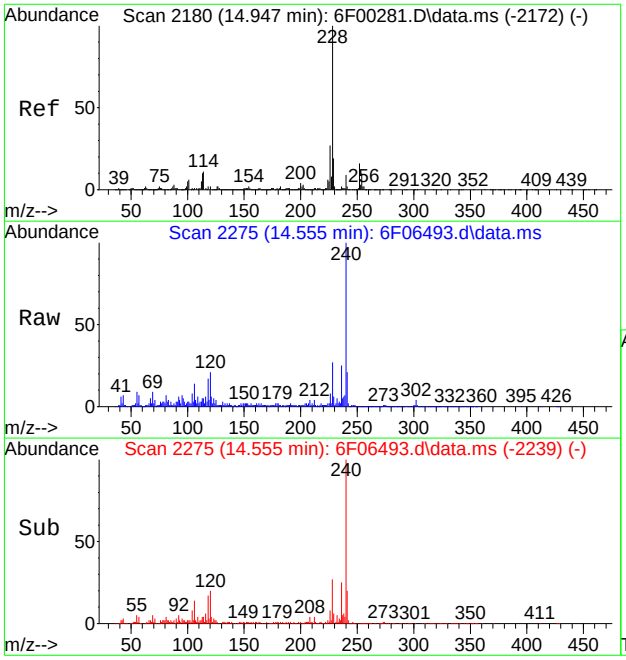


#97
Butylbenzylphthalate
Concen: 0.52 ppm
RT: 13.860 min Scan# 2145
Delta R.T. -0.005 min
Lab File: 6F06493.d
Acq: 11 Aug 2020 3:57 pm

Tgt Ion:149 Resp: 10058

Ion	Ratio	Lower	Upper
149	100		
91	71.3	38.2	98.2
206	18.3	0.0	54.0

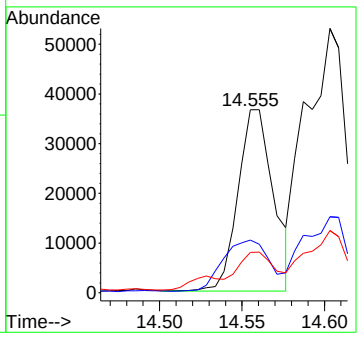


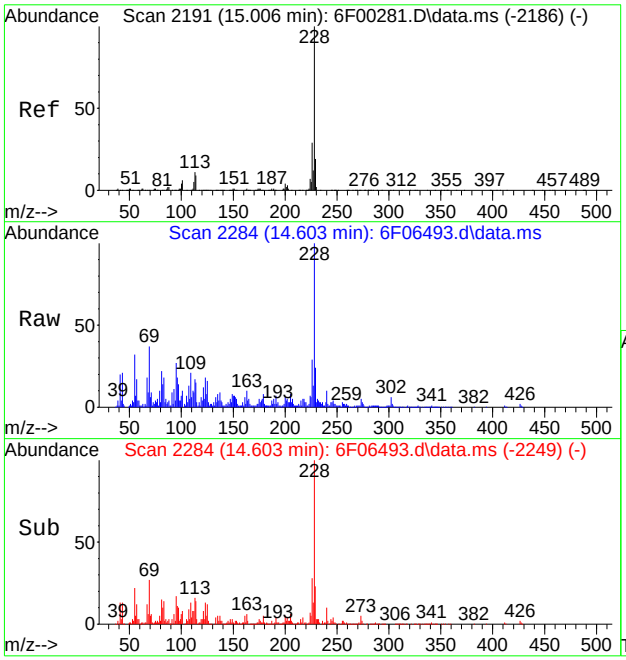


#99
Benzo[a]anthracene
Concen: 1.45 ppm
RT: 14.555 min Scan# 2275
Delta R.T. -0.005 min
Lab File: 6F06493.d
Acq: 11 Aug 2020 3:57 pm

Tgt Ion:228 Resp: 54839

Ion	Ratio	Lower	Upper
228	100		
226	28.0	0.0	56.6
229	19.4	0.0	48.9

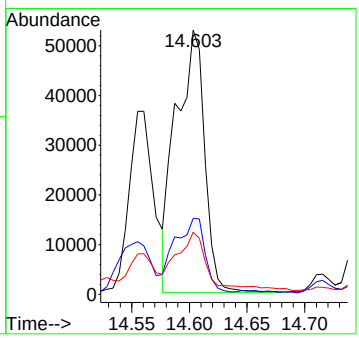


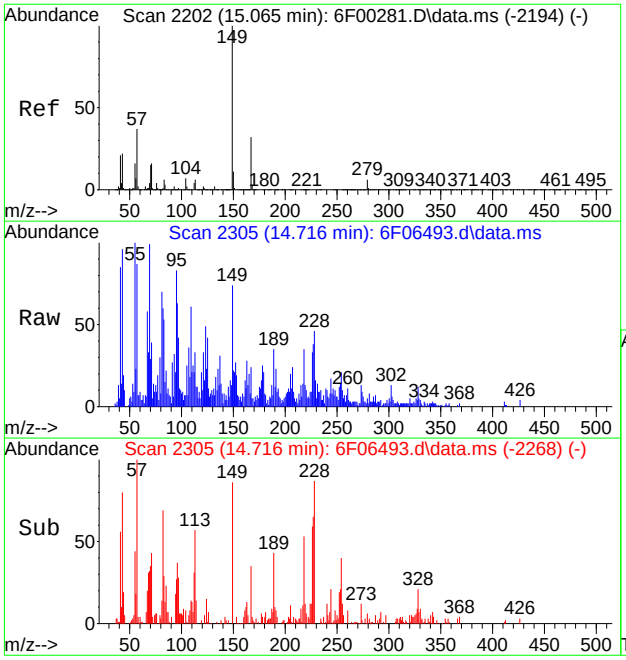


#100
Chrysene
Concen: 2.48 ppm
RT: 14.603 min Scan# 2284
Delta R.T. -0.011 min
Lab File: 6F06493.d
Acq: 11 Aug 2020 3:57 pm

Tgt Ion:228 Resp: 91037

Ion	Ratio	Lower	Upper
228	100		
226	28.0	0.0	58.9
229	21.3	0.0	48.5

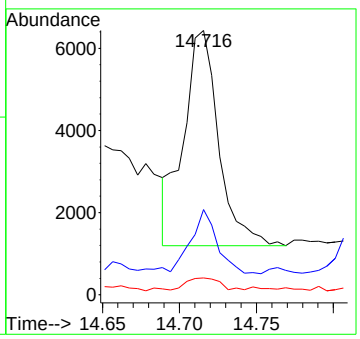


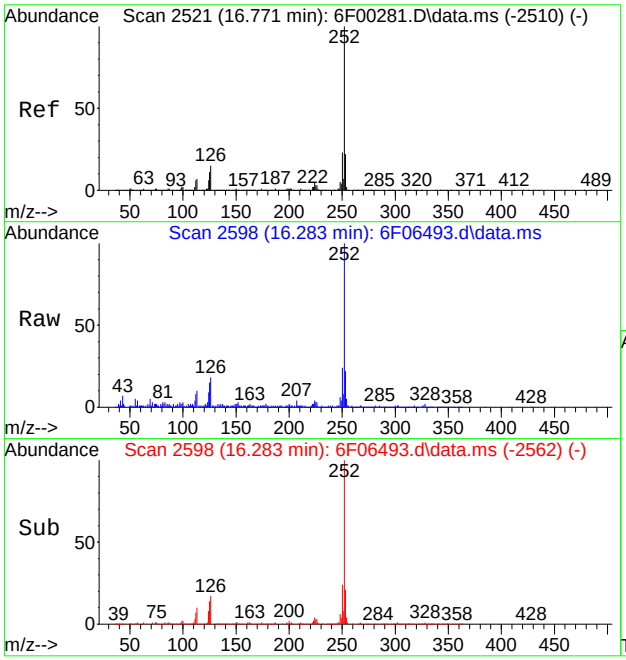


#101
bis(2-Ethylhexyl)phthalate
Concen: 0.31 ppm
RT: 14.716 min Scan# 2305
Delta R.T. -0.000 min
Lab File: 6F06493.d
Acq: 11 Aug 2020 3:57 pm

Tgt Ion:149 Resp: 8335

Ion	Ratio	Lower	Upper
149	100		
167	32.8	1.7	61.7
279	5.7	0.0	35.7

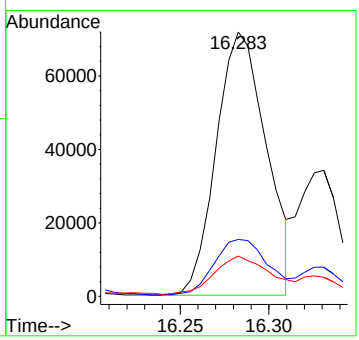


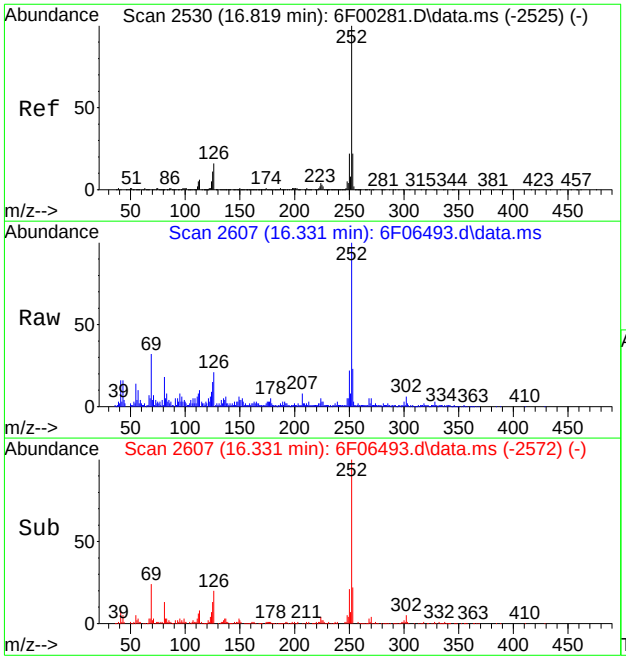


#104
Benzo[b]fluoranthene
Concen: 3.83 ppm
RT: 16.283 min Scan# 2598
Delta R.T. -0.005 min
Lab File: 6F06493.d
Acq: 11 Aug 2020 3:57 pm

Tgt Ion:252 Resp: 140545

Ion	Ratio	Lower	Upper
252	100		
253	21.0	0.0	51.9
125	13.7	0.0	41.3

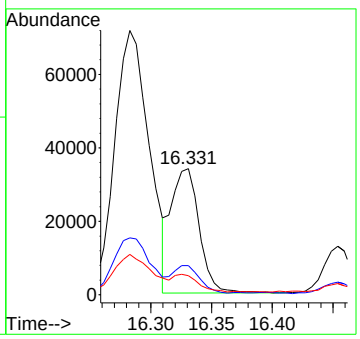


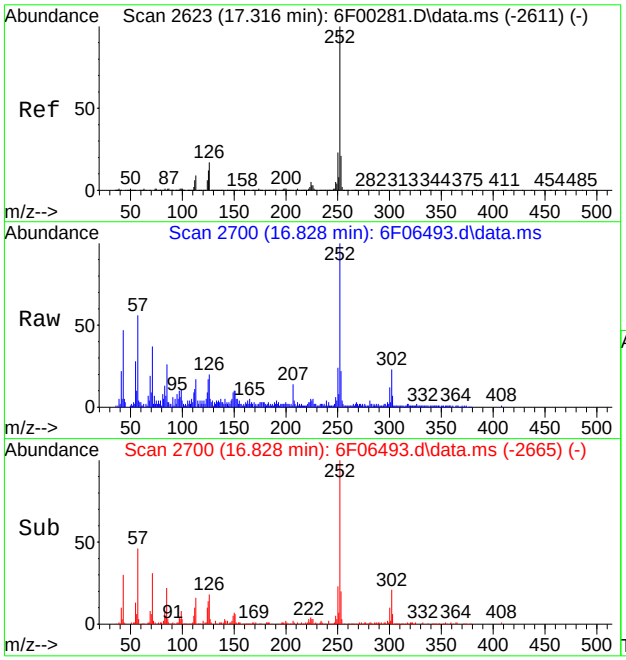


#105
Benzo[k]fluoranthene
Concen: 1.43 ppm
RT: 16.331 min Scan# 2607
Delta R.T. -0.011 min
Lab File: 6F06493.d
Acq: 11 Aug 2020 3:57 pm

Tgt Ion:252 Resp: 54606

Ion	Ratio	Lower	Upper
252	100		
253	22.3	0.0	51.7
125	10.4	0.0	40.7

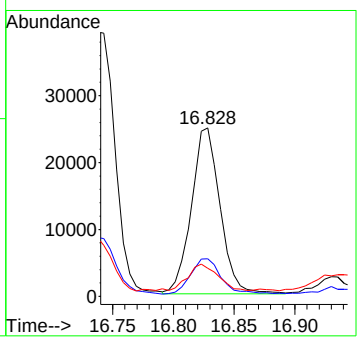


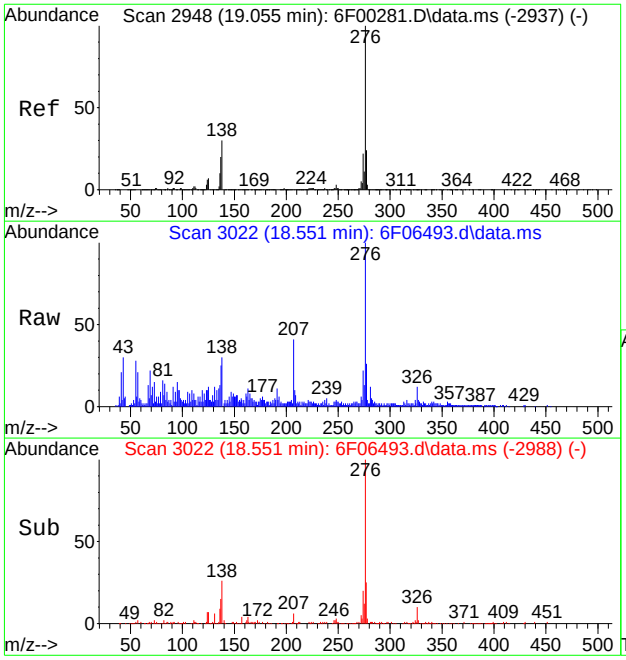


#106
Benzo[a]pyrene
Concen: 1.20 ppm
RT: 16.828 min Scan# 2700
Delta R.T. -0.011 min
Lab File: 6F06493.d
Acq: 11 Aug 2020 3:57 pm

Tgt Ion:252 Resp: 40921

Ion	Ratio	Lower	Upper
252	100		
253	21.3	0.0	51.0
125	12.6	0.0	42.0

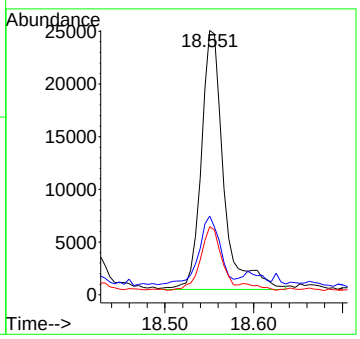


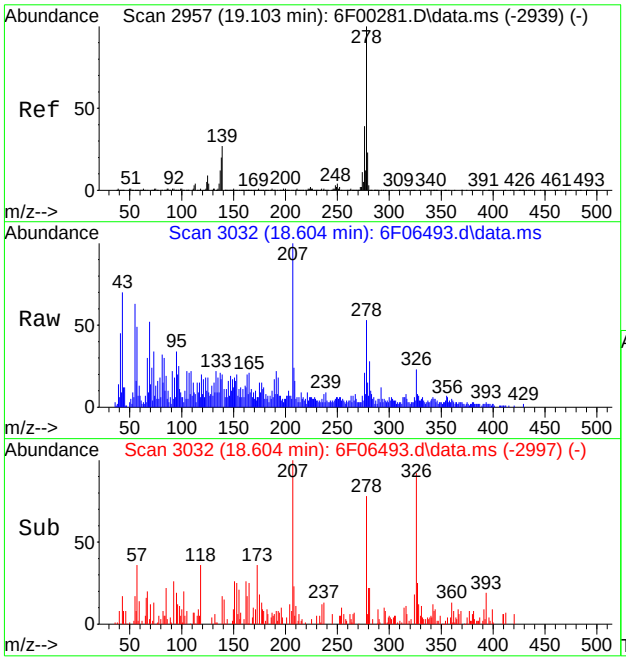


#107
Indeno[1,2,3-cd]pyrene
Concen: 1.36 ppm
RT: 18.551 min Scan# 3022
Delta R.T. -0.016 min
Lab File: 6F06493.d
Acq: 11 Aug 2020 3:57 pm

Tgt Ion:276 Resp: 43048

Ion	Ratio	Lower	Upper
276	100		
138	26.5	0.0	59.6
277	24.3	0.0	54.1

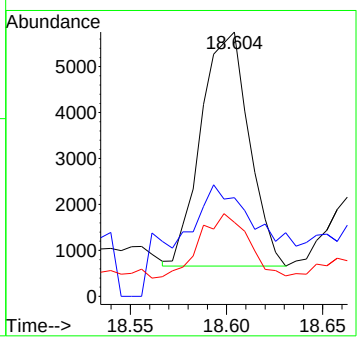


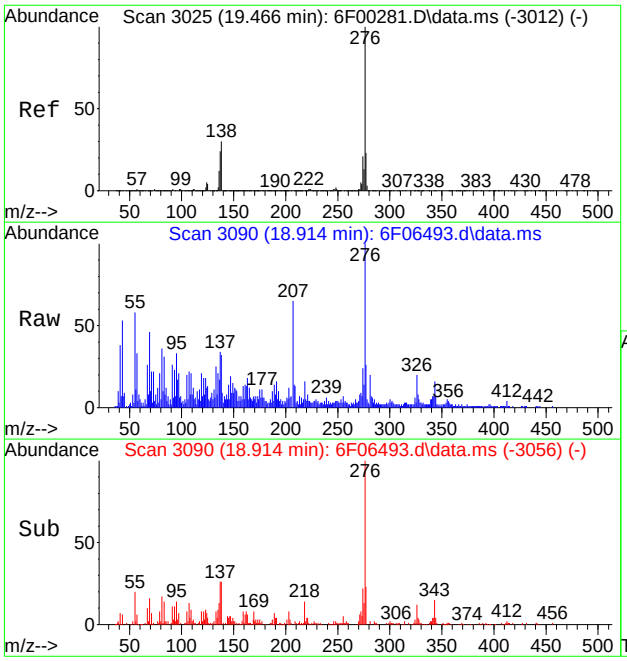


#108
Dibenz[a,h]anthracene
Concen: 0.26 ppm
RT: 18.604 min Scan# 3032
Delta R.T. -0.011 min
Lab File: 6F06493.d
Acq: 11 Aug 2020 3:57 pm

Tgt Ion:278 Resp: 8834

Ion	Ratio	Lower	Upper
278	100		
139	17.0	0.0	56.9
279	23.3	0.0	53.0

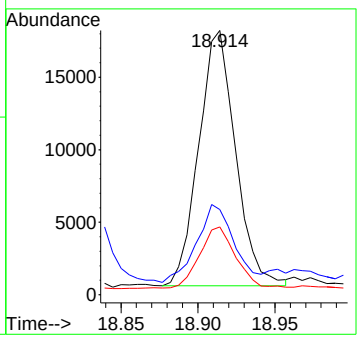




#109
Benzo[g,h,i]perylene
Concen: 0.85 ppm
RT: 18.914 min Scan# 3090
Delta R.T. -0.016 min
Lab File: 6F06493.d
Acq: 11 Aug 2020 3:57 pm

Tgt Ion:276 Resp: 29274

Ion	Ratio	Lower	Upper
276	100		
138	27.0	0.0	59.5
277	24.1	0.0	53.0



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06494.d
Acq On : 11 Aug 2020 4:24 pm
Operator : marthav
Sample : fa77615-2 E Inst : MSBNA10
Misc : op81484,S6F251,30.3,,,1,1,soil
ALS Vial : 10 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Results File: 8270D6F072920.RES
Quant Time: Aug 12 06:16:08 2020
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

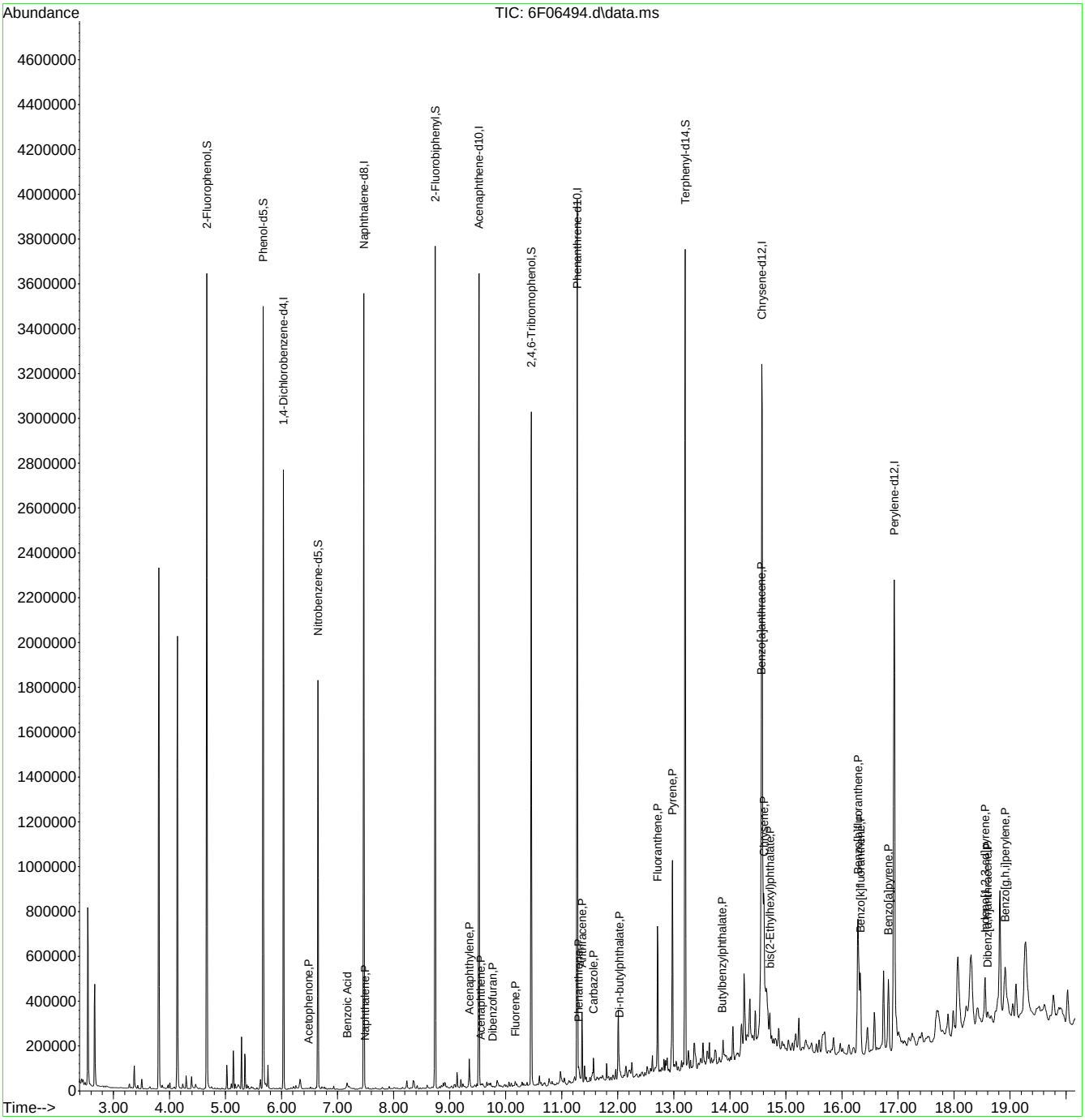
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	6.035	152	378731	40.00	ppm		0.00
22) Naphthalene-d8	7.468	136	1424753	40.00	ppm		0.00
43) Acenaphthene-d10	9.522	164	745735	40.00	ppm		0.00
70) Phenanthrene-d10	11.276	188	1338107	40.00	ppm		0.00
92) Chrysene-d12	14.571	240	1171725	40.00	ppm		0.00
102) Perylene-d12	16.935	264	1170347	40.00	ppm		0.00
System Monitoring Compounds							
7) 2-Fluorophenol	4.665	112	913737	63.85	ppm		0.00
Spiked Amount 100.000	Range 40 - 102		Recovery = 63.85%				
9) Phenol-d5	5.671	99	1178475	69.37	ppm		0.00
Spiked Amount 100.000	Range 41 - 100		Recovery = 69.37%				
23) Nitrobenzene-d5	6.650	82	507530	32.47	ppm		0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 64.94%				
47) 2-Fluorobiphenyl	8.741	172	986276	33.84	ppm		0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 67.68%				
75) 2,4,6-Tribromophenol	10.458	330	354758	78.77	ppm		0.00
Spiked Amount 100.000	Range 42 - 108		Recovery = 78.77%				
95) Terphenyl-d14	13.202	244	1155823	35.09	ppm		0.00
Spiked Amount 50.000	Range 45 - 119		Recovery = 70.18%				
Target Compounds							Qvalue
18) Acetophenone	6.484	105	1148	0.06	ppm		83
30) Benzoic Acid	7.168	105	8531	0.93	ppm		97
34) Naphthalene	7.489	128	2114	0.05	ppm	#	19
52) Acenaphthylene	9.351	152	56694	1.52	ppm		98
57) Acenaphthene	9.554	153	2452	0.10	ppm		94
60) Dibenzofuran	9.763	168	1394	0.04	ppm		77
65) Fluorene	10.169	166	8123	0.29	ppm		99
84) Phenanthrene	11.303	178	14817	0.37	ppm		97
85) Anthracene	11.362	178	112170	2.75	ppm		99
87) Carbazole	11.565	167	42278	1.15	ppm		96
89) Di-n-butylphthalate	12.025	149	7381	0.16	ppm		98
91) Fluoranthene	12.710	202	258931	6.14	ppm		99
94) Pyrene	12.977	202	352414	8.40	ppm		98
97) Butylbenzylphthalate	13.860	149	3555	0.18	ppm		86
99) Benzo[a]anthracene	14.560	228	141462	3.60	ppm		99
100) Chrysene	14.608	228	243804	6.40	ppm		98
101) bis(2-Ethylhexyl)phtha...	14.715	149	6968	0.25	ppm		93
104) Benzo[b]fluoranthene	16.288	252	445097	11.85	ppm		98
105) Benzo[k]fluoranthene	16.331	252	151699	3.88	ppm		98
106) Benzo[a]pyrene	16.828	252	146635	4.20	ppm		96
107) Indeno[1,2,3-cd]pyrene	18.556	276	121868	3.75	ppm		94
108) Dibenz[a,h]anthracene	18.599	278	26999	0.78	ppm		92
109) Benzo[g,h,i]perylene	18.914	276	98796	2.82	ppm		97

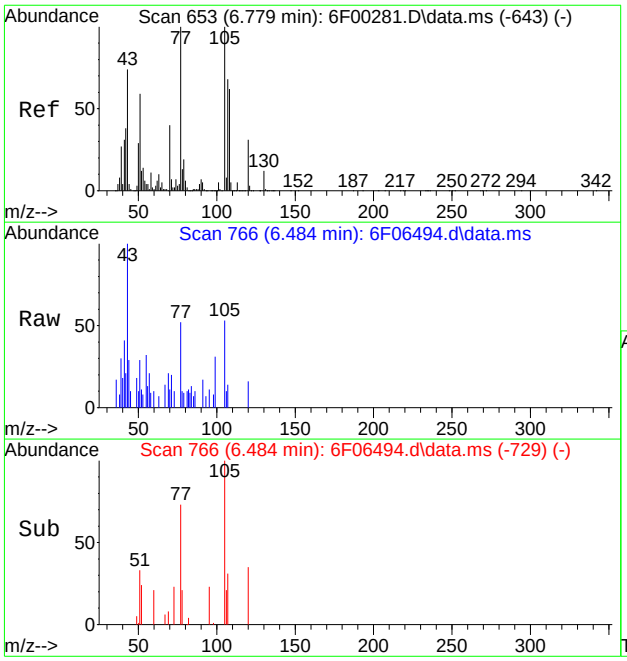
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06494.d
Acq On : 11 Aug 2020 4:24 pm
Operator : marthav
Sample : fa77615-2 E Inst : MSBNA10
Misc : op81484,S6F251,30.3,,,1,1,soil
ALS Vial : 10 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Results File: 8270D6F072920.RES
Quant Time: Aug 12 06:16:08 2020
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

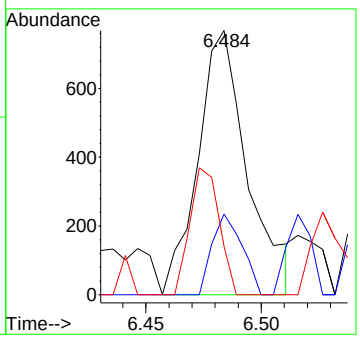


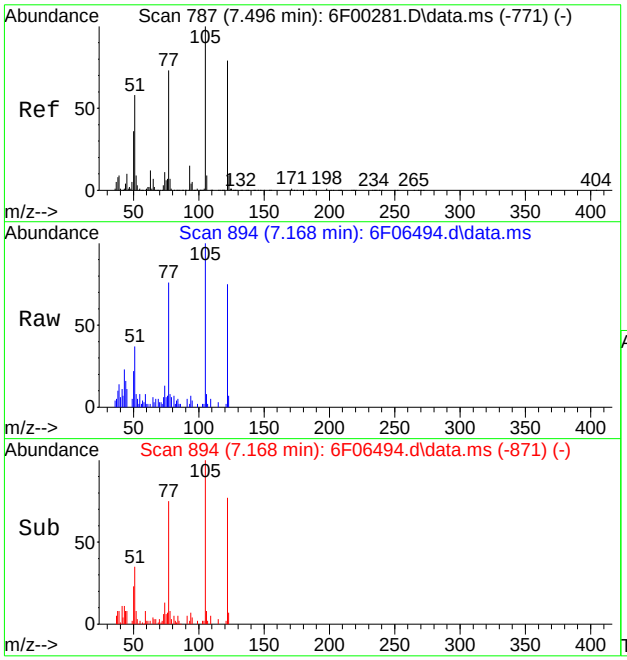


#18
Acetophenone
Concen: 0.06 ppm
RT: 6.484 min Scan# 766
Delta R.T. -0.000 min
Lab File: 6F06494.d
Acq: 11 Aug 2020 4:24 pm

Tgt Ion:105 Resp: 1148

Ion	Ratio	Lower	Upper
105	100		
120	24.0	0.7	60.7
106	20.3	0.0	38.4

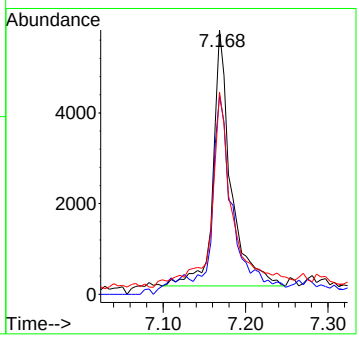


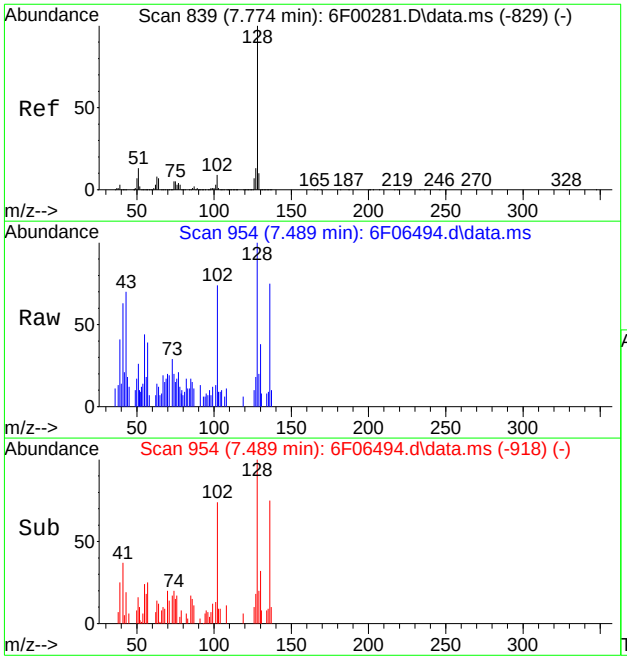


#30
Benzoic Acid
Concen: 0.93 ppm
RT: 7.168 min Scan# 894
Delta R.T. -0.075 min
Lab File: 6F06494.d
Acq: 11 Aug 2020 4:24 pm

Tgt Ion:105 Resp: 8531

Ion	Ratio	Lower	Upper
105	100		
122	74.7	49.5	109.5
77	72.8	43.0	103.0

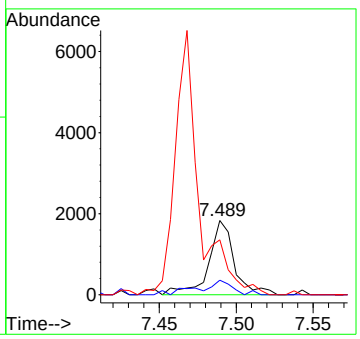


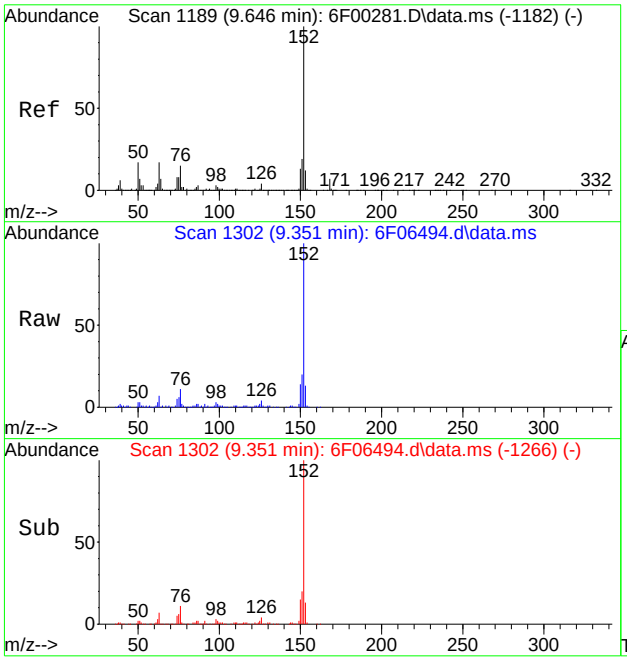


#34
Naphthalene
Concen: 0.05 ppm
RT: 7.489 min Scan# 954
Delta R.T. -0.006 min
Lab File: 6F06494.d
Acq: 11 Aug 2020 4:24 pm

Tgt Ion:128 Resp: 2114

Ion	Ratio	Lower	Upper
128	100		
129	17.0	0.0	40.4
102	64.4	0.0	39.2#

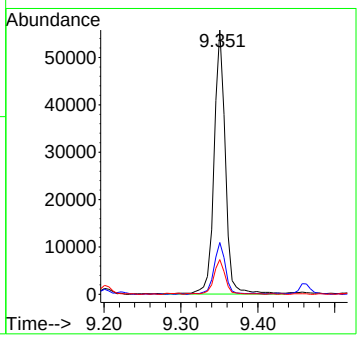


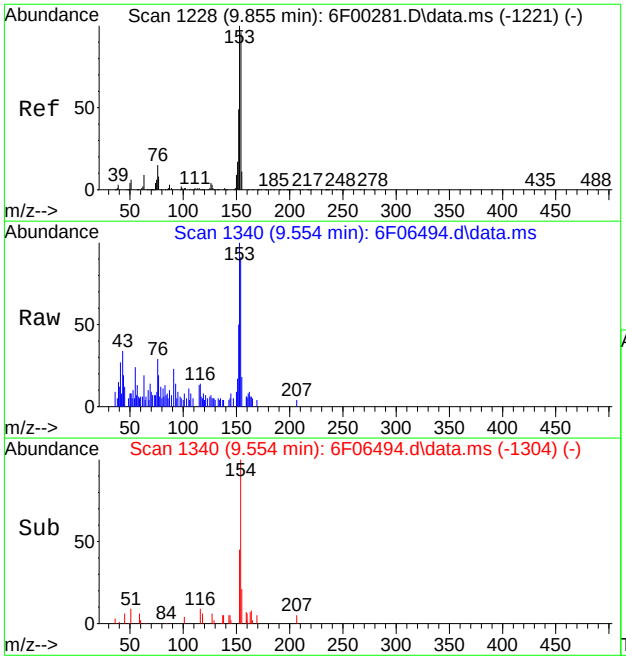


#52
Acenaphthylene
Concen: 1.52 ppm
RT: 9.351 min Scan# 1302
Delta R.T. -0.006 min
Lab File: 6F06494.d
Acq: 11 Aug 2020 4:24 pm

Tgt Ion:152 Resp: 56694

Ion	Ratio	Lower	Upper
152	100		
151	19.5	0.0	48.8
153	13.2	0.0	42.3

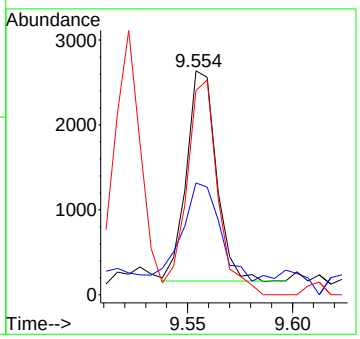


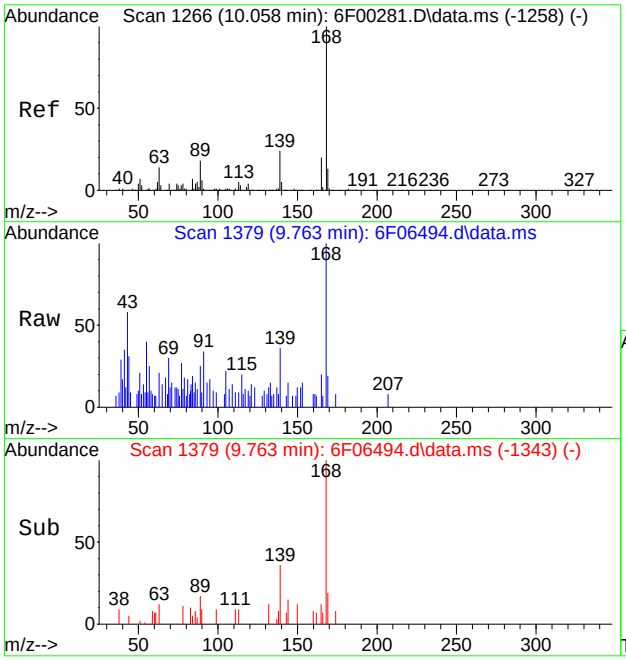


#57
Acenaphthene
Concen: 0.10 ppm
RT: 9.554 min Scan# 1340
Delta R.T. -0.006 min
Lab File: 6F06494.d
Acq: 11 Aug 2020 4:24 pm

Tgt Ion:153 Resp: 2452

Ion	Ratio	Lower	Upper
153	100		
152	37.3	19.4	79.4
154	95.2	65.6	125.6

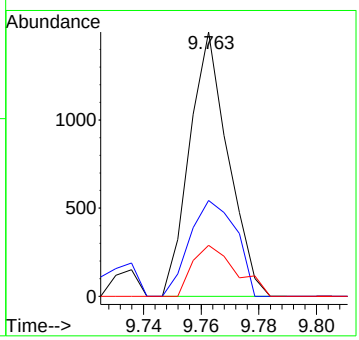


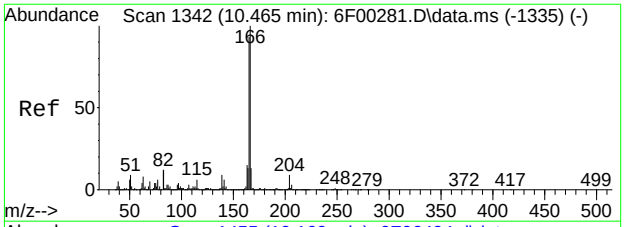


#60
Dibenzofuran
Concen: 0.04 ppm
RT: 9.763 min Scan# 1379
Delta R.T. -0.006 min
Lab File: 6F06494.d
Acq: 11 Aug 2020 4:24 pm

Tgt Ion:168 Resp: 1394

Ion	Ratio	Lower	Upper
168	100		
139	36.3	0.0	53.6
169	19.3	0.0	42.6

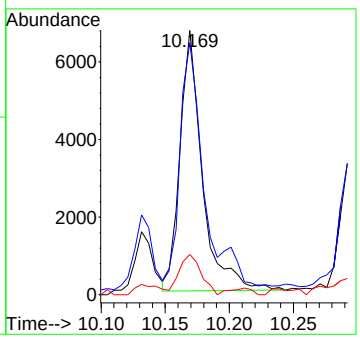


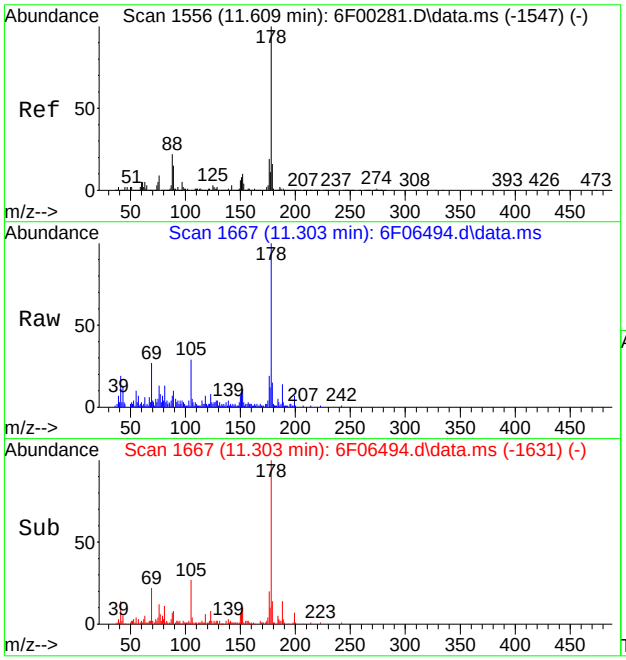


#65
Fluorene
Concen: 0.29 ppm
RT: 10.169 min Scan# 1455
Delta R.T. -0.000 min
Lab File: 6F06494.d
Acq: 11 Aug 2020 4:24 pm

Tgt Ion:166 Resp: 8123

Ion	Ratio	Lower	Upper
166	100		
165	93.9	62.6	122.6
167	13.9	0.0	43.1

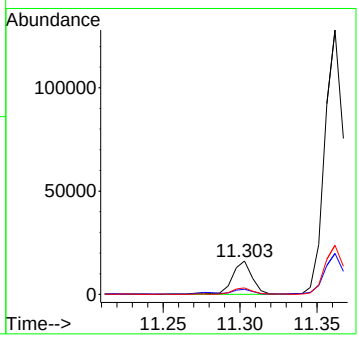


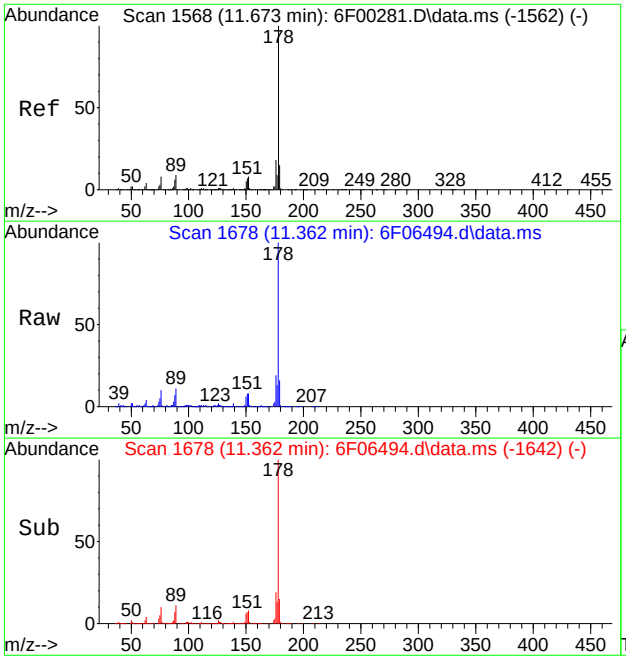


#84
Phenanthrene
Concen: 0.37 ppm
RT: 11.303 min Scan# 1667
Delta R.T. -0.006 min
Lab File: 6F06494.d
Acq: 11 Aug 2020 4:24 pm

Tgt Ion:178 Resp: 14817

Ion	Ratio	Lower	Upper
178	100		
179	13.4	0.0	46.0
176	18.7	0.0	49.0

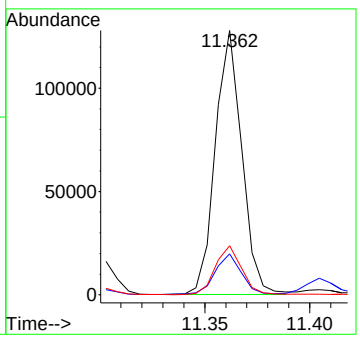


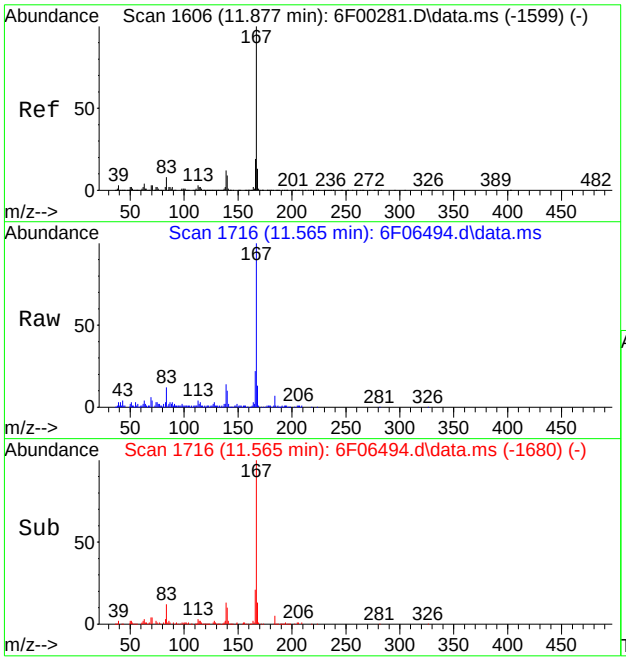


#85
Anthracene
Concen: 2.75 ppm
RT: 11.362 min Scan# 1678
Delta R.T. -0.006 min
Lab File: 6F06494.d
Acq: 11 Aug 2020 4:24 pm

Tgt Ion:178 Resp: 112170

Ion	Ratio	Lower	Upper
178	100		
179	15.3	0.0	45.4
176	18.5	0.0	47.7

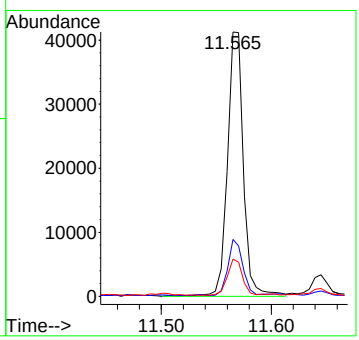


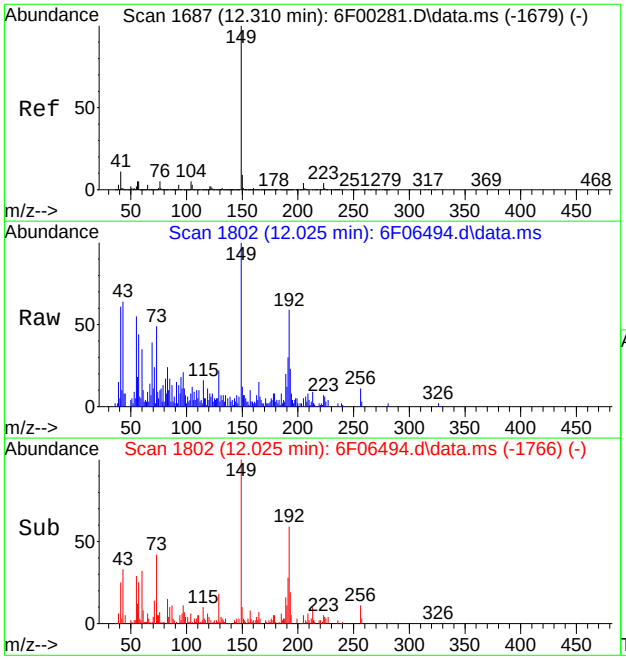


#87
Carbazole
Concen: 1.15 ppm
RT: 11.565 min Scan# 1716
Delta R.T. -0.006 min
Lab File: 6F06494.d
Acq: 11 Aug 2020 4:24 pm

Tgt Ion:167 Resp: 42278

Ion	Ratio	Lower	Upper
167	100		
166	21.1	0.0	49.2
139	13.3	0.0	42.3

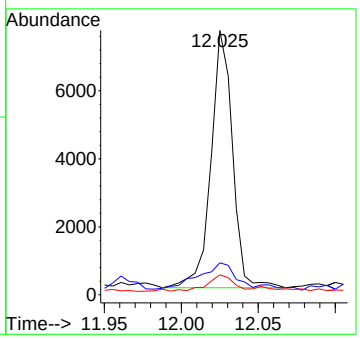


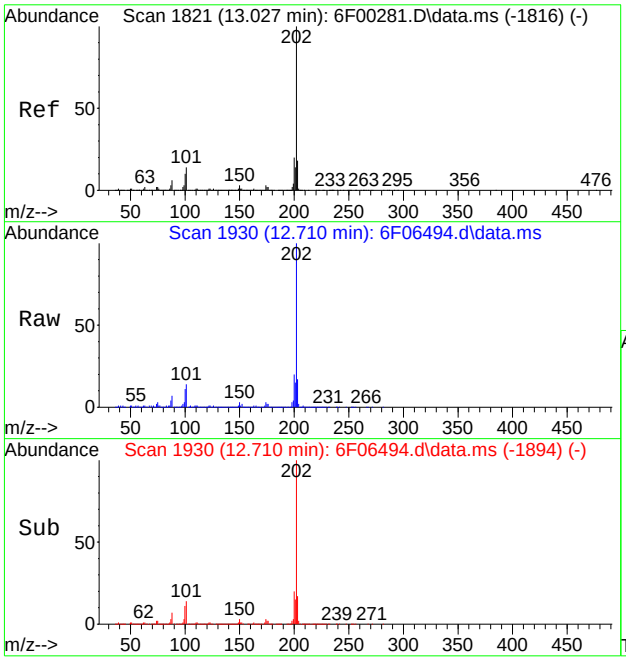


#89
Di-n-butylphthalate
Concen: 0.16 ppm
RT: 12.025 min Scan# 1802
Delta R.T. -0.006 min
Lab File: 6F06494.d
Acq: 11 Aug 2020 4:24 pm

Tgt Ion:149 Resp: 7381

Ion	Ratio	Lower	Upper
149	100		
150	9.8	0.0	38.7
104	5.5	0.0	35.2

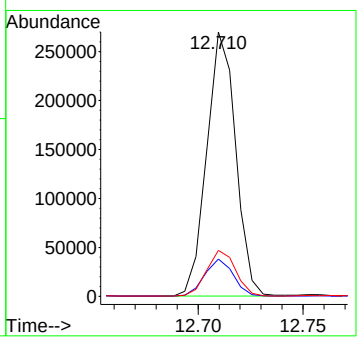


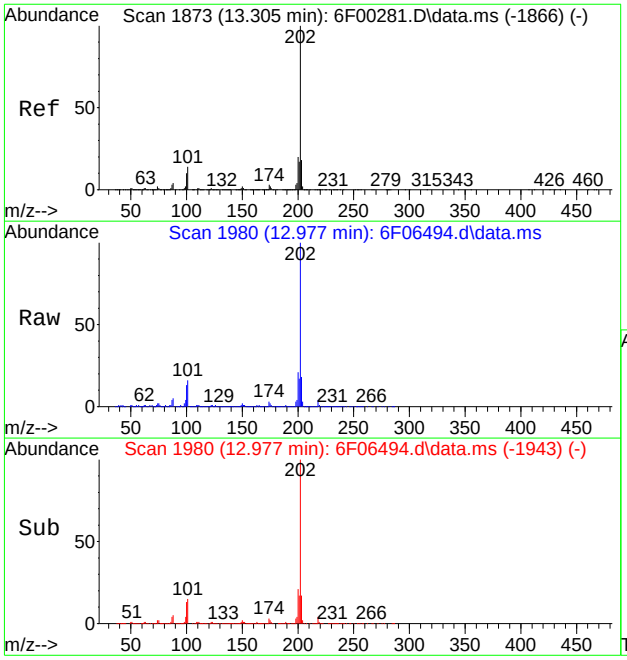


#91
Fluoranthene
Concen: 6.14 ppm
RT: 12.710 min Scan# 1930
Delta R.T. -0.006 min
Lab File: 6F06494.d
Acq: 11 Aug 2020 4:24 pm

Tgt Ion:202 Resp: 258931

Ion	Ratio	Lower	Upper
202	100		
101	14.1	0.0	43.6
203	17.3	0.0	47.7

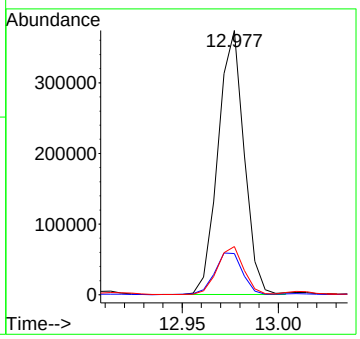


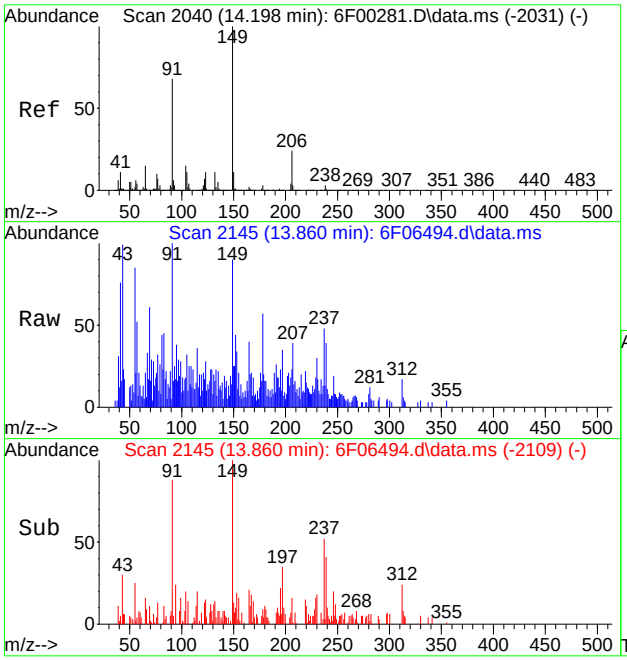


#94
Pyrene
Concen: 8.40 ppm
RT: 12.977 min Scan# 1980
Delta R.T. -0.000 min
Lab File: 6F06494.d
Acq: 11 Aug 2020 4:24 pm

Tgt Ion:202 Resp: 352414

Ion	Ratio	Lower	Upper
202	100		
101	15.4	0.0	43.8
203	17.9	0.0	47.8

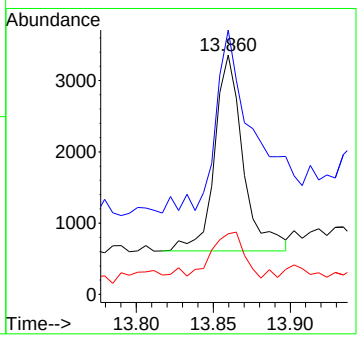


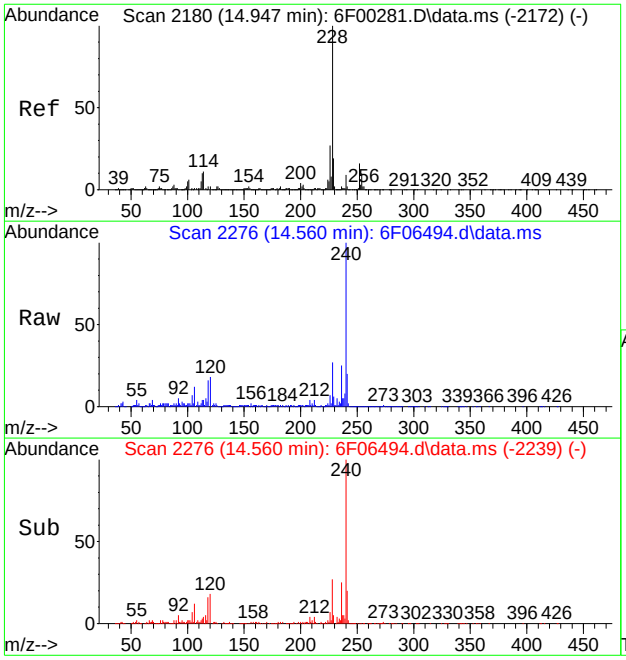


#97
Butylbenzylphthalate
Concen: 0.18 ppm
RT: 13.860 min Scan# 2145
Delta R.T. -0.006 min
Lab File: 6F06494.d
Acq: 11 Aug 2020 4:24 pm

Tgt Ion:149 Resp: 3555

Ion	Ratio	Lower	Upper
149	100		
91	81.4	38.2	98.2
206	20.2	0.0	54.0

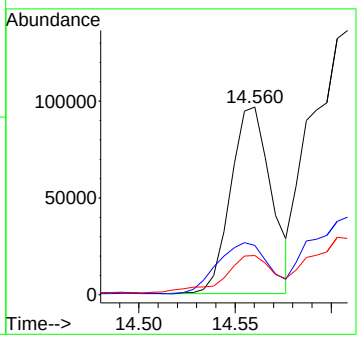


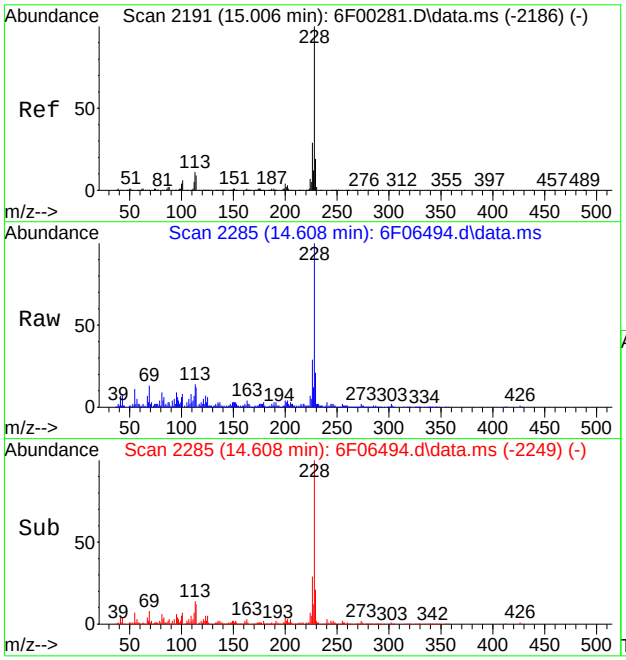


#99
Benzo[a]anthracene
Concen: 3.60 ppm
RT: 14.560 min Scan# 2276
Delta R.T. -0.000 min
Lab File: 6F06494.d
Acq: 11 Aug 2020 4:24 pm

Tgt Ion:228 Resp: 141462

Ion	Ratio	Lower	Upper
228	100		
226	25.7	0.0	56.6
229	18.7	0.0	48.9

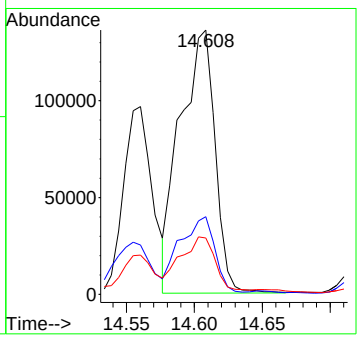


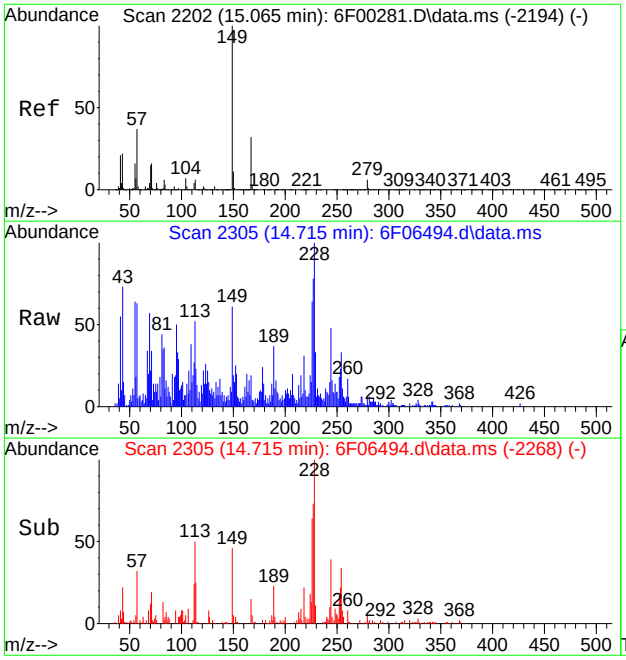


#100
Chrysene
Concen: 6.40 ppm
RT: 14.608 min Scan# 2285
Delta R.T. -0.006 min
Lab File: 6F06494.d
Acq: 11 Aug 2020 4:24 pm

Tgt Ion:228 Resp: 243804

Ion	Ratio	Lower	Upper
228	100		
226	29.3	0.0	58.9
229	19.7	0.0	48.5

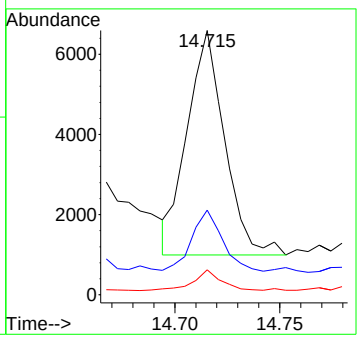


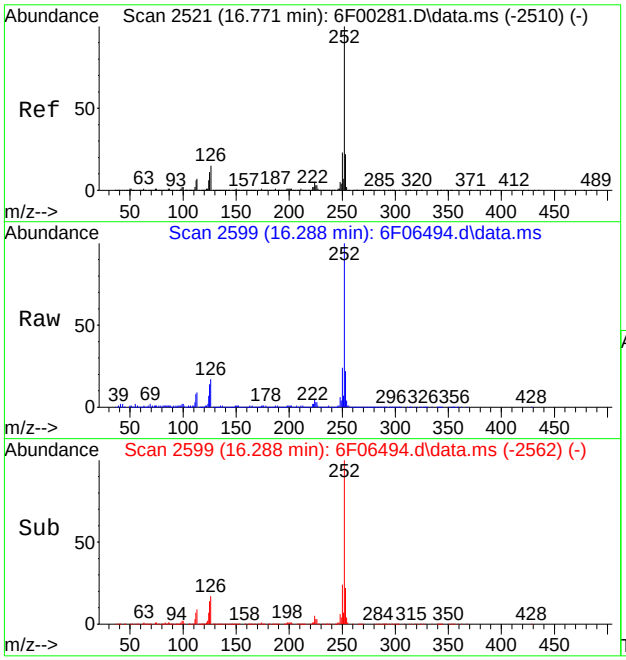


#101
bis(2-Ethylhexyl)phthalate
Concen: 0.25 ppm
RT: 14.715 min Scan# 2305
Delta R.T. -0.000 min
Lab File: 6F06494.d
Acq: 11 Aug 2020 4:24 pm

Tgt Ion:149 Resp: 6968

Ion	Ratio	Lower	Upper
149	100		
167	28.4	1.7	61.7
279	9.6	0.0	35.7

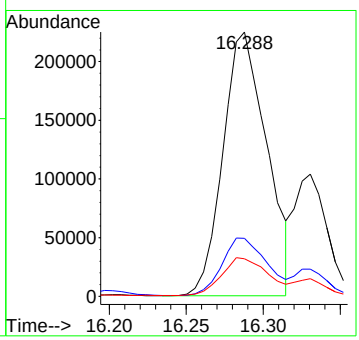


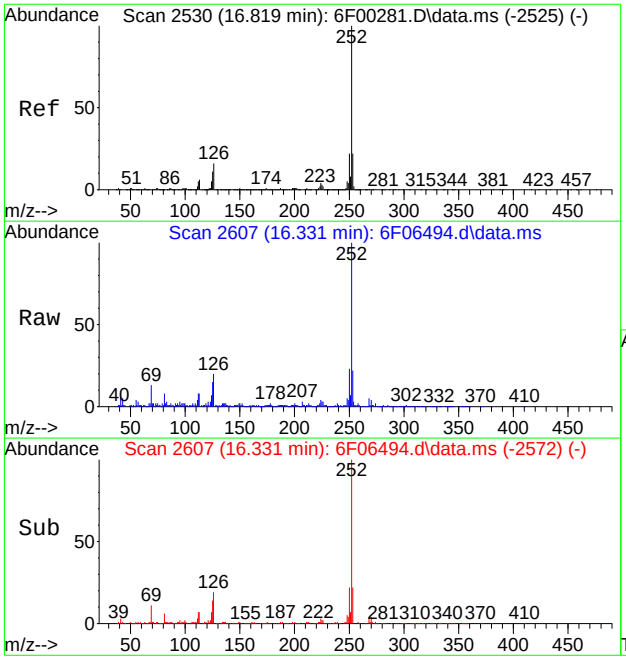


#104
Benzo[b]fluoranthene
Concen: 11.85 ppm
RT: 16.288 min Scan# 2599
Delta R.T. -0.000 min
Lab File: 6F06494.d
Acq: 11 Aug 2020 4:24 pm

Tgt Ion:252 Resp: 445097

Ion	Ratio	Lower	Upper
252	100		
253	21.7	0.0	51.9
125	13.7	0.0	41.3

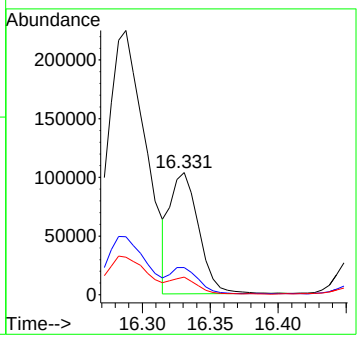


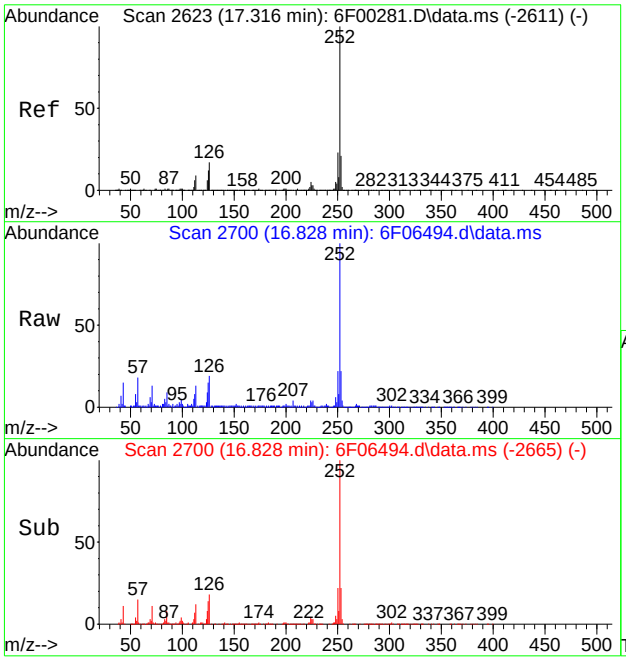


#105
Benzo[k]fluoranthene
Concen: 3.88 ppm
RT: 16.331 min Scan# 2607
Delta R.T. -0.011 min
Lab File: 6F06494.d
Acq: 11 Aug 2020 4:24 pm

Tgt Ion:252 Resp: 151699

Ion	Ratio	Lower	Upper
252	100		
253	21.7	0.0	51.7
125	13.4	0.0	40.7

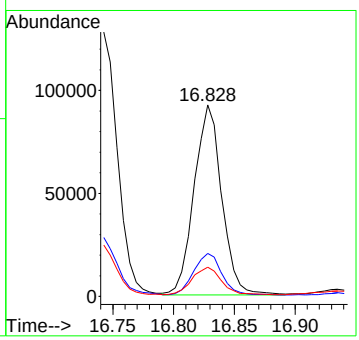


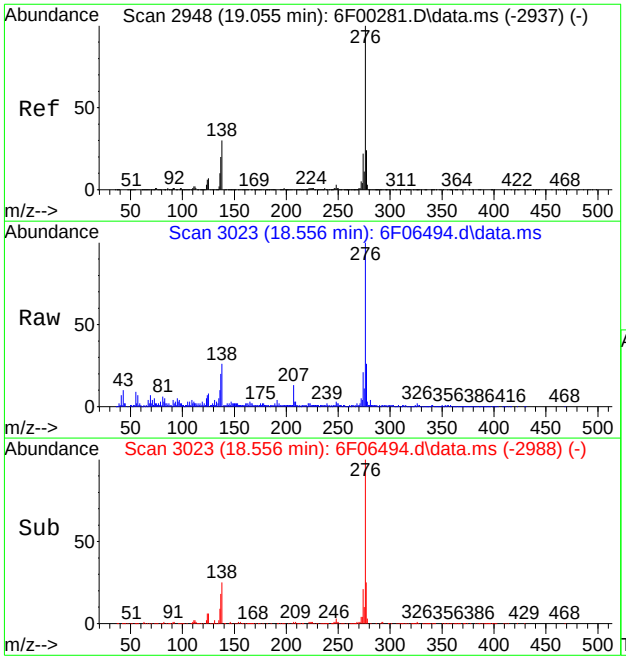


#106
Benzo[a]pyrene
Concen: 4.20 ppm
RT: 16.828 min Scan# 2700
Delta R.T. -0.011 min
Lab File: 6F06494.d
Acq: 11 Aug 2020 4:24 pm

Tgt Ion:252 Resp: 146635

Ion	Ratio	Lower	Upper
252	100		
253	22.0	0.0	51.0
125	14.5	0.0	42.0

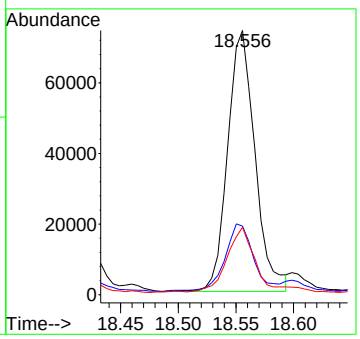


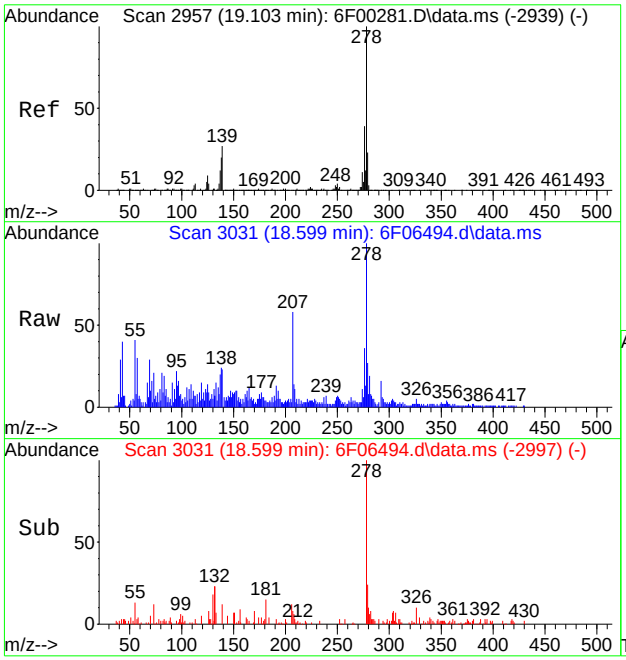


#107
Indeno[1,2,3-cd]pyrene
Concen: 3.75 ppm
RT: 18.556 min Scan# 3023
Delta R.T. -0.011 min
Lab File: 6F06494.d
Acq: 11 Aug 2020 4:24 pm

Tgt Ion:276 Resp: 121868

Ion	Ratio	Lower	Upper
276	100		
138	23.8	0.0	59.6
277	24.6	0.0	54.1

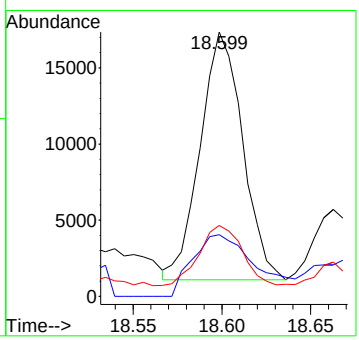


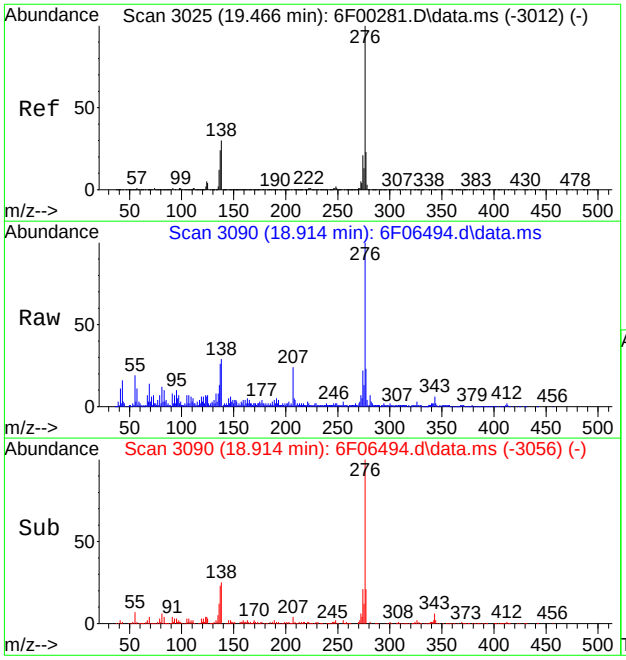


#108
Dibenz[a,h]anthracene
Concen: 0.78 ppm
RT: 18.599 min Scan# 3031
Delta R.T. -0.016 min
Lab File: 6F06494.d
Acq: 11 Aug 2020 4:24 pm

Tgt Ion:278 Resp: 26999

Ion	Ratio	Lower	Upper
278	100		
139	20.1	0.0	56.9
279	24.4	0.0	53.0

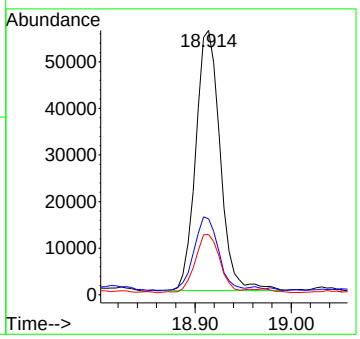




#109
Benzo[g,h,i]perylene
Concen: 2.82 ppm
RT: 18.914 min Scan# 3090
Delta R.T. -0.016 min
Lab File: 6F06494.d
Acq: 11 Aug 2020 4:24 pm

Tgt Ion:276 Resp: 98796

Ion	Ratio	Lower	Upper
276	100		
138	27.5	0.0	59.5
277	22.1	0.0	53.0



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06495.d
Acq On : 11 Aug 2020 4:50 pm
Operator : marthav
Sample : fa77615-3 E Inst : MSBNA10
Misc : op81484,S6F251,30.3,,,1,1,soil
ALS Vial : 11 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Results File: 8270D6F072920.RES
Quant Time: Aug 12 06:17:56 2020
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

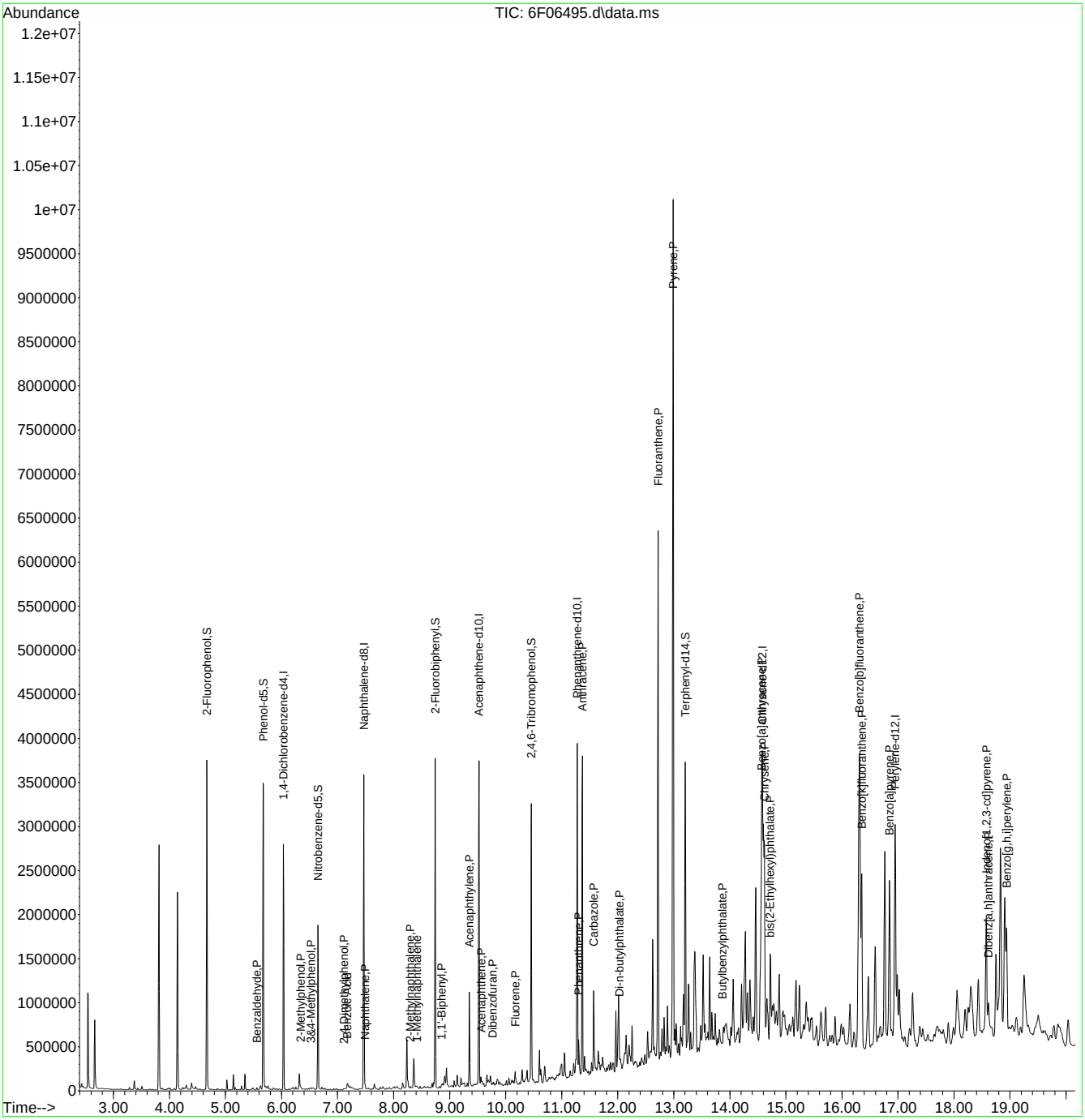
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	6.035	152	381124	40.00	ppm		0.00
22) Naphthalene-d8	7.468	136	1412026	40.00	ppm		0.00
43) Acenaphthene-d10	9.522	164	741775	40.00	ppm		0.00
70) Phenanthrene-d10	11.276	188	1331566	40.00	ppm		0.00
92) Chrysene-d12	14.582	240	1140619	40.00	ppm		0.00
102) Perylene-d12	16.946	264	1165331	40.00	ppm		0.02
System Monitoring Compounds							
7) 2-Fluorophenol	4.665	112	957472	66.48	ppm		0.00
Spiked Amount 100.000	Range 40 - 102		Recovery = 66.48%				
9) Phenol-d5	5.676	99	1236698	72.34	ppm		0.00
Spiked Amount 100.000	Range 41 - 100		Recovery = 72.34%				
23) Nitrobenzene-d5	6.650	82	533454	34.43	ppm		0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 68.86%				
47) 2-Fluorobiphenyl	8.741	172	1015735	35.03	ppm		0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 70.06%				
75) 2,4,6-Tribromophenol	10.458	330	351152	78.36	ppm		0.00
Spiked Amount 100.000	Range 42 - 108		Recovery = 78.36%				
95) Terphenyl-d14	13.202	244	1118334	34.88	ppm		0.00
Spiked Amount 50.000	Range 45 - 119		Recovery = 69.76%				
Target Compounds							Qvalue
5) Benzaldehyde	5.559	106	5338	0.46	ppm		97
17) 2-Methylphenol	6.339	108	1571	0.12	ppm		85
21) 3&4-Methylphenol	6.521	108	4659	0.34	ppm		92
27) 2,4-Dimethylphenol	7.110	107	4006	0.31	ppm		85
30) Benzoic Acid	7.174	105	21354	2.33	ppm		96
34) Naphthalene	7.489	128	7116	0.18	ppm	#	23
40) 2-Methylnaphthalene	8.297	141	4894	0.21	ppm		96
41) 1-Methylnaphthalene	8.415	142	4040	0.16	ppm		92
48) 1,1'-Biphenyl	8.853	154	1865	0.06	ppm		81
52) Acenaphthylene	9.351	152	452183	12.20	ppm		99
57) Acenaphthene	9.559	153	24368	0.99	ppm		94
60) Dibenzofuran	9.763	168	9506	0.28	ppm		77
65) Fluorene	10.169	166	46014	1.67	ppm		98
84) Phenanthrene	11.303	178	129204	3.24	ppm		99
85) Anthracene	11.367	178	1374963	33.93	ppm		99
87) Carbazole	11.570	167	306789	8.40	ppm		97
89) Di-n-butylphthalate	12.025	149	8162	0.18	ppm		76
91) Fluoranthene	12.720	202	2372388	56.51	ppm		98
94) Pyrene	12.988	202	4494830	110.02	ppm		93
97) Butylbenzylphthalate	13.865	149	7149	0.37	ppm		78
99) Benzo[a]anthracene	14.566	228	951631	24.90	ppm		98
100) Chrysene	14.619	228	1541654	41.57	ppm		95
101) bis(2-Ethylhexyl)phtha...	14.715	149	17573	0.64	ppm		92
104) Benzo[b]fluoranthene	16.315	252	2637609	70.52	ppm		97
105) Benzo[k]fluoranthene	16.352	252	908023	23.34	ppm		96
106) Benzo[a]pyrene	16.849	252	1058330	30.47	ppm		96
107) Indeno[1,2,3-cd]pyrene	18.577	276	847690	26.21	ppm		94
108) Dibenz[a,h]anthracene	18.615	278	186595	5.40	ppm		90
109) Benzo[g,h,i]perylene	18.941	276	724567	20.76	ppm		97

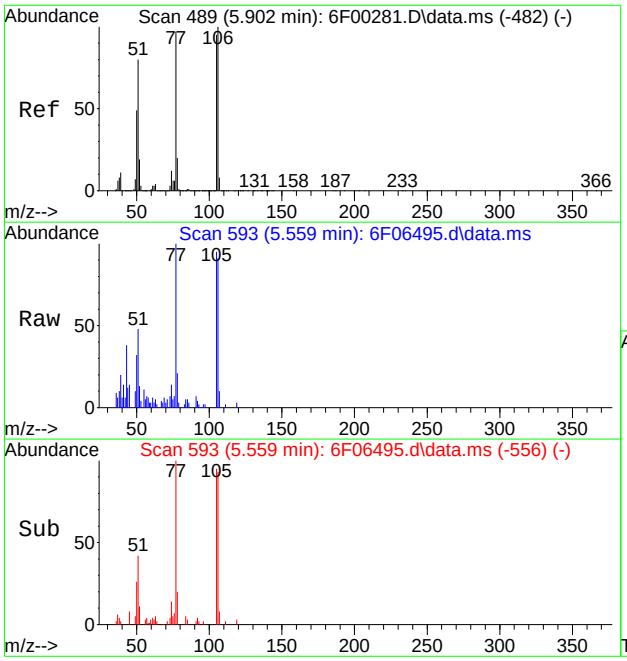
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06495.d
Acq On : 11 Aug 2020 4:50 pm
Operator : marthav
Sample : fa77615-3 E Inst : MSBNA10
Misc : op81484,S6F251,30.3,,,1,1,soil
ALS Vial : 11 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Results File: 8270D6F072920.RES
Quant Time: Aug 12 06:17:56 2020
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

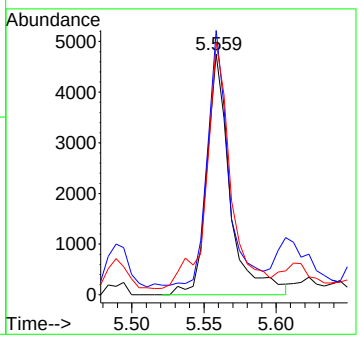


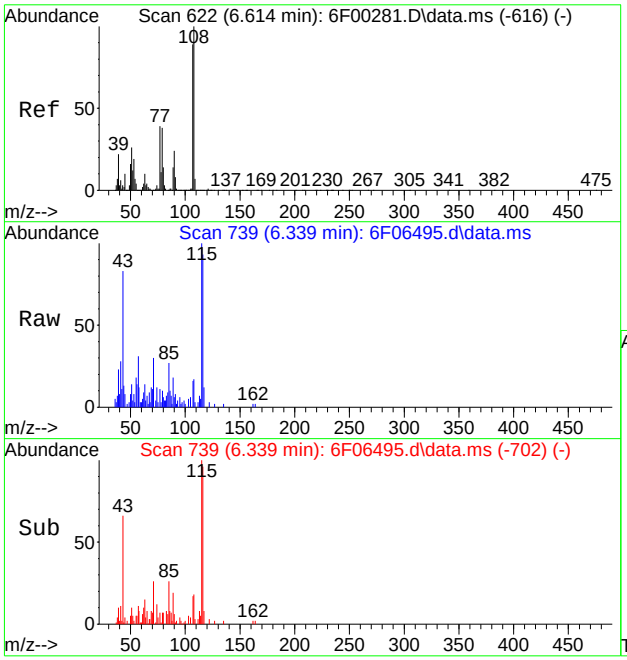


#5
Benzaldehyde
Concen: 0.46 ppm
RT: 5.559 min Scan# 593
Delta R.T. -0.000 min
Lab File: 6F06495.d
Acq: 11 Aug 2020 4:50 pm

Tgt Ion:106 Resp: 5338

Ion	Ratio	Lower	Upper
106	100		
77	98.1	67.1	127.1
105	100.7	65.1	125.1

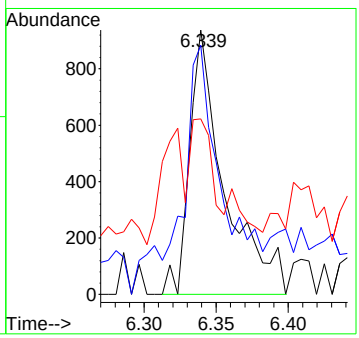


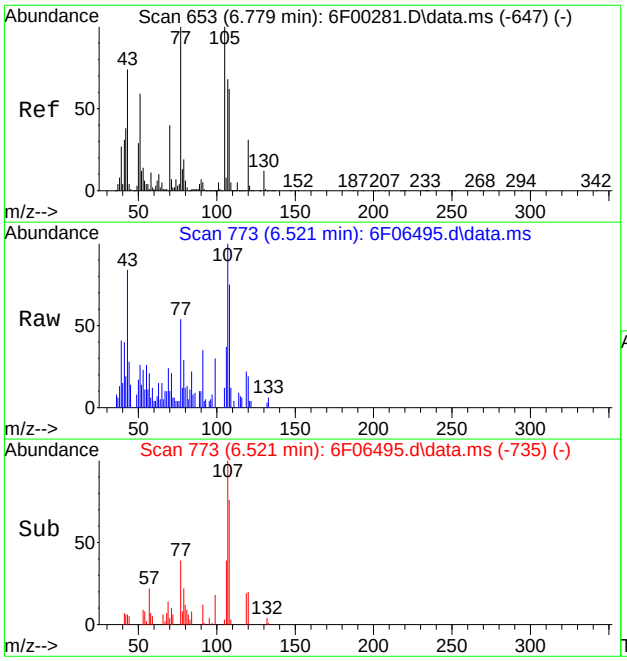


#17
2-Methylphenol
Concen: 0.12 ppm
RT: 6.339 min Scan# 739
Delta R.T. -0.000 min
Lab File: 6F06495.d
Acq: 11 Aug 2020 4:50 pm

Tgt Ion:108 Resp: 1571

Ion	Ratio	Lower	Upper
108	100		
107	75.4	58.8	118.8
77	28.8	9.2	69.2

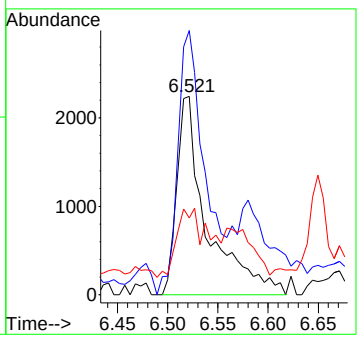


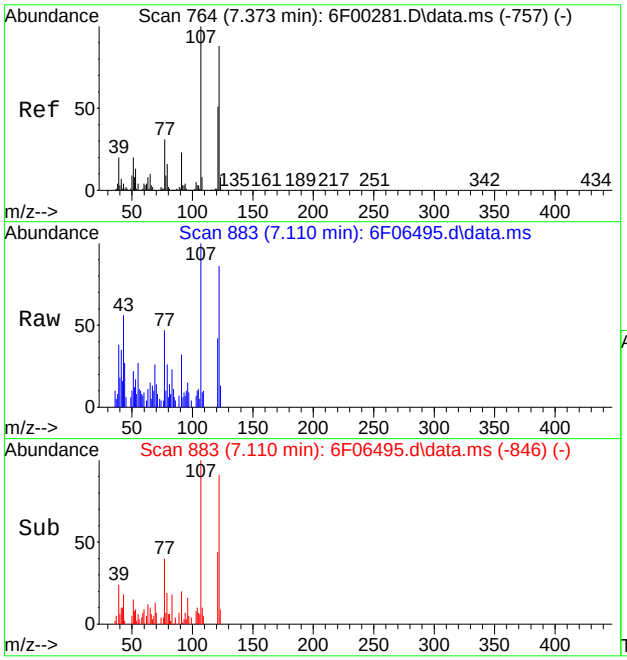


#21
3&4-Methylphenol
Concen: 0.34 ppm
RT: 6.521 min Scan# 773
Delta R.T. 0.005 min
Lab File: 6F06495.d
Acq: 11 Aug 2020 4:50 pm

Tgt Ion:108 Resp: 4659

Ion	Ratio	Lower	Upper
108	100		
107	118.6	80.3	140.3
79	26.6	0.2	60.2

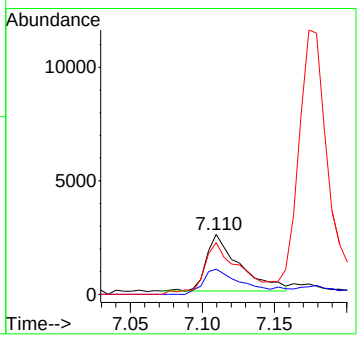


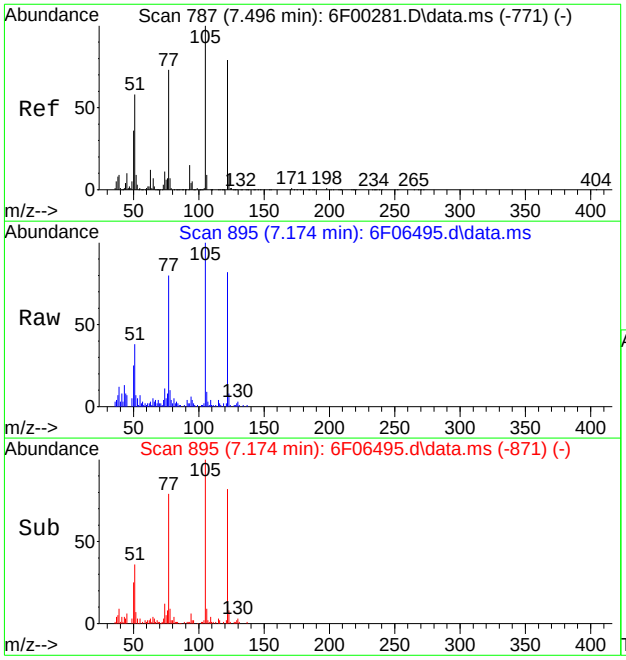


#27
2,4-Dimethylphenol
Concen: 0.31 ppm
RT: 7.110 min Scan# 883
Delta R.T. -0.000 min
Lab File: 6F06495.d
Acq: 11 Aug 2020 4:50 pm

Tgt Ion:107 Resp: 4006

Ion	Ratio	Lower	Upper
107	100		
121	41.5	20.5	80.5
122	73.0	58.5	118.5

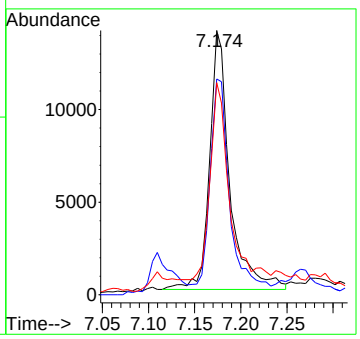


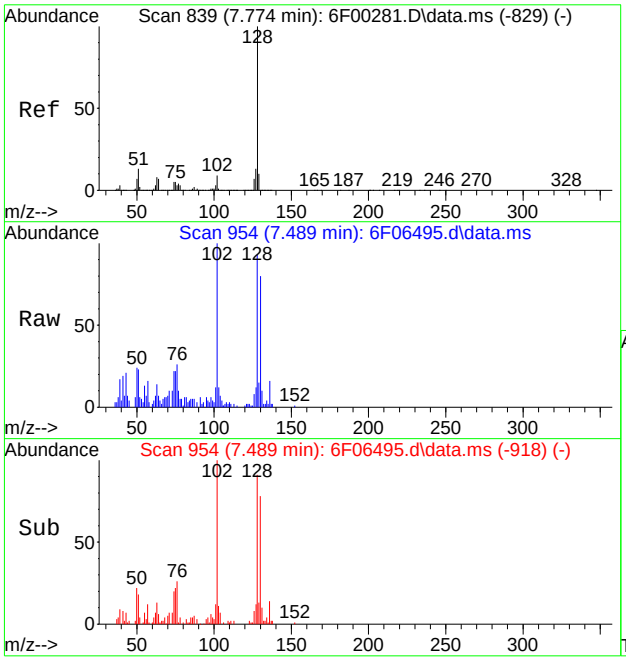


#30
Benzoic Acid
Concen: 2.33 ppm
RT: 7.174 min Scan# 895
Delta R.T. -0.070 min
Lab File: 6F06495.d
Acq: 11 Aug 2020 4:50 pm

Tgt Ion:105 Resp: 21354

Ion	Ratio	Lower	Upper
105	100		
122	75.6	49.5	109.5
77	75.7	43.0	103.0

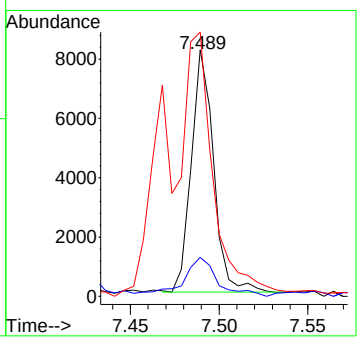


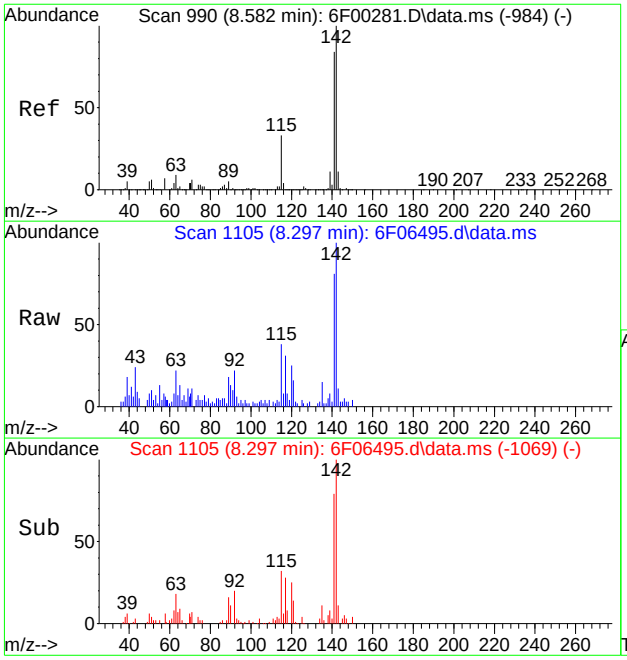


#34
Naphthalene
Concen: 0.18 ppm
RT: 7.489 min Scan# 954
Delta R.T. -0.006 min
Lab File: 6F06495.d
Acq: 11 Aug 2020 4:50 pm

Tgt Ion:128 Resp: 7116

Ion	Ratio	Lower	Upper
128	100		
129	13.9	0.0	40.4
102	64.7	0.0	39.2#

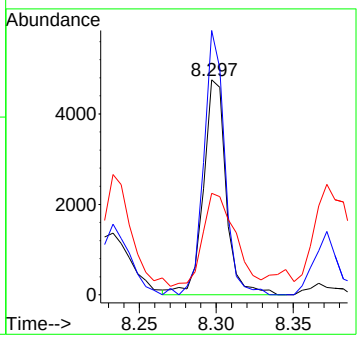


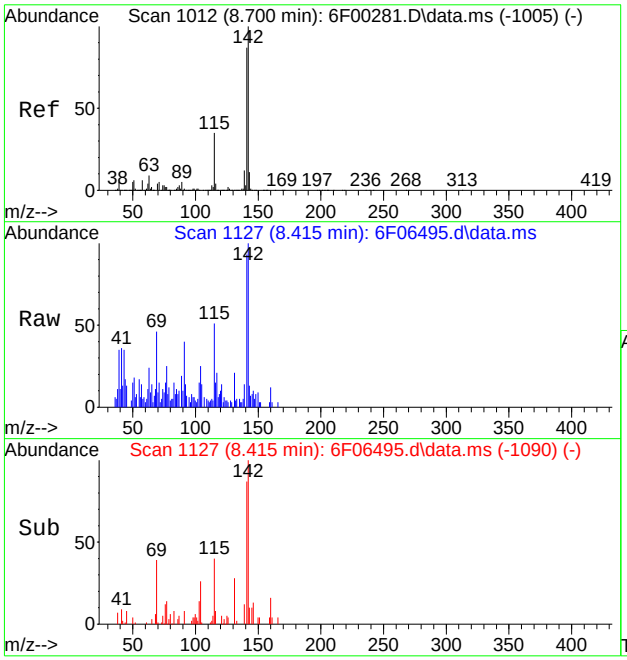


#40
2-Methylnaphthalene
Concen: 0.21 ppm
RT: 8.297 min Scan# 1105
Delta R.T. -0.006 min
Lab File: 6F06495.d
Acq: 11 Aug 2020 4:50 pm

Tgt Ion:141 Resp: 4894

Ion	Ratio	Lower	Upper
141	100		
142	123.3	88.9	148.9
115	37.8	9.7	69.7

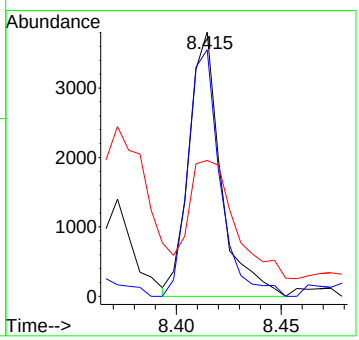


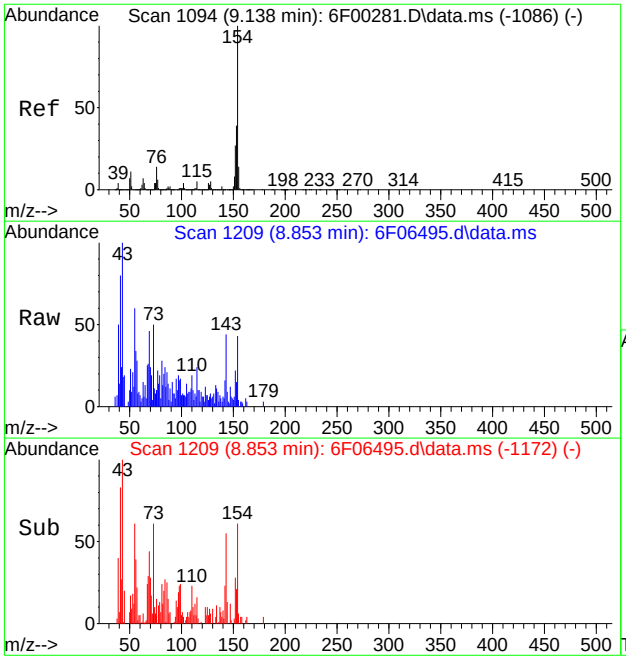


#41
1-Methylnaphthalene
Concen: 0.16 ppm
RT: 8.415 min Scan# 1127
Delta R.T. -0.000 min
Lab File: 6F06495.d
Acq: 11 Aug 2020 4:50 pm

Tgt Ion:142 Resp: 4040

Ion	Ratio	Lower	Upper
142	100		
141	94.8	56.8	116.8
115	38.4	4.7	64.7

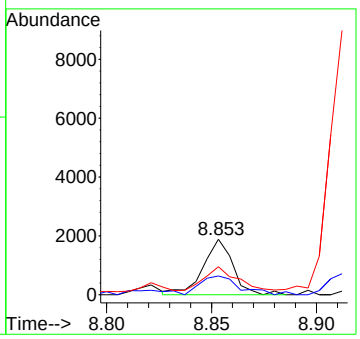


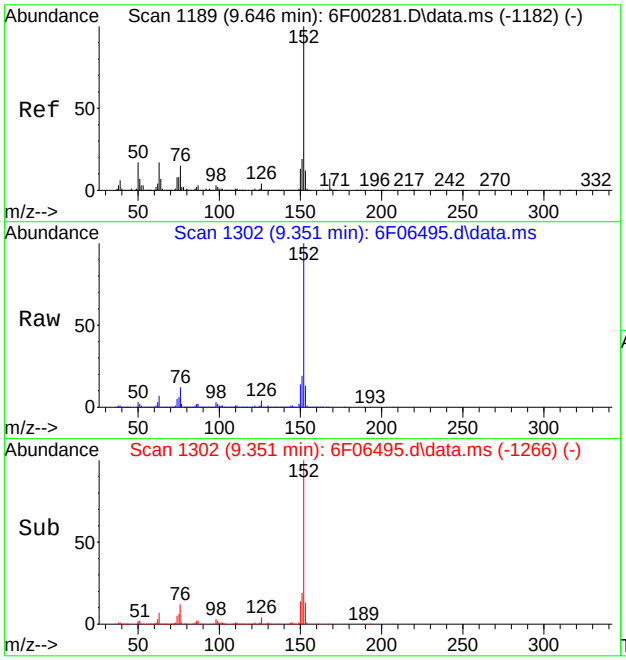


#48
1,1'-Biphenyl
Concen: 0.06 ppm
RT: 8.853 min Scan# 1209
Delta R.T. -0.000 min
Lab File: 6F06495.d
Acq: 11 Aug 2020 4:50 pm

Tgt Ion:154 Resp: 1865

Ion	Ratio	Lower	Upper
154	100		
153	29.3	8.7	68.7
152	39.8	0.0	56.7

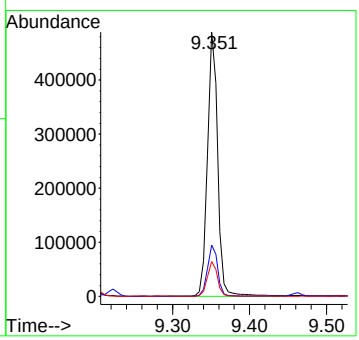


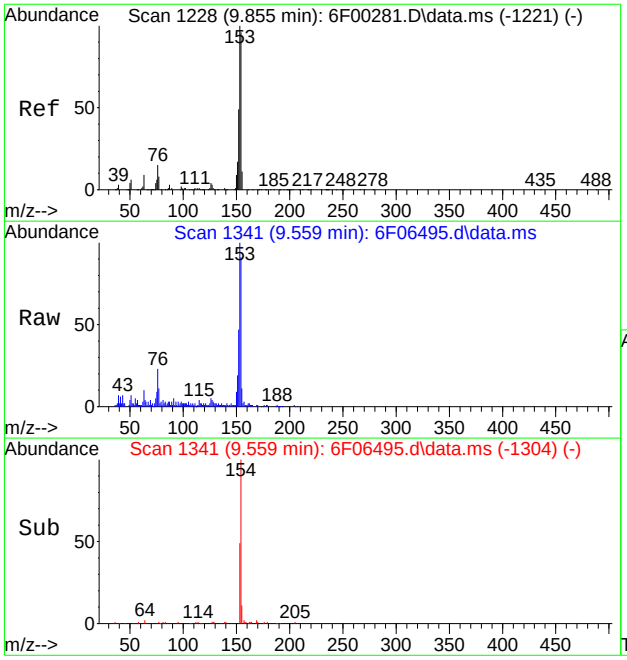


#52
Acenaphthylene
Concen: 12.20 ppm
RT: 9.351 min Scan# 1302
Delta R.T. -0.006 min
Lab File: 6F06495.d
Acq: 11 Aug 2020 4:50 pm

Tgt Ion:152 Resp: 452183

Ion	Ratio	Lower	Upper
152	100		
151	19.3	0.0	48.8
153	13.1	0.0	42.3

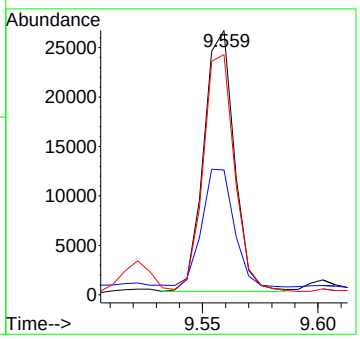


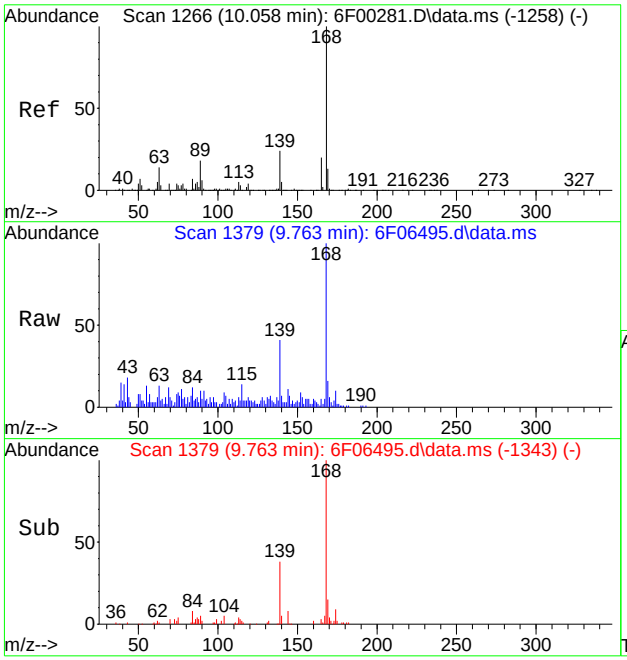


#57
Acenaphthene
Concen: 0.99 ppm
RT: 9.559 min Scan# 1341
Delta R.T. -0.000 min
Lab File: 6F06495.d
Acq: 11 Aug 2020 4:50 pm

Tgt Ion:153 Resp: 24368

Ion	Ratio	Lower	Upper
153	100		
152	44.6	19.4	79.4
154	90.2	65.6	125.6

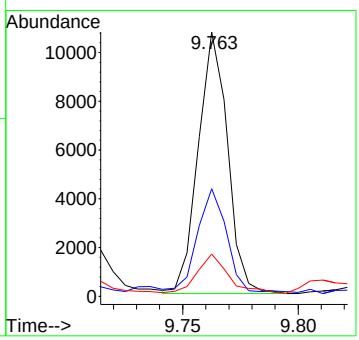


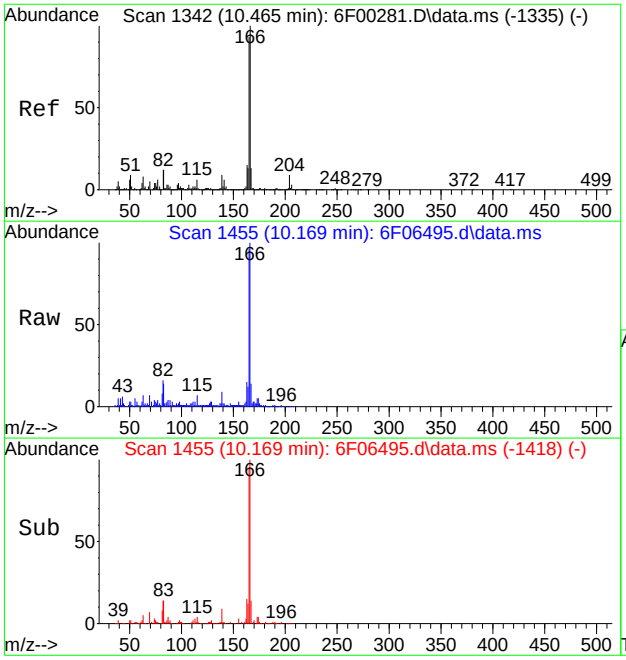


#60
Dibenzofuran
Concen: 0.28 ppm
RT: 9.763 min Scan# 1379
Delta R.T. -0.006 min
Lab File: 6F06495.d
Acq: 11 Aug 2020 4:50 pm

Tgt Ion:168 Resp: 9506

Ion	Ratio	Lower	Upper
168	100		
139	39.1	0.0	53.6
169	14.9	0.0	42.6

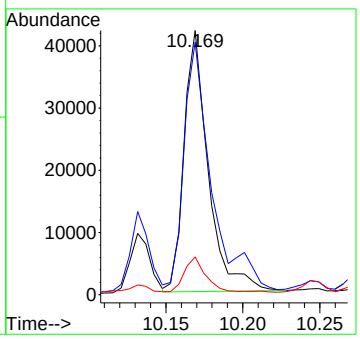


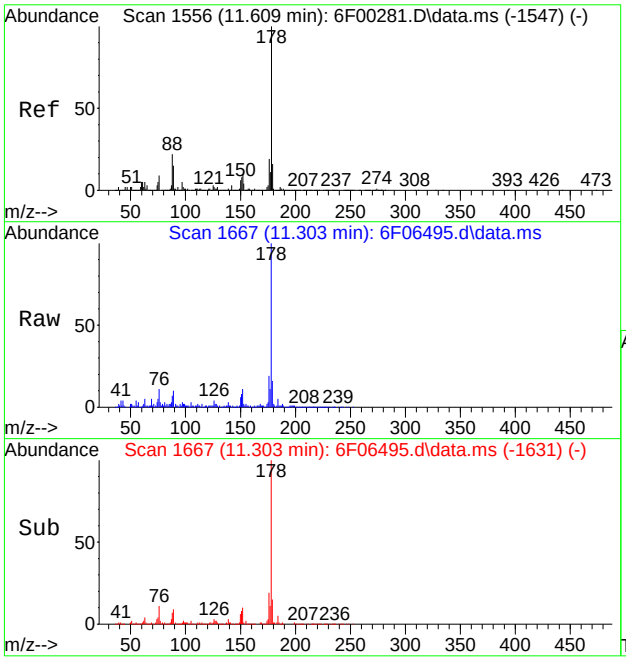


#65
Fluorene
Concen: 1.67 ppm
RT: 10.169 min Scan# 1455
Delta R.T. -0.000 min
Lab File: 6F06495.d
Acq: 11 Aug 2020 4:50 pm

Tgt Ion:166 Resp: 46014

Ion	Ratio	Lower	Upper
166	100		
165	94.5	62.6	122.6
167	13.4	0.0	43.1

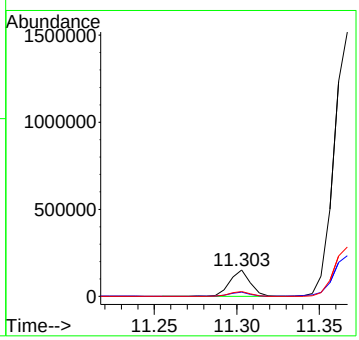


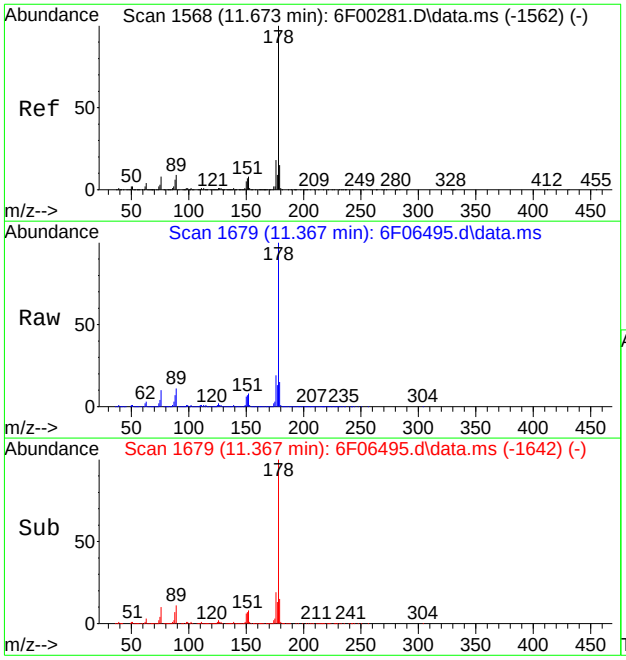


#84
Phenanthrene
Concen: 3.24 ppm
RT: 11.303 min Scan# 1667
Delta R.T. -0.006 min
Lab File: 6F06495.d
Acq: 11 Aug 2020 4:50 pm

Tgt Ion:178 Resp: 129204

Ion	Ratio	Lower	Upper
178	100		
179	15.2	0.0	46.0
176	18.6	0.0	49.0

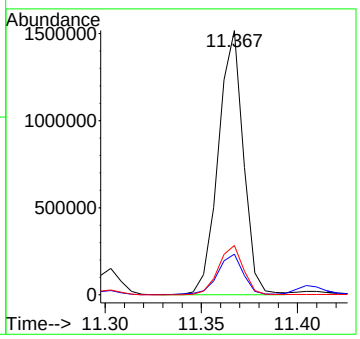


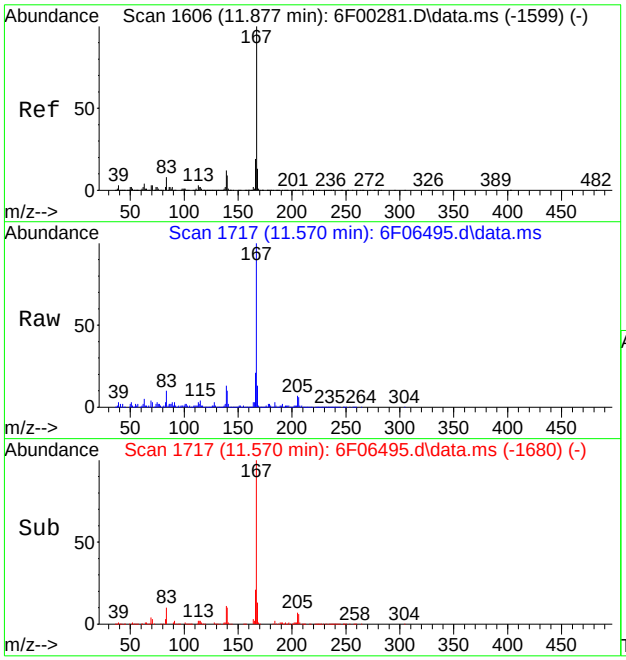


#85
Anthracene
Concen: 33.93 ppm
RT: 11.367 min Scan# 1679
Delta R.T. -0.000 min
Lab File: 6F06495.d
Acq: 11 Aug 2020 4:50 pm

Tgt Ion:178 Resp: 1374963

Ion	Ratio	Lower	Upper
178	100		
179	15.1	0.0	45.4
176	18.7	0.0	47.7

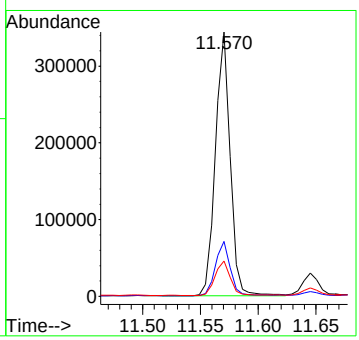


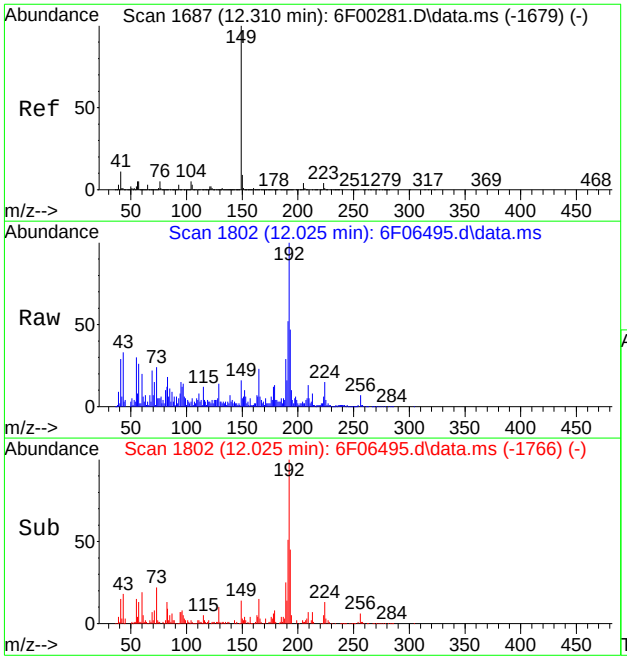


#87
Carbazole
Concen: 8.40 ppm
RT: 11.570 min Scan# 1717
Delta R.T. -0.000 min
Lab File: 6F06495.d
Acq: 11 Aug 2020 4:50 pm

Tgt Ion:167 Resp: 306789

Ion	Ratio	Lower	Upper
167	100		
166	20.6	0.0	49.2
139	13.1	0.0	42.3

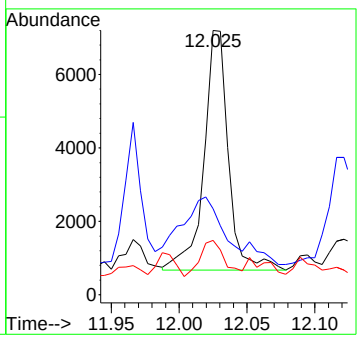


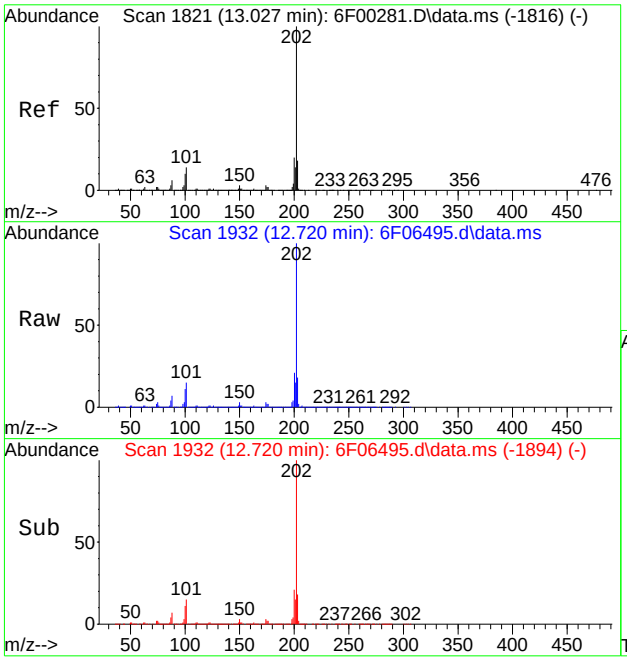


#89
Di-n-butylphthalate
Concen: 0.18 ppm
RT: 12.025 min Scan# 1802
Delta R.T. -0.006 min
Lab File: 6F06495.d
Acq: 11 Aug 2020 4:50 pm

Tgt Ion:149 Resp: 8162

Ion	Ratio	Lower	Upper
149	100		
150	19.8	0.0	38.7
104	9.7	0.0	35.2

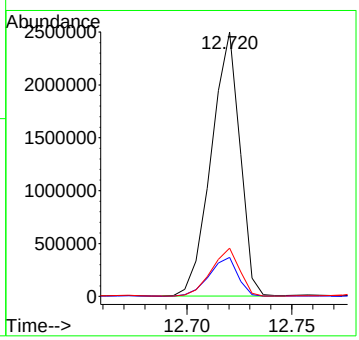


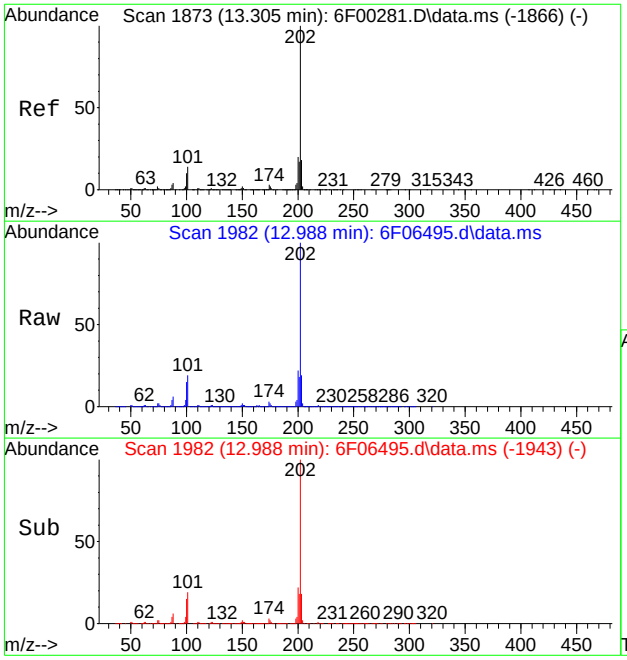


#91
Fluoranthene
Concen: 56.51 ppm
RT: 12.720 min Scan# 1932
Delta R.T. 0.005 min
Lab File: 6F06495.d
Acq: 11 Aug 2020 4:50 pm

Tgt Ion:202 Resp: 2372388

Ion	Ratio	Lower	Upper
202	100		
101	14.7	0.0	43.6
203	18.1	0.0	47.7

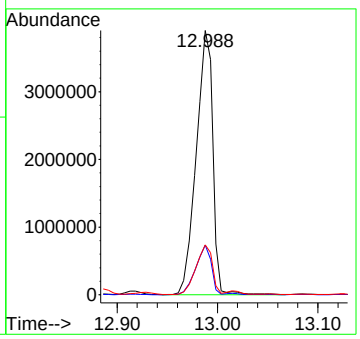


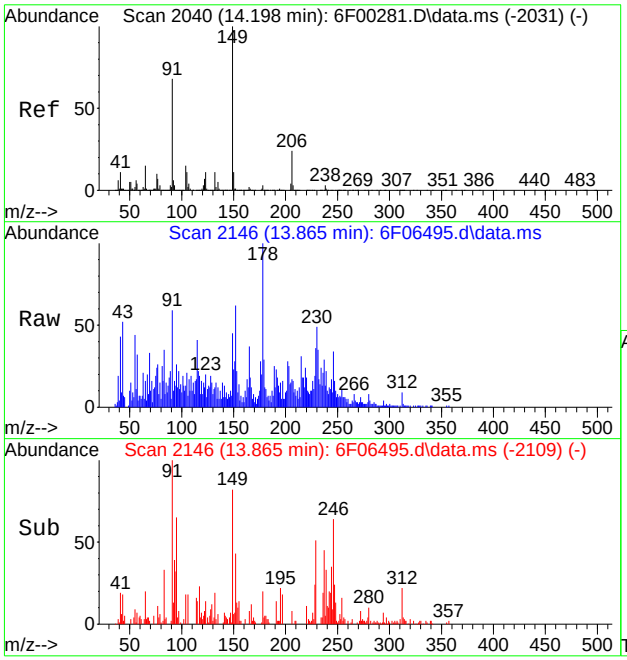


#94
Pyrene
Concen: 110.02 ppm
RT: 12.988 min Scan# 1982
Delta R.T. 0.011 min
Lab File: 6F06495.d
Acq: 11 Aug 2020 4:50 pm

Tgt Ion:202 Resp: 4494830

Ion	Ratio	Lower	Upper
202	100		
101	18.7	0.0	43.8
203	18.8	0.0	47.8

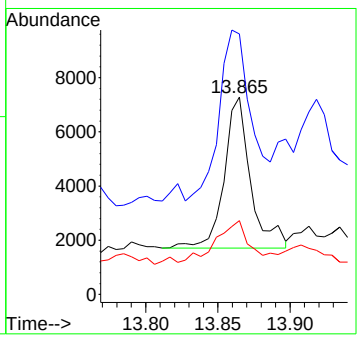


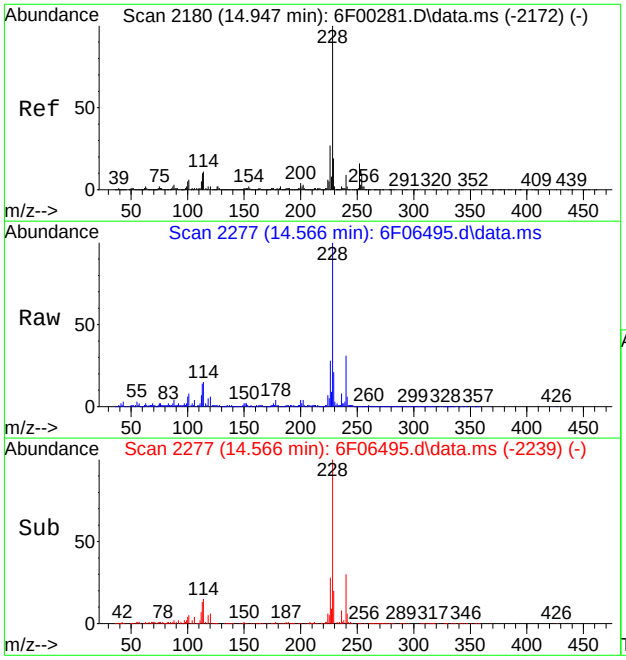


#97
Butylbenzylphthalate
Concen: 0.37 ppm
RT: 13.865 min Scan# 2146
Delta R.T. -0.000 min
Lab File: 6F06495.d
Acq: 11 Aug 2020 4:50 pm

Tgt Ion:149 Resp: 7149

Ion	Ratio	Lower	Upper
149	100		
91	92.2	38.2	98.2
206	24.2	0.0	54.0

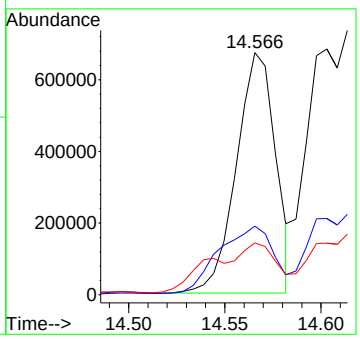


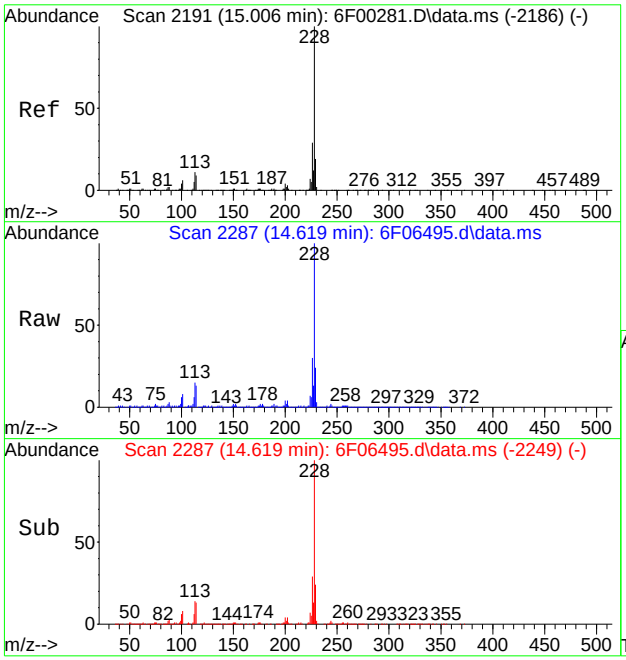


#99
Benzo[a]anthracene
Concen: 24.90 ppm
RT: 14.566 min Scan# 2277
Delta R.T. 0.005 min
Lab File: 6F06495.d
Acq: 11 Aug 2020 4:50 pm

Tgt Ion:228 Resp: 951631

Ion	Ratio	Lower	Upper
228	100		
226	28.1	0.0	56.6
229	19.6	0.0	48.9

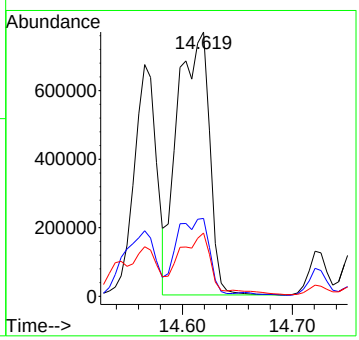


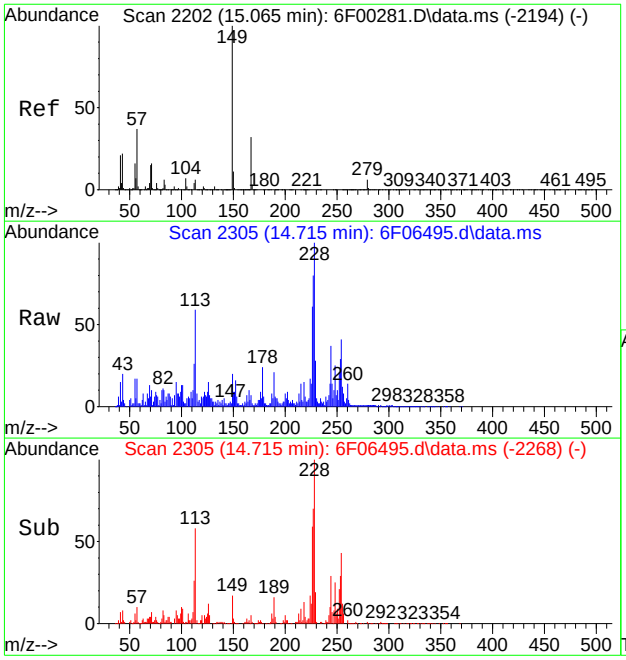


#100
Chrysene
Concen: 41.57 ppm
RT: 14.619 min Scan# 2287
Delta R.T. 0.005 min
Lab File: 6F06495.d
Acq: 11 Aug 2020 4:50 pm

Tgt Ion:228 Resp: 1541654

Ion	Ratio	Lower	Upper
228	100		
226	29.6	0.0	58.9
229	23.0	0.0	48.5

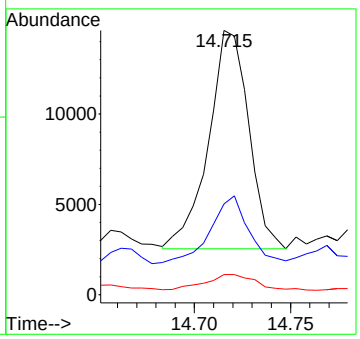


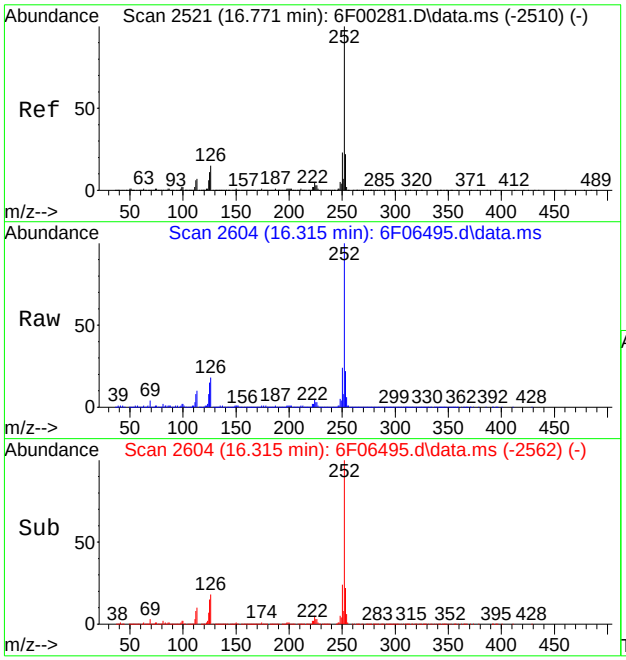


#101
bis(2-Ethylhexyl)phthalate
Concen: 0.64 ppm
RT: 14.715 min Scan# 2305
Delta R.T. -0.000 min
Lab File: 6F06495.d
Acq: 11 Aug 2020 4:50 pm

Tgt Ion:149 Resp: 17573

Ion	Ratio	Lower	Upper
149	100		
167	26.6	1.7	61.7
279	6.8	0.0	35.7

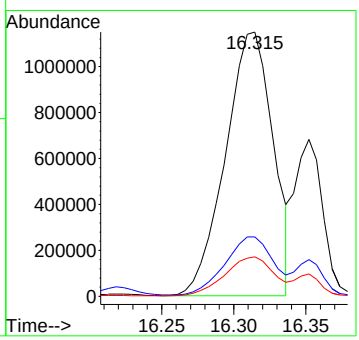


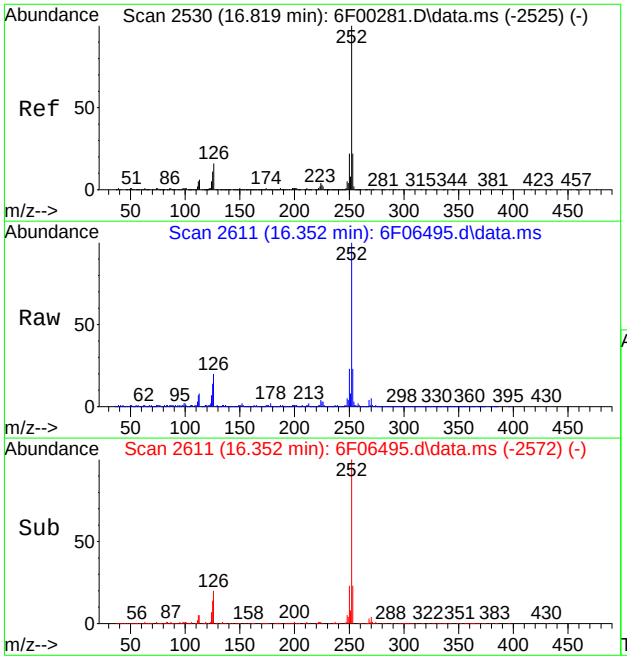


#104
Benzo[b]fluoranthene
Concen: 70.52 ppm
RT: 16.315 min Scan# 2604
Delta R.T. 0.027 min
Lab File: 6F06495.d
Acq: 11 Aug 2020 4:50 pm

Tgt Ion:252 Resp: 2637609

Ion	Ratio	Lower	Upper
252	100		
253	22.0	0.0	51.9
125	14.8	0.0	41.3

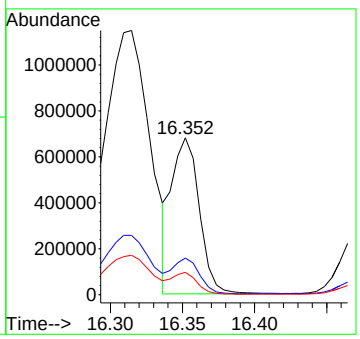


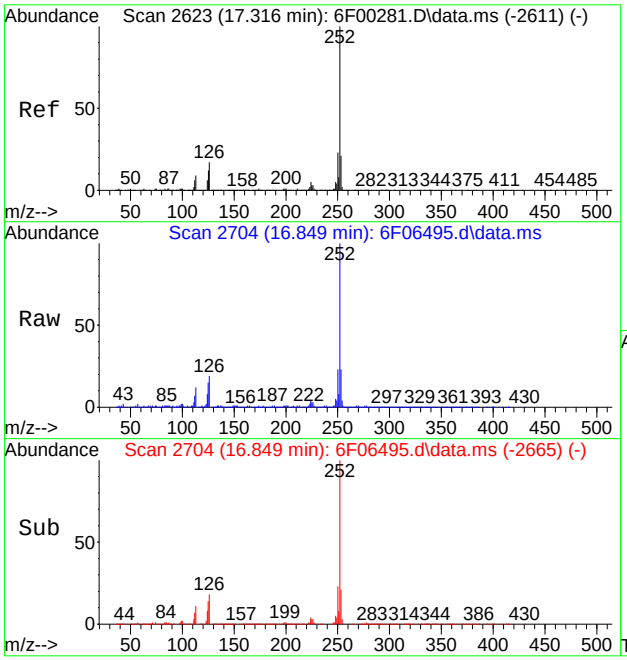


#105
Benzo[k]fluoranthene
Concen: 23.34 ppm
RT: 16.352 min Scan# 2611
Delta R.T. 0.010 min
Lab File: 6F06495.d
Acq: 11 Aug 2020 4:50 pm

Tgt Ion:252 Resp: 908023

Ion	Ratio	Lower	Upper
252	100		
253	23.0	0.0	51.7
125	13.6	0.0	40.7

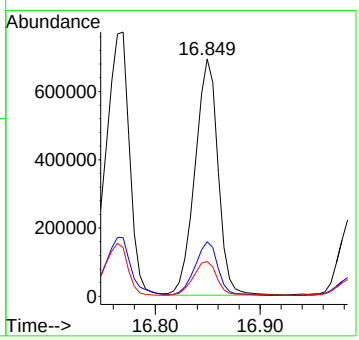


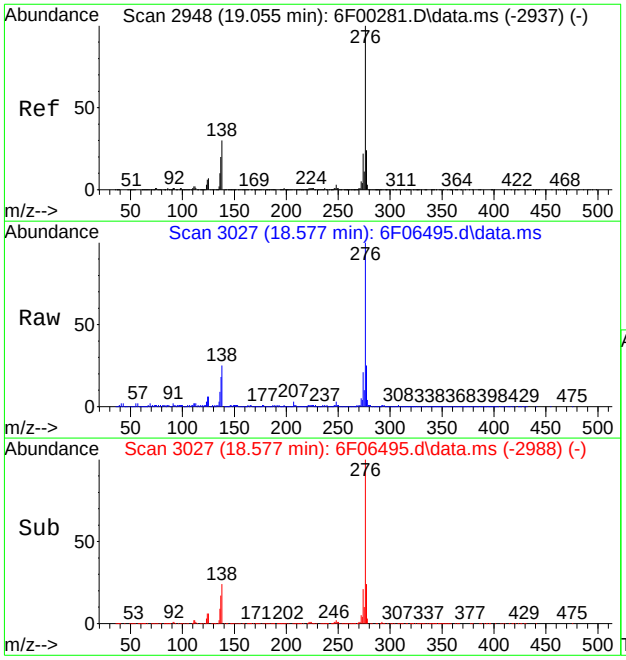


#106
Benzo[a]pyrene
Concen: 30.47 ppm
RT: 16.849 min Scan# 2704
Delta R.T. 0.010 min
Lab File: 6F06495.d
Acq: 11 Aug 2020 4:50 pm

Tgt Ion:252 Resp: 1058330

Ion	Ratio	Lower	Upper
252	100		
253	22.6	0.0	51.0
125	14.3	0.0	42.0

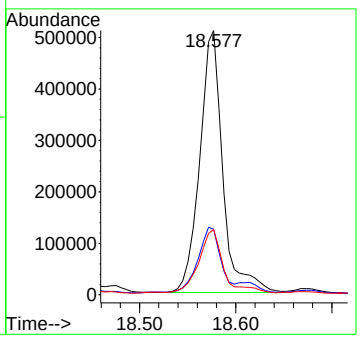


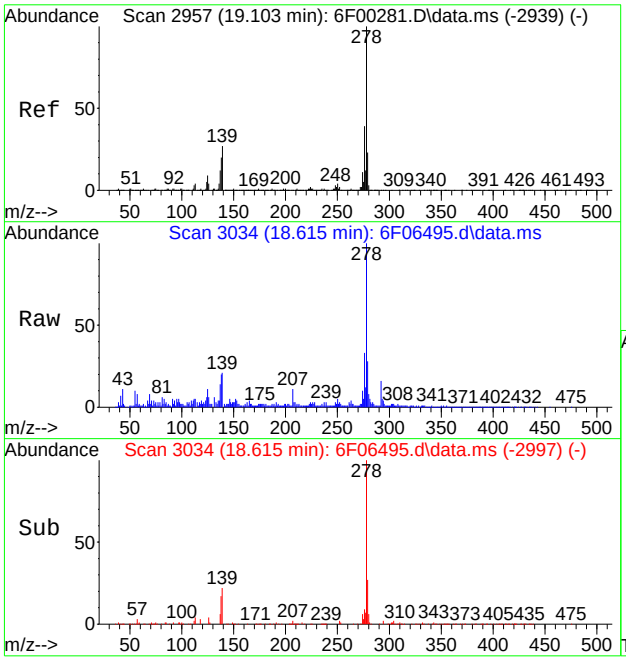


#107
Indeno[1,2,3-cd]pyrene
Concen: 26.21 ppm
RT: 18.577 min Scan# 3027
Delta R.T. 0.011 min
Lab File: 6F06495.d
Acq: 11 Aug 2020 4:50 pm

Tgt Ion:276 Resp: 847690

Ion	Ratio	Lower	Upper
276	100		
138	24.1	0.0	59.6
277	24.0	0.0	54.1

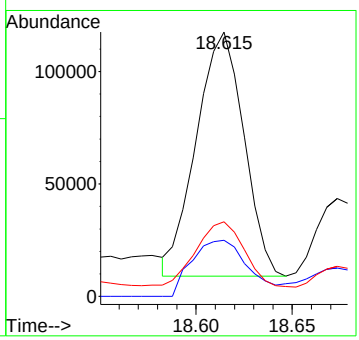


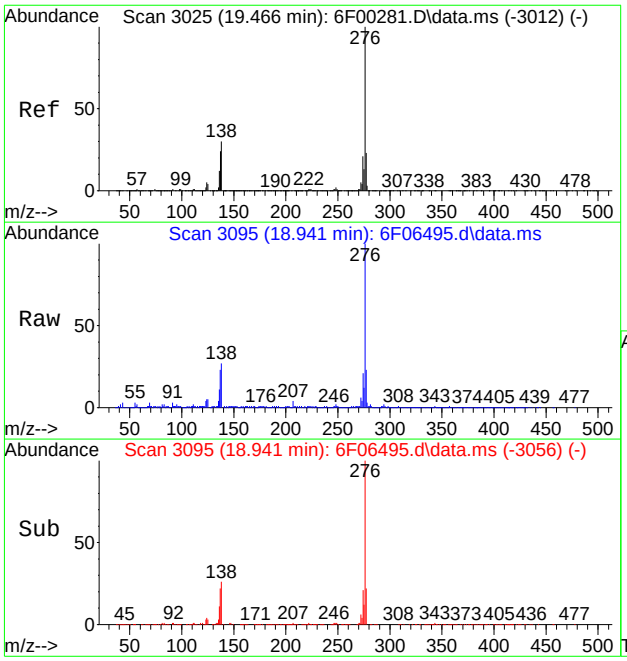


#108
Dibenz[a,h]anthracene
Concen: 5.40 ppm
RT: 18.615 min Scan# 3034
Delta R.T. -0.000 min
Lab File: 6F06495.d
Acq: 11 Aug 2020 4:50 pm

Tgt Ion:278 Resp: 186595

Ion	Ratio	Lower	Upper
278	100		
139	21.1	0.0	56.9
279	27.2	0.0	53.0

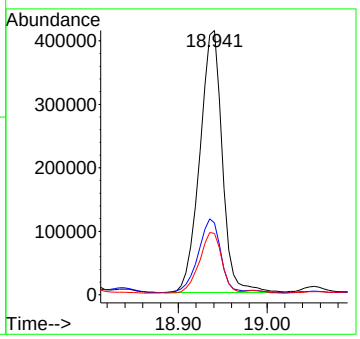




#109
Benzo[g,h,i]perylene
Concen: 20.76 ppm
RT: 18.941 min Scan# 3095
Delta R.T. 0.011 min
Lab File: 6F06495.d
Acq: 11 Aug 2020 4:50 pm

Tgt Ion:276 Resp: 724567

Ion	Ratio	Lower	Upper
276	100		
138	26.5	0.0	59.5
277	22.7	0.0	53.0



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-13-2020\sx2951\
Data File : x072377.d
Acq On : 12 Aug 2020 7:00 pm
Operator : marthav
Sample : fa77615-3 E,2
Misc : op81484,sx2951,30.3,,,1,2,soil
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 13 03:03:59 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.654	152	162640	40.00	ppm	0.00
22) Naphthalene-d8	7.077	136	591331	40.00	ppm	0.00
43) Acenaphthene-d10	9.115	164	282884	40.00	ppm	0.00
70) Phenanthrene-d10	10.859	188	479581	40.00	ppm	0.00
92) Chrysene-d12	14.073	240	392317	40.00	ppm	0.00
102) Perylene-d12	16.277	264	316082	40.00	ppm	0.02
110) 1,4-Dichlorobenzene-d4A	5.654	152	162640	40.00	ppm	0.00
120) Naphthalene-d8A	7.077	136	591331	40.00	ppm	0.00
127) Acenaphthene-d10A	9.115	164	282884	40.00	ppm	0.00
136) Phenanthrene-d10A	10.859	188	479581	40.00	ppm	0.00
146) Chrysene-d12A	14.073	240	392317	40.00	ppm	0.00
153) Perylene-d12A	16.277	264	316082	40.00	ppm	0.02
System Monitoring Compounds						
7) 2-Fluorophenol	4.312	112	196270	33.66	ppm	0.00
Spiked Amount 100.000	Range 40 - 102		Recovery = 33.66%#			
9) Phenol-d5	5.333	99	234691	33.83	ppm	0.00
Spiked Amount 100.000	Range 41 - 100		Recovery = 33.83%#			
23) Nitrobenzene-d5	6.269	82	100065	16.39	ppm	-0.01
Spiked Amount 50.000	Range 40 - 105		Recovery = 32.78%#			
47) 2-Fluorobiphenyl	8.345	172	176399	17.23	ppm	-0.01
Spiked Amount 50.000	Range 43 - 107		Recovery = 34.46%#			
75) 2,4,6-Tribromophenol	10.051	330	32804	34.87	ppm	0.00
Spiked Amount 100.000	Range 42 - 108		Recovery = 34.87%#			
95) Terphenyl-d14	12.779	244	169760	16.29	ppm	0.00
Spiked Amount 50.000	Range 45 - 119		Recovery = 32.58%#			
Target Compounds						Qvalue
5) Benzaldehyde	5.184	106	1172	0.24	ppm	91
18) Acetophenone	6.109	105	982	0.11	ppm	92
24) Nitrobenzene	6.291	77	782	0.13	ppm	85
27) 2,4-Dimethylphenol	6.751	107	756	0.14	ppm #	68
30) Benzoic Acid	6.858	105	3029	0.84	ppm	86
34) Naphthalene	7.099	128	1699	0.11	ppm	99
40) 2-Methylnaphthalene	7.901	142	1138	0.11	ppm	84
41) 1-Methylnaphthalene	8.013	142	1100	0.11	ppm	87
52) Acenaphthylene	8.944	152	113718	8.05	ppm	99
57) Acenaphthene	9.152	153	6247	0.66	ppm	99
60) Dibenzofuran	9.356	168	1644	0.13	ppm	89
65) Fluorene	9.762	166	12495	1.28	ppm	96
84) Phenanthrene	10.885	178	21765	1.50	ppm	99
85) Anthracene	10.950	178	277165	18.35	ppm	97
87) Carbazole	11.164	167	55919	4.20	ppm	97
89) Di-n-butylphthalate	11.624	149	1455	0.10	ppm	93
91) Fluoranthene	12.292	202	397476	29.56	ppm	99
94) Pyrene	12.554	202	778336	47.78	ppm	98
99) Benzo[a]anthracene	14.057	228	148320	12.03	ppm	98
100) Chrysene	14.105	228	248440	18.92	ppm	98
101) bis(2-Ethylhexyl)phtha...	14.218	149	2995	0.37	ppm	97
104) Benzo[b]fluoranthene	15.630	252	343451	37.56	ppm	96
105) Benzo[k]fluoranthene	15.667	252	121924	10.87	ppm	96
106) Benzo[a]pyrene	16.170	252	128235	15.42	ppm	94
107) Indeno[1,2,3-cd]pyrene	17.935	276	98829	19.39	ppm	84
108) Dibenz[a,h]anthracene	17.972	278	21707	4.29	ppm	86
109) Benzo[g,h,i]perylene	18.293	276	85939	11.47	ppm	87

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-13-2020\sx2951\
Data File : x072377.d
Acq On : 12 Aug 2020 7:00 pm
Operator : marthav
Sample : fa77615-3 E,2
Misc : op81484,sx2951,30.3,,,1,2,soil
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 13 03:03:59 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

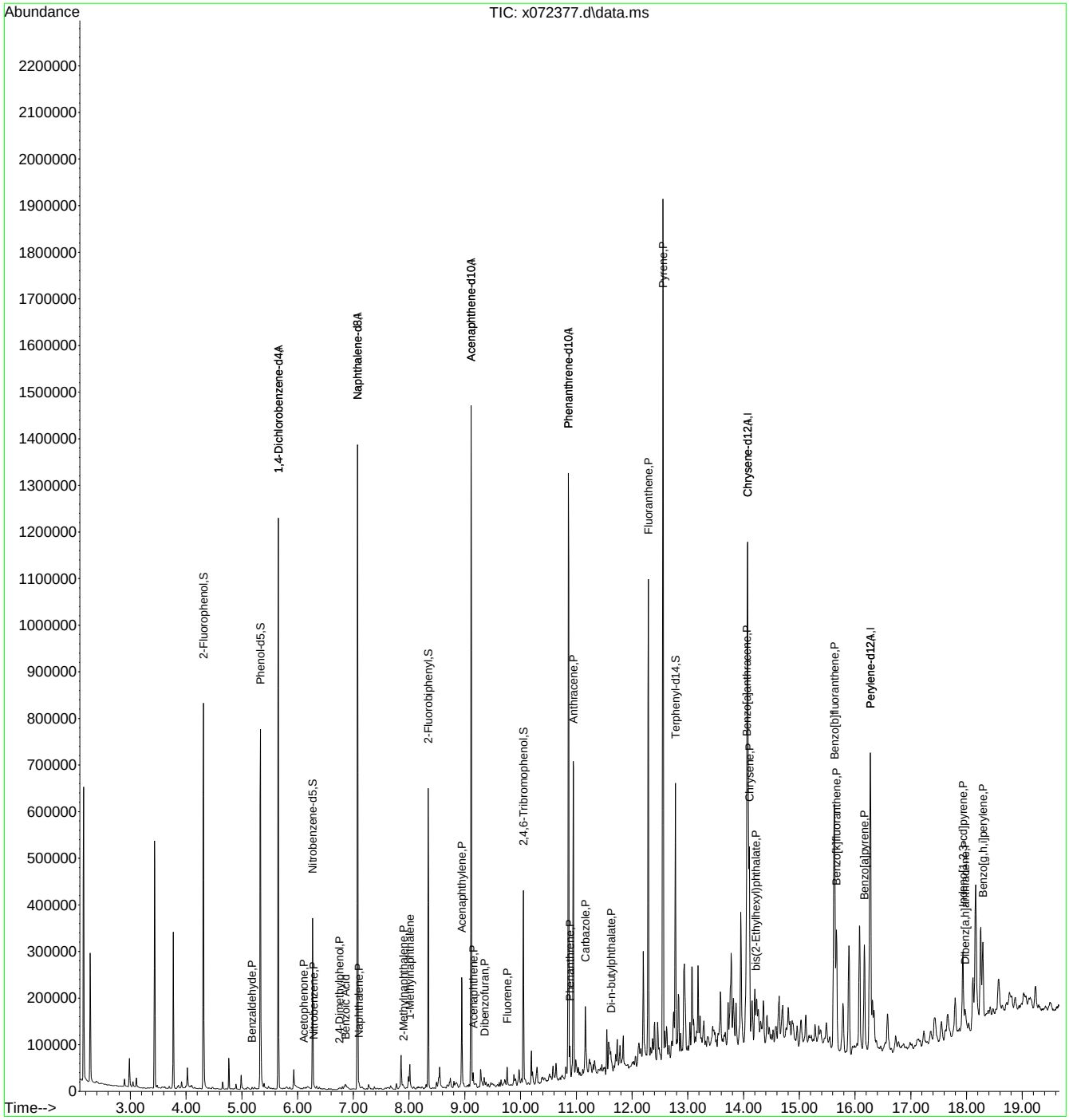
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

(#) = qualifier out of range (m) = manual integration (+) = signals summed

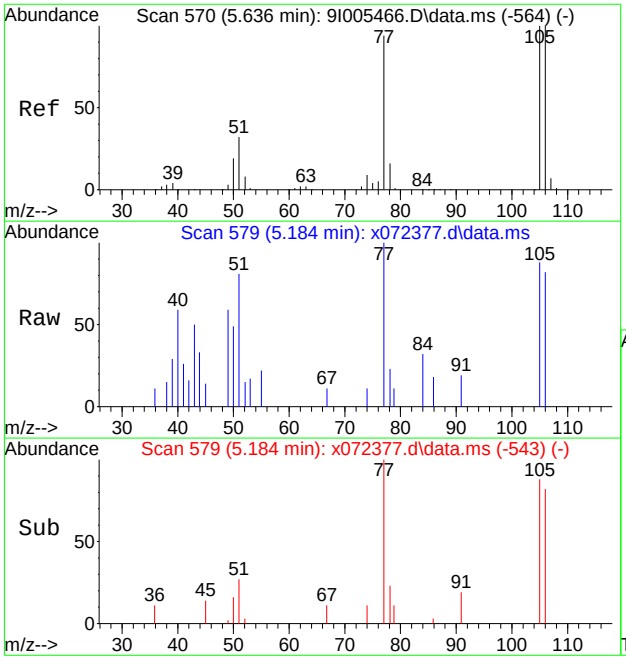
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-13-2020\sx2951\
Data File : x072377.d
Acq On : 12 Aug 2020 7:00 pm
Operator : marthav
Sample : fa77615-3 E,2
Misc : op81484,sx2951,30.3,,,1,2,soil
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 13 03:03:59 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration



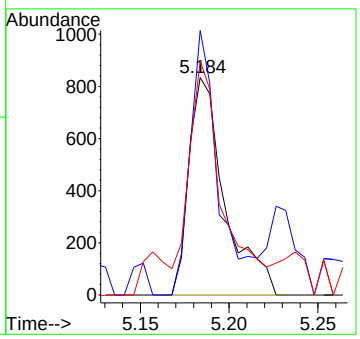
8270DApp9SX-062320.m Thu Aug 13 03:39:45 2020 Page: 3

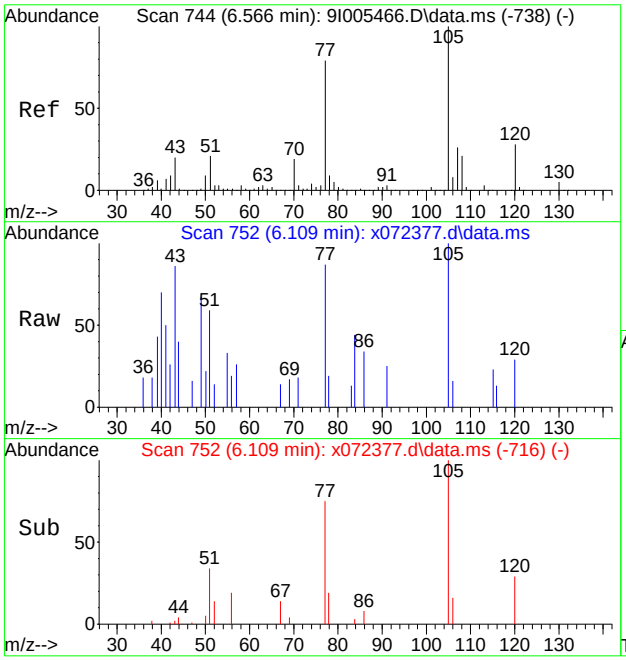


#5
Benzaldehyde
Concen: 0.24 ppm
RT: 5.184 min Scan# 579
Delta R.T. -0.005 min
Lab File: x072377.d
Acq: 12 Aug 2020 7:00 pm

Tgt Ion:106 Resp: 1172

Ion	Ratio	Lower	Upper
106	100		
77	102.3	63.9	123.9
105	91.5	70.0	130.0

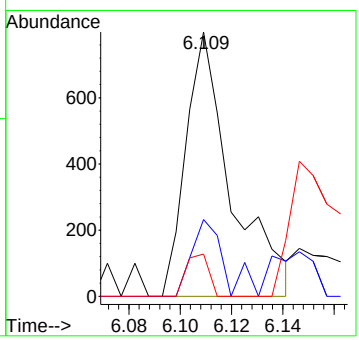


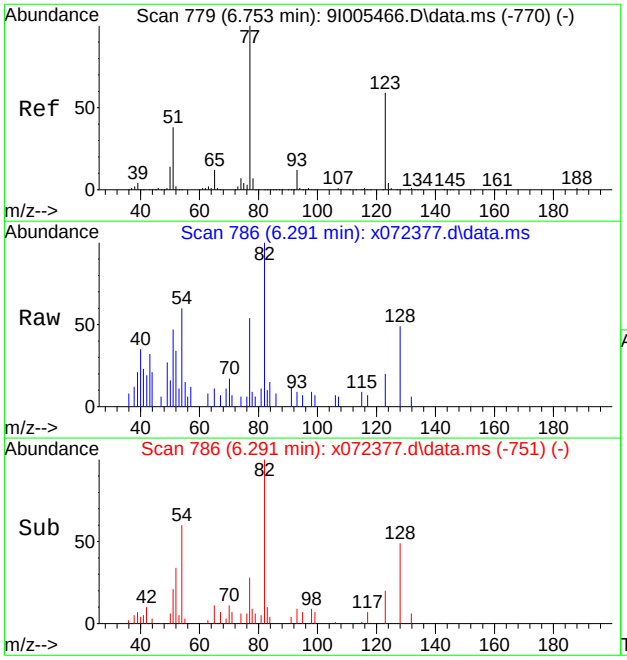


#18
Acetophenone
Concen: 0.11 ppm
RT: 6.109 min Scan# 752
Delta R.T. -0.005 min
Lab File: x072377.d
Acq: 12 Aug 2020 7:00 pm

Tgt Ion:105 Resp: 982

Ion	Ratio	Lower	Upper
105	100		
120	23.9	0.0	58.3
106	5.8	0.0	38.0

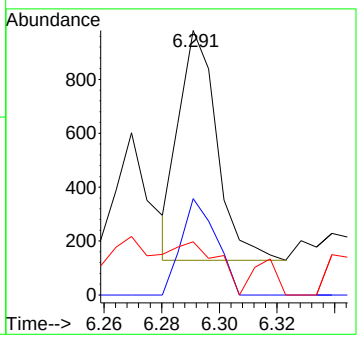


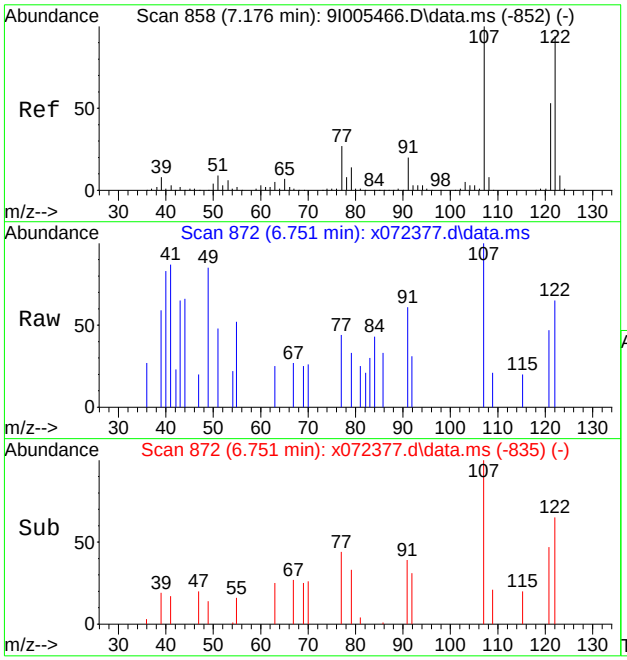


#24
Nitrobenzene
Concen: 0.13 ppm
RT: 6.291 min Scan# 786
Delta R.T. -0.011 min
Lab File: x072377.d
Acq: 12 Aug 2020 7:00 pm

Tgt Ion: 77 Resp: 782

Ion	Ratio	Lower	Upper
77	100		
123	46.4	28.7	88.7
65	15.8	0.0	42.1

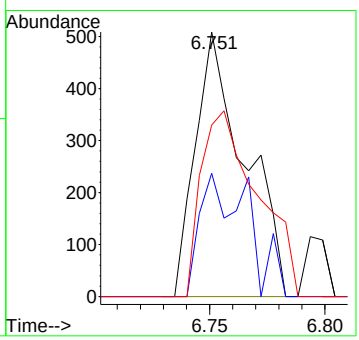


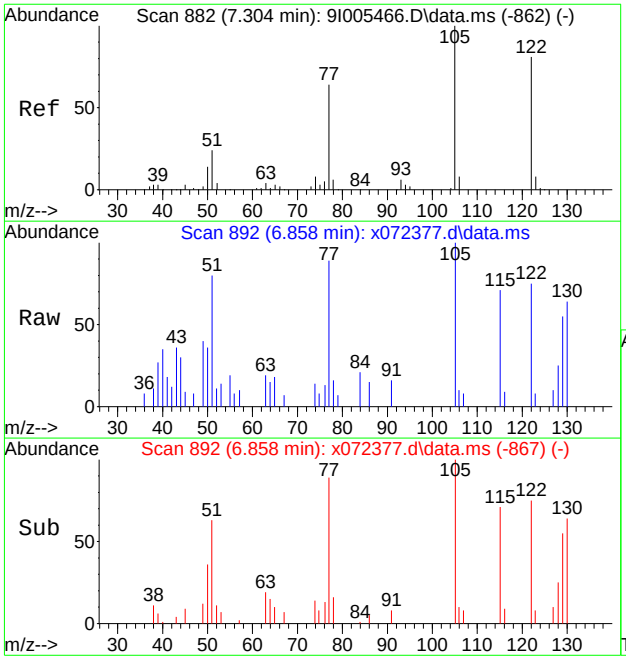


#27
2,4-Dimethylphenol
Concen: 0.14 ppm
RT: 6.751 min Scan# 872
Delta R.T. 0.000 min
Lab File: x072377.d
Acq: 12 Aug 2020 7:00 pm

Tgt Ion:107 Resp: 756

Ion	Ratio	Lower	Upper
107	100		
121	46.6	23.4	83.4
122	50.8	64.3	124.3#

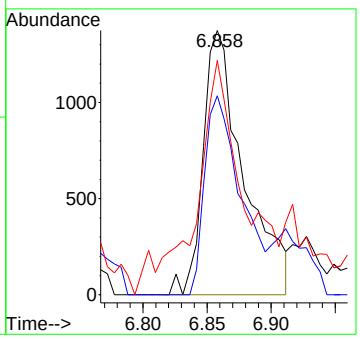


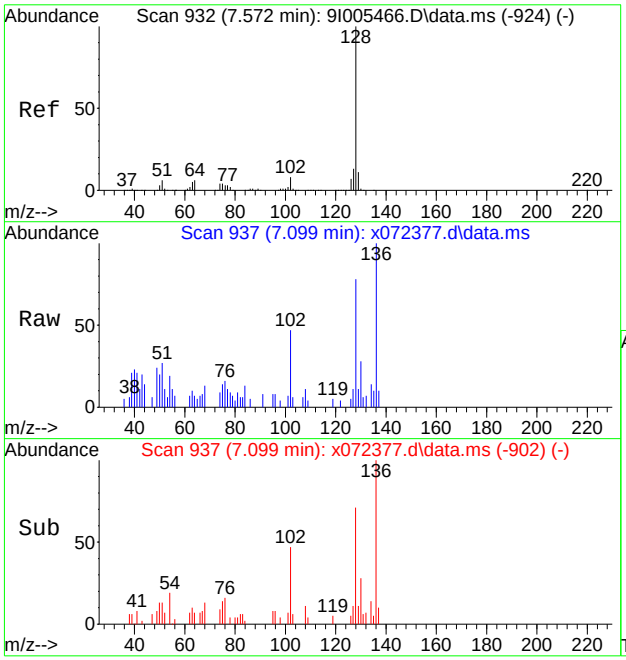


#30
Benzoic Acid
Concen: 0.84 ppm
RT: 6.858 min Scan# 892
Delta R.T. -0.064 min
Lab File: x072377.d
Acq: 12 Aug 2020 7:00 pm

Tgt Ion:105 Resp: 3029

Ion	Ratio	Lower	Upper
105	100		
122	68.4	51.2	111.2
77	73.9	34.1	94.1

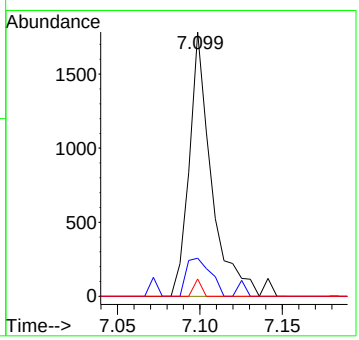


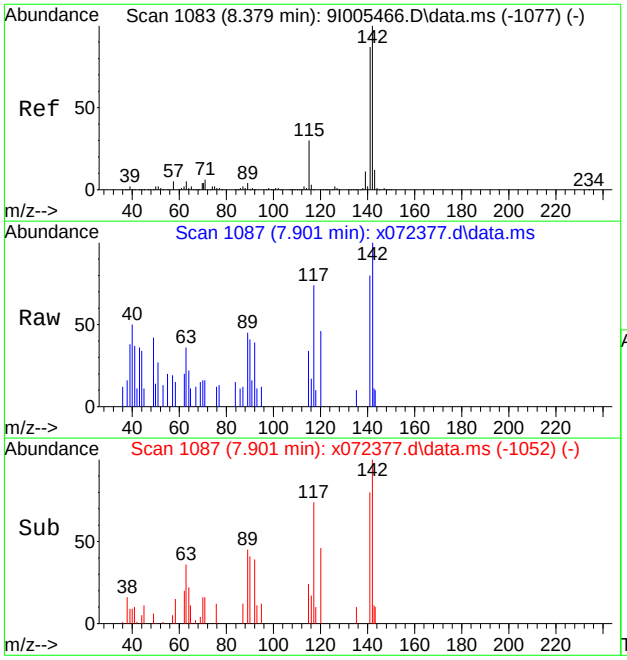


#34
Naphthalene
Concen: 0.11 ppm
RT: 7.099 min Scan# 937
Delta R.T. -0.011 min
Lab File: x072377.d
Acq: 12 Aug 2020 7:00 pm

Tgt Ion:128 Resp: 1699

Ion	Ratio	Lower	Upper
128	100		
129	11.4	0.0	41.4
126	6.6	0.0	37.4

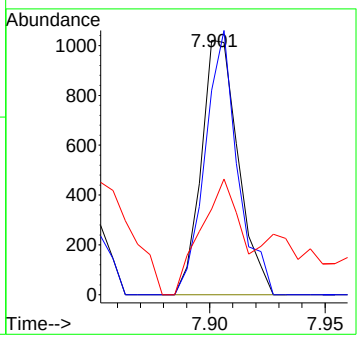


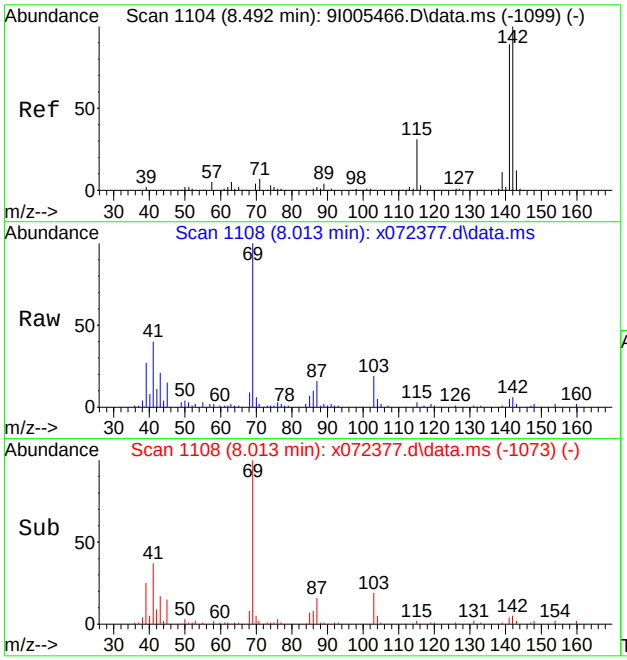


#40
2-Methylnaphthalene
Concen: 0.11 ppm
RT: 7.901 min Scan# 1087
Delta R.T. -0.011 min
Lab File: x072377.d
Acq: 12 Aug 2020 7:00 pm

Tgt Ion:142 Resp: 1138

Ion	Ratio	Lower	Upper
142	100		
141	72.6	56.8	116.8
115	20.4	0.0	60.0

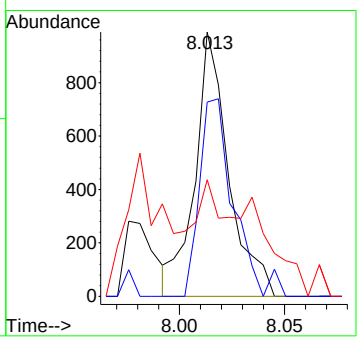


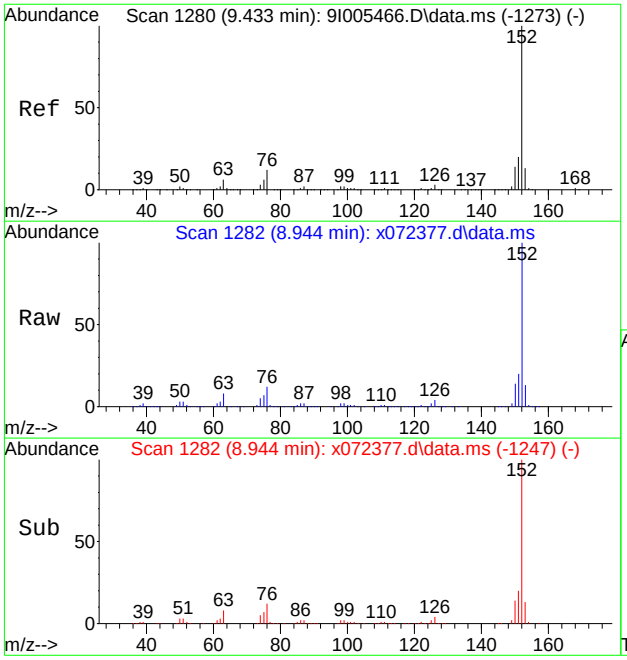


#41
1-Methylnaphthalene
Concen: 0.11 ppm
RT: 8.013 min Scan# 1108
Delta R.T. -0.011 min
Lab File: x072377.d
Acq: 12 Aug 2020 7:00 pm

Tgt Ion:142 Resp: 1100

Ion	Ratio	Lower	Upper
142	100		
141	78.0	59.0	119.0
115	21.2	1.1	61.1

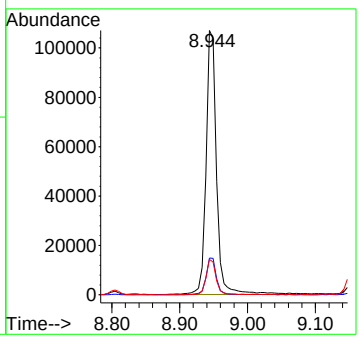


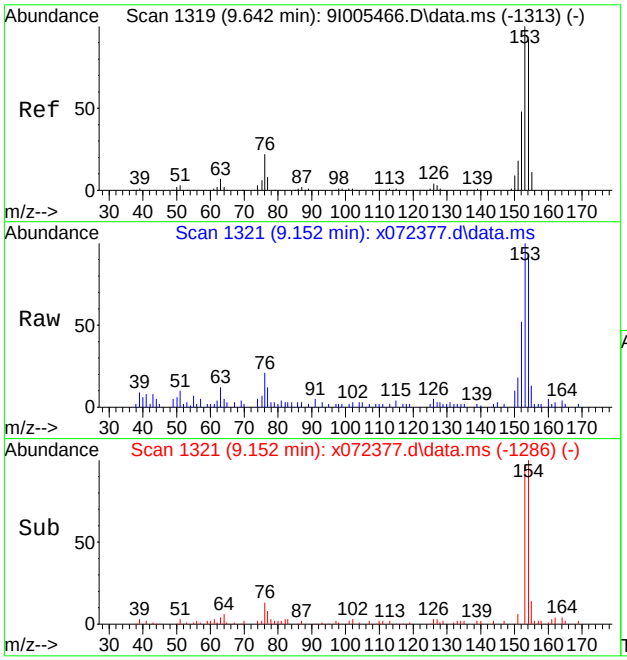


#52
Acenaphthylene
Concen: 8.05 ppm
RT: 8.944 min Scan# 1282
Delta R.T. -0.011 min
Lab File: x072377.d
Acq: 12 Aug 2020 7:00 pm

Tgt Ion:152 Resp: 113718

Ion	Ratio	Lower	Upper
152	100		
150	13.9	0.0	44.3
153	13.4	0.0	43.3

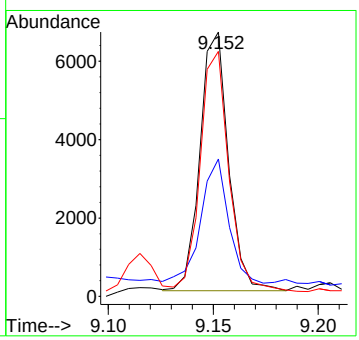




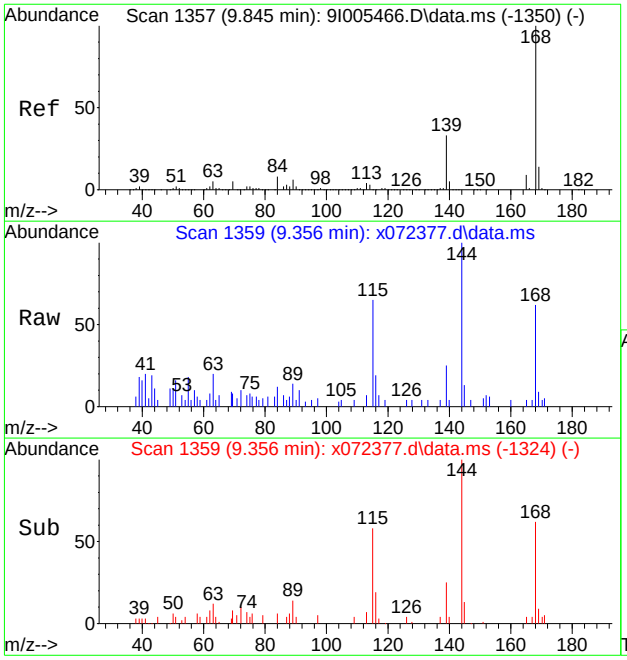
#57
Acenaphthene
Concen: 0.66 ppm
RT: 9.152 min Scan# 1321
Delta R.T. -0.011 min
Lab File: x072377.d
Acq: 12 Aug 2020 7:00 pm

Tgt Ion:153 Resp: 6247

Ion	Ratio	Lower	Upper
153	100		
152	47.1	18.4	78.4
154	91.5	62.4	122.4



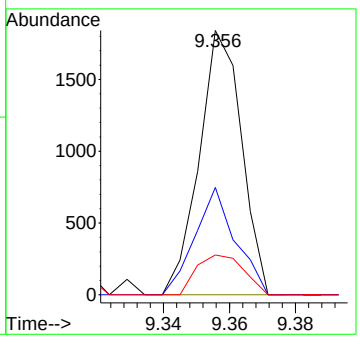
7.1.5

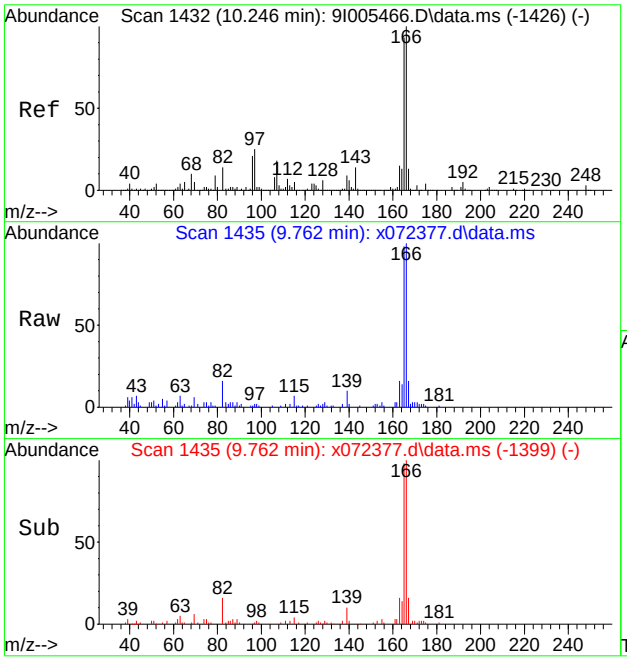


#60
Dibenzofuran
Concen: 0.13 ppm
RT: 9.356 min Scan# 1359
Delta R.T. -0.011 min
Lab File: x072377.d
Acq: 12 Aug 2020 7:00 pm

Tgt Ion:168 Resp: 1644

Ion	Ratio	Lower	Upper
168	100		
139	40.6	3.0	63.0
169	15.0	0.0	43.5

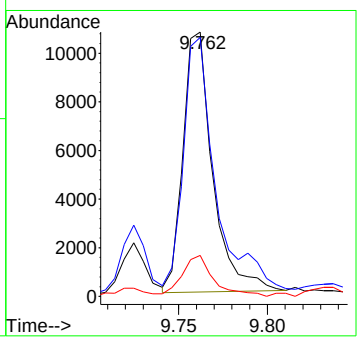


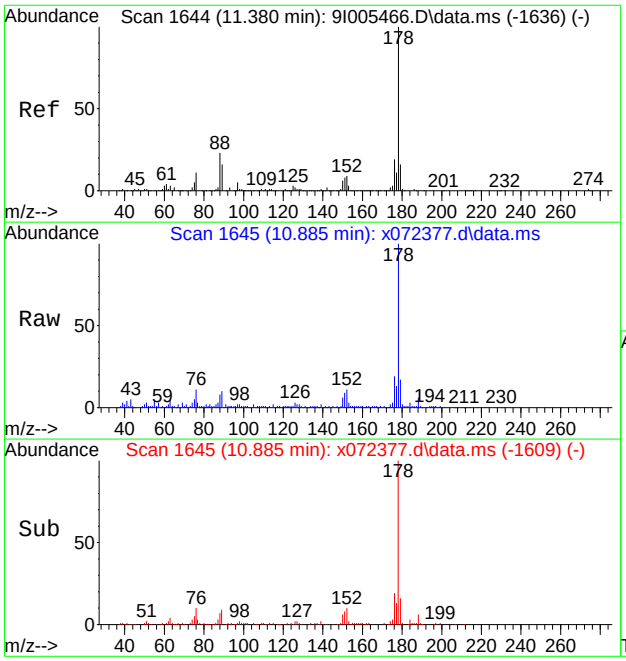


#65
Fluorene
Concen: 1.28 ppm
RT: 9.762 min Scan# 1435
Delta R.T. -0.005 min
Lab File: x072377.d
Acq: 12 Aug 2020 7:00 pm

Tgt Ion:166 Resp: 12495

Ion	Ratio	Lower	Upper
166	100		
165	97.2	62.7	122.7
167	14.8	0.0	43.5

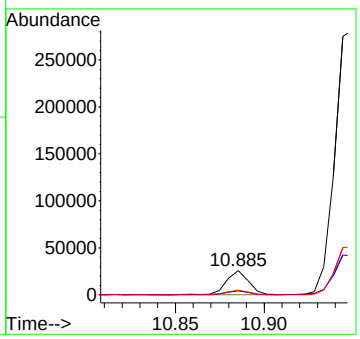


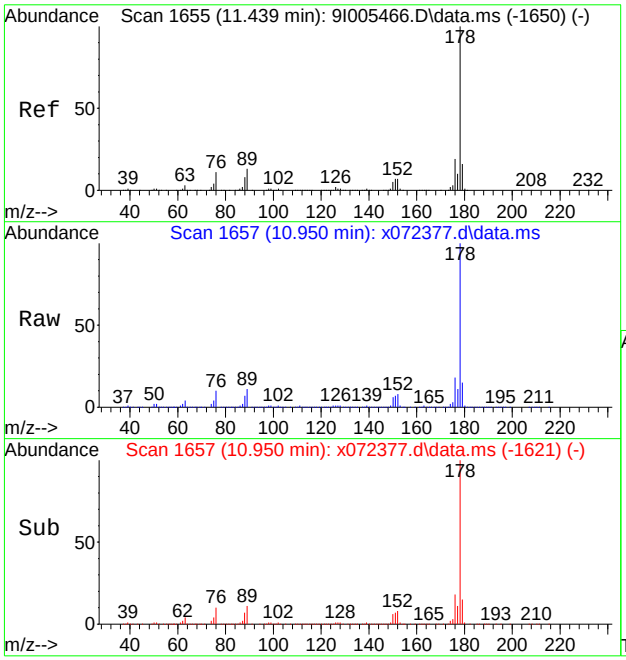


#84
Phenanthrene
Concen: 1.50 ppm
RT: 10.885 min Scan# 1645
Delta R.T. -0.005 min
Lab File: x072377.d
Acq: 12 Aug 2020 7:00 pm

Tgt Ion:178 Resp: 21765

Ion	Ratio	Lower	Upper
178	100		
179	15.9	0.0	45.8
176	18.8	0.0	49.3

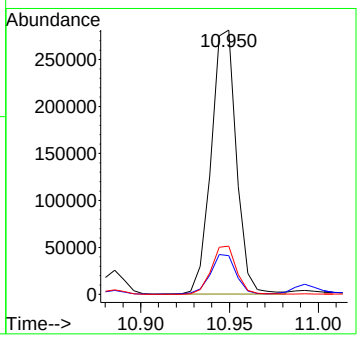


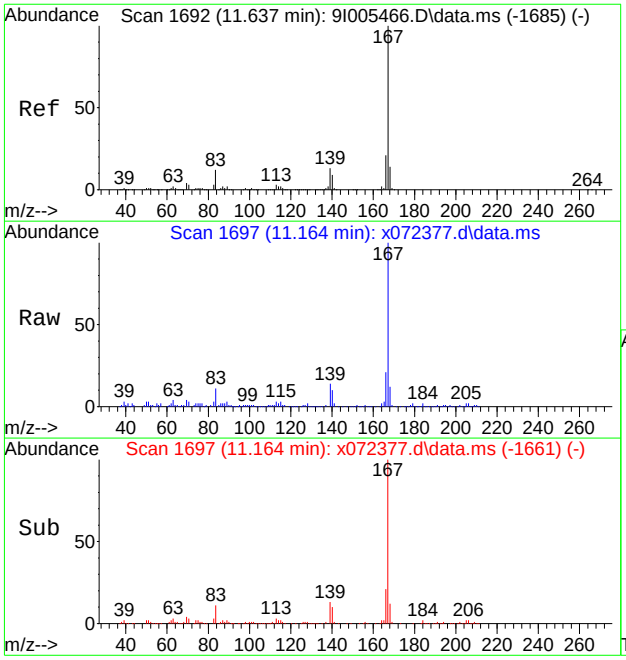


#85
Anthracene
Concen: 18.35 ppm
RT: 10.950 min Scan# 1657
Delta R.T. -0.005 min
Lab File: x072377.d
Acq: 12 Aug 2020 7:00 pm

Tgt Ion:178 Resp: 277165

Ion	Ratio	Lower	Upper
178	100		
179	14.3	0.0	46.0
176	18.3	0.0	49.3

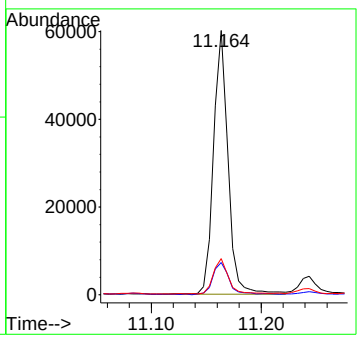


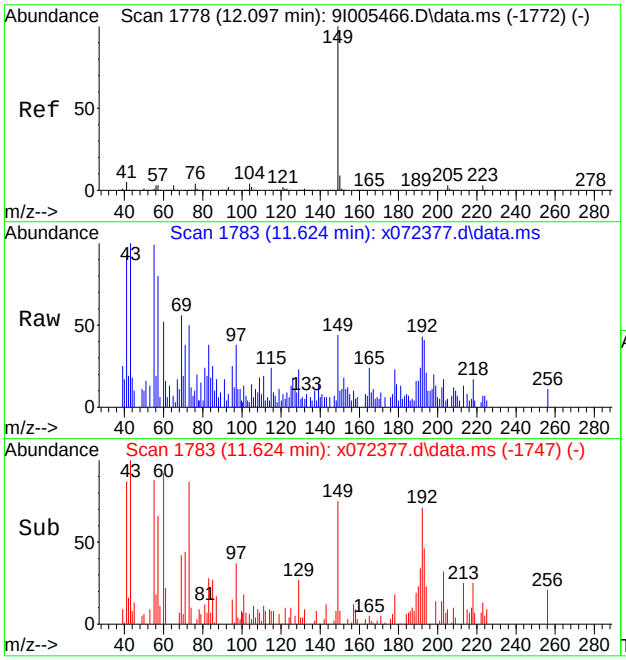


#87
Carbazole
Concen: 4.20 ppm
RT: 11.164 min Scan# 1697
Delta R.T. -0.005 min
Lab File: x072377.d
Acq: 12 Aug 2020 7:00 pm

Tgt Ion:167 Resp: 55919

Ion	Ratio	Lower	Upper
167	100		
168	12.0	0.0	43.9
139	13.2	0.0	42.7

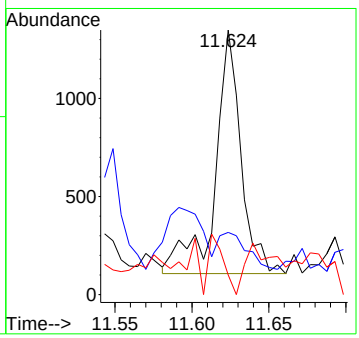


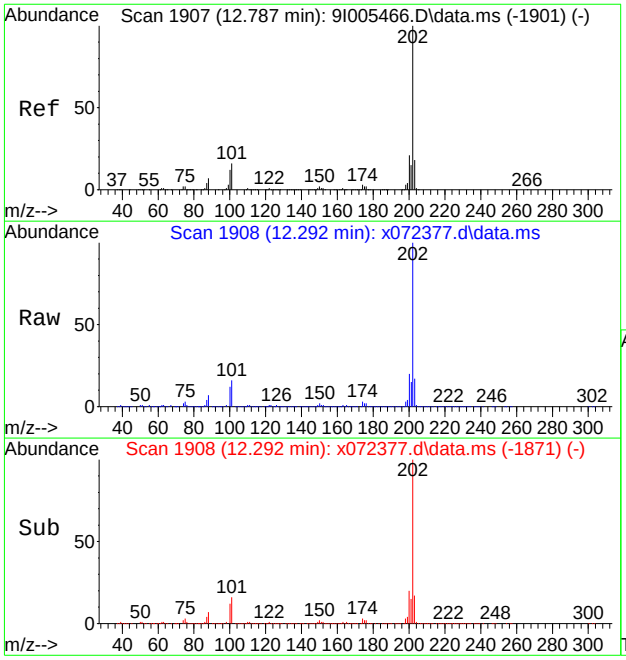


#89
Di-n-butylphthalate
Concen: 0.10 ppm
RT: 11.624 min Scan# 1783
Delta R.T. -0.005 min
Lab File: x072377.d
Acq: 12 Aug 2020 7:00 pm

Tgt Ion:149 Resp: 1455

Ion	Ratio	Lower	Upper
149	100		
150	8.0	0.0	39.5
104	0.0	0.0	34.2

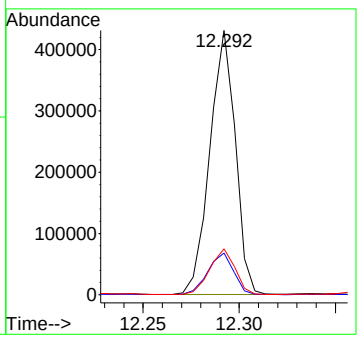


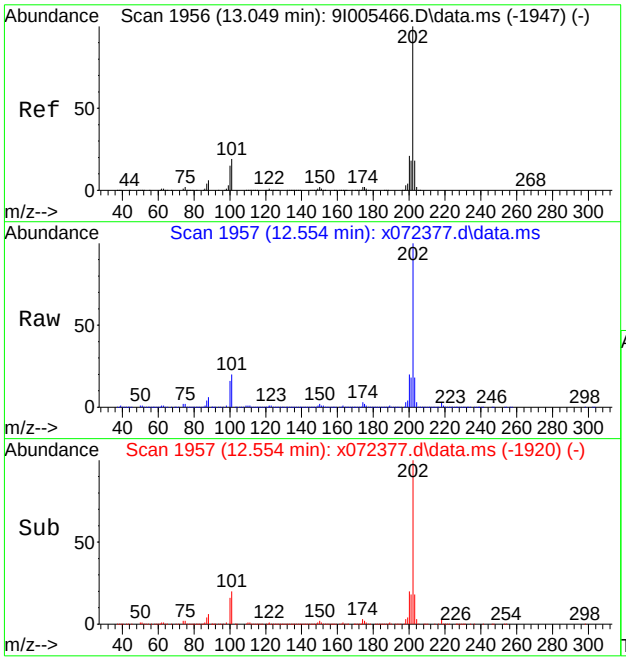


#91
Fluoranthene
Concen: 29.56 ppm
RT: 12.292 min Scan# 1908
Delta R.T. 0.000 min
Lab File: x072377.d
Acq: 12 Aug 2020 7:00 pm

Tgt Ion:202 Resp: 397476

Ion	Ratio	Lower	Upper
202	100		
101	15.7	0.0	45.8
203	17.3	0.0	48.1

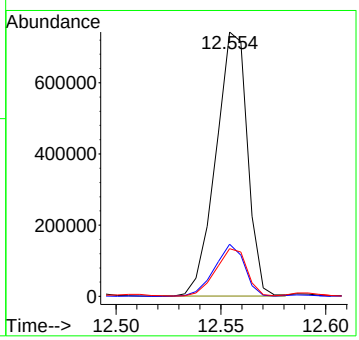


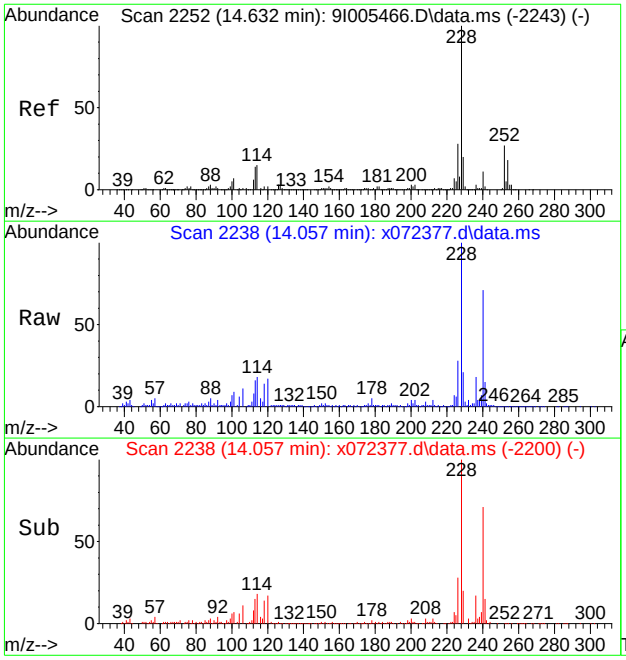


#94
Pyrene
Concen: 47.78 ppm
RT: 12.554 min Scan# 1957
Delta R.T. 0.000 min
Lab File: x072377.d
Acq: 12 Aug 2020 7:00 pm

Tgt Ion:202 Resp: 778336

Ion	Ratio	Lower	Upper
202	100		
101	19.6	0.0	48.7
203	17.7	0.0	48.4

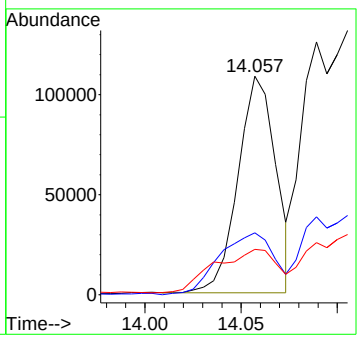


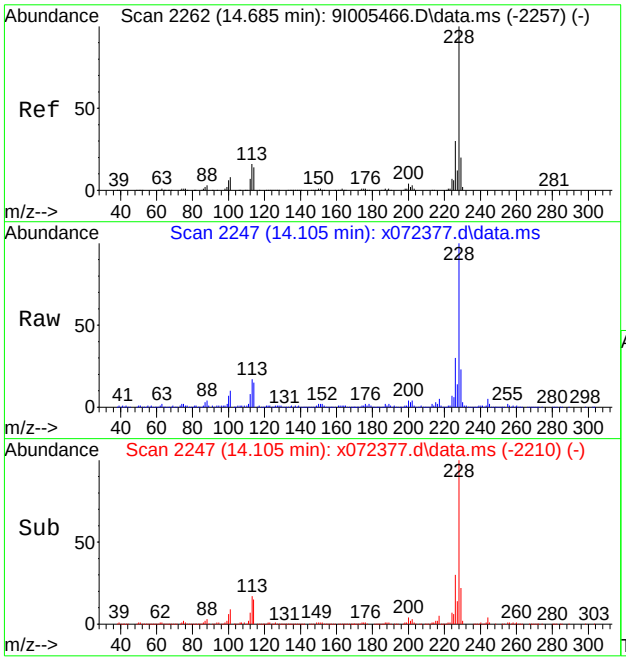


#99
Benzo[a]anthracene
Concen: 12.03 ppm
RT: 14.057 min Scan# 2238
Delta R.T. 0.005 min
Lab File: x072377.d
Acq: 12 Aug 2020 7:00 pm

Tgt Ion:228 Resp: 148320

Ion	Ratio	Lower	Upper
228	100		
226	28.4	0.0	57.5
229	18.8	0.0	49.9

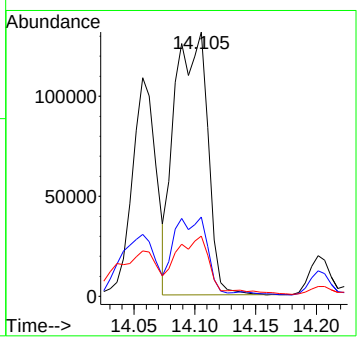


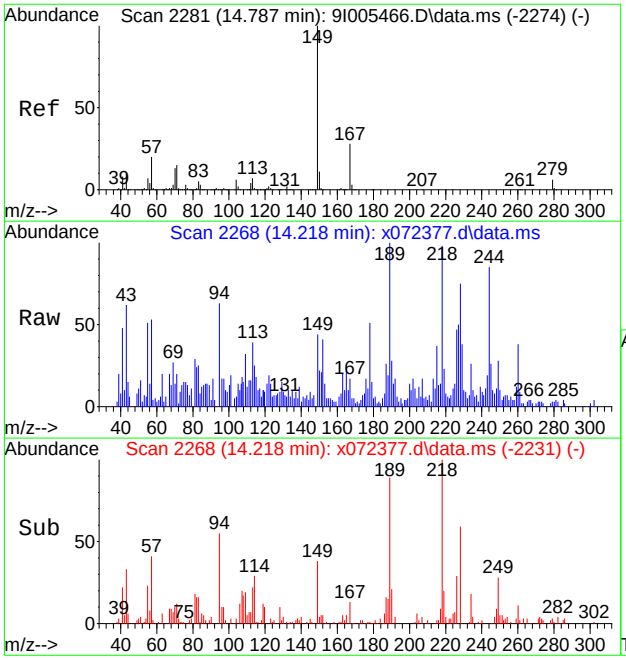


#100
Chrysene
Concen: 18.92 ppm
RT: 14.105 min Scan# 2247
Delta R.T. 0.000 min
Lab File: x072377.d
Acq: 12 Aug 2020 7:00 pm

Tgt Ion:228 Resp: 248440

Ion	Ratio	Lower	Upper
228	100		
226	30.0	0.4	60.4
229	21.4	0.0	50.1

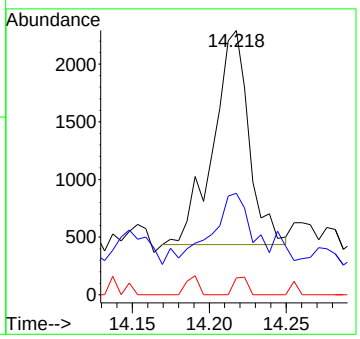


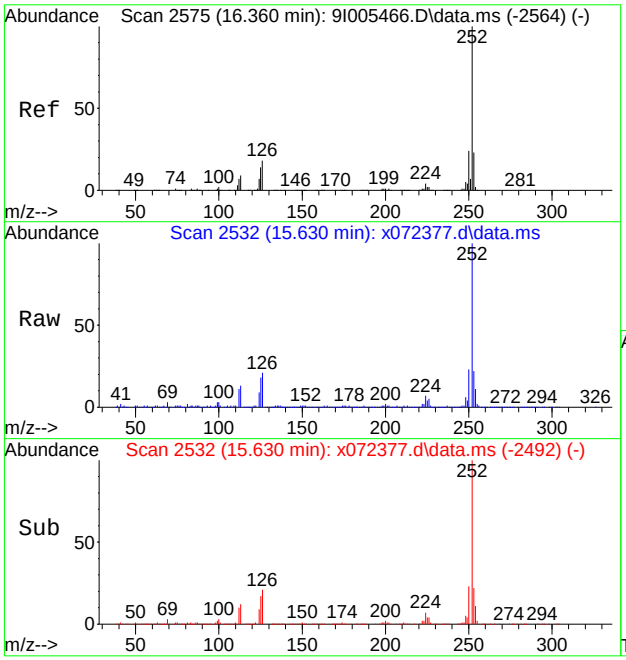


#101
bis(2-Ethylhexyl)phthalate
Concen: 0.37 ppm
RT: 14.218 min Scan# 2268
Delta R.T. 0.000 min
Lab File: x072377.d
Acq: 12 Aug 2020 7:00 pm

Tgt Ion:149 Resp: 2995

Ion	Ratio	Lower	Upper
149	100		
167	29.5	0.0	58.5
279	7.9	0.0	35.7

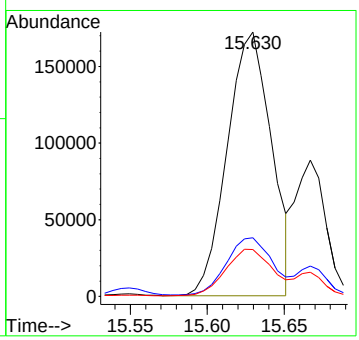


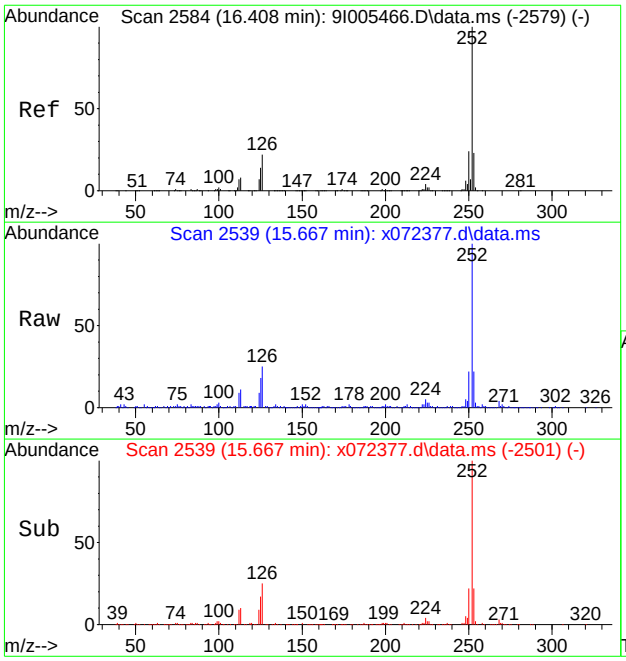


#104
Benzo[b]fluoranthene
Concen: 37.56 ppm
RT: 15.630 min Scan# 2532
Delta R.T. 0.016 min
Lab File: x072377.d
Acq: 12 Aug 2020 7:00 pm

Tgt Ion:252 Resp: 343451

Ion	Ratio	Lower	Upper
252	100		
253	21.6	0.0	52.5
125	17.2	0.0	44.0

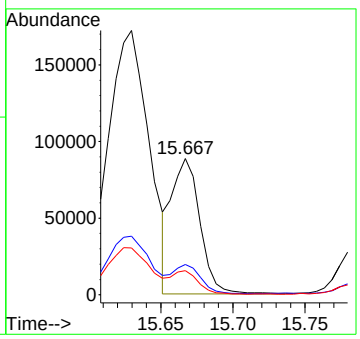


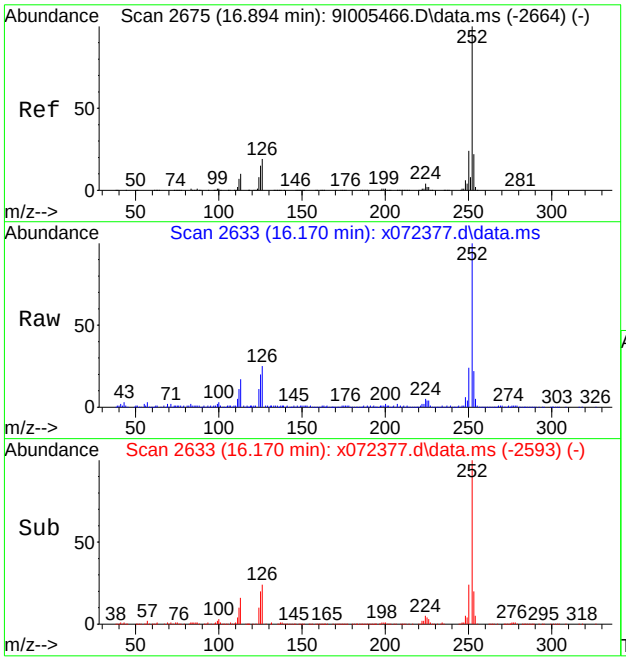


#105
Benzo[k]fluoranthene
Concen: 10.87 ppm
RT: 15.667 min Scan# 2539
Delta R.T. 0.005 min
Lab File: x072377.d
Acq: 12 Aug 2020 7:00 pm

Tgt Ion:252 Resp: 121924

Ion	Ratio	Lower	Upper
252	100		
253	20.9	0.0	52.5
125	16.1	0.0	44.4

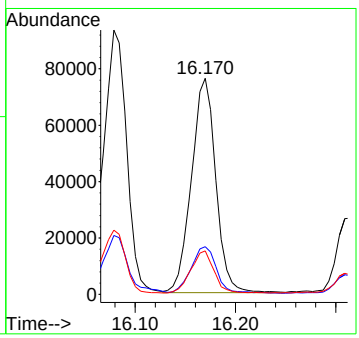


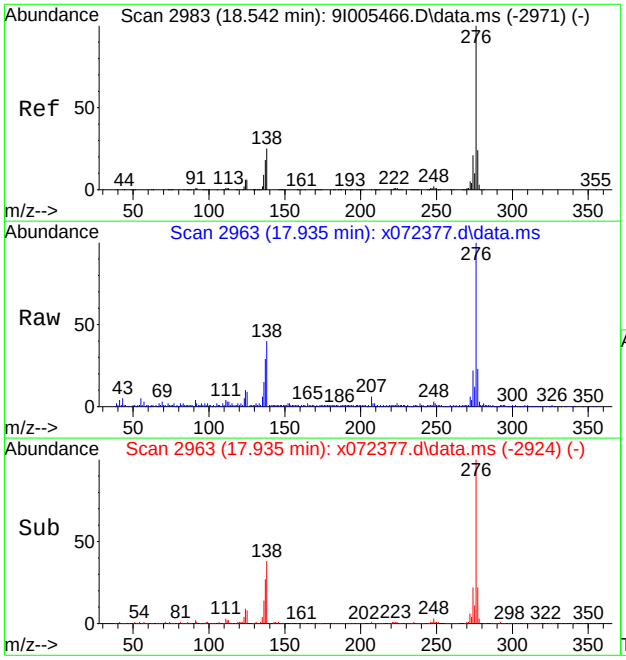


#106
Benzo[a]pyrene
Concen: 15.42 ppm
RT: 16.170 min Scan# 2633
Delta R.T. 0.016 min
Lab File: x072377.d
Acq: 12 Aug 2020 7:00 pm

Tgt Ion:252 Resp: 128235

Ion	Ratio	Lower	Upper
252	100		
253	21.2	0.0	52.3
125	19.7	0.0	44.7

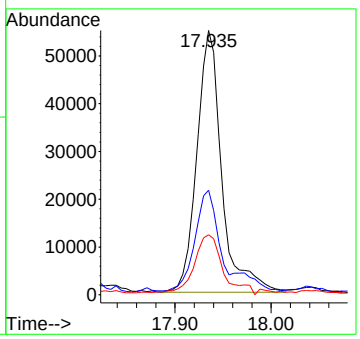


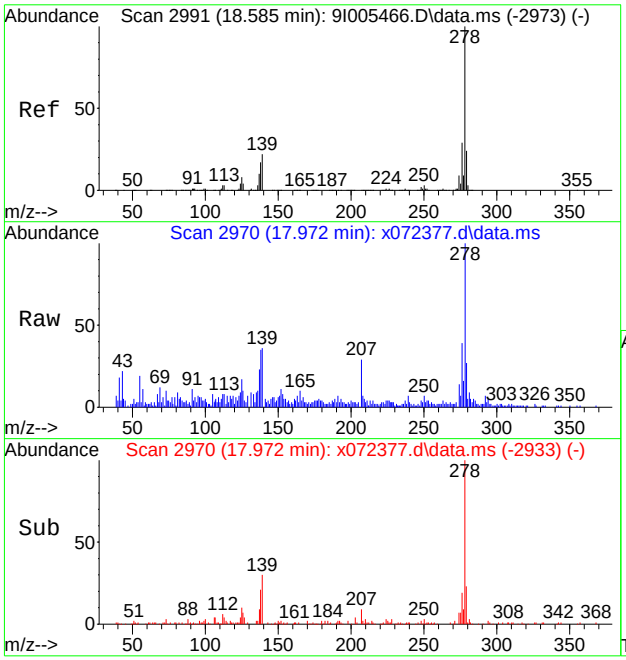


#107
Indeno[1,2,3-cd]pyrene
Concen: 19.39 ppm
RT: 17.935 min Scan# 2963
Delta R.T. 0.011 min
Lab File: x072377.d
Acq: 12 Aug 2020 7:00 pm

Tgt Ion:276 Resp: 98829

Ion	Ratio	Lower	Upper
276	100		
138	38.5	0.0	54.7
277	21.9	0.0	53.8

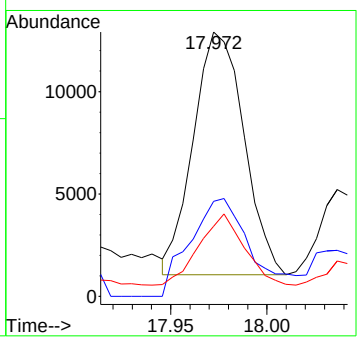


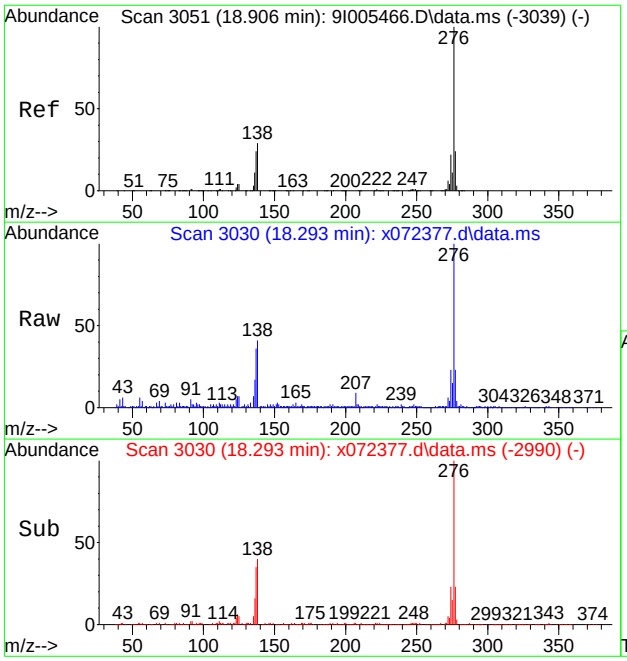


#108
Dibenz[a,h]anthracene
Concen: 4.29 ppm
RT: 17.972 min Scan# 2970
Delta R.T. 0.000 min
Lab File: x072377.d
Acq: 12 Aug 2020 7:00 pm

Tgt Ion:278 Resp: 21707

Ion	Ratio	Lower	Upper
278	100		
139	35.7	0.0	52.4
279	24.8	0.0	54.4

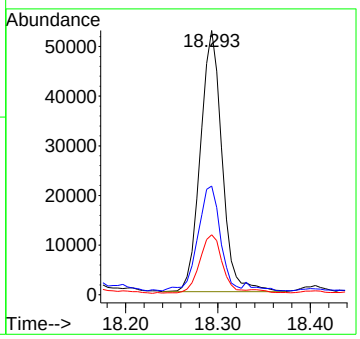




#109
Benzo[g,h,i]perylene
Concen: 11.47 ppm
RT: 18.293 min Scan# 3030
Delta R.T. 0.016 min
Lab File: x072377.d
Acq: 12 Aug 2020 7:00 pm

Tgt Ion:276 Resp: 85939

Ion	Ratio	Lower	Upper
276	100		
138	40.1	0.0	59.4
277	22.3	0.0	54.1



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06496.d
Acq On : 11 Aug 2020 5:16 pm
Operator : marthav
Sample : fa77615-4 E Inst : MSBNA10
Misc : op81484,S6F251,30.4,,,1,1,soil
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Results File: 8270D6F072920.RES
Quant Time: Aug 12 06:19:41 2020
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

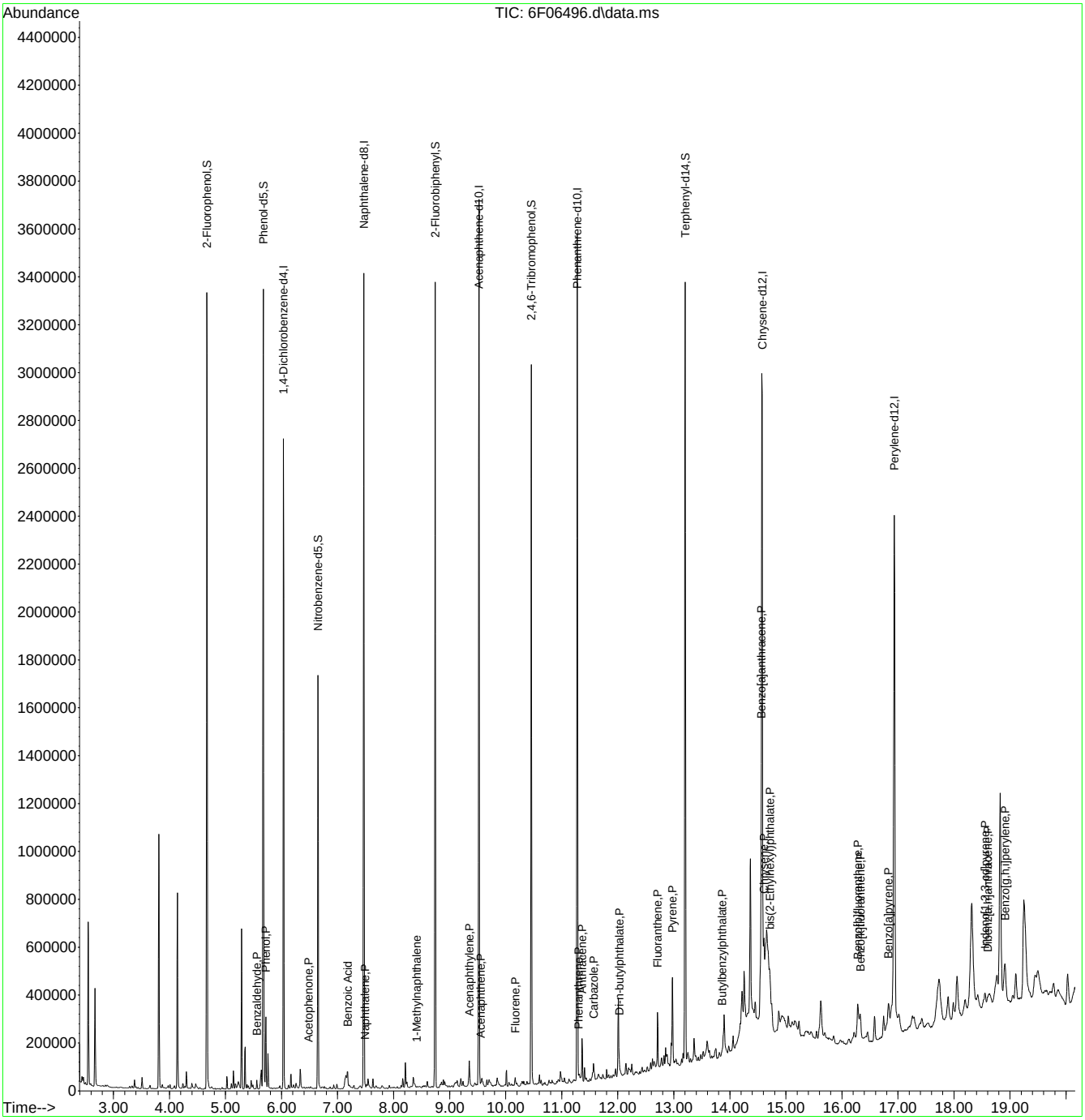
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.035	152	381333	40.00	ppm	0.00
22) Naphthalene-d8	7.468	136	1402351	40.00	ppm	0.00
43) Acenaphthene-d10	9.522	164	727957	40.00	ppm	0.00
70) Phenanthrene-d10	11.276	188	1293248	40.00	ppm	0.00
92) Chrysene-d12	14.576	240	1102297	40.00	ppm	0.00
102) Perylene-d12	16.935	264	1150621	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	4.665	112	879208	61.02	ppm	0.00
Spiked Amount 100.000	Range 40 - 102		Recovery = 61.02%			
9) Phenol-d5	5.676	99	1133870	66.29	ppm	0.00
Spiked Amount 100.000	Range 41 - 100		Recovery = 66.29%			
23) Nitrobenzene-d5	6.650	82	482545	31.36	ppm	0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 62.72%			
47) 2-Fluorobiphenyl	8.741	172	927130	32.59	ppm	0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 65.18%			
75) 2,4,6-Tribromophenol	10.458	330	324691	74.60	ppm	0.00
Spiked Amount 100.000	Range 42 - 108		Recovery = 74.60%			
95) Terphenyl-d14	13.202	244	1049636	33.88	ppm	0.00
Spiked Amount 50.000	Range 45 - 119		Recovery = 67.76%			
Target Compounds						Qvalue
5) Benzaldehyde	5.559	106	6794	0.58	ppm	98
10) Phenol	5.719	94	7768	0.39	ppm	65
18) Acetophenone	6.484	105	1300	0.07	ppm	79
30) Benzoic Acid	7.179	105	18279	2.01	ppm	99
34) Naphthalene	7.489	128	2285	0.06	ppm	79
41) 1-Methylnaphthalene	8.409	142	1123	0.04	ppm #	80
52) Acenaphthylene	9.351	152	60952	1.68	ppm	98
57) Acenaphthene	9.554	153	3833	0.16	ppm	97
65) Fluorene	10.169	166	11758	0.43	ppm	96
84) Phenanthrene	11.303	178	4964	0.13	ppm	92
85) Anthracene	11.362	178	67914	1.73	ppm	97
87) Carbazole	11.570	167	27514	0.78	ppm	97
89) Di-n-butylphthalate	12.025	149	7138	0.16	ppm	97
91) Fluoranthene	12.710	202	83157	2.04	ppm	98
94) Pyrene	12.977	202	133123	3.37	ppm	97
97) Butylbenzylphthalate	13.860	149	5338	0.28	ppm	93
99) Benzo[a]anthracene	14.560	228	34836	0.94	ppm	97
100) Chrysene	14.608	228	61602	1.72	ppm	99
101) bis(2-Ethylhexyl)phtha...	14.715	149	9814	0.37	ppm	92
104) Benzo[b]fluoranthene	16.283	252	104088	2.82	ppm	96
105) Benzo[k]fluoranthene	16.331	252	34572	0.90	ppm	97
106) Benzo[a]pyrene	16.828	252	29267	0.85	ppm	98
107) Indeno[1,2,3-cd]pyrene	18.556	276	31496	0.99	ppm	95
108) Dibenz[a,h]anthracene	18.604	278	7166	0.21	ppm	91
109) Benzo[g,h,i]perylene	18.914	276	21491	0.62	ppm	92

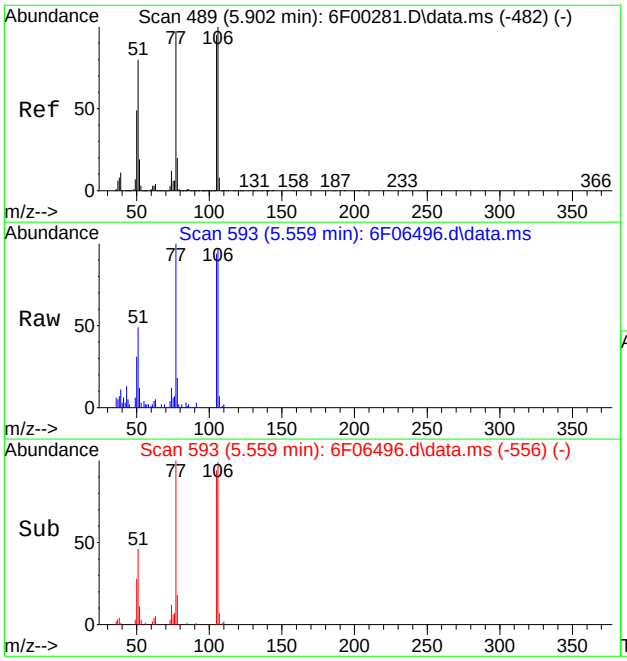
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06496.d
Acq On : 11 Aug 2020 5:16 pm
Operator : marthav
Sample : fa77615-4 E Inst : MSBNA10
Misc : op81484,S6F251,30.4,,,1,1,soil
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Results File: 8270D6F072920.RES
Quant Time: Aug 12 06:19:41 2020
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

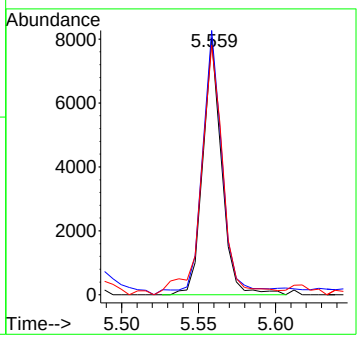


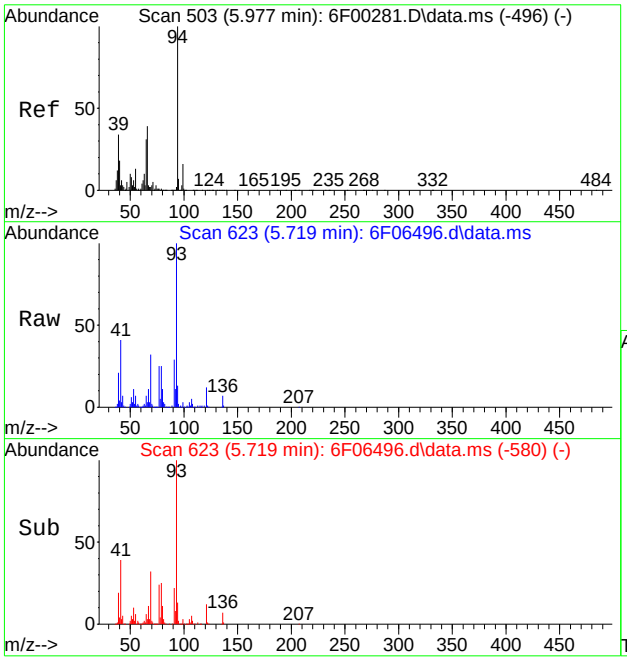


#5
Benzaldehyde
Concen: 0.58 ppm
RT: 5.559 min Scan# 593
Delta R.T. -0.000 min
Lab File: 6F06496.d
Acq: 11 Aug 2020 5:16 pm

Tgt Ion:106 Resp: 6794

Ion	Ratio	Lower	Upper
106	100		
77	100.6	67.1	127.1
105	95.3	65.1	125.1

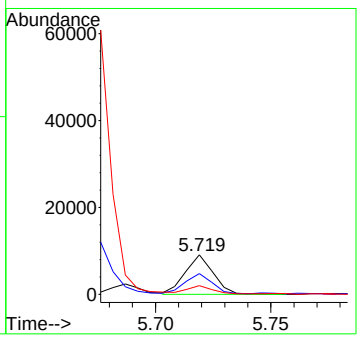


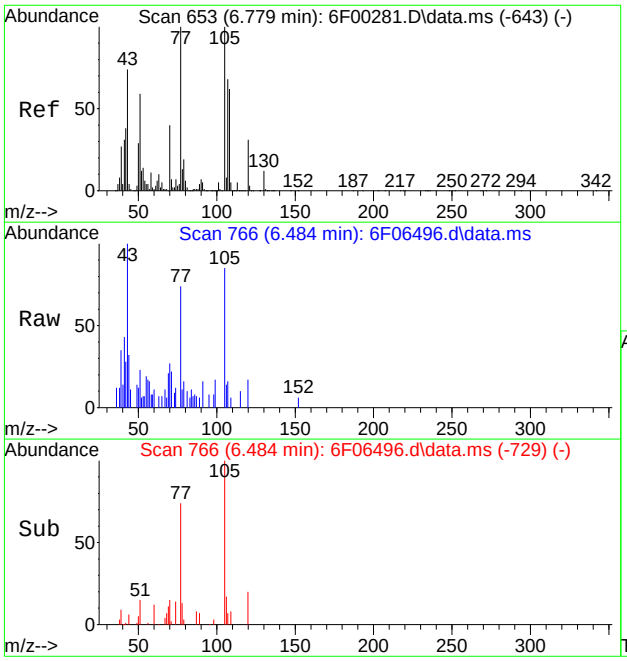


#10
Phenol
Concen: 0.39 ppm
RT: 5.719 min Scan# 623
Delta R.T. 0.032 min
Lab File: 6F06496.d
Acq: 11 Aug 2020 5:16 pm

Tgt Ion: 94 Resp: 7768

Ion	Ratio	Lower	Upper
94	100		
65	50.9	1.0	61.0
66	18.6	8.9	68.9

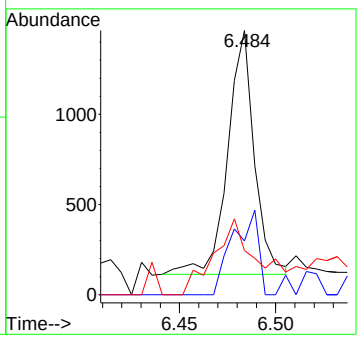


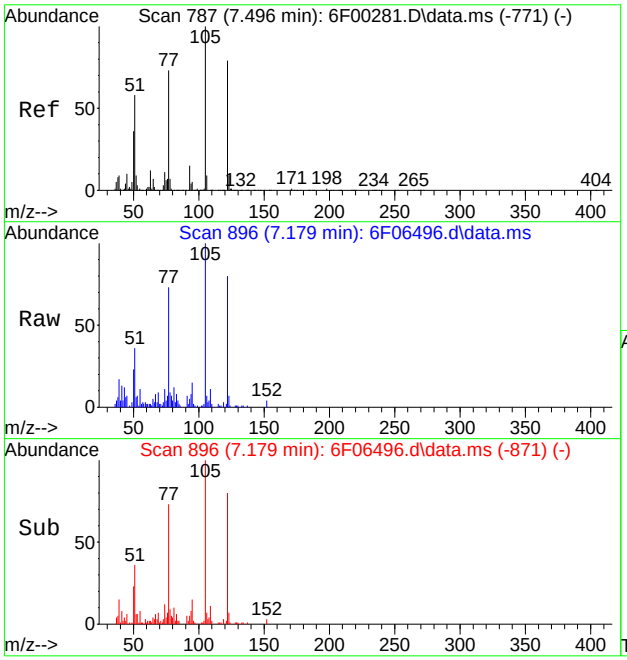


#18
Acetophenone
Concen: 0.07 ppm
RT: 6.484 min Scan# 766
Delta R.T. -0.000 min
Lab File: 6F06496.d
Acq: 11 Aug 2020 5:16 pm

Tgt Ion:105 Resp: 1300

Ion	Ratio	Lower	Upper
105	100		
120	18.4	0.7	60.7
106	13.8	0.0	38.4

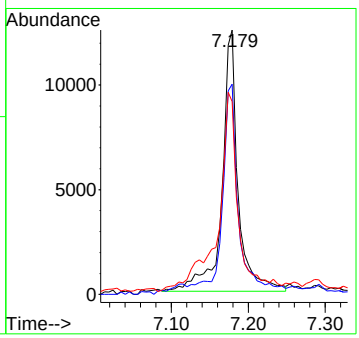


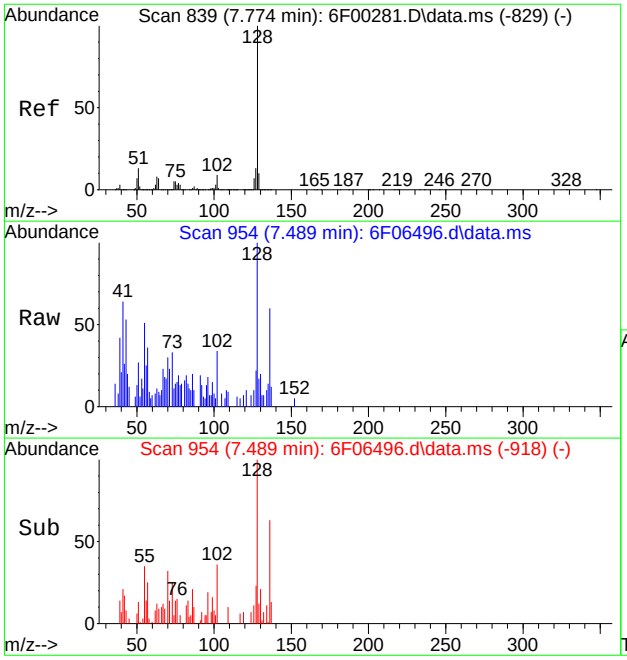


#30
Benzoic Acid
Concen: 2.01 ppm
RT: 7.179 min Scan# 896
Delta R.T. -0.064 min
Lab File: 6F06496.d
Acq: 11 Aug 2020 5:16 pm

Tgt Ion:105 Resp: 18279

Ion	Ratio	Lower	Upper
105	100		
122	79.3	49.5	109.5
77	71.5	43.0	103.0

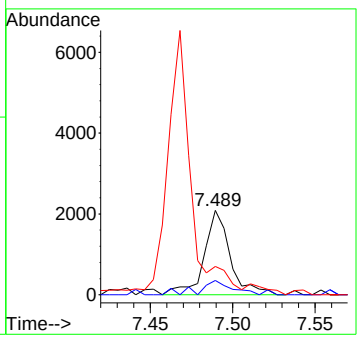


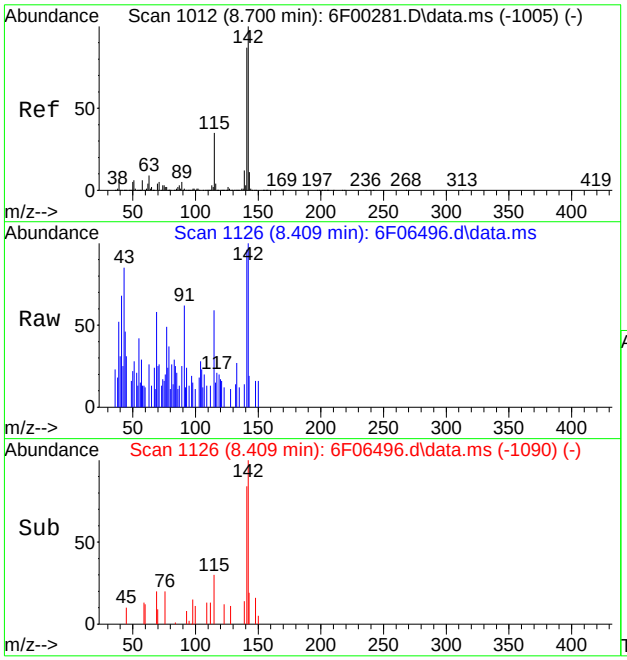


#34
Naphthalene
Concen: 0.06 ppm
RT: 7.489 min Scan# 954
Delta R.T. -0.006 min
Lab File: 6F06496.d
Acq: 11 Aug 2020 5:16 pm

Tgt Ion:128 Resp: 2285

Ion	Ratio	Lower	Upper
128	100		
129	17.1	0.0	40.4
102	0.0	0.0	39.2

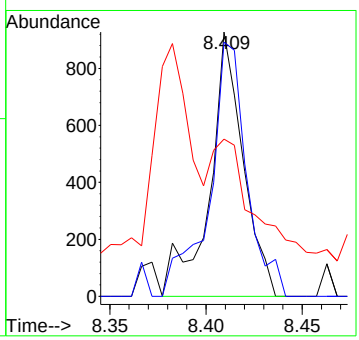


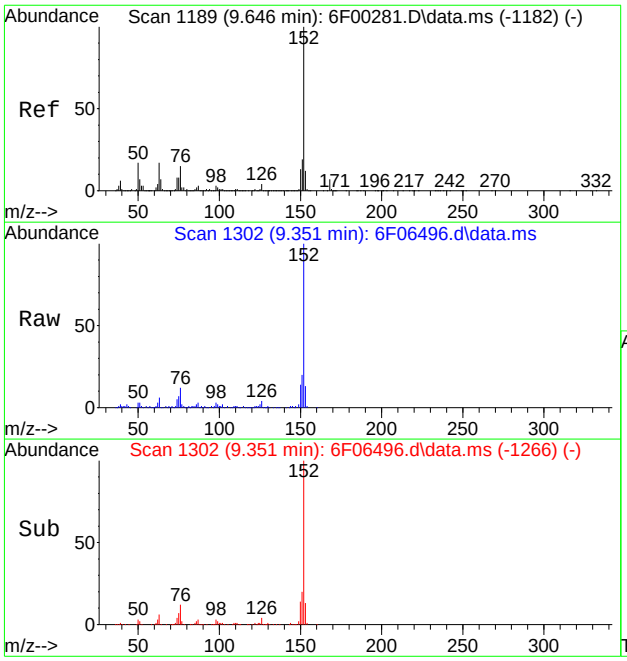


#41
1-Methylnaphthalene
Concen: 0.04 ppm
RT: 8.409 min Scan# 1126
Delta R.T. -0.006 min
Lab File: 6F06496.d
Acq: 11 Aug 2020 5:16 pm

Tgt Ion:142 Resp: 1123

Ion	Ratio	Lower	Upper
142	100		
141	80.5	56.8	116.8
115	4.5	4.7	64.7#

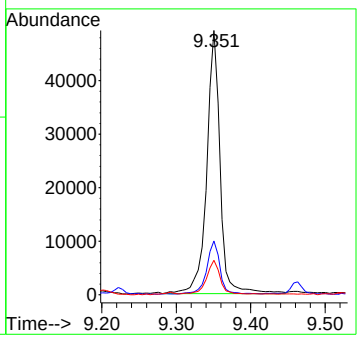


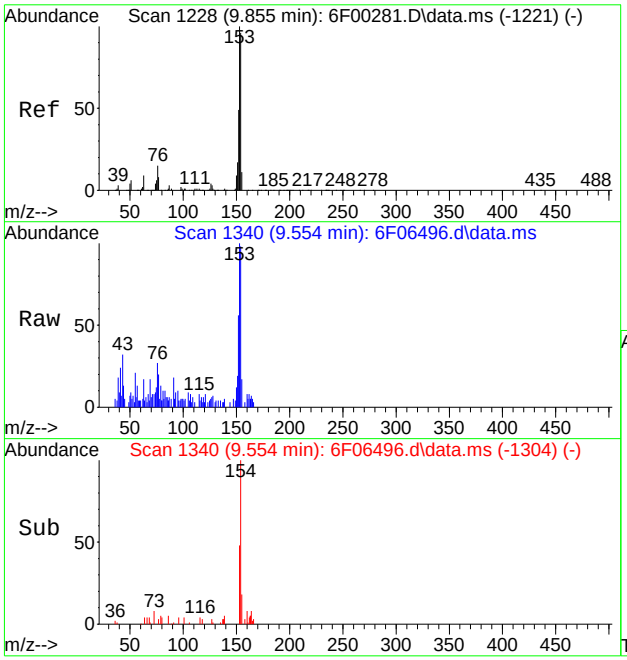


#52
Acenaphthylene
Concen: 1.68 ppm
RT: 9.351 min Scan# 1302
Delta R.T. -0.006 min
Lab File: 6F06496.d
Acq: 11 Aug 2020 5:16 pm

Tgt Ion:152 Resp: 60952

Ion	Ratio	Lower	Upper
152	100		
151	19.9	0.0	48.8
153	12.7	0.0	42.3

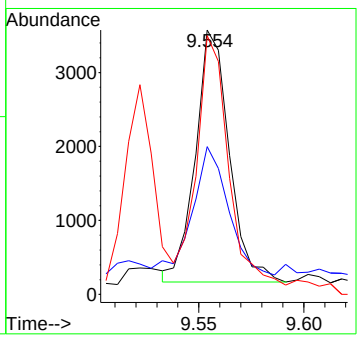


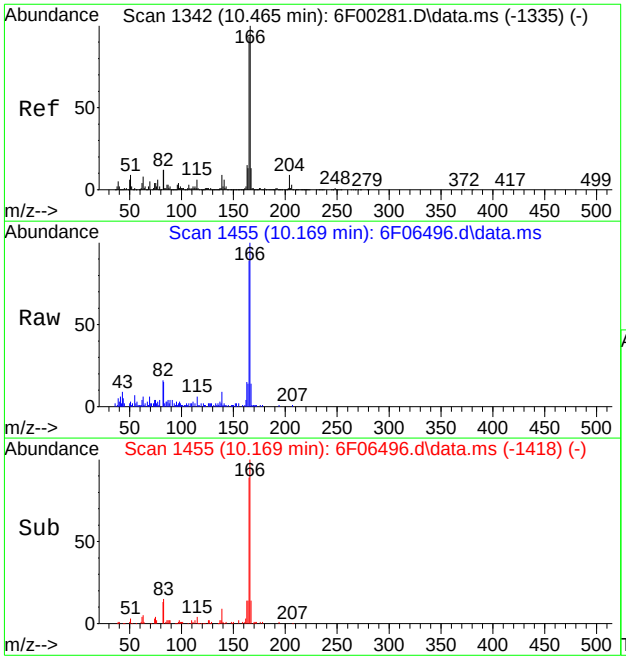


#57
Acenaphthene
Concen: 0.16 ppm
RT: 9.554 min Scan# 1340
Delta R.T. -0.006 min
Lab File: 6F06496.d
Acq: 11 Aug 2020 5:16 pm

Tgt Ion:153 Resp: 3833

Ion	Ratio	Lower	Upper
153	100		
152	46.9	19.4	79.4
154	93.3	65.6	125.6

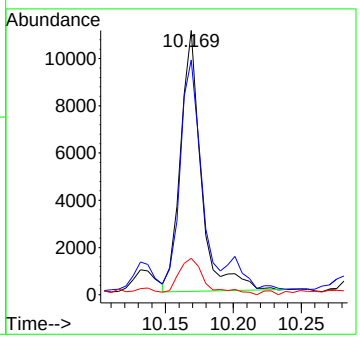


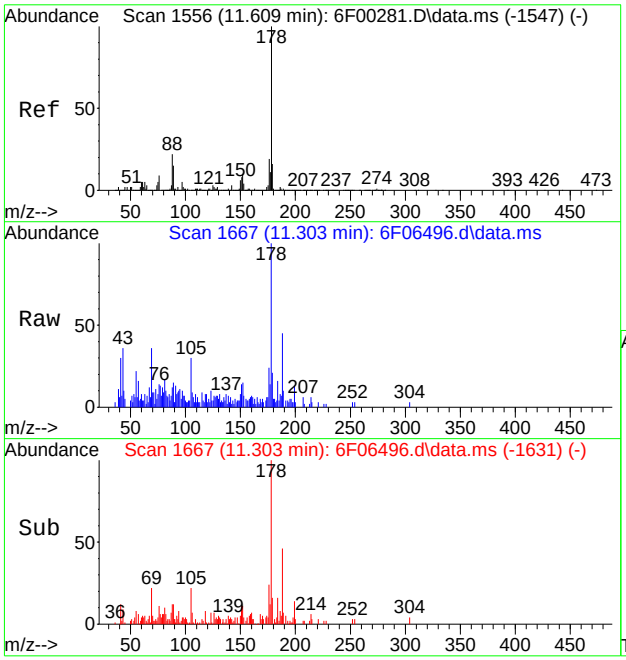


#65
Fluorene
Concen: 0.43 ppm
RT: 10.169 min Scan# 1455
Delta R.T. -0.000 min
Lab File: 6F06496.d
Acq: 11 Aug 2020 5:16 pm

Tgt Ion:166 Resp: 11758

Ion	Ratio	Lower	Upper
166	100		
165	88.3	62.6	122.6
167	13.0	0.0	43.1

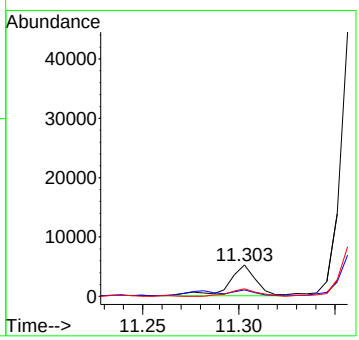


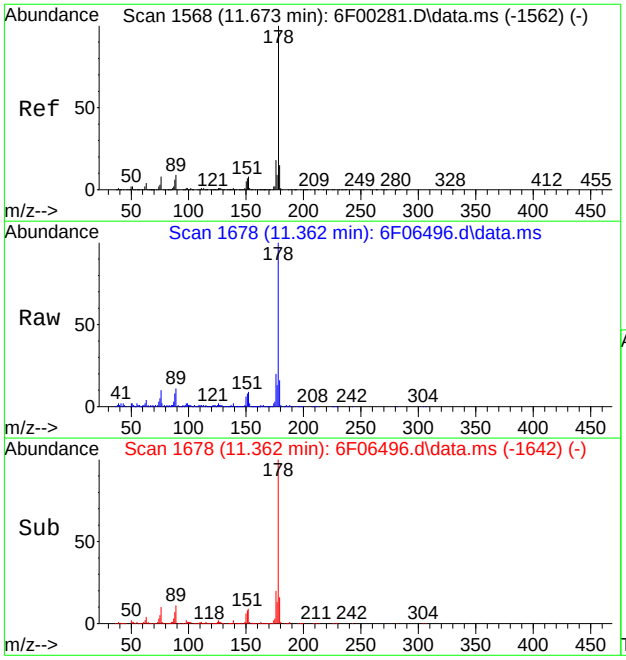


#84
Phenanthrene
Concen: 0.13 ppm
RT: 11.303 min Scan# 1667
Delta R.T. -0.006 min
Lab File: 6F06496.d
Acq: 11 Aug 2020 5:16 pm

Tgt Ion:178 Resp: 4964

Ion	Ratio	Lower	Upper
178	100		
179	18.5	0.0	46.0
176	23.5	0.0	49.0

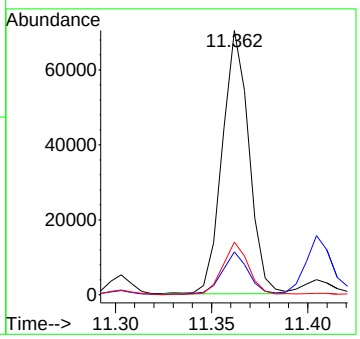


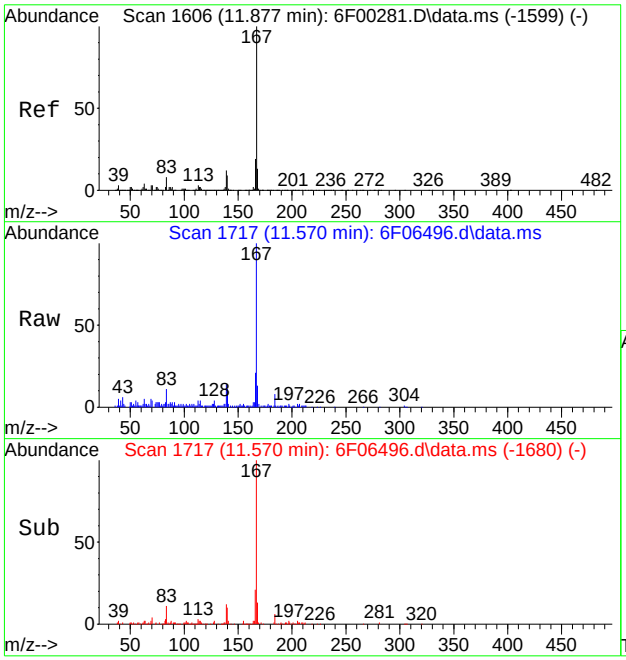


#85
Anthracene
Concen: 1.73 ppm
RT: 11.362 min Scan# 1678
Delta R.T. -0.006 min
Lab File: 6F06496.d
Acq: 11 Aug 2020 5:16 pm

Tgt Ion:178 Resp: 67914

Ion	Ratio	Lower	Upper
178	100		
179	15.7	0.0	45.4
176	19.8	0.0	47.7

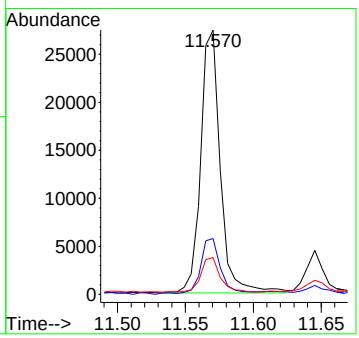


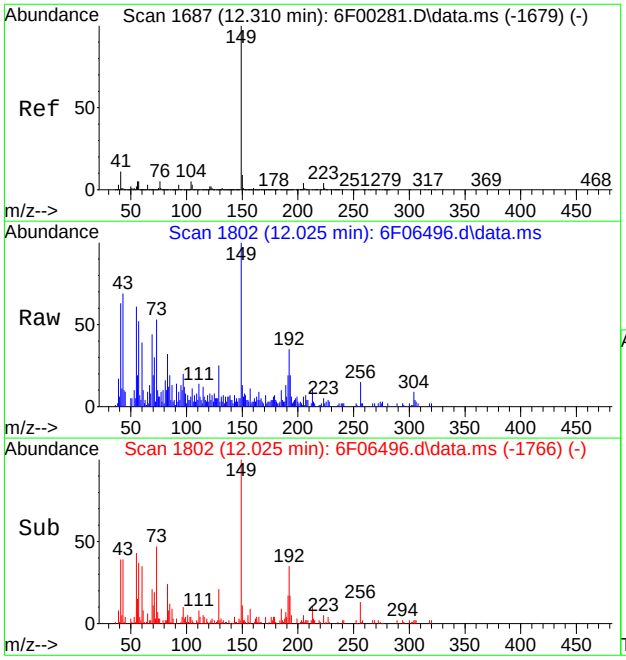


#87
Carbazole
Concen: 0.78 ppm
RT: 11.570 min Scan# 1717
Delta R.T. -0.000 min
Lab File: 6F06496.d
Acq: 11 Aug 2020 5:16 pm

Tgt Ion:167 Resp: 27514

Ion	Ratio	Lower	Upper
167	100		
166	20.6	0.0	49.2
139	13.0	0.0	42.3

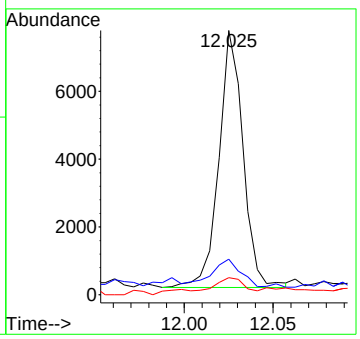


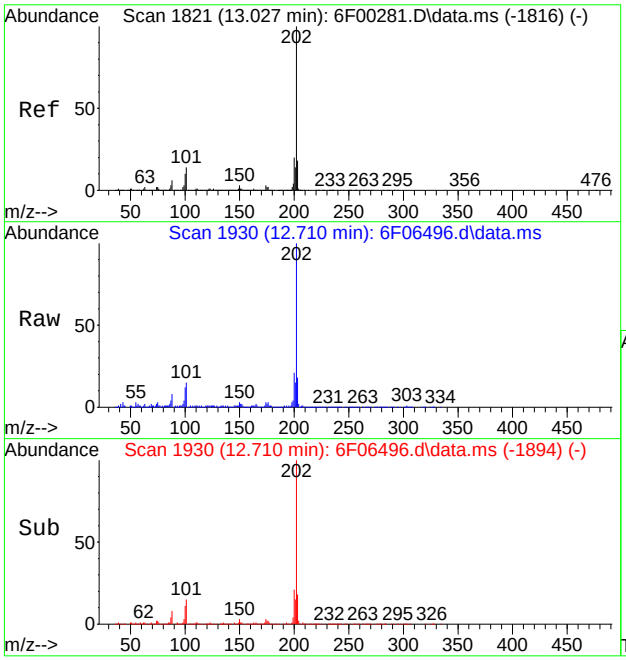


#89
Di-n-butylphthalate
Concen: 0.16 ppm
RT: 12.025 min Scan# 1802
Delta R.T. -0.006 min
Lab File: 6F06496.d
Acq: 11 Aug 2020 5:16 pm

Tgt Ion:149 Resp: 7138

Ion	Ratio	Lower	Upper
149	100		
150	10.1	0.0	38.7
104	4.6	0.0	35.2

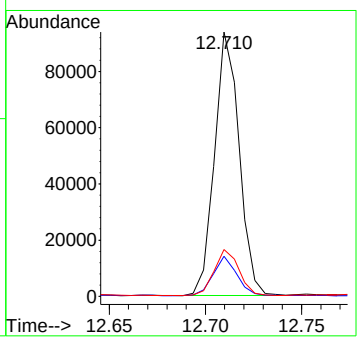


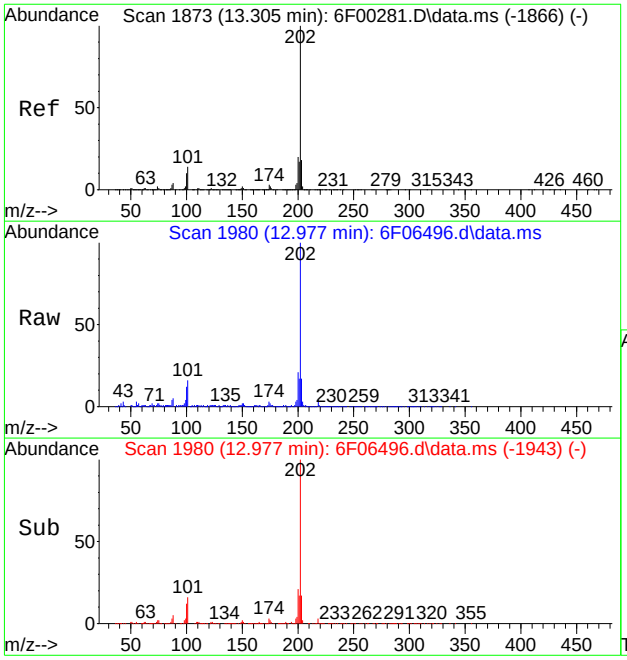


#91
Fluoranthene
Concen: 2.04 ppm
RT: 12.710 min Scan# 1930
Delta R.T. -0.006 min
Lab File: 6F06496.d
Acq: 11 Aug 2020 5:16 pm

Tgt Ion:202 Resp: 83157

Ion	Ratio	Lower	Upper
202	100		
101	14.9	0.0	43.6
203	17.4	0.0	47.7

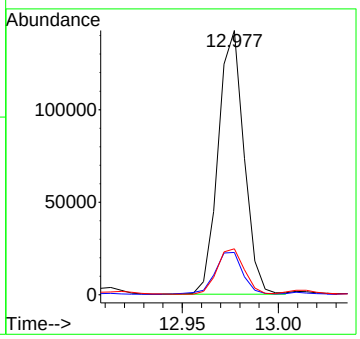


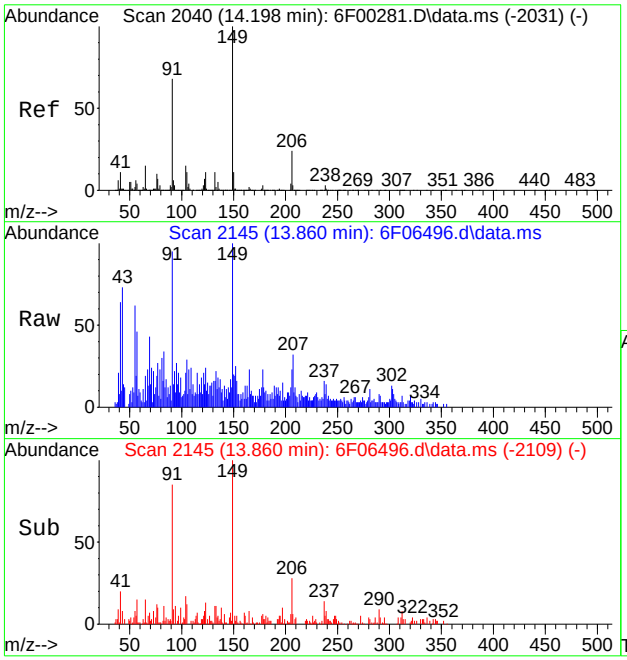


#94
Pyrene
Concen: 3.37 ppm
RT: 12.977 min Scan# 1980
Delta R.T. -0.000 min
Lab File: 6F06496.d
Acq: 11 Aug 2020 5:16 pm

Tgt Ion:202 Resp: 133123

Ion	Ratio	Lower	Upper
202	100		
101	15.7	0.0	43.8
203	16.8	0.0	47.8

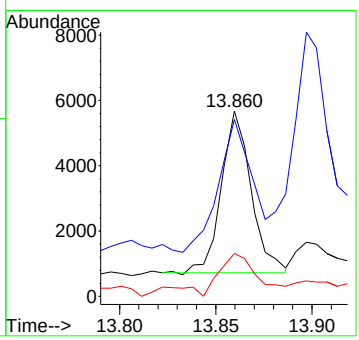


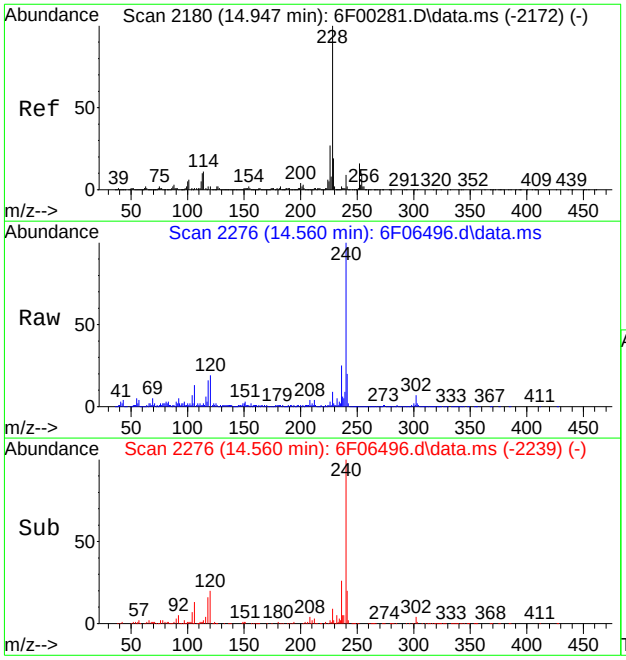


#97
Butylbenzylphthalate
Concen: 0.28 ppm
RT: 13.860 min Scan# 2145
Delta R.T. -0.006 min
Lab File: 6F06496.d
Acq: 11 Aug 2020 5:16 pm

Tgt Ion:149 Resp: 5338

Ion	Ratio	Lower	Upper
149	100		
91	62.6	38.2	98.2
206	20.9	0.0	54.0

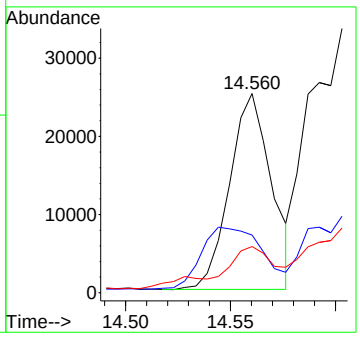


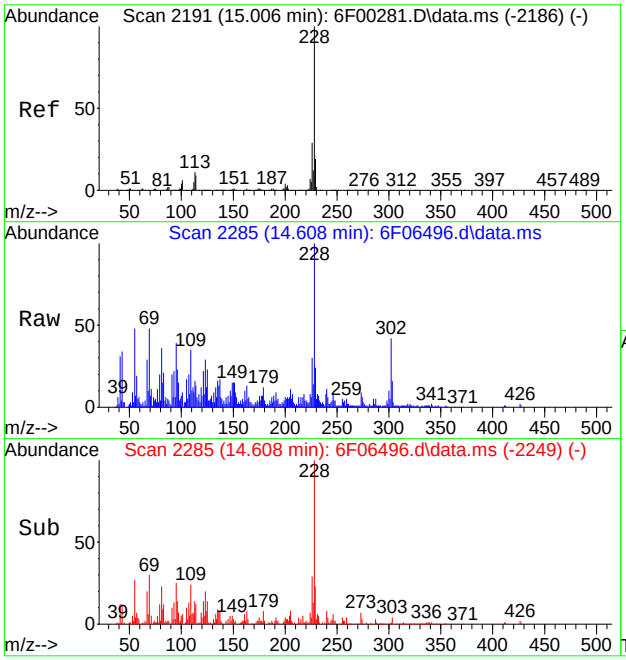


#99
Benzo[a]anthracene
Concen: 0.94 ppm
RT: 14.560 min Scan# 2276
Delta R.T. -0.000 min
Lab File: 6F06496.d
Acq: 11 Aug 2020 5:16 pm

Tgt Ion:228 Resp: 34836

Ion	Ratio	Lower	Upper
228	100		
226	27.7	0.0	56.6
229	17.6	0.0	48.9

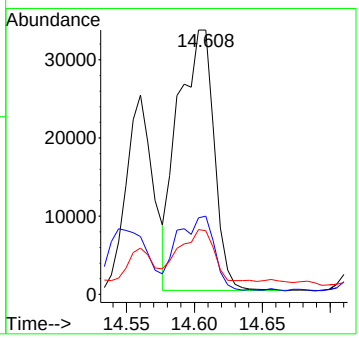


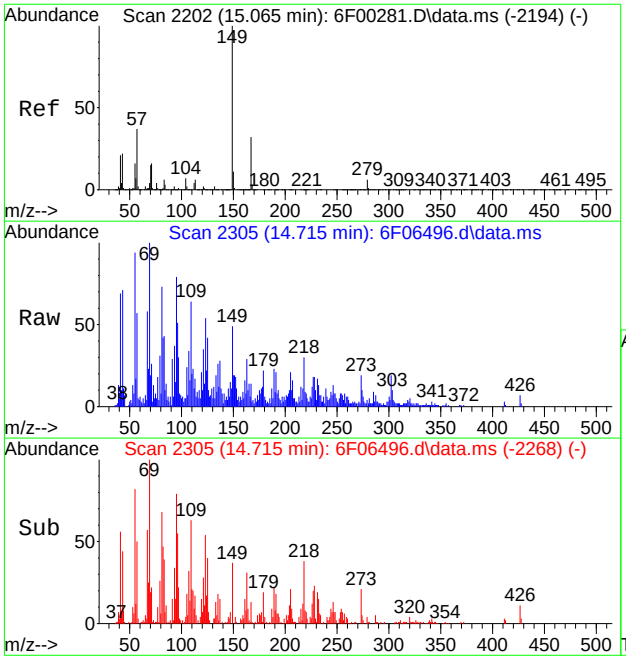


#100
Chrysene
Concen: 1.72 ppm
RT: 14.608 min Scan# 2285
Delta R.T. -0.006 min
Lab File: 6F06496.d
Acq: 11 Aug 2020 5:16 pm

Tgt Ion:228 Resp: 61602

Ion	Ratio	Lower	Upper
228	100		
226	29.0	0.0	58.9
229	19.6	0.0	48.5

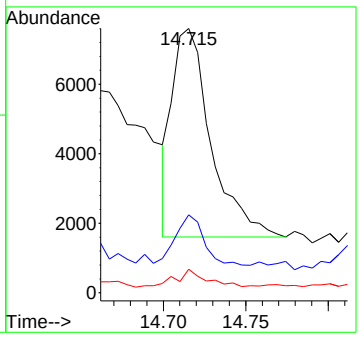


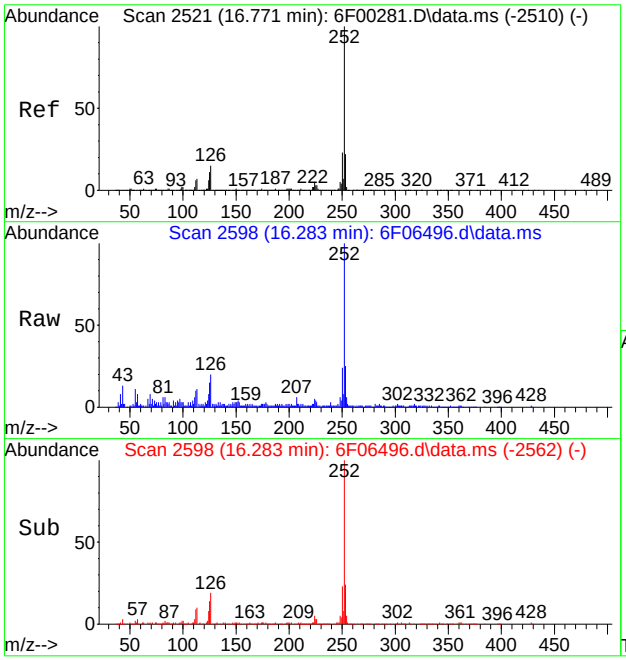


#101
bis(2-Ethylhexyl)phthalate
Concen: 0.37 ppm
RT: 14.715 min Scan# 2305
Delta R.T. -0.000 min
Lab File: 6F06496.d
Acq: 11 Aug 2020 5:16 pm

Tgt Ion:149 Resp: 9814

Ion	Ratio	Lower	Upper
149	100		
167	27.8	1.7	61.7
279	9.5	0.0	35.7

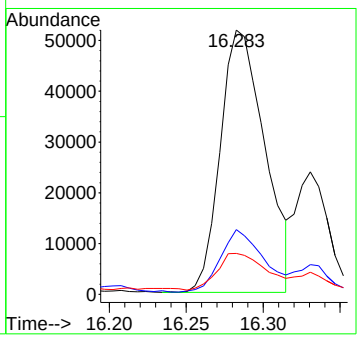


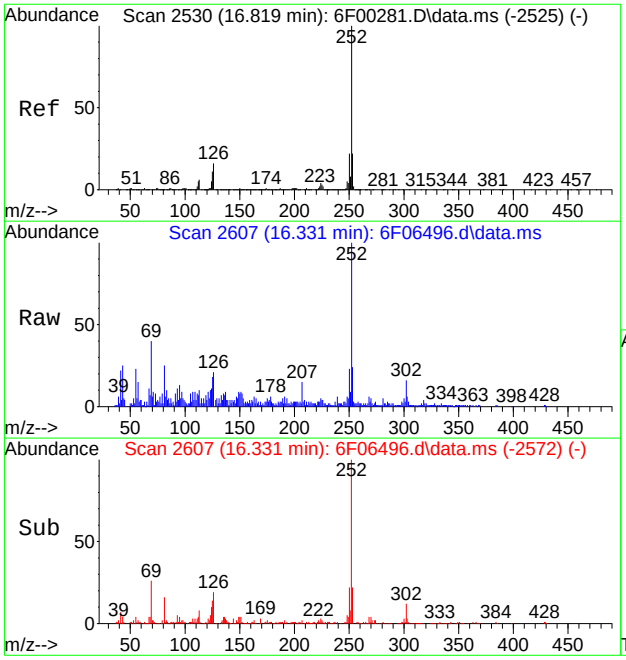


#104
Benzo[b]fluoranthene
Concen: 2.82 ppm
RT: 16.283 min Scan# 2598
Delta R.T. -0.006 min
Lab File: 6F06496.d
Acq: 11 Aug 2020 5:16 pm

Tgt Ion:252 Resp: 104088

Ion	Ratio	Lower	Upper
252	100		
253	23.5	0.0	51.9
125	13.2	0.0	41.3

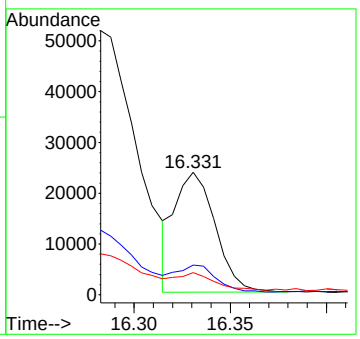


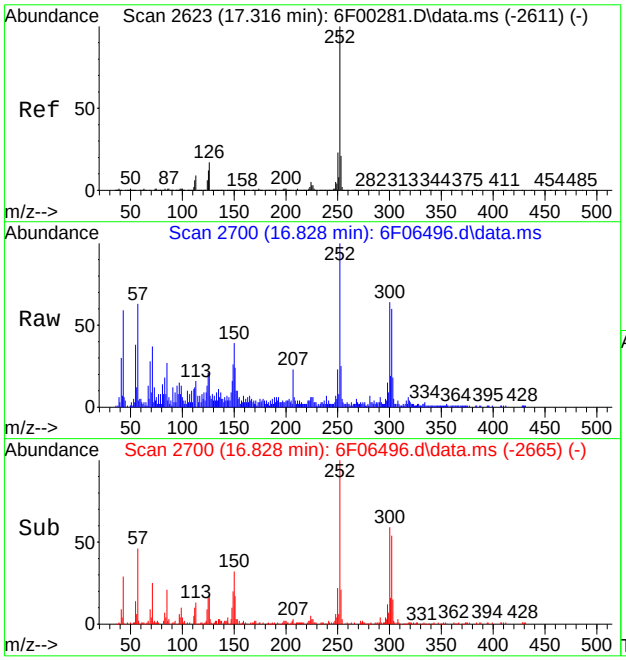


#105
Benzo[k]fluoranthene
Concen: 0.90 ppm
RT: 16.331 min Scan# 2607
Delta R.T. -0.011 min
Lab File: 6F06496.d
Acq: 11 Aug 2020 5:16 pm

Tgt Ion:252 Resp: 34572

Ion	Ratio	Lower	Upper
252	100		
253	22.0	0.0	51.7
125	13.8	0.0	40.7

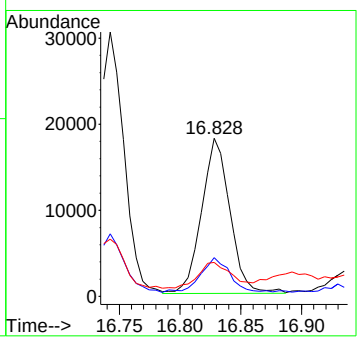


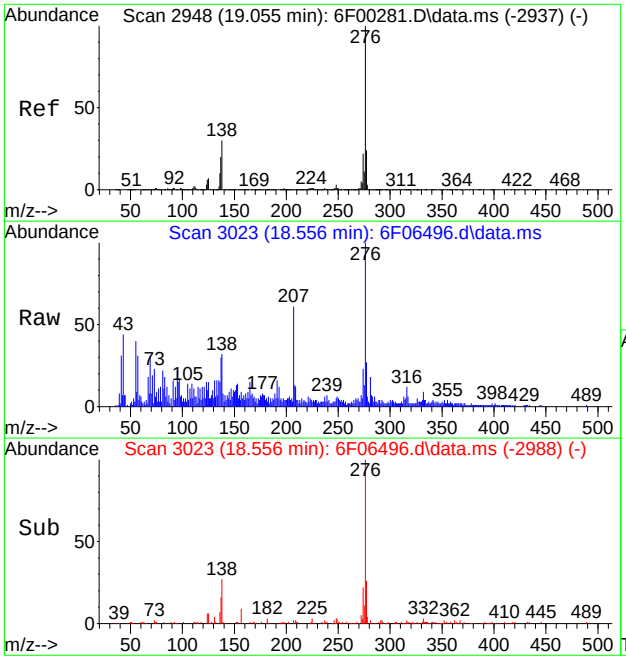


#106
Benzo[a]pyrene
Concen: 0.85 ppm
RT: 16.828 min Scan# 2700
Delta R.T. -0.011 min
Lab File: 6F06496.d
Acq: 11 Aug 2020 5:16 pm

Tgt Ion:252 Resp: 29267

Ion	Ratio	Lower	Upper
252	100		
253	22.2	0.0	51.0
125	12.1	0.0	42.0

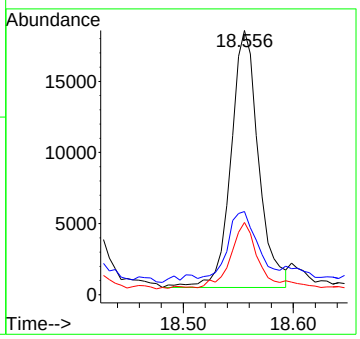


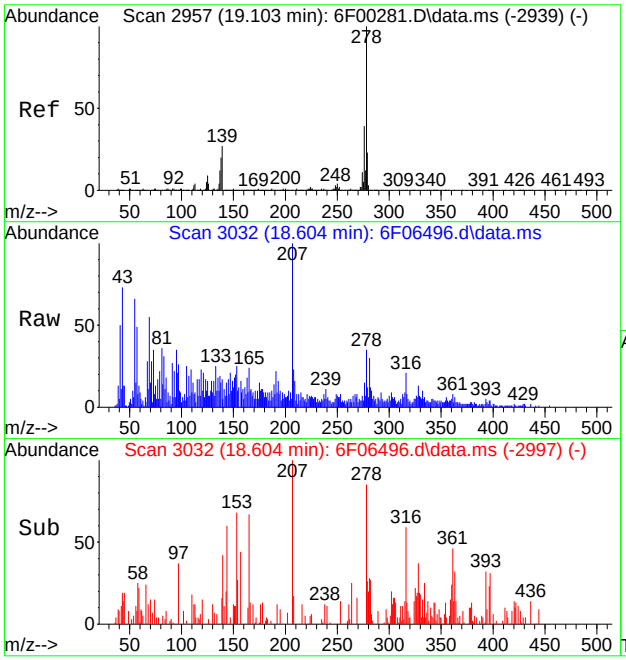


#107
Indeno[1,2,3-cd]pyrene
Concen: 0.99 ppm
RT: 18.556 min Scan# 3023
Delta R.T. -0.011 min
Lab File: 6F06496.d
Acq: 11 Aug 2020 5:16 pm

Tgt Ion:276 Resp: 31496

Ion	Ratio	Lower	Upper
276	100		
138	25.3	0.0	59.6
277	24.8	0.0	54.1

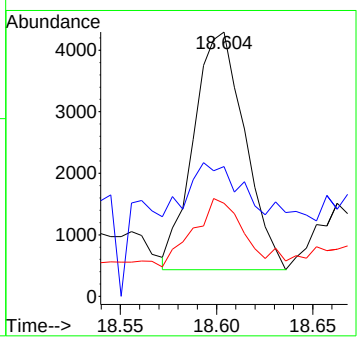


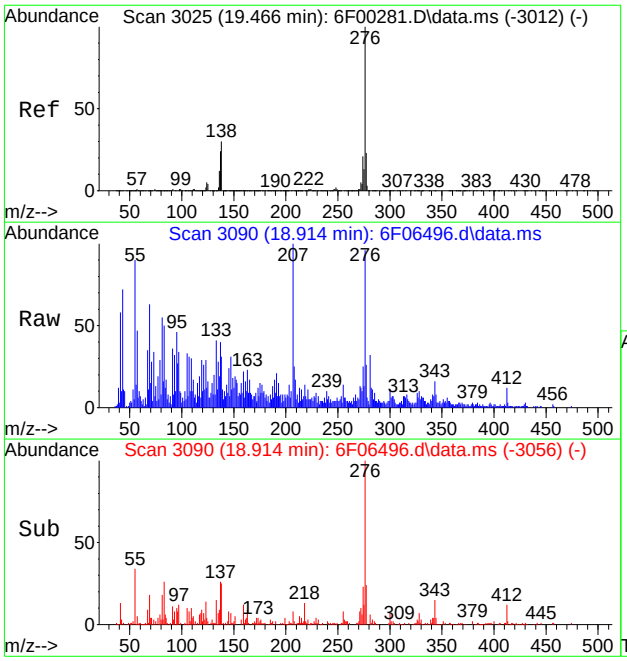


#108
Dibenz[a,h]anthracene
Concen: 0.21 ppm
RT: 18.604 min Scan# 3032
Delta R.T. -0.011 min
Lab File: 6F06496.d
Acq: 11 Aug 2020 5:16 pm

Tgt Ion:278 Resp: 7166

Ion	Ratio	Lower	Upper
278	100		
139	20.8	0.0	56.9
279	26.2	0.0	53.0

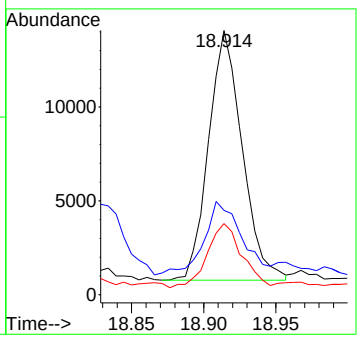




#109
Benzo[g,h,i]perylene
Concen: 0.62 ppm
RT: 18.914 min Scan# 3090
Delta R.T. -0.016 min
Lab File: 6F06496.d
Acq: 11 Aug 2020 5:16 pm

Tgt Ion:276 Resp: 21491

Ion	Ratio	Lower	Upper
276	100		
138	23.1	0.0	59.5
277	24.1	0.0	53.0



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06497.d
Acq On : 11 Aug 2020 5:42 pm
Operator : marthav
Sample : fa77615-5 E Inst : MSBNA10
Misc : op81484,S6F251,30.0,,,1,1,soil
ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Results File: 8270D6F072920.RES
Quant Time: Aug 12 06:21:51 2020
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

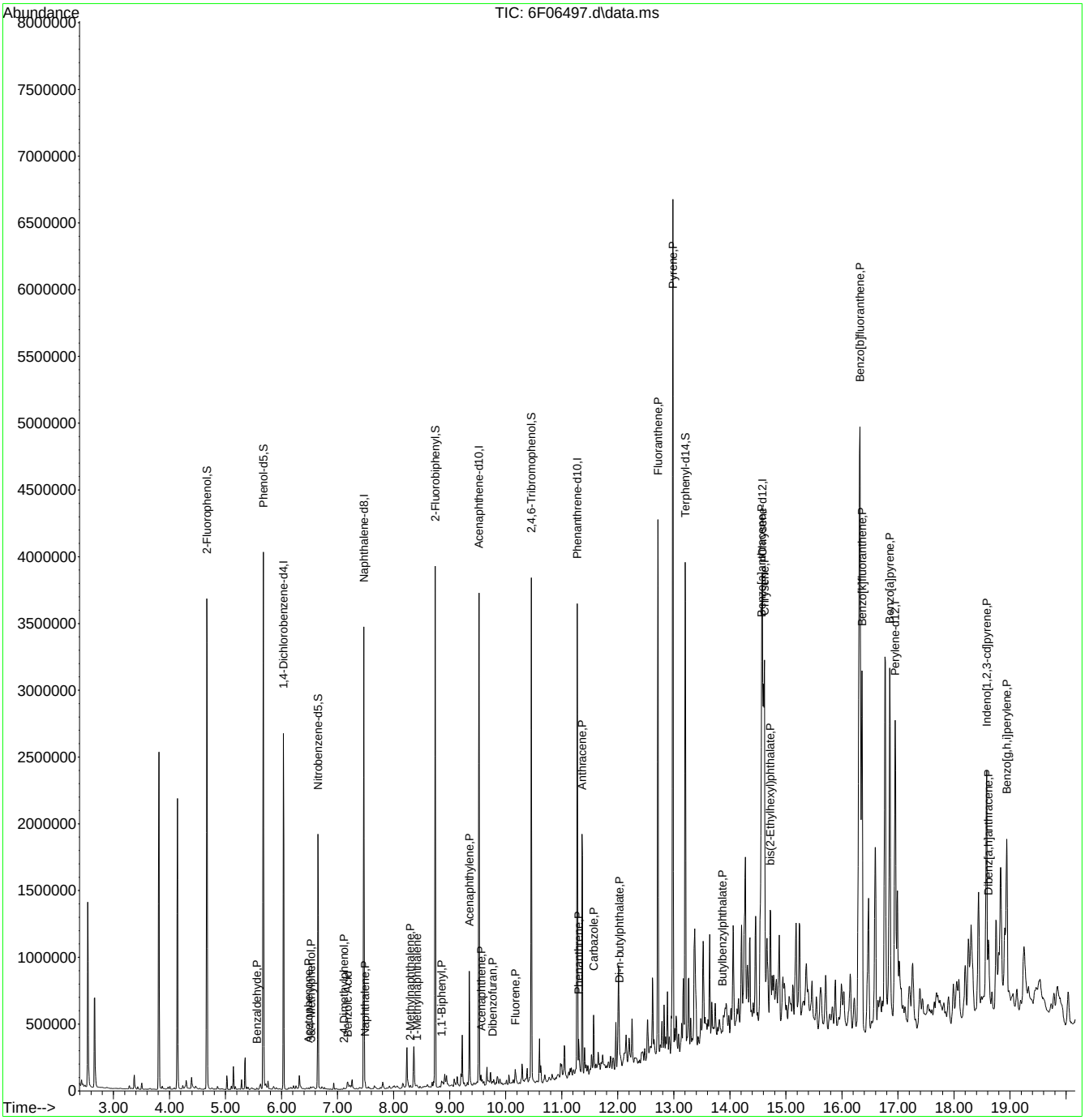
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	6.035	152	360704	40.00	ppm		0.00
22) Naphthalene-d8	7.468	136	1367223	40.00	ppm		0.00
43) Acenaphthene-d10	9.522	164	720277	40.00	ppm		0.00
70) Phenanthrene-d10	11.276	188	1299540	40.00	ppm		0.00
92) Chrysene-d12	14.582	240	1111358	40.00	ppm		0.00
102) Perylene-d12	16.951	264	1104378	40.00	ppm		0.02
System Monitoring Compounds							
7) 2-Fluorophenol	4.665	112	994238	72.94	ppm		0.00
Spiked Amount 100.000	Range 40 - 102		Recovery = 72.94%				
9) Phenol-d5	5.676	99	1311023	81.03	ppm		0.00
Spiked Amount 100.000	Range 41 - 100		Recovery = 81.03%				
23) Nitrobenzene-d5	6.650	82	547821	36.52	ppm		0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 73.04%				
47) 2-Fluorobiphenyl	8.741	172	1087737	38.64	ppm		0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 77.28%				
75) 2,4,6-Tribromophenol	10.458	330	388161	88.75	ppm		0.00
Spiked Amount 100.000	Range 42 - 108		Recovery = 88.75%				
95) Terphenyl-d14	13.202	244	1229480	39.36	ppm		0.00
Spiked Amount 50.000	Range 45 - 119		Recovery = 78.72%				
Target Compounds							Qvalue
5) Benzaldehyde	5.559	106	2504	0.23	ppm		90
18) Acetophenone	6.484	105	2794	0.15	ppm		86
21) 3&4-Methylphenol	6.521	108	2378	0.18	ppm		98
27) 2,4-Dimethylphenol	7.110	107	2226	0.18	ppm	#	45
30) Benzoic Acid	7.179	105	15957	1.81	ppm		91
34) Naphthalene	7.489	128	9481	0.25	ppm	#	52
40) 2-Methylnaphthalene	8.297	141	4348	0.19	ppm		96
41) 1-Methylnaphthalene	8.415	142	3966	0.16	ppm		95
48) 1,1'-Biphenyl	8.853	154	1860	0.06	ppm		83
52) Acenaphthylene	9.351	152	353403	9.82	ppm		98
57) Acenaphthene	9.559	153	19063	0.80	ppm		97
60) Dibenzofuran	9.763	168	10015	0.30	ppm		87
65) Fluorene	10.169	166	36555	1.37	ppm		97
84) Phenanthrene	11.303	178	86742	2.23	ppm		99
85) Anthracene	11.362	178	702220	17.76	ppm		98
87) Carbazole	11.570	167	153191	4.30	ppm		98
89) Di-n-butylphthalate	12.025	149	8254	0.18	ppm		80
91) Fluoranthene	12.715	202	1569670	38.31	ppm		98
94) Pyrene	12.982	202	2462773	61.87	ppm		95
97) Butylbenzylphthalate	13.865	149	4580	0.24	ppm		95
99) Benzo[a]anthracene	14.566	228	999559	26.84	ppm		98
100) Chrysene	14.619	228	1656546	45.85	ppm		96
101) bis(2-Ethylhexyl)phtha...	14.721	149	7315	0.27	ppm		86
104) Benzo[b]fluoranthene	16.320	252	3535344	99.73	ppm		95
105) Benzo[k]fluoranthene	16.357	252	1231301	33.40	ppm		96
106) Benzo[a]pyrene	16.855	252	1409265	42.81	ppm		95
107) Indeno[1,2,3-cd]pyrene	18.582	276	1111713	36.27	ppm		95
108) Dibenz[a,h]anthracene	18.615	278	253519	7.75	ppm		90
109) Benzo[g,h,i]perylene	18.941	276	805148	24.34	ppm		99

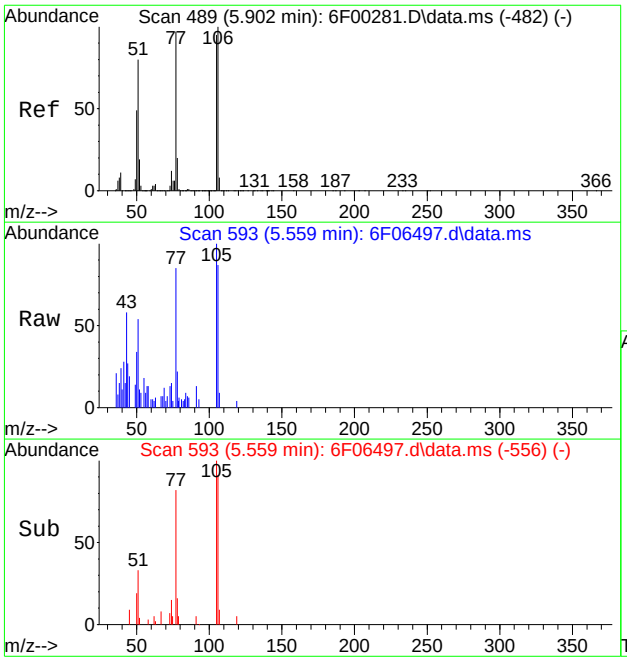
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06497.d
Acq On : 11 Aug 2020 5:42 pm
Operator : marthav
Sample : fa77615-5 E Inst : MSBNA10
Misc : op81484,S6F251,30.0,,,1,1,soil
ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Results File: 8270D6F072920.RES
Quant Time: Aug 12 06:21:51 2020
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

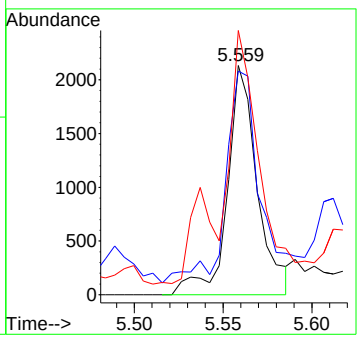


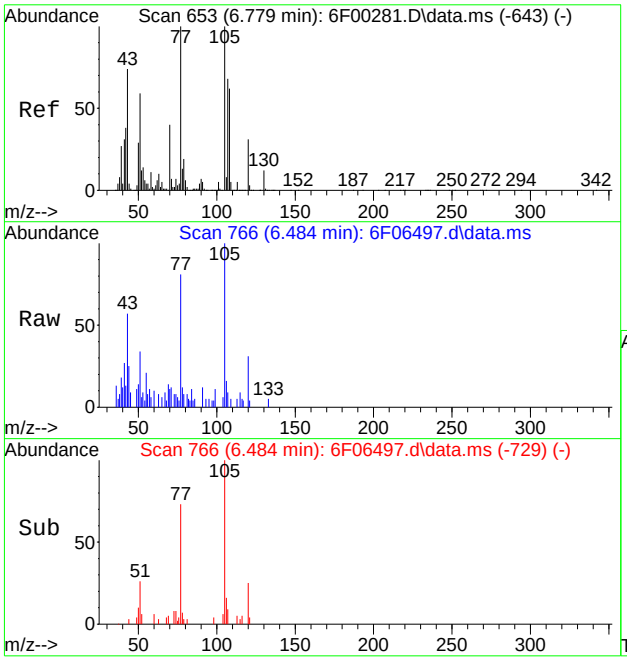


#5
Benzaldehyde
Concen: 0.23 ppm
RT: 5.559 min Scan# 593
Delta R.T. -0.000 min
Lab File: 6F06497.d
Acq: 11 Aug 2020 5:42 pm

Tgt Ion:106 Resp: 2504

Ion	Ratio	Lower	Upper
106	100		
77	91.6	67.1	127.1
105	109.2	65.1	125.1

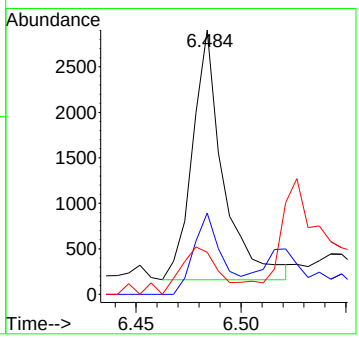


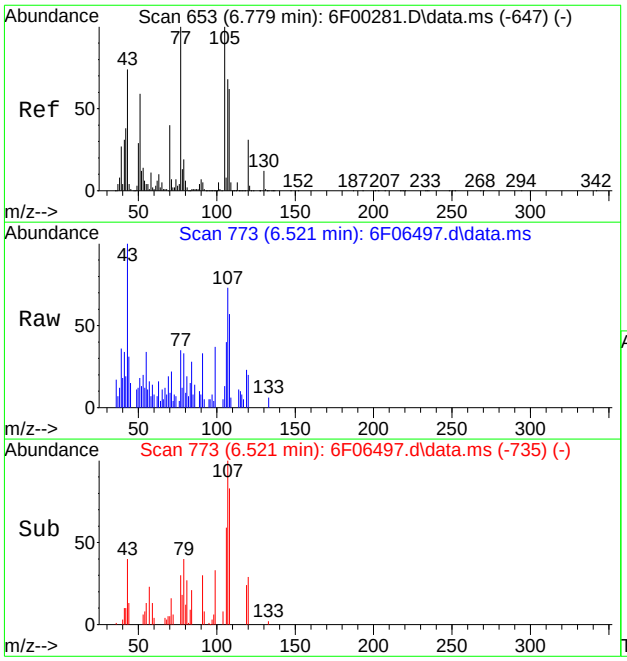


#18
Acetophenone
Concen: 0.15 ppm
RT: 6.484 min Scan# 766
Delta R.T. -0.000 min
Lab File: 6F06497.d
Acq: 11 Aug 2020 5:42 pm

Tgt Ion:105 Resp: 2794

Ion	Ratio	Lower	Upper
105	100		
120	24.2	0.7	60.7
106	0.0	0.0	38.4

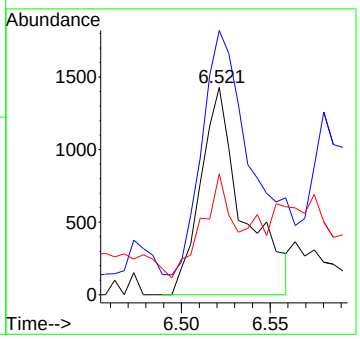


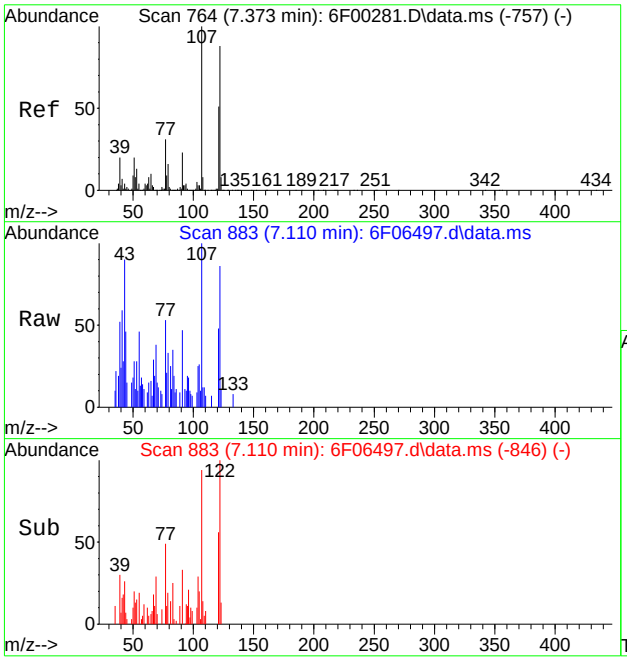


#21
3&4-Methylphenol
Concen: 0.18 ppm
RT: 6.521 min Scan# 773
Delta R.T. 0.005 min
Lab File: 6F06497.d
Acq: 11 Aug 2020 5:42 pm

Tgt Ion:108 Resp: 2378

Ion	Ratio	Lower	Upper
108	100		
107	110.1	80.3	140.3
79	34.3	0.2	60.2

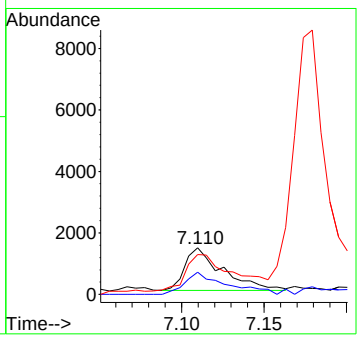


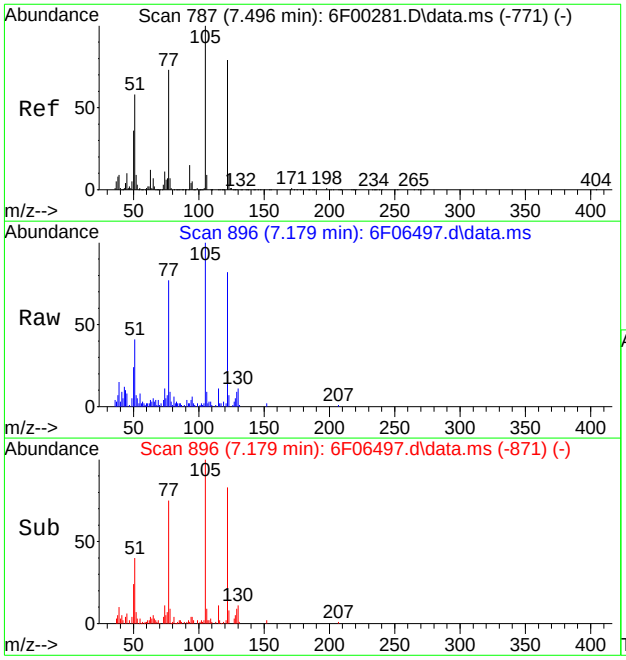


#27
2,4-Dimethylphenol
Concen: 0.18 ppm
RT: 7.110 min Scan# 883
Delta R.T. -0.000 min
Lab File: 6F06497.d
Acq: 11 Aug 2020 5:42 pm

Tgt Ion:107 Resp: 2226

Ion	Ratio	Lower	Upper
107	100		
121	46.9	20.5	80.5
122	9.9	58.5	118.5#

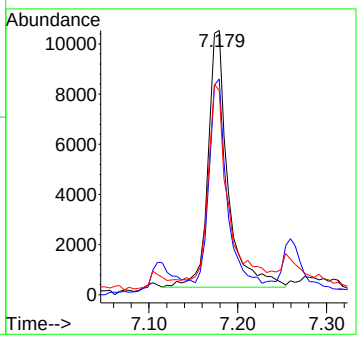


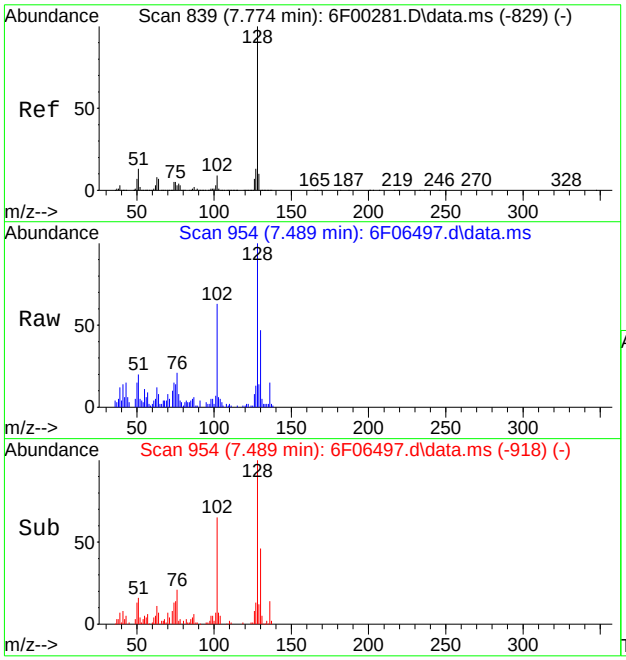


#30
Benzoic Acid
Concen: 1.81 ppm
RT: 7.179 min Scan# 896
Delta R.T. -0.064 min
Lab File: 6F06497.d
Acq: 11 Aug 2020 5:42 pm

Tgt Ion:105 Resp: 15957

Ion	Ratio	Lower	Upper
105	100		
122	68.5	49.5	109.5
77	68.4	43.0	103.0

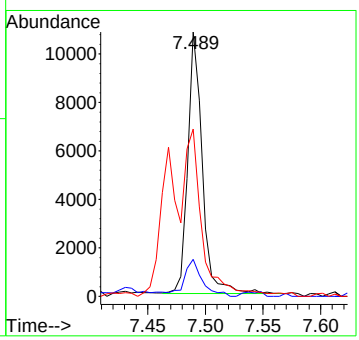


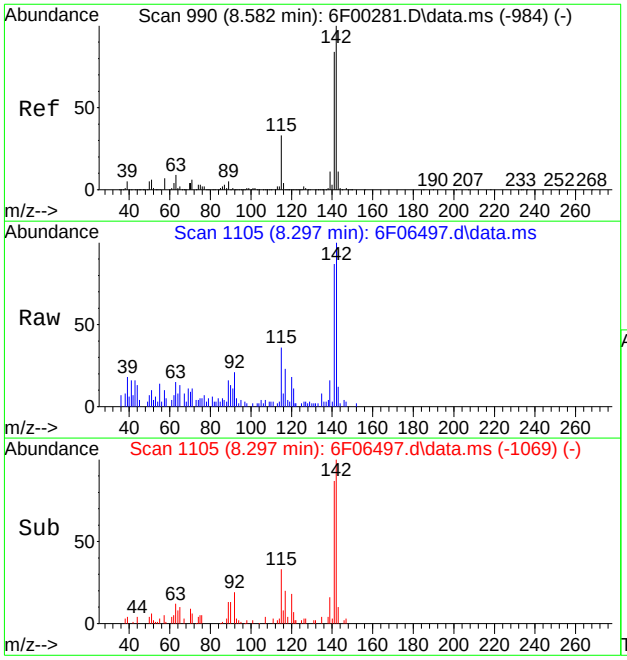


#34
Naphthalene
Concen: 0.25 ppm
RT: 7.489 min Scan# 954
Delta R.T. -0.006 min
Lab File: 6F06497.d
Acq: 11 Aug 2020 5:42 pm

Tgt Ion:128 Resp: 9481

Ion	Ratio	Lower	Upper
128	100		
129	12.8	0.0	40.4
102	43.7	0.0	39.2#

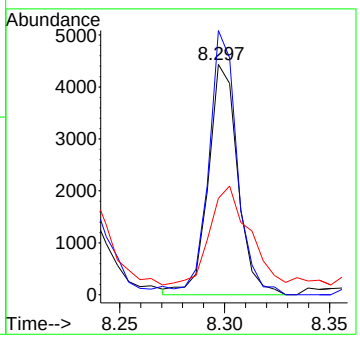


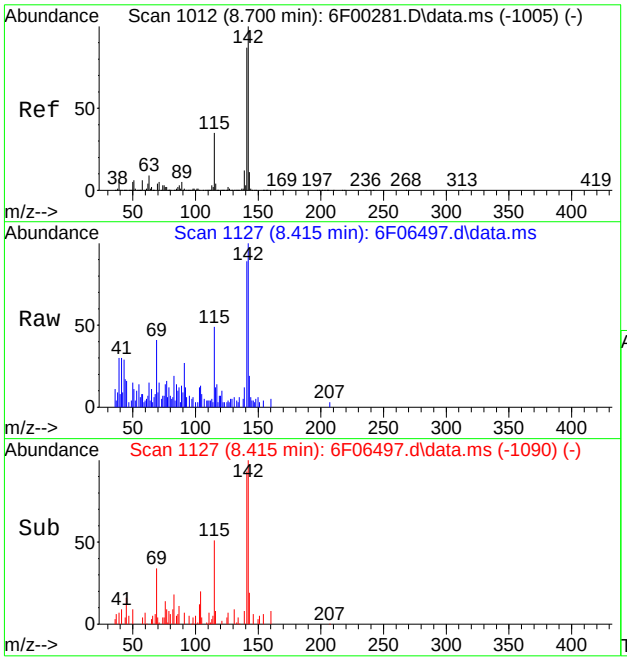


#40
2-Methylnaphthalene
Concen: 0.19 ppm
RT: 8.297 min Scan# 1105
Delta R.T. -0.005 min
Lab File: 6F06497.d
Acq: 11 Aug 2020 5:42 pm

Tgt Ion:141 Resp: 4348

Ion	Ratio	Lower	Upper
141	100		
142	114.3	88.9	148.9
115	37.5	9.7	69.7

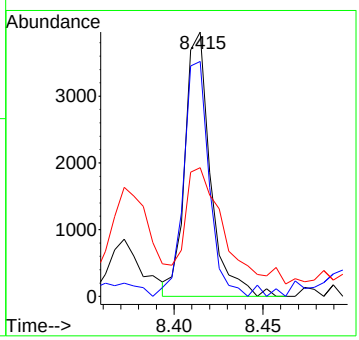


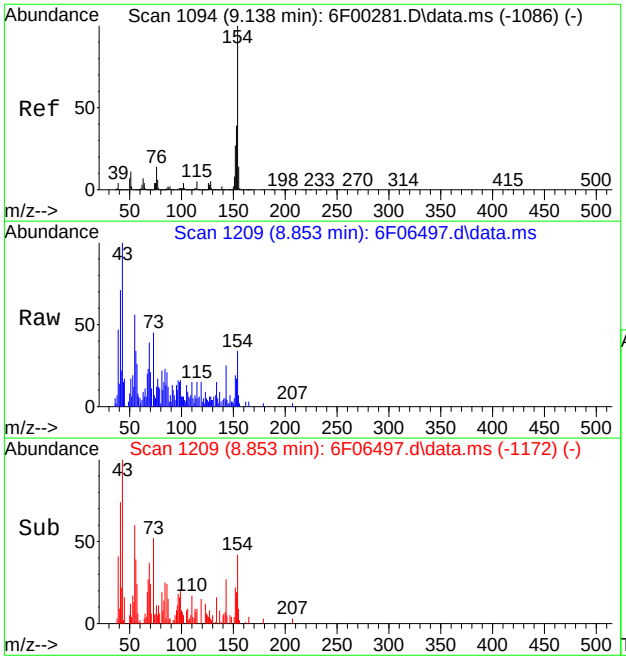


#41
1-Methylnaphthalene
Concen: 0.16 ppm
RT: 8.415 min Scan# 1127
Delta R.T. -0.000 min
Lab File: 6F06497.d
Acq: 11 Aug 2020 5:42 pm

Tgt Ion:142 Resp: 3966

Ion	Ratio	Lower	Upper
142	100		
141	89.6	56.8	116.8
115	41.3	4.7	64.7

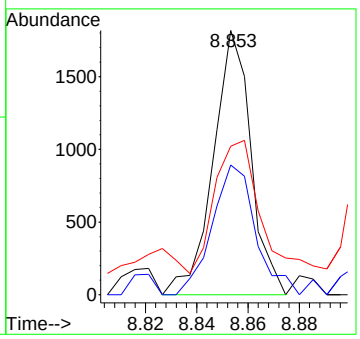


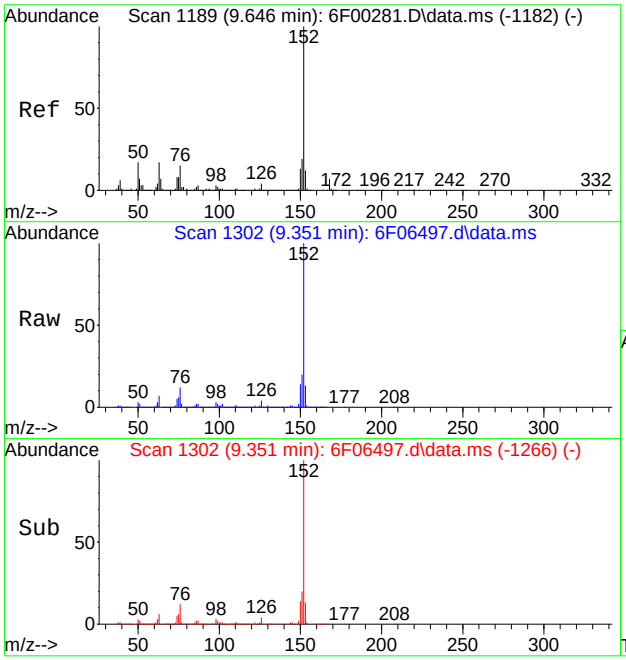


#48
1,1'-Biphenyl
Concen: 0.06 ppm
RT: 8.853 min Scan# 1209
Delta R.T. -0.000 min
Lab File: 6F06497.d
Acq: 11 Aug 2020 5:42 pm

Tgt Ion:154 Resp: 1860

Ion	Ratio	Lower	Upper
154	100		
153	45.4	8.7	68.7
152	40.4	0.0	56.7

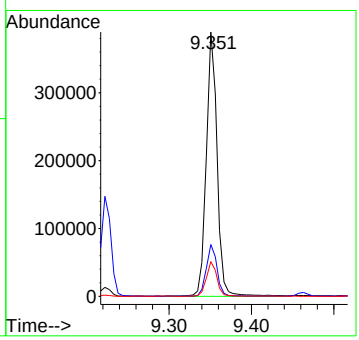


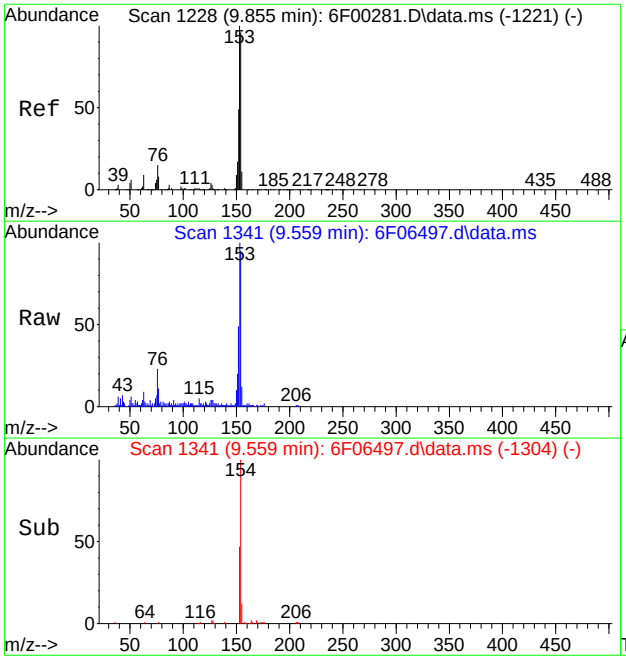


#52
Acenaphthylene
Concen: 9.82 ppm
RT: 9.351 min Scan# 1302
Delta R.T. -0.006 min
Lab File: 6F06497.d
Acq: 11 Aug 2020 5:42 pm

Tgt Ion:152 Resp: 353403

Ion	Ratio	Lower	Upper
152	100		
151	19.5	0.0	48.8
153	13.1	0.0	42.3

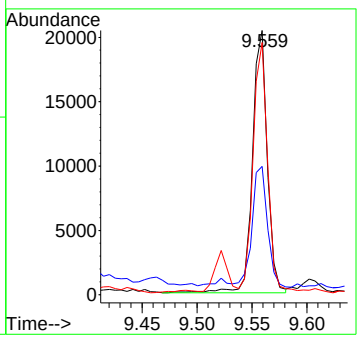


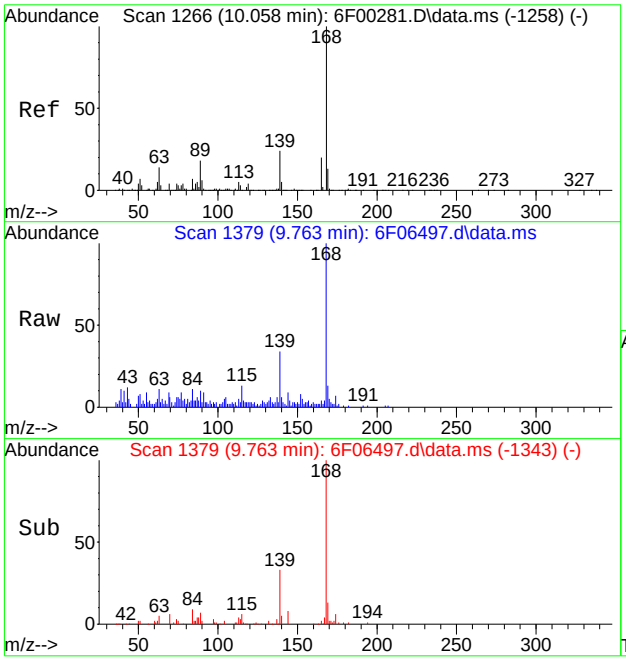


#57
Acenaphthene
Concen: 0.80 ppm
RT: 9.559 min Scan# 1341
Delta R.T. -0.000 min
Lab File: 6F06497.d
Acq: 11 Aug 2020 5:42 pm

Tgt Ion:153 Resp: 19063

Ion	Ratio	Lower	Upper
153	100		
152	44.9	19.4	79.4
154	95.0	65.6	125.6

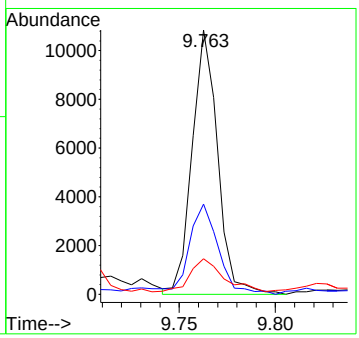


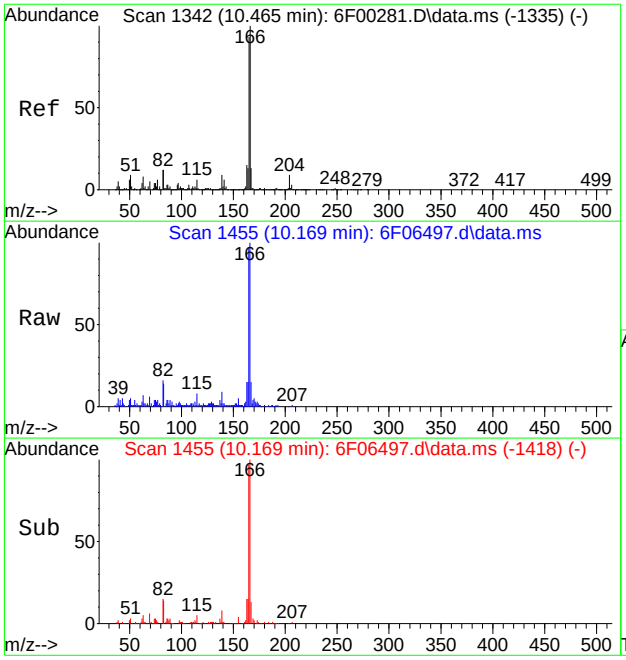


#60
Dibenzofuran
Concen: 0.30 ppm
RT: 9.763 min Scan# 1379
Delta R.T. -0.006 min
Lab File: 6F06497.d
Acq: 11 Aug 2020 5:42 pm

Tgt Ion:168 Resp: 10015

Ion	Ratio	Lower	Upper
168	100		
139	32.8	0.0	53.6
169	12.2	0.0	42.6

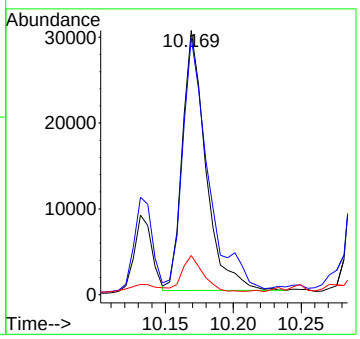


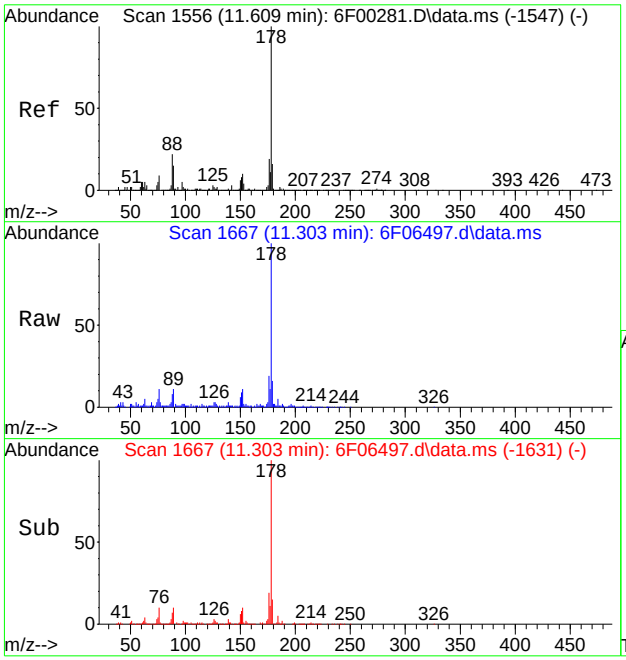


#65
Fluorene
Concen: 1.37 ppm
RT: 10.169 min Scan# 1455
Delta R.T. -0.000 min
Lab File: 6F06497.d
Acq: 11 Aug 2020 5:42 pm

Tgt Ion:166 Resp: 36555

Ion	Ratio	Lower	Upper
166	100		
165	95.9	62.6	122.6
167	13.0	0.0	43.1

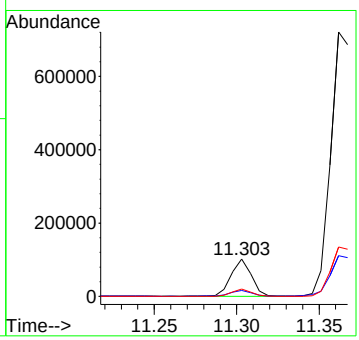


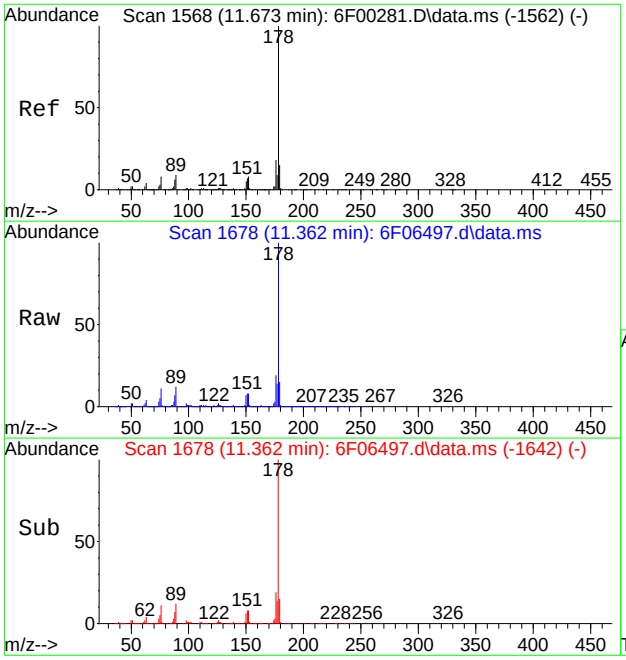


#84
Phenanthrene
Concen: 2.23 ppm
RT: 11.303 min Scan# 1667
Delta R.T. -0.005 min
Lab File: 6F06497.d
Acq: 11 Aug 2020 5:42 pm

Tgt Ion:178 Resp: 86742

Ion	Ratio	Lower	Upper
178	100		
179	15.5	0.0	46.0
176	19.2	0.0	49.0

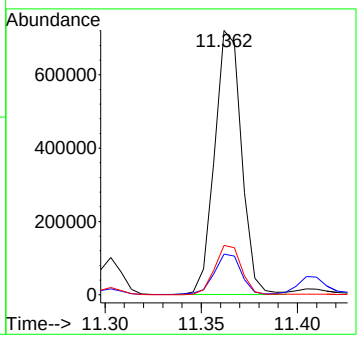


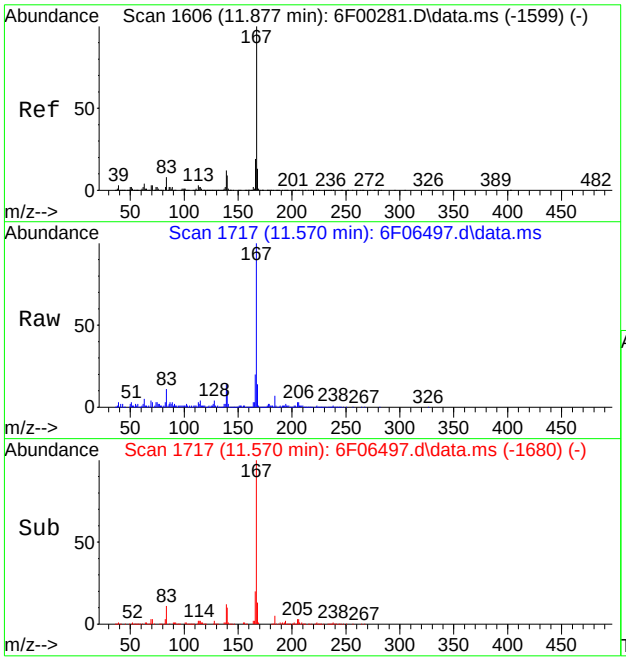


#85
Anthracene
Concen: 17.76 ppm
RT: 11.362 min Scan# 1678
Delta R.T. -0.006 min
Lab File: 6F06497.d
Acq: 11 Aug 2020 5:42 pm

Tgt Ion:178 Resp: 702220

Ion	Ratio	Lower	Upper
178	100		
179	14.9	0.0	45.4
176	18.6	0.0	47.7

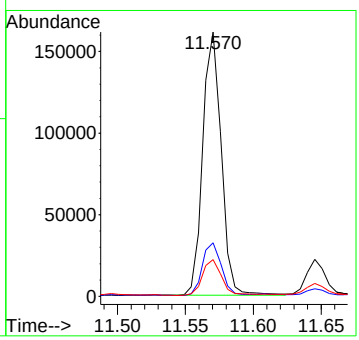


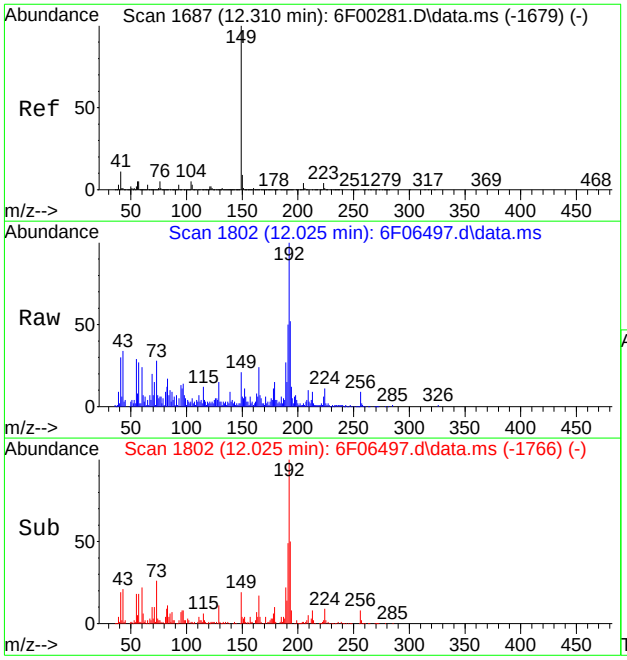


#87
Carbazole
Concen: 4.30 ppm
RT: 11.570 min Scan# 1717
Delta R.T. -0.000 min
Lab File: 6F06497.d
Acq: 11 Aug 2020 5:42 pm

Tgt Ion:167 Resp: 153191

Ion	Ratio	Lower	Upper
167	100		
166	19.9	0.0	49.2
139	13.4	0.0	42.3

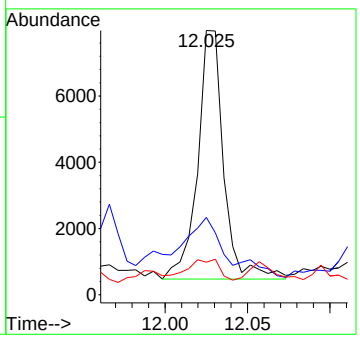


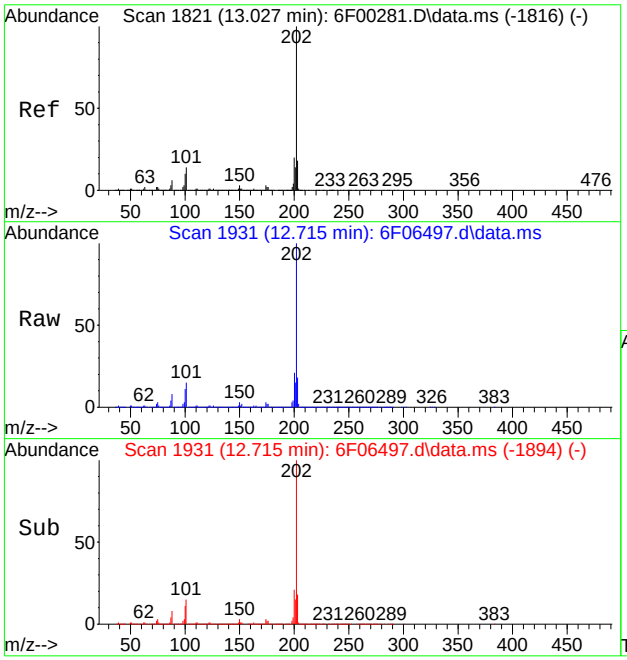


#89
Di-n-butylphthalate
Concen: 0.18 ppm
RT: 12.025 min Scan# 1802
Delta R.T. -0.005 min
Lab File: 6F06497.d
Acq: 11 Aug 2020 5:42 pm

Tgt Ion:149 Resp: 8254

Ion	Ratio	Lower	Upper
149	100		
150	19.6	0.0	38.7
104	5.7	0.0	35.2

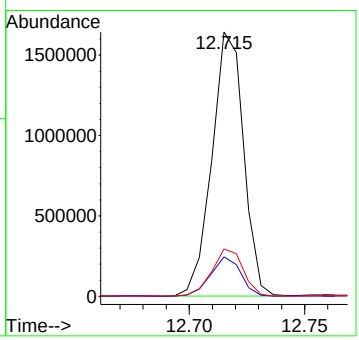


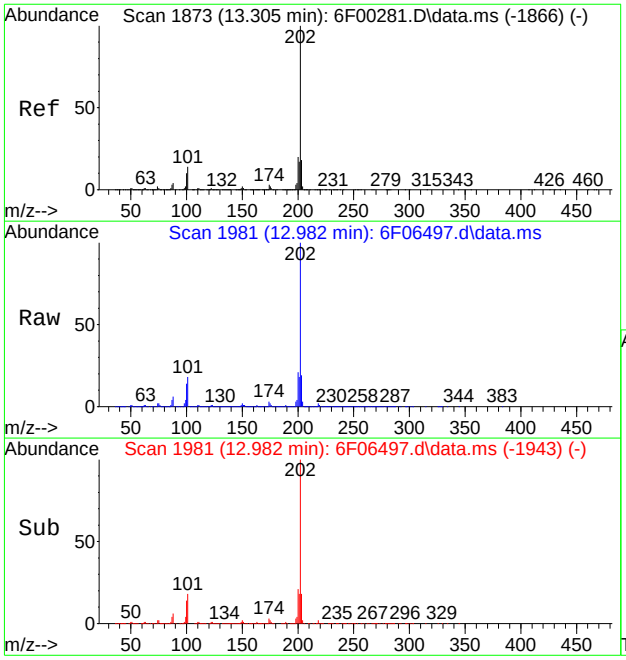


#91
Fluoranthene
Concen: 38.31 ppm
RT: 12.715 min Scan# 1931
Delta R.T. -0.000 min
Lab File: 6F06497.d
Acq: 11 Aug 2020 5:42 pm

Tgt Ion:202 Resp: 1569670

Ion	Ratio	Lower	Upper
202	100		
101	14.9	0.0	43.6
203	17.9	0.0	47.7

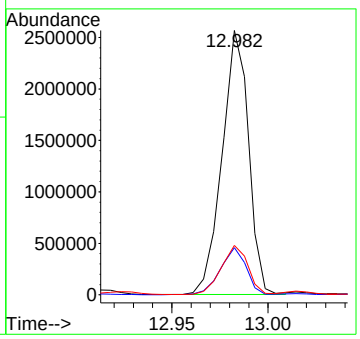


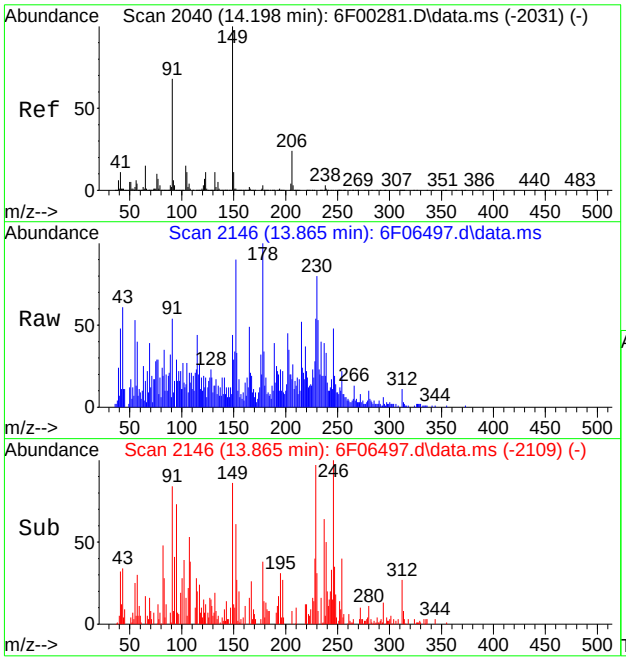


#94
Pyrene
Concen: 61.87 ppm
RT: 12.982 min Scan# 1981
Delta R.T. 0.005 min
Lab File: 6F06497.d
Acq: 11 Aug 2020 5:42 pm

Tgt Ion:202 Resp: 2462773

Ion	Ratio	Lower	Upper
202	100		
101	17.7	0.0	43.8
203	18.2	0.0	47.8

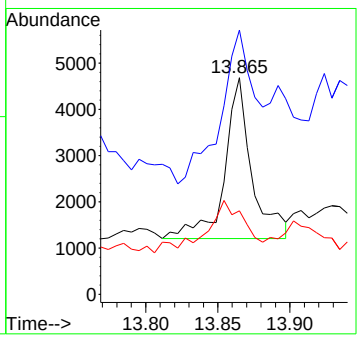


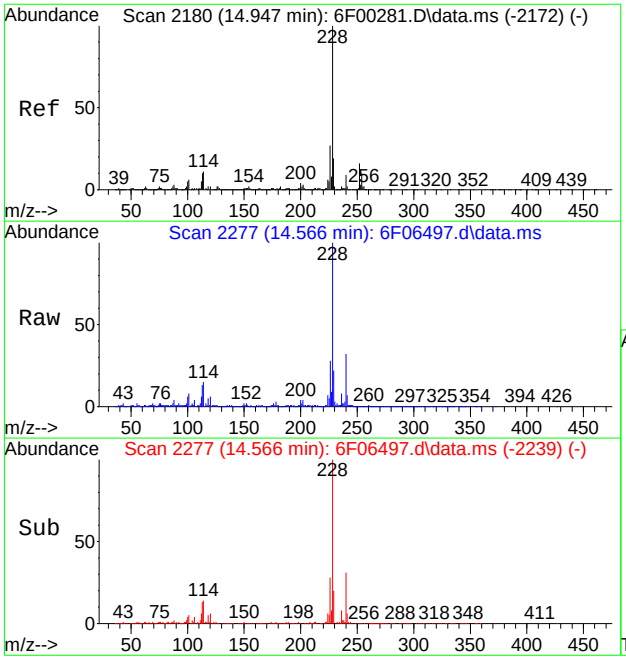


#97
Butylbenzylphthalate
Concen: 0.24 ppm
RT: 13.865 min Scan# 2146
Delta R.T. -0.000 min
Lab File: 6F06497.d
Acq: 11 Aug 2020 5:42 pm

Tgt Ion:149 Resp: 4580

Ion	Ratio	Lower	Upper
149	100		
91	66.5	38.2	98.2
206	17.5	0.0	54.0

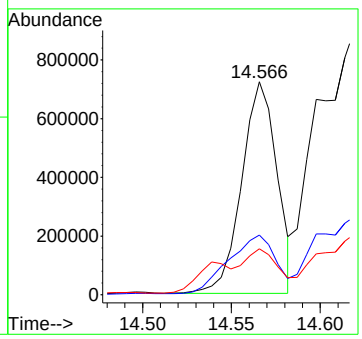


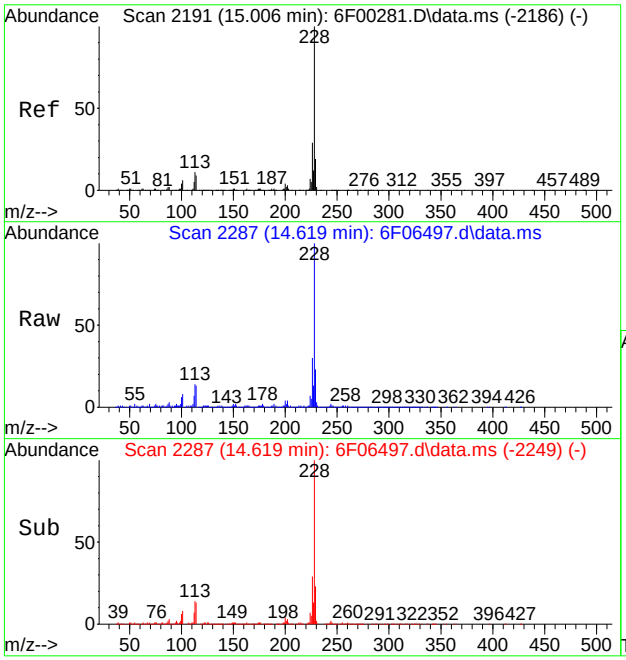


#99
Benzo[a]anthracene
Concen: 26.84 ppm
RT: 14.566 min Scan# 2277
Delta R.T. 0.005 min
Lab File: 6F06497.d
Acq: 11 Aug 2020 5:42 pm

Tgt Ion:228 Resp: 999559

Ion	Ratio	Lower	Upper
228	100		
226	27.9	0.0	56.6
229	19.9	0.0	48.9

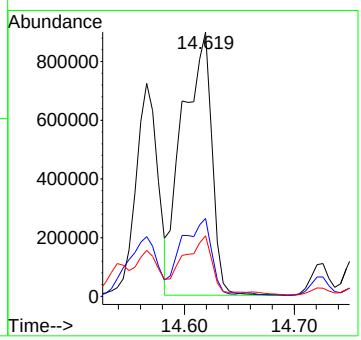


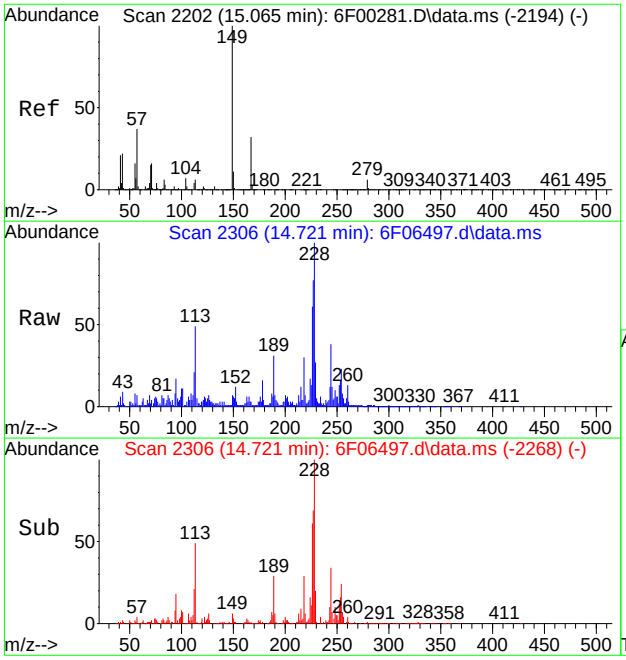


#100
Chrysene
Concen: 45.85 ppm
RT: 14.619 min Scan# 2287
Delta R.T. 0.005 min
Lab File: 6F06497.d
Acq: 11 Aug 2020 5:42 pm

Tgt Ion:228 Resp: 1656546

Ion	Ratio	Lower	Upper
228	100		
226	29.6	0.0	58.9
229	21.8	0.0	48.5

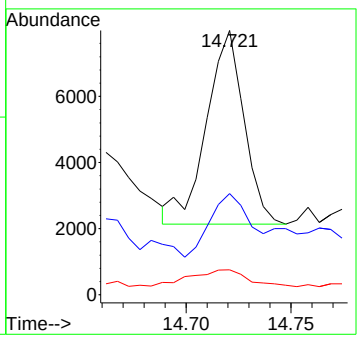


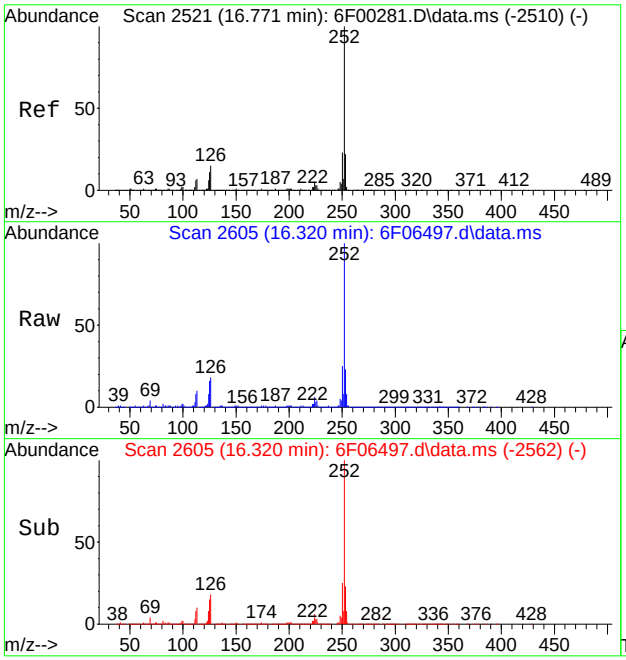


#101
bis(2-Ethylhexyl)phthalate
Concen: 0.27 ppm
RT: 14.721 min Scan# 2306
Delta R.T. 0.005 min
Lab File: 6F06497.d
Acq: 11 Aug 2020 5:42 pm

Tgt Ion:149 Resp: 7315

Ion	Ratio	Lower	Upper
149	100		
167	23.2	1.7	61.7
279	7.5	0.0	35.7

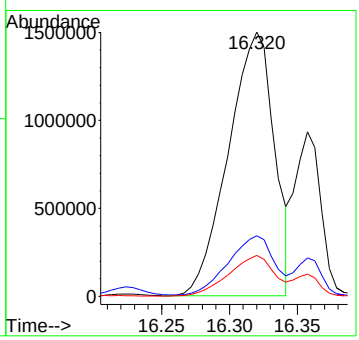


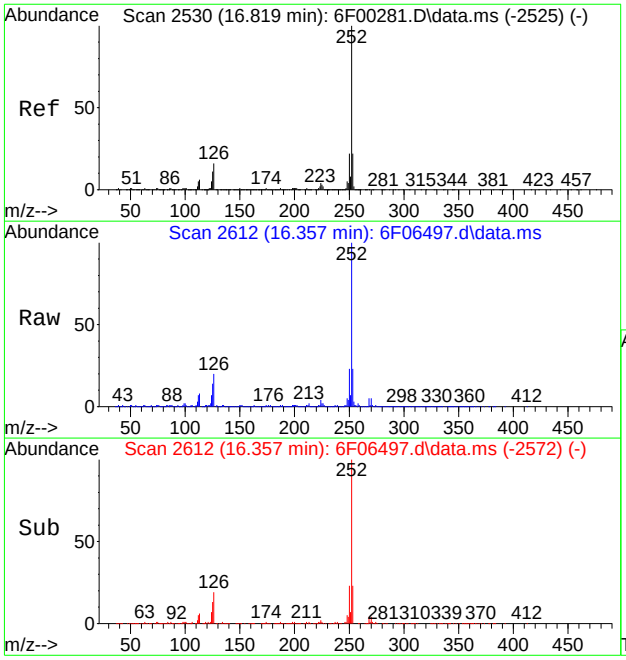


#104
Benzo[b]fluoranthene
Concen: 99.73 ppm
RT: 16.320 min Scan# 2605
Delta R.T. 0.032 min
Lab File: 6F06497.d
Acq: 11 Aug 2020 5:42 pm

Tgt Ion:252 Resp: 3535344

Ion	Ratio	Lower	Upper
252	100		
253	22.6	0.0	51.9
125	15.4	0.0	41.3

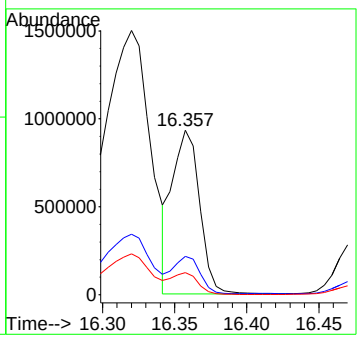


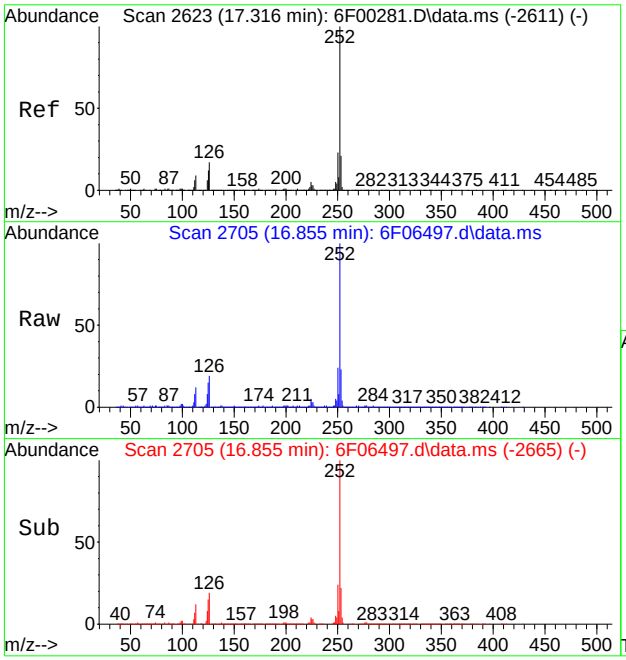


#105
Benzo[k]fluoranthene
Concen: 33.40 ppm
RT: 16.357 min Scan# 2612
Delta R.T. 0.016 min
Lab File: 6F06497.d
Acq: 11 Aug 2020 5:42 pm

Tgt Ion:252 Resp: 1231301

Ion	Ratio	Lower	Upper
252	100		
253	23.1	0.0	51.7
125	12.5	0.0	40.7

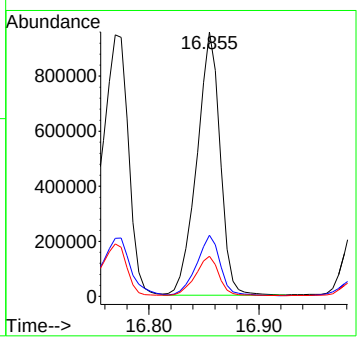


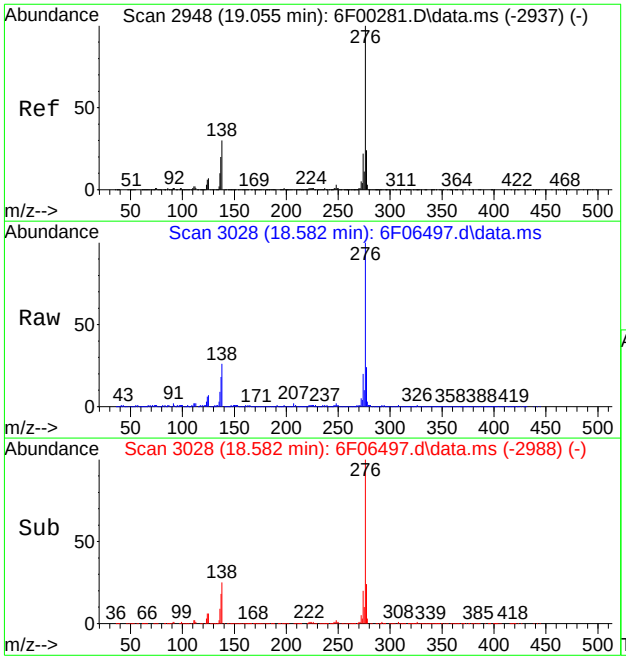


#106
Benzo[a]pyrene
Concen: 42.81 ppm
RT: 16.855 min Scan# 2705
Delta R.T. 0.016 min
Lab File: 6F06497.d
Acq: 11 Aug 2020 5:42 pm

Tgt Ion:252 Resp: 1409265

Ion	Ratio	Lower	Upper
252	100		
253	22.8	0.0	51.0
125	15.0	0.0	42.0

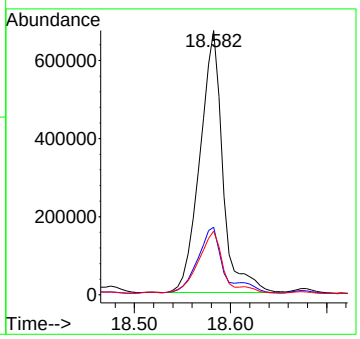


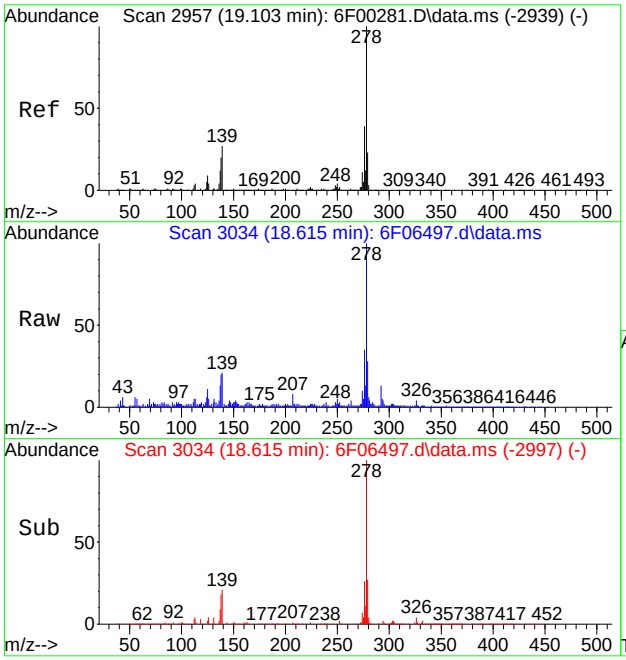


#107
Indeno[1,2,3-cd]pyrene
Concen: 36.27 ppm
RT: 18.582 min Scan# 3028
Delta R.T. 0.016 min
Lab File: 6F06497.d
Acq: 11 Aug 2020 5:42 pm

Tgt Ion:276 Resp: 1111713

Ion	Ratio	Lower	Upper
276	100		
138	25.0	0.0	59.6
277	23.5	0.0	54.1

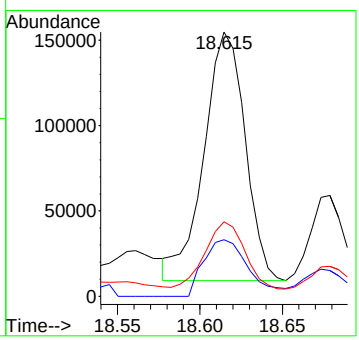


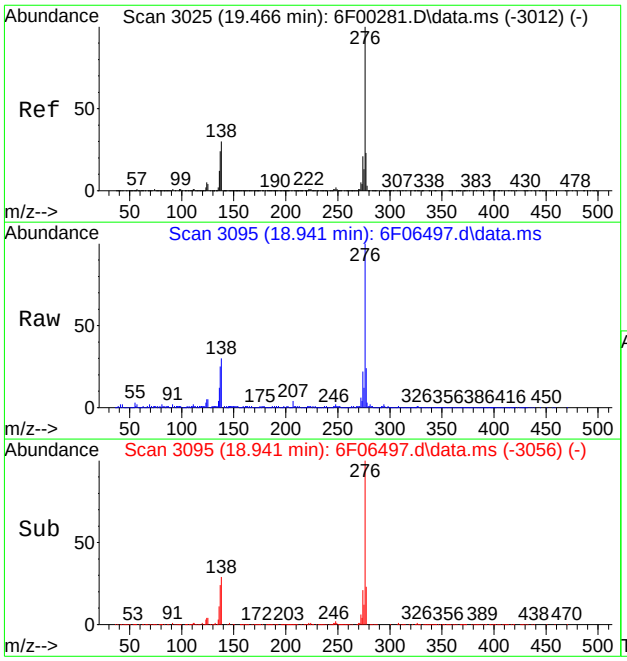


#108
Dibenz[a,h]anthracene
Concen: 7.75 ppm
RT: 18.615 min Scan# 3034
Delta R.T. -0.000 min
Lab File: 6F06497.d
Acq: 11 Aug 2020 5:42 pm

Tgt Ion:278 Resp: 253519

Ion	Ratio	Lower	Upper
278	100		
139	22.1	0.0	56.9
279	27.8	0.0	53.0

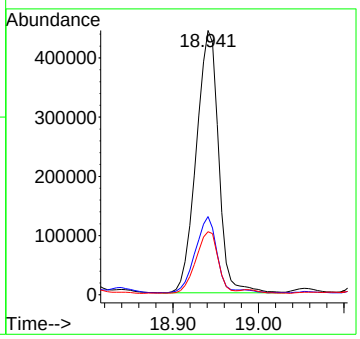




#109
Benzo[g,h,i]perylene
Concen: 24.34 ppm
RT: 18.941 min Scan# 3095
Delta R.T. 0.011 min
Lab File: 6F06497.d
Acq: 11 Aug 2020 5:42 pm

Tgt Ion:276 Resp: 805148

Ion	Ratio	Lower	Upper
276	100		
138	29.0	0.0	59.5
277	23.4	0.0	53.0



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06498.d
Acq On : 11 Aug 2020 6:08 pm
Operator : marthav
Sample : fa77615-6 E Inst : MSBNA10
Misc : op81484,S6F251,30.2,,,1,1,soil
ALS Vial : 14 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Results File: 8270D6F072920.RES
Quant Time: Aug 12 06:24:14 2020
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

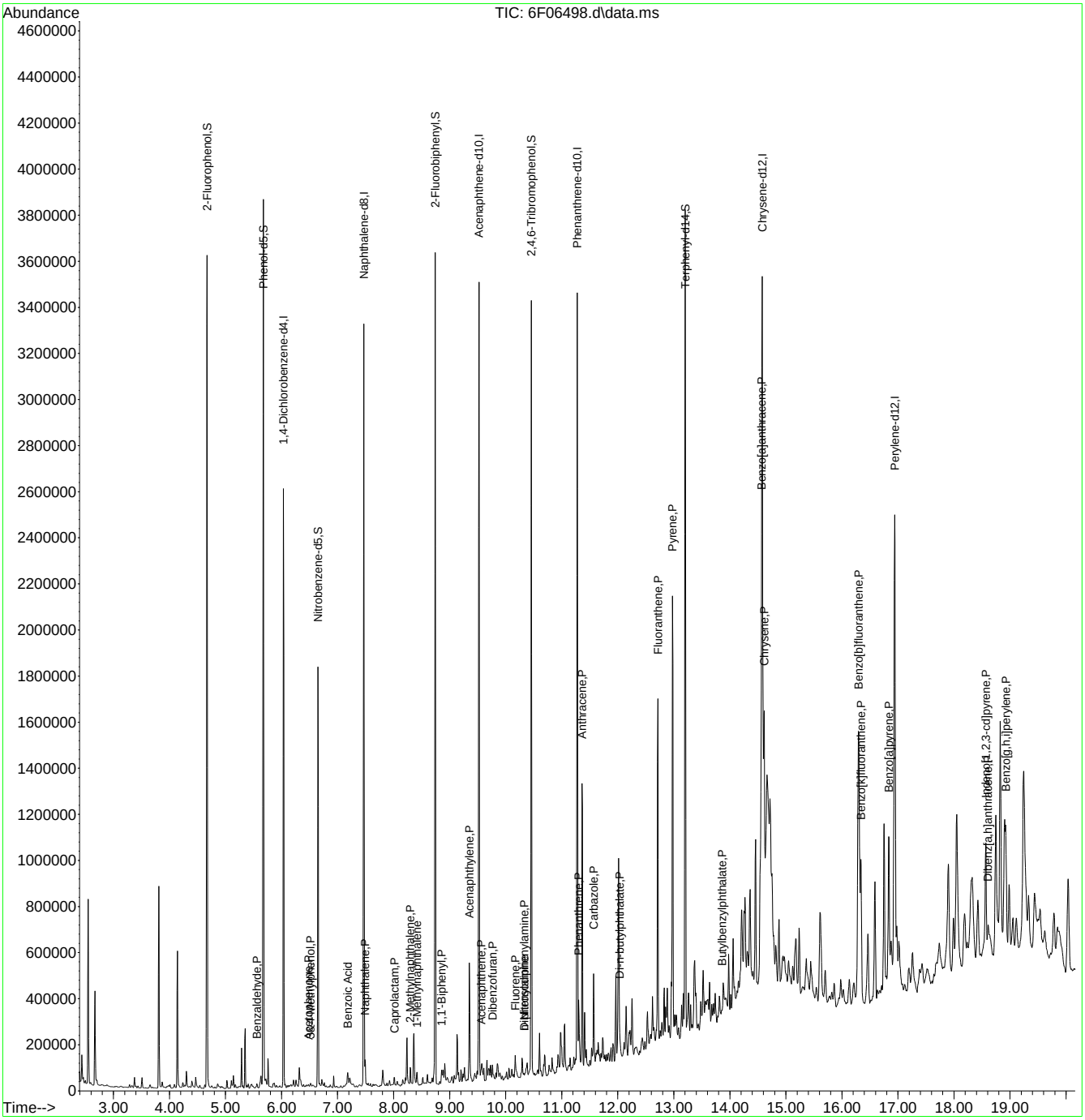
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	6.034	152	357490	40.00	ppm		0.00
22) Naphthalene-d8	7.468	136	1308447	40.00	ppm		0.00
43) Acenaphthene-d10	9.522	164	684334	40.00	ppm		0.00
70) Phenanthrene-d10	11.276	188	1224243	40.00	ppm		0.00
92) Chrysene-d12	14.576	240	1063944	40.00	ppm		0.00
102) Perylene-d12	16.940	264	1099990	40.00	ppm		0.01
System Monitoring Compounds							
7) 2-Fluorophenol	4.671	112	950991	70.40	ppm		0.01
Spiked Amount 100.000	Range 40 - 102		Recovery = 70.40%				
9) Phenol-d5	5.676	99	1220329	76.10	ppm		0.00
Spiked Amount 100.000	Range 41 - 100		Recovery = 76.10%				
23) Nitrobenzene-d5	6.650	82	521724	36.34	ppm		0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 72.68%				
47) 2-Fluorobiphenyl	8.741	172	997964	37.31	ppm		0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 74.62%				
75) 2,4,6-Tribromophenol	10.458	330	348709	84.63	ppm		0.00
Spiked Amount 100.000	Range 42 - 108		Recovery = 84.63%				
95) Terphenyl-d14	13.202	244	1110549	37.13	ppm		0.00
Spiked Amount 50.000	Range 45 - 119		Recovery = 74.26%				
Target Compounds							Qvalue
5) Benzaldehyde	5.558	106	5266	0.48	ppm		88
18) Acetophenone	6.484	105	4117	0.22	ppm		98
21) 3&4-Methylphenol	6.516	108	1758	0.14	ppm		86
30) Benzoic Acid	7.179	105	20305	2.39	ppm		99
34) Naphthalene	7.489	128	25449	0.69	ppm		80
38) Caprolactam	8.013	113	1065	0.26	ppm	#	46
40) 2-Methylnaphthalene	8.297	141	16948	0.78	ppm		94
41) 1-Methylnaphthalene	8.415	142	13644	0.57	ppm		94
48) 1,1'-Biphenyl	8.853	154	5303	0.19	ppm		94
52) Acenaphthylene	9.351	152	225674	6.60	ppm		99
57) Acenaphthene	9.559	153	9268	0.41	ppm		98
60) Dibenzofuran	9.762	168	22590	0.72	ppm		78
65) Fluorene	10.169	166	28654	1.13	ppm		98
72) n-Nitrosodiphenylamine	10.329	169	1482	0.08	ppm		89
73) Diphenylamine	10.329	169	1482	0.07	ppm		89
84) Phenanthrene	11.303	178	93285	2.54	ppm		99
85) Anthracene	11.362	178	470389	12.63	ppm		99
87) Carbazole	11.570	167	142634	4.25	ppm		97
89) Di-n-butylphthalate	12.030	149	7657	0.18	ppm		96
91) Fluoranthene	12.715	202	556813	14.43	ppm		99
94) Pyrene	12.977	202	685059	17.98	ppm		94
97) Butylbenzylphthalate	13.860	149	3748	0.21	ppm		89
99) Benzo[a]anthracene	14.566	228	361568	10.14	ppm		99
100) Chrysene	14.614	228	497587	14.39	ppm		97
104) Benzo[b]fluoranthene	16.299	252	893687	25.31	ppm		97
105) Benzo[k]fluoranthene	16.341	252	270800	7.37	ppm		97
106) Benzo[a]pyrene	16.839	252	308186	9.40	ppm		97
107) Indeno[1,2,3-cd]pyrene	18.566	276	309472	10.14	ppm		95
108) Dibenz[a,h]anthracene	18.604	278	62750	1.93	ppm		95
109) Benzo[g,h,i]perylene	18.925	276	257941	7.83	ppm		98

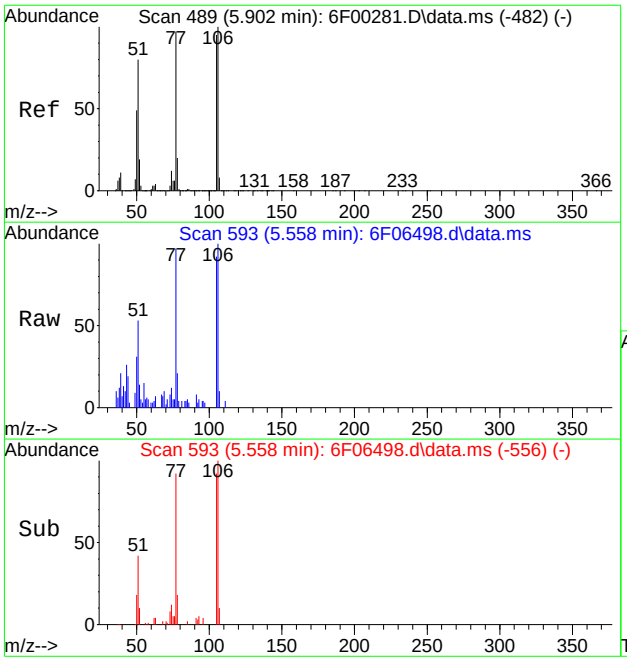
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06498.d
Acq On : 11 Aug 2020 6:08 pm
Operator : marthav
Sample : fa77615-6 E Inst : MSBNA10
Misc : op81484,S6F251,30.2,,,1,1,soil
ALS Vial : 14 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Results File: 8270D6F072920.RES
Quant Time: Aug 12 06:24:14 2020
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

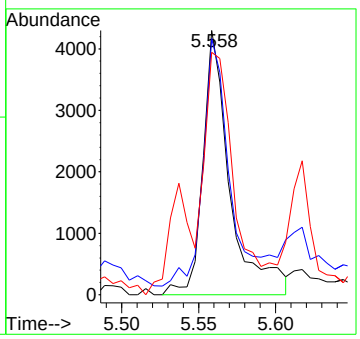


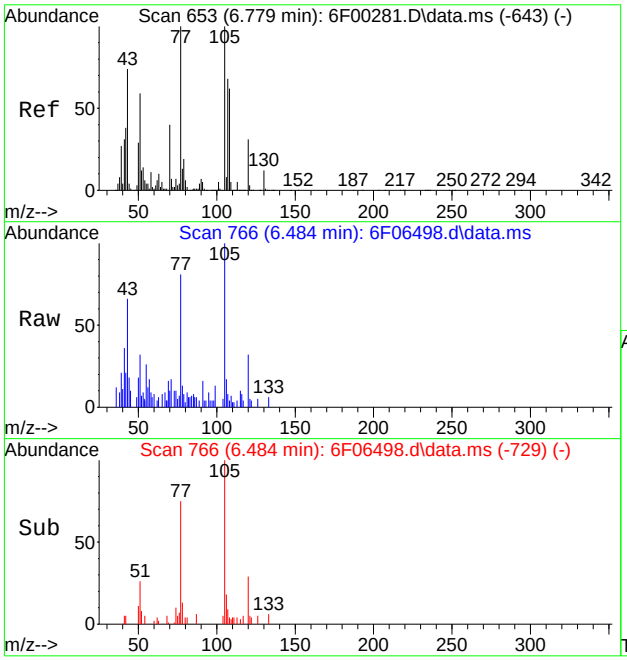


#5
Benzaldehyde
Concen: 0.48 ppm
RT: 5.558 min Scan# 593
Delta R.T. -0.000 min
Lab File: 6F06498.d
Acq: 11 Aug 2020 6:08 pm

Tgt Ion:106 Resp: 5266

Ion	Ratio	Lower	Upper
106	100		
77	87.8	67.1	127.1
105	81.6	65.1	125.1

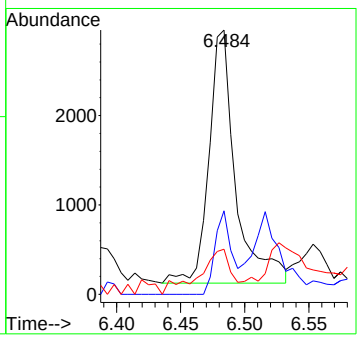


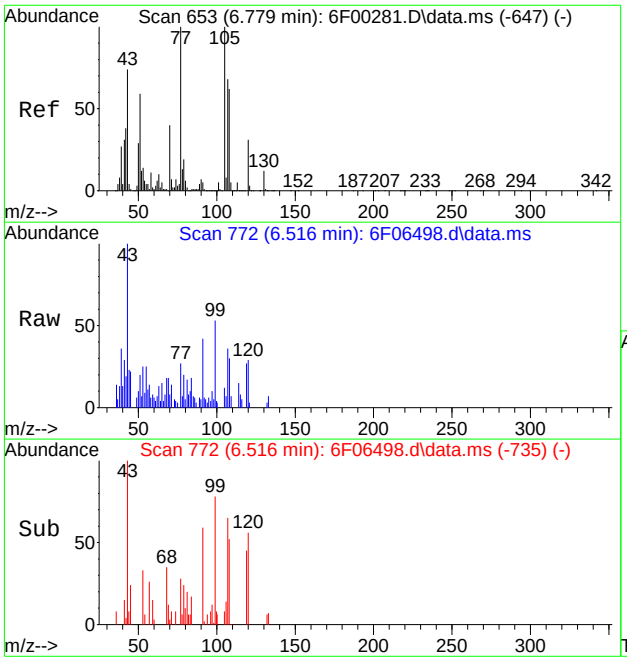


#18
Acetophenone
Concen: 0.22 ppm
RT: 6.484 min Scan# 766
Delta R.T. -0.000 min
Lab File: 6F06498.d
Acq: 11 Aug 2020 6:08 pm

Tgt Ion:105 Resp: 4117

Ion	Ratio	Lower	Upper
105	100		
120	29.3	0.7	60.7
106	8.9	0.0	38.4

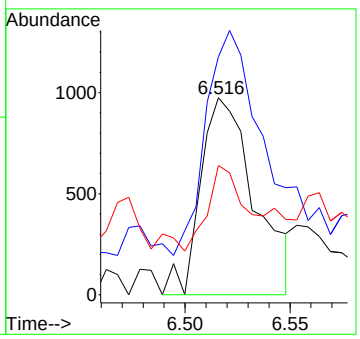


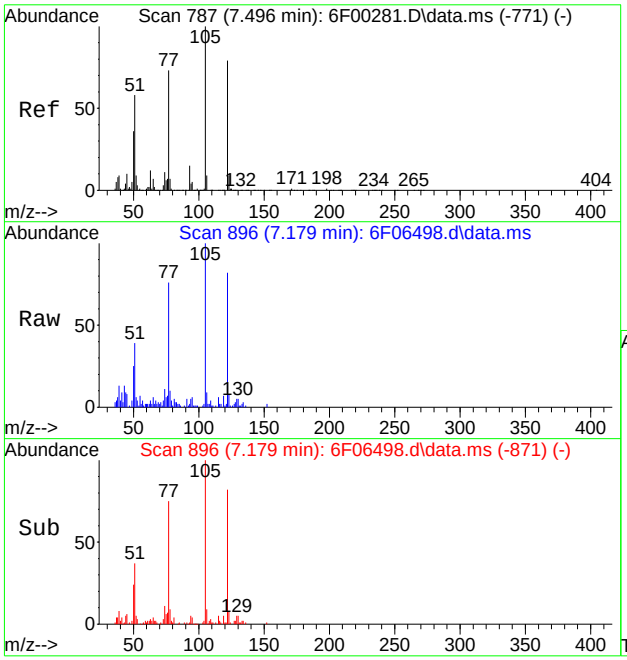


#21
3&4-Methylphenol
Concen: 0.14 ppm
RT: 6.516 min Scan# 772
Delta R.T. -0.000 min
Lab File: 6F06498.d
Acq: 11 Aug 2020 6:08 pm

Tgt Ion:108 Resp: 1758

Ion	Ratio	Lower	Upper
108	100		
107	95.4	80.3	140.3
79	36.6	0.2	60.2

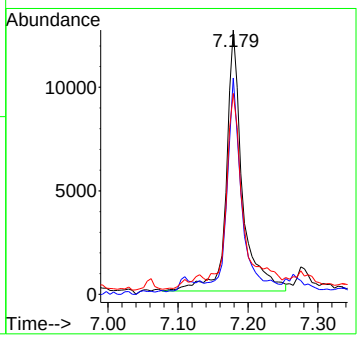


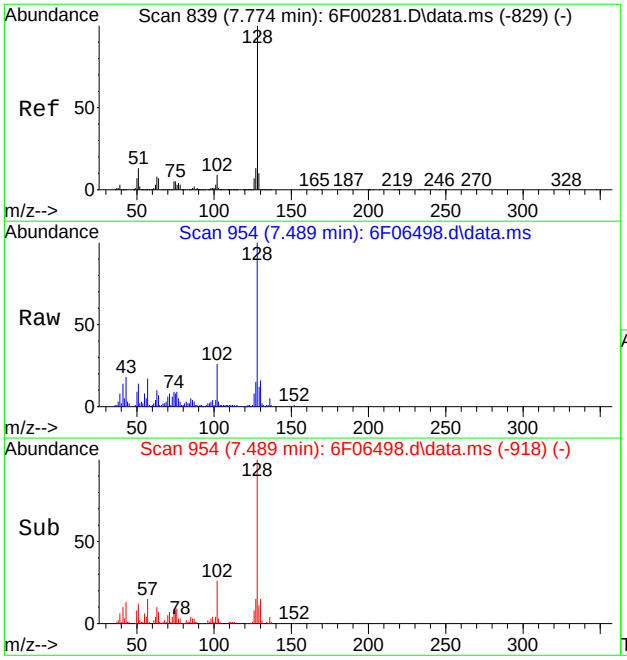


#30
Benzoic Acid
Concen: 2.39 ppm
RT: 7.179 min Scan# 896
Delta R.T. -0.064 min
Lab File: 6F06498.d
Acq: 11 Aug 2020 6:08 pm

Tgt Ion:105 Resp: 20305

Ion	Ratio	Lower	Upper
105	100		
122	80.1	49.5	109.5
77	73.7	43.0	103.0

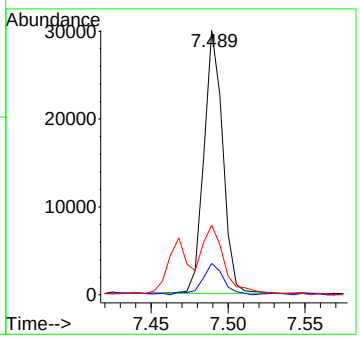


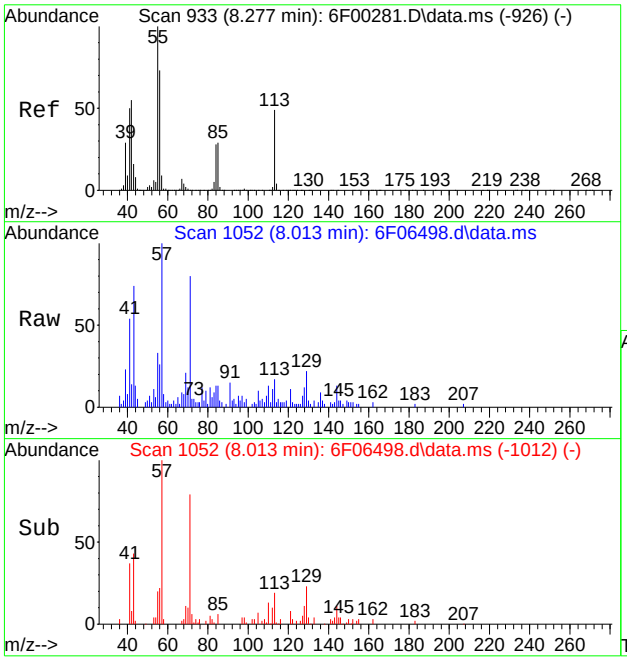


#34
Naphthalene
Concen: 0.69 ppm
RT: 7.489 min Scan# 954
Delta R.T. -0.006 min
Lab File: 6F06498.d
Acq: 11 Aug 2020 6:08 pm

Tgt Ion:128 Resp: 25449

Ion	Ratio	Lower	Upper
128	100		
129	11.5	0.0	40.4
102	23.5	0.0	39.2

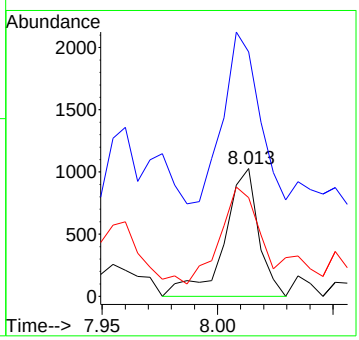


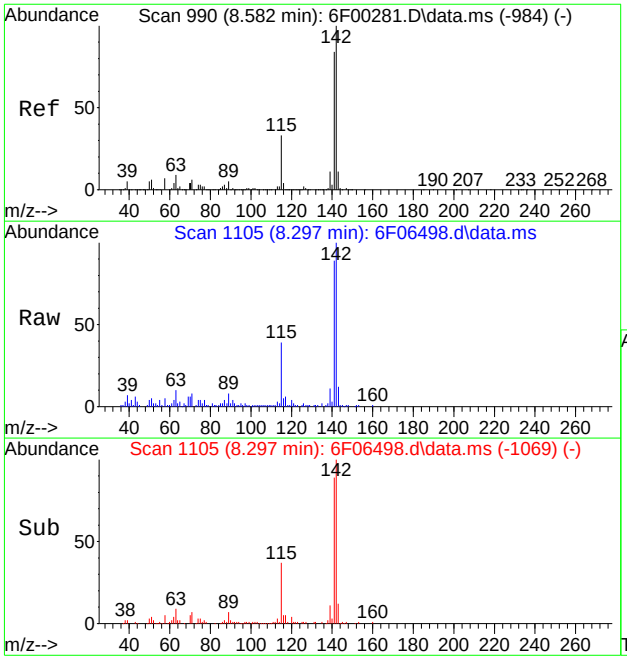


#38
Caprolactam
Concen: 0.26 ppm
RT: 8.013 min Scan# 1052
Delta R.T. 0.016 min
Lab File: 6F06498.d
Acq: 11 Aug 2020 6:08 pm

Tgt Ion:113 Resp: 1065

Ion	Ratio	Lower	Upper
113	100		
55	97.7	172.1	232.1#
85	55.4	29.4	89.4

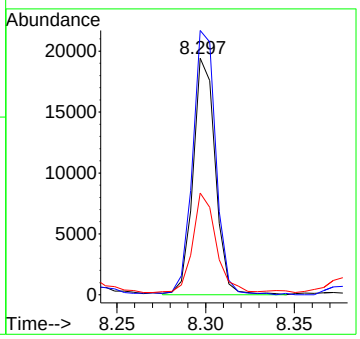


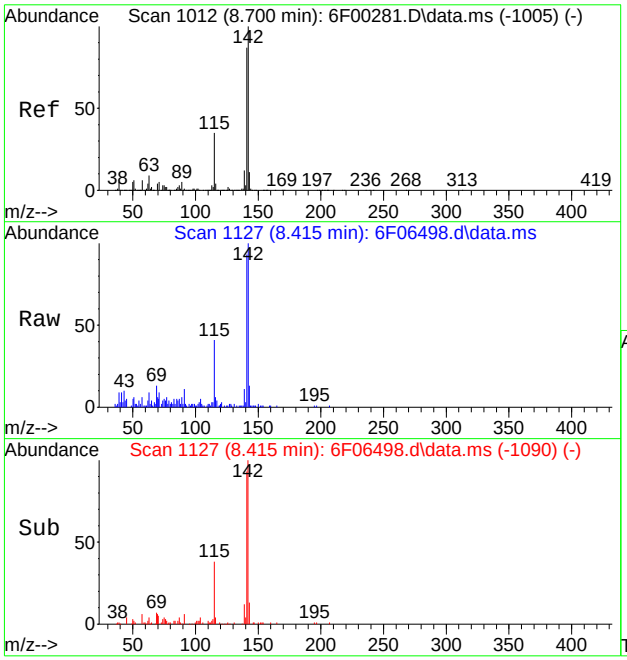


#40
2-Methylnaphthalene
Concen: 0.78 ppm
RT: 8.297 min Scan# 1105
Delta R.T. -0.006 min
Lab File: 6F06498.d
Acq: 11 Aug 2020 6:08 pm

Tgt Ion:141 Resp: 16948

Ion	Ratio	Lower	Upper
141	100		
142	111.4	88.9	148.9
115	41.7	9.7	69.7

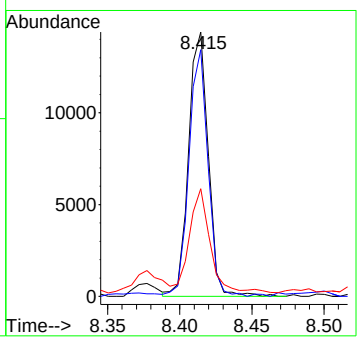


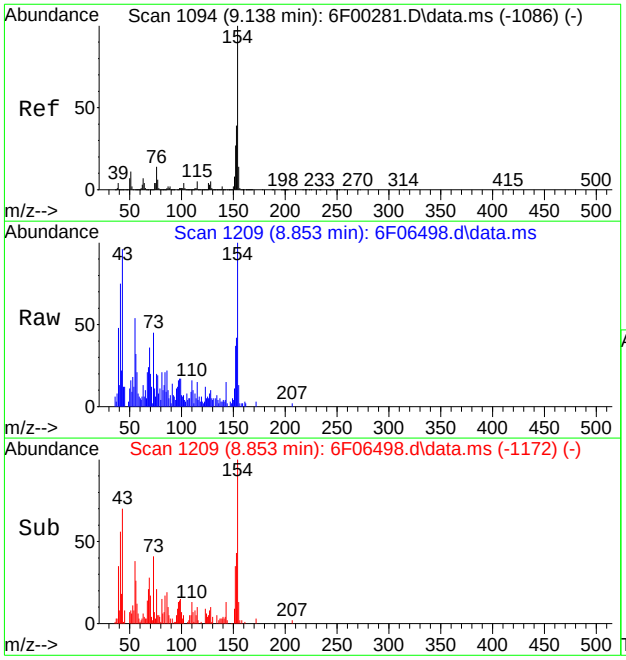


#41
1-Methylnaphthalene
Concen: 0.57 ppm
RT: 8.415 min Scan# 1127
Delta R.T. -0.000 min
Lab File: 6F06498.d
Acq: 11 Aug 2020 6:08 pm

Tgt Ion:142 Resp: 13644

Ion	Ratio	Lower	Upper
142	100		
141	93.2	56.8	116.8
115	36.9	4.7	64.7

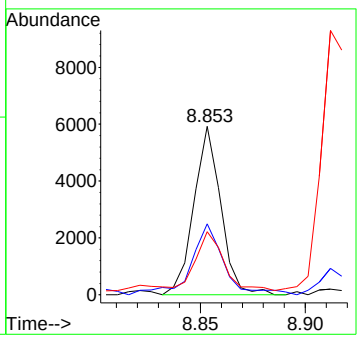


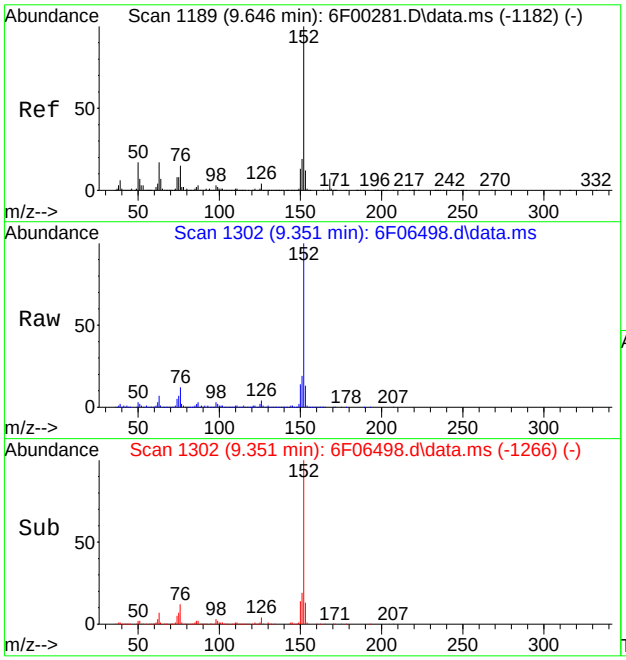


#48
1,1'-Biphenyl
Concen: 0.19 ppm
RT: 8.853 min Scan# 1209
Delta R.T. -0.000 min
Lab File: 6F06498.d
Acq: 11 Aug 2020 6:08 pm

Tgt Ion:154 Resp: 5303

Ion	Ratio	Lower	Upper
154	100		
153	39.1	8.7	68.7
152	33.3	0.0	56.7

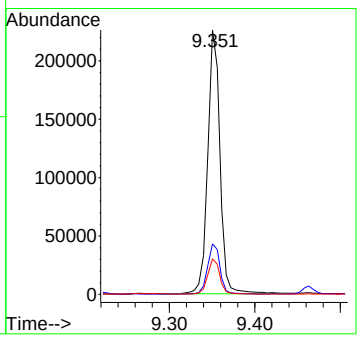


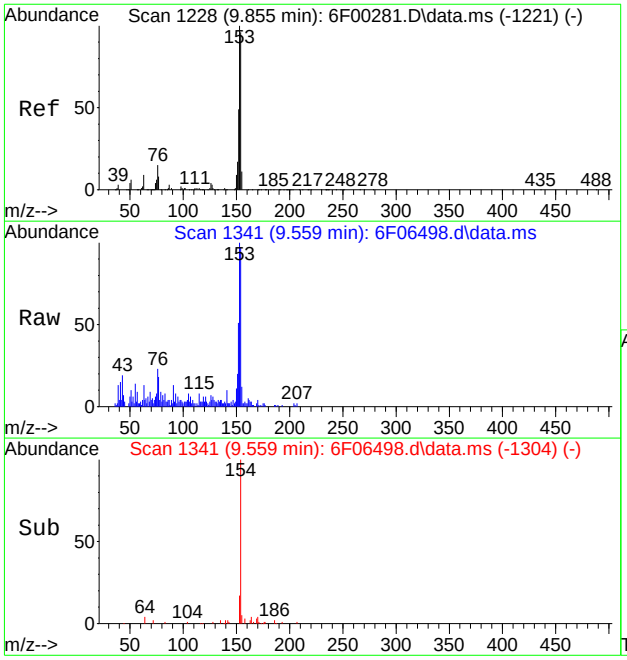


#52
Acenaphthylene
Concen: 6.60 ppm
RT: 9.351 min Scan# 1302
Delta R.T. -0.006 min
Lab File: 6F06498.d
Acq: 11 Aug 2020 6:08 pm

Tgt Ion:152 Resp: 225674

Ion	Ratio	Lower	Upper
152	100		
151	19.0	0.0	48.8
153	13.3	0.0	42.3

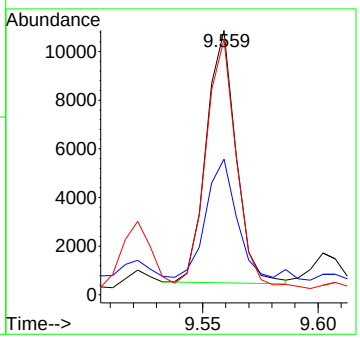


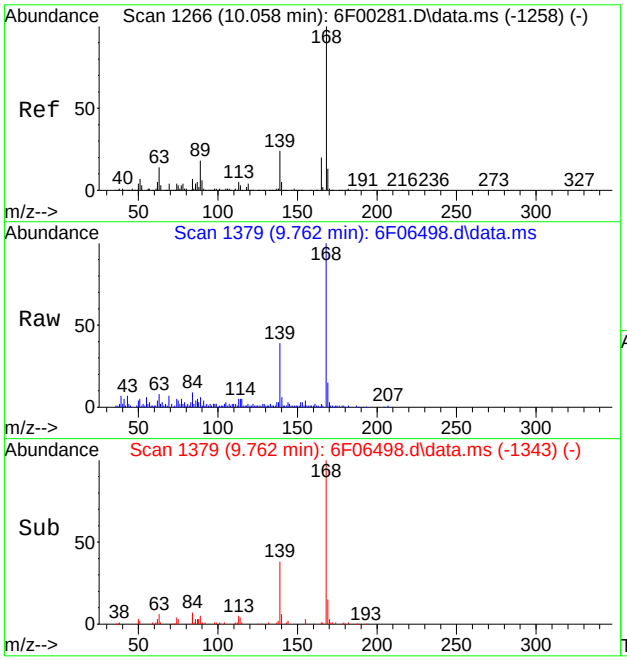


#57
Acenaphthene
Concen: 0.41 ppm
RT: 9.559 min Scan# 1341
Delta R.T. -0.000 min
Lab File: 6F06498.d
Acq: 11 Aug 2020 6:08 pm

Tgt Ion:153 Resp: 9268

Ion	Ratio	Lower	Upper
153	100		
152	45.3	19.4	79.4
154	96.3	65.6	125.6

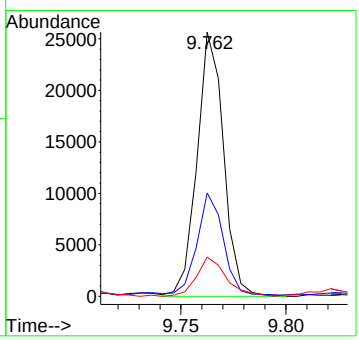


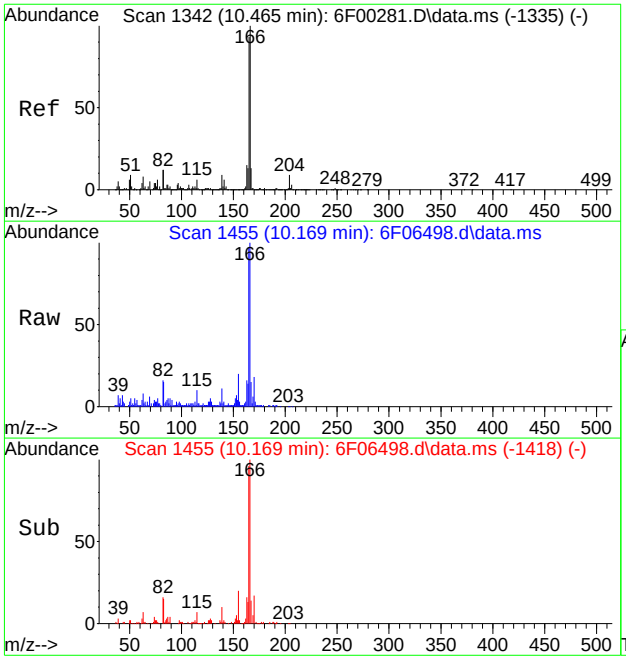


#60
Dibenzofuran
Concen: 0.72 ppm
RT: 9.762 min Scan# 1379
Delta R.T. -0.006 min
Lab File: 6F06498.d
Acq: 11 Aug 2020 6:08 pm

Tgt Ion:168 Resp: 22590

Ion	Ratio	Lower	Upper
168	100		
139	38.4	0.0	53.6
169	14.6	0.0	42.6

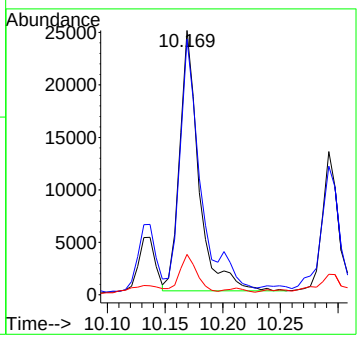


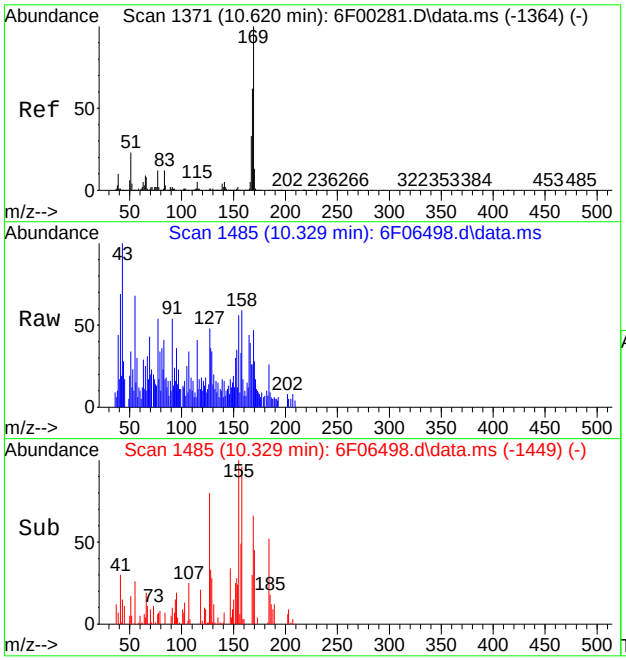


#65
Fluorene
Concen: 1.13 ppm
RT: 10.169 min Scan# 1455
Delta R.T. -0.000 min
Lab File: 6F06498.d
Acq: 11 Aug 2020 6:08 pm

Tgt Ion:166 Resp: 28654

Ion	Ratio	Lower	Upper
166	100		
165	94.6	62.6	122.6
167	13.5	0.0	43.1

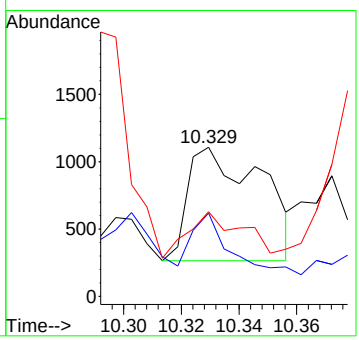


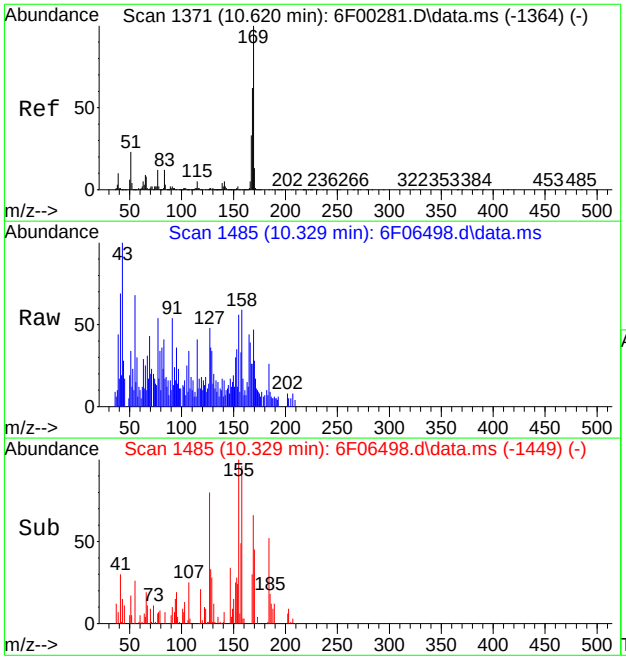


#72
n-Nitrosodiphenylamine
Concen: 0.08 ppm
RT: 10.329 min Scan# 1485
Delta R.T. -0.006 min
Lab File: 6F06498.d
Acq: 11 Aug 2020 6:08 pm

Tgt Ion:169 Resp: 1482

Ion	Ratio	Lower	Upper
169	100		
168	54.5	31.6	91.6
167	24.7	2.7	62.7

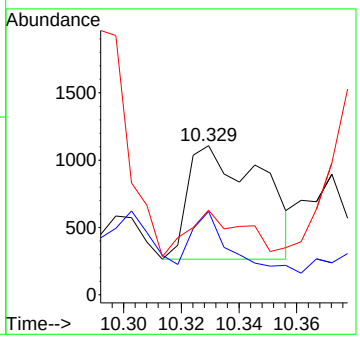


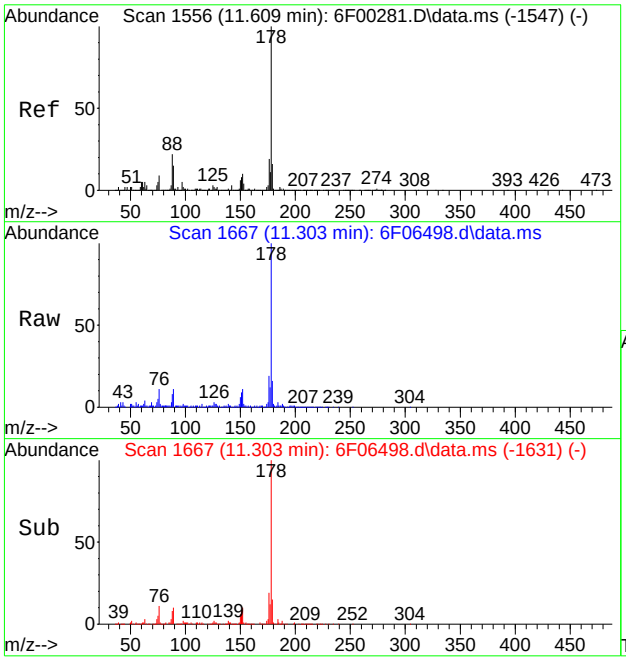


#73
Diphenylamine
Concen: 0.07 ppm
RT: 10.329 min Scan# 1485
Delta R.T. -0.006 min
Lab File: 6F06498.d
Acq: 11 Aug 2020 6:08 pm

Tgt Ion:169 Resp: 1482

Ion	Ratio	Lower	Upper
169	100		
168	54.5	31.6	91.6
167	24.7	2.7	62.7

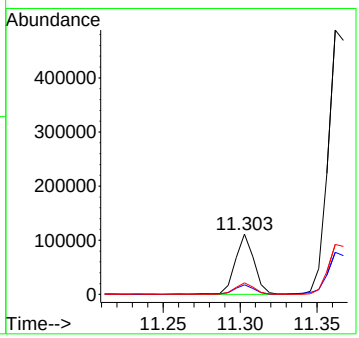


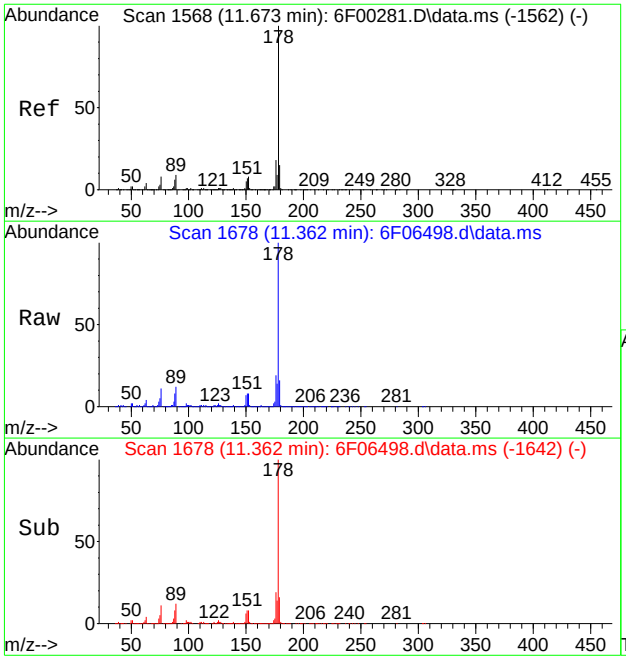


#84
Phenanthrene
Concen: 2.54 ppm
RT: 11.303 min Scan# 1667
Delta R.T. -0.006 min
Lab File: 6F06498.d
Acq: 11 Aug 2020 6:08 pm

Tgt Ion:178 Resp: 93285

Ion	Ratio	Lower	Upper
178	100		
179	15.4	0.0	46.0
176	19.1	0.0	49.0

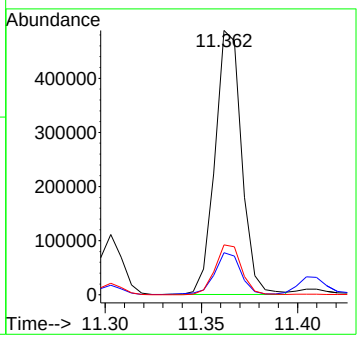


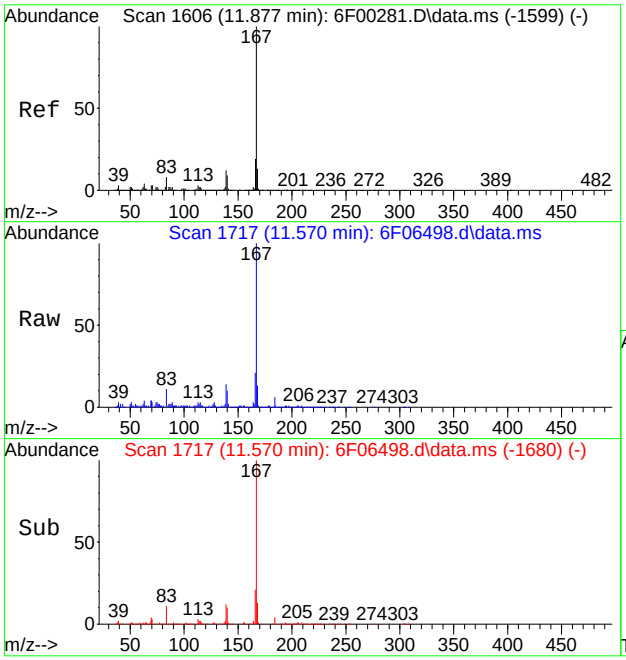


#85
Anthracene
Concen: 12.63 ppm
RT: 11.362 min Scan# 1678
Delta R.T. -0.006 min
Lab File: 6F06498.d
Acq: 11 Aug 2020 6:08 pm

Tgt Ion:178 Resp: 470389

Ion	Ratio	Lower	Upper
178	100		
179	15.4	0.0	45.4
176	18.8	0.0	47.7

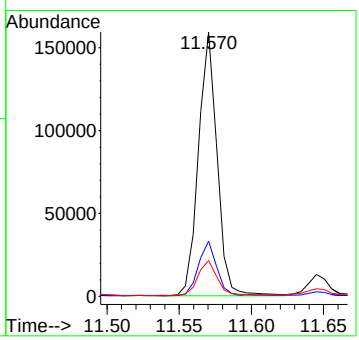


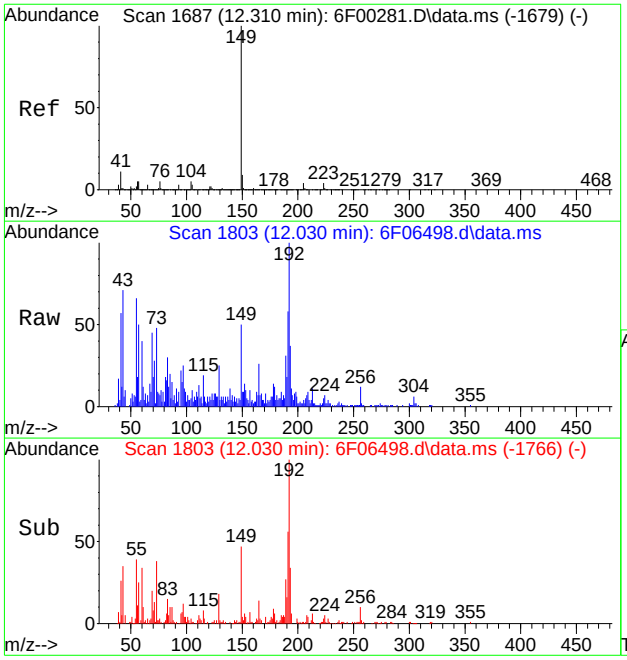


#87
Carbazole
Concen: 4.25 ppm
RT: 11.570 min Scan# 1717
Delta R.T. -0.000 min
Lab File: 6F06498.d
Acq: 11 Aug 2020 6:08 pm

Tgt Ion:167 Resp: 142634

Ion	Ratio	Lower	Upper
167	100		
166	20.7	0.0	49.2
139	13.1	0.0	42.3

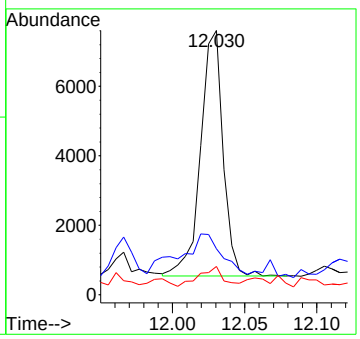


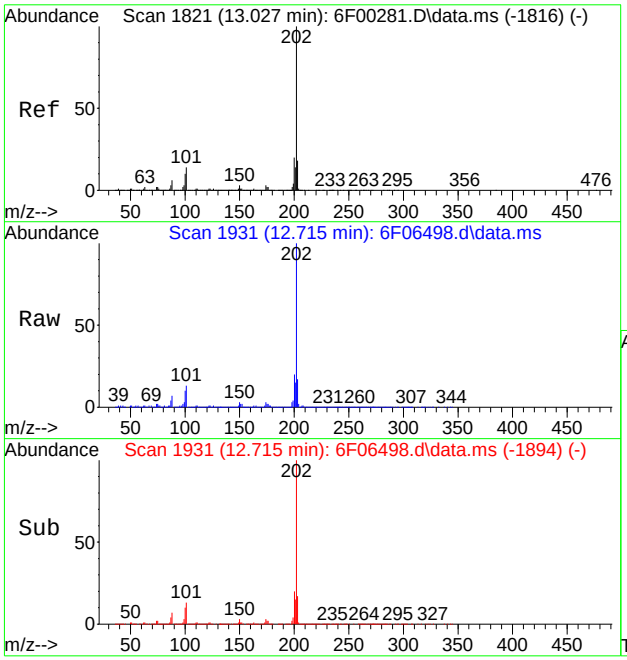


#89
Di-n-butylphthalate
Concen: 0.18 ppm
RT: 12.030 min Scan# 1803
Delta R.T. -0.000 min
Lab File: 6F06498.d
Acq: 11 Aug 2020 6:08 pm

Tgt Ion:149 Resp: 7657

Ion	Ratio	Lower	Upper
149	100		
150	6.9	0.0	38.7
104	5.9	0.0	35.2

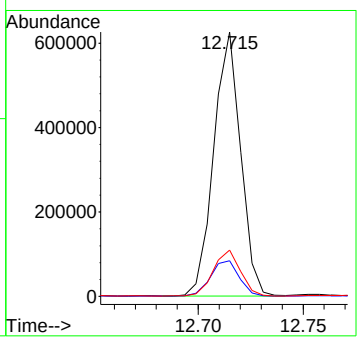


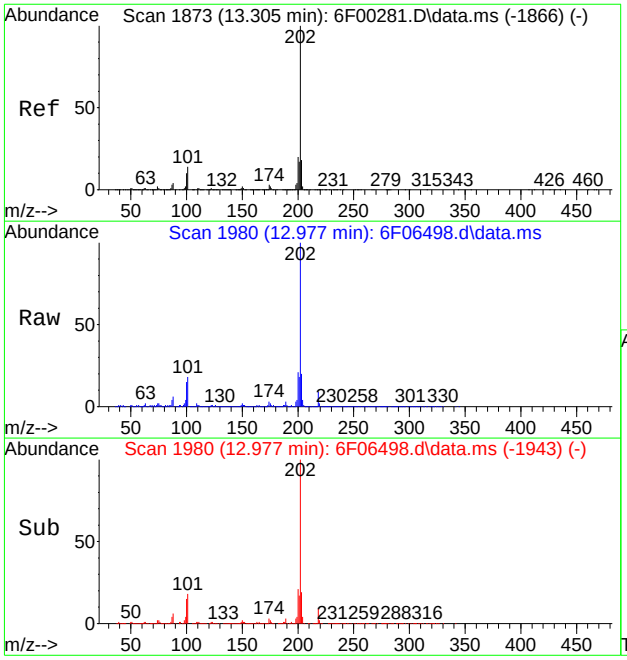


#91
Fluoranthene
Concen: 14.43 ppm
RT: 12.715 min Scan# 1931
Delta R.T. -0.000 min
Lab File: 6F06498.d
Acq: 11 Aug 2020 6:08 pm

Tgt Ion:202 Resp: 556813

Ion	Ratio	Lower	Upper
202	100		
101	13.3	0.0	43.6
203	17.4	0.0	47.7

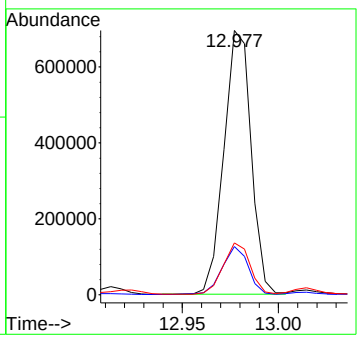


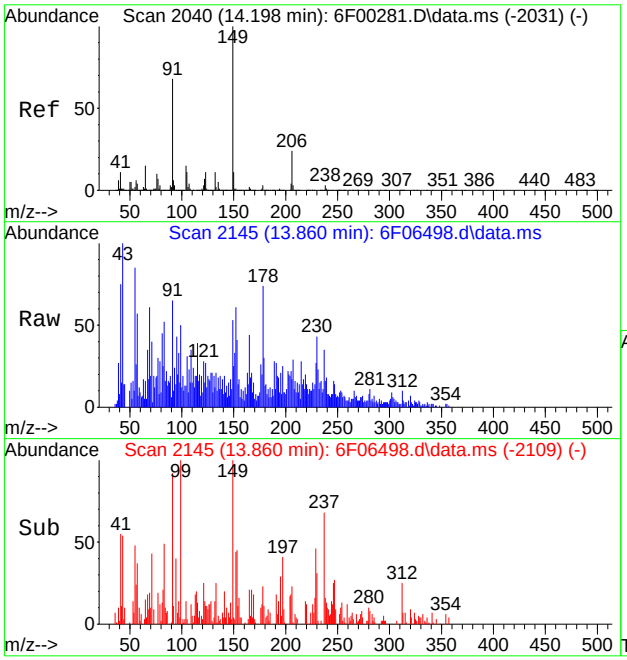


#94
Pyrene
Concen: 17.98 ppm
RT: 12.977 min Scan# 1980
Delta R.T. -0.000 min
Lab File: 6F06498.d
Acq: 11 Aug 2020 6:08 pm

Tgt Ion:202 Resp: 685059

Ion	Ratio	Lower	Upper
202	100		
101	18.1	0.0	43.8
203	19.1	0.0	47.8

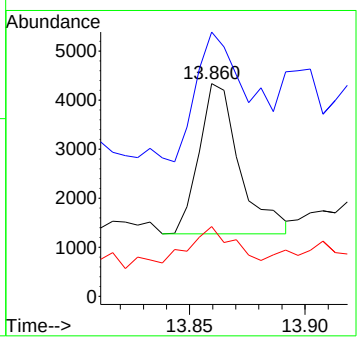


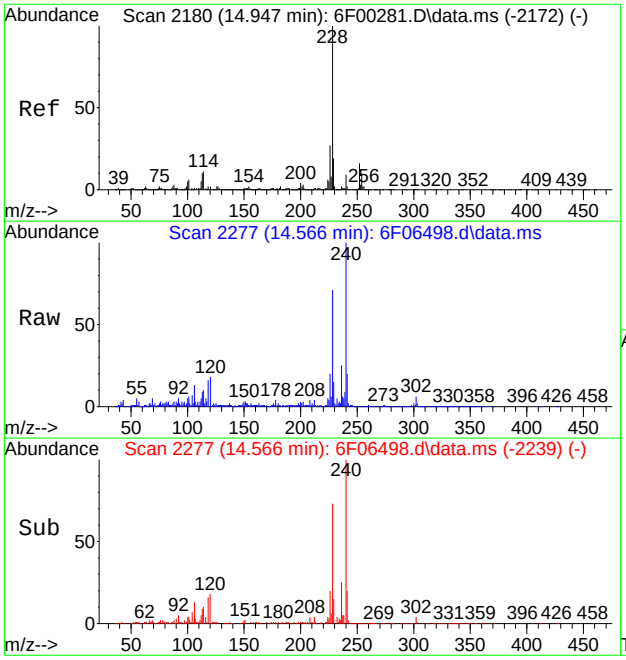


#97
Butylbenzylphthalate
Concen: 0.21 ppm
RT: 13.860 min Scan# 2145
Delta R.T. -0.006 min
Lab File: 6F06498.d
Acq: 11 Aug 2020 6:08 pm

Tgt Ion:149 Resp: 3748

Ion	Ratio	Lower	Upper
149	100		
91	57.6	38.2	98.2
206	20.9	0.0	54.0

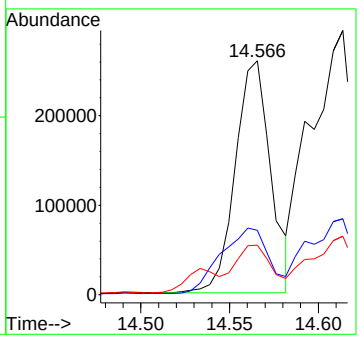


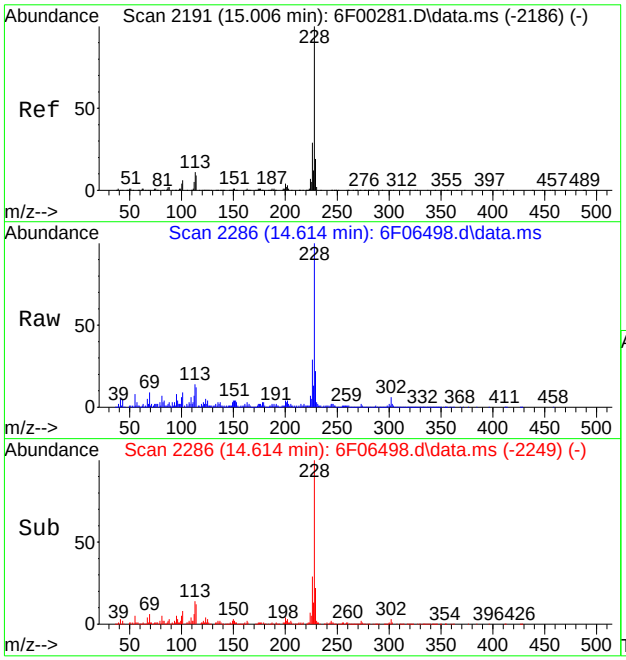


#99
Benzo[a]anthracene
Concen: 10.14 ppm
RT: 14.566 min Scan# 2277
Delta R.T. 0.005 min
Lab File: 6F06498.d
Acq: 11 Aug 2020 6:08 pm

Tgt Ion:228 Resp: 361568

Ion	Ratio	Lower	Upper
228	100		
226	26.9	0.0	56.6
229	19.8	0.0	48.9

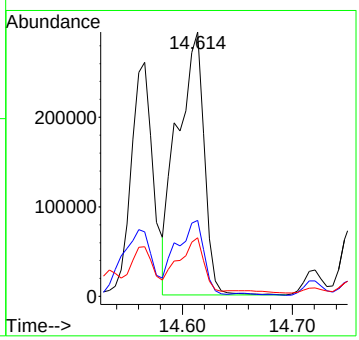


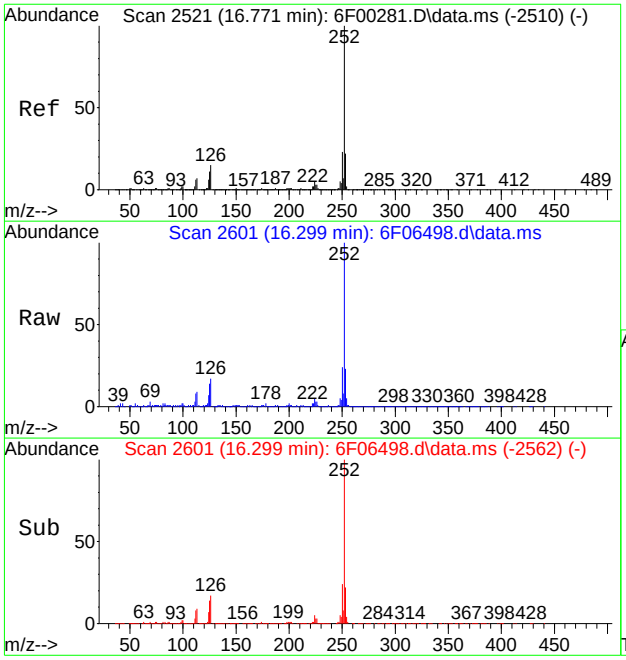


#100
Chrysene
Concen: 14.39 ppm
RT: 14.614 min Scan# 2286
Delta R.T. -0.000 min
Lab File: 6F06498.d
Acq: 11 Aug 2020 6:08 pm

Tgt Ion:228 Resp: 497587

Ion	Ratio	Lower	Upper
228	100		
226	28.3	0.0	58.9
229	20.9	0.0	48.5

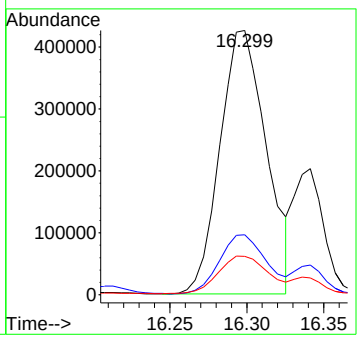


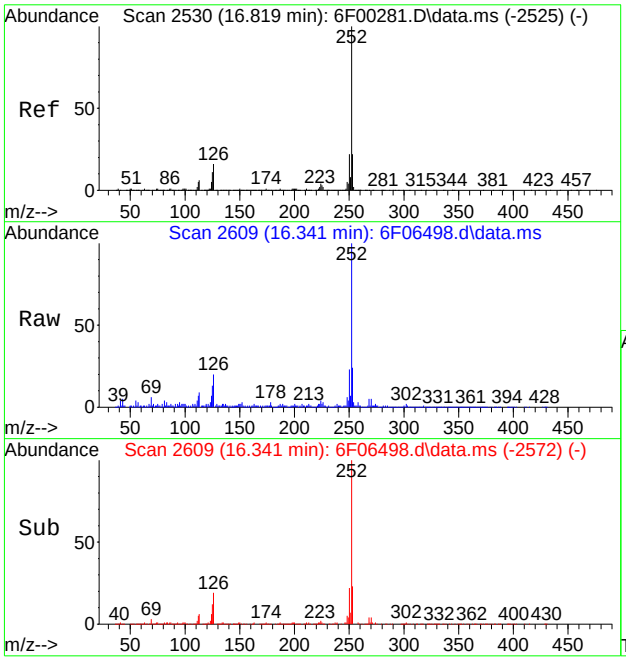


#104
Benzo[b]fluoranthene
Concen: 25.31 ppm
RT: 16.299 min Scan# 2601
Delta R.T. 0.010 min
Lab File: 6F06498.d
Acq: 11 Aug 2020 6:08 pm

Tgt Ion:252 Resp: 893687

Ion	Ratio	Lower	Upper
252	100		
253	22.3	0.0	51.9
125	13.9	0.0	41.3

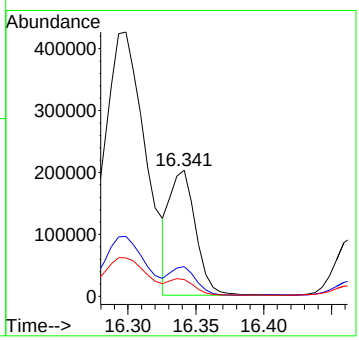


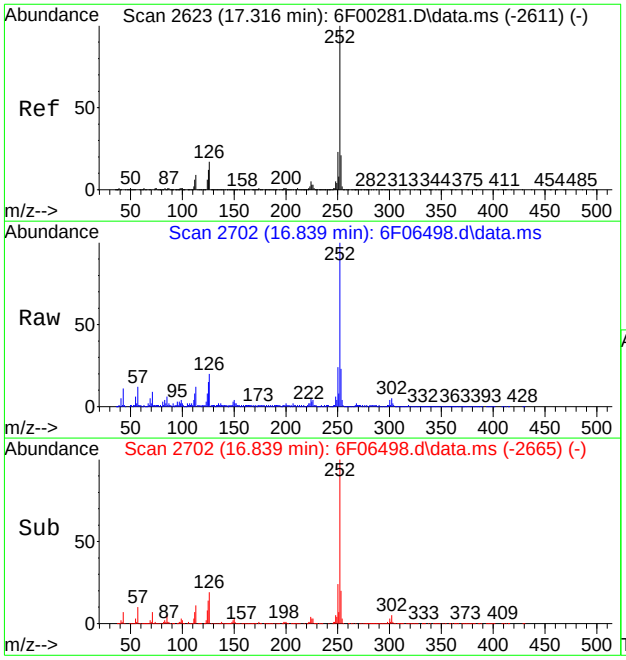


#105
Benzo[k]fluoranthene
Concen: 7.37 ppm
RT: 16.341 min Scan# 2609
Delta R.T. -0.000 min
Lab File: 6F06498.d
Acq: 11 Aug 2020 6:08 pm

Tgt Ion:252 Resp: 270800

Ion	Ratio	Lower	Upper
252	100		
253	23.3	0.0	51.7
125	11.4	0.0	40.7

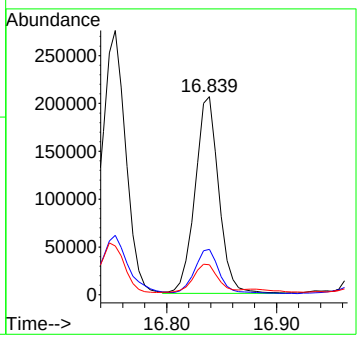


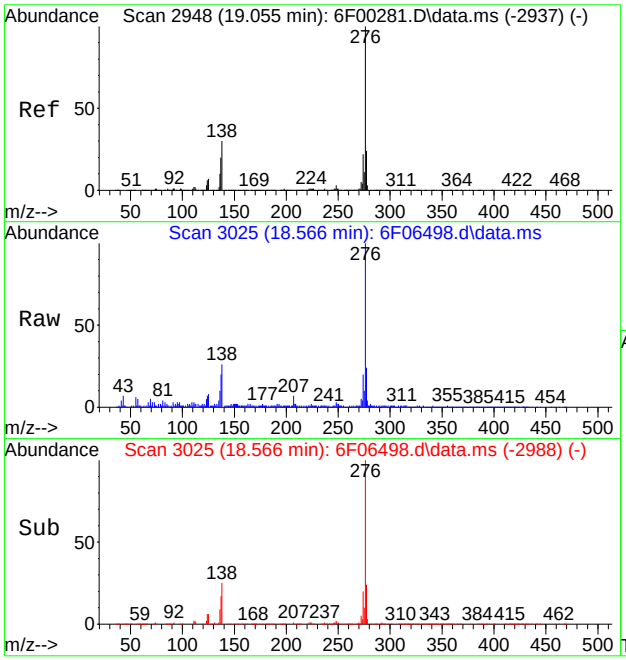


#106
Benzo[a]pyrene
Concen: 9.40 ppm
RT: 16.839 min Scan# 2702
Delta R.T. -0.000 min
Lab File: 6F06498.d
Acq: 11 Aug 2020 6:08 pm

Tgt Ion:252 Resp: 308186

Ion	Ratio	Lower	Upper
252	100		
253	22.2	0.0	51.0
125	14.0	0.0	42.0

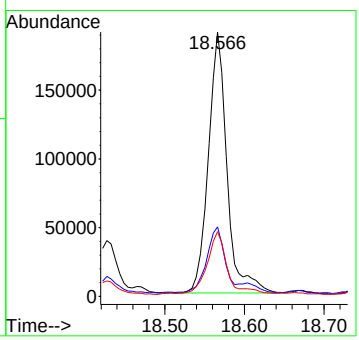


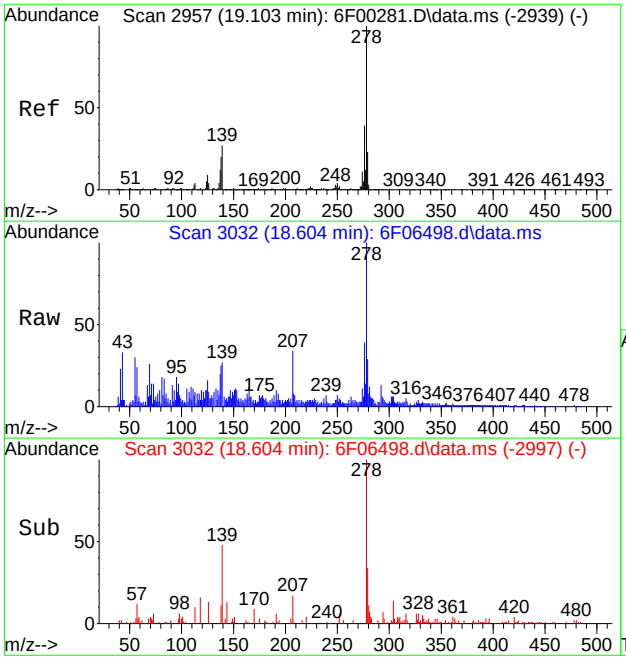


#107
Indeno[1,2,3-cd]pyrene
Concen: 10.14 ppm
RT: 18.566 min Scan# 3025
Delta R.T. -0.000 min
Lab File: 6F06498.d
Acq: 11 Aug 2020 6:08 pm

Tgt Ion:276 Resp: 309472

Ion	Ratio	Lower	Upper
276	100		
138	25.1	0.0	59.6
277	23.7	0.0	54.1

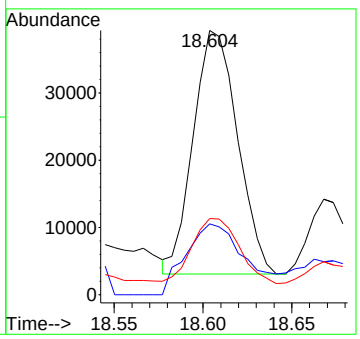


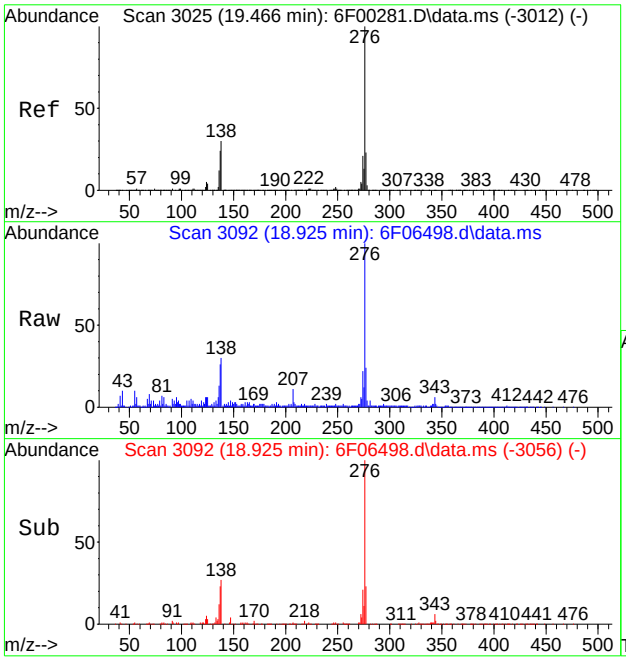


#108
Dibenz[a,h]anthracene
Concen: 1.93 ppm
RT: 18.604 min Scan# 3032
Delta R.T. -0.011 min
Lab File: 6F06498.d
Acq: 11 Aug 2020 6:08 pm

Tgt Ion:278 Resp: 62750

Ion	Ratio	Lower	Upper
278	100		
139	25.4	0.0	56.9
279	26.9	0.0	53.0

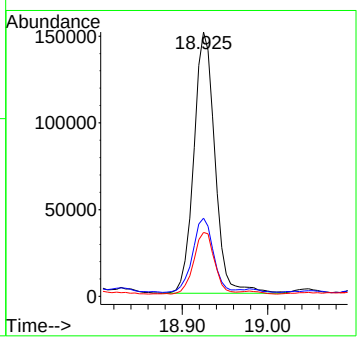




#109
Benzo[g,h,i]perylene
Concen: 7.83 ppm
RT: 18.925 min Scan# 3092
Delta R.T. -0.006 min
Lab File: 6F06498.d
Acq: 11 Aug 2020 6:08 pm

Tgt Ion:276 Resp: 257941

Ion	Ratio	Lower	Upper
276	100		
138	28.4	0.0	59.5
277	23.4	0.0	53.0



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06501.d
Acq On : 11 Aug 2020 7:26 pm
Operator : marthav
Sample : fa77615-7 E Inst : MSBNA10
Misc : op81484,S6F251,30.0,,,1,1,soil
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Results File: 8270D6F072920.RES
Quant Time: Aug 12 06:30:11 2020
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

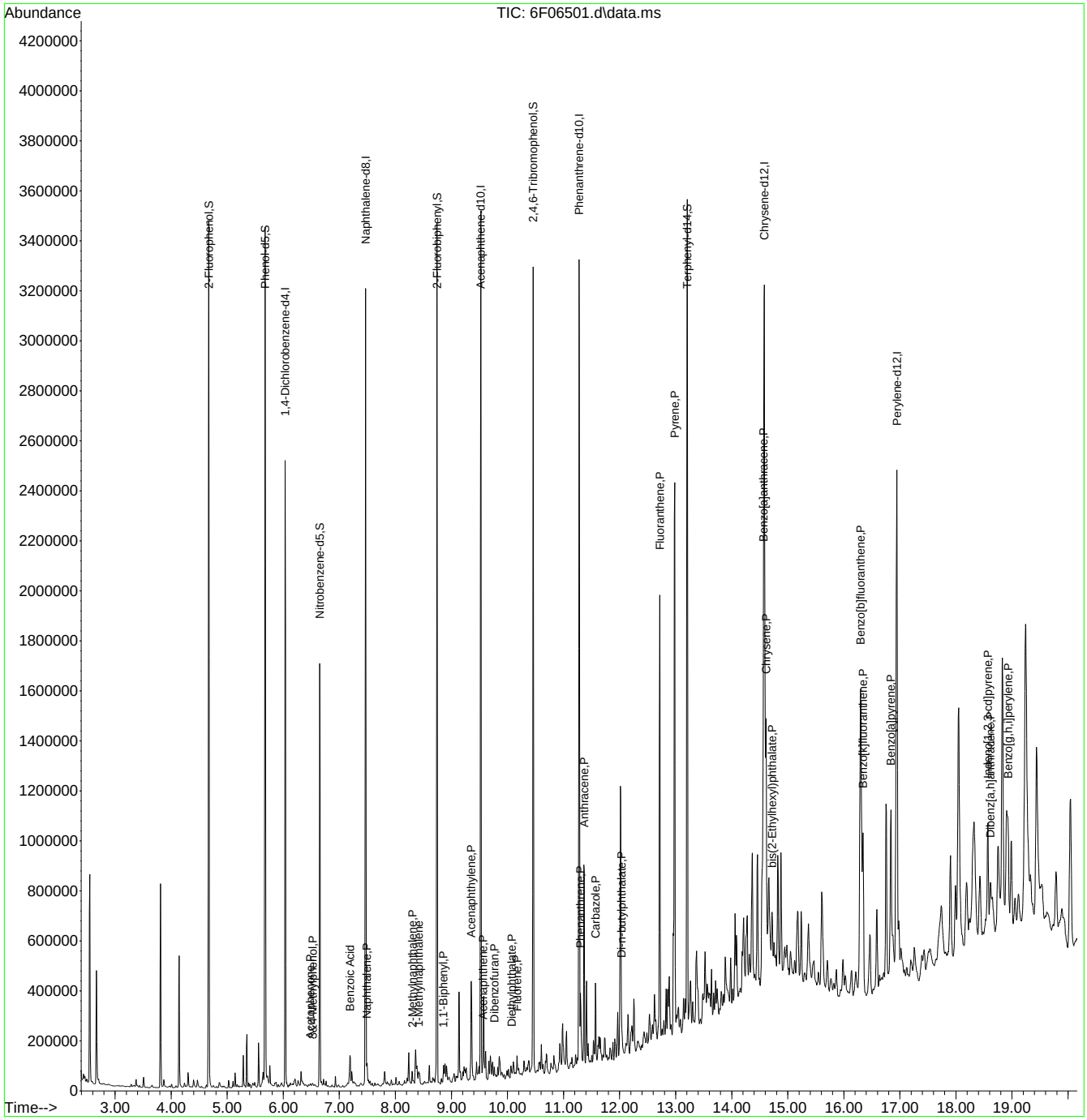
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.035	152	345535	40.00	ppm	0.00
22) Naphthalene-d8	7.468	136	1287704	40.00	ppm	0.00
43) Acenaphthene-d10	9.522	164	675724	40.00	ppm	0.00
70) Phenanthrene-d10	11.276	188	1201776	40.00	ppm	0.00
92) Chrysene-d12	14.582	240	1071811	40.00	ppm	0.00
102) Perylene-d12	16.946	264	1105614	40.00	ppm	0.02
System Monitoring Compounds						
7) 2-Fluorophenol	4.671	112	865495	66.29	ppm	0.01
Spiked Amount 100.000	Range 40 - 102		Recovery = 66.29%			
9) Phenol-d5	5.676	99	1130398	72.93	ppm	0.00
Spiked Amount 100.000	Range 41 - 100		Recovery = 72.93%			
23) Nitrobenzene-d5	6.650	82	476687	33.74	ppm	0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 67.48%			
47) 2-Fluorobiphenyl	8.741	172	924974	35.02	ppm	0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 70.04%			
75) 2,4,6-Tribromophenol	10.458	330	331592	81.98	ppm	0.00
Spiked Amount 100.000	Range 42 - 108		Recovery = 81.98%			
95) Terphenyl-d14	13.207	244	1091797	36.24	ppm	0.00
Spiked Amount 50.000	Range 45 - 119		Recovery = 72.48%			
Target Compounds						Qvalue
18) Acetophenone	6.484	105	4900	0.27	ppm	95
21) 3&4-Methylphenol	6.521	108	1434	0.11	ppm	82
30) Benzoic Acid	7.190	105	38662	4.58	ppm	97
34) Naphthalene	7.490	128	18908	0.52	ppm	77
40) 2-Methylnaphthalene	8.303	141	13117	0.62	ppm	98
41) 1-Methylnaphthalene	8.415	142	11195	0.48	ppm	95
48) 1,1'-Biphenyl	8.853	154	3492	0.12	ppm	94
52) Acenaphthylene	9.351	152	172035	5.09	ppm	98
57) Acenaphthene	9.559	153	7927	0.35	ppm	98
60) Dibenzofuran	9.763	168	15271	0.49	ppm	82
65) Fluorene	10.169	166	24430	0.97	ppm	100
67) Diethylphthalate	10.073	149	1184	0.05	ppm	89
84) Phenanthrene	11.303	178	94511	2.63	ppm	100
85) Anthracene	11.367	178	310569	8.49	ppm	98
87) Carbazole	11.571	167	115559	3.51	ppm	97
89) Di-n-butylphthalate	12.031	149	7235	0.17	ppm	91
91) Fluoranthene	12.715	202	695713	18.36	ppm	98
94) Pyrene	12.983	202	812295	21.16	ppm	97
99) Benzo[a]anthracene	14.566	228	349621	9.73	ppm	100
100) Chrysene	14.614	228	522367	14.99	ppm	97
101) bis(2-Ethylhexyl)phtha...	14.721	149	8139	0.32	ppm	92
104) Benzo[b]fluoranthene	16.299	252	876381	24.70	ppm	96
105) Benzo[k]fluoranthene	16.342	252	297299	8.06	ppm	95
106) Benzo[a]pyrene	16.839	252	316421	9.60	ppm	94
107) Indeno[1,2,3-cd]pyrene	18.567	276	271864	8.86	ppm	96
108) Dibenz[a,h]anthracene	18.615	278	58303	1.78	ppm	86
109) Benzo[g,h,i]perylene	18.930	276	212286	6.41	ppm	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

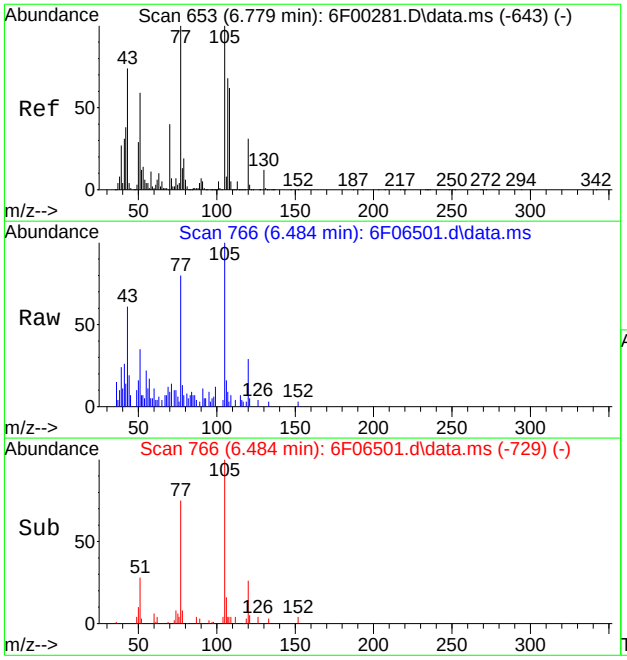
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06501.d
Acq On : 11 Aug 2020 7:26 pm
Operator : marthav
Sample : fa77615-7 E Inst : MSBNA10
Misc : op81484,S6F251,30.0,,,1,1,soil
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Results File: 8270D6F072920.RES
Quant Time: Aug 12 06:30:11 2020
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration



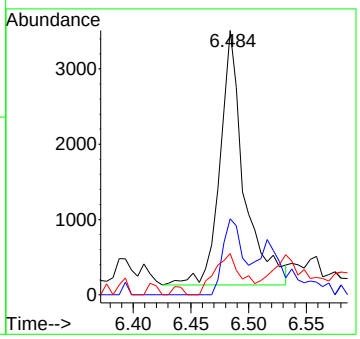
8270D6F072920.m Wed Aug 12 06:58:29 2020 Page: 2

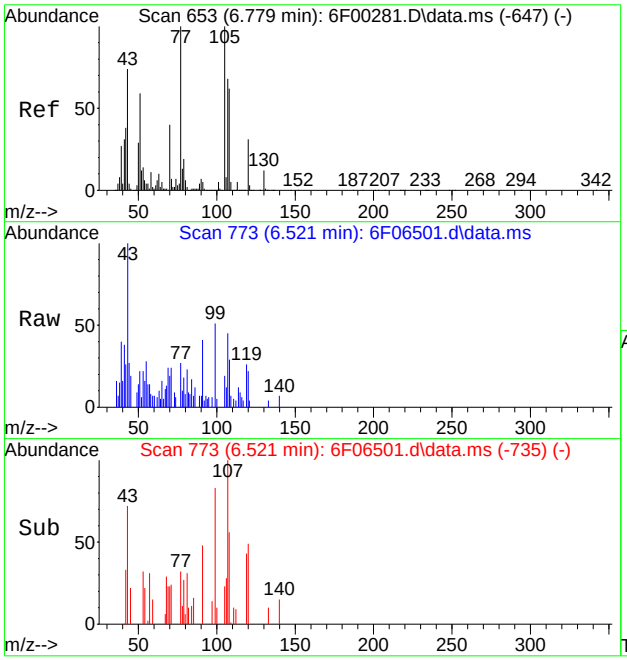


#18
Acetophenone
Concen: 0.27 ppm
RT: 6.484 min Scan# 766
Delta R.T. -0.000 min
Lab File: 6F06501.d
Acq: 11 Aug 2020 7:26 pm

Tgt Ion:105 Resp: 4900

Ion	Ratio	Lower	Upper
105	100		
120	27.6	0.7	60.7
106	8.7	0.0	38.4

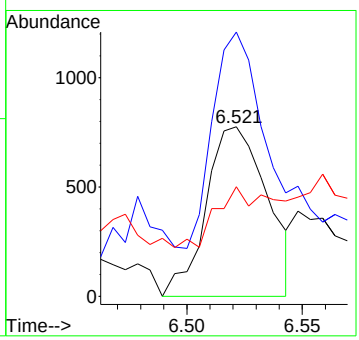


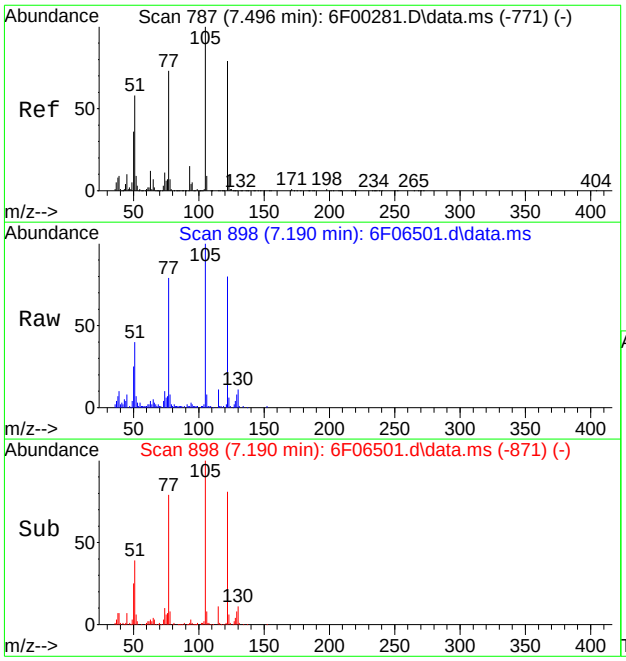


#21
3&4-Methylphenol
Concen: 0.11 ppm
RT: 6.521 min Scan# 773
Delta R.T. 0.005 min
Lab File: 6F06501.d
Acq: 11 Aug 2020 7:26 pm

Tgt Ion:108 Resp: 1434

Ion	Ratio	Lower	Upper
108	100		
107	131.5	80.3	140.3
79	24.2	0.2	60.2

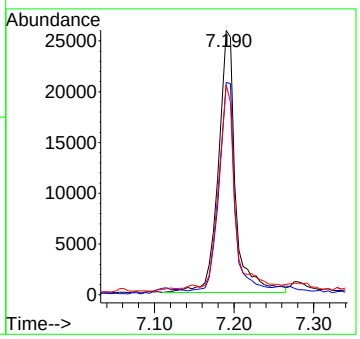


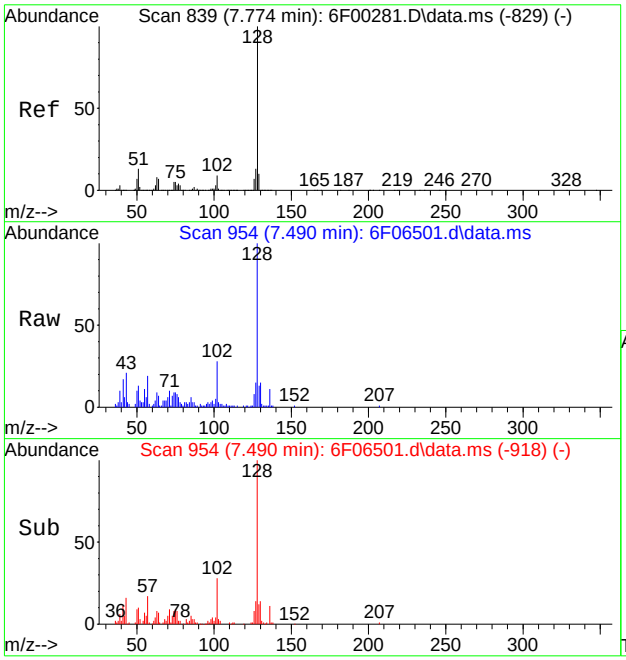


#30
Benzoic Acid
Concen: 4.58 ppm
RT: 7.190 min Scan# 898
Delta R.T. -0.053 min
Lab File: 6F06501.d
Acq: 11 Aug 2020 7:26 pm

Tgt Ion:105 Resp: 38662

Ion	Ratio	Lower	Upper
105	100		
122	78.9	49.5	109.5
77	77.9	43.0	103.0

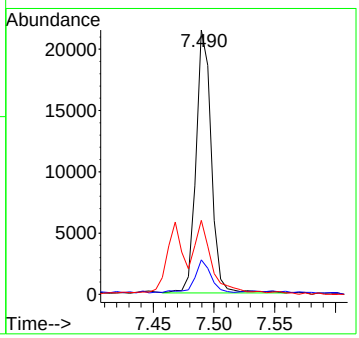


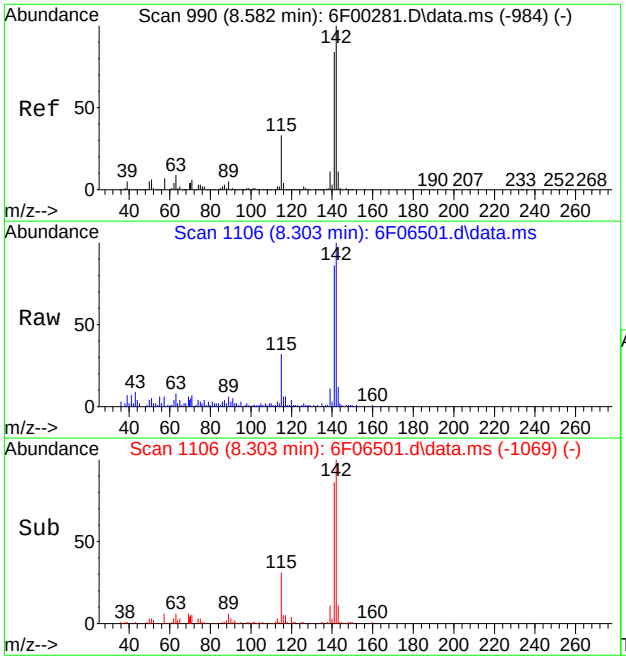


#34
Naphthalene
Concen: 0.52 ppm
RT: 7.490 min Scan# 954
Delta R.T. -0.005 min
Lab File: 6F06501.d
Acq: 11 Aug 2020 7:26 pm

Tgt Ion:128 Resp: 18908

Ion	Ratio	Lower	Upper
128	100		
129	12.1	0.0	40.4
102	24.7	0.0	39.2

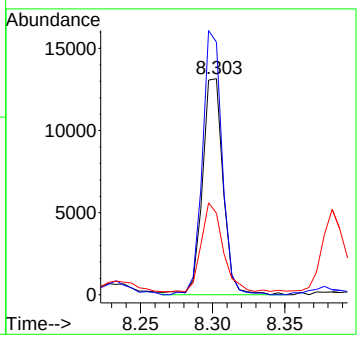


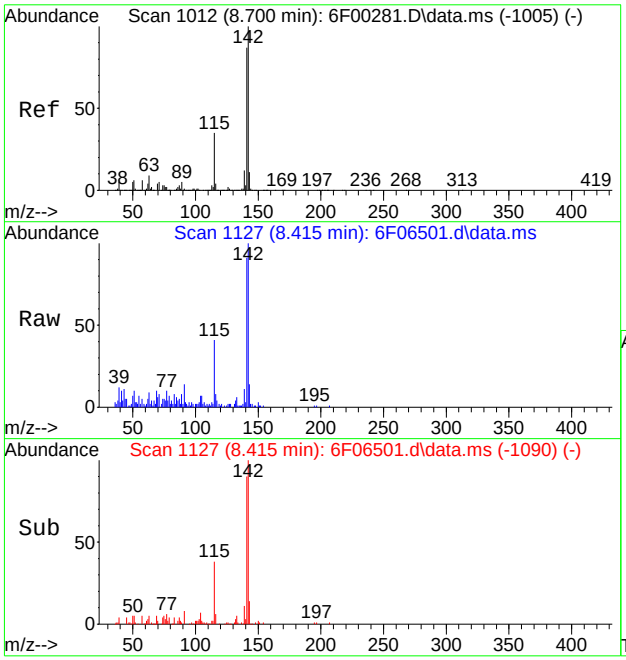


#40
2-Methylnaphthalene
Concen: 0.62 ppm
RT: 8.303 min Scan# 1106
Delta R.T. -0.000 min
Lab File: 6F06501.d
Acq: 11 Aug 2020 7:26 pm

Tgt Ion:141 Resp: 13117

Ion	Ratio	Lower	Upper
141	100		
142	117.4	88.9	148.9
115	36.4	9.7	69.7

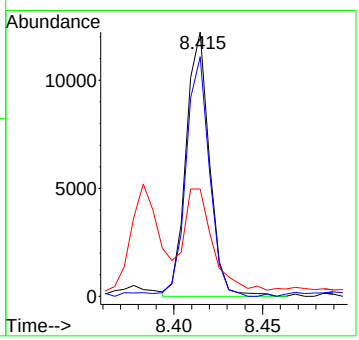


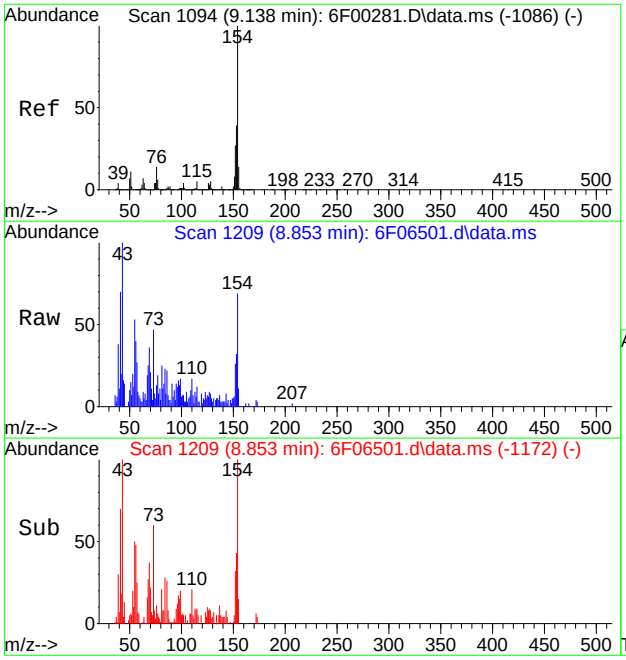


#41
1-Methylnaphthalene
Concen: 0.48 ppm
RT: 8.415 min Scan# 1127
Delta R.T. -0.000 min
Lab File: 6F06501.d
Acq: 11 Aug 2020 7:26 pm

Tgt Ion:142 Resp: 11195

Ion	Ratio	Lower	Upper
142	100		
141	90.3	56.8	116.8
115	30.3	4.7	64.7

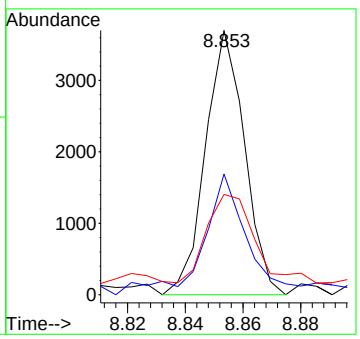


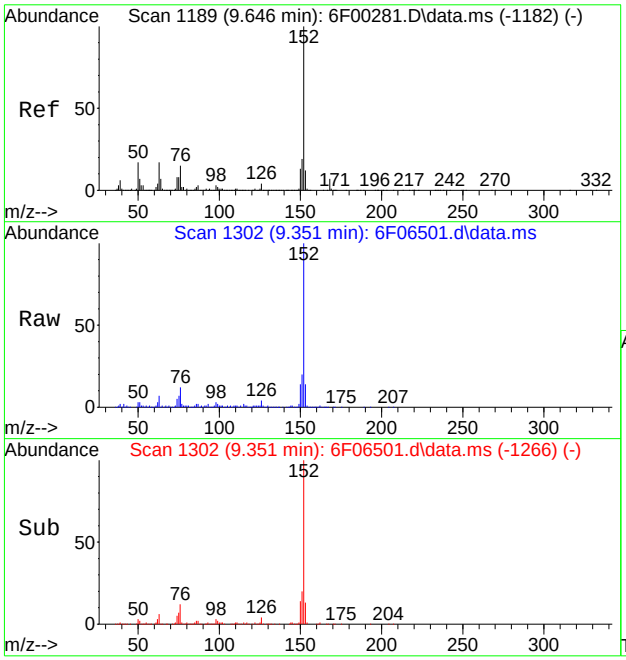


#48
1,1'-Biphenyl
Concen: 0.12 ppm
RT: 8.853 min Scan# 1209
Delta R.T. -0.000 min
Lab File: 6F06501.d
Acq: 11 Aug 2020 7:26 pm

Tgt Ion:154 Resp: 3492

Ion	Ratio	Lower	Upper
154	100		
153	41.0	8.7	68.7
152	31.6	0.0	56.7

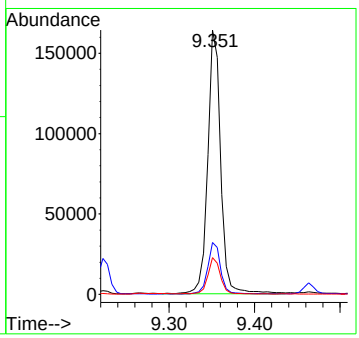


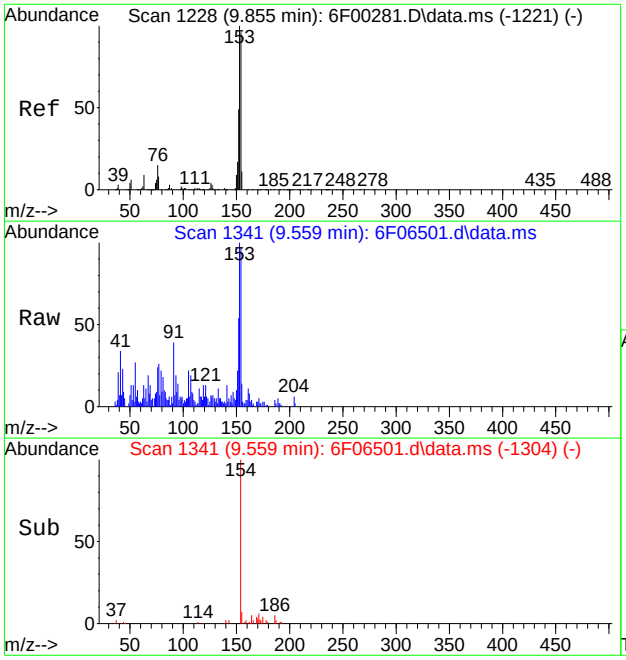


#52
Acenaphthylene
Concen: 5.09 ppm
RT: 9.351 min Scan# 1302
Delta R.T. -0.005 min
Lab File: 6F06501.d
Acq: 11 Aug 2020 7:26 pm

Tgt Ion:152 Resp: 172035

Ion	Ratio	Lower	Upper
152	100		
151	19.5	0.0	48.8
153	13.7	0.0	42.3

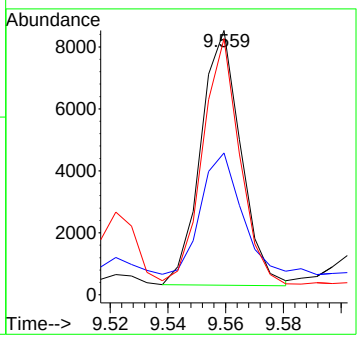


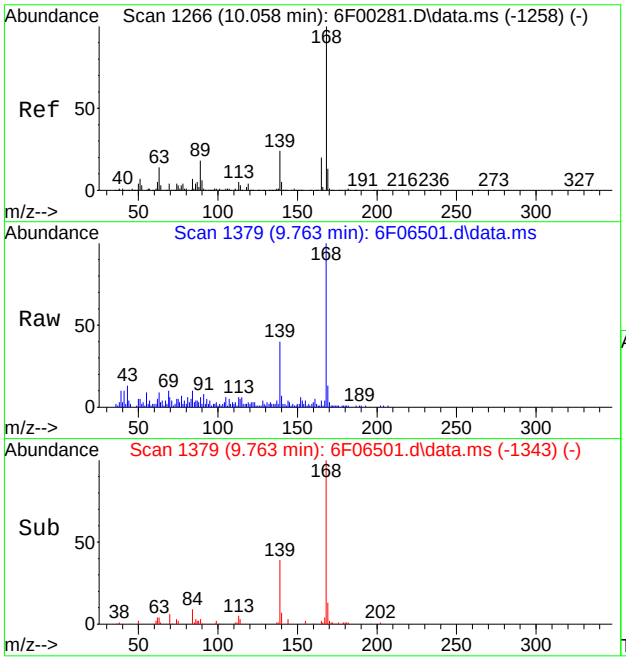


#57
Acenaphthene
Concen: 0.35 ppm
RT: 9.559 min Scan# 1341
Delta R.T. -0.000 min
Lab File: 6F06501.d
Acq: 11 Aug 2020 7:26 pm

Tgt Ion:153 Resp: 7927

Ion	Ratio	Lower	Upper
153	100		
152	47.5	19.4	79.4
154	96.6	65.6	125.6

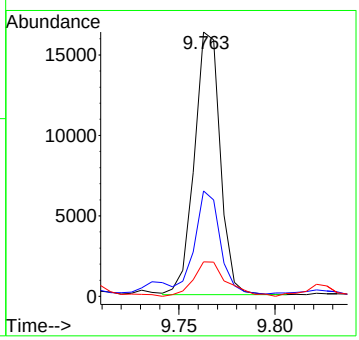


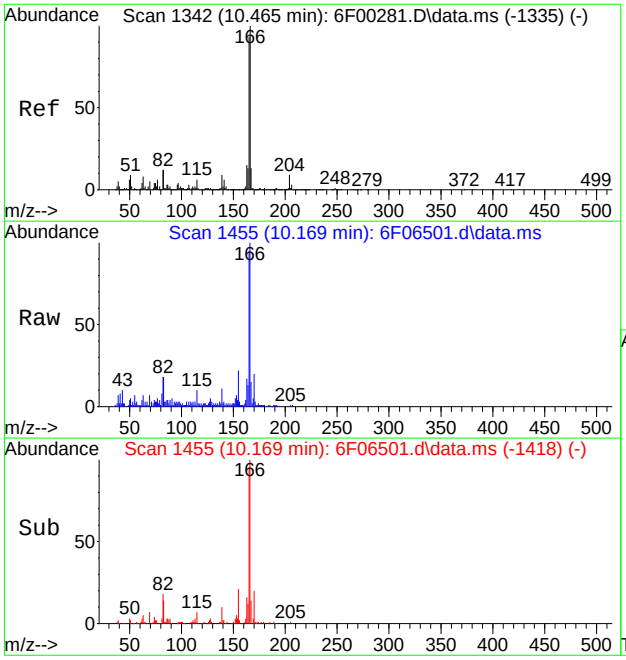


#60
Dibenzofuran
Concen: 0.49 ppm
RT: 9.763 min Scan# 1379
Delta R.T. -0.005 min
Lab File: 6F06501.d
Acq: 11 Aug 2020 7:26 pm

Tgt Ion:168 Resp: 15271

Ion	Ratio	Lower	Upper
168	100		
139	37.0	0.0	53.6
169	12.6	0.0	42.6

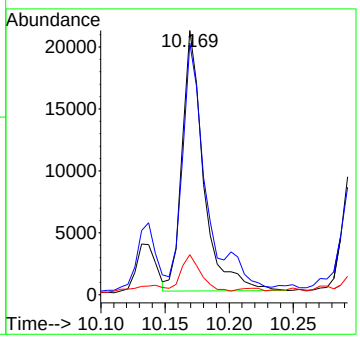


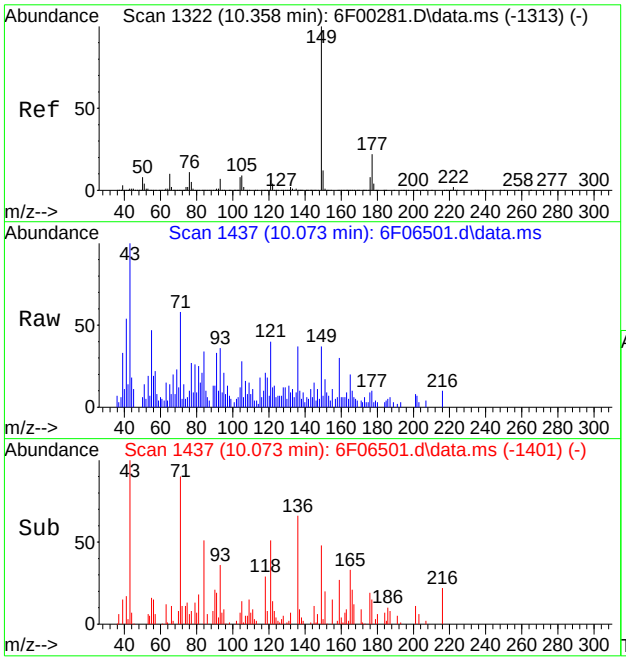


#65
Fluorene
Concen: 0.97 ppm
RT: 10.169 min Scan# 1455
Delta R.T. -0.000 min
Lab File: 6F06501.d
Acq: 11 Aug 2020 7:26 pm

Tgt Ion:166 Resp: 24430

Ion	Ratio	Lower	Upper
166	100		
165	92.8	62.6	122.6
167	13.4	0.0	43.1

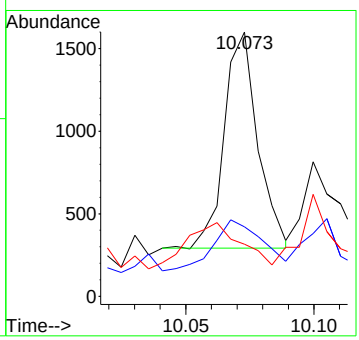


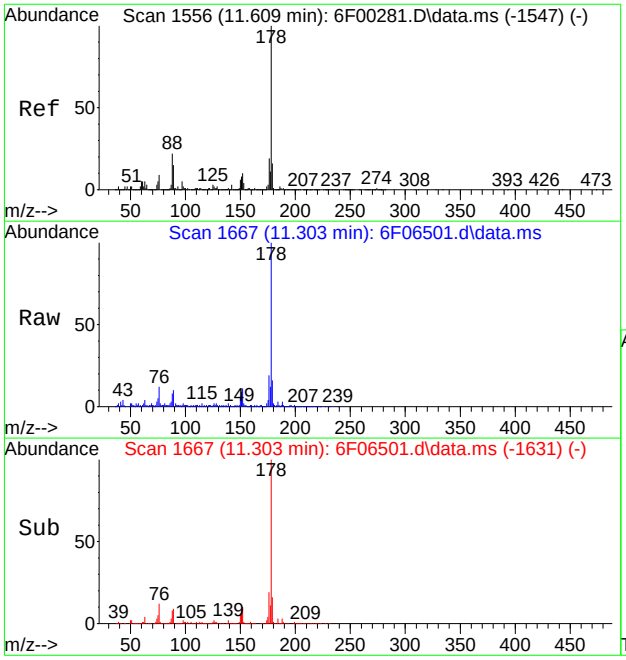


#67
Diethylphthalate
Concen: 0.05 ppm
RT: 10.073 min Scan# 1437
Delta R.T. -0.005 min
Lab File: 6F06501.d
Acq: 11 Aug 2020 7:26 pm

Tgt Ion:149 Resp: 1184

Ion	Ratio	Lower	Upper
149	100		
177	18.4	0.0	52.2
150	5.1	0.0	41.7

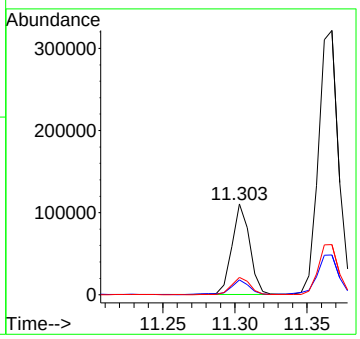


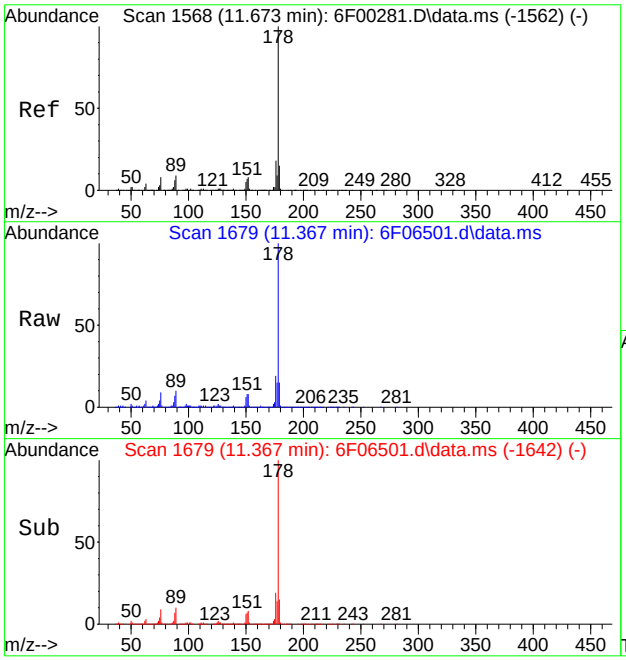


#84
Phenanthrene
Concen: 2.63 ppm
RT: 11.303 min Scan# 1667
Delta R.T. -0.005 min
Lab File: 6F06501.d
Acq: 11 Aug 2020 7:26 pm

Tgt Ion:178 Resp: 94511

Ion	Ratio	Lower	Upper
178	100		
179	15.9	0.0	46.0
176	19.1	0.0	49.0

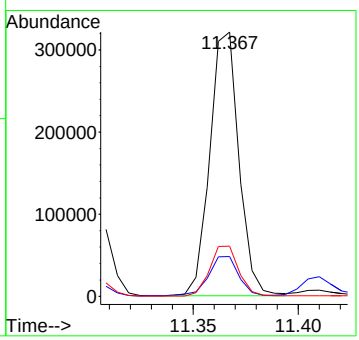


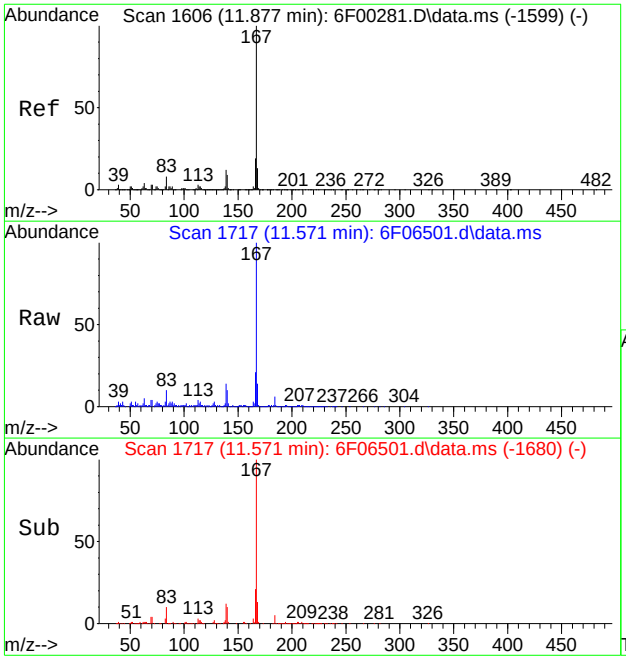


#85
Anthracene
Concen: 8.49 ppm
RT: 11.367 min Scan# 1679
Delta R.T. -0.000 min
Lab File: 6F06501.d
Acq: 11 Aug 2020 7:26 pm

Tgt Ion:178 Resp: 310569

Ion	Ratio	Lower	Upper
178	100		
179	14.7	0.0	45.4
176	18.9	0.0	47.7

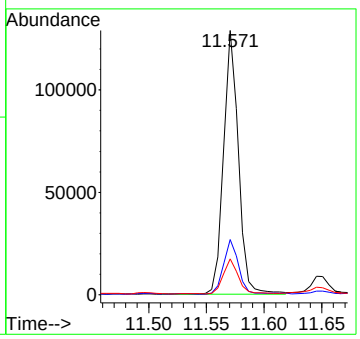


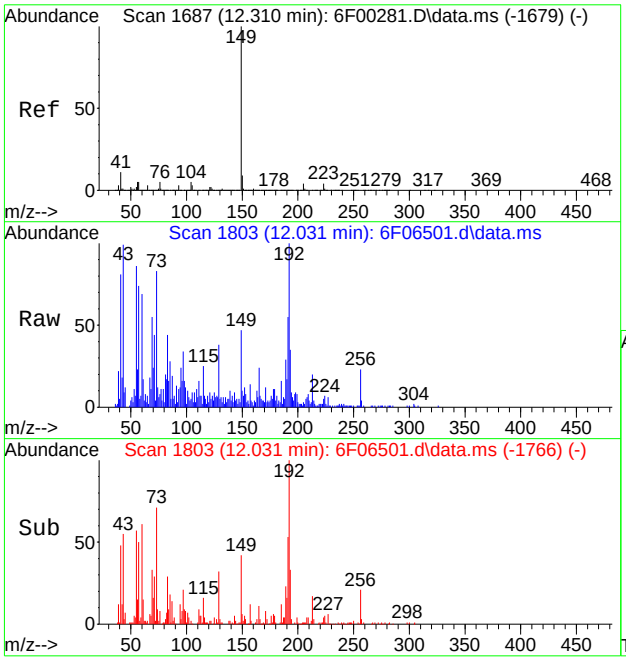


#87
Carbazole
Concen: 3.51 ppm
RT: 11.571 min Scan# 1717
Delta R.T. -0.000 min
Lab File: 6F06501.d
Acq: 11 Aug 2020 7:26 pm

Tgt Ion:167 Resp: 115559

Ion	Ratio	Lower	Upper
167	100		
166	20.5	0.0	49.2
139	13.1	0.0	42.3

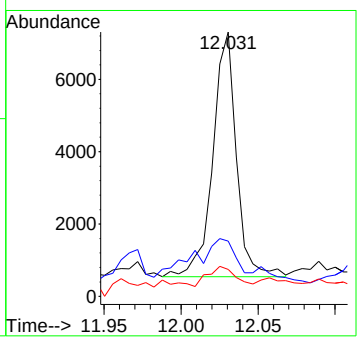


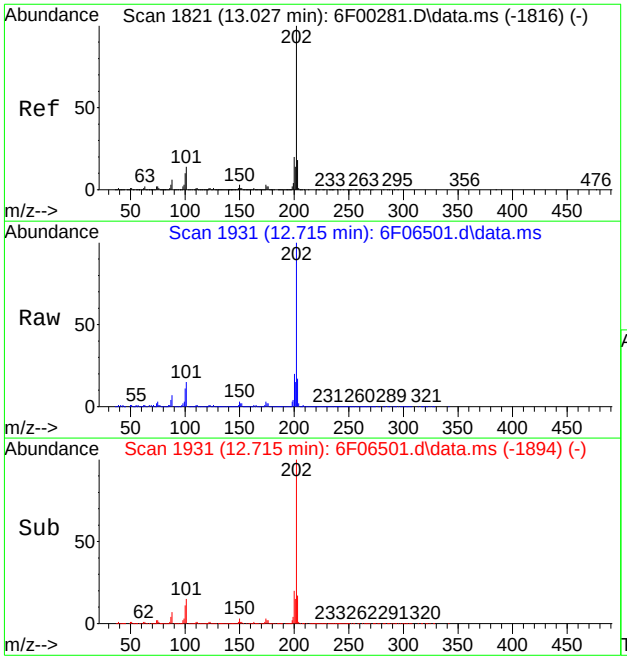


#89
Di-n-butylphthalate
Concen: 0.17 ppm
RT: 12.031 min Scan# 1803
Delta R.T. -0.000 min
Lab File: 6F06501.d
Acq: 11 Aug 2020 7:26 pm

Tgt Ion:149 Resp: 7235

Ion	Ratio	Lower	Upper
149	100		
150	13.2	0.0	38.7
104	4.5	0.0	35.2

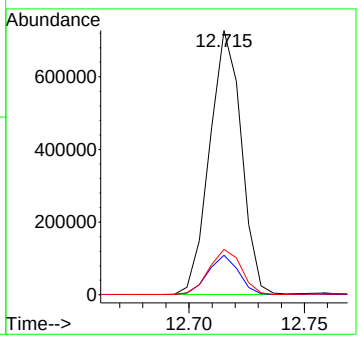


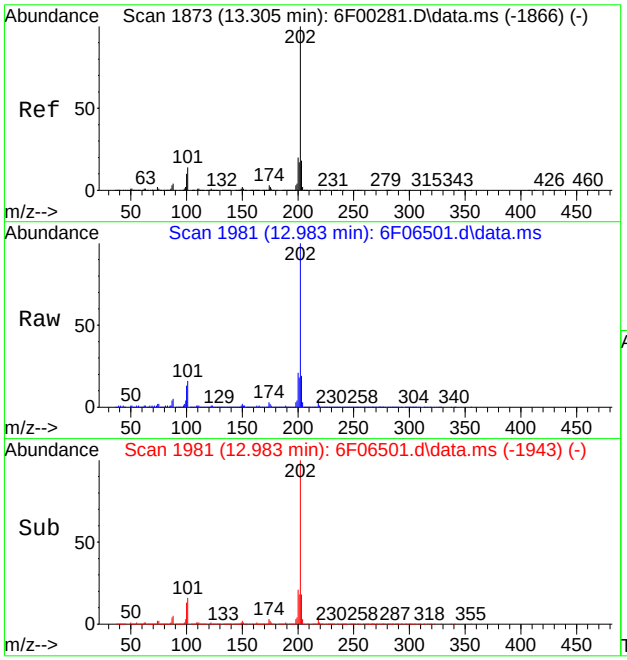


#91
Fluoranthene
Concen: 18.36 ppm
RT: 12.715 min Scan# 1931
Delta R.T. -0.000 min
Lab File: 6F06501.d
Acq: 11 Aug 2020 7:26 pm

Tgt Ion:202 Resp: 695713

Ion	Ratio	Lower	Upper
202	100		
101	14.9	0.0	43.6
203	17.1	0.0	47.7

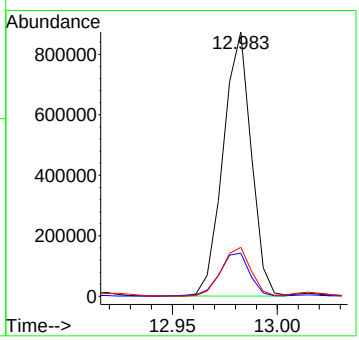


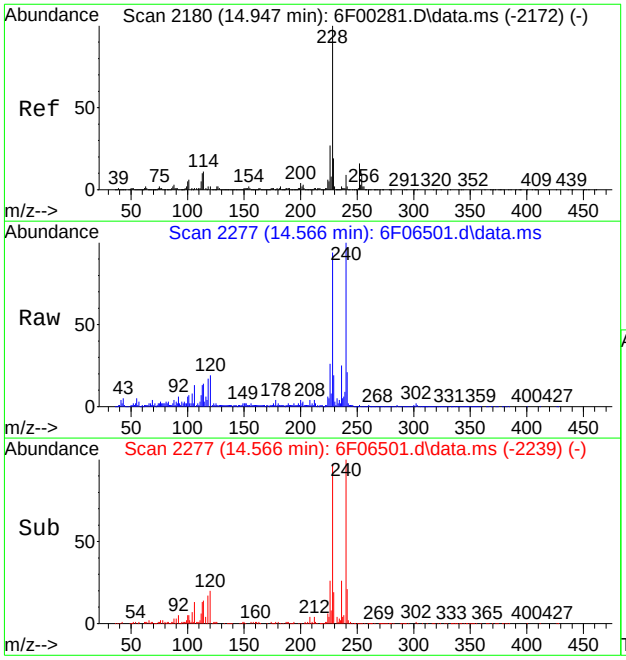


#94
Pyrene
Concen: 21.16 ppm
RT: 12.983 min Scan# 1981
Delta R.T. 0.005 min
Lab File: 6F06501.d
Acq: 11 Aug 2020 7:26 pm

Tgt Ion:202 Resp: 812295

Ion	Ratio	Lower	Upper
202	100		
101	16.2	0.0	43.8
203	18.3	0.0	47.8

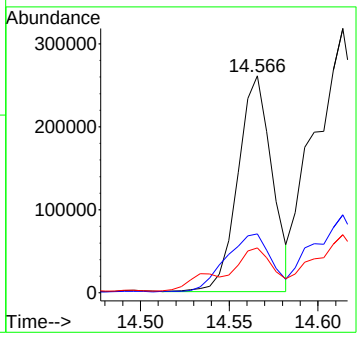


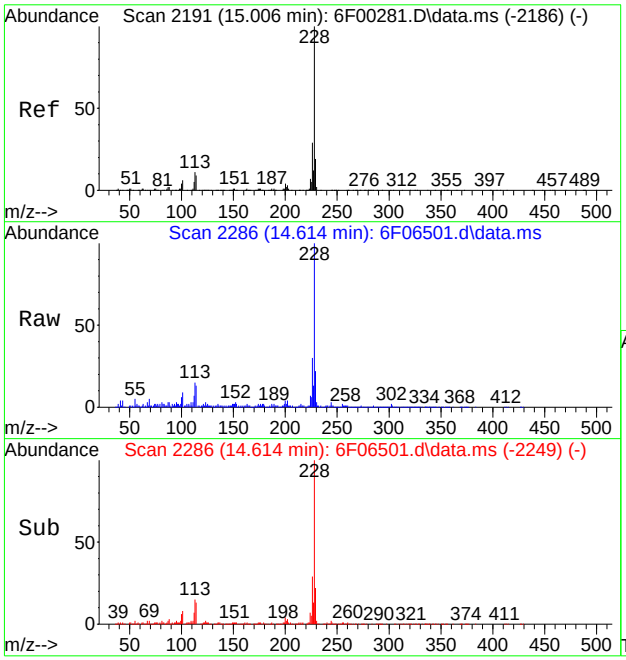


#99
Benzo[a]anthracene
Concen: 9.73 ppm
RT: 14.566 min Scan# 2277
Delta R.T. 0.005 min
Lab File: 6F06501.d
Acq: 11 Aug 2020 7:26 pm

Tgt Ion:228 Resp: 349621

Ion	Ratio	Lower	Upper
228	100		
226	26.8	0.0	56.6
229	19.1	0.0	48.9

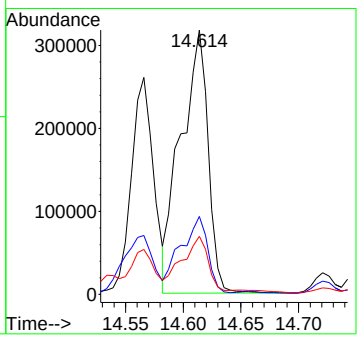


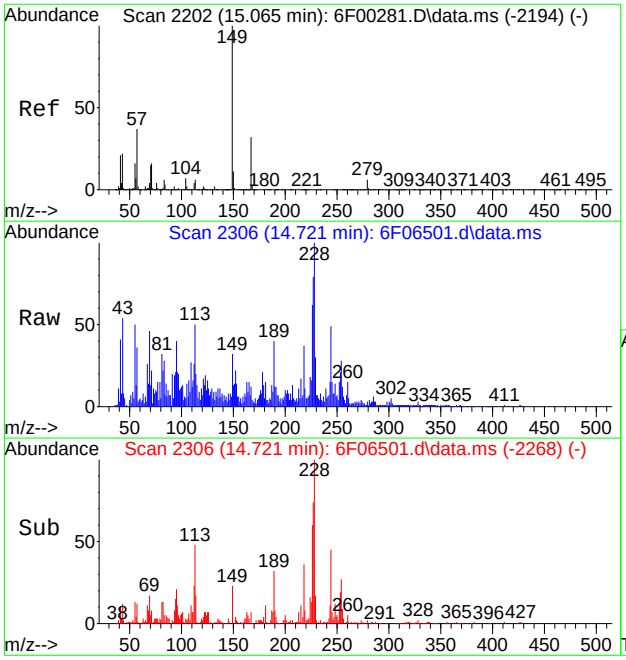


#100
Chrysene
Concen: 14.99 ppm
RT: 14.614 min Scan# 2286
Delta R.T. -0.000 min
Lab File: 6F06501.d
Acq: 11 Aug 2020 7:26 pm

Tgt Ion:228 Resp: 522367

Ion	Ratio	Lower	Upper
228	100		
226	29.5	0.0	58.9
229	20.8	0.0	48.5

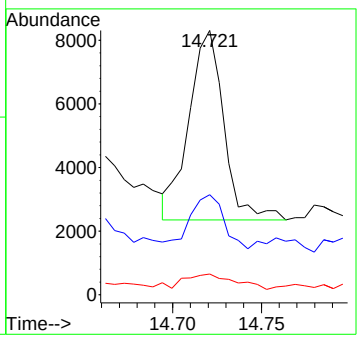


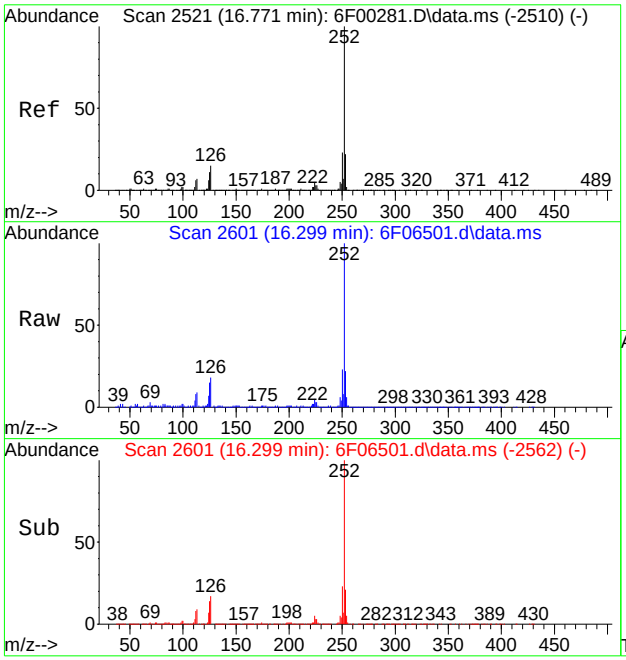


#101
bis(2-Ethylhexyl)phthalate
Concen: 0.32 ppm
RT: 14.721 min Scan# 2306
Delta R.T. 0.005 min
Lab File: 6F06501.d
Acq: 11 Aug 2020 7:26 pm

Tgt Ion:149 Resp: 8139

Ion	Ratio	Lower	Upper
149	100		
167	26.7	1.7	61.7
279	5.8	0.0	35.7

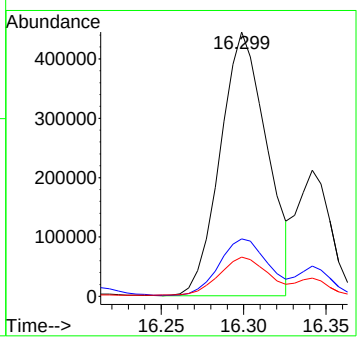


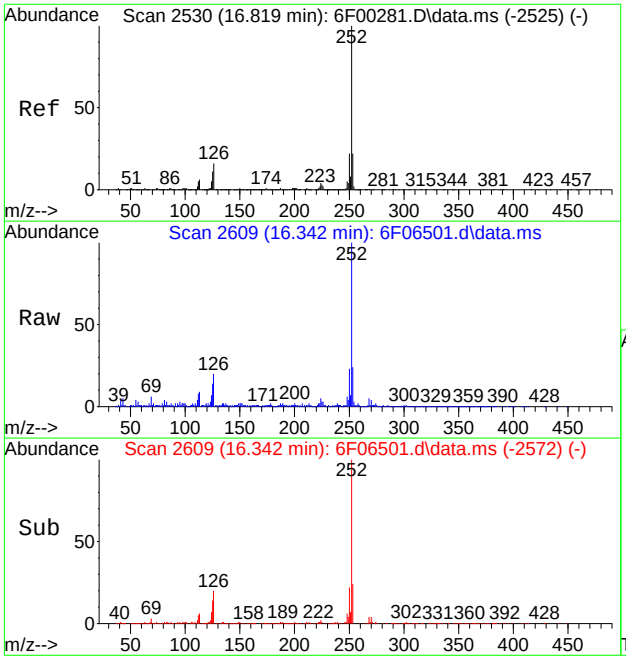


#104
Benzo[b]fluoranthene
Concen: 24.70 ppm
RT: 16.299 min Scan# 2601
Delta R.T. 0.011 min
Lab File: 6F06501.d
Acq: 11 Aug 2020 7:26 pm

Tgt Ion:252 Resp: 876381

Ion	Ratio	Lower	Upper
252	100		
253	21.3	0.0	51.9
125	14.4	0.0	41.3

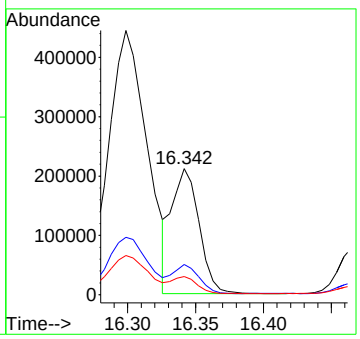


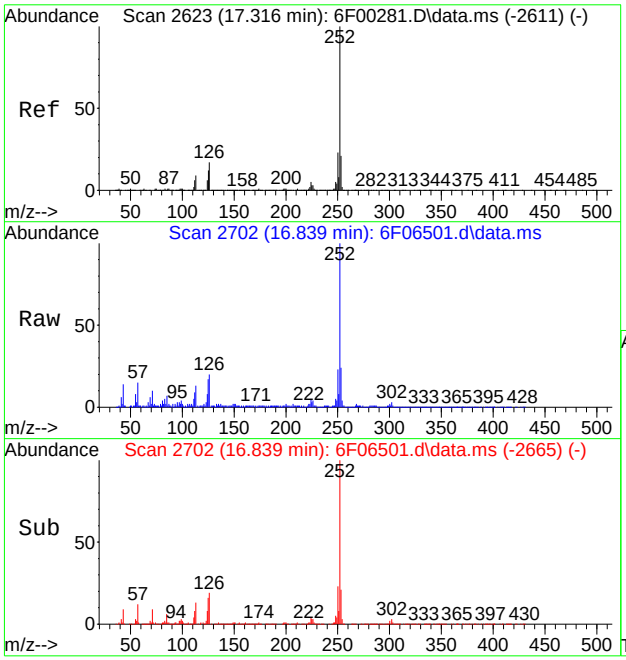


#105
Benzo[k]fluoranthene
Concen: 8.06 ppm
RT: 16.342 min Scan# 2609
Delta R.T. -0.000 min
Lab File: 6F06501.d
Acq: 11 Aug 2020 7:26 pm

Tgt Ion:252 Resp: 297299

Ion	Ratio	Lower	Upper
252	100		
253	23.8	0.0	51.7
125	13.0	0.0	40.7

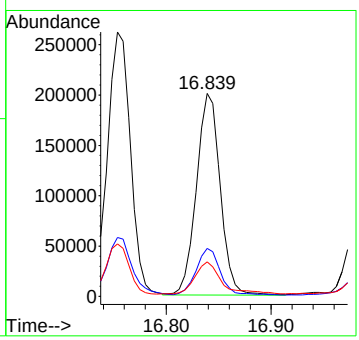


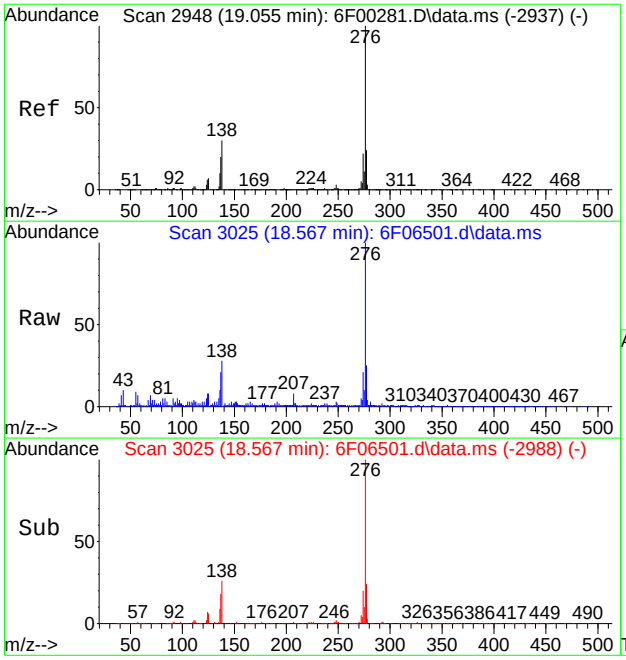


#106
Benzo[a]pyrene
Concen: 9.60 ppm
RT: 16.839 min Scan# 2702
Delta R.T. -0.000 min
Lab File: 6F06501.d
Acq: 11 Aug 2020 7:26 pm

Tgt Ion:252 Resp: 316421

Ion	Ratio	Lower	Upper
252	100		
253	22.9	0.0	51.0
125	15.9	0.0	42.0

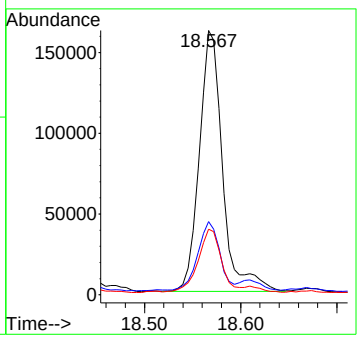


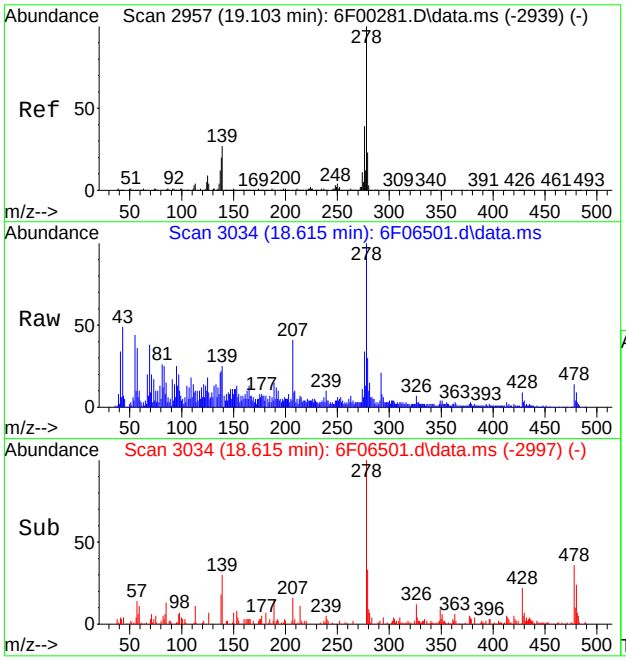


#107
Indeno[1,2,3-cd]pyrene
Concen: 8.86 ppm
RT: 18.567 min Scan# 3025
Delta R.T. -0.000 min
Lab File: 6F06501.d
Acq: 11 Aug 2020 7:26 pm

Tgt Ion:276 Resp: 271864

Ion	Ratio	Lower	Upper
276	100		
138	26.2	0.0	59.6
277	24.1	0.0	54.1

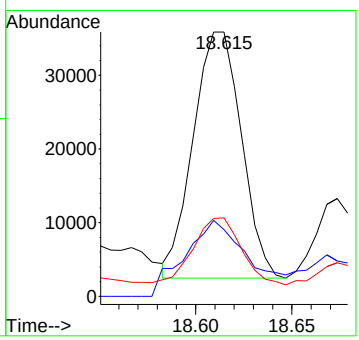


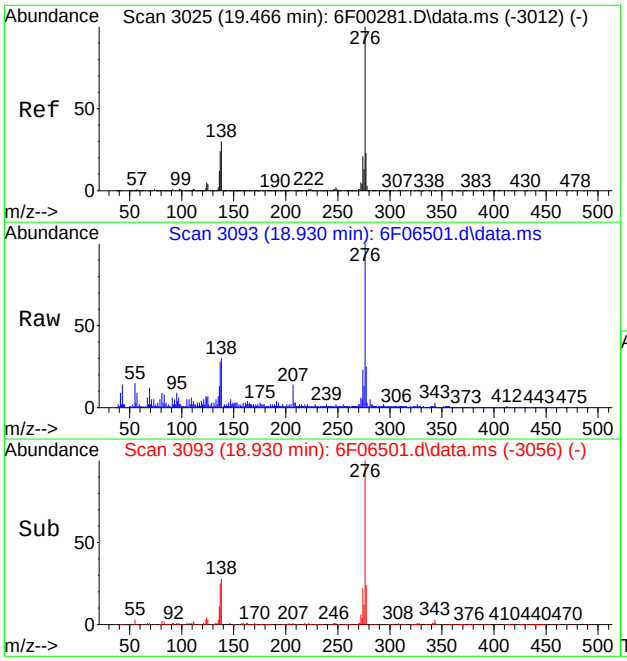


#108
Dibenz[a,h]anthracene
Concen: 1.78 ppm
RT: 18.615 min Scan# 3034
Delta R.T. -0.000 min
Lab File: 6F06501.d
Acq: 11 Aug 2020 7:26 pm

Tgt Ion:278 Resp: 58303

Ion	Ratio	Lower	Upper
278	100		
139	17.6	0.0	56.9
279	27.0	0.0	53.0

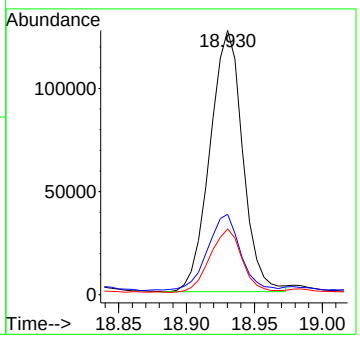




#109
Benzo[g,h,i]perylene
Concen: 6.41 ppm
RT: 18.930 min Scan# 3093
Delta R.T. -0.000 min
Lab File: 6F06501.d
Acq: 11 Aug 2020 7:26 pm

Tgt Ion:276 Resp: 212286

Ion	Ratio	Lower	Upper
276	100		
138	28.7	0.0	59.5
277	24.1	0.0	53.0



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06502.d
Acq On : 11 Aug 2020 7:52 pm
Operator : marthav
Sample : fa77615-8 E Inst : MSBNA10
Misc : op81484,S6F251,30.1,,,1,1,soil
ALS Vial : 18 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Results File: 8270D6F072920.RES
Quant Time: Aug 12 06:32:00 2020
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

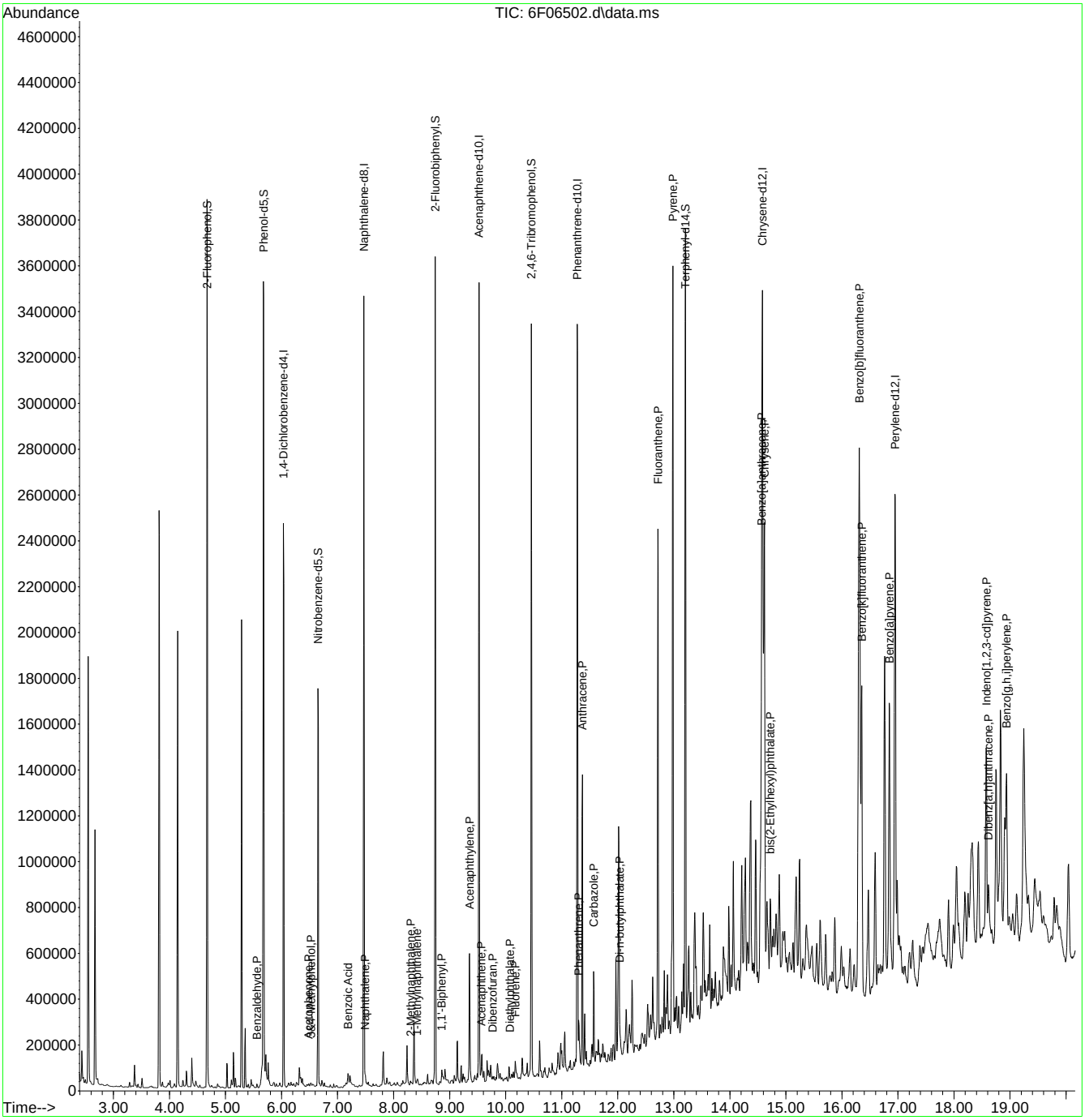
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	6.034	152	365068	40.00	ppm		0.00
22) Naphthalene-d8	7.468	136	1346935	40.00	ppm		0.00
43) Acenaphthene-d10	9.522	164	703545	40.00	ppm		0.00
70) Phenanthrene-d10	11.276	188	1258184	40.00	ppm		0.00
92) Chrysene-d12	14.582	240	1102573	40.00	ppm		0.00
102) Perylene-d12	16.946	264	1134044	40.00	ppm		0.02
System Monitoring Compounds							
7) 2-Fluorophenol	4.671	112	968916	70.24	ppm		0.01
Spiked Amount 100.000	Range 40 - 102		Recovery = 70.24%				
9) Phenol-d5	5.681	99	1239160	75.67	ppm		0.01
Spiked Amount 100.000	Range 41 - 100		Recovery = 75.67%				
23) Nitrobenzene-d5	6.650	82	532327	36.02	ppm		0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 72.04%				
47) 2-Fluorobiphenyl	8.741	172	1013654	36.86	ppm		0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 73.72%				
75) 2,4,6-Tribromophenol	10.458	330	348450	82.29	ppm		0.00
Spiked Amount 100.000	Range 42 - 108		Recovery = 82.29%				
95) Terphenyl-d14	13.207	244	1121219	36.18	ppm		0.00
Spiked Amount 50.000	Range 45 - 119		Recovery = 72.36%				
Target Compounds							Qvalue
5) Benzaldehyde	5.558	106	4830	0.43	ppm		94
18) Acetophenone	6.484	105	3918	0.21	ppm		94
21) 3&4-Methylphenol	6.521	108	2478	0.19	ppm		98
30) Benzoic Acid	7.184	105	18366	2.11	ppm		96
34) Naphthalene	7.489	128	8073	0.21	ppm	#	16
40) 2-Methylnaphthalene	8.302	141	4741	0.21	ppm		90
41) 1-Methylnaphthalene	8.415	142	3921	0.16	ppm		91
48) 1,1'-Biphenyl	8.853	154	2110	0.07	ppm		95
52) Acenaphthylene	9.356	152	251275	7.15	ppm		98
57) Acenaphthene	9.559	153	9353	0.40	ppm		95
60) Dibenzofuran	9.768	168	6923	0.21	ppm		84
65) Fluorene	10.169	166	28960	1.11	ppm		99
67) Diethylphthalate	10.073	149	1176	0.04	ppm		84
84) Phenanthrene	11.303	178	71817	1.91	ppm		100
85) Anthracene	11.367	178	486074	12.70	ppm		98
87) Carbazole	11.570	167	149173	4.32	ppm		97
89) Di-n-butylphthalate	12.030	149	5627	0.13	ppm		89
91) Fluoranthene	12.715	202	892605	22.50	ppm		98
94) Pyrene	12.982	202	1212532	30.70	ppm		96
99) Benzo[a]anthracene	14.566	228	704265	19.06	ppm		97
100) Chrysene	14.619	228	1062436	29.64	ppm		98
101) bis(2-Ethylhexyl)phtha...	14.721	149	6054	0.23	ppm		82
104) Benzo[b]fluoranthene	16.309	252	1843622	50.65	ppm		96
105) Benzo[k]fluoranthene	16.352	252	612095	16.17	ppm		97
106) Benzo[a]pyrene	16.849	252	659746	19.52	ppm		97
107) Indeno[1,2,3-cd]pyrene	18.577	276	550815	17.50	ppm		93
108) Dibenz[a,h]anthracene	18.614	278	119895	3.57	ppm		94
109) Benzo[g,h,i]perylene	18.935	276	445855	13.13	ppm		97

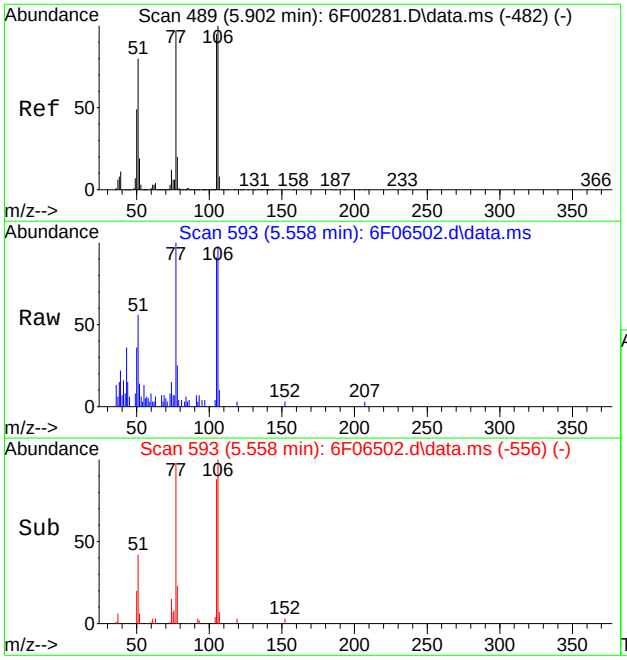
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06502.d
Acq On : 11 Aug 2020 7:52 pm
Operator : marthav
Sample : fa77615-8 E Inst : MSBNA10
Misc : op81484,S6F251,30.1,,,1,1,soil
ALS Vial : 18 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Results File: 8270D6F072920.RES
Quant Time: Aug 12 06:32:00 2020
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

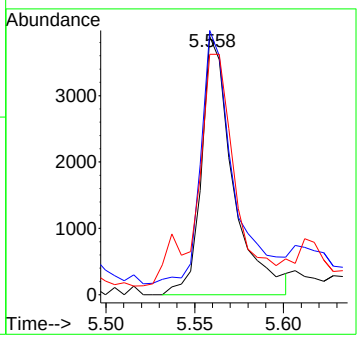


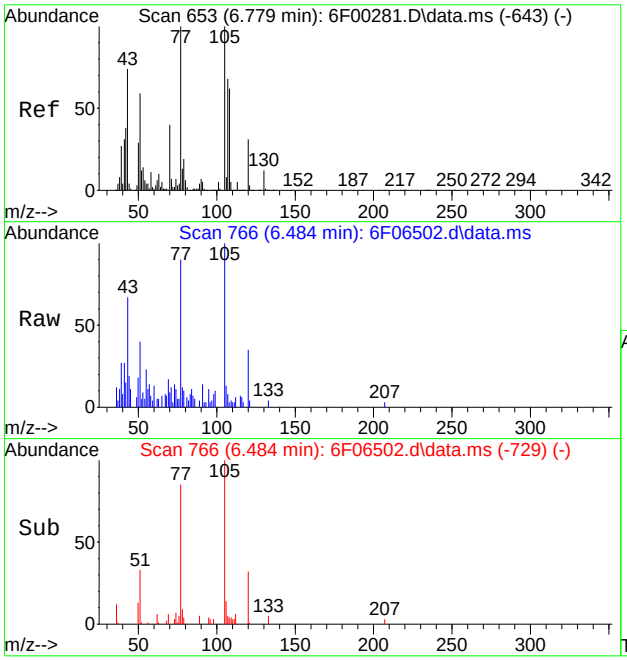


#5
Benzaldehyde
Concen: 0.43 ppm
RT: 5.558 min Scan# 593
Delta R.T. -0.000 min
Lab File: 6F06502.d
Acq: 11 Aug 2020 7:52 pm

Tgt Ion:106 Resp: 4830

Ion	Ratio	Lower	Upper
106	100		
77	96.0	67.1	127.1
105	83.7	65.1	125.1

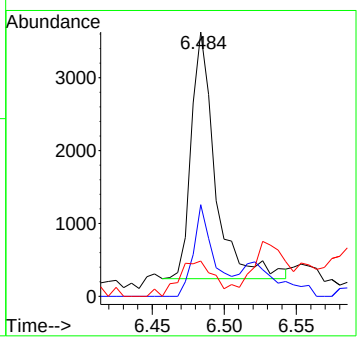


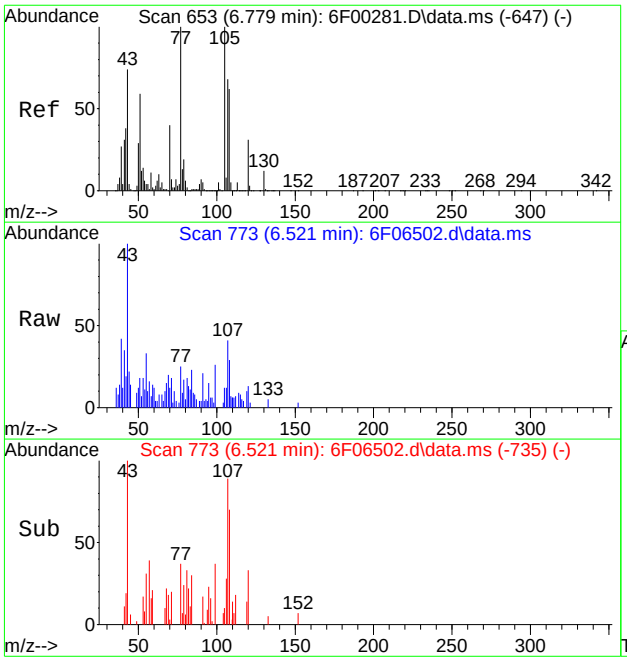


#18
Acetophenone
Concen: 0.21 ppm
RT: 6.484 min Scan# 766
Delta R.T. -0.000 min
Lab File: 6F06502.d
Acq: 11 Aug 2020 7:52 pm

Tgt Ion:105 Resp: 3918

Ion	Ratio	Lower	Upper
105	100		
120	34.8	0.7	60.7
106	7.4	0.0	38.4

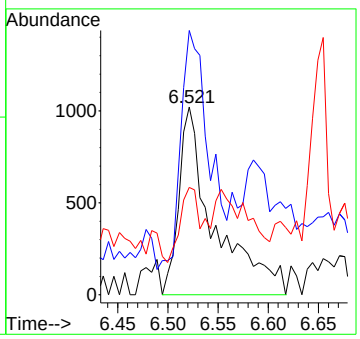


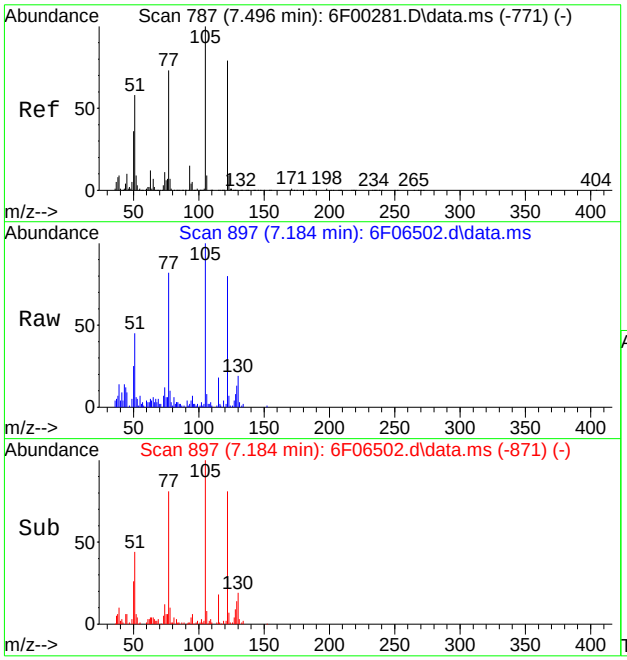


#21
3&4-Methylphenol
Concen: 0.19 ppm
RT: 6.521 min Scan# 773
Delta R.T. 0.005 min
Lab File: 6F06502.d
Acq: 11 Aug 2020 7:52 pm

Tgt Ion:108 Resp: 2478

Ion	Ratio	Lower	Upper
108	100		
107	108.7	80.3	140.3
79	29.0	0.2	60.2

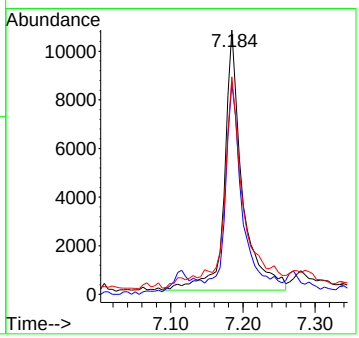


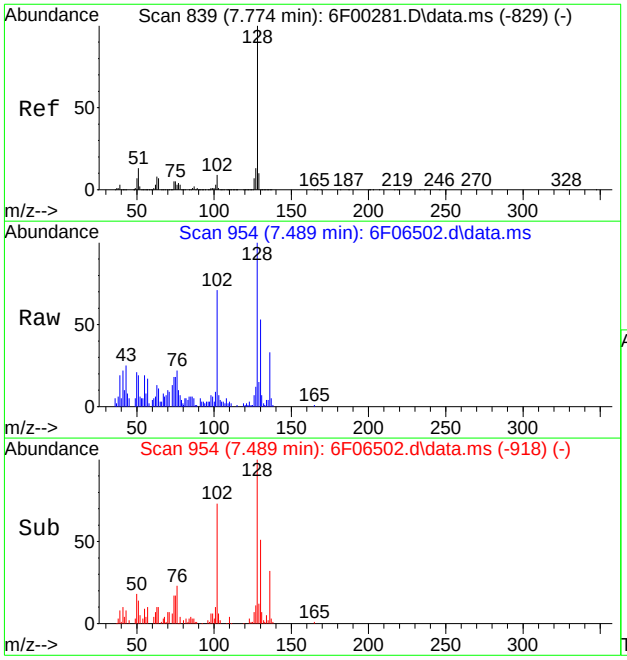


#30
Benzoic Acid
Concen: 2.11 ppm
RT: 7.184 min Scan# 897
Delta R.T. -0.059 min
Lab File: 6F06502.d
Acq: 11 Aug 2020 7:52 pm

Tgt Ion:105 Resp: 18366

Ion	Ratio	Lower	Upper
105	100		
122	79.1	49.5	109.5
77	79.8	43.0	103.0

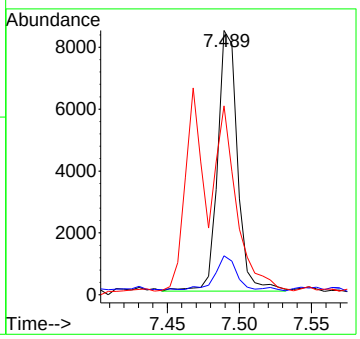


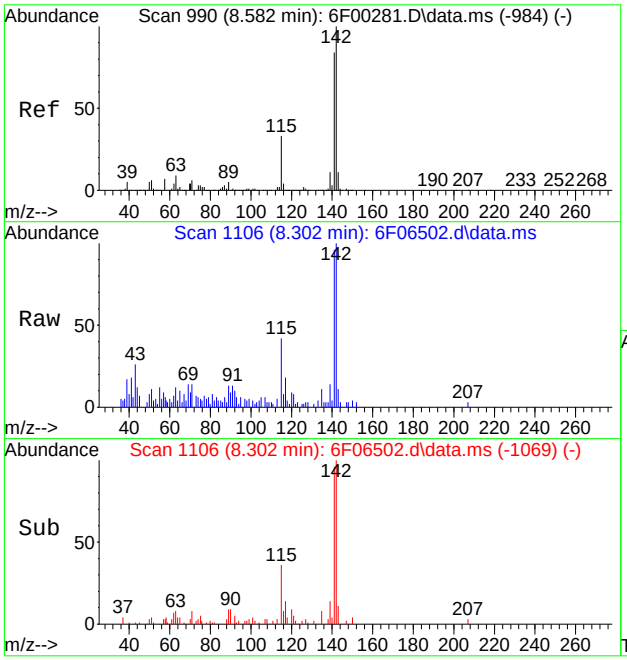


#34
Naphthalene
Concen: 0.21 ppm
RT: 7.489 min Scan# 954
Delta R.T. -0.006 min
Lab File: 6F06502.d
Acq: 11 Aug 2020 7:52 pm

Tgt Ion:128 Resp: 8073

Ion	Ratio	Lower	Upper
128	100		
129	13.3	0.0	40.4
102	70.7	0.0	39.2#

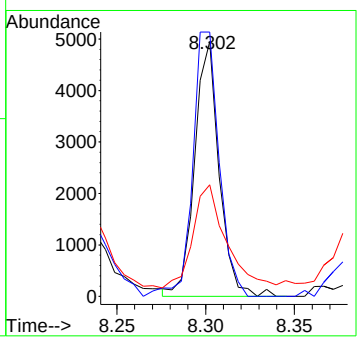


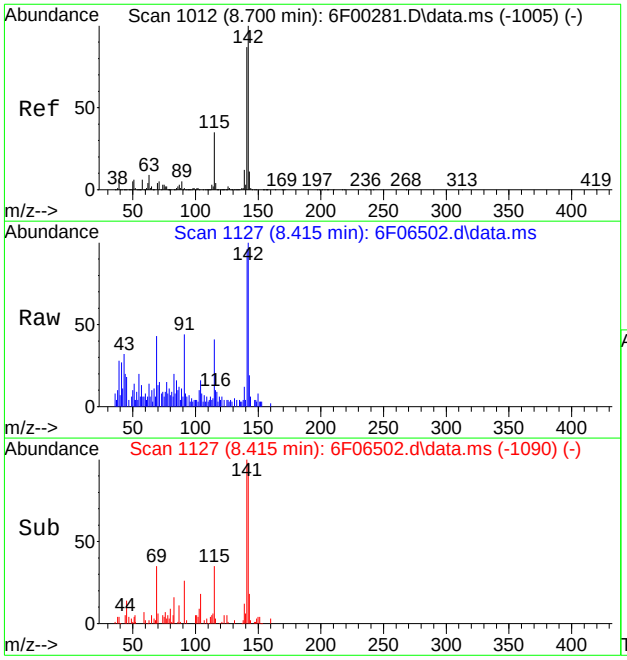


#40
2-Methylnaphthalene
Concen: 0.21 ppm
RT: 8.302 min Scan# 1106
Delta R.T. -0.000 min
Lab File: 6F06502.d
Acq: 11 Aug 2020 7:52 pm

Tgt Ion:141 Resp: 4741

Ion	Ratio	Lower	Upper
141	100		
142	103.6	88.9	148.9
115	39.6	9.7	69.7

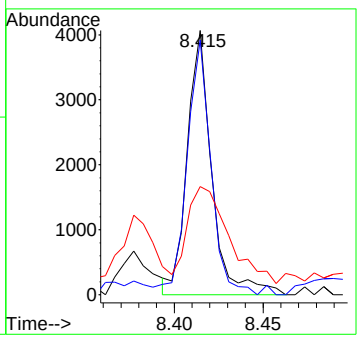


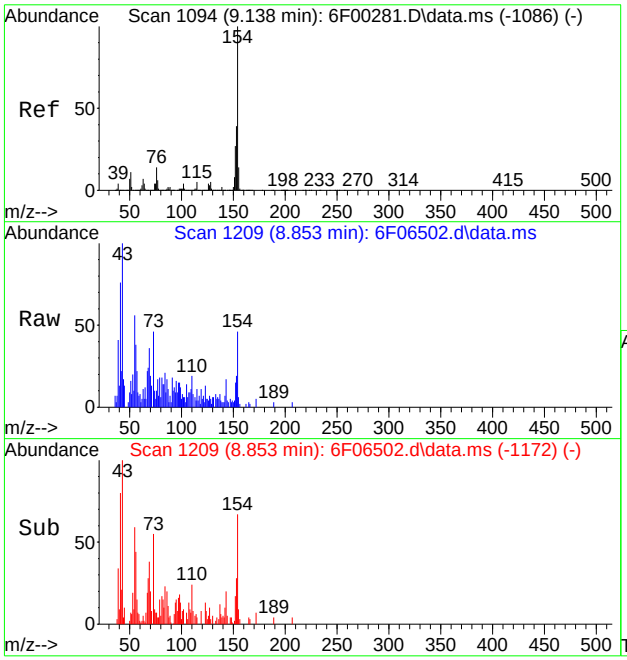


#41
1-Methylnaphthalene
Concen: 0.16 ppm
RT: 8.415 min Scan# 1127
Delta R.T. -0.000 min
Lab File: 6F06502.d
Acq: 11 Aug 2020 7:52 pm

Tgt Ion:142 Resp: 3921

Ion	Ratio	Lower	Upper
142	100		
141	97.5	56.8	116.8
115	32.6	4.7	64.7

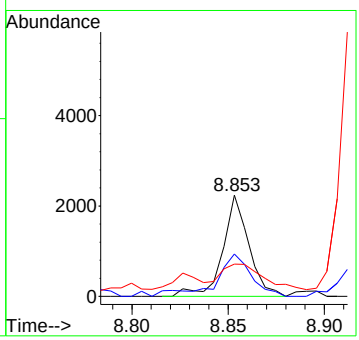


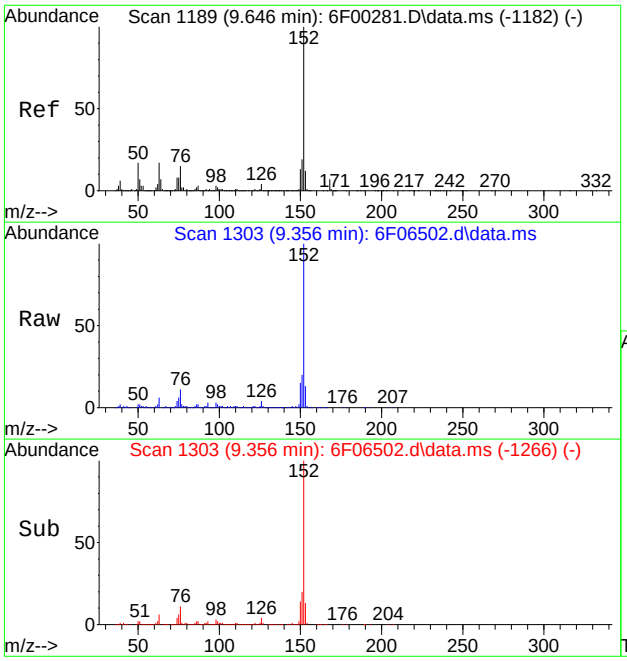


#48
1,1'-Biphenyl
Concen: 0.07 ppm
RT: 8.853 min Scan# 1209
Delta R.T. -0.000 min
Lab File: 6F06502.d
Acq: 11 Aug 2020 7:52 pm

Tgt Ion:154 Resp: 2110

Ion	Ratio	Lower	Upper
154	100		
153	39.3	8.7	68.7
152	21.2	0.0	56.7

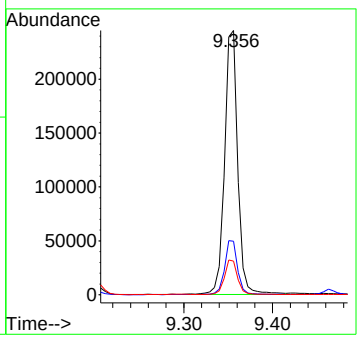


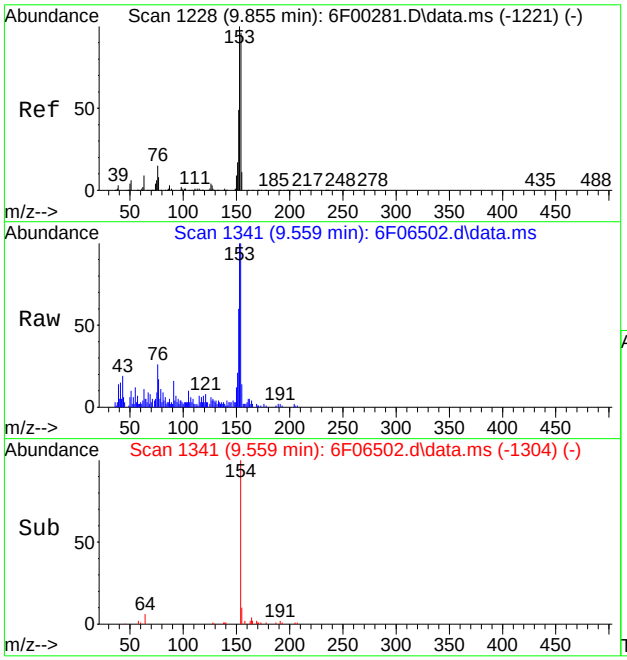


#52
Acenaphthylene
Concen: 7.15 ppm
RT: 9.356 min Scan# 1303
Delta R.T. -0.000 min
Lab File: 6F06502.d
Acq: 11 Aug 2020 7:52 pm

Tgt Ion:152 Resp: 251275

Ion	Ratio	Lower	Upper
152	100		
151	20.2	0.0	48.8
153	12.7	0.0	42.3

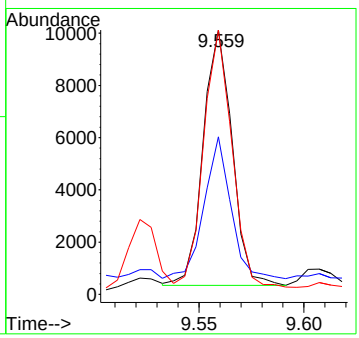


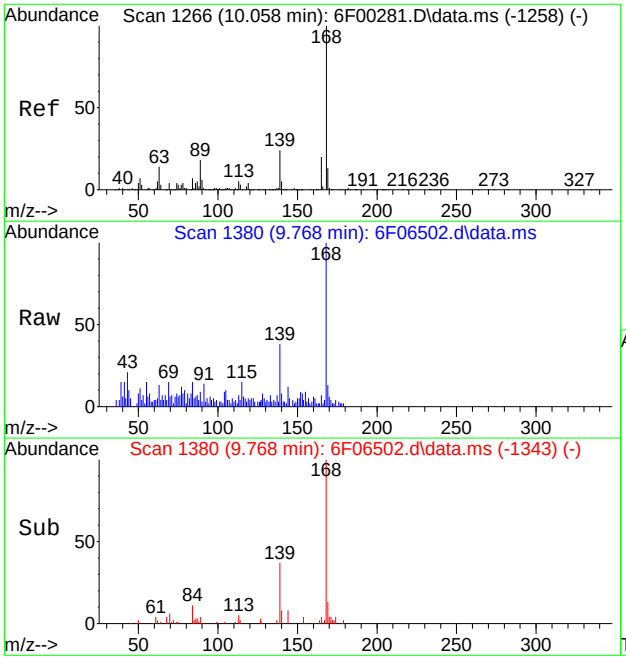


#57
Acenaphthene
Concen: 0.40 ppm
RT: 9.559 min Scan# 1341
Delta R.T. -0.000 min
Lab File: 6F06502.d
Acq: 11 Aug 2020 7:52 pm

Tgt Ion:153 Resp: 9353

Ion	Ratio	Lower	Upper
153	100		
152	55.8	19.4	79.4
154	97.9	65.6	125.6

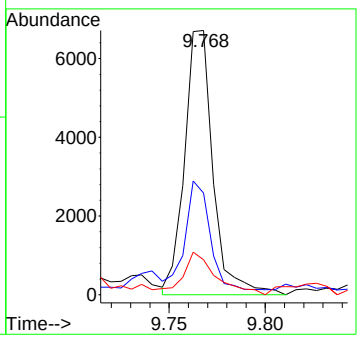


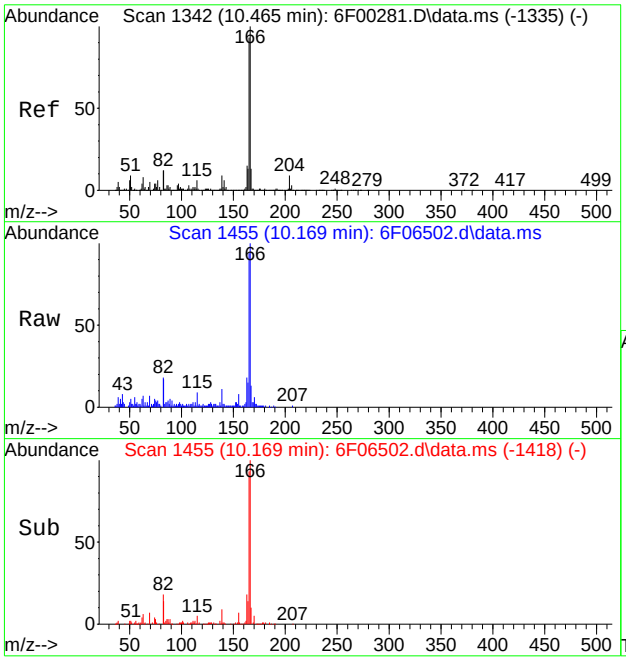


#60
Dibenzofuran
Concen: 0.21 ppm
RT: 9.768 min Scan# 1380
Delta R.T. -0.000 min
Lab File: 6F06502.d
Acq: 11 Aug 2020 7:52 pm

Tgt Ion:168 Resp: 6923

Ion	Ratio	Lower	Upper
168	100		
139	34.4	0.0	53.6
169	10.7	0.0	42.6

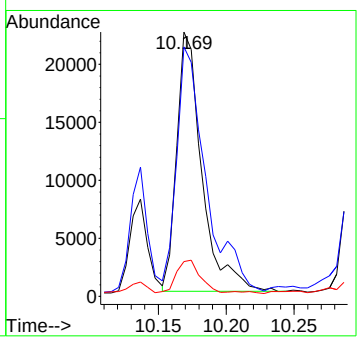


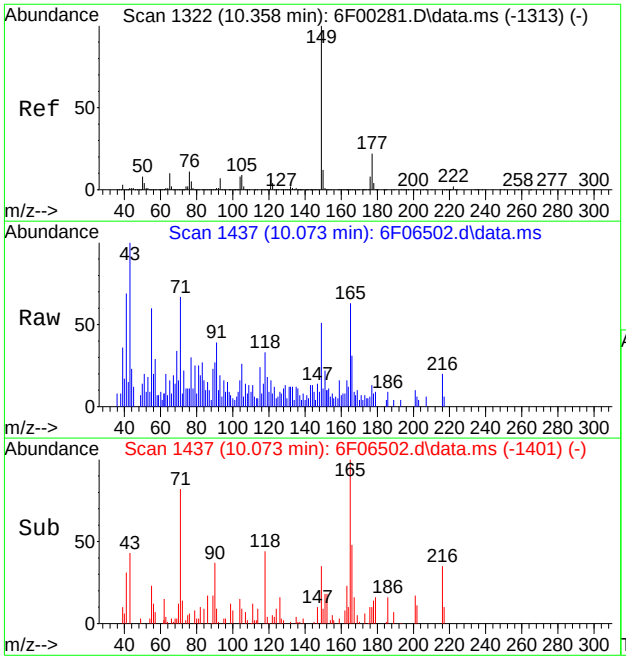


#65
Fluorene
Concen: 1.11 ppm
RT: 10.169 min Scan# 1455
Delta R.T. -0.000 min
Lab File: 6F06502.d
Acq: 11 Aug 2020 7:52 pm

Tgt Ion:166 Resp: 28960

Ion	Ratio	Lower	Upper
166	100		
165	92.3	62.6	122.6
167	11.6	0.0	43.1

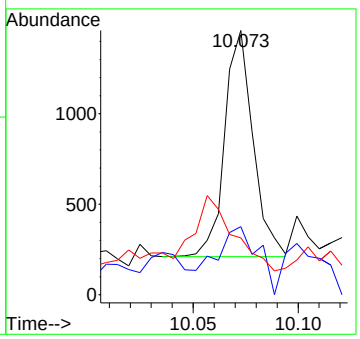


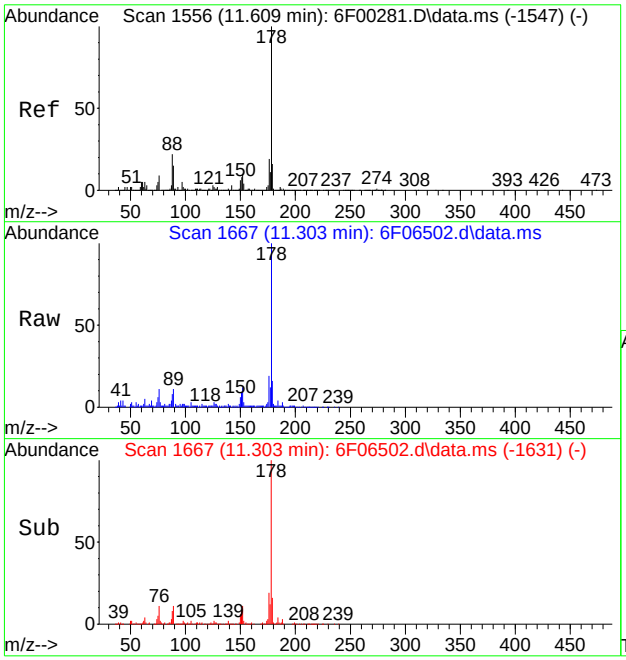


#67
Diethylphthalate
Concen: 0.04 ppm
RT: 10.073 min Scan# 1437
Delta R.T. -0.006 min
Lab File: 6F06502.d
Acq: 11 Aug 2020 7:52 pm

Tgt Ion:149 Resp: 1176

Ion	Ratio	Lower	Upper
149	100		
177	11.6	0.0	52.2
150	10.1	0.0	41.7

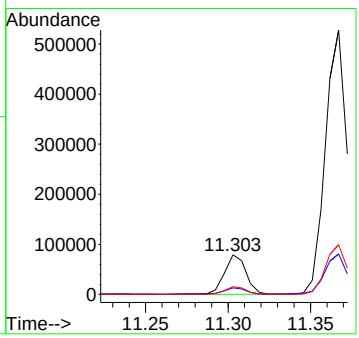


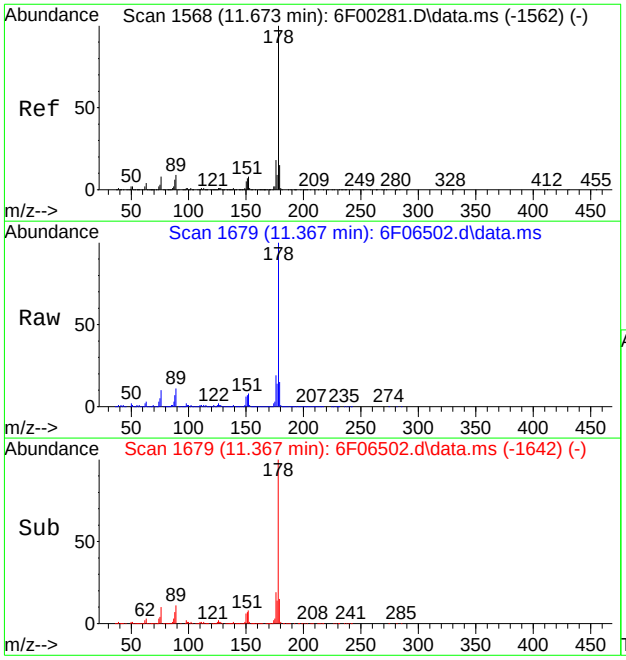


#84
Phenanthrene
Concen: 1.91 ppm
RT: 11.303 min Scan# 1667
Delta R.T. -0.006 min
Lab File: 6F06502.d
Acq: 11 Aug 2020 7:52 pm

Tgt Ion:178 Resp: 71817

Ion	Ratio	Lower	Upper
178	100		
179	15.8	0.0	46.0
176	18.9	0.0	49.0

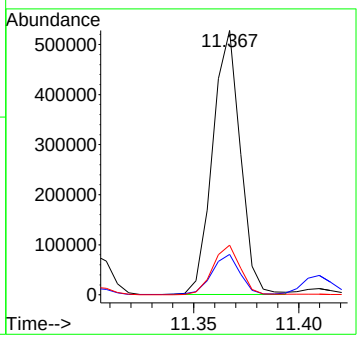


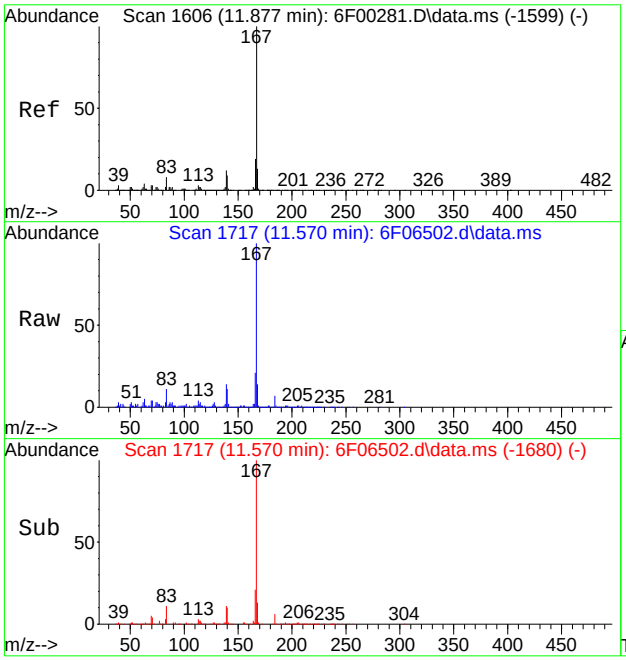


#85
Anthracene
Concen: 12.70 ppm
RT: 11.367 min Scan# 1679
Delta R.T. -0.000 min
Lab File: 6F06502.d
Acq: 11 Aug 2020 7:52 pm

Tgt Ion:178 Resp: 486074

Ion	Ratio	Lower	Upper
178	100		
179	15.0	0.0	45.4
176	18.8	0.0	47.7

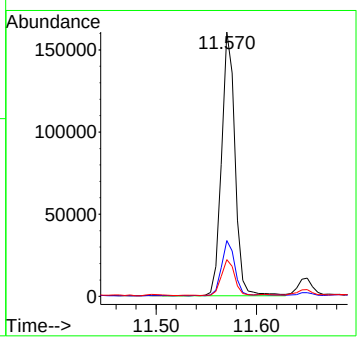


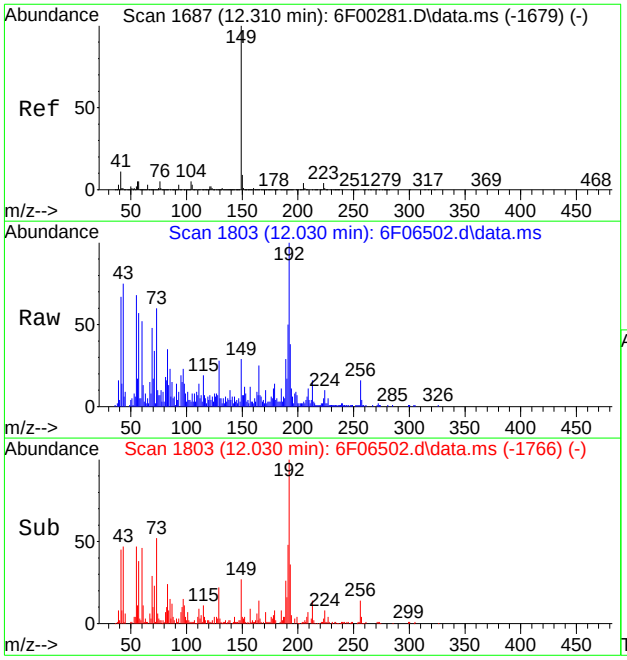


#87
Carbazole
Concen: 4.32 ppm
RT: 11.570 min Scan# 1717
Delta R.T. -0.000 min
Lab File: 6F06502.d
Acq: 11 Aug 2020 7:52 pm

Tgt Ion:167 Resp: 149173

Ion	Ratio	Lower	Upper
167	100		
166	20.8	0.0	49.2
139	13.4	0.0	42.3

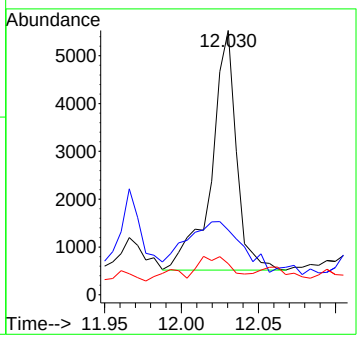


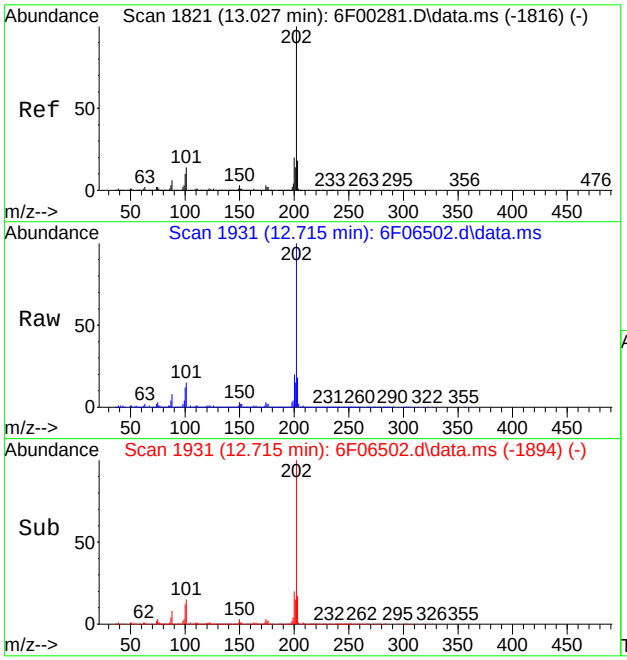


#89
Di-n-butylphthalate
Concen: 0.13 ppm
RT: 12.030 min Scan# 1803
Delta R.T. -0.000 min
Lab File: 6F06502.d
Acq: 11 Aug 2020 7:52 pm

Tgt Ion:149 Resp: 5627

Ion	Ratio	Lower	Upper
149	100		
150	14.4	0.0	38.7
104	4.3	0.0	35.2

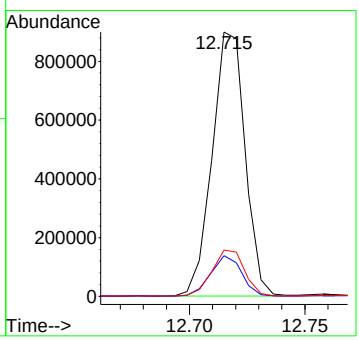


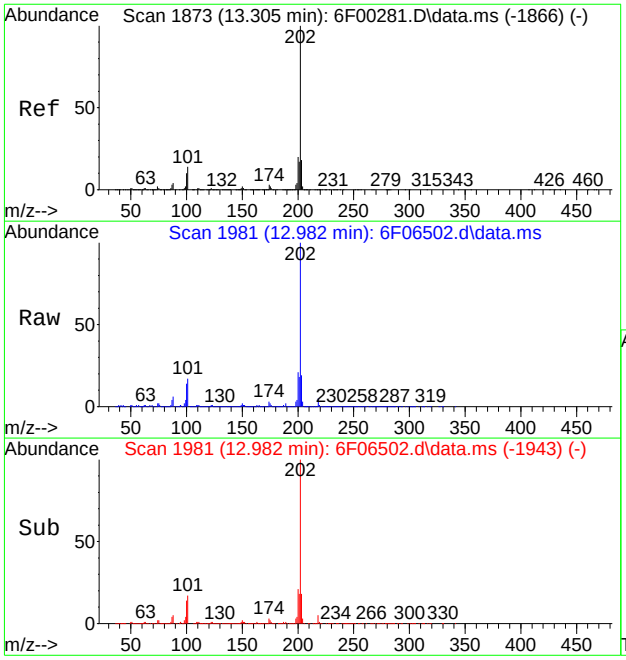


#91
Fluoranthene
Concen: 22.50 ppm
RT: 12.715 min Scan# 1931
Delta R.T. -0.000 min
Lab File: 6F06502.d
Acq: 11 Aug 2020 7:52 pm

Tgt Ion:202 Resp: 892605

Ion	Ratio	Lower	Upper
202	100		
101	15.3	0.0	43.6
203	17.4	0.0	47.7

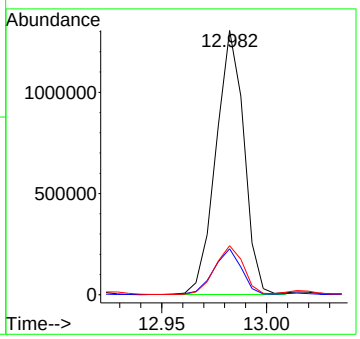


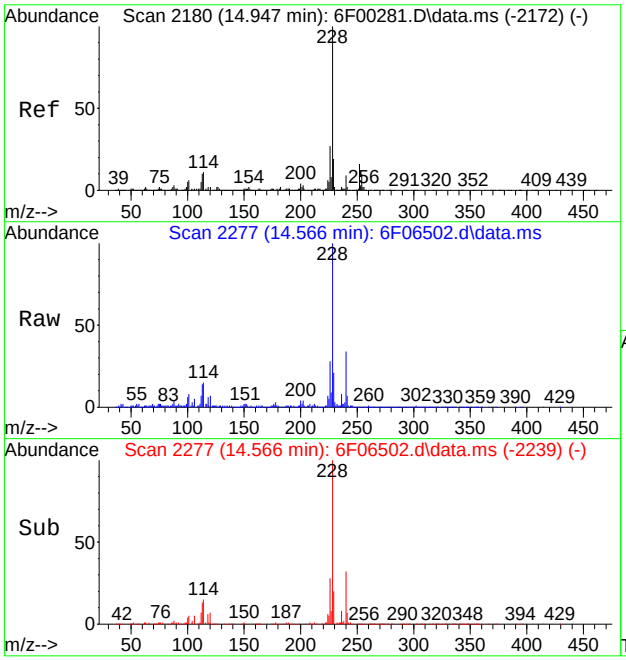


#94
Pyrene
Concen: 30.70 ppm
RT: 12.982 min Scan# 1981
Delta R.T. 0.005 min
Lab File: 6F06502.d
Acq: 11 Aug 2020 7:52 pm

Tgt Ion:202 Resp: 1212532

Ion	Ratio	Lower	Upper
202	100		
101	17.2	0.0	43.8
203	18.1	0.0	47.8

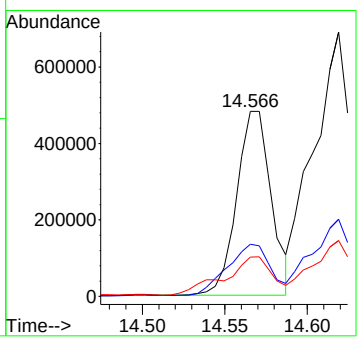


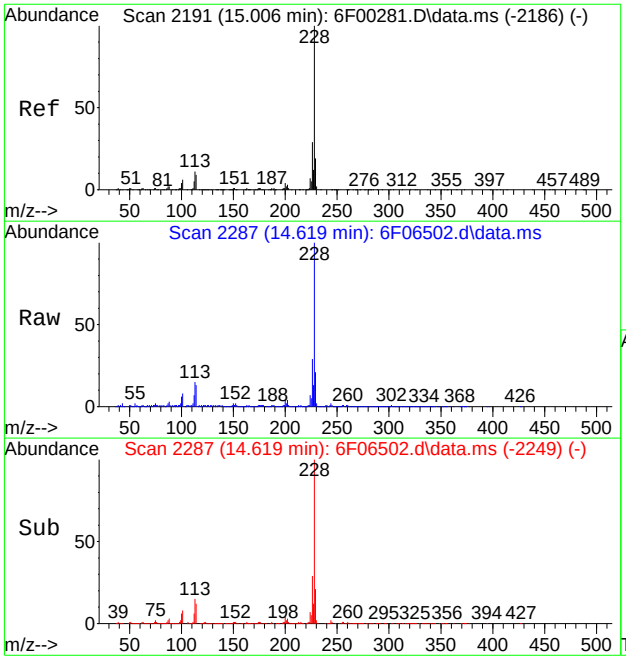


#99
Benzo[a]anthracene
Concen: 19.06 ppm
RT: 14.566 min Scan# 2277
Delta R.T. 0.005 min
Lab File: 6F06502.d
Acq: 11 Aug 2020 7:52 pm

Tgt Ion:228 Resp: 704265

Ion	Ratio	Lower	Upper
228	100		
226	27.8	0.0	56.6
229	20.2	0.0	48.9

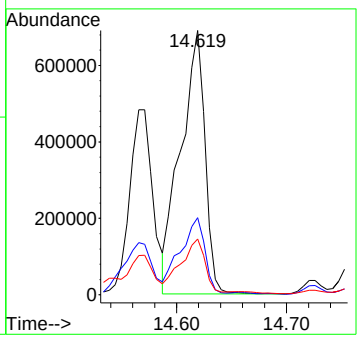


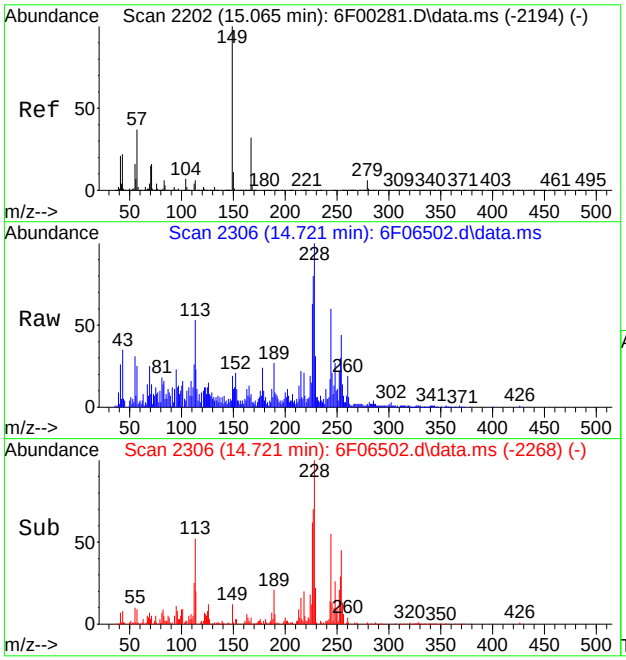


#100
Chrysene
Concen: 29.64 ppm
RT: 14.619 min Scan# 2287
Delta R.T. 0.005 min
Lab File: 6F06502.d
Acq: 11 Aug 2020 7:52 pm

Tgt Ion:228 Resp: 1062436

Ion	Ratio	Lower	Upper
228	100		
226	28.9	0.0	58.9
229	20.5	0.0	48.5

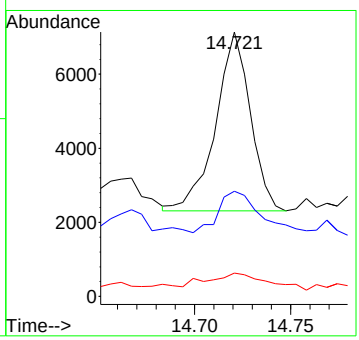


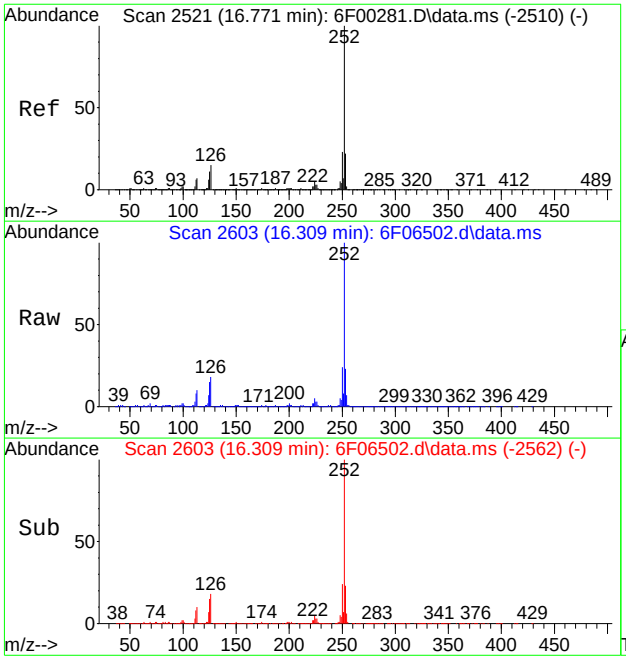


#101
bis(2-Ethylhexyl)phthalate
Concen: 0.23 ppm
RT: 14.721 min Scan# 2306
Delta R.T. 0.005 min
Lab File: 6F06502.d
Acq: 11 Aug 2020 7:52 pm

Tgt Ion:149 Resp: 6054

Ion	Ratio	Lower	Upper
149	100		
167	20.2	1.7	61.7
279	6.5	0.0	35.7

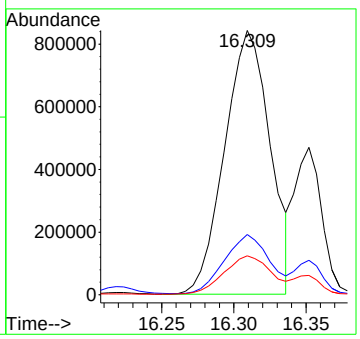


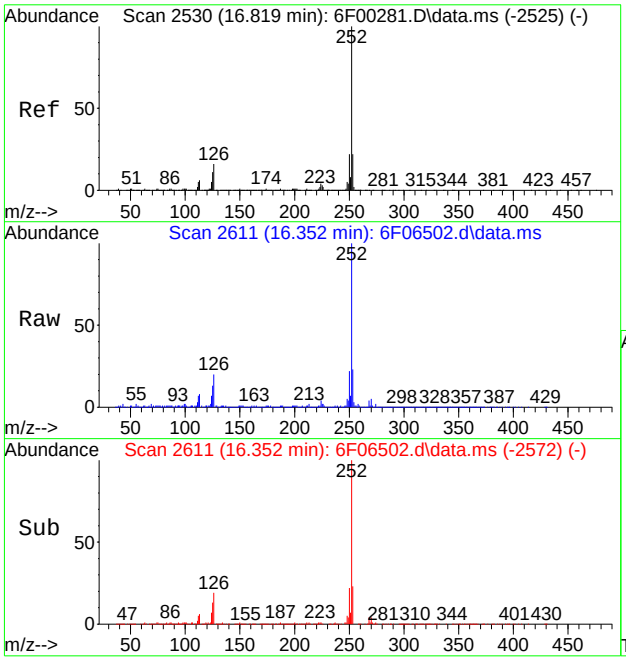


#104
Benzo[b]fluoranthene
Concen: 50.65 ppm
RT: 16.309 min Scan# 2603
Delta R.T. 0.021 min
Lab File: 6F06502.d
Acq: 11 Aug 2020 7:52 pm

Tgt Ion:252 Resp: 1843622

Ion	Ratio	Lower	Upper
252	100		
253	22.5	0.0	51.9
125	14.3	0.0	41.3

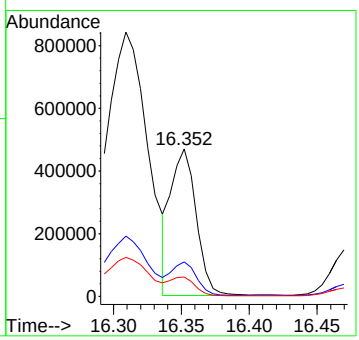


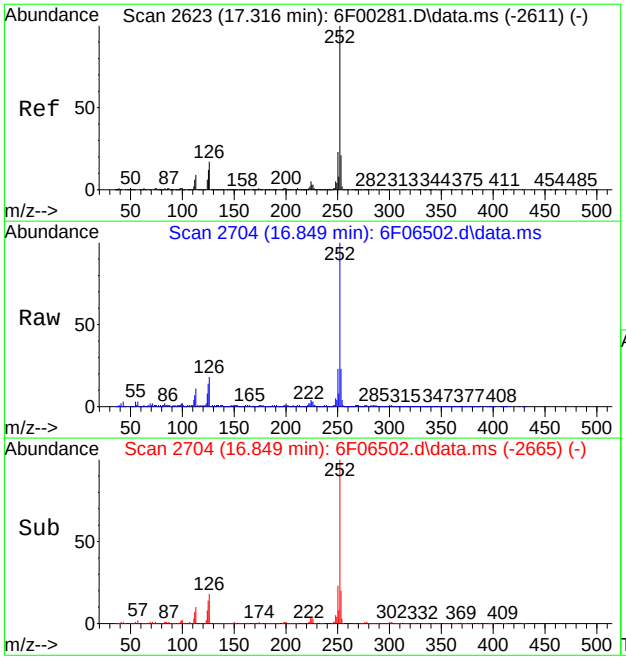


#105
Benzo[k]fluoranthene
Concen: 16.17 ppm
RT: 16.352 min Scan# 2611
Delta R.T. 0.010 min
Lab File: 6F06502.d
Acq: 11 Aug 2020 7:52 pm

Tgt Ion:252 Resp: 612095

Ion	Ratio	Lower	Upper
252	100		
253	23.1	0.0	51.7
125	11.5	0.0	40.7

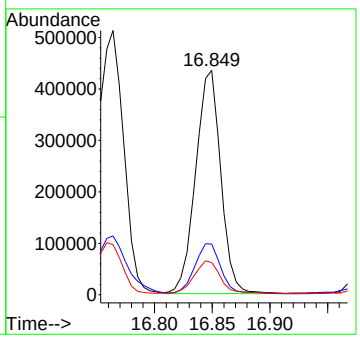


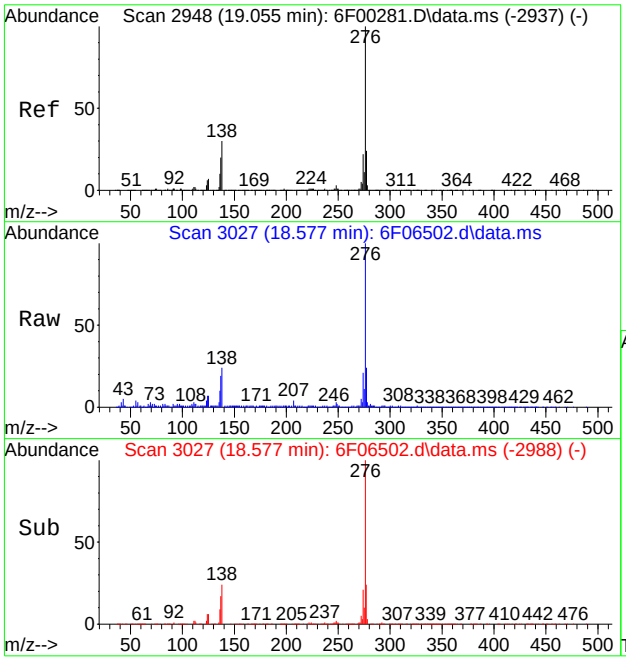


#106
Benzo[a]pyrene
Concen: 19.52 ppm
RT: 16.849 min Scan# 2704
Delta R.T. 0.010 min
Lab File: 6F06502.d
Acq: 11 Aug 2020 7:52 pm

Tgt Ion:252 Resp: 659746

Ion	Ratio	Lower	Upper
252	100		
253	22.1	0.0	51.0
125	13.8	0.0	42.0

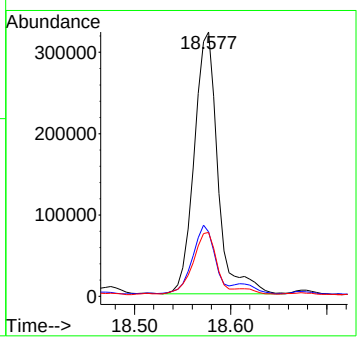


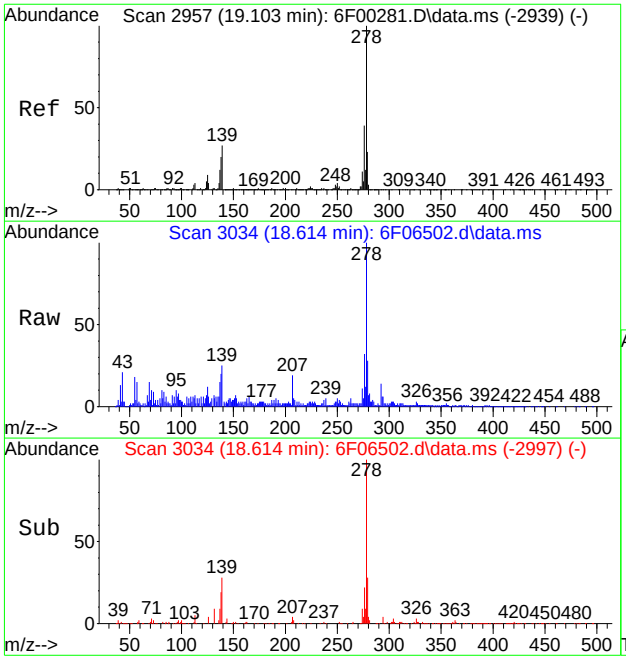


#107
Indeno[1,2,3-cd]pyrene
Concen: 17.50 ppm
RT: 18.577 min Scan# 3027
Delta R.T. 0.010 min
Lab File: 6F06502.d
Acq: 11 Aug 2020 7:52 pm

Tgt Ion:276 Resp: 550815

Ion	Ratio	Lower	Upper
276	100		
138	23.5	0.0	59.6
277	23.5	0.0	54.1

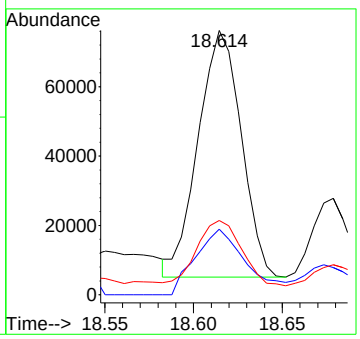


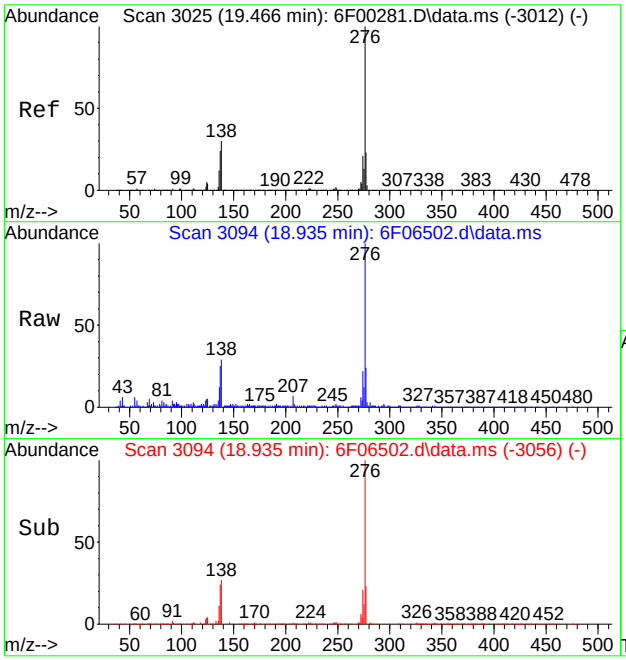


#108
Dibenz[a,h]anthracene
Concen: 3.57 ppm
RT: 18.614 min Scan# 3034
Delta R.T. -0.000 min
Lab File: 6F06502.d
Acq: 11 Aug 2020 7:52 pm

Tgt Ion:278 Resp: 119895

Ion	Ratio	Lower	Upper
278	100		
139	25.0	0.0	56.9
279	26.8	0.0	53.0

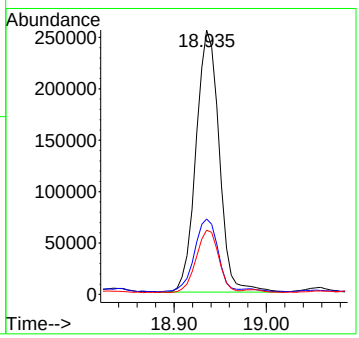




#109
Benzo[g,h,i]perylene
Concen: 13.13 ppm
RT: 18.935 min Scan# 3094
Delta R.T. 0.005 min
Lab File: 6F06502.d
Acq: 11 Aug 2020 7:52 pm

Tgt Ion:276 Resp: 445855

Ion	Ratio	Lower	Upper
276	100		
138	27.7	0.0	59.5
277	23.7	0.0	53.0



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06503.d
Acq On : 11 Aug 2020 8:18 pm
Operator : marthav
Sample : fa77615-9 E Inst : MSBNA10
Misc : op81484,S6F251,30.0,,,1,1,soil
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Results File: 8270D6F072920.RES
Quant Time: Aug 12 06:34:00 2020
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

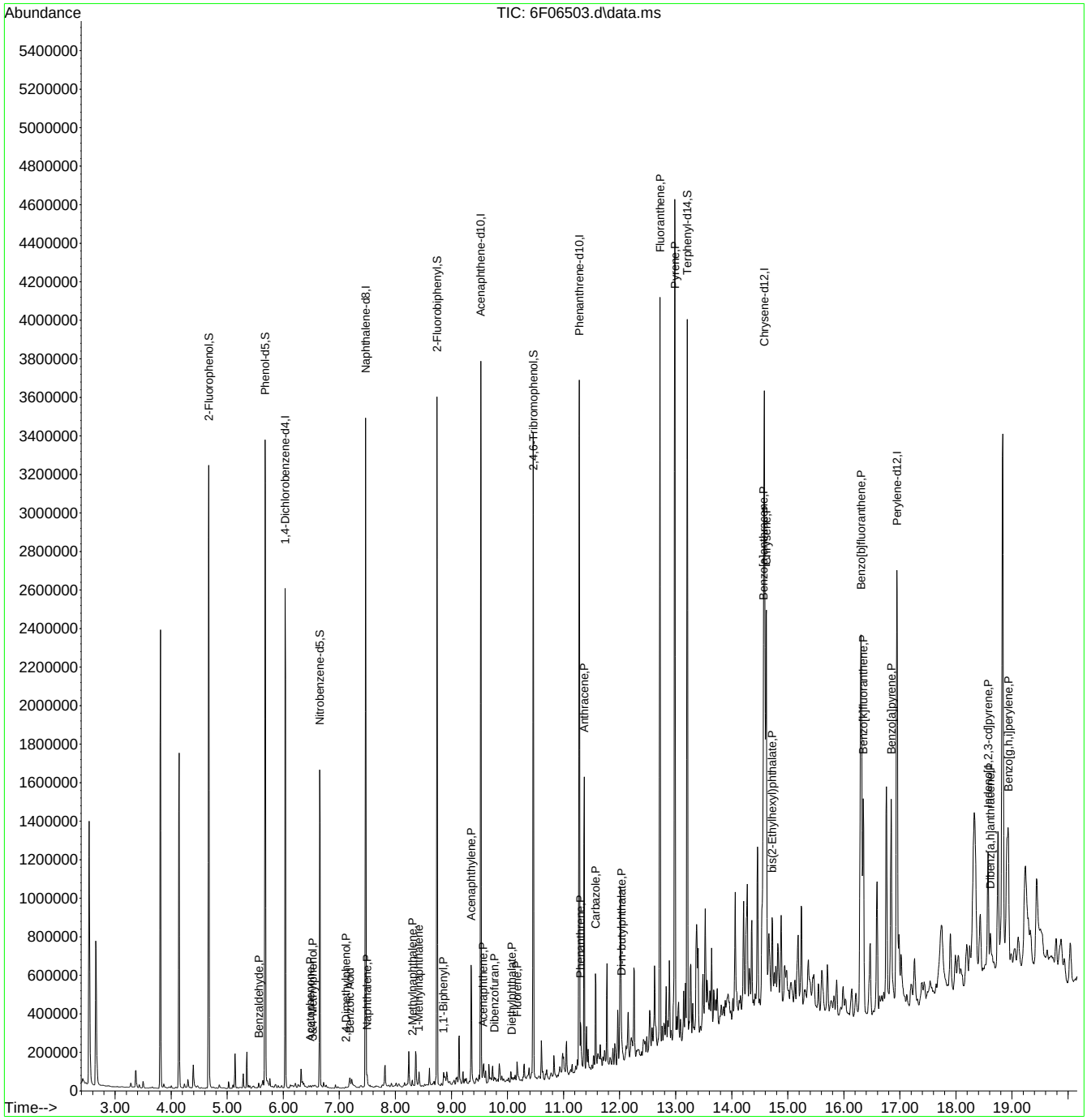
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	6.035	152	371245	40.00	ppm		0.00
22) Naphthalene-d8	7.468	136	1408625	40.00	ppm		0.00
43) Acenaphthene-d10	9.522	164	759203	40.00	ppm		0.00
70) Phenanthrene-d10	11.282	188	1396299	40.00	ppm		0.00
92) Chrysene-d12	14.582	240	1170612	40.00	ppm		0.00
102) Perylene-d12	16.946	264	1155992	40.00	ppm		0.02
System Monitoring Compounds							
7) 2-Fluorophenol	4.671	112	880385	62.76	ppm		0.01
Spiked Amount 100.000	Range 40 - 102		Recovery = 62.76%				
9) Phenol-d5	5.676	99	1170169	70.27	ppm		0.00
Spiked Amount 100.000	Range 41 - 100		Recovery = 70.27%				
23) Nitrobenzene-d5	6.650	82	493412	31.93	ppm		0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 63.86%				
47) 2-Fluorobiphenyl	8.741	172	992732	33.46	ppm		0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 66.92%				
75) 2,4,6-Tribromophenol	10.463	330	371247	79.00	ppm		0.00
Spiked Amount 100.000	Range 42 - 108		Recovery = 79.00%				
95) Terphenyl-d14	13.207	244	1200952	36.50	ppm		0.00
Spiked Amount 50.000	Range 45 - 119		Recovery = 73.00%				
Target Compounds							Qvalue
5) Benzaldehyde	5.564	106	7264	0.64	ppm		92
18) Acetophenone	6.484	105	3732	0.19	ppm		86
21) 3&4-Methylphenol	6.521	108	1947	0.14	ppm		84
27) 2,4-Dimethylphenol	7.115	107	1763	0.14	ppm	#	73
30) Benzoic Acid	7.184	105	16799	1.84	ppm		99
34) Naphthalene	7.495	128	10766	0.27	ppm		66
40) 2-Methylnaphthalene	8.302	141	7058	0.30	ppm		97
41) 1-Methylnaphthalene	8.415	142	5971	0.23	ppm		98
48) 1,1'-Biphenyl	8.853	154	2652	0.08	ppm		97
52) Acenaphthylene	9.351	152	273414	7.21	ppm		98
57) Acenaphthene	9.559	153	12206	0.48	ppm		98
60) Dibenzofuran	9.768	168	9530	0.27	ppm		88
65) Fluorene	10.169	166	31759	1.13	ppm		97
67) Diethylphthalate	10.073	149	1135	0.04	ppm		89
84) Phenanthrene	11.303	178	89570	2.14	ppm		100
85) Anthracene	11.367	178	556610	13.10	ppm		98
87) Carbazole	11.570	167	185624	4.85	ppm		97
89) Di-n-butylphthalate	12.030	149	6481	0.13	ppm		77
91) Fluoranthene	12.720	202	1524393	34.63	ppm		99
94) Pyrene	12.988	202	1807892	43.12	ppm		97
99) Benzo[a]anthracene	14.566	228	696360	17.75	ppm		98
100) Chrysene	14.619	228	1067872	28.06	ppm		97
101) bis(2-Ethylhexyl)phtha...	14.721	149	7121	0.25	ppm		95
104) Benzo[b]fluoranthene	16.304	252	1482039	39.94	ppm		97
105) Benzo[k]fluoranthene	16.347	252	522605	13.54	ppm		97
106) Benzo[a]pyrene	16.844	252	543462	15.77	ppm		95
107) Indeno[1,2,3-cd]pyrene	18.572	276	397622	12.39	ppm		96
108) Dibenz[a,h]anthracene	18.615	278	83800	2.45	ppm		92
109) Benzo[g,h,i]perylene	18.935	276	322283	9.31	ppm		98

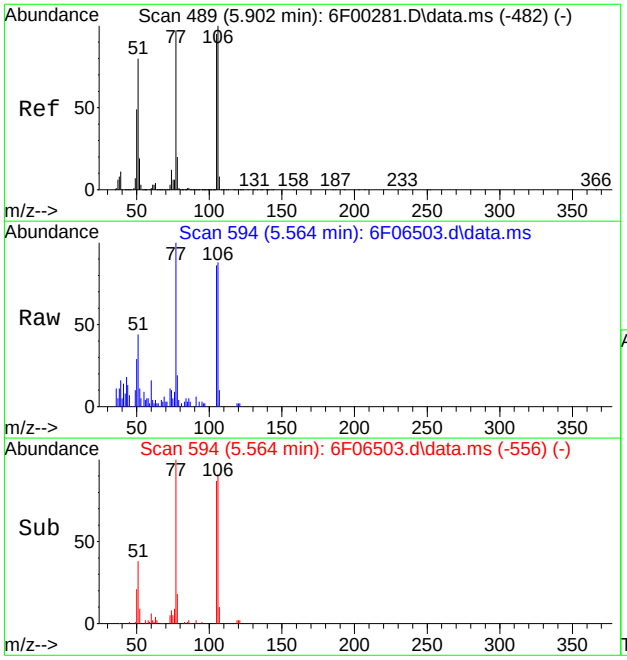
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06503.d
Acq On : 11 Aug 2020 8:18 pm
Operator : marthav
Sample : fa77615-9 E Inst : MSBNA10
Misc : op81484,S6F251,30.0,,,1,1,soil
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Results File: 8270D6F072920.RES
Quant Time: Aug 12 06:34:00 2020
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

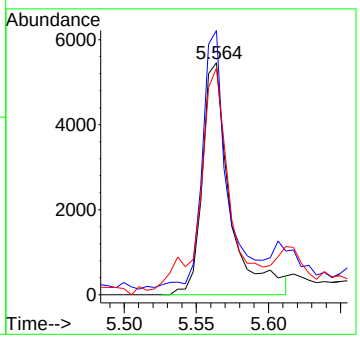


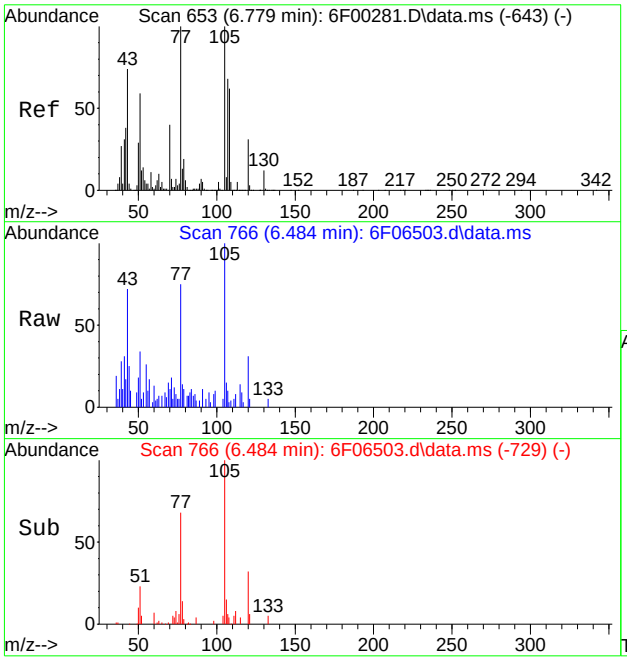


#5
Benzaldehyde
Concen: 0.64 ppm
RT: 5.564 min Scan# 594
Delta R.T. 0.005 min
Lab File: 6F06503.d
Acq: 11 Aug 2020 8:18 pm

Tgt Ion:106 Resp: 7264

Ion	Ratio	Lower	Upper
106	100		
77	106.6	67.1	127.1
105	88.2	65.1	125.1

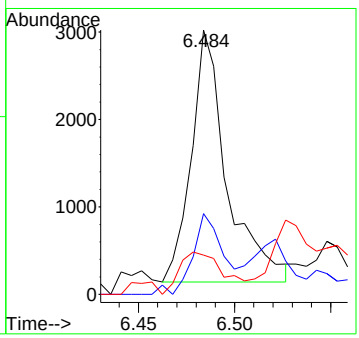


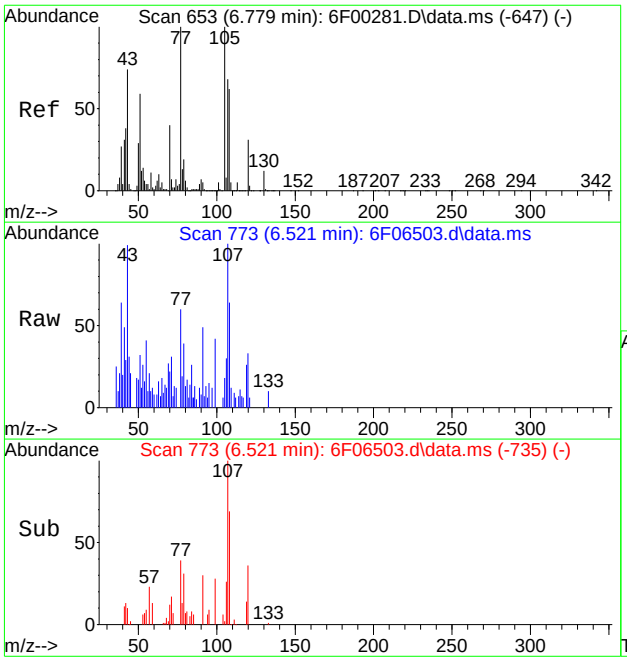


#18
Acetophenone
Concen: 0.19 ppm
RT: 6.484 min Scan# 766
Delta R.T. -0.000 min
Lab File: 6F06503.d
Acq: 11 Aug 2020 8:18 pm

Tgt Ion:105 Resp: 3732

Ion	Ratio	Lower	Upper
105	100		
120	24.4	0.7	60.7
106	0.9	0.0	38.4

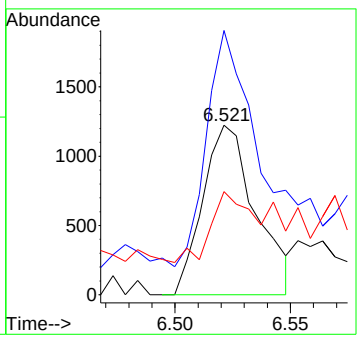


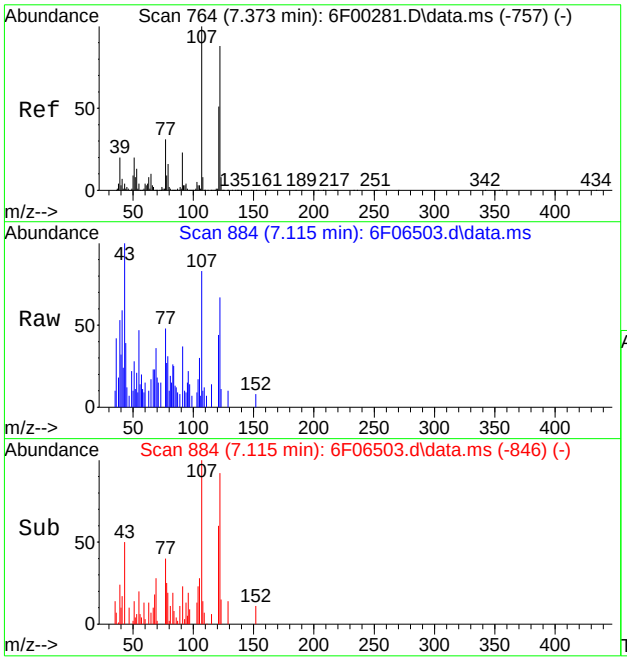


#21
3&4-Methylphenol
Concen: 0.14 ppm
RT: 6.521 min Scan# 773
Delta R.T. 0.005 min
Lab File: 6F06503.d
Acq: 11 Aug 2020 8:18 pm

Tgt Ion:108 Resp: 1947

Ion	Ratio	Lower	Upper
108	100		
107	129.1	80.3	140.3
79	35.8	0.2	60.2

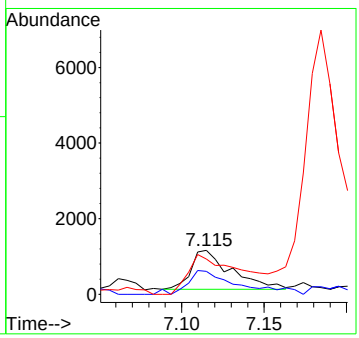


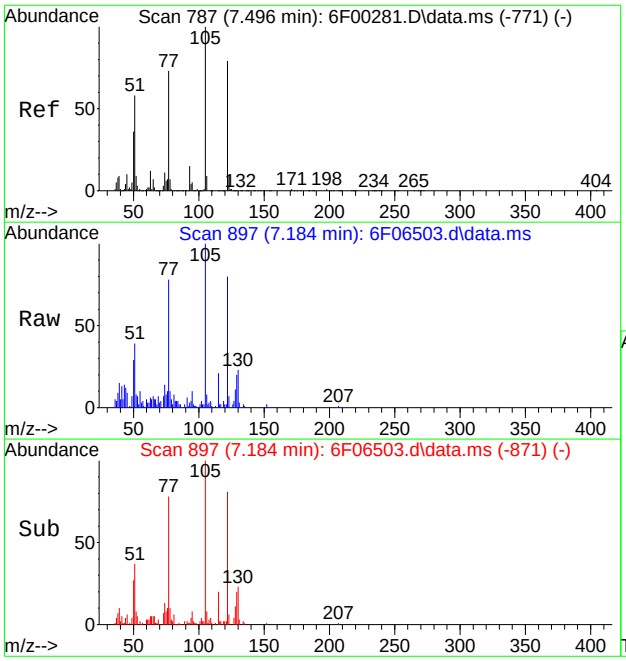


#27
2,4-Dimethylphenol
Concen: 0.14 ppm
RT: 7.115 min Scan# 884
Delta R.T. 0.005 min
Lab File: 6F06503.d
Acq: 11 Aug 2020 8:18 pm

Tgt Ion:107 Resp: 1763

Ion	Ratio	Lower	Upper
107	100		
121	39.8	20.5	80.5
122	56.9	58.5	118.5#

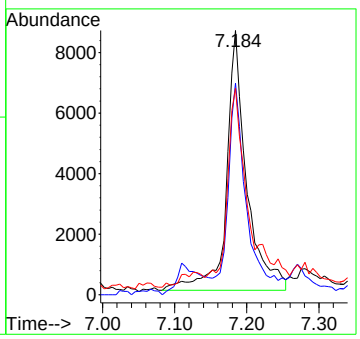


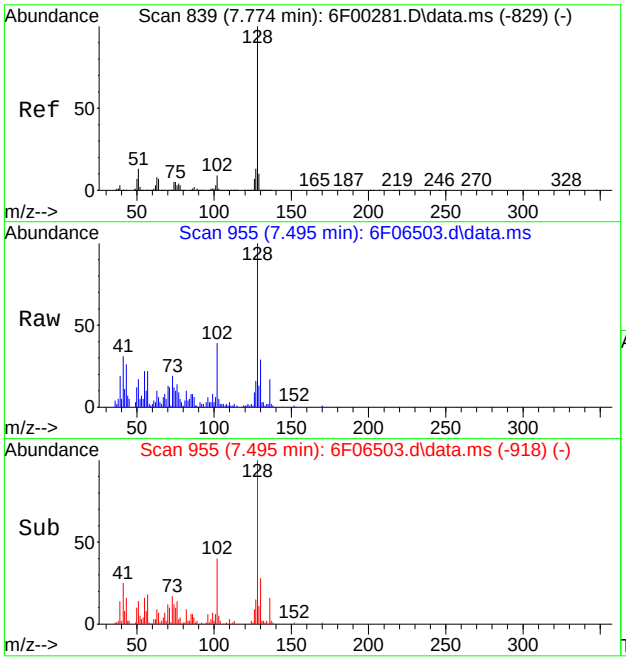


#30
Benzoic Acid
Concen: 1.84 ppm
RT: 7.184 min Scan# 897
Delta R.T. -0.059 min
Lab File: 6F06503.d
Acq: 11 Aug 2020 8:18 pm

Tgt Ion:105 Resp: 16799

Ion	Ratio	Lower	Upper
105	100		
122	80.1	49.5	109.5
77	74.7	43.0	103.0

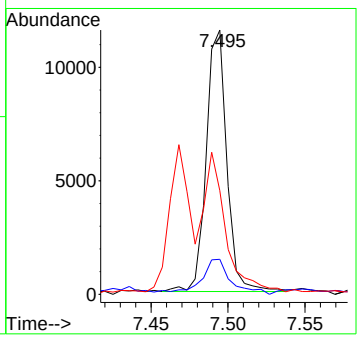


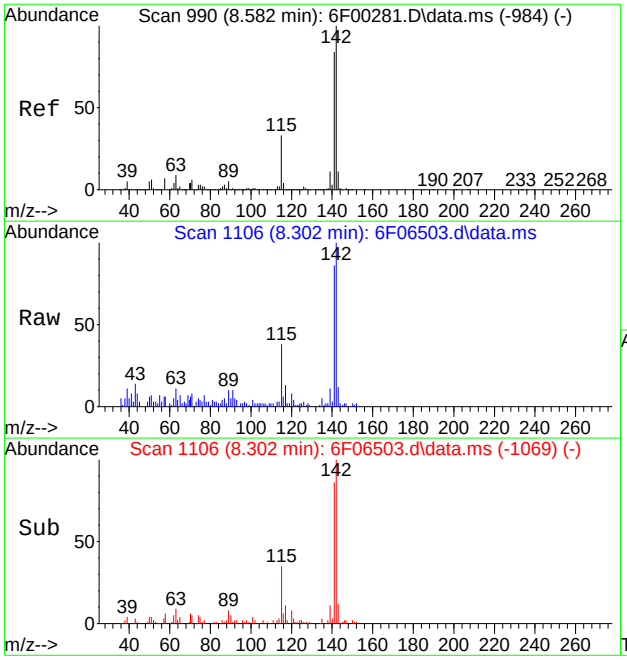


#34
Naphthalene
Concen: 0.27 ppm
RT: 7.495 min Scan# 955
Delta R.T. -0.000 min
Lab File: 6F06503.d
Acq: 11 Aug 2020 8:18 pm

Tgt Ion:128 Resp: 10766

Ion	Ratio	Lower	Upper
128	100		
129	11.8	0.0	40.4
102	34.0	0.0	39.2

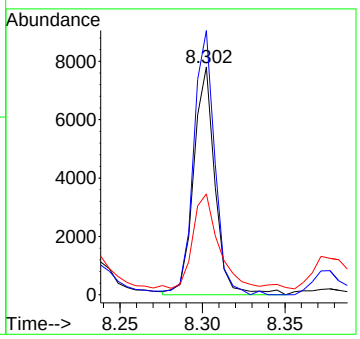


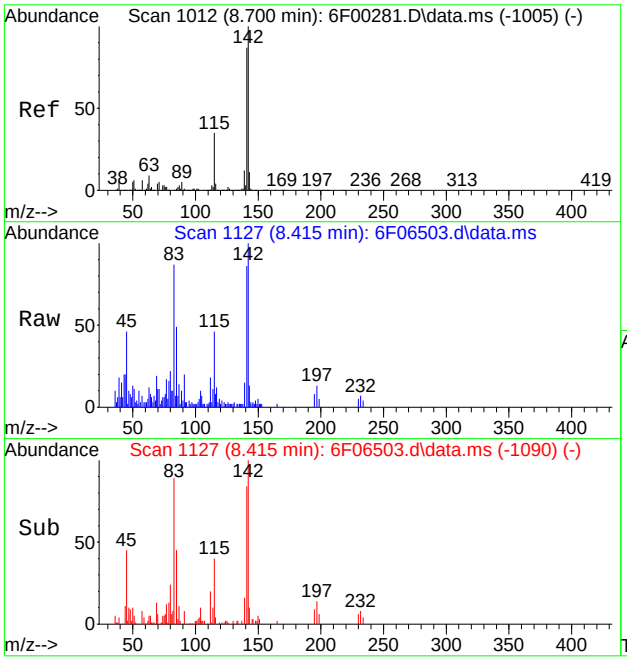


#40
2-Methylnaphthalene
Concen: 0.30 ppm
RT: 8.302 min Scan# 1106
Delta R.T. -0.000 min
Lab File: 6F06503.d
Acq: 11 Aug 2020 8:18 pm

Tgt Ion:141 Resp: 7058

Ion	Ratio	Lower	Upper
141	100		
142	115.2	88.9	148.9
115	40.9	9.7	69.7

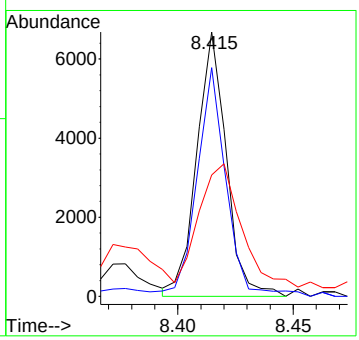


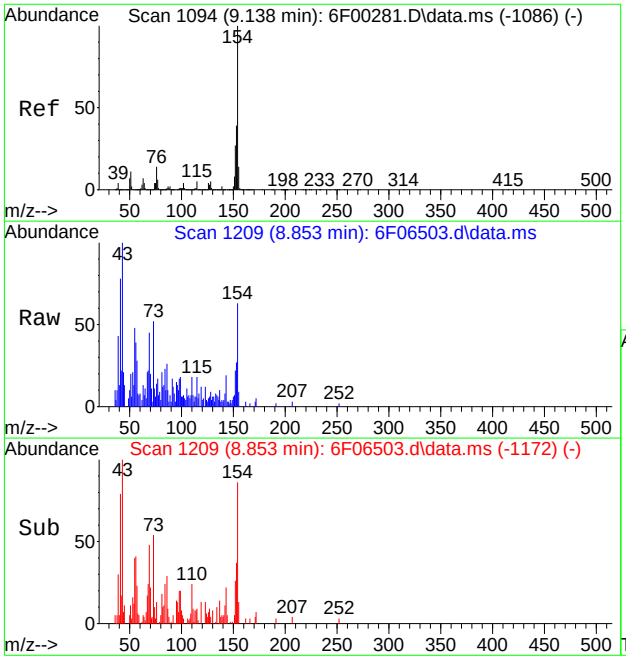


#41
1-Methylnaphthalene
Concen: 0.23 ppm
RT: 8.415 min Scan# 1127
Delta R.T. -0.000 min
Lab File: 6F06503.d
Acq: 11 Aug 2020 8:18 pm

Tgt Ion:142 Resp: 5971

Ion	Ratio	Lower	Upper
142	100		
141	85.7	56.8	116.8
115	38.1	4.7	64.7

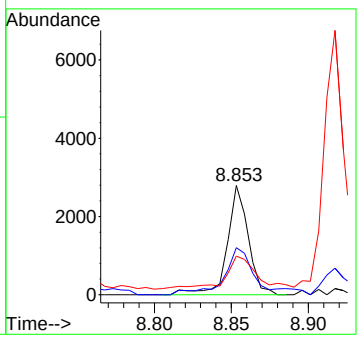


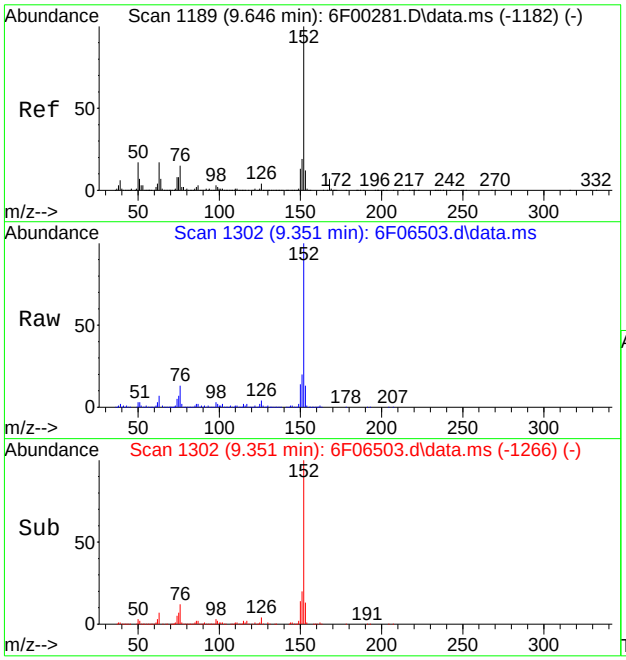


#48
1,1'-Biphenyl
Concen: 0.08 ppm
RT: 8.853 min Scan# 1209
Delta R.T. -0.000 min
Lab File: 6F06503.d
Acq: 11 Aug 2020 8:18 pm

Tgt Ion:154 Resp: 2652

Ion	Ratio	Lower	Upper
154	100		
153	40.3	8.7	68.7
152	27.9	0.0	56.7

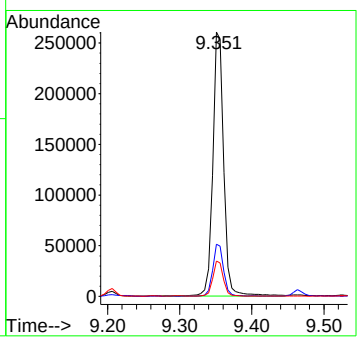


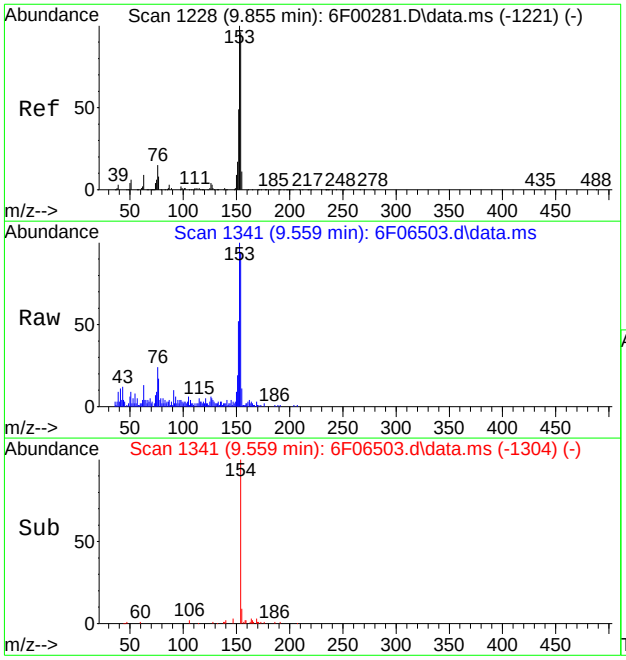


#52
Acenaphthylene
Concen: 7.21 ppm
RT: 9.351 min Scan# 1302
Delta R.T. -0.006 min
Lab File: 6F06503.d
Acq: 11 Aug 2020 8:18 pm

Tgt Ion:152 Resp: 273414

Ion	Ratio	Lower	Upper
152	100		
151	19.6	0.0	48.8
153	13.3	0.0	42.3

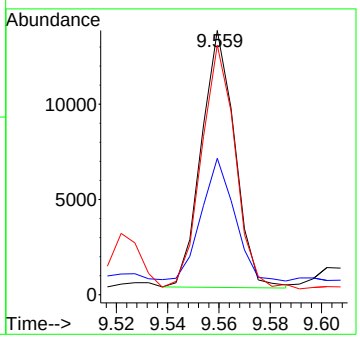


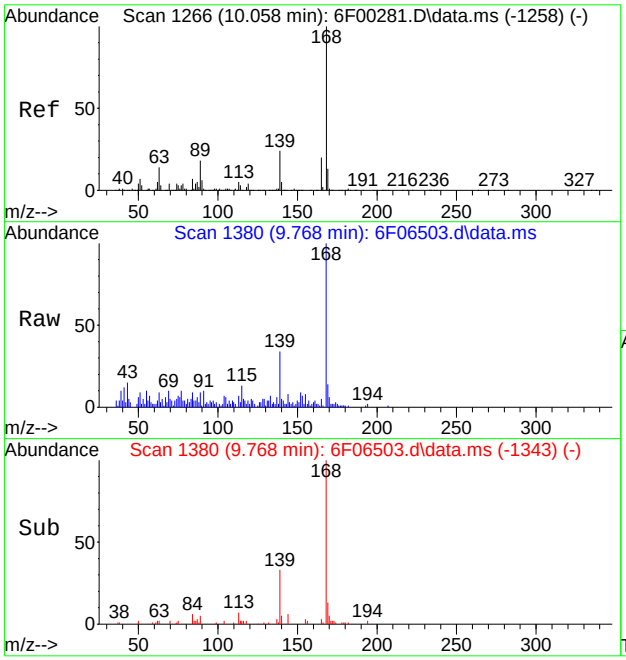


#57
Acenaphthene
Concen: 0.48 ppm
RT: 9.559 min Scan# 1341
Delta R.T. -0.000 min
Lab File: 6F06503.d
Acq: 11 Aug 2020 8:18 pm

Tgt Ion:153 Resp: 12206

Ion	Ratio	Lower	Upper
153	100		
152	47.8	19.4	79.4
154	94.2	65.6	125.6

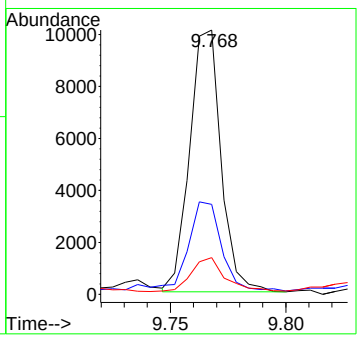


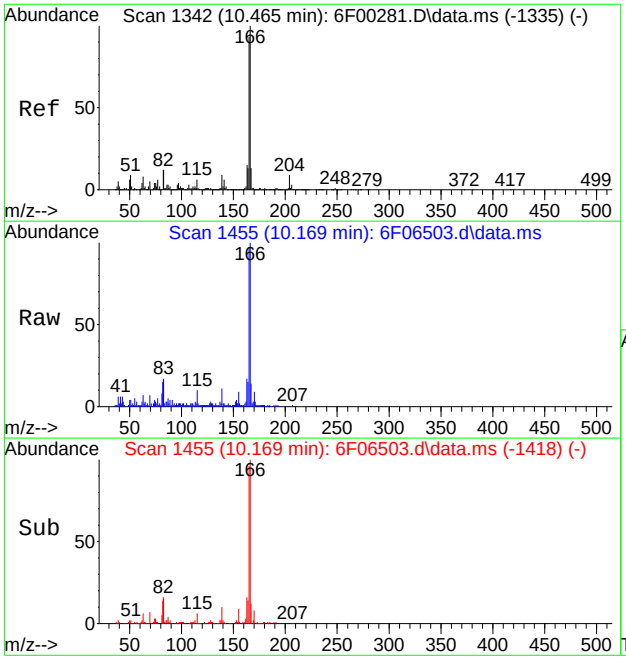


#60
Dibenzofuran
Concen: 0.27 ppm
RT: 9.768 min Scan# 1380
Delta R.T. -0.000 min
Lab File: 6F06503.d
Acq: 11 Aug 2020 8:18 pm

Tgt Ion:168 Resp: 9530

Ion	Ratio	Lower	Upper
168	100		
139	32.3	0.0	53.6
169	12.8	0.0	42.6

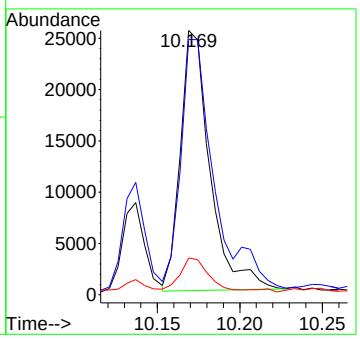


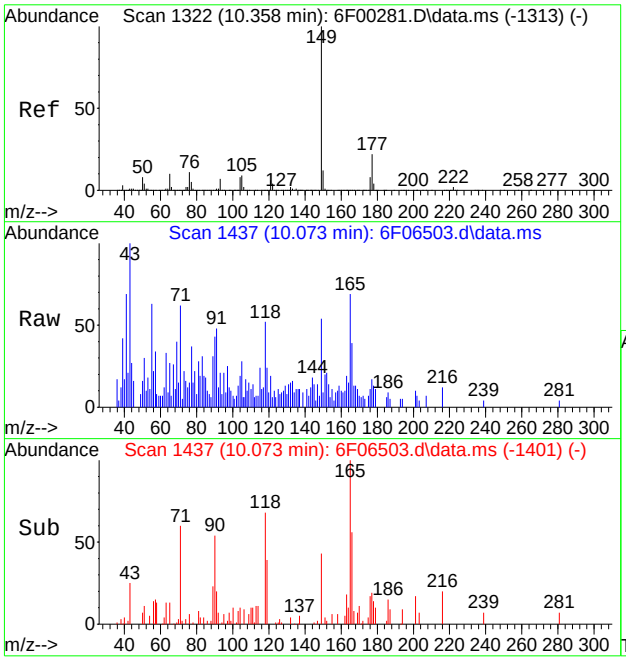


#65
Fluorene
Concen: 1.13 ppm
RT: 10.169 min Scan# 1455
Delta R.T. -0.000 min
Lab File: 6F06503.d
Acq: 11 Aug 2020 8:18 pm

Tgt Ion:166 Resp: 31759

Ion	Ratio	Lower	Upper
166	100		
165	95.5	62.6	122.6
167	12.3	0.0	43.1

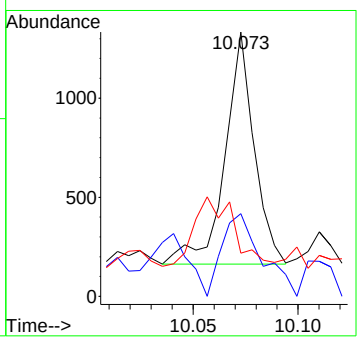


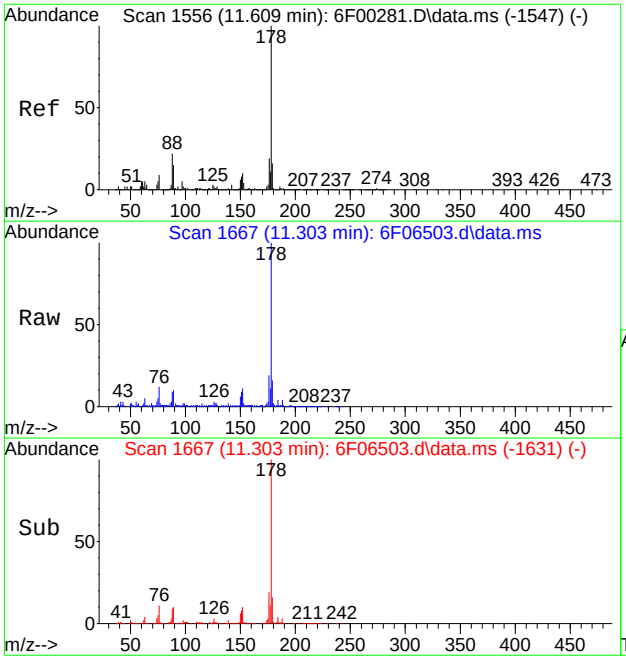


#67
Diethylphthalate
Concen: 0.04 ppm
RT: 10.073 min Scan# 1437
Delta R.T. -0.006 min
Lab File: 6F06503.d
Acq: 11 Aug 2020 8:18 pm

Tgt Ion:149 Resp: 1135

Ion	Ratio	Lower	Upper
149	100		
177	19.3	0.0	52.2
150	4.2	0.0	41.7

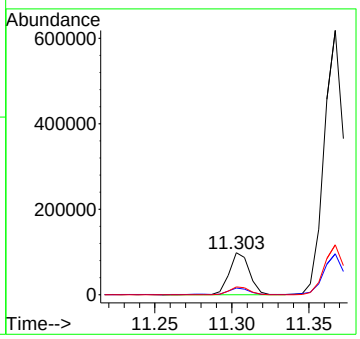


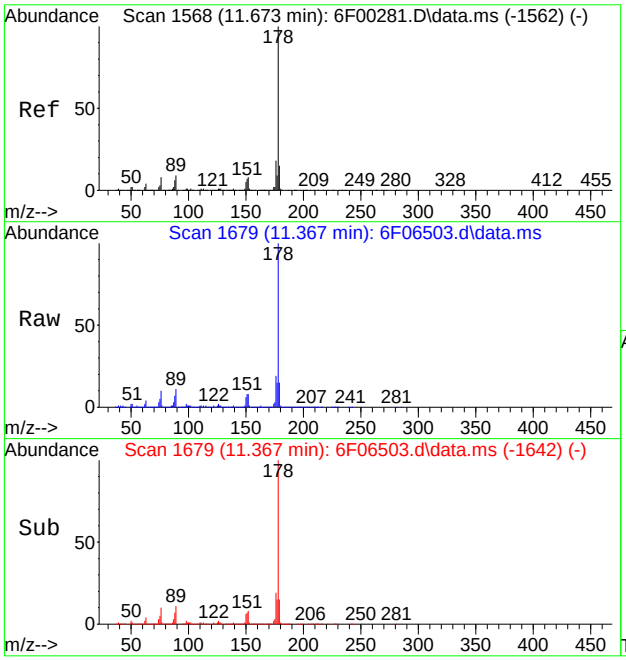


#84
Phenanthrene
Concen: 2.14 ppm
RT: 11.303 min Scan# 1667
Delta R.T. -0.006 min
Lab File: 6F06503.d
Acq: 11 Aug 2020 8:18 pm

Tgt Ion:178 Resp: 89570

Ion	Ratio	Lower	Upper
178	100		
179	15.8	0.0	46.0
176	18.8	0.0	49.0

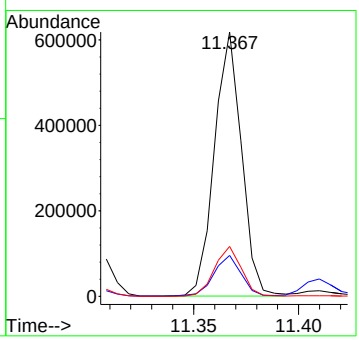


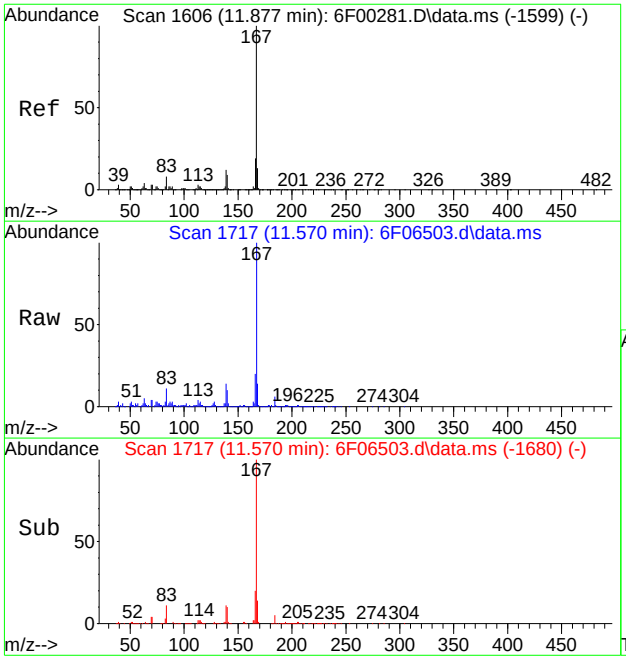


#85
Anthracene
Concen: 13.10 ppm
RT: 11.367 min Scan# 1679
Delta R.T. -0.000 min
Lab File: 6F06503.d
Acq: 11 Aug 2020 8:18 pm

Tgt Ion:178 Resp: 556610

Ion	Ratio	Lower	Upper
178	100		
179	15.2	0.0	45.4
176	18.8	0.0	47.7

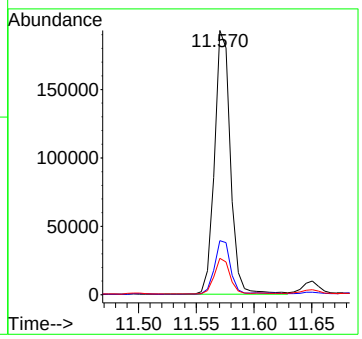


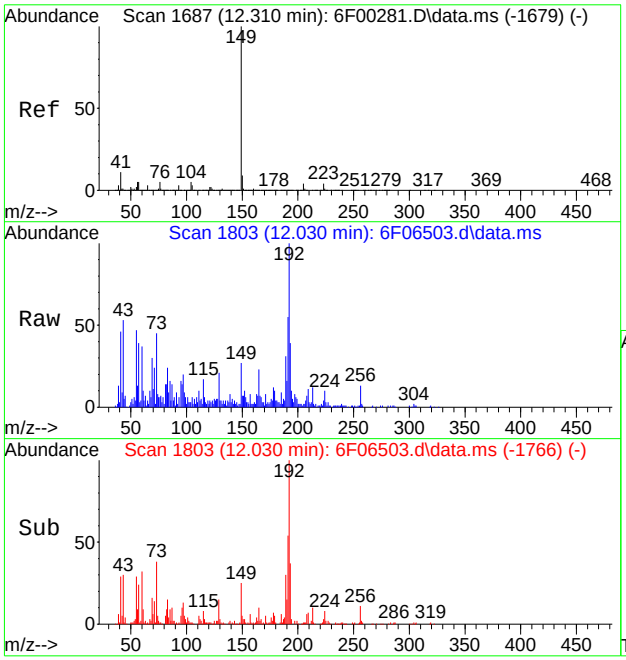


#87
Carbazole
Concen: 4.85 ppm
RT: 11.570 min Scan# 1717
Delta R.T. -0.000 min
Lab File: 6F06503.d
Acq: 11 Aug 2020 8:18 pm

Tgt Ion:167 Resp: 185624

Ion	Ratio	Lower	Upper
167	100		
166	20.2	0.0	49.2
139	13.4	0.0	42.3

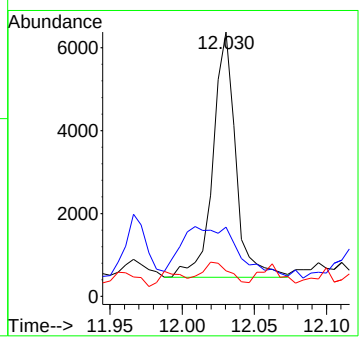


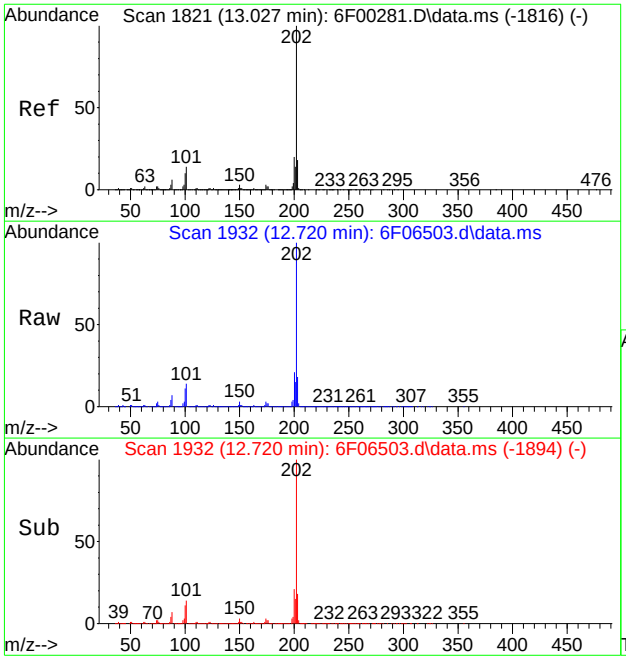


#89
Di-n-butylphthalate
Concen: 0.13 ppm
RT: 12.030 min Scan# 1803
Delta R.T. -0.000 min
Lab File: 6F06503.d
Acq: 11 Aug 2020 8:18 pm

Tgt Ion:149 Resp: 6481

Ion	Ratio	Lower	Upper
149	100		
150	19.1	0.0	38.7
104	1.2	0.0	35.2

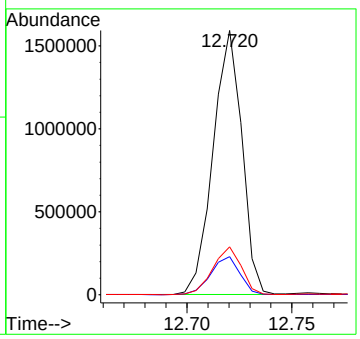


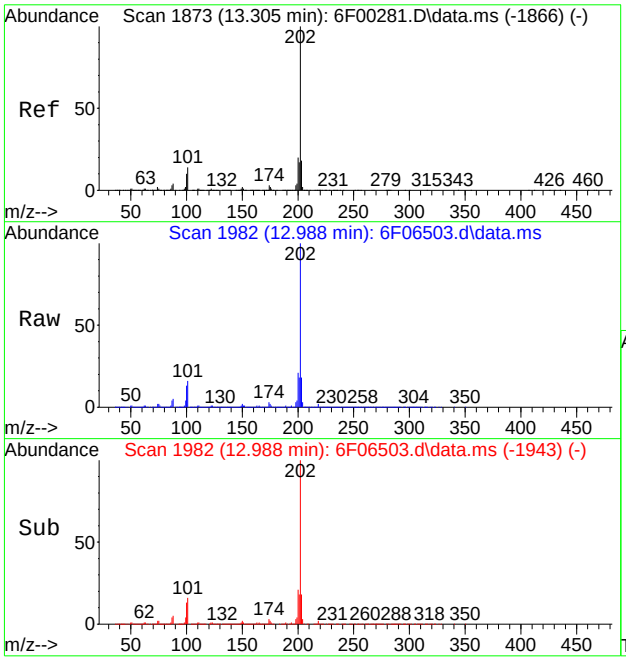


#91
Fluoranthene
Concen: 34.63 ppm
RT: 12.720 min Scan# 1932
Delta R.T. 0.005 min
Lab File: 6F06503.d
Acq: 11 Aug 2020 8:18 pm

Tgt Ion:202 Resp: 1524393

Ion	Ratio	Lower	Upper
202	100		
101	14.4	0.0	43.6
203	18.1	0.0	47.7

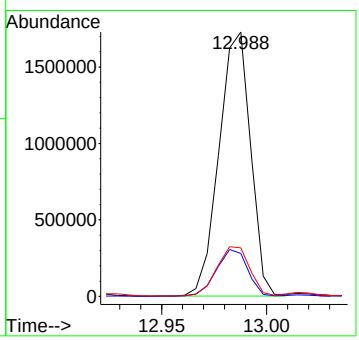


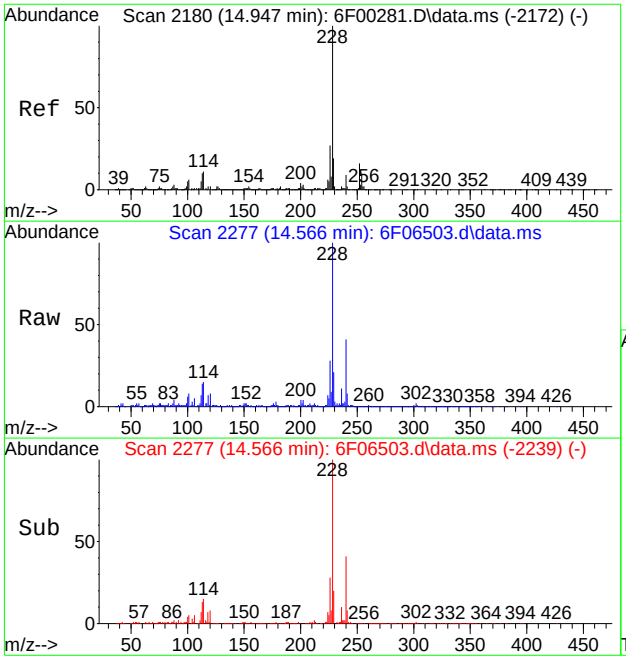


#94
Pyrene
Concen: 43.12 ppm
RT: 12.988 min Scan# 1982
Delta R.T. 0.010 min
Lab File: 6F06503.d
Acq: 11 Aug 2020 8:18 pm

Tgt Ion:202 Resp: 1807892

Ion	Ratio	Lower	Upper
202	100		
101	16.1	0.0	43.8
203	18.0	0.0	47.8

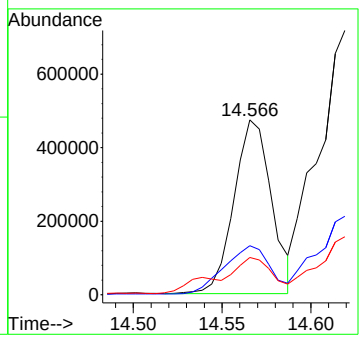


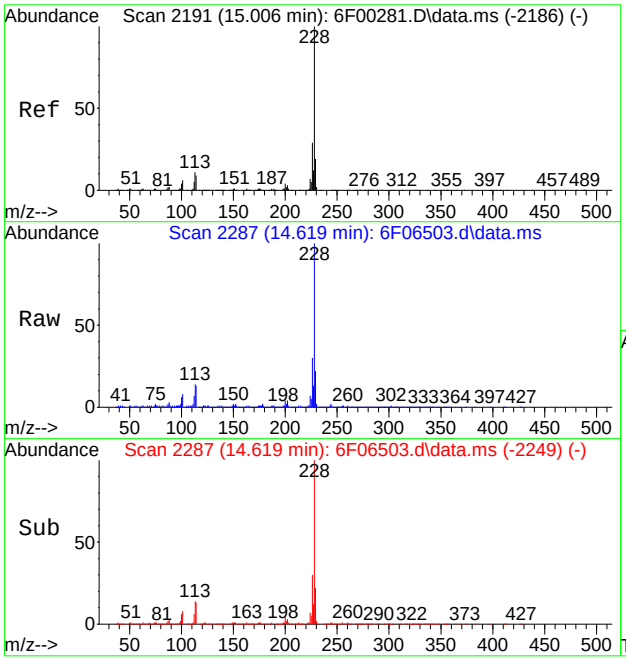


#99
Benzo[a]anthracene
Concen: 17.75 ppm
RT: 14.566 min Scan# 2277
Delta R.T. 0.005 min
Lab File: 6F06503.d
Acq: 11 Aug 2020 8:18 pm

Tgt Ion:228 Resp: 696360

Ion	Ratio	Lower	Upper
228	100		
226	27.8	0.0	56.6
229	20.1	0.0	48.9

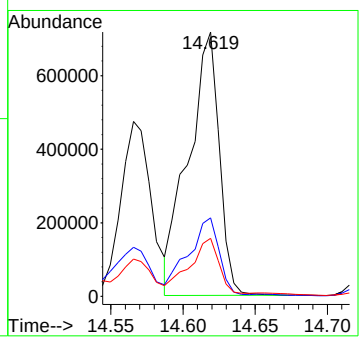


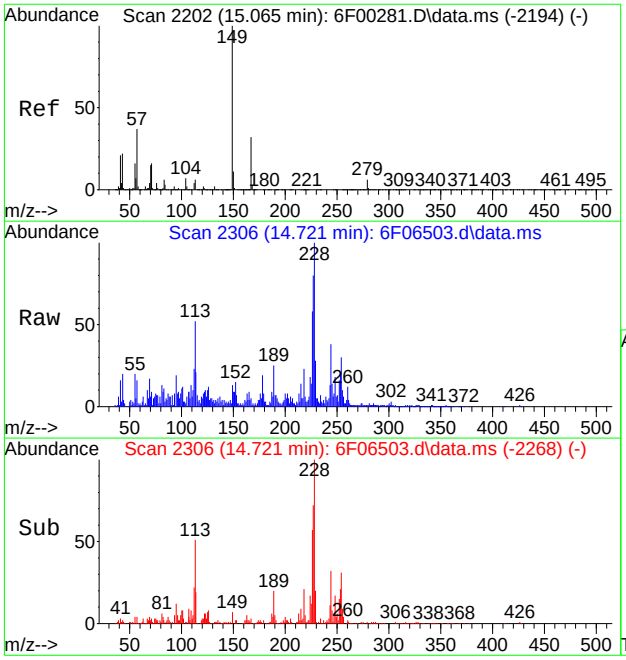


#100
Chrysene
Concen: 28.06 ppm
RT: 14.619 min Scan# 2287
Delta R.T. 0.005 min
Lab File: 6F06503.d
Acq: 11 Aug 2020 8:18 pm

Tgt Ion:228 Resp: 1067872

Ion	Ratio	Lower	Upper
228	100		
226	29.6	0.0	58.9
229	21.0	0.0	48.5

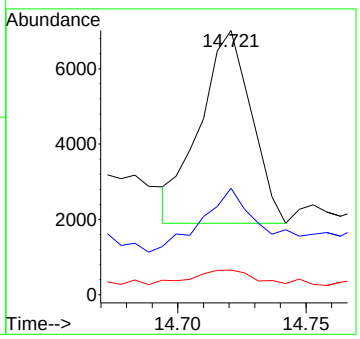


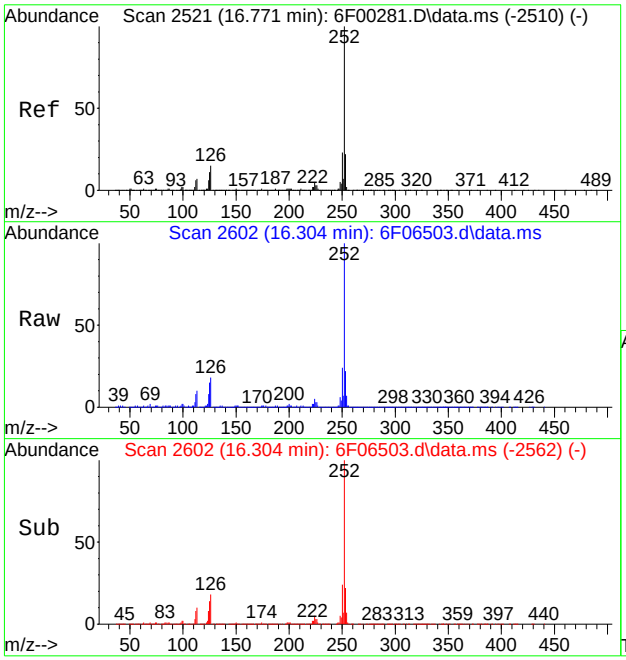


#101
bis(2-Ethylhexyl)phthalate
Concen: 0.25 ppm
RT: 14.721 min Scan# 2306
Delta R.T. 0.005 min
Lab File: 6F06503.d
Acq: 11 Aug 2020 8:18 pm

Tgt Ion:149 Resp: 7121

Ion	Ratio	Lower	Upper
149	100		
167	28.6	1.7	61.7
279	6.7	0.0	35.7

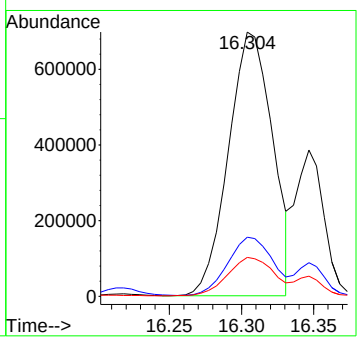


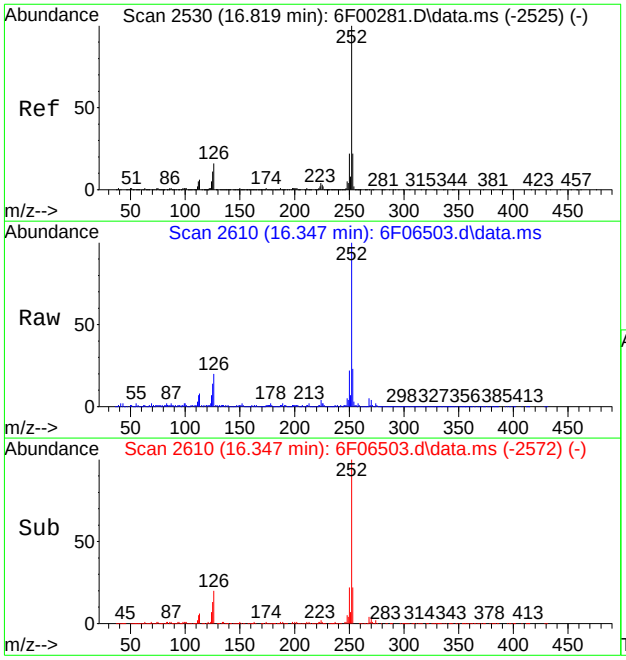


#104
Benzo[b]fluoranthene
Concen: 39.94 ppm
RT: 16.304 min Scan# 2602
Delta R.T. 0.016 min
Lab File: 6F06503.d
Acq: 11 Aug 2020 8:18 pm

Tgt Ion:252 Resp: 1482039

Ion	Ratio	Lower	Upper
252	100		
253	22.0	0.0	51.9
125	14.4	0.0	41.3

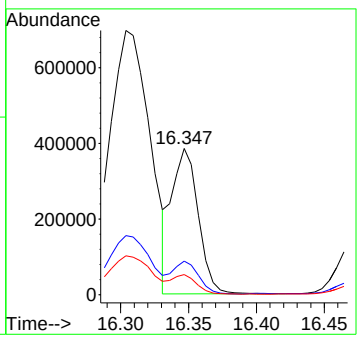


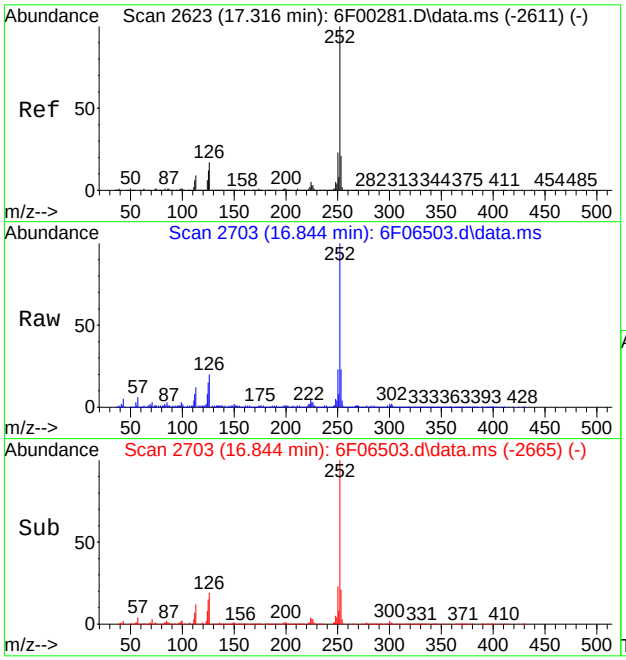


#105
Benzo[k]fluoranthene
Concen: 13.54 ppm
RT: 16.347 min Scan# 2610
Delta R.T. 0.005 min
Lab File: 6F06503.d
Acq: 11 Aug 2020 8:18 pm

Tgt Ion:252 Resp: 522605

Ion	Ratio	Lower	Upper
252	100		
253	22.5	0.0	51.7
125	12.8	0.0	40.7

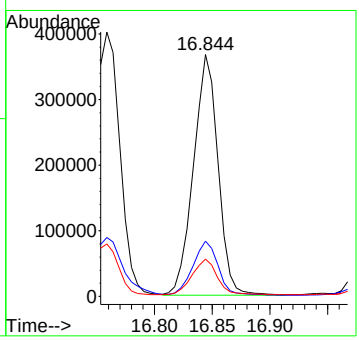


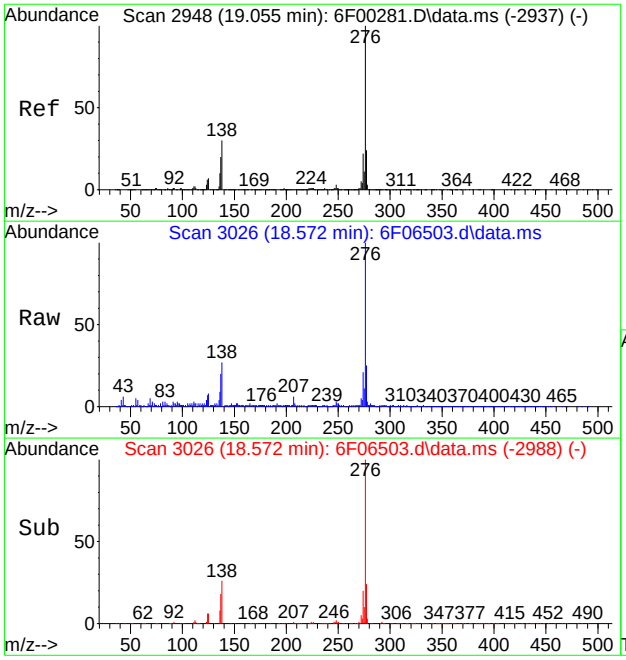


#106
Benzo[a]pyrene
Concen: 15.77 ppm
RT: 16.844 min Scan# 2703
Delta R.T. 0.005 min
Lab File: 6F06503.d
Acq: 11 Aug 2020 8:18 pm

Tgt Ion:252 Resp: 543462

Ion	Ratio	Lower	Upper
252	100		
253	22.4	0.0	51.0
125	14.9	0.0	42.0

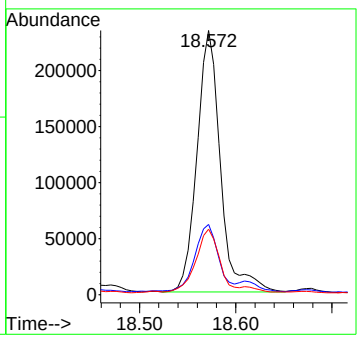


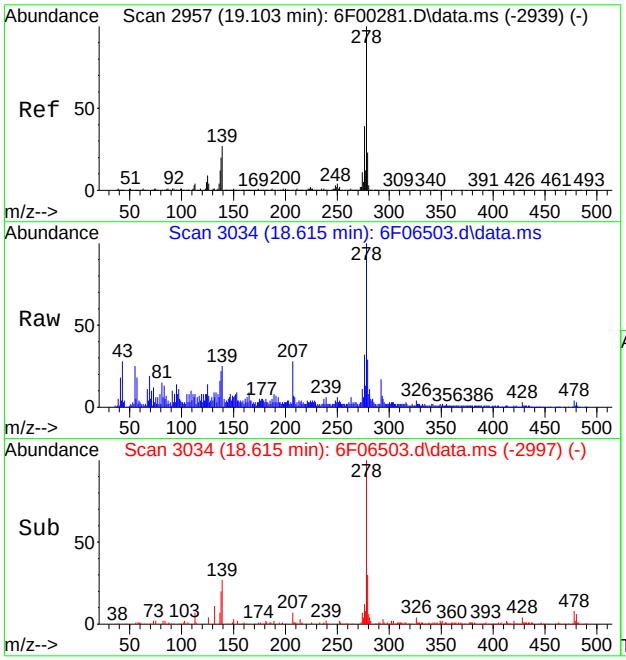


#107
Indeno[1,2,3-cd]pyrene
Concen: 12.39 ppm
RT: 18.572 min Scan# 3026
Delta R.T. 0.005 min
Lab File: 6F06503.d
Acq: 11 Aug 2020 8:18 pm

Tgt Ion:276 Resp: 397622

Ion	Ratio	Lower	Upper
276	100		
138	25.6	0.0	59.6
277	24.1	0.0	54.1

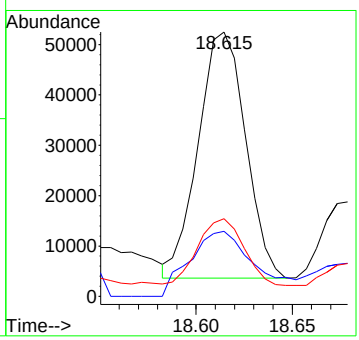


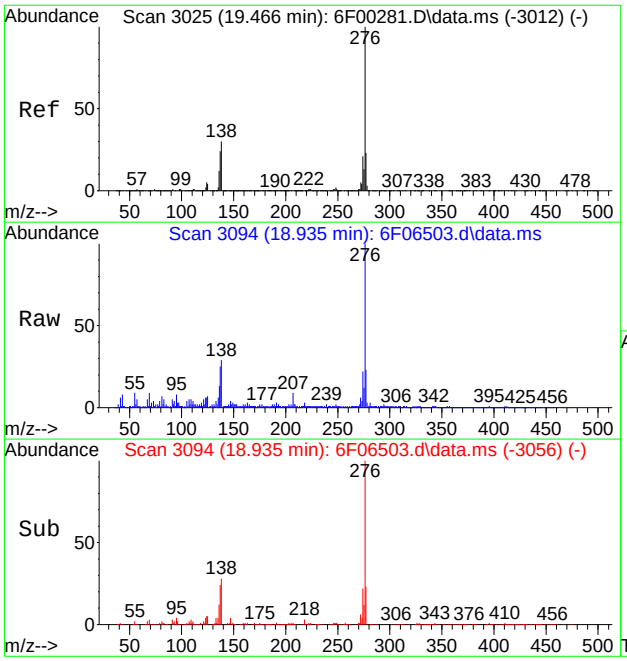


#108
Dibenz[a,h]anthracene
Concen: 2.45 ppm
RT: 18.615 min Scan# 3034
Delta R.T. -0.000 min
Lab File: 6F06503.d
Acq: 11 Aug 2020 8:18 pm

Tgt Ion:278 Resp: 83800

Ion	Ratio	Lower	Upper
278	100		
139	23.2	0.0	56.9
279	27.6	0.0	53.0

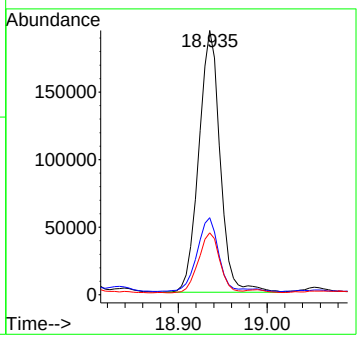




#109
Benzo[g,h,i]perylene
Concen: 9.31 ppm
RT: 18.935 min Scan# 3094
Delta R.T. 0.005 min
Lab File: 6F06503.d
Acq: 11 Aug 2020 8:18 pm

Tgt Ion:276 Resp: 322283

Ion	Ratio	Lower	Upper
276	100		
138	28.1	0.0	59.5
277	22.8	0.0	53.0



7.1.11

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06504.d
Acq On : 11 Aug 2020 8:44 pm
Operator : marthav
Sample : fa77615-10 E Inst : MSBNA10
Misc : op81484,S6F251,30.3,,,1,1,soil
ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Results File: 8270D6F072920.RES
Quant Time: Aug 12 06:40:46 2020
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

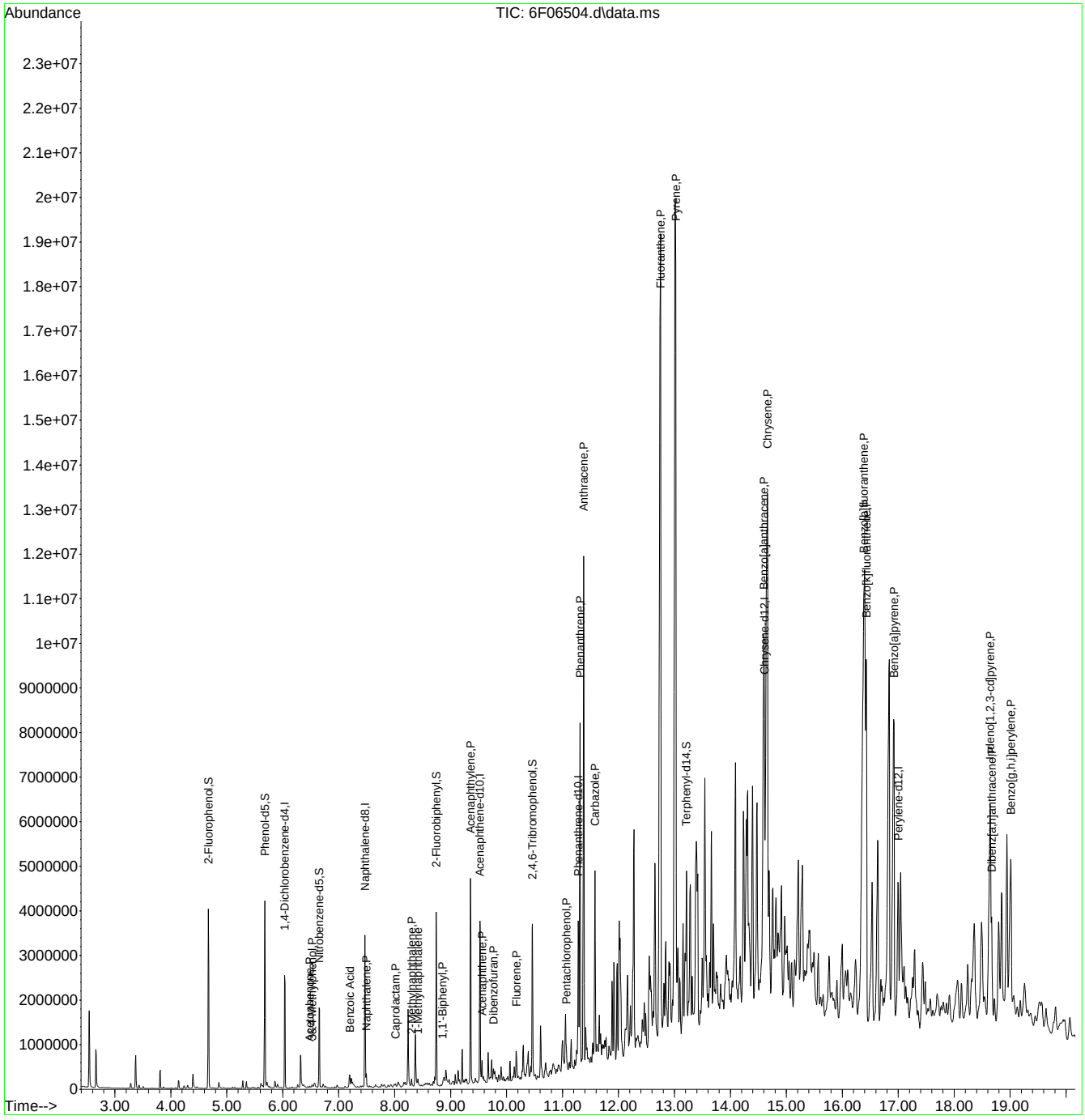
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	6.035	152	378653	40.00	ppm		0.00
22) Naphthalene-d8	7.468	136	1415003	40.00	ppm		0.00
43) Acenaphthene-d10	9.522	164	755254	40.00	ppm		0.00
70) Phenanthrene-d10	11.282	188	1352234	40.00	ppm		0.00
92) Chrysene-d12	14.608	240	1085577	40.00	ppm		0.03
102) Perylene-d12	16.999	264	1169120	40.00	ppm		0.07
System Monitoring Compounds							
7) 2-Fluorophenol	4.671	112	1036043	72.41	ppm		0.01
Spiked Amount 100.000	Range 40 - 102		Recovery = 72.41%				
9) Phenol-d5	5.682	99	1357008	79.90	ppm		0.01
Spiked Amount 100.000	Range 41 - 100		Recovery = 79.90%				
23) Nitrobenzene-d5	6.650	82	575954	37.10	ppm		0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 74.20%				
47) 2-Fluorobiphenyl	8.741	172	1122670	38.03	ppm		0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 76.06%				
75) 2,4,6-Tribromophenol	10.463	330	382449	84.04	ppm		0.00
Spiked Amount 100.000	Range 42 - 108		Recovery = 84.04%				
95) Terphenyl-d14	13.212	244	1248248	40.91	ppm		0.01
Spiked Amount 50.000	Range 45 - 119		Recovery = 81.82%				
Target Compounds							Qvalue
18) Acetophenone	6.484	105	13965	0.71	ppm		94
21) 3&4-Methylphenol	6.521	108	13422	0.98	ppm		94
30) Benzoic Acid	7.201	105	53504	5.74	ppm		94
34) Naphthalene	7.495	128	67787	1.69	ppm	#	50
38) Caprolactam	8.014	113	1113	0.25	ppm	#	61
40) 2-Methylnaphthalene	8.302	141	35405	1.51	ppm		98
41) 1-Methylnaphthalene	8.415	142	37203	1.45	ppm		98
48) 1,1'-Biphenyl	8.853	154	15039	0.48	ppm		95
52) Acenaphthylene	9.356	152	1930740	51.15	ppm		97
57) Acenaphthene	9.559	153	109954	4.39	ppm		98
60) Dibenzofuran	9.768	168	102588	2.96	ppm		83
65) Fluorene	10.174	166	234470	8.36	ppm		98
83) Pentachlorophenol	11.068	266	8572	2.43	ppm		99
84) Phenanthrene	11.314	178	2901571	71.66	ppm		99
85) Anthracene	11.378	178	4972433	120.84	ppm		97
87) Carbazole	11.581	167	1622686	43.77	ppm		97
91) Fluoranthene	12.752	202	12673161	297.28	ppm		93
94) Pyrene	13.025	202	13536091	348.13	ppm		93
99) Benzo[a]anthracene	14.598	228	5180180	142.41	ppm		93
100) Chrysene	14.662	228	8196633	232.25	ppm		94
104) Benzo[b]fluoranthene	16.384	252	13162830	350.77	ppm		95
105) Benzo[k]fluoranthene	16.432	252	2842019	72.82	ppm		93
106) Benzo[a]pyrene	16.924	252	4592421	131.78	ppm		95
107) Indeno[1,2,3-cd]pyrene	18.641	276	3793554	116.92	ppm		98
108) Dibenz[a,h]anthracene	18.668	278	878158	25.35	ppm		91
109) Benzo[g,h,i]perylene	19.010	276	2914633	83.23	ppm		99

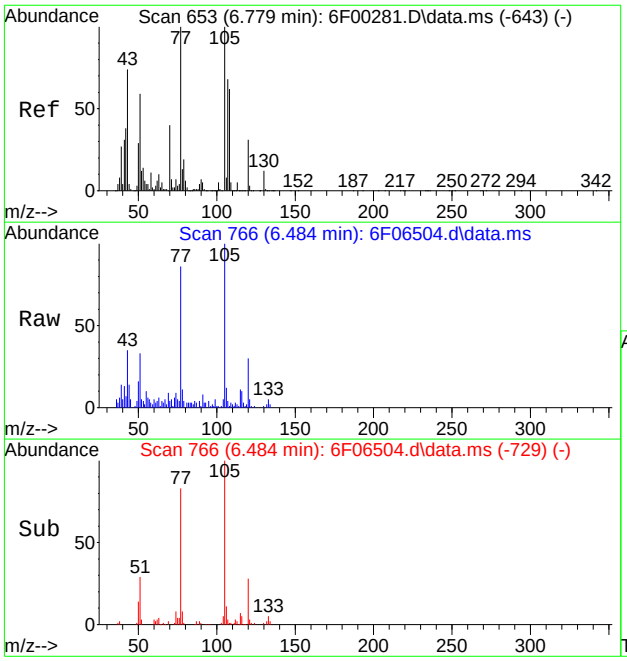
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06504.d
Acq On : 11 Aug 2020 8:44 pm
Operator : marthav
Sample : fa77615-10 E Inst : MSBNA10
Misc : op81484,S6F251,30.3,,,1,1,soil
ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Results File: 8270D6F072920.RES
Quant Time: Aug 12 06:40:46 2020
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

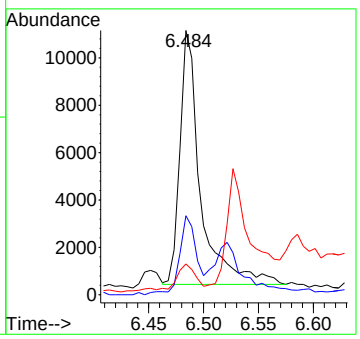


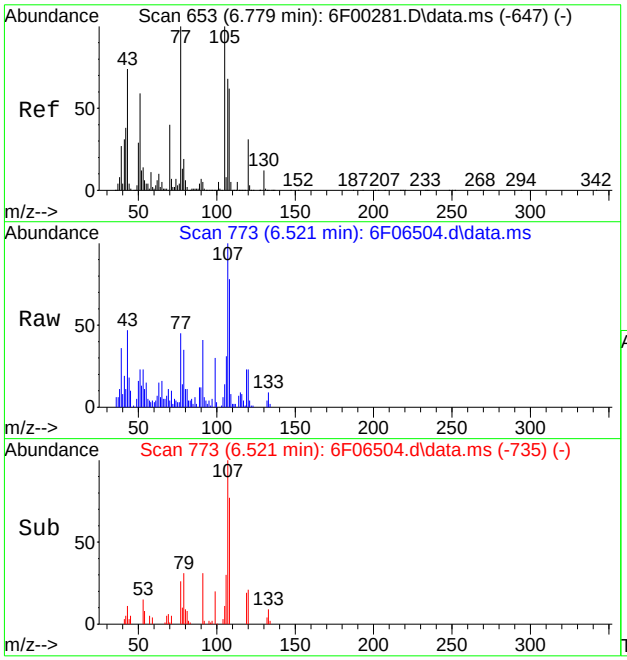


#18
Acetophenone
Concen: 0.71 ppm
RT: 6.484 min Scan# 766
Delta R.T. -0.000 min
Lab File: 6F06504.d
Acq: 11 Aug 2020 8:44 pm

Tgt Ion:105 Resp: 13965

Ion	Ratio	Lower	Upper
105	100		
120	29.4	0.7	60.7
106	2.4	0.0	38.4

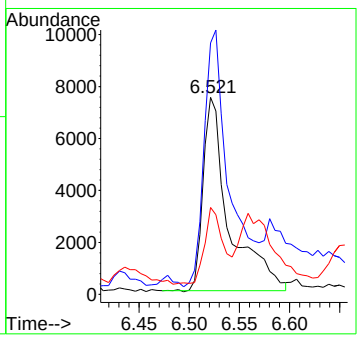


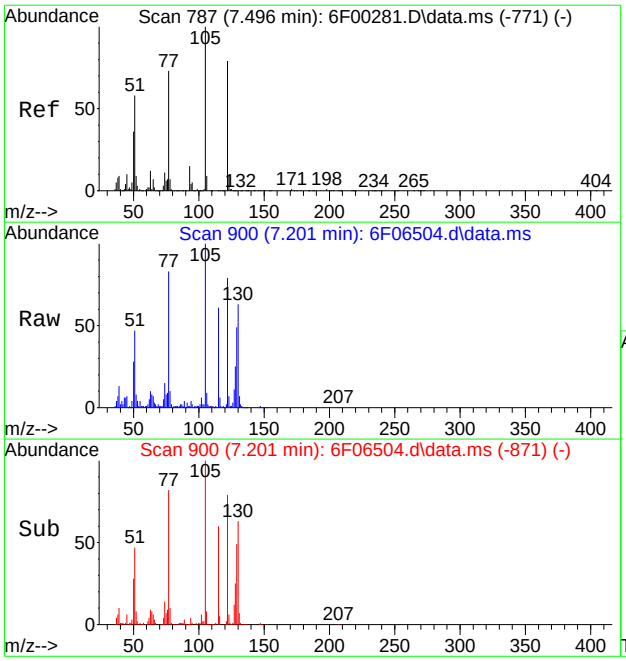


#21
3&4-Methylphenol
Concen: 0.98 ppm
RT: 6.521 min Scan# 773
Delta R.T. 0.005 min
Lab File: 6F06504.d
Acq: 11 Aug 2020 8:44 pm

Tgt Ion:108 Resp: 13422

Ion	Ratio	Lower	Upper
108	100		
107	115.4	80.3	140.3
79	34.8	0.2	60.2

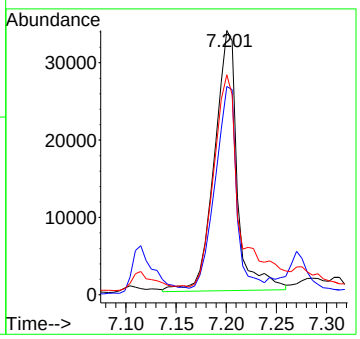


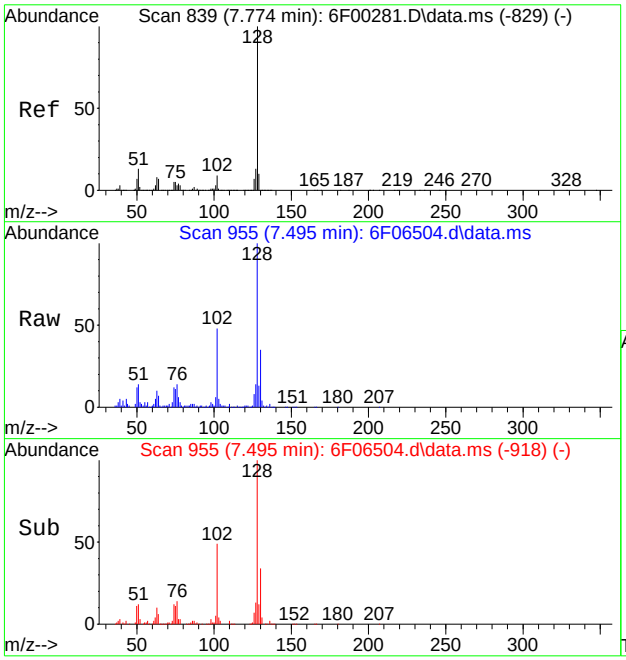


#30
Benzoic Acid
Concen: 5.74 ppm
RT: 7.201 min Scan# 900
Delta R.T. -0.043 min
Lab File: 6F06504.d
Acq: 11 Aug 2020 8:44 pm

Tgt Ion:105 Resp: 53504

Ion	Ratio	Lower	Upper
105	100		
122	74.4	49.5	109.5
77	78.7	43.0	103.0

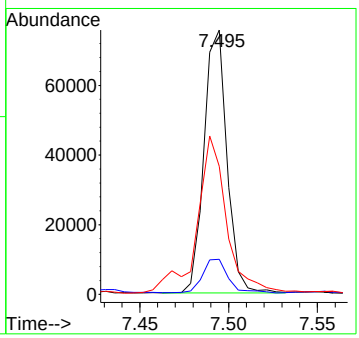


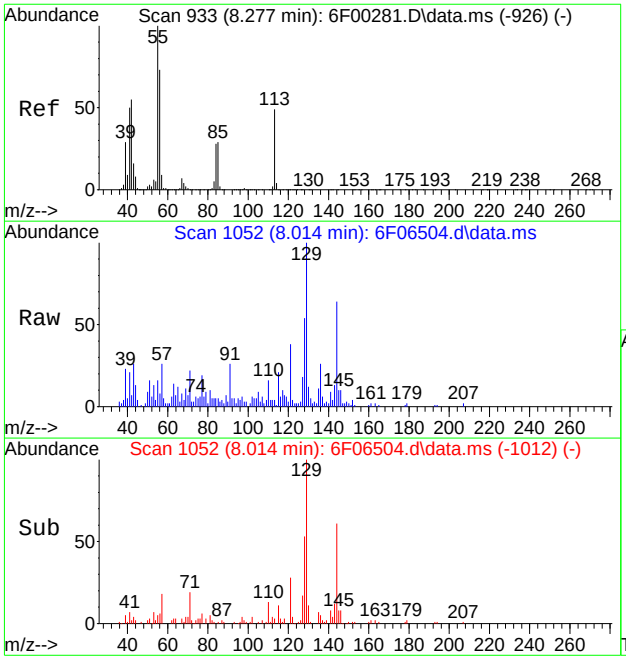


#34
Naphthalene
Concen: 1.69 ppm
RT: 7.495 min Scan# 955
Delta R.T. -0.000 min
Lab File: 6F06504.d
Acq: 11 Aug 2020 8:44 pm

Tgt Ion:128 Resp: 67787

Ion	Ratio	Lower	Upper
128	100		
129	12.6	0.0	40.4
102	45.5	0.0	39.2#

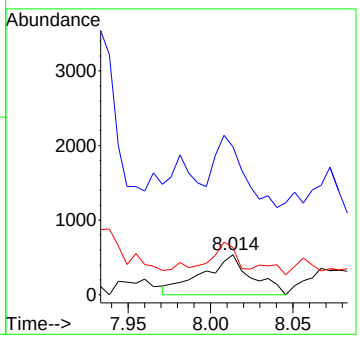


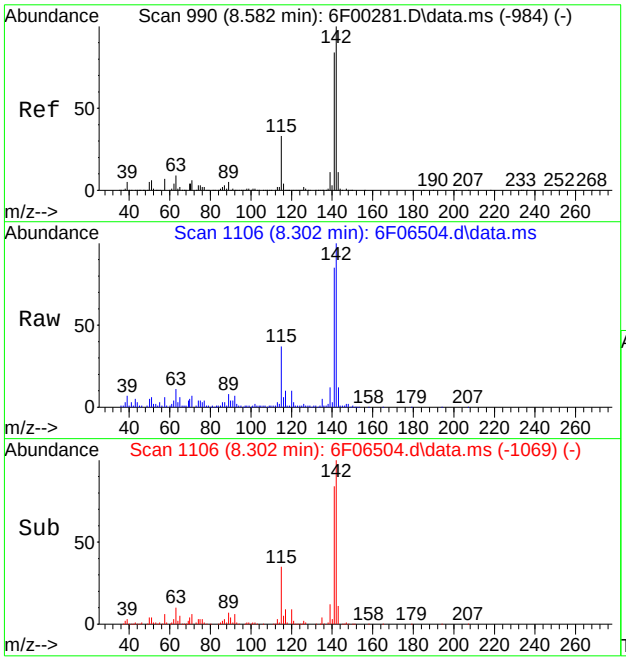


#38
Caprolactam
Concen: 0.25 ppm
RT: 8.014 min Scan# 1052
Delta R.T. 0.016 min
Lab File: 6F06504.d
Acq: 11 Aug 2020 8:44 pm

Tgt Ion:113 Resp: 1113

Ion	Ratio	Lower	Upper
113	100		
55	131.0	172.1	232.1#
85	70.5	29.4	89.4

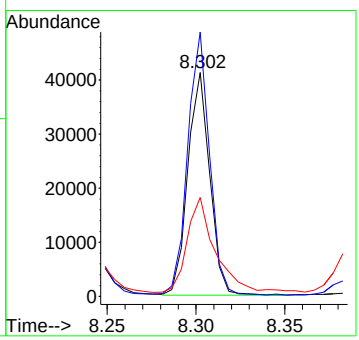


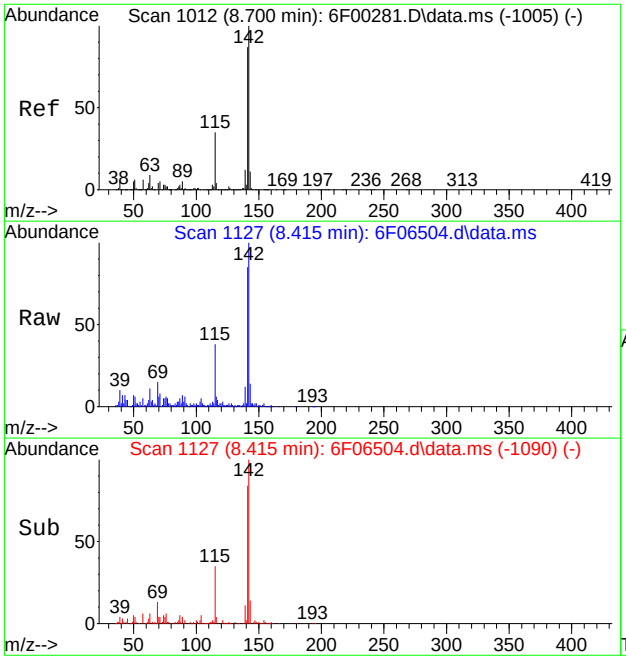


#40
2-Methylnaphthalene
Concen: 1.51 ppm
RT: 8.302 min Scan# 1106
Delta R.T. -0.000 min
Lab File: 6F06504.d
Acq: 11 Aug 2020 8:44 pm

Tgt Ion:141 Resp: 35405

Ion	Ratio	Lower	Upper
141	100		
142	118.0	88.9	148.9
115	42.3	9.7	69.7

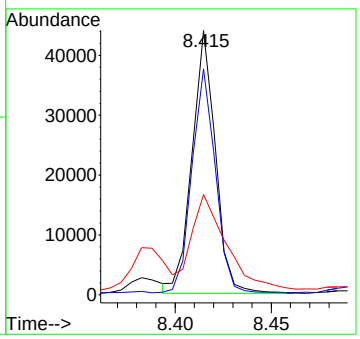


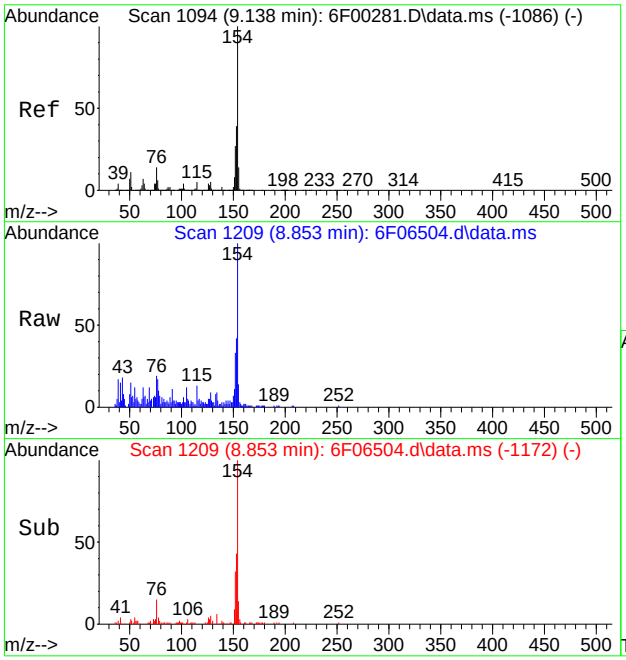


#41
1-Methylnaphthalene
Concen: 1.45 ppm
RT: 8.415 min Scan# 1127
Delta R.T. -0.000 min
Lab File: 6F06504.d
Acq: 11 Aug 2020 8:44 pm

Tgt Ion:142 Resp: 37203

Ion	Ratio	Lower	Upper
142	100		
141	86.6	56.8	116.8
115	30.8	4.7	64.7

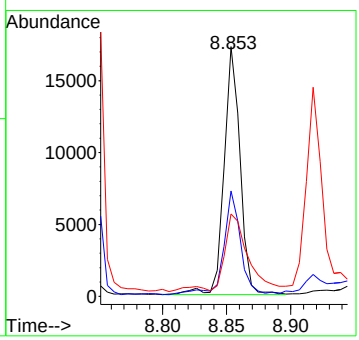


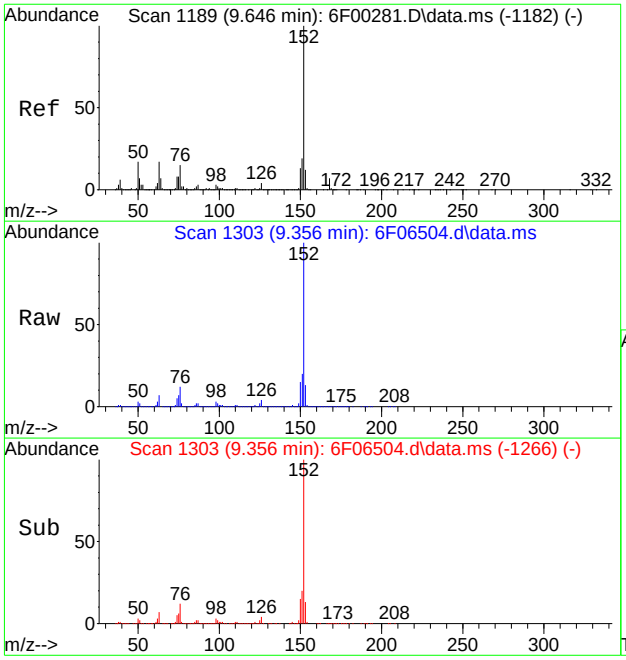


#48
1,1'-Biphenyl
Concen: 0.48 ppm
RT: 8.853 min Scan# 1209
Delta R.T. -0.000 min
Lab File: 6F06504.d
Acq: 11 Aug 2020 8:44 pm

Tgt Ion:154 Resp: 15039

Ion	Ratio	Lower	Upper
154	100		
153	41.0	8.7	68.7
152	29.9	0.0	56.7

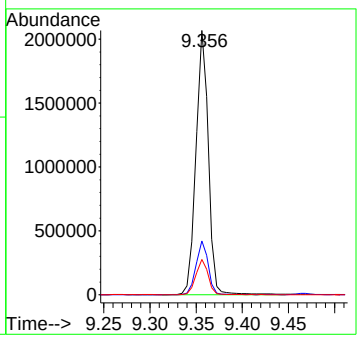


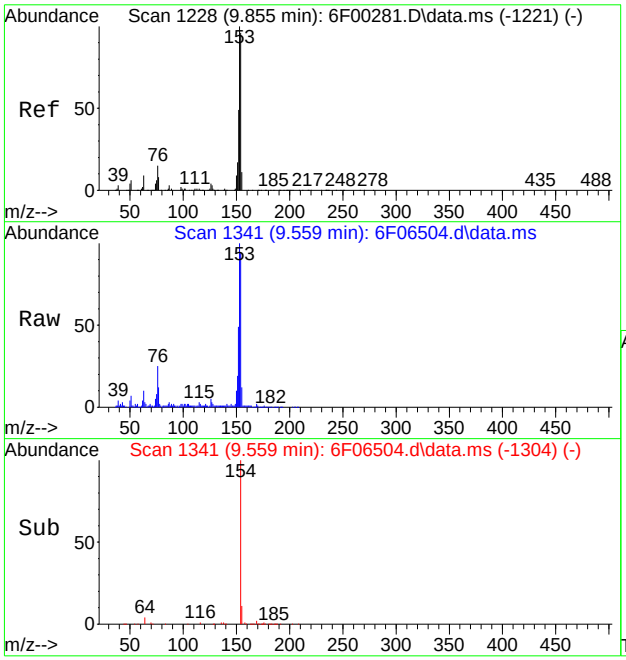


#52
Acenaphthylene
Concen: 51.15 ppm
RT: 9.356 min Scan# 1303
Delta R.T. -0.000 min
Lab File: 6F06504.d
Acq: 11 Aug 2020 8:44 pm

Tgt Ion:152 Resp: 1930740

Ion	Ratio	Lower	Upper
152	100		
151	20.4	0.0	48.8
153	13.4	0.0	42.3

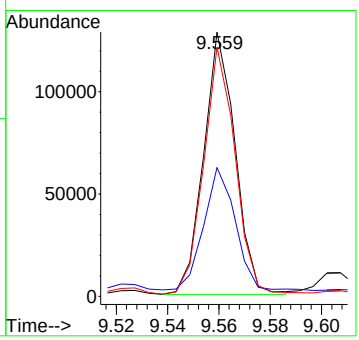


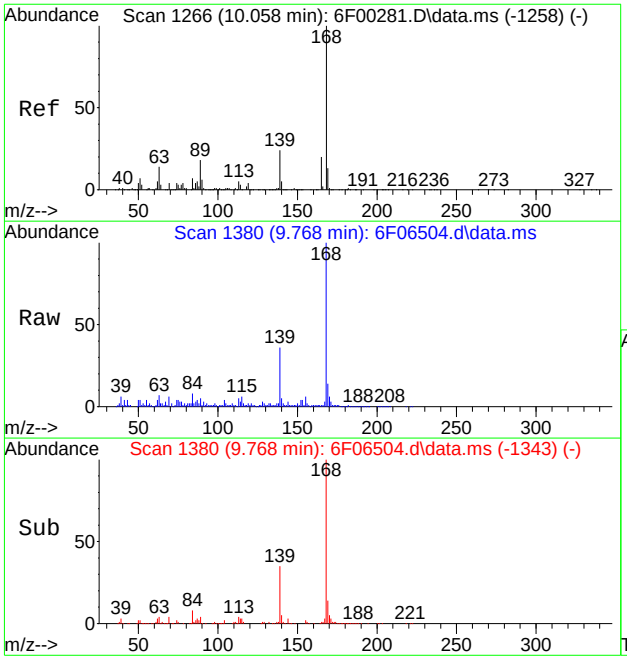


#57
Acenaphthene
Concen: 4.39 ppm
RT: 9.559 min Scan# 1341
Delta R.T. -0.000 min
Lab File: 6F06504.d
Acq: 11 Aug 2020 8:44 pm

Tgt Ion:153 Resp: 109954

Ion	Ratio	Lower	Upper
153	100		
152	46.7	19.4	79.4
154	94.3	65.6	125.6

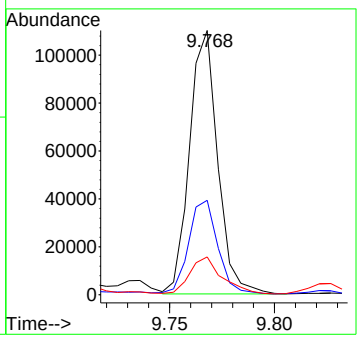


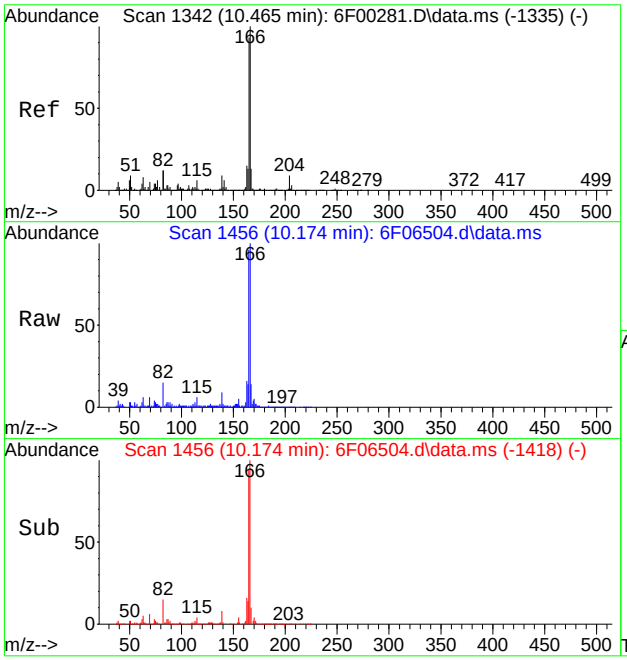


#60
Dibenzofuran
Concen: 2.96 ppm
RT: 9.768 min Scan# 1380
Delta R.T. -0.000 min
Lab File: 6F06504.d
Acq: 11 Aug 2020 8:44 pm

Tgt Ion:168 Resp: 102588

Ion	Ratio	Lower	Upper
168	100		
139	35.4	0.0	53.6
169	13.9	0.0	42.6

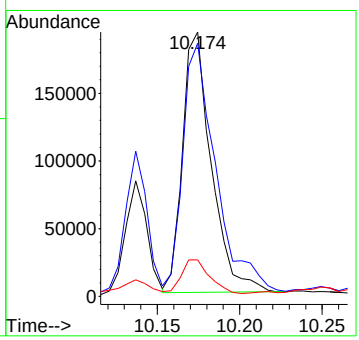


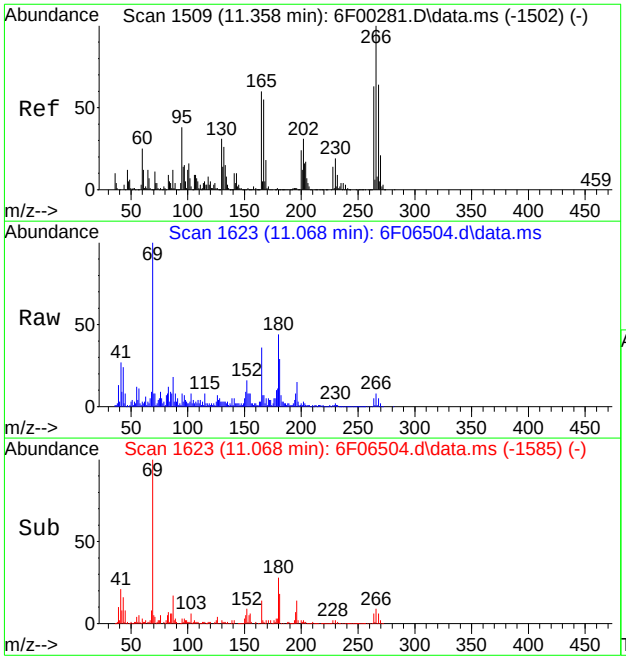


#65
Fluorene
Concen: 8.36 ppm
RT: 10.174 min Scan# 1456
Delta R.T. 0.005 min
Lab File: 6F06504.d
Acq: 11 Aug 2020 8:44 pm

Tgt Ion:166 Resp: 234470

Ion	Ratio	Lower	Upper
166	100		
165	95.0	62.6	122.6
167	12.5	0.0	43.1

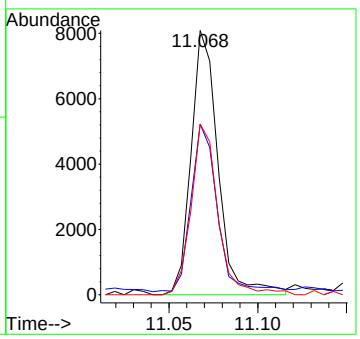


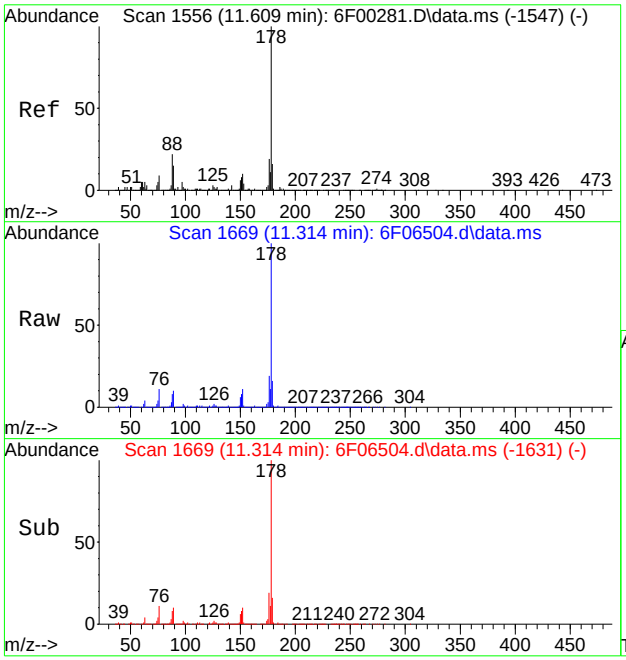


#83
Pentachlorophenol
Concen: 2.43 ppm
RT: 11.068 min Scan# 1623
Delta R.T. 0.005 min
Lab File: 6F06504.d
Acq: 11 Aug 2020 8:44 pm

Tgt Ion:266 Resp: 8572

Ion	Ratio	Lower	Upper
266	100		
264	63.4	32.8	92.8
268	64.5	33.5	93.5

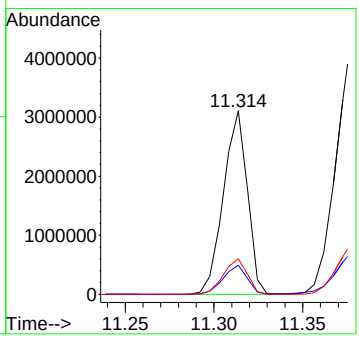


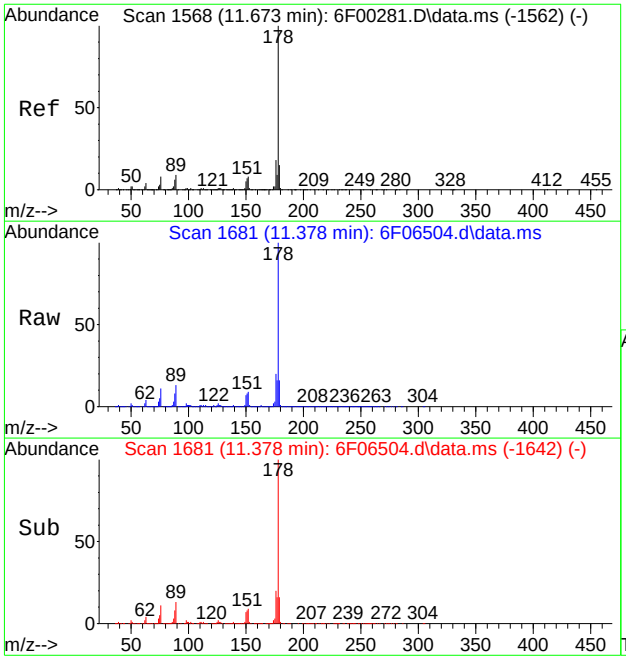


#84
Phenanthrene
Concen: 71.66 ppm
RT: 11.314 min Scan# 1669
Delta R.T. 0.005 min
Lab File: 6F06504.d
Acq: 11 Aug 2020 8:44 pm

Tgt Ion:178 Resp: 2901571

Ion	Ratio	Lower	Upper
178	100		
179	15.8	0.0	46.0
176	19.5	0.0	49.0

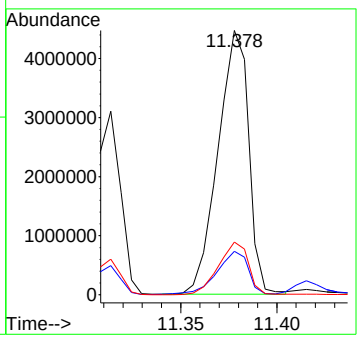


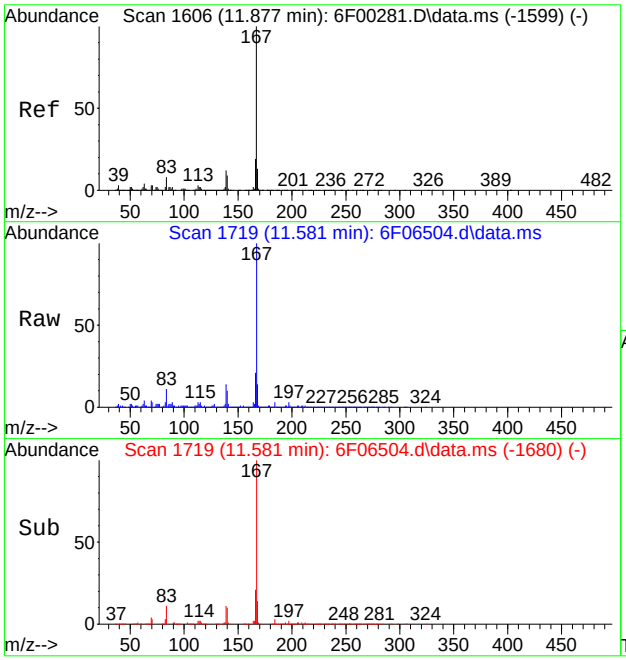


#85
Anthracene
Concen: 120.84 ppm
RT: 11.378 min Scan# 1681
Delta R.T. 0.011 min
Lab File: 6F06504.d
Acq: 11 Aug 2020 8:44 pm

Tgt Ion:178 Resp: 4972433

Ion	Ratio	Lower	Upper
178	100		
179	15.8	0.0	45.4
176	20.0	0.0	47.7

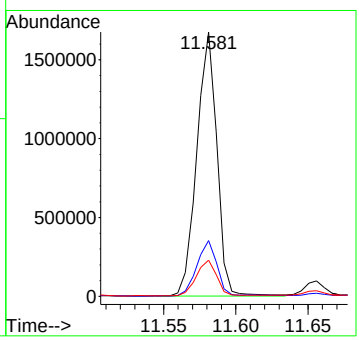


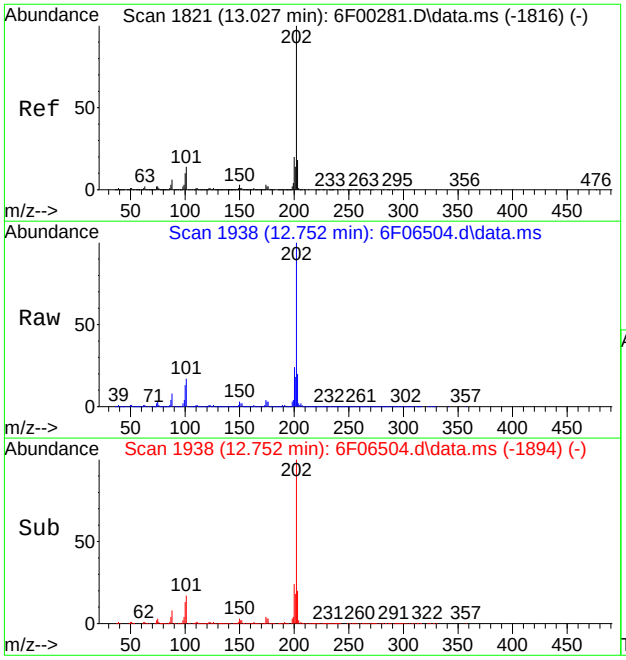


#87
Carbazole
Concen: 43.77 ppm
RT: 11.581 min Scan# 1719
Delta R.T. 0.011 min
Lab File: 6F06504.d
Acq: 11 Aug 2020 8:44 pm

Tgt Ion:167 Resp: 1622686

Ion	Ratio	Lower	Upper
167	100		
166	20.9	0.0	49.2
139	13.5	0.0	42.3

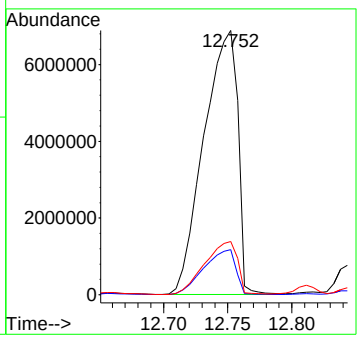


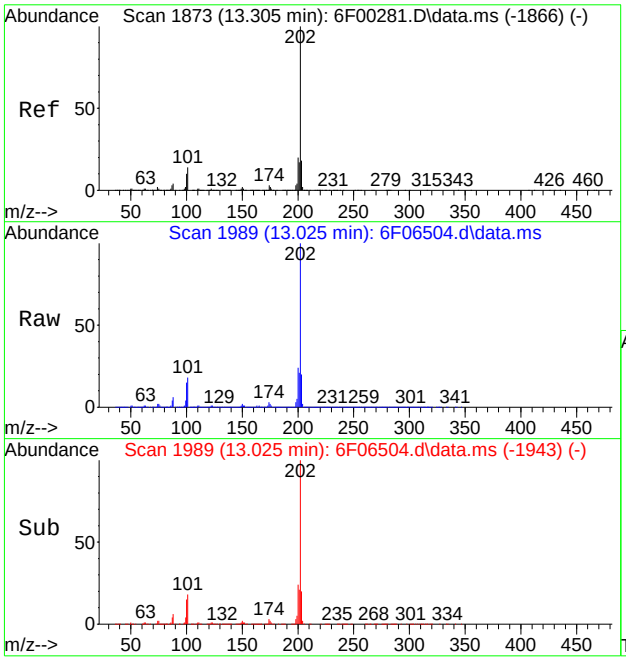


#91
Fluoranthene
Concen: 297.28 ppm
RT: 12.752 min Scan# 1938
Delta R.T. 0.037 min
Lab File: 6F06504.d
Acq: 11 Aug 2020 8:44 pm

Tgt Ion:202 Resp:12673161

Ion	Ratio	Lower	Upper
202	100		
101	17.1	0.0	43.6
203	19.9	0.0	47.7

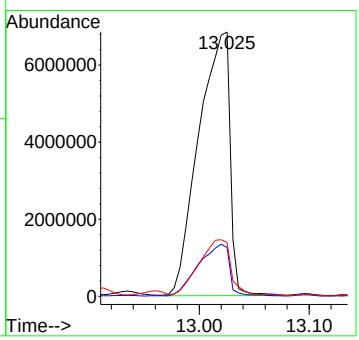


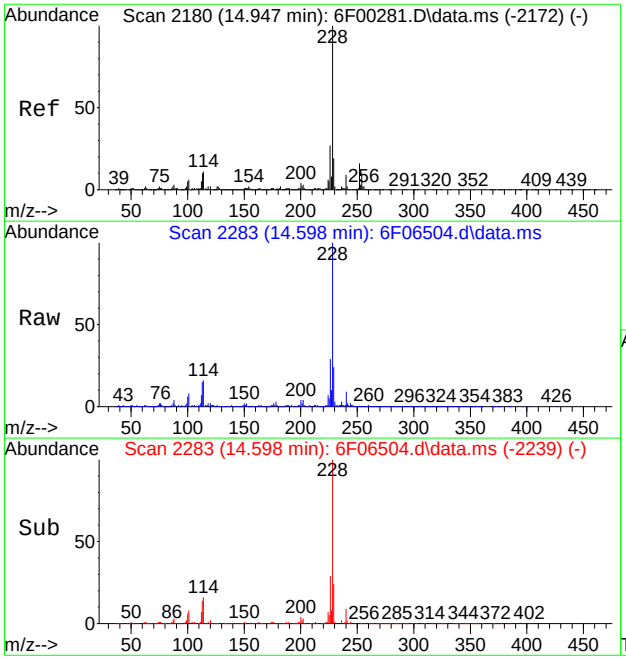


#94
Pyrene
Concen: 348.13 ppm
RT: 13.025 min Scan# 1989
Delta R.T. 0.048 min
Lab File: 6F06504.d
Acq: 11 Aug 2020 8:44 pm

Tgt Ion:202 Resp:13536091

Ion	Ratio	Lower	Upper
202	100		
101	18.3	0.0	43.8
203	19.5	0.0	47.8

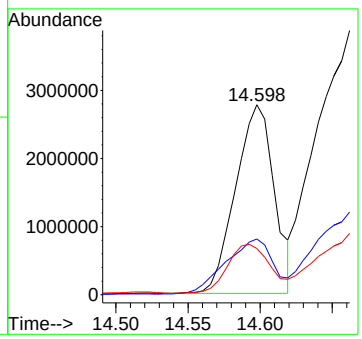


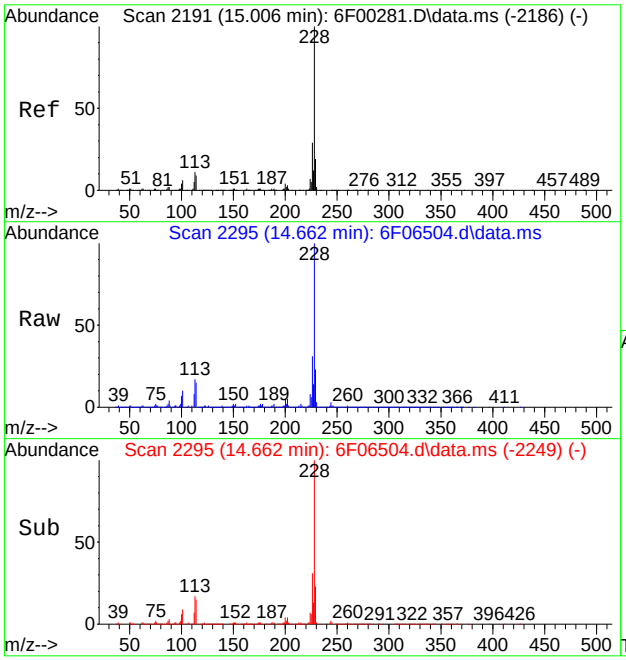


#99
Benzo[a]anthracene
Concen: 142.41 ppm
RT: 14.598 min Scan# 2283
Delta R.T. 0.037 min
Lab File: 6F06504.d
Acq: 11 Aug 2020 8:44 pm

Tgt Ion:228 Resp: 5180180

Ion	Ratio	Lower	Upper
228	100		
226	29.0	0.0	56.6
229	23.2	0.0	48.9

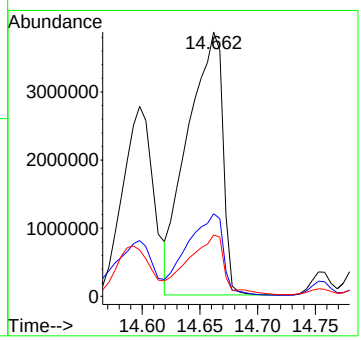


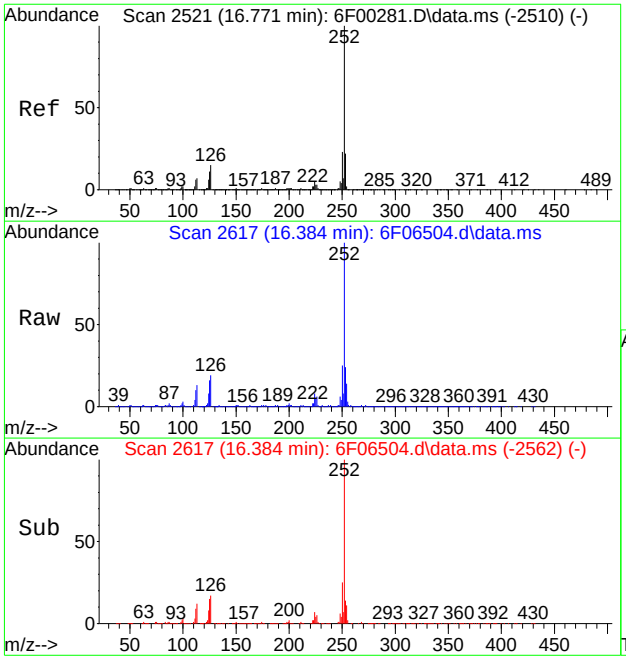


#100
Chrysene
Concen: 232.25 ppm
RT: 14.662 min Scan# 2295
Delta R.T. 0.048 min
Lab File: 6F06504.d
Acq: 11 Aug 2020 8:44 pm

Tgt Ion:228 Resp: 8196633

Ion	Ratio	Lower	Upper
228	100		
226	31.2	0.0	58.9
229	22.4	0.0	48.5

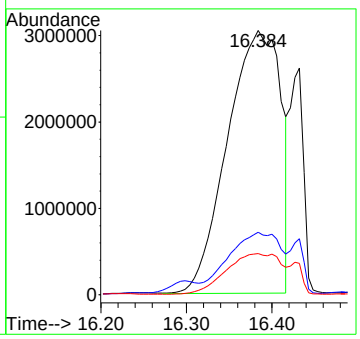


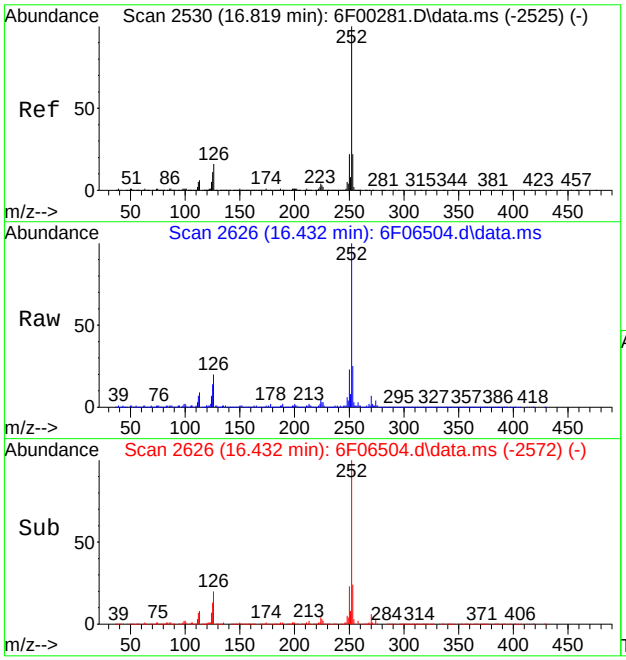


#104
Benzo[b]fluoranthene
Concen: 350.77 ppm
RT: 16.384 min Scan# 2617
Delta R.T. 0.096 min
Lab File: 6F06504.d
Acq: 11 Aug 2020 8:44 pm

Tgt Ion:252 Resp:13162830

Ion	Ratio	Lower	Upper
252	100		
253	22.9	0.0	51.9
125	15.6	0.0	41.3

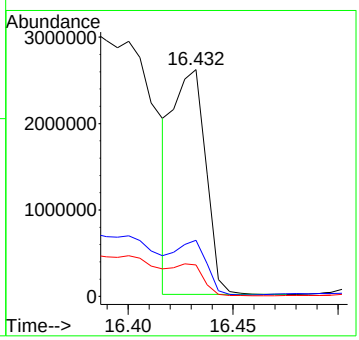


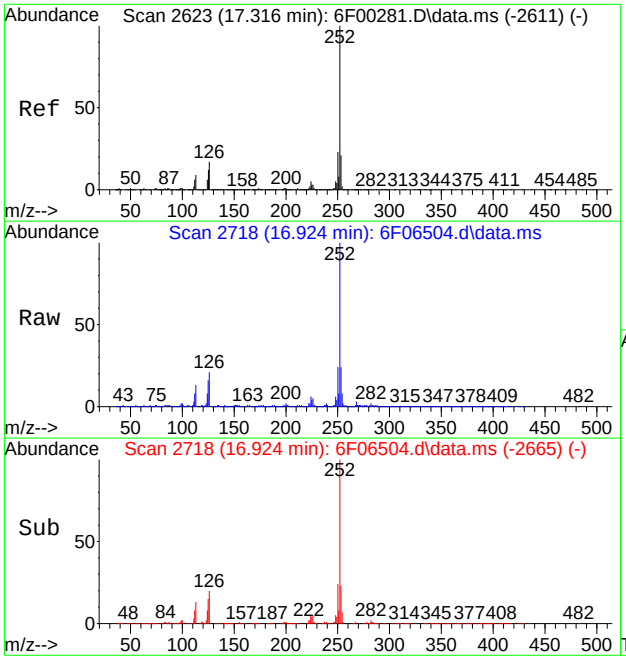


#105
Benzo[k]fluoranthene
Concen: 72.82 ppm
RT: 16.432 min Scan# 2626
Delta R.T. 0.091 min
Lab File: 6F06504.d
Acq: 11 Aug 2020 8:44 pm

Tgt Ion:252 Resp: 2842019

Ion	Ratio	Lower	Upper
252	100		
253	25.1	0.0	51.7
125	12.7	0.0	40.7

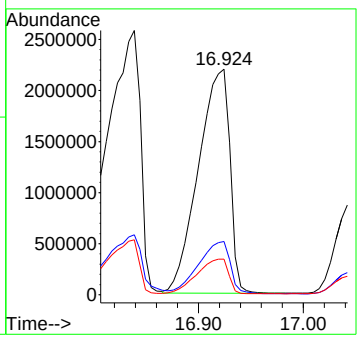


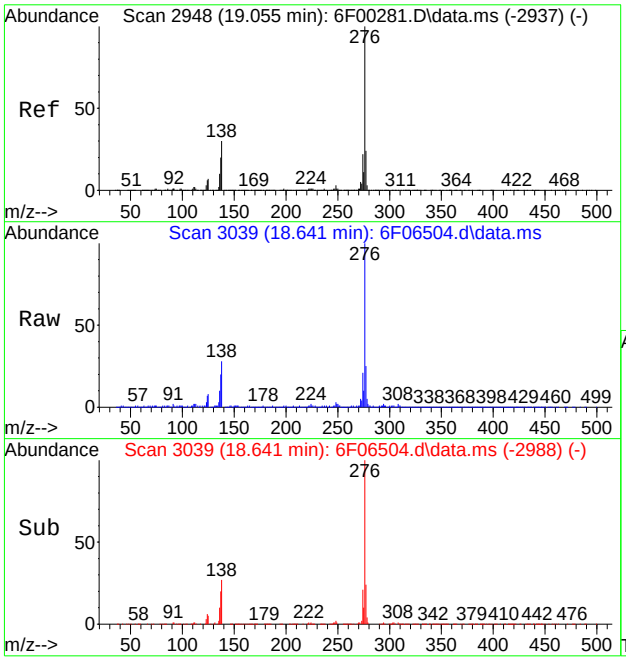


#106
Benzo[a]pyrene
Concen: 131.78 ppm
RT: 16.924 min Scan# 2718
Delta R.T. 0.085 min
Lab File: 6F06504.d
Acq: 11 Aug 2020 8:44 pm

Tgt Ion:252 Resp: 4592421

Ion	Ratio	Lower	Upper
252	100		
253	22.7	0.0	51.0
125	15.4	0.0	42.0

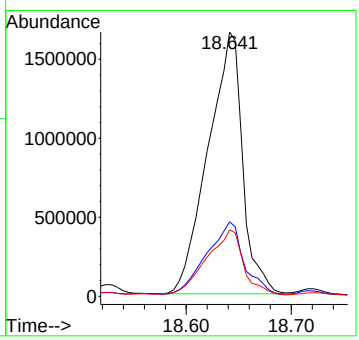


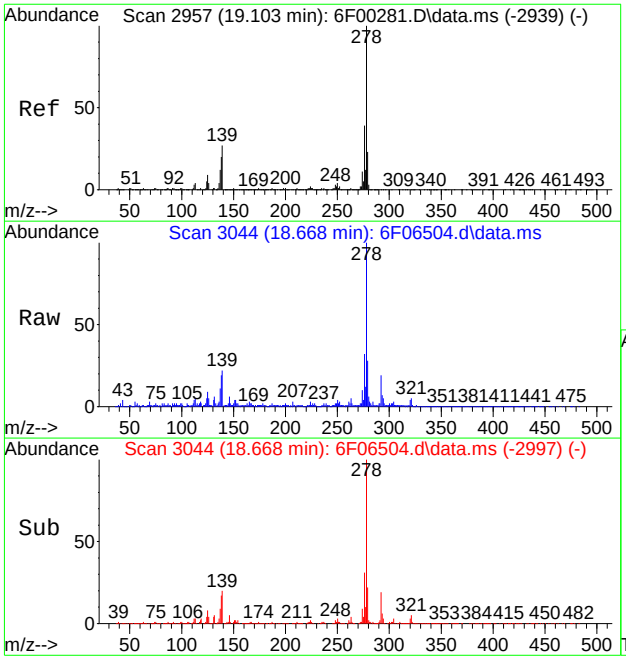


#107
Indeno[1,2,3-cd]pyrene
Concen: 116.92 ppm
RT: 18.641 min Scan# 3039
Delta R.T. 0.075 min
Lab File: 6F06504.d
Acq: 11 Aug 2020 8:44 pm

Tgt Ion:276 Resp: 3793554

Ion	Ratio	Lower	Upper
276	100		
138	27.6	0.0	59.6
277	24.6	0.0	54.1

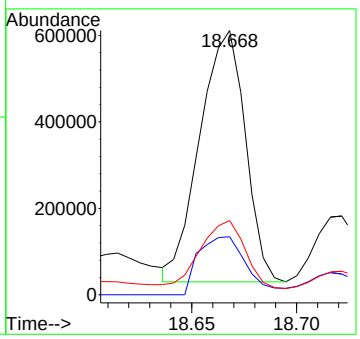


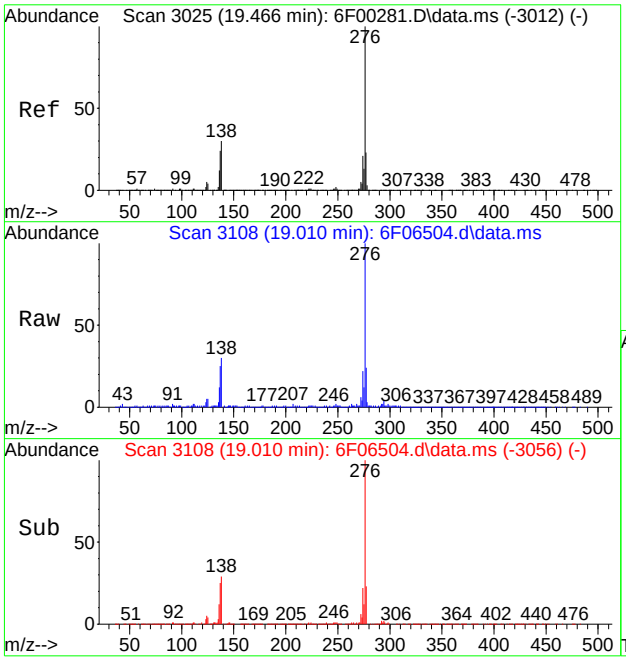


#108
Dibenz[a,h]anthracene
Concen: 25.35 ppm
RT: 18.668 min Scan# 3044
Delta R.T. 0.053 min
Lab File: 6F06504.d
Acq: 11 Aug 2020 8:44 pm

Tgt Ion:278 Resp: 878158

Ion	Ratio	Lower	Upper
278	100		
139	22.5	0.0	56.9
279	27.1	0.0	53.0

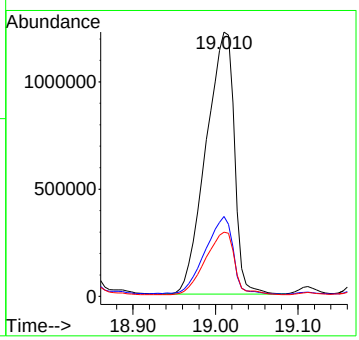




#109
Benzo[g,h,i]perylene
Concen: 83.23 ppm
RT: 19.010 min Scan# 3108
Delta R.T. 0.080 min
Lab File: 6F06504.d
Acq: 11 Aug 2020 8:44 pm

Tgt Ion:276 Resp: 2914633

Ion	Ratio	Lower	Upper
276	100		
138	29.5	0.0	59.5
277	23.9	0.0	53.0



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\Jenniferf\AUGUST 2020\08-14-2020\SX2952\
Data File : x072399.d
Acq On : 13 Aug 2020 5:56 pm
Operator : marthav
Sample : fa77615-10 E,5
Misc : op81484,sx2952,30.3,,,1,5,soil
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 14 02:55:20 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.633	152	181397	40.00	ppm	0.00
22) Naphthalene-d8	7.056	136	668212	40.00	ppm	0.00
43) Acenaphthene-d10	9.094	164	319808	40.00	ppm	0.00
70) Phenanthrene-d10	10.837	188	539420	40.00	ppm	0.00
92) Chrysene-d12	14.047	240	453390	40.00	ppm	0.00
102) Perylene-d12	16.239	264	345642	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	5.633	152	181397	40.00	ppm	0.00
120) Naphthalene-d8A	7.056	136	668212	40.00	ppm	0.00
127) Acenaphthene-d10A	9.094	164	319808	40.00	ppm	0.00
136) Phenanthrene-d10A	10.837	188	539420	40.00	ppm	0.00
146) Chrysene-d12A	14.047	240	453390	40.00	ppm	0.00
153) Perylene-d12A	16.239	264	345642	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	4.291	112	93125	14.32	ppm	0.00
Spiked Amount 100.000	Range 40 - 102		Recovery = 14.32%#			
9) Phenol-d5	5.312	99	112081	14.48	ppm	-0.01
Spiked Amount 100.000	Range 41 - 100		Recovery = 14.48%#			
23) Nitrobenzene-d5	6.248	82	46350	6.72	ppm	-0.01
Spiked Amount 50.000	Range 40 - 105		Recovery = 13.44%#			
47) 2-Fluorobiphenyl	8.323	172	84711	7.32	ppm	0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 14.64%#			
75) 2,4,6-Tribromophenol	10.030	330	14944	14.76	ppm	-0.01
Spiked Amount 100.000	Range 42 - 108		Recovery = 14.76%#			
95) Terphenyl-d14	12.758	244	86299	7.16	ppm	0.00
Spiked Amount 50.000	Range 45 - 119		Recovery = 14.32%#			
Target Compounds						Qvalue
5) Benzaldehyde	5.162	106	564	0.10	ppm	74
6) Aniline	5.291	93	3105	0.29	ppm	92
24) Nitrobenzene	6.270	77	1254	0.18	ppm	88
27) 2,4-Dimethylphenol	6.735	107	833	0.14	ppm	90
30) Benzoic Acid	6.837	105	2623	0.65	ppm	85
34) Naphthalene	7.077	128	5830	0.32	ppm	98
40) 2-Methylnaphthalene	7.885	142	3236	0.27	ppm	97
41) 1-Methylnaphthalene	7.997	142	2753	0.24	ppm	92
48) 1,1'-Biphenyl	8.436	154	989	0.08	ppm	95
52) Acenaphthylene	8.928	152	124544	7.80	ppm	99
57) Acenaphthene	9.131	153	8188	0.77	ppm	97
60) Dibenzofuran	9.334	168	7648	0.54	ppm	93
65) Fluorene	9.741	166	13491	1.22	ppm	96
84) Phenanthrene	10.864	178	219688	13.48	ppm	98
85) Anthracene	10.928	178	297997	17.54	ppm	98
87) Carbazole	11.142	167	114200	7.62	ppm	99
91) Fluoranthene	12.276	202	1242956	82.19	ppm	98
93) Benzidine	12.490	184	1294	0.16	ppm #	41
94) Pyrene	12.538	202	1427168	75.81	ppm	99
99) Benzo[a]anthracene	14.036	228	371501	26.07	ppm	98
100) Chrysene	14.084	228	698338	46.02	ppm	98
104) Benzo[b]fluoranthene	15.603	252	764396	71.28	ppm	96
105) Benzo[k]fluoranthene	15.640	252	239705	19.53	ppm	98
106) Benzo[a]pyrene	16.138	252	259857	27.75	ppm	96
107) Indeno[1,2,3-cd]pyrene	17.903	276	189603	31.39	ppm	87
108) Dibenz[a,h]anthracene	17.940	278	34027	6.06	ppm	86
109) Benzo[g,h,i]perylene	18.261	276	159559	18.86	ppm	88

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\Jenniferf\AUGUST 2020\08-14-2020\SX2952\
Data File : x072399.d
Acq On : 13 Aug 2020 5:56 pm
Operator : marthav
Sample : fa77615-10 E,5
Misc : op81484,sx2952,30.3,,,1,5,soil
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 14 02:55:20 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

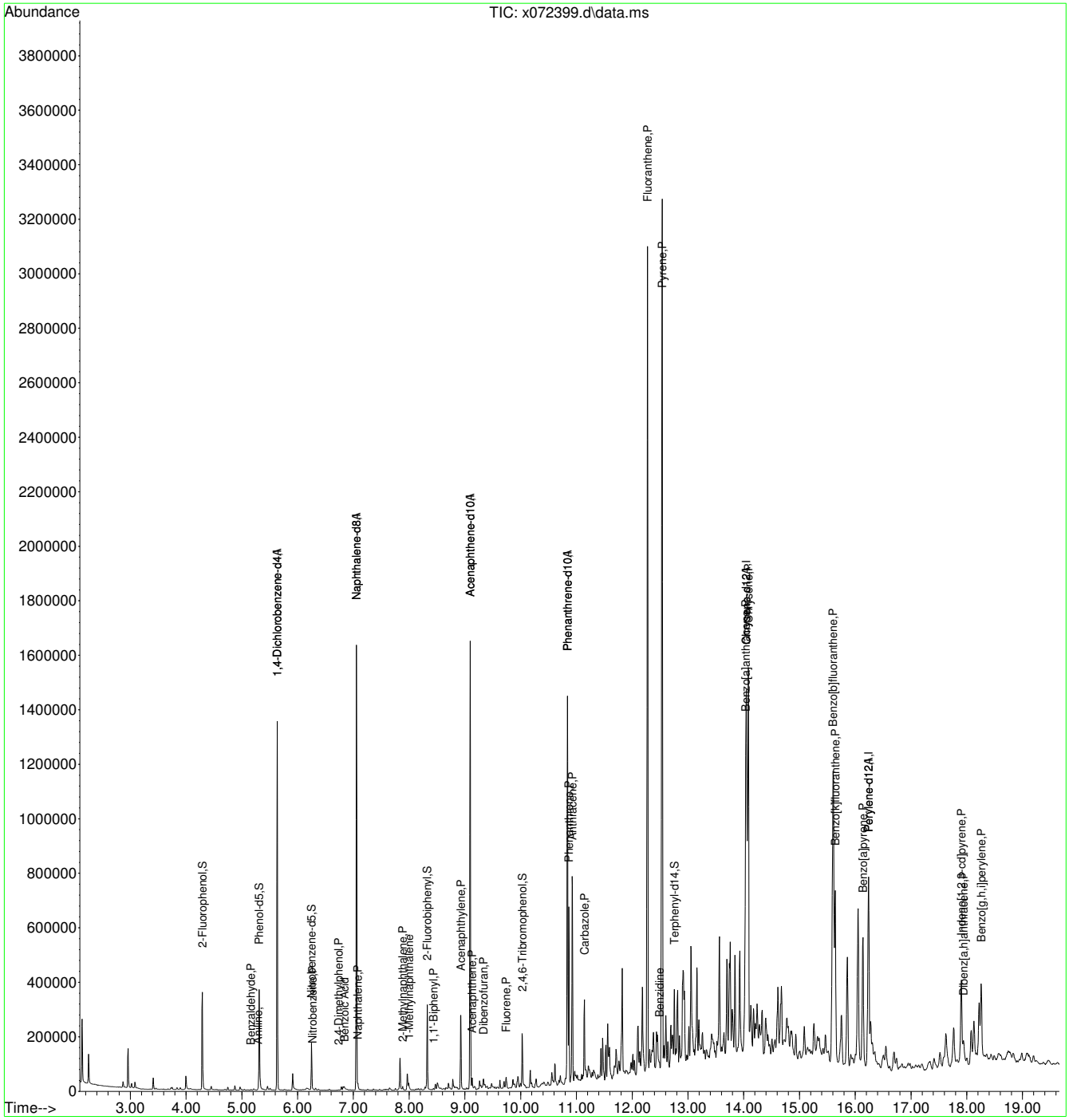
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

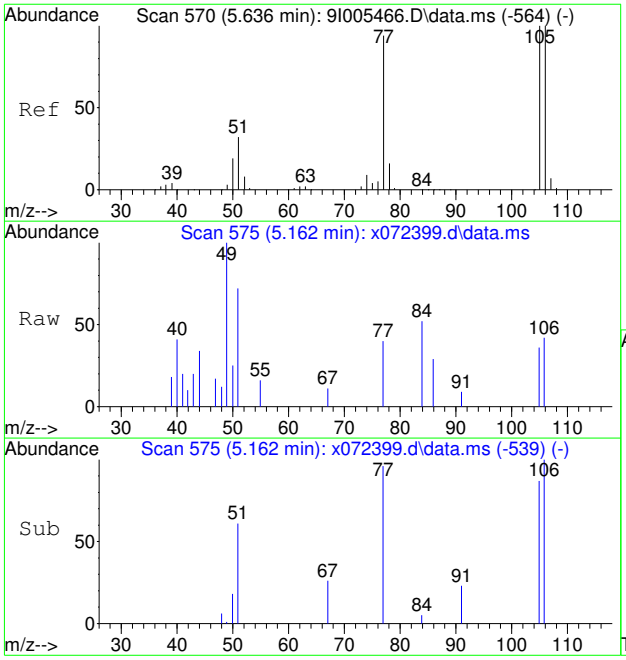
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\Jenniferf\AUGUST 2020\08-14-2020\SX2952\
Data File : x072399.d
Acq On : 13 Aug 2020 5:56 pm
Operator : marthav
Sample : fa77615-10 E,5
Misc : op81484,sx2952,30.3,,,1,5,soil
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 14 02:55:20 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

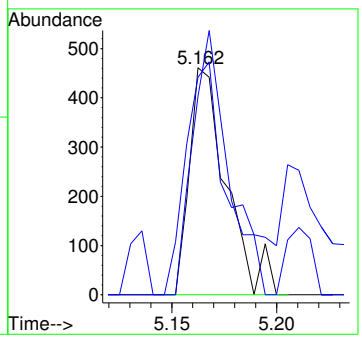


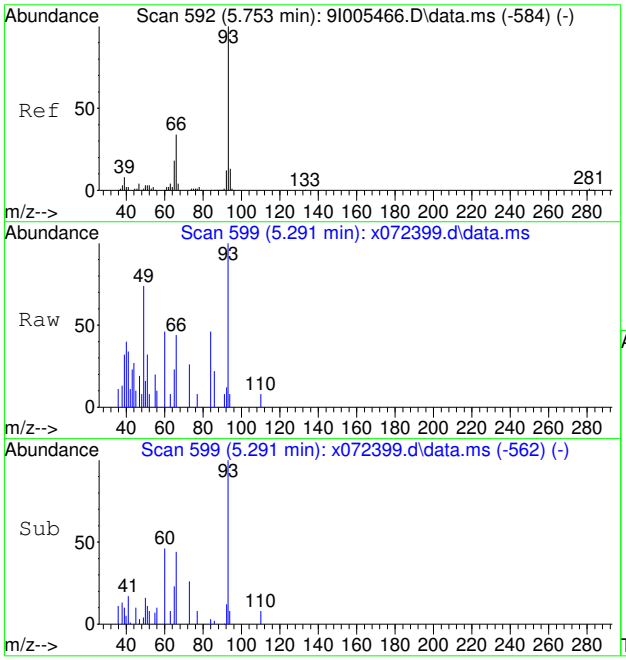


#5
Benzaldehyde
Concen: 0.10 ppm
RT: 5.162 min Scan# 575
Delta R.T. -0.005 min
Lab File: x072399.d
Acq: 13 Aug 2020 5:56 pm

Tgt Ion:106 Resp: 564

Ion	Ratio	Lower	Upper
106	100		
77	67.2	63.9	123.9
105	75.3	70.0	130.0

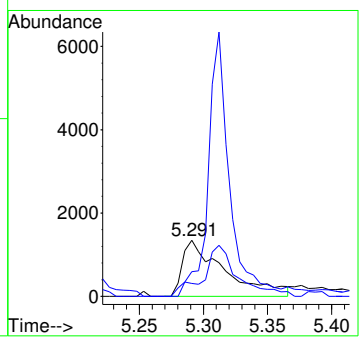


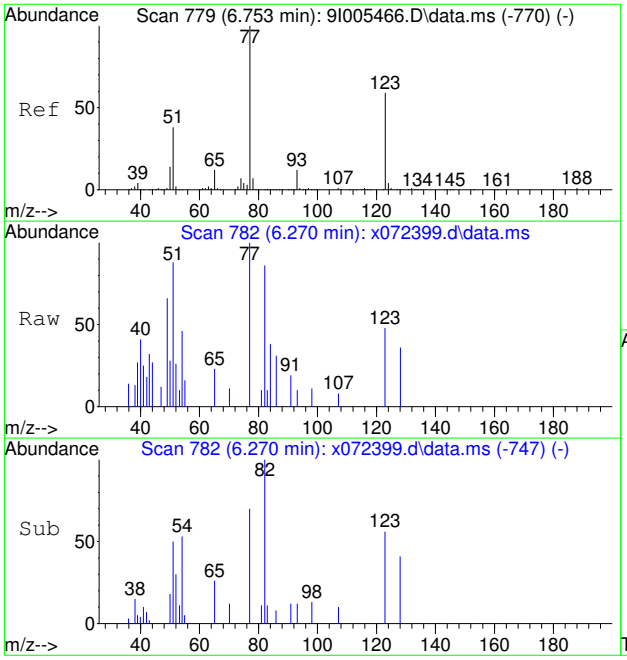


#6
Aniline
Concen: 0.29 ppm
RT: 5.291 min Scan# 599
Delta R.T. 0.000 min
Lab File: x072399.d
Acq: 13 Aug 2020 5:56 pm

Tgt Ion: 93 Resp: 3105

Ion	Ratio	Lower	Upper
93	100		
66	39.2	3.5	63.5
65	20.5	0.0	48.0

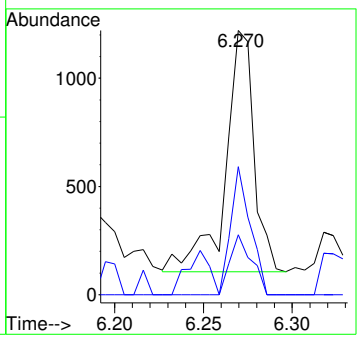


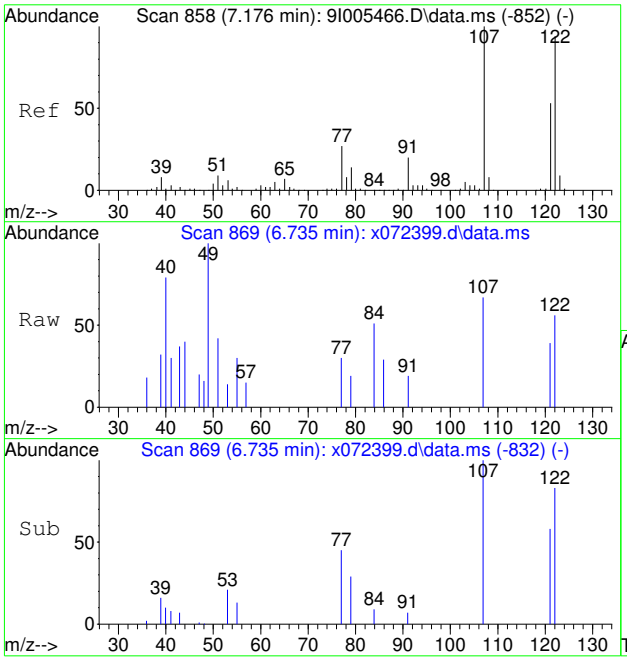


#24
Nitrobenzene
Concen: 0.18 ppm
RT: 6.270 min Scan# 782
Delta R.T. -0.011 min
Lab File: x072399.d
Acq: 13 Aug 2020 5:56 pm

Tgt Ion: 77 Resp: 1254

Ion	Ratio	Lower	Upper
77	100		
123	53.2	28.7	88.7
65	24.9	0.0	42.1

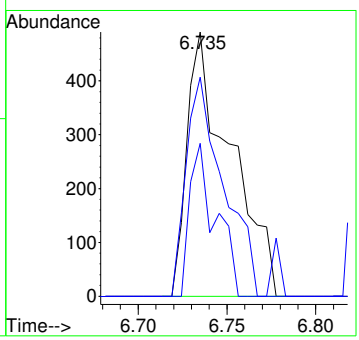


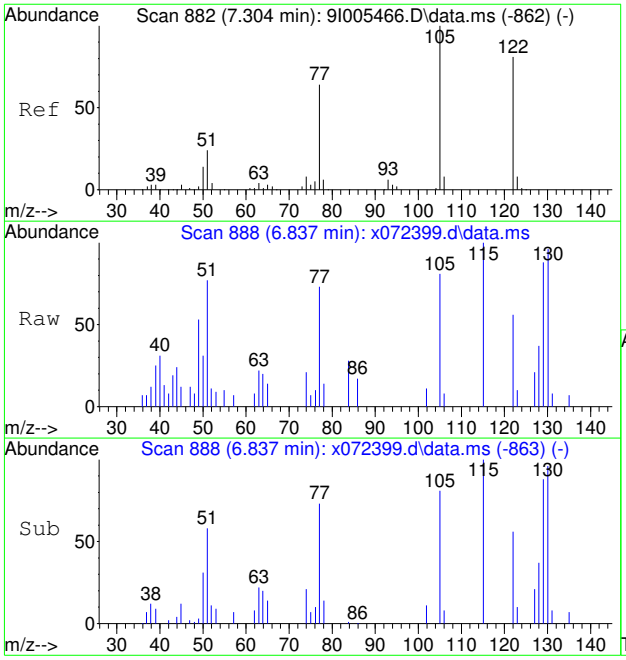


#27
2,4-Dimethylphenol
Concen: 0.14 ppm
RT: 6.735 min Scan# 869
Delta R.T. 0.000 min
Lab File: x072399.d
Acq: 13 Aug 2020 5:56 pm

Tgt Ion:107 Resp: 833

Ion	Ratio	Lower	Upper
107	100		
121	57.8	23.4	83.4
122	82.9	64.3	124.3

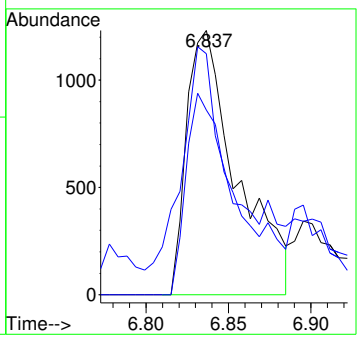


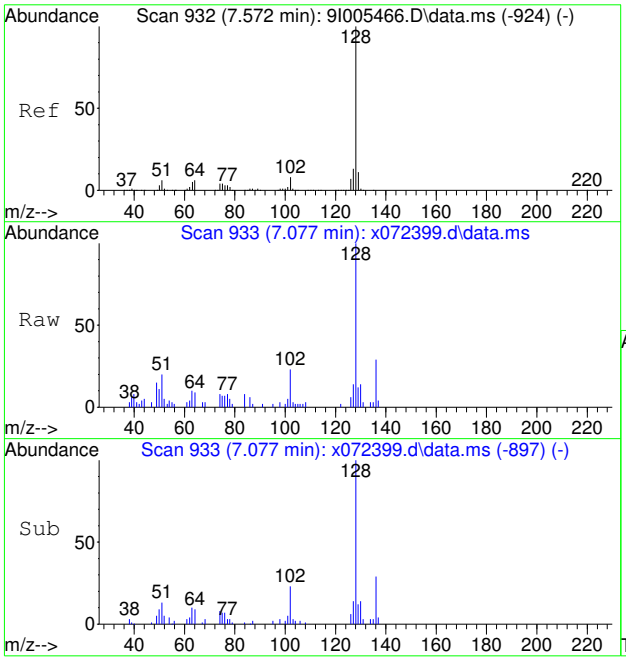


#30
Benzoic Acid
Concen: 0.65 ppm
RT: 6.837 min Scan# 888
Delta R.T. -0.064 min
Lab File: x072399.d
Acq: 13 Aug 2020 5:56 pm

Tgt Ion:105 Resp: 2623

Ion	Ratio	Lower	Upper
105	100		
122	67.5	51.2	111.2
77	76.2	34.1	94.1

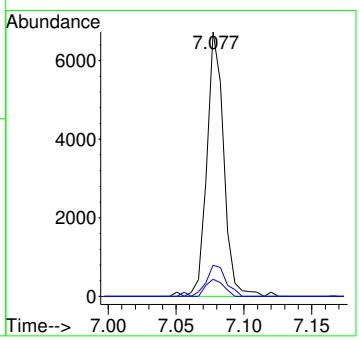


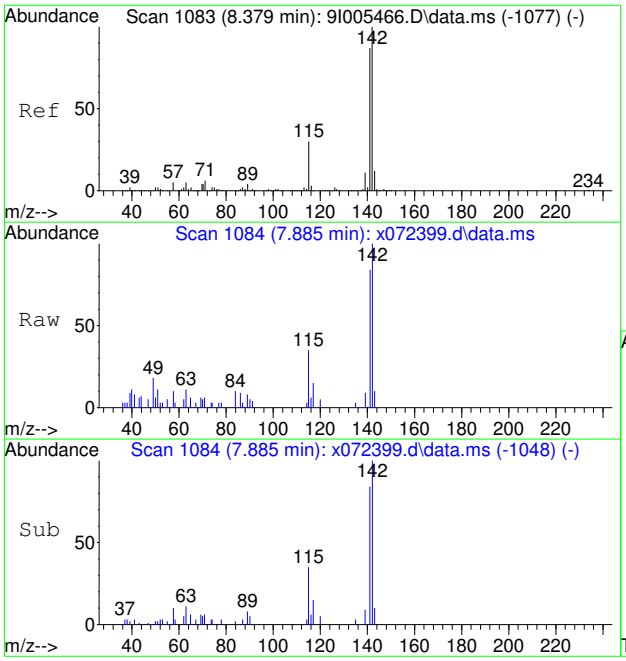


#34
Naphthalene
Concen: 0.32 ppm
RT: 7.077 min Scan# 933
Delta R.T. -0.005 min
Lab File: x072399.d
Acq: 13 Aug 2020 5:56 pm

Tgt Ion:128 Resp: 5830

Ion	Ratio	Lower	Upper
128	100		
129	11.8	0.0	41.4
126	6.5	0.0	37.4

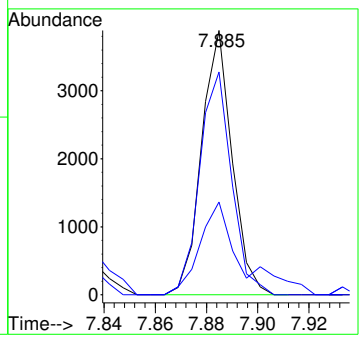


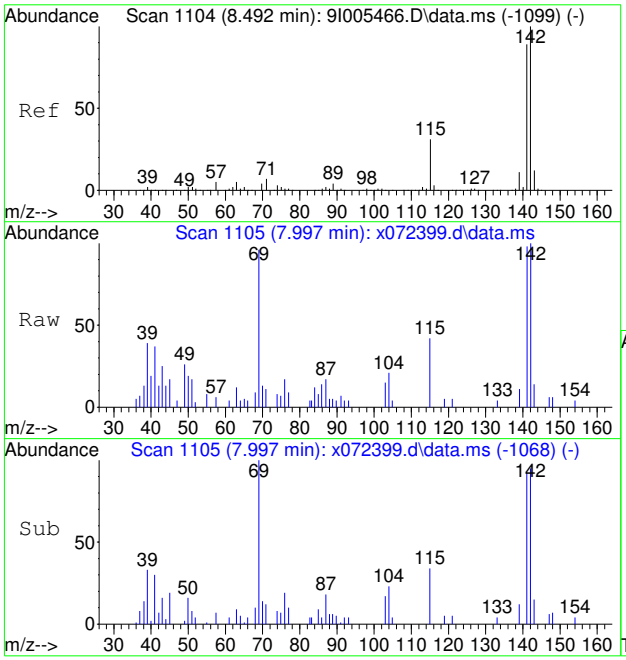


#40
2-Methylnaphthalene
Concen: 0.27 ppm
RT: 7.885 min Scan# 1084
Delta R.T. -0.005 min
Lab File: x072399.d
Acq: 13 Aug 2020 5:56 pm

Tgt Ion:142 Resp: 3236

Ion	Ratio	Lower	Upper
142	100		
141	84.3	56.8	116.8
115	32.6	0.0	60.0

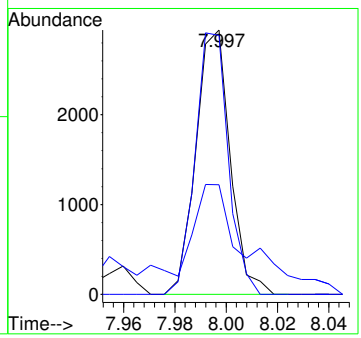


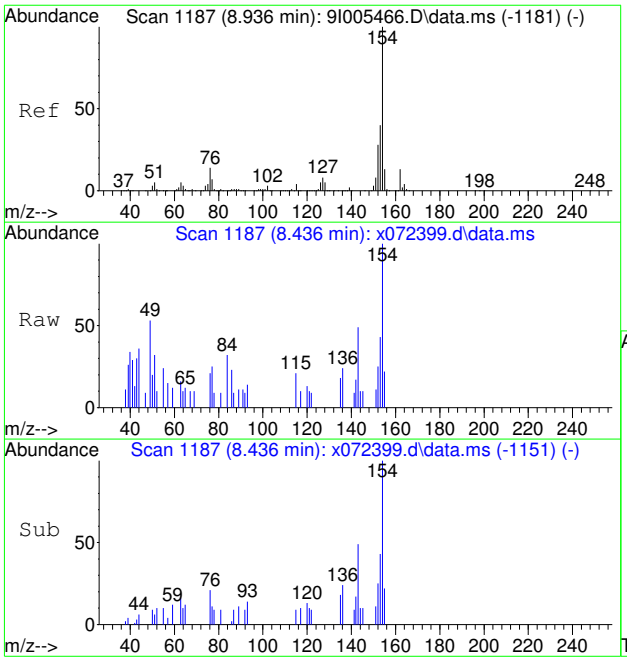


#41
1-Methylnaphthalene
Concen: 0.24 ppm
RT: 7.997 min Scan# 1105
Delta R.T. 0.000 min
Lab File: x072399.d
Acq: 13 Aug 2020 5:56 pm

Tgt Ion:142 Resp: 2753

Ion	Ratio	Lower	Upper
142	100		
141	98.0	59.0	119.0
115	33.5	1.1	61.1

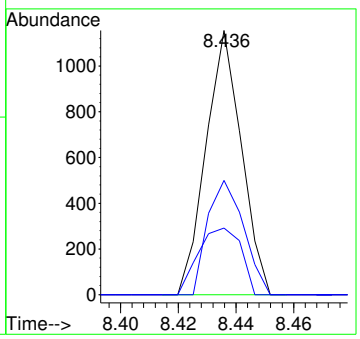


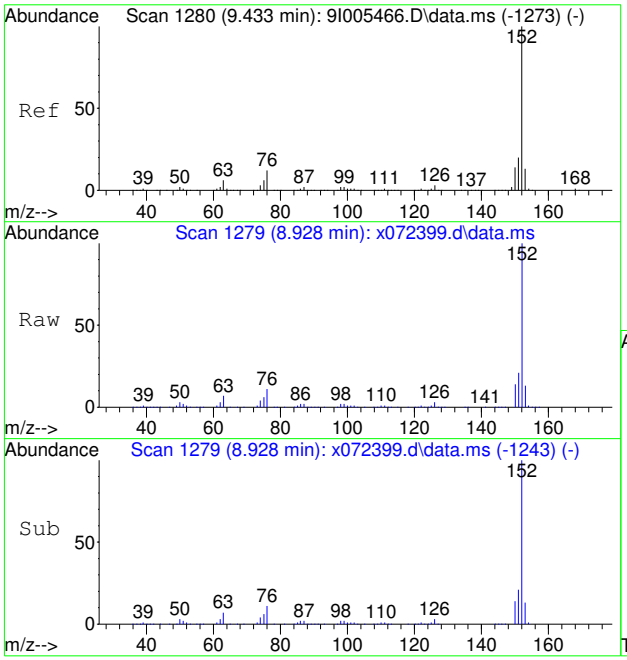


#48
1,1'-Biphenyl
Concen: 0.08 ppm
RT: 8.436 min Scan# 1187
Delta R.T. -0.005 min
Lab File: x072399.d
Acq: 13 Aug 2020 5:56 pm

Tgt Ion:154 Resp: 989

Ion	Ratio	Lower	Upper
154	100		
153	43.3	10.3	70.3
152	25.3	0.0	58.2

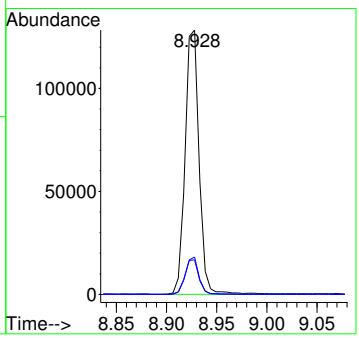


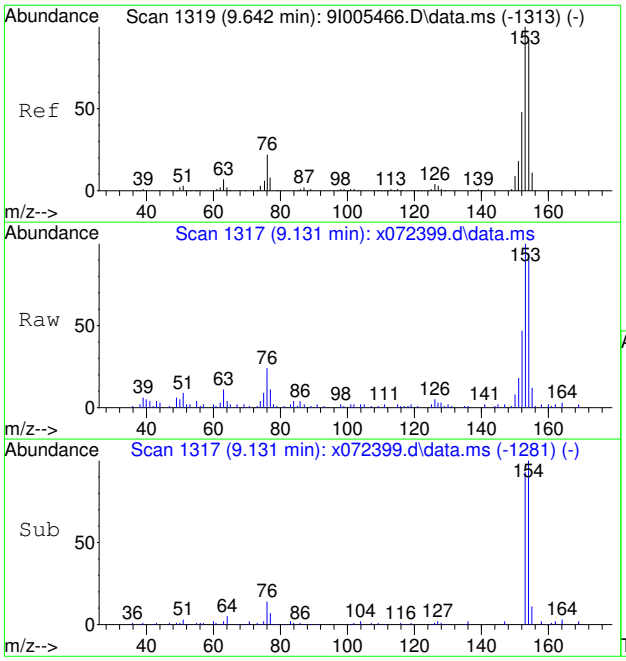


#52
Acenaphthylene
Concen: 7.80 ppm
RT: 8.928 min Scan# 1279
Delta R.T. -0.005 min
Lab File: x072399.d
Acq: 13 Aug 2020 5:56 pm

Tgt Ion:152 Resp: 124544

Ion	Ratio	Lower	Upper
152	100		
150	14.1	0.0	44.3
153	13.1	0.0	43.3

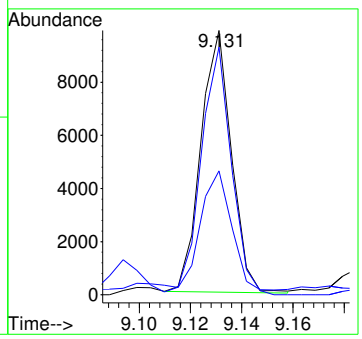


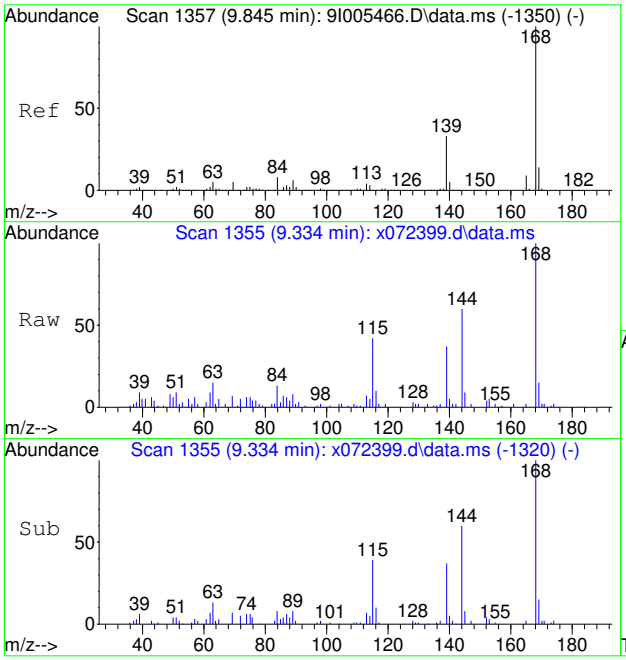


#57
Acenaphthene
Concen: 0.77 ppm
RT: 9.131 min Scan# 1317
Delta R.T. -0.005 min
Lab File: x072399.d
Acq: 13 Aug 2020 5:56 pm

Tgt Ion:153 Resp: 8188

Ion	Ratio	Lower	Upper
153	100		
152	44.6	18.4	78.4
154	94.4	62.4	122.4

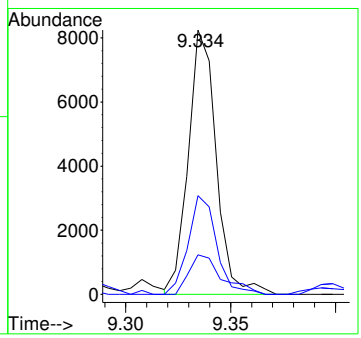


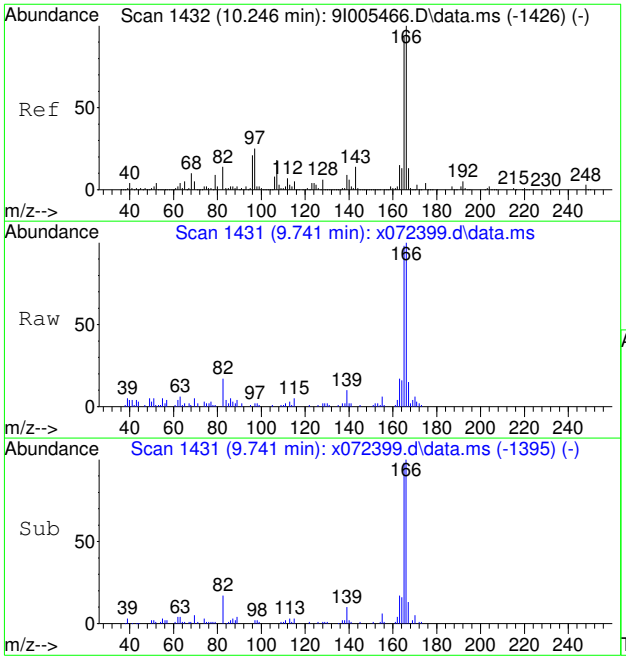


#60
Dibenzofuran
Concen: 0.54 ppm
RT: 9.334 min Scan# 1355
Delta R.T. -0.011 min
Lab File: x072399.d
Acq: 13 Aug 2020 5:56 pm

Tgt Ion:168 Resp: 7648

Ion	Ratio	Lower	Upper
168	100		
139	37.7	3.0	63.0
169	15.1	0.0	43.5

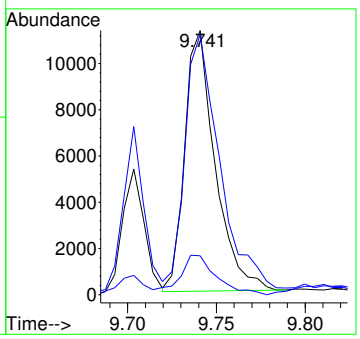


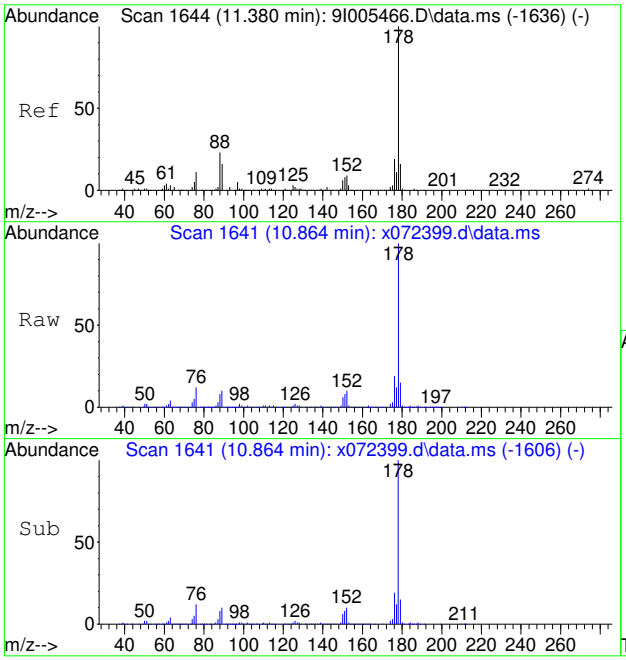


#65
Fluorene
Concen: 1.22 ppm
RT: 9.741 min Scan# 1431
Delta R.T. -0.005 min
Lab File: x072399.d
Acq: 13 Aug 2020 5:56 pm

Tgt Ion:166 Resp: 13491

Ion	Ratio	Lower	Upper
166	100		
165	96.8	62.7	122.7
167	13.0	0.0	43.5

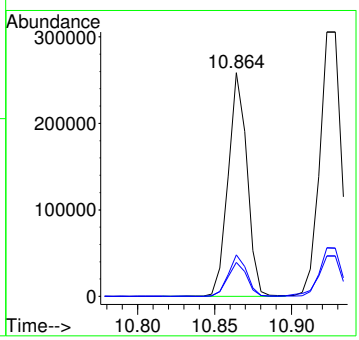


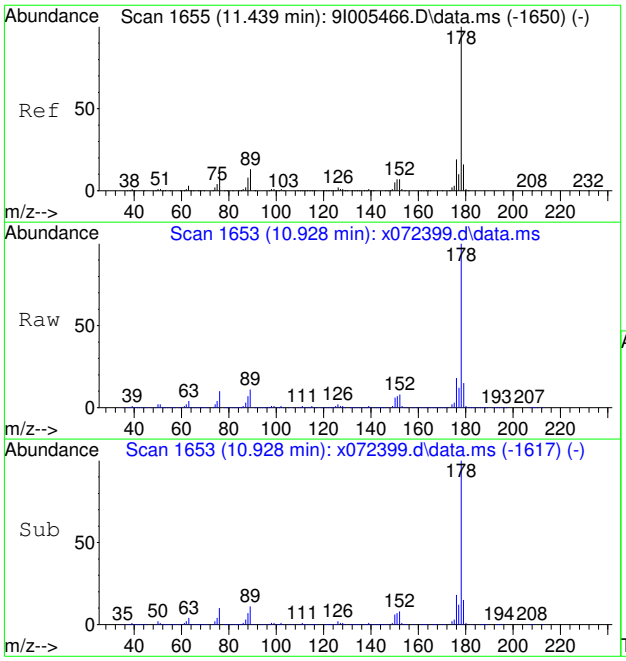


#84
Phenanthrene
Concen: 13.48 ppm
RT: 10.864 min Scan# 1641
Delta R.T. -0.011 min
Lab File: x072399.d
Acq: 13 Aug 2020 5:56 pm

Tgt Ion:178 Resp: 219688

Ion	Ratio	Lower	Upper
178	100		
179	15.0	0.0	45.8
176	18.6	0.0	49.3

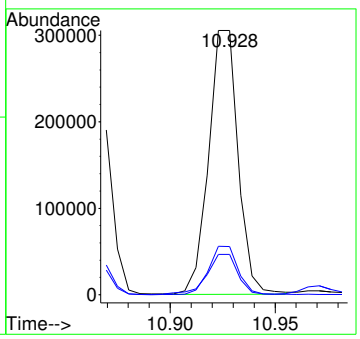


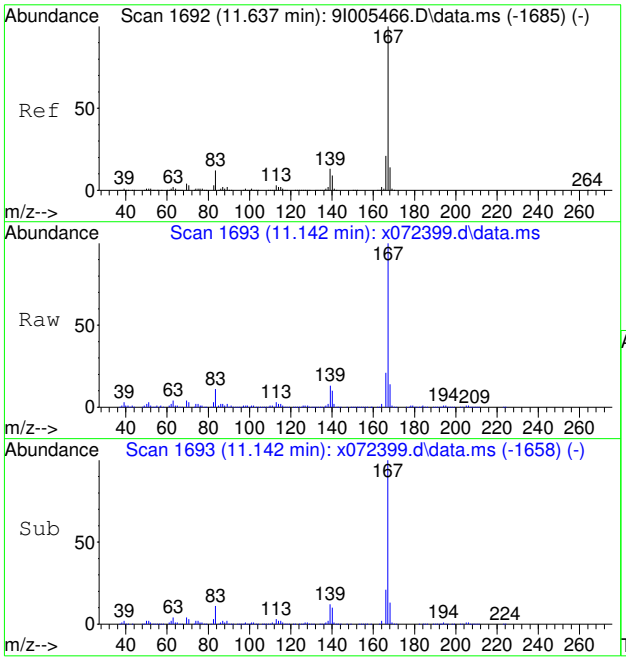


#85
Anthracene
Concen: 17.54 ppm
RT: 10.928 min Scan# 1653
Delta R.T. -0.005 min
Lab File: x072399.d
Acq: 13 Aug 2020 5:56 pm

Tgt Ion:178 Resp: 297997

Ion	Ratio	Lower	Upper
178	100		
179	15.1	0.0	46.0
176	18.2	0.0	49.3

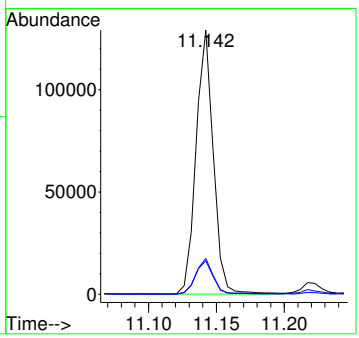


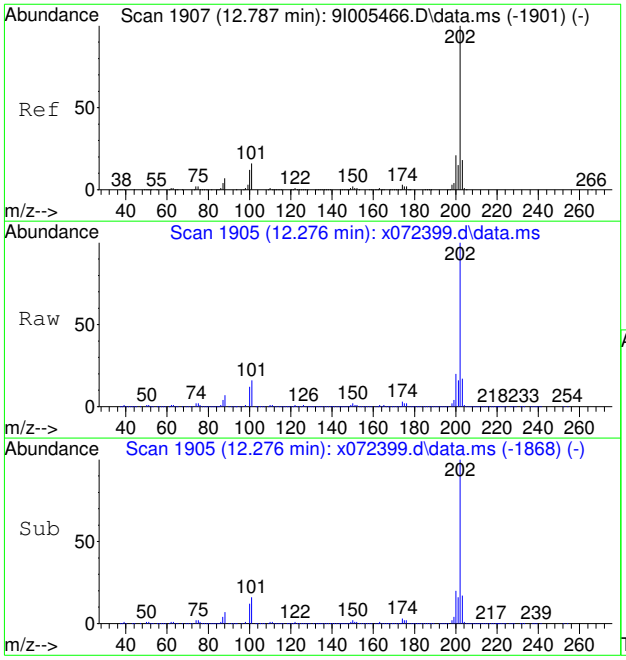


#87
Carbazole
Concen: 7.62 ppm
RT: 11.142 min Scan# 1693
Delta R.T. -0.011 min
Lab File: x072399.d
Acq: 13 Aug 2020 5:56 pm

Tgt Ion:167 Resp: 114200

Ion	Ratio	Lower	Upper
167	100		
168	13.4	0.0	43.9
139	12.5	0.0	42.7

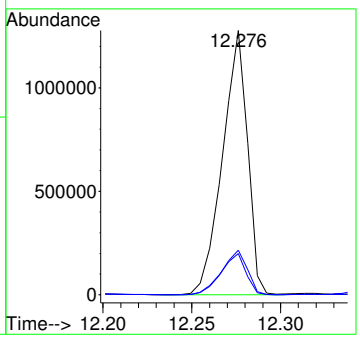


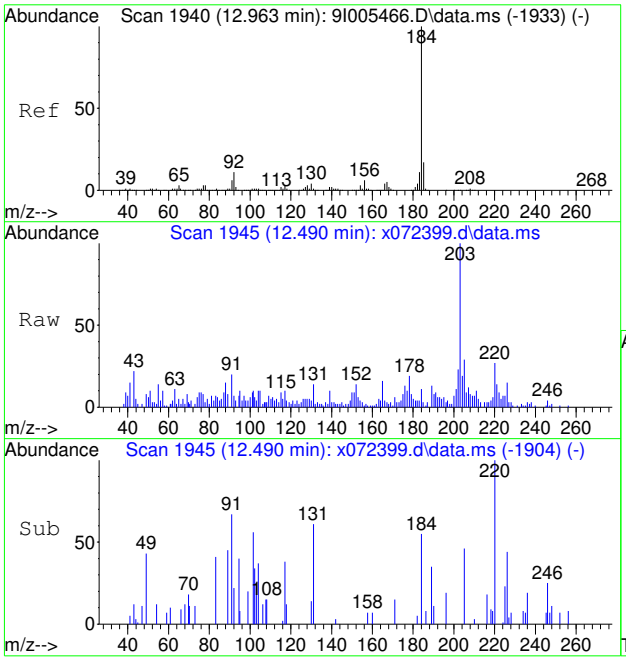


#91
Fluoranthene
Concen: 82.19 ppm
RT: 12.276 min Scan# 1905
Delta R.T. 0.000 min
Lab File: x072399.d
Acq: 13 Aug 2020 5:56 pm

Tgt Ion:202 Resp: 1242956

Ion	Ratio	Lower	Upper
202	100		
101	15.5	0.0	45.8
203	16.9	0.0	48.1

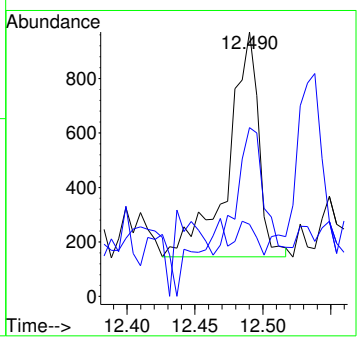


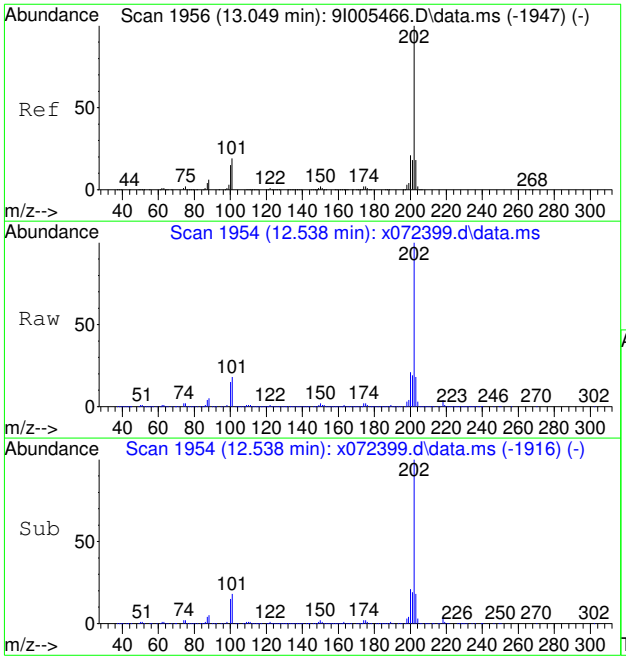


#93
Benzidine
Concen: 0.16 ppm
RT: 12.490 min Scan# 1945
Delta R.T. 0.021 min
Lab File: x072399.d
Acq: 13 Aug 2020 5:56 pm

Tgt Ion:184 Resp: 1294

Ion	Ratio	Lower	Upper
184	100		
92	52.1	0.0	40.8#
185	5.1	0.0	46.7

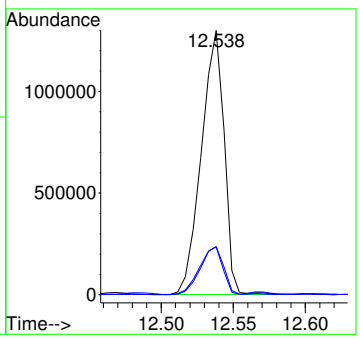


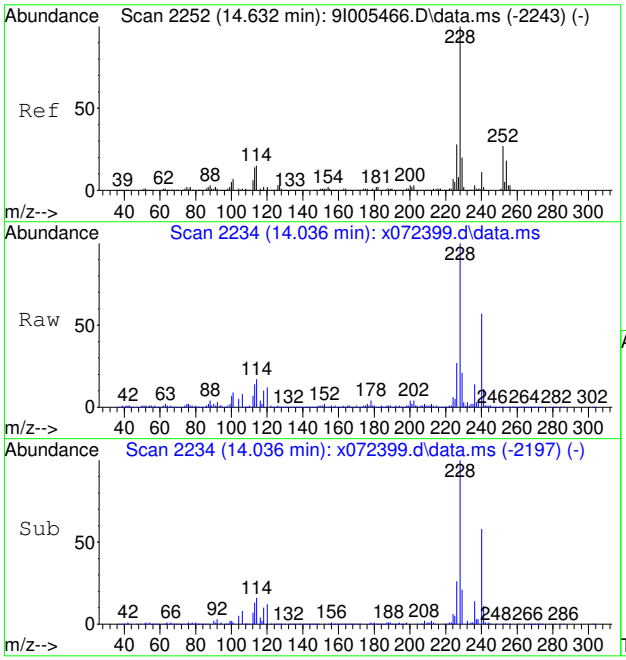


#94
Pyrene
Concen: 75.81 ppm
RT: 12.538 min Scan# 1954
Delta R.T. 0.005 min
Lab File: x072399.d
Acq: 13 Aug 2020 5:56 pm

Tgt Ion:202 Resp: 1427168

Ion	Ratio	Lower	Upper
202	100		
101	18.1	0.0	48.7
203	18.1	0.0	48.4

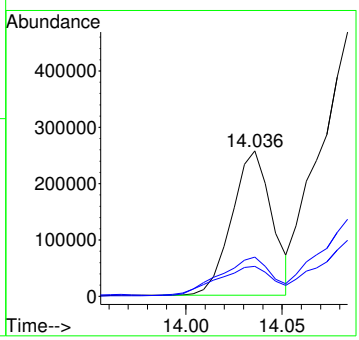


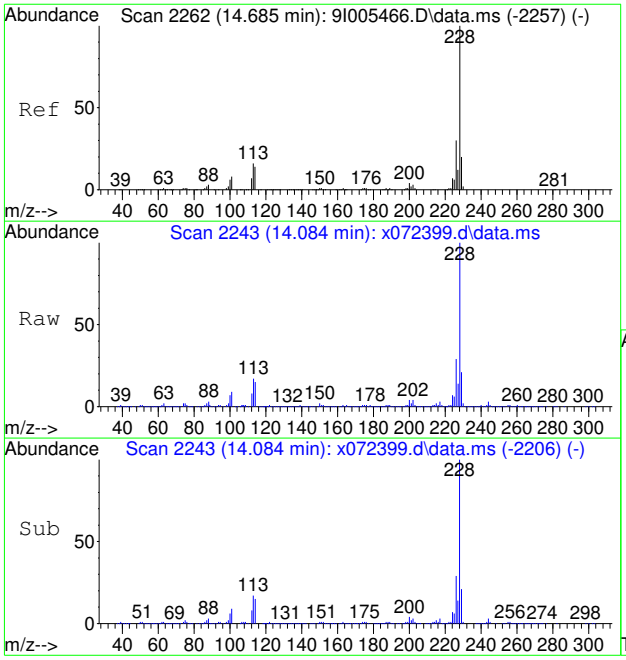


#99
Benzo[a]anthracene
Concen: 26.07 ppm
RT: 14.036 min Scan# 2234
Delta R.T. 0.000 min
Lab File: x072399.d
Acq: 13 Aug 2020 5:56 pm

Tgt Ion:228 Resp: 371501

Ion	Ratio	Lower	Upper
228	100		
226	26.3	0.0	57.5
229	19.2	0.0	49.9

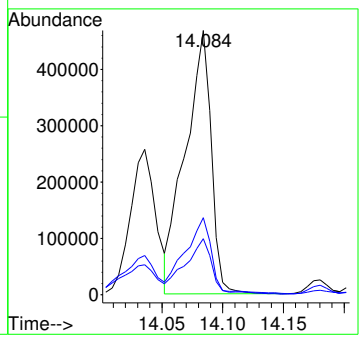


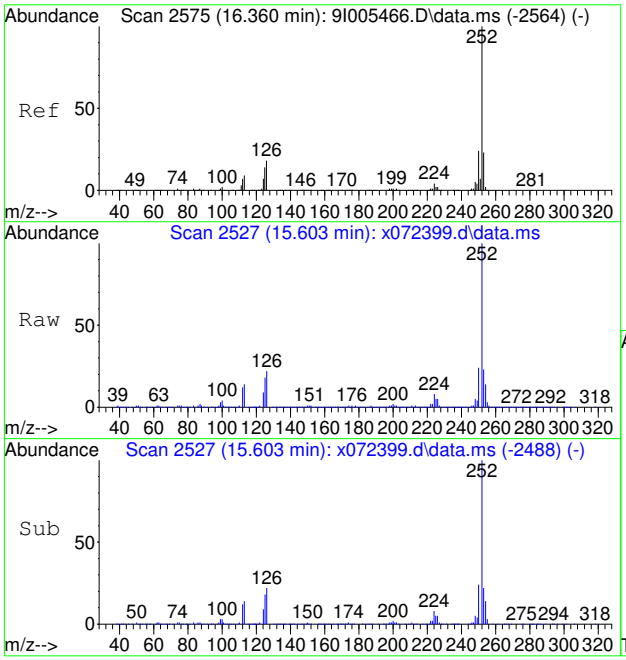


#100
Chrysene
Concen: 46.02 ppm
RT: 14.084 min Scan# 2243
Delta R.T. 0.000 min
Lab File: x072399.d
Acq: 13 Aug 2020 5:56 pm

Tgt Ion:228 Resp: 698338

Ion	Ratio	Lower	Upper
228	100		
226	29.0	0.4	60.4
229	20.6	0.0	50.1

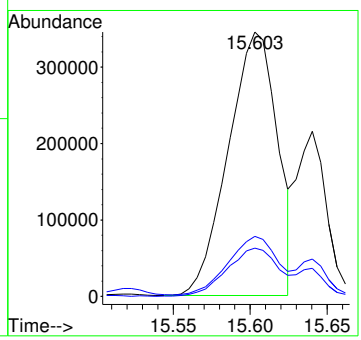


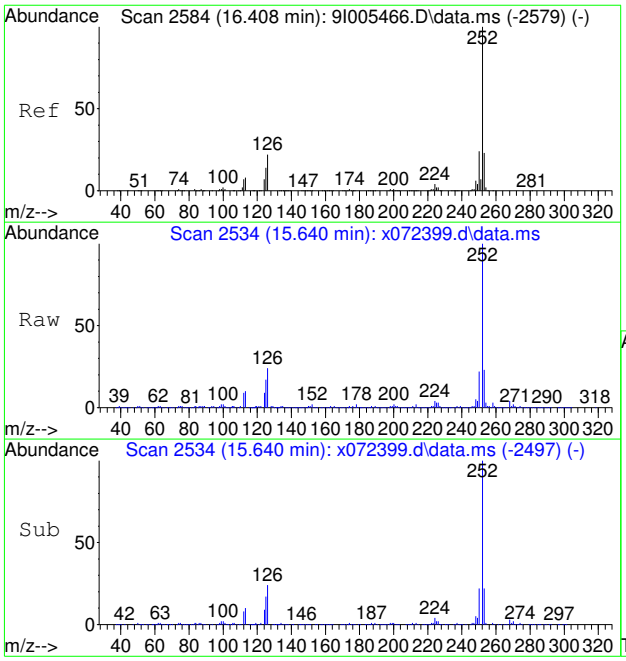


#104
Benzo[b]fluoranthene
Concen: 71.28 ppm
RT: 15.603 min Scan# 2527
Delta R.T. 0.011 min
Lab File: x072399.d
Acq: 13 Aug 2020 5:56 pm

Tgt Ion:252 Resp: 764396

Ion	Ratio	Lower	Upper
252	100		
253	22.2	0.0	52.5
125	17.8	0.0	44.0

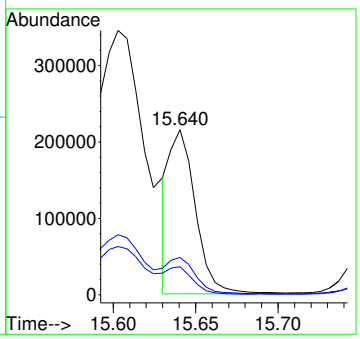


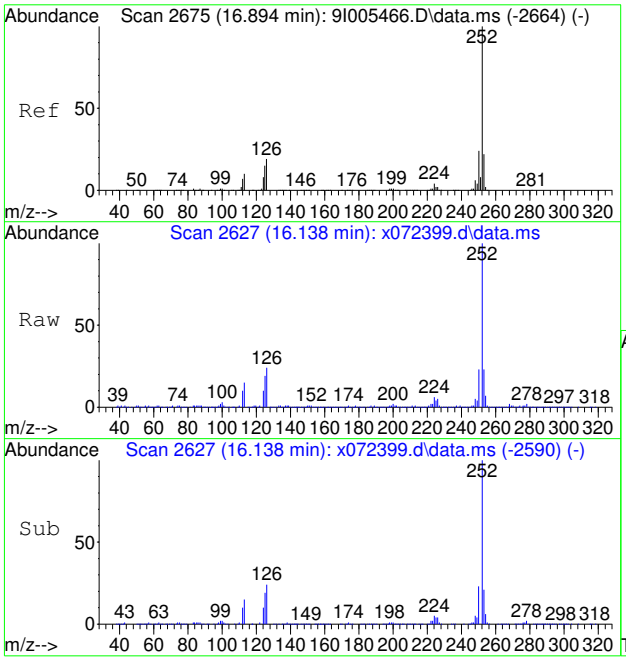


#105
Benzo[k]fluoranthene
Concen: 19.53 ppm
RT: 15.640 min Scan# 2534
Delta R.T. 0.000 min
Lab File: x072399.d
Acq: 13 Aug 2020 5:56 pm

Tgt Ion:252 Resp: 239705

Ion	Ratio	Lower	Upper
252	100		
253	22.1	0.0	52.5
125	16.0	0.0	44.4

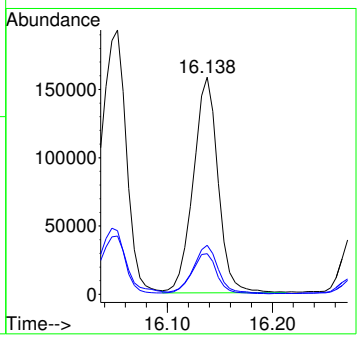


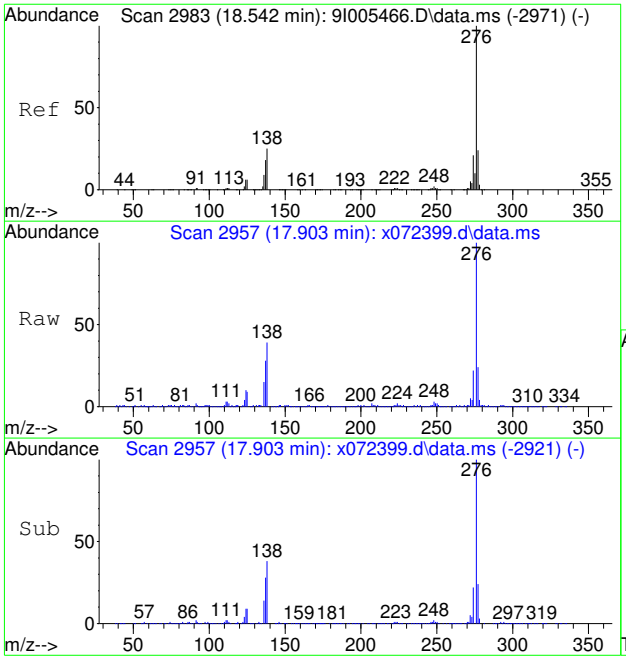


#106
Benzo[a]pyrene
Concen: 27.75 ppm
RT: 16.138 min Scan# 2627
Delta R.T. 0.000 min
Lab File: x072399.d
Acq: 13 Aug 2020 5:56 pm

Tgt Ion:252 Resp: 259857

Ion	Ratio	Lower	Upper
252	100		
253	22.0	0.0	52.3
125	18.5	0.0	44.7

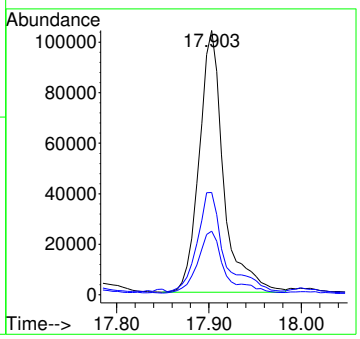


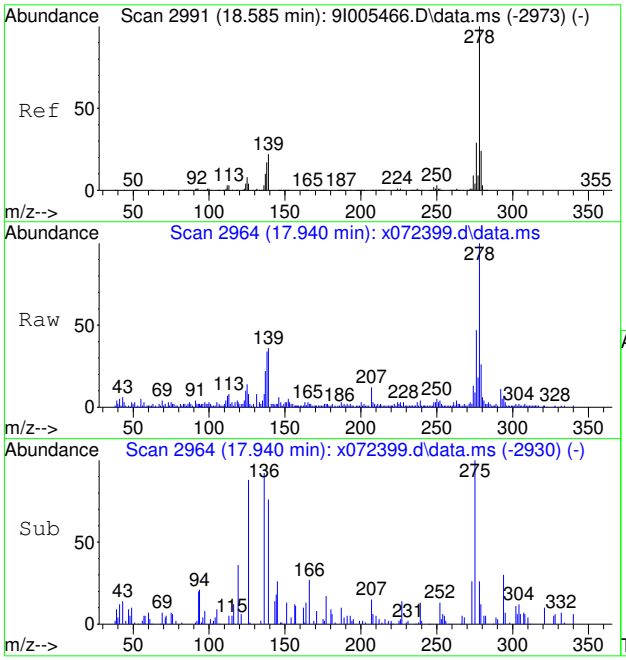


#107
Indeno[1,2,3-cd]pyrene
Concen: 31.39 ppm
RT: 17.903 min Scan# 2957
Delta R.T. -0.005 min
Lab File: x072399.d
Acq: 13 Aug 2020 5:56 pm

Tgt Ion:276 Resp: 189603

Ion	Ratio	Lower	Upper
276	100		
138	37.5	0.0	54.7
277	23.6	0.0	53.8

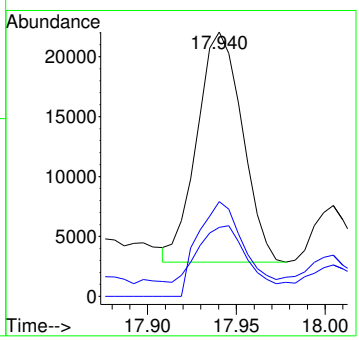


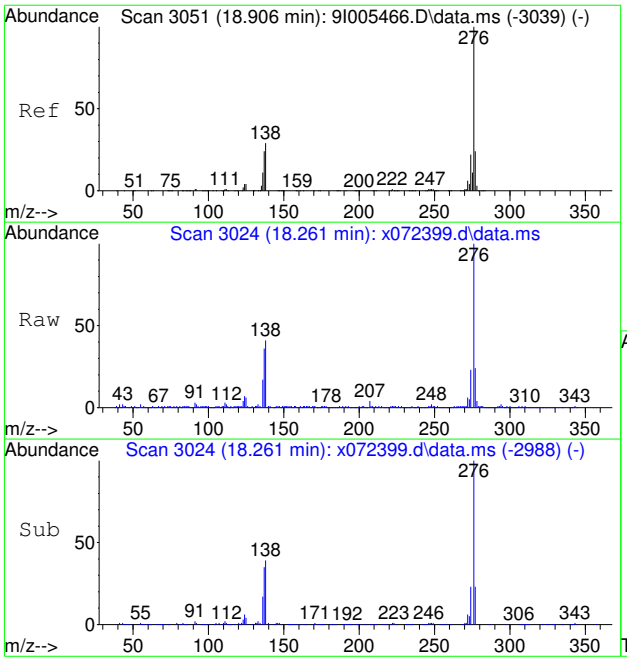


#108
Dibenz[a,h]anthracene
Concen: 6.06 ppm
RT: 17.940 min Scan# 2964
Delta R.T. -0.016 min
Lab File: x072399.d
Acq: 13 Aug 2020 5:56 pm

Tgt Ion:278 Resp: 34027

Ion	Ratio	Lower	Upper
278	100		
139	36.7	0.0	52.4
279	24.5	0.0	54.4

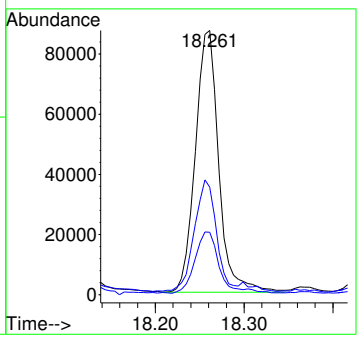




#109
Benzo[g,h,i]perylene
Concen: 18.86 ppm
RT: 18.261 min Scan# 3024
Delta R.T. -0.005 min
Lab File: x072399.d
Acq: 13 Aug 2020 5:56 pm

Tgt Ion:276 Resp: 159559

Ion	Ratio	Lower	Upper
276	100		
138	39.8	0.0	59.4
277	23.1	0.0	54.1



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06505.d
Acq On : 11 Aug 2020 9:10 pm
Operator : marthav
Sample : fa77615-11 E Inst : MSBNA10
Misc : op81484,S6F251,30.2,,,1,1,soil
ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Results File: 8270D6F072920.RES
Quant Time: Aug 12 06:42:53 2020
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

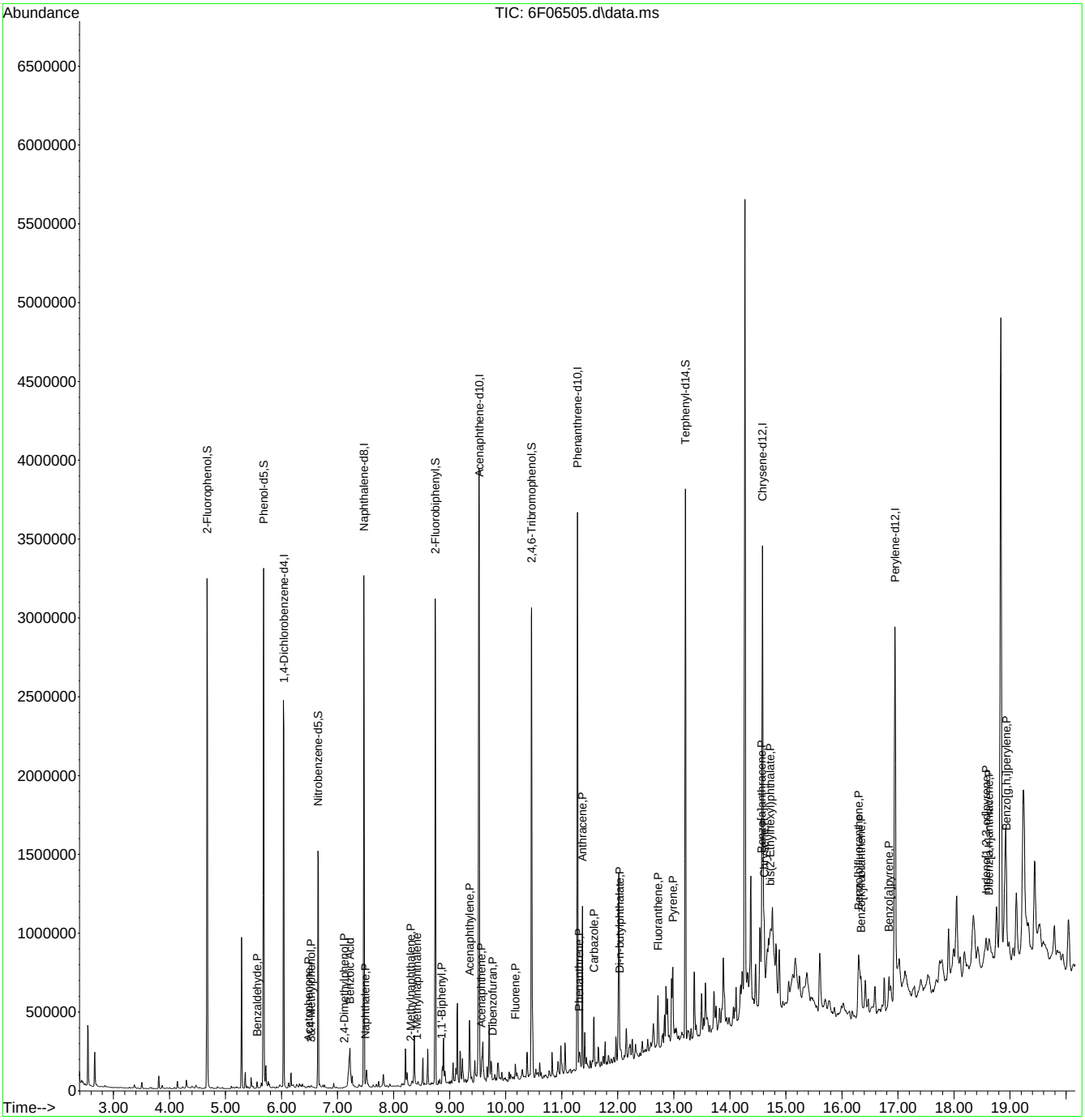
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	6.040	152	362583	40.00	ppm		0.00
22) Naphthalene-d8	7.468	136	1344236	40.00	ppm		0.00
43) Acenaphthene-d10	9.527	164	715905	40.00	ppm		0.00
70) Phenanthrene-d10	11.282	188	1294458	40.00	ppm		0.00
92) Chrysene-d12	14.582	240	1120594	40.00	ppm		0.00
102) Perylene-d12	16.946	264	1164635	40.00	ppm		0.02
System Monitoring Compounds							
7) 2-Fluorophenol	4.671	112	839003	61.24	ppm		0.01
Spiked Amount 100.000	Range 40 - 102		Recovery = 61.24%				
9) Phenol-d5	5.682	99	1093889	67.26	ppm		0.01
Spiked Amount 100.000	Range 41 - 100		Recovery = 67.26%				
23) Nitrobenzene-d5	6.650	82	462372	31.35	ppm		0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 62.70%				
47) 2-Fluorobiphenyl	8.741	172	922100	32.95	ppm		0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 65.90%				
75) 2,4,6-Tribromophenol	10.463	330	337725	77.52	ppm		0.00
Spiked Amount 100.000	Range 42 - 108		Recovery = 77.52%				
95) Terphenyl-d14	13.207	244	1095754	34.79	ppm		0.00
Spiked Amount 50.000	Range 45 - 119		Recovery = 69.58%				
Target Compounds							Qvalue
5) Benzaldehyde	5.564	106	11980	1.08	ppm		97
18) Acetophenone	6.484	105	4433	0.24	ppm		96
21) 3&4-Methylphenol	6.521	108	1125	0.09	ppm	#	59
27) 2,4-Dimethylphenol	7.120	107	1140	0.09	ppm	#	30
30) Benzoic Acid	7.222	105	109022	11.95	ppm		95
34) Naphthalene	7.495	128	1925	0.05	ppm		81
40) 2-Methylnaphthalene	8.303	141	1864	0.08	ppm	#	76
41) 1-Methylnaphthalene	8.415	142	1675	0.07	ppm		75
48) 1,1'-Biphenyl	8.853	154	1139	0.04	ppm		77
52) Acenaphthylene	9.356	152	179588	5.02	ppm		97
57) Acenaphthene	9.559	153	11068	0.47	ppm		99
60) Dibenzofuran	9.763	168	1571	0.05	ppm		87
65) Fluorene	10.169	166	38462	1.45	ppm		98
84) Phenanthrene	11.308	178	27737	0.72	ppm		98
85) Anthracene	11.367	178	373216	9.48	ppm		99
87) Carbazole	11.576	167	127520	3.59	ppm		97
89) Di-n-butylphthalate	12.031	149	5829	0.13	ppm		93
91) Fluoranthene	12.715	202	105471	2.58	ppm		98
94) Pyrene	12.983	202	152426	3.80	ppm		96
99) Benzo[a]anthracene	14.566	228	65140	1.73	ppm		87
100) Chrysene	14.614	228	132544	3.64	ppm		98
101) bis(2-Ethylhexyl)phtha...	14.721	149	36066	1.34	ppm		68
104) Benzo[b]fluoranthene	16.299	252	261857	7.00	ppm		98
105) Benzo[k]fluoranthene	16.342	252	89436	2.30	ppm		95
106) Benzo[a]pyrene	16.839	252	68550	1.97	ppm		96
107) Indeno[1,2,3-cd]pyrene	18.572	276	79261	2.45	ppm		95
108) Dibenz[a,h]anthracene	18.620	278	18830	0.55	ppm		92
109) Benzo[g,h,i]perylene	18.936	276	60156	1.72	ppm		96

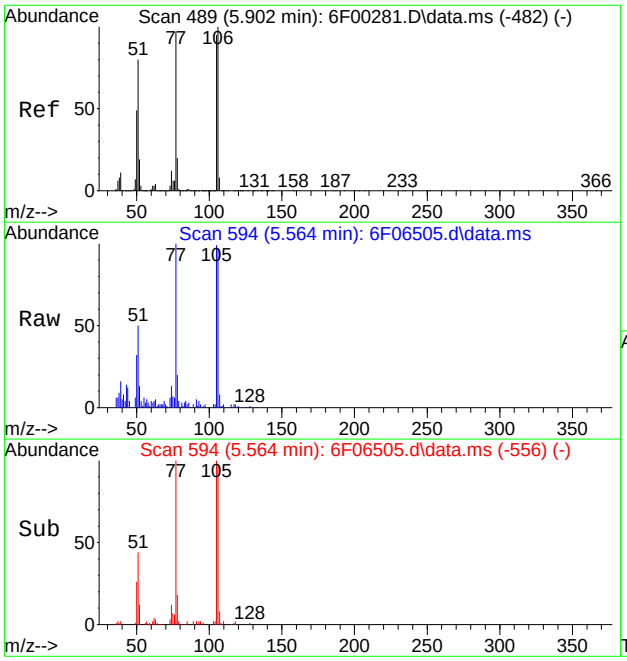
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06505.d
Acq On : 11 Aug 2020 9:10 pm
Operator : marthav
Sample : fa77615-11 E Inst : MSBNA10
Misc : op81484,S6F251,30.2,,,1,1,soil
ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Results File: 8270D6F072920.RES
Quant Time: Aug 12 06:42:53 2020
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

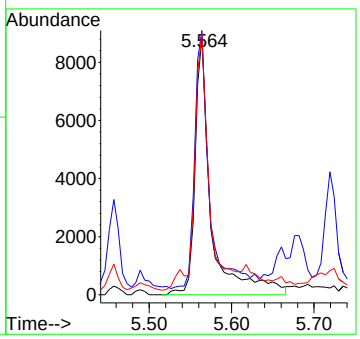


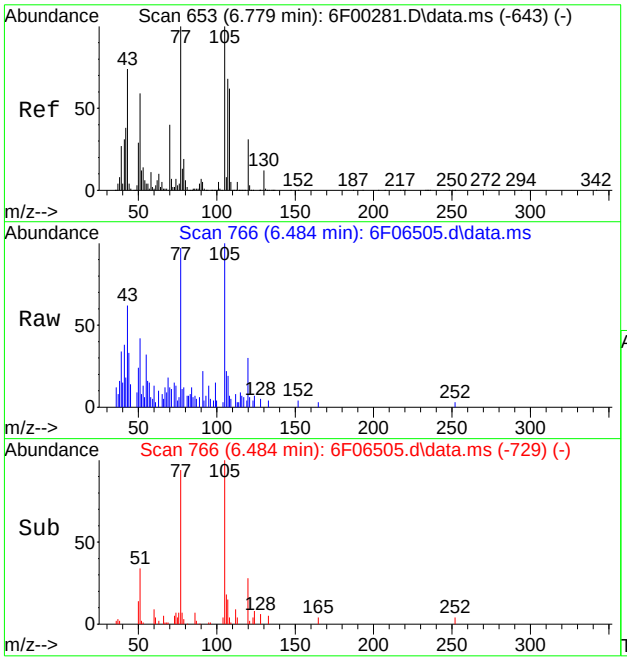


#5
Benzaldehyde
Concen: 1.08 ppm
RT: 5.564 min Scan# 594
Delta R.T. 0.005 min
Lab File: 6F06505.d
Acq: 11 Aug 2020 9:10 pm

Tgt Ion:106 Resp: 11980

Ion	Ratio	Lower	Upper
106	100		
77	95.7	67.1	127.1
105	100.4	65.1	125.1

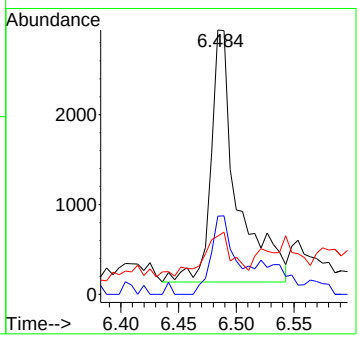


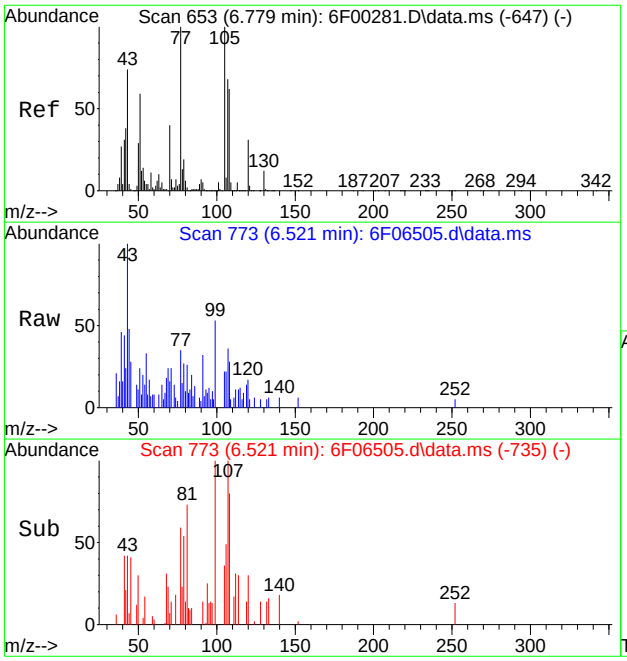


#18
Acetophenone
Concen: 0.24 ppm
RT: 6.484 min Scan# 766
Delta R.T. -0.000 min
Lab File: 6F06505.d
Acq: 11 Aug 2020 9:10 pm

Tgt Ion:105 Resp: 4433

Ion	Ratio	Lower	Upper
105	100		
120	28.5	0.7	60.7
106	7.3	0.0	38.4

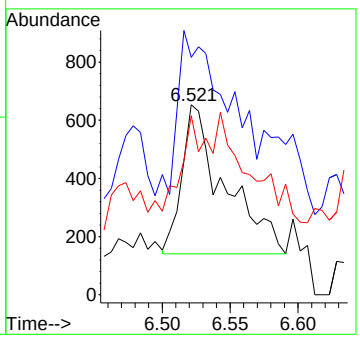


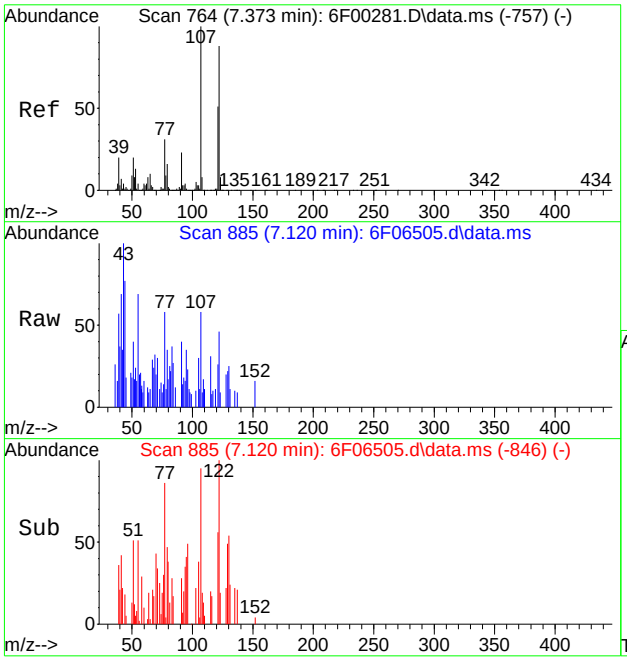


#21
3&4-Methylphenol
Concen: 0.09 ppm
RT: 6.521 min Scan# 773
Delta R.T. 0.005 min
Lab File: 6F06505.d
Acq: 11 Aug 2020 9:10 pm

Tgt Ion:108 Resp: 1125

Ion	Ratio	Lower	Upper
108	100		
107	69.3	80.3	140.3#
79	55.8	0.2	60.2

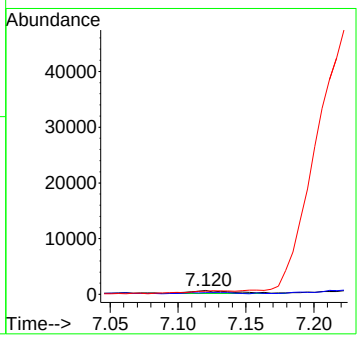


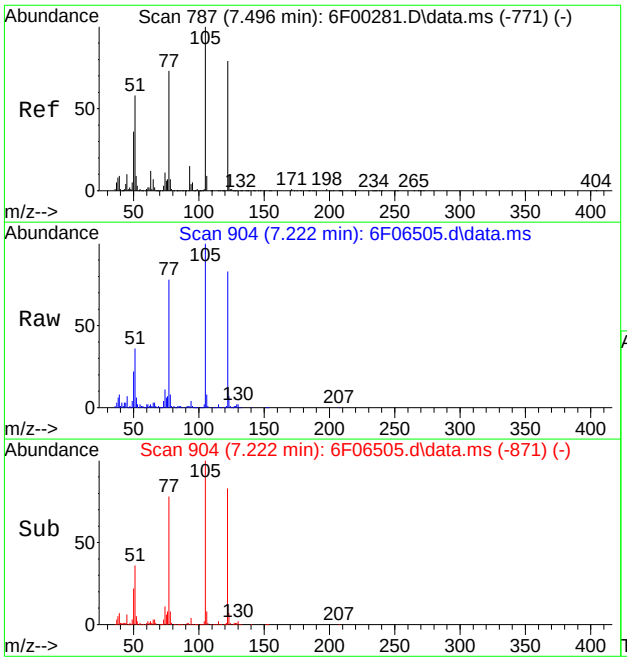


#27
2,4-Dimethylphenol
Concen: 0.09 ppm
RT: 7.120 min Scan# 885
Delta R.T. 0.011 min
Lab File: 6F06505.d
Acq: 11 Aug 2020 9:10 pm

Tgt Ion:107 Resp: 1140

Ion	Ratio	Lower	Upper
107	100		
121	32.7	20.5	80.5
122	0.0	58.5	118.5#

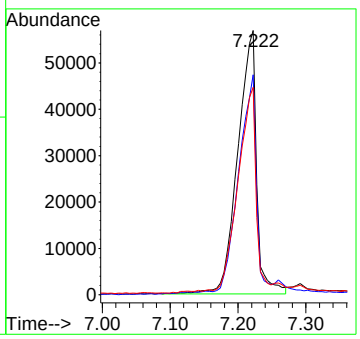


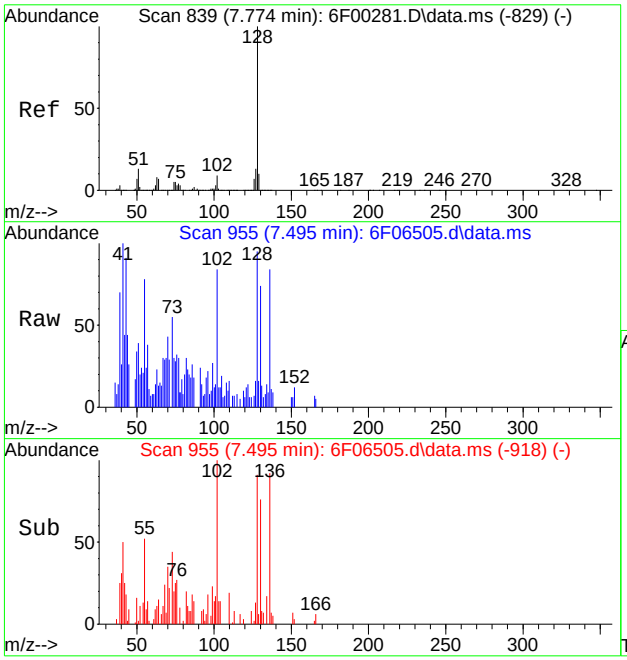


#30
Benzoic Acid
Concen: 11.95 ppm
RT: 7.222 min Scan# 904
Delta R.T. -0.021 min
Lab File: 6F06505.d
Acq: 11 Aug 2020 9:10 pm

Tgt Ion:105 Resp: 109022

Ion	Ratio	Lower	Upper
105	100		
122	82.7	49.5	109.5
77	77.9	43.0	103.0

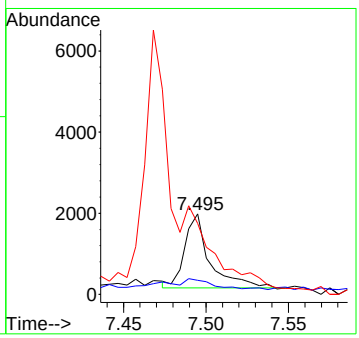


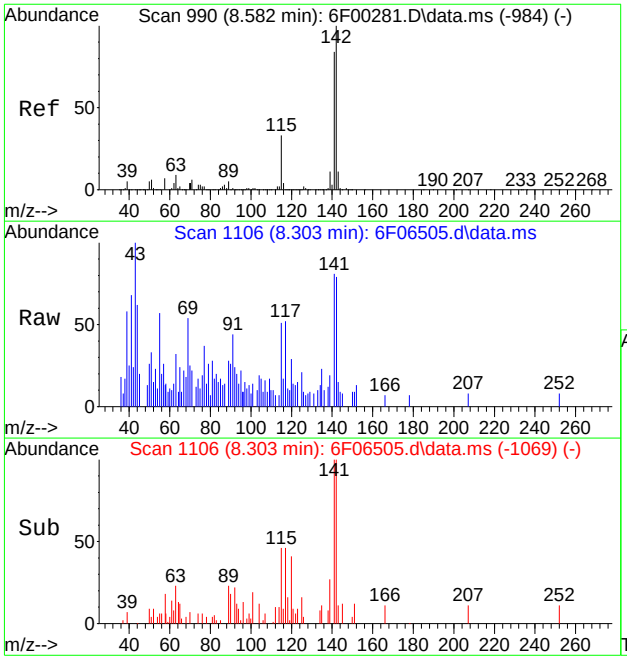


#34
Naphthalene
Concen: 0.05 ppm
RT: 7.495 min Scan# 955
Delta R.T. -0.000 min
Lab File: 6F06505.d
Acq: 11 Aug 2020 9:10 pm

Tgt Ion:128 Resp: 1925

Ion	Ratio	Lower	Upper
128	100		
129	5.7	0.0	40.4
102	0.0	0.0	39.2

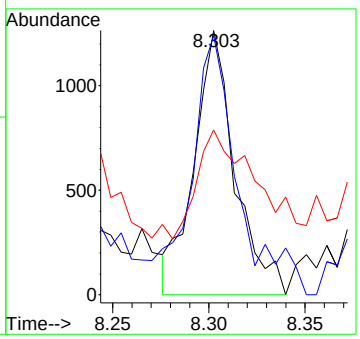


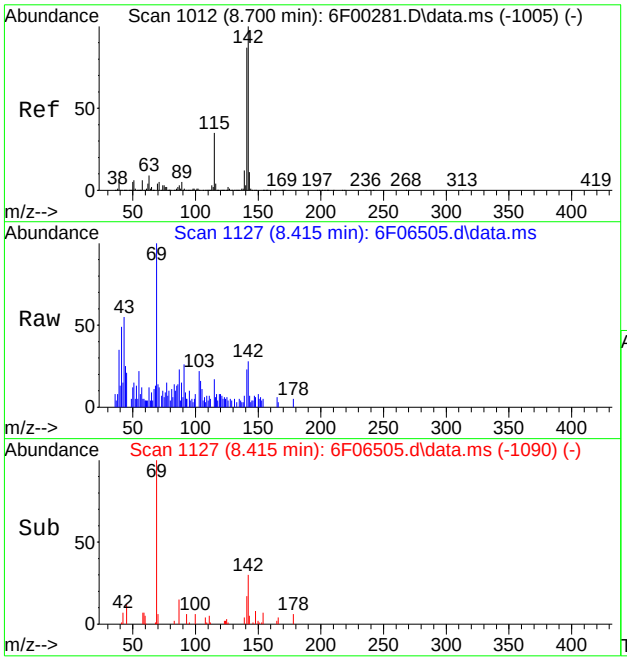


#40
2-Methylnaphthalene
Concen: 0.08 ppm
RT: 8.303 min Scan# 1106
Delta R.T. -0.000 min
Lab File: 6F06505.d
Acq: 11 Aug 2020 9:10 pm

Tgt Ion:141 Resp: 1864

Ion	Ratio	Lower	Upper
141	100		
142	87.1	88.9	148.9#
115	33.0	9.7	69.7

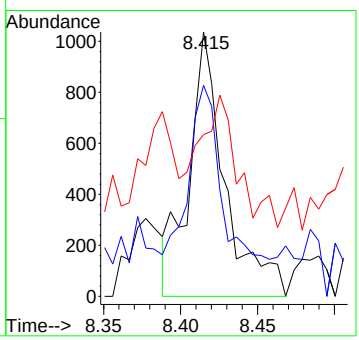


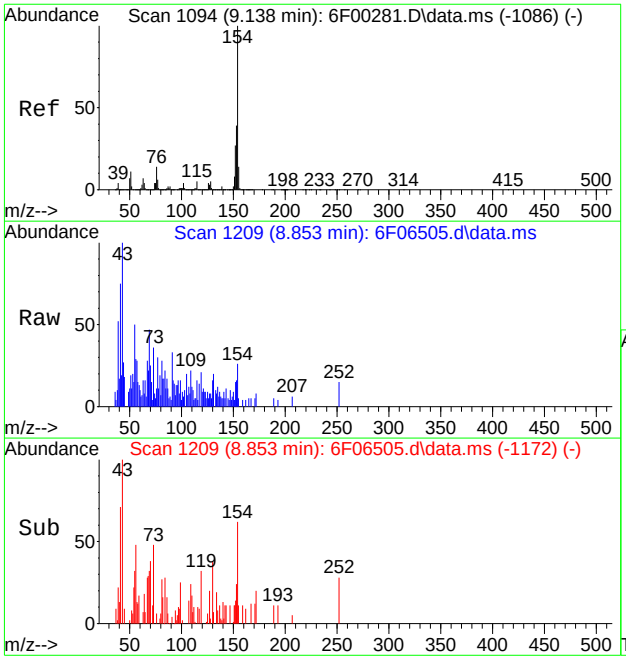


#41
1-Methylnaphthalene
Concen: 0.07 ppm
RT: 8.415 min Scan# 1127
Delta R.T. -0.000 min
Lab File: 6F06505.d
Acq: 11 Aug 2020 9:10 pm

Tgt Ion:142 Resp: 1675

Ion	Ratio	Lower	Upper
142	100		
141	70.4	56.8	116.8
115	10.7	4.7	64.7

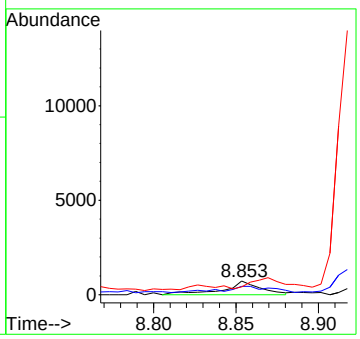


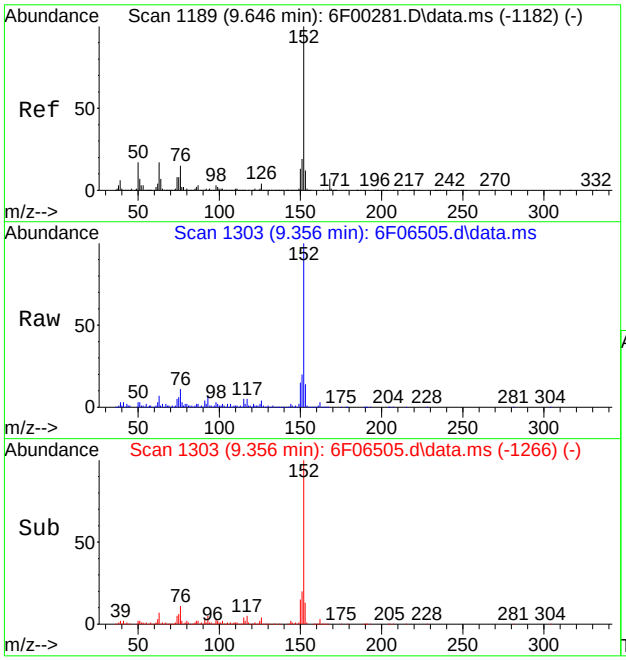


#48
1,1'-Biphenyl
Concen: 0.04 ppm
RT: 8.853 min Scan# 1209
Delta R.T. -0.000 min
Lab File: 6F06505.d
Acq: 11 Aug 2020 9:10 pm

Tgt Ion:154 Resp: 1139

Ion	Ratio	Lower	Upper
154	100		
153	40.5	8.7	68.7
152	0.3	0.0	56.7

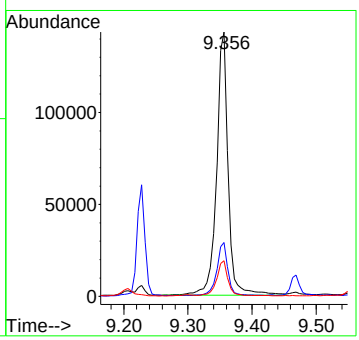


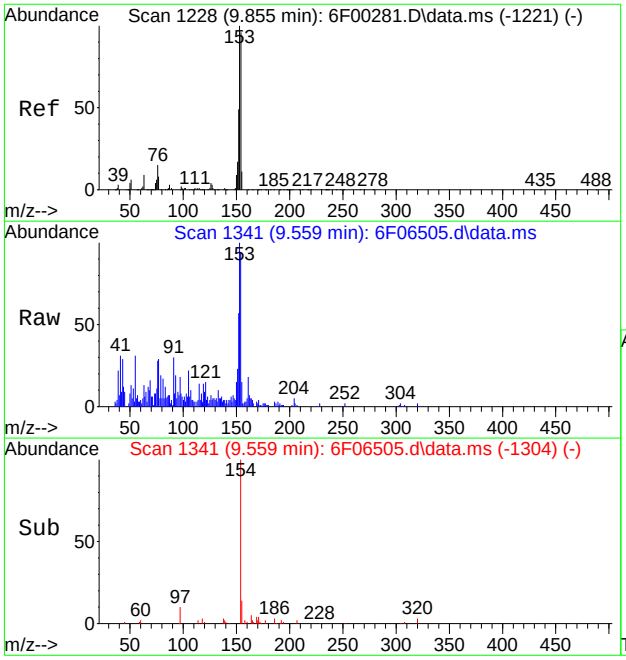


#52
Acenaphthylene
Concen: 5.02 ppm
RT: 9.356 min Scan# 1303
Delta R.T. -0.000 min
Lab File: 6F06505.d
Acq: 11 Aug 2020 9:10 pm

Tgt Ion:152 Resp: 179588

Ion	Ratio	Lower	Upper
152	100		
151	19.9	0.0	48.8
153	13.3	0.0	42.3

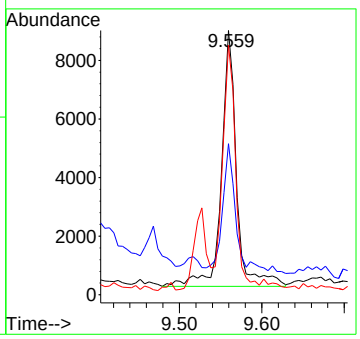


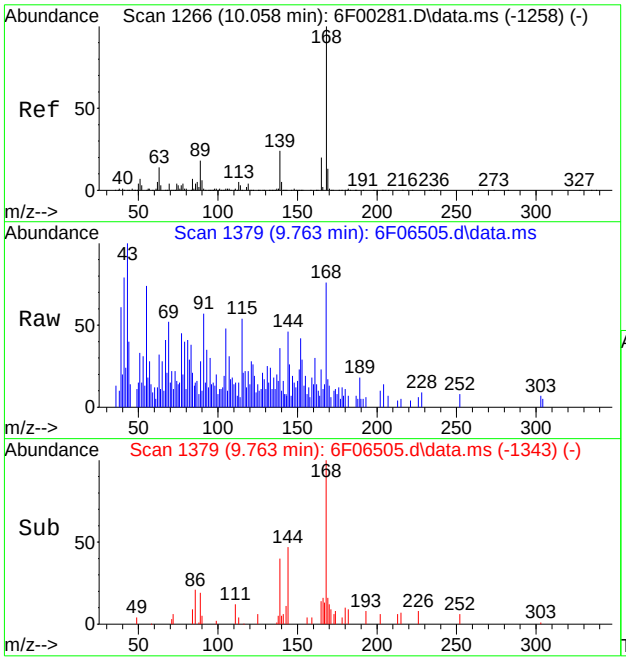


#57
Acenaphthene
Concen: 0.47 ppm
RT: 9.559 min Scan# 1341
Delta R.T. -0.000 min
Lab File: 6F06505.d
Acq: 11 Aug 2020 9:10 pm

Tgt Ion:153 Resp: 11068

Ion	Ratio	Lower	Upper
153	100		
152	47.4	19.4	79.4
154	95.0	65.6	125.6

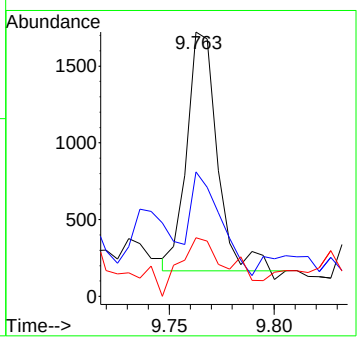


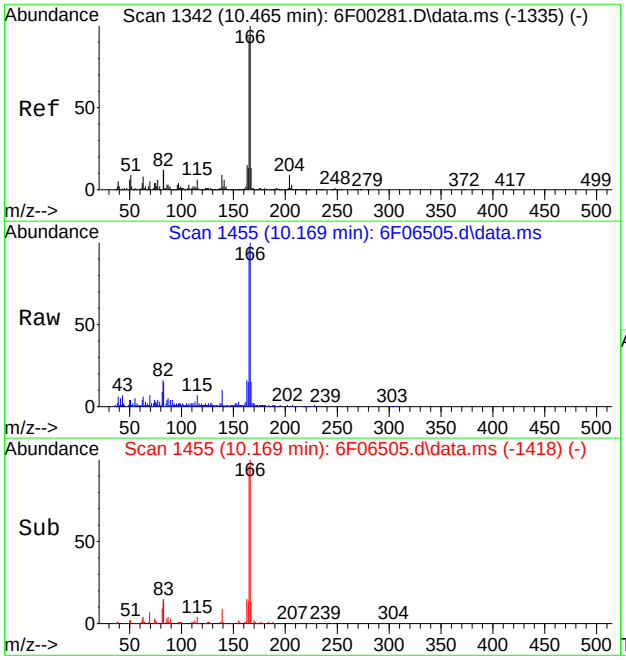


#60
Dibenzofuran
Concen: 0.05 ppm
RT: 9.763 min Scan# 1379
Delta R.T. -0.005 min
Lab File: 6F06505.d
Acq: 11 Aug 2020 9:10 pm

Tgt Ion:168 Resp: 1571

Ion	Ratio	Lower	Upper
168	100		
139	29.0	0.0	53.6
169	19.6	0.0	42.6

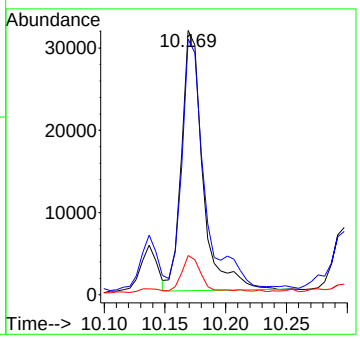


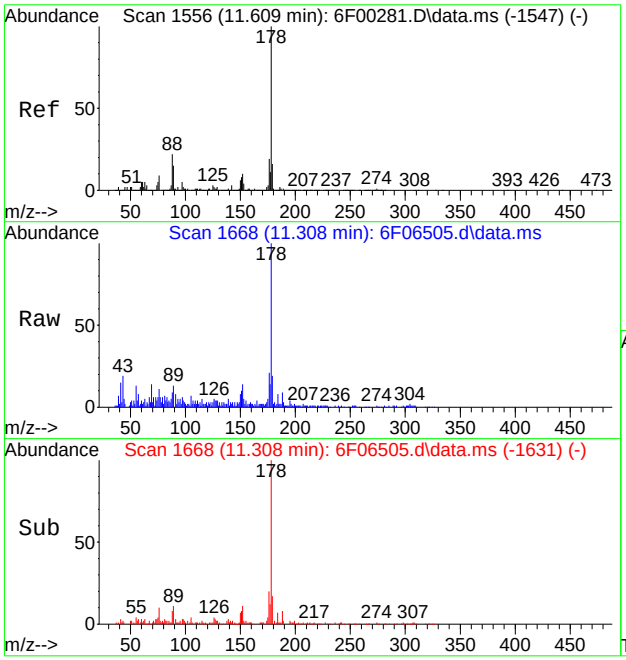


#65
Fluorene
Concen: 1.45 ppm
RT: 10.169 min Scan# 1455
Delta R.T. -0.000 min
Lab File: 6F06505.d
Acq: 11 Aug 2020 9:10 pm

Tgt Ion:166 Resp: 38462

Ion	Ratio	Lower	Upper
166	100		
165	94.9	62.6	122.6
167	13.8	0.0	43.1

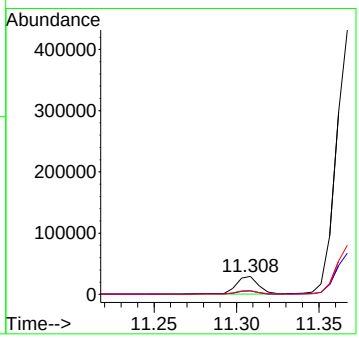


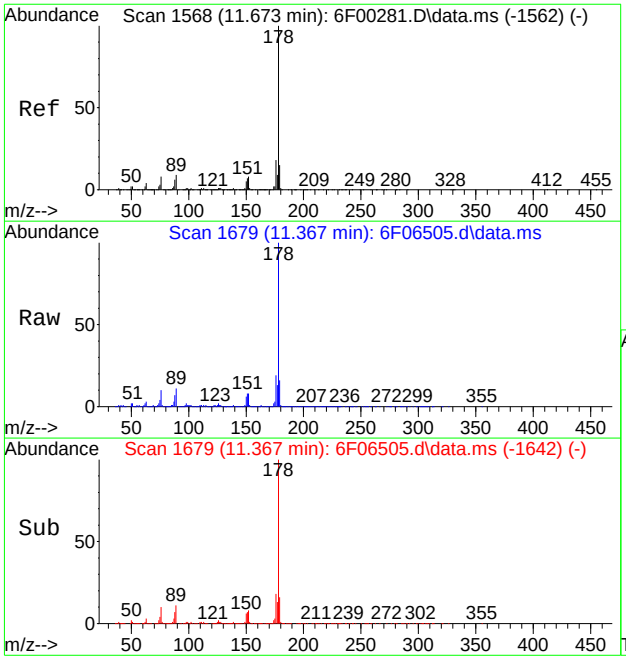


#84
Phenanthrene
Concen: 0.72 ppm
RT: 11.308 min Scan# 1668
Delta R.T. -0.000 min
Lab File: 6F06505.d
Acq: 11 Aug 2020 9:10 pm

Tgt Ion:178 Resp: 27737

Ion	Ratio	Lower	Upper
178	100		
179	17.3	0.0	46.0
176	19.8	0.0	49.0

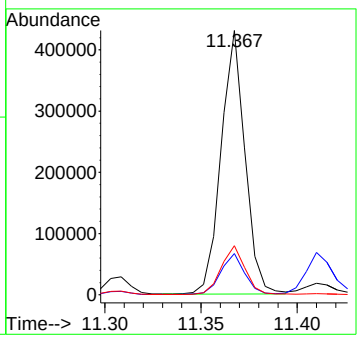


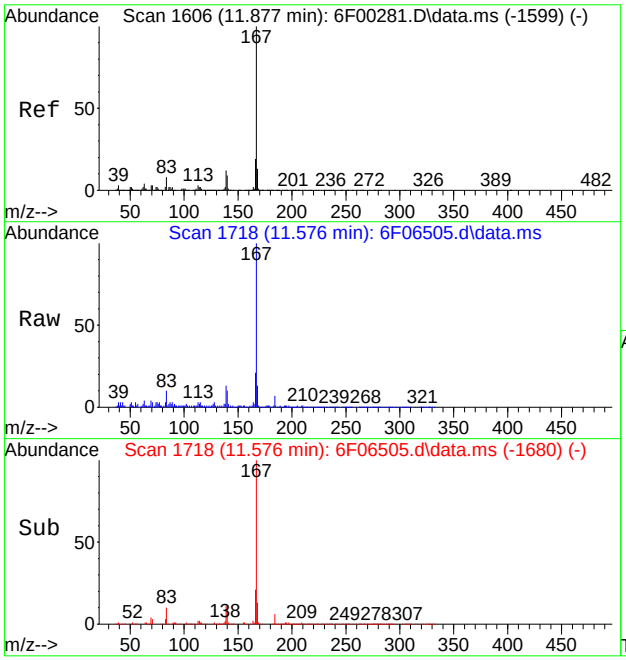


#85
Anthracene
Concen: 9.48 ppm
RT: 11.367 min Scan# 1679
Delta R.T. -0.000 min
Lab File: 6F06505.d
Acq: 11 Aug 2020 9:10 pm

Tgt Ion:178 Resp: 373216

Ion	Ratio	Lower	Upper
178	100		
179	15.3	0.0	45.4
176	18.5	0.0	47.7

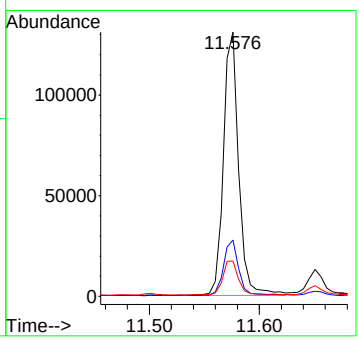


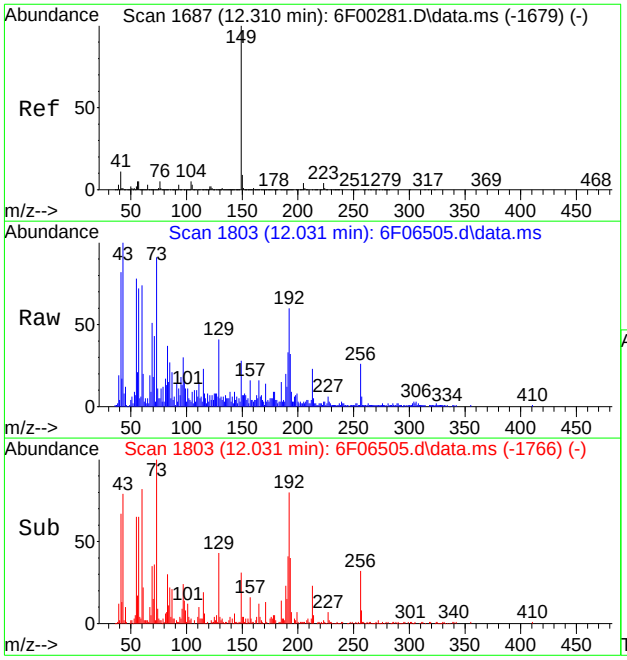


#87
Carbazole
Concen: 3.59 ppm
RT: 11.576 min Scan# 1718
Delta R.T. 0.005 min
Lab File: 6F06505.d
Acq: 11 Aug 2020 9:10 pm

Tgt Ion:167 Resp: 127520

Ion	Ratio	Lower	Upper
167	100		
166	21.0	0.0	49.2
139	12.8	0.0	42.3

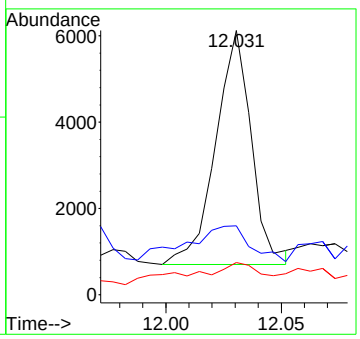


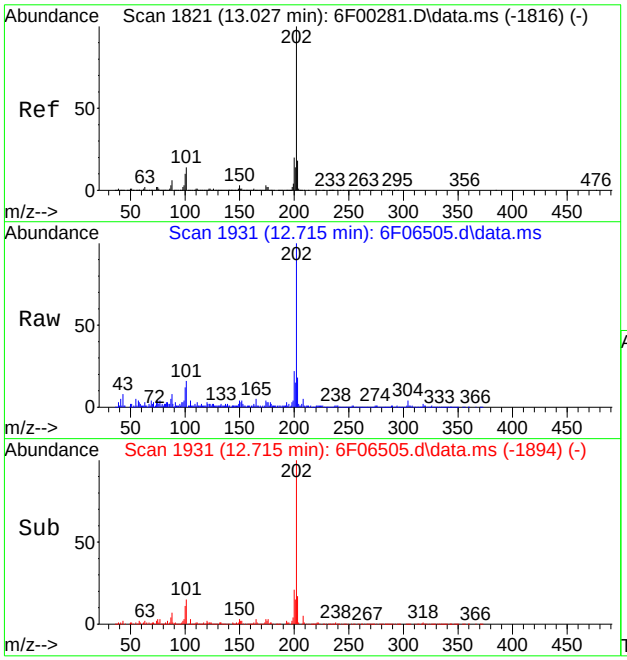


#89
Di-n-butylphthalate
Concen: 0.13 ppm
RT: 12.031 min Scan# 1803
Delta R.T. -0.000 min
Lab File: 6F06505.d
Acq: 11 Aug 2020 9:10 pm

Tgt Ion:149 Resp: 5829

Ion	Ratio	Lower	Upper
149	100		
150	12.6	0.0	38.7
104	5.1	0.0	35.2

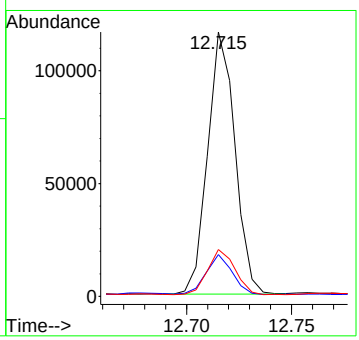


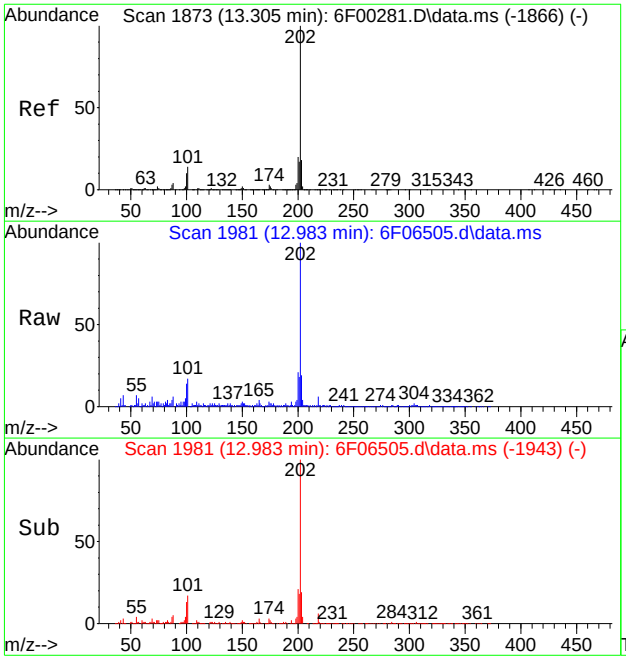


#91
Fluoranthene
Concen: 2.58 ppm
RT: 12.715 min Scan# 1931
Delta R.T. -0.000 min
Lab File: 6F06505.d
Acq: 11 Aug 2020 9:10 pm

Tgt Ion:202 Resp: 105471

Ion	Ratio	Lower	Upper
202	100		
101	14.9	0.0	43.6
203	17.1	0.0	47.7

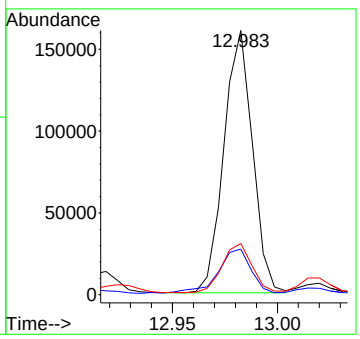


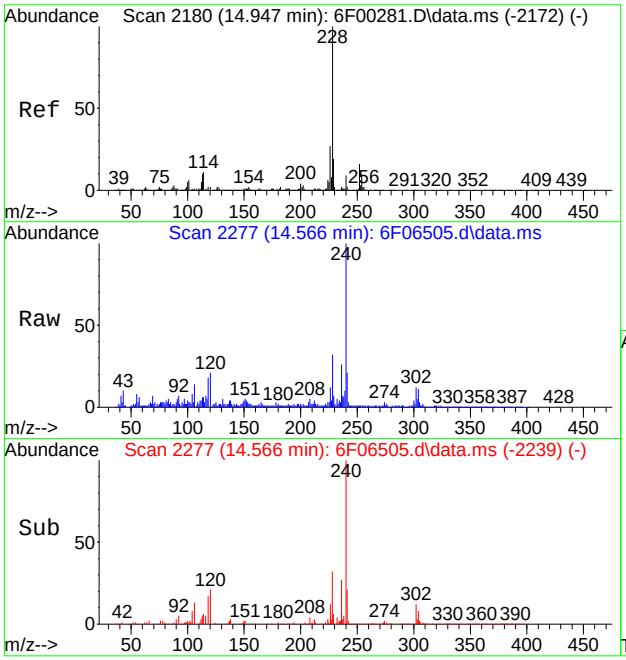


#94
Pyrene
Concen: 3.80 ppm
RT: 12.983 min Scan# 1981
Delta R.T. 0.005 min
Lab File: 6F06505.d
Acq: 11 Aug 2020 9:10 pm

Tgt Ion:202 Resp: 152426

Ion	Ratio	Lower	Upper
202	100		
101	16.7	0.0	43.8
203	18.5	0.0	47.8

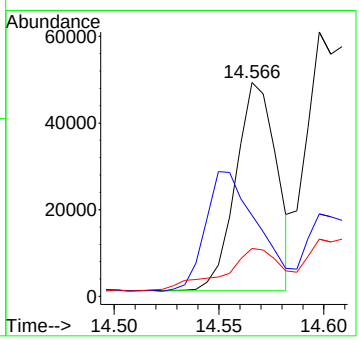


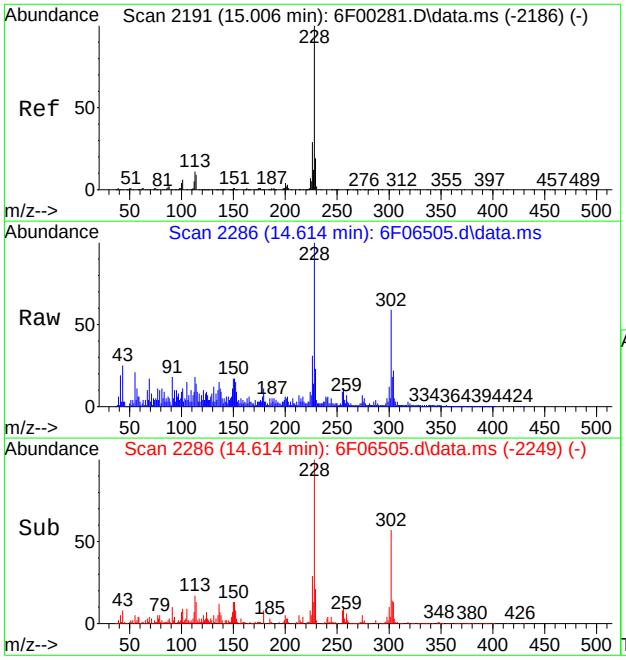


#99
Benzo[a]anthracene
Concen: 1.73 ppm
RT: 14.566 min Scan# 2277
Delta R.T. 0.005 min
Lab File: 6F06505.d
Acq: 11 Aug 2020 9:10 pm

Tgt Ion:228 Resp: 65140

Ion	Ratio	Lower	Upper
228	100		
226	37.9	0.0	56.6
229	18.6	0.0	48.9

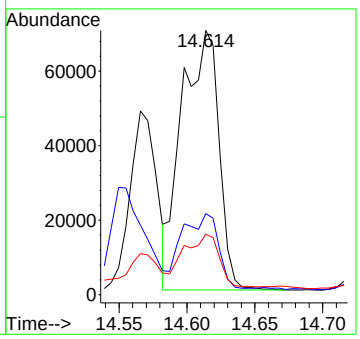


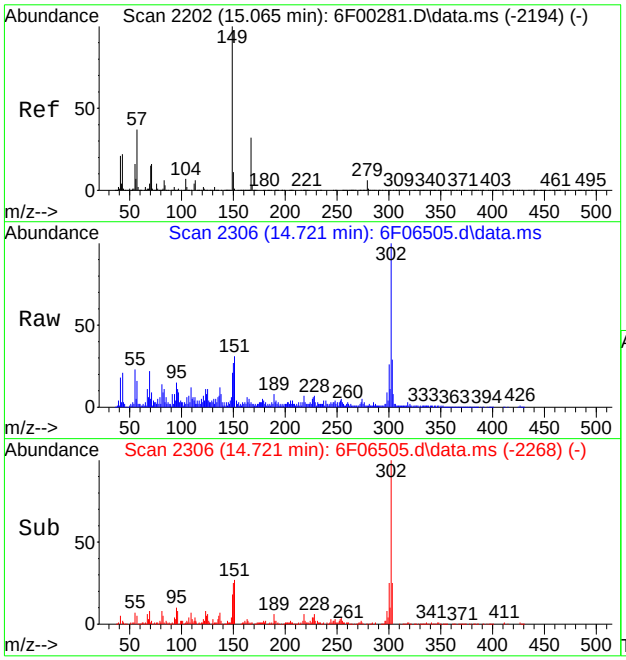


#100
Chrysene
Concen: 3.64 ppm
RT: 14.614 min Scan# 2286
Delta R.T. -0.000 min
Lab File: 6F06505.d
Acq: 11 Aug 2020 9:10 pm

Tgt Ion:228 Resp: 132544

Ion	Ratio	Lower	Upper
228	100		
226	29.4	0.0	58.9
229	20.0	0.0	48.5

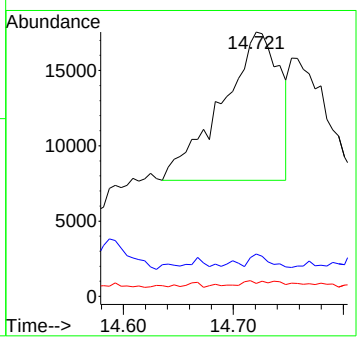


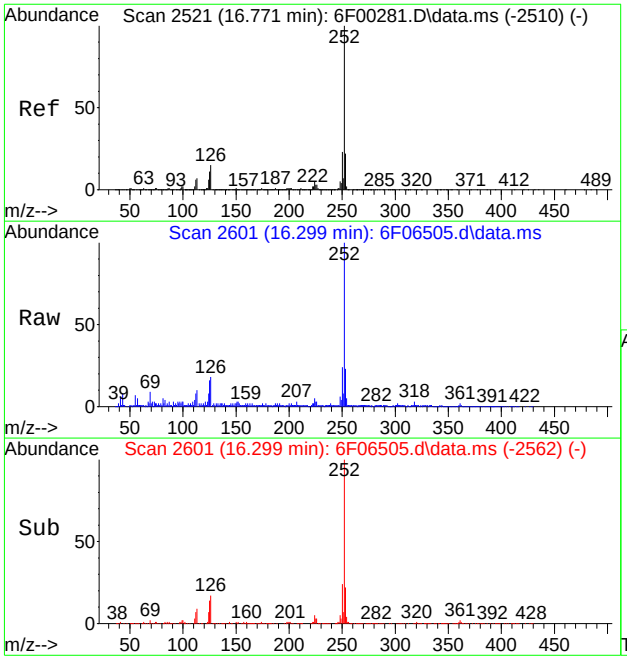


#101
bis(2-Ethylhexyl)phthalate
Concen: 1.34 ppm
RT: 14.721 min Scan# 2306
Delta R.T. 0.005 min
Lab File: 6F06505.d
Acq: 11 Aug 2020 9:10 pm

Tgt Ion:149 Resp: 36066

Ion	Ratio	Lower	Upper
149	100		
167	12.0	1.7	61.7
279	1.8	0.0	35.7

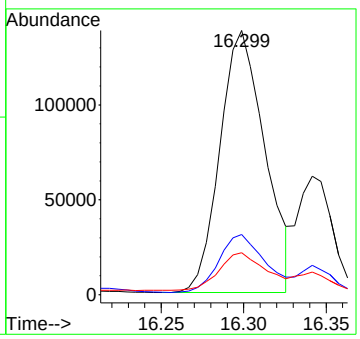


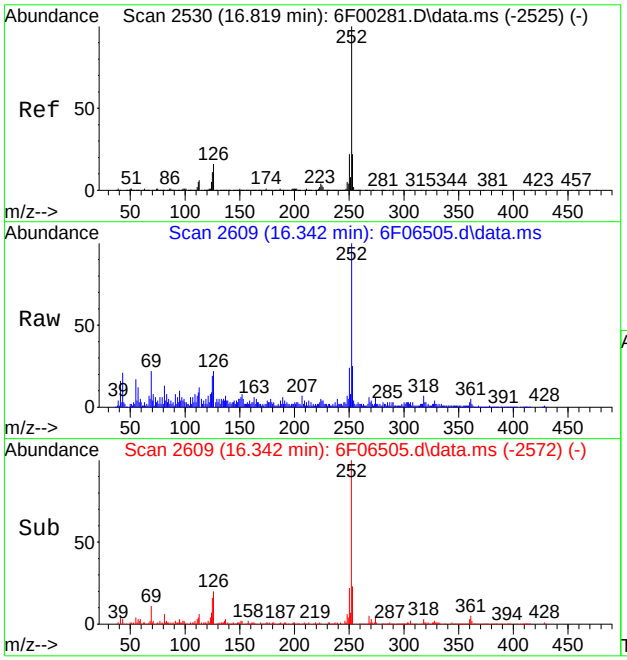


#104
Benzo[b]fluoranthene
Concen: 7.00 ppm
RT: 16.299 min Scan# 2601
Delta R.T. 0.011 min
Lab File: 6F06505.d
Acq: 11 Aug 2020 9:10 pm

Tgt Ion:252 Resp: 261857

Ion	Ratio	Lower	Upper
252	100		
253	21.9	0.0	51.9
125	13.8	0.0	41.3

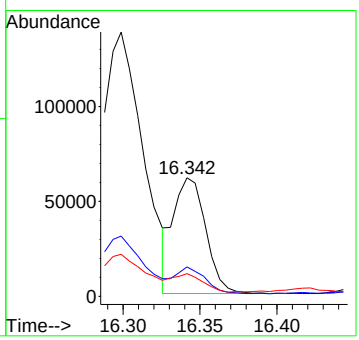


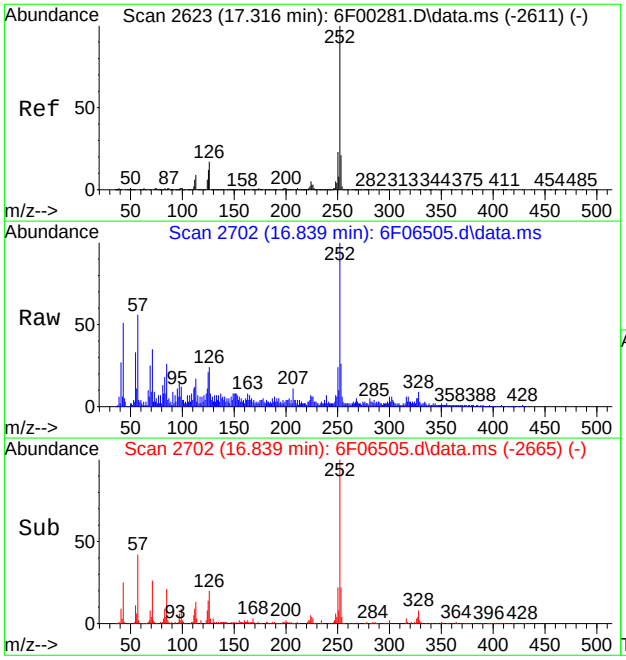


#105
Benzo[k]fluoranthene
Concen: 2.30 ppm
RT: 16.342 min Scan# 2609
Delta R.T. -0.000 min
Lab File: 6F06505.d
Acq: 11 Aug 2020 9:10 pm

Tgt Ion:252 Resp: 89436

Ion	Ratio	Lower	Upper
252	100		
253	23.1	0.0	51.7
125	14.0	0.0	40.7

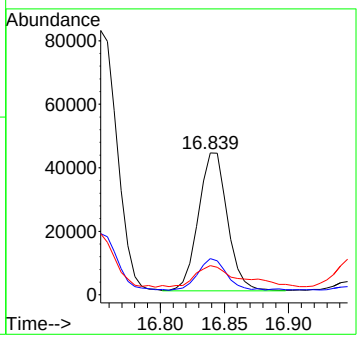


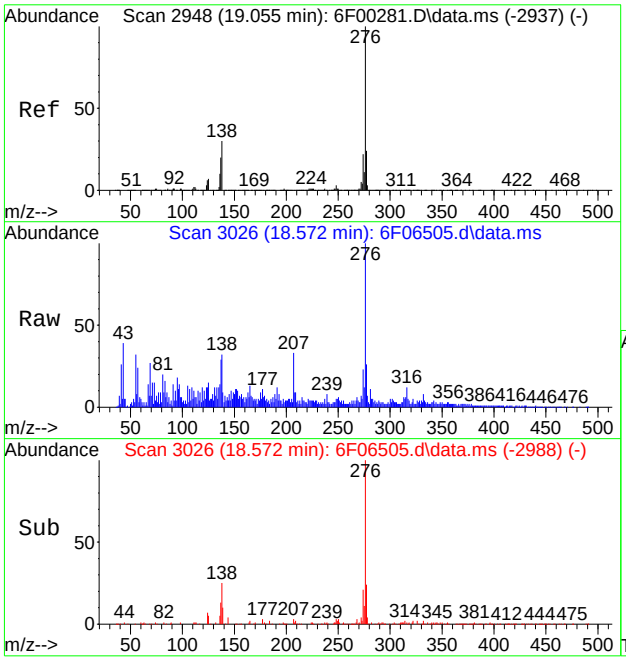


#106
Benzo[a]pyrene
Concen: 1.97 ppm
RT: 16.839 min Scan# 2702
Delta R.T. -0.000 min
Lab File: 6F06505.d
Acq: 11 Aug 2020 9:10 pm

Tgt Ion:252 Resp: 68550

Ion	Ratio	Lower	Upper
252	100		
253	22.5	0.0	51.0
125	14.1	0.0	42.0

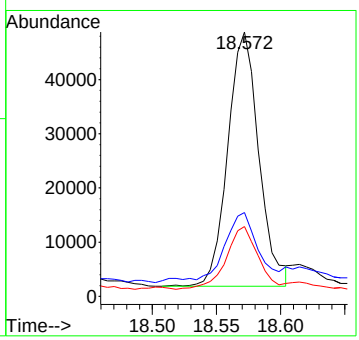


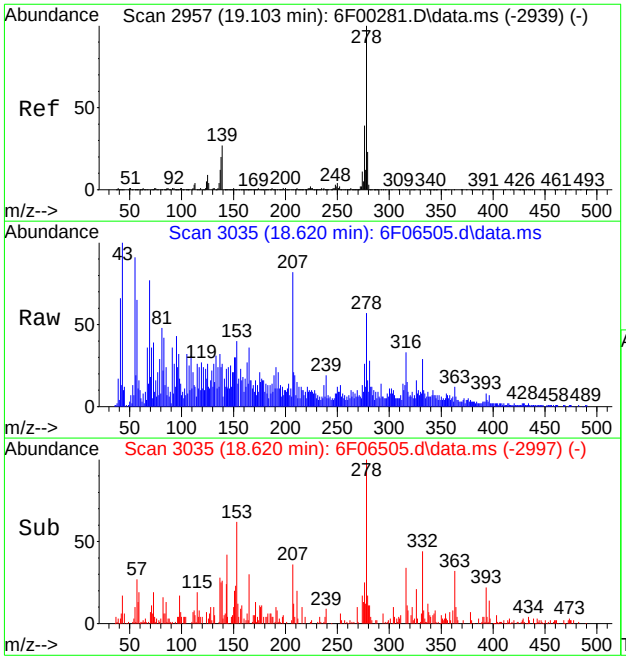


#107
Indeno[1,2,3-cd]pyrene
Concen: 2.45 ppm
RT: 18.572 min Scan# 3026
Delta R.T. 0.005 min
Lab File: 6F06505.d
Acq: 11 Aug 2020 9:10 pm

Tgt Ion:276 Resp: 79261

Ion	Ratio	Lower	Upper
276	100		
138	25.1	0.0	59.6
277	24.1	0.0	54.1

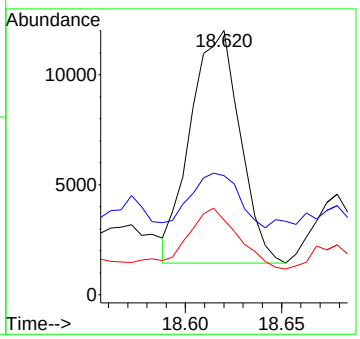


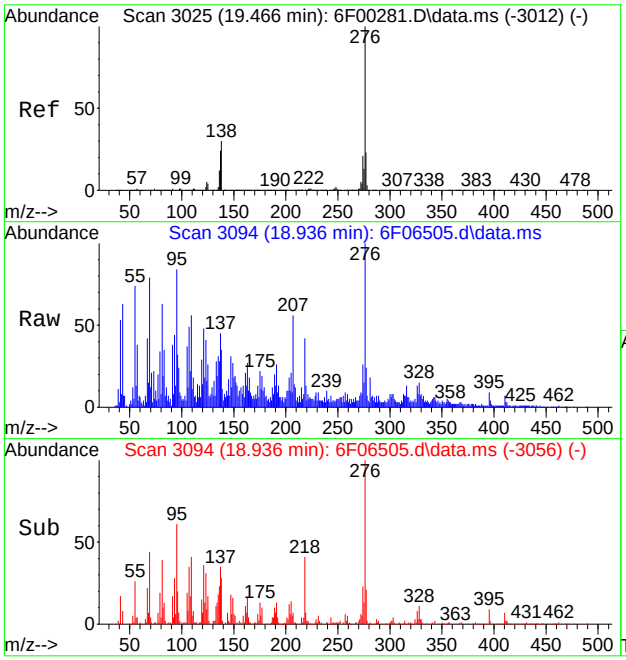


#108
Dibenz[a,h]anthracene
Concen: 0.55 ppm
RT: 18.620 min Scan# 3035
Delta R.T. 0.005 min
Lab File: 6F06505.d
Acq: 11 Aug 2020 9:10 pm

Tgt Ion:278 Resp: 18830

Ion	Ratio	Lower	Upper
278	100		
139	21.1	0.0	56.9
279	20.4	0.0	53.0

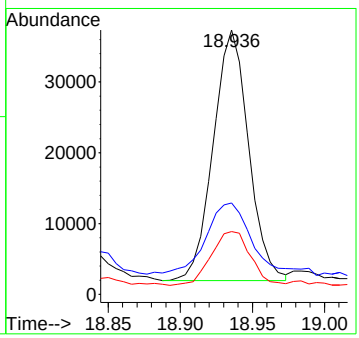




#109
Benzo[g,h,i]perylene
Concen: 1.72 ppm
RT: 18.936 min Scan# 3094
Delta R.T. 0.005 min
Lab File: 6F06505.d
Acq: 11 Aug 2020 9:10 pm

Tgt Ion:276 Resp: 60156

Ion	Ratio	Lower	Upper
276	100		
138	27.3	0.0	59.5
277	21.2	0.0	53.0



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-13-2020\sx2951\
Data File : x072383.d
Acq On : 12 Aug 2020 9:34 pm
Operator : marthav
Sample : fa77615-11 E
Misc : op81484,sx2951,30.2,,,1,1,soil
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Aug 13 03:26:18 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

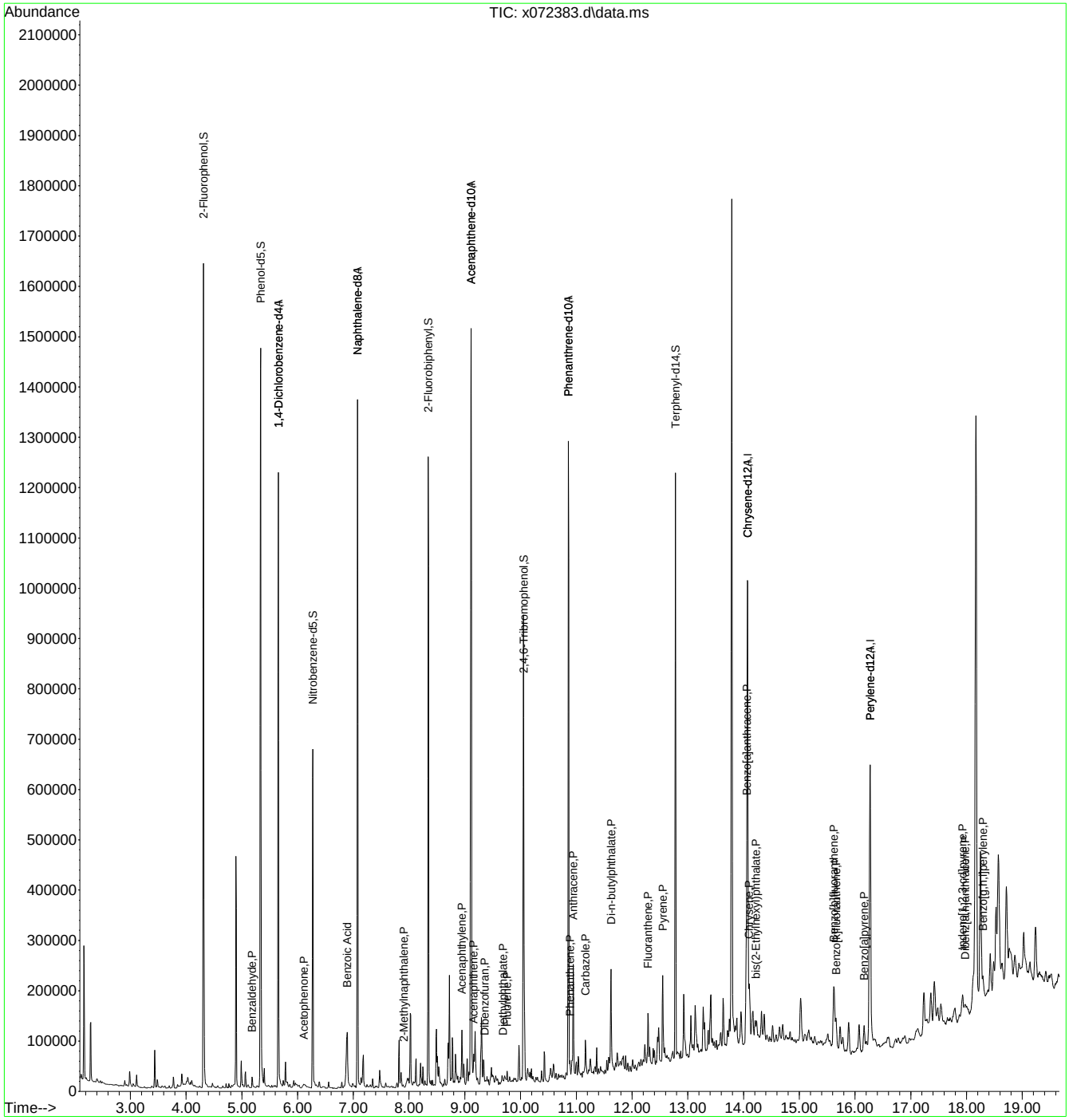
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.654	152	161914	40.00	ppm	0.00
22) Naphthalene-d8	7.077	136	574279	40.00	ppm	0.00
43) Acenaphthene-d10	9.115	164	278406	40.00	ppm	0.00
70) Phenanthrene-d10	10.859	188	458553	40.00	ppm	0.00
92) Chrysene-d12	14.073	240	362449	40.00	ppm	0.00
102) Perylene-d12	16.272	264	291793	40.00	ppm	0.02
110) 1,4-Dichlorobenzene-d4A	5.654	152	161914	40.00	ppm	0.00
120) Naphthalene-d8A	7.077	136	574279	40.00	ppm	0.00
127) Acenaphthene-d10A	9.115	164	278406	40.00	ppm	0.00
136) Phenanthrene-d10A	10.859	188	458553	40.00	ppm	0.00
146) Chrysene-d12A	14.073	240	362449	40.00	ppm	0.00
153) Perylene-d12A	16.272	264	291793	40.00	ppm	0.02
System Monitoring Compounds						
7) 2-Fluorophenol	4.312	112	386547	66.58	ppm	0.00
Spiked Amount 100.000	Range 40 - 102		Recovery = 66.58%			
9) Phenol-d5	5.339	99	483870	70.05	ppm	0.00
Spiked Amount 100.000	Range 41 - 100		Recovery = 70.05%			
23) Nitrobenzene-d5	6.275	82	195221	32.92	ppm	0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 65.84%			
47) 2-Fluorobiphenyl	8.345	172	361826	35.90	ppm	-0.01
Spiked Amount 50.000	Range 43 - 107		Recovery = 71.80%			
75) 2,4,6-Tribromophenol	10.056	330	75592	77.08	ppm	0.00
Spiked Amount 100.000	Range 42 - 108		Recovery = 77.08%			
95) Terphenyl-d14	12.779	244	336931	34.99	ppm	0.00
Spiked Amount 50.000	Range 45 - 119		Recovery = 69.98%			
Target Compounds						Qvalue
5) Benzaldehyde	5.184	106	5459	1.13	ppm	94
18) Acetophenone	6.109	105	1928	0.22	ppm	95
30) Benzoic Acid	6.890	105	41227	11.23	ppm	93
40) 2-Methylnaphthalene	7.906	142	573	0.06	ppm	78
52) Acenaphthylene	8.944	152	41661	3.00	ppm	99
57) Acenaphthene	9.152	153	3222	0.35	ppm	95
60) Dibenzofuran	9.356	168	593	0.05	ppm	84
65) Fluorene	9.757	166	7403	0.77	ppm	97
67) Diethylphthalate	9.682	149	880	0.09	ppm	93
84) Phenanthrene	10.885	178	10115	0.73	ppm	99
85) Anthracene	10.944	178	84587	5.86	ppm	97
87) Carbazole	11.164	167	28776	2.26	ppm	98
89) Di-n-butylphthalate	11.624	149	1690	0.12	ppm	91
91) Fluoranthene	12.287	202	36921	2.87	ppm	100
94) Pyrene	12.549	202	53107	3.53	ppm	99
99) Benzo[a]anthracene	14.057	228	21014	1.84	ppm	99
100) Chrysene	14.100	228	43237	3.56	ppm	96
101) bis(2-Ethylhexyl)phtha...	14.218	149	1322	0.17	ppm	91
104) Benzo[b]fluoranthene	15.619	252	70876	8.95	ppm	97
105) Benzo[k]fluoranthene	15.662	252	23318	2.25	ppm	95
106) Benzo[a]pyrene	16.165	252	16895	2.27	ppm	95
107) Indeno[1,2,3-cd]pyrene	17.930	276	21904	5.17	ppm	88
108) Dibenz[a,h]anthracene	17.972	278	4160	0.92	ppm	80
109) Benzo[g,h,i]perylene	18.293	276	16811	2.53	ppm	86

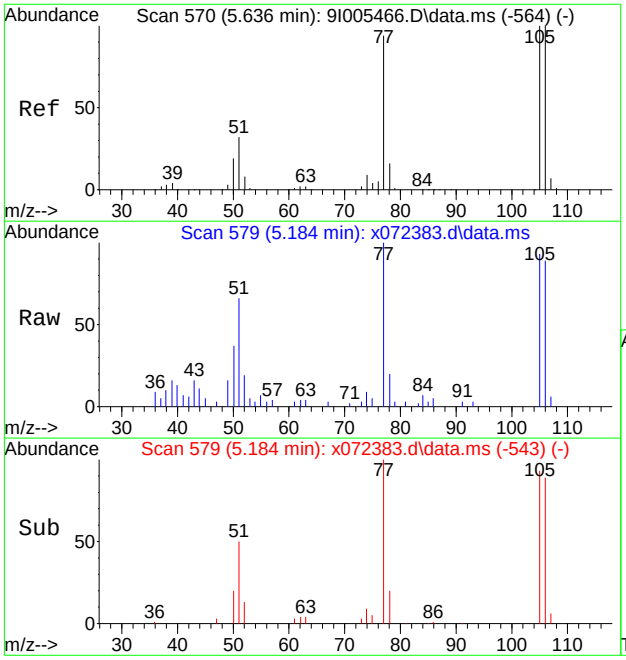
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-13-2020\sx2951\
Data File : x072383.d
Acq On : 12 Aug 2020 9:34 pm
Operator : marthav
Sample : fa77615-11 E
Misc : op81484,sx2951,30.2,,,1,1,soil
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Aug 13 03:26:18 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

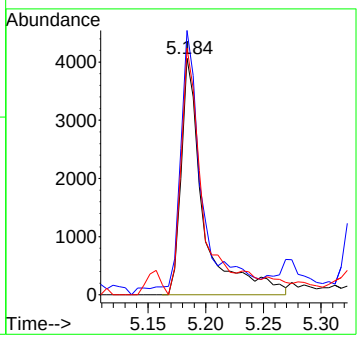


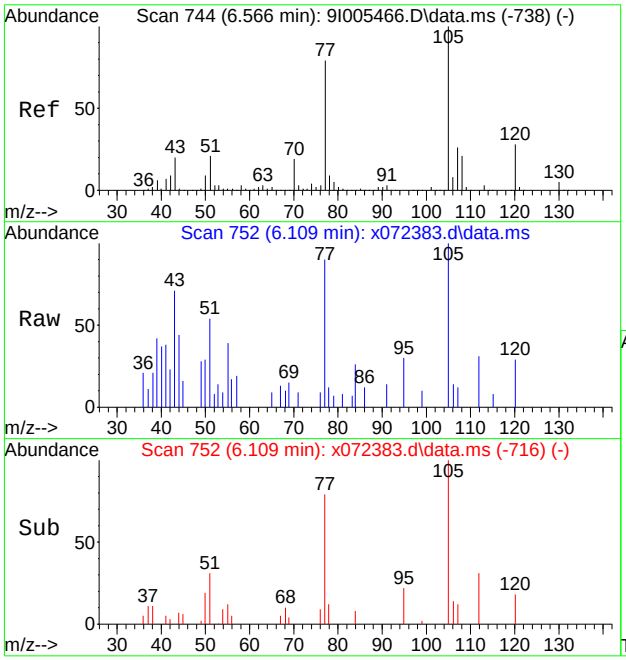


#5
Benzaldehyde
Concen: 1.13 ppm
RT: 5.184 min Scan# 579
Delta R.T. -0.005 min
Lab File: x072383.d
Acq: 12 Aug 2020 9:34 pm

Tgt Ion:106 Resp: 5459

Ion	Ratio	Lower	Upper
106	100		
77	104.3	63.9	123.9
105	101.0	70.0	130.0

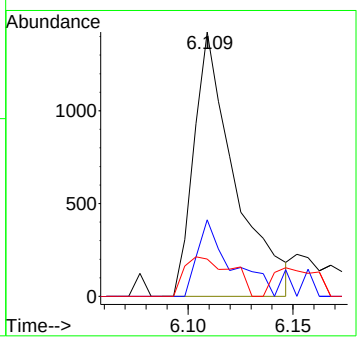


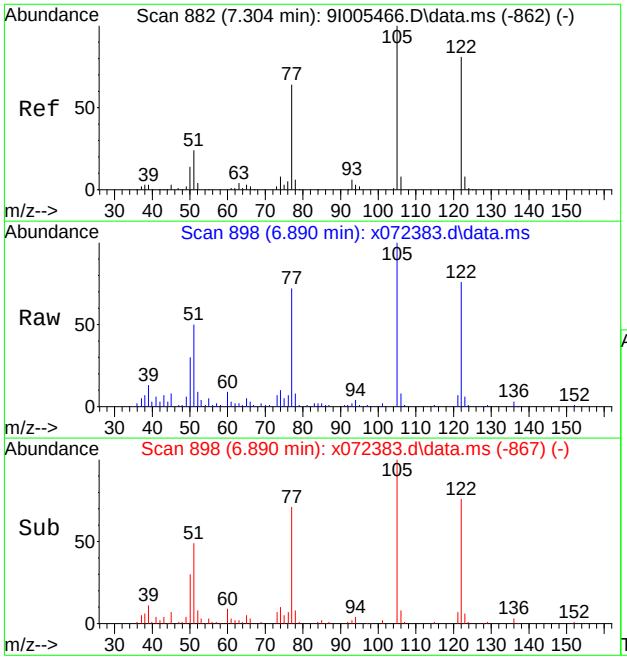


#18
Acetophenone
Concen: 0.22 ppm
RT: 6.109 min Scan# 752
Delta R.T. -0.005 min
Lab File: x072383.d
Acq: 12 Aug 2020 9:34 pm

Tgt Ion:105 Resp: 1928

Ion	Ratio	Lower	Upper
105	100		
120	25.5	0.0	58.3
106	9.3	0.0	38.0

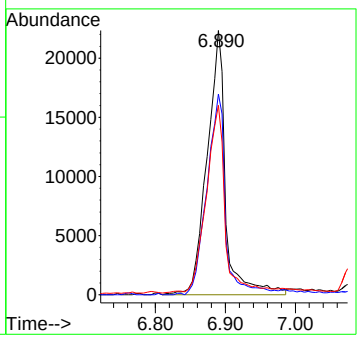


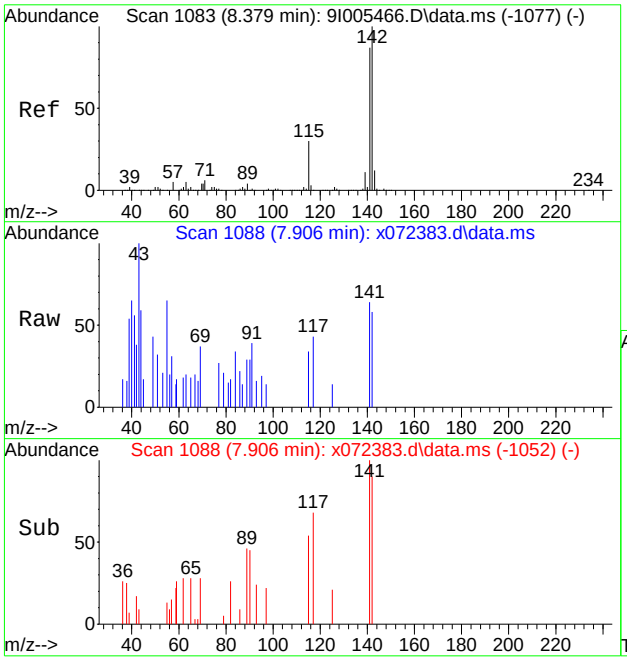


#30
Benzoic Acid
Concen: 11.23 ppm
RT: 6.890 min Scan# 898
Delta R.T. -0.032 min
Lab File: x072383.d
Acq: 12 Aug 2020 9:34 pm

Tgt Ion:105 Resp: 41227

Ion	Ratio	Lower	Upper
105	100		
122	75.8	51.2	111.2
77	70.9	34.1	94.1

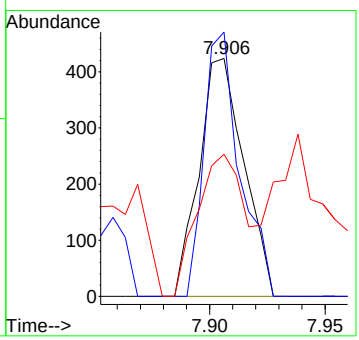


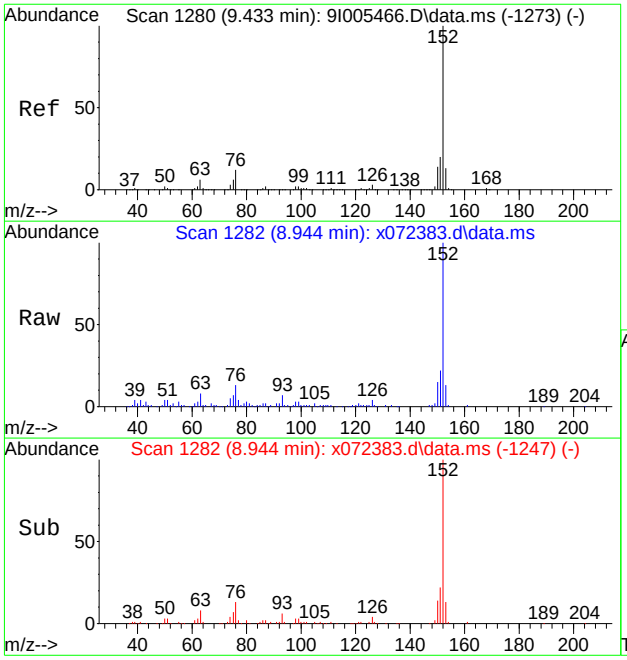


#40
2-Methylnaphthalene
Concen: 0.06 ppm
RT: 7.906 min Scan# 1088
Delta R.T. -0.005 min
Lab File: x072383.d
Acq: 12 Aug 2020 9:34 pm

Tgt Ion:142 Resp: 573

Ion	Ratio	Lower	Upper
142	100		
141	111.1	56.8	116.8
115	35.3	0.0	60.0

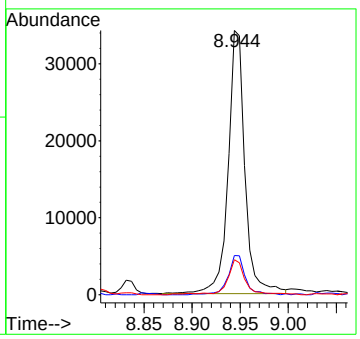


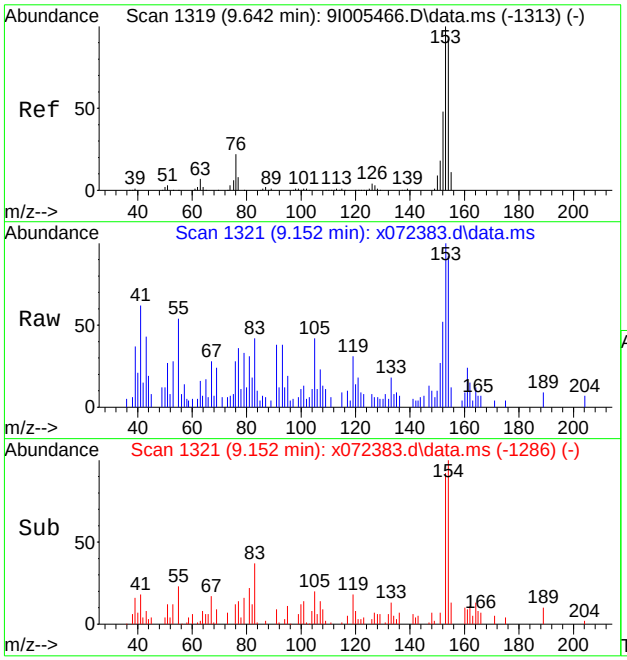


#52
Acenaphthylene
Concen: 3.00 ppm
RT: 8.944 min Scan# 1282
Delta R.T. -0.011 min
Lab File: x072383.d
Acq: 12 Aug 2020 9:34 pm

Tgt Ion:152 Resp: 41661

Ion	Ratio	Lower	Upper
152	100		
150	14.8	0.0	44.3
153	13.2	0.0	43.3

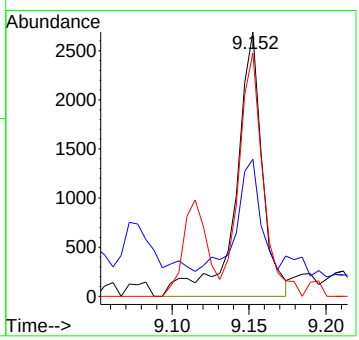


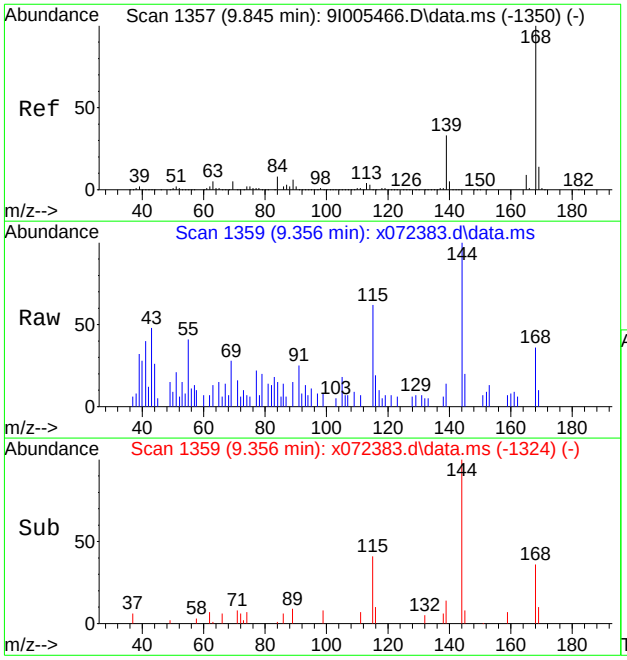


#57
Acenaphthene
Concen: 0.35 ppm
RT: 9.152 min Scan# 1321
Delta R.T. -0.011 min
Lab File: x072383.d
Acq: 12 Aug 2020 9:34 pm

Tgt Ion:153 Resp: 3222

Ion	Ratio	Lower	Upper
153	100		
152	40.0	18.4	78.4
154	91.9	62.4	122.4

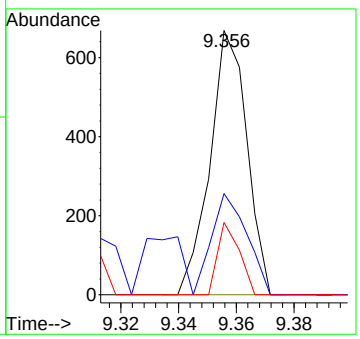


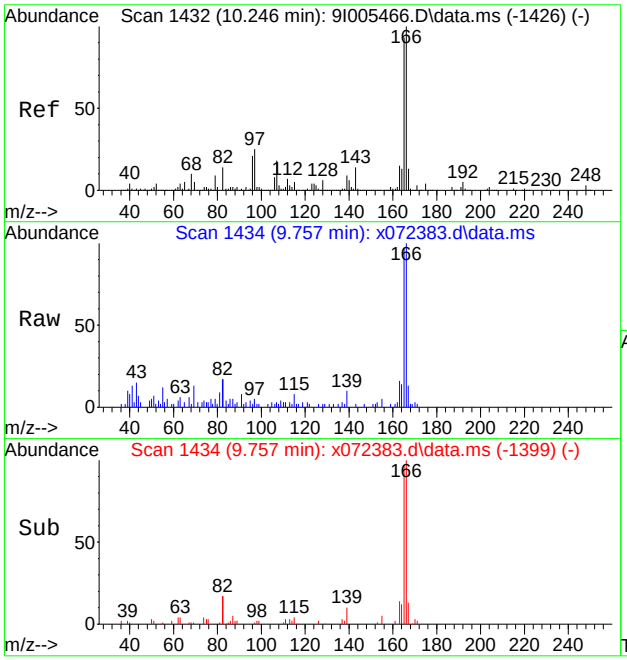


#60
Dibenzofuran
Concen: 0.05 ppm
RT: 9.356 min Scan# 1359
Delta R.T. -0.011 min
Lab File: x072383.d
Acq: 12 Aug 2020 9:34 pm

Tgt Ion:168 Resp: 593

Ion	Ratio	Lower	Upper
168	100		
139	27.9	3.0	63.0
169	27.4	0.0	43.5

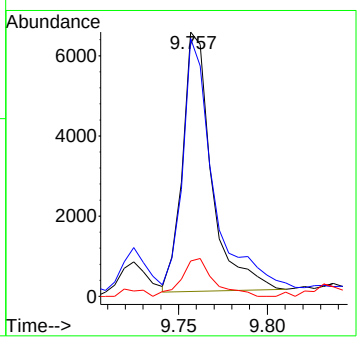


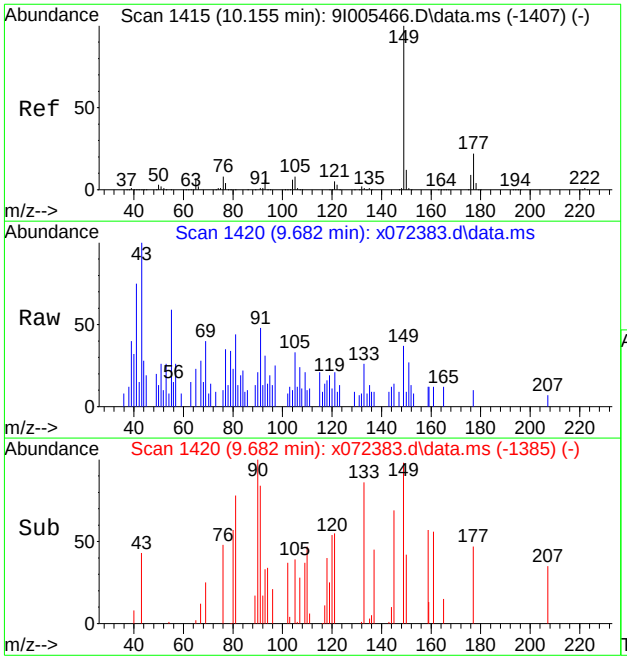


#65
Fluorene
Concen: 0.77 ppm
RT: 9.757 min Scan# 1434
Delta R.T. -0.011 min
Lab File: x072383.d
Acq: 12 Aug 2020 9:34 pm

Tgt Ion:166 Resp: 7403

Ion	Ratio	Lower	Upper
166	100		
165	95.8	62.7	122.7
167	12.0	0.0	43.5

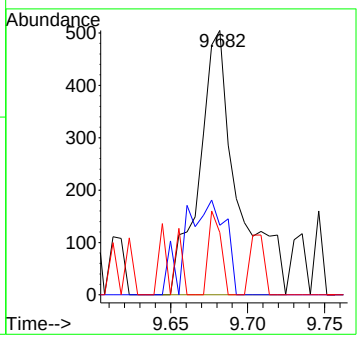


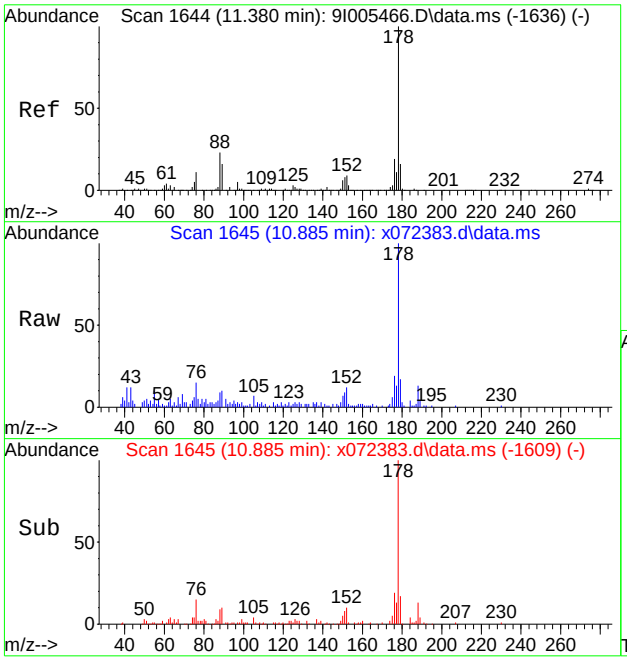


#67
Diethylphthalate
Concen: 0.09 ppm
RT: 9.682 min Scan# 1420
Delta R.T. -0.011 min
Lab File: x072383.d
Acq: 12 Aug 2020 9:34 pm

Tgt Ion:149 Resp: 880

Ion	Ratio	Lower	Upper
149	100		
177	26.3	0.0	52.0
150	10.1	0.0	41.5

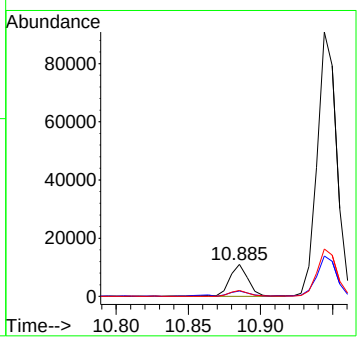


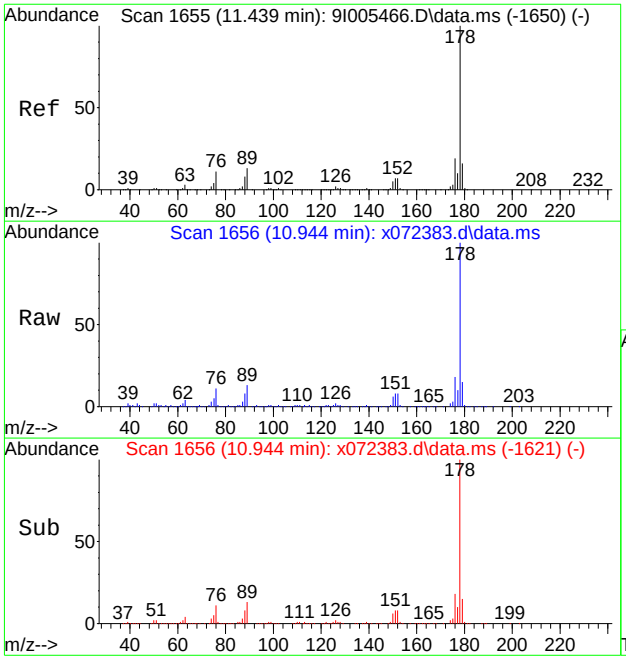


#84
Phenanthrene
Concen: 0.73 ppm
RT: 10.885 min Scan# 1645
Delta R.T. -0.005 min
Lab File: x072383.d
Acq: 12 Aug 2020 9:34 pm

Tgt Ion:178 Resp: 10115

Ion	Ratio	Lower	Upper
178	100		
179	16.2	0.0	45.8
176	18.6	0.0	49.3

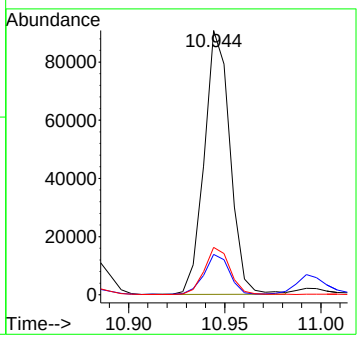


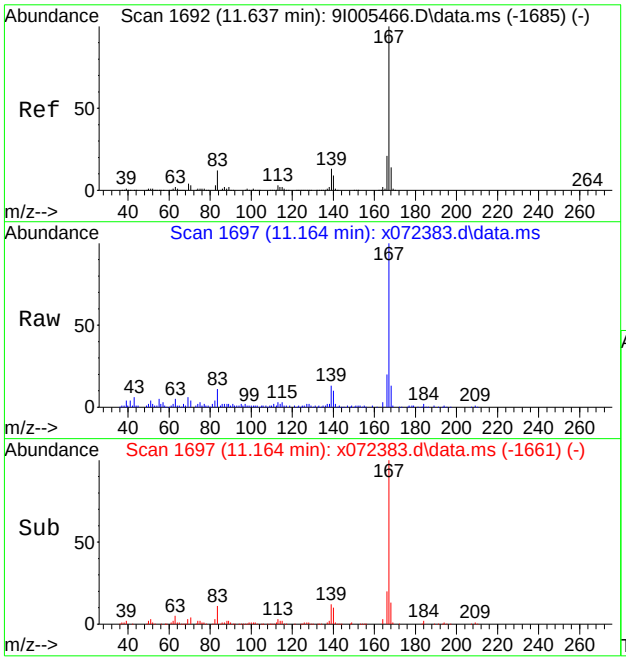


#85
Anthracene
Concen: 5.86 ppm
RT: 10.944 min Scan# 1656
Delta R.T. -0.011 min
Lab File: x072383.d
Acq: 12 Aug 2020 9:34 pm

Tgt Ion:178 Resp: 84587

Ion	Ratio	Lower	Upper
178	100		
179	14.7	0.0	46.0
176	17.9	0.0	49.3

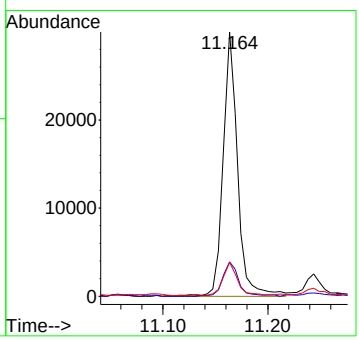


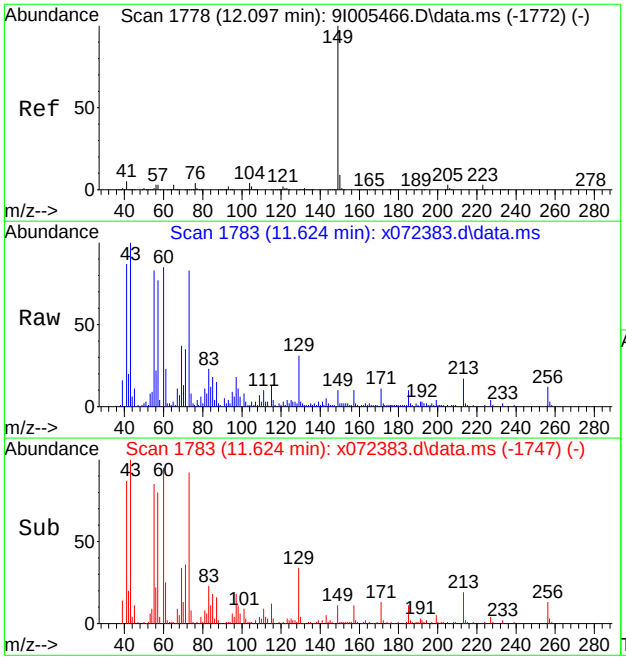


#87
Carbazole
Concen: 2.26 ppm
RT: 11.164 min Scan# 1697
Delta R.T. -0.005 min
Lab File: x072383.d
Acq: 12 Aug 2020 9:34 pm

Tgt Ion:167 Resp: 28776

Ion	Ratio	Lower	Upper
167	100		
168	12.8	0.0	43.9
139	12.2	0.0	42.7

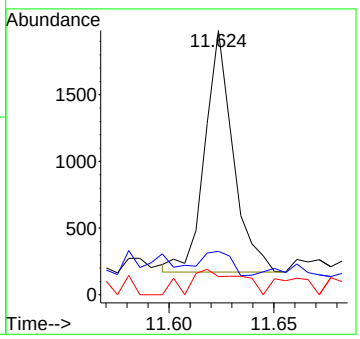


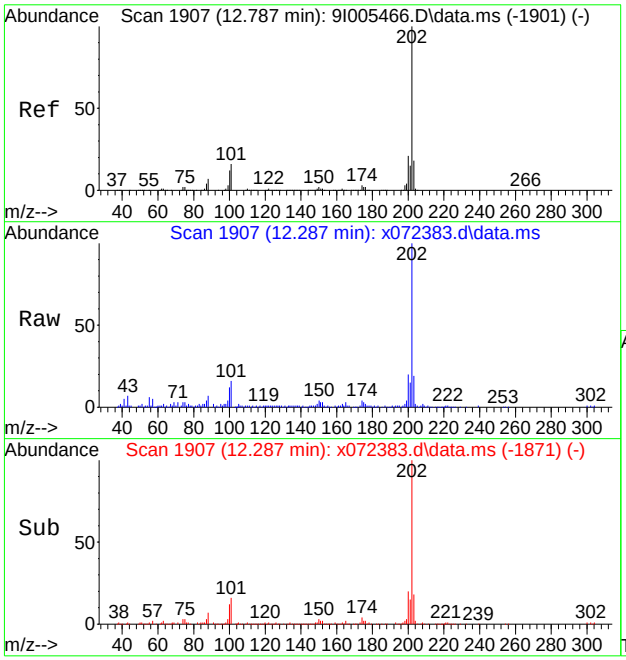


#89
Di-n-butylphthalate
Concen: 0.12 ppm
RT: 11.624 min Scan# 1783
Delta R.T. -0.005 min
Lab File: x072383.d
Acq: 12 Aug 2020 9:34 pm

Tgt Ion:149 Resp: 1690

Ion	Ratio	Lower	Upper
149	100		
150	5.0	0.0	39.5
104	4.7	0.0	34.2

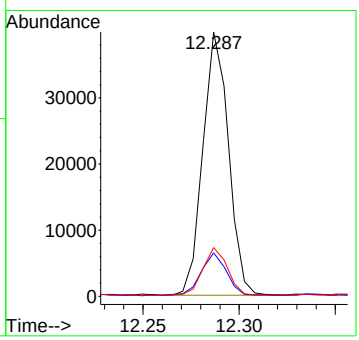


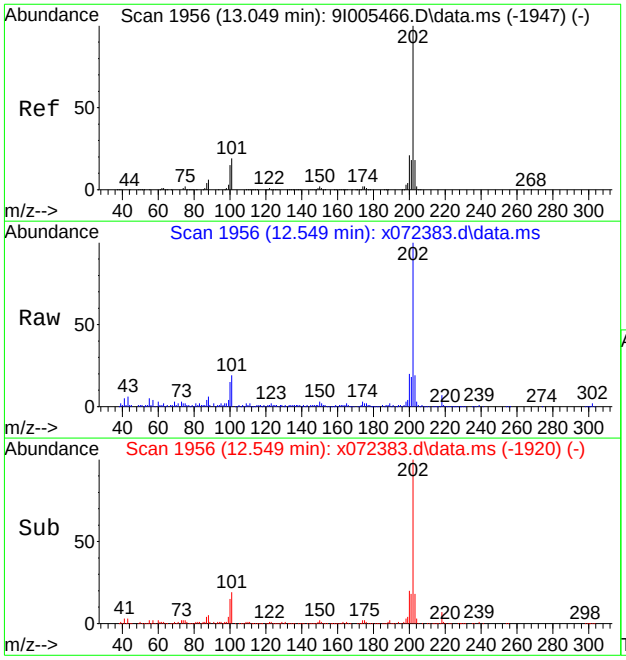


#91
Fluoranthene
Concen: 2.87 ppm
RT: 12.287 min Scan# 1907
Delta R.T. -0.005 min
Lab File: x072383.d
Acq: 12 Aug 2020 9:34 pm

Tgt Ion:202 Resp: 36921

Ion	Ratio	Lower	Upper
202	100		
101	16.1	0.0	45.8
203	18.1	0.0	48.1

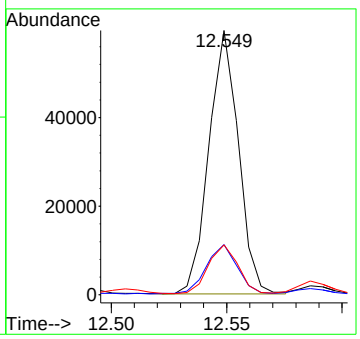


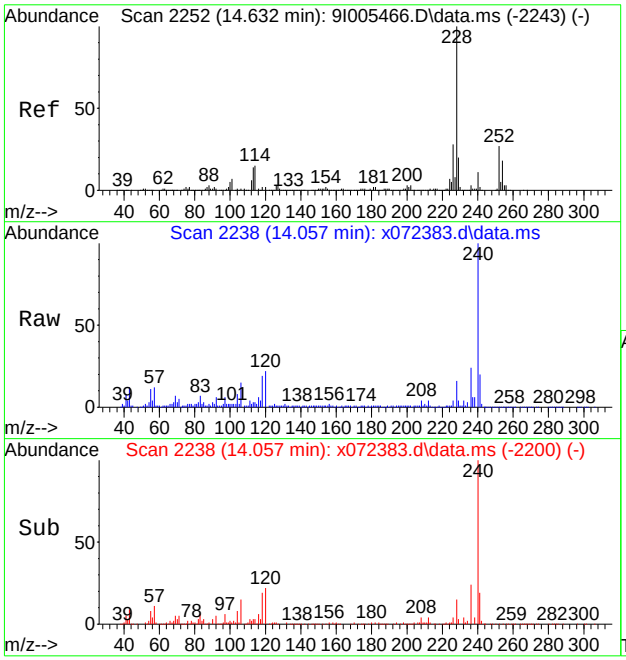


#94
Pyrene
Concen: 3.53 ppm
RT: 12.549 min Scan# 1956
Delta R.T. -0.005 min
Lab File: x072383.d
Acq: 12 Aug 2020 9:34 pm

Tgt Ion:202 Resp: 53107

Ion	Ratio	Lower	Upper
202	100		
101	18.5	0.0	48.7
203	18.2	0.0	48.4

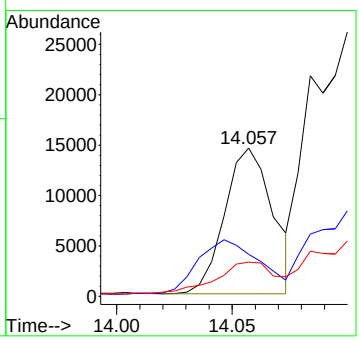


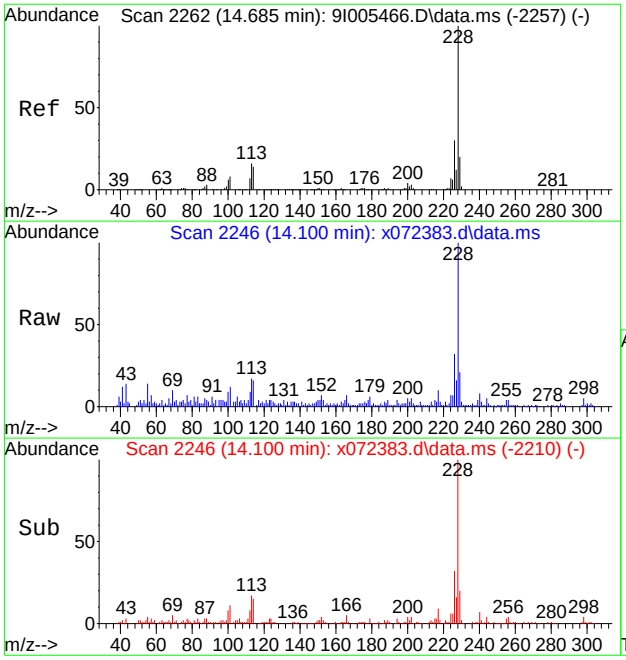


#99
Benzo[a]anthracene
Concen: 1.84 ppm
RT: 14.057 min Scan# 2238
Delta R.T. 0.005 min
Lab File: x072383.d
Acq: 12 Aug 2020 9:34 pm

Tgt Ion:228 Resp: 21014

Ion	Ratio	Lower	Upper
228	100		
226	27.9	0.0	57.5
229	19.4	0.0	49.9

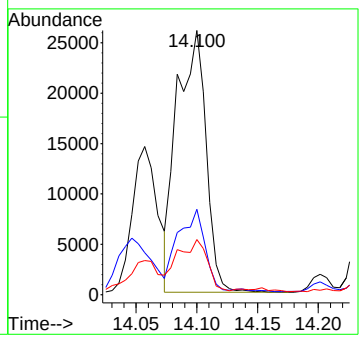


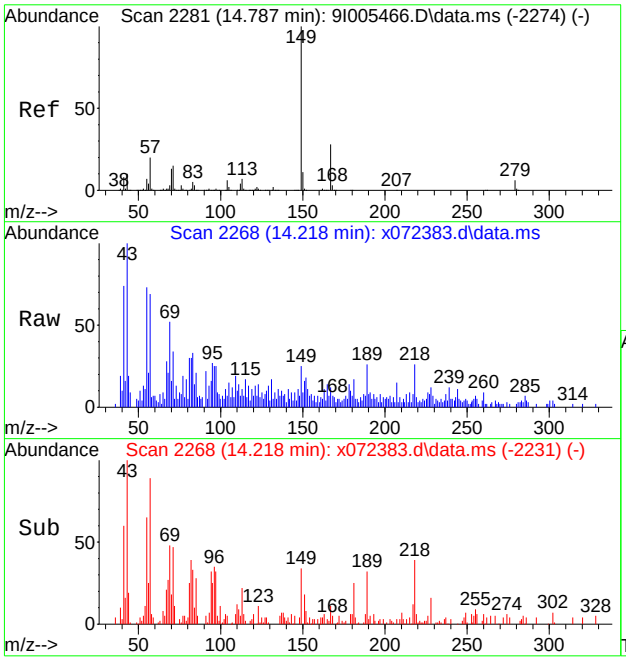


#100
Chrysene
Concen: 3.56 ppm
RT: 14.100 min Scan# 2246
Delta R.T. -0.005 min
Lab File: x072383.d
Acq: 12 Aug 2020 9:34 pm

Tgt Ion:228 Resp: 43237

Ion	Ratio	Lower	Upper
228	100		
226	32.7	0.4	60.4
229	18.9	0.0	50.1

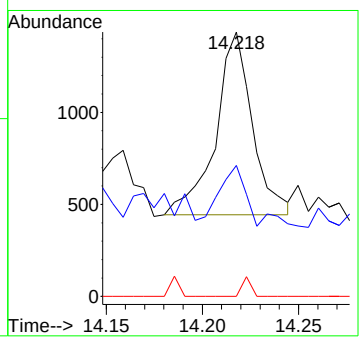


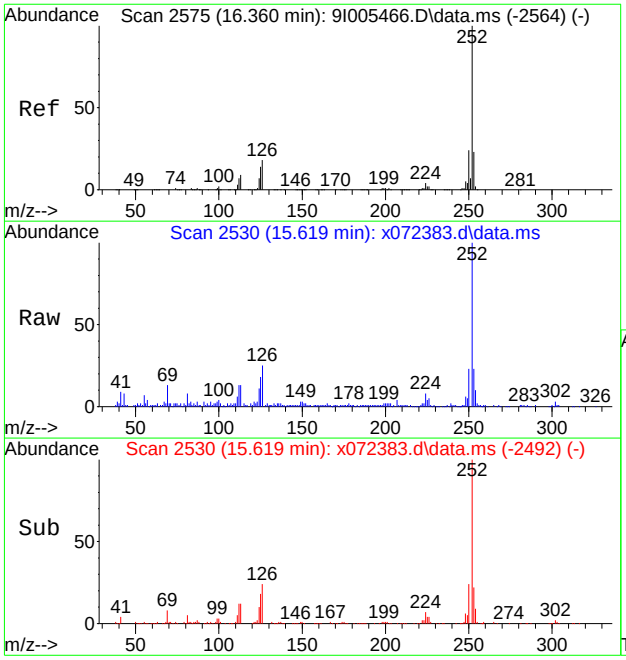


#101
bis(2-Ethylhexyl)phthalate
Concen: 0.17 ppm
RT: 14.218 min Scan# 2268
Delta R.T. 0.000 min
Lab File: x072383.d
Acq: 12 Aug 2020 9:34 pm

Tgt Ion:149 Resp: 1322

Ion	Ratio	Lower	Upper
149	100		
167	24.3	0.0	58.5
279	0.0	0.0	35.7

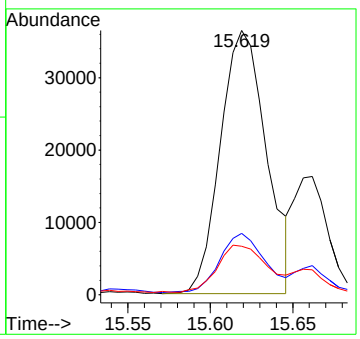


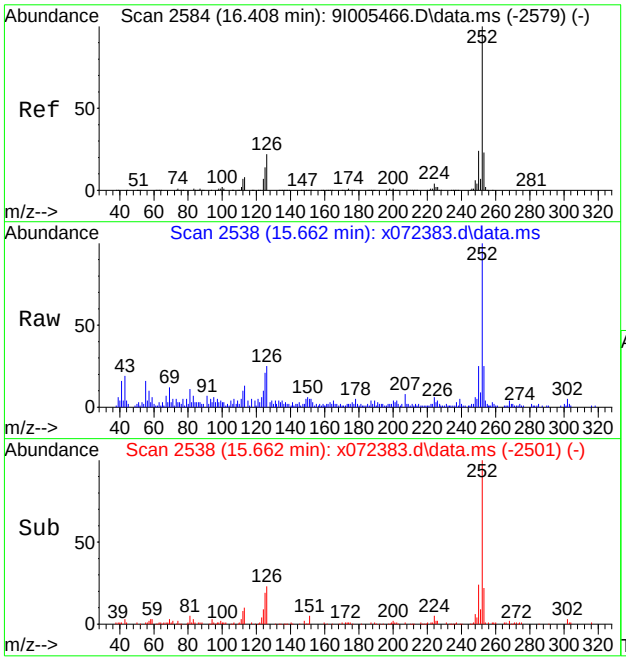


#104
Benzo[b]fluoranthene
Concen: 8.95 ppm
RT: 15.619 min Scan# 2530
Delta R.T. 0.005 min
Lab File: x072383.d
Acq: 12 Aug 2020 9:34 pm

Tgt Ion:252 Resp: 70876

Ion	Ratio	Lower	Upper
252	100		
253	23.0	0.0	52.5
125	16.5	0.0	44.0

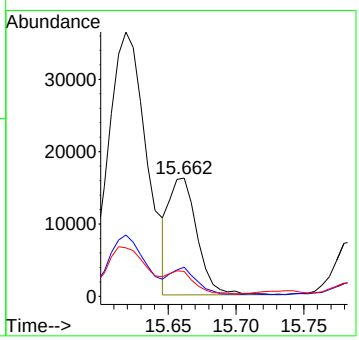


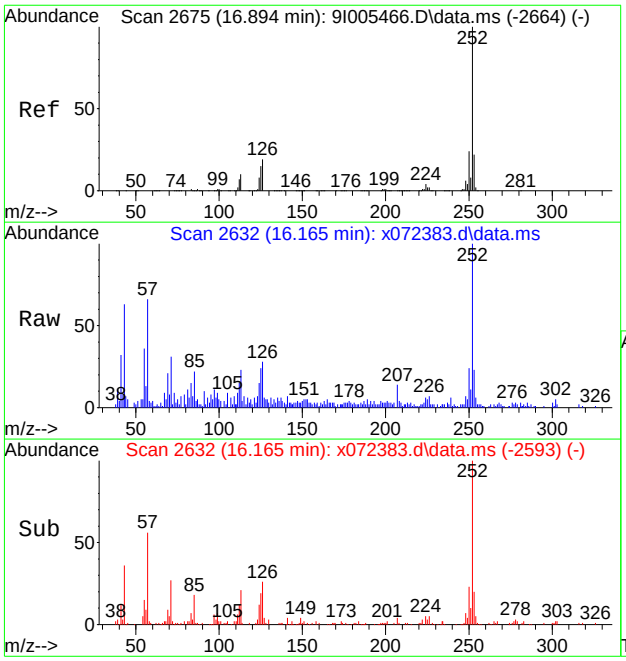


#105
Benzo[k]fluoranthene
Concen: 2.25 ppm
RT: 15.662 min Scan# 2538
Delta R.T. 0.000 min
Lab File: x072383.d
Acq: 12 Aug 2020 9:34 pm

Tgt Ion:252 Resp: 23318

Ion	Ratio	Lower	Upper
252	100		
253	25.0	0.0	52.5
125	15.9	0.0	44.4

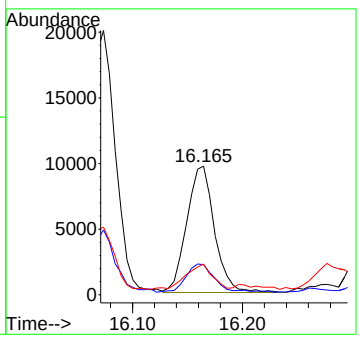


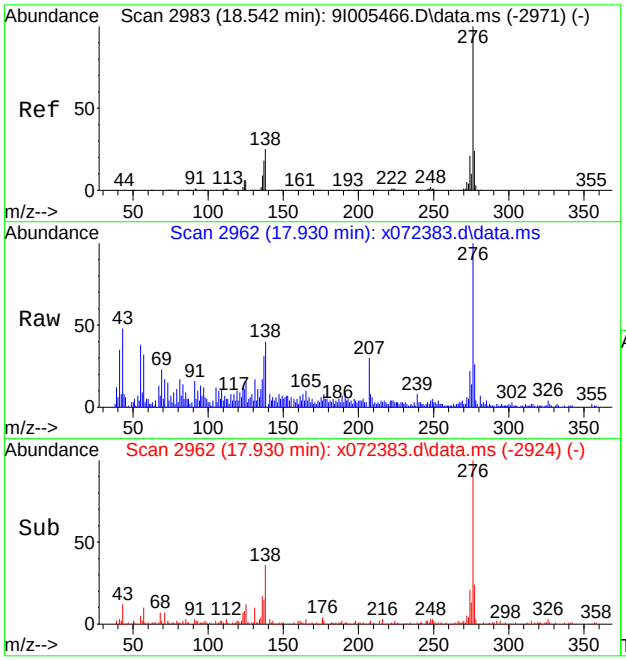


#106
Benzo[a]pyrene
Concen: 2.27 ppm
RT: 16.165 min Scan# 2632
Delta R.T. 0.011 min
Lab File: x072383.d
Acq: 12 Aug 2020 9:34 pm

Tgt Ion:252 Resp: 16895

Ion	Ratio	Lower	Upper
252	100		
253	21.4	0.0	52.3
125	18.9	0.0	44.7

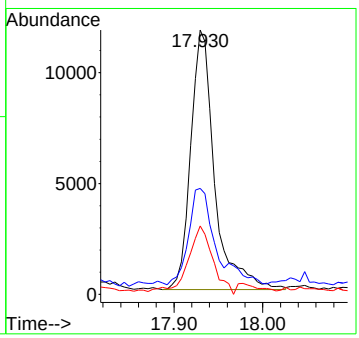


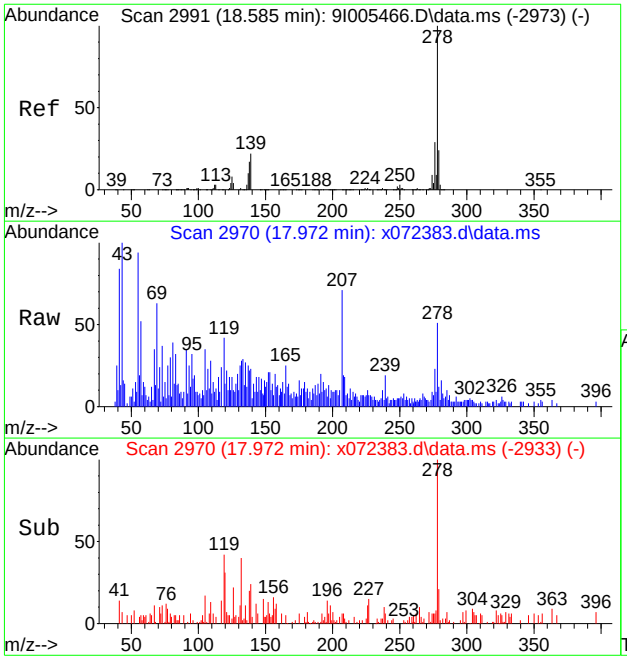


#107
Indeno[1,2,3-cd]pyrene
Concen: 5.17 ppm
RT: 17.930 min Scan# 2962
Delta R.T. 0.005 min
Lab File: x072383.d
Acq: 12 Aug 2020 9:34 pm

Tgt Ion:276 Resp: 21904

Ion	Ratio	Lower	Upper
276	100		
138	36.1	0.0	54.7
277	23.8	0.0	53.8

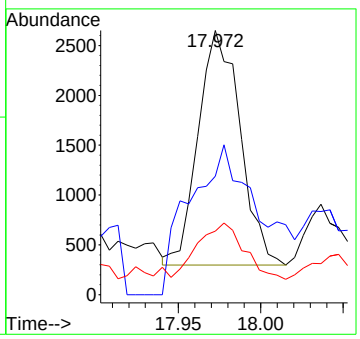


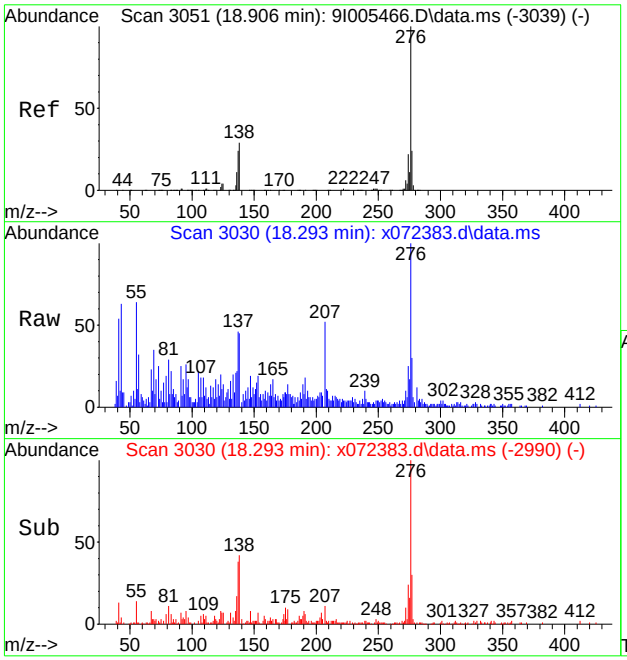


#108
Dibenz[a,h]anthracene
Concen: 0.92 ppm
RT: 17.972 min Scan# 2970
Delta R.T. 0.000 min
Lab File: x072383.d
Acq: 12 Aug 2020 9:34 pm

Tgt Ion:278 Resp: 4160

Ion	Ratio	Lower	Upper
278	100		
139	36.2	0.0	52.4
279	18.2	0.0	54.4

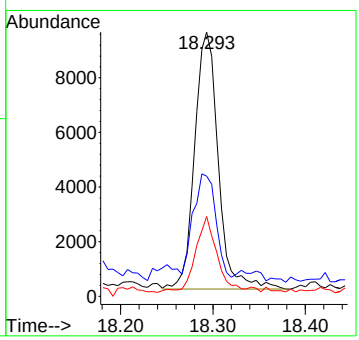




#109
Benzo[g,h,i]perylene
Concen: 2.53 ppm
RT: 18.293 min Scan# 3030
Delta R.T. 0.016 min
Lab File: x072383.d
Acq: 12 Aug 2020 9:34 pm

Tgt Ion:276 Resp: 16811

Ion	Ratio	Lower	Upper
276	100		
138	38.6	0.0	59.4
277	29.1	0.0	54.1



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06506.d
Acq On : 11 Aug 2020 9:35 pm
Operator : marthav
Sample : fa77615-12 E Inst : MSBNA10
Misc : op81484,S6F251,30.0,,,1,1,soil
ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Results File: 8270D6F072920.RES
Quant Time: Aug 12 06:45:43 2020
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

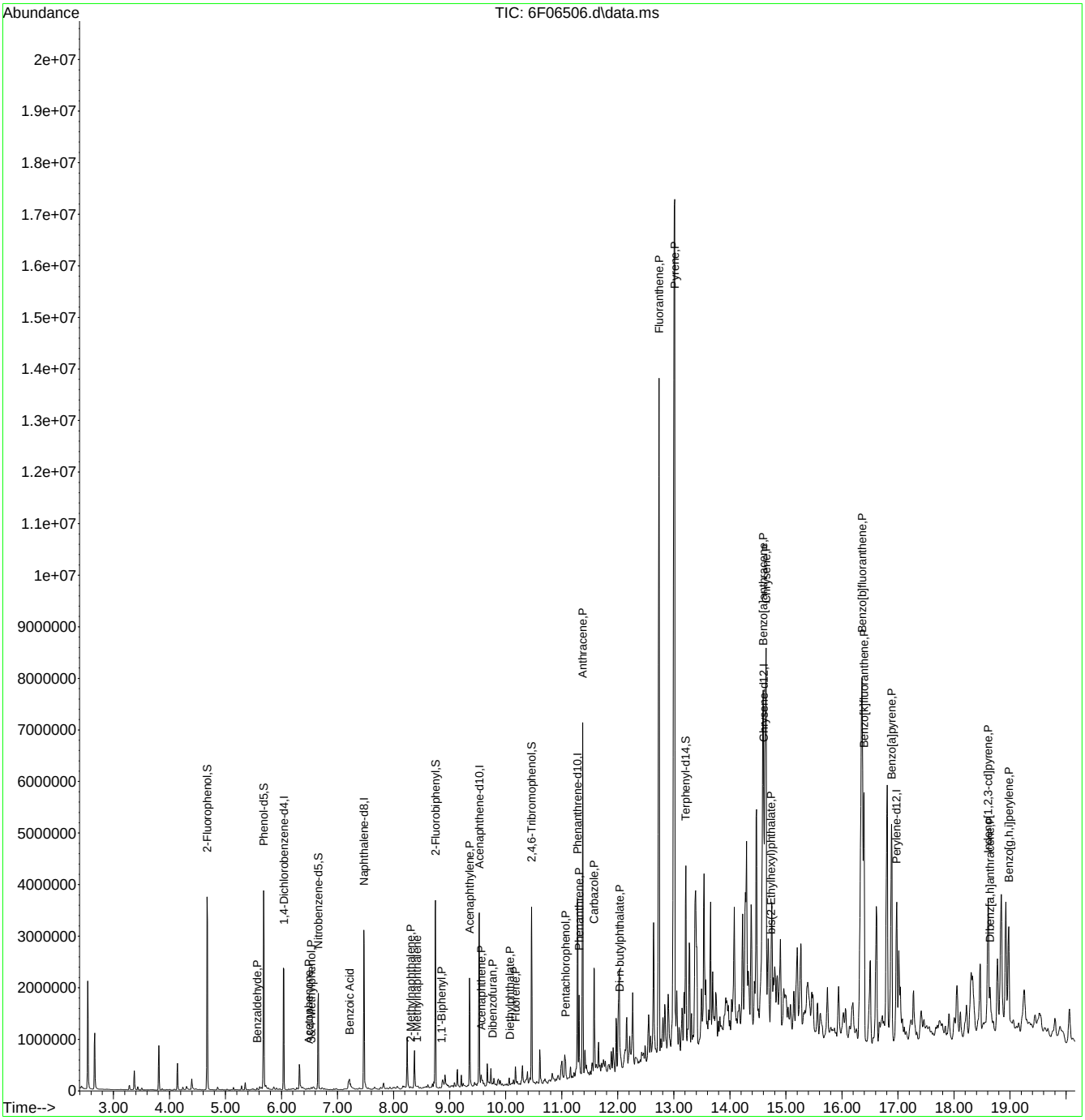
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.040	152	361523	40.00	ppm	0.00
22) Naphthalene-d8	7.468	136	1352547	40.00	ppm	0.00
43) Acenaphthene-d10	9.527	164	716437	40.00	ppm	0.00
70) Phenanthrene-d10	11.282	188	1301320	40.00	ppm	0.00
92) Chrysene-d12	14.603	240	1085653	40.00	ppm	0.03
102) Perylene-d12	16.973	264	1137038	40.00	ppm	0.04
System Monitoring Compounds						
7) 2-Fluorophenol	4.671	112	1000774	73.26	ppm	0.01
Spiked Amount 100.000	Range 40 - 102		Recovery = 73.26%			
9) Phenol-d5	5.682	99	1294699	79.84	ppm	0.01
Spiked Amount 100.000	Range 41 - 100		Recovery = 79.84%			
23) Nitrobenzene-d5	6.655	82	561357	37.83	ppm	0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 75.66%			
47) 2-Fluorobiphenyl	8.746	172	1075787	38.42	ppm	0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 76.84%			
75) 2,4,6-Tribromophenol	10.463	330	371440	84.81	ppm	0.00
Spiked Amount 100.000	Range 42 - 108		Recovery = 84.81%			
95) Terphenyl-d14	13.212	244	1223097	40.08	ppm	0.01
Spiked Amount 50.000	Range 45 - 119		Recovery = 80.16%			
Target Compounds						Qvalue
5) Benzaldehyde	5.564	106	10840	0.98	ppm	91
18) Acetophenone	6.489	105	10203	0.55	ppm	93
21) 3&4-Methylphenol	6.527	108	5701	0.44	ppm #	61
30) Benzoic Acid	7.211	105	67564	7.52	ppm	97
40) 2-Methylnaphthalene	8.302	141	6924	0.31	ppm	98
41) 1-Methylnaphthalene	8.415	142	6257	0.25	ppm	99
48) 1,1'-Biphenyl	8.853	154	3000	0.10	ppm	98
52) Acenaphthylene	9.356	152	867477	24.23	ppm	98
57) Acenaphthene	9.559	153	50007	2.10	ppm	98
60) Dibenzofuran	9.768	168	19243	0.59	ppm	81
65) Fluorene	10.174	166	111220	4.18	ppm	98
67) Diethylphthalate	10.073	149	1921	0.07	ppm	95
83) Pentachlorophenol	11.068	266	6968	2.06	ppm	95
84) Phenanthrene	11.308	178	536209	13.76	ppm	99
85) Anthracene	11.372	178	2555406	64.53	ppm	98
87) Carbazole	11.576	167	699692	19.61	ppm	97
89) Di-n-butylphthalate	12.036	149	12514	0.28	ppm	68
91) Fluoranthene	12.736	202	6240698	152.12	ppm	95
94) Pyrene	13.015	202	10480051	269.51	ppm	92
99) Benzo[a]anthracene	14.592	228	3481024	95.69	ppm	99
100) Chrysene	14.646	228	4649535	131.73	ppm	95
101) bis(2-Ethylhexyl)phtha...	14.731	149	18610	0.72	ppm	88
104) Benzo[b]fluoranthene	16.357	252	6806852	186.51	ppm	96
105) Benzo[k]fluoranthene	16.395	252	2057875	54.22	ppm	97
106) Benzo[a]pyrene	16.887	252	2269852	66.97	ppm	95
107) Indeno[1,2,3-cd]pyrene	18.609	276	1720606	54.53	ppm	96
108) Dibenz[a,h]anthracene	18.641	278	394635	11.71	ppm	93
109) Benzo[g,h,i]perylene	18.978	276	1236804	36.31	ppm	97

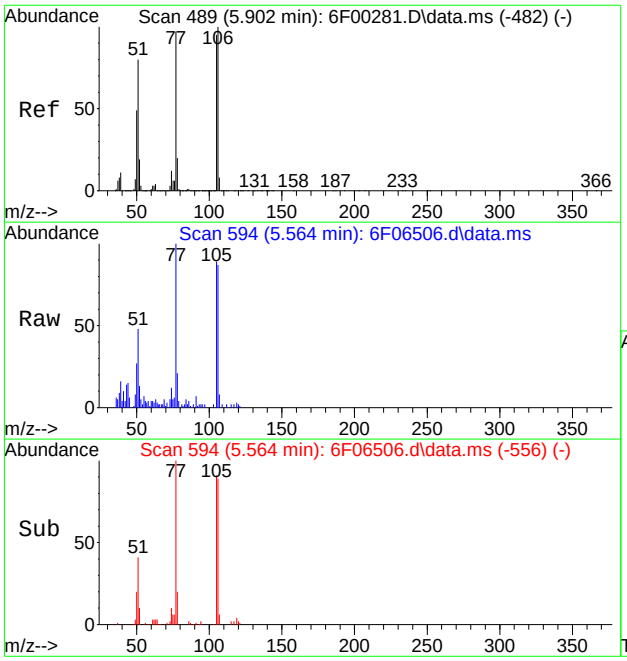
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06506.d
Acq On : 11 Aug 2020 9:35 pm
Operator : marthav
Sample : fa77615-12 E Inst : MSBNA10
Misc : op81484,S6F251,30.0,,,1,1,soil
ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Results File: 8270D6F072920.RES
Quant Time: Aug 12 06:45:43 2020
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

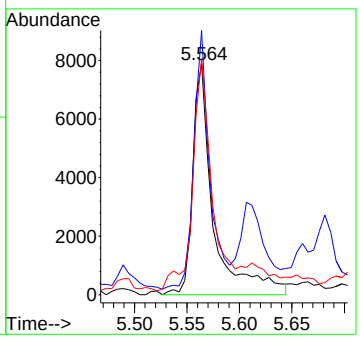


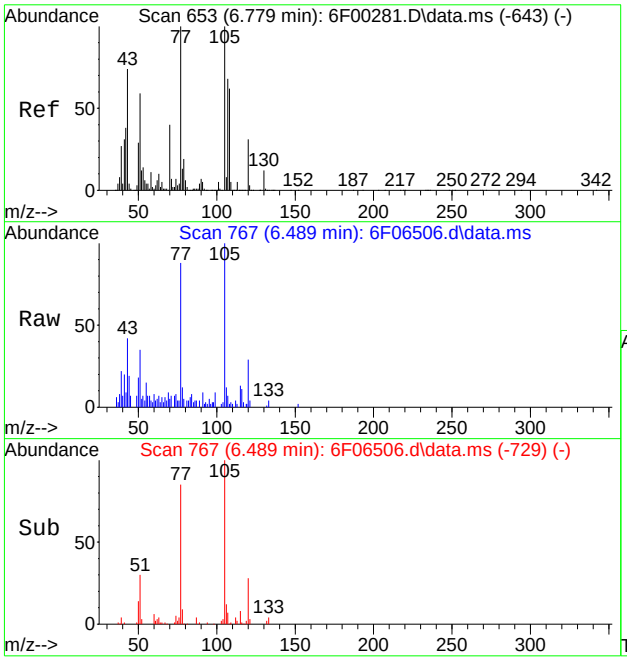


#5
Benzaldehyde
Concen: 0.98 ppm
RT: 5.564 min Scan# 594
Delta R.T. 0.005 min
Lab File: 6F06506.d
Acq: 11 Aug 2020 9:35 pm

Tgt Ion:106 Resp: 10840

Ion	Ratio	Lower	Upper
106	100		
77	110.1	67.1	127.1
105	99.5	65.1	125.1

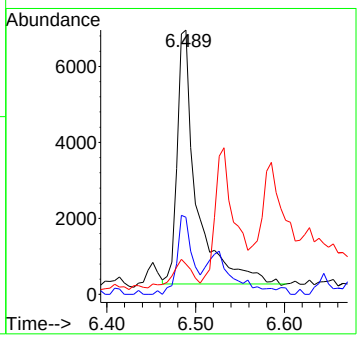


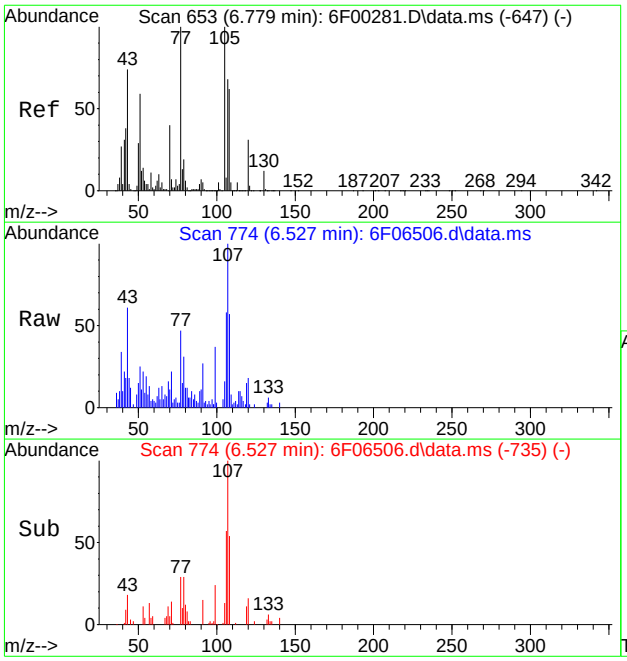


#18
Acetophenone
Concen: 0.55 ppm
RT: 6.489 min Scan# 767
Delta R.T. 0.005 min
Lab File: 6F06506.d
Acq: 11 Aug 2020 9:35 pm

Tgt Ion:105 Resp: 10203

Ion	Ratio	Lower	Upper
105	100		
120	29.3	0.7	60.7
106	0.0	0.0	38.4

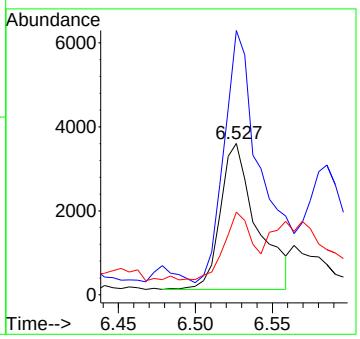


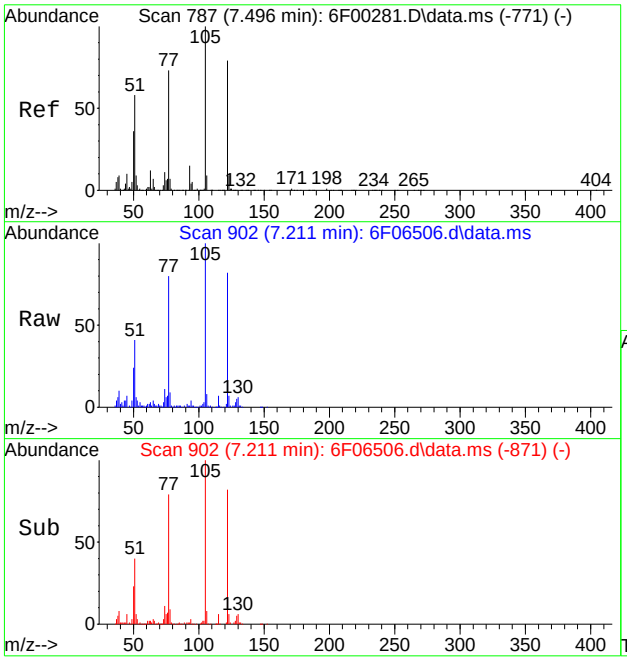


#21
3&4-Methylphenol
Concen: 0.44 ppm
RT: 6.527 min Scan# 774
Delta R.T. 0.010 min
Lab File: 6F06506.d
Acq: 11 Aug 2020 9:35 pm

Tgt Ion:108 Resp: 5701

Ion	Ratio	Lower	Upper
108	100		
107	163.0	80.3	140.3#
79	29.6	0.2	60.2

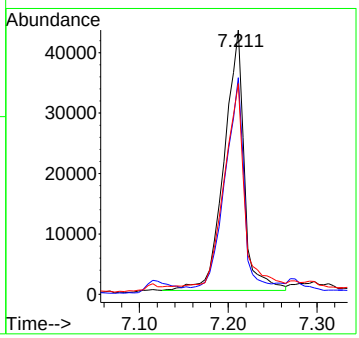


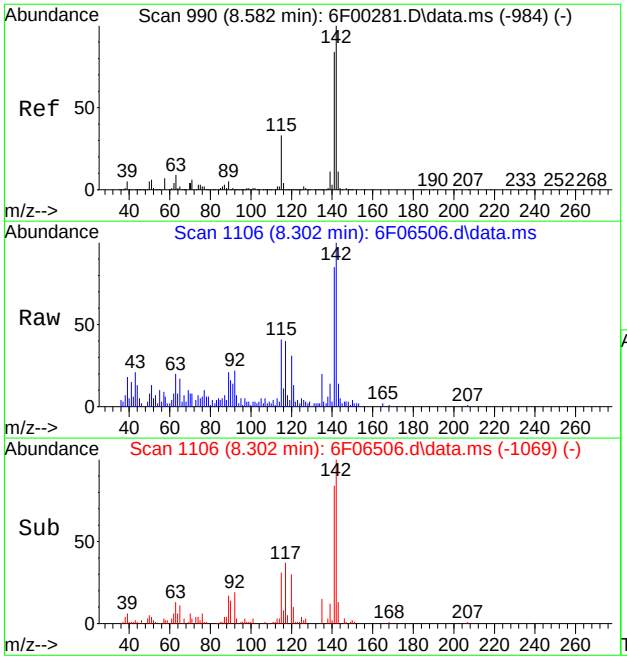


#30
Benzoic Acid
Concen: 7.52 ppm
RT: 7.211 min Scan# 902
Delta R.T. -0.032 min
Lab File: 6F06506.d
Acq: 11 Aug 2020 9:35 pm

Tgt Ion:105 Resp: 67564

Ion	Ratio	Lower	Upper
105	100		
122	79.7	49.5	109.5
77	78.0	43.0	103.0

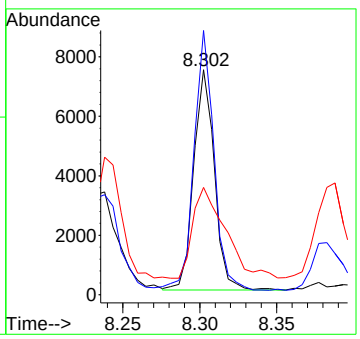


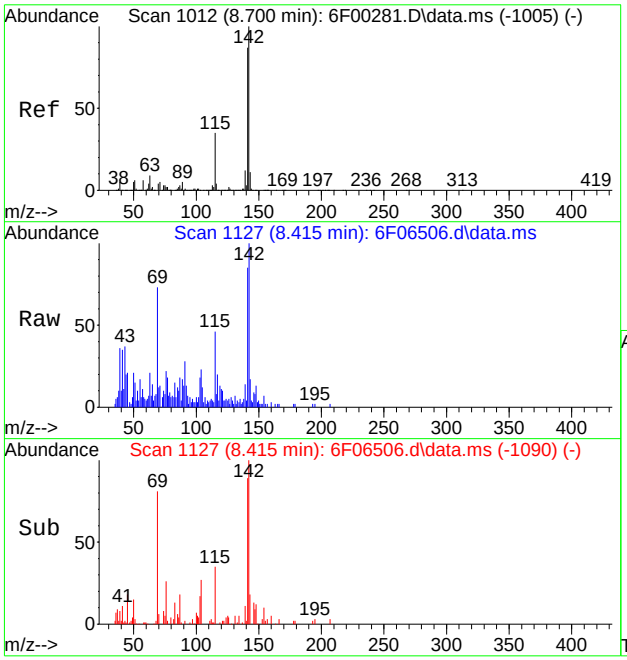


#40
2-Methylnaphthalene
Concen: 0.31 ppm
RT: 8.302 min Scan# 1106
Delta R.T. -0.000 min
Lab File: 6F06506.d
Acq: 11 Aug 2020 9:35 pm

Tgt Ion:141 Resp: 6924

Ion	Ratio	Lower	Upper
141	100		
142	116.0	88.9	148.9
115	41.0	9.7	69.7

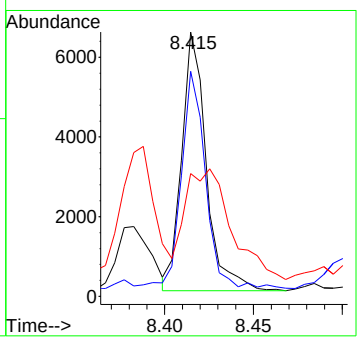


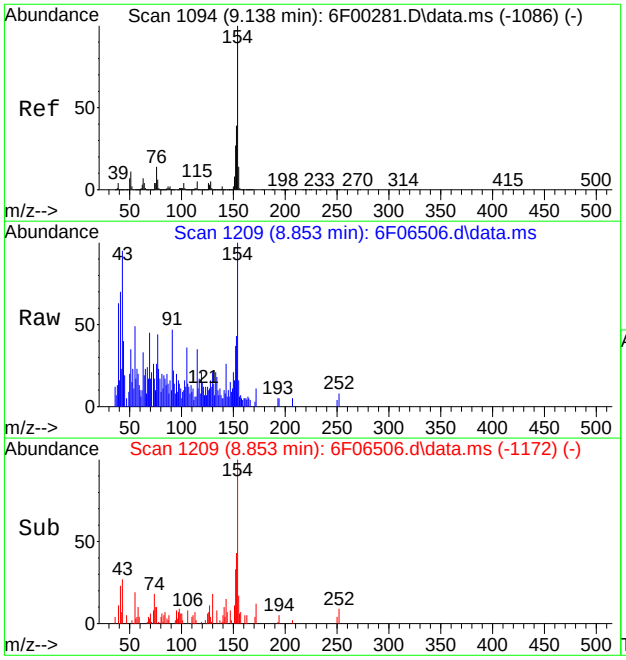


#41
1-Methylnaphthalene
Concen: 0.25 ppm
RT: 8.415 min Scan# 1127
Delta R.T. -0.000 min
Lab File: 6F06506.d
Acq: 11 Aug 2020 9:35 pm

Tgt Ion:142 Resp: 6257

Ion	Ratio	Lower	Upper
142	100		
141	85.0	56.8	116.8
115	34.9	4.7	64.7

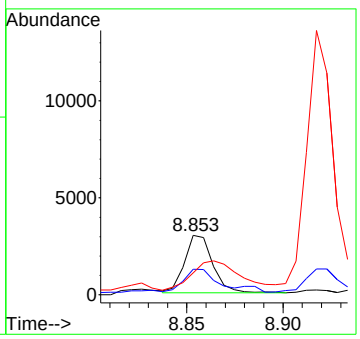


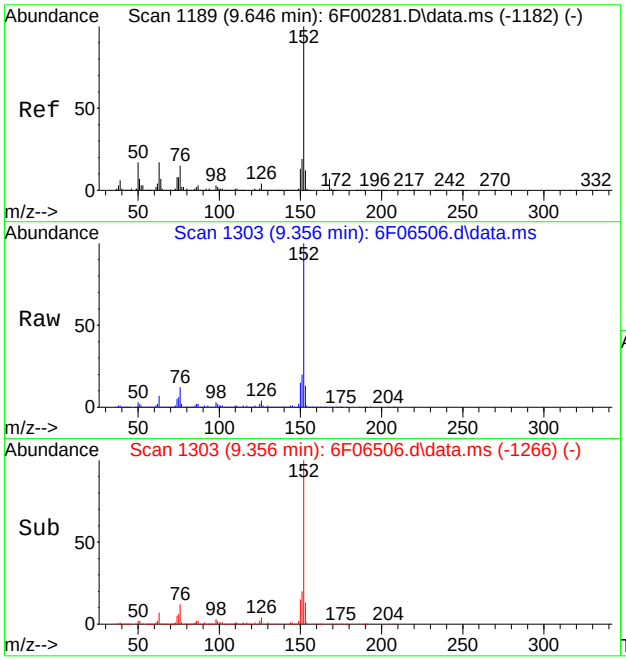


#48
1,1'-Biphenyl
Concen: 0.10 ppm
RT: 8.853 min Scan# 1209
Delta R.T. -0.000 min
Lab File: 6F06506.d
Acq: 11 Aug 2020 9:35 pm

Tgt Ion:154 Resp: 3000

Ion	Ratio	Lower	Upper
154	100		
153	38.8	8.7	68.7
152	24.8	0.0	56.7

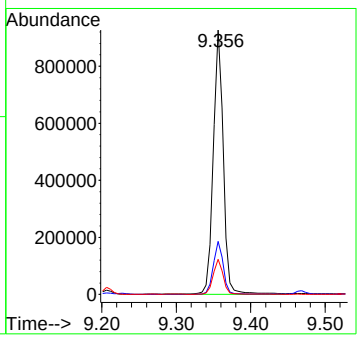


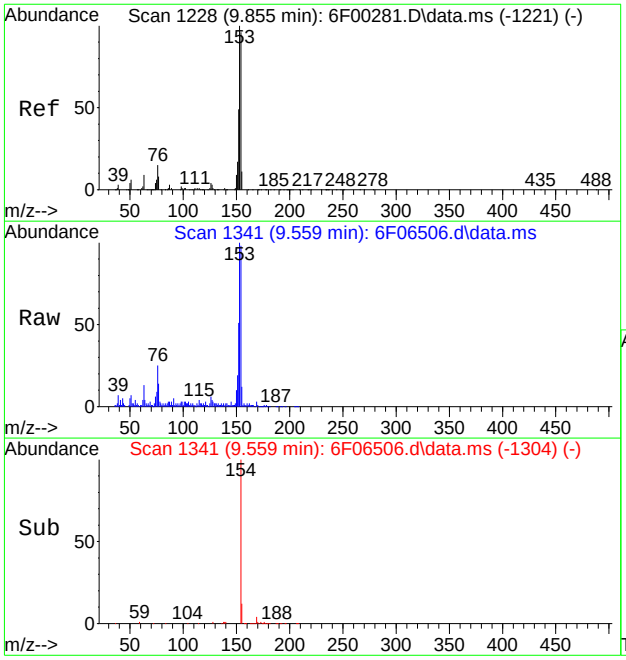


#52
Acenaphthylene
Concen: 24.23 ppm
RT: 9.356 min Scan# 1303
Delta R.T. -0.000 min
Lab File: 6F06506.d
Acq: 11 Aug 2020 9:35 pm

Tgt Ion:152 Resp: 867477

Ion	Ratio	Lower	Upper
152	100		
151	20.0	0.0	48.8
153	13.2	0.0	42.3

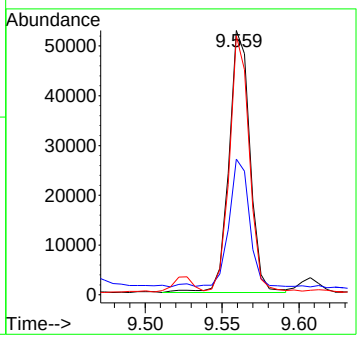


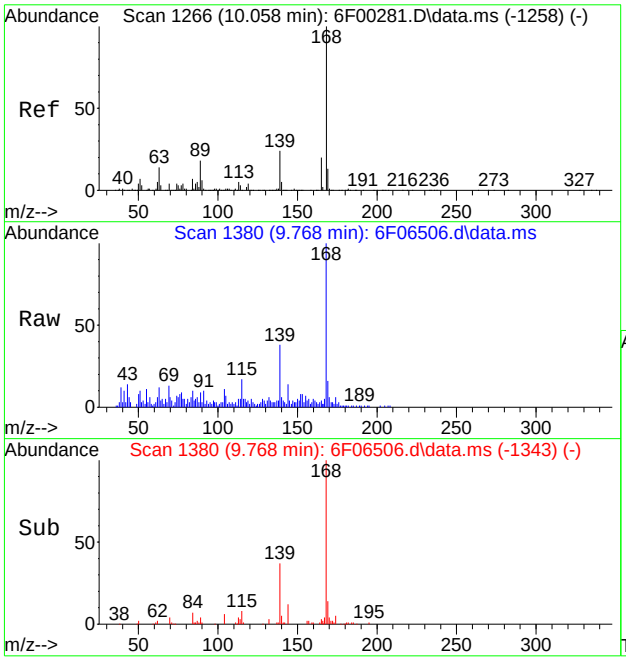


#57
Acenaphthene
Concen: 2.10 ppm
RT: 9.559 min Scan# 1341
Delta R.T. -0.000 min
Lab File: 6F06506.d
Acq: 11 Aug 2020 9:35 pm

Tgt Ion:153 Resp: 50007

Ion	Ratio	Lower	Upper
153	100		
152	48.5	19.4	79.4
154	97.7	65.6	125.6

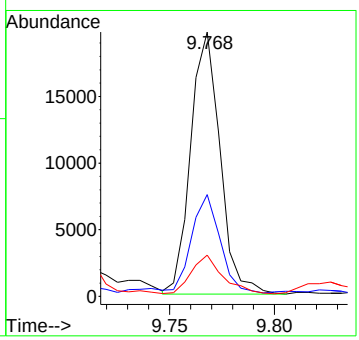


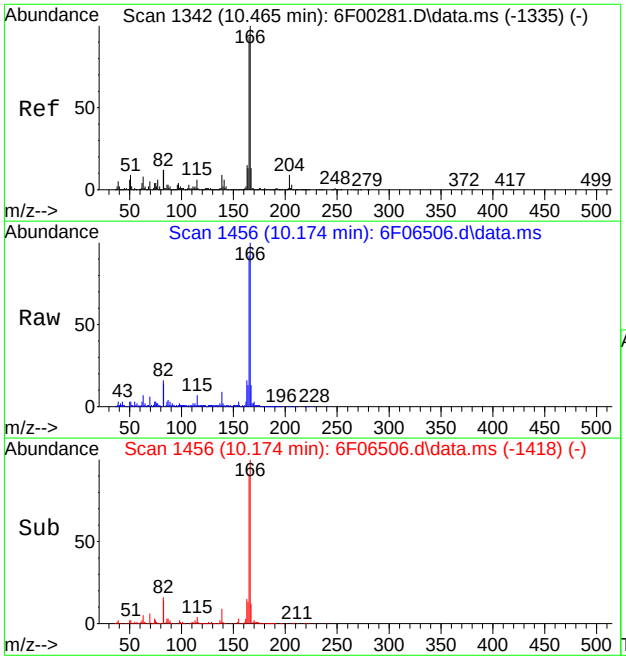


#60
Dibenzofuran
Concen: 0.59 ppm
RT: 9.768 min Scan# 1380
Delta R.T. -0.000 min
Lab File: 6F06506.d
Acq: 11 Aug 2020 9:35 pm

Tgt Ion:168 Resp: 19243

Ion	Ratio	Lower	Upper
168	100		
139	36.9	0.0	53.6
169	14.6	0.0	42.6

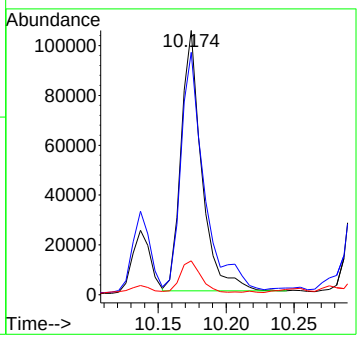


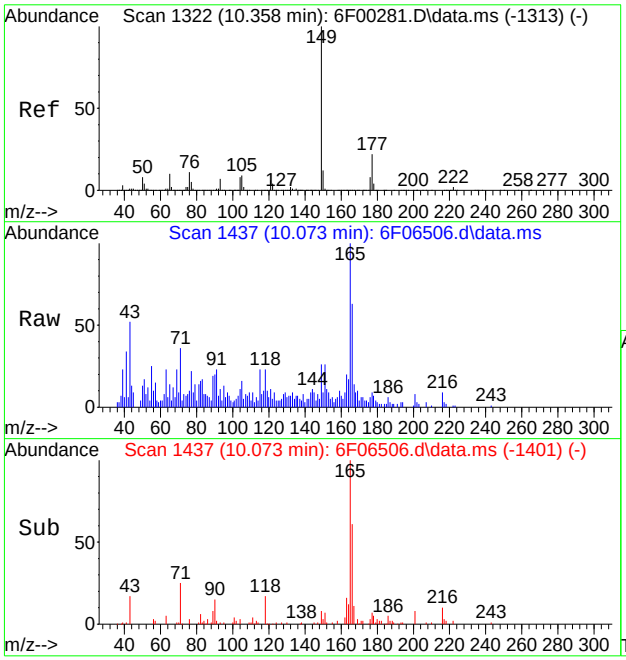


#65
Fluorene
Concen: 4.18 ppm
RT: 10.174 min Scan# 1456
Delta R.T. 0.005 min
Lab File: 6F06506.d
Acq: 11 Aug 2020 9:35 pm

Tgt Ion:166 Resp: 111220

Ion	Ratio	Lower	Upper
166	100		
165	90.7	62.6	122.6
167	11.4	0.0	43.1

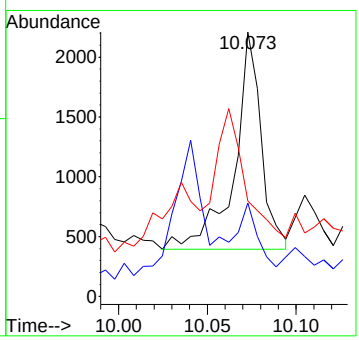


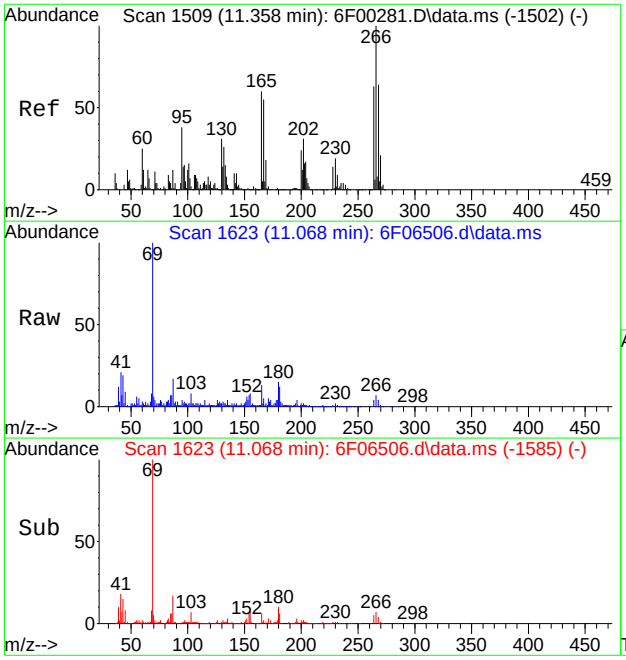


#67
Diethylphthalate
Concen: 0.07 ppm
RT: 10.073 min Scan# 1437
Delta R.T. -0.006 min
Lab File: 6F06506.d
Acq: 11 Aug 2020 9:35 pm

Tgt Ion:149 Resp: 1921

Ion	Ratio	Lower	Upper
149	100		
177	25.1	0.0	52.2
150	12.9	0.0	41.7

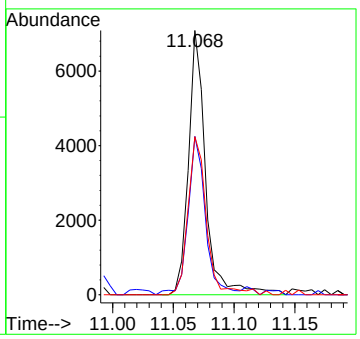


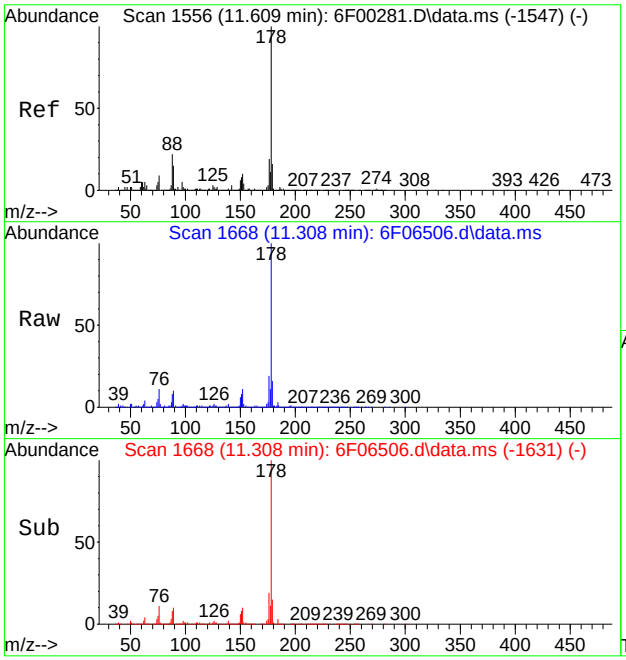


#83
Pentachlorophenol
Concen: 2.06 ppm
RT: 11.068 min Scan# 1623
Delta R.T. 0.005 min
Lab File: 6F06506.d
Acq: 11 Aug 2020 9:35 pm

Tgt Ion:266 Resp: 6968

Ion	Ratio	Lower	Upper
266	100		
264	59.1	32.8	92.8
268	58.9	33.5	93.5

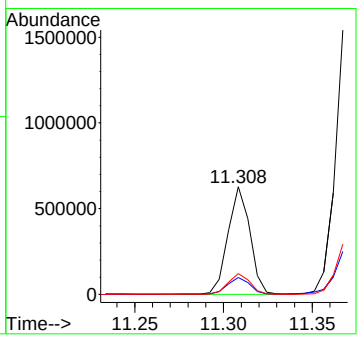


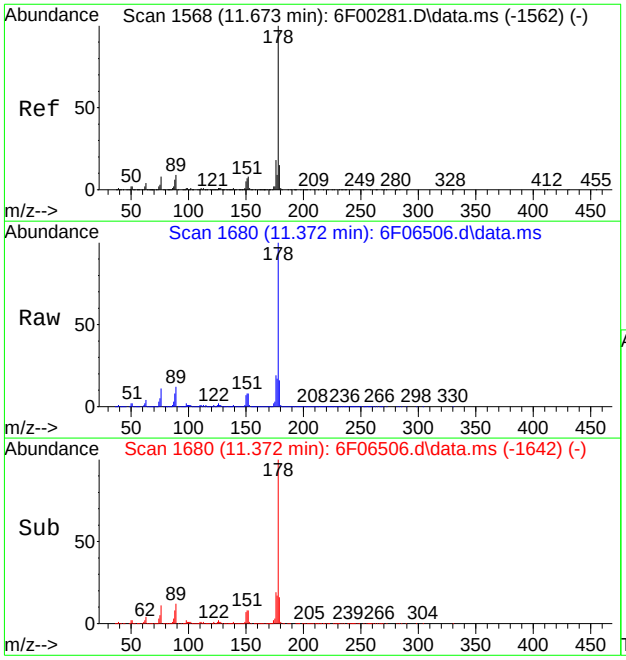


#84
Phenanthrene
Concen: 13.76 ppm
RT: 11.308 min Scan# 1668
Delta R.T. -0.000 min
Lab File: 6F06506.d
Acq: 11 Aug 2020 9:35 pm

Tgt Ion:178 Resp: 536209

Ion	Ratio	Lower	Upper
178	100		
179	15.5	0.0	46.0
176	19.4	0.0	49.0

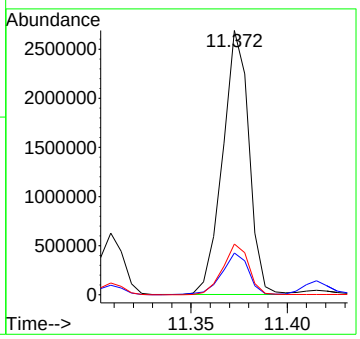


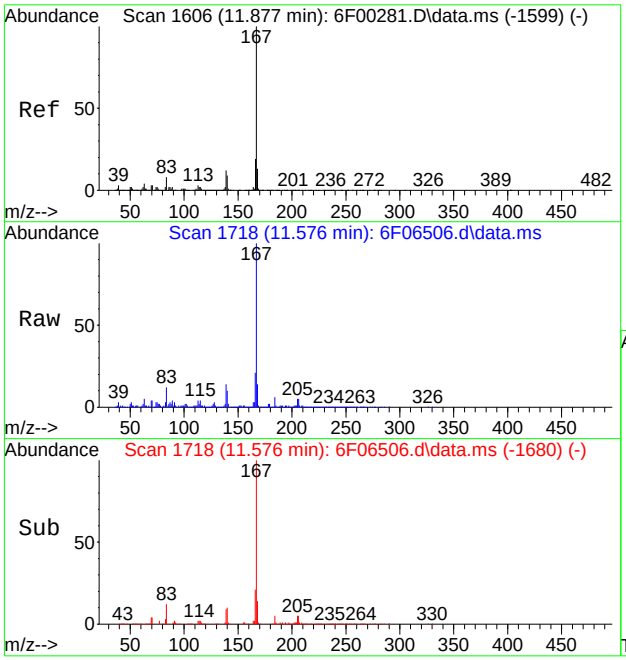


#85
Anthracene
Concen: 64.53 ppm
RT: 11.372 min Scan# 1680
Delta R.T. 0.005 min
Lab File: 6F06506.d
Acq: 11 Aug 2020 9:35 pm

Tgt Ion:178 Resp: 2555406

Ion	Ratio	Lower	Upper
178	100		
179	15.6	0.0	45.4
176	19.2	0.0	47.7

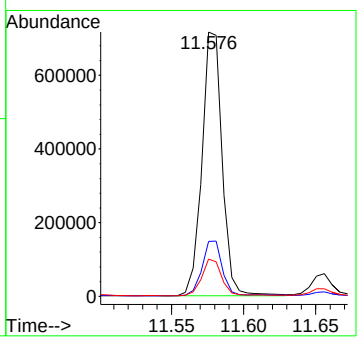


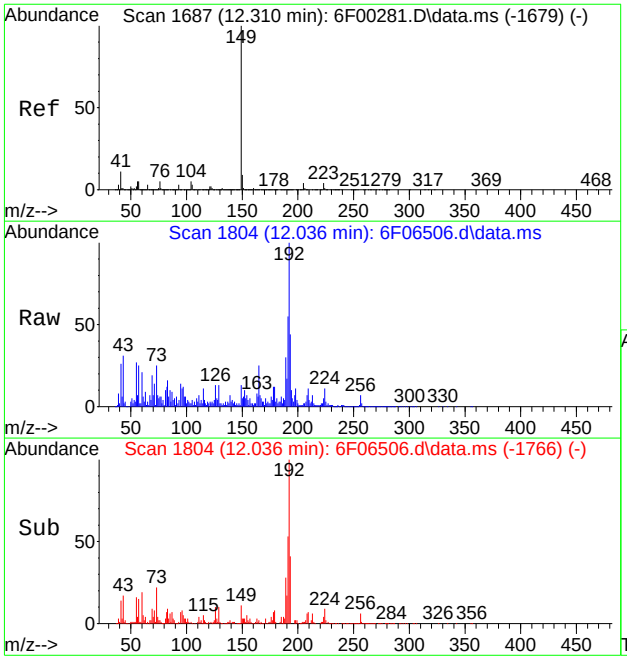


#87
Carbazole
Concen: 19.61 ppm
RT: 11.576 min Scan# 1718
Delta R.T. 0.005 min
Lab File: 6F06506.d
Acq: 11 Aug 2020 9:35 pm

Tgt Ion:167 Resp: 699692

Ion	Ratio	Lower	Upper
167	100		
166	20.6	0.0	49.2
139	13.8	0.0	42.3

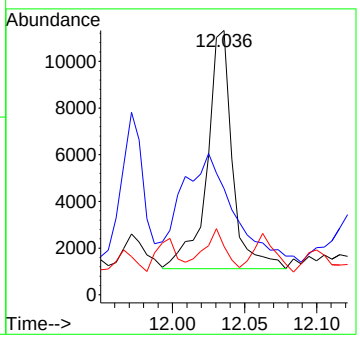


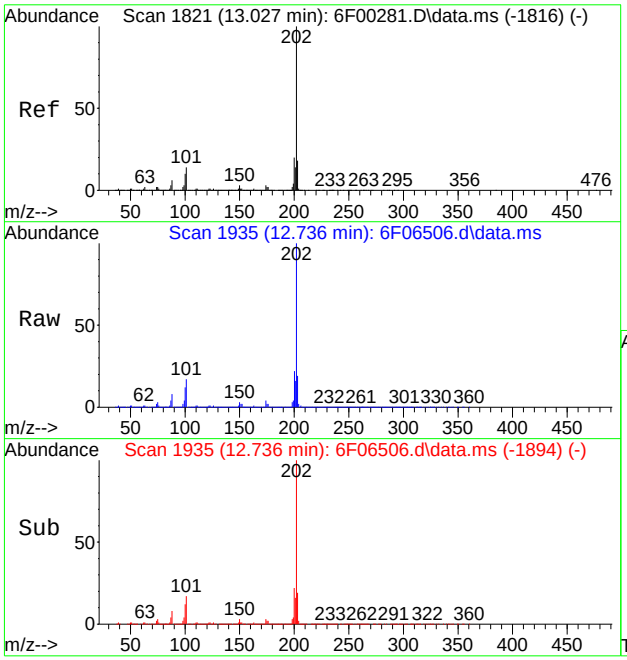


#89
Di-n-butylphthalate
Concen: 0.28 ppm
RT: 12.036 min Scan# 1804
Delta R.T. 0.005 min
Lab File: 6F06506.d
Acq: 11 Aug 2020 9:35 pm

Tgt Ion:149 Resp: 12514

Ion	Ratio	Lower	Upper
149	100		
150	25.4	0.0	38.7
104	3.1	0.0	35.2

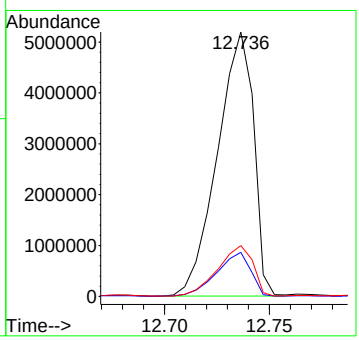


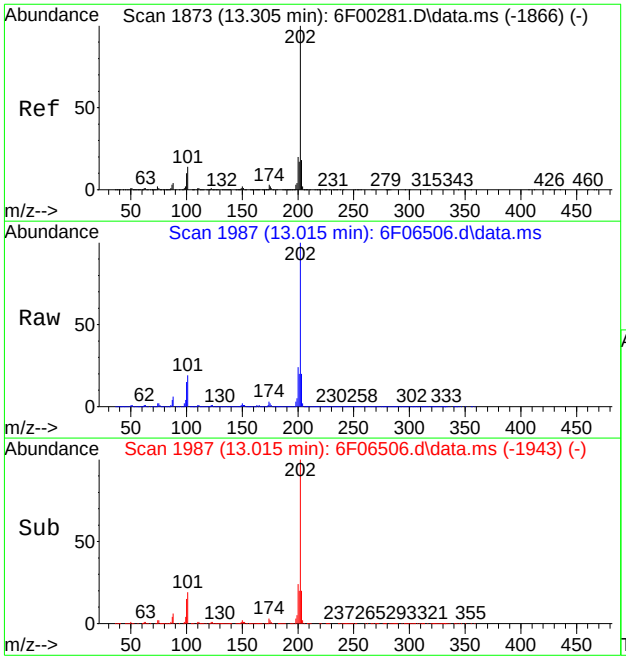


#91
Fluoranthene
Concen: 152.12 ppm
RT: 12.736 min Scan# 1935
Delta R.T. 0.021 min
Lab File: 6F06506.d
Acq: 11 Aug 2020 9:35 pm

Tgt Ion:202 Resp: 6240698

Ion	Ratio	Lower	Upper
202	100		
101	16.6	0.0	43.6
203	19.1	0.0	47.7

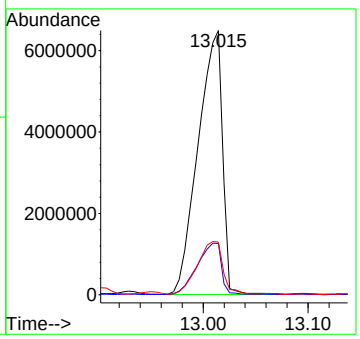


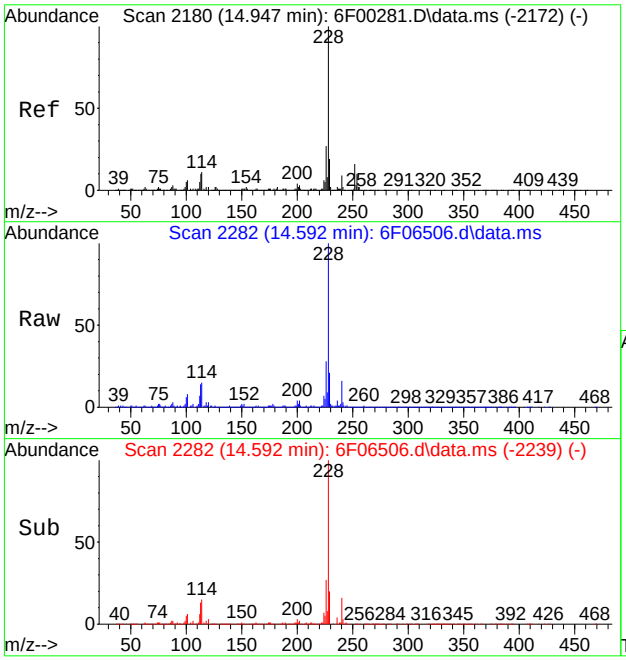


#94
Pyrene
Concen: 269.51 ppm
RT: 13.015 min Scan# 1987
Delta R.T. 0.037 min
Lab File: 6F06506.d
Acq: 11 Aug 2020 9:35 pm

Tgt Ion:202 Resp:10480051

Ion	Ratio	Lower	Upper
202	100		
101	19.3	0.0	43.8
203	19.6	0.0	47.8

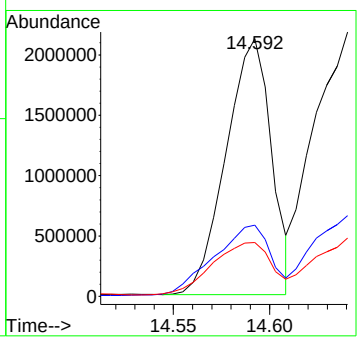


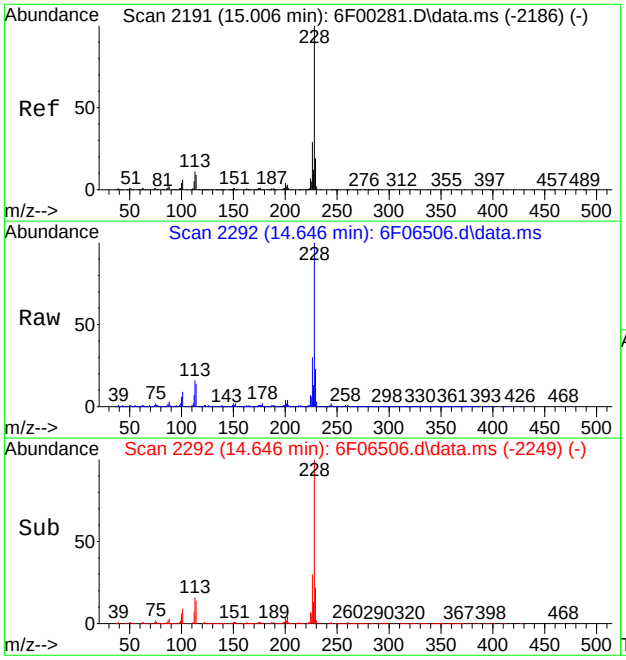


#99
Benzo[a]anthracene
Concen: 95.69 ppm
RT: 14.592 min Scan# 2282
Delta R.T. 0.032 min
Lab File: 6F06506.d
Acq: 11 Aug 2020 9:35 pm

Tgt Ion:228 Resp: 3481024

Ion	Ratio	Lower	Upper
228	100		
226	27.0	0.0	56.6
229	19.4	0.0	48.9

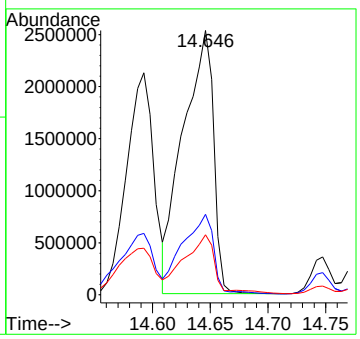


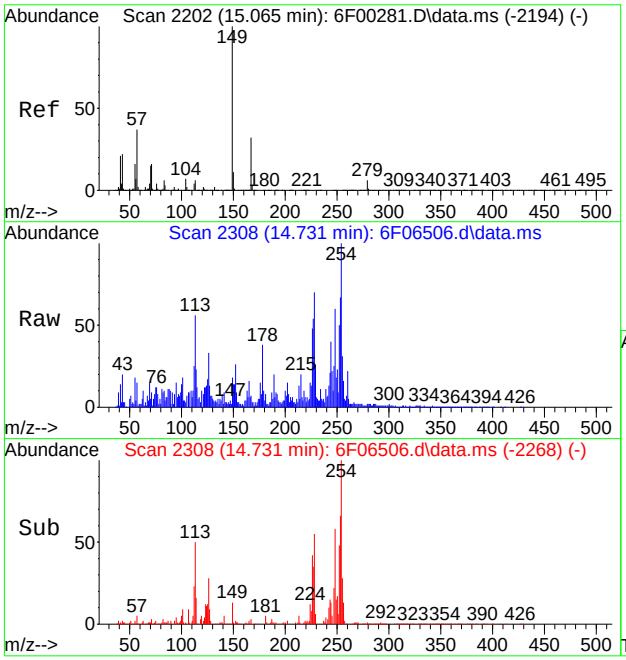


#100
Chrysene
Concen: 131.73 ppm
RT: 14.646 min Scan# 2292
Delta R.T. 0.032 min
Lab File: 6F06506.d
Acq: 11 Aug 2020 9:35 pm

Tgt Ion:228 Resp: 4649535

Ion	Ratio	Lower	Upper
228	100		
226	30.3	0.0	58.9
229	21.9	0.0	48.5

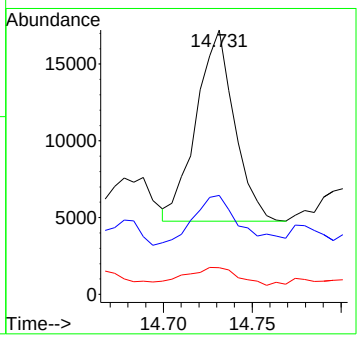


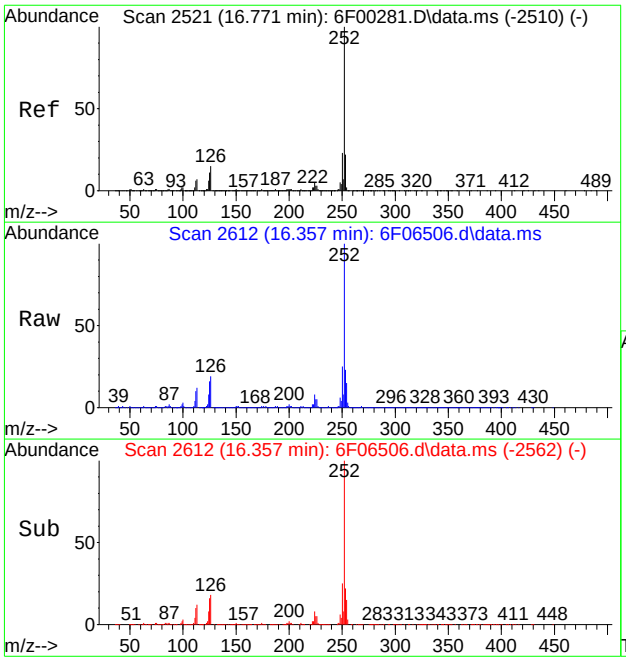


#101
bis(2-Ethylhexyl)phthalate
Concen: 0.72 ppm
RT: 14.731 min Scan# 2308
Delta R.T. 0.016 min
Lab File: 6F06506.d
Acq: 11 Aug 2020 9:35 pm

Tgt Ion:149 Resp: 18610

Ion	Ratio	Lower	Upper
149	100		
167	24.4	1.7	61.7
279	8.1	0.0	35.7

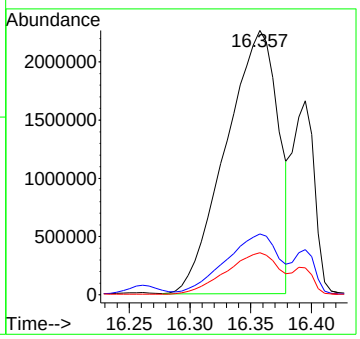


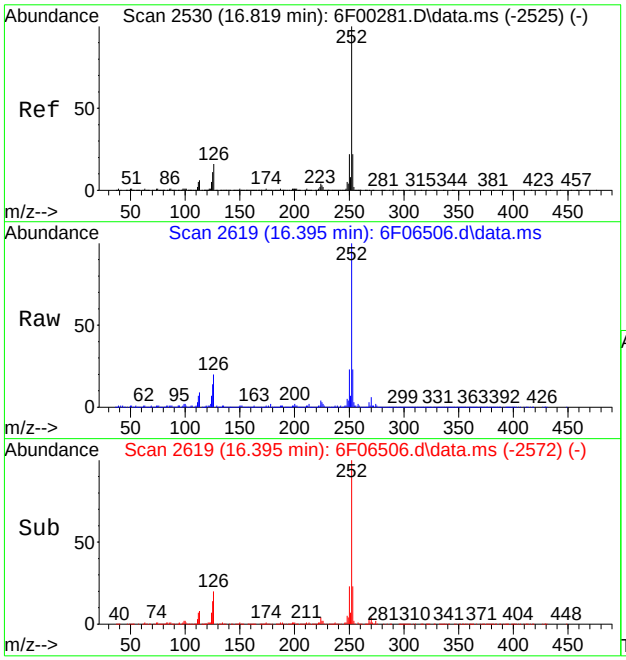


#104
Benzo[b]fluoranthene
Concen: 186.51 ppm
RT: 16.357 min Scan# 2612
Delta R.T. 0.069 min
Lab File: 6F06506.d
Acq: 11 Aug 2020 9:35 pm

Tgt Ion:252 Resp: 6806852

Ion	Ratio	Lower	Upper
252	100		
253	22.0	0.0	51.9
125	15.8	0.0	41.3

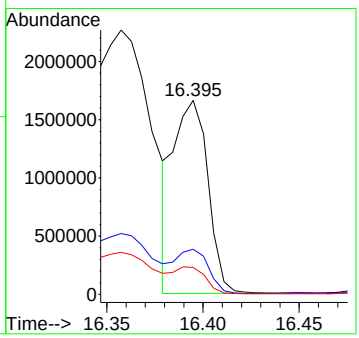


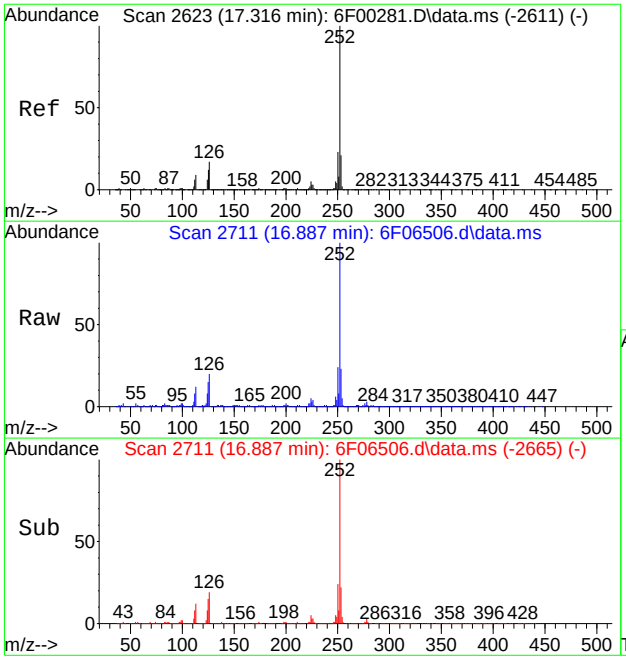


#105
Benzo[k]fluoranthene
Concen: 54.22 ppm
RT: 16.395 min Scan# 2619
Delta R.T. 0.053 min
Lab File: 6F06506.d
Acq: 11 Aug 2020 9:35 pm

Tgt Ion:252 Resp: 2057875

Ion	Ratio	Lower	Upper
252	100		
253	22.9	0.0	51.7
125	12.8	0.0	40.7

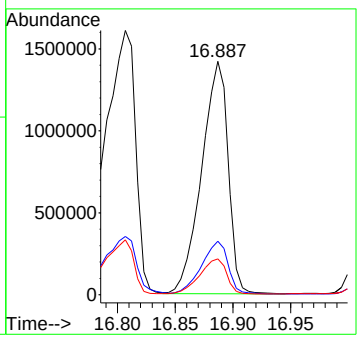


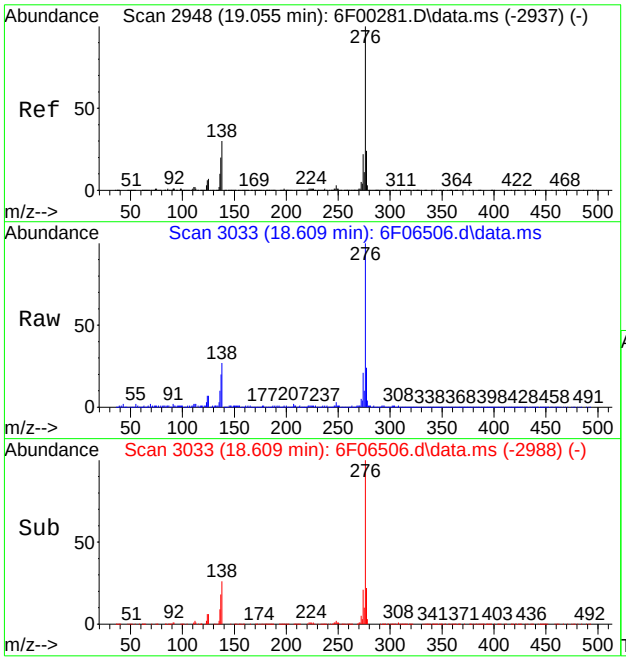


#106
Benzo[a]pyrene
Concen: 66.97 ppm
RT: 16.887 min Scan# 2711
Delta R.T. 0.048 min
Lab File: 6F06506.d
Acq: 11 Aug 2020 9:35 pm

Tgt Ion:252 Resp: 2269852

Ion	Ratio	Lower	Upper
252	100		
253	22.4	0.0	51.0
125	15.0	0.0	42.0

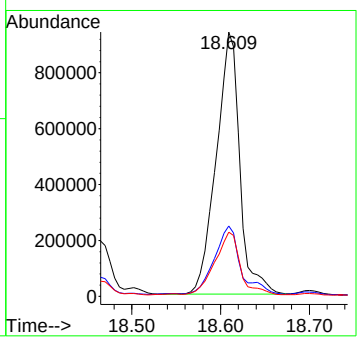


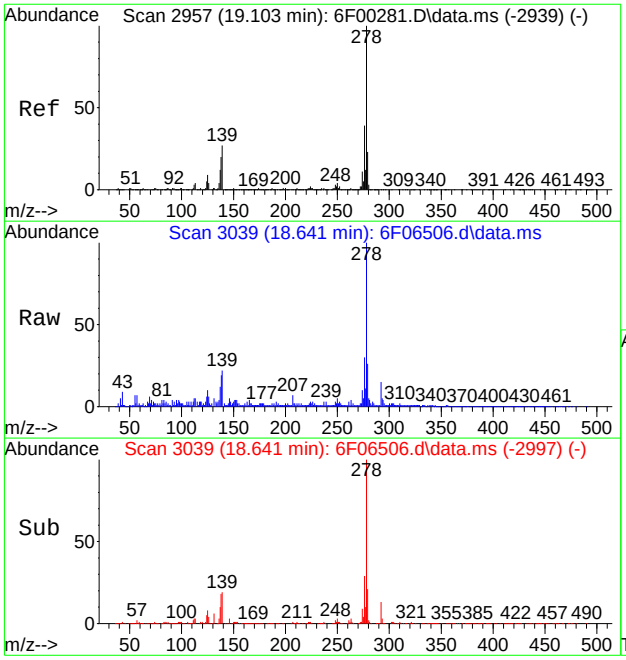


#107
Indeno[1,2,3-cd]pyrene
Concen: 54.53 ppm
RT: 18.609 min Scan# 3033
Delta R.T. 0.043 min
Lab File: 6F06506.d
Acq: 11 Aug 2020 9:35 pm

Tgt Ion:276 Resp: 1720606

Ion	Ratio	Lower	Upper
276	100		
138	26.0	0.0	59.6
277	23.7	0.0	54.1

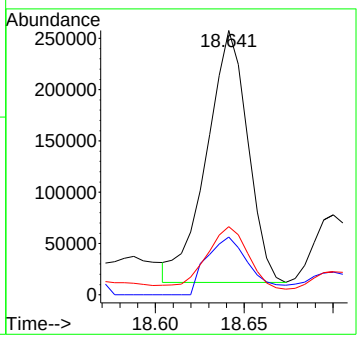


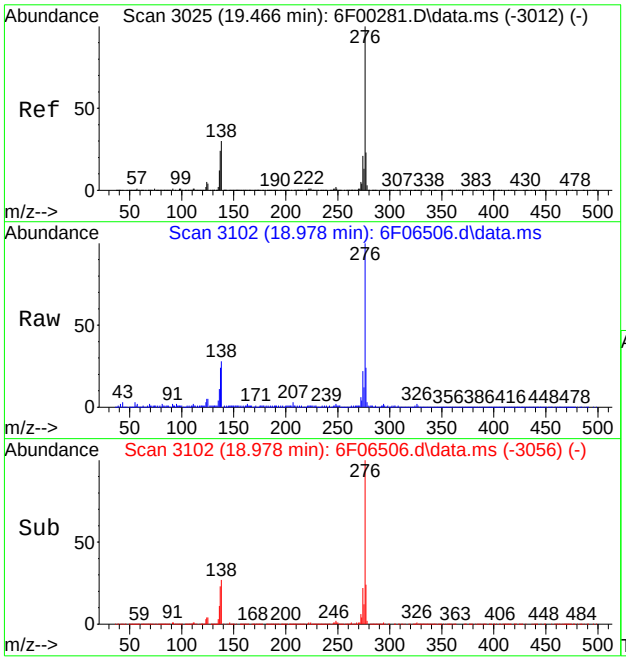


#108
Dibenz[a,h]anthracene
Concen: 11.71 ppm
RT: 18.641 min Scan# 3039
Delta R.T. 0.027 min
Lab File: 6F06506.d
Acq: 11 Aug 2020 9:35 pm

Tgt Ion:278 Resp: 394635

Ion	Ratio	Lower	Upper
278	100		
139	21.9	0.0	56.9
279	25.0	0.0	53.0

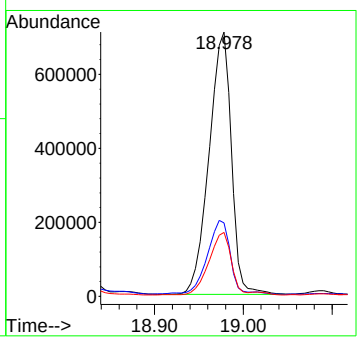




#109
Benzo[g,h,i]perylene
Concen: 36.31 ppm
RT: 18.978 min Scan# 3102
Delta R.T. 0.048 min
Lab File: 6F06506.d
Acq: 11 Aug 2020 9:35 pm

Tgt Ion:276 Resp: 1236804

Ion	Ratio	Lower	Upper
276	100		
138	27.1	0.0	59.5
277	23.8	0.0	53.0



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-13-2020\sx2951\
Data File : x072379.d
Acq On : 12 Aug 2020 7:51 pm
Operator : marthav
Sample : fa77615-12 E,5
Misc : op81484,sx2951,30.0,,,1,5,soil
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Aug 13 03:12:18 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	5.654	152	172906	40.00	ppm		0.00
22) Naphthalene-d8	7.077	136	647699	40.00	ppm		0.00
43) Acenaphthene-d10	9.115	164	316920	40.00	ppm		0.00
70) Phenanthrene-d10	10.859	188	541722	40.00	ppm		0.00
92) Chrysene-d12	14.073	240	452184	40.00	ppm		0.00
102) Perylene-d12	16.271	264	350415	40.00	ppm		0.02
110) 1,4-Dichlorobenzene-d4A	5.654	152	172906	40.00	ppm		0.00
120) Naphthalene-d8A	7.077	136	647699	40.00	ppm		0.00
127) Acenaphthene-d10A	9.115	164	316920	40.00	ppm		0.00
136) Phenanthrene-d10A	10.859	188	541722	40.00	ppm		0.00
146) Chrysene-d12A	14.073	240	452184	40.00	ppm		0.00
153) Perylene-d12A	16.271	264	350415	40.00	ppm		0.02
System Monitoring Compounds							
7) 2-Fluorophenol	4.312	112	79973	12.90	ppm		0.00
Spiked Amount 100.000	Range 40 - 102		Recovery = 12.90%#				
9) Phenol-d5	5.333	99	97395	13.20	ppm		0.00
Spiked Amount 100.000	Range 41 - 100		Recovery = 13.20%#				
23) Nitrobenzene-d5	6.269	82	40646	6.08	ppm		-0.01
Spiked Amount 50.000	Range 40 - 105		Recovery = 12.16%#				
47) 2-Fluorobiphenyl	8.345	172	75376	6.57	ppm		-0.01
Spiked Amount 50.000	Range 43 - 107		Recovery = 13.14%#				
75) 2,4,6-Tribromophenol	10.051	330	13866	13.67	ppm		0.00
Spiked Amount 100.000	Range 42 - 108		Recovery = 13.67%#				
95) Terphenyl-d14	12.779	244	78157	6.51	ppm		0.00
Spiked Amount 50.000	Range 45 - 119		Recovery = 13.02%#				
Target Compounds							Qvalue
5) Benzaldehyde	5.189	106	787	0.15	ppm	#	77
18) Acetophenone	6.109	105	844	0.09	ppm		88
24) Nitrobenzene	6.291	77	1177	0.18	ppm		94
27) 2,4-Dimethylphenol	6.756	107	538	0.09	ppm		73
30) Benzoic Acid	6.858	105	3189	0.81	ppm		87
34) Naphthalene	7.098	128	1240	0.07	ppm		78
40) 2-Methylnaphthalene	7.906	142	873	0.08	ppm	#	75
41) 1-Methylnaphthalene	8.013	142	524	0.05	ppm		88
52) Acenaphthylene	8.949	152	87770	5.54	ppm		99
57) Acenaphthene	9.152	153	4975	0.47	ppm		87
60) Dibenzofuran	9.356	168	1441	0.10	ppm		96
65) Fluorene	9.762	166	11472	1.05	ppm		95
84) Phenanthrene	10.885	178	36702	2.24	ppm		99
85) Anthracene	10.944	178	193543	11.34	ppm		98
87) Carbazole	11.163	167	49885	3.31	ppm		99
89) Di-n-butylphthalate	11.623	149	833	0.05	ppm		88
91) Fluoranthene	12.292	202	465615	30.66	ppm		98
94) Pyrene	12.559	202	923518	49.19	ppm		96
99) Benzo[a]anthracene	14.057	228	226534	15.94	ppm		99
100) Chrysene	14.105	228	335638	22.18	ppm		99
101) bis(2-Ethylhexyl)phtha...	14.212	149	958	0.10	ppm		75
104) Benzo[b]fluoranthene	15.630	252	366498	36.26	ppm		95
105) Benzo[k]fluoranthene	15.667	252	127547	10.25	ppm		98
106) Benzo[a]pyrene	16.164	252	112120	12.25	ppm		96
107) Indeno[1,2,3-cd]pyrene	17.929	276	80712	14.76	ppm		87
108) Dibenz[a,h]anthracene	17.972	278	15865	2.87	ppm		81
109) Benzo[g,h,i]perylene	18.288	276	61888	7.58	ppm		89

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-13-2020\sx2951\
Data File : x072379.d
Acq On : 12 Aug 2020 7:51 pm
Operator : marthav
Sample : fa77615-12 E,5
Misc : op81484,sx2951,30.0,,,1,5,soil
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Aug 13 03:12:18 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

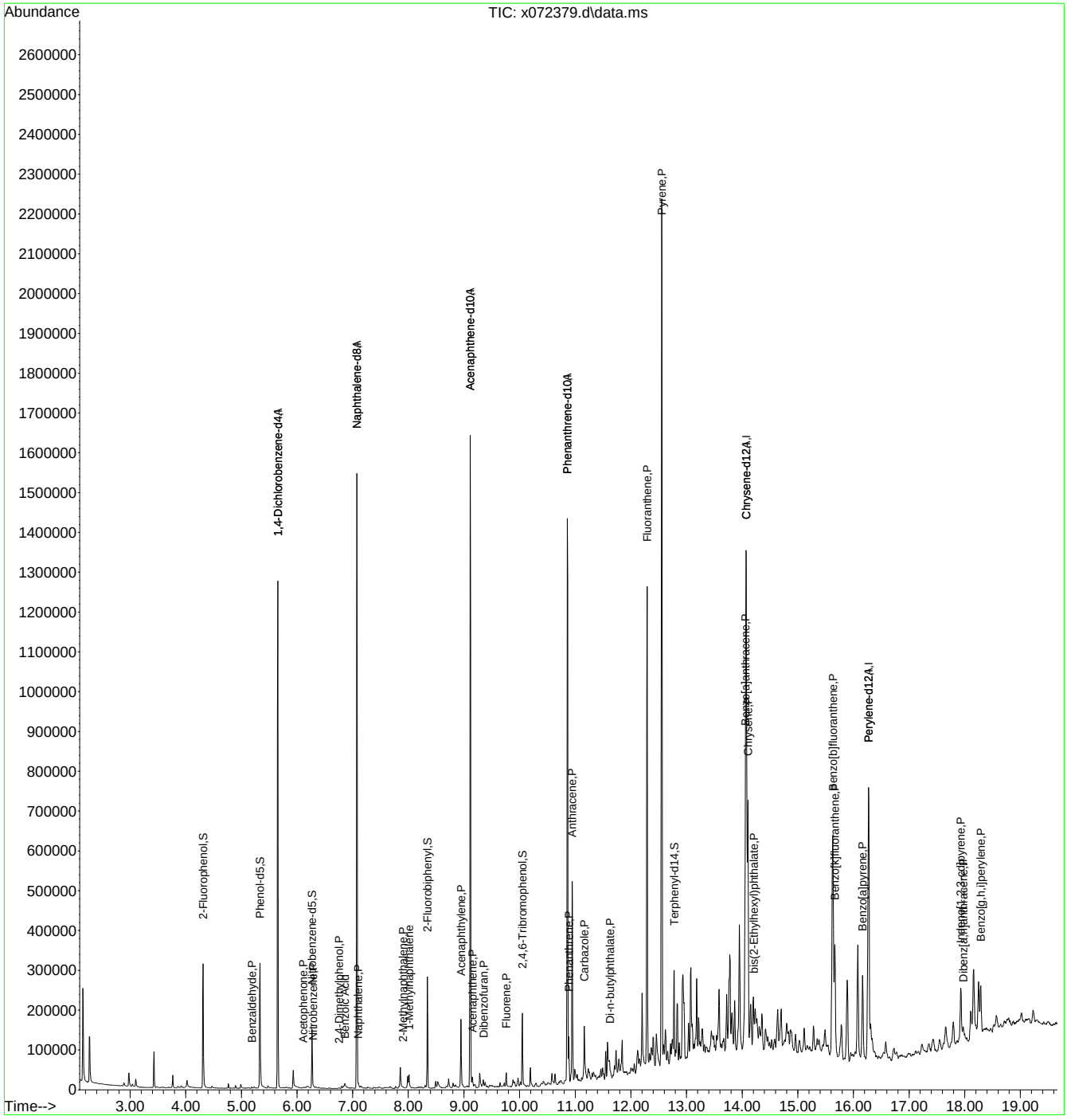
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

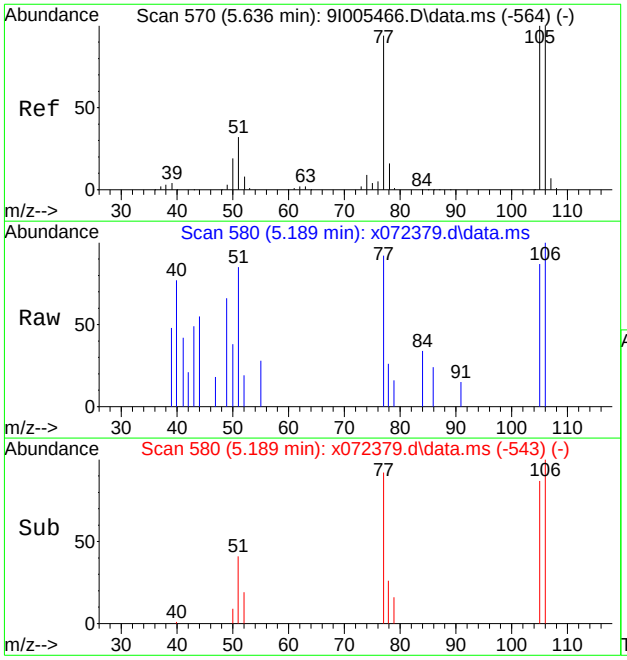
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-13-2020\sx2951\
Data File : x072379.d
Acq On : 12 Aug 2020 7:51 pm
Operator : marthav
Sample : fa77615-12 E,5
Misc : op81484,sx2951,30.0,,,1,5,soil
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Aug 13 03:12:18 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

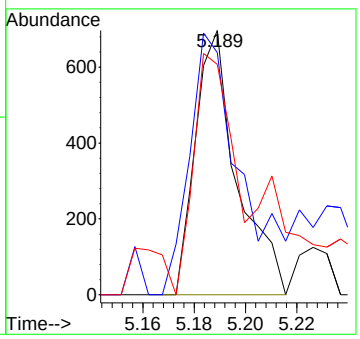


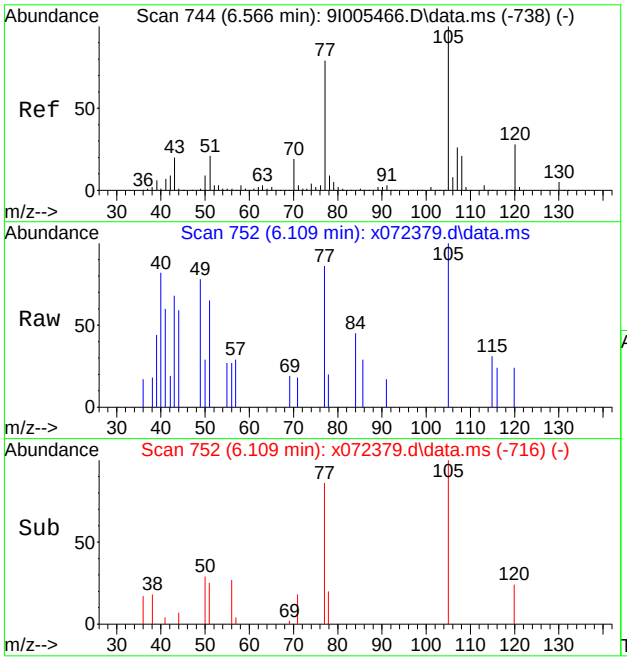


#5
Benzaldehyde
Concen: 0.15 ppm
RT: 5.189 min Scan# 580
Delta R.T. -0.000 min
Lab File: x072379.d
Acq: 12 Aug 2020 7:51 pm

Tgt Ion:106 Resp: 787

Ion	Ratio	Lower	Upper
106	100		
77	81.4	63.9	123.9
105	67.7	70.0	130.0#

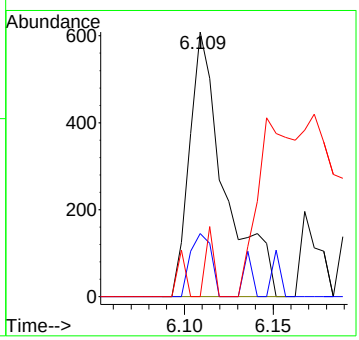


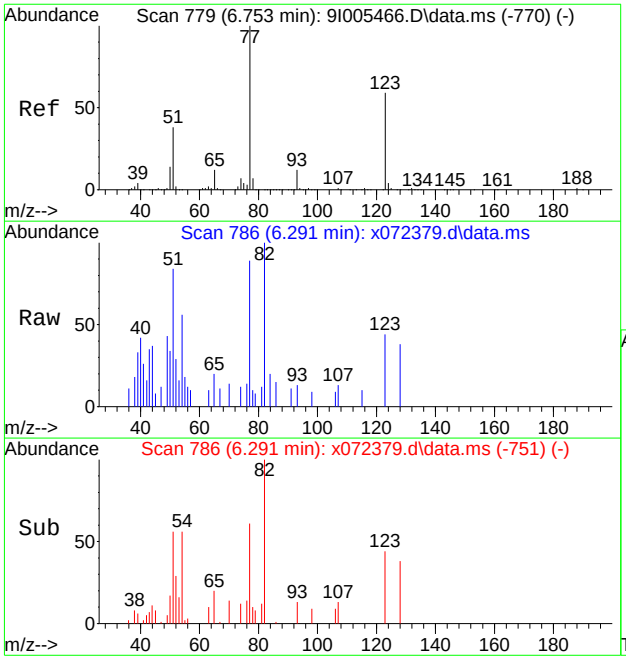


#18
Acetophenone
Concen: 0.09 ppm
RT: 6.109 min Scan# 752
Delta R.T. -0.005 min
Lab File: x072379.d
Acq: 12 Aug 2020 7:51 pm

Tgt Ion:105 Resp: 844

Ion	Ratio	Lower	Upper
105	100		
120	23.8	0.0	58.3
106	0.0	0.0	38.0

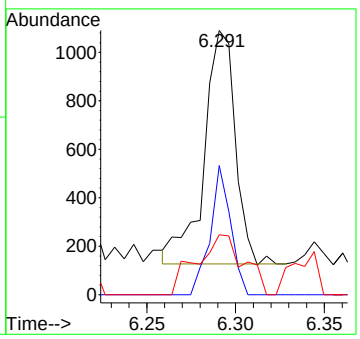


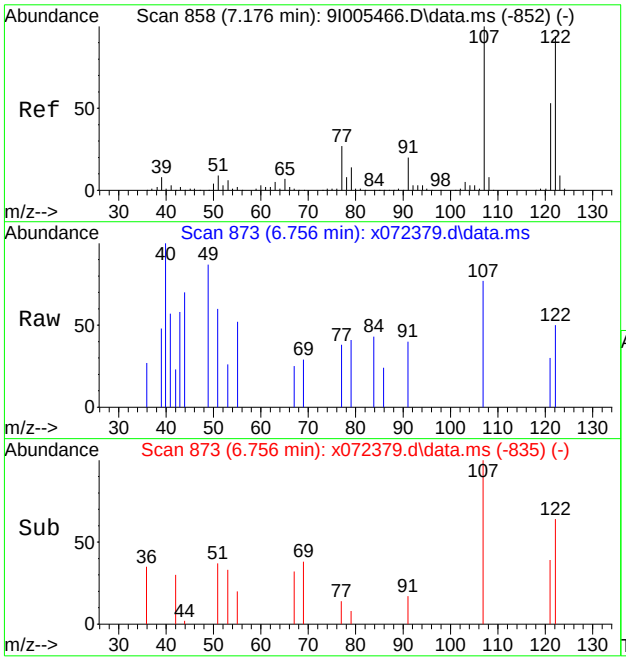


#24
Nitrobenzene
Concen: 0.18 ppm
RT: 6.291 min Scan# 786
Delta R.T. -0.011 min
Lab File: x072379.d
Acq: 12 Aug 2020 7:51 pm

Tgt Ion: 77 Resp: 1177

Ion	Ratio	Lower	Upper
77	100		
123	57.0	28.7	88.7
65	20.4	0.0	42.1

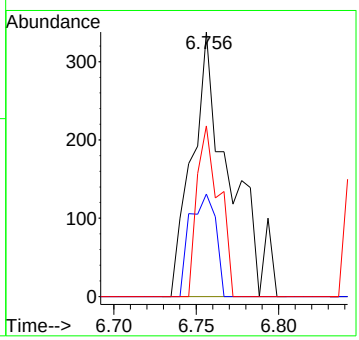


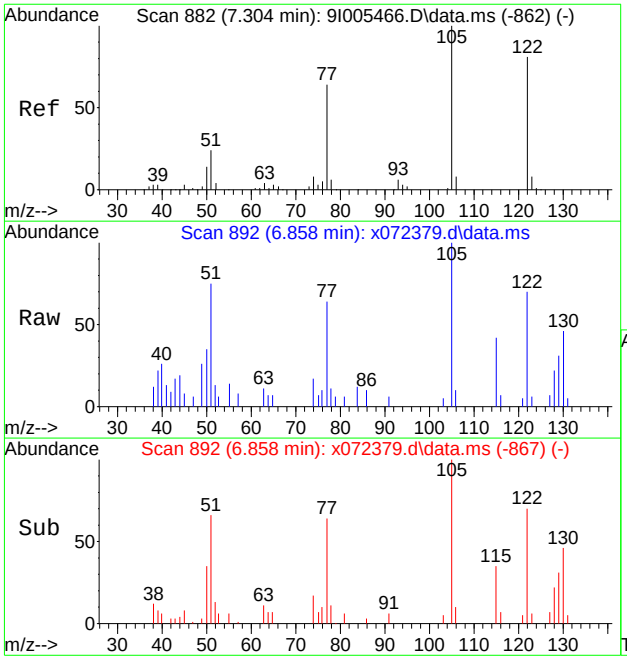


#27
2,4-Dimethylphenol
Concen: 0.09 ppm
RT: 6.756 min Scan# 873
Delta R.T. 0.005 min
Lab File: x072379.d
Acq: 12 Aug 2020 7:51 pm

Tgt Ion:107 Resp: 538

Ion	Ratio	Lower	Upper
107	100		
121	38.8	23.4	83.4
122	64.5	64.3	124.3

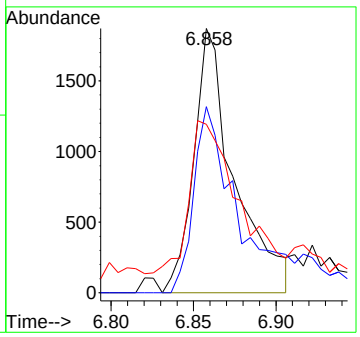


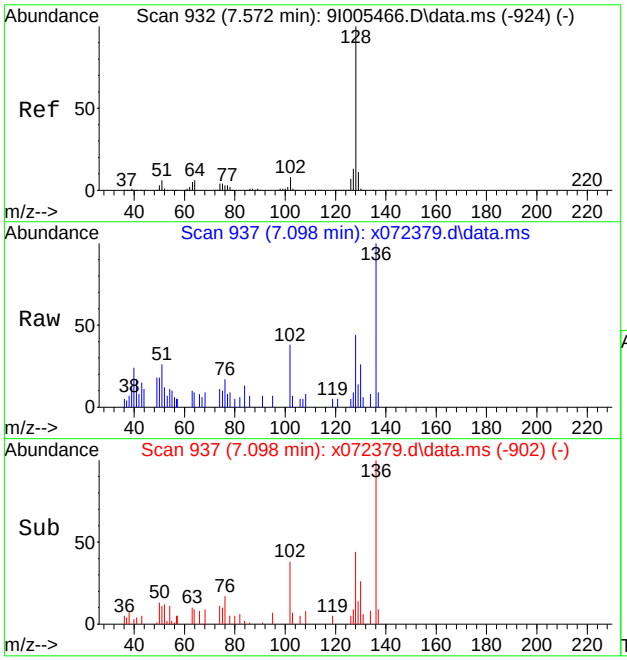


#30
Benzoic Acid
Concen: 0.81 ppm
RT: 6.858 min Scan# 892
Delta R.T. -0.064 min
Lab File: x072379.d
Acq: 12 Aug 2020 7:51 pm

Tgt Ion:105 Resp: 3189

Ion	Ratio	Lower	Upper
105	100		
122	67.7	51.2	111.2
77	55.9	34.1	94.1

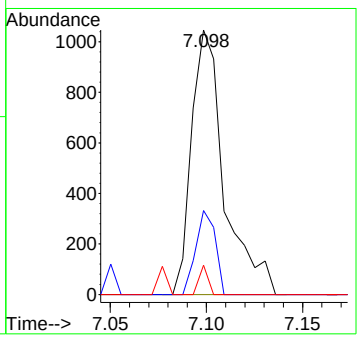


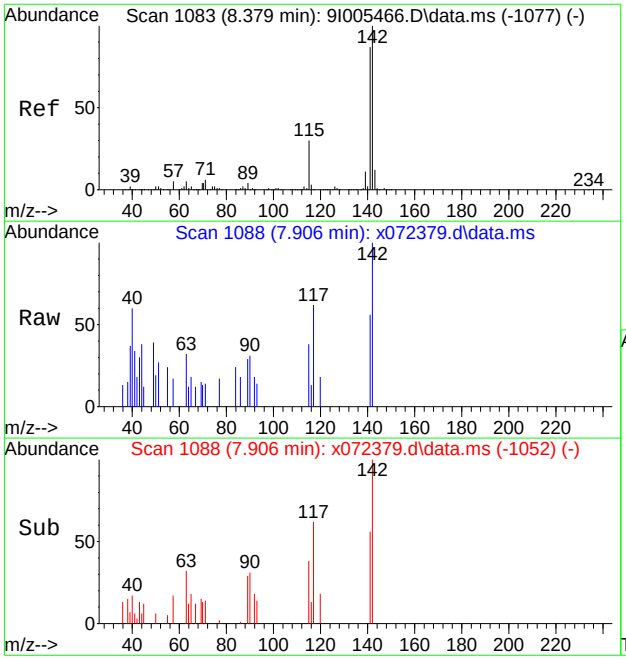


#34
Naphthalene
Concen: 0.07 ppm
RT: 7.098 min Scan# 937
Delta R.T. -0.011 min
Lab File: x072379.d
Acq: 12 Aug 2020 7:51 pm

Tgt Ion:128 Resp: 1240

Ion	Ratio	Lower	Upper
128	100		
129	24.1	0.0	41.4
126	5.8	0.0	37.4

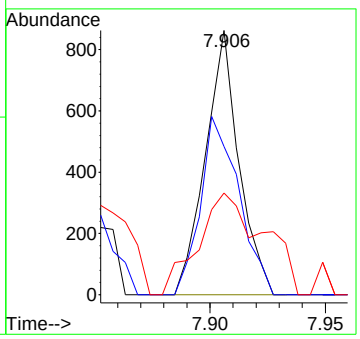


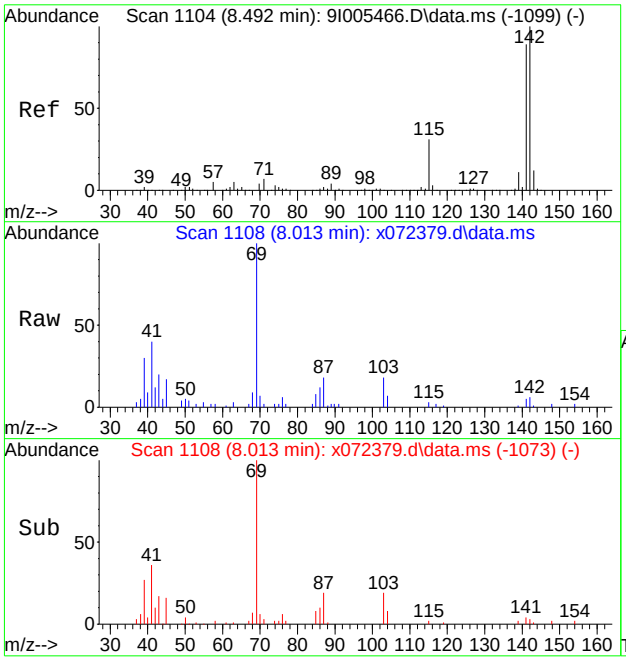


#40
2-Methylnaphthalene
Concen: 0.08 ppm
RT: 7.906 min Scan# 1088
Delta R.T. -0.005 min
Lab File: x072379.d
Acq: 12 Aug 2020 7:51 pm

Tgt Ion:142 Resp: 873

Ion	Ratio	Lower	Upper
142	100		
141	56.1	56.8	116.8#
115	28.7	0.0	60.0

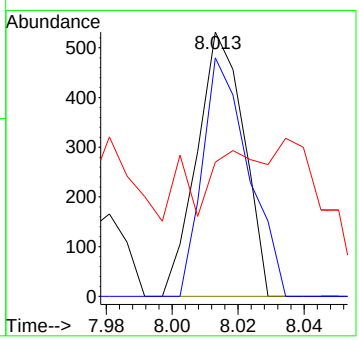


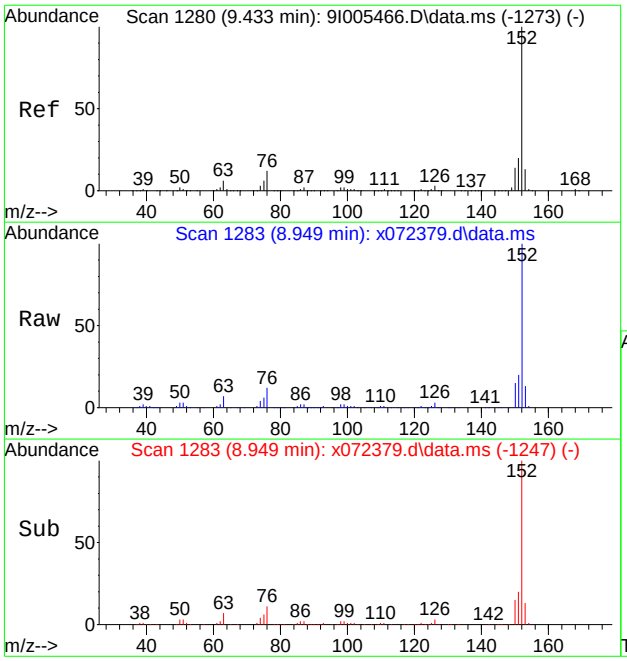


#41
1-Methylnaphthalene
Concen: 0.05 ppm
RT: 8.013 min Scan# 1108
Delta R.T. -0.011 min
Lab File: x072379.d
Acq: 12 Aug 2020 7:51 pm

Tgt Ion:142 Resp: 524

Ion	Ratio	Lower	Upper
142	100		
141	90.2	59.0	119.0
115	6.7	1.1	61.1

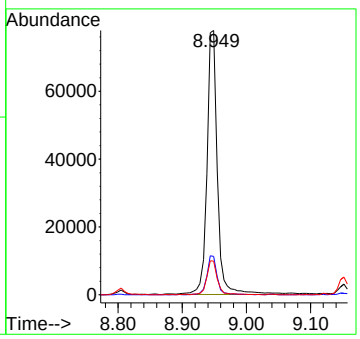


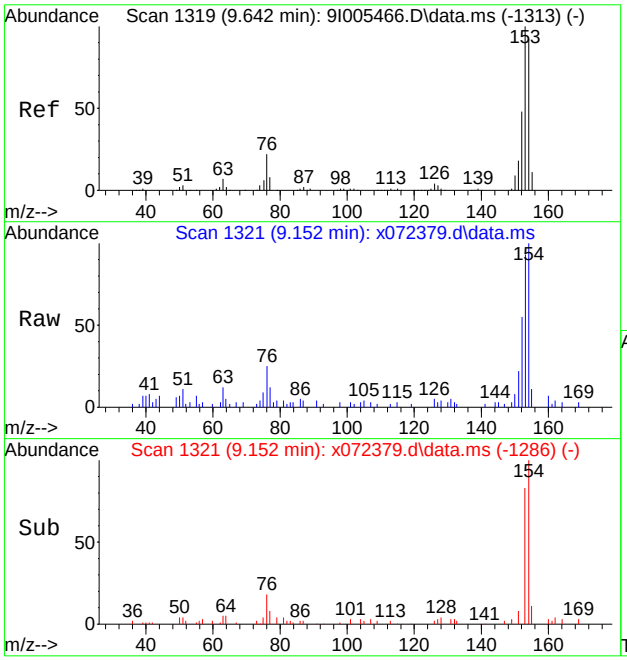


#52
Acenaphthylene
Concen: 5.54 ppm
RT: 8.949 min Scan# 1283
Delta R.T. -0.005 min
Lab File: x072379.d
Acq: 12 Aug 2020 7:51 pm

Tgt Ion:152 Resp: 87770

Ion	Ratio	Lower	Upper
152	100		
150	14.6	0.0	44.3
153	12.7	0.0	43.3

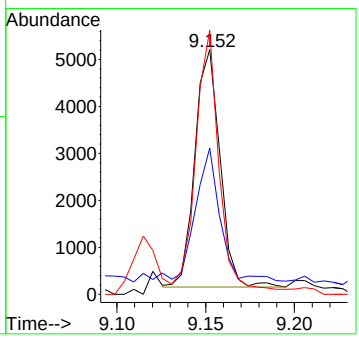


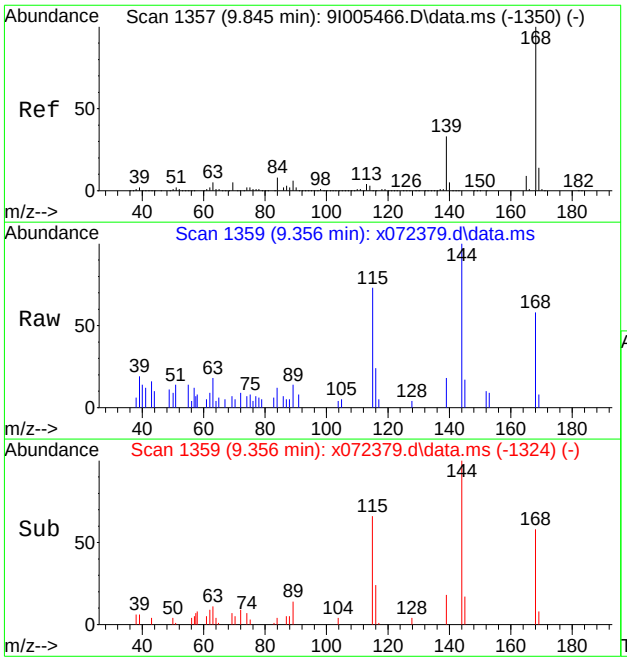


#57
Acenaphthene
Concen: 0.47 ppm
RT: 9.152 min Scan# 1321
Delta R.T. -0.011 min
Lab File: x072379.d
Acq: 12 Aug 2020 7:51 pm

Tgt Ion:153 Resp: 4975

Ion	Ratio	Lower	Upper
153	100		
152	54.6	18.4	78.4
154	107.3	62.4	122.4

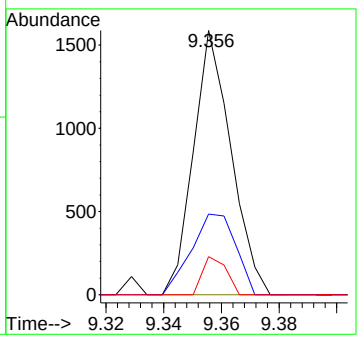


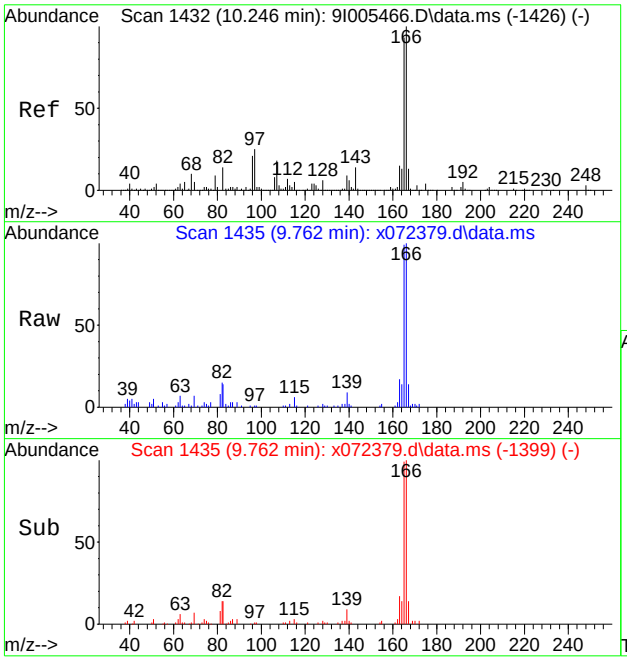


#60
Dibenzofuran
Concen: 0.10 ppm
RT: 9.356 min Scan# 1359
Delta R.T. -0.011 min
Lab File: x072379.d
Acq: 12 Aug 2020 7:51 pm

Tgt Ion:168 Resp: 1441

Ion	Ratio	Lower	Upper
168	100		
139	30.5	3.0	63.0
169	14.4	0.0	43.5

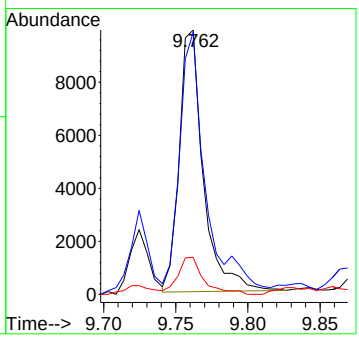


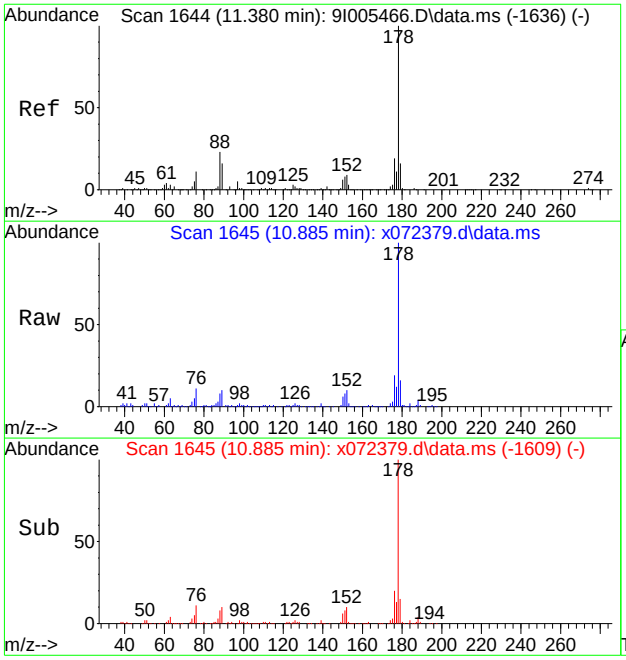


#65
Fluorene
Concen: 1.05 ppm
RT: 9.762 min Scan# 1435
Delta R.T. -0.005 min
Lab File: x072379.d
Acq: 12 Aug 2020 7:51 pm

Tgt Ion:166 Resp: 11472

Ion	Ratio	Lower	Upper
166	100		
165	97.5	62.7	122.7
167	12.3	0.0	43.5

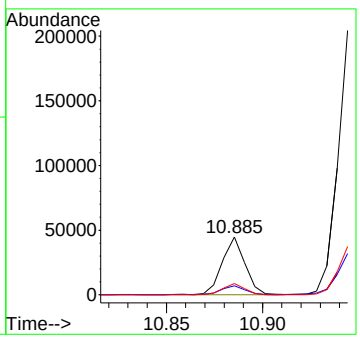


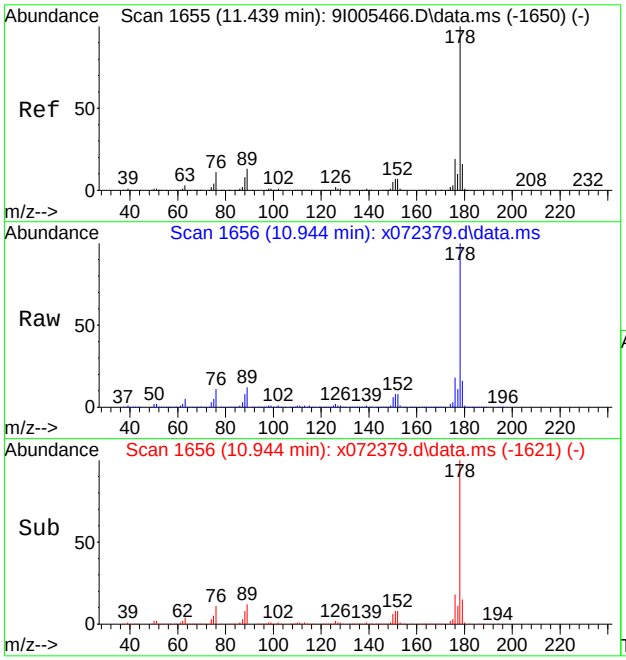


#84
Phenanthrene
Concen: 2.24 ppm
RT: 10.885 min Scan# 1645
Delta R.T. -0.005 min
Lab File: x072379.d
Acq: 12 Aug 2020 7:51 pm

Tgt Ion:178 Resp: 36702

Ion	Ratio	Lower	Upper
178	100		
179	15.3	0.0	45.8
176	19.5	0.0	49.3

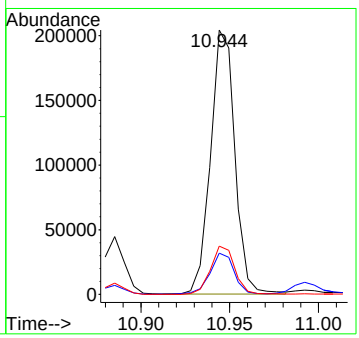


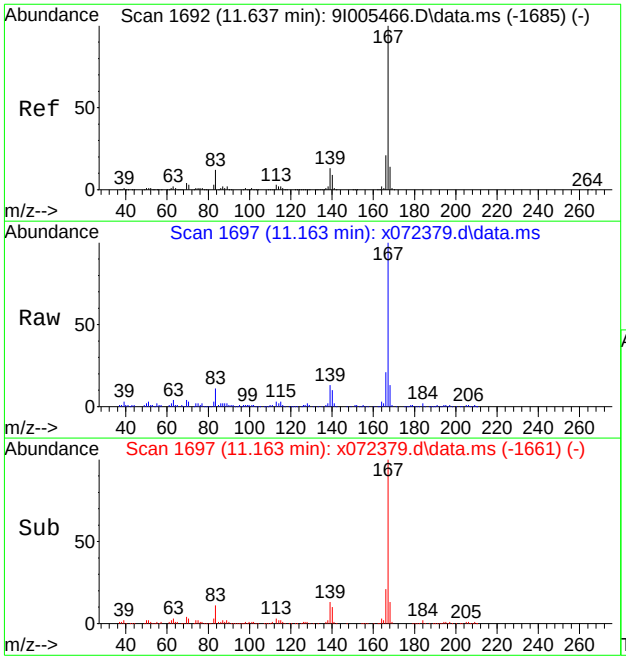


#85
Anthracene
Concen: 11.34 ppm
RT: 10.944 min Scan# 1656
Delta R.T. -0.011 min
Lab File: x072379.d
Acq: 12 Aug 2020 7:51 pm

Tgt Ion:178 Resp: 193543

Ion	Ratio	Lower	Upper
178	100		
179	15.0	0.0	46.0
176	18.3	0.0	49.3

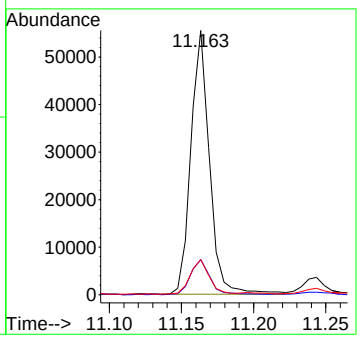


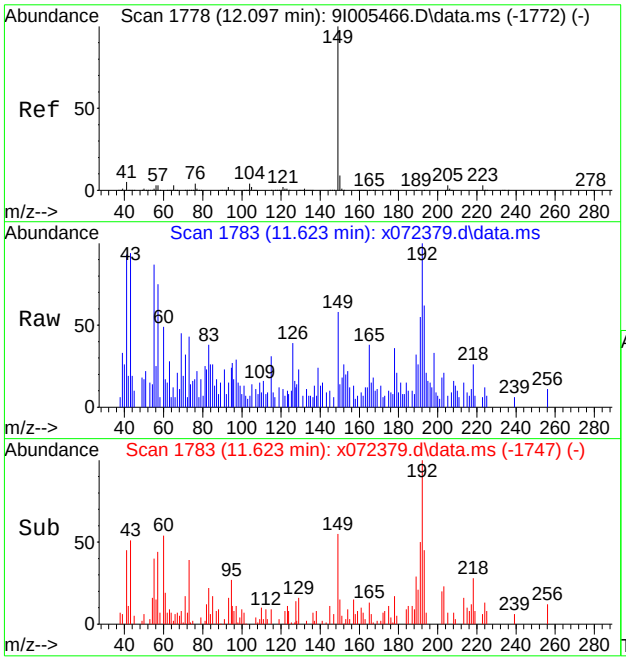


#87
Carbazole
Concen: 3.31 ppm
RT: 11.163 min Scan# 1697
Delta R.T. -0.005 min
Lab File: x072379.d
Acq: 12 Aug 2020 7:51 pm

Tgt Ion:167 Resp: 49885

Ion	Ratio	Lower	Upper
167	100		
168	13.2	0.0	43.9
139	13.0	0.0	42.7

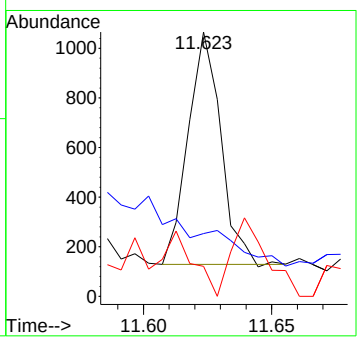


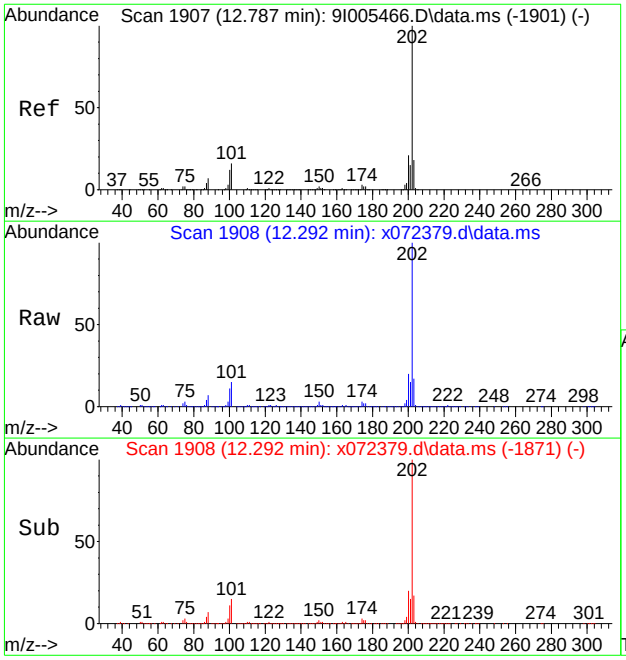


#89
Di-n-butylphthalate
Concen: 0.05 ppm
RT: 11.623 min Scan# 1783
Delta R.T. -0.005 min
Lab File: x072379.d
Acq: 12 Aug 2020 7:51 pm

Tgt Ion:149 Resp: 833

Ion	Ratio	Lower	Upper
149	100		
150	5.1	0.0	39.5
104	0.0	0.0	34.2

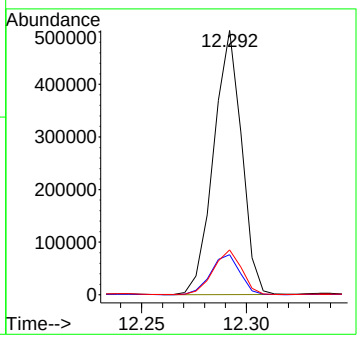


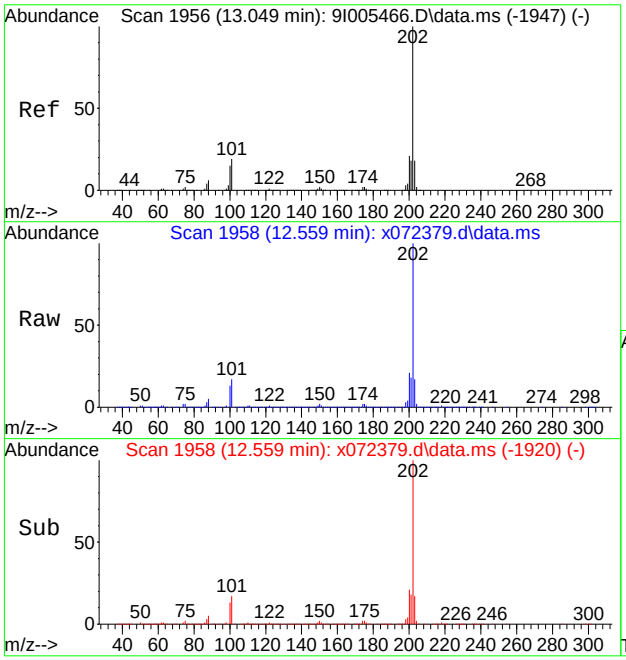


#91
Fluoranthene
Concen: 30.66 ppm
RT: 12.292 min Scan# 1908
Delta R.T. -0.000 min
Lab File: x072379.d
Acq: 12 Aug 2020 7:51 pm

Tgt Ion:202 Resp: 465615

Ion	Ratio	Lower	Upper
202	100		
101	15.1	0.0	45.8
203	16.9	0.0	48.1

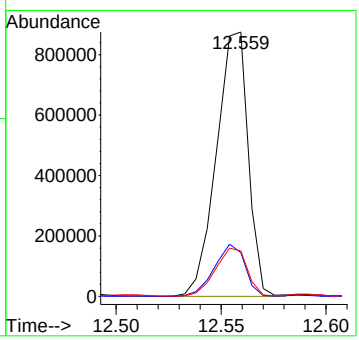


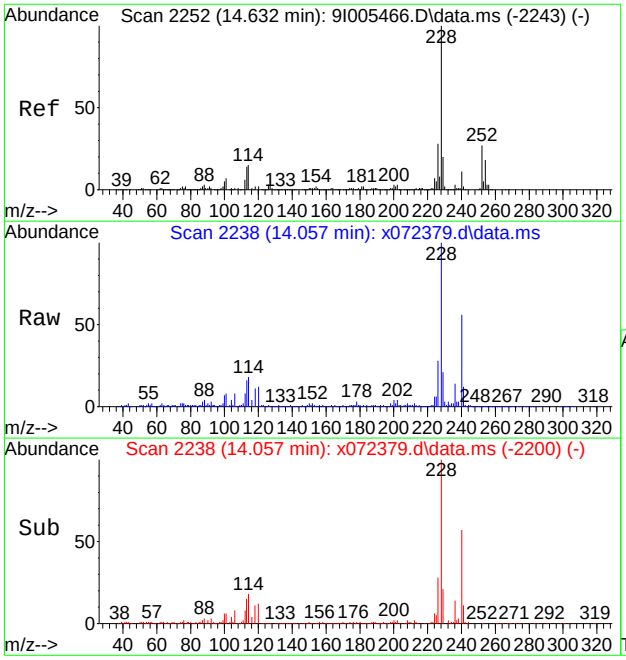


#94
Pyrene
Concen: 49.19 ppm
RT: 12.559 min Scan# 1958
Delta R.T. 0.005 min
Lab File: x072379.d
Acq: 12 Aug 2020 7:51 pm

Tgt Ion:202 Resp: 923518

Ion	Ratio	Lower	Upper
202	100		
101	16.4	0.0	48.7
203	17.0	0.0	48.4

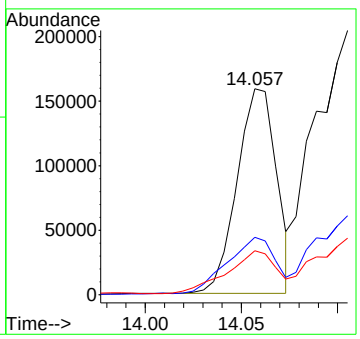


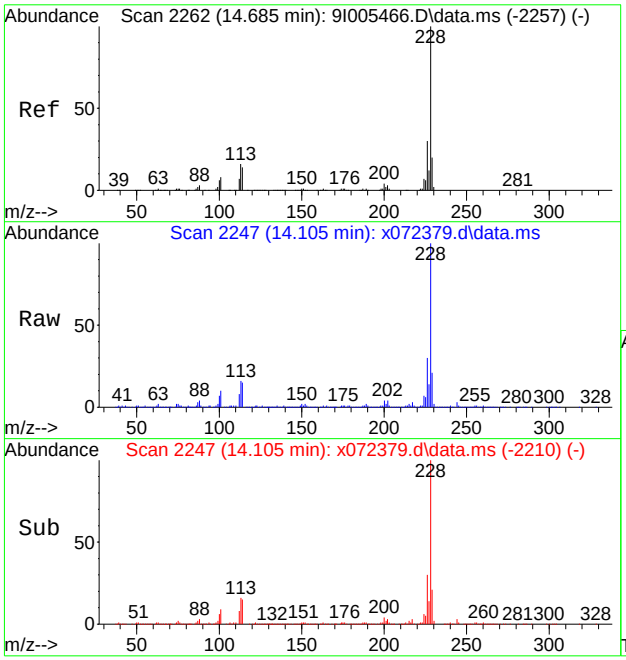


#99
Benzo[a]anthracene
Concen: 15.94 ppm
RT: 14.057 min Scan# 2238
Delta R.T. 0.005 min
Lab File: x072379.d
Acq: 12 Aug 2020 7:51 pm

Tgt Ion:228 Resp: 226534

Ion	Ratio	Lower	Upper
228	100		
226	27.6	0.0	57.5
229	20.4	0.0	49.9

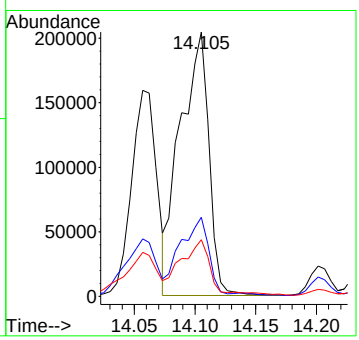


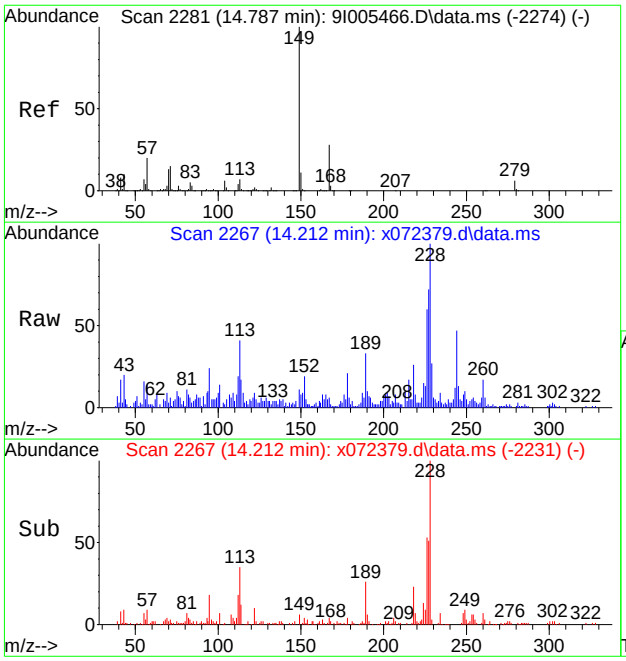


#100
Chrysene
Concen: 22.18 ppm
RT: 14.105 min Scan# 2247
Delta R.T. -0.000 min
Lab File: x072379.d
Acq: 12 Aug 2020 7:51 pm

Tgt Ion:228 Resp: 335638

Ion	Ratio	Lower	Upper
228	100		
226	30.2	0.4	60.4
229	20.6	0.0	50.1

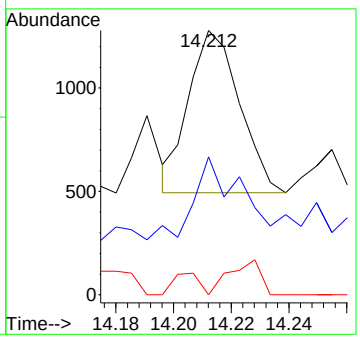


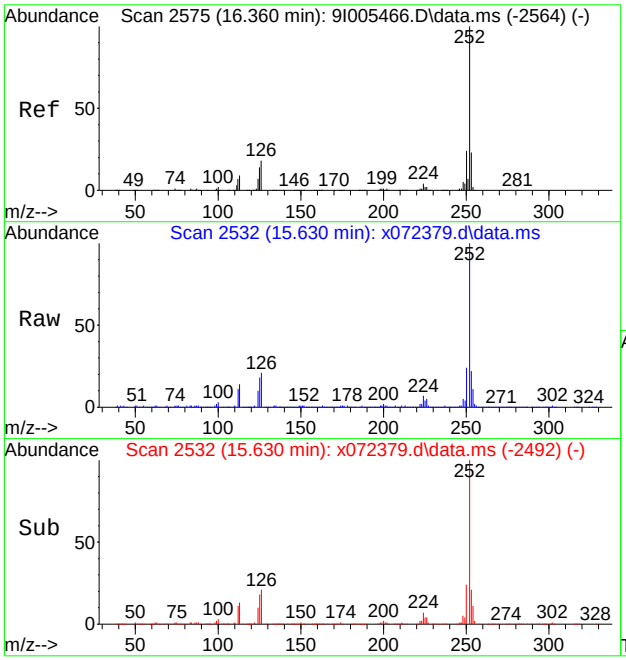


#101
bis(2-Ethylhexyl)phthalate
Concen: 0.10 ppm
RT: 14.212 min Scan# 2267
Delta R.T. -0.005 min
Lab File: x072379.d
Acq: 12 Aug 2020 7:51 pm

Tgt Ion:149 Resp: 958

Ion	Ratio	Lower	Upper
149	100		
167	42.5	0.0	58.5
279	0.0	0.0	35.7

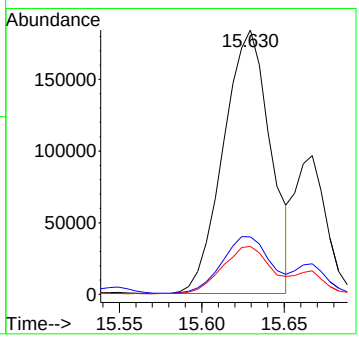


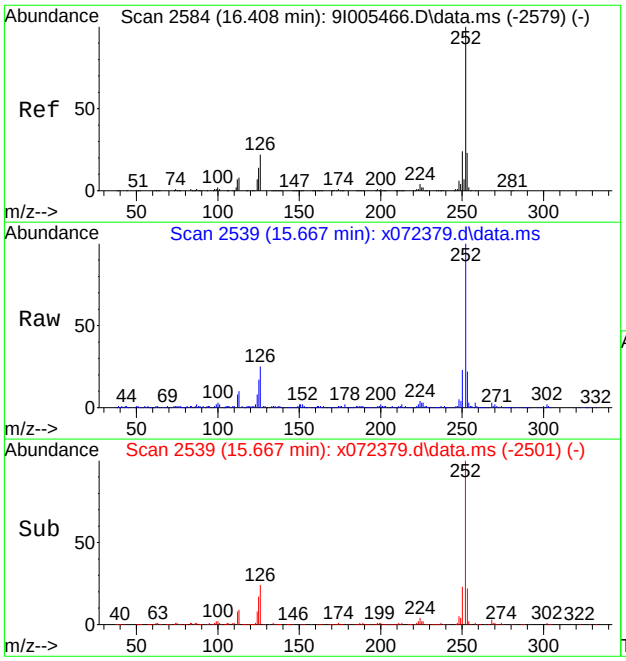


#104
Benzo[b]fluoranthene
Concen: 36.26 ppm
RT: 15.630 min Scan# 2532
Delta R.T. 0.016 min
Lab File: x072379.d
Acq: 12 Aug 2020 7:51 pm

Tgt Ion:252 Resp: 366498

Ion	Ratio	Lower	Upper
252	100		
253	21.3	0.0	52.5
125	17.5	0.0	44.0

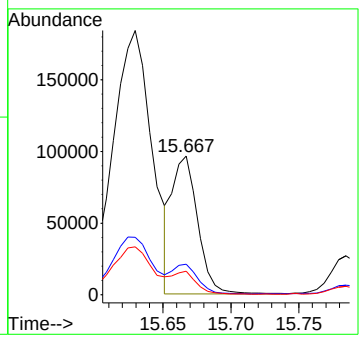


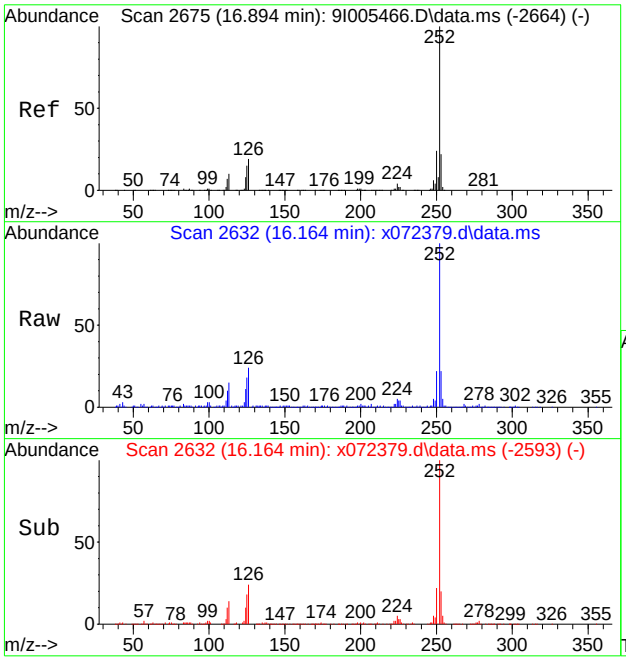


#105
Benzo[k]fluoranthene
Concen: 10.25 ppm
RT: 15.667 min Scan# 2539
Delta R.T. 0.005 min
Lab File: x072379.d
Acq: 12 Aug 2020 7:51 pm

Tgt Ion:252 Resp: 127547

Ion	Ratio	Lower	Upper
252	100		
253	21.3	0.0	52.5
125	15.3	0.0	44.4

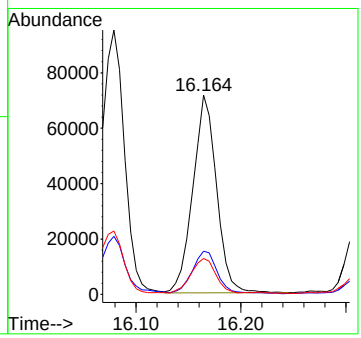


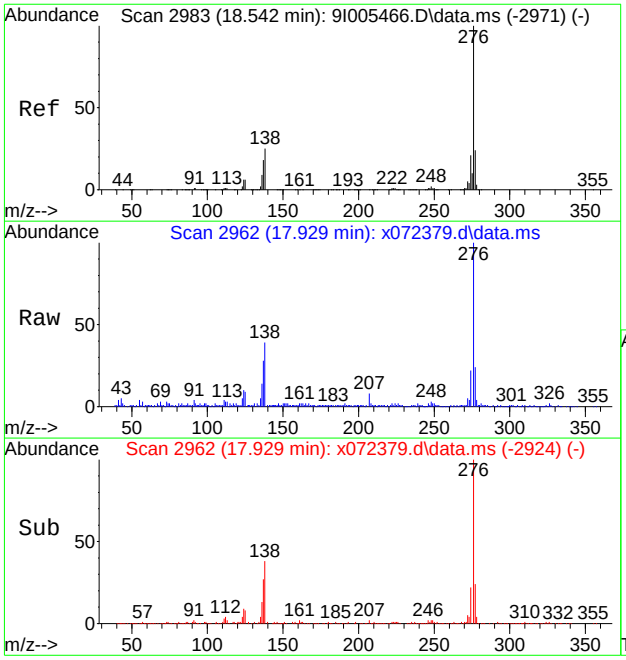


#106
Benzo[a]pyrene
Concen: 12.25 ppm
RT: 16.164 min Scan# 2632
Delta R.T. 0.011 min
Lab File: x072379.d
Acq: 12 Aug 2020 7:51 pm

Tgt Ion:252 Resp: 112120

Ion	Ratio	Lower	Upper
252	100		
253	21.1	0.0	52.3
125	17.5	0.0	44.7

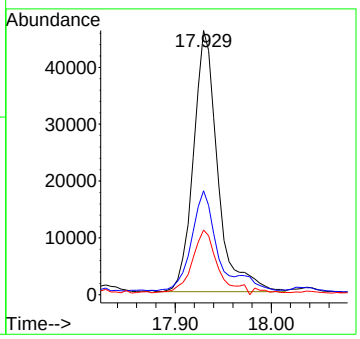


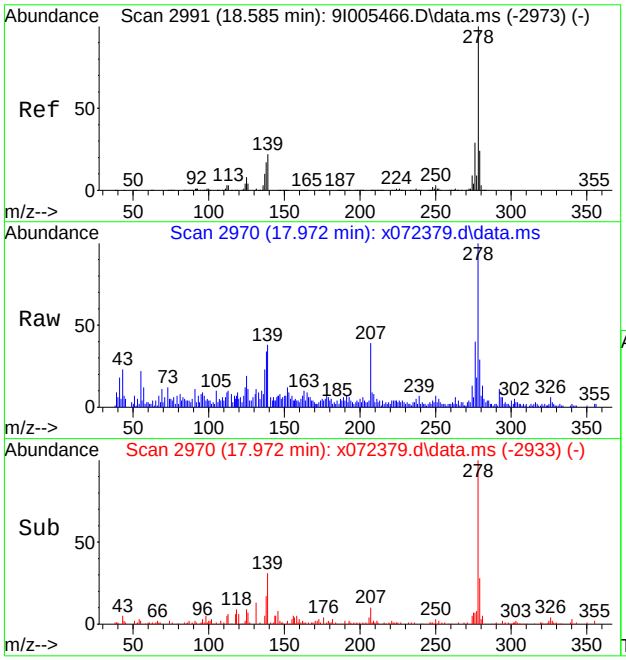


#107
Indeno[1,2,3-cd]pyrene
Concen: 14.76 ppm
RT: 17.929 min Scan# 2962
Delta R.T. 0.005 min
Lab File: x072379.d
Acq: 12 Aug 2020 7:51 pm

Tgt Ion:276 Resp: 80712

Ion	Ratio	Lower	Upper
276	100		
138	37.2	0.0	54.7
277	23.8	0.0	53.8

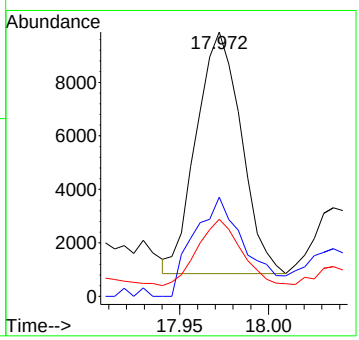


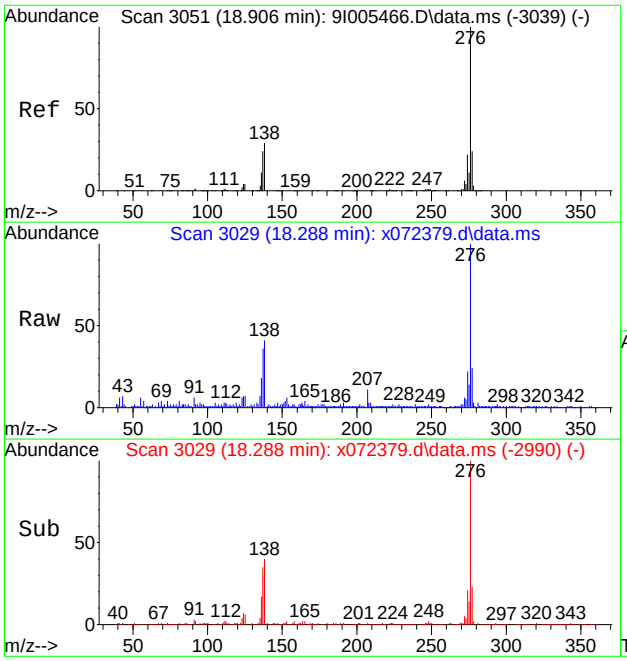


#108
Dibenz[a,h]anthracene
Concen: 2.87 ppm
RT: 17.972 min Scan# 2970
Delta R.T. -0.000 min
Lab File: x072379.d
Acq: 12 Aug 2020 7:51 pm

Tgt Ion:278 Resp: 15865

Ion	Ratio	Lower	Upper
278	100		
139	38.0	0.0	52.4
279	27.9	0.0	54.4

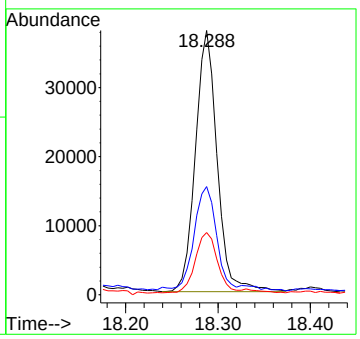




#109
Benzo[g,h,i]perylene
Concen: 7.58 ppm
RT: 18.288 min Scan# 3029
Delta R.T. 0.011 min
Lab File: x072379.d
Acq: 12 Aug 2020 7:51 pm

Tgt Ion:276 Resp: 61888

Ion	Ratio	Lower	Upper
276	100		
138	39.2	0.0	59.4
277	23.1	0.0	54.1



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11137.d
Acq On : 11 Aug 2020 11:14 am
Operator : FOUADS
Sample : fa77615-1 e Inst : MSBNA8
Misc : op81485,S7G483,15.4,,,1,1,soil
ALS Vial : 9 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:32:11 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

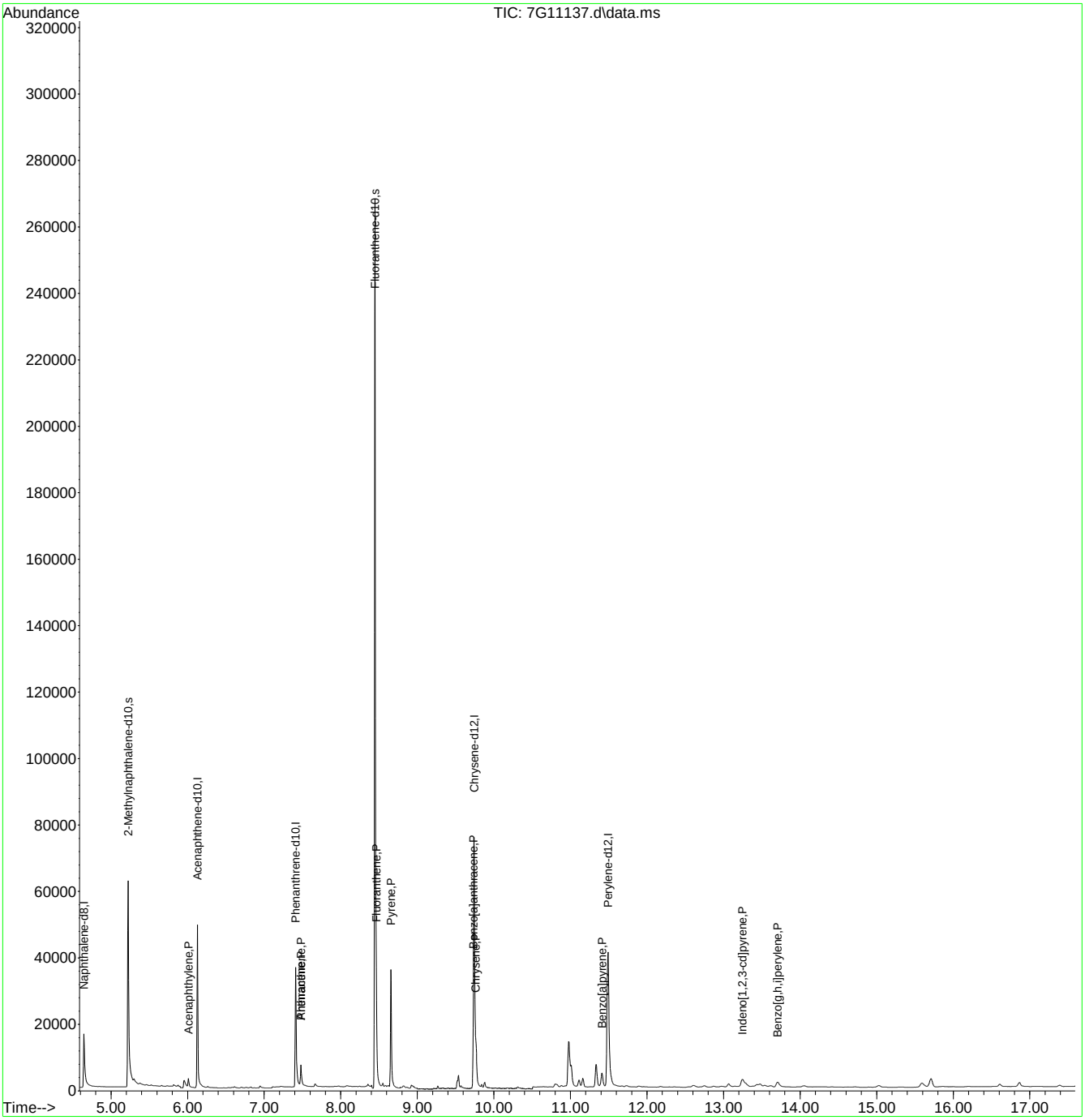
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.646	136	19176	4.00	ppm	0.02
6) Acenaphthene-d10	6.128	164	16041	4.00	ppm	0.01
11) Phenanthrene-d10	7.410	188	31644	4.00	ppm	0.01
18) Chrysene-d12	9.741	240	55090	4.00	ppm	0.01
22) Perylene-d12	11.491	264	53000	4.00	ppm	0.01
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.223	152	29938	10.40	ppm	0.02
Spiked Amount 10.000	Range 50 - 150		Recovery = 104.00%			
17) Fluoranthene-d10	8.448	212	164282	9.93	ppm	0.01
Spiked Amount 10.000	Range 50 - 150		Recovery = 99.30%			
Target Compounds						Qvalue
7) Acenaphthylene	6.012	152	1949	0.21	ppm	98
13) Phenanthrene	7.480	178	5349	0.52	ppm	97
14) Anthracene	7.480	178	5354	0.51	ppm	99
16) Fluoranthene	8.464	202	16590	0.85	ppm	98
19) Pyrene	8.654	202	27163	1.25	ppm	96
20) Benzo[a]anthracene	9.732	228	6122	0.36	ppm	85
21) Chrysene	9.763	228	12240	0.64	ppm	98
25) Benzo[a]pyrene	11.414	252	4886	0.28	ppm	96
26) Indeno[1,2,3-cd]pyrene	13.248	276	4744	0.41	ppm	94
28) Benzo[g,h,i]perylene	13.704	276	3287	0.24	ppm	95

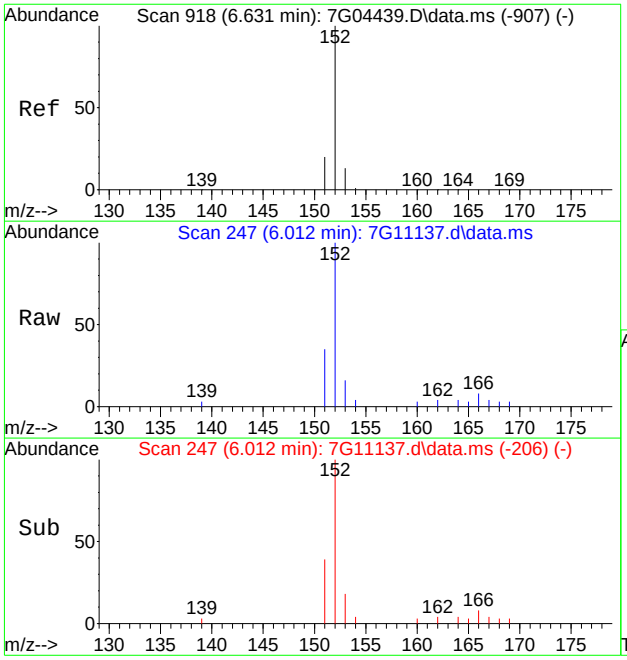
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11137.d
Acq On : 11 Aug 2020 11:14 am
Operator : FOUADS
Sample : fa77615-1 e Inst : MSBNA8
Misc : op81485,S7G483,15.4,,,1,1,soil
ALS Vial : 9 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:32:11 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

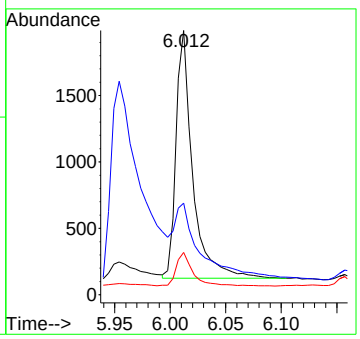


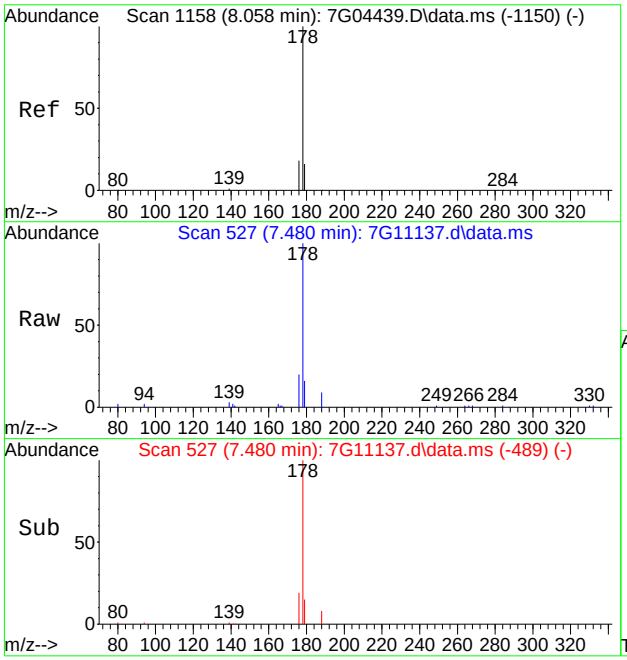


#7
Acenaphthylene
Concen: 0.21 ppm
RT: 6.012 min Scan# 247
Delta R.T. 0.019 min
Lab File: 7G11137.d
Acq: 11 Aug 2020 11:14 am

Tgt Ion:152 Resp: 1949

Ion	Ratio	Lower	Upper
152	100		
151	20.8	0.0	49.8
153	13.4	0.0	42.8

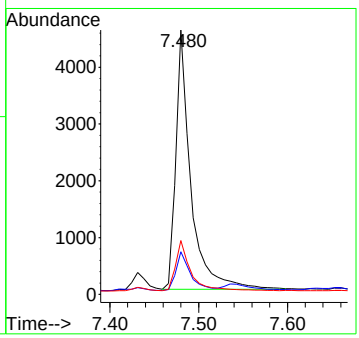


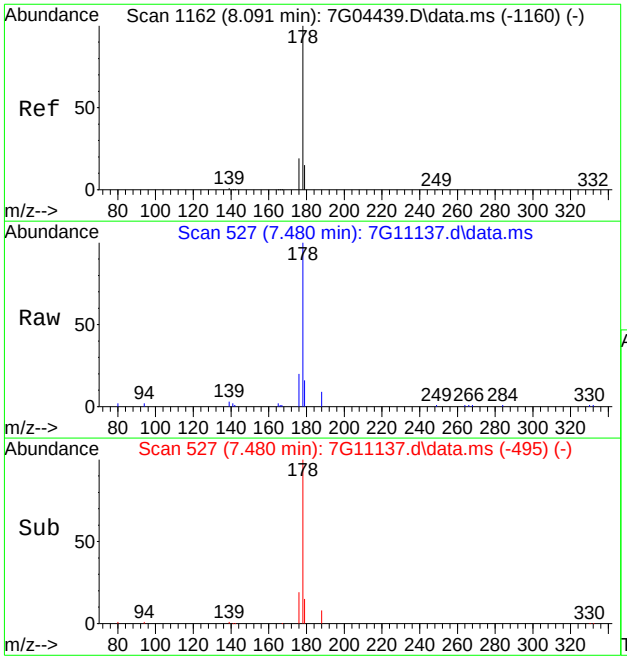


#13
Phenanthrene
Concen: 0.52 ppm
RT: 7.480 min Scan# 527
Delta R.T. 0.063 min
Lab File: 7G11137.d
Acq: 11 Aug 2020 11:14 am

Tgt Ion:178 Resp: 5349

Ion	Ratio	Lower	Upper
178	100		
179	14.8	0.0	45.7
176	19.3	0.0	48.0

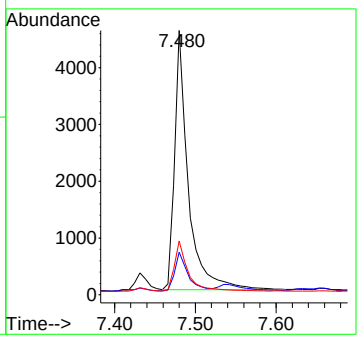


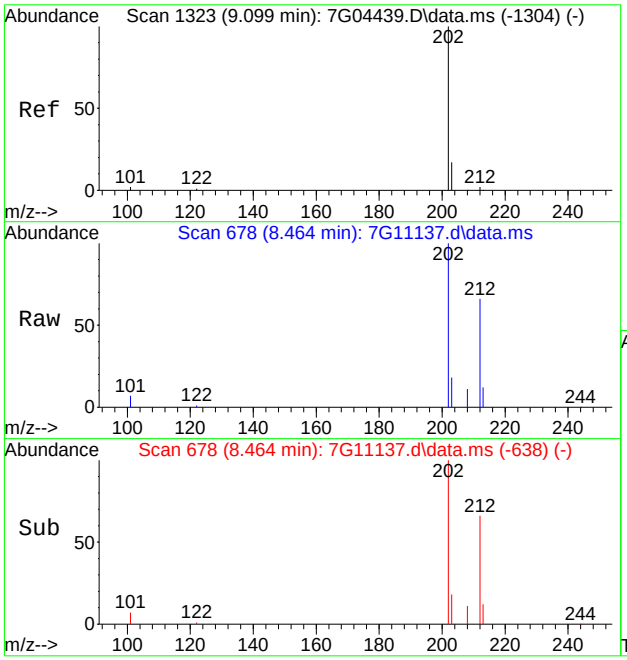


#14
Anthracene
Concen: 0.51 ppm
RT: 7.480 min Scan# 527
Delta R.T. 0.021 min
Lab File: 7G11137.d
Acq: 11 Aug 2020 11:14 am

Tgt Ion:178 Resp: 5354

Ion	Ratio	Lower	Upper
178	100		
179	14.8	0.0	45.1
176	19.3	0.0	48.8

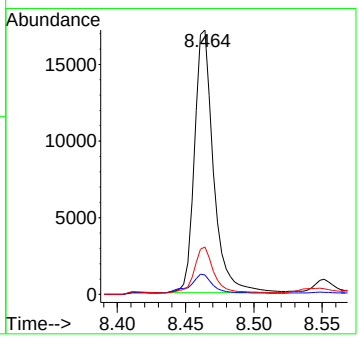


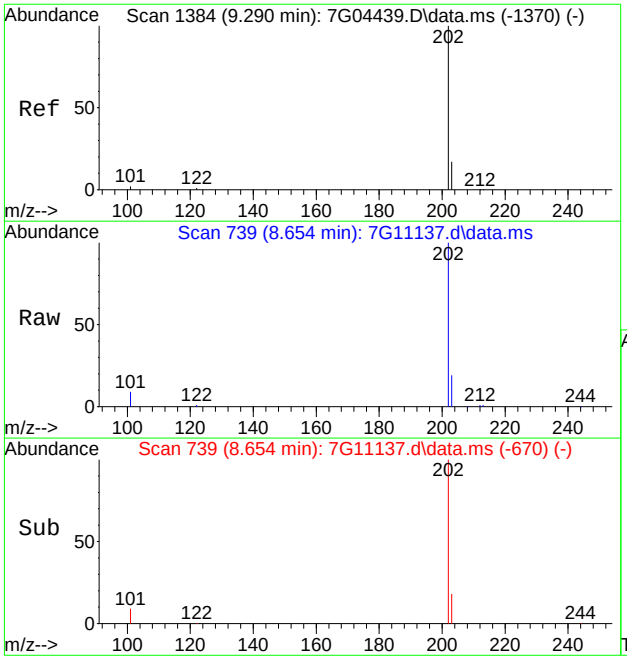


#16
Fluoranthene
Concen: 0.85 ppm
RT: 8.464 min Scan# 678
Delta R.T. 0.016 min
Lab File: 7G11137.d
Acq: 11 Aug 2020 11:14 am

Tgt Ion:202 Resp: 16590

Ion	Ratio	Lower	Upper
202	100		
101	6.9	0.0	32.2
203	17.5	0.0	47.2

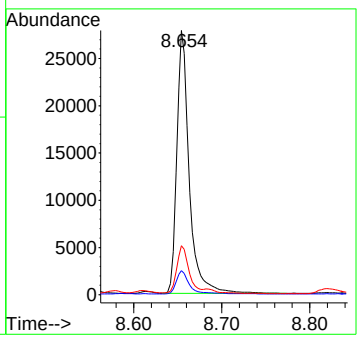


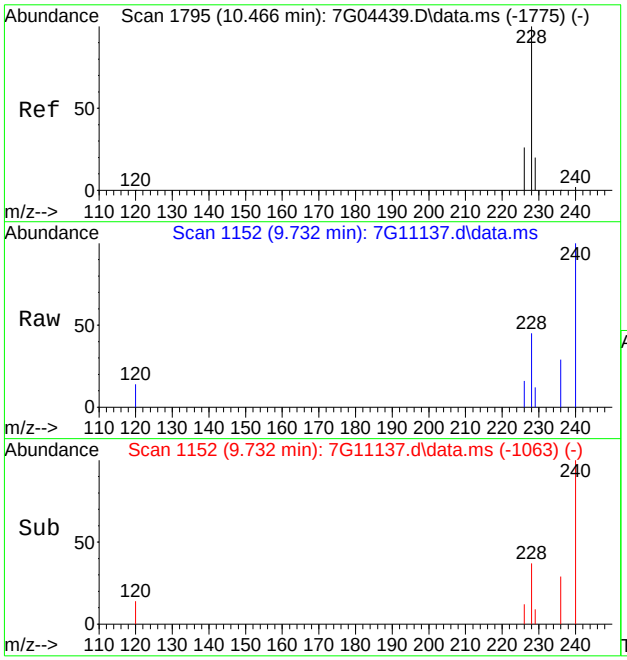


#19
Pyrene
Concen: 1.25 ppm
RT: 8.654 min Scan# 739
Delta R.T. 0.016 min
Lab File: 7G11137.d
Acq: 11 Aug 2020 11:14 am

Tgt Ion:202 Resp: 27163

Ion	Ratio	Lower	Upper
202	100		
101	8.8	0.0	32.4
203	18.1	0.0	47.4

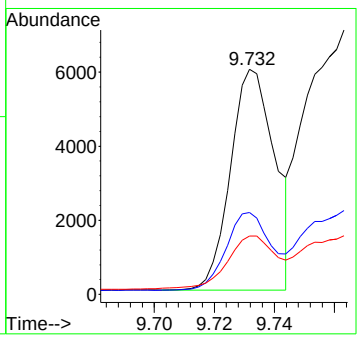


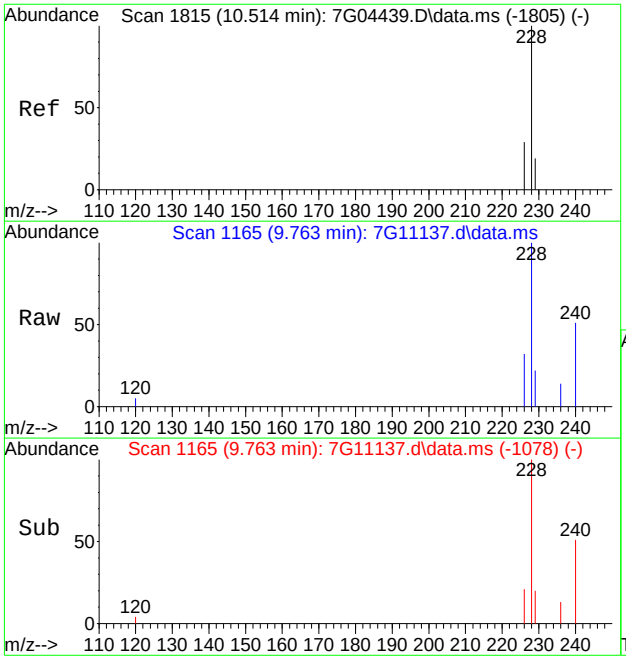


#20
Benzo[a]anthracene
Concen: 0.36 ppm
RT: 9.732 min Scan# 1152
Delta R.T. 0.015 min
Lab File: 7G11137.d
Acq: 11 Aug 2020 11:14 am

Tgt Ion:228 Resp: 6122

Ion	Ratio	Lower	Upper
228	100		
226	36.3	0.0	56.1
229	23.2	0.0	49.5

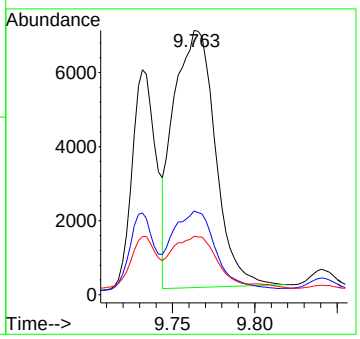


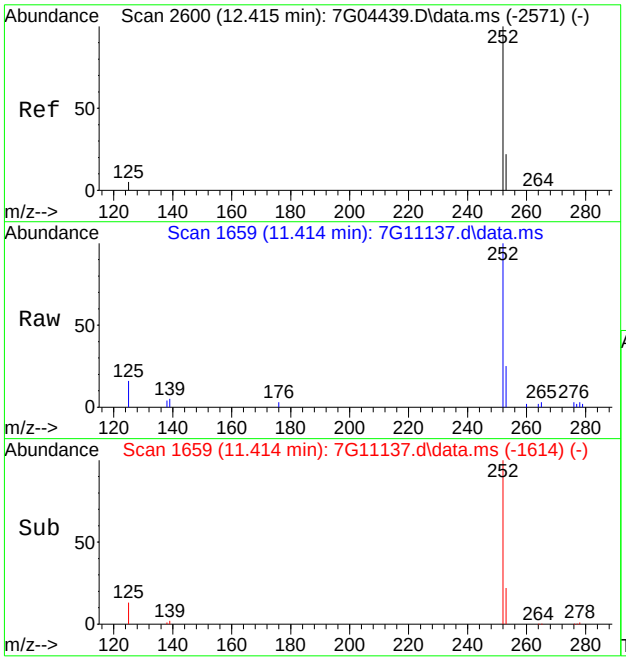


#21
Chrysene
Concen: 0.64 ppm
RT: 9.763 min Scan# 1165
Delta R.T. 0.010 min
Lab File: 7G11137.d
Acq: 11 Aug 2020 11:14 am

Tgt Ion:228 Resp: 12240

Ion	Ratio	Lower	Upper
228	100		
226	30.1	0.0	58.9
229	18.8	0.0	49.5

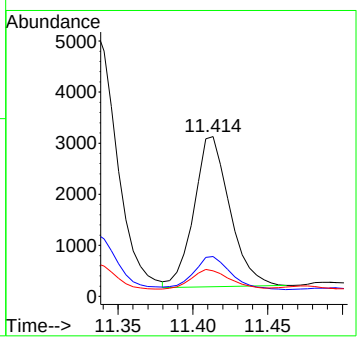


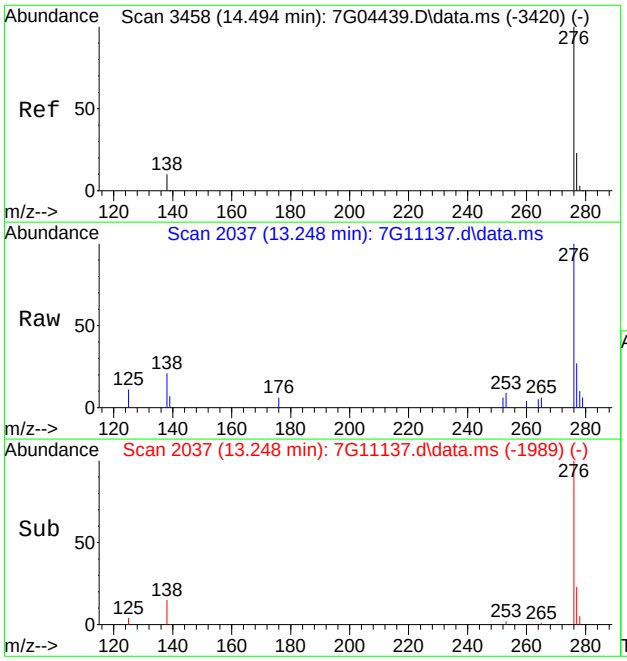


#25
Benzo[a]pyrene
Concen: 0.28 ppm
RT: 11.414 min Scan# 1659
Delta R.T. 0.019 min
Lab File: 7G11137.d
Acq: 11 Aug 2020 11:14 am

Tgt Ion:252 Resp: 4886

Ion	Ratio	Lower	Upper
252	100		
253	21.5	0.0	51.6
125	11.8	0.0	34.8

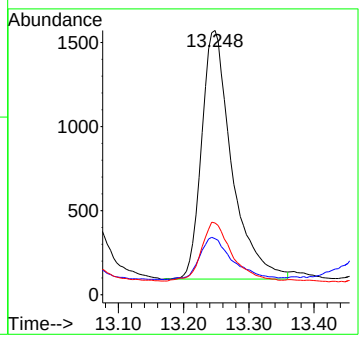


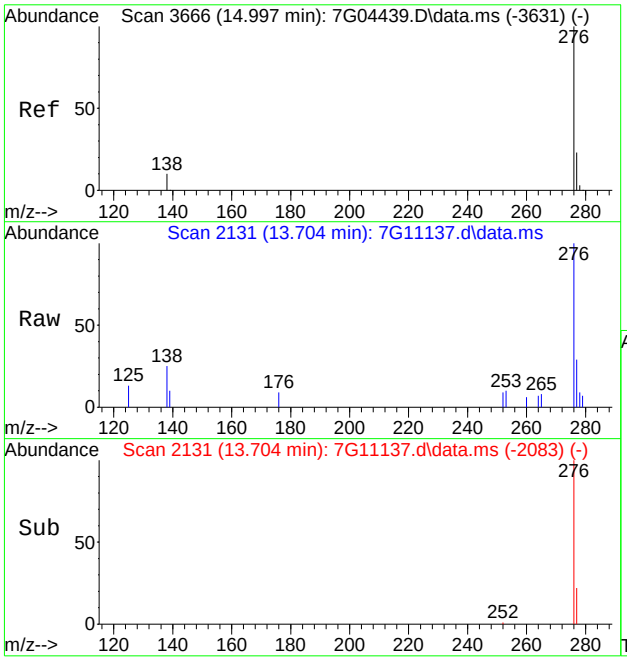


#26
Indeno[1,2,3-cd]pyrene
Concen: 0.41 ppm
RT: 13.248 min Scan# 2037
Delta R.T. 0.034 min
Lab File: 7G11137.d
Acq: 11 Aug 2020 11:14 am

Tgt Ion:276 Resp: 4744

Ion	Ratio	Lower	Upper
276	100		
138	16.3	0.0	39.6
277	23.4	0.0	53.1

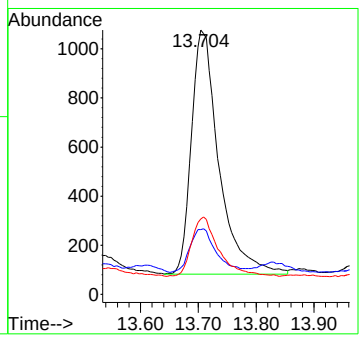




#28
Benzo[g,h,i]perylene
Concen: 0.24 ppm
RT: 13.704 min Scan# 2131
Delta R.T. 0.034 min
Lab File: 7G11137.d
Acq: 11 Aug 2020 11:14 am

Tgt Ion:276 Resp: 3287

Ion	Ratio	Lower	Upper
276	100		
138	16.0	0.0	40.5
277	23.4	0.0	53.2



Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 08/12/20 11:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11138.d
Acq On : 11 Aug 2020 11:38 am
Operator : FOUADS
Sample : fa77615-2 e Inst : MSBNA8
Misc : op81485,S7G483,15.4,,,1,1,soil
ALS Vial : 10 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:32:43 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

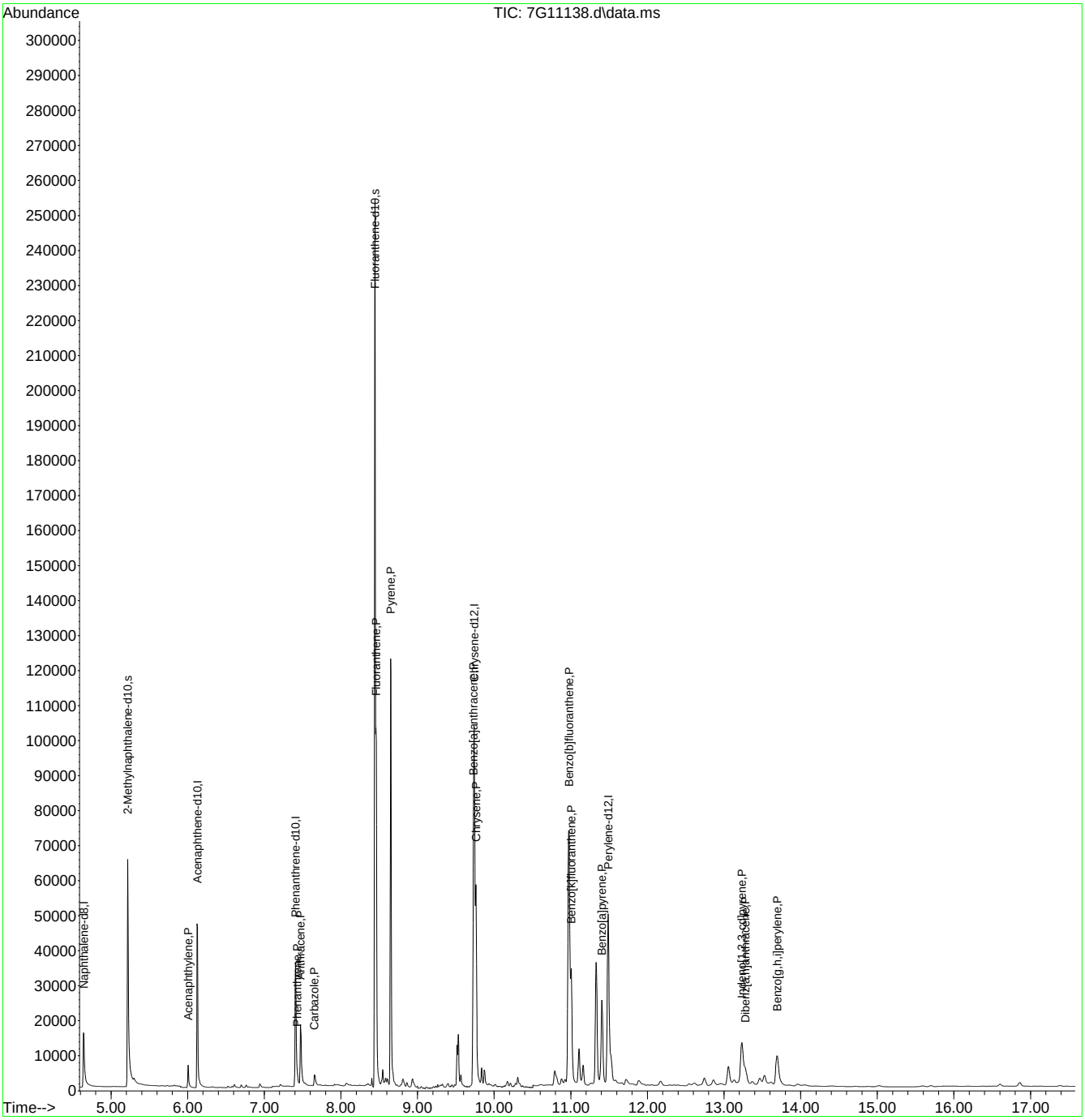
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.646	136	20337	4.00	ppm	0.02
6) Acenaphthene-d10	6.128	164	17240	4.00	ppm	0.01
11) Phenanthrene-d10	7.410	188	33719	4.00	ppm	0.01
18) Chrysene-d12	9.739	240	60041	4.00	ppm	0.01
22) Perylene-d12	11.486	264	58801	4.00	ppm	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.217	152	30643	10.05	ppm	0.01
Spiked Amount 10.000	Range 50 - 150		Recovery = 100.50%			
17) Fluoranthene-d10	8.445	212	168683	9.58	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 95.80%			
Target Compounds						Qvalue
7) Acenaphthylene	6.007	152	5181	0.53	ppm	98
13) Phenanthrene	7.431	178	1718	0.16	ppm	98
14) Anthracene	7.473	178	16023	1.43	ppm	99
15) Carbazole	7.653	167	3688	0.18	ppm	99
16) Fluoranthene	8.461	202	60940	2.91	ppm	98
19) Pyrene	8.648	202	83653	3.51	ppm	96
20) Benzo[a]anthracene	9.729	228	32715	1.75	ppm	90
21) Chrysene	9.763	228	57892	2.78	ppm	100
23) Benzo[b]fluoranthene	10.977	252	99494	4.99	ppm	97
24) Benzo[k]fluoranthene	11.006	252	33135m	1.57	ppm	
25) Benzo[a]pyrene	11.404	252	31132	1.60	ppm	98
26) Indeno[1,2,3-cd]pyrene	13.233	276	23471	1.85	ppm	95
27) Dibenz[a,h]anthracene	13.277	278	5489	0.39	ppm	97
28) Benzo[g,h,i]perylene	13.694	276	17311	1.13	ppm	93

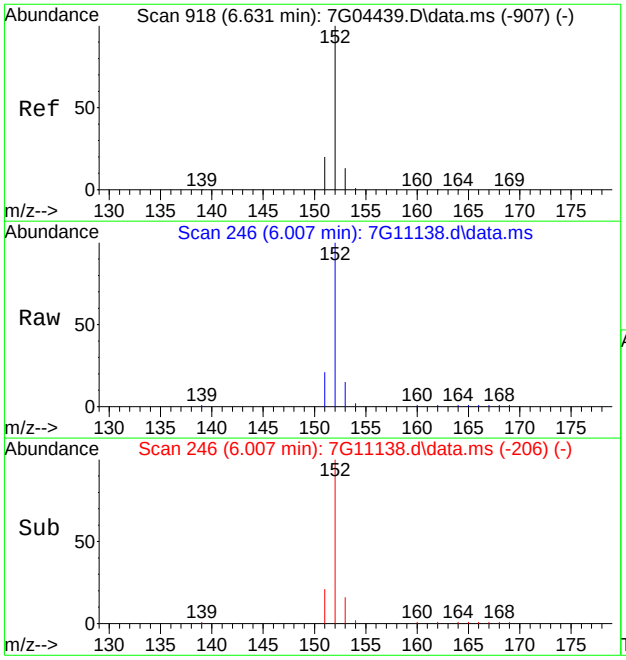
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11138.d
Acq On : 11 Aug 2020 11:38 am
Operator : FOUADS
Sample : fa77615-2 e Inst : MSBNA8
Misc : op81485,S7G483,15.4,,,1,1,soil
ALS Vial : 10 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:32:43 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

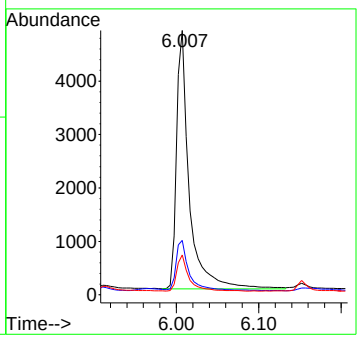


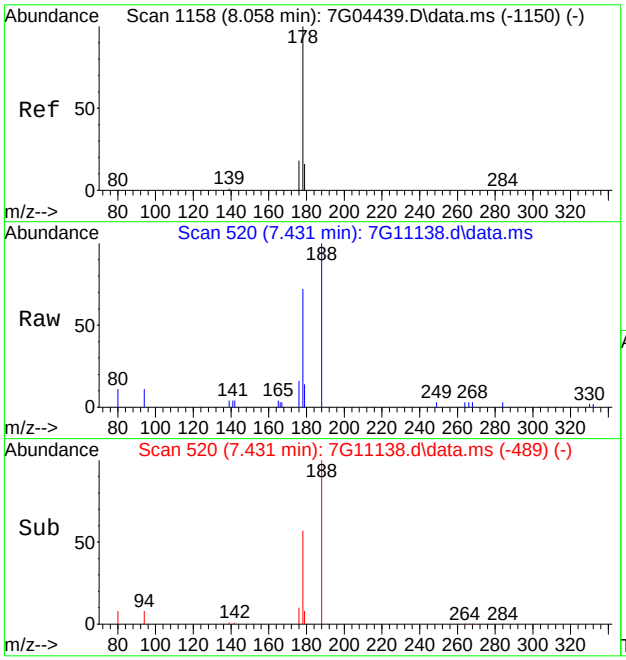


#7
Acenaphthylene
Concen: 0.53 ppm
RT: 6.007 min Scan# 246
Delta R.T. 0.014 min
Lab File: 7G11138.d
Acq: 11 Aug 2020 11:38 am

Tgt Ion:152 Resp: 5181

Ion	Ratio	Lower	Upper
152	100		
151	19.3	0.0	49.8
153	13.9	0.0	42.8

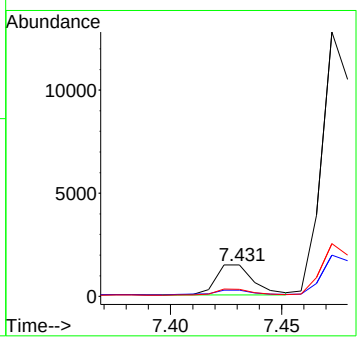


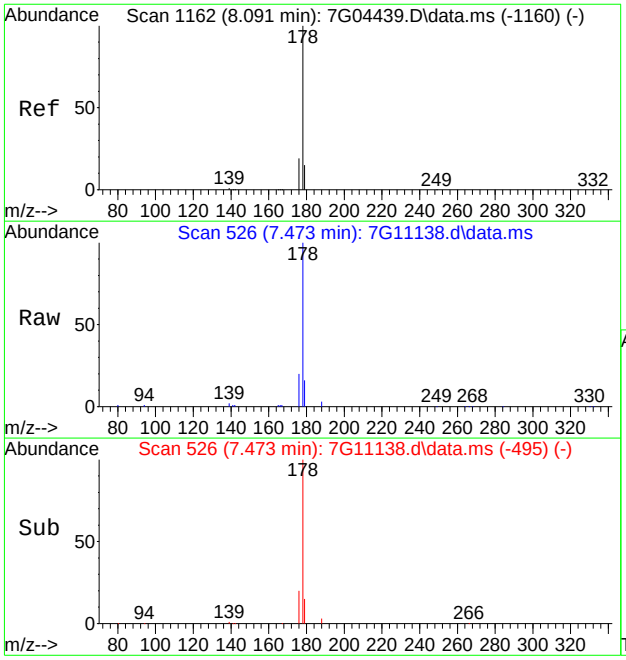


#13
Phenanthrene
Concen: 0.16 ppm
RT: 7.431 min Scan# 520
Delta R.T. 0.014 min
Lab File: 7G11138.d
Acq: 11 Aug 2020 11:38 am

Tgt Ion:178 Resp: 1718

Ion	Ratio	Lower	Upper
178	100		
179	15.5	0.0	45.7
176	19.7	0.0	48.0

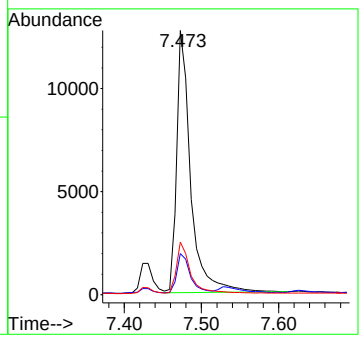


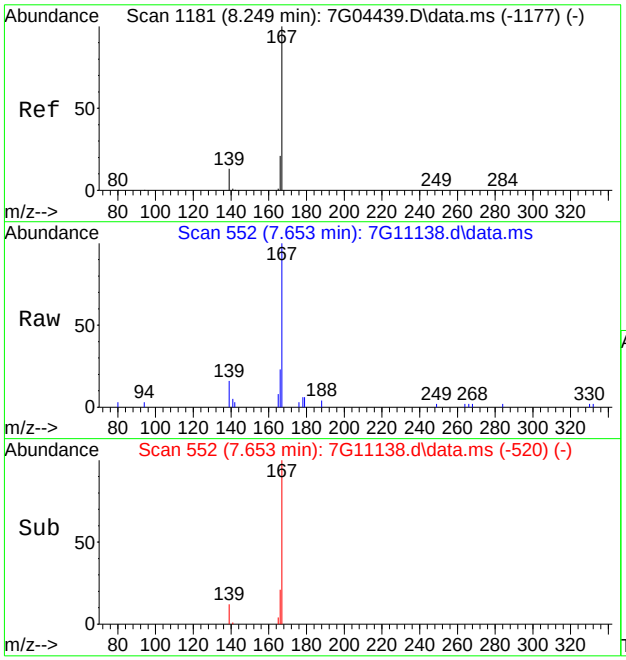


#14
Anthracene
Concen: 1.43 ppm
RT: 7.473 min Scan# 526
Delta R.T. 0.014 min
Lab File: 7G11138.d
Acq: 11 Aug 2020 11:38 am

Tgt Ion:178 Resp: 16023

Ion	Ratio	Lower	Upper
178	100		
179	14.9	0.0	45.1
176	19.5	0.0	48.8

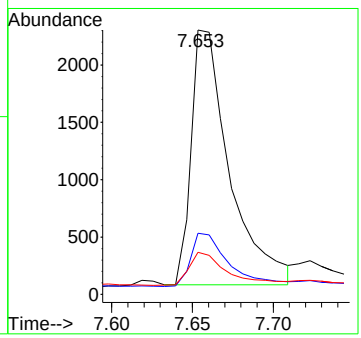


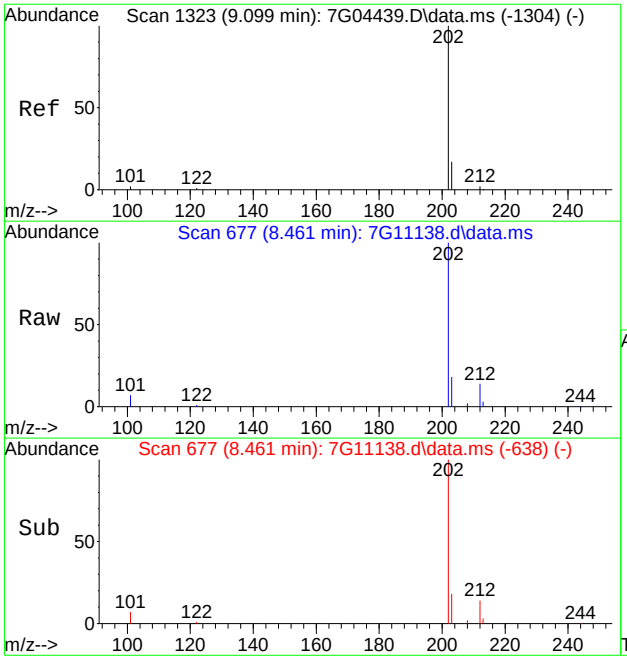


#15
Carbazole
Concen: 0.18 ppm
RT: 7.653 min Scan# 552
Delta R.T. 0.021 min
Lab File: 7G11138.d
Acq: 11 Aug 2020 11:38 am

Tgt Ion:167 Resp: 3688

Ion	Ratio	Lower	Upper
167	100		
166	20.7	1.2	41.2
139	12.7	0.0	32.8

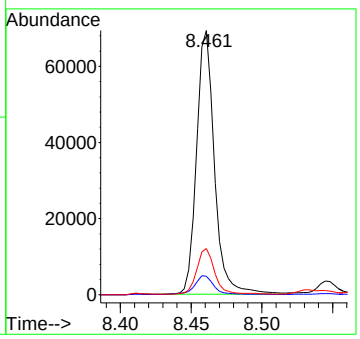


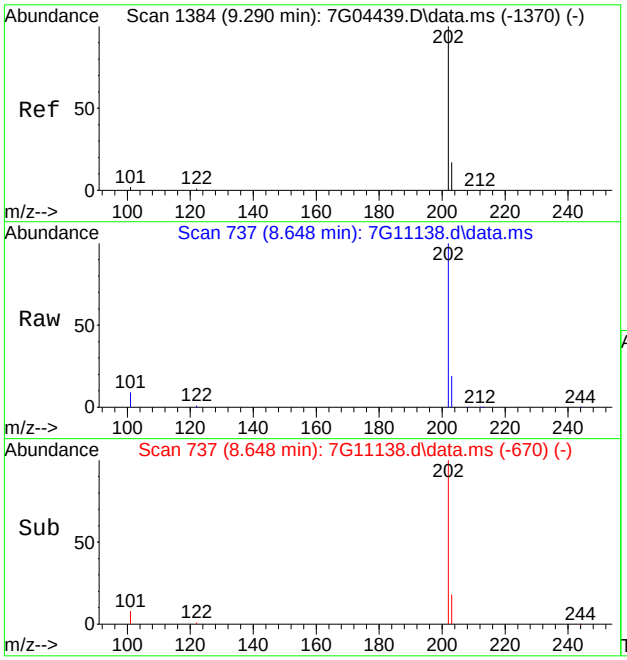


#16
Fluoranthene
Concen: 2.91 ppm
RT: 8.461 min Scan# 677
Delta R.T. 0.012 min
Lab File: 7G11138.d
Acq: 11 Aug 2020 11:38 am

Tgt Ion:202 Resp: 60940

Ion	Ratio	Lower	Upper
202	100		
101	6.9	0.0	32.2
203	17.3	0.0	47.2

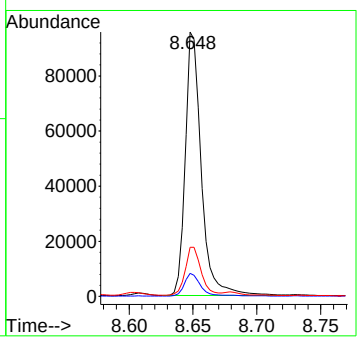


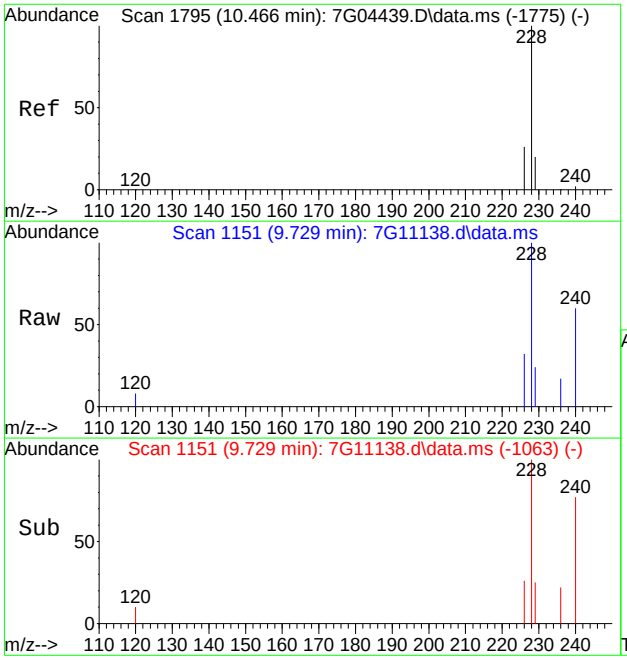


#19
Pyrene
Concen: 3.51 ppm
RT: 8.648 min Scan# 737
Delta R.T. 0.009 min
Lab File: 7G11138.d
Acq: 11 Aug 2020 11:38 am

Tgt Ion:202 Resp: 83653

Ion	Ratio	Lower	Upper
202	100		
101	8.6	0.0	32.4
203	18.3	0.0	47.4

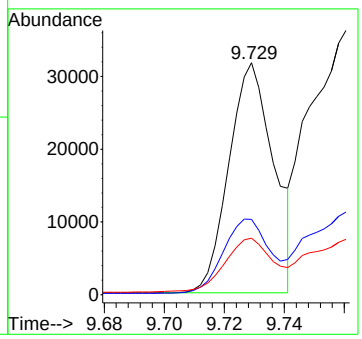


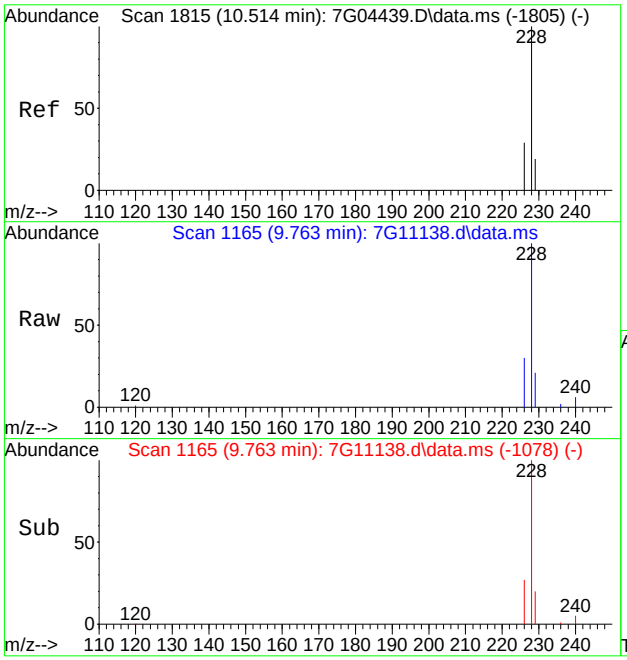


#20
Benzo[a]anthracene
Concen: 1.75 ppm
RT: 9.729 min Scan# 1151
Delta R.T. 0.012 min
Lab File: 7G11138.d
Acq: 11 Aug 2020 11:38 am

Tgt Ion:228 Resp: 32715

Ion	Ratio	Lower	Upper
228	100		
226	31.9	0.0	56.1
229	23.2	0.0	49.5

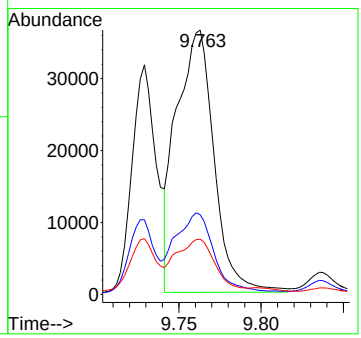


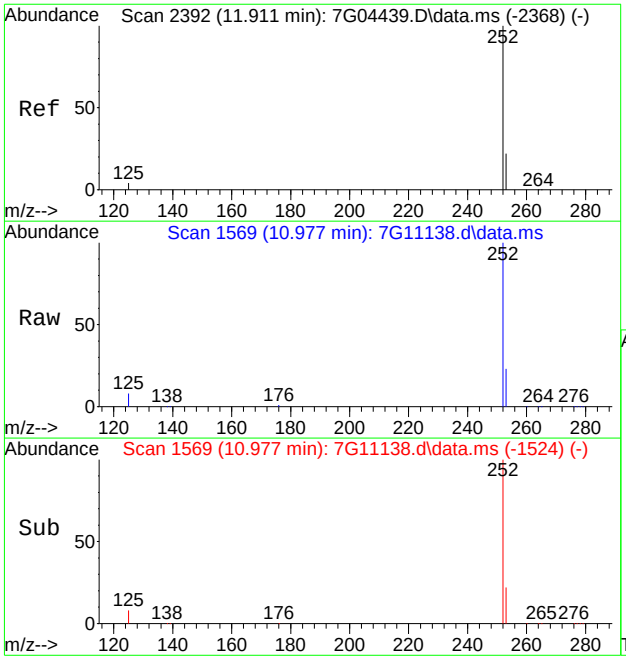


#21
Chrysene
Concen: 2.78 ppm
RT: 9.763 min Scan# 1165
Delta R.T. 0.009 min
Lab File: 7G11138.d
Acq: 11 Aug 2020 11:38 am

Tgt Ion:228 Resp: 57892

Ion	Ratio	Lower	Upper
228	100		
226	29.0	0.0	58.9
229	19.2	0.0	49.5

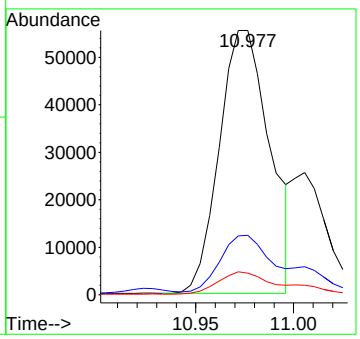


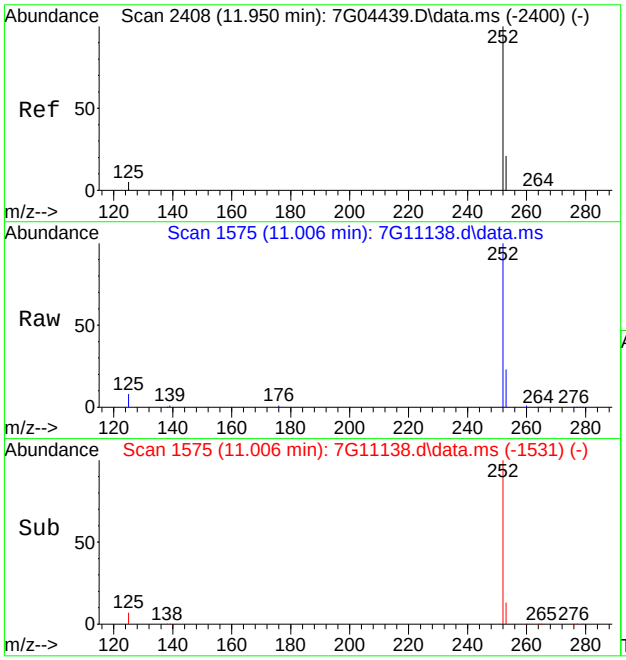


#23
Benzo[b]fluoranthene
Concen: 4.99 ppm
RT: 10.977 min Scan# 1569
Delta R.T. 0.019 min
Lab File: 7G11138.d
Acq: 11 Aug 2020 11:38 am

Tgt Ion:252 Resp: 99494

Ion	Ratio	Lower	Upper
252	100		
253	21.1	0.0	51.7
125	7.9	0.0	34.5

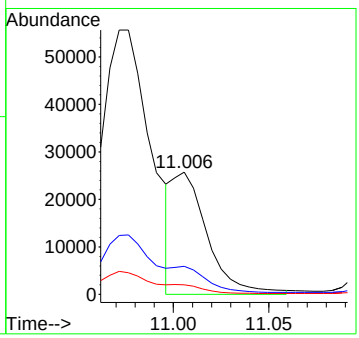


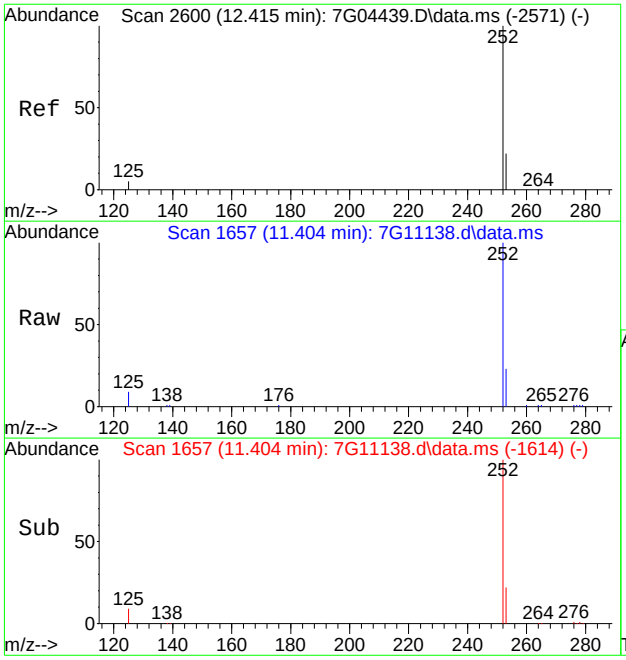


#24
Benzo[k]fluoranthene
Concen: 1.57 ppm m
RT: 11.006 min Scan# 1575
Delta R.T. 0.014 min
Lab File: 7G11138.d
Acq: 11 Aug 2020 11:38 am

Tgt Ion:252 Resp: 33135

Ion	Ratio	Lower	Upper
252	100		
253	22.9	0.0	51.5
125	7.9	0.0	34.8

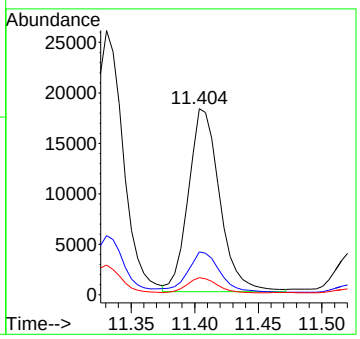


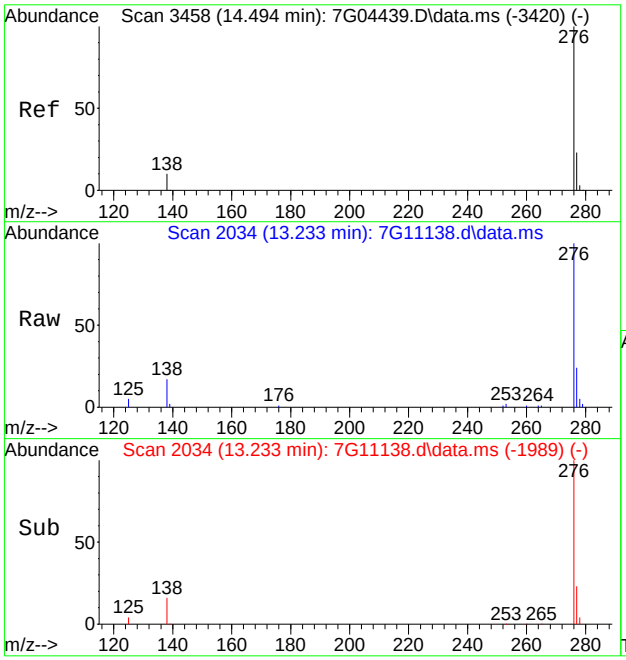


#25
Benzo[a]pyrene
Concen: 1.60 ppm
RT: 11.404 min Scan# 1657
Delta R.T. 0.010 min
Lab File: 7G11138.d
Acq: 11 Aug 2020 11:38 am

Tgt Ion:252 Resp: 31132

Ion	Ratio	Lower	Upper
252	100		
253	21.5	0.0	51.6
125	8.3	0.0	34.8

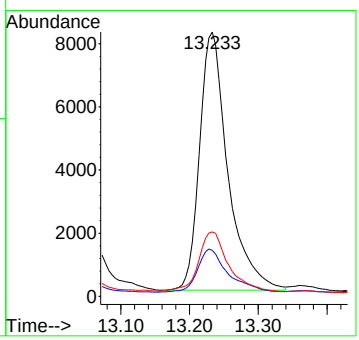


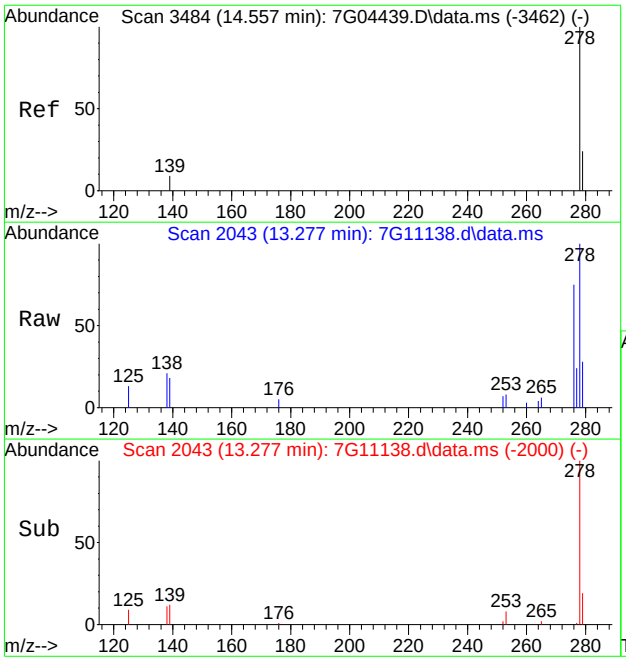


#26
Indeno[1,2,3-cd]pyrene
Concen: 1.85 ppm
RT: 13.233 min Scan# 2034
Delta R.T. 0.019 min
Lab File: 7G11138.d
Acq: 11 Aug 2020 11:38 am

Tgt Ion:276 Resp: 23471

Ion	Ratio	Lower	Upper
276	100		
138	16.1	0.0	39.6
277	23.2	0.0	53.1

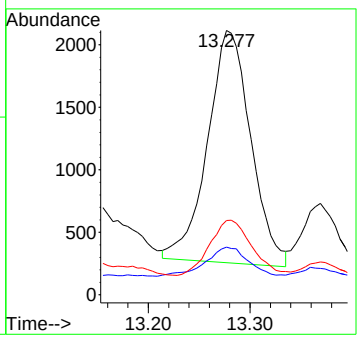


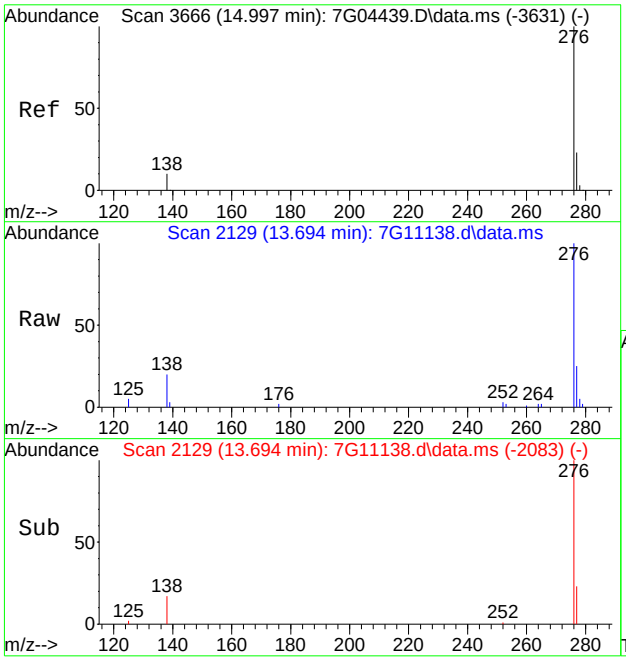


#27
Dibenz[a,h]anthracene
Concen: 0.39 ppm
RT: 13.277 min Scan# 2043
Delta R.T. 0.009 min
Lab File: 7G11138.d
Acq: 11 Aug 2020 11:38 am

Tgt Ion:278 Resp: 5489

Ion	Ratio	Lower	Upper
278	100		
139	12.7	0.0	38.8
279	23.7	0.0	53.6

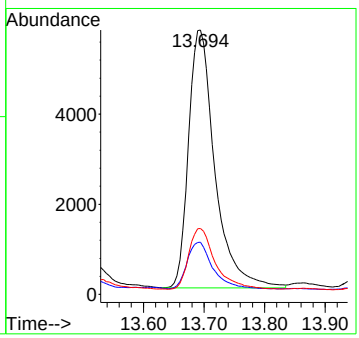




#28
Benzo[g,h,i]perylene
Concen: 1.13 ppm
RT: 13.694 min Scan# 2129
Delta R.T. 0.024 min
Lab File: 7G11138.d
Acq: 11 Aug 2020 11:38 am

Tgt Ion:276 Resp: 17311

Ion	Ratio	Lower	Upper
276	100		
138	18.0	0.0	40.5
277	23.5	0.0	53.2



Manual Integration Approval Summary

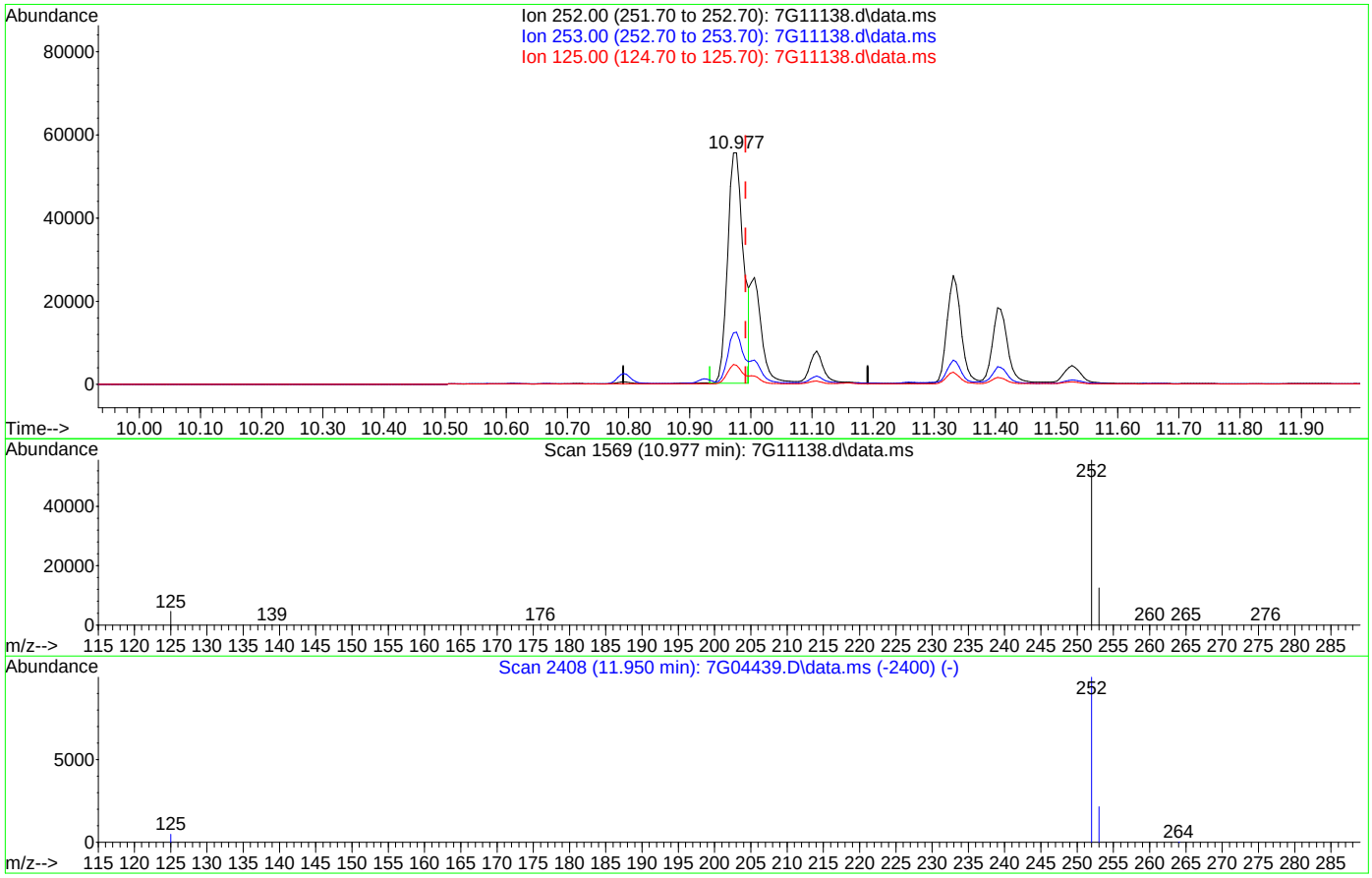
Sample Number: FA77615-2
Lab FileID: 7G11138.D
Injection Time: 08/11/20 11:38
Method: SW846 8270E BY SIM
Analyst approved: 08/12/20 09:33 Fouad Sekkar
Supervisor approved: 08/12/20 11:43 Nicole McCampbell

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(k)fluoranthene	207-08-9		11.01	Missed peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11138.d
Acq On : 11 Aug 2020 11:38 am
Operator : FOUADS
Sample : fa77615-2 e Inst : MSBNA8
Misc : op81485,S7G483,15.4,,,1,1,soil
ALS Vial : 10 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:26:28 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration



TIC: 7G11138.d\data.ms

(24) Benzo[k]fluoranthene (P)

10.977min (-0.015) 4.68ppm

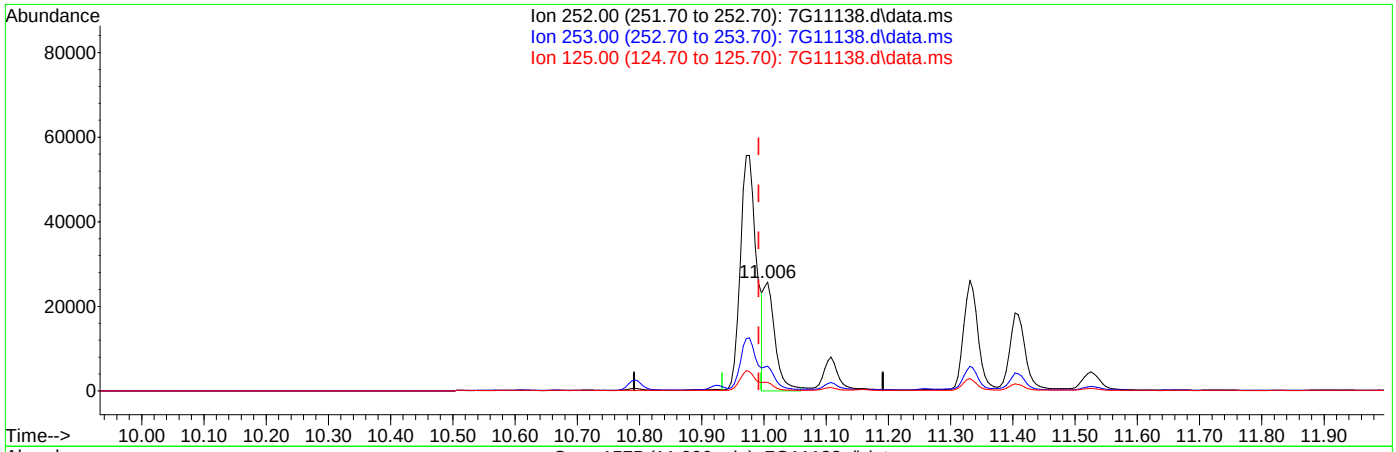
response 99494

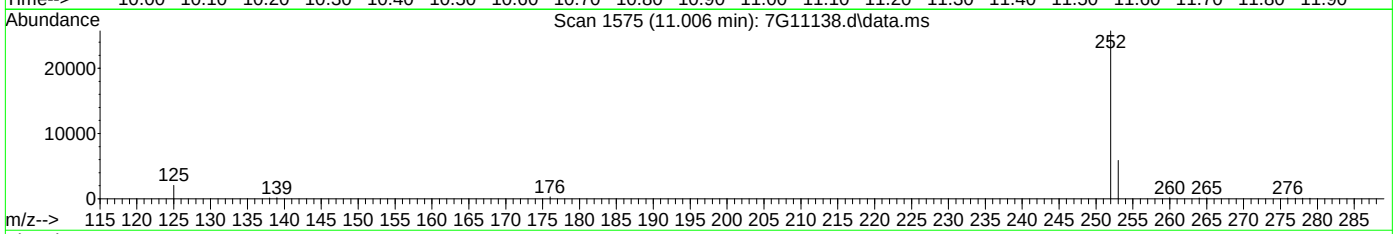
Ion	Exp%	Act%
252.00	100	100
253.00	21.50	21.11
125.00	4.80	7.93
0.00	0.00	0.00

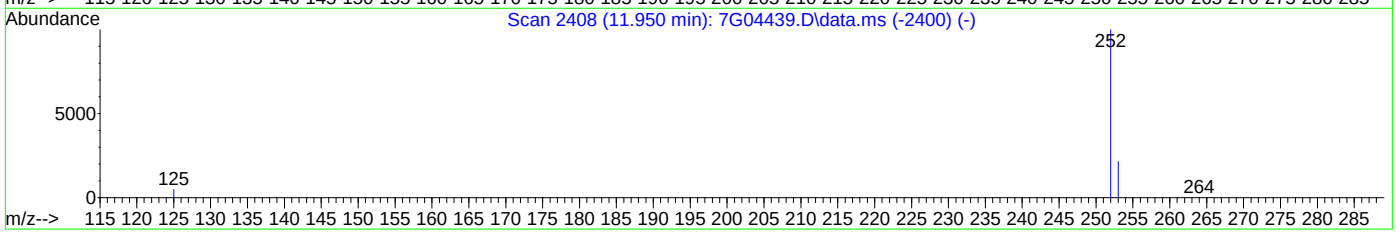
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11138.d
Acq On : 11 Aug 2020 11:38 am
Operator : FOUADS
Sample : fa77615-2 e Inst : MSBNA8
Misc : op81485,S7G483,15.4,,,1,1,soil
ALS Vial : 10 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:26:28 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11138.d\data.ms

(24) Benzo[k]fluoranthene (P)

11.006min (+0.014) 1.57ppm m

response 33135

Ion	Exp%	Act%
252.00	100	100
253.00	21.50	22.86
125.00	4.80	7.94
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 08/12/20 11:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11139.d
Acq On : 11 Aug 2020 12:02 pm
Operator : FOUADS
Sample : fa77615-3 e Inst : MSBNA8
Misc : op81485,S7G483,15.1,,,1,1,soil
ALS Vial : 11 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:33:48 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

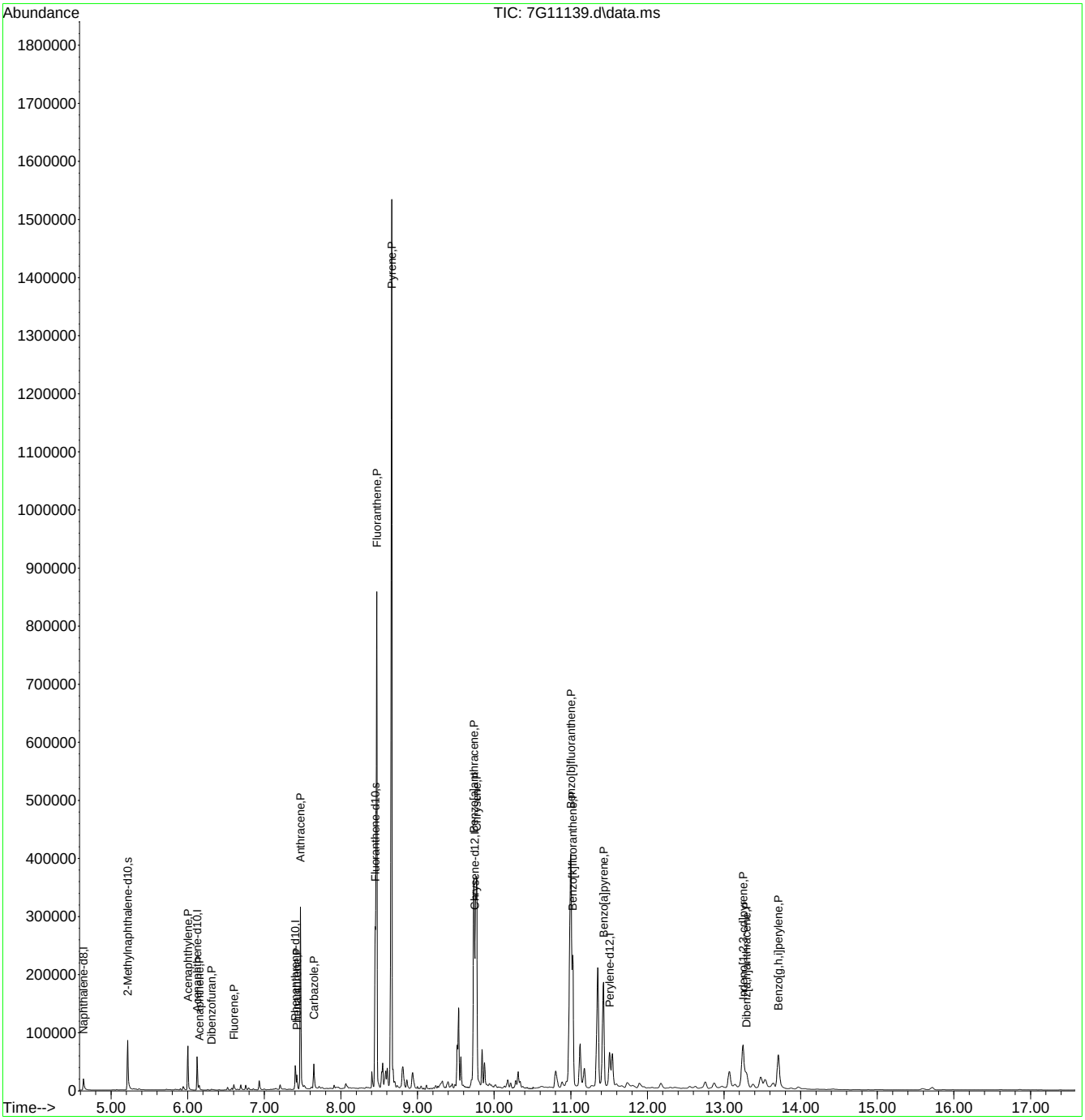
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.640	136	20371	4.00	ppm	0.01
6) Acenaphthene-d10	6.123	164	16941	4.00	ppm	0.00
11) Phenanthrene-d10	7.403	188	32802	4.00	ppm	0.00
18) Chrysene-d12	9.746	240	65875	4.00	ppm	0.02
22) Perylene-d12	11.506	264	62002	4.00	ppm	0.03
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.217	152	34753	11.32	ppm	0.01
Spiked Amount 10.000	Range 50 - 150		Recovery = 113.20%			
17) Fluoranthene-d10	8.448	212	197868	11.51	ppm	0.01
Spiked Amount 10.000	Range 50 - 150		Recovery = 115.10%			
Target Compounds						Qvalue
7) Acenaphthylene	6.002	152	47382	4.84	ppm	99
8) Acenaphthene	6.152	153	2395	0.38	ppm	94
9) Dibenzofuran	6.312	168	1032	0.23	ppm	86
10) Fluorene	6.602	166	3895	0.57	ppm	99
13) Phenanthrene	7.424	178	14779	1.37	ppm	96
14) Anthracene	7.473	178	190891	16.81	ppm	98
15) Carbazole	7.646	167	31784	1.62	ppm	97
16) Fluoranthene	8.467	202	551931	25.46	ppm	98
19) Pyrene	8.663	202	1105364	40.13	ppm	96
20) Benzo[a]anthracene	9.734	228	238198	11.31	ppm	77
21) Chrysene	9.770	228	366602	16.08	ppm	98
23) Benzo[b]fluoranthene	11.001	252	618205m	29.38	ppm	
24) Benzo[k]fluoranthene	11.025	252	191253m	8.43	ppm	
25) Benzo[a]pyrene	11.428	252	227694	11.10	ppm	98
26) Indeno[1,2,3-cd]pyrene	13.248	276	129781	9.70	ppm	95
27) Dibenz[a,h]anthracene	13.291	278	31265	2.11	ppm	97
28) Benzo[g,h,i]perylene	13.709	276	92461	5.73	ppm	94

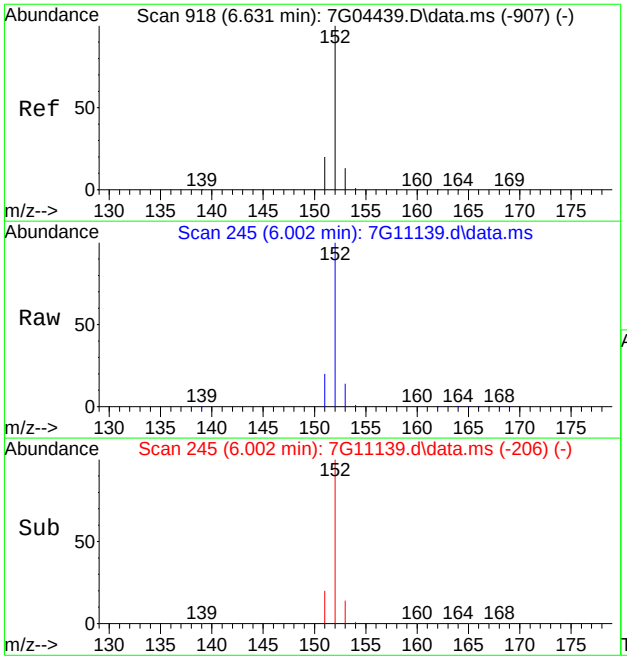
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11139.d
Acq On : 11 Aug 2020 12:02 pm
Operator : FOUADS
Sample : fa77615-3 e Inst : MSBNA8
Misc : op81485,S7G483,15.1,,,1,1,soil
ALS Vial : 11 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:33:48 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

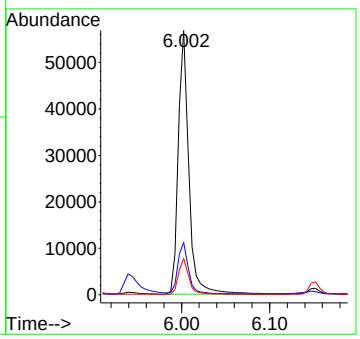


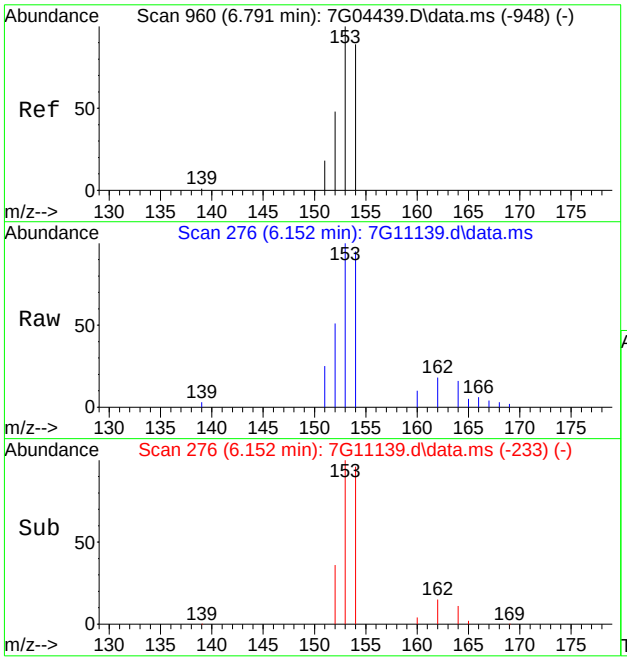


#7
Acenaphthylene
Concen: 4.84 ppm
RT: 6.002 min Scan# 245
Delta R.T. 0.009 min
Lab File: 7G11139.d
Acq: 11 Aug 2020 12:02 pm

Tgt Ion:152 Resp: 47382

Ion	Ratio	Lower	Upper
152	100		
151	19.4	0.0	49.8
153	13.6	0.0	42.8

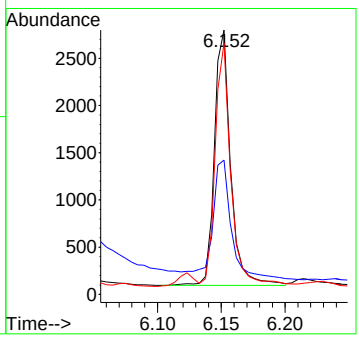


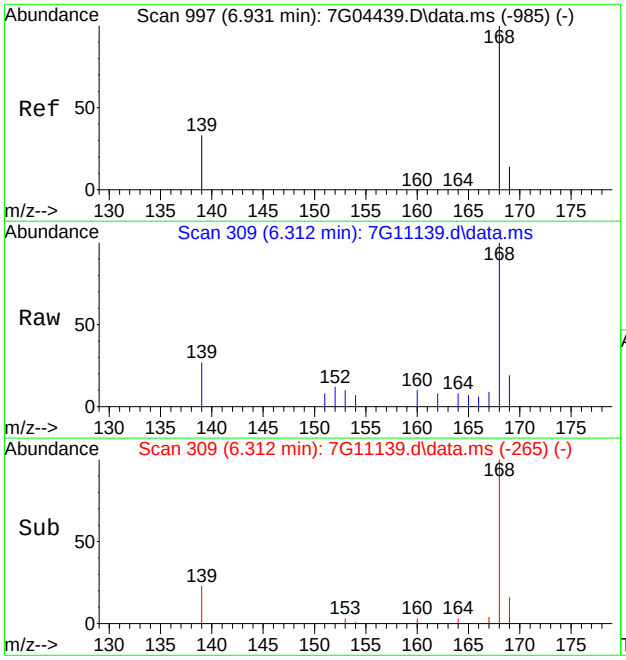


#8
Acenaphthene
Concen: 0.38 ppm
RT: 6.152 min Scan# 276
Delta R.T. 0.009 min
Lab File: 7G11139.d
Acq: 11 Aug 2020 12:02 pm

Tgt Ion:153 Resp: 2395

Ion	Ratio	Lower	Upper
153	100		
152	44.8	18.3	78.3
154	95.0	59.3	119.3

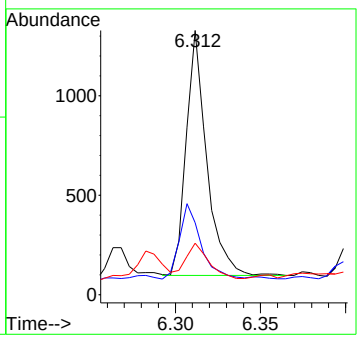


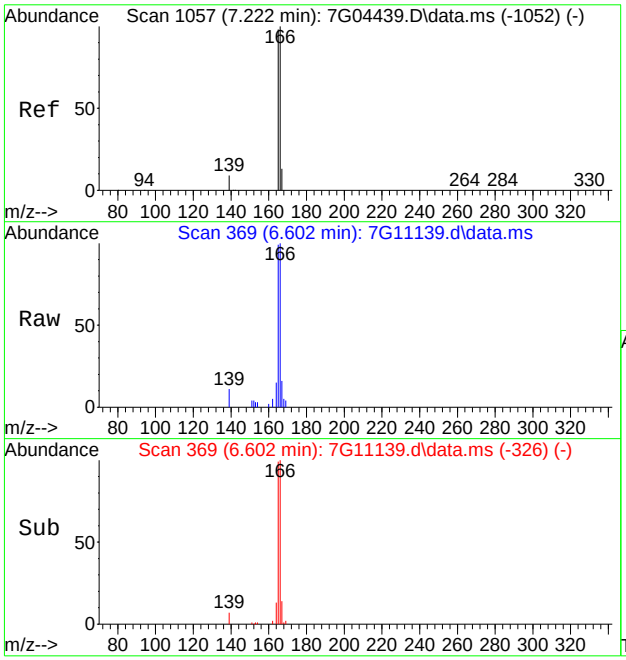


#9
Dibenzofuran
Concen: 0.23 ppm
RT: 6.312 min Scan# 309
Delta R.T. 0.014 min
Lab File: 7G11139.d
Acq: 11 Aug 2020 12:02 pm

Tgt Ion:168 Resp: 1032

Ion	Ratio	Lower	Upper
168	100		
139	23.0	12.6	52.6
169	11.0	0.0	33.8

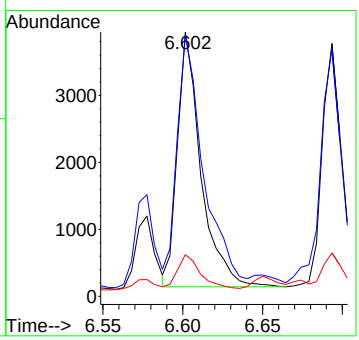


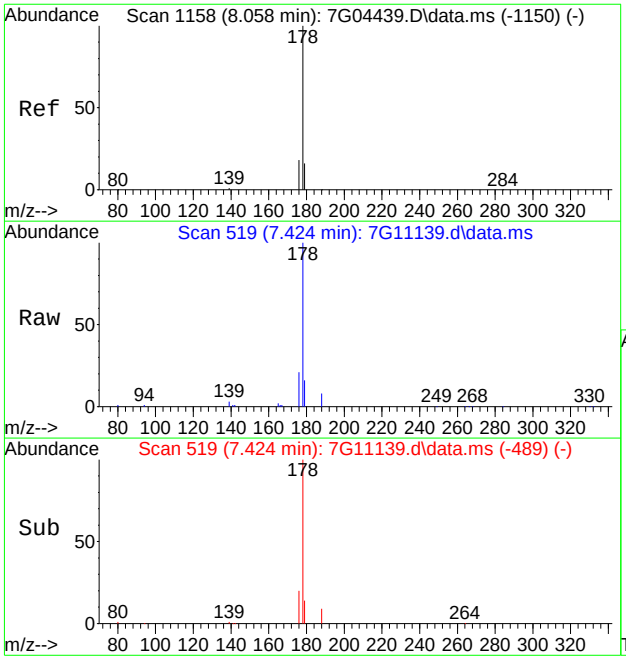


#10
Fluorene
Concen: 0.57 ppm
RT: 6.602 min Scan# 369
Delta R.T. 0.009 min
Lab File: 7G11139.d
Acq: 11 Aug 2020 12:02 pm

Tgt Ion:166 Resp: 3895

Ion	Ratio	Lower	Upper
166	100		
165	96.9	68.2	128.2
167	12.5	0.0	42.9

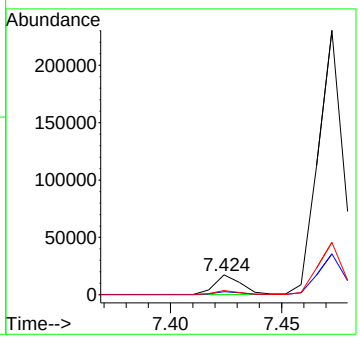


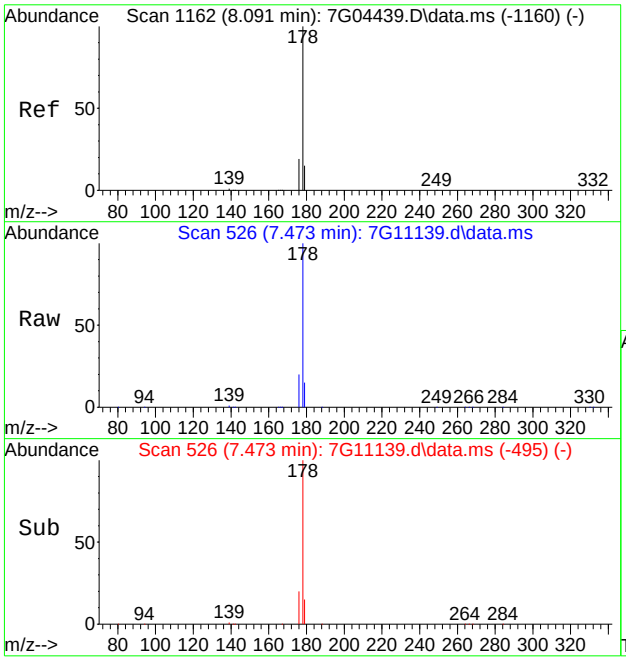


#13
Phenanthrene
Concen: 1.37 ppm
RT: 7.424 min Scan# 519
Delta R.T. 0.007 min
Lab File: 7G11139.d
Acq: 11 Aug 2020 12:02 pm

Tgt Ion:178 Resp: 14779

Ion	Ratio	Lower	Upper
178	100		
179	15.0	0.0	45.7
176	20.5	0.0	48.0

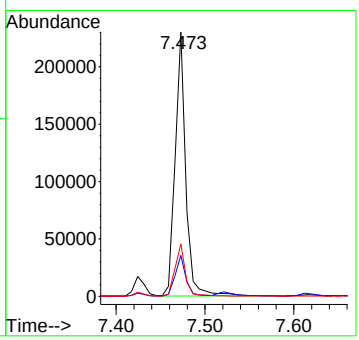


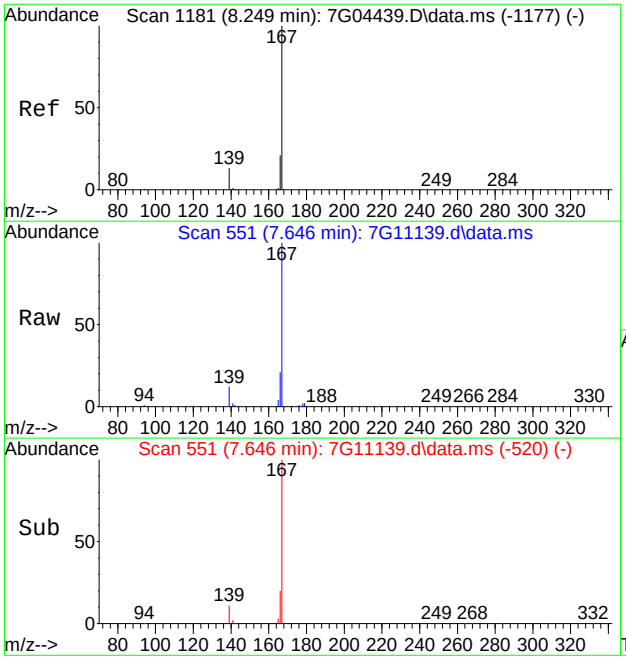


#14
Anthracene
Concen: 16.81 ppm
RT: 7.473 min Scan# 526
Delta R.T. 0.014 min
Lab File: 7G11139.d
Acq: 11 Aug 2020 12:02 pm

Tgt Ion:178 Resp: 190891

Ion	Ratio	Lower	Upper
178	100		
179	15.4	0.0	45.1
176	19.8	0.0	48.8

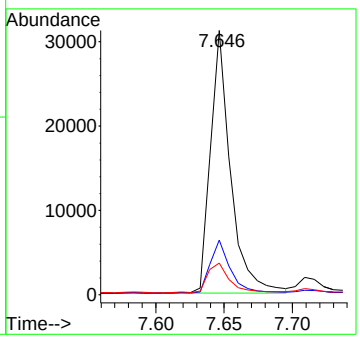


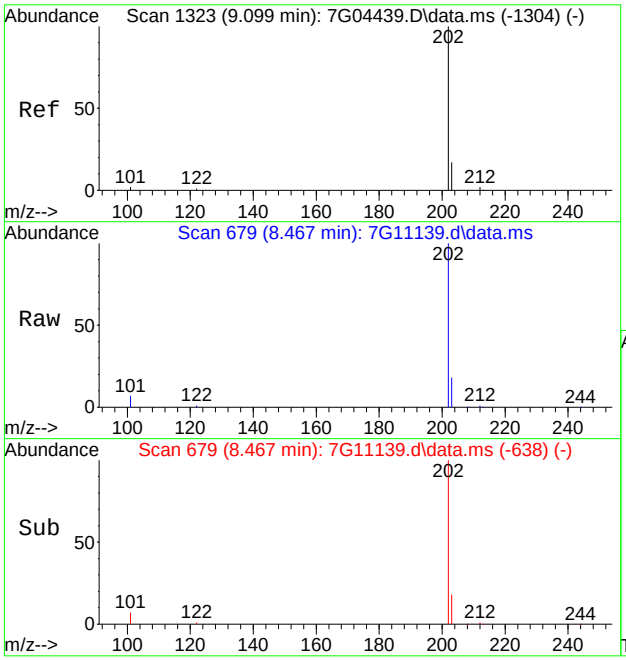


#15
Carbazole
Concen: 1.62 ppm
RT: 7.646 min Scan# 551
Delta R.T. 0.014 min
Lab File: 7G11139.d
Acq: 11 Aug 2020 12:02 pm

Tgt Ion:167 Resp: 31784

Ion	Ratio	Lower	Upper
167	100		
166	20.1	1.2	41.2
139	11.2	0.0	32.8

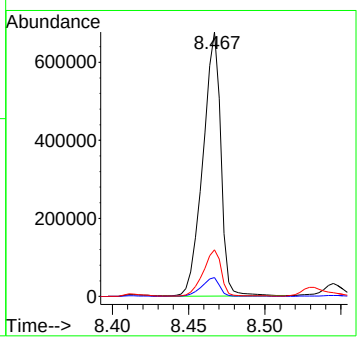


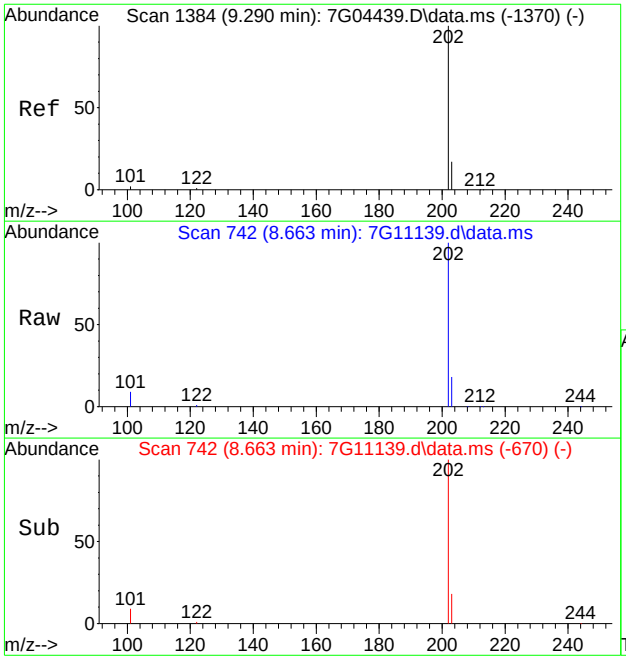


#16
Fluoranthene
Concen: 25.46 ppm
RT: 8.467 min Scan# 679
Delta R.T. 0.018 min
Lab File: 7G11139.d
Acq: 11 Aug 2020 12:02 pm

Tgt Ion:202 Resp: 551931

Ion	Ratio	Lower	Upper
202	100		
101	7.1	0.0	32.2
203	17.5	0.0	47.2

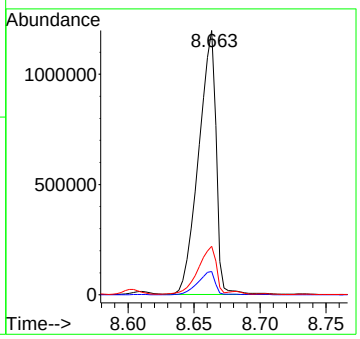


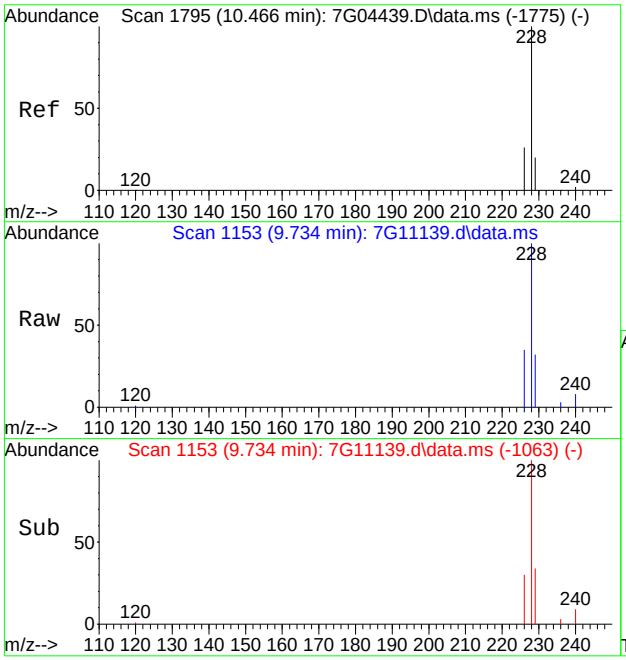


#19
Pyrene
Concen: 40.13 ppm
RT: 8.663 min Scan# 742
Delta R.T. 0.025 min
Lab File: 7G11139.d
Acq: 11 Aug 2020 12:02 pm

Tgt Ion:202 Resp: 1105364

Ion	Ratio	Lower	Upper
202	100		
101	8.8	0.0	32.4
203	18.2	0.0	47.4

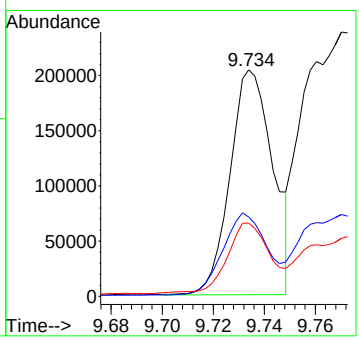


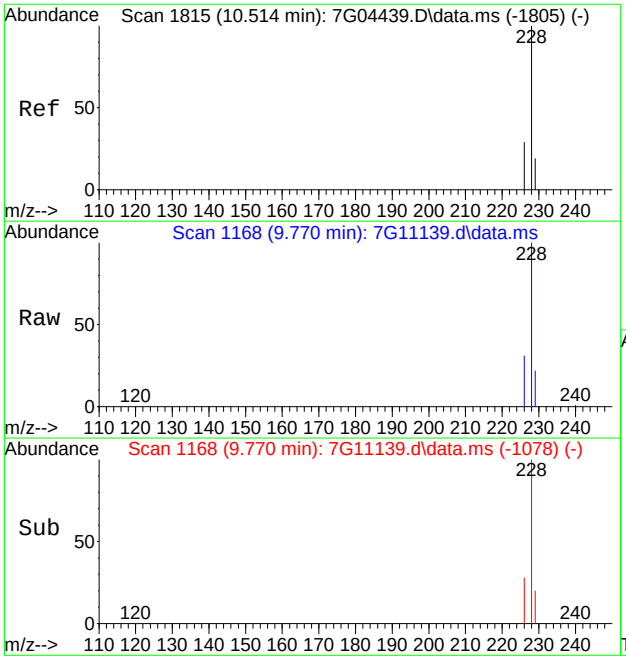


#20
Benzo[a]anthracene
Concen: 11.31 ppm
RT: 9.734 min Scan# 1153
Delta R.T. 0.017 min
Lab File: 7G11139.d
Acq: 11 Aug 2020 12:02 pm

Tgt Ion:228 Resp: 238198

Ion	Ratio	Lower	Upper
228	100		
226	35.4	0.0	56.1
229	33.2	0.0	49.5

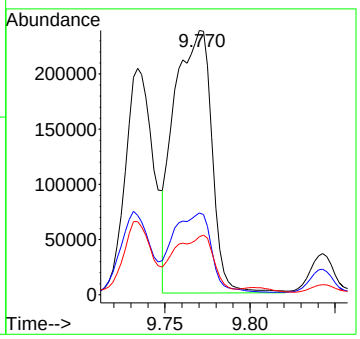


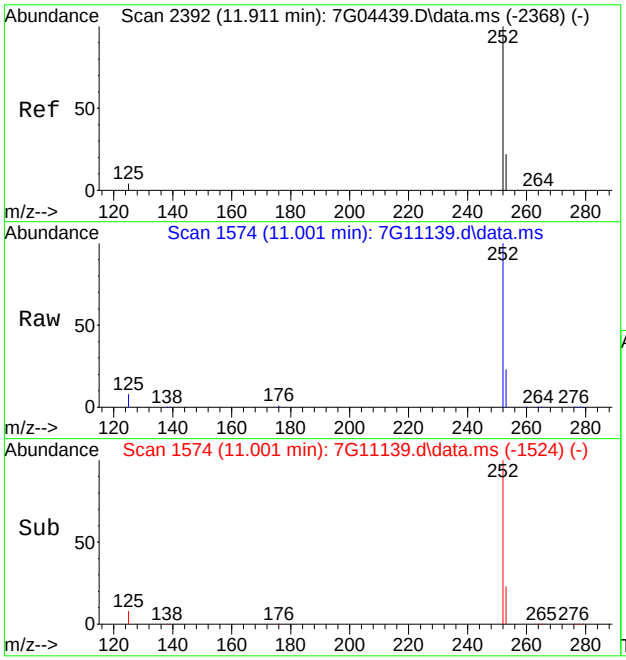


#21
Chrysene
Concen: 16.08 ppm
RT: 9.770 min Scan# 1168
Delta R.T. 0.017 min
Lab File: 7G11139.d
Acq: 11 Aug 2020 12:02 pm

Tgt Ion:228 Resp: 366602

Ion	Ratio	Lower	Upper
228	100		
226	30.2	0.0	58.9
229	20.3	0.0	49.5

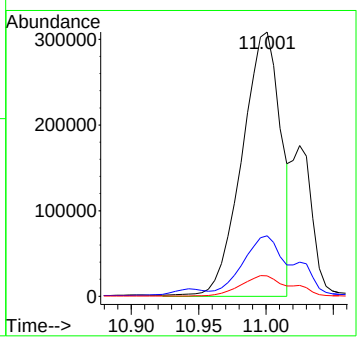


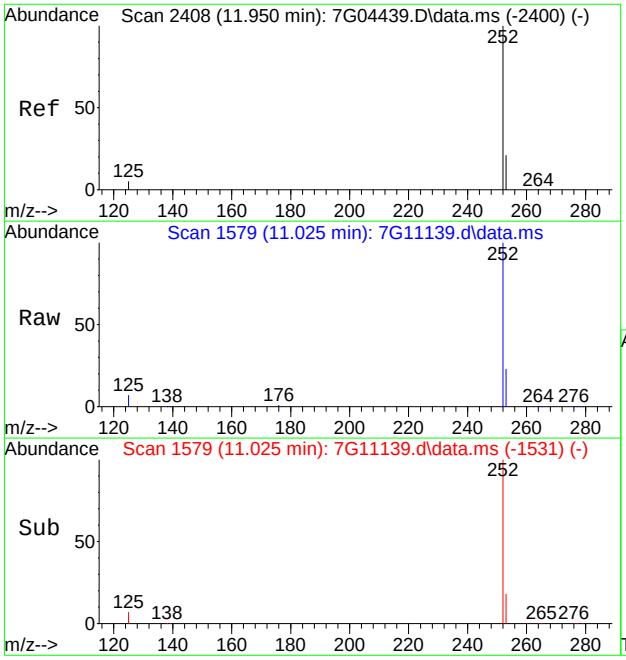


#23
Benzo[b]fluoranthene
Concen: 29.38 ppm m
RT: 11.001 min Scan# 1574
Delta R.T. 0.043 min
Lab File: 7G11139.d
Acq: 11 Aug 2020 12:02 pm

Tgt Ion:252 Resp: 618205

Ion	Ratio	Lower	Upper
252	100		
253	22.9	0.0	51.7
125	7.8	0.0	34.5

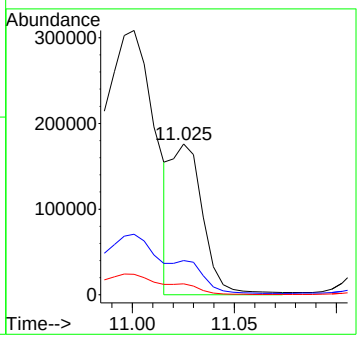


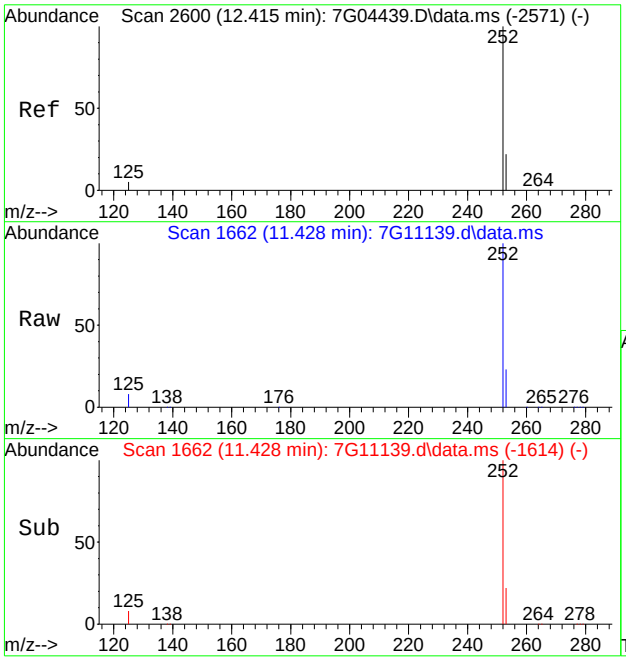


#24
Benzo[k]fluoranthene
Concen: 8.43 ppm m
RT: 11.025 min Scan# 1579
Delta R.T. 0.034 min
Lab File: 7G11139.d
Acq: 11 Aug 2020 12:02 pm

Tgt Ion:252 Resp: 191253

Ion	Ratio	Lower	Upper
252	100		
253	22.8	0.0	51.5
125	7.4	0.0	34.8

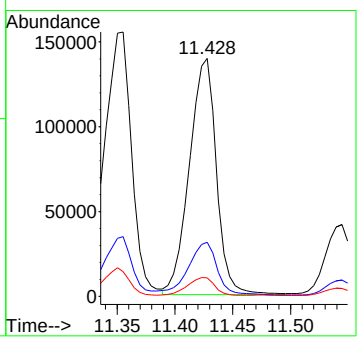


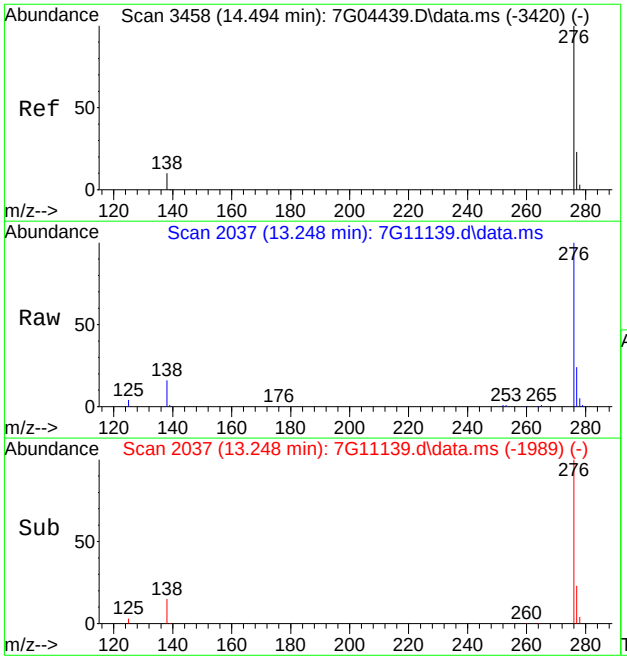


#25
Benzo[a]pyrene
Concen: 11.10 ppm
RT: 11.428 min Scan# 1662
Delta R.T. 0.034 min
Lab File: 7G11139.d
Acq: 11 Aug 2020 12:02 pm

Tgt Ion:252 Resp: 227694

Ion	Ratio	Lower	Upper
252	100		
253	21.7	0.0	51.6
125	7.5	0.0	34.8

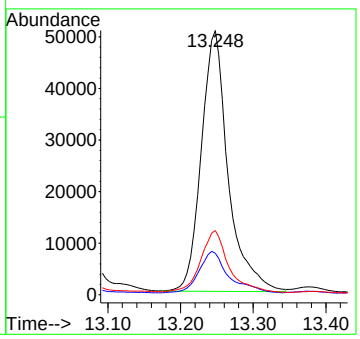


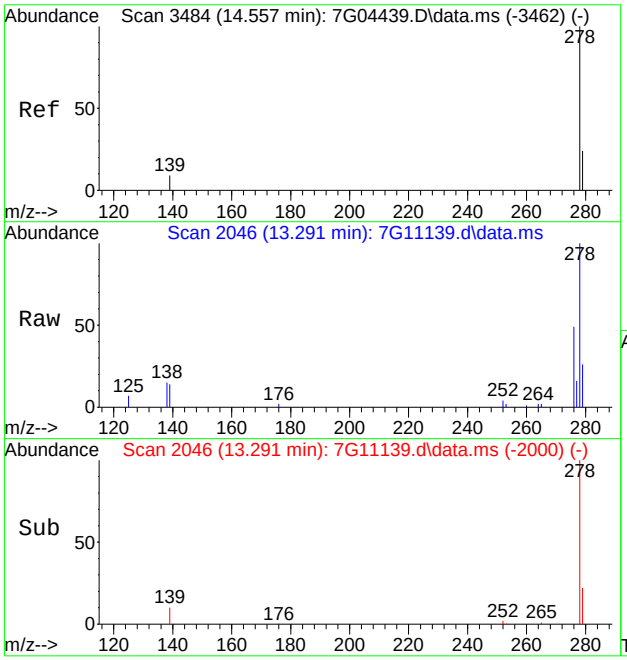


#26
Indeno[1,2,3-cd]pyrene
Concen: 9.70 ppm
RT: 13.248 min Scan# 2037
Delta R.T. 0.034 min
Lab File: 7G11139.d
Acq: 11 Aug 2020 12:02 pm

Tgt Ion:276 Resp: 129781

Ion	Ratio	Lower	Upper
276	100		
138	15.2	0.0	39.6
277	23.7	0.0	53.1

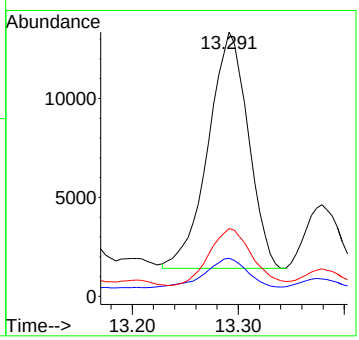


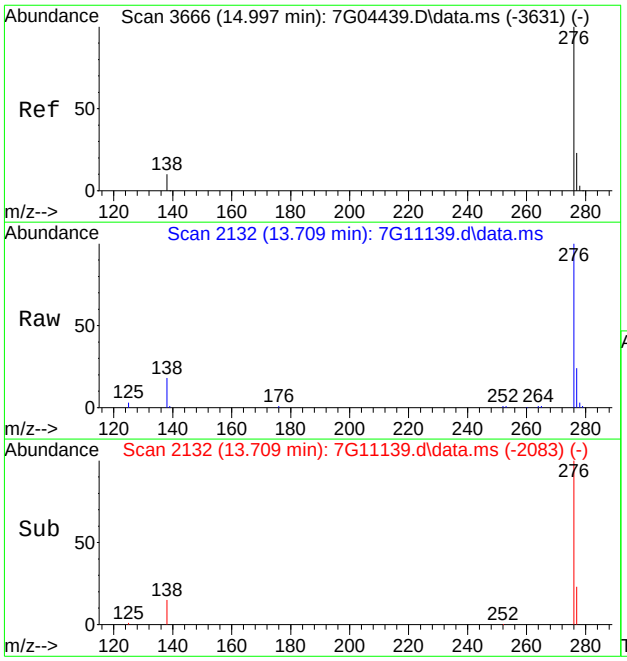


#27
Dibenz[a,h]anthracene
Concen: 2.11 ppm
RT: 13.291 min Scan# 2046
Delta R.T. 0.024 min
Lab File: 7G11139.d
Acq: 11 Aug 2020 12:02 pm

Tgt Ion:278 Resp: 31265

Ion	Ratio	Lower	Upper
278	100		
139	12.2	0.0	38.8
279	23.3	0.0	53.6

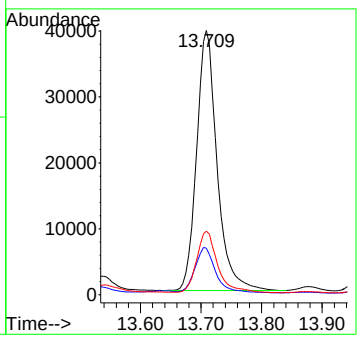




#28
Benzo[g,h,i]perylene
Concen: 5.73 ppm
RT: 13.709 min Scan# 2132
Delta R.T. 0.039 min
Lab File: 7G11139.d
Acq: 11 Aug 2020 12:02 pm

Tgt Ion:276 Resp: 92461

Ion	Ratio	Lower	Upper
276	100		
138	16.8	0.0	40.5
277	23.5	0.0	53.2



Manual Integration Approval Summary

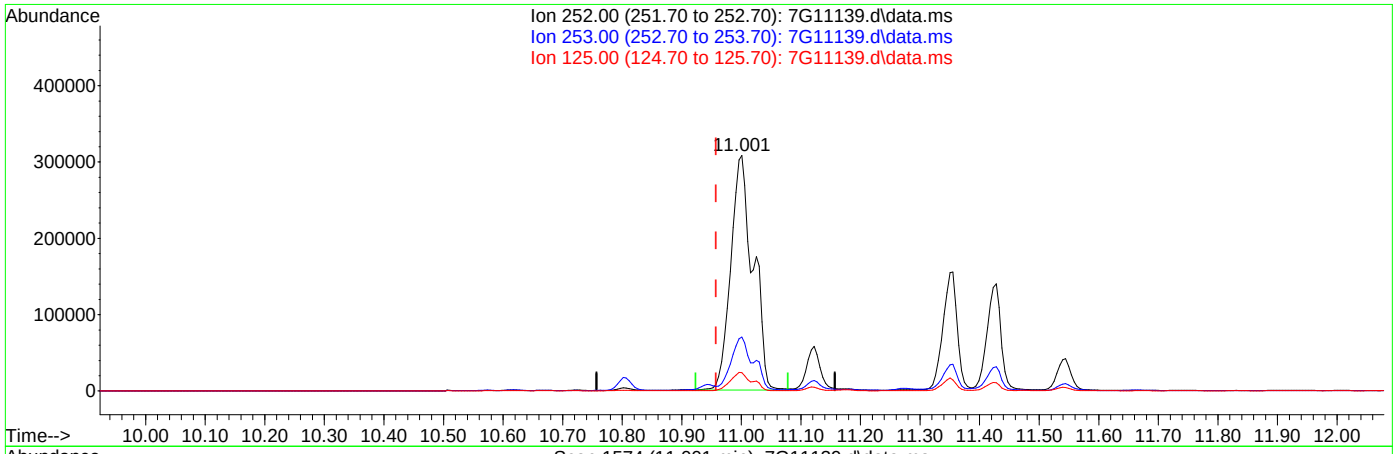
Sample Number: FA77615-3
Lab FileID: 7G11139.D
Injection Time: 08/11/20 12:02
Method: SW846 8270E BY SIM
Analyst approved: 08/12/20 09:33 Fouad Sekkar
Supervisor approved: 08/12/20 11:43 Nicole McCampbell

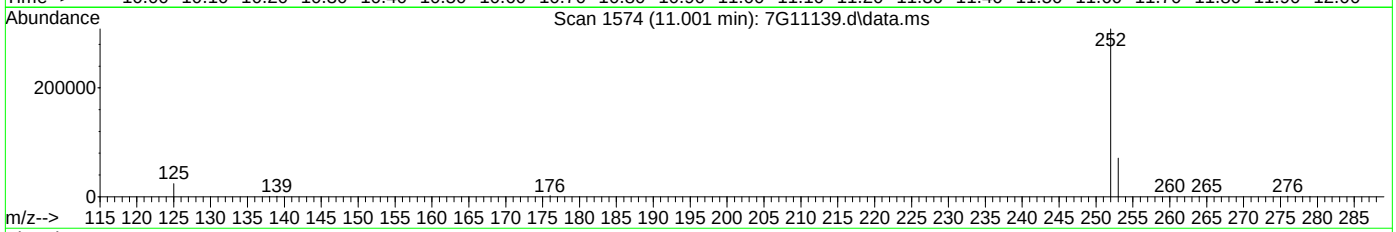
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(b)fluoranthene	205-99-2		11.00	Overlapping peak
Benzo(k)fluoranthene	207-08-9		11.03	Overlapping peak

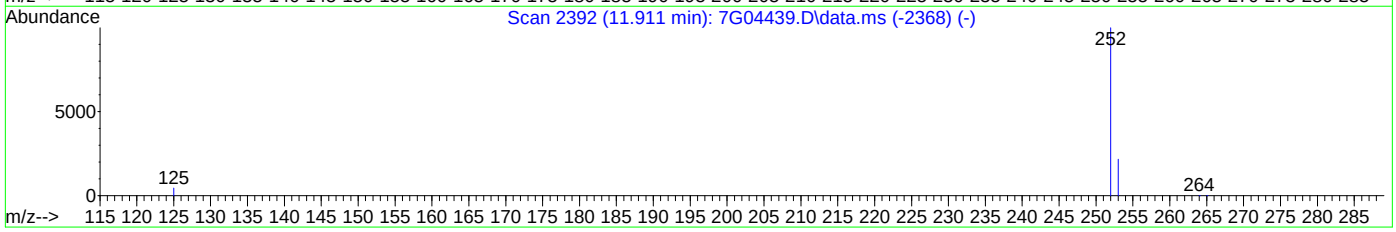
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11139.d
Acq On : 11 Aug 2020 12:02 pm
Operator : FOUADS
Sample : fa77615-3 e Inst : MSBNA8
Misc : op81485,S7G483,15.1,,,1,1,soil
ALS Vial : 11 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:26:32 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11139.d\data.ms

(23) Benzo[b]fluoranthene (P)

11.001min (+0.043) 37.87ppm

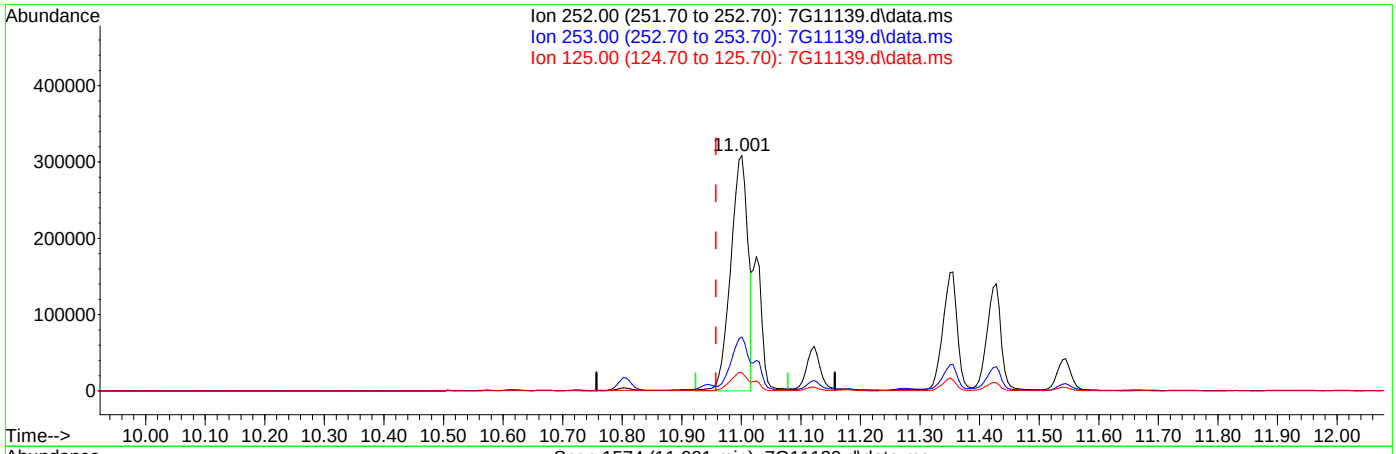
response 796979

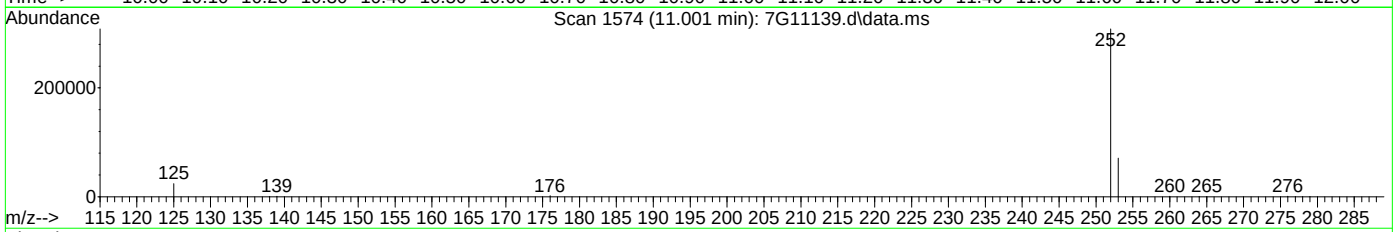
Ion	Exp%	Act%
252.00	100	100
253.00	21.70	22.36
125.00	4.50	7.69
0.00	0.00	0.00

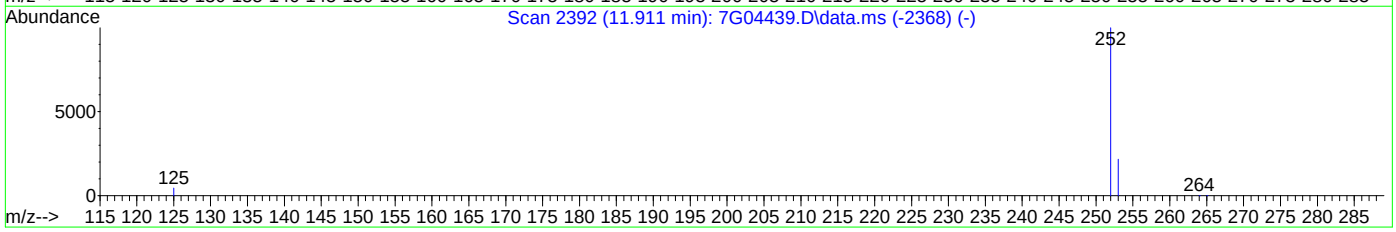
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11139.d
Acq On : 11 Aug 2020 12:02 pm
Operator : FOUADS
Sample : fa77615-3 e Inst : MSBNA8
Misc : op81485,S7G483,15.1,,,1,1,soil
ALS Vial : 11 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:26:32 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11139.d\data.ms

(23) Benzo[b]fluoranthene (P)

11.001min (+0.043) 29.38ppm m

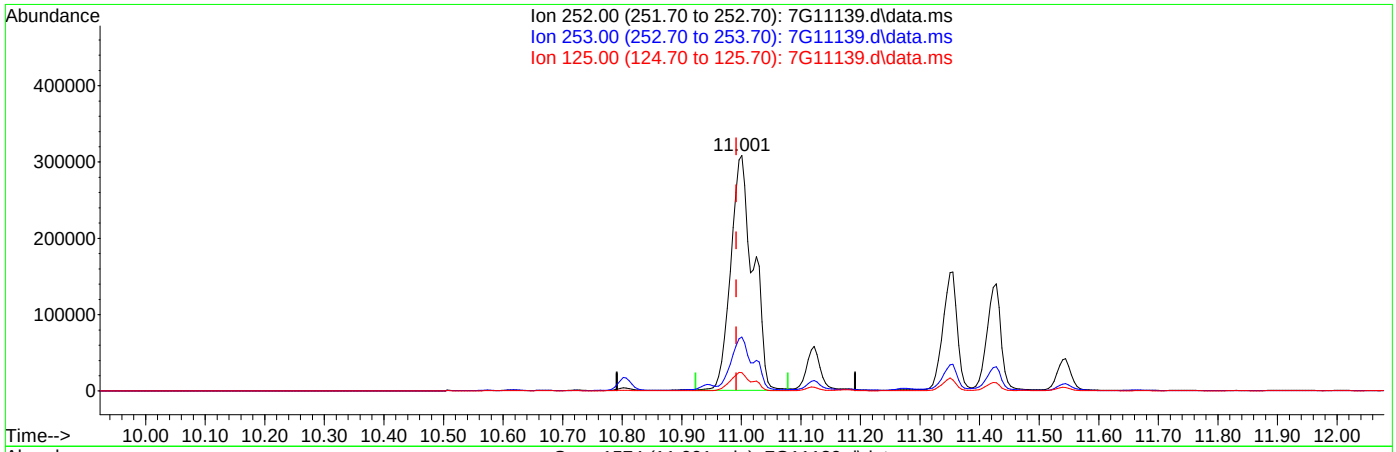
response 618205

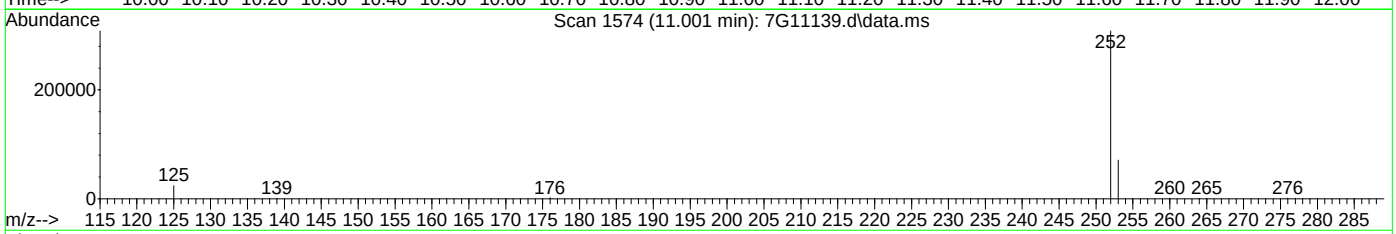
Ion	Exp%	Act%
252.00	100	100
253.00	21.70	22.91
125.00	4.50	7.80
0.00	0.00	0.00

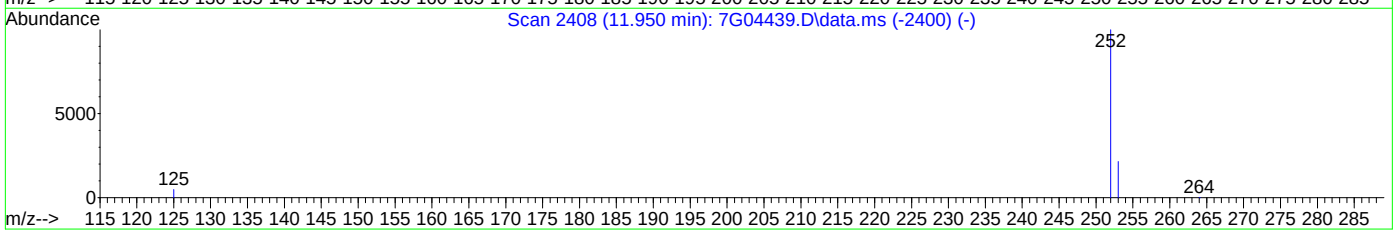
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11139.d
Acq On : 11 Aug 2020 12:02 pm
Operator : FOUADS
Sample : fa77615-3 e Inst : MSBNA8
Misc : op81485,S7G483,15.1,,,1,1,soil
ALS Vial : 11 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:26:32 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11139.d\data.ms

(24) Benzo[k]fluoranthene (P)

11.001min (+0.010) 32.92ppm

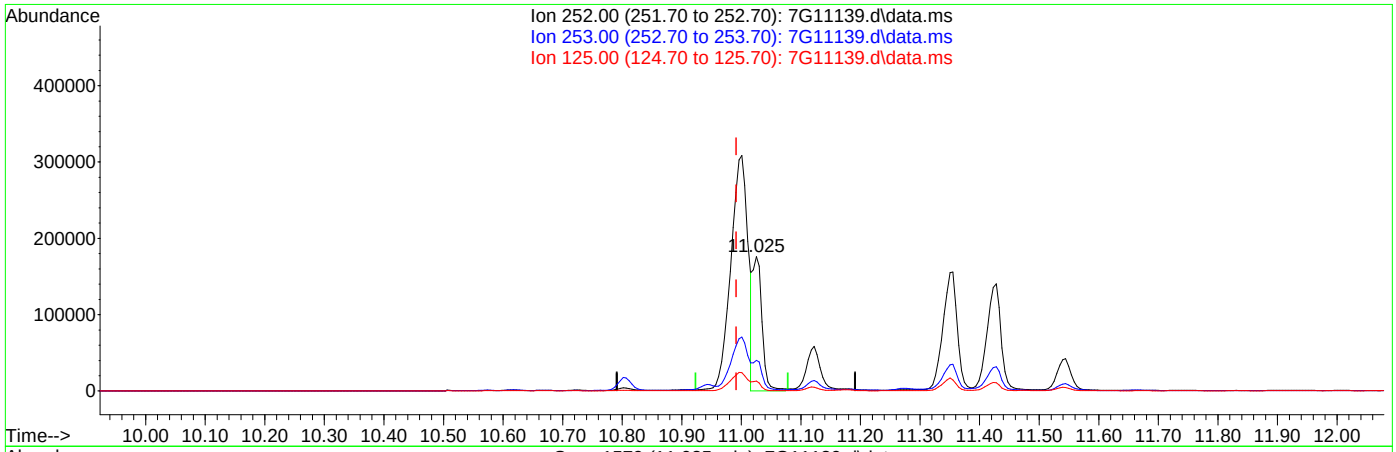
response 801195

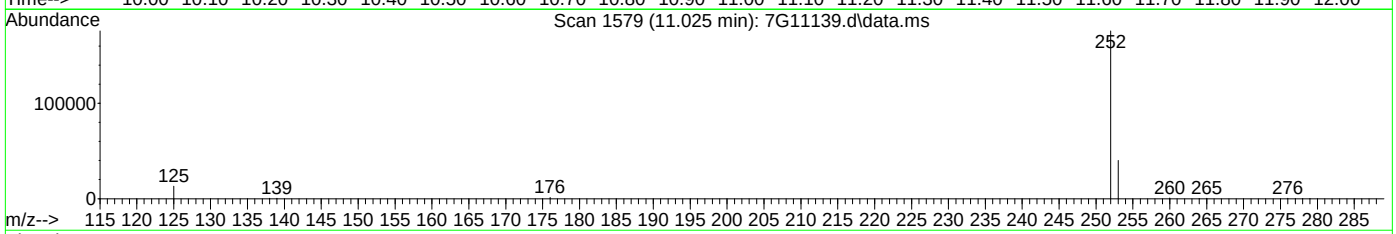
Ion	Exp%	Act%
252.00	100	100
253.00	21.50	22.36
125.00	4.80	7.69
0.00	0.00	0.00

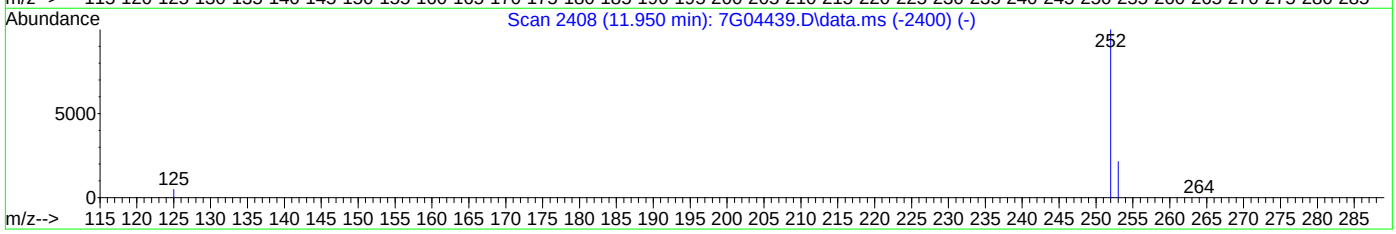
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11139.d
Acq On : 11 Aug 2020 12:02 pm
Operator : FOUADS
Sample : fa77615-3 e Inst : MSBNA8
Misc : op81485,S7G483,15.1,,,1,1,soil
ALS Vial : 11 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:26:32 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11139.d\data.ms

(24) Benzo[k]fluoranthene (P)

11.025min (+0.034) 8.43ppm m

response 191253

Ion	Exp%	Act%
252.00	100	100
253.00	21.50	22.78
125.00	4.80	7.38
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11140.d
Acq On : 11 Aug 2020 12:26 pm
Operator : FOUADS
Sample : fa77615-4 e Inst : MSBNA8
Misc : op81485,S7G483,15.4,,,1,1,soil
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:34:43 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

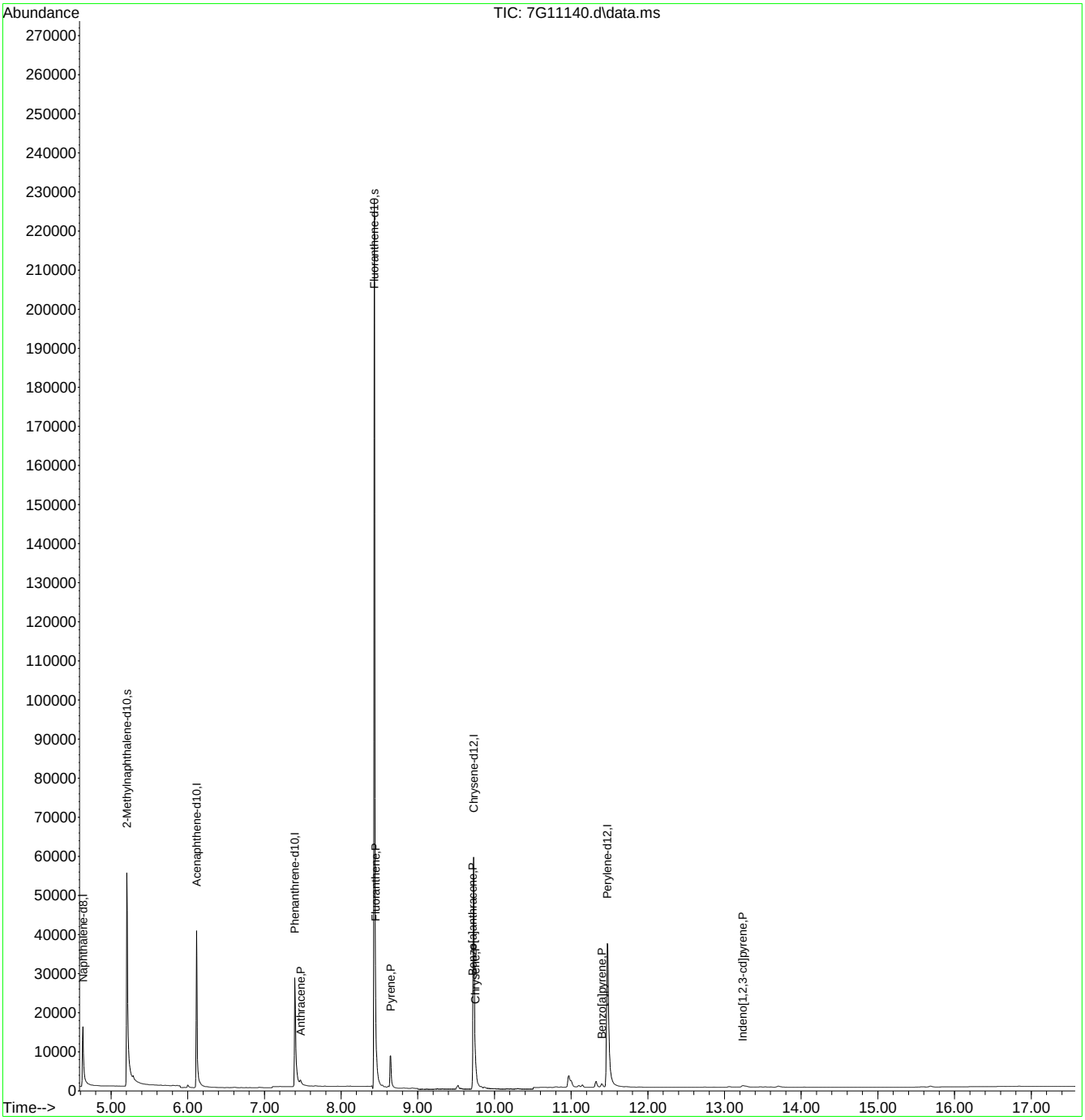
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.634	136	19156	4.00	ppm	0.00
6) Acenaphthene-d10	6.114	164	15860	4.00	ppm	0.00
11) Phenanthrene-d10	7.396	188	31122	4.00	ppm	0.00
18) Chrysene-d12	9.727	240	54619	4.00	ppm	0.00
22) Perylene-d12	11.472	264	52212	4.00	ppm	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.205	152	28944	10.08	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 100.80%			
17) Fluoranthene-d10	8.433	212	164498	10.11	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 101.10%			
Target Compounds						Qvalue
14) Anthracene	7.473	178	1210	0.12	ppm	99
16) Fluoranthene	8.448	202	5866	0.31	ppm	96
19) Pyrene	8.645	202	7629	0.35	ppm	96
20) Benzo[a]anthracene	9.717	228	1520	0.09	ppm	87
21) Chrysene	9.749	228	3561	0.19	ppm	96
25) Benzo[a]pyrene	11.399	252	1149	0.07	ppm	98
26) Indeno[1,2,3-cd]pyrene	13.238	276	1086	0.10	ppm	93

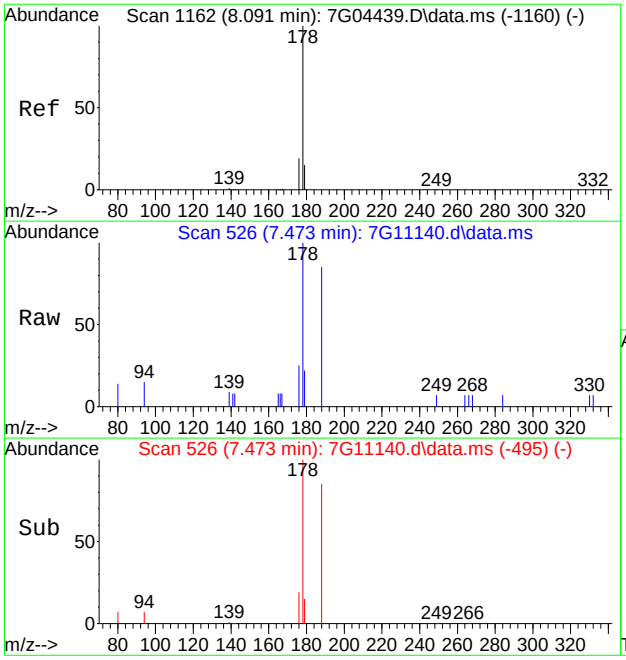
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11140.d
Acq On : 11 Aug 2020 12:26 pm
Operator : FOUADS
Sample : fa77615-4 e Inst : MSBNA8
Misc : op81485,S7G483,15.4,,,1,1,soil
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:34:43 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

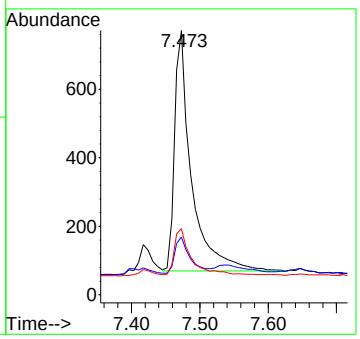


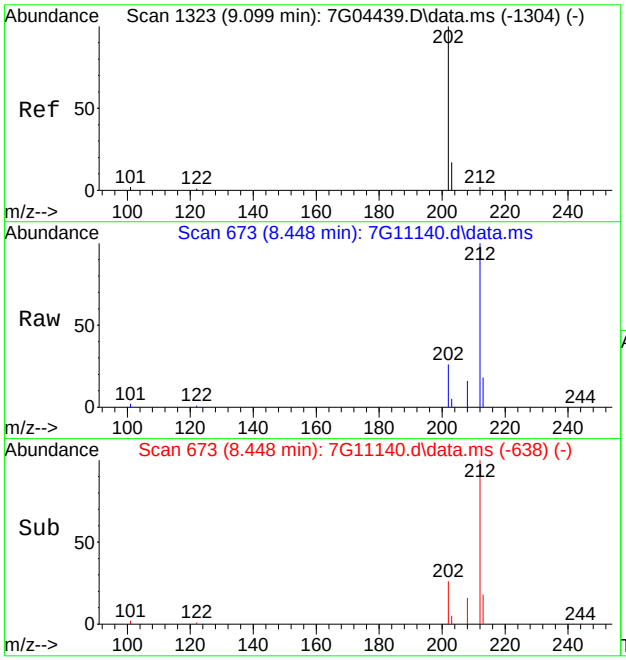


#14
Anthracene
Concen: 0.12 ppm
RT: 7.473 min Scan# 526
Delta R.T. 0.014 min
Lab File: 7G11140.d
Acq: 11 Aug 2020 12:26 pm

Tgt Ion:178 Resp: 1210

Ion	Ratio	Lower	Upper
178	100		
179	14.8	0.0	45.1
176	19.3	0.0	48.8

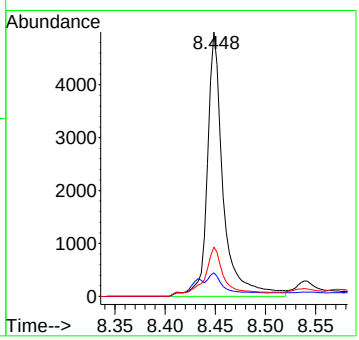


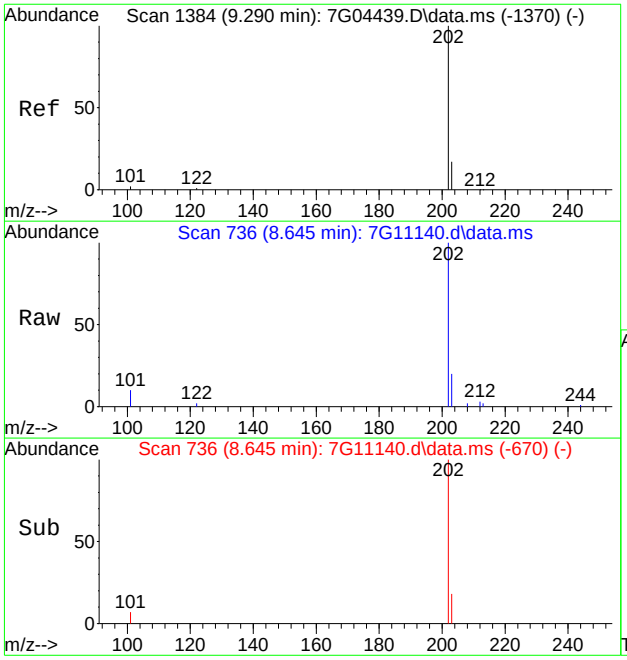


#16
Fluoranthene
Concen: 0.31 ppm
RT: 8.448 min Scan# 673
Delta R.T. -0.000 min
Lab File: 7G11140.d
Acq: 11 Aug 2020 12:26 pm

Tgt Ion:202 Resp: 5866

Ion	Ratio	Lower	Upper
202	100		
101	8.4	0.0	32.2
203	18.0	0.0	47.2

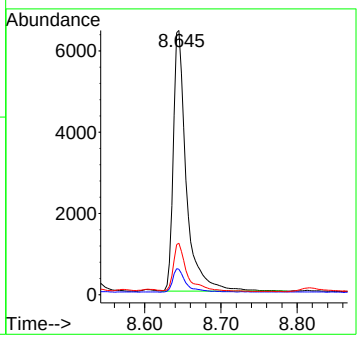


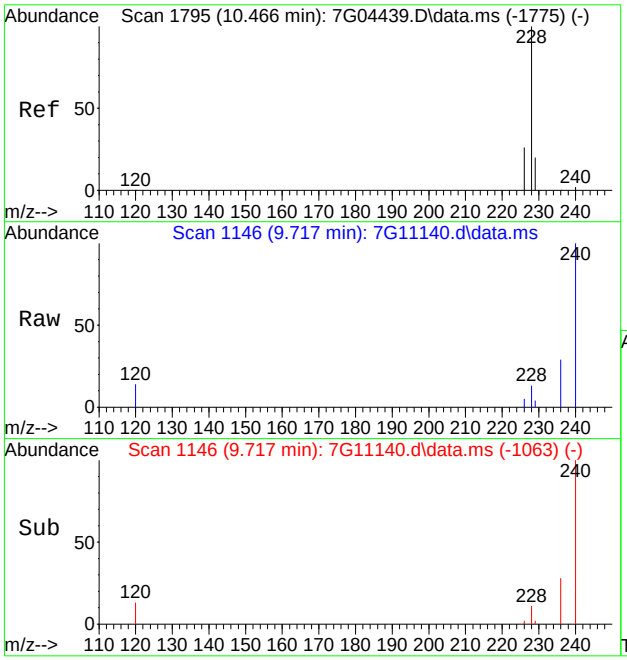


#19
Pyrene
Concen: 0.35 ppm
RT: 8.645 min Scan# 736
Delta R.T. 0.006 min
Lab File: 7G11140.d
Acq: 11 Aug 2020 12:26 pm

Tgt Ion:202 Resp: 7629

Ion	Ratio	Lower	Upper
202	100		
101	8.7	0.0	32.4
203	18.4	0.0	47.4

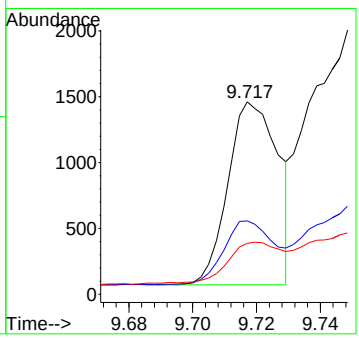


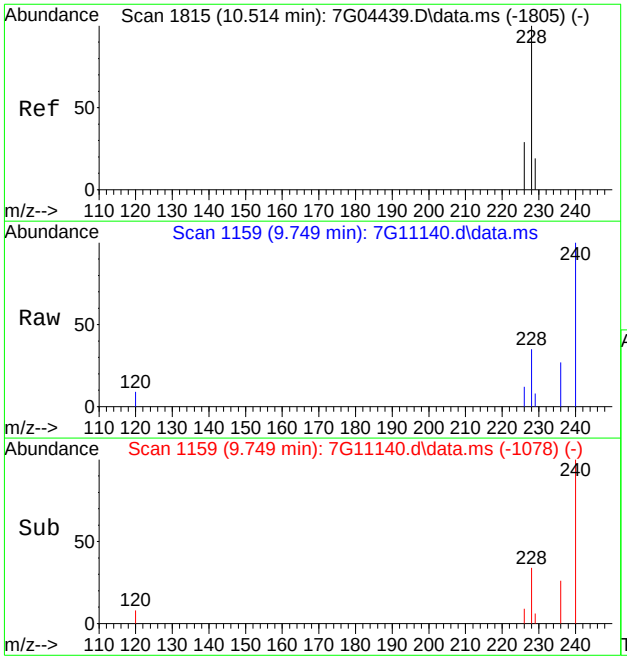


#20
Benzo[a]anthracene
Concen: 0.09 ppm
RT: 9.717 min Scan# 1146
Delta R.T. -0.000 min
Lab File: 7G11140.d
Acq: 11 Aug 2020 12:26 pm

Tgt Ion:228 Resp: 1520

Ion	Ratio	Lower	Upper
228	100		
226	37.4	0.0	56.1
229	19.7	0.0	49.5

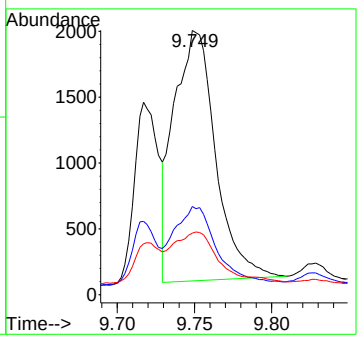


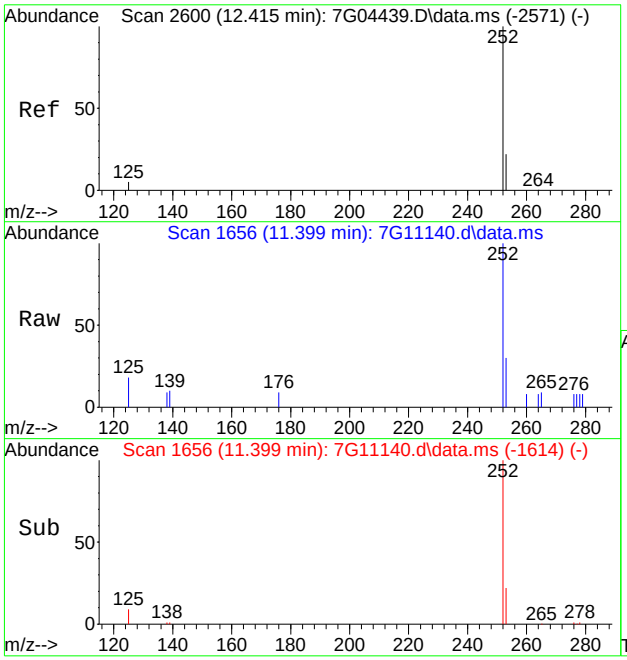


#21
Chrysene
Concen: 0.19 ppm
RT: 9.749 min Scan# 1159
Delta R.T. -0.005 min
Lab File: 7G11140.d
Acq: 11 Aug 2020 12:26 pm

Tgt Ion:228 Resp: 3561

Ion	Ratio	Lower	Upper
228	100		
226	31.1	0.0	58.9
229	17.9	0.0	49.5

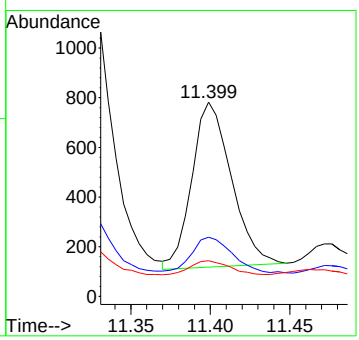


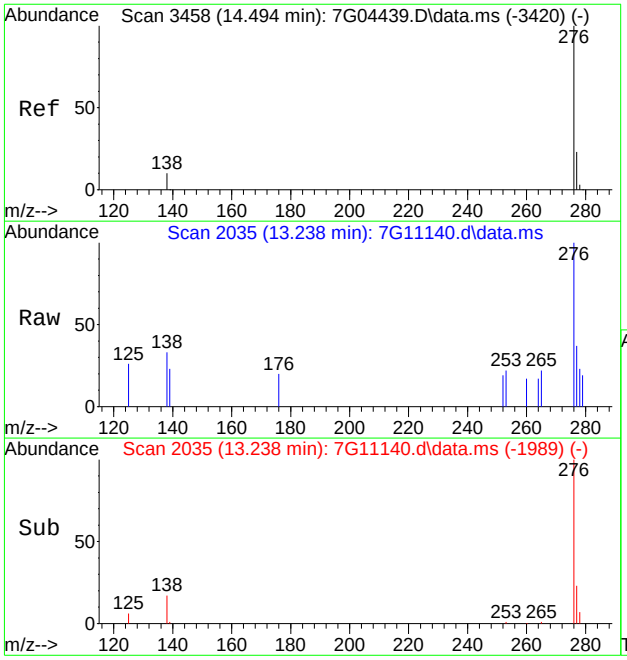


#25
Benzo[a]pyrene
Concen: 0.07 ppm
RT: 11.399 min Scan# 1656
Delta R.T. 0.005 min
Lab File: 7G11140.d
Acq: 11 Aug 2020 12:26 pm

Tgt Ion:252 Resp: 1149

Ion	Ratio	Lower	Upper
252	100		
253	21.6	0.0	51.6
125	8.1	0.0	34.8

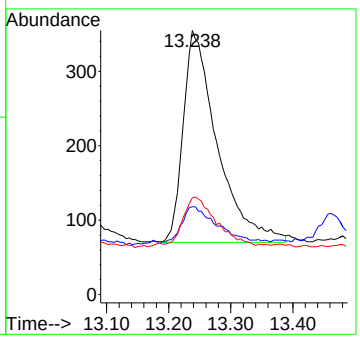




#26
Indeno[1,2,3-cd]pyrene
Concen: 0.10 ppm
RT: 13.238 min Scan# 2035
Delta R.T. 0.024 min
Lab File: 7G11140.d
Acq: 11 Aug 2020 12:26 pm

Tgt Ion:276 Resp: 1086

Ion	Ratio	Lower	Upper
276	100		
138	16.6	0.0	39.6
277	22.5	0.0	53.1



Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 08/12/20 11:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11141.d
Acq On : 11 Aug 2020 12:50 pm
Operator : FOUADS
Sample : fa77615-5 e Inst : MSBNA8
Misc : op81485,S7G483,15.2,,,1,1,soil
ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:35:29 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

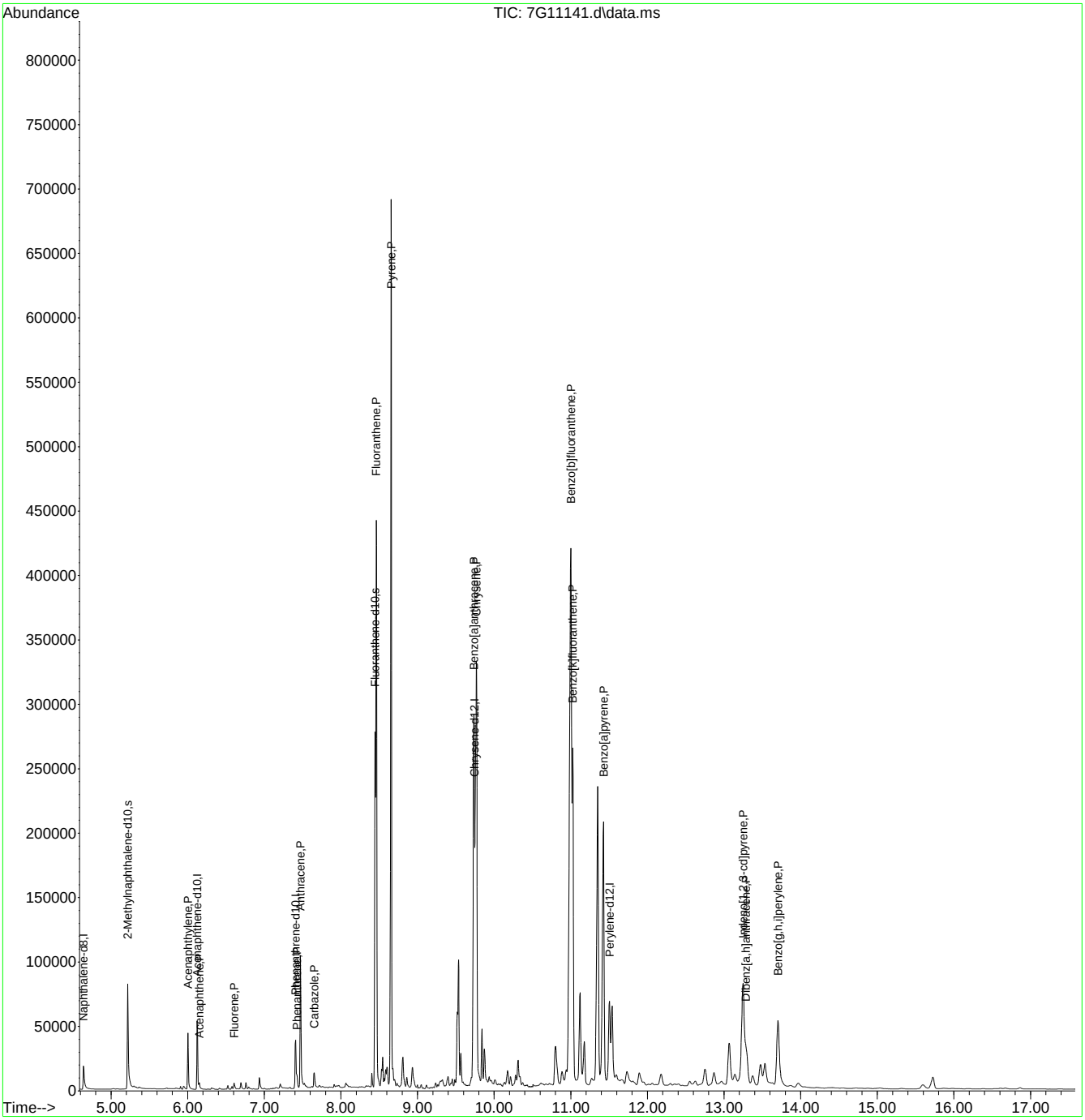
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.640	136	20891	4.00	ppm	0.01
6) Acenaphthene-d10	6.123	164	17140	4.00	ppm	0.00
11) Phenanthrene-d10	7.410	188	33466	4.00	ppm	0.01
18) Chrysene-d12	9.744	240	65680	4.00	ppm	0.02
22) Perylene-d12	11.506	264	63725	4.00	ppm	0.03
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.217	152	34022	10.83	ppm	0.01
Spiked Amount 10.000	Range 50 - 150		Recovery =	108.30%		
17) Fluoranthene-d10	8.445	212	189510	10.82	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery =	108.20%		
Target Compounds						Qvalue
7) Acenaphthylene	6.003	152	27813	2.82	ppm	99
8) Acenaphthene	6.152	153	1371	0.22	ppm	97
10) Fluorene	6.607	166	2122	0.31	ppm	98
13) Phenanthrene	7.424	178	6158	0.56	ppm	96
14) Anthracene	7.473	178	67674	6.01	ppm	99
15) Carbazole	7.654	167	10763	0.54	ppm	97
16) Fluoranthene	8.461	202	267444	12.52	ppm	98
19) Pyrene	8.654	202	433305	16.31	ppm	96
20) Benzo[a]anthracene	9.734	228	181443	8.71	ppm	82
21) Chrysene	9.768	228	311667	13.71	ppm	98
23) Benzo[b]fluoranthene	11.001	252	650836	30.09	ppm	98
24) Benzo[k]fluoranthene	11.025	252	208689m	8.94	ppm	
25) Benzo[a]pyrene	11.428	252	246650	11.70	ppm	99
26) Indeno[1,2,3-cd]pyrene	13.248	276	143869	10.46	ppm	94
27) Dibenz[a,h]anthracene	13.287	278	33916	2.22	ppm	97
28) Benzo[g,h,i]perylene	13.704	276	89441	5.39	ppm	94

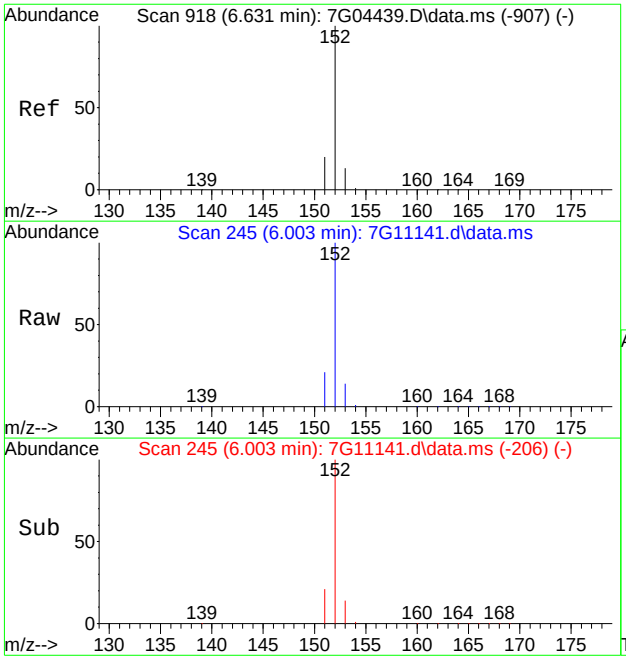
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11141.d
Acq On : 11 Aug 2020 12:50 pm
Operator : FOUADS
Sample : fa77615-5 e Inst : MSBNA8
Misc : op81485,S7G483,15.2,,,1,1,soil
ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:35:29 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

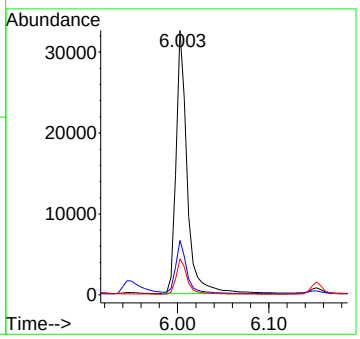


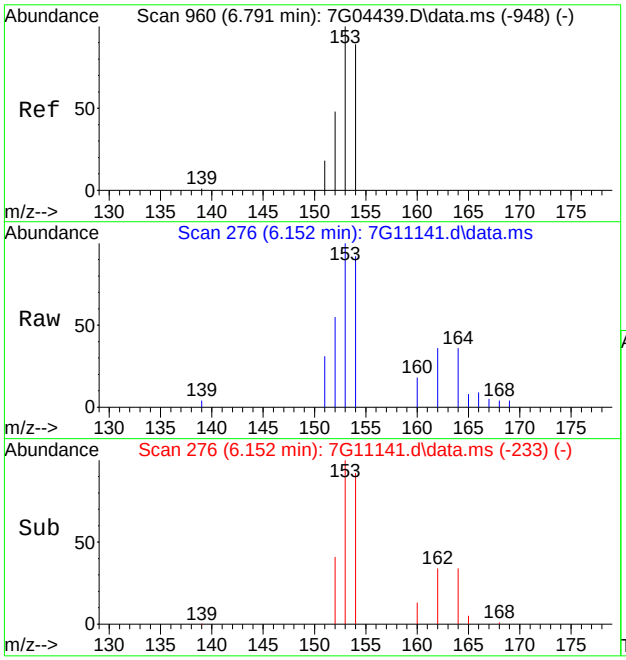


#7
Acenaphthylene
Concen: 2.82 ppm
RT: 6.003 min Scan# 245
Delta R.T. 0.010 min
Lab File: 7G11141.d
Acq: 11 Aug 2020 12:50 pm

Tgt Ion:152 Resp: 27813

Ion	Ratio	Lower	Upper
152	100		
151	20.0	0.0	49.8
153	13.4	0.0	42.8

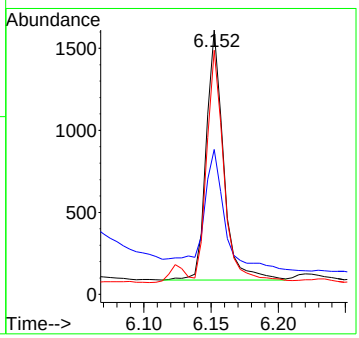


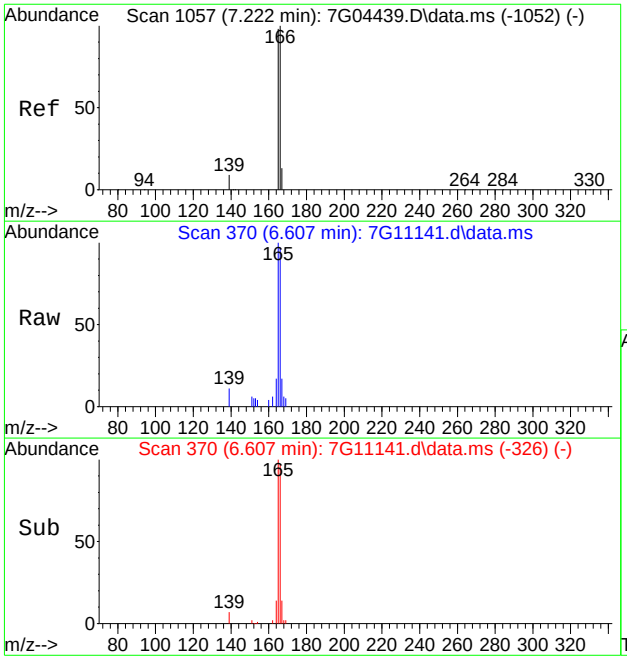


#8
Acenaphthene
Concen: 0.22 ppm
RT: 6.152 min Scan# 276
Delta R.T. 0.010 min
Lab File: 7G11141.d
Acq: 11 Aug 2020 12:50 pm

Tgt Ion:153 Resp: 1371

Ion	Ratio	Lower	Upper
153	100		
152	46.0	18.3	78.3
154	92.3	59.3	119.3

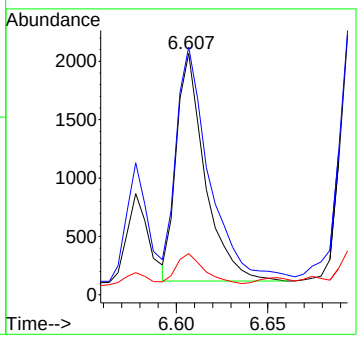


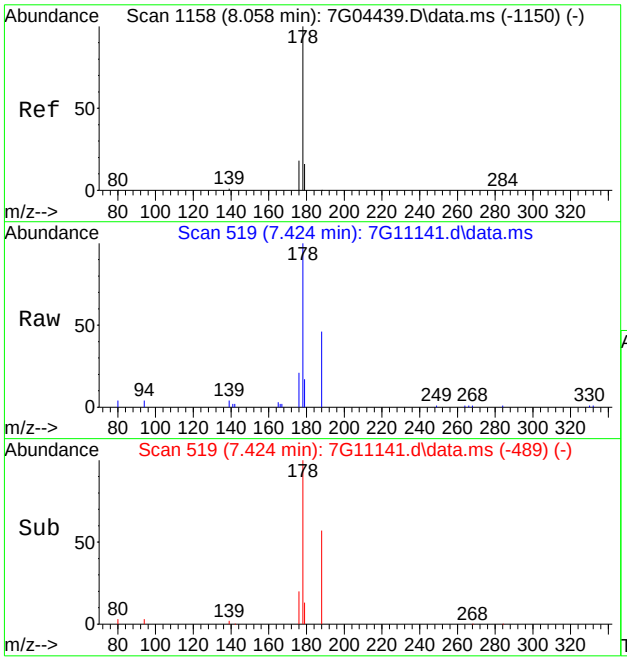


#10
Fluorene
Concen: 0.31 ppm
RT: 6.607 min Scan# 370
Delta R.T. 0.015 min
Lab File: 7G11141.d
Acq: 11 Aug 2020 12:50 pm

Tgt Ion:166 Resp: 2122

Ion	Ratio	Lower	Upper
166	100		
165	100.3	68.2	128.2
167	12.3	0.0	42.9

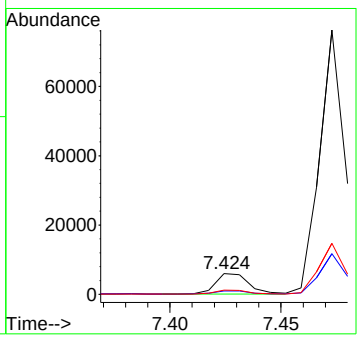


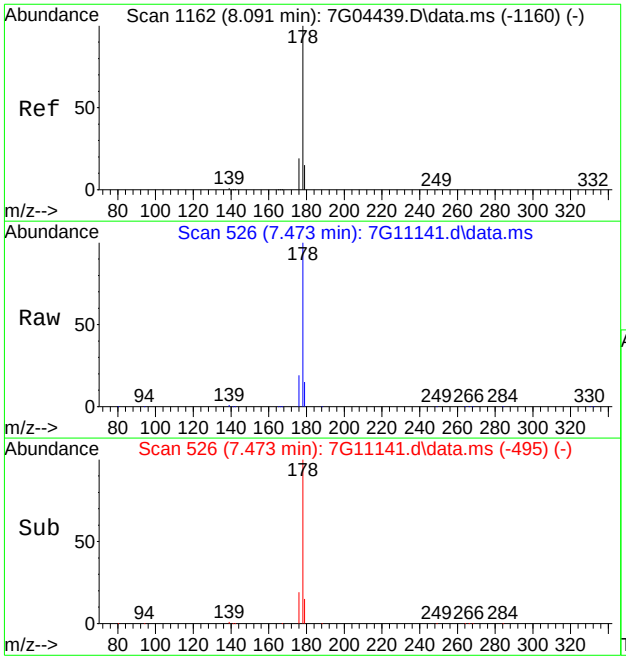


#13
Phenanthrene
Concen: 0.56 ppm
RT: 7.424 min Scan# 519
Delta R.T. 0.007 min
Lab File: 7G11141.d
Acq: 11 Aug 2020 12:50 pm

Tgt Ion:178 Resp: 6158

Ion	Ratio	Lower	Upper
178	100		
179	14.7	0.0	45.7
176	20.2	0.0	48.0

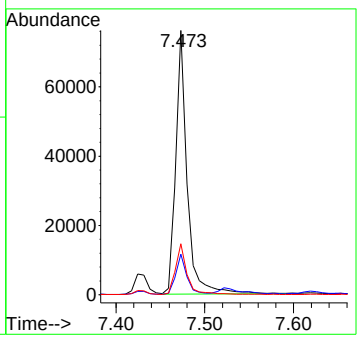


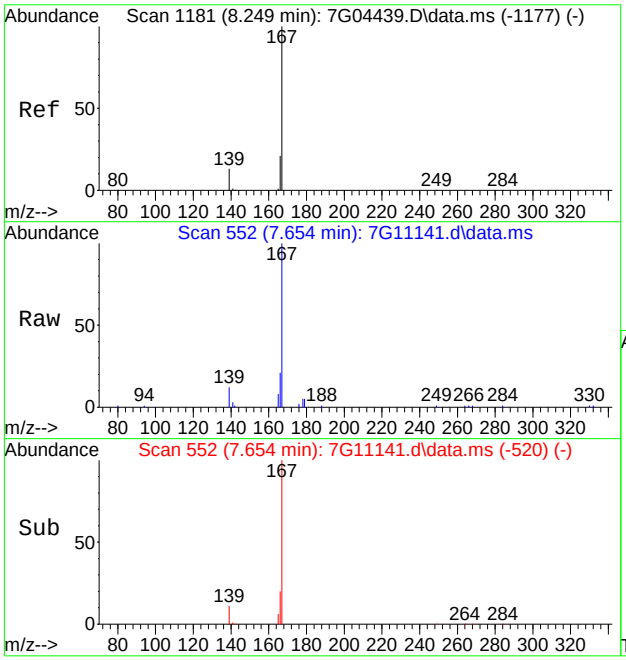


#14
Anthracene
Concen: 6.01 ppm
RT: 7.473 min Scan# 526
Delta R.T. 0.014 min
Lab File: 7G11141.d
Acq: 11 Aug 2020 12:50 pm

Tgt Ion:178 Resp: 67674

Ion	Ratio	Lower	Upper
178	100		
179	15.1	0.0	45.1
176	19.2	0.0	48.8

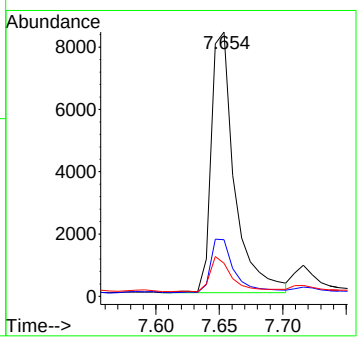


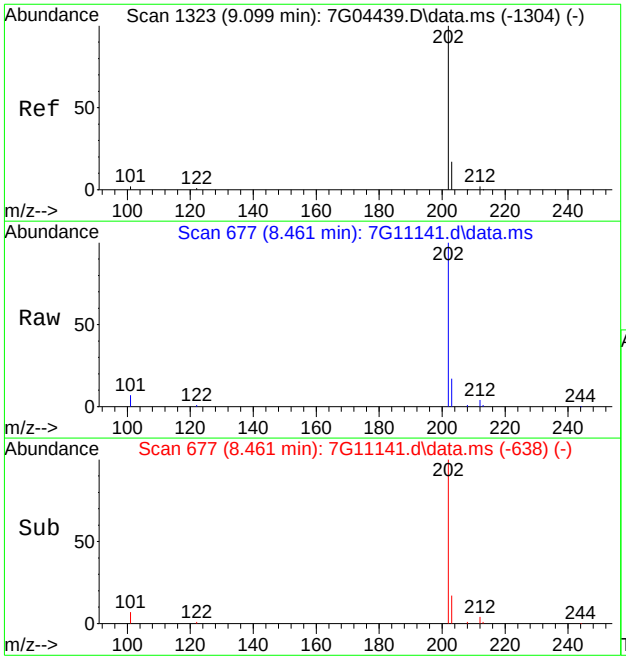


#15
Carbazole
Concen: 0.54 ppm
RT: 7.654 min Scan# 552
Delta R.T. 0.021 min
Lab File: 7G11141.d
Acq: 11 Aug 2020 12:50 pm

Tgt Ion:167 Resp: 10763

Ion	Ratio	Lower	Upper
167	100		
166	20.2	1.2	41.2
139	10.6	0.0	32.8

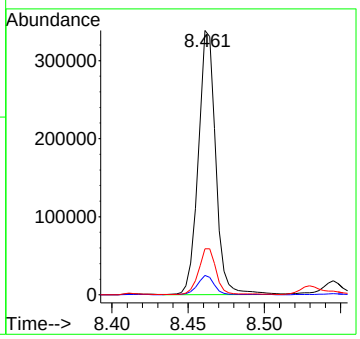


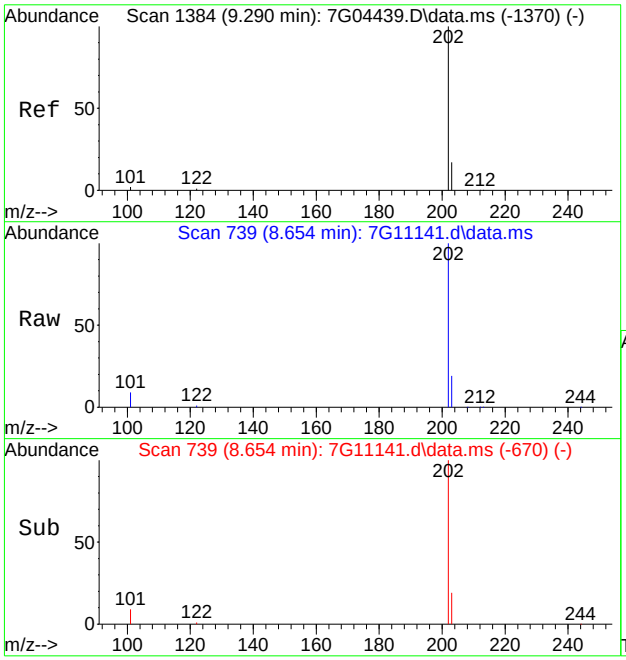


#16
Fluoranthene
Concen: 12.52 ppm
RT: 8.461 min Scan# 677
Delta R.T. 0.013 min
Lab File: 7G11141.d
Acq: 11 Aug 2020 12:50 pm

Tgt Ion:202 Resp: 267444

Ion	Ratio	Lower	Upper
202	100		
101	7.3	0.0	32.2
203	17.2	0.0	47.2

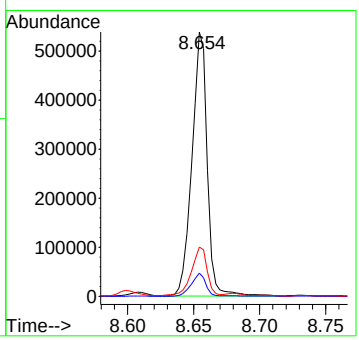


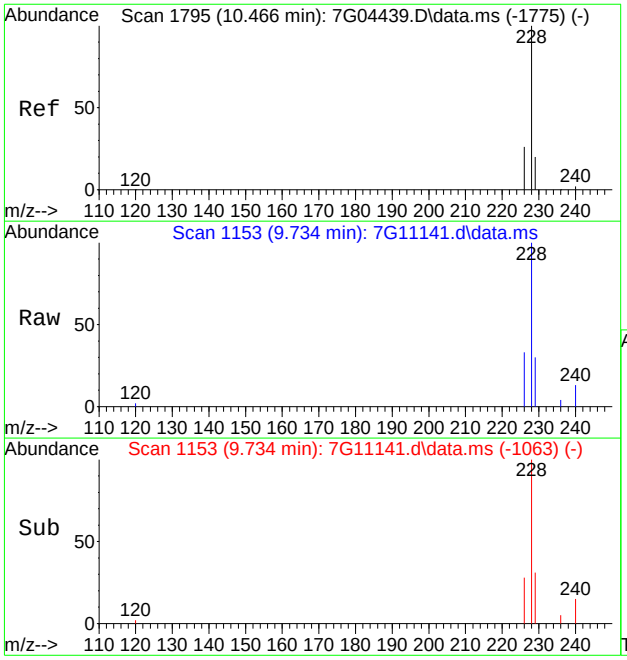


#19
Pyrene
Concen: 16.31 ppm
RT: 8.654 min Scan# 739
Delta R.T. 0.016 min
Lab File: 7G11141.d
Acq: 11 Aug 2020 12:50 pm

Tgt Ion:202 Resp: 433305

Ion	Ratio	Lower	Upper
202	100		
101	8.8	0.0	32.4
203	18.4	0.0	47.4

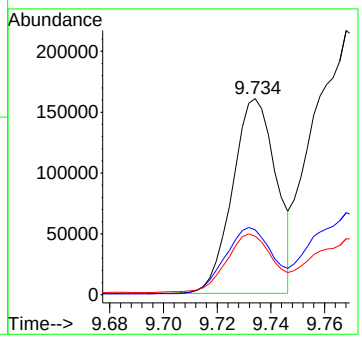


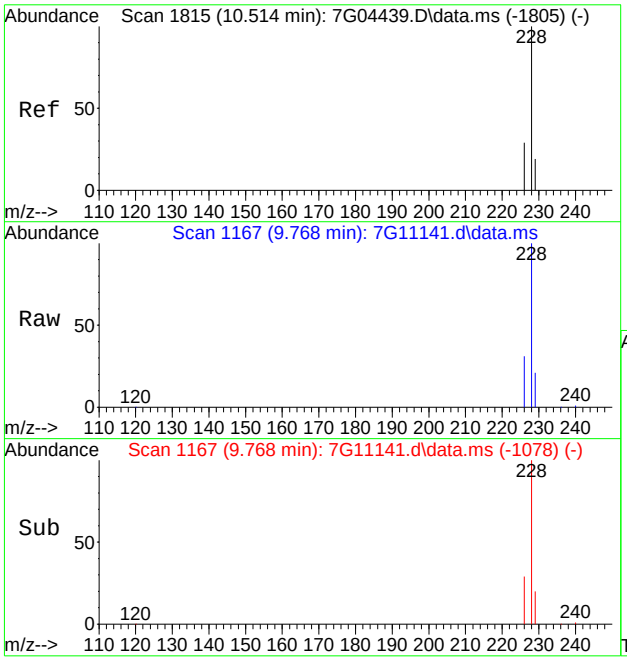


#20
Benzo[a]anthracene
Concen: 8.71 ppm
RT: 9.734 min Scan# 1153
Delta R.T. 0.017 min
Lab File: 7G11141.d
Acq: 11 Aug 2020 12:50 pm

Tgt Ion:228 Resp: 181443

Ion	Ratio	Lower	Upper
228	100		
226	33.3	0.0	56.1
229	30.0	0.0	49.5

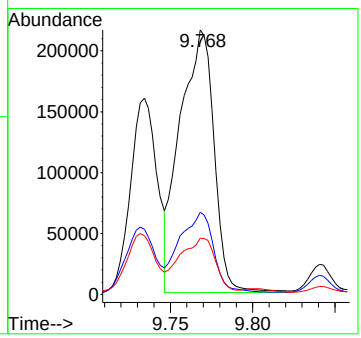


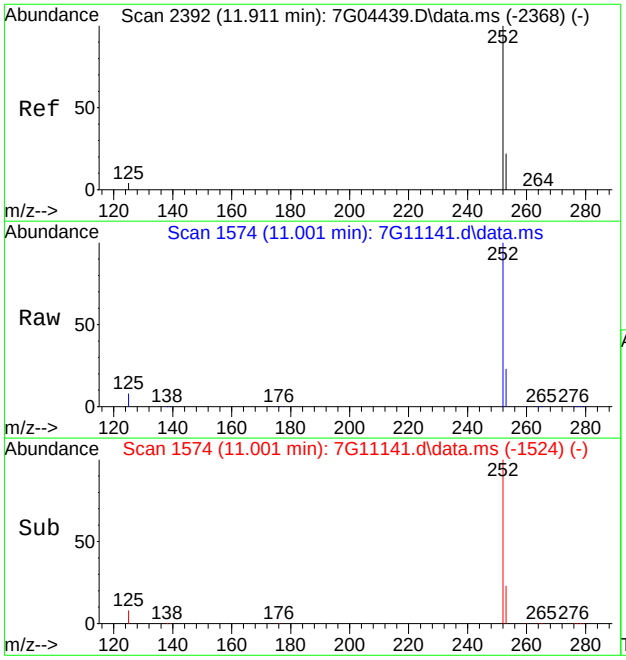


#21
Chrysene
Concen: 13.71 ppm
RT: 9.768 min Scan# 1167
Delta R.T. 0.015 min
Lab File: 7G11141.d
Acq: 11 Aug 2020 12:50 pm

Tgt Ion:228 Resp: 311667

Ion	Ratio	Lower	Upper
228	100		
226	30.7	0.0	58.9
229	19.8	0.0	49.5

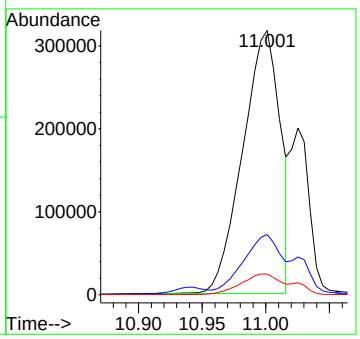


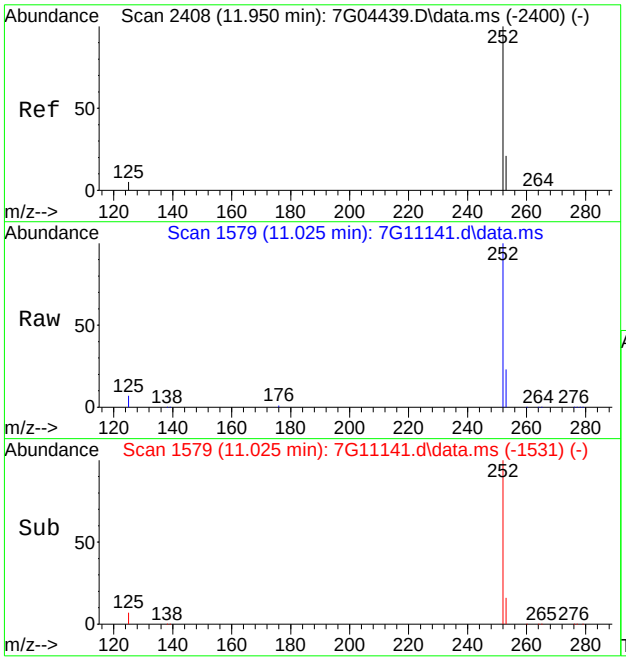


#23
Benzo[b]fluoranthene
Concen: 30.09 ppm
RT: 11.001 min Scan# 1574
Delta R.T. 0.044 min
Lab File: 7G11141.d
Acq: 11 Aug 2020 12:50 pm

Tgt Ion:252 Resp: 650836

Ion	Ratio	Lower	Upper
252	100		
253	21.9	0.0	51.7
125	7.9	0.0	34.5

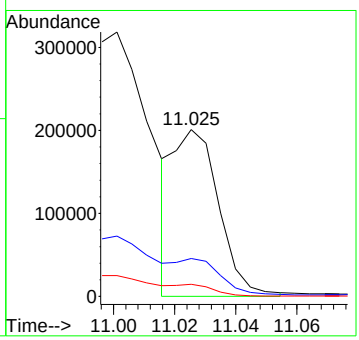


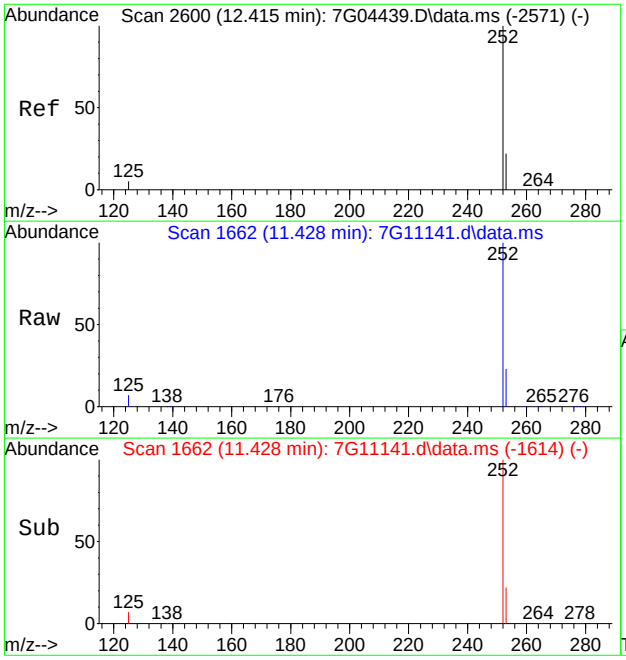


#24
Benzo[k]fluoranthene
Concen: 8.94 ppm m
RT: 11.025 min Scan# 1579
Delta R.T. 0.034 min
Lab File: 7G11141.d
Acq: 11 Aug 2020 12:50 pm

Tgt Ion:252 Resp: 208689

Ion	Ratio	Lower	Upper
252	100		
253	22.7	0.0	51.5
125	7.3	0.0	34.8

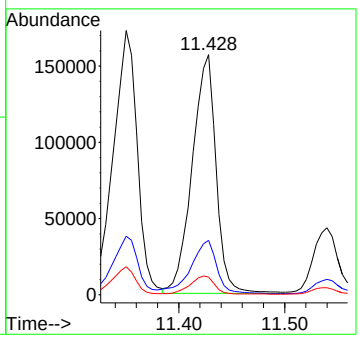


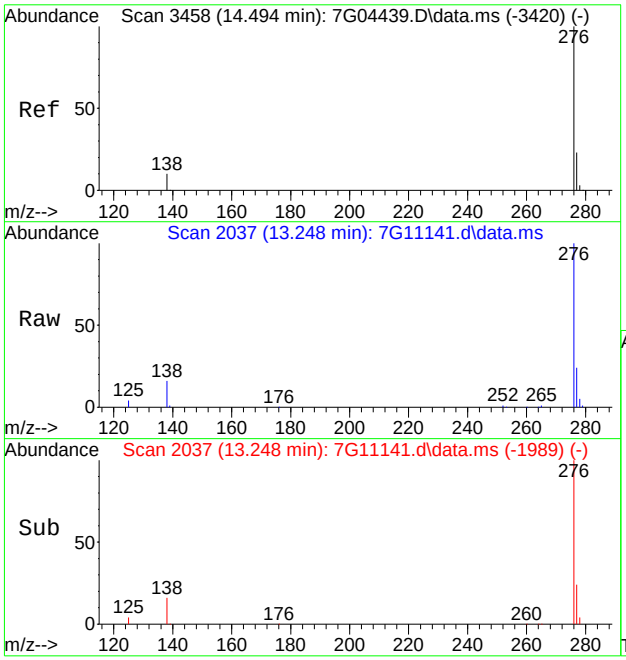


#25
Benzo[a]pyrene
Concen: 11.70 ppm
RT: 11.428 min Scan# 1662
Delta R.T. 0.034 min
Lab File: 7G11141.d
Acq: 11 Aug 2020 12:50 pm

Tgt Ion:252 Resp: 246650

Ion	Ratio	Lower	Upper
252	100		
253	21.6	0.0	51.6
125	7.1	0.0	34.8

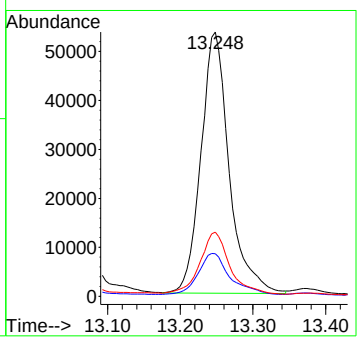


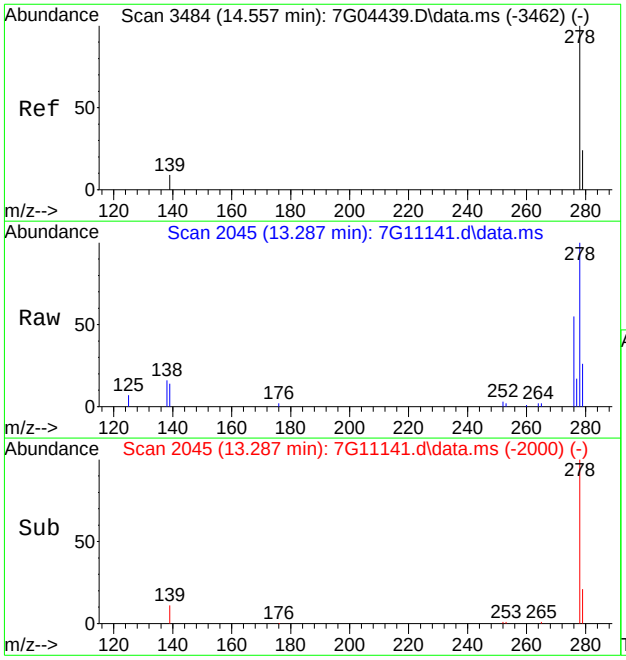


#26
Indeno[1,2,3-cd]pyrene
Concen: 10.46 ppm
RT: 13.248 min Scan# 2037
Delta R.T. 0.034 min
Lab File: 7G11141.d
Acq: 11 Aug 2020 12:50 pm

Tgt Ion:276 Resp: 143869

Ion	Ratio	Lower	Upper
276	100		
138	15.6	0.0	39.6
277	23.7	0.0	53.1

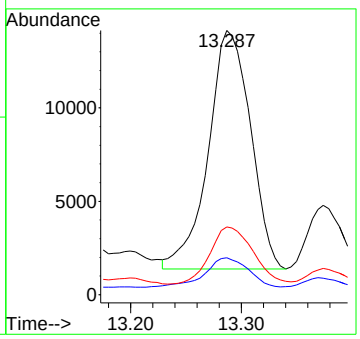


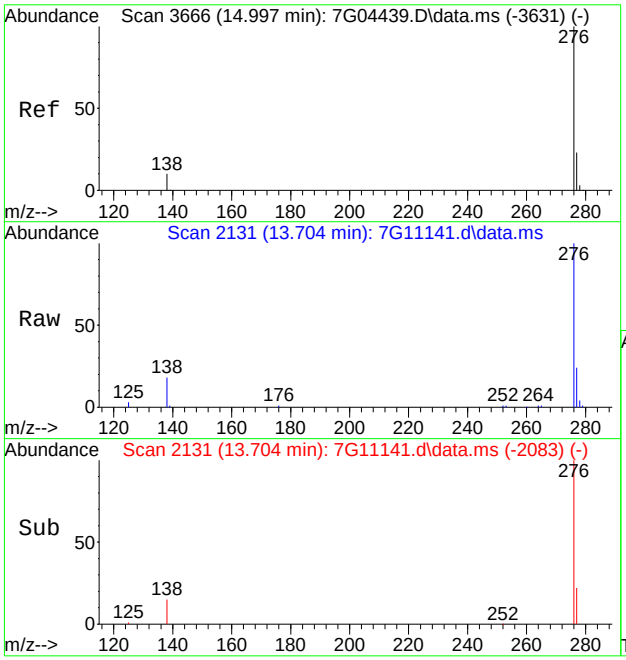


#27
Dibenz[a,h]anthracene
Concen: 2.22 ppm
RT: 13.287 min Scan# 2045
Delta R.T. 0.019 min
Lab File: 7G11141.d
Acq: 11 Aug 2020 12:50 pm

Tgt Ion:278 Resp: 33916

Ion	Ratio	Lower	Upper
278	100		
139	12.2	0.0	38.8
279	23.8	0.0	53.6

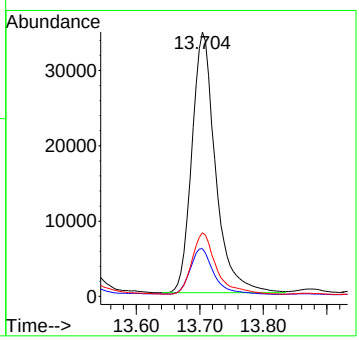




#28
Benzo[g,h,i]perylene
Concen: 5.39 ppm
RT: 13.704 min Scan# 2131
Delta R.T. 0.034 min
Lab File: 7G11141.d
Acq: 11 Aug 2020 12:50 pm

Tgt Ion:276 Resp: 89441

Ion	Ratio	Lower	Upper
276	100		
138	17.5	0.0	40.5
277	23.5	0.0	53.2



Manual Integration Approval Summary

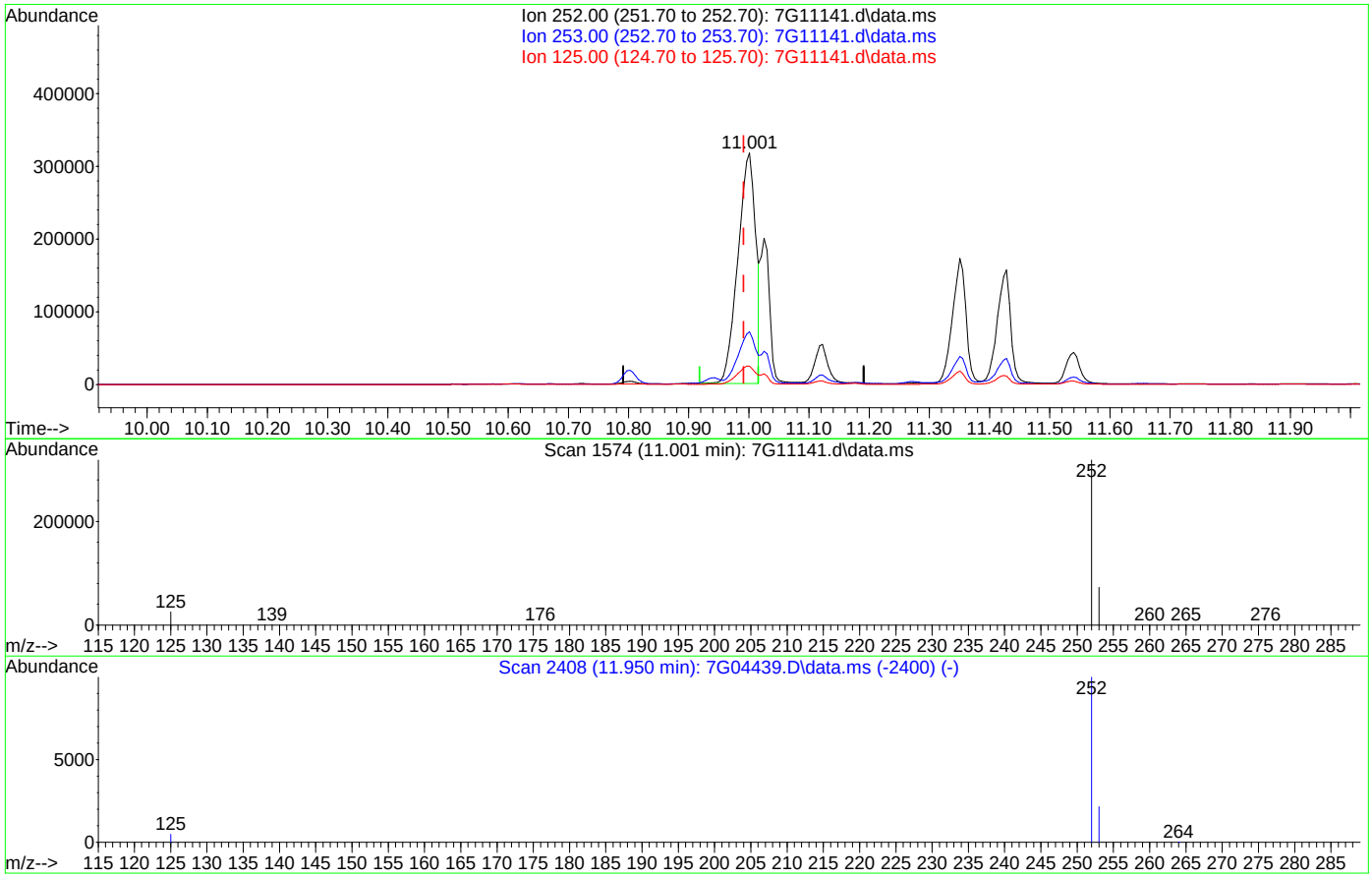
Sample Number: FA77615-5
Lab FileID: 7G11141.D
Injection Time: 08/11/20 12:50
Method: SW846 8270E BY SIM
Analyst approved: 08/12/20 09:33 Fouad Sekkar
Supervisor approved: 08/12/20 11:43 Nicole McCampbell

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(k)fluoranthene	207-08-9		11.03	Missed peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11141.d
Acq On : 11 Aug 2020 12:50 pm
Operator : FOUADS
Sample : fa77615-5 e Inst : MSBNA8
Misc : op81485,S7G483,15.2,,,1,1,soil
ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:26:40 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration



TIC: 7G11141.d\data.ms

(24) Benzo[k]fluoranthene (P)

11.001min (+0.010) 26.49ppm

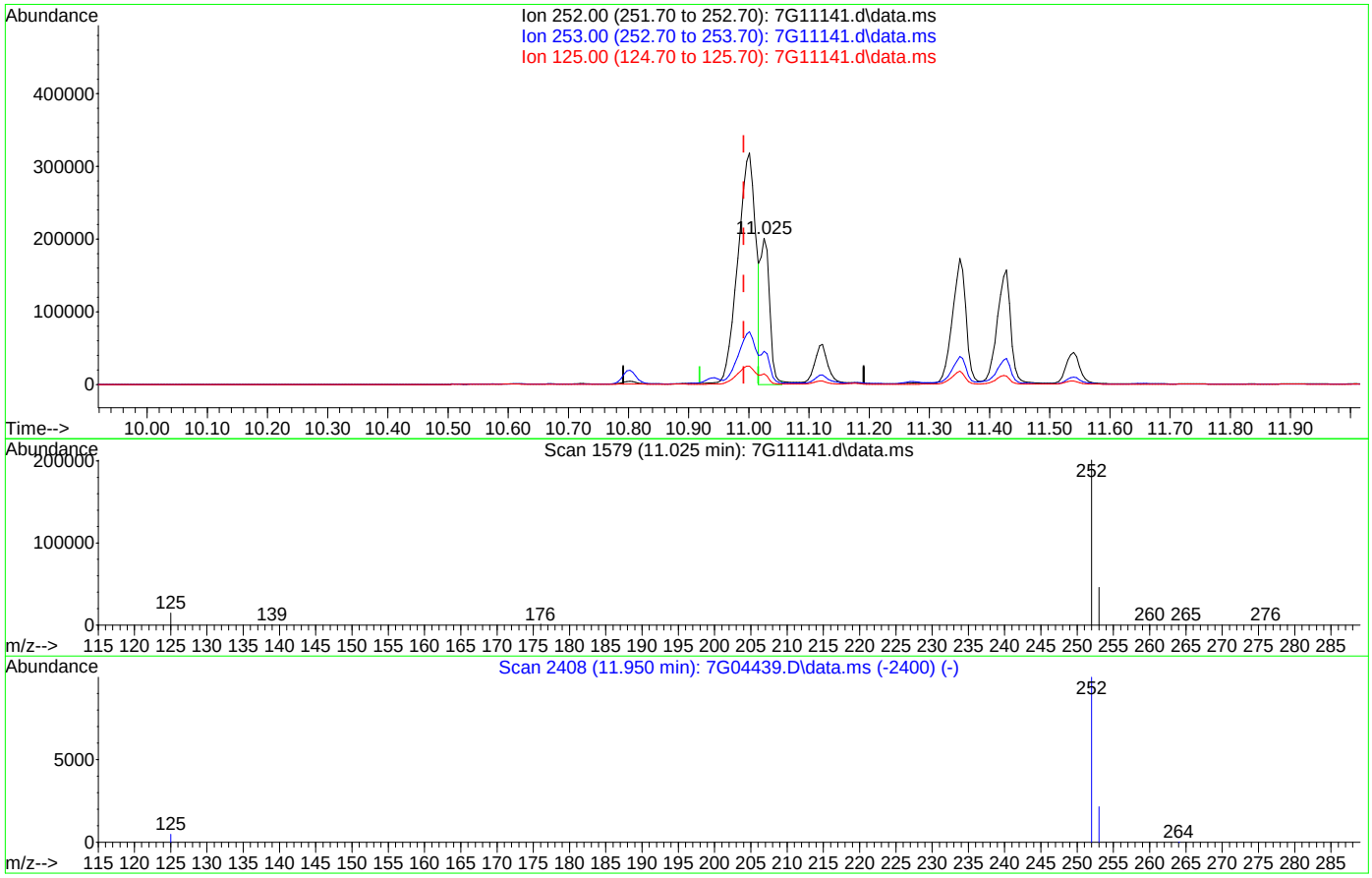
response 650836

Ion	Exp%	Act%
252.00	100	100
253.00	21.50	21.89
125.00	4.80	7.90
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11141.d
Acq On : 11 Aug 2020 12:50 pm
Operator : FOUADS
Sample : fa77615-5 e Inst : MSBNA8
Misc : op81485,S7G483,15.2,,,1,1,soil
ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:26:40 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration



TIC: 7G11141.d\data.ms

(24) Benzo[k]fluoranthene (P)

11.025min (+0.034) 8.94ppm m

response 208689

Ion	Exp%	Act%
252.00	100	100
253.00	21.50	22.73
125.00	4.80	7.31
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 08/12/20 11:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11142.d
Acq On : 11 Aug 2020 1:14 pm
Operator : FOUADS
Sample : fa77615-6 e Inst : MSBNA8
Misc : op81485,S7G483,15.2,,,1,1,soil
ALS Vial : 14 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:36:14 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

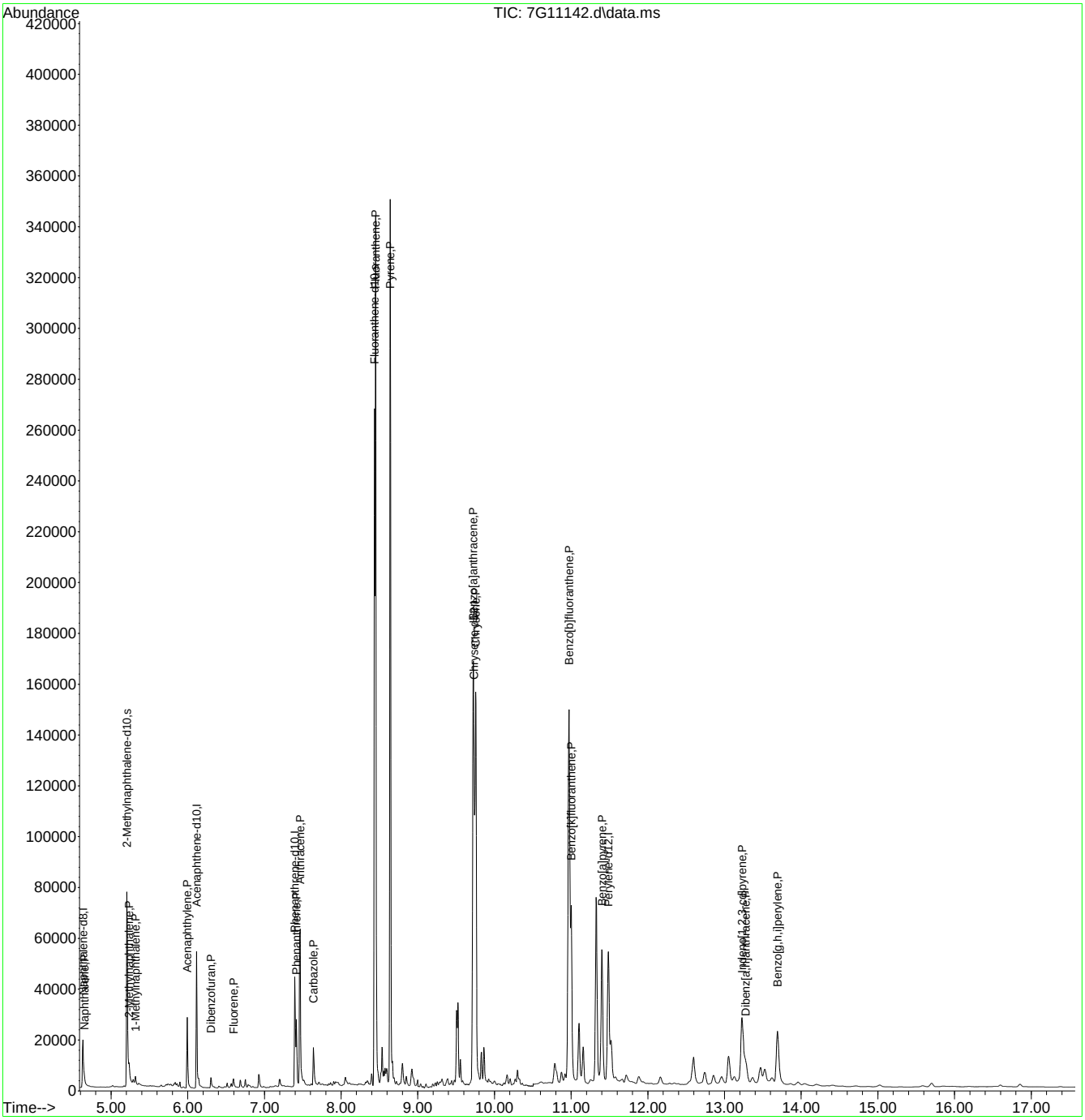
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.634	136	20762	4.00	ppm	0.00
6) Acenaphthene-d10	6.113	164	16997	4.00	ppm	0.00
11) Phenanthrene-d10	7.396	188	32867	4.00	ppm	0.00
18) Chrysene-d12	9.731	240	62212	4.00	ppm	0.00
22) Perylene-d12	11.486	264	58980	4.00	ppm	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.205	152	33476	10.73	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 107.30%			
17) Fluoranthene-d10	8.436	212	177821	10.35	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 103.50%			
Target Compounds						Qvalue
2) Naphthalene	4.652	128	2219	0.38	ppm	100
3) 2-Methylnaphthalene	5.234	142	1901	0.41	ppm	99
5) 1-Methylnaphthalene	5.317	142	1587	0.39	ppm	96
7) Acenaphthylene	5.993	152	18139	1.86	ppm	99
9) Dibenzofuran	6.302	168	2768	0.62	ppm	98
10) Fluorene	6.597	166	1543	0.22	ppm	97
13) Phenanthrene	7.417	178	15503	1.44	ppm	97
14) Anthracene	7.466	178	51745	4.70	ppm	99
15) Carbazole	7.640	167	12187	0.62	ppm	98
16) Fluoranthene	8.451	202	199833	9.60	ppm	98
19) Pyrene	8.642	202	208986	8.40	ppm	95
20) Benzo[a]anthracene	9.722	228	95041	4.87	ppm	90
21) Chrysene	9.756	228	135134	6.27	ppm	98
23) Benzo[b]fluoranthene	10.972	252	191054	9.54	ppm	98
24) Benzo[k]fluoranthene	11.001	252	63239m	2.98	ppm	
25) Benzo[a]pyrene	11.404	252	64537	3.31	ppm	98
26) Indeno[1,2,3-cd]pyrene	13.228	276	48000	3.77	ppm	94
27) Dibenz[a,h]anthracene	13.277	278	11572	0.82	ppm	97
28) Benzo[g,h,i]perylene	13.689	276	36406	2.37	ppm	94

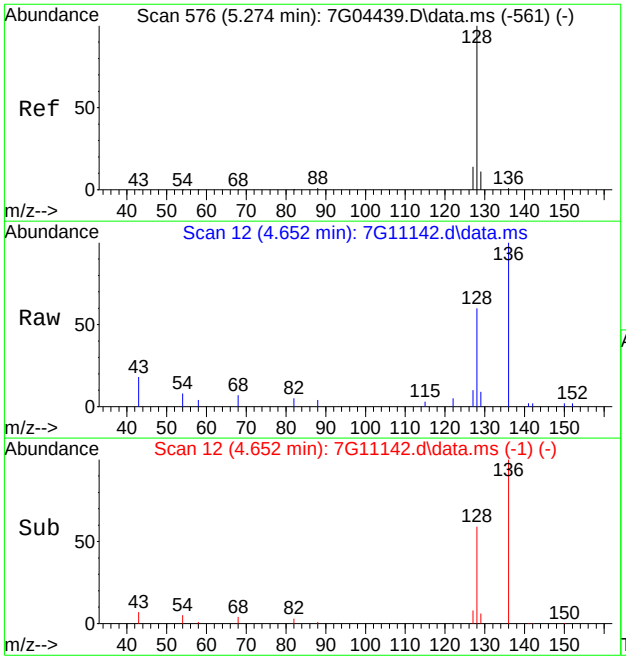
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11142.d
Acq On : 11 Aug 2020 1:14 pm
Operator : FOUADS
Sample : fa77615-6 e Inst : MSBNA8
Misc : op81485,S7G483,15.2,,,1,1,soil
ALS Vial : 14 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:36:14 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

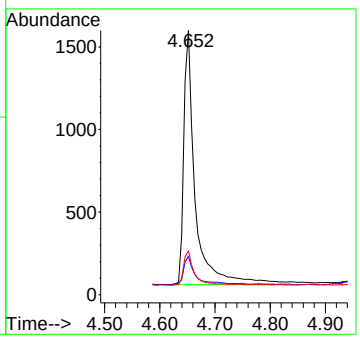


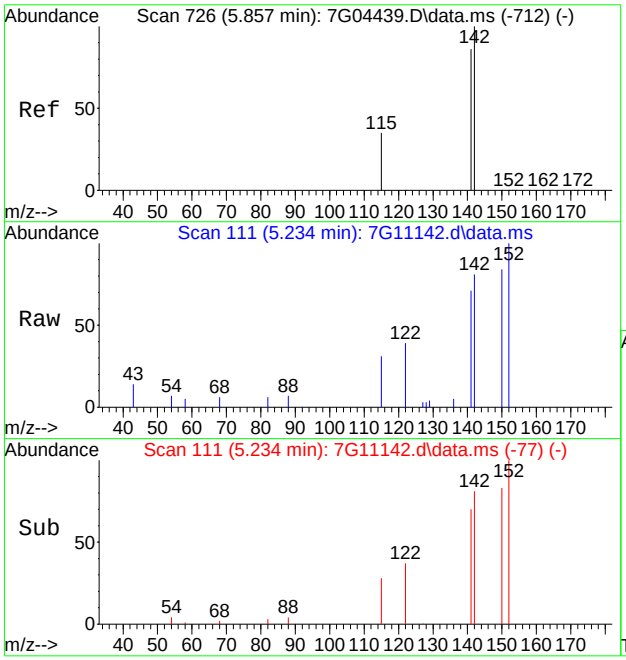


#2
Naphthalene
Concen: 0.38 ppm
RT: 4.652 min Scan# 12
Delta R.T. 0.006 min
Lab File: 7G11142.d
Acq: 11 Aug 2020 1:14 pm

Tgt Ion:128 Resp: 2219

Ion	Ratio	Lower	Upper
128	100		
129	11.0	0.0	40.9
127	13.5	0.0	43.5

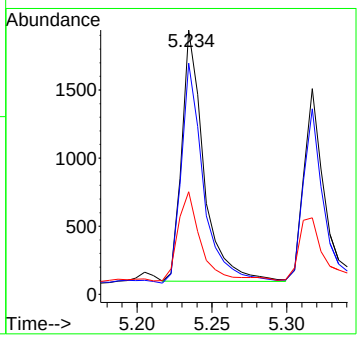


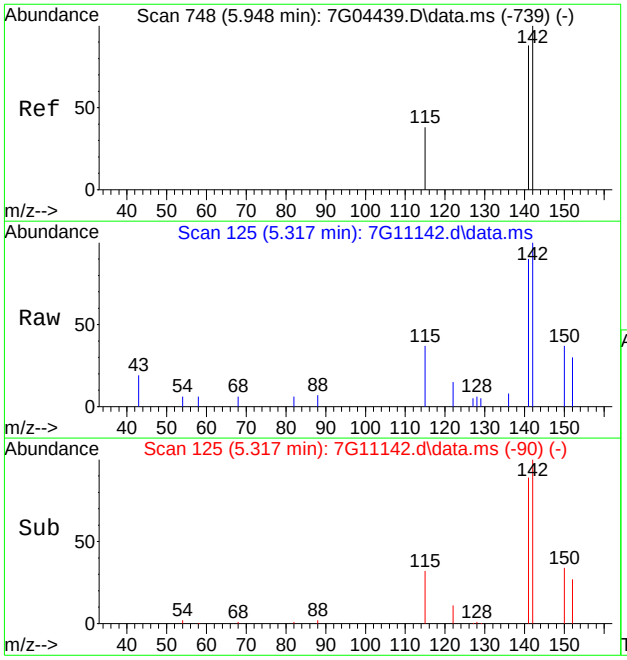


#3
2-Methylnaphthalene
Concen: 0.41 ppm
RT: 5.234 min Scan# 111
Delta R.T. -0.000 min
Lab File: 7G11142.d
Acq: 11 Aug 2020 1:14 pm

Tgt Ion:142 Resp: 1901

Ion	Ratio	Lower	Upper
142	100		
141	87.3	55.7	115.7
115	35.3	5.4	65.4

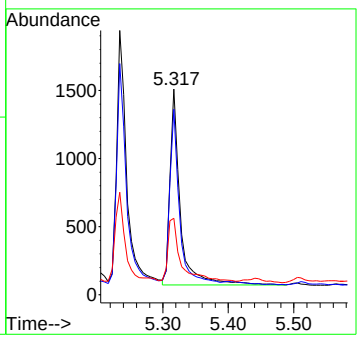


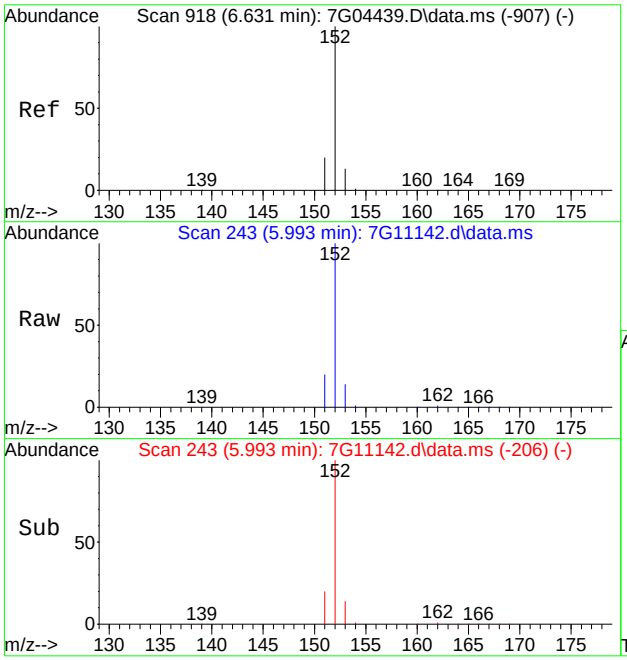


#5
1-Methylnaphthalene
Concen: 0.39 ppm
RT: 5.317 min Scan# 125
Delta R.T. 0.006 min
Lab File: 7G11142.d
Acq: 11 Aug 2020 1:14 pm

Tgt Ion:142 Resp: 1587

Ion	Ratio	Lower	Upper
142	100		
141	89.5	58.1	118.1
115	32.6	7.7	67.7

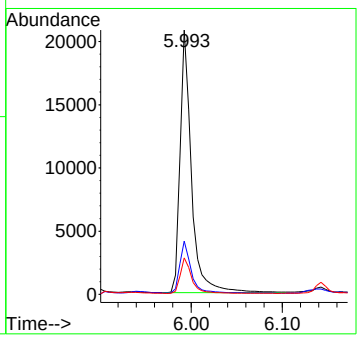


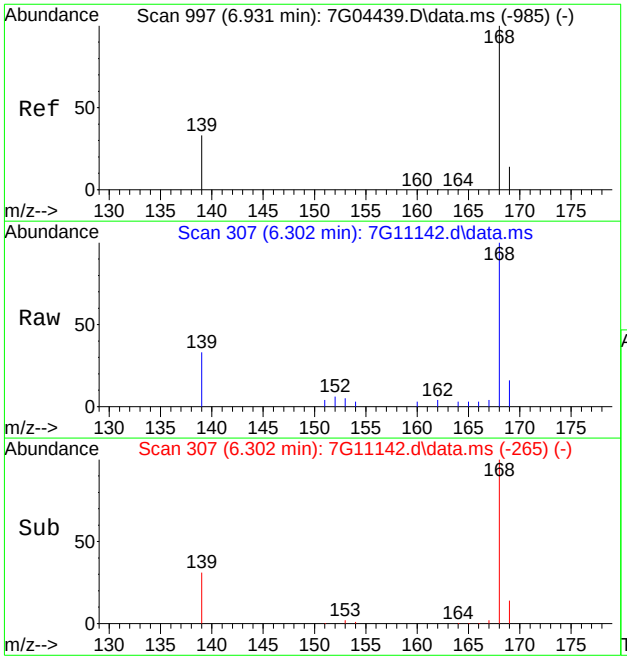


#7
Acenaphthylene
Concen: 1.86 ppm
RT: 5.993 min Scan# 243
Delta R.T. -0.000 min
Lab File: 7G11142.d
Acq: 11 Aug 2020 1:14 pm

Tgt Ion:152 Resp: 18139

Ion	Ratio	Lower	Upper
152	100		
151	19.7	0.0	49.8
153	13.4	0.0	42.8

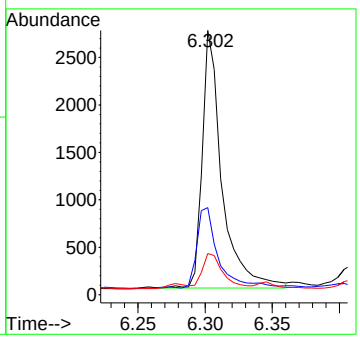


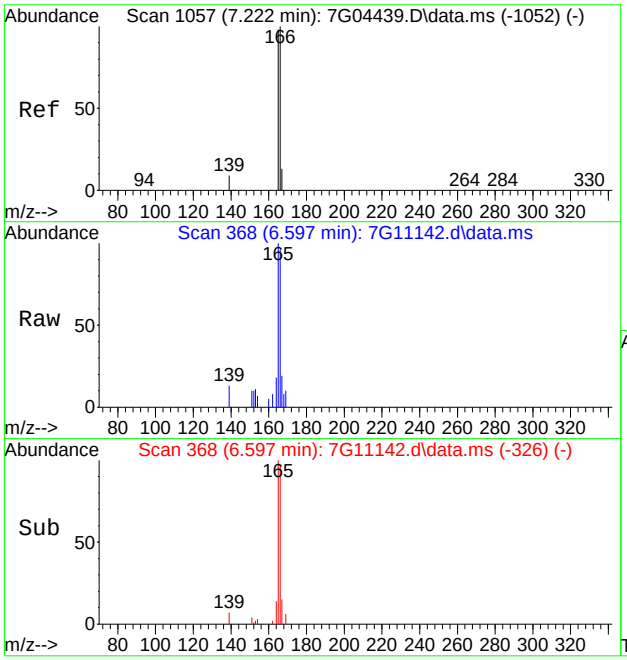


#9
Dibenzofuran
Concen: 0.62 ppm
RT: 6.302 min Scan# 307
Delta R.T. 0.005 min
Lab File: 7G11142.d
Acq: 11 Aug 2020 1:14 pm

Tgt Ion:168 Resp: 2768

Ion	Ratio	Lower	Upper
168	100		
139	31.0	12.6	52.6
169	13.3	0.0	33.8

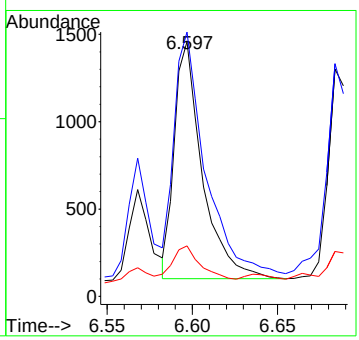


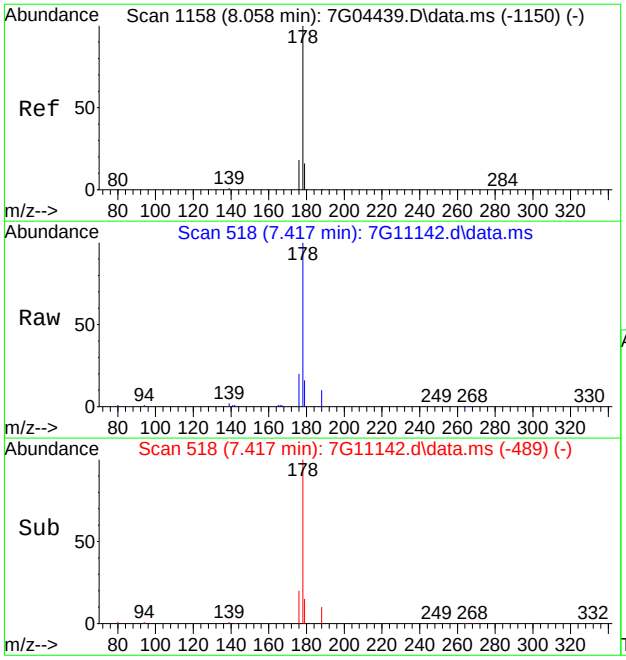


#10
Fluorene
Concen: 0.22 ppm
RT: 6.597 min Scan# 368
Delta R.T. 0.005 min
Lab File: 7G11142.d
Acq: 11 Aug 2020 1:14 pm

Tgt Ion:166 Resp: 1543

Ion	Ratio	Lower	Upper
166	100		
165	100.9	68.2	128.2
167	13.6	0.0	42.9

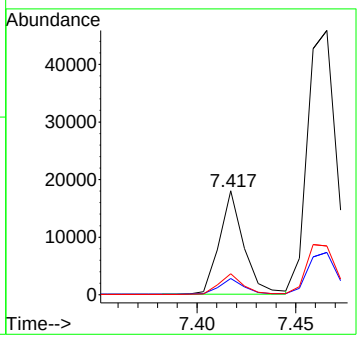


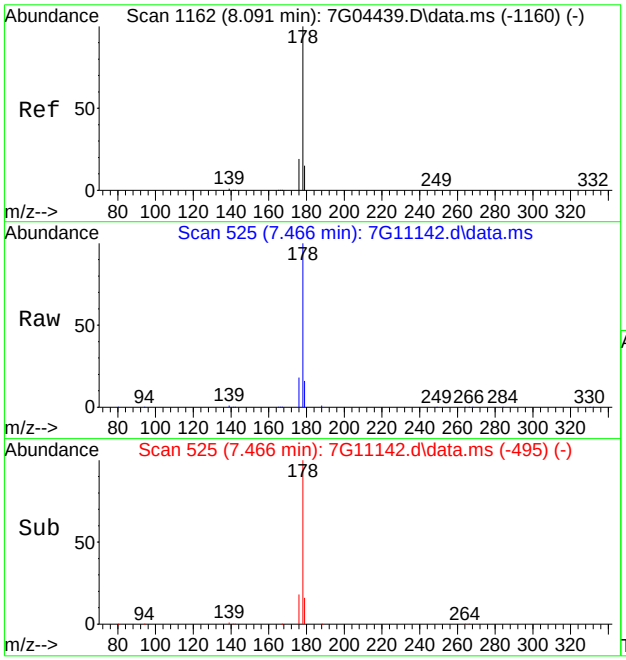


#13
Phenanthrene
Concen: 1.44 ppm
RT: 7.417 min Scan# 518
Delta R.T. -0.000 min
Lab File: 7G11142.d
Acq: 11 Aug 2020 1:14 pm

Tgt Ion:178 Resp: 15503

Ion	Ratio	Lower	Upper
178	100		
179	15.2	0.0	45.7
176	20.0	0.0	48.0

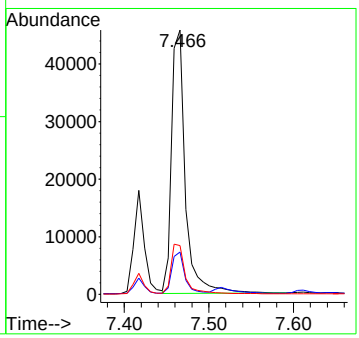


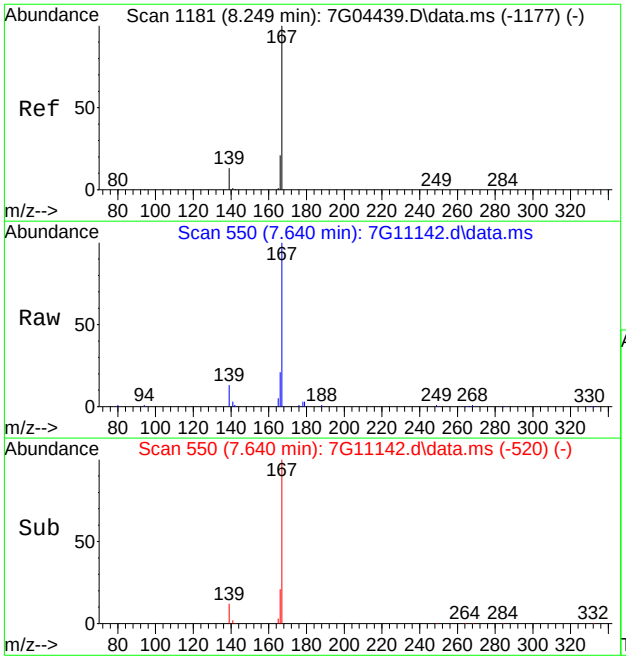


#14
Anthracene
Concen: 4.70 ppm
RT: 7.466 min Scan# 525
Delta R.T. 0.007 min
Lab File: 7G11142.d
Acq: 11 Aug 2020 1:14 pm

Tgt Ion:178 Resp: 51745

Ion	Ratio	Lower	Upper
178	100		
179	15.7	0.0	45.1
176	18.3	0.0	48.8

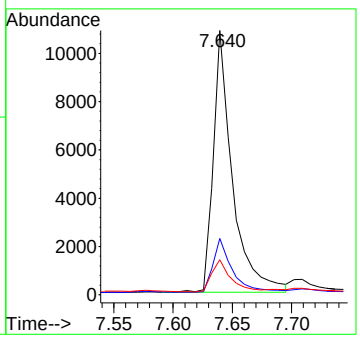


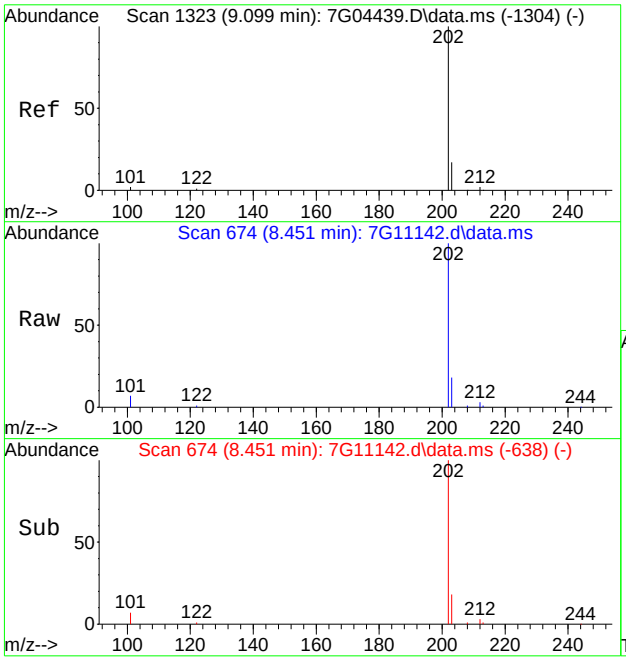


#15
Carbazole
Concen: 0.62 ppm
RT: 7.640 min Scan# 550
Delta R.T. 0.007 min
Lab File: 7G11142.d
Acq: 11 Aug 2020 1:14 pm

Tgt Ion:167 Resp: 12187

Ion	Ratio	Lower	Upper
167	100		
166	20.5	1.2	41.2
139	11.9	0.0	32.8

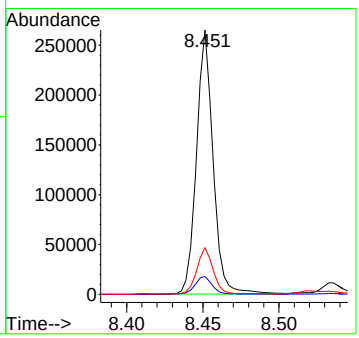


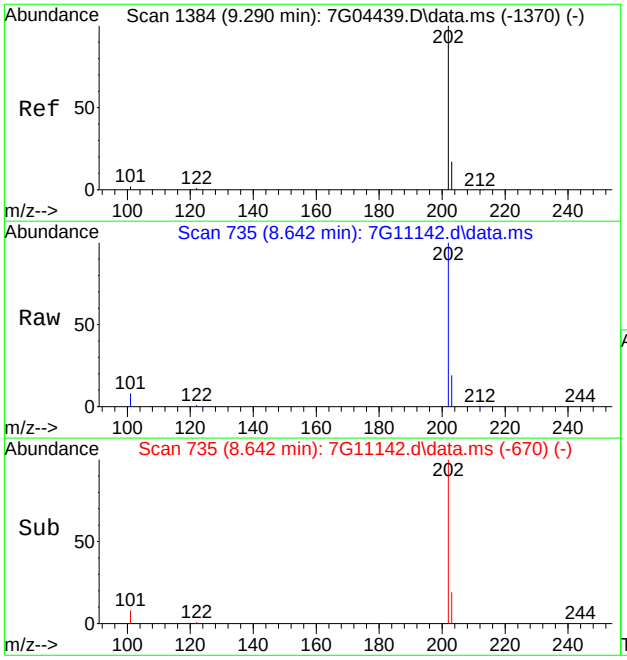


#16
Fluoranthene
Concen: 9.60 ppm
RT: 8.451 min Scan# 674
Delta R.T. 0.003 min
Lab File: 7G11142.d
Acq: 11 Aug 2020 1:14 pm

Tgt Ion:202 Resp: 199833

Ion	Ratio	Lower	Upper
202	100		
101	6.8	0.0	32.2
203	17.6	0.0	47.2

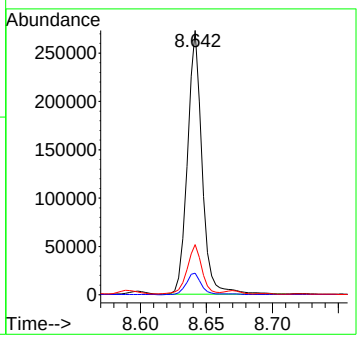


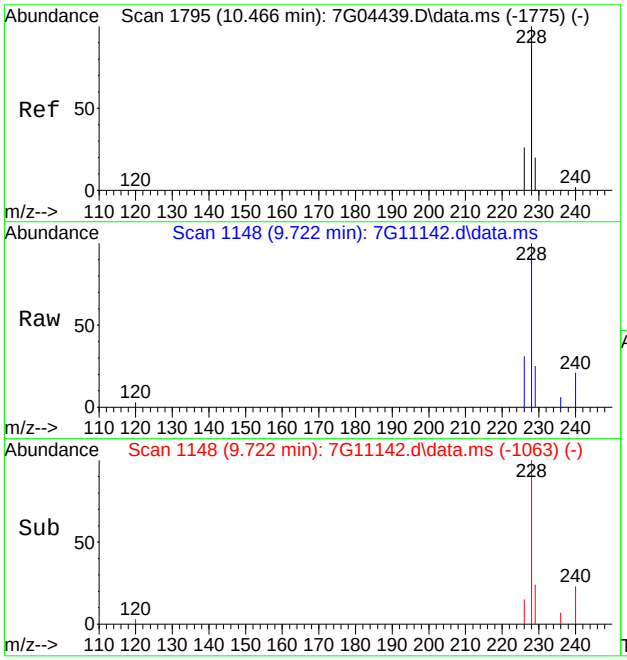


#19
Pyrene
Concen: 8.40 ppm
RT: 8.642 min Scan# 735
Delta R.T. 0.003 min
Lab File: 7G11142.d
Acq: 11 Aug 2020 1:14 pm

Tgt Ion:202 Resp: 208986

Ion	Ratio	Lower	Upper
202	100		
101	8.1	0.0	32.4
203	18.8	0.0	47.4

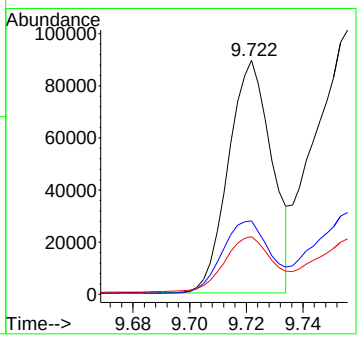


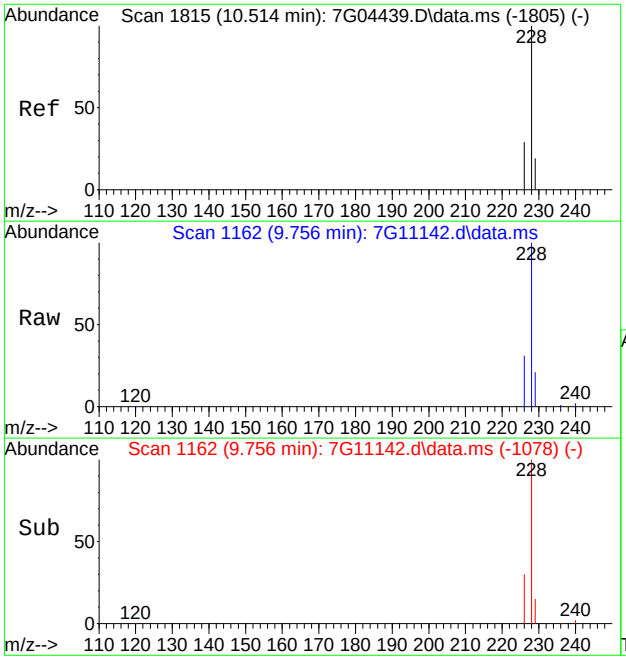


#20
Benzo[a]anthracene
Concen: 4.87 ppm
RT: 9.722 min Scan# 1148
Delta R.T. 0.005 min
Lab File: 7G11142.d
Acq: 11 Aug 2020 1:14 pm

Tgt Ion:228 Resp: 95041

Ion	Ratio	Lower	Upper
228	100		
226	31.3	0.0	56.1
229	23.5	0.0	49.5

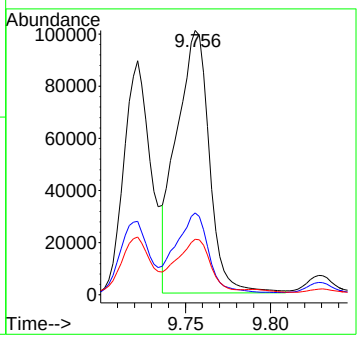


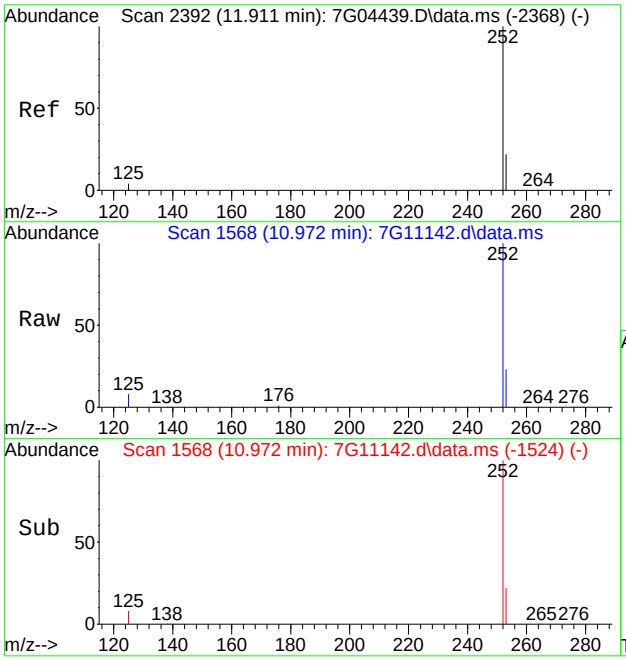


#21
Chrysene
Concen: 6.27 ppm
RT: 9.756 min Scan# 1162
Delta R.T. 0.002 min
Lab File: 7G11142.d
Acq: 11 Aug 2020 1:14 pm

Tgt Ion:228 Resp: 135134

Ion	Ratio	Lower	Upper
228	100		
226	30.5	0.0	58.9
229	19.7	0.0	49.5

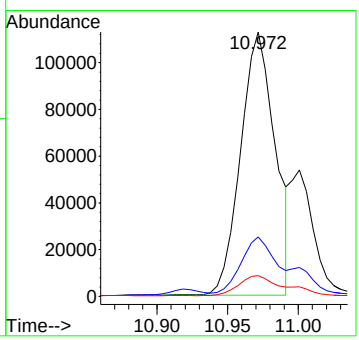


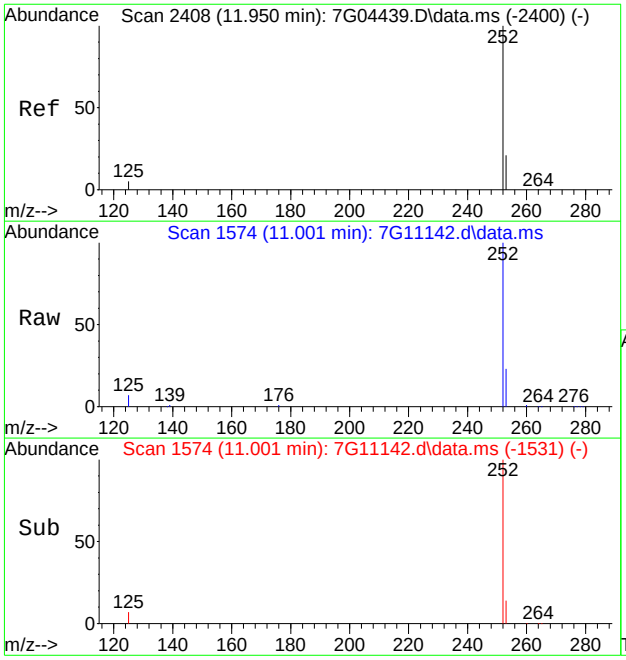


#23
Benzo[b]fluoranthene
Concen: 9.54 ppm
RT: 10.972 min Scan# 1568
Delta R.T. 0.014 min
Lab File: 7G11142.d
Acq: 11 Aug 2020 1:14 pm

Tgt Ion:252 Resp: 191054

Ion	Ratio	Lower	Upper
252	100		
253	21.7	0.0	51.7
125	7.6	0.0	34.5

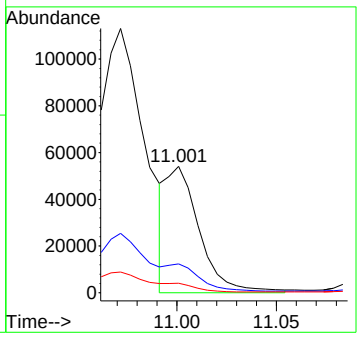


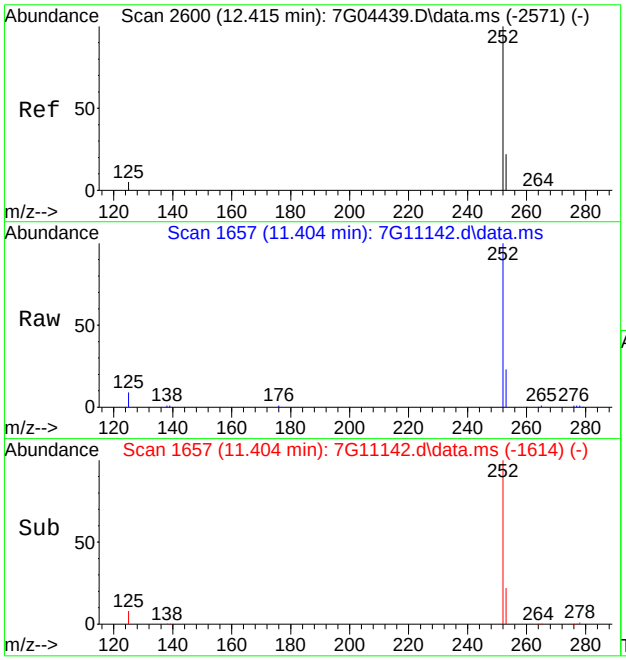


#24
Benzo[k]fluoranthene
Concen: 2.98 ppm m
RT: 11.001 min Scan# 1574
Delta R.T. 0.010 min
Lab File: 7G11142.d
Acq: 11 Aug 2020 1:14 pm

Tgt Ion:252 Resp: 63239

Ion	Ratio	Lower	Upper
252	100		
253	23.0	0.0	51.5
125	7.5	0.0	34.8

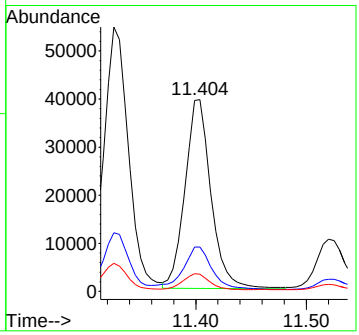


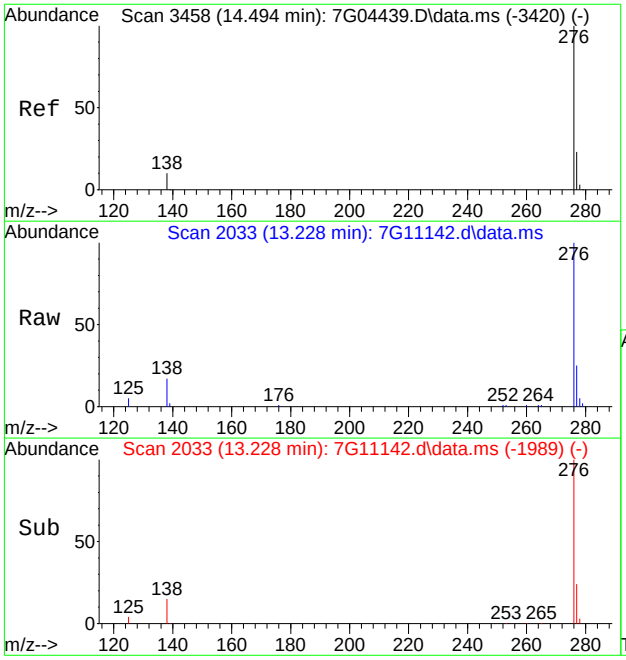


#25
Benzo[a]pyrene
Concen: 3.31 ppm
RT: 11.404 min Scan# 1657
Delta R.T. 0.010 min
Lab File: 7G11142.d
Acq: 11 Aug 2020 1:14 pm

Tgt Ion:252 Resp: 64537

Ion	Ratio	Lower	Upper
252	100		
253	21.5	0.0	51.6
125	8.1	0.0	34.8

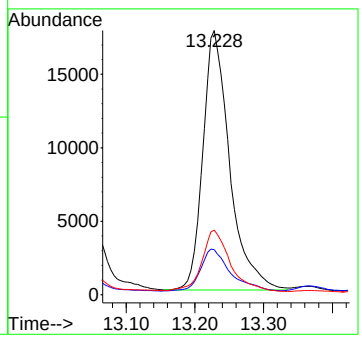


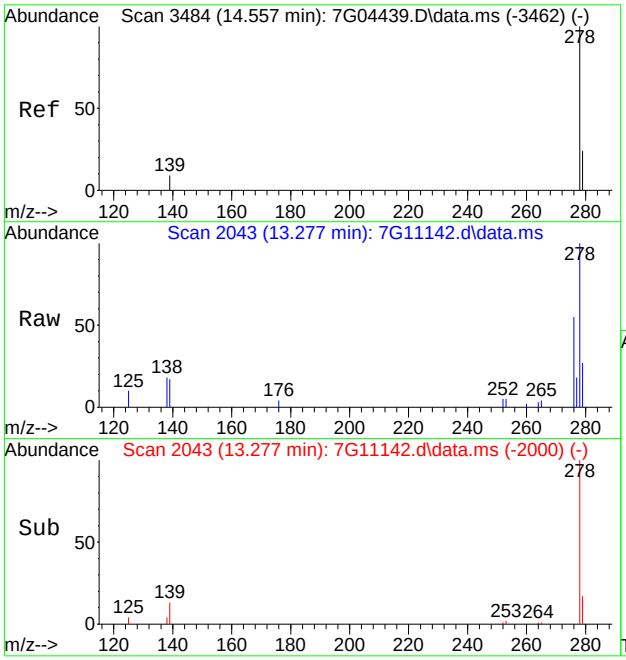


#26
Indeno[1,2,3-cd]pyrene
Concen: 3.77 ppm
RT: 13.228 min Scan# 2033
Delta R.T. 0.014 min
Lab File: 7G11142.d
Acq: 11 Aug 2020 1:14 pm

Tgt Ion:276 Resp: 48000

Ion	Ratio	Lower	Upper
276	100		
138	15.8	0.0	39.6
277	23.6	0.0	53.1

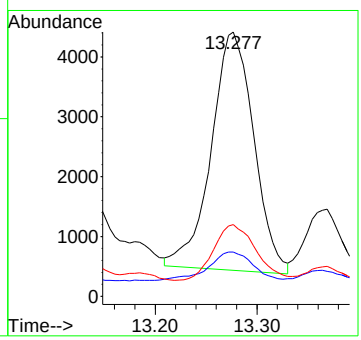


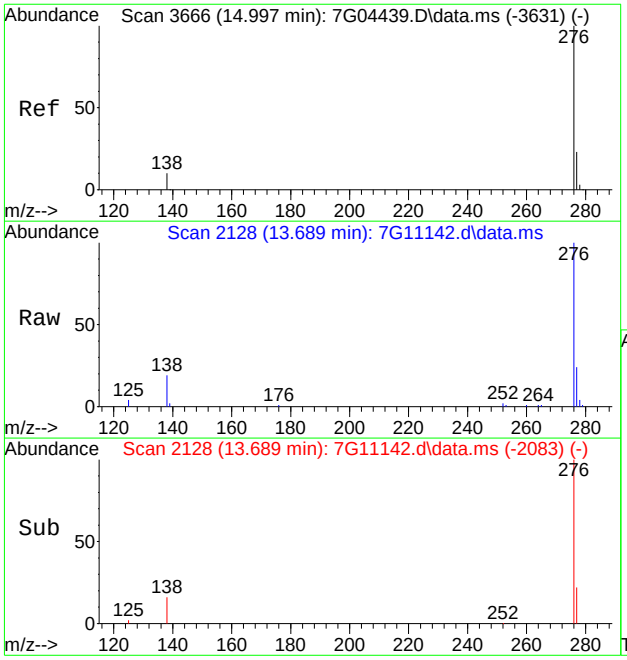


#27
Dibenz[a,h]anthracene
Concen: 0.82 ppm
RT: 13.277 min Scan# 2043
Delta R.T. 0.010 min
Lab File: 7G11142.d
Acq: 11 Aug 2020 1:14 pm

Tgt Ion:278 Resp: 11572

Ion	Ratio	Lower	Upper
278	100		
139	11.8	0.0	38.8
279	23.2	0.0	53.6

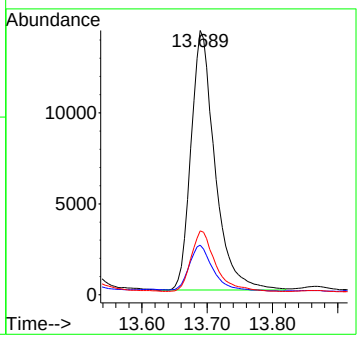




#28
Benzo[g,h,i]perylene
Concen: 2.37 ppm
RT: 13.689 min Scan# 2128
Delta R.T. 0.019 min
Lab File: 7G11142.d
Acq: 11 Aug 2020 1:14 pm

Tgt Ion:276 Resp: 36406

Ion	Ratio	Lower	Upper
276	100		
138	17.4	0.0	40.5
277	23.4	0.0	53.2



Manual Integration Approval Summary

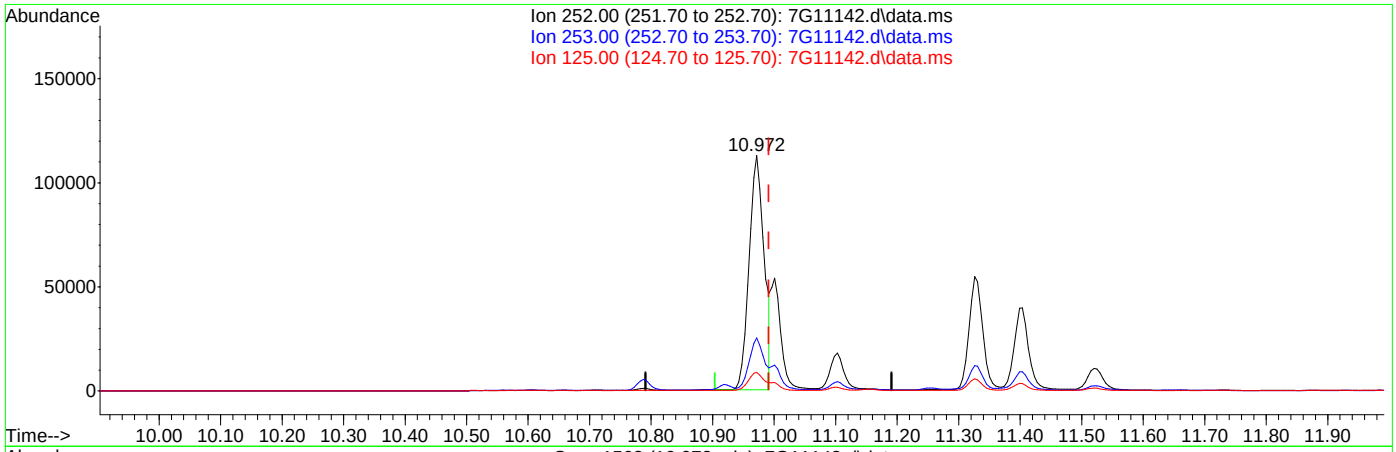
Sample Number: FA77615-6
Lab FileID: 7G11142.D
Injection Time: 08/11/20 13:14
Method: SW846 8270E BY SIM
Analyst approved: 08/12/20 09:33 Fouad Sekkar
Supervisor approved: 08/12/20 11:43 Nicole McCampbell

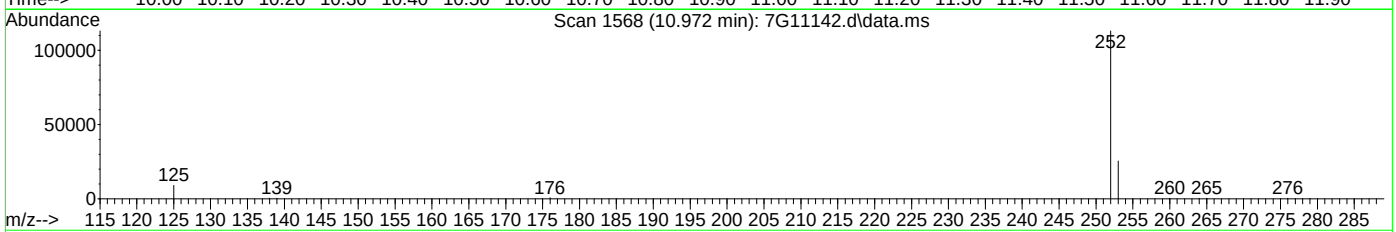
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(k)fluoranthene	207-08-9		11.00	Missed peak

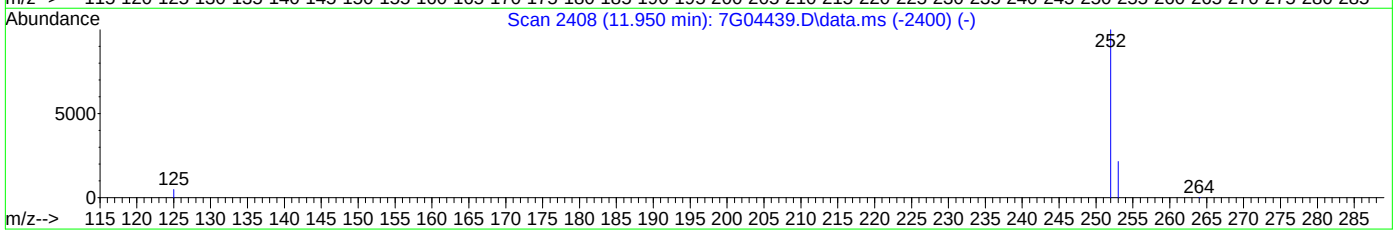
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11142.d
Acq On : 11 Aug 2020 1:14 pm
Operator : FOUADS
Sample : fa77615-6 e Inst : MSBNA8
Misc : op81485,S7G483,15.2,,,1,1,soil
ALS Vial : 14 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:26:43 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11142.d\data.ms

(24) Benzo[k]fluoranthene (P)

10.972min (-0.020) 8.84ppm

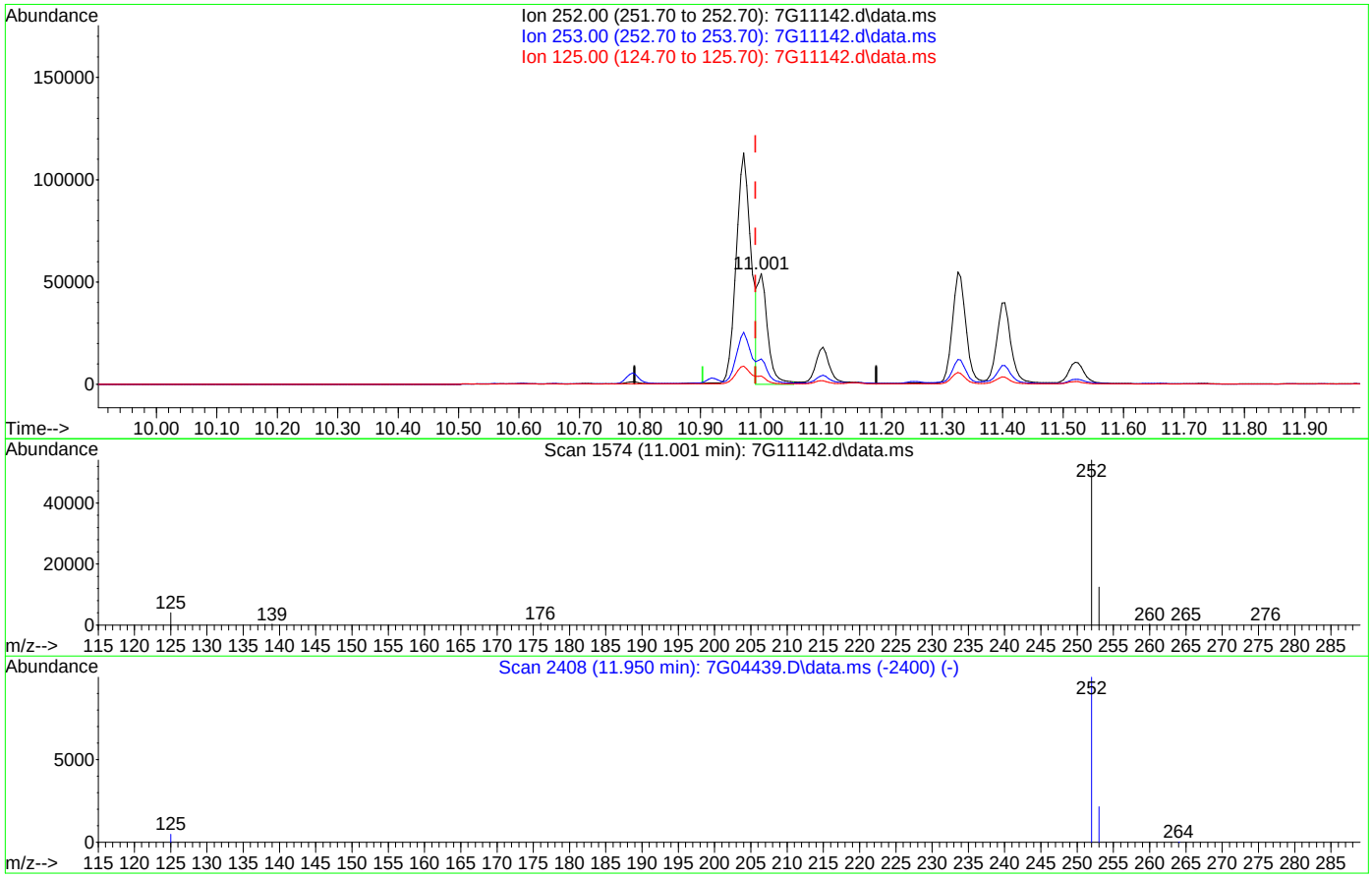
response 191054

Ion	Exp%	Act%
252.00	100	100
253.00	21.50	21.68
125.00	4.80	7.55
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11142.d
Acq On : 11 Aug 2020 1:14 pm
Operator : FOUADS
Sample : fa77615-6 e Inst : MSBNA8
Misc : op81485,S7G483,15.2,,,1,1,soil
ALS Vial : 14 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:26:43 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration



TIC: 7G11142.d\data.ms

(24) Benzo[k]fluoranthene (P)

11.001min (+0.010) 2.98ppm m

response 63239

Ion	Exp%	Act%
252.00	100	100
253.00	21.50	22.95
125.00	4.80	7.50
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 08/12/20 11:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11145.d
Acq On : 11 Aug 2020 2:26 pm
Operator : FOUADS
Sample : fa77615-7 e Inst : MSBNA8
Misc : op81485,S7G483,15.0,,,1,1,soil
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:38:28 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

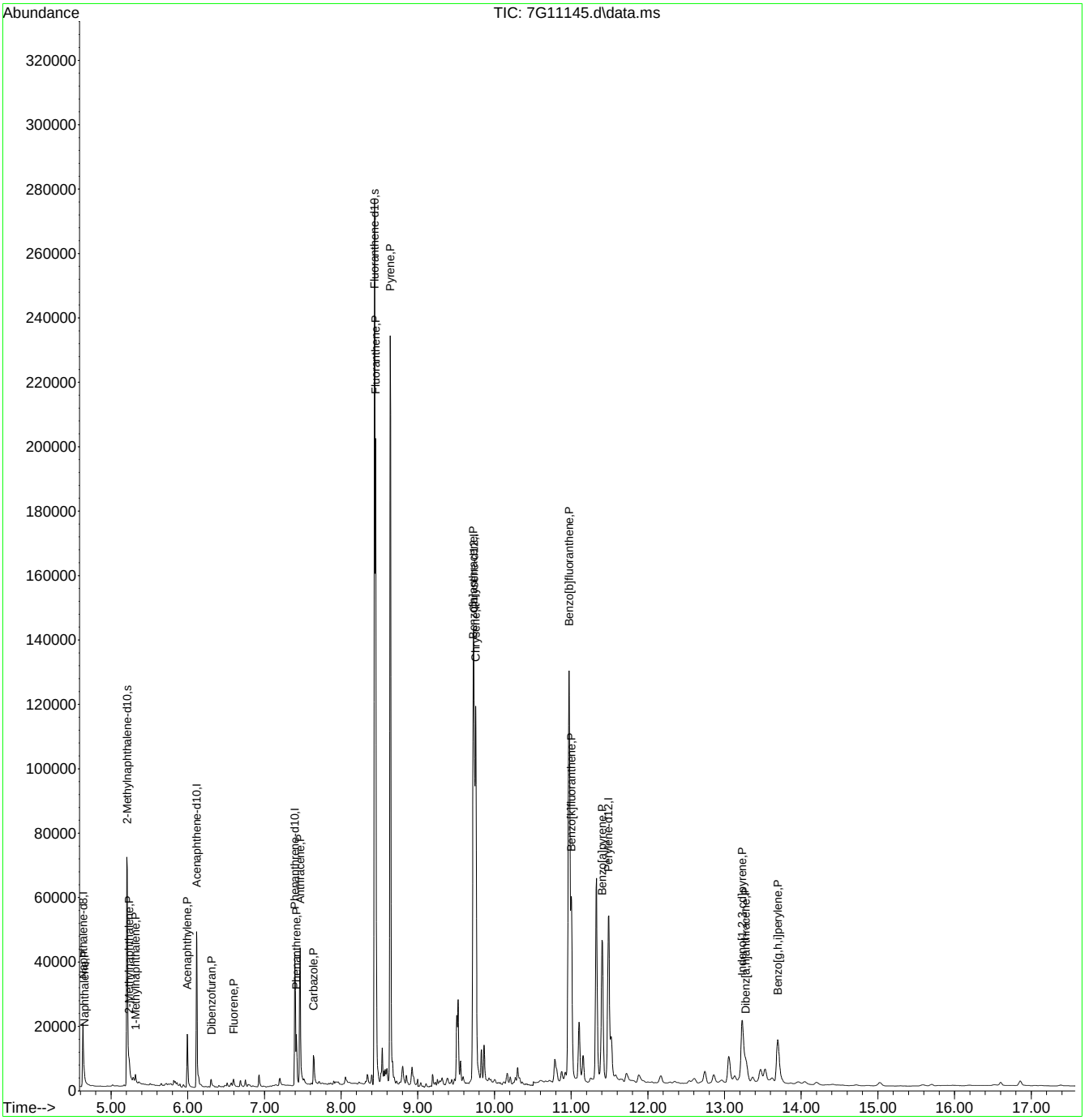
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.634	136	20600	4.00	ppm	0.00
6) Acenaphthene-d10	6.114	164	17101	4.00	ppm	0.00
11) Phenanthrene-d10	7.396	188	33516	4.00	ppm	0.00
18) Chrysene-d12	9.732	240	60935	4.00	ppm	0.00
22) Perylene-d12	11.486	264	57729	4.00	ppm	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.211	152	34399	11.09	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 110.90%			
17) Fluoranthene-d10	8.436	212	183643	10.47	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 104.70%			
Target Compounds						Qvalue
2) Naphthalene	4.652	128	1557	0.27	ppm	100
3) 2-Methylnaphthalene	5.235	142	1324	0.29	ppm	97
5) 1-Methylnaphthalene	5.317	142	1115	0.28	ppm	98
7) Acenaphthylene	5.993	152	12103	1.24	ppm	99
9) Dibenzofuran	6.307	168	1903	0.42	ppm	87
10) Fluorene	6.597	166	1078	0.16	ppm	97
13) Phenanthrene	7.417	178	8682	0.79	ppm	97
14) Anthracene	7.466	178	32746	2.93	ppm	99
15) Carbazole	7.640	167	8459	0.42	ppm	99
16) Fluoranthene	8.452	202	123137	5.86	ppm	98
19) Pyrene	8.642	202	153017	6.30	ppm	95
20) Benzo[a]anthracene	9.722	228	67942	3.57	ppm	88
21) Chrysene	9.756	228	105940	5.02	ppm	99
23) Benzo[b]fluoranthene	10.972	252	177209	9.04	ppm	98
24) Benzo[k]fluoranthene	11.001	252	59457m	2.86	ppm	
25) Benzo[a]pyrene	11.404	252	56947	2.98	ppm	98
26) Indeno[1,2,3-cd]pyrene	13.229	276	36860	2.96	ppm	94
27) Dibenz[a,h]anthracene	13.277	278	8389	0.61	ppm	98
28) Benzo[g,h,i]perylene	13.694	276	26726	1.78	ppm	94

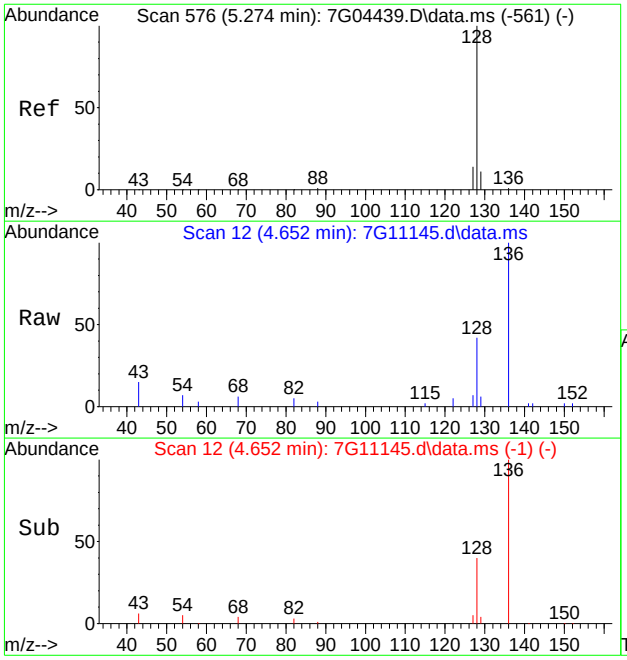
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11145.d
Acq On : 11 Aug 2020 2:26 pm
Operator : FOUADS
Sample : fa77615-7 e Inst : MSBNA8
Misc : op81485,S7G483,15.0,,,1,1,soil
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:38:28 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

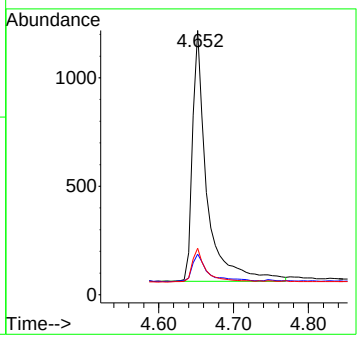


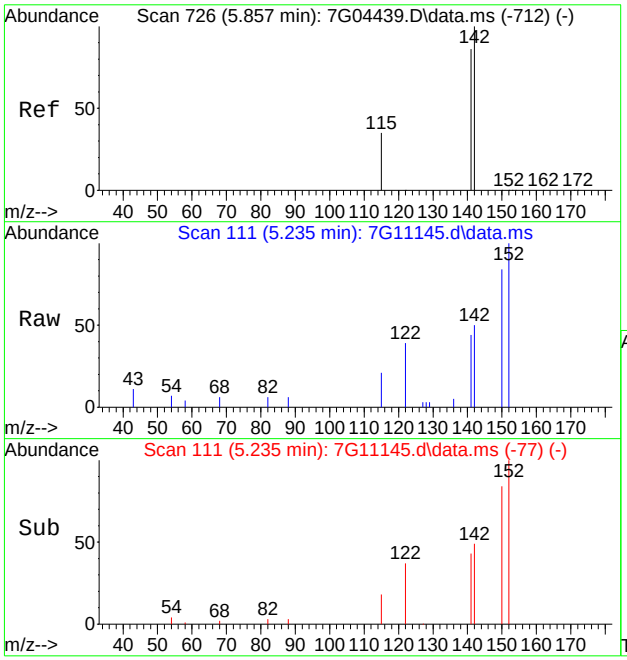


#2
Naphthalene
Concen: 0.27 ppm
RT: 4.652 min Scan# 12
Delta R.T. 0.006 min
Lab File: 7G11145.d
Acq: 11 Aug 2020 2:26 pm

Tgt Ion:128 Resp: 1557

Ion	Ratio	Lower	Upper
128	100		
129	10.8	0.0	40.9
127	13.4	0.0	43.5

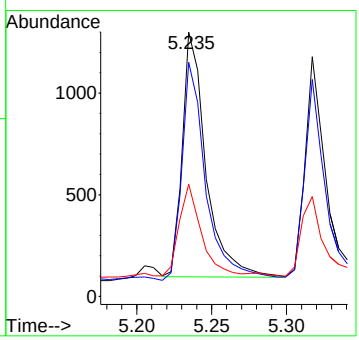


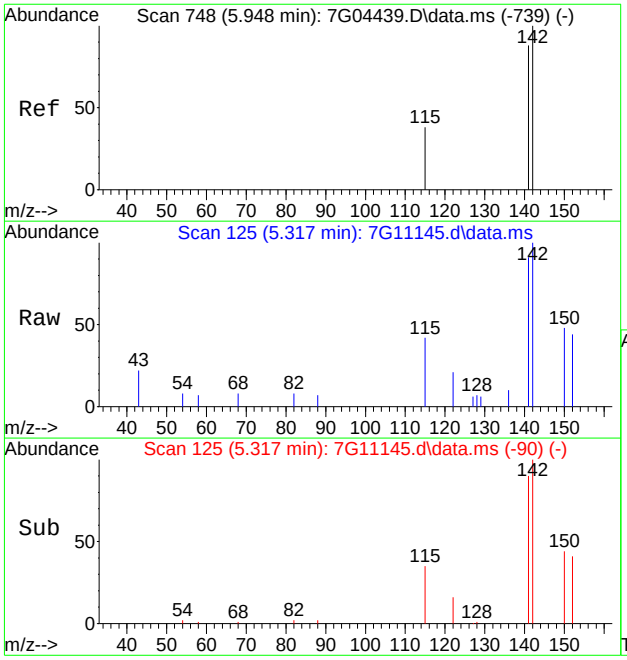


#3
2-Methylnaphthalene
Concen: 0.29 ppm
RT: 5.235 min Scan# 111
Delta R.T. 0.000 min
Lab File: 7G11145.d
Acq: 11 Aug 2020 2:26 pm

Tgt Ion:142 Resp: 1324

Ion	Ratio	Lower	Upper
142	100		
141	88.5	55.7	115.7
115	37.6	5.4	65.4

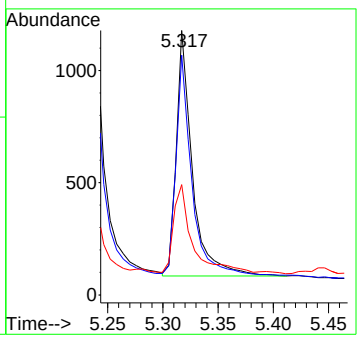


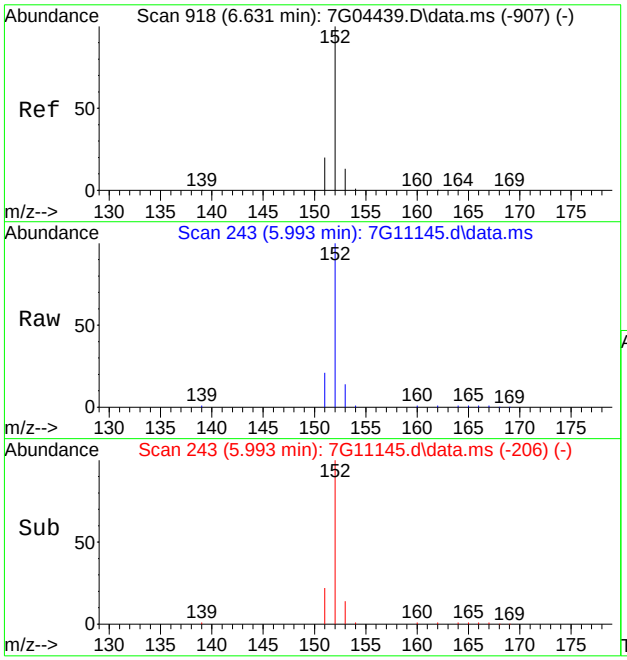


#5
1-Methylnaphthalene
Concen: 0.28 ppm
RT: 5.317 min Scan# 125
Delta R.T. 0.006 min
Lab File: 7G11145.d
Acq: 11 Aug 2020 2:26 pm

Tgt Ion:142 Resp: 1115

Ion	Ratio	Lower	Upper
142	100		
141	89.7	58.1	118.1
115	36.2	7.7	67.7

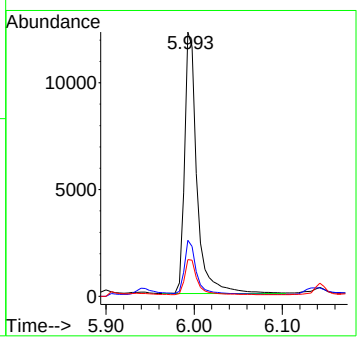


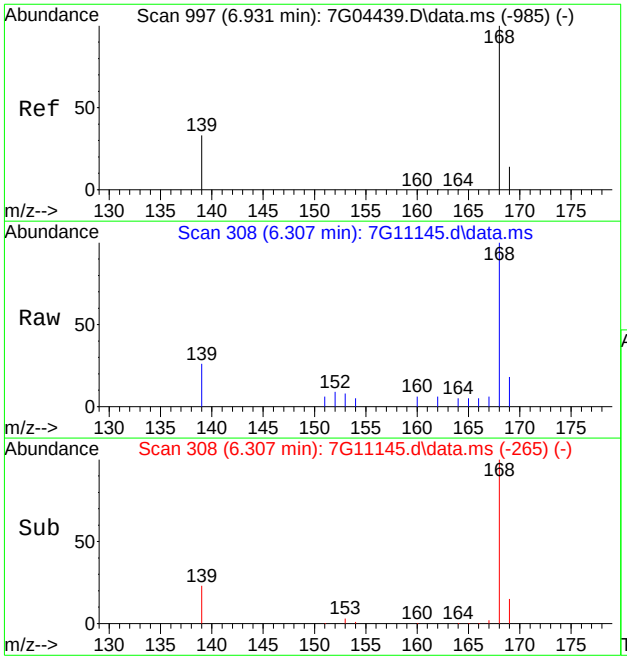


#7
Acenaphthylene
Concen: 1.24 ppm
RT: 5.993 min Scan# 243
Delta R.T. 0.000 min
Lab File: 7G11145.d
Acq: 11 Aug 2020 2:26 pm

Tgt Ion:152 Resp: 12103

Ion	Ratio	Lower	Upper
152	100		
151	20.4	0.0	49.8
153	13.4	0.0	42.8

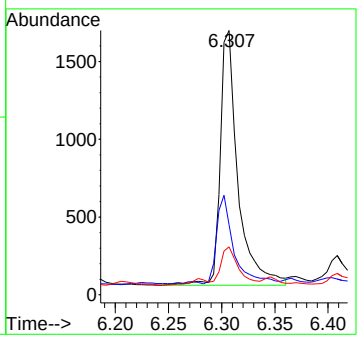


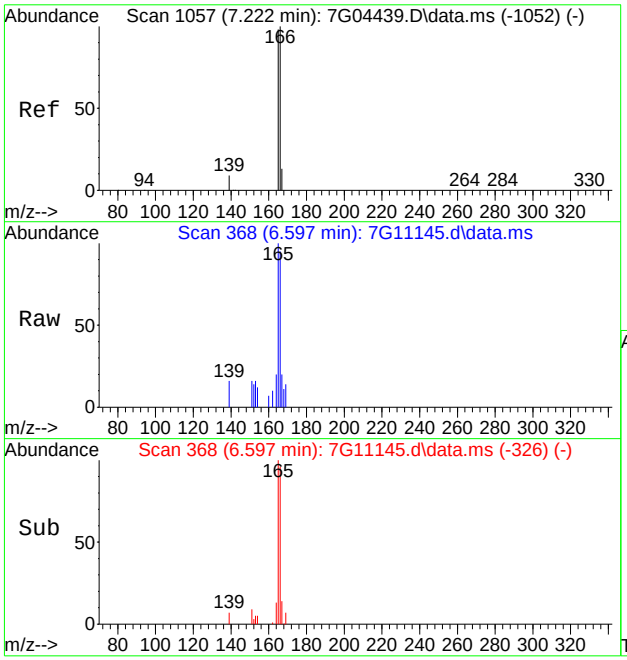


#9
Dibenzofuran
Concen: 0.42 ppm
RT: 6.307 min Scan# 308
Delta R.T. 0.010 min
Lab File: 7G11145.d
Acq: 11 Aug 2020 2:26 pm

Tgt Ion:168 Resp: 1903

Ion	Ratio	Lower	Upper
168	100		
139	22.6	12.6	52.6
169	14.9	0.0	33.8

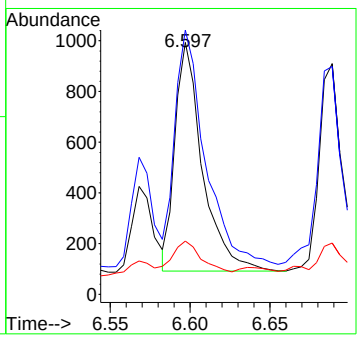


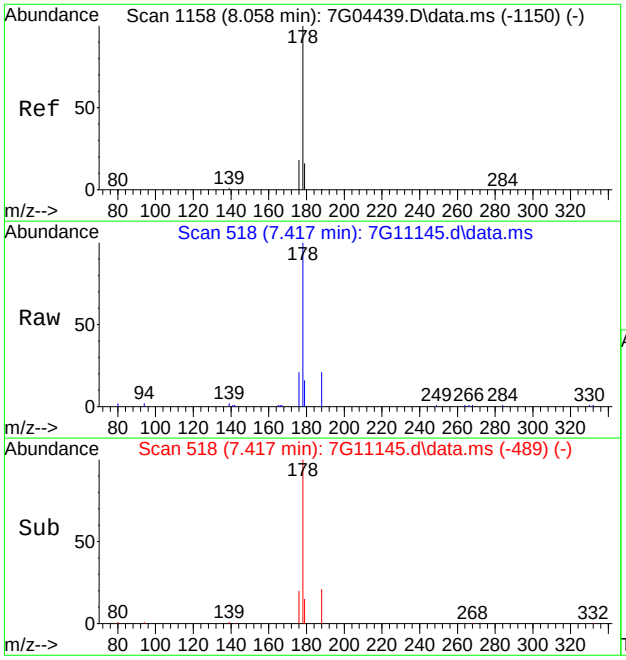


#10
Fluorene
Concen: 0.16 ppm
RT: 6.597 min Scan# 368
Delta R.T. 0.005 min
Lab File: 7G11145.d
Acq: 11 Aug 2020 2:26 pm

Tgt Ion:166 Resp: 1078

Ion	Ratio	Lower	Upper
166	100		
165	101.3	68.2	128.2
167	12.4	0.0	42.9

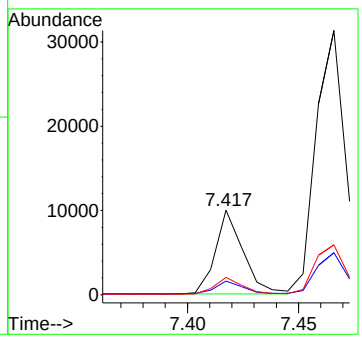


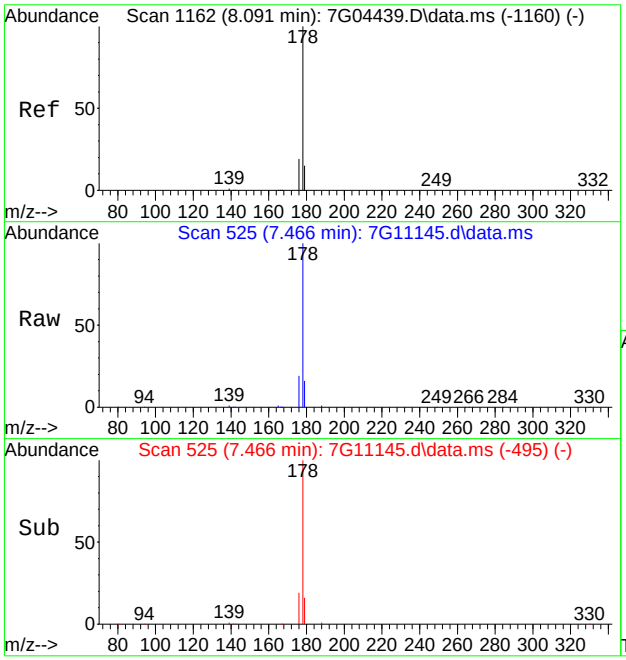


#13
Phenanthrene
Concen: 0.79 ppm
RT: 7.417 min Scan# 518
Delta R.T. 0.000 min
Lab File: 7G11145.d
Acq: 11 Aug 2020 2:26 pm

Tgt Ion:178 Resp: 8682

Ion	Ratio	Lower	Upper
178	100		
179	15.4	0.0	45.7
176	20.1	0.0	48.0

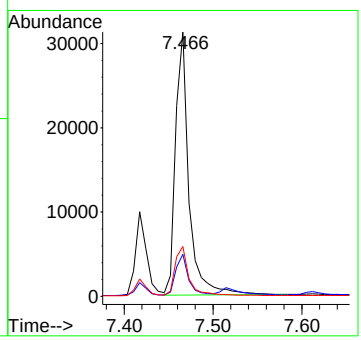


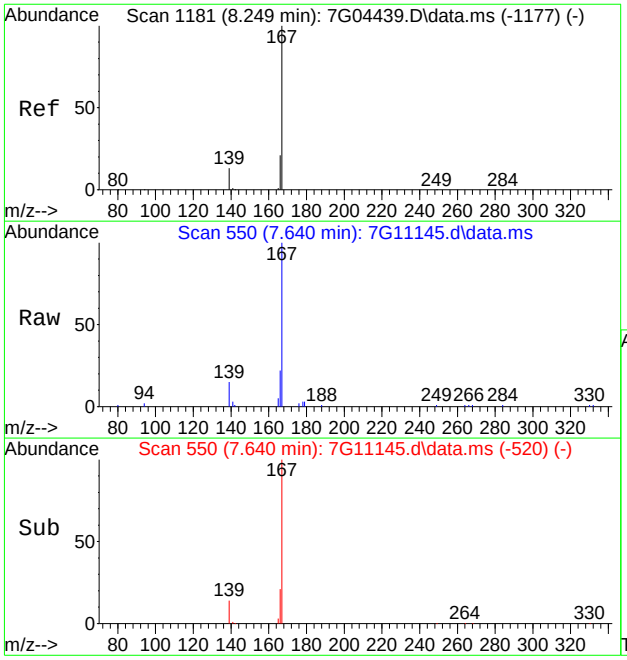


#14
Anthracene
Concen: 2.93 ppm
RT: 7.466 min Scan# 525
Delta R.T. 0.007 min
Lab File: 7G11145.d
Acq: 11 Aug 2020 2:26 pm

Tgt Ion:178 Resp: 32746

Ion	Ratio	Lower	Upper
178	100		
179	15.6	0.0	45.1
176	18.7	0.0	48.8

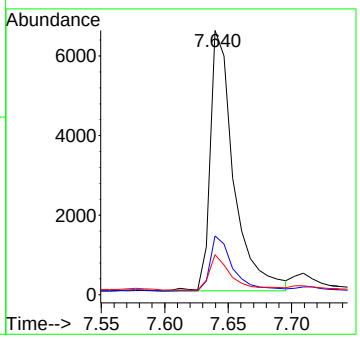


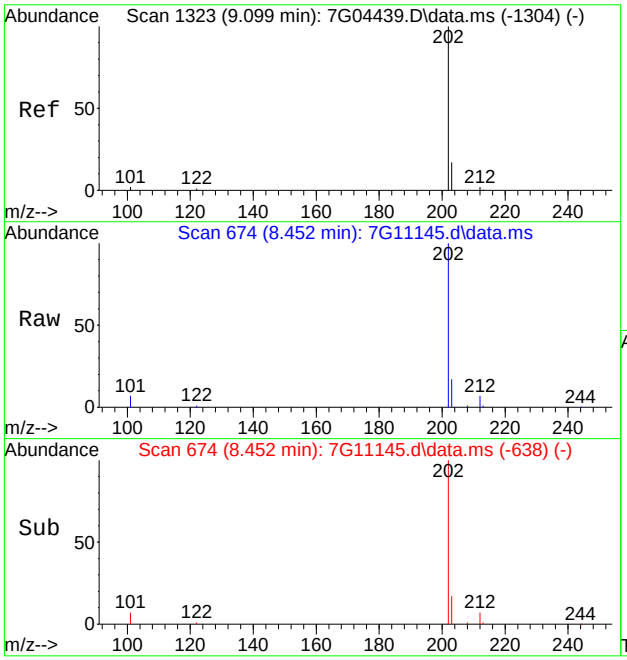


#15
Carbazole
Concen: 0.42 ppm
RT: 7.640 min Scan# 550
Delta R.T. 0.007 min
Lab File: 7G11145.d
Acq: 11 Aug 2020 2:26 pm

Tgt Ion:167 Resp: 8459

Ion	Ratio	Lower	Upper
167	100		
166	21.2	1.2	41.2
139	13.3	0.0	32.8

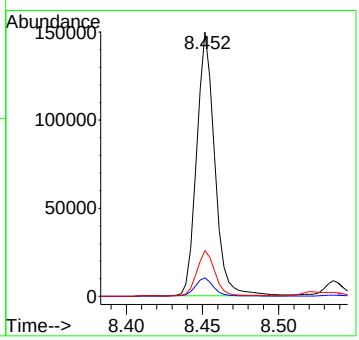


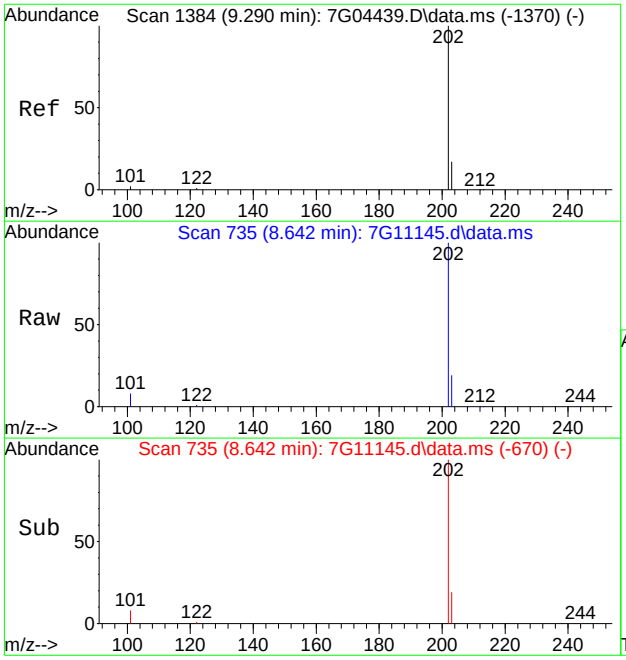


#16
Fluoranthene
Concen: 5.86 ppm
RT: 8.452 min Scan# 674
Delta R.T. 0.003 min
Lab File: 7G11145.d
Acq: 11 Aug 2020 2:26 pm

Tgt Ion:202 Resp: 123137

Ion	Ratio	Lower	Upper
202	100		
101	6.9	0.0	32.2
203	17.2	0.0	47.2

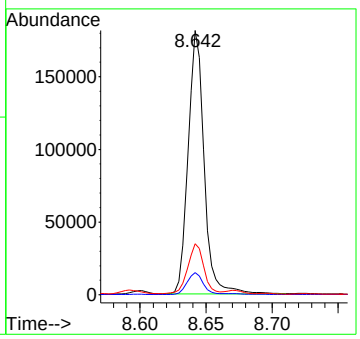


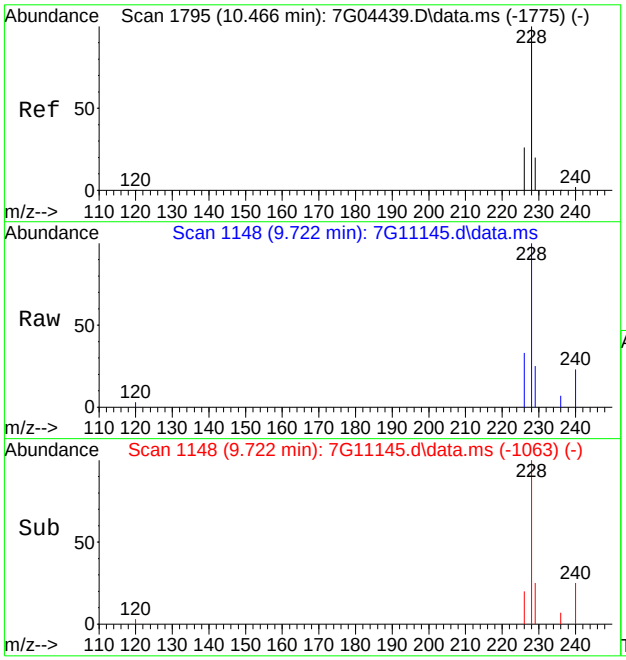


#19
Pyrene
Concen: 6.30 ppm
RT: 8.642 min Scan# 735
Delta R.T. 0.003 min
Lab File: 7G11145.d
Acq: 11 Aug 2020 2:26 pm

Tgt Ion:202 Resp: 153017

Ion	Ratio	Lower	Upper
202	100		
101	8.3	0.0	32.4
203	19.0	0.0	47.4

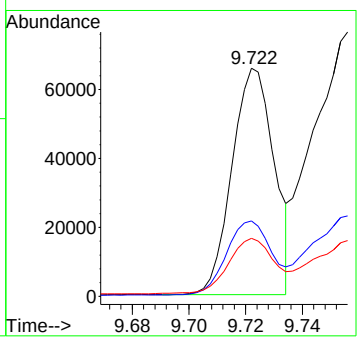


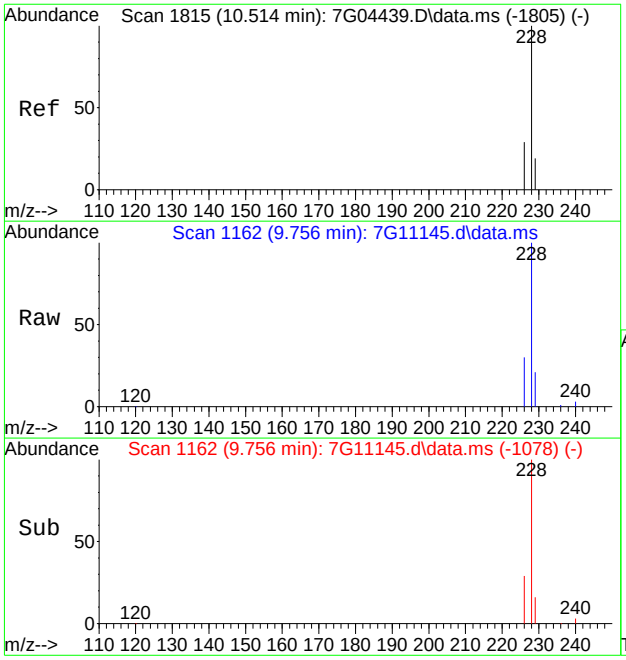


#20
Benzo[a]anthracene
Concen: 3.57 ppm
RT: 9.722 min Scan# 1148
Delta R.T. 0.005 min
Lab File: 7G11145.d
Acq: 11 Aug 2020 2:26 pm

Tgt Ion:228 Resp: 67942

Ion	Ratio	Lower	Upper
228	100		
226	33.1	0.0	56.1
229	24.4	0.0	49.5

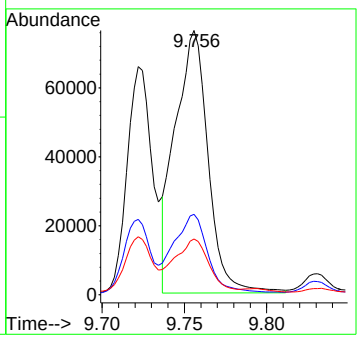


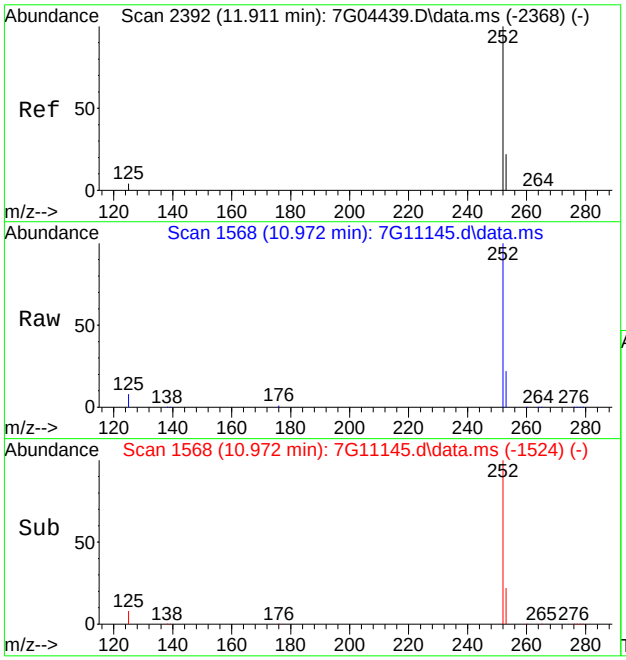


#21
Chrysene
Concen: 5.02 ppm
RT: 9.756 min Scan# 1162
Delta R.T. 0.002 min
Lab File: 7G11145.d
Acq: 11 Aug 2020 2:26 pm

Tgt Ion:228 Resp: 105940

Ion	Ratio	Lower	Upper
228	100		
226	29.7	0.0	58.9
229	19.5	0.0	49.5

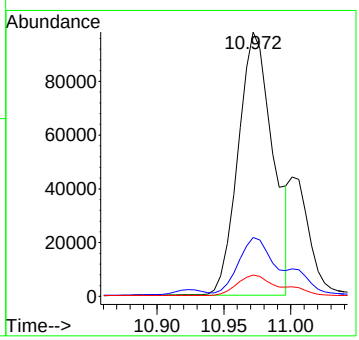


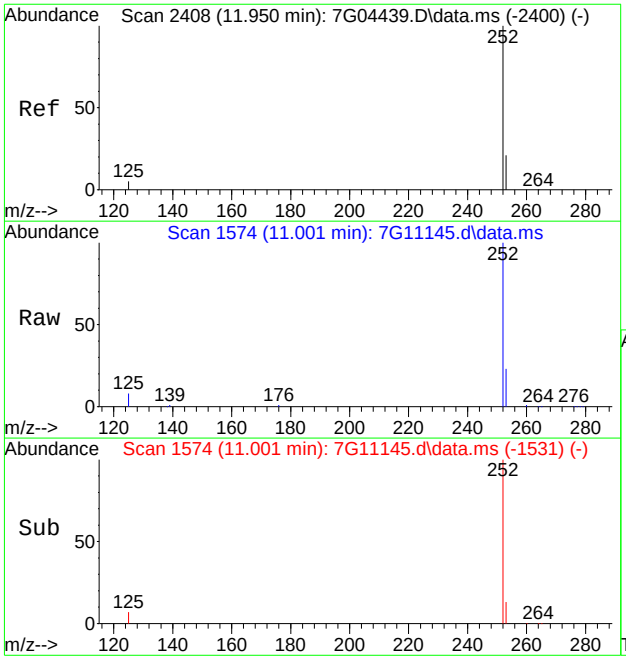


#23
Benzo[b]fluoranthene
Concen: 9.04 ppm
RT: 10.972 min Scan# 1568
Delta R.T. 0.015 min
Lab File: 7G11145.d
Acq: 11 Aug 2020 2:26 pm

Tgt Ion:252 Resp: 177209

Ion	Ratio	Lower	Upper
252	100		
253	21.5	0.0	51.7
125	7.8	0.0	34.5

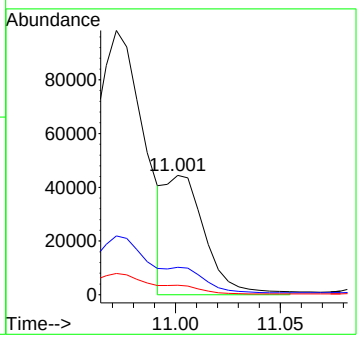


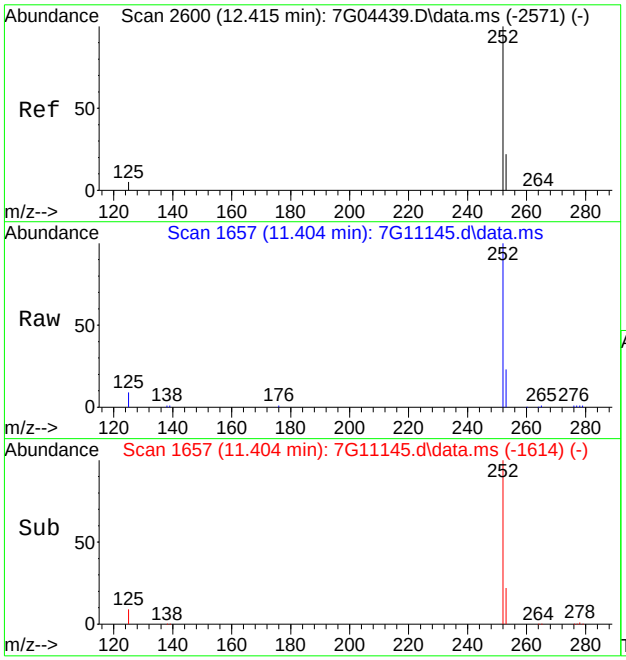


#24
Benzo[k]fluoranthene
Concen: 2.86 ppm m
RT: 11.001 min Scan# 1574
Delta R.T. 0.010 min
Lab File: 7G11145.d
Acq: 11 Aug 2020 2:26 pm

Tgt Ion:252 Resp: 59457

Ion	Ratio	Lower	Upper
252	100		
253	23.2	0.0	51.5
125	8.0	0.0	34.8

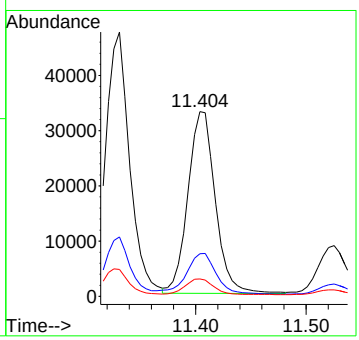


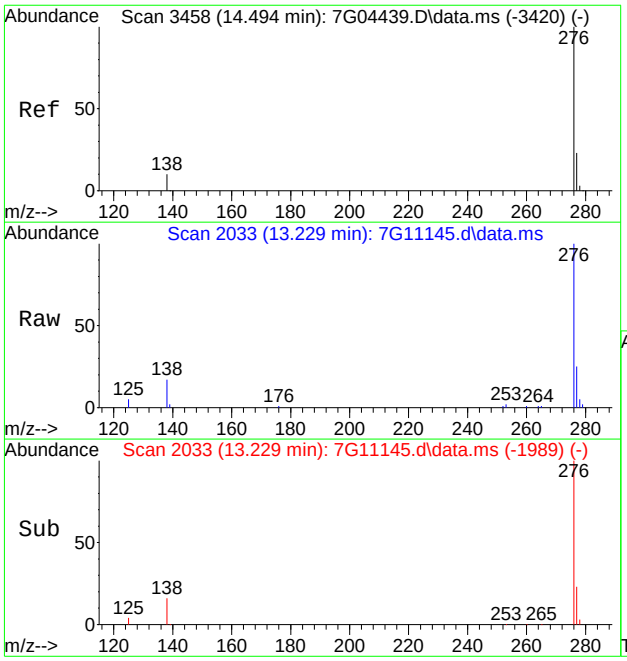


#25
Benzo[a]pyrene
Concen: 2.98 ppm
RT: 11.404 min Scan# 1657
Delta R.T. 0.010 min
Lab File: 7G11145.d
Acq: 11 Aug 2020 2:26 pm

Tgt Ion:252 Resp: 56947

Ion	Ratio	Lower	Upper
252	100		
253	21.5	0.0	51.6
125	8.6	0.0	34.8

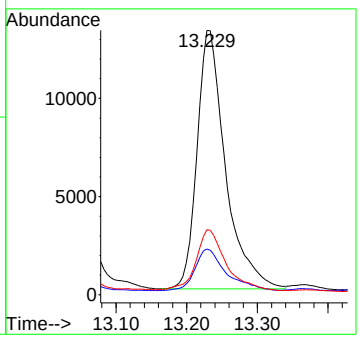


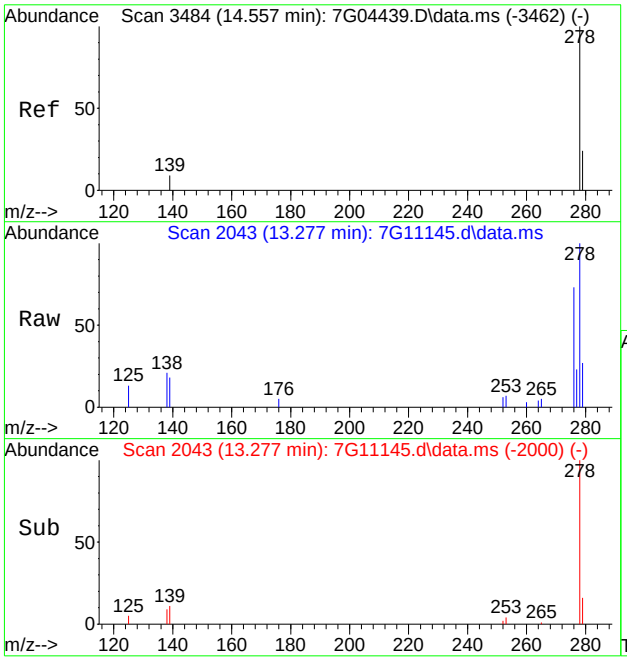


#26
Indeno[1,2,3-cd]pyrene
Concen: 2.96 ppm
RT: 13.229 min Scan# 2033
Delta R.T. 0.015 min
Lab File: 7G11145.d
Acq: 11 Aug 2020 2:26 pm

Tgt Ion:276 Resp: 36860

Ion	Ratio	Lower	Upper
276	100		
138	16.0	0.0	39.6
277	23.4	0.0	53.1

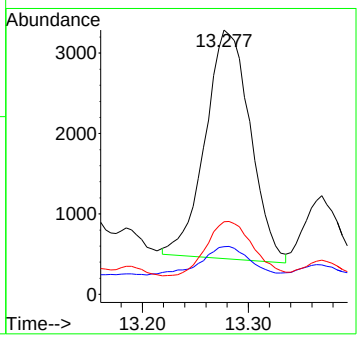


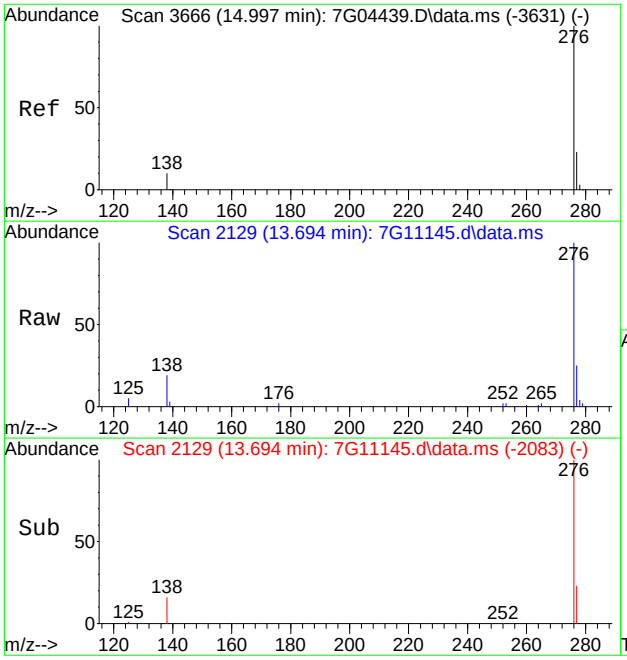


#27
Dibenz[a,h]anthracene
Concen: 0.61 ppm
RT: 13.277 min Scan# 2043
Delta R.T. 0.010 min
Lab File: 7G11145.d
Acq: 11 Aug 2020 2:26 pm

Tgt Ion:278 Resp: 8389

Ion	Ratio	Lower	Upper
278	100		
139	11.7	0.0	38.8
279	23.5	0.0	53.6

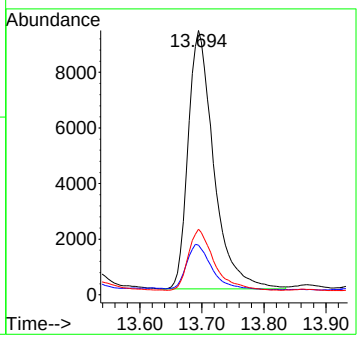




#28
Benzo[g,h,i]perylene
Concen: 1.78 ppm
RT: 13.694 min Scan# 2129
Delta R.T. 0.024 min
Lab File: 7G11145.d
Acq: 11 Aug 2020 2:26 pm

Tgt Ion:276 Resp: 26726

Ion	Ratio	Lower	Upper
276	100		
138	17.0	0.0	40.5
277	23.6	0.0	53.2



Manual Integration Approval Summary

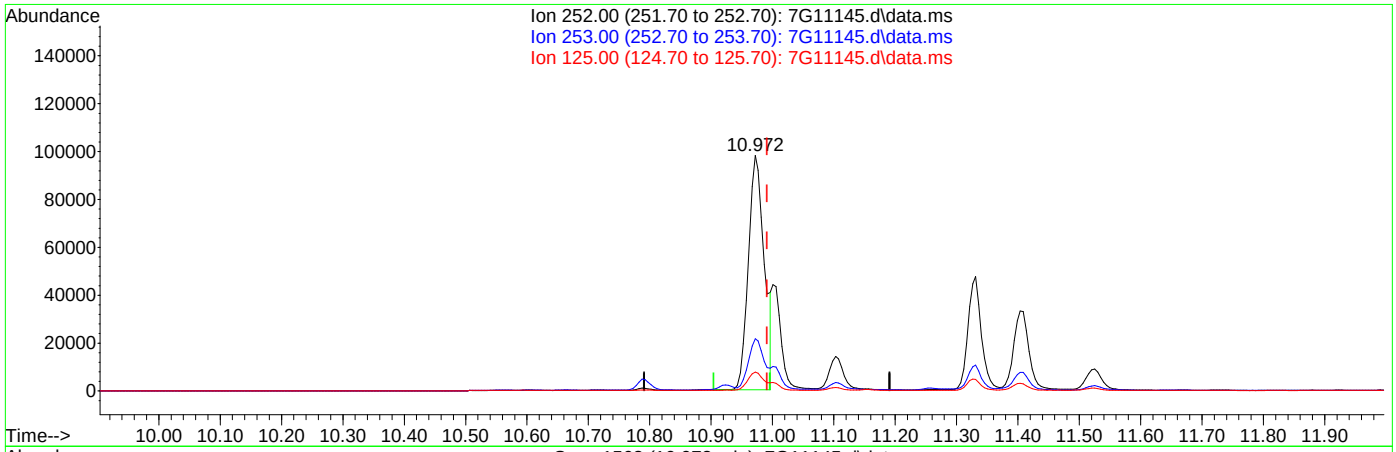
Sample Number: FA77615-7
Lab FileID: 7G11145.D
Injection Time: 08/11/20 14:26
Method: SW846 8270E BY SIM
Analyst approved: 08/12/20 09:33 Fouad Sekkar
Supervisor approved: 08/12/20 11:43 Nicole McCampbell

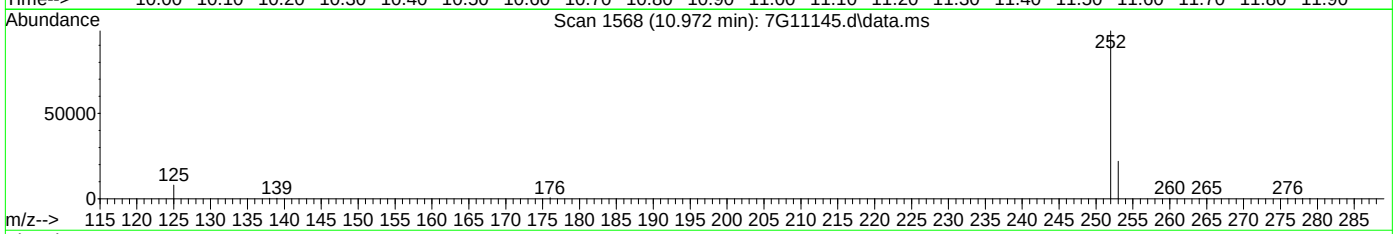
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(k)fluoranthene	207-08-9		11.00	Missed peak

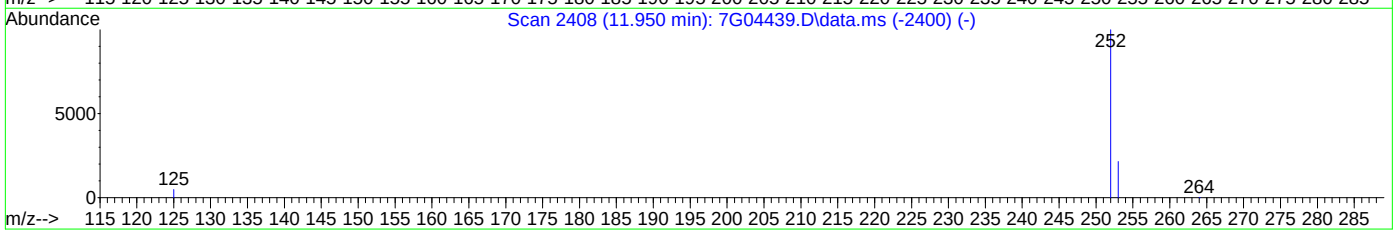
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11145.d
Acq On : 11 Aug 2020 2:26 pm
Operator : FOUADS
Sample : fa77615-7 e Inst : MSBNA8
Misc : op81485,S7G483,15.0,,,1,1,soil
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:26:52 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11145.d\data.ms

(24) Benzo[k]fluoranthene (P)

10.972min (-0.019) 8.39ppm

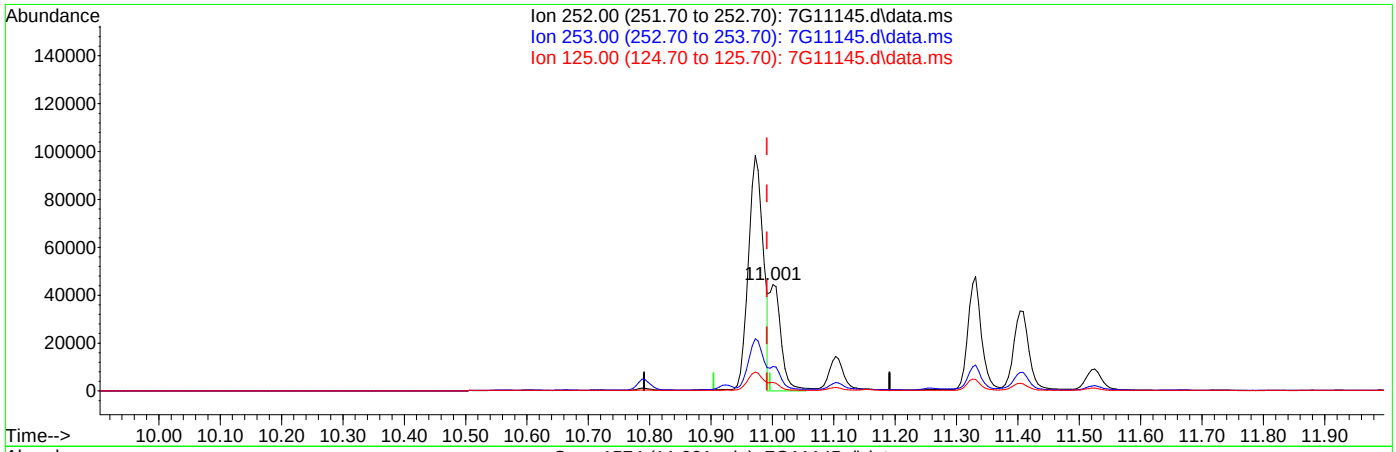
response 177209

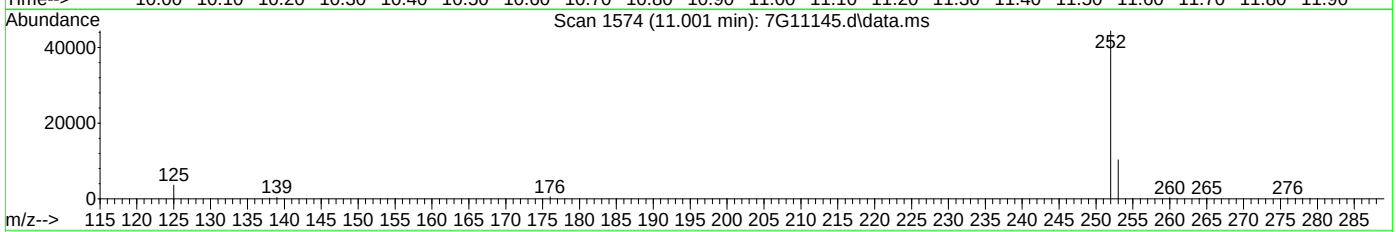
Ion	Exp%	Act%
252.00	100	100
253.00	21.50	21.52
125.00	4.80	7.80
0.00	0.00	0.00

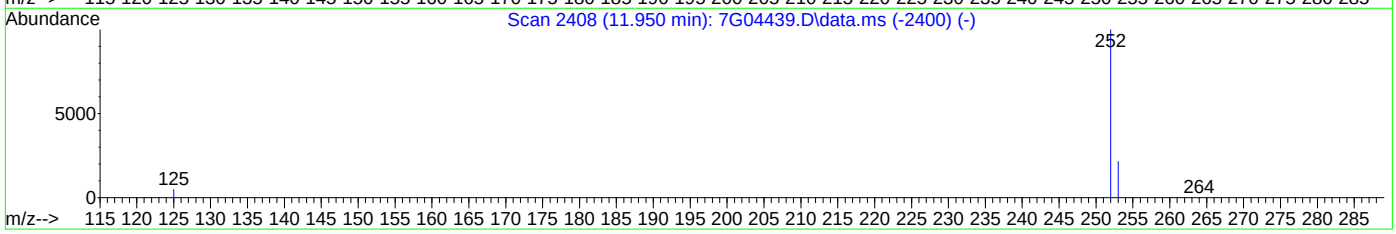
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11145.d
Acq On : 11 Aug 2020 2:26 pm
Operator : FOUADS
Sample : fa77615-7 e Inst : MSBNA8
Misc : op81485,S7G483,15.0,,,1,1,soil
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:26:52 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11145.d\data.ms

(24) Benzo[k]fluoranthene (P)

11.001min (+0.010) 2.86ppm m

response 59457

Ion	Exp%	Act%
252.00	100	100
253.00	21.50	23.18
125.00	4.80	8.03
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 08/12/20 11:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11146.d
Acq On : 11 Aug 2020 2:51 pm
Operator : FOUADS
Sample : fa77615-8 e Inst : MSBNA8
Misc : op81485,S7G483,15.4,,,1,1,soil
ALS Vial : 18 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:39:14 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.640	136	21624	4.00	ppm	0.01
6) Acenaphthene-d10	6.123	164	17811	4.00	ppm	0.00
11) Phenanthrene-d10	7.403	188	34710	4.00	ppm	0.00
18) Chrysene-d12	9.744	240	65043	4.00	ppm	0.02
22) Perylene-d12	11.496	264	61378	4.00	ppm	0.02
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.217	152	36659	11.25	ppm	0.01
Spiked Amount 10.000	Range 50 - 150		Recovery = 112.50%			
17) Fluoranthene-d10	8.445	212	193934	10.68	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 106.80%			
Target Compounds						Qvalue
7) Acenaphthylene	6.002	152	23040	2.25	ppm	99
10) Fluorene	6.607	166	1785	0.25	ppm	95
13) Phenanthrene	7.424	178	8360	0.73	ppm	96
14) Anthracene	7.473	178	58927	5.06	ppm	100
15) Carbazole	7.647	167	13412	0.65	ppm	99
16) Fluoranthene	8.461	202	201037	9.15	ppm	98
19) Pyrene	8.651	202	272966	10.47	ppm	95
20) Benzo[a]anthracene	9.732	228	152562	7.42	ppm	88
21) Chrysene	9.768	228	240181	10.66	ppm	98
23) Benzo[b]fluoranthene	10.991	252	406131	19.49	ppm	97
24) Benzo[k]fluoranthene	11.020	252	113084m	5.09	ppm	
25) Benzo[a]pyrene	11.418	252	133153	6.56	ppm	98
26) Indeno[1,2,3-cd]pyrene	13.243	276	81484	6.15	ppm	95
27) Dibenz[a,h]anthracene	13.287	278	19817	1.35	ppm	98
28) Benzo[g,h,i]perylene	13.704	276	57558	3.60	ppm	95

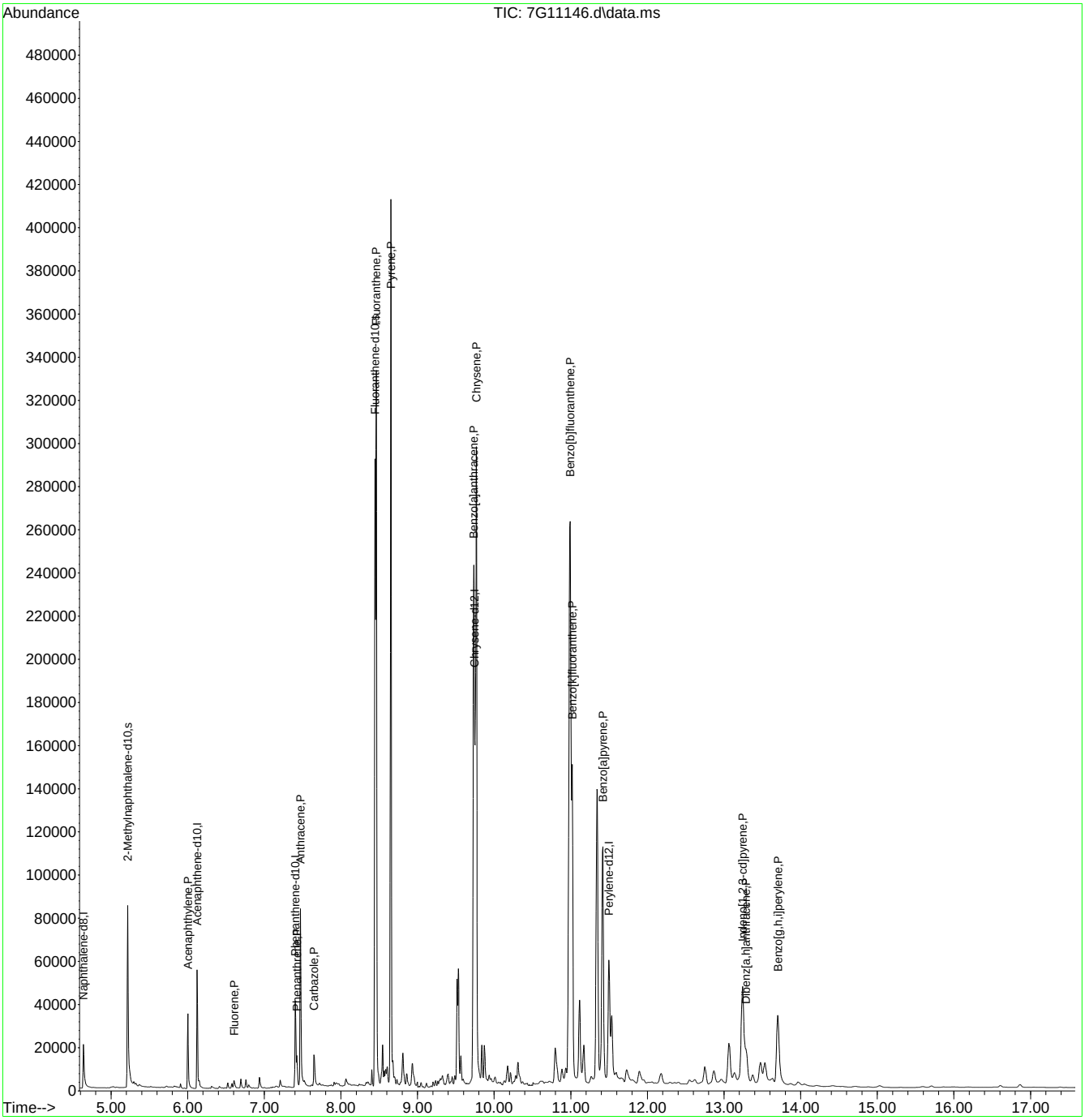
(#) = qualifier out of range (m) = manual integration (+) = signals summed

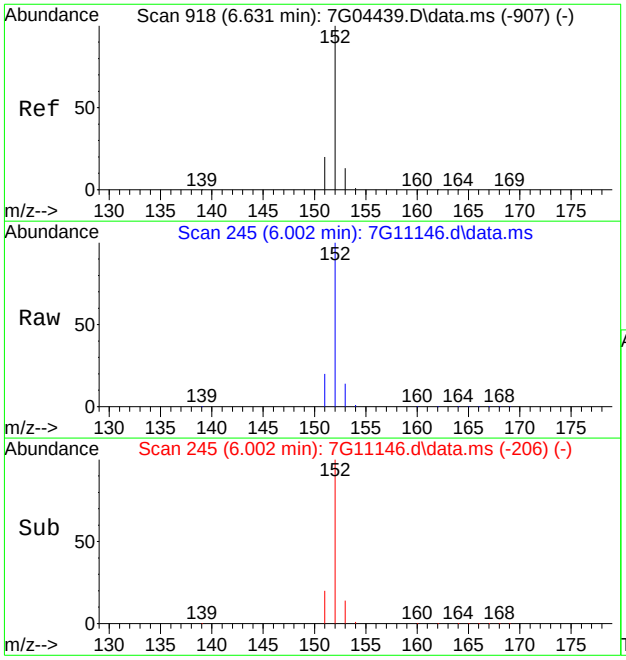
7.1.25
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11146.d
Acq On : 11 Aug 2020 2:51 pm
Operator : FOUADS
Sample : fa77615-8 e Inst : MSBNA8
Misc : op81485,S7G483,15.4,,,1,1,soil
ALS Vial : 18 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:39:14 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

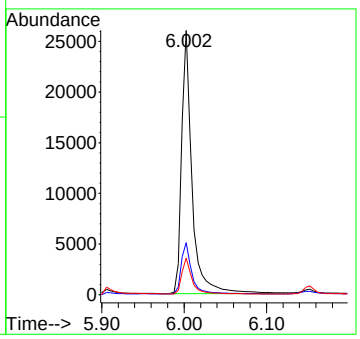


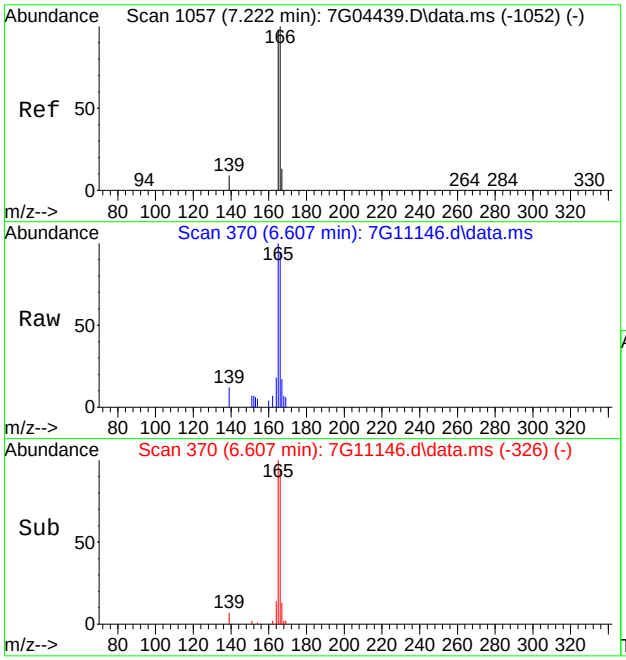


#7
Acenaphthylene
Concen: 2.25 ppm
RT: 6.002 min Scan# 245
Delta R.T. 0.010 min
Lab File: 7G11146.d
Acq: 11 Aug 2020 2:51 pm

Tgt Ion:152 Resp: 23040

Ion	Ratio	Lower	Upper
152	100		
151	19.5	0.0	49.8
153	13.6	0.0	42.8

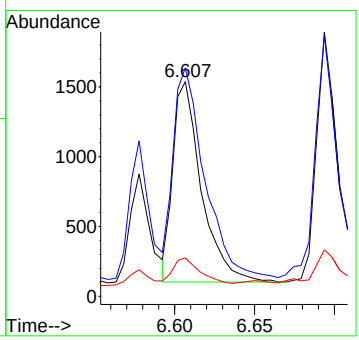


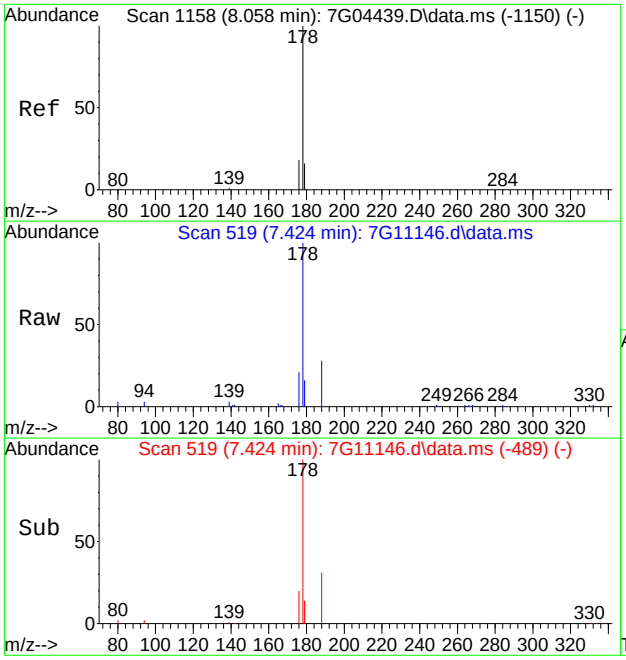


#10
Fluorene
Concen: 0.25 ppm
RT: 6.607 min Scan# 370
Delta R.T. 0.015 min
Lab File: 7G11146.d
Acq: 11 Aug 2020 2:51 pm

Tgt Ion:166 Resp: 1785

Ion	Ratio	Lower	Upper
166	100		
165	103.5	68.2	128.2
167	12.1	0.0	42.9

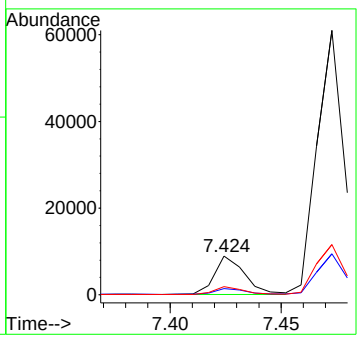


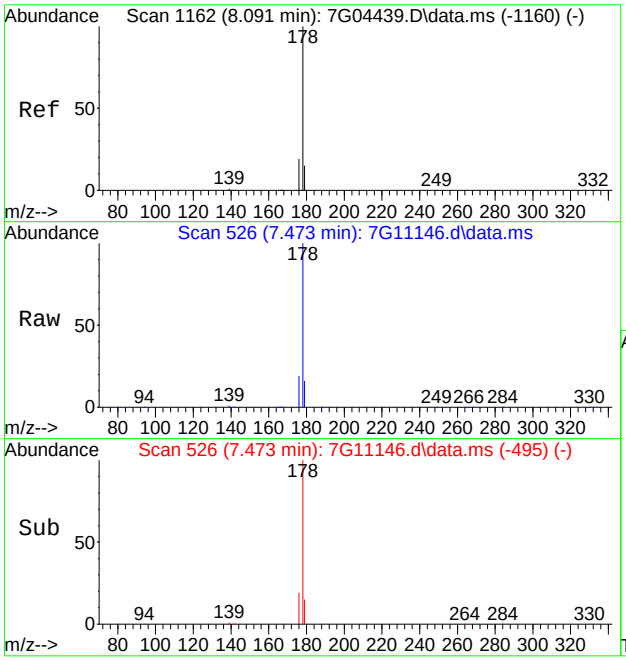


#13
Phenanthrene
Concen: 0.73 ppm
RT: 7.424 min Scan# 519
Delta R.T. 0.007 min
Lab File: 7G11146.d
Acq: 11 Aug 2020 2:51 pm

Tgt Ion:178 Resp: 8360

Ion	Ratio	Lower	Upper
178	100		
179	15.0	0.0	45.7
176	20.5	0.0	48.0

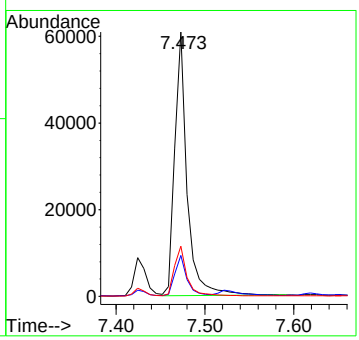


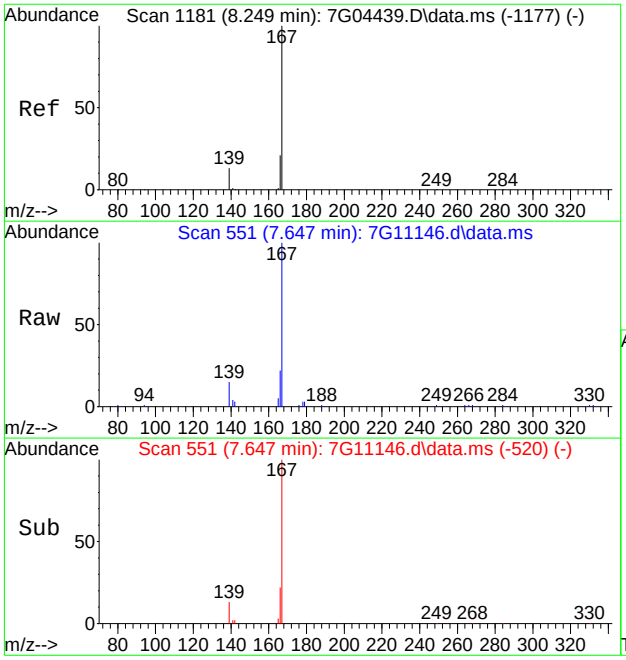


#14
Anthracene
Concen: 5.06 ppm
RT: 7.473 min Scan# 526
Delta R.T. 0.014 min
Lab File: 7G11146.d
Acq: 11 Aug 2020 2:51 pm

Tgt Ion:178 Resp: 58927

Ion	Ratio	Lower	Upper
178	100		
179	15.3	0.0	45.1
176	18.9	0.0	48.8

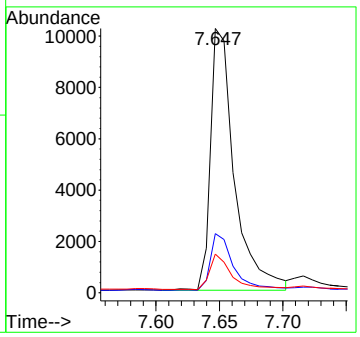


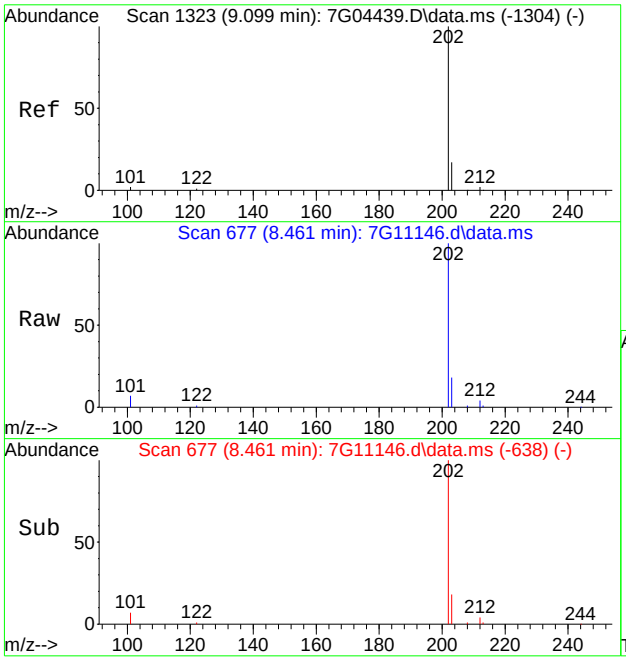


#15
Carbazole
Concen: 0.65 ppm
RT: 7.647 min Scan# 551
Delta R.T. 0.014 min
Lab File: 7G11146.d
Acq: 11 Aug 2020 2:51 pm

Tgt Ion:167 Resp: 13412

Ion	Ratio	Lower	Upper
167	100		
166	21.6	1.2	41.2
139	13.4	0.0	32.8

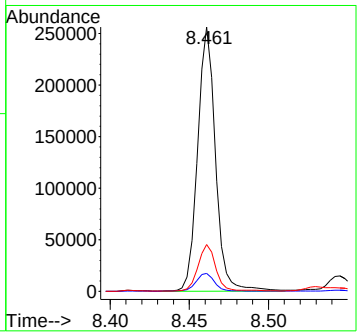


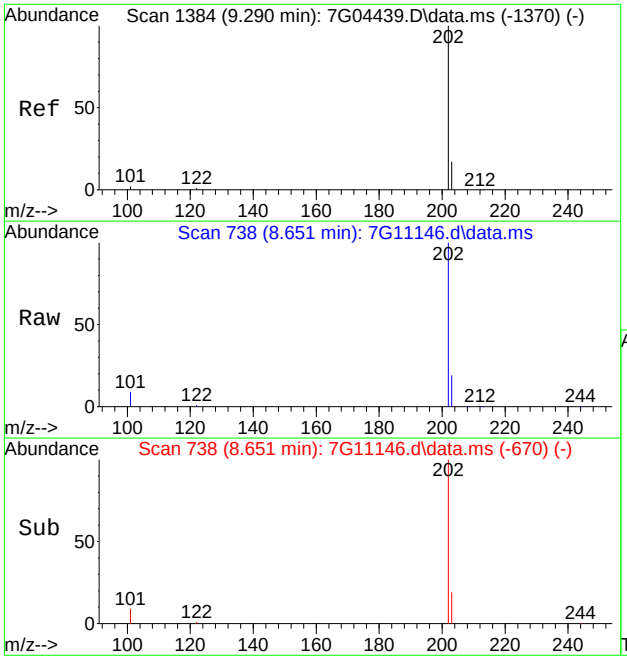


#16
Fluoranthene
Concen: 9.15 ppm
RT: 8.461 min Scan# 677
Delta R.T. 0.012 min
Lab File: 7G11146.d
Acq: 11 Aug 2020 2:51 pm

Tgt Ion:202 Resp: 201037

Ion	Ratio	Lower	Upper
202	100		
101	6.7	0.0	32.2
203	17.6	0.0	47.2

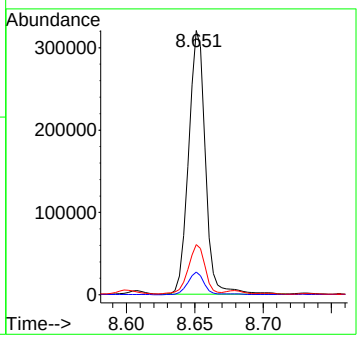


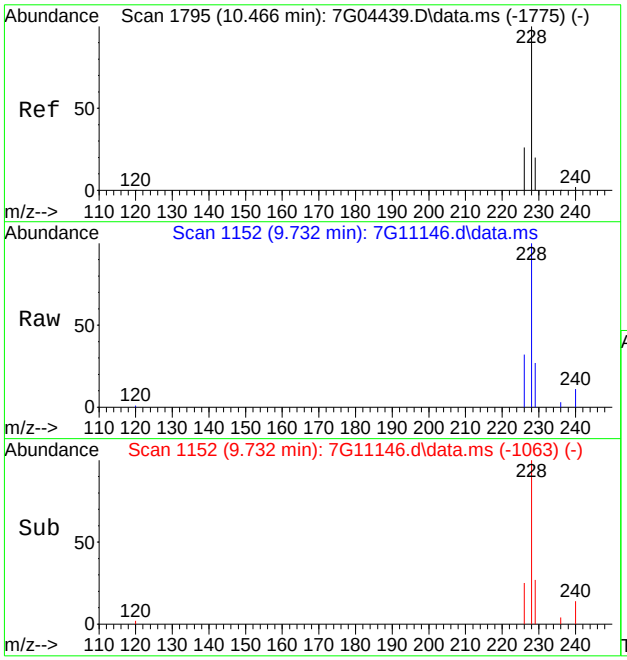


#19
Pyrene
Concen: 10.47 ppm
RT: 8.651 min Scan# 738
Delta R.T. 0.012 min
Lab File: 7G11146.d
Acq: 11 Aug 2020 2:51 pm

Tgt Ion:202 Resp: 272966

Ion	Ratio	Lower	Upper
202	100		
101	8.6	0.0	32.4
203	18.7	0.0	47.4

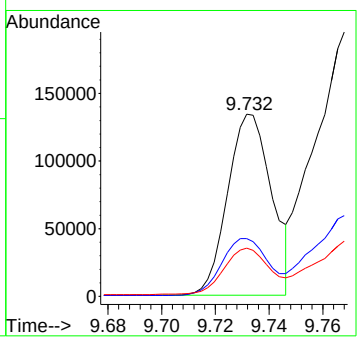


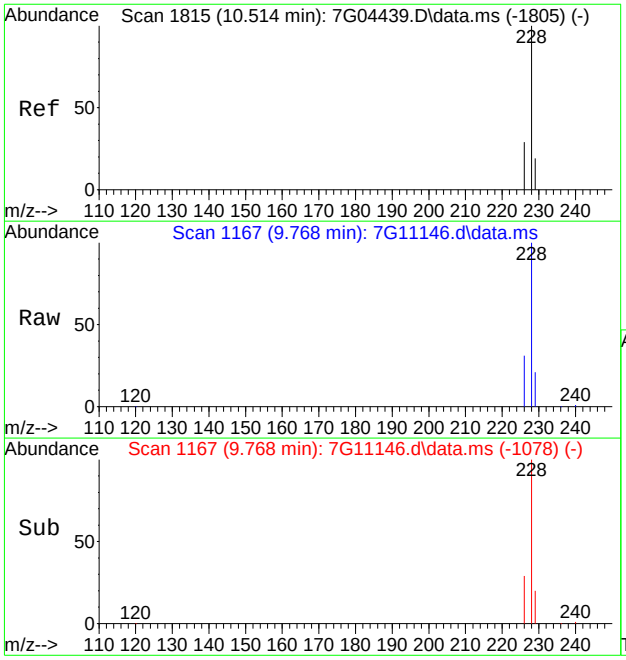


#20
Benzo[a]anthracene
Concen: 7.42 ppm
RT: 9.732 min Scan# 1152
Delta R.T. 0.015 min
Lab File: 7G11146.d
Acq: 11 Aug 2020 2:51 pm

Tgt Ion:228 Resp: 152562

Ion	Ratio	Lower	Upper
228	100		
226	31.6	0.0	56.1
229	26.1	0.0	49.5

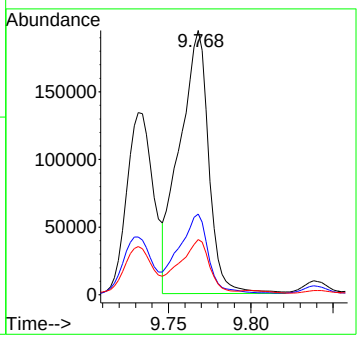


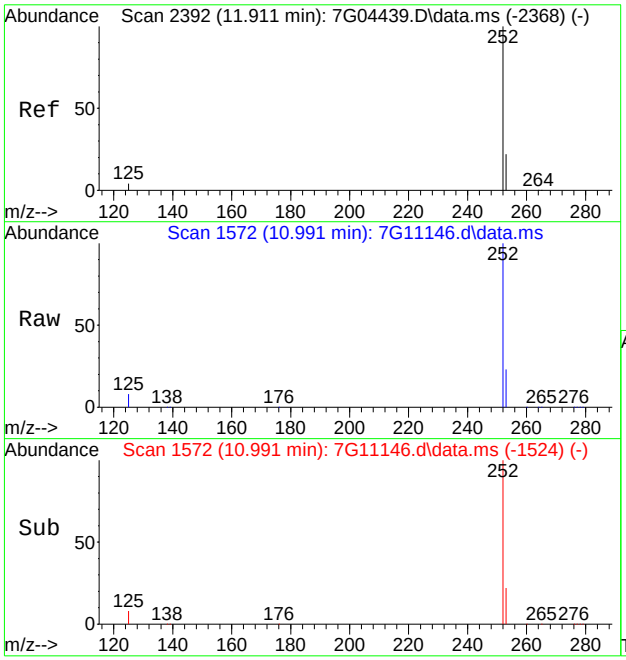


#21
Chrysene
Concen: 10.66 ppm
RT: 9.768 min Scan# 1167
Delta R.T. 0.015 min
Lab File: 7G11146.d
Acq: 11 Aug 2020 2:51 pm

Tgt Ion:228 Resp: 240181

Ion	Ratio	Lower	Upper
228	100		
226	30.2	0.0	58.9
229	19.9	0.0	49.5

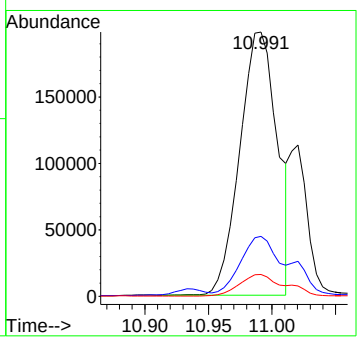


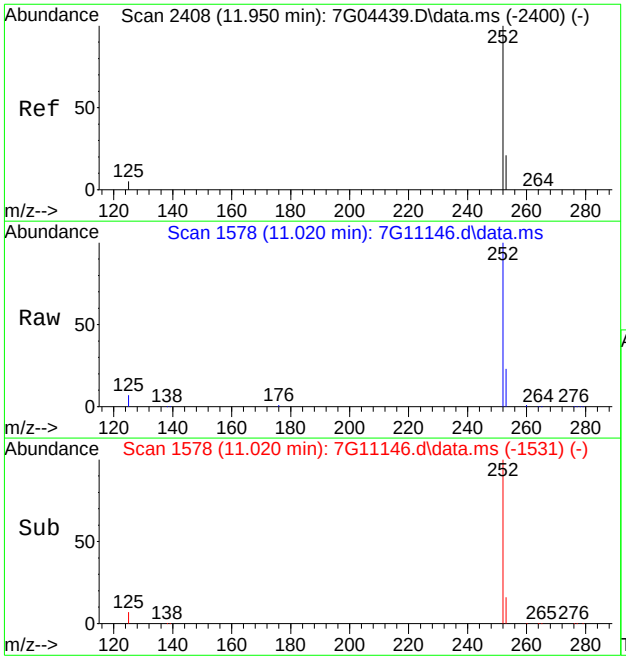


#23
Benzo[b]fluoranthene
Concen: 19.49 ppm
RT: 10.991 min Scan# 1572
Delta R.T. 0.034 min
Lab File: 7G11146.d
Acq: 11 Aug 2020 2:51 pm

Tgt Ion:252 Resp: 406131

Ion	Ratio	Lower	Upper
252	100		
253	22.0	0.0	51.7
125	8.3	0.0	34.5

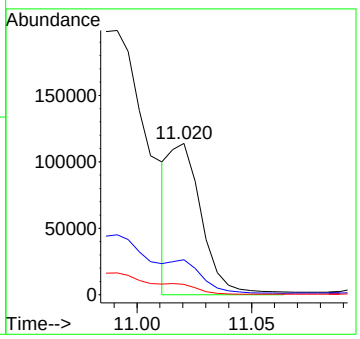


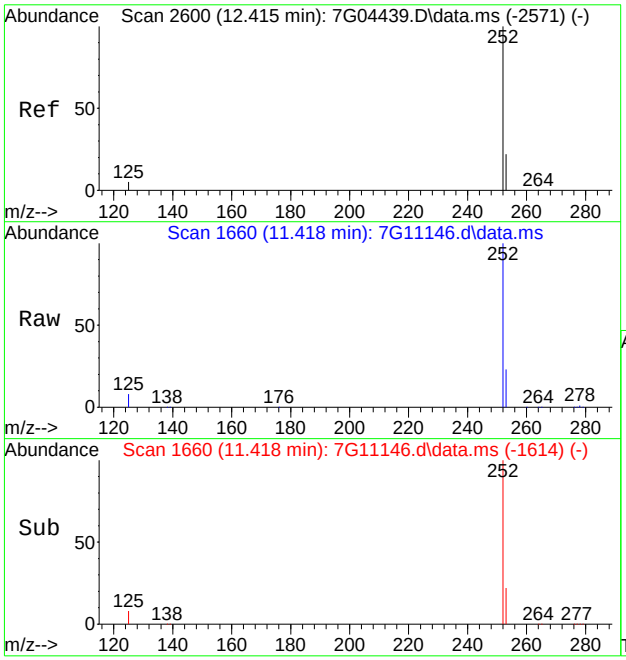


#24
Benzo[k]fluoranthene
Concen: 5.09 ppm m
RT: 11.020 min Scan# 1578
Delta R.T. 0.029 min
Lab File: 7G11146.d
Acq: 11 Aug 2020 2:51 pm

Tgt Ion:252 Resp: 113084

Ion	Ratio	Lower	Upper
252	100		
253	23.1	0.0	51.5
125	6.9	0.0	34.8

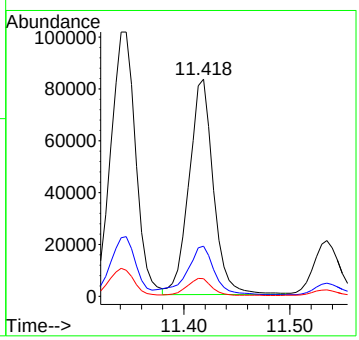


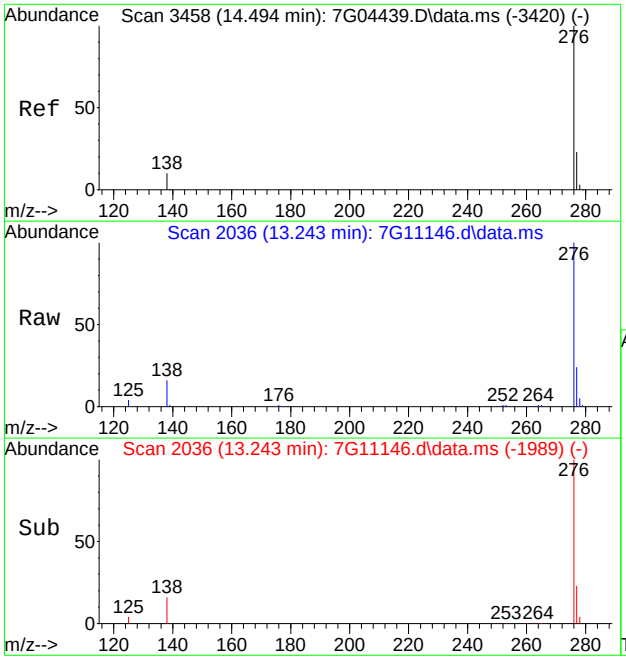


#25
Benzo[a]pyrene
Concen: 6.56 ppm
RT: 11.418 min Scan# 1660
Delta R.T. 0.024 min
Lab File: 7G11146.d
Acq: 11 Aug 2020 2:51 pm

Tgt Ion:252 Resp: 133153

Ion	Ratio	Lower	Upper
252	100		
253	21.4	0.0	51.6
125	7.7	0.0	34.8

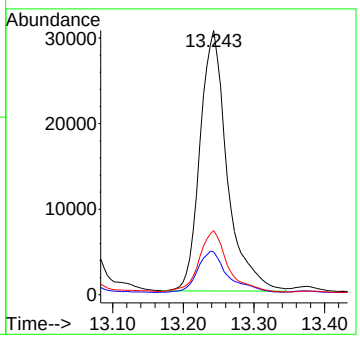


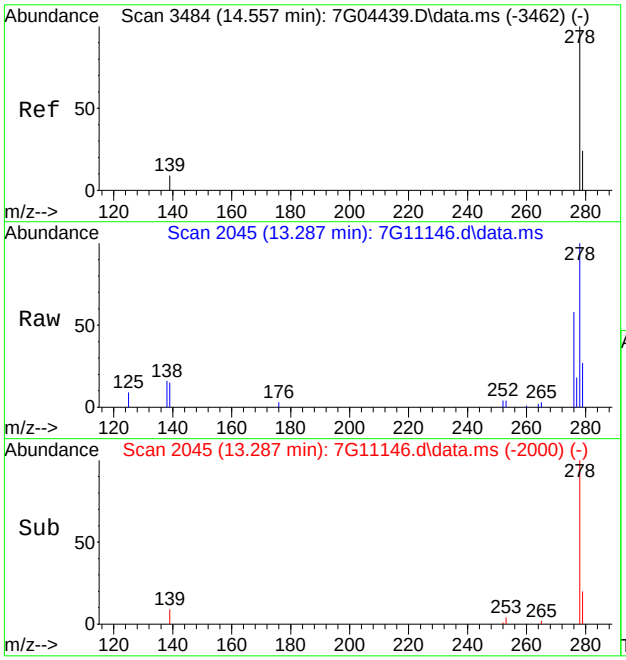


#26
Indeno[1,2,3-cd]pyrene
Concen: 6.15 ppm
RT: 13.243 min Scan# 2036
Delta R.T. 0.029 min
Lab File: 7G11146.d
Acq: 11 Aug 2020 2:51 pm

Tgt Ion:276 Resp: 81484

Ion	Ratio	Lower	Upper
276	100		
138	15.5	0.0	39.6
277	23.6	0.0	53.1

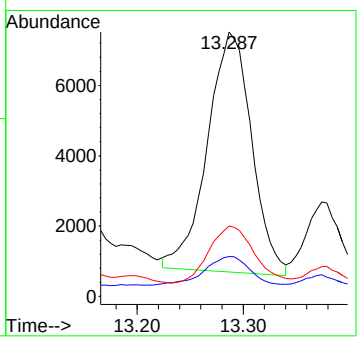


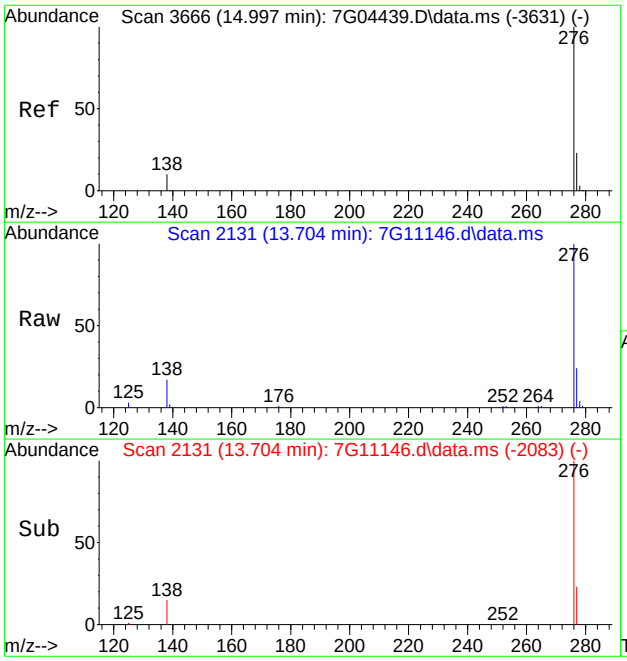


#27
Dibenz[a,h]anthracene
Concen: 1.35 ppm
RT: 13.287 min Scan# 2045
Delta R.T. 0.019 min
Lab File: 7G11146.d
Acq: 11 Aug 2020 2:51 pm

Tgt Ion:278 Resp: 19817

Ion	Ratio	Lower	Upper
278	100		
139	11.9	0.0	38.8
279	23.6	0.0	53.6

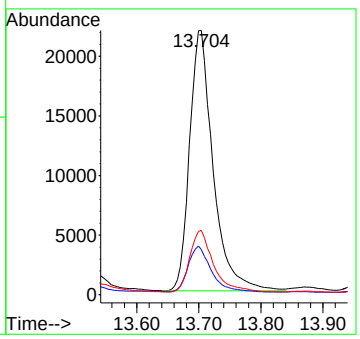




#28
Benzo[g,h,i]perylene
Concen: 3.60 ppm
RT: 13.704 min Scan# 2131
Delta R.T. 0.034 min
Lab File: 7G11146.d
Acq: 11 Aug 2020 2:51 pm

Tgt Ion:276 Resp: 57558

Ion	Ratio	Lower	Upper
276	100		
138	16.2	0.0	40.5
277	23.7	0.0	53.2



Manual Integration Approval Summary

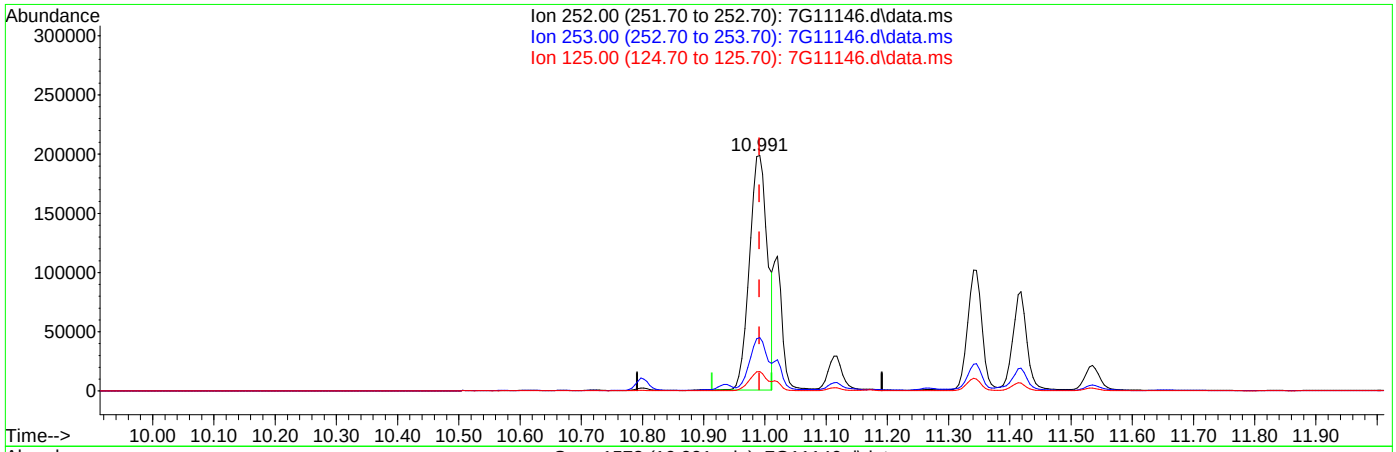
Sample Number: FA77615-8
Lab FileID: 7G11146.D
Injection Time: 08/11/20 14:51
Method: SW846 8270E BY SIM
Analyst approved: 08/12/20 09:33 Fouad Sekkar
Supervisor approved: 08/12/20 11:43 Nicole McCampbell

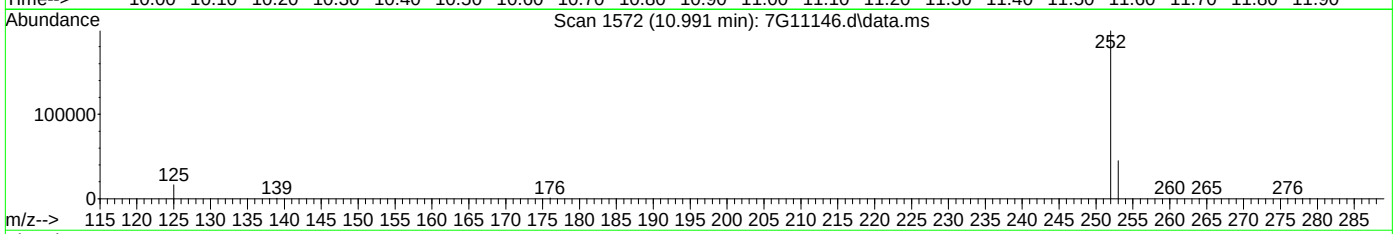
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(k)fluoranthene	207-08-9		11.02	Missed peak

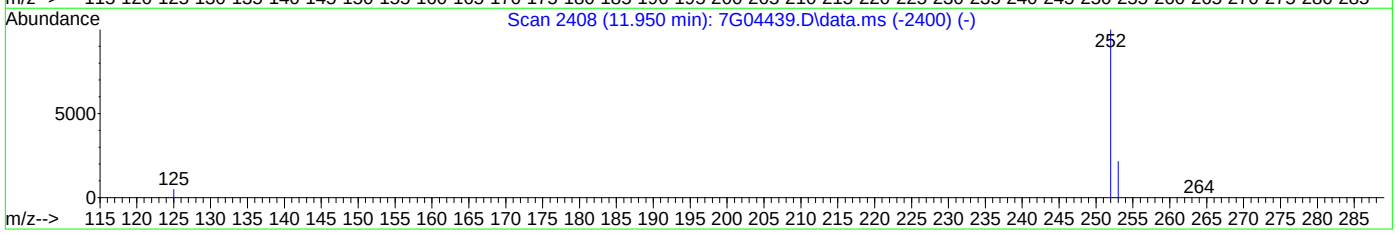
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11146.d
Acq On : 11 Aug 2020 2:51 pm
Operator : FOUADS
Sample : fa77615-8 e Inst : MSBNA8
Misc : op81485,S7G483,15.4,,,1,1,soil
ALS Vial : 18 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:26:55 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11146.d\data.ms

(24) Benzo[k]fluoranthene (P)

10.991min (+0.000) 17.60ppm

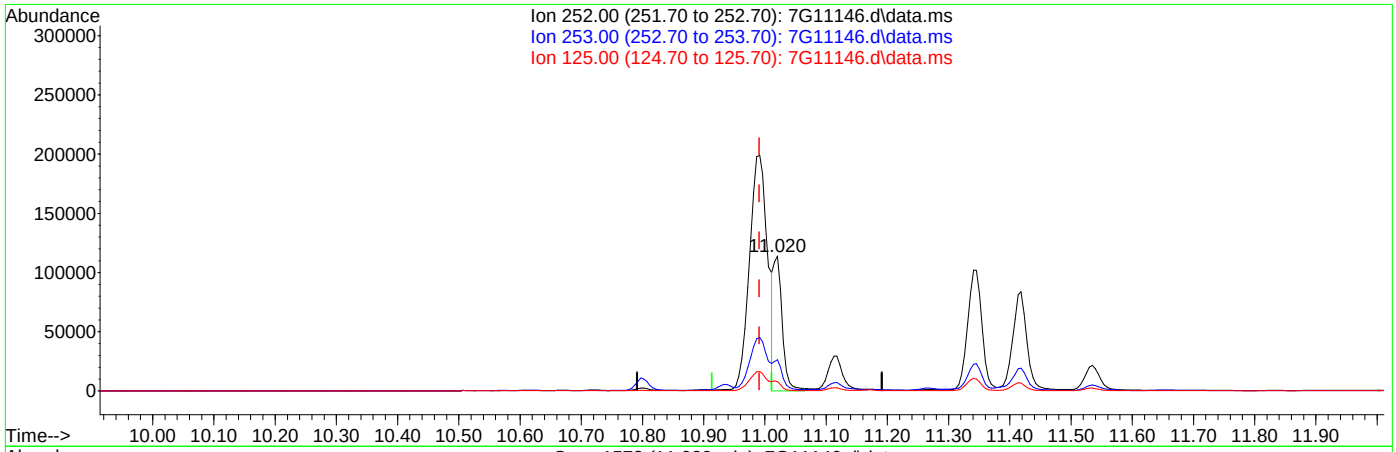
response 406131

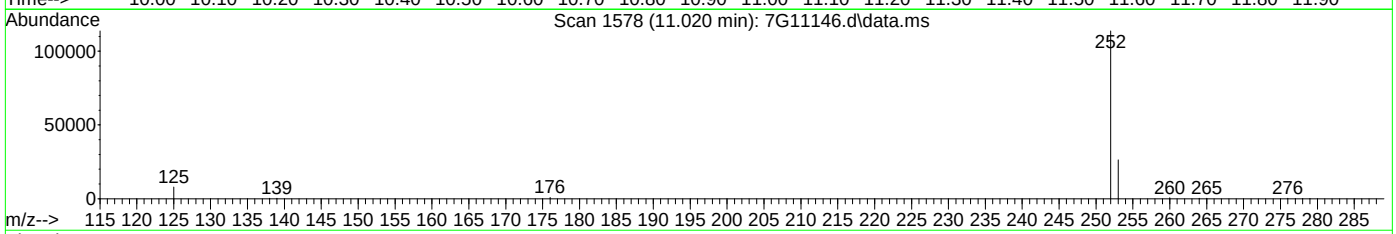
Ion	Exp%	Act%
252.00	100	100
253.00	21.50	22.02
125.00	4.80	8.28
0.00	0.00	0.00

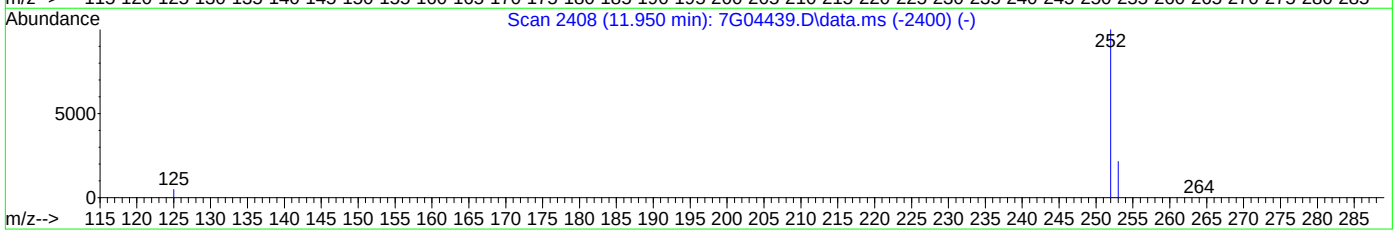
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11146.d
Acq On : 11 Aug 2020 2:51 pm
Operator : FOUADS
Sample : fa77615-8 e Inst : MSBNA8
Misc : op81485,S7G483,15.4,,,1,1,soil
ALS Vial : 18 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:26:55 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11146.d\data.ms

(24) Benzo[k]fluoranthene (P)

11.020min (+0.029) 5.09ppm m

response 113084

Ion	Exp%	Act%
252.00	100	100
253.00	21.50	23.10
125.00	4.80	6.94
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 08/12/20 11:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11147.d
Acq On : 11 Aug 2020 3:15 pm
Operator : FOUADS
Sample : fa77615-9 e Inst : MSBNA8
Misc : op81485,S7G483,15.2,,,1,1,soil
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:40:23 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

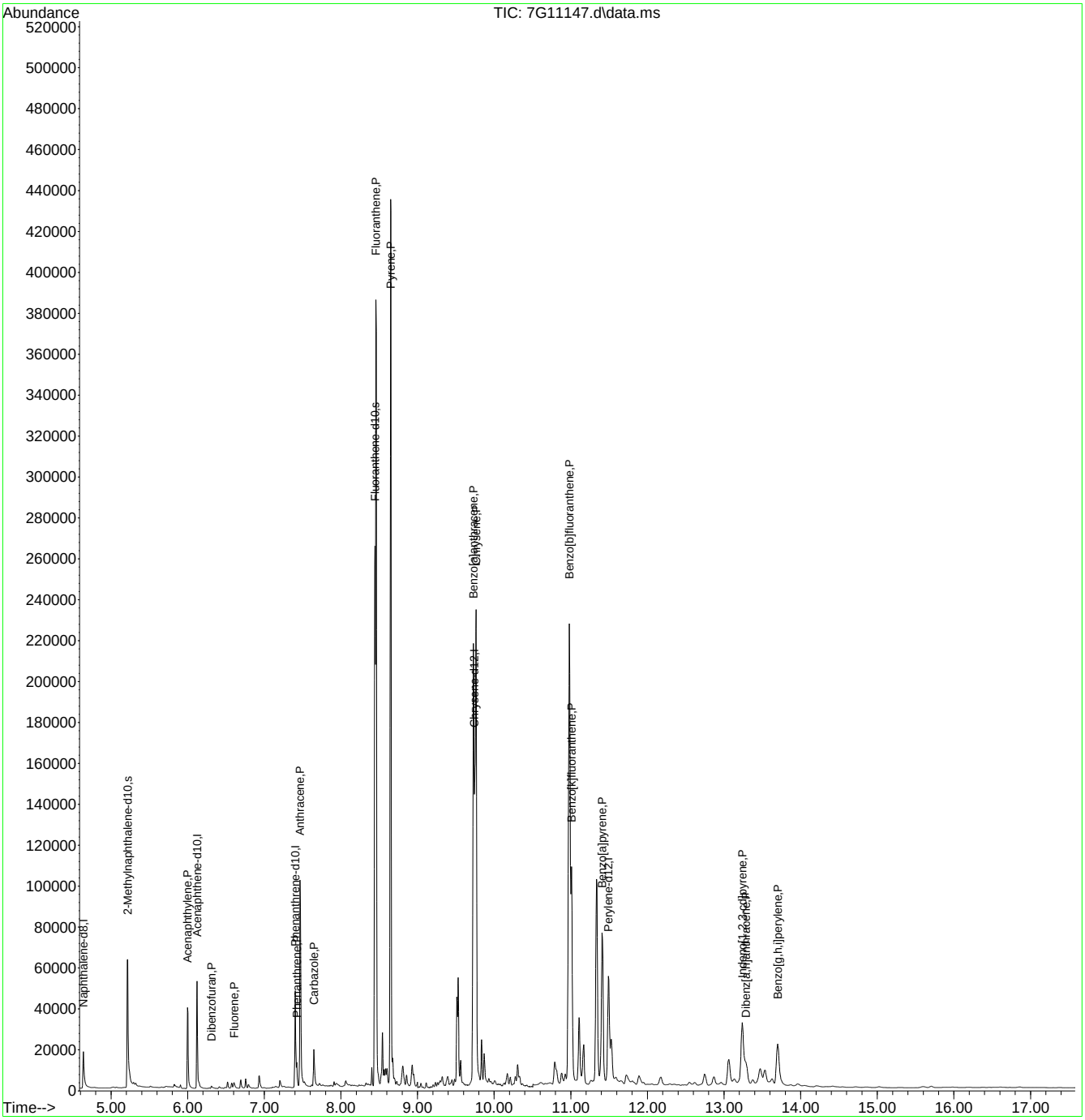
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.640	136	20528	4.00	ppm	0.01
6) Acenaphthene-d10	6.123	164	17614	4.00	ppm	0.00
11) Phenanthrene-d10	7.403	188	34676	4.00	ppm	0.00
18) Chrysene-d12	9.739	240	64840	4.00	ppm	0.01
22) Perylene-d12	11.491	264	59121	4.00	ppm	0.01
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.217	152	32321	10.48	ppm	0.01
Spiked Amount 10.000	Range 50 - 150		Recovery = 104.80%			
17) Fluoranthene-d10	8.445	212	183502	10.12	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 101.20%			
Target Compounds						Qvalue
7) Acenaphthylene	5.998	152	28393	2.80	ppm	99
9) Dibenzofuran	6.312	168	1022	0.22	ppm	92
10) Fluorene	6.607	166	1417	0.20	ppm	84
13) Phenanthrene	7.424	178	6415	0.56	ppm	97
14) Anthracene	7.466	178	78906	6.75	ppm	98
15) Carbazole	7.647	167	16078	0.78	ppm	98
16) Fluoranthene	8.458	202	229141	10.41	ppm	98
19) Pyrene	8.648	202	287853	11.06	ppm	95
20) Benzo[a]anthracene	9.729	228	118943	5.83	ppm	90
21) Chrysene	9.763	228	208257	9.27	ppm	99
23) Benzo[b]fluoranthene	10.982	252	291596	14.53	ppm	97
24) Benzo[k]fluoranthene	11.011	252	91515m	4.28	ppm	
25) Benzo[a]pyrene	11.409	252	94079	4.81	ppm	98
26) Indeno[1,2,3-cd]pyrene	13.238	276	55865	4.38	ppm	95
27) Dibenz[a,h]anthracene	13.287	278	12936	0.91	ppm	96
28) Benzo[g,h,i]perylene	13.699	276	39121	2.54	ppm	94

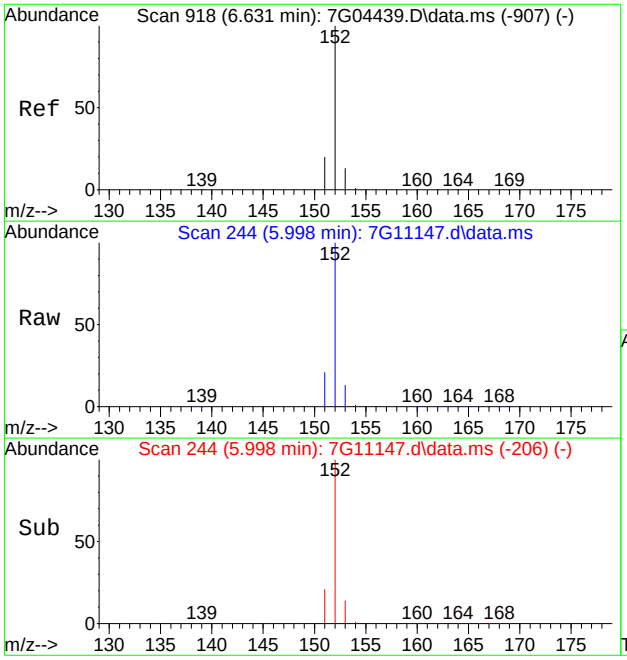
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11147.d
Acq On : 11 Aug 2020 3:15 pm
Operator : FOUADS
Sample : fa77615-9 e Inst : MSBNA8
Misc : op81485,S7G483,15.2,,,1,1,soil
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:40:23 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

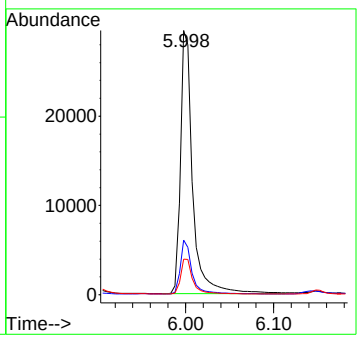


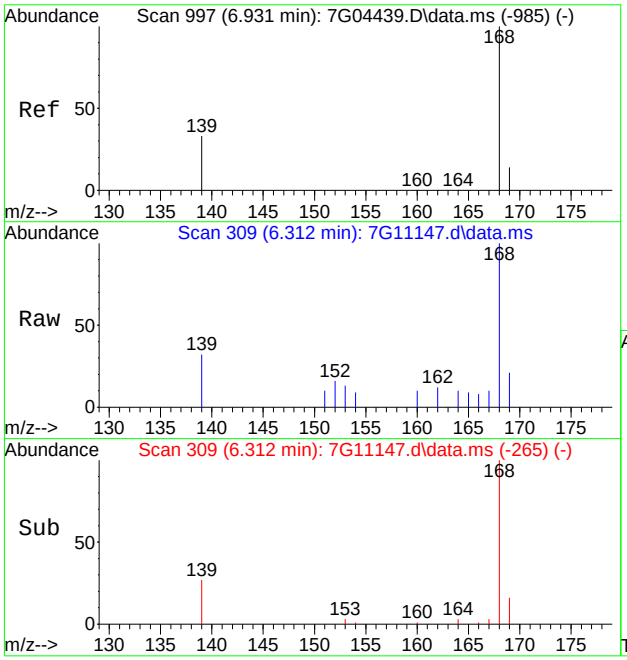


#7
Acenaphthylene
Concen: 2.80 ppm
RT: 5.998 min Scan# 244
Delta R.T. 0.005 min
Lab File: 7G11147.d
Acq: 11 Aug 2020 3:15 pm

Tgt Ion:152 Resp: 28393

Ion	Ratio	Lower	Upper
152	100		
151	20.5	0.0	49.8
153	13.2	0.0	42.8

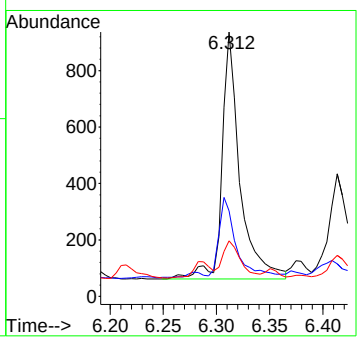


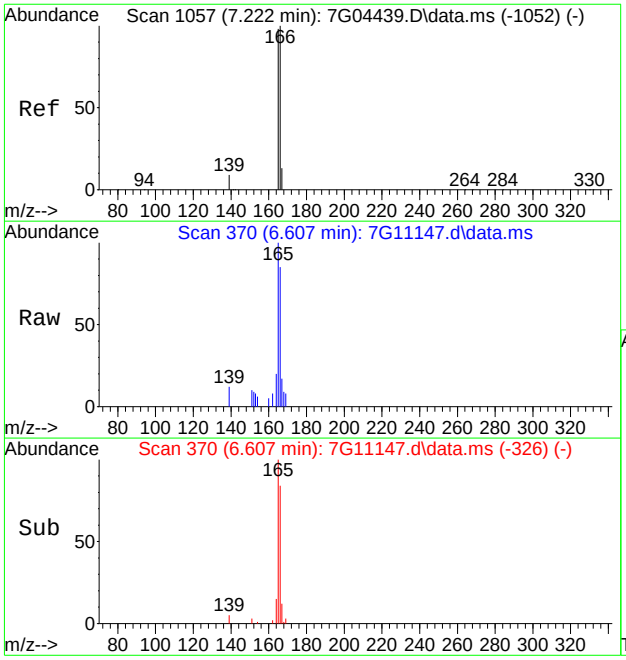


#9
Dibenzofuran
Concen: 0.22 ppm
RT: 6.312 min Scan# 309
Delta R.T. 0.015 min
Lab File: 7G11147.d
Acq: 11 Aug 2020 3:15 pm

Tgt Ion:168 Resp: 1022

Ion	Ratio	Lower	Upper
168	100		
139	26.6	12.6	52.6
169	15.0	0.0	33.8

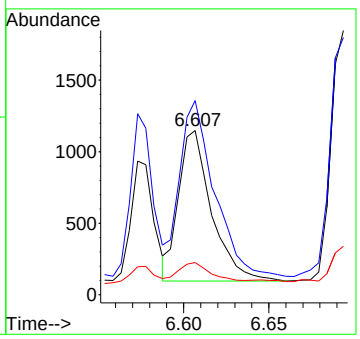


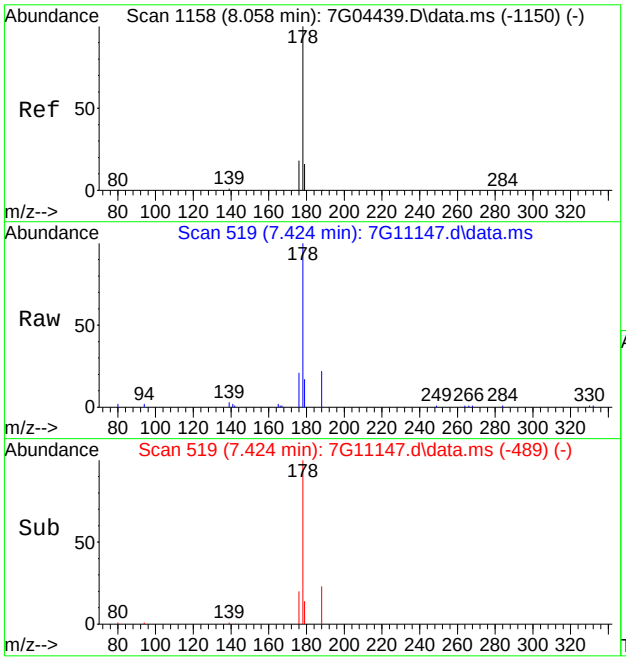


#10
Fluorene
Concen: 0.20 ppm
RT: 6.607 min Scan# 370
Delta R.T. 0.015 min
Lab File: 7G11147.d
Acq: 11 Aug 2020 3:15 pm

Tgt Ion:166 Resp: 1417

Ion	Ratio	Lower	Upper
166	100		
165	116.0	68.2	128.2
167	12.7	0.0	42.9

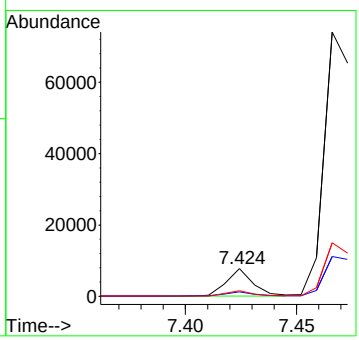


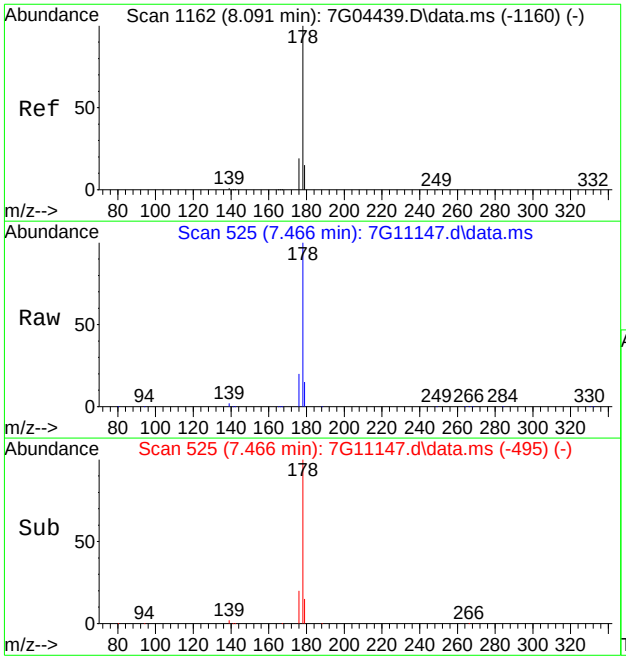


#13
Phenanthrene
Concen: 0.56 ppm
RT: 7.424 min Scan# 519
Delta R.T. 0.007 min
Lab File: 7G11147.d
Acq: 11 Aug 2020 3:15 pm

Tgt Ion:178 Resp: 6415

Ion	Ratio	Lower	Upper
178	100		
179	15.2	0.0	45.7
176	19.8	0.0	48.0

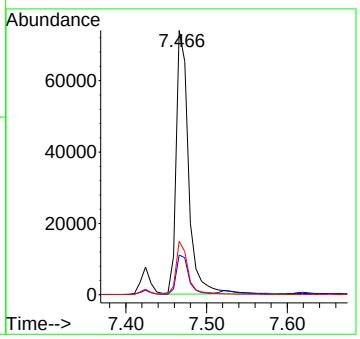


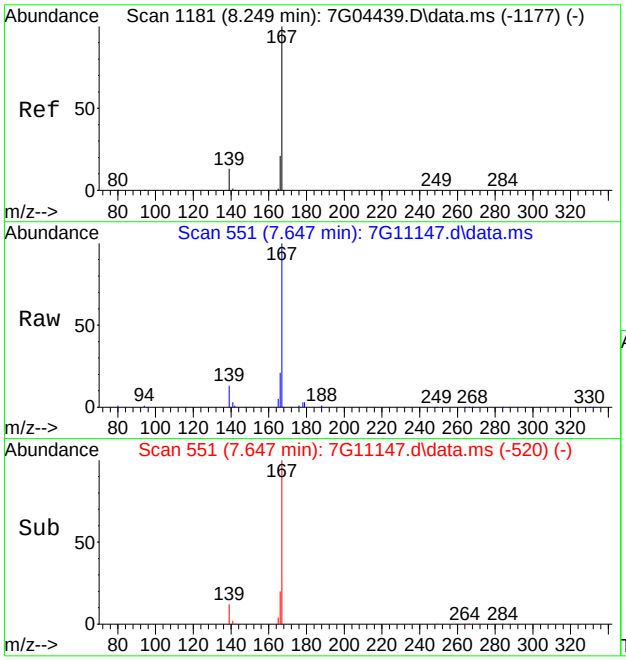


#14
Anthracene
Concen: 6.75 ppm
RT: 7.466 min Scan# 525
Delta R.T. 0.007 min
Lab File: 7G11147.d
Acq: 11 Aug 2020 3:15 pm

Tgt Ion:178 Resp: 78906

Ion	Ratio	Lower	Upper
178	100		
179	14.9	0.0	45.1
176	20.2	0.0	48.8

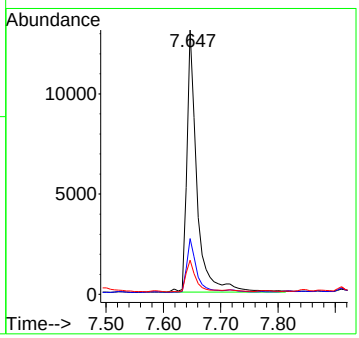


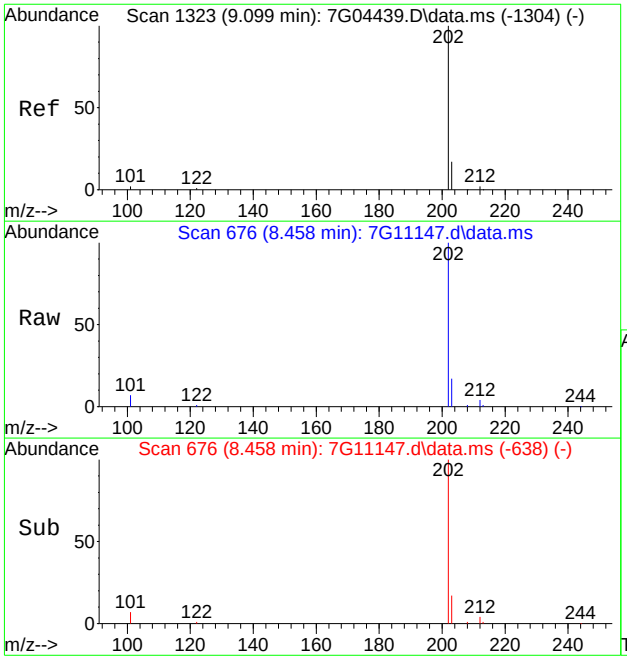


#15
Carbazole
Concen: 0.78 ppm
RT: 7.647 min Scan# 551
Delta R.T. 0.014 min
Lab File: 7G11147.d
Acq: 11 Aug 2020 3:15 pm

Tgt Ion:167 Resp: 16078

Ion	Ratio	Lower	Upper
167	100		
166	20.2	1.2	41.2
139	11.9	0.0	32.8

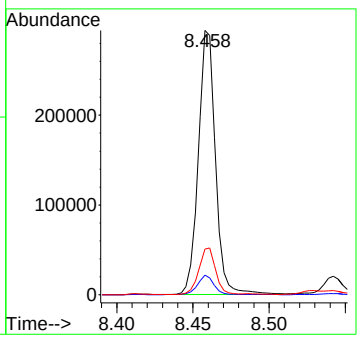


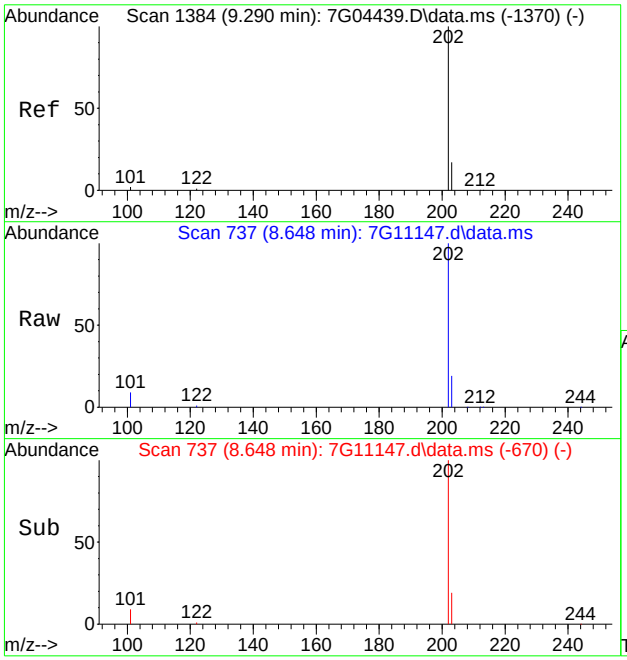


#16
Fluoranthene
Concen: 10.41 ppm
RT: 8.458 min Scan# 676
Delta R.T. 0.009 min
Lab File: 7G11147.d
Acq: 11 Aug 2020 3:15 pm

Tgt Ion:202 Resp: 229141

Ion	Ratio	Lower	Upper
202	100		
101	7.4	0.0	32.2
203	17.2	0.0	47.2

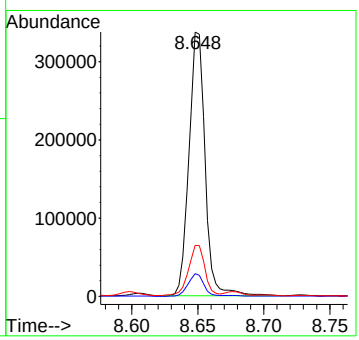


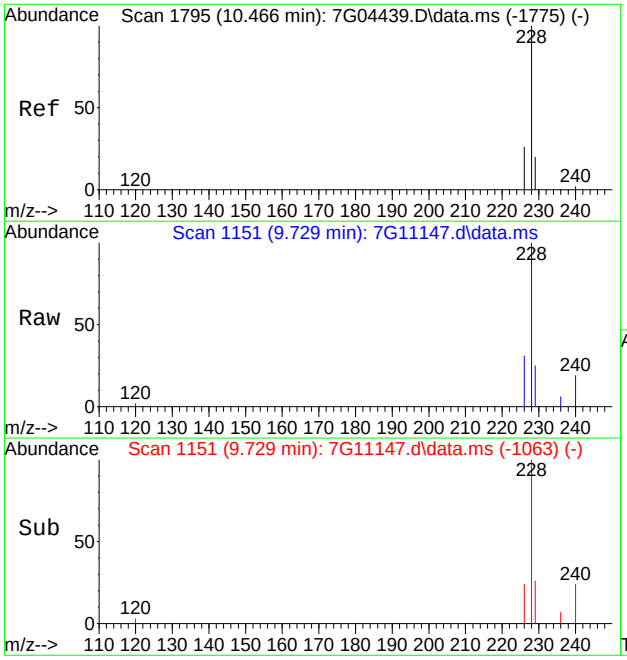


#19
Pyrene
Concen: 11.06 ppm
RT: 8.648 min Scan# 737
Delta R.T. 0.009 min
Lab File: 7G11147.d
Acq: 11 Aug 2020 3:15 pm

Tgt Ion:202 Resp: 287853

Ion	Ratio	Lower	Upper
202	100		
101	8.6	0.0	32.4
203	19.0	0.0	47.4

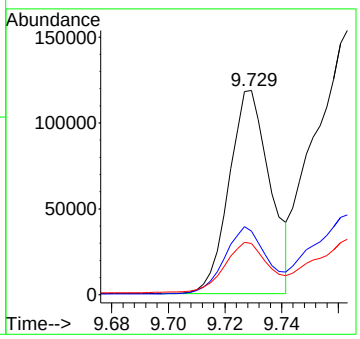


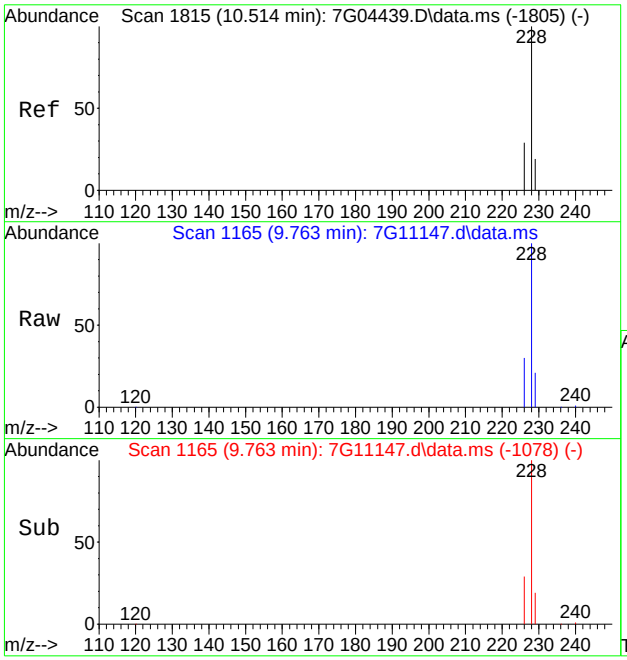


#20
Benzo[a]anthracene
Concen: 5.83 ppm
RT: 9.729 min Scan# 1151
Delta R.T. 0.012 min
Lab File: 7G11147.d
Acq: 11 Aug 2020 3:15 pm

Tgt Ion:228 Resp: 118943

Ion	Ratio	Lower	Upper
228	100		
226	30.9	0.0	56.1
229	24.1	0.0	49.5

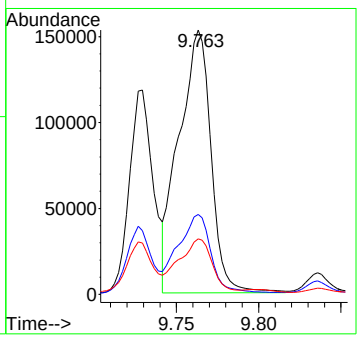


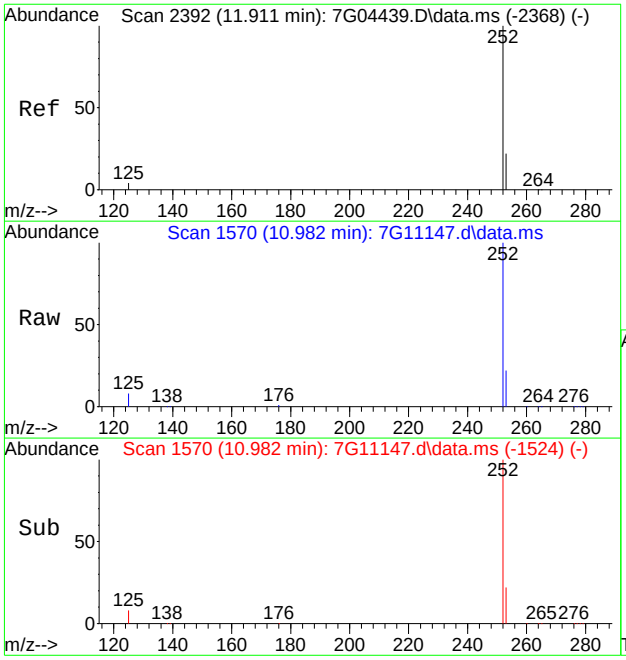


#21
Chrysene
Concen: 9.27 ppm
RT: 9.763 min Scan# 1165
Delta R.T. 0.010 min
Lab File: 7G11147.d
Acq: 11 Aug 2020 3:15 pm

Tgt Ion:228 Resp: 208257

Ion	Ratio	Lower	Upper
228	100		
226	29.8	0.0	58.9
229	19.8	0.0	49.5

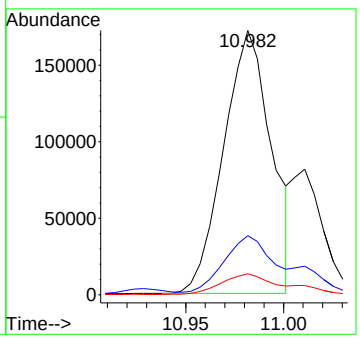


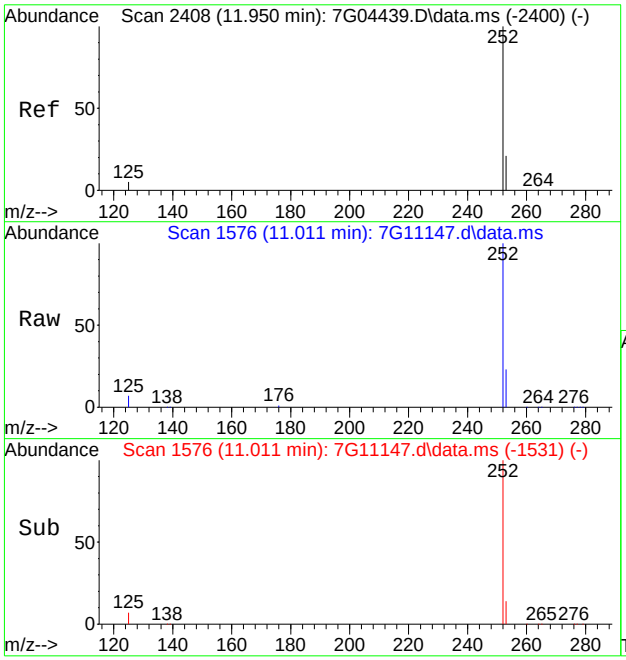


#23
Benzo[b]fluoranthene
Concen: 14.53 ppm
RT: 10.982 min Scan# 1570
Delta R.T. 0.024 min
Lab File: 7G11147.d
Acq: 11 Aug 2020 3:15 pm

Tgt Ion:252 Resp: 291596

Ion	Ratio	Lower	Upper
252	100		
253	21.2	0.0	51.7
125	7.9	0.0	34.5

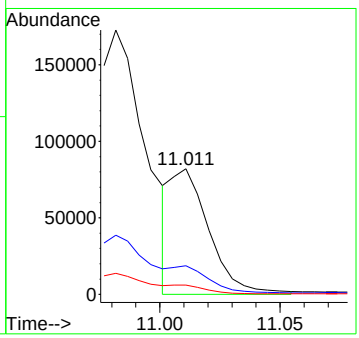


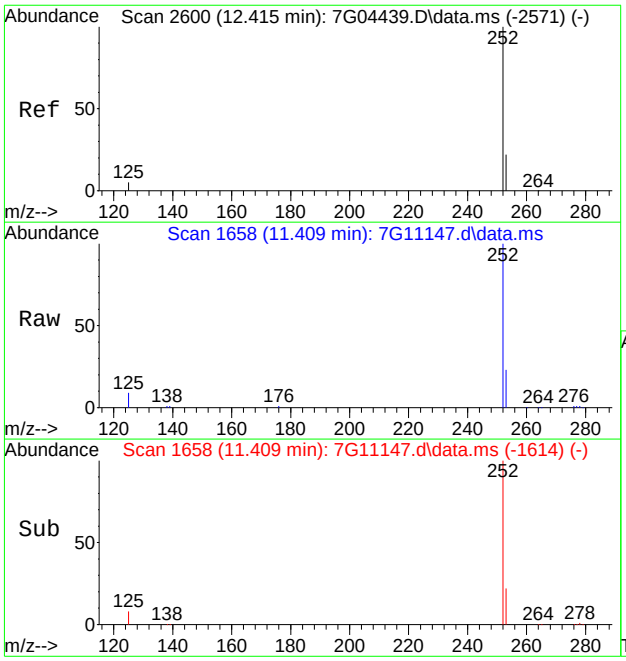


#24
Benzo[k]fluoranthene
Concen: 4.28 ppm m
RT: 11.011 min Scan# 1576
Delta R.T. 0.019 min
Lab File: 7G11147.d
Acq: 11 Aug 2020 3:15 pm

Tgt Ion:252 Resp: 91515

Ion	Ratio	Lower	Upper
252	100		
253	22.8	0.0	51.5
125	7.3	0.0	34.8

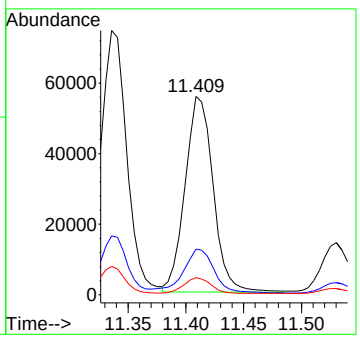


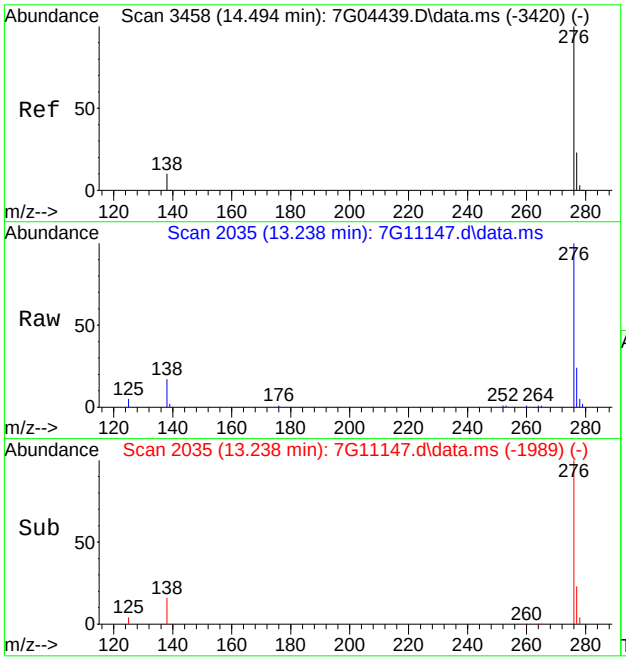


#25
Benzo[a]pyrene
Concen: 4.81 ppm
RT: 11.409 min Scan# 1658
Delta R.T. 0.015 min
Lab File: 7G11147.d
Acq: 11 Aug 2020 3:15 pm

Tgt Ion:252 Resp: 94079

Ion	Ratio	Lower	Upper
252	100		
253	21.5	0.0	51.6
125	8.1	0.0	34.8

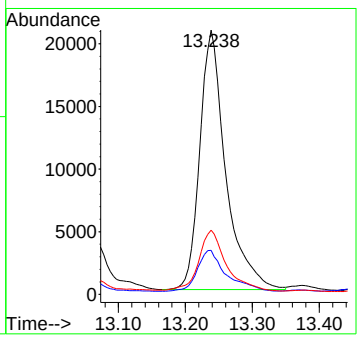


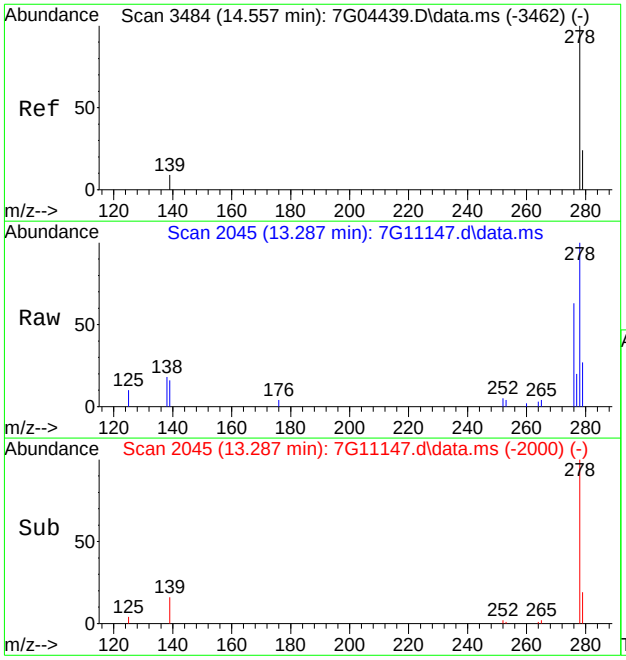


#26
Indeno[1,2,3-cd]pyrene
Concen: 4.38 ppm
RT: 13.238 min Scan# 2035
Delta R.T. 0.024 min
Lab File: 7G11147.d
Acq: 11 Aug 2020 3:15 pm

Tgt Ion:276 Resp: 55865

Ion	Ratio	Lower	Upper
276	100		
138	15.7	0.0	39.6
277	23.4	0.0	53.1

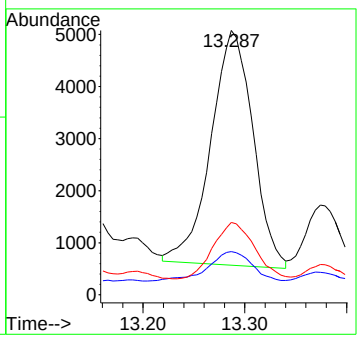


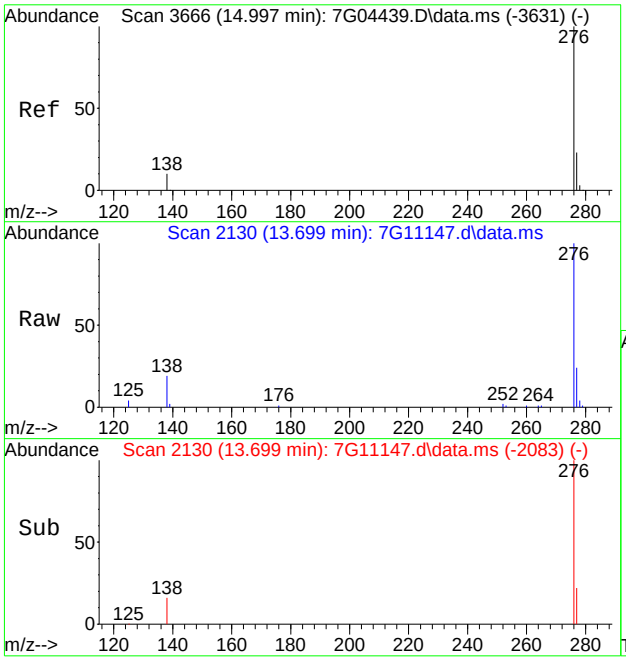


#27
Dibenz[a,h]anthracene
Concen: 0.91 ppm
RT: 13.287 min Scan# 2045
Delta R.T. 0.019 min
Lab File: 7G11147.d
Acq: 11 Aug 2020 3:15 pm

Tgt Ion:278 Resp: 12936

Ion	Ratio	Lower	Upper
278	100		
139	12.4	0.0	38.8
279	24.2	0.0	53.6

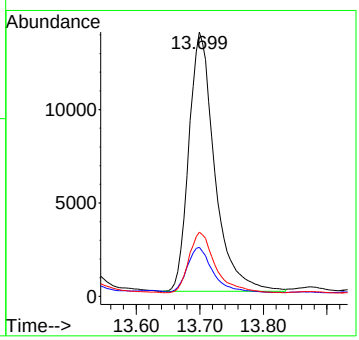




#28
Benzo[g,h,i]perylene
Concen: 2.54 ppm
RT: 13.699 min Scan# 2130
Delta R.T. 0.029 min
Lab File: 7G11147.d
Acq: 11 Aug 2020 3:15 pm

Tgt Ion:276 Resp: 39121

Ion	Ratio	Lower	Upper
276	100		
138	17.2	0.0	40.5
277	23.4	0.0	53.2



Manual Integration Approval Summary

Sample Number: FA77615-9
Lab FileID: 7G11147.D
Injection Time: 08/11/20 15:15

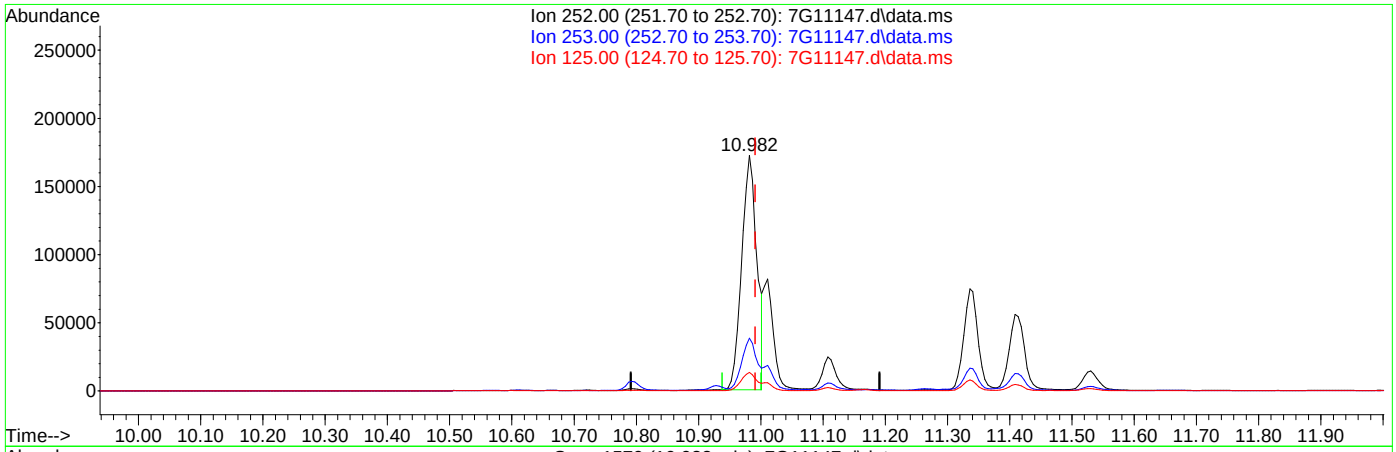
Method: SW846 8270E BY SIM
Analyst approved: 08/12/20 09:33 Fouad Sekkar
Supervisor approved: 08/12/20 11:43 Nicole McCampbell

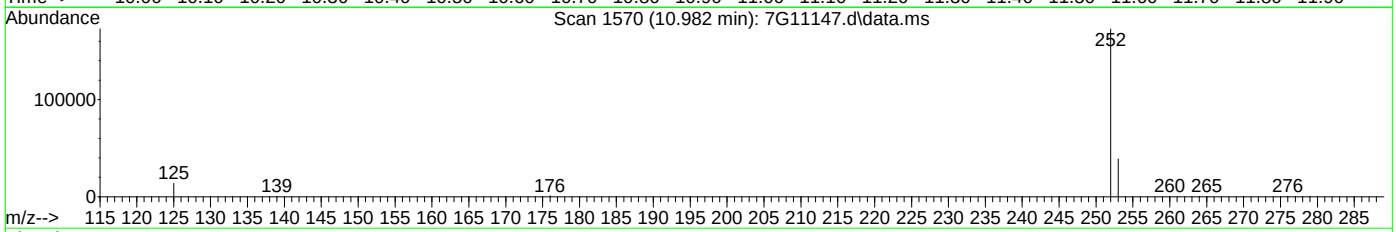
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(k)fluoranthene	207-08-9		11.01	Missed peak

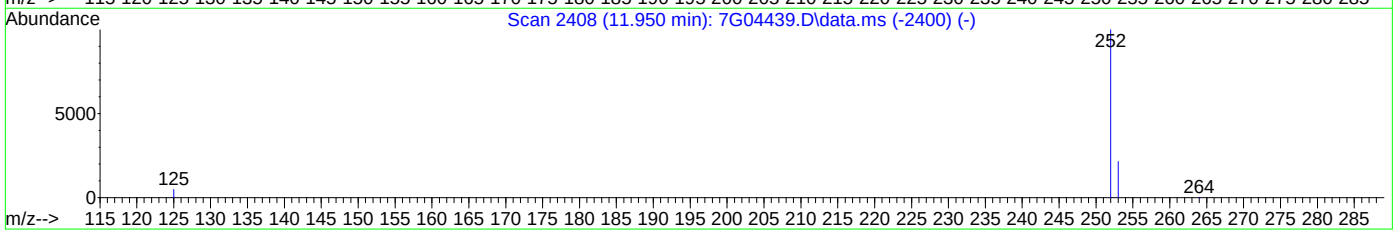
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11147.d
Acq On : 11 Aug 2020 3:15 pm
Operator : FOUADS
Sample : fa77615-9 e Inst : MSBNA8
Misc : op81485,S7G483,15.2,,,1,1,soil
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:26:58 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11147.d\data.ms

(24) Benzo[k]fluoranthene (P)

10.982min (-0.010) 13.29ppm

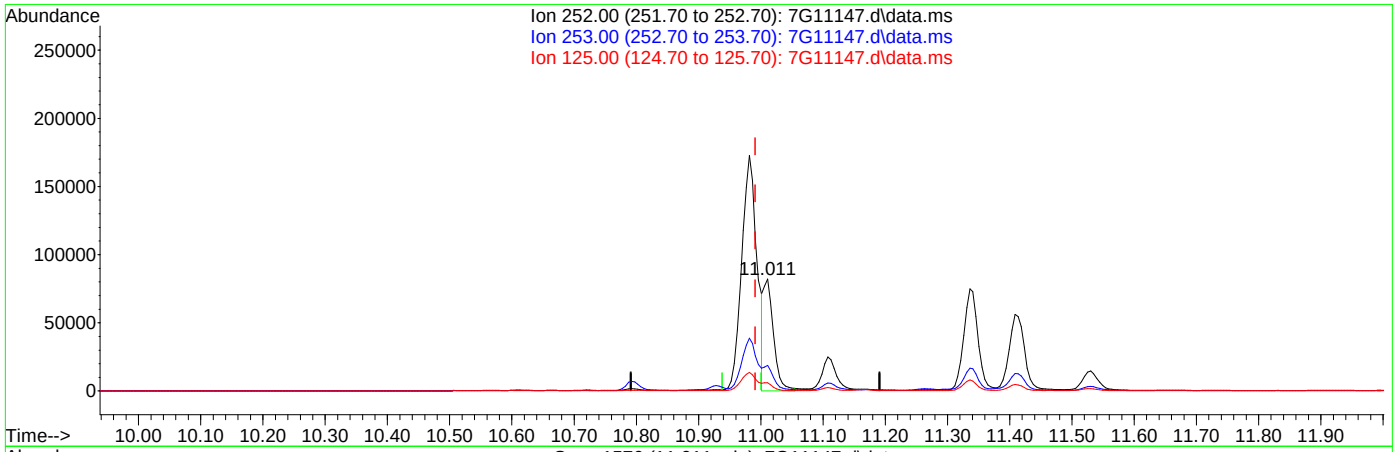
response 291596

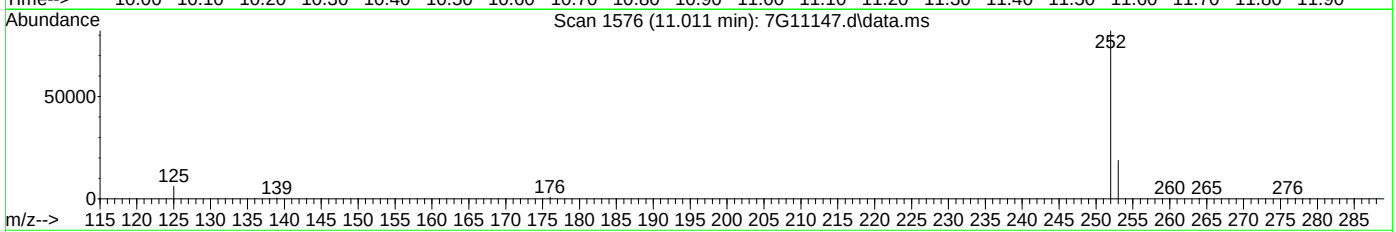
Ion	Exp%	Act%
252.00	100	100
253.00	21.50	21.19
125.00	4.80	7.87
0.00	0.00	0.00

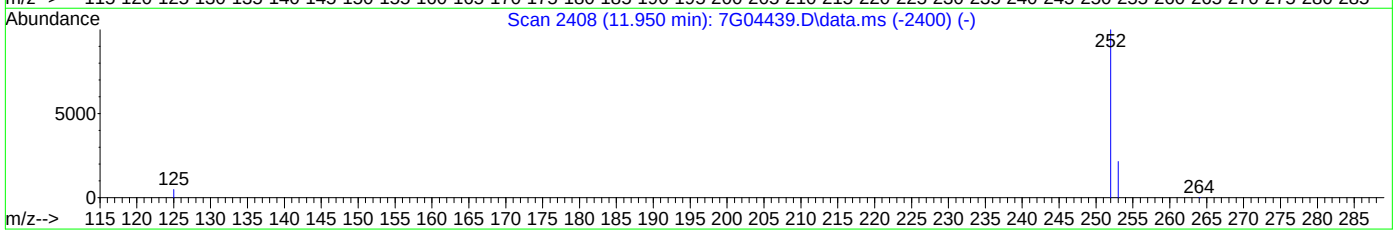
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11147.d
Acq On : 11 Aug 2020 3:15 pm
Operator : FOUADS
Sample : fa77615-9 e Inst : MSBNA8
Misc : op81485,S7G483,15.2,,,1,1,soil
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:26:58 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11147.d\data.ms

(24) Benzo[k]fluoranthene (P)

11.011min (+0.019) 4.28ppm m

response 91515

Ion	Exp%	Act%
252.00	100	100
253.00	21.50	22.77
125.00	4.80	7.32
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 08/12/20 11:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11148.d
Acq On : 11 Aug 2020 3:39 pm
Operator : FOUADS
Sample : fa77615-10 e Inst : MSBNA8
Misc : op81485,S7G483,15.3,,,1,1,soil
ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:41:41 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

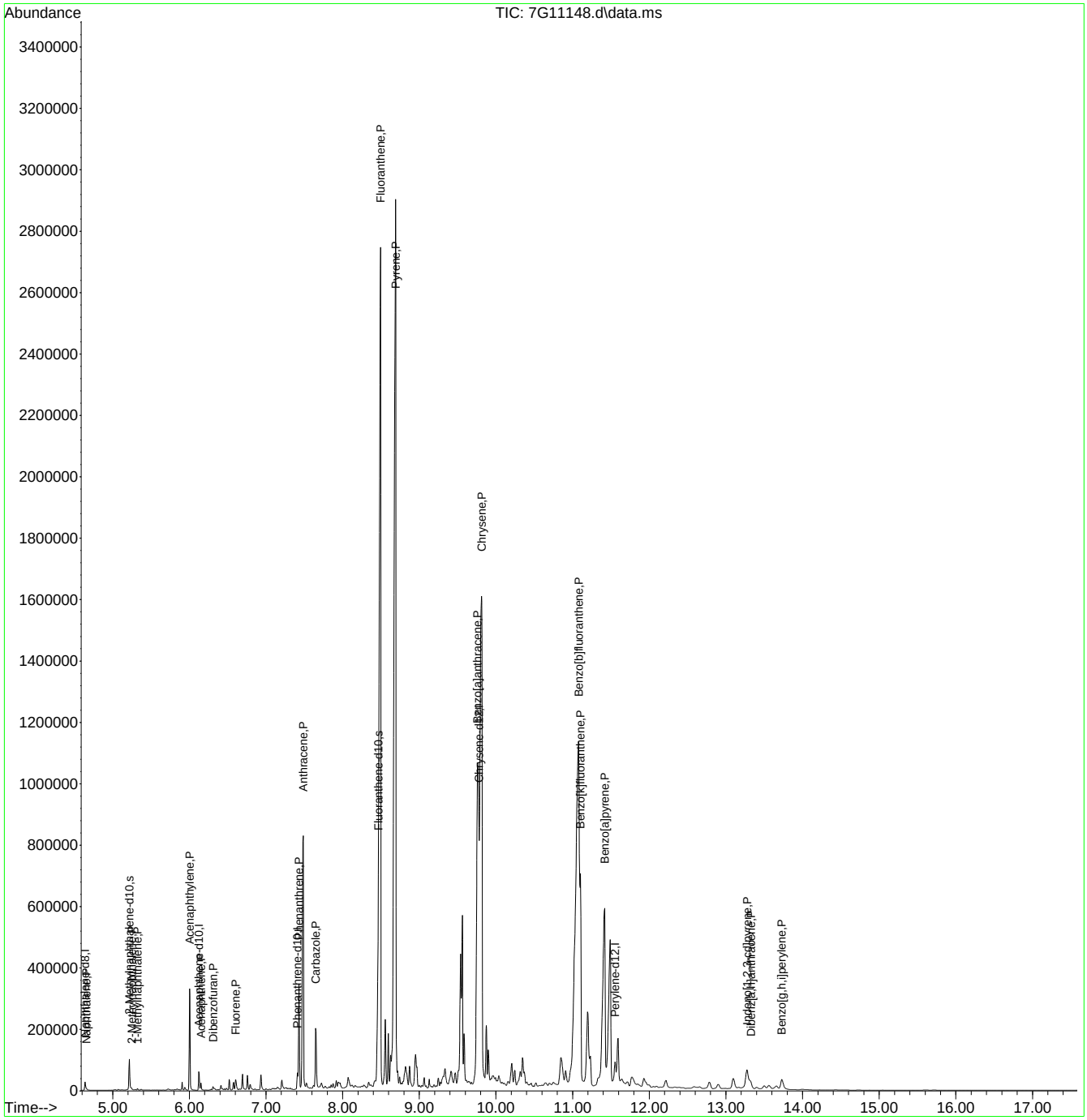
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.640	136	22511	4.00	ppm	0.01
6) Acenaphthene-d10	6.123	164	18710	4.00	ppm	0.00
11) Phenanthrene-d10	7.410	188	37890	4.00	ppm	0.01
18) Chrysene-d12	9.780	240	95046	4.00	ppm	0.05
22) Perylene-d12	11.554	264	52199	4.00	ppm	0.08
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.217	152	37044	10.94	ppm	0.01
Spiked Amount 10.000	Range 50 - 150		Recovery =	109.40%		
17) Fluoranthene-d10	8.464	212	230233	11.59	ppm	0.03
Spiked Amount 10.000	Range 50 - 150		Recovery =	115.90%		
Target Compounds						Qvalue
2) Naphthalene	4.658	128	3498	0.55	ppm	98
3) 2-Methylnaphthalene	5.246	142	2241	0.45	ppm	92
5) 1-Methylnaphthalene	5.323	142	1910	0.43	ppm	96
7) Acenaphthylene	6.002	152	201305	18.09	ppm	98
8) Acenaphthene	6.152	153	6791	0.97	ppm	96
9) Dibenzofuran	6.312	168	7880	1.60	ppm	83
10) Fluorene	6.602	166	14978	1.96	ppm	97
13) Phenanthrene	7.431	178	197389	15.33	ppm	97
14) Anthracene	7.487	178	664762	46.93	ppm	98
15) Carbazole	7.647	167	151620	6.69	ppm	99
16) Fluoranthene	8.495	202	3233161	106.65	ppm	96
19) Pyrene	8.692	202	3850925	90.58	ppm	93
20) Benzo[a]anthracene	9.758	228	1372432	41.47	ppm	88
21) Chrysene	9.811	228	1922108	58.77	ppm	96
23) Benzo[b]fluoranthene	11.079	252	3132314m	176.79	ppm	
24) Benzo[k]fluoranthene	11.103	252	485732m	24.28	ppm	
25) Benzo[a]pyrene	11.418	252	1027758m	59.53	ppm	
26) Indeno[1,2,3-cd]pyrene	13.277	276	121511	10.78	ppm	95
27) Dibenz[a,h]anthracene	13.325	278	30141	2.41	ppm	98
28) Benzo[g,h,i]perylene	13.728	276	62593	4.61	ppm	95

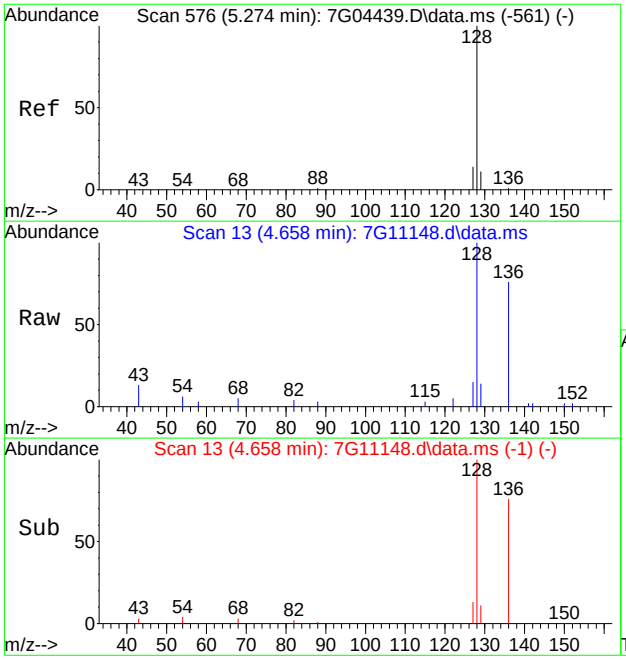
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11148.d
Acq On : 11 Aug 2020 3:39 pm
Operator : FOUADS
Sample : fa77615-10 e Inst : MSBNA8
Misc : op81485,S7G483,15.3,,,1,1,soil
ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:41:41 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

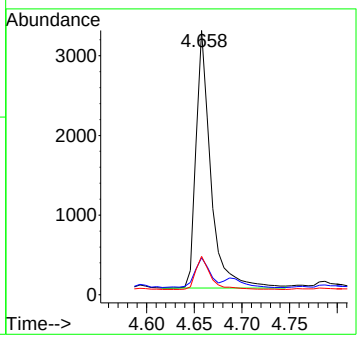


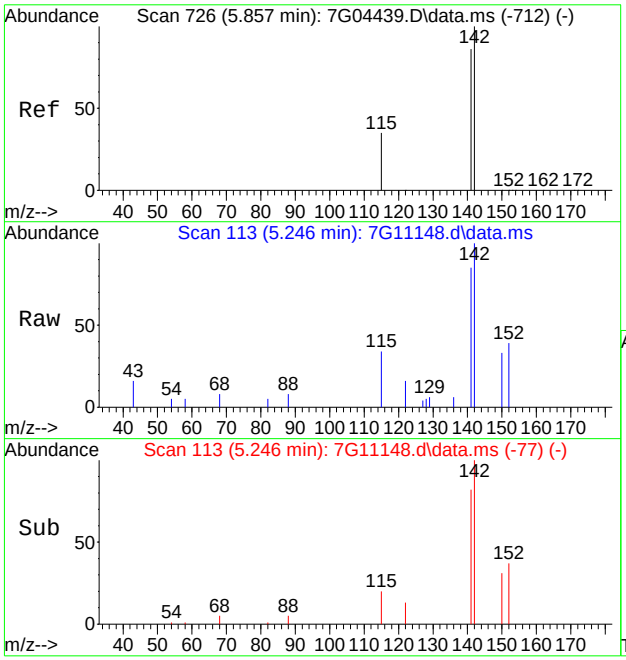


#2
Naphthalene
Concen: 0.55 ppm
RT: 4.658 min Scan# 13
Delta R.T. 0.012 min
Lab File: 7G11148.d
Acq: 11 Aug 2020 3:39 pm

Tgt Ion:128 Resp: 3498

Ion	Ratio	Lower	Upper
128	100		
129	11.6	0.0	40.9
127	12.9	0.0	43.5

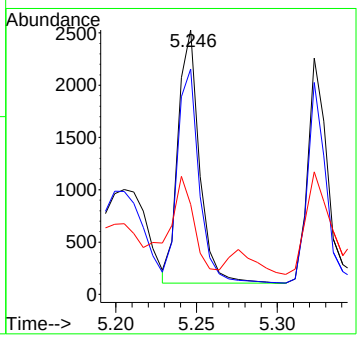


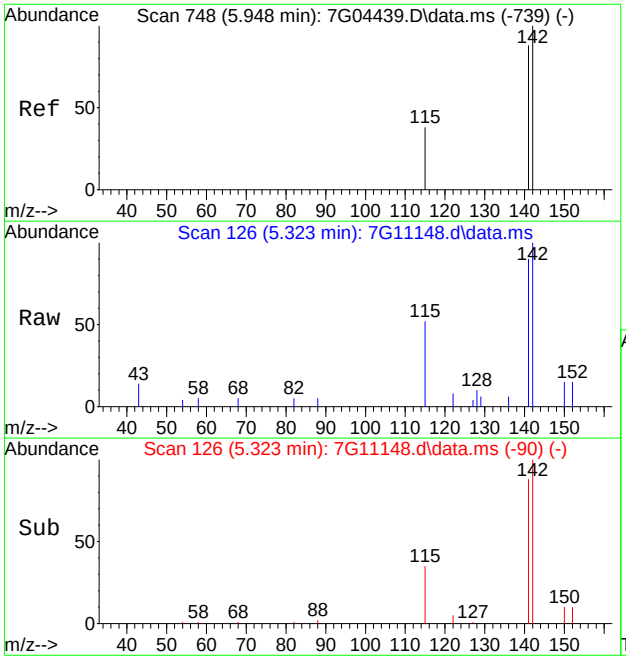


#3
2-Methylnaphthalene
Concen: 0.45 ppm
RT: 5.246 min Scan# 113
Delta R.T. 0.012 min
Lab File: 7G11148.d
Acq: 11 Aug 2020 3:39 pm

Tgt Ion:142 Resp: 2241

Ion	Ratio	Lower	Upper
142	100		
141	84.5	55.7	115.7
115	22.1	5.4	65.4

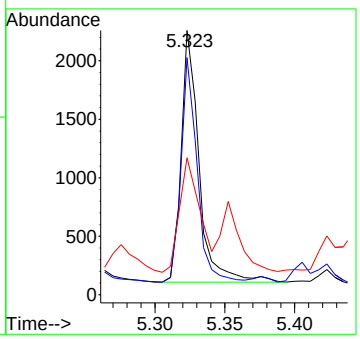


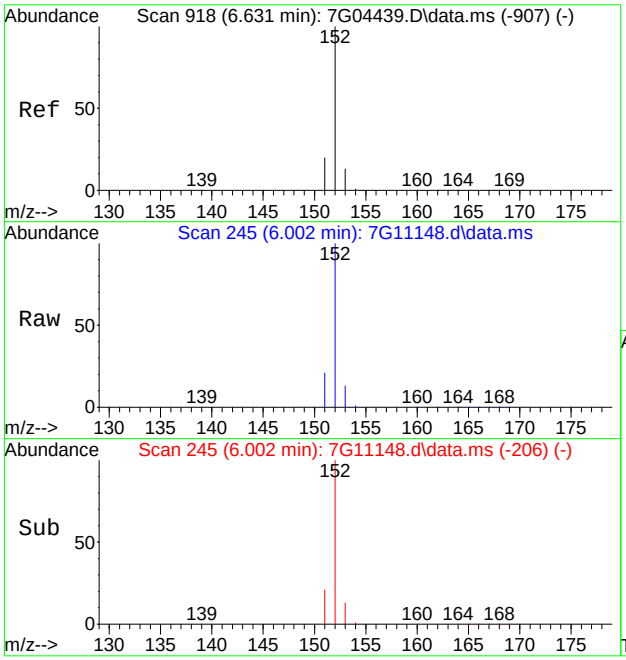


#5
1-Methylnaphthalene
Concen: 0.43 ppm
RT: 5.323 min Scan# 126
Delta R.T. 0.012 min
Lab File: 7G11148.d
Acq: 11 Aug 2020 3:39 pm

Tgt Ion:142 Resp: 1910

Ion	Ratio	Lower	Upper
142	100		
141	88.8	58.1	118.1
115	45.1	7.7	67.7

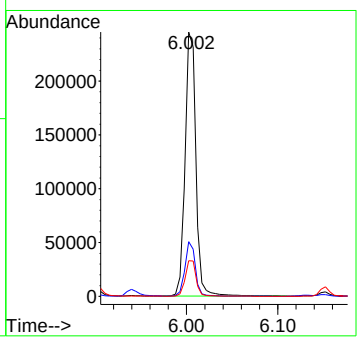


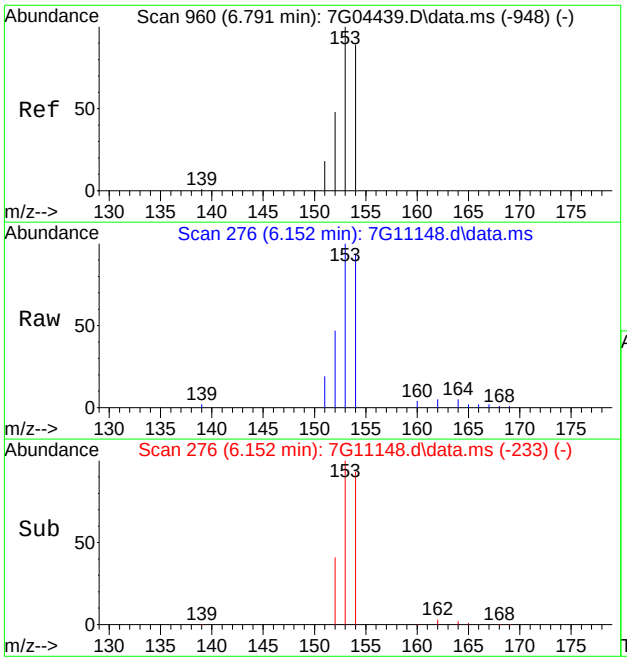


#7
Acenaphthylene
Concen: 18.09 ppm
RT: 6.002 min Scan# 245
Delta R.T. 0.010 min
Lab File: 7G11148.d
Acq: 11 Aug 2020 3:39 pm

Tgt Ion:152 Resp: 201305

Ion	Ratio	Lower	Upper
152	100		
151	20.6	0.0	49.8
153	13.4	0.0	42.8

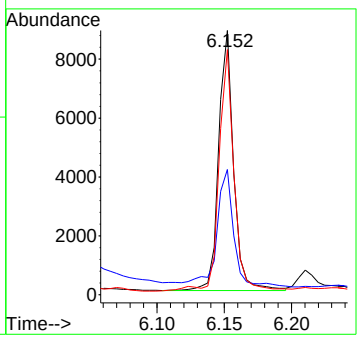


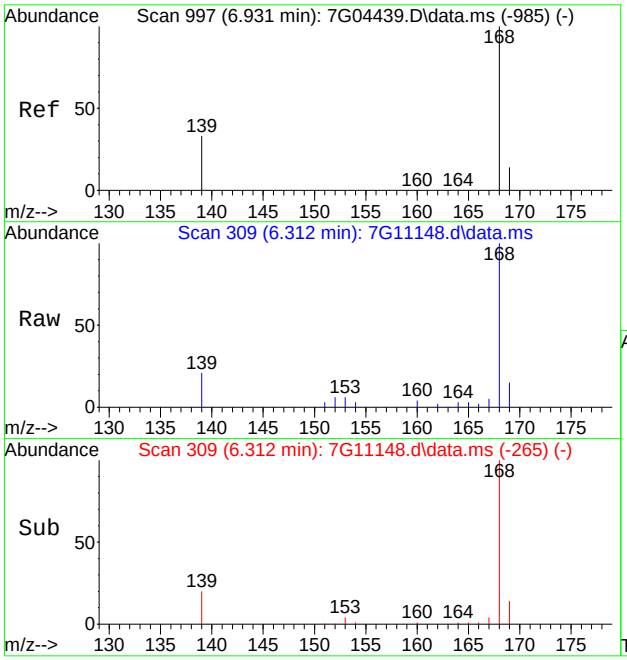


#8
Acenaphthene
Concen: 0.97 ppm
RT: 6.152 min Scan# 276
Delta R.T. 0.010 min
Lab File: 7G11148.d
Acq: 11 Aug 2020 3:39 pm

Tgt Ion:153 Resp: 6791

Ion	Ratio	Lower	Upper
153	100		
152	44.4	18.3	78.3
154	92.7	59.3	119.3

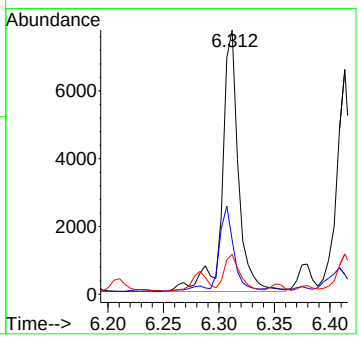


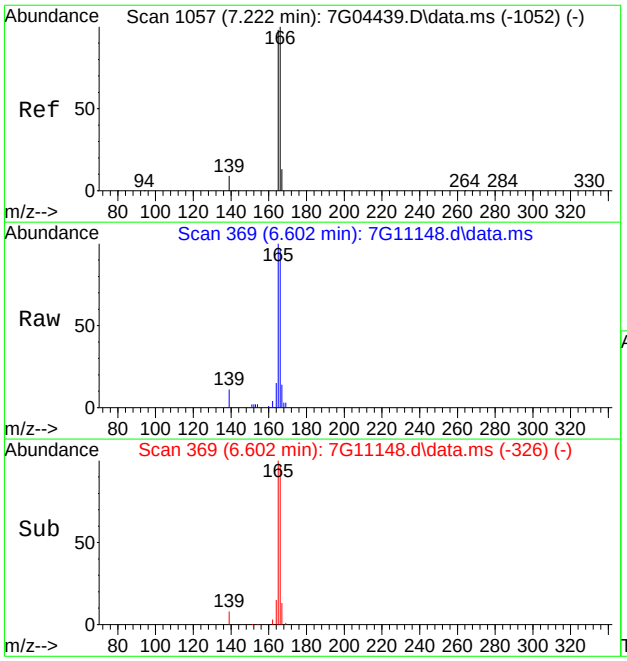


#9
Dibenzofuran
Concen: 1.60 ppm
RT: 6.312 min Scan# 309
Delta R.T. 0.014 min
Lab File: 7G11148.d
Acq: 11 Aug 2020 3:39 pm

Tgt Ion:168 Resp: 7880

Ion	Ratio	Lower	Upper
168	100		
139	19.4	12.6	52.6
169	13.6	0.0	33.8

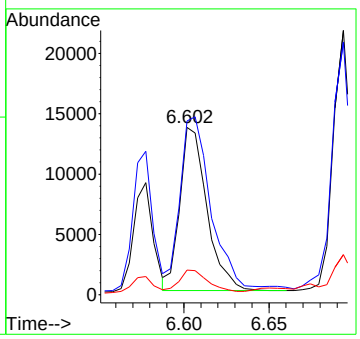


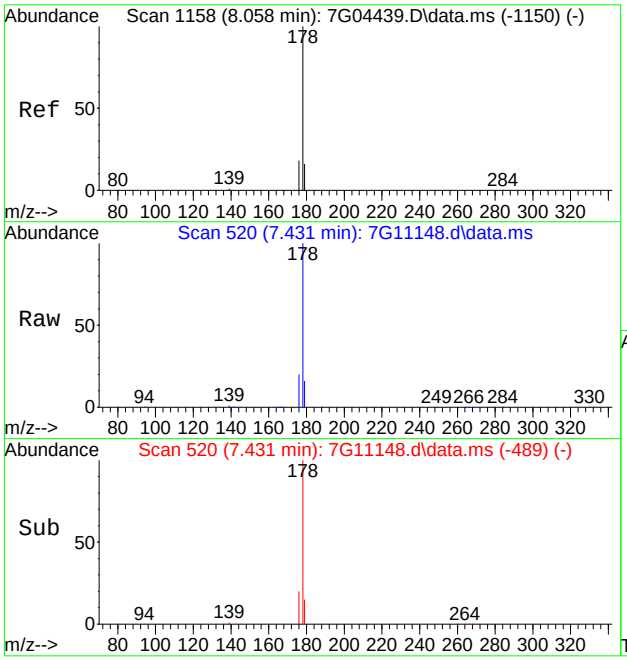


#10
Fluorene
Concen: 1.96 ppm
RT: 6.602 min Scan# 369
Delta R.T. 0.010 min
Lab File: 7G11148.d
Acq: 11 Aug 2020 3:39 pm

Tgt Ion:166 Resp: 14978

Ion	Ratio	Lower	Upper
166	100		
165	101.8	68.2	128.2
167	12.1	0.0	42.9

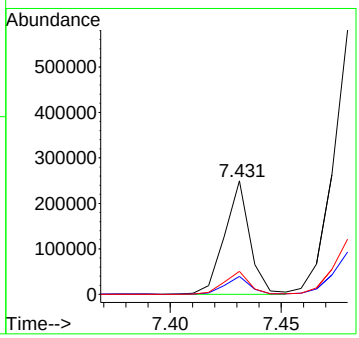


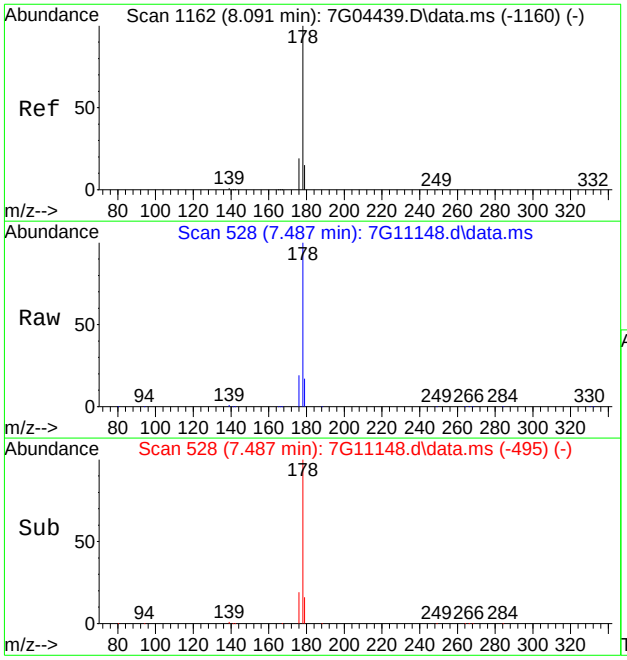


#13
Phenanthrene
Concen: 15.33 ppm
RT: 7.431 min Scan# 520
Delta R.T. 0.014 min
Lab File: 7G11148.d
Acq: 11 Aug 2020 3:39 pm

Tgt Ion:178 Resp: 197389

Ion	Ratio	Lower	Upper
178	100		
179	15.6	0.0	45.7
176	20.1	0.0	48.0

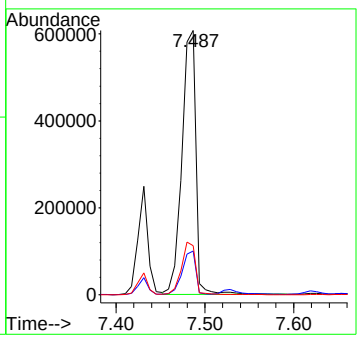


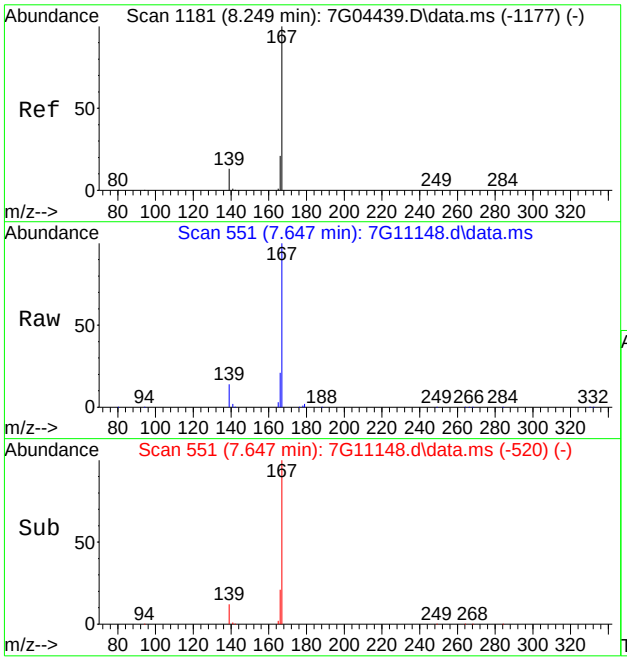


#14
Anthracene
Concen: 46.93 ppm
RT: 7.487 min Scan# 528
Delta R.T. 0.028 min
Lab File: 7G11148.d
Acq: 11 Aug 2020 3:39 pm

Tgt Ion:178 Resp: 664762

Ion	Ratio	Lower	Upper
178	100		
179	16.4	0.0	45.1
176	18.6	0.0	48.8

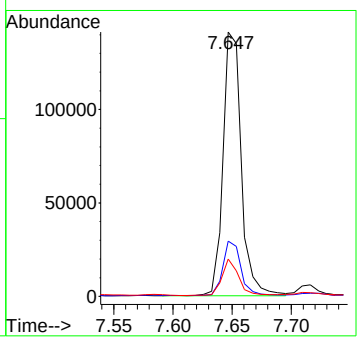


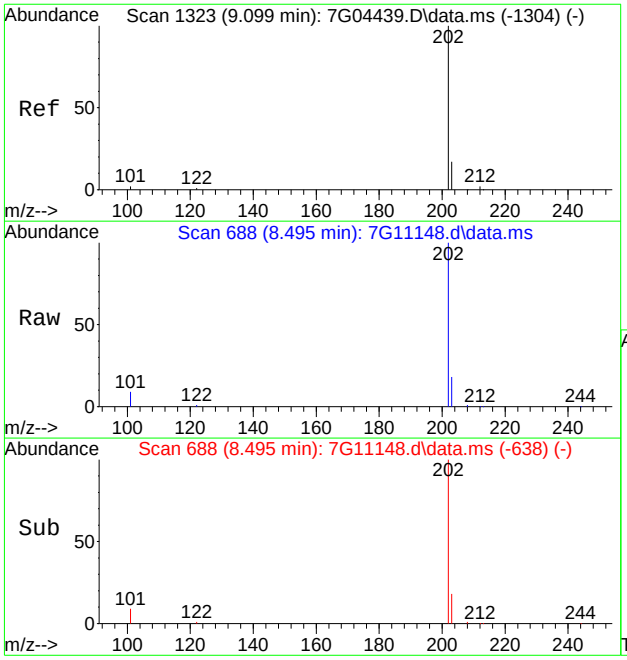


#15
Carbazole
Concen: 6.69 ppm
RT: 7.647 min Scan# 551
Delta R.T. 0.014 min
Lab File: 7G11148.d
Acq: 11 Aug 2020 3:39 pm

Tgt Ion:167 Resp: 151620

Ion	Ratio	Lower	Upper
167	100		
166	20.6	1.2	41.2
139	13.5	0.0	32.8

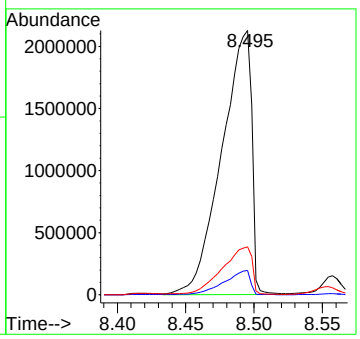


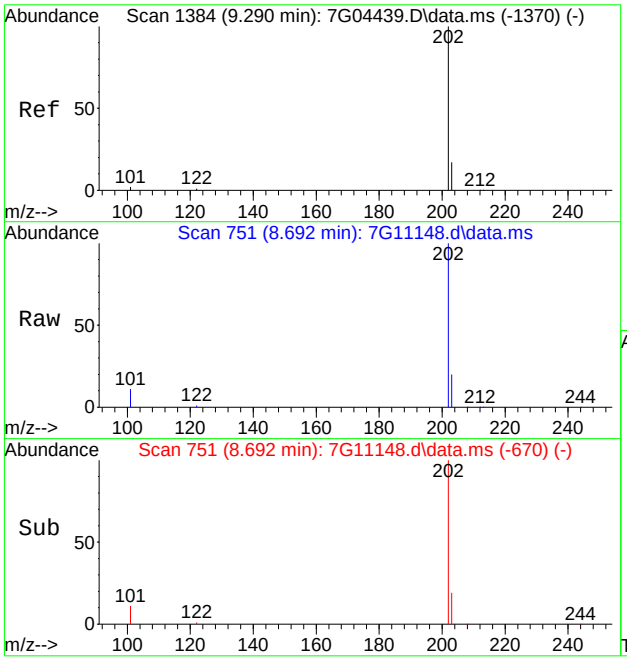


#16
Fluoranthene
Concen: 106.65 ppm
RT: 8.495 min Scan# 688
Delta R.T. 0.047 min
Lab File: 7G11148.d
Acq: 11 Aug 2020 3:39 pm

Tgt Ion:202 Resp: 3233161

Ion	Ratio	Lower	Upper
202	100		
101	9.2	0.0	32.2
203	17.9	0.0	47.2

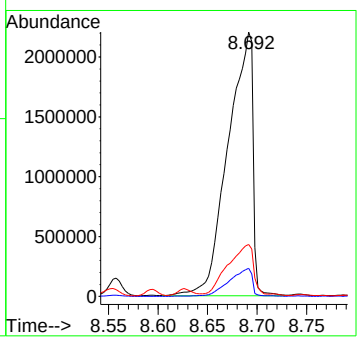


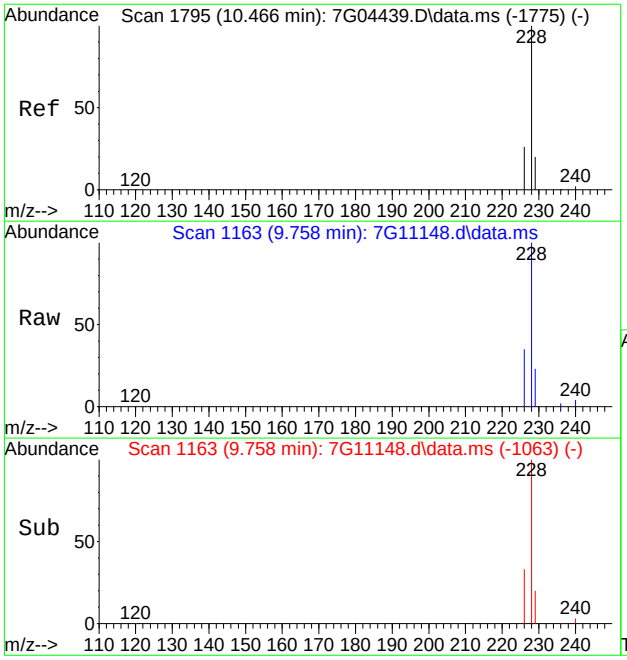


#19
Pyrene
Concen: 90.58 ppm
RT: 8.692 min Scan# 751
Delta R.T. 0.053 min
Lab File: 7G11148.d
Acq: 11 Aug 2020 3:39 pm

Tgt Ion:202 Resp: 3850925

Ion	Ratio	Lower	Upper
202	100		
101	10.6	0.0	32.4
203	19.3	0.0	47.4

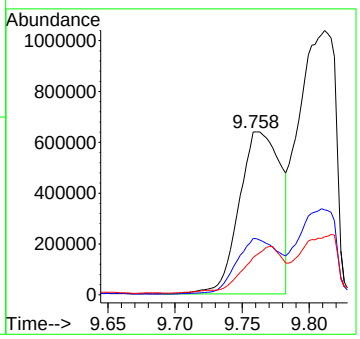


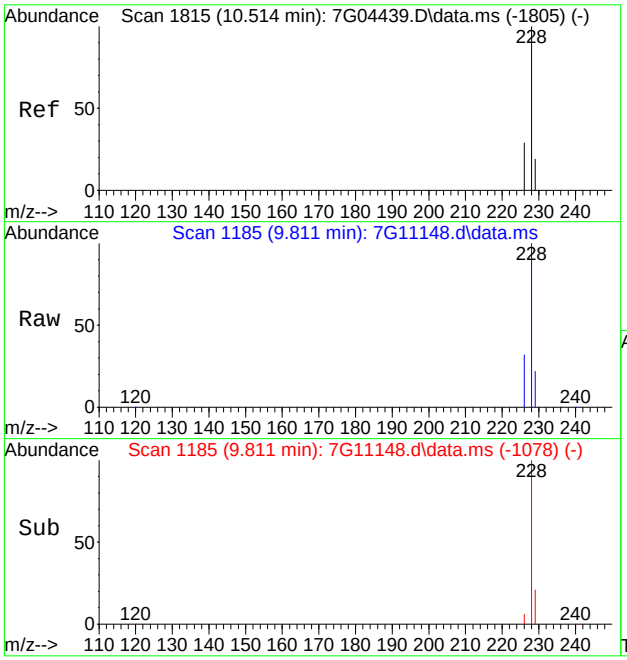


#20
Benzo[a]anthracene
Concen: 41.47 ppm
RT: 9.758 min Scan# 1163
Delta R.T. 0.041 min
Lab File: 7G11148.d
Acq: 11 Aug 2020 3:39 pm

Tgt Ion:228 Resp: 1372432

Ion	Ratio	Lower	Upper
228	100		
226	35.9	0.0	56.1
229	20.3	0.0	49.5

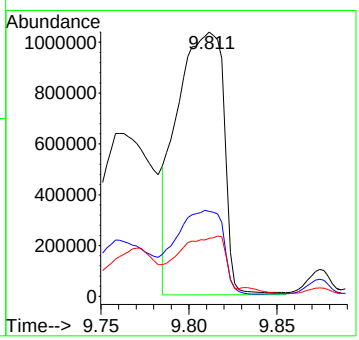


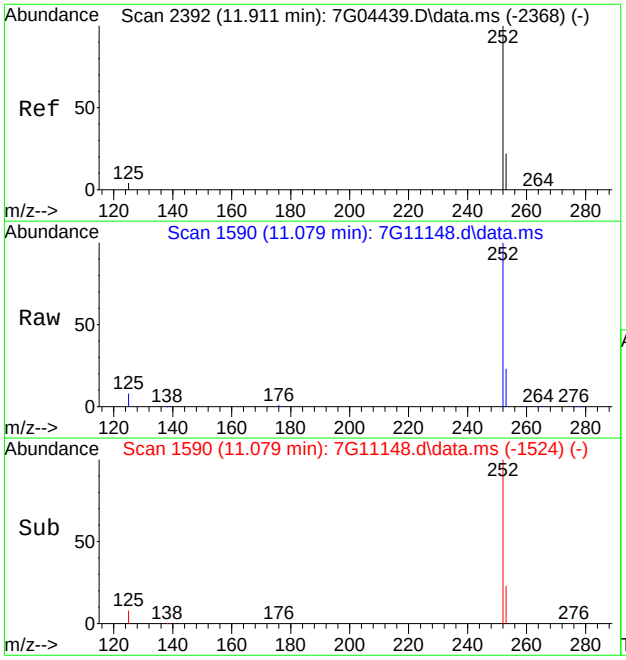


#21
Chrysene
Concen: 58.77 ppm
RT: 9.811 min Scan# 1185
Delta R.T. 0.058 min
Lab File: 7G11148.d
Acq: 11 Aug 2020 3:39 pm

Tgt Ion:228 Resp: 1922108

Ion	Ratio	Lower	Upper
228	100		
226	31.8	0.0	58.9
229	20.7	0.0	49.5

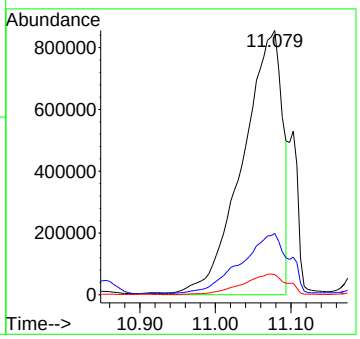


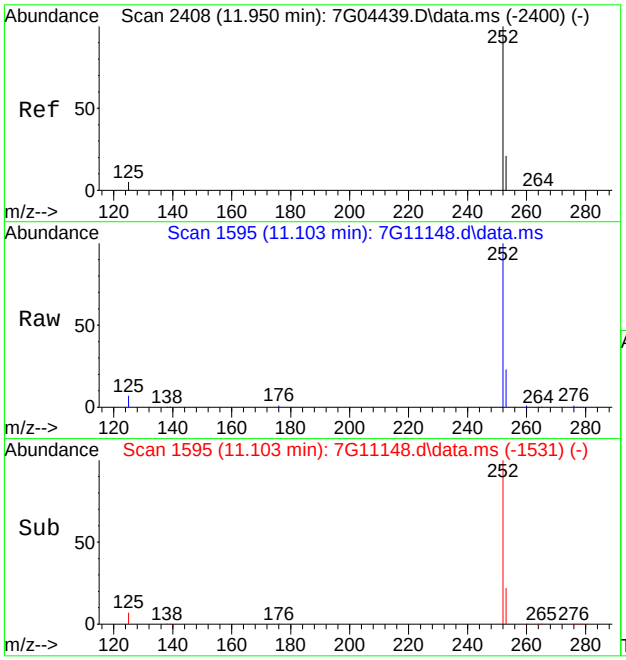


#23
Benzo[b]fluoranthene
Concen: 176.79 ppm m
RT: 11.079 min Scan# 1590
Delta R.T. 0.121 min
Lab File: 7G11148.d
Acq: 11 Aug 2020 3:39 pm

Tgt Ion:252 Resp: 3132314

Ion	Ratio	Lower	Upper
252	100		
253	23.3	0.0	51.7
125	7.7	0.0	34.5

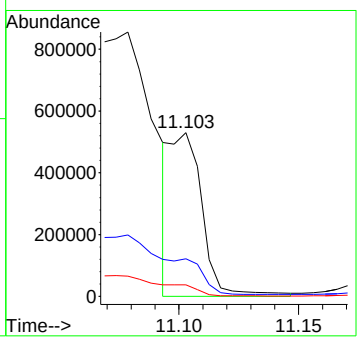


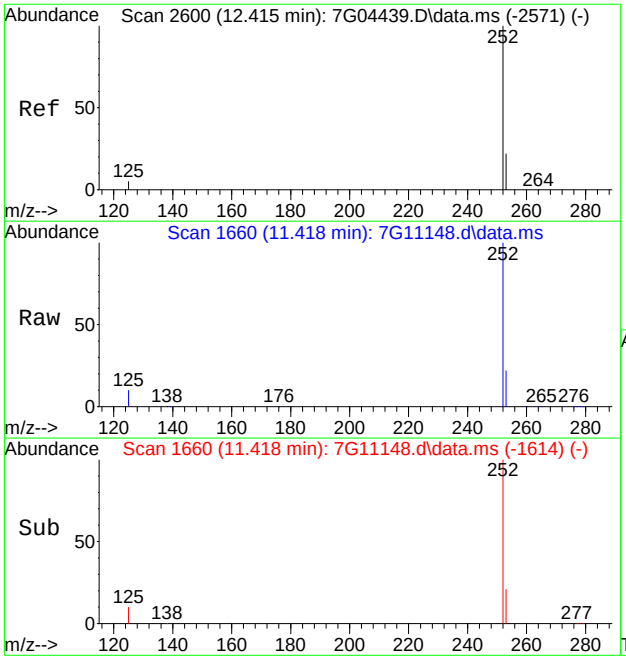


#24
Benzo[k]fluoranthene
Concen: 24.28 ppm m
RT: 11.103 min Scan# 1595
Delta R.T. 0.112 min
Lab File: 7G11148.d
Acq: 11 Aug 2020 3:39 pm

Tgt Ion:252 Resp: 485732

Ion	Ratio	Lower	Upper
252	100		
253	23.0	0.0	51.5
125	7.1	0.0	34.8

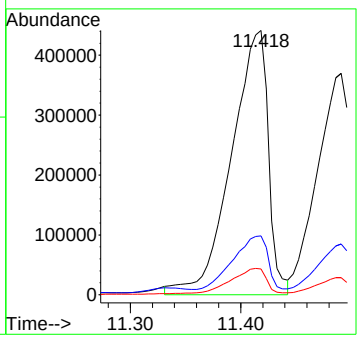


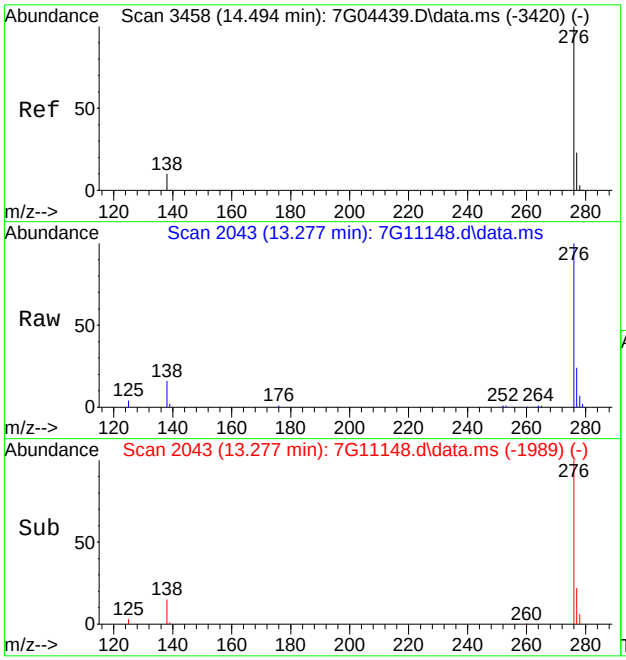


#25
Benzo[a]pyrene
Concen: 59.53 ppm m
RT: 11.418 min Scan# 1660
Delta R.T. 0.024 min
Lab File: 7G11148.d
Acq: 11 Aug 2020 3:39 pm

Tgt Ion:252 Resp: 1027758

Ion	Ratio	Lower	Upper
252	100		
253	22.3	0.0	51.6
125	9.8	0.0	34.8

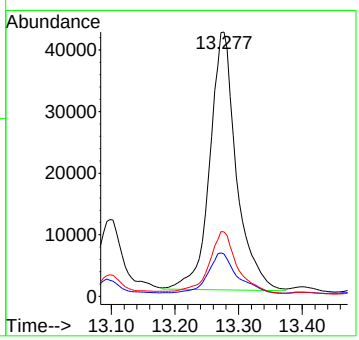


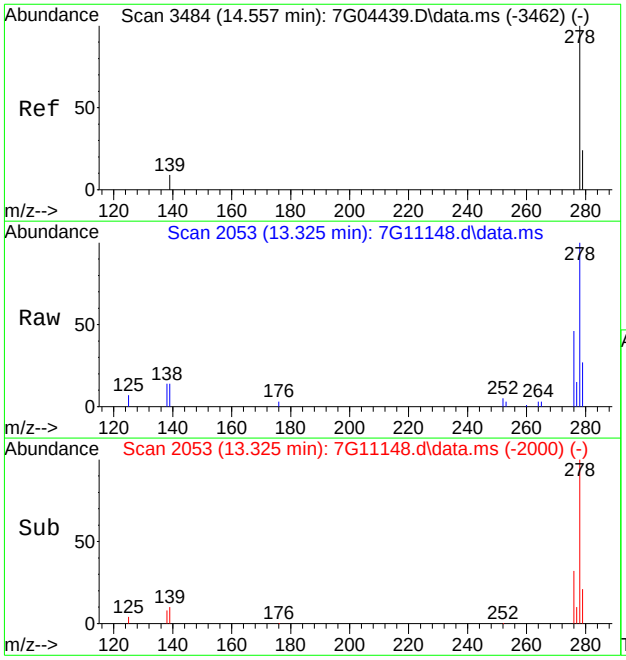


#26
Indeno[1,2,3-cd]pyrene
Concen: 10.78 ppm
RT: 13.277 min Scan# 2043
Delta R.T. 0.063 min
Lab File: 7G11148.d
Acq: 11 Aug 2020 3:39 pm

Tgt Ion:276 Resp: 121511

Ion	Ratio	Lower	Upper
276	100		
138	15.2	0.0	39.6
277	23.6	0.0	53.1

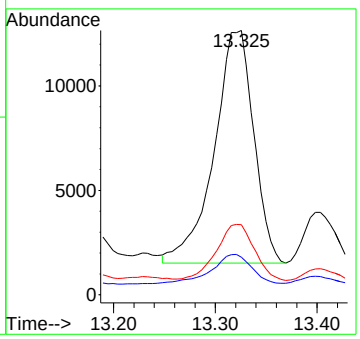


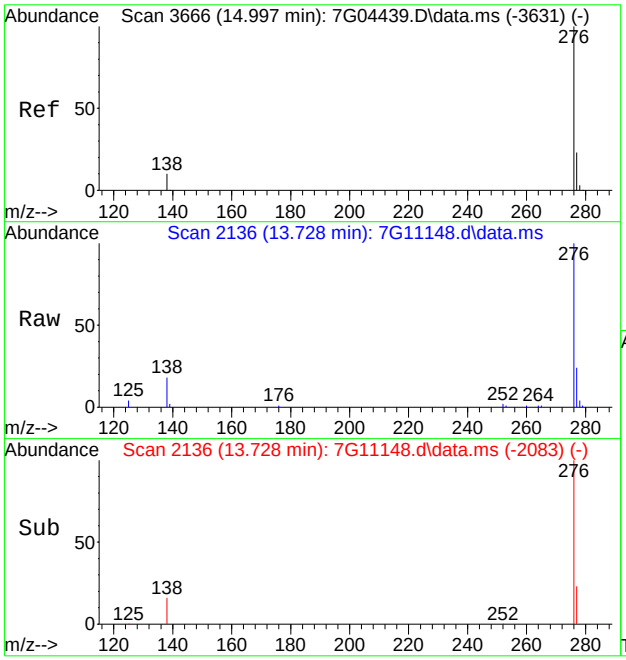


#27
Dibenz[a,h]anthracene
Concen: 2.41 ppm
RT: 13.325 min Scan# 2053
Delta R.T. 0.058 min
Lab File: 7G11148.d
Acq: 11 Aug 2020 3:39 pm

Tgt Ion:278 Resp: 30141

Ion	Ratio	Lower	Upper
278	100		
139	11.3	0.0	38.8
279	24.0	0.0	53.6

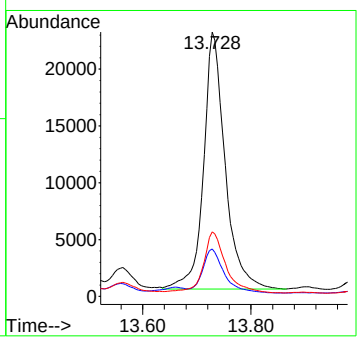




#28
Benzo[g,h,i]perylene
Concen: 4.61 ppm
RT: 13.728 min Scan# 2136
Delta R.T. 0.058 min
Lab File: 7G11148.d
Acq: 11 Aug 2020 3:39 pm

Tgt Ion:276 Resp: 62593

Ion	Ratio	Lower	Upper
276	100		
138	16.5	0.0	40.5
277	23.5	0.0	53.2



Manual Integration Approval Summary

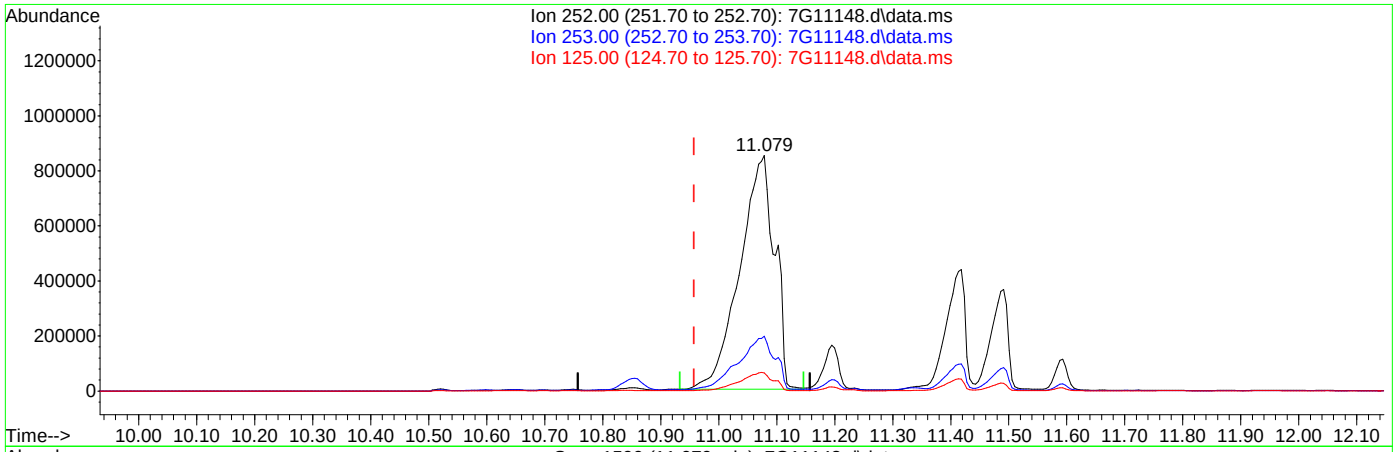
Sample Number: FA77615-10
Lab FileID: 7G11148.D
Injection Time: 08/11/20 15:39
Method: SW846 8270E BY SIM
Analyst approved: 08/12/20 09:33 Fouad Sekkar
Supervisor approved: 08/12/20 11:43 Nicole McCampbell

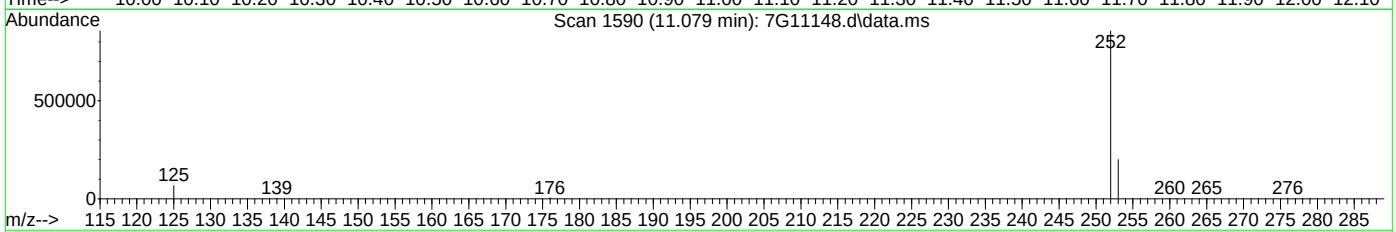
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(b)fluoranthene	205-99-2		11.08	Overlapping peak
Benzo(k)fluoranthene	207-08-9		11.10	Overlapping peak
Benzo(a)pyrene	50-32-8		11.42	Missed peak

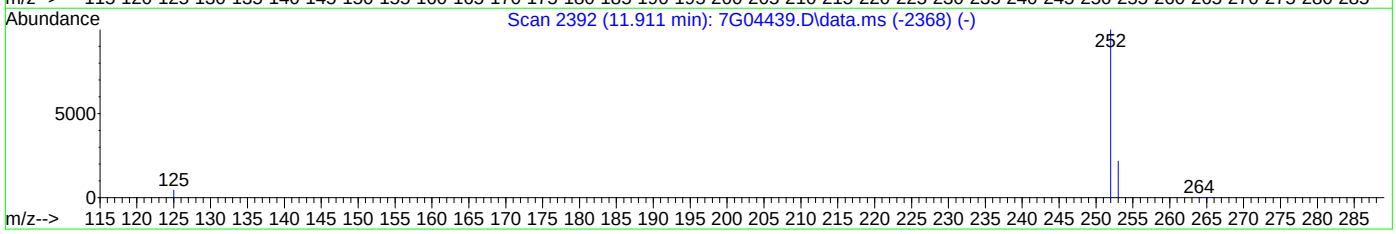
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11148.d
Acq On : 11 Aug 2020 3:39 pm
Operator : FOUADS
Sample : fa77615-10 e Inst : MSBNA8
Misc : op81485,S7G483,15.3,,,1,1,soil
ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:27:01 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11148.d\data.ms

(23) Benzo[b]fluoranthene (P)

11.079min (+0.121) 199.70ppm

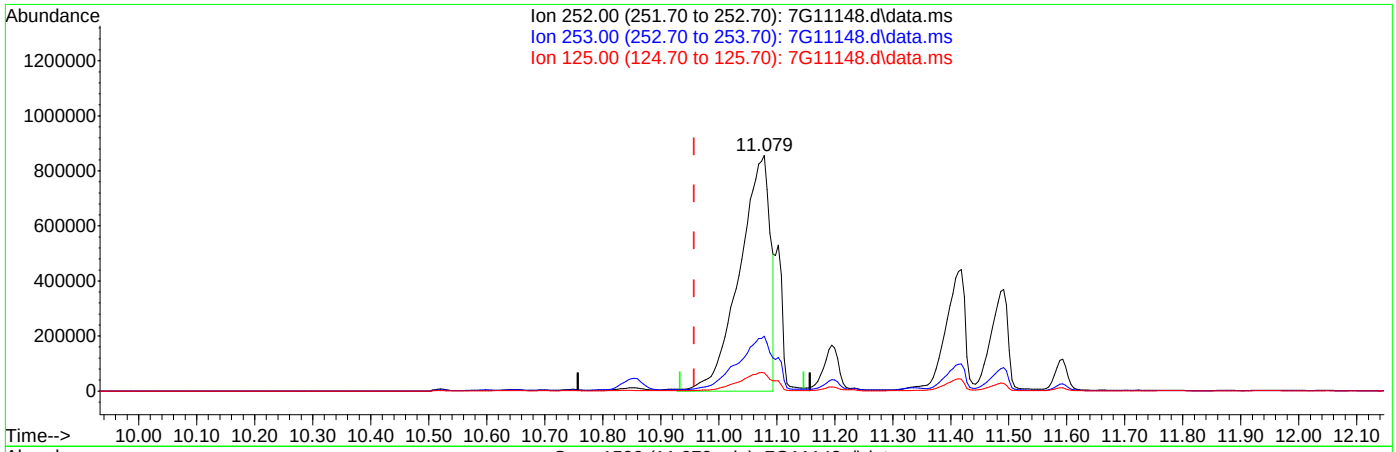
response 3538266

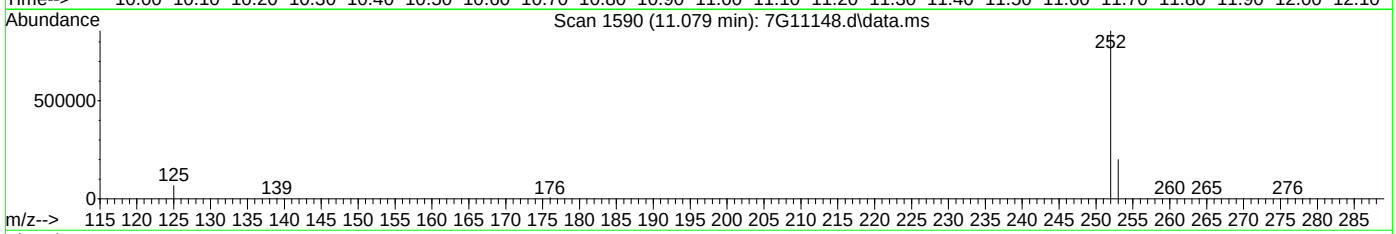
Ion	Exp%	Act%
252.00	100	100
253.00	21.70	22.83
125.00	4.50	7.61
0.00	0.00	0.00

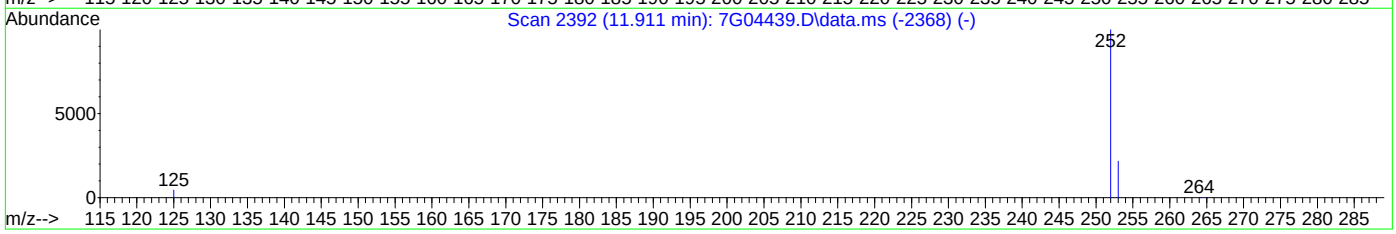
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11148.d
Acq On : 11 Aug 2020 3:39 pm
Operator : FOUADS
Sample : fa77615-10 e Inst : MSBNA8
Misc : op81485,S7G483,15.3,,,1,1,soil
ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:27:01 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11148.d\data.ms

(23) Benzo[b]fluoranthene (P)

11.079min (+0.121) 176.79ppm m

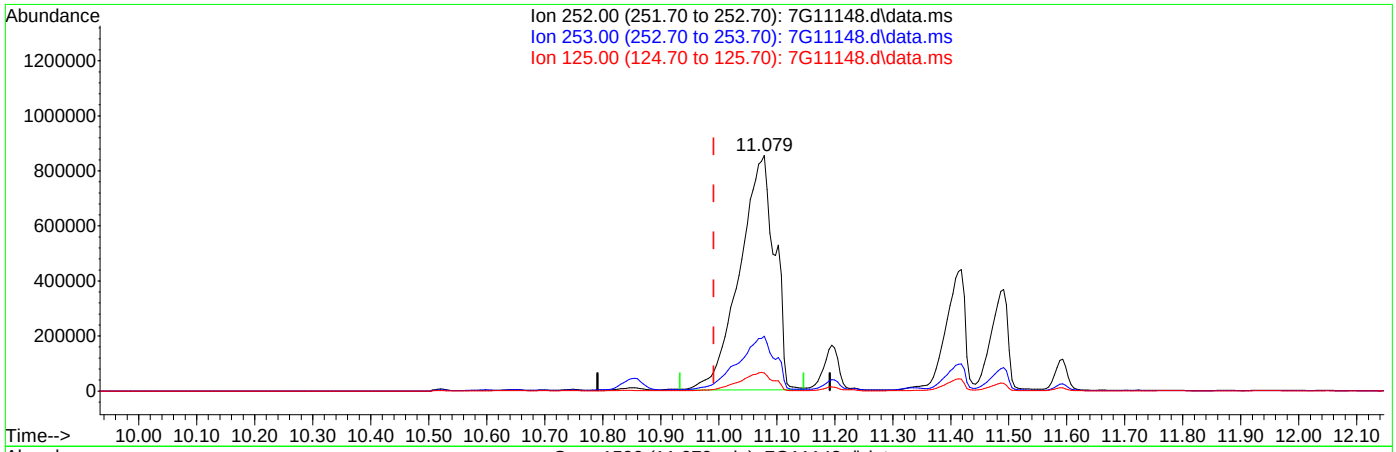
response 3132314

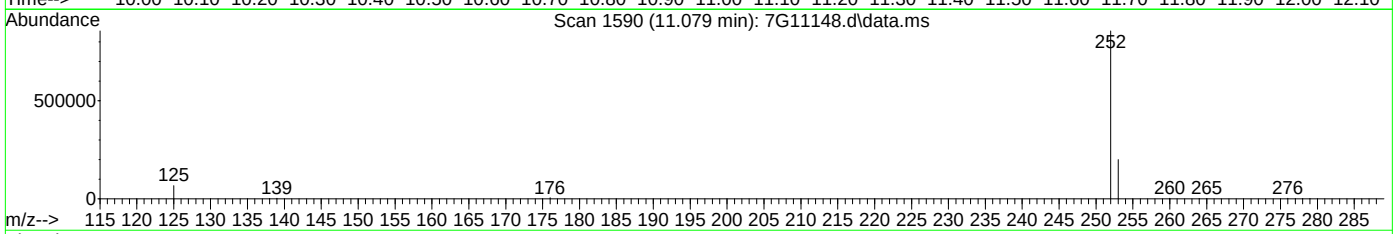
Ion	Exp%	Act%
252.00	100	100
253.00	21.70	23.25
125.00	4.50	7.69
0.00	0.00	0.00

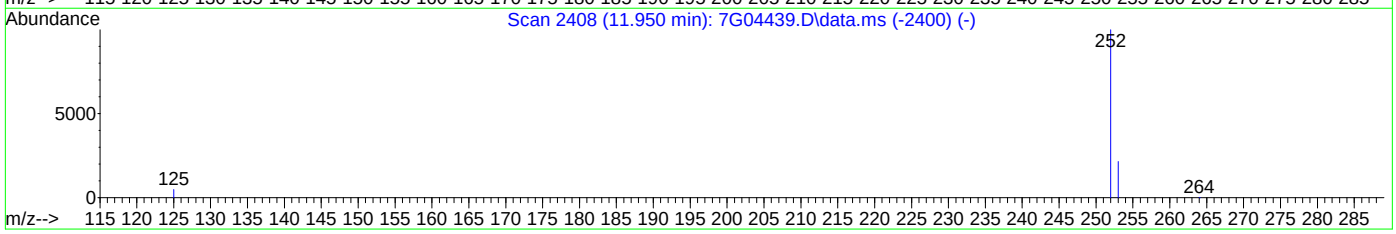
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11148.d
Acq On : 11 Aug 2020 3:39 pm
Operator : FOUADS
Sample : fa77615-10 e Inst : MSBNA8
Misc : op81485,S7G483,15.3,,,1,1,soil
ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:27:01 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11148.d\data.ms

(24) Benzo[k]fluoranthene (P)

11.079min (+0.087) 135.54ppm

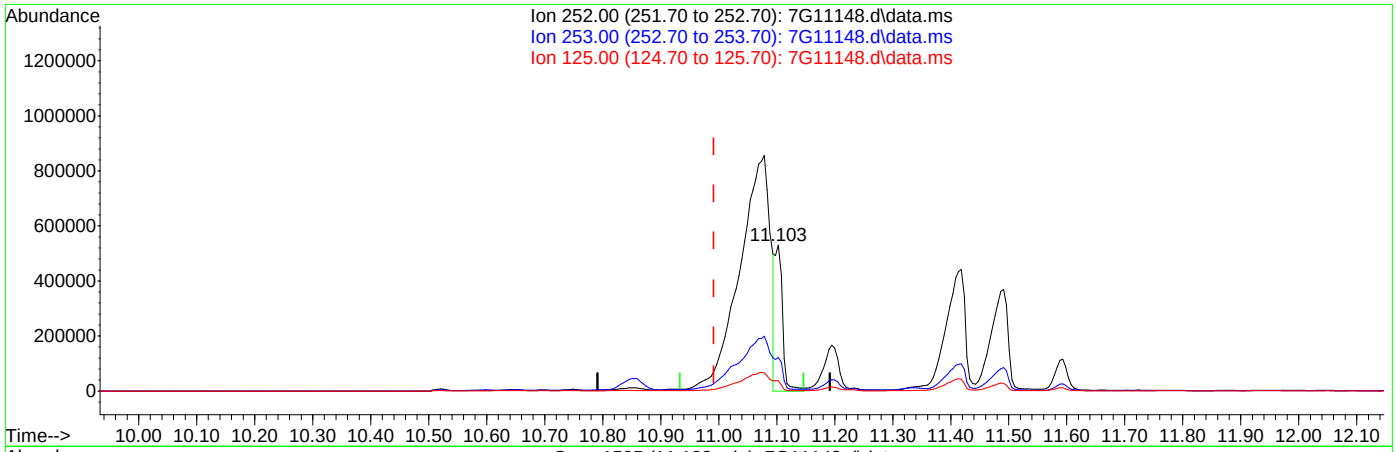
response 3567611

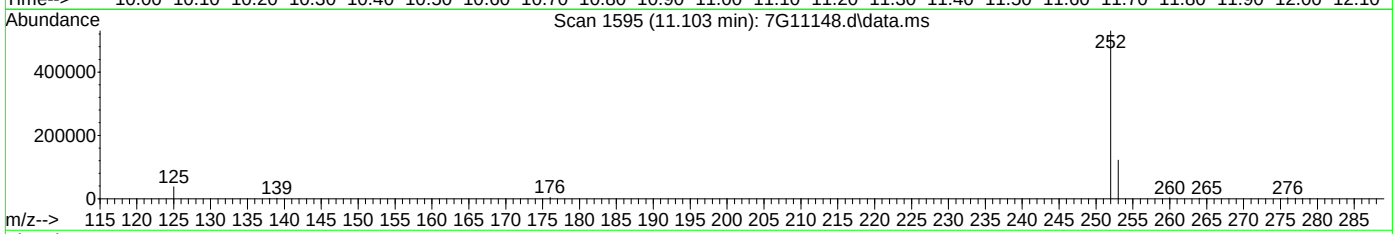
Ion	Exp%	Act%
252.00	100	100
253.00	21.50	22.83
125.00	4.80	7.61
0.00	0.00	0.00

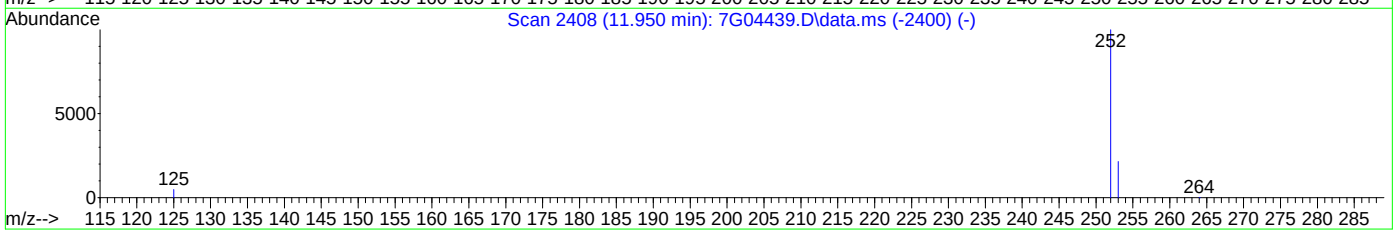
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11148.d
Acq On : 11 Aug 2020 3:39 pm
Operator : FOUADS
Sample : fa77615-10 e Inst : MSBNA8
Misc : op81485,S7G483,15.3,,,1,1,soil
ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:27:01 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11148.d\data.ms

(24) Benzo[k]fluoranthene (P)

11.103min (+0.112) 24.28ppm m

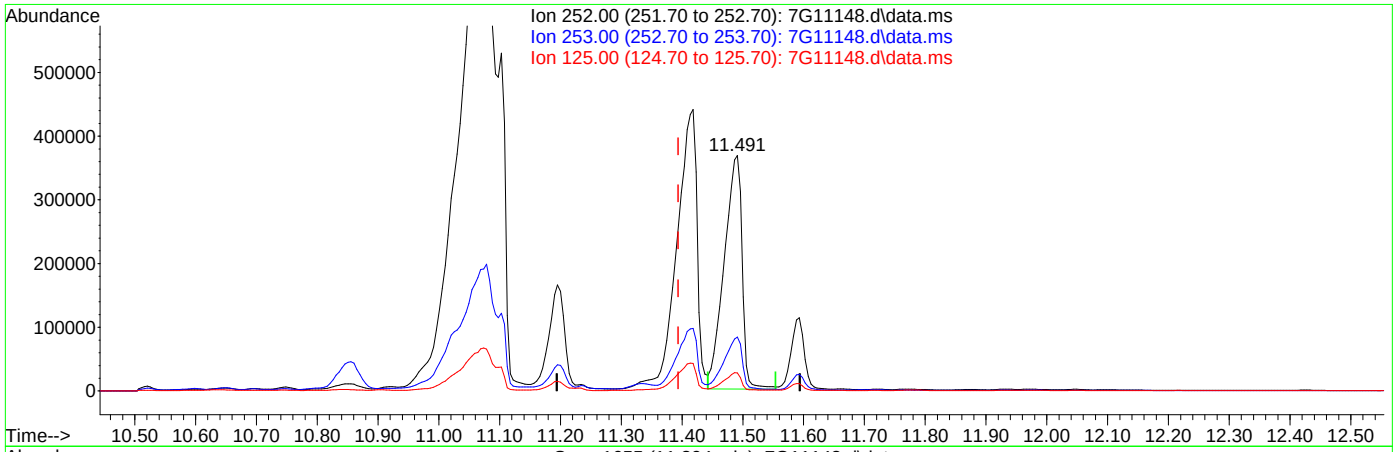
response 485732

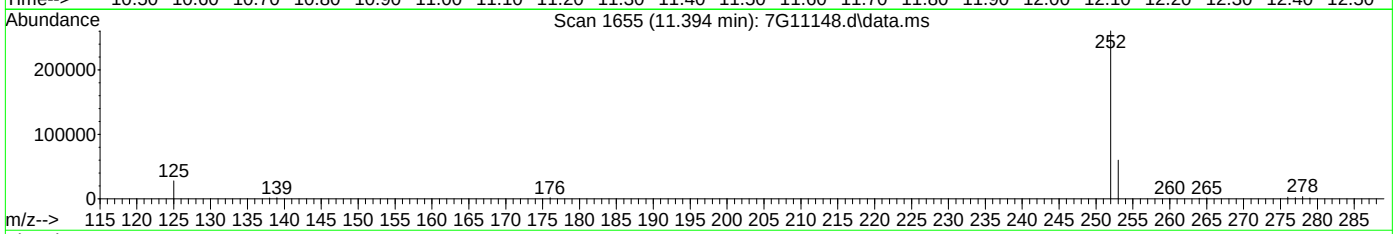
Ion	Exp%	Act%
252.00	100	100
253.00	21.50	23.02
125.00	4.80	7.07
0.00	0.00	0.00

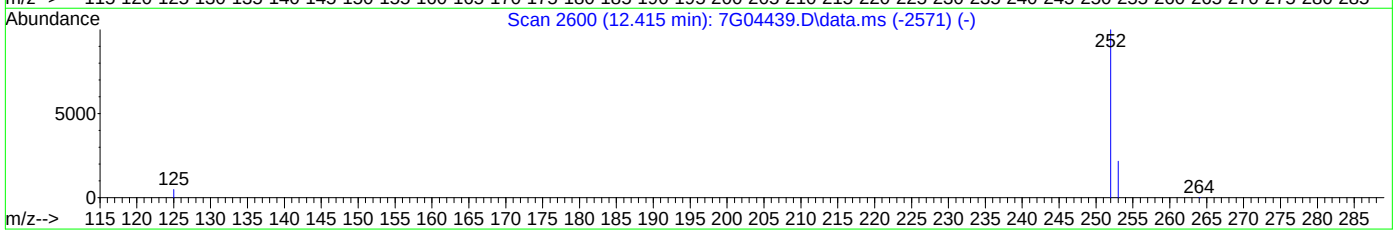
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11148.d
Acq On : 11 Aug 2020 3:39 pm
Operator : FOUADS
Sample : fa77615-10 e Inst : MSBNA8
Misc : op81485,S7G483,15.3,,,1,1,soil
ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:27:01 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11148.d\data.ms

(25) Benzo[a]pyrene (P)

11.491min (+0.097) 43.43ppm

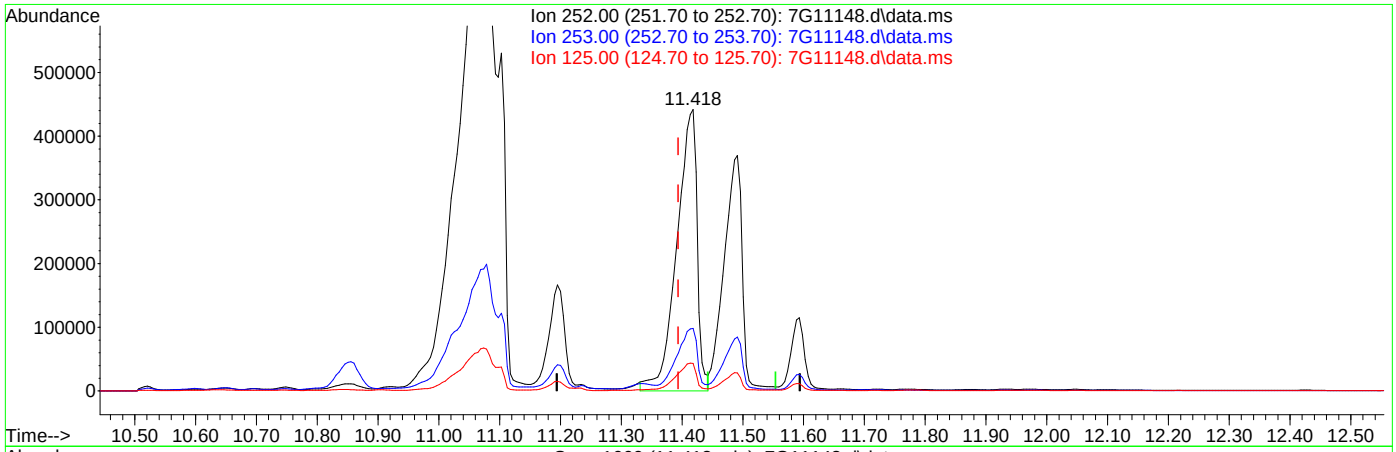
response 749847

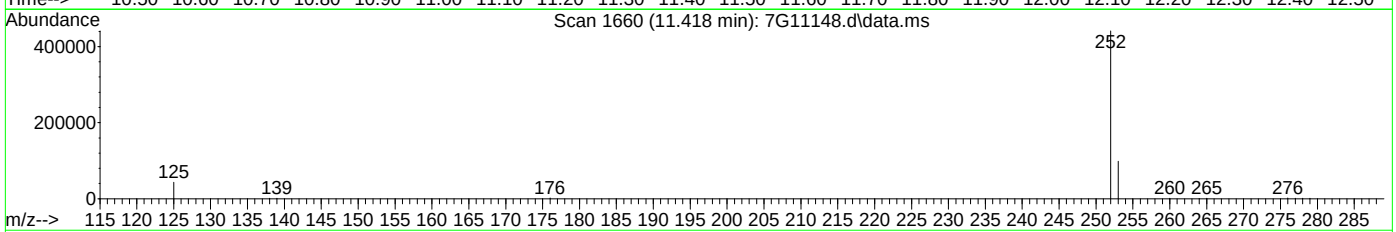
Ion	Exp%	Act%
252.00	100	100
253.00	21.60	22.09
125.00	4.80	7.34
0.00	0.00	0.00

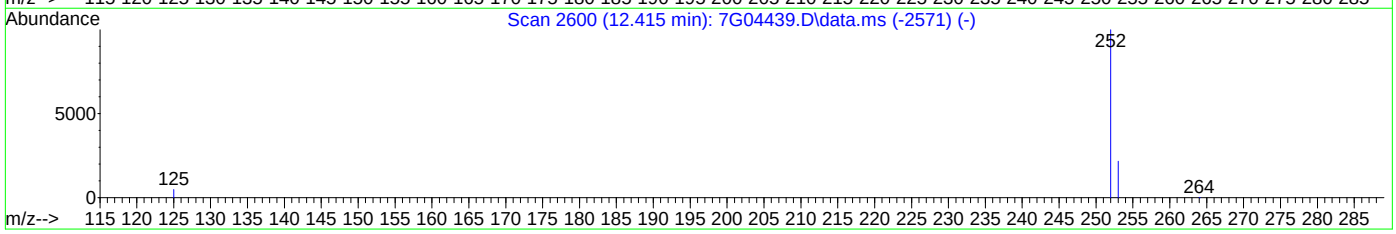
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11148.d
Acq On : 11 Aug 2020 3:39 pm
Operator : FOUADS
Sample : fa77615-10 e Inst : MSBNA8
Misc : op81485,S7G483,15.3,,,1,1,soil
ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:27:01 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11148.d\data.ms

(25) Benzo[a]pyrene (P)

11.418min (+0.024) 59.53ppm m

response 1027758

Ion	Exp%	Act%
252.00	100	100
253.00	21.60	22.27
125.00	4.80	9.78
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11149.d
Acq On : 11 Aug 2020 4:04 pm
Operator : FOUADS
Sample : fa77615-11 e Inst : MSBNA8
Misc : op81485,S7G483,15.1,,,1,1,soil
ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:43:37 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

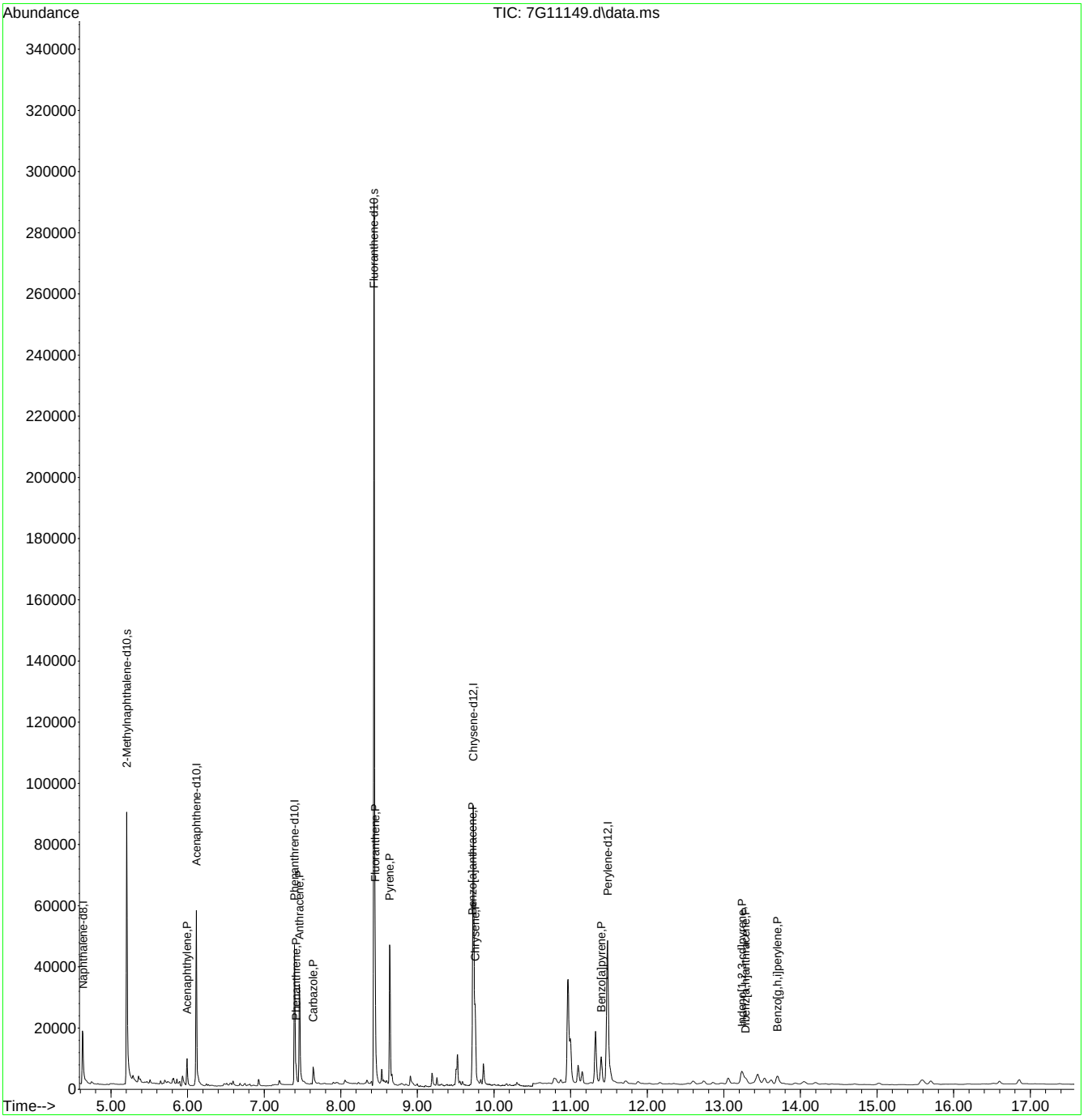
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.634	136	20947	4.00	ppm	0.00
6) Acenaphthene-d10	6.114	164	18088	4.00	ppm	0.00
11) Phenanthrene-d10	7.396	188	35722	4.00	ppm	0.00
18) Chrysene-d12	9.729	240	62374	4.00	ppm	0.00
22) Perylene-d12	11.481	264	56624	4.00	ppm	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.205	152	36354	11.51	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 115.10%			
17) Fluoranthene-d10	8.433	212	194767	10.42	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 104.20%			
Target Compounds						Qvalue
7) Acenaphthylene	5.993	152	6048	0.58	ppm	98
13) Phenanthrene	7.417	178	2866	0.24	ppm	98
14) Anthracene	7.459	178	26222	2.21	ppm	99
15) Carbazole	7.640	167	5508	0.26	ppm	98
16) Fluoranthene	8.448	202	23232	1.05	ppm	98
19) Pyrene	8.639	202	31665	1.28	ppm	94
20) Benzo[a]anthracene	9.720	228	12106	0.63	ppm	82
21) Chrysene	9.753	228	25554	1.18	ppm	99
25) Benzo[a]pyrene	11.399	252	10410	0.56	ppm	99
26) Indeno[1,2,3-cd]pyrene	13.238	276	8924	0.73	ppm	96
27) Dibenz[a,h]anthracene	13.282	278	1965	0.14	ppm	98
28) Benzo[g,h,i]perylene	13.699	276	5572	0.38	ppm	95

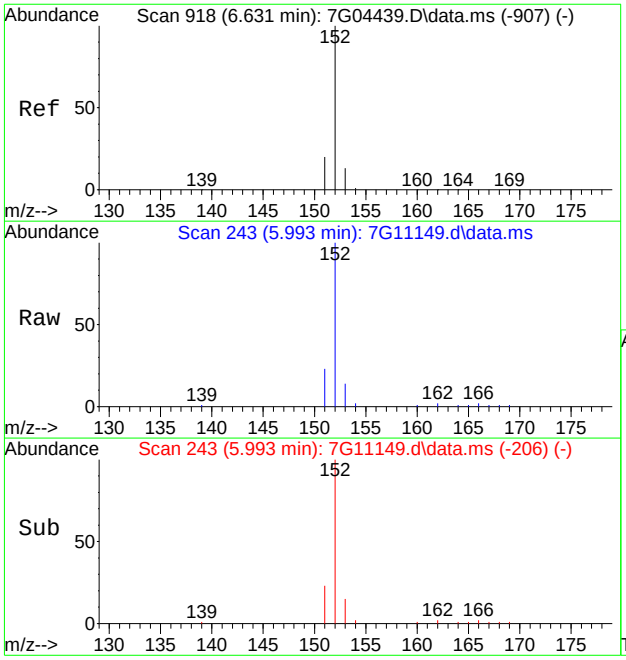
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11149.d
Acq On : 11 Aug 2020 4:04 pm
Operator : FOUADS
Sample : fa77615-11 e Inst : MSBNA8
Misc : op81485,S7G483,15.1,,,1,1,soil
ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:43:37 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

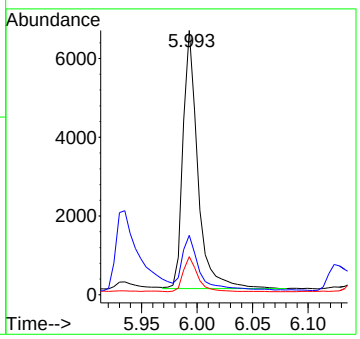


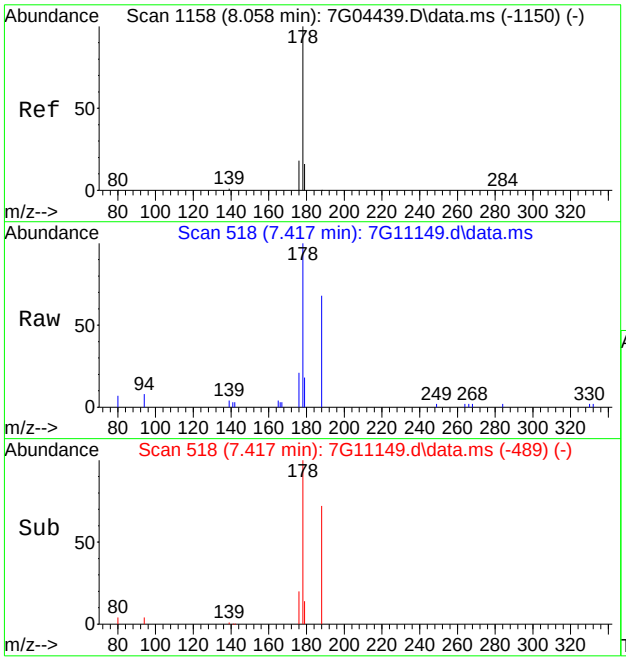


#7
Acenaphthylene
Concen: 0.58 ppm
RT: 5.993 min Scan# 243
Delta R.T. 0.000 min
Lab File: 7G11149.d
Acq: 11 Aug 2020 4:04 pm

Tgt Ion:152 Resp: 6048

Ion	Ratio	Lower	Upper
152	100		
151	19.1	0.0	49.8
153	13.5	0.0	42.8

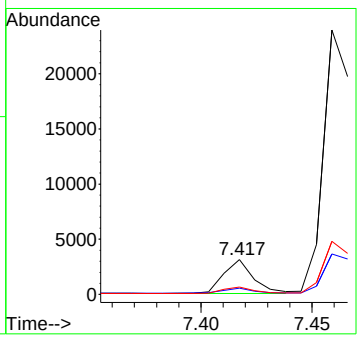


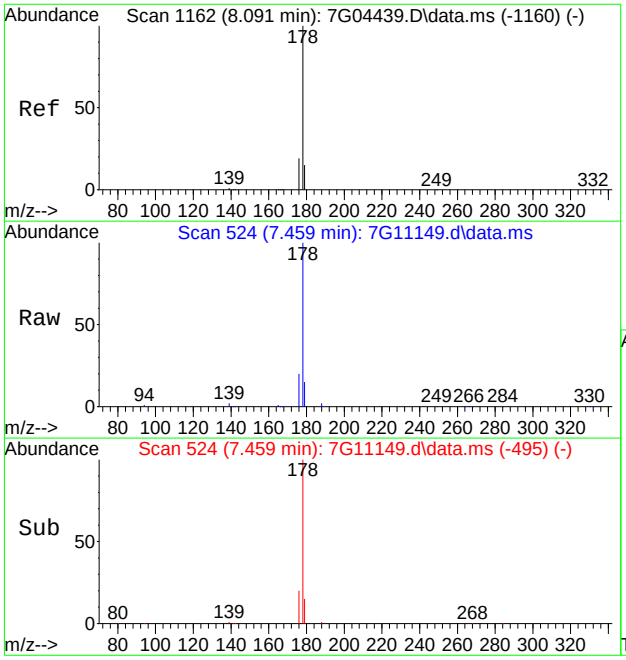


#13
Phenanthrene
Concen: 0.24 ppm
RT: 7.417 min Scan# 518
Delta R.T. 0.000 min
Lab File: 7G11149.d
Acq: 11 Aug 2020 4:04 pm

Tgt Ion:178 Resp: 2866

Ion	Ratio	Lower	Upper
178	100		
179	14.9	0.0	45.7
176	19.1	0.0	48.0

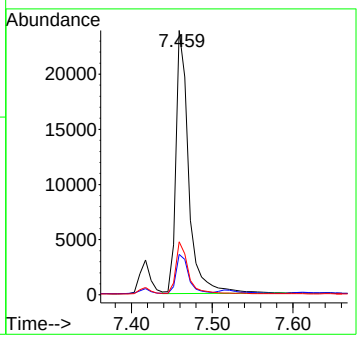


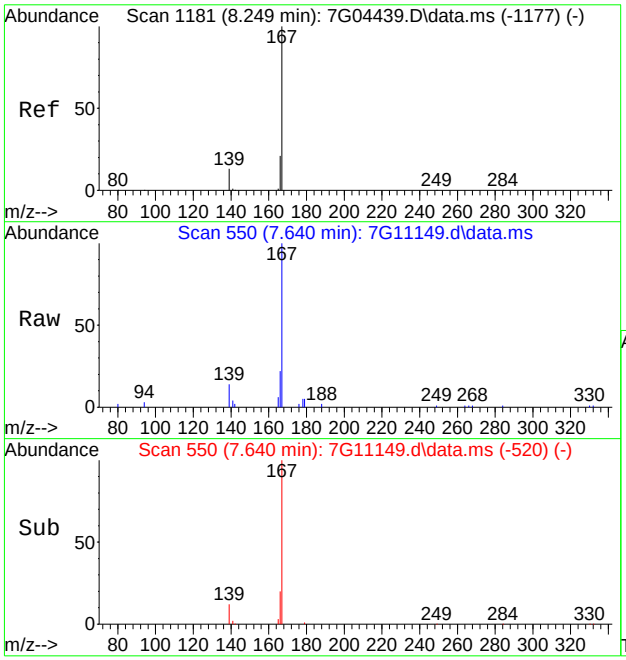


#14
Anthracene
Concen: 2.21 ppm
RT: 7.459 min Scan# 524
Delta R.T. 0.000 min
Lab File: 7G11149.d
Acq: 11 Aug 2020 4:04 pm

Tgt Ion:178 Resp: 26222

Ion	Ratio	Lower	Upper
178	100		
179	14.9	0.0	45.1
176	19.8	0.0	48.8

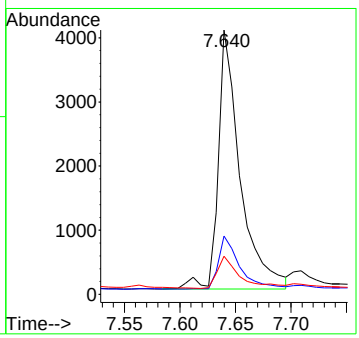


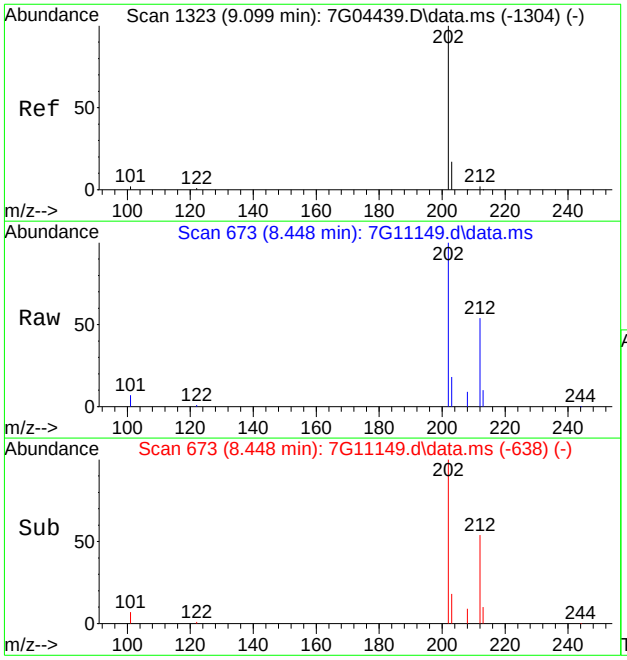


#15
Carbazole
Concen: 0.26 ppm
RT: 7.640 min Scan# 550
Delta R.T. 0.007 min
Lab File: 7G11149.d
Acq: 11 Aug 2020 4:04 pm

Tgt Ion:167 Resp: 5508

Ion	Ratio	Lower	Upper
167	100		
166	20.5	1.2	41.2
139	11.9	0.0	32.8

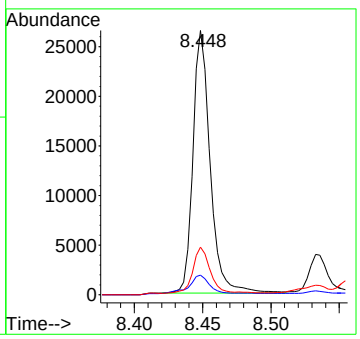


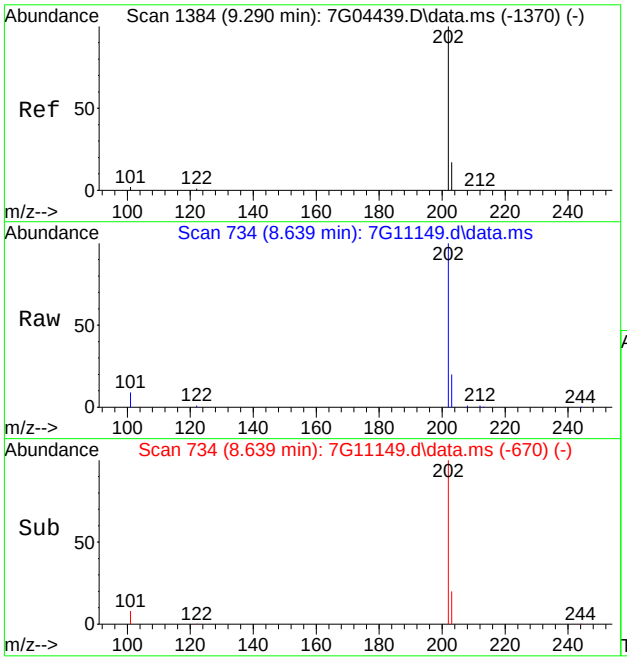


#16
Fluoranthene
Concen: 1.05 ppm
RT: 8.448 min Scan# 673
Delta R.T. 0.000 min
Lab File: 7G11149.d
Acq: 11 Aug 2020 4:04 pm

Tgt Ion:202 Resp: 23232

Ion	Ratio	Lower	Upper
202	100		
101	6.9	0.0	32.2
203	17.4	0.0	47.2

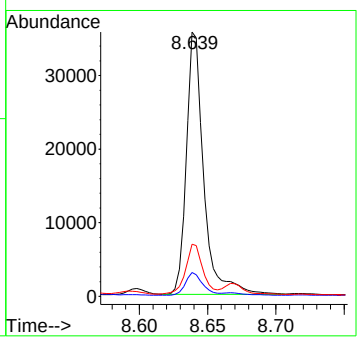


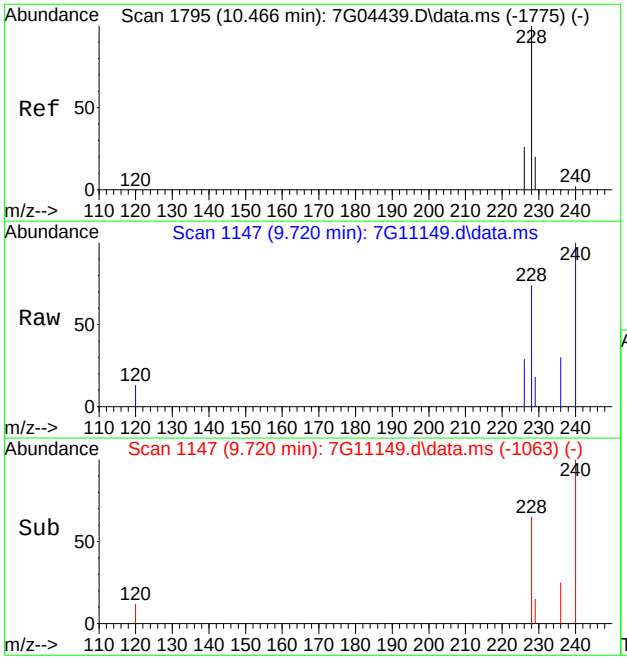


#19
Pyrene
Concen: 1.28 ppm
RT: 8.639 min Scan# 734
Delta R.T. -0.000 min
Lab File: 7G11149.d
Acq: 11 Aug 2020 4:04 pm

Tgt Ion:202 Resp: 31665

Ion	Ratio	Lower	Upper
202	100		
101	8.6	0.0	32.4
203	19.1	0.0	47.4

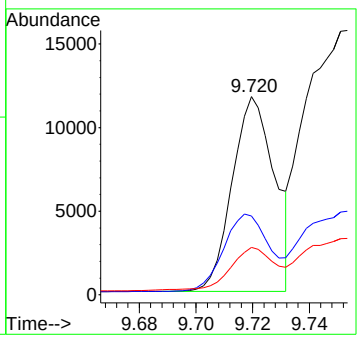


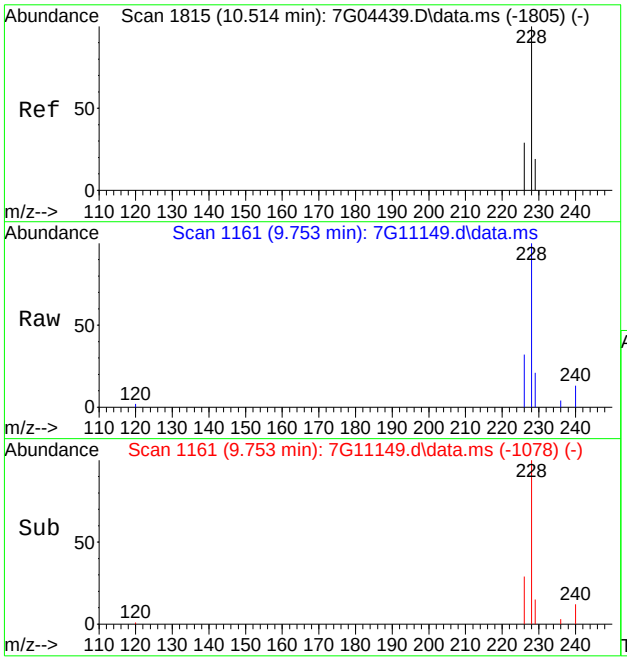


#20
Benzo[a]anthracene
Concen: 0.63 ppm
RT: 9.720 min Scan# 1147
Delta R.T. 0.002 min
Lab File: 7G11149.d
Acq: 11 Aug 2020 4:04 pm

Tgt Ion:228 Resp: 12106

Ion	Ratio	Lower	Upper
228	100		
226	40.5	0.0	56.1
229	21.6	0.0	49.5

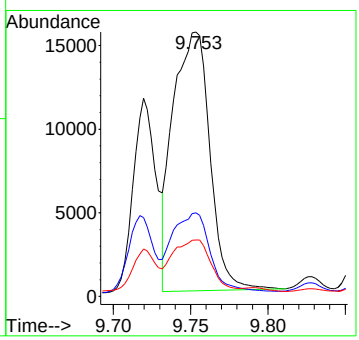


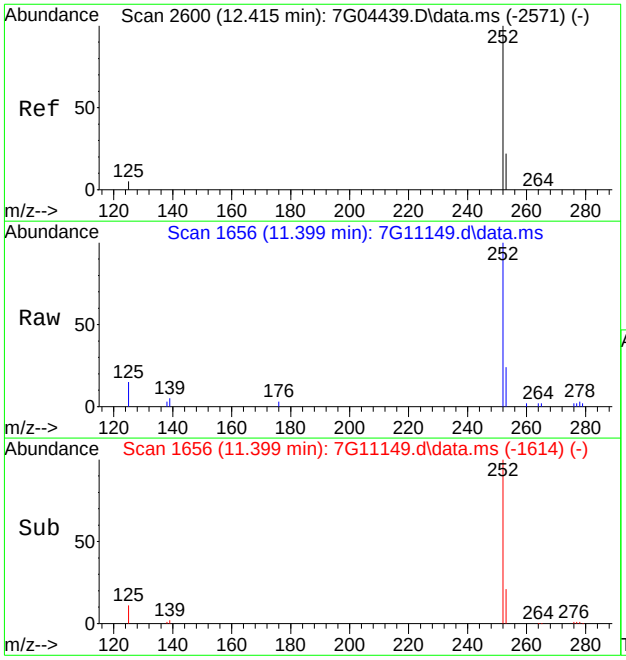


#21
Chrysene
Concen: 1.18 ppm
RT: 9.753 min Scan# 1161
Delta R.T. -0.000 min
Lab File: 7G11149.d
Acq: 11 Aug 2020 4:04 pm

Tgt Ion:228 Resp: 25554

Ion	Ratio	Lower	Upper
228	100		
226	29.9	0.0	58.9
229	19.3	0.0	49.5

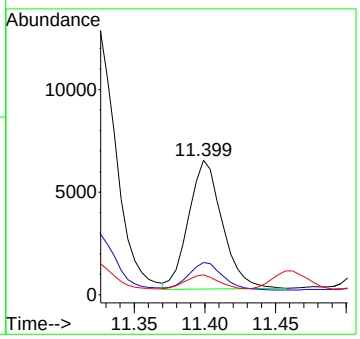


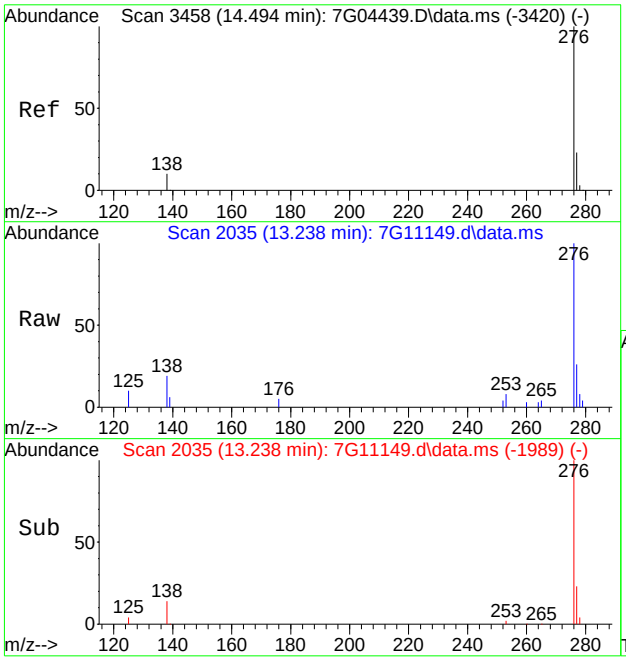


#25
Benzo[a]pyrene
Concen: 0.56 ppm
RT: 11.399 min Scan# 1656
Delta R.T. 0.005 min
Lab File: 7G11149.d
Acq: 11 Aug 2020 4:04 pm

Tgt Ion:252 Resp: 10410

Ion	Ratio	Lower	Upper
252	100		
253	21.2	0.0	51.6
125	4.1	0.0	34.8

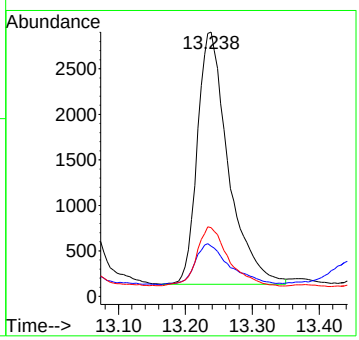


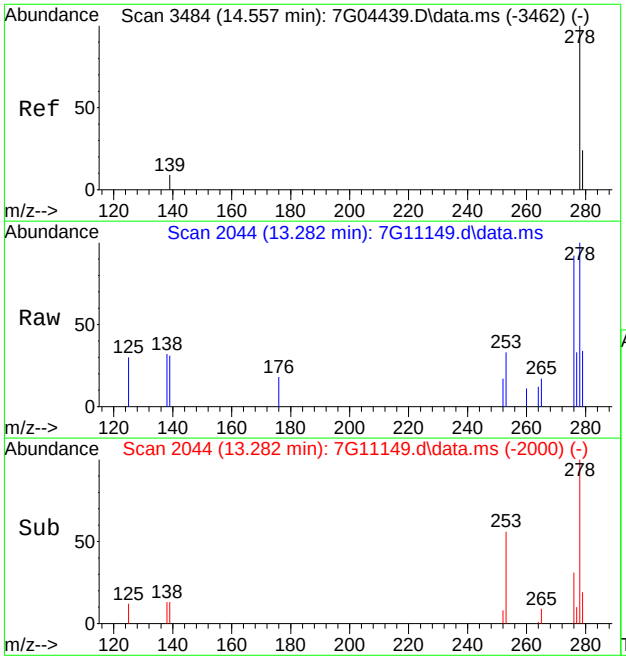


#26
Indeno[1,2,3-cd]pyrene
Concen: 0.73 ppm
RT: 13.238 min Scan# 2035
Delta R.T. 0.024 min
Lab File: 7G11149.d
Acq: 11 Aug 2020 4:04 pm

Tgt Ion:276 Resp: 8924

Ion	Ratio	Lower	Upper
276	100		
138	15.0	0.0	39.6
277	23.2	0.0	53.1

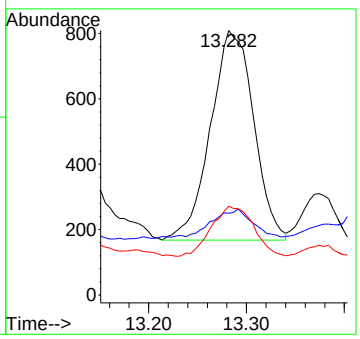


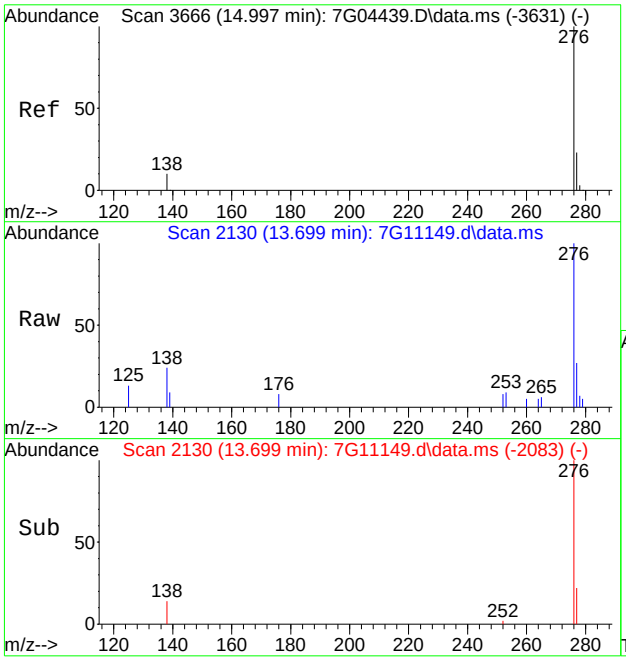


#27
Dibenz[a,h]anthracene
Concen: 0.14 ppm
RT: 13.282 min Scan# 2044
Delta R.T. 0.015 min
Lab File: 7G11149.d
Acq: 11 Aug 2020 4:04 pm

Tgt Ion:278 Resp: 1965

Ion	Ratio	Lower	Upper
278	100		
139	11.2	0.0	38.8
279	24.0	0.0	53.6

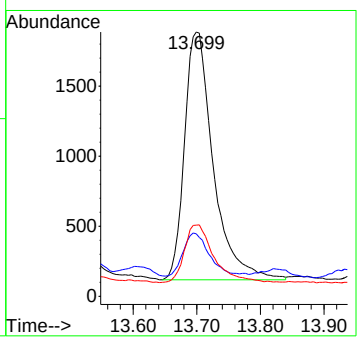




#28
Benzo[g,h,i]perylene
Concen: 0.38 ppm
RT: 13.699 min Scan# 2130
Delta R.T. 0.029 min
Lab File: 7G11149.d
Acq: 11 Aug 2020 4:04 pm

Tgt Ion:276 Resp: 5572

Ion	Ratio	Lower	Upper
276	100		
138	15.9	0.0	40.5
277	23.1	0.0	53.2



Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 08/12/20 11:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11150.d
Acq On : 11 Aug 2020 4:28 pm
Operator : FOUADS
Sample : fa77615-12 e Inst : MSBNA8
Misc : op81485,S7G483,15.0,,,1,1,soil
ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:44:29 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

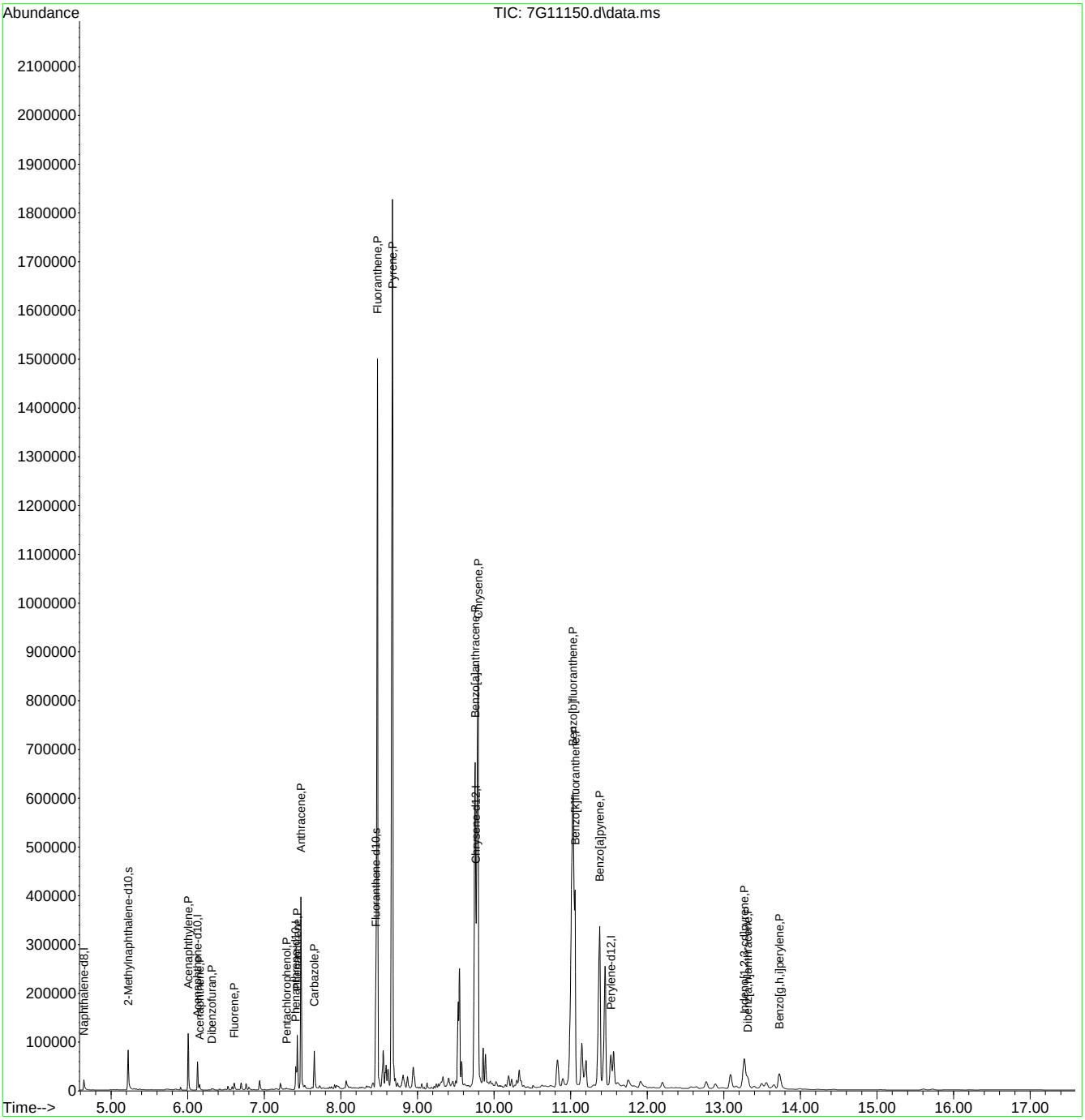
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.646	136	20517	4.00	ppm	0.02
6) Acenaphthene-d10	6.128	164	18471	4.00	ppm	0.01
11) Phenanthrene-d10	7.410	188	36375	4.00	ppm	0.01
18) Chrysene-d12	9.763	240	75424	4.00	ppm	0.04
22) Perylene-d12	11.525	264	62403	4.00	ppm	0.05
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.223	152	33514	10.86	ppm	0.02
Spiked Amount 10.000	Range 50 - 150		Recovery = 108.60%			
17) Fluoranthene-d10	8.458	212	177725	9.36	ppm	0.02
Spiked Amount 10.000	Range 50 - 150		Recovery = 93.60%			
Target Compounds						Qvalue
7) Acenaphthylene	6.007	152	68322	6.38	ppm	99
8) Acenaphthene	6.157	153	3312	0.48	ppm	94
9) Dibenzofuran	6.317	168	2231	0.46	ppm	85
10) Fluorene	6.607	166	6020	0.80	ppm	100
12) Pentachlorophenol	7.292	266	1129	0.87	ppm	95
13) Phenanthrene	7.431	178	65449	5.42	ppm	96
14) Anthracene	7.480	178	240145	18.96	ppm	98
15) Carbazole	7.654	167	54929	2.53	ppm	96
16) Fluoranthene	8.480	202	1057728	42.18	ppm	97
19) Pyrene	8.676	202	1509863	47.40	ppm	96
20) Benzo[a]anthracene	9.753	228	511403	20.64	ppm	88
21) Chrysene	9.792	228	808342	31.03	ppm	97
23) Benzo[b]fluoranthene	11.030	252	1229803m	58.06	ppm	
24) Benzo[k]fluoranthene	11.059	252	261082m	11.33	ppm	
25) Benzo[a]pyrene	11.380	252	452247m	21.91	ppm	
26) Indeno[1,2,3-cd]pyrene	13.267	276	114097	8.47	ppm	94
27) Dibenz[a,h]anthracene	13.311	278	26599	1.78	ppm	96
28) Benzo[g,h,i]perylene	13.724	276	58487	3.60	ppm	94

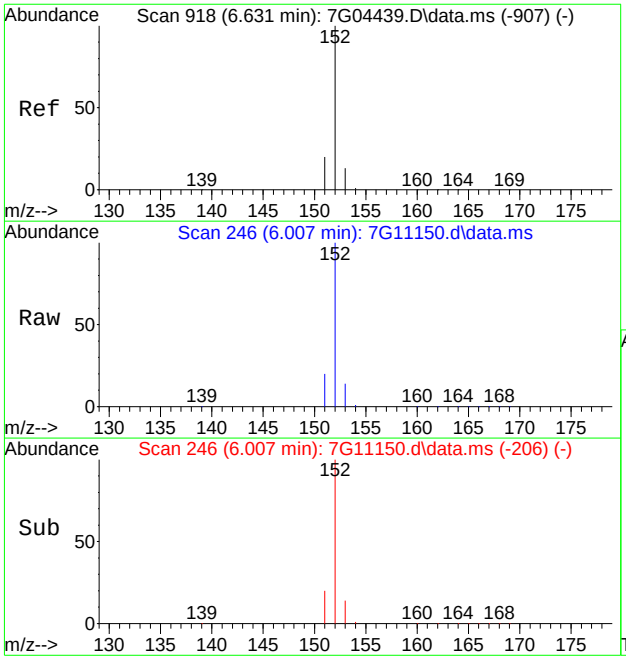
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11150.d
Acq On : 11 Aug 2020 4:28 pm
Operator : FOUADS
Sample : fa77615-12 e Inst : MSBNA8
Misc : op81485,S7G483,15.0,,,1,1,soil
ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:44:29 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

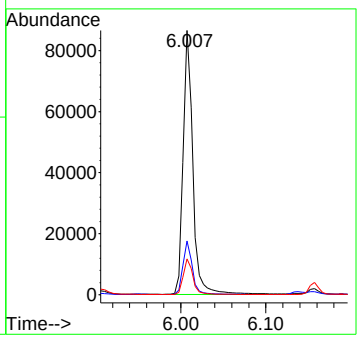


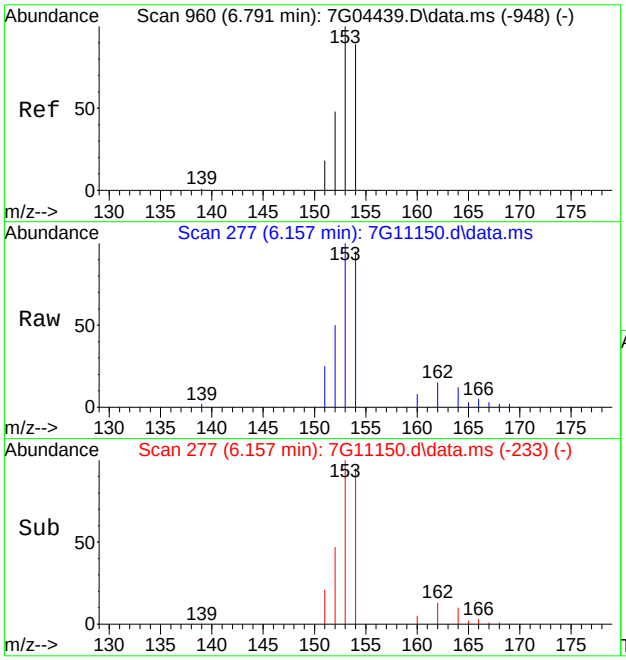


#7
Acenaphthylene
Concen: 6.38 ppm
RT: 6.007 min Scan# 246
Delta R.T. 0.015 min
Lab File: 7G11150.d
Acq: 11 Aug 2020 4:28 pm

Tgt Ion:152 Resp: 68322

Ion	Ratio	Lower	Upper
152	100		
151	20.3	0.0	49.8
153	13.5	0.0	42.8

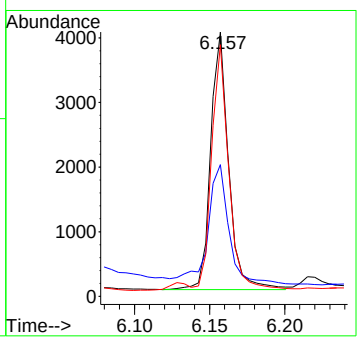


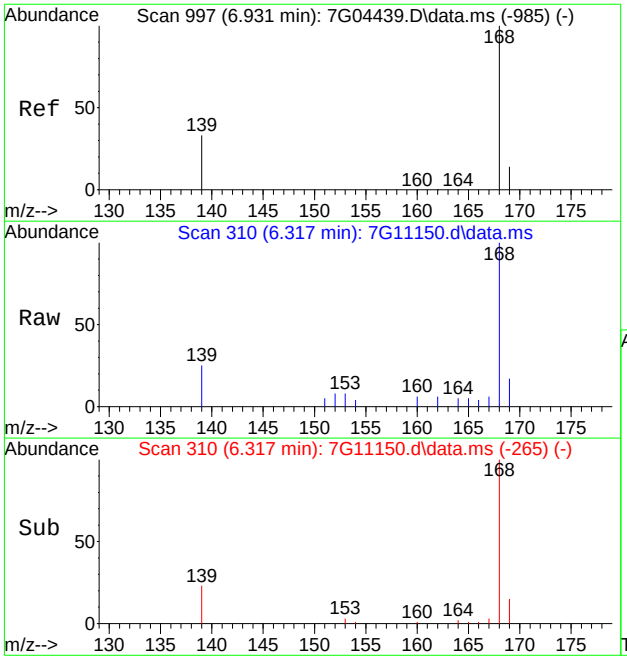


#8
Acenaphthene
Concen: 0.48 ppm
RT: 6.157 min Scan# 277
Delta R.T. 0.015 min
Lab File: 7G11150.d
Acq: 11 Aug 2020 4:28 pm

Tgt Ion:153 Resp: 3312

Ion	Ratio	Lower	Upper
153	100		
152	45.3	18.3	78.3
154	95.2	59.3	119.3

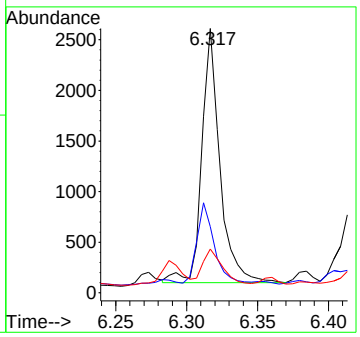


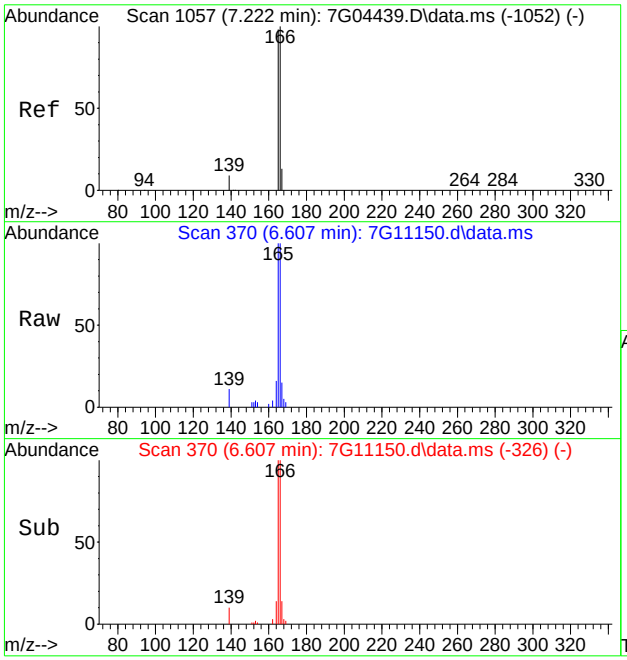


#9
Dibenzofuran
Concen: 0.46 ppm
RT: 6.317 min Scan# 310
Delta R.T. 0.019 min
Lab File: 7G11150.d
Acq: 11 Aug 2020 4:28 pm

Tgt Ion:168 Resp: 2231

Ion	Ratio	Lower	Upper
168	100		
139	21.7	12.6	52.6
169	11.3	0.0	33.8

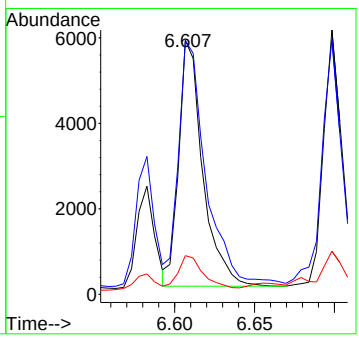


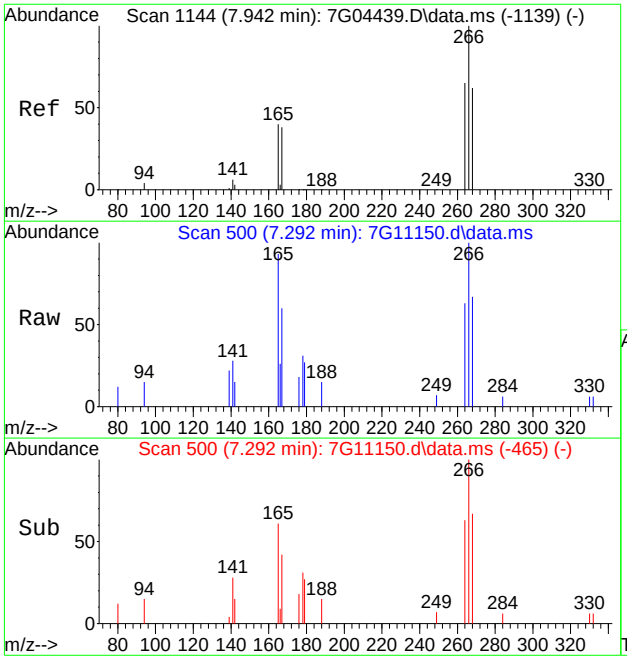


#10
Fluorene
Concen: 0.80 ppm
RT: 6.607 min Scan# 370
Delta R.T. 0.015 min
Lab File: 7G11150.d
Acq: 11 Aug 2020 4:28 pm

Tgt Ion:166 Resp: 6020

Ion	Ratio	Lower	Upper
166	100		
165	98.1	68.2	128.2
167	12.6	0.0	42.9

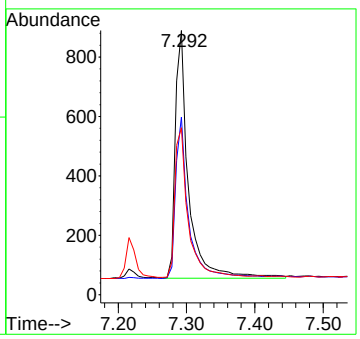


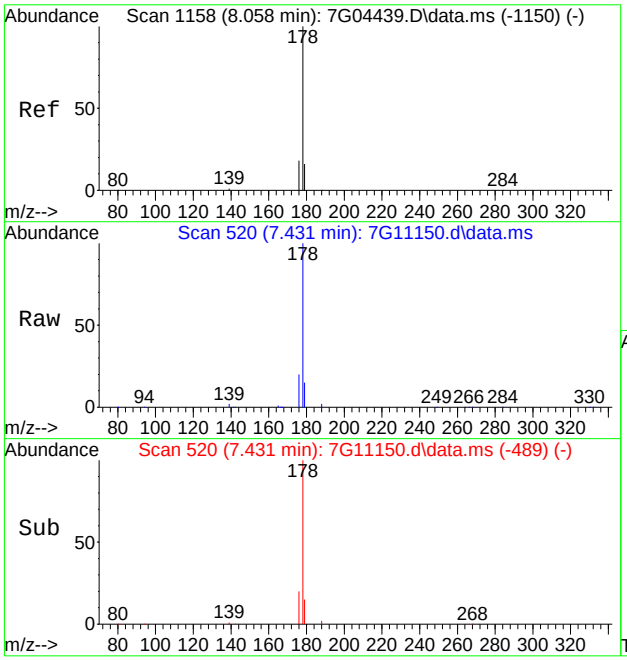


#12
Pentachlorophenol
Concen: 0.87 ppm
RT: 7.292 min Scan# 500
Delta R.T. 0.028 min
Lab File: 7G11150.d
Acq: 11 Aug 2020 4:28 pm

Tgt Ion:266 Resp: 1129

Ion	Ratio	Lower	Upper
266	100		
268	64.9	41.9	81.9
264	60.4	44.8	84.8

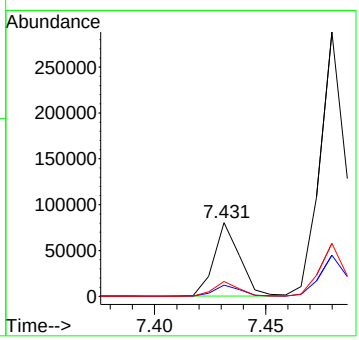


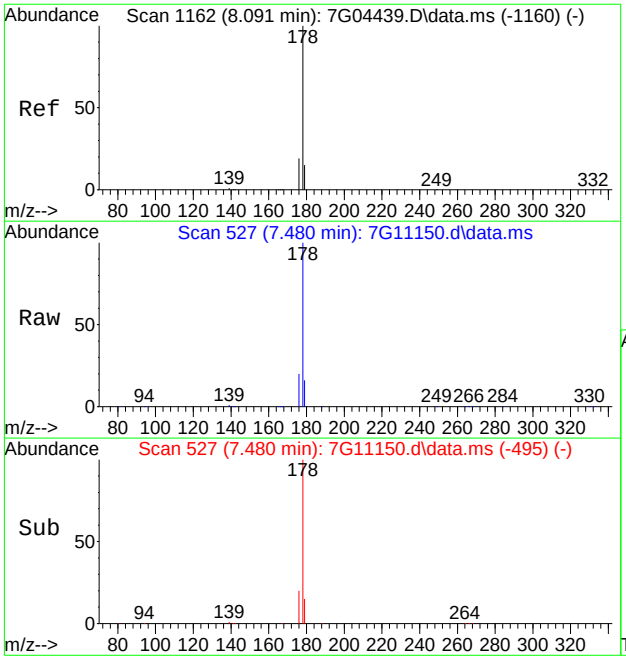


#13
Phenanthrene
Concen: 5.42 ppm
RT: 7.431 min Scan# 520
Delta R.T. 0.014 min
Lab File: 7G11150.d
Acq: 11 Aug 2020 4:28 pm

Tgt Ion:178 Resp: 65449

Ion	Ratio	Lower	Upper
178	100		
179	15.0	0.0	45.7
176	20.3	0.0	48.0

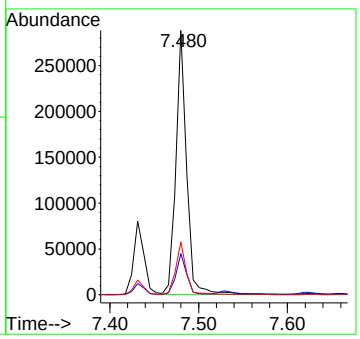


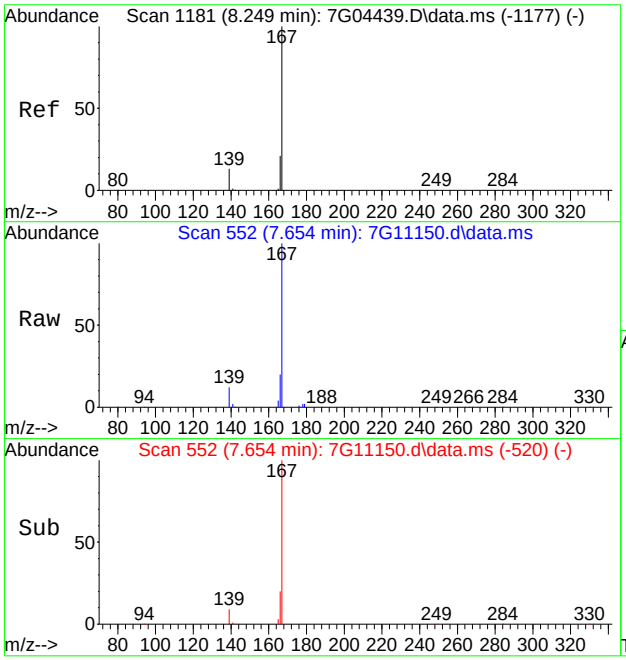


#14
Anthracene
Concen: 18.96 ppm
RT: 7.480 min Scan# 527
Delta R.T. 0.021 min
Lab File: 7G11150.d
Acq: 11 Aug 2020 4:28 pm

Tgt Ion:178 Resp: 240145

Ion	Ratio	Lower	Upper
178	100		
179	15.5	0.0	45.1
176	20.0	0.0	48.8

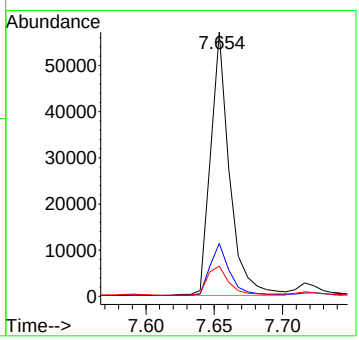


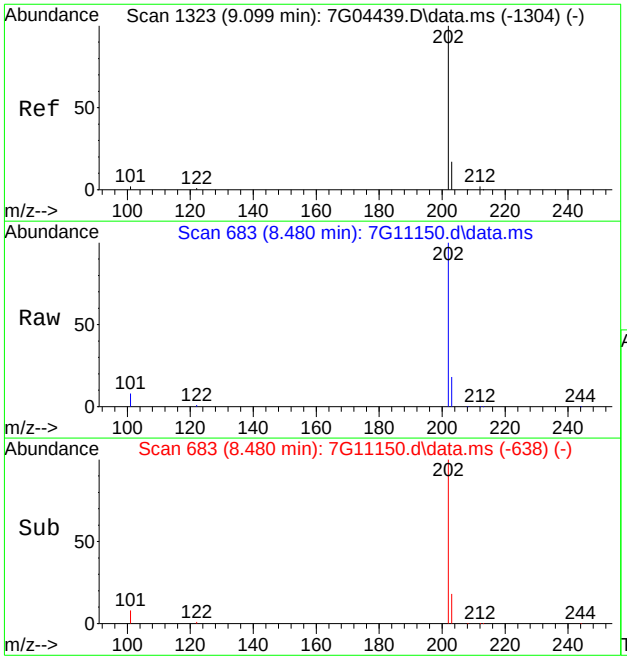


#15
Carbazole
Concen: 2.53 ppm
RT: 7.654 min Scan# 552
Delta R.T. 0.021 min
Lab File: 7G11150.d
Acq: 11 Aug 2020 4:28 pm

Tgt Ion:167 Resp: 54929

Ion	Ratio	Lower	Upper
167	100		
166	19.8	1.2	41.2
139	11.0	0.0	32.8

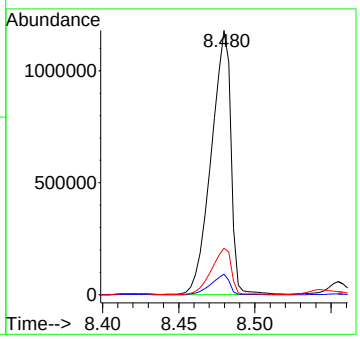


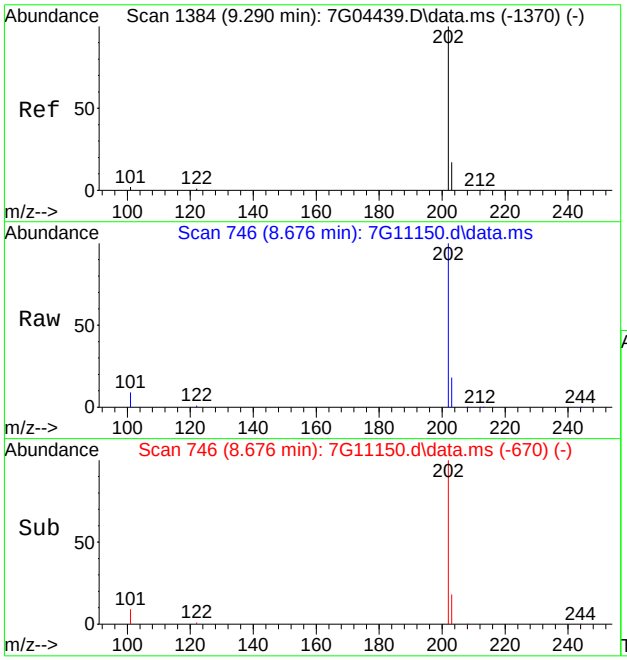


#16
Fluoranthene
Concen: 42.18 ppm
RT: 8.480 min Scan# 683
Delta R.T. 0.031 min
Lab File: 7G11150.d
Acq: 11 Aug 2020 4:28 pm

Tgt Ion:202 Resp: 1057728

Ion	Ratio	Lower	Upper
202	100		
101	7.9	0.0	32.2
203	17.5	0.0	47.2

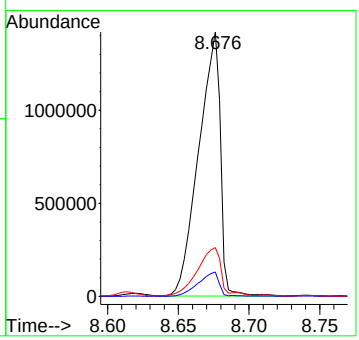


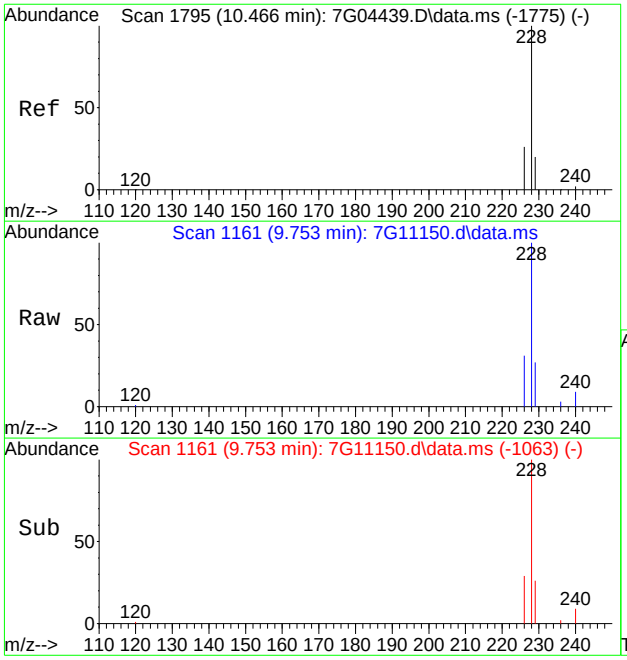


#19
Pyrene
Concen: 47.40 ppm
RT: 8.676 min Scan# 746
Delta R.T. 0.037 min
Lab File: 7G11150.d
Acq: 11 Aug 2020 4:28 pm

Tgt Ion:202 Resp: 1509863

Ion	Ratio	Lower	Upper
202	100		
101	9.2	0.0	32.4
203	18.3	0.0	47.4

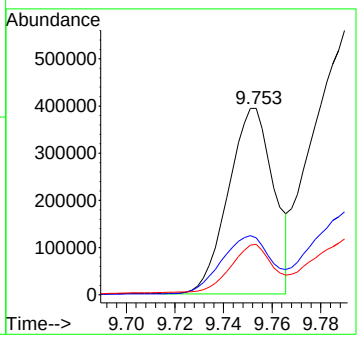


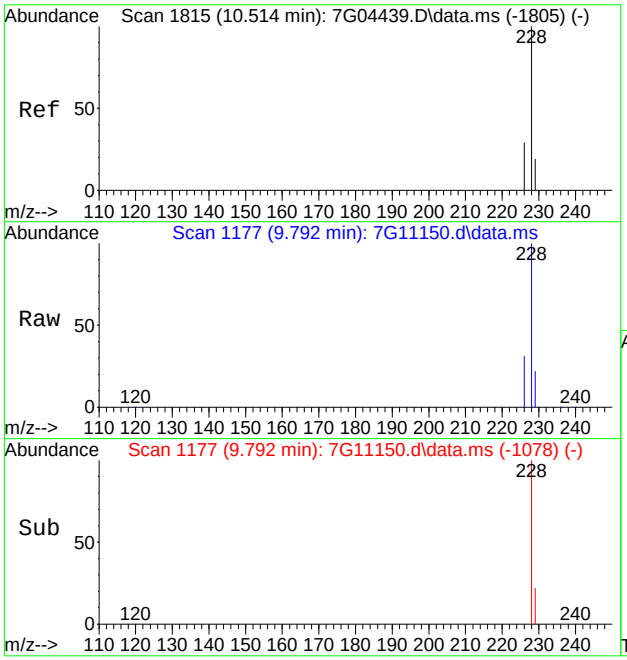


#20
Benzo[a]anthracene
Concen: 20.64 ppm
RT: 9.753 min Scan# 1161
Delta R.T. 0.036 min
Lab File: 7G11150.d
Acq: 11 Aug 2020 4:28 pm

Tgt Ion:228 Resp: 511403

Ion	Ratio	Lower	Upper
228	100		
226	30.2	0.0	56.1
229	27.1	0.0	49.5

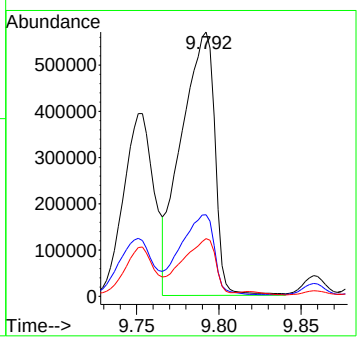


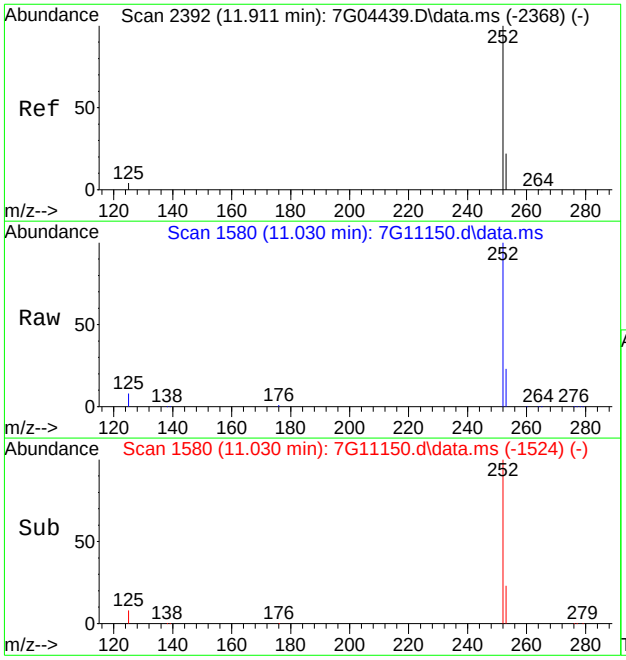


#21
Chrysene
Concen: 31.03 ppm
RT: 9.792 min Scan# 1177
Delta R.T. 0.039 min
Lab File: 7G11150.d
Acq: 11 Aug 2020 4:28 pm

Tgt Ion:228 Resp: 808342

Ion	Ratio	Lower	Upper
228	100		
226	30.6	0.0	58.9
229	21.2	0.0	49.5

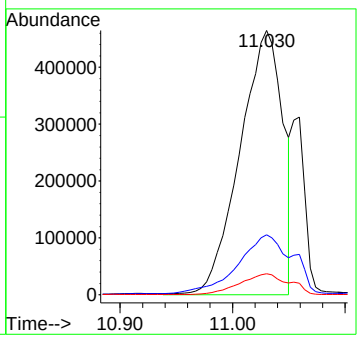


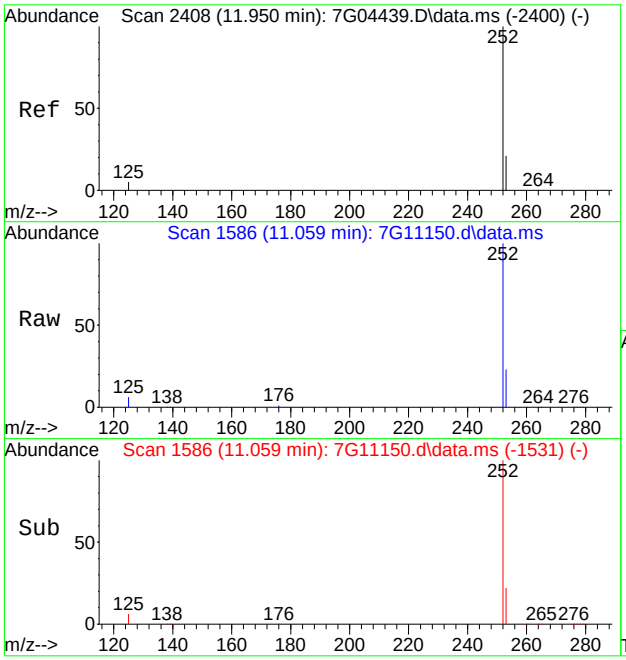


#23
Benzo[b]fluoranthene
Concen: 58.06 ppm m
RT: 11.030 min Scan# 1580
Delta R.T. 0.073 min
Lab File: 7G11150.d
Acq: 11 Aug 2020 4:28 pm

Tgt Ion:252 Resp: 1229803

Ion	Ratio	Lower	Upper
252	100		
253	22.7	0.0	51.7
125	7.9	0.0	34.5

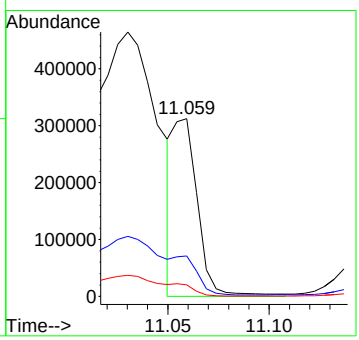


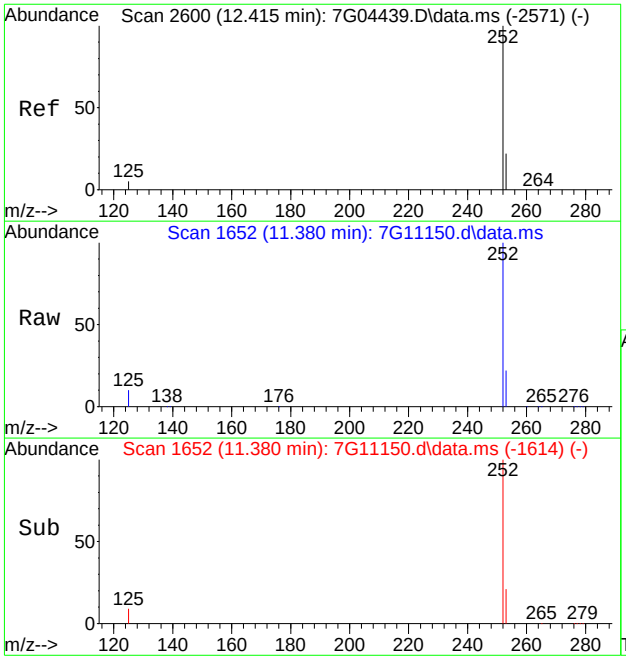


#24
Benzo[k]fluoranthene
Concen: 11.33 ppm m
RT: 11.059 min Scan# 1586
Delta R.T. 0.068 min
Lab File: 7G11150.d
Acq: 11 Aug 2020 4:28 pm

Tgt Ion:252 Resp: 261082

Ion	Ratio	Lower	Upper
252	100		
253	22.8	0.0	51.5
125	6.5	0.0	34.8

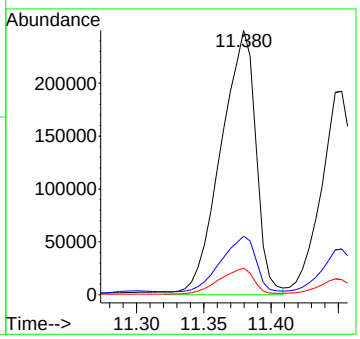


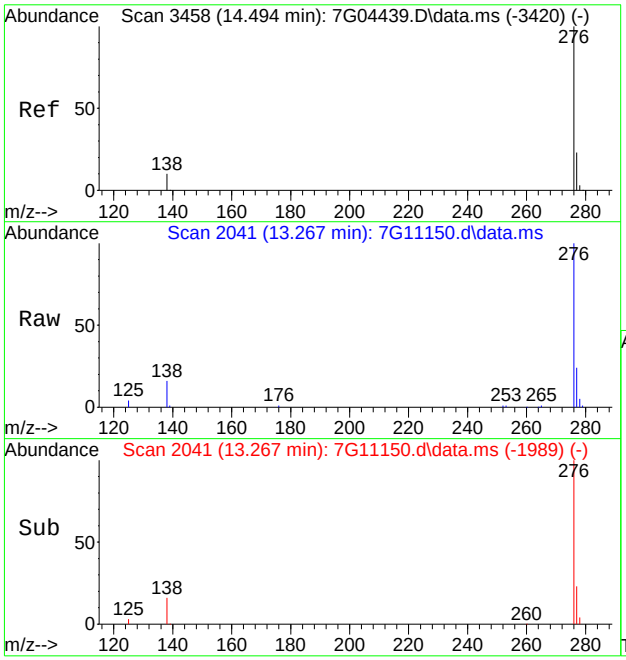


#25
Benzo[a]pyrene
Concen: 21.91 ppm m
RT: 11.380 min Scan# 1652
Delta R.T. -0.015 min
Lab File: 7G11150.d
Acq: 11 Aug 2020 4:28 pm

Tgt Ion:252 Resp: 452247

Ion	Ratio	Lower	Upper
252	100		
253	22.1	0.0	51.6
125	10.1	0.0	34.8

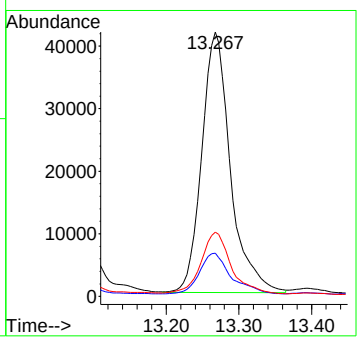


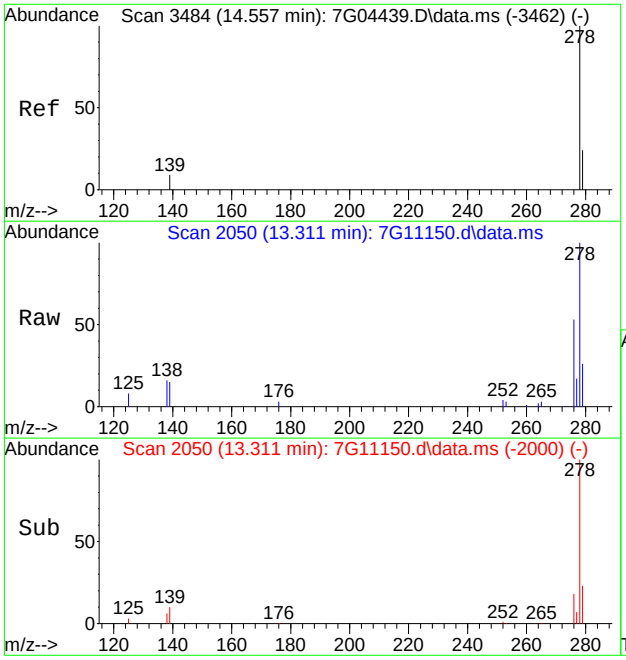


#26
Indeno[1,2,3-cd]pyrene
Concen: 8.47 ppm
RT: 13.267 min Scan# 2041
Delta R.T. 0.053 min
Lab File: 7G11150.d
Acq: 11 Aug 2020 4:28 pm

Tgt Ion:276 Resp: 114097

Ion	Ratio	Lower	Upper
276	100		
138	15.7	0.0	39.6
277	23.7	0.0	53.1

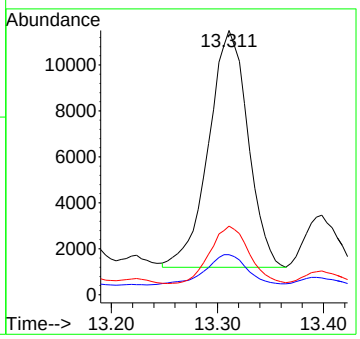


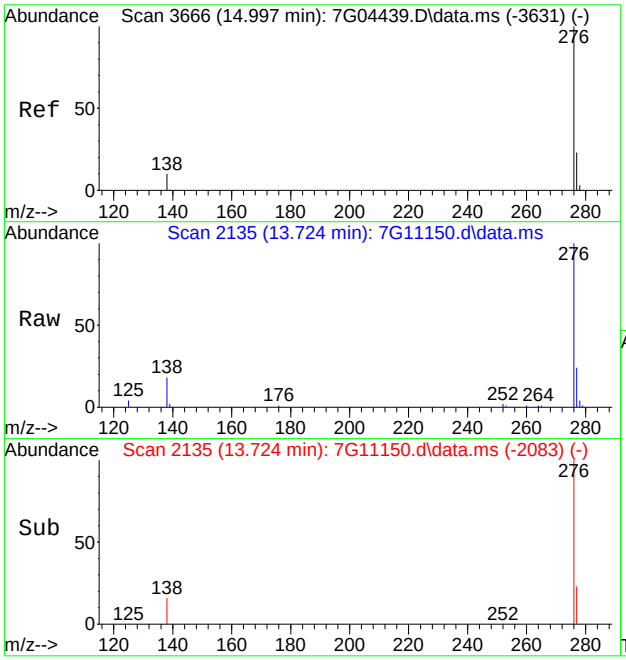


#27
Dibenz[a,h]anthracene
Concen: 1.78 ppm
RT: 13.311 min Scan# 2050
Delta R.T. 0.044 min
Lab File: 7G11150.d
Acq: 11 Aug 2020 4:28 pm

Tgt Ion:278 Resp: 26599

Ion	Ratio	Lower	Upper
278	100		
139	12.4	0.0	38.8
279	24.2	0.0	53.6

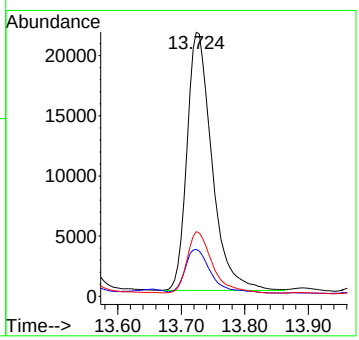




#28
Benzo[g,h,i]perylene
Concen: 3.60 ppm
RT: 13.724 min Scan# 2135
Delta R.T. 0.053 min
Lab File: 7G11150.d
Acq: 11 Aug 2020 4:28 pm

Tgt Ion:276 Resp: 58487

Ion	Ratio	Lower	Upper
276	100		
138	16.5	0.0	40.5
277	23.7	0.0	53.2



Manual Integration Approval Summary

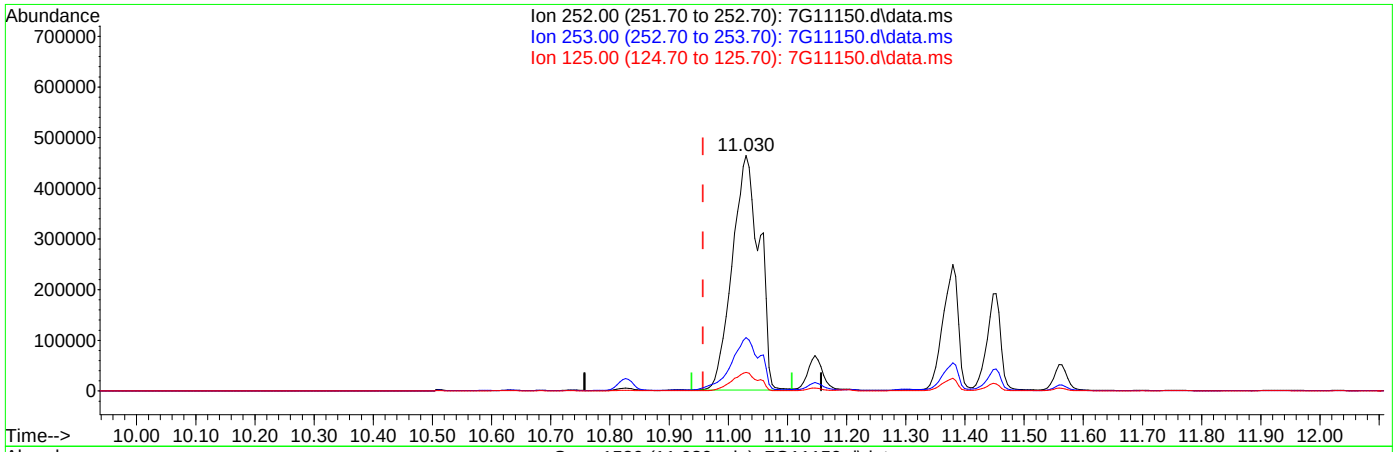
Sample Number: FA77615-12
Lab FileID: 7G11150.D
Injection Time: 08/11/20 16:28
Method: SW846 8270E BY SIM
Analyst approved: 08/12/20 09:33 Fouad Sekkar
Supervisor approved: 08/12/20 11:43 Nicole McCampbell

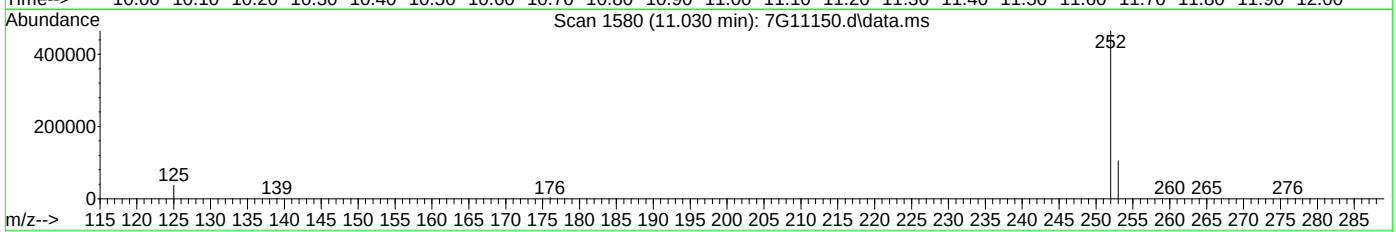
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(b)fluoranthene	205-99-2		11.03	Overlapping peak
Benzo(k)fluoranthene	207-08-9		11.06	Overlapping peak
Benzo(a)pyrene	50-32-8		11.38	Missed peak

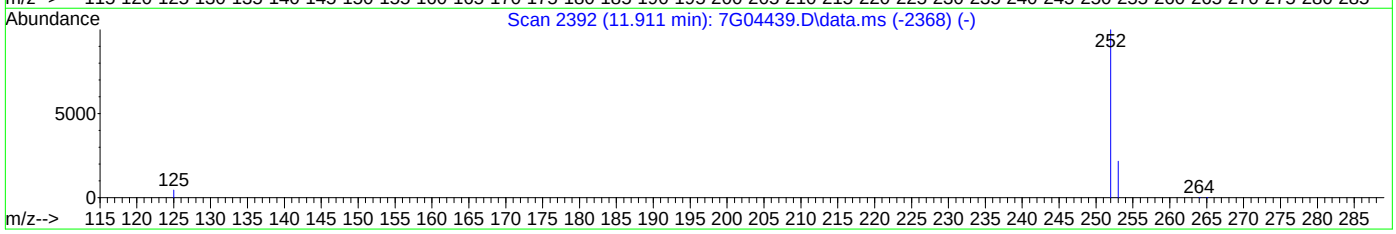
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11150.d
Acq On : 11 Aug 2020 4:28 pm
Operator : FOUADS
Sample : fa77615-12 e Inst : MSBNA8
Misc : op81485,S7G483,15.0,,,1,1,soil
ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:27:07 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11150.d\data.ms

(23) Benzo[b]fluoranthene (P)

11.030min (+0.073) 69.49ppm

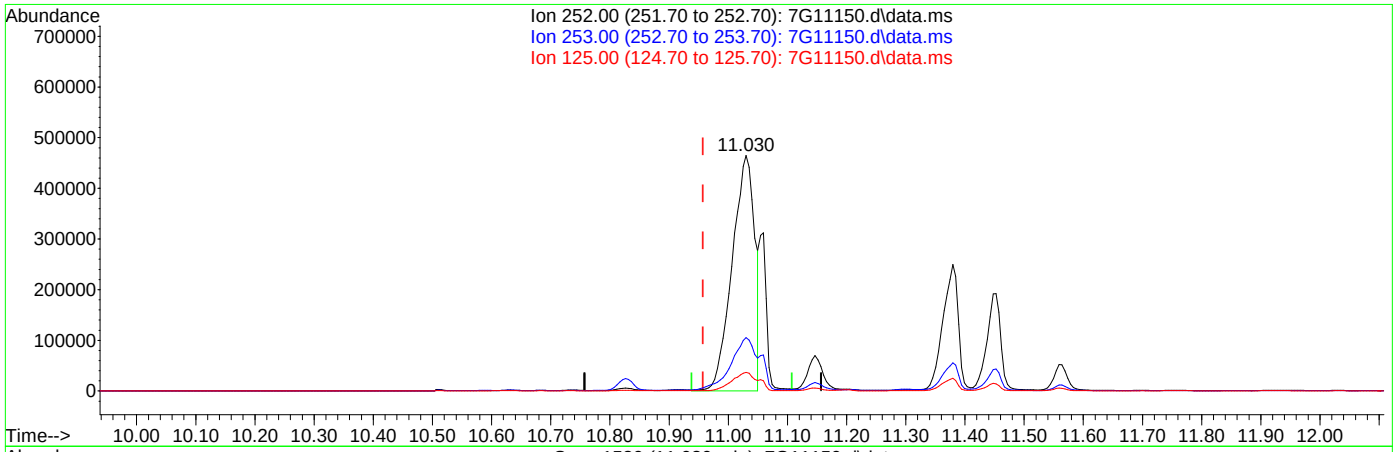
response 1471832

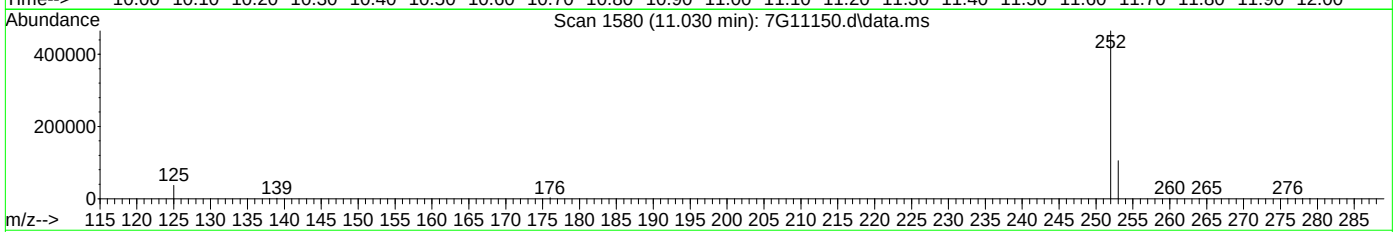
Ion	Exp%	Act%
252.00	100	100
253.00	21.70	22.26
125.00	4.50	7.86
0.00	0.00	0.00

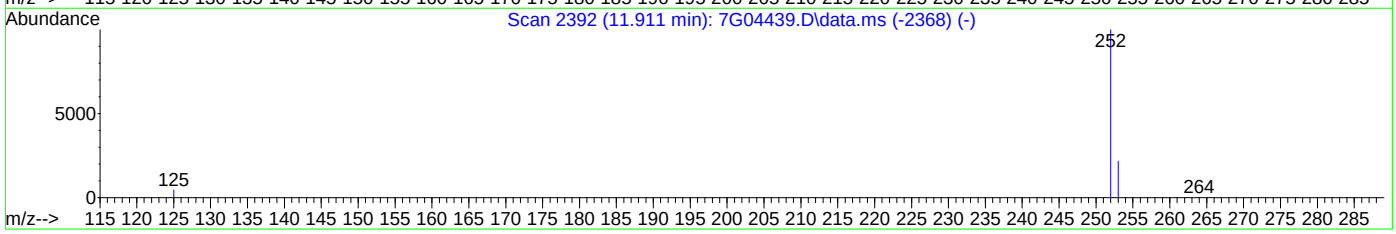
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11150.d
Acq On : 11 Aug 2020 4:28 pm
Operator : FOUADS
Sample : fa77615-12 e Inst : MSBNA8
Misc : op81485,S7G483,15.0,,,1,1,soil
ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:27:07 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11150.d\data.ms

(23) Benzo[b]fluoranthene (P)

11.030min (+0.073) 58.06ppm m

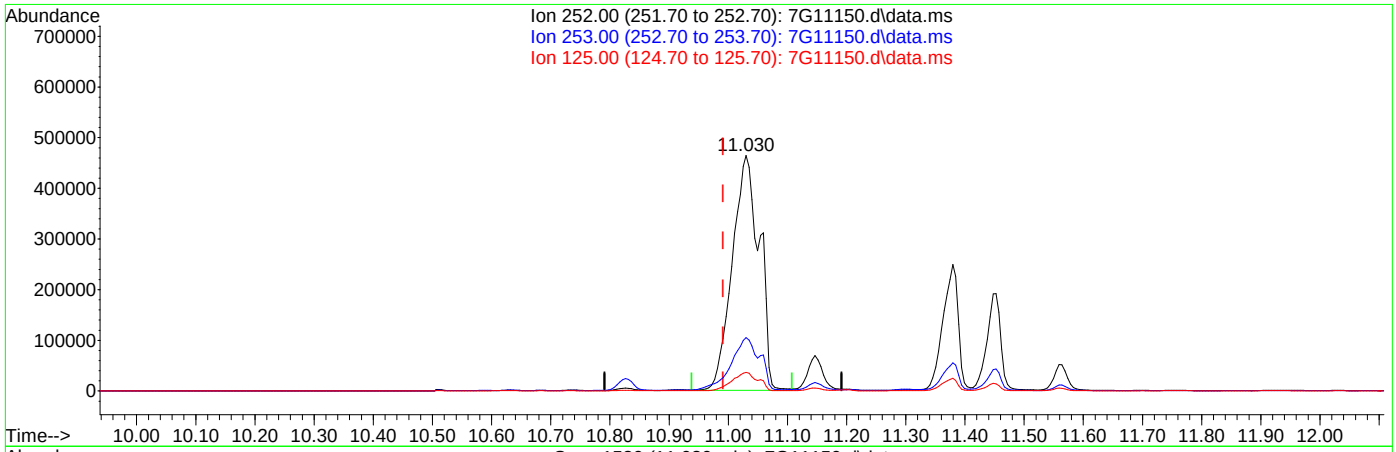
response 1229803

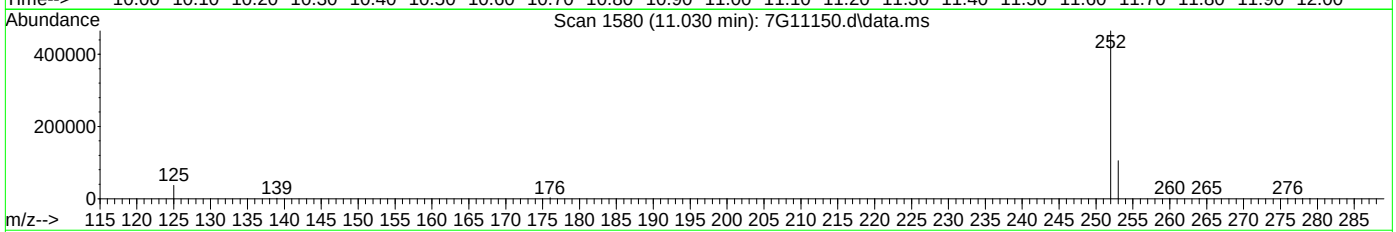
Ion	Exp%	Act%
252.00	100	100
253.00	21.70	22.65
125.00	4.50	7.95
0.00	0.00	0.00

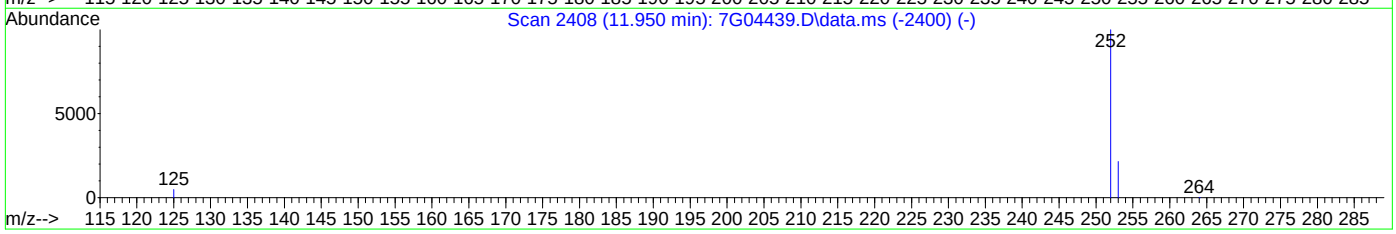
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11150.d
Acq On : 11 Aug 2020 4:28 pm
Operator : FOUADS
Sample : fa77615-12 e Inst : MSBNA8
Misc : op81485,S7G483,15.0,,,1,1,soil
ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:27:07 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11150.d\data.ms

(24) Benzo[k]fluoranthene (P)

11.030min (+0.039) 56.58ppm

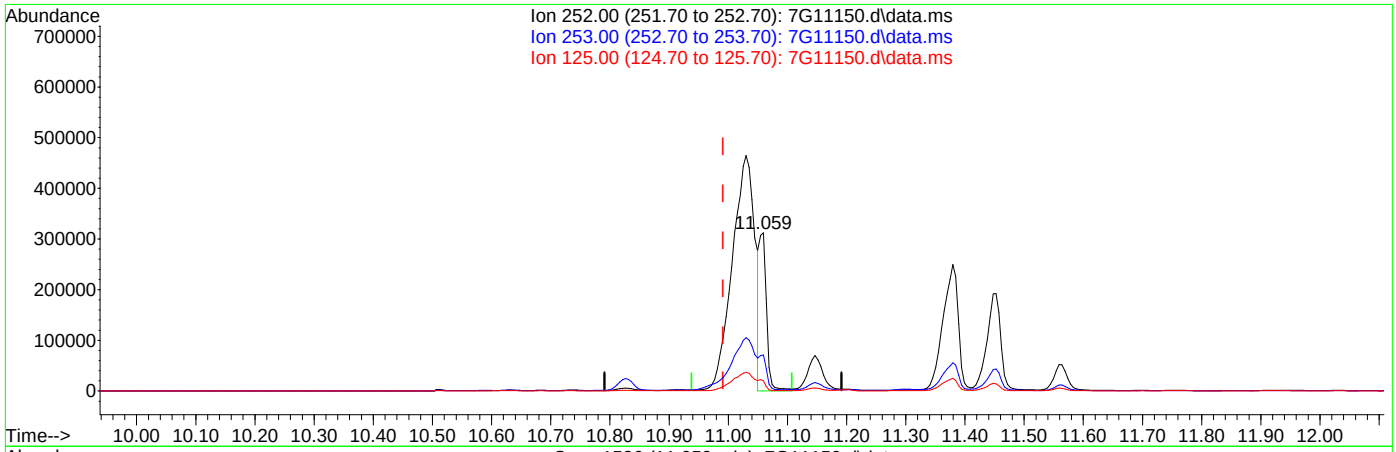
response 1477080

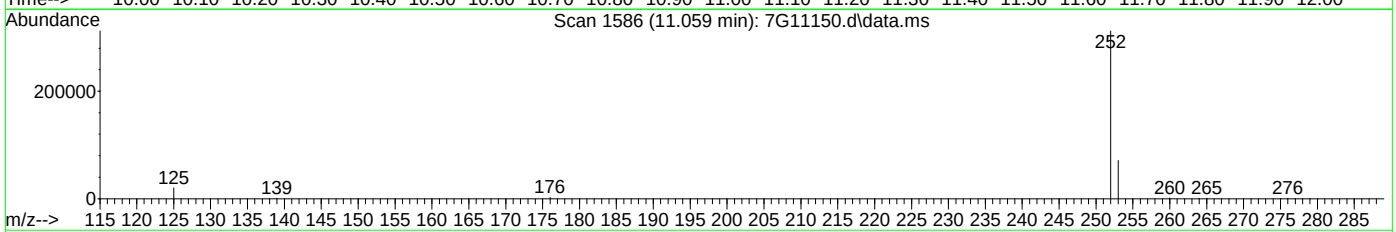
Ion	Exp%	Act%
252.00	100	100
253.00	21.50	22.26
125.00	4.80	7.86
0.00	0.00	0.00

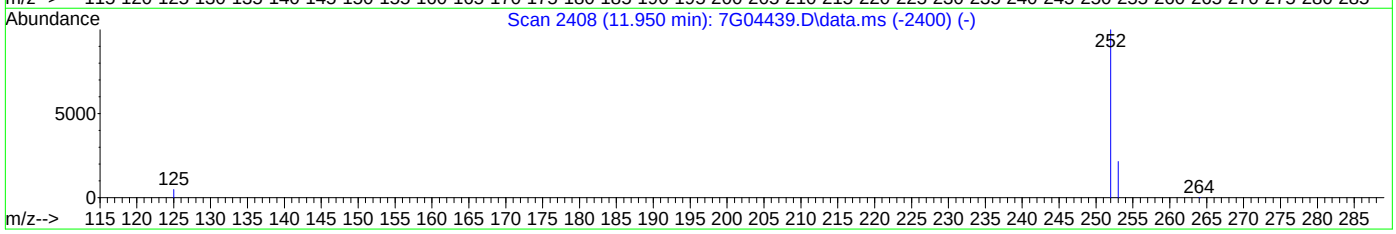
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11150.d
Acq On : 11 Aug 2020 4:28 pm
Operator : FOUADS
Sample : fa77615-12 e Inst : MSBNA8
Misc : op81485,S7G483,15.0,,,1,1,soil
ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:27:07 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11150.d\data.ms

(24) Benzo[k]fluoranthene (P)

11.059min (+0.068) 11.33ppm m

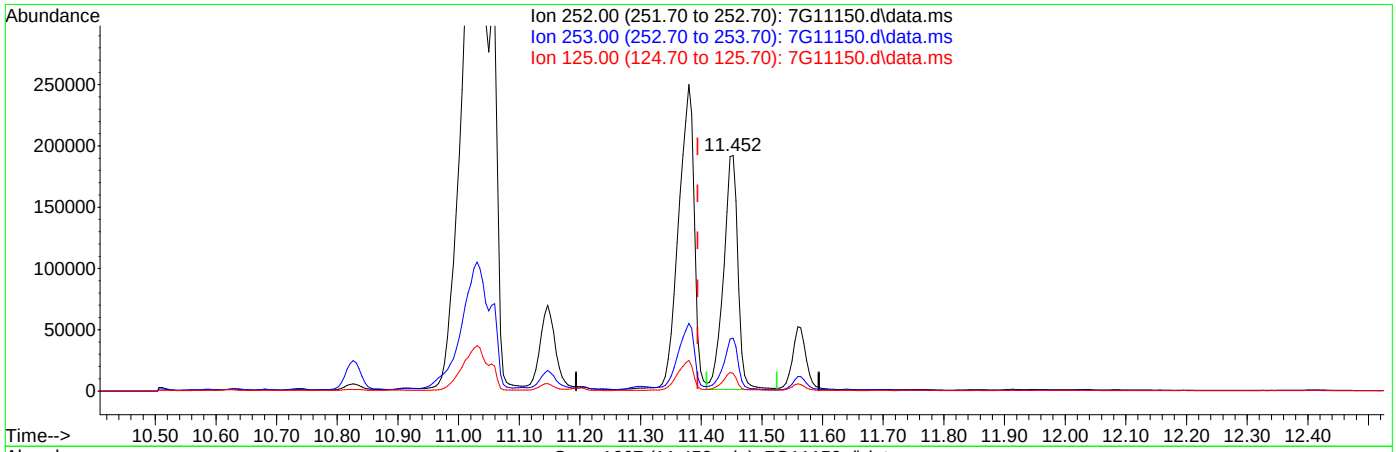
response 261082

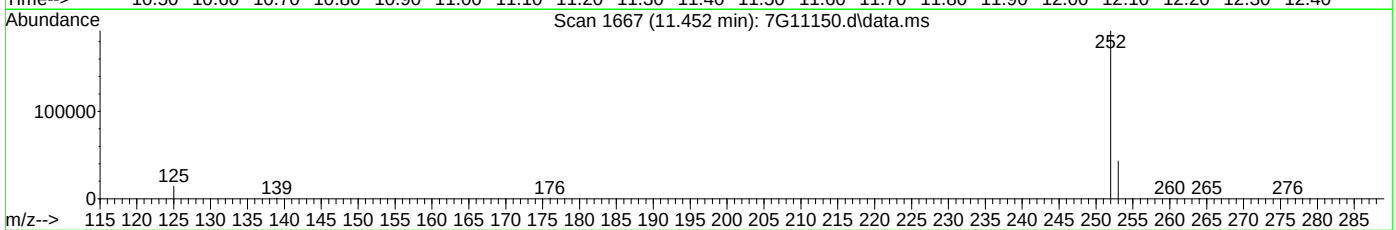
Ion	Exp%	Act%
252.00	100	100
253.00	21.50	22.77
125.00	4.80	6.50
0.00	0.00	0.00

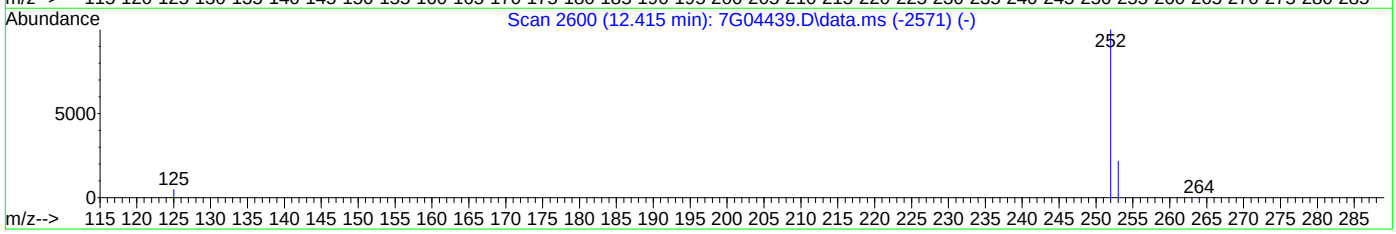
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11150.d
Acq On : 11 Aug 2020 4:28 pm
Operator : FOUADS
Sample : fa77615-12 e Inst : MSBNA8
Misc : op81485,S7G483,15.0,,,1,1,soil
ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:27:07 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11150.d\data.ms

(25) Benzo[a]pyrene (P)

11.452min (+0.058) 15.16ppm

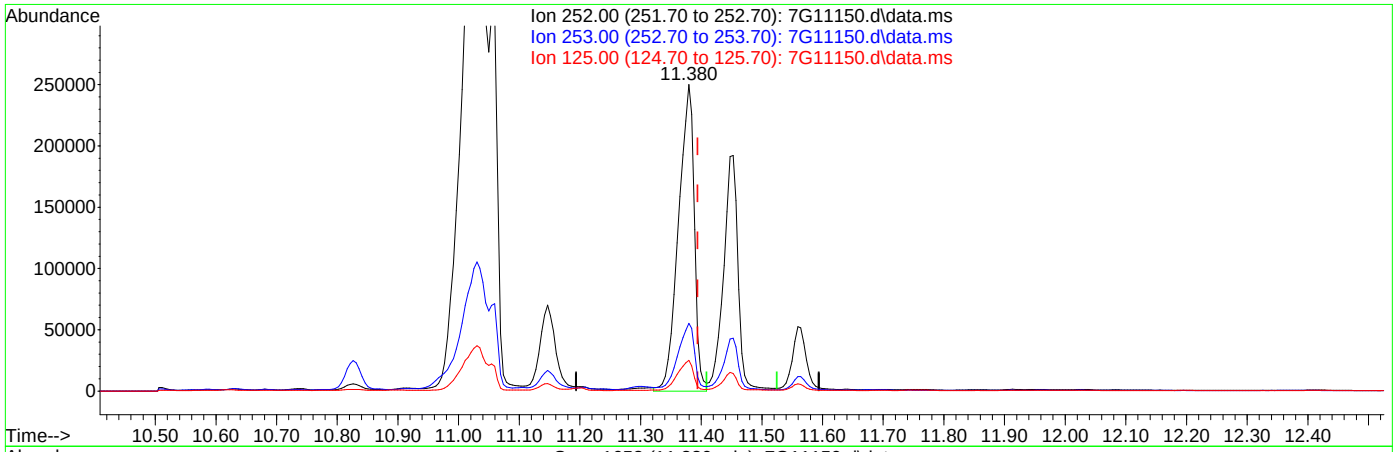
response 312856

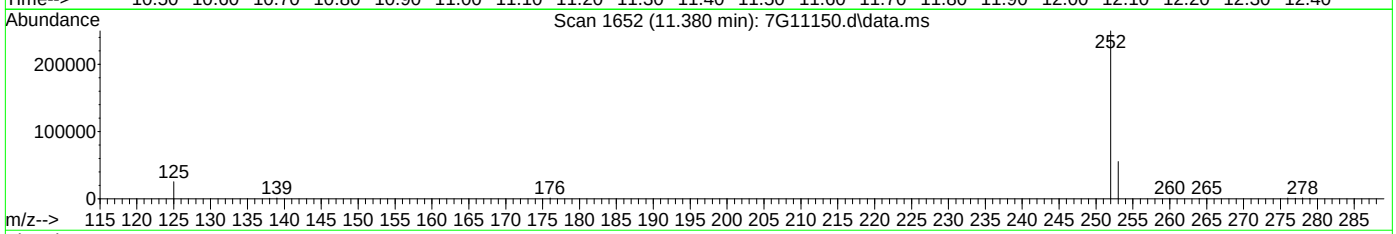
Ion	Exp%	Act%
252.00	100	100
253.00	21.60	21.71
125.00	4.80	7.05
0.00	0.00	0.00

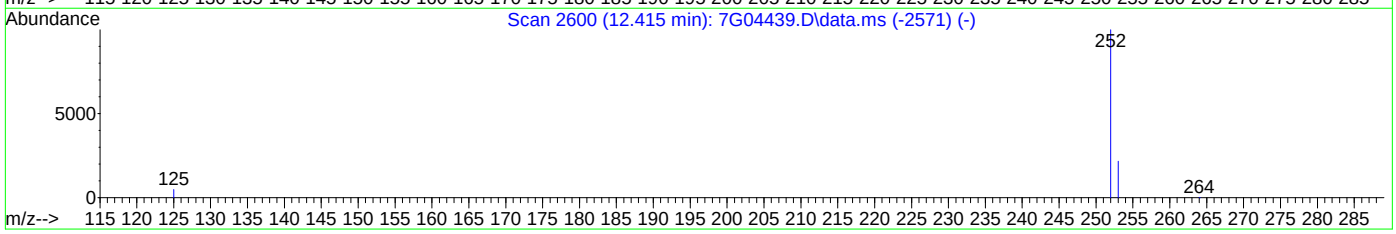
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11150.d
Acq On : 11 Aug 2020 4:28 pm
Operator : FOUADS
Sample : fa77615-12 e Inst : MSBNA8
Misc : op81485,S7G483,15.0,,,1,1,soil
ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:27:07 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11150.d\data.ms

(25) Benzo[a]pyrene (P)

11.380min (-0.015) 21.91ppm m

response 452247

Ion	Exp%	Act%
252.00	100	100
253.00	21.60	22.13
125.00	4.80	10.06
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 08/12/20 11:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11151.d
Acq On : 11 Aug 2020 4:53 pm
Operator : FOUADS
Sample : fa77615-13 e Inst : MSBNA8
Misc : op81485,S7G483,15.3,,,1,1,soil
ALS Vial : 23 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:45:19 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

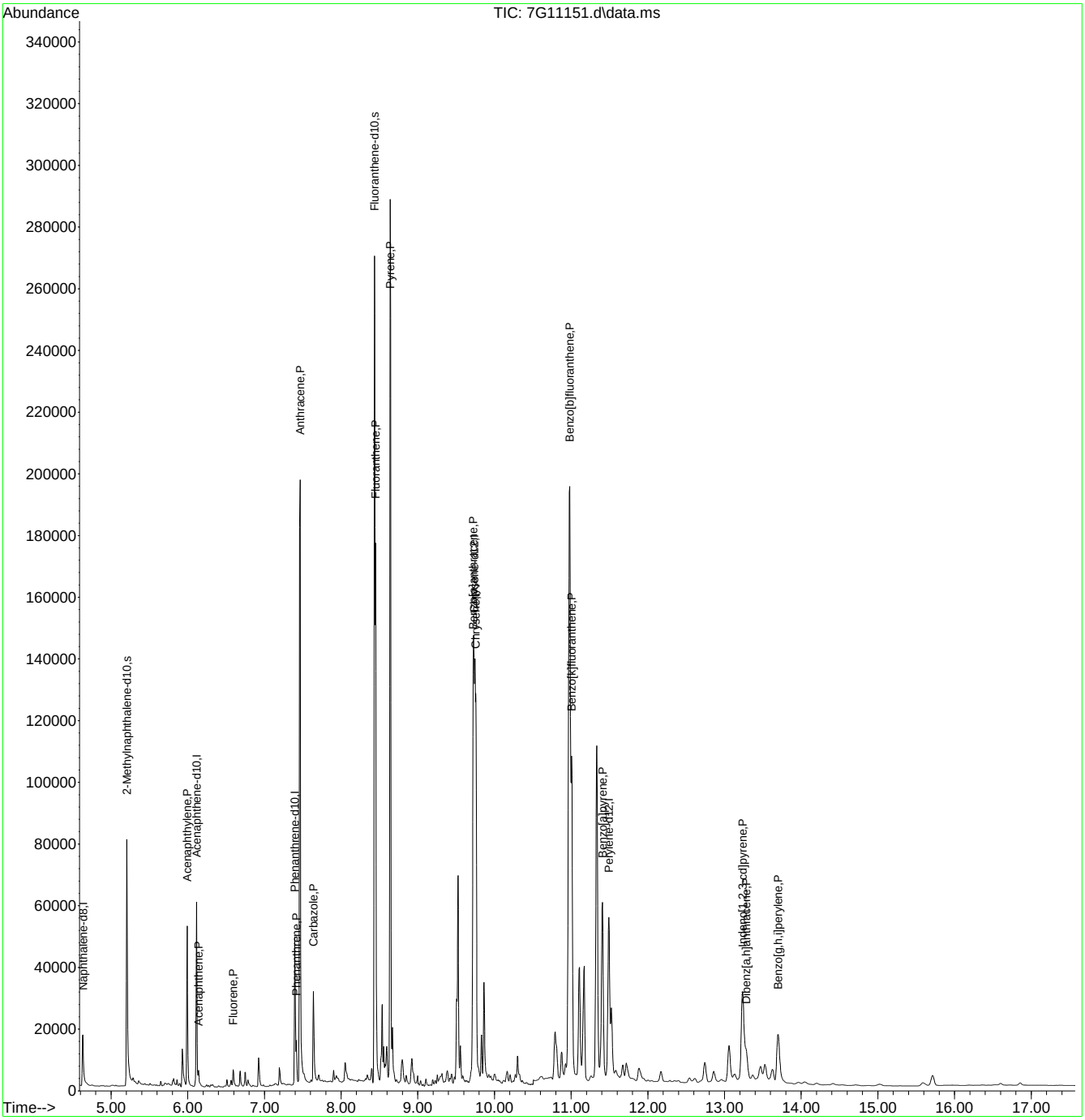
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.634	136	20299	4.00	ppm	0.00
6) Acenaphthene-d10	6.114	164	18312	4.00	ppm	0.00
11) Phenanthrene-d10	7.396	188	35117	4.00	ppm	0.00
18) Chrysene-d12	9.734	240	65101	4.00	ppm	0.00
22) Perylene-d12	11.491	264	57852	4.00	ppm	0.01
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.205	152	33229	10.88	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 108.80%			
17) Fluoranthene-d10	8.436	212	183795	10.01	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 100.10%			
Target Compounds						Qvalue
7) Acenaphthylene	5.993	152	31674	3.01	ppm	99
8) Acenaphthene	6.143	153	1319	0.19	ppm	98
10) Fluorene	6.592	166	2417	0.33	ppm	100
13) Phenanthrene	7.417	178	7776	0.68	ppm	97
14) Anthracene	7.466	178	148875	12.39	ppm	99
15) Carbazole	7.640	167	22954	1.09	ppm	97
16) Fluoranthene	8.451	202	105129	4.79	ppm	98
19) Pyrene	8.642	202	171528	6.61	ppm	96
20) Benzo[a]anthracene	9.722	228	70222	3.45	ppm	77
21) Chrysene	9.756	228	135731	6.02	ppm	99
23) Benzo[b]fluoranthene	10.981	252	276213m	14.07	ppm	
24) Benzo[k]fluoranthene	11.006	252	100870m	4.82	ppm	
25) Benzo[a]pyrene	11.409	252	72338	3.78	ppm	98
26) Indeno[1,2,3-cd]pyrene	13.238	276	55895	4.48	ppm	94
27) Dibenz[a,h]anthracene	13.282	278	12837	0.93	ppm	97
28) Benzo[g,h,i]perylene	13.699	276	31202	2.07	ppm	94

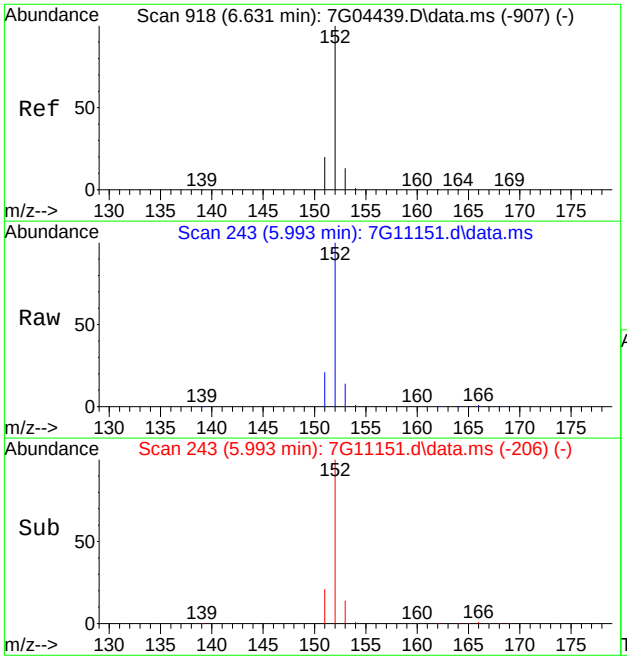
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11151.d
Acq On : 11 Aug 2020 4:53 pm
Operator : FOUADS
Sample : fa77615-13 e Inst : MSBNA8
Misc : op81485,S7G483,15.3,,,1,1,soil
ALS Vial : 23 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:45:19 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

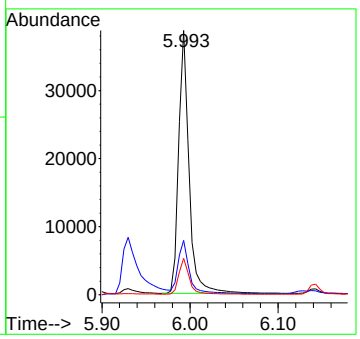


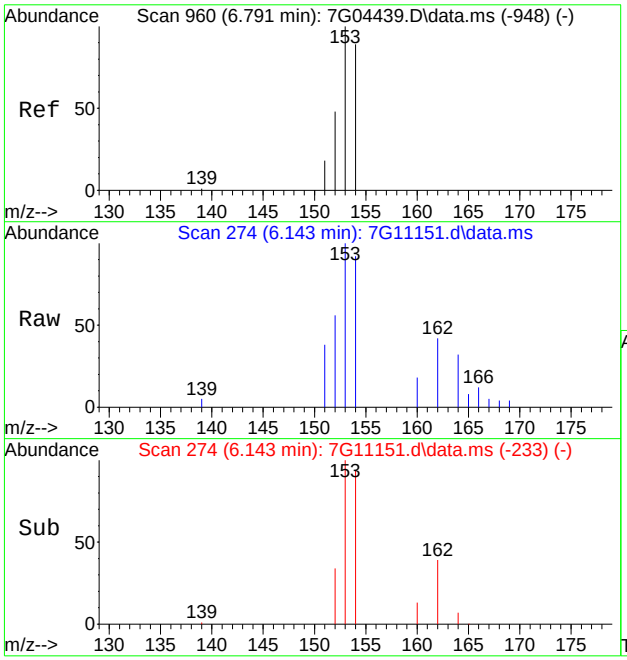


#7
Acenaphthylene
Concen: 3.01 ppm
RT: 5.993 min Scan# 243
Delta R.T. -0.000 min
Lab File: 7G11151.d
Acq: 11 Aug 2020 4:53 pm

Tgt Ion:152 Resp: 31674

Ion	Ratio	Lower	Upper
152	100		
151	19.4	0.0	49.8
153	13.6	0.0	42.8

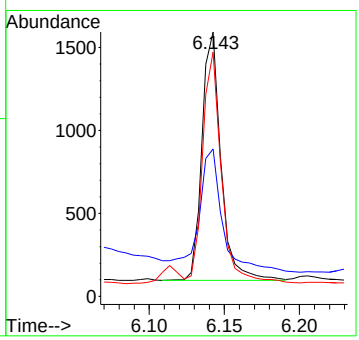


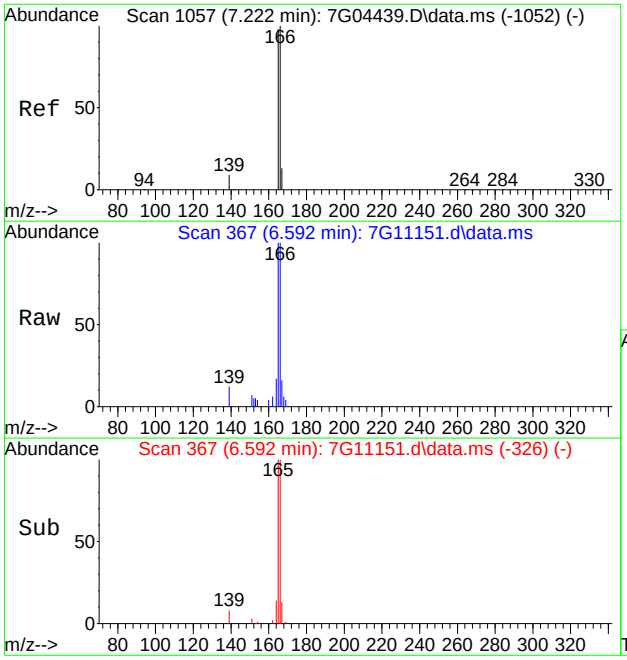


#8
Acenaphthene
Concen: 0.19 ppm
RT: 6.143 min Scan# 274
Delta R.T. -0.000 min
Lab File: 7G11151.d
Acq: 11 Aug 2020 4:53 pm

Tgt Ion:153 Resp: 1319

Ion	Ratio	Lower	Upper
153	100		
152	47.2	18.3	78.3
154	90.9	59.3	119.3

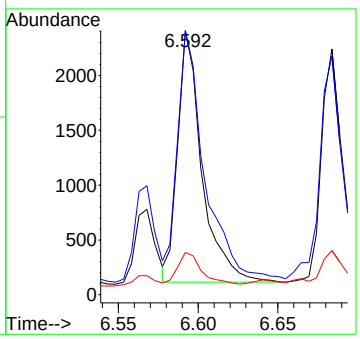


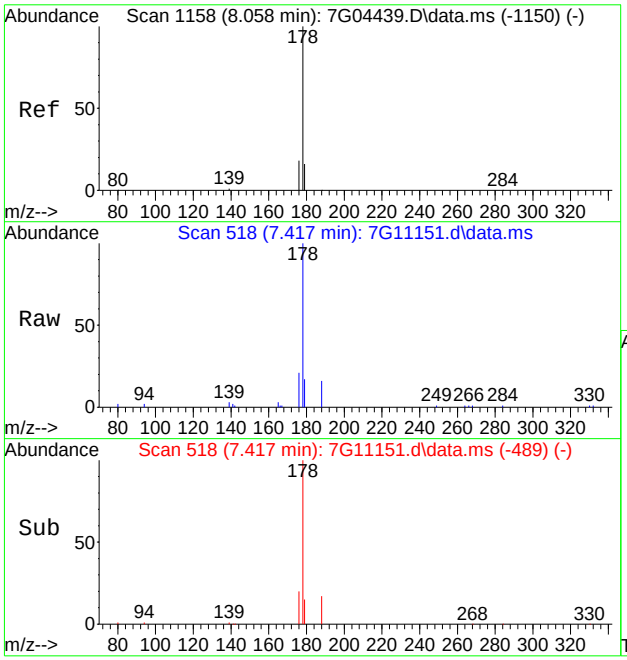


#10
Fluorene
Concen: 0.33 ppm
RT: 6.592 min Scan# 367
Delta R.T. -0.000 min
Lab File: 7G11151.d
Acq: 11 Aug 2020 4:53 pm

Tgt Ion:166 Resp: 2417

Ion	Ratio	Lower	Upper
166	100		
165	98.3	68.2	128.2
167	12.6	0.0	42.9

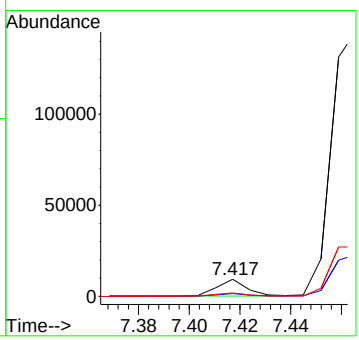


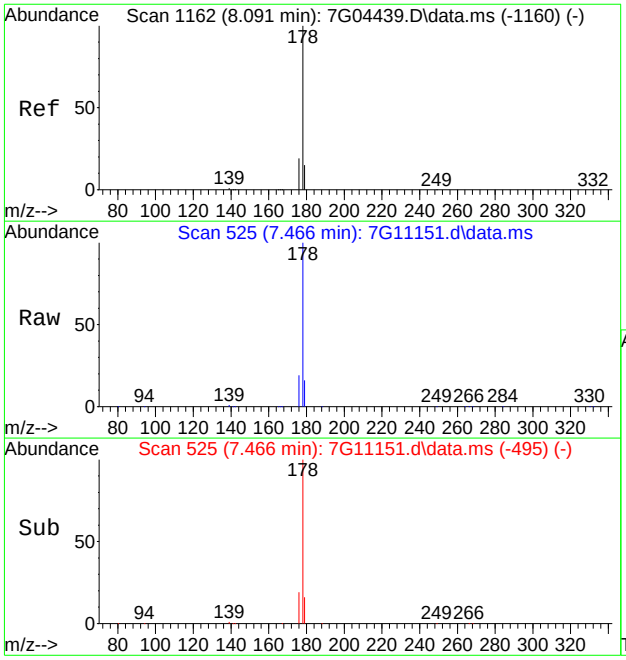


#13
Phenanthrene
Concen: 0.68 ppm
RT: 7.417 min Scan# 518
Delta R.T. -0.000 min
Lab File: 7G11151.d
Acq: 11 Aug 2020 4:53 pm

Tgt Ion:178 Resp: 7776

Ion	Ratio	Lower	Upper
178	100		
179	15.2	0.0	45.7
176	19.8	0.0	48.0

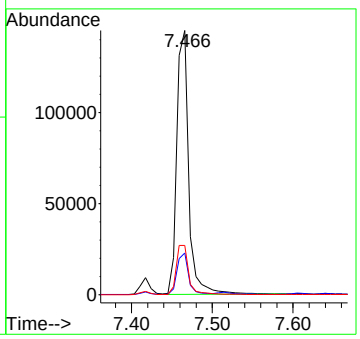


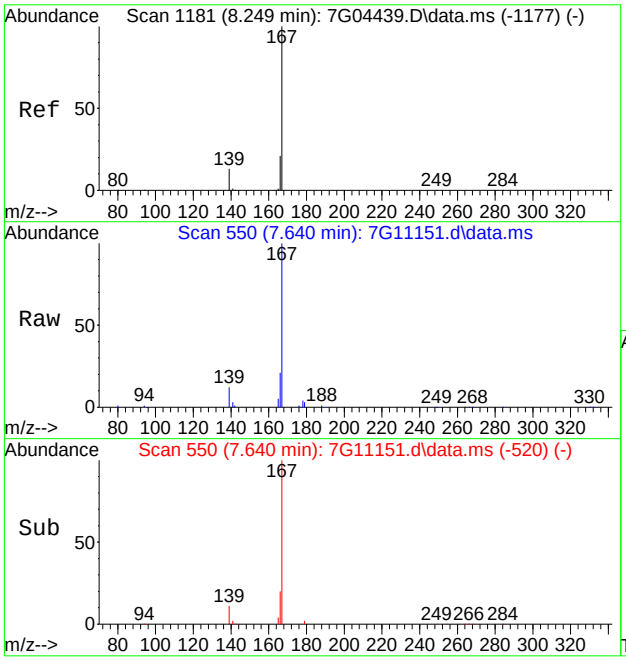


#14
Anthracene
Concen: 12.39 ppm
RT: 7.466 min Scan# 525
Delta R.T. 0.007 min
Lab File: 7G11151.d
Acq: 11 Aug 2020 4:53 pm

Tgt Ion:178 Resp: 148875

Ion	Ratio	Lower	Upper
178	100		
179	15.7	0.0	45.1
176	18.6	0.0	48.8

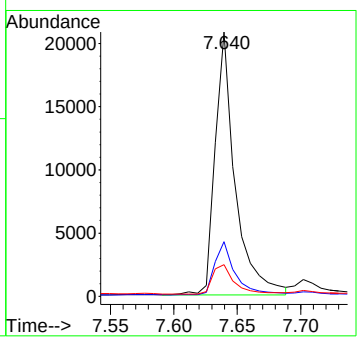


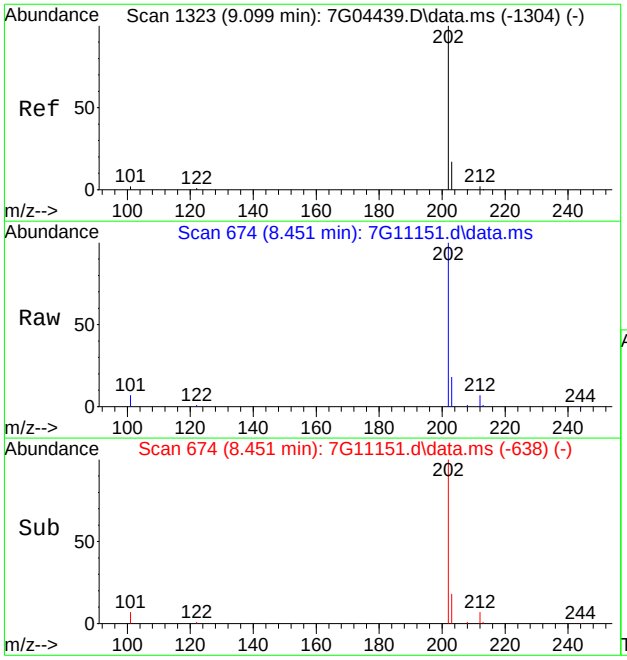


#15
Carbazole
Concen: 1.09 ppm
RT: 7.640 min Scan# 550
Delta R.T. 0.007 min
Lab File: 7G11151.d
Acq: 11 Aug 2020 4:53 pm

Tgt Ion:167 Resp: 22954

Ion	Ratio	Lower	Upper
167	100		
166	20.2	1.2	41.2
139	11.1	0.0	32.8

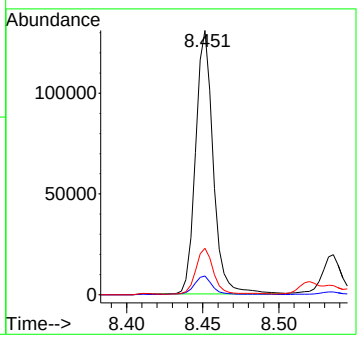


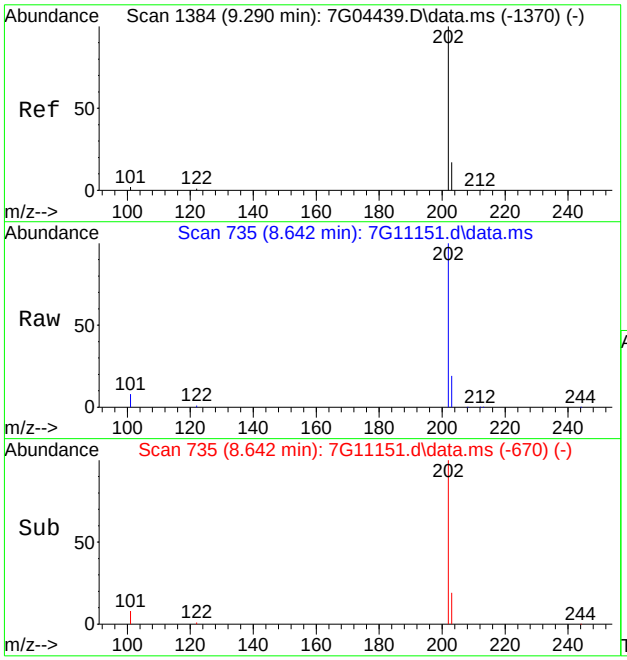


#16
Fluoranthene
Concen: 4.79 ppm
RT: 8.451 min Scan# 674
Delta R.T. 0.003 min
Lab File: 7G11151.d
Acq: 11 Aug 2020 4:53 pm

Tgt Ion:202 Resp: 105129

Ion	Ratio	Lower	Upper
202	100		
101	6.9	0.0	32.2
203	17.3	0.0	47.2

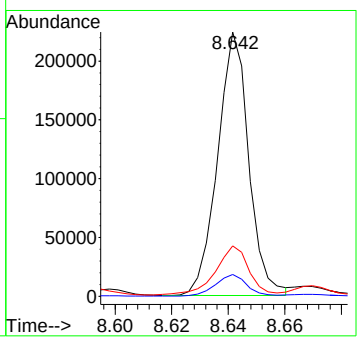


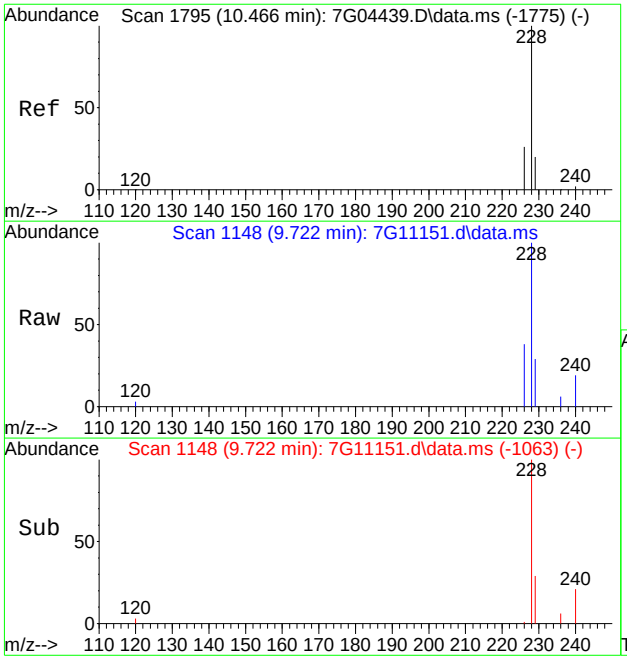


#19
Pyrene
Concen: 6.61 ppm
RT: 8.642 min Scan# 735
Delta R.T. 0.003 min
Lab File: 7G11151.d
Acq: 11 Aug 2020 4:53 pm

Tgt Ion:202 Resp: 171528

Ion	Ratio	Lower	Upper
202	100		
101	8.1	0.0	32.4
203	18.2	0.0	47.4

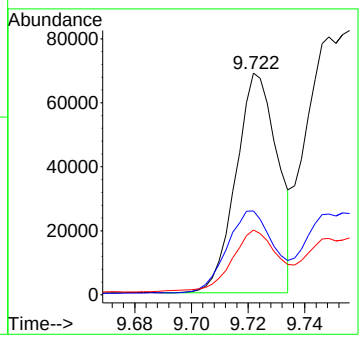


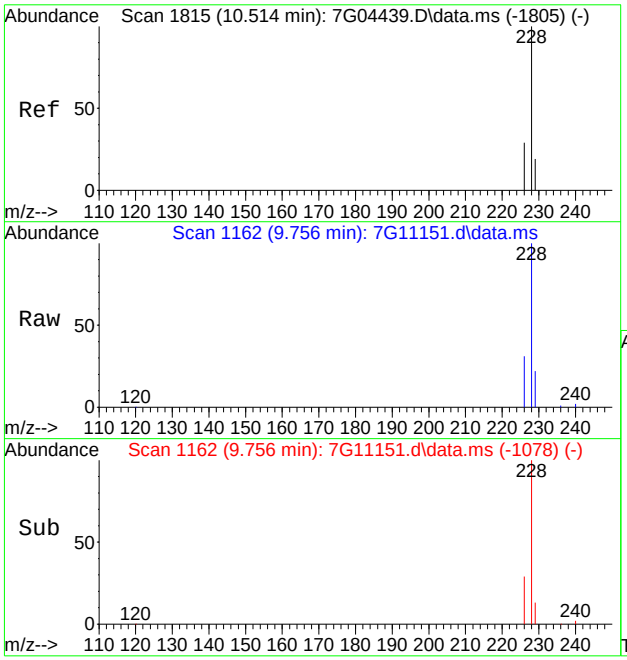


#20
Benzo[a]anthracene
Concen: 3.45 ppm
RT: 9.722 min Scan# 1148
Delta R.T. 0.005 min
Lab File: 7G11151.d
Acq: 11 Aug 2020 4:53 pm

Tgt Ion:228 Resp: 70222

Ion	Ratio	Lower	Upper
228	100		
226	39.1	0.0	56.1
229	28.4	0.0	49.5

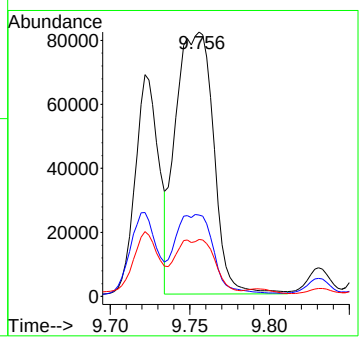


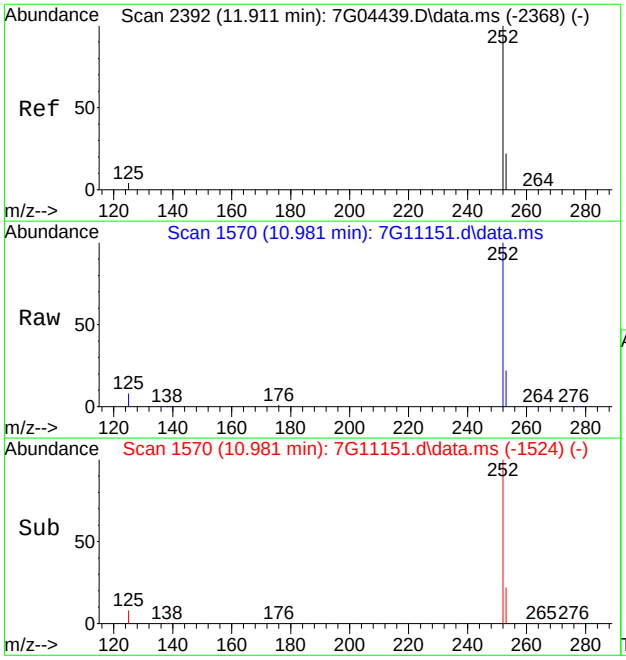


#21
Chrysene
Concen: 6.02 ppm
RT: 9.756 min Scan# 1162
Delta R.T. 0.002 min
Lab File: 7G11151.d
Acq: 11 Aug 2020 4:53 pm

Tgt Ion:228 Resp: 135731

Ion	Ratio	Lower	Upper
228	100		
226	29.8	0.0	58.9
229	19.2	0.0	49.5

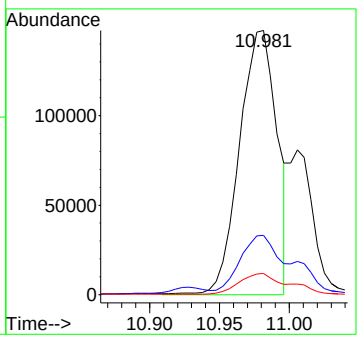


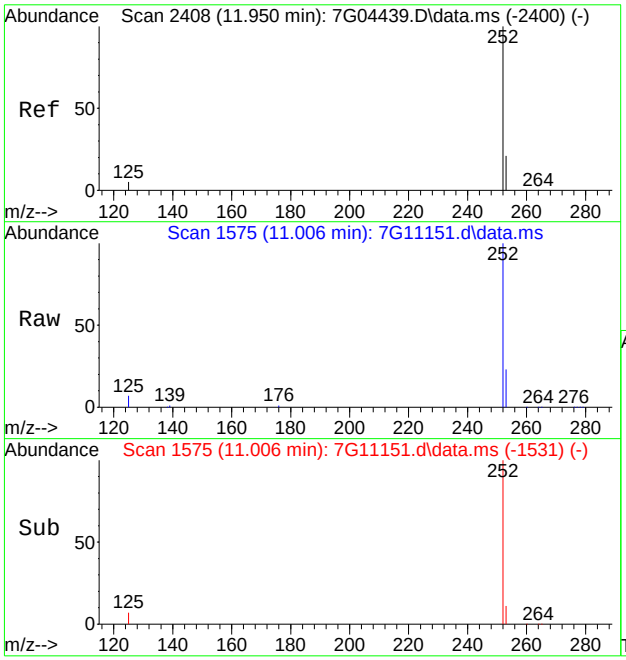


#23
Benzo[b]fluoranthene
Concen: 14.07 ppm m
RT: 10.981 min Scan# 1570
Delta R.T. 0.024 min
Lab File: 7G11151.d
Acq: 11 Aug 2020 4:53 pm

Tgt Ion:252 Resp: 276213

Ion	Ratio	Lower	Upper
252	100		
253	22.5	0.0	51.7
125	8.1	0.0	34.5

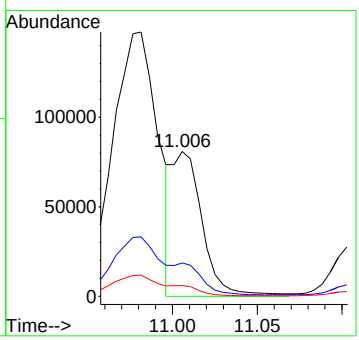


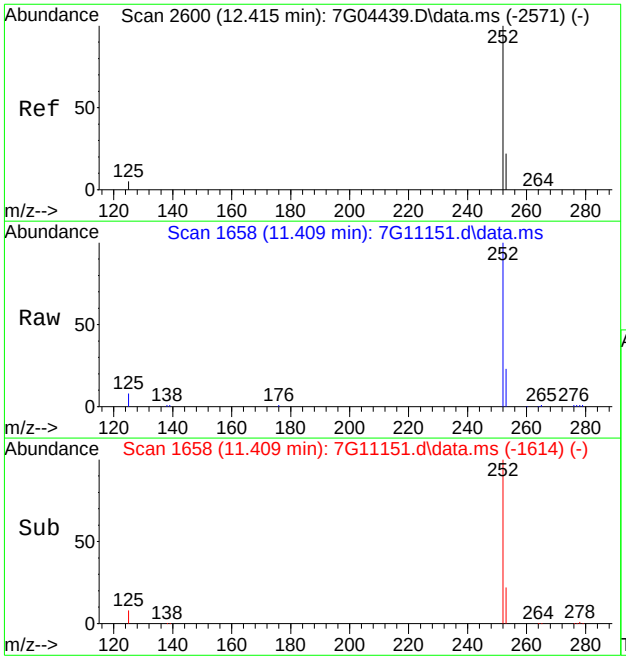


#24
Benzo[k]fluoranthene
Concen: 4.82 ppm m
RT: 11.006 min Scan# 1575
Delta R.T. 0.014 min
Lab File: 7G11151.d
Acq: 11 Aug 2020 4:53 pm

Tgt Ion:252 Resp: 100870

Ion	Ratio	Lower	Upper
252	100		
253	23.0	0.0	51.5
125	7.4	0.0	34.8

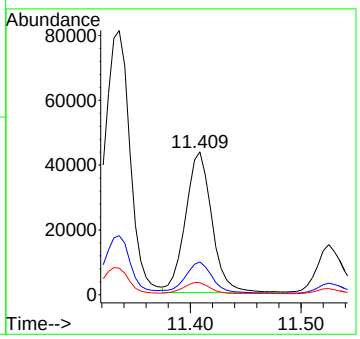


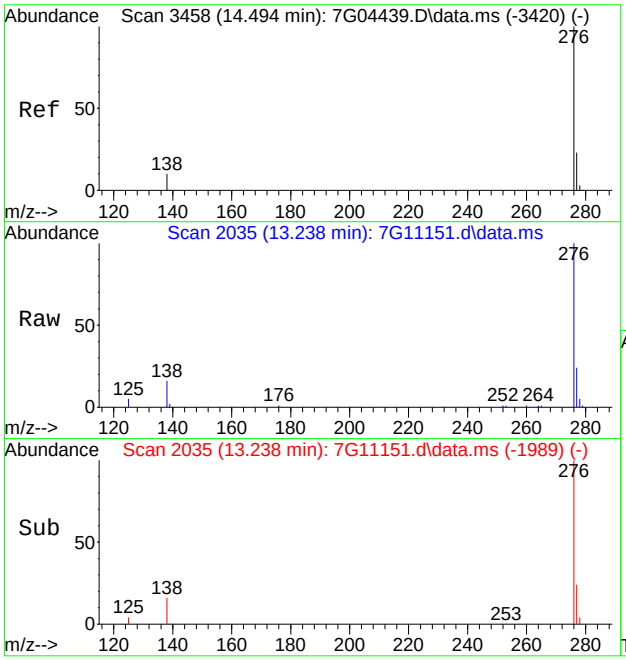


#25
Benzo[a]pyrene
Concen: 3.78 ppm
RT: 11.409 min Scan# 1658
Delta R.T. 0.014 min
Lab File: 7G11151.d
Acq: 11 Aug 2020 4:53 pm

Tgt Ion:252 Resp: 72338

Ion	Ratio	Lower	Upper
252	100		
253	21.6	0.0	51.6
125	7.7	0.0	34.8

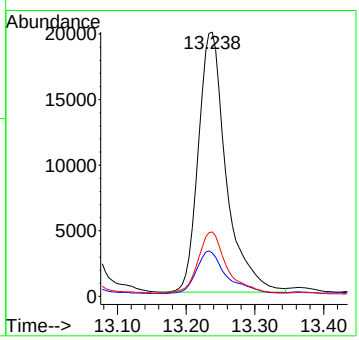


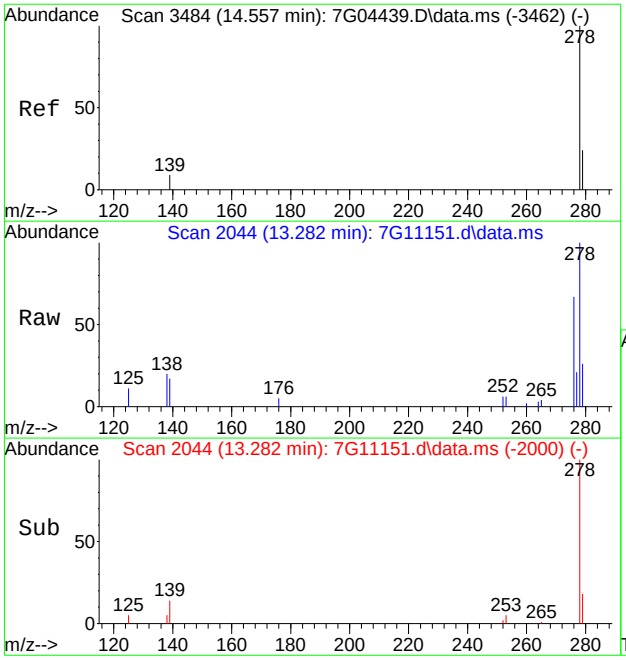


#26
Indeno[1,2,3-cd]pyrene
Concen: 4.48 ppm
RT: 13.238 min Scan# 2035
Delta R.T. 0.024 min
Lab File: 7G11151.d
Acq: 11 Aug 2020 4:53 pm

Tgt Ion:276 Resp: 55895

Ion	Ratio	Lower	Upper
276	100		
138	15.6	0.0	39.6
277	23.7	0.0	53.1

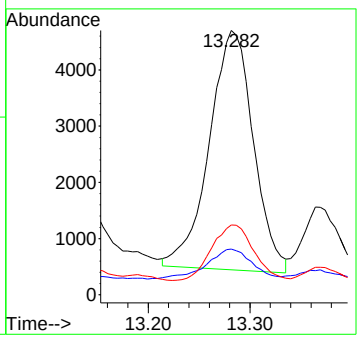


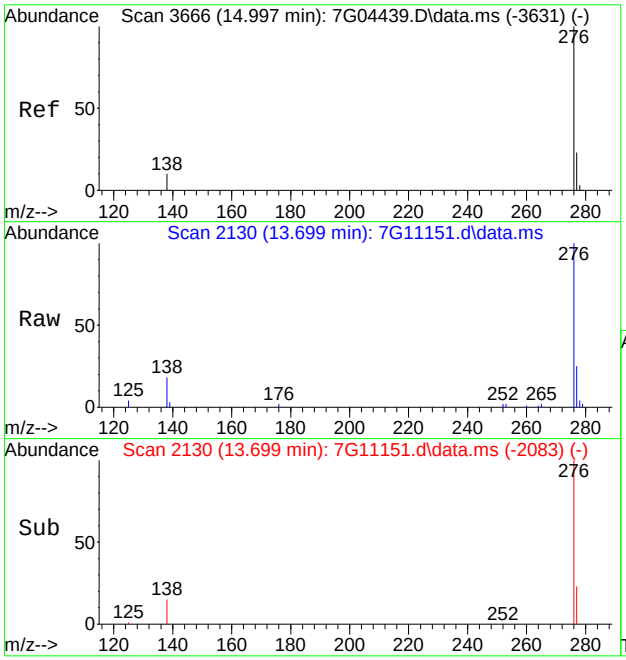


#27
Dibenz[a,h]anthracene
Concen: 0.93 ppm
RT: 13.282 min Scan# 2044
Delta R.T. 0.014 min
Lab File: 7G11151.d
Acq: 11 Aug 2020 4:53 pm

Tgt Ion:278 Resp: 12837

Ion	Ratio	Lower	Upper
278	100		
139	12.2	0.0	38.8
279	23.6	0.0	53.6

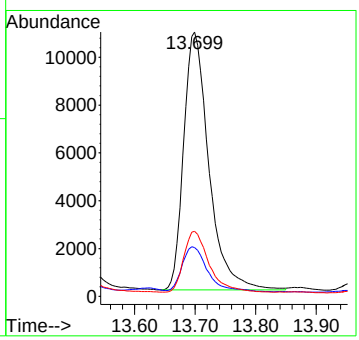




#28
Benzo[g,h,i]perylene
Concen: 2.07 ppm
RT: 13.699 min Scan# 2130
Delta R.T. 0.029 min
Lab File: 7G11151.d
Acq: 11 Aug 2020 4:53 pm

Tgt Ion:276 Resp: 31202

Ion	Ratio	Lower	Upper
276	100		
138	16.9	0.0	40.5
277	23.6	0.0	53.2



Manual Integration Approval Summary

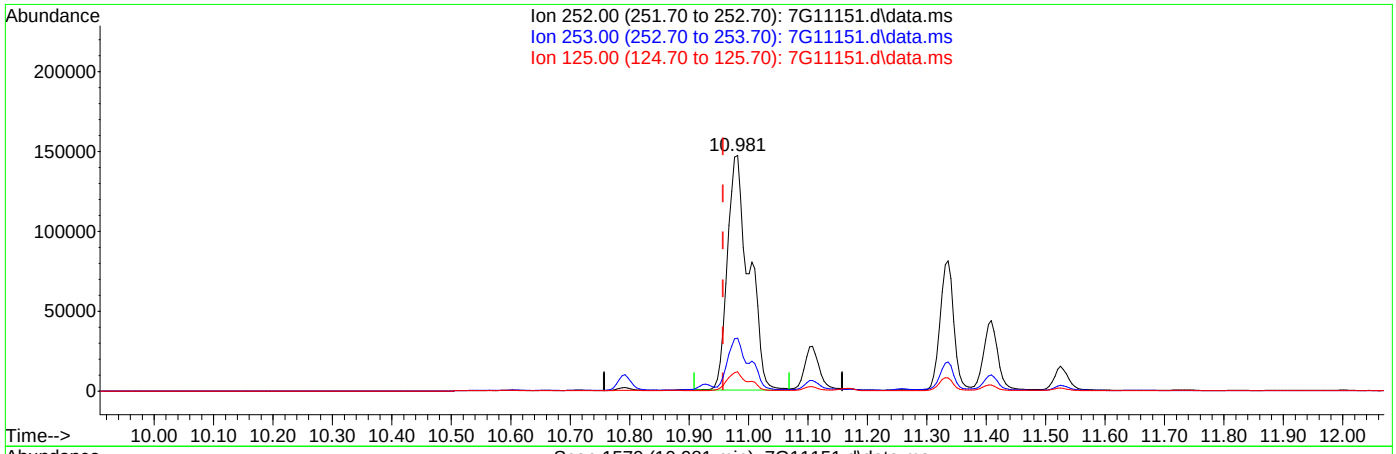
Sample Number: FA77615-13
Lab FileID: 7G11151.D
Injection Time: 08/11/20 16:53
Method: SW846 8270E BY SIM
Analyst approved: 08/12/20 09:33 Fouad Sekkar
Supervisor approved: 08/12/20 11:43 Nicole McCampbell

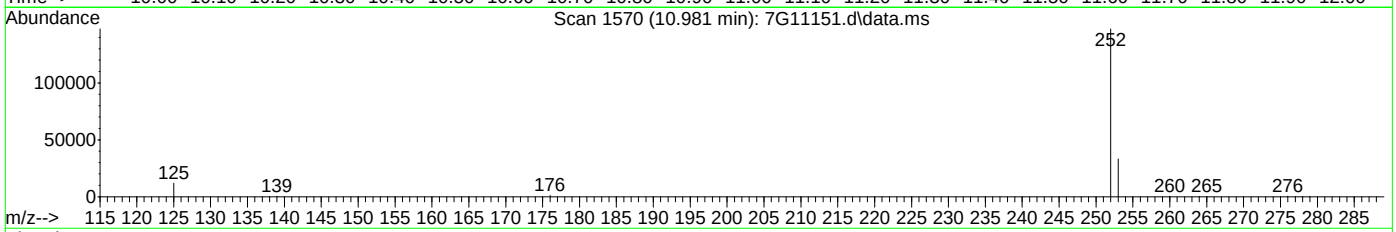
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(b)fluoranthene	205-99-2		10.98	Overlapping peak
Benzo(k)fluoranthene	207-08-9		11.01	Overlapping peak

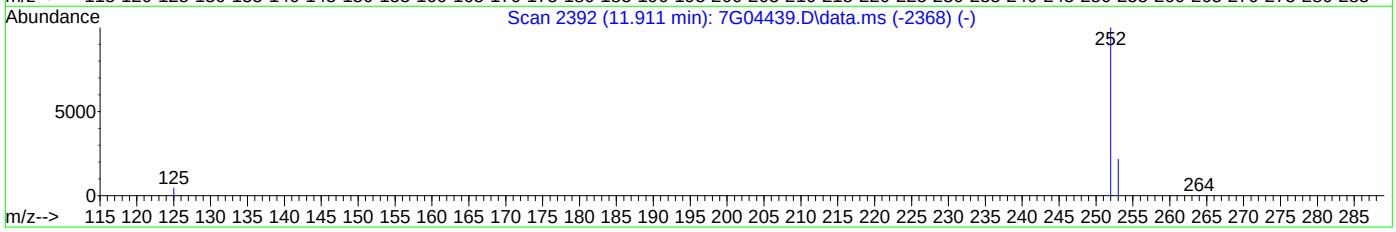
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11151.d
Acq On : 11 Aug 2020 4:53 pm
Operator : FOUADS
Sample : fa77615-13 e Inst : MSBNA8
Misc : op81485,S7G483,15.3,,,1,1,soil
ALS Vial : 23 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:27:10 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11151.d\data.ms

(23) Benzo[b]fluoranthene (P)

10.981min (+0.024) 18.89ppm

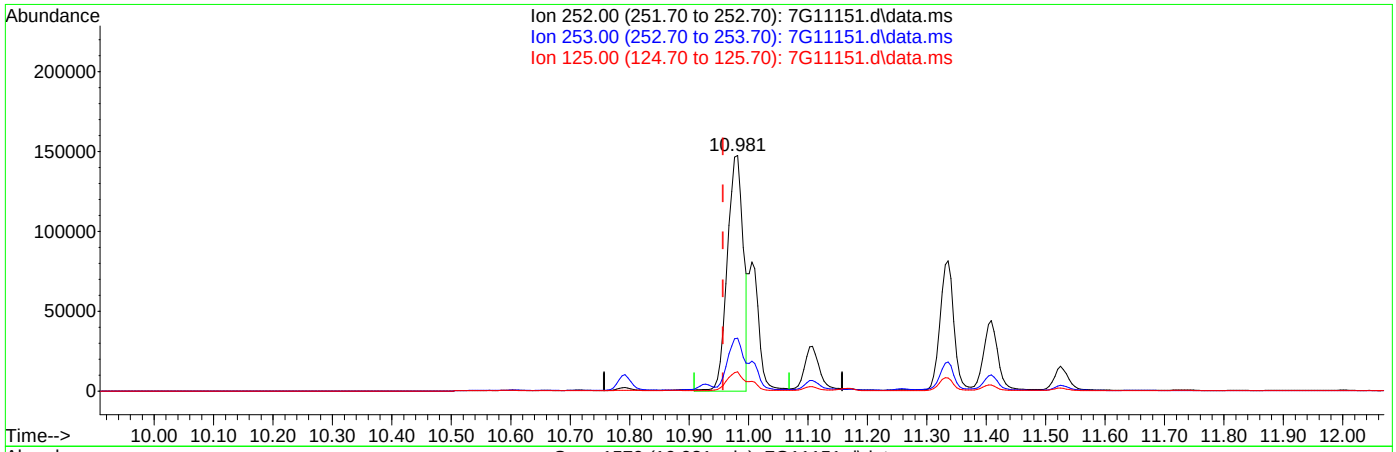
response 370960

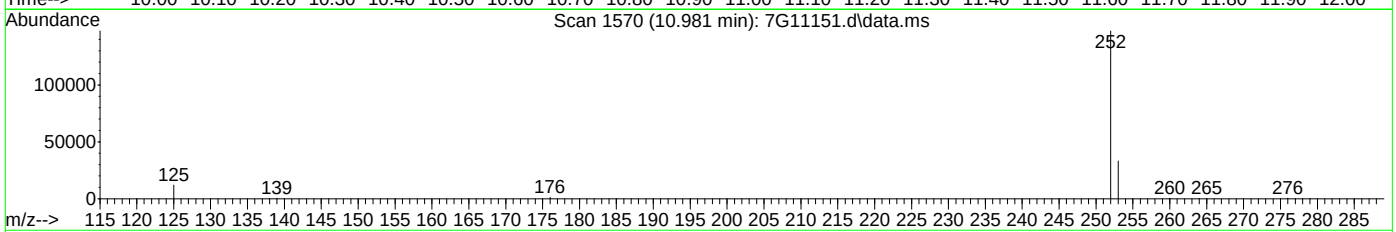
Ion	Exp%	Act%
252.00	100	100
253.00	21.70	21.88
125.00	4.50	7.95
0.00	0.00	0.00

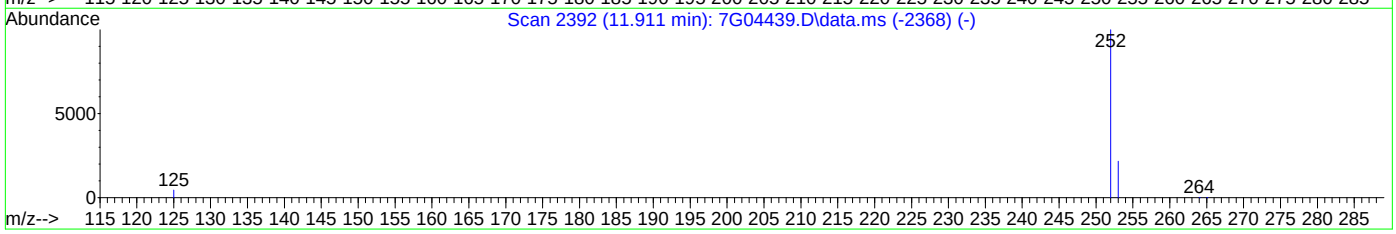
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11151.d
Acq On : 11 Aug 2020 4:53 pm
Operator : FOUADS
Sample : fa77615-13 e Inst : MSBNA8
Misc : op81485,S7G483,15.3,,,1,1,soil
ALS Vial : 23 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:27:10 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11151.d\data.ms

(23) Benzo[b]fluoranthene (P)

10.981min (+0.024) 14.07ppm m

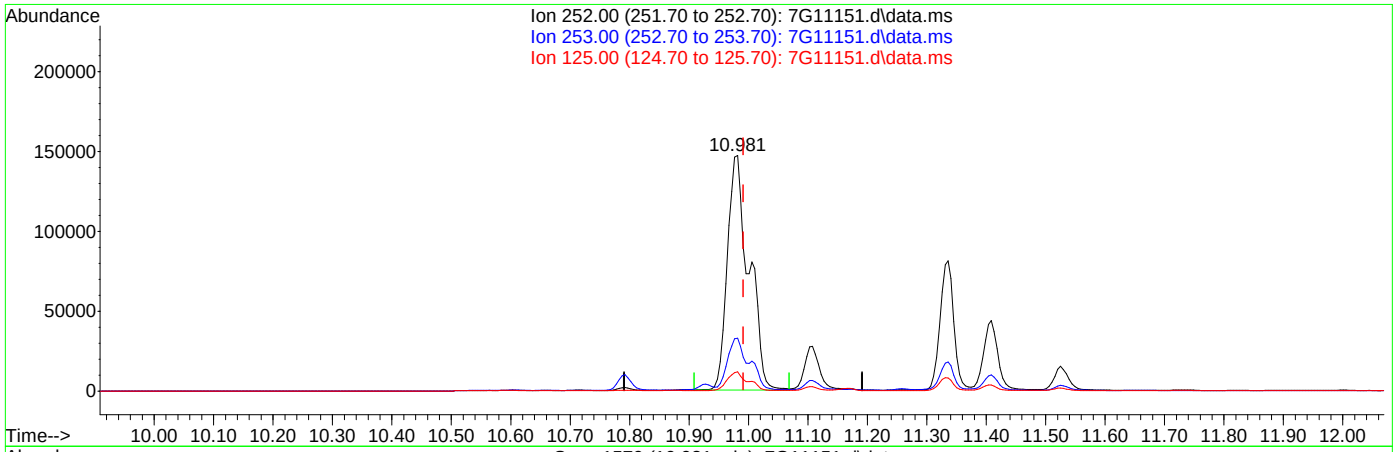
response 276213

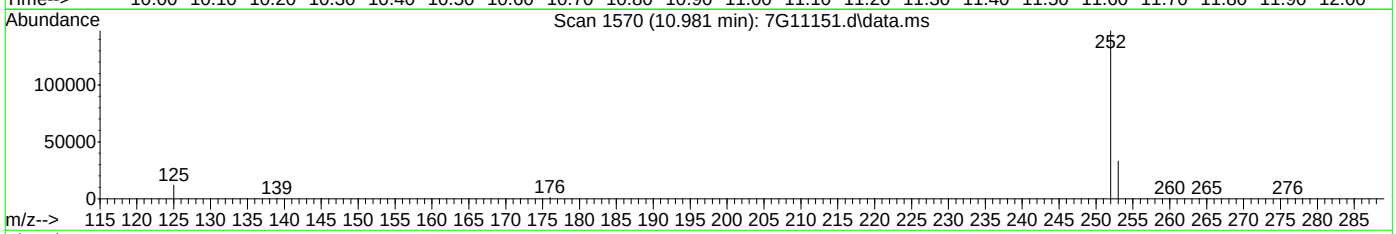
Ion	Exp%	Act%
252.00	100	100
253.00	21.70	22.46
125.00	4.50	8.12
0.00	0.00	0.00

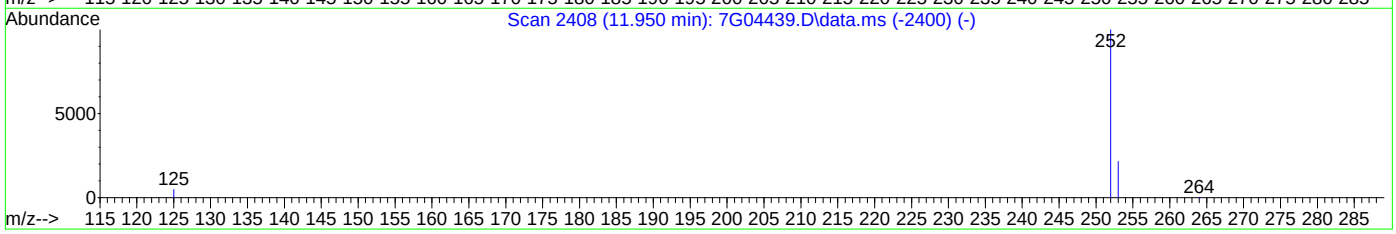
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11151.d
Acq On : 11 Aug 2020 4:53 pm
Operator : FOUADS
Sample : fa77615-13 e Inst : MSBNA8
Misc : op81485,S7G483,15.3,,,1,1,soil
ALS Vial : 23 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:27:10 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11151.d\data.ms

(24) Benzo[k]fluoranthene (P)

10.981min (-0.010) 17.08ppm

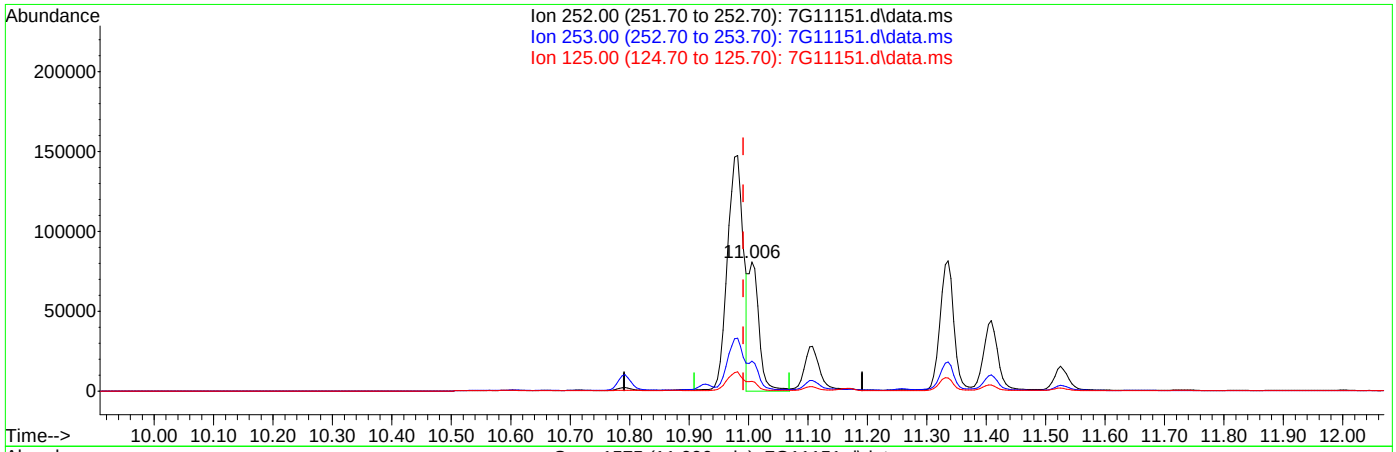
response 370960

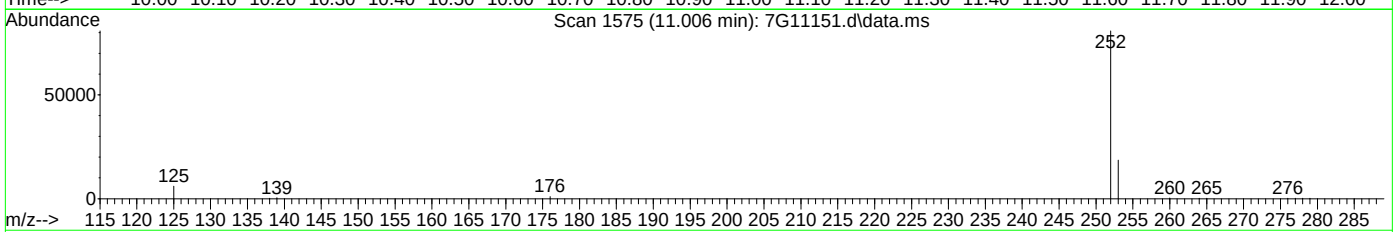
Ion	Exp%	Act%
252.00	100	100
253.00	21.50	21.88
125.00	4.80	7.95
0.00	0.00	0.00

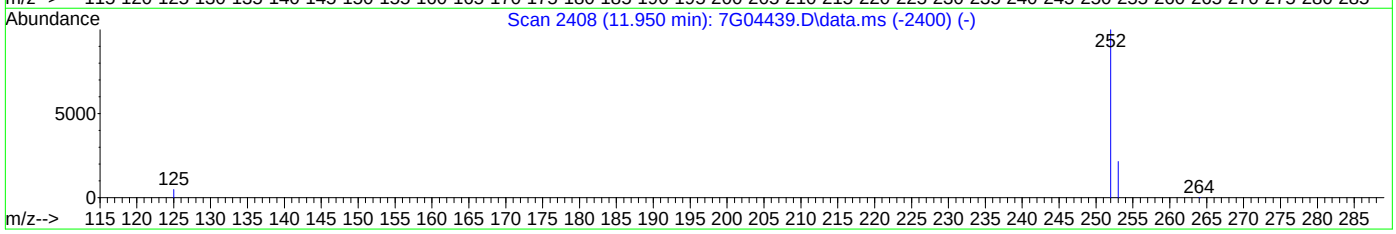
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11151.d
Acq On : 11 Aug 2020 4:53 pm
Operator : FOUADS
Sample : fa77615-13 e Inst : MSBNA8
Misc : op81485,S7G483,15.3,,,1,1,soil
ALS Vial : 23 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:27:10 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11151.d\data.ms

(24) Benzo[k]fluoranthene (P)

11.006min (+0.014) 4.82ppm m

response 100870

Ion	Exp%	Act%
252.00	100	100
253.00	21.50	23.03
125.00	4.80	7.43
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06488.d
Acq On : 11 Aug 2020 1:46 pm
Operator : marthav
Sample : op81484-mb E Inst : MSBNA10
Misc : op81484,S6F251,30.0,,,1,1,soil
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Results File: 8270D6F072920.RES
Quant Time: Aug 12 06:04:18 2020
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

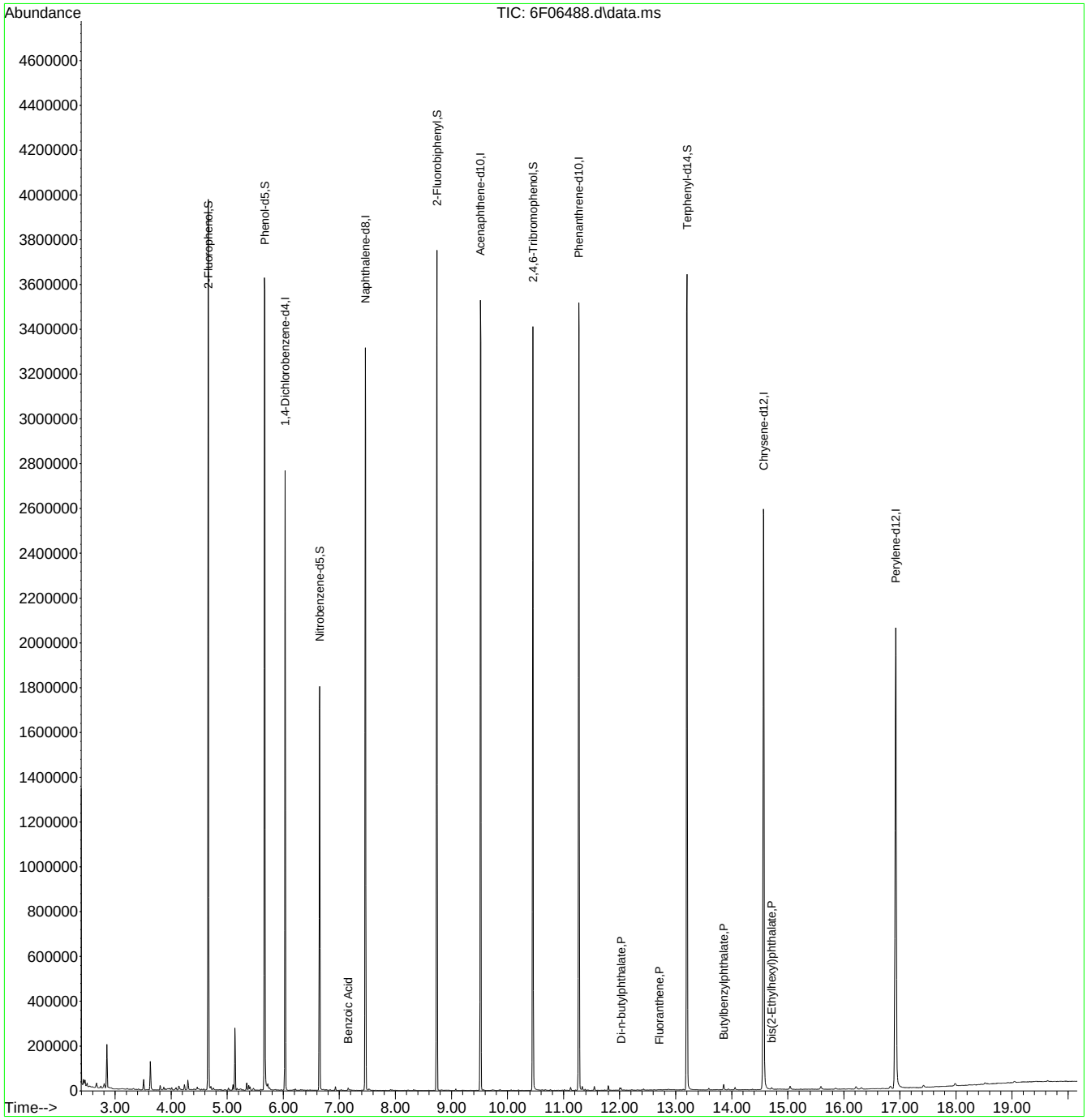
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.035	152	379614	40.00	ppm	0.00
22) Naphthalene-d8	7.463	136	1425462	40.00	ppm	0.00
43) Acenaphthene-d10	9.517	164	760513	40.00	ppm	0.00
70) Phenanthrene-d10	11.271	188	1370889	40.00	ppm	0.00
92) Chrysene-d12	14.571	240	1142281	40.00	ppm	0.00
102) Perylene-d12	16.924	264	1117696	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	4.660	112	996130	69.44	ppm	0.00
Spiked Amount 100.000	Range 40 - 102		Recovery = 69.44%			
9) Phenol-d5	5.671	99	1285478	75.49	ppm	0.00
Spiked Amount 100.000	Range 41 - 100		Recovery = 75.49%			
23) Nitrobenzene-d5	6.650	82	557206	35.63	ppm	0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 71.26%			
47) 2-Fluorobiphenyl	8.741	172	1077696	36.26	ppm	0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 72.52%			
75) 2,4,6-Tribromophenol	10.453	330	361672	78.39	ppm	0.00
Spiked Amount 100.000	Range 42 - 108		Recovery = 78.39%			
95) Terphenyl-d14	13.202	244	1203676	37.49	ppm	0.00
Spiked Amount 50.000	Range 45 - 119		Recovery = 74.98%			
Target Compounds						Qvalue
30) Benzoic Acid	7.158	105	3220	0.35	ppm	89
89) Di-n-butylphthalate	12.025	149	4166	0.09	ppm	95
91) Fluoranthene	12.710	202	1007	0.02	ppm	89
97) Butylbenzylphthalate	13.854	149	6734	0.34	ppm	93
101) bis(2-Ethylhexyl)phtha...	14.710	149	2591	0.09	ppm	94

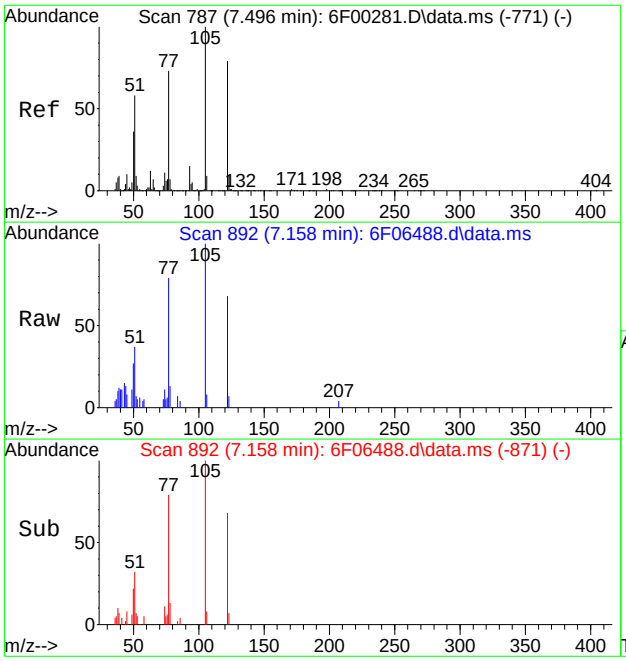
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06488.d
Acq On : 11 Aug 2020 1:46 pm
Operator : marthav
Sample : op81484-mb E Inst : MSBNA10
Misc : op81484,S6F251,30.0,,,1,1,soil
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Results File: 8270D6F072920.RES
Quant Time: Aug 12 06:04:18 2020
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

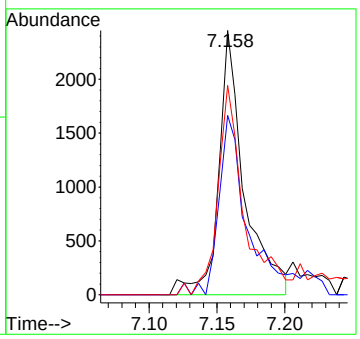


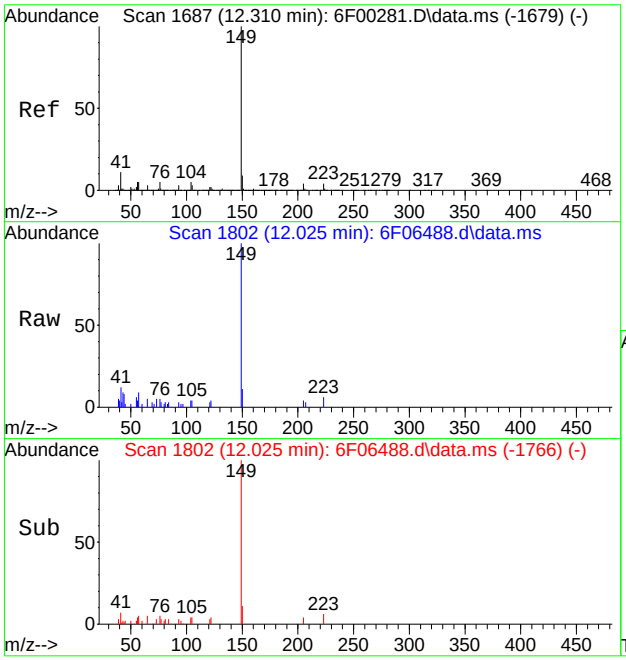


#30
Benzoic Acid
Concen: 0.35 ppm
RT: 7.158 min Scan# 892
Delta R.T. -0.086 min
Lab File: 6F06488.d
Acq: 11 Aug 2020 1:46 pm

Tgt Ion:105 Resp: 3220

Ion	Ratio	Lower	Upper
105	100		
122	66.6	49.5	109.5
77	79.5	43.0	103.0

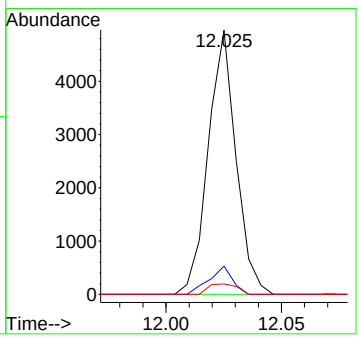


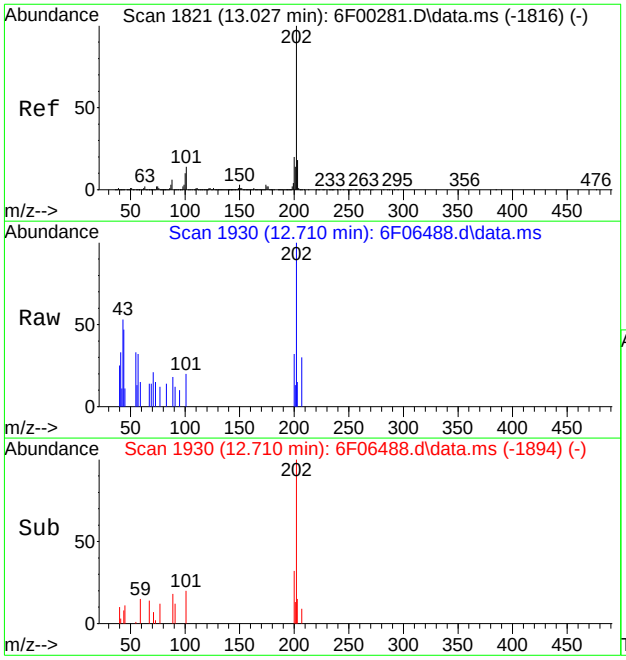


#89
Di-n-butylphthalate
Concen: 0.09 ppm
RT: 12.025 min Scan# 1802
Delta R.T. -0.005 min
Lab File: 6F06488.d
Acq: 11 Aug 2020 1:46 pm

Tgt Ion:149 Resp: 4166

Ion	Ratio	Lower	Upper
149	100		
150	10.7	0.0	38.7
104	4.0	0.0	35.2

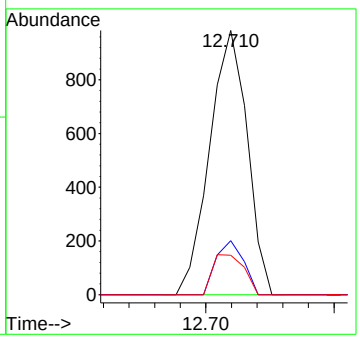


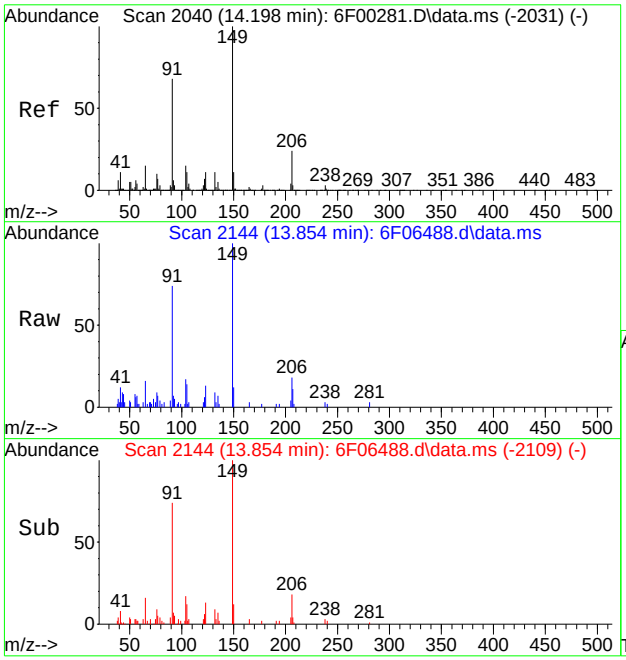


#91
Fluoranthene
Concen: 0.02 ppm
RT: 12.710 min Scan# 1930
Delta R.T. -0.005 min
Lab File: 6F06488.d
Acq: 11 Aug 2020 1:46 pm

Tgt Ion:202 Resp: 1007

Ion	Ratio	Lower	Upper
202	100		
101	17.8	0.0	43.6
203	13.0	0.0	47.7

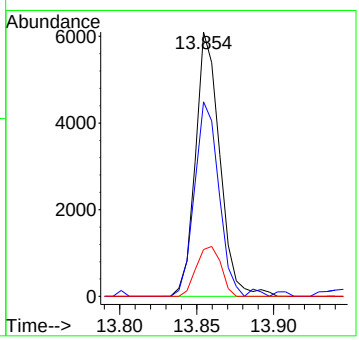


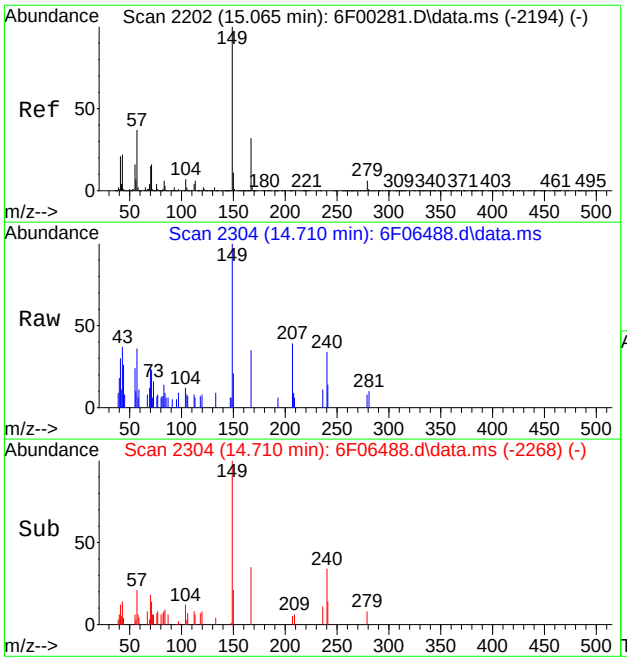


#97
Butylbenzylphthalate
Concen: 0.34 ppm
RT: 13.854 min Scan# 2144
Delta R.T. -0.011 min
Lab File: 6F06488.d
Acq: 11 Aug 2020 1:46 pm

Tgt Ion:149 Resp: 6734

Ion	Ratio	Lower	Upper
149	100		
91	72.7	38.2	98.2
206	17.7	0.0	54.0

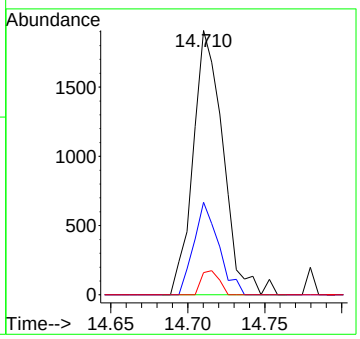




#101
bis(2-Ethylhexyl)phthalate
Concen: 0.09 ppm
RT: 14.710 min Scan# 2304
Delta R.T. -0.005 min
Lab File: 6F06488.d
Acq: 11 Aug 2020 1:46 pm

Tgt Ion:149 Resp: 2591

Ion	Ratio	Lower	Upper
149	100		
167	35.0	1.7	61.7
279	8.4	0.0	35.7



7.2.1

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s6f253\
Data File : 6F06546.d
Acq On : 13 Aug 2020 3:34 pm
Operator : marthav
Sample : op81538-mb E
Misc : op81538,S6F253,30.0,,,1,1,soil
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 14 04:49:29 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.024	152	365153	40.00	ppm	0.00
22) Naphthalene-d8	7.457	136	1289751	40.00	ppm	0.00
43) Acenaphthene-d10	9.511	164	642644	40.00	ppm	0.00
70) Phenanthrene-d10	11.265	188	1049060	40.00	ppm	0.00
92) Chrysene-d12	14.560	240	799614	40.00	ppm	-0.01
102) Perylene-d12	16.914	264	754550	40.00	ppm	-0.01
System Monitoring Compounds						
7) 2-Fluorophenol	4.649	112	691764	50.13	ppm	0.00
Spiked Amount 100.000	Range 40 - 102		Recovery = 50.13%			
9) Phenol-d5	5.655	99	874856	53.41	ppm	-0.01
Spiked Amount 100.000	Range 41 - 100		Recovery = 53.41%			
23) Nitrobenzene-d5	6.639	82	374429	26.46	ppm	0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 52.92%			
47) 2-Fluorobiphenyl	8.730	172	729542	29.05	ppm	0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 58.10%			
75) 2,4,6-Tribromophenol	10.447	330	223697	63.36	ppm	0.00
Spiked Amount 100.000	Range 42 - 108		Recovery = 63.36%			
95) Terphenyl-d14	13.191	244	793097	35.29	ppm	0.00
Spiked Amount 50.000	Range 45 - 119		Recovery = 70.58%			
Target Compounds						Qvalue
21) 3&4-Methylphenol	6.500	108	1457	0.11	ppm	94
25) Isophorone	6.933	82	1614	0.07	ppm	93
30) Benzoic Acid	7.152	105	3008	0.36	ppm	93
34) Naphthalene	7.479	128	2323	0.06	ppm	85
40) 2-Methylnaphthalene	8.286	141	1368	0.06	ppm	98
41) 1-Methylnaphthalene	8.399	142	1411	0.06	ppm	93
48) 1,1'-Biphenyl	8.842	154	1945	0.07	ppm	95
49) 2-Chloronaphthalene	8.853	162	1425	0.07	ppm	93
52) Acenaphthylene	9.340	152	2616	0.08	ppm	96
53) Dimethylphthalate	9.217	163	2037	0.08	ppm	97
57) Acenaphthene	9.543	153	1489	0.07	ppm	98
60) Dibenzofuran	9.752	168	2048	0.07	ppm	91
65) Fluorene	10.158	166	1680	0.07	ppm	97
67) Diethylphthalate	10.057	149	1962	0.08	ppm	99
72) n-Nitrosodiphenylamine	10.313	169	1240	0.08	ppm	94
73) Diphenylamine	10.313	169	1240	0.07	ppm	94
74) 1,2-Diphenylhydrazine	10.356	77	1539	0.07	ppm	94
84) Phenanthrene	11.287	178	3315	0.11	ppm	97
85) Anthracene	11.351	178	2775	0.09	ppm	96
87) Carbazole	11.554	167	2915	0.10	ppm	98
89) Di-n-butylphthalate	12.014	149	4347	0.12	ppm	95
91) Fluoranthene	12.699	202	3816	0.12	ppm	98
94) Pyrene	12.966	202	3737	0.13	ppm	91
97) Butylbenzylphthalate	13.849	149	1398	0.10	ppm	95
99) Benzo[a]anthracene	14.555	228	4245	0.16	ppm	80
100) Chrysene	14.592	228	2475	0.10	ppm	88
101) bis(2-Ethylhexyl)phtha...	14.705	149	3494	0.18	ppm	95
103) Di-n-octylphthalate	15.758	149	1941	0.07	ppm	87
104) Benzo[b]fluoranthene	16.266	252	1954	0.08	ppm	91
105) Benzo[k]fluoranthene	16.309	252	1896	0.08	ppm	88
106) Benzo[a]pyrene	16.812	252	1675	0.07	ppm	88
107) Indeno[1,2,3-cd]pyrene	18.545	276	1941	0.09	ppm	97
108) Dibenz[a,h]anthracene	18.593	278	1736	0.08	ppm	81
109) Benzo[g,h,i]perylene	18.898	276	2030	0.09	ppm	86

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s6f253\
Data File : 6F06546.d
Acq On : 13 Aug 2020 3:34 pm
Operator : marthav
Sample : op81538-mb E
Misc : op81538,S6F253,30.0,,,1,1,soil
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 14 04:49:29 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

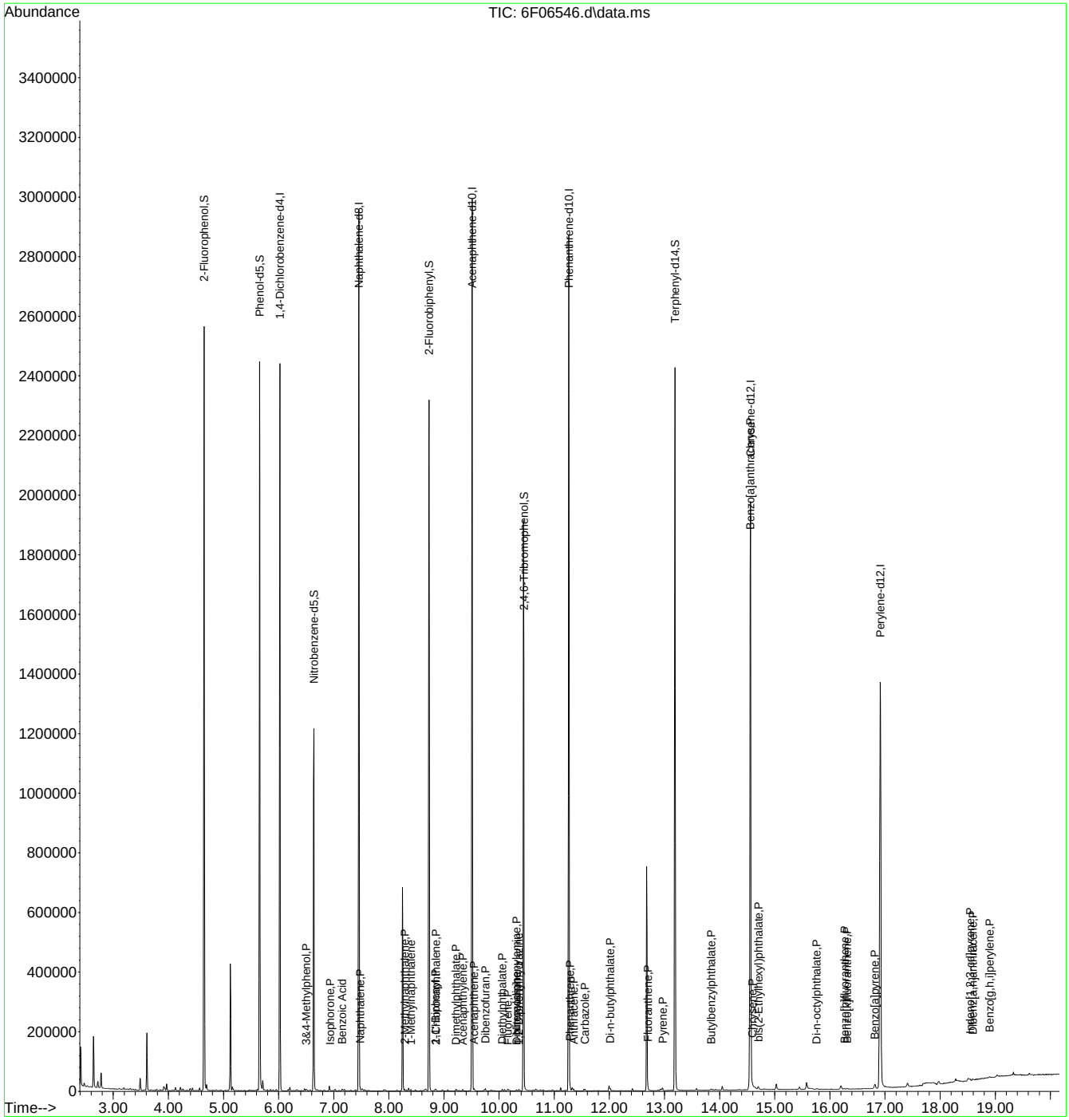
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

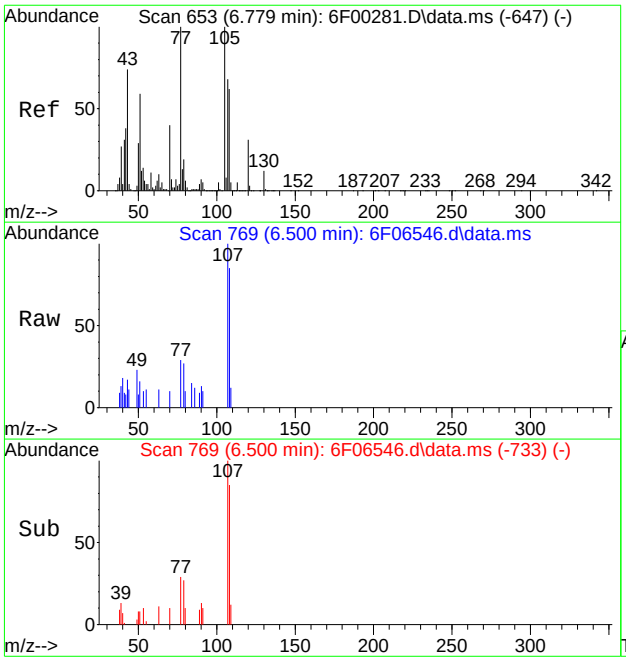
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s6f253\
Data File : 6F06546.d
Acq On : 13 Aug 2020 3:34 pm
Operator : marthav
Sample : op81538-mb E
Misc : op81538,S6F253,30.0,,,1,1,soil
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 14 04:49:29 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

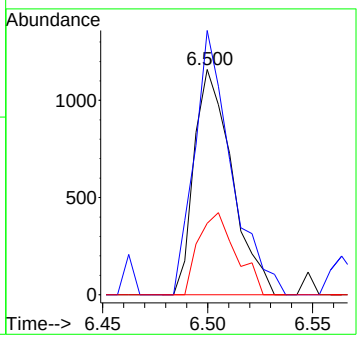


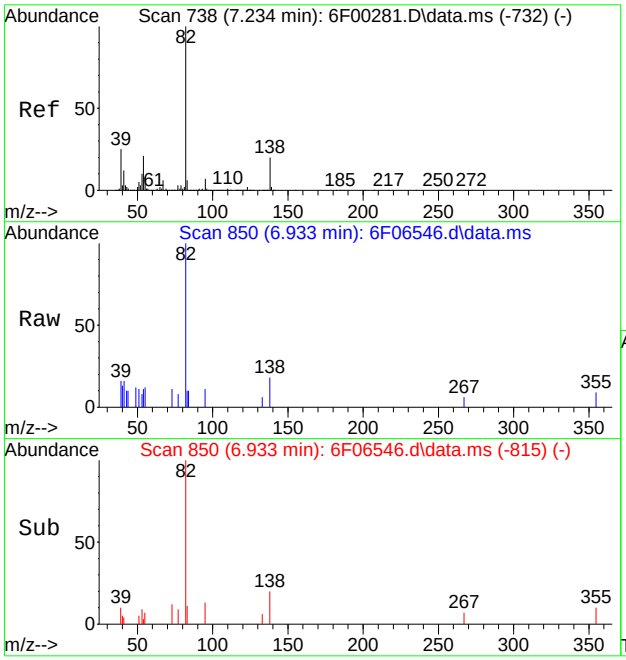


#21
3&4-Methylphenol
Concen: 0.11 ppm
RT: 6.500 min Scan# 769
Delta R.T. -0.006 min
Lab File: 6F06546.d
Acq: 13 Aug 2020 3:34 pm

Tgt Ion:108 Resp: 1457

Ion	Ratio	Lower	Upper
108	100		
107	117.3	80.2	140.2
79	31.7	0.1	60.1

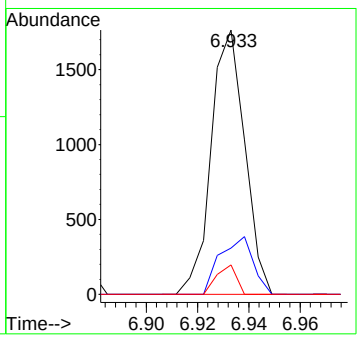


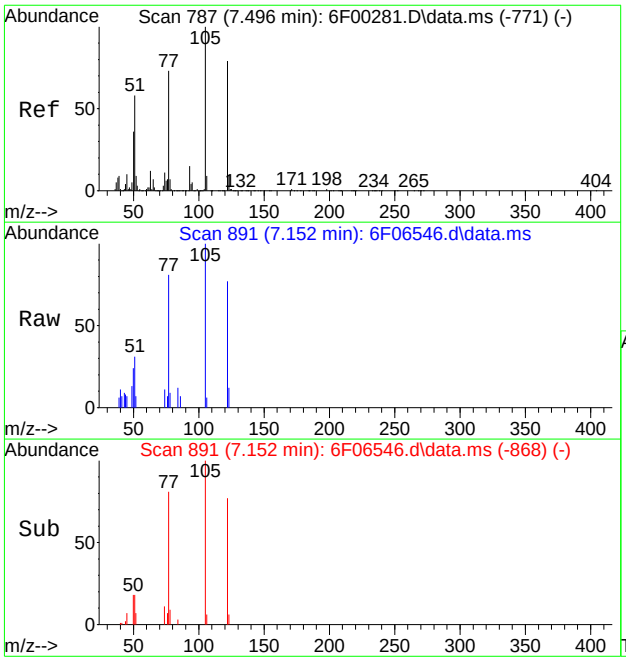


#25
Isophorone
Concen: 0.07 ppm
RT: 6.933 min Scan# 850
Delta R.T. -0.011 min
Lab File: 6F06546.d
Acq: 13 Aug 2020 3:34 pm

Tgt Ion: 82 Resp: 1614

Ion	Ratio	Lower	Upper
82	100		
138	17.5	0.0	49.9
95	11.2	0.0	36.6

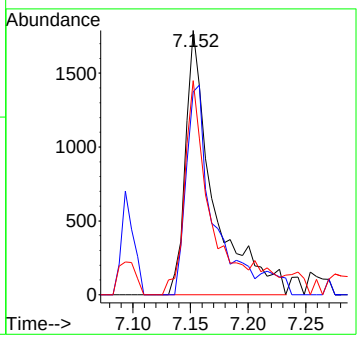


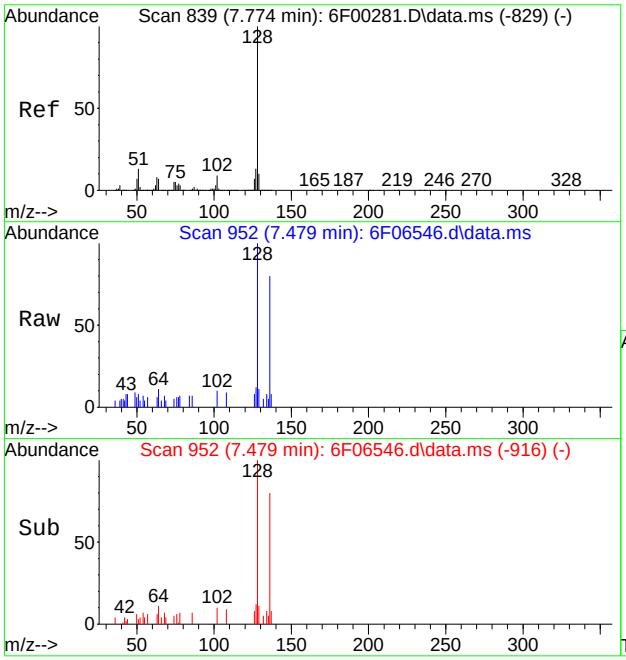


#30
Benzoic Acid
Concen: 0.36 ppm
RT: 7.152 min Scan# 891
Delta R.T. -0.075 min
Lab File: 6F06546.d
Acq: 13 Aug 2020 3:34 pm

Tgt Ion:105 Resp: 3008

Ion	Ratio	Lower	Upper
105	100		
122	73.6	51.7	111.7
77	77.3	42.8	102.8

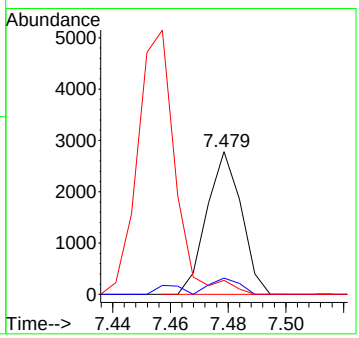


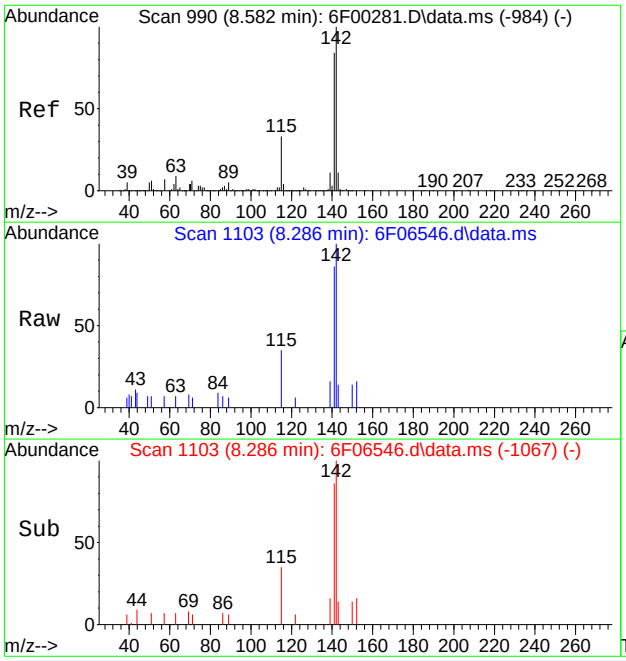


#34
Naphthalene
Concen: 0.06 ppm
RT: 7.479 min Scan# 952
Delta R.T. -0.005 min
Lab File: 6F06546.d
Acq: 13 Aug 2020 3:34 pm

Tgt Ion:128 Resp: 2323

Ion	Ratio	Lower	Upper
128	100		
129	8.2	0.0	41.3
102	0.0	0.0	38.9

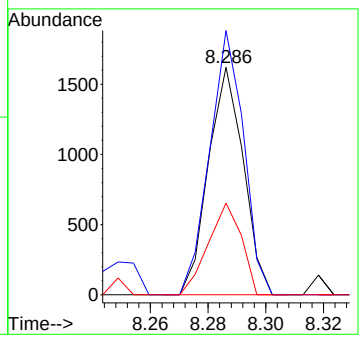


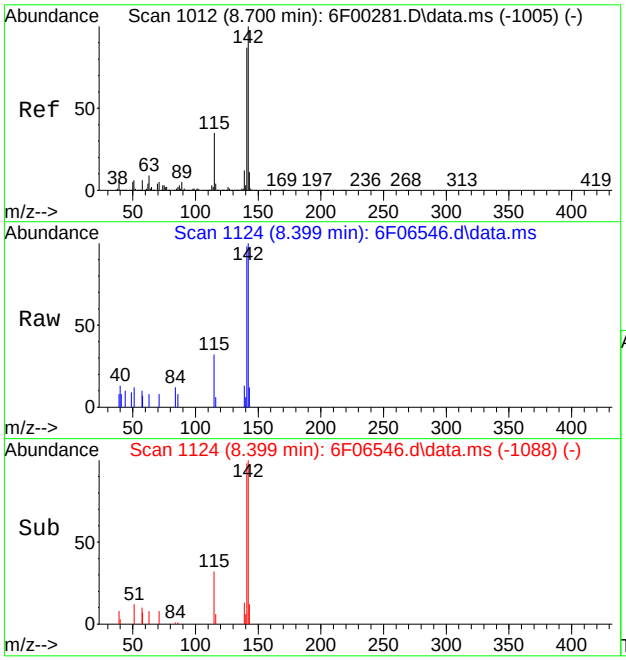


#40
2-Methylnaphthalene
Concen: 0.06 ppm
RT: 8.286 min Scan# 1103
Delta R.T. -0.005 min
Lab File: 6F06546.d
Acq: 13 Aug 2020 3:34 pm

Tgt Ion:141 Resp: 1368

Ion	Ratio	Lower	Upper
141	100		
142	116.2	87.4	147.4
115	40.3	8.3	68.3

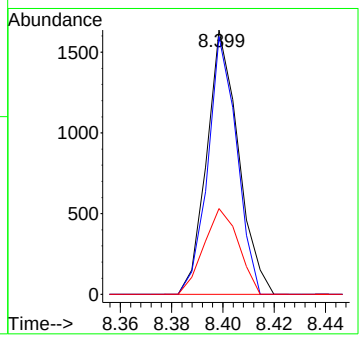


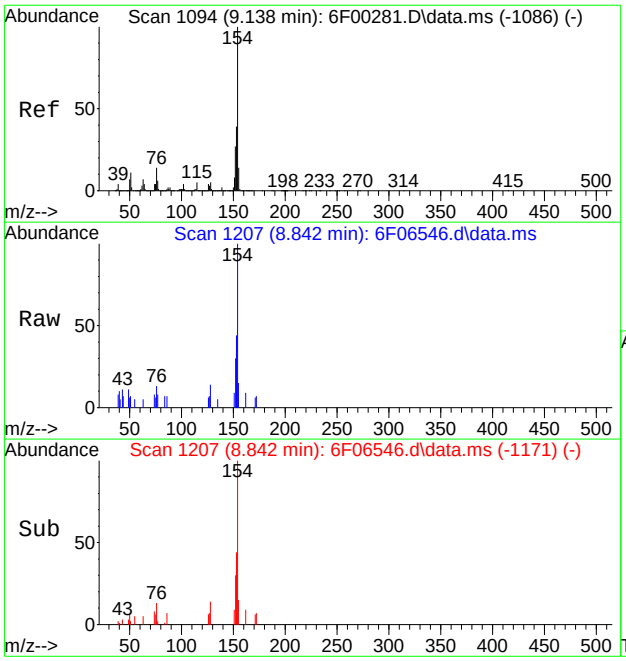


#41
1-Methylnaphthalene
Concen: 0.06 ppm
RT: 8.399 min Scan# 1124
Delta R.T. -0.005 min
Lab File: 6F06546.d
Acq: 13 Aug 2020 3:34 pm

Tgt Ion:142 Resp: 1411

Ion	Ratio	Lower	Upper
142	100		
141	97.6	58.9	118.9
115	32.4	3.8	63.8

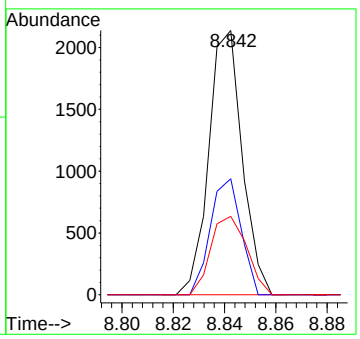


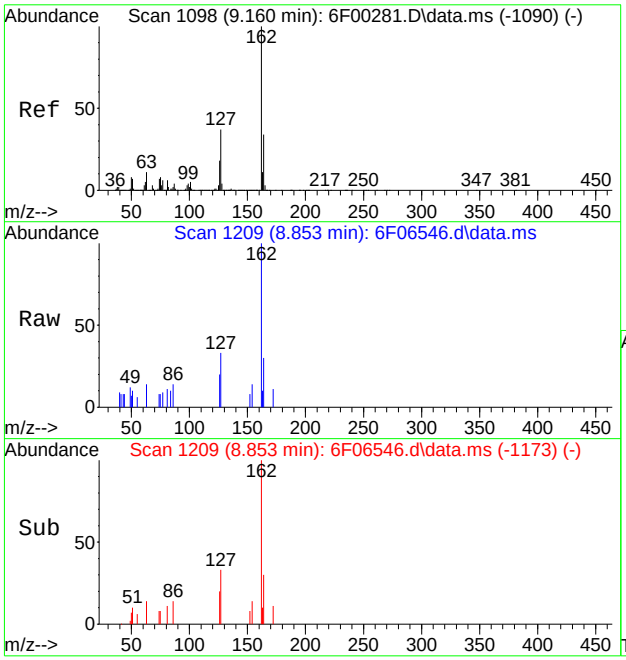


#48
1,1'-Biphenyl
Concen: 0.07 ppm
RT: 8.842 min Scan# 1207
Delta R.T. -0.006 min
Lab File: 6F06546.d
Acq: 13 Aug 2020 3:34 pm

Tgt Ion:154 Resp: 1945

Ion	Ratio	Lower	Upper
154	100		
153	43.9	10.4	70.4
152	29.7	0.0	57.6

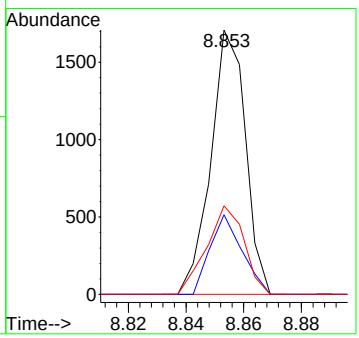


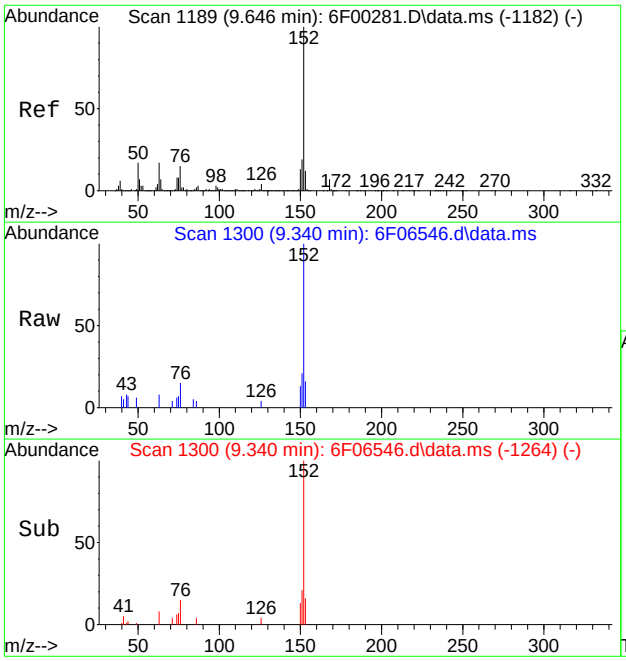


#49
2-Chloronaphthalene
Concen: 0.07 ppm
RT: 8.853 min Scan# 1209
Delta R.T. -0.006 min
Lab File: 6F06546.d
Acq: 13 Aug 2020 3:34 pm

Tgt Ion:162 Resp: 1425

Ion	Ratio	Lower	Upper
162	100		
164	30.1	3.0	63.0
127	33.5	8.9	68.9

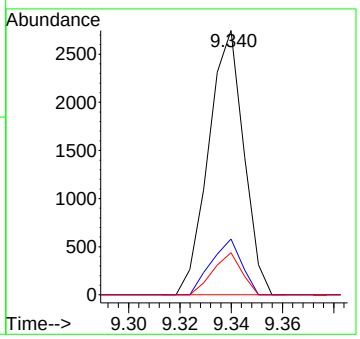


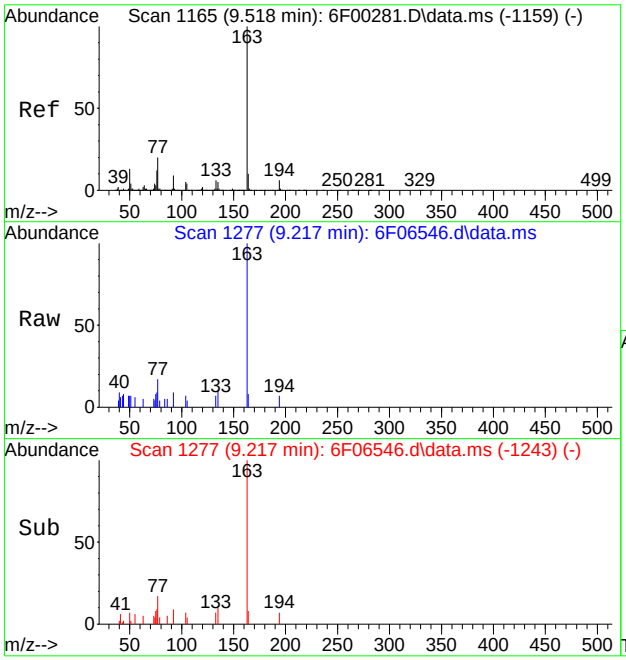


#52
Acenaphthylene
Concen: 0.08 ppm
RT: 9.340 min Scan# 1300
Delta R.T. -0.005 min
Lab File: 6F06546.d
Acq: 13 Aug 2020 3:34 pm

Tgt Ion:152 Resp: 2616

Ion	Ratio	Lower	Upper
152	100		
151	21.1	0.0	49.9
153	15.9	0.0	43.2

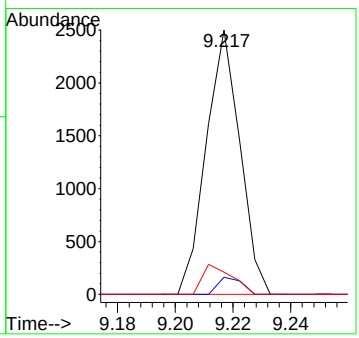


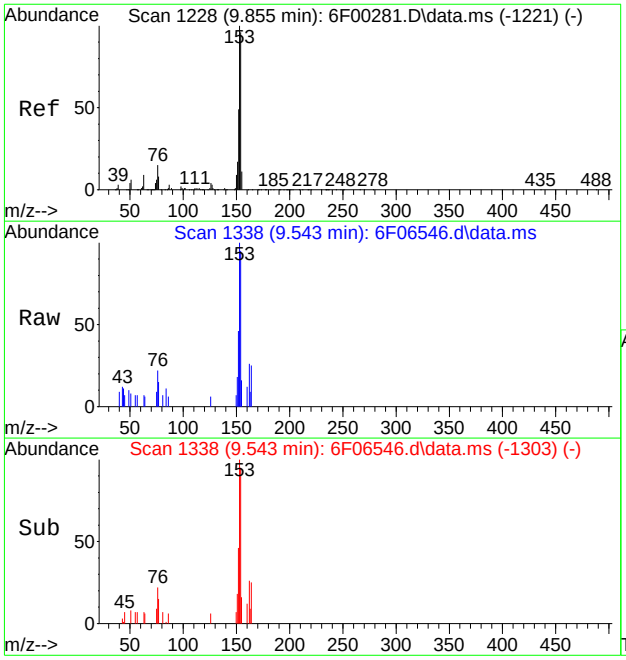


#53
Dimethylphthalate
Concen: 0.08 ppm
RT: 9.217 min Scan# 1277
Delta R.T. -0.016 min
Lab File: 6F06546.d
Acq: 13 Aug 2020 3:34 pm

Tgt Ion:163 Resp: 2037

Ion	Ratio	Lower	Upper
163	100		
194	6.5	0.0	36.4
164	8.4	0.0	39.9

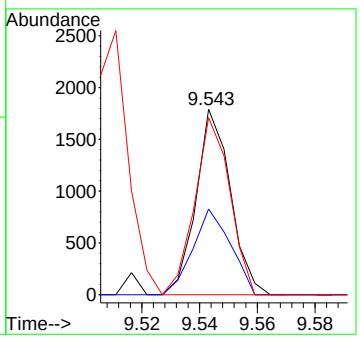


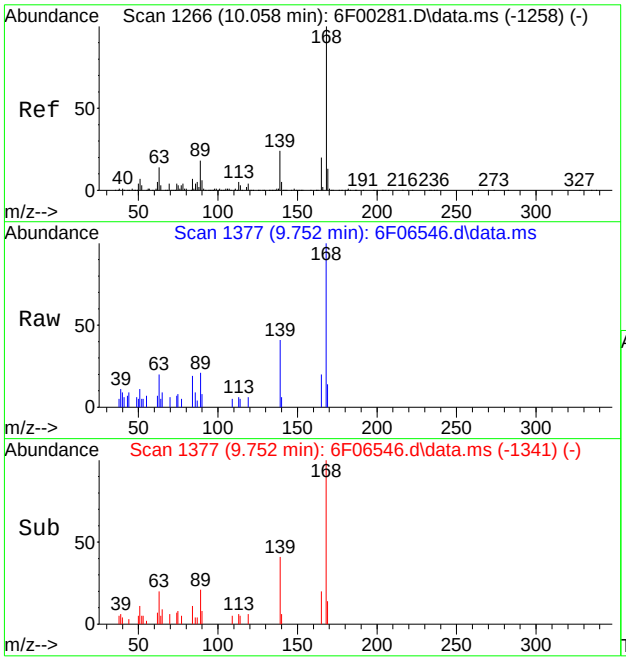


#57
Acenaphthene
Concen: 0.07 ppm
RT: 9.543 min Scan# 1338
Delta R.T. -0.011 min
Lab File: 6F06546.d
Acq: 13 Aug 2020 3:34 pm

Tgt Ion:153 Resp: 1489

Ion	Ratio	Lower	Upper
153	100		
152	46.3	16.2	76.2
154	95.4	63.3	123.3

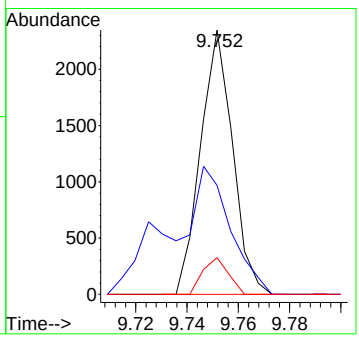


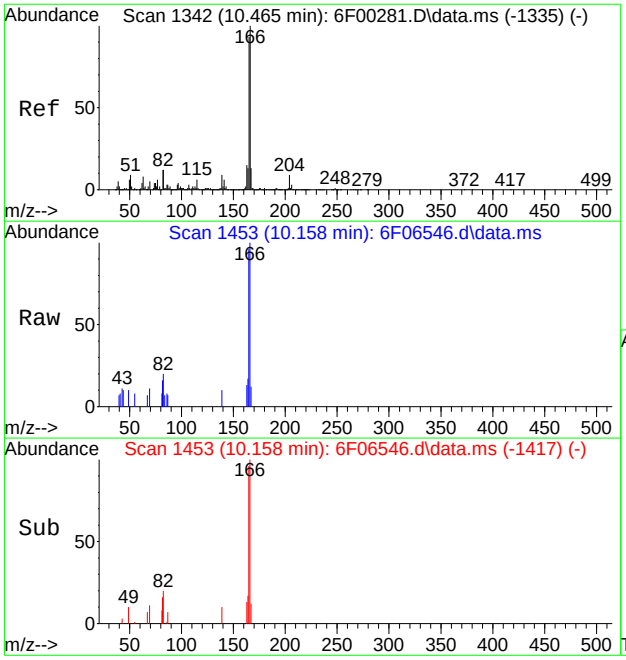


#60
Dibenzofuran
Concen: 0.07 ppm
RT: 9.752 min Scan# 1377
Delta R.T. -0.005 min
Lab File: 6F06546.d
Acq: 13 Aug 2020 3:34 pm

Tgt Ion:168 Resp: 2048

Ion	Ratio	Lower	Upper
168	100		
139	29.9	7.1	67.1
169	14.0	0.0	43.6

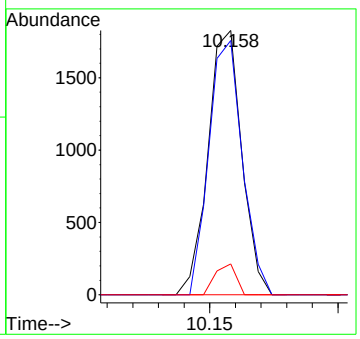


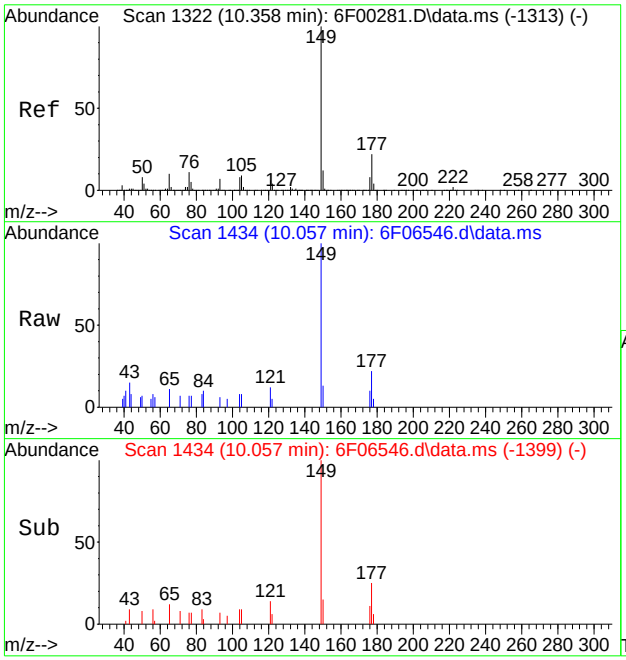


#65
Fluorene
Concen: 0.07 ppm
RT: 10.158 min Scan# 1453
Delta R.T. -0.005 min
Lab File: 6F06546.d
Acq: 13 Aug 2020 3:34 pm

Tgt Ion:166 Resp: 1680

Ion	Ratio	Lower	Upper
166	100		
165	96.2	63.2	123.2
167	11.7	0.0	43.3

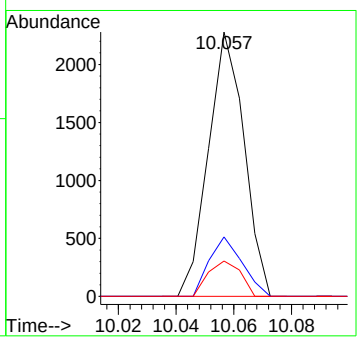


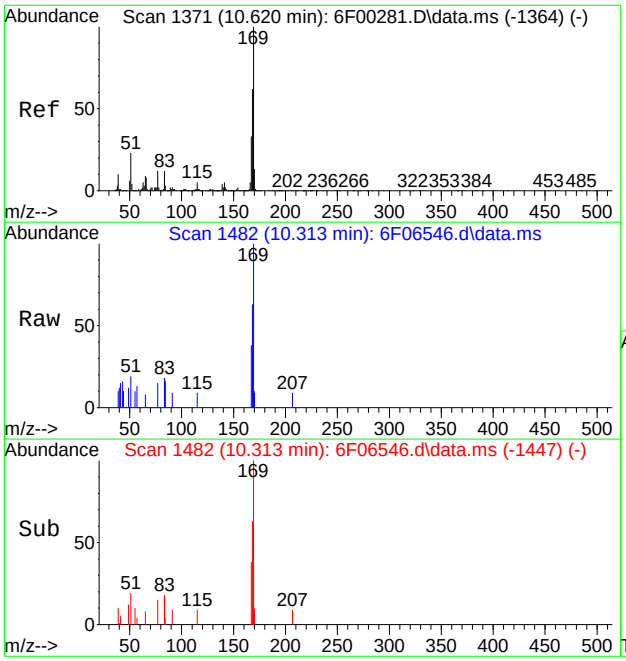


#67
Diethylphthalate
Concen: 0.08 ppm
RT: 10.057 min Scan# 1434
Delta R.T. -0.011 min
Lab File: 6F06546.d
Acq: 13 Aug 2020 3:34 pm

Tgt Ion:149 Resp: 1962

Ion	Ratio	Lower	Upper
149	100		
177	22.5	0.0	52.8
150	13.4	0.0	42.6

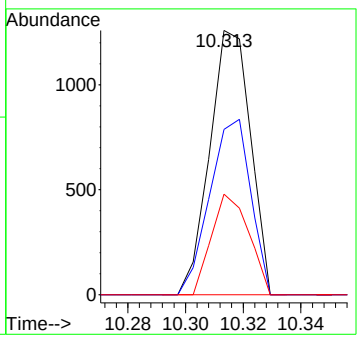


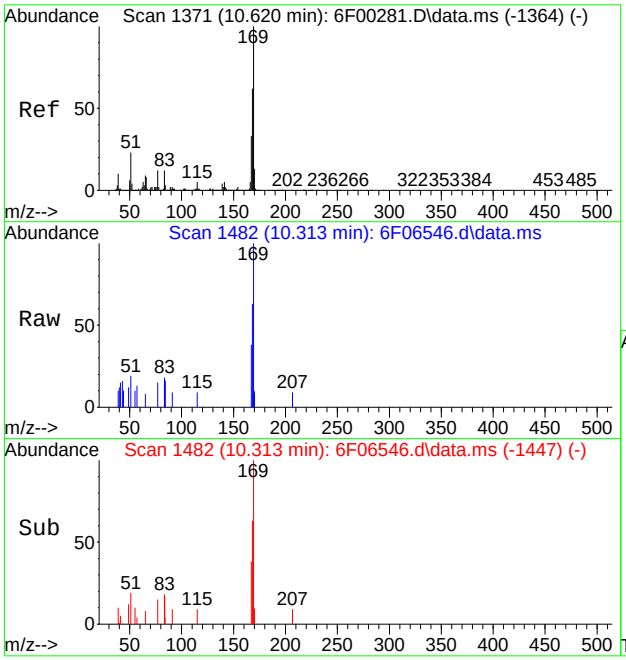


#72
n-Nitrosodiphenylamine
Concen: 0.08 ppm
RT: 10.313 min Scan# 1482
Delta R.T. -0.011 min
Lab File: 6F06546.d
Acq: 13 Aug 2020 3:34 pm

Tgt Ion:169 Resp: 1240

Ion	Ratio	Lower	Upper
169	100		
168	56.8	34.1	94.1
167	34.5	4.7	64.7

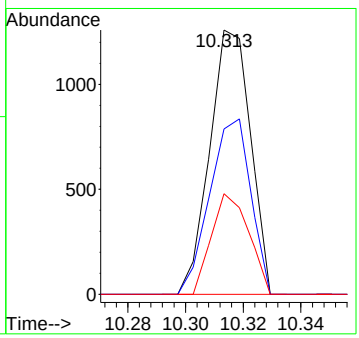


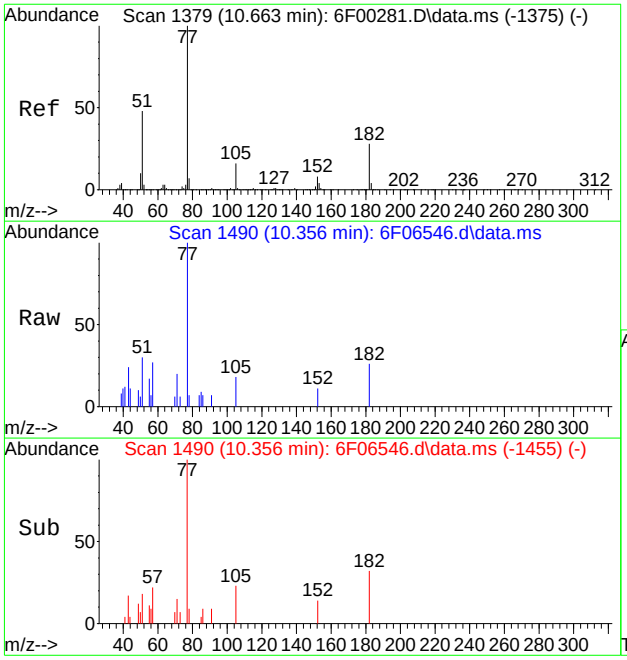


#73
Diphenylamine
Concen: 0.07 ppm
RT: 10.313 min Scan# 1482
Delta R.T. -0.011 min
Lab File: 6F06546.d
Acq: 13 Aug 2020 3:34 pm

Tgt Ion:169 Resp: 1240

Ion	Ratio	Lower	Upper
169	100		
168	56.8	34.1	94.1
167	34.5	4.7	64.7

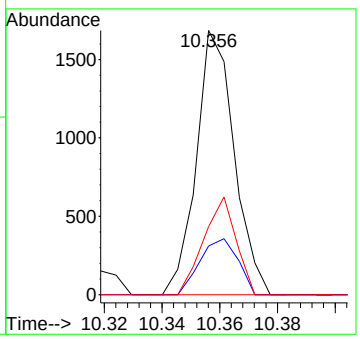


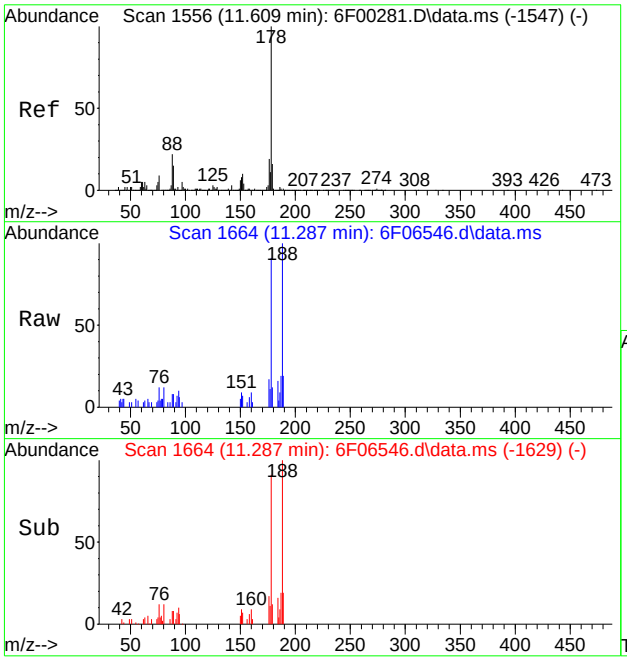


#74
1,2-Diphenylhydrazine
Concen: 0.07 ppm
RT: 10.356 min Scan# 1490
Delta R.T. -0.011 min
Lab File: 6F06546.d
Acq: 13 Aug 2020 3:34 pm

Tgt Ion: 77 Resp: 1539

Ion	Ratio	Lower	Upper
77	100		
105	18.4	0.0	48.4
182	25.8	0.8	60.8

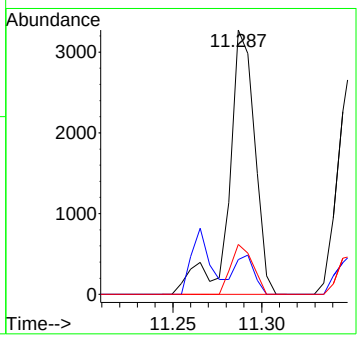


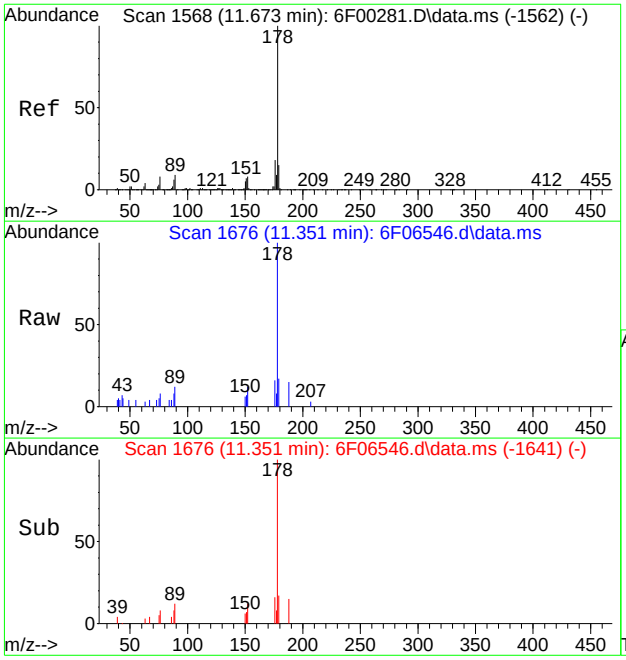


#84
Phenanthrene
Concen: 0.11 ppm
RT: 11.287 min Scan# 1664
Delta R.T. -0.011 min
Lab File: 6F06546.d
Acq: 13 Aug 2020 3:34 pm

Tgt Ion:178 Resp: 3315

Ion	Ratio	Lower	Upper
178	100		
179	13.2	0.0	45.6
176	18.9	0.0	48.6

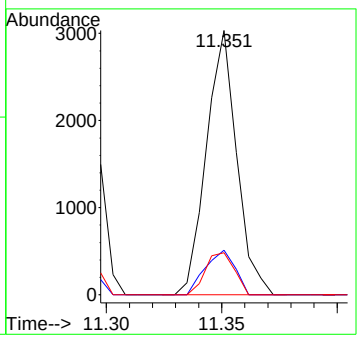


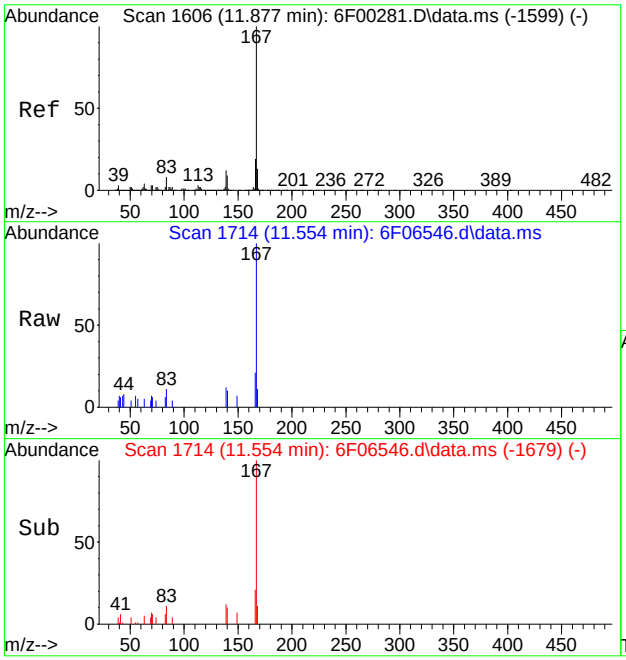


#85
Anthracene
Concen: 0.09 ppm
RT: 11.351 min Scan# 1676
Delta R.T. -0.011 min
Lab File: 6F06546.d
Acq: 13 Aug 2020 3:34 pm

Tgt Ion:178 Resp: 2775

Ion	Ratio	Lower	Upper
178	100		
179	16.8	0.0	45.4
176	15.9	0.0	48.2

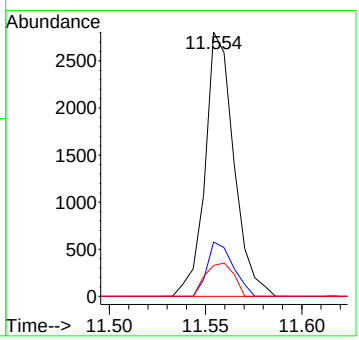


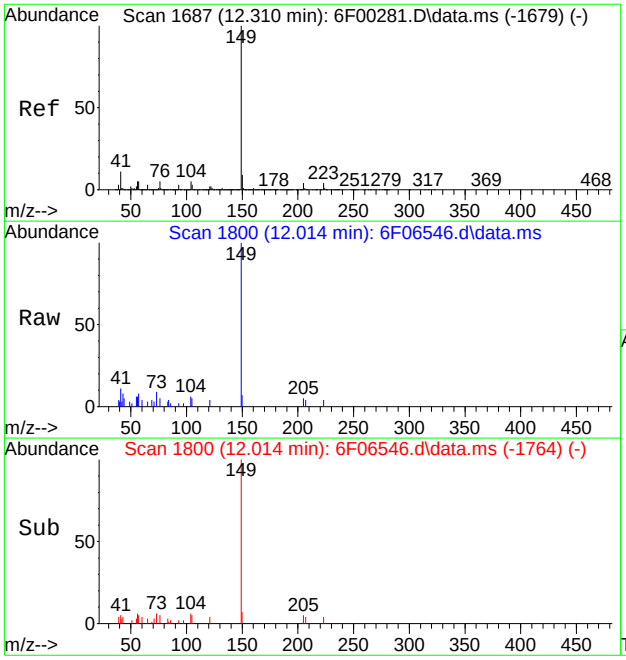


#87
Carbazole
Concen: 0.10 ppm
RT: 11.554 min Scan# 1714
Delta R.T. -0.011 min
Lab File: 6F06546.d
Acq: 13 Aug 2020 3:34 pm

Tgt Ion:167 Resp: 2915

Ion	Ratio	Lower	Upper
167	100		
166	20.6	0.0	50.9
139	11.7	0.0	43.2

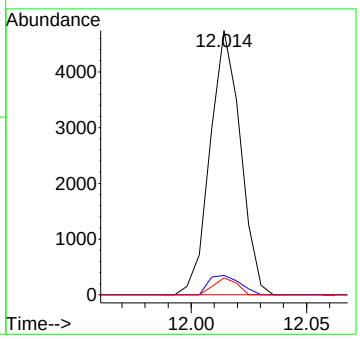


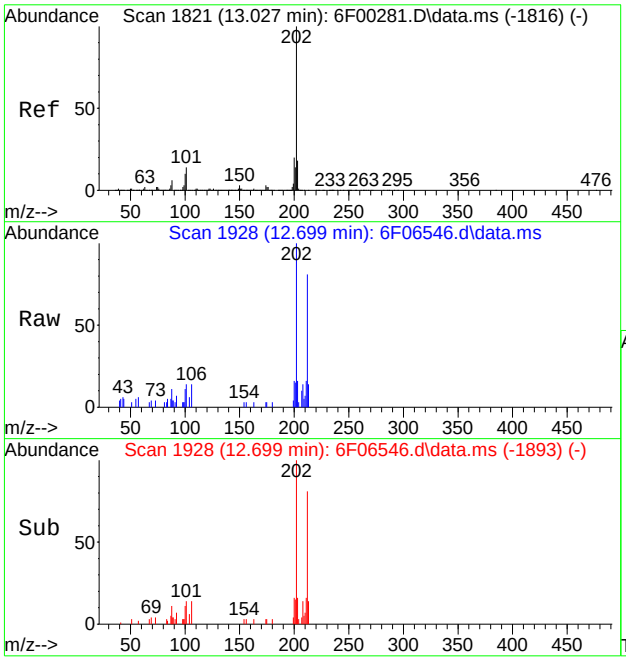


#89
Di-n-butylphthalate
Concen: 0.12 ppm
RT: 12.014 min Scan# 1800
Delta R.T. -0.005 min
Lab File: 6F06546.d
Acq: 13 Aug 2020 3:34 pm

Tgt Ion:149 Resp: 4347

Ion	Ratio	Lower	Upper
149	100		
150	7.4	0.0	39.2
104	6.4	0.0	34.7

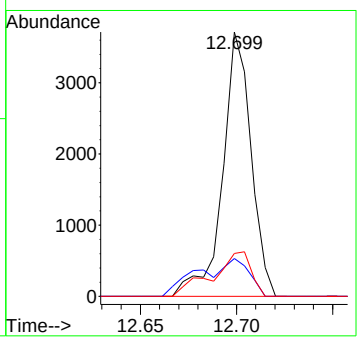


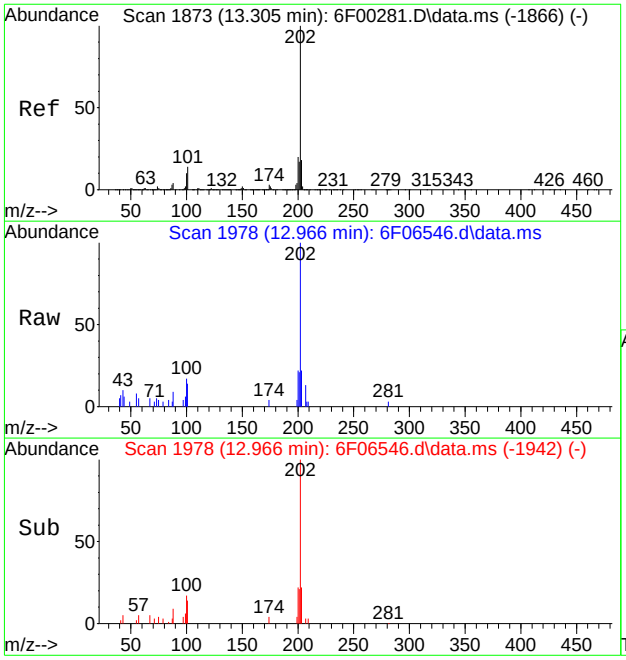


#91
Fluoranthene
Concen: 0.12 ppm
RT: 12.699 min Scan# 1928
Delta R.T. -0.011 min
Lab File: 6F06546.d
Acq: 13 Aug 2020 3:34 pm

Tgt Ion:202 Resp: 3816

Ion	Ratio	Lower	Upper
202	100		
101	14.4	0.0	44.4
203	16.3	0.0	47.5

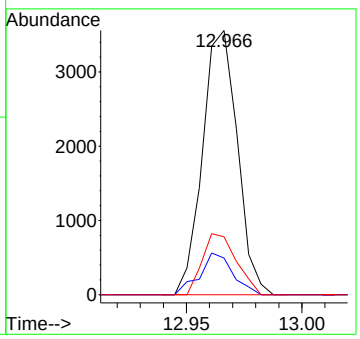


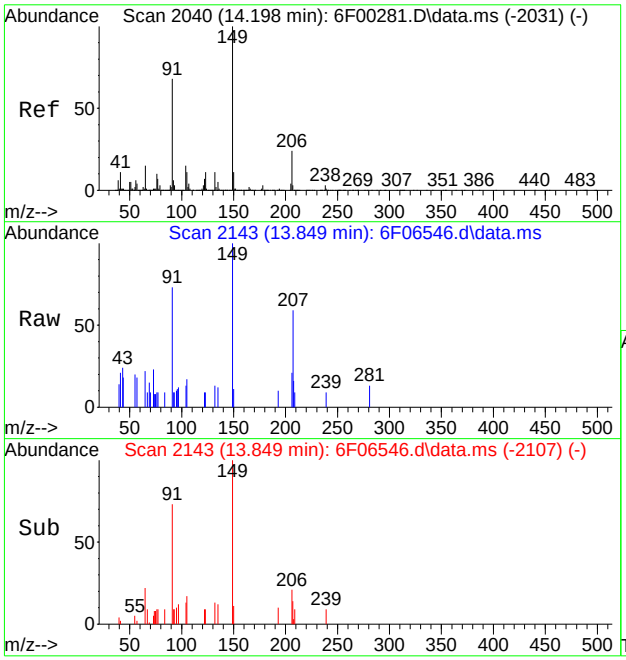


#94
Pyrene
Concen: 0.13 ppm
RT: 12.966 min Scan# 1978
Delta R.T. -0.005 min
Lab File: 6F06546.d
Acq: 13 Aug 2020 3:34 pm

Tgt Ion:202 Resp: 3737

Ion	Ratio	Lower	Upper
202	100		
101	13.9	0.0	48.6
203	22.0	0.0	48.3

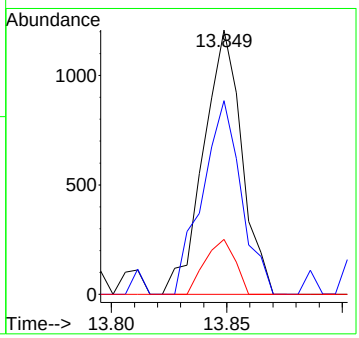


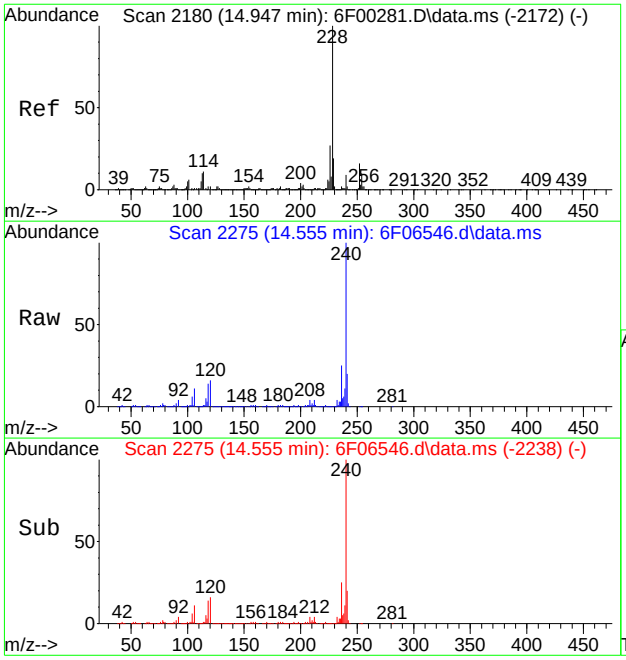


#97
Butylbenzylphthalate
Concen: 0.10 ppm
RT: 13.849 min Scan# 2143
Delta R.T. -0.005 min
Lab File: 6F06546.d
Acq: 13 Aug 2020 3:34 pm

Tgt Ion:149 Resp: 1398

Ion	Ratio	Lower	Upper
149	100		
91	73.3	38.4	98.4
206	20.8	0.0	51.7

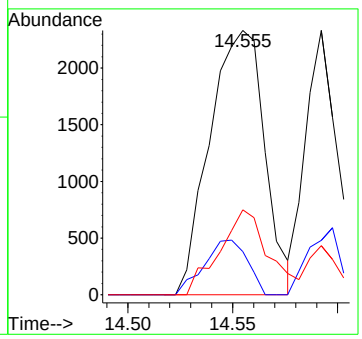


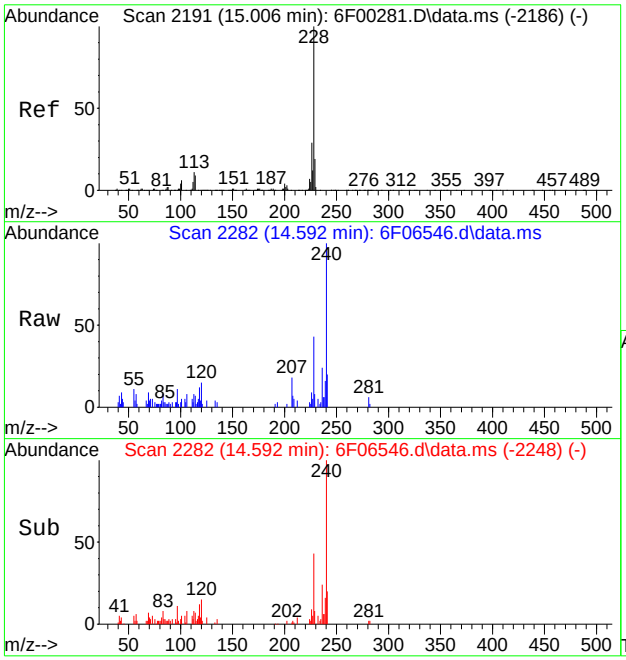


#99
Benzo[a]anthracene
Concen: 0.16 ppm
RT: 14.555 min Scan# 2275
Delta R.T. -0.000 min
Lab File: 6F06546.d
Acq: 13 Aug 2020 3:34 pm

Tgt Ion:228 Resp: 4245

Ion	Ratio	Lower	Upper
228	100		
226	17.5	0.0	56.8
229	30.1	0.0	49.8

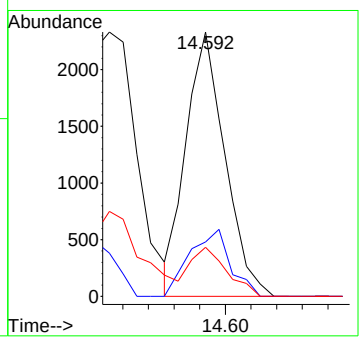


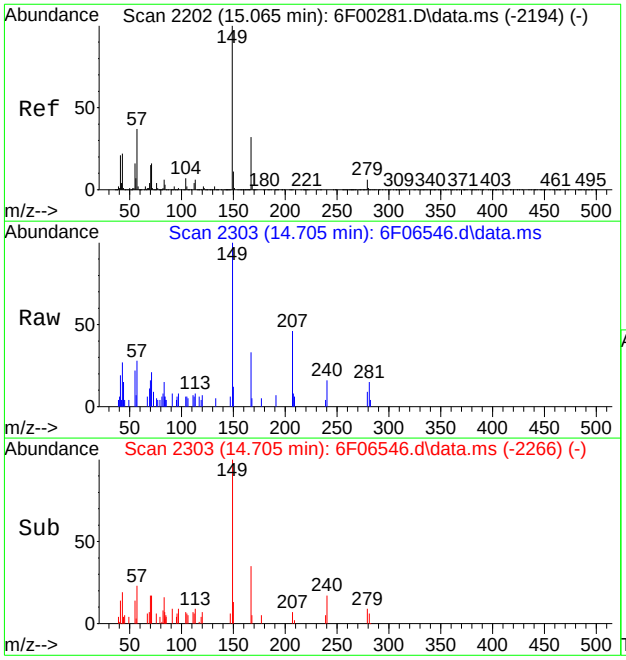


#100
Chrysene
Concen: 0.10 ppm
RT: 14.592 min Scan# 2282
Delta R.T. -0.016 min
Lab File: 6F06546.d
Acq: 13 Aug 2020 3:34 pm

Tgt Ion:228 Resp: 2475

Ion	Ratio	Lower	Upper
228	100		
226	22.0	0.0	59.3
229	15.6	0.0	49.8

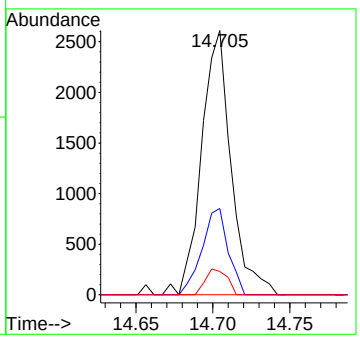


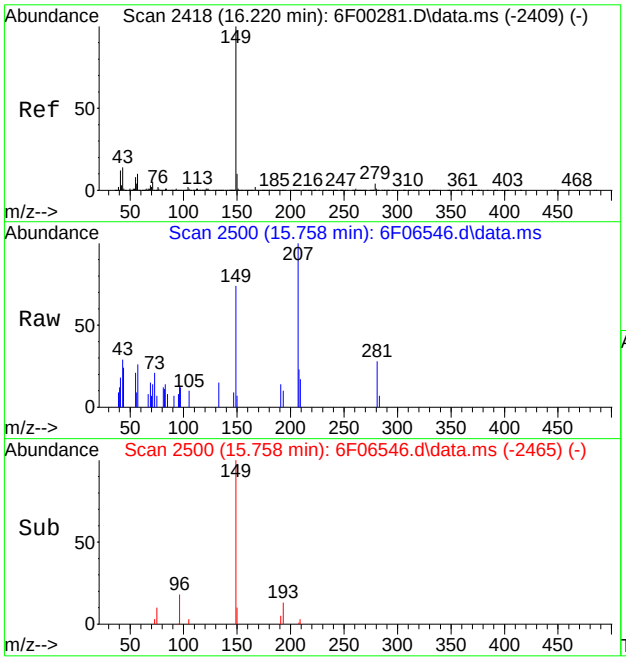


#101
bis(2-Ethylhexyl)phthalate
Concen: 0.18 ppm
RT: 14.705 min Scan# 2303
Delta R.T. -0.000 min
Lab File: 6F06546.d
Acq: 13 Aug 2020 3:34 pm

Tgt Ion:149 Resp: 3494

Ion	Ratio	Lower	Upper
149	100		
167	32.7	0.0	59.9
279	8.8	0.0	36.7

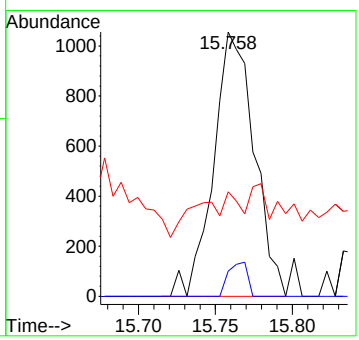


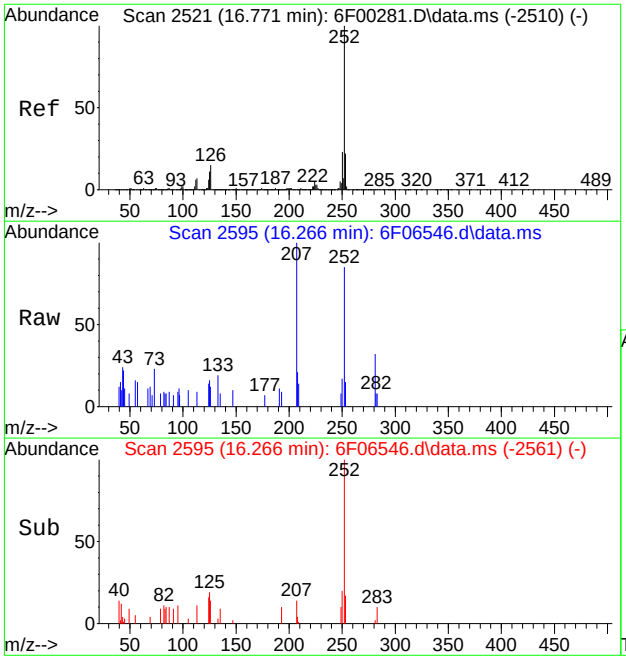


#103
Di-n-octylphthalate
Concen: 0.07 ppm
RT: 15.758 min Scan# 2500
Delta R.T. -0.011 min
Lab File: 6F06546.d
Acq: 13 Aug 2020 3:34 pm

Tgt Ion:149 Resp: 1941

Ion	Ratio	Lower	Upper
149	100		
150	9.6	0.0	40.2
43	0.0	0.0	39.4

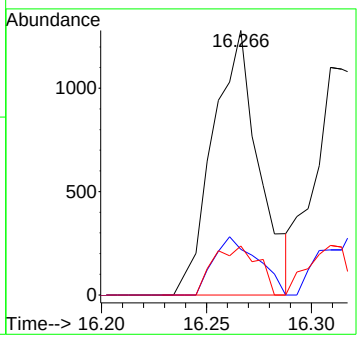


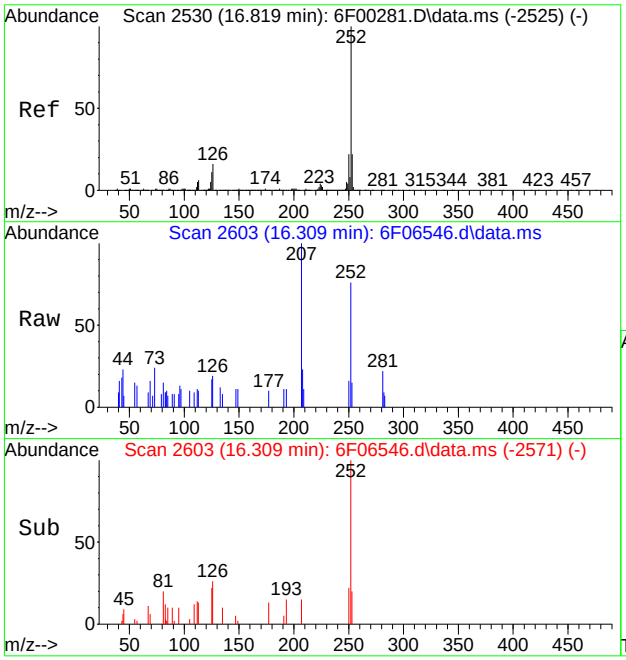


#104
Benzo[b]fluoranthene
Concen: 0.08 ppm
RT: 16.266 min Scan# 2595
Delta R.T. -0.016 min
Lab File: 6F06546.d
Acq: 13 Aug 2020 3:34 pm

Tgt Ion:252 Resp: 1954

Ion	Ratio	Lower	Upper
252	100		
253	19.5	0.0	51.7
125	20.9	0.0	44.0

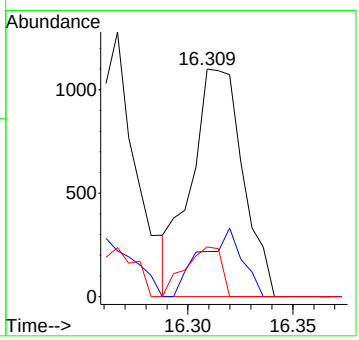


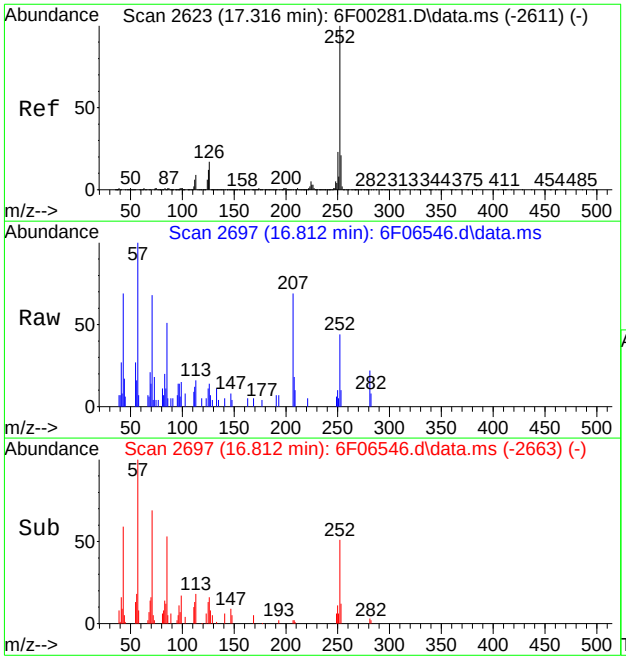


#105
Benzo[k]fluoranthene
Concen: 0.08 ppm
RT: 16.309 min Scan# 2603
Delta R.T. -0.027 min
Lab File: 6F06546.d
Acq: 13 Aug 2020 3:34 pm

Tgt Ion:252 Resp: 1896

Ion	Ratio	Lower	Upper
252	100		
253	22.9	0.0	51.9
125	25.2	0.0	43.3

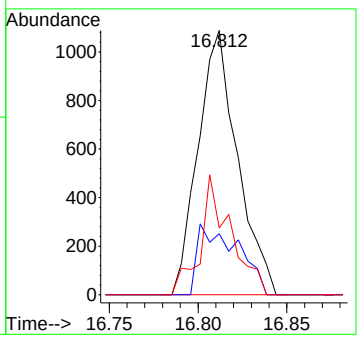


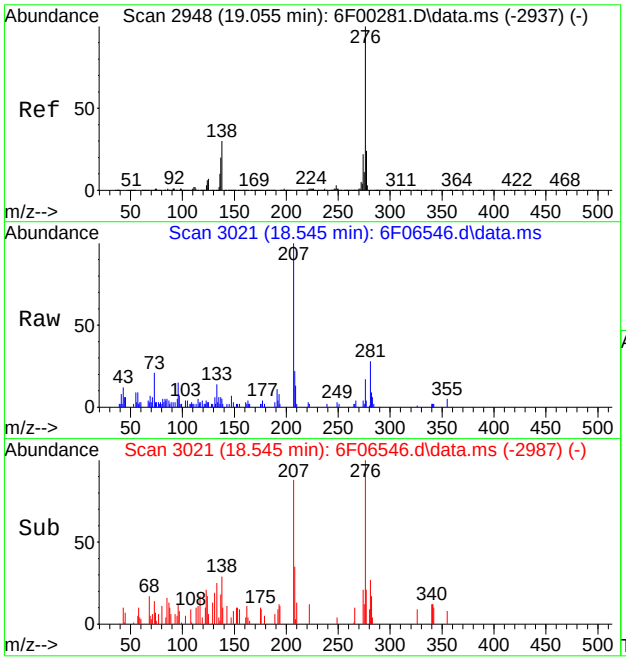


#106
Benzo[a]pyrene
Concen: 0.07 ppm
RT: 16.812 min Scan# 2697
Delta R.T. -0.016 min
Lab File: 6F06546.d
Acq: 13 Aug 2020 3:34 pm

Tgt Ion:252 Resp: 1675

Ion	Ratio	Lower	Upper
252	100		
253	23.1	0.0	52.0
125	25.3	0.0	44.6

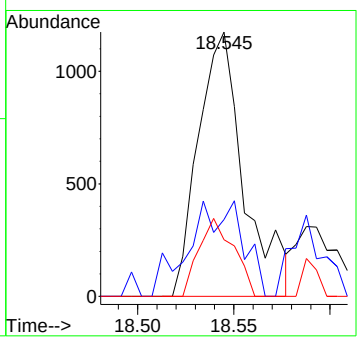


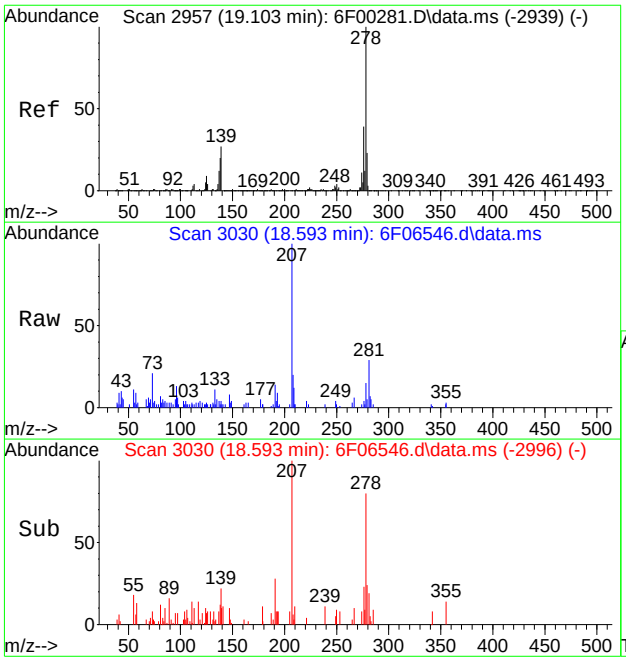


#107
Indeno[1,2,3-cd]pyrene
Concen: 0.09 ppm
RT: 18.545 min Scan# 3021
Delta R.T. -0.016 min
Lab File: 6F06546.d
Acq: 13 Aug 2020 3:34 pm

Tgt Ion:276 Resp: 1941

Ion	Ratio	Lower	Upper
276	100		
138	24.1	0.0	56.9
277	23.3	0.0	53.9

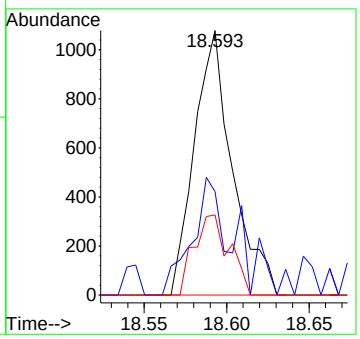


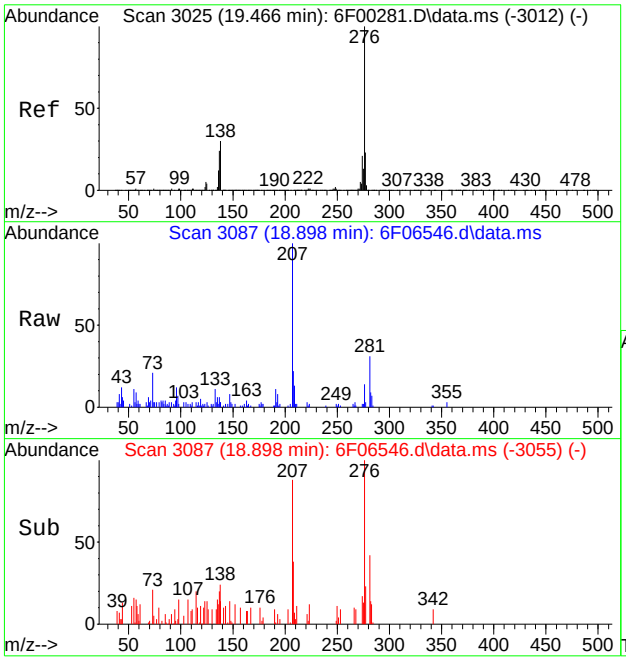


#108
Dibenz[a,h]anthracene
Concen: 0.08 ppm
RT: 18.593 min Scan# 3030
Delta R.T. -0.016 min
Lab File: 6F06546.d
Acq: 13 Aug 2020 3:34 pm

Tgt Ion:278 Resp: 1736

Ion	Ratio	Lower	Upper
278	100		
139	34.2	0.0	51.9
279	30.3	0.0	54.3

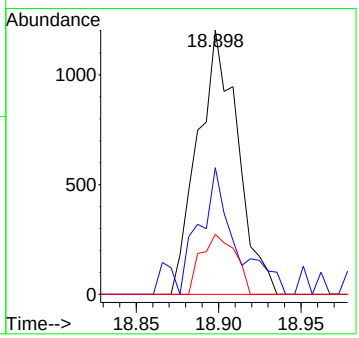




#109
Benzo[g,h,i]perylene
Concen: 0.09 ppm
RT: 18.898 min Scan# 3087
Delta R.T. -0.027 min
Lab File: 6F06546.d
Acq: 13 Aug 2020 3:34 pm

Tgt Ion:276 Resp: 2030

Ion	Ratio	Lower	Upper
276	100		
138	41.9	0.0	59.3
277	22.7	0.0	53.8



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11131.d
Acq On : 11 Aug 2020 8:52 am
Operator : FOUADS
Sample : op81485-mb e Inst : MSBNA8
Misc : op81485,S7G483,15.0,,,1,1,soil
ALS Vial : 3 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:26:06 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

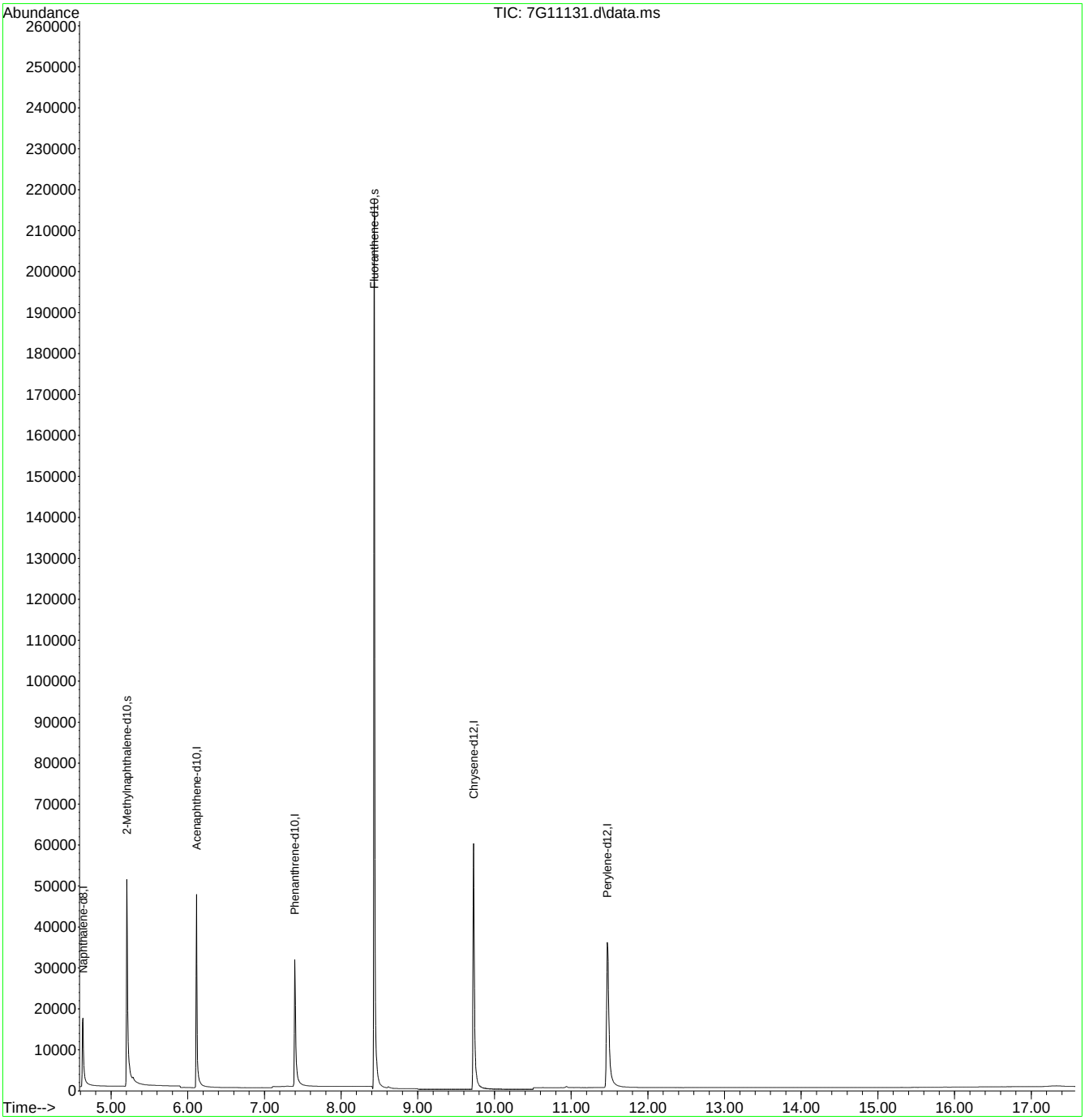
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.634	136	21667	4.00	ppm	0.00
6) Acenaphthene-d10	6.113	164	17417	4.00	ppm	0.00
11) Phenanthrene-d10	7.396	188	34159	4.00	ppm	0.00
18) Chrysene-d12	9.727	240	60313	4.00	ppm	0.00
22) Perylene-d12	11.472	264	54929	4.00	ppm	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.205	152	25388	7.88	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 78.80%			
17) Fluoranthene-d10	8.433	212	161036	9.03	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 90.30%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11131.d
Acq On : 11 Aug 2020 8:52 am
Operator : FOUADS
Sample : op81485-mb e Inst : MSBNA8
Misc : op81485,S7G483,15.0,,,1,1,soil
ALS Vial : 3 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:26:06 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 08/12/20 14:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06487.d
Acq On : 11 Aug 2020 1:20 pm
Operator : marthav
Sample : op81484-bs E Inst : MSBNA10
Misc : op81484,S6F251,30.0,,,1,1,soil
ALS Vial : 3 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Results File: 8270D6F072920.RES
Quant Time: Aug 12 06:03:08 2020
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.035	152	372320	40.00	ppm	0.00
22) Naphthalene-d8	7.468	136	1389543	40.00	ppm	0.00
43) Acenaphthene-d10	9.522	164	731029	40.00	ppm	0.00
70) Phenanthrene-d10	11.276	188	1322211	40.00	ppm	0.00
92) Chrysene-d12	14.576	240	1161496	40.00	ppm	0.00
102) Perylene-d12	16.930	264	1125889	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	4.665	112	978233	69.53	ppm	0.00
Spiked Amount 100.000	Range 40 - 102		Recovery = 69.53%			
9) Phenol-d5	5.671	99	1270651	76.08	ppm	0.00
Spiked Amount 100.000	Range 41 - 100		Recovery = 76.08%			
23) Nitrobenzene-d5	6.650	82	539574	35.39	ppm	0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 70.78%			
47) 2-Fluorobiphenyl	8.741	172	1045674	36.60	ppm	0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 73.20%			
75) 2,4,6-Tribromophenol	10.458	330	368458	82.80	ppm	0.00
Spiked Amount 100.000	Range 42 - 108		Recovery = 82.80%			
95) Terphenyl-d14	13.202	244	1237770	37.91	ppm	0.00
Spiked Amount 50.000	Range 45 - 119		Recovery = 75.82%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.879	88	145404	26.26	ppm	# 67
3) N-nitrosodimethylamine	3.200	42	241908	32.02	ppm	# 61
4) Pyridine	3.243	79	413230	28.98	ppm	# 57
5) Benzaldehyde	5.559	106	370915	32.53	ppm	96
6) Aniline	5.676	93	623641	28.56	ppm	65
8) bis(2-Chloroethyl)ether	5.757	93	508000	35.52	ppm	87
10) Phenol	5.687	94	691288	35.60	ppm	96
11) 2-Chlorophenol	5.810	128	521890	36.20	ppm	90
12) 1,3-Dichlorobenzene	5.971	146	529503	33.96	ppm	98
13) 1,4-Dichlorobenzene	6.056	146	533104	33.73	ppm	97
14) 1,2-Dichlorobenzene	6.217	146	511691	34.31	ppm	99
15) Benzyl alcohol	6.201	108	328618	37.34	ppm	98
16) bis(2-chloroisopropyl)...	6.350	45	651017	36.40	ppm	76
17) 2-Methylphenol	6.340	108	453122	34.90	ppm	96
18) Acetophenone	6.484	105	688983	35.80	ppm	99
19) Hexachloroethane	6.591	117	216048	33.49	ppm	91
20) N-Nitroso-di-n-propyla...	6.495	70	360475	35.28	ppm	# 67
21) 3&4-Methylphenol	6.516	108	983286	72.88	ppm	96
24) Nitrobenzene	6.671	77	538544	36.28	ppm	95
25) Isophorone	6.949	82	1026254	38.47	ppm	100
26) 2-Nitrophenol	7.035	139	283114	38.72	ppm	87
27) 2,4-Dimethylphenol	7.110	107	443512	35.04	ppm	99
29) bis(2-Chloroethoxy)met...	7.211	93	638687	39.10	ppm	98
30) Benzoic Acid	7.286	105	911139	74.79	ppm	98
31) 2,4-Dichlorophenol	7.324	162	429052	38.12	ppm	95
32) 1,2,4-Trichlorobenzene	7.404	180	450883	36.03	ppm	99
34) Naphthalene	7.490	128	1416153	36.03	ppm	98
35) 4-Chloroaniline	7.570	127	528563	30.84	ppm	94
36) 2,6-Dichlorophenol	7.575	162	410587	37.53	ppm	95
37) Hexachlorobutadiene	7.645	225	252390	36.76	ppm	98
38) Caprolactam	7.987	113	179794m	40.94	ppm	
39) 4-Chloro-3-methylphenol	8.158	107	452957	39.04	ppm	97
40) 2-Methylnaphthalene	8.297	141	861790	37.50	ppm	98
41) 1-Methylnaphthalene	8.415	142	909325	36.00	ppm	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06487.d
Acq On : 11 Aug 2020 1:20 pm
Operator : marthav
Sample : op81484-bs E Inst : MSBNA10
Misc : op81484,S6F251,30.0,,,1,1,soil
ALS Vial : 3 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Results File: 8270D6F072920.RES
Quant Time: Aug 12 06:03:08 2020
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

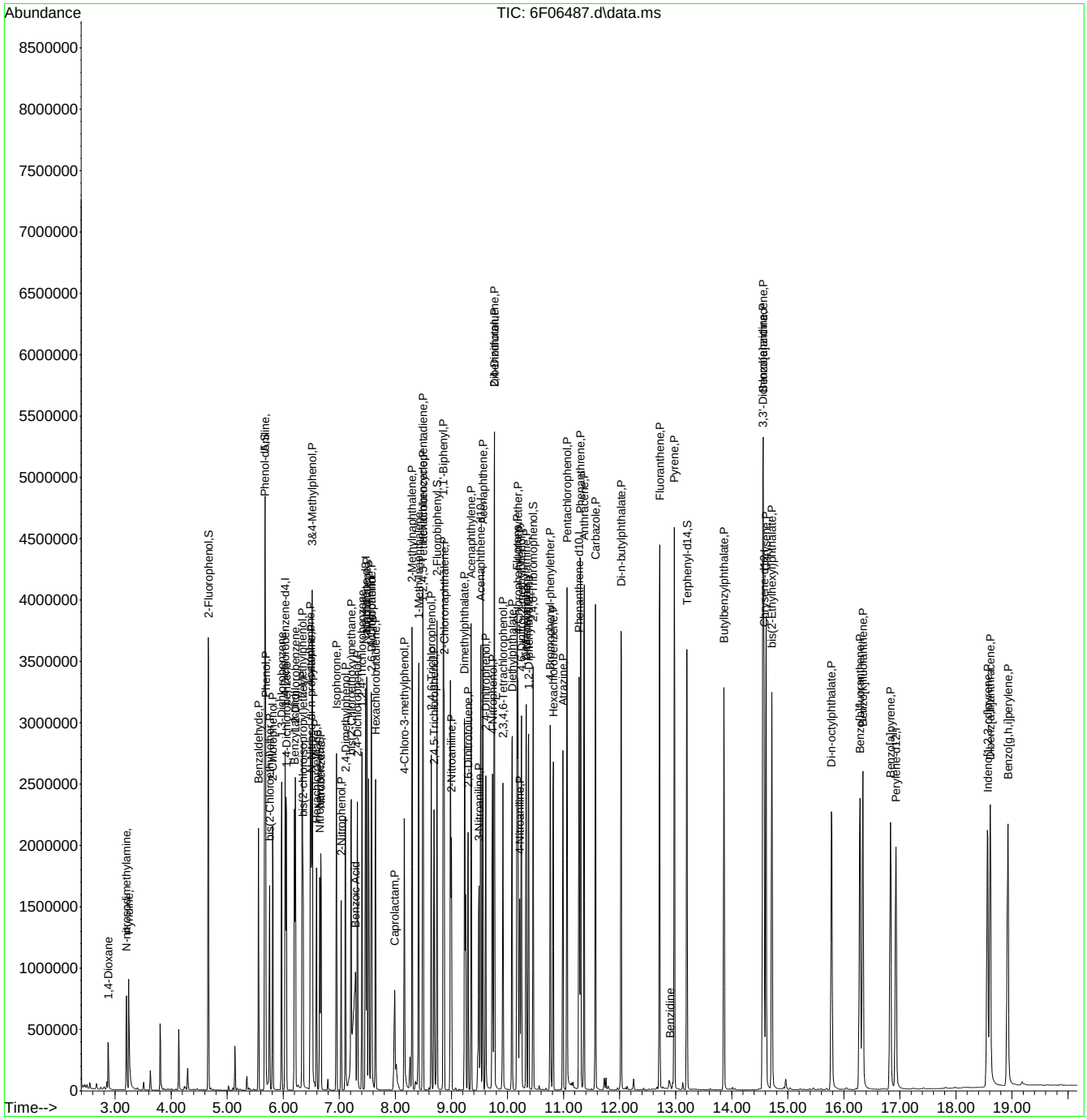
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42) 1,2,4,5-Tetrachloroben...	8.495	216	446086	36.98	ppm		99
44) Hexachlorocyclopentadiene	8.490	237	333374	43.78	ppm		97
45) 2,4,6-Trichlorophenol	8.640	196	325981	40.87	ppm		97
46) 2,4,5-Trichlorophenol	8.688	196	349991	41.17	ppm		98
48) 1,1'-Biphenyl	8.853	154	1166538	38.21	ppm		97
49) 2-Chloronaphthalene	8.869	162	908512	37.83	ppm		97
50) 2-Nitroaniline	8.998	65	387637	51.54	ppm		86
52) Acenaphthylene	9.351	152	1504330	41.18	ppm		97
53) Dimethylphthalate	9.233	163	1138834	41.75	ppm		99
55) 2,6-Dinitrotoluene	9.297	165	263633	41.61	ppm		96
57) Acenaphthene	9.559	153	930843	38.37	ppm		97
58) 3-Nitroaniline	9.490	138	274221	37.52	ppm		99
59) 2,4-Dinitrophenol	9.613	184	355255	79.86	ppm		84
60) Dibenzofuran	9.768	168	1320044	39.36	ppm		98
61) 2,4-Dinitrotoluene	9.768	165	378279	45.34	ppm		86
62) 4-Nitrophenol	9.736	109	351003	83.97	ppm	#	81
64) 2,3,4,6-Tetrachlorophenol	9.918	232	277576	40.48	ppm		97
65) Fluorene	10.169	166	1100684	40.53	ppm		99
66) 4-Chlorophenyl-phenyle...	10.185	204	552164	41.10	ppm		92
67) Diethylphthalate	10.084	149	1180768	42.66	ppm		98
69) 4-Nitroaniline	10.217	138	289820	39.24	ppm		97
71) 4,6-Dinitro-2-methylph...	10.249	198	491187	83.42	ppm	#	73
72) n-Nitrosodiphenylamine	10.335	169	792996	38.59	ppm		97
73) Diphenylamine	10.335	169	792996	34.61	ppm		97
74) 1,2-Diphenylhydrazine	10.378	77	1139605	38.89	ppm		97
78) 4-Bromophenyl-phenylether	10.763	248	333801	43.26	ppm		98
79) Hexachlorobenzene	10.816	284	358214	40.65	ppm		80
82) Atrazine	10.988	200	321509	41.28	ppm		94
83) Pentachlorophenol	11.062	266	470786	82.87	ppm		99
84) Phenanthrene	11.303	178	1617646	40.86	ppm		99
85) Anthracene	11.367	178	1589313	39.50	ppm		99
87) Carbazole	11.571	167	1528029	42.15	ppm		96
89) Di-n-butylphthalate	12.025	149	2019771	44.20	ppm		98
91) Fluoranthene	12.715	202	1746093	41.89	ppm		99
93) Benzidine	12.897	184	20943	0.86	ppm		98
94) Pyrene	12.977	202	1784903	42.90	ppm		97
97) Butylbenzylphthalate	13.860	149	890865	44.69	ppm		94
98) 3,3'-Dichlorobenzidine	14.555	252	567298	37.67	ppm		99
99) Benzo[a]anthracene	14.560	228	1640333	42.15	ppm		97
100) Chrysene	14.614	228	1615662	42.79	ppm		99
101) bis(2-Ethylhexyl)phtha...	14.716	149	1209555	43.45	ppm		97
103) Di-n-octylphthalate	15.780	149	1938916	43.54	ppm		93
104) Benzo[b]fluoranthene	16.288	252	1532046	42.39	ppm		98
105) Benzo[k]fluoranthene	16.342	252	1627372	43.30	ppm		98
106) Benzo[a]pyrene	16.834	252	1412854	42.10	ppm		97
107) Indeno[1,2,3-cd]pyrene	18.567	276	1356182	43.40	ppm		93
108) Dibenz[a,h]anthracene	18.615	278	1442291	43.23	ppm		91
109) Benzo[g,h,i]perylene	18.930	276	1512447	44.85	ppm		95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06487.d
Acq On : 11 Aug 2020 1:20 pm
Operator : marthav
Sample : op81484-bs E Inst : MSBNA10
Misc : op81484,S6F251,30.0,,,1,1,soil
ALS Vial : 3 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Results File: 8270D6F072920.RES
Quant Time: Aug 12 06:03:08 2020
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration



Manual Integration Approval Summary

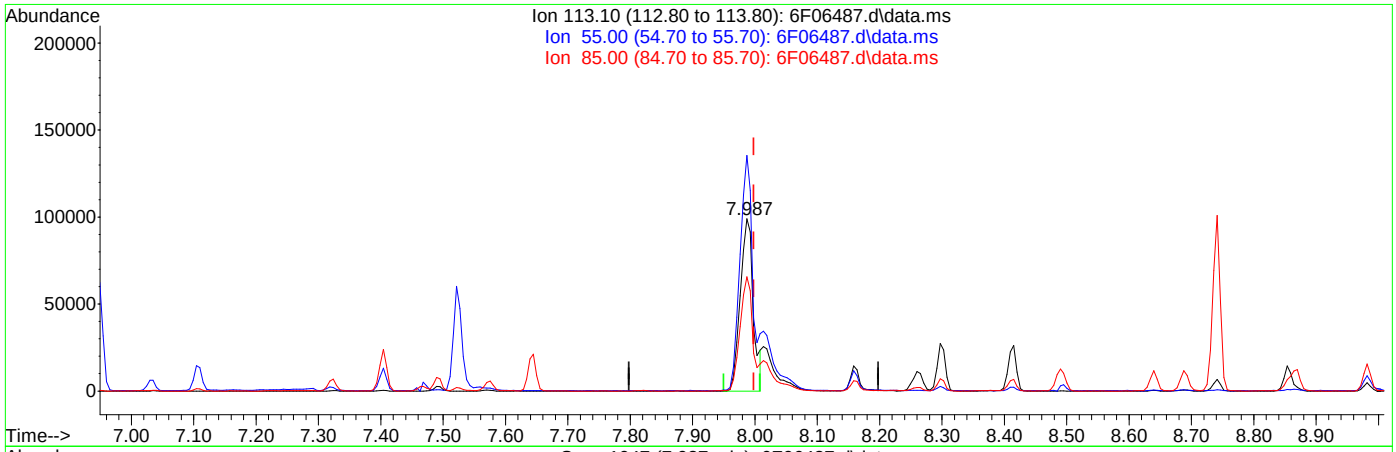
Sample Number:	OP81484-BS	**Method:**	SW846 8270E
Lab FileID:	6F06487.D	**Analyst approved:**	08/12/20 07:02 Jennifer Fereira
Injection Time:	08/11/20 13:20	**Supervisor approved:**	08/12/20 14:43 Nicole McCampbell

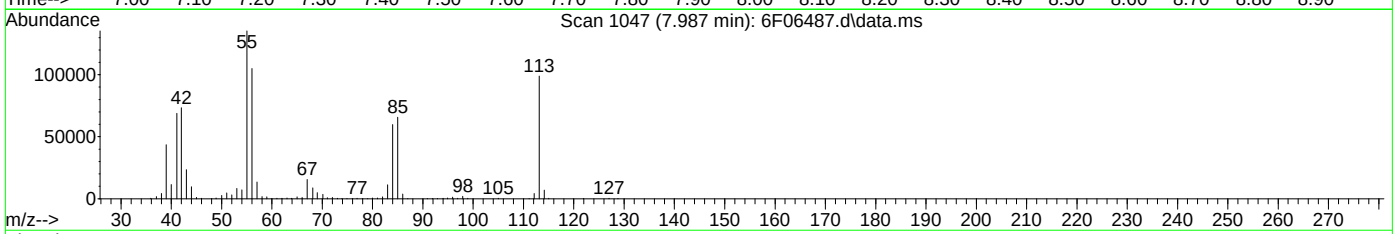
Parameter	CAS	Sig#	R.T. (min.)	Reason
Caprolactam	105-60-2		7.99	Split peak

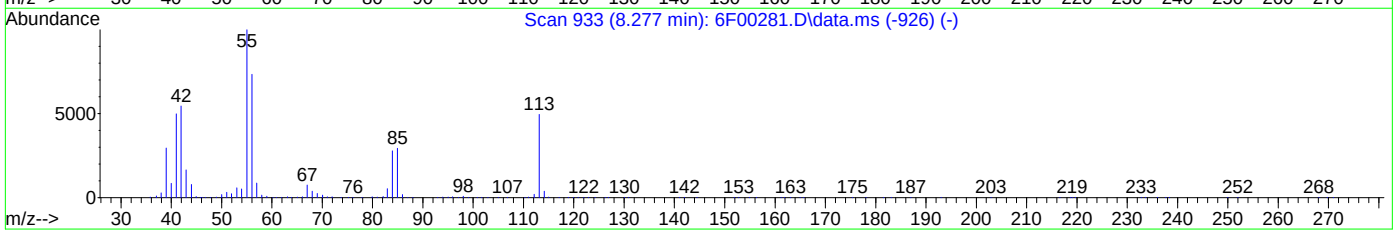
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06487.d
Acq On : 11 Aug 2020 1:20 pm
Operator : marthav
Sample : op81484-bs E Inst : MSBNA10
Misc : op81484,S6F251,30.0,,,1,1,soil
ALS Vial : 3 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Results File: 8270D6F072920.RES
Quant Time: Aug 12 05:58:44 2020
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration







TIC: 6F06487.d\data.ms

(38) Caprolactam (P)

7.987min (-0.011) 32.43ppm

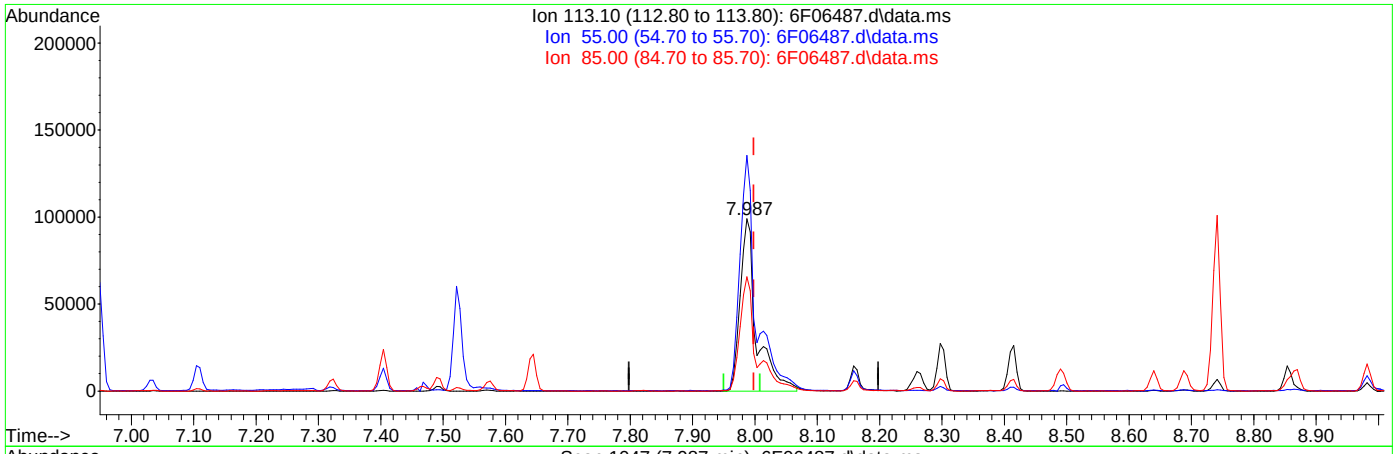
response 142424

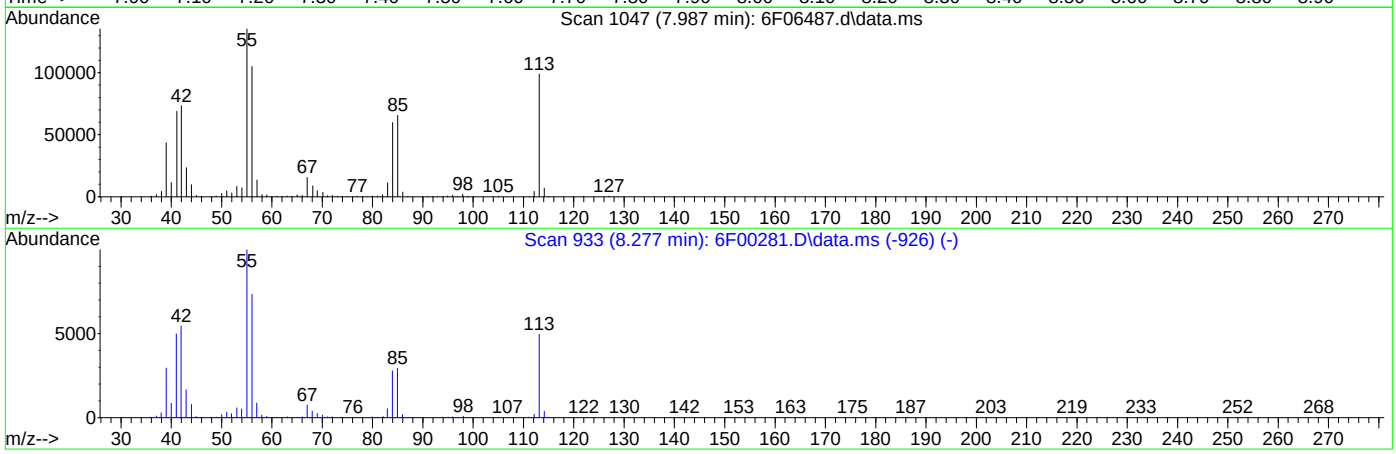
Ion	Exp%	Act%
113.10	100	100
55.00	202.10	136.08#
85.00	59.40	66.35
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06487.d
Acq On : 11 Aug 2020 1:20 pm
Operator : marthav
Sample : op81484-bs E Inst : MSBNA10
Misc : op81484,S6F251,30.0,,,1,1,soil
ALS Vial : 3 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Results File: 8270D6F072920.RES
Quant Time: Aug 12 05:58:44 2020
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration





TIC: 6F06487.d\data.ms

(38) Caprolactam (P)

7.987min (-0.011) 40.94ppm m

response 179794

Ion	Exp%	Act%
113.10	100	100
55.00	202.10	136.85#
85.00	59.40	66.39
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s6f253\
Data File : 6F06545.d
Acq On : 13 Aug 2020 3:08 pm
Operator : marthav
Sample : op81538-bs E
Misc : op81538,S6F253,30.0,,,1,1,soil
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 14 04:48:21 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.024	152	397644	40.00	ppm	0.00
22) Naphthalene-d8	7.457	136	1244035	40.00	ppm	0.00
43) Acenaphthene-d10	9.511	164	598082	40.00	ppm	0.00
70) Phenanthrene-d10	11.266	188	1013646	40.00	ppm	0.00
92) Chrysene-d12	14.566	240	771358	40.00	ppm	0.00
102) Perylene-d12	16.919	264	709104	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	4.655	112	987392	65.71	ppm	0.00
Spiked Amount 100.000	Range 40 - 102		Recovery = 65.71%			
9) Phenol-d5	5.660	99	1075222	60.28	ppm	0.00
Spiked Amount 100.000	Range 41 - 100		Recovery = 60.28%			
23) Nitrobenzene-d5	6.639	82	443678	32.51	ppm	0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 65.02%			
47) 2-Fluorobiphenyl	8.730	172	854253	36.54	ppm	0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 73.08%			
75) 2,4,6-Tribromophenol	10.447	330	272709	79.94	ppm	0.00
Spiked Amount 100.000	Range 42 - 108		Recovery = 79.94%			
95) Terphenyl-d14	13.191	244	838797	38.69	ppm	0.00
Spiked Amount 50.000	Range 45 - 119		Recovery = 77.38%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.863	88	184578	31.21	ppm	99
3) N-nitrosodimethylamine	3.189	42	186652	23.14	ppm	90
4) Pyridine	3.232	79	517688	33.99	ppm	98
5) Benzaldehyde	5.548	106	376779	30.94	ppm	97
6) Aniline	5.666	93	601596	25.80	ppm	98
8) bis(2-Chloroethyl)ether	5.746	93	479697	31.41	ppm	97
10) Phenol	5.676	94	606191	29.23	ppm	94
11) 2-Chlorophenol	5.799	128	481834	31.29	ppm	98
12) 1,3-Dichlorobenzene	5.960	146	538151	32.32	ppm	99
13) 1,4-Dichlorobenzene	6.045	146	540716	32.03	ppm	99
14) 1,2-Dichlorobenzene	6.206	146	497973	31.26	ppm	99
15) Benzyl alcohol	6.190	108	304375	32.38	ppm	93
16) bis(2-chloroisopropyl)...	6.340	45	570045	29.84	ppm	85
17) 2-Methylphenol	6.329	108	394645	28.46	ppm	94
18) Acetophenone	6.473	105	601047	29.24	ppm	99
19) Hexachloroethane	6.580	117	202463	29.38	ppm	93
20) N-Nitroso-di-n-propyla...	6.484	70	303675	27.83	ppm	97
21) 3&4-Methylphenol	6.505	108	832127	57.74	ppm	98
24) Nitrobenzene	6.666	77	447125	33.64	ppm	94
25) Isophorone	6.939	82	843477	35.32	ppm	100
26) 2-Nitrophenol	7.024	139	255362	39.01	ppm	90
27) 2,4-Dimethylphenol	7.099	107	384309	33.91	ppm	98
29) bis(2-Chloroethoxy)met...	7.201	93	545234	37.28	ppm	99
30) Benzoic Acid	7.270	105	689831	65.45	ppm	99
31) 2,4-Dichlorophenol	7.313	162	366275	36.34	ppm	100
32) 1,2,4-Trichlorobenzene	7.393	180	414295	36.98	ppm	99
34) Naphthalene	7.484	128	1232591	35.02	ppm	99
35) 4-Chloroaniline	7.559	127	491018	32.00	ppm	97
36) 2,6-Dichlorophenol	7.570	162	349130	35.64	ppm	99
37) Hexachlorobutadiene	7.634	225	233583	38.00	ppm	99
38) Caprolactam	7.976	113	135927	34.57	ppm	95
39) 4-Chloro-3-methylphenol	8.153	107	403338	38.83	ppm	96
40) 2-Methylnaphthalene	8.292	141	737346	35.83	ppm	99
41) 1-Methylnaphthalene	8.404	142	767119	33.92	ppm	100
42) 1,2,4,5-Tetrachloroben...	8.484	216	386151	35.75	ppm	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s6f253\
Data File : 6F06545.d
Acq On : 13 Aug 2020 3:08 pm
Operator : marthav
Sample : op81538-bs E
Misc : op81538,S6F253,30.0,,,1,1,soil
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 14 04:48:21 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

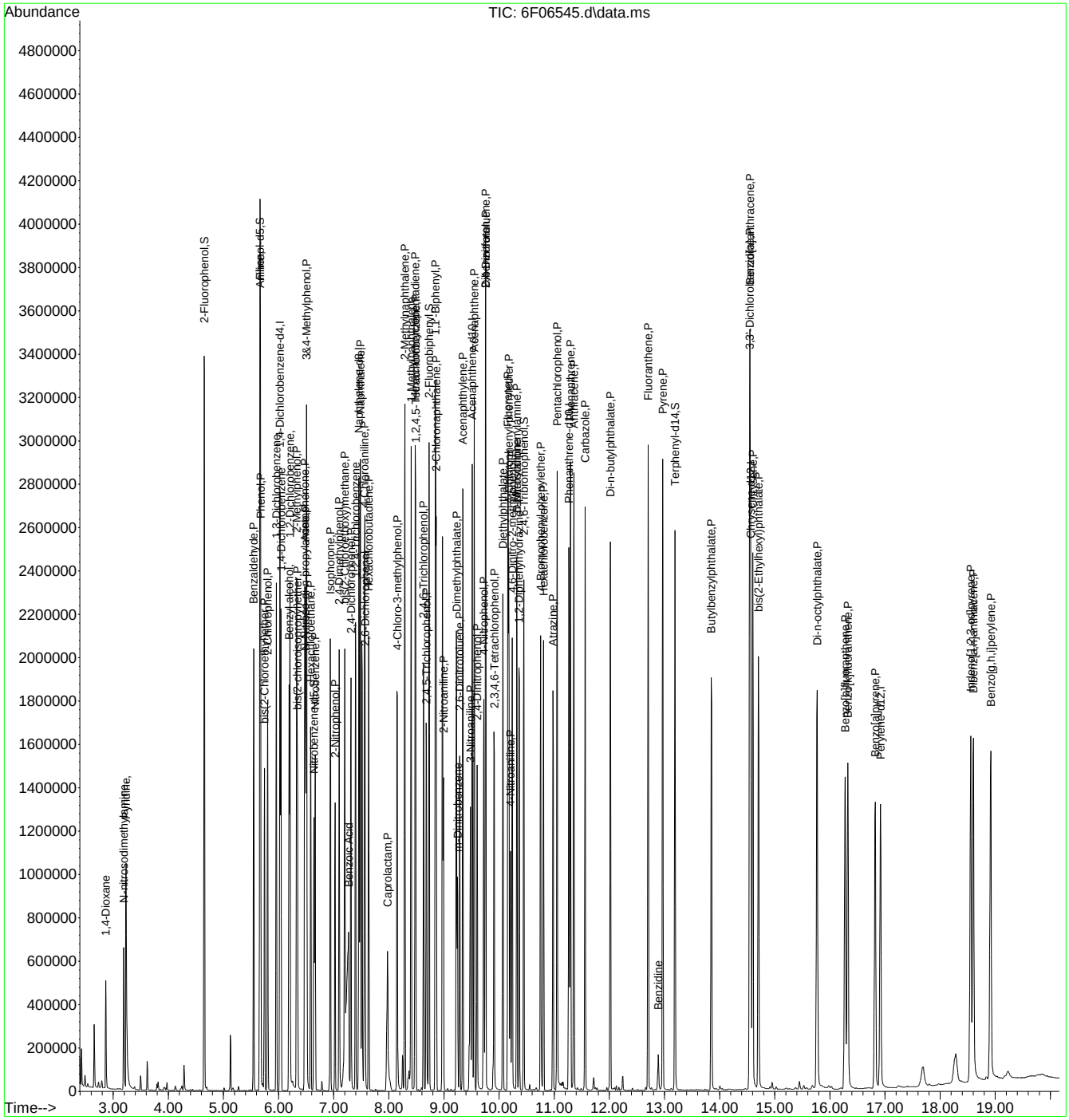
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
44)	Hexachlorocyclopentadiene	8.479	237	276005	44.30	ppm		98
45)	2,4,6-Trichlorophenol	8.629	196	266847	40.89	ppm		99
46)	2,4,5-Trichlorophenol	8.682	196	287094	41.28	ppm		98
48)	1,1'-Biphenyl	8.843	154	947407	37.93	ppm		99
49)	2-Chloronaphthalene	8.859	162	744614	37.89	ppm		99
50)	2-Nitroaniline	8.993	65	265385	43.13	ppm		90
52)	Acenaphthylene	9.340	152	1226417	41.03	ppm		99
53)	Dimethylphthalate	9.228	163	894961	40.10	ppm		99
54)	m-Dinitrobenzene	9.249	168	156018	40.37	ppm		81
55)	2,6-Dinitrotoluene	9.287	165	206811	39.90	ppm		96
57)	Acenaphthene	9.549	153	740584	37.31	ppm		96
58)	3-Nitroaniline	9.479	138	224596	37.56	ppm		100
59)	2,4-Dinitrophenol	9.602	184	236864	69.63	ppm		97
60)	Dibenzofuran	9.757	168	1033602	37.67	ppm		90
61)	2,4-Dinitrotoluene	9.757	165	274408	40.21	ppm		90
62)	4-Nitrophenol	9.725	109	213924	62.55	ppm		98
64)	2,3,4,6-Tetrachlorophenol	9.912	232	218368	38.92	ppm		97
65)	Fluorene	10.159	166	851560	38.33	ppm		100
66)	4-Chlorophenyl-phenyle...	10.175	204	437076	39.77	ppm		98
67)	Diethylphthalate	10.068	149	881039	38.91	ppm		99
69)	4-Nitroaniline	10.207	138	218626	36.18	ppm		99
71)	4,6-Dinitro-2-methylph...	10.239	198	348046	78.73	ppm	#	57
72)	n-Nitrosodiphenylamine	10.319	169	607313	38.55	ppm		99
73)	Diphenylamine	10.319	169	607313	34.57	ppm		99
74)	1,2-Diphenylhydrazine	10.362	77	800184	35.62	ppm		96
78)	4-Bromophenyl-phenylether	10.752	248	259658	43.89	ppm		98
79)	Hexachlorobenzene	10.806	284	274495	40.63	ppm		95
82)	Atrazine	10.977	200	233839	39.16	ppm		94
83)	Pentachlorophenol	11.052	266	341695	79.69	ppm		98
84)	Phenanthrene	11.298	178	1174574	38.70	ppm		100
85)	Anthracene	11.357	178	1161569	37.66	ppm		100
87)	Carbazole	11.560	167	1080767	38.89	ppm		99
89)	Di-n-butylphthalate	12.020	149	1409847	40.25	ppm		100
91)	Fluoranthene	12.704	202	1207944	37.80	ppm		99
93)	Benzidine	12.886	184	69424	4.31	ppm		99
94)	Pyrene	12.967	202	1220377	44.17	ppm		99
97)	Butylbenzylphthalate	13.849	149	581681	43.94	ppm		100
98)	3,3'-Dichlorobenzidine	14.544	252	403562	40.36	ppm		99
99)	Benzo[a]anthracene	14.550	228	1027208	39.74	ppm		100
100)	Chrysene	14.603	228	1036837	41.35	ppm		99
101)	bis(2-Ethylhexyl)phtha...	14.705	149	780942	42.24	ppm		99
103)	Di-n-octylphthalate	15.769	149	1501641	53.54	ppm		99
104)	Benzo[b]fluoranthene	16.277	252	911236	40.04	ppm		99
105)	Benzo[k]fluoranthene	16.326	252	938697	39.65	ppm		100
106)	Benzo[a]pyrene	16.823	252	849293	40.18	ppm		99
107)	Indeno[1,2,3-cd]pyrene	18.556	276	932651	47.39	ppm		97
108)	Dibenz[a,h]anthracene	18.604	278	944655	44.96	ppm		100
109)	Benzo[g,h,i]perylene	18.920	276	1019524	48.00	ppm		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s6f253\
Data File : 6F06545.d
Acq On : 13 Aug 2020 3:08 pm
Operator : marthav
Sample : op81538-bs E
Misc : op81538,S6F253,30.0,,,1,1,soil
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 14 04:48:21 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 08/12/20 11:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11132.d
Acq On : 11 Aug 2020 9:16 am
Operator : FOUADS
Sample : op81485-bs e Inst : MSBNA8
Misc : op81485,S7G483,15.0,,,1,1,soil
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:28:26 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

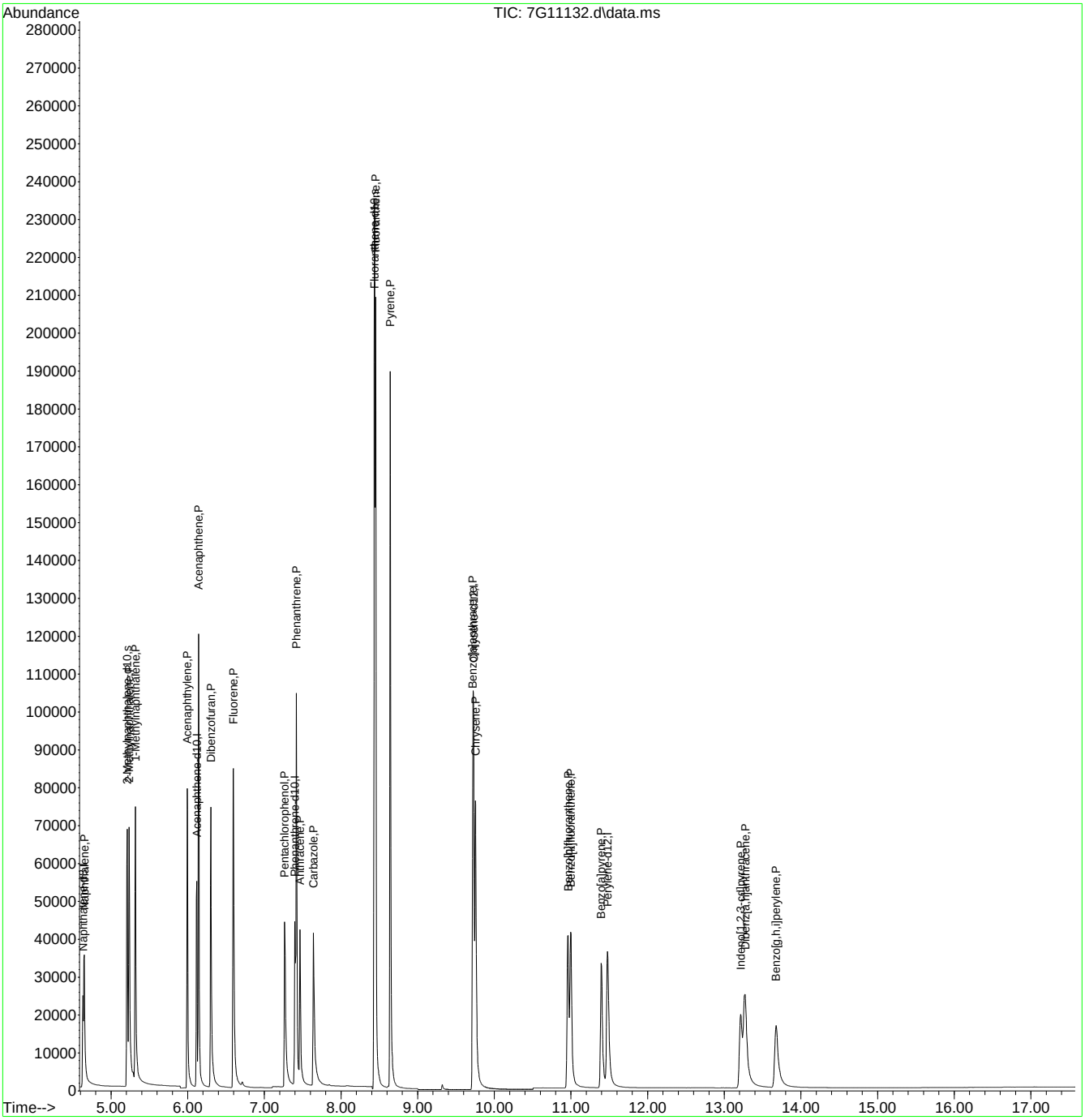
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.634	136	22419	4.00	ppm	0.00
6) Acenaphthene-d10	6.118	164	17721	4.00	ppm	0.00
11) Phenanthrene-d10	7.396	188	35054	4.00	ppm	0.00
18) Chrysene-d12	9.729	240	60725	4.00	ppm	0.00
22) Perylene-d12	11.477	264	55339	4.00	ppm	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.211	152	29576	8.84	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 88.40%			
17) Fluoranthene-d10	8.436	212	164610	9.00	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 90.00%			
Target Compounds						Qvalue
2) Naphthalene	4.652	128	33845	5.28	ppm	98
3) 2-Methylnaphthalene	5.235	142	29074	5.83	ppm	97
5) 1-Methylnaphthalene	5.317	142	32676	7.25	ppm	95
7) Acenaphthylene	5.993	152	55401	5.41	ppm	99
8) Acenaphthene	6.143	153	38067	5.69	ppm	98
9) Dibenzofuran	6.302	168	55169	11.59	ppm	90
10) Fluorene	6.597	166	43755	6.00	ppm	95
12) Pentachlorophenol	7.264	266	19636	14.44	ppm	99
13) Phenanthrene	7.417	178	65210	5.60	ppm	96
14) Anthracene	7.466	178	32656	2.80	ppm	100
15) Carbazole	7.640	167	45989	2.19	ppm	98
16) Fluoranthene	8.452	202	140035	6.36	ppm	98
19) Pyrene	8.642	202	138231	5.72	ppm	96
20) Benzo[a]anthracene	9.720	228	54693	2.89	ppm	99
21) Chrysene	9.753	228	67669	3.22	ppm	99
23) Benzo[b]fluoranthene	10.962	252	48197	2.57	ppm	98
24) Benzo[k]fluoranthene	10.996	252	61199	3.07	ppm	98
25) Benzo[a]pyrene	11.394	252	49703	2.72	ppm	98
26) Indeno[1,2,3-cd]pyrene	13.214	276	35757m	2.99	ppm	
27) Dibenz[a,h]anthracene	13.272	278	42571	3.21	ppm	96
28) Benzo[g,h,i]perylene	13.675	276	40007	2.78	ppm	92

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11132.d
Acq On : 11 Aug 2020 9:16 am
Operator : FOUADS
Sample : op81485-bs e Inst : MSBNA8
Misc : op81485,S7G483,15.0,,,1,1,soil
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:28:26 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration



Manual Integration Approval Summary

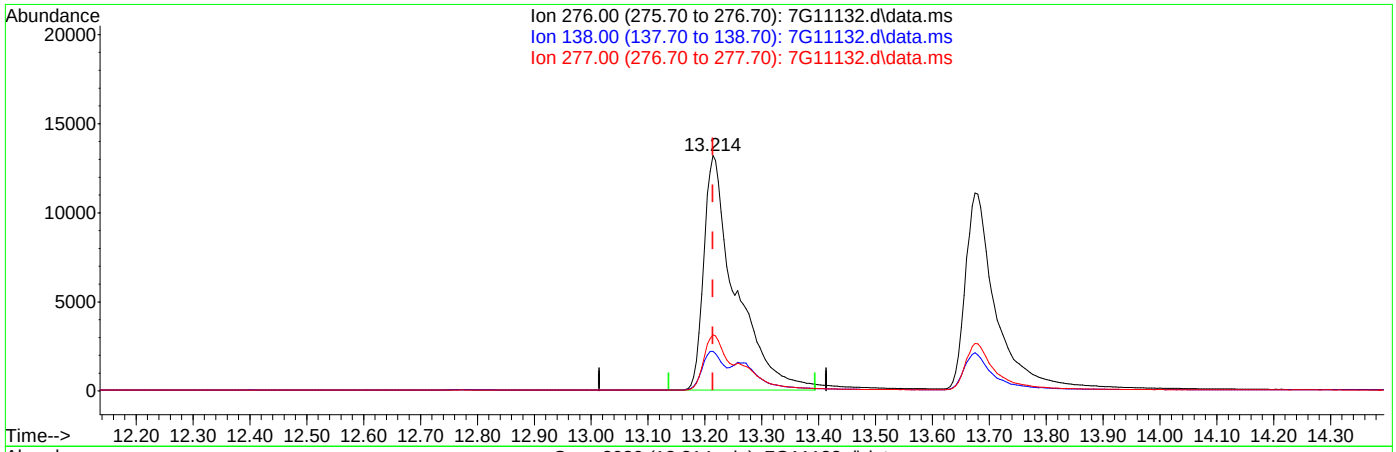
Sample Number: OP81485-BS
Lab FileID: 7G11132.D
Injection Time: 08/11/20 09:16
Method: SW846 8270E BY SIM
Analyst approved: 08/12/20 08:06 Jennifer Fereira
Supervisor approved: 08/12/20 11:43 Nicole McCampbell

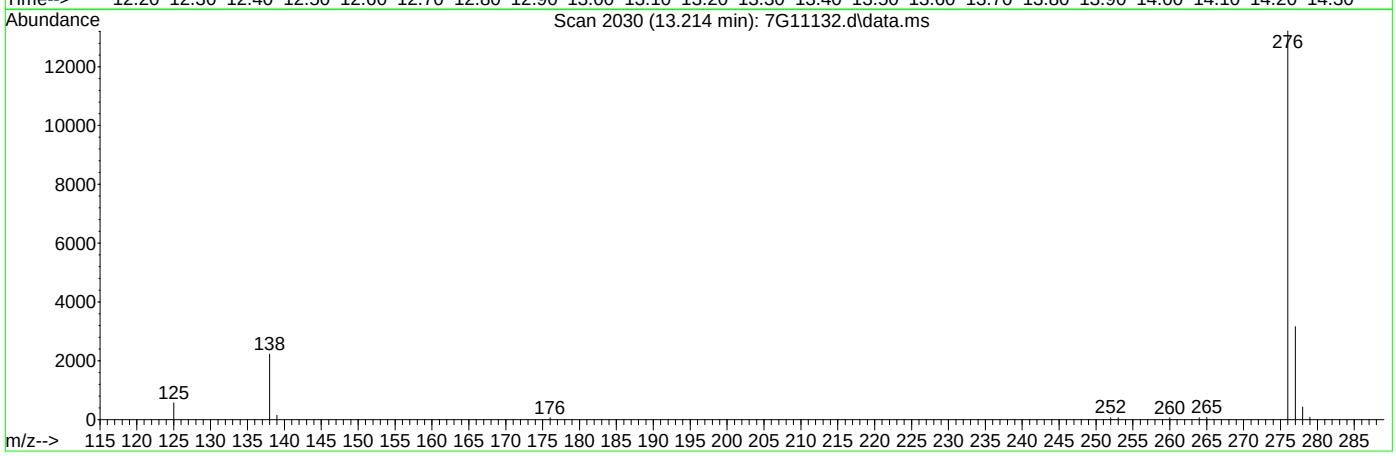
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		13.21	Missed peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11132.d
Acq On : 11 Aug 2020 9:16 am
Operator : FOUADS
Sample : op81485-bs e Inst : MSBNA8
Misc : op81485,S7G483,15.0,,,1,1,soil
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:26:09 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration





TIC: 7G11132.d\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.214min (-0.000) 4.28ppm

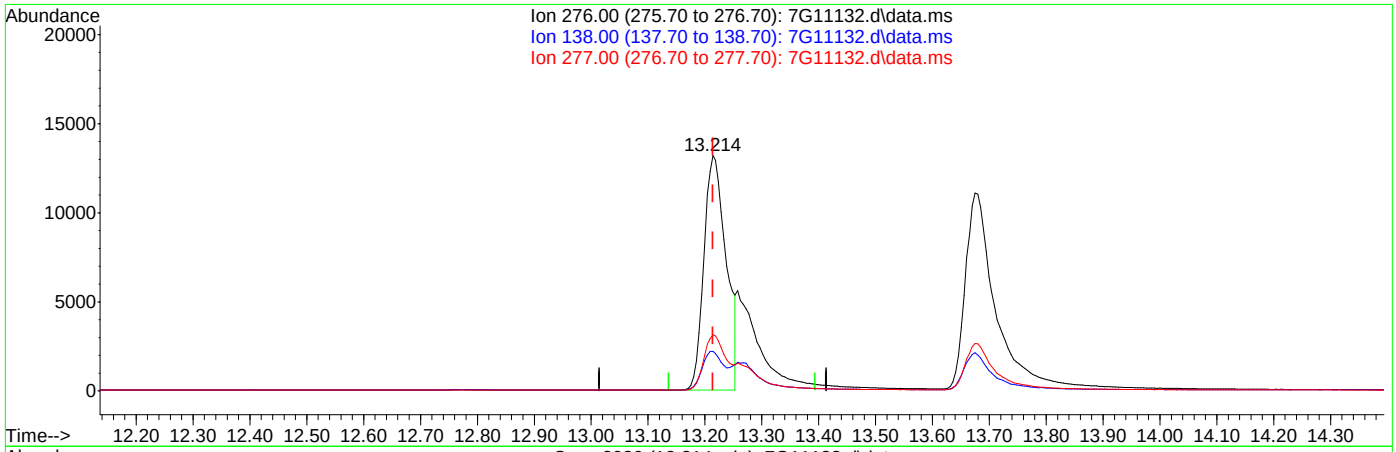
response 51083

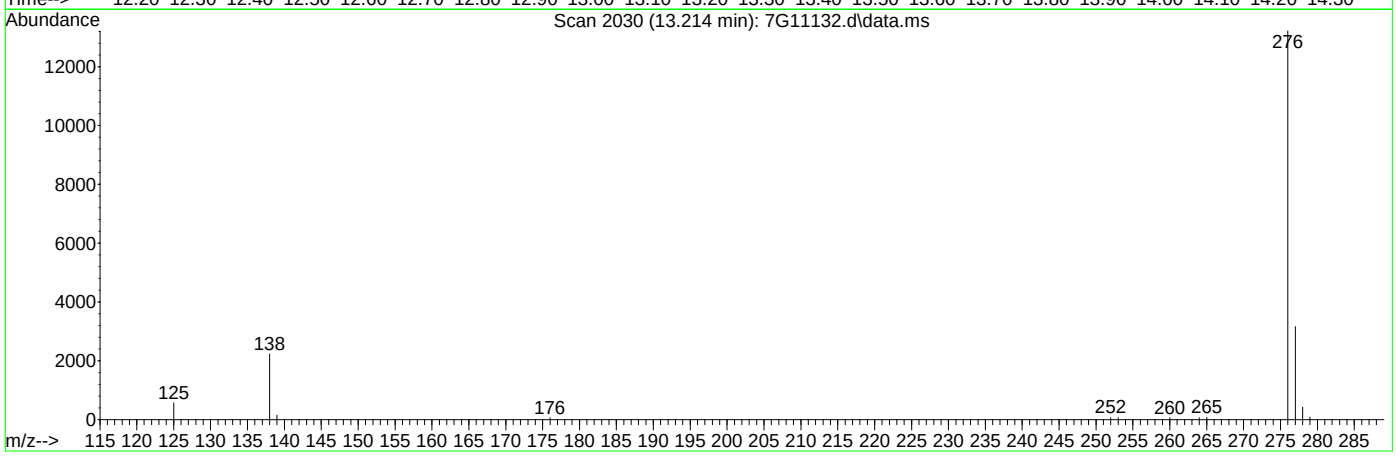
Ion	Exp%	Act%
276.00	100	100
138.00	9.60	16.35
277.00	23.10	23.54
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11132.d
Acq On : 11 Aug 2020 9:16 am
Operator : FOUADS
Sample : op81485-bs e Inst : MSBNA8
Misc : op81485,S7G483,15.0,,,1,1,soil
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:26:09 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration





TIC: 7G11132.d\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.214min (-0.000) 2.99ppm m

response 35757

Ion	Exp%	Act%
276.00	100	100
138.00	9.60	16.84
277.00	23.10	23.90
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06499.d
Acq On : 11 Aug 2020 6:34 pm
Operator : marthav
Sample : op81484-ms E Inst : MSBNA10
Misc : op81484,S6F251,30.0,,,1,1,soil
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Results File: 8270D6F072920.RES
Quant Time: Aug 12 06:26:06 2020
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.035	152	355841	40.00	ppm	0.00
22) Naphthalene-d8	7.468	136	1312698	40.00	ppm	0.00
43) Acenaphthene-d10	9.522	164	687606	40.00	ppm	0.00
70) Phenanthrene-d10	11.282	188	1237189	40.00	ppm	0.00
92) Chrysene-d12	14.582	240	1078087	40.00	ppm	0.00
102) Perylene-d12	16.946	264	1108819	40.00	ppm	0.02
System Monitoring Compounds						
7) 2-Fluorophenol	4.671	112	862563	64.15	ppm	0.01
Spiked Amount 100.000	Range 40 - 102		Recovery = 64.15%			
9) Phenol-d5	5.682	99	1122350	70.32	ppm	0.01
Spiked Amount 100.000	Range 41 - 100		Recovery = 70.32%			
23) Nitrobenzene-d5	6.655	82	474352	32.94	ppm	0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 65.88%			
47) 2-Fluorobiphenyl	8.741	172	928841	34.56	ppm	0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 69.12%			
75) 2,4,6-Tribromophenol	10.463	330	337789	81.12	ppm	0.00
Spiked Amount 100.000	Range 42 - 108		Recovery = 81.12%			
95) Terphenyl-d14	13.202	244	1112268	36.70	ppm	0.00
Spiked Amount 50.000	Range 45 - 119		Recovery = 73.40%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.874	88	123815	23.39	ppm	# 70
3) N-nitrosodimethylamine	3.200	42	216800	30.03	ppm	# 61
4) Pyridine	3.259	79	304168	22.32	ppm	# 58
5) Benzaldehyde	5.559	106	343979	31.56	ppm	93
6) Aniline	5.692	93	363825	17.44	ppm	# 1
8) bis(2-Chloroethyl)ether	5.757	93	479892	35.11	ppm	89
10) Phenol	5.692	94	614460	33.11	ppm	96
11) 2-Chlorophenol	5.815	128	468266	33.98	ppm	91
12) 1,3-Dichlorobenzene	5.970	146	469384	31.50	ppm	98
13) 1,4-Dichlorobenzene	6.056	146	474319	31.40	ppm	97
14) 1,2-Dichlorobenzene	6.217	146	451324	31.66	ppm	98
15) Benzyl alcohol	6.206	108	307032	36.50	ppm	97
16) bis(2-chloroisopropyl)...	6.356	45	608848	35.62	ppm	73
17) 2-Methylphenol	6.345	108	404103	32.57	ppm	94
18) Acetophenone	6.489	105	614740	33.42	ppm	98
19) Hexachloroethane	6.596	117	179613	29.13	ppm	99
20) N-Nitroso-di-n-propyla...	6.500	70	326468	33.43	ppm	# 66
21) 3&4-Methylphenol	6.521	108	894360	69.35	ppm	98
24) Nitrobenzene	6.677	77	478043	34.09	ppm	97
25) Isophorone	6.955	82	941192	37.35	ppm	99
26) 2-Nitrophenol	7.035	139	253890	36.76	ppm	96
27) 2,4-Dimethylphenol	7.115	107	429254	35.90	ppm	99
29) bis(2-Chloroethoxy)met...	7.211	93	568042	36.81	ppm	98
30) Benzoic Acid	7.297	105	885120	76.46	ppm	97
31) 2,4-Dichlorophenol	7.324	162	395175	37.16	ppm	92
32) 1,2,4-Trichlorobenzene	7.409	180	400546	33.89	ppm	99
34) Naphthalene	7.495	128	1294857	34.87	ppm	99
35) 4-Chloroaniline	7.575	127	368530	22.76	ppm	96
36) 2,6-Dichlorophenol	7.580	162	378206	36.59	ppm	97
37) Hexachlorobutadiene	7.645	225	223231	34.42	ppm	99
38) Caprolactam	7.998	113	167716	40.43	ppm	# 66
39) 4-Chloro-3-methylphenol	8.163	107	429705	39.21	ppm	98
40) 2-Methylnaphthalene	8.303	141	772999	35.60	ppm	98
41) 1-Methylnaphthalene	8.415	142	829744	34.77	ppm	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06499.d
Acq On : 11 Aug 2020 6:34 pm
Operator : marthav
Sample : op81484-ms E Inst : MSBNA10
Misc : op81484,S6F251,30.0,,,1,1,soil
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Results File: 8270D6F072920.RES
Quant Time: Aug 12 06:26:06 2020
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

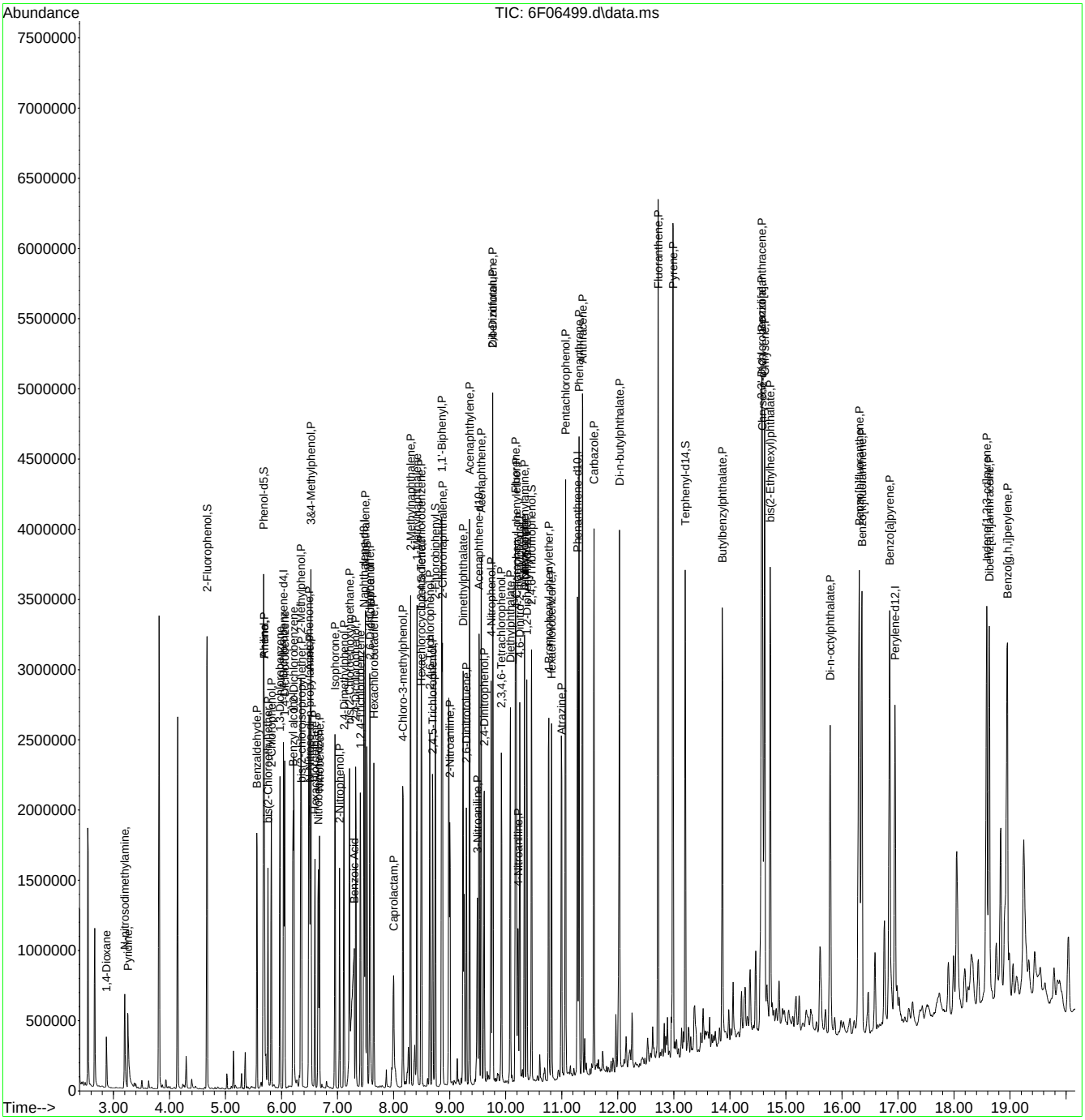
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42) 1,2,4,5-Tetrachloroben...	8.495	216	403298	35.39	ppm		99
44) Hexachlorocyclopentadiene	8.490	237	206531	28.83	ppm		96
45) 2,4,6-Trichlorophenol	8.645	196	306923	40.91	ppm		96
46) 2,4,5-Trichlorophenol	8.698	196	339398	42.45	ppm		97
48) 1,1'-Biphenyl	8.859	154	1058961	36.88	ppm		98
49) 2-Chloronaphthalene	8.869	162	822145	36.39	ppm		96
50) 2-Nitroaniline	9.003	65	357071	50.48	ppm		85
52) Acenaphthylene	9.356	152	1604988	46.71	ppm		97
53) Dimethylphthalate	9.239	163	1045624	40.75	ppm		100
55) 2,6-Dinitrotoluene	9.297	165	241715	40.56	ppm		90
57) Acenaphthene	9.565	153	870912	38.16	ppm		98
58) 3-Nitroaniline	9.495	138	224191	32.61	ppm		99
59) 2,4-Dinitrophenol	9.618	184	317372	77.18	ppm		82
60) Dibenzofuran	9.768	168	1215830	38.54	ppm		82
61) 2,4-Dinitrotoluene	9.768	165	339431	43.26	ppm		84
62) 4-Nitrophenol	9.741	109	312267	79.42	ppm	#	86
64) 2,3,4,6-Tetrachlorophenol	9.923	232	266120	41.26	ppm		96
65) Fluorene	10.175	166	1060388	41.51	ppm		99
66) 4-Chlorophenyl-phenyle...	10.191	204	506413	40.08	ppm		95
67) Diethylphthalate	10.084	149	1080376	41.50	ppm		98
69) 4-Nitroaniline	10.223	138	213252	30.69	ppm		94
71) 4,6-Dinitro-2-methylph...	10.249	198	416427	77.58	ppm		81
72) n-Nitrosodiphenylamine	10.335	169	724838	37.69	ppm		96
73) Diphenylamine	10.335	169	724838	33.80	ppm		96
74) 1,2-Diphenylhydrazine	10.378	77	1055261	38.49	ppm		98
78) 4-Bromophenyl-phenylether	10.768	248	307233	42.55	ppm		96
79) Hexachlorobenzene	10.816	284	328401	39.83	ppm		85
82) Atrazine	10.998	200	275718	37.83	ppm		87
83) Pentachlorophenol	11.068	266	471301	86.93	ppm		100
84) Phenanthrene	11.308	178	1594188	43.03	ppm		99
85) Anthracene	11.373	178	1934665	51.39	ppm		99
87) Carbazole	11.576	167	1505595	44.38	ppm		96
89) Di-n-butylphthalate	12.031	149	1854413	43.37	ppm		99
91) Fluoranthene	12.720	202	2405341	61.67	ppm		99
94) Pyrene	12.988	202	2502674	64.81	ppm		97
97) Butylbenzylphthalate	13.865	149	842834	45.56	ppm		95
98) 3,3'-Dichlorobenzidine	14.566	252	152955	10.94	ppm		98
99) Benzo[a]anthracene	14.571	228	1966411	54.43	ppm		99
100) Chrysene	14.625	228	2020685	57.65	ppm		98
101) bis(2-Ethylhexyl)phtha...	14.721	149	1143403	44.25	ppm		97
103) Di-n-octylphthalate	15.791	149	1876233	42.78	ppm		93
104) Benzo[b]fluoranthene	16.309	252	2408992	67.69	ppm		97
105) Benzo[k]fluoranthene	16.358	252	1781597	48.13	ppm		96
106) Benzo[a]pyrene	16.855	252	1698758	51.40	ppm		97
107) Indeno[1,2,3-cd]pyrene	18.583	276	1800086	58.50	ppm		95
108) Dibenz[a,h]anthracene	18.631	278	1572924	47.87	ppm		92
109) Benzo[g,h,i]perylene	18.952	276	1800689	54.22	ppm		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06499.d
Acq On : 11 Aug 2020 6:34 pm
Operator : marthav
Sample : op81484-ms E Inst : MSBNA10
Misc : op81484,S6F251,30.0,,,1,1,soil
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Results File: 8270D6F072920.RES
Quant Time: Aug 12 06:26:06 2020
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06500.d
Acq On : 11 Aug 2020 7:00 pm
Operator : marthav
Sample : op81484-msd E Inst : MSBNA10
Misc : op81484,S6F251,30.2,,,1,1,soil
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Results File: 8270D6F072920.RES
Quant Time: Aug 12 06:26:58 2020
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.040	152	349551	40.00	ppm	0.00
22) Naphthalene-d8	7.468	136	1288913	40.00	ppm	0.00
43) Acenaphthene-d10	9.527	164	676015	40.00	ppm	0.00
70) Phenanthrene-d10	11.282	188	1217631	40.00	ppm	0.00
92) Chrysene-d12	14.587	240	1067199	40.00	ppm	0.01
102) Perylene-d12	16.946	264	1076080	40.00	ppm	0.02
System Monitoring Compounds						
7) 2-Fluorophenol	4.671	112	902685	68.34	ppm	0.01
Spiked Amount 100.000	Range 40 - 102		Recovery = 68.34%			
9) Phenol-d5	5.682	99	1171644	74.73	ppm	0.01
Spiked Amount 100.000	Range 41 - 100		Recovery = 74.73%			
23) Nitrobenzene-d5	6.655	82	501810	35.49	ppm	0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 70.98%			
47) 2-Fluorobiphenyl	8.741	172	962158	36.42	ppm	0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 72.84%			
75) 2,4,6-Tribromophenol	10.463	330	344324	84.02	ppm	0.00
Spiked Amount 100.000	Range 42 - 108		Recovery = 84.02%			
95) Terphenyl-d14	13.207	244	1122976	37.44	ppm	0.00
Spiked Amount 50.000	Range 45 - 119		Recovery = 74.88%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.879	88	141430	27.20	ppm	# 70
3) N-nitrosodimethylamine	3.200	42	233708	32.95	ppm	# 62
4) Pyridine	3.259	79	347933	25.99	ppm	# 58
5) Benzaldehyde	5.564	106	369151	34.48	ppm	95
6) Aniline	5.692	93	408693	19.94	ppm	# 1
8) bis(2-Chloroethyl)ether	5.756	93	510996	38.06	ppm	89
10) Phenol	5.692	94	648569	35.58	ppm	92
11) 2-Chlorophenol	5.815	128	492141	36.36	ppm	92
12) 1,3-Dichlorobenzene	5.970	146	506452	34.60	ppm	97
13) 1,4-Dichlorobenzene	6.056	146	508649	34.28	ppm	97
14) 1,2-Dichlorobenzene	6.216	146	483208	34.51	ppm	97
15) Benzyl alcohol	6.206	108	330318	39.98	ppm	97
16) bis(2-chloroisopropyl)...	6.355	45	651628	38.81	ppm	74
17) 2-Methylphenol	6.345	108	430317	35.31	ppm	94
18) Acetophenone	6.489	105	654727	36.23	ppm	99
19) Hexachloroethane	6.596	117	189826	31.34	ppm	98
20) N-Nitroso-di-n-propyla...	6.500	70	345120	35.98	ppm	# 66
21) 3&4-Methylphenol	6.521	108	944625	74.57	ppm	99
24) Nitrobenzene	6.676	77	510723	37.09	ppm	96
25) Isophorone	6.955	82	979993	39.61	ppm	98
26) 2-Nitrophenol	7.035	139	272788	40.22	ppm	95
27) 2,4-Dimethylphenol	7.115	107	452514	38.54	ppm	98
29) bis(2-Chloroethoxy)met...	7.211	93	608162	40.14	ppm	98
30) Benzoic Acid	7.297	105	906410	79.02	ppm	98
31) 2,4-Dichlorophenol	7.324	162	414834	39.73	ppm	92
32) 1,2,4-Trichlorobenzene	7.409	180	425373	36.65	ppm	99
34) Naphthalene	7.495	128	1373604	37.67	ppm	98
35) 4-Chloroaniline	7.575	127	387990	24.41	ppm	94
36) 2,6-Dichlorophenol	7.580	162	398466	39.26	ppm	95
37) Hexachlorobutadiene	7.645	225	236552	37.14	ppm	99
38) Caprolactam	8.003	113	170161	41.77	ppm	# 67
39) 4-Chloro-3-methylphenol	8.169	107	444063	41.26	ppm	99
40) 2-Methylnaphthalene	8.302	141	829009	38.88	ppm	99
41) 1-Methylnaphthalene	8.415	142	877878	37.46	ppm	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06500.d
Acq On : 11 Aug 2020 7:00 pm
Operator : marthav
Sample : op81484-msd E Inst : MSBNA10
Misc : op81484,S6F251,30.2,,,1,1,soil
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Results File: 8270D6F072920.RES
Quant Time: Aug 12 06:26:58 2020
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

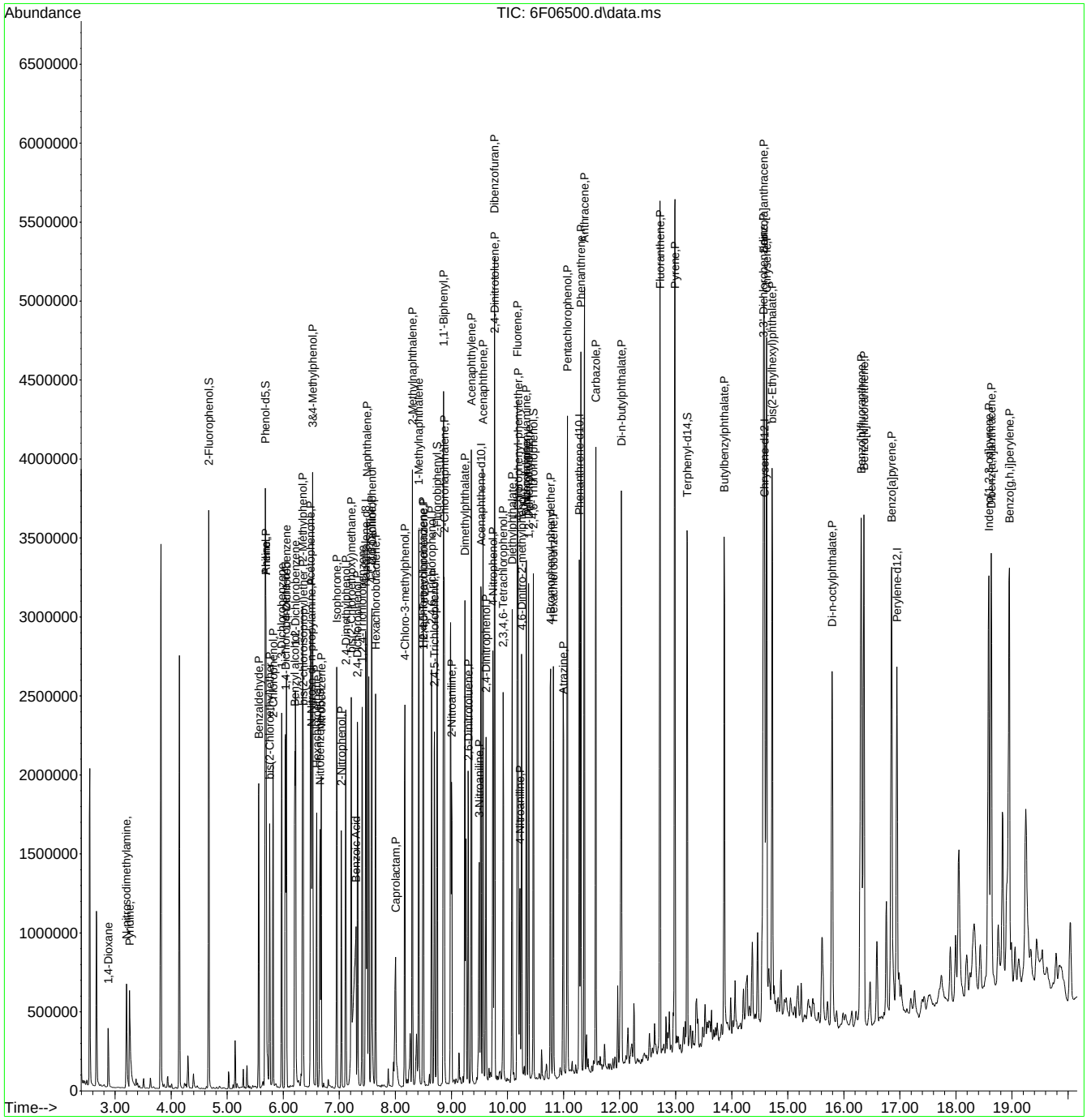
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42)	1,2,4,5-Tetrachloroben...	8.500	216	422811	37.78	ppm		99
44)	Hexachlorocyclopentadiene	8.490	237	208424	29.60	ppm		99
45)	2,4,6-Trichlorophenol	8.645	196	318831	43.22	ppm		97
46)	2,4,5-Trichlorophenol	8.698	196	342568	43.58	ppm		95
48)	1,1'-Biphenyl	8.859	154	1125507	39.86	ppm		98
49)	2-Chloronaphthalene	8.869	162	859641	38.70	ppm		96
50)	2-Nitroaniline	9.003	65	371023	53.35	ppm		85
52)	Acenaphthylene	9.356	152	1662807	49.22	ppm		97
53)	Dimethylphthalate	9.238	163	1076483	42.67	ppm		99
55)	2,6-Dinitrotoluene	9.303	165	246307	42.04	ppm		84
57)	Acenaphthene	9.565	153	909705	40.55	ppm		97
58)	3-Nitroaniline	9.495	138	236182	34.94	ppm		99
59)	2,4-Dinitrophenol	9.618	184	321408	78.71	ppm		84
60)	Dibenzofuran	9.768	168	1291979	41.66	ppm		81
61)	2,4-Dinitrotoluene	9.773	165	343976	44.59	ppm		89
62)	4-Nitrophenol	9.741	109	315099	81.51	ppm	#	87
64)	2,3,4,6-Tetrachlorophenol	9.923	232	271495	42.81	ppm		98
65)	Fluorene	10.174	166	1078673	42.95	ppm		99
66)	4-Chlorophenyl-phenyle...	10.190	204	526744	42.40	ppm		95
67)	Diethylphthalate	10.083	149	1103173	43.10	ppm		98
69)	4-Nitroaniline	10.223	138	231078	33.83	ppm		95
71)	4,6-Dinitro-2-methylph...	10.255	198	426660	79.92	ppm	#	71
72)	n-Nitrosodiphenylamine	10.335	169	735778	38.88	ppm		95
73)	Diphenylamine	10.335	169	735778	34.87	ppm		95
74)	1,2-Diphenylhydrazine	10.378	77	1083444	40.15	ppm		98
78)	4-Bromophenyl-phenylether	10.768	248	313417	44.10	ppm		94
79)	Hexachlorobenzene	10.816	284	333751	41.13	ppm		86
82)	Atrazine	10.998	200	277663	38.71	ppm		88
83)	Pentachlorophenol	11.068	266	473080	88.15	ppm		98
84)	Phenanthrene	11.308	178	1622147	44.49	ppm		99
85)	Anthracene	11.373	178	1953537	52.72	ppm		99
87)	Carbazole	11.576	167	1545491	46.29	ppm		96
89)	Di-n-butylphthalate	12.030	149	1880903	44.70	ppm		99
91)	Fluoranthene	12.720	202	2194922	57.18	ppm		98
94)	Pyrene	12.988	202	2303654	60.27	ppm		97
97)	Butylbenzylphthalate	13.865	149	844919	46.13	ppm		93
98)	3,3'-Dichlorobenzidine	14.566	252	205584	14.86	ppm		99
99)	Benzo[a]anthracene	14.571	228	1901946	53.19	ppm		99
100)	Chrysene	14.624	228	1959557	56.48	ppm		98
101)	bis(2-Ethylhexyl)phtha...	14.721	149	1157171	45.24	ppm		98
103)	Di-n-octylphthalate	15.790	149	1904310	44.74	ppm		93
104)	Benzo[b]fluoranthene	16.309	252	2333802	67.57	ppm		97
105)	Benzo[k]fluoranthene	16.357	252	1782816	49.63	ppm		96
106)	Benzo[a]pyrene	16.855	252	1695037	52.84	ppm		97
107)	Indeno[1,2,3-cd]pyrene	18.588	276	1792404	60.02	ppm		93
108)	Dibenz[a,h]anthracene	18.631	278	1614655	50.64	ppm		92
109)	Benzo[g,h,i]perylene	18.952	276	1798417	55.79	ppm		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06500.d
Acq On : 11 Aug 2020 7:00 pm
Operator : marthav
Sample : op81484-msd E Inst : MSBNA10
Misc : op81484,S6F251,30.2,,,1,1,soil
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Results File: 8270D6F072920.RES
Quant Time: Aug 12 06:26:58 2020
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-17-2020\s6f254\
Data File : 6F06589.d
Acq On : 14 Aug 2020 7:42 pm
Operator : marthav
Sample : op81538-ms E,5
Misc : op81538,S6F254,30.0,,,1,5,soil
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Aug 16 20:18:08 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.013	152	311335	40.00	ppm	0.00
22) Naphthalene-d8	7.447	136	1100775	40.00	ppm	0.00
43) Acenaphthene-d10	9.501	164	561116	40.00	ppm	0.00
70) Phenanthrene-d10	11.260	188	999992	40.00	ppm	0.00
92) Chrysene-d12	14.560	240	767400	40.00	ppm	0.00
102) Perylene-d12	16.925	264	735911	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	4.644	112	135393	11.51	ppm	0.00
Spiked Amount 100.000	Range 40 - 102		Recovery = 11.51%#			
9) Phenol-d5	5.655	99	170082	12.18	ppm	0.00
Spiked Amount 100.000	Range 41 - 100		Recovery = 12.18%#			
23) Nitrobenzene-d5	6.628	82	70683	5.85	ppm	0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 11.70%#			
47) 2-Fluorobiphenyl	8.720	172	147162	6.71	ppm	0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 13.42%#			
75) 2,4,6-Tribromophenol	10.437	330	47955	14.25	ppm	-0.01
Spiked Amount 100.000	Range 42 - 108		Recovery = 14.25%#			
95) Terphenyl-d14	13.181	244	149266	6.92	ppm	0.00
Spiked Amount 50.000	Range 45 - 119		Recovery = 13.84%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.842	88	23531	5.08	ppm	# 64
3) N-nitrosodimethylamine	3.173	42	26242	4.15	ppm	# 31
4) Pyridine	3.243	79	33918	2.84	ppm	# 55
5) Benzaldehyde	5.537	106	60430	6.34	ppm	96
6) Aniline	5.660	93	55032	3.01	ppm	# 47
8) bis(2-Chloroethyl)ether	5.730	93	75369	6.30	ppm	84
10) Phenol	5.671	94	94675	5.83	ppm	92
11) 2-Chlorophenol	5.794	128	76705	6.36	ppm	85
12) 1,3-Dichlorobenzene	5.949	146	81913	6.28	ppm	98
13) 1,4-Dichlorobenzene	6.029	146	82607	6.25	ppm	96
14) 1,2-Dichlorobenzene	6.195	146	76759	6.15	ppm	100
15) Benzyl alcohol	6.179	108	48014	6.52	ppm	93
16) bis(2-chloroisopropyl)...	6.329	45	84361	5.64	ppm	61
17) 2-Methylphenol	6.324	108	63135	5.82	ppm	94
18) Acetophenone	6.463	105	98561	6.12	ppm	97
19) Hexachloroethane	6.570	117	27981	5.19	ppm	98
20) N-Nitroso-di-n-propyla...	6.468	70	48512	5.68	ppm	# 60
21) 3&4-Methylphenol	6.500	108	138755	12.30	ppm	97
24) Nitrobenzene	6.650	77	73339	6.24	ppm	97
25) Isophorone	6.928	82	138434	6.55	ppm	99
26) 2-Nitrophenol	7.014	139	41513	7.17	ppm	87
27) 2,4-Dimethylphenol	7.088	107	65224	6.50	ppm	98
29) bis(2-Chloroethoxy)met...	7.185	93	89780	6.94	ppm	99
30) Benzoic Acid	7.206	105	117771	15.51	ppm	97
31) 2,4-Dichlorophenol	7.302	162	60025	6.73	ppm	94
32) 1,2,4-Trichlorobenzene	7.383	180	67321	6.79	ppm	99
34) Naphthalene	7.468	128	209705	6.73	ppm	98
35) 4-Chloroaniline	7.548	127	65393	4.82	ppm	93
36) 2,6-Dichlorophenol	7.554	162	59198	6.83	ppm	95
37) Hexachlorobutadiene	7.623	225	38179	7.02	ppm	99
38) Caprolactam	7.939	113	22907	6.58	ppm	# 55
39) 4-Chloro-3-methylphenol	8.142	107	63109	6.87	ppm	98
40) 2-Methylnaphthalene	8.281	141	122064	6.70	ppm	97
41) 1-Methylnaphthalene	8.393	142	129846	6.49	ppm	97
42) 1,2,4,5-Tetrachloroben...	8.474	216	65646	6.87	ppm	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-17-2020\s6f254\
Data File : 6F06589.d
Acq On : 14 Aug 2020 7:42 pm
Operator : marthav
Sample : op81538-ms E,5
Misc : op81538,S6F254,30.0,,,1,5,soil
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Aug 16 20:18:08 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

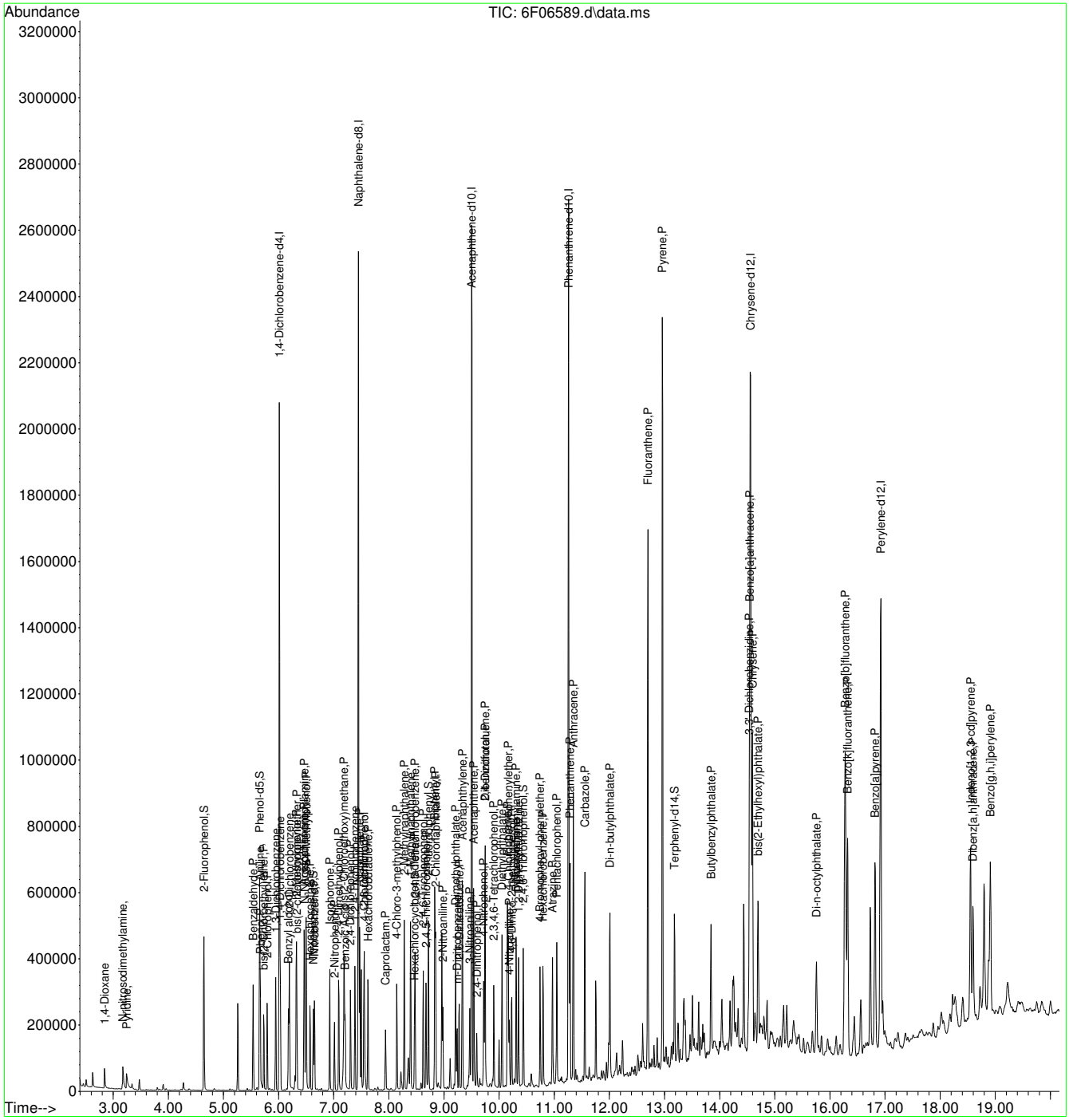
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
44)	Hexachlorocyclopentadiene	8.463	237	20447	3.50	ppm		97
45)	2,4,6-Trichlorophenol	8.623	196	46270	7.56	ppm		97
46)	2,4,5-Trichlorophenol	8.677	196	49859	7.64	ppm		96
48)	1,1'-Biphenyl	8.832	154	165989	7.08	ppm		98
49)	2-Chloronaphthalene	8.848	162	129660	7.03	ppm		97
50)	2-Nitroaniline	8.982	65	45867	7.95	ppm	#	65
52)	Acenaphthylene	9.335	152	281961	10.05	ppm		98
53)	Dimethylphthalate	9.212	163	157553	7.52	ppm		99
54)	m-Dinitrobenzene	9.239	168	25254	7.77	ppm		73
55)	2,6-Dinitrotoluene	9.276	165	35964	7.40	ppm		85
57)	Acenaphthene	9.538	153	135615	7.28	ppm		95
58)	3-Nitroaniline	9.469	138	37747	6.73	ppm		100
59)	2,4-Dinitrophenol	9.597	184	26436	13.43	ppm	#	73
60)	Dibenzofuran	9.747	168	184851	7.18	ppm		82
61)	2,4-Dinitrotoluene	9.747	165	48973	7.65	ppm		91
62)	4-Nitrophenol	9.720	109	38441	11.98	ppm	#	78
64)	2,3,4,6-Tetrachlorophenol	9.902	232	37070	7.04	ppm		98
65)	Fluorene	10.148	166	160406	7.69	ppm		99
66)	4-Chlorophenyl-phenyle...	10.164	204	76106	7.38	ppm		93
67)	Diethylphthalate	10.052	149	159238	7.50	ppm		98
69)	4-Nitroaniline	10.185	138	35990	6.35	ppm		92
71)	4,6-Dinitro-2-methylph...	10.228	198	44159	14.28	ppm	#	66
72)	n-Nitrosodiphenylamine	10.308	169	107036	6.89	ppm		96
73)	Diphenylamine	10.308	169	107036	6.18	ppm		96
74)	1,2-Diphenylhydrazine	10.351	77	135520	6.11	ppm		97
78)	4-Bromophenyl-phenylether	10.742	248	44517	7.63	ppm		97
79)	Hexachlorobenzene	10.795	284	48721	7.31	ppm		81
82)	Atrazine	10.966	200	40260	6.84	ppm		87
83)	Pentachlorophenol	11.046	266	51899	17.73	ppm		97
84)	Phenanthrene	11.287	178	244415	8.16	ppm		99
85)	Anthracene	11.346	178	329773	10.84	ppm		99
87)	Carbazole	11.555	167	240873	8.79	ppm		98
89)	Di-n-butylphthalate	12.009	149	254495	7.36	ppm		99
91)	Fluoranthene	12.699	202	633619	20.10	ppm		100
94)	Pyrene	12.961	202	890854	32.41	ppm		95
97)	Butylbenzylphthalate	13.844	149	106685	8.10	ppm		96
98)	3,3'-Dichlorobenzidine	14.539	252	26411	2.65	ppm		98
99)	Benzo[a]anthracene	14.544	228	437529	17.02	ppm		99
100)	Chrysene	14.598	228	508011	20.36	ppm		98
101)	bis(2-Ethylhexyl)phtha...	14.694	149	145160	7.89	ppm		94
103)	Di-n-octylphthalate	15.759	149	221186	7.60	ppm		89
104)	Benzo[b]fluoranthene	16.277	252	703154	29.77	ppm		98
105)	Benzo[k]fluoranthene	16.320	252	342182	13.93	ppm		98
106)	Benzo[a]pyrene	16.818	252	340127	15.50	ppm		96
107)	Indeno[1,2,3-cd]pyrene	18.551	276	297373	14.56	ppm		93
108)	Dibenz[a,h]anthracene	18.593	278	198119	9.09	ppm		94
109)	Benzo[g,h,i]perylene	18.909	276	285592	12.96	ppm		96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-17-2020\s6f254\
Data File : 6F06589.d
Acq On : 14 Aug 2020 7:42 pm
Operator : marthav
Sample : op81538-ms E,5
Misc : op81538,S6F254,30.0,,,1,5,soil
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Aug 16 20:18:08 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-17-2020\s6f254\
Data File : 6F06590.d
Acq On : 14 Aug 2020 8:08 pm
Operator : marthav
Sample : op81538-msd E,5
Misc : op81538,S6F254,29.8,,,1,5,soil
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Aug 16 20:19:08 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	6.013	152	319223	40.00	ppm		0.00
22) Naphthalene-d8	7.447	136	1092575	40.00	ppm		0.00
43) Acenaphthene-d10	9.501	164	552231	40.00	ppm		0.00
70) Phenanthrene-d10	11.260	188	959718	40.00	ppm		0.00
92) Chrysene-d12	14.560	240	757400	40.00	ppm		0.00
102) Perylene-d12	16.919	264	733755	40.00	ppm		0.00
System Monitoring Compounds							
7) 2-Fluorophenol	4.644	112	83064	6.89	ppm		0.00
Spiked Amount 100.000	Range 40 - 102		Recovery = 6.89%#				
9) Phenol-d5	5.655	99	103260	7.21	ppm		0.00
Spiked Amount 100.000	Range 41 - 100		Recovery = 7.21%#				
23) Nitrobenzene-d5	6.628	82	43284	3.61	ppm		0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 7.22%#				
47) 2-Fluorobiphenyl	8.720	172	87211	4.04	ppm		0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 8.08%#				
75) 2,4,6-Tribromophenol	10.437	330	28747	8.90	ppm		-0.01
Spiked Amount 100.000	Range 42 - 108		Recovery = 8.90%#				
95) Terphenyl-d14	13.180	244	91159	4.28	ppm		0.00
Spiked Amount 50.000	Range 45 - 119		Recovery = 8.56%#				
Target Compounds							Qvalue
2) 1,4-Dioxane	2.841	88	14607	3.08	ppm	#	68
3) N-nitrosodimethylamine	3.178	42	15441	2.38	ppm	#	30
4) Pyridine	3.248	79	20033	1.64	ppm	#	56
5) Benzaldehyde	5.537	106	35993	3.68	ppm		94
6) Aniline	5.655	93	33242	1.78	ppm		71
8) bis(2-Chloroethyl)ether	5.730	93	45713	3.73	ppm		85
10) Phenol	5.666	94	56252	3.38	ppm		95
11) 2-Chlorophenol	5.794	128	45502	3.68	ppm		83
12) 1,3-Dichlorobenzene	5.949	146	49302	3.69	ppm		100
13) 1,4-Dichlorobenzene	6.029	146	49883	3.68	ppm		98
14) 1,2-Dichlorobenzene	6.195	146	46831	3.66	ppm		98
15) Benzyl alcohol	6.179	108	28019	3.71	ppm		93
16) bis(2-chloroisopropyl)...	6.329	45	49790	3.25	ppm		59
17) 2-Methylphenol	6.318	108	38921	3.50	ppm		97
18) Acetophenone	6.462	105	57851	3.51	ppm		97
19) Hexachloroethane	6.569	117	16759	3.03	ppm		92
20) N-Nitroso-di-n-propyla...	6.468	70	28757	3.28	ppm	#	59
21) 3&4-Methylphenol	6.500	108	81981	7.09	ppm		97
24) Nitrobenzene	6.650	77	43054	3.69	ppm		98
25) Isophorone	6.928	82	81225	3.87	ppm		97
26) 2-Nitrophenol	7.013	139	23918	4.16	ppm		87
27) 2,4-Dimethylphenol	7.088	107	39080	3.93	ppm		98
29) bis(2-Chloroethoxy)met...	7.185	93	52269	4.07	ppm		98
30) Benzoic Acid	7.190	105	66671	9.11	ppm		96
31) 2,4-Dichlorophenol	7.302	162	35946	4.06	ppm		94
32) 1,2,4-Trichlorobenzene	7.382	180	40020	4.07	ppm		96
34) Naphthalene	7.468	128	124956	4.04	ppm		97
35) 4-Chloroaniline	7.548	127	39424	2.93	ppm		93
36) 2,6-Dichlorophenol	7.554	162	35003	4.07	ppm		95
37) Hexachlorobutadiene	7.623	225	22591	4.18	ppm		96
38) Caprolactam	7.933	113	13079	3.79	ppm	#	56
39) 4-Chloro-3-methylphenol	8.142	107	37380	4.10	ppm		98
40) 2-Methylnaphthalene	8.281	141	71750	3.97	ppm		98
41) 1-Methylnaphthalene	8.393	142	76500	3.85	ppm		96
42) 1,2,4,5-Tetrachloroben...	8.474	216	38003	4.01	ppm		96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-17-2020\s6f254\
Data File : 6F06590.d
Acq On : 14 Aug 2020 8:08 pm
Operator : marthav
Sample : op81538-msd E,5
Misc : op81538,S6F254,29.8,,,1,5,soil
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Aug 16 20:19:08 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

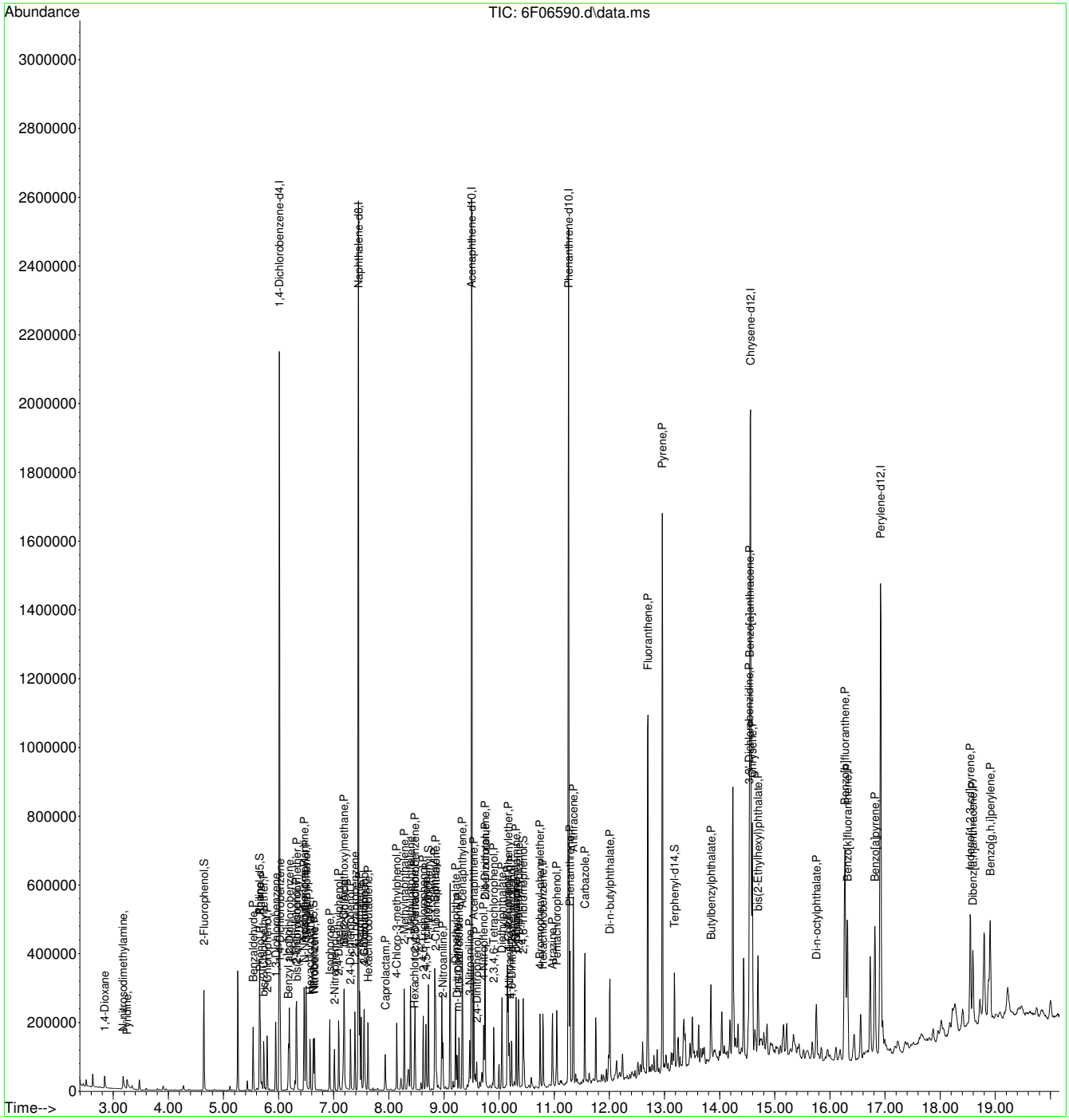
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
44) Hexachlorocyclopentadiene	8.463	237	10822	1.88	ppm		98
45) 2,4,6-Trichlorophenol	8.623	196	27129	4.50	ppm		98
46) 2,4,5-Trichlorophenol	8.671	196	28565	4.45	ppm		99
48) 1,1'-Biphenyl	8.832	154	97454	4.23	ppm		98
49) 2-Chloronaphthalene	8.848	162	76773	4.23	ppm		96
50) 2-Nitroaniline	8.982	65	26435	4.65	ppm	#	64
52) Acenaphthylene	9.329	152	175007	6.34	ppm		98
53) Dimethylphthalate	9.212	163	92321	4.48	ppm		100
54) m-Dinitrobenzene	9.238	168	14357	4.54	ppm	#	72
55) 2,6-Dinitrotoluene	9.271	165	20814	4.35	ppm		98
57) Acenaphthene	9.538	153	78481	4.28	ppm		96
58) 3-Nitroaniline	9.468	138	21924	3.97	ppm		97
59) 2,4-Dinitrophenol	9.597	184	12413	6.90	ppm	#	72
60) Dibenzofuran	9.747	168	106639	4.21	ppm		83
61) 2,4-Dinitrotoluene	9.747	165	27625	4.38	ppm		82
62) 4-Nitrophenol	9.720	109	22711	7.19	ppm	#	79
64) 2,3,4,6-Tetrachlorophenol	9.902	232	21430	4.14	ppm		97
65) Fluorene	10.148	166	96252	4.69	ppm		99
66) 4-Chlorophenyl-phenyle...	10.164	204	45416	4.48	ppm		93
67) Diethylphthalate	10.051	149	95328	4.56	ppm		100
69) 4-Nitroaniline	10.185	138	21765	3.90	ppm		92
71) 4,6-Dinitro-2-methylph...	10.228	198	22439	7.88	ppm	#	67
72) n-Nitrosodiphenylamine	10.308	169	62373	4.18	ppm		97
73) Diphenylamine	10.308	169	62373	3.75	ppm		97
74) 1,2-Diphenylhydrazine	10.351	77	78253	3.68	ppm		95
78) 4-Bromophenyl-phenylether	10.741	248	26439	4.72	ppm		97
79) Hexachlorobenzene	10.795	284	28200	4.41	ppm		82
82) Atrazine	10.966	200	23940	4.23	ppm		90
83) Pentachlorophenol	11.046	266	27376	10.29	ppm		96
84) Phenanthrene	11.287	178	146633	5.10	ppm		98
85) Anthracene	11.346	178	209431	7.17	ppm		99
87) Carbazole	11.554	167	148555	5.65	ppm		97
89) Di-n-butylphthalate	12.009	149	147825	4.46	ppm		98
91) Fluoranthene	12.699	202	441300	14.59	ppm		98
94) Pyrene	12.961	202	612142	22.57	ppm		96
97) Butylbenzylphthalate	13.844	149	62096	4.78	ppm		95
98) 3,3'-Dichlorobenzidine	14.539	252	19830	2.02	ppm		95
99) Benzo[a]anthracene	14.544	228	296934	11.70	ppm		99
100) Chrysene	14.592	228	340191	13.82	ppm		97
101) bis(2-Ethylhexyl)phtha...	14.694	149	83489	4.60	ppm		95
103) Di-n-octylphthalate	15.753	149	128948	4.44	ppm		90
104) Benzo[b]fluoranthene	16.272	252	450092	19.11	ppm		99
105) Benzo[k]fluoranthene	16.320	252	224079	9.15	ppm		98
106) Benzo[a]pyrene	16.817	252	219902	10.05	ppm		97
107) Indeno[1,2,3-cd]pyrene	18.545	276	185878	9.13	ppm		95
108) Dibenz[a,h]anthracene	18.593	278	116537	5.36	ppm		93
109) Benzo[g,h,i]perylene	18.909	276	174803	7.95	ppm		95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-17-2020\s6f254\
Data File : 6F06590.d
Acq On : 14 Aug 2020 8:08 pm
Operator : marthav
Sample : op81538-msd E,5
Misc : op81538,S6F254,29.8,,,1,5,soil
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Aug 16 20:19:08 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 08/12/20 11:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11143.d
Acq On : 11 Aug 2020 1:38 pm
Operator : FOUADS
Sample : op81485-ms e Inst : MSBNA8
Misc : op81485,S7G483,15.3,,,1,1,soil
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:36:51 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

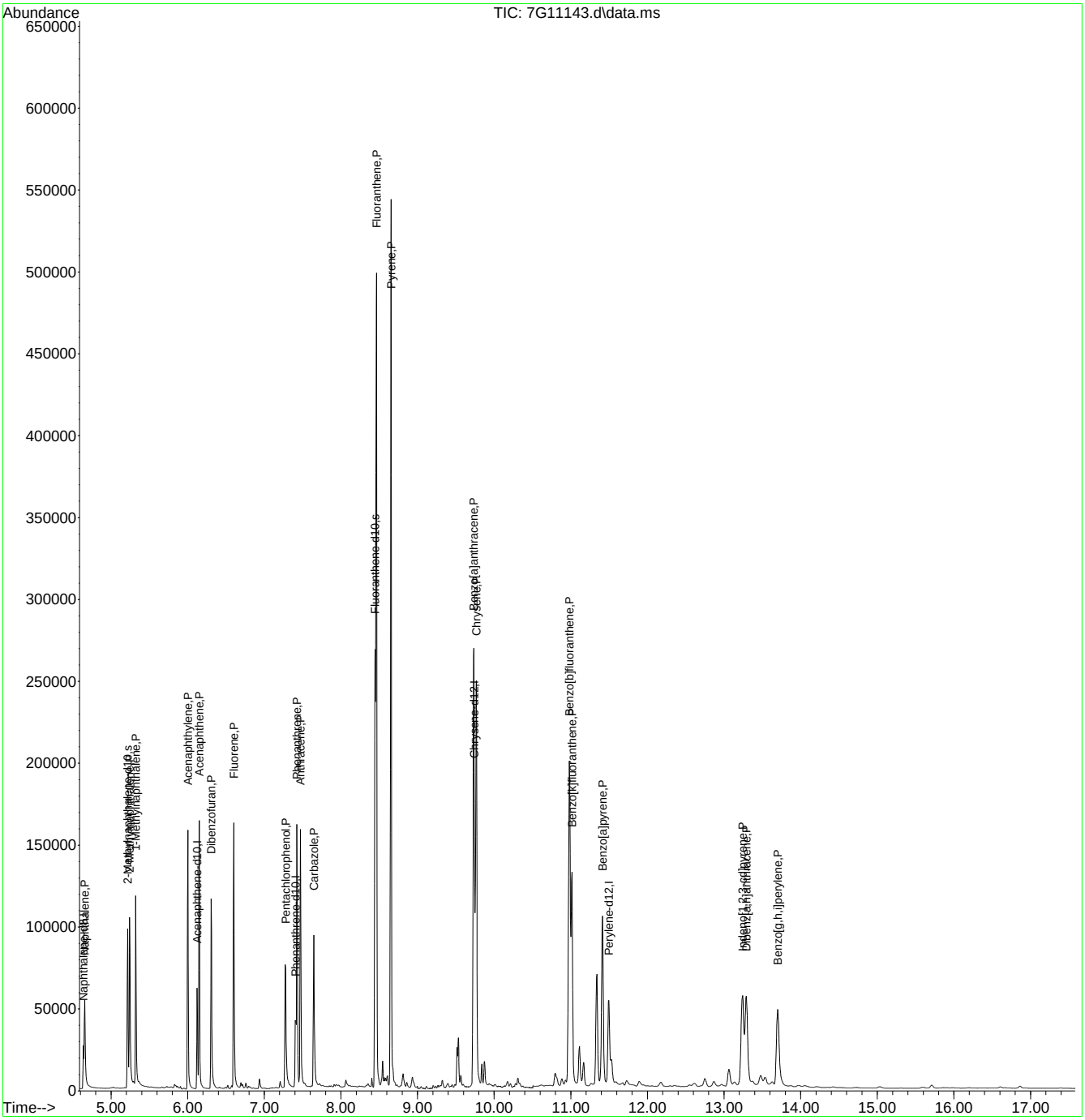
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.640	136	21679	4.00	ppm	0.01
6) Acenaphthene-d10	6.123	164	17776	4.00	ppm	0.00
11) Phenanthrene-d10	7.410	188	35130	4.00	ppm	0.01
18) Chrysene-d12	9.741	240	63709	4.00	ppm	0.01
22) Perylene-d12	11.496	264	59713	4.00	ppm	0.02
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.217	152	36751	11.25	ppm	0.01
Spiked Amount 10.000	Range 50 - 150		Recovery = 112.50%			
17) Fluoranthene-d10	8.445	212	188903	10.28	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 102.80%			
Target Compounds						Qvalue
2) Naphthalene	4.658	128	46591	7.47	ppm	99
3) 2-Methylnaphthalene	5.240	142	41614	8.63	ppm	94
5) 1-Methylnaphthalene	5.323	142	44771	10.15	ppm	97
7) Acenaphthylene	6.002	152	93699	9.04	ppm	99
8) Acenaphthene	6.152	153	50330	7.46	ppm	96
9) Dibenzofuran	6.307	168	73781	15.33	ppm	98
10) Fluorene	6.602	166	58603	7.98	ppm	97
12) Pentachlorophenol	7.278	266	31007	21.80	ppm	95
13) Phenanthrene	7.424	178	99706	8.49	ppm	96
14) Anthracene	7.473	178	101496	8.53	ppm	99
15) Carbazole	7.647	167	74419	3.54	ppm	96
16) Fluoranthene	8.464	202	312764	13.89	ppm	98
19) Pyrene	8.654	202	346673	13.51	ppm	96
20) Benzo[a]anthracene	9.732	228	161141	7.99	ppm	94
21) Chrysene	9.768	228	202186	9.16	ppm	99
23) Benzo[b]fluoranthene	10.982	252	260930	12.87	ppm	98
24) Benzo[k]fluoranthene	11.015	252	132139	6.09	ppm	98
25) Benzo[a]pyrene	11.413	252	129066	6.54	ppm	98
26) Indeno[1,2,3-cd]pyrene	13.243	276	102670m	7.96	ppm	
27) Dibenz[a,h]anthracene	13.291	278	67232	4.70	ppm	97
28) Benzo[g,h,i]perylene	13.699	276	86728	5.58	ppm	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11143.d
Acq On : 11 Aug 2020 1:38 pm
Operator : FOUADS
Sample : op81485-ms e Inst : MSBNA8
Misc : op81485,S7G483,15.3,,,1,1,soil
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:36:51 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration



Manual Integration Approval Summary

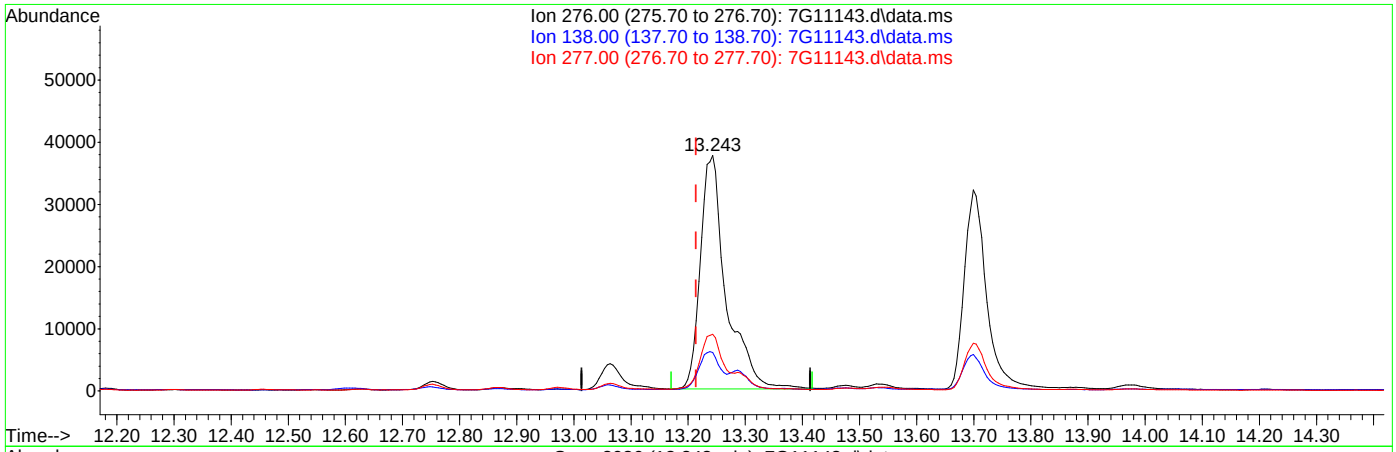
Sample Number: OP81485-MS
Lab FileID: 7G11143.D
Injection Time: 08/11/20 13:38
Method: SW846 8270E BY SIM
Analyst approved: 08/12/20 09:33 Fouad Sekkar
Supervisor approved: 08/12/20 11:43 Nicole McCampbell

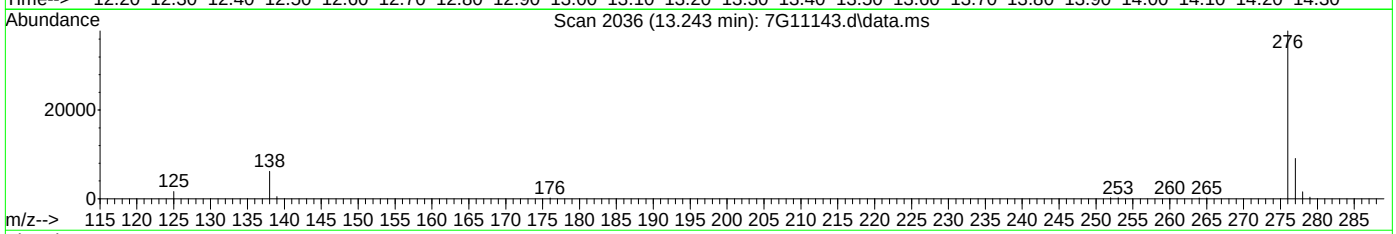
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		13.24	Overlapping peak

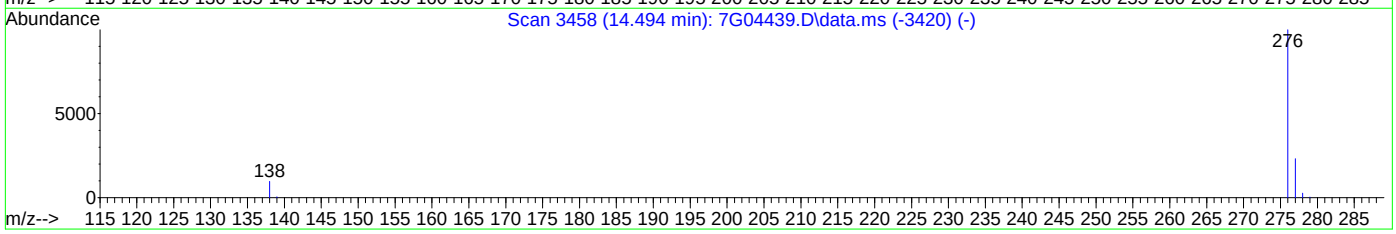
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11143.d
Acq On : 11 Aug 2020 1:38 pm
Operator : FOUADS
Sample : op81485-ms e Inst : MSBNA8
Misc : op81485,S7G483,15.3,,,1,1,soil
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:26:46 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11143.d\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.243min (+0.029) 9.17ppm

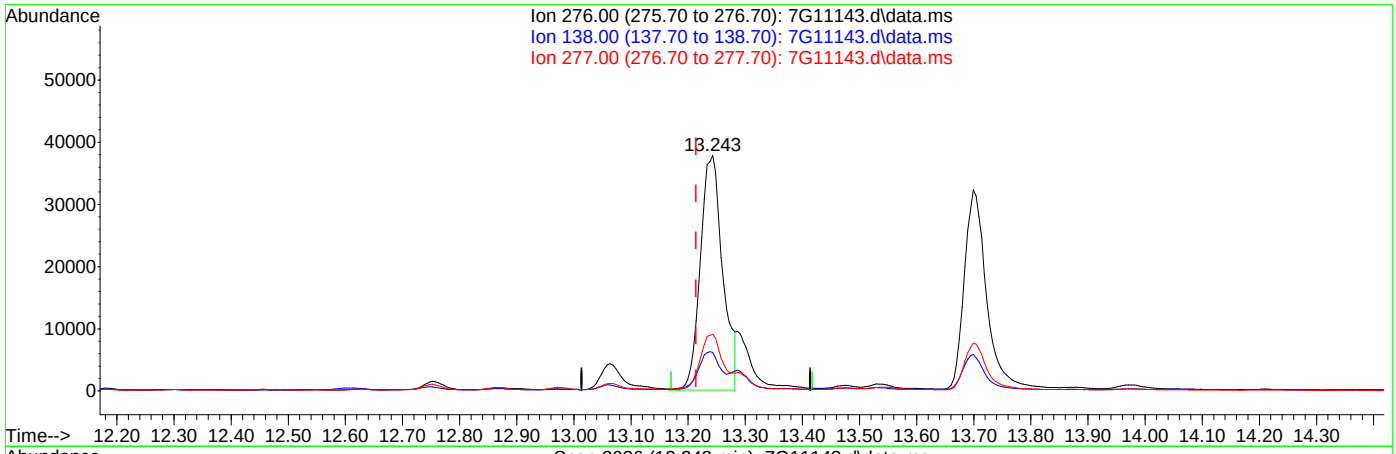
response 118232

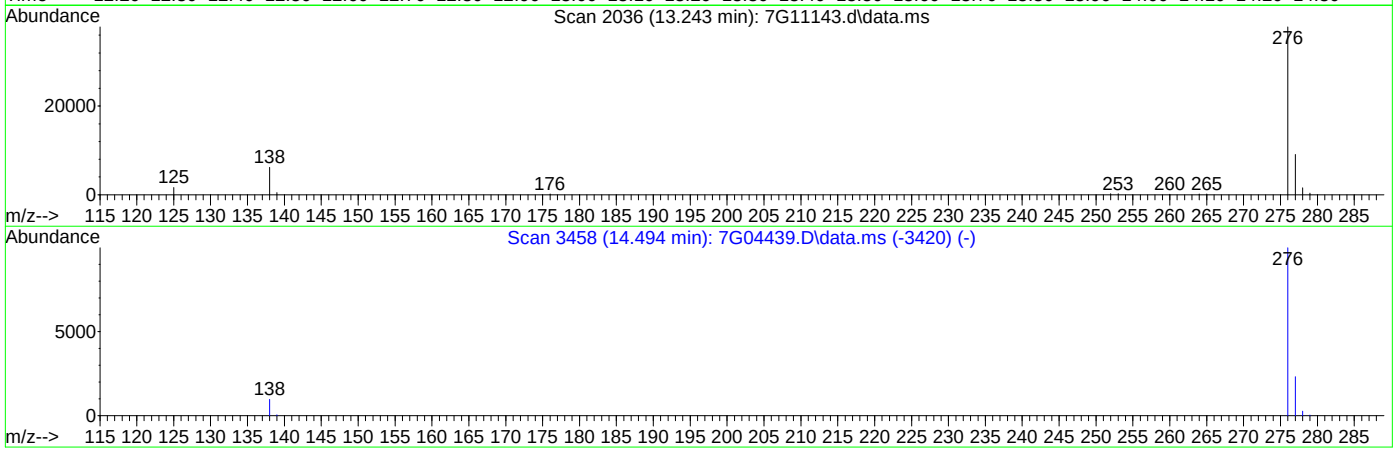
Ion	Exp%	Act%
276.00	100	100
138.00	9.60	15.78
277.00	23.10	23.55
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11143.d
Acq On : 11 Aug 2020 1:38 pm
Operator : FOUADS
Sample : op81485-ms e Inst : MSBNA8
Misc : op81485,S7G483,15.3,,,1,1,soil
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:26:46 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration





TIC: 7G11143.d\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.243min (+0.029) 7.96ppm m

response 102670

Ion	Exp%	Act%
276.00	100	100
138.00	9.60	16.30
277.00	23.10	24.03
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 08/12/20 11:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11144.d
Acq On : 11 Aug 2020 2:02 pm
Operator : FOUADS
Sample : op81485-msd e Inst : MSBNA8
Misc : op81485,S7G483,15.2,,,1,1,soil
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:37:36 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.646	136	22295	4.00	ppm	0.02
6) Acenaphthene-d10	6.128	164	18278	4.00	ppm	0.01
11) Phenanthrene-d10	7.410	188	36401	4.00	ppm	0.01
18) Chrysene-d12	9.744	240	66697	4.00	ppm	0.02
22) Perylene-d12	11.496	264	61462	4.00	ppm	0.02
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.217	152	40194	11.94	ppm	0.01
Spiked Amount 10.000	Range 50 - 150		Recovery = 119.40%			
17) Fluoranthene-d10	8.449	212	189514	9.96	ppm	0.01
Spiked Amount 10.000	Range 50 - 150		Recovery = 99.60%			
Target Compounds						Qvalue
2) Naphthalene	4.658	128	45588	7.12	ppm	100
3) 2-Methylnaphthalene	5.247	142	40845	8.24	ppm	97
5) 1-Methylnaphthalene	5.329	142	43582	9.63	ppm	93
7) Acenaphthylene	6.007	152	93669	8.79	ppm	98
8) Acenaphthene	6.152	153	49322	7.12	ppm	99
9) Dibenzofuran	6.312	168	72629	14.69	ppm	90
10) Fluorene	6.607	166	57813	7.66	ppm	96
12) Pentachlorophenol	7.278	266	30103	20.57	ppm	98
13) Phenanthrene	7.431	178	92481	7.62	ppm	98
14) Anthracene	7.473	178	104836	8.51	ppm	98
15) Carbazole	7.647	167	71271	3.28	ppm	99
16) Fluoranthene	8.467	202	313301	13.45	ppm	98
19) Pyrene	8.657	202	351395	13.09	ppm	95
20) Benzo[a]anthracene	9.734	228	165554	7.85	ppm	93
21) Chrysene	9.770	228	213153	9.23	ppm	99
23) Benzo[b]fluoranthene	10.987	252	278535	13.35	ppm	98
24) Benzo[k]fluoranthene	11.021	252	134312	6.01	ppm	98
25) Benzo[a]pyrene	11.418	252	133189	6.55	ppm	98
26) Indeno[1,2,3-cd]pyrene	13.243	276	102680m	7.74	ppm	
27) Dibenz[a,h]anthracene	13.296	278	65956	4.48	ppm	96
28) Benzo[g,h,i]perylene	13.704	276	87370	5.46	ppm	94

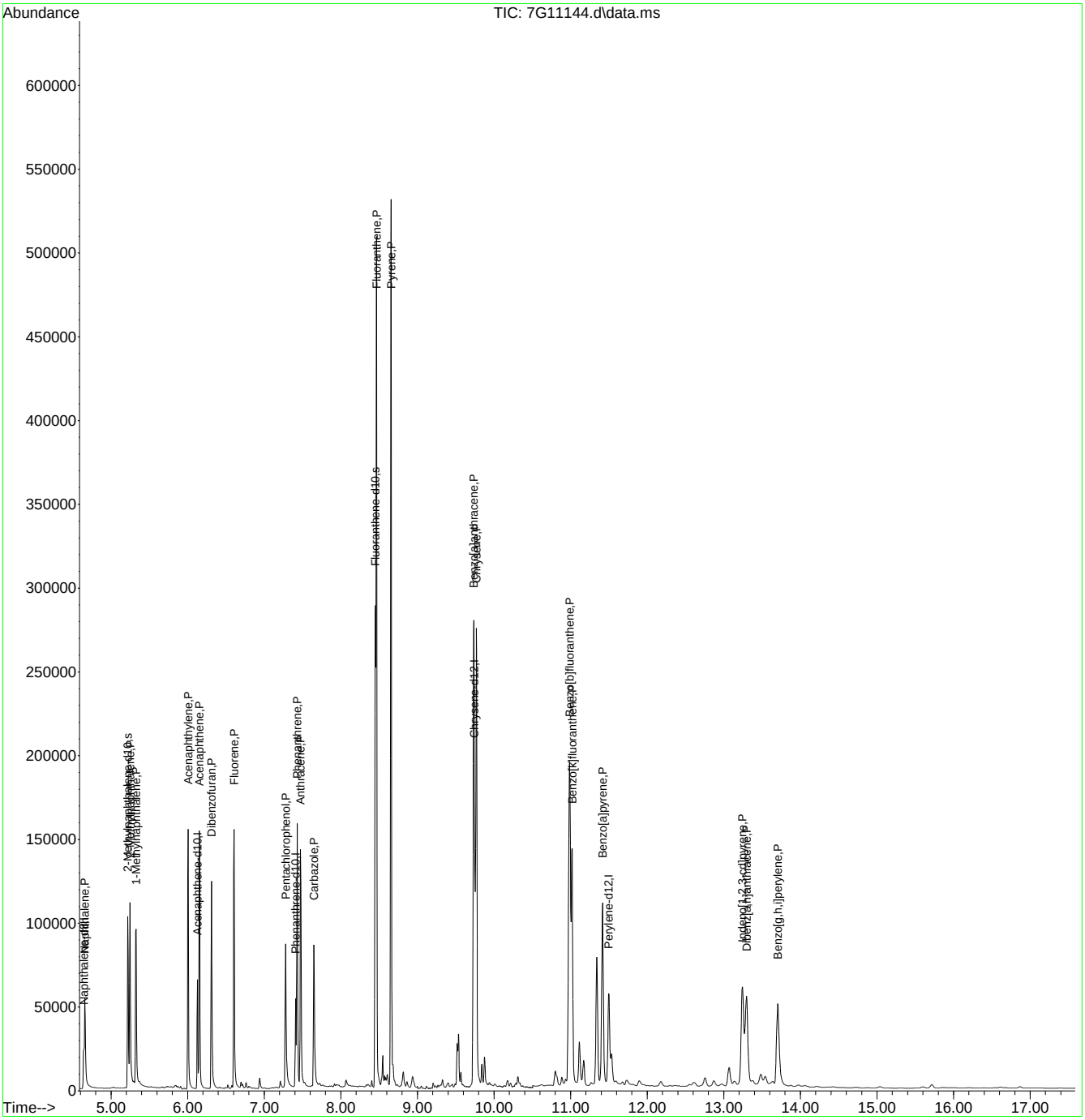
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.4.6
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11144.d
Acq On : 11 Aug 2020 2:02 pm
Operator : FOUADS
Sample : op81485-msd e Inst : MSBNA8
Misc : op81485,S7G483,15.2,,,1,1,soil
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:37:36 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration



Manual Integration Approval Summary

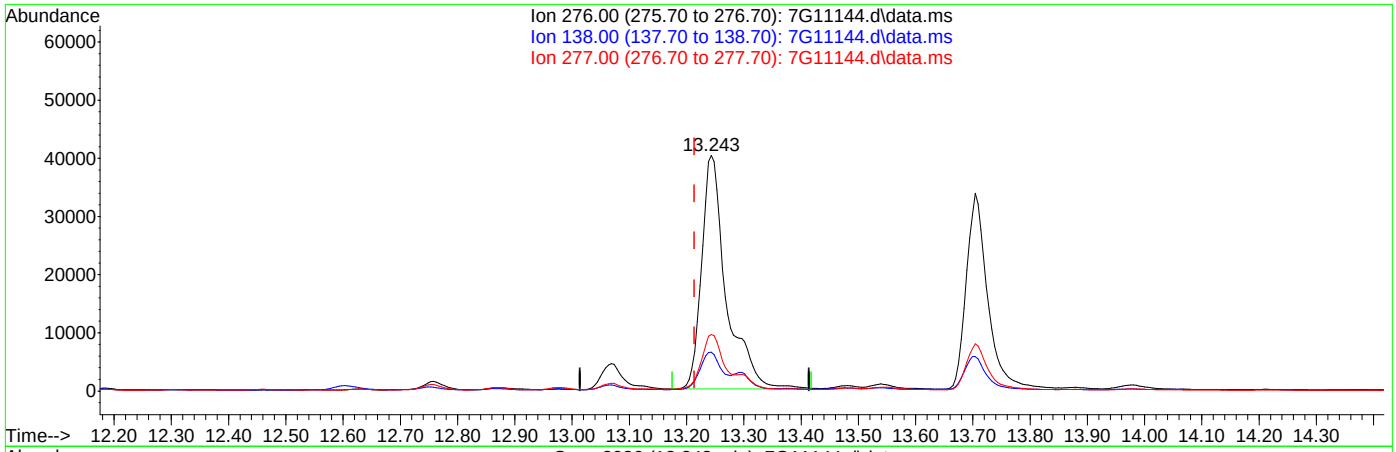
Sample Number: OP81485-MSD
Lab FileID: 7G11144.D
Injection Time: 08/11/20 14:02
Method: SW846 8270E BY SIM
Analyst approved: 08/12/20 09:33 Fouad Sekkar
Supervisor approved: 08/12/20 11:43 Nicole McCampbell

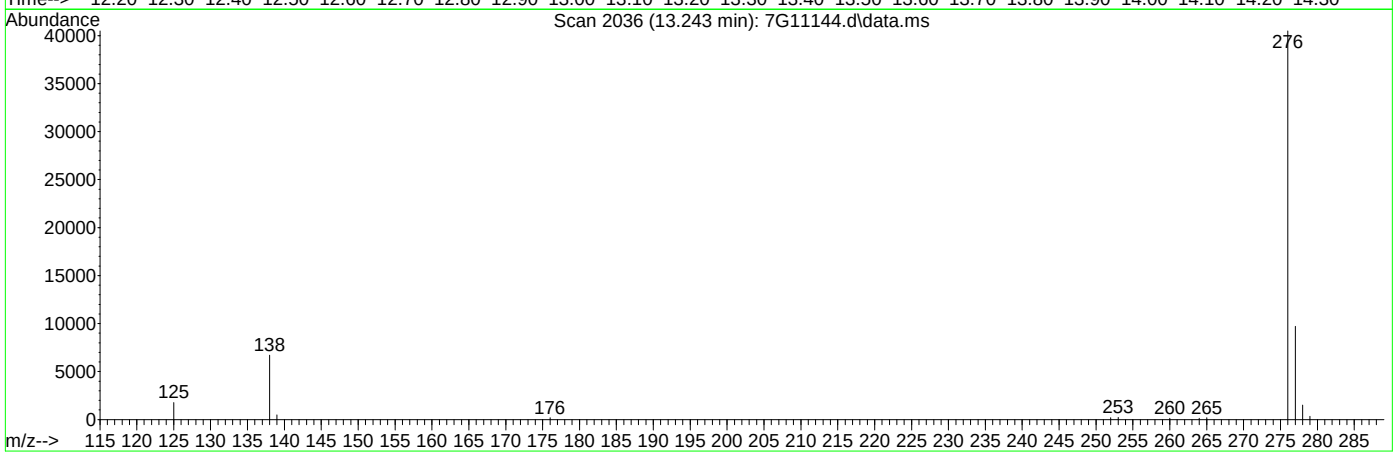
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		13.24	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11144.d
Acq On : 11 Aug 2020 2:02 pm
Operator : FOUADS
Sample : op81485-msd e Inst : MSBNA8
Misc : op81485,S7G483,15.2,,,1,1,soil
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:26:49 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration





TIC: 7G11144.d\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.243min (+0.029) 9.09ppm

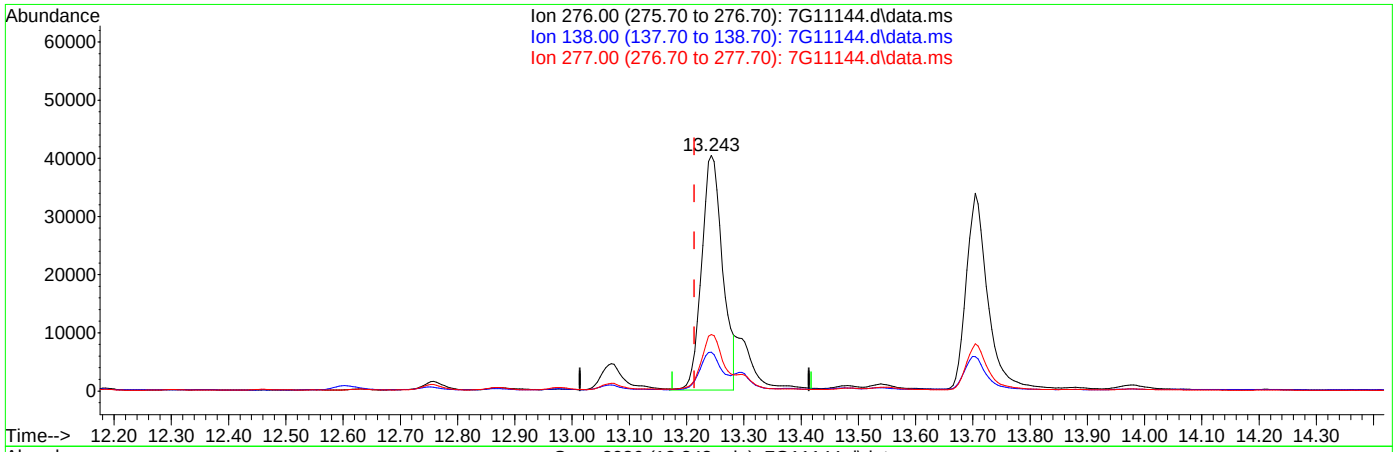
response 120614

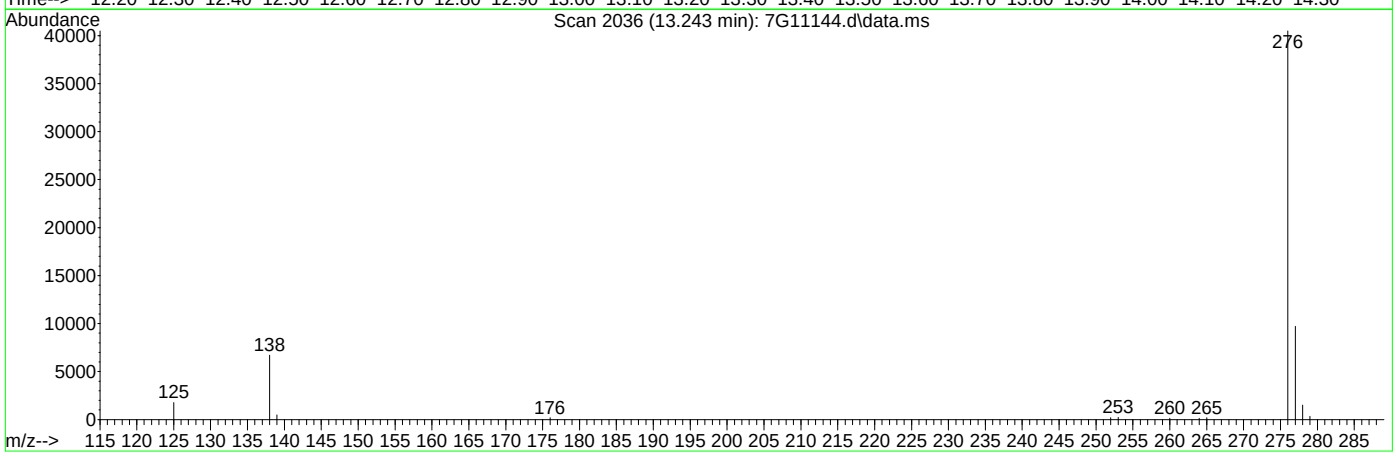
Ion	Exp%	Act%
276.00	100	100
138.00	9.60	16.02
277.00	23.10	23.52
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11144.d
Acq On : 11 Aug 2020 2:02 pm
Operator : FOUADS
Sample : op81485-msd e Inst : MSBNA8
Misc : op81485,S7G483,15.2,,,1,1,soil
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:26:49 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration





TIC: 7G11144.d\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.243min (+0.029) 7.74ppm m

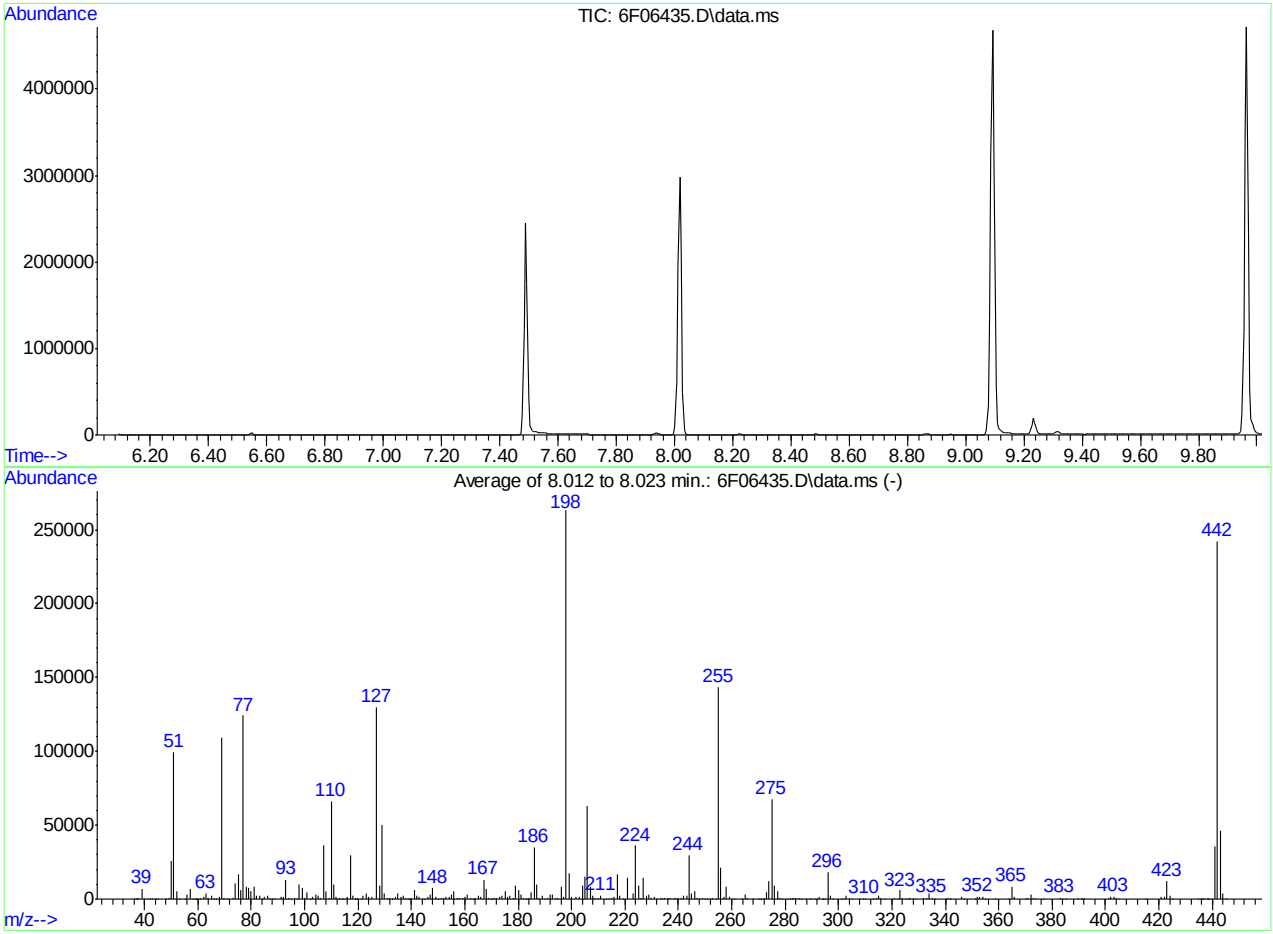
response 102680

Ion	Exp%	Act%
276.00	100	100
138.00	9.60	16.53
277.00	23.10	23.98
0.00	0.00	0.00

SW-846 Method 8270

Data File : C:\msdchem\1\data\S6F248_072920\6F06435.D Vial: 1
Acq On : 29 Jul 2020 12:37 pm Operator: marthav
Sample : DFTPP Inst : MSBNA10
Misc : op81256,S6F248,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\methods\DFTPP.m (RTE Integrator)
Title : Tune Evaluation



AutoFind: Scans 360, 361, 362; Background Corrected with Scan 354

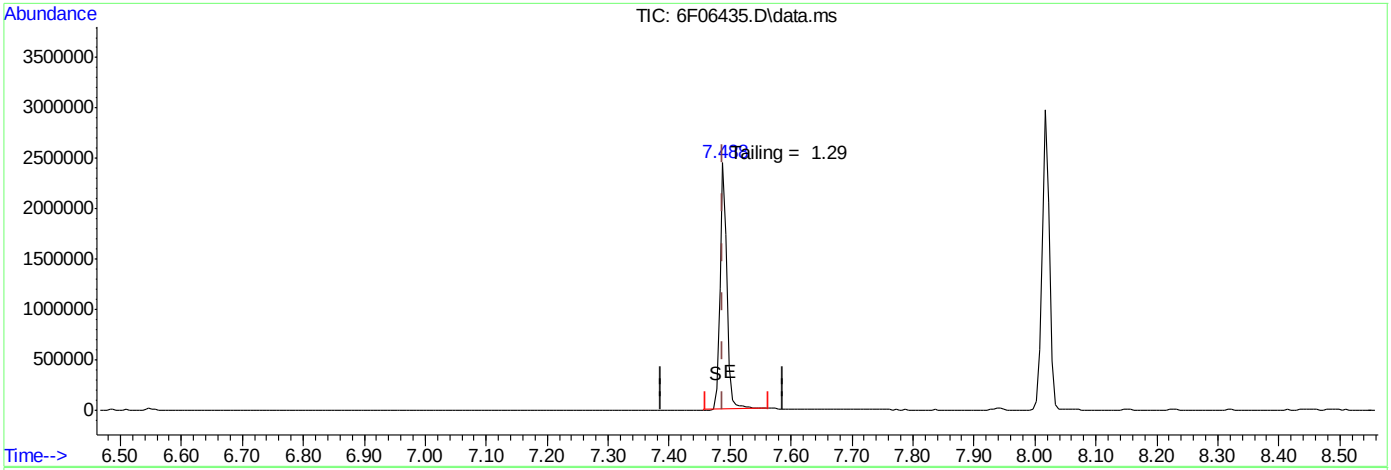
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	37.9	99720	PASS
68	69	0.00	2	1.7	1843	PASS
69	198	0.00	100	41.5	109212	PASS
70	69	0.00	2	0.5	588	PASS
127	198	40	60	49.4	130053	PASS
197	198	0.00	1	0.6	1470	PASS
198	198	100	100	100.0	263083	PASS
199	198	5	9	6.8	17833	PASS
275	198	10	30	25.8	67861	PASS
365	198	1	100	3.2	8361	PASS
441	443	0.01	100	77.9	35832	PASS
442	198	40	100	92.0	242163	PASS
443	442	17	23	19.0	46013	PASS

6F06435.D DFTPP.m Thu Jul 30 13:07:25 2020

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06435.D
Sample : DFTPP
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1
Acq On : 29 Jul 2020 12:37 pm Operator: marthav

Quant Time: Jul 30 13:07:27 2020
Quant Method : C:\msdchem\1\methods\DFTPP.m
Quant Title : Tune Evaluation



TIC: 6F06435.D\data.ms

(1) Pentachlorophenol

7.488min (+0.000) 86.71

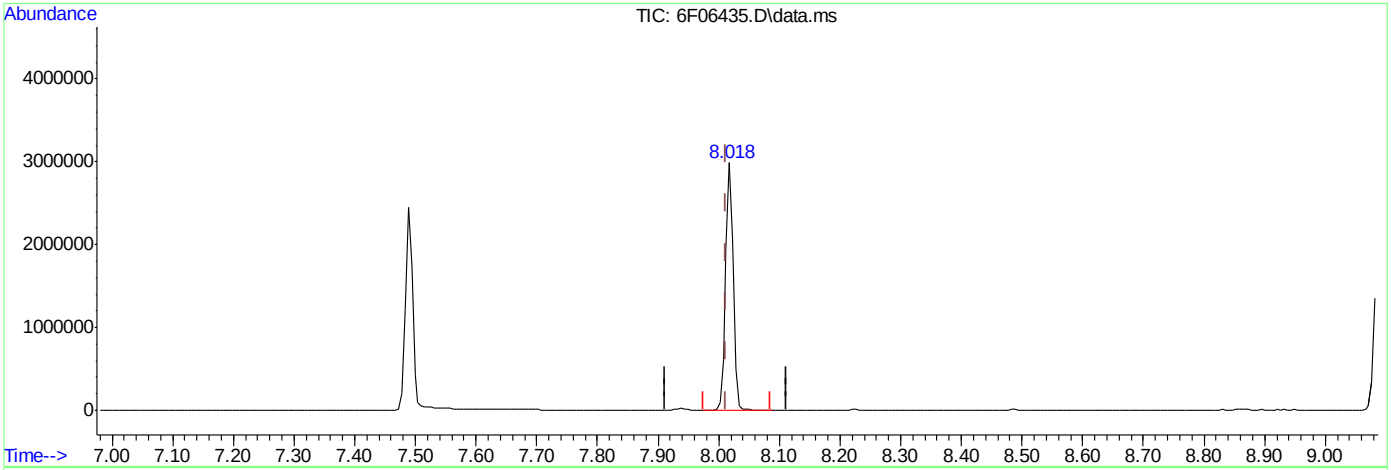
response 2074124

Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06435.D
Sample : DFTPP
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1
Acq On : 29 Jul 2020 12:37 pm Operator: marthav

Quant Time: Jul 30 13:07:27 2020
Quant Method : C:\msdchem\1\methods\DFTPP.m
Quant Title : Tune Evaluation



TIC: 6F06435.D\data.ms

(2) DFTPP

8.018min (+0.005) 93.73

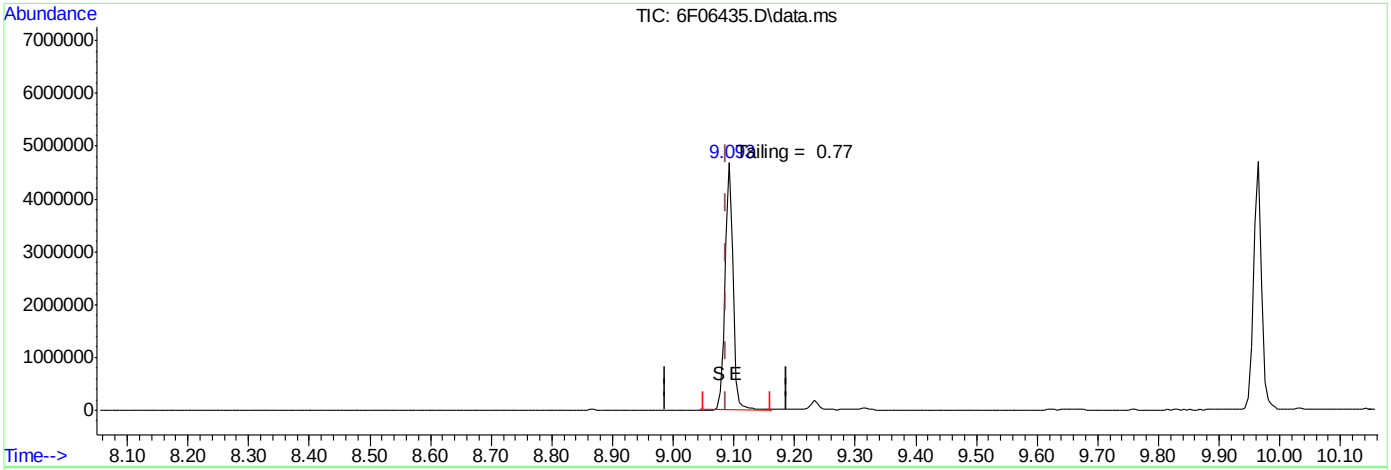
response 2645055

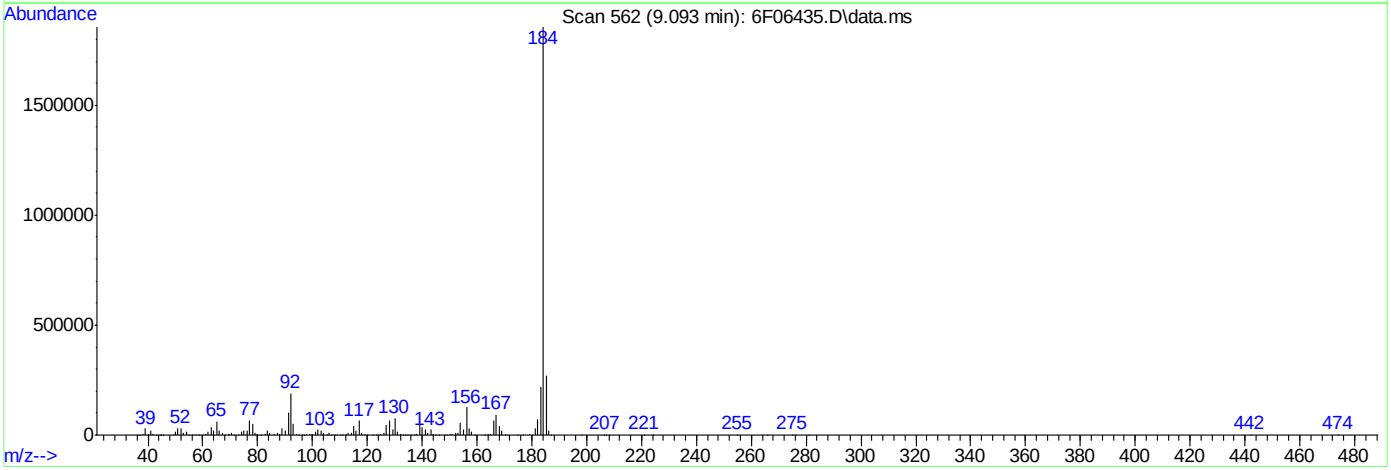
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06435.D
Sample : DFTPP
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1
Acq On : 29 Jul 2020 12:37 pm Operator: marthav

Quant Time: Jul 30 13:07:27 2020
Quant Method : C:\msdchem\1\methods\DFTPP.m
Quant Title : Tune Evaluation





TIC: 6F06435.D\data.ms

(3) Benzidine

9.093min (+0.005) 103.11

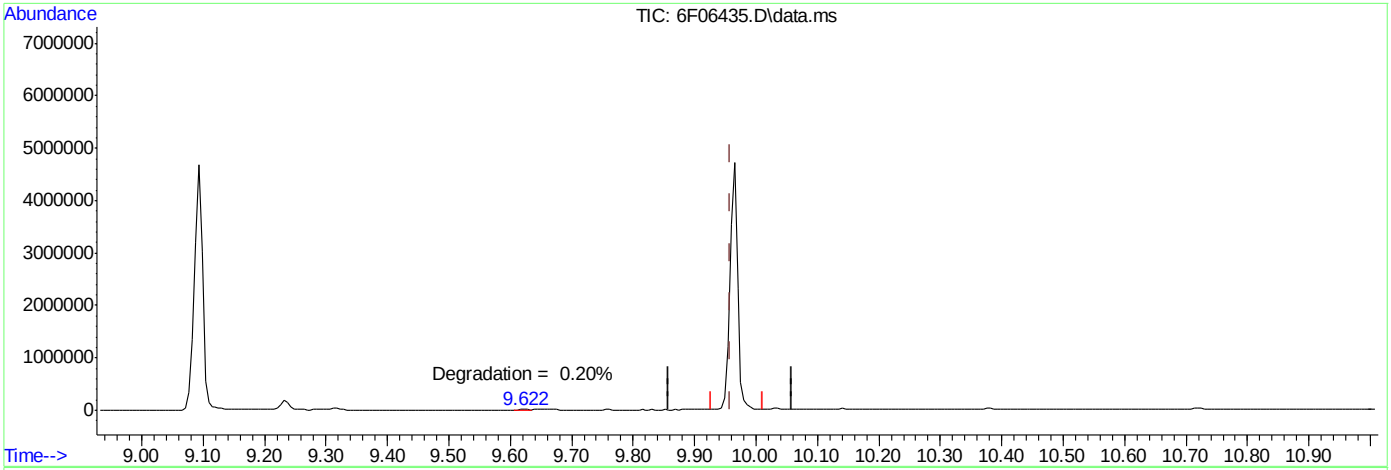
response 4373300

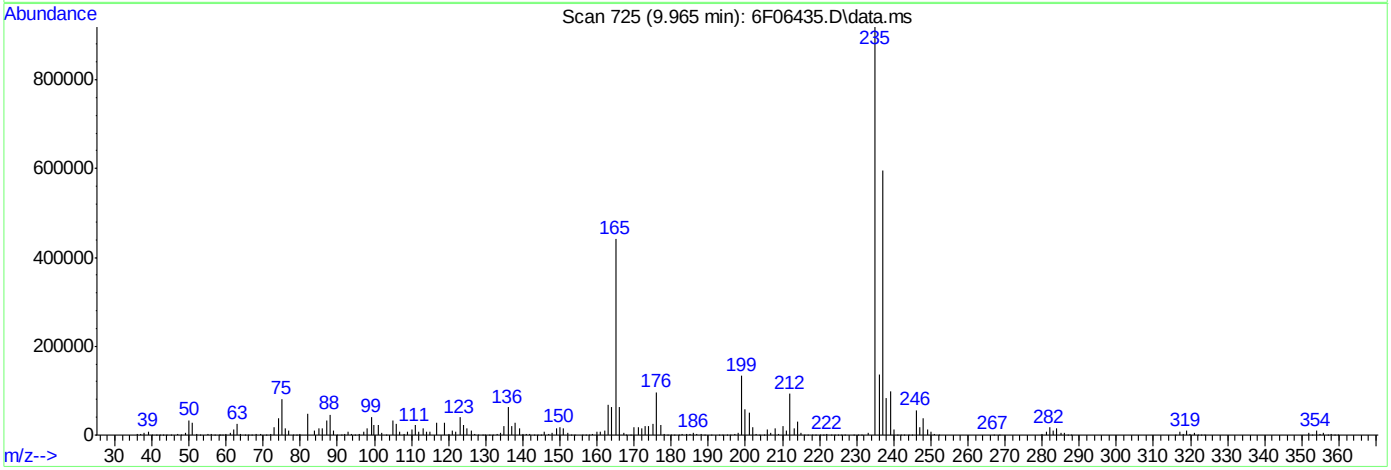
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06435.D
Sample : DFTPP
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1
Acq On : 29 Jul 2020 12:37 pm Operator: marthav

Quant Time: Jul 30 13:07:27 2020
Quant Method : C:\msdchem\1\methods\DFTPP.m
Quant Title : Tune Evaluation





TIC: 6F06435.D\data.ms

(4) DDT

9.965min (+0.005) 118.64

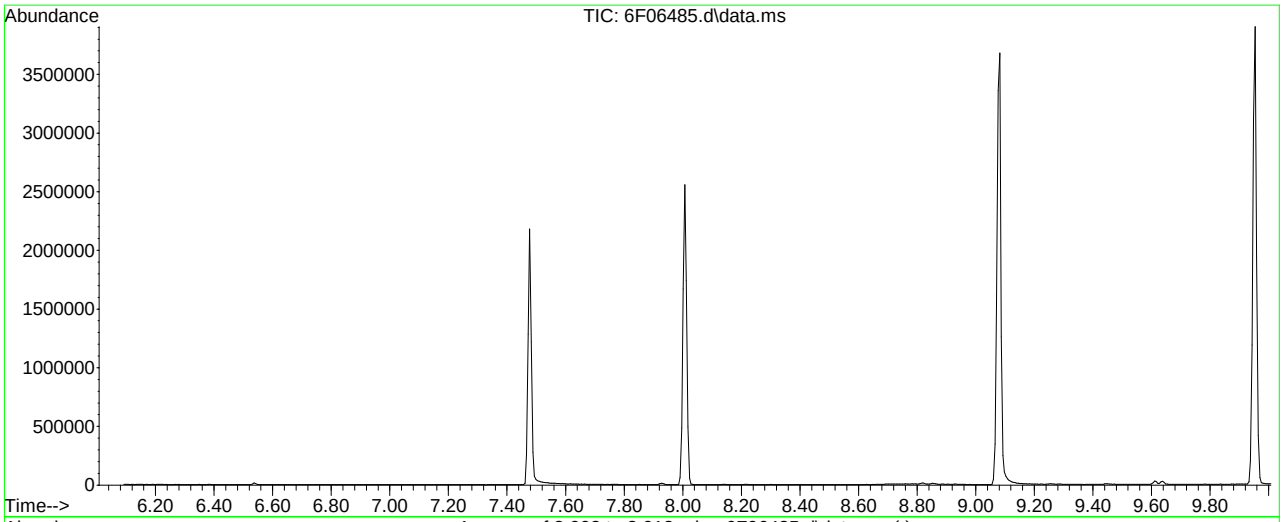
response 4141541

Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

SW-846 Method 8270

Data File : C:\msdchem\1\data\Je...2020\S6F251\6F06485.d Vial: 1
Acq On : 11 Aug 2020 12:38 pm Operator: marthav
Sample : DFTPP Inst : MSBNA10
Misc : op81484,S6F251,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\methods\dftpp.m (RTE Integrator)
Title : Tune Evaluation



AutoFind: Scans 358, 359, 360; Background Corrected with Scan 354

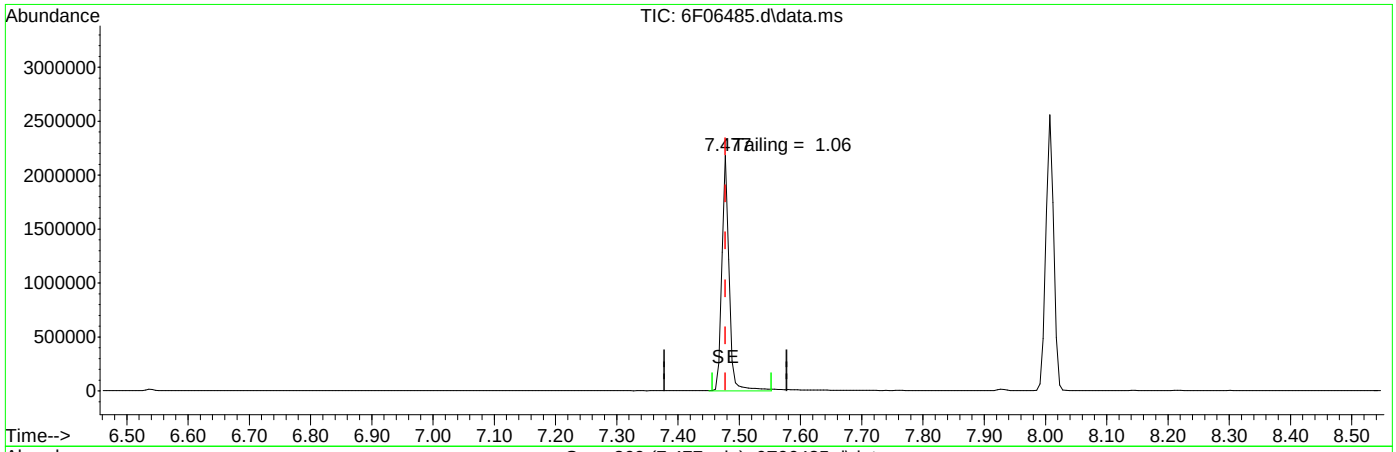
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	38.3	86109	PASS
68	69	0.00	2	1.5	1447	PASS
69	198	0.00	100	42.0	94603	PASS
70	69	0.00	2	0.5	507	PASS
127	198	40	60	48.6	109275	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	225045	PASS
199	198	5	9	6.7	15094	PASS
275	198	10	30	25.6	57523	PASS
365	198	1	100	3.3	7450	PASS
441	443	0.01	100	76.2	30951	PASS
442	198	40	100	92.8	208749	PASS
443	442	17	23	19.5	40608	PASS

6F06485.d dftpp.m Wed Aug 12 05:36:15 2020

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06485.d
Acq On : 11 Aug 2020 12:38 pm
Operator : marthav
Sample : DFTPP Inst : MSBNA10
Misc : op81484,S6F251,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Results File: dftpp.RES
Quant Time: Aug 12 05:35:30 2020
Quant Title : Tune Evaluation
QLast Update : Wed Aug 12 05:35:27 2020
Response via : Initial Calibration



TIC: 6F06485.d\data.ms

(1) Pentachlorophenol

7.477min (0.000) 74.41

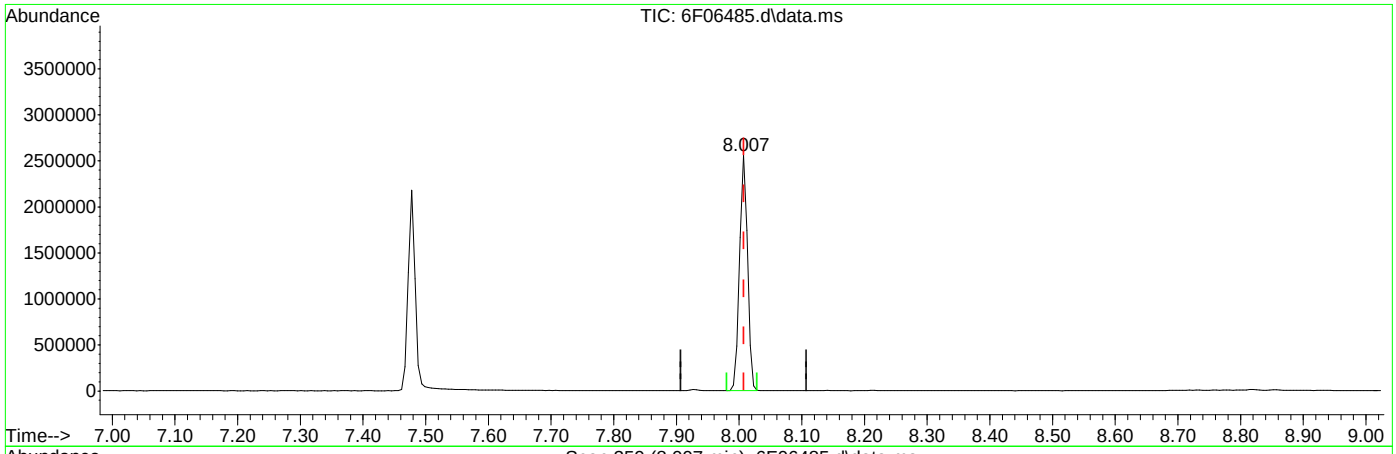
response 1779848

Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06485.d
Acq On : 11 Aug 2020 12:38 pm
Operator : marthav
Sample : DFTPP Inst : MSBNA10
Misc : op81484,S6F251,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Results File: dftpp.RES
Quant Time: Aug 12 05:35:30 2020
Quant Title : Tune Evaluation
QLast Update : Wed Aug 12 05:35:27 2020
Response via : Initial Calibration



TIC: 6F06485.d\data.ms

(2) DFTPP

8.007min (0.000) 80.22

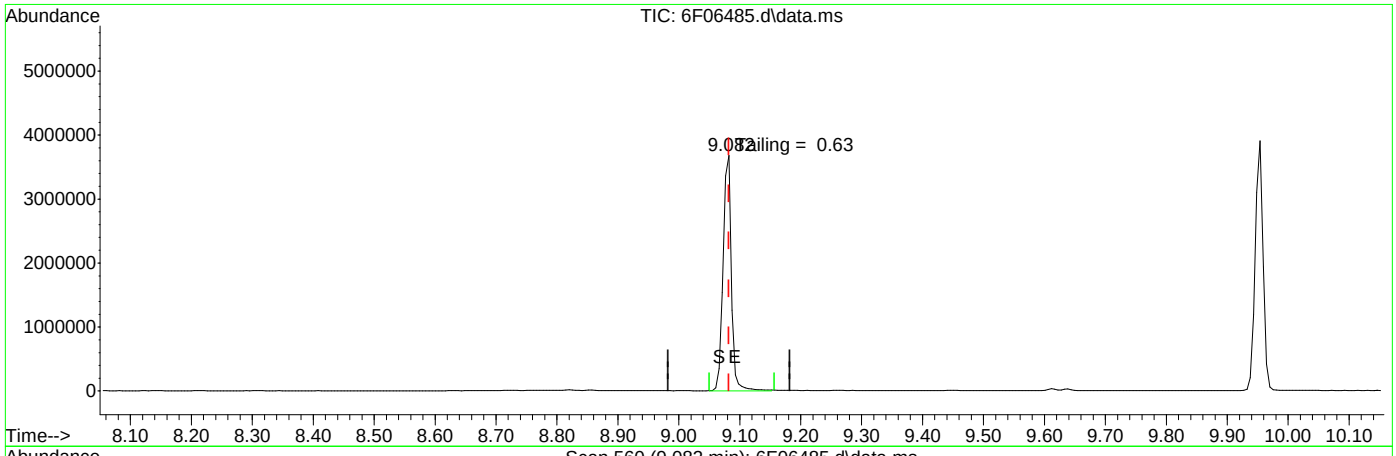
response 2263750

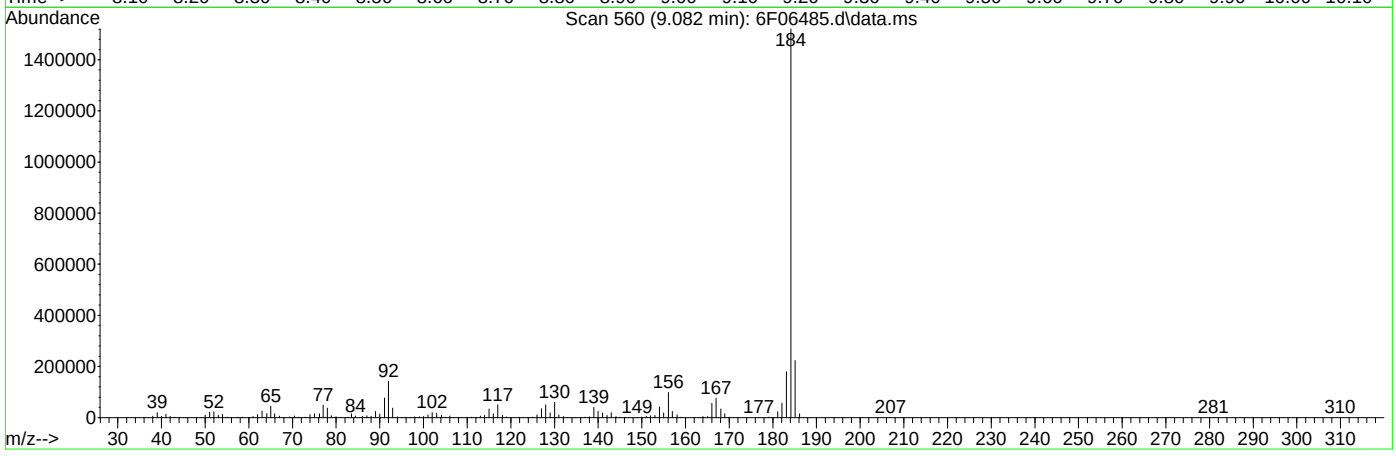
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06485.d
Acq On : 11 Aug 2020 12:38 pm
Operator : marthav
Sample : DFTPP Inst : MSBNA10
Misc : op81484,S6F251,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Results File: dftpp.RES
Quant Time: Aug 12 05:35:30 2020
Quant Title : Tune Evaluation
QLast Update : Wed Aug 12 05:35:27 2020
Response via : Initial Calibration





TIC: 6F06485.d\data.ms

(3) Benzidine

9.082min (0.000) 82.10

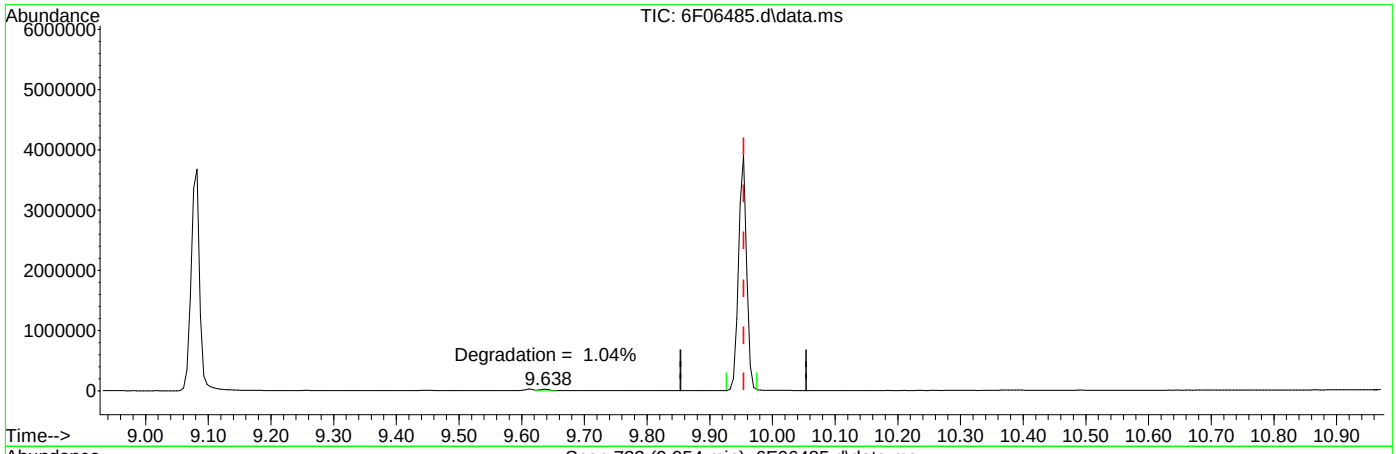
response 3482419

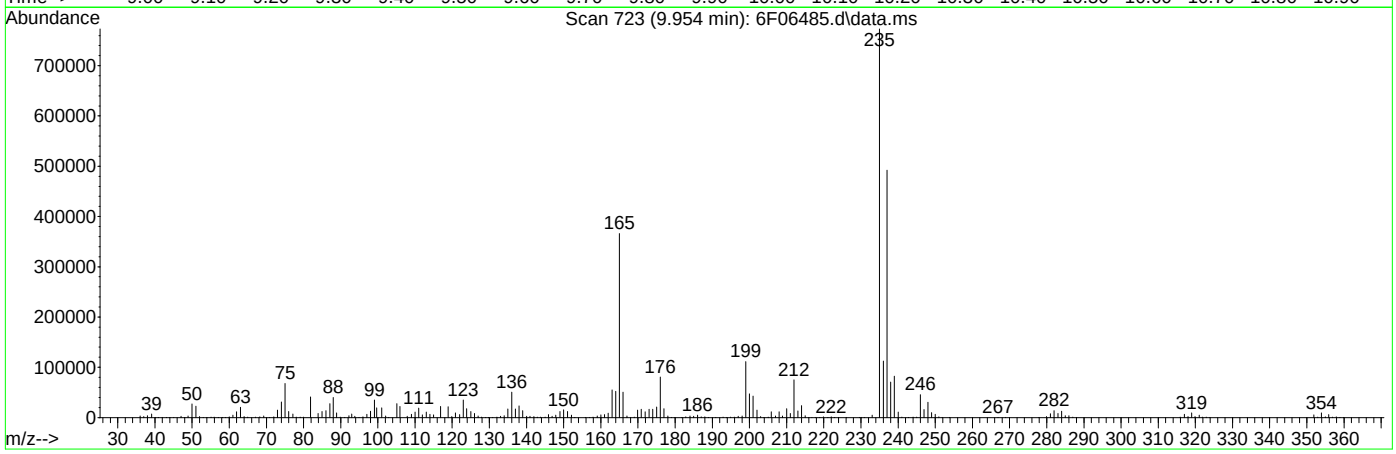
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06485.d
Acq On : 11 Aug 2020 12:38 pm
Operator : marthav
Sample : DFTPP Inst : MSBNA10
Misc : op81484,S6F251,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Results File: dftpp.RES
Quant Time: Aug 12 05:35:30 2020
Quant Title : Tune Evaluation
QLast Update : Wed Aug 12 05:35:27 2020
Response via : Initial Calibration





TIC: 6F06485.d\data.ms

(4) DDT

9.954min (0.000) 99.32

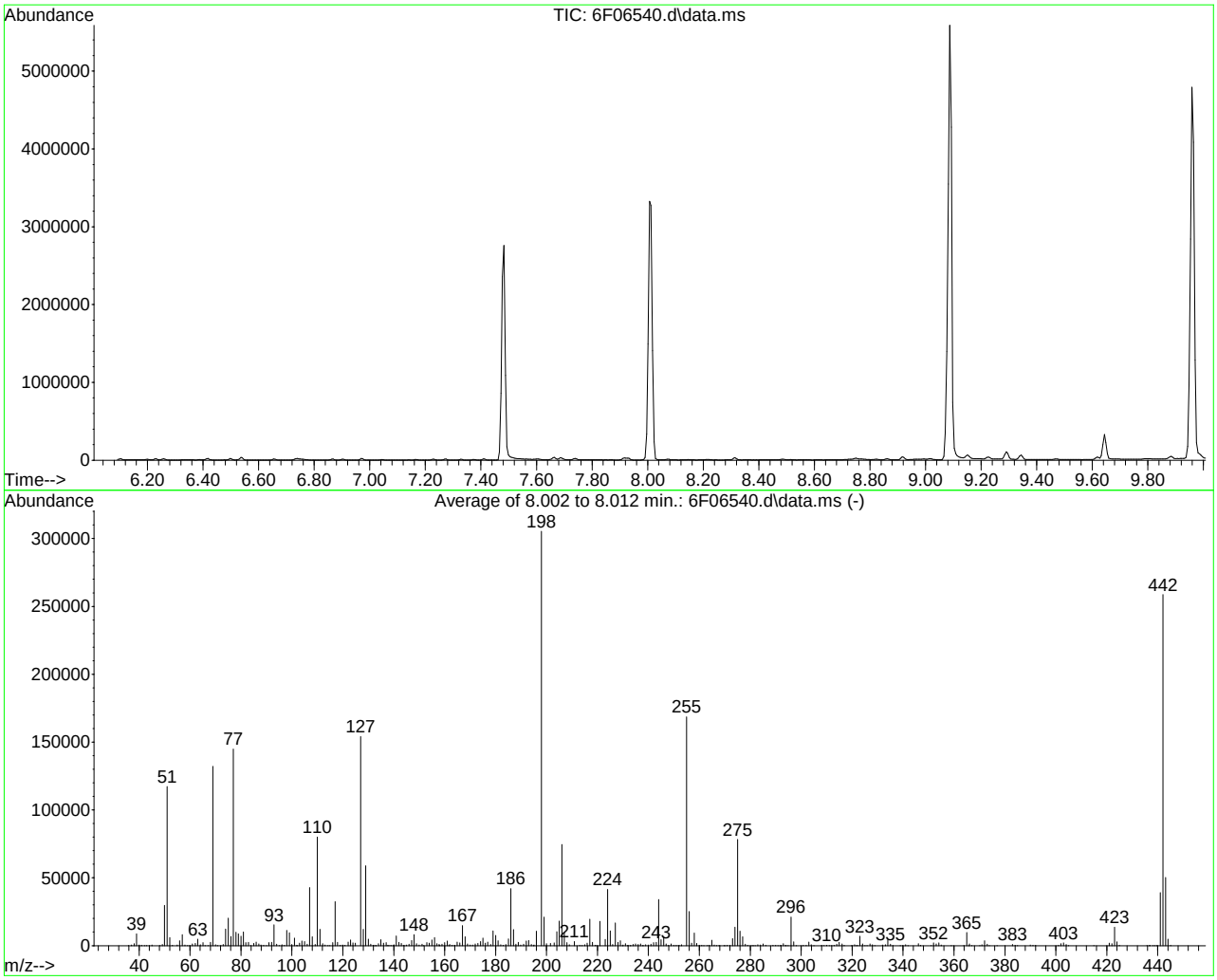
response 3466937

Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

SW-846 Method 8270

Data File : C:\msdchem\1\data\ed...2020\s6f253\6F06540.d Vial: 1
Acq On : 13 Aug 2020 1:09 pm Operator: marthav
Sample : DFTPP Inst : MSBNA10
Misc : op81484,S6F253,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\methods\dftpp.m (RTE Integrator)
Title : Tune Evaluation



AutoFind: Scans 358, 359, 360; Background Corrected with Scan 354

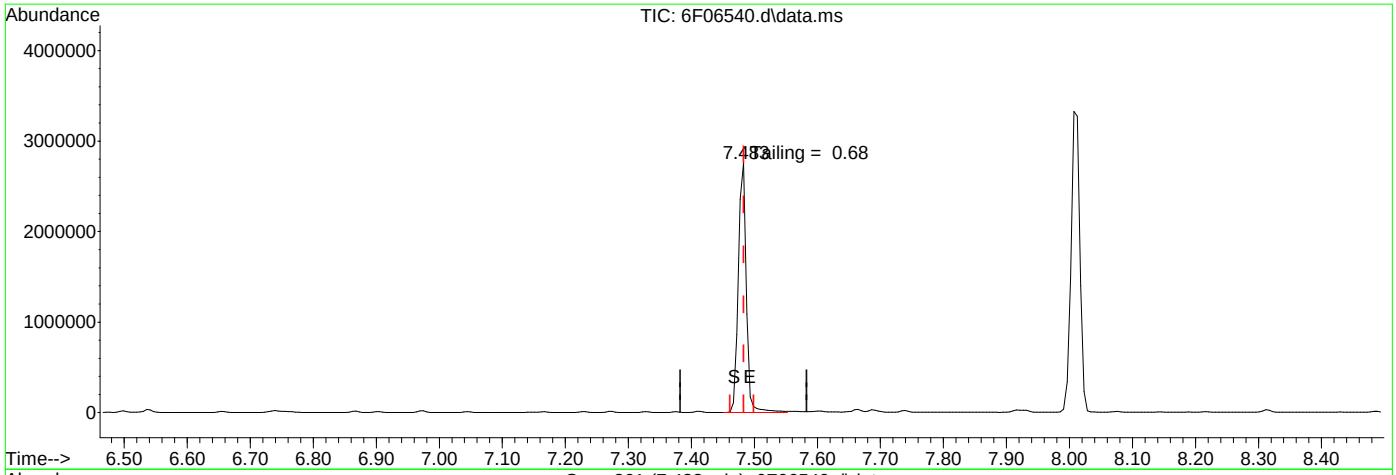
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	38.4	117285	PASS
68	69	0.00	2	1.8	2405	PASS
69	198	0.00	100	43.3	132213	PASS
70	69	0.00	2	0.5	629	PASS
127	198	40	60	50.5	154155	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	305280	PASS
199	198	5	9	6.9	21102	PASS
275	198	10	30	25.6	78245	PASS
365	198	1	100	3.2	9775	PASS
441	443	0.01	100	78.0	39182	PASS
442	198	40	100	84.8	258819	PASS
443	442	17	23	19.4	50251	PASS

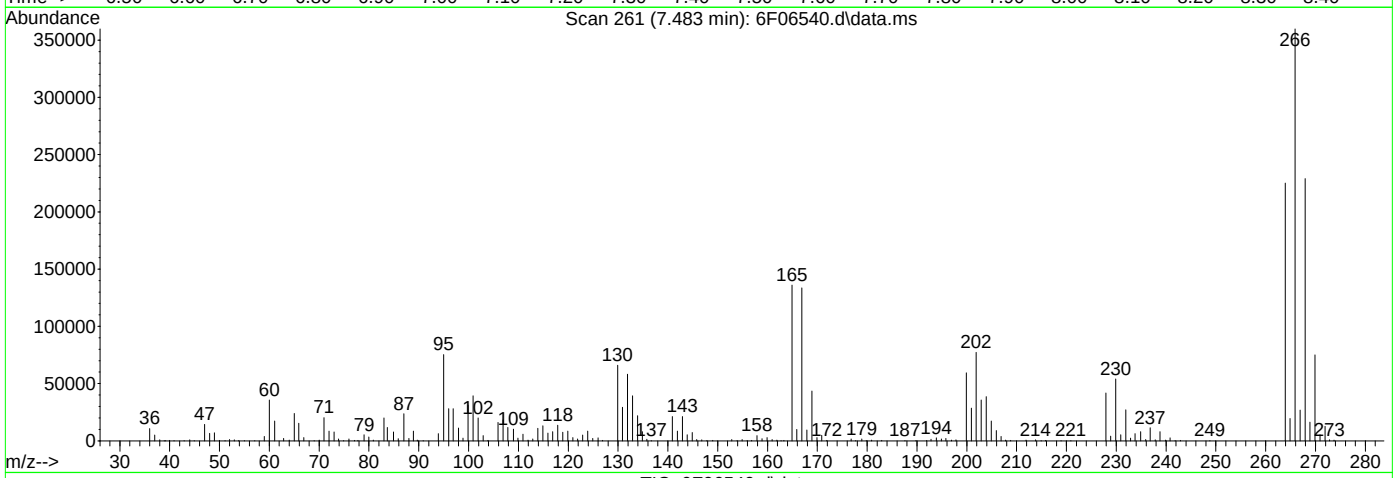
6F06540.d dftpp.m Fri Aug 14 04:31:26 2020

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s6f253\
Data File : 6F06540.d
Acq On : 13 Aug 2020 1:09 pm
Operator : marthav
Sample : DFTPP
Misc : op81484,S6F253,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 04:31:16 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Fri Aug 14 04:31:13 2020
Response via : Initial Calibration





TIC: 6F06540.d\data.ms

(1) Pentachlorophenol

7.483min (0.000) 98.83

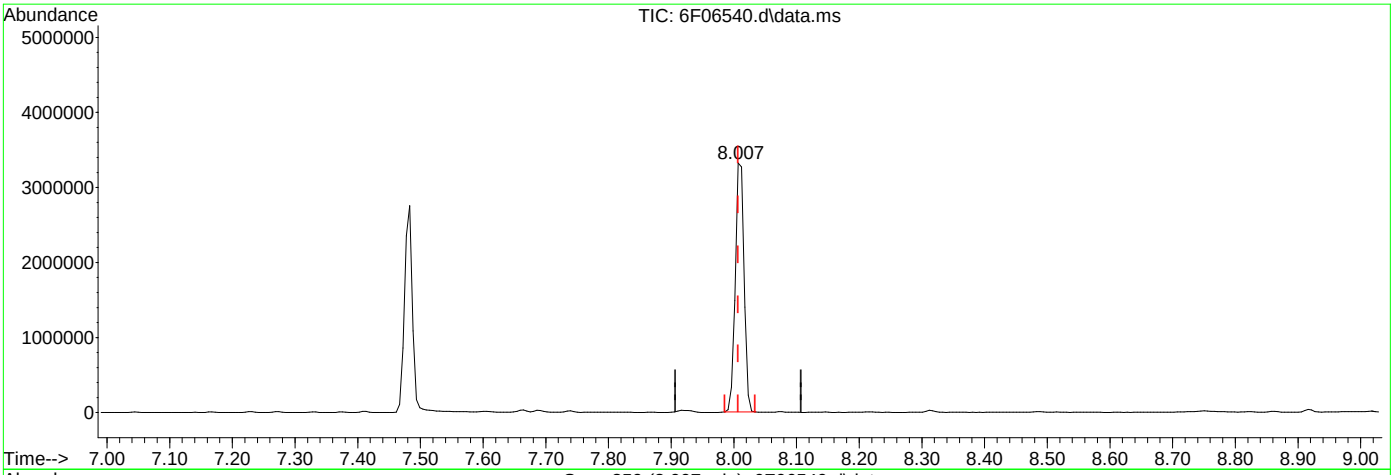
response 2364025

Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s6f253\
Data File : 6F06540.d
Acq On : 13 Aug 2020 1:09 pm
Operator : marthav
Sample : DFTPP
Misc : op81484,S6F253,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 04:31:16 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Fri Aug 14 04:31:13 2020
Response via : Initial Calibration



TIC: 6F06540.d\data.ms

(2) DFTPP

8.007min (0.000) 114.54

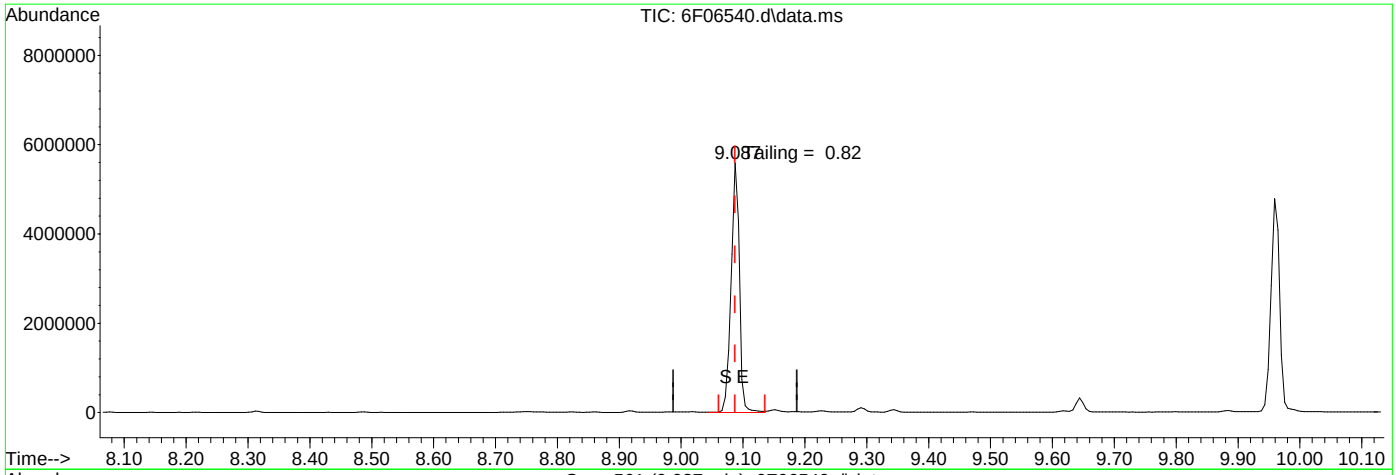
response 3232391

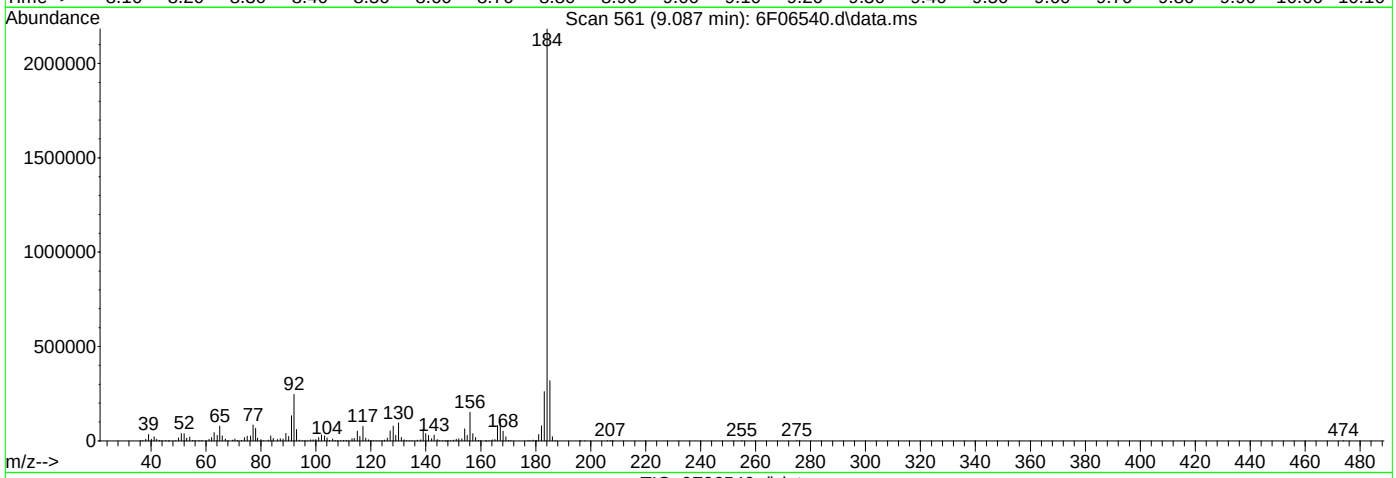
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s6f253\
Data File : 6F06540.d
Acq On : 13 Aug 2020 1:09 pm
Operator : marthav
Sample : DFTPP
Misc : op81484,S6F253,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 04:31:16 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Fri Aug 14 04:31:13 2020
Response via : Initial Calibration





TIC: 6F06540.d\data.ms

(3) Benzidine

9.087min (0.000) 122.99

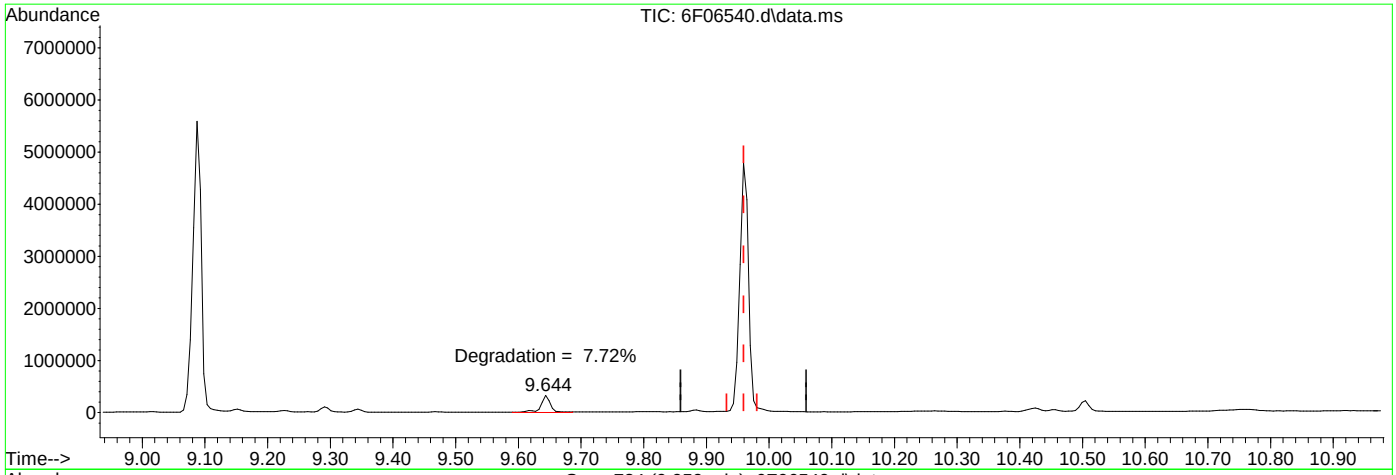
response 5216719

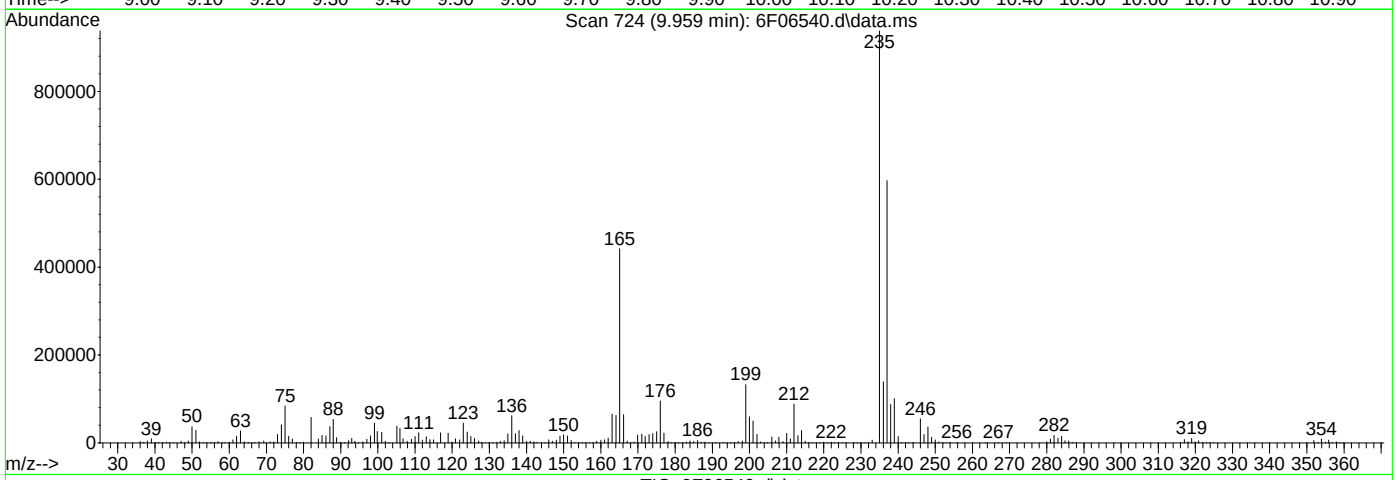
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s6f253\
Data File : 6F06540.d
Acq On : 13 Aug 2020 1:09 pm
Operator : marthav
Sample : DFTPP
Misc : op81484,S6F253,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 04:31:16 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Fri Aug 14 04:31:13 2020
Response via : Initial Calibration





TIC: 6F06540.d\data.ms

(4) DDT

9.959min (0.000) 131.40

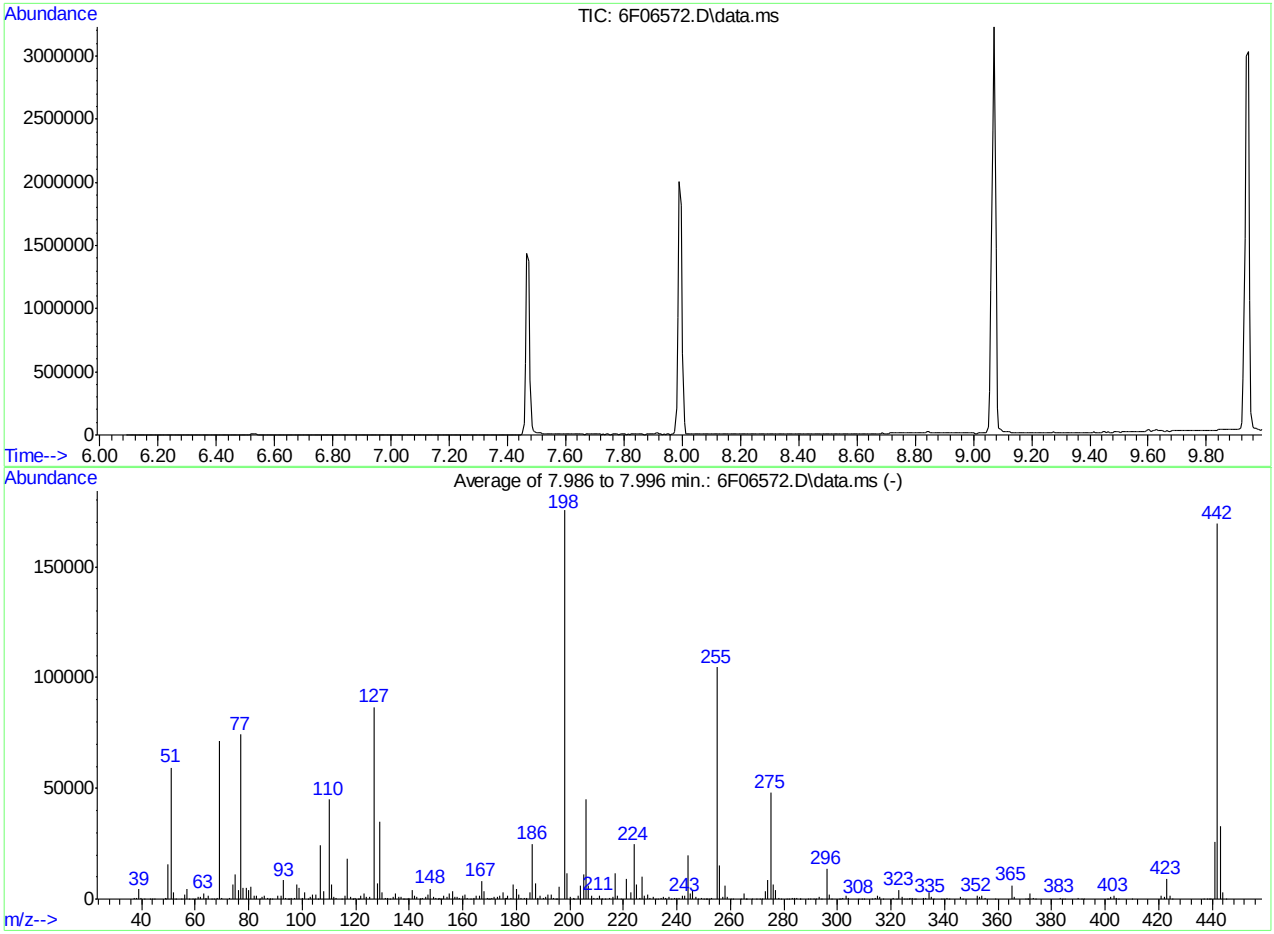
response 4586970

Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

SW-846 Method 8270

Data File : C:\msdchem\1\data\S6F254_081420\6F06572.D Vial: 1
Acq On : 14 Aug 2020 12:30 pm Operator: marthav
Sample : DFTPP Inst : MSBNA10
Misc : op81484,S6F254,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\methods\DFTPP.m (RTE Integrator)
Title : Tune Evaluation



AutoFind: Scans 355, 356, 357; Background Corrected with Scan 349

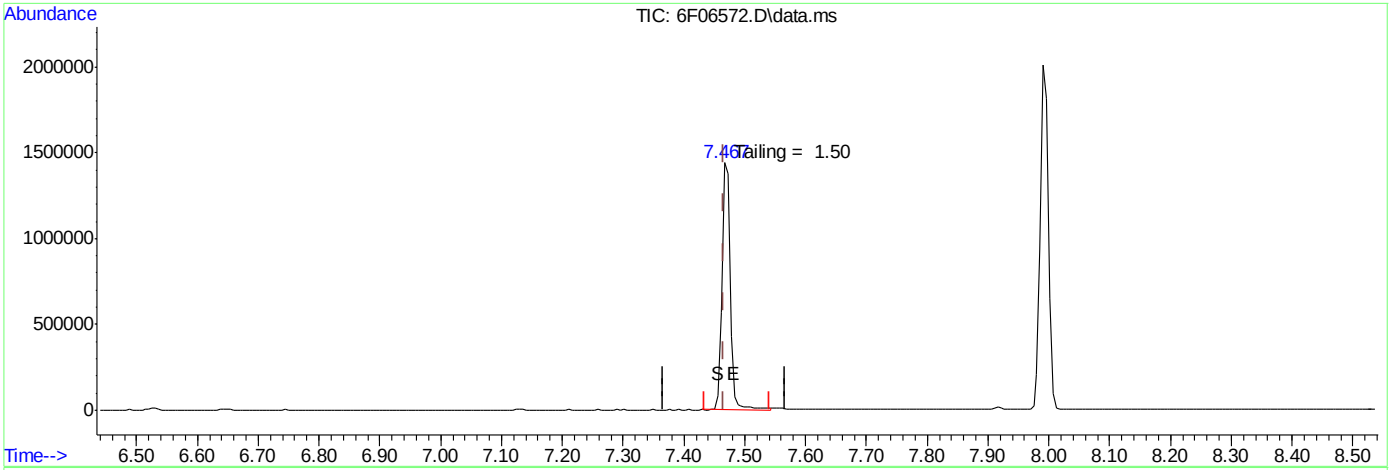
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	33.8	59315	PASS
68	69	0.00	2	0.6	399	PASS
69	198	0.00	100	40.7	71416	PASS
70	69	0.00	2	0.6	405	PASS
127	198	40	60	49.5	86805	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	175488	PASS
199	198	5	9	6.6	11627	PASS
275	198	10	30	27.4	48077	PASS
365	198	1	100	3.5	6195	PASS
441	443	0.01	100	78.8	25833	PASS
442	198	40	100	96.5	169416	PASS
443	442	17	23	19.3	32768	PASS

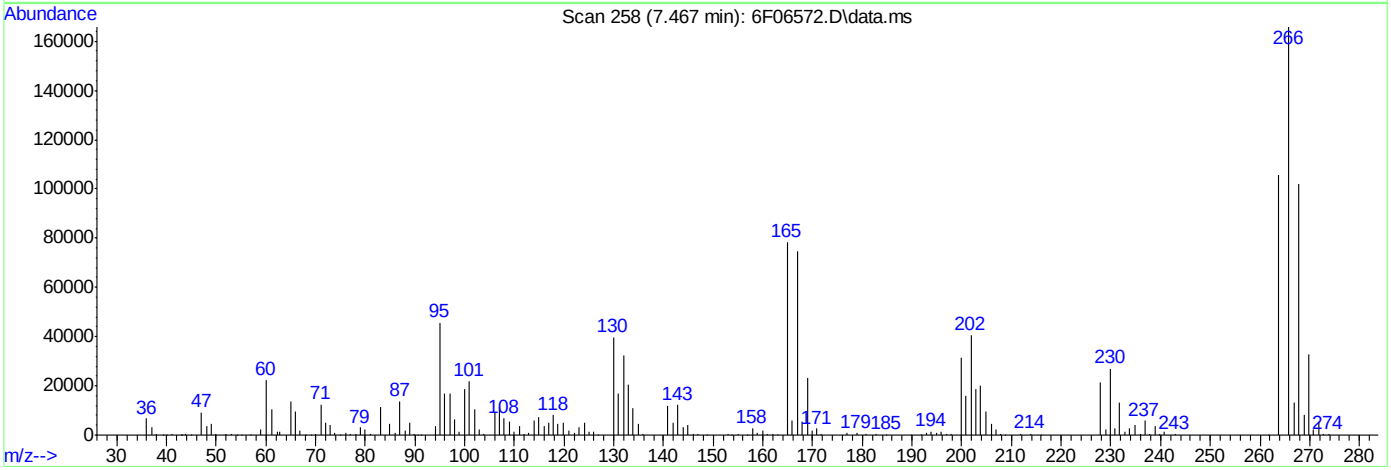
6F06572.D DFTPP.m Fri Aug 14 14:07:04 2020

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F254_081420\6F06572.D
Sample : DFTPP
Misc : op81484,S6F254,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1
Acq On : 14 Aug 2020 12:30 pm Operator: marthav

Quant Time: Aug 14 14:06:58 2020
Quant Method : C:\msdchem\1\methods\DFTPP.m
Quant Title : Tune Evaluation





TIC: 6F06572.D\data.ms

(1) Pentachlorophenol

7.467min (0.000) 55.40

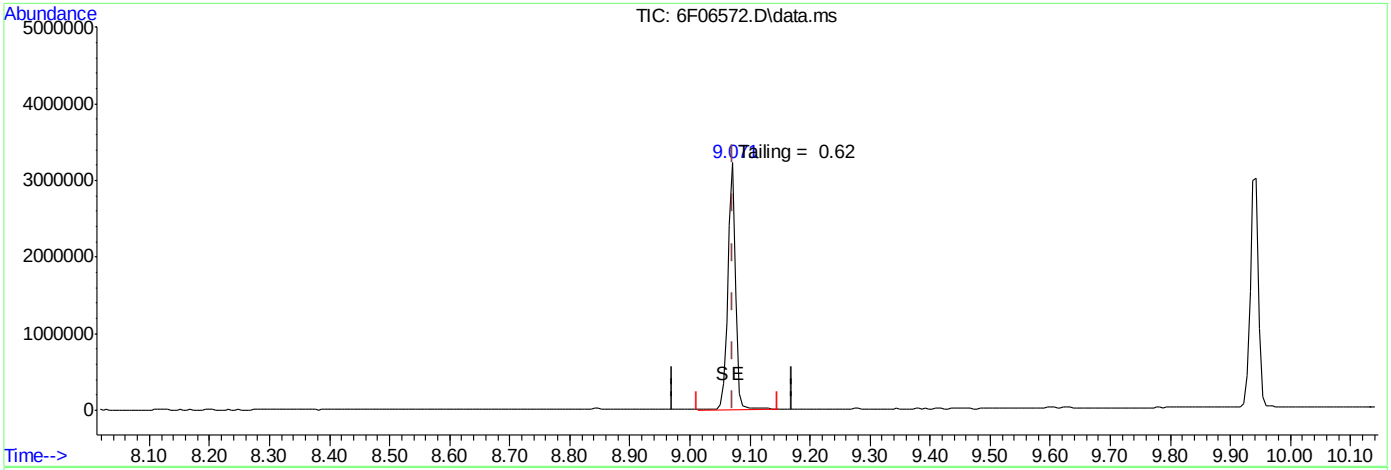
response 1325115

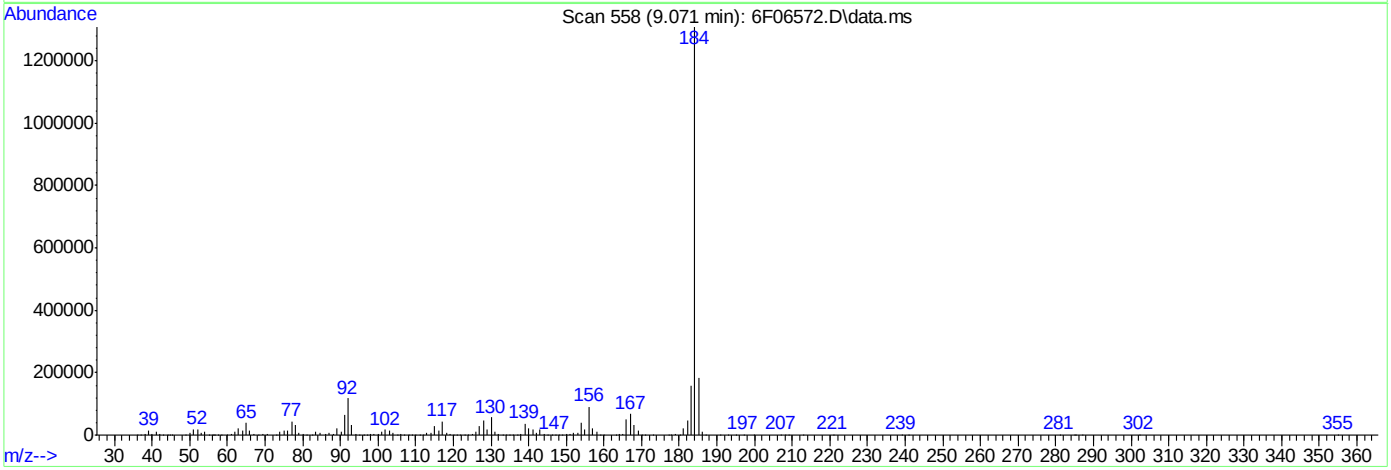
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F254_081420\6F06572.D
Sample : DFTPP
Misc : op81484,S6F254,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1
Acq On : 14 Aug 2020 12:30 pm Operator: marthav

Quant Time: Aug 14 14:06:58 2020
Quant Method : C:\msdchem\1\methods\DFTPP.m
Quant Title : Tune Evaluation





TIC: 6F06572.D\data.ms

(3) Benzidine

9.071min (0.000) 68.07

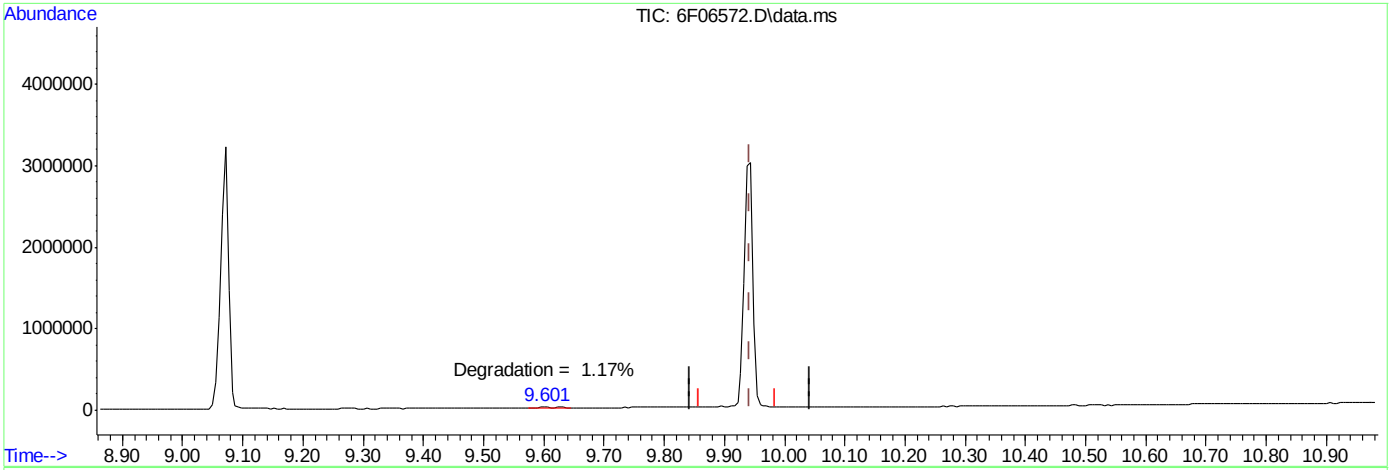
response 2887038

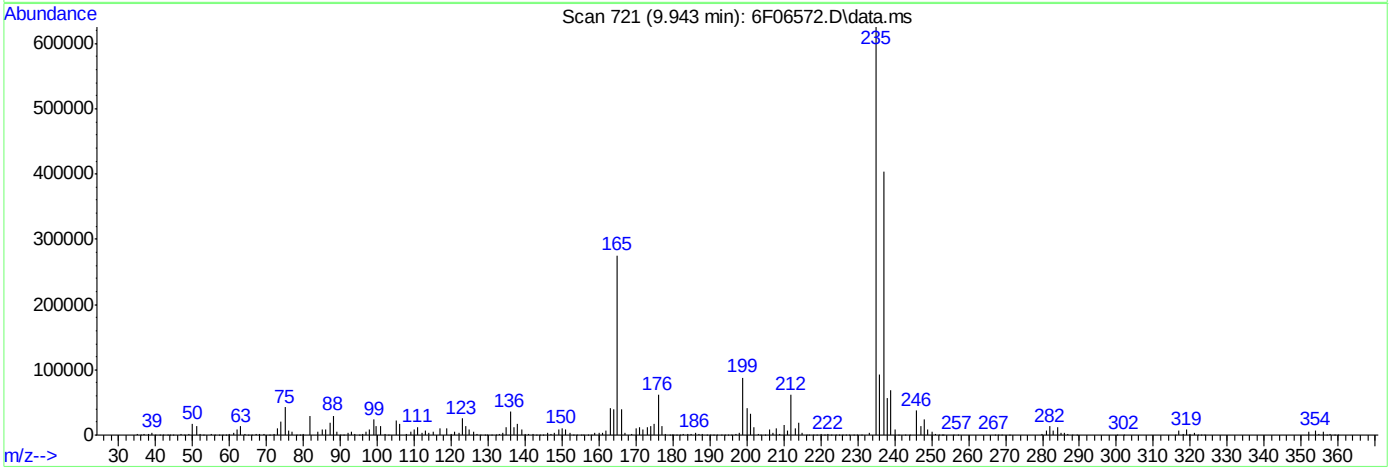
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F254_081420\6F06572.D
Sample : DFTPP
Misc : op81484,S6F254,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1
Acq On : 14 Aug 2020 12:30 pm Operator: marthav

Quant Time: Aug 14 14:06:58 2020
Quant Method : C:\msdchem\1\methods\DFTPP.m
Quant Title : Tune Evaluation





TIC: 6F06572.D\data.ms

(4) DDT

9.943min (0.000) 84.78

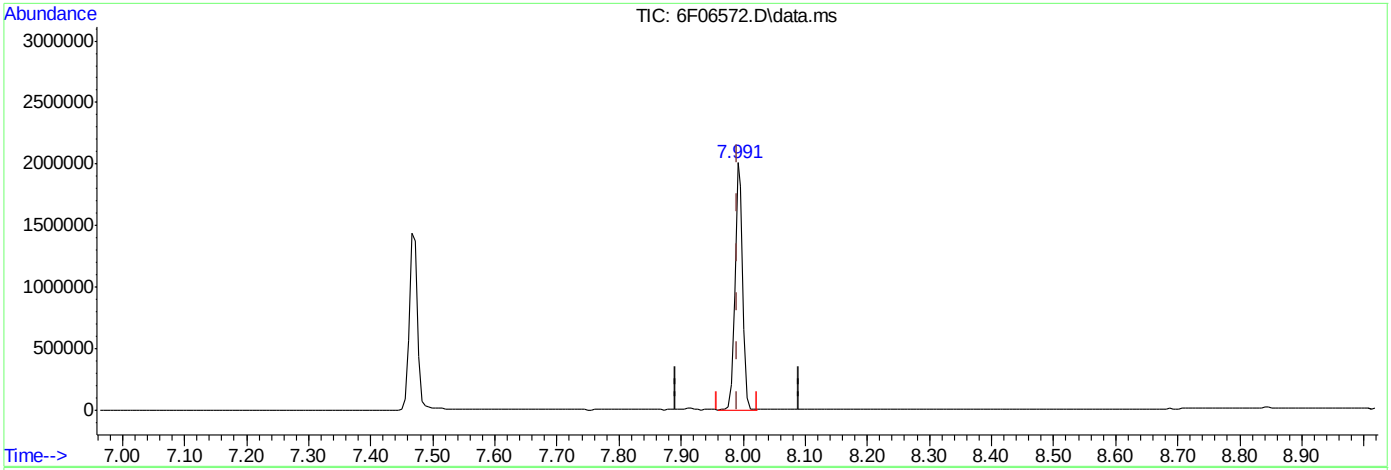
response 2959372

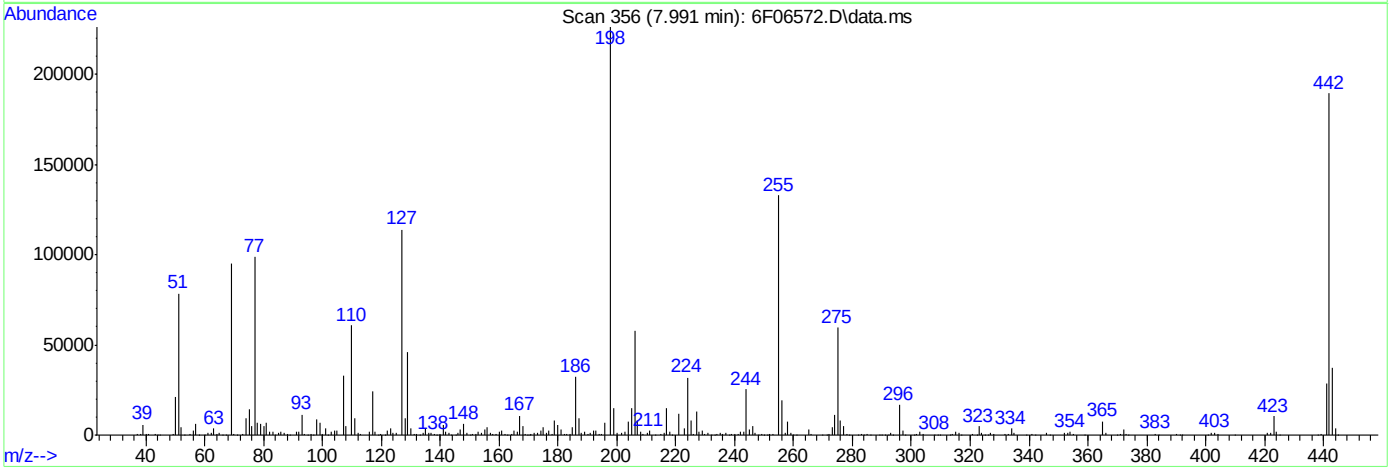
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F254_081420\6F06572.D
Sample : DFTPP
Misc : op81484,S6F254,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1
Acq On : 14 Aug 2020 12:30 pm Operator: marthav

Quant Time: Aug 14 14:06:58 2020
Quant Method : C:\msdchem\1\methods\DFTPP.m
Quant Title : Tune Evaluation





TIC: 6F06572.D\data.ms

(2) DFTPP

7.991min (0.000) 65.20

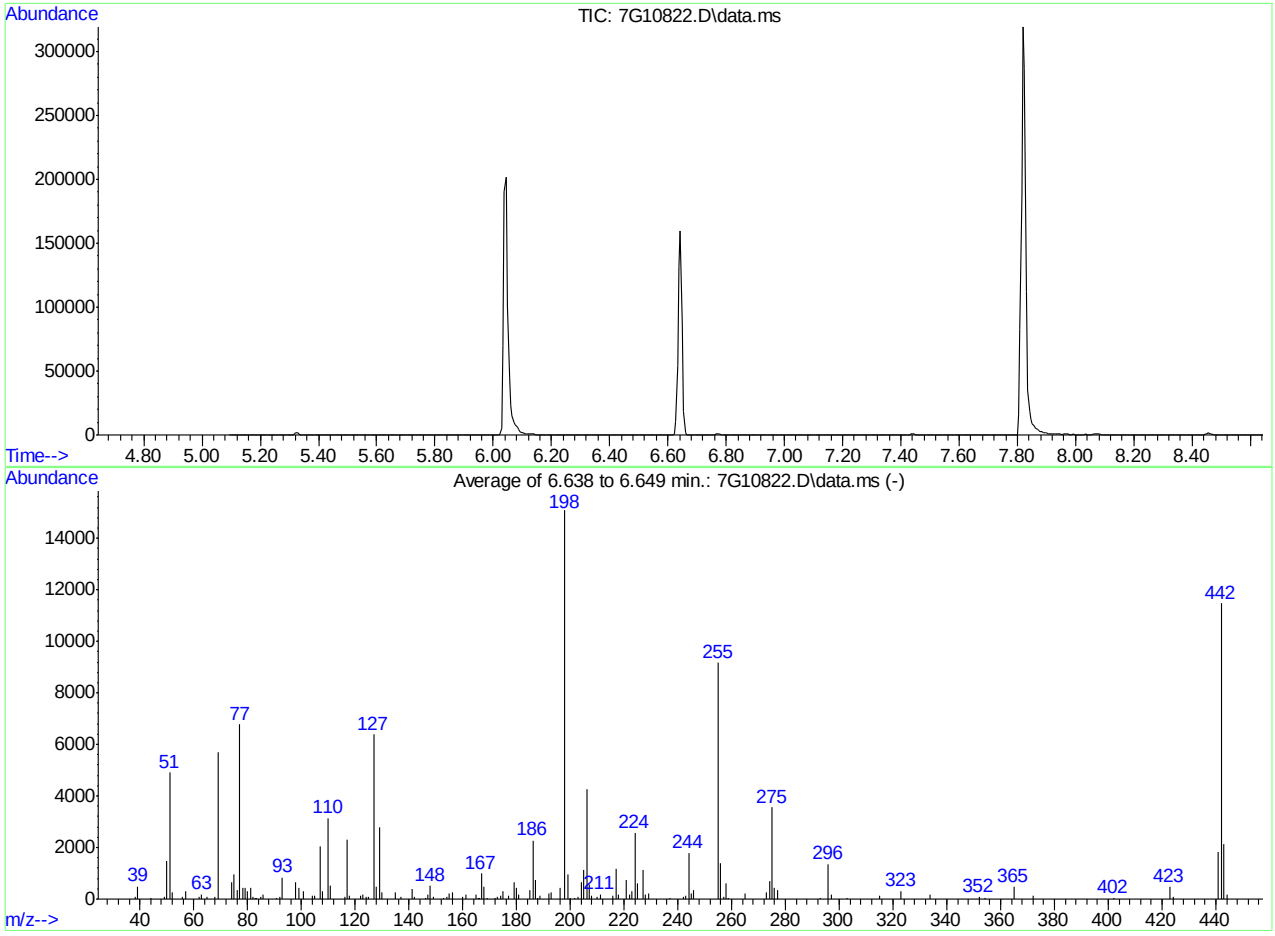
response 1839943

Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

SW-846 Method 8270

Data File : C:\msdchem\1\data\072120_7G472\7G10822.D Vial: 1
Acq On : 21 Jul 2020 8:44 am Operator: fouads
Sample : dftpp Inst : MSBNA8
Misc : op80679,S7G472,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\methods\dftpp.m (RTE Integrator)
Title : Tune Evaluation



AutoFind: Scans 290, 291, 292; Background Corrected with Scan 285

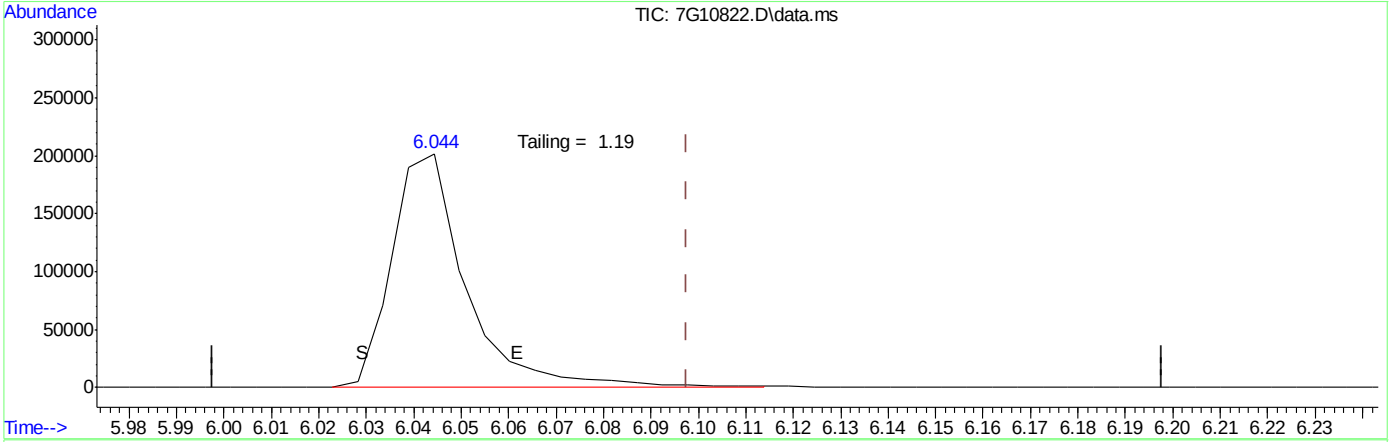
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	32.6	4908	PASS
68	69	0.00	2	1.6	91	PASS
69	198	0.00	100	37.7	5683	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	42.3	6380	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	15078	PASS
199	198	5	9	6.3	953	PASS
275	198	10	30	23.5	3550	PASS
365	198	1	100	3.1	473	PASS
441	443	0.01	100	84.1	1808	PASS
442	198	40	100	76.1	11474	PASS
443	442	17	23	18.7	2149	PASS

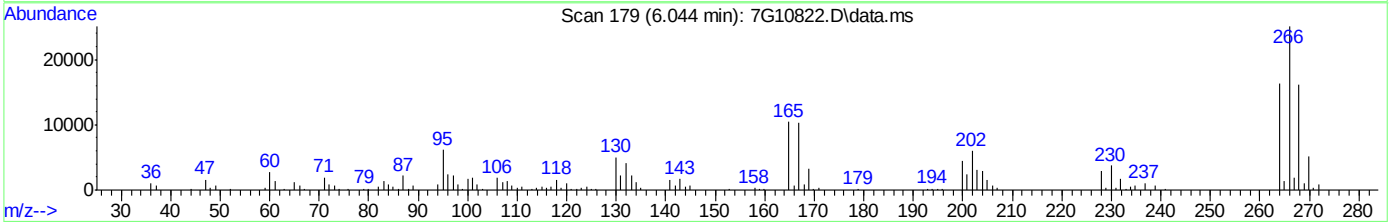
7G10822.D dftpp.m Wed Jul 22 13:20:11 2020

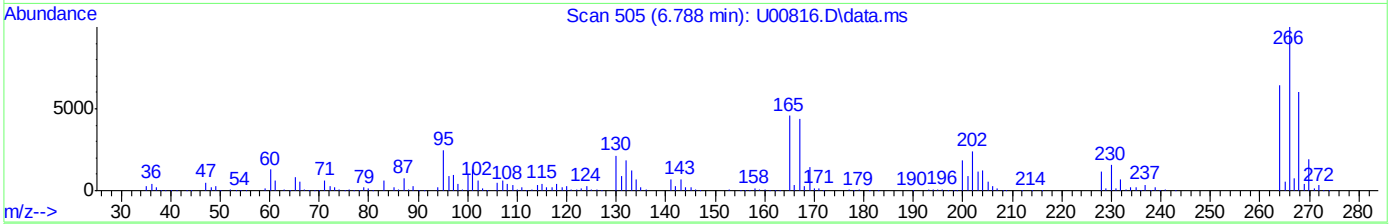
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10822.D
Acq On : 21 Jul 2020 8:44 am
Operator : fouads
Sample : dftpp
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 21 08:58:05 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Tue Jun 23 13:15:39 2020
Response via : Initial Calibration







TIC: 7G10822.D\data.ms

(1) Pentachlorophenol

6.044min (-0.053) 9.28

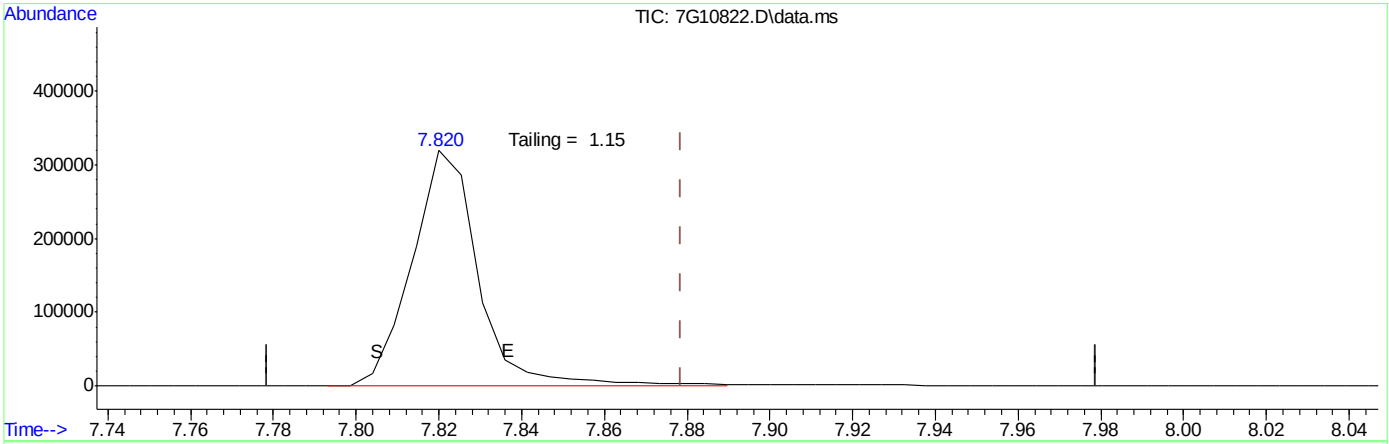
response 221934

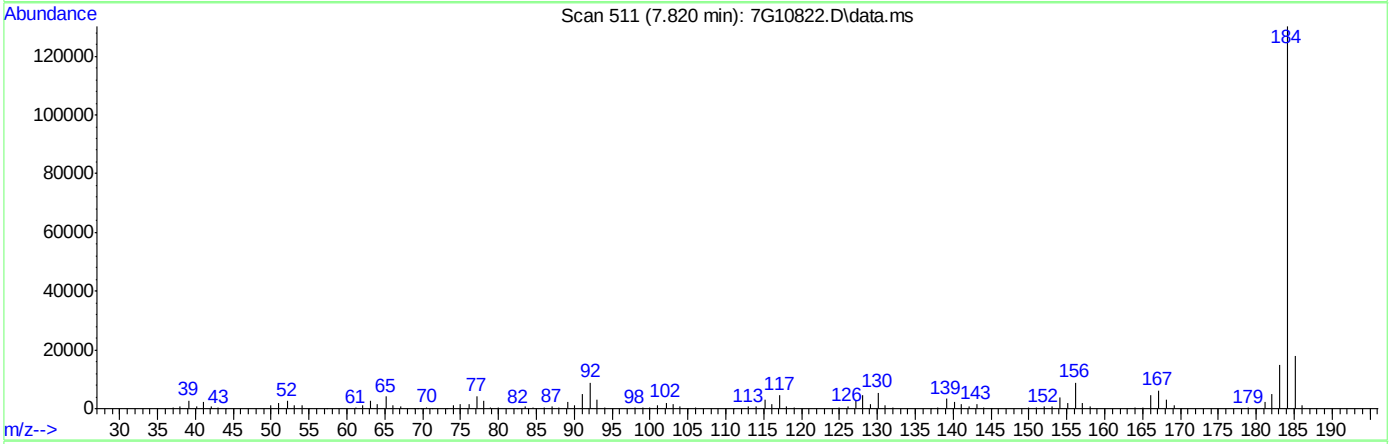
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10822.D
Acq On : 21 Jul 2020 8:44 am
Operator : fouads
Sample : dftpp
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 21 08:58:05 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Tue Jun 23 13:15:39 2020
Response via : Initial Calibration





TIC: 7G10822.D\data.ms

(3) Benzidine

7.820min (-0.059) 8.36

response 354536

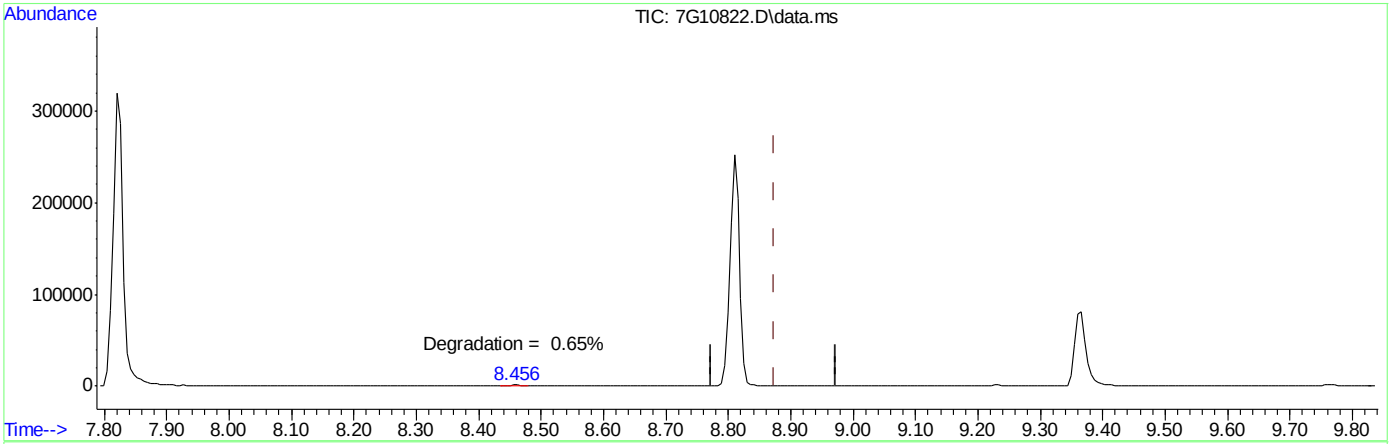
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

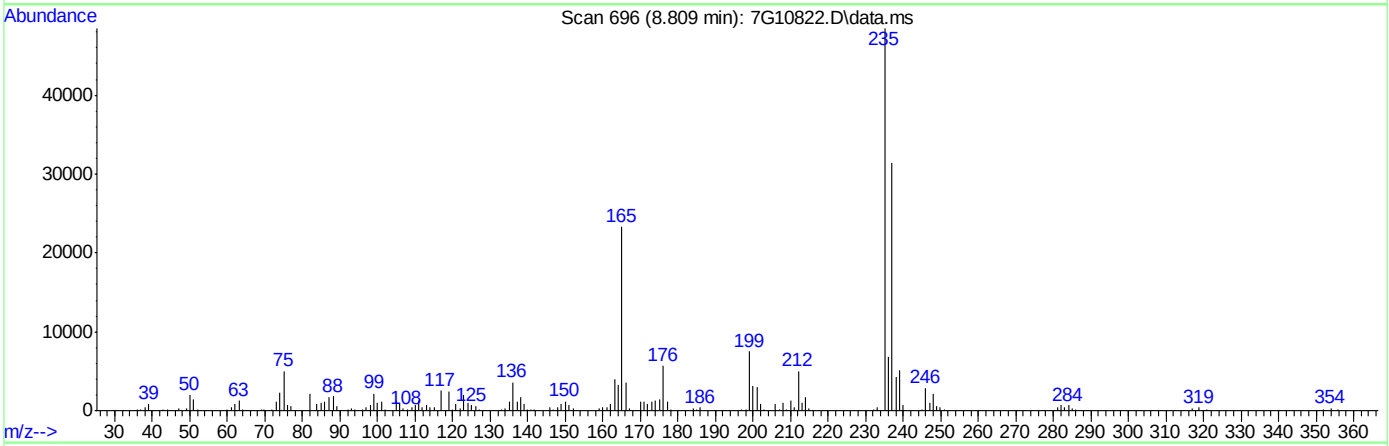
SGS FA77615

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10822.D
Acq On : 21 Jul 2020 8:44 am
Operator : fouads
Sample : dftpp
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 21 08:58:05 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Tue Jun 23 13:15:39 2020
Response via : Initial Calibration





TIC: 7G10822.D\data.ms

(4) DDT

8.809min (-0.064) 7.86

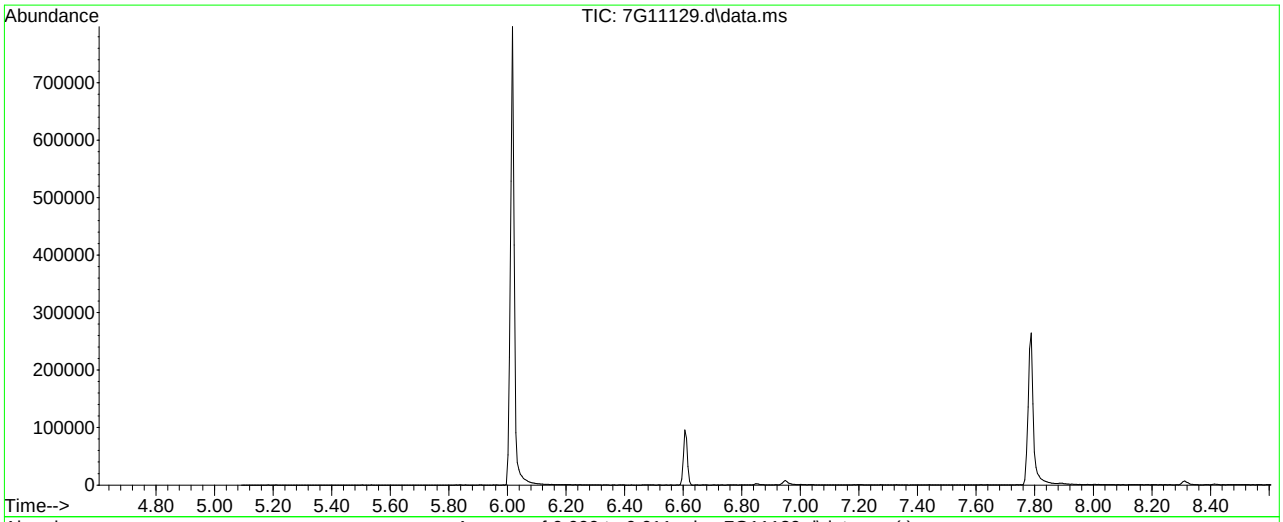
response 274297

Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

SW-846 Method 8270

Data File : C:\msdchem\1\data\Je...2020\S7G483\7G11129.d Vial: 1
Acq On : 11 Aug 2020 8:11 am Operator: FOUADS
Sample : dftpp Inst : MSBNA8
Misc : op81342,S7G483,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\methods\dftpp.m (RTE Integrator)
Title : Tune Evaluation



AutoFind: Scans 283, 284, 285; Background Corrected with Scan 279

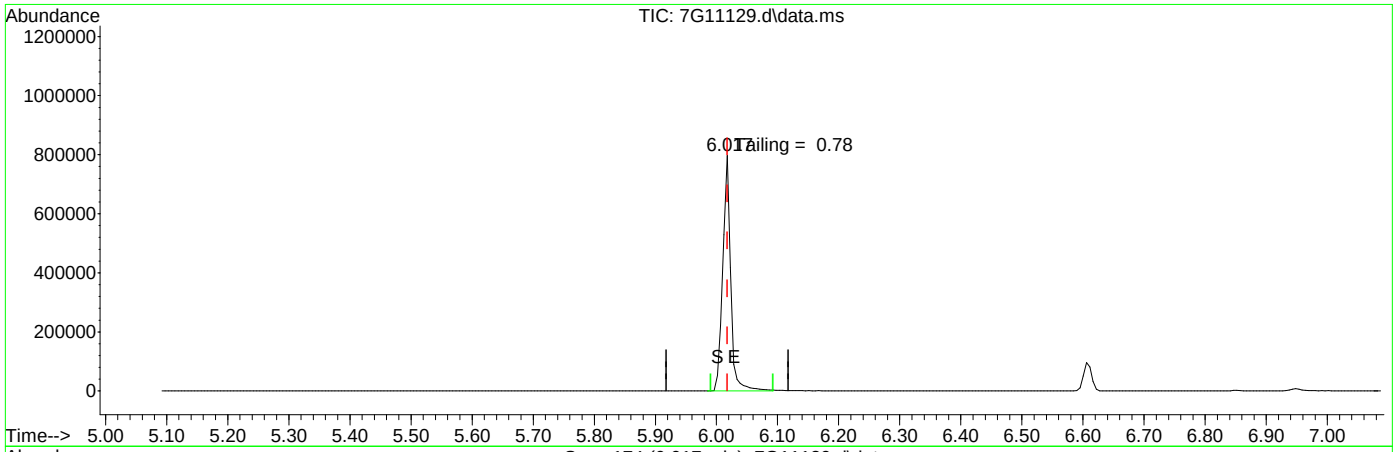
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	35.6	3303	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	41.8	3872	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	43.9	4068	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	9270	PASS
199	198	5	9	6.3	583	PASS
275	198	10	30	23.1	2141	PASS
365	198	1	100	3.5	327	PASS
441	443	0.01	100	86.0	938	PASS
442	198	40	100	66.0	6121	PASS
443	442	17	23	17.8	1091	PASS

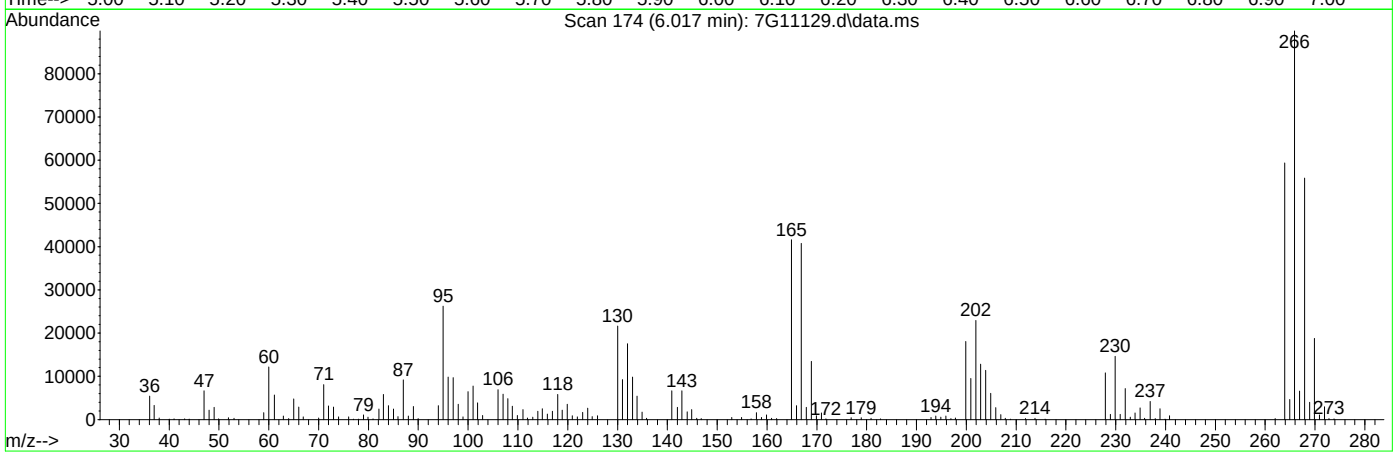
7G11129.d dftpp.m Wed Aug 12 07:16:58 2020

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11129.d
Acq On : 11 Aug 2020 8:11 am
Operator : FOUADS
Sample : dftpp Inst : MSBNA8
Misc : op81342,S7G483,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Results File: dftpp.RES
Quant Time: Aug 12 07:14:47 2020
Quant Title : Tune Evaluation
QLast Update : Wed Aug 12 07:14:44 2020
Response via : Initial Calibration





TIC: 7G11129.d\data.ms

(1) Pentachlorophenol

6.017min (0.000) 30.34

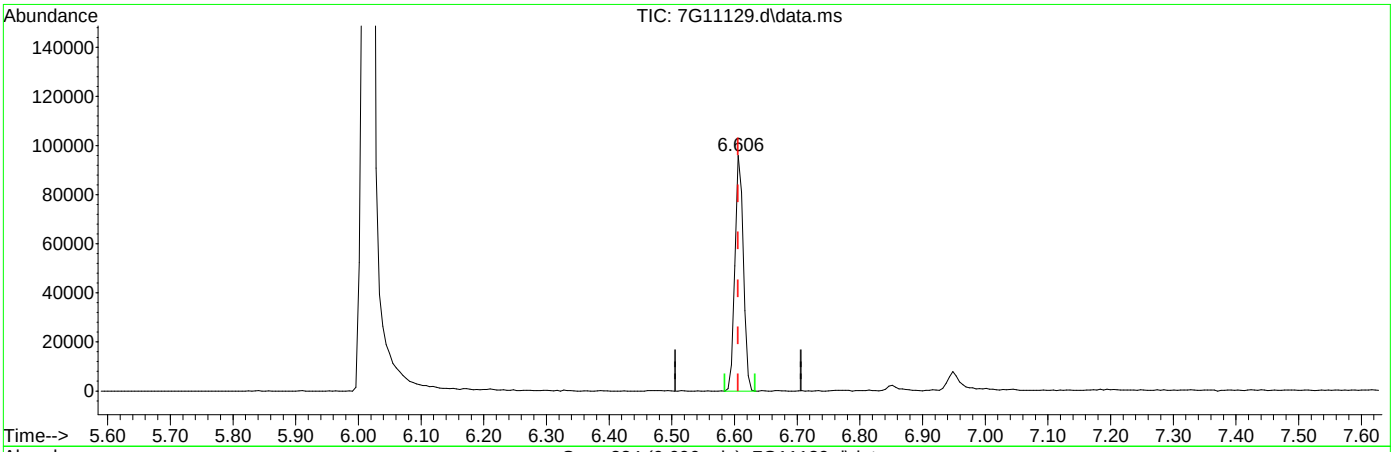
response 725833

Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11129.d
Acq On : 11 Aug 2020 8:11 am
Operator : FOUADS
Sample : dftpp Inst : MSBNA8
Misc : op81342,S7G483,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Results File: dftpp.RES
Quant Time: Aug 12 07:14:47 2020
Quant Title : Tune Evaluation
QLast Update : Wed Aug 12 07:14:44 2020
Response via : Initial Calibration



TIC: 7G11129.d\data.ms

(2) DFTPP

6.606min (0.000) 3.17

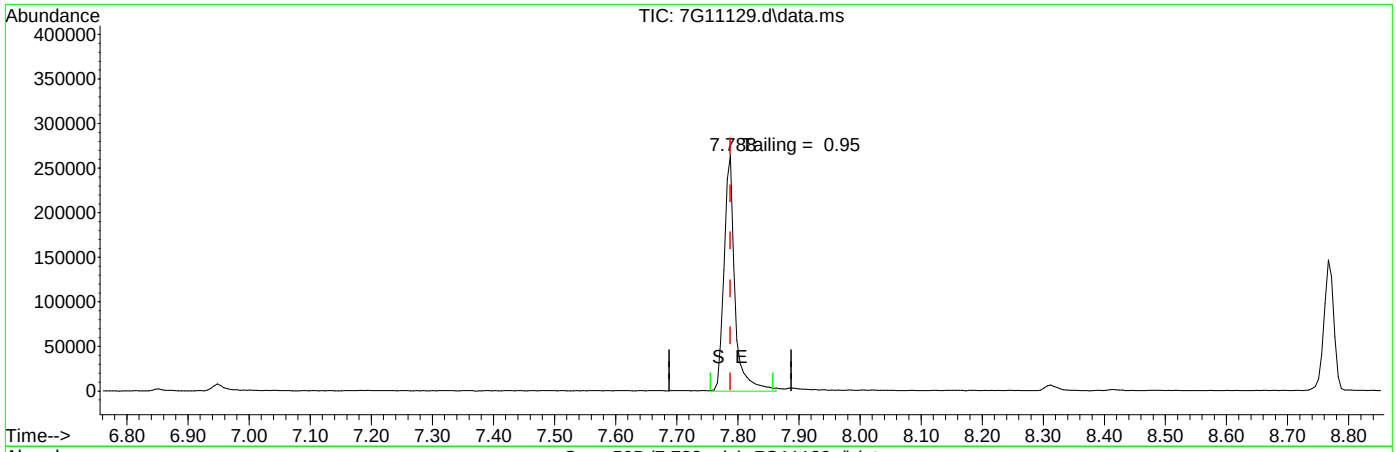
response 89512

Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11129.d
Acq On : 11 Aug 2020 8:11 am
Operator : FOUADS
Sample : dftpp Inst : MSBNA8
Misc : op81342,S7G483,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Results File: dftpp.RES
Quant Time: Aug 12 07:14:47 2020
Quant Title : Tune Evaluation
QLast Update : Wed Aug 12 07:14:44 2020
Response via : Initial Calibration



TIC: 7G11129.d\data.ms

(3) Benzidine

7.788min (0.000) 7.66

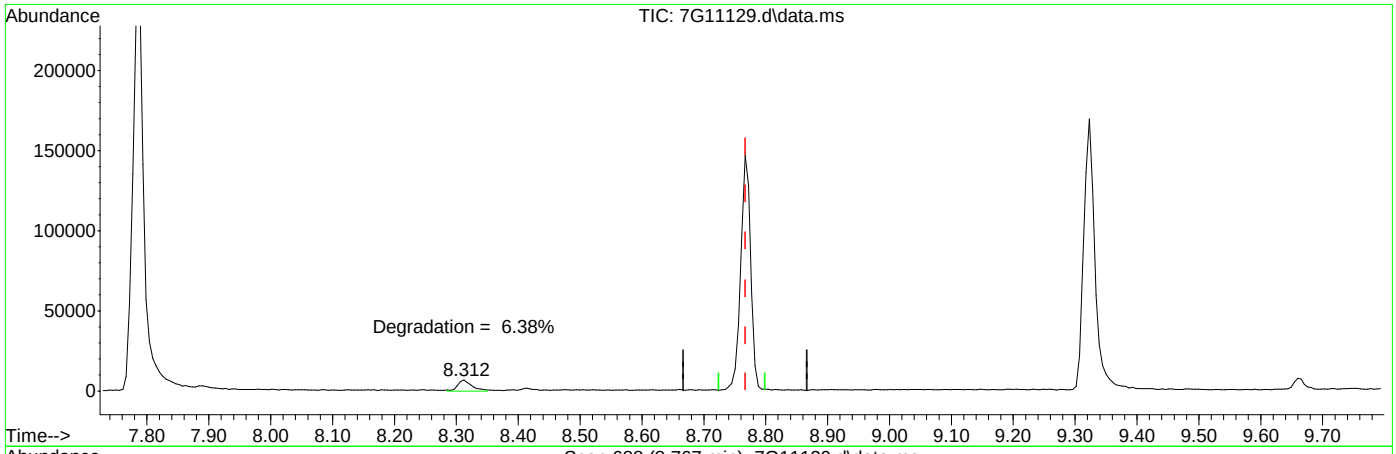
response 324892

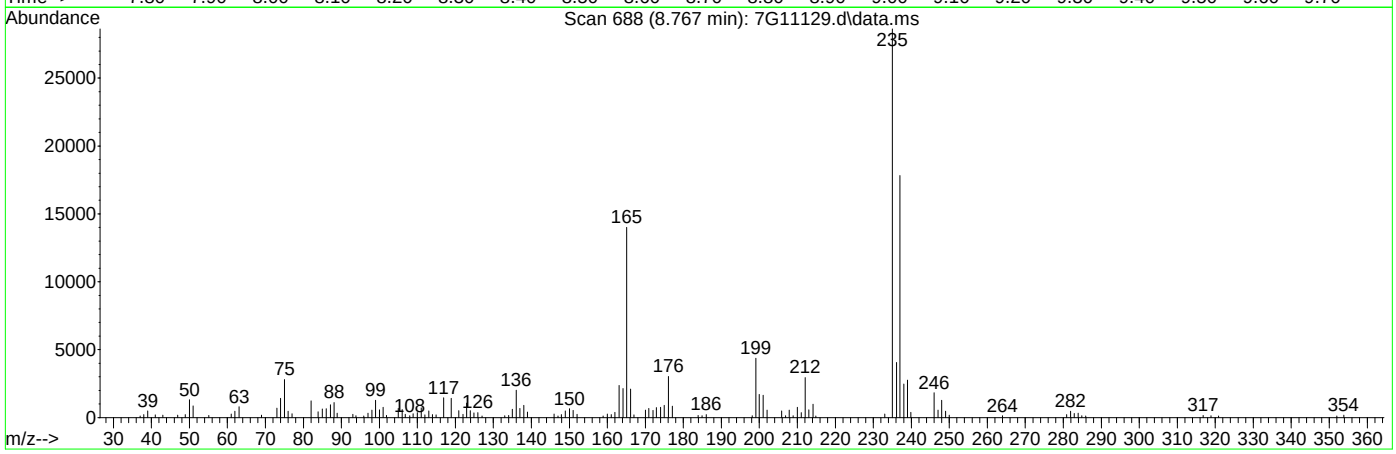
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11129.d
Acq On : 11 Aug 2020 8:11 am
Operator : FOUADS
Sample : dftpp Inst : MSBNA8
Misc : op81342,S7G483,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Results File: dftpp.RES
Quant Time: Aug 12 07:14:47 2020
Quant Title : Tune Evaluation
QLast Update : Wed Aug 12 07:14:44 2020
Response via : Initial Calibration





TIC: 7G11129.d\data.ms

(4) DDT

8.767min (0.000) 4.71

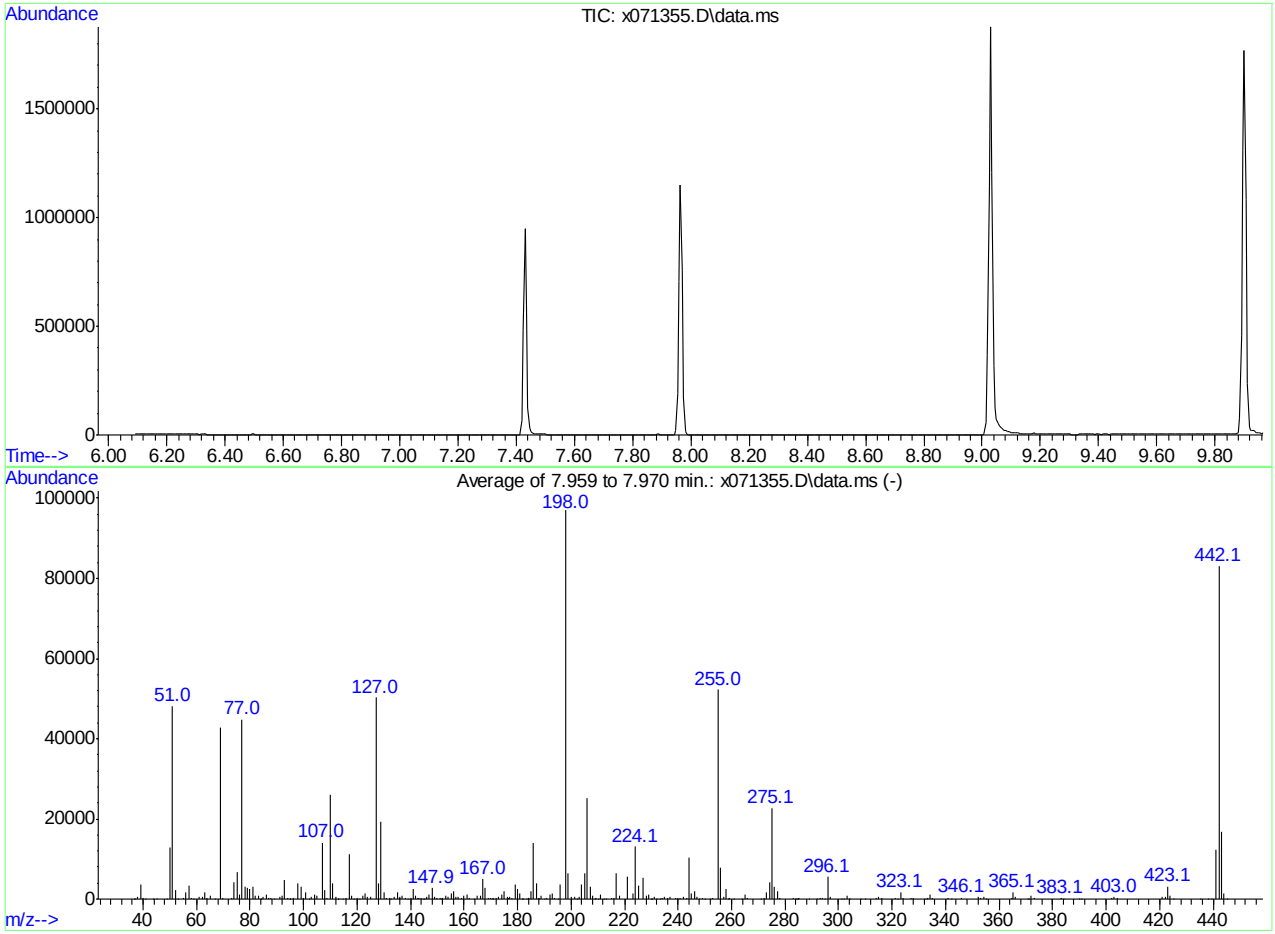
response 164421

Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

SW-846 Method 8270

Data File : C:\msdchem\1\DATA\0623_sx2918\x071355.D Vial: 1
Acq On : 23 Jun 2020 9:47 am Operator: marthav
Sample : dftpp Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\METHODS\dftpp.m (RTE Integrator)
Title : Tune Evaluation



AutoFind: Scans 350, 351, 352; Background Corrected with Scan 344

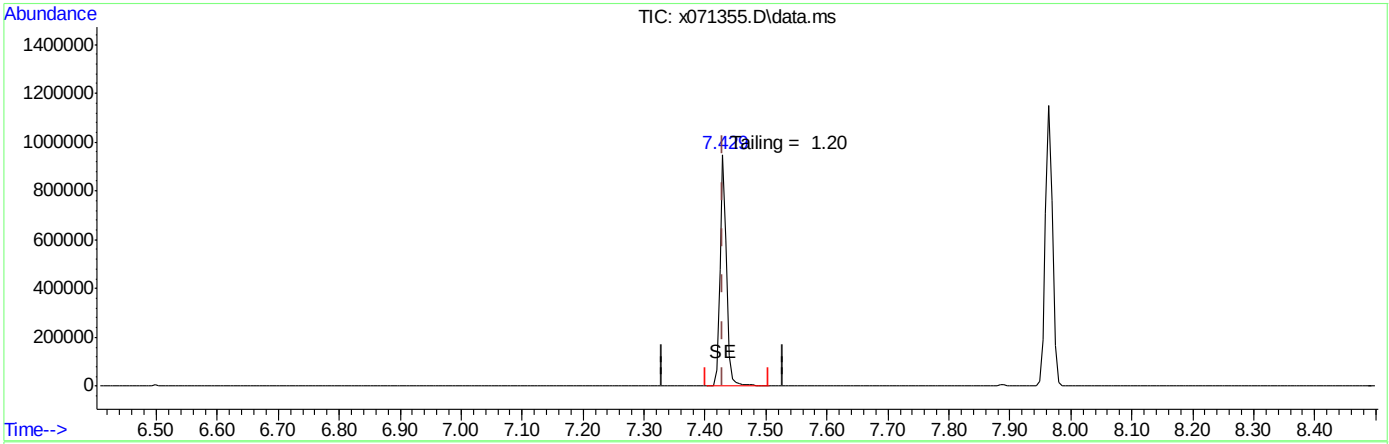
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	49.7	48227	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	44.1	42739	PASS
70	69	0.00	2	0.5	206	PASS
127	198	40	60	51.8	50221	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	96957	PASS
199	198	5	9	6.7	6460	PASS
275	198	10	30	23.4	22665	PASS
365	198	1	100	1.9	1798	PASS
441	443	0.01	100	74.3	12438	PASS
442	198	40	100	85.7	83123	PASS
443	442	17	23	20.1	16733	PASS

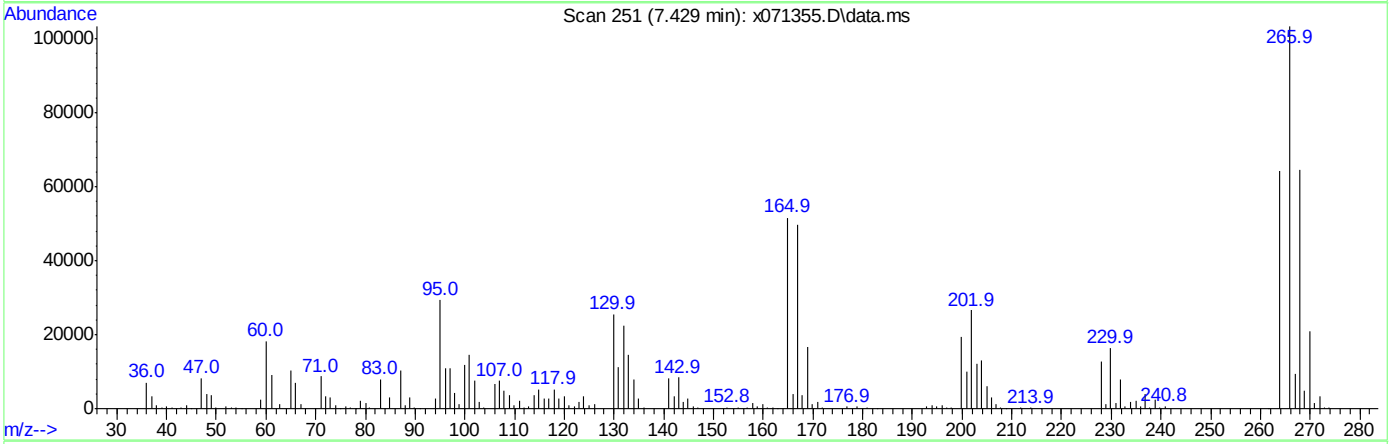
x071355.D dftpp.m Tue Jun 23 16:05:39 2020

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071355.D
Acq On : 23 Jun 2020 9:47 am
Operator : marthav
Sample : dftpp Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 23 16:05:35 2020
Quant Method : C:\msdchem\1\METHODS\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Tue Jun 23 16:05:31 2020
Response via : Initial Calibration





TIC: x071355.D\data.ms

(1) Pentachlorophenol

7.429min (0.000) 30.90

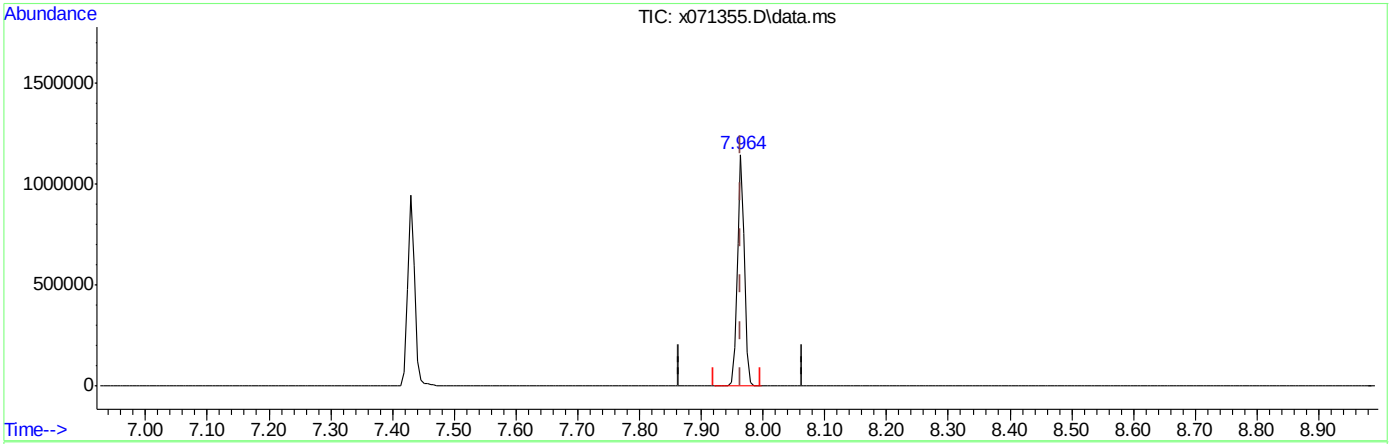
response 739095

Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071355.D
Acq On : 23 Jun 2020 9:47 am
Operator : marthav
Sample : dftpp Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 23 16:05:35 2020
Quant Method : C:\msdchem\1\METHODS\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Tue Jun 23 16:05:31 2020
Response via : Initial Calibration



TIC: x071355.D\data.ms

(2) DFTPP

7.964min (0.000) 34.25

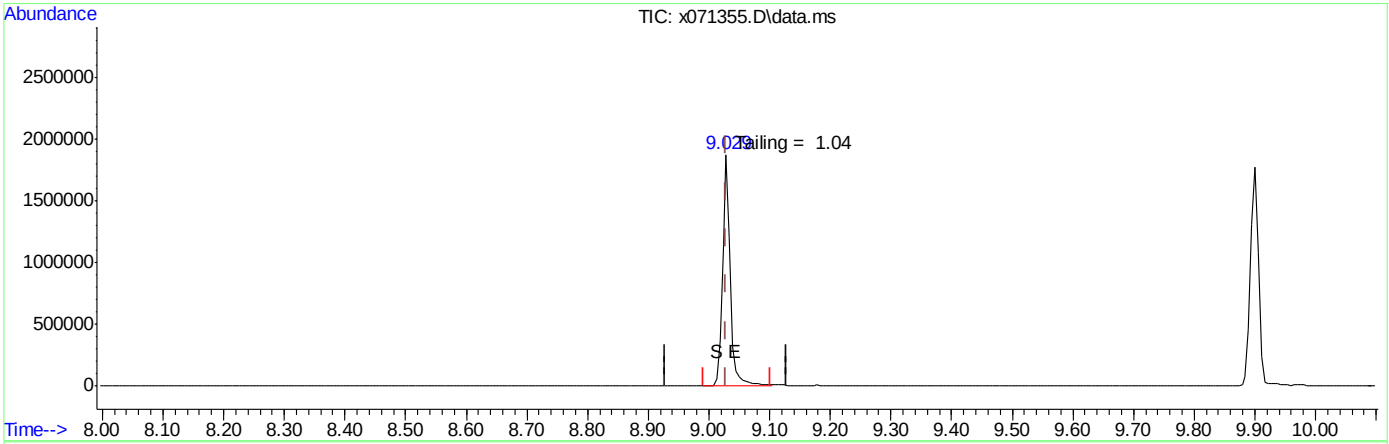
response 966439

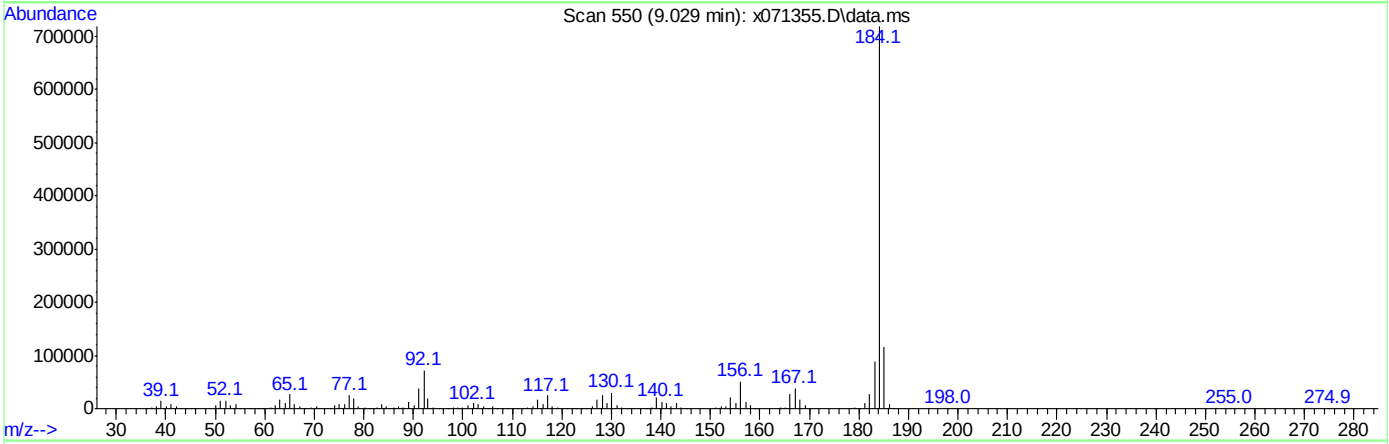
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071355.D
Acq On : 23 Jun 2020 9:47 am
Operator : marthav
Sample : dftpp Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 23 16:05:35 2020
Quant Method : C:\msdchem\1\METHODS\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Tue Jun 23 16:05:31 2020
Response via : Initial Calibration





TIC: x071355.D\data.ms

(3) Benzidine

9.029min (0.000) 40.81

response 1730836

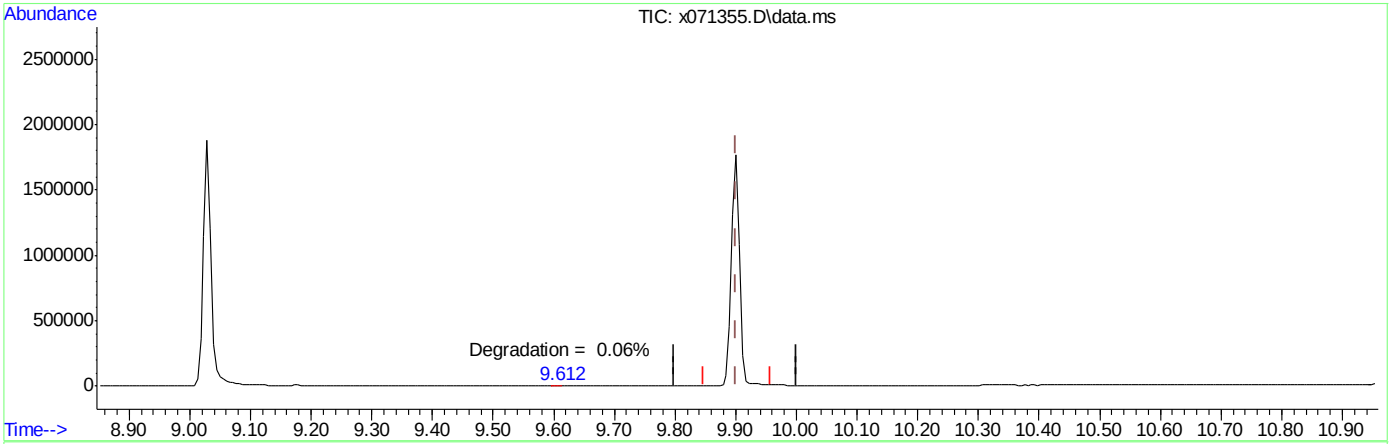
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

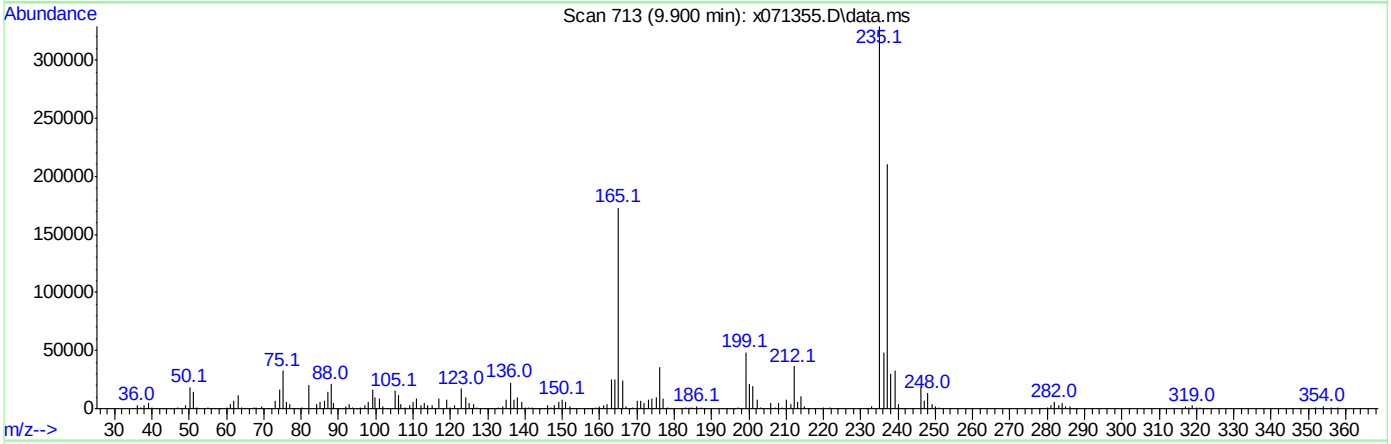
SGS FA77615

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071355.D
Acq On : 23 Jun 2020 9:47 am
Operator : marthav
Sample : dftpp Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 23 16:05:35 2020
Quant Method : C:\msdchem\1\METHODS\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Tue Jun 23 16:05:31 2020
Response via : Initial Calibration





TIC: x071355.D\data.ms

(4) DDT

9.900min (0.000) 46.28

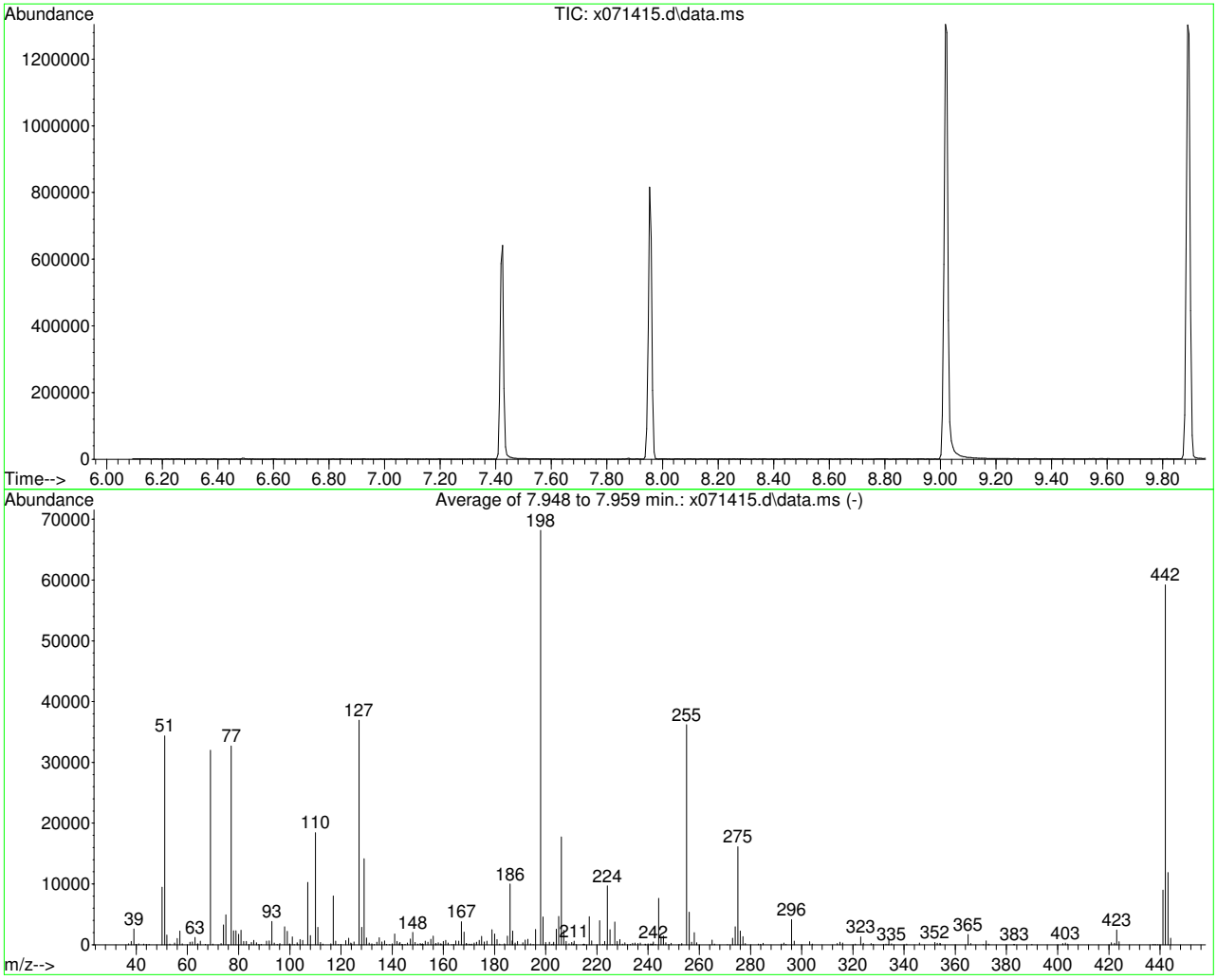
response 1615385

Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

SW-846 Method 8270

Data File : C:\msdchem\1\data\jo...2020\sx2919\x071415.d Vial: 1
Acq On : 24 Jun 2020 3:04 pm Operator: marthav
Sample : dftpp Inst : MSBNA05
Misc : op80508,sx2919,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\methods\dftpp.m (RTE Integrator)
Title : Tune Evaluation



AutoFind: Scans 348, 349, 350; Background Corrected with Scan 344

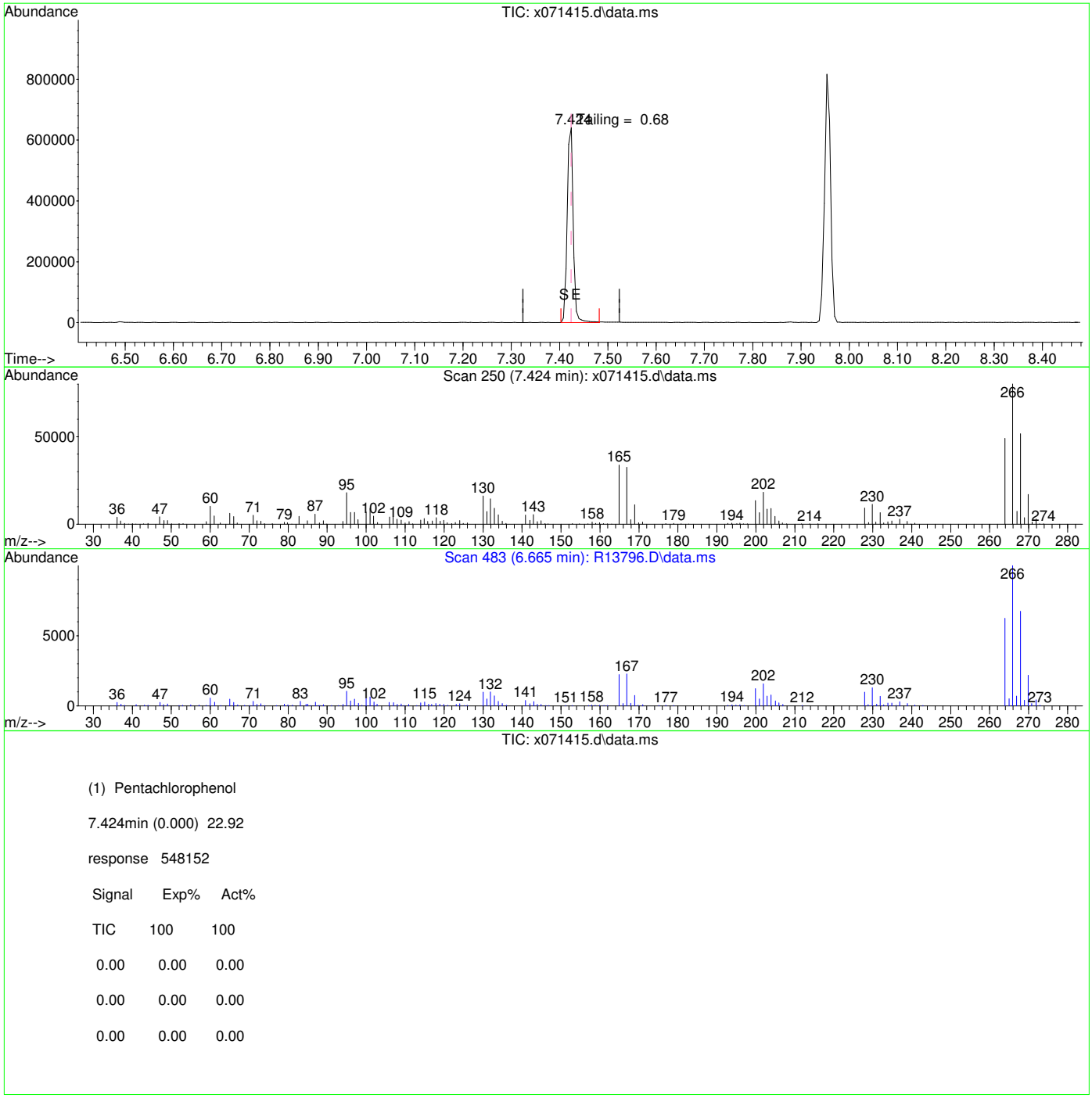
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	50.4	34387	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	47.0	32027	PASS
70	69	0.00	2	0.3	101	PASS
127	198	40	60	54.2	36939	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	68165	PASS
199	198	5	9	6.7	4563	PASS
275	198	10	30	23.7	16125	PASS
365	198	1	100	2.5	1684	PASS
441	443	0.01	100	75.9	9013	PASS
442	198	40	100	86.9	59211	PASS
443	442	17	23	20.0	11869	PASS

x071415.d dftpp.m Thu Jun 25 04:11:49 2020

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\June 2020\06-25-2020\sx2919\
Data File : x071415.d
Acq On : 24 Jun 2020 3:04 pm
Operator : marthav
Sample : dftpp
Misc : op80508,sx2919,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 25 02:42:47 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Thu Jun 25 02:42:45 2020
Response via : Initial Calibration



TIC: x071415.d\data.ms

(1) Pentachlorophenol

7.424min (0.000) 22.92

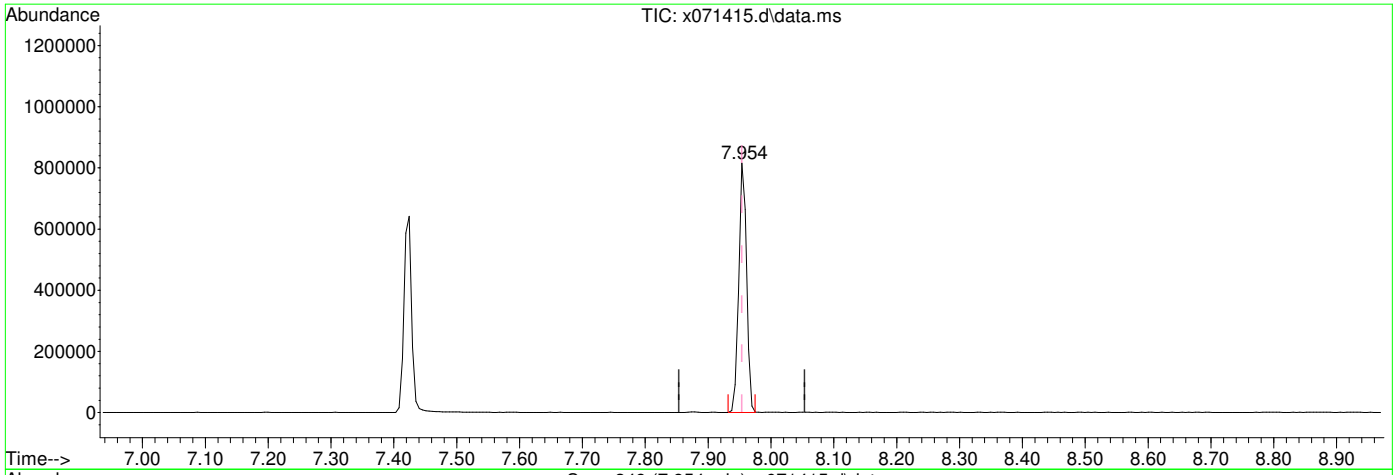
response 548152

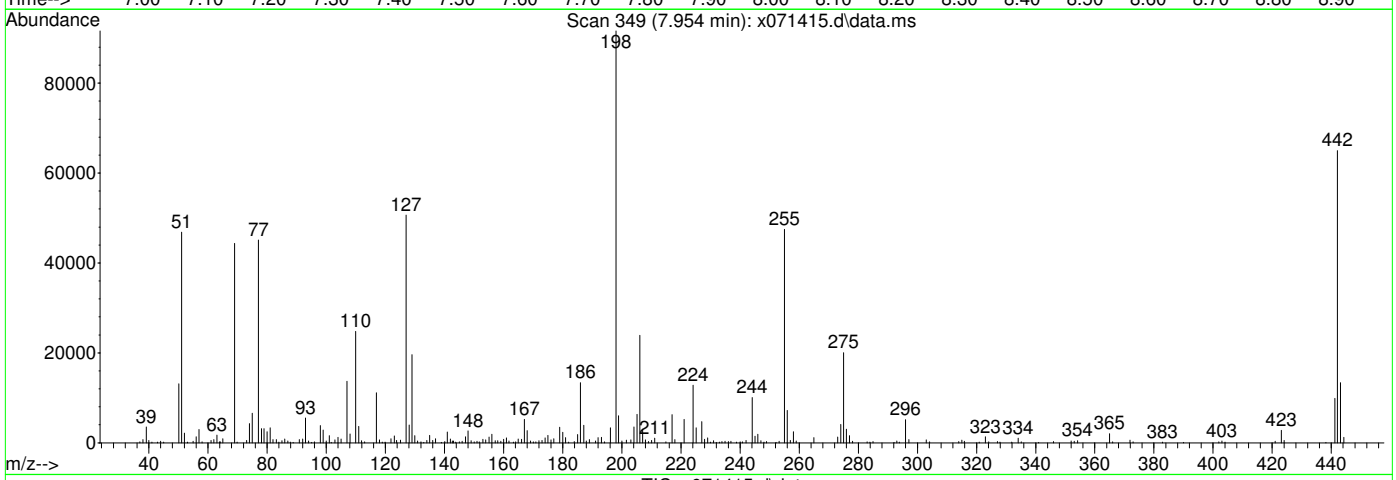
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\June 2020\06-25-2020\sx2919\
Data File : x071415.d
Acq On : 24 Jun 2020 3:04 pm
Operator : marthav
Sample : dftpp
Misc : op80508,sx2919,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 25 02:42:47 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Thu Jun 25 02:42:45 2020
Response via : Initial Calibration





TIC: x071415.d\data.ms

(2) DFTPP

7.954min (0.000) 24.97

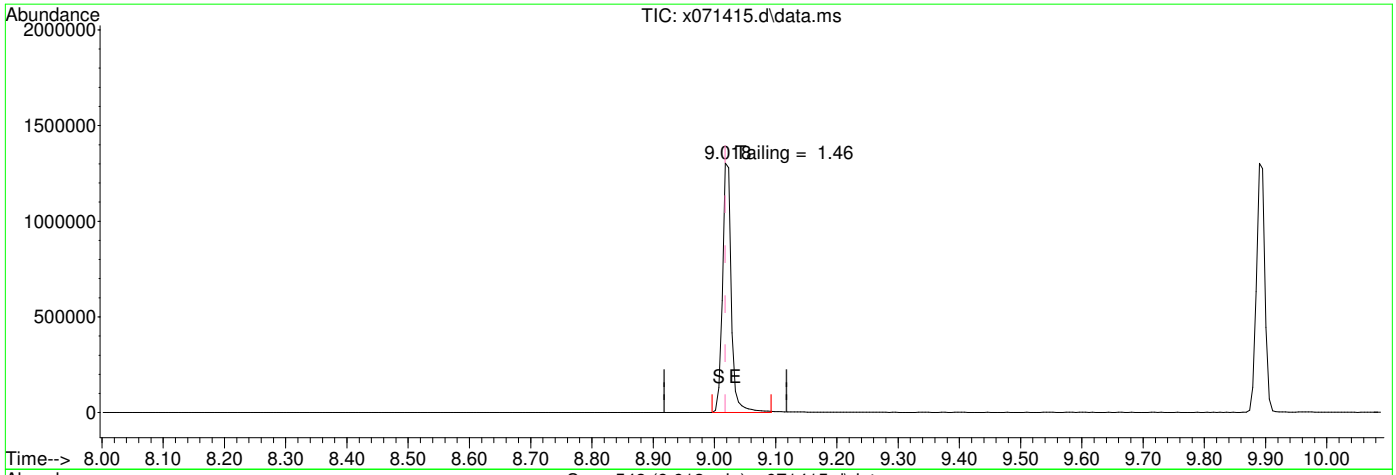
response 704578

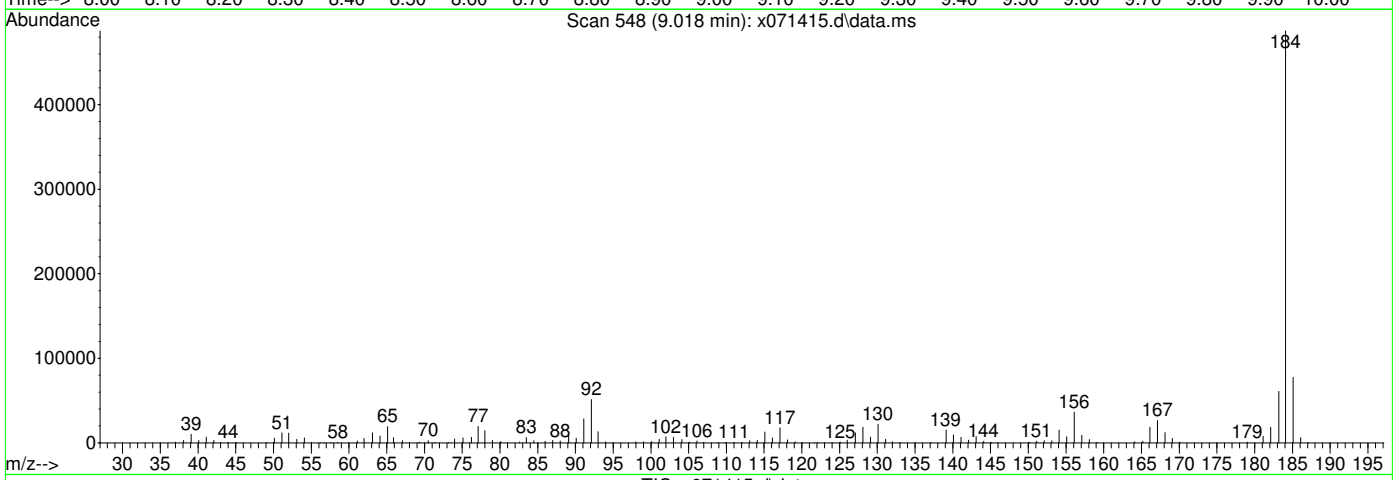
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\June 2020\06-25-2020\sx2919\
Data File : x071415.d
Acq On : 24 Jun 2020 3:04 pm
Operator : marthav
Sample : dftpp
Misc : op80508,sx2919,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 25 02:42:47 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Thu Jun 25 02:42:45 2020
Response via : Initial Calibration





TIC: x071415.d\data.ms

(3) Benzidine

9.018min (0.000) 30.47

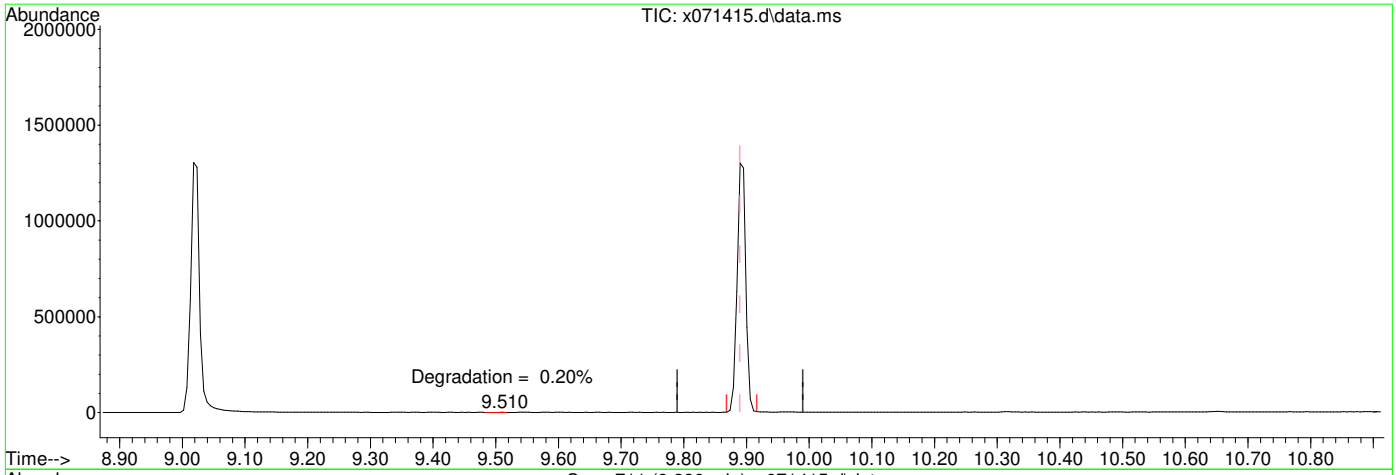
response 1292283

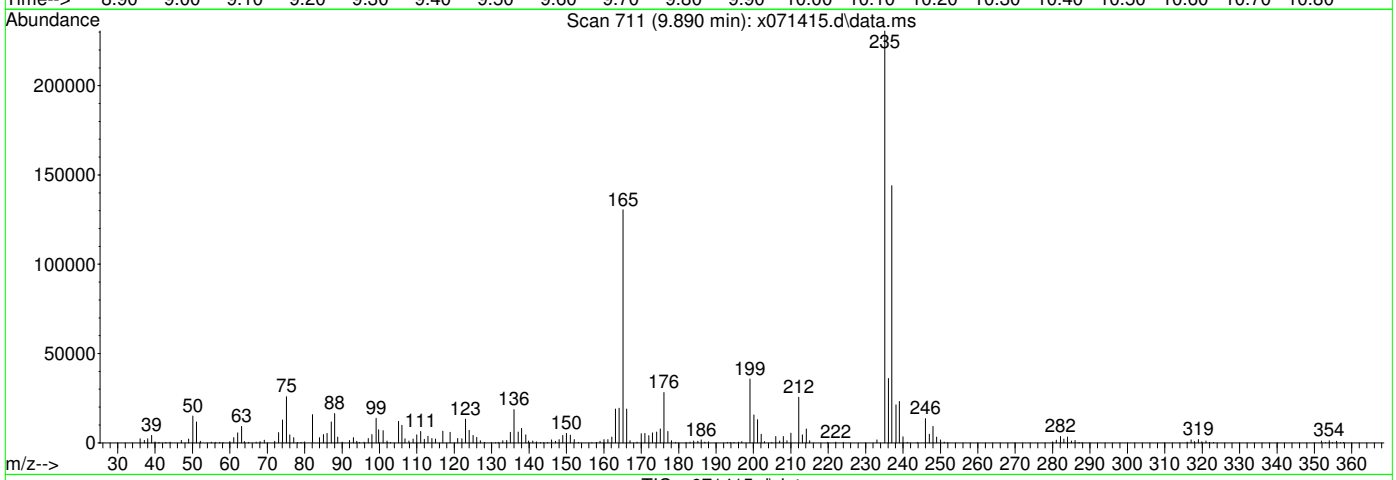
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\June 2020\06-25-2020\sx2919\
Data File : x071415.d
Acq On : 24 Jun 2020 3:04 pm
Operator : marthav
Sample : dftpp
Misc : op80508,sx2919,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 25 02:42:47 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Thu Jun 25 02:42:45 2020
Response via : Initial Calibration





TIC: x071415.d\data.ms

(4) DDT

9.890min (0.000) 35.58

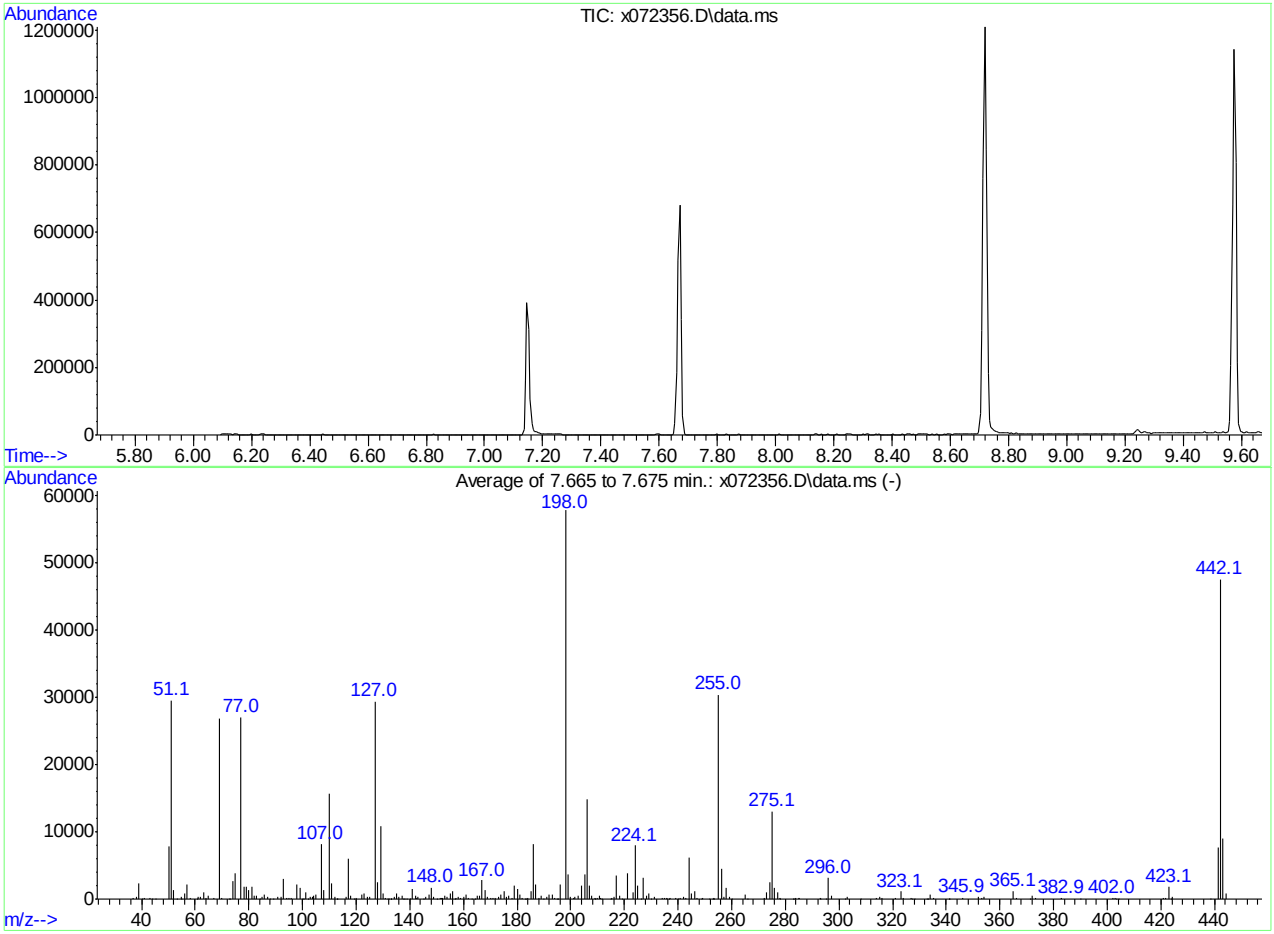
response 1241968

Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

SW-846 Method 8270

Data File : C:\msdchem\1\DATA\0812_sx2951\x072356.D Vial: 1
Acq On : 12 Aug 2020 10:07 am Operator: marthav
Sample : dftpp Inst : MSBNA05
Misc : op81484,sx2951,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\METHODS\dftpp.m (RTE Integrator)
Title : Tune Evaluation



AutoFind: Scans 295, 296, 297; Background Corrected with Scan 289

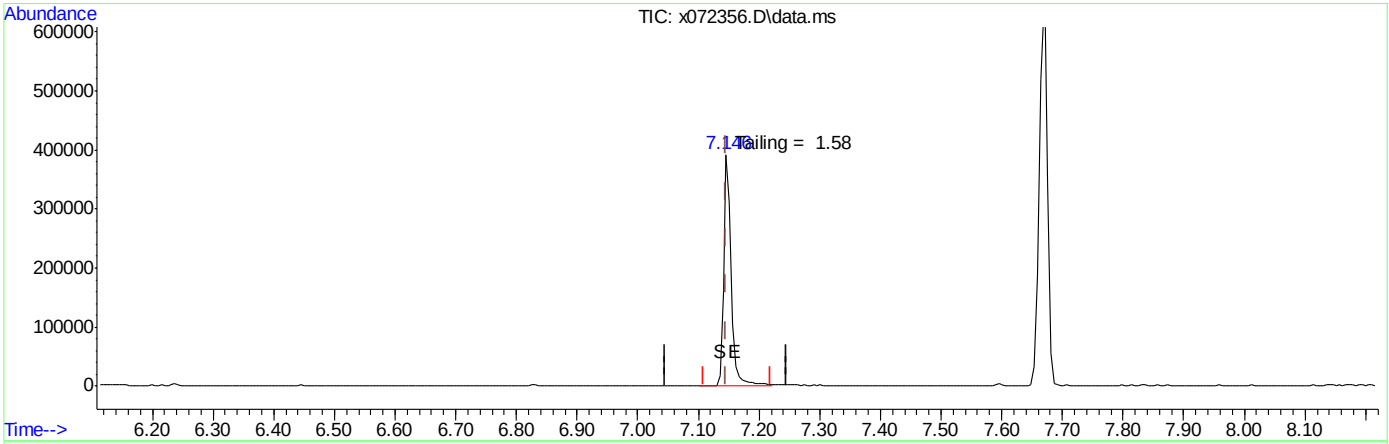
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	51.2	29610	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	46.4	26838	PASS
70	69	0.00	2	0.4	95	PASS
127	198	40	60	50.9	29425	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	57845	PASS
199	198	5	9	6.3	3631	PASS
275	198	10	30	22.6	13046	PASS
365	198	1	100	2.1	1226	PASS
441	443	0.01	100	85.3	7696	PASS
442	198	40	100	82.3	47624	PASS
443	442	17	23	18.9	9017	PASS

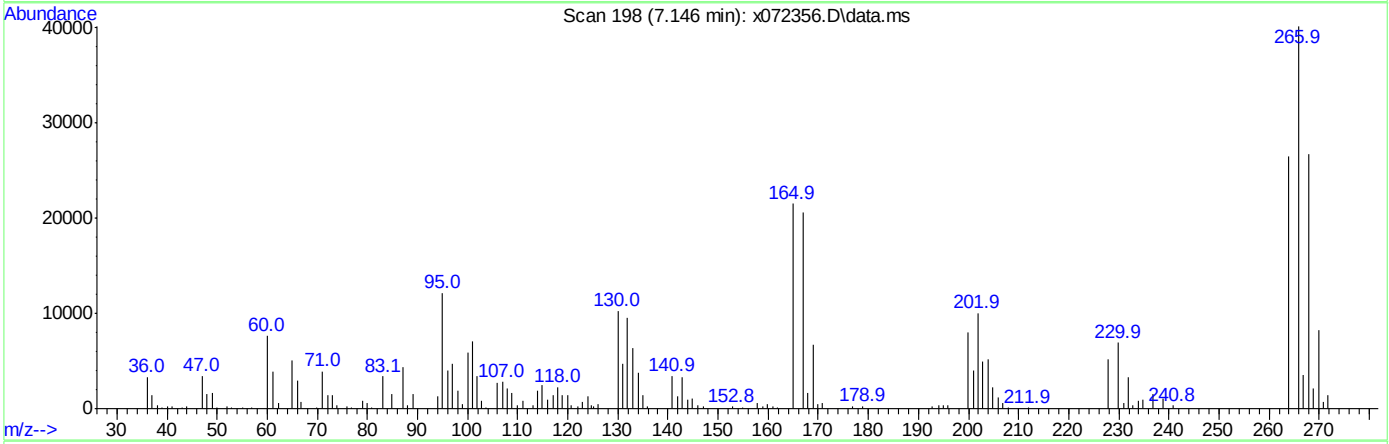
x072356.D dftpp.m Wed Aug 12 13:53:52 2020

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072356.D
Acq On : 12 Aug 2020 10:07 am
Operator : marthav
Sample : dftpp Inst : MSBNA05
Misc : op81484,sx2951,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 12 13:53:48 2020
Quant Method : C:\msdchem\1\METHODS\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Wed Aug 12 13:53:46 2020
Response via : Initial Calibration





TIC: x072356.D\data.ms

(1) Pentachlorophenol

7.146min (0.000) 14.49

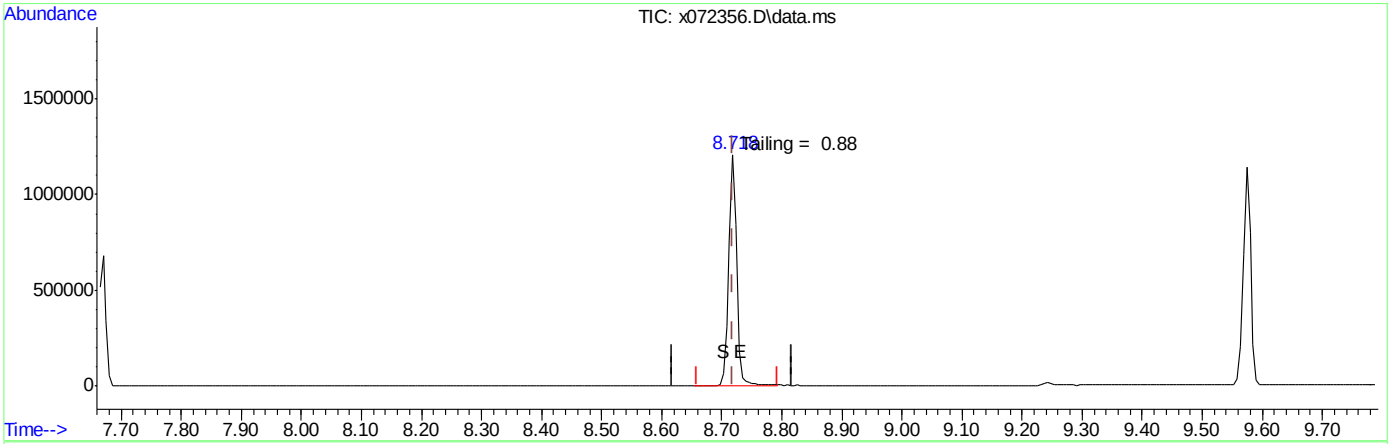
response 346616

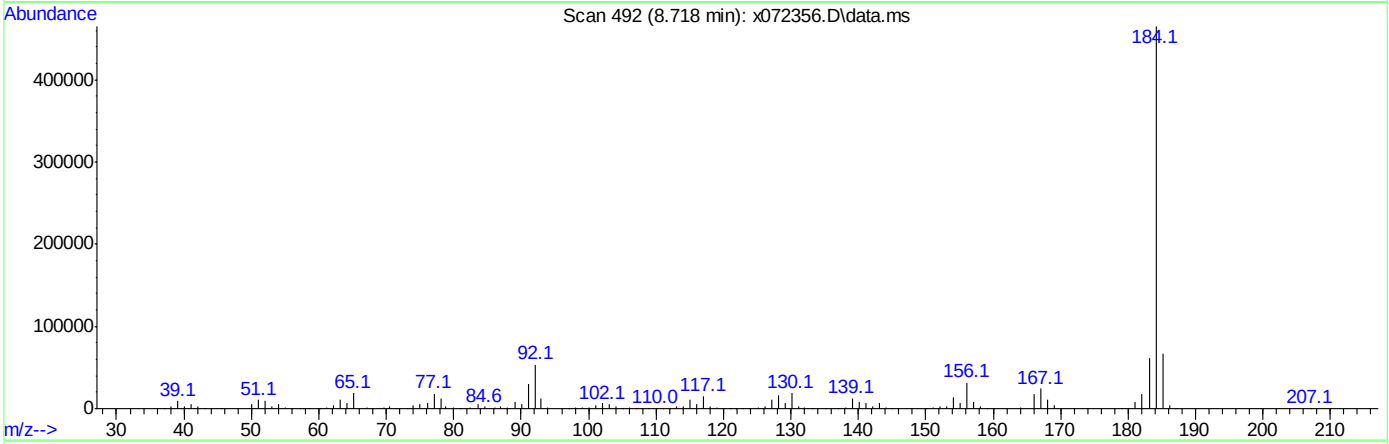
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072356.D
Acq On : 12 Aug 2020 10:07 am
Operator : marthav
Sample : dftpp Inst : MSBNA05
Misc : op81484,sx2951,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 12 13:53:48 2020
Quant Method : C:\msdchem\1\METHODS\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Wed Aug 12 13:53:46 2020
Response via : Initial Calibration





TIC: x072356.D\data.ms

(3) Benzidine

8.718min (0.000) 26.47

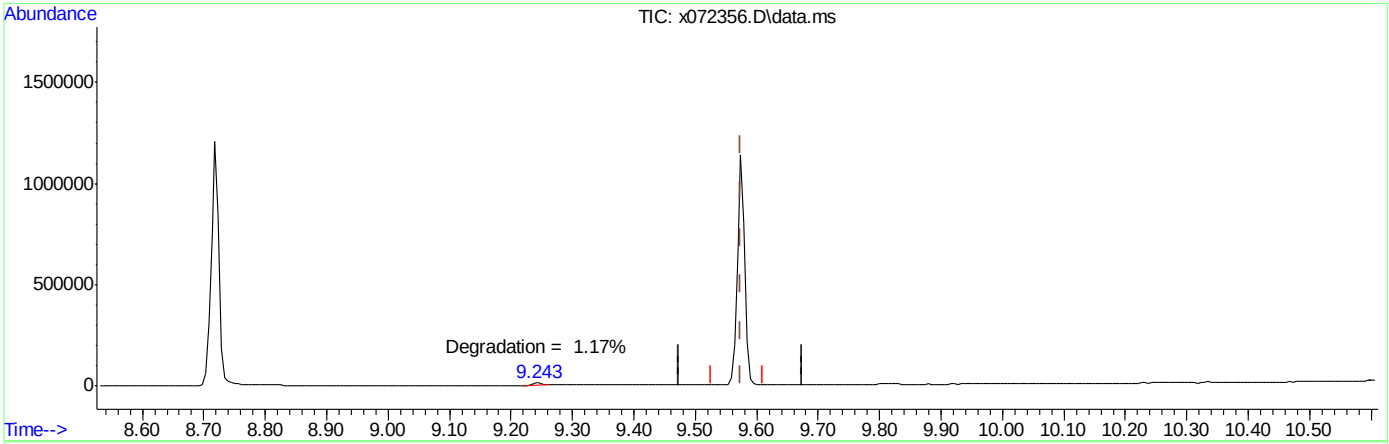
response 1122844

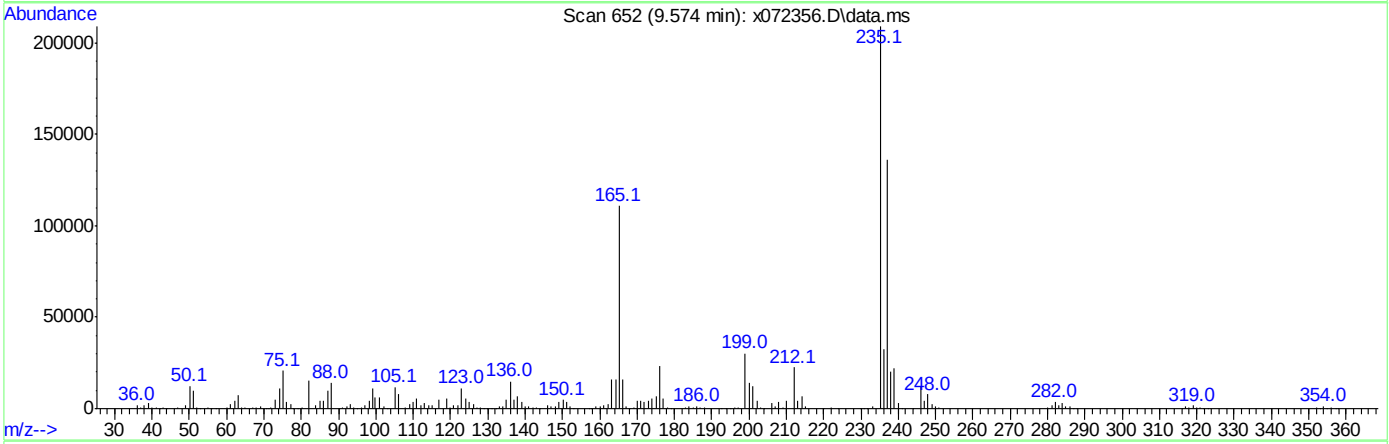
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072356.D
Acq On : 12 Aug 2020 10:07 am
Operator : marthav
Sample : dftpp Inst : MSBNA05
Misc : op81484,sx2951,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 12 13:53:48 2020
Quant Method : C:\msdchem\1\METHODS\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Wed Aug 12 13:53:46 2020
Response via : Initial Calibration





TIC: x072356.D\data.ms

(4) DDT

9.574min (0.000) 28.36

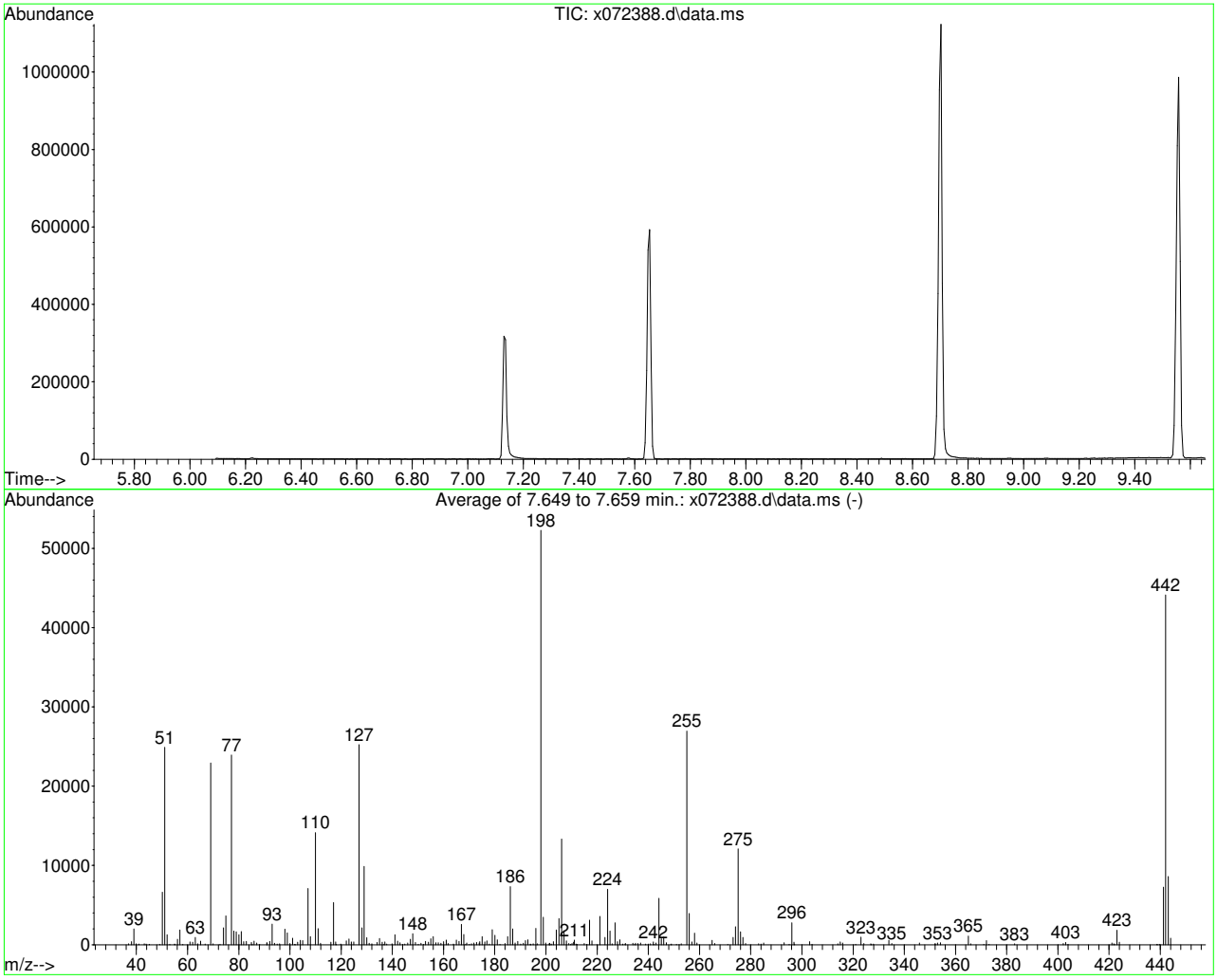
response 990085

Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

SW-846 Method 8270

Data File : C:\msdchem\1\data\Je...2020\SX2952\x072388.d Vial: 1
Acq On : 13 Aug 2020 1:21 pm Operator: marthav
Sample : dftpp Inst : MSBNA05
Misc : op81484,sx2952,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\methods\dftpp.m (RTE Integrator)
Title : Tune Evaluation



AutoFind: Scans 292, 293, 294; Background Corrected with Scan 287

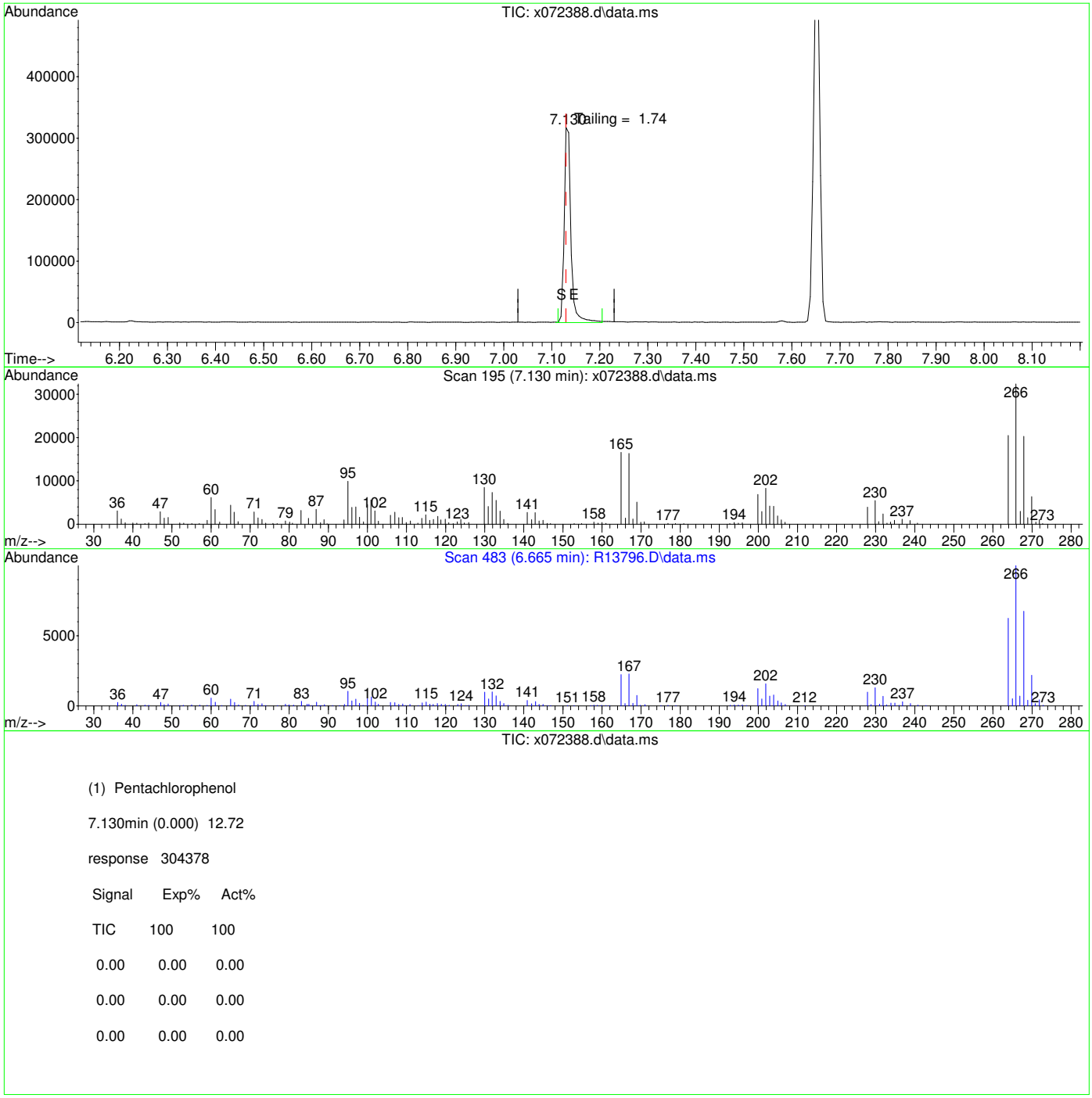
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	47.7	24905	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	43.9	22939	PASS
70	69	0.00	2	0.5	111	PASS
127	198	40	60	48.3	25242	PASS
197	198	0.00	1	0.2	109	PASS
198	198	100	100	100.0	52253	PASS
199	198	5	9	6.7	3476	PASS
275	198	10	30	23.2	12102	PASS
365	198	1	100	2.1	1098	PASS
441	443	0.01	100	84.6	7270	PASS
442	198	40	100	84.4	44123	PASS
443	442	17	23	19.5	8592	PASS

x072388.d dftpp.m Fri Aug 14 01:59:01 2020

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\Jenniferf\AUGUST 2020\08-14-2020\SX2952\
Data File : x072388.d
Acq On : 13 Aug 2020 1:21 pm
Operator : marthav
Sample : dftpp
Misc : op81484,sx2952,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 01:58:00 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Fri Aug 14 01:57:58 2020
Response via : Initial Calibration



TIC: x072388.d\data.ms

(1) Pentachlorophenol

7.130min (0.000) 12.72

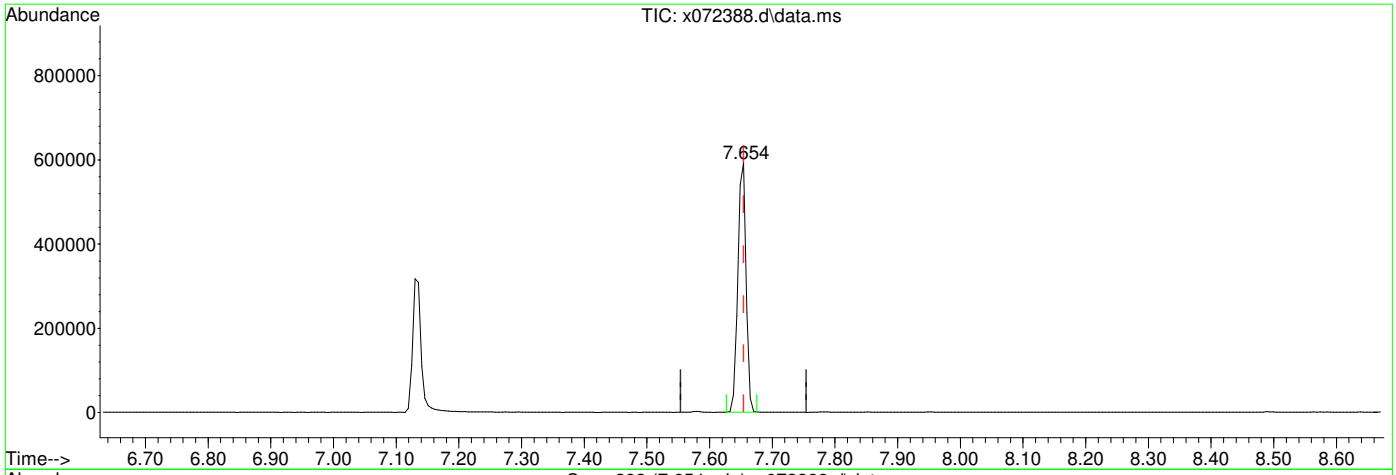
response 304378

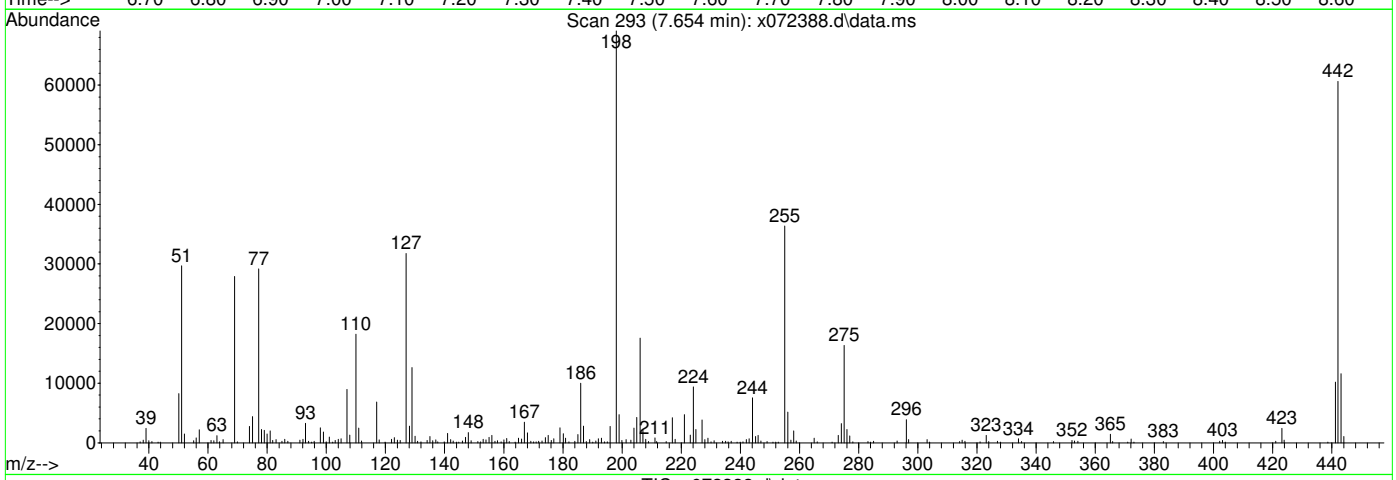
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\Jenniferf\AUGUST 2020\08-14-2020\SX2952\
Data File : x072388.d
Acq On : 13 Aug 2020 1:21 pm
Operator : marthav
Sample : dftpp
Misc : op81484,sx2952,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 01:58:00 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Fri Aug 14 01:57:58 2020
Response via : Initial Calibration





TIC: x072388.d\data.ms

(2) DFTPP

7.654min (0.000) 19.08

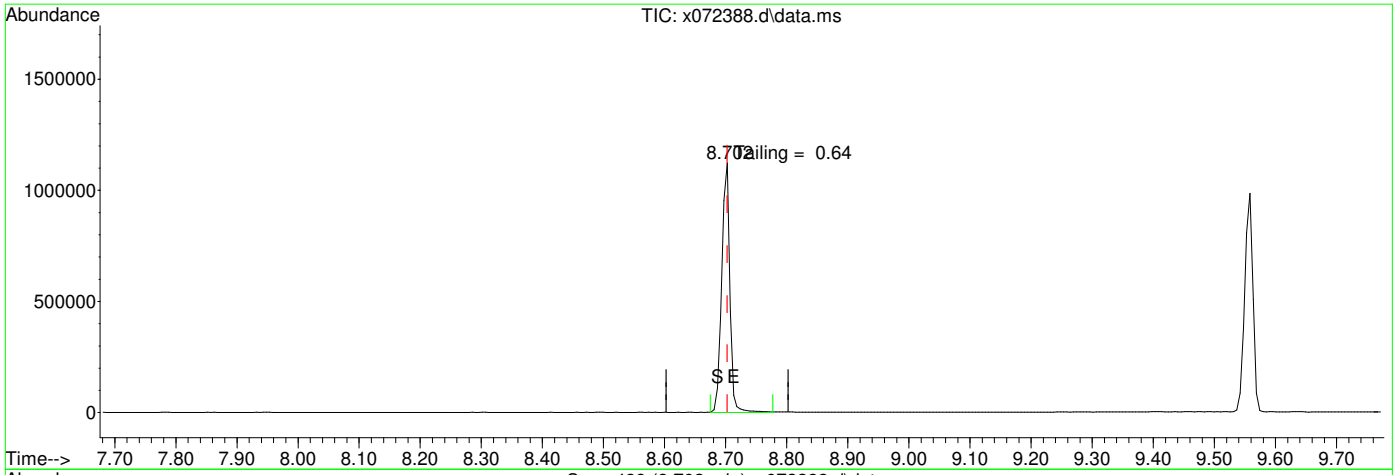
response 538361

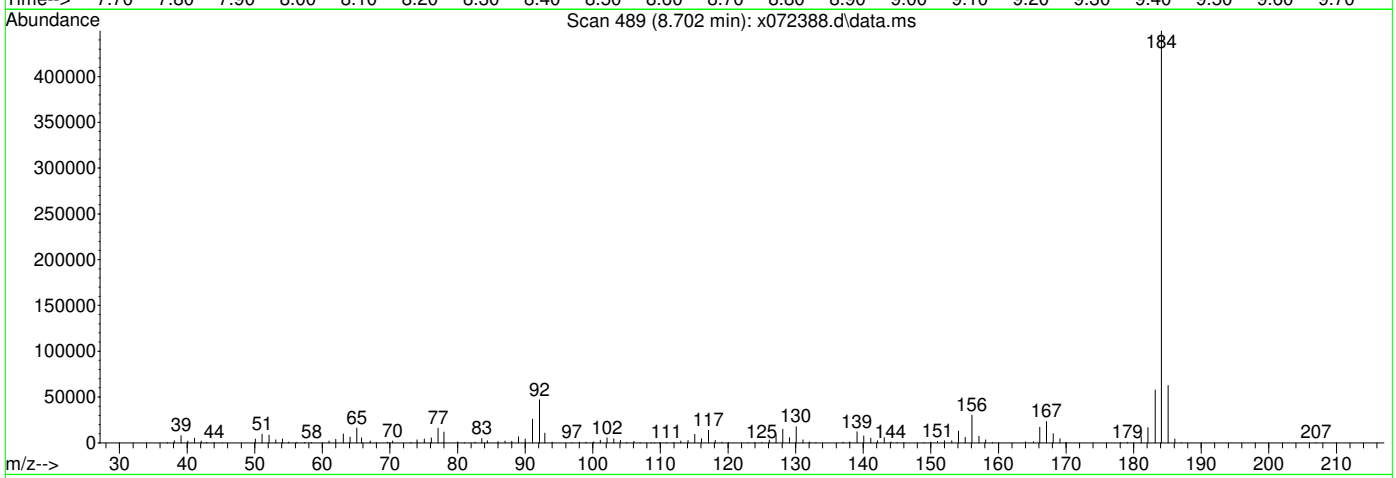
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\Jenniferf\AUGUST 2020\08-14-2020\SX2952\
Data File : x072388.d
Acq On : 13 Aug 2020 1:21 pm
Operator : marthav
Sample : dftpp
Misc : op81484,sx2952,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 01:58:00 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Fri Aug 14 01:57:58 2020
Response via : Initial Calibration





(3) Benzidine

8.702min (0.000) 24.51

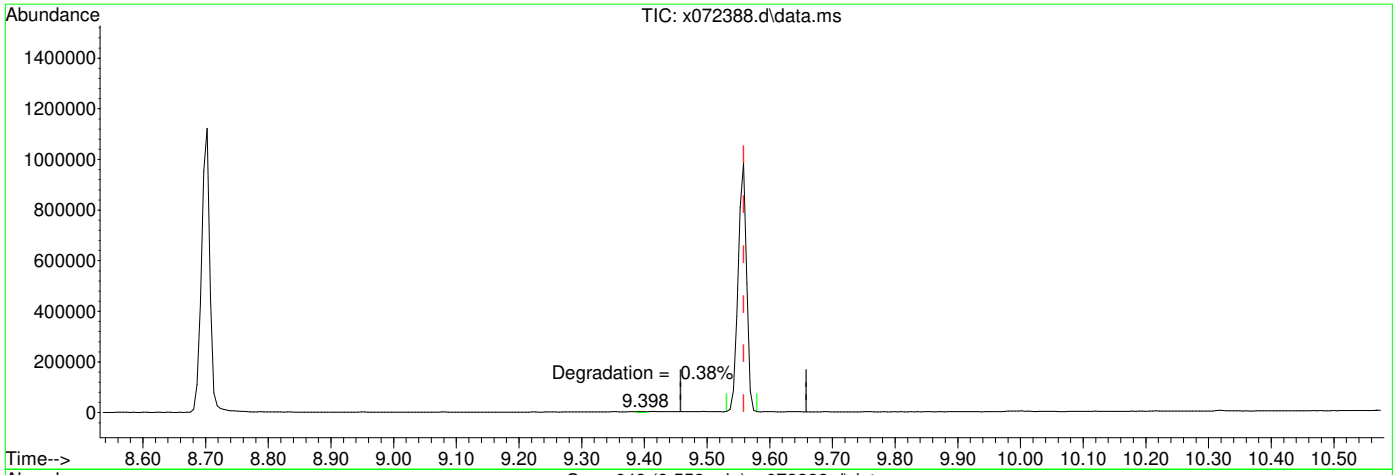
response 1039782

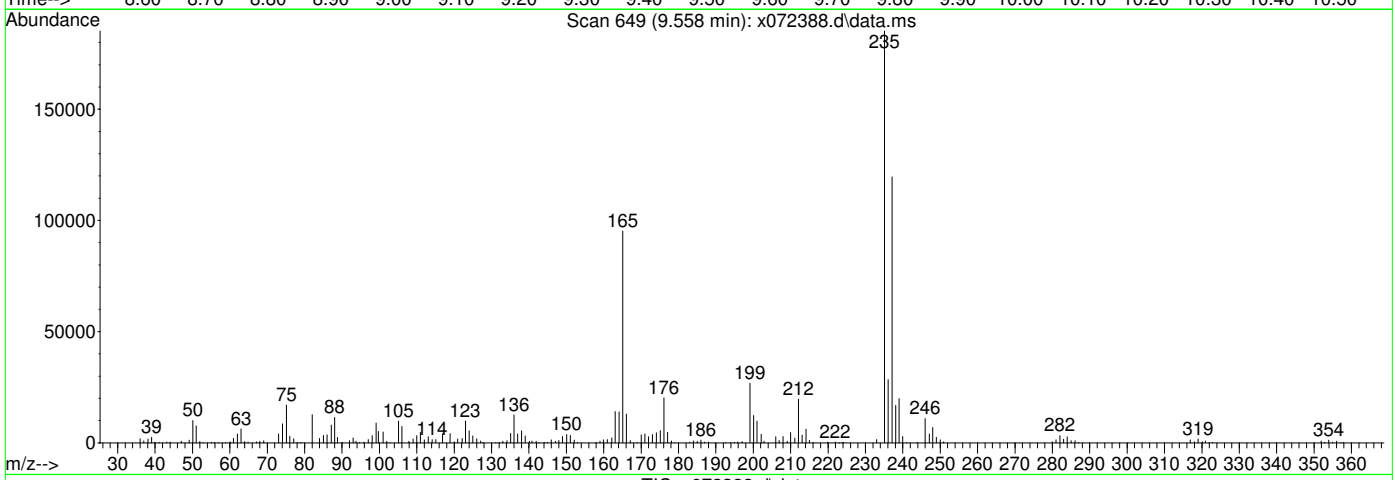
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\Jenniferf\AUGUST 2020\08-14-2020\SX2952\
Data File : x072388.d
Acq On : 13 Aug 2020 1:21 pm
Operator : marthav
Sample : dftpp
Misc : op81484,sx2952,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 01:58:00 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Fri Aug 14 01:57:58 2020
Response via : Initial Calibration





TIC: x072388.d\data.ms

(4) DDT

9.558min (0.000) 26.21

response 914903

Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 07/30/20 14:11

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06436.D
Sample : ic248-1
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1
Acq On : 29 Jul 2020 12:53 pm Operator: marthav

Quant Time: Jul 29 13:54:40 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	6.045	152	339395	40.00	ppm		-0.04
22) Naphthalene-d8	7.473	136	1294127	40.00	ppm		0.00
43) Acenaphthene-d10	9.527	164	688296	40.00	ppm		0.00
70) Phenanthrene-d10	11.282	188	1218446	40.00	ppm		0.00
92) Chrysene-d12	14.582	240	1031190	40.00	ppm		-0.01
102) Perylene-d12	16.946	264	1045930	40.00	ppm		0.00
System Monitoring Compounds							
7) 2-Fluorophenol	4.665	112	22185	1.84	ppm		0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 1.84%#				
9) Phenol-d5	5.676	99	27217	1.97	ppm		-0.01
Spiked Amount 100.000	Range 10 - 50		Recovery = 1.97%#				
23) Nitrobenzene-d5	6.655	82	13248	1.49	ppm		0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 2.98%#				
47) 2-Fluorobiphenyl	8.746	172	27098	1.05	ppm		0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 2.10%#				
75) 2,4,6-Tribromophenol	10.463	330	6975	2.36	ppm		0.00
Spiked Amount 100.000	Range 33 - 118		Recovery = 2.36%#				
95) Terphenyl-d14	13.207	244	28881	1.09	ppm		0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 2.18%#				
Target Compounds							Qvalue
2) 1,4-Dioxane	2.879	88	5162	1.421	ppm		98
3) N-nitrosodimethylamine	3.221	42	6146	0.943	ppm		93
4) Pyridine	3.285	79	11106	0.906	ppm		100
5) Benzaldehyde	5.564	106	10174	1.027	ppm		96
6) Aniline	5.687	93	17993	0.986	ppm		74
8) bis(2-Chloroethyl)ether	5.762	93	12244	0.995	ppm		96
10) Phenol	5.687	94	16224	1.010	ppm	#	58
11) 2-Chlorophenol	5.815	128	11735	0.965	ppm		98
12) 1,3-Dichlorobenzene	5.976	146	13101	0.954	ppm		96
13) 1,4-Dichlorobenzene	6.061	146	13230	0.951	ppm		94
14) 1,2-Dichlorobenzene	6.227	146	12445	0.949	ppm		97
15) Benzyl alcohol	6.206	108	7157	1.228	ppm		93
16) bis(2-chloroisopropyl)...	6.356	45	15773	1.010	ppm	#	66
17) 2-Methylphenol	6.345	108	10936	1.023	ppm		94
18) Acetophenone	6.489	105	16648	1.009	ppm		99
19) Hexachloroethane	6.602	117	5176	0.949	ppm		96
20) N-Nitroso-di-n-propyla...	6.495	70	9104	1.087	ppm		99
21) 3&4-Methylphenol	6.521	108	11630	1.065	ppm		91
24) Nitrobenzene	6.676	77	13177	1.379	ppm		92
25) Isophorone	6.955	82	24175	1.063	ppm		98
26) 2-Nitrophenol	7.040	139	5500	2.738	ppm		92
27) 2,4-Dimethylphenol	7.115	107	11229	1.056	ppm		100
28) O,O,O-Triethylphosphor...	7.185	198	5815	0.999	ppm		93
29) bis(2-Chloroethoxy)met...	7.217	93	14846	1.042	ppm		99
30) Benzoic Acid	7.174	105	4169	3.146	ppm		93
31) 2,4-Dichlorophenol	7.329	162	9727	1.253	ppm		98
32) 1,2,4-Trichlorobenzene	7.415	180	11030	0.968	ppm		94
34) Naphthalene	7.500	128	36157	1.030	ppm		96
35) 4-Chloroaniline	7.575	127	15421	1.051	ppm		97
36) 2,6-Dichlorophenol	7.580	162	9614	1.259	ppm		99
37) Hexachlorobutadiene	7.650	225	6405	0.998	ppm		93

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06436.D
Sample : ic248-1
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1
Acq On : 29 Jul 2020 12:53 pm Operator: marthav

Quant Time: Jul 29 13:54:40 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38)	Caprolactam	7.939	113	3531	1.051	ppm	90
39)	4-Chloro-3-methylphenol	8.163	107	9846	1.033	ppm	96
40)	2-Methylnaphthalene	8.308	141	20379	1.003	ppm	97
41)	1-Methylnaphthalene	8.420	142	22671	1.016	ppm	99
42)	1,2,4,5-Tetrachloroben...	8.500	216	10899	0.997	ppm	97
44)	Hexachlorocyclopentadiene	8.495	237	5524	1.600	ppm	98
45)	2,4,6-Trichlorophenol	8.645	196	6513	1.287	ppm	98
46)	2,4,5-Trichlorophenol	8.693	196	7129	1.239	ppm	94
48)	1,1'-Biphenyl	8.859	154	28432	1.027	ppm	99
49)	2-Chloronaphthalene	8.875	162	22036	1.029	ppm	100
50)	2-Nitroaniline	9.003	65	5875	1.994	ppm	96
51)	p-Dinitrobenzene	9.174	75	3156	1.812	ppm	96
52)	Acenaphthylene	9.356	152	33532	1.042	ppm	99
53)	Dimethylphthalate	9.233	163	25118	1.090	ppm	99
54)	m-Dinitrobenzene	9.260	168	2855m	1.484	ppm	
55)	2,6-Dinitrotoluene	9.297	165	4724	1.443	ppm	97
56)	o-Dinitrobenzene	9.351	50	4097	1.510	ppm	90
57)	Acenaphthene	9.565	153	23009	1.082	ppm	99
58)	3-Nitroaniline	9.490	138	5580	1.221	ppm	91
59)	2,4-Dinitrophenol	9.618	184	278m	4.967	ppm	
60)	Dibenzofuran	9.768	168	31271	1.057	ppm	98
61)	2,4-Dinitrotoluene	9.768	165	5516	1.327	ppm	77
62)	4-Nitrophenol	9.731	109	3271	1.581	ppm	85
63)	2,3,5,6-Tetrachlorophenol	9.875	232	4546	1.231	ppm	90
64)	2,3,4,6-Tetrachlorophenol	9.928	232	5204	1.215	ppm	96
65)	Fluorene	10.175	166	24501	1.037	ppm	99
66)	4-Chlorophenyl-phenyle...	10.191	204	12321	1.033	ppm	98
67)	Diethylphthalate	10.078	149	24651	1.094	ppm	99
68)	Thionazin	10.169	97	5437	1.307	ppm	97
69)	4-Nitroaniline	10.207	138	5502	1.247	ppm	86
71)	4,6-Dinitro-2-methylph...	10.244	198	1446	1.962	ppm	62
72)	n-Nitrosodiphenylamine	10.335	169	20583	1.167	ppm	99
73)	Diphenylamine	10.335	169	20583	1.031	ppm	99
74)	1,2-Diphenylhydrazine	10.378	77	27000	1.104	ppm	99
76)	Sulfotep	10.549	97	4112	1.219	ppm	81
77)	Phorate	10.699	75	12800	1.197	ppm	99
78)	4-Bromophenyl-phenylether	10.768	248	7073	1.034	ppm	94
79)	Hexachlorobenzene	10.822	284	8297	1.045	ppm	96
80)	Dimethoate	10.886	87	8394	1.289	ppm	94
81)	Simazine	10.945	201	3925	1.019	ppm	99
82)	Atrazine	10.988	200	6589	0.990	ppm	97
83)	Pentachlorophenol	11.068	266	880m	0.412	ppm	
84)	Phenanthrene	11.308	178	39097	1.159	ppm	99
85)	Anthracene	11.367	178	36776	1.057	ppm	99
86)	Disulfoton	11.319	88	13894	1.094	ppm	93
87)	Carbazole	11.576	167	32589	1.063	ppm	99
88)	Methyl Parathion	11.758	109	4906	1.301	ppm	91
89)	Di-n-butylphthalate	12.036	149	38905	1.086	ppm	98
90)	Ethyl Parathion	12.228	97	3228	1.631	ppm	93
91)	Fluoranthene	12.720	202	36388	1.029	ppm	99
93)	Benzidine	12.908	184	21124	1.356	ppm	99
94)	Pyrene	12.983	202	37315	1.097	ppm	99
96)	Famphur	13.774	218	11566	1.344	ppm	96
97)	Butylbenzylphthalate	13.870	149	16601	1.463	ppm	94

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06436.D
Sample : ic248-1
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1
Acq On : 29 Jul 2020 12:53 pm Operator: marthav

Quant Time: Jul 29 13:54:40 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

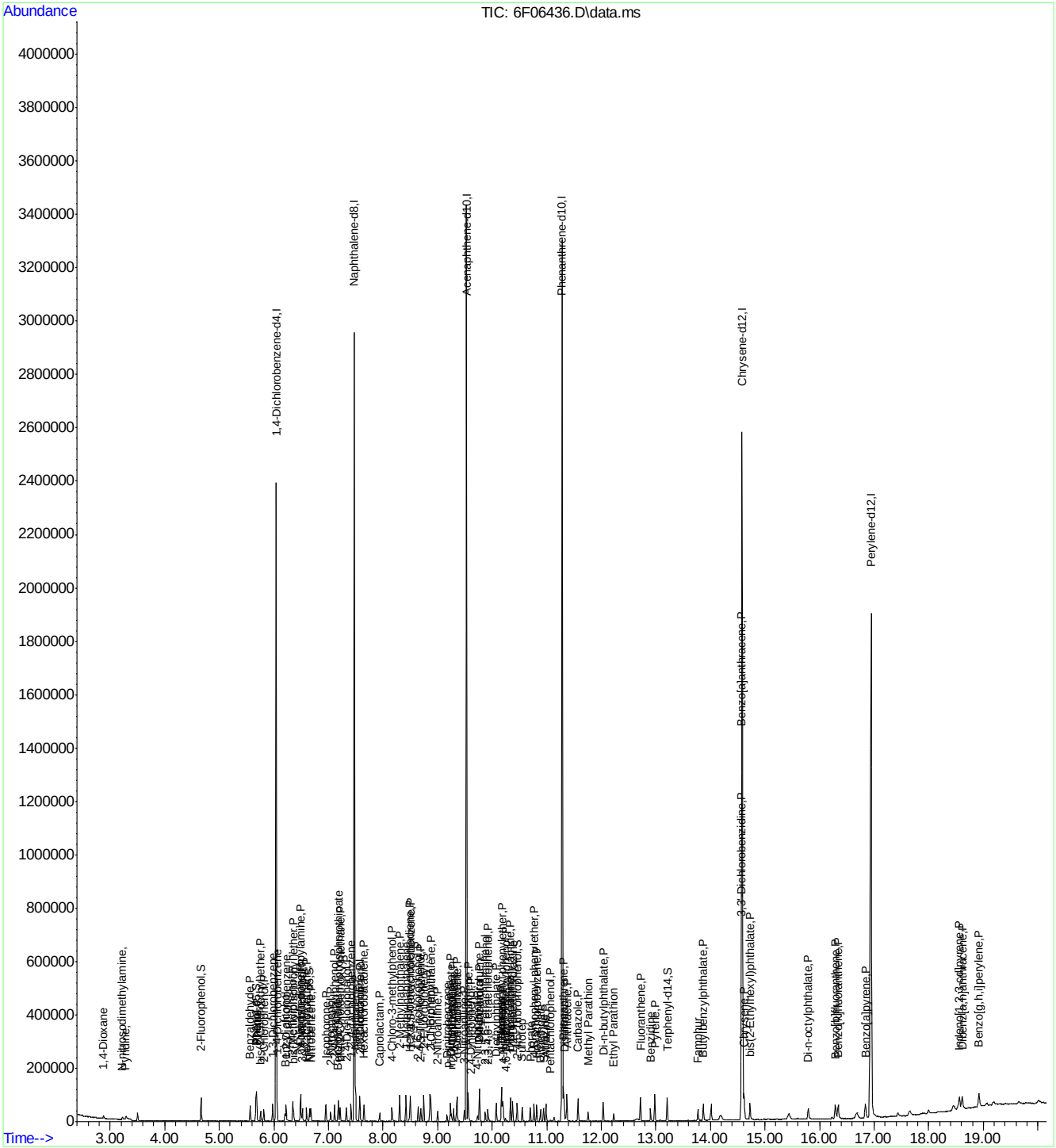
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
98)	3,3'-Dichlorobenzidine	14.566	252	12155	1.200	ppm	97
99)	Benzo[a]anthracene	14.571	228	35545	1.136	ppm	97
100)	Chrysene	14.614	228	34871	1.125	ppm	100
101)	bis(2-Ethylhexyl)phtha...	14.726	149	24107	1.490	ppm	100
103)	Di-n-octylphthalate	15.791	149	35856	1.561	ppm	97
104)	Benzo[b]fluoranthene	16.293	252	31213	1.114	ppm	99
105)	Benzo[k]fluoranthene	16.341	252	33122m	1.007	ppm	
106)	Benzo[a]pyrene	16.839	252	29481	1.037	ppm	98
107)	Indeno[1,2,3-cd]pyrene	18.561	276	27465	1.267	ppm	98
108)	Dibenz[a,h]anthracene	18.615	278	27903	1.145	ppm	94
109)	Benzo[g,h,i]perylene	18.920	276	31234	1.049	ppm	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06436.D
Sample : ic248-1
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1
Acq On : 29 Jul 2020 12:53 pm Operator: marthav

Quant Time: Jul 29 13:54:40 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625



8270D6F072920.m Thu Jul 30 12:54:54 2020 Page: 4

Manual Integration Approval Summary

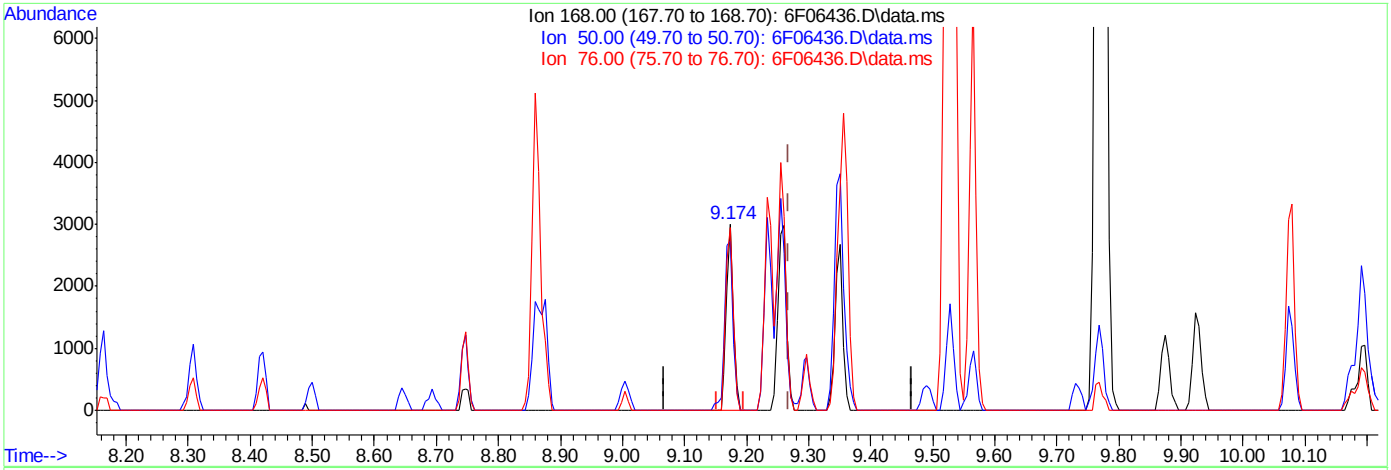
Sample Number: S6F248-IC248
Lab FileID: 6F06436.D
Injection Time: 07/29/20 12:53
Method: SW846 8270D
Analyst approved: 07/30/20 13:11 Martha Valls
Supervisor approved: 07/30/20 14:11 Nicole McCampbell

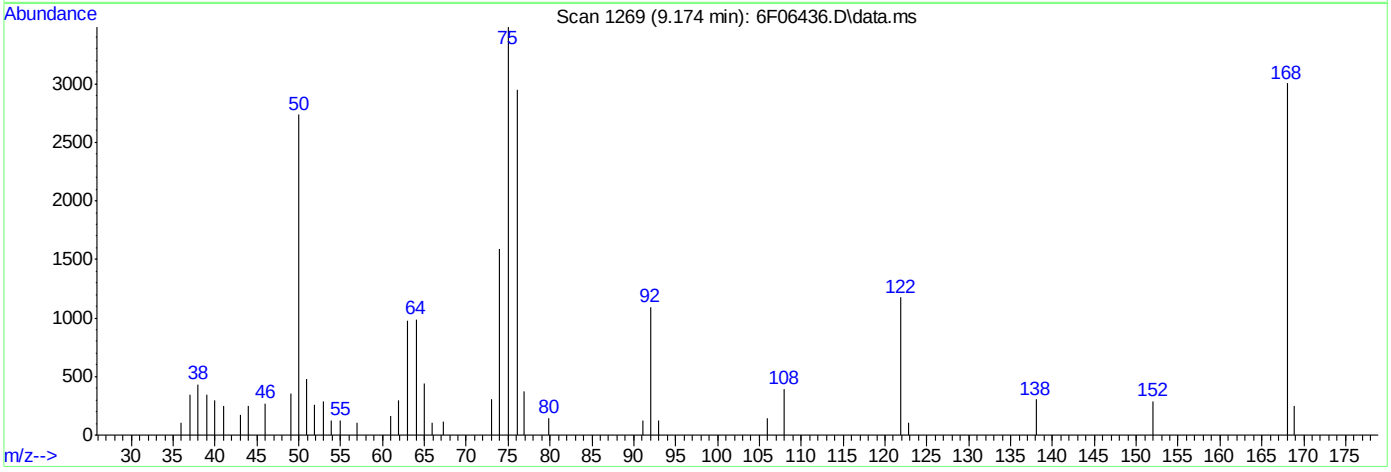
Parameter	CAS	Sig#	R.T. (min.)	Reason
m-Dinitrobenzene	99-65-0		9.26	Missed peak
2,4-Dinitrophenol	51-28-5		9.62	Missed peak
Pentachlorophenol	87-86-5		11.07	Missed peak
Benzo(k)fluoranthene	207-08-9		16.34	Poorly defined baseline

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06436.D
Sample : ic248-1
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1
Acq On : 29 Jul 2020 12:53 pm Operator: marthav

Quant Time: Jul 29 13:51:58 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625





TIC: 6F06436.D\data.ms

(54) m-Dinitrobenzene

9.174min (-0.094) 1.23ppm

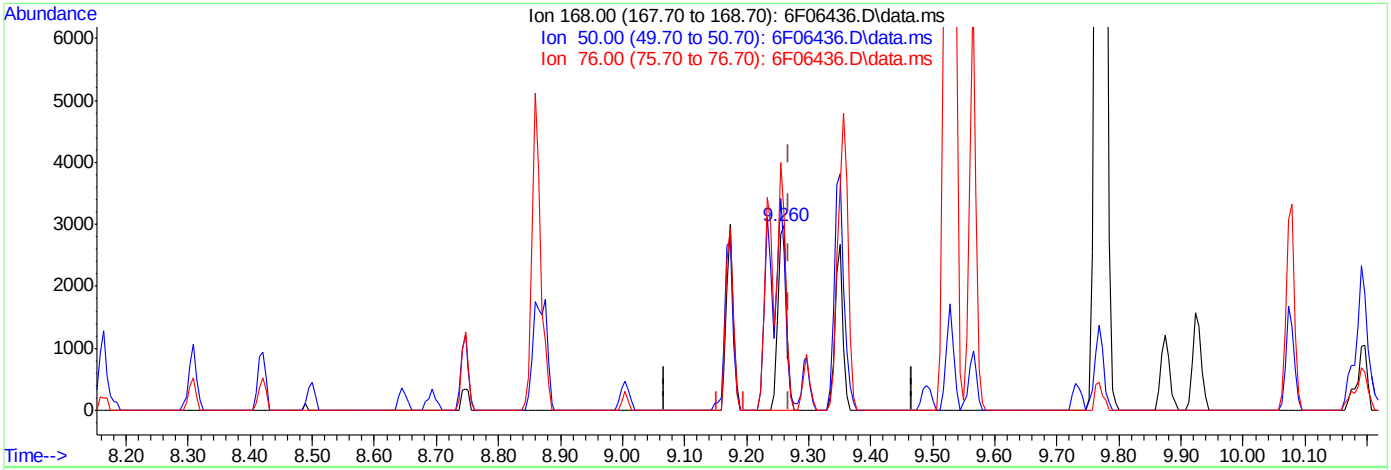
response 2354

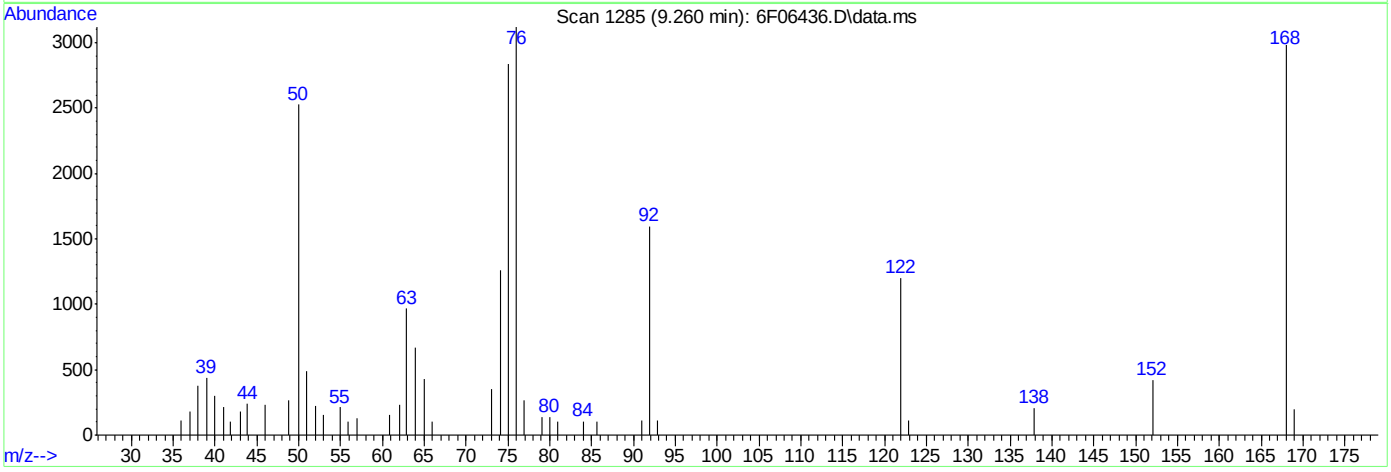
Ion	Exp%	Act%
168.00	100	100
50.00	94.70	88.87
76.00	116.40	98.10
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06436.D
Sample : ic248-1
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1
Acq On : 29 Jul 2020 12:53 pm Operator: marthav

Quant Time: Jul 29 13:51:58 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625





TIC: 6F06436.D\data.ms

(54) m-Dinitrobenzene

9.260min (-0.008) 1.48ppm m

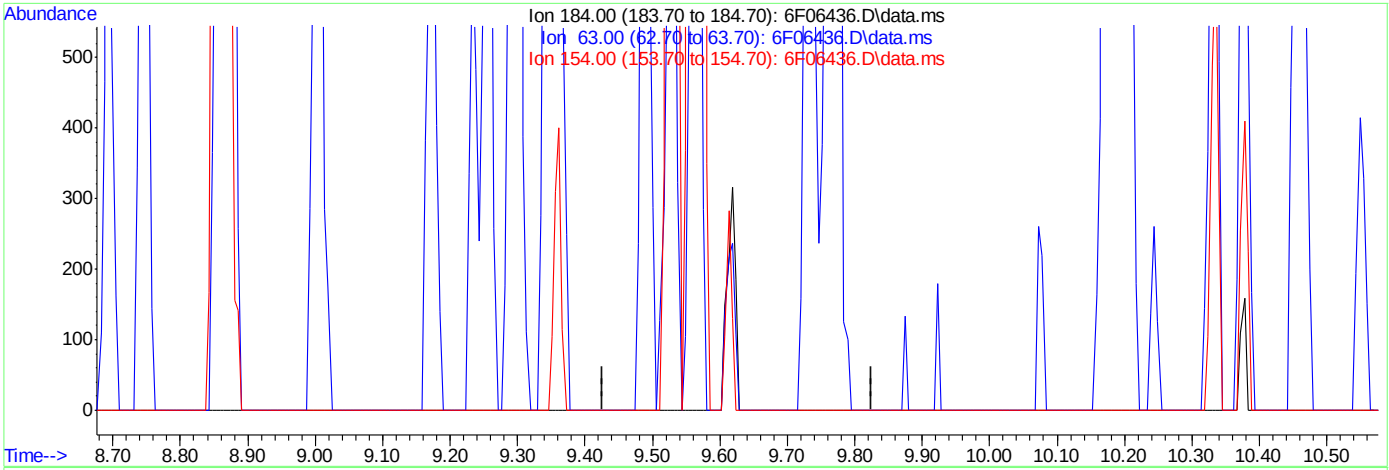
response 2855

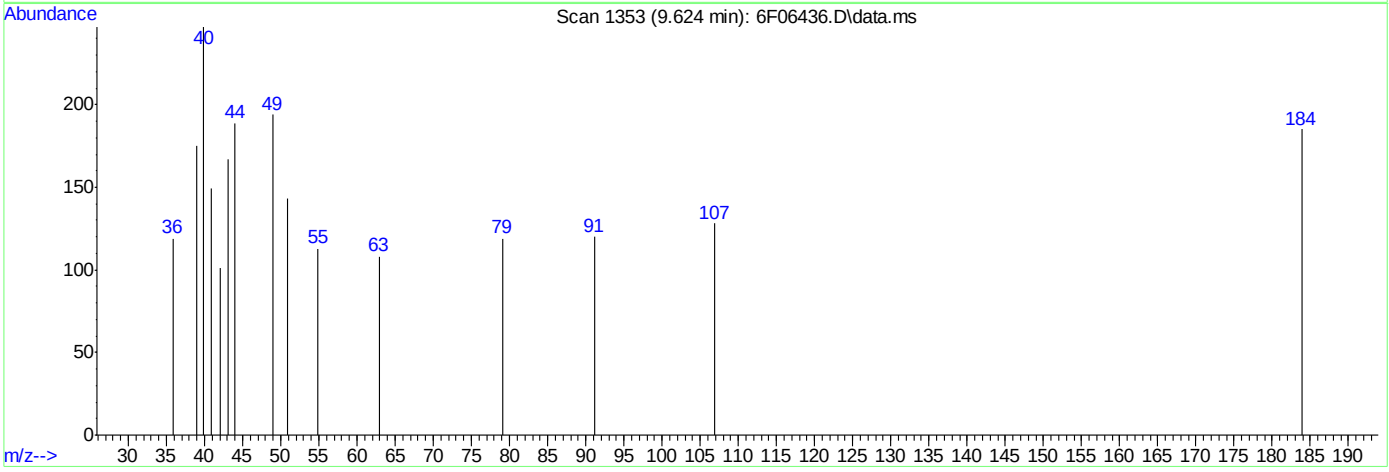
Ion	Exp%	Act%
168.00	100	100
50.00	94.70	84.86
76.00	116.40	104.73
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06436.D
Sample : ic248-1
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1
Acq On : 29 Jul 2020 12:53 pm Operator: marthav

Quant Time: Jul 29 13:51:58 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625





TIC: 6F06436.D\data.ms

(59) 2,4-Dinitrophenol (P)

9.626min (-9.626) 0.00ppm

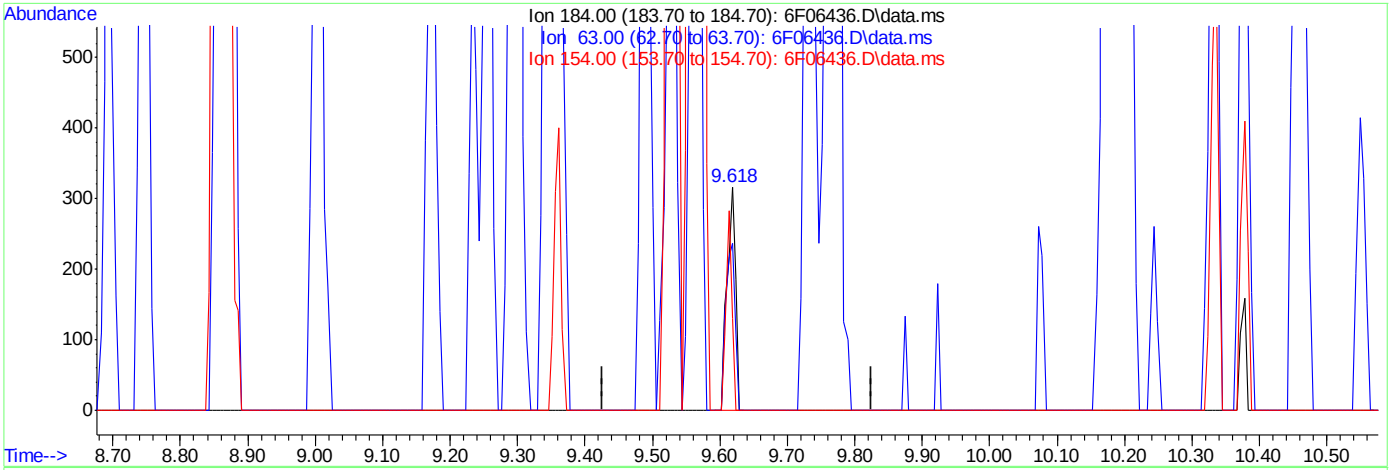
response 0

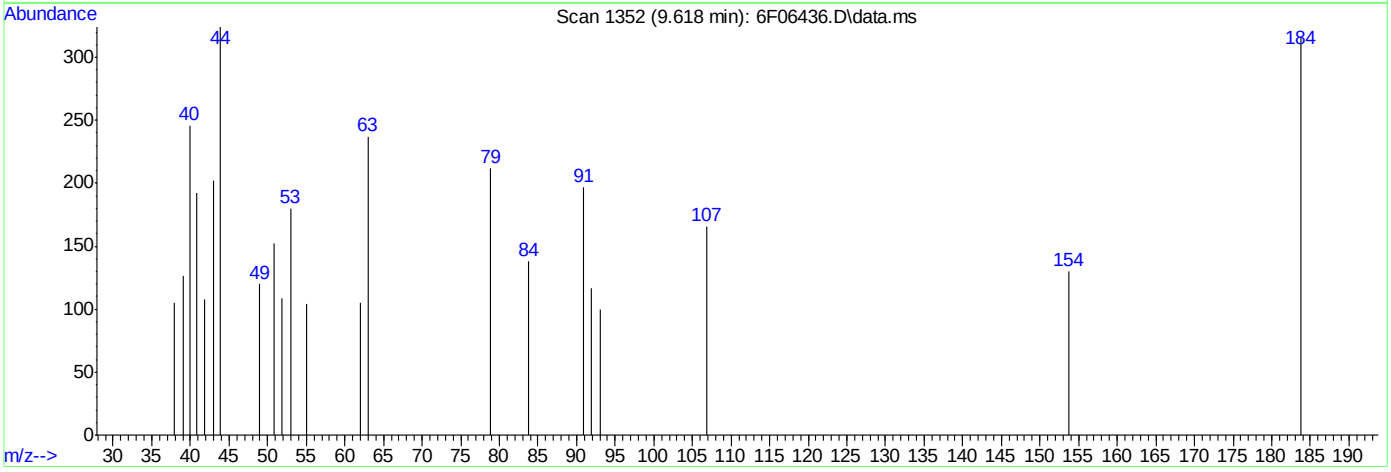
Ion	Exp%	Act%
184.00	100	0.00
63.00	60.50	0.00#
154.00	48.80	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06436.D
Sample : ic248-1
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1
Acq On : 29 Jul 2020 12:53 pm Operator: marthav

Quant Time: Jul 29 13:51:58 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625





TIC: 6F06436.D\data.ms

(59) 2,4-Dinitrophenol (P)

9.618min (-0.008) 4.97ppm m

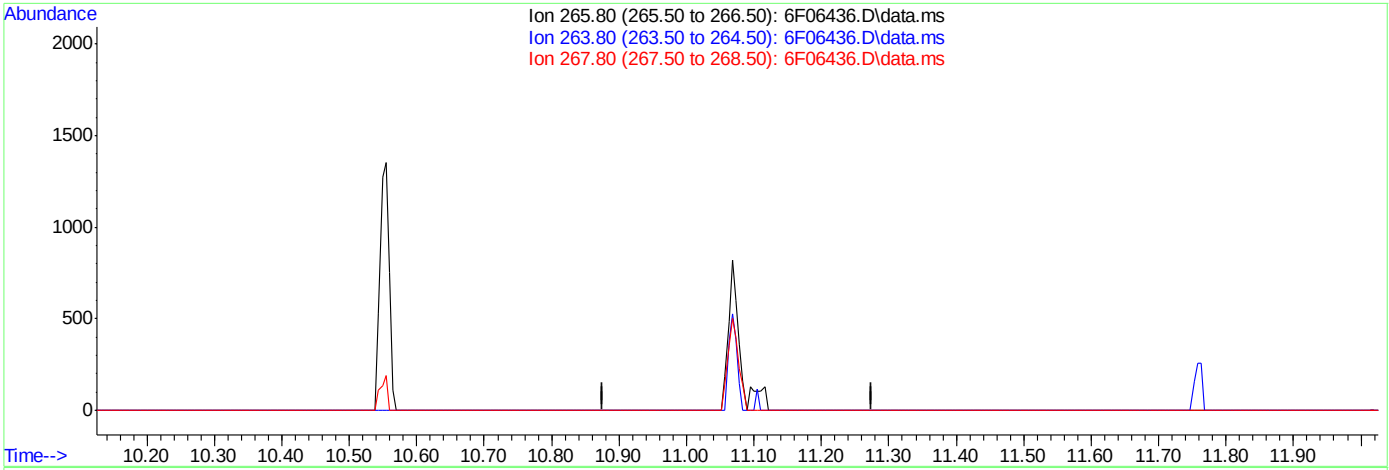
response 278

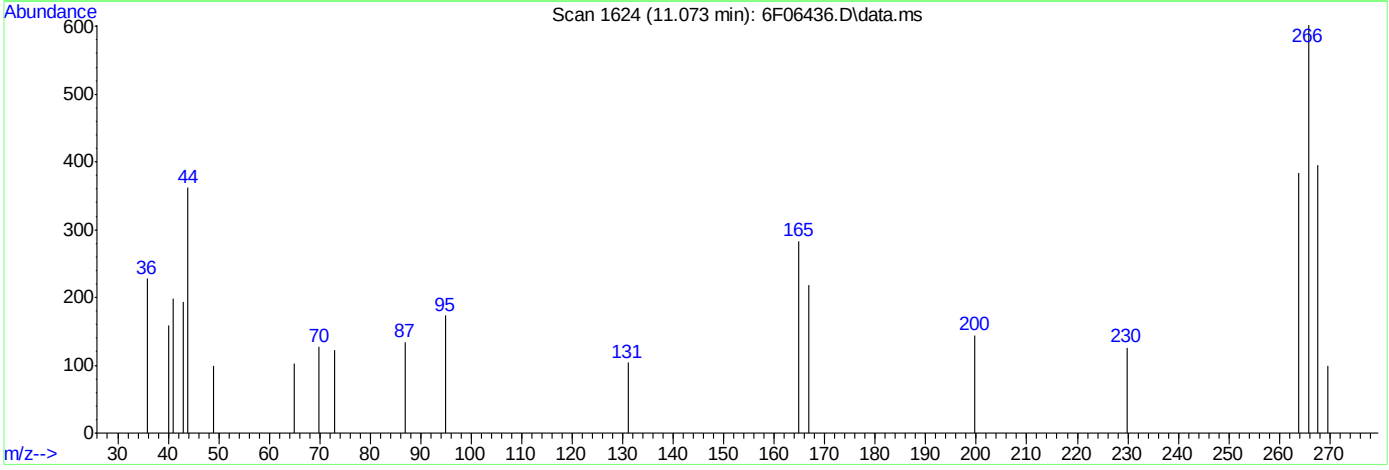
Ion	Exp%	Act%
184.00	100	100
63.00	60.50	75.00
154.00	48.80	41.14
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06436.D
Sample : ic248-1
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1
Acq On : 29 Jul 2020 12:53 pm Operator: marthav

Quant Time: Jul 29 13:51:58 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625





TIC: 6F06436.D\data.ms

(83) Pentachlorophenol (P)

11.076min (-11.076) 0.00ppm

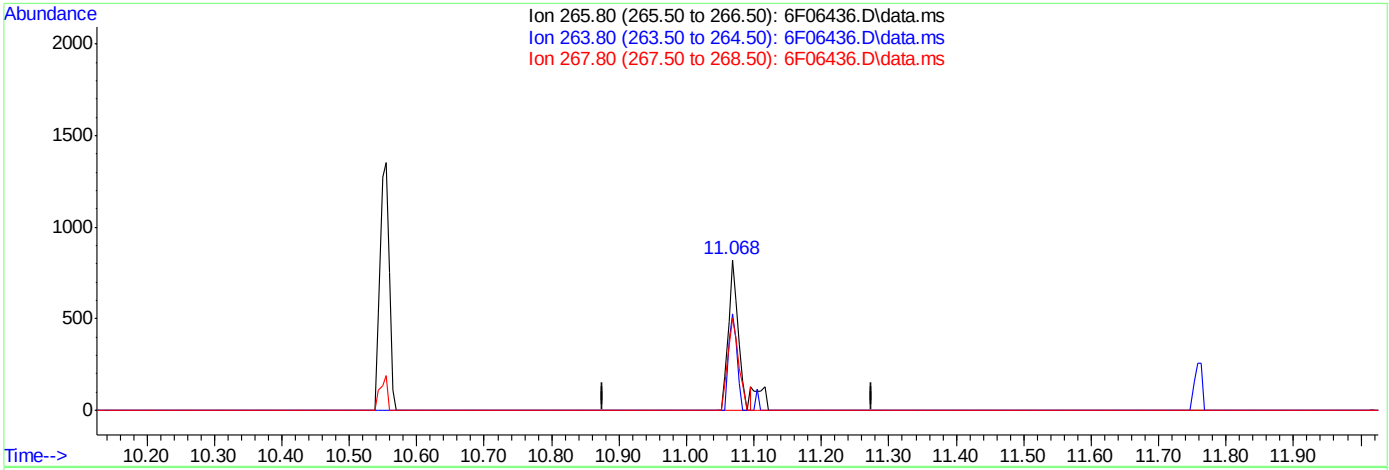
response 0

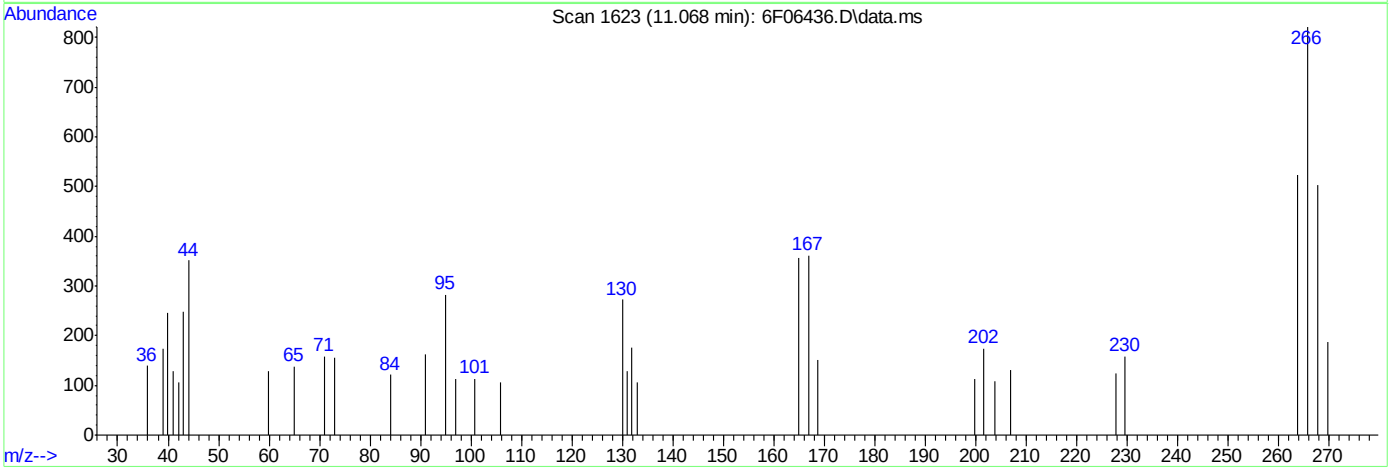
Ion	Exp%	Act%
265.80	100	0.00
263.80	65.00	0.00#
267.80	64.10	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06436.D
Sample : ic248-1
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1
Acq On : 29 Jul 2020 12:53 pm Operator: marthav

Quant Time: Jul 29 13:51:58 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625





TIC: 6F06436.D\data.ms

(83) Pentachlorophenol (P)

11.068min (-0.008) 0.41ppm m

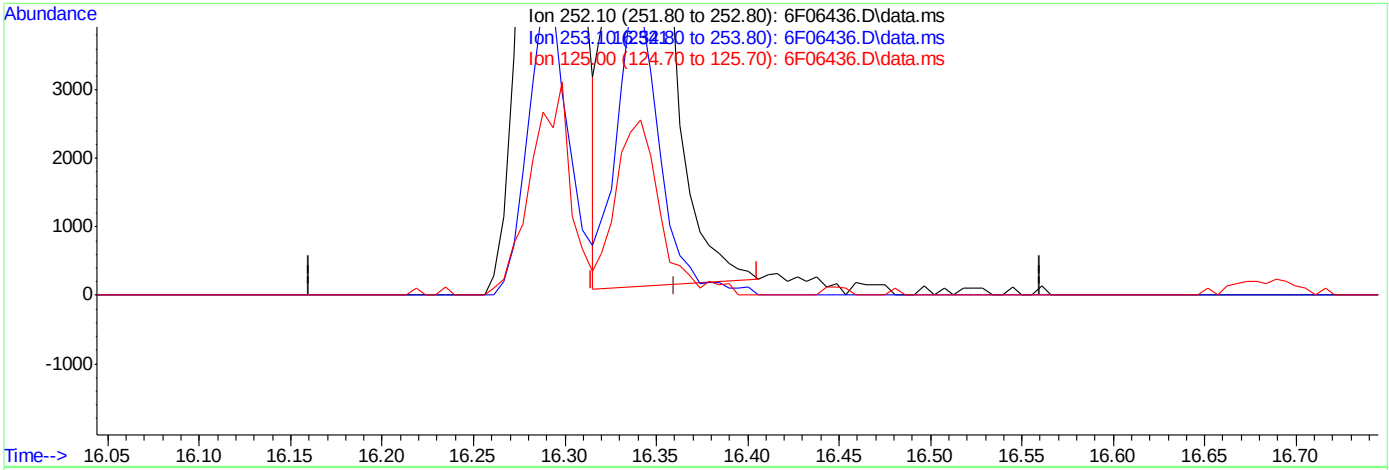
response 880

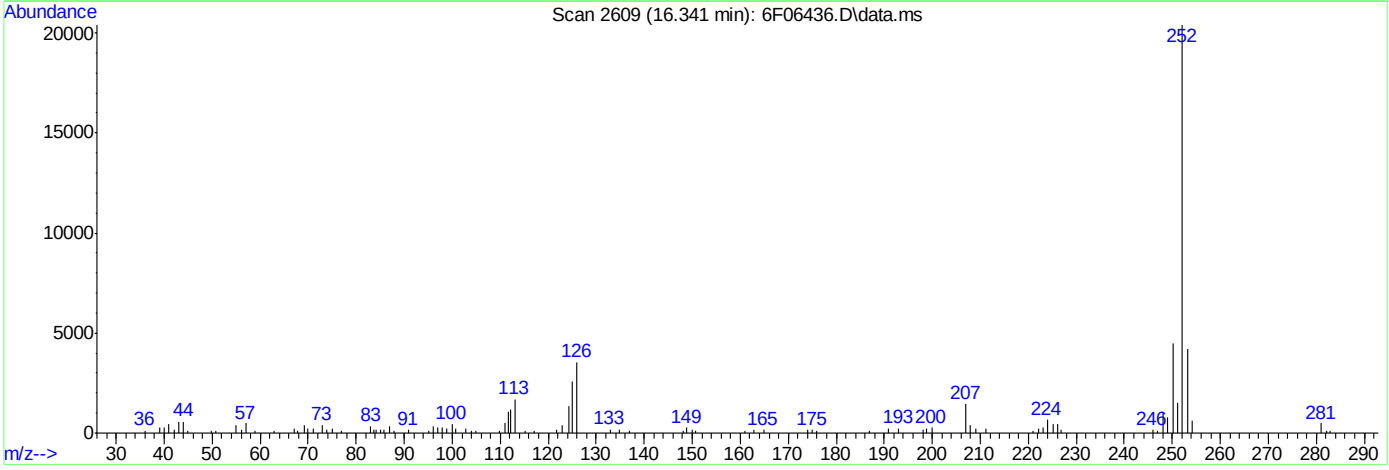
Ion	Exp%	Act%
265.80	100	100
263.80	65.00	63.82
267.80	64.10	61.14
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06436.D
Sample : ic248-1
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1
Acq On : 29 Jul 2020 12:53 pm Operator: marthav

Quant Time: Jul 29 13:51:58 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625





TIC: 6F06436.D\data.ms

(105) Benzo[k]fluoranthene (P)

16.341min (-0.019) 0.98ppm

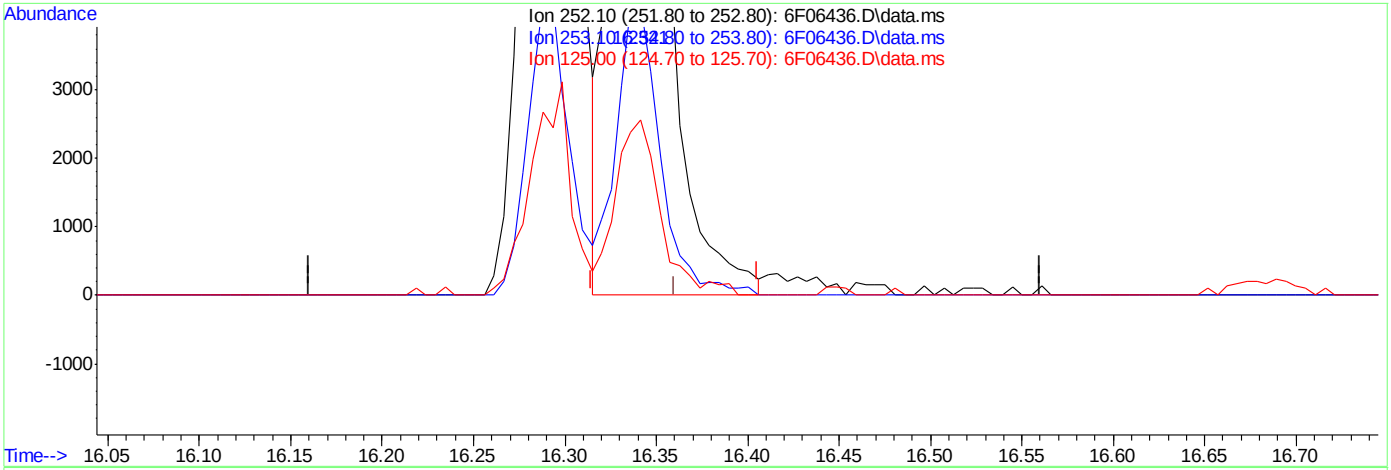
response 32225

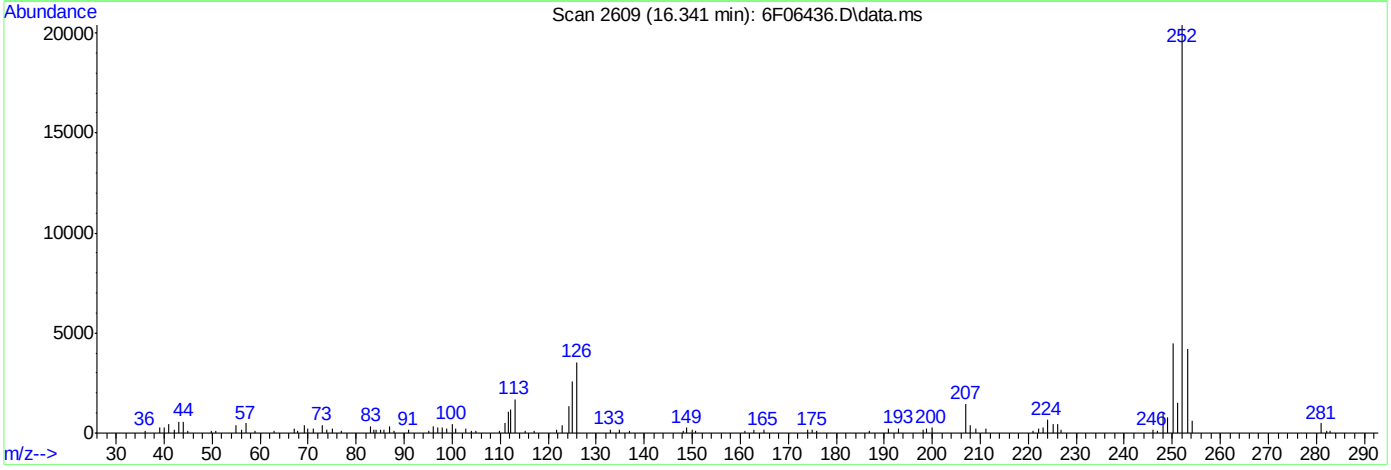
Ion	Exp%	Act%
252.10	100	100
253.10	22.00	20.63
125.00	13.40	12.82
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06436.D
Sample : ic248-1
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1
Acq On : 29 Jul 2020 12:53 pm Operator: marthav

Quant Time: Jul 29 13:51:58 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625





TIC: 6F06436.D\data.ms

(105) Benzo[k]fluoranthene (P)

16.341min (-0.019) 1.01ppm m

response 33122

Ion	Exp%	Act%
252.10	100	100
253.10	22.00	20.70
125.00	13.40	12.60
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 07/30/20 14:11

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06437.D
Sample : ic248-5
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1
Acq On : 29 Jul 2020 1:19 pm Operator: marthav

Quant Time: Jul 29 14:30:48 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.045	152	318455	40.00	ppm	-0.04
22) Naphthalene-d8	7.474	136	1222979	40.00	ppm	0.00
43) Acenaphthene-d10	9.527	164	669440	40.00	ppm	0.00
70) Phenanthrene-d10	11.282	188	1233747	40.00	ppm	0.00
92) Chrysene-d12	14.582	240	1104905	40.00	ppm	-0.01
102) Perylene-d12	16.946	264	1105990	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	4.666	112	114999	10.19	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 10.19%#			
9) Phenol-d5	5.676	99	138610	10.68	ppm	-0.01
Spiked Amount 100.000	Range 10 - 50		Recovery = 10.68%			
23) Nitrobenzene-d5	6.655	82	65442	7.46	ppm	0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 14.92%#			
47) 2-Fluorobiphenyl	8.747	172	130403	5.22	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 10.44%#			
75) 2,4,6-Tribromophenol	10.463	330	38509	12.49	ppm	0.00
Spiked Amount 100.000	Range 33 - 118		Recovery = 12.49%#			
95) Terphenyl-d14	13.207	244	149889	5.28	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 10.56%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.874	88	22885	6.497	ppm	97
3) N-nitrosodimethylamine	3.205	42	31179	5.099	ppm	97
4) Pyridine	3.254	79	58266	5.065	ppm	96
5) Benzaldehyde	5.564	106	48057	5.171	ppm	97
6) Aniline	5.687	93	91490	5.343	ppm	69
8) bis(2-Chloroethyl)ether	5.757	93	60547	5.246	ppm	100
10) Phenol	5.687	94	81309	5.394	ppm	69
11) 2-Chlorophenol	5.816	128	59278	5.197	ppm	99
12) 1,3-Dichlorobenzene	5.976	146	65233	5.062	ppm	98
13) 1,4-Dichlorobenzene	6.062	146	66893	5.122	ppm	99
14) 1,2-Dichlorobenzene	6.222	146	62700	5.095	ppm	98
15) Benzyl alcohol	6.201	108	36420	6.483	ppm	96
16) bis(2-chloroisopropyl)...	6.356	45	76836	5.245	ppm #	68
17) 2-Methylphenol	6.345	108	55458	5.531	ppm	92
18) Acetophenone	6.489	105	80514	5.199	ppm	98
19) Hexachloroethane	6.602	117	27332	5.342	ppm	96
20) N-Nitroso-di-n-propyla...	6.495	70	43676	5.555	ppm	97
21) 3&4-Methylphenol	6.516	108	57450	5.607	ppm	97
24) Nitrobenzene	6.677	77	65006	6.980	ppm	96
25) Isophorone	6.955	82	117360	5.463	ppm	98
26) 2-Nitrophenol	7.040	139	29995	12.423	ppm	95
27) 2,4-Dimethylphenol	7.115	107	55257	5.499	ppm	97
28) O,O,O-Triethylphosphor...	7.185	198	28230	5.130	ppm	91
29) bis(2-Chloroethoxy)met...	7.217	93	72731	5.401	ppm	98
30) Benzoic Acid	7.185	105	36925	15.690	ppm	95
31) 2,4-Dichlorophenol	7.329	162	48759	6.477	ppm	99
32) 1,2,4-Trichlorobenzene	7.415	180	54274	5.039	ppm	98
34) Naphthalene	7.500	128	175592	5.293	ppm	99
35) 4-Chloroaniline	7.575	127	75120	5.418	ppm	99
36) 2,6-Dichlorophenol	7.581	162	47439	6.412	ppm	98
37) Hexachlorobutadiene	7.650	225	29548	4.873	ppm	97

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06437.D
Sample : ic248-5
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1
Acq On : 29 Jul 2020 1:19 pm Operator: marthav

Quant Time: Jul 29 14:30:48 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38)	Caprolactam	7.944	113	18656	5.811	ppm	97
39)	4-Chloro-3-methylphenol	8.164	107	49821	5.530	ppm	99
40)	2-Methylnaphthalene	8.308	141	102000	5.310	ppm	98
41)	1-Methylnaphthalene	8.420	142	111007	5.263	ppm	97
42)	1,2,4,5-Tetrachloroben...	8.501	216	52507	5.082	ppm	99
44)	Hexachlorocyclopentadiene	8.495	237	30184	8.181	ppm	99
45)	2,4,6-Trichlorophenol	8.650	196	34878	6.826	ppm	96
46)	2,4,5-Trichlorophenol	8.693	196	36905	6.408	ppm	96
48)	1,1'-Biphenyl	8.859	154	135983	5.052	ppm	99
49)	2-Chloronaphthalene	8.875	162	109000	5.233	ppm	100
50)	2-Nitroaniline	9.003	65	32288	10.027	ppm	97
51)	p-Dinitrobenzene	9.174	75	18053	9.357	ppm	99
52)	Acenaphthylene	9.356	152	166305	5.314	ppm	99
53)	Dimethylphthalate	9.239	163	124000	5.533	ppm	100
54)	m-Dinitrobenzene	9.255	168	18954m	9.042	ppm	
55)	2,6-Dinitrotoluene	9.297	165	27373	8.042	ppm	95
56)	o-Dinitrobenzene	9.351	50	21528	7.901	ppm	94
57)	Acenaphthene	9.565	153	112210	5.423	ppm	97
58)	3-Nitroaniline	9.490	138	31892	6.949	ppm	97
59)	2,4-Dinitrophenol	9.613	184	6514	16.419	ppm	93
60)	Dibenzofuran	9.774	168	156514	5.437	ppm	96
61)	2,4-Dinitrotoluene	9.768	165	35389	8.132	ppm	91
62)	4-Nitrophenol	9.731	109	17722	8.278	ppm	95
63)	2,3,5,6-Tetrachlorophenol	9.875	232	26572	6.995	ppm	97
64)	2,3,4,6-Tetrachlorophenol	9.923	232	28770	6.626	ppm	92
65)	Fluorene	10.175	166	123147	5.360	ppm	96
66)	4-Chlorophenyl-phenyle...	10.191	204	62136	5.354	ppm	99
67)	Diethylphthalate	10.078	149	125875	5.742	ppm	99
68)	Thionazin	10.169	97	28170	6.830	ppm	97
69)	4-Nitroaniline	10.207	138	31694	7.113	ppm	94
71)	4,6-Dinitro-2-methylph...	10.244	198	13898	11.980	ppm	89
72)	n-Nitrosodiphenylamine	10.335	169	105929	5.929	ppm	100
73)	Diphenylamine	10.335	169	105929	5.241	ppm	100
74)	1,2-Diphenylhydrazine	10.378	77	137796	5.563	ppm	100
76)	Sulfotep	10.549	97	21741	6.287	ppm	88
77)	Phorate	10.699	75	71284	6.450	ppm	99
78)	4-Bromophenyl-phenylether	10.768	248	34734	5.013	ppm	98
79)	Hexachlorobenzene	10.822	284	40699	5.064	ppm	97
80)	Dimethoate	10.886	87	48422	7.124	ppm	97
81)	Simazine	10.945	201	21176	5.427	ppm	98
82)	Atrazine	10.988	200	34790	5.162	ppm	97
83)	Pentachlorophenol	11.068	266	10992	4.749	ppm	98
84)	Phenanthrene	11.309	178	184831	5.412	ppm	99
85)	Anthracene	11.367	178	187257	5.318	ppm	98
86)	Disulfoton	11.319	88	75443	5.805	ppm	97
87)	Carbazole	11.576	167	167513	5.397	ppm	100
88)	Methyl Parathion	11.758	109	34168	8.283	ppm	95
89)	Di-n-butylphthalate	12.036	149	208225	5.740	ppm	98
90)	Ethyl Parathion	12.229	97	21964	9.720	ppm	95
91)	Fluoranthene	12.721	202	189552	5.295	ppm	98
93)	Benzidine	12.902	184	117825	6.952	ppm	97
94)	Pyrene	12.983	202	196154	5.383	ppm	99
96)	Famphur	13.774	218	67743	7.330	ppm	96
97)	Butylbenzylphthalate	13.871	149	90089	7.168	ppm	99

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06437.D
Sample : ic248-5
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1
Acq On : 29 Jul 2020 1:19 pm Operator: marthav

Quant Time: Jul 29 14:30:48 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

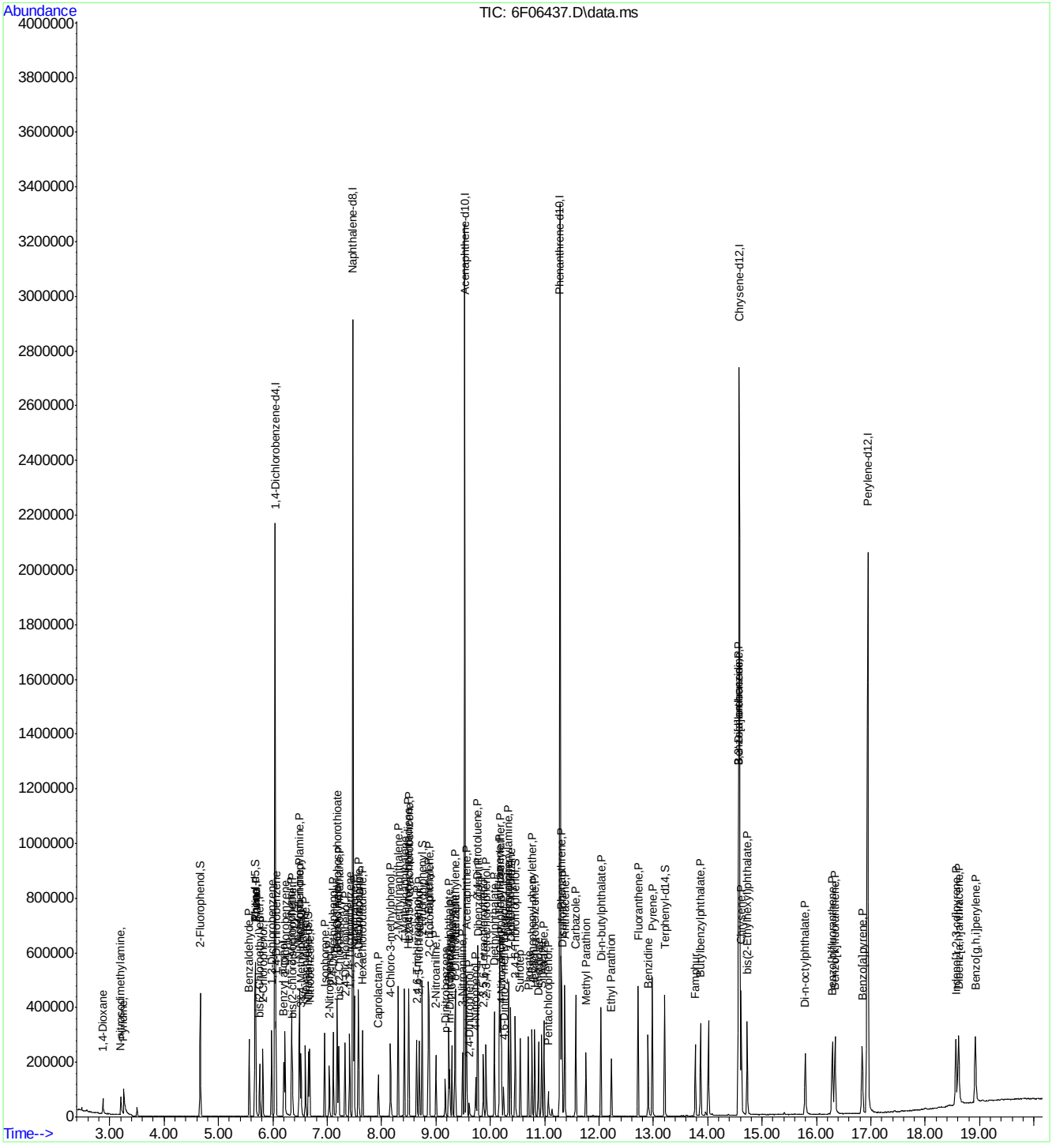
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
98)	3,3'-Dichlorobenzidine	14.566	252	68160	6.172	ppm	100
99)	Benzo[a]anthracene	14.566	228	177388	5.291	ppm	98
100)	Chrysene	14.614	228	180416	5.433	ppm	98
101)	bis(2-Ethylhexyl)phtha...	14.726	149	129395	7.232	ppm	98
103)	Di-n-octylphthalate	15.796	149	198245	7.740	ppm	99
104)	Benzo[b]fluoranthene	16.294	252	165127	5.509	ppm	98
105)	Benzo[k]fluoranthene	16.342	252	179743	5.170	ppm	99
106)	Benzo[a]pyrene	16.839	252	155979	5.189	ppm	99
107)	Indeno[1,2,3-cd]pyrene	18.567	276	145827	6.197	ppm	96
108)	Dibenz[a,h]anthracene	18.615	278	155425	5.903	ppm	97
109)	Benzo[g,h,i]perylene	18.925	276	162812	5.169	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06437.D
Sample : ic248-5
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1
Acq On : 29 Jul 2020 1:19 pm Operator: marthav

Quant Time: Jul 29 14:30:48 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625



Manual Integration Approval Summary

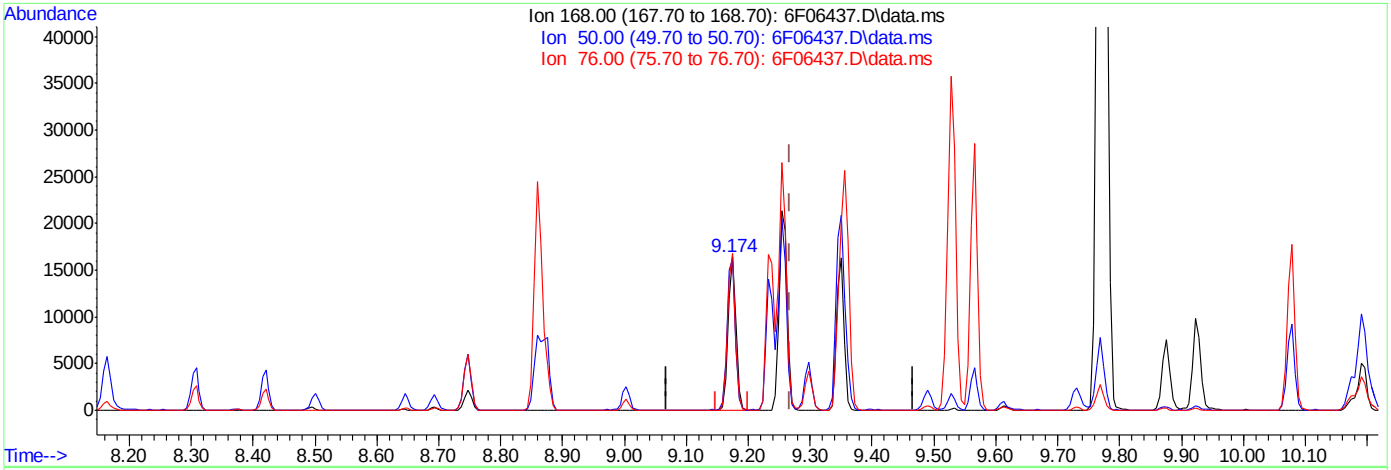
Sample Number:	S6F248-IC248	**Method:**	SW846 8270D
Lab FileID:	6F06437.D	**Analyst approved:**	07/30/20 13:11 Martha Valls
Injection Time:	07/29/20 13:19	**Supervisor approved:**	07/30/20 14:11 Nicole McCampbell

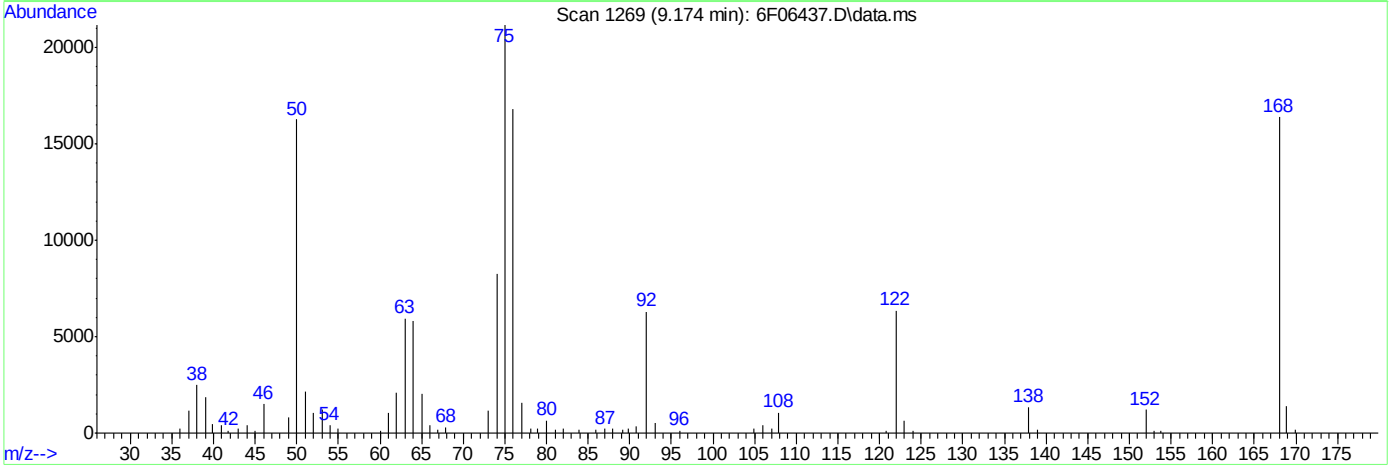
Parameter	CAS	Sig#	R.T. (min.)	Reason
m-Dinitrobenzene	99-65-0		9.25	Missed peak

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06437.D
Sample : ic248-5
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1
Acq On : 29 Jul 2020 1:19 pm Operator: marthav

Quant Time: Jul 29 13:52:01 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625





TIC: 6F06437.D\data.ms

(54) m-Dinitrobenzene

9.174min (-0.093) 6.95ppm

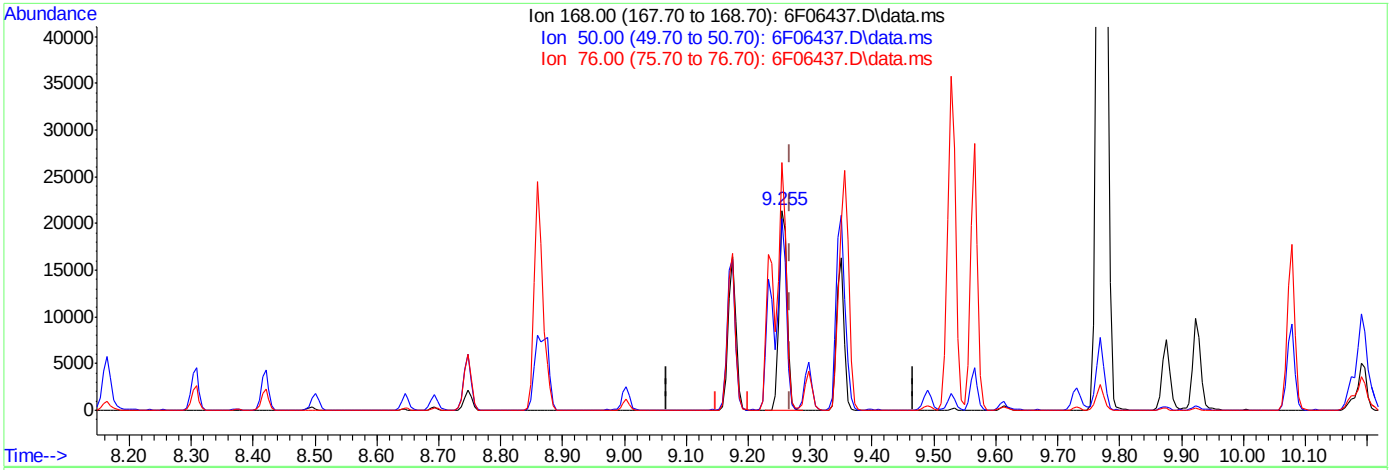
response 14130

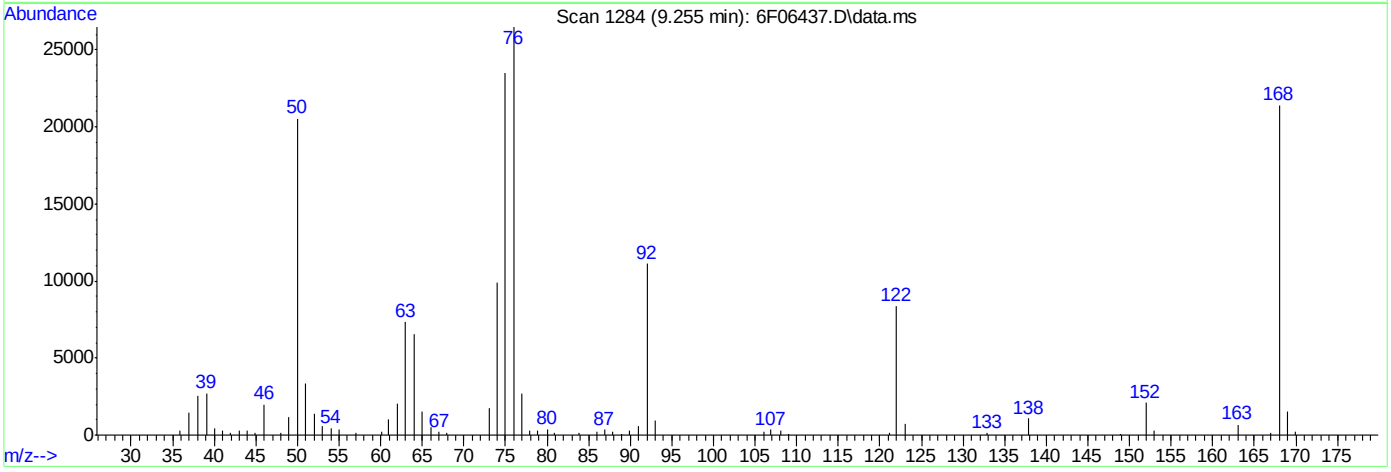
Ion	Exp%	Act%
168.00	100	100
50.00	94.70	99.22
76.00	116.40	102.48
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06437.D
Sample : ic248-5
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1
Acq On : 29 Jul 2020 1:19 pm Operator: marthav

Quant Time: Jul 29 13:52:01 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625





TIC: 6F06437.D\data.ms

(54) m-Dinitrobenzene

9.255min (-0.013) 9.04ppm m

response 18954

Ion	Exp%	Act%
168.00	100	100
50.00	94.70	96.07
76.00	116.40	123.79
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06438.D
Sample : ic248-10
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1
Acq On : 29 Jul 2020 1:45 pm Operator: marthav

Quant Time: Jul 29 14:36:04 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	6.045	152	328143	40.00	ppm		0.00
22) Naphthalene-d8	7.479	136	1282707	40.00	ppm		0.00
43) Acenaphthene-d10	9.533	164	695695	40.00	ppm		0.00
70) Phenanthrene-d10	11.287	188	1269574	40.00	ppm		0.00
92) Chrysene-d12	14.582	240	1134139	40.00	ppm		0.00
102) Perylene-d12	16.946	264	1144729	40.00	ppm		0.00
System Monitoring Compounds							
7) 2-Fluorophenol	4.665	112	239059	20.56	ppm		0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 20.56%				
9) Phenol-d5	5.676	99	285463	21.35	ppm		0.00
Spiked Amount 100.000	Range 10 - 50		Recovery = 21.35%				
23) Nitrobenzene-d5	6.655	82	135148	12.18	ppm		0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 24.36%#				
47) 2-Fluorobiphenyl	8.746	172	262028	10.09	ppm		0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 20.18%#				
75) 2,4,6-Tribromophenol	10.463	330	80435	21.45	ppm		0.00
Spiked Amount 100.000	Range 33 - 118		Recovery = 21.45%#				
95) Terphenyl-d14	13.207	244	307791	10.56	ppm		0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 21.12%#				
Target Compounds							Qvalue
2) 1,4-Dioxane	2.868	88	46153	9.860	ppm		99
3) N-nitrosodimethylamine	3.200	42	65504	10.396	ppm		98
4) Pyridine	3.248	79	124024	10.463	ppm		100
5) Benzaldehyde	5.564	106	98510	10.287	ppm		99
6) Aniline	5.687	93	186463	10.568	ppm	#	38
8) bis(2-Chloroethyl)ether	5.762	93	122731	10.319	ppm		89
10) Phenol	5.687	94	166709	10.733	ppm	#	56
11) 2-Chlorophenol	5.821	128	124160	10.564	ppm		87
12) 1,3-Dichlorobenzene	5.976	146	132981	10.014	ppm		98
13) 1,4-Dichlorobenzene	6.061	146	136087	10.113	ppm		97
14) 1,2-Dichlorobenzene	6.227	146	126782	9.998	ppm		97
15) Benzyl alcohol	6.206	108	73092	10.437	ppm		97
16) bis(2-chloroisopropyl)...	6.356	45	156912	10.395	ppm		74
17) 2-Methylphenol	6.345	108	111196	10.763	ppm		97
18) Acetophenone	6.489	105	167555	10.500	ppm		99
19) Hexachloroethane	6.602	117	55899	10.602	ppm		95
20) N-Nitroso-di-n-propyla...	6.495	70	88424	10.915	ppm	#	70
21) 3&4-Methylphenol	6.521	108	115952	10.982	ppm		95
24) Nitrobenzene	6.677	77	131446	11.441	ppm		96
25) Isophorone	6.955	82	236664	10.504	ppm		99
26) 2-Nitrophenol	7.040	139	62567	14.627	ppm		97
27) 2,4-Dimethylphenol	7.115	107	112441	10.669	ppm		100
28) O,O,O-Triethylphosphor...	7.185	198	57594	9.979	ppm		85
29) bis(2-Chloroethoxy)met...	7.217	93	144973	10.264	ppm		99
30) Benzoic Acid	7.201	105	86511	16.620	ppm		97
31) 2,4-Dichlorophenol	7.329	162	99117	10.590	ppm		99
32) 1,2,4-Trichlorobenzene	7.415	180	109873	9.727	ppm		96
34) Naphthalene	7.500	128	356000	10.232	ppm		99
35) 4-Chloroaniline	7.575	127	153055	10.524	ppm		99
36) 2,6-Dichlorophenol	7.580	162	97270	10.635	ppm		99
37) Hexachlorobutadiene	7.655	225	59857	9.412	ppm		98

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06438.D
Sample : ic248-10
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1
Acq On : 29 Jul 2020 1:45 pm Operator: marthav

Quant Time: Jul 29 14:36:04 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38)	Caprolactam	7.949	113	39308	11.830	ppm		98
39)	4-Chloro-3-methylphenol	8.163	107	102298	10.827	ppm		100
40)	2-Methylnaphthalene	8.308	141	206277	10.239	ppm		99
41)	1-Methylnaphthalene	8.420	142	224775	10.160	ppm		98
42)	1,2,4,5-Tetrachloroben...	8.500	216	105843	9.766	ppm		99
44)	Hexachlorocyclopentadiene	8.495	237	65993	11.601	ppm		98
45)	2,4,6-Trichlorophenol	8.650	196	72277	11.033	ppm		98
46)	2,4,5-Trichlorophenol	8.693	196	77596	10.817	ppm		98
48)	1,1'-Biphenyl	8.859	154	283510	10.136	ppm		99
49)	2-Chloronaphthalene	8.875	162	221914	10.253	ppm		100
50)	2-Nitroaniline	9.003	65	67789	14.357	ppm		96
51)	p-Dinitrobenzene	9.174	75	40563	13.258	ppm		99
52)	Acenaphthylene	9.362	152	338693	10.414	ppm		99
53)	Dimethylphthalate	9.239	163	249742	10.723	ppm		99
54)	m-Dinitrobenzene	9.260	168	41210	13.166	ppm		76
55)	2,6-Dinitrotoluene	9.297	165	57812	12.598	ppm		94
56)	o-Dinitrobenzene	9.351	50	45068	13.717	ppm		89
57)	Acenaphthene	9.565	153	223048	10.374	ppm		98
58)	3-Nitroaniline	9.490	138	67629	12.570	ppm		100
59)	2,4-Dinitrophenol	9.613	184	19805	14.310	ppm		90
60)	Dibenzofuran	9.773	168	311502	10.413	ppm		97
61)	2,4-Dinitrotoluene	9.768	165	75933	12.822	ppm		93
62)	4-Nitrophenol	9.731	109	34740	12.256	ppm	#	78
63)	2,3,5,6-Tetrachlorophenol	9.875	232	57153	11.065	ppm		99
64)	2,3,4,6-Tetrachlorophenol	9.928	232	61665	10.846	ppm		98
65)	Fluorene	10.175	166	250963	10.511	ppm		100
66)	4-Chlorophenyl-phenyle...	10.196	204	122569	10.163	ppm		97
67)	Diethylphthalate	10.078	149	256201	11.246	ppm		99
68)	Thionazin	10.169	97	58897	12.817	ppm		95
69)	4-Nitroaniline	10.212	138	67589	12.313	ppm		100
71)	4,6-Dinitro-2-methylph...	10.244	198	35453	13.808	ppm		93
72)	n-Nitrosodiphenylamine	10.335	169	214520	11.668	ppm		99
73)	Diphenylamine	10.335	169	214520	10.315	ppm		99
74)	1,2-Diphenylhydrazine	10.378	77	281121	11.028	ppm		98
76)	Sulfotep	10.554	97	46219	12.643	ppm		91
77)	Phorate	10.699	75	153204	12.594	ppm		100
78)	4-Bromophenyl-phenylether	10.774	248	71386	10.011	ppm		95
79)	Hexachlorobenzene	10.822	284	80721	9.760	ppm		99
80)	Dimethoate	10.886	87	107034	13.944	ppm		98
81)	Simazine	10.950	201	44229	11.016	ppm		98
82)	Atrazine	10.993	200	73114	10.543	ppm		94
83)	Pentachlorophenol	11.068	266	31791	8.709	ppm		97
84)	Phenanthrene	11.308	178	368751	10.493	ppm		99
85)	Anthracene	11.373	178	377686	10.423	ppm		98
86)	Disulfoton	11.319	88	158988	11.445	ppm		96
87)	Carbazole	11.576	167	337900	10.580	ppm		100
88)	Methyl Parathion	11.758	109	77633	14.226	ppm		97
89)	Di-n-butylphthalate	12.036	149	427585	11.455	ppm		98
90)	Ethyl Parathion	12.234	97	50797	15.400	ppm		92
91)	Fluoranthene	12.720	202	389163	10.565	ppm		99
93)	Benzidine	12.908	184	245451	13.141	ppm		99
94)	Pyrene	12.983	202	396885	10.610	ppm		100
96)	Famphur	13.774	218	142860	16.082	ppm		98
97)	Butylbenzylphthalate	13.870	149	185599	12.629	ppm		99

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06438.D
Sample : ic248-10
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1
Acq On : 29 Jul 2020 1:45 pm Operator: marthav

Quant Time: Jul 29 14:36:04 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

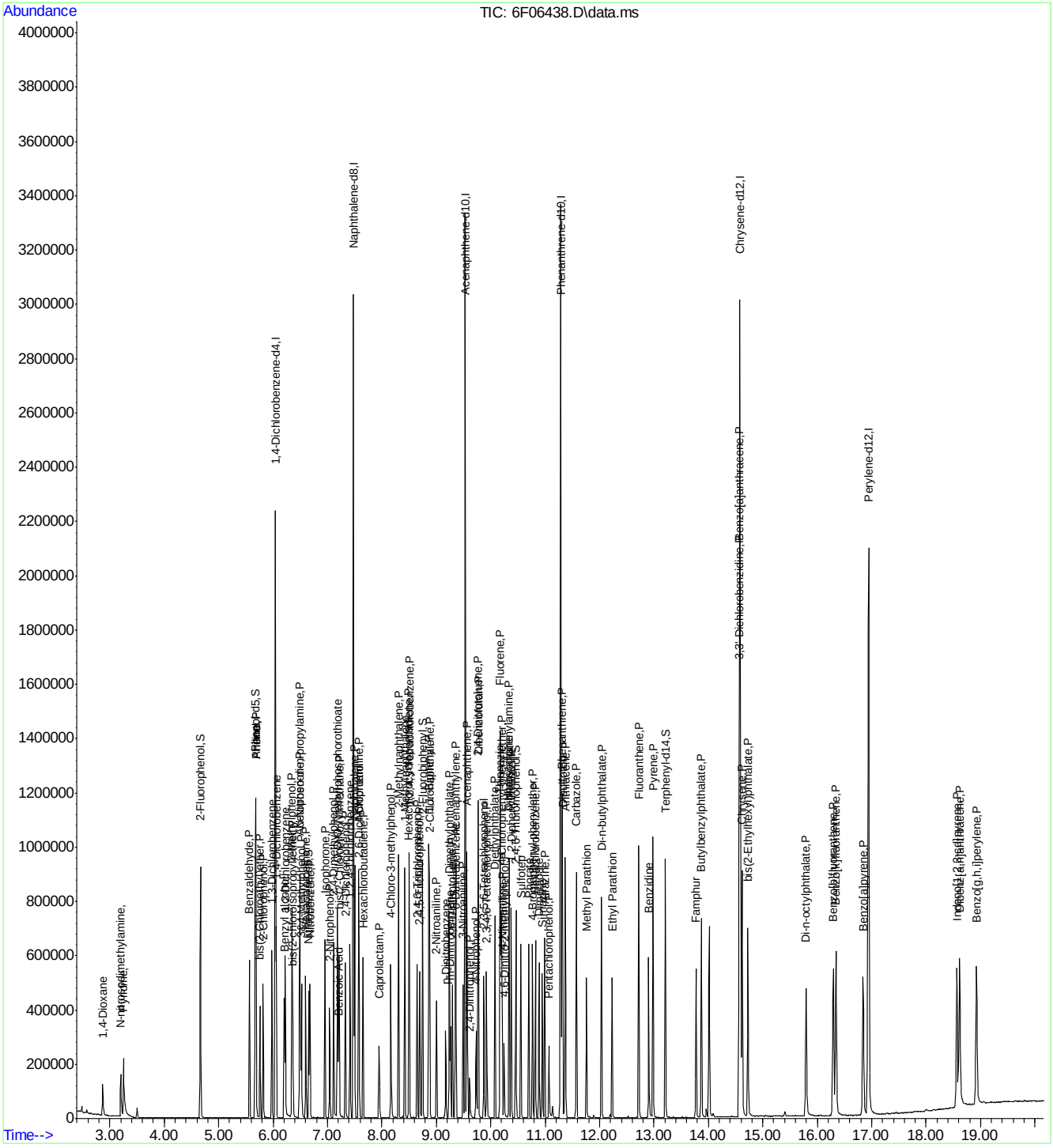
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
98)	3,3'-Dichlorobenzidine	14.566	252	144315	11.475	ppm	98
99)	Benzo[a]anthracene	14.571	228	367572	10.681	ppm	99
100)	Chrysene	14.619	228	360309	10.571	ppm	99
101)	bis(2-Ethylhexyl)phtha...	14.726	149	260224	12.584	ppm	100
103)	Di-n-octylphthalate	15.796	149	419014	12.819	ppm	99
104)	Benzo[b]fluoranthene	16.299	252	341475	10.216	ppm	98
105)	Benzo[k]fluoranthene	16.347	252	364688	10.135	ppm	99
106)	Benzo[a]pyrene	16.844	252	318308	10.232	ppm	100
107)	Indeno[1,2,3-cd]pyrene	18.567	276	302248	10.419	ppm	97
108)	Dibenz[a,h]anthracene	18.615	278	322765	10.183	ppm	98
109)	Benzo[g,h,i]perylene	18.930	276	338780	10.392	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06438.D
Sample : ic248-10
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1
Acq On : 29 Jul 2020 1:45 pm Operator: marthav

Quant Time: Jul 29 14:36:04 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625



Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06439.D
Sample : ic248-25
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1
Acq On : 29 Jul 2020 2:10 pm Operator: marthav

Quant Time: Jul 29 14:38:45 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	6.045	152	338981	40.00	ppm		0.00
22) Naphthalene-d8	7.479	136	1292284	40.00	ppm		0.00
43) Acenaphthene-d10	9.533	164	685433	40.00	ppm		0.00
70) Phenanthrene-d10	11.287	188	1263350	40.00	ppm		0.00
92) Chrysene-d12	14.587	240	1130091	40.00	ppm		0.00
102) Perylene-d12	16.946	264	1147834	40.00	ppm		0.00
System Monitoring Compounds							
7) 2-Fluorophenol	4.665	112	617588	51.41	ppm		0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 51.41%				
9) Phenol-d5	5.676	99	730747	52.90	ppm		0.00
Spiked Amount 100.000	Range 10 - 50		Recovery = 52.90%#				
23) Nitrobenzene-d5	6.660	82	339775	30.39	ppm		0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 60.78%				
47) 2-Fluorobiphenyl	8.752	172	656630	25.66	ppm		0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 51.32%				
75) 2,4,6-Tribromophenol	10.469	330	208148	55.79	ppm		0.00
Spiked Amount 100.000	Range 33 - 118		Recovery = 55.79%				
95) Terphenyl-d14	13.207	244	769179	26.48	ppm		0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 52.96%				
Target Compounds							Qvalue
2) 1,4-Dioxane	2.868	88	118155	24.436	ppm		100
3) N-nitrosodimethylamine	3.195	42	166240	25.541	ppm		100
4) Pyridine	3.237	79	312237	25.500	ppm		100
5) Benzaldehyde	5.564	106	255705	25.849	ppm		100
6) Aniline	5.687	93	477999	26.225	ppm		52
8) bis(2-Chloroethyl)ether	5.762	93	309583	25.197	ppm		90
10) Phenol	5.692	94	424411	26.452	ppm		79
11) 2-Chlorophenol	5.821	128	314072	25.868	ppm		88
12) 1,3-Dichlorobenzene	5.981	146	341406	24.887	ppm		99
13) 1,4-Dichlorobenzene	6.061	146	345520	24.857	ppm		97
14) 1,2-Dichlorobenzene	6.227	146	328104	25.048	ppm		98
15) Benzyl alcohol	6.206	108	192376	26.592	ppm		98
16) bis(2-chloroisopropyl)...	6.361	45	391954	25.135	ppm		75
17) 2-Methylphenol	6.345	108	280808	26.311	ppm		94
18) Acetophenone	6.495	105	421785	25.587	ppm		98
19) Hexachloroethane	6.602	117	142139	26.097	ppm		92
20) N-Nitroso-di-n-propyla...	6.500	70	218806	26.146	ppm	#	71
21) 3&4-Methylphenol	6.521	108	293024	26.865	ppm		97
24) Nitrobenzene	6.682	77	336060	29.034	ppm		98
25) Isophorone	6.955	82	591153	26.042	ppm		100
26) 2-Nitrophenol	7.040	139	165852	38.485	ppm		95
27) 2,4-Dimethylphenol	7.115	107	279420	26.317	ppm		95
28) O,O,O-Triethylphosphor...	7.190	198	147000	25.282	ppm		95
29) bis(2-Chloroethoxy)met...	7.217	93	367516	25.826	ppm		99
30) Benzoic Acid	7.227	105	235467	44.901	ppm		95
31) 2,4-Dichlorophenol	7.329	162	253701	26.904	ppm		99
32) 1,2,4-Trichlorobenzene	7.415	180	279267	24.539	ppm		99
34) Naphthalene	7.500	128	888371	25.344	ppm		100
35) 4-Chloroaniline	7.575	127	383374	26.166	ppm		99
36) 2,6-Dichlorophenol	7.580	162	243517	26.426	ppm		99
37) Hexachlorobutadiene	7.655	225	152699	23.833	ppm		99

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06439.D
Sample : ic248-25
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1
Acq On : 29 Jul 2020 2:10 pm Operator: marthav

Quant Time: Jul 29 14:38:45 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38)	Caprolactam	7.976	113	99057	29.592	ppm	95
39)	4-Chloro-3-methylphenol	8.169	107	259869	27.300	ppm	99
40)	2-Methylnaphthalene	8.308	141	520299	25.635	ppm	100
41)	1-Methylnaphthalene	8.420	142	564290	25.318	ppm	99
42)	1,2,4,5-Tetrachloroben...	8.506	216	264872	24.259	ppm	99
44)	Hexachlorocyclopentadiene	8.495	237	177131	31.606	ppm	99
45)	2,4,6-Trichlorophenol	8.650	196	184046	28.515	ppm	98
46)	2,4,5-Trichlorophenol	8.698	196	192337	27.213	ppm	99
48)	1,1'-Biphenyl	8.864	154	708980	25.726	ppm	100
49)	2-Chloronaphthalene	8.875	162	547707	25.684	ppm	99
50)	2-Nitroaniline	9.008	65	175123	37.644	ppm	99
51)	p-Dinitrobenzene	9.174	75	109957	36.478	ppm	97
52)	Acenaphthylene	9.362	152	840567	26.232	ppm	99
53)	Dimethylphthalate	9.244	163	621964	27.104	ppm	100
54)	m-Dinitrobenzene	9.260	168	107529	34.869	ppm	96
55)	2,6-Dinitrotoluene	9.303	165	147501	32.623	ppm	97
56)	o-Dinitrobenzene	9.356	50	110330	34.084	ppm	93
57)	Acenaphthene	9.570	153	550275	25.976	ppm	97
58)	3-Nitroaniline	9.495	138	169701	32.015	ppm	97
59)	2,4-Dinitrophenol	9.618	184	71222	52.230	ppm	91
60)	Dibenzofuran	9.773	168	770970	26.159	ppm	96
61)	2,4-Dinitrotoluene	9.773	165	194996	33.421	ppm	98
62)	4-Nitrophenol	9.736	109	91146	32.638	ppm	88
63)	2,3,5,6-Tetrachlorophenol	9.875	232	153420	30.147	ppm	97
64)	2,3,4,6-Tetrachlorophenol	9.928	232	158544	28.303	ppm	96
65)	Fluorene	10.180	166	623097	26.487	ppm	99
66)	4-Chlorophenyl-phenyle...	10.196	204	306415	25.788	ppm	98
67)	Diethylphthalate	10.084	149	627131	27.941	ppm	99
68)	Thionazin	10.175	97	148862	32.880	ppm	97
69)	4-Nitroaniline	10.217	138	174394	32.246	ppm	97
71)	4,6-Dinitro-2-methylph...	10.249	198	108370	42.417	ppm	92
72)	n-Nitrosodiphenylamine	10.340	169	528298	28.877	ppm	99
73)	Diphenylamine	10.340	169	528298	25.528	ppm	99
74)	1,2-Diphenylhydrazine	10.383	77	685870	27.039	ppm	98
76)	Sulfotep	10.554	97	114071	31.357	ppm	98
77)	Phorate	10.699	75	385179	31.818	ppm	98
78)	4-Bromophenyl-phenylether	10.774	248	173279	24.420	ppm	97
79)	Hexachlorobenzene	10.822	284	199776	24.273	ppm	94
80)	Dimethoate	10.891	87	265322	34.737	ppm	98
81)	Simazine	10.955	201	109012	27.285	ppm	98
82)	Atrazine	10.998	200	180247	26.119	ppm	93
83)	Pentachlorophenol	11.073	266	100261	27.602	ppm	98
84)	Phenanthrene	11.314	178	905615	25.898	ppm	100
85)	Anthracene	11.373	178	933964	25.900	ppm	99
86)	Disulfoton	11.324	88	407836	29.503	ppm	96
87)	Carbazole	11.581	167	843644	26.544	ppm	100
88)	Methyl Parathion	11.763	109	213457	39.308	ppm	95
89)	Di-n-butylphthalate	12.036	149	1074462	28.927	ppm	99
90)	Ethyl Parathion	12.234	97	136383	41.551	ppm	97
91)	Fluoranthene	12.726	202	965906	26.352	ppm	98
93)	Benzidine	12.908	184	592731	31.848	ppm	98
94)	Pyrene	12.988	202	985310	26.436	ppm	98
96)	Famphur	13.779	218	338944	38.293	ppm	94
97)	Butylbenzylphthalate	13.870	149	475575	32.476	ppm	99

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06439.D
Sample : ic248-25
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1
Acq On : 29 Jul 2020 2:10 pm Operator: marthav

Quant Time: Jul 29 14:38:45 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

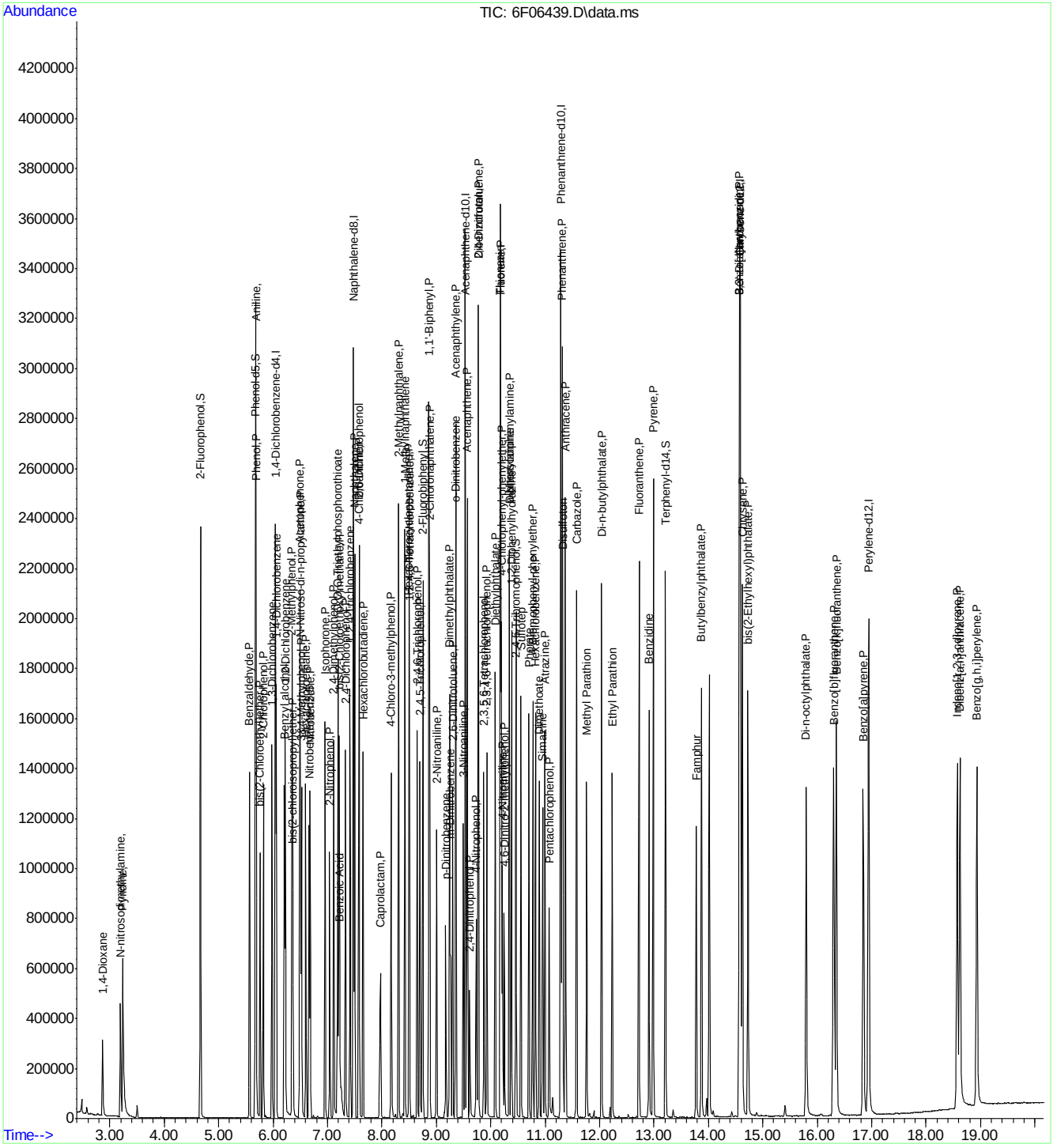
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
98)	3,3'-Dichlorobenzidine	14.571	252	369323	29.471	ppm	99
99)	Benzo[a]anthracene	14.571	228	905609	26.410	ppm	99
100)	Chrysene	14.625	228	884420	26.040	ppm	99
101)	bis(2-Ethylhexyl)phtha...	14.726	149	655979	31.835	ppm	99
103)	Di-n-octylphthalate	15.796	149	1082087	33.016	ppm	100
104)	Benzo[b]fluoranthene	16.304	252	870288	25.967	ppm	98
105)	Benzo[k]fluoranthene	16.352	252	931207	25.809	ppm	99
106)	Benzo[a]pyrene	16.844	252	822487	26.366	ppm	98
107)	Indeno[1,2,3-cd]pyrene	18.572	276	767722	26.392	ppm	99
108)	Dibenz[a,h]anthracene	18.625	278	817093	25.709	ppm	98
109)	Benzo[g,h,i]perylene	18.936	276	837929	25.635	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06439.D
Sample : ic248-25
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1
Acq On : 29 Jul 2020 2:10 pm Operator: marthav

Quant Time: Jul 29 14:38:45 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625



Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 07/30/20 14:11

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06440.D
Sample : icc248-50
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1
Acq On : 29 Jul 2020 2:36 pm Operator: marthav

Quant Time: Jul 29 15:41:07 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	6.045	152	302884	40.00	ppm		0.00
22) Naphthalene-d8	7.479	136	1170478	40.00	ppm		0.00
43) Acenaphthene-d10	9.533	164	637579	40.00	ppm		0.00
70) Phenanthrene-d10	11.287	188	1169544	40.00	ppm		0.00
92) Chrysene-d12	14.593	240	1074260	40.00	ppm		0.00
102) Perylene-d12	16.951	264	1069323	40.00	ppm		0.00
System Monitoring Compounds							
7) 2-Fluorophenol	4.671	112	1158365	107.92	ppm		0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 107.92%#				
9) Phenol-d5	5.682	99	1371442	111.12	ppm		0.00
Spiked Amount 100.000	Range 10 - 50		Recovery = 111.12%#				
23) Nitrobenzene-d5	6.661	82	634627	62.67	ppm		0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 125.34%#				
47) 2-Fluorobiphenyl	8.752	172	1212362	50.92	ppm		0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 101.84%				
75) 2,4,6-Tribromophenol	10.469	330	396960	114.92	ppm		0.00
Spiked Amount 100.000	Range 33 - 118		Recovery = 114.92%				
95) Terphenyl-d14	13.213	244	1460555	52.89	ppm		0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 105.78%				
Target Compounds							Qvalue
2) 1,4-Dioxane	2.863	88	219459	50.795	ppm		99
3) N-nitrosodimethylamine	3.195	42	308424	53.034	ppm		98
4) Pyridine	3.232	79	584958	53.466	ppm		99
5) Benzaldehyde	5.569	106	481409	54.465	ppm		98
6) Aniline	5.687	93	891958	54.769	ppm		73
8) bis(2-Chloroethyl)ether	5.767	93	576542	52.517	ppm		87
10) Phenol	5.698	94	793480	55.348	ppm		94
11) 2-Chlorophenol	5.821	128	590080	54.392	ppm		90
12) 1,3-Dichlorobenzene	5.981	146	634754	51.784	ppm		99
13) 1,4-Dichlorobenzene	6.061	146	642006	51.690	ppm		96
14) 1,2-Dichlorobenzene	6.227	146	605586	51.741	ppm		100
15) Benzyl alcohol	6.211	108	363729	56.269	ppm		98
16) bis(2-chloroisopropyl)...	6.361	45	716763	51.441	ppm		70
17) 2-Methylphenol	6.350	108	526393	55.199	ppm		98
18) Acetophenone	6.495	105	796504	54.077	ppm		99
19) Hexachloroethane	6.602	117	262937	54.030	ppm		90
20) N-Nitroso-di-n-propyla...	6.505	70	410873	54.949	ppm	#	68
21) 3&4-Methylphenol	6.527	108	545880	56.012	ppm		94
24) Nitrobenzene	6.687	77	615441	58.705	ppm		100
25) Isophorone	6.960	82	1097838	53.396	ppm		99
26) 2-Nitrophenol	7.046	139	315749	80.892	ppm		98
27) 2,4-Dimethylphenol	7.120	107	526525	54.752	ppm		98
28) O,O,O-Triethylphosphor...	7.195	198	276548	52.513	ppm		98
29) bis(2-Chloroethoxy)met...	7.222	93	670164	51.995	ppm		99
30) Benzoic Acid	7.249	105	476621m	100.345	ppm		
31) 2,4-Dichlorophenol	7.334	162	472604	55.334	ppm		99
32) 1,2,4-Trichlorobenzene	7.415	180	520718	50.516	ppm		98
34) Naphthalene	7.506	128	1612327	50.785	ppm		100
35) 4-Chloroaniline	7.580	127	716867	54.020	ppm		98
36) 2,6-Dichlorophenol	7.586	162	455458	54.570	ppm		98
37) Hexachlorobutadiene	7.655	225	286188	49.315	ppm		100

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06440.D
Sample : icc248-50
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1
Acq On : 29 Jul 2020 2:36 pm Operator: marthav

Quant Time: Jul 29 15:41:07 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Caprolactam	8.003	113	190019	62.672	ppm	99
39) 4-Chloro-3-methylphenol	8.169	107	491320	56.986	ppm	97
40) 2-Methylnaphthalene	8.313	141	958674	52.148	ppm	98
41) 1-Methylnaphthalene	8.426	142	1047144	51.871	ppm	99
42) 1,2,4,5-Tetrachloroben...	8.506	216	503590	50.923	ppm	99
44) Hexachlorocyclopentadiene	8.500	237	344021	65.991	ppm	99
45) 2,4,6-Trichlorophenol	8.650	196	347603	57.897	ppm	98
46) 2,4,5-Trichlorophenol	8.704	196	369002	56.127	ppm	100
48) 1,1'-Biphenyl	8.864	154	1319141	51.458	ppm	98
49) 2-Chloronaphthalene	8.880	162	1012998	51.068	ppm	99
50) 2-Nitroaniline	9.014	65	332508	76.841	ppm	97
51) p-Dinitrobenzene	9.180	75	216510	77.218	ppm	98
52) Acenaphthylene	9.367	152	1551740	52.061	ppm	99
53) Dimethylphthalate	9.249	163	1158539	54.276	ppm	100
54) m-Dinitrobenzene	9.265	168	210331	73.324	ppm	92
55) 2,6-Dinitrotoluene	9.308	165	282289	67.120	ppm	96
56) o-Dinitrobenzene	9.362	50	200385	66.550	ppm	93
57) Acenaphthene	9.570	153	1017544	51.638	ppm	98
58) 3-Nitroaniline	9.501	138	321096	65.123	ppm	99
59) 2,4-Dinitrophenol	9.618	184	161618	127.417	ppm	91
60) Dibenzofuran	9.779	168	1414469	51.595	ppm	96
61) 2,4-Dinitrotoluene	9.779	165	378169	69.680	ppm	94
62) 4-Nitrophenol	9.741	109	189197	72.834	ppm	97
63) 2,3,5,6-Tetrachlorophenol	9.880	232	296325	62.598	ppm	98
64) 2,3,4,6-Tetrachlorophenol	9.929	232	302727	58.099	ppm	95
65) Fluorene	10.185	166	1155042	52.784	ppm	99
66) 4-Chlorophenyl-phenyle...	10.196	204	563047	50.944	ppm	98
67) Diethylphthalate	10.089	149	1175941	56.325	ppm	100
68) Thionazin	10.185	97	280191	66.532	ppm	99
69) 4-Nitroaniline	10.233	138	325091	64.622	ppm	99
71) 4,6-Dinitro-2-methylph...	10.260	198	226572	95.794	ppm	88
72) n-Nitrosodiphenylamine	10.346	169	989717	58.437	ppm	99
73) Diphenylamine	10.346	169	989717	51.659	ppm	99
74) 1,2-Diphenylhydrazine	10.383	77	1259631	53.641	ppm	100
76) Sulfotep	10.560	97	214064	63.564	ppm	81
77) Phorate	10.704	75	727157	64.886	ppm	99
78) 4-Bromophenyl-phenylether	10.774	248	335268	51.039	ppm	97
79) Hexachlorobenzene	10.827	284	375140	49.236	ppm	100
80) Dimethoate	10.897	87	509961	72.120	ppm	98
81) Simazine	10.966	201	202283	54.692	ppm	98
82) Atrazine	11.004	200	343315	53.739	ppm	97
83) Pentachlorophenol	11.073	266	218237	64.901	ppm	98
84) Phenanthrene	11.319	178	1691143	52.240	ppm	100
85) Anthracene	11.378	178	1744432	52.256	ppm	100
86) Disulfoton	11.325	88	753938	58.914	ppm	98
87) Carbazole	11.581	167	1575784	53.557	ppm	100
88) Methyl Parathion	11.763	109	426294	84.799	ppm	98
89) Di-n-butylphthalate	12.041	149	2030151	59.041	ppm	99
90) Ethyl Parathion	12.234	97	270282	88.949	ppm	99
91) Fluoranthene	12.726	202	1828129	53.875	ppm	100
93) Benzidine	12.913	184	1101962	62.286	ppm	99
94) Pyrene	12.993	202	1863222	52.588	ppm	96
96) Famphur	13.780	218	618110	73.462	ppm	97
97) Butylbenzylphthalate	13.876	149	907704	65.206	ppm	96

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06440.D
Sample : icc248-50
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1
Acq On : 29 Jul 2020 2:36 pm Operator: marthav

Quant Time: Jul 29 15:41:07 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

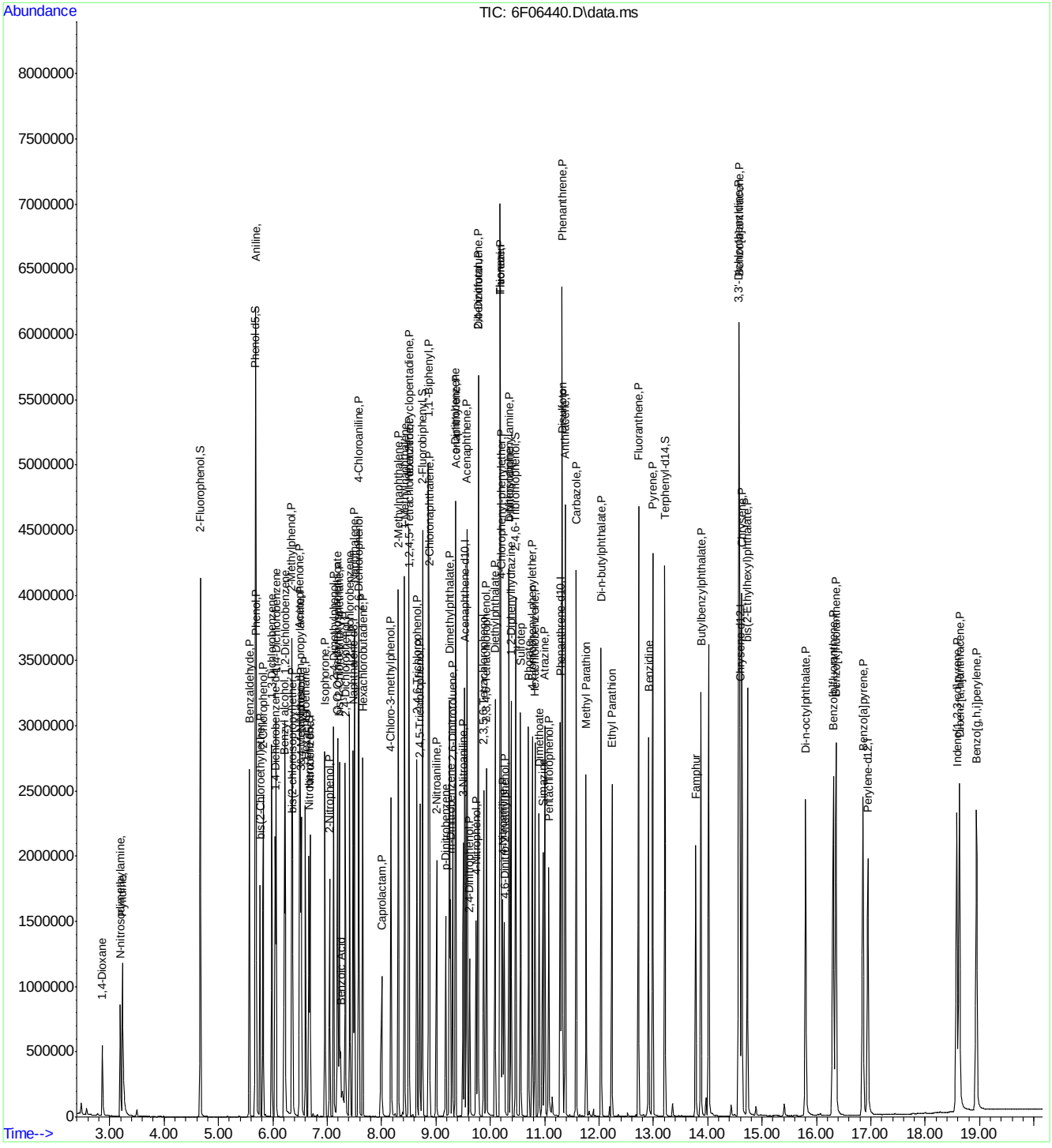
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
98)	3,3'-Dichlorobenzidine	14.571	252	701774	58.910	ppm	99
99)	Benzo[a]anthracene	14.576	228	1749149	53.662	ppm	100
100)	Chrysene	14.630	228	1667303	51.642	ppm	100
101)	bis(2-Ethylhexyl)phtha...	14.732	149	1252787	63.958	ppm	99
103)	Di-n-octylphthalate	15.801	149	2106608	68.994	ppm	99
104)	Benzo[b]fluoranthene	16.309	252	1677650	53.732	ppm	99
105)	Benzo[k]fluoranthene	16.358	252	1760852	52.386	ppm	100
106)	Benzo[a]pyrene	16.855	252	1570308	54.035	ppm	100
107)	Indeno[1,2,3-cd]pyrene	18.583	276	1450692	53.533	ppm	97
108)	Dibenz[a,h]anthracene	18.631	278	1602436	54.121	ppm	99
109)	Benzo[g,h,i]perylene	18.946	276	1559067	51.199	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06440.D
Sample : icc248-50
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1
Acq On : 29 Jul 2020 2:36 pm Operator: marthav

Quant Time: Jul 29 15:41:07 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625



Manual Integration Approval Summary

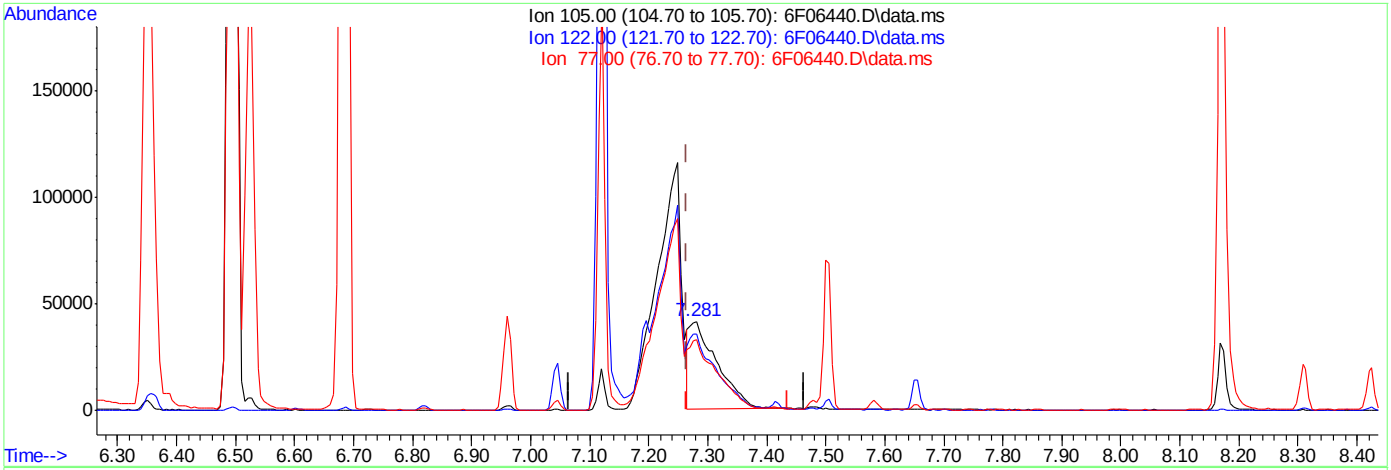
Sample Number:	S6F248-ICC248	**Method:**	SW846 8270D
Lab FileID:	6F06440.D	**Analyst approved:**	07/30/20 13:11 Martha Valls
Injection Time:	07/29/20 14:36	**Supervisor approved:**	07/30/20 14:11 Nicole McCampbell

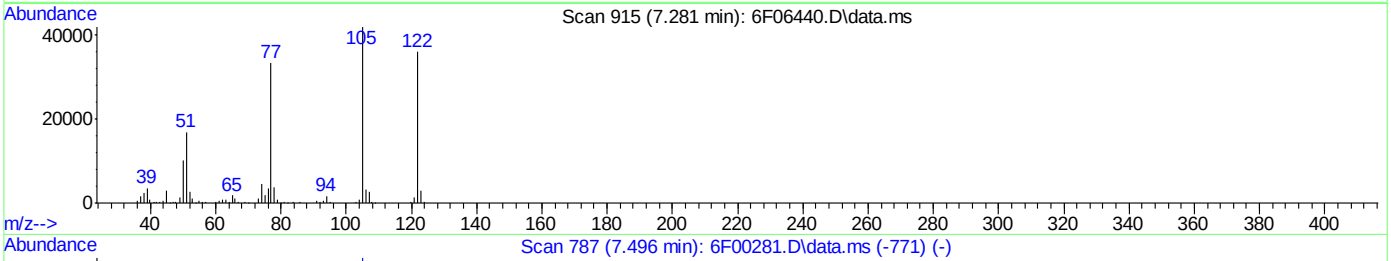
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic Acid	65-85-0		7.25	Split peak

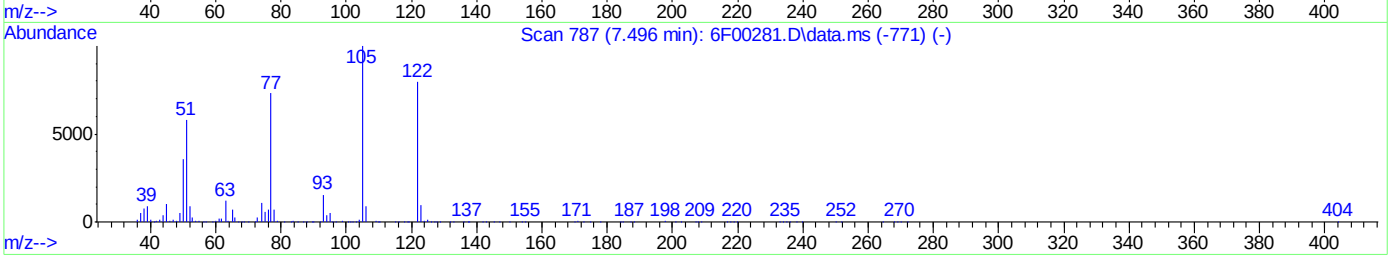
Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06440.D
Sample : icc248-50
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1
Acq On : 29 Jul 2020 2:36 pm Operator: marthav

Quant Time: Jul 29 15:40:25 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625







TIC: 6F06440.D\data.ms

(30) Benzoic Acid

7.281min (+0.016) 28.05ppm

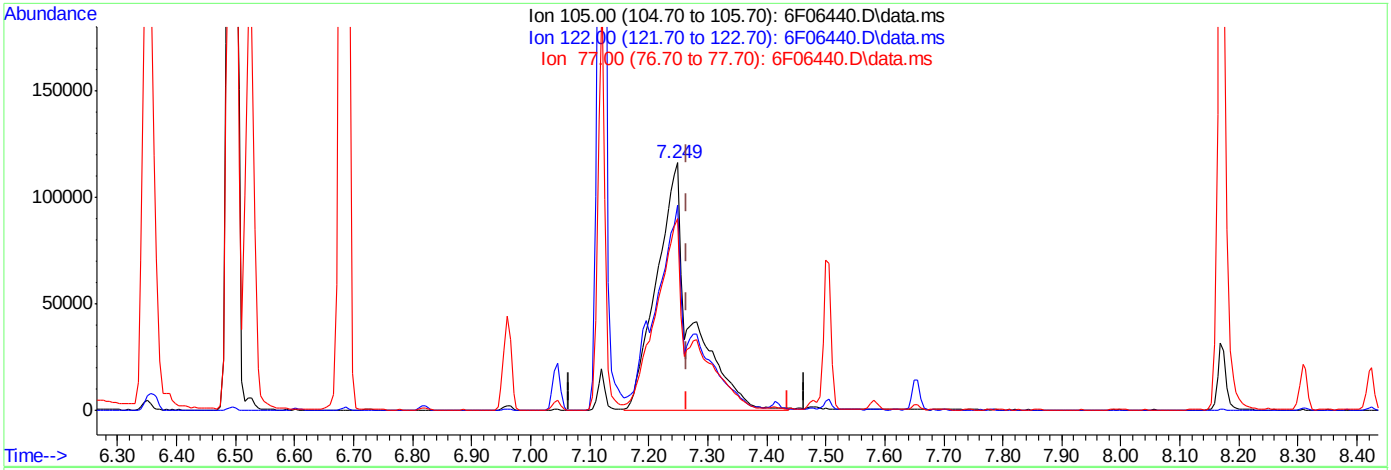
response 133235

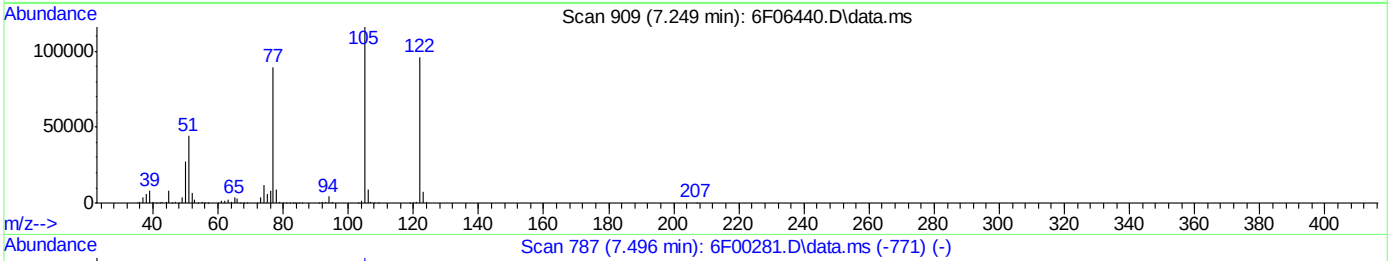
Ion	Exp%	Act%
105.00	100	100
122.00	81.90	91.59
77.00	77.70	83.14
0.00	0.00	0.00

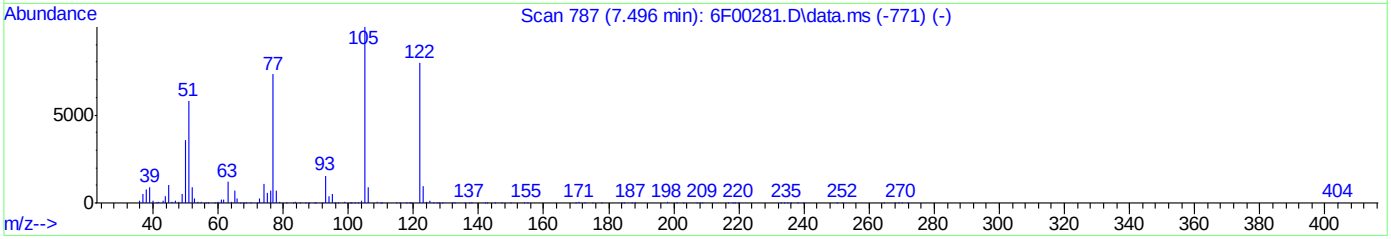
Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06440.D
Sample : icc248-50
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1
Acq On : 29 Jul 2020 2:36 pm Operator: marthav

Quant Time: Jul 29 15:40:25 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625







TIC: 6F06440.D\data.ms

(30) Benzoic Acid

7.249min (-0.016) 100.35ppm m

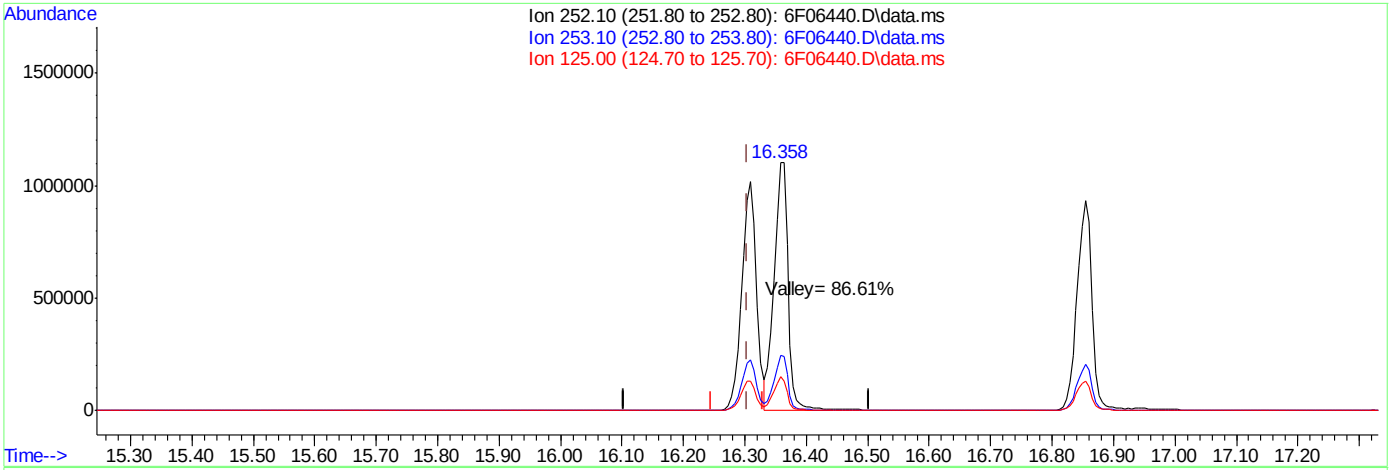
response 476621

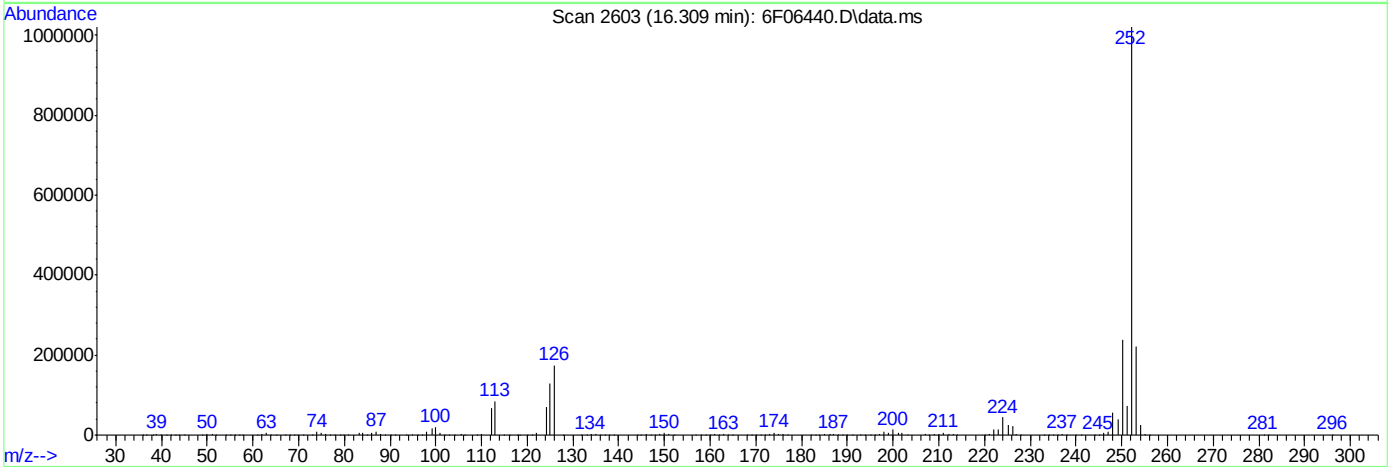
Ion	Exp%	Act%
105.00	100	100
122.00	81.90	83.05
77.00	77.70	77.28
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06440.D
Sample : icc248-50
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1
Acq On : 29 Jul 2020 2:36 pm Operator: marthav

Quant Time: Jul 29 15:41:07 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625





TIC: 6F06440.D\data.ms

(104) Benzo[b]fluoranthene (P)

16.309min (+0.005) 53.73ppm

response 1677650

Ion	Exp%	Act%
252.10	100	100
253.10	22.40	21.80
125.00	13.30	12.80
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 07/30/20 14:11

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06441.D
Sample : ic248-60
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1
Acq On : 29 Jul 2020 3:02 pm Operator: marthav

Quant Time: Jul 29 15:47:41 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.045	152	313687	40.00	ppm	0.00
22) Naphthalene-d8	7.479	136	1196299	40.00	ppm	0.00
43) Acenaphthene-d10	9.533	164	638048	40.00	ppm	0.00
70) Phenanthrene-d10	11.287	188	1185294	40.00	ppm	0.00
92) Chrysene-d12	14.593	240	1081339	40.00	ppm	0.00
102) Perylene-d12	16.951	264	1054339	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	4.671	112	1467791	132.04	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 132.04%#			
9) Phenol-d5	5.687	99	1728253	135.20	ppm	0.01
Spiked Amount 100.000	Range 10 - 50		Recovery = 135.20%#			
23) Nitrobenzene-d5	6.666	82	810432	78.30	ppm	0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 156.60%#			
47) 2-Fluorobiphenyl	8.752	172	1508400	63.31	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 126.62%#			
75) 2,4,6-Tribromophenol	10.474	330	507940	145.10	ppm	0.00
Spiked Amount 100.000	Range 33 - 118		Recovery = 145.10%#			
95) Terphenyl-d14	13.213	244	1849036	66.52	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 133.04%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.863	88	280871	62.771	ppm	99
3) N-nitrosodimethylamine	3.195	42	387788	64.384	ppm	98
4) Pyridine	3.232	79	740510	65.353	ppm	99
5) Benzaldehyde	5.569	106	599187	65.455	ppm	97
6) Aniline	5.692	93	1126658	66.798	ppm	63
8) bis(2-Chloroethyl)ether	5.767	93	733419	64.506	ppm	87
10) Phenol	5.698	94	997274	67.168	ppm	87
11) 2-Chlorophenol	5.821	128	742039	66.044	ppm	91
12) 1,3-Dichlorobenzene	5.981	146	801907	63.168	ppm	99
13) 1,4-Dichlorobenzene	6.067	146	811904	63.118	ppm	97
14) 1,2-Dichlorobenzene	6.227	146	765076	63.116	ppm	99
15) Benzyl alcohol	6.211	108	450660	67.316	ppm	98
16) bis(2-chloroisopropyl)...	6.361	45	900279	62.387	ppm	65
17) 2-Methylphenol	6.350	108	664944	67.327	ppm	97
18) Acetophenone	6.500	105	992920	65.091	ppm	99
19) Hexachloroethane	6.602	117	334507	66.369	ppm	90
20) N-Nitroso-di-n-propyla...	6.511	70	513194	66.269	ppm #	67
21) 3&4-Methylphenol	6.527	108	679850	67.356	ppm	97
24) Nitrobenzene	6.687	77	775090	72.337	ppm	99
25) Isophorone	6.965	82	1392390	66.260	ppm	98
26) 2-Nitrophenol	7.046	139	400979	100.510	ppm	98
27) 2,4-Dimethylphenol	7.120	107	664303	67.588	ppm	96
28) O,O,O-Triethylphosphor...	7.195	198	345579	64.204	ppm	95
29) bis(2-Chloroethoxy)met...	7.222	93	849093	64.455	ppm	100
30) Benzoic Acid	7.260	105	608998m	125.448	ppm	
31) 2,4-Dichlorophenol	7.334	162	591581	67.769	ppm	99
32) 1,2,4-Trichlorobenzene	7.415	180	661287	62.769	ppm	99
34) Naphthalene	7.506	128	2037624	62.796	ppm	100
35) 4-Chloroaniline	7.580	127	890965	65.690	ppm	99
36) 2,6-Dichlorophenol	7.586	162	575028	67.409	ppm	100
37) Hexachlorobutadiene	7.655	225	359147	60.552	ppm	99

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06441.D
Sample : ic248-60
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1
Acq On : 29 Jul 2020 3:02 pm Operator: marthav

Quant Time: Jul 29 15:47:41 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38)	Caprolactam	8.014	113	239634	77.331	ppm		100
39)	4-Chloro-3-methylphenol	8.174	107	611603	69.406	ppm		99
40)	2-Methylnaphthalene	8.313	141	1192839	63.486	ppm		99
41)	1-Methylnaphthalene	8.426	142	1327232	64.327	ppm		100
42)	1,2,4,5-Tetrachloroben...	8.506	216	632783	62.606	ppm		99
44)	Hexachlorocyclopentadiene	8.500	237	439521	84.248	ppm		99
45)	2,4,6-Trichlorophenol	8.656	196	438334	72.956	ppm		99
46)	2,4,5-Trichlorophenol	8.704	196	467397	71.041	ppm		99
48)	1,1'-Biphenyl	8.870	154	1658775	64.659	ppm		100
49)	2-Chloronaphthalene	8.880	162	1281669	64.565	ppm		99
50)	2-Nitroaniline	9.014	65	419044	96.768	ppm		100
51)	p-Dinitrobenzene	9.185	75	279148	99.485	ppm		93
52)	Acenaphthylene	9.367	152	1947651	65.296	ppm		100
53)	Dimethylphthalate	9.249	163	1455304	68.128	ppm		99
54)	m-Dinitrobenzene	9.271	168	268831	93.648	ppm		84
55)	2,6-Dinitrotoluene	9.308	165	354956	84.336	ppm		94
56)	o-Dinitrobenzene	9.367	50	251112	83.336	ppm		95
57)	Acenaphthene	9.576	153	1279871	64.903	ppm		99
58)	3-Nitroaniline	9.506	138	400686	81.206	ppm		95
59)	2,4-Dinitrophenol	9.624	184	215304	169.618	ppm		98
60)	Dibenzofuran	9.779	168	1765413	64.348	ppm		92
61)	2,4-Dinitrotoluene	9.779	165	477858	87.984	ppm		95
62)	4-Nitrophenol	9.741	109	240560	92.539	ppm		97
63)	2,3,5,6-Tetrachlorophenol	9.880	232	378328	79.862	ppm		99
64)	2,3,4,6-Tetrachlorophenol	9.934	232	388434	74.493	ppm		98
65)	Fluorene	10.185	166	1459593	66.652	ppm		99
66)	4-Chlorophenyl-phenyle...	10.201	204	706497	63.876	ppm		97
67)	Diethylphthalate	10.094	149	1480592	70.865	ppm		99
68)	Thionazin	10.185	97	344882	81.833	ppm		99
69)	4-Nitroaniline	10.239	138	410506	81.541	ppm		99
71)	4,6-Dinitro-2-methylph...	10.260	198	296376	123.642	ppm	#	54
72)	n-Nitrosodiphenylamine	10.346	169	1255183	73.126	ppm		99
73)	Diphenylamine	10.346	169	1255183	64.645	ppm		99
74)	1,2-Diphenylhydrazine	10.389	77	1578337	66.320	ppm		97
76)	Sulfotep	10.560	97	267021	78.235	ppm		89
77)	Phorate	10.704	75	916738	80.716	ppm		99
78)	4-Bromophenyl-phenylether	10.779	248	423125	63.558	ppm		96
79)	Hexachlorobenzene	10.827	284	476331	61.687	ppm		95
80)	Dimethoate	10.902	87	642598	89.671	ppm		98
81)	Simazine	10.972	201	251635	67.131	ppm		99
82)	Atrazine	11.009	200	435589	67.277	ppm		91
83)	Pentachlorophenol	11.078	266	283930	83.315	ppm		99
84)	Phenanthrene	11.319	178	2134541	65.061	ppm		100
85)	Anthracene	11.383	178	2198297	64.977	ppm		99
86)	Disulfoton	11.325	88	949858	73.237	ppm		98
87)	Carbazole	11.587	167	1962659	65.820	ppm		99
88)	Methyl Parathion	11.768	109	537451	105.490	ppm		94
89)	Di-n-butylphthalate	12.041	149	2551480	73.216	ppm		99
90)	Ethyl Parathion	12.239	97	344068	111.727	ppm		94
91)	Fluoranthene	12.731	202	2293584	66.694	ppm		98
93)	Benzidine	12.913	184	1369070	76.878	ppm		98
94)	Pyrene	12.993	202	2335139	65.476	ppm		99
96)	Famphur	13.785	218	733759	86.636	ppm		93
97)	Butylbenzylphthalate	13.876	149	1156661	82.546	ppm		99

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06441.D
Sample : ic248-60
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1
Acq On : 29 Jul 2020 3:02 pm Operator: marthav

Quant Time: Jul 29 15:47:41 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
98)	3,3'-Dichlorobenzidine	14.576	252	873562	72.850	ppm	100
99)	Benzo[a]anthracene	14.576	228	2212758	67.440	ppm	100
100)	Chrysene	14.635	228	2098961	64.587	ppm	100
101)	bis(2-Ethylhexyl)phtha...	14.732	149	1601480	81.224	ppm	99
103)	Di-n-octylphthalate	15.801	149	2678244	88.963	ppm	99
104)	Benzo[b]fluoranthene	16.315	252	2121346	68.908	ppm	98
105)	Benzo[k]fluoranthene	16.368	252	2178875	65.744	ppm	99
106)	Benzo[a]pyrene	16.860	252	1957739	68.324	ppm	100
107)	Indeno[1,2,3-cd]pyrene	18.588	276	1793215	67.113	ppm	97
108)	Dibenz[a,h]anthracene	18.636	278	1950896	66.826	ppm	98
109)	Benzo[g,h,i]perylene	18.952	276	1884136	62.753	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06441.D
Sample : ic248-60
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1
Acq On : 29 Jul 2020 3:02 pm Operator: marthav

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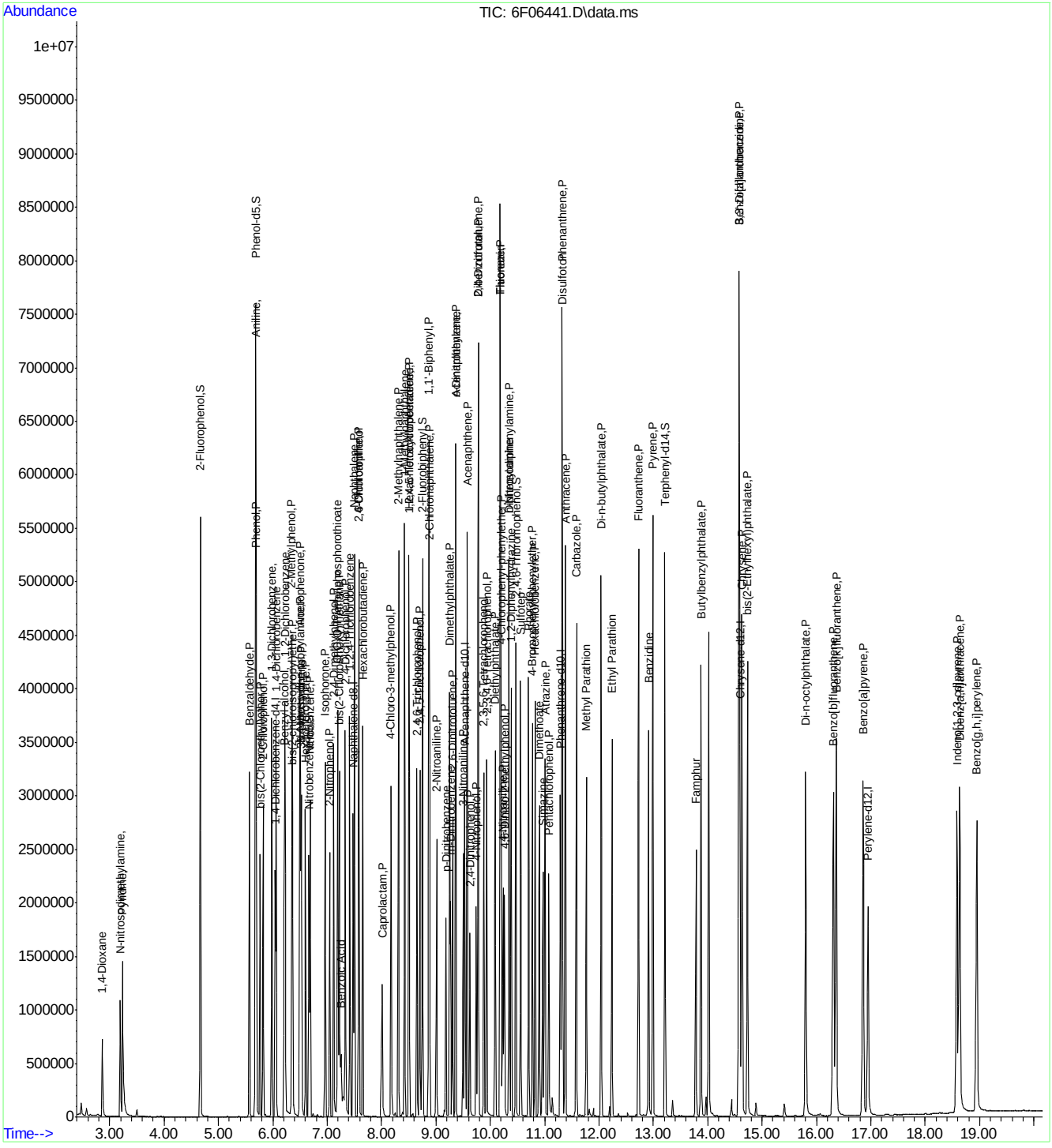
Quant Title : SW846 8270D OR EPA 625



Manual Integration Approval Summary

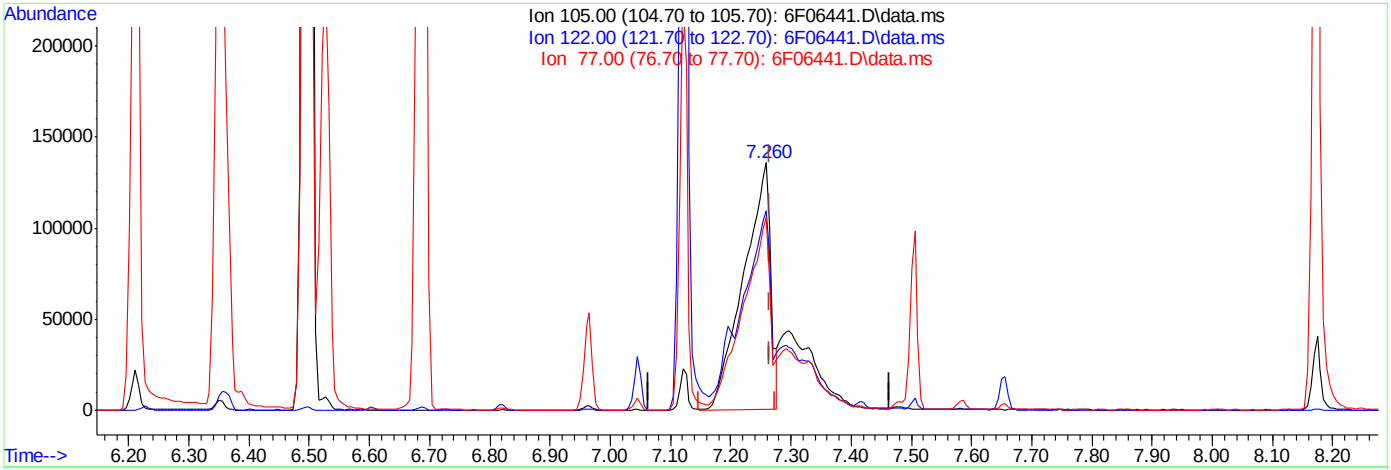
Sample Number:	S6F248-IC248	**Method:**	SW846 8270D
Lab FileID:	6F06441.D	**Analyst approved:**	07/30/20 13:11 Martha Valls
Injection Time:	07/29/20 15:02	**Supervisor approved:**	07/30/20 14:11 Nicole McCampbell

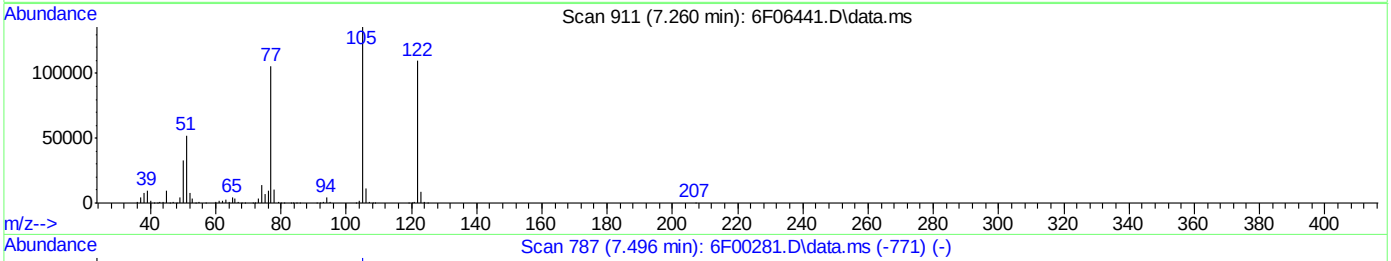
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic Acid	65-85-0		7.26	Split peak

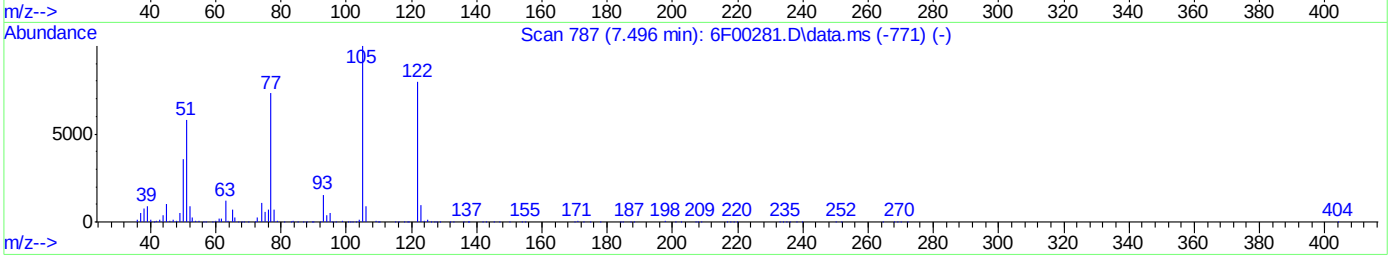
Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06441.D
Sample : ic248-60
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1
Acq On : 29 Jul 2020 3:02 pm Operator: marthav

Quant Time: Jul 29 15:46:07 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625







TIC: 6F06441.D\data.ms

(30) Benzoic Acid

7.260min (-0.005) 87.24ppm

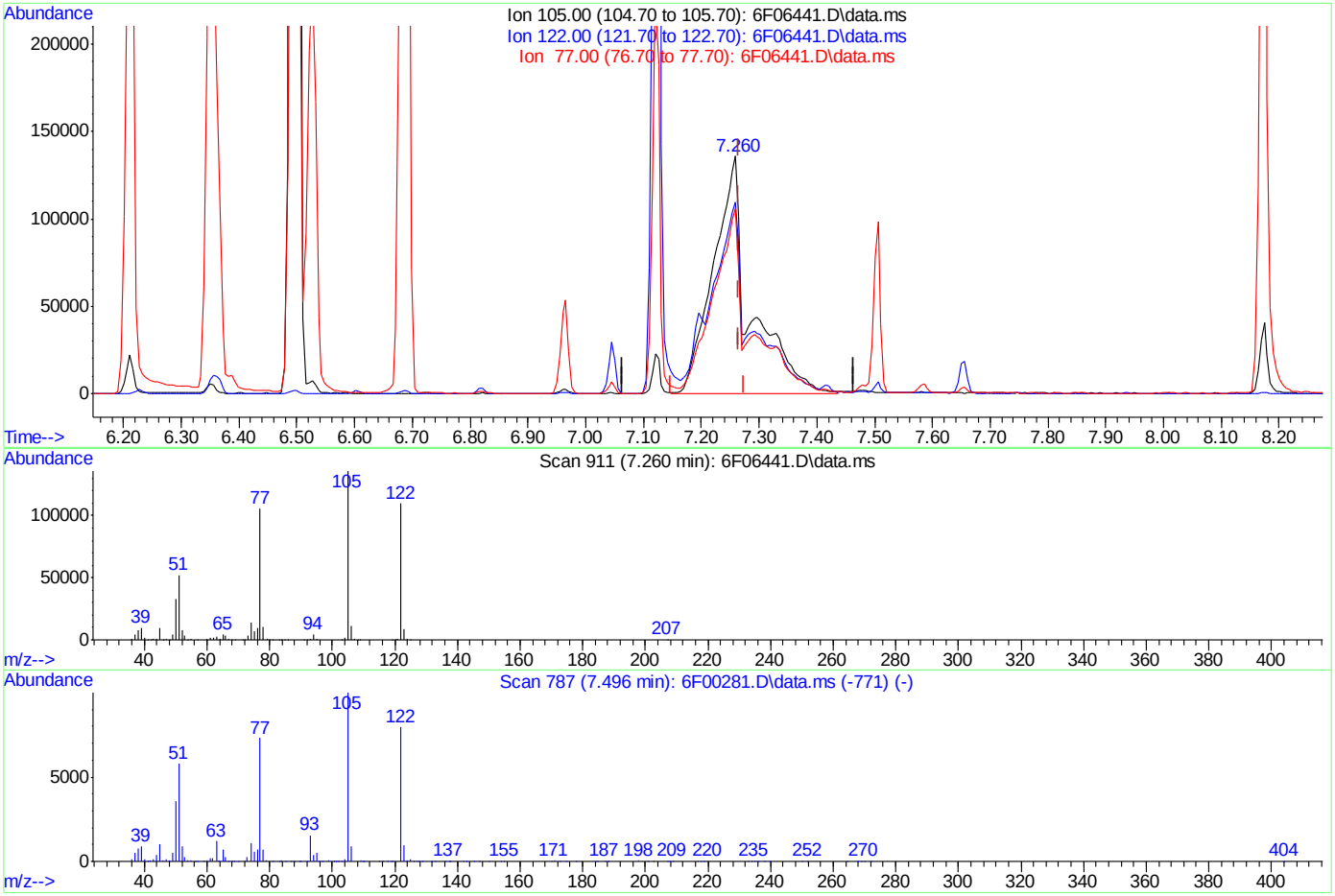
response 423495

Ion	Exp%	Act%
105.00	100	100
122.00	81.90	73.83
77.00	77.70	75.68
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06441.D
Sample : ic248-60
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1
Acq On : 29 Jul 2020 3:02 pm Operator: marthav

Quant Time: Jul 29 15:46:07 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625



TIC: 6F06441.D\data.ms

(30) Benzoic Acid

7.260min (-0.005) 125.45ppm m

response 608998

Ion	Exp%	Act%
105.00	100	100
122.00	81.90	80.64
77.00	77.70	77.78
0.00	0.00	0.00

6F06442.D

Manual Integrations APPROVED (compounds with "m" flag)

Nicole McCampbell 07/30/20 14:11

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06442.D
Sample : ic248-75
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1
Acq On : 29 Jul 2020 3:28 pm Operator: marthav

Quant Time: Jul 29 15:50:01 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	6.045	152	311921	40.00	ppm		0.00
22) Naphthalene-d8	7.479	136	1183929	40.00	ppm		0.00
43) Acenaphthene-d10	9.533	164	634974	40.00	ppm		0.00
70) Phenanthrene-d10	11.292	188	1180183	40.00	ppm		0.00
92) Chrysene-d12	14.598	240	1061055	40.00	ppm		0.01
102) Perylene-d12	16.951	264	1024599	40.00	ppm		0.00
System Monitoring Compounds							
7) 2-Fluorophenol	4.671	112	1826643	165.25	ppm		0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 165.25%#				
9) Phenol-d5	5.687	99	2149007	169.07	ppm		0.01
Spiked Amount 100.000	Range 10 - 50		Recovery = 169.07%#				
23) Nitrobenzene-d5	6.666	82	994594	97.10	ppm		0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 194.20%#				
47) 2-Fluorobiphenyl	8.757	172	1851031	78.07	ppm		0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 156.14%#				
75) 2,4,6-Tribromophenol	10.474	330	629853	180.70	ppm		0.00
Spiked Amount 100.000	Range 33 - 118		Recovery = 180.70%#				
95) Terphenyl-d14	13.212	244	2273959	83.37	ppm		0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 166.74%#				
Target Compounds							Qvalue
2) 1,4-Dioxane	2.863	88	349434	78.536	ppm		99
3) N-nitrosodimethylamine	3.200	42	482569	80.574	ppm		96
4) Pyridine	3.232	79	919153	81.578	ppm		99
5) Benzaldehyde	5.569	106	718996	78.988	ppm		99
6) Aniline	5.692	93	1396654	83.274	ppm		73
8) bis(2-Chloroethyl)ether	5.767	93	901081	79.701	ppm		89
10) Phenol	5.703	94	1234356	83.606	ppm		99
11) 2-Chlorophenol	5.826	128	925434	82.833	ppm		88
12) 1,3-Dichlorobenzene	5.981	146	988347	78.295	ppm		99
13) 1,4-Dichlorobenzene	6.067	146	998004	78.025	ppm		98
14) 1,2-Dichlorobenzene	6.227	146	948522	78.693	ppm		98
15) Benzyl alcohol	6.216	108	572549	86.007	ppm		98
16) bis(2-chloroisopropyl)...	6.361	45	1111663	77.471	ppm		59
17) 2-Methylphenol	6.350	108	823864	83.890	ppm		95
18) Acetophenone	6.500	105	1227427	80.920	ppm		99
19) Hexachloroethane	6.607	117	407620	81.334	ppm		98
20) N-Nitroso-di-n-propyla...	6.516	70	638274	82.888	ppm	#	65
21) 3&4-Methylphenol	6.527	108	850037	84.694	ppm		99
24) Nitrobenzene	6.687	77	956344	90.186	ppm		98
25) Isophorone	6.965	82	1717350	82.578	ppm		99
26) 2-Nitrophenol	7.045	139	499893	126.613	ppm		96
27) 2,4-Dimethylphenol	7.126	107	822669	84.575	ppm		98
28) O,O,O-Triethylphosphor...	7.195	198	432186	81.134	ppm		91
29) bis(2-Chloroethoxy)met...	7.227	93	1054141	80.857	ppm		99
30) Benzoic Acid	7.270	105	757042m	157.573	ppm		
31) 2,4-Dichlorophenol	7.340	162	735556	85.143	ppm		98
32) 1,2,4-Trichlorobenzene	7.420	180	813186	77.993	ppm		98
34) Naphthalene	7.505	128	2492044	77.602	ppm		99
35) 4-Chloroaniline	7.586	127	1104727	82.301	ppm		98
36) 2,6-Dichlorophenol	7.591	162	714431	84.626	ppm		98
37) Hexachlorobutadiene	7.655	225	445669	75.924	ppm		99

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06442.D
Sample : ic248-75
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1
Acq On : 29 Jul 2020 3:28 pm Operator: marthav

Quant Time: Jul 29 15:50:01 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38)	Caprolactam	8.030	113	295766	96.442	ppm	94
39)	4-Chloro-3-methylphenol	8.174	107	761276	87.294	ppm	98
40)	2-Methylnaphthalene	8.313	141	1475647	79.358	ppm	99
41)	1-Methylnaphthalene	8.425	142	1635977	80.119	ppm	99
42)	1,2,4,5-Tetrachloroben...	8.511	216	785716	78.549	ppm	100
44)	Hexachlorocyclopentadiene	8.500	237	546544	105.269	ppm	98
45)	2,4,6-Trichlorophenol	8.655	196	542140	90.670	ppm	99
46)	2,4,5-Trichlorophenol	8.704	196	577098	88.140	ppm	99
48)	1,1'-Biphenyl	8.869	154	2033706	79.658	ppm	99
49)	2-Chloronaphthalene	8.885	162	1580469	80.002	ppm	99
50)	2-Nitroaniline	9.014	65	518967	120.422	ppm	97
51)	p-Dinitrobenzene	9.185	75	345931	123.883	ppm	98
52)	Acenaphthylene	9.367	152	2381291	80.220	ppm	99
53)	Dimethylphthalate	9.254	163	1796451	84.506	ppm	99
54)	m-Dinitrobenzene	9.271	168	332353	116.337	ppm	89
55)	2,6-Dinitrotoluene	9.313	165	437547	104.462	ppm	92
56)	o-Dinitrobenzene	9.372	50	303517	101.215	ppm	98
57)	Acenaphthene	9.575	153	1577280	80.372	ppm	99
58)	3-Nitroaniline	9.511	138	504585	102.758	ppm	91
59)	2,4-Dinitrophenol	9.629	184	277086	219.347	ppm	95
60)	Dibenzofuran	9.779	168	2167977	79.404	ppm	94
61)	2,4-Dinitrotoluene	9.784	165	596818	110.419	ppm	92
62)	4-Nitrophenol	9.747	109	296797	114.725	ppm	98
63)	2,3,5,6-Tetrachlorophenol	9.886	232	474197	100.584	ppm	97
64)	2,3,4,6-Tetrachlorophenol	9.934	232	476958	91.913	ppm	95
65)	Fluorene	10.185	166	1790175	82.144	ppm	98
66)	4-Chlorophenyl-phenyle...	10.201	204	886142	80.506	ppm	97
67)	Diethylphthalate	10.094	149	1834588	88.233	ppm	100
68)	Thionazin	10.190	97	422507	100.737	ppm	99
69)	4-Nitroaniline	10.244	138	510832	101.960	ppm	99
71)	4,6-Dinitro-2-methylph...	10.265	198	370555	155.258	ppm	77
72)	n-Nitrosodiphenylamine	10.351	169	1537243	89.946	ppm	99
73)	Diphenylamine	10.351	169	1537243	79.515	ppm	99
74)	1,2-Diphenylhydrazine	10.388	77	1927519	81.343	ppm	98
76)	Sulfotep	10.560	97	327321	96.318	ppm	98
77)	Phorate	10.704	75	1135599	100.419	ppm	98
78)	4-Bromophenyl-phenylether	10.779	248	524530	79.132	ppm	97
79)	Hexachlorobenzene	10.832	284	592591	77.075	ppm	98
80)	Dimethoate	10.907	87	775394	108.670	ppm	99
81)	Simazine	10.977	201	309746	82.992	ppm	97
82)	Atrazine	11.009	200	525593	81.530	ppm	99
83)	Pentachlorophenol	11.078	266	353272	104.111	ppm	98
84)	Phenanthrene	11.319	178	2596380	79.481	ppm	100
85)	Anthracene	11.383	178	2663084	79.056	ppm	100
86)	Disulfoton	11.330	88	1164170	90.150	ppm	97
87)	Carbazole	11.586	167	2436518	82.065	ppm	100
88)	Methyl Parathion	11.768	109	655301	129.178	ppm	96
89)	Di-n-butylphthalate	12.041	149	3088931	89.022	ppm	100
90)	Ethyl Parathion	12.239	97	423578	138.142	ppm	98
91)	Fluoranthene	12.731	202	2825696	82.523	ppm	99
93)	Benzidine	12.913	184	1621724	92.806	ppm	98
94)	Pyrene	12.993	202	2821418	80.624	ppm	100
96)	Famphur	13.785	218	835781	100.568	ppm	94
97)	Butylbenzylphthalate	13.876	149	1410454	102.583	ppm	100

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06442.D
Sample : ic248-75
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1
Acq On : 29 Jul 2020 3:28 pm Operator: marthav

Quant Time: Jul 29 15:50:01 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

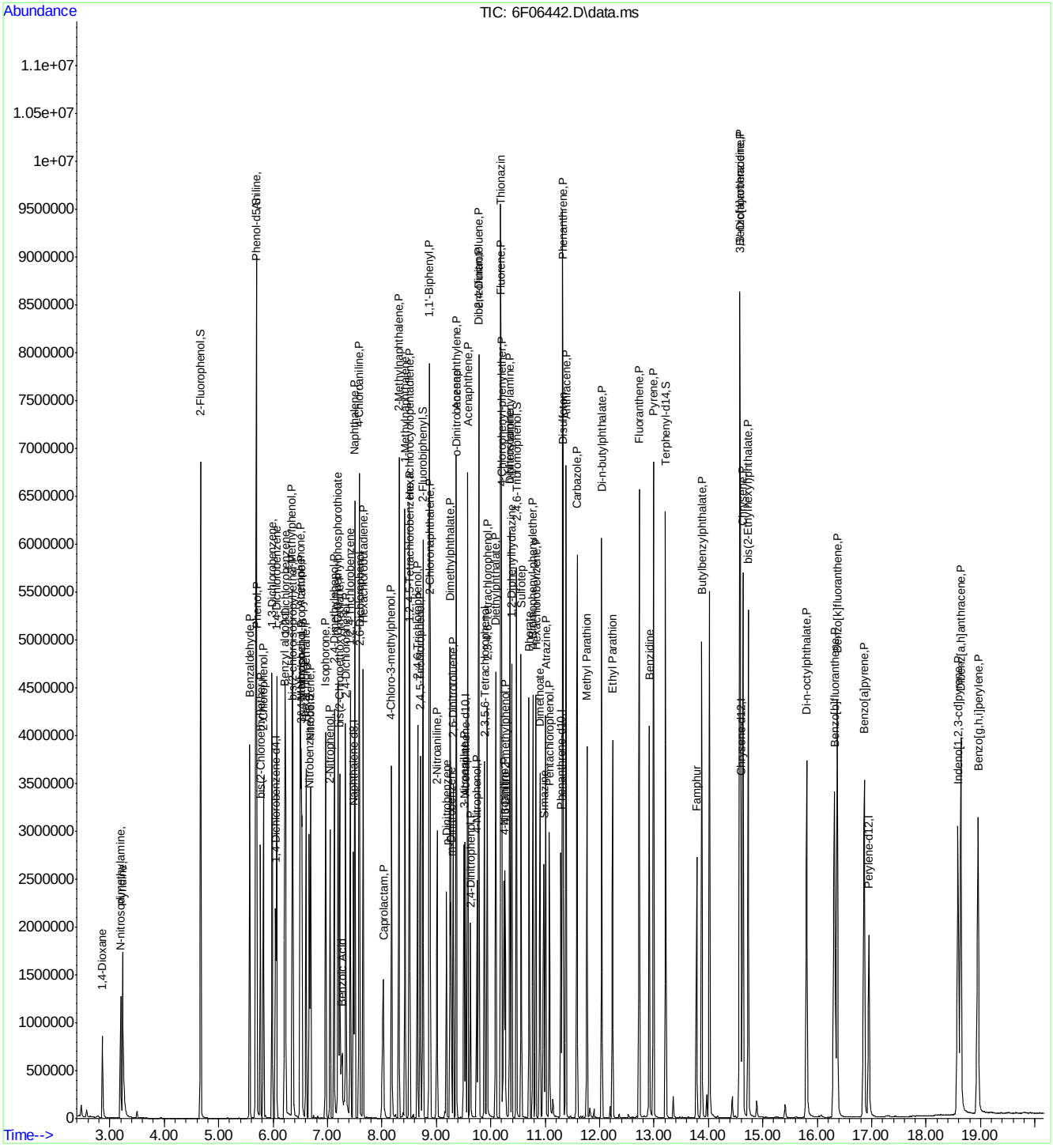
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
98)	3,3'-Dichlorobenzidine	14.576	252	1050616	89.291	ppm	100
99)	Benzo[a]anthracene	14.582	228	2694409	83.690	ppm	100
100)	Chrysene	14.635	228	2561949	80.340	ppm	99
101)	bis(2-Ethylhexyl)phtha...	14.731	149	1939774	100.263	ppm	99
103)	Di-n-octylphthalate	15.807	149	3289205	112.428	ppm	99
104)	Benzo[b]fluoranthene	16.320	252	2623555	87.695	ppm	98
105)	Benzo[k]fluoranthene	16.368	252	2604598	80.870	ppm	99
106)	Benzo[a]pyrene	16.866	252	2383575	85.600	ppm	100
107)	Indeno[1,2,3-cd]pyrene	18.593	276	2200247	84.736	ppm	96
108)	Dibenz[a,h]anthracene	18.641	278	2350737	82.859	ppm	99
109)	Benzo[g,h,i]perylene	18.957	276	2271964	77.867	ppm	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06442.D
Sample : ic248-75
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1
Acq On : 29 Jul 2020 3:28 pm Operator: marthav

Quant Time: Jul 29 15:50:01 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625



Manual Integration Approval Summary

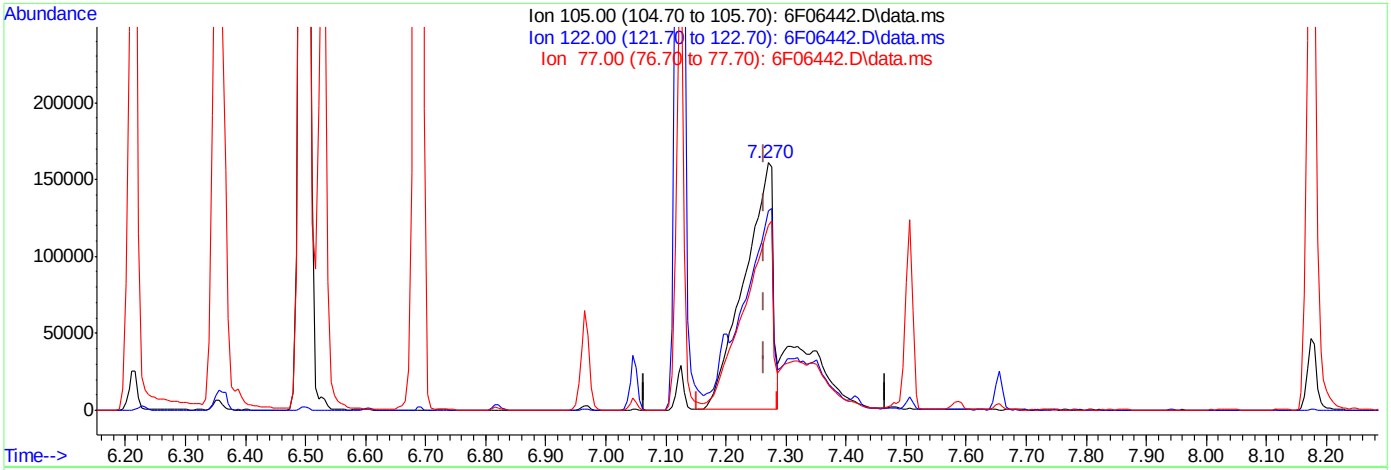
Sample Number:	S6F248-IC248	**Method:**	SW846 8270D
Lab FileID:	6F06442.D	**Analyst approved:**	07/30/20 13:11 Martha Valls
Injection Time:	07/29/20 15:28	**Supervisor approved:**	07/30/20 14:11 Nicole McCampbell

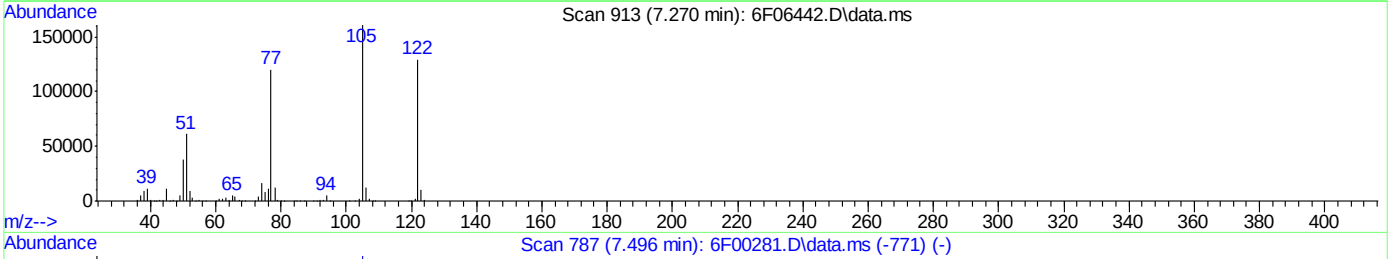
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic Acid	65-85-0		7.27	Split peak

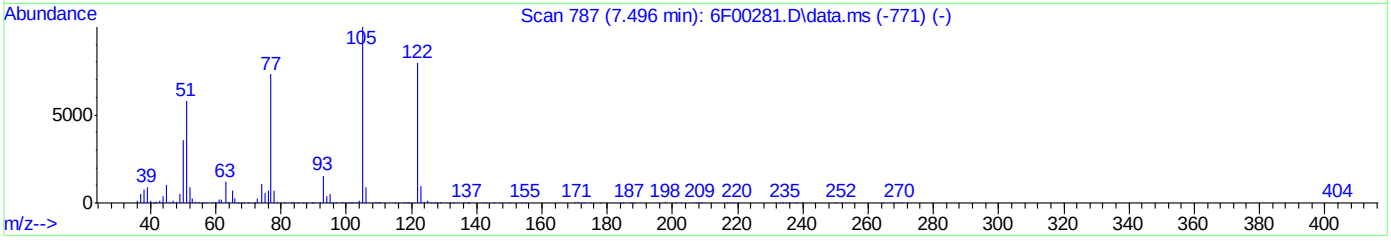
Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06442.D
Sample : ic248-75
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1
Acq On : 29 Jul 2020 3:28 pm Operator: marthav

Quant Time: Jul 29 15:49:07 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625







TIC: 6F06442.D\data.ms

(30) Benzoic Acid

7.270min (+0.005) 111.27ppm

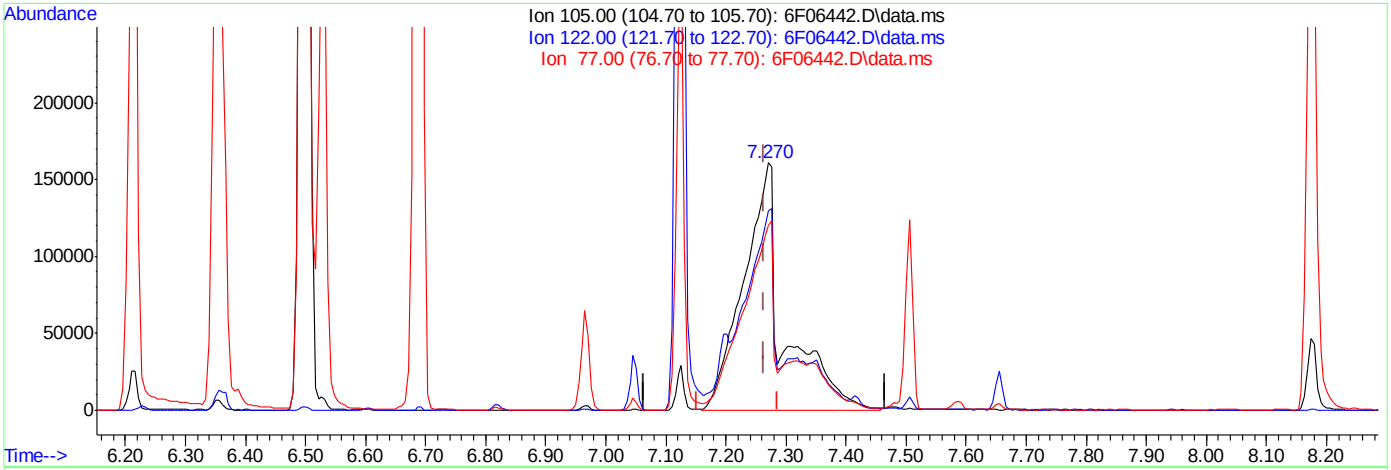
response 534590

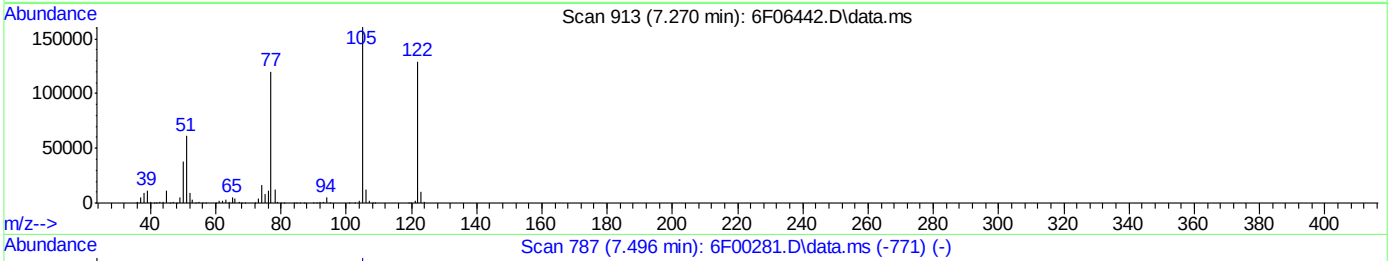
Ion	Exp%	Act%
105.00	100	100
122.00	81.90	75.52
77.00	77.70	72.66
0.00	0.00	0.00

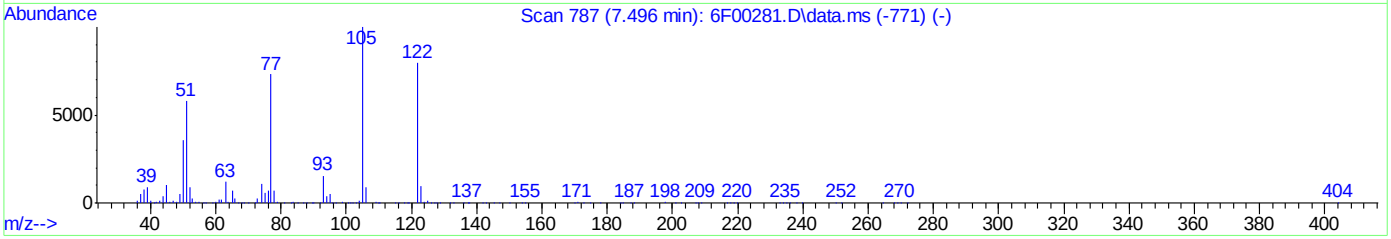
Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06442.D
Sample : ic248-75
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1
Acq On : 29 Jul 2020 3:28 pm Operator: marthav

Quant Time: Jul 29 15:49:07 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625







TIC: 6F06442.D\data.ms

(30) Benzoic Acid

7.270min (+0.005) 157.57ppm m

response 757042

Ion	Exp%	Act%
105.00	100	100
122.00	81.90	80.55
77.00	77.70	74.77
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 07/30/20 14:11

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06443.D
Sample : ic248-100
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1
Acq On : 29 Jul 2020 3:54 pm Operator: marthav

Quant Time: Jul 29 16:15:52 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.045	152	277100	40.00	ppm	0.00
22) Naphthalene-d8	7.479	136	1078145	40.00	ppm	0.00
43) Acenaphthene-d10	9.538	164	583080	40.00	ppm	0.00
70) Phenanthrene-d10	11.292	188	1080623	40.00	ppm	0.00
92) Chrysene-d12	14.598	240	986480	40.00	ppm	0.01
102) Perylene-d12	16.956	264	938564	40.00	ppm	0.01
System Monitoring Compounds						
7) 2-Fluorophenol	4.676	112	2458510	250.36	ppm	0.01
Spiked Amount 100.000	Range 14 - 67		Recovery = 250.36%#			
9) Phenol-d5	5.692	99	2853599	252.72	ppm	0.02
Spiked Amount 100.000	Range 10 - 50		Recovery = 252.72%#			
23) Nitrobenzene-d5	6.671	82	1341418	143.81	ppm	0.01
Spiked Amount 50.000	Range 42 - 108		Recovery = 287.62%#			
47) 2-Fluorobiphenyl	8.757	172	2452744	112.65	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 225.30%#			
75) 2,4,6-Tribromophenol	10.479	330	854748	267.81	ppm	0.01
Spiked Amount 100.000	Range 33 - 118		Recovery = 267.81%#			
95) Terphenyl-d14	13.218	244	3068288	121.00	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 242.00%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.863	88	472373	119.507	ppm	99
3) N-nitrosodimethylamine	3.200	42	649744	122.120	ppm	98
4) Pyridine	3.232	79	1251468	125.030	ppm	100
5) Benzaldehyde	5.569	106	839334	103.795	ppm	99
6) Aniline	5.692	93	1855874	124.560	ppm	80
8) bis(2-Chloroethyl)ether	5.772	93	1210059	120.480	ppm	87
10) Phenol	5.708	94	1644148	125.357	ppm	95
11) 2-Chlorophenol	5.826	128	1251068	126.051	ppm	89
12) 1,3-Dichlorobenzene	5.981	146	1325268	118.178	ppm	97
13) 1,4-Dichlorobenzene	6.067	146	1334364	117.431	ppm	97
14) 1,2-Dichlorobenzene	6.227	146	1271488	118.743	ppm	98
15) Benzyl alcohol	6.216	108	768317	129.919	ppm	98
16) bis(2-chloroisopropyl)...	6.366	45	1463406	114.800	ppm	64
17) 2-Methylphenol	6.355	108	1096575	125.691	ppm	97
18) Acetophenone	6.505	105	1532532	113.731	ppm	99
19) Hexachloroethane	6.607	117	550110	123.558	ppm	98
20) N-Nitroso-di-n-propyla...	6.516	70	854339	124.888	ppm #	67
21) 3&4-Methylphenol	6.532	108	1140360	127.898	ppm	97
24) Nitrobenzene	6.692	77	1284434	133.010	ppm	99
25) Isophorone	6.971	82	2312721	122.117	ppm	98
26) 2-Nitrophenol	7.051	139	681075	189.428	ppm	98
27) 2,4-Dimethylphenol	7.126	107	1103239	124.548	ppm	97
28) O,O,O-Triethylphosphor...	7.201	198	538749	111.062	ppm	95
29) bis(2-Chloroethoxy)met...	7.227	93	1385727	116.719	ppm	99
30) Benzoic Acid	7.297	105	1034003m	236.337	ppm	
31) 2,4-Dichlorophenol	7.340	162	985036	125.208	ppm	99
32) 1,2,4-Trichlorobenzene	7.420	180	1095436	115.373	ppm	99
34) Naphthalene	7.505	128	3278445	112.108	ppm	98
35) 4-Chloroaniline	7.586	127	1461859	119.593	ppm	99
36) 2,6-Dichlorophenol	7.591	162	953685	124.050	ppm	99
37) Hexachlorobutadiene	7.655	225	586726	109.762	ppm	99

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06443.D
Sample : ic248-100
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1
Acq On : 29 Jul 2020 3:54 pm Operator: marthav

Quant Time: Jul 29 16:15:52 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38)	Caprolactam	8.040	113	372604m	133.418	ppm		
39)	4-Chloro-3-methylphenol	8.179	107	1027372	129.366	ppm		99
40)	2-Methylnaphthalene	8.313	141	1950816	115.205	ppm		98
41)	1-Methylnaphthalene	8.431	142	2153353	115.804	ppm		99
42)	1,2,4,5-Tetrachloroben...	8.511	216	1048649	115.120	ppm		100
44)	Hexachlorocyclopentadiene	8.506	237	741570	155.545	ppm		100
45)	2,4,6-Trichlorophenol	8.655	196	731456	133.219	ppm		98
46)	2,4,5-Trichlorophenol	8.709	196	779129	129.587	ppm		100
48)	1,1'-Biphenyl	8.869	154	2486458	106.060	ppm		98
49)	2-Chloronaphthalene	8.885	162	2096953	115.594	ppm		100
50)	2-Nitroaniline	9.019	65	692782	175.062	ppm		99
51)	p-Dinitrobenzene	9.190	75	472833	184.398	ppm		93
52)	Acenaphthylene	9.372	152	3155426	115.760	ppm		100
53)	Dimethylphthalate	9.260	163	2374541	121.641	ppm		99
54)	m-Dinitrobenzene	9.281	168	451783	172.217	ppm		78
55)	2,6-Dinitrotoluene	9.319	165	586224	152.414	ppm		86
56)	o-Dinitrobenzene	9.377	50	406080	147.469	ppm		90
57)	Acenaphthene	9.581	153	2094156	116.207	ppm		96
58)	3-Nitroaniline	9.511	138	675866	149.889	ppm		97
59)	2,4-Dinitrophenol	9.629	184	394091	339.735	ppm		92
60)	Dibenzofuran	9.784	168	2860476	114.092	ppm		94
61)	2,4-Dinitrotoluene	9.789	165	789277	159.023	ppm		89
62)	4-Nitrophenol	9.752	109	404490	170.268	ppm		100
63)	2,3,5,6-Tetrachlorophenol	9.886	232	636152	146.947	ppm		99
64)	2,3,4,6-Tetrachlorophenol	9.939	232	647944	135.975	ppm		98
65)	Fluorene	10.190	166	2357646	117.811	ppm		99
66)	4-Chlorophenyl-phenyle...	10.201	204	1185514	117.289	ppm		98
67)	Diethylphthalate	10.100	149	2446906	128.155	ppm		100
68)	Thionazin	10.190	97	511146	132.717	ppm		100
69)	4-Nitroaniline	10.255	138	689865	149.949	ppm		99
71)	4,6-Dinitro-2-methylph...	10.276	198	513306	234.883	ppm	#	56
72)	n-Nitrosodiphenylamine	10.356	169	2055283	131.337	ppm		99
73)	Diphenylamine	10.356	169	2055283	116.105	ppm		99
74)	1,2-Diphenylhydrazine	10.394	77	2532777	116.733	ppm		94
76)	Sulfotep	10.565	97	400034	128.560	ppm		78
77)	Phorate	10.709	75	1385515	133.806	ppm		100
78)	4-Bromophenyl-phenylether	10.784	248	706190	116.353	ppm		93
79)	Hexachlorobenzene	10.832	284	801527	113.855	ppm		97
80)	Dimethoate	10.913	87	957831	146.606	ppm		99
81)	Simazine	10.982	201	412316	120.652	ppm		96
82)	Atrazine	11.014	200	721329	122.201	ppm		98
83)	Pentachlorophenol	11.078	266	501324	161.354	ppm		99
84)	Phenanthrene	11.324	178	3405606	113.858	ppm		98
85)	Anthracene	11.389	178	3538648	114.727	ppm		99
86)	Disulfoton	11.330	88	1442831	122.022	ppm		98
87)	Carbazole	11.592	167	3246819	119.432	ppm		99
88)	Methyl Parathion	11.768	109	812740	174.974	ppm		99
89)	Di-n-butylphthalate	12.046	149	4061180	127.825	ppm		99
90)	Ethyl Parathion	12.244	97	525467	187.160	ppm		91
91)	Fluoranthene	12.731	202	3776024	120.437	ppm		98
93)	Benzidine	12.918	184	2032206	125.088	ppm		99
94)	Pyrene	12.998	202	3831594	117.767	ppm		99
96)	Famphur	13.785	218	937459	121.331	ppm		95
97)	Butylbenzylphthalate	13.881	149	1897243	148.418	ppm		97

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06443.D
Sample : ic248-100
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1
Acq On : 29 Jul 2020 3:54 pm Operator: marthav

Quant Time: Jul 29 16:15:52 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
98)	3,3'-Dichlorobenzidine	14.582	252	1387107	126.801	ppm	99
99)	Benzo[a]anthracene	14.587	228	3600138	120.276	ppm	99
100)	Chrysene	14.640	228	3447796	116.293	ppm	98
101)	bis(2-Ethylhexyl)phtha...	14.737	149	2605547	144.856	ppm	97
103)	Di-n-octylphthalate	15.807	149	4454812	166.227	ppm	99
104)	Benzo[b]fluoranthene	16.325	252	3554017	129.686	ppm	100
105)	Benzo[k]fluoranthene	16.379	252	3501782	118.694	ppm	100
106)	Benzo[a]pyrene	16.871	252	3216889	126.116	ppm	99
107)	Indeno[1,2,3-cd]pyrene	18.599	276	3014217	126.725	ppm	96
108)	Dibenz[a,h]anthracene	18.647	278	3209398	123.495	ppm	98
109)	Benzo[g,h,i]perylene	18.968	276	3099442	115.964	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

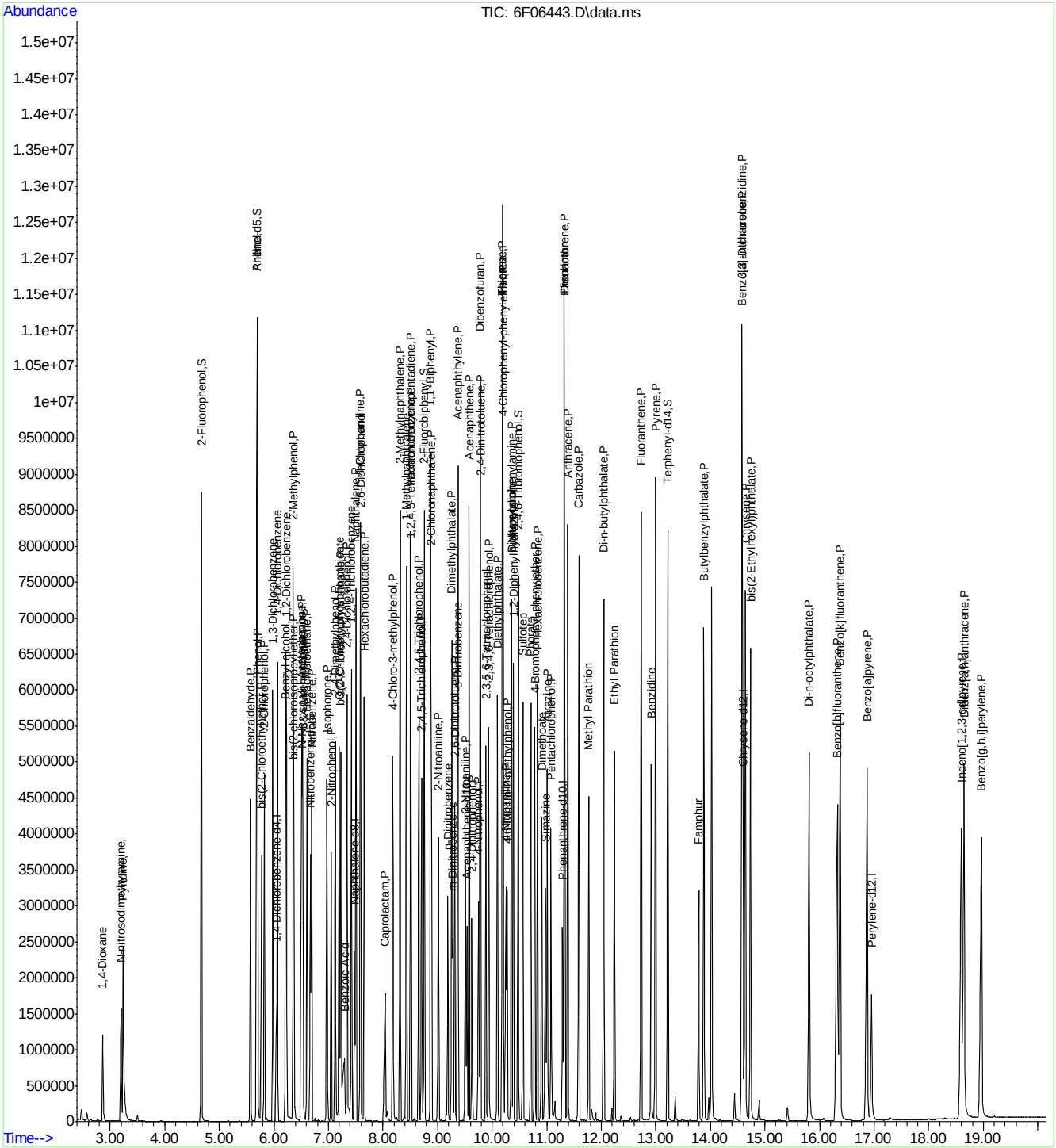
7.6.8

7

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06443.D
Sample : ic248-100
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1
Acq On : 29 Jul 2020 3:54 pm Operator: marthav

Quant Time: Jul 29 16:15:52 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625



Manual Integration Approval Summary

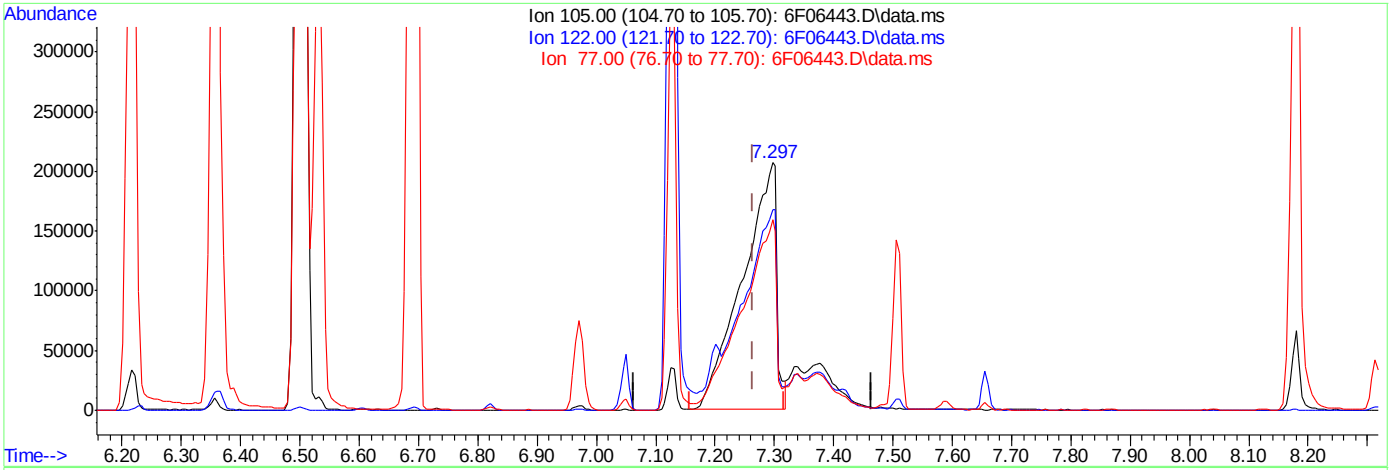
Sample Number: S6F248-IC248
Lab FileID: 6F06443.D
Injection Time: 07/29/20 15:54
Method: SW846 8270D
Analyst approved: 07/30/20 13:11 Martha Valls
Supervisor approved: 07/30/20 14:11 Nicole McCampbell

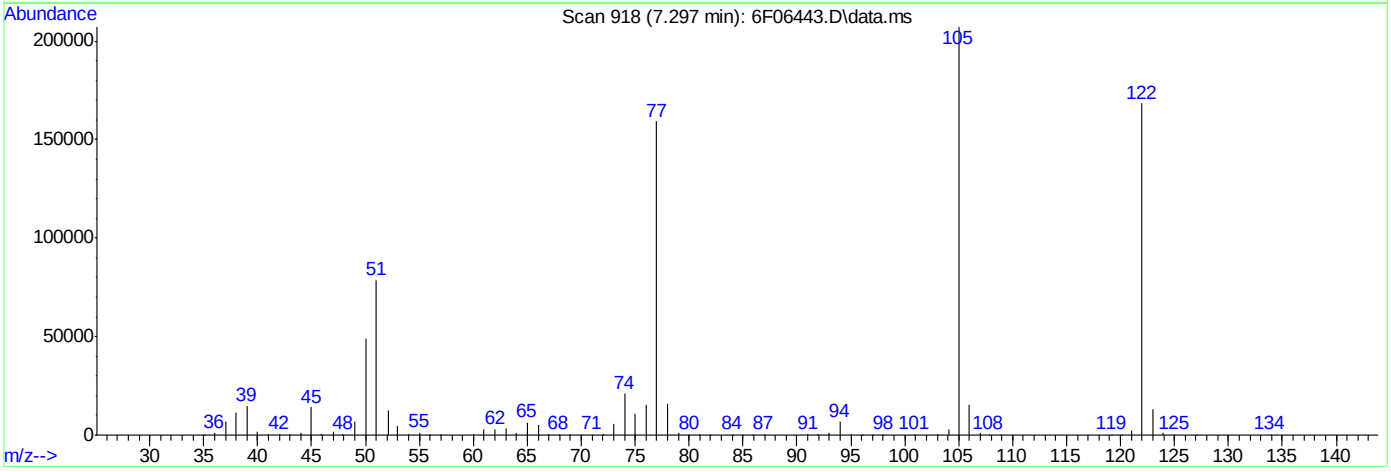
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic Acid	65-85-0		7.30	Split peak
Caprolactam	105-60-2		8.04	Split peak

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06443.D
Sample : ic248-100
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1
Acq On : 29 Jul 2020 3:54 pm Operator: marthav

Quant Time: Jul 29 16:15:19 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625





TIC: 6F06443.D\data.ms

(30) Benzoic Acid

7.297min (+0.032) 190.03ppm

response 831418

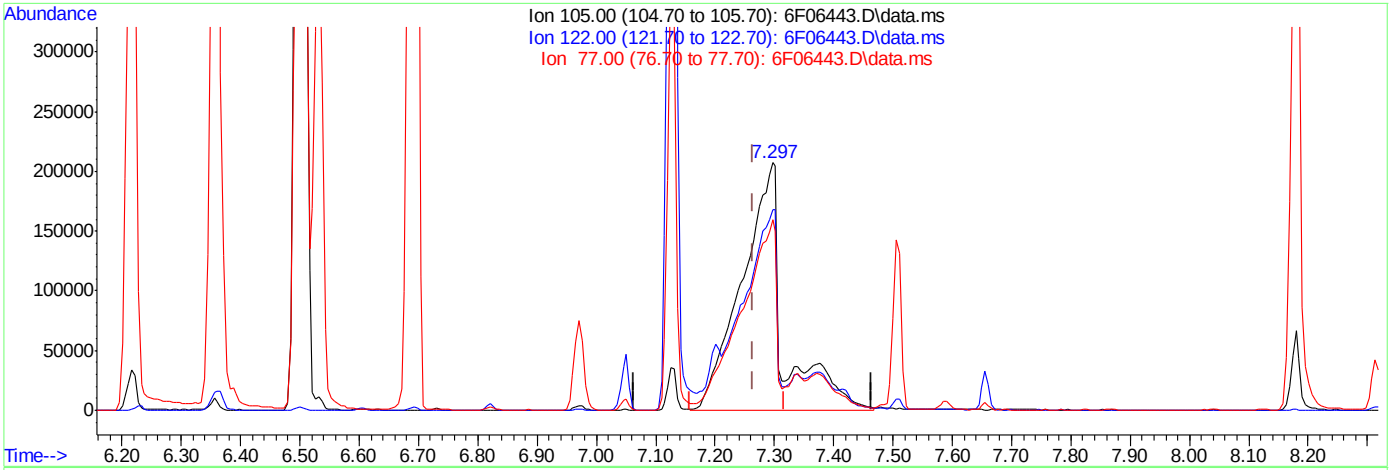
Ion	Exp%	Act%
105.00	100	100
122.00	81.90	77.12
77.00	77.70	75.23
0.00	0.00	0.00

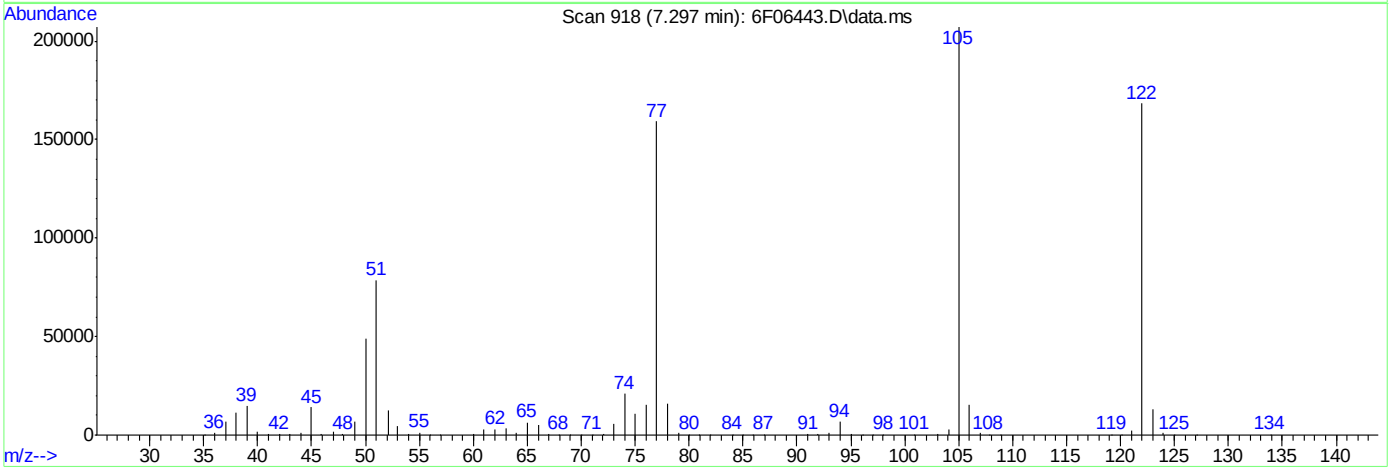
8270D6F072920.m Wed Jul 29 16:15:30 2020 Page: 1

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06443.D
Sample : ic248-100
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1
Acq On : 29 Jul 2020 3:54 pm Operator: marthav

Quant Time: Jul 29 16:15:19 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625





TIC: 6F06443.D\data.ms

(30) Benzoic Acid

7.297min (+0.032) 236.34ppm m

response 1034003

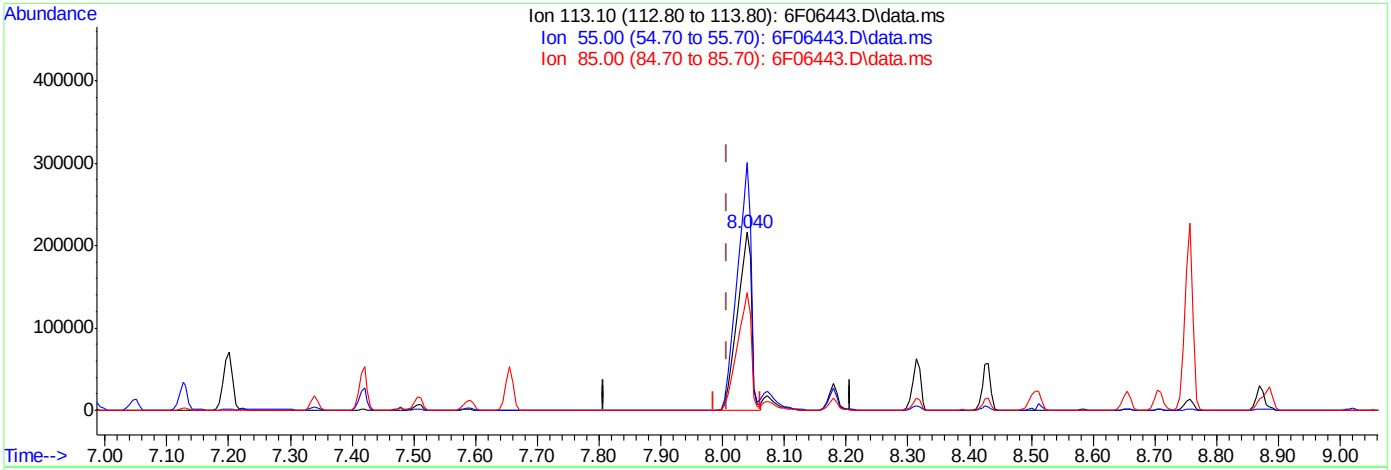
Ion	Exp%	Act%
105.00	100	100
122.00	81.90	81.24
77.00	77.70	76.92
0.00	0.00	0.00

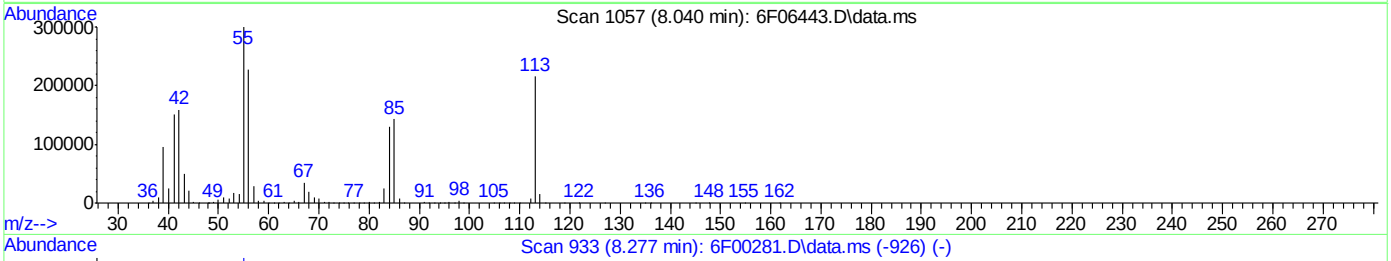
8270D6F072920.m Wed Jul 29 16:15:37 2020 Page: 1

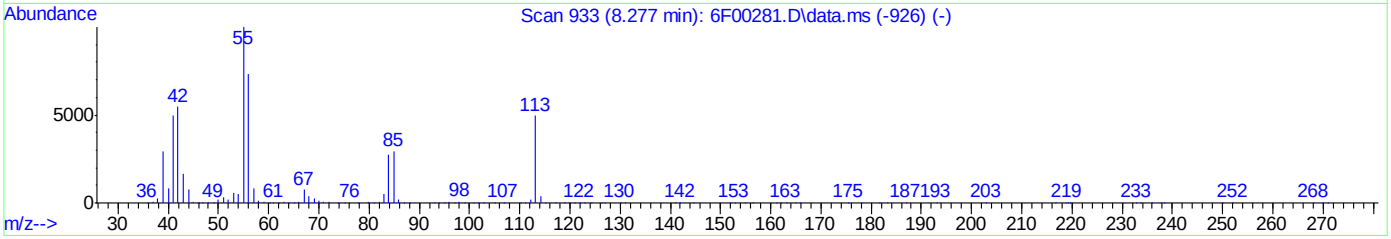
Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06443.D
Sample : ic248-100
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1
Acq On : 29 Jul 2020 3:54 pm Operator: marthav

Quant Time: Jul 29 16:15:19 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625







TIC: 6F06443.D\data.ms

(38) Caprolactam (P)

8.040min (+0.032) 124.79ppm

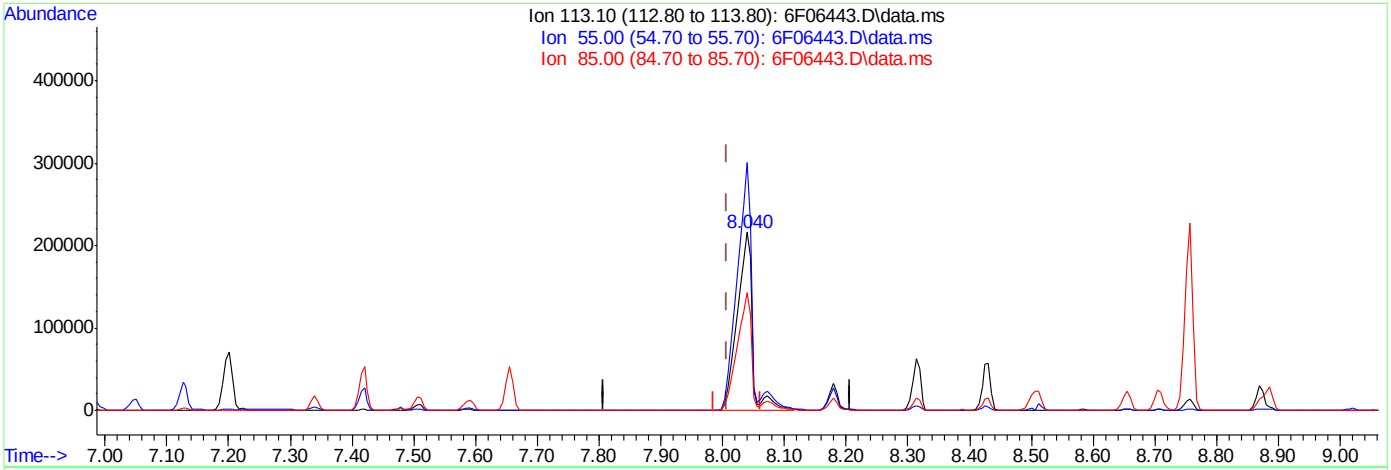
response 348513

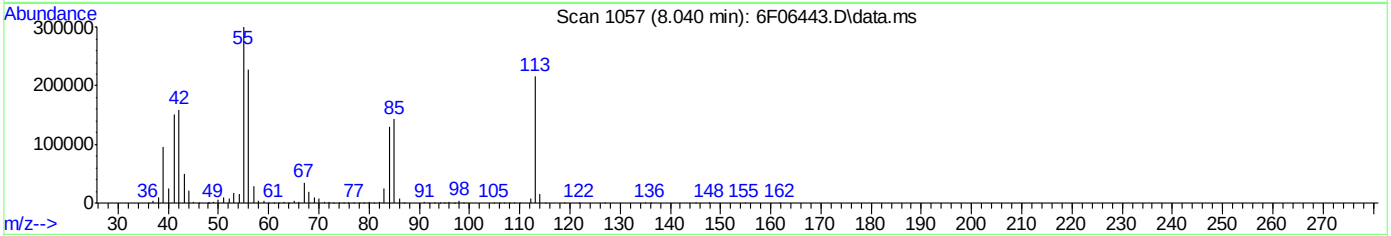
Ion	Exp%	Act%
113.10	100	100
55.00	141.10	138.63
85.00	65.10	65.86
0.00	0.00	0.00

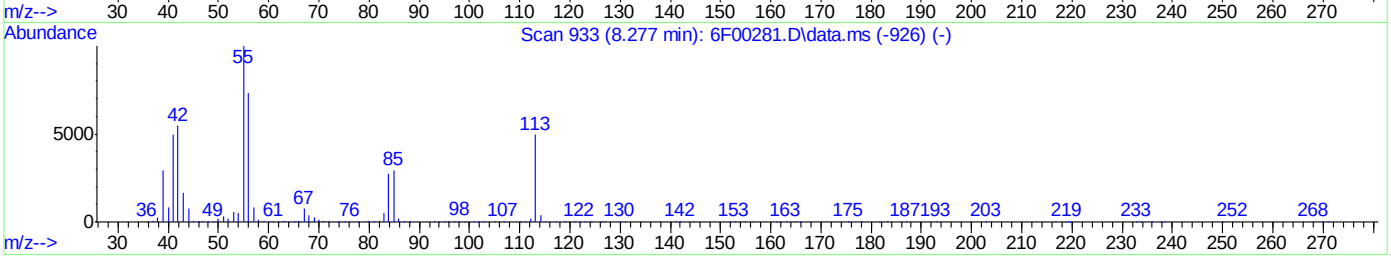
Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06443.D
Sample : ic248-100
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1
Acq On : 29 Jul 2020 3:54 pm Operator: marthav

Quant Time: Jul 29 16:15:19 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625







TIC: 6F06443.D\data.ms

(38) Caprolactam (P)

8.040min (+0.032) 133.42ppm m

response 372604

Ion	Exp%	Act%
113.10	100	100
55.00	141.10	138.93
85.00	65.10	65.96
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06444.D
Sample : icv248-50
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1
Acq On : 29 Jul 2020 4:20 pm Operator: marthav

Quant Time: Jul 30 12:06:54 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.045	152	385259	40.00	ppm	0.00
22) Naphthalene-d8	7.479	136	1416043	40.00	ppm	0.00
43) Acenaphthene-d10	9.533	164	727675	40.00	ppm	0.00
70) Phenanthrene-d10	11.287	188	1272017	40.00	ppm	0.00
92) Chrysene-d12	14.593	240	1051891	40.00	ppm	0.00
102) Perylene-d12	16.951	264	1000077	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#		
9) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#		
23) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#		
47) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#		
75) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#		
95) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#		
Target Compounds						Qvalue
2) 1,4-Dioxane	2.895	88	264826	46.216	ppm	99
3) N-nitrosodimethylamine	3.221	42	343172	43.903	ppm	95
5) Benzaldehyde	5.569	106	528908	44.828	ppm	99
8) bis(2-Chloroethyl)ether	5.767	93	659327	44.559	ppm	98
10) Phenol	5.692	94	795582	39.595	ppm	90
11) 2-Chlorophenol	5.821	128	663471	44.471	ppm	100
12) 1,3-Dichlorobenzene	5.981	146	739739	45.857	ppm	99
13) 1,4-Dichlorobenzene	6.061	146	743039	45.437	ppm	99
14) 1,2-Dichlorobenzene	6.227	146	698868	45.284	ppm	99
16) bis(2-chloroisopropyl)...	6.361	45	829377	44.816	ppm	93
17) 2-Methylphenol	6.350	108	543051	40.425	ppm	94
18) Acetophenone	6.495	105	865293	43.446	ppm	100
19) Hexachloroethane	6.602	117	301391	45.143	ppm	99
20) N-Nitroso-di-n-propyla...	6.505	70	452395	42.791	ppm	99
21) 3&4-Methylphenol	6.527	108	1169763	83.784	ppm	96
24) Nitrobenzene	6.682	77	672844	44.480	ppm	96
25) Isophorone	6.960	82	1239040	45.582	ppm	99
26) 2-Nitrophenol	7.046	139	356008	47.780	ppm	99
27) 2,4-Dimethylphenol	7.120	107	539978	41.860	ppm	97
29) bis(2-Chloroethoxy)met...	7.222	93	711251	42.725	ppm	100
30) Benzoic Acid	7.308	105	1032108	81.252	ppm	97
31) 2,4-Dichlorophenol	7.334	162	515590	44.946	ppm	99
32) 1,2,4-Trichlorobenzene	7.415	180	587915	46.107	ppm	100
34) Naphthalene	7.506	128	1779128	44.412	ppm	100
36) 2,6-Dichlorophenol	7.586	162	494072	44.311	ppm	99
37) Hexachlorobutadiene	7.655	225	335441	47.942	ppm	99
38) Caprolactam	8.003	113	189917	42.439	ppm	98
39) 4-Chloro-3-methylphenol	8.169	107	509473	43.093	ppm	99
41) 1-Methylnaphthalene	8.426	142	1101778	42.797	ppm	99
42) 1,2,4,5-Tetrachloroben...	8.506	216	551642	44.871	ppm	99
44) Hexachlorocyclopentadiene	8.500	237	413366	54.534	ppm	98

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06444.D
Sample : icv248-50
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1
Acq On : 29 Jul 2020 4:20 pm Operator: marthav

Quant Time: Jul 30 12:06:54 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

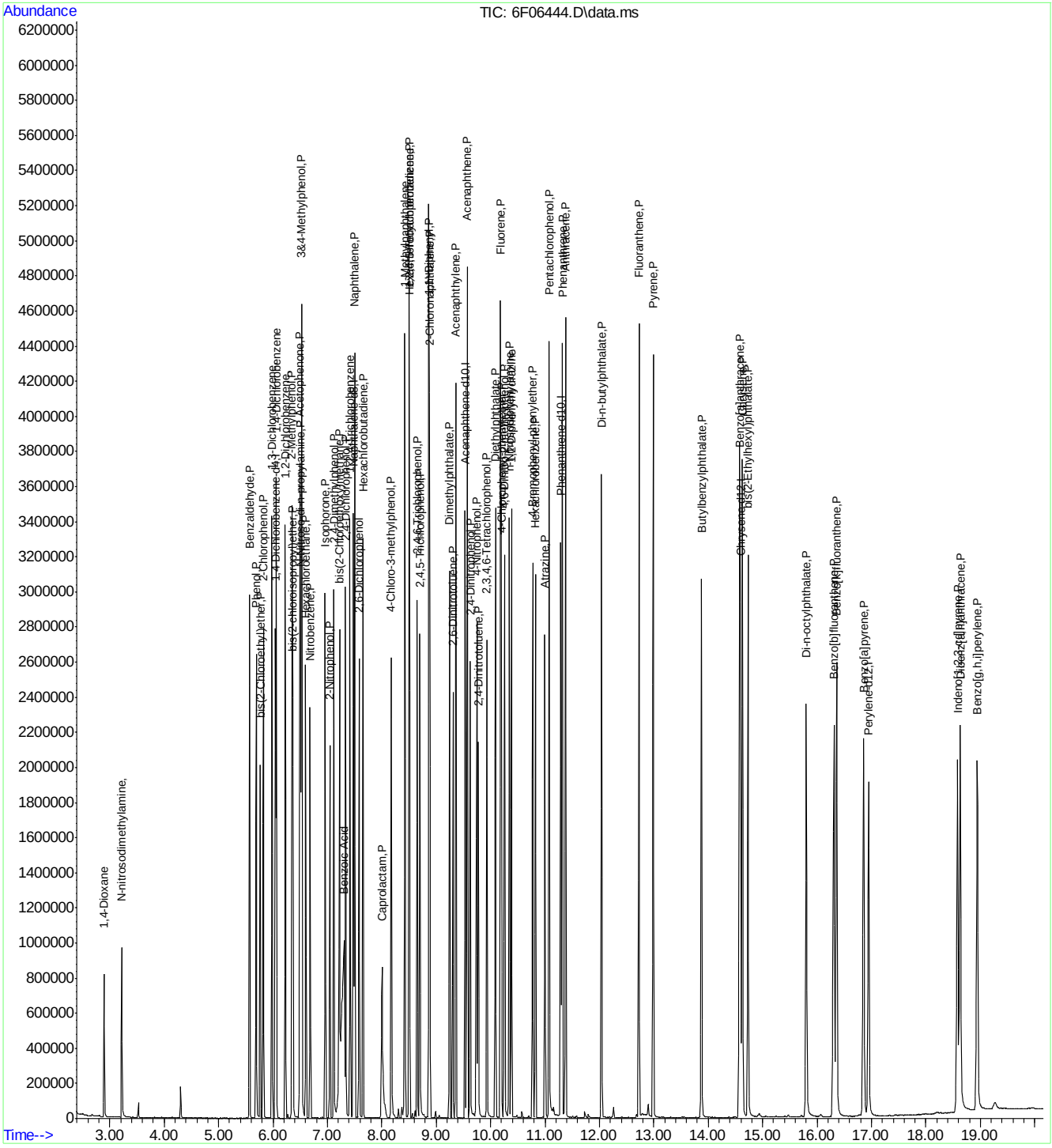
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
45)	2,4,6-Trichlorophenol	8.650	196	375289	47.264	ppm	99
46)	2,4,5-Trichlorophenol	8.698	196	403010	47.628	ppm	98
48)	1,1'-Biphenyl	8.864	154	1390071	45.739	ppm	98
49)	2-Chloronaphthalene	8.880	162	1078516	45.110	ppm	99
52)	Acenaphthylene	9.362	152	1787970	49.165	ppm	99
53)	Dimethylphthalate	9.244	163	1197180	44.087	ppm	100
55)	2,6-Dinitrotoluene	9.308	165	280214	44.436	ppm	99
57)	Acenaphthene	9.570	153	1079664	44.705	ppm	97
59)	2,4-Dinitrophenol	9.624	184	369589	82.230	ppm	90
61)	2,4-Dinitrotoluene	9.779	165	394492	47.506	ppm	84
62)	4-Nitrophenol	9.747	109	365130	87.747	ppm	98
64)	2,3,4,6-Tetrachlorophenol	9.929	232	302640	44.338	ppm	100
65)	Fluorene	10.185	166	1231041	45.537	ppm	99
66)	4-Chlorophenyl-phenyle...	10.201	204	590613	44.165	ppm	93
67)	Diethylphthalate	10.089	149	1228595	44.593	ppm	99
71)	4,6-Dinitro-2-methylph...	10.255	198	515041	88.804	ppm	88
72)	n-Nitrosodiphenylamine	10.340	169	817807	41.363	ppm	98
74)	1,2-Diphenylhydrazine	10.383	77	1265682	44.895	ppm	100
78)	4-Bromophenyl-phenylether	10.774	248	349394	47.065	ppm	98
79)	Hexachlorobenzene	10.827	284	385478	45.472	ppm	99
82)	Atrazine	10.998	200	334511	44.646	ppm	98
83)	Pentachlorophenol	11.073	266	485515	87.054	ppm	98
84)	Phenanthrene	11.319	178	1713954	44.999	ppm	100
85)	Anthracene	11.378	178	1700513	43.934	ppm	100
89)	Di-n-butylphthalate	12.036	149	1992179	45.321	ppm	99
91)	Fluoranthene	12.726	202	1771215	44.168	ppm	100
94)	Pyrene	12.988	202	1822231	48.366	ppm	95
97)	Butylbenzylphthalate	13.876	149	856565	47.452	ppm	99
99)	Benzo[a]anthracene	14.576	228	1614211	45.797	ppm	99
100)	Chrysene	14.630	228	1598280	46.737	ppm	100
101)	bis(2-Ethylhexyl)phtha...	14.732	149	1188674	47.144	ppm	100
103)	Di-n-octylphthalate	15.801	149	1965705	49.690	ppm	100
104)	Benzo[b]fluoranthene	16.309	252	1496383	46.616	ppm	100
105)	Benzo[k]fluoranthene	16.363	252	1589141	47.600	ppm	99
106)	Benzo[a]pyrene	16.855	252	1388867	46.589	ppm	100
107)	Indeno[1,2,3-cd]pyrene	18.583	276	1245848	44.889	ppm	99
108)	Dibenz[a,h]anthracene	18.631	278	1315333	44.387	ppm	99
109)	Benzo[g,h,i]perylene	18.946	276	1342495	44.815	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06444.D
Sample : icv248-50
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1
Acq On : 29 Jul 2020 4:20 pm Operator: marthav

Quant Time: Jul 30 12:06:54 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625



Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06445.D
Sample : icv248-50
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 11 Sample Multiplier: 1
Acq On : 29 Jul 2020 4:46 pm Operator: marthav

Quant Time: Jul 30 12:08:21 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

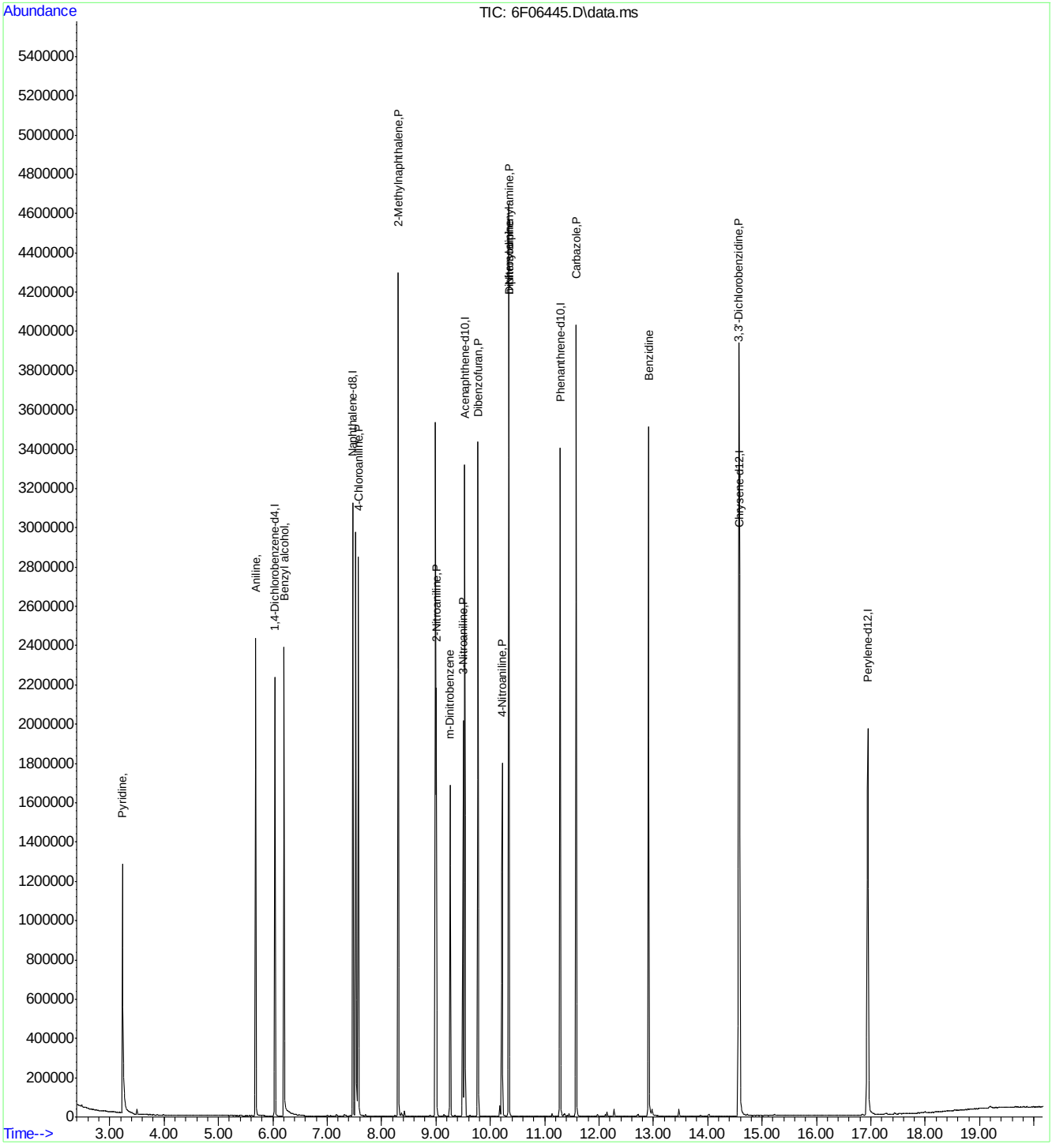
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.040	152	325344	40.00	ppm	0.00
22) Naphthalene-d8	7.473	136	1273253	40.00	ppm	0.00
43) Acenaphthene-d10	9.533	164	685475	40.00	ppm	0.00
70) Phenanthrene-d10	11.287	188	1269859	40.00	ppm	0.00
92) Chrysene-d12	14.587	240	1156122	40.00	ppm	0.00
102) Perylene-d12	16.946	264	1121147	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#		
9) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#		
23) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#		
47) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#		
75) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#		
95) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#		
Target Compounds						Qvalue
4) Pyridine	3.232	79	583055	46.795	ppm	98
6) Aniline	5.687	93	807661	42.333	ppm	83
15) Benzyl alcohol	6.206	108	363715	47.296	ppm	96
35) 4-Chloroaniline	7.575	127	697117	44.395	ppm	98
40) 2-Methylnaphthalene	8.308	141	913152	43.358	ppm	99
50) 2-Nitroaniline	9.008	65	403876	57.272	ppm	92
54) m-Dinitrobenzene	9.260	168	199557	44.477	ppm	92
58) 3-Nitroaniline	9.501	138	324832	47.397	ppm	94
60) Dibenzofuran	9.779	168	1376892	43.783	ppm	95
69) 4-Nitroaniline	10.217	138	319067	46.067	ppm	95
72) n-Nitrosodiphenylamine	10.340	169	1066537	54.035	ppm	99
73) Diphenylamine	10.340	169	1066537	48.461	ppm	99
87) Carbazole	11.581	167	1566082	44.980	ppm	100
93) Benzidine	12.913	184	1315020	54.478	ppm	99
98) 3,3'-Dichlorobenzidine	14.571	252	728427	48.599	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06445.D
Sample : icv248-50
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 11 Sample Multiplier: 1
Acq On : 29 Jul 2020 4:46 pm Operator: marthav

Quant Time: Jul 30 12:08:21 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625



Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 08/12/20 14:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06486.d
Acq On : 11 Aug 2020 12:54 pm
Operator : marthav
Sample : cc248-50 Inst : MSBNA10
Misc : op81484,S6F251,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Results File: 8270D6F072920.RES
Quant Time: Aug 12 05:54:11 2020
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.035	152	320148	40.00	ppm	0.00
22) Naphthalene-d8	7.468	136	1244639	40.00	ppm	0.00
43) Acenaphthene-d10	9.522	164	690499	40.00	ppm	0.00
70) Phenanthrene-d10	11.276	188	1290149	40.00	ppm	0.00
92) Chrysene-d12	14.576	240	1201004	40.00	ppm	0.00
102) Perylene-d12	16.930	264	1198860	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	4.660	112	1199597	99.16	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 99.16%#			
9) Phenol-d5	5.671	99	1431353	99.67	ppm	0.00
Spiked Amount 100.000	Range 10 - 50		Recovery = 99.67%#			
23) Nitrobenzene-d5	6.650	82	666577	48.81	ppm	0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 97.62%			
47) 2-Fluorobiphenyl	8.741	172	1279954	47.43	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 94.86%			
75) 2,4,6-Tribromophenol	10.458	330	443376	102.11	ppm	0.00
Spiked Amount 100.000	Range 33 - 118		Recovery = 102.11%			
95) Terphenyl-d14	13.202	244	1617831	47.92	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 95.84%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.858	88	231715	48.66	ppm	# 70
3) N-nitrosodimethylamine	3.189	42	308322	47.47	ppm	# 60
4) Pyridine	3.227	79	622155	50.74	ppm	# 58
5) Benzaldehyde	5.559	106	468723	47.81	ppm	96
6) Aniline	5.676	93	897984	47.83	ppm	69
8) bis(2-Chloroethyl)ether	5.757	93	599389	48.75	ppm	86
10) Phenol	5.687	94	822742	49.27	ppm	95
11) 2-Chlorophenol	5.810	128	616212	49.70	ppm	90
12) 1,3-Dichlorobenzene	5.971	146	650497	48.53	ppm	98
13) 1,4-Dichlorobenzene	6.051	146	658393	48.45	ppm	96
14) 1,2-Dichlorobenzene	6.217	146	617382	48.14	ppm	98
15) Benzyl alcohol	6.201	108	361279	47.74	ppm	98
16) bis(2-chloroisopropyl)...	6.350	45	734757	47.78	ppm	70
17) 2-Methylphenol	6.340	108	552503	49.49	ppm	# 80
18) Acetophenone	6.484	105	833993	50.39	ppm	99
19) Hexachloroethane	6.591	117	267363	48.19	ppm	91
20) N-Nitroso-di-n-propyla...	6.495	70	430808	49.04	ppm	# 66
21) 3&4-Methylphenol	6.516	108	578515	49.86	ppm	94
24) Nitrobenzene	6.677	77	646926	48.66	ppm	98
25) Isophorone	6.949	82	1174722	49.17	ppm	98
26) 2-Nitrophenol	7.035	139	340569	52.00	ppm	92
27) 2,4-Dimethylphenol	7.110	107	545223	48.09	ppm	99
28) O,O,O-Triethylphosphor...	7.185	198	291235	49.85	ppm	98
29) bis(2-Chloroethoxy)met...	7.211	93	702122	47.99	ppm	98
30) Benzoic Acid	7.244	105	529510m	52.72	ppm	
31) 2,4-Dichlorophenol	7.324	162	499206	49.51	ppm	93
32) 1,2,4-Trichlorobenzene	7.404	180	542357	48.39	ppm	99
34) Naphthalene	7.495	128	1685564	47.87	ppm	99
35) 4-Chloroaniline	7.570	127	725346	47.25	ppm	95
36) 2,6-Dichlorophenol	7.575	162	479848	48.96	ppm	95
37) Hexachlorobutadiene	7.645	225	296595	48.23	ppm	98
38) Caprolactam	7.998	113	207955	52.87	ppm	# 60
39) 4-Chloro-3-methylphenol	8.163	107	530674	51.07	ppm	91
40) 2-Methylnaphthalene	8.303	141	1003999	48.77	ppm	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06486.d
Acq On : 11 Aug 2020 12:54 pm
Operator : marthav
Sample : cc248-50 Inst : MSBNA10
Misc : op81484,S6F251,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Results File: 8270D6F072920.RES
Quant Time: Aug 12 05:54:11 2020
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41)	1-Methylnaphthalene	8.415	142	1116278	49.33	ppm		98
42)	1,2,4,5-Tetrachloroben...	8.495	216	533204	49.34	ppm		98
44)	Hexachlorocyclopentadiene	8.490	237	366080	50.90	ppm		98
45)	2,4,6-Trichlorophenol	8.640	196	370785	49.21	ppm		97
46)	2,4,5-Trichlorophenol	8.693	196	399727	49.78	ppm		98
48)	1,1'-Biphenyl	8.853	154	1399566	48.53	ppm		97
49)	2-Chloronaphthalene	8.870	162	1081075	47.65	ppm		97
50)	2-Nitroaniline	9.003	65	362039	50.97	ppm		77
51)	p-Dinitrobenzene	9.169	75	243847	51.33	ppm	#	69
52)	Acenaphthylene	9.356	152	1689491	48.96	ppm		97
53)	Dimethylphthalate	9.239	163	1249098	48.48	ppm		100
54)	m-Dinitrobenzene	9.255	168	233741	50.72	ppm	#	9
55)	2,6-Dinitrotoluene	9.297	165	307928	51.46	ppm		92
56)	o-Dinitrobenzene	9.356	50	212320	47.78	ppm	#	65
57)	Acenaphthene	9.559	153	1098896	47.95	ppm		96
58)	3-Nitroaniline	9.490	138	341370	49.45	ppm		93
59)	2,4-Dinitrophenol	9.613	184	192825	54.67	ppm		80
60)	Dibenzofuran	9.768	168	1532987	48.39	ppm		91
61)	2,4-Dinitrotoluene	9.768	165	418954	53.17	ppm		91
62)	4-Nitrophenol	9.731	109	205056	51.93	ppm	#	83
63)	2,3,5,6-Tetrachlorophenol	9.870	232	328957	50.51	ppm		99
64)	2,3,4,6-Tetrachlorophenol	9.918	232	335281	51.76	ppm		96
65)	Fluorene	10.169	166	1262376	49.21	ppm		99
66)	4-Chlorophenyl-phenyle...	10.185	204	615973	48.54	ppm		93
67)	Diethylphthalate	10.078	149	1289010	49.30	ppm		99
68)	Thionazin	10.175	97	298167	50.13	ppm		96
69)	4-Nitroaniline	10.223	138	352389	50.51	ppm		96
71)	4,6-Dinitro-2-methylph...	10.249	198	261746	52.71	ppm	#	75
72)	n-Nitrosodiphenylamine	10.335	169	1080130	53.86	ppm		96
73)	Diphenylamine	10.335	169	1080130	48.31	ppm		96
74)	1,2-Diphenylhydrazine	10.378	77	1340846	46.89	ppm		97
76)	Sulfotep	10.549	97	227022	48.60	ppm	#	62
77)	Phorate	10.693	75	789009	50.28	ppm		99
78)	4-Bromophenyl-phenylether	10.768	248	366211	48.64	ppm		94
79)	Hexachlorobenzene	10.816	284	416937	48.49	ppm		82
80)	Dimethoate	10.891	87	554160	51.33	ppm		98
81)	Simazine	10.955	201	215453	47.88	ppm		94
82)	Atrazine	10.993	200	380662	50.09	ppm		92
83)	Pentachlorophenol	11.062	266	253265	53.39	ppm		99
84)	Phenanthrene	11.308	178	1863642	48.24	ppm		99
85)	Anthracene	11.367	178	1879655	47.88	ppm		98
86)	Disulfoton	11.314	88	834493	50.82	ppm		95
87)	Carbazole	11.571	167	1722979	48.71	ppm		96
88)	Methyl Parathion	11.752	109	465999	50.80	ppm		96
89)	Di-n-butylphthalate	12.031	149	2190366	49.13	ppm		99
90)	Ethyl Parathion	12.228	97	294563	50.13	ppm		87
91)	Fluoranthene	12.715	202	2009337	49.40	ppm		100
93)	Benzidine	12.902	184	1009767	40.27	ppm		98
94)	Pyrene	12.977	202	2067684	48.07	ppm		95
96)	Famphur	13.769	218	622842	45.64	ppm		99
97)	Butylbenzylphthalate	13.865	149	993062	48.18	ppm		99
98)	3,3'-Dichlorobenzidine	14.560	252	752353	48.32	ppm		99
99)	Benzo[a]anthracene	14.560	228	1923165	47.79	ppm		98
100)	Chrysene	14.614	228	1877255	48.08	ppm		98
101)	bis(2-Ethylhexyl)phtha...	14.716	149	1380559	47.96	ppm		98
103)	Di-n-octylphthalate	15.785	149	2311518	48.74	ppm		93
104)	Benzo[b]fluoranthene	16.288	252	1875531	48.74	ppm		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06486.d
Acq On : 11 Aug 2020 12:54 pm
Operator : marthav
Sample : cc248-50 Inst : MSBNA10
Misc : op81484,S6F251,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Results File: 8270D6F072920.RES
Quant Time: Aug 12 05:54:11 2020
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

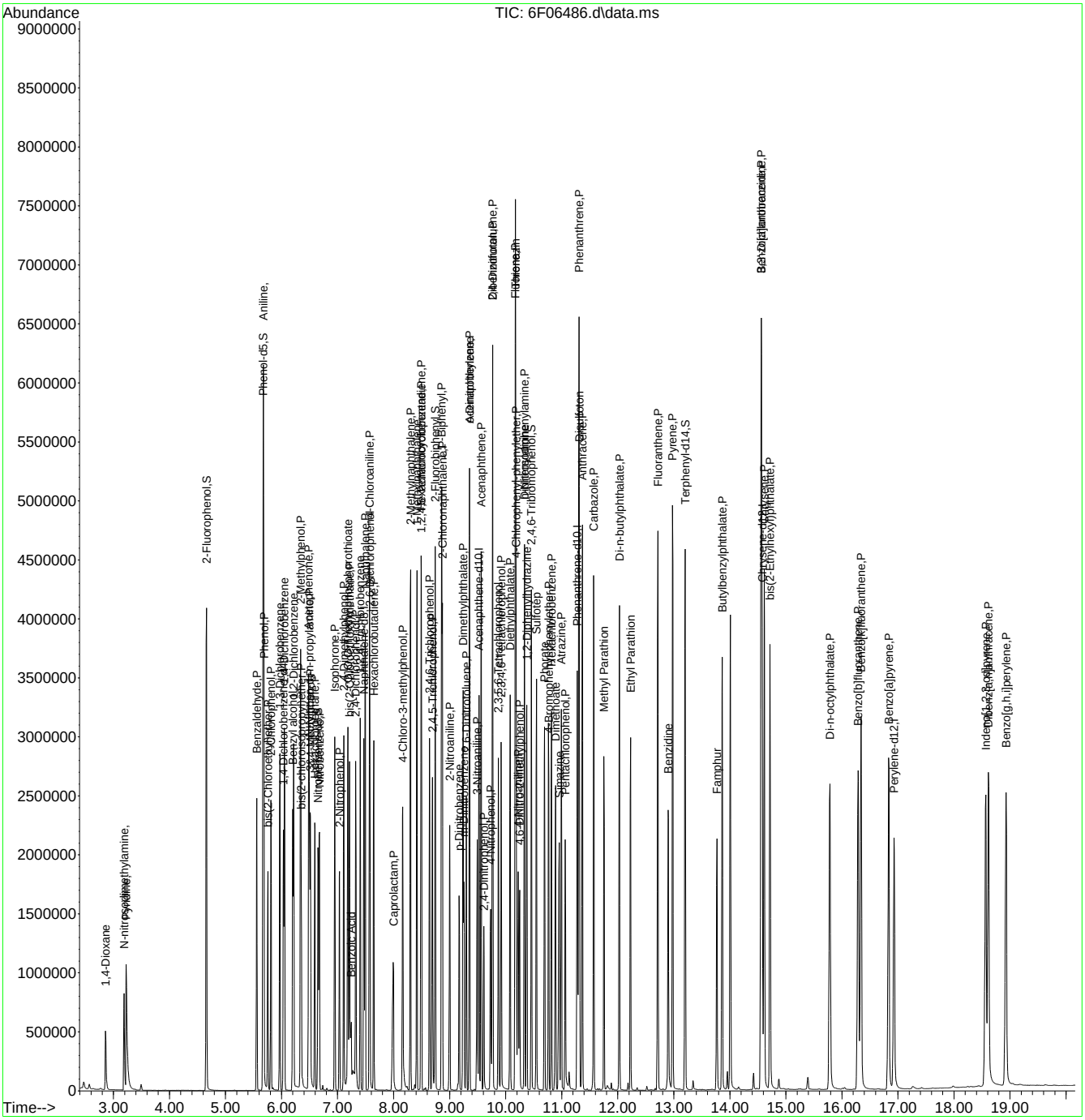
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
105) Benzo[k]fluoranthene	16.342	252	1935386	48.36	ppm	97
106) Benzo[a]pyrene	16.839	252	1744361	48.81	ppm	97
107) Indeno[1,2,3-cd]pyrene	18.567	276	1648635	49.55	ppm	93
108) Dibenz[a,h]anthracene	18.615	278	1780316	50.12	ppm	92
109) Benzo[g,h,i]perylene	18.930	276	1720309	47.91	ppm	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06486.d
Acq On : 11 Aug 2020 12:54 pm
Operator : marthav
Sample : cc248-50 Inst : MSBNA10
Misc : op81484,S6F251,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Results File: 8270D6F072920.RES
Quant Time: Aug 12 05:54:11 2020
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration



Manual Integration Approval Summary

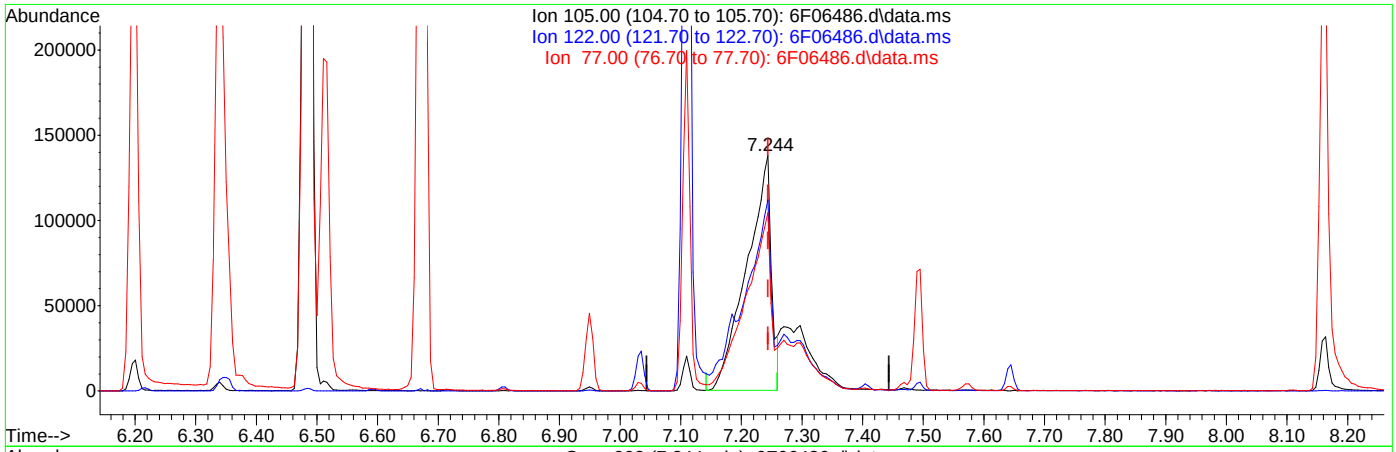
Sample Number: S6F251-CC248
Lab FileID: 6F06486.D
Injection Time: 08/11/20 12:54
Method: SW846 8270D
Analyst approved: 08/12/20 07:02 Jennifer Fereira
Supervisor approved: 08/12/20 14:43 Nicole McCampbell

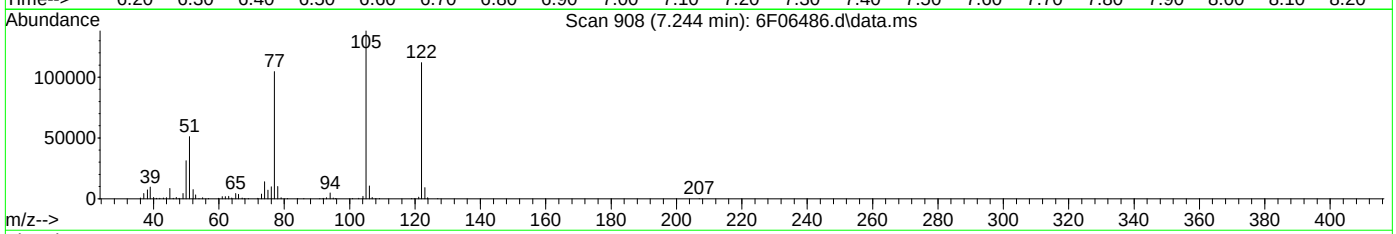
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic Acid	65-85-0		7.24	Split peak

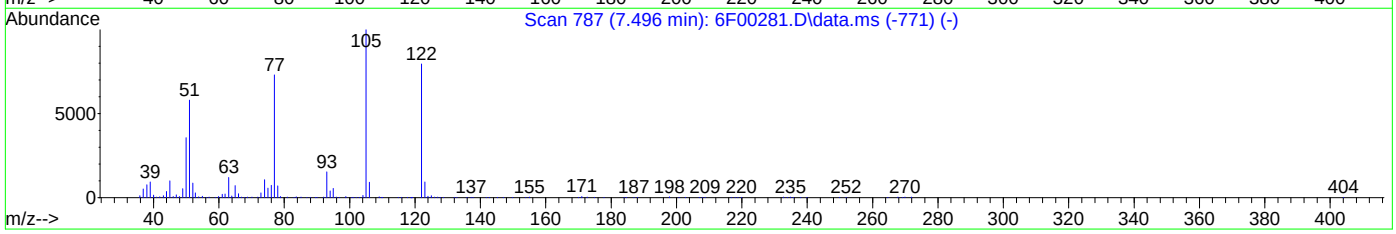
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06486.d
Acq On : 11 Aug 2020 12:54 pm
Operator : marthav
Sample : cc248-50 Inst : MSBNA10
Misc : op81484,S6F251,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Results File: 8270D6F072920.RES
Quant Time: Aug 12 05:52:10 2020
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration







TIC: 6F06486.d\data.ms

(30) Benzoic Acid

7.244min (0.000) 40.42ppm

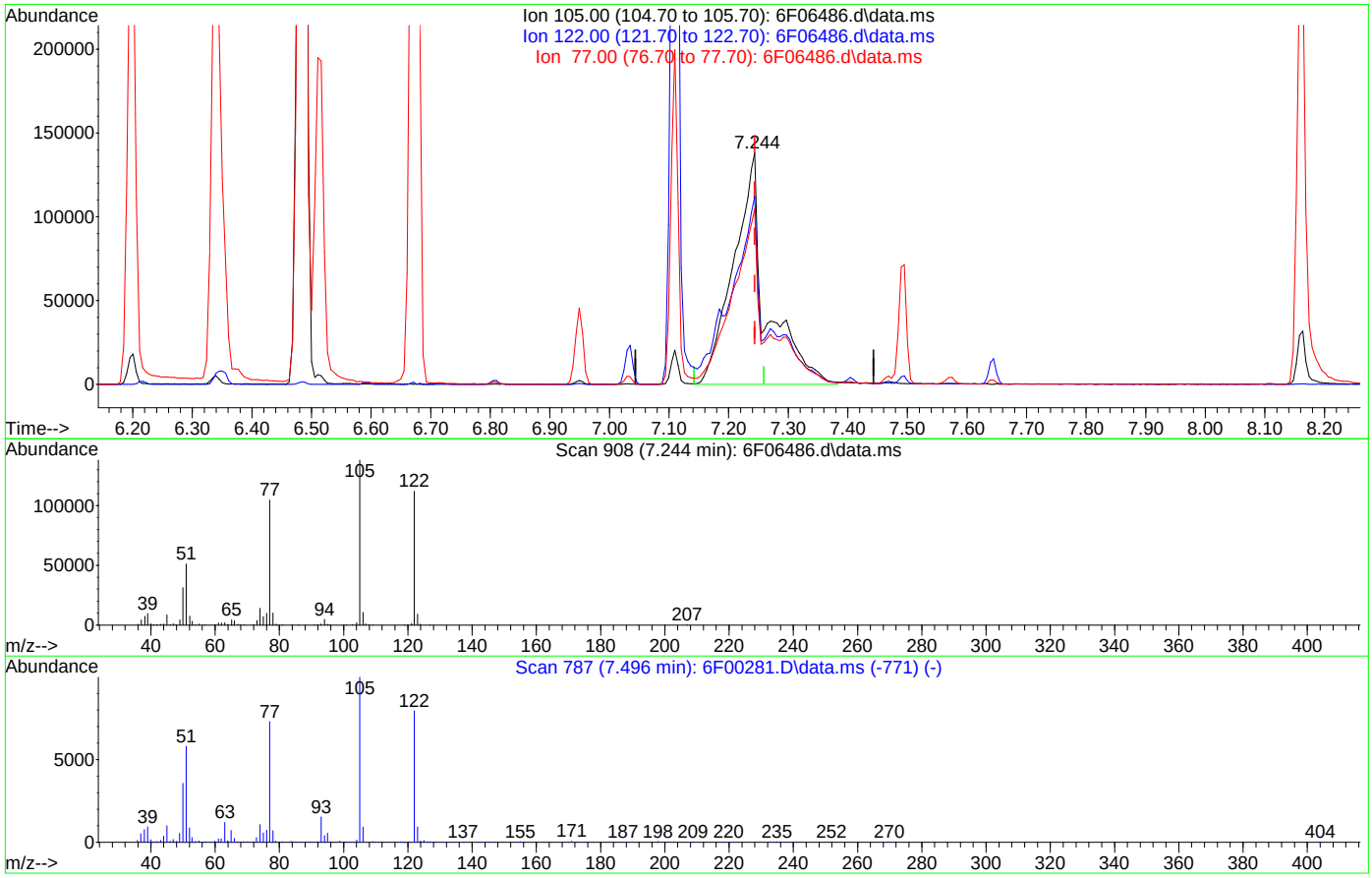
response 386466

Ion	Exp%	Act%
105.00	100	100
122.00	79.50	76.92
77.00	73.00	73.95
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06486.d
Acq On : 11 Aug 2020 12:54 pm
Operator : marthav
Sample : cc248-50 Inst : MSBNA10
Misc : op81484,S6F251,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Results File: 8270D6F072920.RES
Quant Time: Aug 12 05:52:10 2020
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration



TIC: 6F06486.d\data.ms

(30) Benzoic Acid

7.244min (0.000) 52.72ppm m

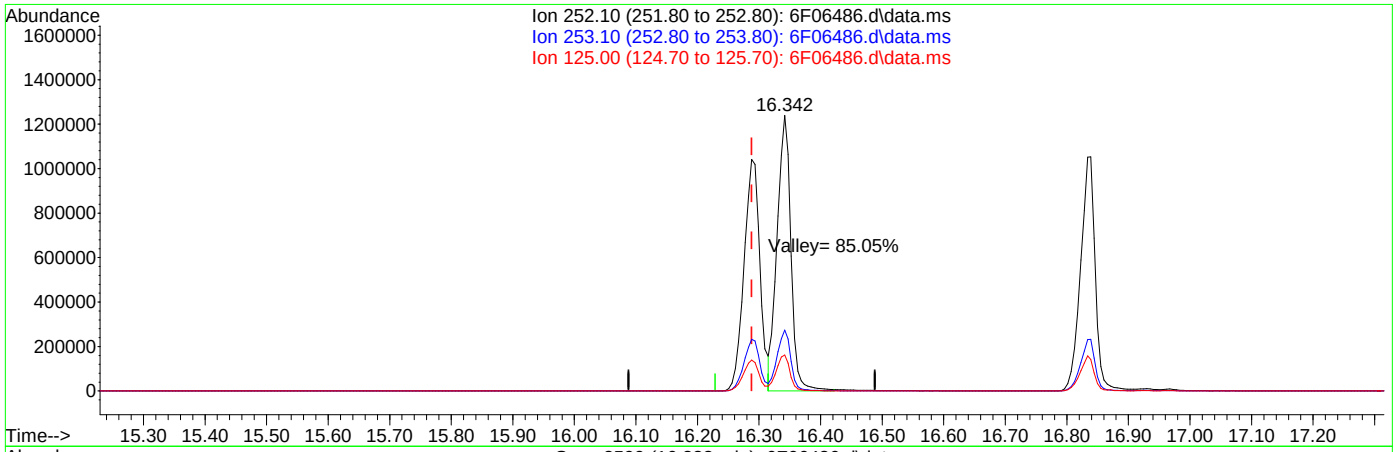
response 529510

Ion	Exp%	Act%
105.00	100	100
122.00	79.50	81.09
77.00	73.00	75.68
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S6F251\
Data File : 6F06486.d
Acq On : 11 Aug 2020 12:54 pm
Operator : marthav
Sample : cc248-50 Inst : MSBNA10
Misc : op81484,S6F251,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Results File: 8270D6F072920.RES
Quant Time: Aug 12 05:54:11 2020
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration



TIC: 6F06486.d\data.ms

(104) Benzo[b]fluoranthene (P)

16.288min (0.000) 48.74ppm

response 1875531

Ion	Exp%	Act%
252.10	100	100
253.10	21.90	22.39
125.00	11.30	13.32
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 08/14/20 14:57

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s6f253\
Data File : 6F06541.d
Acq On : 13 Aug 2020 1:25 pm
Operator : marthav
Sample : cc248-50
Misc : op81484,S6F253,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 14 04:39:59 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Fri Aug 14 04:37:44 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.024	152	402551	40.00	ppm	0.00
22) Naphthalene-d8	7.457	136	1382487	40.00	ppm	0.00
43) Acenaphthene-d10	9.517	164	667405	40.00	ppm	0.00
70) Phenanthrene-d10	11.271	188	1057047	40.00	ppm	0.00
92) Chrysene-d12	14.571	240	984775	40.00	ppm	0.00
102) Perylene-d12	16.924	264	963172	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	4.649	112	1506784	99.06	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 99.06%#			
9) Phenol-d5	5.665	99	1639261	90.78	ppm	0.00
Spiked Amount 100.000	Range 10 - 50		Recovery = 90.78%#			
23) Nitrobenzene-d5	6.644	82	756879	49.90	ppm	0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 99.80%			
47) 2-Fluorobiphenyl	8.736	172	1363286	52.26	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 104.52%			
75) 2,4,6-Tribromophenol	10.453	330	383893	107.91	ppm	0.00
Spiked Amount 100.000	Range 33 - 118		Recovery = 107.91%			
95) Terphenyl-d14	13.196	244	1273003	45.99	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 91.98%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.847	88	322685	53.89	ppm	100
3) N-nitrosodimethylamine	3.178	42	330702	40.49	ppm	100
4) Pyridine	3.216	79	810188	52.55	ppm	100
5) Benzaldehyde	5.548	106	566101	45.92	ppm	100
6) Aniline	5.671	93	1060511	44.92	ppm	100
8) bis(2-Chloroethyl)ether	5.746	93	736639	47.65	ppm	100
10) Phenol	5.682	94	947620	45.14	ppm	100
11) 2-Chlorophenol	5.805	128	753488	48.34	ppm	100
12) 1,3-Dichlorobenzene	5.960	146	831166	49.31	ppm	100
13) 1,4-Dichlorobenzene	6.045	146	835584	48.90	ppm	100
14) 1,2-Dichlorobenzene	6.206	146	785920	48.74	ppm	100
15) Benzyl alcohol	6.190	108	442719	46.53	ppm	100
16) bis(2-chloroisopropyl)...	6.339	45	907312	46.92	ppm	100
17) 2-Methylphenol	6.334	108	633715	45.15	ppm	100
18) Acetophenone	6.479	105	936037	44.98	ppm	100
19) Hexachloroethane	6.585	117	334739	47.98	ppm	100
20) N-Nitroso-di-n-propyla...	6.489	70	484139	43.83	ppm	100
21) 3&4-Methylphenol	6.505	108	646891	44.34	ppm	100
24) Nitrobenzene	6.666	77	732056	49.57	ppm	100
25) Isophorone	6.944	82	1284438	48.40	ppm	100
26) 2-Nitrophenol	7.024	139	399776	54.96	ppm	94
27) 2,4-Dimethylphenol	7.104	107	611108	48.52	ppm	98
28) O,O,O-Triethylphosphor...	7.174	198	336821	51.90	ppm	100
29) bis(2-Chloroethoxy)met...	7.206	93	811301	49.92	ppm	99
30) Benzoic Acid	7.227	105	451161m	42.17	ppm	
31) 2,4-Dichlorophenol	7.318	162	547640	48.90	ppm	100
32) 1,2,4-Trichlorobenzene	7.398	180	640161	51.42	ppm	100
34) Naphthalene	7.484	128	1937766	49.55	ppm	100
35) 4-Chloroaniline	7.559	127	790006	46.34	ppm	100
36) 2,6-Dichlorophenol	7.570	162	528301	48.53	ppm	100
37) Hexachlorobutadiene	7.634	225	353334	51.72	ppm	100
38) Caprolactam	7.987	113	203185	46.51	ppm	100
39) 4-Chloro-3-methylphenol	8.153	107	528628	45.80	ppm	96
40) 2-Methylnaphthalene	8.292	141	1097707	48.00	ppm	100
41) 1-Methylnaphthalene	8.404	142	1187420	47.24	ppm	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s6f253\
Data File : 6F06541.d
Acq On : 13 Aug 2020 1:25 pm
Operator : marthav
Sample : cc248-50
Misc : op81484,S6F253,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 14 04:39:59 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Fri Aug 14 04:37:44 2020
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
42)	1,2,4,5-Tetrachloroben...	8.490	216	581076	48.41	ppm	100
44)	Hexachlorocyclopentadiene	8.479	237	378198	54.40	ppm	100
45)	2,4,6-Trichlorophenol	8.634	196	385807	52.98	ppm	100
46)	2,4,5-Trichlorophenol	8.682	196	400216	51.57	ppm	100
48)	1,1'-Biphenyl	8.848	154	1442304	51.74	ppm	100
49)	2-Chloronaphthalene	8.859	162	1123987	51.26	ppm	100
50)	2-Nitroaniline	8.992	65	321634	46.84	ppm	100
51)	p-Dinitrobenzene	9.164	75	225777	49.49	ppm	100
52)	Acenaphthylene	9.345	152	1680418	50.38	ppm	100
53)	Dimethylphthalate	9.233	163	1229782	49.38	ppm	100
54)	m-Dinitrobenzene	9.249	168	227737	51.07	ppm	91
55)	2,6-Dinitrotoluene	9.292	165	301296	52.09	ppm	98
56)	o-Dinitrobenzene	9.345	50	178901	41.65	ppm	100
57)	Acenaphthene	9.554	153	1093088	49.35	ppm	100
58)	3-Nitroaniline	9.484	138	324944	48.70	ppm	100
59)	2,4-Dinitrophenol	9.602	184	131176	42.42	ppm	100
60)	Dibenzofuran	9.757	168	1367764	44.67	ppm	89
61)	2,4-Dinitrotoluene	9.763	165	348114	45.71	ppm	95
62)	4-Nitrophenol	9.725	109	146886	38.49	ppm	100
63)	2,3,5,6-Tetrachlorophenol	9.864	232	297587	47.69	ppm	100
64)	2,3,4,6-Tetrachlorophenol	9.912	232	304510	48.64	ppm	100
65)	Fluorene	10.164	166	1072973	43.27	ppm	100
66)	4-Chlorophenyl-phenyle...	10.180	204	553034	45.09	ppm	100
67)	Diethylphthalate	10.067	149	1086185	42.98	ppm	100
68)	Thionazin	10.164	97	235581	40.98	ppm	100
69)	4-Nitroaniline	10.212	138	301156	44.66	ppm	100
71)	4,6-Dinitro-2-methylph...	10.239	198	203261	50.53	ppm	97
72)	n-Nitrosodiphenylamine	10.324	169	949250	57.77	ppm	100
73)	Diphenylamine	10.324	169	949250	51.82	ppm	100
74)	1,2-Diphenylhydrazine	10.367	77	1079696	46.09	ppm	100
76)	Sulfotep	10.538	97	178020	46.51	ppm	100
77)	Phorate	10.683	75	642009	49.94	ppm	100
78)	4-Bromophenyl-phenylether	10.757	248	325175	52.71	ppm	100
79)	Hexachlorobenzene	10.806	284	369147	52.40	ppm	100
80)	Dimethoate	10.880	87	433518	49.01	ppm	100
81)	Simazine	10.945	201	187231	50.79	ppm	99
82)	Atrazine	10.987	200	315471	50.67	ppm	100
83)	Pentachlorophenol	11.057	266	221854	56.18	ppm	100
84)	Phenanthrene	11.298	178	1512404	47.78	ppm	100
85)	Anthracene	11.362	178	1586310	49.32	ppm	100
86)	Disulfoton	11.308	88	664447	49.39	ppm	100
87)	Carbazole	11.565	167	1393544	48.08	ppm	100
88)	Methyl Parathion	11.747	109	364831	48.71	ppm	100
89)	Di-n-butylphthalate	12.020	149	1750571	47.92	ppm	100
90)	Ethyl Parathion	12.218	97	247383	51.28	ppm	100
91)	Fluoranthene	12.710	202	1607403	48.24	ppm	100
93)	Benzidine	12.892	184	855458	41.61	ppm	100
94)	Pyrene	12.972	202	1663104	47.15	ppm	100
96)	Famphur	13.763	218	490818	43.87	ppm	100
97)	Butylbenzylphthalate	13.854	149	728517	43.11	ppm	100
98)	3,3'-Dichlorobenzidine	14.555	252	646620	50.65	ppm	100
99)	Benzo[a]anthracene	14.555	228	1642603	49.78	ppm	100
100)	Chrysene	14.608	228	1603929	50.10	ppm	100
101)	bis(2-Ethylhexyl)phtha...	14.705	149	1173913	49.73	ppm	100
103)	Di-n-octylphthalate	15.769	149	1928009	50.60	ppm	100
104)	Benzo[b]fluoranthene	16.283	252	1506200	48.72	ppm	100
105)	Benzo[k]fluoranthene	16.336	252	1569190	48.80	ppm	100
106)	Benzo[a]pyrene	16.828	252	1443514	50.28	ppm	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s6f253\
Data File : 6F06541.d
Acq On : 13 Aug 2020 1:25 pm
Operator : marthav
Sample : cc248-50
Misc : op81484,S6F253,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 14 04:39:59 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Fri Aug 14 04:37:44 2020
Response via : Initial Calibration

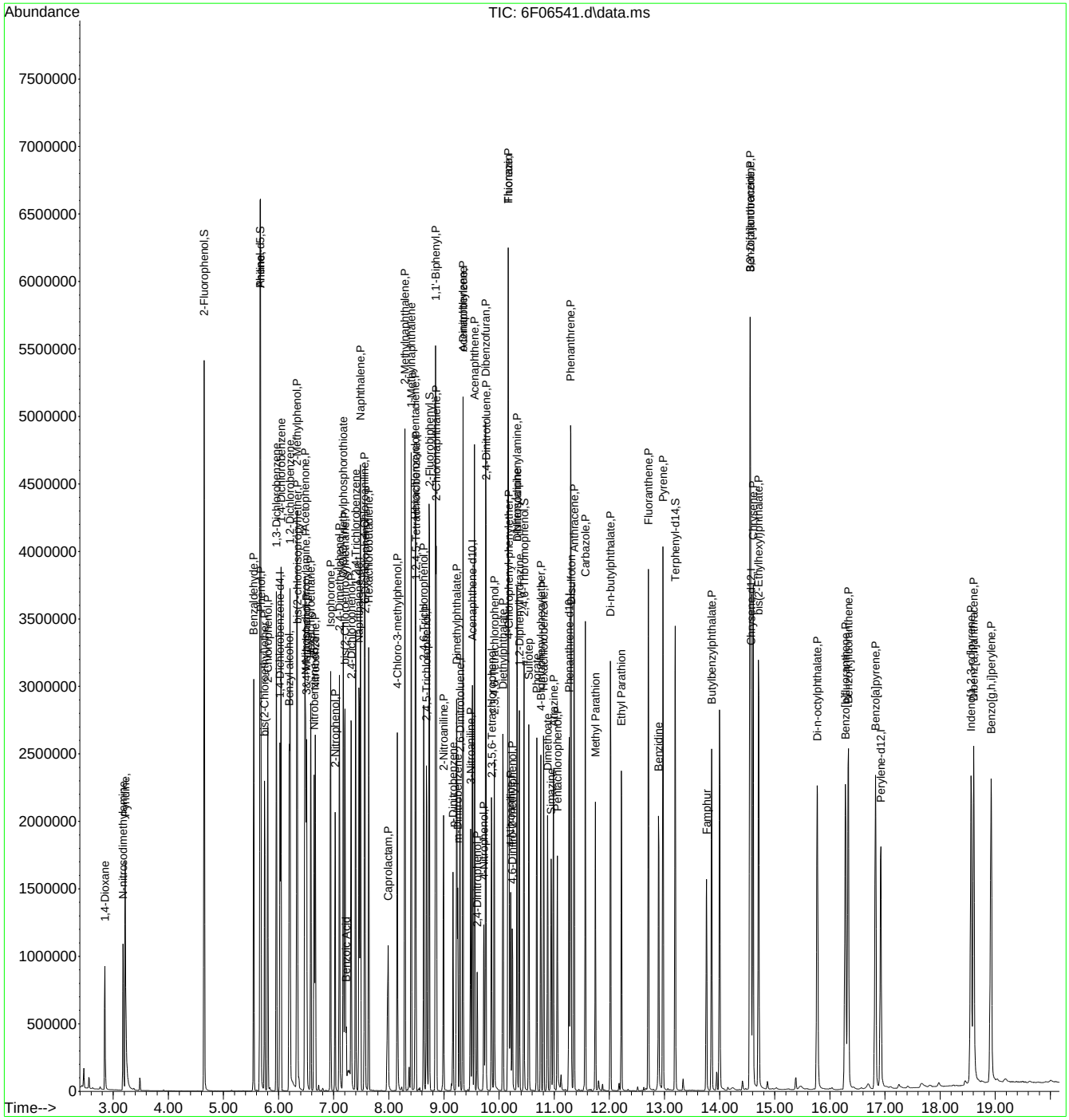
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
107) Indeno[1,2,3-cd]pyrene	18.561	276	1438336	53.81	ppm	99
108) Dibenz[a,h]anthracene	18.609	278	1507780	52.83	ppm	100
109) Benzo[g,h,i]perylene	18.925	276	1552009	53.79	ppm	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s6f253\
Data File : 6F06541.d
Acq On : 13 Aug 2020 1:25 pm
Operator : marthav
Sample : cc248-50
Misc : op81484,S6F253,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 14 04:39:59 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Fri Aug 14 04:37:44 2020
Response via : Initial Calibration



Manual Integration Approval Summary

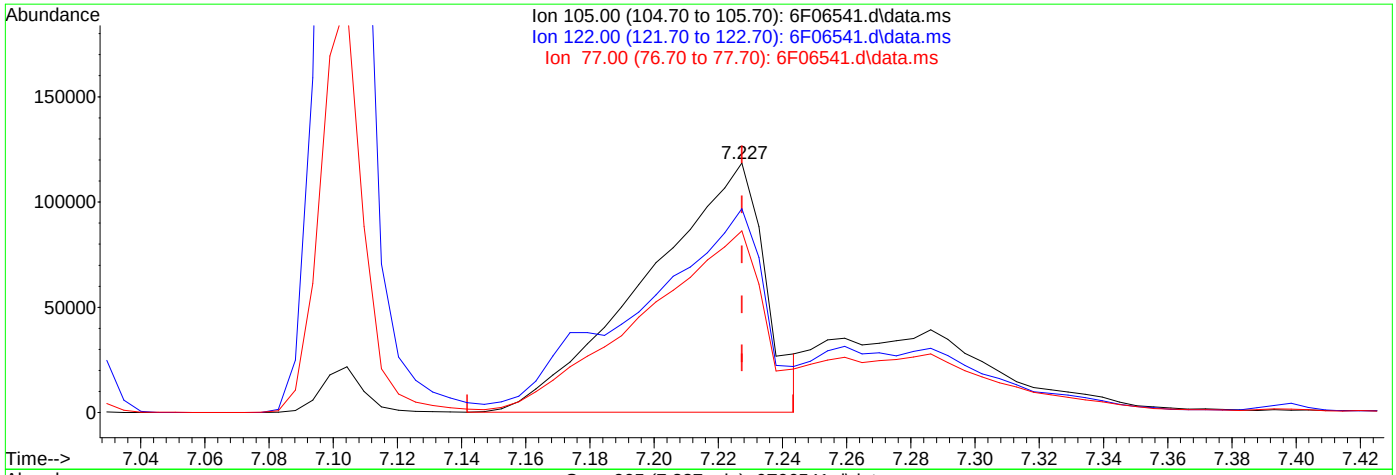
Sample Number:	S6F253-CC248	**Method:**	SW846 8270D
Lab FileID:	6F06541.D	**Analyst approved:**	08/14/20 05:47 Edessa Sumagaysay
Injection Time:	08/13/20 13:25	**Supervisor approved:**	08/14/20 14:57 Nicole McCampbell

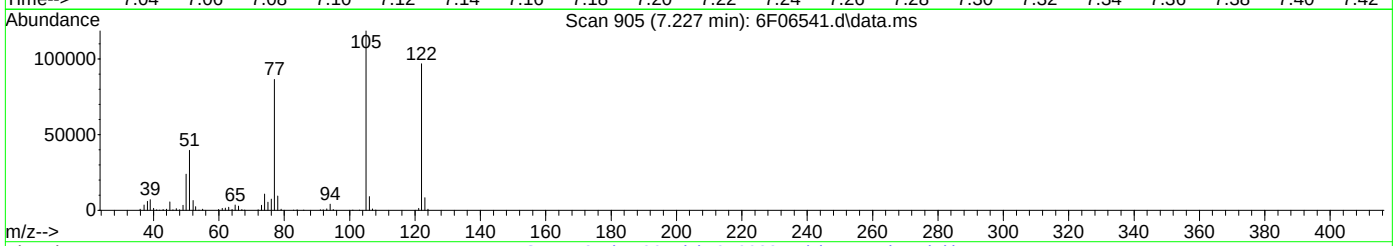
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic Acid	65-85-0		7.23	Split peak

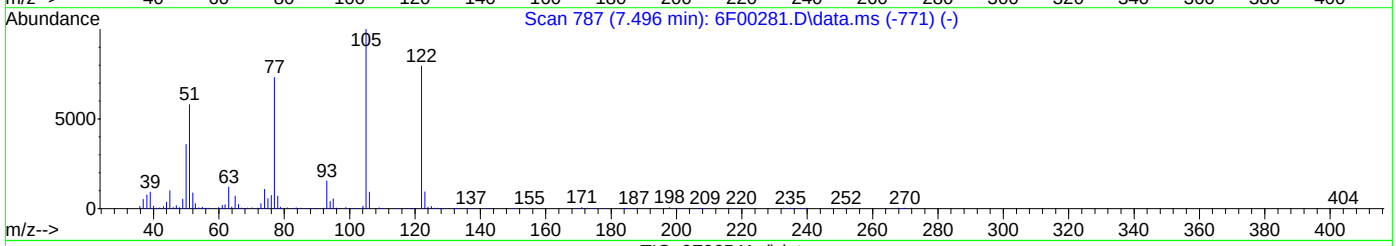
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s6f253\
Data File : 6F06541.d
Acq On : 13 Aug 2020 1:25 pm
Operator : marthav
Sample : cc248-50
Misc : op81484,S6F253,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 14 04:37:48 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Fri Aug 14 04:37:44 2020
Response via : Initial Calibration







TIC: 6F06541.d\data.ms

(30) Benzoic Acid

7.227min (0.000) 29.79ppm

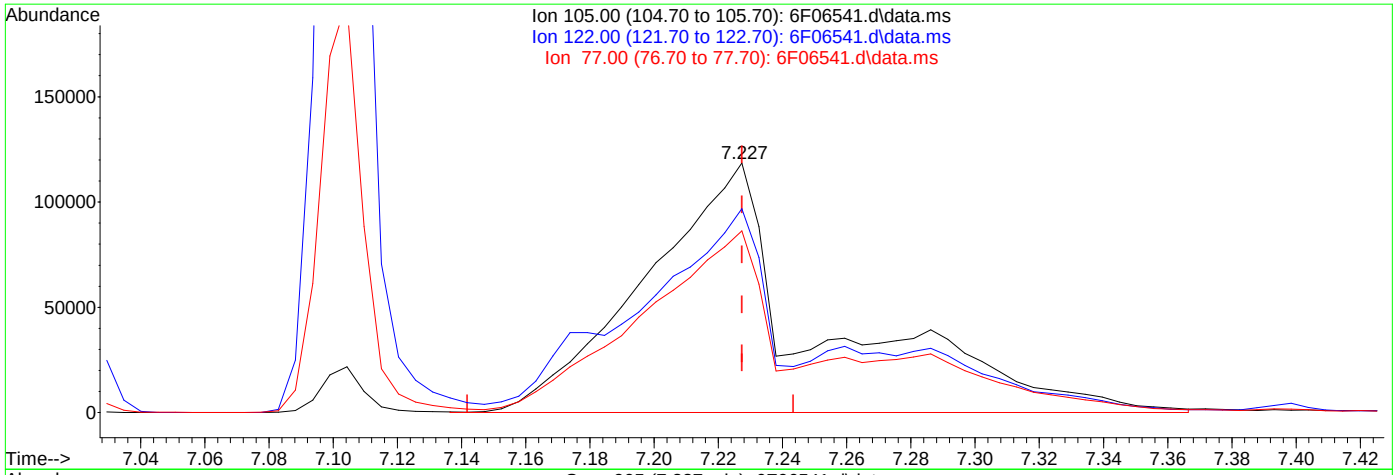
response 302571

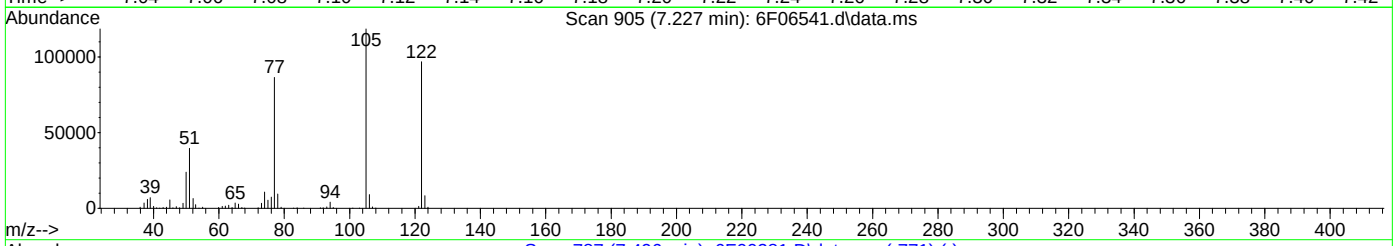
Ion	Exp%	Act%
105.00	100	100
122.00	81.70	79.95
77.00	72.80	71.96
0.00	0.00	0.00

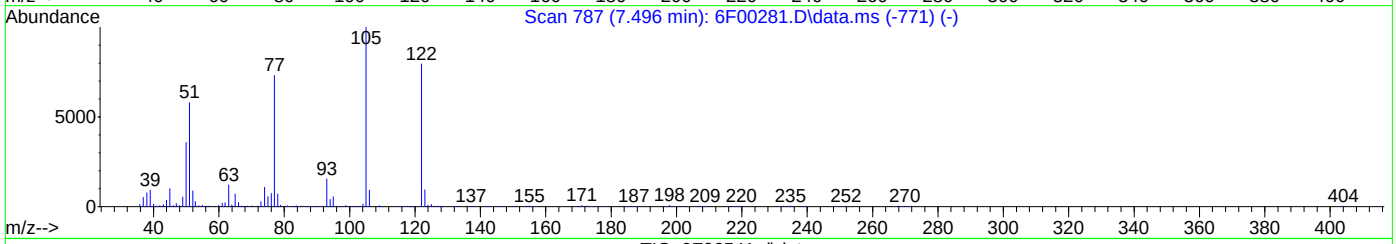
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s6f253\
Data File : 6F06541.d
Acq On : 13 Aug 2020 1:25 pm
Operator : marthav
Sample : cc248-50
Misc : op81484,S6F253,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 14 04:37:48 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Fri Aug 14 04:37:44 2020
Response via : Initial Calibration







TIC: 6F06541.d\data.ms

(30) Benzoic Acid

7.227min (0.000) 42.17ppm m

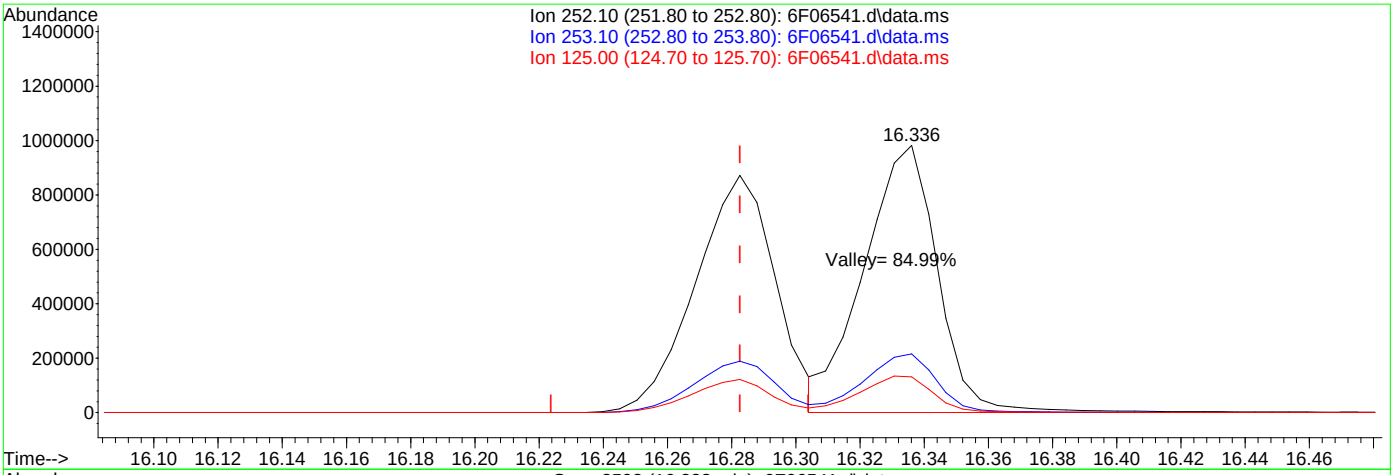
response 451161

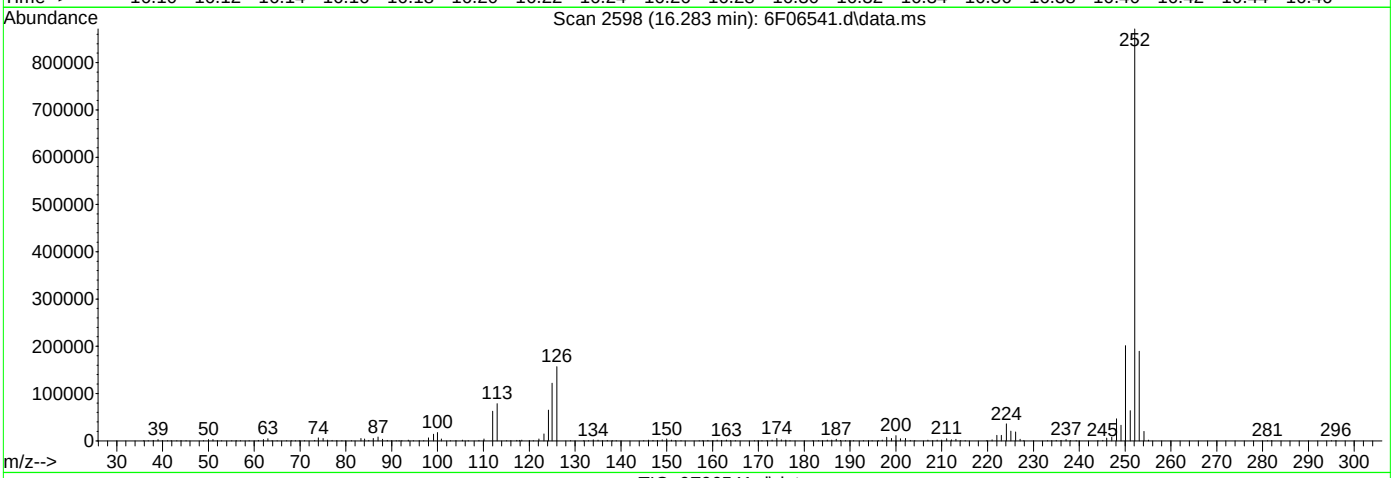
Ion	Exp%	Act%
105.00	100	100
122.00	81.70	81.69
77.00	72.80	72.82
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s6f253\
Data File : 6F06541.d
Acq On : 13 Aug 2020 1:25 pm
Operator : marthav
Sample : cc248-50
Misc : op81484,S6F253,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 14 04:39:59 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Fri Aug 14 04:37:44 2020
Response via : Initial Calibration





TIC: 6F06541.d\data.ms

(104) Benzo[b]fluoranthene (P)

16.283min (0.000) 48.72ppm

response 1506200

Ion	Exp%	Act%
252.10	100	100
253.10	21.70	21.70
125.00	14.00	14.07
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan
08/14/20 14:37

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F254_081420\6F06573.D
Sample : cc248-50
Misc : op81484,S6F254,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1
Acq On : 14 Aug 2020 12:47 pm Operator: marthav

Quant Time: Aug 14 14:25:28 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.013	152	244618	40.00	ppm	0.00
22) Naphthalene-d8	7.452	136	888239	40.00	ppm	0.00
43) Acenaphthene-d10	9.506	164	463309	40.00	ppm	0.00
70) Phenanthrene-d10	11.260	188	829636	40.00	ppm	0.00
92) Chrysene-d12	14.566	240	660438	40.00	ppm	0.00
102) Perylene-d12	16.919	264	640184	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	4.644	112	957475	103.58	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 103.58%#			
9) Phenol-d5	5.660	99	1058352	96.45	ppm	0.00
Spiked Amount 100.000	Range 10 - 50		Recovery = 96.45%#			
23) Nitrobenzene-d5	6.634	82	482672	49.53	ppm	0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 99.06%			
47) 2-Fluorobiphenyl	8.725	172	944382	52.15	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 104.30%			
75) 2,4,6-Tribromophenol	10.447	330	313285	112.20	ppm	0.00
Spiked Amount 100.000	Range 33 - 118		Recovery = 112.20%			
95) Terphenyl-d14	13.186	244	1066955	57.47	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 114.94%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.831	88	185328	50.938	ppm	92
3) N-nitrosodimethylamine	3.168	42	180700	36.409	ppm #	67
4) Pyridine	3.205	79	478281	51.054	ppm	96
5) Benzaldehyde	5.543	106	382488	51.057	ppm	96
6) Aniline	5.660	93	676916	47.189	ppm	89
8) bis(2-Chloroethyl)ether	5.735	93	467515	49.762	ppm	97
10) Phenol	5.676	94	616906	48.355	ppm	86
11) 2-Chlorophenol	5.794	128	490574	51.788	ppm	98
12) 1,3-Dichlorobenzene	5.949	146	526718	51.424	ppm	99
13) 1,4-Dichlorobenzene	6.035	146	529496	50.994	ppm	99
14) 1,2-Dichlorobenzene	6.195	146	499746	51.000	ppm	99
15) Benzyl alcohol	6.184	108	300700	52.005	ppm	97
16) bis(2-chloroisopropyl)...	6.334	45	493014	41.957	ppm	77
17) 2-Methylphenol	6.329	108	407000	47.716	ppm	91
18) Acetophenone	6.468	105	609185	48.172	ppm	99
19) Hexachloroethane	6.570	117	204393	48.216	ppm	94
20) N-Nitroso-di-n-propyla...	6.479	70	304935	45.427	ppm	90
21) 3&4-Methylphenol	6.505	108	433039	48.849	ppm	98
24) Nitrobenzene	6.660	77	459564	48.433	ppm	94
25) Isophorone	6.933	82	832044	48.798	ppm	98
26) 2-Nitrophenol	7.019	139	268143	57.371	ppm	91
27) 2,4-Dimethylphenol	7.099	107	414724	51.254	ppm	96
28) O,O,O-Triethylphosphor...	7.163	198	220850	52.966	ppm	94
29) bis(2-Chloroethoxy)met...	7.195	93	524593	50.238	ppm	98
30) Benzoic Acid	7.233	105	347080m	49.110	ppm	
31) 2,4-Dichlorophenol	7.308	162	378847	52.650	ppm	99
32) 1,2,4-Trichlorobenzene	7.388	180	422217	52.788	ppm	99
34) Naphthalene	7.473	128	1274815	50.733	ppm	99
35) 4-Chloroaniline	7.554	127	548557	50.076	ppm	98
36) 2,6-Dichlorophenol	7.559	162	361389	51.671	ppm	98
37) Hexachlorobutadiene	7.623	225	237204	54.046	ppm	99

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F254_081420\6F06573.D
Sample : cc248-50
Misc : op81484,S6F254,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1
Acq On : 14 Aug 2020 12:47 pm Operator: marthav

Quant Time: Aug 14 14:25:28 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38)	Caprolactam	7.987	113	145873	51.966	ppm		85
39)	4-Chloro-3-methylphenol	8.153	107	384912	51.903	ppm		96
40)	2-Methylnaphthalene	8.281	141	748900	50.973	ppm		97
41)	1-Methylnaphthalene	8.399	142	817569	50.628	ppm		99
42)	1,2,4,5-Tetrachloroben...	8.479	216	400540	51.940	ppm		100
44)	Hexachlorocyclopentadiene	8.468	237	284288	58.906	ppm		100
45)	2,4,6-Trichlorophenol	8.629	196	279628	55.311	ppm		100
46)	2,4,5-Trichlorophenol	8.677	196	295958	54.935	ppm		97
48)	1,1'-Biphenyl	8.837	154	995424	51.443	ppm		99
49)	2-Chloronaphthalene	8.853	162	785770	51.619	ppm		98
50)	2-Nitroaniline	8.987	65	229406	48.130	ppm		91
51)	p-Dinitrobenzene	9.158	75	161270	50.704	ppm		87
52)	Acenaphthylene	9.335	152	1190984	51.436	ppm		99
53)	Dimethylphthalate	9.222	163	906339	52.422	ppm		100
54)	m-Dinitrobenzene	9.244	168	170192	54.420	ppm		83
55)	2,6-Dinitrotoluene	9.281	165	225894	56.262	ppm	#	68
56)	o-Dinitrobenzene	9.340	50	120095	40.279	ppm		87
57)	Acenaphthene	9.543	153	781184	50.803	ppm		98
58)	3-Nitroaniline	9.479	138	246549	53.225	ppm		91
59)	2,4-Dinitrophenol	9.602	184	143791	58.877	ppm		80
60)	Dibenzofuran	9.752	168	1071487	50.409	ppm		99
61)	2,4-Dinitrotoluene	9.757	165	287995	54.470	ppm		79
62)	4-Nitrophenol	9.725	109	126719	47.829	ppm		92
63)	2,3,5,6-Tetrachlorophenol	9.854	232	240926	54.477	ppm		98
64)	2,3,4,6-Tetrachlorophenol	9.907	232	244210	56.192	ppm		96
65)	Fluorene	10.153	166	852529	49.530	ppm		100
66)	4-Chlorophenyl-phenyle...	10.169	204	436553	51.272	ppm		96
67)	Diethylphthalate	10.062	149	909626	51.855	ppm		99
68)	Thionazin	10.153	97	190280	47.683	ppm		98
69)	4-Nitroaniline	10.207	138	248300	53.040	ppm		95
71)	4,6-Dinitro-2-methylph...	10.239	198	190398	58.044	ppm		95
72)	n-Nitrosodiphenylamine	10.319	169	758789	58.842	ppm		99
73)	Diphenylamine	10.319	169	758789	52.772	ppm		99
74)	1,2-Diphenylhydrazine	10.356	77	848348	46.138	ppm		95
76)	Sulfotep	10.528	97	141813	47.209	ppm		96
77)	Phorate	10.672	75	500709	49.622	ppm		98
78)	4-Bromophenyl-phenylether	10.747	248	262695	54.255	ppm		96
79)	Hexachlorobenzene	10.800	284	297936	53.885	ppm		99
80)	Dimethoate	10.875	87	353926	50.976	ppm		97
81)	Simazine	10.939	201	152507	52.706	ppm		99
82)	Atrazine	10.977	200	257520	52.697	ppm		98
83)	Pentachlorophenol	11.052	266	173928	56.133	ppm		100
84)	Phenanthrene	11.292	178	1222860	49.224	ppm		99
85)	Anthracene	11.351	178	1291667	51.165	ppm		99
86)	Disulfoton	11.298	88	526827	49.892	ppm		96
87)	Carbazole	11.560	167	1155206	50.785	ppm		99
88)	Methyl Parathion	11.736	109	305644	51.731	ppm		99
89)	Di-n-butylphthalate	12.009	149	1470180	51.280	ppm		100
90)	Ethyl Parathion	12.212	97	183164	48.604	ppm		84
91)	Fluoranthene	12.699	202	1342110	51.314	ppm		99
93)	Benzidine	12.886	184	741691	53.788	ppm		99
94)	Pyrene	12.967	202	1328269	56.152	ppm		98
96)	Famphur	13.753	218	406105	54.120	ppm		95
97)	Butylbenzylphthalate	13.844	149	629106	55.508	ppm		99

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F254_081420\6F06573.D
Sample : cc248-50
Misc : op81484,S6F254,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1
Acq On : 14 Aug 2020 12:47 pm Operator: marthav

Quant Time: Aug 14 14:25:28 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

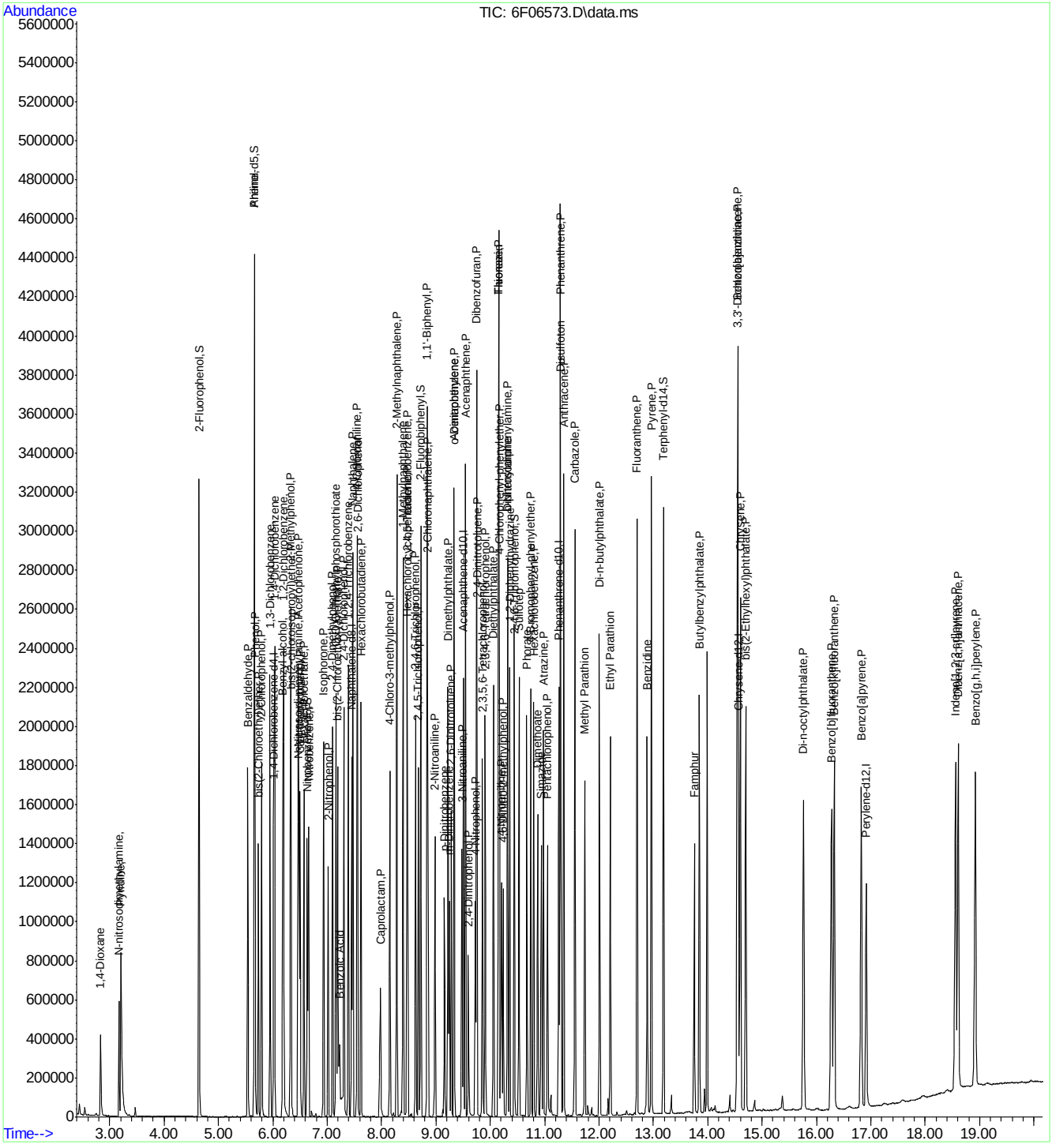
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
98)	3,3'-Dichlorobenzidine	14.544	252	460934	53.834	ppm	99
99)	Benzo[a]anthracene	14.550	228	1152473	52.077	ppm	98
100)	Chrysene	14.603	228	1117731	52.057	ppm	99
101)	bis(2-Ethylhexyl)phtha...	14.699	149	838788	52.985	ppm	99
103)	Di-n-octylphthalate	15.758	149	1397610	55.191	ppm	98
104)	Benzo[b]fluoranthene	16.277	252	1078168	52.470	ppm	100
105)	Benzo[k]fluoranthene	16.331	252	1084797	50.760	ppm	99
106)	Benzo[a]pyrene	16.823	252	1014498	53.162	ppm	99
107)	Indeno[1,2,3-cd]pyrene	18.561	276	1053856	59.318	ppm	98
108)	Dibenz[a,h]anthracene	18.609	278	1090429	57.484	ppm	99
109)	Benzo[g,h,i]perylene	18.925	276	1060001	55.277	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F254_081420\6F06573.D
Sample : cc248-50
Misc : op81484,S6F254,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1
Acq On : 14 Aug 2020 12:47 pm Operator: marthav

Quant Time: Aug 14 14:25:28 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625



Manual Integration Approval Summary

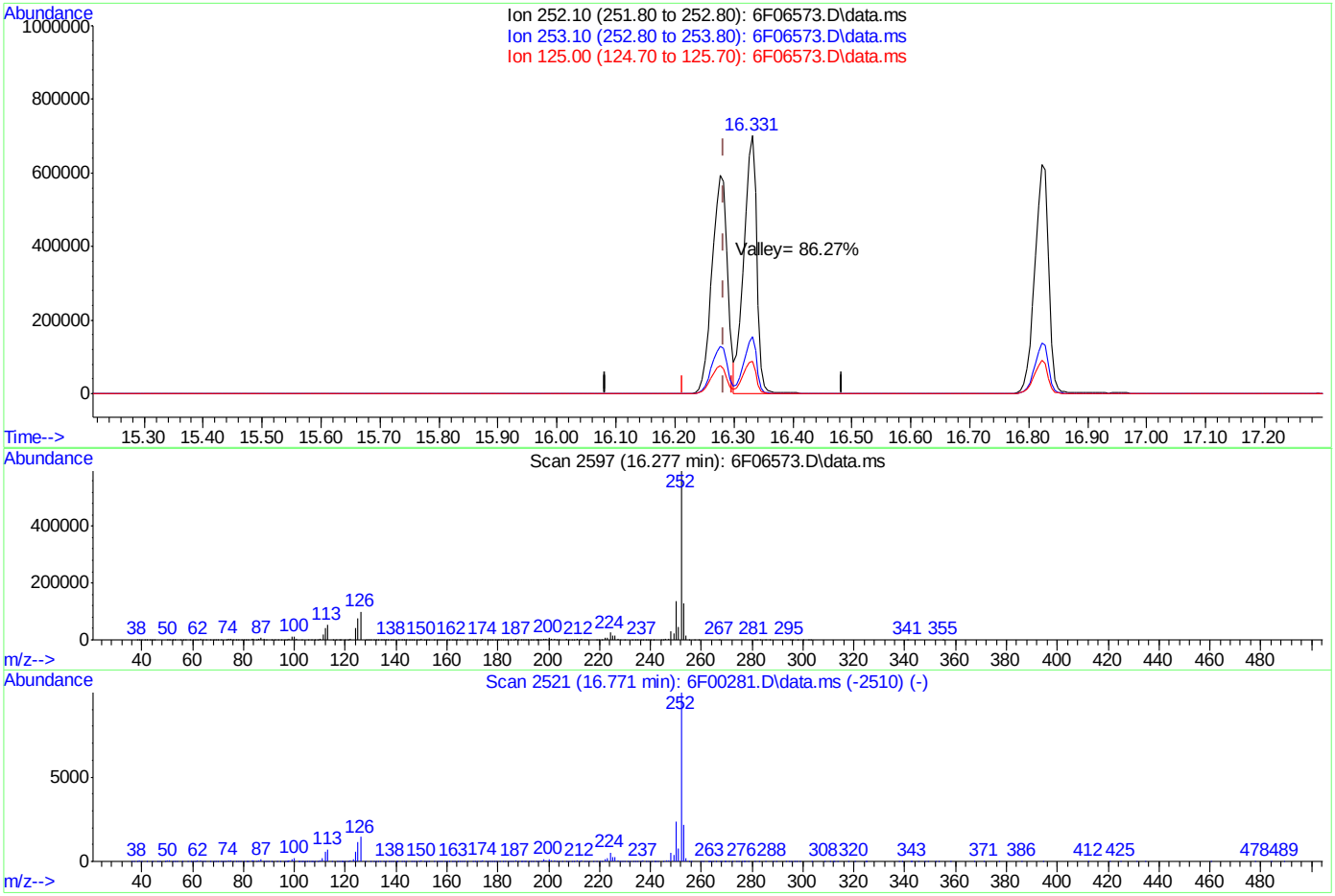
Sample Number:	S6F254-CC248	**Method:**	SW846 8270D
Lab FileID:	6F06573.D	**Analyst approved:**	08/14/20 14:29 Martha Valls
Injection Time:	08/14/20 12:47	**Supervisor approved:**	08/14/20 14:37 Naresh Jiawan

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic Acid	65-85-0		7.23	Split peak

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F254_081420\6F06573.D
Sample : cc248-50
Misc : op81484,S6F254,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1
Acq On : 14 Aug 2020 12:47 pm Operator: marthav

Quant Time: Aug 14 14:08:44 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625



TIC: 6F06573.D\data.ms

(104) Benzo[b]fluoranthene (P)

16.277min (-0.006) 52.47ppm

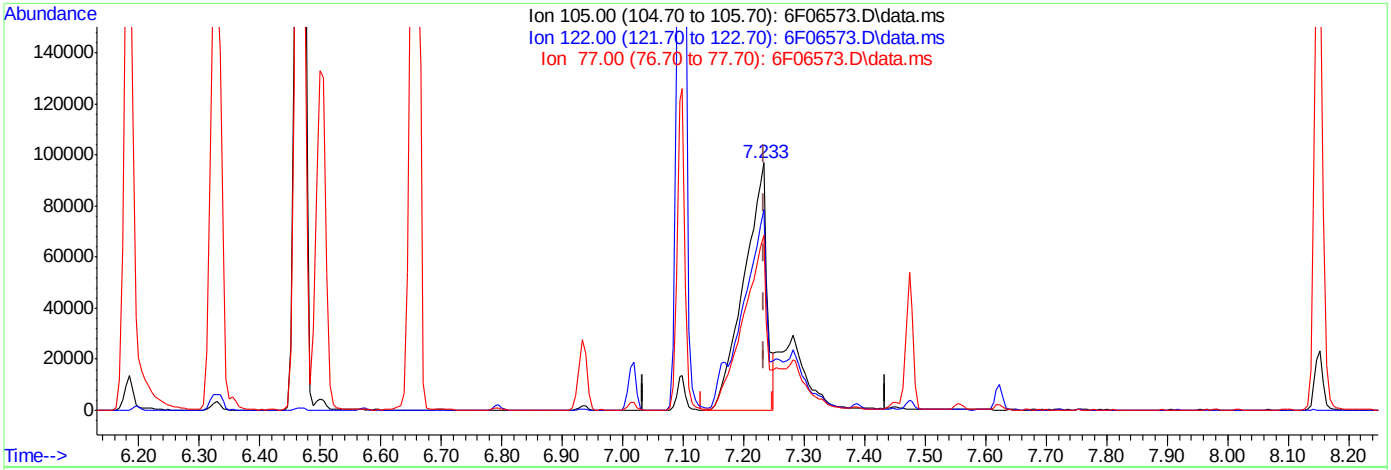
response 1078168

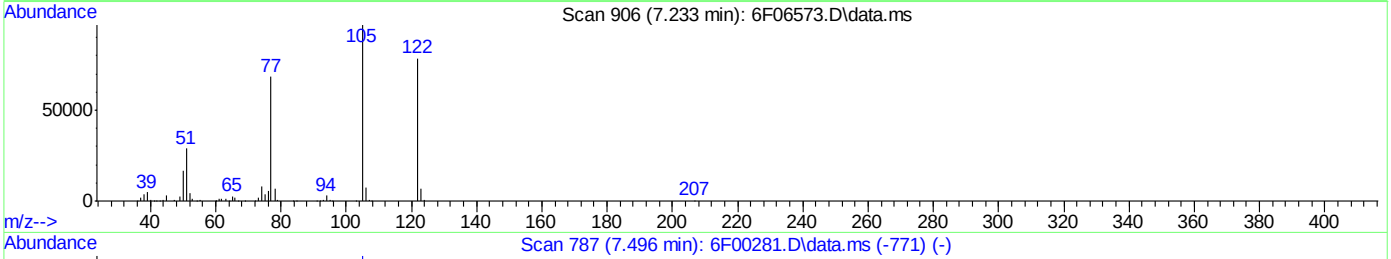
Ion	Exp%	Act%
252.10	100	100
253.10	21.80	21.68
125.00	12.80	12.99
0.00	0.00	0.00

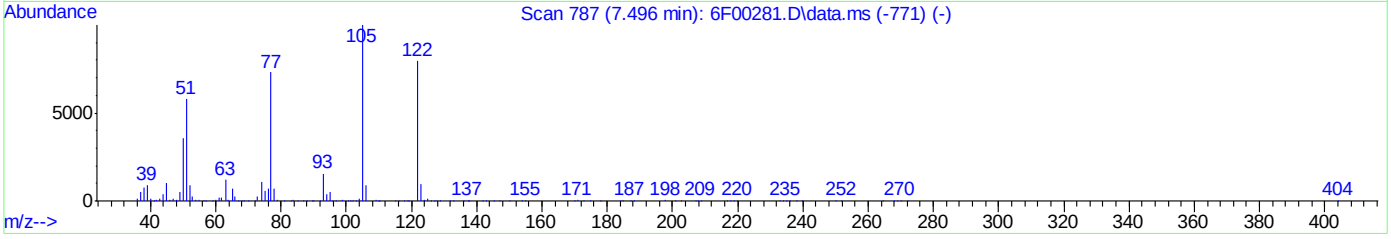
Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F254_081420\6F06573.D
Sample : cc248-50
Misc : op81484,S6F254,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1
Acq On : 14 Aug 2020 12:47 pm Operator: marthav

Quant Time: Aug 14 14:25:14 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625







TIC: 6F06573.D\data.ms

(30) Benzoic Acid

7.233min (-0.002) 37.88ppm

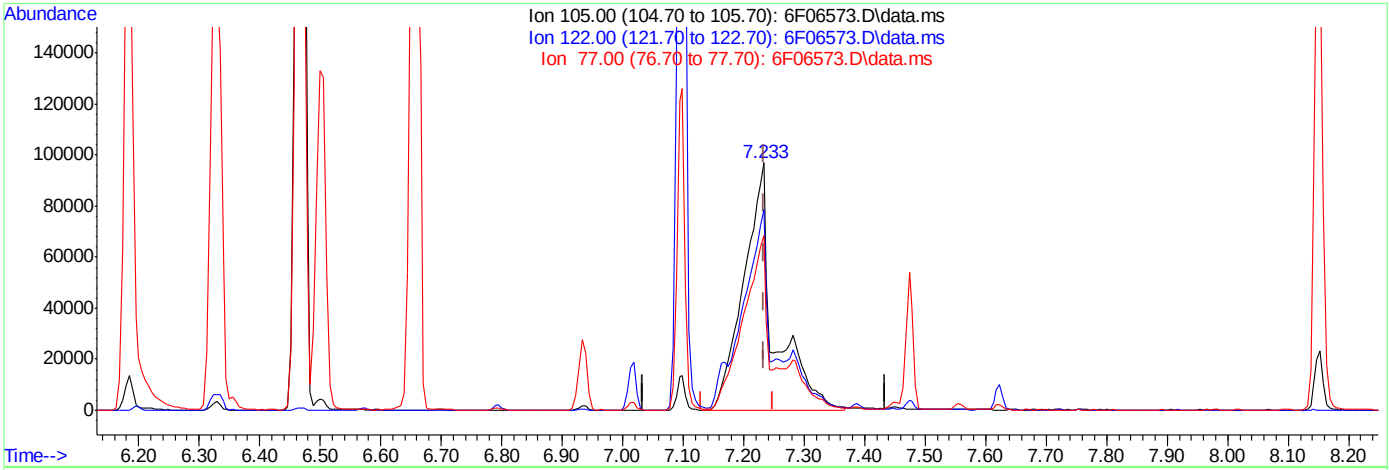
response 255817

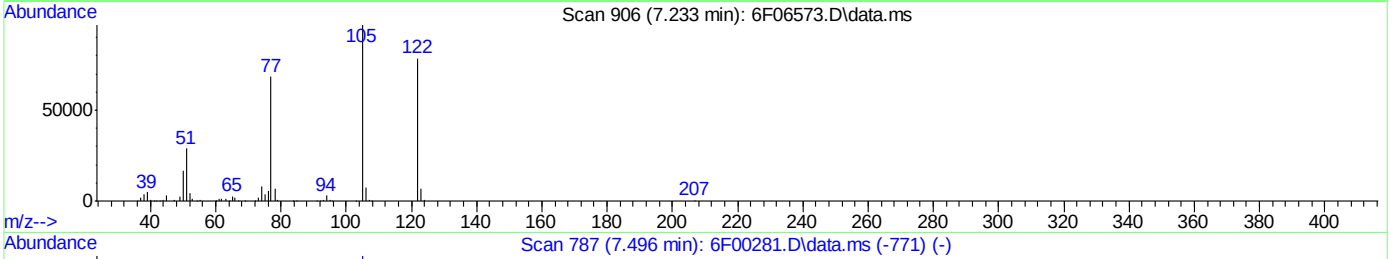
Ion	Exp%	Act%
105.00	100	100
122.00	83.10	79.70
77.00	77.30	70.38
0.00	0.00	0.00

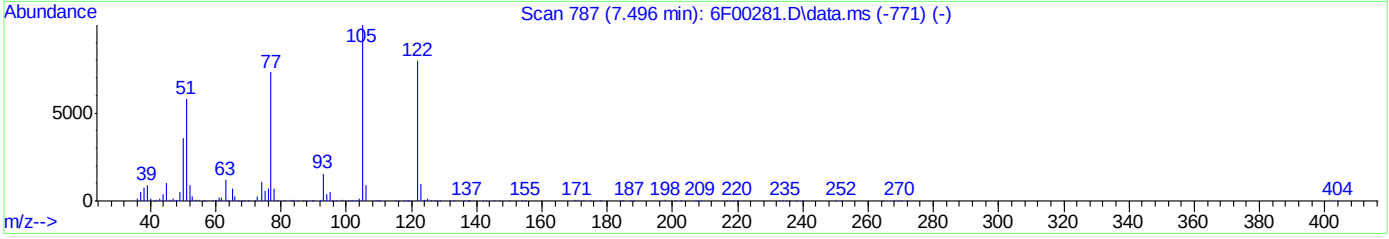
Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F254_081420\6F06573.D
Sample : cc248-50
Misc : op81484,S6F254,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1
Acq On : 14 Aug 2020 12:47 pm Operator: marthav

Quant Time: Aug 14 14:25:14 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625







TIC: 6F06573.D\data.ms

(30) Benzoic Acid

7.233min (-0.002) 49.11ppm m

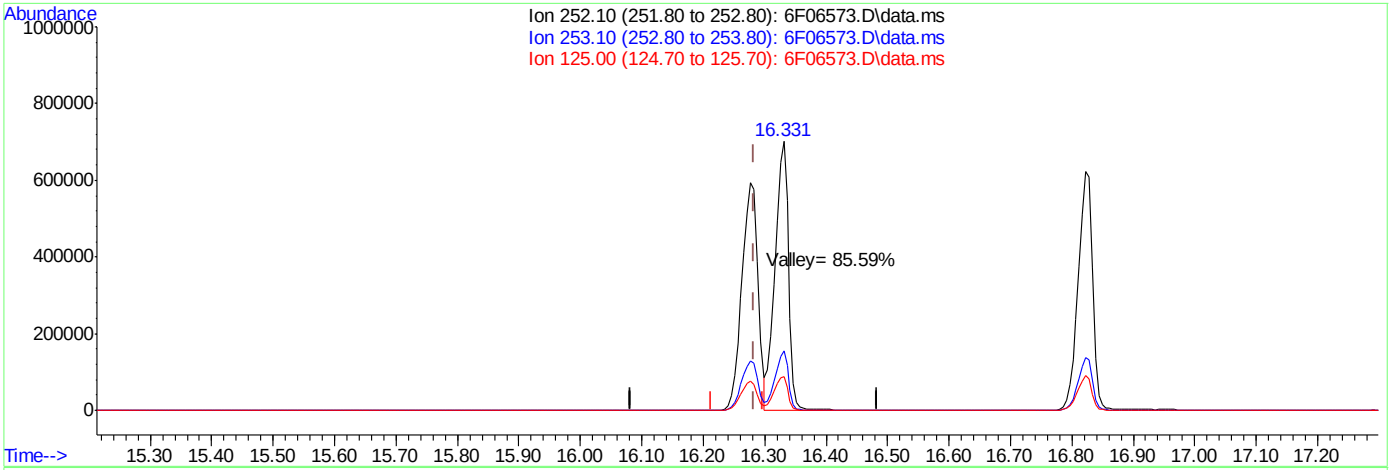
response 347080

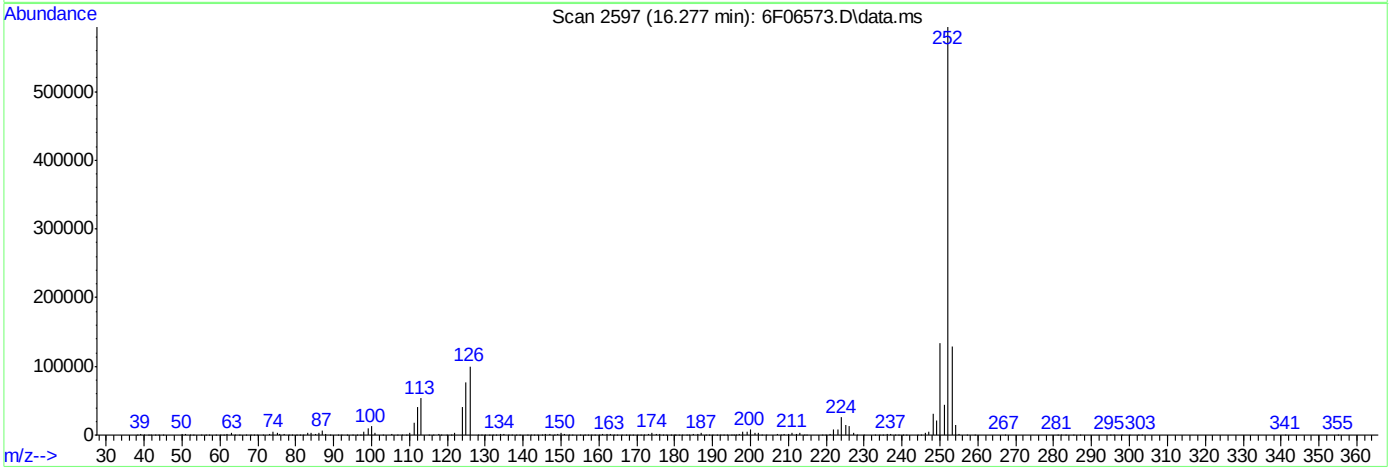
Ion	Exp%	Act%
105.00	100	100
122.00	83.10	81.03
77.00	77.30	70.66
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F254_081420\6F06573.D
Sample : cc248-50
Misc : op81484,S6F254,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1
Acq On : 14 Aug 2020 12:47 pm Operator: marthav

Quant Time: Aug 14 14:25:28 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625





TIC: 6F06573.D\data.ms

(104) Benzo[b]fluoranthene (P)

16.277min (-0.006) 52.47ppm

response 1078168

Ion	Exp%	Act%
252.10	100	100
253.10	21.80	21.68
125.00	12.80	12.99
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 07/22/20 17:04

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10833.D
Acq On : 21 Jul 2020 1:31 pm
Operator : fouads
Sample : ic472-1
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 21 16:22:34 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration

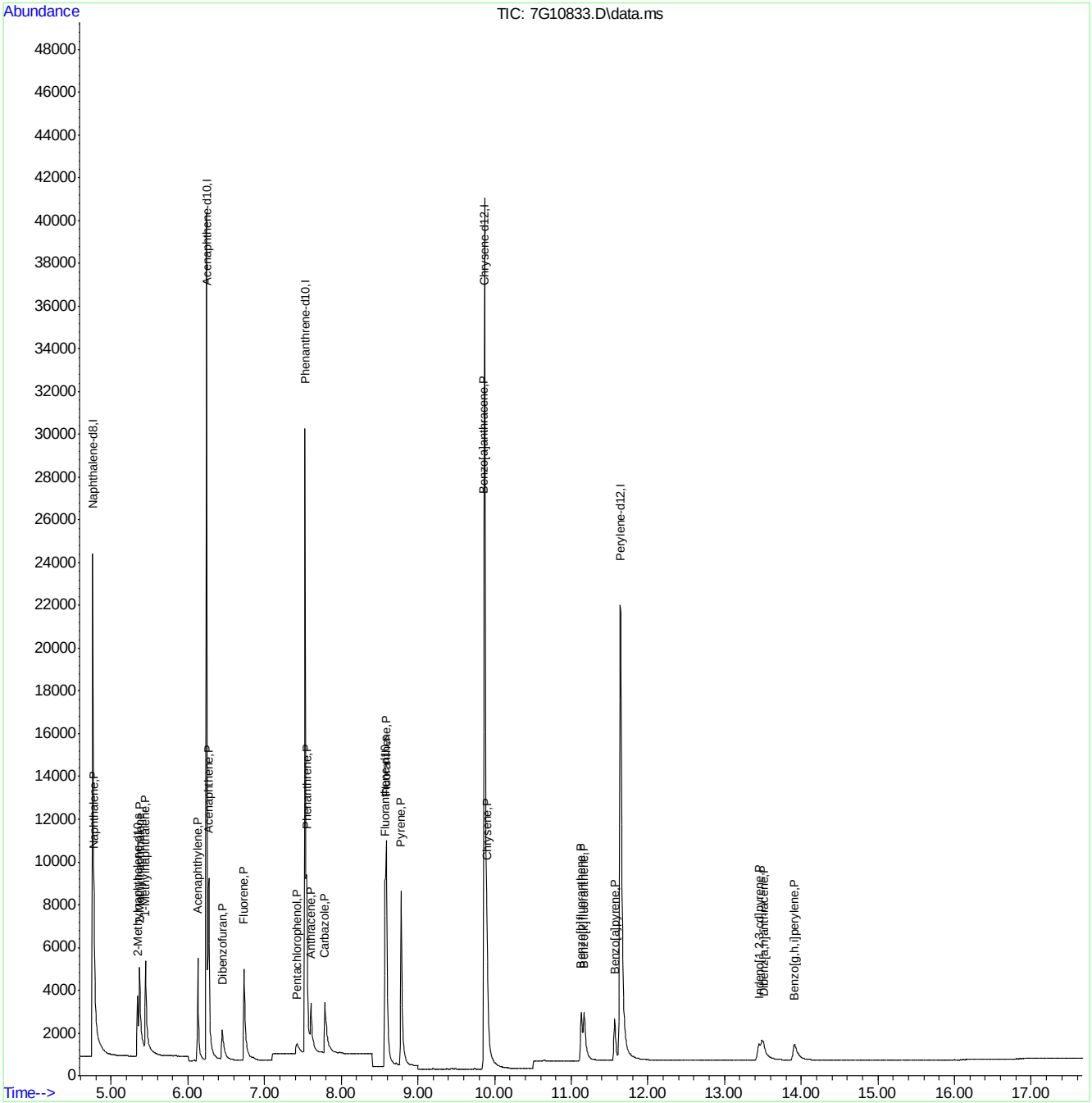
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.758	136	23994	4.00	ppm	-0.01
6) Acenaphthene-d10	6.244	164	13702	4.00	ppm	-0.01
11) Phenanthrene-d10	7.528	188	24543	4.00	ppm	-0.01
18) Chrysene-d12	9.872	240	38114	4.00	ppm	-0.01
22) Perylene-d12	11.639	264	32339	4.00	ppm	-0.02
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.346	152	2098	0.52	ppm	-0.02
Spiked Amount 10.000	Range 50 - 150		Recovery =	5.20%#		
17) Fluoranthene-d10	8.573	212	7444	0.53	ppm	-0.03
Spiked Amount 10.000	Range 50 - 150		Recovery =	5.30%#		
Target Compounds						Qvalue
2) Naphthalene	4.775	128	4289	0.56	ppm	98
3) 2-Methylnaphthalene	5.370	142	2500	0.43	ppm	97
5) 1-Methylnaphthalene	5.447	142	3106	0.56	ppm	91
7) Acenaphthylene	6.128	152	4559	0.52	ppm	99
8) Acenaphthene	6.273	153	3108	0.54	ppm	97
9) Dibenzofuran	6.447	168	2138	0.53	ppm	100
10) Fluorene	6.732	166	3338	0.54	ppm	100
12) Pentachlorophenol	7.424	266	516m	0.70	ppm	
13) Phenanthrene	7.549	178	4926	0.55	ppm	99
14) Anthracene	7.605	178	2668	0.30	ppm	99
15) Carbazole	7.785	167	3902	0.26	ppm	95
16) Fluoranthene	8.588	202	9291	0.54	ppm	99
19) Pyrene	8.782	202	9492	0.53	ppm	100
20) Benzo[a]anthracene	9.862	228	3464	0.26	ppm	98
21) Chrysene	9.898	228	4647	0.32	ppm	100
23) Benzo[b]fluoranthene	11.129	252	2712	0.21	ppm	99
24) Benzo[k]fluoranthene	11.168	252	3873	0.26	ppm	99
25) Benzo[a]pyrene	11.566	252	2679	0.24	ppm	100
26) Indeno[1,2,3-cd]pyrene	13.449	276	1438m	0.29	ppm	
27) Dibenz[a,h]anthracene	13.507	278	1764	0.34	ppm	99
28) Benzo[g,h,i]perylene	13.910	276	2089	0.39	ppm	92

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10833.D
Acq On : 21 Jul 2020 1:31 pm
Operator : fouads
Sample : ic472-1
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 21 16:22:34 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration



Manual Integration Approval Summary

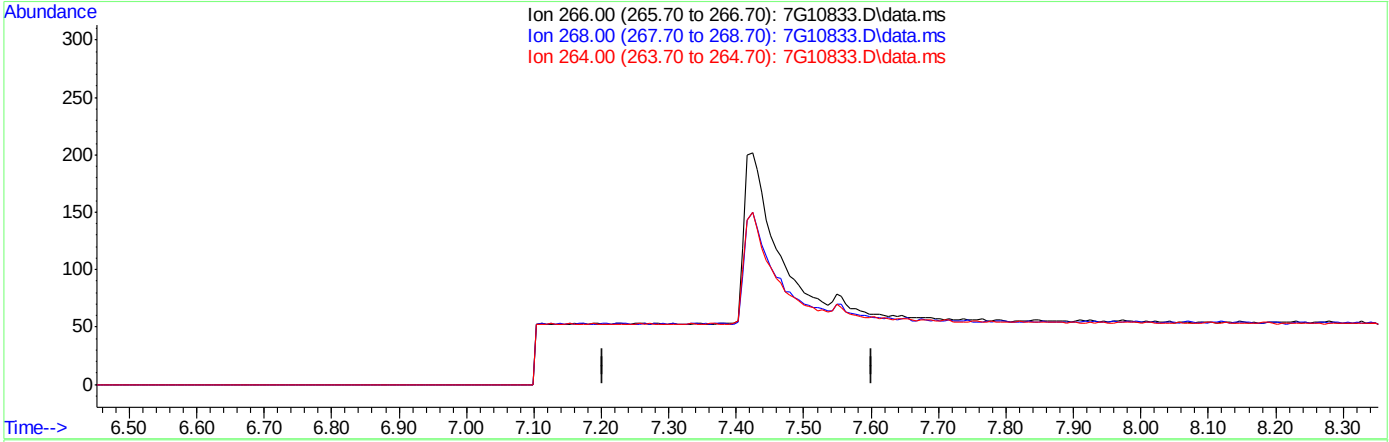
Sample Number: S7G472-IC472
Lab FileID: 7G10833.D
Injection Time: 07/21/20 13:31
Method: SW846 8270D BY SIM
Analyst approved: 07/22/20 13:31 Fouad Sekkar
Supervisor approved: 07/22/20 17:04 Nicole McCampbell

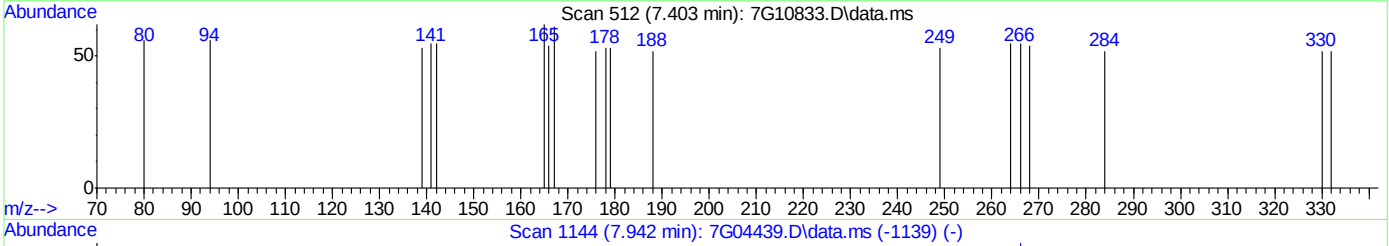
Parameter	CAS	Sig#	R.T. (min.)	Reason
Pentachlorophenol	87-86-5		7.42	Missed peak
Indeno(1,2,3-cd)pyrene	193-39-5		13.45	Missed peak

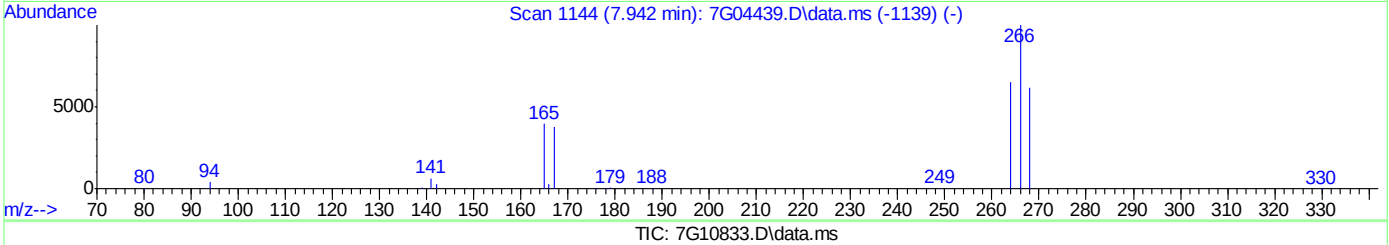
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10833.D
Acq On : 21 Jul 2020 1:31 pm
Operator : fouads
Sample : ic472-1
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 21 16:18:33 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration







TIC: 7G10833.D\data.ms

(12) Pentachlorophenol (P)

7.402min (-7.402) 0.00ppm

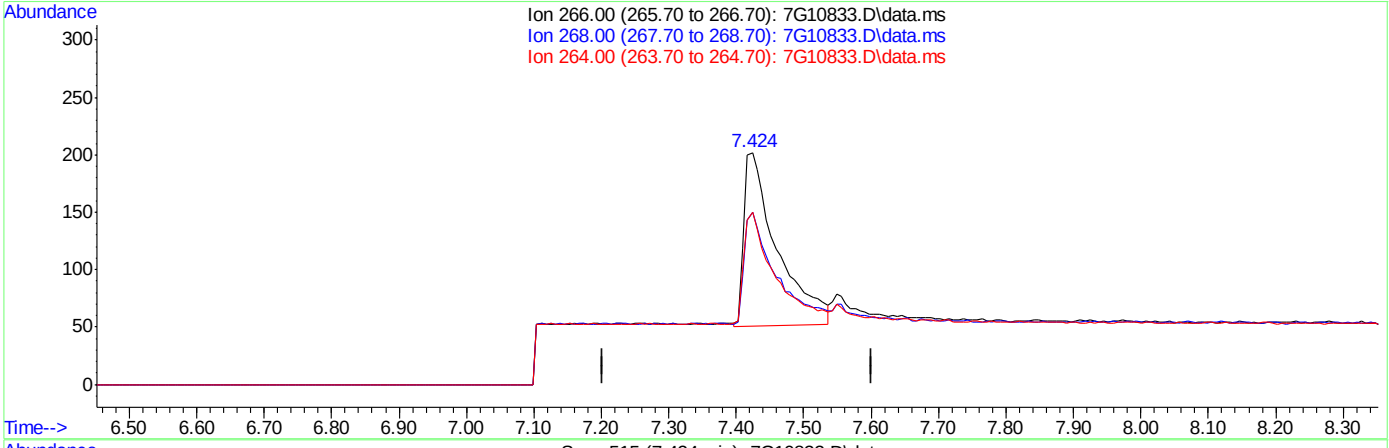
response 0

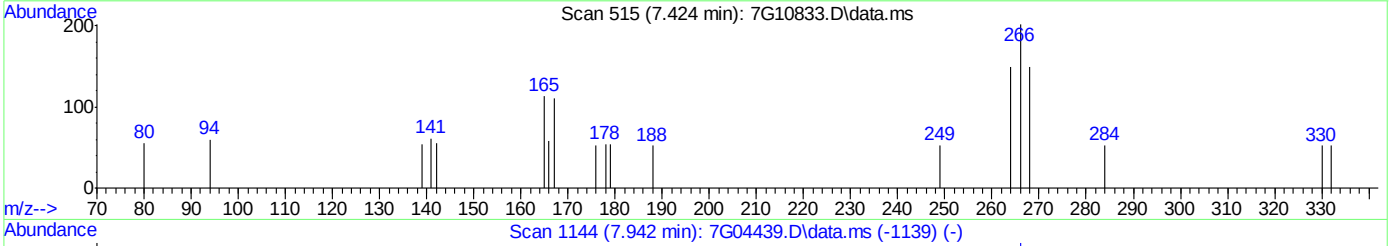
Ion	Exp%	Act%
266.00	100	0.00
268.00	61.80	0.00#
264.00	65.30	0.00#
0.00	0.00	0.00

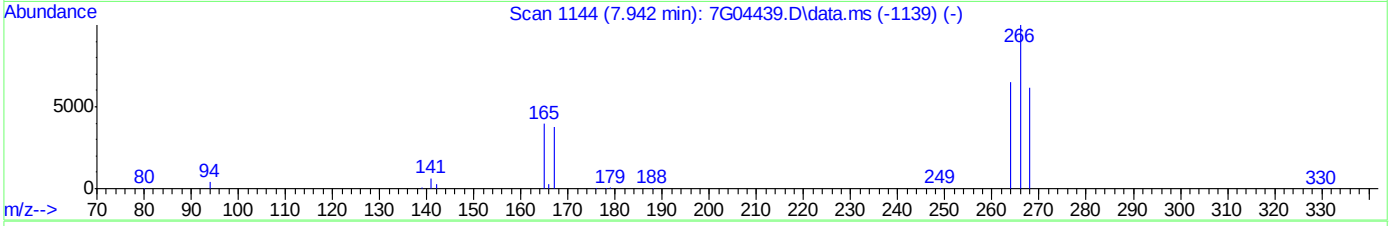
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10833.D
Acq On : 21 Jul 2020 1:31 pm
Operator : fouads
Sample : ic472-1
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 21 16:18:33 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration







TIC: 7G10833.D\data.ms

(12) Pentachlorophenol (P)

7.424min (+0.022) 0.70ppm m

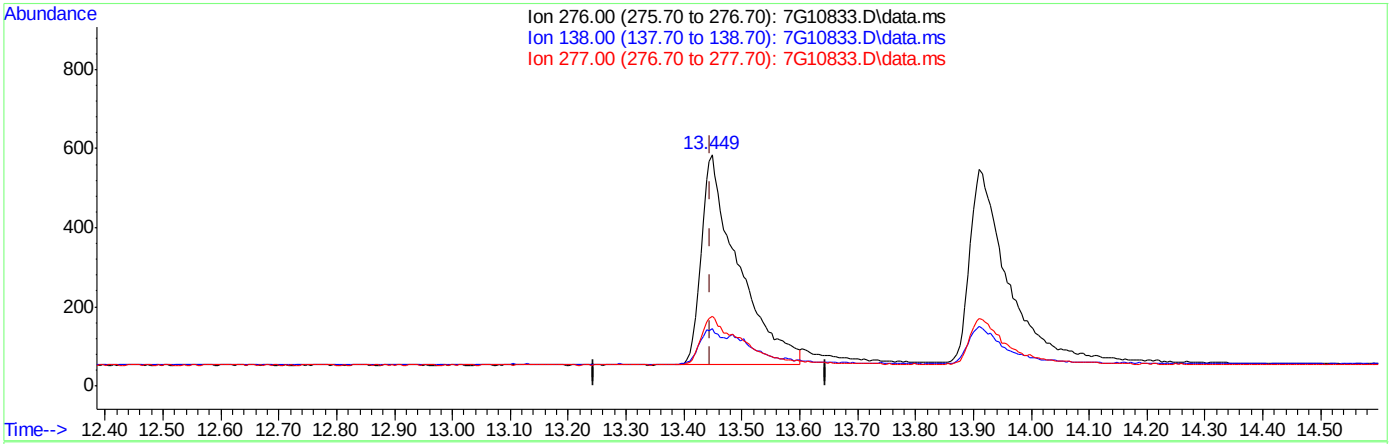
response 516

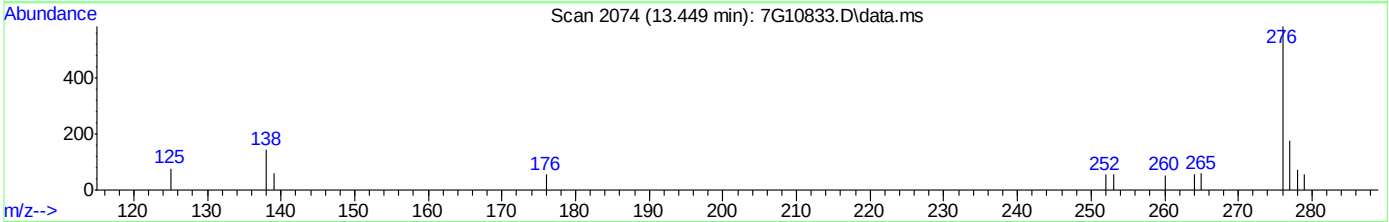
Ion	Exp%	Act%
266.00	100	100
268.00	61.80	74.26
264.00	65.30	74.26
0.00	0.00	0.00

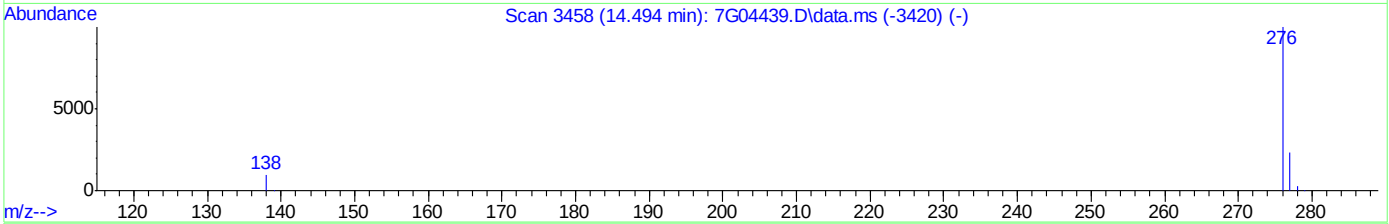
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10833.D
Acq On : 21 Jul 2020 1:31 pm
Operator : fouads
Sample : ic472-1
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 21 16:18:33 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration







TIC: 7G10833.D\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.449min (+0.004) 0.47ppm

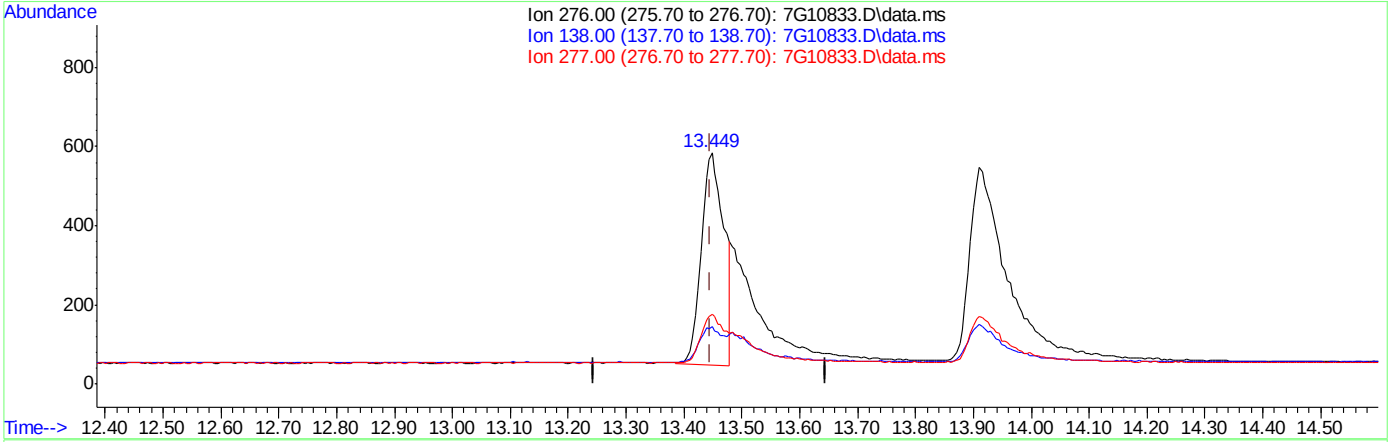
response 2338

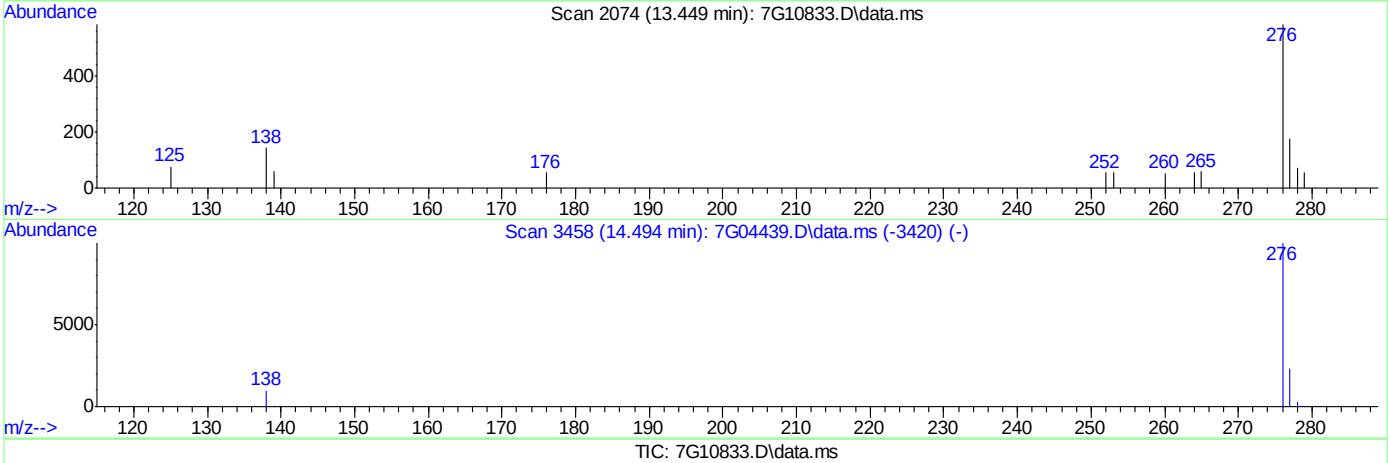
Ion	Exp%	Act%
276.00	100	100
138.00	14.60	16.37
277.00	22.90	23.10
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10833.D
Acq On : 21 Jul 2020 1:31 pm
Operator : fouads
Sample : ic472-1
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 21 16:18:33 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration





TIC: 7G10833.D\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.449min (+0.004) 0.29ppm m

response 1438

Ion	Exp%	Act%
276.00	100	100
138.00	14.60	24.62
277.00	22.90	30.26
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 07/22/20 17:04

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10834.D
Acq On : 21 Jul 2020 1:55 pm
Operator : fouads
Sample : ic472-2
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 21 16:23:38 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration

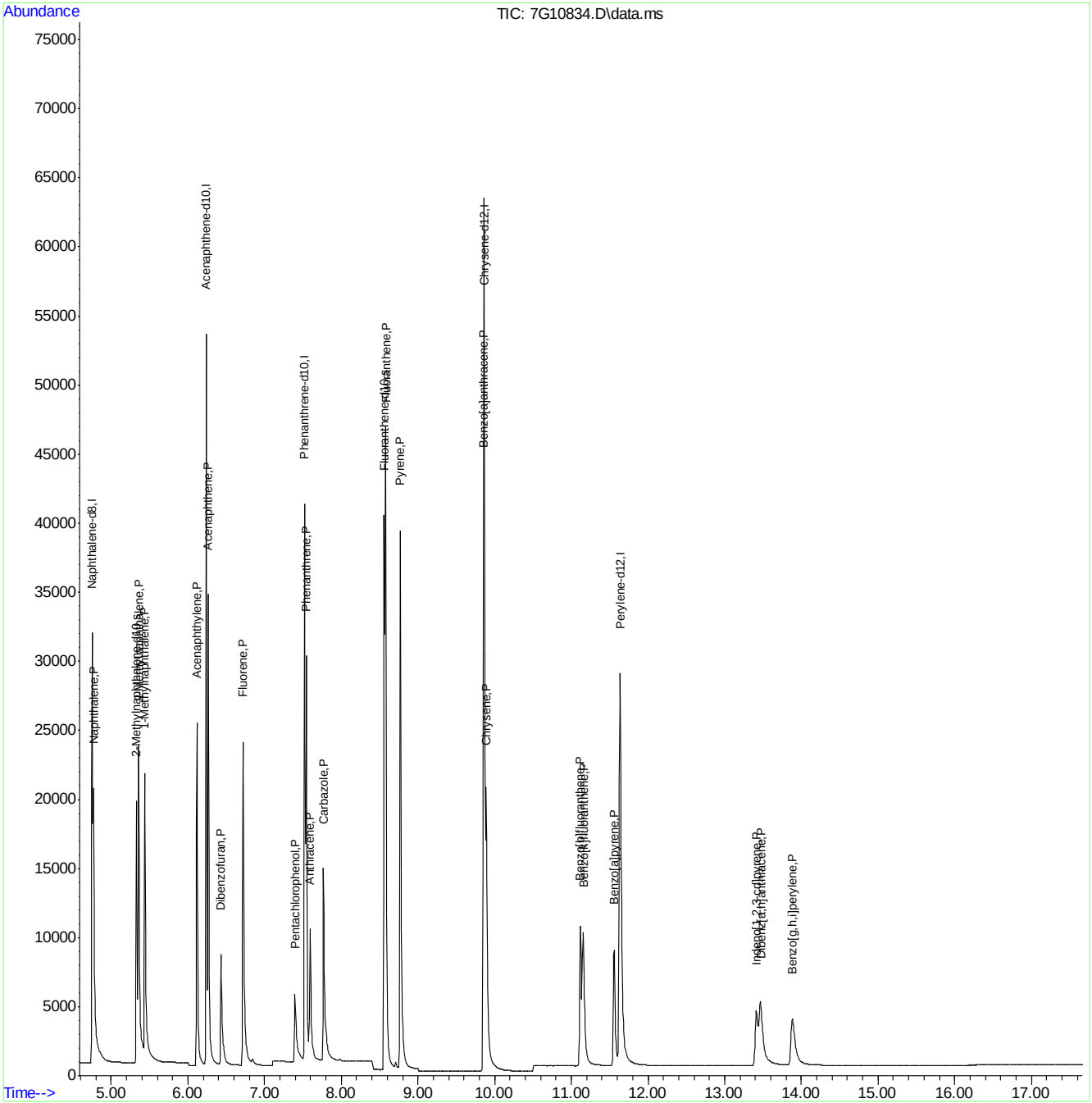
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.752	136	29081	4.00	ppm	-0.02
6) Acenaphthene-d10	6.239	164	16862	4.00	ppm	-0.02
11) Phenanthrene-d10	7.521	188	30203	4.00	ppm	-0.02
18) Chrysene-d12	9.862	240	48257	4.00	ppm	-0.02
22) Perylene-d12	11.636	264	41825	4.00	ppm	-0.03
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.329	152	7918	1.62	ppm	-0.04
Spiked Amount 10.000	Range 50 - 150		Recovery = 16.20%#			
17) Fluoranthene-d10	8.560	212	29862	1.74	ppm	-0.04
Spiked Amount 10.000	Range 50 - 150		Recovery = 17.40%#			
Target Compounds						Qvalue
2) Naphthalene	4.769	128	16703	1.81	ppm	100
3) 2-Methylnaphthalene	5.358	142	11209	1.60	ppm	98
5) 1-Methylnaphthalene	5.435	142	11625	1.74	ppm	84
7) Acenaphthylene	6.118	152	18703	1.74	ppm	99
8) Acenaphthene	6.263	153	12399	1.77	ppm	94
9) Dibenzofuran	6.432	168	8863	1.80	ppm	95
10) Fluorene	6.717	166	13533	1.79	ppm	100
12) Pentachlorophenol	7.396	266	3019	3.31	ppm	98
13) Phenanthrene	7.542	178	19355	1.76	ppm	99
14) Anthracene	7.591	178	10083	0.91	ppm	100
15) Carbazole	7.764	167	16301	0.88	ppm	97
16) Fluoranthene	8.579	202	36358	1.73	ppm	99
19) Pyrene	8.769	202	37461	1.66	ppm	98
20) Benzo[a]anthracene	9.855	228	14421	0.85	ppm	99
21) Chrysene	9.891	228	17593	0.97	ppm	99
23) Benzo[b]fluoranthene	11.117	252	12271	0.74	ppm	99
24) Benzo[k]fluoranthene	11.156	252	15759	0.82	ppm	99
25) Benzo[a]pyrene	11.559	252	12673	0.88	ppm	99
26) Indeno[1,2,3-cd]pyrene	13.412	276	7001m	1.08	ppm	
27) Dibenz[a,h]anthracene	13.471	278	8032	1.18	ppm	100
28) Benzo[g,h,i]perylene	13.883	276	9167	1.33	ppm	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10834.D
Acq On : 21 Jul 2020 1:55 pm
Operator : fouads
Sample : ic472-2
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 21 16:23:38 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration



Manual Integration Approval Summary

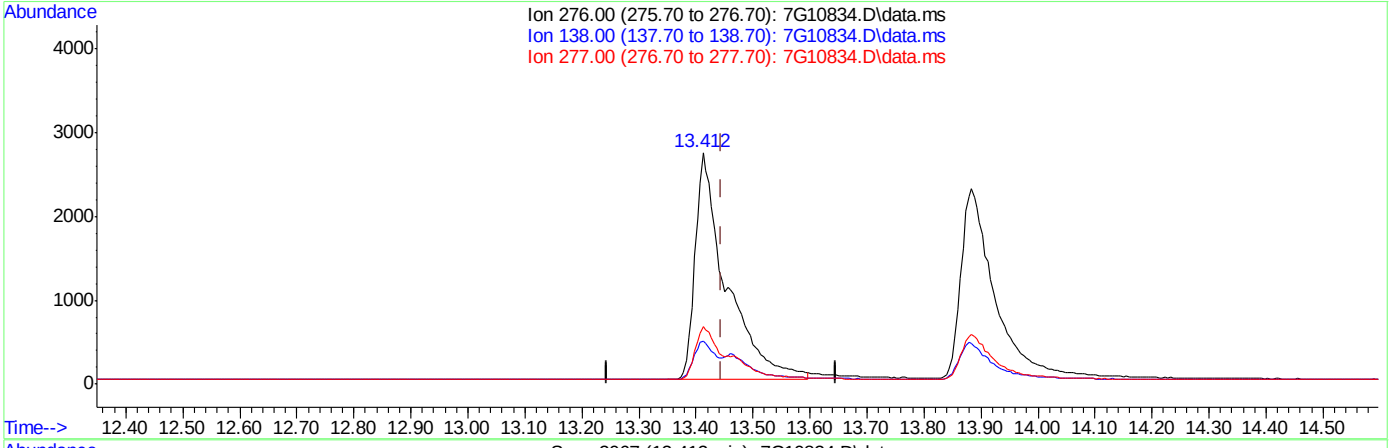
Sample Number: S7G472-IC472
Lab FileID: 7G10834.D
Injection Time: 07/21/20 13:55
Method: SW846 8270D BY SIM
Analyst approved: 07/22/20 13:31 Fouad Sekkar
Supervisor approved: 07/22/20 17:04 Nicole McCampbell

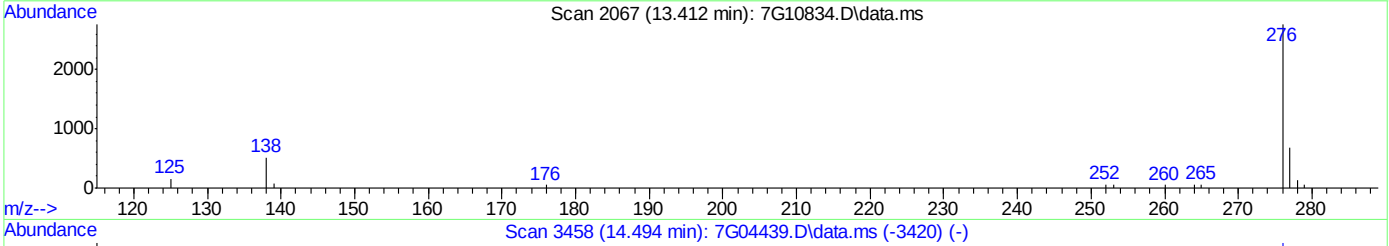
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		13.41	Missed peak

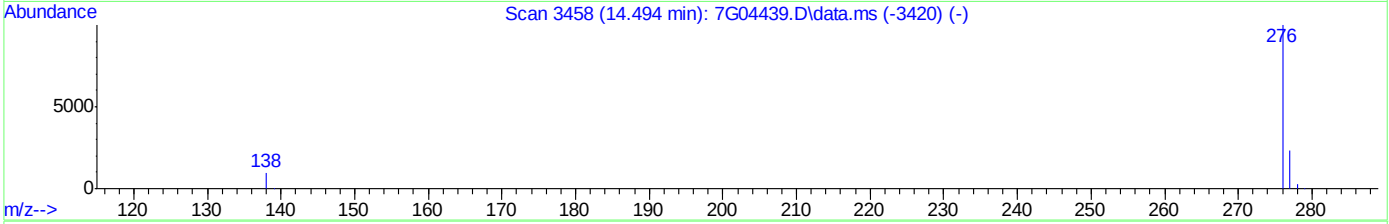
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10834.D
Acq On : 21 Jul 2020 1:55 pm
Operator : fouads
Sample : ic472-2
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 21 16:18:37 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration







TIC: 7G10834.D\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.412min (-0.033) 1.59ppm

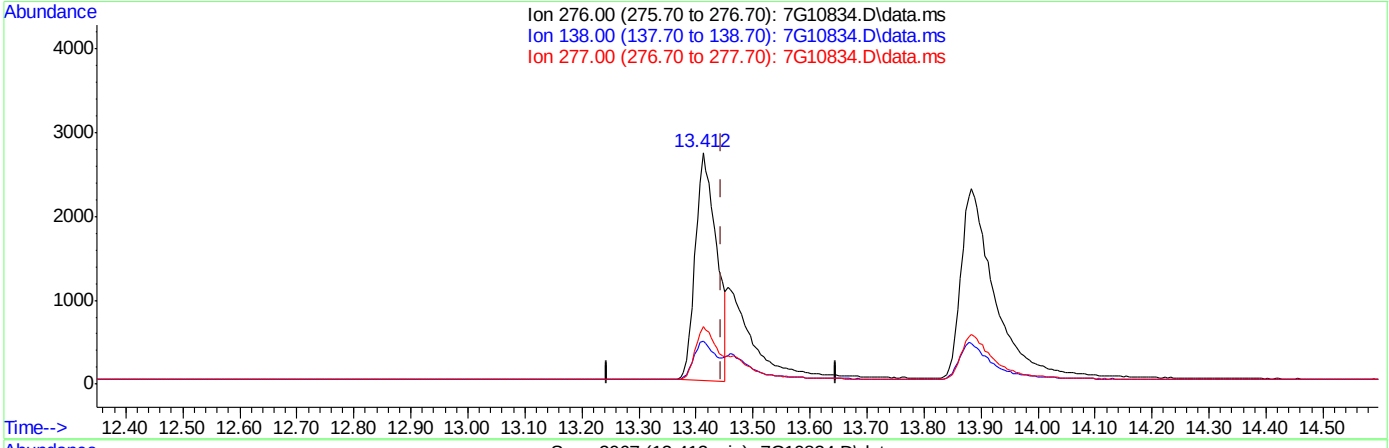
response 10318

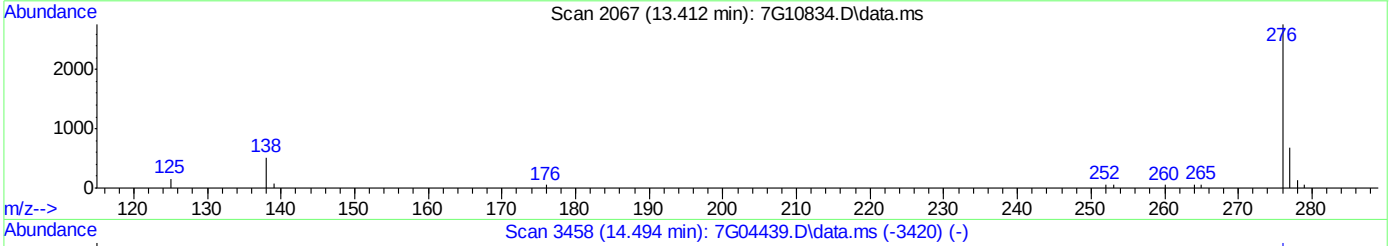
Ion	Exp%	Act%
276.00	100	100
138.00	14.60	16.99
277.00	22.90	23.44
0.00	0.00	0.00

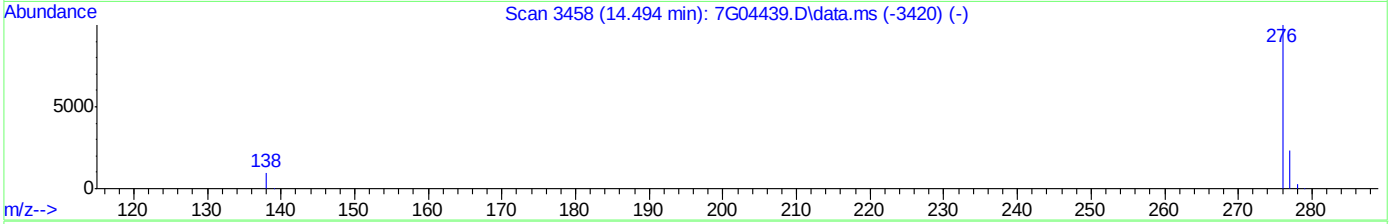
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10834.D
Acq On : 21 Jul 2020 1:55 pm
Operator : fouads
Sample : ic472-2
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 21 16:18:37 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration







TIC: 7G10834.D\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.412min (-0.033) 1.08ppm m

response 7001

Ion	Exp%	Act%
276.00	100	100
138.00	14.60	18.75
277.00	22.90	24.95
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 07/22/20 17:04

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10835.D
Acq On : 21 Jul 2020 2:19 pm
Operator : fouads
Sample : ic472-3
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 21 16:24:24 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration

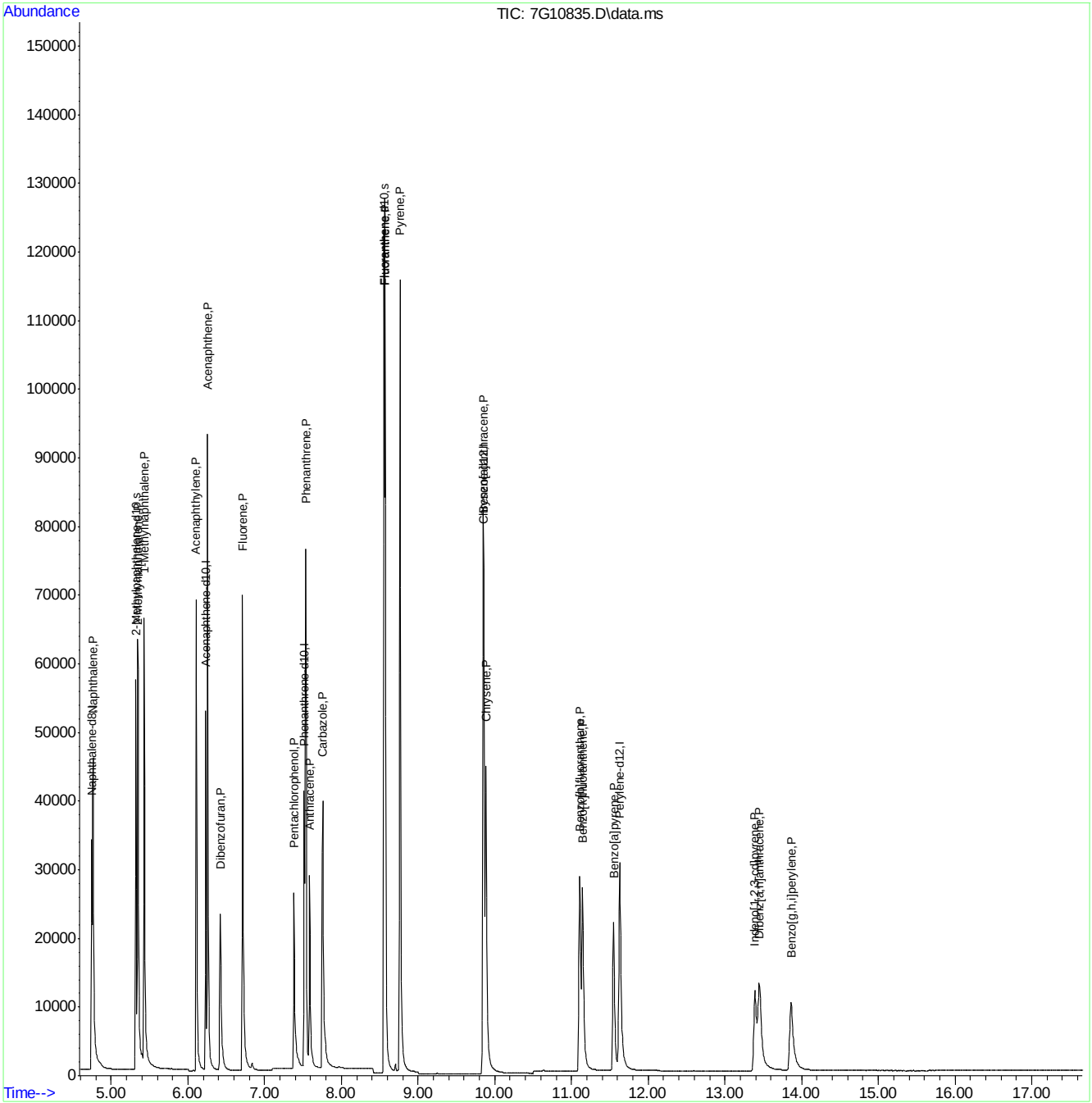
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.746	136	28715	4.00	ppm	-0.02
6) Acenaphthene-d10	6.234	164	16760	4.00	ppm	-0.02
11) Phenanthrene-d10	7.514	188	29264	4.00	ppm	-0.03
18) Chrysene-d12	9.857	240	48140	4.00	ppm	-0.03
22) Perylene-d12	11.627	264	42133	4.00	ppm	-0.04
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.323	152	19987	4.15	ppm	-0.04
Spiked Amount 10.000	Range 50 - 150		Recovery = 41.50%#			
17) Fluoranthene-d10	8.557	212	74078	4.46	ppm	-0.04
Spiked Amount 10.000	Range 50 - 150		Recovery = 44.60%#			
Target Compounds						Qvalue
2) Naphthalene	4.764	128	40296	4.43	ppm	100
3) 2-Methylnaphthalene	5.352	142	28506	4.13	ppm	98
5) 1-Methylnaphthalene	5.429	142	27972	4.23	ppm	89
7) Acenaphthylene	6.108	152	46420	4.35	ppm	98
8) Acenaphthene	6.258	153	30591	4.38	ppm	96
9) Dibenzofuran	6.423	168	21620	4.42	ppm	92
10) Fluorene	6.713	166	32883	4.37	ppm	98
12) Pentachlorophenol	7.382	266	10713	12.12	ppm	97
13) Phenanthrene	7.535	178	47680	4.47	ppm	99
14) Anthracene	7.584	178	23874	2.22	ppm	100
15) Carbazole	7.757	167	40148	2.22	ppm	100
16) Fluoranthene	8.570	202	89721	4.40	ppm	99
19) Pyrene	8.763	202	92682	4.12	ppm	99
20) Benzo[a]anthracene	9.847	228	36400	2.15	ppm	99
21) Chrysene	9.886	228	41406	2.29	ppm	100
23) Benzo[b]fluoranthene	11.107	252	32655	1.96	ppm	99
24) Benzo[k]fluoranthene	11.141	252	37458	1.94	ppm	100
25) Benzo[a]pyrene	11.549	252	31646	2.17	ppm	100
26) Indeno[1,2,3-cd]pyrene	13.393	276	20359m	3.11	ppm	
27) Dibenz[a,h]anthracene	13.446	278	21793	3.19	ppm	99
28) Benzo[g,h,i]perylene	13.864	276	24010	3.45	ppm	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10835.D
Acq On : 21 Jul 2020 2:19 pm
Operator : fouads
Sample : ic472-3
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 21 16:24:24 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration



Manual Integration Approval Summary

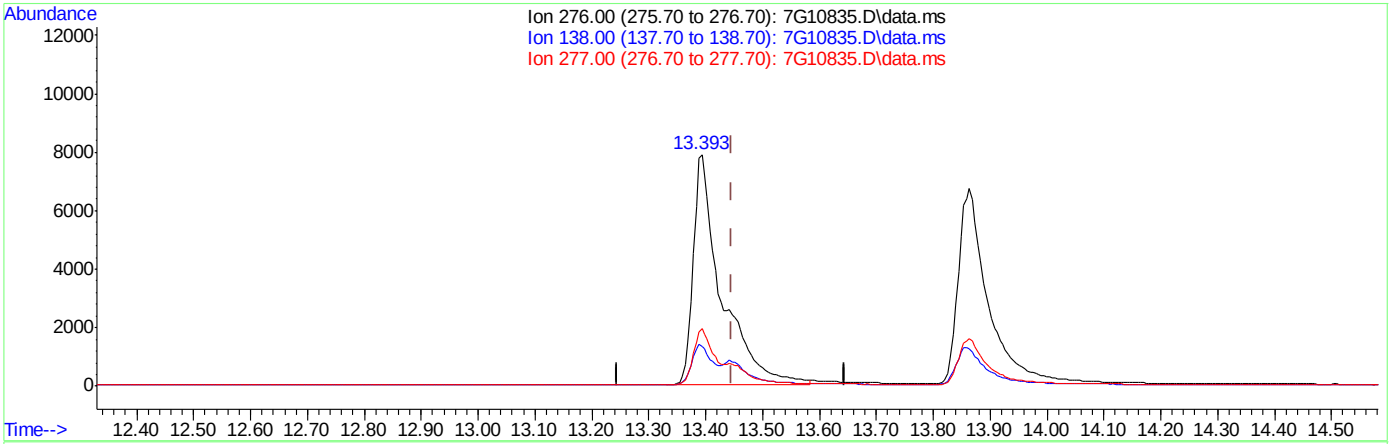
Sample Number: S7G472-IC472
Lab FileID: 7G10835.D
Injection Time: 07/21/20 14:19
Method: SW846 8270D BY SIM
Analyst approved: 07/22/20 13:31 Fouad Sekkar
Supervisor approved: 07/22/20 17:04 Nicole McCampbell

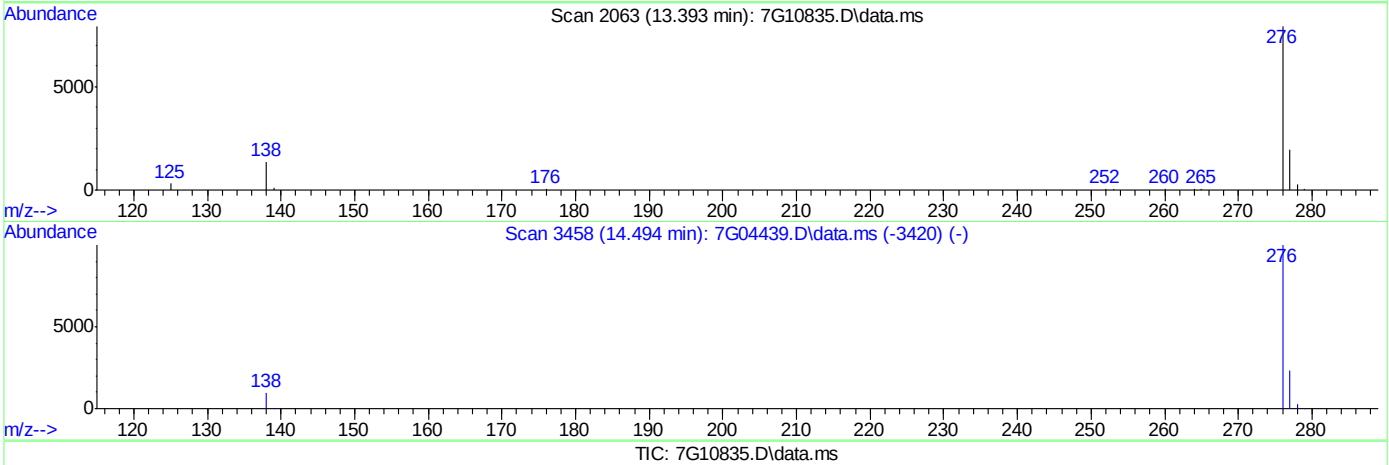
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		13.39	Missed peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10835.D
Acq On : 21 Jul 2020 2:19 pm
Operator : fouads
Sample : ic472-3
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 21 16:18:41 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration





TIC: 7G10835.D\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.393min (-0.052) 4.18ppm

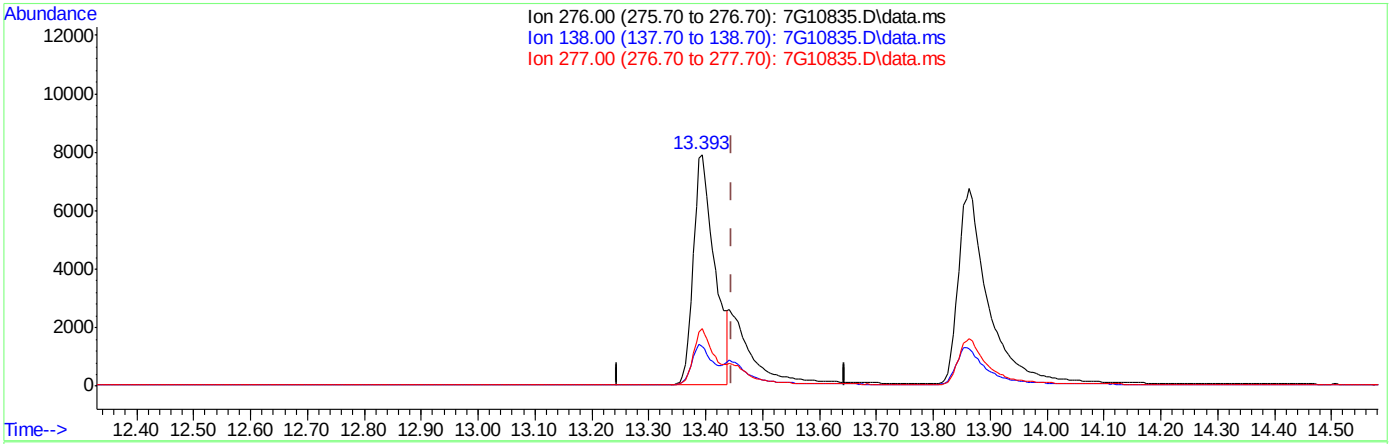
response 27333

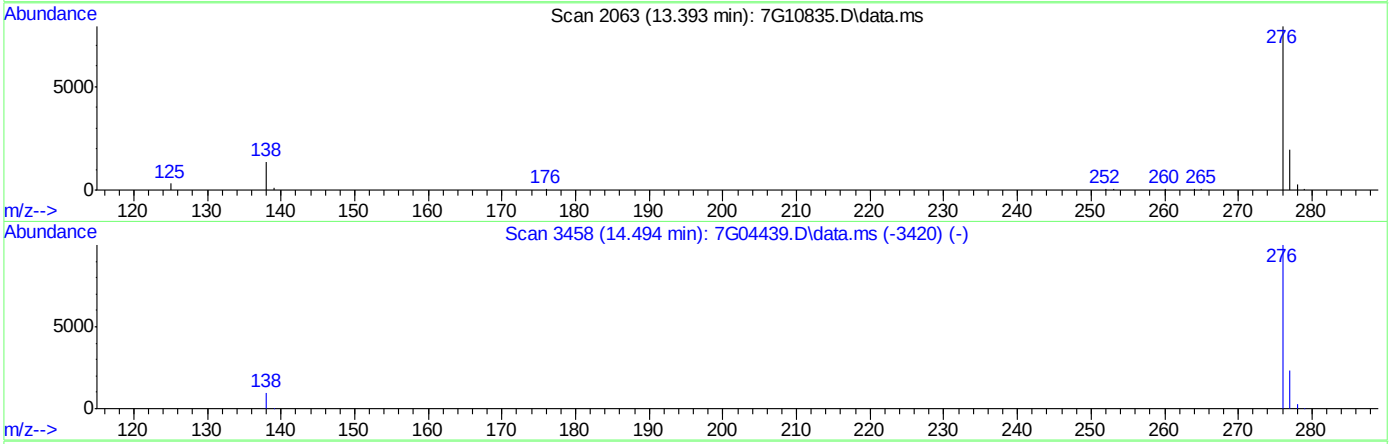
Ion	Exp%	Act%
276.00	100	100
138.00	14.60	16.53
277.00	22.90	24.07
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10835.D
Acq On : 21 Jul 2020 2:19 pm
Operator : fouads
Sample : ic472-3
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 21 16:18:41 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration





TIC: 7G10835.D\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.393min (-0.052) 3.11ppm m

response 20359

Ion	Exp%	Act%
276.00	100	100
138.00	14.60	17.21
277.00	22.90	24.62
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10836.D
Acq On : 21 Jul 2020 2:43 pm
Operator : fouads
Sample : icc472-4
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 21 16:18:45 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration

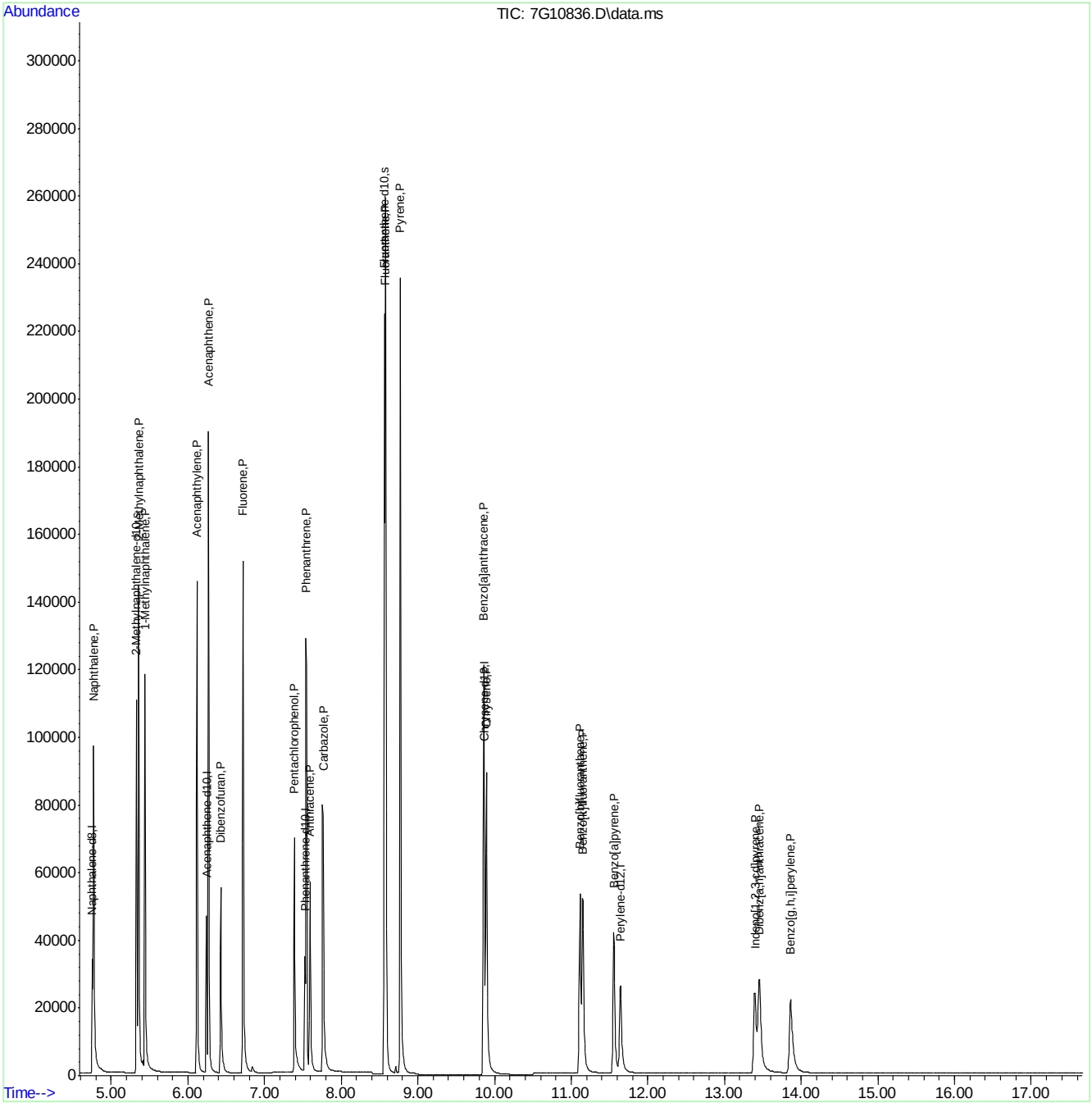
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.752	136	25300	4.00	ppm	-0.02
6) Acenaphthene-d10	6.244	164	14609	4.00	ppm	-0.01
11) Phenanthrene-d10	7.528	188	26093	4.00	ppm	-0.01
18) Chrysene-d12	9.867	240	42851	4.00	ppm	-0.02
22) Perylene-d12	11.644	264	37551	4.00	ppm	-0.02
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.329	152	38049	8.97	ppm	-0.04
Spiked Amount 10.000	Range 50 - 150		Recovery = 89.70%			
17) Fluoranthene-d10	8.567	212	140061	9.46	ppm	-0.03
Spiked Amount 10.000	Range 50 - 150		Recovery = 94.60%			
Target Compounds						Qvalue
2) Naphthalene	4.770	128	74430	9.28	ppm	100
3) 2-Methylnaphthalene	5.358	142	54816	9.01	ppm	99
5) 1-Methylnaphthalene	5.441	142	52432	9.01	ppm	97
7) Acenaphthylene	6.118	152	88343	9.50	ppm	99
8) Acenaphthene	6.268	153	57505	9.45	ppm	98
9) Dibenzofuran	6.428	168	40635	9.53	ppm	95
10) Fluorene	6.718	166	61698	9.42	ppm	98
12) Pentachlorophenol	7.389	266	24644	31.26	ppm	96
13) Phenanthrene	7.542	178	89406	9.41	ppm	98
14) Anthracene	7.591	178	44114	4.59	ppm	100
15) Carbazole	7.764	167	75881	4.72	ppm	100
16) Fluoranthene	8.579	202	169605	9.33	ppm	99
19) Pyrene	8.769	202	173437	8.66	ppm	99
20) Benzo[a]anthracene	9.857	228	68306	4.53	ppm	99
21) Chrysene	9.893	228	77498	4.81	ppm	100
23) Benzo[b]fluoranthene	11.115	252	63976	4.30	ppm	100
24) Benzo[k]fluoranthene	11.149	252	70592	4.10	ppm	99
25) Benzo[a]pyrene	11.556	252	60678	4.68	ppm	100
26) Indeno[1,2,3-cd]pyrene	13.400	276	41853	7.17	ppm	99
27) Dibenz[a,h]anthracene	13.454	278	44122	7.25	ppm	99
28) Benzo[g,h,i]perylene	13.861	276	47313	7.62	ppm	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10836.D
Acq On : 21 Jul 2020 2:43 pm
Operator : fouads
Sample : icc472-4
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

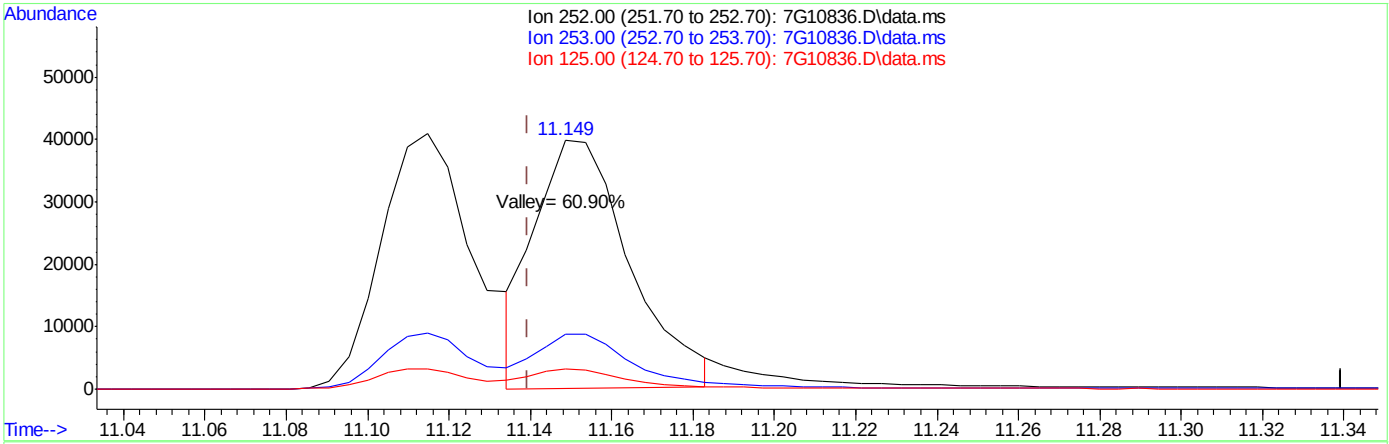
Quant Time: Jul 21 16:18:45 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration

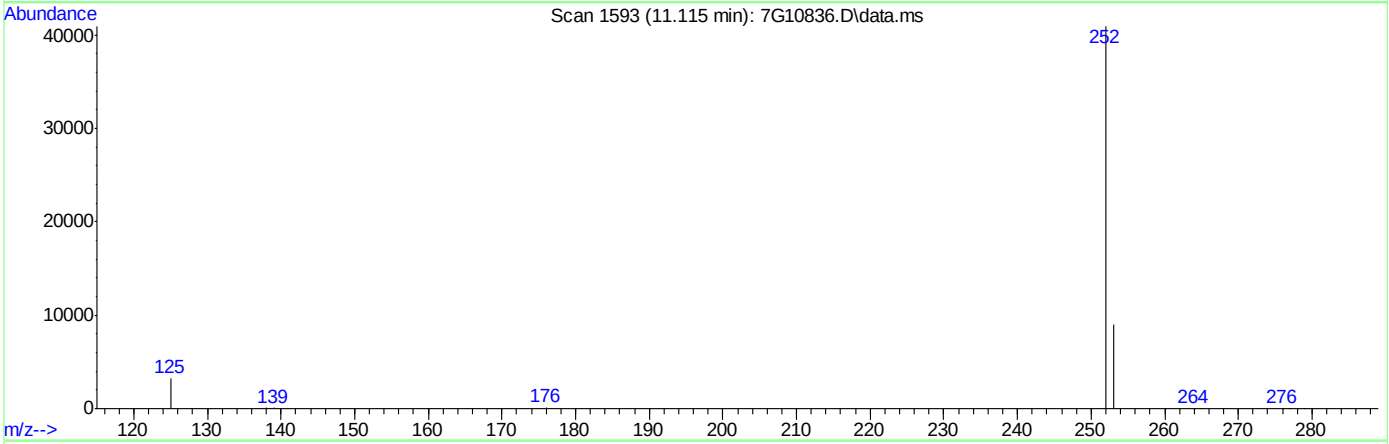


Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10836.D
Acq On : 21 Jul 2020 2:43 pm
Operator : fouads
Sample : icc472-4
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 21 16:18:45 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration





TIC: 7G10836.D\data.ms

(23) Benzo[b]fluoranthene (P)

11.115min (-0.025) 4.30ppm

response 63976

Ion	Exp%	Act%
252.00	100	100
253.00	22.10	22.03
125.00	7.40	7.61
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10837.D
Acq On : 21 Jul 2020 3:07 pm
Operator : fouads
Sample : ic472-5
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 21 16:18:49 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration

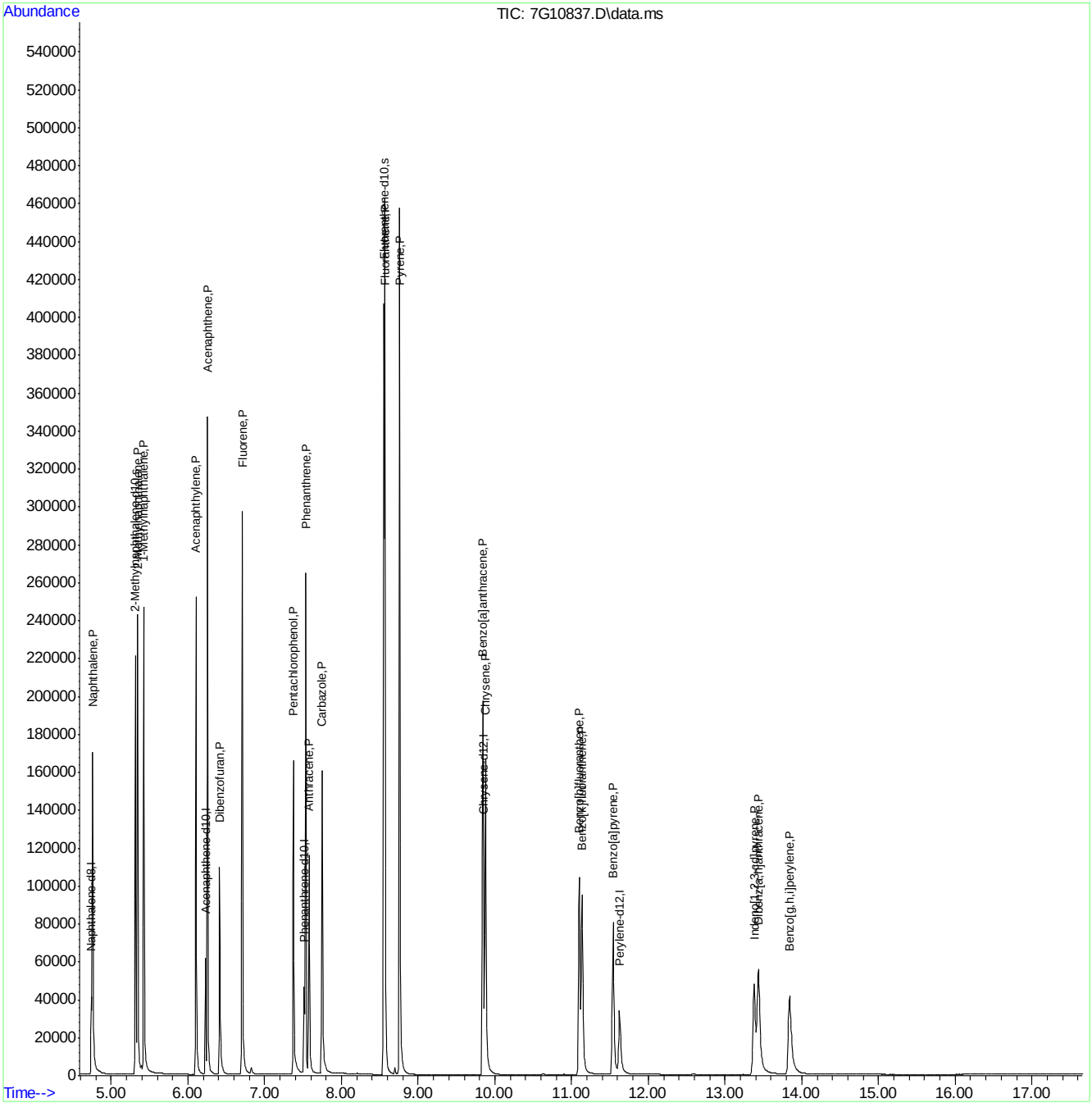
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.740	136	29180	4.00	ppm	-0.03
6) Acenaphthene-d10	6.229	164	17414	4.00	ppm	-0.03
11) Phenanthrene-d10	7.514	188	31347	4.00	ppm	-0.03
18) Chrysene-d12	9.852	240	50970	4.00	ppm	-0.03
22) Perylene-d12	11.624	264	45434	4.00	ppm	-0.04
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.317	152	67210	13.75	ppm	-0.05
Spiked Amount 10.000	Range 50 - 150		Recovery = 137.50%			
17) Fluoranthene-d10	8.554	212	243460	13.69	ppm	-0.04
Spiked Amount 10.000	Range 50 - 150		Recovery = 136.90%			
Target Compounds						Qvalue
2) Naphthalene	4.758	128	128711	13.92	ppm	100
3) 2-Methylnaphthalene	5.347	142	95557	13.62	ppm	97
5) 1-Methylnaphthalene	5.423	142	90151	13.42	ppm	85
7) Acenaphthylene	6.104	152	152885	13.80	ppm	98
8) Acenaphthene	6.253	153	101085	13.94	ppm	95
9) Dibenzofuran	6.413	168	71111	13.99	ppm	91
10) Fluorene	6.708	166	109450	14.01	ppm	97
12) Pentachlorophenol	7.375	266	52326	55.25	ppm	97
13) Phenanthrene	7.535	178	157070	13.76	ppm	99
14) Anthracene	7.577	178	78741	6.82	ppm	100
15) Carbazole	7.744	167	133273	6.89	ppm	93
16) Fluoranthene	8.570	202	298825	13.68	ppm	99
19) Pyrene	8.757	202	307670	12.91	ppm	99
20) Benzo[a]anthracene	9.843	228	121166	6.75	ppm	99
21) Chrysene	9.879	228	131534	6.86	ppm	100
23) Benzo[b]fluoranthene	11.100	252	113926	6.33	ppm	100
24) Benzo[k]fluoranthene	11.134	252	121858	5.85	ppm	98
25) Benzo[a]pyrene	11.542	252	108027	6.88	ppm	100
26) Indeno[1,2,3-cd]pyrene	13.381	276	76251	10.80	ppm	99
27) Dibenz[a,h]anthracene	13.434	278	81827	11.11	ppm	99
28) Benzo[g,h,i]perylene	13.842	276	86286	11.49	ppm	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10837.D
Acq On : 21 Jul 2020 3:07 pm
Operator : fouads
Sample : ic472-5
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 21 16:18:49 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10838.D
Acq On : 21 Jul 2020 3:31 pm
Operator : fouads
Sample : ic472-6
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 21 16:18:53 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration

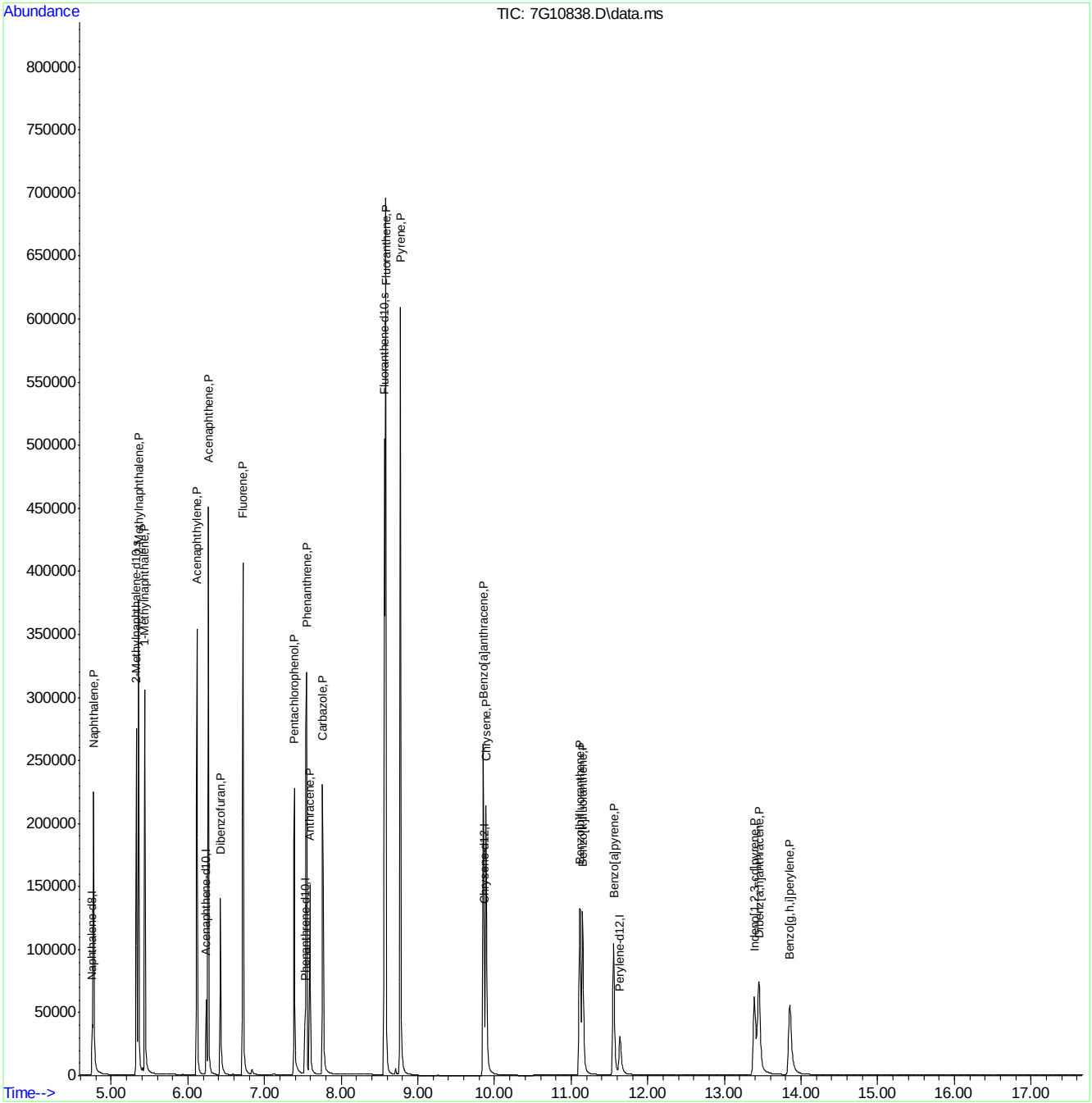
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.752	136	27924	4.00	ppm	-0.02
6) Acenaphthene-d10	6.239	164	16693	4.00	ppm	-0.02
11) Phenanthrene-d10	7.528	188	29642	4.00	ppm	-0.01
18) Chrysene-d12	9.867	240	49529	4.00	ppm	-0.02
22) Perylene-d12	11.636	264	43958	4.00	ppm	-0.03
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.329	152	87127	18.62	ppm	-0.04
Spiked Amount 10.000	Range 50 - 150		Recovery = 186.20%#			
17) Fluoranthene-d10	8.566	212	316580	18.82	ppm	-0.03
Spiked Amount 10.000	Range 50 - 150		Recovery = 188.20%#			
Target Compounds						Qvalue
2) Naphthalene	4.770	128	165015	18.64	ppm	99
3) 2-Methylnaphthalene	5.358	142	126792	18.88	ppm	100
5) 1-Methylnaphthalene	5.435	142	118187	18.39	ppm	82
7) Acenaphthylene	6.118	152	198973	18.73	ppm	99
8) Acenaphthene	6.268	153	129983	18.69	ppm	96
9) Dibenzofuran	6.423	168	89811	18.43	ppm	98
10) Fluorene	6.717	166	141988	18.97	ppm	98
12) Pentachlorophenol	7.389	266	73035	81.55	ppm	95
13) Phenanthrene	7.549	178	204799	18.97	ppm	98
14) Anthracene	7.591	178	101141	9.27	ppm	99
15) Carbazole	7.757	167	170049	9.30	ppm	93
16) Fluoranthene	8.582	202	386576	18.71	ppm	99
19) Pyrene	8.772	202	403389	17.42	ppm	99
20) Benzo[a]anthracene	9.855	228	156963	9.00	ppm	100
21) Chrysene	9.891	228	169372	9.09	ppm	98
23) Benzo[b]fluoranthene	11.112	252	146078	8.39	ppm	99
24) Benzo[k]fluoranthene	11.151	252	161554	8.02	ppm	99
25) Benzo[a]pyrene	11.554	252	141460	9.32	ppm	100
26) Indeno[1,2,3-cd]pyrene	13.393	276	99407	14.56	ppm	98
27) Dibenz[a,h]anthracene	13.451	278	109943	15.42	ppm	99
28) Benzo[g,h,i]perylene	13.854	276	114554	15.76	ppm	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10838.D
Acq On : 21 Jul 2020 3:31 pm
Operator : fouads
Sample : ic472-6
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 21 16:18:53 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10839.D
Acq On : 21 Jul 2020 3:55 pm
Operator : fouads
Sample : ic472-7
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 21 16:18:56 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration

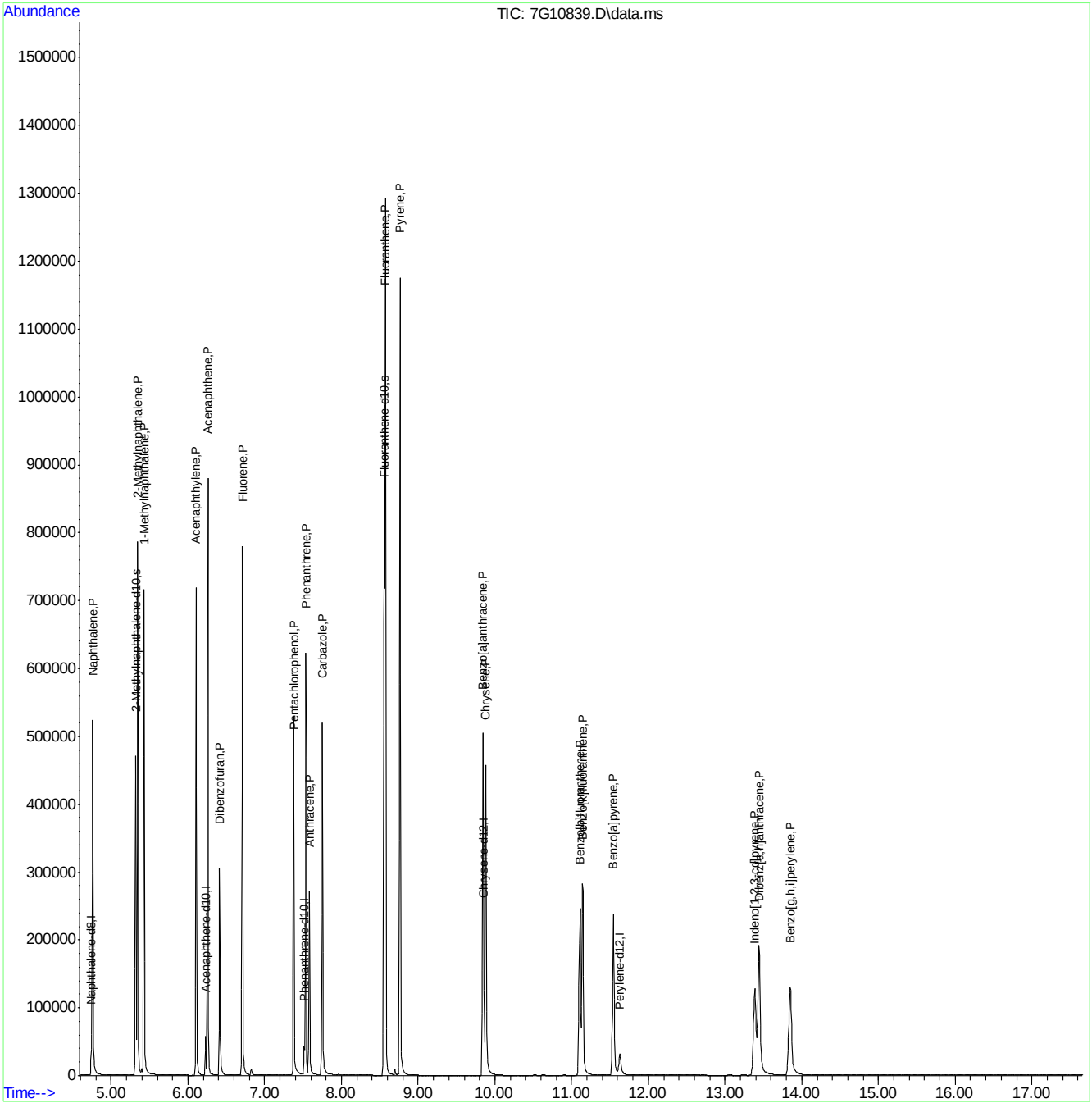
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.740	136	26293	4.00	ppm	-0.03
6) Acenaphthene-d10	6.229	164	15786	4.00	ppm	-0.03
11) Phenanthrene-d10	7.514	188	28087	4.00	ppm	-0.03
18) Chrysene-d12	9.855	240	46860	4.00	ppm	-0.03
22) Perylene-d12	11.629	264	41097	4.00	ppm	-0.03
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.323	152	176001	39.95	ppm	-0.04
Spiked Amount 10.000	Range 50 - 150		Recovery =	399.50%#		
17) Fluoranthene-d10	8.560	212	616116	38.66	ppm	-0.04
Spiked Amount 10.000	Range 50 - 150		Recovery =	386.60%#		
Target Compounds						Qvalue
2) Naphthalene	4.758	128	329242	39.51	ppm	99
3) 2-Methylnaphthalene	5.347	142	255780	40.45	ppm	90
5) 1-Methylnaphthalene	5.429	142	239953	39.66	ppm	92
7) Acenaphthylene	6.108	152	393285	39.15	ppm	98
8) Acenaphthene	6.258	153	260794	39.66	ppm	95
9) Dibenzofuran	6.413	168	179943	39.06	ppm	90
10) Fluorene	6.708	166	280750	39.66	ppm	98
12) Pentachlorophenol	7.382	266	163526	192.69	ppm	92
13) Phenanthrene	7.535	178	404134	39.50	ppm	98
14) Anthracene	7.584	178	196055	18.96	ppm	97
15) Carbazole	7.751	167	325209	18.77	ppm	95
16) Fluoranthene	8.576	202	770477	39.36	ppm	98
19) Pyrene	8.763	202	783512	35.75	ppm	99
20) Benzo[a]anthracene	9.845	228	307361	18.64	ppm	99
21) Chrysene	9.881	228	324523	18.40	ppm	99
23) Benzo[b]fluoranthene	11.110	252	284281	17.47	ppm	99
24) Benzo[k]fluoranthene	11.144	252	311293	16.53	ppm	100
25) Benzo[a]pyrene	11.547	252	275786	19.43	ppm	99
26) Indeno[1,2,3-cd]pyrene	13.391	276	209818	32.86	ppm	99
27) Dibenz[a,h]anthracene	13.444	278	229817	34.49	ppm	99
28) Benzo[g,h,i]perylene	13.852	276	234890	34.57	ppm	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10839.D
Acq On : 21 Jul 2020 3:55 pm
Operator : fouads
Sample : ic472-7
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 21 16:18:56 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration



Manual Integrations APPROVED
(compounds with "m" flag)
Nicole McCampbell
07/22/20 17:04

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10840.D
Acq On : 21 Jul 2020 4:19 pm
Operator : fouads
Sample : icv472-4
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 21 16:47:23 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

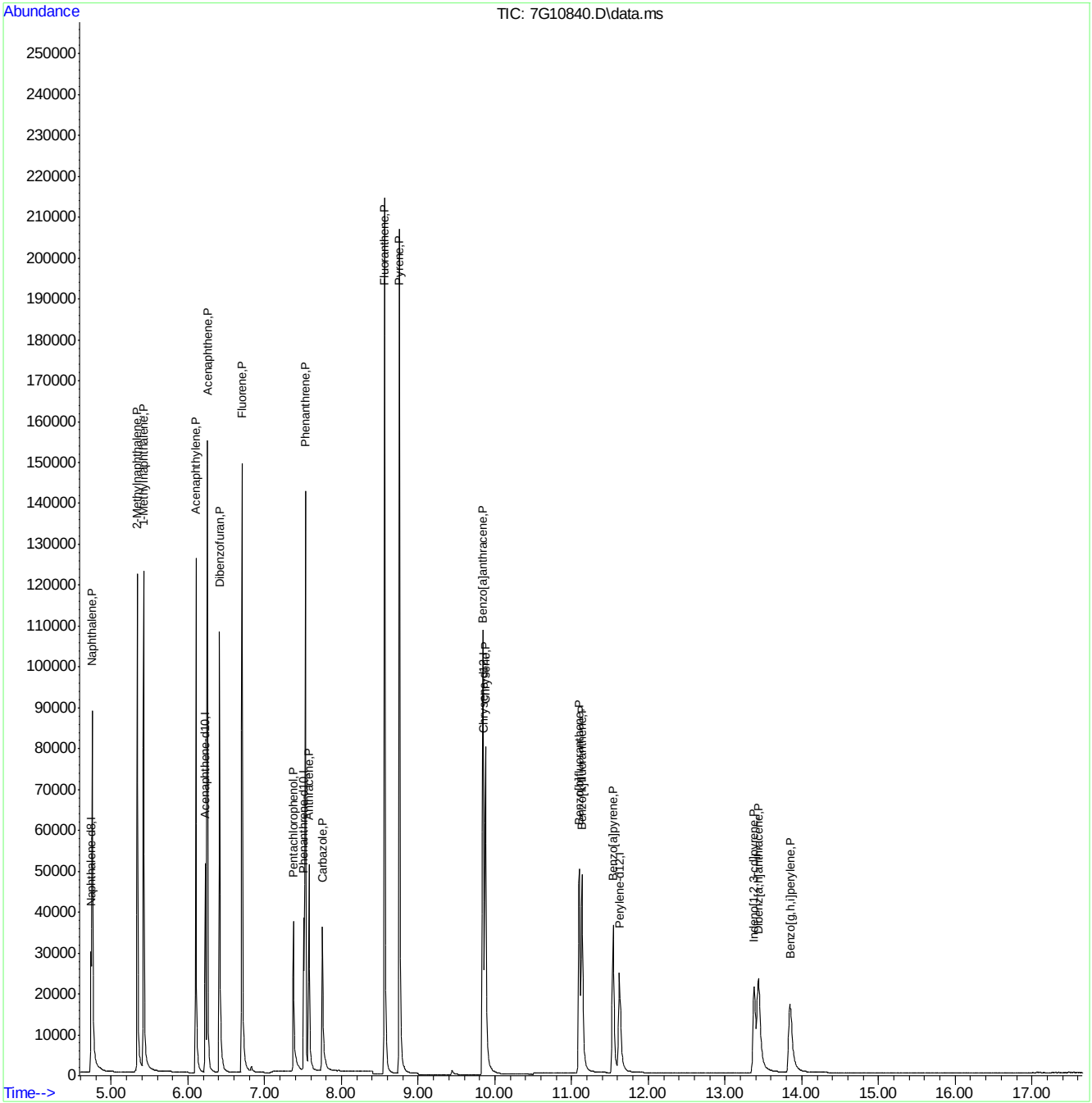
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.734	136	24813	4.00	ppm	0.00
6) Acenaphthene-d10	6.224	164	14478	4.00	ppm	0.00
11) Phenanthrene-d10	7.507	188	26182	4.00	ppm	0.00
18) Chrysene-d12	9.852	240	41612	4.00	ppm	0.00
22) Perylene-d12	11.624	264	36348	4.00	ppm	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	0.000	152	0	0.00	ppm	
Spiked Amount 10.000	Range 50 - 150		Recovery =	0.00%#		
17) Fluoranthene-d10	0.000	212	0d	0.00	ppm	
Spiked Amount 10.000	Range 50 - 150		Recovery =	0.00%#		
Target Compounds						Qvalue
2) Naphthalene	4.752	128	68472	9.54	ppm	99
3) 2-Methylnaphthalene	5.341	142	45097	8.17	ppm	95
5) 1-Methylnaphthalene	5.423	142	49815	9.88	ppm	97
7) Acenaphthylene	6.104	152	76527	9.07	ppm	100
8) Acenaphthene	6.253	153	53203	9.63	ppm	98
9) Dibenzofuran	6.408	168	74284	18.81	ppm	90
10) Fluorene	6.703	166	58318	9.70	ppm	98
12) Pentachlorophenol	7.375	266	15014	14.76	ppm	99
13) Phenanthrene	7.528	178	83170	9.48	ppm	99
14) Anthracene	7.577	178	37274	4.25	ppm	99
15) Carbazole	7.750	167	37176	2.38	ppm	99
16) Fluoranthene	8.563	202	144320	8.72	ppm	100
19) Pyrene	8.753	202	152837	9.18	ppm	99
20) Benzo[a]anthracene	9.840	228	58564	4.49	ppm	99
21) Chrysene	9.879	228	72701	5.04	ppm	100
23) Benzo[b]fluoranthene	11.100	252	57562	4.67	ppm	100
24) Benzo[k]fluoranthene	11.134	252	62383	4.74	ppm	100
25) Benzo[a]pyrene	11.542	252	54221	4.51	ppm	100
26) Indeno[1,2,3-cd]pyrene	13.376	276	34907m	4.45	ppm	
27) Dibenz[a,h]anthracene	13.439	278	38293	4.40	ppm	99
28) Benzo[g,h,i]perylene	13.847	276	40149	4.24	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10840.D
Acq On : 21 Jul 2020 4:19 pm
Operator : fouads
Sample : icv472-4
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 21 16:47:23 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration



Manual Integration Approval Summary

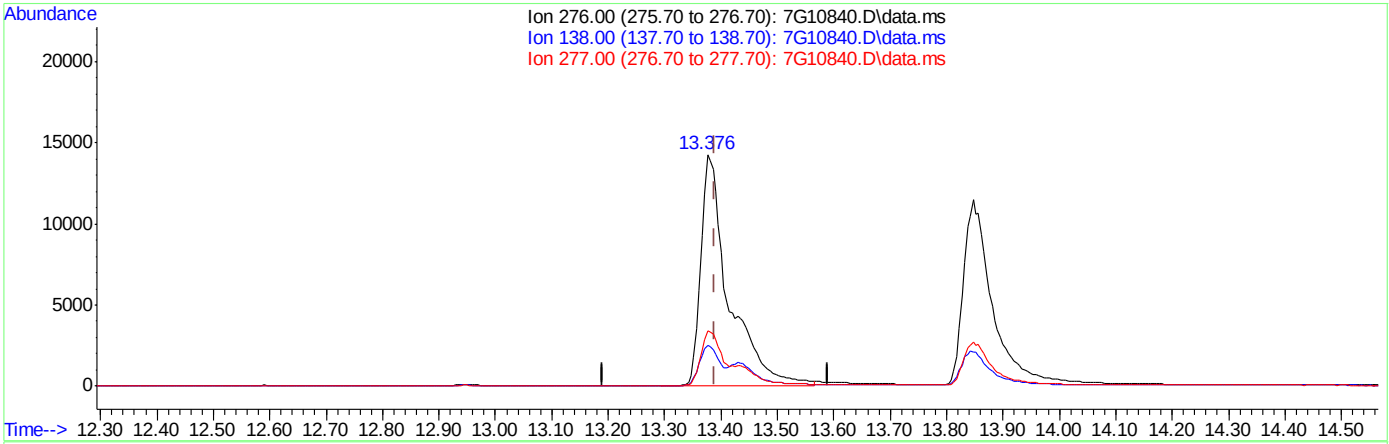
Sample Number: S7G472-ICV472
Lab FileID: 7G10840.D
Injection Time: 07/21/20 16:19
Method: SW846 8270D BY SIM
Analyst approved: 07/22/20 13:31 Fouad Sekkar
Supervisor approved: 07/22/20 17:04 Nicole McCampbell

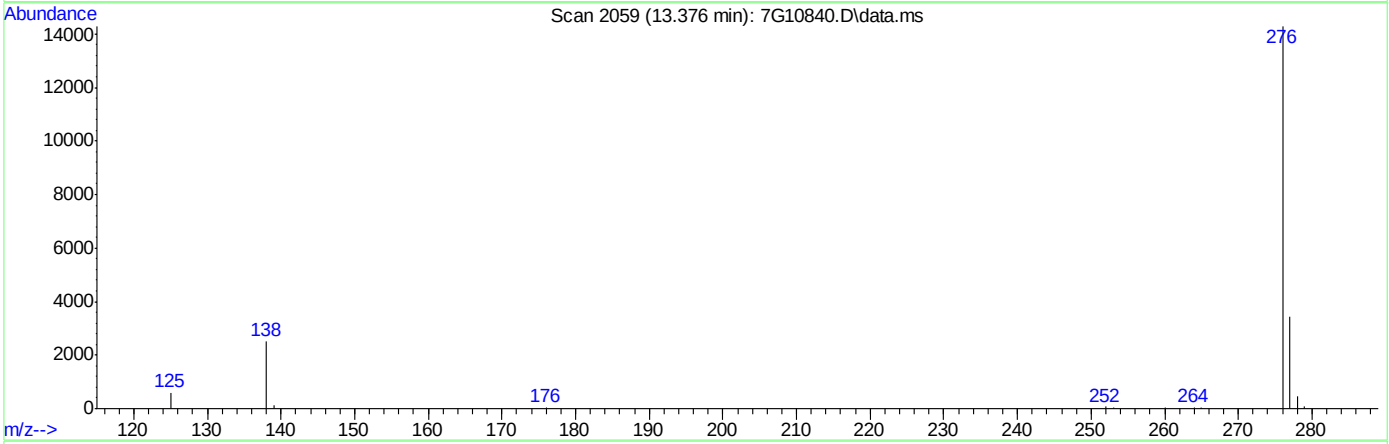
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		13.38	Missed peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10840.D
Acq On : 21 Jul 2020 4:19 pm
Operator : fouads
Sample : icv472-4
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 21 16:46:41 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration





TIC: 7G10840.D\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.376min (-0.015) 6.21ppm

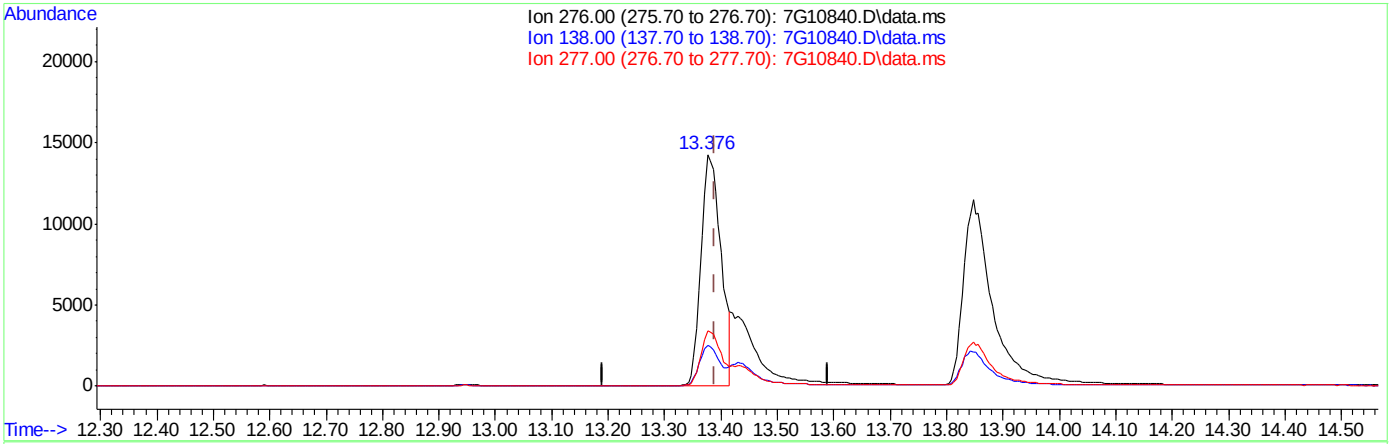
response 48737

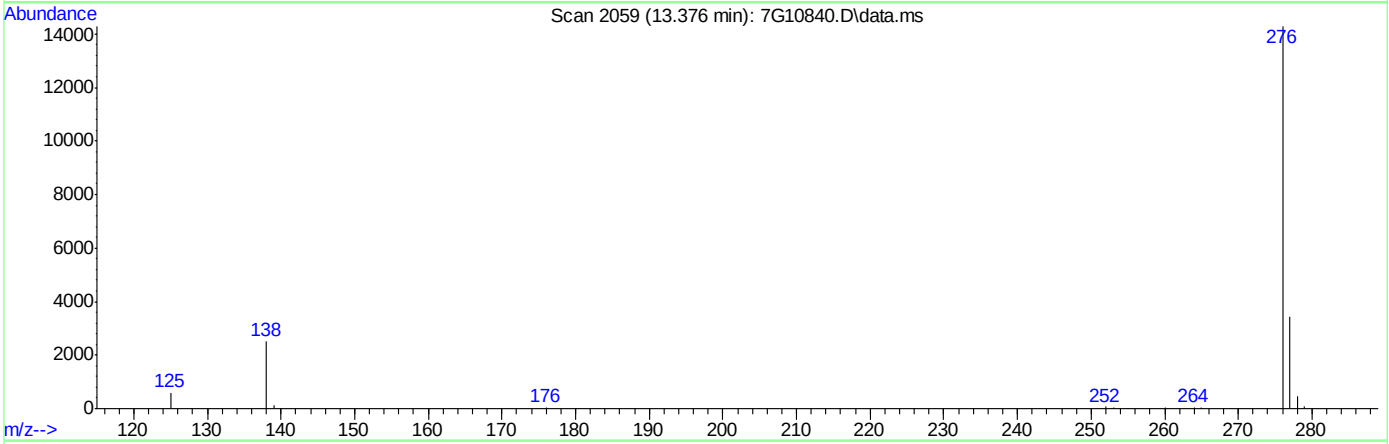
Ion	Exp%	Act%
276.00	100	100
138.00	14.00	17.25
277.00	23.10	23.60
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10840.D
Acq On : 21 Jul 2020 4:19 pm
Operator : fouads
Sample : icv472-4
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 21 16:46:41 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration





TIC: 7G10840.D\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.376min (-0.015) 4.45ppm m

response 34907

Ion	Exp%	Act%
276.00	100	100
138.00	14.00	17.64
277.00	23.10	23.92
0.00	0.00	0.00

Manual Integrations APPROVED
(compounds with "m" flag)
Nicole McCampbell
08/12/20 11:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11130.d
Acq On : 11 Aug 2020 8:29 am
Operator : FOUADS
Sample : CC472-4 Inst : MSBNA8
Misc : op81342,S7G483,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:24:22 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Wed Aug 12 07:23:49 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.628	136	23021	4.00	ppm	0.00
6) Acenaphthene-d10	6.114	164	17904	4.00	ppm	0.00
11) Phenanthrene-d10	7.396	188	34538	4.00	ppm	0.00
18) Chrysene-d12	9.727	240	58481	4.00	ppm	0.00
22) Perylene-d12	11.477	264	51783	4.00	ppm	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.205	152	40233	11.59	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 115.90%			
17) Fluoranthene-d10	8.436	212	182607	10.11	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 101.10%			
Target Compounds						Qvalue
2) Naphthalene	4.646	128	63624	9.56	ppm	99
3) 2-Methylnaphthalene	5.235	142	57650	11.26	ppm	96
5) 1-Methylnaphthalene	5.311	142	56829	12.04	ppm	90
7) Acenaphthylene	5.993	152	100391	9.61	ppm	99
8) Acenaphthene	6.143	153	66186	9.68	ppm	95
9) Dibenzofuran	6.297	168	49385	10.29	ppm	98
10) Fluorene	6.592	166	73249	9.85	ppm	96
12) Pentachlorophenol	7.264	266	35848	25.16	ppm	96
13) Phenanthrene	7.417	178	108455	9.37	ppm	97
14) Anthracene	7.459	178	56294	4.86	ppm	98
15) Carbazole	7.633	167	97922	4.74	ppm	99
16) Fluoranthene	8.448	202	215976	9.86	ppm	98
19) Pyrene	8.639	202	220794	9.43	ppm	97
20) Benzo[a]anthracene	9.717	228	89564	4.88	ppm	98
21) Chrysene	9.753	228	98780	4.87	ppm	99
23) Benzo[b]fluoranthene	10.957	252	82074	4.67	ppm	98
24) Benzo[k]fluoranthene	10.991	252	90262	4.81	ppm	97
25) Benzo[a]pyrene	11.394	252	78638	4.59	ppm	98
26) Indeno[1,2,3-cd]pyrene	13.214	276	59178m	5.29	ppm	
27) Dibenz[a,h]anthracene	13.267	278	69669	5.62	ppm	96
28) Benzo[g,h,i]perylene	13.670	276	68425	5.08	ppm	93

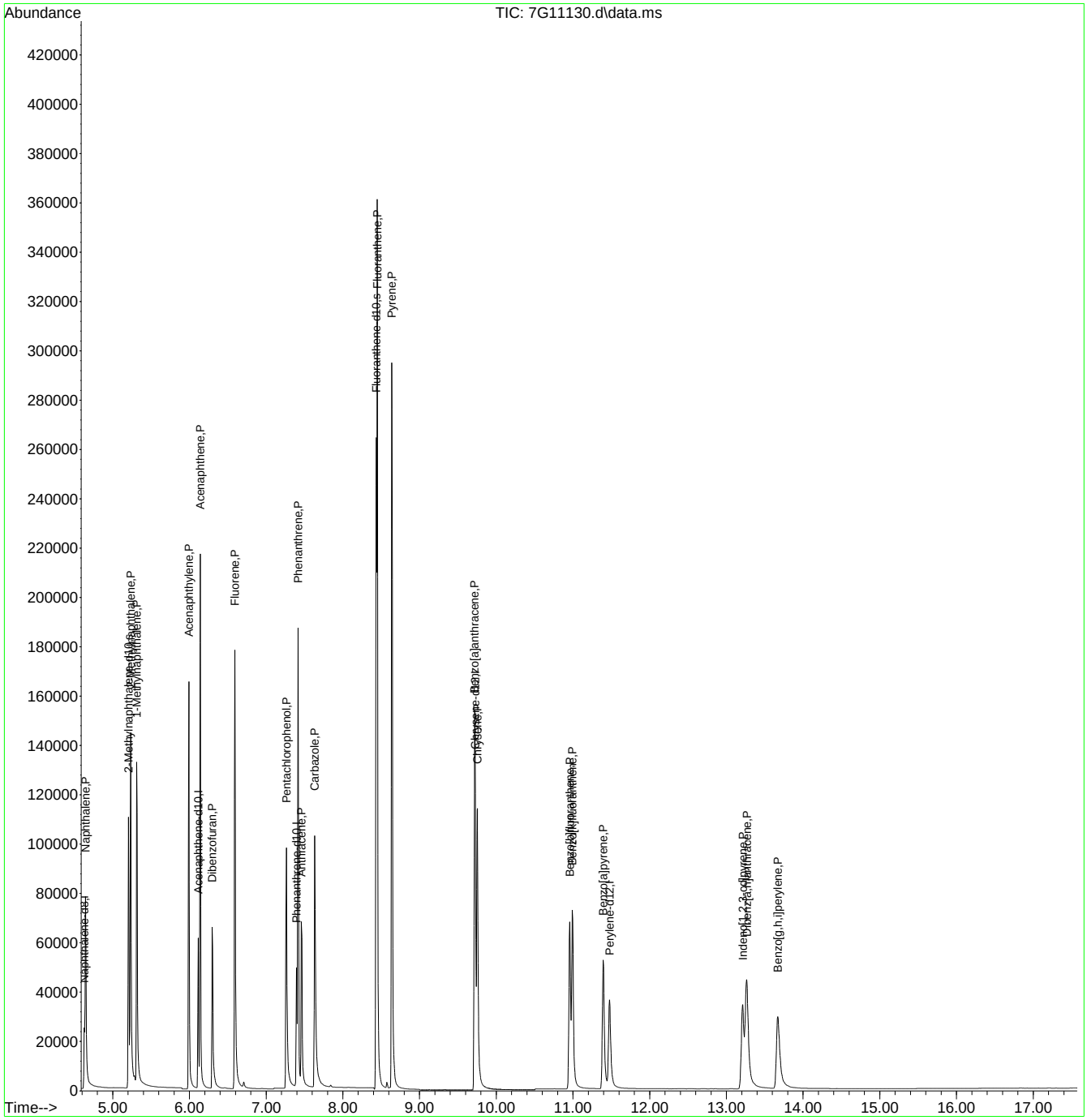
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.6.22
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11130.d
Acq On : 11 Aug 2020 8:29 am
Operator : FOUADS
Sample : CC472-4 Inst : MSBNA8
Misc : op81342,S7G483,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:24:22 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Wed Aug 12 07:23:49 2020
Response via : Initial Calibration



Manual Integration Approval Summary

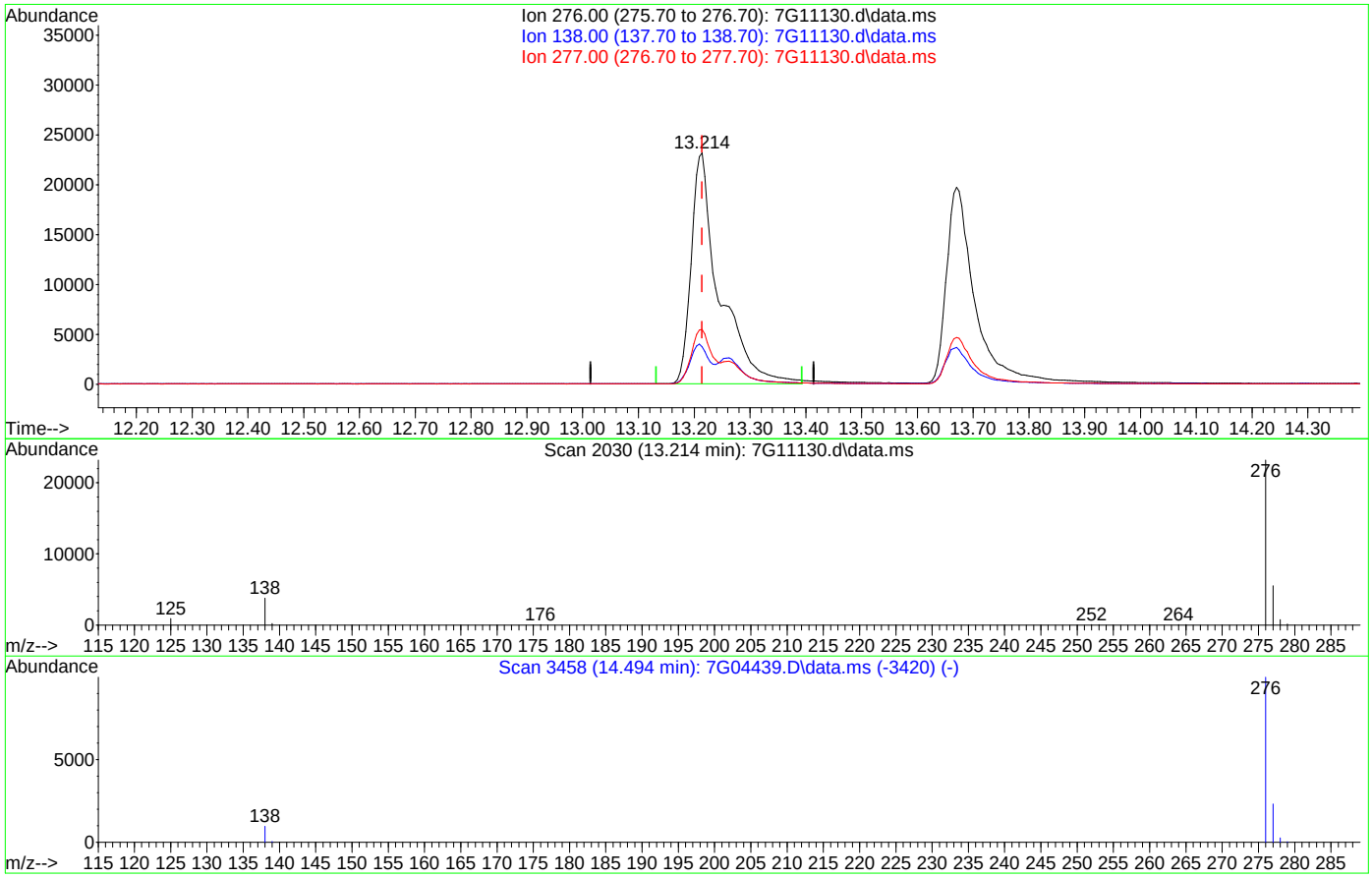
Sample Number: S7G483-CC472
Lab FileID: 7G11130.D
Injection Time: 08/11/20 08:29
Method: SW846 8270D BY SIM
Analyst approved: 08/12/20 08:06 Jennifer Fereira
Supervisor approved: 08/12/20 11:43 Nicole McCampbell

Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		13.21	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11130.d
Acq On : 11 Aug 2020 8:29 am
Operator : FOUADS
Sample : CC472-4 Inst : MSBNA8
Misc : op81342,S7G483,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:23:52 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Wed Aug 12 07:23:49 2020
Response via : Initial Calibration



TIC: 7G11130.d\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.214min (0.000) 7.26ppm

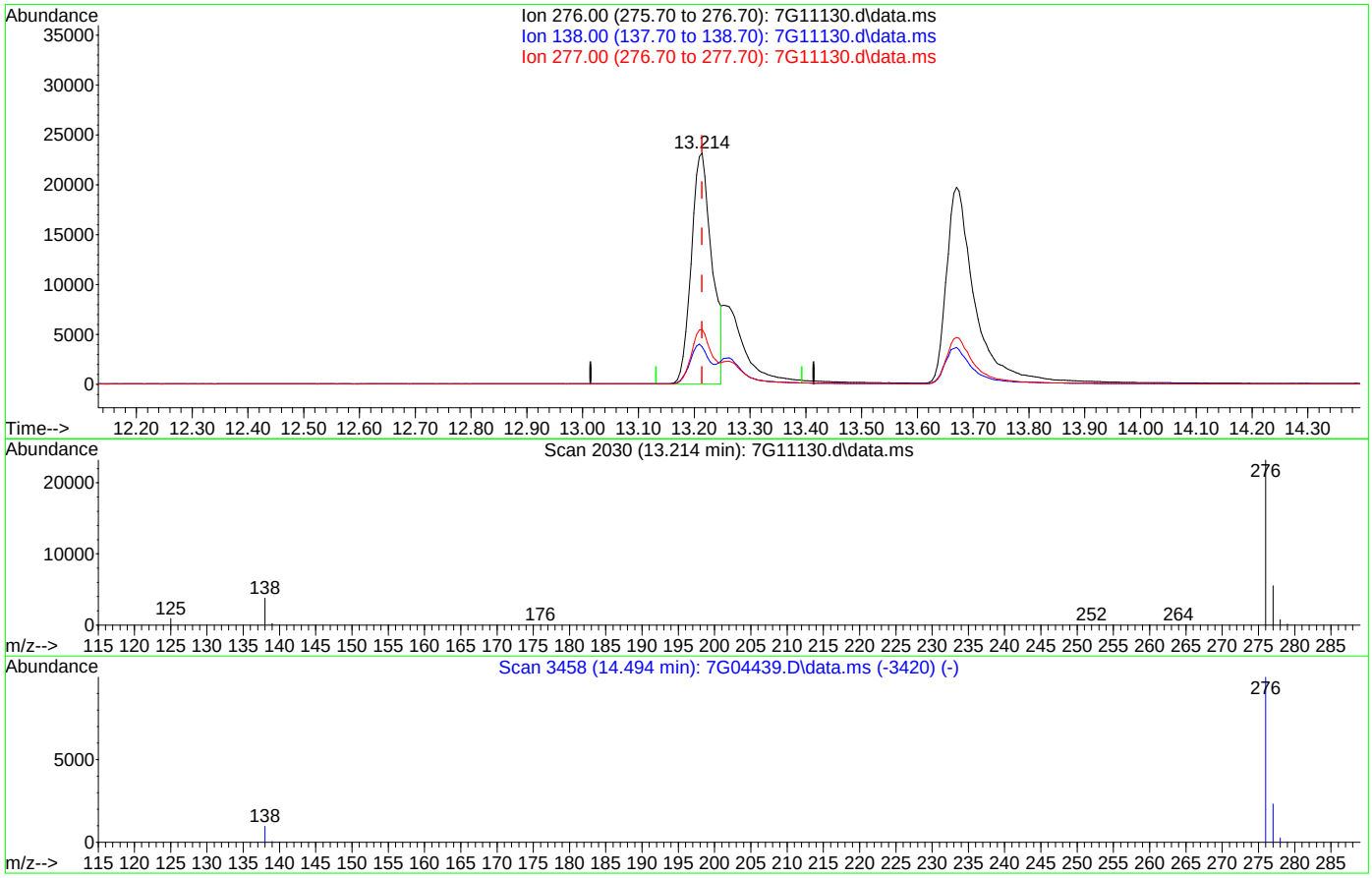
response 81139

Ion	Exp%	Act%
276.00	100	100
138.00	9.60	15.96
277.00	23.10	23.53
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11130.d
Acq On : 11 Aug 2020 8:29 am
Operator : FOUADS
Sample : CC472-4 Inst : MSBNA8
Misc : op81342,S7G483,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:23:52 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Wed Aug 12 07:23:49 2020
Response via : Initial Calibration



TIC: 7G11130.d\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.214min (0.000) 5.29ppm m

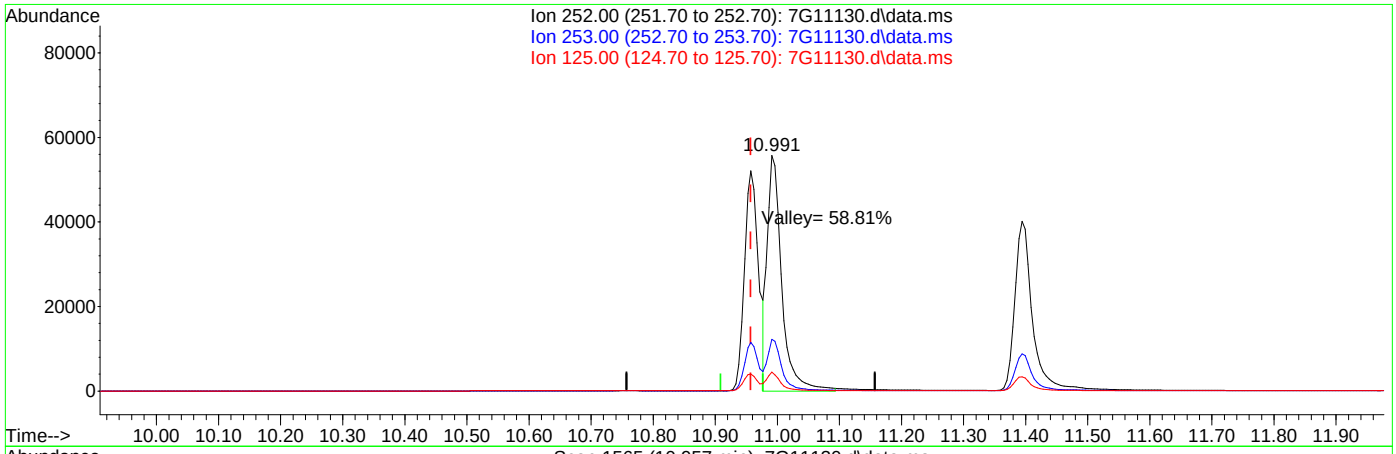
response 59178

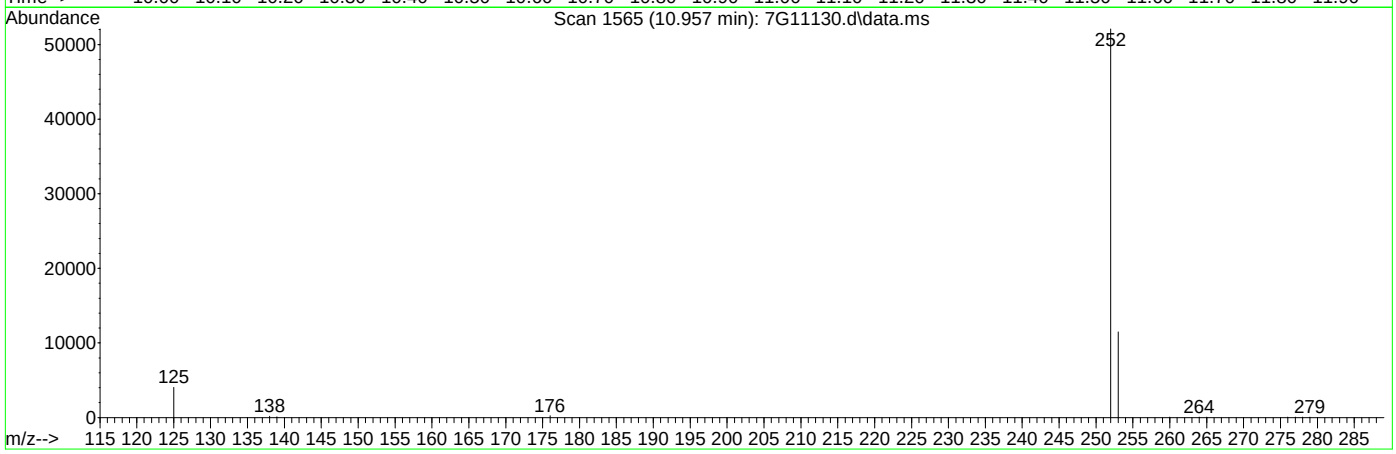
Ion	Exp%	Act%
276.00	100	100
138.00	9.60	16.27
277.00	23.10	23.75
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-12-2020\S7G483\
Data File : 7G11130.d
Acq On : 11 Aug 2020 8:29 am
Operator : FOUADS
Sample : CC472-4 Inst : MSBNA8
Misc : op81342,S7G483,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 12 07:24:22 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Wed Aug 12 07:23:49 2020
Response via : Initial Calibration





TIC: 7G11130.d\data.ms

(23) Benzo[b]fluoranthene (P)

10.957min (0.000) 4.67ppm

response 82074

Ion	Exp%	Act%
252.00	100	100
253.00	21.70	22.12
125.00	4.50	7.54
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 06/24/20 14:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071356.D
Acq On : 23 Jun 2020 10:04 am
Operator : marthav
Sample : ic2918-1 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 23 16:54:17 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	0.000	152	0m	40.00	ppm		-6.00
22) Naphthalene-d8	0.000	136	0m	40.00	ppm		-7.43
43) Acenaphthene-d10	0.000	164	0m	40.00	ppm		-9.48
70) Phenanthrene-d10	0.000	188	0m	40.00	ppm		-11.22
92) Chrysene-d12	0.000	240	0m	40.00	ppm		-14.49
102) Perylene-d12	0.000	264	0m	40.00	ppm		-16.82
110) 1,4-Dichlorobenzene-d4A	6.005	152	175495	40.00	ppm		0.00
120) Naphthalene-d8A	7.433	136	686765	40.00	ppm		0.00
127) Acenaphthene-d10A	9.476	164	358350	40.00	ppm		0.00
136) Phenanthrene-d10A	11.225	188	643792	40.00	ppm		0.00
146) Chrysene-d12A	14.493	240	465781	40.00	ppm		0.00
153) Perylene-d12A	16.809	264	402255	40.00	ppm		-0.01
System Monitoring Compounds							
7) 2-Fluorophenol	0.000	112	0d	0.00	ppm		
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#			
9) Phenol-d5	0.000	99	0d	0.00	ppm		
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#			
23) Nitrobenzene-d5	0.000	82	0d	0.00	ppm		
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#			
47) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm		
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#			
75) 2,4,6-Tribromophenol	0.000	330	0d	0.00	ppm		
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#			
95) Terphenyl-d14	0.000	244	0d	0.00	ppm		
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#			
Target Compounds							Qvalue
111) 2-Picoline	3.994	93	8256	0.95	ppm		89
112) N-Nitrosomethylethylamine	4.111	42	6507m	2.11	ppm		
113) Methyl methanesulfonate	4.432	80	3965	0.92	ppm		92
114) N-Nitrosodiethylamine	4.849	102	3125	0.90	ppm	#	7
115) Ethyl methanesulfonate	5.176	79	5412	0.89	ppm		96
116) Pentachloroethane	5.700	167	2337	0.94	ppm		92
117) N-Nitrosopyrrolidine	6.417	100	2483	0.70	ppm	#	1
118) N-Nitrosomorpholine	6.470	56	5091	1.38	ppm	#	70
119) O-Toluidine	6.486	106	10147	0.94	ppm		97
121) N-Nitrosopiperidine	6.807	42	6295	1.67	ppm	#	58
122) A,A-Dimethylphenethyla...	7.267	58	20213m	1.12	ppm		
123) Hexachloropropene	7.561	213	2268	0.62	ppm		94
124) N-Nitrosodi-n-butylamine	7.925	84	3931	0.87	ppm	#	20
125) p-Phenylenediamine	7.930	108	5377	0.96	ppm		88
126) Isosafrole	8.171	162	4342	0.97	ppm		87
128) Safrole	8.775	162	4333	0.93	ppm		90
129) 1-Chloronaphthalene	8.845	162	10813	0.97	ppm		97
130) Diphenyl Ether	8.941	170	7575	1.00	ppm		94
131) 1,4-Naphthoquinone	9.032	158	3169	0.65	ppm		76
132) Pentachlorobenzene	9.663	250	4141	0.80	ppm		92
133) 1-Naphthylamine	9.808	143	11709	1.03	ppm		92

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071356.D
Acq On : 23 Jun 2020 10:04 am
Operator : marthav
Sample : ic2918-1 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 23 16:54:17 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration

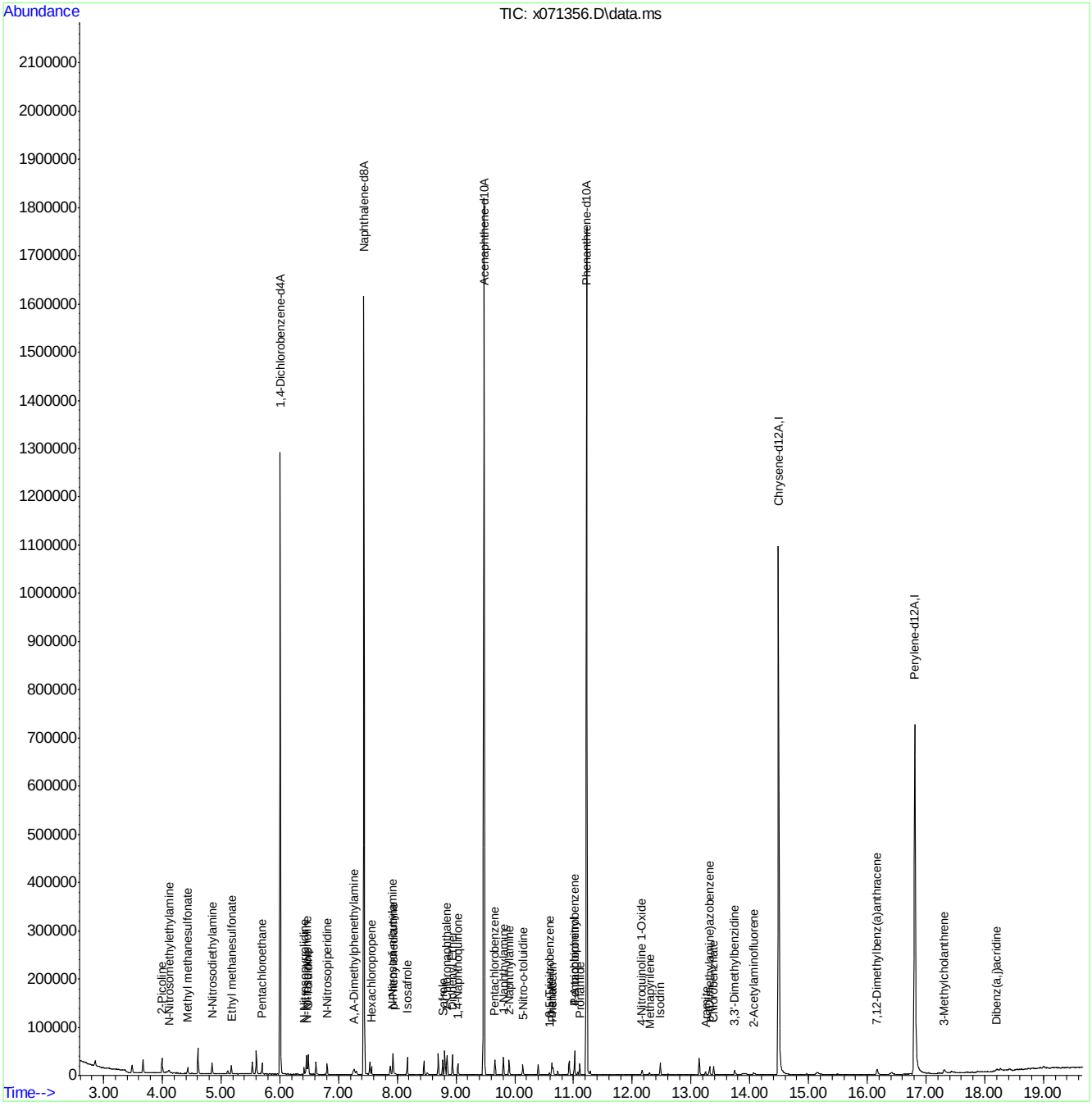
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
134) 2-Naphthylamine	9.904	143	12300	1.06	ppm		96
135) 5-Nitro-o-toluidine	10.134	152	2552	0.69	ppm	#	68
137) 1,3,5-Trinitrobenzene	10.589	75	1080	0.28	ppm	#	76
138) Diallate	10.631	43	10150m	1.43	ppm		
139) Phenacetin	10.647	108	4577	0.71	ppm		85
140) 4-Aminobiphenyl	11.016	169	12376	1.14	ppm		96
141) Pronamide	11.107	173	3728	0.69	ppm		95
142) Pentachloronitrobenzene	11.016	237	1011	0.62	ppm		84
143) 4-Nitroquinoline 1-Oxide	12.166	190	192m	0.47	ppm		
144) Methapyrilene	12.295	58	2289	0.29	ppm	#	66
145) Isodrin	12.477	193	1891	0.85	ppm		82
147) Aramite	13.247	185	738m	0.42	ppm		
148) p-(Dimethylamine)azobe...	13.316	120	3227	0.58	ppm		77
149) Chlorobenzilate	13.386	139	4146	0.75	ppm	#	59
151) 3,3'-Dimethylbenzidine	13.744	212	5535	0.83	ppm		100
152) 2-Acetylaminofluorene	14.065	181	2599	0.46	ppm		84
154) 7,12-Dimethylbenz(a)an...	16.162	256	4637	0.80	ppm		96
156) 3-Methylcholanthrene	17.306	268	3799	0.74	ppm		95
157) Dibenz(a,j)acridine	18.200	279	3086	0.41	ppm		86

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071356.D
Acq On : 23 Jun 2020 10:04 am
Operator : marthav
Sample : ic2918-1 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 23 16:54:17 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: SX2918-IC2918
Lab FileID: X071356.D
Injection Time: 06/23/20 10:04

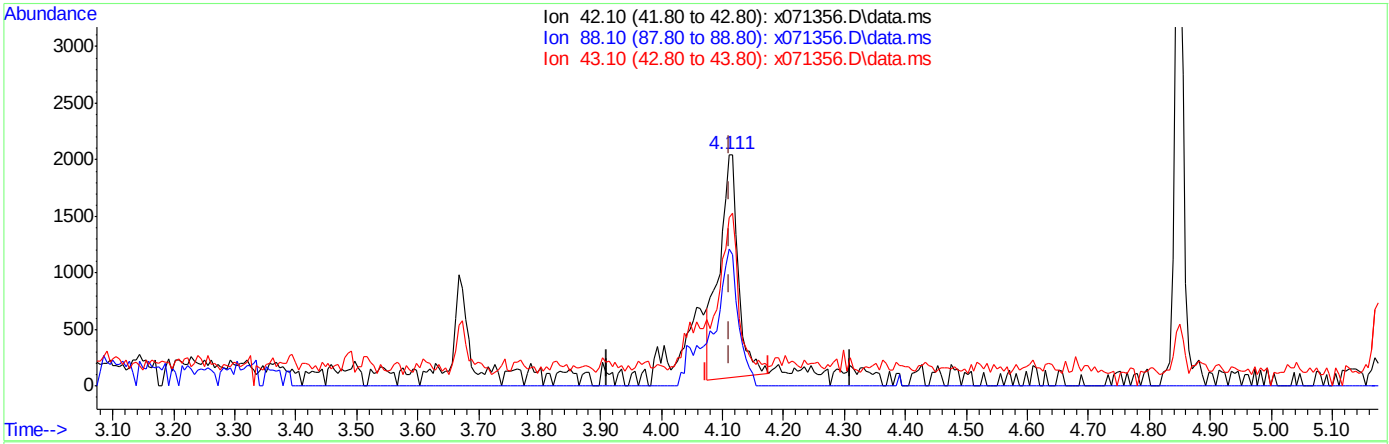
Method: EPA 625.1
Analyst approved: 06/24/20 09:50 Martha Valls
Supervisor approved: 06/24/20 14:07 Naresh Jiawan

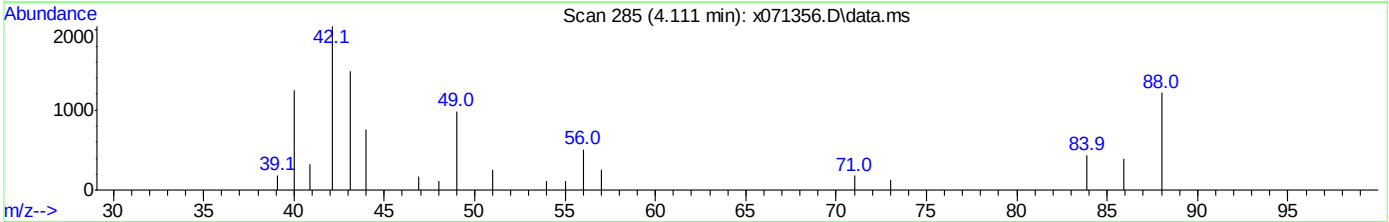
Parameter	CAS	Sig#	R.T. (min.)	Reason
N-Nitrosomethylethylamine	10595-95-6		4.11	Split peak
A,A-Dimethylphenethylamine	122-09-8		7.27	Split peak
Diallate	2303-16-4		10.63	Split peak
4-Nitroquinoline 1-Oxide	56-57-5		12.17	Split peak
Aramite	140-57-8		13.25	Split peak

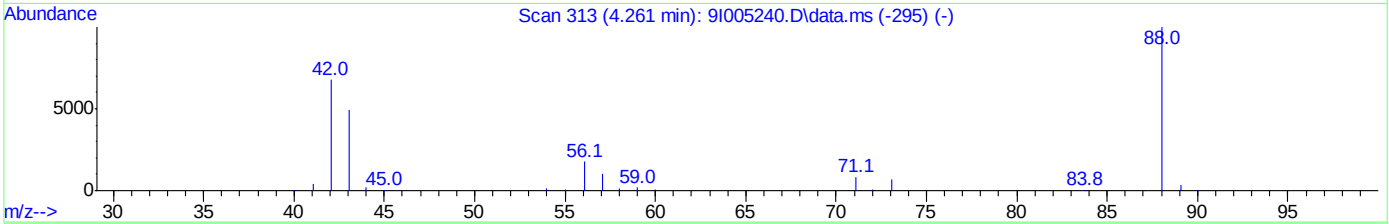
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071356.D
Acq On : 23 Jun 2020 10:04 am
Operator : marthav
Sample : ic2918-1 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 23 14:00:58 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071356.D\data.ms

(112) N-Nitrosomethylethylamine

4.111min (+0.000) 1.40ppm

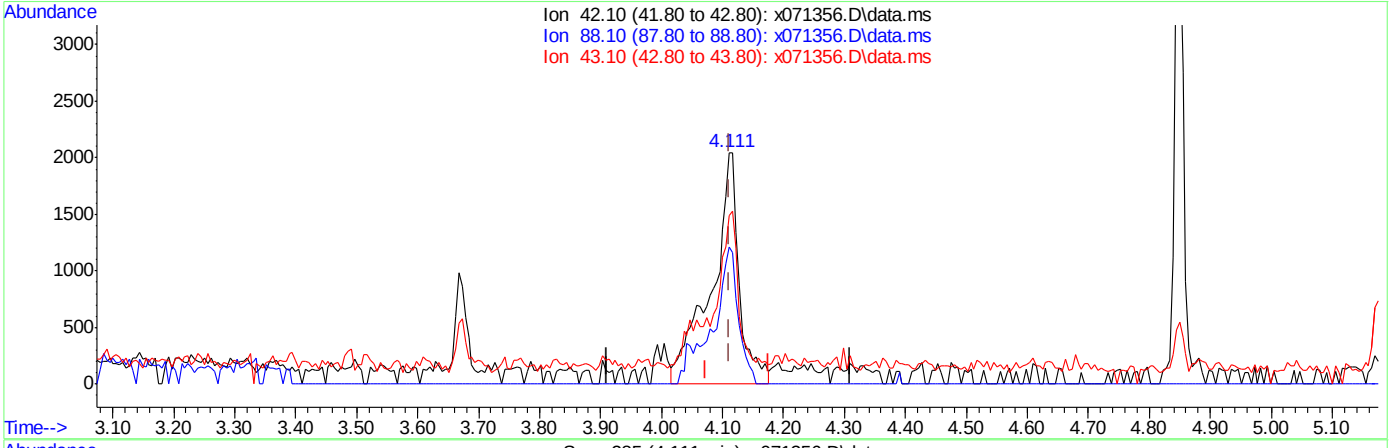
response 4325

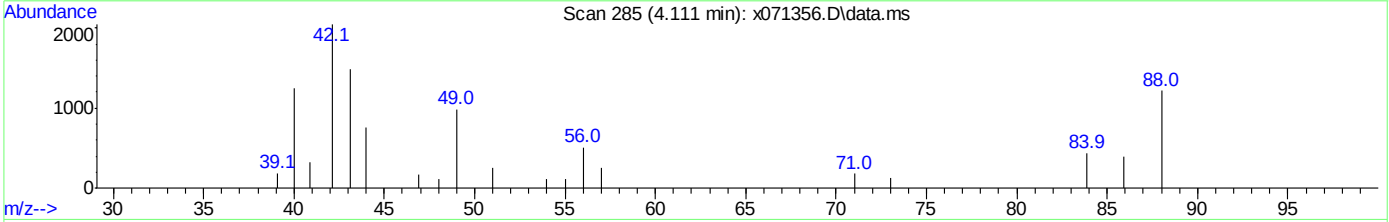
Ion	Exp%	Act%
42.10	100	100
88.10	147.70	62.09#
43.10	72.60	67.64
0.00	0.00	0.00

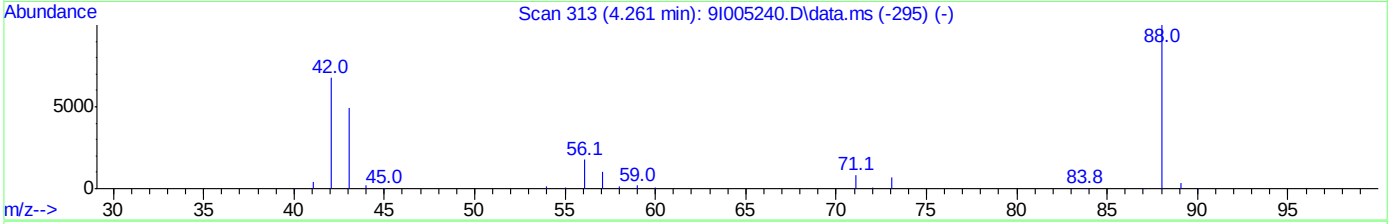
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071356.D
Acq On : 23 Jun 2020 10:04 am
Operator : marthav
Sample : ic2918-1 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 23 14:00:58 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071356.D\data.ms

(112) N-Nitrosomethylethylamine

4.111min (+0.000) 2.11ppm m

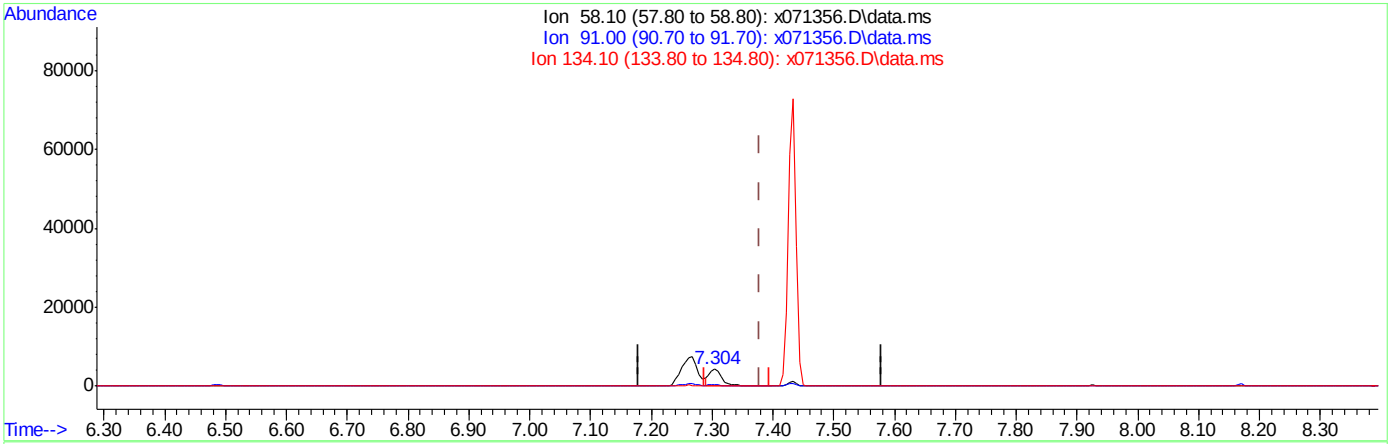
response 6507

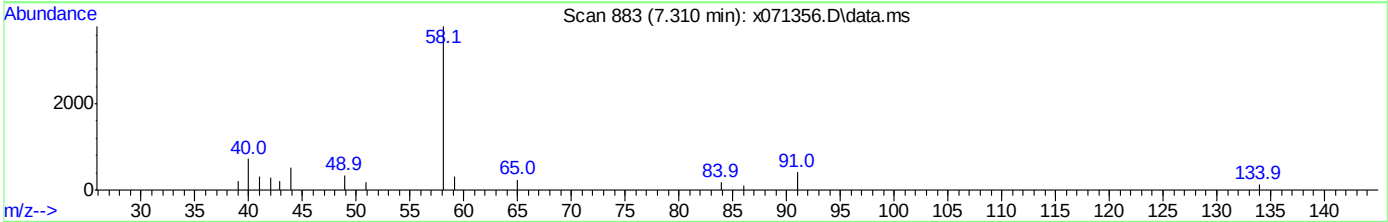
Ion	Exp%	Act%
42.10	100	100
88.10	147.70	59.31#
43.10	72.60	72.84
0.00	0.00	0.00

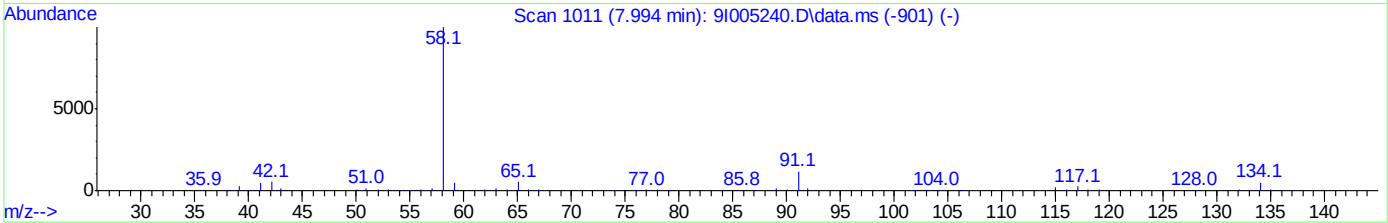
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071356.D
Acq On : 23 Jun 2020 10:04 am
Operator : marthav
Sample : ic2918-1 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 23 14:00:58 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071356.D\data.ms

(122) A,A-Dimethylphenethylamine

7.304min (-0.075) 0.36ppm

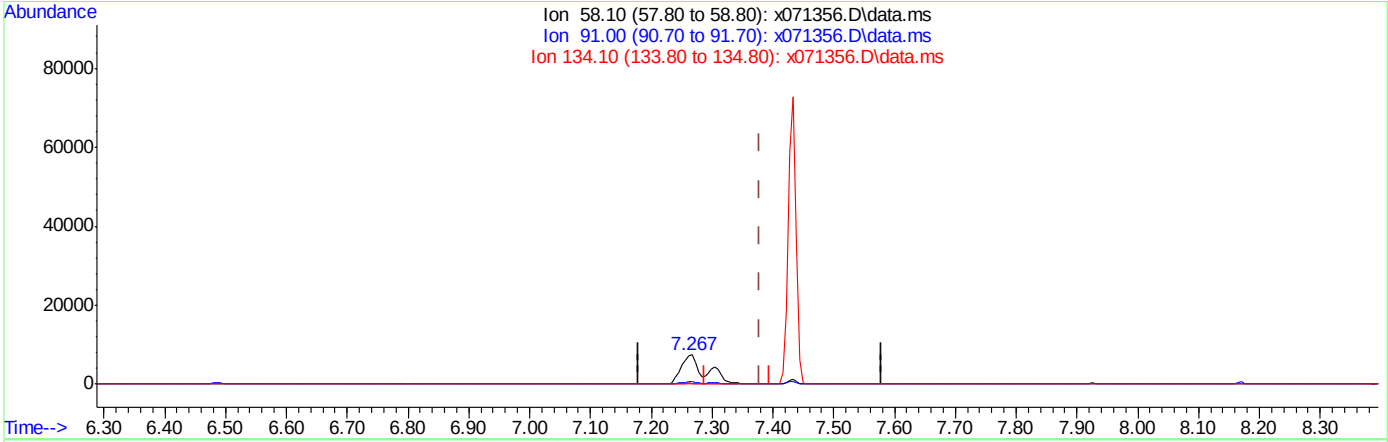
response 6599

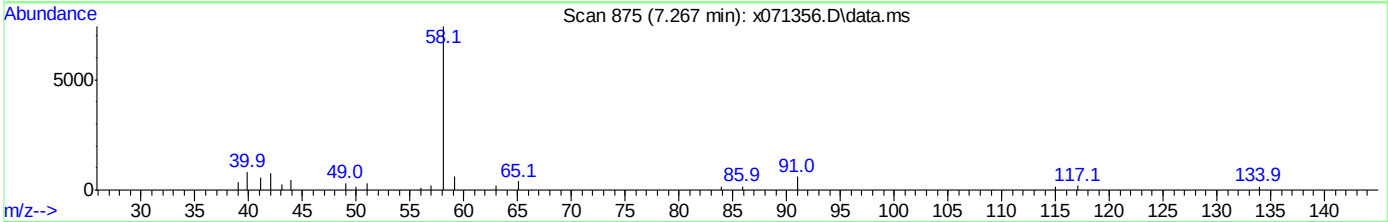
Ion	Exp%	Act%
58.10	100	100
91.00	11.70	9.31
134.10	5.10	4.38
0.00	0.00	0.00

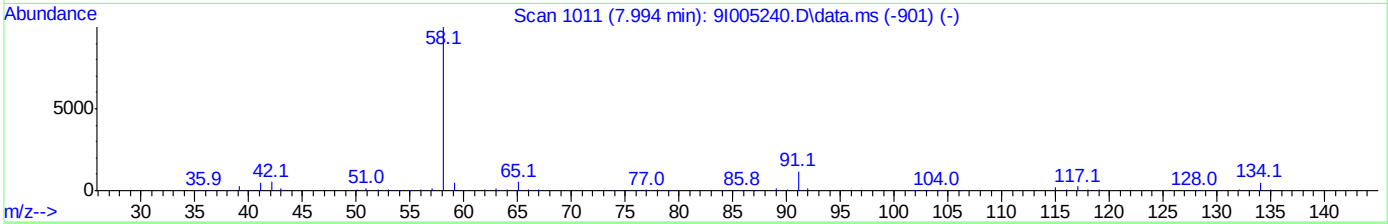
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071356.D
Acq On : 23 Jun 2020 10:04 am
Operator : marthav
Sample : ic2918-1 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 23 14:00:58 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071356.D\data.ms

(122) A,A-Dimethylphenethylamine

7.267min (-0.112) 1.12ppm m

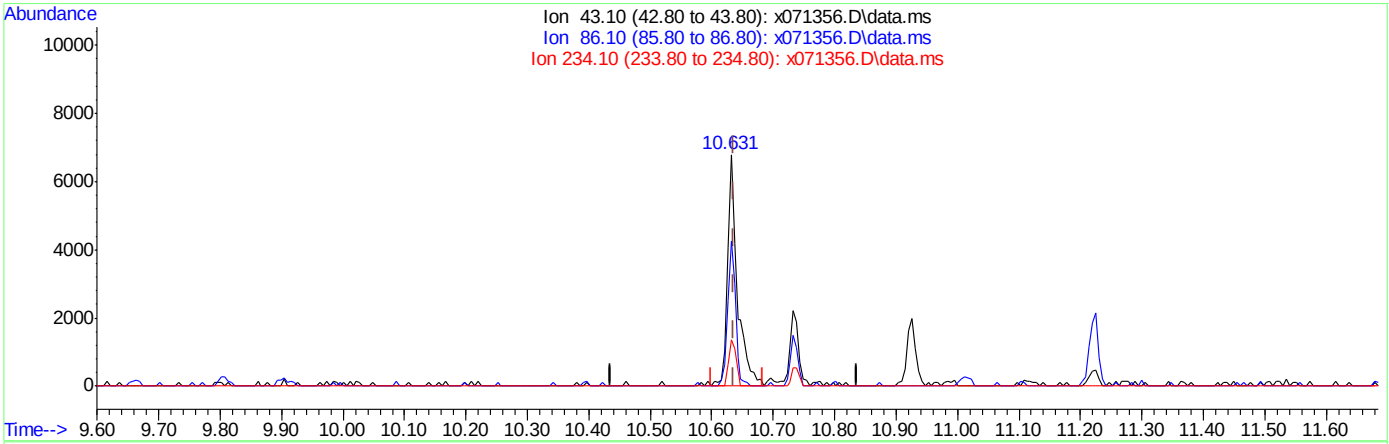
response 20213

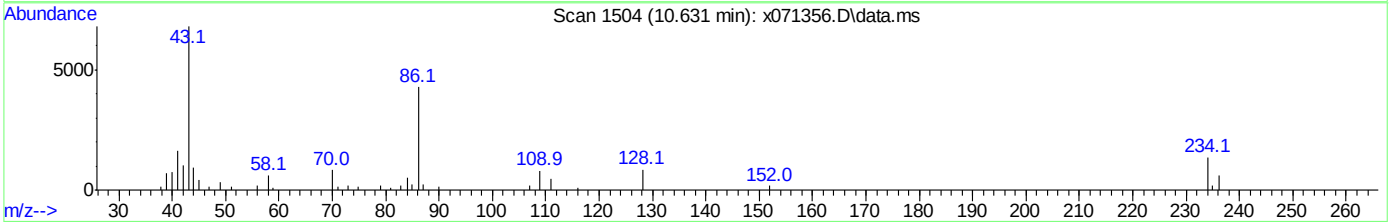
Ion	Exp%	Act%
58.10	100	100
91.00	11.70	8.08
134.10	5.10	2.17
0.00	0.00	0.00

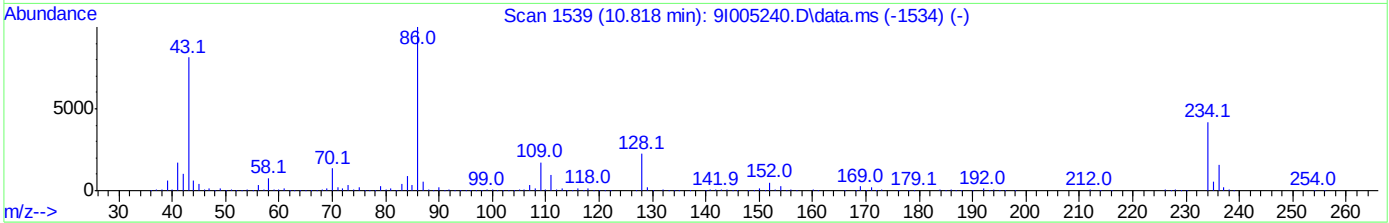
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071356.D
Acq On : 23 Jun 2020 10:04 am
Operator : marthav
Sample : ic2918-1 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 23 14:00:58 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071356.D\data.ms

(138) Diallate

10.631min (-0.005) 1.08ppm

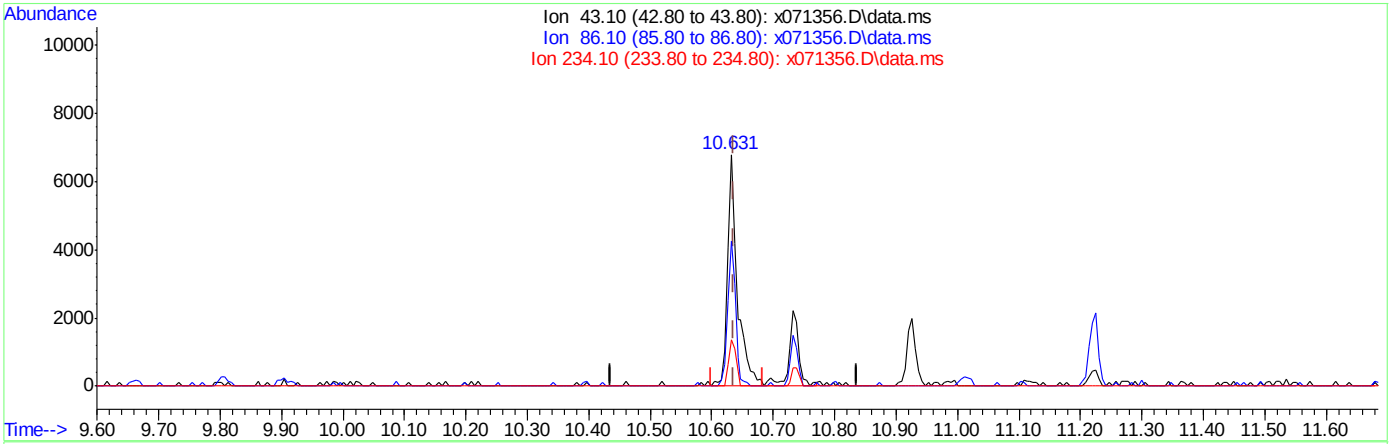
response 7646

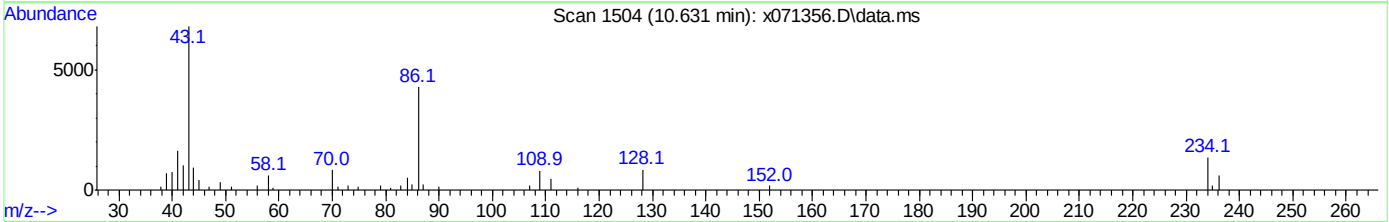
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	62.82#
234.10	51.50	20.16#
0.00	0.00	0.00

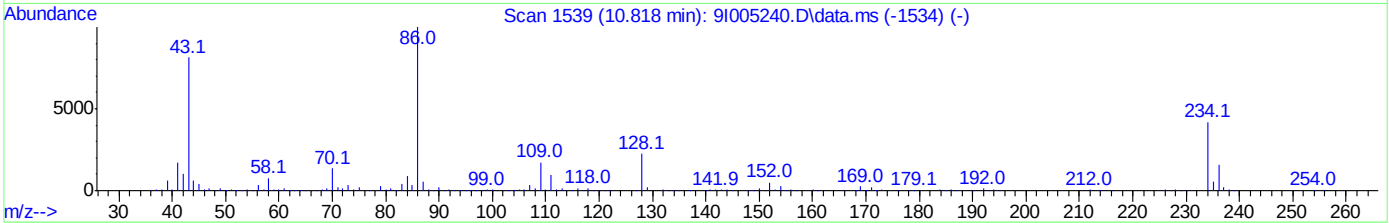
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071356.D
Acq On : 23 Jun 2020 10:04 am
Operator : marthav
Sample : ic2918-1 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 23 14:00:58 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071356.D\data.ms

(138) Diallate

10.631min (-0.005) 1.43ppm m

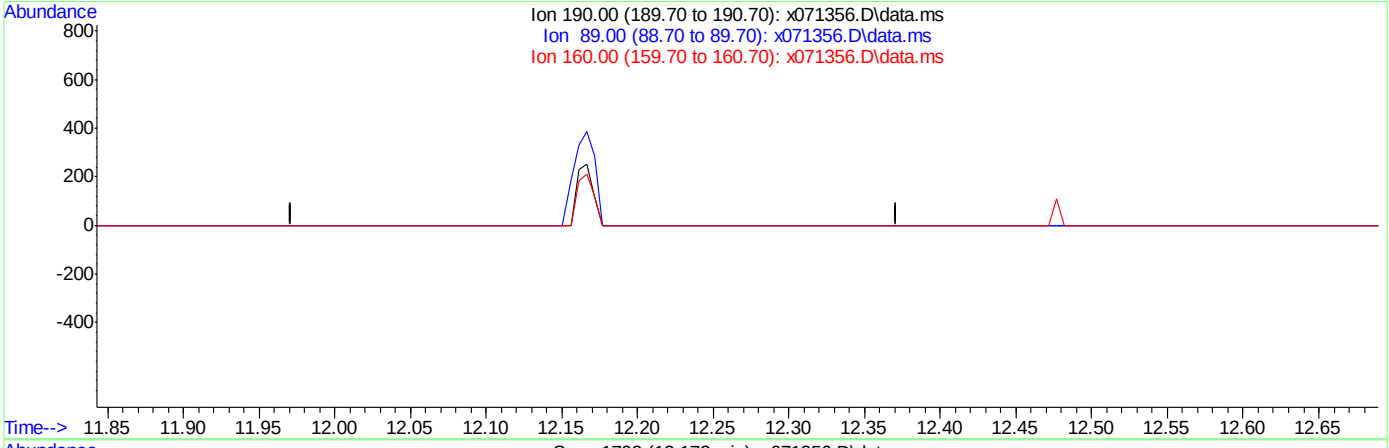
response 10150

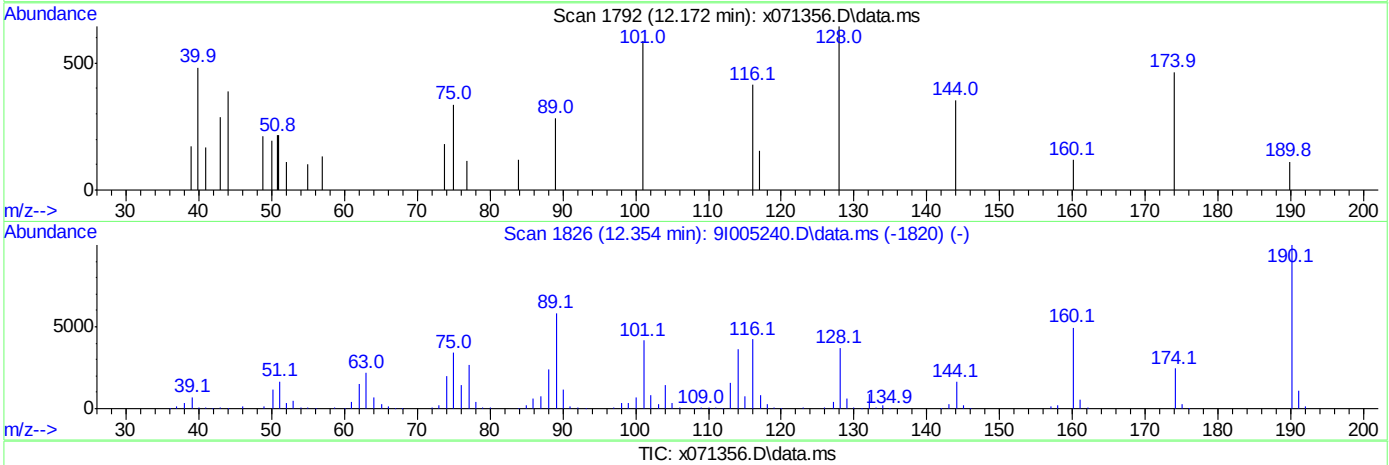
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	62.82#
234.10	51.50	20.16#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071356.D
Acq On : 23 Jun 2020 10:04 am
Operator : marthav
Sample : ic2918-1 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 23 14:00:58 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration





TIC: x071356.D\data.ms

(143) 4-Nitroquinoline 1-Oxide

12.172min (-12.172) 0.00ppm

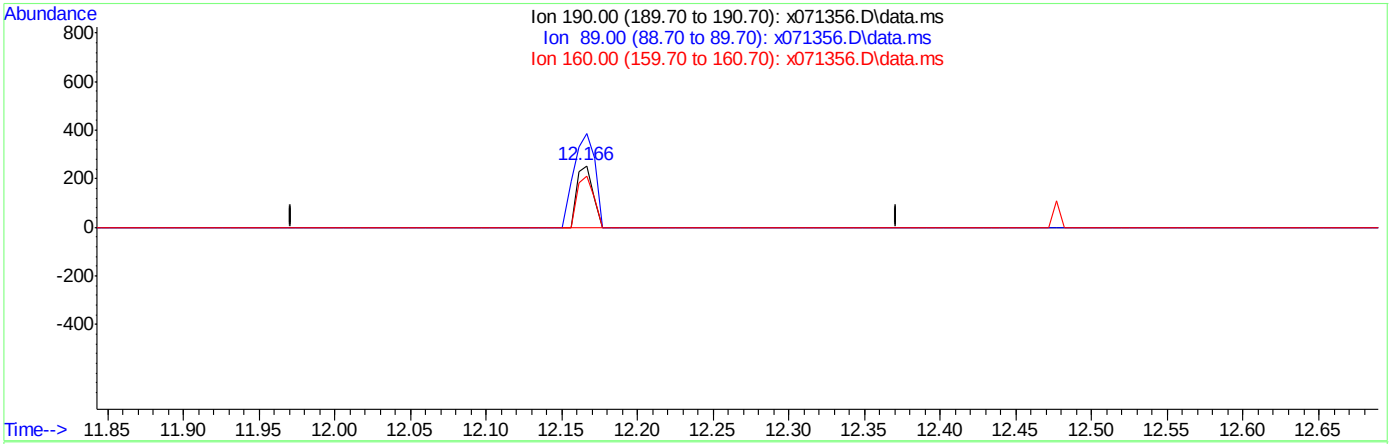
response 0

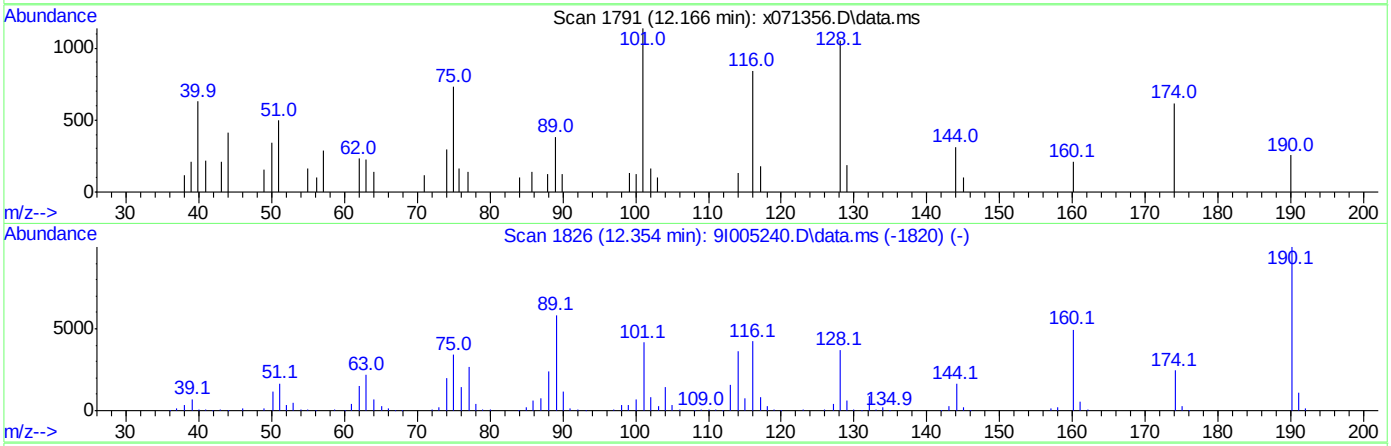
Ion	Exp%	Act%
190.00	100	0.00
89.00	58.20	0.00#
160.00	49.40	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071356.D
Acq On : 23 Jun 2020 10:04 am
Operator : marthav
Sample : ic2918-1 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 23 14:00:58 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration





TIC: x071356.D\data.ms

(143) 4-Nitroquinoline 1-Oxide

12.166min (-0.005) 0.47ppm m

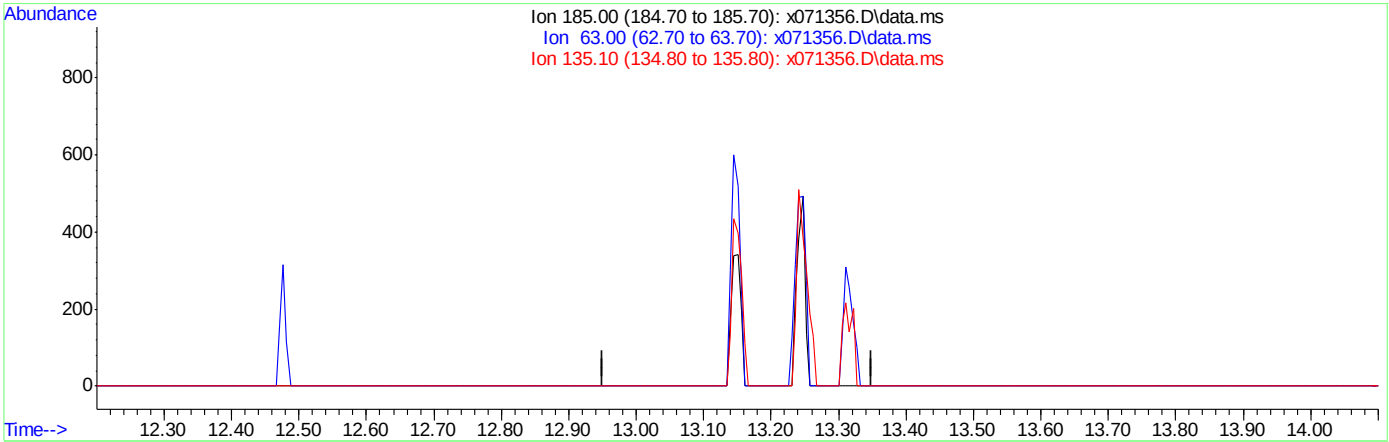
response 192

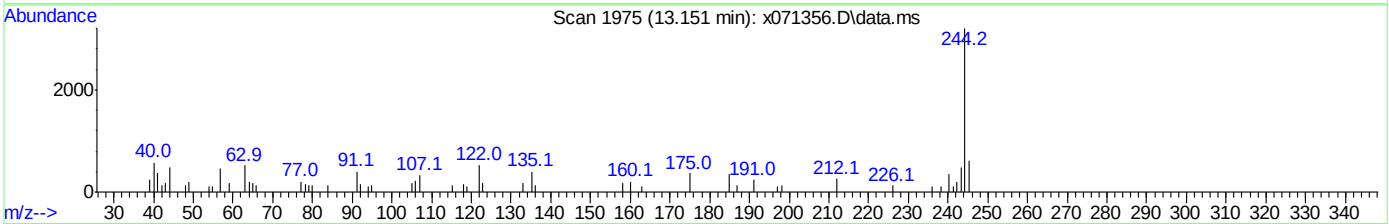
Ion	Exp%	Act%
190.00	100	100
89.00	58.20	150.98#
160.00	49.40	81.96#
0.00	0.00	0.00

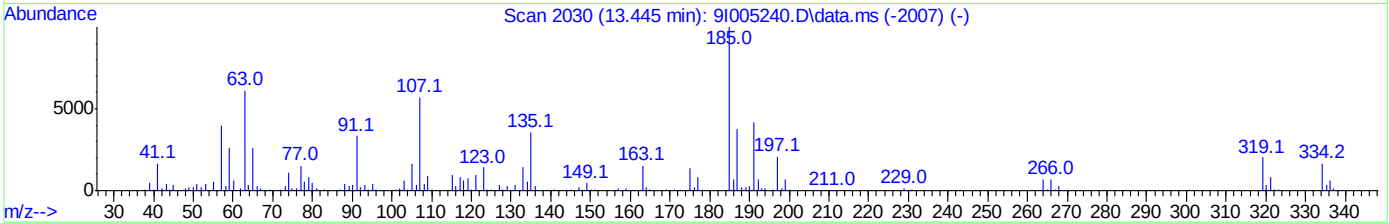
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071356.D
Acq On : 23 Jun 2020 10:04 am
Operator : marthav
Sample : ic2918-1 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 23 14:00:58 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071356.D\data.ms

(147) Aramite

13.150min (-13.150) 0.00ppm

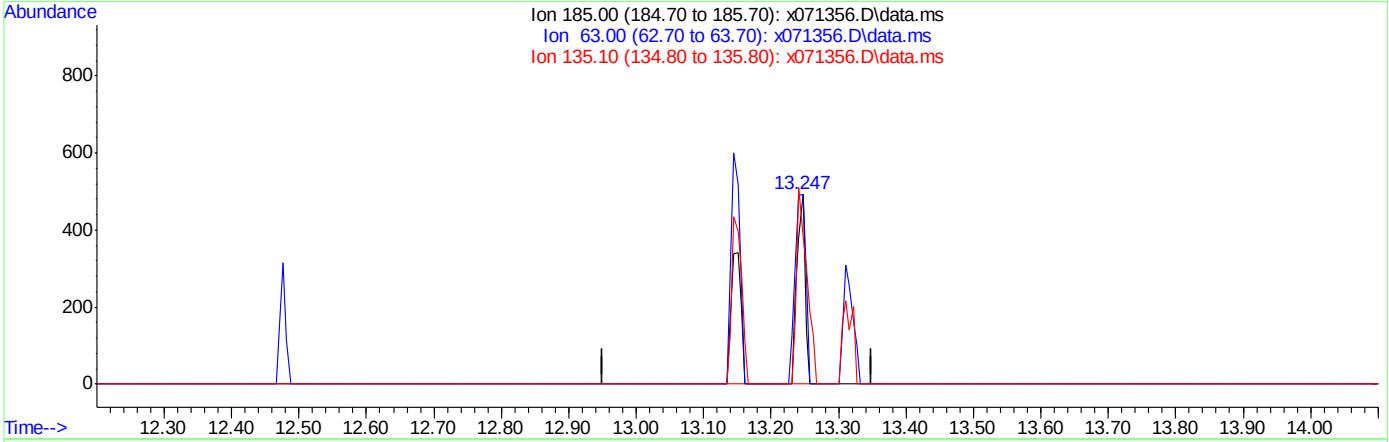
response 0

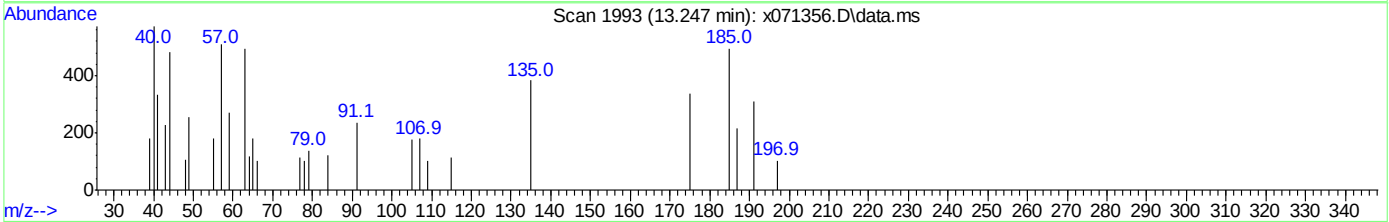
Ion	Exp%	Act%
185.00	100	0.00
63.00	61.10	0.00#
135.10	35.60	0.00#
0.00	0.00	0.00

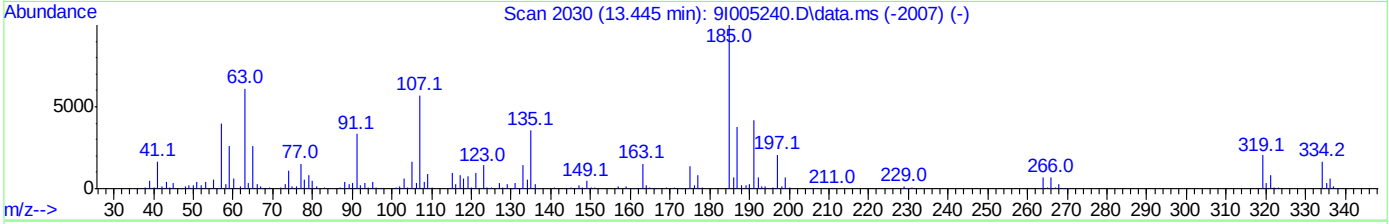
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071356.D
Acq On : 23 Jun 2020 10:04 am
Operator : marthav
Sample : ic2918-1 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 23 14:00:58 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071356.D\data.ms

(147) Aramite

13.247min (+0.096) 0.42ppm m

response 738

Ion	Exp%	Act%
185.00	100	100
63.00	61.10	99.60#
135.10	35.60	77.53#
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 06/24/20 14:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071357.D
Acq On : 23 Jun 2020 10:30 am
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 23 16:54:30 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	0.000	152	0m	40.00	ppm	-6.00
22) Naphthalene-d8	0.000	136	0m	40.00	ppm	-7.43
43) Acenaphthene-d10	0.000	164	0m	40.00	ppm	-9.48
70) Phenanthrene-d10	0.000	188	0m	40.00	ppm	-11.22
92) Chrysene-d12	0.000	240	0m	40.00	ppm	-14.49
102) Perylene-d12	0.000	264	0m	40.00	ppm	-16.82
110) 1,4-Dichlorobenzene-d4A	6.005	152	149418	40.00	ppm	0.00
120) Naphthalene-d8A	7.433	136	609909	40.00	ppm	0.00
127) Acenaphthene-d10A	9.476	164	331998	40.00	ppm	0.00
136) Phenanthrene-d10A	11.219	188	590459	40.00	ppm	0.00
146) Chrysene-d12A	14.487	240	412323	40.00	ppm	0.00
153) Perylene-d12A	16.809	264	356217	40.00	ppm	-0.01
System Monitoring Compounds						
7) 2-Fluorophenol	0.000	112	0d	0.00	ppm	
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#		
9) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#		
23) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#		
47) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#		
75) 2,4,6-Tribromophenol	0.000	330	0d	0.00	ppm	
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#		
95) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#		
Target Compounds						Qvalue
111) 2-Picoline	3.988	93	35007	4.72	ppm	89
112) N-Nitrosomethylethylamine	4.111	42	22841	8.69	ppm #	52
113) Methyl methanesulfonate	4.427	80	16633	4.53	ppm	92
114) N-Nitrosodiethylamine	4.849	102	13558	4.60	ppm #	26
115) Ethyl methanesulfonate	5.175	79	22557	4.34	ppm	99
116) Pentachloroethane	5.700	167	9643	4.56	ppm	96
117) N-Nitrosopyrrolidine	6.416	100	12046	3.99	ppm #	25
118) N-Nitrosomorpholine	6.470	56	22583	7.17	ppm #	66
119) O-Toluidine	6.486	106	45385	4.96	ppm	96
121) N-Nitrosopiperidine	6.807	42	27579	8.25	ppm #	61
122) A,A-Dimethylphenethyla...	7.299	58	109296m	6.74	ppm	
123) Hexachloropropene	7.561	213	10599	3.27	ppm	97
124) N-Nitrosodi-n-butylamine	7.930	84	18823	4.65	ppm #	43
125) p-Phenylenediamine	7.925	108	31553	6.43	ppm	91
126) Isosafrole	8.171	162	19762	4.95	ppm	88
128) Safrole	8.775	162	19808	4.61	ppm	88
129) 1-Chloronaphthalene	8.845	162	47557	4.61	ppm	96
130) Diphenyl Ether	8.941	170	32892	4.70	ppm	93
131) 1,4-Naphthoquinone	9.032	158	17887	3.98	ppm	76
132) Pentachlorobenzene	9.668	250	17118	3.58	ppm	95
133) 1-Naphthylamine	9.807	143	55061	5.20	ppm	93

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071357.D
Acq On : 23 Jun 2020 10:30 am
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 23 16:54:30 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration

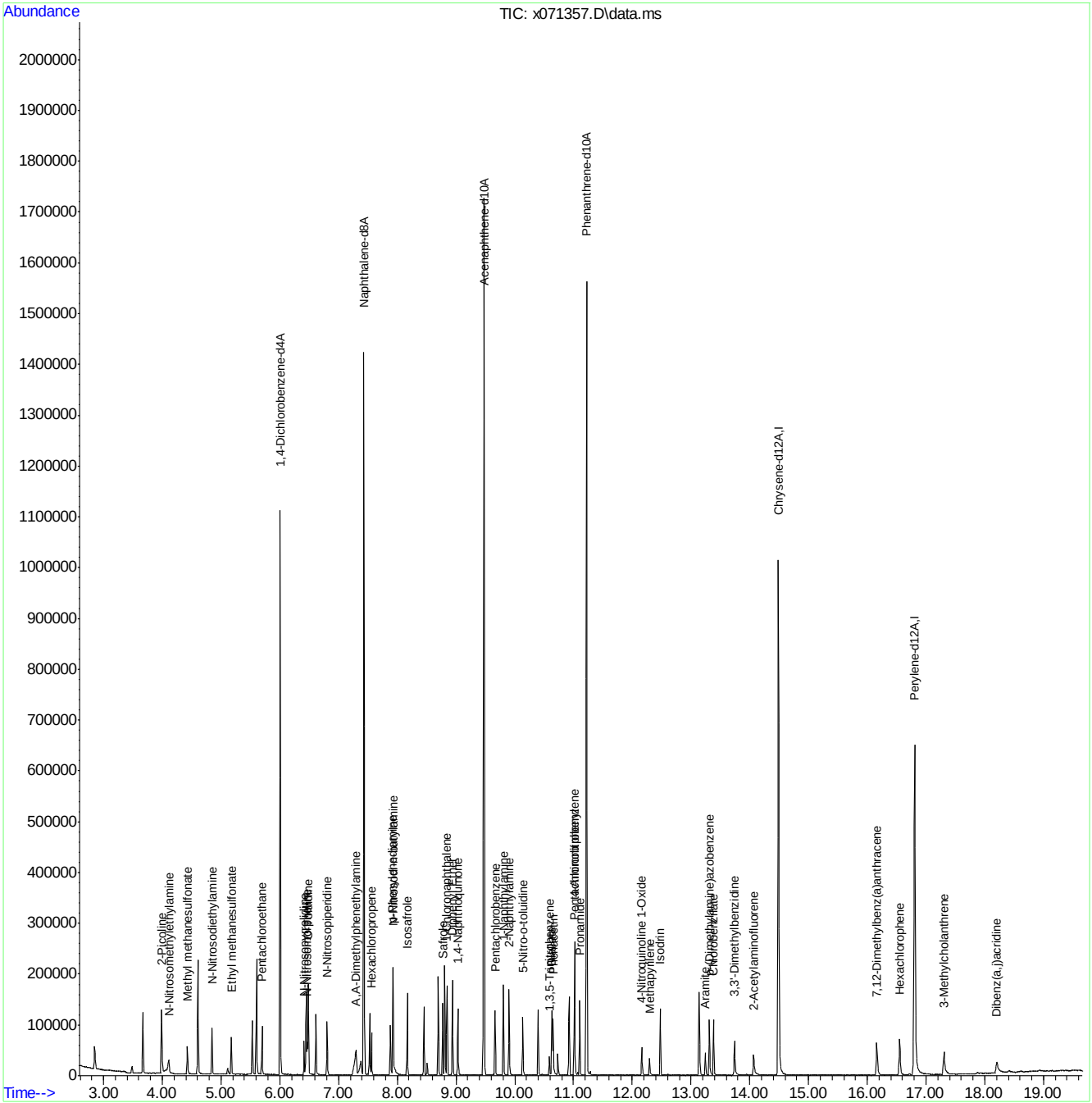
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
134) 2-Naphthylamine	9.904	143	58142	5.40	ppm		99
135) 5-Nitro-o-toluidine	10.134	152	14085	4.07	ppm		71
137) 1,3,5-Trinitrobenzene	10.588	75	6902	1.97	ppm		78
138) Diallate	10.631	43	46068m	7.07	ppm		
139) Phenacetin	10.652	108	25046	4.22	ppm		87
140) 4-Aminobiphenyl	11.016	169	59632	5.99	ppm		96
141) Pronamide	11.107	173	20771	4.18	ppm		96
142) Pentachloronitrobenzene	11.011	237	5479	3.65	ppm		86
143) 4-Nitroquinoline 1-Oxide	12.166	190	1319	3.38	ppm	#	26
144) Methapyrilene	12.294	58	13373	1.83	ppm		71
145) Isodrin	12.476	193	8210	4.01	ppm	#	77
147) Aramite	13.241	185	5359m	3.41	ppm		
148) p-(Dimethylamine)azobe...	13.311	120	18718	3.82	ppm		77
149) Chlorobenzilate	13.386	139	22927	4.66	ppm	#	65
151) 3,3'-Dimethylbenzidine	13.739	212	31071	5.26	ppm		96
152) 2-Acetylaminofluorene	14.065	181	17579	3.50	ppm		88
154) 7,12-Dimethylbenz(a)an...	16.162	256	21270	4.16	ppm		95
155) Hexachlorophene	16.552	196	7994	119.27	ppm		97
156) 3-Methylcholanthrene	17.306	268	17684	3.87	ppm		91
157) Dibenz(a,j)acridine	18.205	279	24909m	3.73	ppm		

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071357.D
Acq On : 23 Jun 2020 10:30 am
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 23 16:54:30 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: SX2918-IC2918
Lab FileID: X071357.D
Injection Time: 06/23/20 10:30

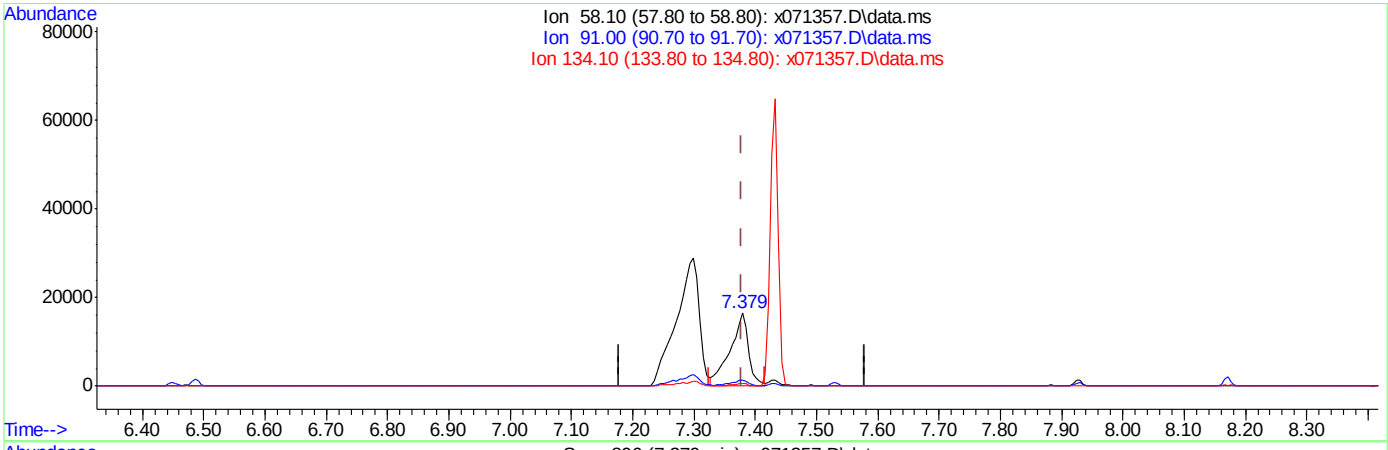
Method: EPA 625.1
Analyst approved: 06/24/20 09:50 Martha Valls
Supervisor approved: 06/24/20 14:07 Naresh Jiawan

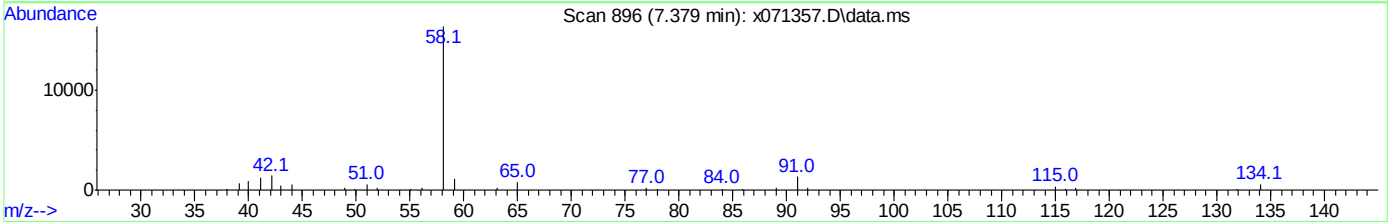
Parameter	CAS	Sig#	R.T. (min.)	Reason
A,A-Dimethylphenethylamine	122-09-8		7.30	Split peak
Diallate	2303-16-4		10.63	Split peak
Aramite	140-57-8		13.24	Split peak
Dibenz(a,j)acridine	224-42-0		18.20	Split peak

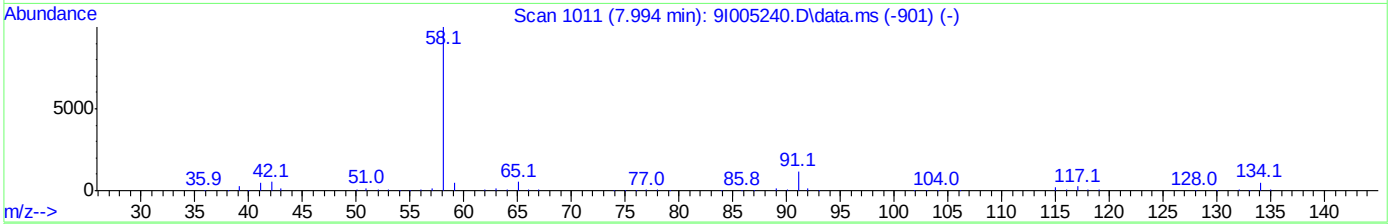
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071357.D
Acq On : 23 Jun 2020 10:30 am
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 23 14:01:00 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071357.D\data.ms

(122) A,A-Dimethylphenethylamine

7.379min (-0.000) 2.08ppm

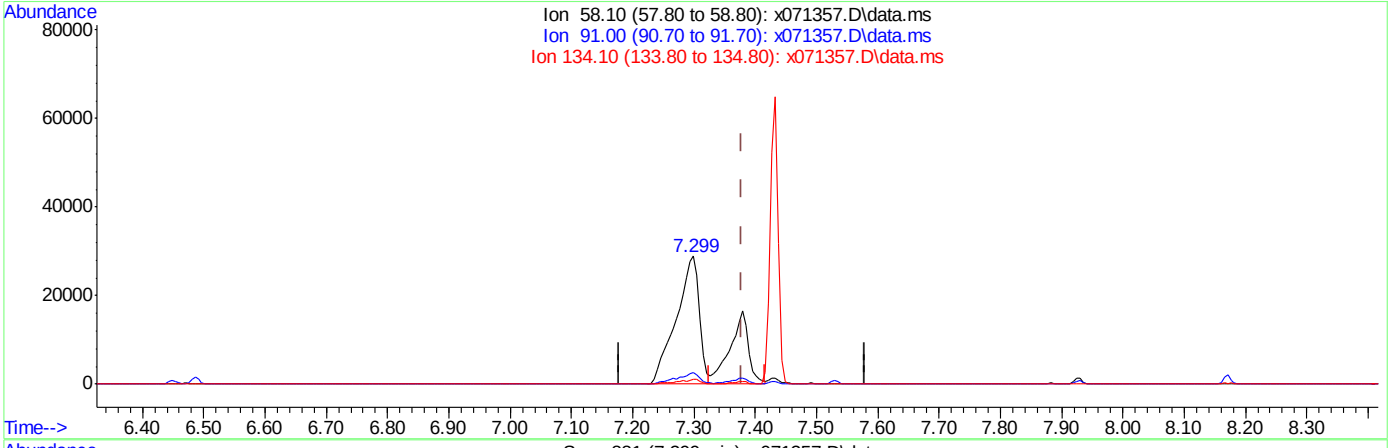
response 33554

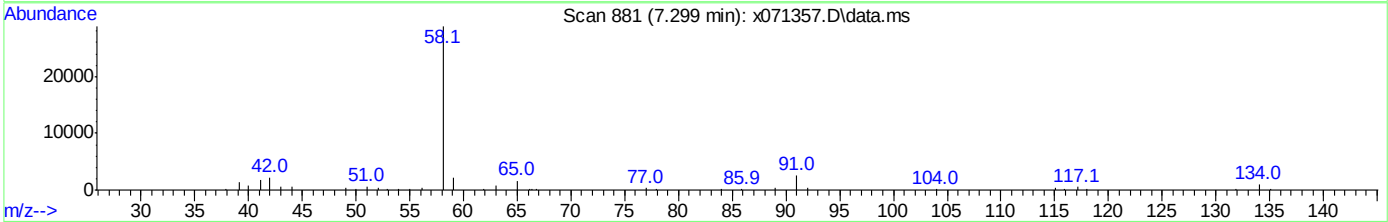
Ion	Exp%	Act%
58.10	100	100
91.00	11.70	7.51
134.10	5.10	0.00
0.00	0.00	0.00

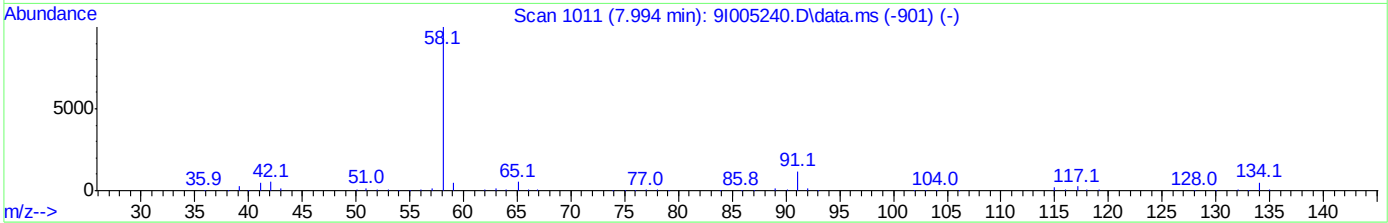
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071357.D
Acq On : 23 Jun 2020 10:30 am
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 23 14:01:00 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071357.D\data.ms

(122) A,A-Dimethylphenethylamine

7.299min (-0.080) 6.74ppm m

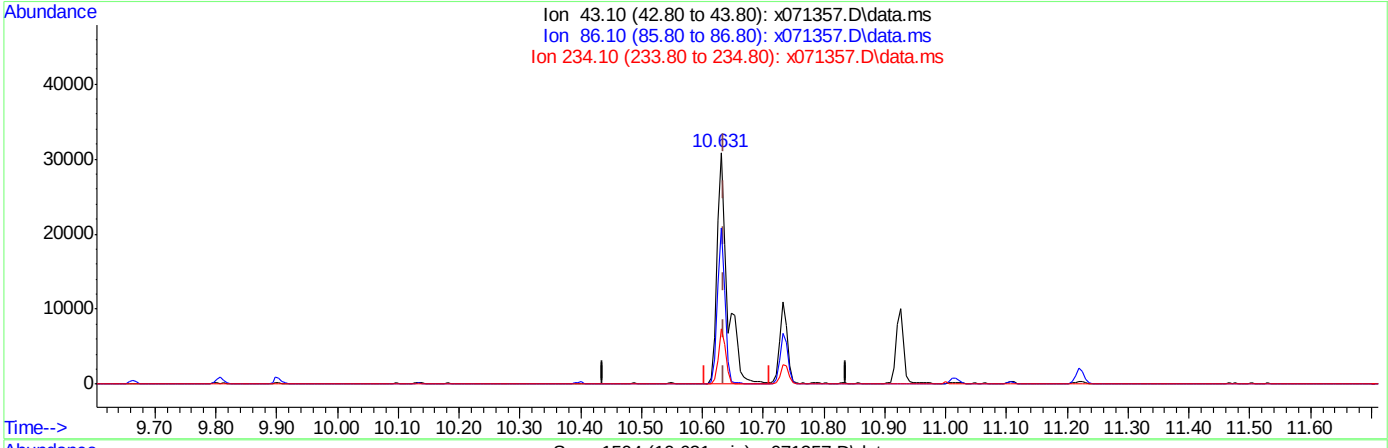
response 109296

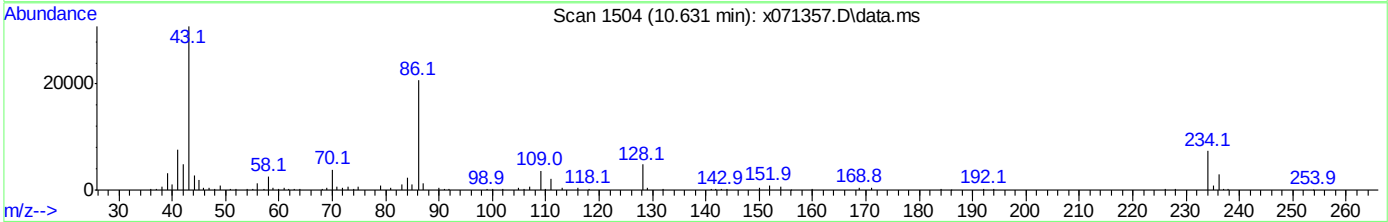
Ion	Exp%	Act%
58.10	100	100
91.00	11.70	8.96
134.10	5.10	3.54
0.00	0.00	0.00

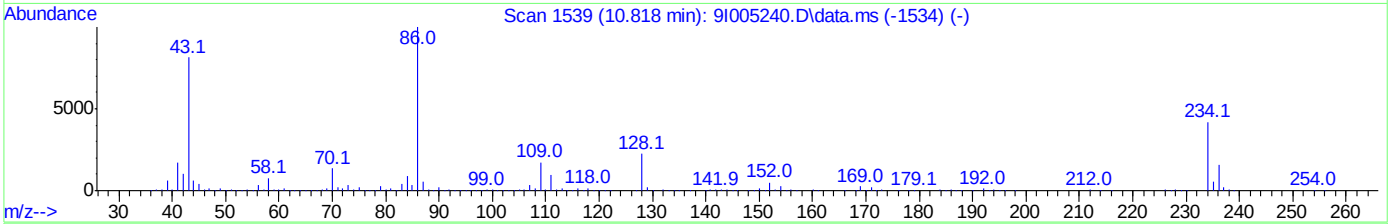
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071357.D
Acq On : 23 Jun 2020 10:30 am
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 23 14:01:00 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071357.D\data.ms

(138) Diallate

10.631min (-0.005) 5.62ppm

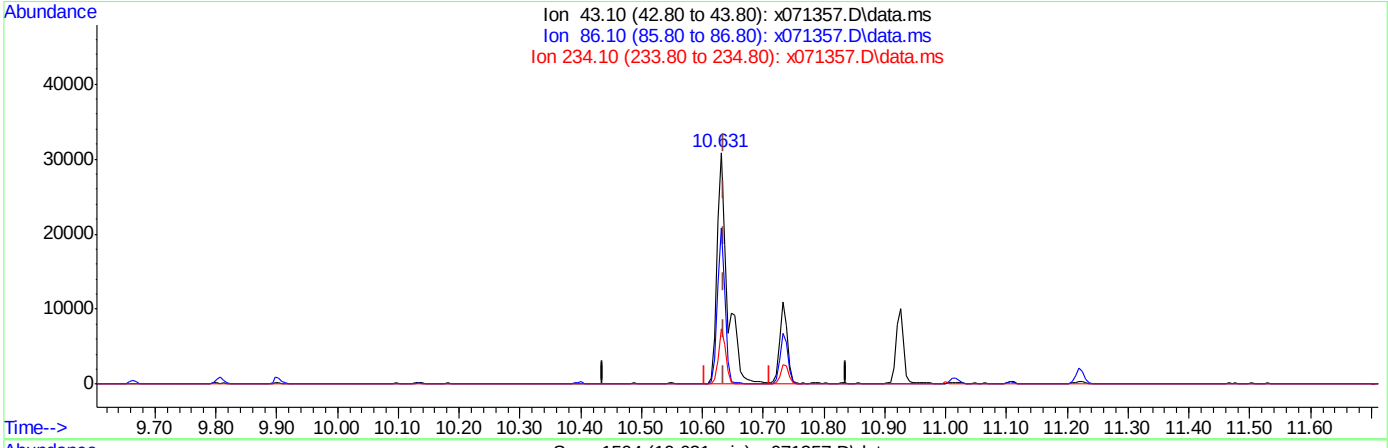
response 36663

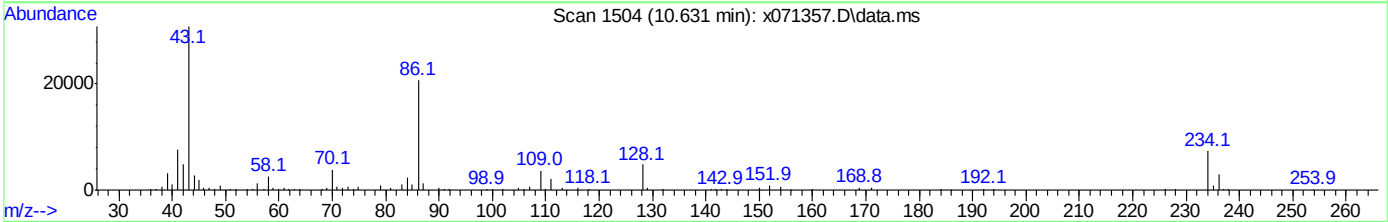
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	67.74#
234.10	51.50	24.04
0.00	0.00	0.00

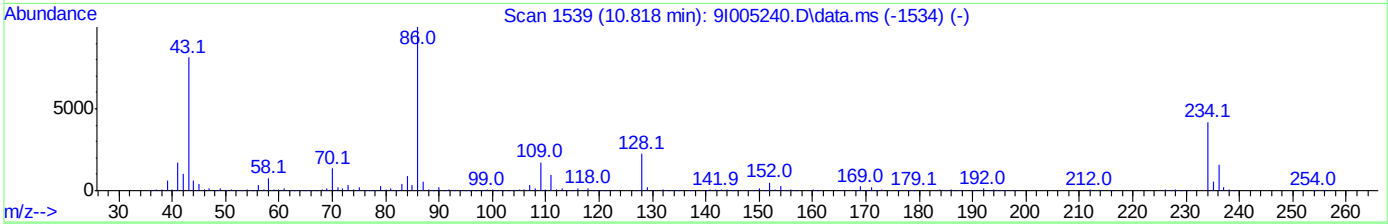
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071357.D
Acq On : 23 Jun 2020 10:30 am
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 23 14:01:00 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071357.D\data.ms

(138) Diallate

10.631min (-0.005) 7.07ppm m

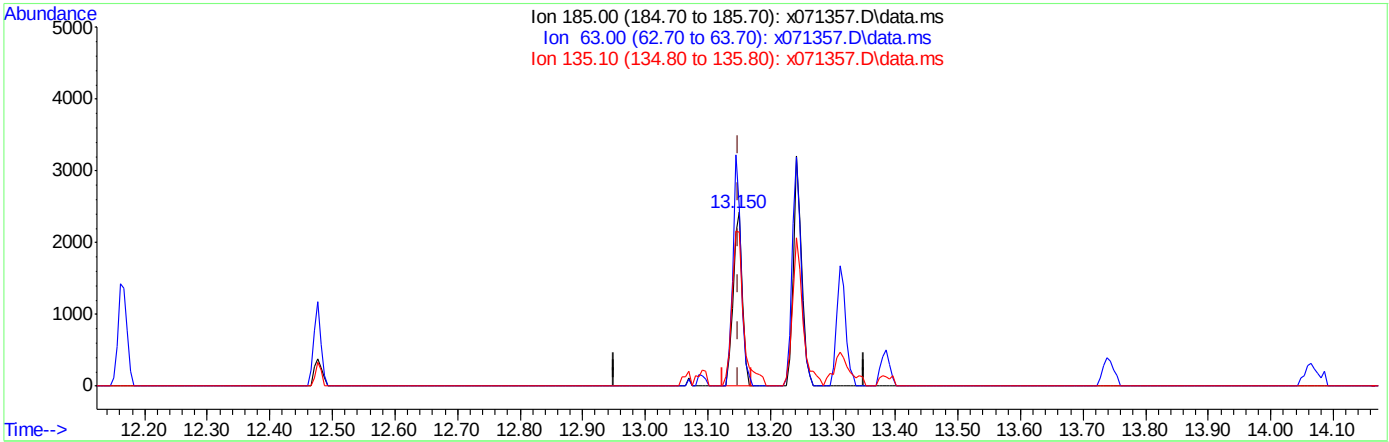
response 46068

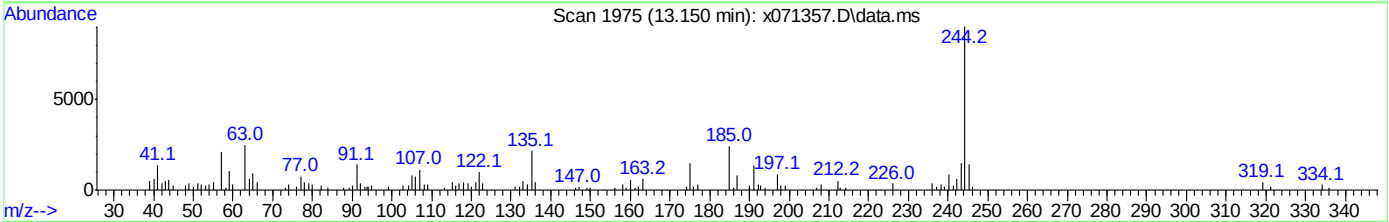
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	67.49#
234.10	51.50	23.95
0.00	0.00	0.00

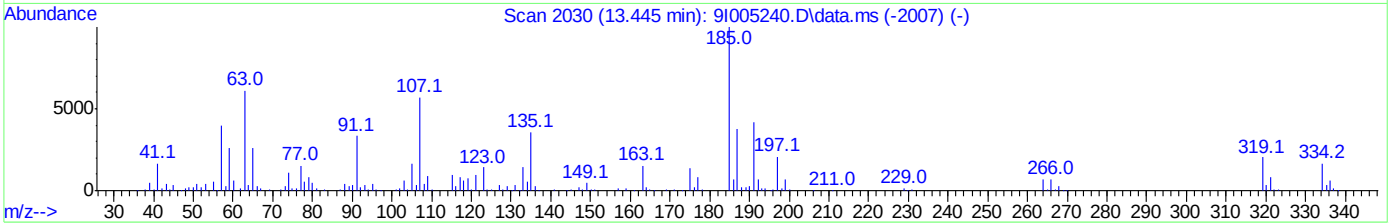
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071357.D
Acq On : 23 Jun 2020 10:30 am
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 23 14:01:00 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071357.D\data.ms

(147) Aramite

13.150min (-0.000) 1.55ppm

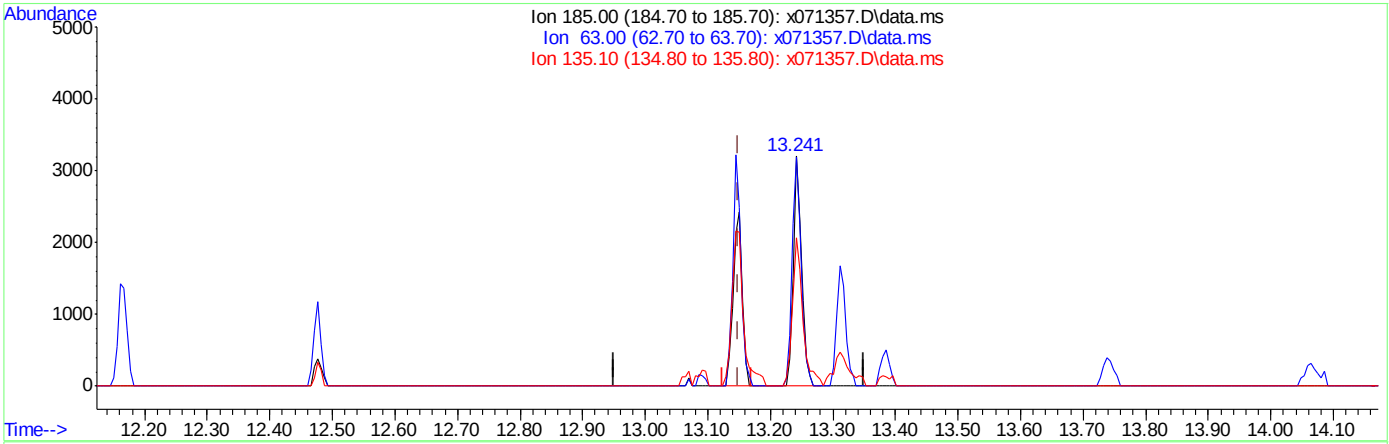
response 2431

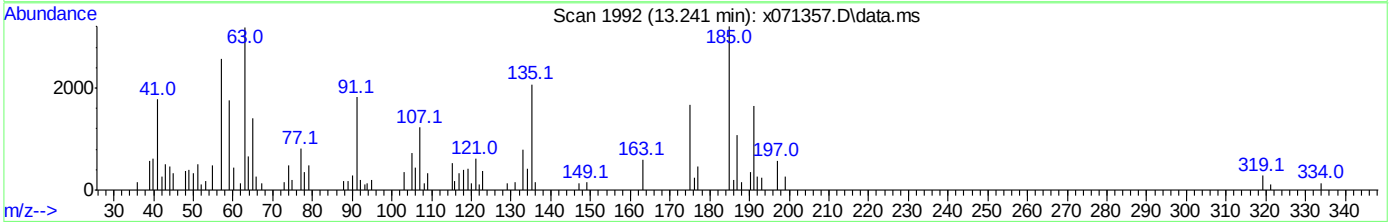
Ion	Exp%	Act%
185.00	100	100
63.00	61.10	102.64#
135.10	35.60	84.51#
0.00	0.00	0.00

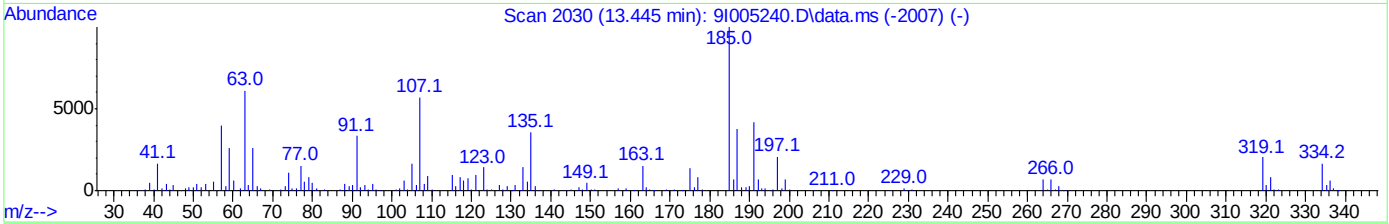
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071357.D
Acq On : 23 Jun 2020 10:30 am
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 23 14:01:00 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071357.D\data.ms

(147) Aramite

13.241min (+0.091) 3.41ppm m

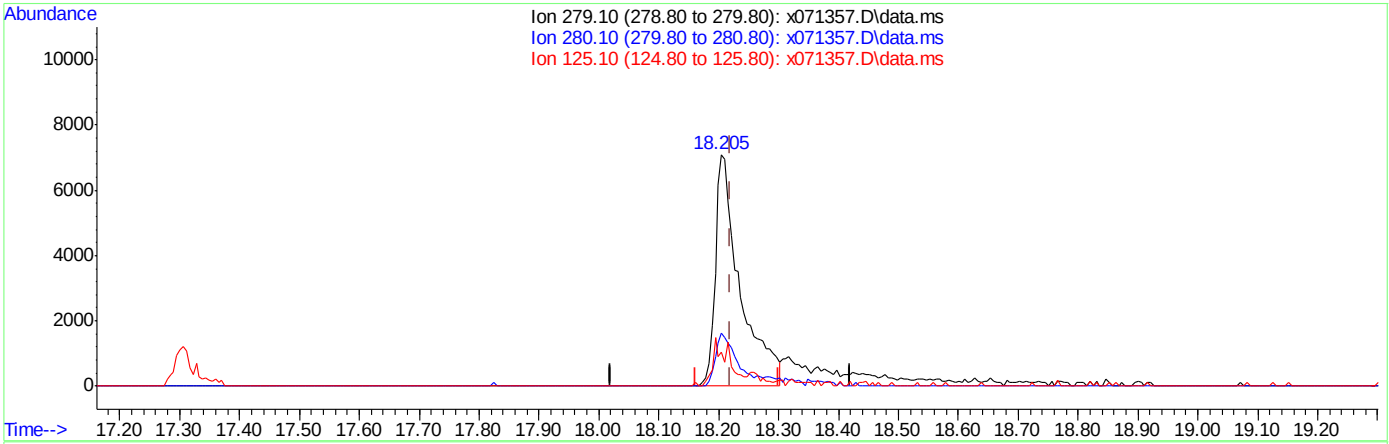
response 5359

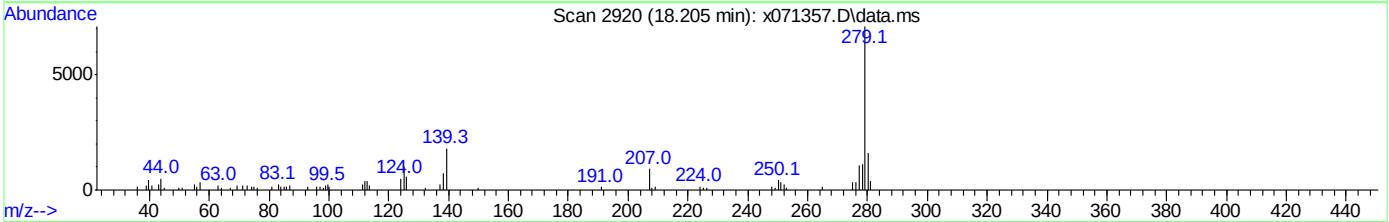
Ion	Exp%	Act%
185.00	100	100
63.00	61.10	99.63#
135.10	35.60	64.66
0.00	0.00	0.00

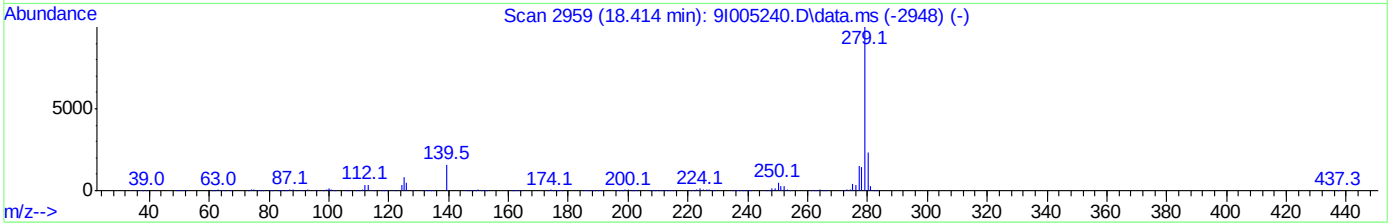
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071357.D
Acq On : 23 Jun 2020 10:30 am
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 23 14:01:00 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071357.D\data.ms

(157) Dibenz(a,j)acridine

18.205min (-0.016) 3.05ppm

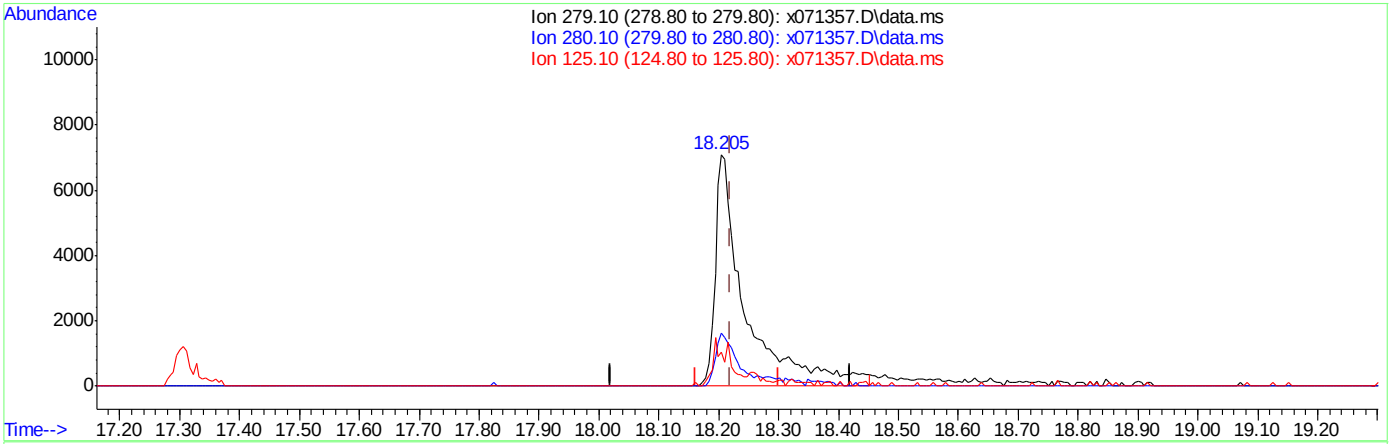
response 20312

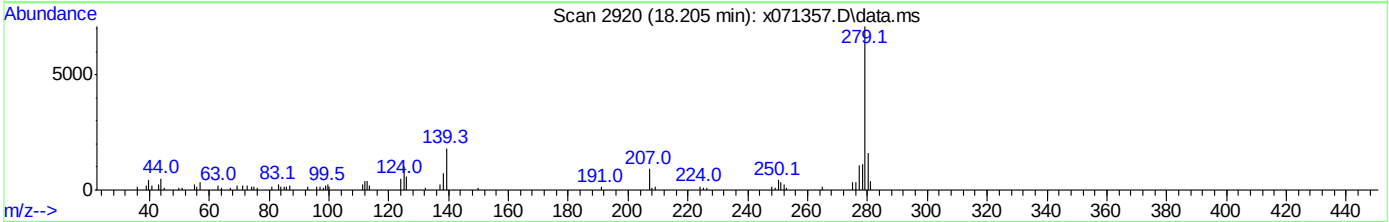
Ion	Exp%	Act%
279.10	100	100
280.10	23.20	22.27
125.10	8.60	13.11
0.00	0.00	0.00

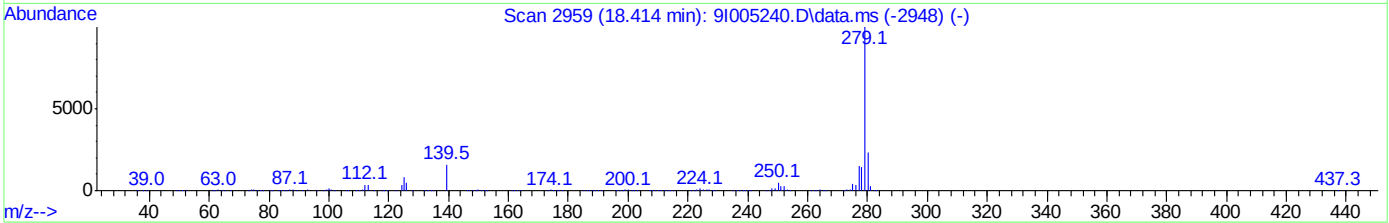
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071357.D
Acq On : 23 Jun 2020 10:30 am
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 23 14:01:00 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071357.D\data.ms

(157) Dibenz(a,j)acridine

18.205min (-0.016) 3.73ppm m

response 24909

Ion	Exp%	Act%
279.10	100	100
280.10	23.20	22.95
125.10	8.60	14.56
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 06/24/20 14:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071358.D
Acq On : 23 Jun 2020 10:55 am
Operator : marthav
Sample : ic2918-10 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 23 16:54:45 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	0.000	152	0m	40.00	ppm	-6.00
22) Naphthalene-d8	0.000	136	0m	40.00	ppm	-7.43
43) Acenaphthene-d10	0.000	164	0m	40.00	ppm	-9.48
70) Phenanthrene-d10	0.000	188	0m	40.00	ppm	-11.22
92) Chrysene-d12	0.000	240	0m	40.00	ppm	-14.49
102) Perylene-d12	0.000	264	0m	40.00	ppm	-16.82
110) 1,4-Dichlorobenzene-d4A	6.005	152	156922	40.00	ppm	0.00
120) Naphthalene-d8A	7.433	136	643577	40.00	ppm	0.00
127) Acenaphthene-d10A	9.476	164	345206	40.00	ppm	0.00
136) Phenanthrene-d10A	11.225	188	622990	40.00	ppm	0.00
146) Chrysene-d12A	14.488	240	421200	40.00	ppm	0.00
153) Perylene-d12A	16.809	264	365416	40.00	ppm	-0.01
System Monitoring Compounds						
7) 2-Fluorophenol	0.000	112	0d	0.00	ppm	
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#		
9) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#		
23) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#		
47) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#		
75) 2,4,6-Tribromophenol	0.000	330	0d	0.00	ppm	
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#		
95) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#		
Target Compounds						Qvalue
111) 2-Picoline	3.983	93	74366	9.54	ppm	87
112) N-Nitrosomethylethylamine	4.106	42	49731	18.02	ppm #	53
113) Methyl methanesulfonate	4.427	80	35567	9.23	ppm	90
114) N-Nitrosodiethylamine	4.849	102	29289	9.46	ppm #	24
115) Ethyl methanesulfonate	5.176	79	48879	8.96	ppm	98
116) Pentachloroethane	5.700	167	20367	9.18	ppm	94
117) N-Nitrosopyrrolidine	6.417	100	26896	8.48	ppm #	19
118) N-Nitrosomorpholine	6.470	56	48542	14.67	ppm #	66
119) O-Toluidine	6.486	106	97569	10.14	ppm	99
121) N-Nitrosopiperidine	6.807	42	59493	16.87	ppm #	59
122) A,A-Dimethylphenethyla...	7.326	58	235966m	13.68	ppm	
123) Hexachloropropene	7.561	213	24561	7.17	ppm	98
124) N-Nitrosodi-n-butylamine	7.930	84	40055	9.28	ppm #	44
125) p-Phenylenediamine	7.925	108	66930	13.14	ppm	92
126) Isosafrole	8.171	162	42968	10.20	ppm	83
128) Safrole	8.775	162	43049	9.64	ppm	89
129) 1-Chloronaphthalene	8.845	162	102922	9.60	ppm	97
130) Diphenyl Ether	8.941	170	73174	10.05	ppm	93
131) 1,4-Naphthoquinone	9.032	158	42030	9.17	ppm	78
132) Pentachlorobenzene	9.669	250	36760	7.39	ppm	98
133) 1-Naphthylamine	9.808	143	118101	10.74	ppm	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071358.D
Acq On : 23 Jun 2020 10:55 am
Operator : marthav
Sample : ic2918-10 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 23 16:54:45 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration

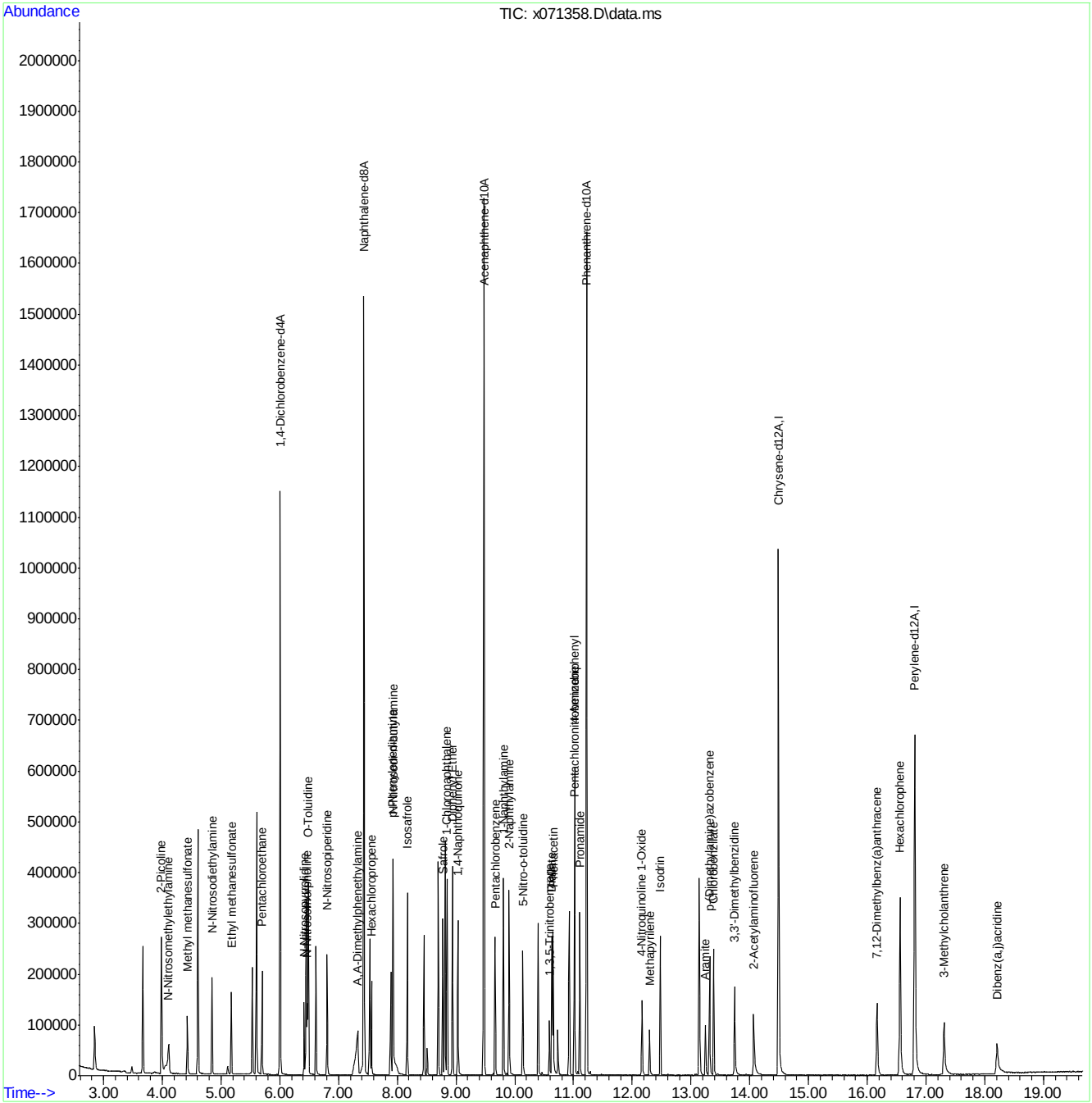
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
134) 2-Naphthylamine	9.904	143	127640	11.39	ppm		98
135) 5-Nitro-o-toluidine	10.134	152	32916	9.09	ppm	#	70
137) 1,3,5-Trinitrobenzene	10.589	75	20814	5.61	ppm		80
138) Diallate	10.631	43	99125m	14.41	ppm		
139) Phenacetin	10.653	108	56928	9.03	ppm		94
140) 4-Aminobiphenyl	11.016	169	131145	12.49	ppm		97
141) Pronamide	11.107	173	48051	9.12	ppm		96
142) Pentachloronitrobenzene	11.011	237	11641	7.34	ppm		86
143) 4-Nitroquinoline 1-Oxide	12.166	190	4741	10.73	ppm	#	62
144) Methapyrilene	12.295	58	33362	4.33	ppm		72
145) Isodrin	12.477	193	17893	8.28	ppm	#	76
147) Aramite	13.241	185	13073m	8.08	ppm		
148) p-(Dimethylamine)azobe...	13.316	120	44838	9.01	ppm		87
149) Chlorobenzilate	13.386	139	50891	10.08	ppm	#	67
151) 3,3'-Dimethylbenzidine	13.744	212	72156	11.91	ppm		98
152) 2-Acetylaminofluorene	14.065	181	46047	8.83	ppm		91
154) 7,12-Dimethylbenz(a)an...	16.167	256	46557	8.85	ppm		94
155) Hexachlorophene	16.558	196	41927	186.26	ppm		96
156) 3-Methylcholanthrene	17.306	268	41211	8.77	ppm		94
157) Dibenz(a,j)acridine	18.210	279	51661	7.45	ppm		89

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071358.D
Acq On : 23 Jun 2020 10:55 am
Operator : marthav
Sample : ic2918-10 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 23 16:54:45 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: SX2918-IC2918
Lab FileID: X071358.D
Injection Time: 06/23/20 10:55

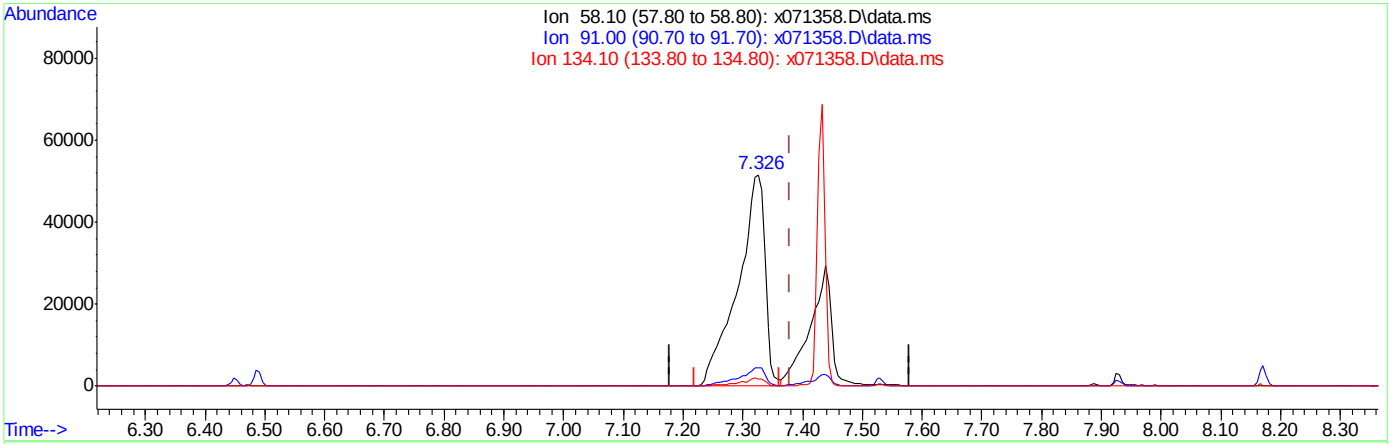
Method: EPA 625.1
Analyst approved: 06/24/20 09:50 Martha Valls
Supervisor approved: 06/24/20 14:07 Naresh Jiawan

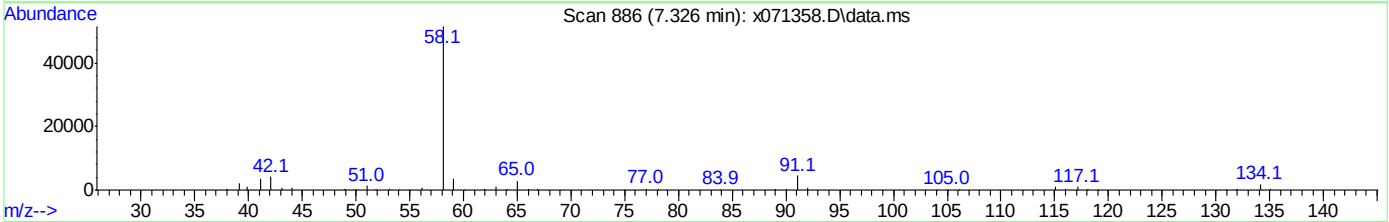
Parameter	CAS	Sig#	R.T. (min.)	Reason
A,A-Dimethylphenethylamine	122-09-8		7.33	Split peak
Diallate	2303-16-4		10.63	Split peak
Aramite	140-57-8		13.24	Split peak

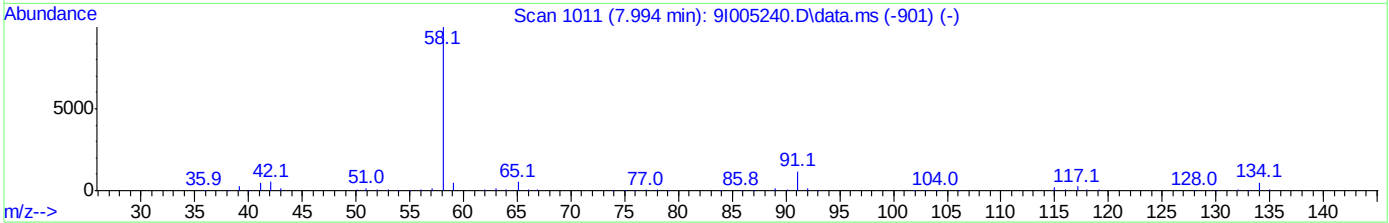
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071358.D
Acq On : 23 Jun 2020 10:55 am
Operator : marthav
Sample : ic2918-10 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 23 14:01:02 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071358.D\data.ms

(122) A,A-Dimethylphenethylamine

7.326min (-0.053) 9.43ppm

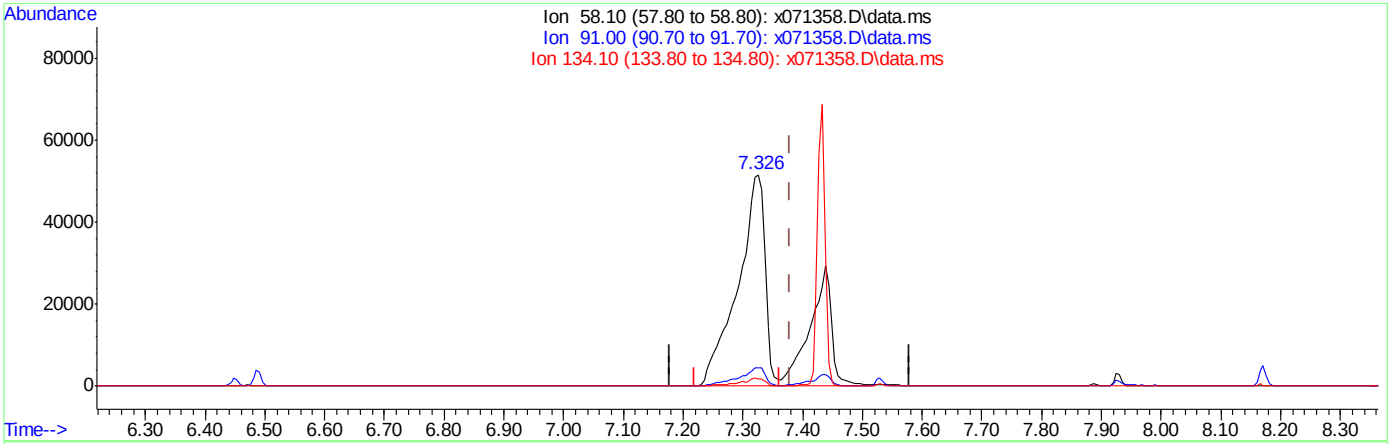
response 161765

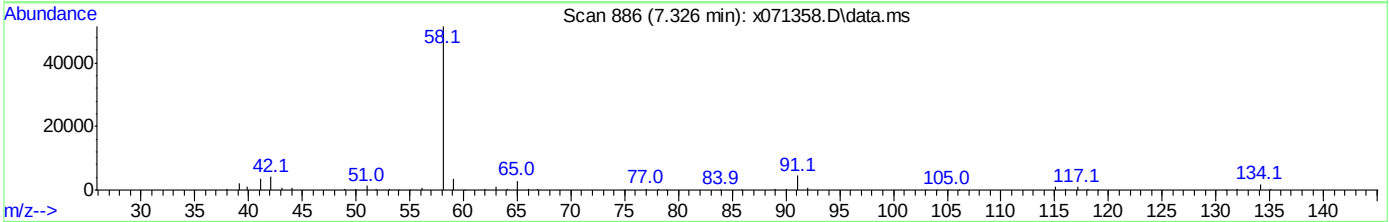
Ion	Exp%	Act%
58.10	100	100
91.00	11.70	8.75
134.10	5.10	3.52
0.00	0.00	0.00

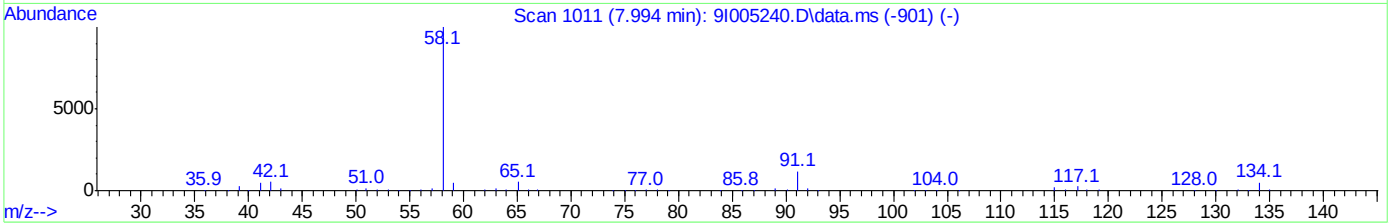
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071358.D
Acq On : 23 Jun 2020 10:55 am
Operator : marthav
Sample : ic2918-10 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 23 14:01:02 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071358.D\data.ms

(122) A,A-Dimethylphenethylamine

7.326min (-0.053) 13.68ppm m

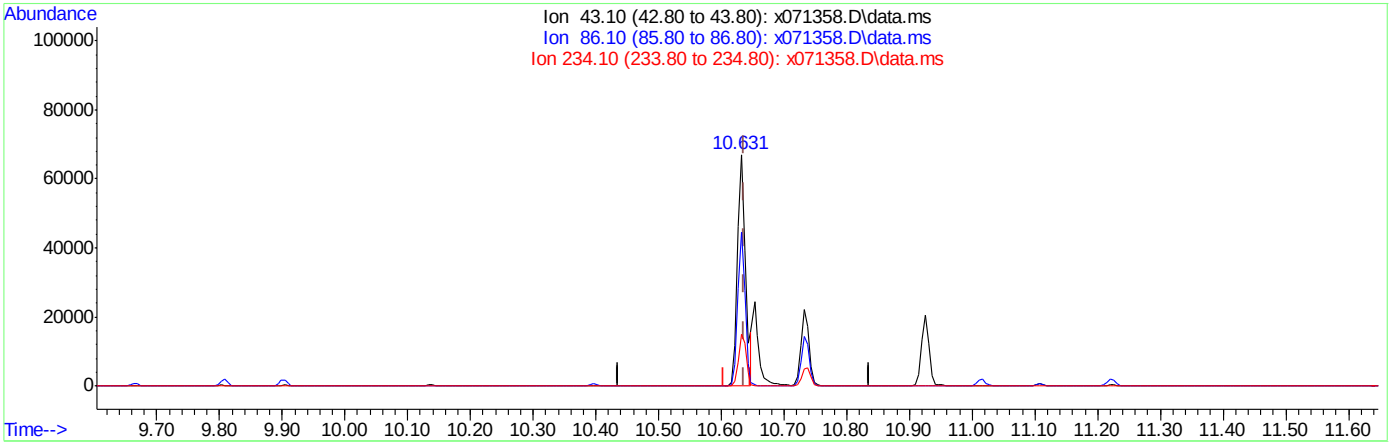
response 235966

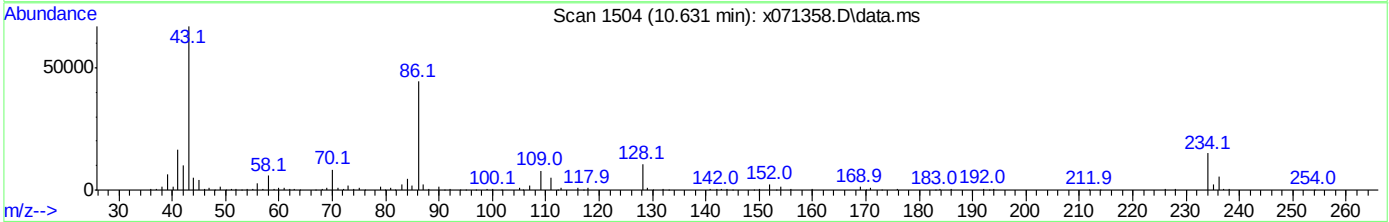
Ion	Exp%	Act%
58.10	100	100
91.00	11.70	8.82
134.10	5.10	3.47
0.00	0.00	0.00

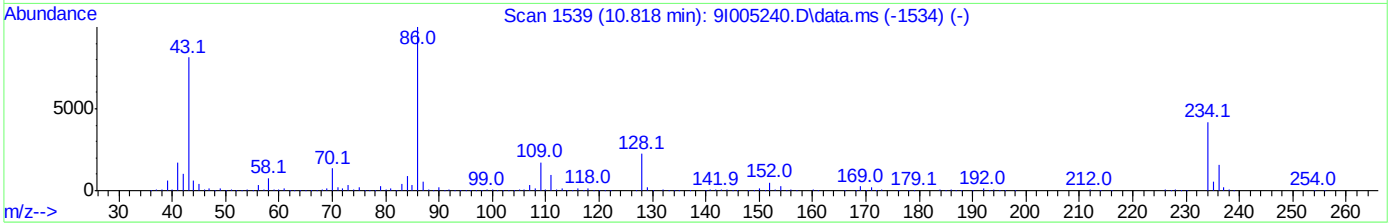
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071358.D
Acq On : 23 Jun 2020 10:55 am
Operator : marthav
Sample : ic2918-10 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 23 14:01:02 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071358.D\data.ms

(138) Diallate

10.631min (-0.005) 9.05ppm

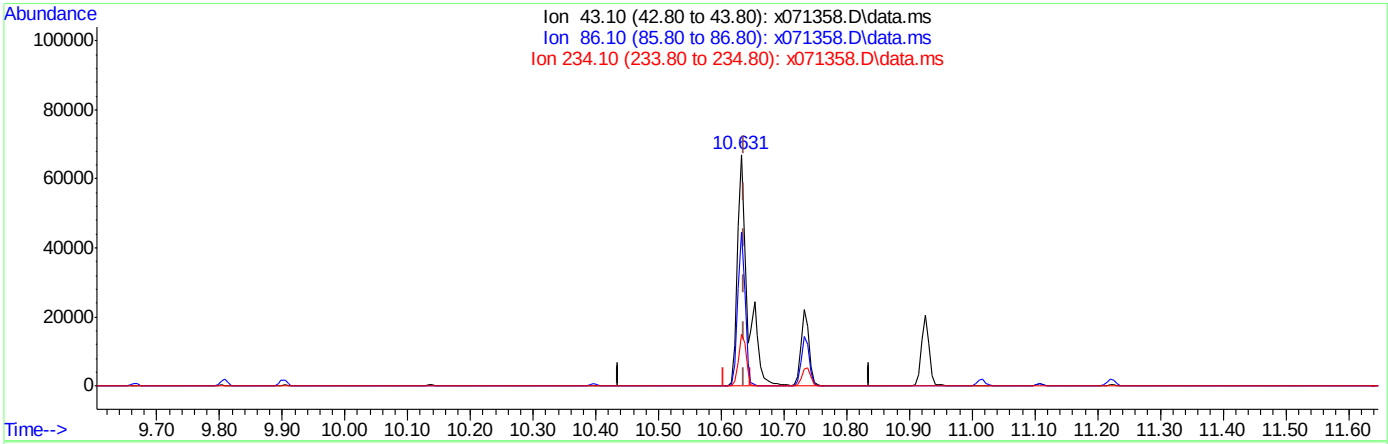
response 62255

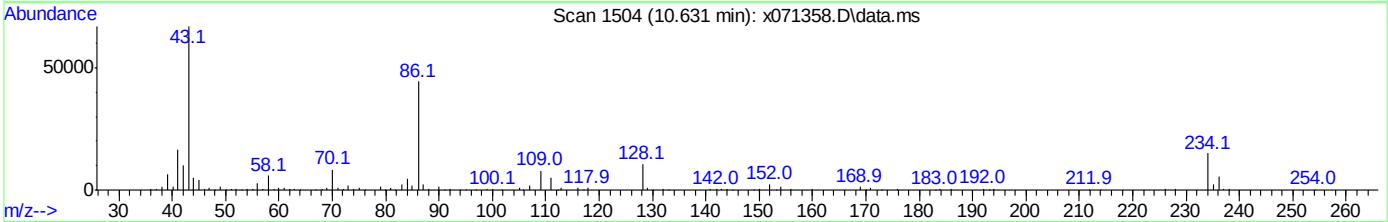
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	74.38#
234.10	51.50	24.76
0.00	0.00	0.00

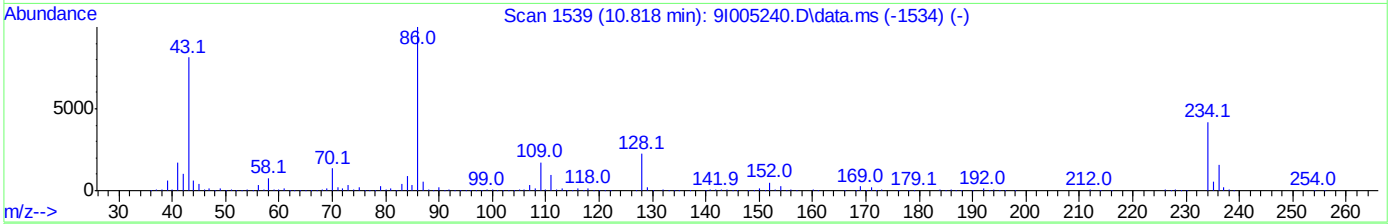
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071358.D
Acq On : 23 Jun 2020 10:55 am
Operator : marthav
Sample : ic2918-10 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 23 14:01:02 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071358.D\data.ms

(138) Diallate

10.631min (-0.005) 14.41ppm m

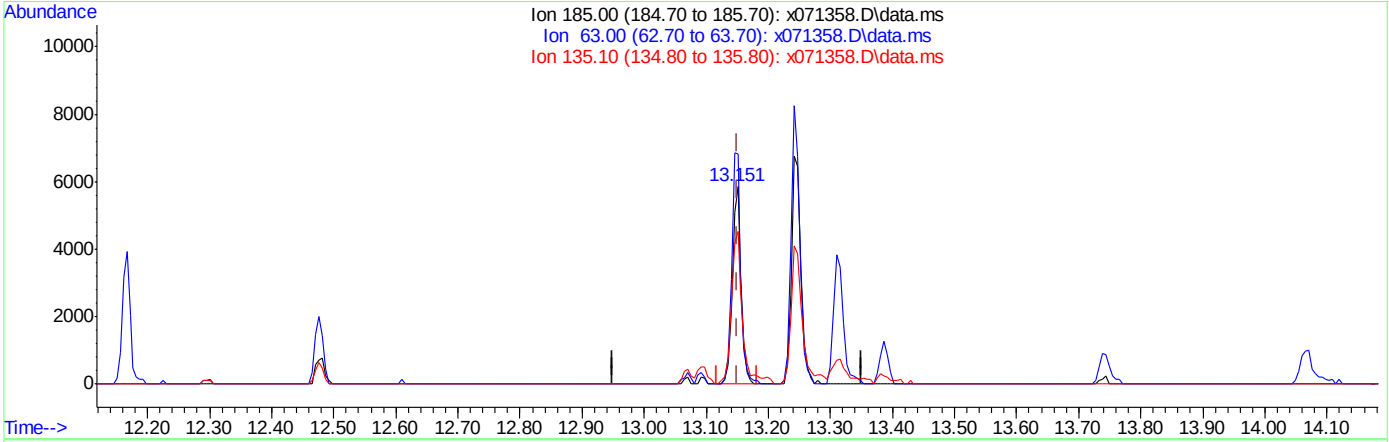
response 99125

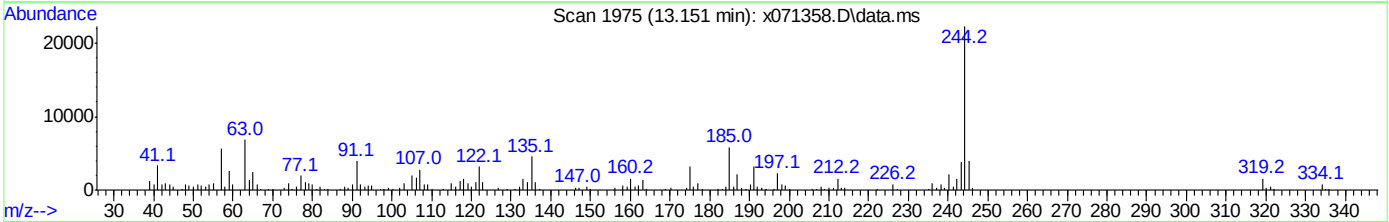
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	66.38#
234.10	51.50	22.30
0.00	0.00	0.00

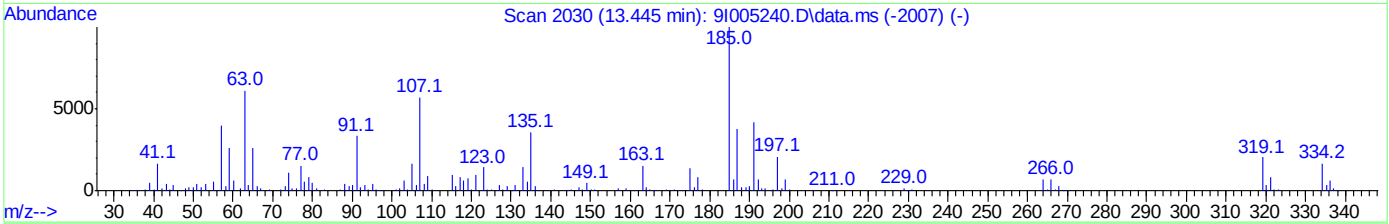
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071358.D
Acq On : 23 Jun 2020 10:55 am
Operator : marthav
Sample : ic2918-10 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 23 14:08:36 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071358.D\data.ms

(147) Aramite

13.151min (+0.000) 3.78ppm

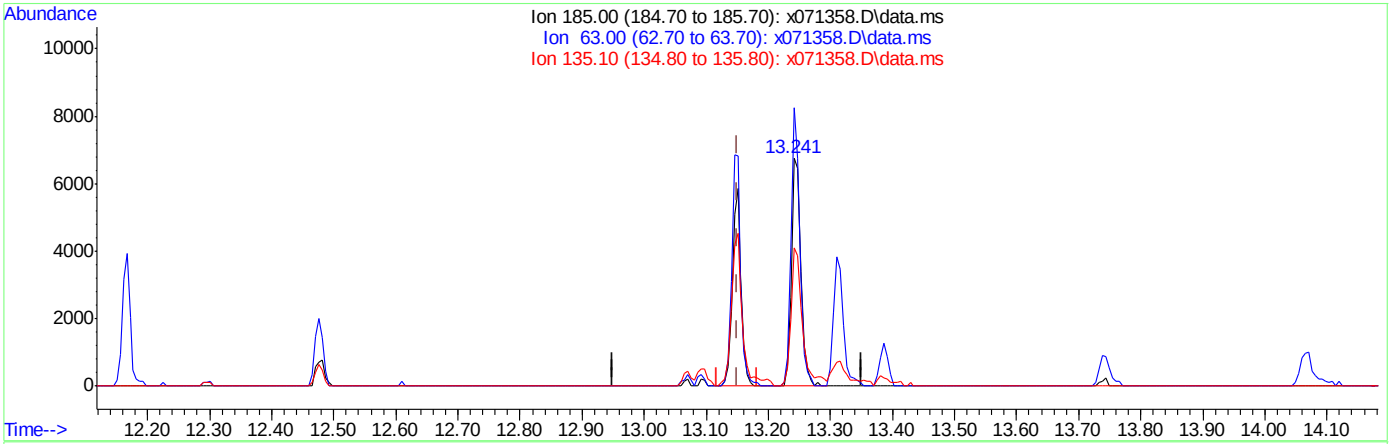
response 6080

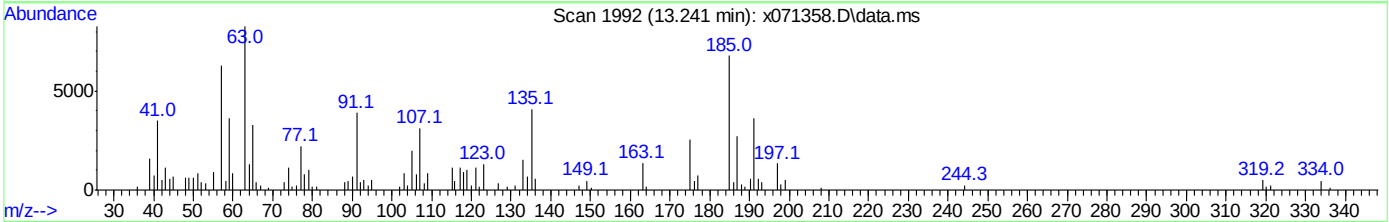
Ion	Exp%	Act%
185.00	100	100
63.00	61.10	115.07#
135.10	35.60	74.78#
0.00	0.00	0.00

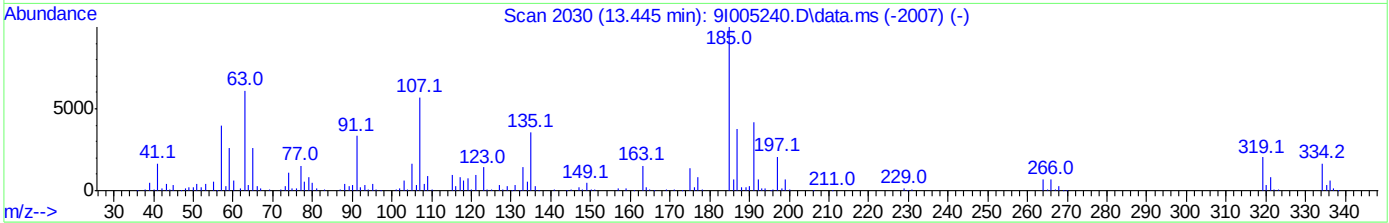
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071358.D
Acq On : 23 Jun 2020 10:55 am
Operator : marthav
Sample : ic2918-10 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 23 14:08:36 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071358.D\data.ms

(147) Aramite

13.241min (+0.091) 8.08ppm m

response 13073

Ion	Exp%	Act%
185.00	100	100
63.00	61.10	122.06#
135.10	35.60	60.55
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 06/24/20 14:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071359.D
Acq On : 23 Jun 2020 11:21 am
Operator : marthav
Sample : ic2918-25 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 23 16:54:59 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	0.000	152	0m	40.00	ppm	-6.00
22) Naphthalene-d8	0.000	136	0m	40.00	ppm	-7.43
43) Acenaphthene-d10	0.000	164	0m	40.00	ppm	-9.48
70) Phenanthrene-d10	0.000	188	0m	40.00	ppm	-11.22
92) Chrysene-d12	0.000	240	0m	40.00	ppm	-14.49
102) Perylene-d12	0.000	264	0m	40.00	ppm	-16.82
110) 1,4-Dichlorobenzene-d4A	6.005	152	158676	40.00	ppm	0.00
120) Naphthalene-d8A	7.433	136	654937	40.00	ppm	0.00
127) Acenaphthene-d10A	9.476	164	355001	40.00	ppm	0.00
136) Phenanthrene-d10A	11.225	188	638763	40.00	ppm	0.00
146) Chrysene-d12A	14.487	240	425269	40.00	ppm	0.00
153) Perylene-d12A	16.814	264	360527	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	0.000	112	0d	0.00	ppm	
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#		
9) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#		
23) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#		
47) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#		
75) 2,4,6-Tribromophenol	0.000	330	0d	0.00	ppm	
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#		
95) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#		
Target Compounds						Qvalue
111) 2-Picoline	3.983	93	185422	23.53	ppm	87
112) N-Nitrosomethylethylamine	4.106	42	124718	44.70	ppm #	53
113) Methyl methanesulfonate	4.432	80	89970	23.09	ppm	91
114) N-Nitrosodiethylamine	4.849	102	74730	23.86	ppm #	18
115) Ethyl methanesulfonate	5.176	79	123287	22.35	ppm	93
116) Pentachloroethane	5.700	167	52204	23.27	ppm	97
117) N-Nitrosopyrrolidine	6.422	100	68904	21.49	ppm #	26
118) N-Nitrosomorpholine	6.475	56	125871	37.61	ppm #	67
119) O-Toluidine	6.491	106	251000	25.81	ppm	98
121) N-Nitrosopiperidine	6.807	42	150841	42.04	ppm #	57
122) A,A-Dimethylphenethyla...	7.352	58	614390m	34.13	ppm	
123) Hexachloropropene	7.561	213	68332	19.62	ppm	100
124) N-Nitrosodi-n-butylamine	7.930	84	101921	22.53	ppm #	41
125) p-Phenylenediamine	7.930	108	173372m	35.56	ppm	
126) Isosafrole	8.171	162	110395	25.75	ppm	81
128) Safrole	8.775	162	112129	24.41	ppm	85
129) 1-Chloronaphthalene	8.850	162	269339	24.44	ppm	98
130) Diphenyl Ether	8.941	170	190986	25.51	ppm	92
131) 1,4-Naphthoquinone	9.037	158	118609	26.87	ppm	87
132) Pentachlorobenzene	9.668	250	94218	18.43	ppm	100
133) 1-Naphthylamine	9.807	143	302346	26.73	ppm	92

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071359.D
Acq On : 23 Jun 2020 11:21 am
Operator : marthav
Sample : ic2918-25 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 23 16:54:59 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration

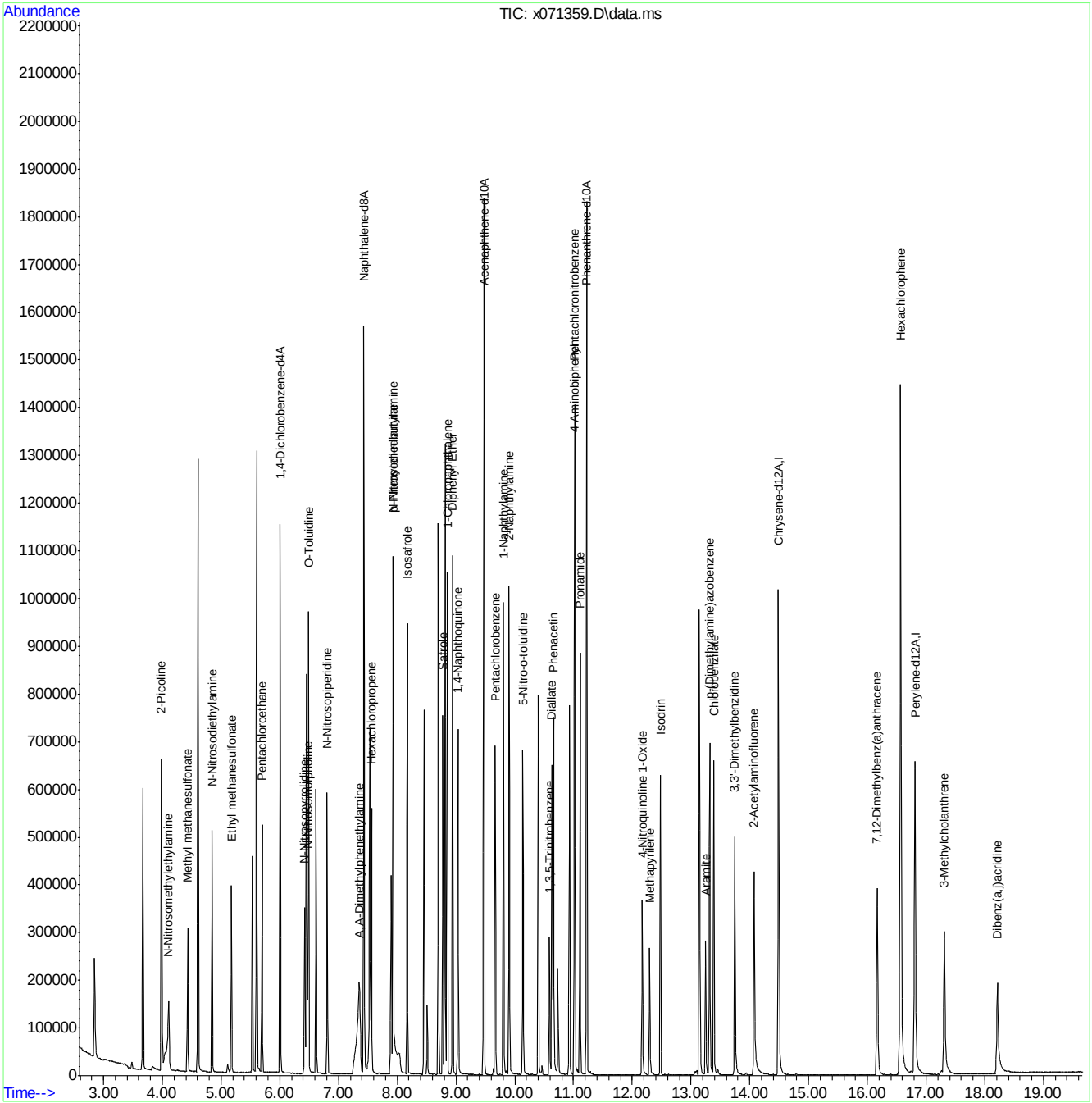
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
134) 2-Naphthylamine	9.904	143	327376	28.41	ppm		96
135) 5-Nitro-o-toluidine	10.139	152	91941	24.27	ppm		80
137) 1,3,5-Trinitrobenzene	10.588	75	67291	17.44	ppm		84
138) Diallate	10.631	43	252842m	35.85	ppm		
139) Phenacetin	10.658	108	154829	23.52	ppm		91
140) 4-Aminobiphenyl	11.022	169	342587	31.81	ppm		98
141) Pronamide	11.112	173	128388	23.47	ppm		98
142) Pentachloronitrobenzene	11.016	237	31448	19.34	ppm		90
143) 4-Nitroquinoline 1-Oxide	12.172	190	21069	37.18	ppm		72
144) Methapyrilene	12.295	58	93392	11.77	ppm	#	70
145) Isodrin	12.482	193	43906	19.81	ppm		85
147) Aramite	13.247	185	39644m	23.75	ppm		
148) p-(Dimethylamine)azobe...	13.316	120	121096	24.52	ppm		82
149) Chlorobenzilate	13.391	139	138411	26.77	ppm		74
151) 3,3'-Dimethylbenzidine	13.744	212	185725	30.03	ppm		99
152) 2-Acetylaminofluorene	14.070	181	141745	25.52	ppm		91
154) 7,12-Dimethylbenz(a)an...	16.167	256	123384	23.57	ppm		95
155) Hexachlorophene	16.568	196	189721	433.83	ppm		99
156) 3-Methylcholanthrene	17.312	268	110629	23.67	ppm		91
157) Dibenz(a,j)acridine	18.215	279	142603	19.95	ppm		97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071359.D
Acq On : 23 Jun 2020 11:21 am
Operator : marthav
Sample : ic2918-25 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 23 16:54:59 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: SX2918-IC2918
Lab FileID: X071359.D
Injection Time: 06/23/20 11:21

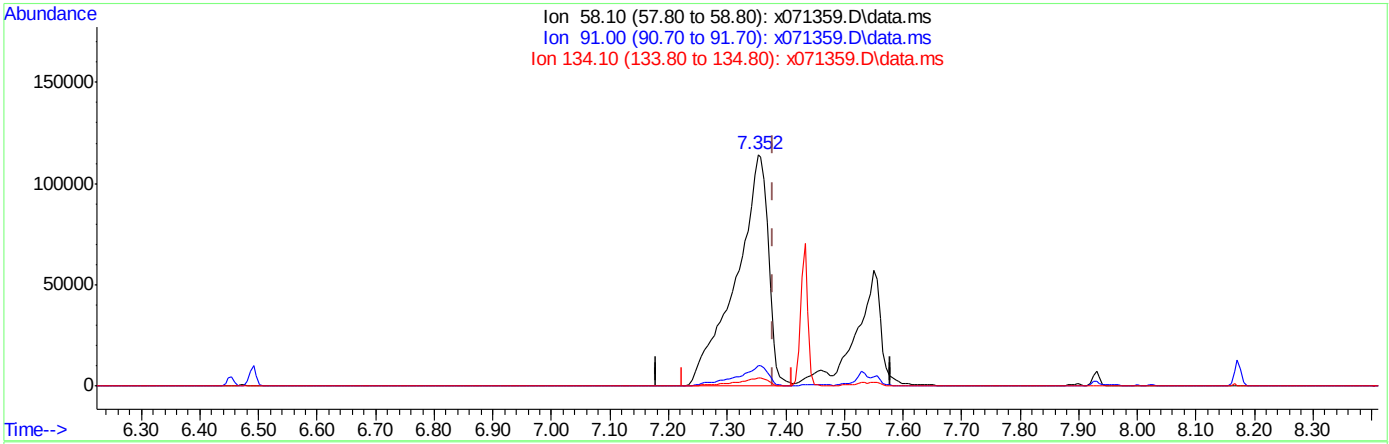
Method: EPA 625.1
Analyst approved: 06/24/20 09:50 Martha Valls
Supervisor approved: 06/24/20 14:07 Naresh Jiawan

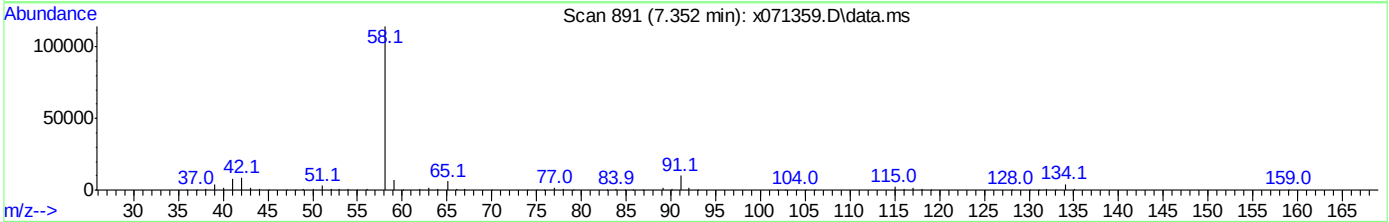
Parameter	CAS	Sig#	R.T. (min.)	Reason
A,A-Dimethylphenethylamine	122-09-8		7.35	Split peak
p-Phenylenediamine	106-50-3		7.93	Split peak
Diallate	2303-16-4		10.63	Split peak
Aramite	140-57-8		13.25	Split peak

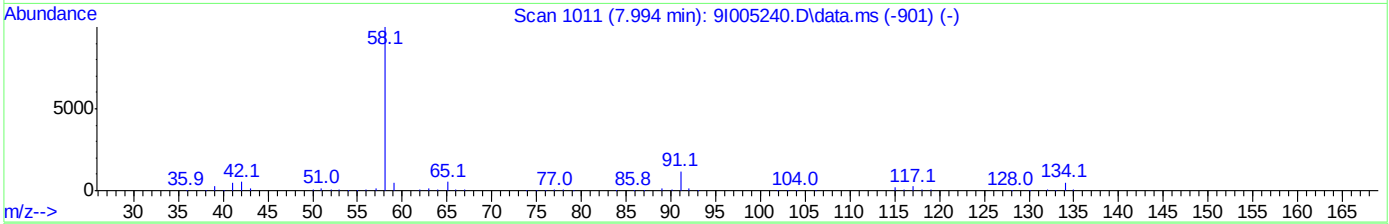
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071359.D
Acq On : 23 Jun 2020 11:21 am
Operator : marthav
Sample : ic2918-25 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 23 14:01:04 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071359.D\data.ms

(122) A,A-Dimethylphenethylamine

7.352min (-0.027) 24.61ppm

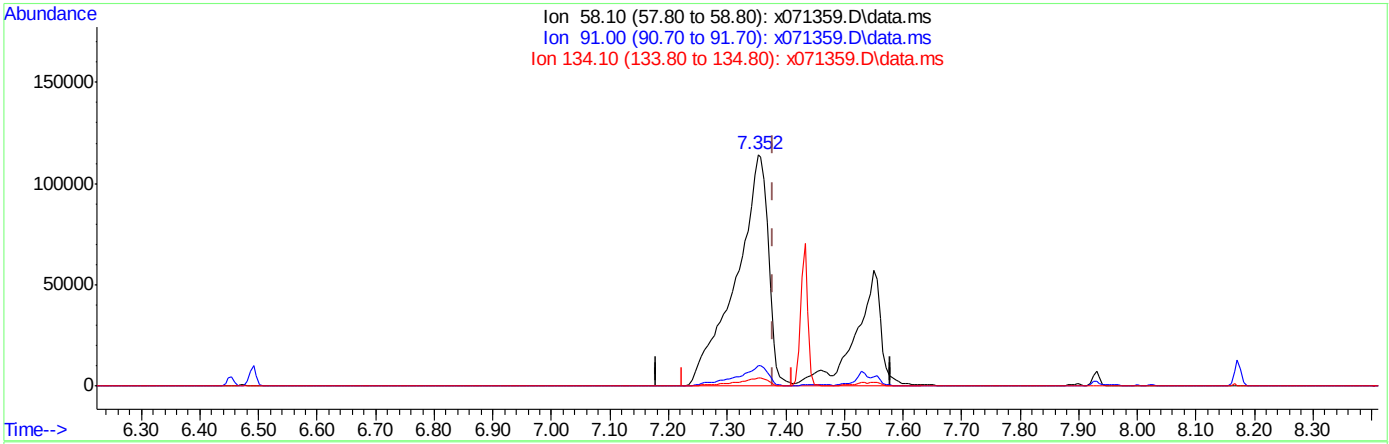
response 437927

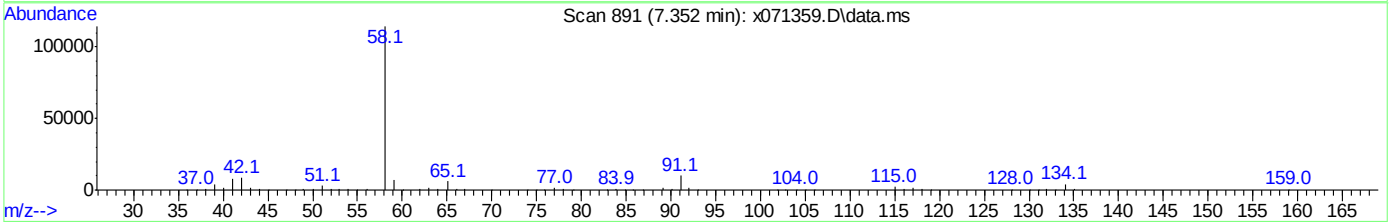
Ion	Exp%	Act%
58.10	100	100
91.00	11.70	8.67
134.10	5.10	3.64
0.00	0.00	0.00

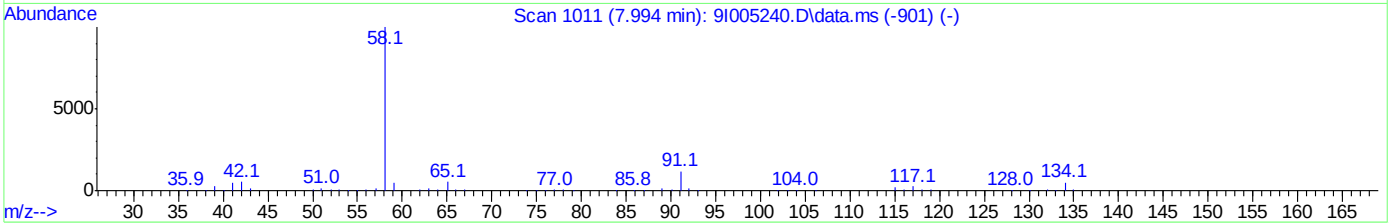
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071359.D
Acq On : 23 Jun 2020 11:21 am
Operator : marthav
Sample : ic2918-25 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 23 14:01:04 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071359.D\data.ms

(122) A,A-Dimethylphenethylamine

7.352min (-0.027) 34.13ppm m

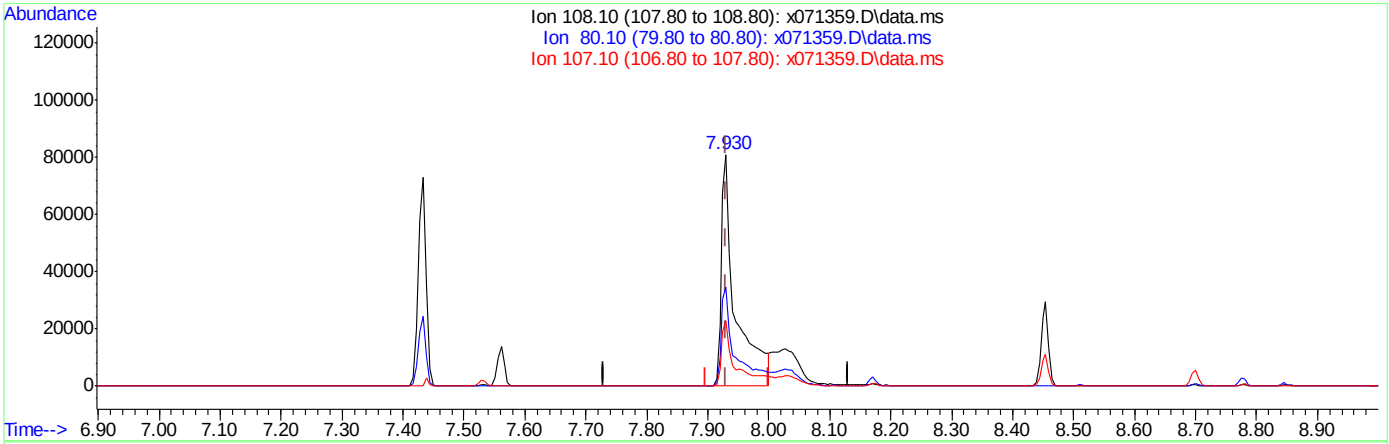
response 614390

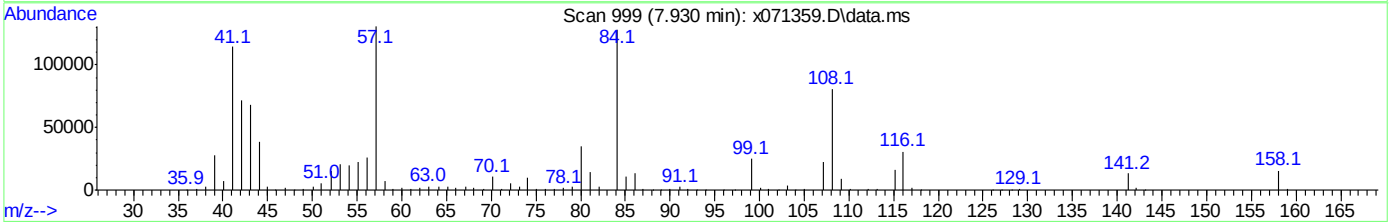
Ion	Exp%	Act%
58.10	100	100
91.00	11.70	8.72
134.10	5.10	3.70
0.00	0.00	0.00

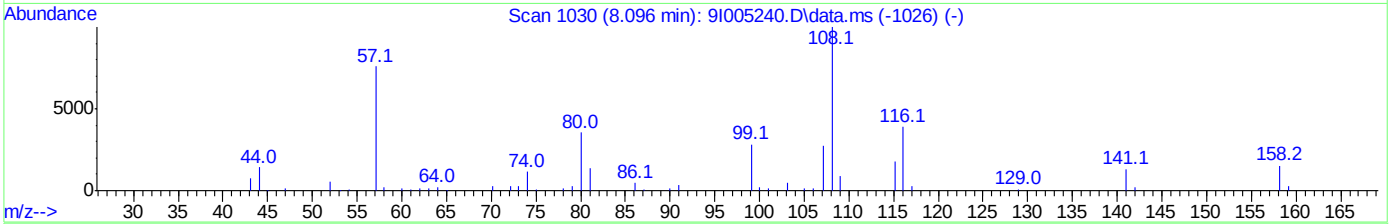
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071359.D
Acq On : 23 Jun 2020 11:21 am
Operator : marthav
Sample : ic2918-25 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 23 14:01:04 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071359.D\data.ms

(125) p-Phenylenediamine

7.930min (0.000) 26.70ppm

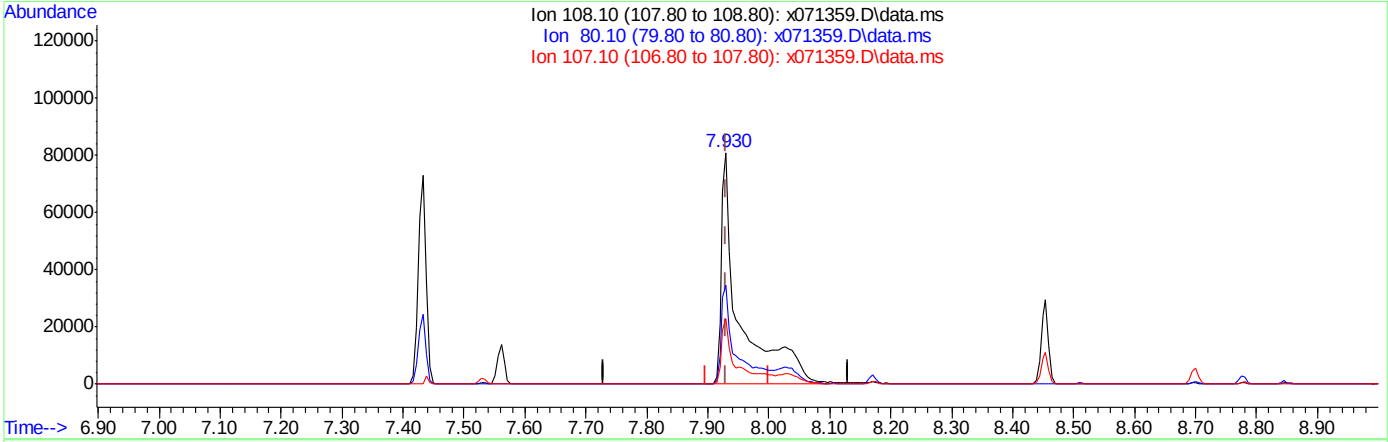
response 133387

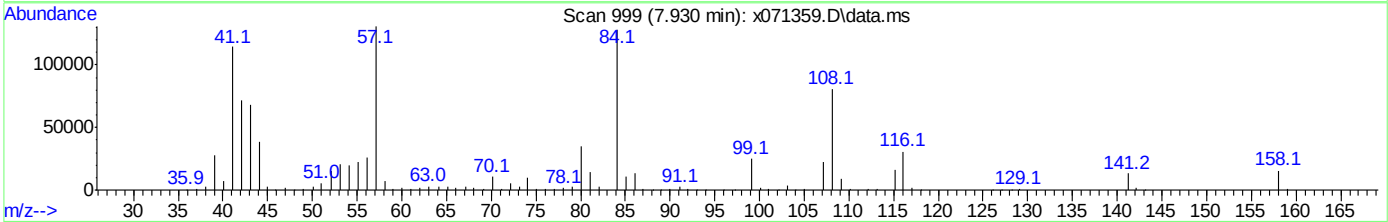
Ion	Exp%	Act%
108.10	100	100
80.10	35.50	42.72
107.10	27.70	28.16
0.00	0.00	0.00

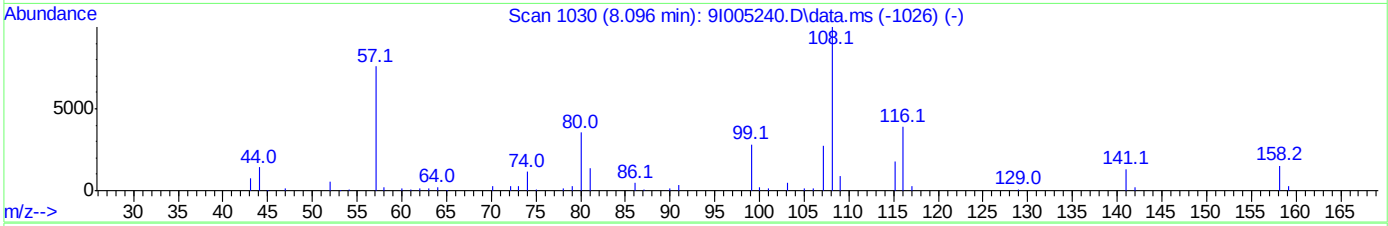
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071359.D
Acq On : 23 Jun 2020 11:21 am
Operator : marthav
Sample : ic2918-25 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 23 14:01:04 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071359.D\data.ms

(125) p-Phenylenediamine

7.930min (0.000) 35.56ppm m

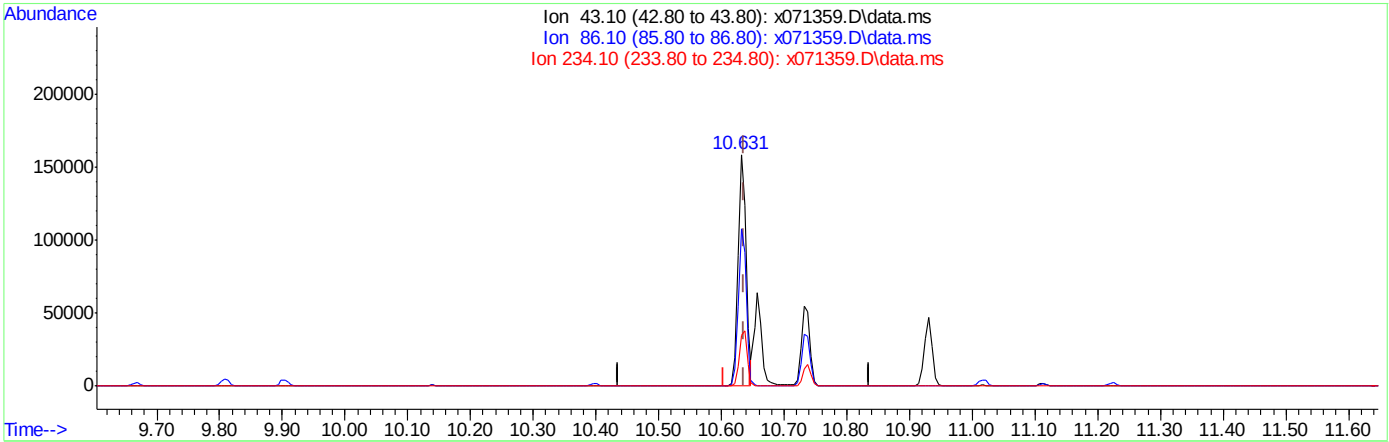
response 173372

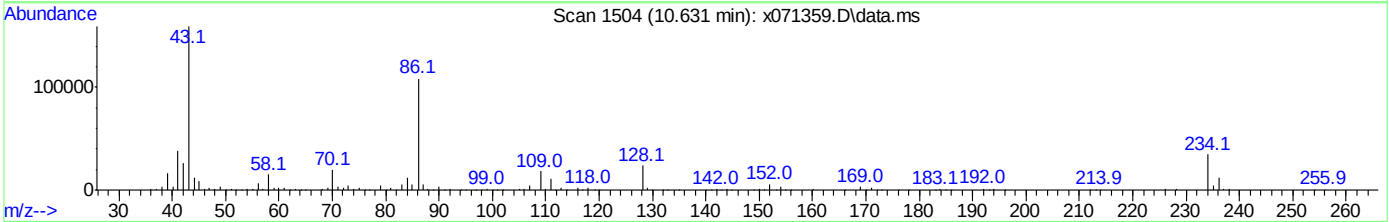
Ion	Exp%	Act%
108.10	100	100
80.10	35.50	42.92
107.10	27.70	28.19
0.00	0.00	0.00

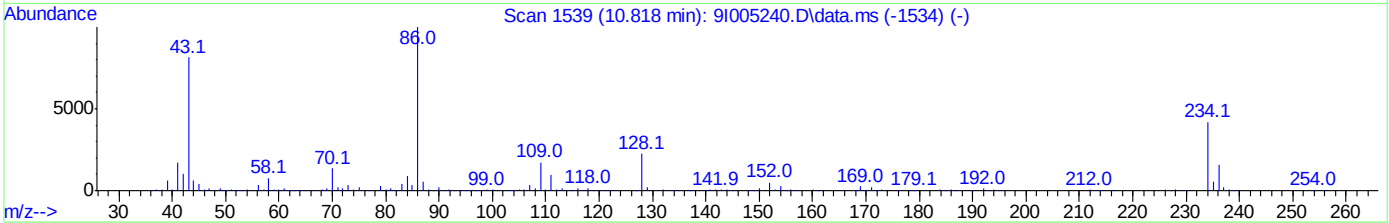
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071359.D
Acq On : 23 Jun 2020 11:21 am
Operator : marthav
Sample : ic2918-25 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 23 14:01:04 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071359.D\data.ms

(138) Diallate

10.631min (-0.005) 20.55ppm

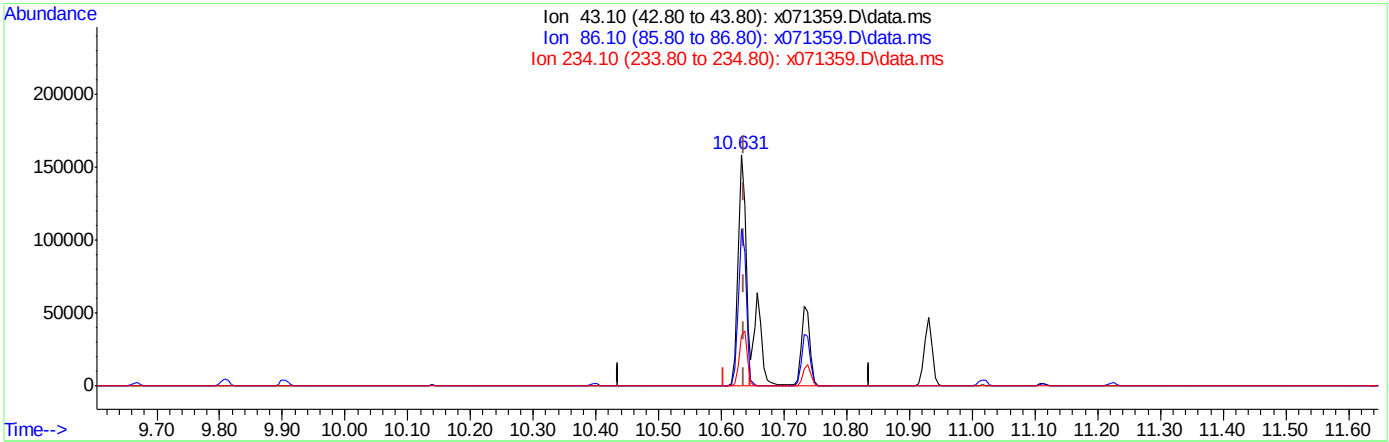
response 144925

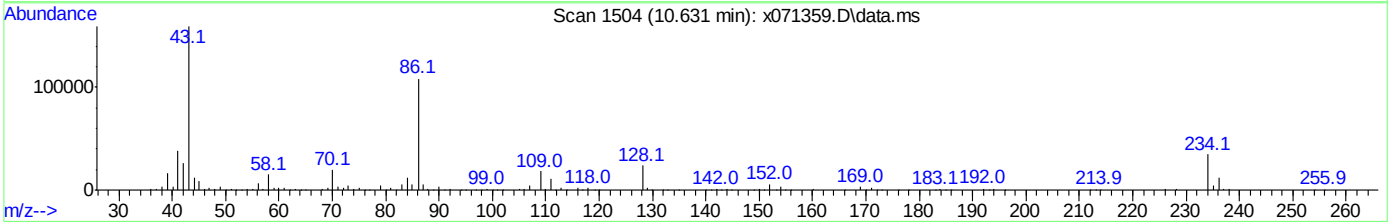
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	70.53#
234.10	51.50	22.40
0.00	0.00	0.00

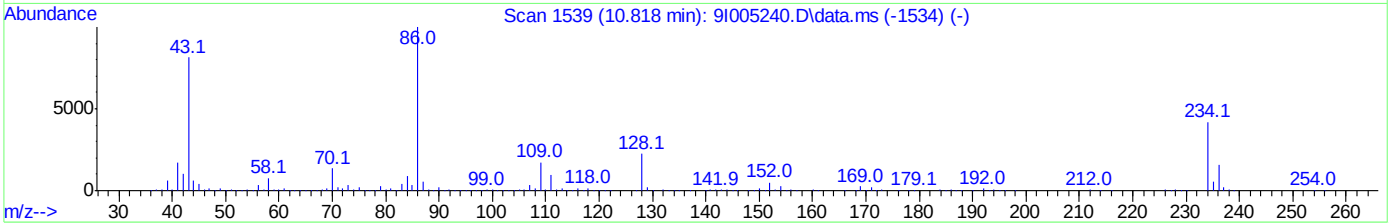
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071359.D
Acq On : 23 Jun 2020 11:21 am
Operator : marthav
Sample : ic2918-25 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 23 14:01:04 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071359.D\data.ms

(138) Diallate

10.631min (-0.005) 35.85ppm m

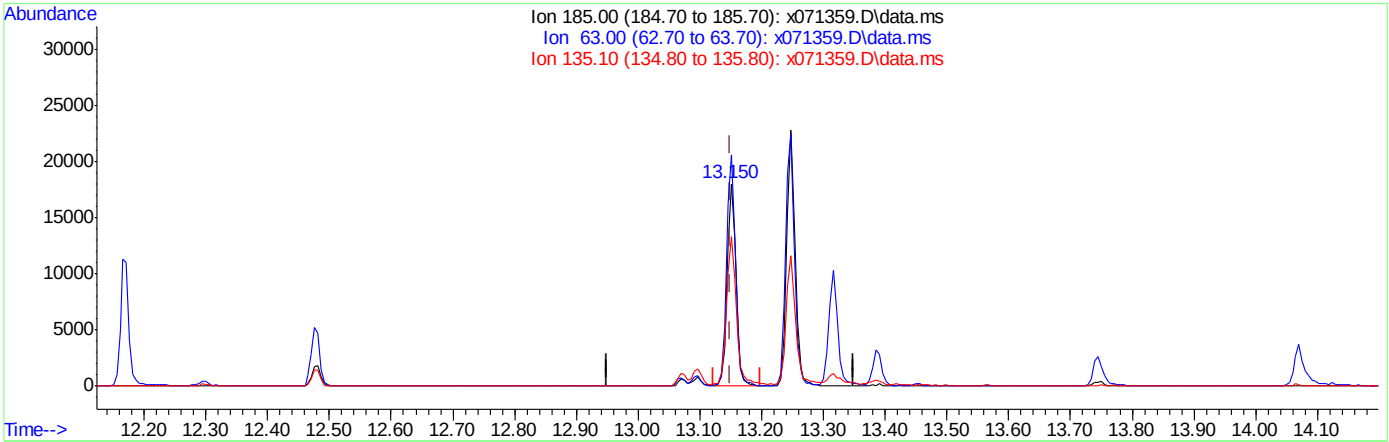
response 252842

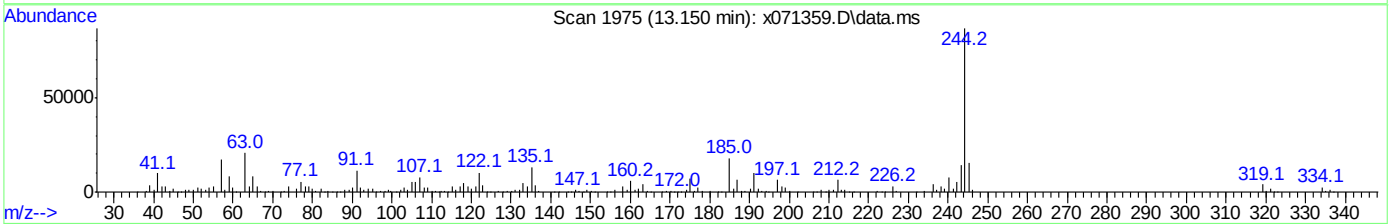
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	67.84#
234.10	51.50	21.87
0.00	0.00	0.00

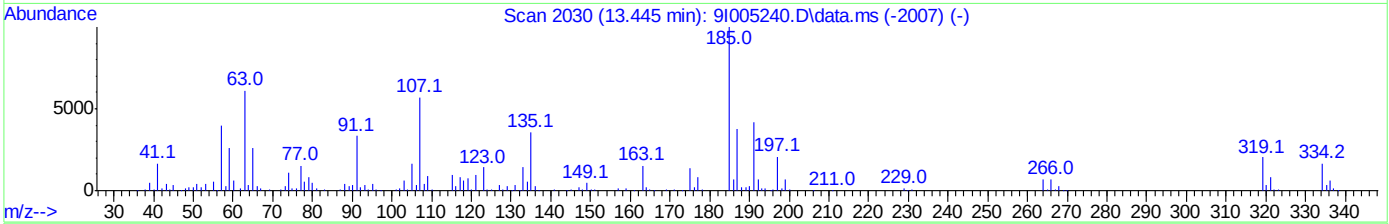
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071359.D
Acq On : 23 Jun 2020 11:21 am
Operator : marthav
Sample : ic2918-25 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 23 14:01:04 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071359.D\data.ms

(147) Aramite

13.150min (0.000) 10.97ppm

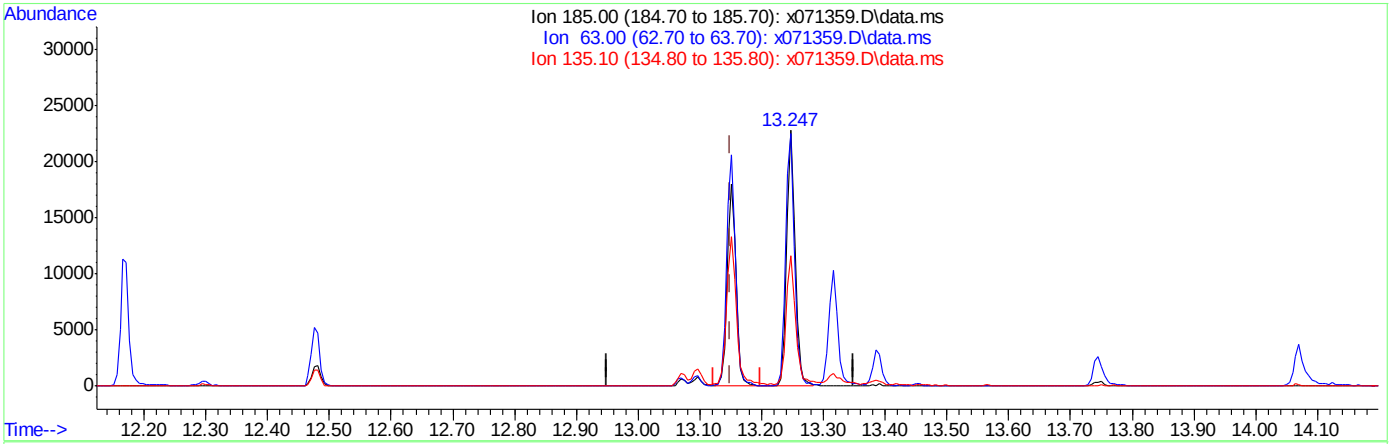
response 17983

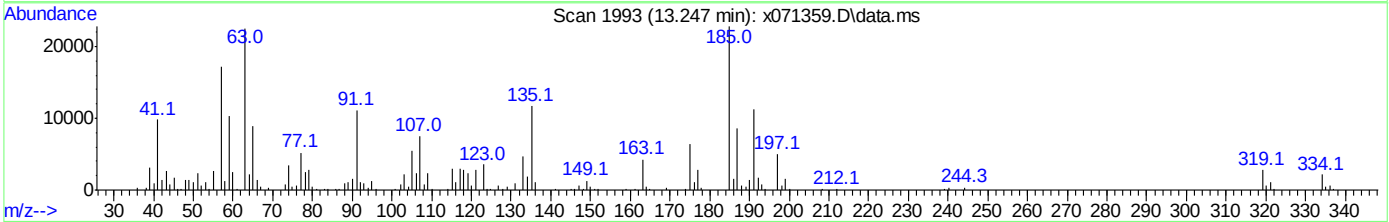
Ion	Exp%	Act%
185.00	100	100
63.00	61.10	114.08#
135.10	35.60	72.34#
0.00	0.00	0.00

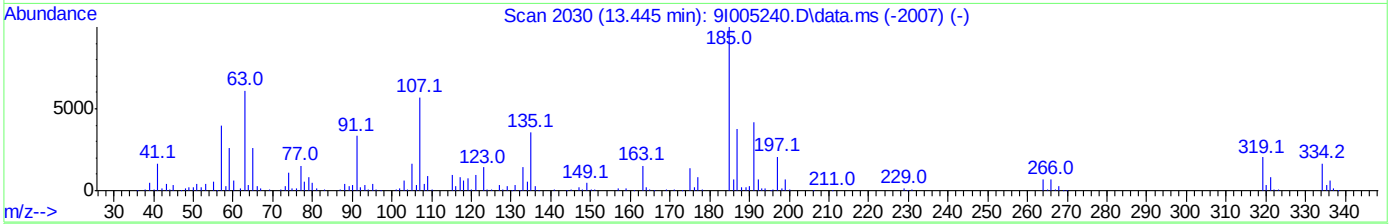
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071359.D
Acq On : 23 Jun 2020 11:21 am
Operator : marthav
Sample : ic2918-25 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 23 14:01:04 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071359.D\data.ms

(147) Aramite

13.247min (+0.096) 23.72ppm m

response 39594

Ion	Exp%	Act%
185.00	100	100
63.00	61.10	98.70#
135.10	35.60	51.18
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 06/24/20 14:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071360.D
Acq On : 23 Jun 2020 11:46 am
Operator : marthav
Sample : ic2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 23 16:55:12 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	0.000	152	0m	40.00	ppm		-6.00
22) Naphthalene-d8	0.000	136	0m	40.00	ppm		-7.43
43) Acenaphthene-d10	0.000	164	0m	40.00	ppm		-9.48
70) Phenanthrene-d10	0.000	188	0m	40.00	ppm		-11.22
92) Chrysene-d12	0.000	240	0m	40.00	ppm		-14.49
102) Perylene-d12	0.000	264	0m	40.00	ppm		-16.82
110) 1,4-Dichlorobenzene-d4A	6.005	152	151564	40.00	ppm		0.00
120) Naphthalene-d8A	7.433	136	655182	40.00	ppm		0.00
127) Acenaphthene-d10A	9.476	164	349855	40.00	ppm		0.00
136) Phenanthrene-d10A	11.225	188	638196	40.00	ppm		0.00
146) Chrysene-d12A	14.487	240	407074	40.00	ppm		0.00
153) Perylene-d12A	16.819	264	338302	40.00	ppm		0.00
System Monitoring Compounds							
7) 2-Fluorophenol	0.000	112	0d	0.00	ppm		
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#			
9) Phenol-d5	0.000	99	0d	0.00	ppm		
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#			
23) Nitrobenzene-d5	0.000	82	0d	0.00	ppm		
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#			
47) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm		
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#			
75) 2,4,6-Tribromophenol	0.000	330	0d	0.00	ppm		
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#			
95) Terphenyl-d14	0.000	244	0d	0.00	ppm		
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#			
Target Compounds							Qvalue
111) 2-Picoline	3.983	93	378323	50.26	ppm		88
112) N-Nitrosomethylethylamine	4.111	42	260501	97.75	ppm	#	52
113) Methyl methanesulfonate	4.437	80	187573	50.40	ppm		91
114) N-Nitrosodiethylamine	4.855	102	158519	52.99	ppm	#	28
115) Ethyl methanesulfonate	5.181	79	259741	49.29	ppm		97
116) Pentachloroethane	5.700	167	109705	51.19	ppm		93
117) N-Nitrosopyrrolidine	6.432	100	147319	48.12	ppm	#	36
118) N-Nitrosomorpholine	6.481	56	265918	83.18	ppm	#	67
119) O-Toluidine	6.497	106	549182	59.12	ppm		98
121) N-Nitrosopiperidine	6.812	42	316635	88.22	ppm	#	58
122) A,A-Dimethylphenethyla...	7.379	58	1293311m	68.93	ppm		
123) Hexachloropropene	7.561	213	155362	44.58	ppm		100
124) N-Nitrosodi-n-butylamine	7.935	84	281690	57.84	ppm	#	52
125) p-Phenylenediamine	7.930	108	342749m	80.37	ppm		
126) Isosafrole	8.176	162	237534	55.38	ppm		84
128) Safrole	8.780	162	246210	54.39	ppm		89
129) 1-Chloronaphthalene	8.850	162	588257	54.17	ppm		96
130) Diphenyl Ether	8.941	170	409072	55.45	ppm		90
131) 1,4-Naphthoquinone	9.037	158	244539	66.13	ppm		80
132) Pentachlorobenzene	9.668	250	198634	39.42	ppm		100
133) 1-Naphthylamine	9.813	143	634517	56.92	ppm		95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071360.D
Acq On : 23 Jun 2020 11:46 am
Operator : marthav
Sample : ic2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 23 16:55:12 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration

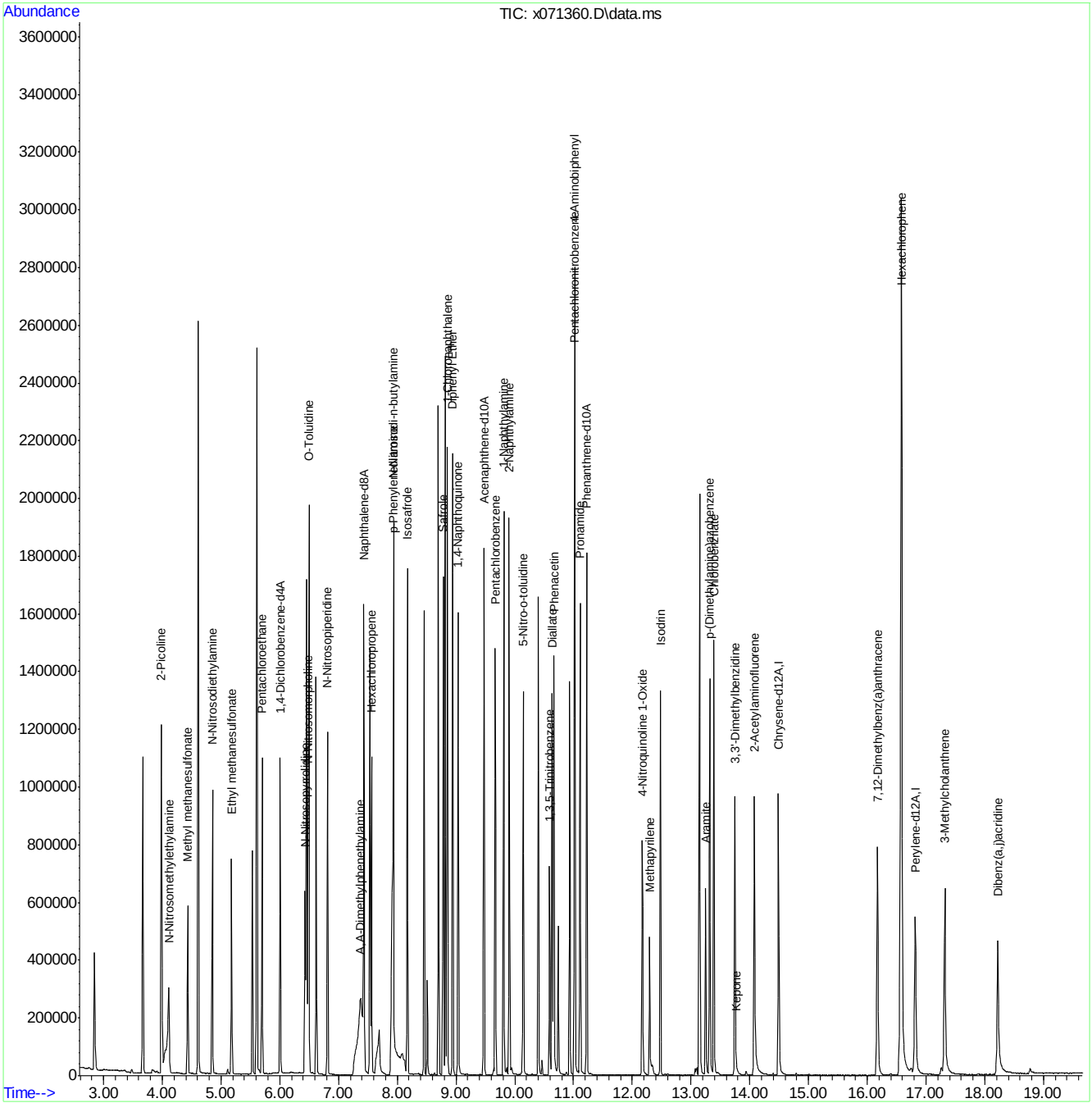
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
134) 2-Naphthylamine	9.904	143	686741	60.48	ppm	95
135) 5-Nitro-o-toluidine	10.144	152	201942	52.44	ppm	78
137) 1,3,5-Trinitrobenzene	10.594	75	166805	42.00	ppm	87
138) Diallate	10.636	43	519071m	73.66	ppm	
139) Phenacetin	10.669	108	343358	50.50	ppm	92
140) 4-Aminobiphenyl	11.022	169	699848	65.04	ppm	99
141) Pronamide	11.118	173	280696	50.21	ppm	98
142) Pentachloronitrobenzene	11.016	237	68116	41.94	ppm	93
143) 4-Nitroquinoline 1-Oxide	12.172	190	60083	80.11	ppm	73
144) Methapyrilene	12.295	58	185003m	23.18	ppm	
145) Isodrin	12.482	193	93557	42.24	ppm	87
147) Aramite	13.247	185	90482m	54.36	ppm	
148) p-(Dimethylamine)azobe...	13.321	120	263027	57.86	ppm	88
149) Chlorobenzilate	13.391	139	302437	59.53	ppm	74
150) Kepone	13.771	272	673	0.46	ppm	86
151) 3,3'-Dimethylbenzidine	13.749	212	377447	62.52	ppm	96
152) 2-Acetylaminofluorene	14.076	181	315144	54.38	ppm	90
154) 7,12-Dimethylbenz(a)an...	16.172	256	259627	51.97	ppm	96
155) Hexachlorophene	16.584	196	479639	831.02	ppm	97
156) 3-Methylcholanthrene	17.322	268	235721	52.86	ppm	95
157) Dibenz(a,j)acridine	18.221	279	319323	44.00	ppm	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071360.D
Acq On : 23 Jun 2020 11:46 am
Operator : marthav
Sample : ic2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 23 16:55:12 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: SX2918-IC2918
Lab FileID: X071360.D
Injection Time: 06/23/20 11:46

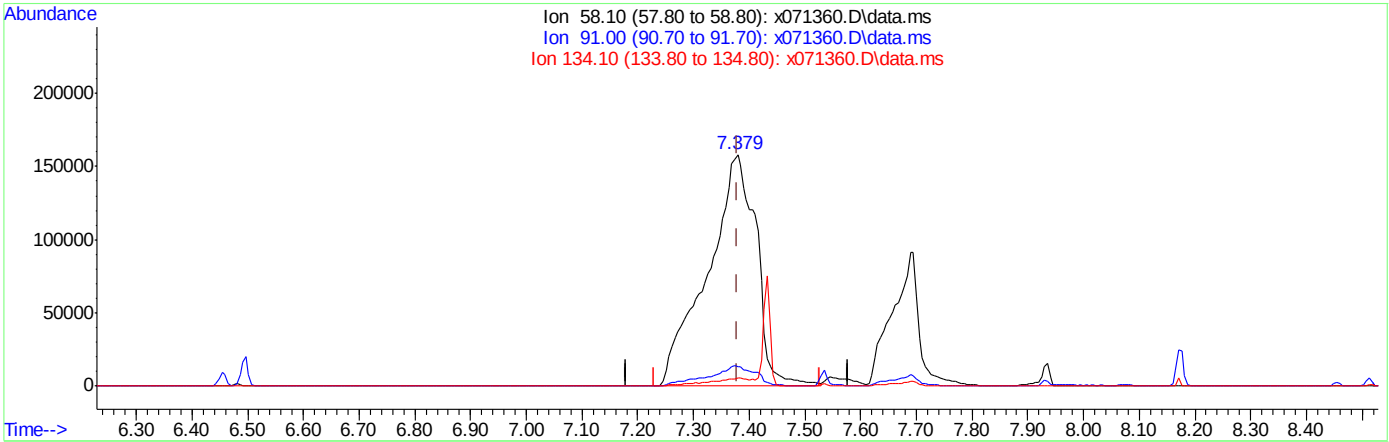
Method: EPA 625.1
Analyst approved: 06/24/20 09:50 Martha Valls
Supervisor approved: 06/24/20 14:07 Naresh Jiawan

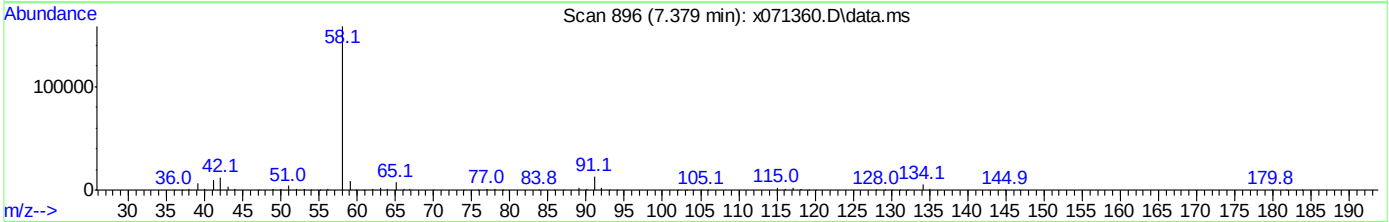
Parameter	CAS	Sig#	R.T. (min.)	Reason
A,A-Dimethylphenethylamine	122-09-8		7.38	Split peak
p-Phenylenediamine	106-50-3		7.93	Split peak
Diallate	2303-16-4		10.64	Split peak
Methapyrilene	91-80-5		12.29	Split peak
Aramite	140-57-8		13.25	Split peak

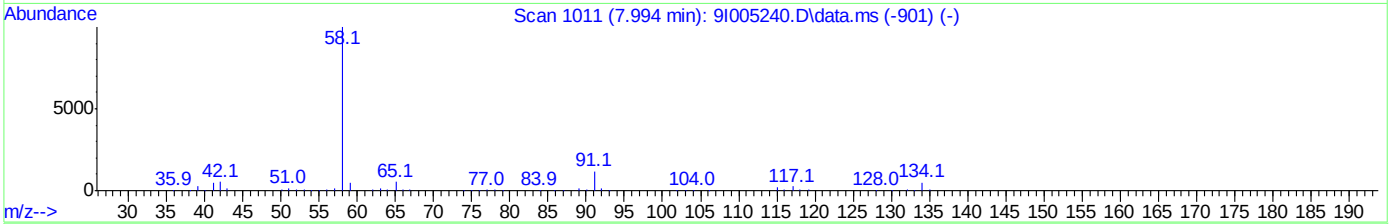
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071360.D
Acq On : 23 Jun 2020 11:46 am
Operator : marthav
Sample : ic2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 23 14:01:06 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071360.D\data.ms

(122) A,A-Dimethylphenethylamine

7.379min (0.000) 52.39ppm

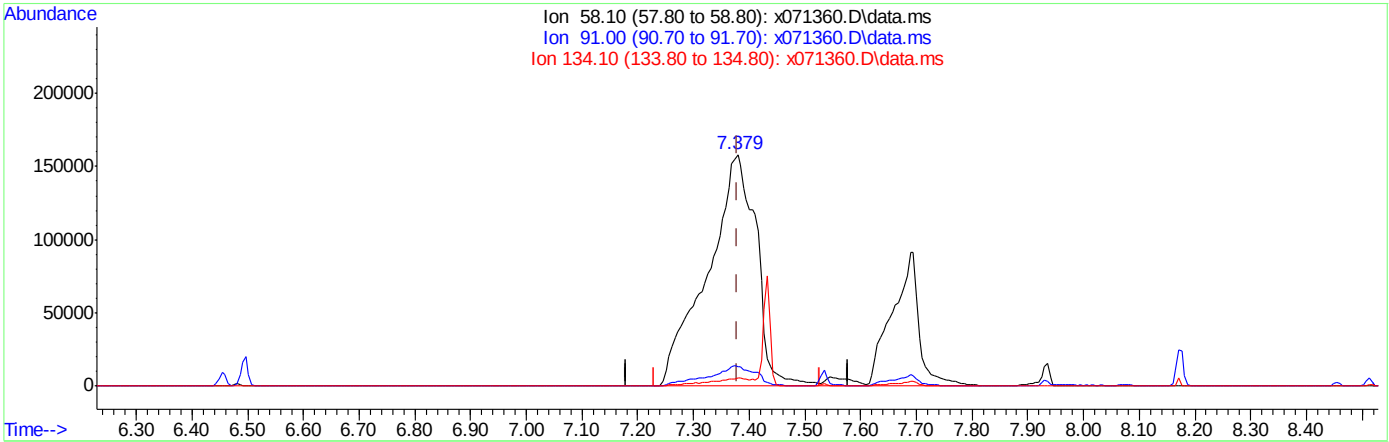
response 964162

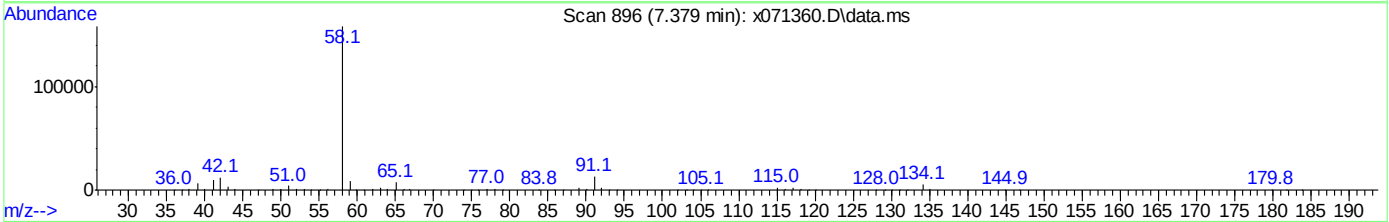
Ion	Exp%	Act%
58.10	100	100
91.00	11.70	6.05
134.10	5.10	3.27
0.00	0.00	0.00

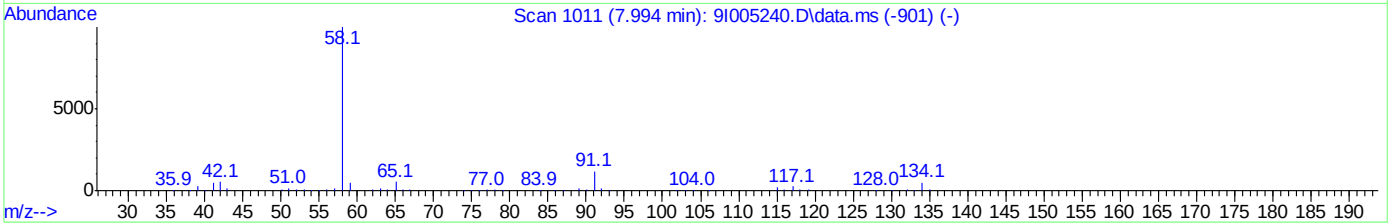
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071360.D
Acq On : 23 Jun 2020 11:46 am
Operator : marthav
Sample : ic2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 23 14:01:06 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071360.D\data.ms

(122) A,A-Dimethylphenethylamine

7.379min (0.000) 68.93ppm m

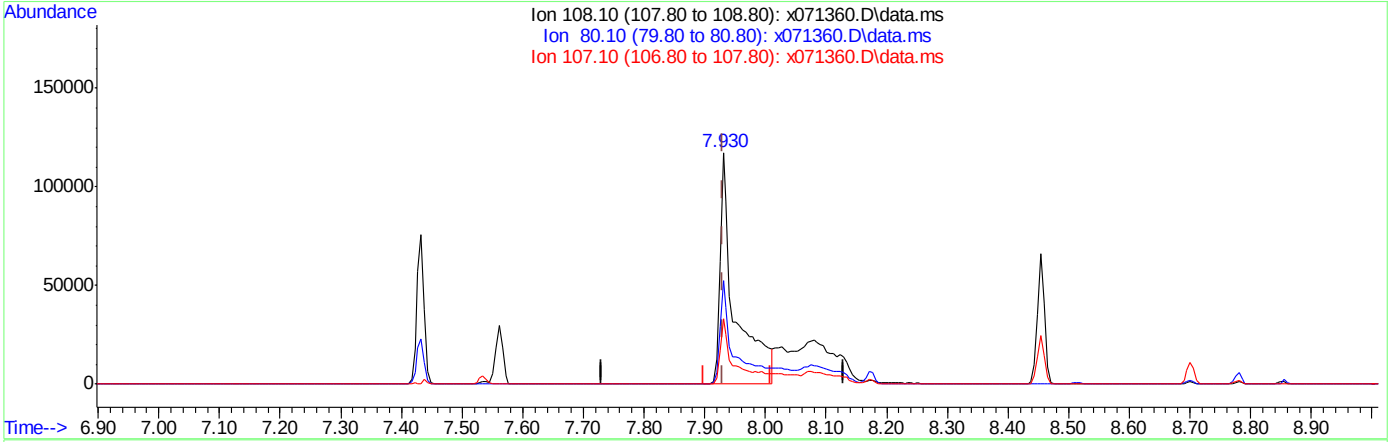
response 1293311

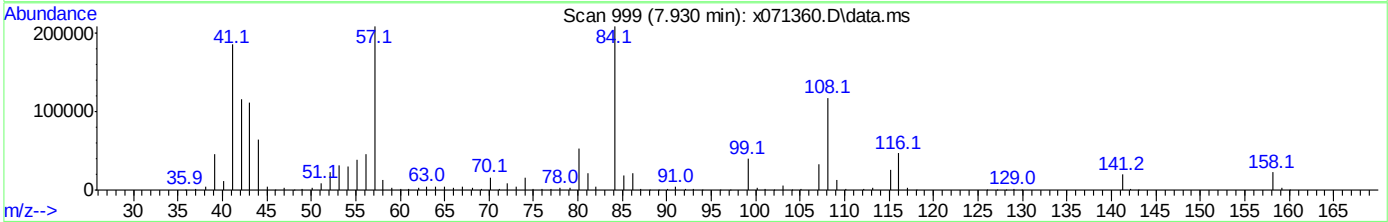
Ion	Exp%	Act%
58.10	100	100
91.00	11.70	8.30
134.10	5.10	3.68
0.00	0.00	0.00

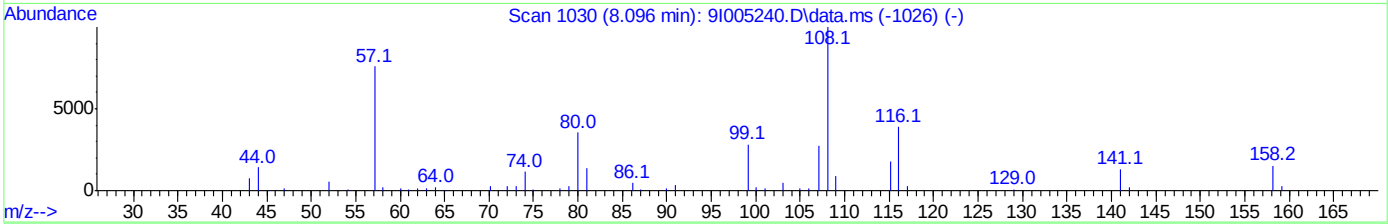
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071360.D
Acq On : 23 Jun 2020 11:46 am
Operator : marthav
Sample : ic2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 23 14:01:06 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071360.D\data.ms

(125) p-Phenylenediamine

7.930min (0.000) 43.42ppm

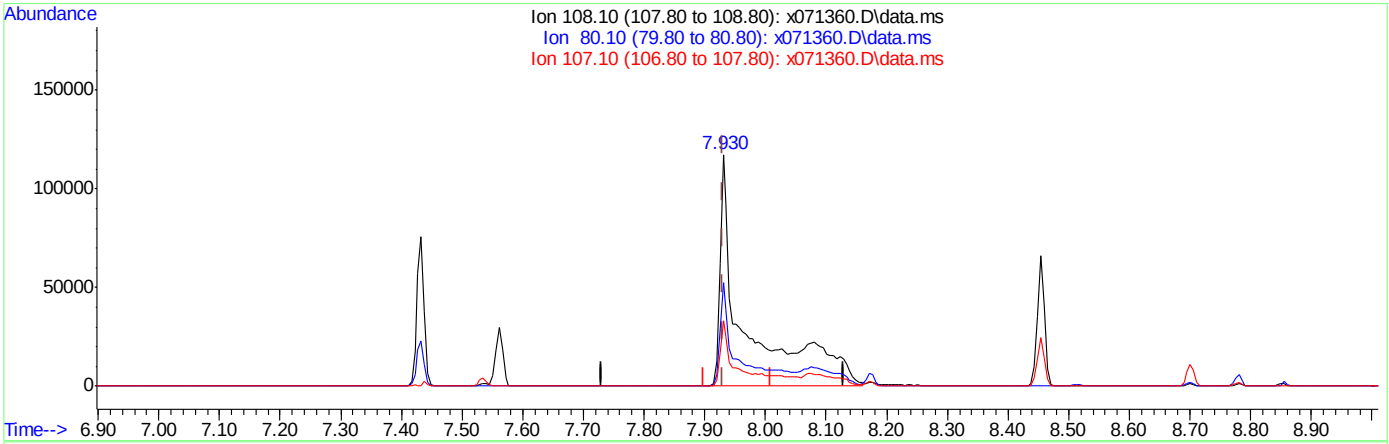
response 207105

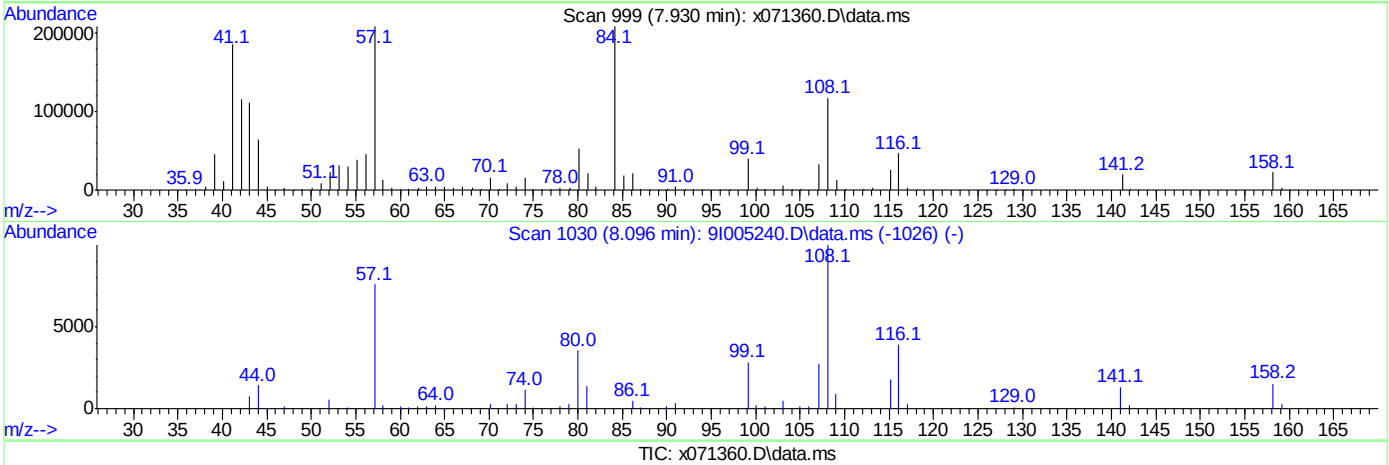
Ion	Exp%	Act%
108.10	100	100
80.10	35.50	44.36
107.10	27.70	28.19
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071360.D
Acq On : 23 Jun 2020 11:46 am
Operator : marthav
Sample : ic2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 23 14:01:06 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration





TIC: x071360.D\data.ms

(125) p-Phenylenediamine

7.930min (0.000) 80.37ppm m

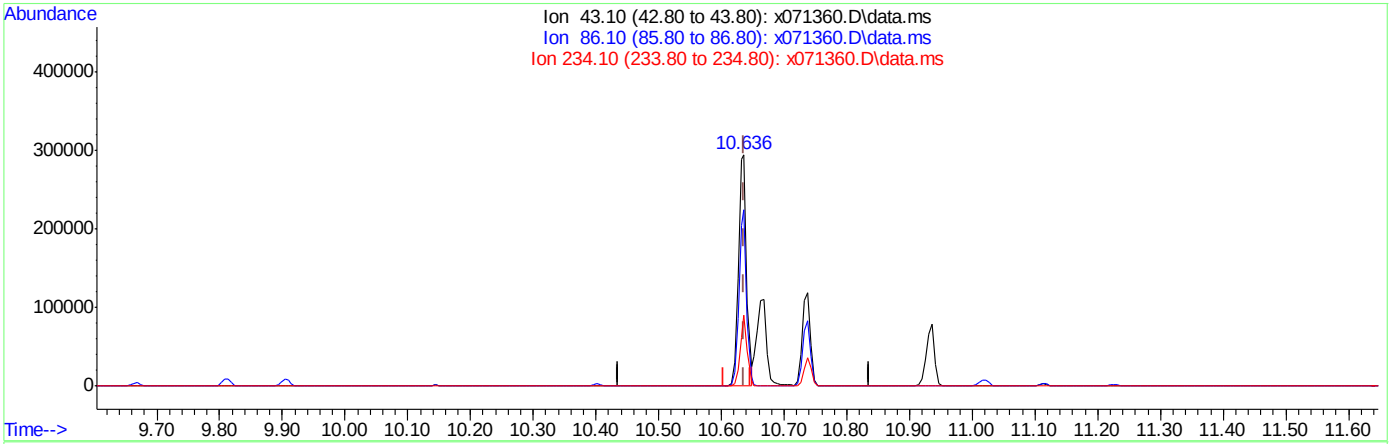
response 342749

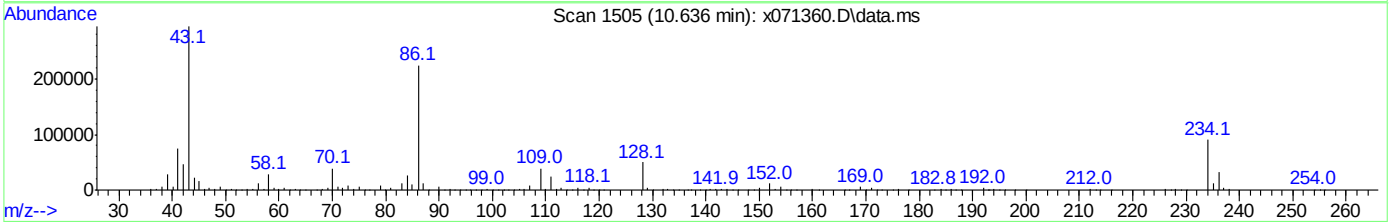
Ion	Exp%	Act%
108.10	100	100
80.10	35.50	44.57
107.10	27.70	28.29
0.00	0.00	0.00

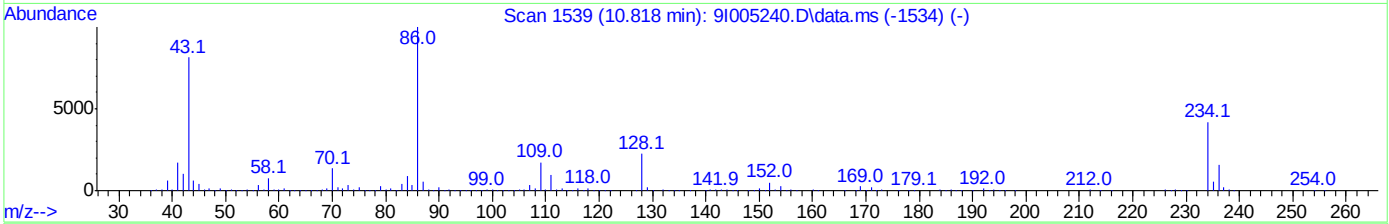
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071360.D
Acq On : 23 Jun 2020 11:46 am
Operator : marthav
Sample : ic2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 23 14:01:06 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071360.D\data.ms

(138) Diallate

10.636min (0.000) 40.34ppm

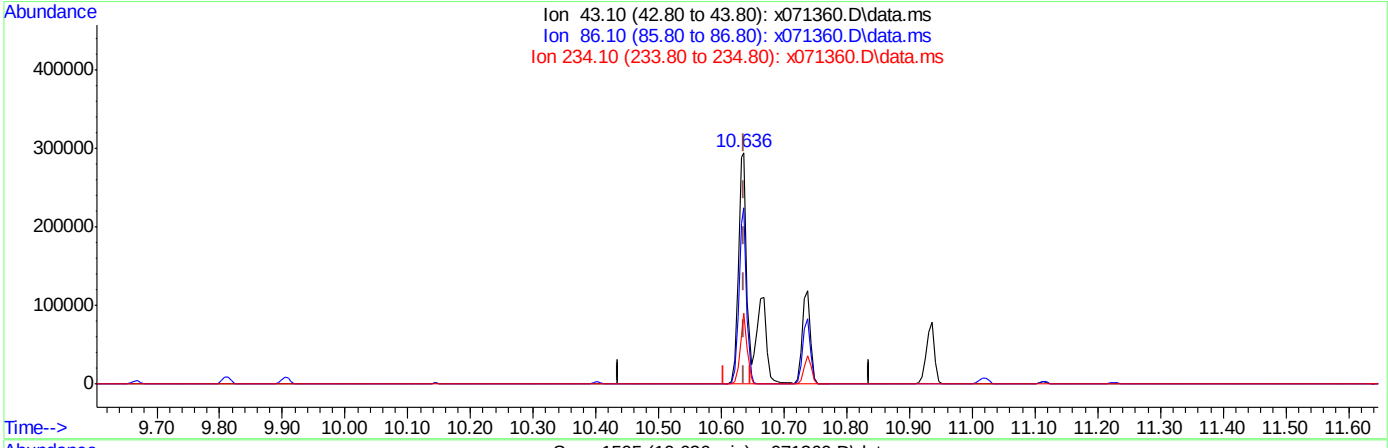
response 284269

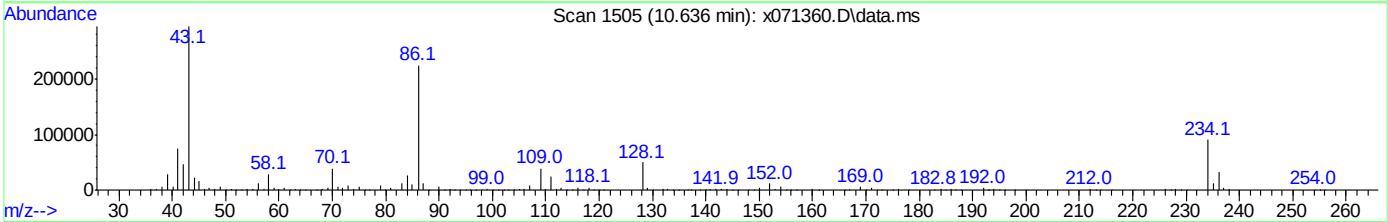
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	77.18#
234.10	51.50	30.56
0.00	0.00	0.00

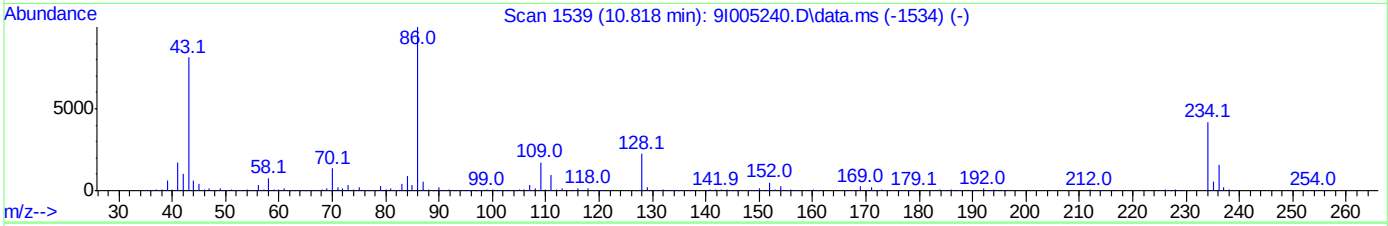
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071360.D
Acq On : 23 Jun 2020 11:46 am
Operator : marthav
Sample : ic2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 23 14:01:06 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071360.D\data.ms

(138) Diallate

10.636min (0.000) 73.66ppm m

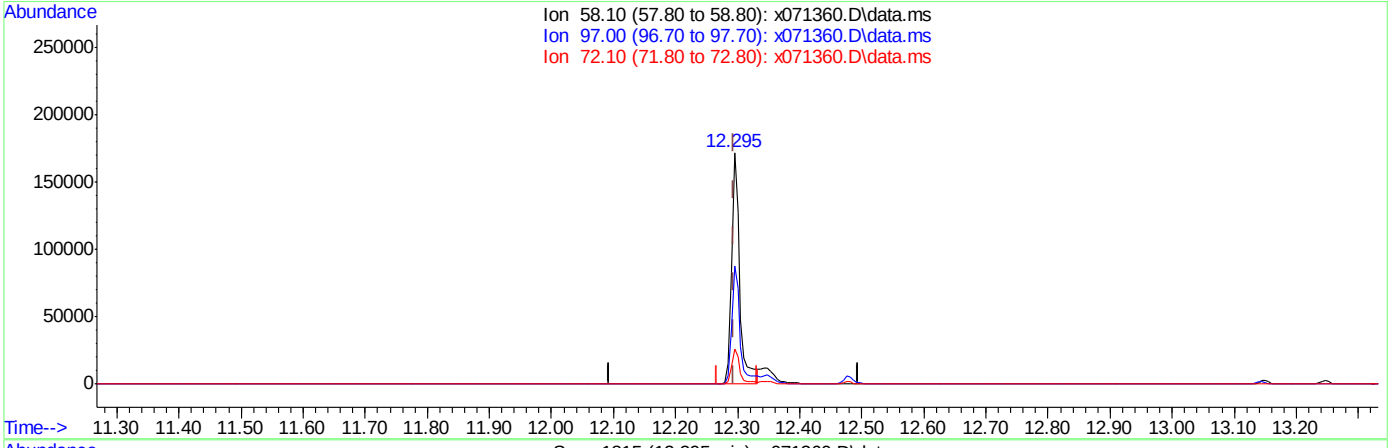
response 519071

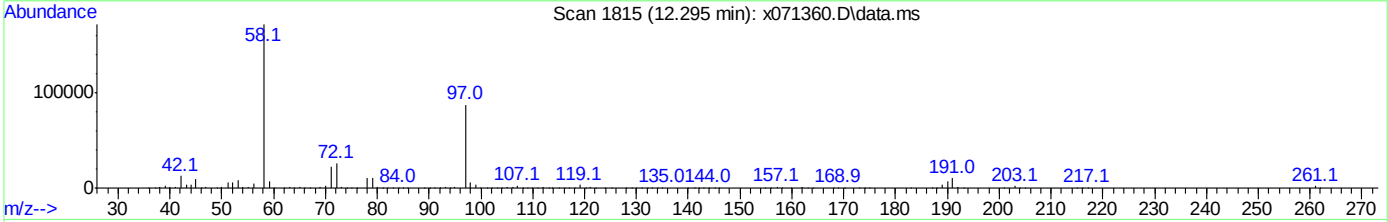
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	76.03#
234.10	51.50	30.57
0.00	0.00	0.00

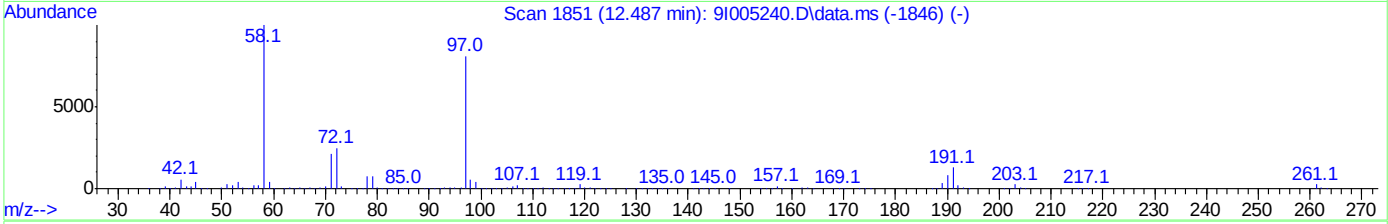
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071360.D
Acq On : 23 Jun 2020 11:46 am
Operator : marthav
Sample : ic2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 23 14:01:06 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071360.D\data.ms

(144) Methapyrilene

12.295min (0.000) 20.65ppm

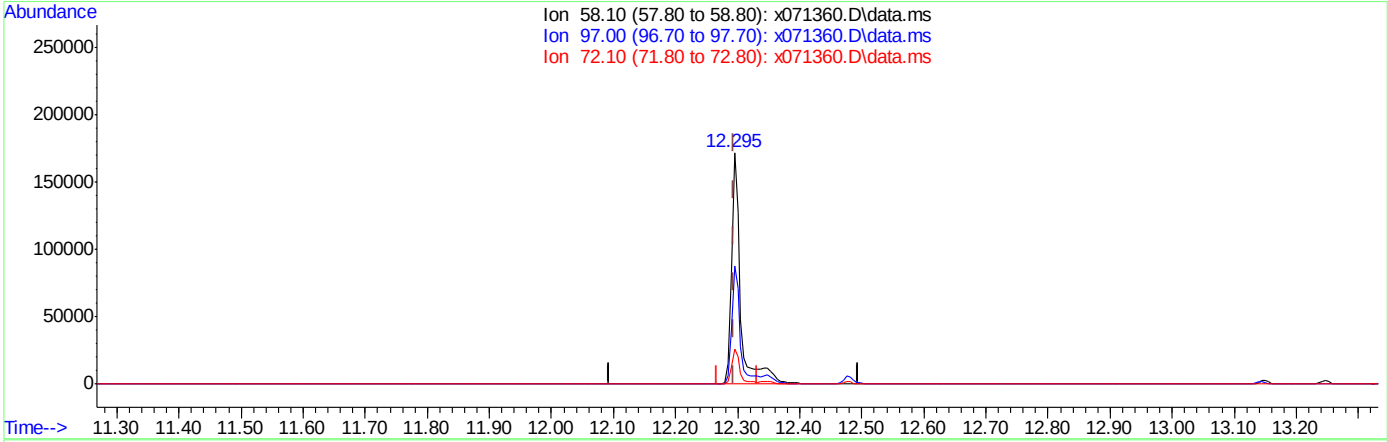
response 164618

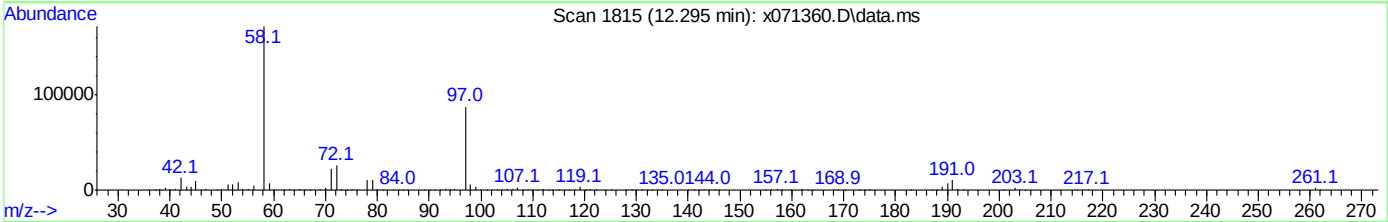
Ion	Exp%	Act%
58.10	100	100
97.00	80.90	50.84#
72.10	24.80	15.37
0.00	0.00	0.00

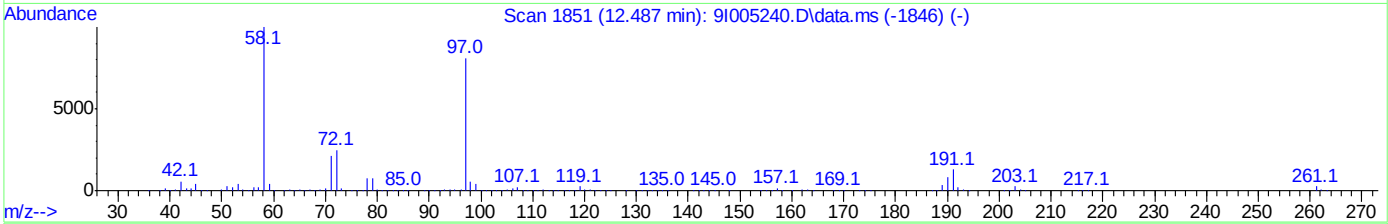
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071360.D
Acq On : 23 Jun 2020 11:46 am
Operator : marthav
Sample : ic2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 23 14:01:06 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071360.D\data.ms

(144) Methapyrilene

12.295min (0.000) 23.18ppm m

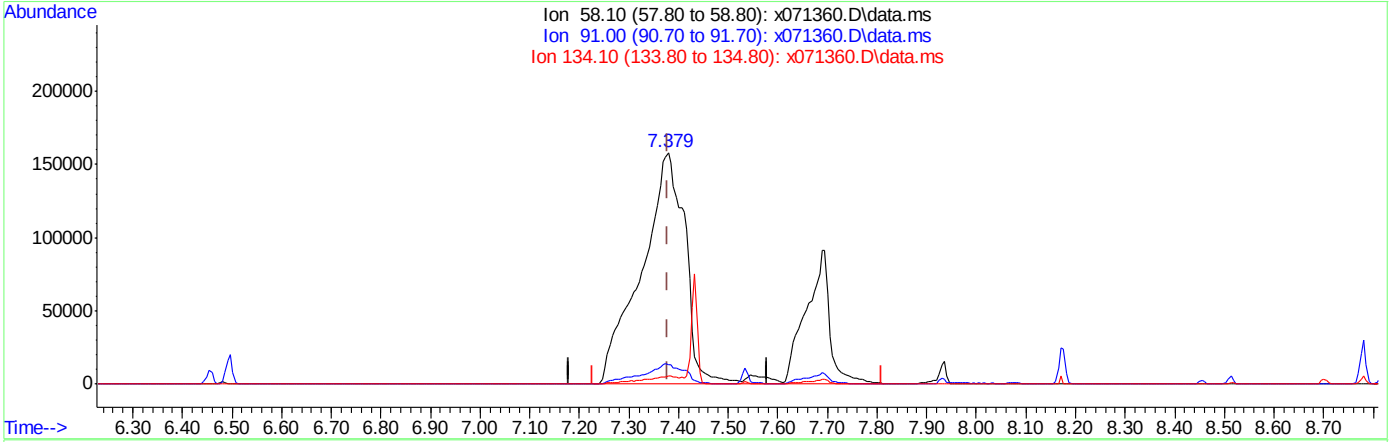
response 185003

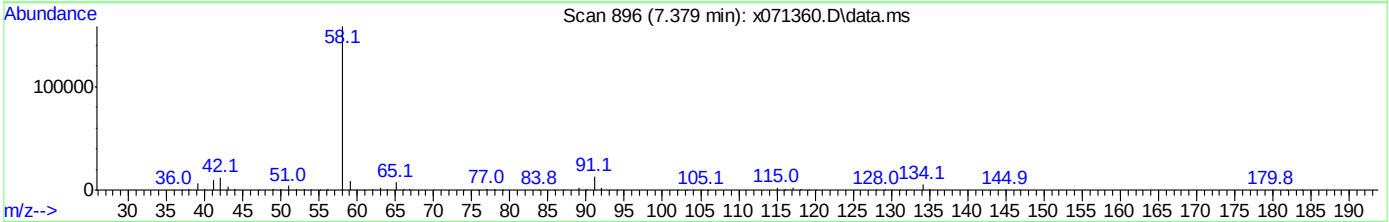
Ion	Exp%	Act%
58.10	100	100
97.00	80.90	51.00
72.10	24.80	15.30
0.00	0.00	0.00

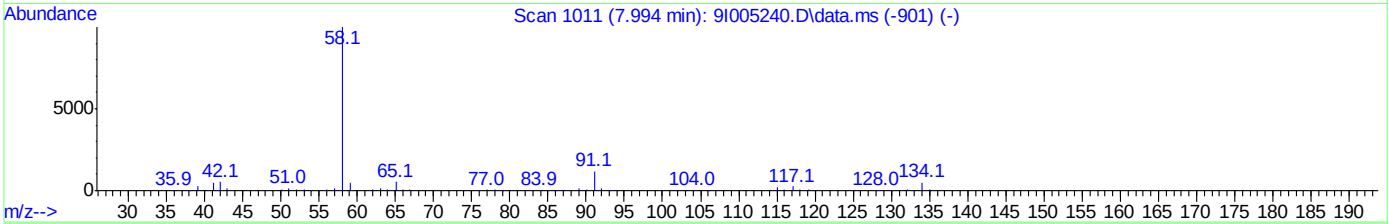
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071360.D
Acq On : 23 Jun 2020 11:46 am
Operator : marthav
Sample : ic2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 23 14:01:06 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071360.D\data.ms

(122) A,A-Dimethylphenethylamine

7.379min (0.000) 68.93ppm m

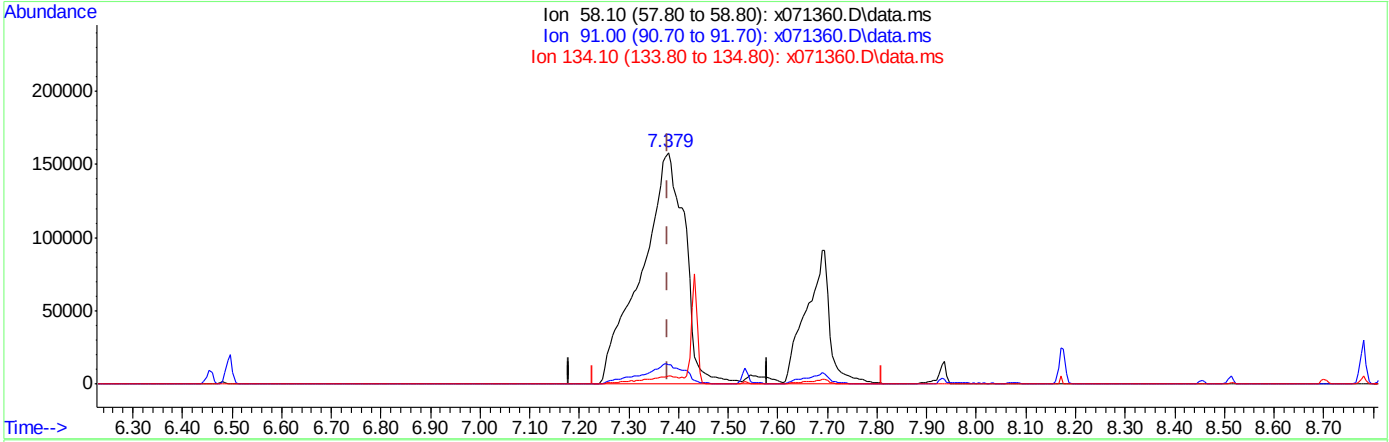
response 1293311

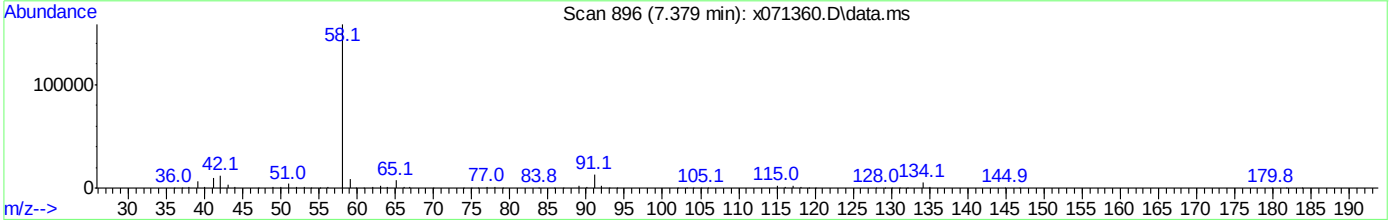
Ion	Exp%	Act%
58.10	100	100
91.00	11.70	8.30
134.10	5.10	3.68
0.00	0.00	0.00

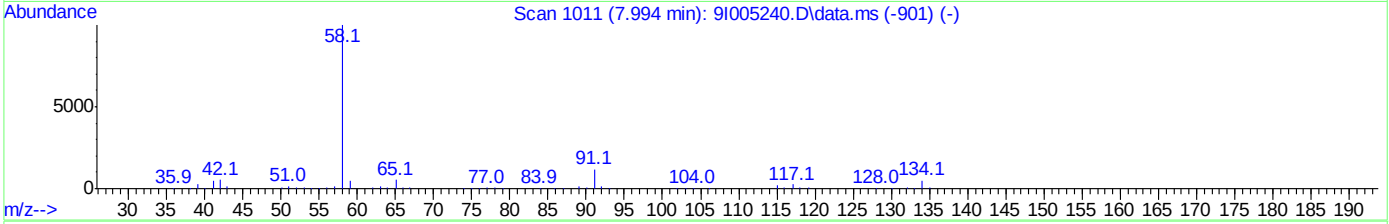
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071360.D
Acq On : 23 Jun 2020 11:46 am
Operator : marthav
Sample : ic2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 23 14:01:06 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071360.D\data.ms

(122) A,A-Dimethylphenethylamine

7.379min (0.000) 68.93ppm m

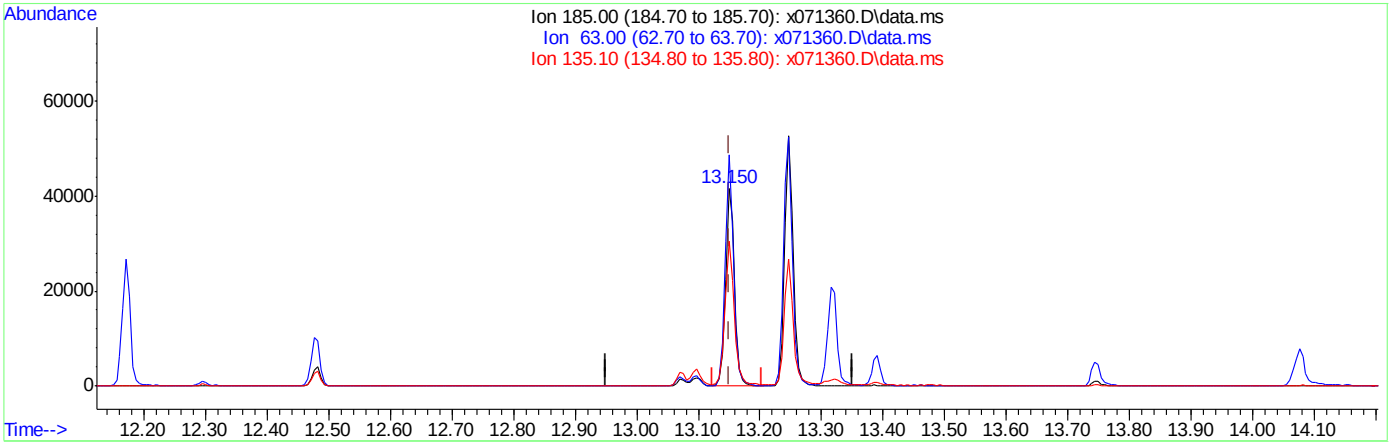
response 1293311

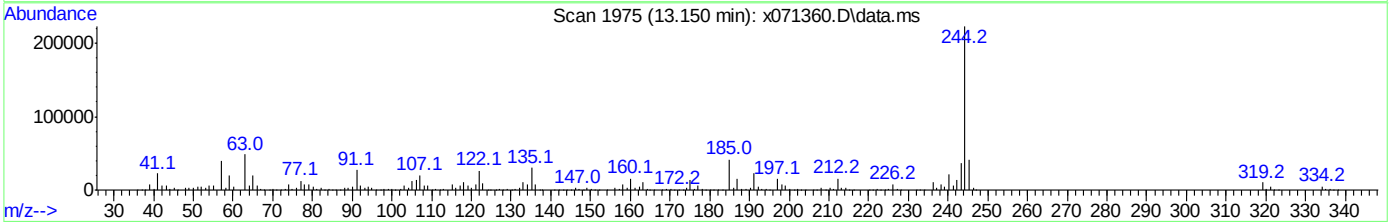
Ion	Exp%	Act%
58.10	100	100
91.00	11.70	8.30
134.10	5.10	3.68
0.00	0.00	0.00

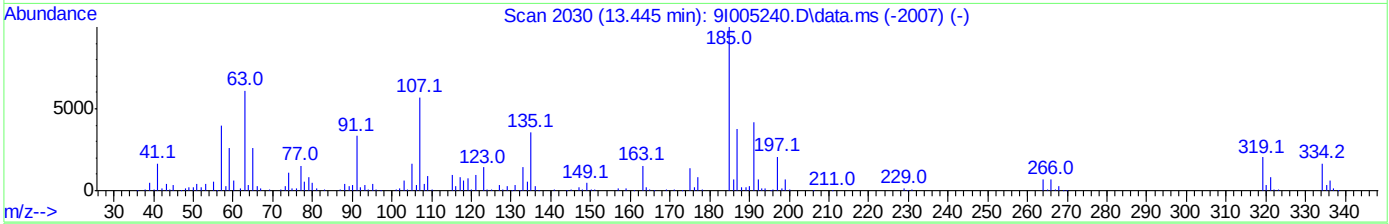
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071360.D
Acq On : 23 Jun 2020 11:46 am
Operator : marthav
Sample : ic2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 23 14:16:35 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071360.D\data.ms

(147) Aramite

13.150min (0.000) 25.40ppm

response 40679

Ion	Exp%	Act%
185.00	100	100
63.00	61.10	116.81#
135.10	35.60	72.41#
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 06/24/20 14:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071361.D
Acq On : 23 Jun 2020 12:12 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 23 16:55:26 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	0.000	152	0m	40.00	ppm		-6.00
22) Naphthalene-d8	0.000	136	0m	40.00	ppm		-7.43
43) Acenaphthene-d10	0.000	164	0m	40.00	ppm		-9.48
70) Phenanthrene-d10	0.000	188	0m	40.00	ppm		-11.22
92) Chrysene-d12	0.000	240	0m	40.00	ppm		-14.49
102) Perylene-d12	0.000	264	0m	40.00	ppm		-16.82
110) 1,4-Dichlorobenzene-d4A	6.005	152	164144	40.00	ppm		0.00
120) Naphthalene-d8A	7.433	136	698026	40.00	ppm		0.00
127) Acenaphthene-d10A	9.476	164	366185	40.00	ppm		0.00
136) Phenanthrene-d10A	11.225	188	677538	40.00	ppm		0.00
146) Chrysene-d12A	14.493	240	429861	40.00	ppm		0.00
153) Perylene-d12A	16.820	264	357481	40.00	ppm		0.00
System Monitoring Compounds							
7) 2-Fluorophenol	0.000	112	0d	0.00	ppm		
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#			
9) Phenol-d5	0.000	99	0d	0.00	ppm		
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#			
23) Nitrobenzene-d5	0.000	82	0d	0.00	ppm		
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#			
47) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm		
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#			
75) 2,4,6-Tribromophenol	0.000	330	0d	0.00	ppm		
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#			
95) Terphenyl-d14	0.000	244	0d	0.00	ppm		
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#			
Target Compounds							Qvalue
111) 2-Picoline	3.983	93	482356	59.18	ppm		88
112) N-Nitrosomethylethylamine	4.111	42	335860	116.37	ppm	#	53
113) Methyl methanesulfonate	4.438	80	237961	59.04	ppm		90
114) N-Nitrosodiethylamine	4.855	102	201274	62.12	ppm	#	22
115) Ethyl methanesulfonate	5.186	79	330136	57.85	ppm		96
116) Pentachloroethane	5.700	167	140826	60.68	ppm		94
117) N-Nitrosopyrrolidine	6.438	100	185562	55.98	ppm	#	47
118) N-Nitrosomorpholine	6.481	56	332467	96.03	ppm	#	66
119) O-Toluidine	6.497	106	694865	69.07	ppm		99
121) N-Nitrosopiperidine	6.818	42	391759	102.45	ppm	#	62
122) A,A-Dimethylphenethyla...	7.401	58	1613562m	79.73	ppm		
123) Hexachloropropene	7.561	213	198594	53.49	ppm		99
124) N-Nitrosodi-n-butylamine	7.936	84	354651	67.10	ppm	#	53
125) p-Phenylenediamine	7.930	108	407415m	93.67	ppm		
126) Isosafrole	8.176	162	302122	66.11	ppm		83
128) Safrole	8.781	162	308936	65.20	ppm		87
129) 1-Chloronaphthalene	8.856	162	735524	64.70	ppm		98
130) Diphenyl Ether	8.946	170	509112	65.94	ppm		92
131) 1,4-Naphthoquinone	9.037	158	305070	86.96	ppm		79
132) Pentachlorobenzene	9.669	250	245692	46.59	ppm		99
133) 1-Naphthylamine	9.813	143	798365	68.42	ppm		94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071361.D
Acq On : 23 Jun 2020 12:12 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 23 16:55:26 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
134) 2-Naphthylamine	9.909	143	845717	71.16	ppm		96
135) 5-Nitro-o-toluidine	10.150	152	253152	62.16	ppm		86
137) 1,3,5-Trinitrobenzene	10.594	75	217752	51.09	ppm		86
138) Diallate	10.631	43	644225m	86.11	ppm		
139) Phenacetin	10.669	108	433725	59.44	ppm		91
140) 4-Aminobiphenyl	11.022	169	833196	72.94	ppm		99
141) Pronamide	11.118	173	353013	59.04	ppm		98
142) Pentachloronitrobenzene	11.016	237	83820	48.61	ppm		90
143) 4-Nitroquinoline 1-Oxide	12.177	190	77483	91.41	ppm		83
144) Methapyrilene	12.295	58	227166m	26.75	ppm		
145) Isodrin	12.482	193	115911	49.30	ppm		87
147) Aramite	13.247	185	116692m	65.43	ppm		
148) p-(Dimethylamine)azobe...	13.322	120	333830	70.62	ppm		86
149) Chlorobenzilate	13.391	139	386556	71.38	ppm	#	72
150) Kepone	13.771	272	3034	1.98	ppm		87
151) 3,3'-Dimethylbenzidine	13.750	212	456299	71.20	ppm		97
152) 2-Acetylaminofluorene	14.081	181	404560	64.28	ppm		93
154) 7,12-Dimethylbenz(a)an...	16.178	256	327919	61.76	ppm		97
155) Hexachlorophene	16.590	196	614267	942.16	ppm		99
156) 3-Methylcholanthrene	17.322	268	302821	63.88	ppm		94
157) Dibenz(a,j)acridine	18.221	279	416799	52.87	ppm		97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
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Quant Title : SW846 8270D OR EPA 625
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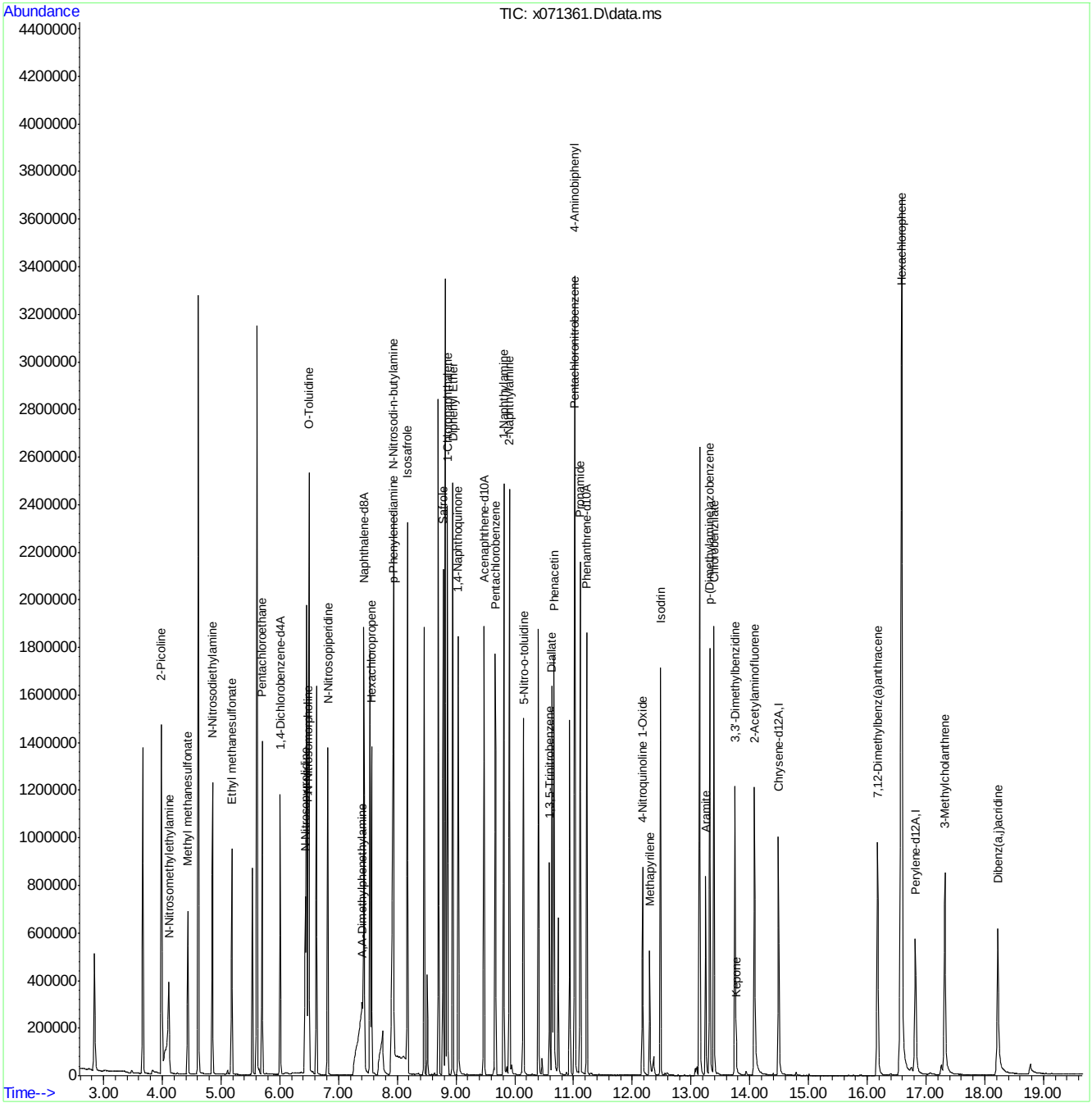


Manual Integration Approval Summary

Sample Number: SX2918-IC2918
Lab FileID: X071361.D
Injection Time: 06/23/20 12:12

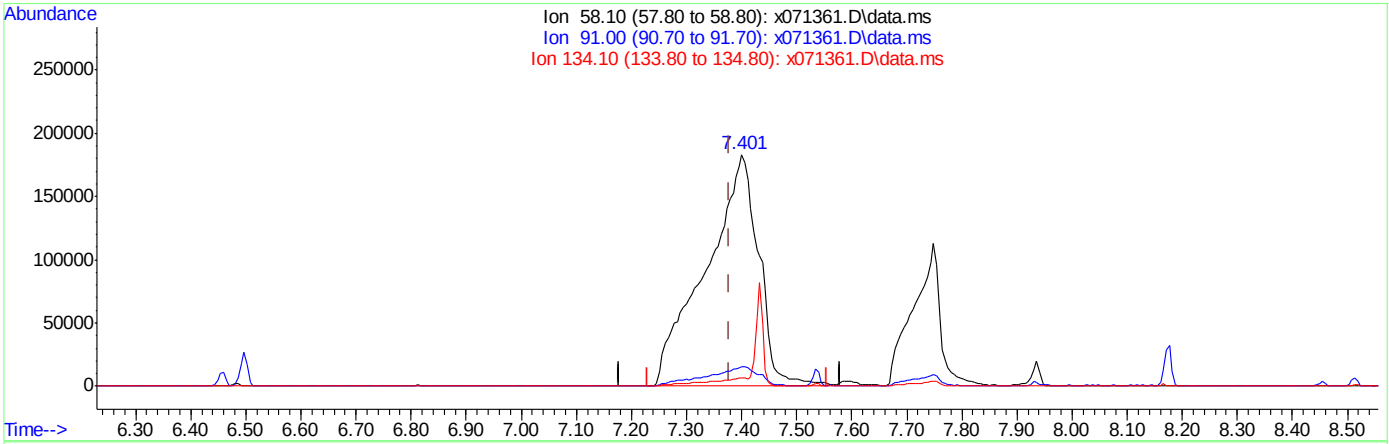
Method: EPA 625.1
Analyst approved: 06/24/20 09:50 Martha Valls
Supervisor approved: 06/24/20 14:07 Naresh Jiawan

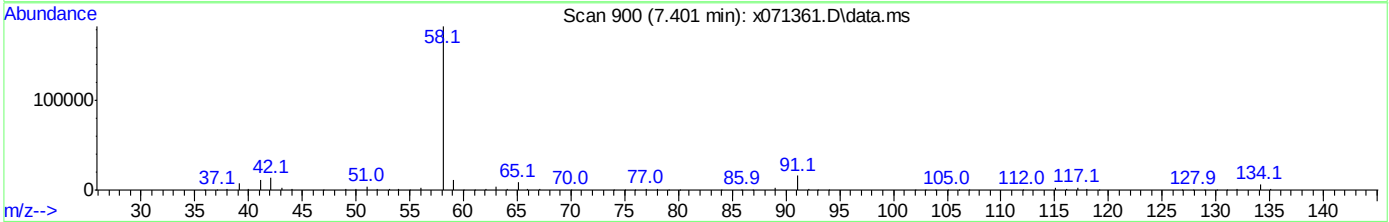
Parameter	CAS	Sig#	R.T. (min.)	Reason
A,A-Dimethylphenethylamine	122-09-8		7.40	Split peak
p-Phenylenediamine	106-50-3		7.93	Split peak
Diallate	2303-16-4		10.63	Split peak
Methapyrilene	91-80-5		12.29	Split peak
Aramite	140-57-8		13.25	Split peak

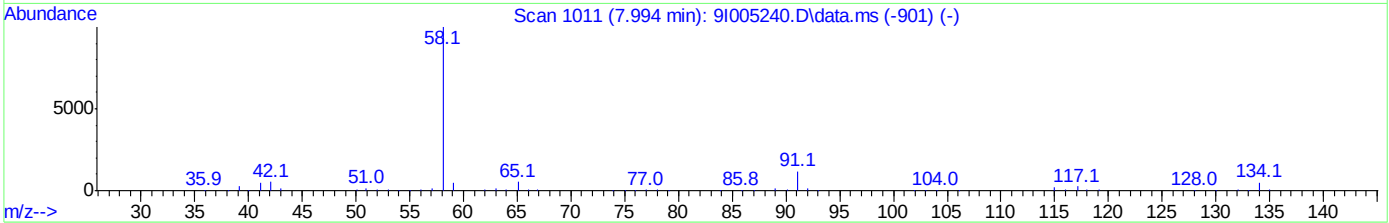
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071361.D
Acq On : 23 Jun 2020 12:12 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 23 14:01:08 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071361.D\data.ms

(122) A,A-Dimethylphenethylamine

7.401min (+0.022) 61.38ppm

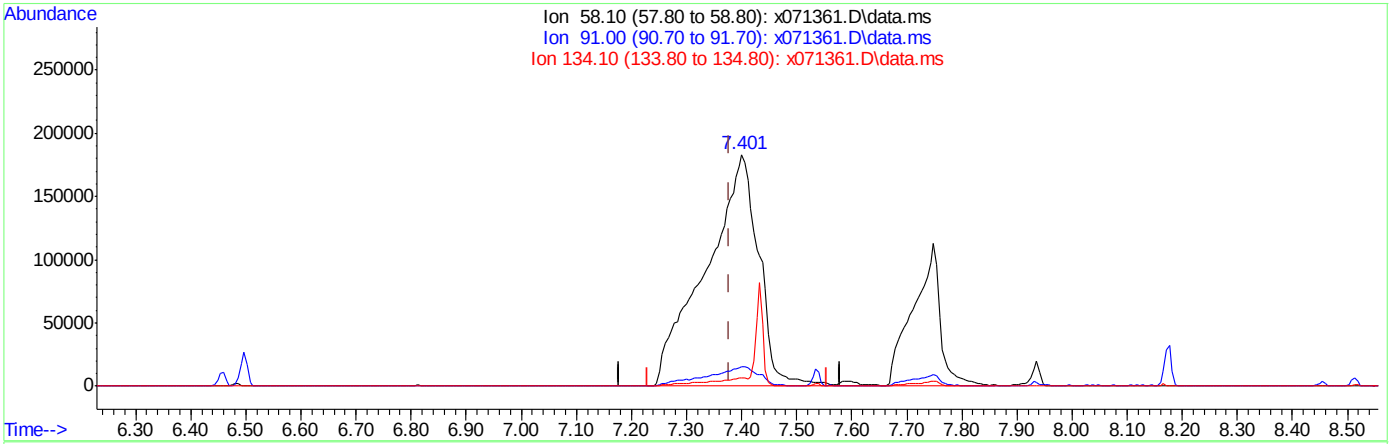
response 1216131

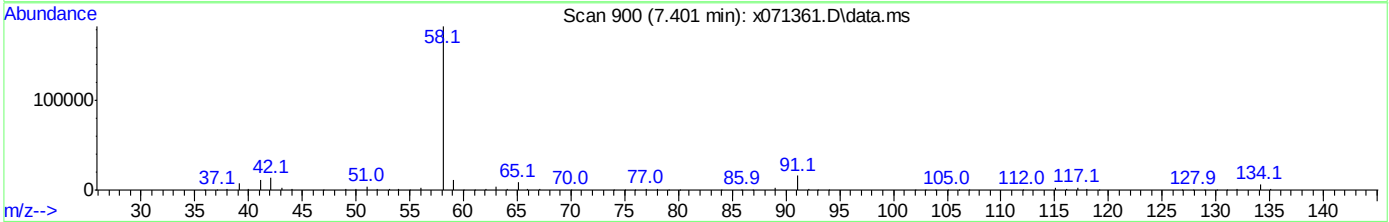
Ion	Exp%	Act%
58.10	100	100
91.00	11.70	8.50
134.10	5.10	3.64
0.00	0.00	0.00

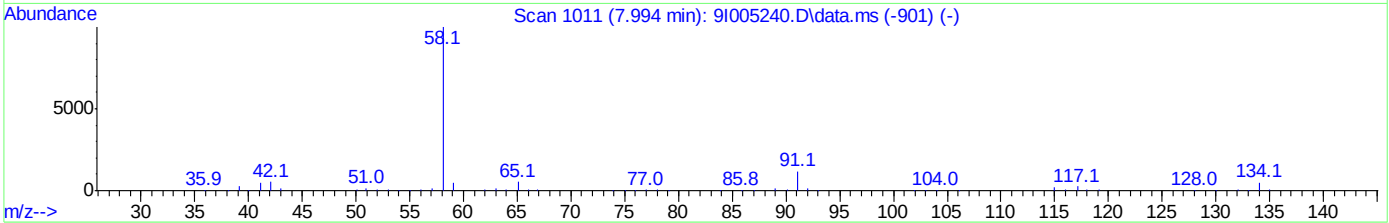
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071361.D
Acq On : 23 Jun 2020 12:12 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 23 14:01:08 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071361.D\data.ms

(122) A,A-Dimethylphenethylamine

7.401min (+0.022) 79.73ppm m

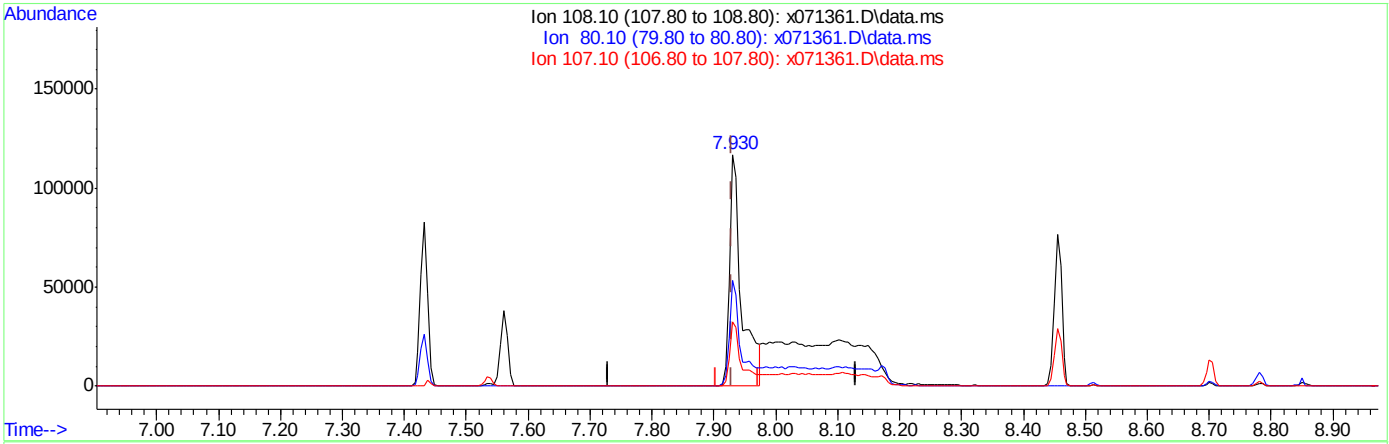
response 1613562

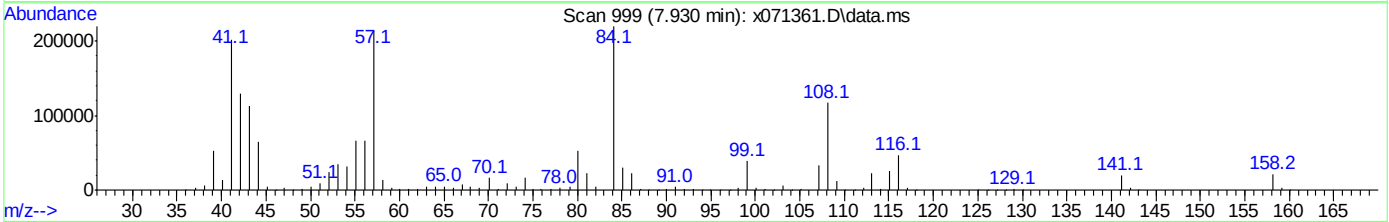
Ion	Exp%	Act%
58.10	100	100
91.00	11.70	8.62
134.10	5.10	3.71
0.00	0.00	0.00

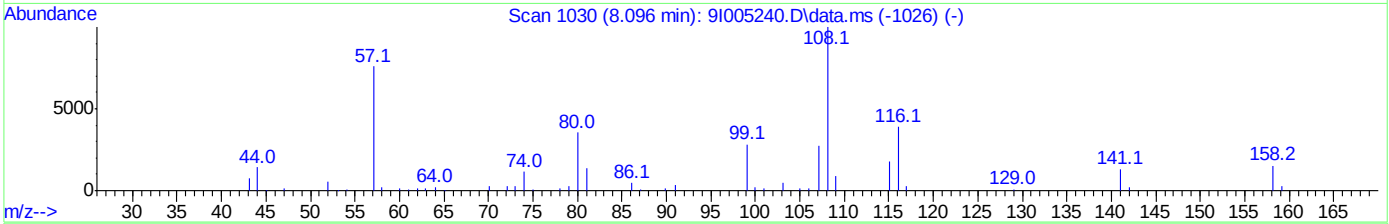
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071361.D
Acq On : 23 Jun 2020 12:12 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 23 14:01:08 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071361.D\data.ms

(125) p-Phenylenediamine

7.930min (+0.000) 29.55ppm

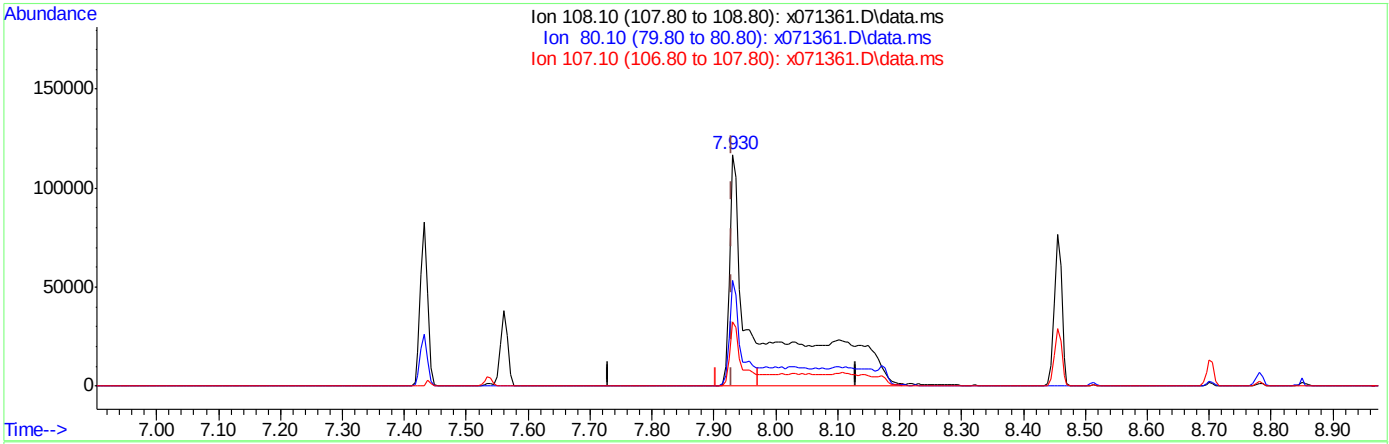
response 156113

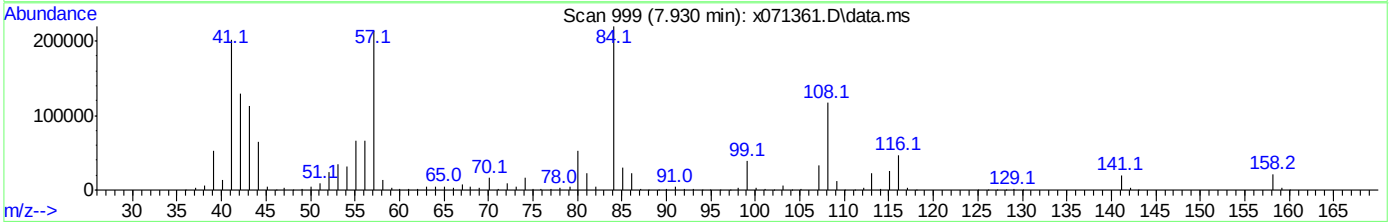
Ion	Exp%	Act%
108.10	100	100
80.10	35.50	45.74
107.10	27.70	27.90
0.00	0.00	0.00

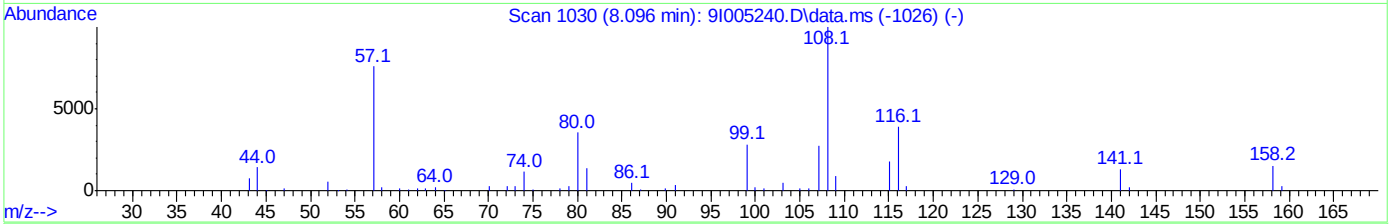
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071361.D
Acq On : 23 Jun 2020 12:12 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 23 14:01:08 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071361.D\data.ms

(125) p-Phenylenediamine

7.930min (+0.000) 93.67ppm m

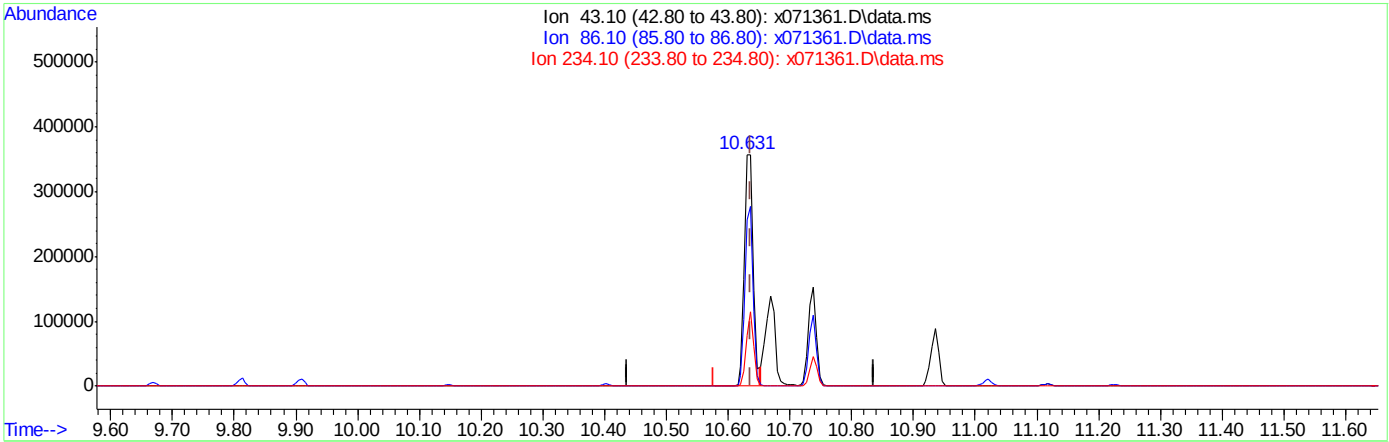
response 407415

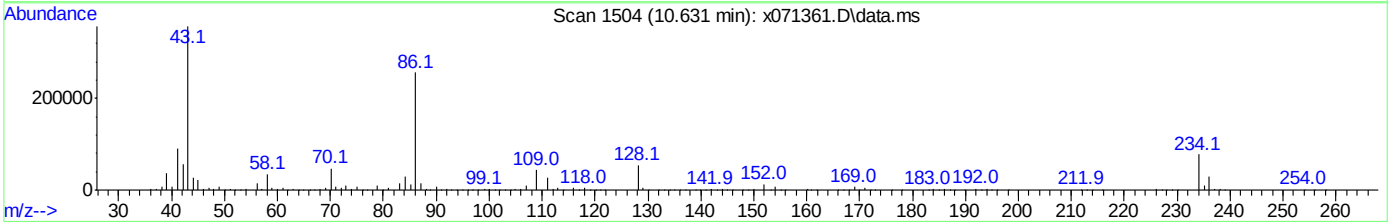
Ion	Exp%	Act%
108.10	100	100
80.10	35.50	45.61
107.10	27.70	27.91
0.00	0.00	0.00

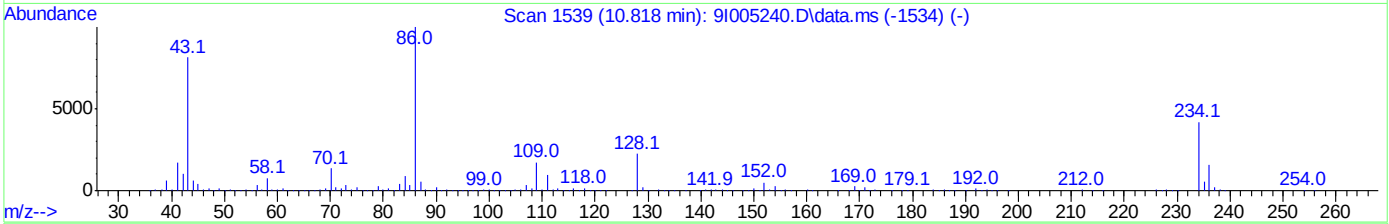
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071361.D
Acq On : 23 Jun 2020 12:12 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 23 14:01:08 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071361.D\data.ms

(138) Diallate

10.631min (-0.005) 47.83ppm

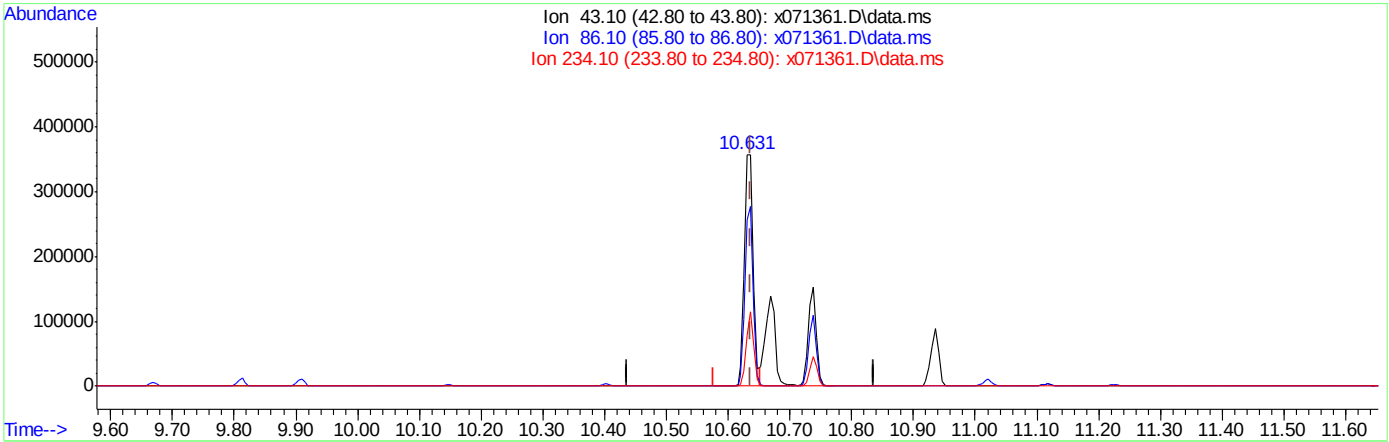
response 357785

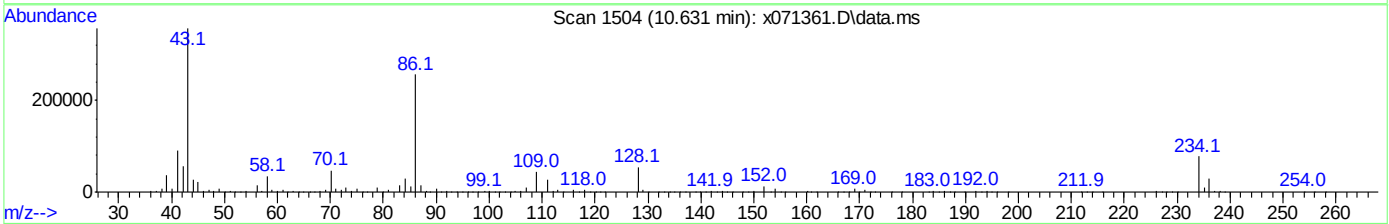
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	74.60#
234.10	51.50	22.72
0.00	0.00	0.00

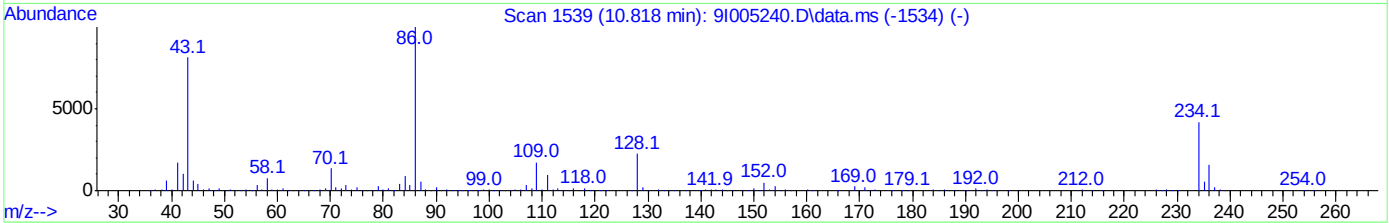
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071361.D
Acq On : 23 Jun 2020 12:12 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 23 14:01:08 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071361.D\data.ms

(138) Diallate

10.631min (-0.005) 86.11ppm m

response 644225

Ion	Exp%	Act%
43.10	100	100
86.10	123.10	71.83#
234.10	51.50	21.85
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071361.D
Acq On : 23 Jun 2020 12:12 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 23 14:01:08 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
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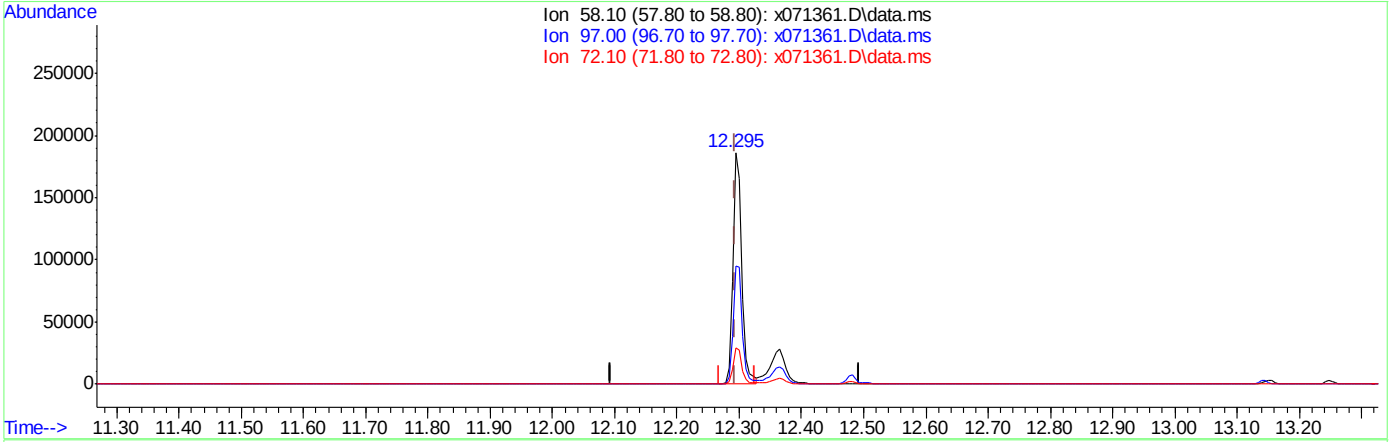

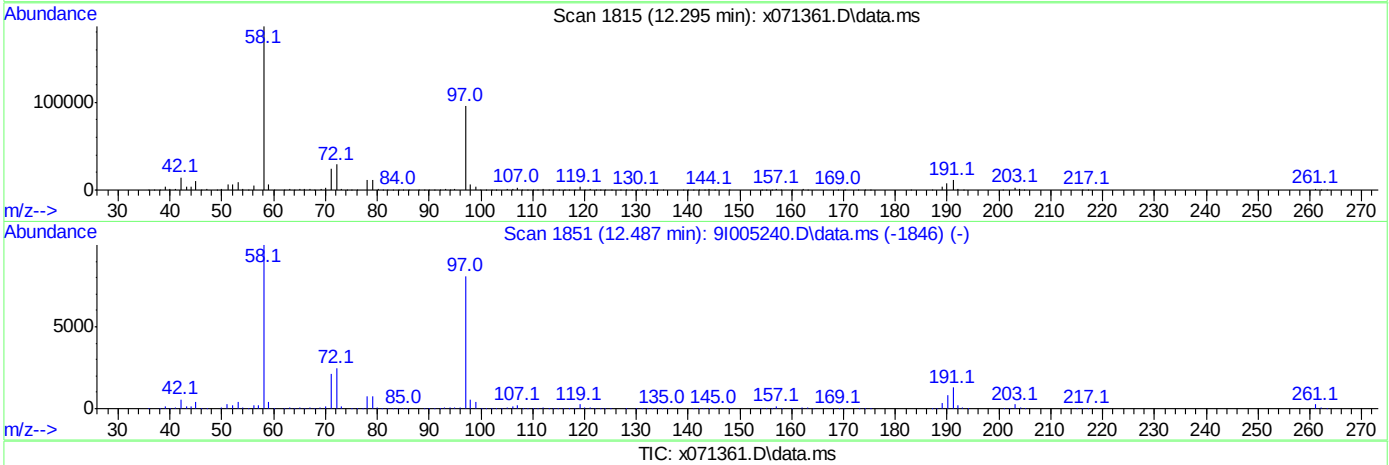

TIC: x071361.D\data.ms

(144) Methapyrilene

12.295min (+0.000) 21.05ppm

response 178201

Ion	Exp%	Act%
58.10	100	100
97.00	80.90	51.08
72.10	24.80	15.54
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071361.D
Acq On : 23 Jun 2020 12:12 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
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Quant Title : SW846 8270D OR EPA 625
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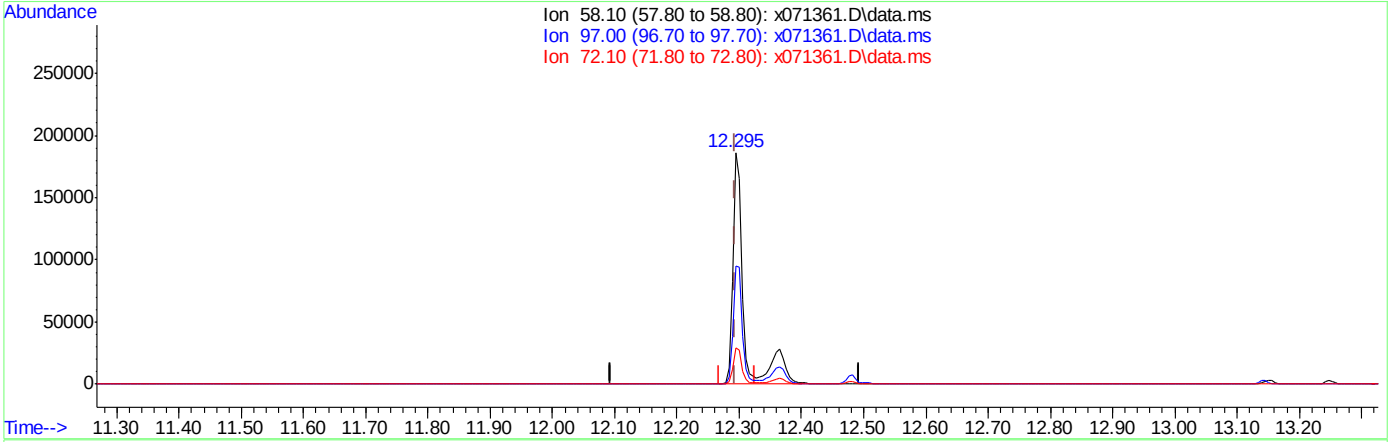
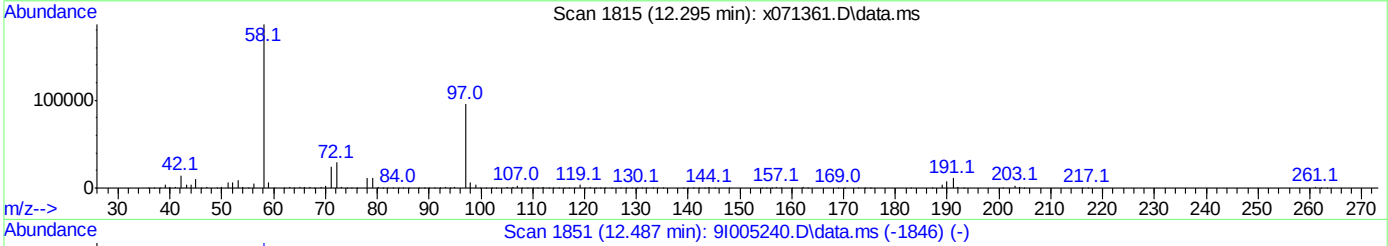
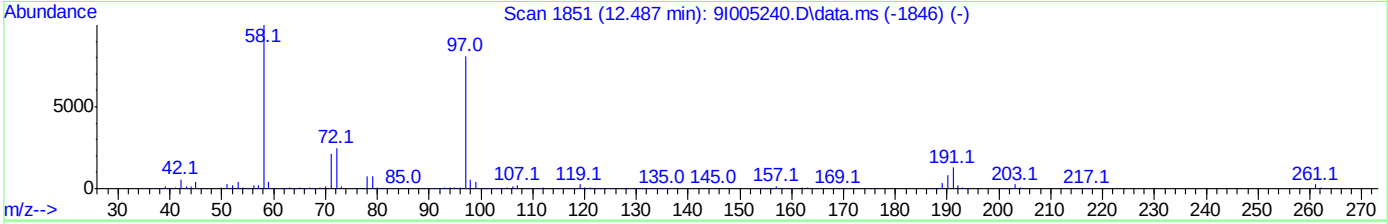






TIC: x071361.D\data.ms

(144) Methapyrilene

12.295min (+0.000) 26.75ppm m

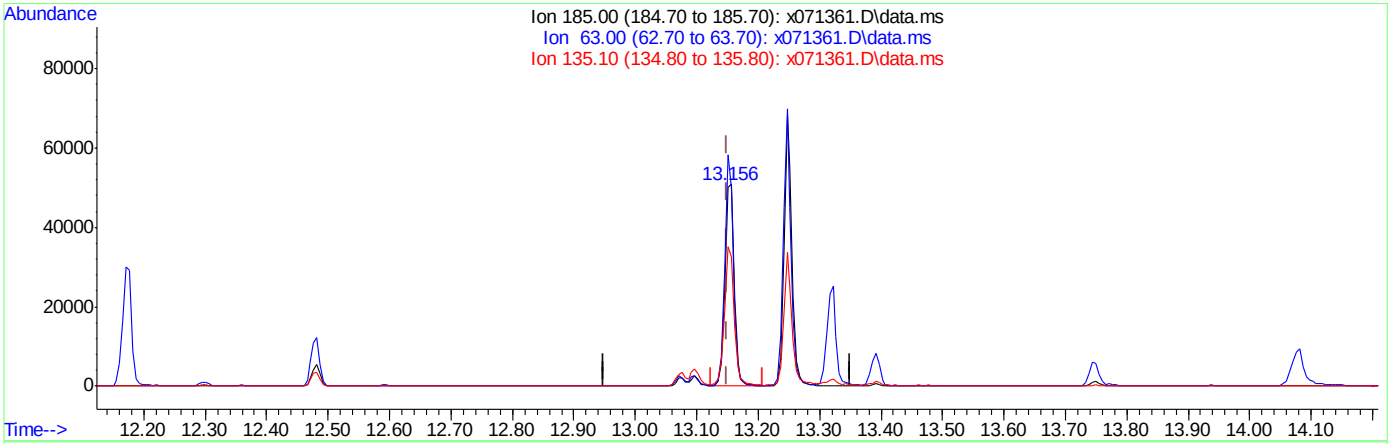
response 227166

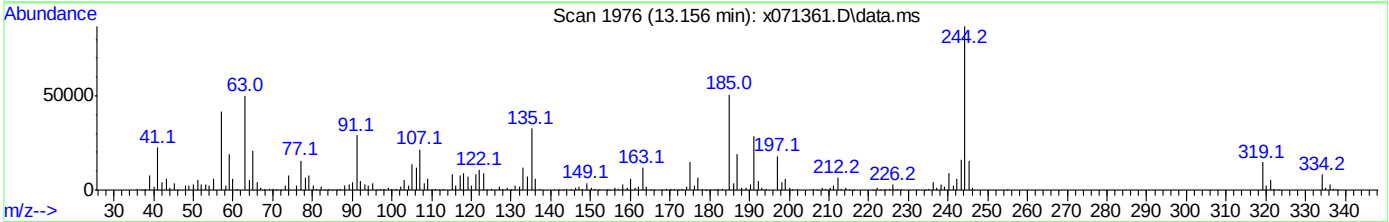
Ion	Exp%	Act%
58.10	100	100
97.00	80.90	51.12
72.10	24.80	15.55
0.00	0.00	0.00

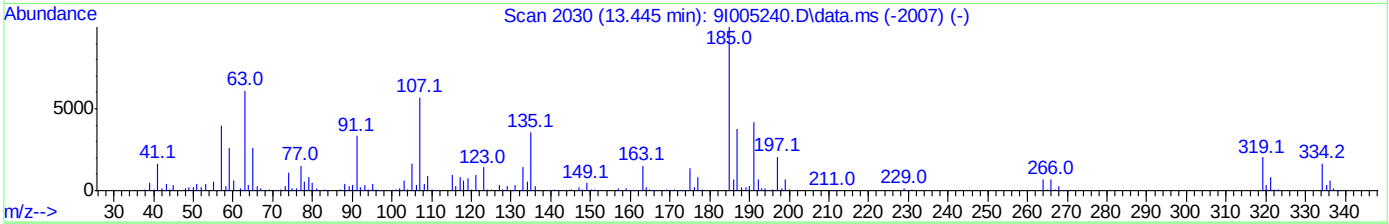
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071361.D
Acq On : 23 Jun 2020 12:12 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 23 14:01:08 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071361.D\data.ms

(147) Aramite

13.156min (+0.006) 30.90ppm

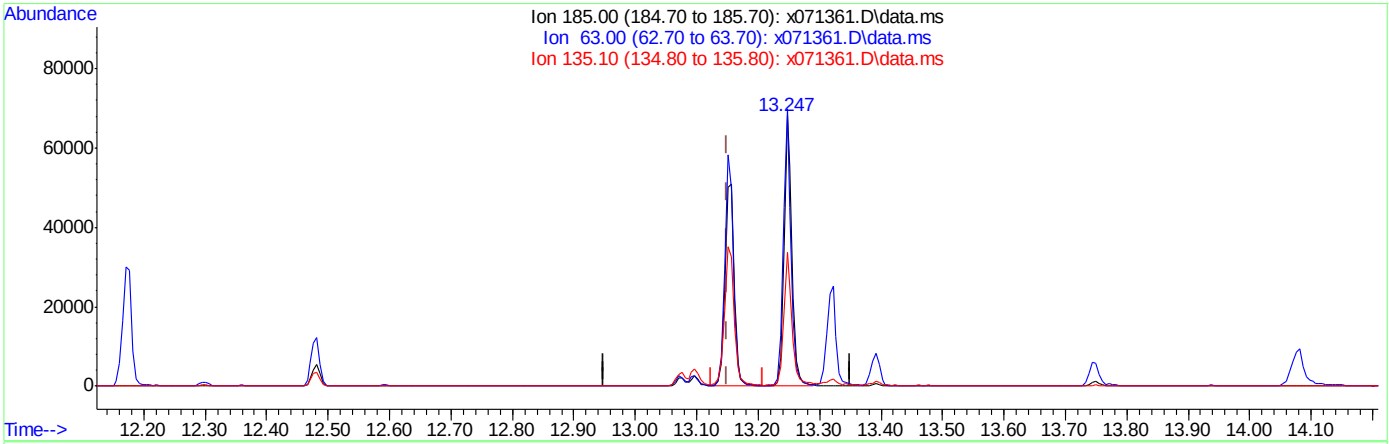
response 52639

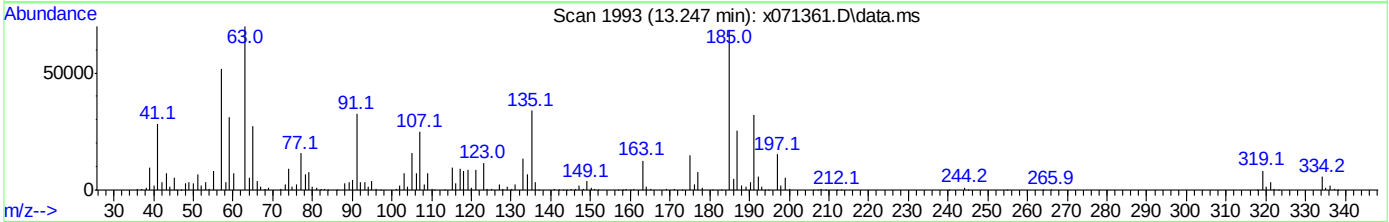
Ion	Exp%	Act%
185.00	100	100
63.00	61.10	97.59#
135.10	35.60	63.72
0.00	0.00	0.00

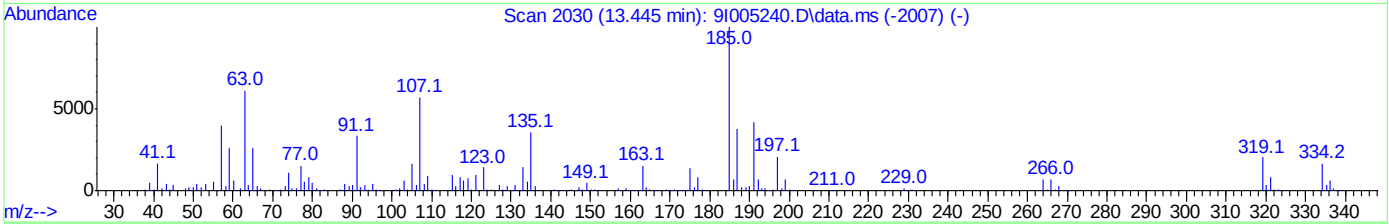
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071361.D
Acq On : 23 Jun 2020 12:12 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 23 14:01:08 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071361.D\data.ms

(147) Aramite

13.247min (+0.096) 65.43ppm m

response 116692

Ion	Exp%	Act%
185.00	100	100
63.00	61.10	102.56#
135.10	35.60	49.62
0.00	0.00	0.00

X071362.D

Manual Integrations APPROVED (compounds with "m" flag)

Naresh Jiawan 06/24/20 14:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071362.D
Acq On : 23 Jun 2020 12:37 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 23 16:55:40 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	0.000	152	0m	40.00	ppm	-6.00
22) Naphthalene-d8	0.000	136	0m	40.00	ppm	-7.43
43) Acenaphthene-d10	0.000	164	0m	40.00	ppm	-9.48
70) Phenanthrene-d10	0.000	188	0m	40.00	ppm	-11.22
92) Chrysene-d12	0.000	240	0m	40.00	ppm	-14.49
102) Perylene-d12	0.000	264	0m	40.00	ppm	-16.82
110) 1,4-Dichlorobenzene-d4A	6.005	152	162385	40.00	ppm	0.00
120) Naphthalene-d8A	7.433	136	698390	40.00	ppm	0.00
127) Acenaphthene-d10A	9.476	164	364024	40.00	ppm	0.00
136) Phenanthrene-d10A	11.225	188	682783	40.00	ppm	0.00
146) Chrysene-d12A	14.493	240	432572	40.00	ppm	0.00
153) Perylene-d12A	16.825	264	357392	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	0.000	112	0d	0.00	ppm	
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#		
9) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#		
23) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#		
47) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#		
75) 2,4,6-Tribromophenol	0.000	330	0d	0.00	ppm	
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#		
95) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#		
Target Compounds						Qvalue
111) 2-Picoline	3.983	93	578839	71.78	ppm	86
112) N-Nitrosomethylethylamine	4.111	42	403837	141.44	ppm #	54
113) Methyl methanesulfonate	4.443	80	288958	72.47	ppm	90
114) N-Nitrosodiethylamine	4.860	102	247345	77.17	ppm #	36
115) Ethyl methanesulfonate	5.186	79	400843	71.00	ppm	95
116) Pentachloroethane	5.700	167	171923	74.88	ppm	93
117) N-Nitrosopyrrolidine	6.438	100	228116	69.58	ppm #	20
118) N-Nitrosomorpholine	6.486	56	407544	118.99	ppm #	70
119) O-Toluidine	6.497	106	848373	85.24	ppm	99
121) N-Nitrosopiperidine	6.818	42	477710	124.86	ppm #	59
122) A,A-Dimethylphenethyla...	7.417	58	1993287m	96.58	ppm	
123) Hexachloropropene	7.561	213	245225	66.01	ppm	99
124) N-Nitrosodi-n-butylamine	7.935	84	428055	79.08	ppm #	53
125) p-Phenylenediamine	7.930	108	467834m	116.33	ppm	
126) Isosafrole	8.176	162	367589	80.39	ppm	83
128) Safrole	8.781	162	384141	81.55	ppm	86
129) 1-Chloronaphthalene	8.855	162	898137	79.48	ppm	97
130) Diphenyl Ether	8.946	170	623653	81.25	ppm	93
131) 1,4-Naphthoquinone	9.043	158	347003	116.71	ppm	85
132) Pentachlorobenzene	9.668	250	309864	59.10	ppm	98
133) 1-Naphthylamine	9.813	143	976524	84.19	ppm	92

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071362.D
Acq On : 23 Jun 2020 12:37 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 23 16:55:40 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration

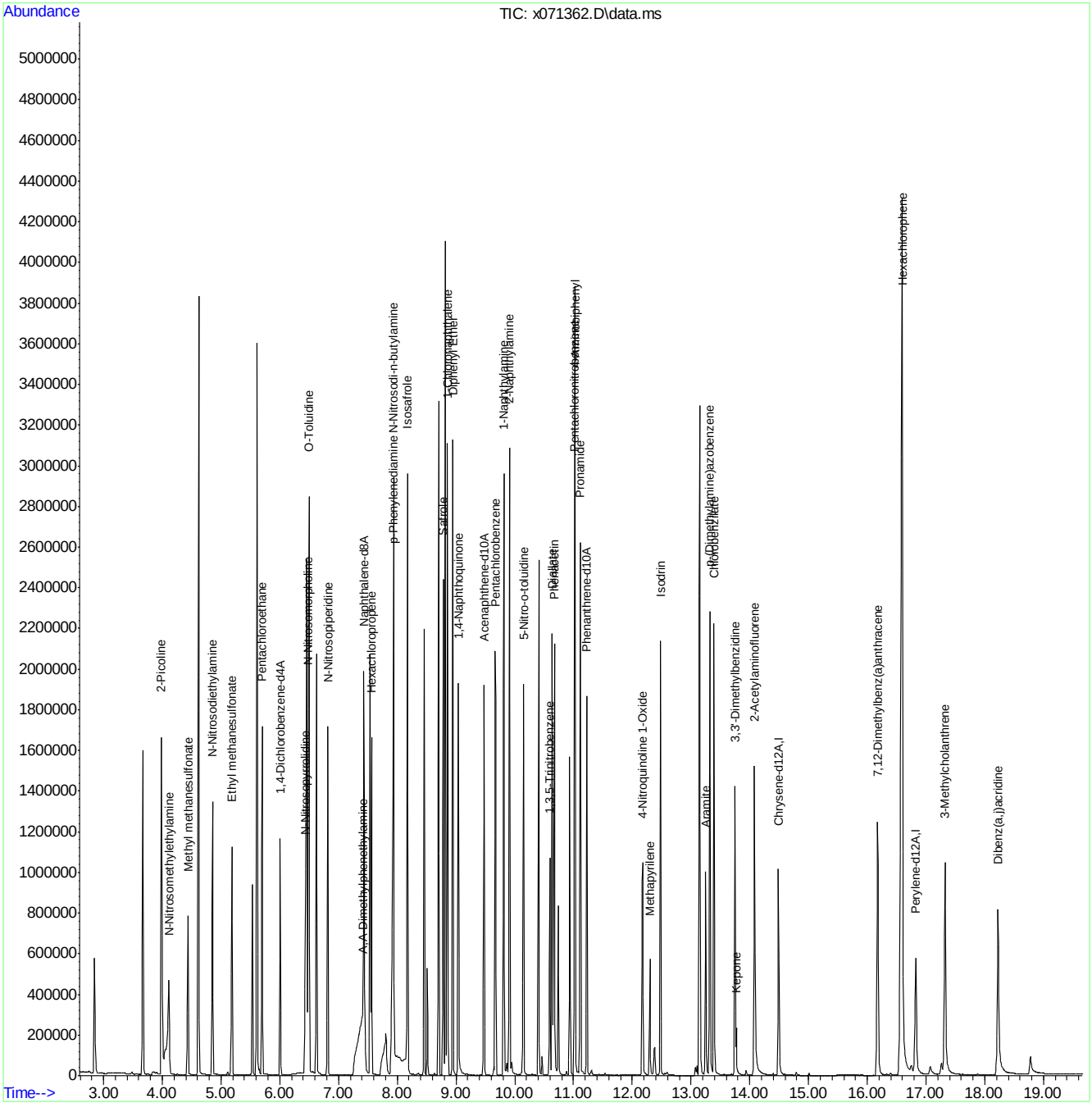
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
134) 2-Naphthylamine	9.909	143	1057229	89.49	ppm	96
135) 5-Nitro-o-toluidine	10.150	152	315750	76.78	ppm	82
137) 1,3,5-Trinitrobenzene	10.599	75	274775	63.07	ppm	90
138) Diallate	10.637	43	784030m	104.00	ppm	
139) Phenacetin	10.674	108	541870	72.54	ppm	90
140) 4-Aminobiphenyl	11.027	169	1005962	87.39	ppm	99
141) Pronamide	11.118	173	434232	71.34	ppm	98
142) Pentachloronitrobenzene	11.016	237	105065	60.46	ppm	91
143) 4-Nitroquinoline 1-Oxide	12.177	190	94011	103.40	ppm	82
144) Methapyrilene	12.295	58	273027m	31.81	ppm	
145) Isodrin	12.482	193	143445	60.54	ppm	87
147) Aramite	13.247	185	149117m	81.41	ppm	
148) p-(Dimethylamine)azobe...	13.322	120	418081	90.01	ppm	84
149) Chlorobenzilate	13.391	139	482994	87.52	ppm	72
150) Kepone	13.776	272	9074	5.86	ppm	93
151) 3,3'-Dimethylbenzidine	13.749	212	533573	82.19	ppm	98
152) 2-Acetylaminofluorene	14.081	181	512353	77.94	ppm	91
154) 7,12-Dimethylbenz(a)an...	16.178	256	409390	76.47	ppm	96
155) Hexachlorophene	16.595	196	808908	1125.67	ppm	100
156) 3-Methylcholanthrene	17.328	268	385313	80.55	ppm	92
157) Dibenz(a,j)acridine	18.226	279	538705	65.75	ppm	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071362.D
Acq On : 23 Jun 2020 12:37 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 23 16:55:40 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration



8270DApp9SX-062320.m Tue Jun 23 19:10:25 2020 Page: 3

Manual Integration Approval Summary

Sample Number: SX2918-IC2918
Lab FileID: X071362.D
Injection Time: 06/23/20 12:37

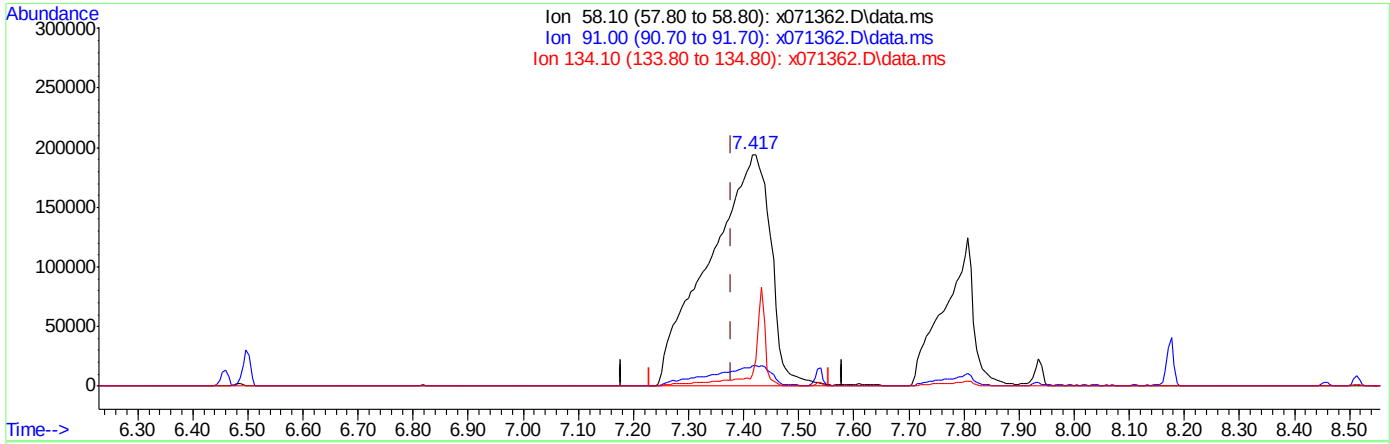
Method: EPA 625.1
Analyst approved: 06/24/20 09:50 Martha Valls
Supervisor approved: 06/24/20 14:07 Naresh Jiawan

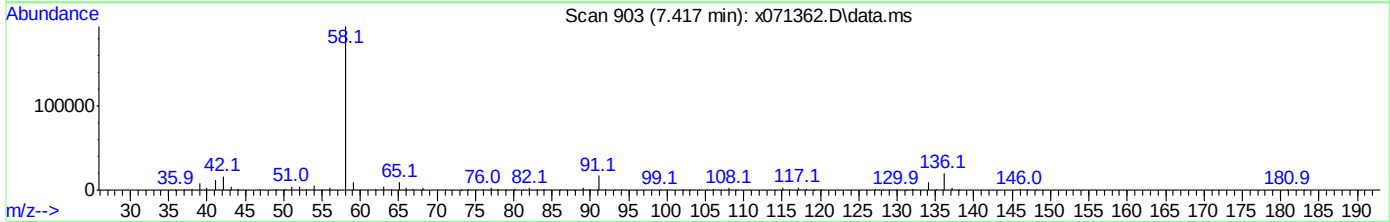
Parameter	CAS	Sig#	R.T. (min.)	Reason
A,A-Dimethylphenethylamine	122-09-8		7.42	Split peak
p-Phenylenediamine	106-50-3		7.93	Split peak
Diallate	2303-16-4		10.64	Split peak
Methapyrilene	91-80-5		12.29	Split peak
Aramite	140-57-8		13.25	Split peak

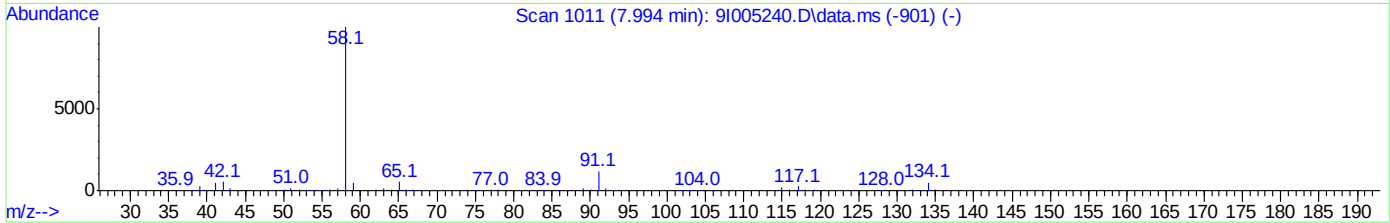
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071362.D
Acq On : 23 Jun 2020 12:37 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 23 14:01:10 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071362.D\data.ms

(122) A,A-Dimethylphenethylamine

7.417min (+0.037) 74.94ppm

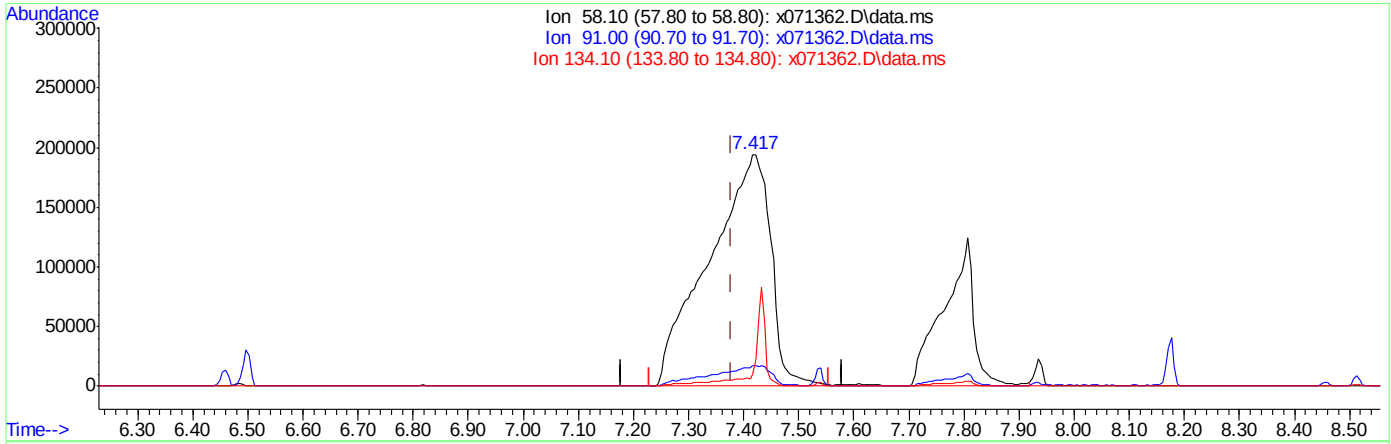
response 1509105

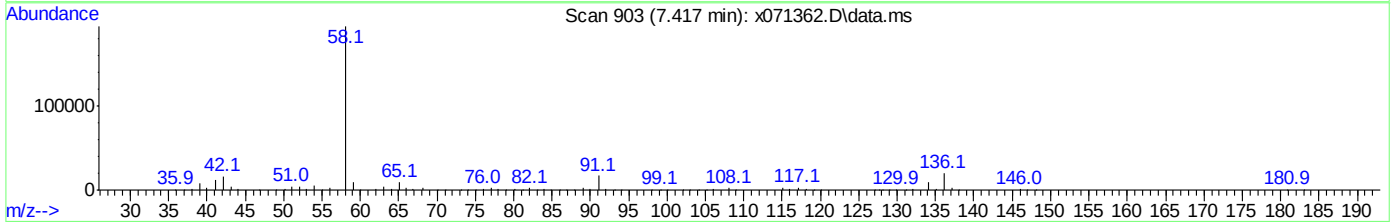
Ion	Exp%	Act%
58.10	100	100
91.00	11.70	8.64
134.10	5.10	4.79
0.00	0.00	0.00

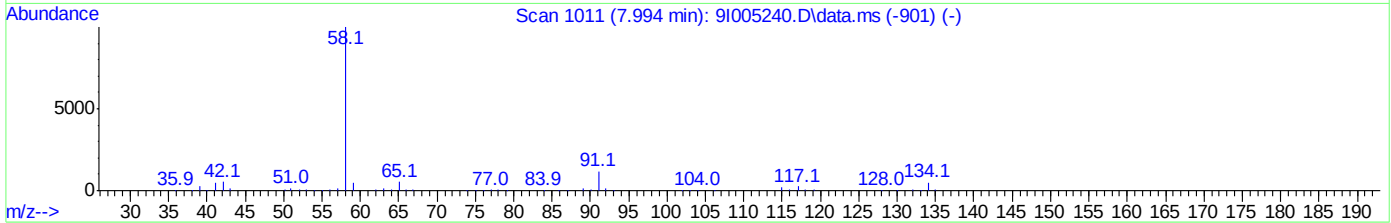
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071362.D
Acq On : 23 Jun 2020 12:37 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 23 14:01:10 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071362.D\data.ms

(122) A,A-Dimethylphenethylamine

7.417min (+0.037) 96.58ppm m

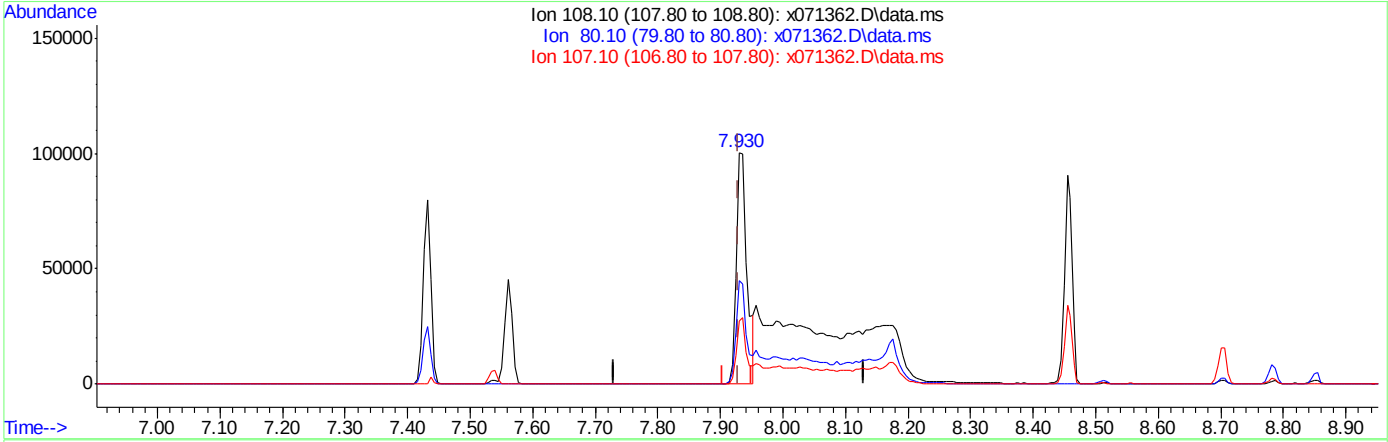
response 1993287

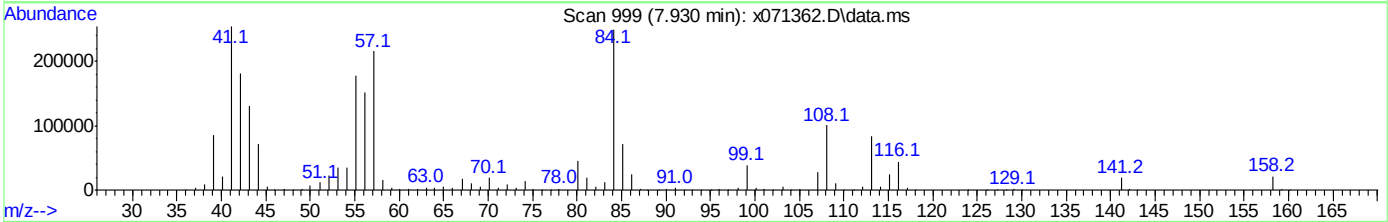
Ion	Exp%	Act%
58.10	100	100
91.00	11.70	8.75
134.10	5.10	4.81
0.00	0.00	0.00

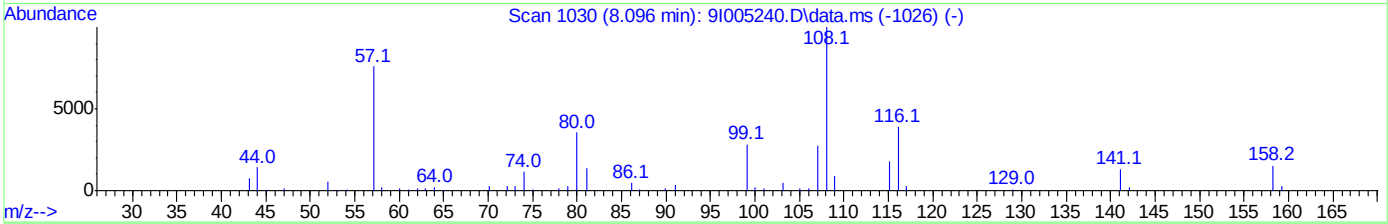
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071362.D
Acq On : 23 Jun 2020 12:37 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 23 14:01:10 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071362.D\data.ms

(125) p-Phenylenediamine

7.930min (+0.000) 21.84ppm

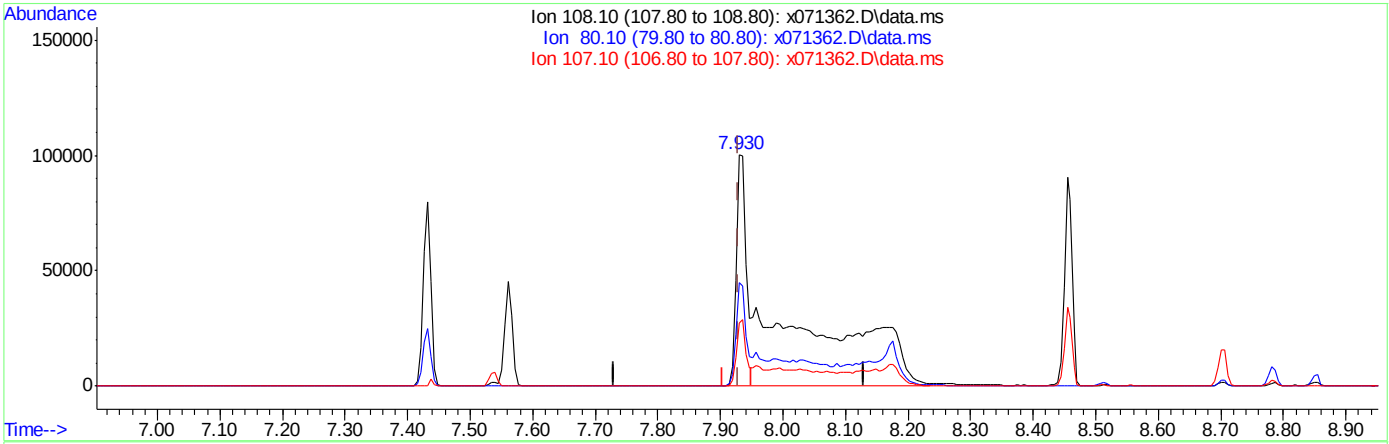
response 117920

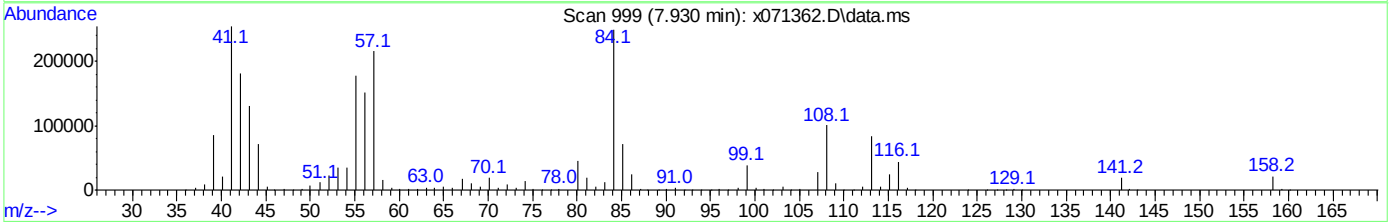
Ion	Exp%	Act%
108.10	100	100
80.10	35.50	45.05
107.10	27.70	27.34
0.00	0.00	0.00

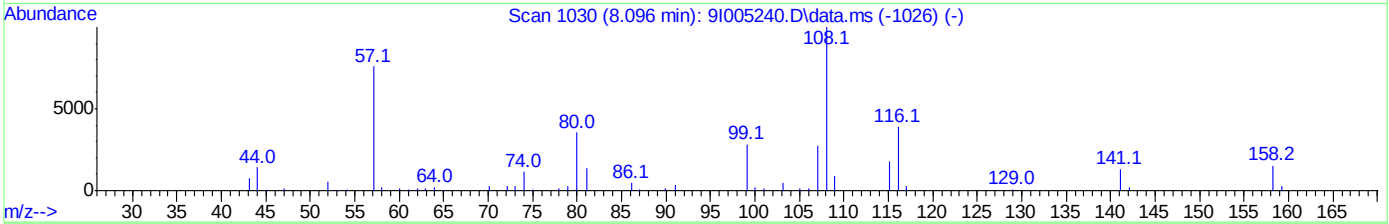
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071362.D
Acq On : 23 Jun 2020 12:37 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 23 14:01:10 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071362.D\data.ms

(125) p-Phenylenediamine

7.930min (+0.000) 116.33ppm m

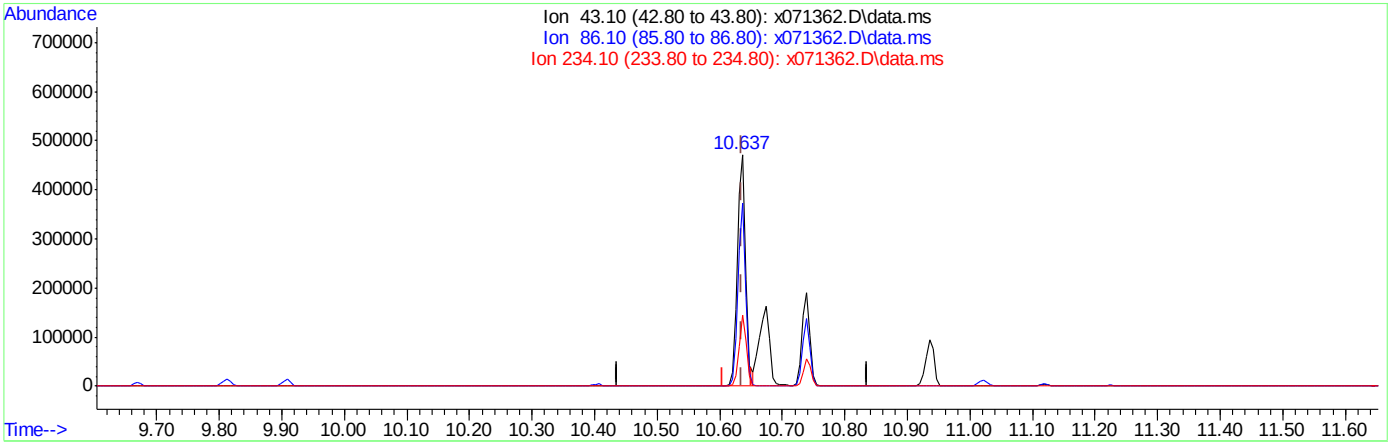
response 467834

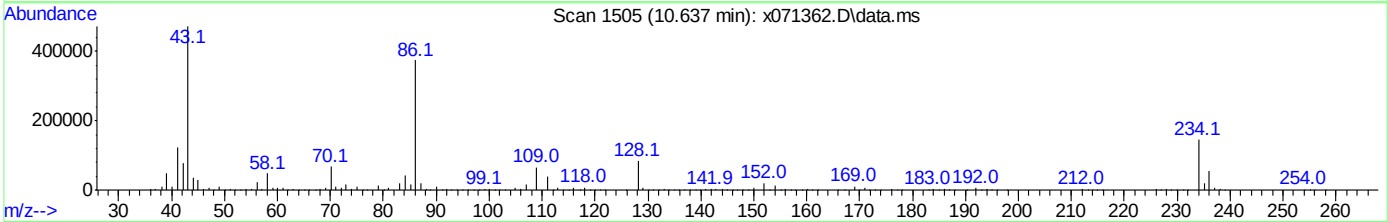
Ion	Exp%	Act%
108.10	100	100
80.10	35.50	44.62
107.10	27.70	27.32
0.00	0.00	0.00

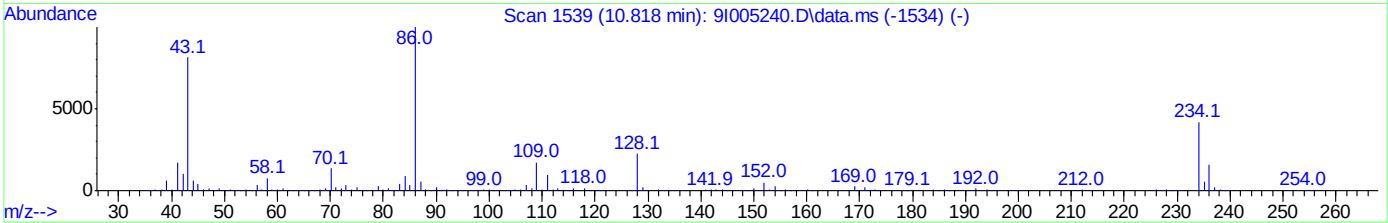
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071362.D
Acq On : 23 Jun 2020 12:37 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 23 14:01:10 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071362.D\data.ms

(138) Diallate

10.637min (+0.000) 56.94ppm

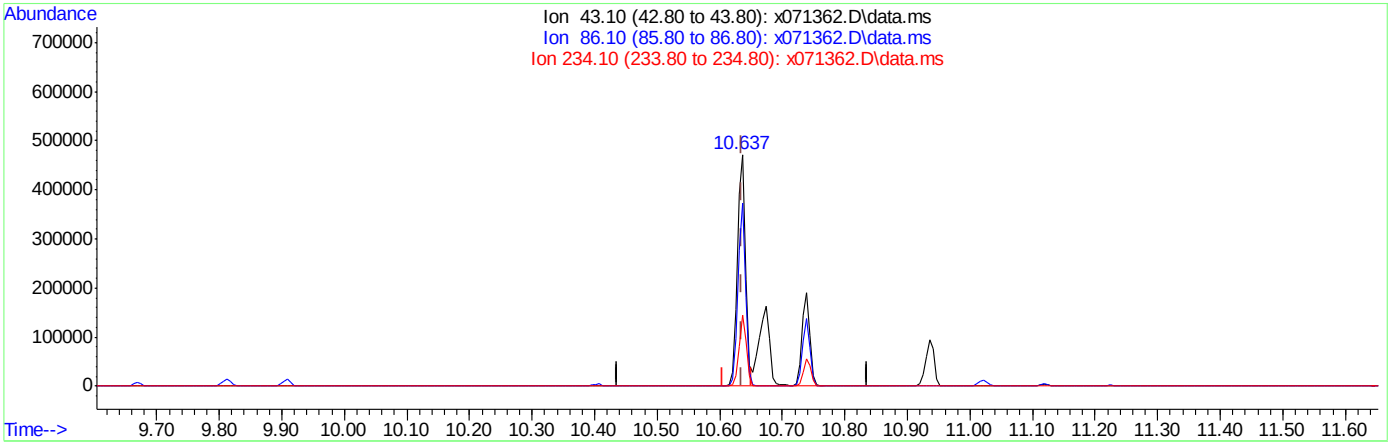
response 429265

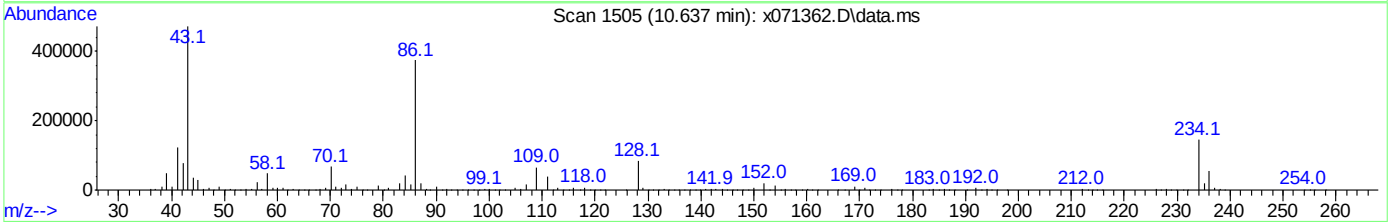
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	81.31#
234.10	51.50	31.39
0.00	0.00	0.00

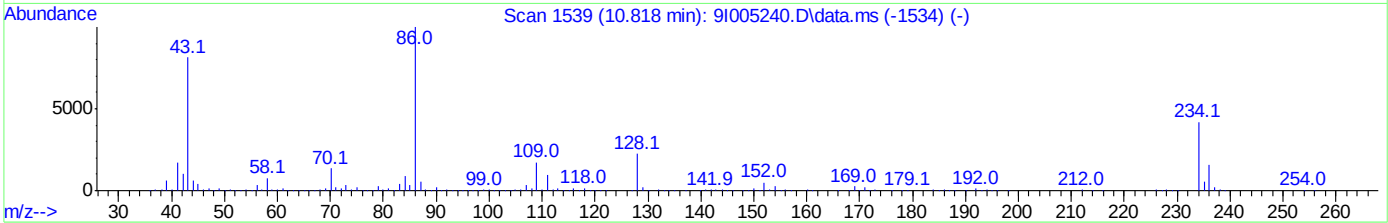
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071362.D
Acq On : 23 Jun 2020 12:37 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 23 14:01:10 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071362.D\data.ms

(138) Diallate

10.637min (+0.000) 104.00ppm m

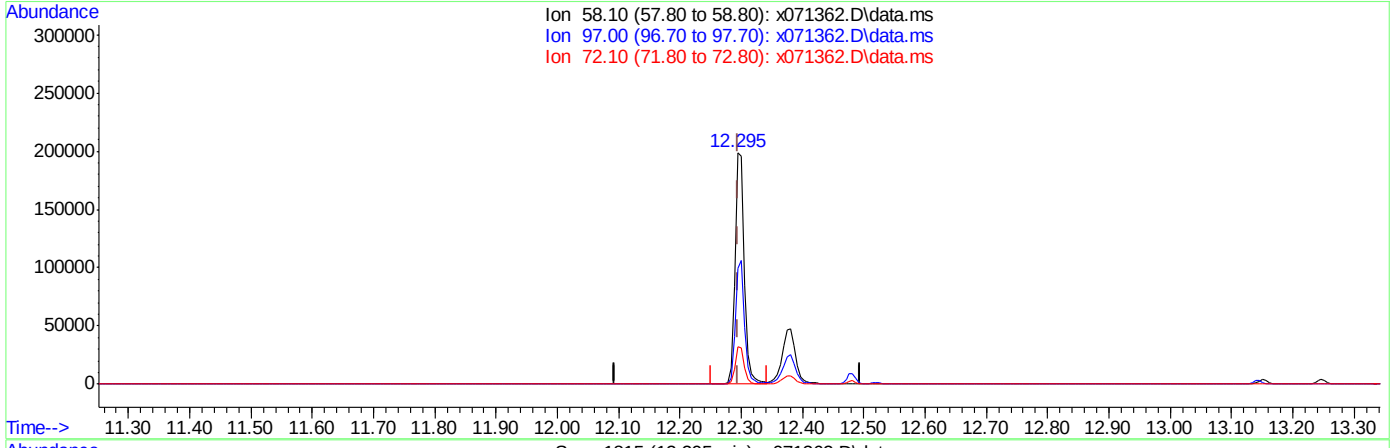
response 784030

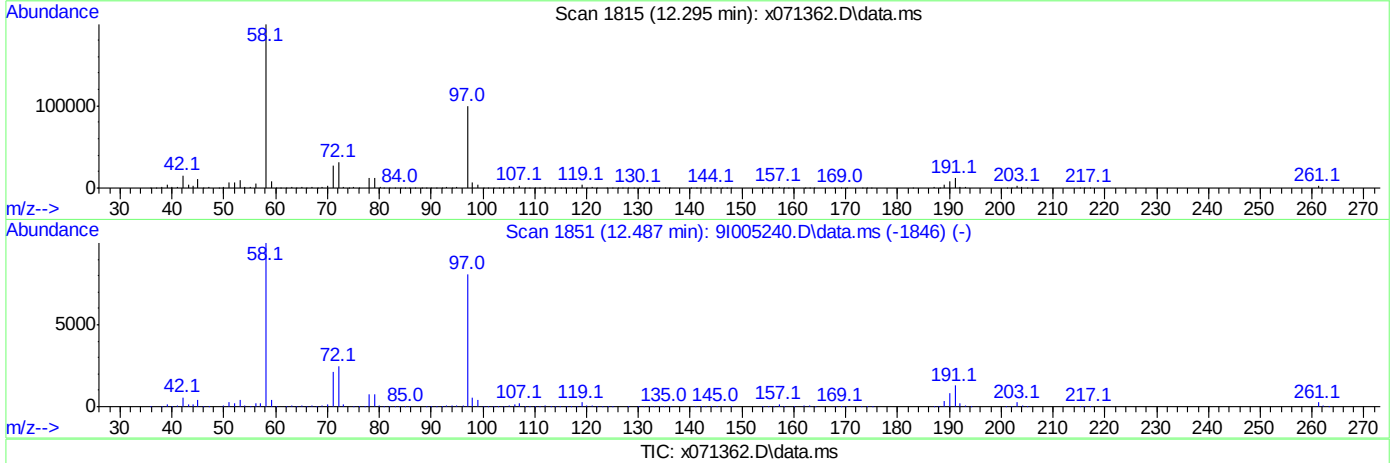
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	79.23#
234.10	51.50	30.56
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071362.D
Acq On : 23 Jun 2020 12:37 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 23 14:01:10 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration





TIC: x071362.D\data.ms

(144) Methapyrilene

12.295min (+0.000) 23.54ppm

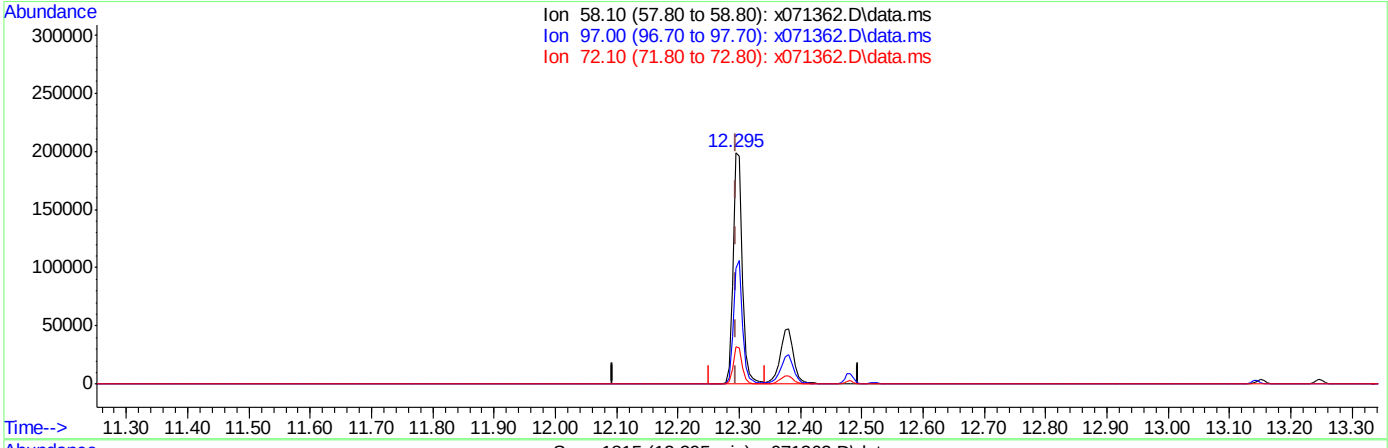
response 201112

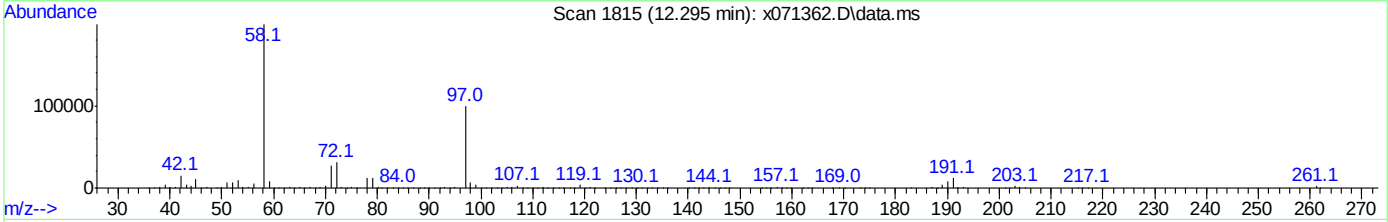
Ion	Exp%	Act%
58.10	100	100
97.00	80.90	50.07#
72.10	24.80	15.89
0.00	0.00	0.00

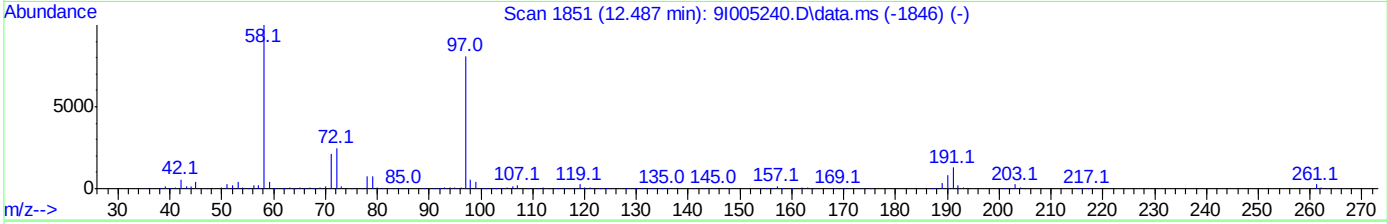
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071362.D
Acq On : 23 Jun 2020 12:37 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 23 14:01:10 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071362.D\data.ms

(144) Methapyrilene

12.295min (+0.000) 31.81ppm m

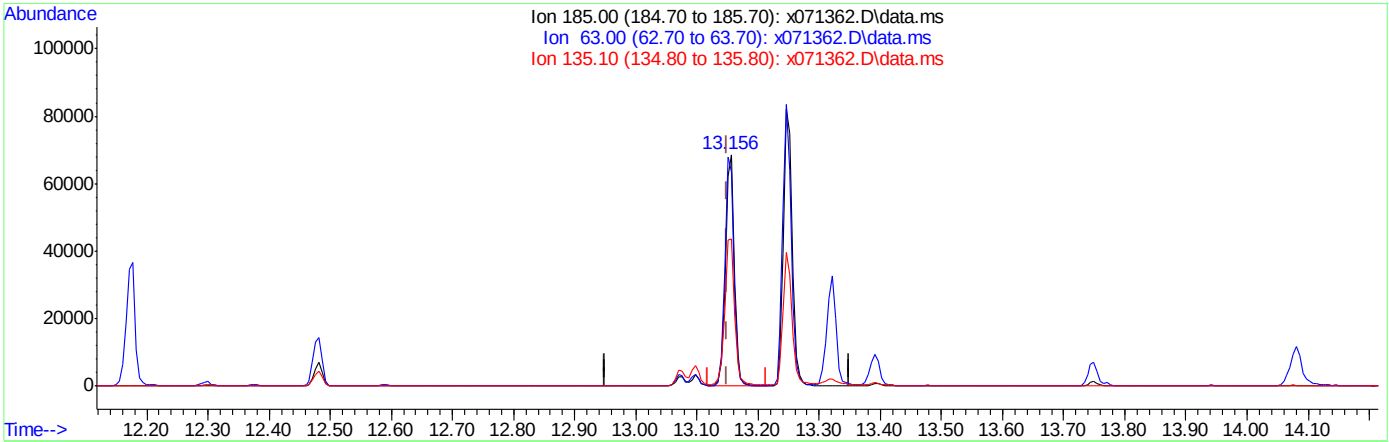
response 273027

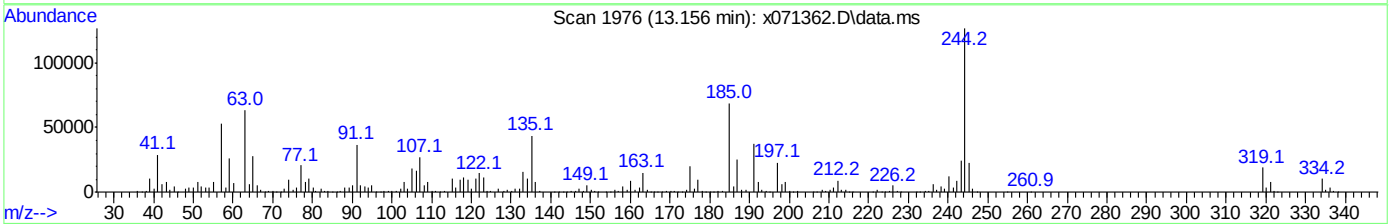
Ion	Exp%	Act%
58.10	100	100
97.00	80.90	50.10#
72.10	24.80	15.93
0.00	0.00	0.00

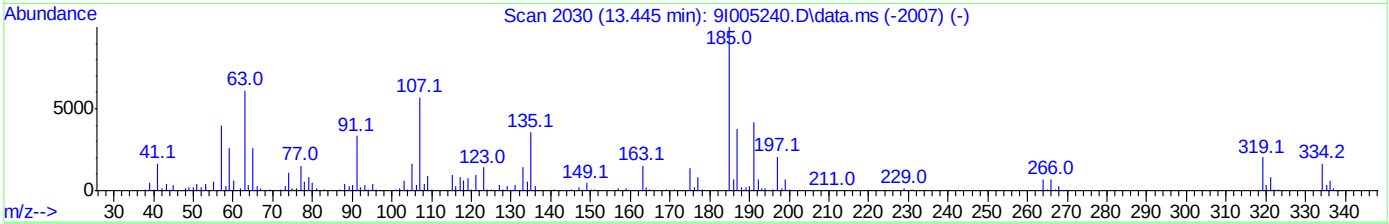
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071362.D
Acq On : 23 Jun 2020 12:37 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 23 14:01:10 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071362.D\data.ms

(147) Aramite

13.156min (+0.005) 39.17ppm

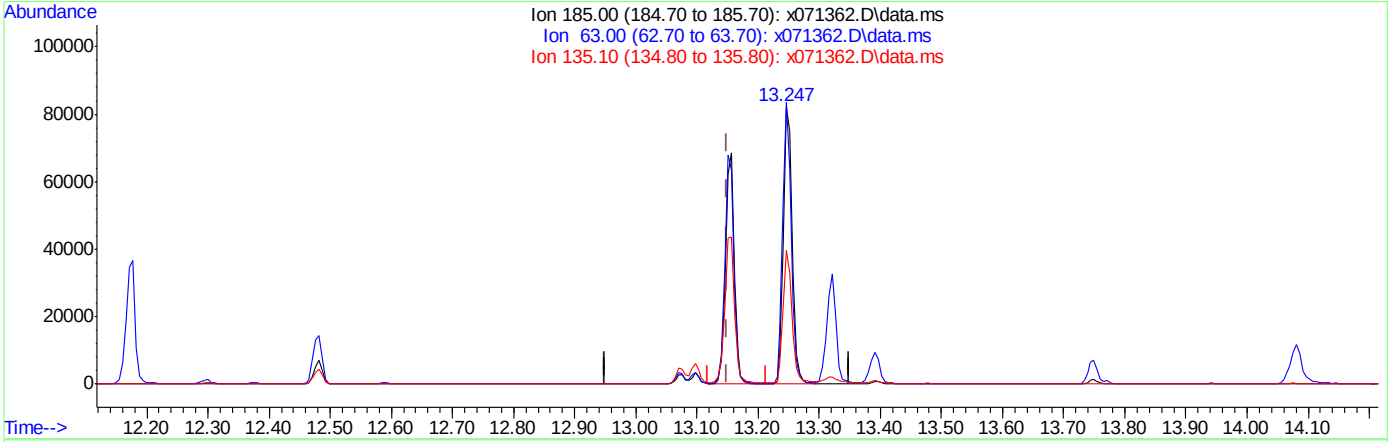
response 67896

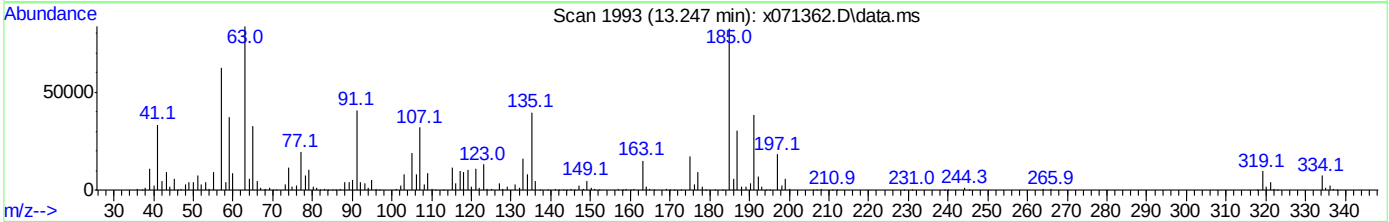
Ion	Exp%	Act%
185.00	100	100
63.00	61.10	92.71#
135.10	35.60	63.15
0.00	0.00	0.00

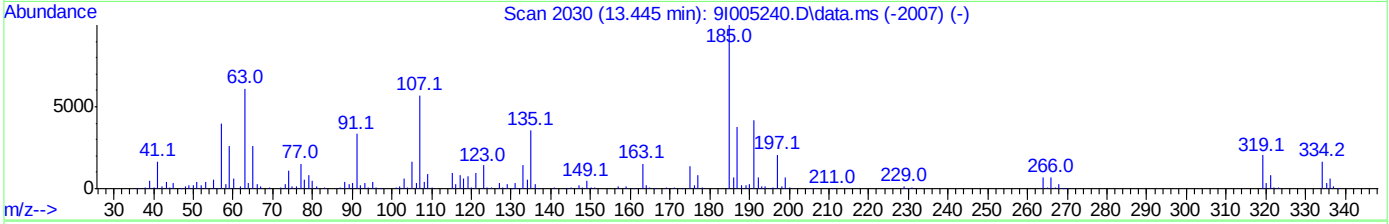
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071362.D
Acq On : 23 Jun 2020 12:37 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 23 14:01:10 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071362.D\data.ms

(147) Aramite

13.247min (+0.096) 81.41ppm m

response 149117

Ion	Exp%	Act%
185.00	100	100
63.00	61.10	101.63#
135.10	35.60	48.30
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 06/24/20 14:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071363.D
Acq On : 23 Jun 2020 1:03 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 23 17:10:52 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	0.000	152	0m	40.00	ppm		-6.00
22) Naphthalene-d8	0.000	136	0m	40.00	ppm		-7.43
43) Acenaphthene-d10	0.000	164	0m	40.00	ppm		-9.48
70) Phenanthrene-d10	0.000	188	0m	40.00	ppm		-11.22
92) Chrysene-d12	0.000	240	0m	40.00	ppm		-14.49
102) Perylene-d12	0.000	264	0m	40.00	ppm		-16.82
110) 1,4-Dichlorobenzene-d4A	6.005	152	163786	40.00	ppm		0.00
120) Naphthalene-d8A	7.433	136	700883	40.00	ppm		0.00
127) Acenaphthene-d10A	9.476	164	365750	40.00	ppm		0.00
136) Phenanthrene-d10A	11.225	188	688047	40.00	ppm		0.00
146) Chrysene-d12A	14.488	240	434561	40.00	ppm		0.00
153) Perylene-d12A	16.836	264	355855	40.00	ppm		0.02
System Monitoring Compounds							
7) 2-Fluorophenol	0.000	112	0d	0.00	ppm		
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#			
9) Phenol-d5	0.000	99	0d	0.00	ppm		
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#			
23) Nitrobenzene-d5	0.000	82	0d	0.00	ppm		
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#			
47) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm		
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#			
75) 2,4,6-Tribromophenol	0.000	330	0d	0.00	ppm		
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#			
95) Terphenyl-d14	0.000	244	0d	0.00	ppm		
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#			
Target Compounds							Qvalue
111) 2-Picoline	3.983	93	770885	94.78	ppm		88
112) N-Nitrosomethylethylamine	4.111	42	538567	187.02	ppm	#	54
113) Methyl methanesulfonate	4.443	80	379784	94.44	ppm		91
114) N-Nitrosodiethylamine	4.860	102	325074	100.55	ppm	#	26
115) Ethyl methanesulfonate	5.192	79	529425	92.97	ppm		96
116) Pentachloroethane	5.700	167	227433	98.21	ppm		94
117) N-Nitrosopyrrolidine	6.449	100	300078	90.78	ppm	#	51
118) N-Nitrosomorpholine	6.491	56	515740	149.30	ppm	#	72
119) O-Toluidine	6.502	106	1097953	109.37	ppm		99
121) N-Nitrosopiperidine	6.818	42	615840	160.39	ppm	#	58
122) A,A-Dimethylphenethyla...	7.449	58	2657015m	124.39	ppm		
123) Hexachloropropene	7.561	213	325540	87.32	ppm		99
124) N-Nitrosodi-n-butylamine	7.941	84	552594	98.13	ppm	#	61
125) p-Phenylenediamine	7.930	108	534166m	152.00	ppm		
126) Isosafrole	8.176	162	476964	103.94	ppm		80
128) Safrole	8.786	162	507081	107.15	ppm		90
129) 1-Chloronaphthalene	8.856	162	1155136	101.74	ppm		97
130) Diphenyl Ether	8.946	170	802823	104.10	ppm		92
131) 1,4-Naphthoquinone	9.043	158	340836m	109.51	ppm		
132) Pentachlorobenzene	9.674	250	407827	77.42	ppm		99
133) 1-Naphthylamine	9.818	143	1293951	111.03	ppm		95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071363.D
Acq On : 23 Jun 2020 1:03 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 23 17:10:52 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration

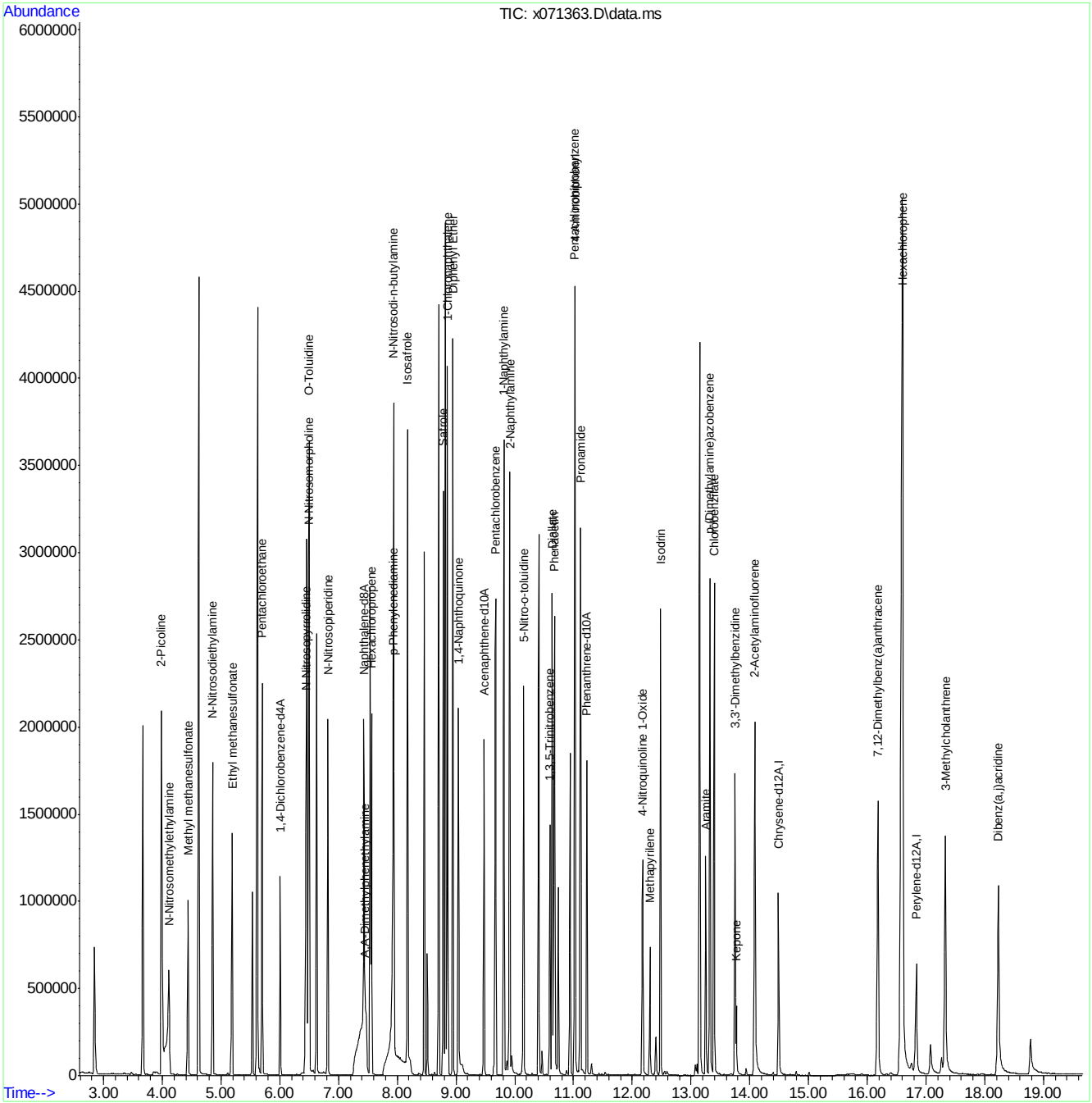
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
134) 2-Naphthylamine	9.915	143	1364529	114.95	ppm	98
135) 5-Nitro-o-toluidine	10.155	152	423615	100.08	ppm	87
137) 1,3,5-Trinitrobenzene	10.599	75	371047	82.63	ppm	87
138) Diallate	10.637	43	1020639m	134.35	ppm	
139) Phenacetin	10.679	108	727692	94.25	ppm	89
140) 4-Aminobiphenyl	11.027	169	1255640	108.24	ppm	99
141) Pronamide	11.123	173	570411	91.47	ppm	98
142) Pentachloronitrobenzene	11.022	237	137647	78.60	ppm	92
143) 4-Nitroquinoline 1-Oxide	12.177	190	117036	118.63	ppm	82
144) Methapyrilene	12.300	58	346867m	39.90	ppm	
145) Isodrin	12.482	193	190850	79.93	ppm	85
147) Aramite	13.252	185	197374m	104.24	ppm	
148) p-(Dimethylamine)azobe...	13.322	120	548044	122.37	ppm	84
149) Chlorobenzilate	13.391	139	629934	111.55	ppm	72
150) Kepone	13.776	272	19564	12.50	ppm	93
151) 3,3'-Dimethylbenzidine	13.750	212	651285	98.88	ppm	98
152) 2-Acetylaminofluorene	14.087	181	686507	98.52	ppm	92
154) 7,12-Dimethylbenz(a)an...	16.183	256	539852	99.92	ppm	95
155) Hexachlorophene	16.600	196	1092597	1366.31	ppm	98
156) 3-Methylcholanthrene	17.333	268	523043	108.16	ppm	94
157) Dibenz(a,j)acridine	18.232	279	769588	88.43	ppm	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071363.D
Acq On : 23 Jun 2020 1:03 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 23 17:10:52 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: SX2918-IC2918
Lab FileID: X071363.D
Injection Time: 06/23/20 13:03

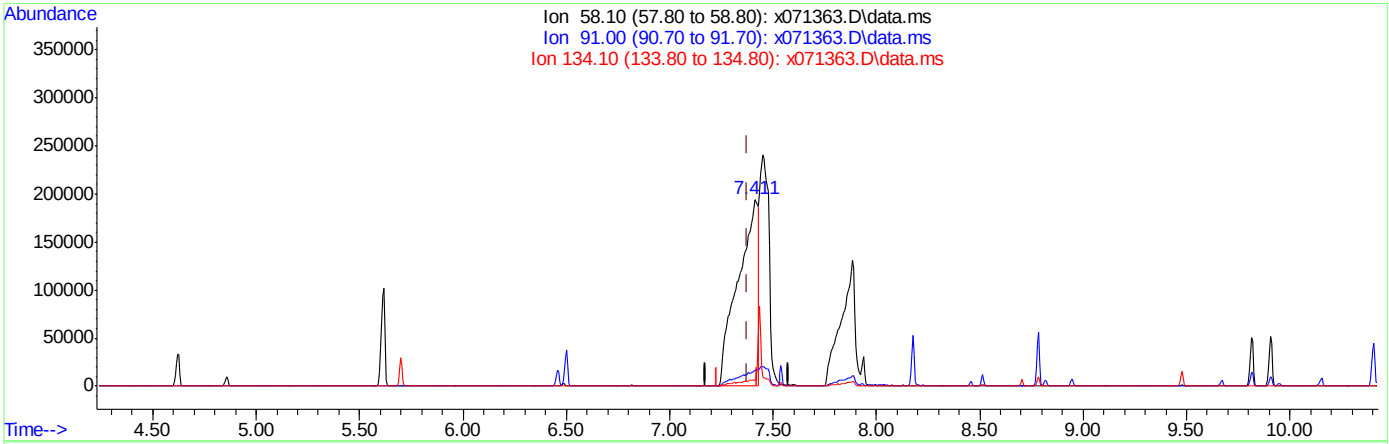
Method: EPA 625.1
Analyst approved: 06/24/20 09:50 Martha Valls
Supervisor approved: 06/24/20 14:07 Naresh Jiawan

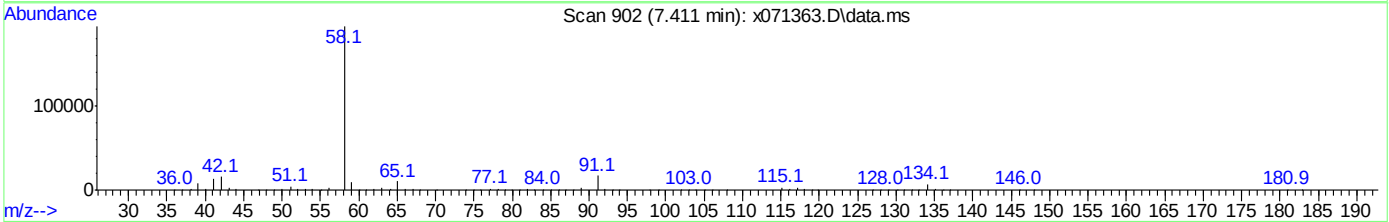
Parameter	CAS	Sig#	R.T. (min.)	Reason
A,A-Dimethylphenethylamine	122-09-8		7.45	Split peak
p-Phenylenediamine	106-50-3		7.93	Split peak
Diallate	2303-16-4		10.64	Split peak
Methapyrilene	91-80-5		12.30	Split peak
Aramite	140-57-8		13.25	Split peak

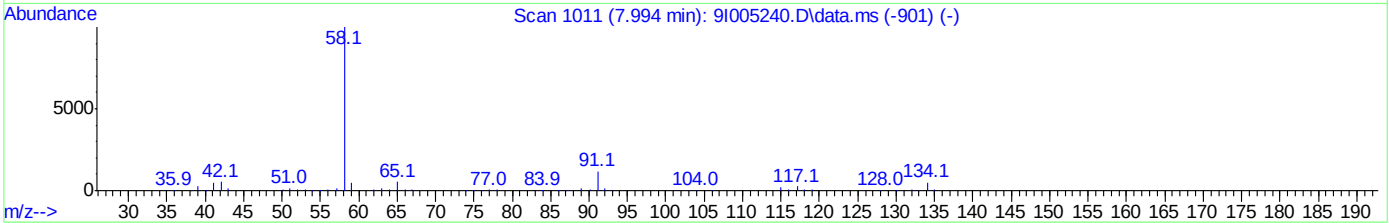
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071363.D
Acq On : 23 Jun 2020 1:03 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 23 14:01:12 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071363.D\data.ms

(122) A,A-Dimethylphenethylamine

7.411min (+0.032) 64.09ppm

response 1279100

Ion	Exp%	Act%
58.10	100	100
91.00	11.70	8.33
134.10	5.10	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071363.D
Acq On : 23 Jun 2020 1:03 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 23 14:01:12 2020
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Quant Title : SW846 8270D OR EPA 625
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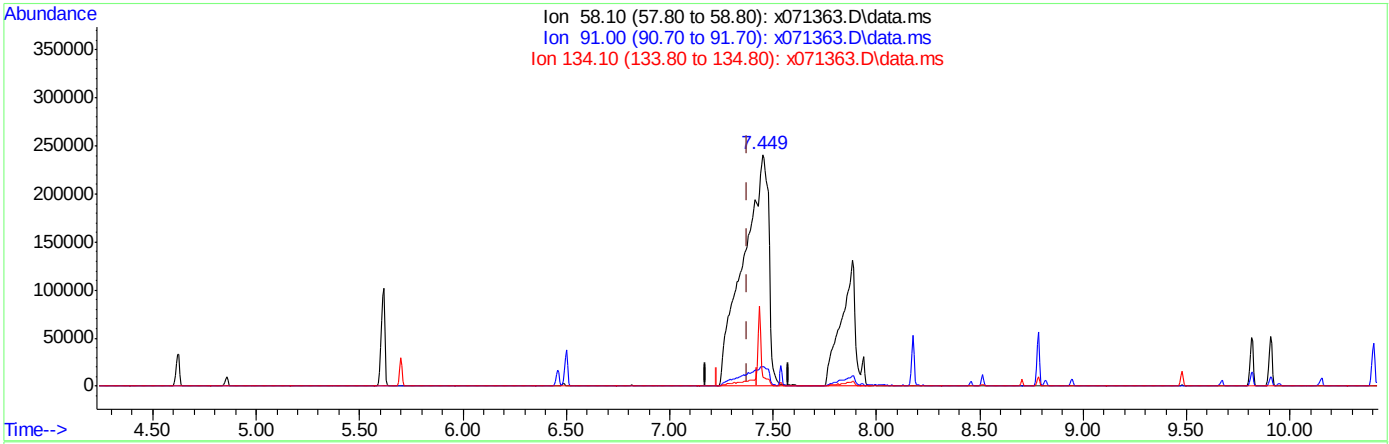

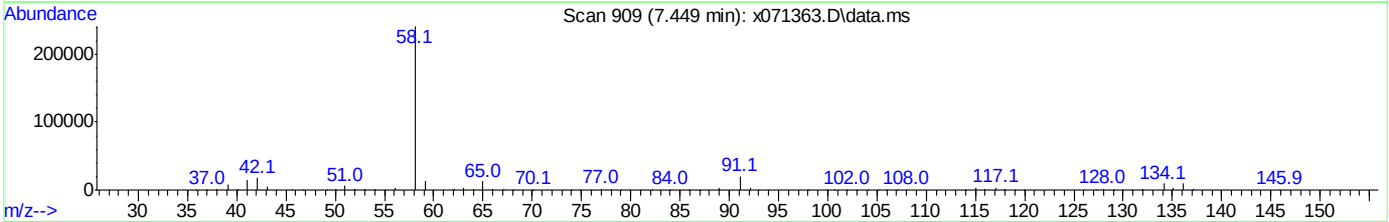

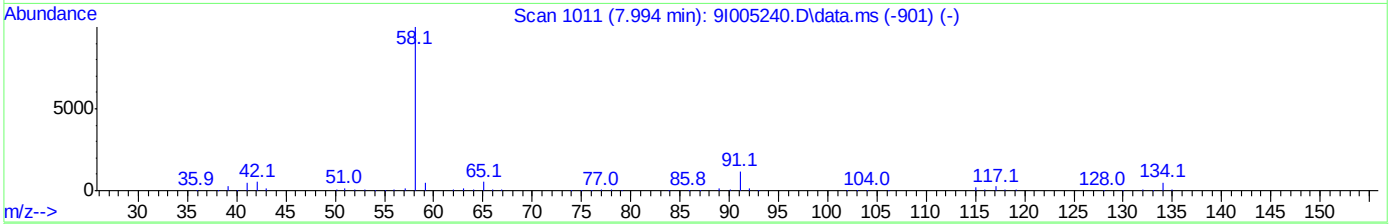

TIC: x071363.D\data.ms

(122) A,A-Dimethylphenethylamine

7.449min (+0.070) 124.39ppm m

response 2657015

Ion	Exp%	Act%
58.10	100	100
91.00	11.70	8.26
134.10	5.10	4.07
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071363.D
Acq On : 23 Jun 2020 1:03 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 23 14:01:12 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
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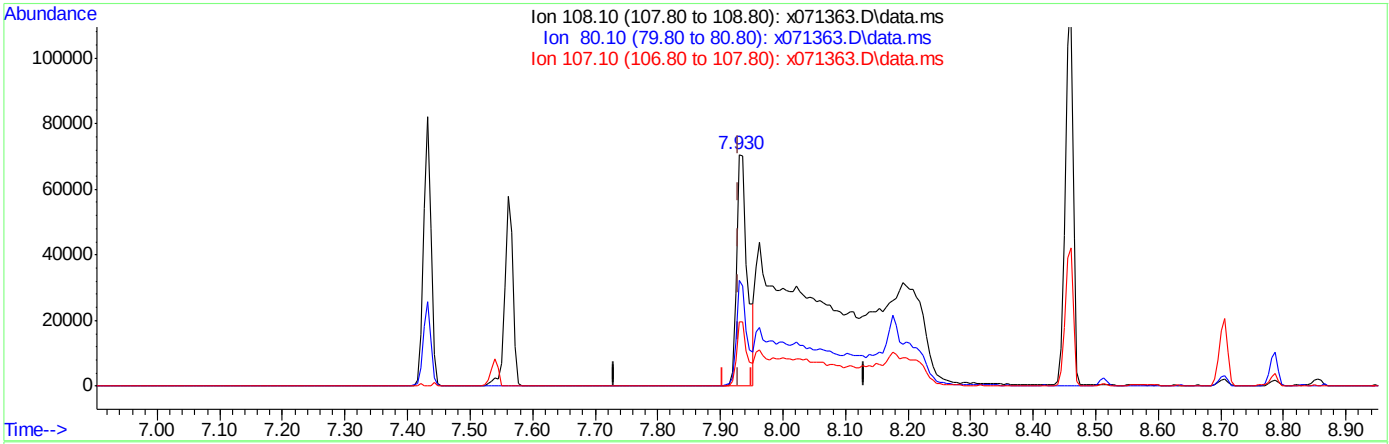
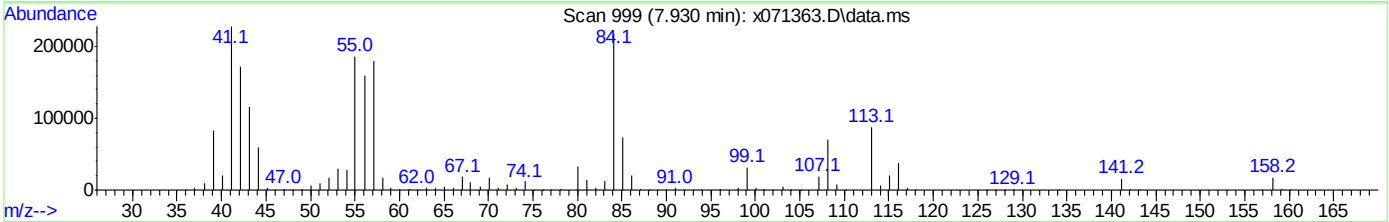
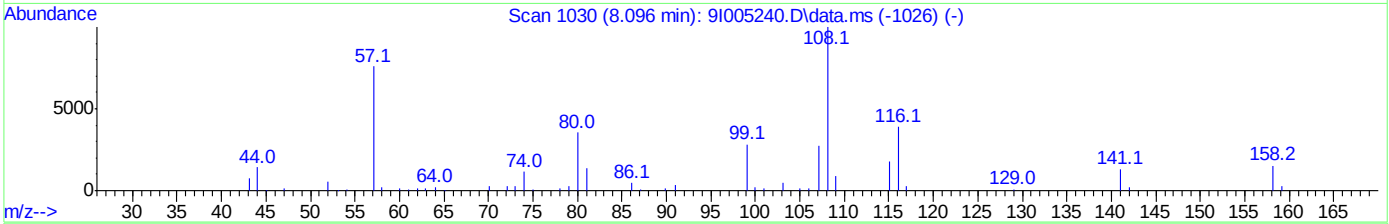






TIC: x071363.D\data.ms

(125) p-Phenylenediamine

7.930min (+0.000) 15.16ppm

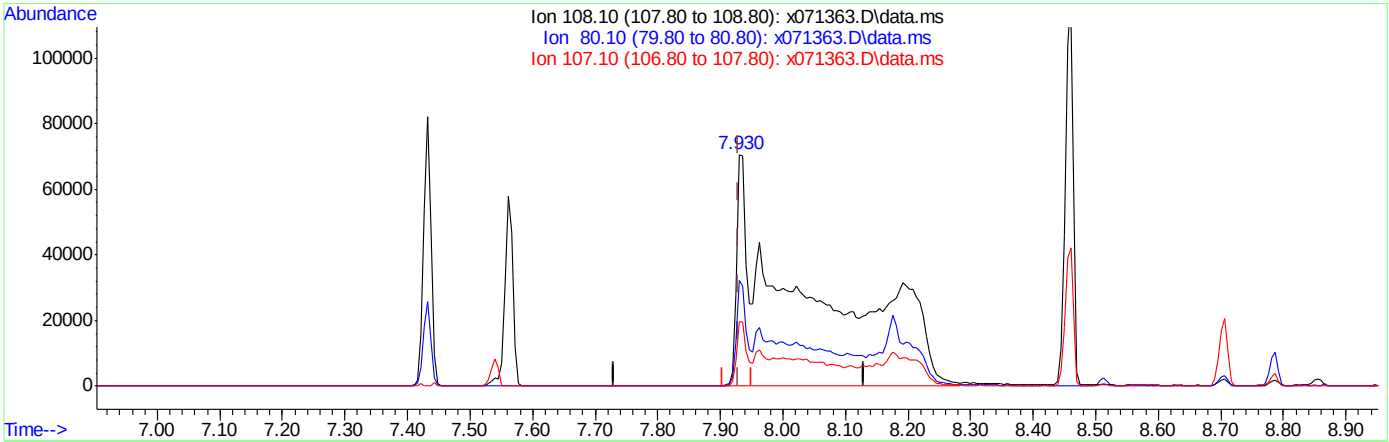
response 83601

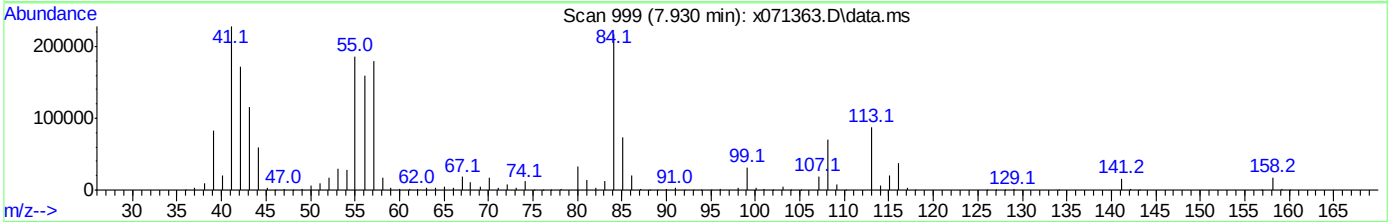
Ion	Exp%	Act%
108.10	100	100
80.10	35.50	46.00
107.10	27.70	27.66
0.00	0.00	0.00

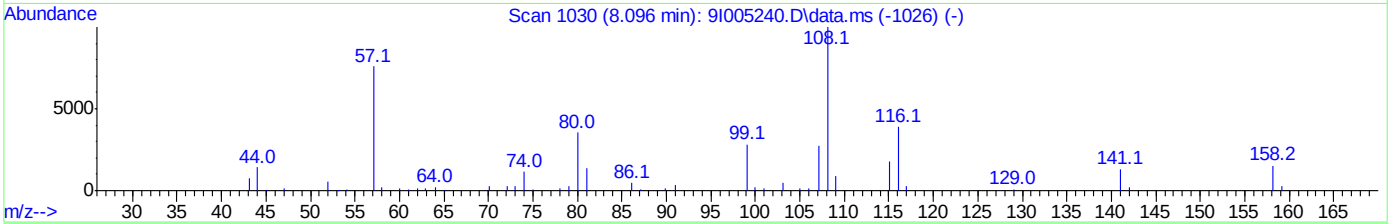
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071363.D
Acq On : 23 Jun 2020 1:03 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 23 14:01:12 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071363.D\data.ms

(125) p-Phenylenediamine

7.930min (+0.000) 152.00ppm m

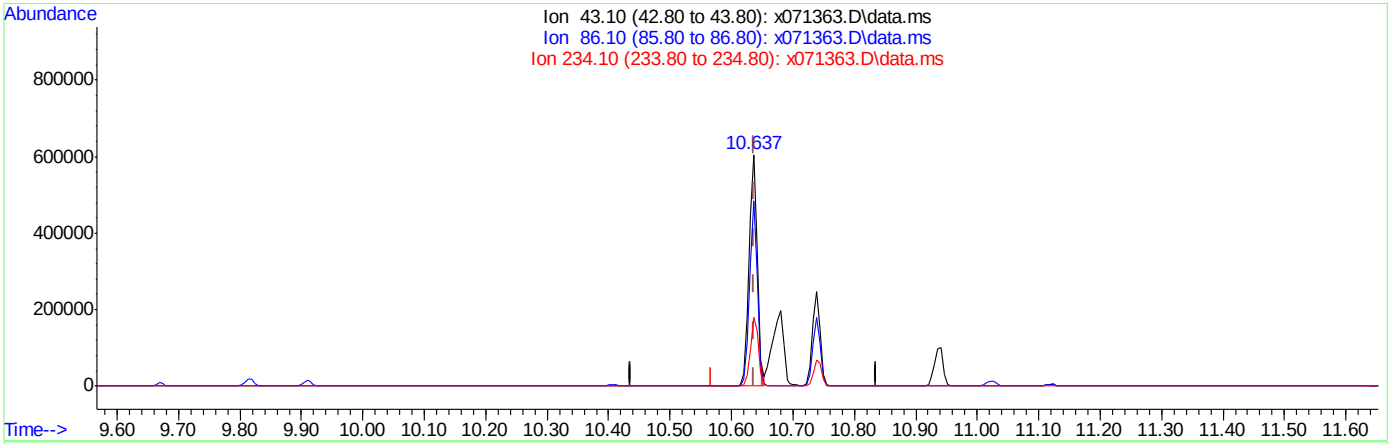
response 534166

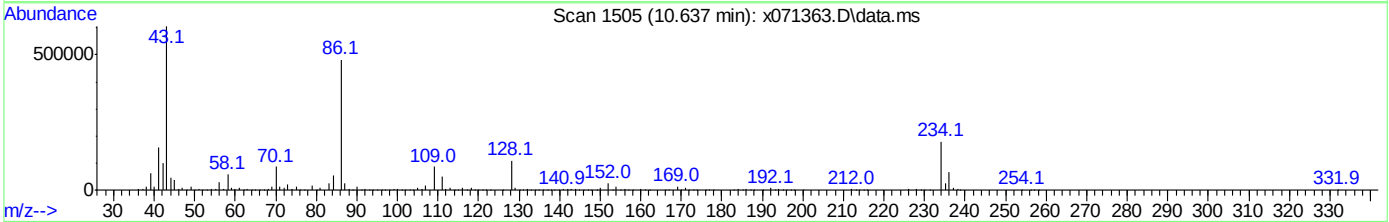
Ion	Exp%	Act%
108.10	100	100
80.10	35.50	45.66
107.10	27.70	27.59
0.00	0.00	0.00

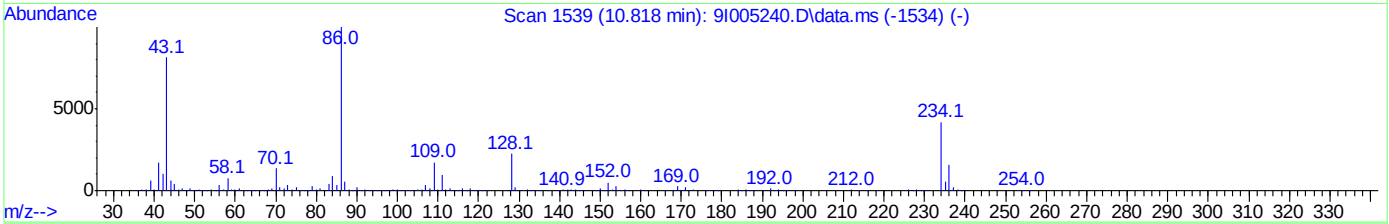
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071363.D
Acq On : 23 Jun 2020 1:03 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 23 14:01:12 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071363.D\data.ms

(138) Diallate

10.637min (+0.000) 72.84ppm

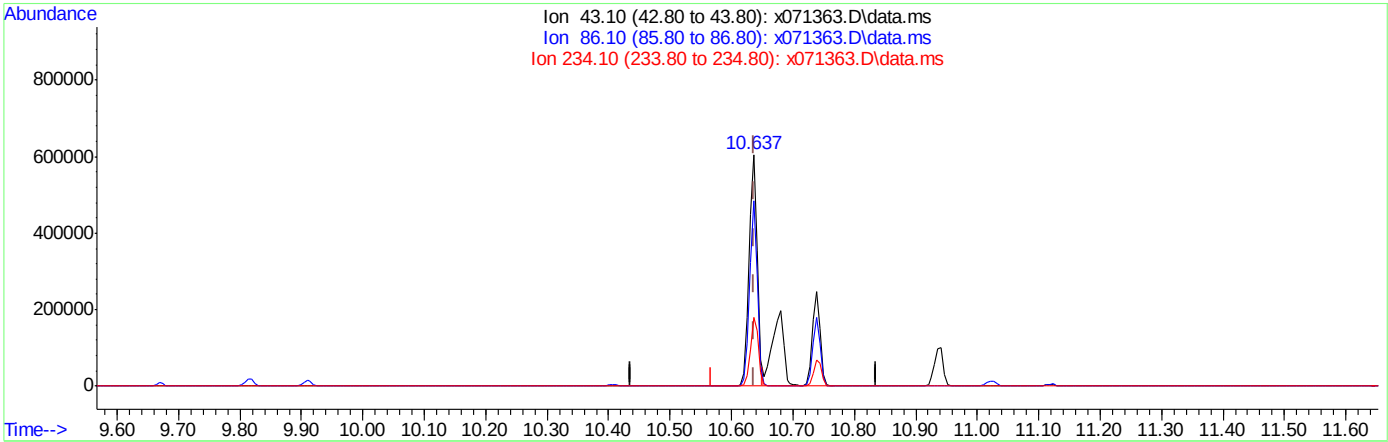
response 553405

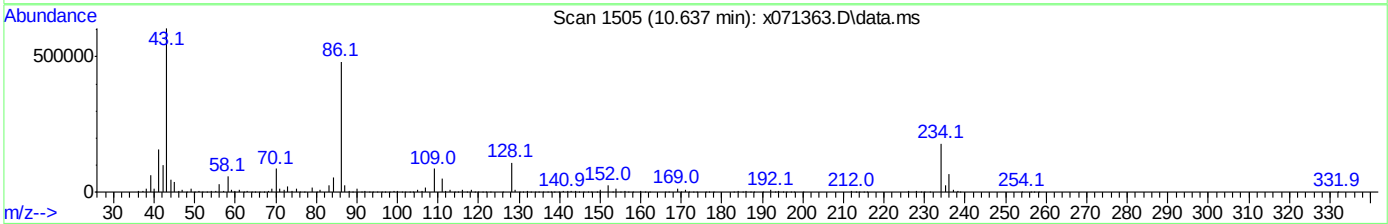
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	80.94#
234.10	51.50	29.93
0.00	0.00	0.00

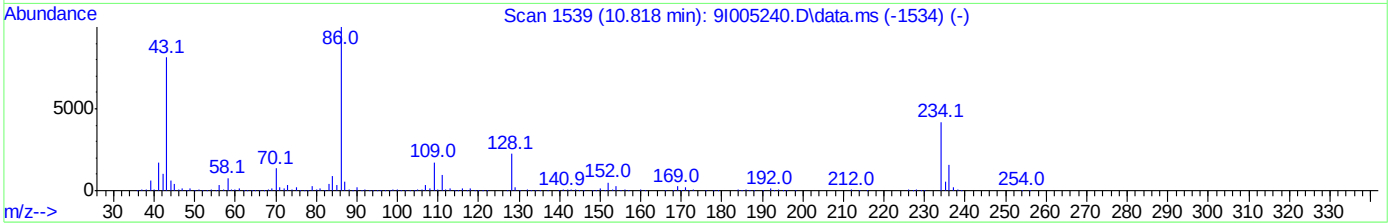
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071363.D
Acq On : 23 Jun 2020 1:03 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 23 14:01:12 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071363.D\data.ms

(138) Diallate

10.637min (+0.000) 134.35ppm m

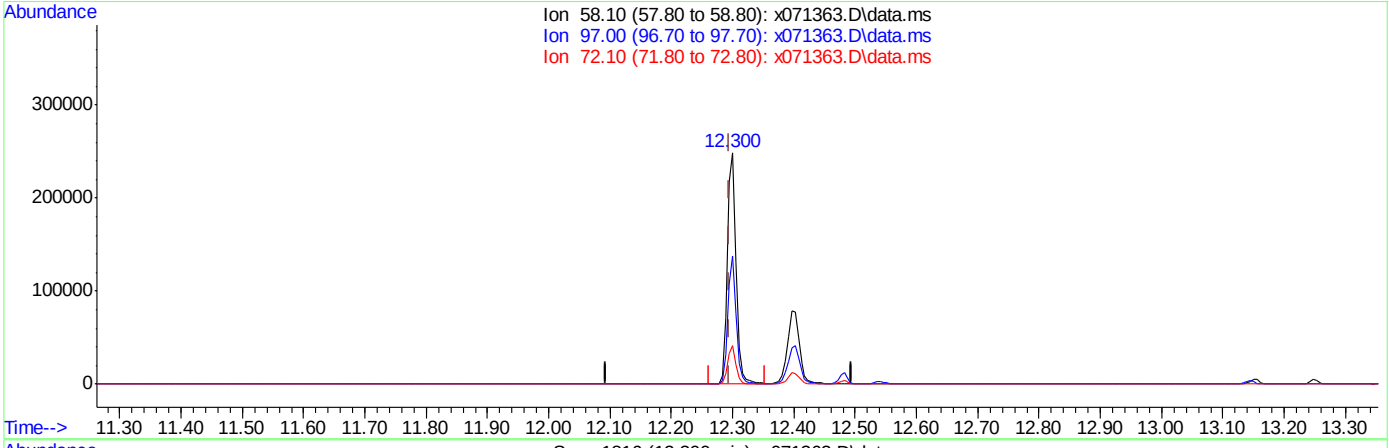
response 1020639

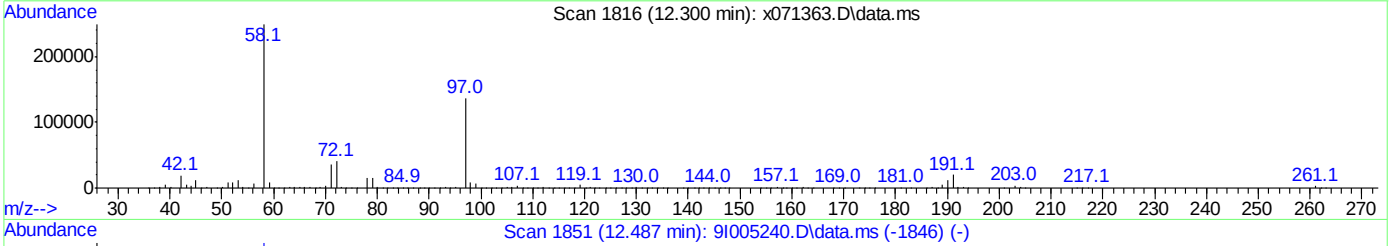
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	79.79#
234.10	51.50	29.55
0.00	0.00	0.00

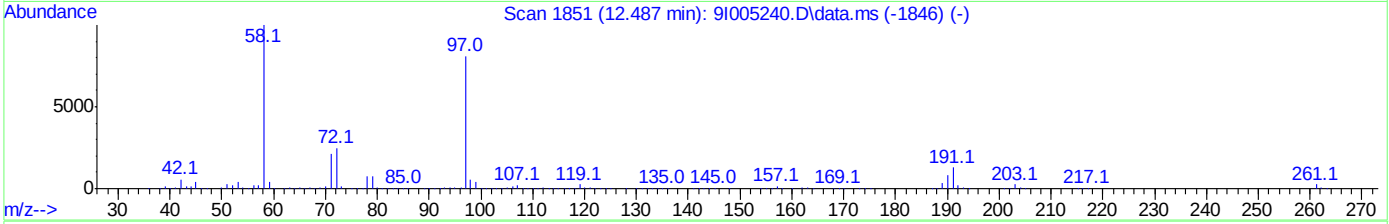
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071363.D
Acq On : 23 Jun 2020 1:03 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 23 14:01:12 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071363.D\data.ms

(144) Methapyrilene

12.300min (+0.006) 27.74ppm

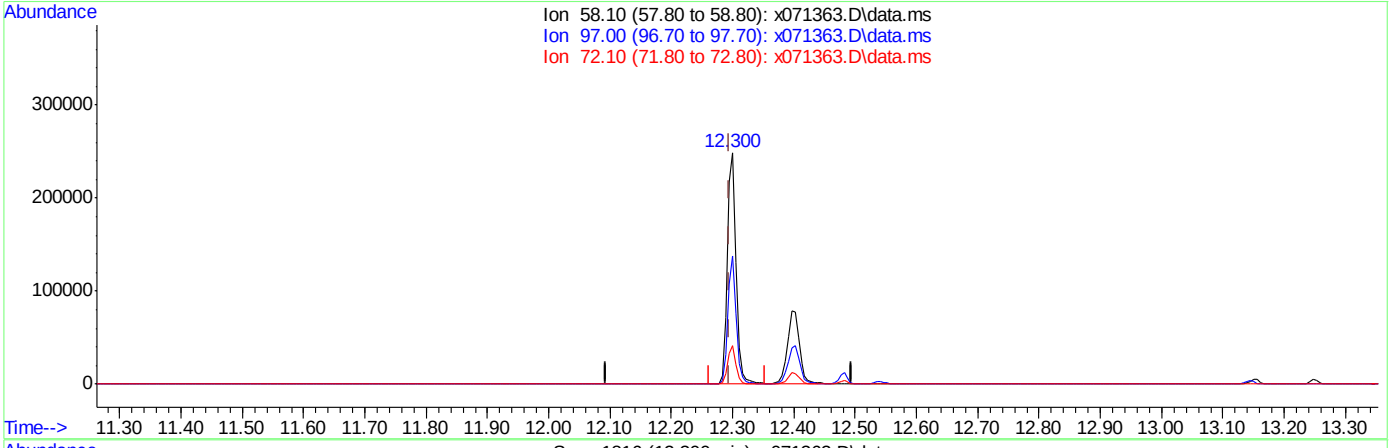
response 239390

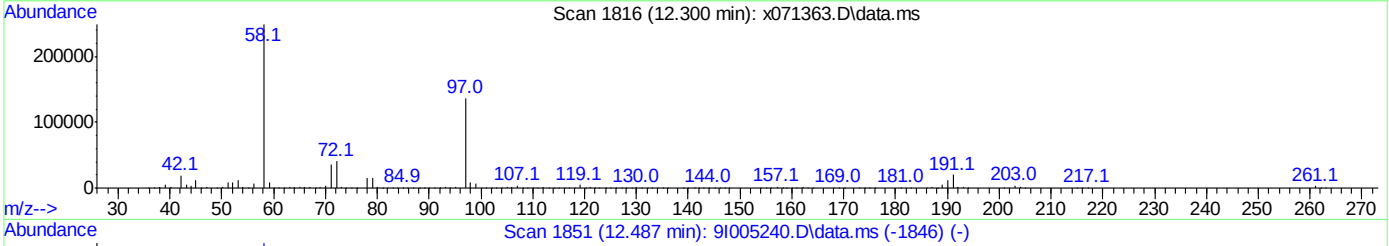
Ion	Exp%	Act%
58.10	100	100
97.00	80.90	55.12
72.10	24.80	16.74
0.00	0.00	0.00

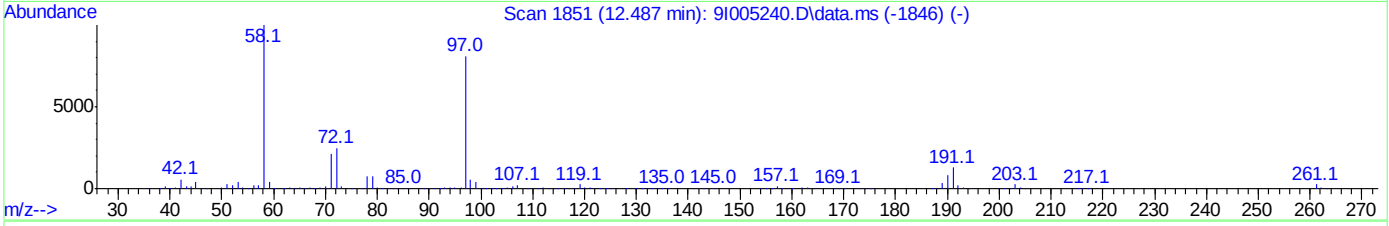
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071363.D
Acq On : 23 Jun 2020 1:03 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 23 14:01:12 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071363.D\data.ms

(144) Methapyrilene

12.300min (+0.006) 39.90ppm m

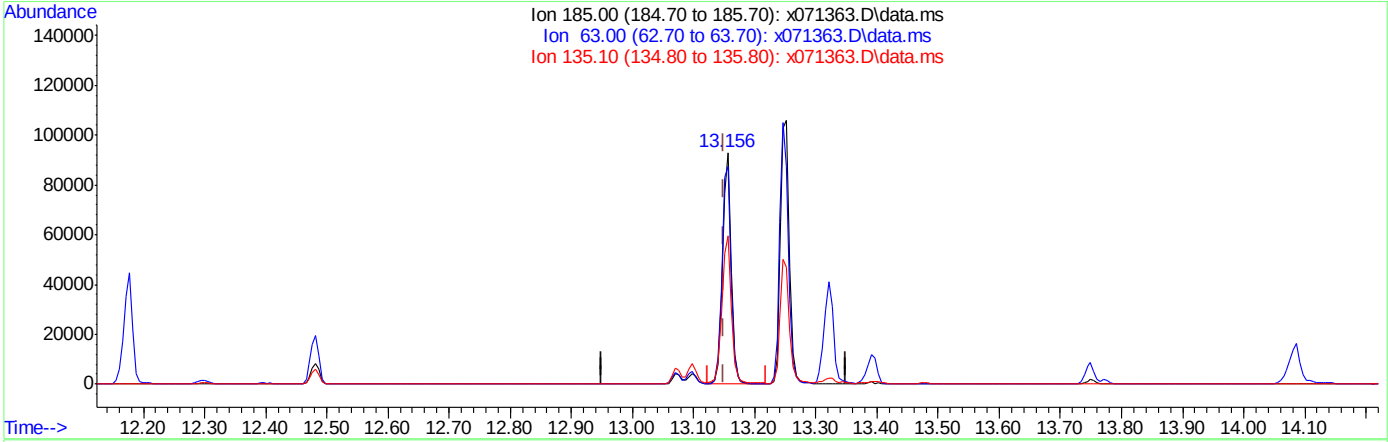
response 346867

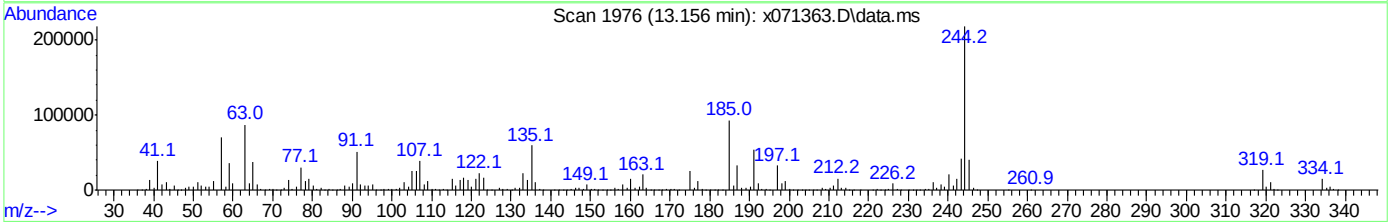
Ion	Exp%	Act%
58.10	100	100
97.00	80.90	55.14
72.10	24.80	16.74
0.00	0.00	0.00

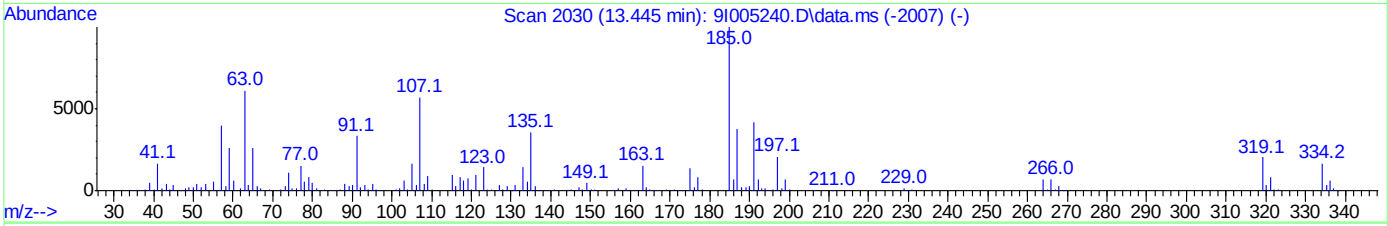
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071363.D
Acq On : 23 Jun 2020 1:03 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 23 14:25:07 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071363.D\data.ms

(147) Aramite

13.156min (+0.006) 50.24ppm

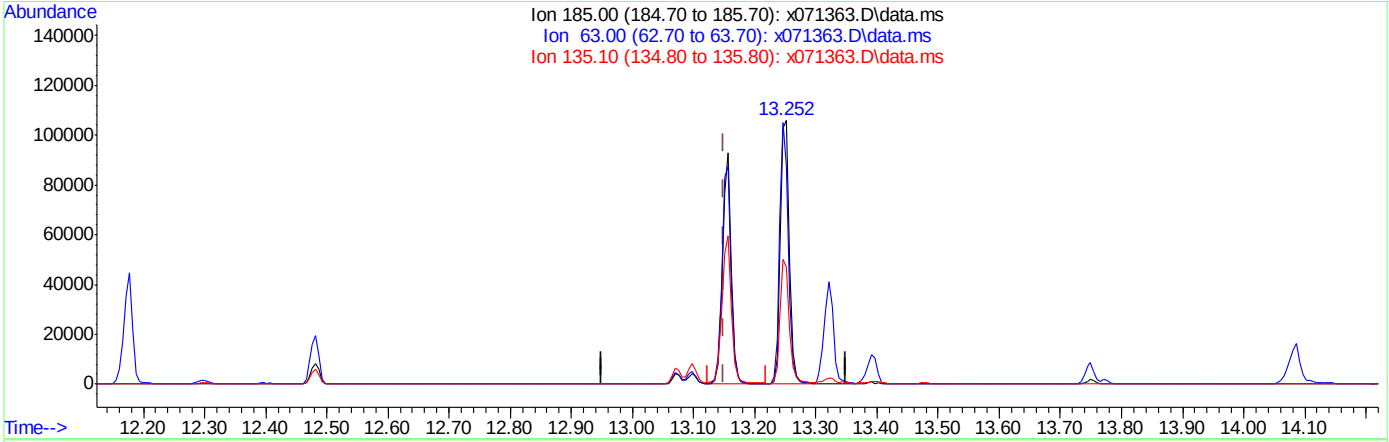
response 88801

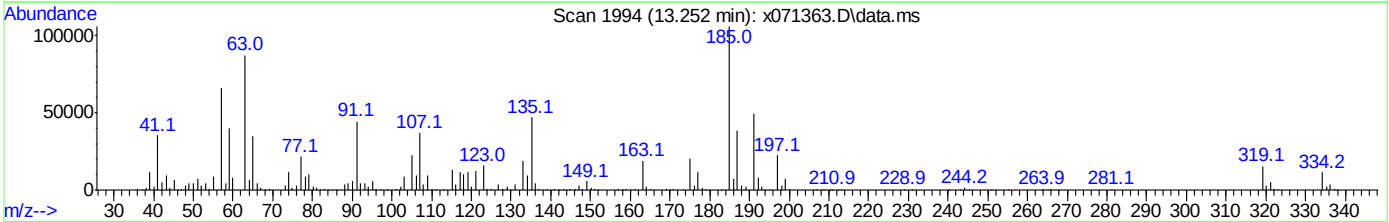
Ion	Exp%	Act%
185.00	100	100
63.00	61.10	93.92#
135.10	35.60	63.61
0.00	0.00	0.00

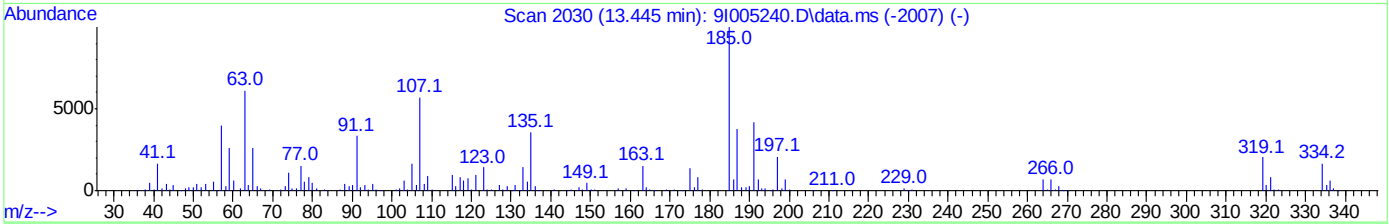
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071363.D
Acq On : 23 Jun 2020 1:03 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 23 14:25:07 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071363.D\data.ms

(147) Aramite

13.252min (+0.102) 104.24ppm m

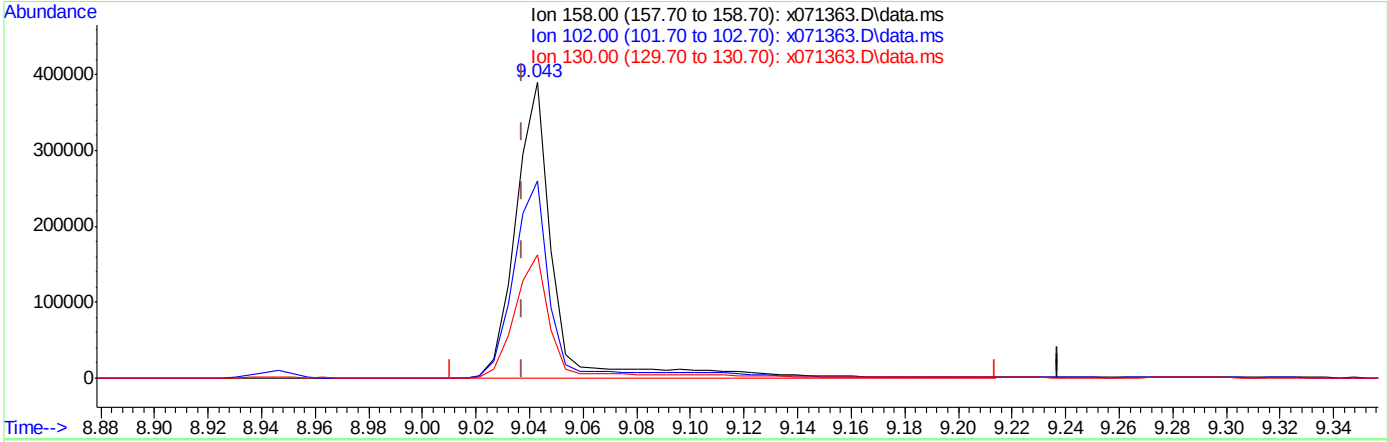
response 197374

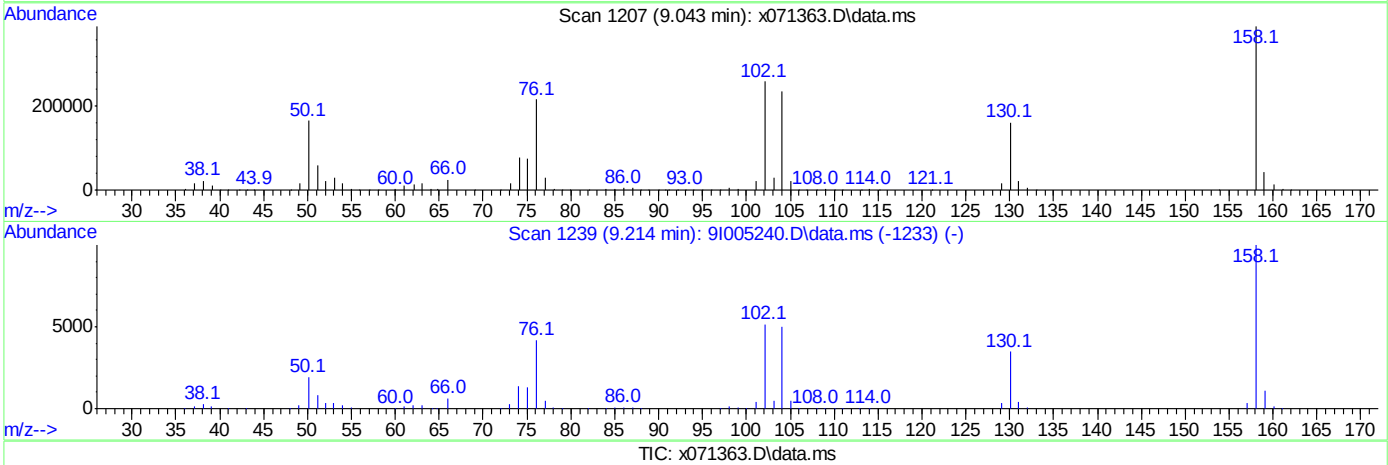
Ion	Exp%	Act%
185.00	100	100
63.00	61.10	82.44
135.10	35.60	44.38
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071363.D
Acq On : 23 Jun 2020 1:03 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 23 16:55:54 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration





TIC: x071363.D\data.ms

(131) 1,4-Naphthoquinone

9.043min (+0.006) -40.00ppm

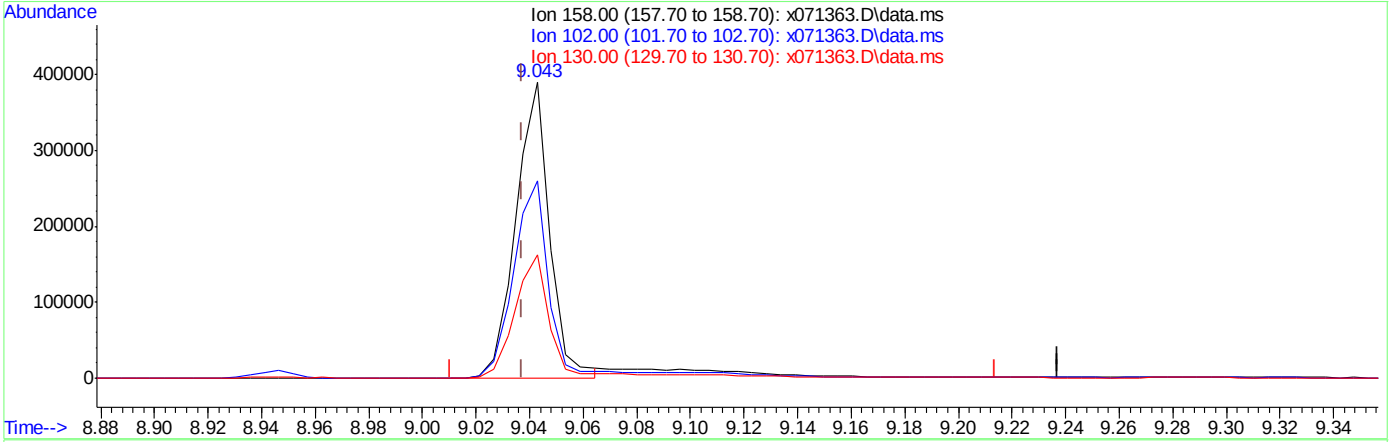
response 385634

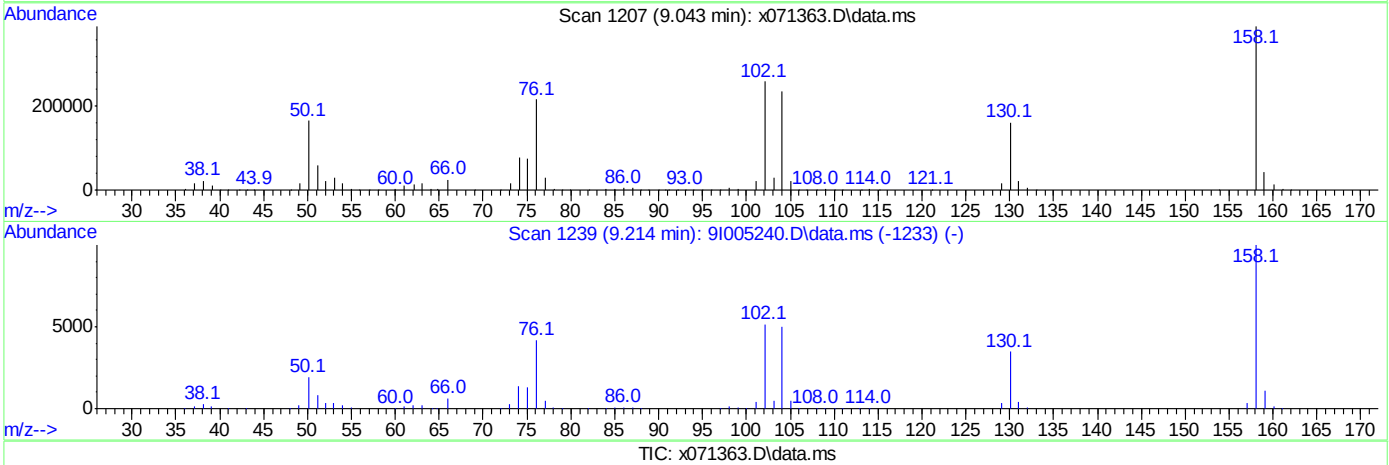
Ion	Exp%	Act%
158.00	100	100
102.00	51.70	66.40
130.00	34.90	41.35
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071363.D
Acq On : 23 Jun 2020 1:03 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 23 16:55:54 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration





TIC: x071363.D\data.ms

(131) 1,4-Naphthoquinone

9.043min (+0.006) 109.51ppm m

response 340836

Ion	Exp%	Act%
158.00	100	100
102.00	51.70	66.40
130.00	34.90	41.34
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 06/24/20 14:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071364.D
Acq On : 23 Jun 2020 1:29 pm
Operator : marthav
Sample : ic2918-1 8270 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 23 16:56:07 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 15:18:55 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.005	152	144015	40.00	ppm	0.00
22) Naphthalene-d8	7.433	136	575045	40.00	ppm	0.00
43) Acenaphthene-d10	9.476	164	313667	40.00	ppm	0.00
70) Phenanthrene-d10	11.219	188	566431	40.00	ppm	0.00
92) Chrysene-d12	14.487	240	391149	40.00	ppm	0.00
102) Perylene-d12	16.809	264	333880	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	0.000	152	0m	40.00	ppm	-6.00
120) Naphthalene-d8A	0.000	136	0m	40.00	ppm	-7.43
127) Acenaphthene-d10A	0.000	164	0m	40.00	ppm	-9.48
136) Phenanthrene-d10A	0.000	188	0m	40.00	ppm	-11.22
146) Chrysene-d12A	0.000	240	0m	40.00	ppm	-14.49
153) Perylene-d12A	0.000	264	0m	40.00	ppm	-16.82
System Monitoring Compounds						
7) 2-Fluorophenol	4.609	112	10582	4.26	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery =	4.26%#		
9) Phenol-d5	5.603	99	11874	4.44	ppm	0.00
Spiked Amount 100.000	Range 10 - 50		Recovery =	4.44%#		
23) Nitrobenzene-d5	6.614	82	5896	2.14	ppm	0.00
Spiked Amount 50.000	Range 42 - 108		Recovery =	4.28%#		
47) 2-Fluorobiphenyl	8.695	172	11323	2.40	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery =	4.80%#		
75) 2,4,6-Tribromophenol	10.401	330	1785	2.38	ppm	0.00
Spiked Amount 100.000	Range 33 - 118		Recovery =	2.38%#		
95) Terphenyl-d14	13.140	244	9017	1.72	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery =	3.44%#		
Target Compounds						Qvalue
2) 1,4-Dioxane	2.849	88	2730	2.27	ppm	# 18
3) N-nitrosodimethylamine	3.180	42	4556	4.29	ppm	# 30
4) Pyridine	3.229	79	5659	2.25	ppm	# 27
5) Benzaldehyde	5.528	106	3940	1.89	ppm	92
6) Aniline	5.641	93	7747	2.05	ppm	96
8) bis(2-Chloroethyl)ether	5.721	93	5283	2.01	ppm	# 69
10) Phenol	5.614	94	6535	1.92	ppm	91
11) 2-Chlorophenol	5.769	128	4992	2.04	ppm	81
12) 1,3-Dichlorobenzene	5.940	146	5811	2.32	ppm	94
13) 1,4-Dichlorobenzene	6.026	146	6113	2.39	ppm	91
14) 1,2-Dichlorobenzene	6.186	146	5638	2.36	ppm	97
15) Benzyl alcohol	6.154	108	3389	2.10	ppm	83
16) 2,2'-Oxybis(1-chloropr...	6.320	45	11659	3.71	ppm	71
17) 2-Methylphenol	6.283	108	4611	2.10	ppm	99
18) Acetophenone	6.448	105	6688	1.93	ppm	95
19) Hexachloroethane	6.566	117	2216	2.04	ppm	91
20) N-Nitroso-di-n-propyla...	6.454	70	3871	2.17	ppm	# 48
21) 3&4-Methylphenol	6.454	108	4803	2.11	ppm	95
24) Nitrobenzene	6.636	77	5746	2.20	ppm	84
25) Isophorone	6.908	82	10485	2.20	ppm	90
26) 2-Nitrophenol	6.999	139	2481	1.97	ppm	75

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071364.D
Acq On : 23 Jun 2020 1:29 pm
Operator : marthav
Sample : ic2918-1 8270 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 23 16:56:07 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 15:18:55 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
27) 2,4-Dimethylphenol	7.053	107	4687	2.16	ppm		90
28) O,O,O-Triethylphosphor...	7.144	198	2001	1.99	ppm		71
29) bis(2-Chloroethoxy)met...	7.170	93	6233	2.09	ppm		95
30) Benzoic Acid	7.090	105	1123	0.69	ppm	#	78
31) 2,4-Dichlorophenol	7.267	162	3672	2.12	ppm		92
32) 1,2,4-Trichlorobenzene	7.368	180	4440	2.27	ppm		95
34) Naphthalene	7.454	128	15939	2.46	ppm		98
35) 4-Chloroaniline	7.524	127	6467	2.38	ppm		88
36) 2,6-Dichlorophenol	7.529	162	4127	2.33	ppm		93
37) Hexachlorobutadiene	7.609	225	2132	1.96	ppm		95
38) Caprolactam	7.882	113	1341	1.86	ppm	#	36
39) 4-Chloro-3-methylphenol	8.090	107	3984	2.11	ppm		97
40) 2-Methylnaphthalene	8.256	142	10437	2.49	ppm		93
41) 1-Methylnaphthalene	8.374	142	10027	2.55	ppm		96
42) 1,2,4,5-Tetrachloroben...	8.454	216	4309	2.12	ppm		96
44) Hexachlorocyclopentadiene	8.449	237	1709	1.59	ppm		82
45) 2,4,6-Trichlorophenol	8.588	196	2542	1.98	ppm		93
46) 2,4,5-Trichlorophenol	8.625	196	2702	1.97	ppm		97
48) 1,1'-Biphenyl	8.813	154	11390	2.20	ppm		97
49) 2-Chloronaphthalene	8.823	162	9331	2.33	ppm		95
50) 2-Nitroaniline	8.946	65	3109	2.38	ppm	#	62
51) p-Dinitrobenzene	9.117	75	1540	1.61	ppm	#	53
52) Acenaphthylene	9.305	152	14844	2.42	ppm		99
53) Dimethylphthalate	9.182	163	11507	2.50	ppm		99
54) m-Dinitrobenzene	9.198	168	1329	1.66	ppm	#	70
55) 2,6-Dinitrotoluene	9.240	165	2299	2.06	ppm	#	52
56) o-Dinitrobenzene	9.289	50	2701	4.08	ppm	#	40
57) Acenaphthene	9.513	153	10744	2.65	ppm		100
58) 3-Nitroaniline	9.428	138	2290	1.91	ppm		94
59) 2,4-Dinitrophenol	9.556	184	160m	0.30	ppm		
60) Dibenzofuran	9.716	168	14854	2.67	ppm		95
61) 2,4-Dinitrotoluene	9.711	165	2798	1.98	ppm	#	55
62) 4-Nitrophenol	9.636	109	987	1.74	ppm	#	61
63) 2,3,5,6-Tetrachlorophenol	9.813	232	1704	1.61	ppm	#	73
64) 2,3,4,6-Tetrachlorophenol	9.861	232	2151	1.90	ppm		84
65) Fluorene	10.118	166	10994	2.53	ppm		100
66) 4-Chlorophenyl-phenyle...	10.139	204	5190	2.38	ppm		88
67) Diethylphthalate	10.021	149	10638	2.32	ppm		98
68) Thionazin	10.112	97	2096	1.94	ppm		89
69) 4-Nitroaniline	10.139	138	2736	2.23	ppm		73
71) 4,6-Dinitro-2-methylph...	10.182	198	604	0.77	ppm	#	55
72) n-Nitrosodiphenylamine	10.273	169	9328	2.99	ppm		88
73) Diphenylamine	10.273	169	9328	2.56	ppm		88
74) 1,2-Diphenylhydrazine	10.321	77	11835	2.32	ppm		89
76) Sulfotep	10.497	97	1291	1.62	ppm	#	67
77) Phorate	10.642	75	4229	1.50	ppm		99
78) 4-Bromophenyl-phenylether	10.711	248	2321	1.78	ppm	#	67
79) Hexachlorobenzene	10.759	284	2860	1.92	ppm		83
80) Dimethoate	10.824	87	2766	1.64	ppm		91
81) Simazine	10.882	201	1601	2.51	ppm		91

Quantitation Report (QT Reviewed)

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Acq On : 23 Jun 2020 1:29 pm
Operator : marthav
Sample : ic2918-1 8270 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 23 16:56:07 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 15:18:55 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
82) Atrazine	10.925	200	2395	1.93	ppm	#	73
83) Pentachlorophenol	11.000	266	529	0.71	ppm		99
84) Phenanthrene	11.246	178	17522	2.81	ppm		99
85) Anthracene	11.305	178	16450	2.58	ppm		96
86) Disulfoton	11.262	88	5104	1.76	ppm		75
87) Carbazole	11.508	167	14422	2.54	ppm		98
88) Methyl Parathion	11.695	109	1825	1.28	ppm	#	75
89) Di-n-butylphthalate	11.974	149	12697	1.75	ppm		96
90) Ethyl Parathion	12.166	97	941	1.00	ppm	#	74
91) Fluoranthene	12.653	202	13932	2.10	ppm		96
93) Benzidine	12.835	184	3039	1.29	ppm		99
94) Pyrene	12.915	202	14445	2.04	ppm		96
96) Famphur	13.696	218	2070	1.55	ppm		77
97) Butylbenzylphthalate	13.792	149	3749	1.21	ppm		91
98) 3,3'-Dichlorobenzidine	14.471	252	2309	1.24	ppm		94
99) Benzo[a]anthracene	14.477	228	11906	2.04	ppm		99
100) Chrysene	14.525	228	13100	2.26	ppm		95
101) bis(2-Ethylhexyl)phtha...	14.637	149	3571	0.89	ppm		91
103) Di-n-octylphthalate	15.675	149	9858m	1.57	ppm		
104) Benzo[b]fluoranthene	16.156	252	6565	1.34	ppm		88
105) Benzo[k]fluoranthene	16.210	252	11113m	2.06	ppm		
106) Benzo[a]pyrene	16.702	252	5647	1.15	ppm		93
107) Indeno[1,2,3-cd]pyrene	18.429	276	2595	0.61	ppm		88
108) Dibenz[a,h]anthracene	18.483	278	4110m	0.89	ppm		
109) Benzo[g,h,i]perylene	18.788	276	6615m	1.35	ppm		

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

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Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

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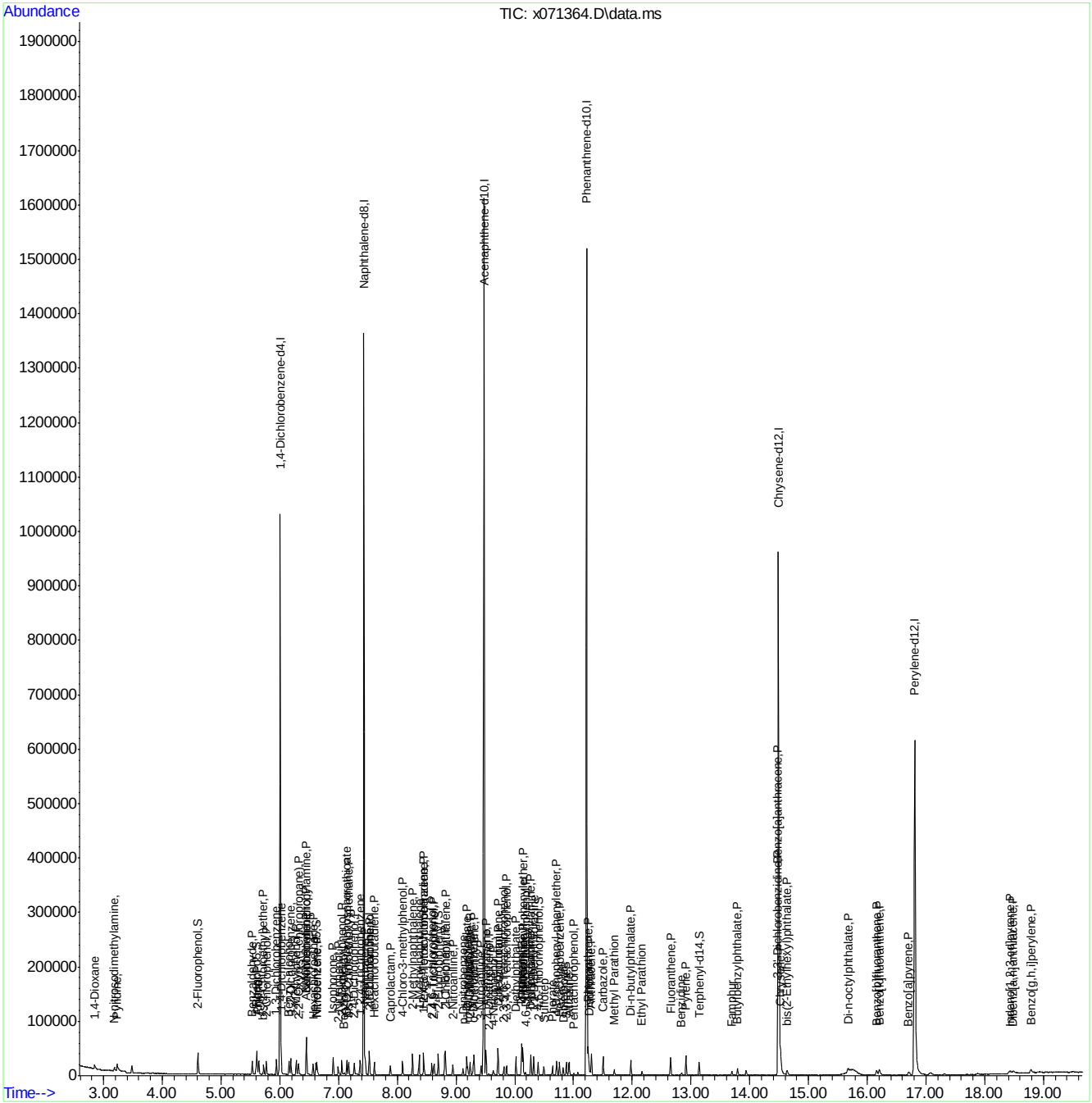
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 15:18:55 2020
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: SX2918-IC2918
Lab FileID: X071364.D
Injection Time: 06/23/20 13:29

Method: EPA 625.1
Analyst approved: 06/24/20 09:50 Martha Valls
Supervisor approved: 06/24/20 14:07 Naresh Jiawan

Parameter	CAS	Sig#	R.T. (min.)	Reason
2,4-Dinitrophenol	51-28-5		9.56	Split peak
Di-n-octyl Phthalate	117-84-0		15.67	Split peak
Benzo(k)fluoranthene	207-08-9		16.21	Split peak
Dibenzo(a,h)anthracene	53-70-3		18.48	Split peak
Benzo(g,h,i)perylene	191-24-2		18.79	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
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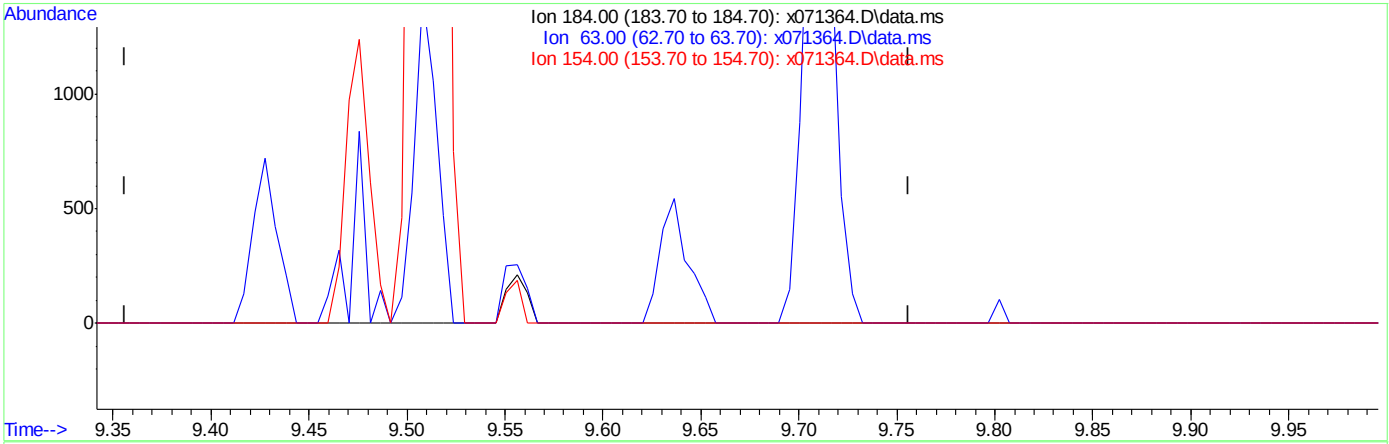
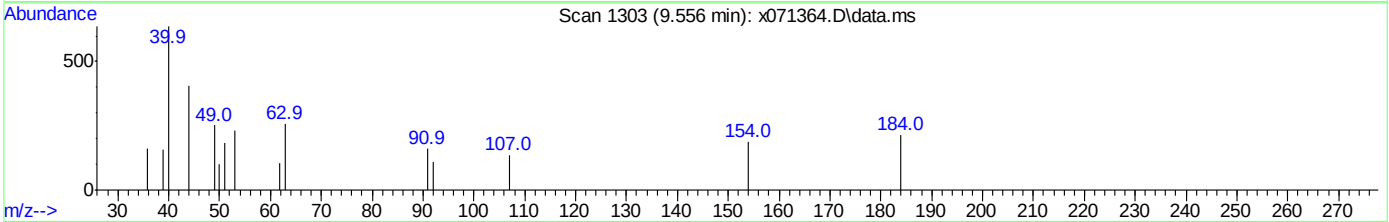
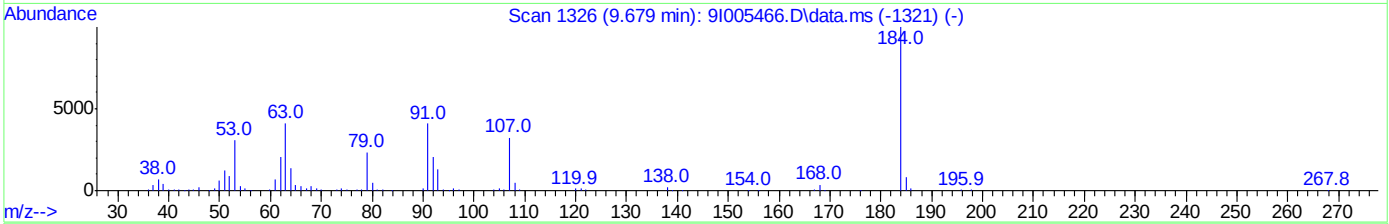






TIC: x071364.D\data.ms

(59) 2,4-Dinitrophenol (P)

9.556min (-9.556) 0.00ppm

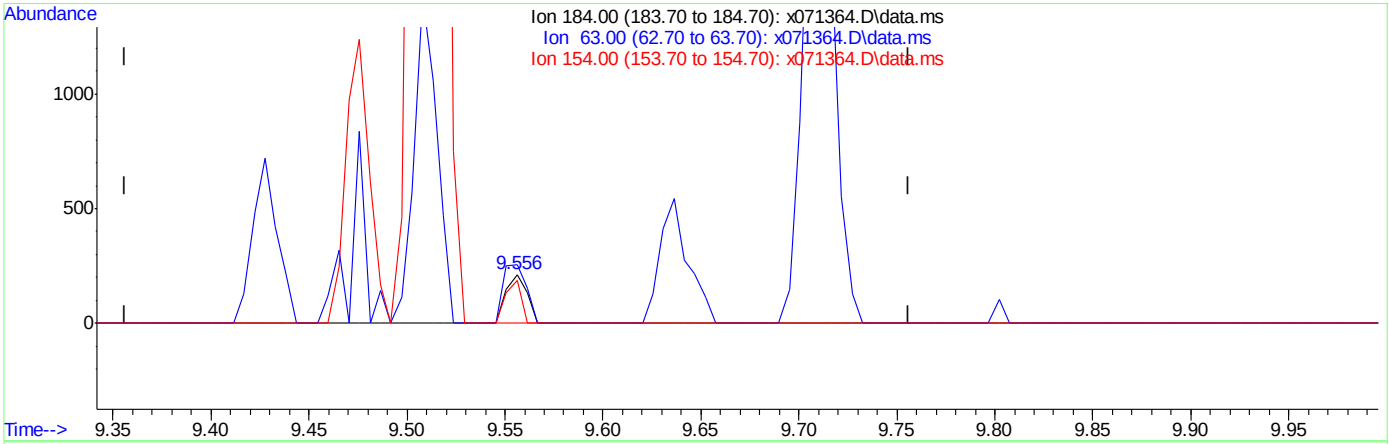
response 0

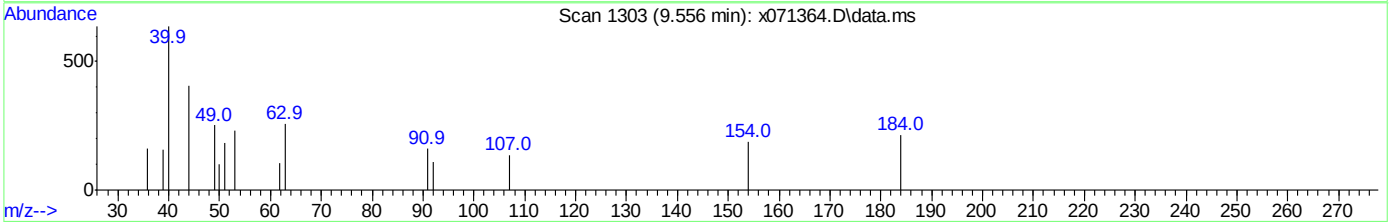
Ion	Exp%	Act%
184.00	100	0.00
63.00	41.30	0.00#
154.00	0.30	0.00
0.00	0.00	0.00

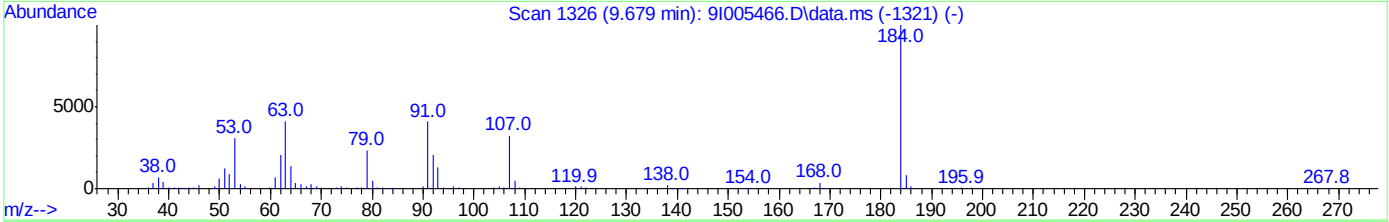
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071364.D
Acq On : 23 Jun 2020 1:29 pm
Operator : marthav
Sample : ic2918-1 8270 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 23 15:19:07 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 15:18:55 2020
Response via : Initial Calibration







TIC: x071364.D\data.ms

(59) 2,4-Dinitrophenol (P)

9.556min (-0.000) 0.30ppm m

response 160

Ion	Exp%	Act%
184.00	100	100
63.00	41.30	119.63#
154.00	0.30	87.38#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071364.D
Acq On : 23 Jun 2020 1:29 pm
Operator : marthav
Sample : ic2918-1 8270 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
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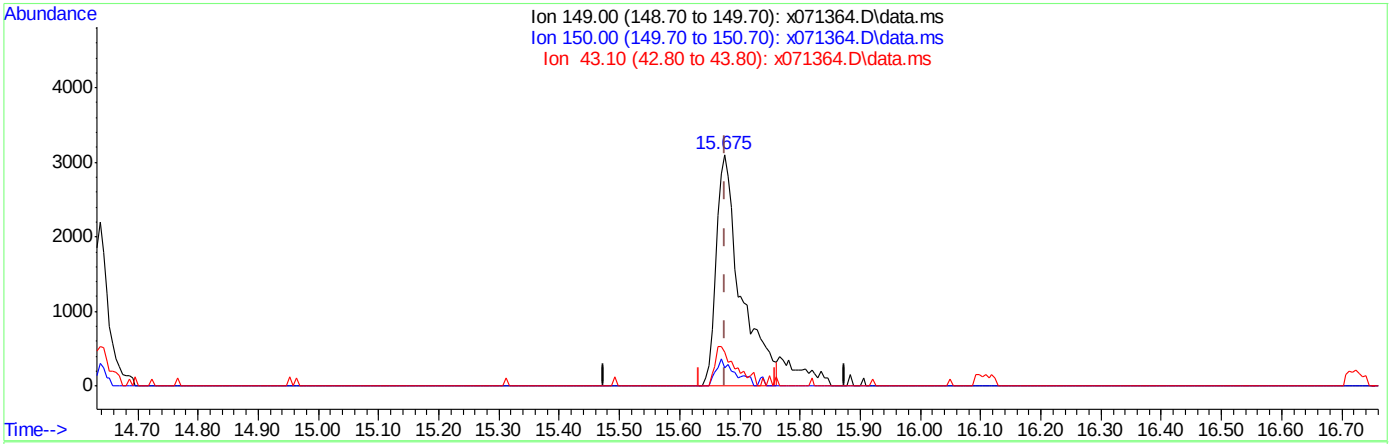

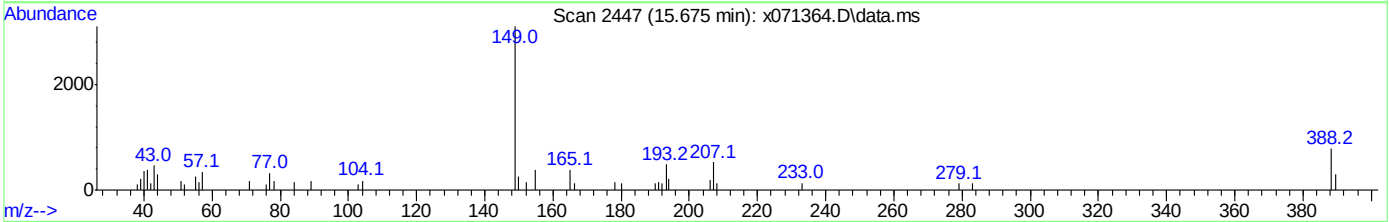

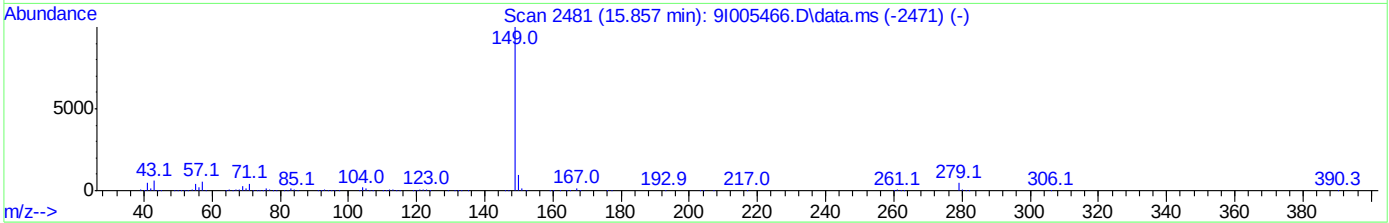

TIC: x071364.D\data.ms

(103) Di-n-octylphthalate (P)

15.675min (-0.000) 1.39ppm

response 8731

Ion	Exp%	Act%
149.00	100	100
150.00	9.90	8.50
43.10	6.00	13.64
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071364.D
Acq On : 23 Jun 2020 1:29 pm
Operator : marthav
Sample : ic2918-1 8270 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 23 15:19:07 2020
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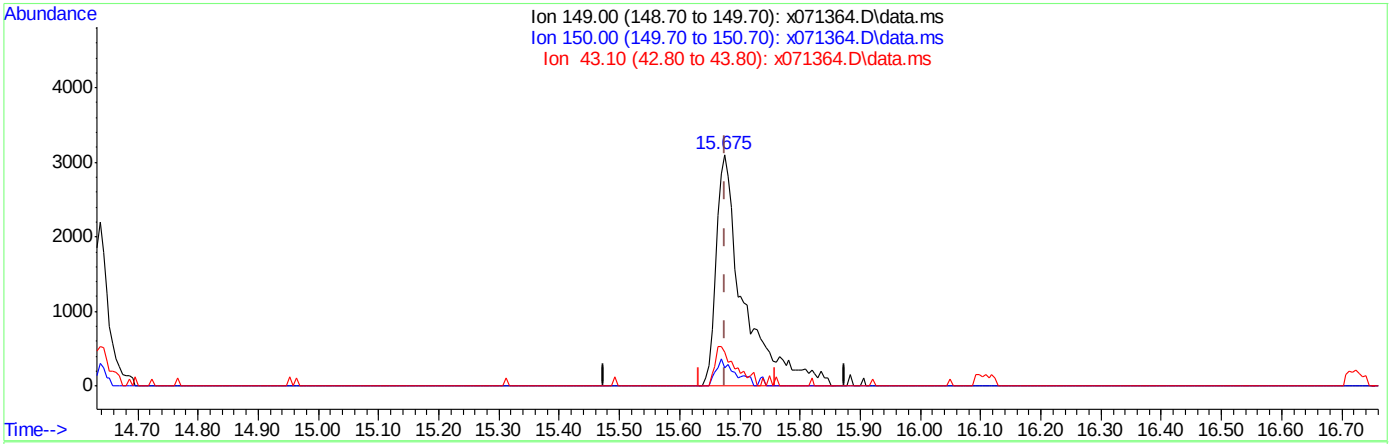

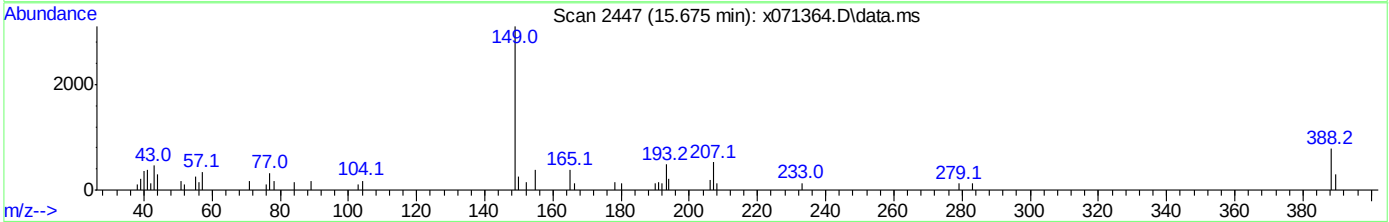

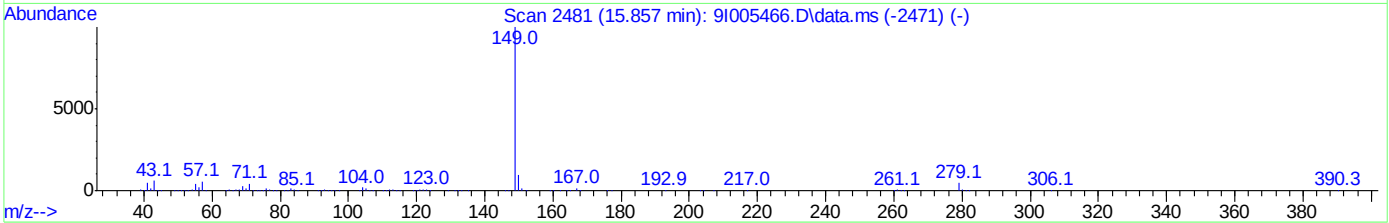

TIC: x071364.D\data.ms

(103) Di-n-octylphthalate (P)

15.675min (-0.000) 1.57ppm m

response 9858

Ion	Exp%	Act%
149.00	100	100
150.00	9.90	8.05
43.10	6.00	14.87
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071364.D
Acq On : 23 Jun 2020 1:29 pm
Operator : marthav
Sample : ic2918-1 8270 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

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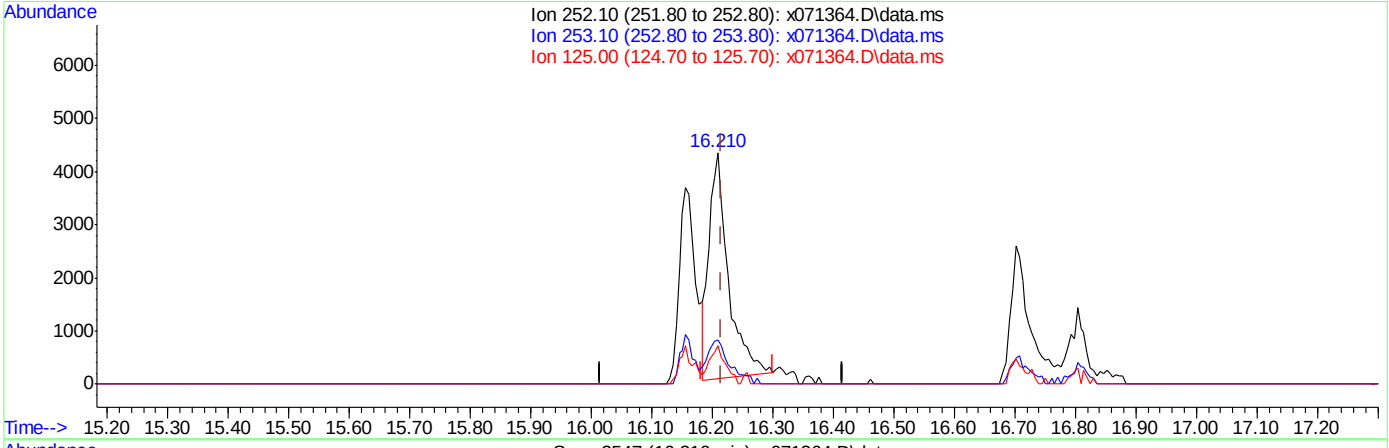

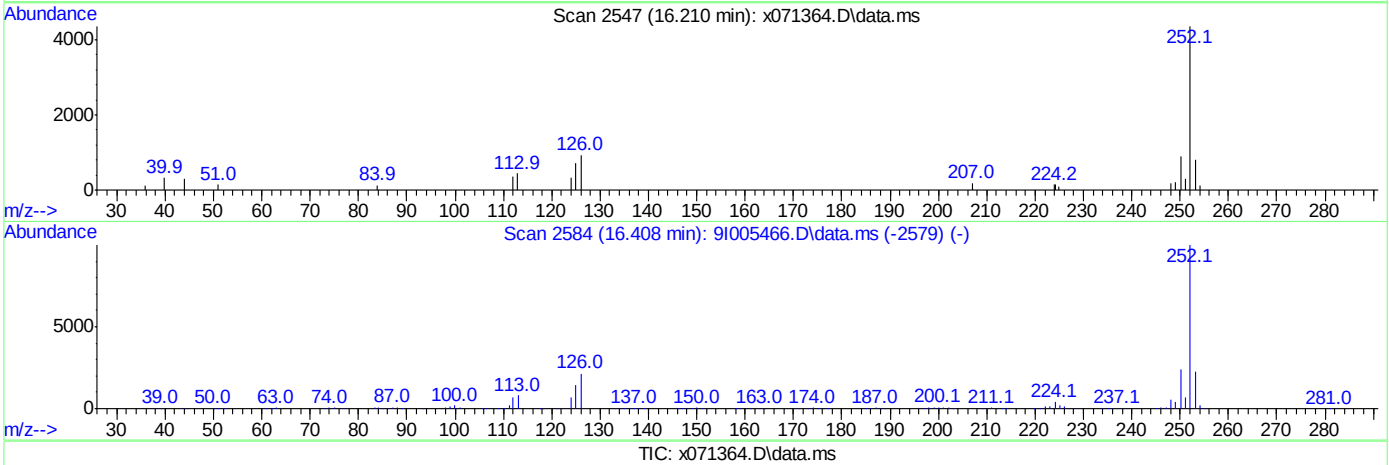

TIC: x071364.D\data.ms

(105) Benzo[k]fluoranthene (P)

16.210min (-0.005) 1.77ppm

response 9543

Ion	Exp%	Act%
252.10	100	100
253.10	22.50	19.11
125.00	14.40	17.92
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
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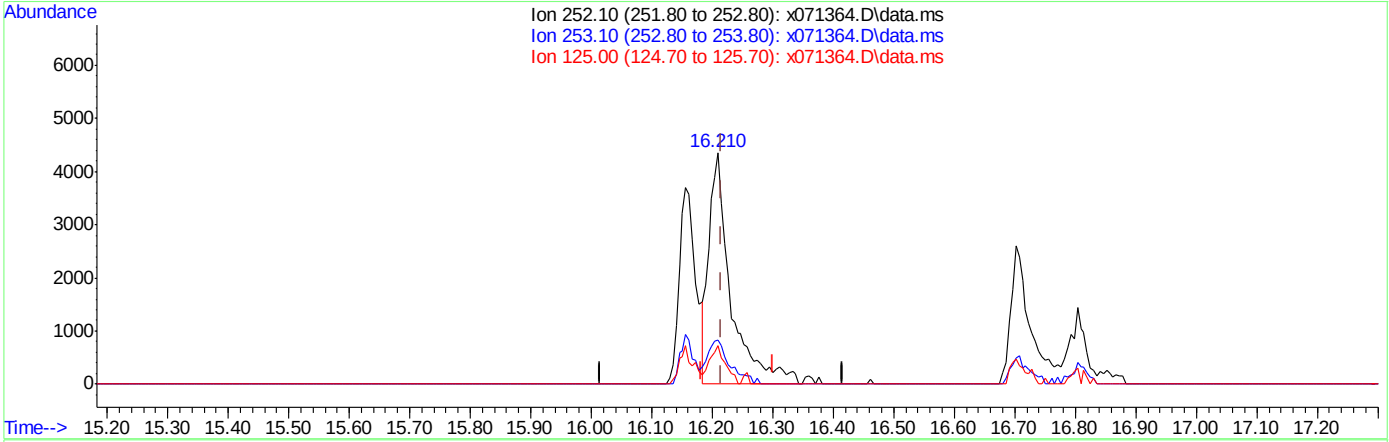

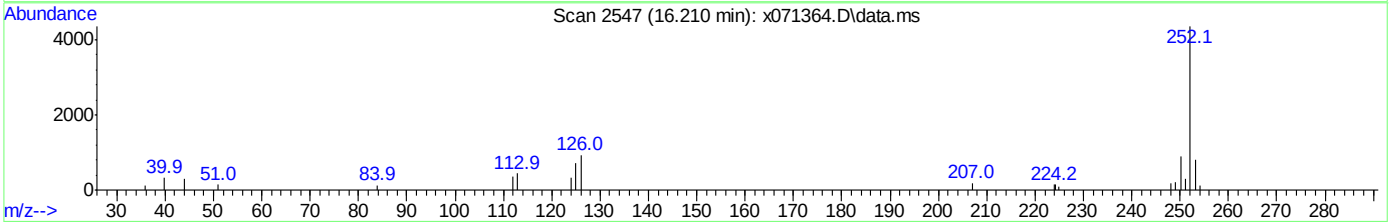

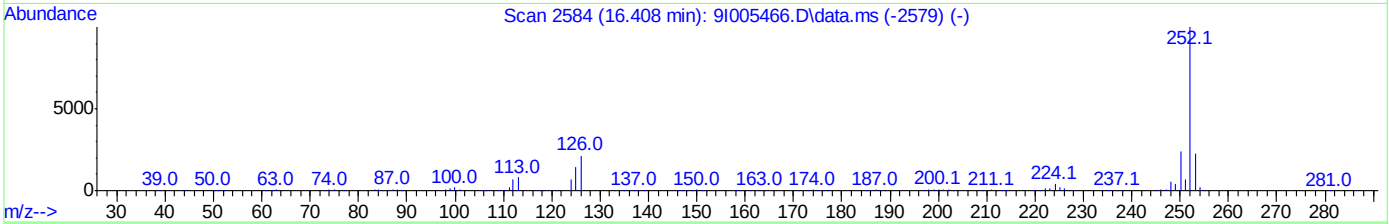

TIC: x071364.D\data.ms

(105) Benzo[k]fluoranthene (P)

16.210min (-0.005) 2.06ppm m

response 11113

Ion	Exp%	Act%
252.10	100	100
253.10	22.50	18.85
125.00	14.40	16.42
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071364.D
Acq On : 23 Jun 2020 1:29 pm
Operator : marthav
Sample : ic2918-1 8270 Inst : MSBNA05
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QLast Update : Tue Jun 23 15:18:55 2020
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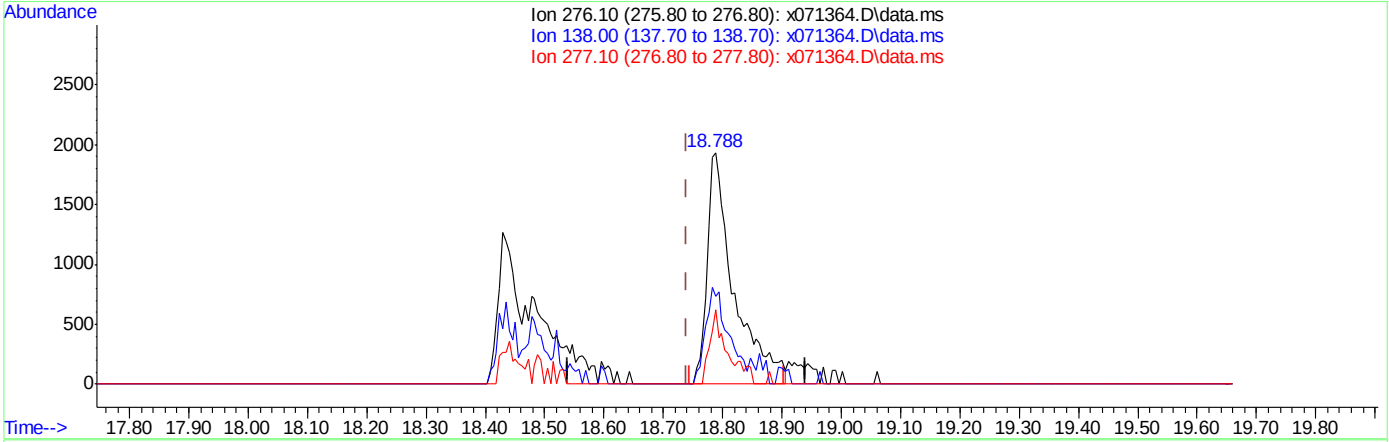

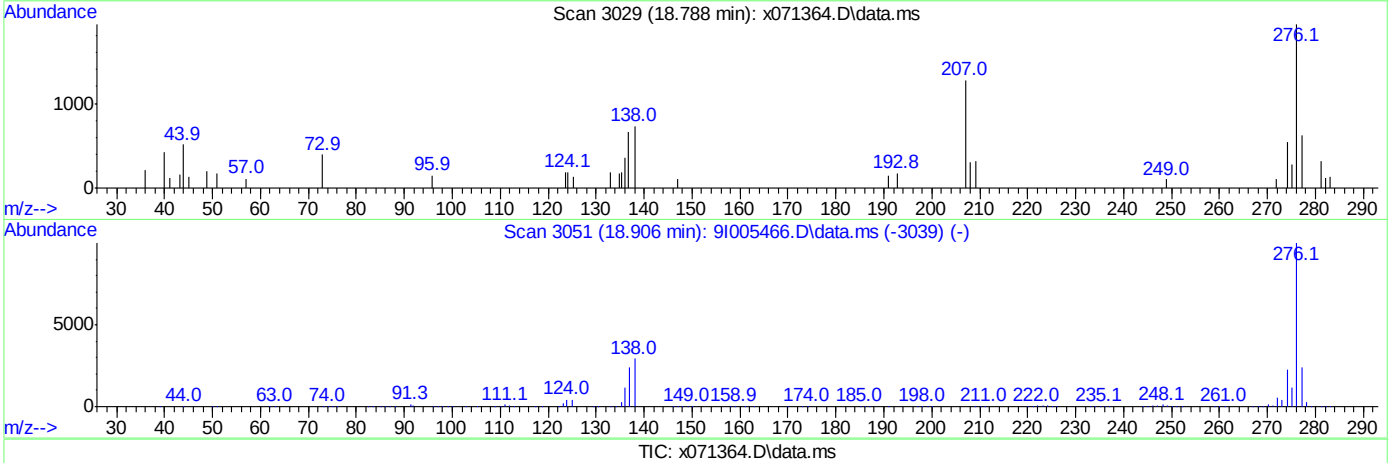

TIC: x071364.D\data.ms

(109) Benzo[g,h,i]perylene (P)

18.788min (+0.048) 1.23ppm

response 6037

Ion	Exp%	Act%
276.10	100	100
138.00	31.00	36.21
277.10	23.90	33.12
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071364.D
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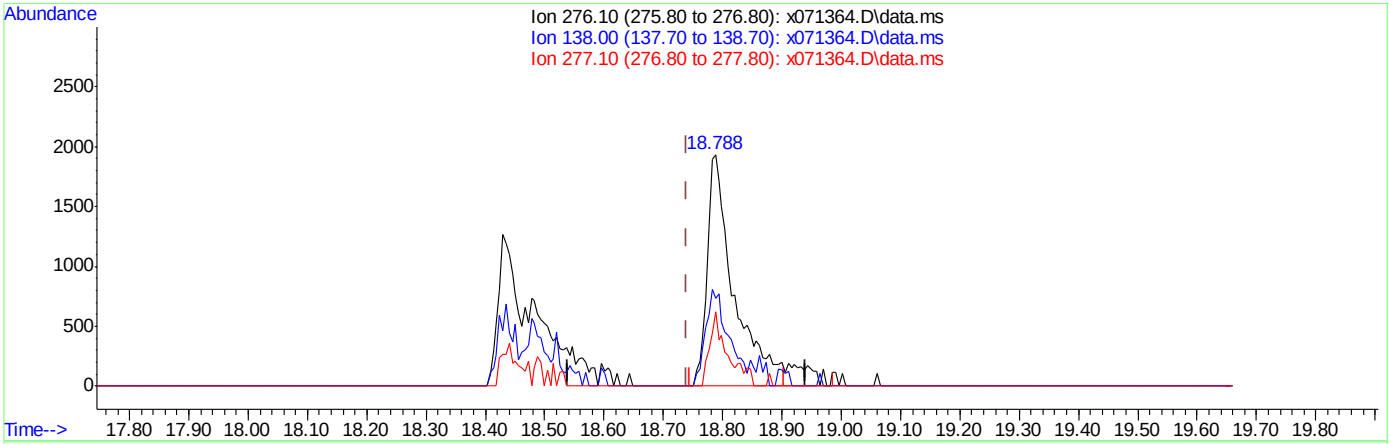
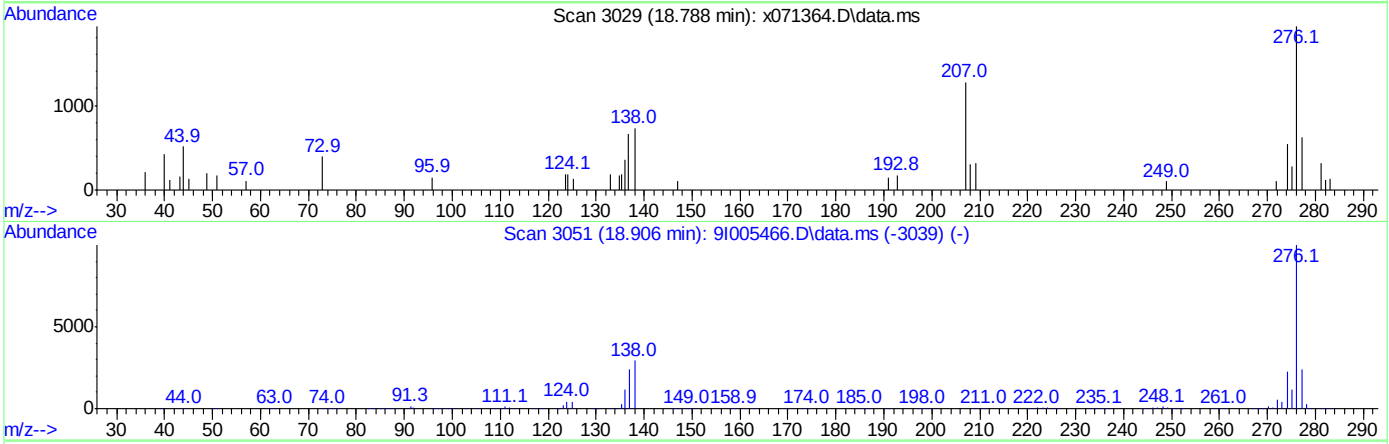
QLast Update : Tue Jun 23 15:18:55 2020
Response via : Initial Calibration





TIC: x071364.D\data.ms

(109) Benzo[g,h,i]perylene (P)

18.788min (+0.048) 1.35ppm m

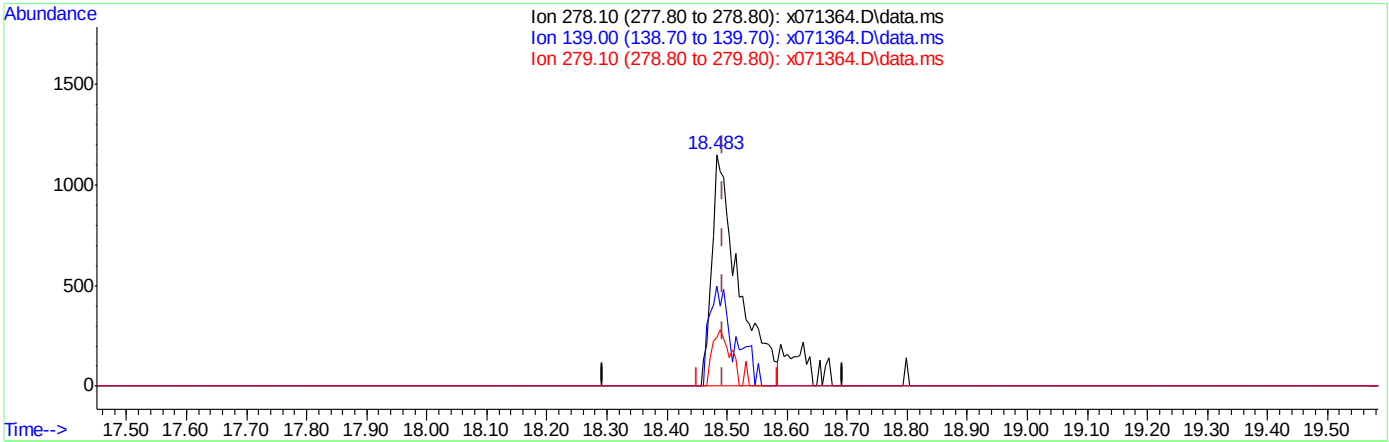
response 6615

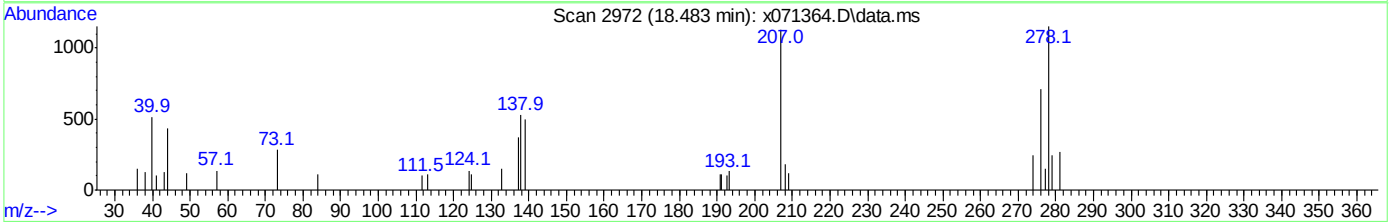
Ion	Exp%	Act%
276.10	100	100
138.00	31.00	37.98
277.10	23.90	32.14
0.00	0.00	0.00

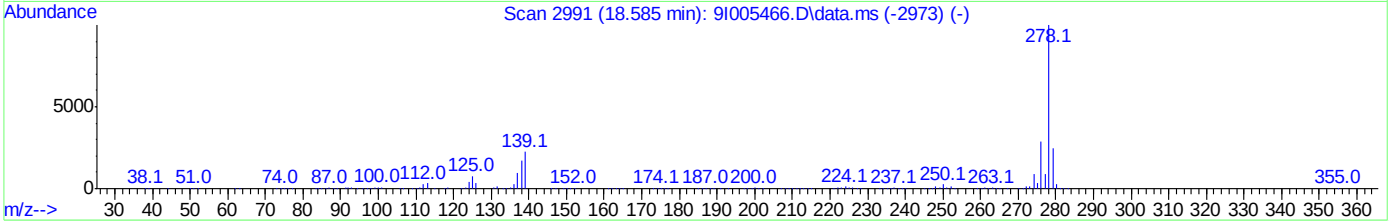
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071364.D
Acq On : 23 Jun 2020 1:29 pm
Operator : marthav
Sample : ic2918-1 8270 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 23 15:19:07 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 15:18:55 2020
Response via : Initial Calibration







TIC: x071364.D\data.ms

(108) Dibenz[a,h]anthracene (P)

18.483min (-0.011) 0.78ppm

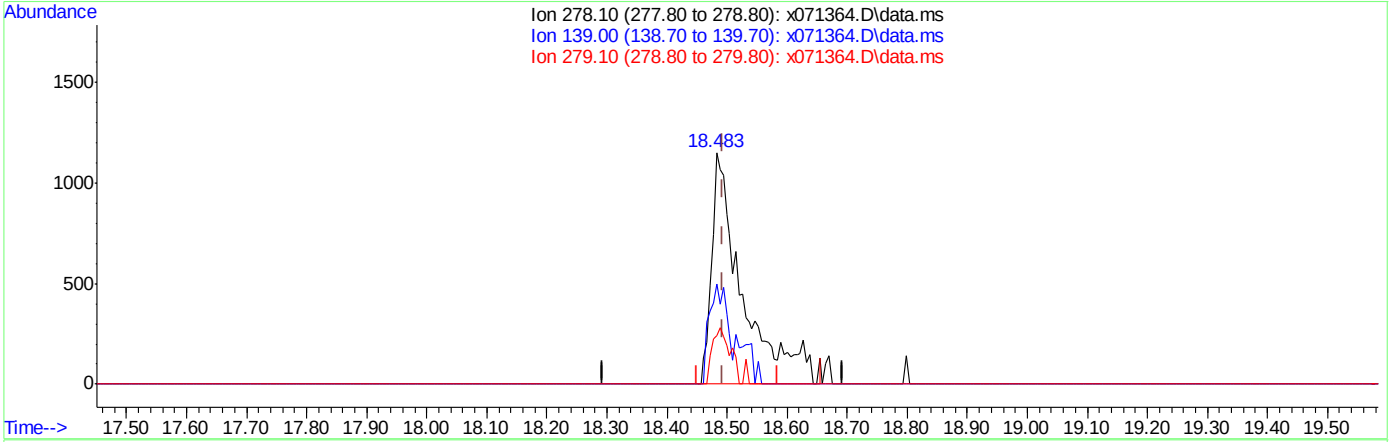
response 3566

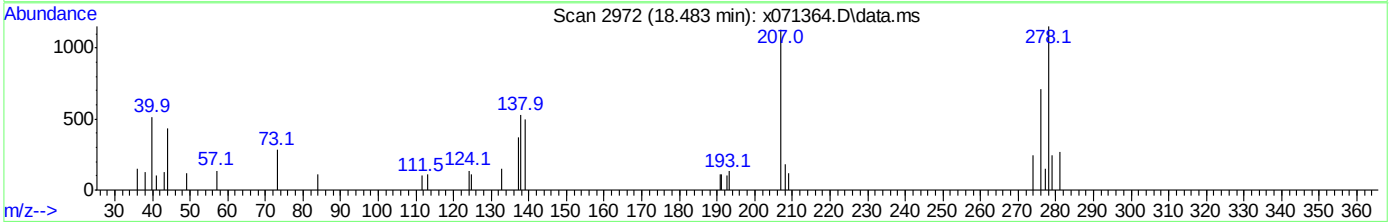
Ion	Exp%	Act%
278.10	100	100
139.00	22.40	45.54
279.10	24.40	22.22
0.00	0.00	0.00

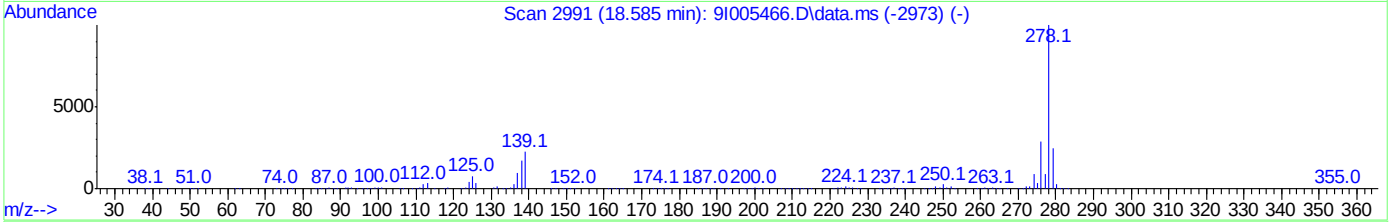
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071364.D
Acq On : 23 Jun 2020 1:29 pm
Operator : marthav
Sample : ic2918-1 8270 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 23 15:19:07 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 15:18:55 2020
Response via : Initial Calibration







TIC: x071364.D\data.ms

(108) Dibenz[a,h]anthracene (P)

18.483min (-0.011) 0.89ppm m

response 4110

Ion	Exp%	Act%
278.10	100	100
139.00	22.40	43.23
279.10	24.40	21.09
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071365.D
Acq On : 23 Jun 2020 1:54 pm
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 24 12:53:43 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.005	152	153213	40.00	ppm	0.00
22) Naphthalene-d8	7.433	136	638047	40.00	ppm	0.00
43) Acenaphthene-d10	9.476	164	345272	40.00	ppm	0.00
70) Phenanthrene-d10	11.225	188	604959	40.00	ppm	0.00
92) Chrysene-d12	14.488	240	419398	40.00	ppm	0.00
102) Perylene-d12	16.809	264	355811	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	0.000	152	0m	40.00	ppm	-6.00
120) Naphthalene-d8A	0.000	136	0m	40.00	ppm	-7.43
127) Acenaphthene-d10A	0.000	164	0m	40.00	ppm	-9.48
136) Phenanthrene-d10A	0.000	188	0m	40.00	ppm	-11.22
146) Chrysene-d12A	0.000	240	0m	40.00	ppm	-14.49
153) Perylene-d12A	0.000	264	0m	40.00	ppm	-16.82
System Monitoring Compounds						
7) 2-Fluorophenol	4.609	112	54506	20.64	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 20.64%			
9) Phenol-d5	5.604	99	62273	21.90	ppm	0.00
Spiked Amount 100.000	Range 10 - 50		Recovery = 21.90%			
23) Nitrobenzene-d5	6.614	82	30954	10.10	ppm	0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 20.20%#			
47) 2-Fluorobiphenyl	8.700	172	59356	11.43	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 22.86%#			
75) 2,4,6-Tribromophenol	10.401	330	10209	12.76	ppm	0.00
Spiked Amount 100.000	Range 33 - 118		Recovery = 12.76%#			
95) Terphenyl-d14	13.140	244	51464	9.16	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 18.32%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.849	88	13616	10.62	ppm	# 33
3) N-nitrosodimethylamine	3.170	42	22798	20.20	ppm	# 34
4) Pyridine	3.213	79	30208	11.30	ppm	# 17
5) Benzaldehyde	5.529	106	23984	10.83	ppm	91
6) Aniline	5.646	93	41928	10.44	ppm	89
8) bis(2-Chloroethyl)ether	5.727	93	26138	9.35	ppm	75
10) Phenol	5.614	94	33511	9.23	ppm	93
11) 2-Chlorophenol	5.769	128	25959	9.97	ppm	77
12) 1,3-Dichlorobenzene	5.940	146	28900	10.83	ppm	96
13) 1,4-Dichlorobenzene	6.026	146	30913	11.34	ppm	97
14) 1,2-Dichlorobenzene	6.187	146	28675	11.28	ppm	97
15) Benzyl alcohol	6.154	108	18012	10.50	ppm	81
16) 2,2'-Oxybis(1-chloropr...	6.315	45	59027	17.67	ppm	72
17) 2-Methylphenol	6.283	108	26103	11.20	ppm	96
18) Acetophenone	6.449	105	42629	11.58	ppm	95
19) Hexachloroethane	6.566	117	11399	9.87	ppm	84
20) N-Nitroso-di-n-propyla...	6.454	70	21567	11.37	ppm	# 52
21) 3&4-Methylphenol	6.454	108	27468	11.32	ppm	94
24) Nitrobenzene	6.636	77	31070	10.71	ppm	83
25) Isophorone	6.909	82	56848	10.73	ppm	95
26) 2-Nitrophenol	7.000	139	13250	9.48	ppm	85

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071365.D
Acq On : 23 Jun 2020 1:54 pm
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 24 12:53:43 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
27)	2,4-Dimethylphenol	7.058	107	27475	11.43	ppm		88
28)	O,O,O-Triethylphosphor...	7.144	198	11974	10.72	ppm		74
29)	bis(2-Chloroethoxy)met...	7.171	93	32252	9.76	ppm		98
30)	Benzoic Acid	7.112	105	11853	6.54	ppm		93
31)	2,4-Dichlorophenol	7.267	162	21072	10.94	ppm		95
32)	1,2,4-Trichlorobenzene	7.369	180	22305	10.29	ppm		96
34)	Naphthalene	7.454	128	83411	11.60	ppm		99
35)	4-Chloroaniline	7.524	127	35261	11.69	ppm		89
36)	2,6-Dichlorophenol	7.529	162	22234	11.31	ppm		97
37)	Hexachlorobutadiene	7.609	225	10837	8.96	ppm		99
38)	Caprolactam	7.893	113	9906	12.39	ppm	#	56
39)	4-Chloro-3-methylphenol	8.091	107	23324	11.14	ppm		93
40)	2-Methylnaphthalene	8.262	142	56022	12.05	ppm		97
41)	1-Methylnaphthalene	8.374	142	53213	12.21	ppm		97
42)	1,2,4,5-Tetrachloroben...	8.454	216	22402	9.94	ppm		100
44)	Hexachlorocyclopentadiene	8.449	237	9902	8.37	ppm		97
45)	2,4,6-Trichlorophenol	8.588	196	14307	10.11	ppm		98
46)	2,4,5-Trichlorophenol	8.625	196	15337m	10.15	ppm		
48)	1,1'-Biphenyl	8.813	154	73891	12.99	ppm		98
49)	2-Chloronaphthalene	8.823	162	50082	11.35	ppm		96
50)	2-Nitroaniline	8.946	65	18263	12.69	ppm	#	66
51)	p-Dinitrobenzene	9.118	75	9297	8.81	ppm	#	59
52)	Acenaphthylene	9.305	152	81401	12.05	ppm		100
53)	Dimethylphthalate	9.187	163	59459	11.72	ppm		99
54)	m-Dinitrobenzene	9.203	168	9085	10.31	ppm	#	72
55)	2,6-Dinitrotoluene	9.246	165	13549	11.04	ppm	#	64
56)	o-Dinitrobenzene	9.294	50	13934	19.10	ppm	#	53
57)	Acenaphthene	9.513	153	55757	12.48	ppm		100
58)	3-Nitroaniline	9.428	138	14873	11.26	ppm		94
59)	2,4-Dinitrophenol	9.556	184	3149	5.37	ppm	#	35
60)	Dibenzofuran	9.717	168	74600	12.18	ppm		92
61)	2,4-Dinitrotoluene	9.711	165	17732	11.40	ppm		70
62)	4-Nitrophenol	9.636	109	7265	11.63	ppm	#	65
63)	2,3,5,6-Tetrachlorophenol	9.813	232	10983	9.40	ppm	#	84
64)	2,3,4,6-Tetrachlorophenol	9.861	232	11983m	9.61	ppm		
65)	Fluorene	10.118	166	58317	12.20	ppm		98
66)	4-Chlorophenyl-phenyle...	10.139	204	27722	11.56	ppm		85
67)	Diethylphthalate	10.021	149	57887	11.48	ppm		96
68)	Thionazin	10.112	97	13361	11.25	ppm		99
69)	4-Nitroaniline	10.139	138	16256	12.02	ppm		83
71)	4,6-Dinitro-2-methylph...	10.187	198	6121	7.31	ppm	#	64
72)	n-Nitrosodiphenylamine	10.273	169	51304	15.42	ppm		95
73)	Diphenylamine	10.273	169	51304	13.16	ppm		95
74)	1,2-Diphenylhydrazine	10.321	77	64320	11.81	ppm		91
76)	Sulfotep	10.498	97	9868	11.58	ppm	#	64
77)	Phorate	10.642	75	33799	11.21	ppm		99
78)	4-Bromophenyl-phenylether	10.711	248	13131	9.44	ppm	#	76
79)	Hexachlorobenzene	10.760	284	12669	7.97	ppm	#	61
80)	Dimethoate	10.824	87	21744	12.09	ppm		94
81)	Simazine	10.883	201	9688	14.23	ppm		95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071365.D
Acq On : 23 Jun 2020 1:54 pm
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 24 12:53:43 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration

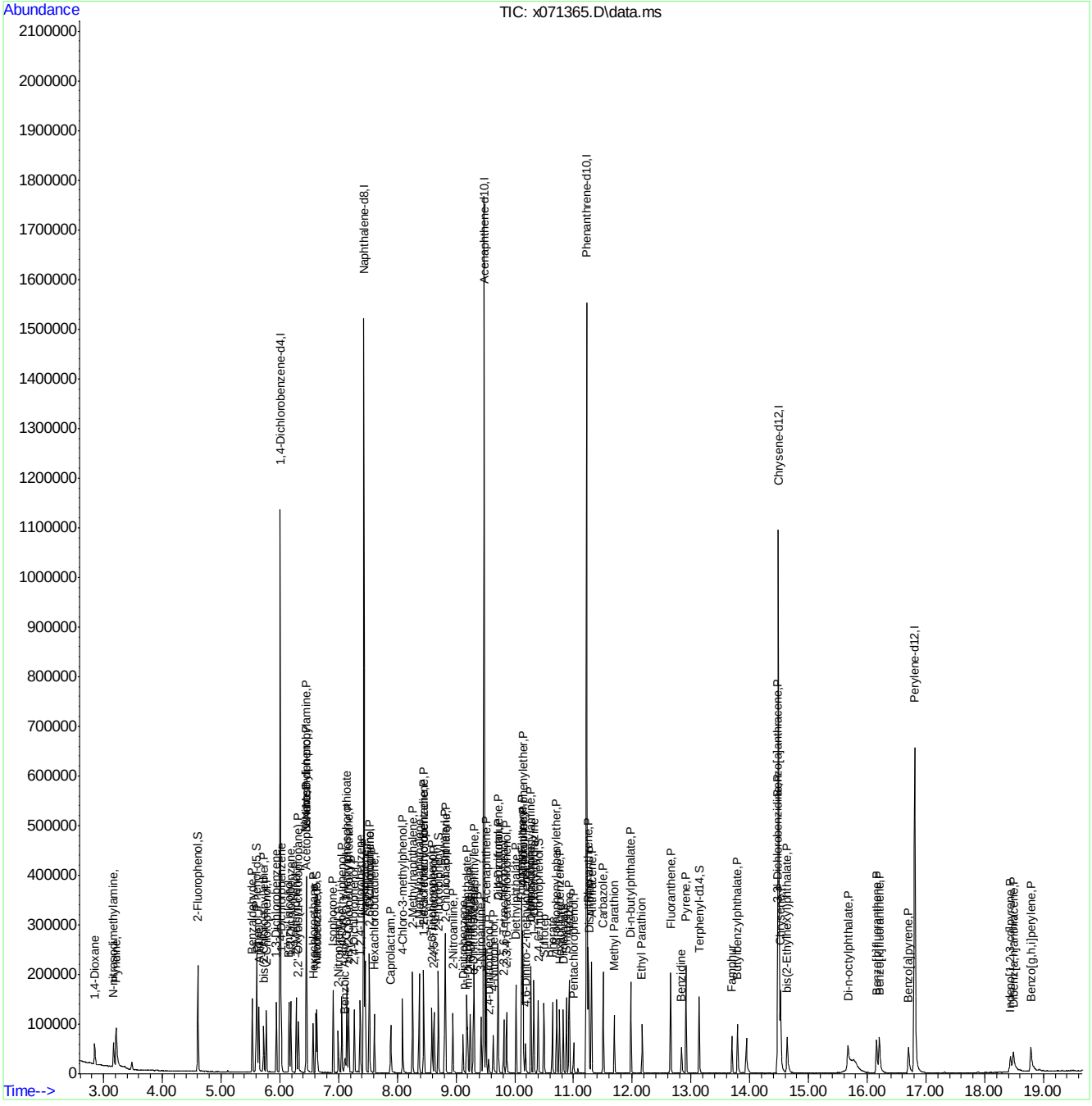
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
82)	Atrazine	10.925	200	16977	12.83	ppm	#	74
83)	Pentachlorophenol	11.000	266	5568	7.00	ppm		95
84)	Phenanthrene	11.246	178	89391	13.41	ppm		99
85)	Anthracene	11.310	178	89678	13.17	ppm		97
86)	Disulfoton	11.262	88	36118	11.68	ppm		91
87)	Carbazole	11.508	167	78812	12.97	ppm		98
88)	Methyl Parathion	11.696	109	17952	11.83	ppm	#	82
89)	Di-n-butylphthalate	11.974	149	85133	11.01	ppm		98
90)	Ethyl Parathion	12.166	97	9653	9.58	ppm		78
91)	Fluoranthene	12.653	202	78579	11.09	ppm		97
93)	Benzidine	12.835	184	25116	9.97	ppm		93
94)	Pyrene	12.915	202	83933	11.06	ppm		98
96)	Famphur	13.696	218	20230	14.14	ppm		89
97)	Butylbenzylphthalate	13.792	149	29273	8.79	ppm		88
98)	3,3'-Dichlorobenzidine	14.472	252	16143	8.07	ppm		97
99)	Benzo[a]anthracene	14.477	228	61251	9.80	ppm		100
100)	Chrysene	14.525	228	65072	10.46	ppm		95
101)	bis(2-Ethylhexyl)phtha...	14.637	149	33892	7.85	ppm		93
103)	Di-n-octylphthalate	15.675	149	59386	8.88	ppm		93
104)	Benzo[b]fluoranthene	16.156	252	43287	8.28	ppm		99
105)	Benzo[k]fluoranthene	16.210	252	56428	9.80	ppm		98
106)	Benzo[a]pyrene	16.702	252	38337	7.31	ppm		94
107)	Indeno[1,2,3-cd]pyrene	18.435	276	22408	4.94	ppm		96
108)	Dibenz[a,h]anthracene	18.488	278	23664	4.83	ppm		91
109)	Benzo[g,h,i]perylene	18.788	276	37051	7.11	ppm		90

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071365.D
Acq On : 23 Jun 2020 1:54 pm
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 11 Sample Multiplier: 1

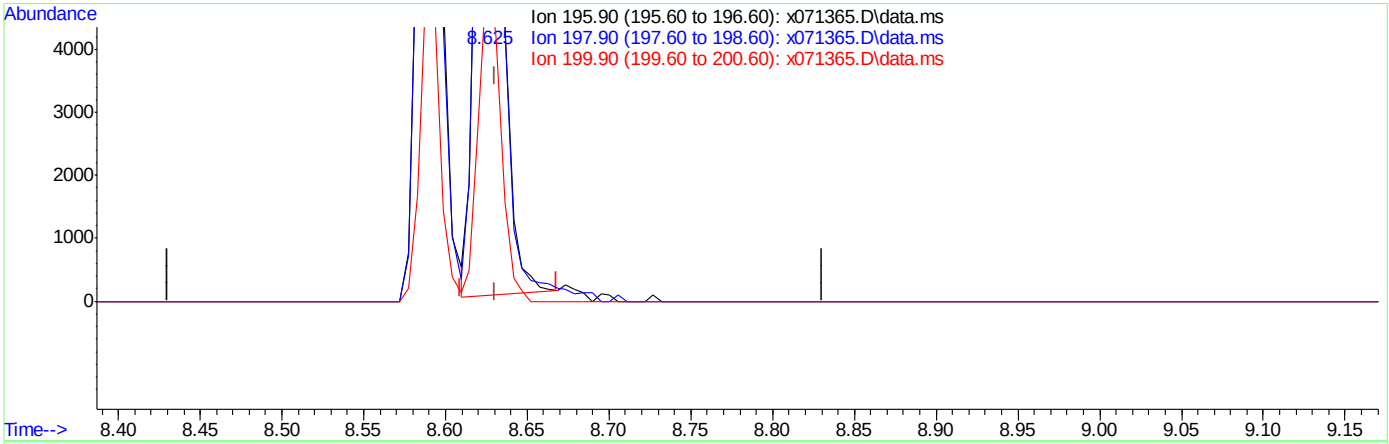
Quant Time: Jun 24 12:53:43 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration

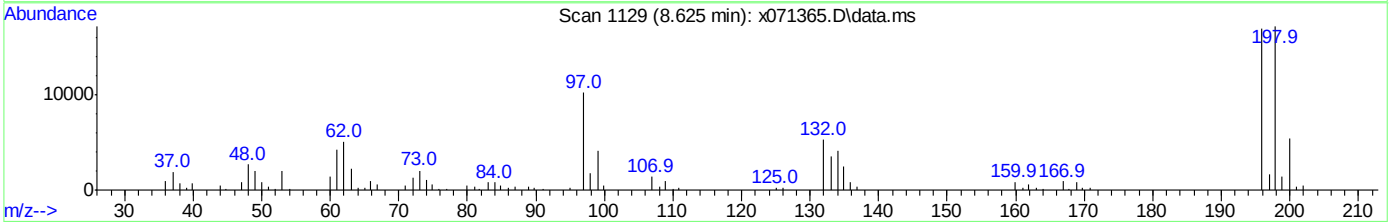


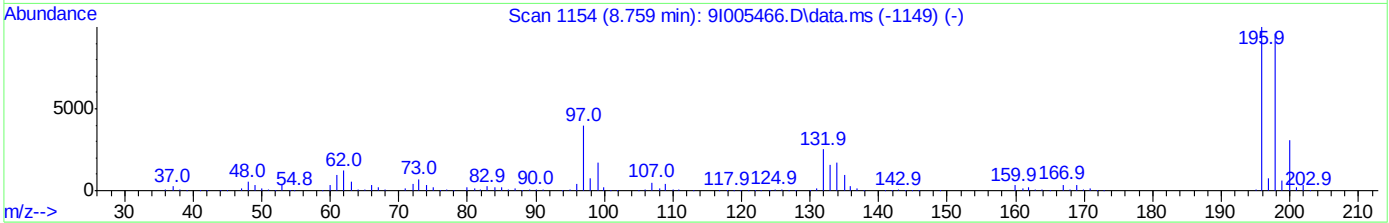
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071365.D
Acq On : 23 Jun 2020 1:54 pm
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 23 16:56:20 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration







TIC: x071365.D\data.ms

(46) 2,4,5-Trichlorophenol (P)

8.625min (-0.005) 9.87ppm

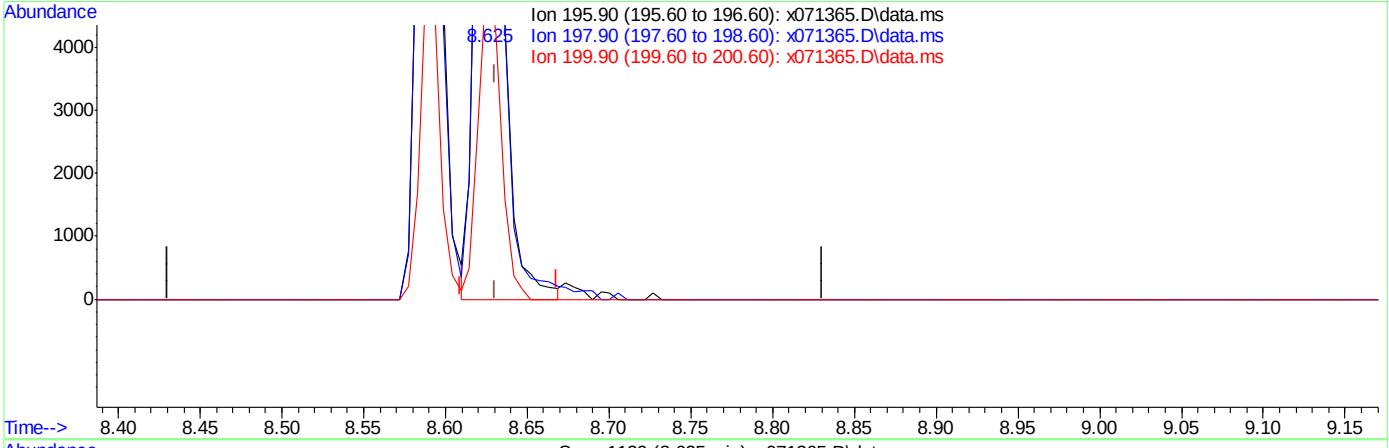
response 14908

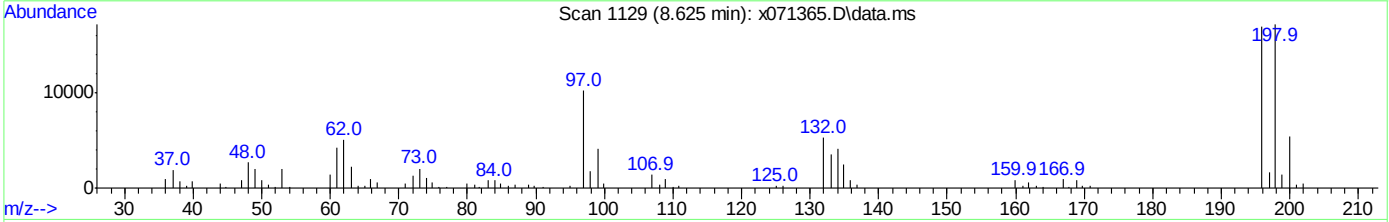
Ion	Exp%	Act%
195.90	100	100
197.90	96.00	101.59
199.90	30.90	32.14
0.00	0.00	0.00

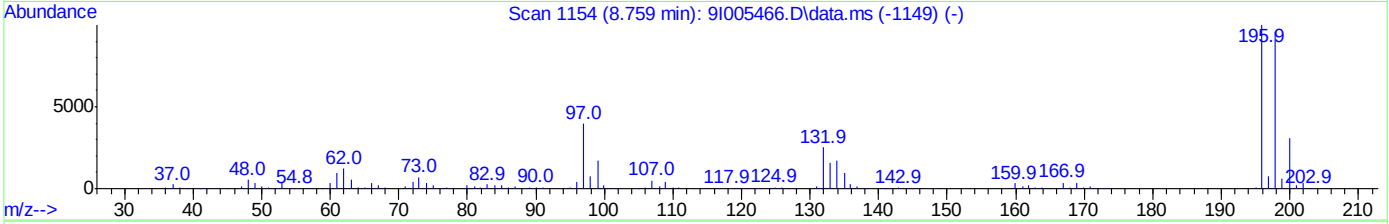
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071365.D
Acq On : 23 Jun 2020 1:54 pm
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 23 16:56:20 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration







TIC: x071365.D\data.ms

(46) 2,4,5-Trichlorophenol (P)

8.625min (-0.005) 10.15ppm m

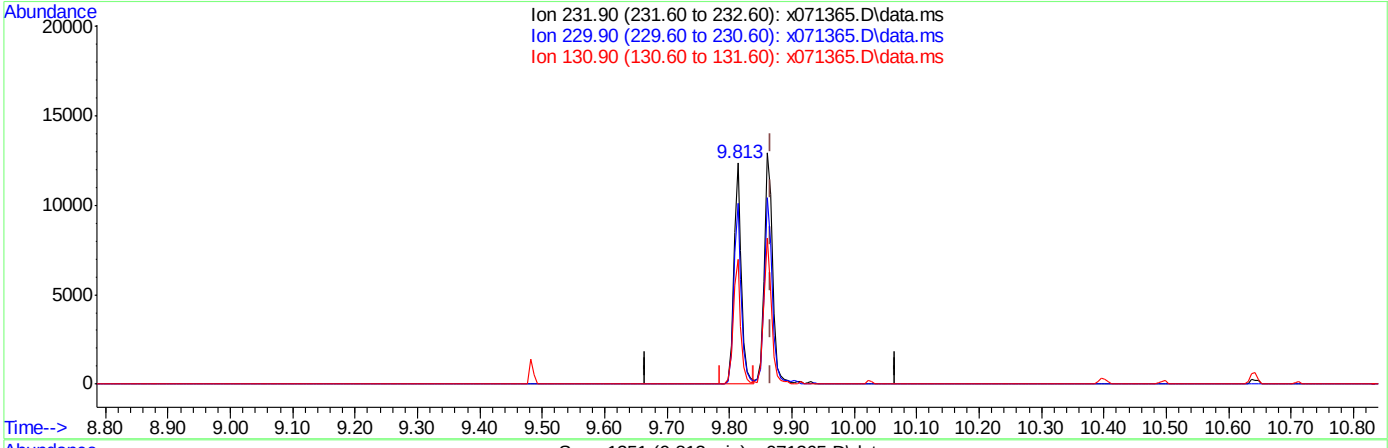
response 15337

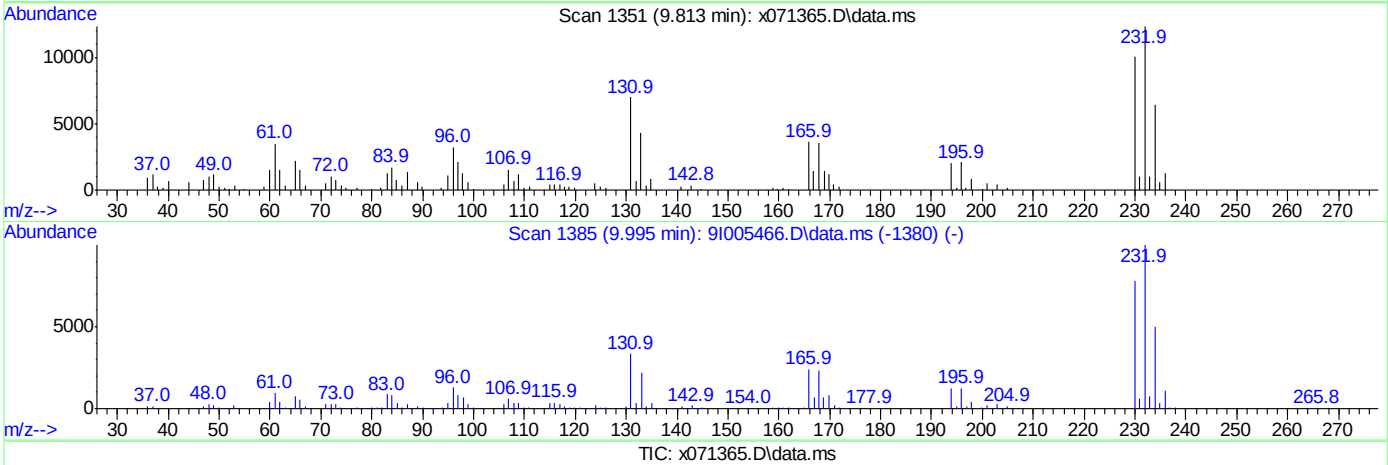
Ion	Exp%	Act%
195.90	100	100
197.90	96.00	101.08
199.90	30.90	31.85
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071365.D
Acq On : 23 Jun 2020 1:54 pm
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 24 12:53:06 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration





TIC: x071365.D\data.ms

(64) 2,3,4,6-Tetrachlorophenol (P)

9.813min (-0.053) 8.81ppm

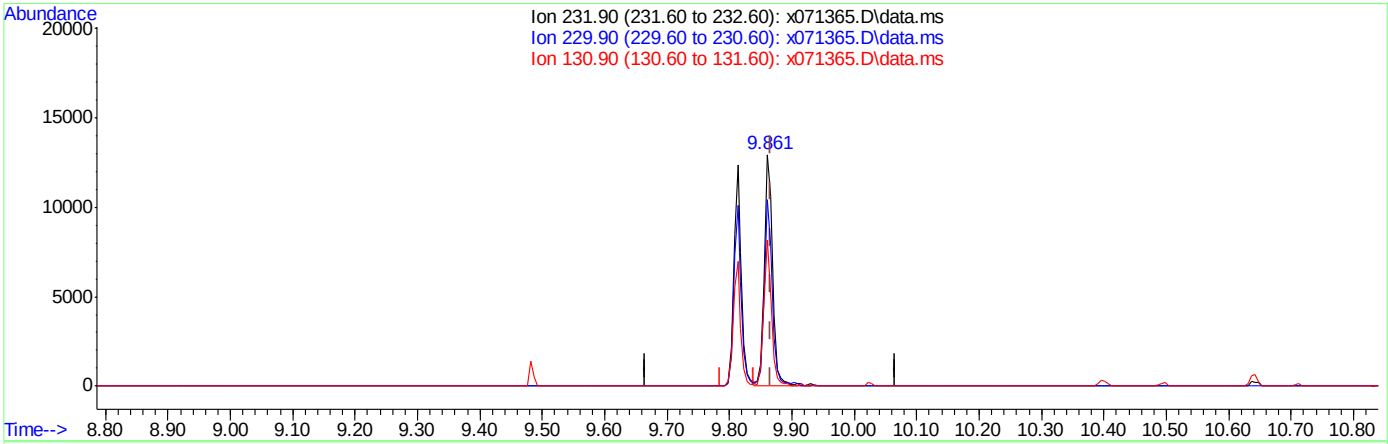
response 10983

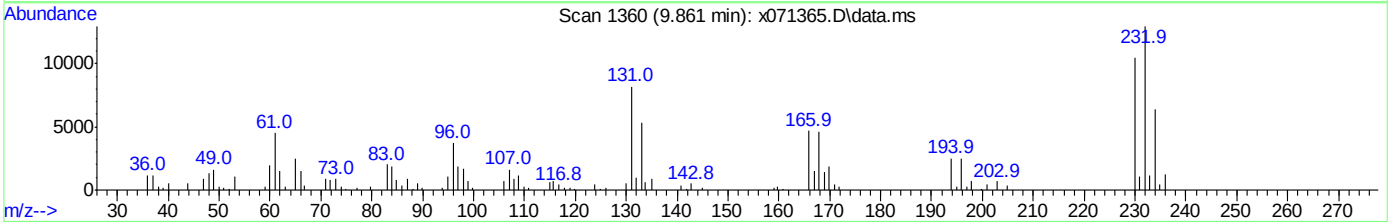
Ion	Exp%	Act%
231.90	100	100
229.90	78.40	81.93
130.90	33.30	56.61
0.00	0.00	0.00

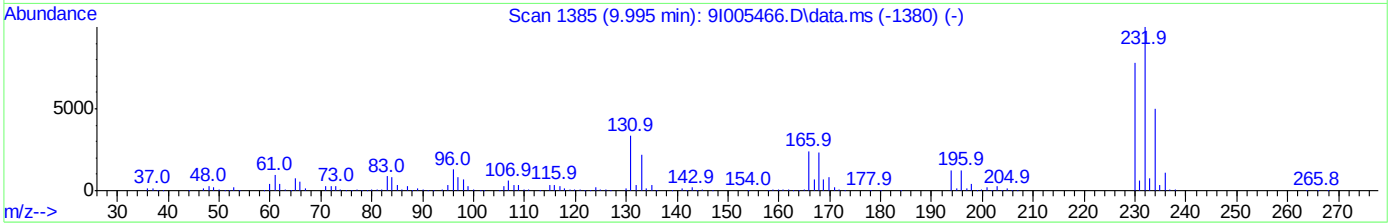
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071365.D
Acq On : 23 Jun 2020 1:54 pm
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 24 12:53:06 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration







TIC: x071365.D\data.ms

(64) 2,3,4,6-Tetrachlorophenol (P)

9.861min (-0.005) 9.61ppm m

response 11983

Ion	Exp%	Act%
231.90	100	100
229.90	78.40	80.64
130.90	33.30	63.25
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071366.D
Acq On : 23 Jun 2020 2:20 pm
Operator : marthav
Sample : ic2918-10 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 23 16:56:48 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.005	152	155496	40.00	ppm	0.00
22) Naphthalene-d8	7.433	136	654391	40.00	ppm	0.00
43) Acenaphthene-d10	9.476	164	353292	40.00	ppm	0.00
70) Phenanthrene-d10	11.225	188	615230	40.00	ppm	0.00
92) Chrysene-d12	14.493	240	423636	40.00	ppm	0.00
102) Perylene-d12	16.809	264	348672	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	0.000	152	0m	40.00	ppm	-6.00
120) Naphthalene-d8A	0.000	136	0m	40.00	ppm	-7.43
127) Acenaphthene-d10A	0.000	164	0m	40.00	ppm	-9.48
136) Phenanthrene-d10A	0.000	188	0m	40.00	ppm	-11.22
146) Chrysene-d12A	0.000	240	0m	40.00	ppm	-14.49
153) Perylene-d12A	0.000	264	0m	40.00	ppm	-16.82
System Monitoring Compounds						
7) 2-Fluorophenol	4.609	112	114758	42.82	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 42.82%			
9) Phenol-d5	5.603	99	134134	46.48	ppm	0.00
Spiked Amount 100.000	Range 10 - 50		Recovery = 46.48%			
23) Nitrobenzene-d5	6.614	82	66899	21.29	ppm	0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 42.58%			
47) 2-Fluorobiphenyl	8.700	172	125790	23.68	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 47.36%			
75) 2,4,6-Tribromophenol	10.401	330	23184	28.48	ppm	0.00
Spiked Amount 100.000	Range 33 - 118		Recovery = 28.48%#			
95) Terphenyl-d14	13.140	244	110276	19.43	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 38.86%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.849	88	28140	21.62	ppm	# 32
3) N-nitrosodimethylamine	3.170	42	49226	42.97	ppm	# 35
4) Pyridine	3.207	79	66089	24.35	ppm	# 15
5) Benzaldehyde	5.528	106	49405	21.98	ppm	93
6) Aniline	5.646	93	88588	21.73	ppm	86
8) bis(2-Chloroethyl)ether	5.726	93	56030	19.74	ppm	# 74
10) Phenol	5.614	94	74149	20.13	ppm	96
11) 2-Chlorophenol	5.769	128	57618	21.81	ppm	79
12) 1,3-Dichlorobenzene	5.940	146	61108	22.57	ppm	97
13) 1,4-Dichlorobenzene	6.026	146	64641	23.36	ppm	99
14) 1,2-Dichlorobenzene	6.186	146	60961	23.63	ppm	96
15) Benzyl alcohol	6.154	108	39919	22.93	ppm	79
16) 2,2'-Oxybis(1-chloropr...	6.315	45	123847	36.53	ppm	75
17) 2-Methylphenol	6.283	108	56254	23.78	ppm	97
18) Acetophenone	6.448	105	88063	23.58	ppm	96
19) Hexachloroethane	6.566	117	24344	20.77	ppm	89
20) N-Nitroso-di-n-propyla...	6.459	70	45135	23.44	ppm	# 55
21) 3&4-Methylphenol	6.454	108	59928	24.33	ppm	97
24) Nitrobenzene	6.636	77	66335	22.29	ppm	82
25) Isophorone	6.914	82	122821	22.61	ppm	98
26) 2-Nitrophenol	6.999	139	30272	21.13	ppm	86

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071366.D
Acq On : 23 Jun 2020 2:20 pm
Operator : marthav
Sample : ic2918-10 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 23 16:56:48 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
27)	2,4-Dimethylphenol	7.058	107	60041	24.36	ppm		96
28)	O,O,O-Triethylphosphor...	7.144	198	25587	22.34	ppm		67
29)	bis(2-Chloroethoxy)met...	7.176	93	69341	20.45	ppm		97
30)	Benzoic Acid	7.128	105	36022	19.37	ppm		89
31)	2,4-Dichlorophenol	7.272	162	47127	23.86	ppm		98
32)	1,2,4-Trichlorobenzene	7.368	180	47830	21.52	ppm		97
34)	Naphthalene	7.454	128	180087	24.41	ppm		99
35)	4-Chloroaniline	7.524	127	76278	24.65	ppm		89
36)	2,6-Dichlorophenol	7.529	162	49400	24.50	ppm		96
37)	Hexachlorobutadiene	7.609	225	23667	19.08	ppm		99
38)	Caprolactam	7.898	113	21367	26.05	ppm	#	44
39)	4-Chloro-3-methylphenol	8.090	107	52723	24.56	ppm		90
40)	2-Methylnaphthalene	8.262	142	120867	25.34	ppm		97
41)	1-Methylnaphthalene	8.374	142	114860	25.70	ppm		98
42)	1,2,4,5-Tetrachloroben...	8.454	216	47554	20.57	ppm		99
44)	Hexachlorocyclopentadiene	8.449	237	22969	18.98	ppm		98
45)	2,4,6-Trichlorophenol	8.593	196	31015	21.41	ppm		99
46)	2,4,5-Trichlorophenol	8.625	196	34887	22.57	ppm		98
48)	1,1'-Biphenyl	8.813	154	149463	25.69	ppm		99
49)	2-Chloronaphthalene	8.823	162	107769	23.86	ppm		95
50)	2-Nitroaniline	8.946	65	40476	27.48	ppm	#	66
51)	p-Dinitrobenzene	9.117	75	21846	20.22	ppm	#	57
52)	Acenaphthylene	9.305	152	178166	25.78	ppm		100
53)	Dimethylphthalate	9.187	163	125366	24.15	ppm		99
54)	m-Dinitrobenzene	9.203	168	20257	22.47	ppm	#	47
55)	2,6-Dinitrotoluene	9.246	165	28857	22.98	ppm	#	63
56)	o-Dinitrobenzene	9.294	50	30312	40.61	ppm	#	47
57)	Acenaphthene	9.513	153	118768	25.98	ppm		99
58)	3-Nitroaniline	9.433	138	32061	23.73	ppm		98
59)	2,4-Dinitrophenol	9.556	184	9607	16.00	ppm	#	32
60)	Dibenzofuran	9.716	168	158964	25.37	ppm		91
61)	2,4-Dinitrotoluene	9.711	165	37895	23.81	ppm	#	64
62)	4-Nitrophenol	9.636	109	16992	26.57	ppm	#	65
63)	2,3,5,6-Tetrachlorophenol	9.813	232	25132	21.02	ppm		90
64)	2,3,4,6-Tetrachlorophenol	9.861	232	26671	20.90	ppm		83
65)	Fluorene	10.118	166	126410	25.84	ppm		99
66)	4-Chlorophenyl-phenyle...	10.139	204	59056	24.08	ppm		86
67)	Diethylphthalate	10.027	149	126377	24.50	ppm		98
68)	Thionazin	10.118	97	28910	23.78	ppm		98
69)	4-Nitroaniline	10.144	138	35972	26.00	ppm		82
71)	4,6-Dinitro-2-methylph...	10.187	198	16902	19.85	ppm	#	62
72)	n-Nitrosodiphenylamine	10.278	169	109884	32.48	ppm		97
73)	Diphenylamine	10.278	169	109884	27.73	ppm		97
74)	1,2-Diphenylhydrazine	10.321	77	138419	24.99	ppm		89
76)	Sulfotep	10.497	97	21074	24.32	ppm	#	63
77)	Phorate	10.642	75	73892	24.09	ppm		97
78)	4-Bromophenyl-phenylether	10.711	248	28119	19.88	ppm	#	73
79)	Hexachlorobenzene	10.759	284	27000	16.69	ppm	#	61
80)	Dimethoate	10.824	87	47659	26.05	ppm		92
81)	Simazine	10.888	201	21012	30.35	ppm		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071366.D
Acq On : 23 Jun 2020 2:20 pm
Operator : marthav
Sample : ic2918-10 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 23 16:56:48 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration

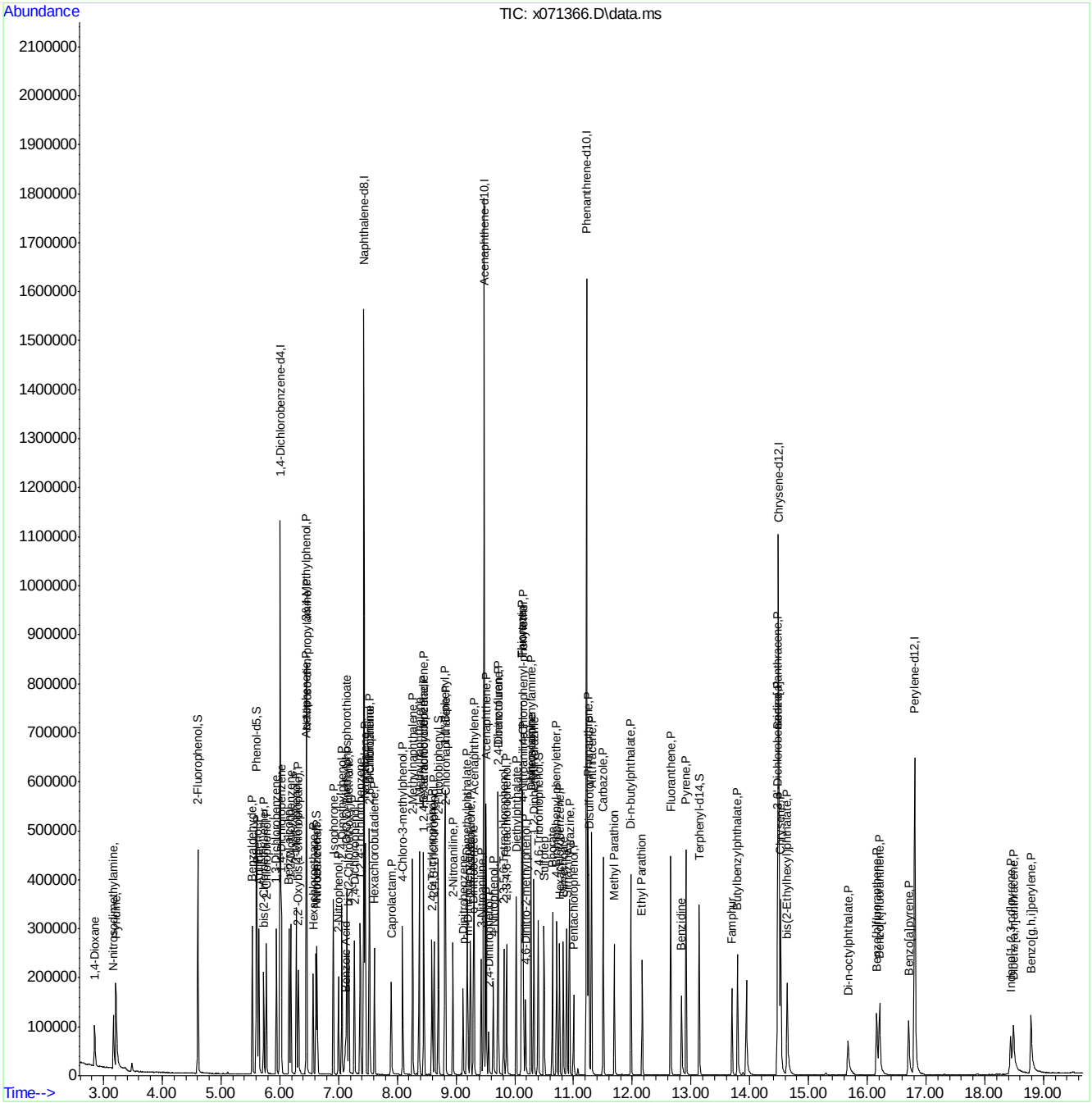
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
82) Atrazine	10.931	200	35344	26.26	ppm		84
83) Pentachlorophenol	11.000	266	15136	18.71	ppm		95
84) Phenanthrene	11.246	178	184650	27.24	ppm		99
85) Anthracene	11.310	178	191041	27.59	ppm		98
86) Disulfoton	11.262	88	77727	24.73	ppm		91
87) Carbazole	11.508	167	170347	27.57	ppm		99
88) Methyl Parathion	11.695	109	41081	26.63	ppm	#	85
89) Di-n-butylphthalate	11.974	149	191605	24.36	ppm		99
90) Ethyl Parathion	12.166	97	22244	21.70	ppm		84
91) Fluoranthene	12.653	202	169848	23.58	ppm		97
93) Benzidine	12.835	184	68168	26.79	ppm		95
94) Pyrene	12.915	202	178407	23.26	ppm		97
96) Famphur	13.696	218	45272	31.33	ppm		85
97) Butylbenzylphthalate	13.792	149	68441	20.35	ppm		87
98) 3,3'-Dichlorobenzidine	14.471	252	38018	18.83	ppm		95
99) Benzo[a]anthracene	14.477	228	130952	20.74	ppm		100
100) Chrysene	14.525	228	140095	22.28	ppm		98
101) bis(2-Ethylhexyl)phtha...	14.637	149	84382	19.34	ppm		96
103) Di-n-octylphthalate	15.675	149	86621	13.22	ppm		93
104) Benzo[b]fluoranthene	16.162	252	79954	15.61	ppm		97
105) Benzo[k]fluoranthene	16.210	252	114793	20.34	ppm		100
106) Benzo[a]pyrene	16.707	252	78804	15.33	ppm		99
107) Indeno[1,2,3-cd]pyrene	18.440	276	47837	10.76	ppm		93
108) Dibenz[a,h]anthracene	18.488	278	62126	12.94	ppm		89
109) Benzo[g,h,i]perylene	18.793	276	83957	16.44	ppm		94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071366.D
Acq On : 23 Jun 2020 2:20 pm
Operator : marthav
Sample : ic2918-10 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 23 16:56:48 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 06/24/20 14:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071367.D
Acq On : 23 Jun 2020 2:46 pm
Operator : marthav
Sample : ic2918-25 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 23 16:57:01 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.010	152	167074	40.00	ppm	0.00
22) Naphthalene-d8	7.433	136	718312	40.00	ppm	0.00
43) Acenaphthene-d10	9.476	164	380711	40.00	ppm	0.00
70) Phenanthrene-d10	11.225	188	643412	40.00	ppm	0.00
92) Chrysene-d12	14.493	240	456853	40.00	ppm	0.00
102) Perylene-d12	16.809	264	354803	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	0.000	152	0m	40.00	ppm	-6.00
120) Naphthalene-d8A	0.000	136	0m	40.00	ppm	-7.43
127) Acenaphthene-d10A	0.000	164	0m	40.00	ppm	-9.48
136) Phenanthrene-d10A	0.000	188	0m	40.00	ppm	-11.22
146) Chrysene-d12A	0.000	240	0m	40.00	ppm	-14.49
153) Perylene-d12A	0.000	264	0m	40.00	ppm	-16.82
System Monitoring Compounds						
7) 2-Fluorophenol	4.609	112	296188	102.86	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 102.86%#			
9) Phenol-d5	5.609	99	352148	113.56	ppm	0.00
Spiked Amount 100.000	Range 10 - 50		Recovery = 113.56%#			
23) Nitrobenzene-d5	6.620	82	184362	53.45	ppm	0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 106.90%			
47) 2-Fluorobiphenyl	8.700	172	337040	58.87	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 117.74%#			
75) 2,4,6-Tribromophenol	10.401	330	66539	78.17	ppm	0.00
Spiked Amount 100.000	Range 33 - 118		Recovery = 78.17%			
95) Terphenyl-d14	13.140	244	305446	49.89	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 99.78%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.844	88	71707	51.29	ppm	# 25
3) N-nitrosodimethylamine	3.164	42	127558	103.64	ppm	# 36
4) Pyridine	3.202	79	176874	60.66	ppm	# 18
5) Benzaldehyde	5.534	106	125669	52.05	ppm	96
6) Aniline	5.646	93	240316	54.85	ppm	84
8) bis(2-Chloroethyl)ether	5.726	93	150380	49.31	ppm	# 74
10) Phenol	5.619	94	202082	51.07	ppm	91
11) 2-Chlorophenol	5.769	128	156153	55.01	ppm	78
12) 1,3-Dichlorobenzene	5.940	146	162398	55.82	ppm	96
13) 1,4-Dichlorobenzene	6.026	146	172045	57.87	ppm	97
14) 1,2-Dichlorobenzene	6.186	146	162906	58.76	ppm	96
15) Benzyl alcohol	6.160	108	109579	58.57	ppm	81
16) 2,2'-Oxybis(1-chloropr...	6.320	45	329775	90.53	ppm	75
17) 2-Methylphenol	6.283	108	153153	60.25	ppm	95
18) Acetophenone	6.454	105	231507	57.68	ppm	97
19) Hexachloroethane	6.566	117	66075	52.47	ppm	90
20) N-Nitroso-di-n-propyla...	6.459	70	123252	59.57	ppm	# 57
21) 3&4-Methylphenol	6.459	108	164224	62.06	ppm	97
24) Nitrobenzene	6.641	77	184755	56.55	ppm	85
25) Isophorone	6.914	82	328957	55.17	ppm	95
26) 2-Nitrophenol	6.999	139	88328	56.16	ppm	74

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071367.D
Acq On : 23 Jun 2020 2:46 pm
Operator : marthav
Sample : ic2918-25 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 23 16:57:01 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
27)	2,4-Dimethylphenol	7.058	107	161238	59.61	ppm		92
28)	O,O,O-Triethylphosphor...	7.149	198	68176	54.22	ppm		81
29)	bis(2-Chloroethoxy)met...	7.176	93	194366	52.22	ppm		95
30)	Benzoic Acid	7.155	105	123126m	60.30	ppm		
31)	2,4-Dichlorophenol	7.272	162	129306	59.63	ppm		97
32)	1,2,4-Trichlorobenzene	7.368	180	130434	53.46	ppm		96
34)	Naphthalene	7.459	128	487020	60.15	ppm		99
35)	4-Chloroaniline	7.524	127	209742	61.76	ppm		89
36)	2,6-Dichlorophenol	7.534	162	134562	60.79	ppm		98
37)	Hexachlorobutadiene	7.609	225	63913	46.95	ppm		99
38)	Caprolactam	7.925	113	55078	61.17	ppm	#	49
39)	4-Chloro-3-methylphenol	8.096	107	140174	59.48	ppm		92
40)	2-Methylnaphthalene	8.262	142	316307	60.41	ppm		97
41)	1-Methylnaphthalene	8.374	142	301274	61.42	ppm		97
42)	1,2,4,5-Tetrachloroben...	8.454	216	130158	51.29	ppm		98
44)	Hexachlorocyclopentadiene	8.449	237	70261	53.87	ppm		96
45)	2,4,6-Trichlorophenol	8.593	196	87035	55.75	ppm		99
46)	2,4,5-Trichlorophenol	8.631	196	95733	57.47	ppm		98
48)	1,1'-Biphenyl	8.813	154	386811	61.69	ppm		100
49)	2-Chloronaphthalene	8.823	162	292275	60.05	ppm		94
50)	2-Nitroaniline	8.946	65	110868	69.86	ppm	#	61
51)	p-Dinitrobenzene	9.123	75	62645	53.81	ppm	#	68
52)	Acenaphthylene	9.310	152	478876	64.29	ppm		99
53)	Dimethylphthalate	9.192	163	330261	59.04	ppm		99
54)	m-Dinitrobenzene	9.203	168	58044	59.74	ppm	#	22
55)	2,6-Dinitrotoluene	9.246	165	78532	58.04	ppm	#	52
56)	o-Dinitrobenzene	9.299	50	77948	96.90	ppm	#	53
57)	Acenaphthene	9.513	153	314387	63.82	ppm		99
58)	3-Nitroaniline	9.433	138	89750	61.64	ppm		91
59)	2,4-Dinitrophenol	9.556	184	35846	55.41	ppm	#	25
60)	Dibenzofuran	9.722	168	422234	62.52	ppm		94
61)	2,4-Dinitrotoluene	9.717	165	103282	60.23	ppm	#	64
62)	4-Nitrophenol	9.642	109	49624	72.02	ppm	#	69
63)	2,3,5,6-Tetrachlorophenol	9.813	232	72401	56.20	ppm		89
64)	2,3,4,6-Tetrachlorophenol	9.866	232	73940	53.77	ppm		88
65)	Fluorene	10.123	166	329261	62.46	ppm		99
66)	4-Chlorophenyl-phenyle...	10.139	204	158495	59.96	ppm		85
67)	Diethylphthalate	10.032	149	335780	60.42	ppm		97
68)	Thionazin	10.118	97	73744	56.30	ppm		100
69)	4-Nitroaniline	10.150	138	101280	67.94	ppm		78
71)	4,6-Dinitro-2-methylph...	10.187	198	54403	61.11	ppm	#	56
72)	n-Nitrosodiphenylamine	10.278	169	296377	83.76	ppm		97
73)	Diphenylamine	10.278	169	296377	71.50	ppm		97
74)	1,2-Diphenylhydrazine	10.326	77	365382	63.08	ppm		92
76)	Sulfotep	10.497	97	54825	60.50	ppm	#	58
77)	Phorate	10.642	75	195293	60.89	ppm		97
78)	4-Bromophenyl-phenylether	10.717	248	76134	51.48	ppm		83
79)	Hexachlorobenzene	10.765	284	71650	42.36	ppm		72
80)	Dimethoate	10.829	87	128904	67.38	ppm		94
81)	Simazine	10.893	201	55700	76.94	ppm		94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071367.D
Acq On : 23 Jun 2020 2:46 pm
Operator : marthav
Sample : ic2918-25 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 23 16:57:01 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration

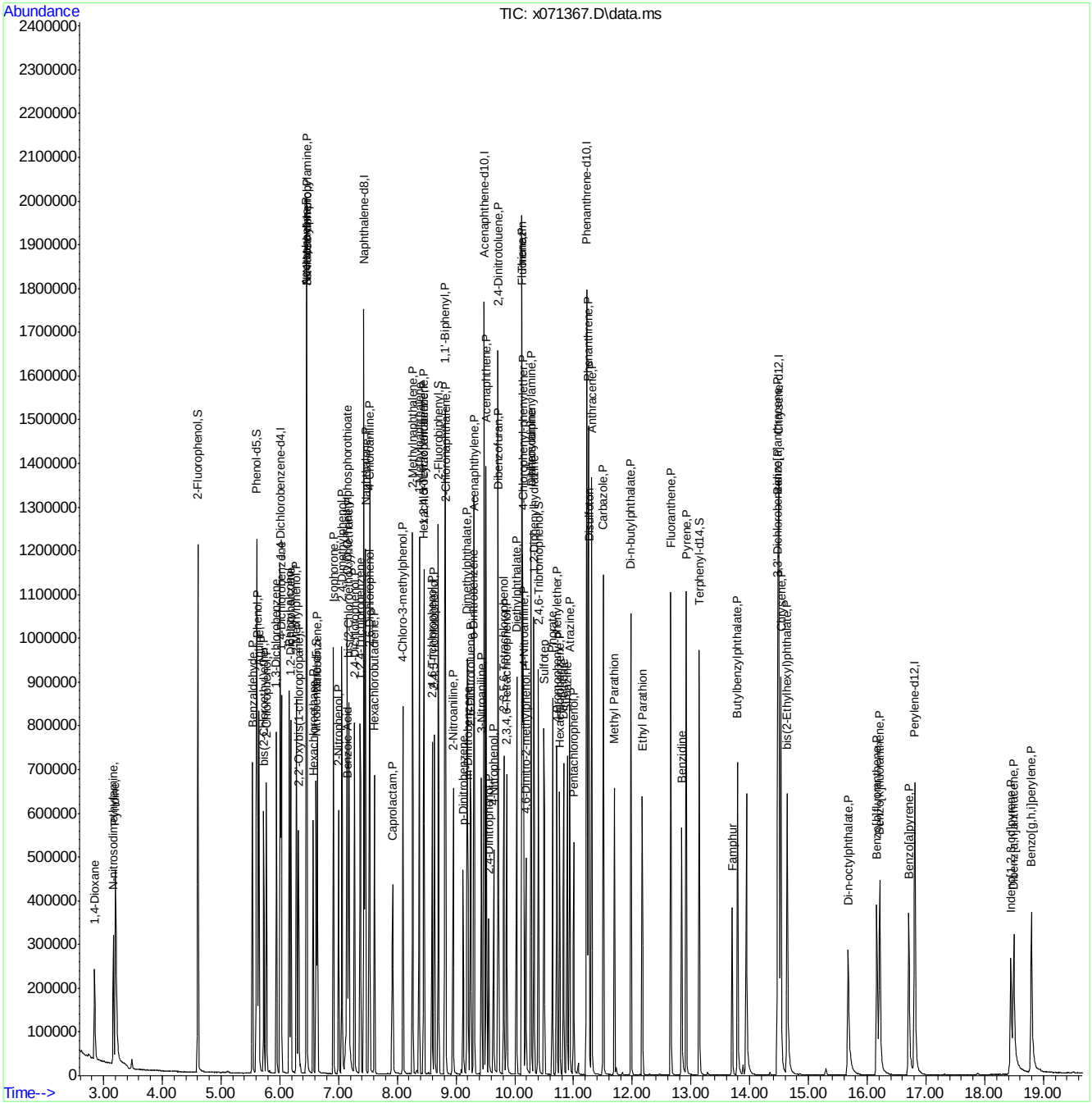
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
82) Atrazine	10.936	200	93870	66.68	ppm		87
83) Pentachlorophenol	11.000	266	45957	54.31	ppm		96
84) Phenanthrene	11.252	178	482902	68.13	ppm		99
85) Anthracene	11.310	178	509170	70.32	ppm		98
86) Disulfoton	11.262	88	206671	62.87	ppm		92
87) Carbazole	11.508	167	451343	69.84	ppm		98
88) Methyl Parathion	11.696	109	111405	69.05	ppm	#	83
89) Di-n-butylphthalate	11.974	149	519074	63.12	ppm		98
90) Ethyl Parathion	12.172	97	62808	58.60	ppm		88
91) Fluoranthene	12.653	202	447785	59.44	ppm		99
93) Benzidine	12.840	184	219352	79.93	ppm		96
94) Pyrene	12.920	202	475210	57.46	ppm		95
96) Famphur	13.701	218	106685	68.46	ppm		93
97) Butylbenzylphthalate	13.792	149	198022	54.61	ppm		88
98) 3,3'-Dichlorobenzidine	14.471	252	115753	53.15	ppm		96
99) Benzo[a]anthracene	14.477	228	354729	52.10	ppm		99
100) Chrysene	14.530	228	378801	55.87	ppm		98
101) bis(2-Ethylhexyl)phtha...	14.637	149	263880	56.09	ppm		95
103) Di-n-octylphthalate	15.675	149	309620	46.43	ppm		92
104) Benzo[b]fluoranthene	16.162	252	243405	46.69	ppm		98
105) Benzo[k]fluoranthene	16.215	252	310730	54.11	ppm		100
106) Benzo[a]pyrene	16.713	252	239153	45.73	ppm		98
107) Indeno[1,2,3-cd]pyrene	18.440	276	157709	34.86	ppm		92
108) Dibenz[a,h]anthracene	18.494	278	181799	37.20	ppm		92
109) Benzo[g,h,i]perylene	18.799	276	230159	44.30	ppm		94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071367.D
Acq On : 23 Jun 2020 2:46 pm
Operator : marthav
Sample : ic2918-25 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 23 16:57:01 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration



Manual Integration Approval Summary

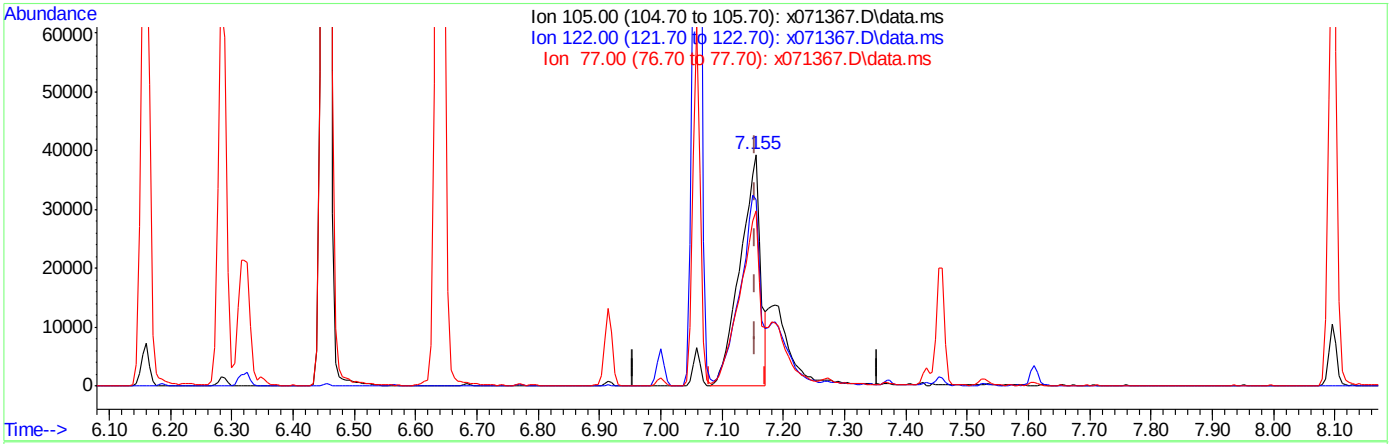
Sample Number:	SX2918-IC2918	**Method:**	EPA 625.1
Lab FileID:	X071367.D	**Analyst approved:**	06/24/20 09:50 Martha Valls
Injection Time:	06/23/20 14:46	**Supervisor approved:**	06/24/20 14:07 Naresh Jiawan

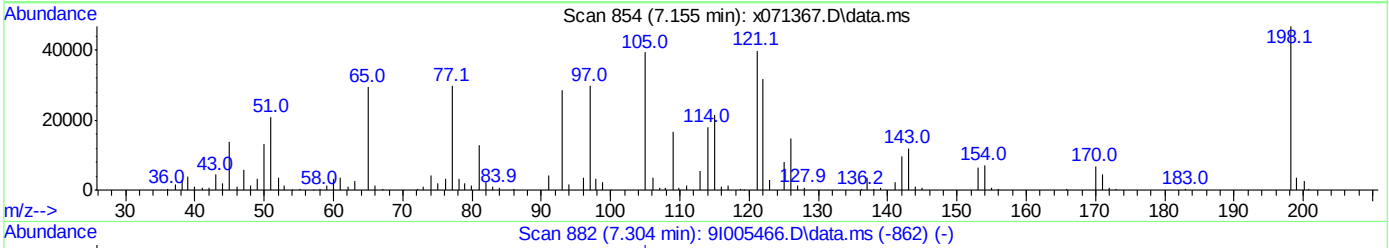
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic Acid	65-85-0		7.15	Split peak

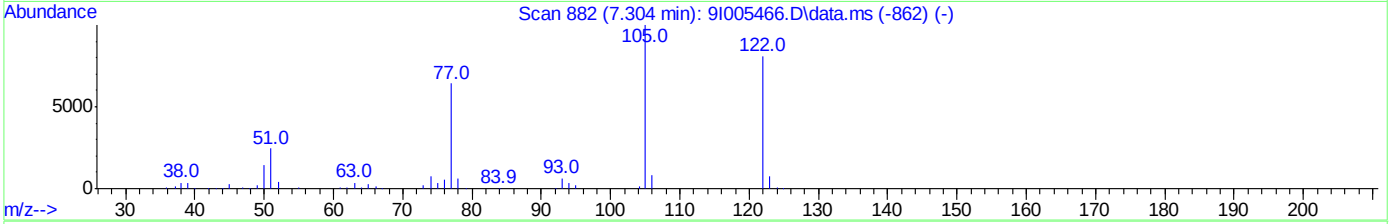
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071367.D
Acq On : 23 Jun 2020 2:46 pm
Operator : marthav
Sample : ic2918-25 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 23 15:19:13 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration







TIC: x071367.D\data.ms

(30) Benzoic Acid

7.155min (0.000) 43.78ppm

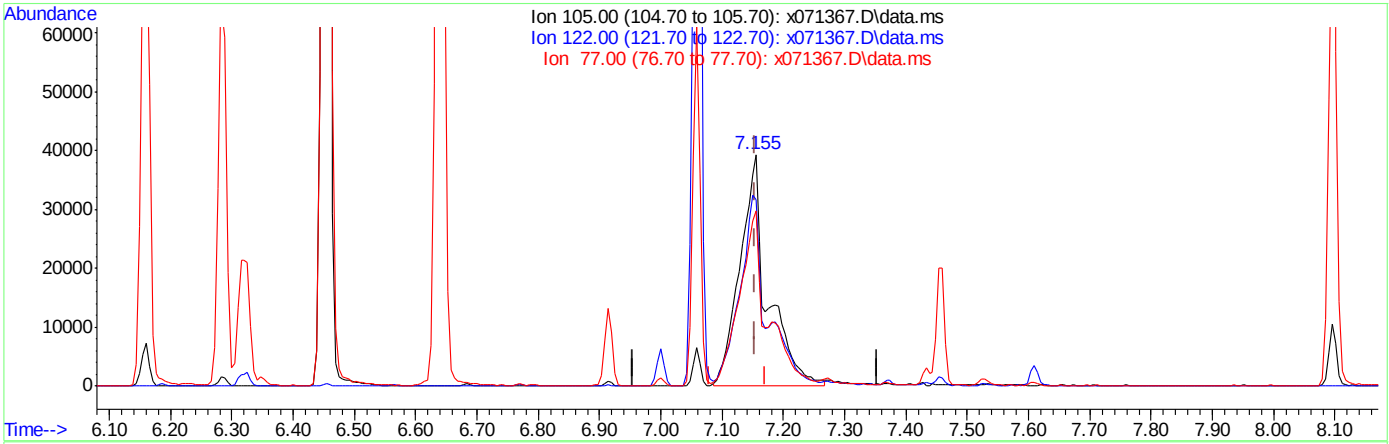
response 89388

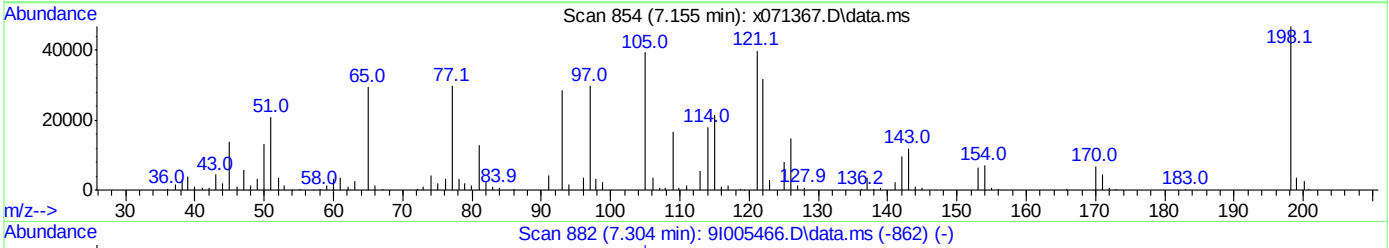
Ion	Exp%	Act%
105.00	100	100
122.00	81.20	79.14
77.00	64.10	74.62
0.00	0.00	0.00

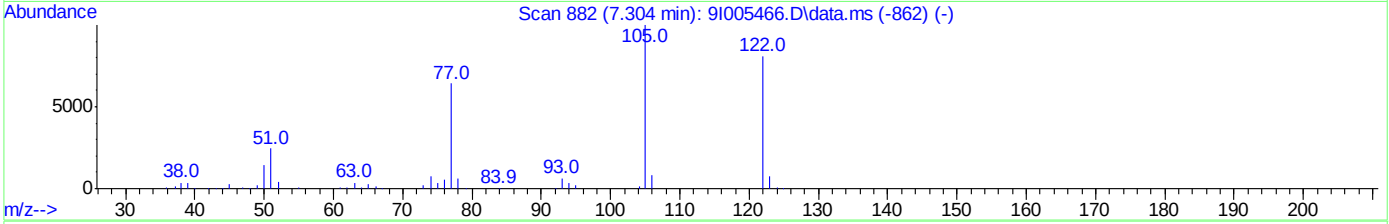
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071367.D
Acq On : 23 Jun 2020 2:46 pm
Operator : marthav
Sample : ic2918-25 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 23 15:19:13 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration







TIC: x071367.D\data.ms

(30) Benzoic Acid

7.155min (0.000) 60.30ppm m

response 123126

Ion	Exp%	Act%
105.00	100	100
122.00	81.20	80.35
77.00	64.10	75.61
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 06/24/20 14:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071368.D
Acq On : 23 Jun 2020 3:12 pm
Operator : marthav
Sample : icc2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 23 16:57:37 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.010	152	170190	40.00	ppm	0.00
22) Naphthalene-d8	7.433	136	730199	40.00	ppm	0.00
43) Acenaphthene-d10	9.481	164	379384	40.00	ppm	0.00
70) Phenanthrene-d10	11.225	188	636433	40.00	ppm	0.00
92) Chrysene-d12	14.498	240	474373	40.00	ppm	0.00
102) Perylene-d12	16.809	264	348798	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	0.000	152	0m	40.00	ppm	-6.00
120) Naphthalene-d8A	0.000	136	0m	40.00	ppm	-7.43
127) Acenaphthene-d10A	0.000	164	0m	40.00	ppm	-9.48
136) Phenanthrene-d10A	0.000	188	0m	40.00	ppm	-11.22
146) Chrysene-d12A	0.000	240	0m	40.00	ppm	-14.49
153) Perylene-d12A	0.000	264	0m	40.00	ppm	-16.82
System Monitoring Compounds						
7) 2-Fluorophenol	4.609	112	581541	198.25	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 198.25%#			
9) Phenol-d5	5.614	99	702165	222.29	ppm	0.00
Spiked Amount 100.000	Range 10 - 50		Recovery = 222.29%#			
23) Nitrobenzene-d5	6.620	82	371628	105.99	ppm	0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 211.98%#			
47) 2-Fluorobiphenyl	8.700	172	687481	120.50	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 241.00%#			
75) 2,4,6-Tribromophenol	10.407	330	141075	167.55	ppm	0.00
Spiked Amount 100.000	Range 33 - 118		Recovery = 167.55%#			
95) Terphenyl-d14	13.140	244	632272	99.47	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 198.94%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.844	88	135258	94.97	ppm	# 29
3) N-nitrosodimethylamine	3.165	42	247597	197.49	ppm	# 34
4) Pyridine	3.202	79	347463	116.98	ppm	# 20
5) Benzaldehyde	5.534	106	244610	99.45	ppm	94
6) Aniline	5.652	93	517495	115.96	ppm	91
8) bis(2-Chloroethyl)ether	5.732	93	310263	99.87	ppm	75
10) Phenol	5.625	94	447918	111.12	ppm	84
11) 2-Chlorophenol	5.775	128	331118	114.52	ppm	81
12) 1,3-Dichlorobenzene	5.941	146	332239	112.10	ppm	96
13) 1,4-Dichlorobenzene	6.026	146	355012	117.23	ppm	97
14) 1,2-Dichlorobenzene	6.187	146	338462	119.85	ppm	95
15) Benzyl alcohol	6.165	108	225749	118.46	ppm	84
16) 2,2'-Oxybis(1-chloropr...	6.326	45	647052	174.37	ppm	77
17) 2-Methylphenol	6.288	108	316556	122.24	ppm	96
18) Acetophenone	6.459	105	458751	112.21	ppm	97
19) Hexachloroethane	6.566	117	133396	104.00	ppm	86
20) N-Nitroso-di-n-propyla...	6.470	70	245638	116.54	ppm	# 66
21) 3&4-Methylphenol	6.465	108	325992	120.95	ppm	97
24) Nitrobenzene	6.647	77	370334	111.50	ppm	86
25) Isophorone	6.919	82	648108	106.92	ppm	96
26) 2-Nitrophenol	7.000	139	179002	111.96	ppm	81

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071368.D
Acq On : 23 Jun 2020 3:12 pm
Operator : marthav
Sample : icc2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 23 16:57:37 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
27)	2,4-Dimethylphenol	7.064	107	328379	119.42	ppm		93
28)	O,O,O-Triethylphosphor...	7.155	198	137643	107.68	ppm		88
29)	bis(2-Chloroethoxy)met...	7.181	93	384175	101.55	ppm		96
30)	Benzoic Acid	7.176	105	281742m	135.74	ppm		
31)	2,4-Dichlorophenol	7.278	162	269208	122.13	ppm		97
32)	1,2,4-Trichlorobenzene	7.374	180	263849	106.37	ppm		97
34)	Naphthalene	7.460	128	978658	118.90	ppm		99
35)	4-Chloroaniline	7.529	127	417641	120.97	ppm		91
36)	2,6-Dichlorophenol	7.534	162	269840	119.92	ppm		97
37)	Hexachlorobutadiene	7.609	225	130690	94.44	ppm		99
38)	Caprolactam	7.952	113	108415	118.45	ppm	#	53
39)	4-Chloro-3-methylphenol	8.101	107	280801	117.22	ppm		93
40)	2-Methylnaphthalene	8.262	142	638104	119.89	ppm		98
41)	1-Methylnaphthalene	8.374	142	612512	122.84	ppm		97
42)	1,2,4,5-Tetrachloroben...	8.460	216	270199	104.75	ppm		97
44)	Hexachlorocyclopentadiene	8.449	237	154031	118.51	ppm		98
45)	2,4,6-Trichlorophenol	8.593	196	180184	115.82	ppm		97
46)	2,4,5-Trichlorophenol	8.636	196	195993	118.08	ppm		99
48)	1,1'-Biphenyl	8.813	154	774415	123.94	ppm		99
49)	2-Chloronaphthalene	8.829	162	587674	121.17	ppm		96
50)	2-Nitroaniline	8.952	65	217159	137.31	ppm	#	65
51)	p-Dinitrobenzene	9.123	75	126328	108.90	ppm	#	60
52)	Acenaphthylene	9.310	152	963028	129.74	ppm		99
53)	Dimethylphthalate	9.198	163	651563	116.88	ppm		99
54)	m-Dinitrobenzene	9.209	168	117437	121.30	ppm	#	25
55)	2,6-Dinitrotoluene	9.251	165	162115	120.23	ppm		76
56)	o-Dinitrobenzene	9.310	50	147548	184.06	ppm	#	63
57)	Acenaphthene	9.519	153	622009	126.70	ppm		98
58)	3-Nitroaniline	9.439	138	180019	124.06	ppm		89
59)	2,4-Dinitrophenol	9.562	184	83541	129.58	ppm	#	41
60)	Dibenzofuran	9.722	168	822372	122.20	ppm		93
61)	2,4-Dinitrotoluene	9.722	165	205436	120.22	ppm	#	67
62)	4-Nitrophenol	9.647	109	98995	144.17	ppm	#	66
63)	2,3,5,6-Tetrachlorophenol	9.818	232	149105	116.15	ppm		93
64)	2,3,4,6-Tetrachlorophenol	9.866	232	150195	109.60	ppm		85
65)	Fluorene	10.123	166	646099	122.99	ppm		98
66)	4-Chlorophenyl-phenyle...	10.145	204	316481	120.15	ppm		92
67)	Diethylphthalate	10.038	149	662960	119.71	ppm		98
68)	Thionazin	10.129	97	142705	109.33	ppm		97
69)	4-Nitroaniline	10.166	138	196264	132.11	ppm		85
71)	4,6-Dinitro-2-methylph...	10.198	198	118222	134.24	ppm		89
72)	n-Nitrosodiphenylamine	10.284	169	584050	166.87	ppm		97
73)	Diphenylamine	10.284	169	584050	142.45	ppm		97
74)	1,2-Diphenylhydrazine	10.326	77	718418	125.39	ppm		91
76)	Sulfotep	10.503	97	109712	122.40	ppm	#	73
77)	Phorate	10.642	75	385046	121.36	ppm		96
78)	4-Bromophenyl-phenylether	10.717	248	152873	104.50	ppm	#	81
79)	Hexachlorobenzene	10.765	284	150881	90.19	ppm		69
80)	Dimethoate	10.835	87	254067	134.25	ppm		94
81)	Simazine	10.904	201	110243	153.95	ppm		95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071368.D
Acq On : 23 Jun 2020 3:12 pm
Operator : marthav
Sample : icc2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 23 16:57:37 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration

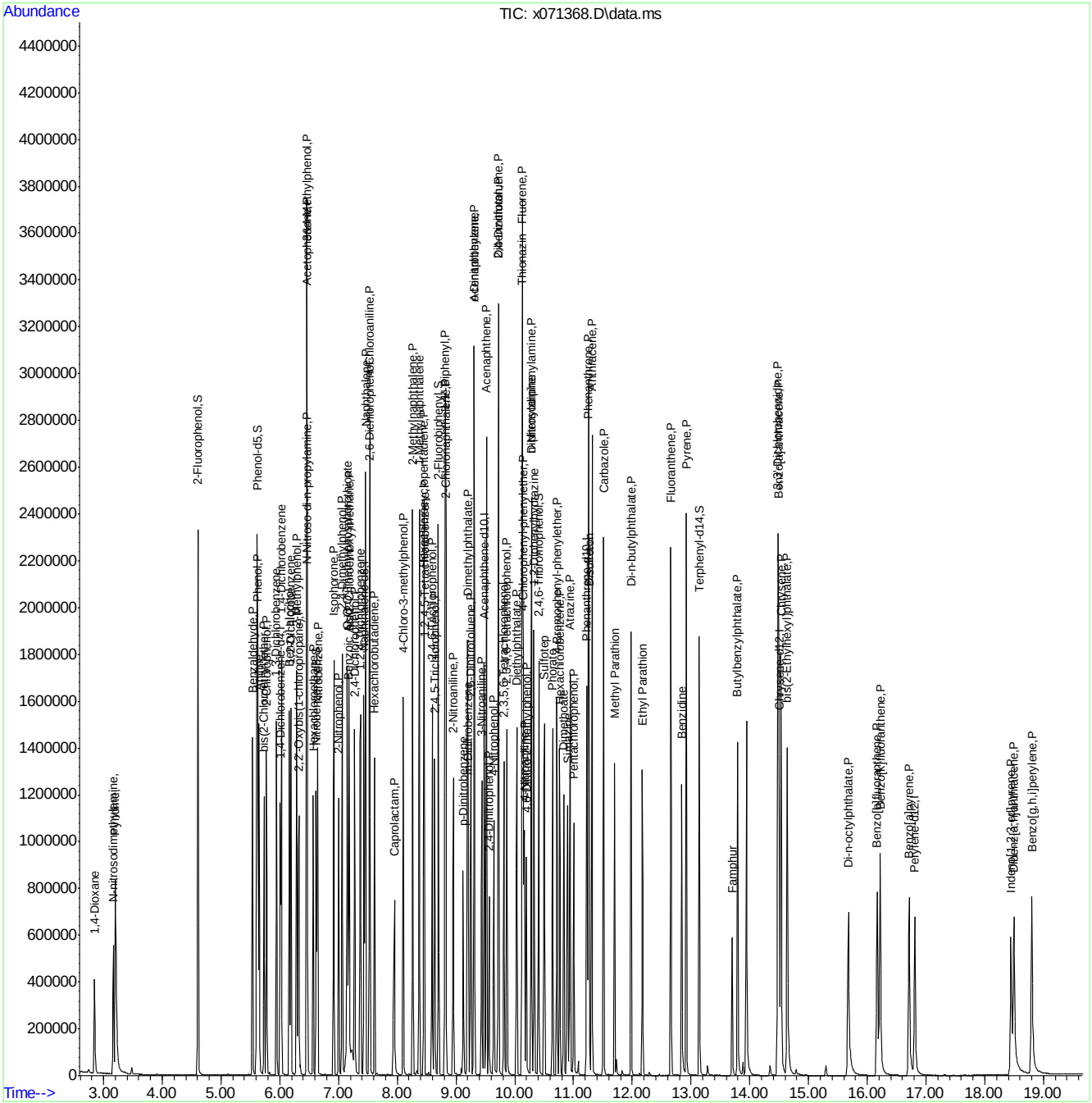
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
82) Atrazine	10.941	200	186308	133.80	ppm		88
83) Pentachlorophenol	11.006	266	102560	122.54	ppm		98
84) Phenanthrene	11.252	178	955958	136.34	ppm		99
85) Anthracene	11.316	178	1017200	142.02	ppm		98
86) Disulfoton	11.268	88	401616	123.51	ppm		90
87) Carbazole	11.514	167	882727	138.09	ppm		98
88) Methyl Parathion	11.701	109	218419	136.86	ppm	#	88
89) Di-n-butylphthalate	11.979	149	1036569	127.42	ppm		98
90) Ethyl Parathion	12.172	97	126325	119.15	ppm		87
91) Fluoranthene	12.658	202	894676	120.07	ppm		97
93) Benzidine	12.840	184	473506	166.17	ppm		98
94) Pyrene	12.920	202	967727	112.69	ppm		97
96) Famphur	13.701	218	170704	105.50	ppm		92
97) Butylbenzylphthalate	13.792	149	404219	107.36	ppm		87
98) 3,3'-Dichlorobenzidine	14.477	252	252309	111.58	ppm		97
99) Benzo[a]anthracene	14.482	228	739664	104.62	ppm		99
100) Chrysene	14.536	228	782608	111.17	ppm		99
101) bis(2-Ethylhexyl)phtha...	14.637	149	568149	116.31	ppm		96
103) Di-n-octylphthalate	15.680	149	709158	108.17	ppm		93
104) Benzo[b]fluoranthene	16.167	252	507571	99.05	ppm		99
105) Benzo[k]fluoranthene	16.221	252	615358	109.00	ppm		99
106) Benzo[a]pyrene	16.718	252	488606	95.04	ppm		99
107) Indeno[1,2,3-cd]pyrene	18.446	276	334683	75.26	ppm		90
108) Dibenz[a,h]anthracene	18.499	278	380638	79.23	ppm		93
109) Benzo[g,h,i]perylene	18.804	276	470714	92.15	ppm		94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071368.D
Acq On : 23 Jun 2020 3:12 pm
Operator : marthav
Sample : icc2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 23 16:57:37 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration



Manual Integration Approval Summary

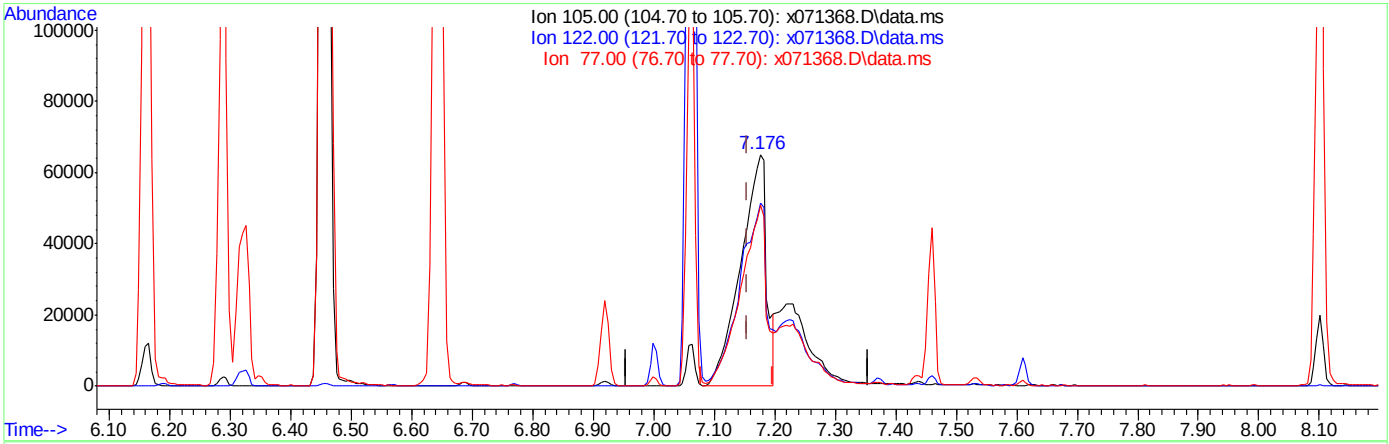
Sample Number:	SX2918-ICC2918	**Method:**	EPA 625.1
Lab FileID:	X071368.D	**Analyst approved:**	06/24/20 09:50 Martha Valls
Injection Time:	06/23/20 15:12	**Supervisor approved:**	06/24/20 14:07 Naresh Jiawan

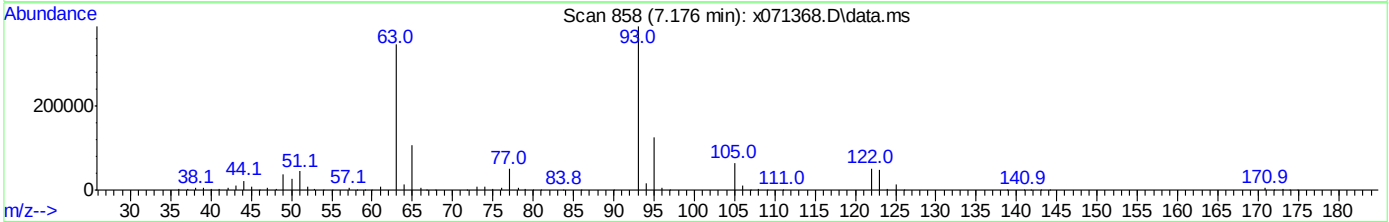
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic Acid	65-85-0		7.18	Split peak

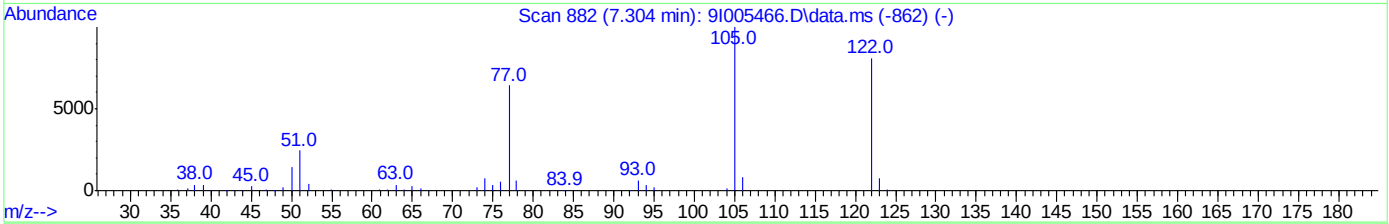
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071368.D
Acq On : 23 Jun 2020 3:12 pm
Operator : marthav
Sample : icc2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 23 15:47:06 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration







TIC: x071368.D\data.ms

(30) Benzoic Acid

7.176min (+0.022) 92.98ppm

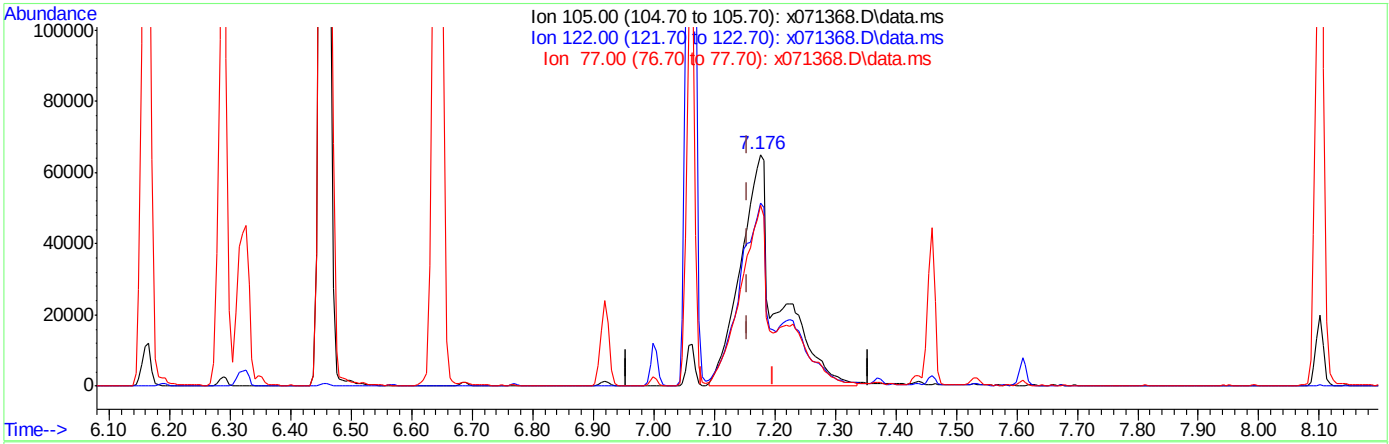
response 192977

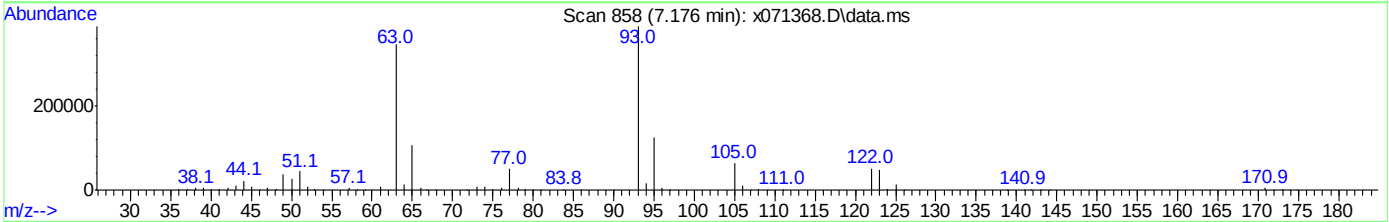
Ion	Exp%	Act%
105.00	100	100
122.00	81.20	77.04
77.00	64.10	77.97
0.00	0.00	0.00

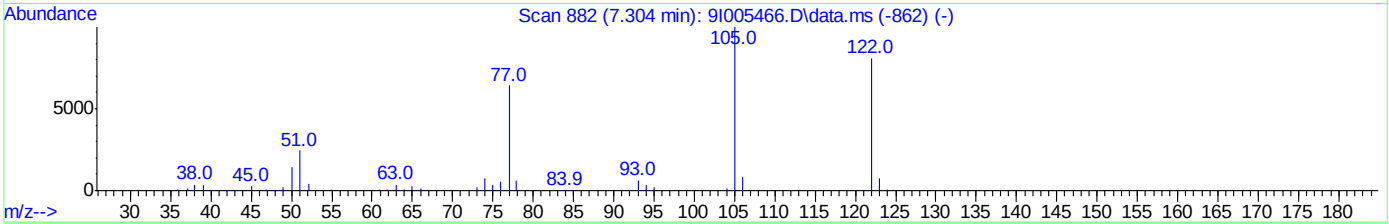
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071368.D
Acq On : 23 Jun 2020 3:12 pm
Operator : marthav
Sample : icc2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 23 15:47:06 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration







TIC: x071368.D\data.ms

(30) Benzoic Acid

7.176min (+0.022) 135.74ppm m

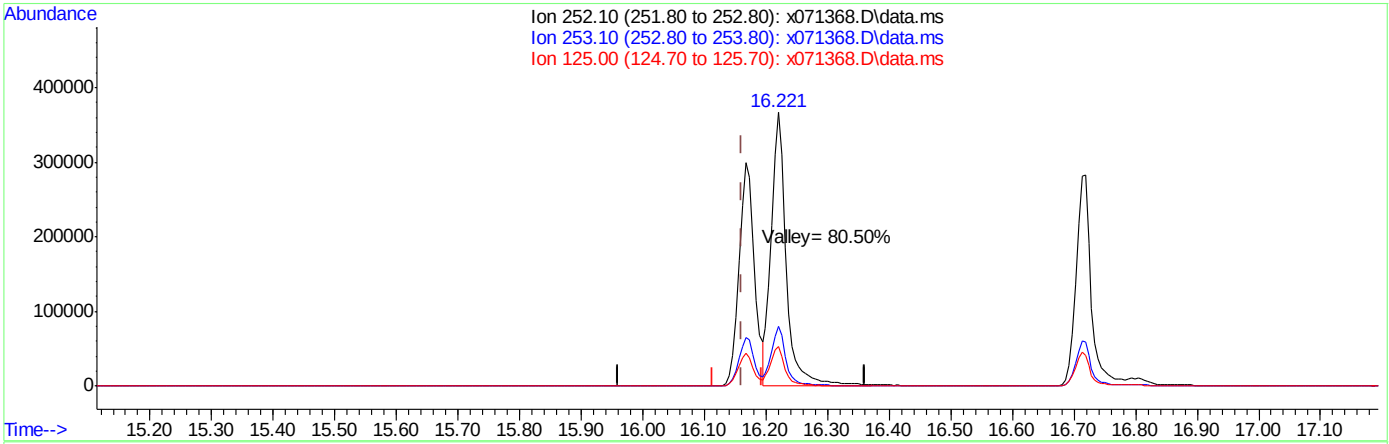
response 281742

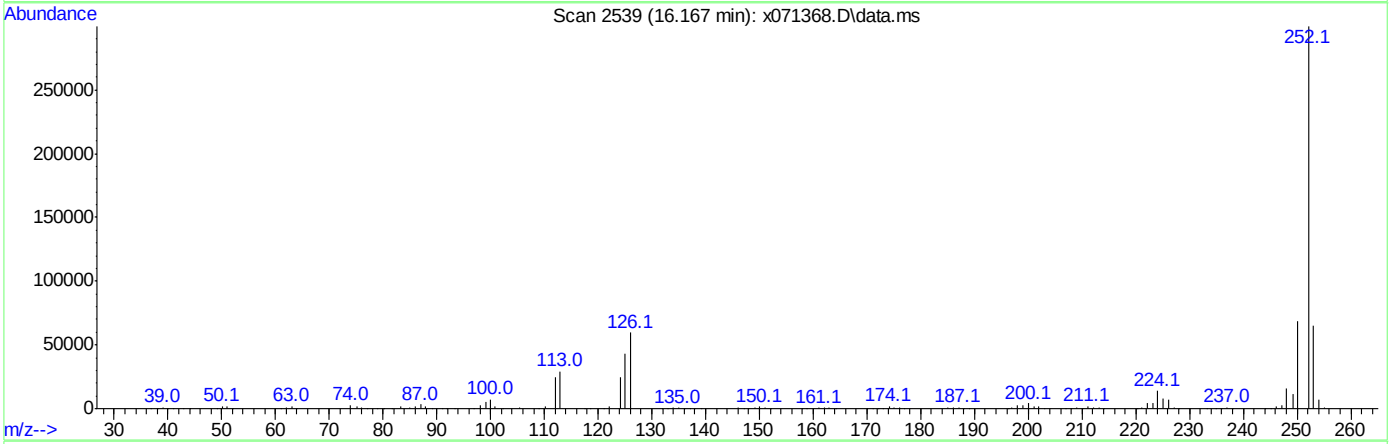
Ion	Exp%	Act%
105.00	100	100
122.00	81.20	79.16
77.00	64.10	77.84
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071368.D
Acq On : 23 Jun 2020 3:12 pm
Operator : marthav
Sample : icc2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 23 16:57:37 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration





TIC: x071368.D\data.ms

(104) Benzo[b]fluoranthene (P)

16.167min (+0.005) 99.05ppm

response 507571

Ion	Exp%	Act%
252.10	100	100
253.10	22.50	21.85
125.00	14.00	14.47
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 06/24/20 14:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071369.D
Acq On : 23 Jun 2020 3:39 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 23 16:57:50 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.010	152	174295	40.00	ppm	0.00
22) Naphthalene-d8	7.438	136	737140	40.00	ppm	0.00
43) Acenaphthene-d10	9.481	164	387286	40.00	ppm	0.00
70) Phenanthrene-d10	11.225	188	649330	40.00	ppm	0.00
92) Chrysene-d12	14.498	240	486162	40.00	ppm	0.00
102) Perylene-d12	16.814	264	350182	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	0.000	152	0m	40.00	ppm	-6.00
120) Naphthalene-d8A	0.000	136	0m	40.00	ppm	-7.43
127) Acenaphthene-d10A	0.000	164	0m	40.00	ppm	-9.48
136) Phenanthrene-d10A	0.000	188	0m	40.00	ppm	-11.22
146) Chrysene-d12A	0.000	240	0m	40.00	ppm	-14.49
153) Perylene-d12A	0.000	264	0m	40.00	ppm	-16.82
System Monitoring Compounds						
7) 2-Fluorophenol	4.608	112	736130	245.04	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 245.04%#			
9) Phenol-d5	5.614	99	889040	274.83	ppm	0.00
Spiked Amount 100.000	Range 10 - 50		Recovery = 274.83%#			
23) Nitrobenzene-d5	6.625	82	467597	132.10	ppm	0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 264.20%#			
47) 2-Fluorobiphenyl	8.705	172	862858	148.15	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 296.30%#			
75) 2,4,6-Tribromophenol	10.412	330	183053	213.09	ppm	0.01
Spiked Amount 100.000	Range 33 - 118		Recovery = 213.09%#			
95) Terphenyl-d14	13.145	244	807081	123.89	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 247.78%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.843	88	168471	115.50	ppm	# 32
3) N-nitrosodimethylamine	3.170	42	314954	245.30	ppm	# 36
4) Pyridine	3.202	79	431489	141.85	ppm	# 17
5) Benzaldehyde	5.534	106	306979	121.87	ppm	93
6) Aniline	5.651	93	653163	142.91	ppm	86
8) bis(2-Chloroethyl)ether	5.732	93	391334	123.00	ppm	75
10) Phenol	5.630	94	570547	138.21	ppm	86
11) 2-Chlorophenol	5.774	128	418524	141.34	ppm	81
12) 1,3-Dichlorobenzene	5.946	146	419455	138.20	ppm	98
13) 1,4-Dichlorobenzene	6.026	146	443073	142.87	ppm	97
14) 1,2-Dichlorobenzene	6.192	146	426380	147.42	ppm	98
15) Benzyl alcohol	6.165	108	283907	145.47	ppm	81
16) 2,2'-Oxybis(1-chloropr...	6.325	45	790430	207.99	ppm	77
17) 2-Methylphenol	6.288	108	392943	148.17	ppm	96
18) Acetophenone	6.459	105	565958	135.17	ppm	96
19) Hexachloroethane	6.566	117	166318	126.61	ppm	86
20) N-Nitroso-di-n-propyla...	6.470	70	299849	138.91	ppm	# 64
21) 3&4-Methylphenol	6.464	108	405941	147.06	ppm	95
24) Nitrobenzene	6.646	77	463119	138.12	ppm	84
25) Isophorone	6.924	82	810323	132.42	ppm	97
26) 2-Nitrophenol	7.005	139	228478	141.56	ppm	76

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071369.D
Acq On : 23 Jun 2020 3:39 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 23 16:57:50 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
27)	2,4-Dimethylphenol	7.063	107	416013	149.86	ppm		92
28)	O,O,O-Triethylphosphor...	7.154	198	173675	134.58	ppm		79
29)	bis(2-Chloroethoxy)met...	7.181	93	482396	126.31	ppm		96
30)	Benzoic Acid	7.192	105	368165m	175.71	ppm		
31)	2,4-Dichlorophenol	7.277	162	341207	153.34	ppm		96
32)	1,2,4-Trichlorobenzene	7.374	180	334150	133.45	ppm		98
34)	Naphthalene	7.459	128	1209565	145.57	ppm		99
35)	4-Chloroaniline	7.529	127	517431	148.46	ppm		89
36)	2,6-Dichlorophenol	7.534	162	336531	148.15	ppm		96
37)	Hexachlorobutadiene	7.614	225	166131	118.92	ppm		99
38)	Caprolactam	7.962	113	138158	149.52	ppm	#	52
39)	4-Chloro-3-methylphenol	8.101	107	354807	146.72	ppm		93
40)	2-Methylnaphthalene	8.262	142	793056	147.60	ppm		98
41)	1-Methylnaphthalene	8.379	142	771536	153.27	ppm		98
42)	1,2,4,5-Tetrachloroben...	8.459	216	337842	129.74	ppm		99
44)	Hexachlorocyclopentadiene	8.454	237	196644	148.21	ppm		98
45)	2,4,6-Trichlorophenol	8.593	196	226012	142.32	ppm		97
46)	2,4,5-Trichlorophenol	8.636	196	250094	147.60	ppm		99
48)	1,1'-Biphenyl	8.818	154	970793	152.20	ppm		99
49)	2-Chloronaphthalene	8.829	162	734690	148.39	ppm		95
50)	2-Nitroaniline	8.957	65	273674	169.52	ppm	#	71
51)	p-Dinitrobenzene	9.128	75	161352	136.26	ppm	#	67
52)	Acenaphthylene	9.315	152	1199982	158.37	ppm		99
53)	Dimethylphthalate	9.198	163	828709	145.62	ppm		99
54)	m-Dinitrobenzene	9.214	168	148275	150.03	ppm	#	40
55)	2,6-Dinitrotoluene	9.256	165	202871	147.39	ppm		78
56)	o-Dinitrobenzene	9.310	50	181502	221.80	ppm	#	59
57)	Acenaphthene	9.518	153	781995	156.04	ppm		98
58)	3-Nitroaniline	9.444	138	226359	152.81	ppm		94
59)	2,4-Dinitrophenol	9.561	184	111911	170.04	ppm	#	26
60)	Dibenzofuran	9.722	168	1035619	150.74	ppm		92
61)	2,4-Dinitrotoluene	9.722	165	259054	148.50	ppm	#	63
62)	4-Nitrophenol	9.652	109	127212	181.48	ppm	#	68
63)	2,3,5,6-Tetrachlorophenol	9.818	232	191147	145.87	ppm		91
64)	2,3,4,6-Tetrachlorophenol	9.871	232	192270	137.44	ppm		90
65)	Fluorene	10.128	166	807040	150.50	ppm		99
66)	4-Chlorophenyl-phenyle...	10.144	204	401786	149.43	ppm		91
67)	Diethylphthalate	10.037	149	842703	149.06	ppm		97
68)	Thionazin	10.134	97	179844	134.97	ppm		97
69)	4-Nitroaniline	10.171	138	251396	165.77	ppm		84
71)	4,6-Dinitro-2-methylph...	10.198	198	155251	172.79	ppm		64
72)	n-Nitrosodiphenylamine	10.289	169	740920	207.48	ppm		97
73)	Diphenylamine	10.289	169	740920	177.13	ppm		97
74)	1,2-Diphenylhydrazine	10.331	77	901177	154.16	ppm		94
76)	Sulfotep	10.503	97	138038	150.95	ppm	#	68
77)	Phorate	10.647	75	488040	150.77	ppm		98
78)	4-Bromophenyl-phenylether	10.717	248	198083	132.71	ppm	#	80
79)	Hexachlorobenzene	10.770	284	192411	112.73	ppm		78
80)	Dimethoate	10.840	87	324379	168.00	ppm		93
81)	Simazine	10.909	201	141563	193.75	ppm		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071369.D
Acq On : 23 Jun 2020 3:39 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 23 16:57:50 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration

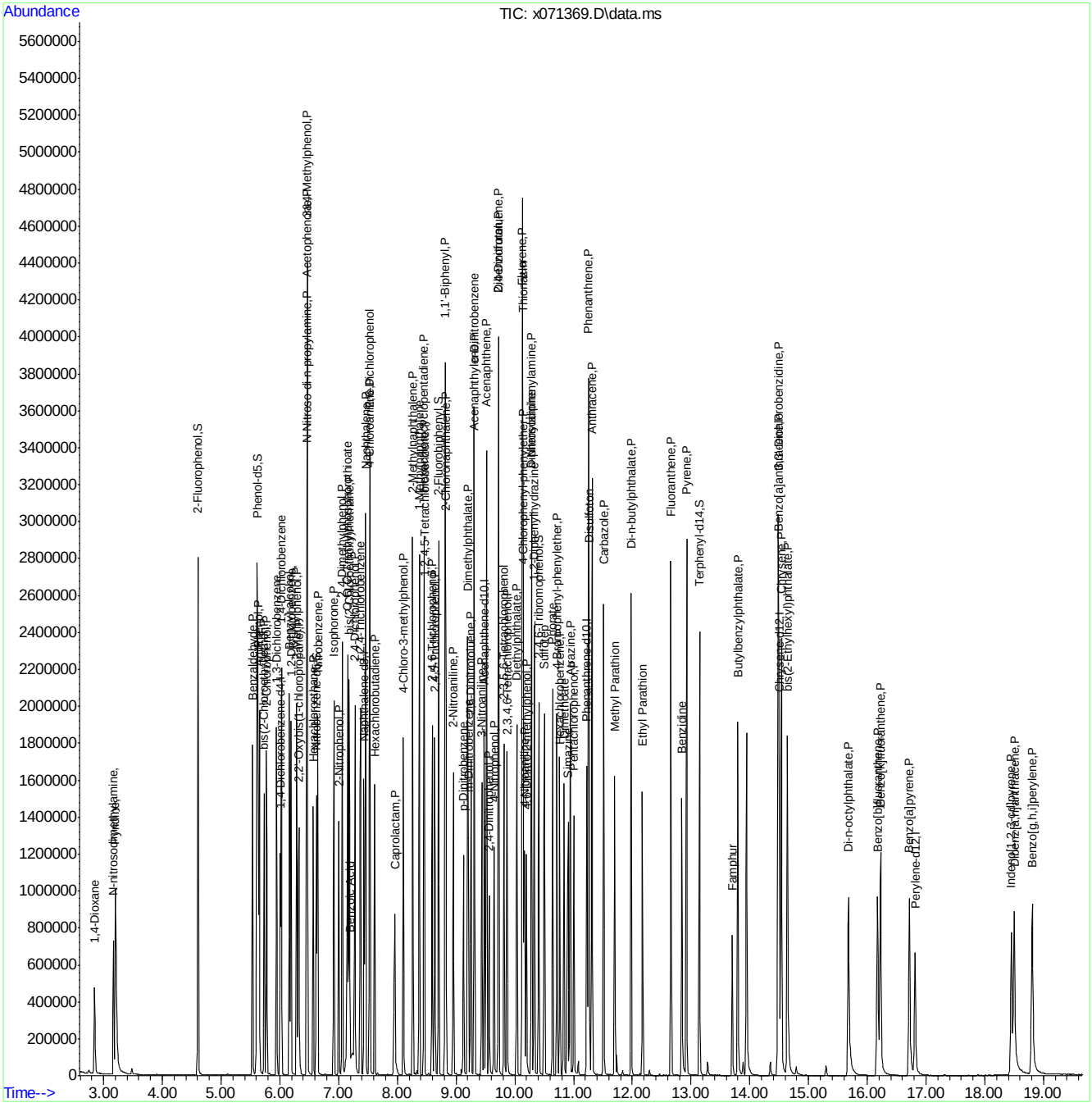
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
82) Atrazine	10.947	200	241370	169.90	ppm		93
83) Pentachlorophenol	11.005	266	132964	155.71	ppm		98
84) Phenanthrene	11.257	178	1187834	166.05	ppm		99
85) Anthracene	11.316	178	1278417	174.94	ppm		98
86) Disulfoton	11.267	88	504419	152.04	ppm		91
87) Carbazole	11.519	167	1125795	172.62	ppm		98
88) Methyl Parathion	11.701	109	277600	170.49	ppm	#	87
89) Di-n-butylphthalate	11.979	149	1311478	158.01	ppm		98
90) Ethyl Parathion	12.171	97	165428	152.93	ppm		86
91) Fluoranthene	12.658	202	1151897	151.51	ppm		98
93) Benzidine	12.845	184	611414	209.37	ppm		98
94) Pyrene	12.926	202	1254185	142.51	ppm		94
96) Famphur	13.701	218	199377	120.23	ppm		86
97) Butylbenzylphthalate	13.797	149	525040	136.07	ppm		92
98) 3,3'-Dichlorobenzidine	14.482	252	323705	139.68	ppm		96
99) Benzo[a]anthracene	14.487	228	942720	130.11	ppm		99
100) Chrysene	14.536	228	1006458	139.50	ppm		98
101) bis(2-Ethylhexyl)phtha...	14.642	149	730142	145.85	ppm		96
103) Di-n-octylphthalate	15.680	149	926997	140.84	ppm		94
104) Benzo[b]fluoranthene	16.172	252	652829	126.89	ppm		98
105) Benzo[k]fluoranthene	16.226	252	789311	139.26	ppm		99
106) Benzo[a]pyrene	16.718	252	624413	120.97	ppm		97
107) Indeno[1,2,3-cd]pyrene	18.451	276	443513	99.33	ppm		91
108) Dibenz[a,h]anthracene	18.504	278	504897	104.68	ppm		93
109) Benzo[g,h,i]perylene	18.814	276	611844	119.31	ppm		96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071369.D
Acq On : 23 Jun 2020 3:39 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 23 16:57:50 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: SX2918-IC2918
Lab FileID: X071369.D
Injection Time: 06/23/20 15:39

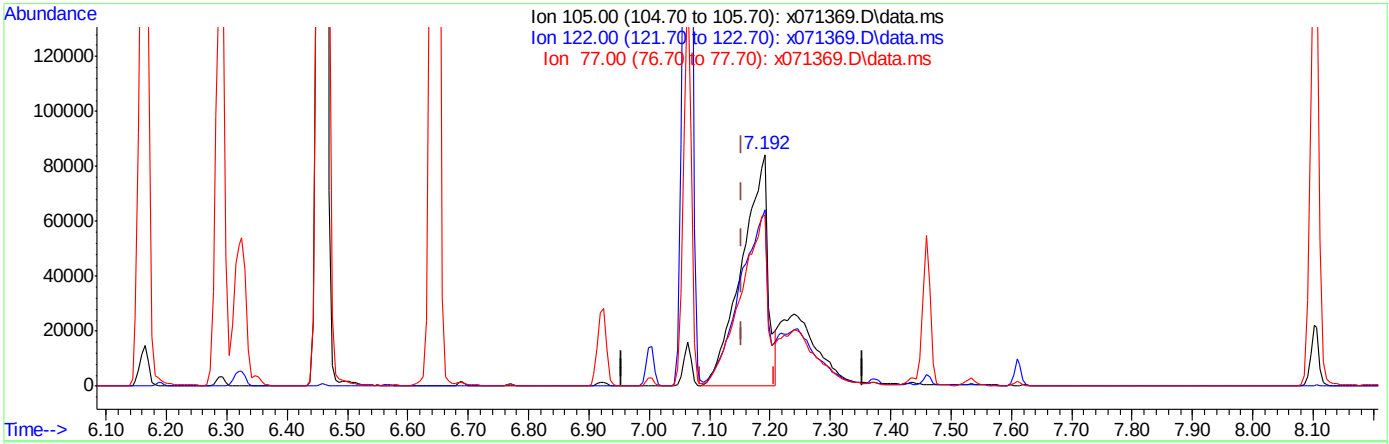
Method: EPA 625.1
Analyst approved: 06/24/20 09:50 Martha Valls
Supervisor approved: 06/24/20 14:07 Naresh Jiawan

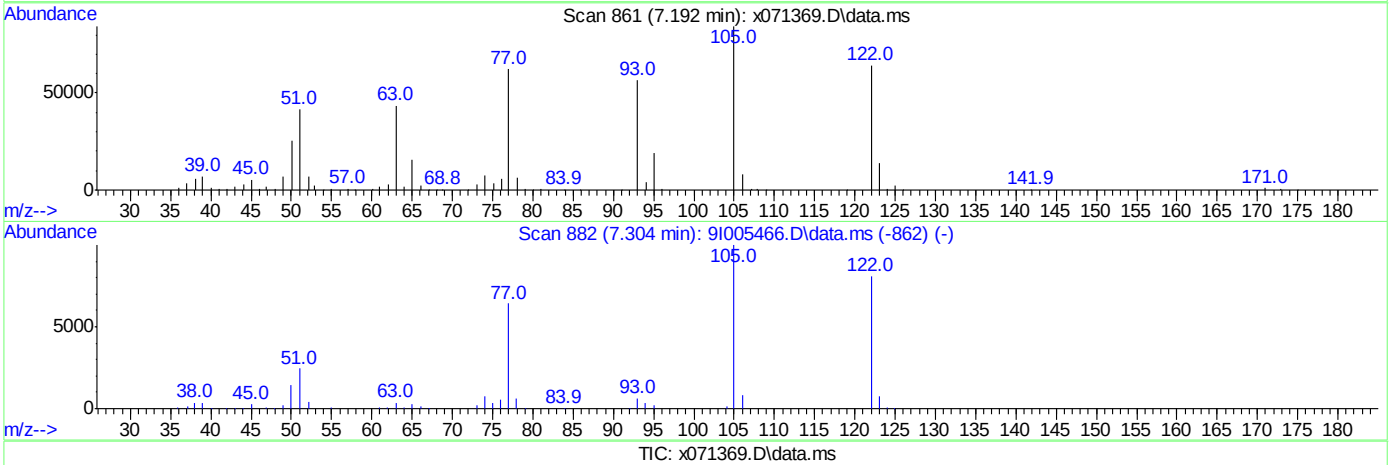
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic Acid	65-85-0		7.19	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071369.D
Acq On : 23 Jun 2020 3:39 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 23 16:03:31 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration





TIC: x071369.D\data.ms

(30) Benzoic Acid

7.192min (+0.037) 120.63ppm

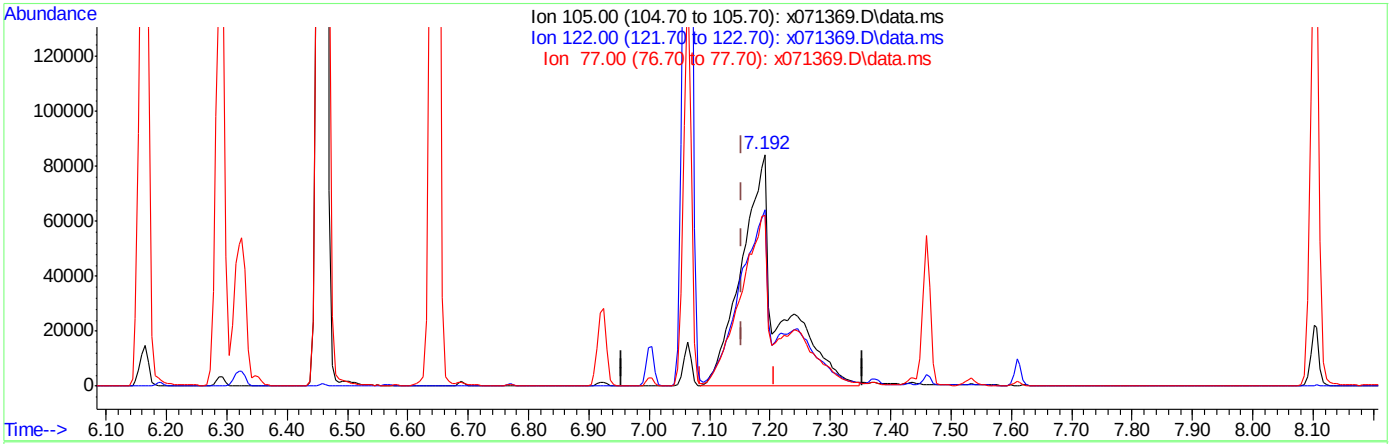
response 252754

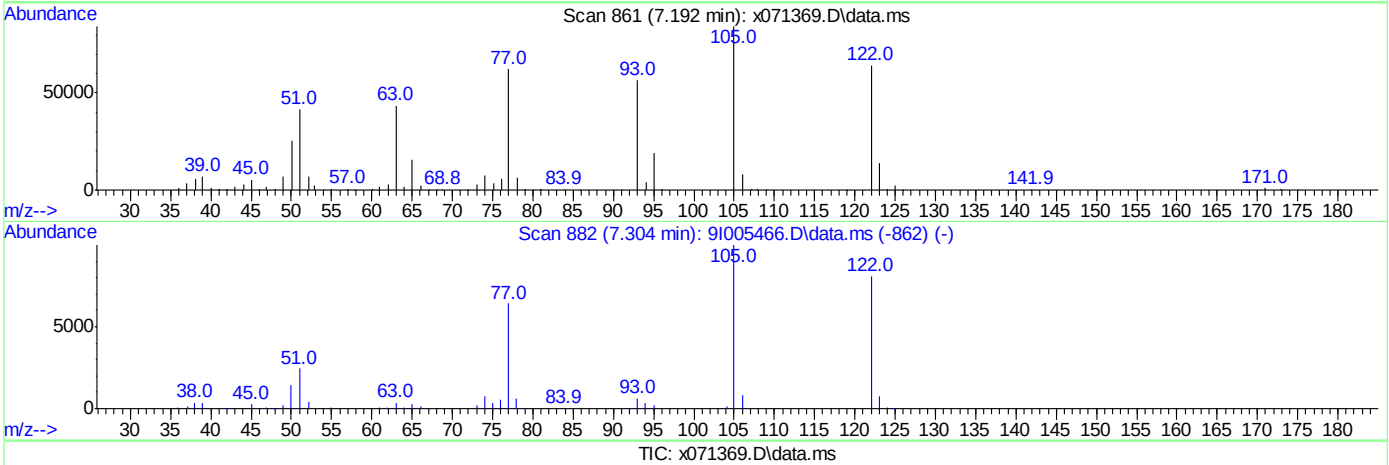
Ion	Exp%	Act%
105.00	100	100
122.00	81.20	74.21
77.00	64.10	72.76
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071369.D
Acq On : 23 Jun 2020 3:39 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 23 16:03:31 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration





TIC: x071369.D\data.ms

(30) Benzoic Acid

7.192min (+0.037) 175.71ppm m

response 368165

Ion	Exp%	Act%
105.00	100	100
122.00	81.20	76.12
77.00	64.10	73.68
0.00	0.00	0.00

X071370.D

Manual Integrations APPROVED (compounds with "m" flag)

Naresh Jiawan 06/24/20 14:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071370.D
Acq On : 23 Jun 2020 4:05 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jun 23 16:58:06 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:33:00 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.010	152	184182	40.00	ppm	0.00
22) Naphthalene-d8	7.438	136	795596	40.00	ppm	0.00
43) Acenaphthene-d10	9.481	164	415197	40.00	ppm	0.00
70) Phenanthrene-d10	11.225	188	687369	40.00	ppm	0.00
92) Chrysene-d12	14.498	240	513475	40.00	ppm	0.00
102) Perylene-d12	16.814	264	367168	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	0.000	152	0m	40.00	ppm	-6.00
120) Naphthalene-d8A	0.000	136	0m	40.00	ppm	-7.43
127) Acenaphthene-d10A	0.000	164	0m	40.00	ppm	-9.48
136) Phenanthrene-d10A	0.000	188	0m	40.00	ppm	-11.22
146) Chrysene-d12A	0.000	240	0m	40.00	ppm	-14.49
153) Perylene-d12A	0.000	264	0m	40.00	ppm	-16.82
System Monitoring Compounds						
7) 2-Fluorophenol	4.614	112	993932	313.10	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 313.10%#			
9) Phenol-d5	5.620	99	1229702	359.73	ppm	0.01
Spiked Amount 100.000	Range 10 - 50		Recovery = 359.73%#			
23) Nitrobenzene-d5	6.625	82	632075	165.45	ppm	0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 330.90%#			
47) 2-Fluorobiphenyl	8.706	172	1167244	186.94	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 373.88%#			
75) 2,4,6-Tribromophenol	10.412	330	252496	277.66	ppm	0.01
Spiked Amount 100.000	Range 33 - 118		Recovery = 277.66%#			
95) Terphenyl-d14	13.145	244	1091853	158.69	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 317.38%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.844	88	228596	148.31	ppm	# 30
3) N-nitrosodimethylamine	3.170	42	414509	305.50	ppm	# 37
4) Pyridine	3.202	79	596326	185.52	ppm	# 19
5) Benzaldehyde	5.534	106	412817	155.09	ppm	93
6) Aniline	5.652	93	890215	184.32	ppm	97
8) bis(2-Chloroethyl)ether	5.737	93	528529	157.21	ppm	78
10) Phenol	5.630	94	781504	179.15	ppm	82
11) 2-Chlorophenol	5.775	128	577643	184.61	ppm	80
12) 1,3-Dichlorobenzene	5.946	146	566579	176.65	ppm	97
13) 1,4-Dichlorobenzene	6.026	146	597968	182.46	ppm	96
14) 1,2-Dichlorobenzene	6.192	146	579586	189.64	ppm	98
15) Benzyl alcohol	6.165	108	386231	187.27	ppm	78
16) 2,2'-Oxybis(1-chloropr...	6.326	45	1048750	261.15	ppm	78
17) 2-Methylphenol	6.293	108	530008	189.13	ppm	96
18) Acetophenone	6.459	105	750263	169.57	ppm	96
19) Hexachloroethane	6.566	117	225072	162.14	ppm	87
20) N-Nitroso-di-n-propyla...	6.475	70	392032	171.87	ppm	# 67
21) 3&4-Methylphenol	6.470	108	534960	183.40	ppm	97
24) Nitrobenzene	6.646	77	622089	171.90	ppm	83
25) Isophorone	6.925	82	1086778	164.55	ppm	95
26) 2-Nitrophenol	7.005	139	315215	180.94	ppm	84

76.37

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071370.D
Acq On : 23 Jun 2020 4:05 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jun 23 16:58:06 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:33:00 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
27) 2,4-Dimethylphenol	7.069	107	558703	186.47	ppm		94
28) O,O,O-Triethylphosphor...	7.160	198	234536	168.39	ppm		90
29) bis(2-Chloroethoxy)met...	7.181	93	650917	157.91	ppm		97
30) Benzoic Acid	7.208	105	509248m	225.18	ppm		
31) 2,4-Dichlorophenol	7.278	162	462509	192.58	ppm		94
32) 1,2,4-Trichlorobenzene	7.374	180	451987	167.24	ppm		97
34) Naphthalene	7.459	128	1617864	180.41	ppm		99
35) 4-Chloroaniline	7.534	127	687303	182.71	ppm		92
36) 2,6-Dichlorophenol	7.540	162	449742	183.45	ppm		97
37) Hexachlorobutadiene	7.609	225	226837	150.44	ppm		98
38) Caprolactam	7.978	113	184819	185.32	ppm	#	57
39) 4-Chloro-3-methylphenol	8.107	107	478341	183.27	ppm		95
40) 2-Methylnaphthalene	8.267	142	1076778	185.68	ppm		98
41) 1-Methylnaphthalene	8.379	142	1032928	190.13	ppm		98
42) 1,2,4,5-Tetrachloroben...	8.460	216	465425	165.60	ppm		98
44) Hexachlorocyclopentadiene	8.454	237	276347	194.28	ppm		99
45) 2,4,6-Trichlorophenol	8.599	196	307240	180.46	ppm		100
46) 2,4,5-Trichlorophenol	8.636	196	340155	187.25	ppm		99
48) 1,1'-Biphenyl	8.818	154	1288409	188.41	ppm		99
49) 2-Chloronaphthalene	8.829	162	985180	185.60	ppm		94
50) 2-Nitroaniline	8.957	65	366840	211.95	ppm	#	68
51) p-Dinitrobenzene	9.128	75	214772	169.17	ppm	#	64
52) Acenaphthylene	9.315	152	1607770	197.92	ppm		99
53) Dimethylphthalate	9.203	163	1105697	181.24	ppm		99
54) m-Dinitrobenzene	9.214	168	204112	192.64	ppm	#	30
55) 2,6-Dinitrotoluene	9.257	165	276132	187.13	ppm		70
56) o-Dinitrobenzene	9.315	50	233849	266.56	ppm	#	61
57) Acenaphthene	9.519	153	1037545	193.12	ppm		98
58) 3-Nitroaniline	9.449	138	306081	192.74	ppm		100
59) 2,4-Dinitrophenol	9.567	184	155926	220.99	ppm	#	45
60) Dibenzofuran	9.727	168	1364487	185.26	ppm		95
61) 2,4-Dinitrotoluene	9.727	165	344922	184.43	ppm		74
62) 4-Nitrophenol	9.652	109	169451	225.48	ppm	#	64
63) 2,3,5,6-Tetrachlorophenol	9.818	232	260523	185.44	ppm		90
64) 2,3,4,6-Tetrachlorophenol	9.872	232	260254	173.53	ppm		89
65) Fluorene	10.128	166	1087568	189.18	ppm		100
66) 4-Chlorophenyl-phenyle...	10.145	204	529204	183.59	ppm		91
67) Diethylphthalate	10.038	149	1125649	185.72	ppm		97
68) Thionazin	10.134	97	226094	158.27	ppm		97
69) 4-Nitroaniline	10.177	138	335101	206.12	ppm		85
71) 4,6-Dinitro-2-methylph...	10.209	198	213402	224.37	ppm		81
72) n-Nitrosodiphenylamine	10.289	169	988849	261.59	ppm		97
73) Diphenylamine	10.289	169	988849	223.32	ppm		97
74) 1,2-Diphenylhydrazine	10.332	77	1192123	192.65	ppm		93
76) Sulfotep	10.503	97	180883	186.85	ppm	#	70
77) Phorate	10.647	75	639802	186.72	ppm		98
78) 4-Bromophenyl-phenylether	10.722	248	272545	172.50	ppm		86
79) Hexachlorobenzene	10.770	284	264744	146.52	ppm		79
80) Dimethoate	10.845	87	422017	206.47	ppm		92
81) Simazine	10.915	201	190208	245.93	ppm		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071370.D
Acq On : 23 Jun 2020 4:05 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jun 23 16:58:06 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:33:00 2020
Response via : Initial Calibration

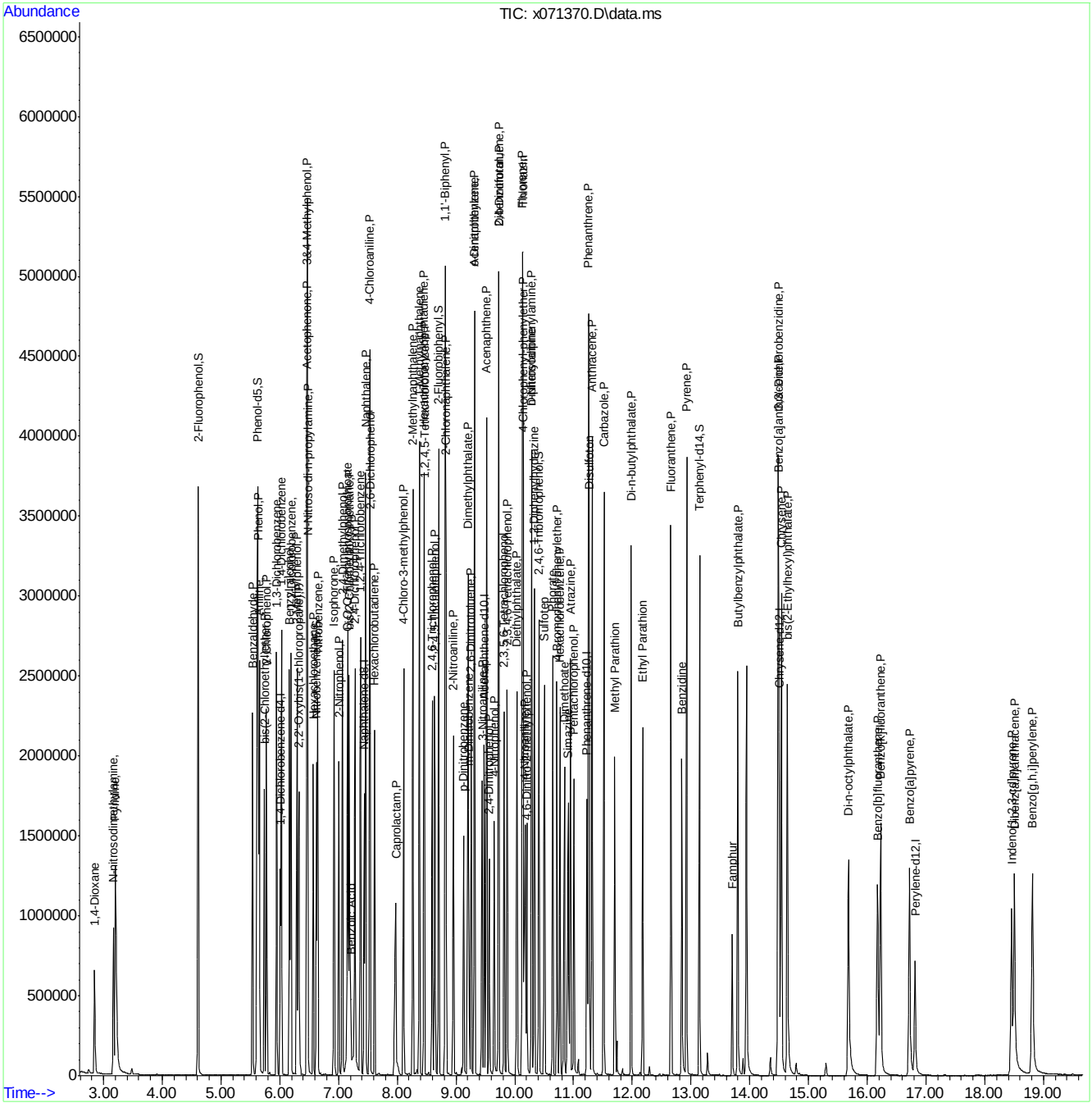
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
82) Atrazine	10.947	200	320374	213.03	ppm		86
83) Pentachlorophenol	11.006	266	181453	200.73	ppm		97
84) Phenanthrene	11.257	178	1573875	207.84	ppm		99
85) Anthracene	11.321	178	1704703	220.37	ppm		98
86) Disulfoton	11.268	88	650007	185.08	ppm		90
87) Carbazole	11.519	167	1494706	216.50	ppm		98
88) Methyl Parathion	11.701	109	362465	210.29	ppm	#	85
89) Di-n-butylphthalate	11.979	149	1744713	198.58	ppm		98
90) Ethyl Parathion	12.177	97	218449	190.77	ppm		91
91) Fluoranthene	12.664	202	1544086	191.86	ppm		95
93) Benzidine	12.846	184	805812	261.26	ppm		97
94) Pyrene	12.926	202	1665026	179.13	ppm		95
96) Famphur	13.701	218	239023	136.47	ppm		91
97) Butylbenzylphthalate	13.798	149	694470	170.40	ppm		91
98) 3,3'-Dichlorobenzidine	14.482	252	436466	178.31	ppm		99
99) Benzo[a]anthracene	14.488	228	1267054	165.57	ppm		99
100) Chrysene	14.541	228	1324468	173.81	ppm		98
101) bis(2-Ethylhexyl)phtha...	14.643	149	961974	181.94	ppm		98
103) Di-n-octylphthalate	15.680	149	1260410	182.63	ppm		94
104) Benzo[b]fluoranthene	16.178	252	869683	161.22	ppm		99
105) Benzo[k]fluoranthene	16.231	252	1058843	178.17	ppm		97
106) Benzo[a]pyrene	16.723	252	831194	153.59	ppm		98
107) Indeno[1,2,3-cd]pyrene	18.456	276	627476	134.03	ppm		94
108) Dibenz[a,h]anthracene	18.504	278	694066	137.24	ppm		91
109) Benzo[g,h,i]perylene	18.815	276	832318	154.79	ppm		94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071370.D
Acq On : 23 Jun 2020 4:05 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jun 23 16:58:06 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:33:00 2020
Response via : Initial Calibration



Manual Integration Approval Summary

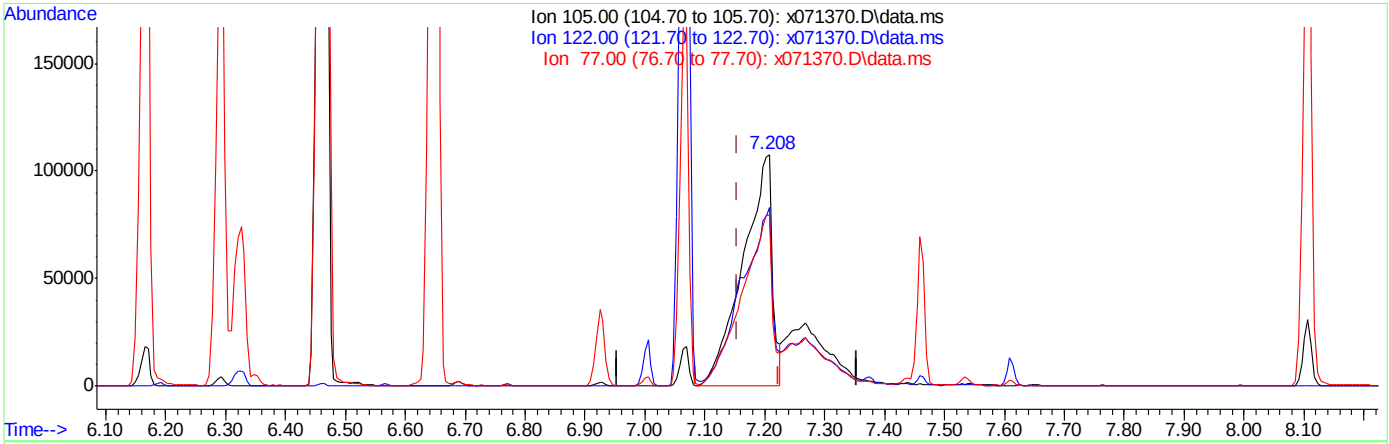
Sample Number:	SX2918-IC2918	**Method:**	EPA 625.1
Lab FileID:	X071370.D	**Analyst approved:**	06/24/20 09:50 Martha Valls
Injection Time:	06/23/20 16:05	**Supervisor approved:**	06/24/20 14:07 Naresh Jiawan

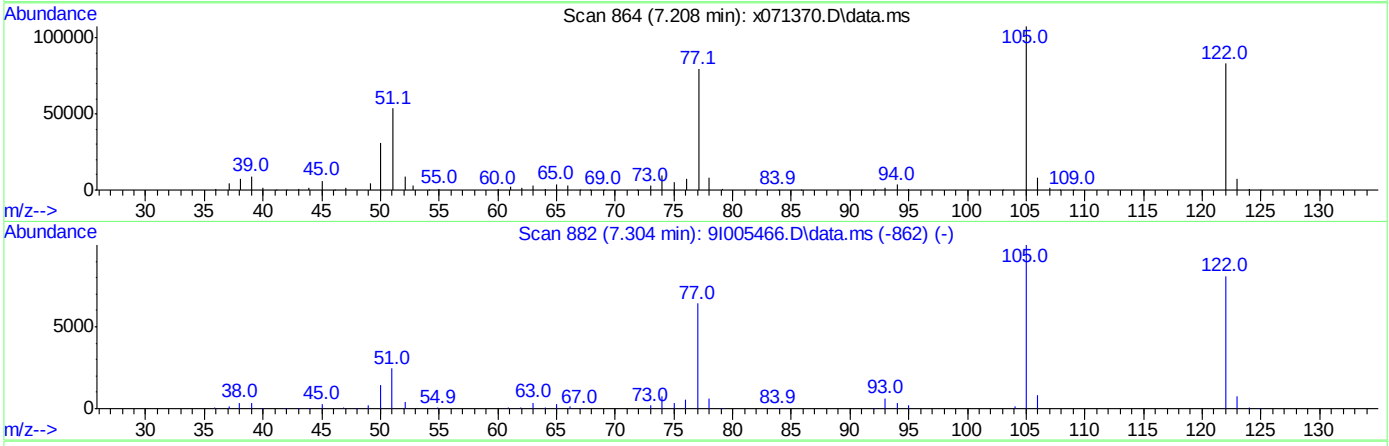
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic Acid	65-85-0		7.21	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071370.D
Acq On : 23 Jun 2020 4:05 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jun 23 16:34:49 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:33:00 2020
Response via : Initial Calibration





TIC: x071370.D\data.ms

(30) Benzoic Acid

7.208min (+0.054) 160.19ppm

response 362267

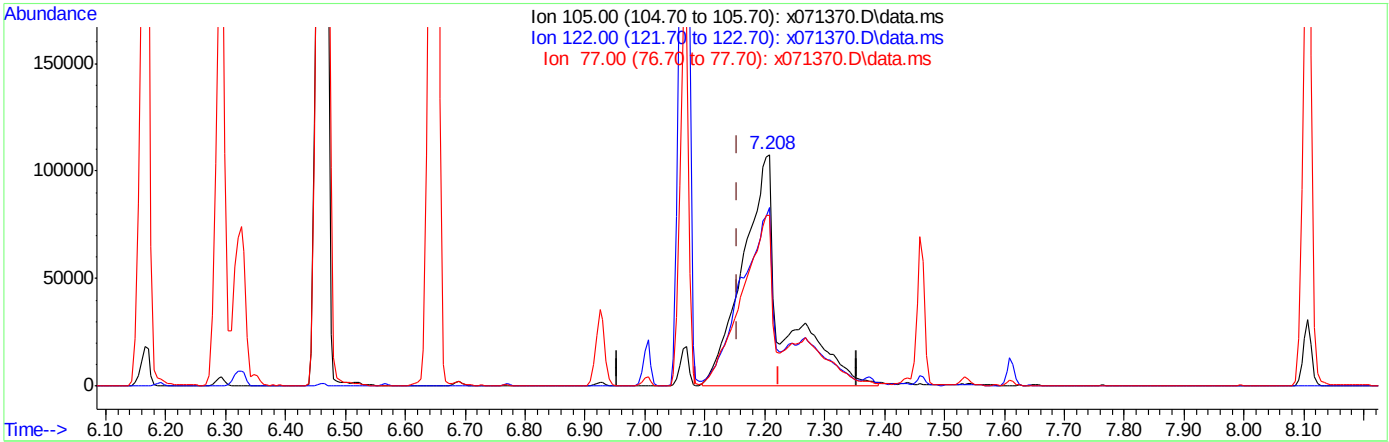
Ion	Exp%	Act%
105.00	100	100
122.00	81.20	75.13
77.00	64.10	72.53
0.00	0.00	0.00

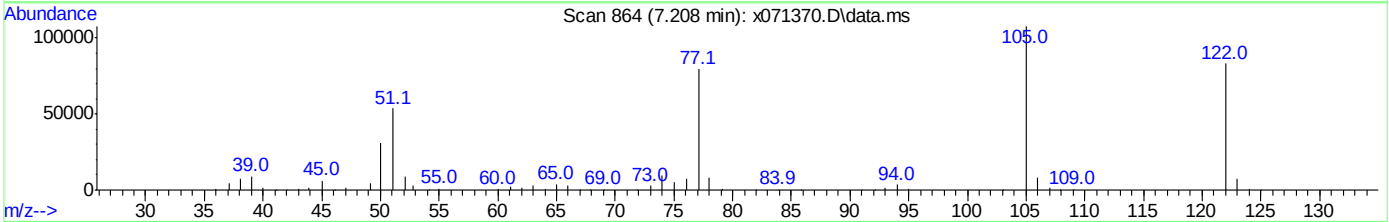
FA77615

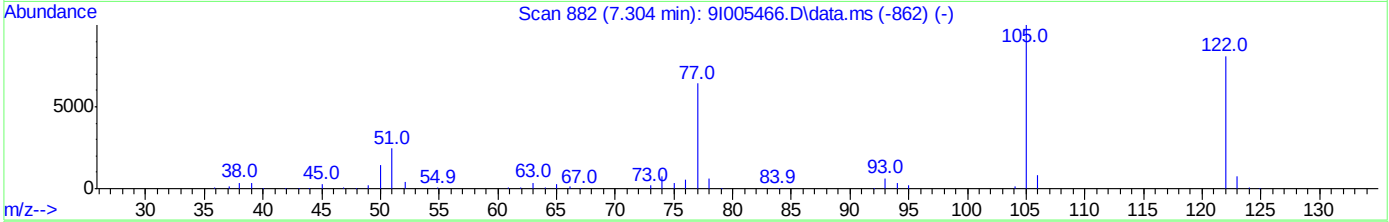
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071370.D
Acq On : 23 Jun 2020 4:05 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jun 23 16:34:49 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:33:00 2020
Response via : Initial Calibration







TIC: x071370.D\data.ms

(30) Benzoic Acid

7.208min (+0.054) 225.18ppm m

response 509248

Ion	Exp%	Act%
105.00	100	100
122.00	81.20	77.24
77.00	64.10	73.76
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 06/24/20 14:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071371.D
Acq On : 23 Jun 2020 4:31 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jun 23 16:58:19 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:33:00 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.010	152	196466	40.00	ppm	0.00
22) Naphthalene-d8	7.438	136	851386	40.00	ppm	0.00
43) Acenaphthene-d10	9.481	164	445105	40.00	ppm	0.00
70) Phenanthrene-d10	11.230	188	723575	40.00	ppm	0.00
92) Chrysene-d12	14.504	240	534252	40.00	ppm	0.01
102) Perylene-d12	16.820	264	385695	40.00	ppm	0.01
110) 1,4-Dichlorobenzene-d4A	0.000	152	0m	40.00	ppm	-6.00
120) Naphthalene-d8A	0.000	136	0m	40.00	ppm	-7.43
127) Acenaphthene-d10A	0.000	164	0m	40.00	ppm	-9.48
136) Phenanthrene-d10A	0.000	188	0m	40.00	ppm	-11.22
146) Chrysene-d12A	0.000	240	0m	40.00	ppm	-14.49
153) Perylene-d12A	0.000	264	0m	40.00	ppm	-16.82
System Monitoring Compounds						
7) 2-Fluorophenol	4.614	112	1447342	427.42	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 427.42%#			
9) Phenol-d5	5.625	99	1801216	493.97	ppm	0.02
Spiked Amount 100.000	Range 10 - 50		Recovery = 493.97%#			
23) Nitrobenzene-d5	6.631	82	922012	225.52	ppm	0.01
Spiked Amount 50.000	Range 42 - 108		Recovery = 451.04%#			
47) 2-Fluorobiphenyl	8.706	172	1657926	247.68	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 495.36%#			
75) 2,4,6-Tribromophenol	10.417	330	382386	399.45	ppm	0.02
Spiked Amount 100.000	Range 33 - 118		Recovery = 399.45%#			
95) Terphenyl-d14	13.151	244	1577008	220.28	ppm	0.01
Spiked Amount 50.000	Range 39 - 121		Recovery = 440.56%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.844	88	325295	197.85	ppm	# 34
3) N-nitrosodimethylamine	3.175	42	601707	415.75	ppm	# 38
4) Pyridine	3.202	79	878586	256.24	ppm	# 23
5) Benzaldehyde	5.539	106	588752	207.36	ppm	94
6) Aniline	5.657	93	1274273	247.34	ppm	99
8) bis(2-Chloroethyl)ether	5.737	93	756907	211.06	ppm	77
10) Phenol	5.641	94	1097312	235.81	ppm	73
11) 2-Chlorophenol	5.780	128	831993	249.27	ppm	85
12) 1,3-Dichlorobenzene	5.946	146	816430	238.63	ppm	96
13) 1,4-Dichlorobenzene	6.031	146	854881	244.55	ppm	98
14) 1,2-Dichlorobenzene	6.192	146	831789	255.14	ppm	97
15) Benzyl alcohol	6.171	108	555751	252.62	ppm	79
16) 2,2'-Oxybis(1-chloropr...	6.331	45	1427748	333.30	ppm	80
17) 2-Methylphenol	6.294	108	768068	256.94	ppm	96
18) Acetophenone	6.465	105	1068591	226.42	ppm	97
19) Hexachloroethane	6.566	117	328380	221.77	ppm	86
20) N-Nitroso-di-n-propyla...	6.481	70	551620	226.71	ppm	# 68
21) 3&4-Methylphenol	6.475	108	747847	240.35	ppm	97
24) Nitrobenzene	6.652	77	897664	231.79	ppm	85
25) Isophorone	6.930	82	1576566	223.07	ppm	95
26) 2-Nitrophenol	7.005	139	468000	251.04	ppm	80

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071371.D
Acq On : 23 Jun 2020 4:31 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jun 23 16:58:19 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:33:00 2020
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
27)	2,4-Dimethylphenol	7.074	107	807736	251.93	ppm		93
28)	O,O,O-Triethylphosphor...	7.165	198	345847	232.04	ppm		94
29)	bis(2-Chloroethoxy)met...	7.187	93	909033	206.07	ppm		97
30)	Benzoic Acid	7.230	105	746921m	308.64	ppm		
31)	2,4-Dichlorophenol	7.283	162	676134	263.08	ppm		95
32)	1,2,4-Trichlorobenzene	7.374	180	664863	229.89	ppm		96
34)	Naphthalene	7.465	128	2311700	240.88	ppm		99
35)	4-Chloroaniline	7.540	127	963011	239.23	ppm		94
36)	2,6-Dichlorophenol	7.545	162	646414	246.39	ppm		98
37)	Hexachlorobutadiene	7.615	225	332067	205.80	ppm		99
38)	Caprolactam	8.000	113	270490m	253.45	ppm		
39)	4-Chloro-3-methylphenol	8.112	107	697931	249.88	ppm		93
40)	2-Methylnaphthalene	8.267	142	1549268	249.65	ppm		98
41)	1-Methylnaphthalene	8.380	142	1478955	254.39	ppm		98
42)	1,2,4,5-Tetrachloroben...	8.465	216	664043	220.79	ppm		98
44)	Hexachlorocyclopentadiene	8.454	237	411690	269.98	ppm		99
45)	2,4,6-Trichlorophenol	8.599	196	446173	244.45	ppm		97
46)	2,4,5-Trichlorophenol	8.642	196	496266	254.84	ppm		98
48)	1,1'-Biphenyl	8.823	154	1808755	246.74	ppm		99
49)	2-Chloronaphthalene	8.834	162	1379237	242.38	ppm		95
50)	2-Nitroaniline	8.963	65	519455	279.96	ppm	#	71
51)	p-Dinitrobenzene	9.134	75	313814	230.58	ppm	#	68
52)	Acenaphthylene	9.316	152	2239279	257.14	ppm		100
53)	Dimethylphthalate	9.209	163	1575597	240.91	ppm		99
54)	m-Dinitrobenzene	9.225	168	292540	257.54	ppm	#	46
55)	2,6-Dinitrotoluene	9.262	165	394575	249.43	ppm		71
56)	o-Dinitrobenzene	9.321	50	322363	342.76	ppm	#	60
57)	Acenaphthene	9.524	153	1457637	253.08	ppm		97
58)	3-Nitroaniline	9.455	138	435862	256.02	ppm		97
59)	2,4-Dinitrophenol	9.572	184	232415	307.26	ppm	#	57
60)	Dibenzofuran	9.727	168	1913807	242.39	ppm		93
61)	2,4-Dinitrotoluene	9.733	165	494120	246.45	ppm		78
62)	4-Nitrophenol	9.663	109	242809	301.39	ppm	#	67
63)	2,3,5,6-Tetrachlorophenol	9.824	232	377511	250.66	ppm		93
64)	2,3,4,6-Tetrachlorophenol	9.877	232	379105	235.79	ppm		92
65)	Fluorene	10.134	166	1503962	244.03	ppm		99
66)	4-Chlorophenyl-phenyle...	10.145	204	740272	239.55	ppm		91
67)	Diethylphthalate	10.043	149	1603423	246.77	ppm		97
68)	Thionazin	10.139	97	311496	203.40	ppm		98
69)	4-Nitroaniline	10.193	138	473902	271.90	ppm		85
71)	4,6-Dinitro-2-methylph...	10.214	198	312932	312.55	ppm		89
72)	n-Nitrosodiphenylamine	10.294	169	1419678	356.77	ppm		96
73)	Diphenylamine	10.294	169	1419678	304.57	ppm		96
74)	1,2-Diphenylhydrazine	10.337	77	1669778	256.34	ppm		96
76)	Sulfotep	10.508	97	252251	247.54	ppm	#	81
77)	Phorate	10.653	75	905489	251.03	ppm		99
78)	4-Bromophenyl-phenylether	10.722	248	397568	239.04	ppm	#	82
79)	Hexachlorobenzene	10.776	284	392614	206.42	ppm		82
80)	Dimethoate	10.851	87	595879	276.95	ppm		94
81)	Simazine	10.925	201	275623	338.53	ppm		92

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071371.D
Acq On : 23 Jun 2020 4:31 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jun 23 16:58:19 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:33:00 2020
Response via : Initial Calibration

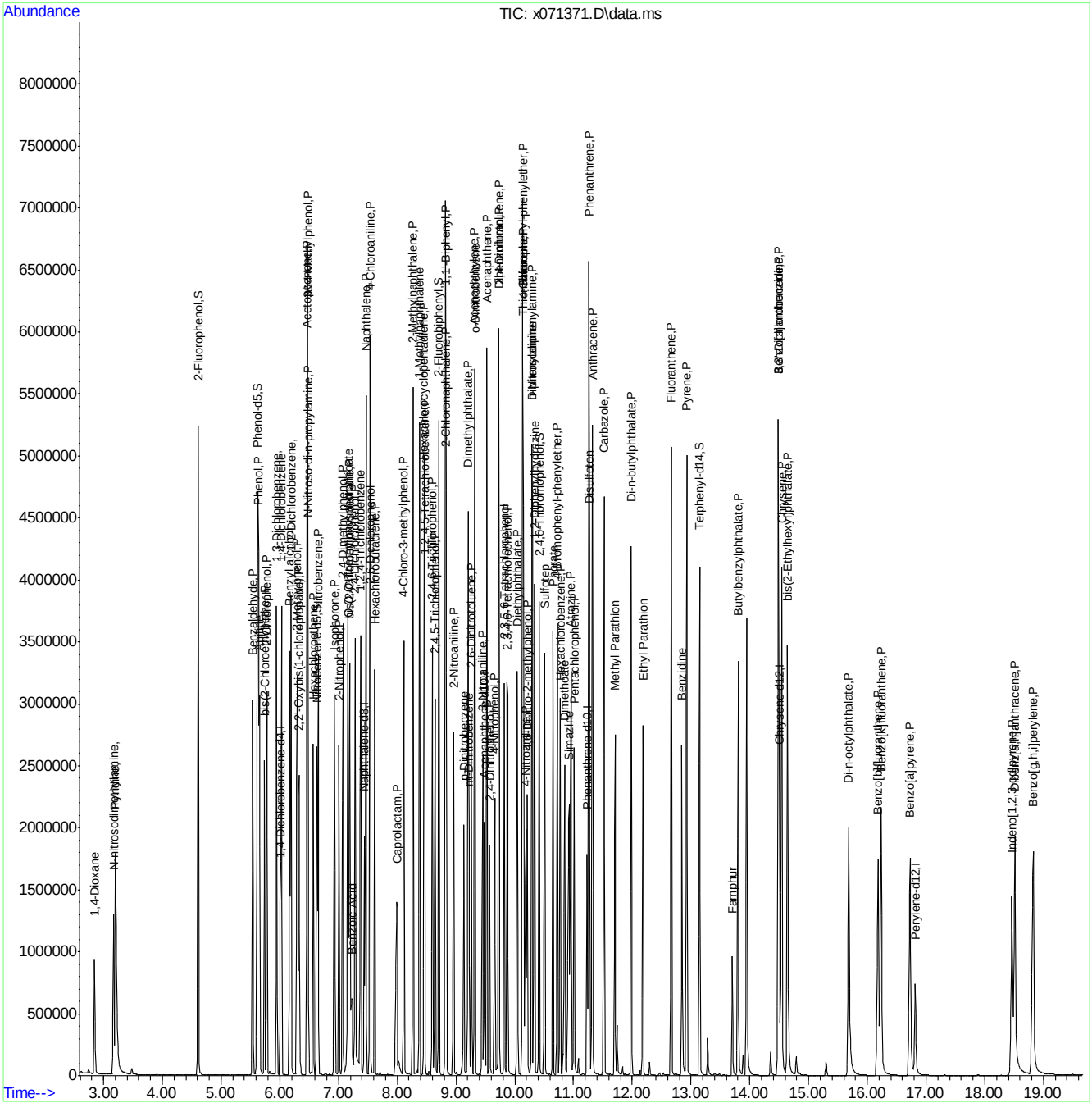
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
82) Atrazine	10.958	200	508273	321.06	ppm		93
83) Pentachlorophenol	11.011	266	264451	277.91	ppm		98
84) Phenanthrene	11.262	178	2183315	273.89	ppm		99
85) Anthracene	11.327	178	2366894	290.66	ppm		98
86) Disulfoton	11.273	88	870469	235.45	ppm		90
87) Carbazole	11.525	167	2129541	293.02	ppm		98
88) Methyl Parathion	11.706	109	508609	280.32	ppm	#	88
89) Di-n-butylphthalate	11.985	149	2467839	266.82	ppm		98
90) Ethyl Parathion	12.182	97	314399	260.82	ppm		93
91) Fluoranthene	12.664	202	2217272	261.72	ppm		97
93) Benzidine	12.846	184	1108204	345.33	ppm		99
94) Pyrene	12.931	202	2375247	245.60	ppm		95
96) Famphur	13.707	218	284954	156.37	ppm		95
97) Butylbenzylphthalate	13.803	149	989049	233.25	ppm		95
98) 3,3'-Dichlorobenzidine	14.488	252	617680	242.53	ppm		97
99) Benzo[a]anthracene	14.488	228	1785259	224.22	ppm		100
100) Chrysene	14.547	228	1876003	236.62	ppm		98
101) bis(2-Ethylhexyl)phtha...	14.643	149	1377435	250.38	ppm		98
103) Di-n-octylphthalate	15.686	149	1860855	256.69	ppm		94
104) Benzo[b]fluoranthene	16.183	252	1257505	221.92	ppm		98
105) Benzo[k]fluoranthene	16.242	252	1533403	245.63	ppm		97
106) Benzo[a]pyrene	16.734	252	1216893	214.05	ppm		99
107) Indeno[1,2,3-cd]pyrene	18.467	276	959240	195.06	ppm		95
108) Dibenz[a,h]anthracene	18.515	278	1148615	216.21	ppm		94
109) Benzo[g,h,i]perylene	18.825	276	1267870	224.47	ppm		96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071371.D
Acq On : 23 Jun 2020 4:31 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jun 23 16:58:19 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:33:00 2020
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: SX2918-IC2918
Lab FileID: X071371.D
Injection Time: 06/23/20 16:31

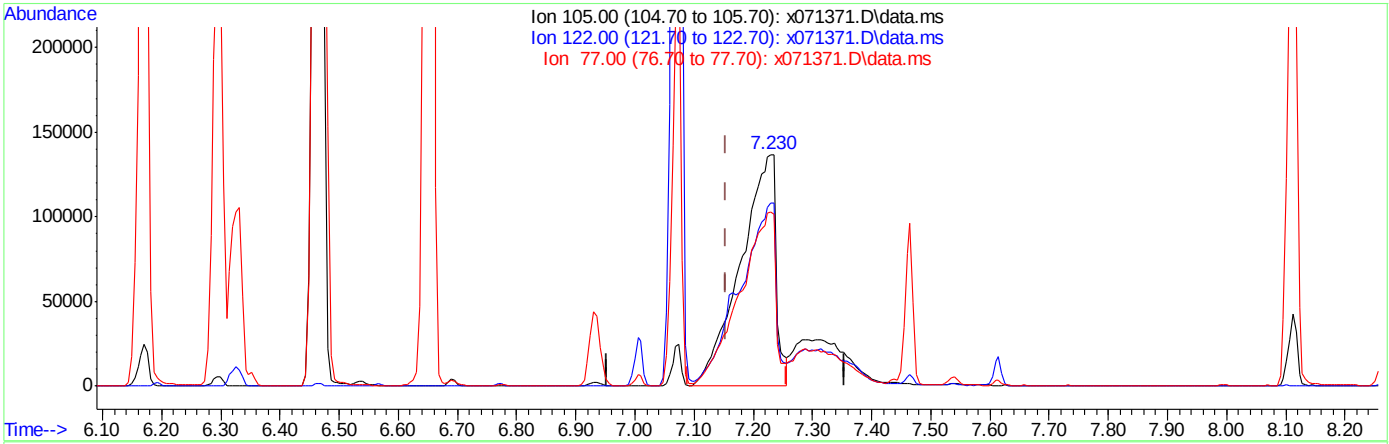
Method: EPA 625.1
Analyst approved: 06/24/20 09:50 Martha Valls
Supervisor approved: 06/24/20 14:07 Naresh Jiawan

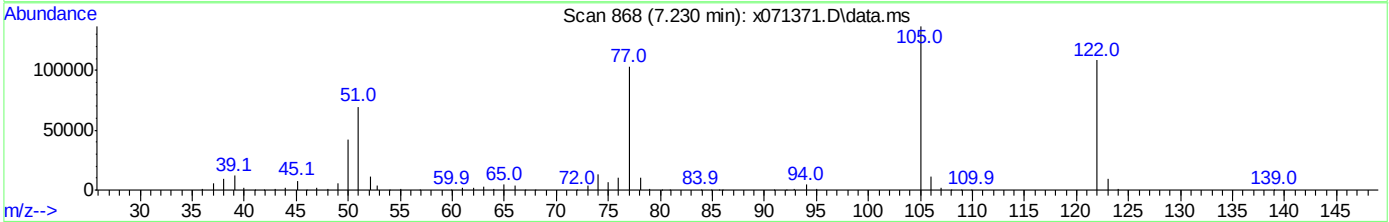
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic Acid	65-85-0		7.23	Split peak
Caprolactam	105-60-2		8.00	Split peak

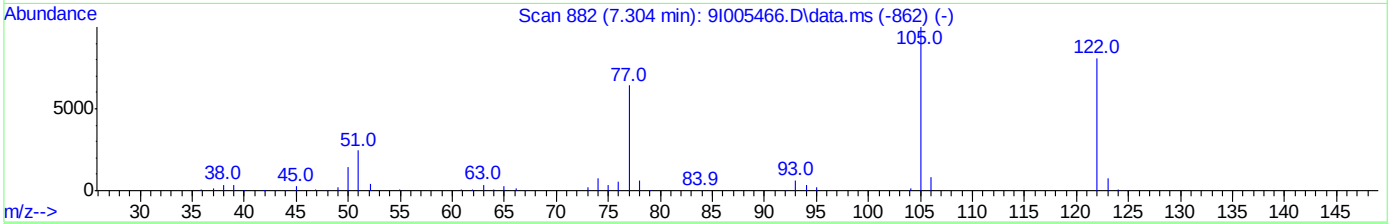
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071371.D
Acq On : 23 Jun 2020 4:31 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jun 23 16:51:36 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:33:00 2020
Response via : Initial Calibration







TIC: x071371.D\data.ms

(30) Benzoic Acid

7.230min (+0.075) 234.38ppm

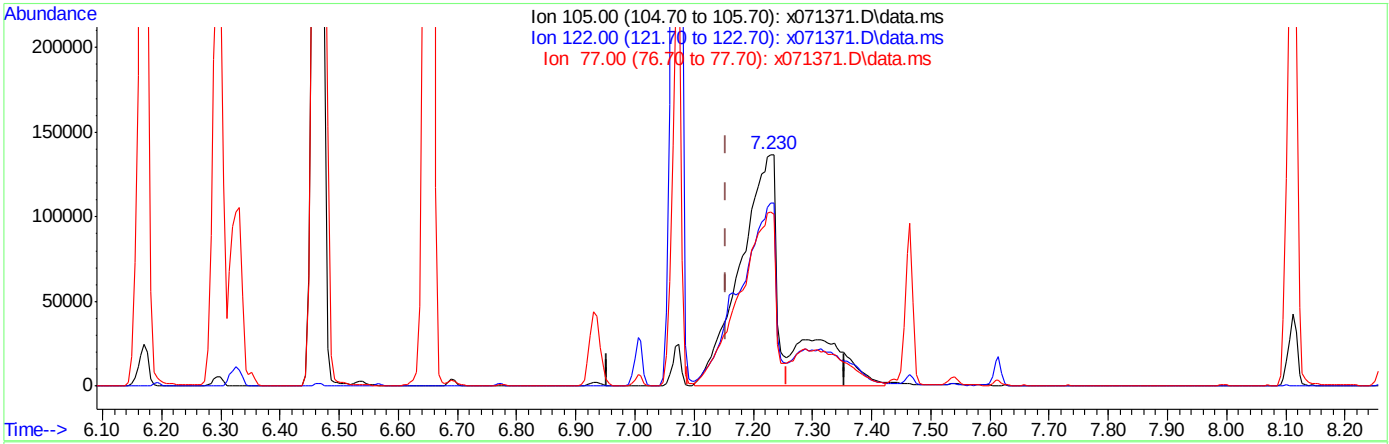
response 567202

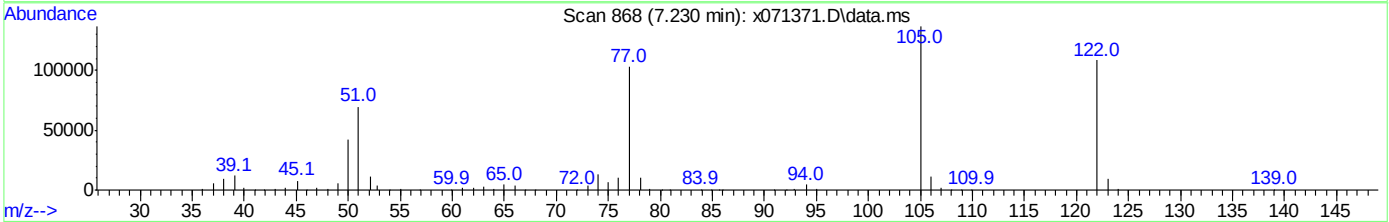
Ion	Exp%	Act%
105.00	100	100
122.00	81.20	77.79
77.00	64.10	74.35
0.00	0.00	0.00

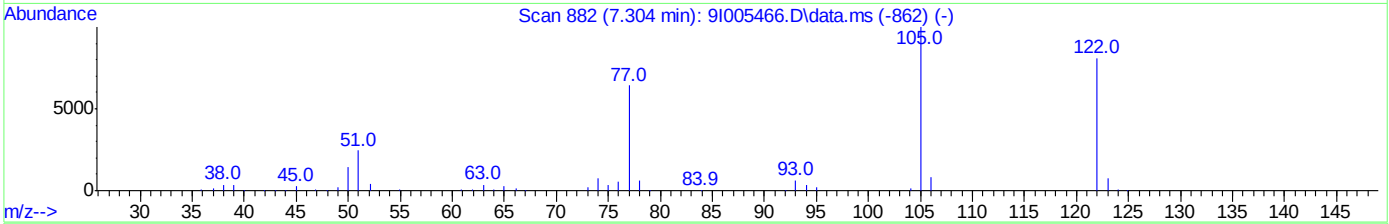
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071371.D
Acq On : 23 Jun 2020 4:31 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jun 23 16:51:36 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:33:00 2020
Response via : Initial Calibration







TIC: x071371.D\data.ms

(30) Benzoic Acid

7.230min (+0.075) 308.64ppm m

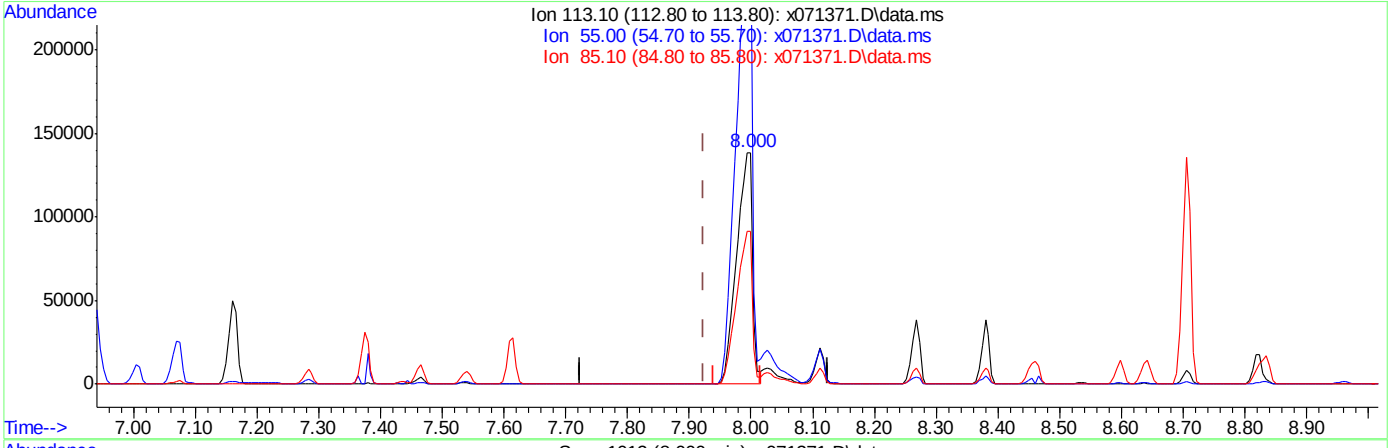
response 746921

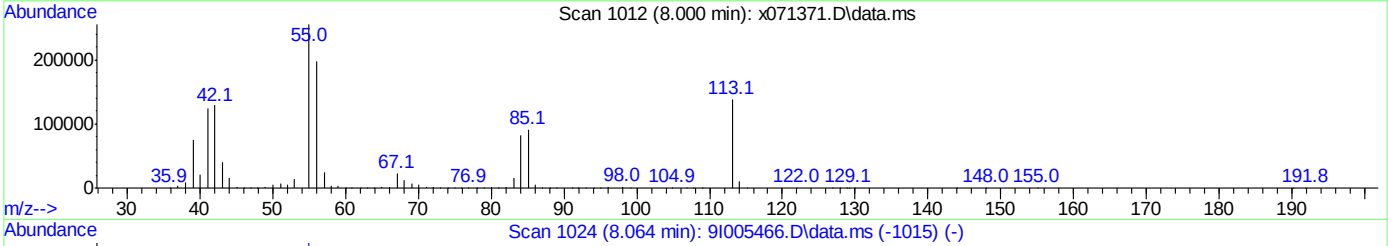
Ion	Exp%	Act%
105.00	100	100
122.00	81.20	79.27
77.00	64.10	75.09
0.00	0.00	0.00

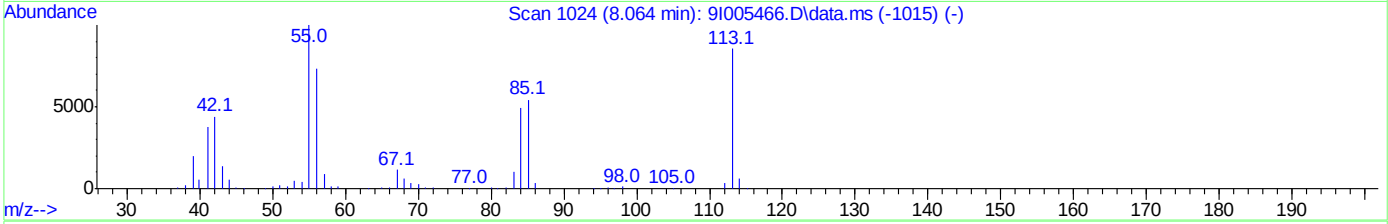
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071371.D
Acq On : 23 Jun 2020 4:31 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jun 23 16:51:36 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:33:00 2020
Response via : Initial Calibration







TIC: x071371.D\data.ms

(38) Caprolactam (P)

8.000min (+0.075) 235.97ppm

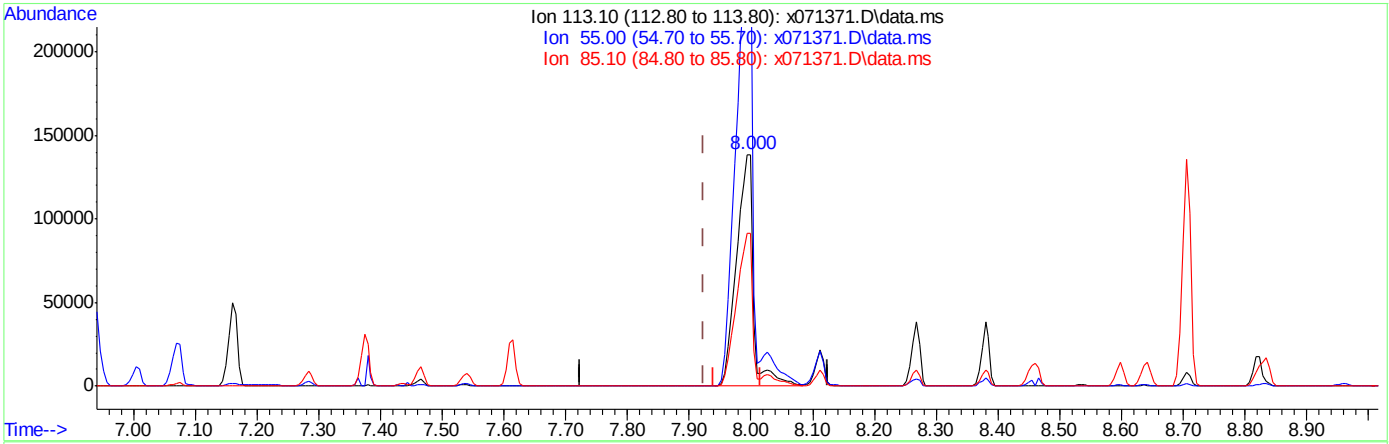
response 251829

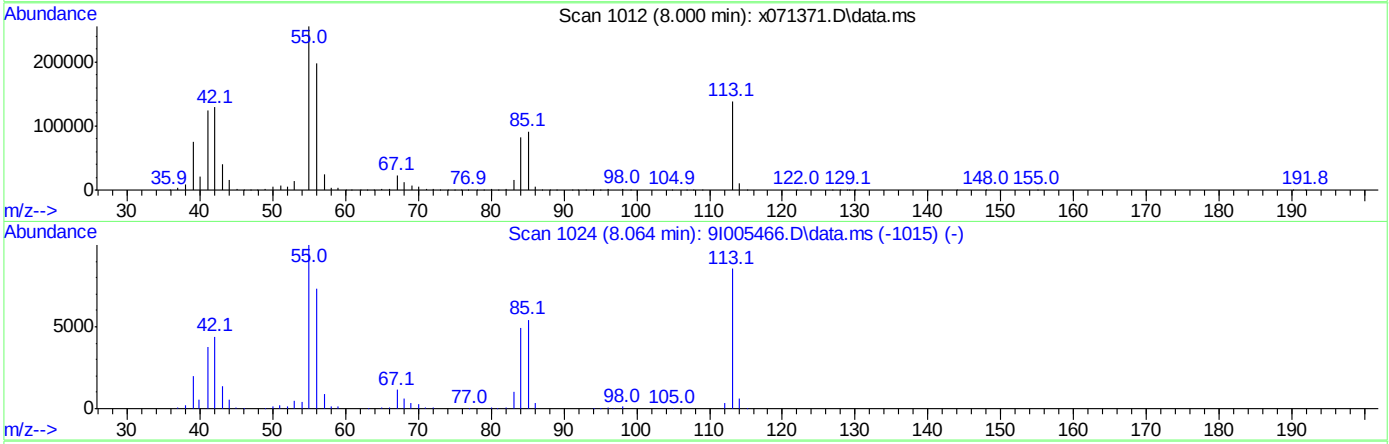
Ion	Exp%	Act%
113.10	100	100
55.00	117.00	183.66#
85.10	63.40	66.16
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071371.D
Acq On : 23 Jun 2020 4:31 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jun 23 16:51:36 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:33:00 2020
Response via : Initial Calibration





TIC: x071371.D\data.ms

(38) Caprolactam (P)

8.000min (+0.075) 253.45ppm m

response 270490

Ion	Exp%	Act%
113.10	100	100
55.00	117.00	184.25#
85.10	63.40	66.06
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071372.D
Acq On : 23 Jun 2020 4:58 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jun 24 13:02:09 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.010	152	183379	40.00	ppm	0.00
22) Naphthalene-d8	7.433	136	761641	40.00	ppm	0.00
43) Acenaphthene-d10	9.476	164	366243	40.00	ppm	0.00
70) Phenanthrene-d10	11.225	188	590804	40.00	ppm	0.00
92) Chrysene-d12	14.493	240	381234	40.00	ppm	0.00
102) Perylene-d12	16.809	264	308770	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	6.010	152	183379	40.00	ppm	0.00
120) Naphthalene-d8A	7.433	136	761641	40.00	ppm	0.00
127) Acenaphthene-d10A	9.476	164	366243	40.00	ppm	0.00
136) Phenanthrene-d10A	11.225	188	590804	40.00	ppm	0.00
146) Chrysene-d12A	14.493	240	381234	40.00	ppm	0.00
153) Perylene-d12A	16.809	264	309063	40.00	ppm	-0.02
System Monitoring Compounds						
7) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#		
9) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#		
23) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#		
47) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#		
75) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#		
95) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#		
Target Compounds						Qvalue
2) 1,4-Dioxane	2.854	88	149489	47.57	ppm	98
3) N-nitrosodimethylamine	3.175	42	258160	46.26	ppm	96
5) Benzaldehyde	5.534	106	205047	37.51	ppm	98
8) bis(2-Chloroethyl)ether	5.727	93	288499	42.88	ppm	97
10) Phenol	5.625	94	378450	40.78	ppm	97
11) 2-Chlorophenol	5.775	128	317439	45.24	ppm	98
12) 1,3-Dichlorobenzene	5.946	146	347468	47.67	ppm	98
13) 1,4-Dichlorobenzene	6.026	146	369369	47.89	ppm	99
14) 1,2-Dichlorobenzene	6.187	146	341657	46.63	ppm	99
16) 2,2'-Oxybis(1-chloropr...	6.326	45	661107	46.76	ppm	99
17) 2-Methylphenol	6.288	108	296147	44.37	ppm	99
18) Acetophenone	6.454	105	448943	45.45	ppm	99
19) Hexachloroethane	6.566	117	144318	49.84	ppm	98
20) N-Nitroso-di-n-propyla...	6.465	70	236671	45.37	ppm	98
21) 3&4-Methylphenol	6.465	108	640525	92.84	ppm	98
24) Nitrobenzene	6.641	77	359823	46.24	ppm	98
25) Isophorone	6.919	82	588290	42.34	ppm	99
26) 2-Nitrophenol	7.000	139	177715	48.03	ppm	93
27) 2,4-Dimethylphenol	7.064	107	297230	43.26	ppm	99
29) bis(2-Chloroethoxy)met...	7.176	93	377117	46.39	ppm	100
30) Benzoic Acid	7.235	105	562871	85.51	ppm	94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071372.D
Acq On : 23 Jun 2020 4:58 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jun 24 13:02:09 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration

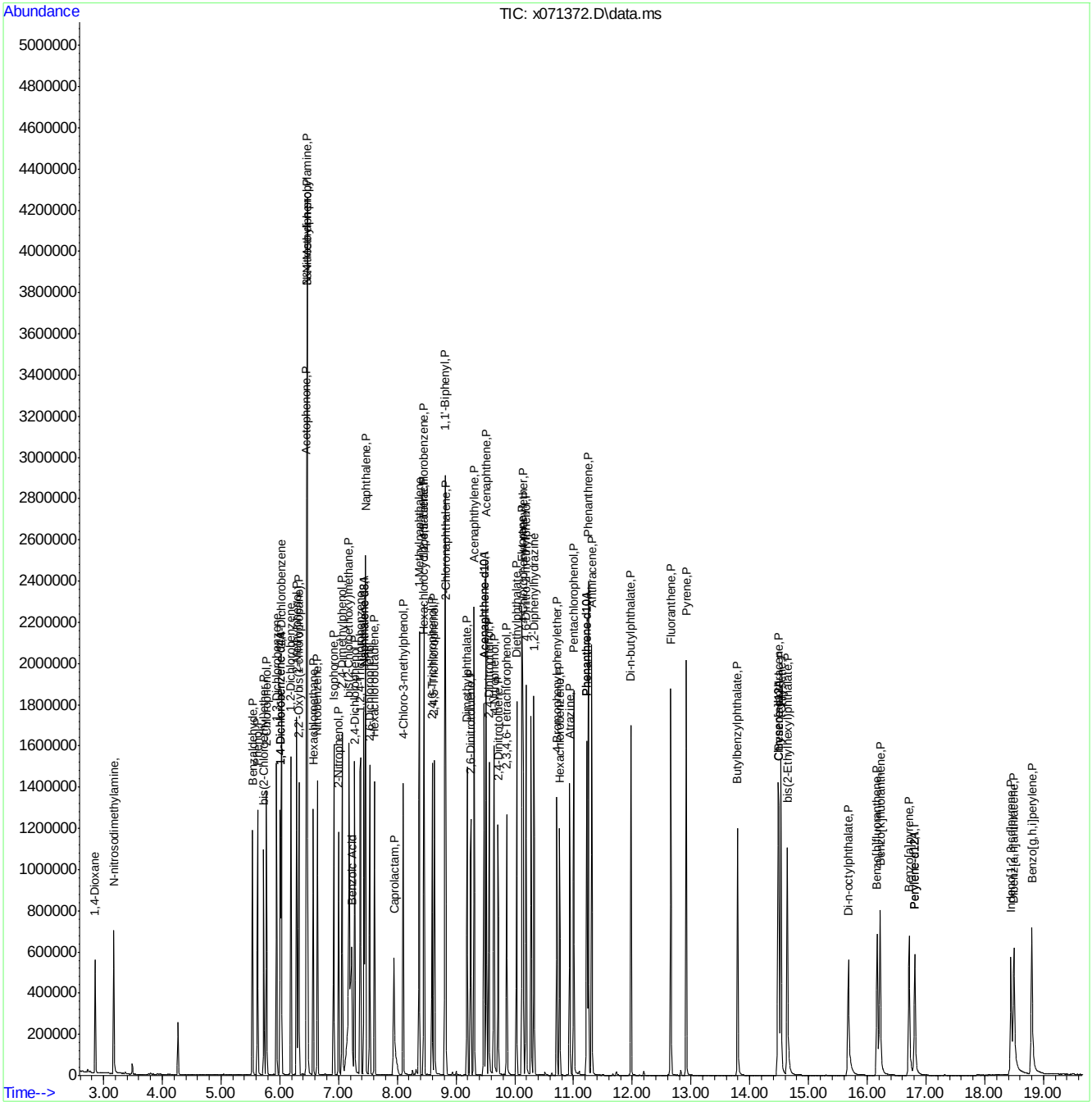
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
31)	2,4-Dichlorophenol	7.278	162	269185	48.60	ppm	98
32)	1,2,4-Trichlorobenzene	7.374	180	272003	48.06	ppm	97
34)	Naphthalene	7.460	128	959832	46.48	ppm	100
36)	2,6-Dichlorophenol	7.534	162	263049	46.58	ppm	98
37)	Hexachlorobutadiene	7.609	225	137064	49.11	ppm	98
38)	Caprolactam	7.946	113	96386	41.94	ppm	98
39)	4-Chloro-3-methylphenol	8.101	107	257540	43.61	ppm	97
41)	1-Methylnaphthalene	8.374	142	543287	41.55	ppm	98
42)	1,2,4,5-Tetrachloroben...	8.454	216	249473	43.92	ppm	98
44)	Hexachlorocyclopentadiene	8.449	237	140580	48.13	ppm	99
45)	2,4,6-Trichlorophenol	8.593	196	172067	51.18	ppm	100
46)	2,4,5-Trichlorophenol	8.631	196	193062	52.32	ppm	98
48)	1,1'-Biphenyl	8.813	154	703618	47.05	ppm	100
49)	2-Chloronaphthalene	8.829	162	568344	50.63	ppm	99
52)	Acenaphthylene	9.310	152	937291	51.24	ppm	99
53)	Dimethylphthalate	9.193	163	607393	47.01	ppm	100
55)	2,6-Dinitrotoluene	9.251	165	137746	45.17	ppm	93
57)	Acenaphthene	9.513	153	574692	47.24	ppm	98
59)	2,4-Dinitrophenol	9.562	184	180349	93.33	ppm	98
61)	2,4-Dinitrotoluene	9.717	165	191936	49.37	ppm	86
62)	4-Nitrophenol	9.652	109	180279	96.19	ppm	93
64)	2,3,4,6-Tetrachlorophenol	9.866	232	128385	45.10	ppm	95
65)	Fluorene	10.123	166	615161	48.56	ppm	99
66)	4-Chlorophenyl-phenyle...	10.139	204	303003	49.55	ppm	93
67)	Diethylphthalate	10.032	149	616706	47.79	ppm	99
71)	4,6-Dinitro-2-methylph...	10.193	198	241924	94.07	ppm	80
74)	1,2-Diphenylhydrazine	10.326	77	633167	47.82	ppm	98
78)	4-Bromophenyl-phenylether	10.717	248	140300	49.46	ppm	97
79)	Hexachlorobenzene	10.765	284	129727	45.84	ppm	97
82)	Atrazine	10.936	200	149174	43.24	ppm	96
83)	Pentachlorophenol	11.006	266	190511	89.05	ppm	99
84)	Phenanthrene	11.252	178	850710	47.65	ppm	99
85)	Anthracene	11.316	178	870452	46.78	ppm	100
89)	Di-n-butylphthalate	11.974	149	903668	49.31	ppm	99
91)	Fluoranthene	12.658	202	758618	45.80	ppm	100
94)	Pyrene	12.921	202	791178	49.98	ppm	99
97)	Butylbenzylphthalate	13.792	149	336762	50.95	ppm	98
99)	Benzo[a]anthracene	14.482	228	569609	47.54	ppm	99
100)	Chrysene	14.530	228	626698	49.11	ppm	99
101)	bis(2-Ethylhexyl)phtha...	14.643	149	456979	50.76	ppm	98
103)	Di-n-octylphthalate	15.680	149	563435	46.20	ppm	99
104)	Benzo[b]fluoranthene	16.167	252	436889	47.85	ppm	99
105)	Benzo[k]fluoranthene	16.221	252	523305	47.74	ppm	99
106)	Benzo[a]pyrene	16.713	252	423489	48.31	ppm	99
107)	Indeno[1,2,3-cd]pyrene	18.446	276	310730	51.10	ppm	99
108)	Dibenz[a,h]anthracene	18.499	278	352524	50.72	ppm	100
109)	Benzo[g,h,i]perylene	18.804	276	446029	51.81	ppm	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071372.D
Acq On : 23 Jun 2020 4:58 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jun 24 13:02:09 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration



FA77615

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071373.D
Acq On : 23 Jun 2020 5:25 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jun 23 19:01:20 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

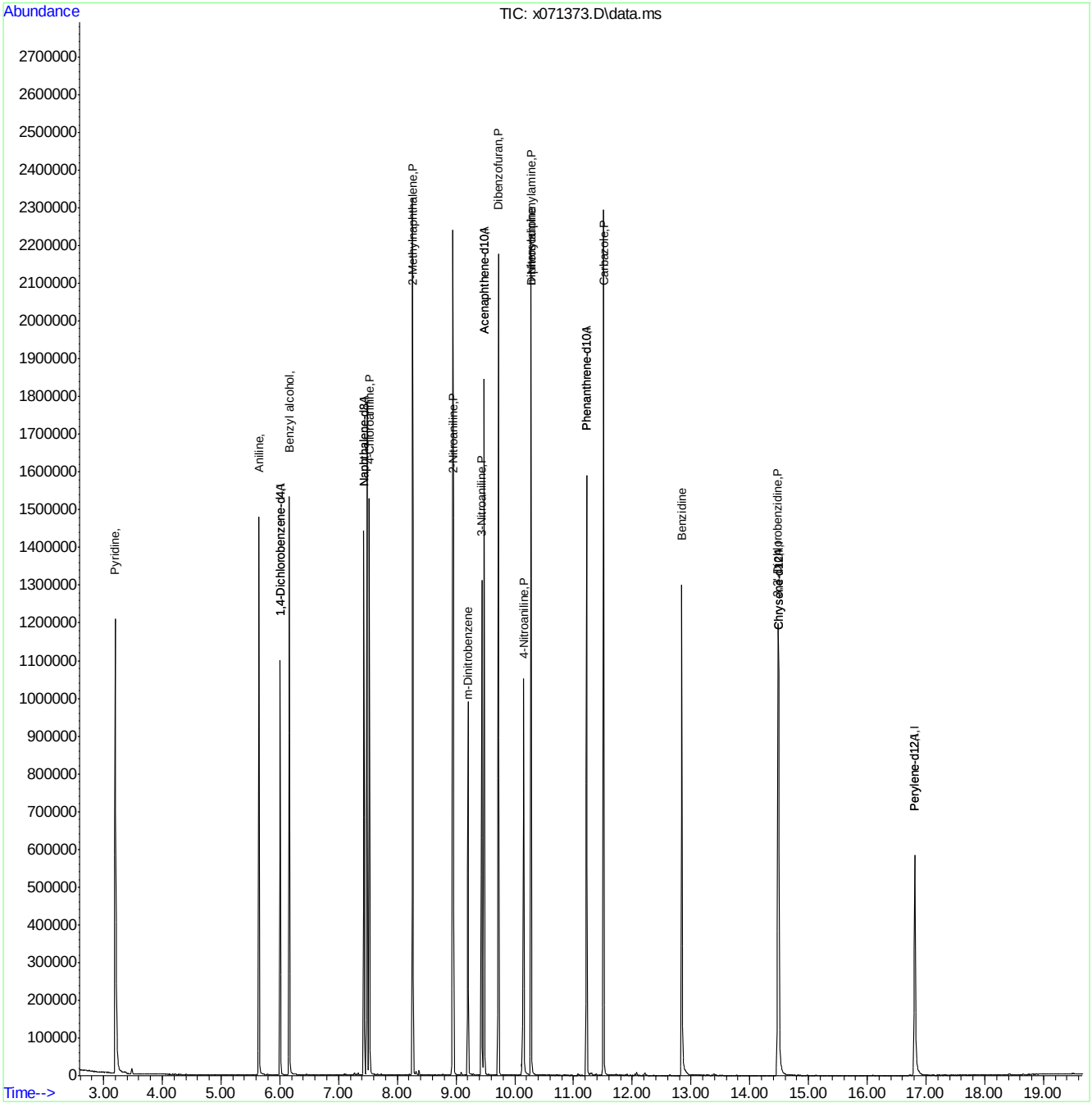
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.005	152	150227	40.00	ppm	0.00
22) Naphthalene-d8	7.433	136	615206	40.00	ppm	0.00
43) Acenaphthene-d10	9.476	164	365093	40.00	ppm	0.00
70) Phenanthrene-d10	11.219	188	599891	40.00	ppm	0.00
92) Chrysene-d12	14.493	240	424744	40.00	ppm	0.00
102) Perylene-d12	16.809	264	319412	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	6.005	152	150227	40.00	ppm	0.00
120) Naphthalene-d8A	7.433	136	615206	40.00	ppm	0.00
127) Acenaphthene-d10A	9.476	164	365093	40.00	ppm	0.00
136) Phenanthrene-d10A	11.219	188	599891	40.00	ppm	0.00
146) Chrysene-d12A	14.493	240	424744	40.00	ppm	0.00
153) Perylene-d12A	16.809	264	319412	40.00	ppm	-0.02
System Monitoring Compounds						
7) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#		
9) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#		
23) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#		
47) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#		
75) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#		
95) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#		
Target Compounds						Qvalue
4) Pyridine	3.196	79	390264	62.31	ppm	99
6) Aniline	5.646	93	431423	48.31	ppm	74
15) Benzyl alcohol	6.160	108	207097	52.06	ppm	94
35) 4-Chloroaniline	7.529	127	402810	57.18	ppm	98
40) 2-Methylnaphthalene	8.262	142	597160	54.13	ppm	99
50) 2-Nitroaniline	8.957	65	257908	62.60	ppm	94
54) m-Dinitrobenzene	9.208	168	111952	52.16	ppm	84
58) 3-Nitroaniline	9.438	138	189950	56.80	ppm	95
60) Dibenzofuran	9.722	168	826121	51.04	ppm	99
69) 4-Nitroaniline	10.155	138	182518	49.05	ppm	97
72) n-Nitrosodiphenylamine	10.278	169	512961	55.03	ppm	99
73) Diphenylamine	10.278	169	512961	46.89	ppm	99
87) Carbazole	11.514	167	881162	52.85	ppm	99
93) Benzidine	12.840	184	485848	57.66	ppm	98
98) 3,3'-Dichlorobenzidine	14.477	252	205960	46.38	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071373.D
Acq On : 23 Jun 2020 5:25 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jun 23 19:01:20 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071374.D
Acq On : 23 Jun 2020 5:51 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jun 24 09:47:41 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 09:47:01 2020
Response via : Initial Calibration

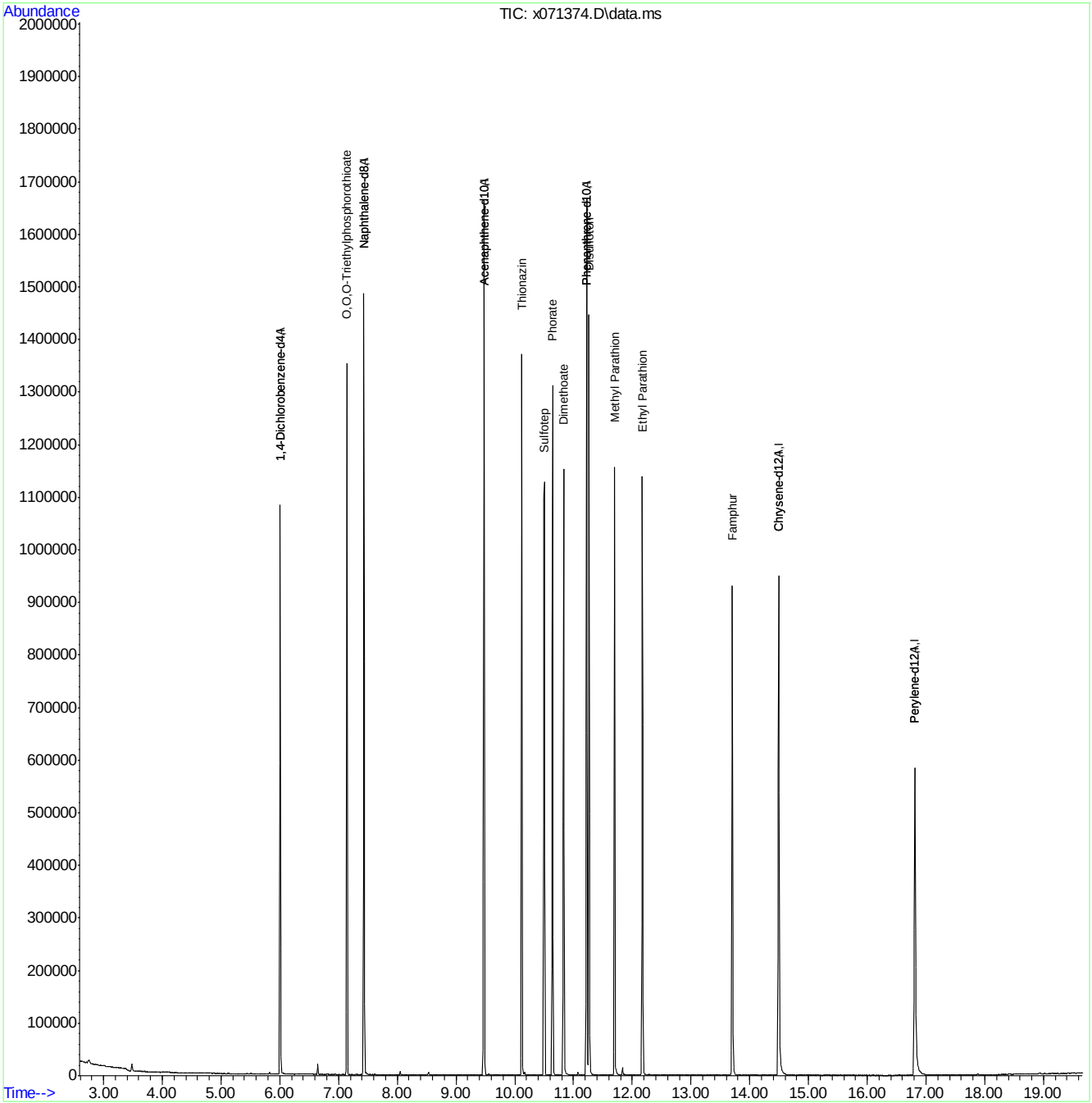
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.005	152	148473	40.00	ppm	0.00
22) Naphthalene-d8	7.433	136	622145	40.00	ppm	0.00
43) Acenaphthene-d10	9.476	164	318777	40.00	ppm	0.00
70) Phenanthrene-d10	11.225	188	611399	40.00	ppm	0.00
92) Chrysene-d12	14.493	240	410353	40.00	ppm	0.00
102) Perylene-d12	16.809	264	324234	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	6.005	152	148473	40.00	ppm	0.00
120) Naphthalene-d8A	7.433	136	622145	40.00	ppm	0.00
127) Acenaphthene-d10A	9.476	164	318777	40.00	ppm	0.00
136) Phenanthrene-d10A	11.225	188	611399	40.00	ppm	0.00
146) Chrysene-d12A	14.493	240	410353	40.00	ppm	0.00
153) Perylene-d12A	16.809	264	324958	40.00	ppm	-0.02
System Monitoring Compounds						
7) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#		
9) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#		
23) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#		
47) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#		
75) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#		
95) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#		
Target Compounds						Qvalue
28) O,O,O-Triethylphosphor...	7.144	198	105879	44.45	ppm	83
68) Thionazin	10.118	97	120853	50.65	ppm	97
76) Sulfotep	10.498	97	86642	43.01	ppm	81
77) Phorate	10.642	75	319548	45.28	ppm	100
80) Dimethoate	10.835	87	214899	43.90	ppm	97
86) Disulfoton	11.262	88	274405	37.15	ppm	98
88) Methyl Parathion	11.701	109	189499	45.13	ppm	99
90) Ethyl Parathion	12.172	97	110890	45.60	ppm	99
96) Famphur	13.701	218	254343	81.91	ppm	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071374.D
Acq On : 23 Jun 2020 5:51 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jun 24 09:47:41 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 09:47:01 2020
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 06/24/20 14:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071375.D
Acq On : 23 Jun 2020 6:17 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jun 23 19:09:37 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.005	152	172015	40.00	ppm	0.00
22) Naphthalene-d8	7.433	136	793987	40.00	ppm	0.00
43) Acenaphthene-d10	9.476	164	393550	40.00	ppm	0.00
70) Phenanthrene-d10	11.225	188	731895	40.00	ppm	0.00
92) Chrysene-d12	14.493	240	462942	40.00	ppm	0.00
102) Perylene-d12	16.825	264	392896	40.00	ppm	0.01
110) 1,4-Dichlorobenzene-d4A	6.005	152	172015	40.00	ppm	0.00
120) Naphthalene-d8A	7.433	136	793987	40.00	ppm	0.00
127) Acenaphthene-d10A	9.476	164	393550	40.00	ppm	0.00
136) Phenanthrene-d10A	11.225	188	731895	40.00	ppm	0.00
146) Chrysene-d12A	14.493	240	462942	40.00	ppm	0.00
153) Perylene-d12A	16.825	264	392896	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#		
9) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#		
23) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#		
47) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#		
75) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#		
95) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#		
Target Compounds						Qvalue
111) 2-Picoline	3.983	93	342381	41.74	ppm	98
112) N-Nitrosomethylethylamine	4.111	42	225307	39.50	ppm	98
113) Methyl methanesulfonate	4.438	80	168971	42.24	ppm	99
114) N-Nitrosodiethylamine	4.855	102	139040	41.73	ppm	97
115) Ethyl methanesulfonate	5.181	79	220292	39.97	ppm	99
116) Pentachloroethane	5.700	167	91780	39.11	ppm	98
117) N-Nitrosopyrrolidine	6.427	100	132223	43.89	ppm	89
118) N-Nitrosomorpholine	6.481	56	229903	41.82	ppm	97
119) O-Toluidine	6.497	106	485556	43.12	ppm	98
121) N-Nitrosopiperidine	6.812	42	267559	36.63	ppm	99
122) A,A-Dimethylphenethyla...	7.347	58	1119809m	38.45	ppm	
123) Hexachloropropene	7.561	213	157157	47.16	ppm	98
124) N-Nitrosodi-n-butylamine	7.936	84	192456	32.17	ppm	98
125) p-Phenylenediamine	7.930	108	311107	41.30	ppm	99
126) Isosafrole	8.176	162	205499	37.99	ppm	99
128) Safrole	8.781	162	242204	46.80	ppm	99
129) 1-Chloronaphthalene	8.850	162	563217	45.69	ppm	99
131) 1,4-Naphthoquinone	9.037	158	155250m	29.96	ppm	
132) Pentachlorobenzene	9.668	250	183989	42.42	ppm	99
133) 1-Naphthylamine	9.813	143	566555	41.45	ppm	98
134) 2-Naphthylamine	9.909	143	621752	42.56	ppm	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071375.D
Acq On : 23 Jun 2020 6:17 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jun 23 19:09:37 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

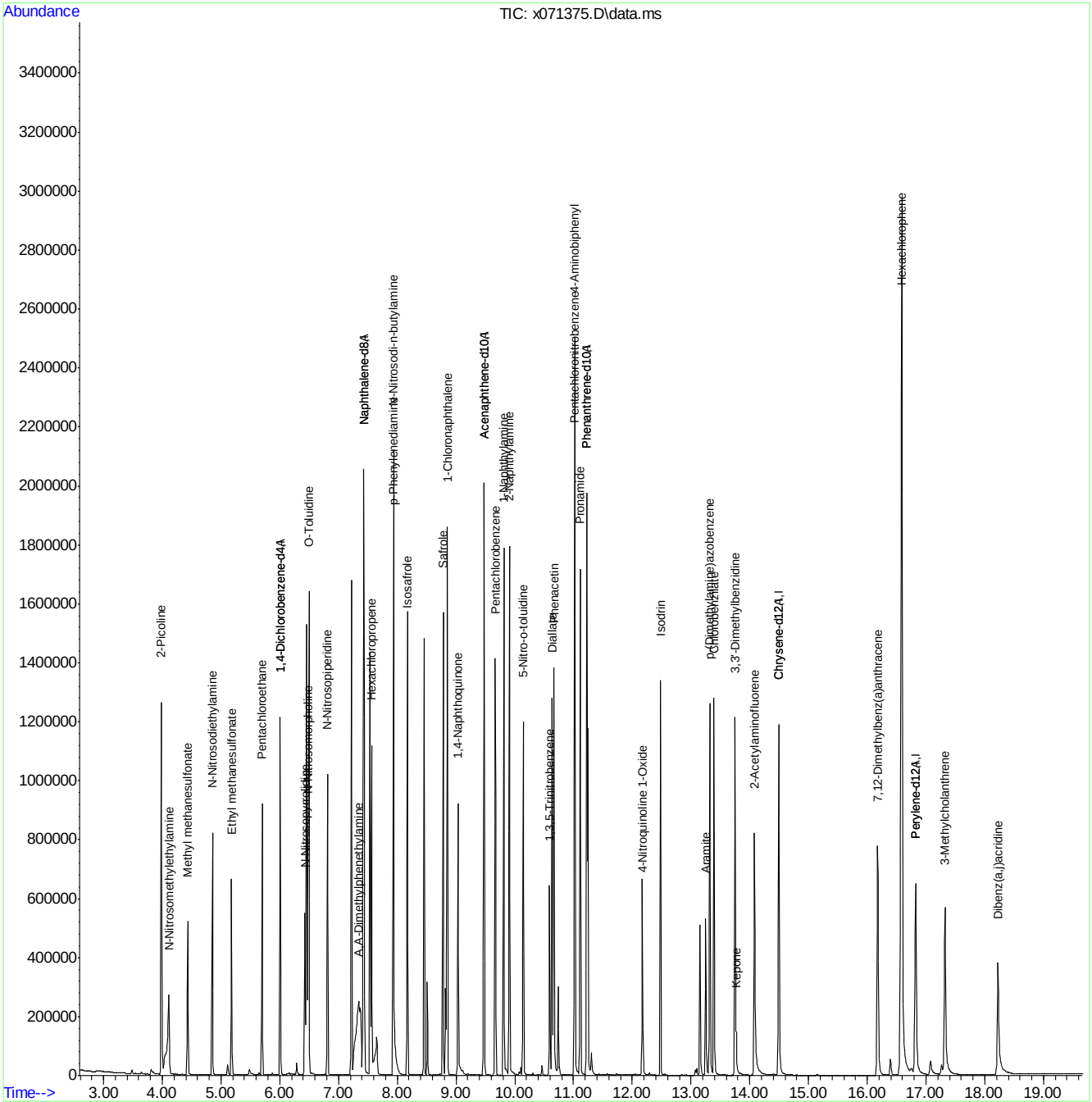
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
135) 5-Nitro-o-toluidine	10.145	152	175241	40.97	ppm	100
137) 1,3,5-Trinitrobenzene	10.594	75	152873	44.22	ppm	97
138) Diallate	10.637	43	439408m	38.31	ppm	
139) Phenacetin	10.669	108	309981	44.00	ppm	100
140) 4-Aminobiphenyl	11.022	169	600349	40.45	ppm	99
141) Pronamide	11.118	173	257415	44.78	ppm	99
142) Pentachloronitrobenzene	11.016	237	59311	41.79	ppm	97
143) 4-Nitroquinoline 1-Oxide	12.177	190	48279	36.49	ppm	90
145) Isodrin	12.482	193	85930	41.38	ppm	95
147) Aramite	13.247	185	78750m	41.76	ppm	
148) p-(Dimethylamine)azobe...	13.322	120	235287	40.07	ppm	96
149) Chlorobenzilate	13.391	139	267455	41.31	ppm	92
150) Kepone	13.776	272	4803	23.05	ppm	90
151) 3,3'-Dimethylbenzidine	13.749	212	450468	60.24	ppm	97
152) 2-Acetylaminofluorene	14.081	181	275835	41.97	ppm	98
154) 7,12-Dimethylbenz(a)an...	16.178	256	253624	46.53	ppm	99
155) Hexachlorophene	16.590	196	456808	469.07	ppm	97
156) 3-Methylcholanthrene	17.328	268	211601	39.83	ppm	98
157) Dibenz(a,j)acridine	18.226	279	276905	40.35	ppm	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071375.D
Acq On : 23 Jun 2020 6:17 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jun 23 19:09:37 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration



8270DApp9SX-062320.m Tue Jun 23 19:10:51 2020 Page: 3

SGS FA77615

Manual Integration Approval Summary

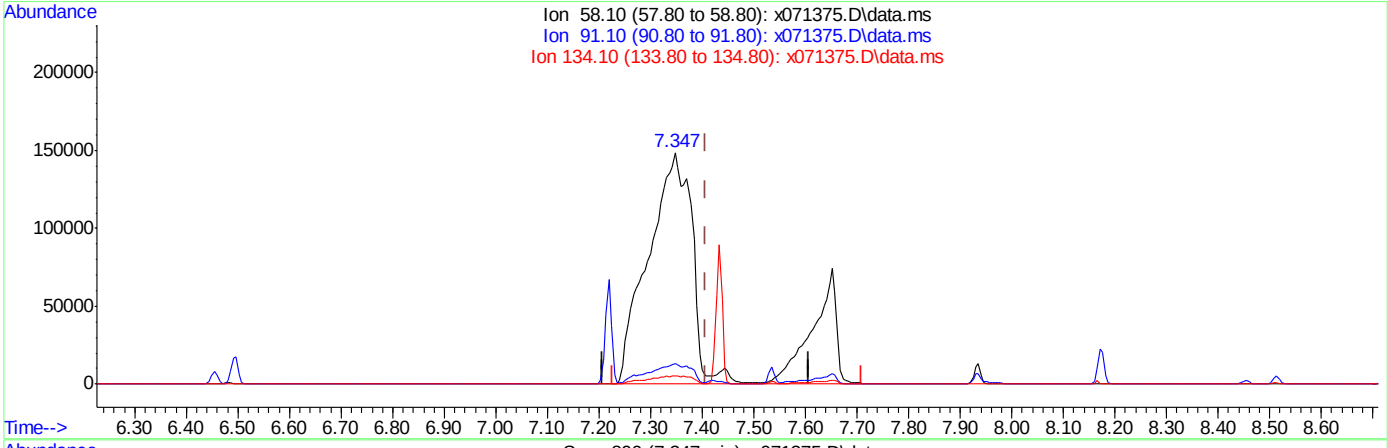
Sample Number: SX2918-ICV2918 **Method:** EPA 625.1
Lab FileID: X071375.D **Analyst approved:** 06/24/20 09:50 Martha Valls
Injection Time: 06/23/20 18:17 **Supervisor approved:** 06/24/20 14:07 Naresh Jiawan

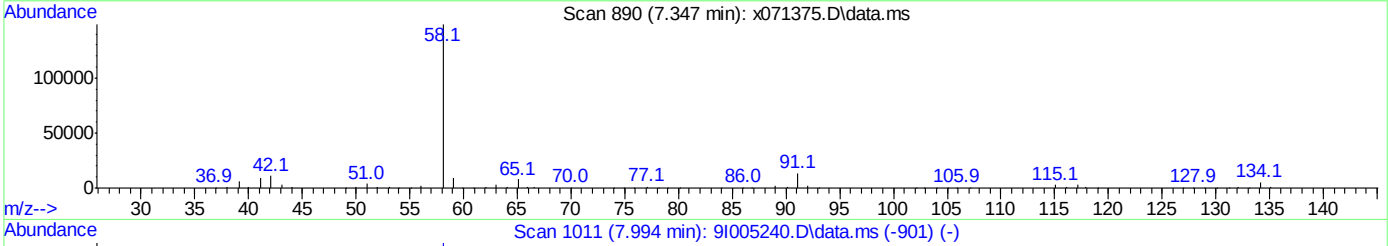
Parameter	CAS	Sig#	R.T. (min.)	Reason
A,A-Dimethylphenethylamine	122-09-8		7.35	Split peak
1,4-Naphthoquinone	130-15-4		9.04	Split peak
Diallate	2303-16-4		10.64	Split peak
Aramite	140-57-8		13.25	Split peak

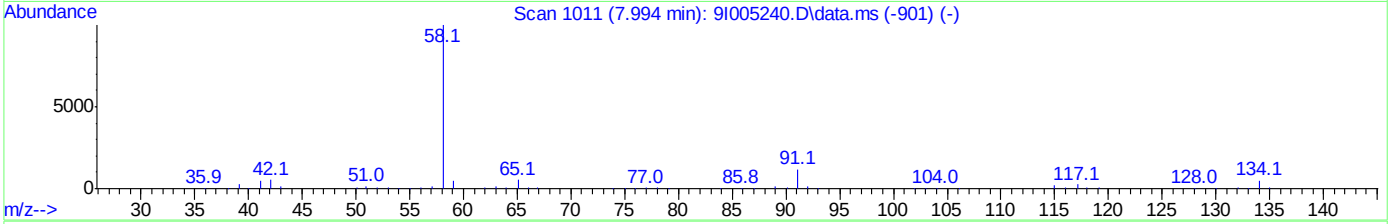
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071375.D
Acq On : 23 Jun 2020 6:17 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jun 23 19:02:41 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration







TIC: x071375.D\data.ms

(122) A,A-Dimethylphenethylamine

7.347min (-0.061) 38.45ppm m

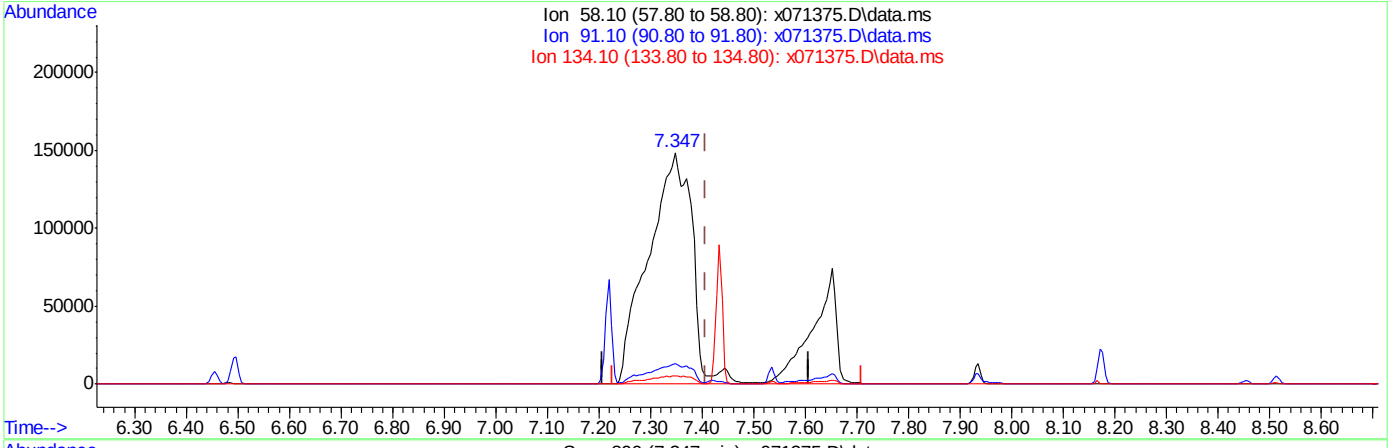
response 1119854

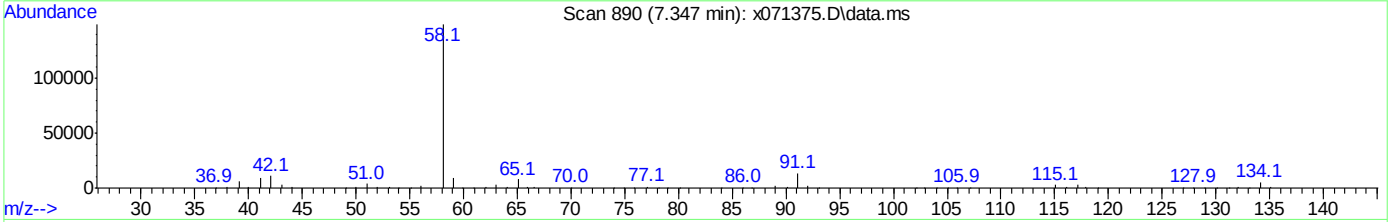
Ion	Exp%	Act%
58.10	100	100
91.10	8.30	9.03
134.10	3.70	3.76
0.00	0.00	0.00

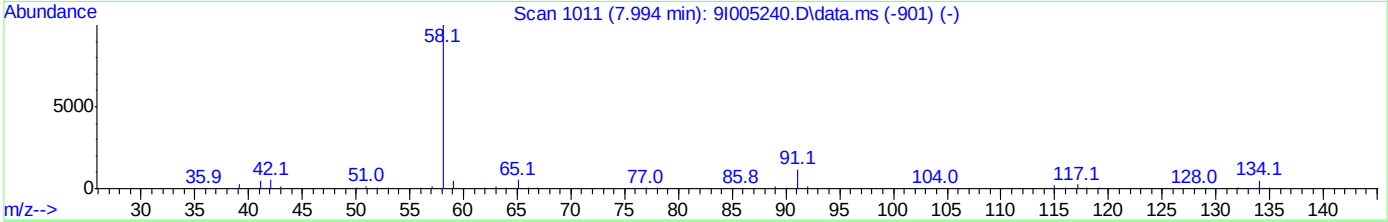
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071375.D
Acq On : 23 Jun 2020 6:17 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jun 23 19:02:41 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration







TIC: x071375.D\data.ms

(122) A,A-Dimethylphenethylamine

7.347min (-0.061) 38.45ppm m

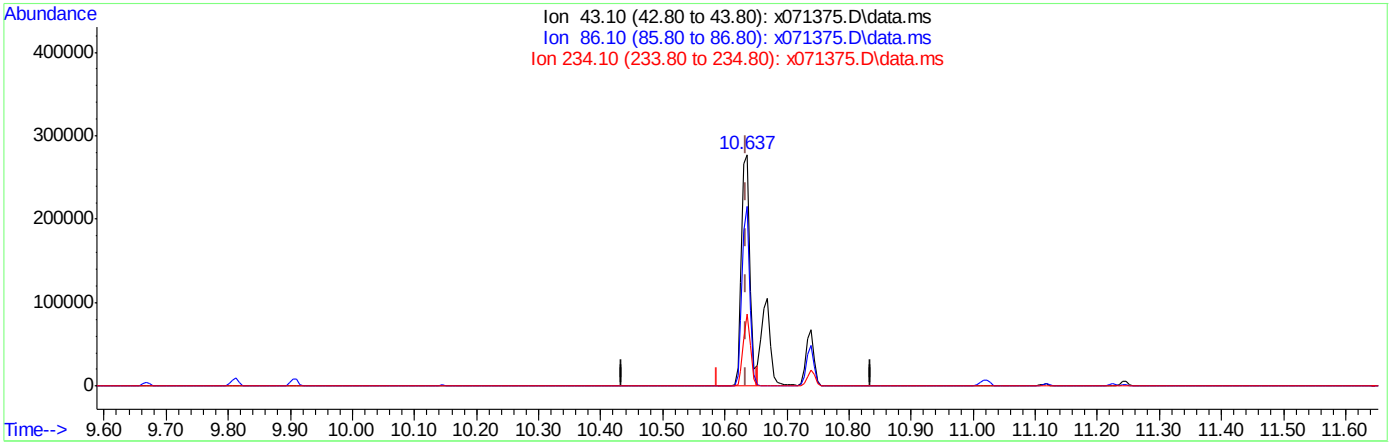
response 1119809

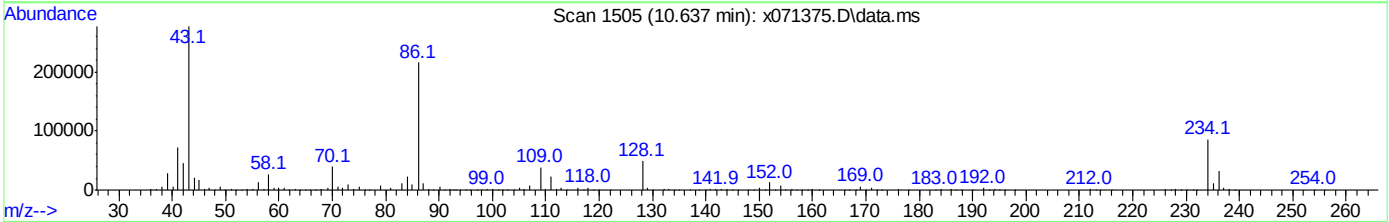
Ion	Exp%	Act%
58.10	100	100
91.10	8.30	9.03
134.10	3.70	3.76
0.00	0.00	0.00

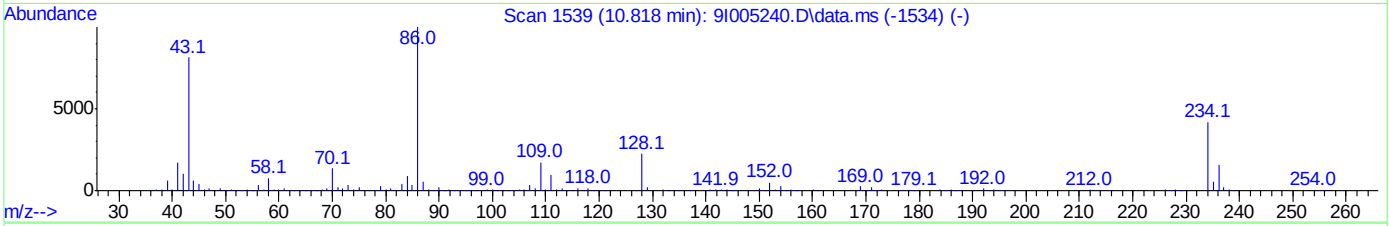
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071375.D
Acq On : 23 Jun 2020 6:17 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jun 23 19:02:41 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration







TIC: x071375.D\data.ms

(138) Diallate

10.637min (+0.002) 23.83ppm

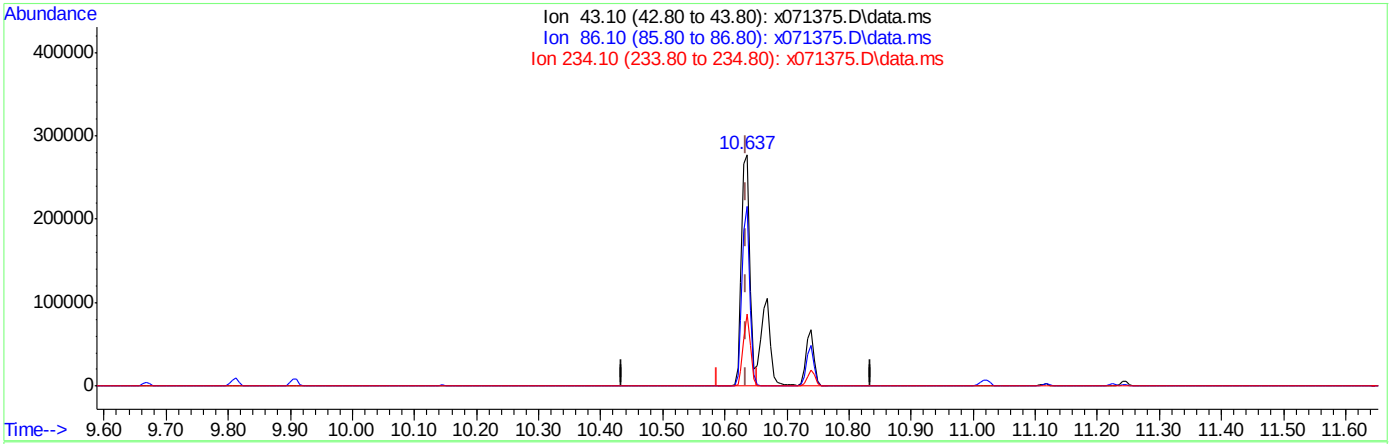
response 273290

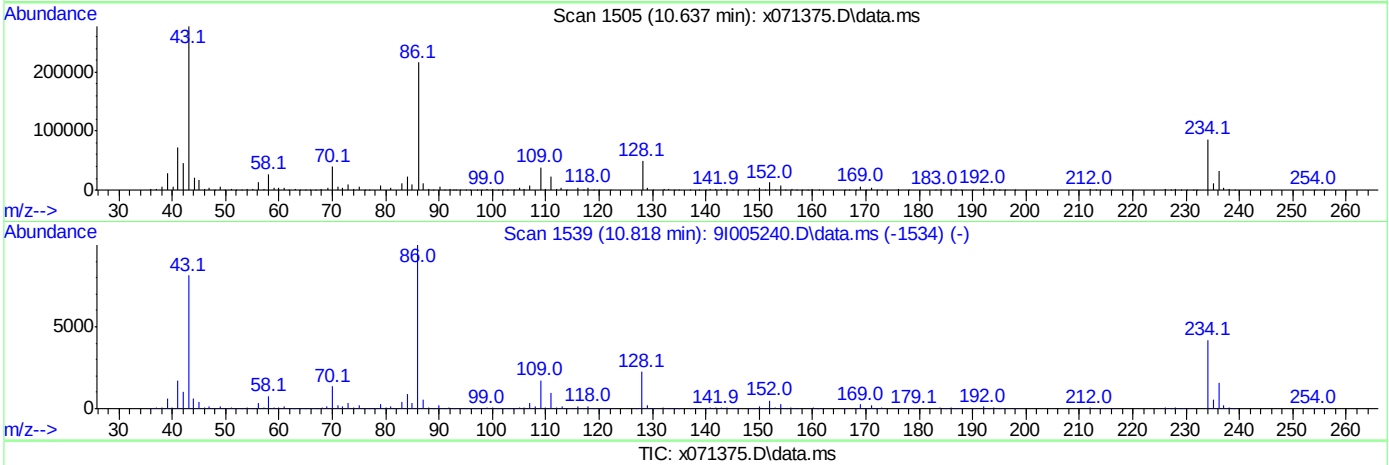
Ion	Exp%	Act%
43.10	100	100
86.10	76.00	80.95
234.10	30.60	32.24
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071375.D
Acq On : 23 Jun 2020 6:17 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jun 23 19:02:41 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration





TIC: x071375.D\data.ms

(138) Diallate

10.637min (+0.002) 38.31ppm m

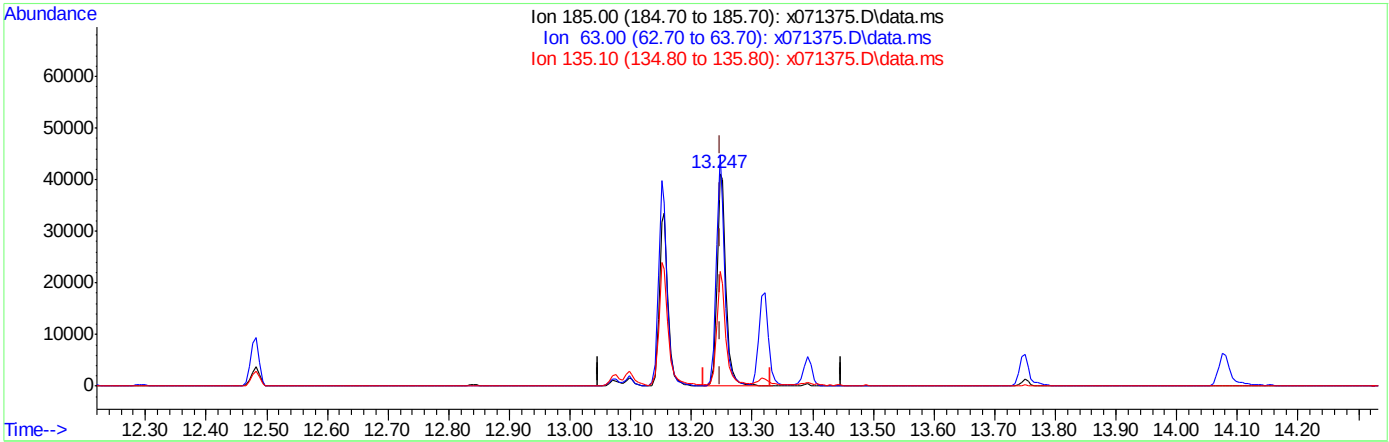
response 439408

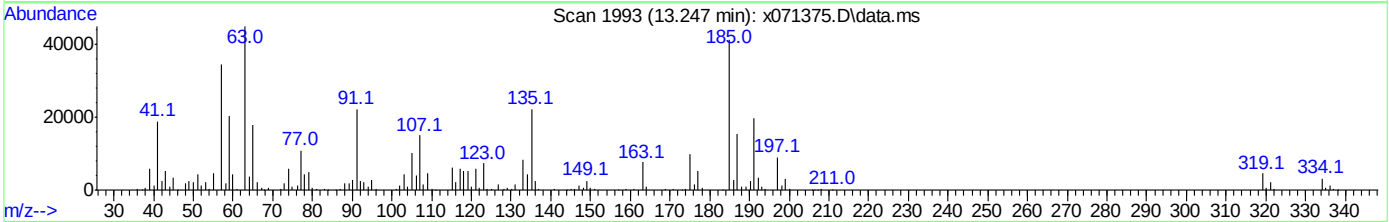
Ion	Exp%	Act%
43.10	100	100
86.10	76.00	77.78
234.10	30.60	31.05
0.00	0.00	0.00

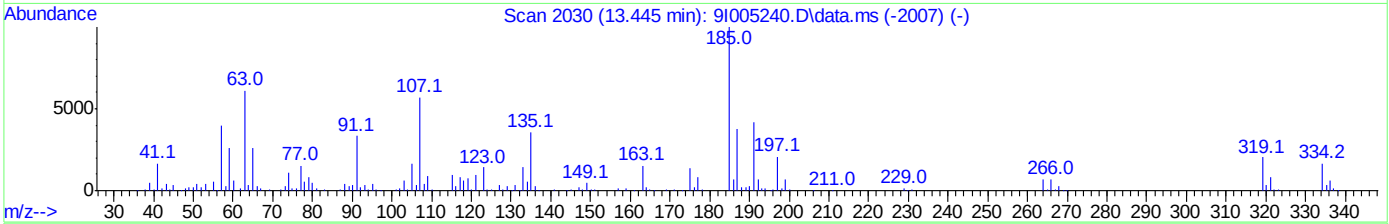
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071375.D
Acq On : 23 Jun 2020 6:17 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jun 23 19:07:08 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration







TIC: x071375.D\data.ms

(147) Aramite

13.247min (-0.001) 24.60ppm

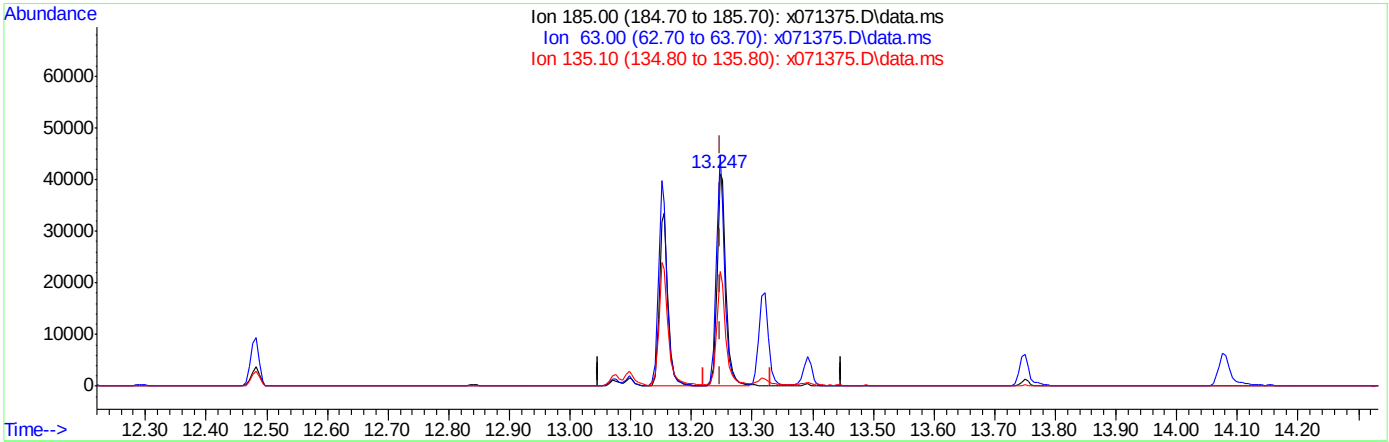
response 44104

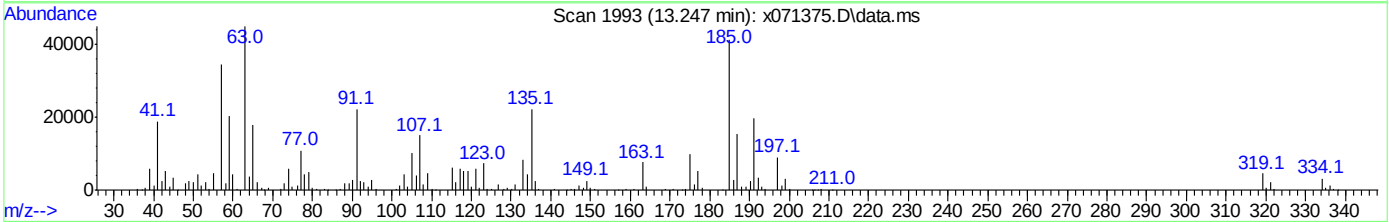
Ion	Exp%	Act%
185.00	100	100
63.00	99.40	105.13
135.10	50.50	53.08
0.00	0.00	0.00

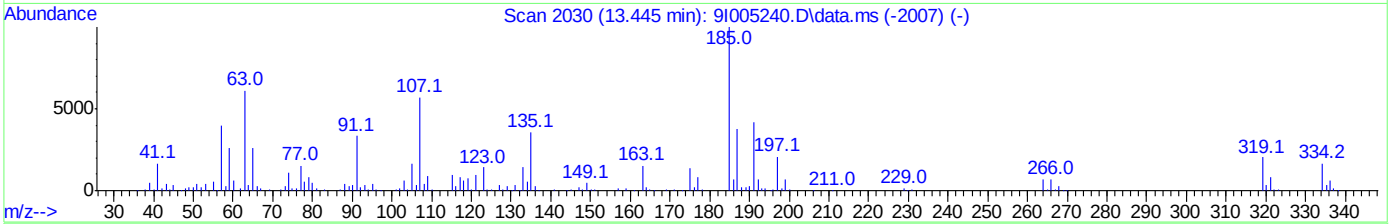
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071375.D
Acq On : 23 Jun 2020 6:17 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jun 23 19:07:08 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration







TIC: x071375.D\data.ms

(147) Aramite

13.247min (-0.001) 41.76ppm m

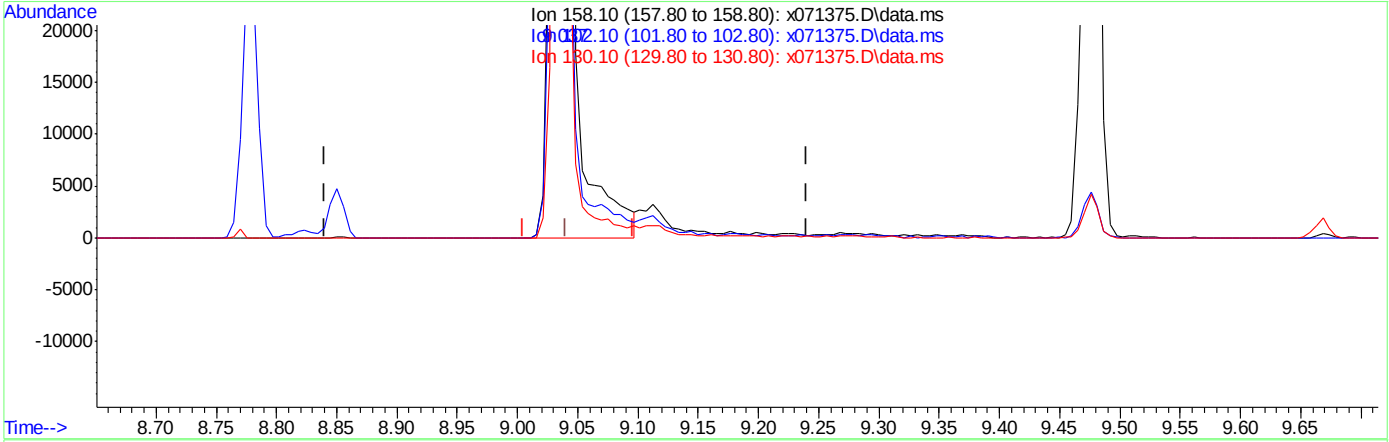
response 78750

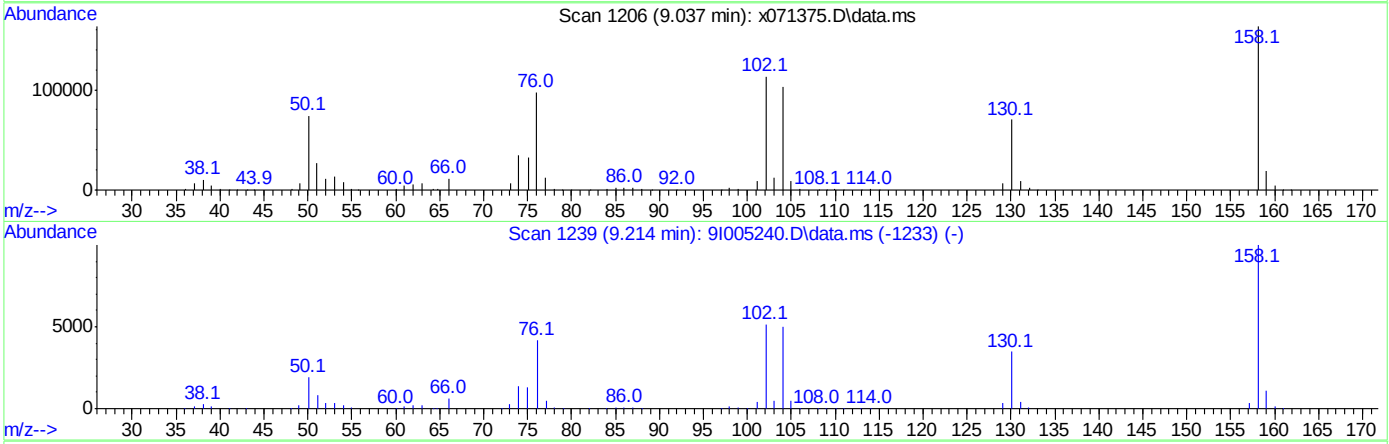
Ion	Exp%	Act%
185.00	100	100
63.00	99.40	108.99
135.10	50.50	54.14
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071375.D
Acq On : 23 Jun 2020 6:17 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jun 23 19:07:08 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration





TIC: x071375.D\data.ms

(131) 1,4-Naphthoquinone

9.037min (-0.003) 28.96ppm

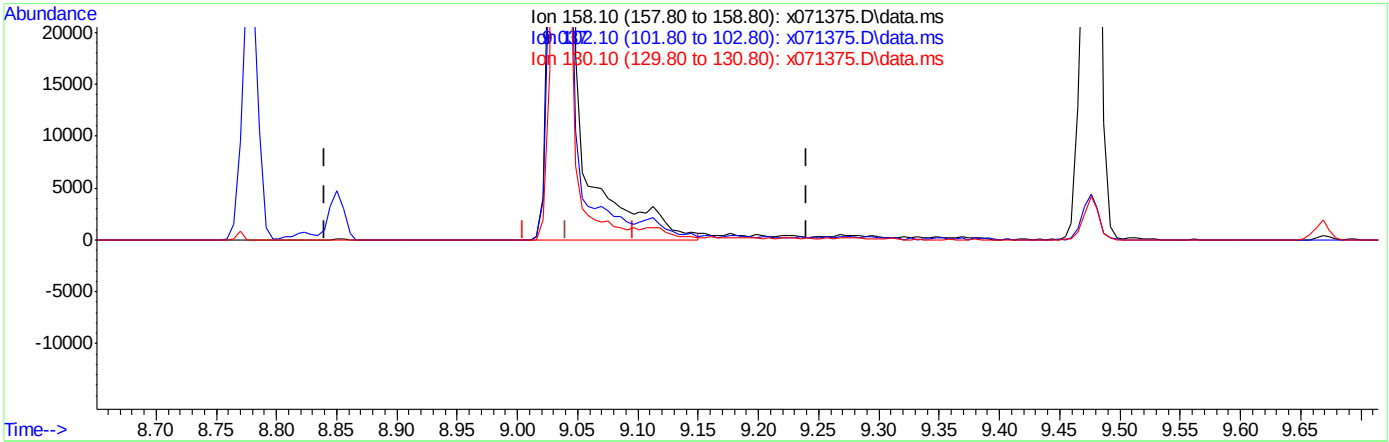
response 149991

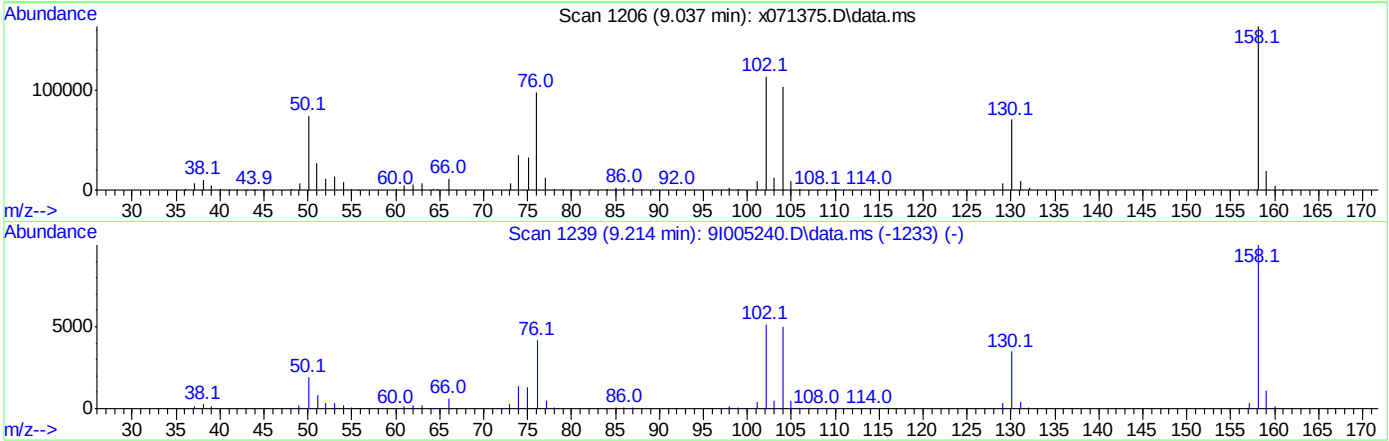
Ion	Exp%	Act%
158.10	100	100
102.10	69.70	69.26
130.10	42.30	43.02
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071375.D
Acq On : 23 Jun 2020 6:17 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jun 23 19:07:08 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration





TIC: x071375.D\data.ms

(131) 1,4-Naphthoquinone

9.037min (-0.003) 29.96ppm m

response 155250

Ion	Exp%	Act%
158.10	100	100
102.10	69.70	69.18
130.10	42.30	43.05
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071376.D
Acq On : 23 Jun 2020 6:43 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jun 23 19:07:50 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

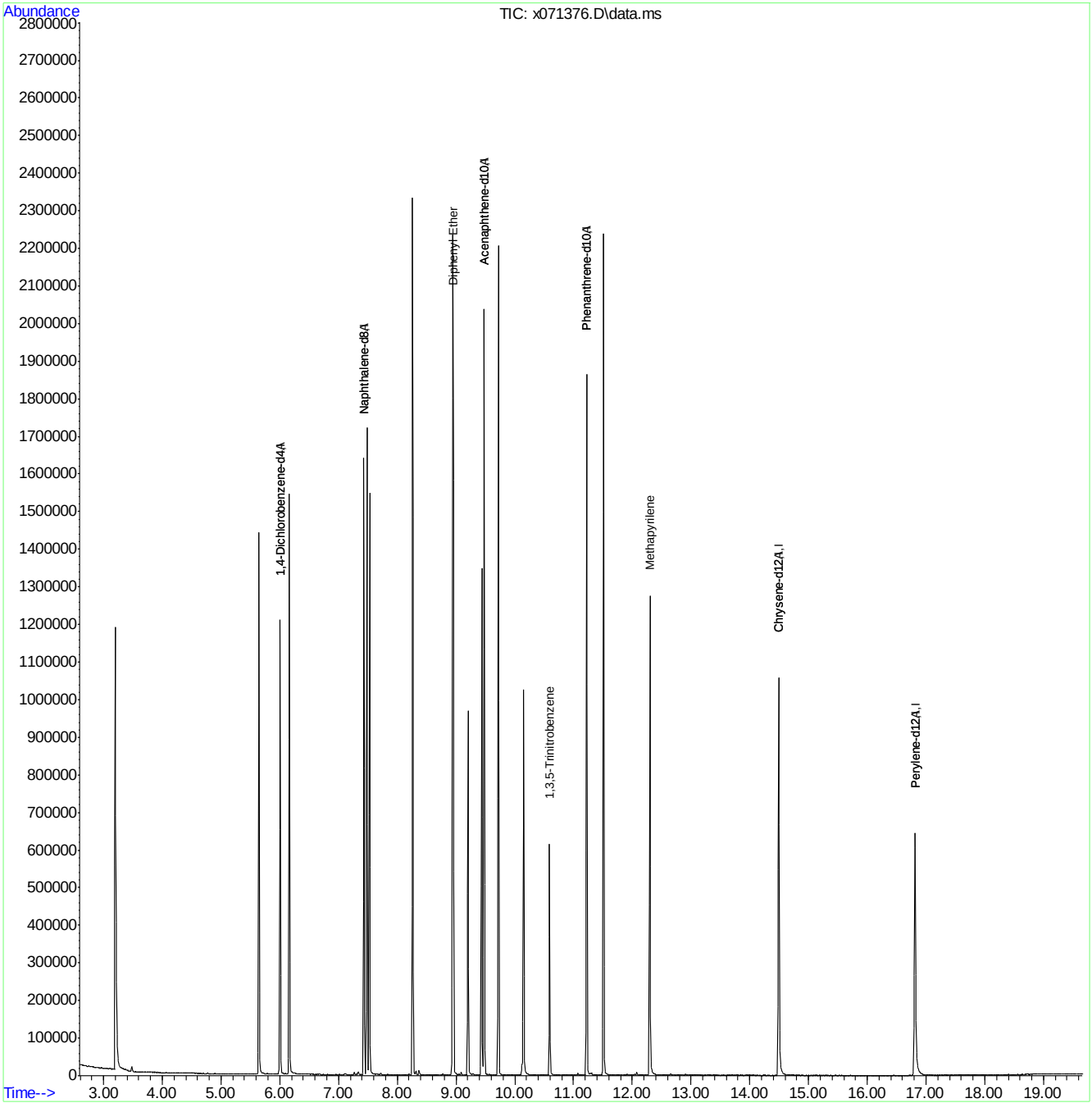
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.005	152	162946	40.00	ppm	0.00
22) Naphthalene-d8	7.433	136	686954	40.00	ppm	0.00
43) Acenaphthene-d10	9.476	164	413885	40.00	ppm	0.00
70) Phenanthrene-d10	11.225	188	667116	40.00	ppm	0.00
92) Chrysene-d12	14.493	240	441735	40.00	ppm	0.00
102) Perylene-d12	16.814	264	357783	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	6.005	152	162946	40.00	ppm	0.00
120) Naphthalene-d8A	7.433	136	686954	40.00	ppm	0.00
127) Acenaphthene-d10A	9.476	164	413885	40.00	ppm	0.00
136) Phenanthrene-d10A	11.225	188	667116	40.00	ppm	0.00
146) Chrysene-d12A	14.493	240	441735	40.00	ppm	0.00
153) Perylene-d12A	16.814	264	358466	40.00	ppm	-0.01
System Monitoring Compounds						
7) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#		
9) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#		
23) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#		
47) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#		
75) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#		
95) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#		
Target Compounds						Qvalue
130) Diphenyl Ether	8.946	170	374652	41.38	ppm	98
137) 1,3,5-Trinitrobenzene	10.594	75	141558	44.82	ppm	97
144) Methapyrilene	12.295	58	438223	128.03	ppm	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071376.D
Acq On : 23 Jun 2020 6:43 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jun 23 19:07:50 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan
06/25/20 15:55

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\June 2020\06-25-2020\sx2919\
Data File : x071416.d
Acq On : 24 Jun 2020 3:22 pm
Operator : marthav
Sample : icv2918-50 app9
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 25 02:53:35 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Thu Jun 25 02:50:18 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.994	152	159488	40.00	ppm	0.00
22) Naphthalene-d8	7.422	136	675368	40.00	ppm	0.00
43) Acenaphthene-d10	9.465	164	316836	40.00	ppm	0.00
70) Phenanthrene-d10	11.214	188	574623	40.00	ppm	0.00
92) Chrysene-d12	14.477	240	403905	40.00	ppm	0.00
102) Perylene-d12	16.803	264	385155	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	5.994	152	159488	40.00	ppm	0.00
120) Naphthalene-d8A	7.422	136	675368	40.00	ppm	0.00
127) Acenaphthene-d10A	9.465	164	316836	40.00	ppm	0.00
136) Phenanthrene-d10A	11.214	188	574623	40.00	ppm	0.00
146) Chrysene-d12A	14.477	240	403905	40.00	ppm	0.00
153) Perylene-d12A	16.803	264	385155	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#		
9) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#		
23) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#		
47) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#		
75) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#		
95) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#		
Target Compounds						Qvalue
111) 2-Picoline	3.967	93	395982	52.06	ppm	87
112) N-Nitrosomethylethylamine	4.095	42	260669	49.28	ppm #	56
113) Methyl methanesulfonate	4.421	80	176859	47.69	ppm	90
114) N-Nitrosodiethylamine	4.839	102	158768	51.39	ppm #	30
115) Ethyl methanesulfonate	5.170	79	224922	44.02	ppm	96
116) Pentachloroethane	5.684	167	101460	46.63	ppm	91
117) N-Nitrosopyrrolidine	6.416	100	143191	51.26	ppm #	20
118) N-Nitrosomorpholine	6.465	56	245205	48.10	ppm #	66
119) O-Toluidine	6.481	106	538729	51.60	ppm	99
121) N-Nitrosopiperidine	6.801	42	281884	45.37	ppm #	60
122) A,A-Dimethylphenethyla...	7.315	58	951947	38.43	ppm	87
123) Hexachloropropene	7.550	213	167883	59.22	ppm	100
124) N-Nitrosodi-n-butylamine	7.925	84	203432	39.53	ppm #	54
125) p-Phenylenediamine	7.925	108	336165	52.46	ppm	93
126) Isosafrole	8.160	162	200621	43.60	ppm	78
128) Safrole	8.770	162	232090	55.71	ppm	92
129) 1-Chloronaphthalene	8.839	162	544498	54.87	ppm	97
131) 1,4-Naphthoquinone	9.027	158	126951	30.43	ppm	82
132) Pentachlorobenzene	9.658	250	174738	50.04	ppm	99
133) 1-Naphthylamine	9.802	143	587293	53.36	ppm	94
134) 2-Naphthylamine	9.898	143	619160	52.64	ppm	98
135) 5-Nitro-o-toluidine	10.134	152	180970	51.69	ppm	80
137) 1,3,5-Trinitrobenzene	10.588	75	146886	52.54	ppm	90
138) Diallate	10.620	43	416437m	46.24	ppm	
139) Phenacetin	10.658	108	305531	55.23	ppm	91
140) 4-Aminobiphenyl	11.011	169	619883	53.19	ppm	99
141) Pronamide	11.107	173	248936	55.16	ppm	98
142) Pentachloronitrobenzene	11.006	237	55950	50.21	ppm	91
143) 4-Nitroquinoline 1-Oxide	12.166	190	51977	50.37	ppm	88

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\June 2020\06-25-2020\sx2919\
Data File : x071416.d
Acq On : 24 Jun 2020 3:22 pm
Operator : marthav
Sample : icv2918-50 app9
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 25 02:53:35 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Thu Jun 25 02:50:18 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
145) Isodrin	12.471	193	82017	50.31	ppm	87
147) Aramite	13.236	185	83620m	49.69	ppm	
148) p-(Dimethylamine)azobe...	13.311	120	253632	49.47	ppm	86
149) Chlorobenzilate	13.380	139	264506	46.52	ppm	74
150) Kepone	13.760	272	14639	80.51	ppm	90
151) 3,3'-Dimethylbenzidine	13.739	212	540574	82.86	ppm	97
152) 2-Acetylaminofluorene	14.070	181	352354	58.75	ppm	91
154) 7,12-Dimethylbenz(a)an...	16.162	256	287086	53.73	ppm	96
155) Hexachlorophene	16.568	196	511787	520.12	ppm	99
156) 3-Methylcholanthrene	17.306	268	265370	50.15	ppm	93
157) Dibenz(a,j)acridine	18.210	279	404847	56.31	ppm	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

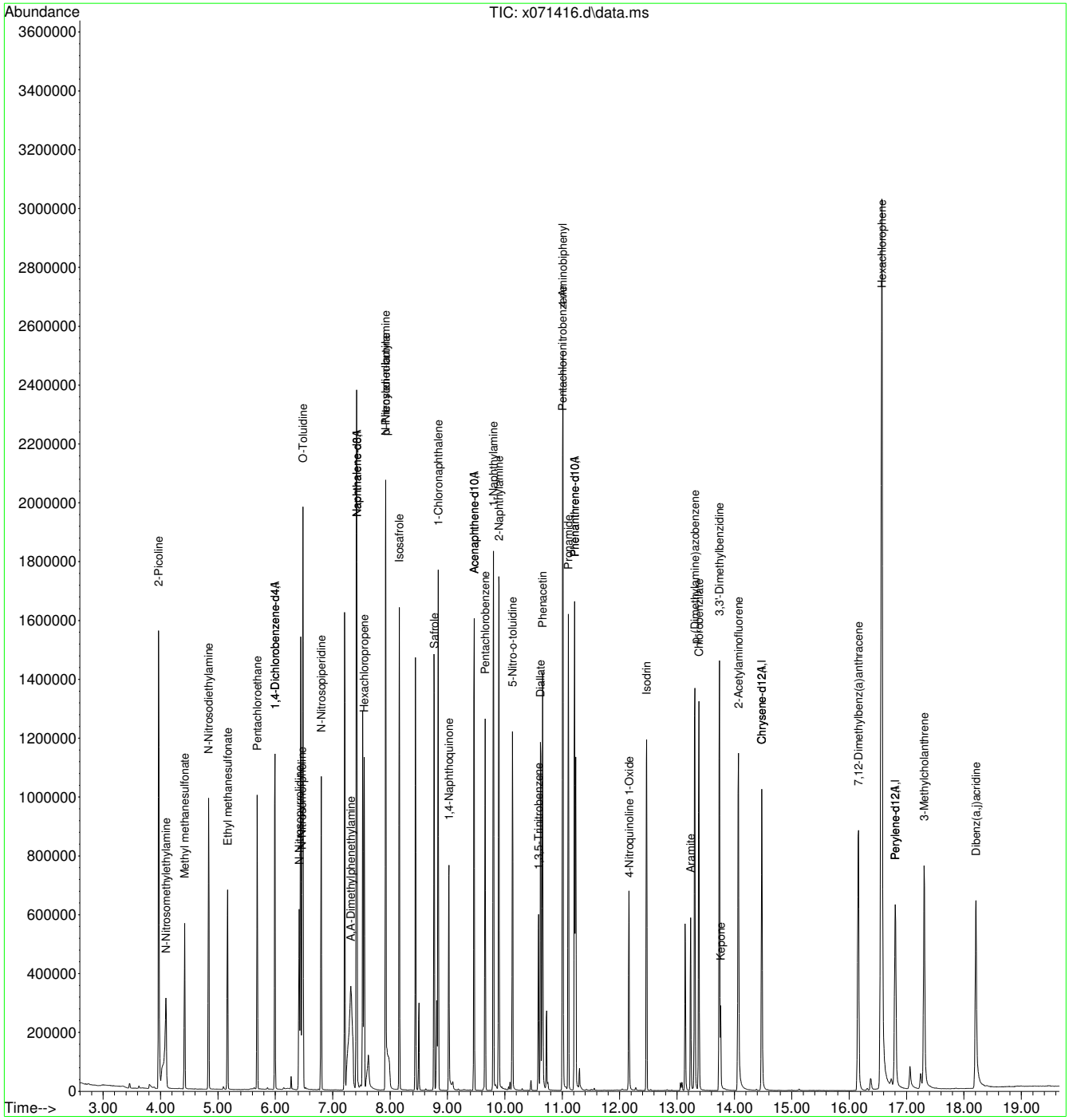
7.6.44

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\June 2020\06-25-2020\sx2919\
Data File : x071416.d
Acq On : 24 Jun 2020 3:22 pm
Operator : marthav
Sample : icv2918-50 app9
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 25 02:53:35 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Thu Jun 25 02:50:18 2020
Response via : Initial Calibration



SGS FA77615

Manual Integration Approval Summary

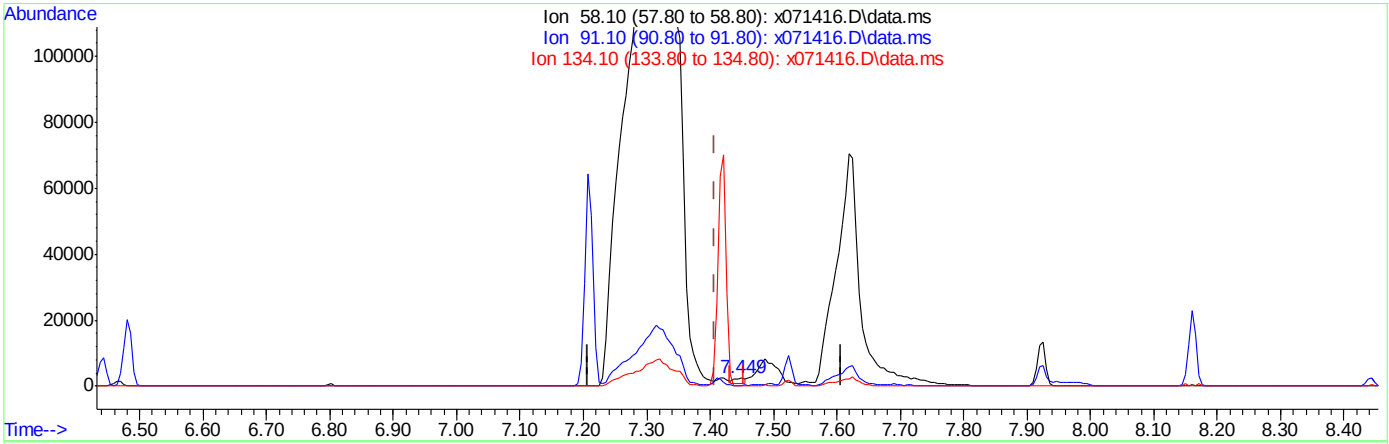
Sample Number: SX2918-ICV2918 **Method:** EPA 625.1
Lab FileID: X071416.D **Analyst approved:** 06/25/20 15:55 Naresh Jiawan
Injection Time: 06/24/20 15:22 **Supervisor approved:** 06/25/20 15:55 Naresh Jiawan

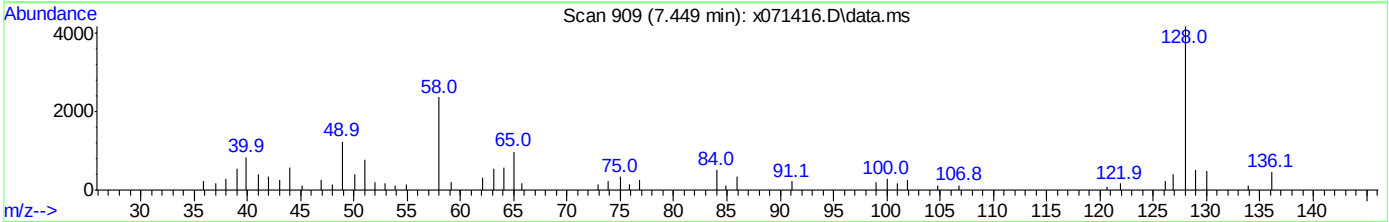
Parameter	CAS	Sig#	R.T. (min.)	Reason
Diallate	2303-16-4		10.62	Split peak
Aramite	140-57-8		13.24	Split peak

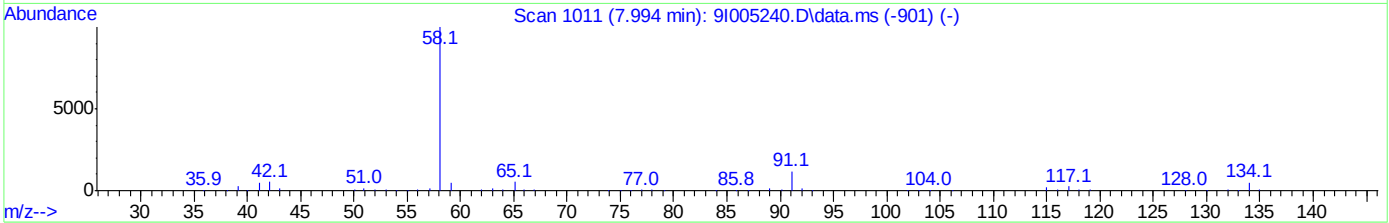
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0624_sx2919\
Data File : x071416.D
Acq On : 24 Jun 2020 3:22 pm
Operator : marthav
Sample : icv2918-50 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 24 15:43:42 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration







TIC: x071416.D\data.ms

(122) A,A-Dimethylphenethylamine

7.449min (+0.041) 0.08ppm

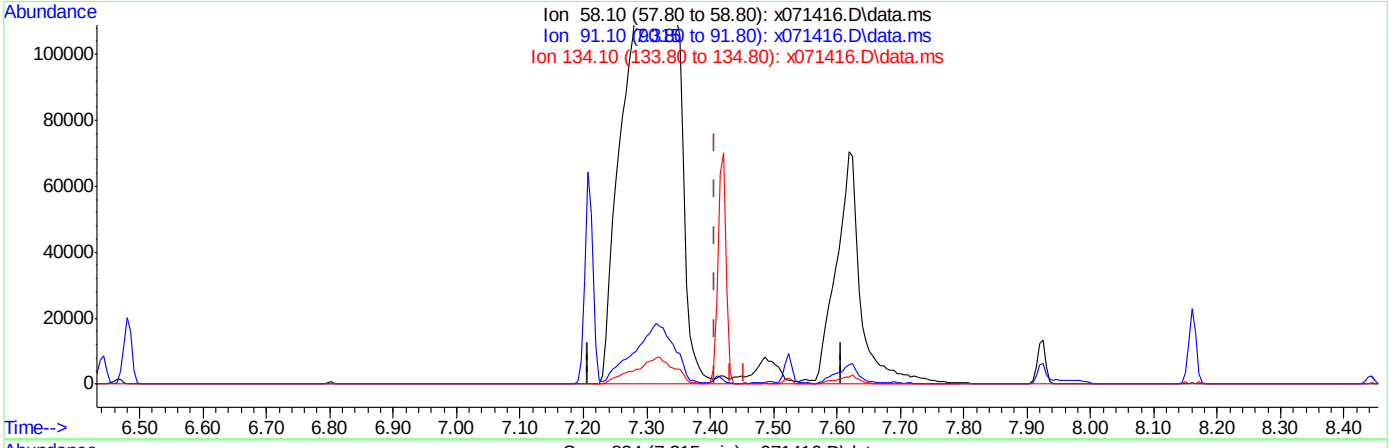
response 1956

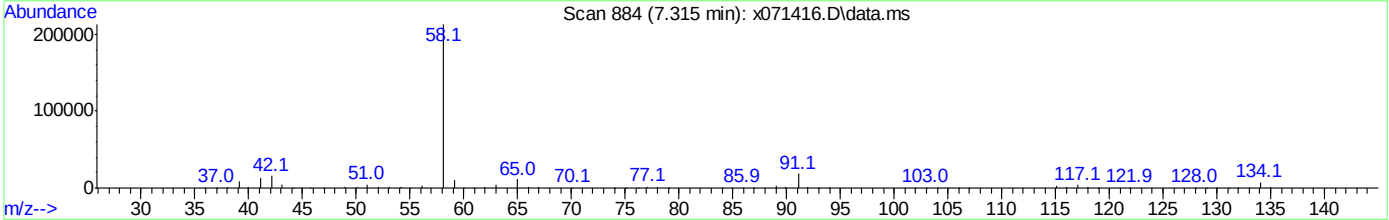
Ion	Exp%	Act%
58.10	100	100
91.10	8.30	0.00
134.10	3.70	0.00
0.00	0.00	0.00

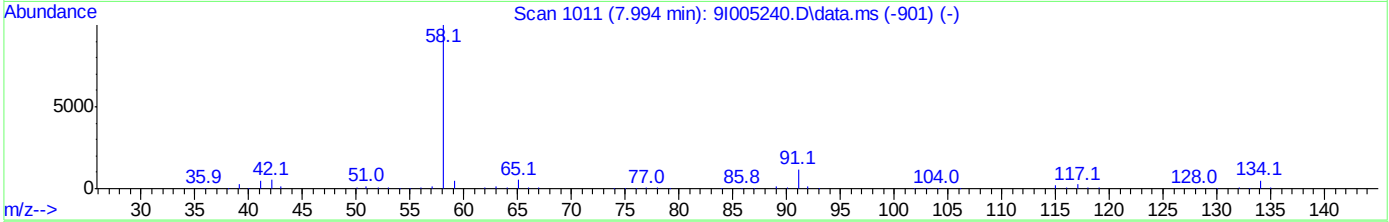
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0624_sx2919\
Data File : x071416.D
Acq On : 24 Jun 2020 3:22 pm
Operator : marthav
Sample : icv2918-50 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 24 15:43:42 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration







TIC: x071416.D\data.ms

(122) A,A-Dimethylphenethylamine

7.315min (-0.093) 47.29ppm m

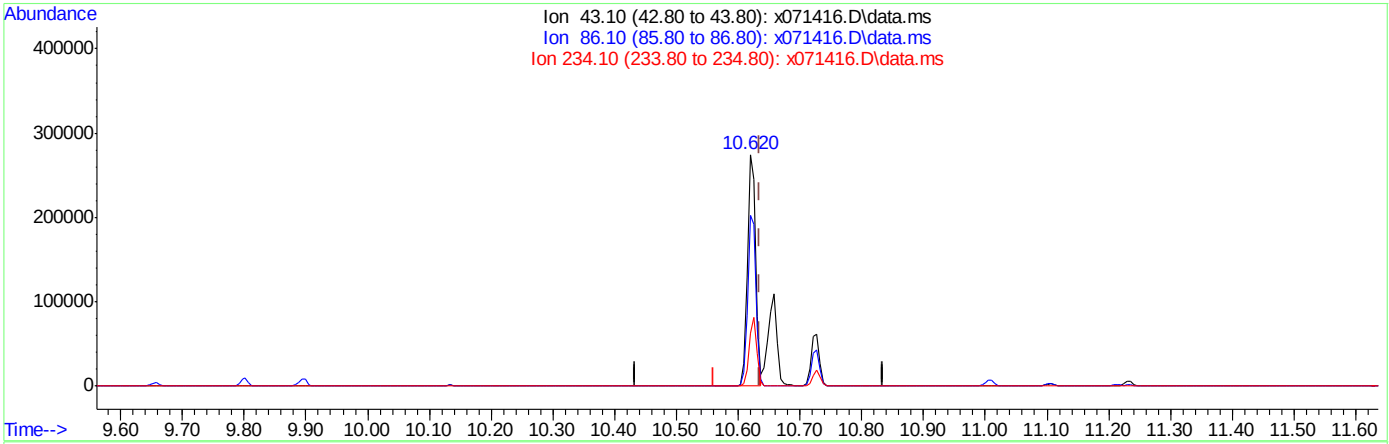
response 1171334

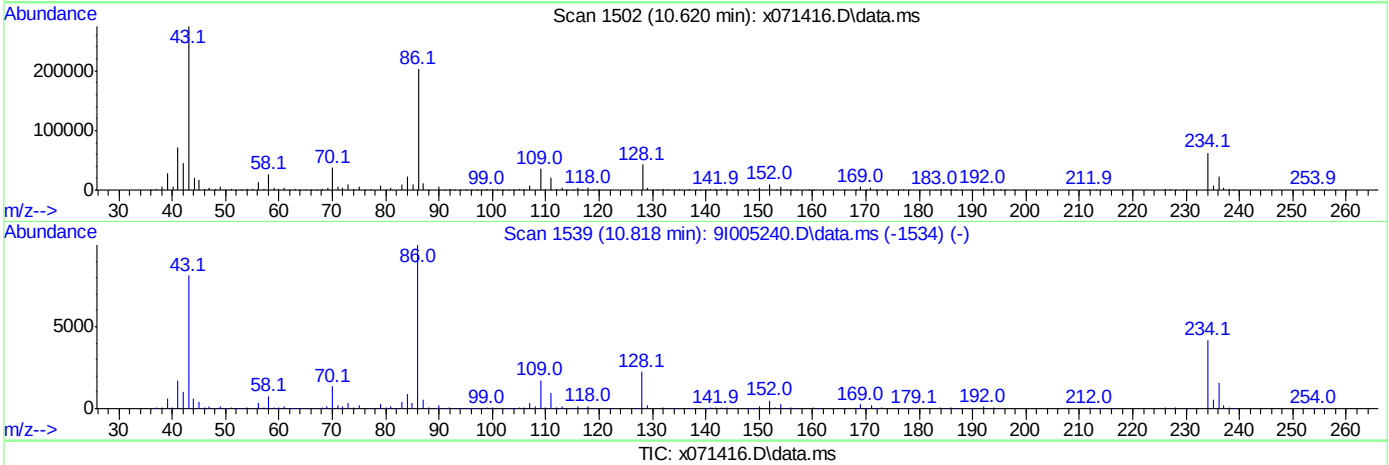
Ion	Exp%	Act%
58.10	100	100
91.10	8.30	8.67
134.10	3.70	3.66
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0624_sx2919\
Data File : x071416.D
Acq On : 24 Jun 2020 3:22 pm
Operator : marthav
Sample : icv2918-50 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 24 15:43:42 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration





TIC: x071416.D\data.ms

(138) Diallate

10.620min (-0.014) 27.71ppm

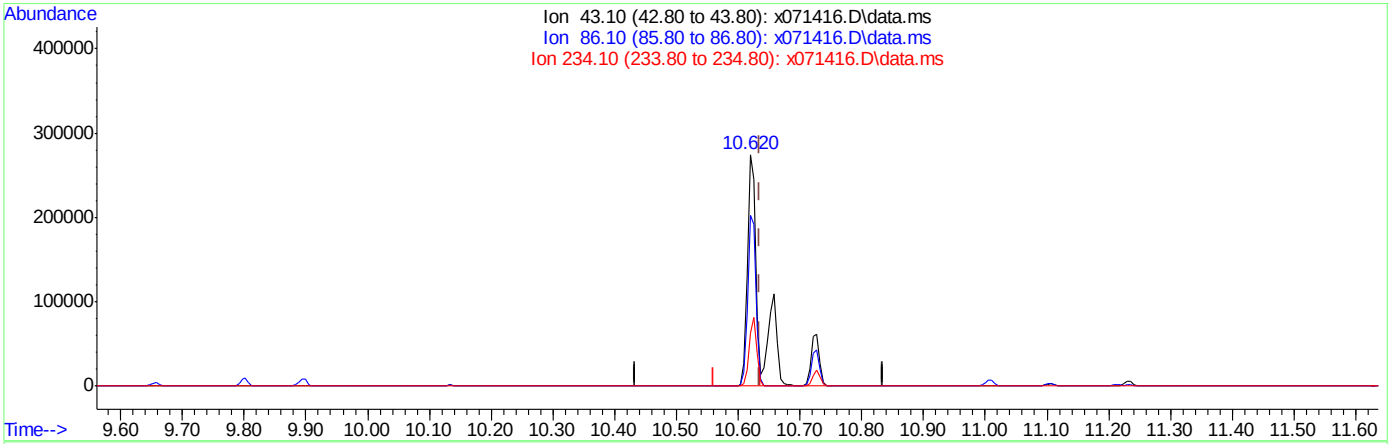
response 249556

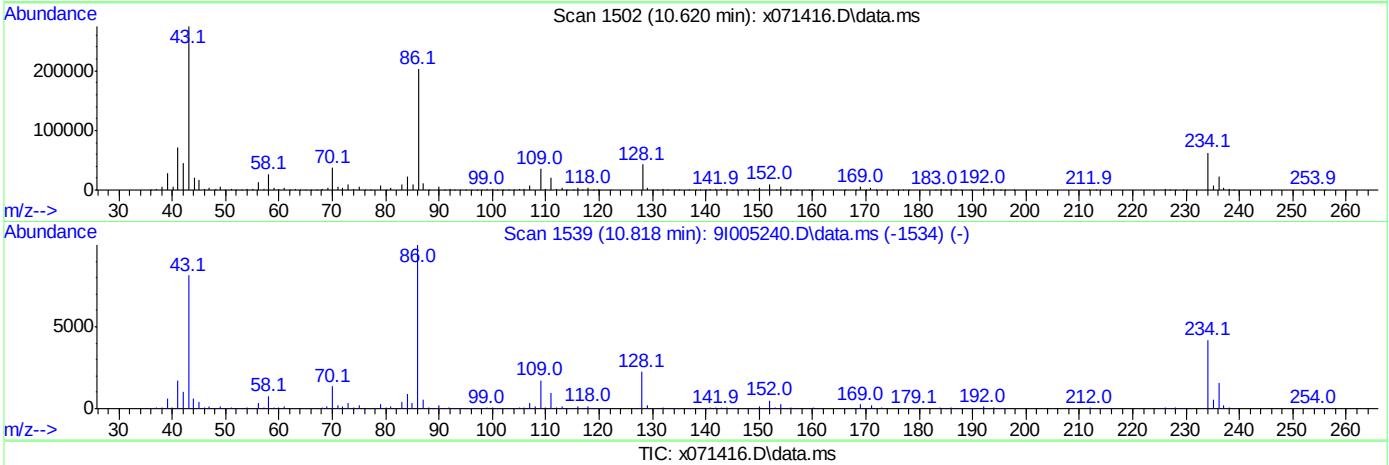
Ion	Exp%	Act%
43.10	100	100
86.10	76.00	74.00
234.10	30.60	22.32
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0624_sx2919\
Data File : x071416.D
Acq On : 24 Jun 2020 3:22 pm
Operator : marthav
Sample : icv2918-50 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 24 15:43:42 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration





TIC: x071416.D\data.ms

(138) Diallate

10.620min (-0.014) 46.24ppm m

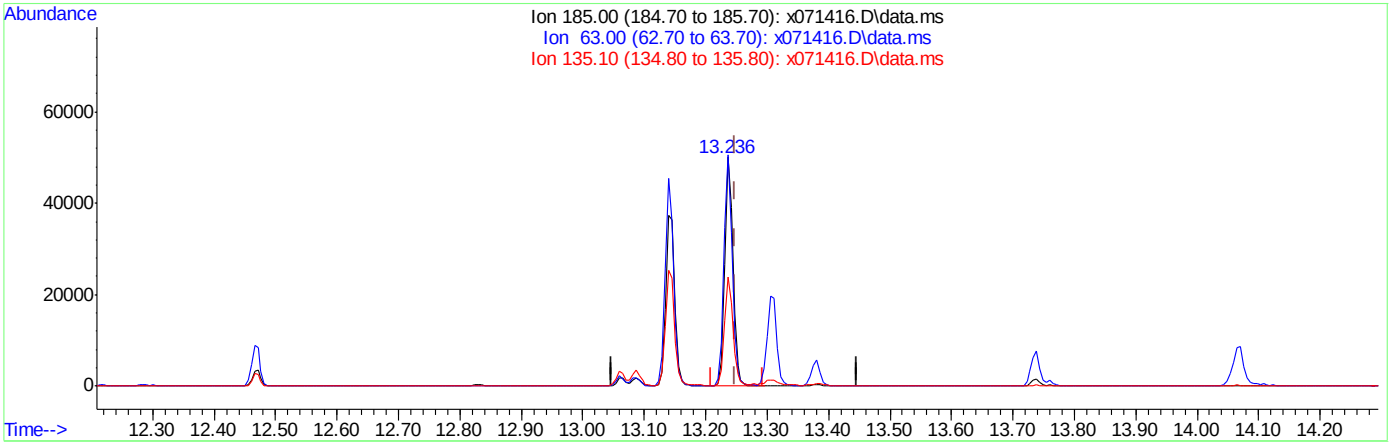
response 416360

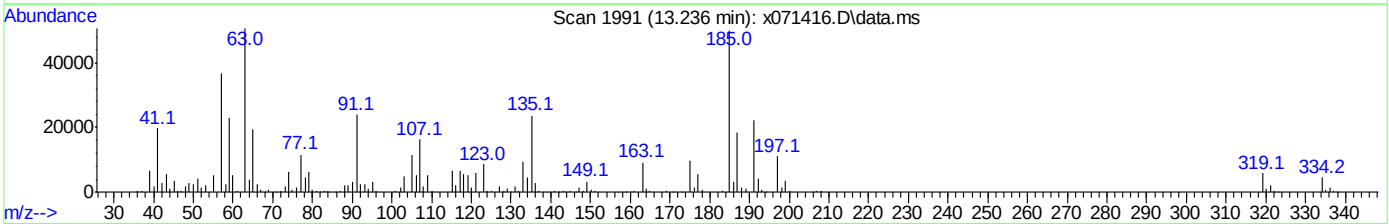
Ion	Exp%	Act%
43.10	100	100
86.10	76.00	73.74
234.10	30.60	22.86
0.00	0.00	0.00

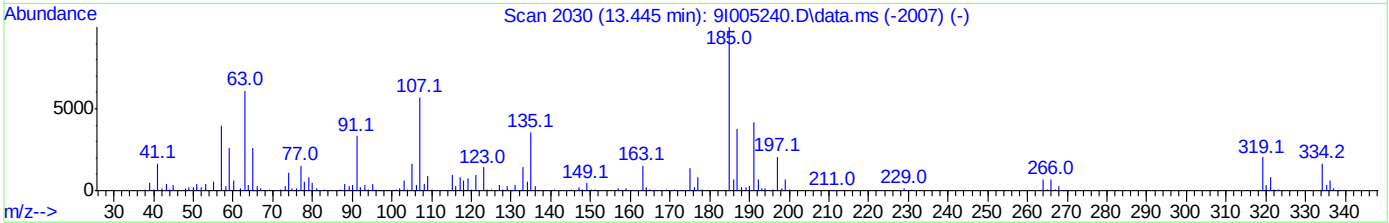
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0624_sx2919\
Data File : x071416.D
Acq On : 24 Jun 2020 3:22 pm
Operator : marthav
Sample : icv2918-50 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 24 15:43:42 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration







TIC: x071416.D\data.ms

(147) Aramite

13.236min (-0.012) 29.24ppm

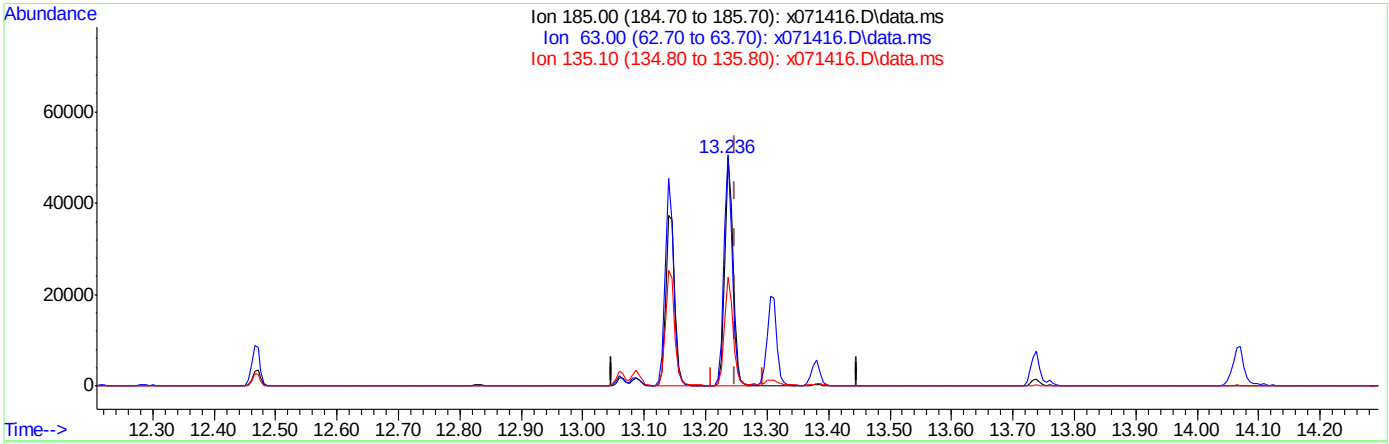
response 46379

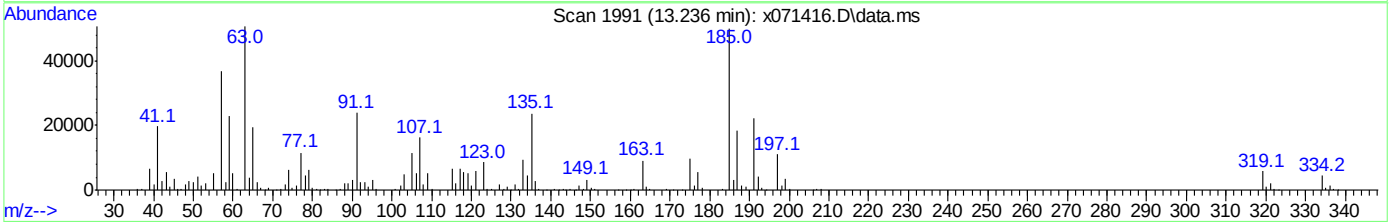
Ion	Exp%	Act%
185.00	100	100
63.00	99.40	97.60
135.10	50.50	46.70
0.00	0.00	0.00

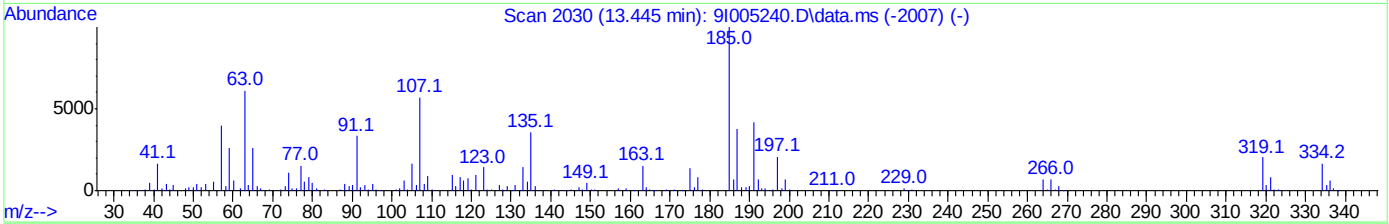
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0624_sx2919\
Data File : x071416.D
Acq On : 24 Jun 2020 3:22 pm
Operator : marthav
Sample : icv2918-50 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 24 15:43:42 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration







TIC: x071416.D\data.ms

(147) Aramite

13.236min (-0.012) 49.65ppm m

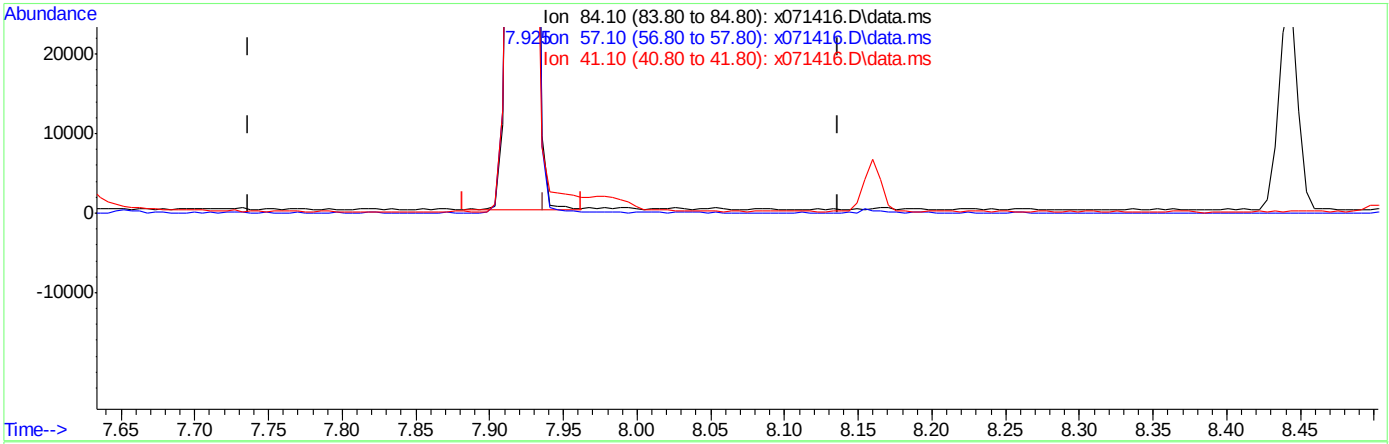
response 83540

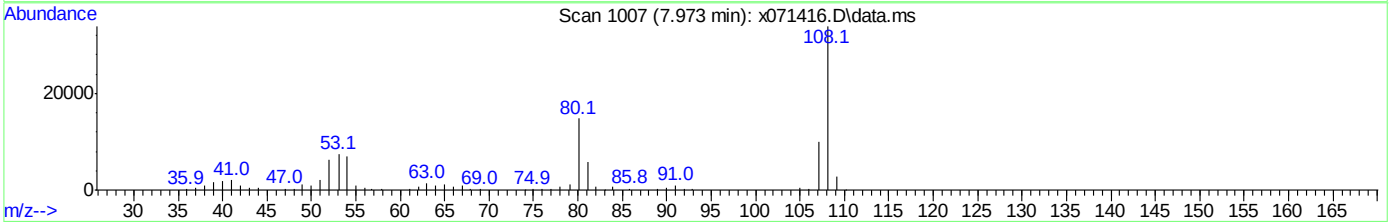
Ion	Exp%	Act%
185.00	100	100
63.00	99.40	101.34
135.10	50.50	47.53
0.00	0.00	0.00

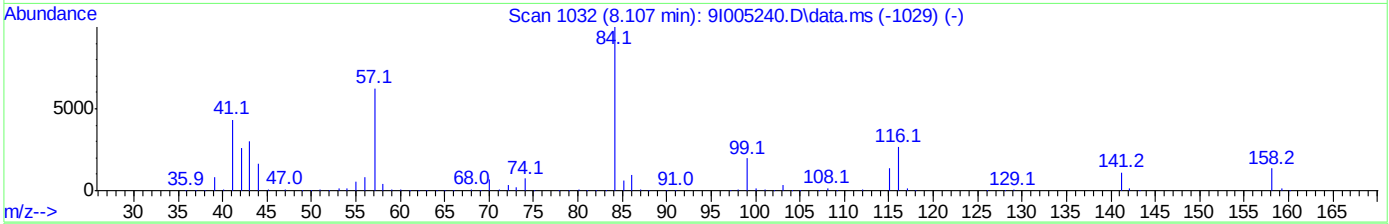
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0624_sx2919\
Data File : x071416.D
Acq On : 24 Jun 2020 3:22 pm
Operator : marthav
Sample : icv2918-50 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 24 15:45:01 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration







TIC: x071416.D\data.ms

(124) N-Nitrosodi-n-butylamine

7.925min (-0.012) 39.53ppm

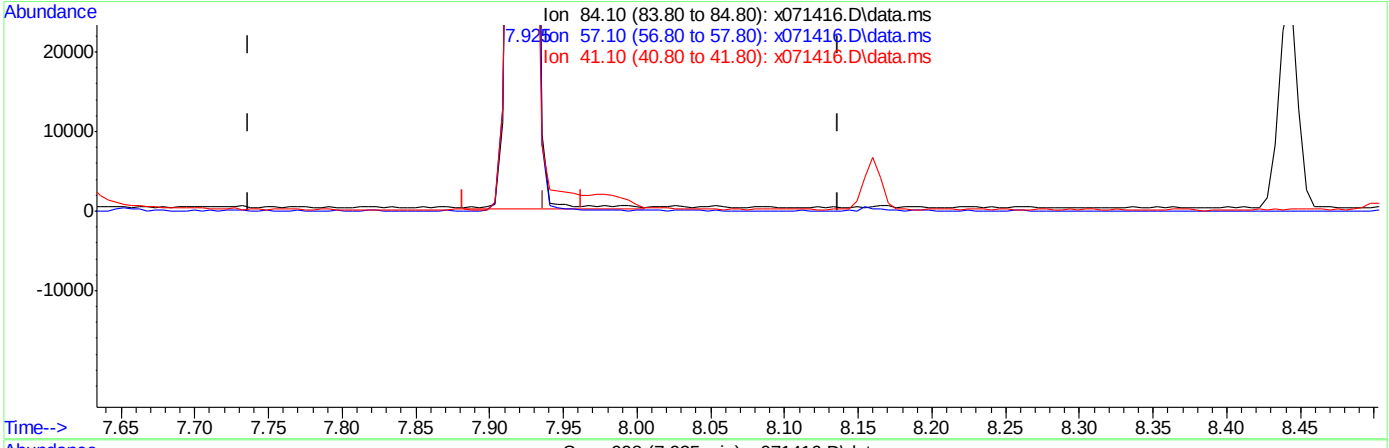
response 203432

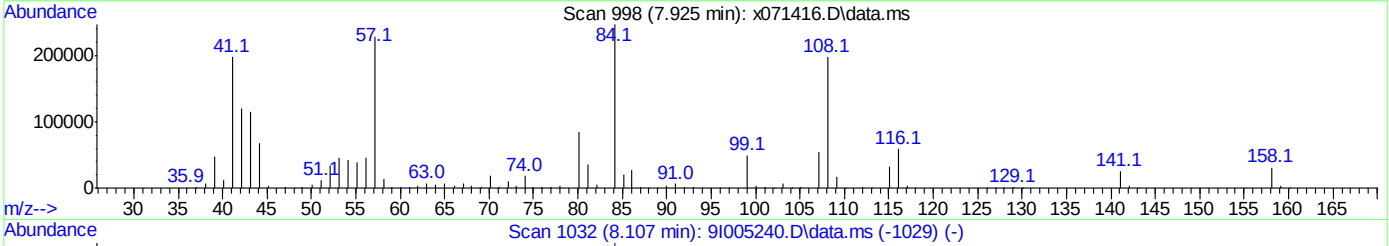
Ion	Exp%	Act%
84.10	100	100
57.10	94.40	92.34
41.10	81.30	79.76
0.00	0.00	0.00

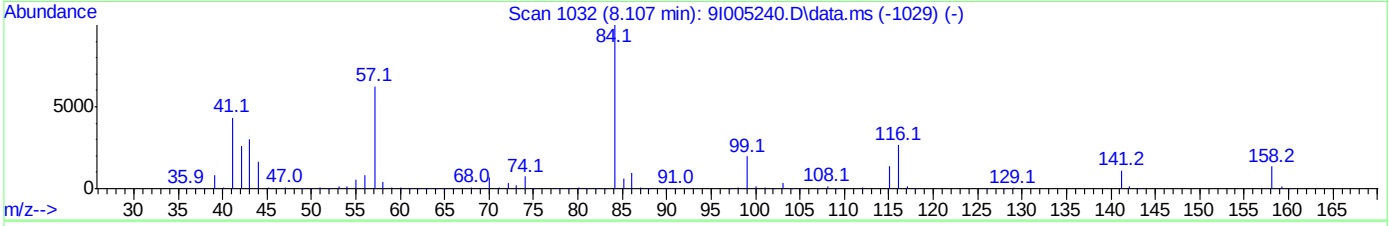
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0624_sx2919\
Data File : x071416.D
Acq On : 24 Jun 2020 3:22 pm
Operator : marthav
Sample : icv2918-50 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 24 15:45:01 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration







TIC: x071416.D\data.ms

(124) N-Nitrosodi-n-butylamine

7.925min (-0.012) 39.74ppm m

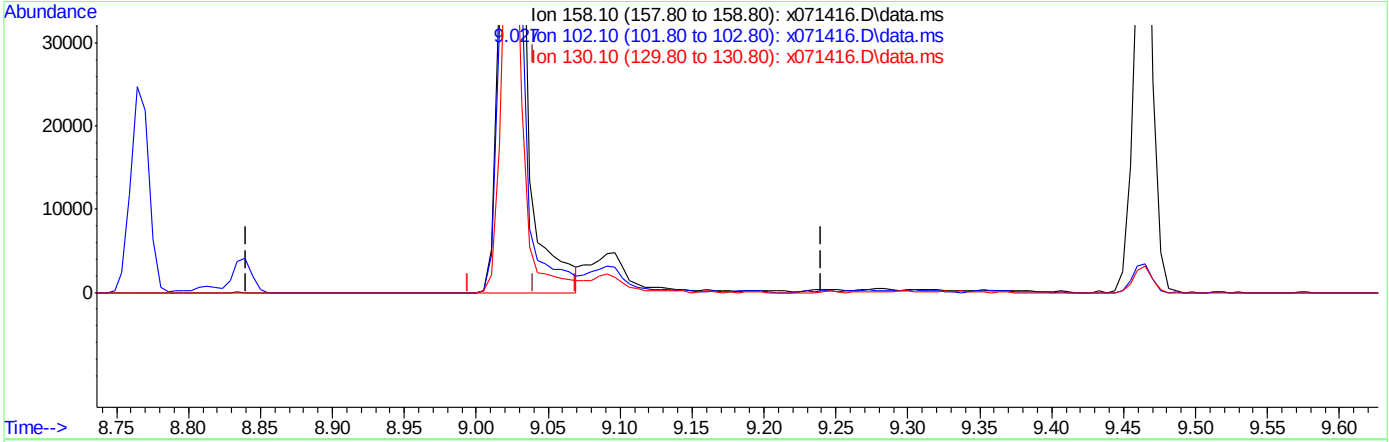
response 204562

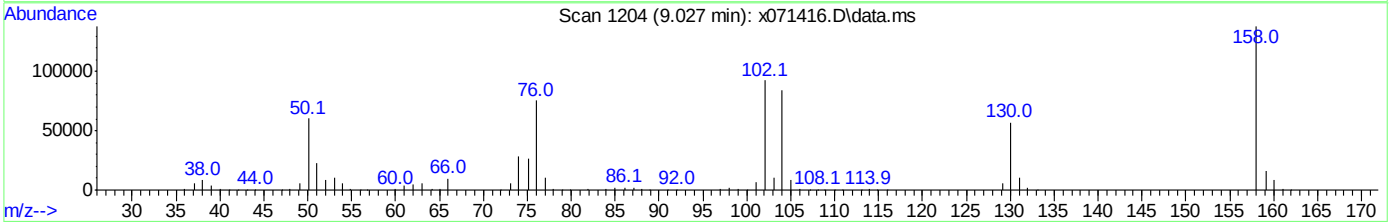
Ion	Exp%	Act%
84.10	100	100
57.10	94.40	92.19
41.10	81.30	80.06
0.00	0.00	0.00

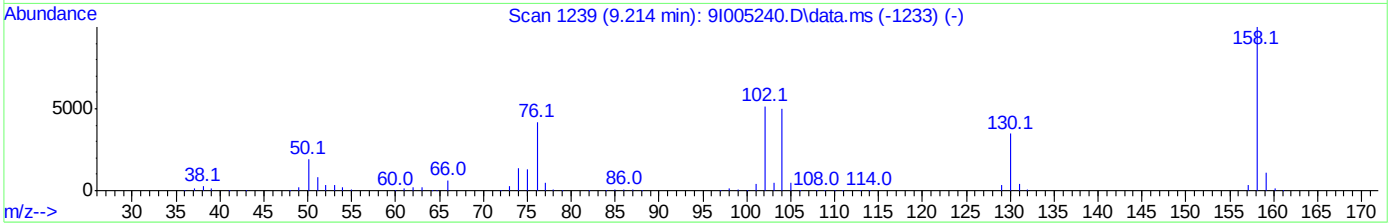
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0624_sx2919\
Data File : x071416.D
Acq On : 24 Jun 2020 3:22 pm
Operator : marthav
Sample : icv2918-50 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 24 15:45:01 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration







TIC: x071416.D\data.ms

(131) 1,4-Naphthoquinone

9.027min (-0.013) 30.43ppm

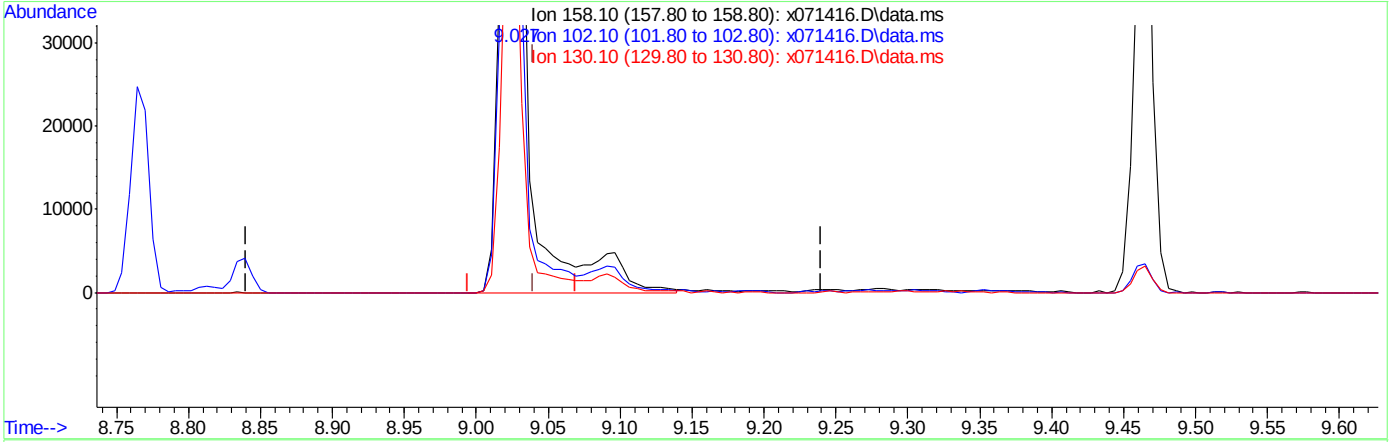
response 126951

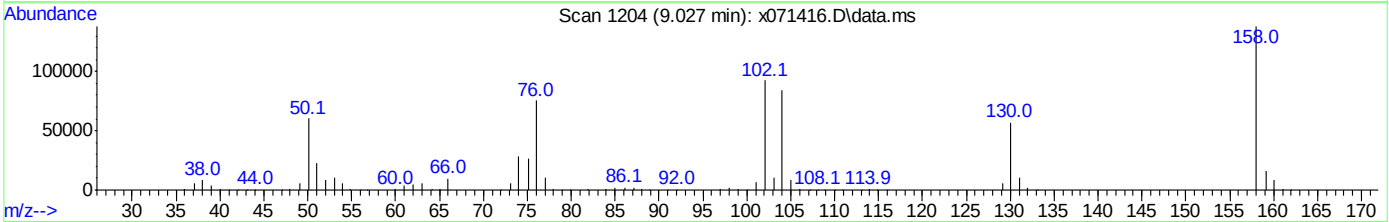
Ion	Exp%	Act%
158.10	100	100
102.10	69.70	67.02
130.10	42.30	41.38
0.00	0.00	0.00

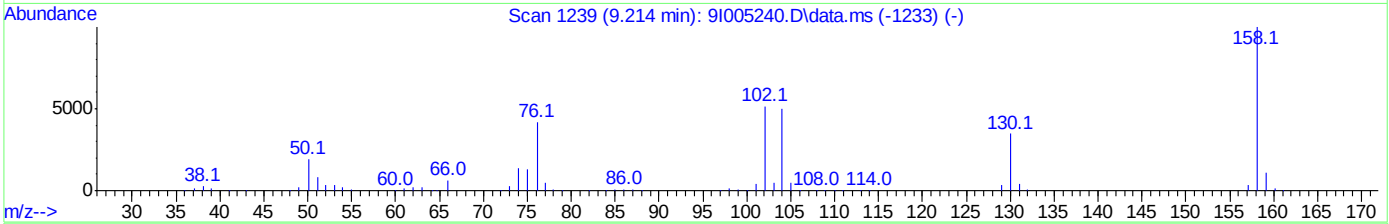
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0624_sx2919\
Data File : x071416.D
Acq On : 24 Jun 2020 3:22 pm
Operator : marthav
Sample : icv2918-50 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 24 15:45:01 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration







TIC: x071416.D\data.ms

(131) 1,4-Naphthoquinone

9.027min (-0.013) 32.56ppm m

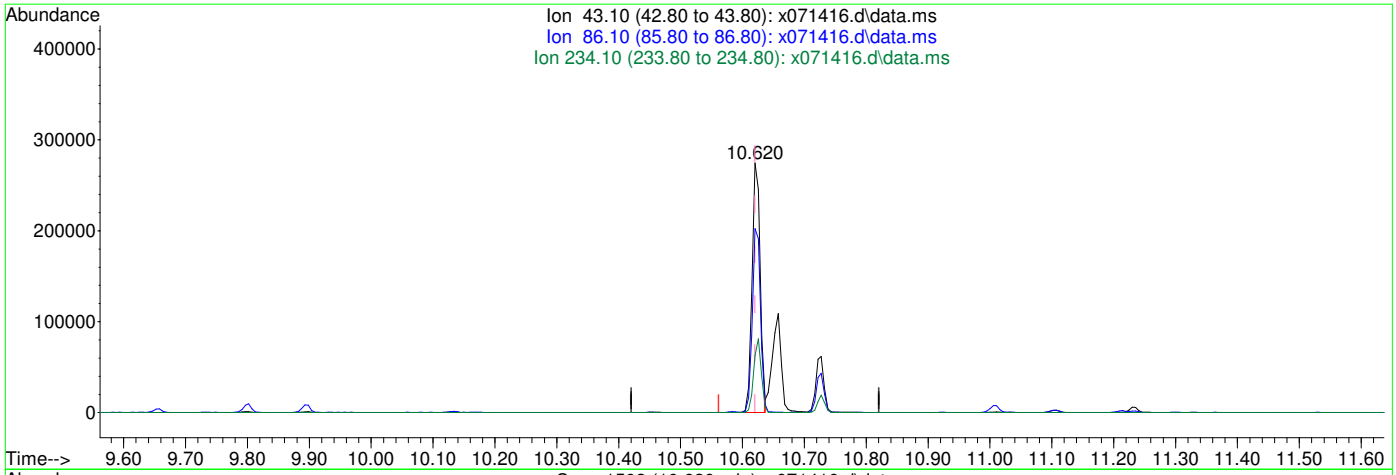
response 135960

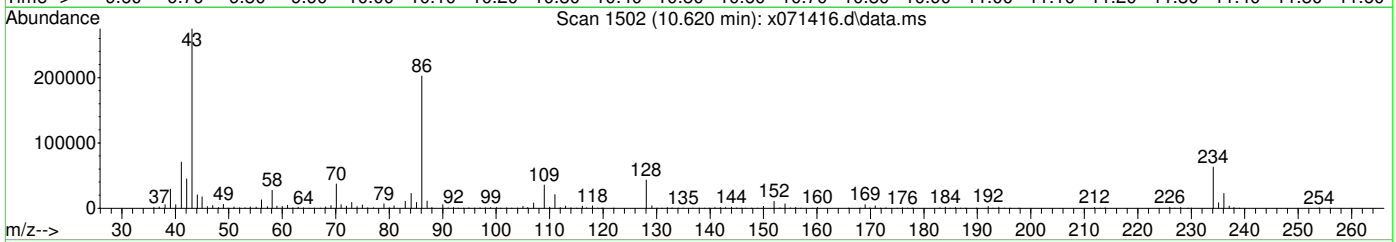
Ion	Exp%	Act%
158.10	100	100
102.10	69.70	67.02
130.10	42.30	41.45
0.00	0.00	0.00

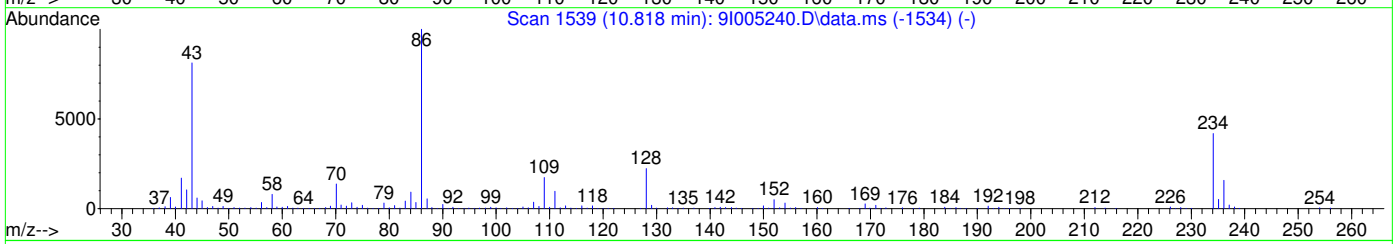
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\June 2020\06-25-2020\sx2919\
Data File : x071416.d
Acq On : 24 Jun 2020 3:22 pm
Operator : marthav
Sample : icv2918-50 app9
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 25 02:50:38 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Thu Jun 25 02:50:18 2020
Response via : Initial Calibration







TIC: x071416.d\data.ms

(138) Diallate

10.620min (0.000) 27.71ppm

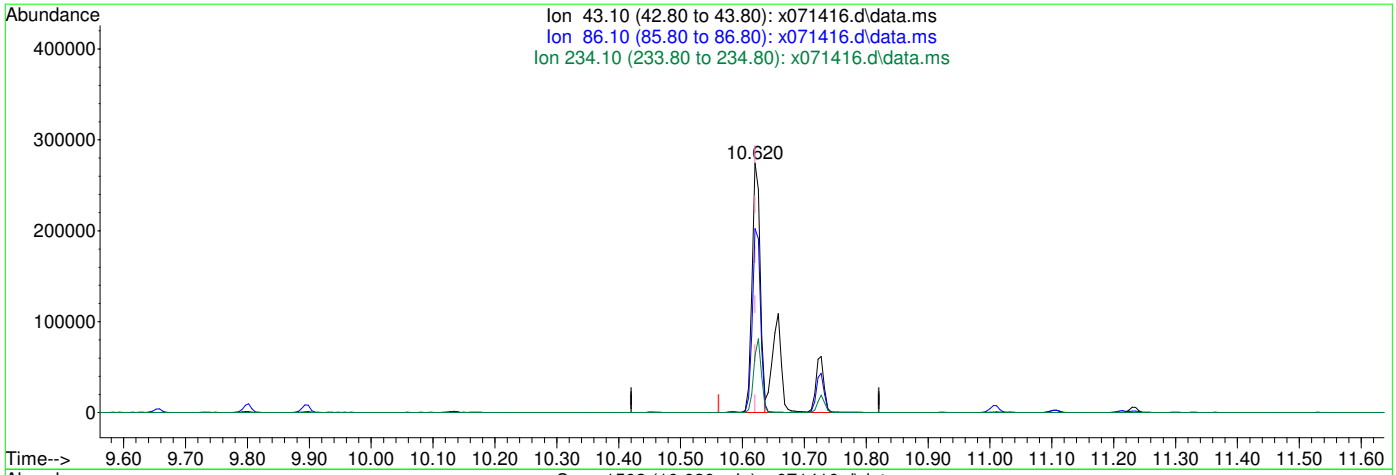
response 249556

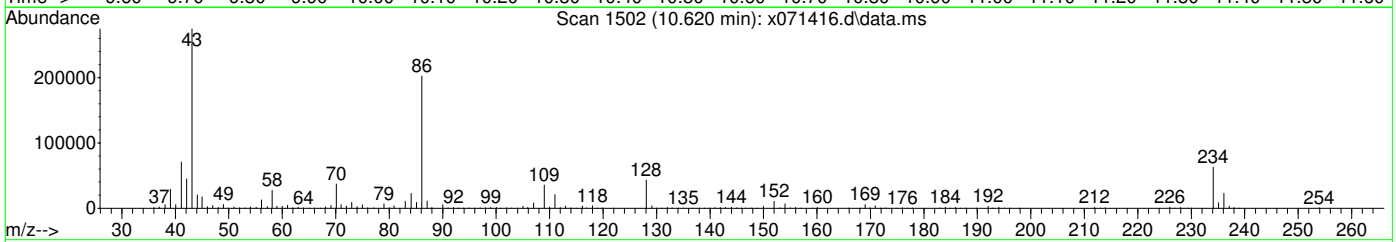
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	74.00#
234.10	51.50	22.32
0.00	0.00	0.00

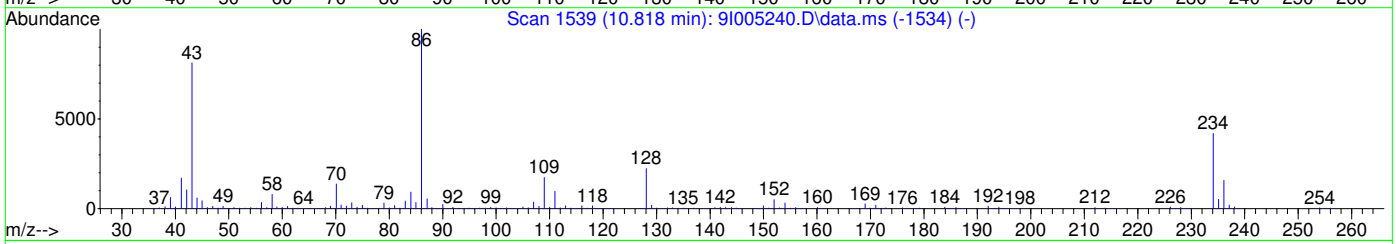
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\June 2020\06-25-2020\sx2919\
Data File : x071416.d
Acq On : 24 Jun 2020 3:22 pm
Operator : marthav
Sample : icv2918-50 app9
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 25 02:50:38 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Thu Jun 25 02:50:18 2020
Response via : Initial Calibration







TIC: x071416.d\data.ms

(138) Diallate

10.620min (0.000) 46.24ppm m

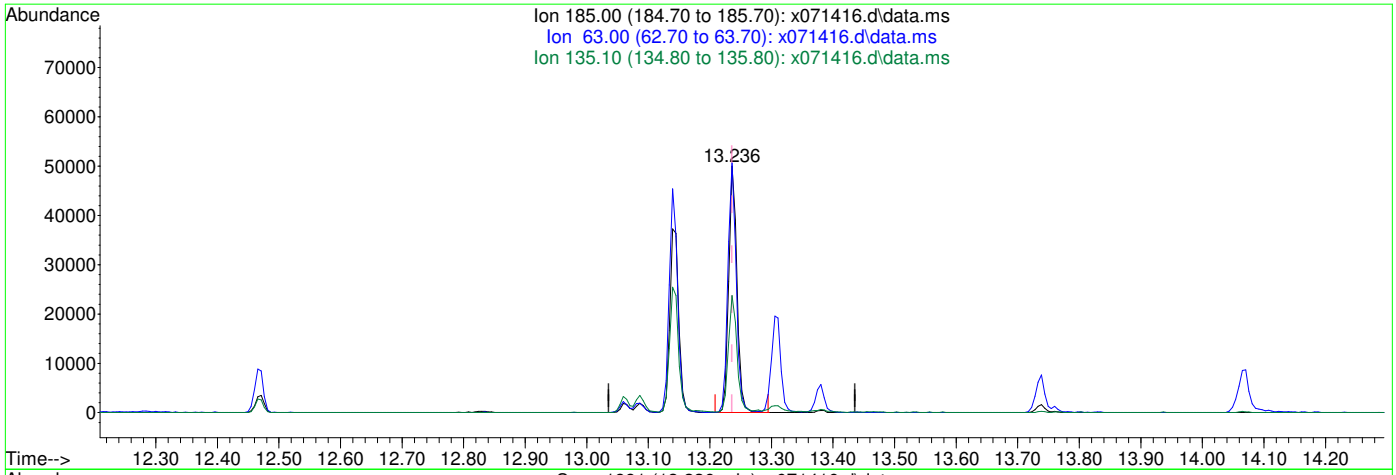
response 416437

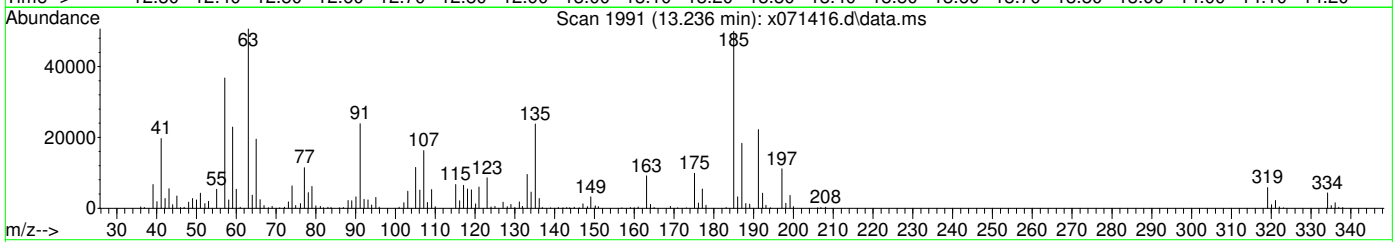
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	73.74#
234.10	51.50	22.86
0.00	0.00	0.00

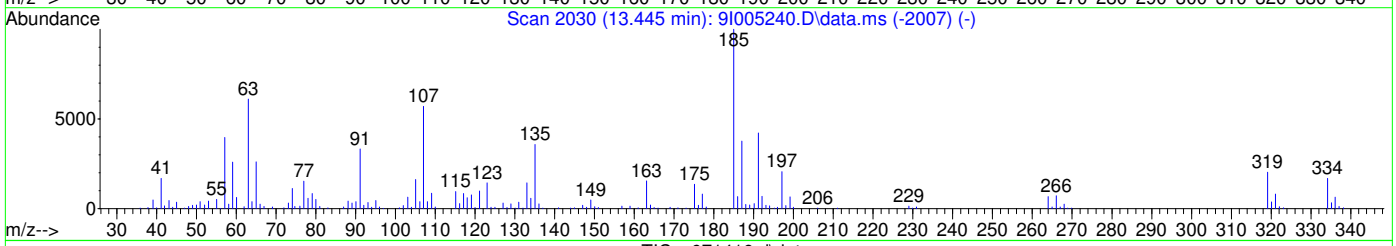
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\June 2020\06-25-2020\sx2919\
Data File : x071416.d
Acq On : 24 Jun 2020 3:22 pm
Operator : marthav
Sample : icv2918-50 app9
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 25 02:50:38 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Thu Jun 25 02:50:18 2020
Response via : Initial Calibration







TIC: x071416.d\data.ms

(147) Aramite

13.236min (0.000) 29.24ppm

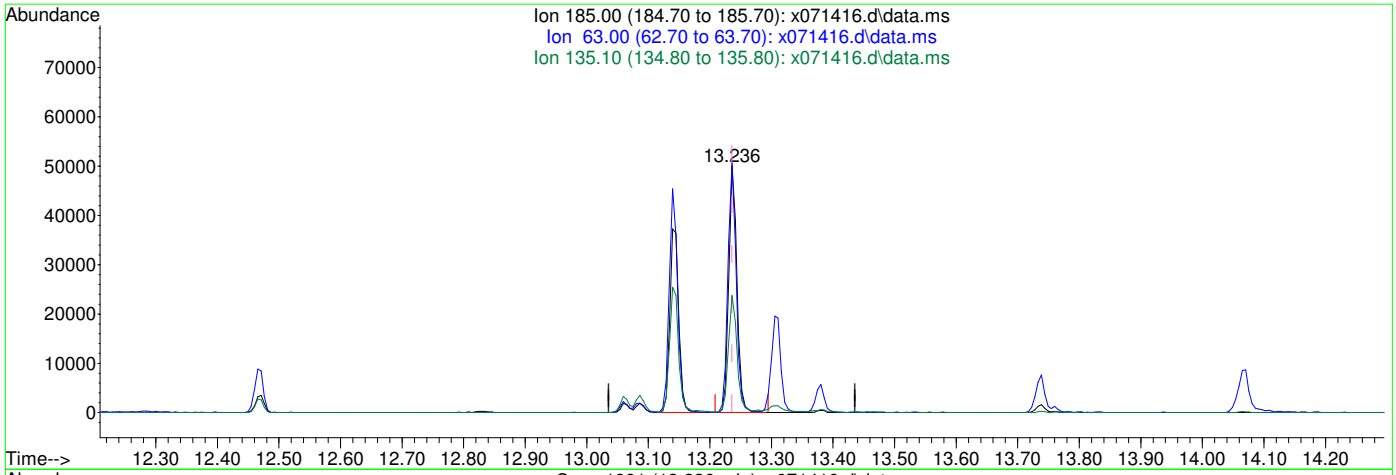
response 46379

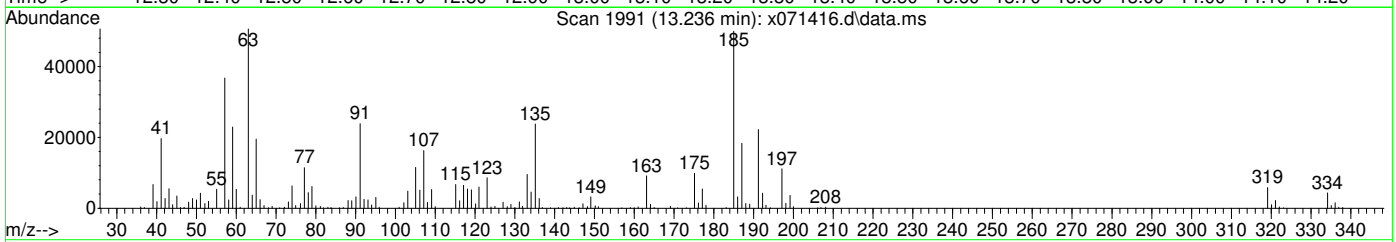
Ion	Exp%	Act%
185.00	100	100
63.00	61.10	97.60#
135.10	35.60	46.70
0.00	0.00	0.00

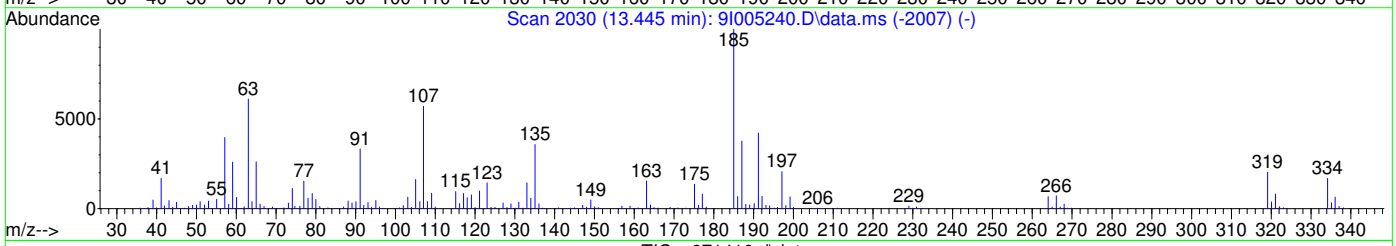
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\June 2020\06-25-2020\sx2919\
Data File : x071416.d
Acq On : 24 Jun 2020 3:22 pm
Operator : marthav
Sample : icv2918-50 app9
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 25 02:50:38 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Thu Jun 25 02:50:18 2020
Response via : Initial Calibration







TIC: x071416.d\data.ms

(147) Aramite

13.236min (0.000) 49.69ppm m

response 83620

Ion	Exp%	Act%
185.00	100	100
63.00	61.10	101.34#
135.10	35.60	47.53
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan
08/12/20 16:38

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072357.D
Acq On : 12 Aug 2020 10:24 am
Operator : marthav
Sample : cc2918-50 8270 Inst : MSBNA05
Misc : op81484,sx2951,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 12 14:04:41 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Aug 12 14:02:37 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.654	152	163781	40.00	ppm	0.00
22) Naphthalene-d8	7.077	136	635873	40.00	ppm	0.00
43) Acenaphthene-d10	9.115	164	311303	40.00	ppm	0.00
70) Phenanthrene-d10	10.859	188	516972	40.00	ppm	0.00
92) Chrysene-d12	14.073	240	400284	40.00	ppm	0.00
102) Perylene-d12	16.266	264	293676	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	5.654	152	163781	40.00	ppm	0.00
120) Naphthalene-d8A	7.077	136	635873	40.00	ppm	0.00
127) Acenaphthene-d10A	9.115	164	311303	40.00	ppm	0.00
136) Phenanthrene-d10A	10.859	188	516972	40.00	ppm	0.00
146) Chrysene-d12A	14.073	240	400284	40.00	ppm	0.00
153) Perylene-d12A	16.266	264	293676	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	4.307	112	592760	100.94	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 100.94%#			
9) Phenol-d5	5.334	99	714039	102.20	ppm	0.00
Spiked Amount 100.000	Range 10 - 50		Recovery = 102.20%#			
23) Nitrobenzene-d5	6.275	82	351199	53.48	ppm	0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 106.96%			
47) 2-Fluorobiphenyl	8.350	172	625223	55.48	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 110.96%#			
75) 2,4,6-Tribromophenol	10.056	330	121276	104.17	ppm	0.00
Spiked Amount 100.000	Range 33 - 118		Recovery = 104.17%			
95) Terphenyl-d14	12.779	244	573536	53.93	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 107.86%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.467	88	128978	45.95	ppm	# 45
3) N-nitrosodimethylamine	2.809	42	215855	43.31	ppm	# 41
4) Pyridine	2.836	79	368282	53.93	ppm	# 35
5) Benzaldehyde	5.184	106	234014	47.93	ppm	94
6) Aniline	5.307	93	431203	44.29	ppm	82
8) bis(2-Chloroethyl)ether	5.387	93	307785	51.22	ppm	78
10) Phenol	5.350	94	404362	48.79	ppm	92
11) 2-Chlorophenol	5.440	128	328467	52.42	ppm	79
12) 1,3-Dichlorobenzene	5.585	146	337226	51.80	ppm	96
13) 1,4-Dichlorobenzene	5.670	146	353449	51.31	ppm	97
14) 1,2-Dichlorobenzene	5.831	146	316716	48.40	ppm	97
15) Benzyl alcohol	5.836	108	207502	47.85	ppm	88
16) 2,2'-Oxybis(1-chloropr...	5.975	45	545480	43.20	ppm	79
17) 2-Methylphenol	5.991	108	294066	49.33	ppm	96
18) Acetophenone	6.109	105	420398	47.66	ppm	96
19) Hexachloroethane	6.200	117	136346	52.72	ppm	88
20) N-Nitroso-di-n-propyla...	6.130	70	227402	48.81	ppm	# 67
21) 3&4-Methylphenol	6.168	108	314576	51.05	ppm	97
24) Nitrobenzene	6.296	77	342947	52.79	ppm	84
25) Isophorone	6.574	82	561636	48.42	ppm	94
26) 2-Nitrophenol	6.655	139	171457	55.51	ppm	76

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072357.D
Acq On : 12 Aug 2020 10:24 am
Operator : marthav
Sample : cc2918-50 8270 Inst : MSBNA05
Misc : op81484,sx2951,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 12 14:04:41 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Aug 12 14:02:37 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
27) 2,4-Dimethylphenol	6.751	107	272949	47.58	ppm		95
28) O,O,O-Triethylphosphor...	6.810	198	123659	50.79	ppm		80
29) bis(2-Chloroethoxy)met...	6.836	93	345910	50.97	ppm		96
30) Benzoic Acid	6.917	105	210919m	44.77	ppm		
31) 2,4-Dichlorophenol	6.954	162	242314	52.40	ppm		97
32) 1,2,4-Trichlorobenzene	7.018	180	252165	53.36	ppm		97
34) Naphthalene	7.104	128	887333	51.46	ppm		99
35) 4-Chloroaniline	7.189	127	358866	49.29	ppm		88
36) 2,6-Dichlorophenol	7.200	162	237128	50.29	ppm		99
37) Hexachlorobutadiene	7.248	225	127572	54.74	ppm		99
38) Caprolactam	7.639	113	92107	48.01	ppm	#	60
39) 4-Chloro-3-methylphenol	7.810	107	242298	49.14	ppm	#	72
40) 2-Methylnaphthalene	7.906	142	567792	49.80	ppm		99
41) 1-Methylnaphthalene	8.019	142	544627	49.89	ppm		98
42) 1,2,4,5-Tetrachloroben...	8.104	216	238867	50.36	ppm		99
44) Hexachlorocyclopentadiene	8.088	237	86891	36.48	ppm		99
45) 2,4,6-Trichlorophenol	8.259	196	157484	55.11	ppm		98
46) 2,4,5-Trichlorophenol	8.323	196	172817	55.10	ppm		100
48) 1,1'-Biphenyl	8.457	154	667012	52.47	ppm		99
49) 2-Chloronaphthalene	8.473	162	514756	53.95	ppm		98
50) 2-Nitroaniline	8.618	65	190569	54.25	ppm	#	68
51) p-Dinitrobenzene	8.799	75	108973	55.33	ppm	#	72
52) Acenaphthylene	8.949	152	829146	53.33	ppm		99
53) Dimethylphthalate	8.858	163	562893	51.25	ppm		99
54) m-Dinitrobenzene	8.885	168	102567	56.04	ppm	#	59
55) 2,6-Dinitrotoluene	8.917	165	139001	53.63	ppm		84
56) o-Dinitrobenzene	8.971	50	133955	53.96	ppm	#	50
57) Acenaphthene	9.158	153	538498	52.08	ppm		99
58) 3-Nitroaniline	9.110	138	159083	55.79	ppm		95
59) 2,4-Dinitrophenol	9.238	184	68103	50.71	ppm	#	83
60) Dibenzofuran	9.361	168	700276	50.74	ppm		94
61) 2,4-Dinitrotoluene	9.388	165	184292	55.77	ppm		73
62) 4-Nitrophenol	9.393	109	67427	42.33	ppm	#	44
63) 2,3,5,6-Tetrachlorophenol	9.479	232	118472	51.21	ppm		91
64) 2,3,4,6-Tetrachlorophenol	9.532	232	125961	52.06	ppm		92
65) Fluorene	9.762	166	572740	53.19	ppm		98
66) 4-Chlorophenyl-phenyle...	9.784	204	274145	52.74	ppm		91
67) Diethylphthalate	9.687	149	556583	50.74	ppm		97
68) Thionazin	9.778	97	127497	54.72	ppm		97
69) 4-Nitroaniline	9.837	138	167730	52.87	ppm		89
71) 4,6-Dinitro-2-methylph...	9.874	198	104721	54.29	ppm		83
72) n-Nitrosodiphenylamine	9.939	169	505118	62.88	ppm		96
73) Diphenylamine	9.939	169	505118	53.58	ppm		96
74) 1,2-Diphenylhydrazine	9.971	77	612491	52.87	ppm		93
76) Sulfotep	10.153	97	91855	53.92	ppm	#	65
77) Phorate	10.286	75	334816	56.11	ppm		94
78) 4-Bromophenyl-phenylether	10.356	248	130683	52.65	ppm	#	85
79) Hexachlorobenzene	10.404	284	132859	53.65	ppm		73
80) Dimethoate	10.495	87	231881	55.58	ppm		96
81) Simazine	10.570	201	88581	48.60	ppm		96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072357.D
Acq On : 12 Aug 2020 10:24 am
Operator : marthav
Sample : cc2918-50 8270 Inst : MSBNA05
Misc : op81484,sx2951,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 12 14:04:41 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Aug 12 14:02:37 2020
Response via : Initial Calibration

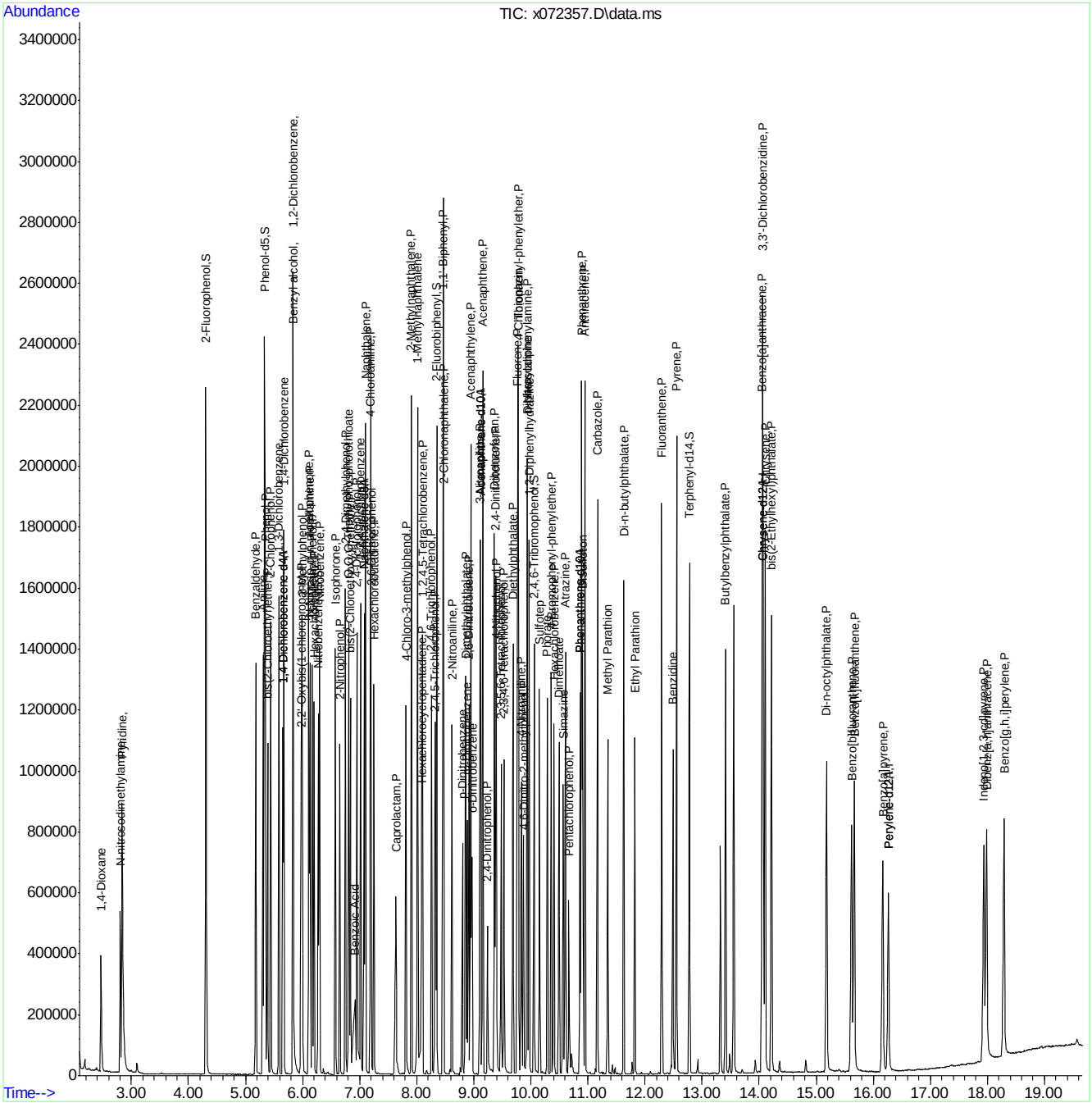
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
82) Atrazine	10.607	200	157747	52.26	ppm	87
83) Pentachlorophenol	10.666	266	58786	37.70	ppm	97
84) Phenanthrene	10.891	178	812429	52.00	ppm	99
85) Anthracene	10.950	178	863778	53.05	ppm	99
86) Disulfoton	10.907	88	276711m	44.31	ppm	
87) Carbazole	11.169	167	758862	52.82	ppm	98
88) Methyl Parathion	11.351	109	192066	53.79	ppm	89
89) Di-n-butylphthalate	11.629	149	875439	54.59	ppm	98
90) Ethyl Parathion	11.821	97	112854	53.98	ppm	89
91) Fluoranthene	12.292	202	778551	53.71	ppm	99
93) Benzidine	12.490	184	403212	51.40	ppm	96
94) Pyrene	12.554	202	829934	49.94	ppm	99
97) Butylbenzylphthalate	13.410	149	361195	51.96	ppm	89
98) 3,3'-Dichlorobenzidine	14.062	252	233526	54.72	ppm	97
99) Benzo[a]anthracene	14.057	228	653024	51.91	ppm	99
100) Chrysene	14.111	228	698491	52.14	ppm	98
101) bis(2-Ethylhexyl)phtha...	14.218	149	513106	53.89	ppm	97
103) Di-n-octylphthalate	15.180	149	761823	61.31	ppm	93
104) Benzo[b]fluoranthene	15.624	252	510521	57.61	ppm	96
105) Benzo[k]fluoranthene	15.672	252	555619	53.29	ppm	97
106) Benzo[a]pyrene	16.170	252	461880	54.63	ppm	97
107) Indeno[1,2,3-cd]pyrene	17.935	276	418817	66.55	ppm	88
108) Dibenz[a,h]anthracene	17.988	278	464950	64.70	ppm	92
109) Benzo[g,h,i]perylene	18.299	276	451918	54.62	ppm	90

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072357.D
Acq On : 12 Aug 2020 10:24 am
Operator : marthav
Sample : cc2918-50 8270 Inst : MSBNA05
Misc : op81484,sx2951,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 12 14:04:41 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Aug 12 14:02:37 2020
Response via : Initial Calibration



Manual Integration Approval Summary

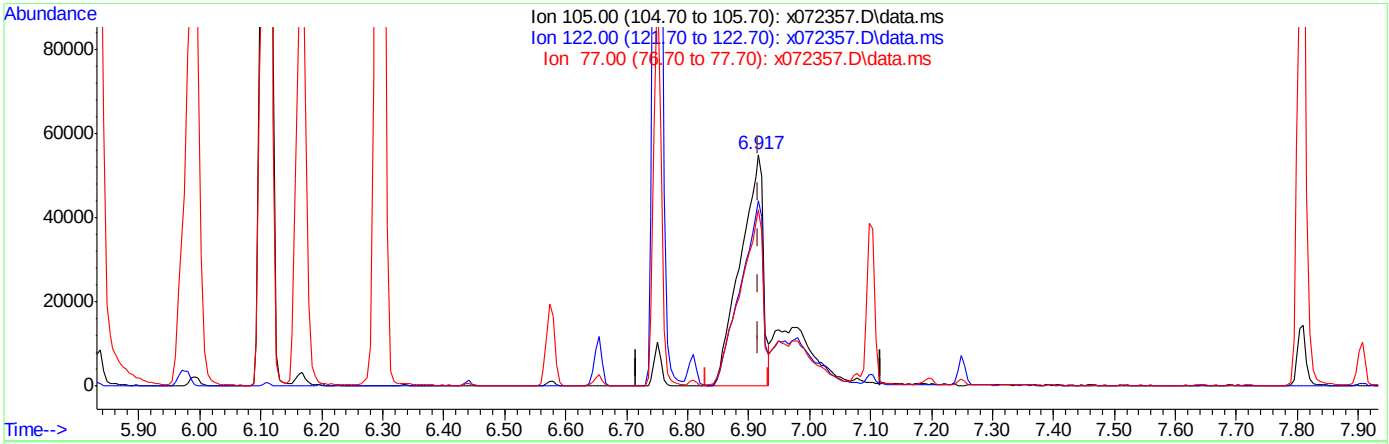
Sample Number: SX2951-CC2918 **Method:** SW846 8270D
Lab FileID: X072357.D **Analyst approved:** 08/12/20 15:54 Martha Valls
Injection Time: 08/12/20 10:24 **Supervisor approved:** 08/12/20 16:38 Naresh Jiawan

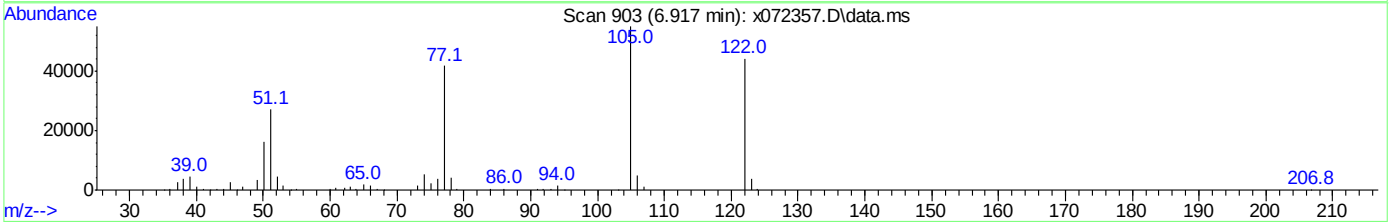
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic Acid	65-85-0		6.92	Split peak
Disulfoton	298-04-4		10.91	Split peak

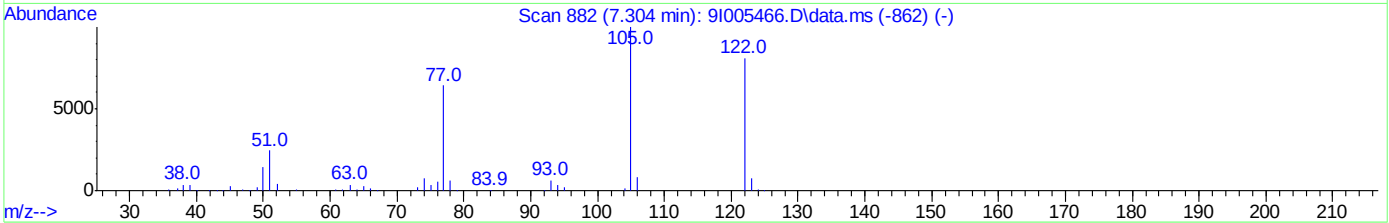
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072357.D
Acq On : 12 Aug 2020 10:24 am
Operator : marthav
Sample : cc2918-50 8270 Inst : MSBNA05
Misc : op81484,sx2951,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 12 14:03:15 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Aug 12 14:02:37 2020
Response via : Initial Calibration







TIC: x072357.D\data.ms

(30) Benzoic Acid

6.917min (0.000) 32.55ppm

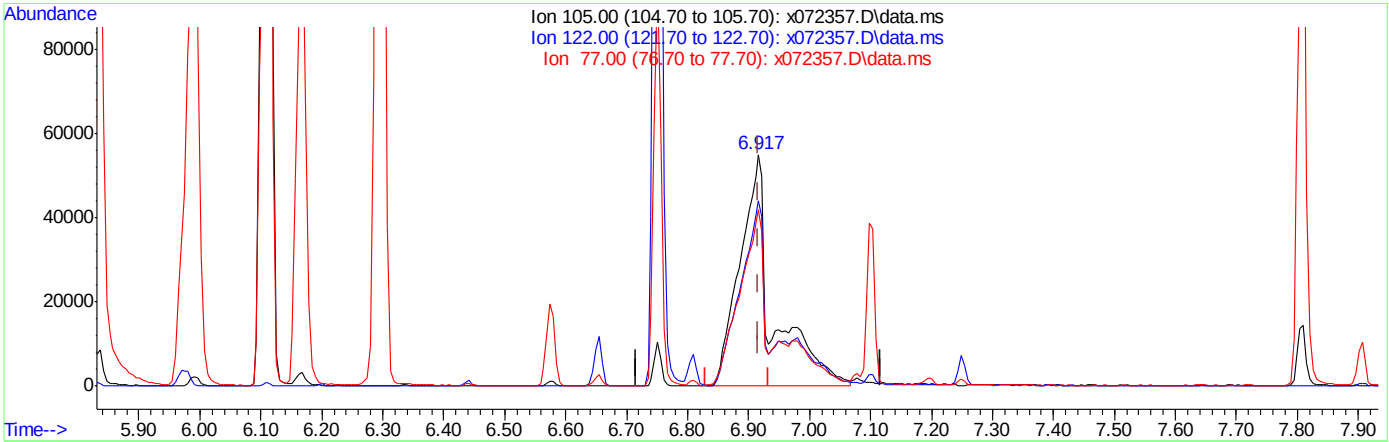
response 145700

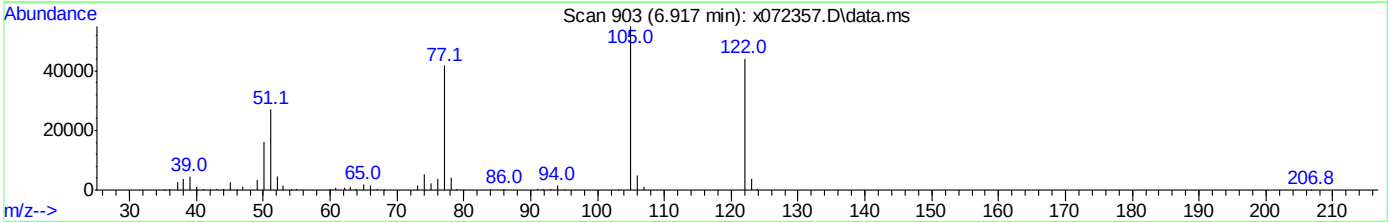
Ion	Exp%	Act%
105.00	100	100
122.00	81.20	80.80
77.00	64.10	75.55
0.00	0.00	0.00

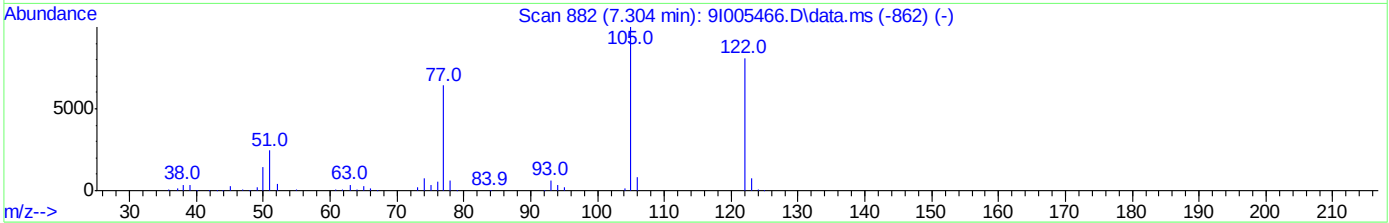
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072357.D
Acq On : 12 Aug 2020 10:24 am
Operator : marthav
Sample : cc2918-50 8270 Inst : MSBNA05
Misc : op81484,sx2951,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 12 14:03:15 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Aug 12 14:02:37 2020
Response via : Initial Calibration







TIC: x072357.D\data.ms

(30) Benzoic Acid

6.917min (0.000) 44.77ppm m

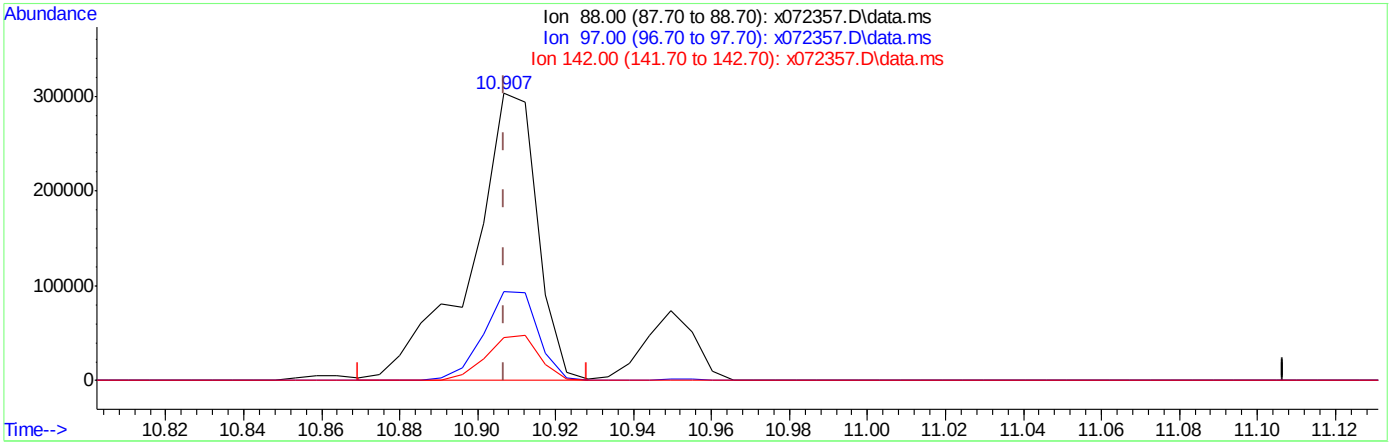
response 210919

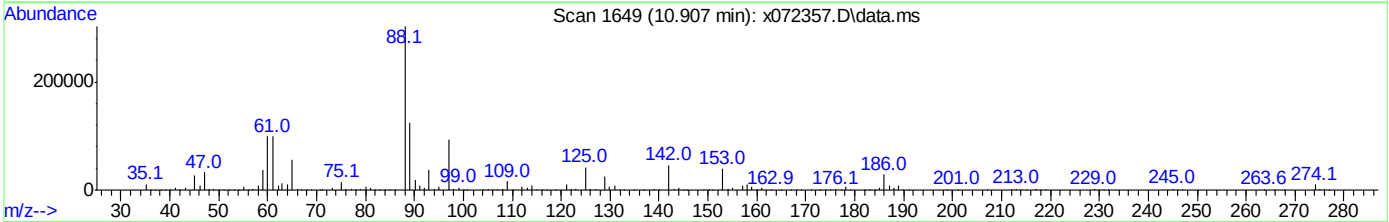
Ion	Exp%	Act%
105.00	100	100
122.00	81.20	80.22
77.00	64.10	75.96
0.00	0.00	0.00

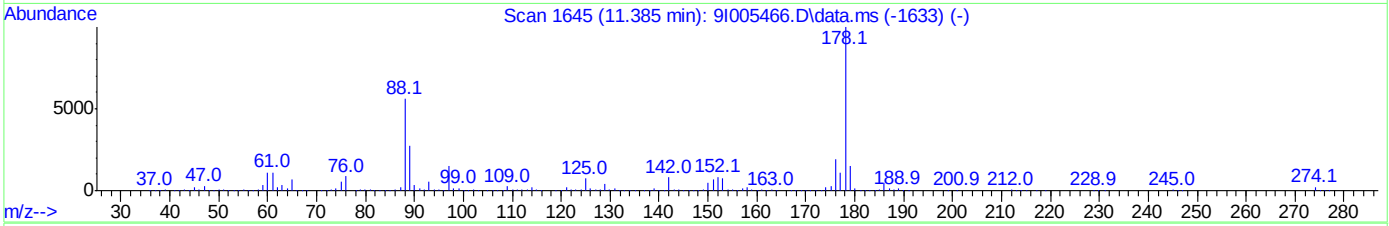
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072357.D
Acq On : 12 Aug 2020 10:24 am
Operator : marthav
Sample : cc2918-50 8270 Inst : MSBNA05
Misc : op81484,sx2951,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 12 14:03:15 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Aug 12 14:02:37 2020
Response via : Initial Calibration







TIC: x072357.D\data.ms

(86) Disulfoton

10.907min (0.000) 57.27ppm

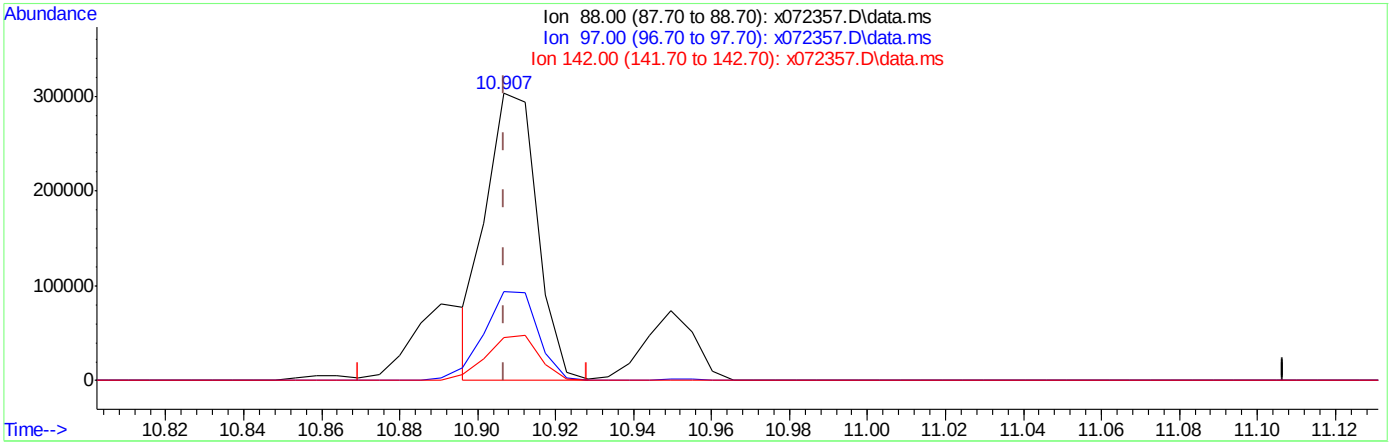
response 357632

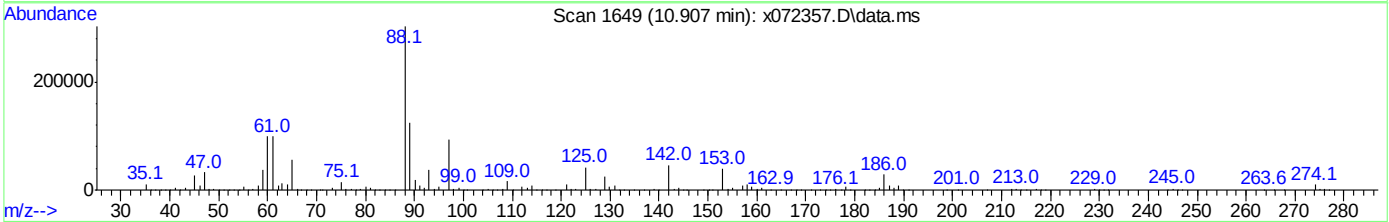
Ion	Exp%	Act%
88.00	100	100
97.00	26.50	31.01
142.00	14.20	15.14
0.00	0.00	0.00

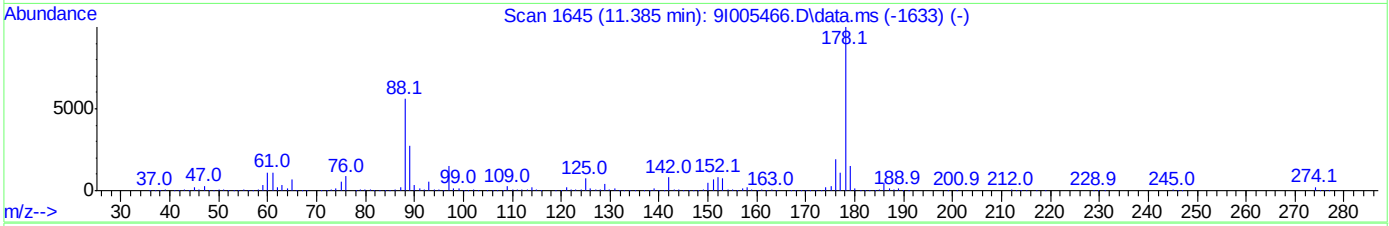
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072357.D
Acq On : 12 Aug 2020 10:24 am
Operator : marthav
Sample : cc2918-50 8270 Inst : MSBNA05
Misc : op81484,sx2951,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 12 14:03:15 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Aug 12 14:02:37 2020
Response via : Initial Calibration







TIC: x072357.D\data.ms

(86) Disulfoton

10.907min (0.000) 44.31ppm m

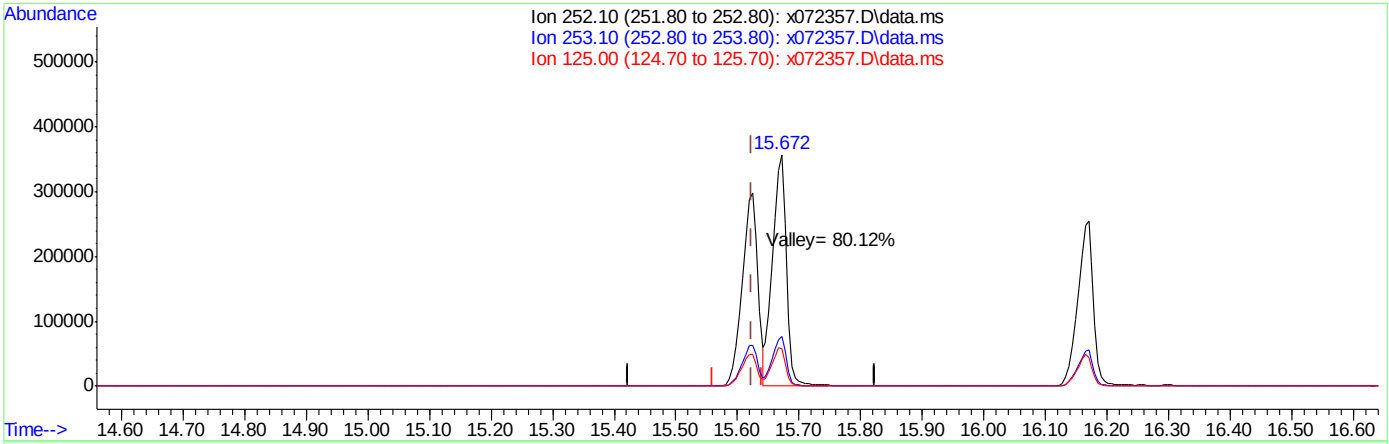
response 276711

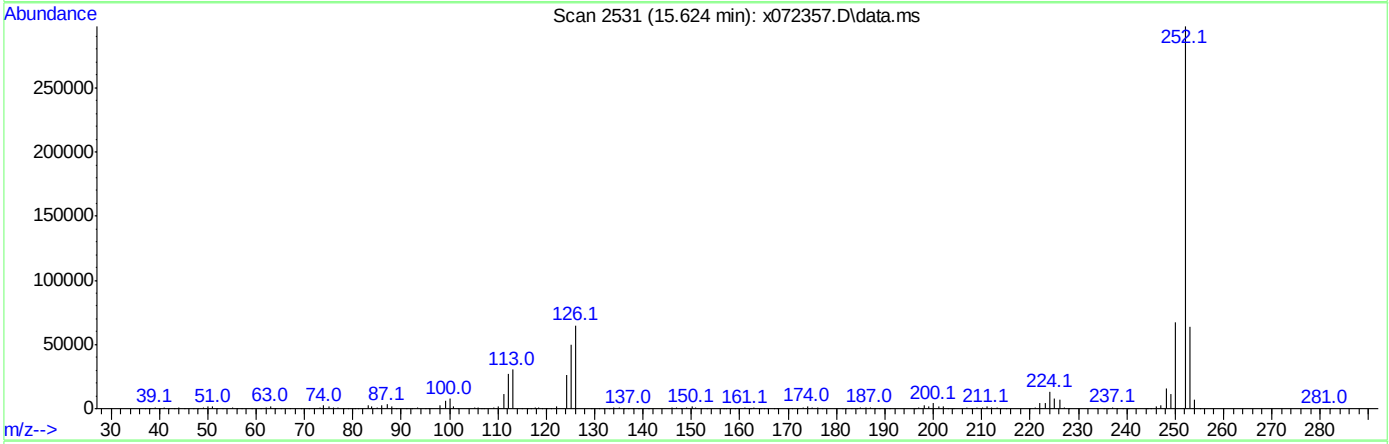
Ion	Exp%	Act%
88.00	100	100
97.00	26.50	30.86
142.00	14.20	15.17
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072357.D
Acq On : 12 Aug 2020 10:24 am
Operator : marthav
Sample : cc2918-50 8270 Inst : MSBNA05
Misc : op81484,sx2951,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 12 14:04:41 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Aug 12 14:02:37 2020
Response via : Initial Calibration





TIC: x072357.D\data.ms

(104) Benzo[b]fluoranthene (P)

15.624min (0.000) 57.61ppm

response 510521

Ion	Exp%	Act%
252.10	100	100
253.10	22.50	21.21
125.00	14.00	16.63
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072358.D
Acq On : 12 Aug 2020 10:49 am
Operator : marthav
Sample : cc2918-5 8270 Inst : MSBNA05
Misc : op81484,sx2951,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 12 14:05:17 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.649	152	167506	40.00	ppm	0.00
22) Naphthalene-d8	7.077	136	643671	40.00	ppm	0.00
43) Acenaphthene-d10	9.115	164	325538	40.00	ppm	0.00
70) Phenanthrene-d10	10.858	188	548983	40.00	ppm	0.00
92) Chrysene-d12	14.062	240	412046	40.00	ppm	-0.01
102) Perylene-d12	16.261	264	349424	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	5.649	152	167506	40.00	ppm	0.00
120) Naphthalene-d8A	7.077	136	643671	40.00	ppm	0.00
127) Acenaphthene-d10A	9.115	164	325538	40.00	ppm	0.00
136) Phenanthrene-d10A	10.858	188	548983	40.00	ppm	0.00
146) Chrysene-d12A	14.062	240	412046	40.00	ppm	-0.01
153) Perylene-d12A	16.261	264	349424	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	4.306	112	62578	10.42	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 10.42%#			
9) Phenol-d5	5.328	99	69489	9.72	ppm	0.00
Spiked Amount 100.000	Range 10 - 50		Recovery = 9.72%#			
23) Nitrobenzene-d5	6.269	82	33686	5.07	ppm	0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 10.14%#			
47) 2-Fluorobiphenyl	8.345	172	57380	4.87	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 9.74%#			
75) 2,4,6-Tribromophenol	10.046	330	9980	9.79	ppm	-0.01
Spiked Amount 100.000	Range 33 - 118		Recovery = 9.79%#			
95) Terphenyl-d14	12.773	244	50807	4.64	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 9.28%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.477	88	13647	4.75	ppm	# 43
3) N-nitrosodimethylamine	2.814	42	22247	4.36	ppm	# 41
4) Pyridine	2.857	79	37488	5.37	ppm	# 33
5) Benzaldehyde	5.178	106	24741	4.95	ppm	94
6) Aniline	5.301	93	43426	4.36	ppm	87
8) bis(2-Chloroethyl)ether	5.381	93	28448	4.63	ppm	74
10) Phenol	5.344	94	37222	4.39	ppm	96
11) 2-Chlorophenol	5.440	128	29998	4.68	ppm	85
12) 1,3-Dichlorobenzene	5.585	146	32329	4.86	ppm	94
13) 1,4-Dichlorobenzene	5.670	146	33973	4.82	ppm	99
14) 1,2-Dichlorobenzene	5.831	146	31879	4.76	ppm	97
15) Benzyl alcohol	5.825	108	19098	4.31	ppm	86
16) 2,2'-Oxybis(1-chloropr...	5.970	45	55985	4.33	ppm	77
17) 2-Methylphenol	5.981	108	27552	4.52	ppm	90
18) Acetophenone	6.104	105	40603	4.50	ppm	96
19) Hexachloroethane	6.200	117	12738	4.82	ppm	96
20) N-Nitroso-di-n-propyla...	6.114	70	21070	4.42	ppm	# 60
21) 3&4-Methylphenol	6.162	108	28557	4.53	ppm	97
24) Nitrobenzene	6.285	77	33521	5.10	ppm	82
25) Isophorone	6.564	82	54665	4.66	ppm	95
26) 2-Nitrophenol	6.649	139	15591	4.99	ppm	76

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072358.D
Acq On : 12 Aug 2020 10:49 am
Operator : marthav
Sample : cc2918-5 8270 Inst : MSBNA05
Misc : op81484,sx2951,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 12 14:05:17 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
27) 2,4-Dimethylphenol	6.745	107	26534	4.57	ppm		94
28) O,O,O-Triethylphosphor...	6.804	198	11584	4.70	ppm		88
29) bis(2-Chloroethoxy)met...	6.831	93	32309	4.70	ppm		95
30) Benzoic Acid	6.858	105	14049	3.54	ppm		93
31) 2,4-Dichlorophenol	6.949	162	22597	4.83	ppm		97
32) 1,2,4-Trichlorobenzene	7.013	180	23693	4.95	ppm		97
34) Naphthalene	7.098	128	86837	4.98	ppm		98
35) 4-Chloroaniline	7.184	127	34989	4.75	ppm		89
36) 2,6-Dichlorophenol	7.189	162	23116	4.84	ppm		97
37) Hexachlorobutadiene	7.248	225	12502	5.30	ppm		97
38) Caprolactam	7.569	113	8954	4.61	ppm	#	45
39) 4-Chloro-3-methylphenol	7.799	107	23363	4.68	ppm		95
40) 2-Methylnaphthalene	7.901	142	55695	4.83	ppm		99
41) 1-Methylnaphthalene	8.013	142	52311	4.73	ppm		98
42) 1,2,4,5-Tetrachloroben...	8.099	216	22437	4.67	ppm		97
44) Hexachlorocyclopentadiene	8.083	237	2943	1.35	ppm		93
45) 2,4,6-Trichlorophenol	8.254	196	14434	4.83	ppm		94
46) 2,4,5-Trichlorophenol	8.313	196	15051	4.59	ppm		95
48) 1,1'-Biphenyl	8.452	154	64132	4.82	ppm		98
49) 2-Chloronaphthalene	8.462	162	47928	4.80	ppm		95
50) 2-Nitroaniline	8.607	65	17823	4.85	ppm	#	63
51) p-Dinitrobenzene	8.789	75	9240	4.49	ppm	#	65
52) Acenaphthylene	8.944	152	73929	4.55	ppm		98
53) Dimethylphthalate	8.842	163	52583	4.58	ppm		99
54) m-Dinitrobenzene	8.874	168	8711	4.55	ppm	#	59
55) 2,6-Dinitrotoluene	8.906	165	12466	4.60	ppm		82
56) o-Dinitrobenzene	8.954	50	12647	4.87	ppm	#	47
57) Acenaphthene	9.147	153	51818	4.79	ppm		99
58) 3-Nitroaniline	9.093	138	14412	4.83	ppm		89
59) 2,4-Dinitrophenol	9.238	184	1511	1.45	ppm	#	82
60) Dibenzofuran	9.356	168	67274	4.66	ppm		95
61) 2,4-Dinitrotoluene	9.377	165	16202	4.69	ppm		93
62) 4-Nitrophenol	9.393	109	5395	3.24	ppm	#	73
63) 2,3,5,6-Tetrachlorophenol	9.473	232	9364	3.87	ppm		87
64) 2,3,4,6-Tetrachlorophenol	9.527	232	10771	4.26	ppm		91
65) Fluorene	9.757	166	53357	4.74	ppm		98
66) 4-Chlorophenyl-phenyle...	9.778	204	24483	4.50	ppm		88
67) Diethylphthalate	9.676	149	51647	4.50	ppm		96
68) Thionazin	9.767	97	12000	4.93	ppm		99
69) 4-Nitroaniline	9.810	138	14417	4.35	ppm		86
71) 4,6-Dinitro-2-methylph...	9.858	198	5341	3.32	ppm	#	61
72) n-Nitrosodiphenylamine	9.928	169	45910	5.38	ppm		97
73) Diphenylamine	9.928	169	45910	4.59	ppm		97
74) 1,2-Diphenylhydrazine	9.965	77	54857	4.46	ppm		93
76) Sulfotep	10.147	97	8375	4.63	ppm	#	61
77) Phorate	10.281	75	30633	4.83	ppm		93
78) 4-Bromophenyl-phenylether	10.350	248	11948	4.53	ppm	#	82
79) Hexachlorobenzene	10.399	284	11860	4.51	ppm		73
80) Dimethoate	10.479	87	20383	4.76	ppm		95
81) Simazine	10.548	201	7999	4.13	ppm		96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072358.D
Acq On : 12 Aug 2020 10:49 am
Operator : marthav
Sample : cc2918-5 8270 Inst : MSBNA05
Misc : op81484,sx2951,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 12 14:05:17 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration

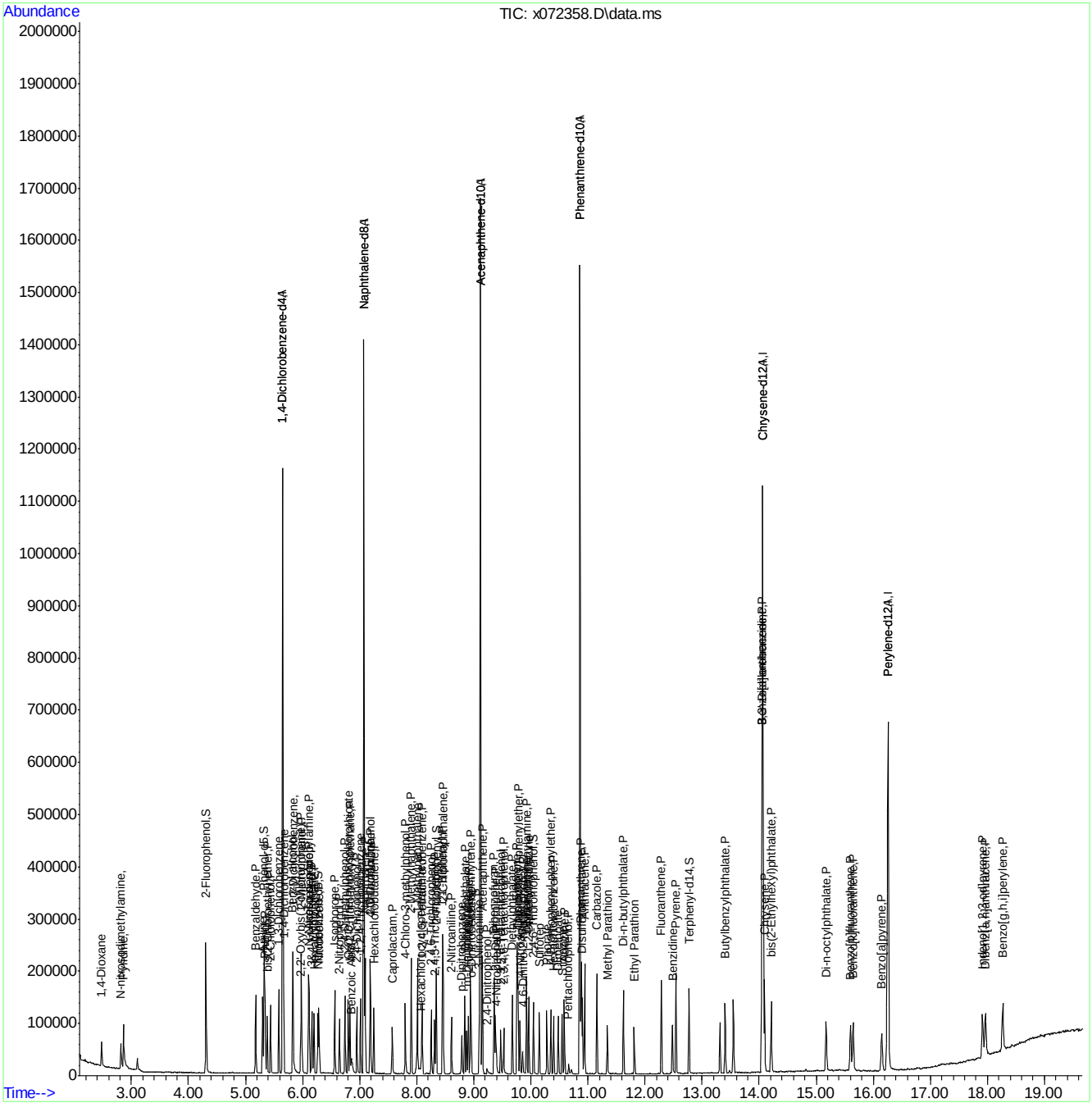
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
82) Atrazine	10.591	200	13611	4.25	ppm		87
83) Pentachlorophenol	10.661	266	2112	1.49	ppm		91
84) Phenanthrene	10.885	178	76795	4.63	ppm		98
85) Anthracene	10.944	178	79388	4.59	ppm		97
86) Disulfoton	10.901	88	32475	4.90	ppm		94
87) Carbazole	11.158	167	70398	4.61	ppm		98
88) Methyl Parathion	11.340	109	16804	4.58	ppm	#	83
89) Di-n-butylphthalate	11.623	149	80870	4.75	ppm		99
90) Ethyl Parathion	11.811	97	9517	4.75	ppm		85
91) Fluoranthene	12.287	202	72748	4.73	ppm		98
93) Benzidine	12.484	184	39546	5.38	ppm		96
94) Pyrene	12.543	202	74545	4.36	ppm		98
97) Butylbenzylphthalate	13.404	149	33390	5.03	ppm		93
98) 3,3'-Dichlorobenzidine	14.052	252	20901	5.38	ppm		93
99) Benzo[a]anthracene	14.052	228	60020	4.63	ppm		98
100) Chrysene	14.094	228	62727	4.55	ppm		98
101) bis(2-Ethylhexyl)phtha...	14.212	149	43601	5.00	ppm		97
103) Di-n-octylphthalate	15.169	149	68079	6.08	ppm		92
104) Benzo[b]fluoranthene	15.603	252	48644	5.17	ppm		97
105) Benzo[k]fluoranthene	15.646	252	51049	4.12	ppm		95
106) Benzo[a]pyrene	16.148	252	44652	4.98	ppm		96
107) Indeno[1,2,3-cd]pyrene	17.913	276	43843	8.43	ppm		89
108) Dibenz[a,h]anthracene	17.967	278	45145	7.83	ppm		91
109) Benzo[g,h,i]perylene	18.272	276	49002	6.06	ppm		86

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0812_sx2951\
Data File : x072358.D
Acq On : 12 Aug 2020 10:49 am
Operator : marthav
Sample : cc2918-5 8270 Inst : MSBNA05
Misc : op81484,sx2951,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 12 14:05:17 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 08/14/20 11:17

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\Jenniferf\AUGUST 2020\08-14-2020\SX2952\
Data File : x072389.d
Acq On : 13 Aug 2020 1:38 pm
Operator : marthav
Sample : cc2918-50 8270
Misc : op81484,sx2952,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 14 02:18:02 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Fri Aug 14 02:15:13 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.633	152	166017	40.00	ppm	0.00
22) Naphthalene-d8	7.061	136	649488	40.00	ppm	0.00
43) Acenaphthene-d10	9.099	164	321937	40.00	ppm	0.00
70) Phenanthrene-d10	10.843	188	541016	40.00	ppm	0.00
92) Chrysene-d12	14.052	240	424734	40.00	ppm	0.00
102) Perylene-d12	16.234	264	307492	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	5.633	152	166017	40.00	ppm	0.00
120) Naphthalene-d8A	7.061	136	649488	40.00	ppm	0.00
127) Acenaphthene-d10A	9.099	164	321937	40.00	ppm	0.00
136) Phenanthrene-d10A	10.843	188	541016	40.00	ppm	0.00
146) Chrysene-d12A	14.052	240	424734	40.00	ppm	0.00
153) Perylene-d12A	16.234	264	307492	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	4.291	112	579232	97.31	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 97.31%#			
9) Phenol-d5	5.323	99	694677	98.09	ppm	0.00
Spiked Amount 100.000	Range 10 - 50		Recovery = 98.09%#			
23) Nitrobenzene-d5	6.259	82	340015	50.69	ppm	0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 101.38%			
47) 2-Fluorobiphenyl	8.329	172	616456	52.90	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 105.80%			
75) 2,4,6-Tribromophenol	10.040	330	120712	99.87	ppm	0.00
Spiked Amount 100.000	Range 33 - 118		Recovery = 99.87%			
95) Terphenyl-d14	12.763	244	574332	50.89	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 101.78%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.451	88	128002	44.99	ppm	# 44
3) N-nitrosodimethylamine	2.788	42	206348	40.85	ppm	# 42
4) Pyridine	2.820	79	353811	51.11	ppm	# 38
5) Benzaldehyde	5.168	106	227456	45.96	ppm	95
6) Aniline	5.291	93	419008	42.45	ppm	91
8) bis(2-Chloroethyl)ether	5.371	93	298825	49.06	ppm	79
10) Phenol	5.334	94	394954	47.01	ppm	94
11) 2-Chlorophenol	5.425	128	324764	51.13	ppm	81
12) 1,3-Dichlorobenzene	5.569	146	330349	50.06	ppm	97
13) 1,4-Dichlorobenzene	5.655	146	347994	49.84	ppm	98
14) 1,2-Dichlorobenzene	5.815	146	312102	47.05	ppm	97
15) Benzyl alcohol	5.820	108	202309	46.02	ppm	93
16) 2,2'-Oxybis(1-chloropr...	5.959	45	524245	40.96	ppm	78
17) 2-Methylphenol	5.975	108	287301	47.55	ppm	98
18) Acetophenone	6.093	105	412325	46.11	ppm	97
19) Hexachloroethane	6.184	117	130884	49.92	ppm	95
20) N-Nitroso-di-n-propyla...	6.114	70	221693	46.94	ppm	# 67
21) 3&4-Methylphenol	6.152	108	304162	48.70	ppm	94
24) Nitrobenzene	6.280	77	329450	49.64	ppm	86
25) Isophorone	6.558	82	543862	45.90	ppm	96
26) 2-Nitrophenol	6.639	139	167590	53.12	ppm	81
27) 2,4-Dimethylphenol	6.735	107	264450	45.14	ppm	95
28) O,O,O-Triethylphosphor...	6.794	198	122208	49.15	ppm	88
29) bis(2-Chloroethoxy)met...	6.821	93	338036	48.76	ppm	95
30) Benzoic Acid	6.901	105	205006m	42.93	ppm	
31) 2,4-Dichlorophenol	6.938	162	238785	50.56	ppm	97
32) 1,2,4-Trichlorobenzene	7.002	180	247473	51.27	ppm	98
34) Naphthalene	7.083	128	867944	49.28	ppm	99
35) 4-Chloroaniline	7.174	127	358162	48.16	ppm	90

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\Jenniferf\AUGUST 2020\08-14-2020\SX2952\
Data File : x072389.d
Acq On : 13 Aug 2020 1:38 pm
Operator : marthav
Sample : cc2918-50 8270
Misc : op81484,sx2952,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 14 02:18:02 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Fri Aug 14 02:15:13 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
36) 2,6-Dichlorophenol	7.184	162	232678	48.32	ppm		99
37) Hexachlorobutadiene	7.232	225	124418	52.27	ppm		99
38) Caprolactam	7.623	113	91767	46.83	ppm	#	64
39) 4-Chloro-3-methylphenol	7.794	107	236334	46.93	ppm		86
40) 2-Methylnaphthalene	7.890	142	555871	47.73	ppm		99
41) 1-Methylnaphthalene	7.997	142	540790	48.50	ppm		98
42) 1,2,4,5-Tetrachloroben...	8.083	216	237465	49.02	ppm		99
44) Hexachlorocyclopentadiene	8.072	237	80862	33.22	ppm		98
45) 2,4,6-Trichlorophenol	8.243	196	156410	52.93	ppm		97
46) 2,4,5-Trichlorophenol	8.307	196	167981	51.95	ppm		100
48) 1,1'-Biphenyl	8.441	154	656753	49.96	ppm		99
49) 2-Chloronaphthalene	8.452	162	503646	51.04	ppm		96
50) 2-Nitroaniline	8.602	65	181237	49.89	ppm	#	71
51) p-Dinitrobenzene	8.783	75	105676	51.89	ppm	#	74
52) Acenaphthylene	8.933	152	820826	51.05	ppm		99
53) Dimethylphthalate	8.837	163	556683	49.01	ppm		99
54) m-Dinitrobenzene	8.869	168	101776	53.78	ppm	#	51
55) 2,6-Dinitrotoluene	8.901	165	138016	51.49	ppm		83
56) o-Dinitrobenzene	8.955	50	127534	49.68	ppm	#	51
57) Acenaphthene	9.136	153	538957	50.40	ppm		99
58) 3-Nitroaniline	9.094	138	156864	53.20	ppm		99
59) 2,4-Dinitrophenol	9.222	184	72124	51.67	ppm	#	70
60) Dibenzofuran	9.345	168	696449	48.80	ppm		95
61) 2,4-Dinitrotoluene	9.372	165	182346	53.36	ppm		83
62) 4-Nitrophenol	9.377	109	64281	39.02	ppm	#	54
63) 2,3,5,6-Tetrachlorophenol	9.463	232	114839	48.00	ppm		93
64) 2,3,4,6-Tetrachlorophenol	9.511	232	126114	50.87	ppm		88
65) Fluorene	9.746	166	564293	50.68	ppm		99
66) 4-Chlorophenyl-phenyle...	9.768	204	271093	50.43	ppm		94
67) Diethylphthalate	9.671	149	543491	47.91	ppm		98
68) Thionazin	9.757	97	124638	51.73	ppm		99
69) 4-Nitroaniline	9.821	138	166642	50.79	ppm		91
71) 4,6-Dinitro-2-methylph...	9.853	198	108052	53.67	ppm	#	46
72) n-Nitrosodiphenylamine	9.917	169	501172	59.61	ppm		96
73) Diphenylamine	9.917	169	501172	50.80	ppm		96
74) 1,2-Diphenylhydrazine	9.955	77	602687	49.71	ppm		95
76) Sulfotep	10.137	97	89659	50.29	ppm	#	73
77) Phorate	10.270	75	329573	52.77	ppm		94
78) 4-Bromophenyl-phenylether	10.340	248	131777	50.73	ppm		88
79) Hexachlorobenzene	10.388	284	133652	51.57	ppm		78
80) Dimethoate	10.479	87	230582	52.91	ppm		95
81) Simazine	10.554	201	90563	47.48	ppm		96
82) Atrazine	10.591	200	160329	50.75	ppm		94
83) Pentachlorophenol	10.650	266	56584	35.04	ppm		98
84) Phenanthrene	10.875	178	811820	49.66	ppm		98
85) Anthracene	10.934	178	865950	50.82	ppm		98
86) Disulfoton	10.891	88	362224	55.42	ppm		93
87) Carbazole	11.153	167	759277	50.50	ppm		99
88) Methyl Parathion	11.329	109	191093	51.23	ppm	#	86
89) Di-n-butylphthalate	11.608	149	872516	51.99	ppm		99
90) Ethyl Parathion	11.800	97	111077	51.06	ppm		87
91) Fluoranthene	12.276	202	781105	51.50	ppm		97
93) Benzidine	12.469	184	432637	51.92	ppm		96
94) Pyrene	12.533	202	841357	47.71	ppm		99
96) Famphur	13.303	218	202455	75.38	ppm		95
97) Butylbenzylphthalate	13.389	149	360171	49.05	ppm		90
98) 3,3'-Dichlorobenzidine	14.041	252	233896	51.98	ppm		97
99) Benzo[a]anthracene	14.036	228	656464	49.18	ppm		100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\Jenniferf\AUGUST 2020\08-14-2020\SX2952\
Data File : x072389.d
Acq On : 13 Aug 2020 1:38 pm
Operator : marthav
Sample : cc2918-50 8270
Misc : op81484,sx2952,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 14 02:18:02 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Fri Aug 14 02:15:13 2020
Response via : Initial Calibration

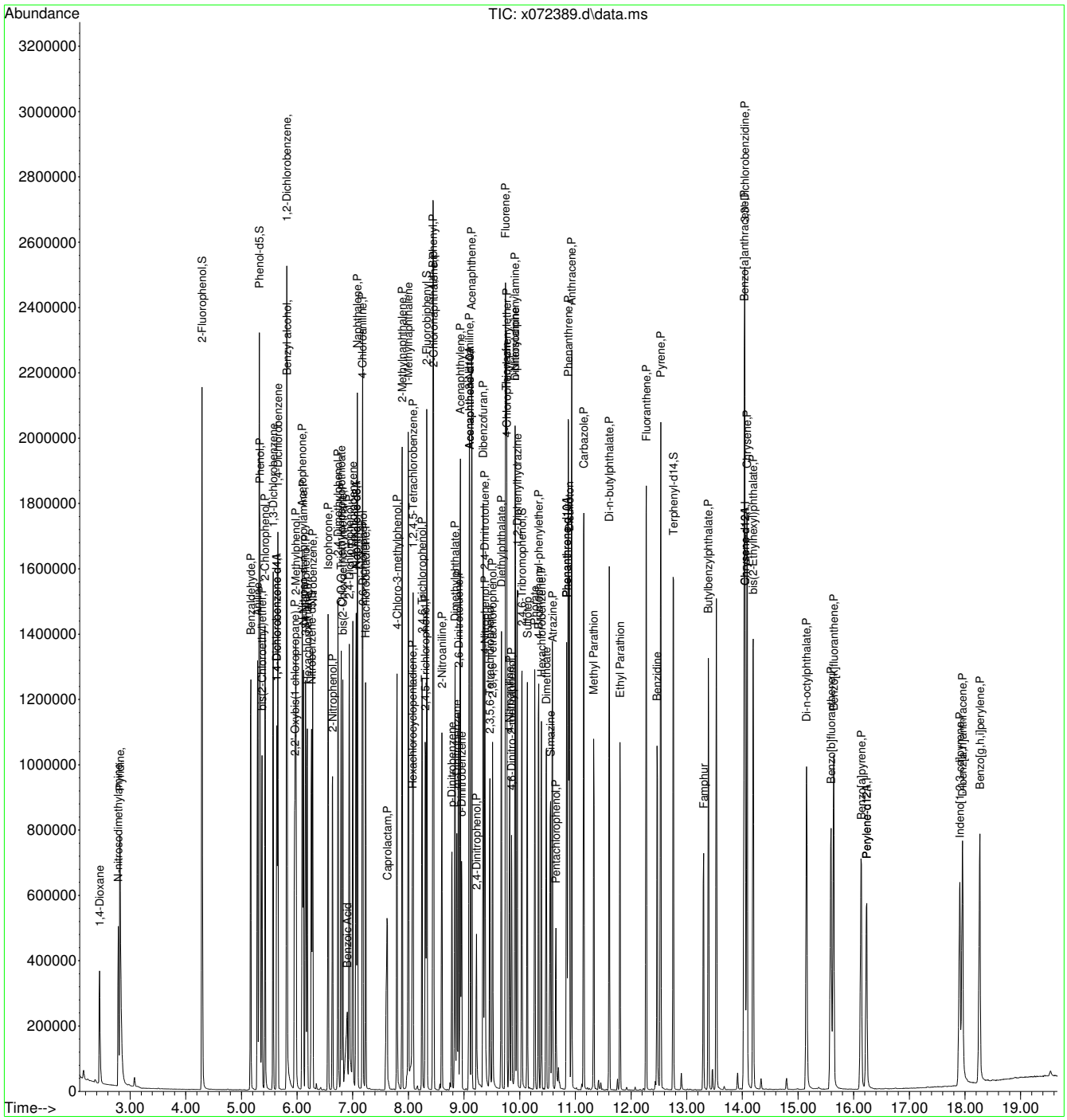
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
100) Chrysene	14.084	228	716961	50.43	ppm	99
101) bis(2-Ethylhexyl)phtha...	14.196	149	513308	51.13	ppm	98
103) Di-n-octylphthalate	15.154	149	747083	58.22	ppm	94
104) Benzo[b]fluoranthene	15.592	252	525024	56.69	ppm	97
105) Benzo[k]fluoranthene	15.640	252	549656	50.35	ppm	97
106) Benzo[a]pyrene	16.138	252	459062	52.14	ppm	96
107) Indeno[1,2,3-cd]pyrene	17.908	276	378752	59.64	ppm	87
108) Dibenz[a,h]anthracene	17.956	278	440088	60.08	ppm	90
109) Benzo[g,h,i]perylene	18.267	276	432758	50.69	ppm	88

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\Jenniferf\AUGUST 2020\08-14-2020\SX2952\
Data File : x072389.d
Acq On : 13 Aug 2020 1:38 pm
Operator : marthav
Sample : cc2918-50 8270
Misc : op81484,sx2952,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 14 02:18:02 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Fri Aug 14 02:15:13 2020
Response via : Initial Calibration



SGS FA77615

Manual Integration Approval Summary

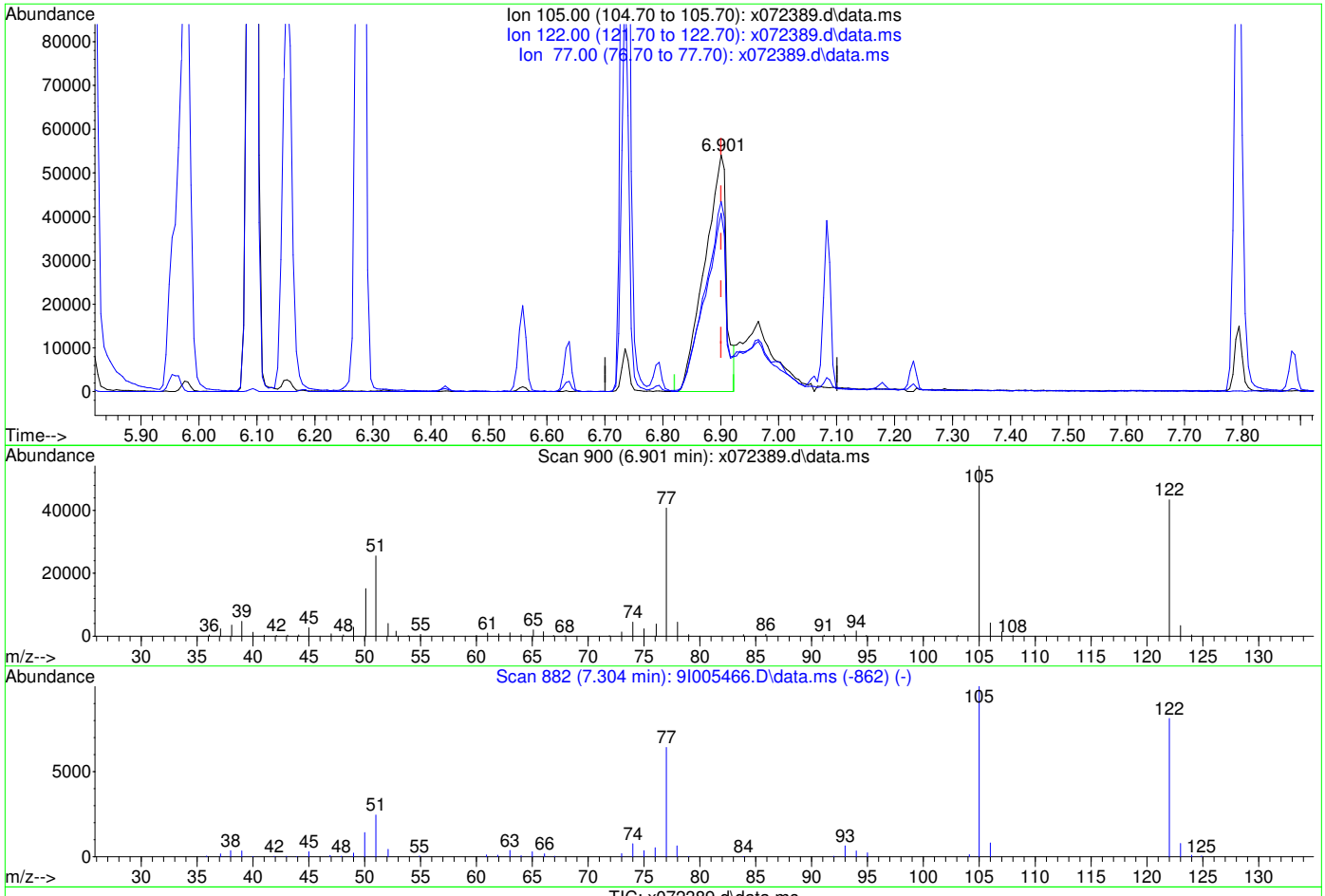
Sample Number: SX2952-CC2918
Lab FileID: X072389.D
Injection Time: 08/13/20 13:38
Method: SW846 8270D
Analyst approved: 08/14/20 02:22 Jennifer Fereira
Supervisor approved: 08/14/20 11:17 Nicole McCampbell

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic Acid	65-85-0		6.90	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\Jenniferf\AUGUST 2020\08-14-2020\SX2952\
Data File : x072389.d
Acq On : 13 Aug 2020 1:38 pm
Operator : marthav
Sample : cc2918-50 8270
Misc : op81484,sx2952,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 14 02:15:19 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Fri Aug 14 02:15:13 2020
Response via : Initial Calibration



TIC: x072389.d\data.ms

(30) Benzoic Acid

6.901min (0.000) 31.08ppm

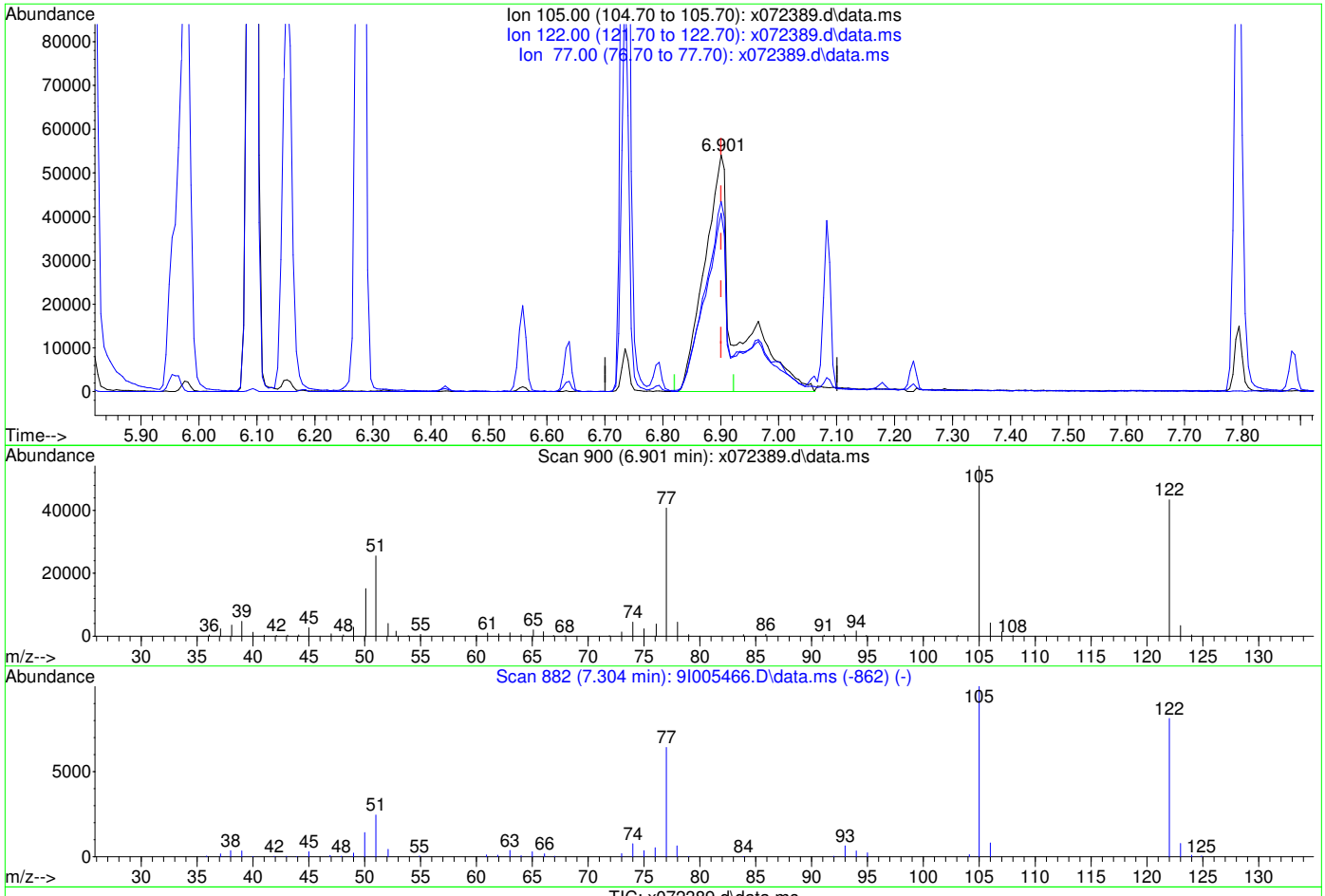
response 141176

Ion	Exp%	Act%
105.00	100	100
122.00	81.20	80.47
77.00	64.10	74.93
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\Jenniferf\AUGUST 2020\08-14-2020\SX2952\
Data File : x072389.d
Acq On : 13 Aug 2020 1:38 pm
Operator : marthav
Sample : cc2918-50 8270
Misc : op81484,sx2952,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 14 02:15:19 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Fri Aug 14 02:15:13 2020
Response via : Initial Calibration



TIC: x072389.d\data.ms

(30) Benzoic Acid

6.901min (0.000) 42.93ppm m

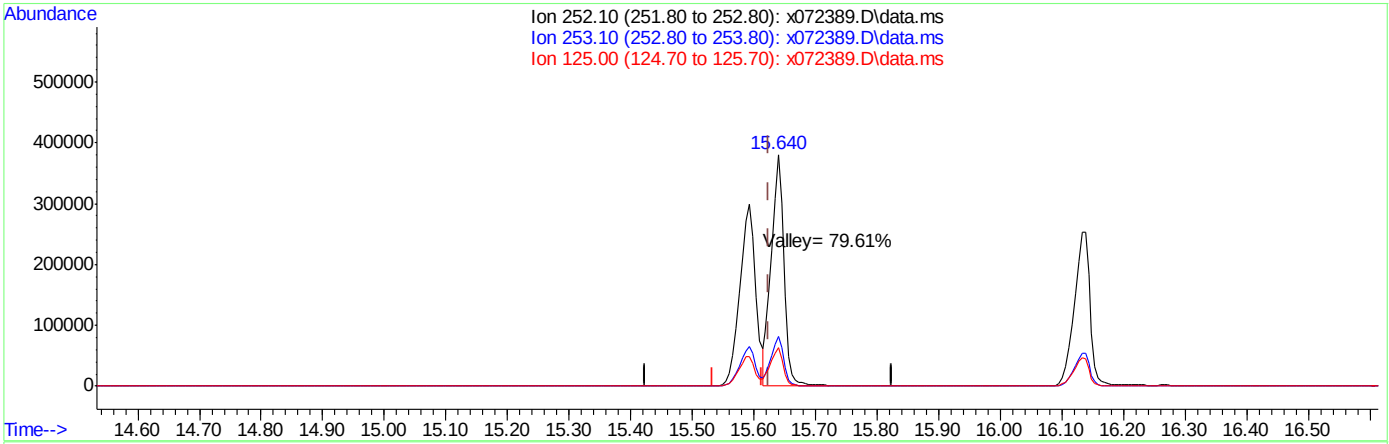
response 205006

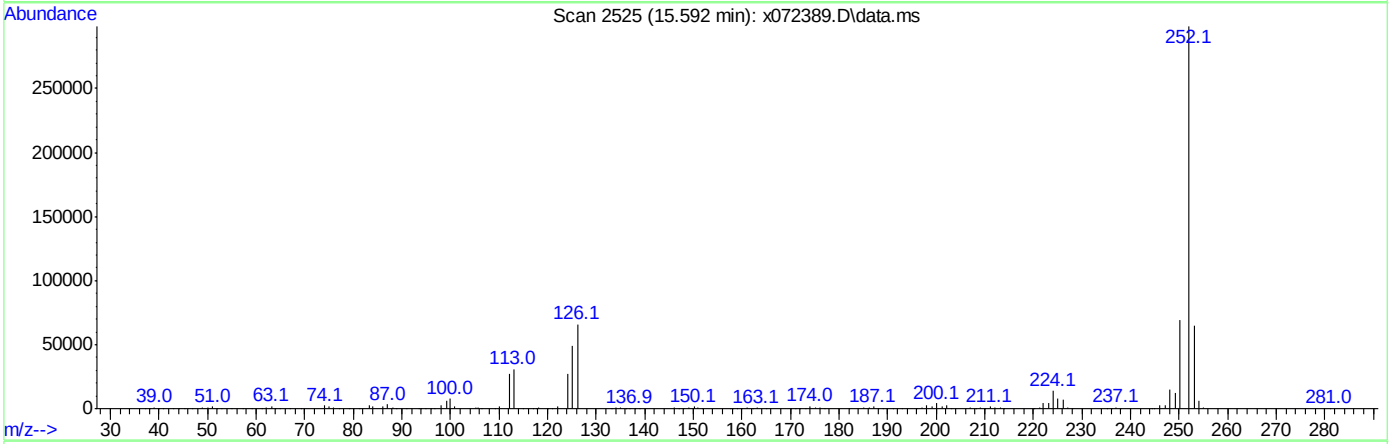
Ion	Exp%	Act%
105.00	100	100
122.00	81.20	80.14
77.00	64.10	75.25
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0813_sx2952\
Data File : x072389.D
Acq On : 13 Aug 2020 1:38 pm
Operator : marthav
Sample : cc2918-50 8270 Inst : MSBNA05
Misc : op81484,sx2952,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 13 13:58:15 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration





TIC: x072389.D\data.ms

(104) Benzo[b]fluoranthene (P)

15.592min (-0.032) 56.69ppm

response 525024

Ion	Exp%	Act%
252.10	100	100
253.10	22.50	21.53
125.00	14.00	16.31
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\Jenniferf\AUGUST 2020\08-14-2020\SX2952\
Data File : x072390.d
Acq On : 13 Aug 2020 2:03 pm
Operator : marthav
Sample : cc2918-5 8270
Misc : op81484,sx2952,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 14 02:21:28 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.633	152	163021	40.00	ppm	0.00
22) Naphthalene-d8	7.056	136	629305	40.00	ppm	0.00
43) Acenaphthene-d10	9.099	164	328157	40.00	ppm	0.00
70) Phenanthrene-d10	10.842	188	563260	40.00	ppm	0.00
92) Chrysene-d12	14.046	240	422957	40.00	ppm	0.00
102) Perylene-d12	16.229	264	348814	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	5.633	152	163021	40.00	ppm	0.00
120) Naphthalene-d8A	7.056	136	629305	40.00	ppm	0.00
127) Acenaphthene-d10A	9.099	164	328157	40.00	ppm	0.00
136) Phenanthrene-d10A	10.842	188	563260	40.00	ppm	0.00
146) Chrysene-d12A	14.046	240	422957	40.00	ppm	0.00
153) Perylene-d12A	16.229	264	348814	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	4.290	112	59312	10.15	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 10.15%#			
9) Phenol-d5	5.317	99	67244	9.67	ppm	0.00
Spiked Amount 100.000	Range 10 - 50		Recovery = 9.67%#			
23) Nitrobenzene-d5	6.253	82	32154	4.95	ppm	0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 9.90%#			
47) 2-Fluorobiphenyl	8.329	172	57685	4.86	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 9.72%#			
75) 2,4,6-Tribromophenol	10.029	330	9928	9.50	ppm	-0.01
Spiked Amount 100.000	Range 33 - 118		Recovery = 9.50%#			
95) Terphenyl-d14	12.757	244	52624	4.68	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 9.36%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.456	88	13760	4.93	ppm	# 42
3) N-nitrosodimethylamine	2.793	42	21022	4.24	ppm	# 43
4) Pyridine	2.830	79	35482	5.22	ppm	# 30
5) Benzaldehyde	5.162	106	23964	4.93	ppm	93
6) Aniline	5.285	93	41984	4.33	ppm	87
8) bis(2-Chloroethyl)ether	5.365	93	27594	4.61	ppm	77
10) Phenol	5.328	94	36747	4.45	ppm	92
11) 2-Chlorophenol	5.424	128	29156	4.67	ppm	79
12) 1,3-Dichlorobenzene	5.569	146	32163	4.96	ppm	98
13) 1,4-Dichlorobenzene	5.654	146	33173	4.84	ppm	99
14) 1,2-Dichlorobenzene	5.815	146	30437	4.67	ppm	97
15) Benzyl alcohol	5.809	108	18328	4.25	ppm	87
16) 2,2'-Oxybis(1-chloropr...	5.959	45	53326	4.24	ppm	79
17) 2-Methylphenol	5.970	108	26762	4.51	ppm	95
18) Acetophenone	6.088	105	39351	4.48	ppm	96
19) Hexachloroethane	6.178	117	12568	4.88	ppm	86
20) N-Nitroso-di-n-propyla...	6.098	70	20930	4.51	ppm	# 64
21) 3&4-Methylphenol	6.152	108	28098	4.58	ppm	96
24) Nitrobenzene	6.269	77	31764	4.94	ppm	82
25) Isophorone	6.547	82	53735	4.68	ppm	96
26) 2-Nitrophenol	6.633	139	15754	5.15	ppm	73
27) 2,4-Dimethylphenol	6.729	107	25750	4.54	ppm	91
28) O,O,O-Triethylphosphor...	6.783	198	11231	4.66	ppm	72
29) bis(2-Chloroethoxy)met...	6.815	93	31855	4.74	ppm	93
30) Benzoic Acid	6.842	105	13204	3.41	ppm	88
31) 2,4-Dichlorophenol	6.938	162	21901	4.79	ppm	97
32) 1,2,4-Trichlorobenzene	6.997	180	23530	5.03	ppm	96
34) Naphthalene	7.082	128	84242	4.94	ppm	99
35) 4-Chloroaniline	7.168	127	34401	4.77	ppm	89

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\Jenniferf\AUGUST 2020\08-14-2020\SX2952\
Data File : x072390.d
Acq On : 13 Aug 2020 2:03 pm
Operator : marthav
Sample : cc2918-5 8270
Misc : op81484,sx2952,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 14 02:21:28 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
36)	2,6-Dichlorophenol	7.173	162	22189	4.76	ppm		97
37)	Hexachlorobutadiene	7.232	225	11953	5.18	ppm		97
38)	Caprolactam	7.553	113	8646	4.55	ppm	#	51
39)	4-Chloro-3-methylphenol	7.788	107	22921	4.70	ppm		98
40)	2-Methylnaphthalene	7.885	142	54781	4.85	ppm		99
41)	1-Methylnaphthalene	7.997	142	51837	4.80	ppm		99
42)	1,2,4,5-Tetrachloroben...	8.083	216	21662	4.62	ppm		97
44)	Hexachlorocyclopentadiene	8.066	237	2275	1.04	ppm		95
45)	2,4,6-Trichlorophenol	8.243	196	14439	4.79	ppm		94
46)	2,4,5-Trichlorophenol	8.302	196	15076	4.57	ppm		94
48)	1,1'-Biphenyl	8.436	154	63730	4.76	ppm		99
49)	2-Chloronaphthalene	8.446	162	47621	4.73	ppm		94
50)	2-Nitroaniline	8.591	65	16915	4.57	ppm	#	66
51)	p-Dinitrobenzene	8.773	75	9514	4.58	ppm	#	61
52)	Acenaphthylene	8.928	152	74283	4.53	ppm		100
53)	Dimethylphthalate	8.826	163	52902	4.57	ppm		100
54)	m-Dinitrobenzene	8.858	168	8891	4.61	ppm	#	57
55)	2,6-Dinitrotoluene	8.890	165	12574	4.60	ppm		84
56)	o-Dinitrobenzene	8.938	50	11875	4.54	ppm	#	48
57)	Acenaphthene	9.131	153	51213	4.70	ppm		99
58)	3-Nitroaniline	9.083	138	14503	4.83	ppm		92
59)	2,4-Dinitrophenol	9.216	184	1864	1.77	ppm	#	29
60)	Dibenzofuran	9.339	168	68659	4.72	ppm		99
61)	2,4-Dinitrotoluene	9.361	165	16306	4.68	ppm		86
62)	4-Nitrophenol	9.377	109	5082	3.03	ppm	#	78
63)	2,3,5,6-Tetrachlorophenol	9.457	232	9343	3.83	ppm		92
64)	2,3,4,6-Tetrachlorophenol	9.511	232	10067	3.98	ppm		89
65)	Fluorene	9.741	166	54169	4.77	ppm		100
66)	4-Chlorophenyl-phenyle...	9.762	204	24946	4.55	ppm		92
67)	Diethylphthalate	9.660	149	51943	4.49	ppm		97
68)	Thionazin	9.746	97	11640	4.74	ppm		97
69)	4-Nitroaniline	9.794	138	14634	4.38	ppm		89
71)	4,6-Dinitro-2-methylph...	9.842	198	5858	3.54	ppm	#	63
72)	n-Nitrosodiphenylamine	9.906	169	47073	5.38	ppm		96
73)	Diphenylamine	9.906	169	47073	4.58	ppm		96
74)	1,2-Diphenylhydrazine	9.944	77	55992	4.44	ppm		89
76)	Sulfotep	10.131	97	8595	4.63	ppm	#	63
77)	Phorate	10.265	75	30601	4.71	ppm		93
78)	4-Bromophenyl-phenylether	10.334	248	12224	4.52	ppm	#	83
79)	Hexachlorobenzene	10.382	284	11804	4.37	ppm		73
80)	Dimethoate	10.463	87	20828	4.75	ppm		97
81)	Simazine	10.527	201	8257	4.16	ppm		93
82)	Atrazine	10.570	200	14524	4.42	ppm		78
83)	Pentachlorophenol	10.645	266	1831	1.26	ppm		91
84)	Phenanthrene	10.864	178	78645	4.62	ppm		98
85)	Anthracene	10.923	178	80506	4.54	ppm		99
86)	Disulfoton	10.885	88	31878	4.69	ppm		89
87)	Carbazole	11.142	167	73057	4.67	ppm		99
88)	Methyl Parathion	11.324	109	16585	4.41	ppm	#	84
89)	Di-n-butylphthalate	11.607	149	82722	4.73	ppm		98
90)	Ethyl Parathion	11.794	97	9873	4.80	ppm		85
91)	Fluoranthene	12.265	202	75248	4.76	ppm		98
93)	Benzidine	12.463	184	37740	5.01	ppm		96
94)	Pyrene	12.527	202	77390	4.41	ppm		99
96)	Famphur	13.297	218	23599	5.76	ppm		93
97)	Butylbenzylphthalate	13.388	149	32869	4.83	ppm		91
98)	3,3'-Dichlorobenzidine	14.036	252	20723	5.20	ppm		95
99)	Benzo[a]anthracene	14.030	228	61097	4.60	ppm		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\Jenniferf\AUGUST 2020\08-14-2020\SX2952\
Data File : x072390.d
Acq On : 13 Aug 2020 2:03 pm
Operator : marthav
Sample : cc2918-5 8270
Misc : op81484,sx2952,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 14 02:21:28 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

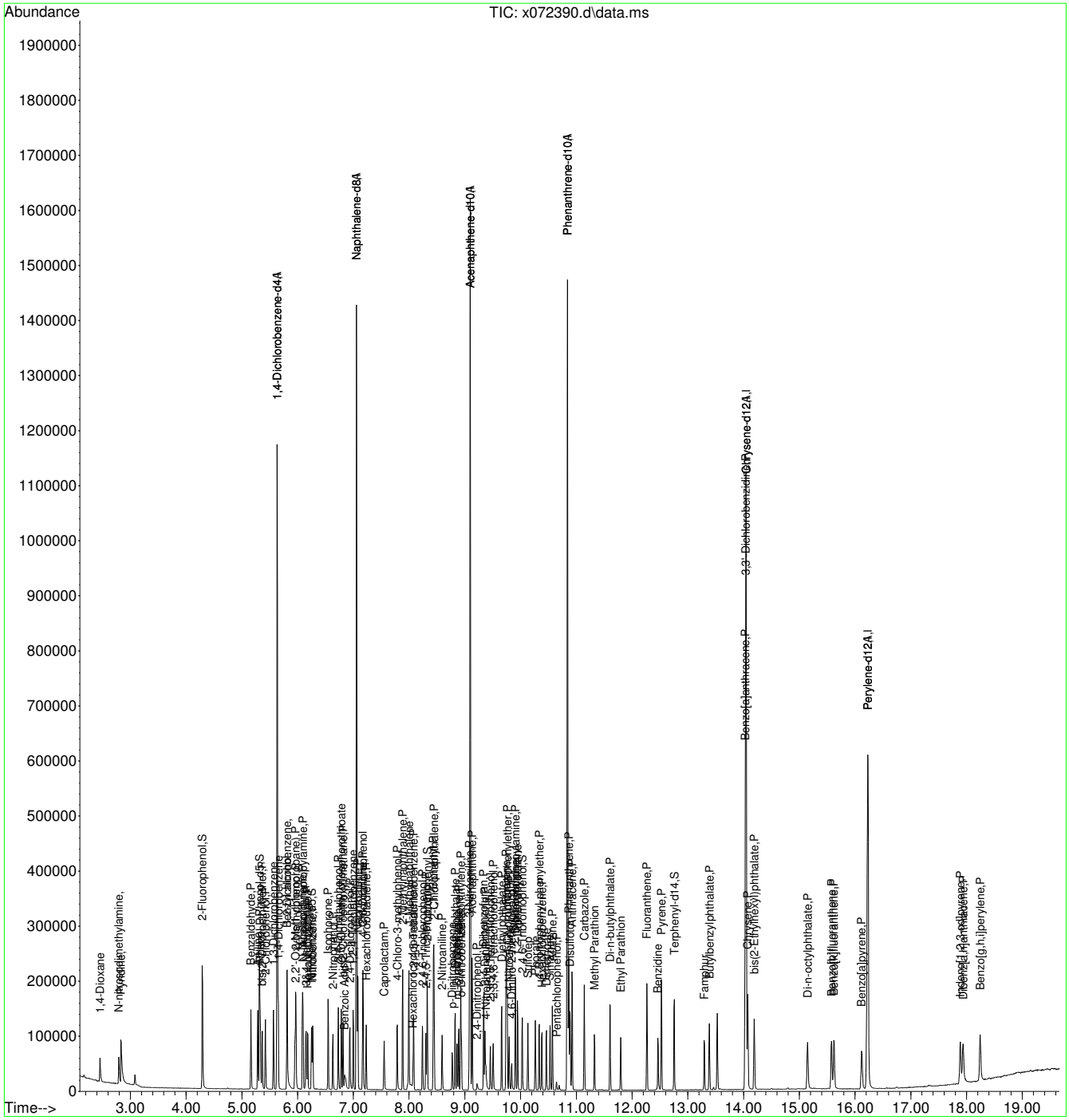
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
100) Chrysene	14.073	228	64371	4.55	ppm	99
101) bis(2-Ethylhexyl)phtha...	14.191	149	44414	4.96	ppm	95
103) Di-n-octylphthalate	15.148	149	64660	5.79	ppm	92
104) Benzo[b]fluoranthene	15.576	252	48192	5.13	ppm	97
105) Benzo[k]fluoranthene	15.619	252	52396	4.23	ppm	97
106) Benzo[a]pyrene	16.116	252	43096	4.82	ppm	96
107) Indeno[1,2,3-cd]pyrene	17.887	276	39363	7.63	ppm	88
108) Dibenz[a,h]anthracene	17.940	278	39813	6.97	ppm	89
109) Benzo[g,h,i]perylene	18.245	276	46404	5.75	ppm	86

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\Jenniferf\AUGUST 2020\08-14-2020\SX2952\
Data File : x072390.d
Acq On : 13 Aug 2020 2:03 pm
Operator : marthav
Sample : cc2918-5 8270
Misc : op81484,sx2952,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 14 02:21:28 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration



SGS-ORLANDO **MS BNA05-X** **ANALYSIS LOG**

DATE	7/29/2020	**METHODS**	8270D	**IC/ICC STD LOT**	**S6418/S6417**
COLUMN TYPE	DB-5MS	**ACQ. METHOD**	ACQ-BNA	**ICV STD LOT**	**10204A**
AMOUNT INJ	1	**PROC. METHOD**	8270D6F072920	**DFTPP**	**S6384**
INSTRUMENT	MS-6F	**CALIB. DATE**	7/29/2020	**EM VOLTAGE**	**1471V**
ANALYST	M.Valls	**RUN BATCH**	S6F248	**ISTD LOT**	**10132J**

ICV(1) 10204A ICV(2) 9809D + 9782 + 10072D ICV(3) (OP) 9934A

DATA FILE	ALS	SAMPLE NAME	METHOD	DF	MISC. INFO	COMMENTS
6F06431	41	Cond Std	8270	""""""""""""""	op81256,S6F248,1000,,,1,1,water	Conditioning
6F06432	1	DFTPP	DFTPP	1x	op81256,S6F248,1000,,,1,1,water	Pass
6F06433	2	ic248-1	8270	2+2/400	op81256,S6F248,1000,,,1,1,water	ok
6F06434	3	ic248-5	8270	10+10/400	op81256,S6F248,1000,,,1,1,water	rr, lost time
6F06435	1	DFTPP	DFTPP	1x	op81256,S6F248,1000,,,1,1,water	Pass
6F06436	2	ic248-1	8270	2+2/400	op81256,S6F248,1000,,,1,1,water	Level 1 Response fail for PCP, Curve Pass
6F06437	3	ic248-5	8270	10+10/400	op81256,S6F248,1000,,,1,1,water	Curve Pass, Pass DOD
6F06438	4	ic248-10	8270	20+20/400	op81256,S6F248,1000,,,1,1,water	Curve Pass, Pass DOD
6F06439	5	ic248-25	8270	50+50/400	op81256,S6F248,1000,,,1,1,water	Curve Pass, Pass DOD
6F06440	6	icc248-50	8270	100+100/400	op81256,S6F248,1000,,,1,1,water	Curve Pass, Pass DOD
6F06441	7	ic248-60	8270	120+120/400	op81256,S6F248,1000,,,1,1,water	Curve Pass, Pass DOD
6F06442	8	ic248-75	8270	150+150/400	op81256,S6F248,1000,,,1,1,water	Curve Pass, Pass DOD
6F06443	9	ic248-100	8270	200+200	op81256,S6F248,1000,,,1,1,water	Curve Pass, Pass DOD
6F06444	10	icv248-50	8270	2x	op81256,S6F248,1000,,,1,1,water	Pass, Phenol low dod
6F06445	11	icv248-50	8270	20+20+10/400	op81256,S6F248,1000,,,1,1,water	Pass

SGS-ORLANDO **MS BNA05-X** **ANALYSIS LOG**

DATE	8/11/2020	**METHODS**	8270D	**IC/ICC STD LOT**	**S6418/S6417**
COLUMN TYPE	DB-5MS	**ACQ. METHOD**	ACQ-BNA	**ICV STD LOT**	**10204A**
AMOUNT INJ	1	**PROC. METHOD**	8270D6F072920	**DFTPP**	**S6384**
INSTRUMENT	MS-6F	**CALIB. DATE**	7/29/2020	**EM VOLTAGE**	**1471V**
ANALYST	M.Valls	**RUN BATCH**	S6F251	**ISTD LOT**	**10194B**

ICV(1) 10204A ICV(2) 9809D + 9782 + 10072D ICV(3) (OP) 9934A

DATA FILE	ALS	SAMPLE NAME	METHOD	DF	MISC. INFO	COMMENTS
6F06484	41	Cond Std	8270	""""""""	op81484,S6F251,1000,,,1,1,water	Conditioning
6F06485	1	DFTPP	DFTPP	1X	op81484,S6F251,1000,,,1,1,water	Passed (Response: 2263750)
6F06486	2	cc248-50	8270	100+100/400	op81484,S6F251,1000,,,1,1,water	Passed
6F06487	3	op81484-bs E	8270	1X	op81484,S6F251,30.0,,,1,1,soil	#38(SP);Passed
6F06488	4	op81484-mb E	8270	1X	op81484,S6F251,30.0,,,1,1,soil	ND
6F06489	5	fa77581-7 E	8270	1X	op81484,S6F251,30.3,,,1,1,soil	Ok
6F06490	6	fa77581-8 E	8270	1X	op81484,S6F251,30.0,,,1,1,soil	Ok
6F06491	7	fa77581-9 E	8270	1X	op81484,S6F251,30.2,,,1,1,soil	Ok
6F06492	8	fa77581-10 E	8270	1X	op81484,S6F251,30.1,,,1,1,soil	Ok
6F06493	9	fa77615-1 E	8270	1X	op81484,S6F251,30.3,,,1,1,soil	Ok
6F06494	10	fa77615-2 E	8270	1X	op81484,S6F251,30.3,,,1,1,soil	Ok
6F06495	11	fa77615-3 E	8270	1X	op81484,S6F251,30.3,,,1,1,soil	**Ok + RR2x**
6F06496	12	fa77615-4 E	8270	1X	op81484,S6F251,30.4,,,1,1,soil	Ok
6F06497	13	fa77615-5 E	8270	1X	op81484,S6F251,30.0,,,1,1,soil	Ok
6F06498	14	fa77615-6 E	8270	1X	op81484,S6F251,30.2,,,1,1,soil	Ok
6F06499	15	op81484-ms E	8270	1X	op81484,S6F251,30.0,,,1,1,soil	Passed
6F06500	16	op81484-msd E	8270	1X	op81484,S6F251,30.2,,,1,1,soil	Passed
6F06501	17	fa77615-7 E	8270	1X	op81484,S6F251,30.0,,,1,1,soil	Ok
6F06502	18	fa77615-8 E	8270	1X	op81484,S6F251,30.1,,,1,1,soil	Ok
6F06503	19	fa77615-9 E	8270	1X	op81484,S6F251,30.0,,,1,1,soil	Ok
6F06504	20	fa77615-10 E	8270	1X	op81484,S6F251,30.3,,,1,1,soil	**RR10x**
6F06505	21	fa77615-11 E	8270	1X	op81484,S6F251,30.2,,,1,1,soil	**RR1x carryover**
6F06506	22	fa77615-12 E	8270	1X	op81484,S6F251,30.0,,,1,1,soil	**RR5x**

SGS-ORLANDO **MS BNA05-X** **ANALYSIS LOG**

6F06507	23	fa77615-13 E	8270	1X	op81484,S6F251,30.0,,,1,1,soil	**SS Fail RR1x**
6F06508	24	fa77616-1 E	8270	1X	op81484,S6F251,30.2,,,1,1,soil	Ok
6F06509	25	fa77616-2 E	8270	1X	op81484,S6F251,30.2,,,1,1,soil	**RR5x**
6F06510	26	fa77616-3 E	8270	1X	op81484,S6F251,30.2,,,1,1,soil	**RR2x**

SGS-ORLANDO **MS BNA05-X** **ANALYSIS LOG**

DATE	8/13/2020	**METHODS**	8270D	**IC/ICC STD LOT**	**S6418/S6417**
COLUMN TYPE	DB-5MS	**ACQ. METHOD**	ACQ-BNA	**ICV STD LOT**	**10204A**
AMOUNT INJ	1	**PROC. METHOD**	8270D6F072920	**DFTPP**	**S6384**
INSTRUMENT	MS-6F	**CALIB. DATE**	7/29/2020	**EM VOLTAGE**	**1471V**
ANALYST	M.Valls	**RUN BATCH**	S6F253	**ISTD LOT**	**10194B**

ICV(1) 10204A ICV(2) 9809D + 9782 + 10072D ICV(3) (OP) 9934A

DATA FILE	ALS	SAMPLE NAME	METHOD	DF	MISC. INFO	COMMENTS
6F06540	1	DFTPP	8270	1X	op81484,S6F253,1000,,,1,1,water	PASS(response:3232391)
6F06541	2	cc248-50	DFTPP	100+100/400	op81484,S6F253,1000,,,1,1,water	OK, 4-NP↓#30(SP)
6F06542	3	op81540-bs E	8270	1X	op81540,S6F253,30.0,,,1,1,soil	Pass #30(SP)
6F06543	4	op81540-mb E	8270	1X	op81540,S6F253,30.0,,,1,1,soil	ND
6F06544	5	fa77700-1 E	8270	1X	op81540,S6F253,30.5,,,1,1,soil	OK, #107(OP)
6F06545	6	op81538-bs E	8270	1X	op81538,S6F253,30.0,,,1,1,soil	OK, Pass #30(SP)
6F06546	7	op81538-mb E	8270	1X	op81538,S6F253,30.0,,,1,1,soil	ND
6F06547	8	fa77698-11 E	8270	1X	op81540,S6F253,30.3,,,1,1,soil	RR10x Pyrene #18(PII)#105(MP)#107(OP)
6F06548	9	op81540-ms E	8270	1X	op81540,S6F253,30.2,,,1,1,soil	OK, #105(MP)#107(OP)
6F06549	10	op81540-msd E	8270	1X	op81540,S6F253,30.1,,,1,1,soil	OK, #105(MP)#107(OP)
6F06550	11	fa77698-5 E	8270	1X	op81538,S6F253,30.5,,,1,1,soil	RR5x Pyrene #107(OP)
6F06551	12	op81538-ms E	8270	1X	op81538,S6F253,30.0,,,1,1,soil	OK
6F06552	13	op81538-msd E	8270	1X	op81538,S6F253,29.8,,,1,1,soil	OK
6F06553	14	fa77700-2 E	8270	1X	op81540,S6F253,30.5,,,1,1,soil	OK, #107(OP)
6F06554	15	fa77700-3 E	8270	1X	op81540,S6F253,30.3,,,1,1,soil	OK, #107(OP)
6F06555	16	fa77700-4 E	8270	1X	op81540,S6F253,30.1,,,1,1,soil	OK
6F06556	17	fa77700-5 E	8270	1X	op81540,S6F253,30.3,,,1,1,soil	RR5x Pyrene #107(OP)
6F06557	18	fa77700-6 E	8270	1X	op81540,S6F253,30.1,,,1,1,soil	RR2x BBF #107(OP)
6F06558	19	fa77700-7 E	8270	1X	op81540,S6F253,30.2,,,1,1,soil	RR1x IS failure #105(PII)#107(OP)
6F06559	20	fa77689-1 E	8270	1X	op81538,S6F253,30.1,,,1,1,soil	OK, #21(PII)#107(OP)
6F06560	21	fa77689-2 E	8270	1X	op81538,S6F253,30.0,,,1,1,soil	OK, #107(OP)
6F06561	22	fa77689-3 E	8270	1X	op81538,S6F253,30.3,,,1,1,soil	OK
6F06562	23	fa77689-8 E	8270	1X	op81538,S6F253,30.1,,,1,1,soil	OK, #107(OP)

6F06563	24	fa77689-9 E	8270	1X	op81538,S6F253,29.9,,,1,1,soil	OK, #107(OP)
6F06564	25	fa77689-10 E	8270	1X	op81538,S6F253,30.3,,,1,1,soil	OK, #107(OP)
6F06565	26	fa77689-11 E	8270	1X	op81538,S6F253,30.0,,,1,1,soil	OK,#107(OP)
6F06566	27	fa77698-1 E	8270	1X	op81538,S6F253,30.0,,,1,1,soil	Ok, #107(OP)
6F06567	28	fa77698-2 E	8270	1X	op81538,S6F253,30.2,,,1,1,soil	RR5x Pyrene #107(OP)
6F06568	29	fa77698-6 E	8270	1X	op81538,S6F253,30.1,,,1,1,soil	OK, #107(OP)

DATE	8/14/2020	**METHODS**	8270D	**IC/ICC STD LOT**	**S6418/S6417**
COLUMN TYPE	DB-5MS	**ACQ. METHOD**	ACQ-BNA	**ICV STD LOT**	**10204A**
AMOUNT INJ	1	**PROC. METHOD**	8270D6F072920	**DFTPP**	**S6384**
INSTRUMENT	MS-6F	**CALIB. DATE**	7/29/2020	**EM VOLTAGE**	**1471V**
ANALYST	M.Valls	**RUN BATCH**	S6F254	**ISTD LOT**	**10194B**

ICV(1) 10204A ICV(2) 9809D + 9782 + 10072D ICV(3) (OP) 9934A

DATA FILE	ALS	SAMPLE NAME	METHOD	DF	MISC. INFO	COMMENTS
6F06569	41	Cond Std	8270	""""""""""""""	op81484,S6F254,1000,,,1,1,water	Lost presure
6F06570	41	Cond Std	DFTPP	""""""""""""""	op81484,S6F254,1000,,,1,1,water	Lost presure
6F06571	41	Cond Std	8270	""""""""""""""	op81484,S6F254,1000,,,1,1,water	Conditioning
6F06572	1	DFTPP	DFTPP	1	op81484,S6F254,1000,,,1,1,water	Pass, response: 1839943
6F06573	2	cc248-50	8270	100+100/400	op81484,S6F254,1000,,,1,1,water	# 30 (SP) N-nitrosodimethylamine low
6F06574	3	fa77698-7 E	8270	1	op81538,S6F254,30.5,,,1,1,soil	
6F06575	4	fa77698-9 E	8270	1	op81538,S6F254,29.9,,,1,1,soil	
6F06576	7	fa77512-1,100	8270	5/500	op81455,S6F254,1000,,,1,1,water	ok, for Benzoic Acid only
6F06577	5	fa77698-10 E	8270	1	op81538,S6F254,30.4,,,1,1,soil	
6F06578	6	fa77698-12 E	8270	1	op81538,S6F254,30.1,,,1,1,soil	
6F06579	15	fa77615-13	8270	1	op81538,S6F254,30.1,,,1,1,soil	ok
6F06580	8	fa77698-4	8270		op81545,S6F254,240,,,1,1,water	
6F06581	9	fa77698-11 E,10	8270		op81540,S6F254,30.3,,,1,10,soil	
6F06582	10	op81540-ms E,10	8270		op81540,S6F254,30.2,,,1,10,soil	
6F06583	11	op81540-msd E,10	8270		op81540,S6F254,30.1,,,1,10,soil	
6F06584	12	fa77700-5 E,5	8270		op81540,S6F254,30.3,,,1,5,soil	
6F06585	13	fa77700-6 E,2	8270		op81540,S6F254,30.1,,,1,2,soil	
6F06586	14	fa77700-7 E	8270		op81540,S6F254,30.2,,,1,1,soil	
6F06587	16	fa77698-2 E,5	8270		op81538,S6F254,30.2,,,1,5,soil	
6F06588	17	fa77698-5 E,5	8270		op81538,S6F254,30.5,,,1,5,soil	
6F06589	18	op81538-ms E,5	8270		op81538,S6F254,30.0,,,1,5,soil	
6F06590	19	op81538-msd E,5	8270		op81538,S6F254,29.8,,,1,5,soil	

DATE	7/21/2020	METHODS	8270D Simpah	IC/ICC STD LOT	s6349
COLUMN TYPE	ZB5-MS	ACQ. METHOD	FASTPAH	ICV STD LOT	E6624
AMOUNT INJ	1ul	PROC. METHOD	SIMPAHF7GD072120.M	DFTPP	s6313
INSTRUMENT	MSBNA-S7G	CALIB. DATE	7/21/2020	EM VOLTAGE	ev1376
ANALYST	fouads	RUN BATCH	S7G472	ISTD LOT	s6358

DATA FILE	ALS	SAMPLE NAME	METHOD	DF	MISC. INFO	COMMENTS
7G10821	1	dftpp	DFTPP	1	op80679,S7G472,1000,,,1,1,water	
7G10822	1	dftpp	DFTPP	1	op80679,S7G472,1000,,,1,1,water	tune passed, response(148973)
7G10823	2	cc470-4	FASTPAH	100/400	op80679,S7G472,1000,,,1,1,water	failed
7G10824	3	ic472-1	FASTPAH	na	op80679,S7G472,1000,,,1,1,water	
7G10825	4	ic472-2	FASTPAH	na	op80679,S7G472,1000,,,1,1,water	
7G10826	5	ic472-3	FASTPAH	na	op80679,S7G472,1000,,,1,1,water	
7G10827	6	icc472-4	FASTPAH	na	op80679,S7G472,1000,,,1,1,water	na
7G10828	7	ic472-5	FASTPAH	na	op80679,S7G472,1000,,,1,1,water	
7G10829	8	ic472-6	FASTPAH	na	op80679,S7G472,1000,,,1,1,water	
7G10830	9	ic472-7	FASTPAH	na	op80679,S7G472,1000,,,1,1,water	
7G10831	10	ic472-4	FASTPAH	na	op80679,S7G472,1000,,,1,1,water	
7G10832	2	cc472-1	FASTPAH	na	op80679,S7G472,1000,,,1,1,water	na
7G10833	3	ic472-1	FASTPAH	5+495	op80679,S7G472,1000,,,1,1,water	
7G10834	4	ic472-2	FASTPAH	20+380	op80679,S7G472,1000,,,1,1,water	
7G10835	5	ic472-3	FASTPAH	50+350	op80679,S7G472,1000,,,1,1,water	
7G10836	6	icc472-4	FASTPAH	100+300	op80679,S7G472,1000,,,1,1,water	curve passed
7G10837	7	ic472-5	FASTPAH	150+250	op80679,S7G472,1000,,,1,1,water	
7G10838	8	ic472-6	FASTPAH	200+200	op80679,S7G472,1000,,,1,1,water	
7G10839	9	ic472-7	FASTPAH	1X	op80679,S7G472,1000,,,1,1,water	
7G10840	10	icV472-4	FASTPAH	2X SPK	op80679,S7G472,1000,,,1,1,water	passed dibenzo high,carbz low ,pcp less30%
7G10841	1	dftpp	DFTPP	1	op80679,S7G472,1000,,,1,1,water	tune passed
7G10842	2	cc472-4	FASTPAH	100+300	op81126-,s7G472,1000,,,1,1,water	ccv passed
7G10843	3	op71120-mb	FASTPAH	1	op81120,s7G472,1000,,,1,1,water	nd
7G10844	4	op71120-bs	FASTPAH	1	op81120,s7G472,1000,,,1,1,water	8270 spk used rr@1x
7G10845	5	op71126-mb	FASTPAH	1	op81126,s7G472,15.0,,,1,1,soil	nd
7G10846	6	op71126-bs	FASTPAH	1	op81126,s7G472,15.0,,,1,1,soil	ok
7G10847	7	fa76888-1	FASTPAH	1	op81120,s7G472,1050,,,1,1,water	nd
7G10848	8	fa76888-2	FASTPAH	1	op81120,s7G472,1050,,,1,1,water	nd
7G10849	9	fa76888-3	FASTPAH	1	op81120,s7G472,1050,,,1,1,water	nd
7G10850	10	fa76888-4	FASTPAH	1	op81120,s7G472,1050,,,1,1,water	nd
7G10851	11	fa76888-5	FASTPAH	1	op81120,s7G472,1050,,,1,1,water	nd
7G10852	12	fa76888-6	FASTPAH	1	op81120,s7G472,1050,,,1,1,water	nd
7G10853	13	op81120-ms	FASTPAH	1	op81120,s7G472,520,,,1,1,water	ok
7G10854	14	op81120-msd	FASTPAH	1	op81120,s7G472,520,,,1,1,water	ok
7G10855	15	fa76853-2	FASTPAH	1	op81126,s7G472,15.0,,,1,1,soil	ok
7G10856	16	fa76854-2	FASTPAH	1	op81126,s7G472,15.0,,,1,1,soil	ok
7G10857	17	fa76825-1a,5	FASTPAH	5	op81126,s7G472,15.3,,,1,5,soil	ok,dl req matrix viscous
7G10858	18	fa76878-1	FASTPAH	1	op81126,s7G472,15.1,,,1,1,soil	ok
7G10859	19	op81126-ms	FASTPAH	1	op81126,s7G472,15.2,,,1,1,soil	ok
7G10860	20	op81126-msd	FASTPAH	1	op81126,s7G472,14.9,,,1,1,soil	ok
7G10861	21	fa76878-2	FASTPAH	1	op81126,s7G472,14.9,,,1,1,soil	ok
7G10862	22	fa76878-3	FASTPAH	1	op81126,s7G472,15.2,,,1,1,soil	ok
7G10863	23	fa76886-1,5	FASTPAH	5	op81126,s7G472,15.2,,,1,1,soil	ok,dl req matrix viscous
7G10864	24	fa76886-2,5	FASTPAH	5	op81126,s7G472,15.0,,,2,5,soil	ok,dl req matrix viscous
7G10865	25	fa76886-3,5	FASTPAH	5	op81126,s7G472,15.4,,,1,5,soil	ok,dl req matrix viscous
7G10866	26	fa76886-4,5	FASTPAH	5	op81126,s7G472,15.1,,,1,5,soil	surrg low rr@5x
7G10867	27	fa76886-5,5	FASTPAH	5	op81126,s7G472,15.2,,,1,5,soil	ok.dl req matrix viscous
7G10868	28	fa76886-6	FASTPAH	1	op81126,s7G472,15.3,,,1,1,soil	ok
7G10869	3	blk	FASTPAH	1	op81126,s7G472,15.3,,,1,1,soil	na

DATE	8/11/2020	**METHODS**	8270D Simpah	**IC/ICC STD LOT**	**s6420**
COLUMN TYPE	ZB5-MS	**ACQ. METHOD**	FASTPAH	**ICV STD LOT**	**E6750**
AMOUNT INJ	1ul	**PROC. METHOD**	SIMPAHF7GD0072120.M	**DFTPP**	**s6313**
INSTRUMENT	MSBNA-S7G	**CALIB. DATE**	7/21/2020	**EM VOLTAGE**	**ev1376**
ANALYST	fouads	**RUN BATCH**	S7G483	**ISTD LOT**	**s6415**

DATA FILE	ALS	SAMPLE NAME	METHOD	DF	MISC. INFO	COMMENTS
7G11127	1	dftpp	DFTPP	1	op81342,S7G483,1000,,,1,1,water	-
7G11128	1	DFTPP	DFTPP	1	op81342,S7G483,1000,,,1,1,water	-
7G11129	1	dftpp	DFTPP	1	op81342,S7G483,1000,,,1,1,water	Passed (Response: 89512)
7G11130	2	CC472-4	8270	1	op81342,S7G483,1000,,,1,1,water	1MNap high, #26(OP)
7G11131	3	op81485-mb e	8270	1	op81485,S7G483,15.0,,,1,1,soil	ND
7G11132	4	op81485-bs e	8270	1	op81485,S7G483,15.0,,,1,1,soil	#26(OP); Passed
7G11133	5	fa77581-7 e	8270	1	op81485,S7G483,15.3,,,1,1,soil	Ok
7G11134	6	fa77581-8 e	8270	1	op81485,S7G483,15.1,,,1,1,soil	#24(MP), Ok
7G11135	7	fa77581-9 e	8270	1	op81485,S7G483,15.3,,,1,1,soil	#24(MP), Ok
7G11136	8	fa77581-10 e	8270	1	op81485,S7G483,15.3,,,1,1,soil	#24(MP), Ok
7G11137	9	fa77615-1 e	8270	1	op81485,S7G483,15.4,,,1,1,soil	Ok
7G11138	10	fa77615-2 e	8270	1	op81485,S7G483,15.4,,,1,1,soil	#24(MP), Ok
7G11139	11	fa77615-3 e	8270	1	op81485,S7G483,15.1,,,1,1,soil	#23,24(OP),Ok
7G11140	12	fa77615-4 e	8270	1	op81485,S7G483,15.4,,,1,1,soil	Ok
7G11141	13	fa77615-5 e	8270	1	op81485,S7G483,15.2,,,1,1,soil	#24(MP), Ok
7G11142	14	fa77615-6 e	8270	1	op81485,S7G483,15.2,,,1,1,soil	#24(MP), Ok
7G11143	15	op81485-ms e	8270	1	op81485,S7G483,15.3,,,1,1,soil	#26(OP), Ok
7G11144	16	op81485-msd e	8270	1	op81485,S7G483,15.2,,,1,1,soil	#26(OP), Ok
7G11145	17	fa77615-7 e	8270	1	op81485,S7G483,15.0,,,1,1,soil	#24(MP), Ok
7G11146	18	fa77615-8 e	8270	1	op81485,S7G483,15.4,,,1,1,soil	#24(MP), Ok
7G11147	19	fa77615-9 e	8270	1	op81485,S7G483,15.2,,,1,1,soil	#24(MP), Ok
7G11148	20	fa77615-10 e	8270	1	op81485,S7G483,15.3,,,1,1,soil	#23,24(OP) #25(MP), Ok
7G11149	21	fa77615-11 e	8270	1	op81485,S7G483,15.1,,,1,1,soil	Ok
7G11150	22	fa77615-12 e	8270	1	op81485,S7G483,15.0,,,1,1,soil	#23,24(OP) #25(MP), Ok
7G11151	23	fa77615-13 e	8270	1	op81485,S7G483,15.3,,,1,1,soil	#23,24(OP)
7G11152	24	fa77616-1 e	8270	1	op81485,S7G483,15.2,,,1,1,soil	#24(MP), Ok
7G11153	25	fa77616-2 e	8270	1	op81485,S7G483,15.3,,,1,1,soil	#5,20,21(MP) #23,24(OP), Ok
7G11154	26	fa77616-3 e	8270	1	op81485,S7G483,15.0,,,1,1,soil	#24(MP), Ok
7G11155	27	fa77576-1 e	8270	1	op81483,S7G483,15.0,,,1,1,soil	#23,24(OP) #25(MP), Ok
7G11156	28	fa77576-5 e	8270	1	op81483,S7G483,15.3,,,1,1,soil	#23,24(OP) #25(MP), Ok
7G11157	29	fa77576-8 e	8270	1	op81483,S7G483,15.3,,,1,1,soil	#23,24(OP) #25(MP), Ok
7G11158	30	fa77581-5 e	8270	1	op81483,S7G483,15.0,,,1,1,soil	Ok
7G11159	31	blk	8270	1	op81483,S7G483,15.0,,,1,1,soil	-

SGS-ORLANDO **MS BNA05-X** **ANALYSIS LOG**

DATE	6/23/2020	**METHODS**	8270D	**IC/ICC STD LOT**	**S6387/S6388**
COLUMN TYPE	DB-5MS	**ACQ. METHOD**	ACQ-BNA	**ICV STD LOT**	**9821D**
AMOUNT INJ	2	**PROC. METHOD**	8270DAPP9SX-062320	**DFTPP**	**S6384**
INSTRUMENT	MS-SX	**CALIB. DATE**	6/23/2020	**EM VOLTAGE**	**1000V**
ANALYST	MV	**RUN BATCH**	SX2918	**ISTD LOT**	**1011OE**

ICV(1) 9821HD ICV(2) 9809A + 9782 + 10072D ICV(3) (OP) 9934A

DATA FILE	ALS	SAMPLE NAME	METHOD	DF	MISC. INFO	COMMENTS
x071355	1	dftpp	DFTPP	1x	op80734,sx2918,1000,,,1,1,water	Pass
x071356	2	ic2918-1 app9	8270	2/400	op80734,sx2918,1000,,,1,1,water	Curve Pass, no Kepone
x071357	3	ic2918-5	8270	10+4/400	op80734,sx2918,1000,,,1,1,water	Curve Pass, no Kepone
x071358	4	ic2918-10	8270	20+8/400	op80734,sx2918,1000,,,1,1,water	Curve Pass, no Kepone
x071359	5	ic2918-25	8270	50+20/400	op80734,sx2918,1000,,,1,1,water	Curve Pass, no Kepone
x071360	6	ic2918-50	8270	100+40/400	op80734,sx2918,1000,,,1,1,water	Curve Pass, no Kepone
x071361	7	ic2918-60	8270	120+48/400	op80734,sx2918,1000,,,1,1,water	Curve Pass, no Kepone
x071362	8	ic2918-75	8270	150+60/400	op80734,sx2918,1000,,,1,1,water	Curve Pass, no Kepone
x071363	9	ic2918-100	8270	200+80/400	op80734,sx2918,1000,,,1,1,water	Curve Pass, no Kepone
x071364	10	ic2918-1 8270	8270	2+2/400	op80734,sx2918,1000,,,1,1,water	Curve Pass
x071365	11	ic2918-5	8270	10+10/400	op80734,sx2918,1000,,,1,1,water	Curve Pass
x071366	12	ic2918-10	8270	20+20/400	op80734,sx2918,1000,,,1,1,water	Curve Pass
x071367	13	ic2918-25	8270	50+50/400	op80734,sx2918,1000,,,1,1,water	Curve Pass
x071368	14	icc2918-50	8270	100+100/400	op80734,sx2918,1000,,,1,1,water	Curve Pass
x071369	15	ic2918-60	8270	120+120/400	op80734,sx2918,1000,,,1,1,water	Curve Pass
x071370	16	ic2918-75	8270	150+150/400	op80734,sx2918,1000,,,1,1,water	Curve Pass
x071371	17	ic2918-100	8270	200+200	op80734,sx2918,1000,,,1,1,water	Curve Pass
x071372	18	icv2918-50	8270	200/400	op80734,sx2918,1000,,,1,1,water	Benzaldehyde low dod
x071373	19	icv2918-50	8270	20+20+10/400	op80734,sx2918,1000,,,1,1,water	Pyridine, 2-Nitroaniline high dod
x071374	20	icv2918-50	8270	10/400	op80734,sx2918,1000,,,1,1,water	Disulfoton low dod, Famphur fail high
x071375	21	icv2918-50	8270	10+20+100/400	op80734,sx2918,1000,,,1,1,water	Low for dod, RR for DOD
x071376	22	icv2918-50	8270	20+20+20/400	op80734,sx2918,1000,,,1,1,water	Methapyr fail high
x071377	1	dftpp	DFTPP	1x	op80734,sx2918,1000,,,1,1,water	Passed (Response: 777585)

x071378	6	cc2918-50 app9	8270	100+40/400	op80734,sx2918,1000,,,1,1,water	Pass, #122,138,147(SP) #125(PII);
x071379	14	cc2918-50 8270	8270	100+100/400	op80734,sx2918,1000,,,1,1,water	#30(SP); Passed
x071380	23	op80558-bs	8270	1x	op80558,sx2918,1000,,,1,1,water	OP compounds fail high
x071381	24	op80558-bs2	8270	1x	op80558,sx2918,1000,,,1,1,water	#122,138,147(SP) #125(PII)
x071382	25	op80558-mb	8270	1x	op80558,sx2918,1000,,,1,1,water	ND
x071383	26	fa75495-7	8270	1x	op80558,sx2918,960,,,1,1,water	**ND, surr high**
x071384	27	fa75495-8	8270	1x	op80558,sx2918,980,,,1,1,water	Ok
x071385	28	fa75495-9	8270	1x	op80558,sx2918,1000,,,1,1,water	Ok
x071386	29	fa75495-10	8270	1x	op80558,sx2918,1000,,,1,1,water	Ok
x071387	30	op80508-bs	8270	1x	op80508,sx2918,1000,,,1,1,water	Fail high
x071388	31	op80508-bs2	8270	1x	op80508,sx2918,1000,,,1,1,water	Fail high, #122,138,147(SP)
x071389	32	op80508-mb	8270	1x	op80508,sx2918,1000,,,1,1,water	ND, 2-Fluorobiphenyl high
x071390	33	fa75495-1	8270	1x	op80508,sx2918,1000,,,1,1,water	**IS,SS Fail RR@1x**
x071391	34	fa75495-2	8270	1x	op80508,sx2918,1000,,,1,1,water	**SS Fail RR@1x**
x071392	35	fa75495-3	8270	1x	op80508,sx2918,1000,,,1,1,water	**SS Fail RR@1x**
x071393	36	op80508-ms	8270	1x	op80508,sx2918,500,,,1,1,water	rr
x071394	37	op80508-msd	8270	1x	op80508,sx2918,500,,,1,1,water	rr
x071395	38	fa75495-4	8270	1x	op80508,sx2918,1000,,,1,1,water	**SS Fail RR@1x**
x071396	39	op80508-ms2	8270	1x	op80508,sx2918,500,,,1,1,water	#122,138,147(SP) #150(PII);rr
x071397	40	op80508-msd2	8270	1x	op80508,sx2918,500,,,1,1,water	#122,138,147(SP); rr
x071398	41	fa75495-5	8270	1x	op80508,sx2918,1000,,,1,1,water	**SS Fail RR@1x**
x071399	42	fa75495-6	8270	1x	op80508,sx2918,1000,,,1,1,water	**SS Fail RR@1x**
x071400	1	dftpp	DFTPP	1x	op80789,sx2918,1000,,,1,1,water	Tune fail
x071401	6	cc2918-50 app9	8270	100+40/400	op80789,sx2918,1000,,,1,1,water	Screen run
x071402	14	cc2918-50 8270	8270	100+100/400	op80789,sx2918,1000,,,1,1,water	Screen run
x071403	60	op80804-bs1	8270	1x	op80804,sx2918,30.0,,,1,1,soil	RR 1x
x071404	61	op80804-bs2	8270	1x	op80804,sx2918,30.0,,,1,1,soil	RR 1x
x071405	62	op80804-mb	8270	1x	op80804,sx2918,30.0,,,1,1,soil	RR 1x
x071406	63	fa76166-5,4	8270	100/400	op80804,sx2918,29.8,,,1,4,soil	RR 1x

x071407	64	fa76166-6,4	8270	100/400	op80804,sx2918,30.4,,,1,4,soil	RR 1x
x071408	65	fa75873-1,10	8270	50/500	op80804,sx2918,30.2,,,1,10,soil	RR 1x
x071409	66	fa75873-32,4	8270	100/400	op80804,sx2918,30.0,,,1,4,soil	RR 1x
x071410	67	fa76070-4,20	8270	25/500	op80804,sx2918,3.7,,,1,1,soil	RR 20x
x071411	68	fa76100-1	8270	1x	op80804,sx2918,3.7,,,1,1,soil	RR 1x
x071412	6	ecc2918-50 app9	8270	100+40/400	op80734,sx2918,1000,,,1,1,water	RR 1x
x071413	14	ecc2918-50 8270	8270	100+100/400	op80734,sx2918,1000,,,1,1,water	RR 1x

SGS-ORLANDO **MS BNA05-X** **ANALYSIS LOG**

DATE	8/12/2020	**METHODS**	8270D	**IC/ICC STD LOT**	**S6387/S6388**
COLUMN TYPE	DB-5MS	**ACQ. METHOD**	ACQ-BNA	**ICV STD LOT**	**9821D**
AMOUNT INJ	2	**PROC. METHOD**	8270DAPP9SX-062320	**DFTPP**	**S6384**
INSTRUMENT	MS-SX	**CALIB. DATE**	6/23/2020	**EM VOLTAGE**	**1000V**
ANALYST	MV	**RUN BATCH**	SX2951	**ISTD LOT**	**10132J**

ICV(1) 9821HD ICV(2) 9809A + 9782 + 10072D ICV(3) (OP) 9934A

DATA FILE	ALS	SAMPLE NAME	METHOD	DF	MISC. INFO	COMMENTS
x072355	100	Cond Std	8270	""""""""""	op81484,sx2951,1000,,,1,1,water	Conditioning
x072356	1	dftpp	DFTPP	1X	op81484,sx2951,1000,,,1,1,water	Pass (response: #30 (SP) Hccp, PCP low Di-n-octp,Indeno,Dz[a,h]anc high Peaks Present
x072357	2	cc2918-50 8270	8270	100+100/400	op81484,sx2951,1000,,,1,1,water	
x072358	3	cc2918-5 8270	8270	10+10/400	op81484,sx2951,1000,,,1,1,water	
x072359	4	fa77576-1 E,5	8270	100/500	op81482,sx2951,30.3,,,1,5,soil	ok, E combined
x072360	5	fa77576-3 E,2	8270	200/400	op81482,sx2951,30.2,,,1,2,soil	ok, E combined
x072361	6	fa77576-4 E,5	8270	100/500	op81482,sx2951,30.3,,,1,5,soil	ok, E combined
x072362	7	fa77576-5 E,5	8270	100/500	op81482,sx2951,30.1,,,1,5,soil	ok, E combined
x072363	8	fa77576-7 E,5	8270	100/500	op81482,sx2951,30.3,,,1,5,soil	wrong preparation, RR 5x
x072364	9	fa77576-8 E,5	8270	100/500	op81482,sx2951,30.0,,,1,5,soil	wrong preparation, RR 5x
x072365	10	fa77576-11 E,2	8270	200/400	op81482,sx2951,30.0,,,1,2,soil	wrong preparation, RR 2x
x072366	11	fa77576-14 E	8270	1x	op81482,sx2951,30.3,,,1,1,soil	ok, E combined
x072367	12	fa77581-1 E,2	8270	200/400	op81482,sx2951,30.1,,,1,2,soil	wrong preparation, RR 2x
x072368	29	fa77576-7 E,5	8270	100/500	op81482,sx2951,30.3,,,1,5,soil	ok, E combined
x072369	30	fa77576-8 E,5	8270	100/500	op81482,sx2951,30.0,,,1,5,soil	ok, E combined
x072370	31	fa77576-11 E,2	8270	200/400	op81482,sx2951,30.0,,,1,2,soil	rr 5X
x072371	33	fa77581-1 E,2	8270	200/400	op81482,sx2951,30.1,,,1,2,soil	ok, E combined
x072372	13	fa77581-3 E,5	8270	100/500	op81482,sx2951,30.2,,,1,5,soil	wrong preparation, RR 5x
x072373	14	fa77581-4 E,2	8270	200/400	op81482,sx2951,30.2,,,1,2,soil	ok, E combined
x072374	15	fa77581-5 E,2	8270	200/400	op81482,sx2951,30.2,,,1,2,soil	E-combine
x072375	34	fa77576-11 E,5	8270	100/500	op81482,sx2951,30.0,,,1,5,soil	E-combine #105(PII)
x072376	13	fa77581-3 E,5	8270	100/500	op81482,sx2951,30.2,,,1,5,soil	E-combine

x072377	16	fa77615-3 E,2	8270	200/400	op81484,sx2951,30.3,,,1,2,soil	E-combine
x072378	17	fa77615-10 E,5	8270	100/500	op81484,sx2951,30.3,,,1,5,soil	RR5x CCV hits #105(PII)
x072379	18	fa77615-12 E,5	8270	100/500	op81484,sx2951,30.0,,,1,5,soil	E-combine
x072380	19	fa77615-13 E	8270	200/400	op81484,sx2951,30.0,,,1,1,soil	R-ext surr↓
x072381	20	fa77612-2 E,5	8270	100/500	op81484,sx2951,30.2,,,1,5,soil	E-combine #6(MP)
x072382	21	fa77612-3 E,2	8270	200/400	op81484,sx2951,30.2,,,1,2,soil	E-combine #6(MP)
x072383	22	fa77615-11 E	8270	1X	op81484,sx2951,30.2,,,1,1,soil	OK
x072384	23	fa77384-1	8270	1X	op81455,sx2951,1000,,,1,1,water	surr↓, CFS
x072385	24	op81455-ms,5	8270	100/500	op81455,sx2951,500,,,1,5,water	RR5x Out of tune #30,62(MP)
x072386	25	op81455-ms,5	8270	100/500	op81455,sx2951,500,,,1,5,water	RR5x Out of tune #30,62(MP)

SGS-ORLANDO **MS BNA05-X** **ANALYSIS LOG**

DATE	8/13/2020	**METHODS**	8270D	**IC/ICC STD LOT**	**S6387/S6388**
COLUMN TYPE	DB-5MS	**ACQ. METHOD**	ACQ-BNA	**ICV STD LOT**	**9821D**
AMOUNT INJ	2	**PROC. METHOD**	8270DAPP9SX-062320	**DFTPP**	**S6384**
INSTRUMENT	MS-SX	**CALIB. DATE**	6/23/2020	**EM VOLTAGE**	**1000V**
ANALYST	MV	**RUN BATCH**	SX2952	**ISTD LOT**	**10194B**

ICV(1) 9821HD ICV(2) 9809A + 9782 + 10072D ICV(3) (OP) 9934A

DATA FILE	ALS	SAMPLE NAME	METHOD	DF	MISC. INFO	COMMENTS
x072387	100	Cond Std	8270	""""""""""	op81484,sx2952,1000,,,1,1,water	Conditioning
x072388	1	dftpp	DFTPP	1X	op81484,sx2952,1000,,,1,1,water	Passed (Response: 538361)
x072389	2	cc2918-50 8270	8270	100+100/400	op81484,sx2952,1000,,,1,1,water	Passed, #30(SP), #44,62,83↓ 96,108↑
x072390	3	cc2918-5 8270	8270	10+10/400	op81484,sx2952,1000,,,1,1,water	ccv low peaks present
x072391	4	op81519-bs E	8270	1X	op81519,sx2952,30.0,,,1,1,soil	PCP low
x072392	5	op81519-mb E	8270	1X	op81519,sx2952,30.0,,,1,1,soil	ND
x072393	6	fa77503-1 E	8270	1X	op81519,sx2952,30.0,,,1,1,soil	Ok
x072394	7	op81519-ms E	8270	1X	op81519,sx2952,30.2,,,1,1,soil	Passed
x072395	8	op81519-msd E	8270	1X	op81519,sx2952,30.4,,,1,1,soil	Passed
x072396	9	op81516-bs	8270	1X	op81516,sx2952,1.00,,,10,1,soil	Capro, Phenol,Dz(a,h)a, 1,4 Diox, Indeno, Pyne high
x072397	10	op81516-mb	8270	1X	op81516,sx2952,1.00,,,10,1,soil	ND
x072398	11	fa77416-1L,10	8270	50/500	op81516,sx2952,1.00,,,10,10,soil	Ok
x072399	12	fa77615-10 E,5	8270	1X	op81484,sx2952,30.3,,,1,5,soil	ok, For ecombine
x072400	13	op81455-ms,5	8270	100/500	op81455,sx2952,500,,,1,5,water	#30(SP) ok
x072401	14	op81455-ms,5	8270	100/500	op81455,sx2952,500,,,1,5,water	#30(SP) ok
x072402	15	fa77698-7 E	8270	1X	op81538,sx2952,30.5,,,1,1,soil	ccv hit for Dibenz (a,h) For ecombine
x072403	16	fa77698-8 E	8270	1X	op81538,sx2952,29.9,,,1,1,soil	ok
x072404	17	fa77698-9 E	8270	1X	op81538,sx2952,30.0,,,1,1,soil	**ccv hit for Dibenz (a,h) RR1x**
x072405	18	fa77698-10 E	8270	1X	op81538,sx2952,30.4,,,1,1,soil	**ccv hit for Dibenz (a,h) RR1x**
x072406	19	fa77698-12 E	8270	1X	op81538,sx2952,30.1,,,1,1,soil	**ccv hit for Dibenz (a,h) RR1x**
x072407	20	fa77615-13 E	8270	1X	op81538,sx2952,30.1,,,1,1,soil	Ok
x072408	21	fa77615-13 E,10	8270	10X	op81538,sx2952,30.1,,,1,10,soil	Ok
x072409	22	op81545-bs E	8270	1X	op81545,sx2952,250,,,1,1,water	PCP, Hccp fail low

SGS-ORLANDO **MS BNA05-X** **ANALYSIS LOG**

x072410	23	op81545-mb E	8270	1X	op81545,sx2952,250,,,1,1,water	ND
x072411	24	fa77689-4 E	8270	1X	op81545,sx2952,250,,,1,1,water	ND
x072412	25	fa77689-5 E	8270	1X	op81545,sx2952,250,,,1,1,water	ND
x072413	26	fa77689-6 E	8270	1X	op81545,sx2952,250,,,1,1,water	ND
x072414	27	fa77689-7 E	8270	1X	op81545,sx2952,250,,,1,1,water	ND
x072415	28	fa77689-12 E	8270	1X	op81545,sx2952,250,,,1,1,water	ND
x072416	29	fa77698-3 E	8270	1x	op81545,sx2952,250,,,1,1,water	ND
x072417	30	fa77698-4 E	8270	1x	op81545,sx2952,240,,,1,1,water	RR > 12hr

SGS - ORLANDO

SOLID SAMPLE PREP REPORT

Date/Time Started: 8/10/20 13:00 {mm/dd/yy 24:00}

Date/Time Finished: 8/11/2020 10:00 {mm/dd/yy 24:00}

Prep Method: _____ 3550C _____ 3580A

Analytical Method: 8270

Batch No: OP81484

Ext. By: AF JM Conc. By: EA Vialed By: AN Balance ID: NAVS

Sample ID	Bottle Number	Amount Extracted (g)	Surrogate Amount	Spike Amount	Final Volume (ml)	Comments
OP81484-MB	-	30.0	0.5		1 ml	
OP81484-BS	-	30.0	0.5	0.5 + 0.5		
FA77581-7	1	30.3				
FA77581-8	1	30.0				
FA77581-9	1	30.2				
FA77581-10	1	30.1				
FA77615-1	1	30.3				
FA77615-2	1	30.3				
FA77615-3	1	30.3				
FA77615-4	1	30.4				
FA77615-5	1	30.0				
FA77615-6	1	30.2				
FA77615-7	1	30.0				
FA77615-8	1	30.1				
FA77615-9	1	30.0				
FA77615-10	1	30.3				
FA77615-11	1	30.2				
FA77615-12	1	30.0				
FA77615-13	1	30.0				
FA77616-1	1	30.2				
FA77616-2	1	30.2				
FA77616-3	1	30.2				
FA77615-6-MS	1	30.0	0.5	0.5 + 0.5		
FA77615-6-MSD	1	30.2	0.5	0.5 + 0.5	↓	
DUP						

Comments:

Surr ID: _____ Conc: 100/200 PPM Exp. Date: _____ Inj. By: _____ Ver. By: _____

Spk ID: 10127-1 Conc: Varied Exp. Date: 12/31/20 Inj. By: _____ Ver. By: _____

Spk ID2: E6746 Conc: 100 PPM Exp. Date: 01/01/21 Inj. By: _____ Ver. By: _____

Initial Bath Temp (Therm ID): TH#3.4 Exchange Bath/N-Evap Temp (Therm ID): —

Observed Temp °C: 45° Observed Temp °C: — Corr. Temp °C: —

CH_2Cl_2 Lot#	201444	Hexane Lot #	X	Na_2SO_4 Lot#	SS2551
CH_3CN Lot #	X	Methanol Lot #	X	Acetone Lot#	197447
Filter Paper Lot#	231019	pH Paper #	X	Reagent #	X

Copper Lot # X If Sulfur Cleaning is performed in Extractions (3660B)

Relinquished By: JM Date: 8/11/2020

Accepted By: _____ Date: _____

NF 02/16

SGS ORLANDO

SOLID SAMPLE PREP REPORT

Date/Time: 08/10/2020 12:00
Started: {mm/dd/yy 24:00}

Date/Time: 8/10/2020 14:00
Finished: {mm/dd/yy 24:00}

Prep Method: 3546 Analytical Method: SIMPCP

Microwave ID: NAV5 Program: SIMPCP

Batch#: OP81485 Balance ID: Advpro 8

Ext. By: AF, JM Conc. By: EA Vialed By: am

Sample ID	Bottle Number	Amount Extracted (g)	Surrogate Amount	Spike Amount	Final Volume (ml)	MW Pos	Comments
OP81485-MB	-	15.0	0.1		1.0ml	1	
OP81485-BS	-	15.0	0.1	0.5		2	
FA77581-7	1	15.3				5	
FA77581-8	1	15.1				6	
FA77581-9	1	15.3				7	
FA77581-10	1	15.3				8	
FA77615-1	1	15.4				9	
FA77615-2	1	15.4				10	
FA77615-3	1	15.1				11	
FA77615-4	1	15.4				12	
FA77615-5	1	15.2				13	
FA77615-6	1	15.2				14	
FA77615-7	1	15.0				15	
FA77615-8	1	15.4				16	
FA77615-9	1	15.2				17	
FA77615-10	1	15.3				18	
FA77615-11	1	15.1				19	
FA77615-12	1	15.0				20	
FA77615-13	1	15.3				21	
FA77616-1	1	15.2				22	
FA77616-2	1	15.3				23	
FA77616-3	1	15.0				24	
FA77615-6-MS	1	15.3	0.1	0.5		3	
FA77615-6-MSD	1	15.2	0.1	0.5		4	
DUP							

Comments:

Surr ID: E66990 Conc: **100 PPM** Exp. Date: 10/02/20 Inj. By: AF Ver. By: JM

Spk ID: E6750C Conc: **20/10 PPM** Exp. Date: 01/09/20 Inj. By: AF Ver. By: JM

Initial Bath Temp (Therm ID): TH#3,4 Exchange Bath/N-Evap Temp (Therm ID): —

Observed Temp °C: 45°C Observed Temp °C: — Corr. Temp °C: —

CH2CL2 Lot#	201444	Hexane Lot #	X	Na2SO4 Lot#	SS2551
CH3CN Lot #	X	Methanol Lot #	X	Acetone Lot#	29110
Filter Paper Lot#	231019	pH Paper #	X	Reagent #	X

Copper Lot # X If Sulfur Cleaning is performed in Extractions (3660B)

Relinquished By: am Date: 8/10/2020

Accepted By: Forrest Date: 08/10/20

NF 02/16

7.8.2

7

SGS - ORLANDO

SOLID SAMPLE PREP REPORT

Date/Time Started: 8/13/20 8:00 {mm/dd/yy 24:00}

Date/Time Finished: 8/13/2020 12:30 {mm/dd/yy 24:00}

Prep Method: ✓ 3550C ____ 3580A

Analytical Method: 8270

Batch No: OP81538

Ext. By: GT JM Conc. By: EA Vialed By: AN Balance ID: Nav 5

Sample ID	Bottle Number	Amount Extracted (g)	Surrogate Amount	Spike Amount	Final Volume (ml)	Comments
OP81538-MB	-	30.0	0.5		1.0ml	
OP81538-BS	-	30.0	0.5	0.5 + 0.5		
FA77689-1	1	30.1				
FA77689-2	1	30.0				
FA77689-3	1	30.3				
FA77689-8	1	30.1				
FA77689-9	1	29.9				
FA77689-10	1	30.3				
FA77689-11	1	30.0				
FA77698-1	1	30.0				
FA77698-2	1	30.2				
FA77698-5	1	30.5				
FA77698-6	1	30.1				
FA77698-7	1	30.5				
FA77698-8	1	29.9				
FA77698-9	1	30.0				
FA77698-10	1	30.4				
FA77698-12	1	30.1				
FA77615-13	1	30.1	JM .5 8/13/2020		1.0mL	
FA77698-5 MS	1	30.0	0.5	0.5 + 0.5	1.0ml	
FA77698-5 MSD	1	29.9	0.5	0.5 + 0.5		
DUP						

Comments:

Surr ID: E6743 Conc: 100/200 PPM Exp. Date: 12/30/20 Inj. By: JM Ver. By: GT

Spk ID: 10129 Conc: Varied Exp. Date: 12/31/20 Inj. By: JM Ver. By: GT

Spk ID2: E6746 Conc: 100 PPM Exp. Date: 1/1/21 Inj. By: JM Ver. By: GT

Initial Bath Temp (Therm ID): #14 Exchange Bath/N-Evap Temp (Therm ID): —

Observed Temp °C: 45°C Observed Temp °C: — Corr. Temp °C: —

CH_2Cl_2 Lot#	201444	Hexane Lot #	X	Na_2SO_4 Lot#	SS2551
CH_3CN Lot #	X	Methanol Lot #	X	Acetone Lot#	197447
Filter Paper Lot#	231019	pH Paper #	X	Reagent #	X

Copper Lot # X If Sulfur Cleaning is performed in Extractions (3660B)

Relinquished By: Date: 8/13/2020

Accepted By: Date: 8/18/20

NF 02/16

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Percent Solids Raw Data Summary

Percent Solids Raw Data Summary

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: FA77615-1 **Analyzed:** 08-AUG-20 by JB **Method:** SM19 2540G
ClientID: CS-29

Wet Weight (Total)	13.63	g
Tare Weight	2.58	g
Dry Weight (Total)	12.77	g
Solids, Percent	92.2	%

Sample: FA77615-2 **Analyzed:** 08-AUG-20 by JB **Method:** SM19 2540G
ClientID: CS-30

Wet Weight (Total)	14.94	g
Tare Weight	2.54	g
Dry Weight (Total)	13.58	g
Solids, Percent	89	%

Sample: FA77615-3 **Analyzed:** 08-AUG-20 by JB **Method:** SM19 2540G
ClientID: CS-31

Wet Weight (Total)	14.47	g
Tare Weight	2.54	g
Dry Weight (Total)	13.33	g
Solids, Percent	90.4	%

Sample: FA77615-4 **Analyzed:** 08-AUG-20 by JB **Method:** SM19 2540G
ClientID: DUP-01

Wet Weight (Total)	13.12	g
Tare Weight	2.56	g
Dry Weight (Total)	10.76	g
Solids, Percent	77.7	%

Sample: FA77615-5 **Analyzed:** 08-AUG-20 by JB **Method:** SM19 2540G
ClientID: CS-40

Wet Weight (Total)	14.59	g
Tare Weight	2.51	g
Dry Weight (Total)	13.47	g
Solids, Percent	90.7	%

Sample: FA77615-6 **Analyzed:** 08-AUG-20 by JB **Method:** SM19 2540G
ClientID: CS-41

Wet Weight (Total)	13.38	g
Tare Weight	2.58	g
Dry Weight (Total)	12.15	g
Solids, Percent	88.6	%

Percent Solids Raw Data Summary

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: FA77615-7 **Analyzed:** 08-AUG-20 by JB **Method:** SM19 2540G
ClientID: CS-42

Wet Weight (Total)	13.78	g
Tare Weight	2.52	g
Dry Weight (Total)	12.09	g
Solids, Percent	85	%

Sample: FA77615-8 **Analyzed:** 08-AUG-20 by JB **Method:** SM19 2540G
ClientID: CS-43

Wet Weight (Total)	14.16	g
Tare Weight	2.43	g
Dry Weight (Total)	12.92	g
Solids, Percent	89.4	%

Sample: FA77615-9 **Analyzed:** 08-AUG-20 by JB **Method:** SM19 2540G
ClientID: CS-44

Wet Weight (Total)	14.24	g
Tare Weight	2.45	g
Dry Weight (Total)	12.72	g
Solids, Percent	87.1	%

Sample: FA77615-10 **Analyzed:** 08-AUG-20 by JB **Method:** SM19 2540G
ClientID: CS-45

Wet Weight (Total)	12.56	g
Tare Weight	2.49	g
Dry Weight (Total)	11.65	g
Solids, Percent	91	%

Sample: FA77615-11 **Analyzed:** 08-AUG-20 by JB **Method:** SM19 2540G
ClientID: CS-54

Wet Weight (Total)	13.04	g
Tare Weight	2.56	g
Dry Weight (Total)	11.84	g
Solids, Percent	88.5	%

Sample: FA77615-12 **Analyzed:** 08-AUG-20 by JB **Method:** SM19 2540G
ClientID: CS-46

Wet Weight (Total)	15.8	g
Tare Weight	2.56	g
Dry Weight (Total)	13.87	g
Solids, Percent	85.4	%

Percent Solids Raw Data Summary

Job Number: FA77615
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: FA77615-13 **Analyzed:** 08-AUG-20 by JB **Method:** SM19 2540G
ClientID: CS-47

Wet Weight (Total)	12.8	g
Tare Weight	2.56	g
Dry Weight (Total)	11.3	g
Solids, Percent	85.4	%

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

EarthCon Consultants, Inc

KMCC Navassa Site; 120 Quality Dr, Navassa, NC

02.20200007.00

SGS Job Number: FA77689

Sampling Dates: 08/07/20 - 08/08/20



Report to:

EarthCon Consultants, Inc
1880 W Oak Pkwy Bldg 100, Suite 106
Marietta, GA 30062
mbrookshire@earthcon.com; bhatfield@earthcon.com

ATTN: Mary Ann Brookshire

Total number of pages in report: **1004**

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Caitlin Brice, M.S.
General Manager

Client Service contact: Muna Mohammed 407-425-6700

Certifications: FL(E83510), LA(03051), KS(E-10327), IL(200063), NC(573), NJ(FL002), NY(12022), SC(96038001) DoD ELAP(ANAB L2229), AZ(AZ0806), CA(2937), TX(T104704404), PA(68-03573), VA(460177), AK, AR, IA, KY, MA, MS, ND, NH, NV, OK, OR, UT, WA, WV

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SGS North America Inc.

Sample Summary

EarthCon Consultants, Inc

Job No: FA77689

KMCC Navassa Site; 120 Quality Dr, Navassa, NC
Project No: 02.20200007.00

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
This report contains results reported as ND = Not detected. The following applies: Organics ND = Not detected above the MDL							
FA77689-1	08/07/20	15:02	TFT	08/12/20	SO	Soil	CS-55
FA77689-2	08/07/20	17:15	TFT	08/12/20	SO	Soil	CS-50
FA77689-3	08/07/20	17:05	TFT	08/12/20	SO	Soil	CS-51
FA77689-4	08/08/20	08:30	TFT	08/12/20	AQ	Field Blank Soil	FB-02
FA77689-5	08/08/20	09:20	TFT	08/12/20	AQ	Equipment Blank	EB-02
FA77689-6	08/08/20	08:35	TFT	08/12/20	AQ	Equipment Blank	EB-03
FA77689-7	08/08/20	08:45	TFT	08/12/20	AQ	Equipment Blank	EB-04
FA77689-8	08/08/20	09:00	TFT	08/12/20	SO	Soil	CS-48
FA77689-9	08/08/20	09:30	TFT	08/12/20	SO	Soil	CS-52
FA77689-10	08/08/20	00:00	TFT	08/12/20	SO	Soil	DUP-03
FA77689-11	08/08/20	08:40	TFT	08/12/20	SO	Soil	CS-49
FA77689-12	08/08/20	14:30	TFT	08/12/20	AQ	Equipment Blank	EB-07

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: EarthCon Consultants, Inc **Job No:** FA77689

Site: KMCC Navassa Site; 120 Quality Dr, Navassa, NC **Report Date** 8/17/2020 3:15:40

11 Sample(s), 0 Trip Blank(s) and 1 Field Blank(s) were collected on between 08/07/2020 and 08/08/2020 and were received at SGS North America Inc - Orlando on 08/12/2020 properly preserved, at 4.6 Deg. C and intact. These Samples received an SGS Orlando job number of FA77689. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section. Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

MS Semi-volatiles By Method SW846 8270D BY SIM

Matrix: AQ **Batch ID:** OP81544

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

OP81544-BS: Insufficient sample for MS/MSD.

FA77689-4 for Pentachlorophenol: Associated CCV outside of control limits high, sample was ND.

FA77689-5 for Pentachlorophenol: Associated CCV outside of control limits high, sample was ND.

FA77689-6 for Pentachlorophenol: Associated CCV outside of control limits high, sample was ND.

FA77689-7 for Pentachlorophenol: Associated CCV outside of control limits high, sample was ND.

FA77689-12 for Pentachlorophenol: Associated CCV outside of control limits high, sample was ND.

MS Semi-volatiles By Method SW846 8270E

Matrix: AQ **Batch ID:** OP81545

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

FA77689-4 for Dibenzo(a,h)anthracene: Associated CCV outside of control limits high, sample was ND.

FA77689-5 for Dibenzo(a,h)anthracene: Associated CCV outside of control limits high, sample was ND.

FA77689-6 for Dibenzo(a,h)anthracene: Associated CCV outside of control limits high, sample was ND.

FA77689-7 for Dibenzo(a,h)anthracene: Associated CCV outside of control limits high, sample was ND.

FA77689-12 for Dibenzo(a,h)anthracene: Associated CCV outside of control limits high, sample was ND.

Matrix: SO **Batch ID:** OP81538

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA77698-5MS, FA77698-5MSD were used as the QC samples indicated.

Matrix Spike Recovery(s) for Anthracene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, Chrysene, Fluoranthene, Indeno(1,2,3-cd)pyrene, Phenanthrene, Benzo(b)fluoranthene, Pyrene are outside control limits. Outside control limits due to high level in sample relative to spike amount.

Matrix Spike Duplicate Recovery(s) for 1-Methylnaphthalene, 2-Methylnaphthalene, Acenaphthene, Acenaphthylene, Anthracene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, Chrysene, Dibenzo(a,h)anthracene, Fluoranthene, Fluorene, Indeno(1,2,3-cd)pyrene, Naphthalene, Phenanthrene, Pyrene are outside control limits. Probable cause is due to matrix interference.

RPD(s) for MSD for 1-Methylnaphthalene, 2-Methylnaphthalene, Acenaphthene, Acenaphthylene, Anthracene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, Chrysene, Dibenzo(a,h)anthracene, Fluoranthene, Fluorene, Indeno(1,2,3-cd)pyrene, Naphthalene, Phenanthrene, Pyrene are outside control limits for sample OP81538-MSD. Probable cause is due to sample non-homogeneity.

MS Semi-volatiles By Method SW846 8270E BY SIM

Matrix: SO **Batch ID:** OP81539

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

Sample(s) FA77698-5MS, FA77698-5MSD were used as the QC samples indicated.

All method blanks for this batch meet method specific criteria.

General Chemistry By Method SM19 2540G

Matrix: SO **Batch ID:** GN85916

Sample(s) FA77689-1DUP were used as the QC samples for Solids, Percent.

Matrix: SO **Batch ID:** GN85928

Sample(s) FA77700-1DUP were used as the QC samples for Solids, Percent.

SGS Orlando certifies that this report meets the project requirements for analytical data produced for the samples as received at SGS Orlando and as stated on the COC. SGS Orlando certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the SGS Orlando Quality Manual except as noted above. This report is to be used in its entirety. SGS Orlando is not responsible for any assumptions of data quality if partial data packages are used.

Narrative prepared by:

_____

Ariel Hartney, Client Services *(Signature on file)*

Summary of Hits

Job Number: FA77689
Account: EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC
Collected: 08/07/20 thru 08/08/20

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FA77689-1	**CS-55**					
Acenaphthene		244	190	20	ug/kg	SW846 8270E
Acenaphthylene		284	190	19	ug/kg	SW846 8270E
Anthracene		867	190	22	ug/kg	SW846 8270E
Benzo(a)anthracene		1070	190	19	ug/kg	SW846 8270E
Benzo(a)pyrene		640	190	23	ug/kg	SW846 8270E
Benzo(b)fluoranthene		846	190	21	ug/kg	SW846 8270E
Benzo(g,h,i)perylene		255	190	20	ug/kg	SW846 8270E
Benzo(k)fluoranthene		263	190	25	ug/kg	SW846 8270E
Chrysene		1210	190	20	ug/kg	SW846 8270E
Dibenzo(a,h)anthracene		71.0 J	190	24	ug/kg	SW846 8270E
Fluoranthene		3310	190	19	ug/kg	SW846 8270E
Fluorene		380	190	21	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene		291	190	23	ug/kg	SW846 8270E
1-Methylnaphthalene		38.8 J	190	19	ug/kg	SW846 8270E
2-Methylnaphthalene		33.9 J	190	19	ug/kg	SW846 8270E
Naphthalene		26.1 J	190	19	ug/kg	SW846 8270E
Phenanthrene		3110	190	19	ug/kg	SW846 8270E
Pyrene		3370	190	22	ug/kg	SW846 8270E
FA77689-2	**CS-50**					
Acenaphthylene		167 J	190	19	ug/kg	SW846 8270E
Anthracene		346	190	22	ug/kg	SW846 8270E
Benzo(a)anthracene		558	190	19	ug/kg	SW846 8270E
Benzo(a)pyrene		357	190	23	ug/kg	SW846 8270E
Benzo(b)fluoranthene		861	190	21	ug/kg	SW846 8270E
Benzo(g,h,i)perylene		272	190	20	ug/kg	SW846 8270E
Benzo(k)fluoranthene		276	190	25	ug/kg	SW846 8270E
Chrysene		668	190	20	ug/kg	SW846 8270E
Dibenzo(a,h)anthracene		74.2 J	190	24	ug/kg	SW846 8270E
Fluoranthene		845	190	19	ug/kg	SW846 8270E
Fluorene		36.1 J	190	21	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene		323	190	23	ug/kg	SW846 8270E
1-Methylnaphthalene		29.6 J	190	19	ug/kg	SW846 8270E
2-Methylnaphthalene		39.6 J	190	19	ug/kg	SW846 8270E
Naphthalene		45.4 J	190	19	ug/kg	SW846 8270E
Phenanthrene		180 J	190	19	ug/kg	SW846 8270E
Pyrene		952	190	22	ug/kg	SW846 8270E
FA77689-3	**CS-51**					
Acenaphthylene		210 J	220	22	ug/kg	SW846 8270E
Anthracene		311	220	24	ug/kg	SW846 8270E

Summary of Hits

Job Number: FA77689
Account: EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC
Collected: 08/07/20 thru 08/08/20

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Benzo(a)anthracene		452	220	22	ug/kg	SW846 8270E
Benzo(a)pyrene		372	220	26	ug/kg	SW846 8270E
Benzo(b)fluoranthene		795	220	24	ug/kg	SW846 8270E
Benzo(g,h,i)perylene		264	220	22	ug/kg	SW846 8270E
Benzo(k)fluoranthene		263	220	28	ug/kg	SW846 8270E
Chrysene		555	220	22	ug/kg	SW846 8270E
Dibenzo(a,h)anthracene		69.4 J	220	27	ug/kg	SW846 8270E
Fluoranthene		691	220	22	ug/kg	SW846 8270E
Fluorene		58.3 J	220	23	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene		318	220	26	ug/kg	SW846 8270E
1-Methylnaphthalene		30.7 J	220	22	ug/kg	SW846 8270E
2-Methylnaphthalene		38.7 J	220	22	ug/kg	SW846 8270E
Naphthalene		40.6 J	220	22	ug/kg	SW846 8270E
Phenanthrene		188 J	220	22	ug/kg	SW846 8270E
Pyrene		788	220	25	ug/kg	SW846 8270E

FA77689-4 **FB-02**

No hits reported in this sample.

FA77689-5 **EB-02**

No hits reported in this sample.

FA77689-6 **EB-03**

No hits reported in this sample.

FA77689-7 **EB-04**

No hits reported in this sample.

FA77689-8 **CS-48**

Acenaphthene		27.1 J	250	27	ug/kg	SW846 8270E
Acenaphthylene		217 J	250	25	ug/kg	SW846 8270E
Anthracene		346	250	28	ug/kg	SW846 8270E
Benzo(a)anthracene		644	250	25	ug/kg	SW846 8270E
Benzo(a)pyrene		470	250	30	ug/kg	SW846 8270E
Benzo(b)fluoranthene		1280	250	28	ug/kg	SW846 8270E
Benzo(g,h,i)perylene		265	250	26	ug/kg	SW846 8270E
Benzo(k)fluoranthene		397	250	33	ug/kg	SW846 8270E
Chrysene		1060	250	26	ug/kg	SW846 8270E
Dibenzo(a,h)anthracene		81.1 J	250	32	ug/kg	SW846 8270E
Fluoranthene		1950	250	25	ug/kg	SW846 8270E

Summary of Hits

Job Number: FA77689
Account: EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC
Collected: 08/07/20 thru 08/08/20

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Fluorene		56.3 J	250	27	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene		363	250	31	ug/kg	SW846 8270E
Phenanthrene		157 J	250	25	ug/kg	SW846 8270E
Pyrene		2190	250	29	ug/kg	SW846 8270E
FA77689-9	**CS-52**					
Acenaphthene		22.4 J	200	21	ug/kg	SW846 8270E
Acenaphthylene		306	200	20	ug/kg	SW846 8270E
Anthracene		499	200	23	ug/kg	SW846 8270E
Benzo(a)anthracene		596	200	20	ug/kg	SW846 8270E
Benzo(a)pyrene		800	200	24	ug/kg	SW846 8270E
Benzo(b)fluoranthene		1190	200	22	ug/kg	SW846 8270E
Benzo(g,h,i)perylene		394	200	21	ug/kg	SW846 8270E
Benzo(k)fluoranthene		396	200	26	ug/kg	SW846 8270E
Chrysene		796	200	21	ug/kg	SW846 8270E
Dibenzo(a,h)anthracene		99.0 J	200	25	ug/kg	SW846 8270E
Fluoranthene		625	200	20	ug/kg	SW846 8270E
Fluorene		65.9 J	200	22	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene		470	200	25	ug/kg	SW846 8270E
Phenanthrene		65.2 J	200	20	ug/kg	SW846 8270E
Pyrene		1050	200	23	ug/kg	SW846 8270E
FA77689-10	**DUP-03**					
Acenaphthylene		232 J	260	26	ug/kg	SW846 8270E
Anthracene		403	260	29	ug/kg	SW846 8270E
Benzo(a)anthracene		491	260	26	ug/kg	SW846 8270E
Benzo(a)pyrene		473	260	30	ug/kg	SW846 8270E
Benzo(b)fluoranthene		1310	260	28	ug/kg	SW846 8270E
Benzo(g,h,i)perylene		305	260	26	ug/kg	SW846 8270E
Benzo(k)fluoranthene		399	260	34	ug/kg	SW846 8270E
Chrysene		828	260	26	ug/kg	SW846 8270E
Dibenzo(a,h)anthracene		87.7 J	260	32	ug/kg	SW846 8270E
Fluoranthene		933	260	26	ug/kg	SW846 8270E
Fluorene		56.8 J	260	27	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene		414	260	31	ug/kg	SW846 8270E
Phenanthrene		123 J	260	26	ug/kg	SW846 8270E
Pyrene		1320	260	29	ug/kg	SW846 8270E
FA77689-11	**CS-49**					
Acenaphthylene		87.6 J	240	24	ug/kg	SW846 8270E
Anthracene		94.0 J	240	27	ug/kg	SW846 8270E
Benzo(a)anthracene		56.1 J	240	24	ug/kg	SW846 8270E

Summary of Hits

Job Number: FA77689
Account: EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC
Collected: 08/07/20 thru 08/08/20

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Benzo(a)pyrene		50.5 J	240	29	ug/kg	SW846 8270E
Benzo(b)fluoranthene		138 J	240	27	ug/kg	SW846 8270E
Benzo(g,h,i)perylene		40.6 J	240	25	ug/kg	SW846 8270E
Benzo(k)fluoranthene		43.4 J	240	32	ug/kg	SW846 8270E
Chrysene		93.7 J	240	25	ug/kg	SW846 8270E
Fluoranthene		91.4 J	240	24	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene		52.4 J	240	30	ug/kg	SW846 8270E
Pyrene		123 J	240	28	ug/kg	SW846 8270E

FA77689-12 EB-07

No hits reported in this sample.

Sample Results

Report of Analysis

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-55		
Lab Sample ID:	FA77689-1	**Date Sampled:**	08/07/20
Matrix:	SO - Soil	**Date Received:**	08/12/20
Method:	SW846 8270E SW846 3550C	**Percent Solids:**	86.4
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6F06559.D	1	08/13/20 21:12	MV	08/13/20 08:00	OP81538	S6F253
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	244	190	20	ug/kg	
208-96-8	Acenaphthylene	284	190	19	ug/kg	
120-12-7	Anthracene	867	190	22	ug/kg	
56-55-3	Benzo(a)anthracene	1070	190	19	ug/kg	
50-32-8	Benzo(a)pyrene	640	190	23	ug/kg	
205-99-2	Benzo(b)fluoranthene	846	190	21	ug/kg	
191-24-2	Benzo(g,h,i)perylene	255	190	20	ug/kg	
207-08-9	Benzo(k)fluoranthene	263	190	25	ug/kg	
218-01-9	Chrysene	1210	190	20	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	71.0	190	24	ug/kg	J
206-44-0	Fluoranthene	3310	190	19	ug/kg	
86-73-7	Fluorene	380	190	21	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	291	190	23	ug/kg	
90-12-0	1-Methylnaphthalene	38.8	190	19	ug/kg	J
91-57-6	2-Methylnaphthalene	33.9	190	19	ug/kg	J
91-20-3	Naphthalene	26.1	190	19	ug/kg	J
85-01-8	Phenanthrene	3110	190	19	ug/kg	
129-00-0	Pyrene	3370	190	22	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	51%		40-105%
321-60-8	2-Fluorobiphenyl	64%		43-107%
1718-51-0	Terphenyl-d14	74%		45-119%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID: CS-55
Lab Sample ID: FA77689-1
Matrix: SO - Soil
Method: SW846 8270E BY SIM SW846 3550C
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Date Sampled: 08/07/20
Date Received: 08/12/20
Percent Solids: 86.4

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7G11166.D	1	08/13/20 16:22	FS	08/13/20 08:00	OP81539	S7G484
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	77	9.6	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
7297-45-2	2-Methylnaphthalene-d10	97%		50-150%
93951-69-0	Fluoranthene-d10	118%		50-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-50		
Lab Sample ID:	FA77689-2	**Date Sampled:**	08/07/20
Matrix:	SO - Soil	**Date Received:**	08/12/20
Method:	SW846 8270E SW846 3550C	**Percent Solids:**	86.7
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6F06560.D	1	08/13/20 21:37	MV	08/13/20 08:00	OP81538	S6F253
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	190	20	ug/kg	
208-96-8	Acenaphthylene	167	190	19	ug/kg	J
120-12-7	Anthracene	346	190	22	ug/kg	
56-55-3	Benzo(a)anthracene	558	190	19	ug/kg	
50-32-8	Benzo(a)pyrene	357	190	23	ug/kg	
205-99-2	Benzo(b)fluoranthene	861	190	21	ug/kg	
191-24-2	Benzo(g,h,i)perylene	272	190	20	ug/kg	
207-08-9	Benzo(k)fluoranthene	276	190	25	ug/kg	
218-01-9	Chrysene	668	190	20	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	74.2	190	24	ug/kg	J
206-44-0	Fluoranthene	845	190	19	ug/kg	
86-73-7	Fluorene	36.1	190	21	ug/kg	J
193-39-5	Indeno(1,2,3-cd)pyrene	323	190	23	ug/kg	
90-12-0	1-Methylnaphthalene	29.6	190	19	ug/kg	J
91-57-6	2-Methylnaphthalene	39.6	190	19	ug/kg	J
91-20-3	Naphthalene	45.4	190	19	ug/kg	J
85-01-8	Phenanthrene	180	190	19	ug/kg	J
129-00-0	Pyrene	952	190	22	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	49%		40-105%
321-60-8	2-Fluorobiphenyl	44%		43-107%
1718-51-0	Terphenyl-d14	67%		45-119%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-50		
Lab Sample ID:	FA77689-2	**Date Sampled:**	08/07/20
Matrix:	SO - Soil	**Date Received:**	08/12/20
Method:	SW846 8270E BY SIM SW846 3550C	**Percent Solids:**	86.7
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7G11167.D	1	08/13/20 16:46	FS	08/13/20 08:00	OP81539	S7G484
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	77	9.6	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
7297-45-2	2-Methylnaphthalene-d10	89%		50-150%
93951-69-0	Fluoranthene-d10	97%		50-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID: CS-51
Lab Sample ID: FA77689-3
Matrix: SO - Soil
Method: SW846 8270E SW846 3550C
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Date Sampled: 08/07/20
Date Received: 08/12/20
Percent Solids: 76.2

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6F06561.D	1	08/13/20 22:03	MV	08/13/20 08:00	OP81538	S6F253
Run #2							

	Initial Weight	Final Volume
Run #1	30.3 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	220	23	ug/kg	
208-96-8	Acenaphthylene	210	220	22	ug/kg	J
120-12-7	Anthracene	311	220	24	ug/kg	
56-55-3	Benzo(a)anthracene	452	220	22	ug/kg	
50-32-8	Benzo(a)pyrene	372	220	26	ug/kg	
205-99-2	Benzo(b)fluoranthene	795	220	24	ug/kg	
191-24-2	Benzo(g,h,i)perylene	264	220	22	ug/kg	
207-08-9	Benzo(k)fluoranthene	263	220	28	ug/kg	
218-01-9	Chrysene	555	220	22	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	69.4	220	27	ug/kg	J
206-44-0	Fluoranthene	691	220	22	ug/kg	
86-73-7	Fluorene	58.3	220	23	ug/kg	J
193-39-5	Indeno(1,2,3-cd)pyrene	318	220	26	ug/kg	
90-12-0	1-Methylnaphthalene	30.7	220	22	ug/kg	J
91-57-6	2-Methylnaphthalene	38.7	220	22	ug/kg	J
91-20-3	Naphthalene	40.6	220	22	ug/kg	J
85-01-8	Phenanthrene	188	220	22	ug/kg	J
129-00-0	Pyrene	788	220	25	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	47%		40-105%
321-60-8	2-Fluorobiphenyl	56%		43-107%
1718-51-0	Terphenyl-d14	62%		45-119%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID: CS-51
Lab Sample ID: FA77689-3
Matrix: SO - Soil
Method: SW846 8270E BY SIM SW846 3550C
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Date Sampled: 08/07/20
Date Received: 08/12/20
Percent Solids: 76.2

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7G11168.D	1	08/13/20 17:10	FS	08/13/20 08:00	OP81539	S7G484
Run #2							

	Initial Weight	Final Volume
Run #1	30.3 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	87	11	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
7297-45-2	2-Methylnaphthalene-d10	98%		50-150%
93951-69-0	Fluoranthene-d10	99%		50-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	FB-02		
Lab Sample ID:	FA77689-4	**Date Sampled:**	08/08/20
Matrix:	AQ - Field Blank Soil	**Date Received:**	08/12/20
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X072411.D	1	08/13/20 23:05	MV	08/13/20 11:00	OP81545	SX2952
Run #2							

	Initial Volume	Final Volume
Run #1	250 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	20	2.5	ug/l	
208-96-8	Acenaphthylene	ND	20	2.6	ug/l	
120-12-7	Anthracene	ND	20	3.2	ug/l	
56-55-3	Benzo(a)anthracene	ND	20	3.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	20	3.1	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	20	3.1	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	20	3.3	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	20	3.4	ug/l	
218-01-9	Chrysene	ND	20	3.4	ug/l	
53-70-3	Dibenzo(a,h)anthracene [a]	ND	20	3.2	ug/l	
206-44-0	Fluoranthene	ND	20	2.2	ug/l	
86-73-7	Fluorene	ND	20	2.8	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	20	2.9	ug/l	
90-12-0	1-Methylnaphthalene	ND	20	2.1	ug/l	
91-57-6	2-Methylnaphthalene	ND	20	2.4	ug/l	
91-20-3	Naphthalene	ND	20	2.0	ug/l	
85-01-8	Phenanthrene	ND	20	3.5	ug/l	
129-00-0	Pyrene	ND	20	2.7	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	69%		42-108%
321-60-8	2-Fluorobiphenyl	70%		40-106%
1718-51-0	Terphenyl-d14	79%		39-121%

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	FB-02		
Lab Sample ID:	FA77689-4	**Date Sampled:**	08/08/20
Matrix:	AQ - Field Blank Soil	**Date Received:**	08/12/20
Method:	SW846 8270D BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	T050179.D	1	08/13/20 16:34	NJ	08/13/20 11:00	OP81544	ST1749
Run #2							

	Initial Volume	Final Volume
Run #1	250 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol [a]	ND	0.80	0.20	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
7297-45-2	2-Methylnaphthalene-d10	70%		50-150%
93951-69-0	Fluoranthene-d10	90%		50-150%

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	EB-02		
Lab Sample ID:	FA77689-5	**Date Sampled:**	08/08/20
Matrix:	AQ - Equipment Blank	**Date Received:**	08/12/20
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X072412.D	1	08/13/20 23:30	MV	08/13/20 11:00	OP81545	SX2952
Run #2							

	Initial Volume	Final Volume
Run #1	250 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	20	2.5	ug/l	
208-96-8	Acenaphthylene	ND	20	2.6	ug/l	
120-12-7	Anthracene	ND	20	3.2	ug/l	
56-55-3	Benzo(a)anthracene	ND	20	3.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	20	3.1	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	20	3.1	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	20	3.3	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	20	3.4	ug/l	
218-01-9	Chrysene	ND	20	3.4	ug/l	
53-70-3	Dibenzo(a,h)anthracene [a]	ND	20	3.2	ug/l	
206-44-0	Fluoranthene	ND	20	2.2	ug/l	
86-73-7	Fluorene	ND	20	2.8	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	20	2.9	ug/l	
90-12-0	1-Methylnaphthalene	ND	20	2.1	ug/l	
91-57-6	2-Methylnaphthalene	ND	20	2.4	ug/l	
91-20-3	Naphthalene	ND	20	2.0	ug/l	
85-01-8	Phenanthrene	ND	20	3.5	ug/l	
129-00-0	Pyrene	ND	20	2.7	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	77%		42-108%
321-60-8	2-Fluorobiphenyl	78%		40-106%
1718-51-0	Terphenyl-d14	86%		39-121%

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	EB-02		
Lab Sample ID:	FA77689-5	**Date Sampled:**	08/08/20
Matrix:	AQ - Equipment Blank	**Date Received:**	08/12/20
Method:	SW846 8270D BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	T050180.D	1	08/13/20 17:06	NJ	08/13/20 11:00	OP81544	ST1749
Run #2							

	Initial Volume	Final Volume
Run #1	250 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol [a]	ND	0.80	0.20	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
7297-45-2	2-Methylnaphthalene-d10	77%		50-150%
93951-69-0	Fluoranthene-d10	97%		50-150%

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	EB-03		
Lab Sample ID:	FA77689-6	**Date Sampled:**	08/08/20
Matrix:	AQ - Equipment Blank	**Date Received:**	08/12/20
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X072413.D	1	08/13/20 23:56	MV	08/13/20 11:00	OP81545	SX2952
Run #2							

	Initial Volume	Final Volume
Run #1	250 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	20	2.5	ug/l	
208-96-8	Acenaphthylene	ND	20	2.6	ug/l	
120-12-7	Anthracene	ND	20	3.2	ug/l	
56-55-3	Benzo(a)anthracene	ND	20	3.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	20	3.1	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	20	3.1	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	20	3.3	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	20	3.4	ug/l	
218-01-9	Chrysene	ND	20	3.4	ug/l	
53-70-3	Dibenzo(a,h)anthracene [a]	ND	20	3.2	ug/l	
206-44-0	Fluoranthene	ND	20	2.2	ug/l	
86-73-7	Fluorene	ND	20	2.8	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	20	2.9	ug/l	
90-12-0	1-Methylnaphthalene	ND	20	2.1	ug/l	
91-57-6	2-Methylnaphthalene	ND	20	2.4	ug/l	
91-20-3	Naphthalene	ND	20	2.0	ug/l	
85-01-8	Phenanthrene	ND	20	3.5	ug/l	
129-00-0	Pyrene	ND	20	2.7	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	78%		42-108%
321-60-8	2-Fluorobiphenyl	80%		40-106%
1718-51-0	Terphenyl-d14	85%		39-121%

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	EB-03		
Lab Sample ID:	FA77689-6	**Date Sampled:**	08/08/20
Matrix:	AQ - Equipment Blank	**Date Received:**	08/12/20
Method:	SW846 8270D BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	T050181.D	1	08/13/20 17:37	NJ	08/13/20 11:00	OP81544	ST1749
Run #2							

	Initial Volume	Final Volume
Run #1	250 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol [a]	ND	0.80	0.20	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
7297-45-2	2-Methylnaphthalene-d10	77%		50-150%
93951-69-0	Fluoranthene-d10	98%		50-150%

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	EB-04		
Lab Sample ID:	FA77689-7	**Date Sampled:**	08/08/20
Matrix:	AQ - Equipment Blank	**Date Received:**	08/12/20
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X072414.D	1	08/14/20 00:21	MV	08/13/20 11:00	OP81545	SX2952
Run #2							

	Initial Volume	Final Volume
Run #1	250 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	20	2.5	ug/l	
208-96-8	Acenaphthylene	ND	20	2.6	ug/l	
120-12-7	Anthracene	ND	20	3.2	ug/l	
56-55-3	Benzo(a)anthracene	ND	20	3.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	20	3.1	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	20	3.1	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	20	3.3	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	20	3.4	ug/l	
218-01-9	Chrysene	ND	20	3.4	ug/l	
53-70-3	Dibenzo(a,h)anthracene [a]	ND	20	3.2	ug/l	
206-44-0	Fluoranthene	ND	20	2.2	ug/l	
86-73-7	Fluorene	ND	20	2.8	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	20	2.9	ug/l	
90-12-0	1-Methylnaphthalene	ND	20	2.1	ug/l	
91-57-6	2-Methylnaphthalene	ND	20	2.4	ug/l	
91-20-3	Naphthalene	ND	20	2.0	ug/l	
85-01-8	Phenanthrene	ND	20	3.5	ug/l	
129-00-0	Pyrene	ND	20	2.7	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	73%		42-108%
321-60-8	2-Fluorobiphenyl	76%		40-106%
1718-51-0	Terphenyl-d14	85%		39-121%

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	EB-04		
Lab Sample ID:	FA77689-7	**Date Sampled:**	08/08/20
Matrix:	AQ - Equipment Blank	**Date Received:**	08/12/20
Method:	SW846 8270D BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	T050182.D	1	08/13/20 18:08	NJ	08/13/20 11:00	OP81544	ST1749
Run #2							

	Initial Volume	Final Volume
Run #1	250 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol [a]	ND	0.80	0.20	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
7297-45-2	2-Methylnaphthalene-d10	68%		50-150%
93951-69-0	Fluoranthene-d10	85%		50-150%

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-48		
Lab Sample ID:	FA77689-8	**Date Sampled:**	08/08/20
Matrix:	SO - Soil	**Date Received:**	08/12/20
Method:	SW846 8270E SW846 3550C	**Percent Solids:**	65.4
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6F06562.D	1	08/13/20 22:29	MV	08/13/20 08:00	OP81538	S6F253
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	27.1	250	27	ug/kg	J
208-96-8	Acenaphthylene	217	250	25	ug/kg	J
120-12-7	Anthracene	346	250	28	ug/kg	
56-55-3	Benzo(a)anthracene	644	250	25	ug/kg	
50-32-8	Benzo(a)pyrene	470	250	30	ug/kg	
205-99-2	Benzo(b)fluoranthene	1280	250	28	ug/kg	
191-24-2	Benzo(g,h,i)perylene	265	250	26	ug/kg	
207-08-9	Benzo(k)fluoranthene	397	250	33	ug/kg	
218-01-9	Chrysene	1060	250	26	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	81.1	250	32	ug/kg	J
206-44-0	Fluoranthene	1950	250	25	ug/kg	
86-73-7	Fluorene	56.3	250	27	ug/kg	J
193-39-5	Indeno(1,2,3-cd)pyrene	363	250	31	ug/kg	
90-12-0	1-Methylnaphthalene	ND	250	25	ug/kg	
91-57-6	2-Methylnaphthalene	ND	250	25	ug/kg	
91-20-3	Naphthalene	ND	250	25	ug/kg	
85-01-8	Phenanthrene	157	250	25	ug/kg	J
129-00-0	Pyrene	2190	250	29	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	54%		40-105%
321-60-8	2-Fluorobiphenyl	66%		43-107%
1718-51-0	Terphenyl-d14	75%		45-119%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-48		
Lab Sample ID:	FA77689-8	**Date Sampled:**	08/08/20
Matrix:	SO - Soil	**Date Received:**	08/12/20
Method:	SW846 8270E BY SIM SW846 3550C	**Percent Solids:**	65.4
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7G11169.D	1	08/13/20 17:34	FS	08/13/20 08:00	OP81539	S7G484
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	100	13	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
7297-45-2	2-Methylnaphthalene-d10	111%		50-150%
93951-69-0	Fluoranthene-d10	117%		50-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-52		
Lab Sample ID:	FA77689-9	**Date Sampled:**	08/08/20
Matrix:	SO - Soil	**Date Received:**	08/12/20
Method:	SW846 8270E SW846 3550C	**Percent Solids:**	83.0
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6F06563.D	1	08/13/20 22:54	MV	08/13/20 08:00	OP81538	S6F253
Run #2							

	Initial Weight	Final Volume
Run #1	29.9 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	22.4	200	21	ug/kg	J
208-96-8	Acenaphthylene	306	200	20	ug/kg	
120-12-7	Anthracene	499	200	23	ug/kg	
56-55-3	Benzo(a)anthracene	596	200	20	ug/kg	
50-32-8	Benzo(a)pyrene	800	200	24	ug/kg	
205-99-2	Benzo(b)fluoranthene	1190	200	22	ug/kg	
191-24-2	Benzo(g,h,i)perylene	394	200	21	ug/kg	
207-08-9	Benzo(k)fluoranthene	396	200	26	ug/kg	
218-01-9	Chrysene	796	200	21	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	99.0	200	25	ug/kg	J
206-44-0	Fluoranthene	625	200	20	ug/kg	
86-73-7	Fluorene	65.9	200	22	ug/kg	J
193-39-5	Indeno(1,2,3-cd)pyrene	470	200	25	ug/kg	
90-12-0	1-Methylnaphthalene	ND	200	20	ug/kg	
91-57-6	2-Methylnaphthalene	ND	200	20	ug/kg	
91-20-3	Naphthalene	ND	200	20	ug/kg	
85-01-8	Phenanthrene	65.2	200	20	ug/kg	J
129-00-0	Pyrene	1050	200	23	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	49%		40-105%
321-60-8	2-Fluorobiphenyl	58%		43-107%
1718-51-0	Terphenyl-d14	69%		45-119%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-52		
Lab Sample ID:	FA77689-9	**Date Sampled:**	08/08/20
Matrix:	SO - Soil	**Date Received:**	08/12/20
Method:	SW846 8270E BY SIM SW846 3550C	**Percent Solids:**	83.0
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7G11170.D	1	08/13/20 17:58	FS	08/13/20 08:00	OP81539	S7G484
Run #2							

	Initial Weight	Final Volume
Run #1	29.9 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	81	10	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
7297-45-2	2-Methylnaphthalene-d10	96%		50-150%
93951-69-0	Fluoranthene-d10	107%		50-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	DUP-03		
Lab Sample ID:	FA77689-10	**Date Sampled:**	08/08/20
Matrix:	SO - Soil	**Date Received:**	08/12/20
Method:	SW846 8270E SW846 3550C	**Percent Solids:**	64.6
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6F06564.D	1	08/13/20 23:20	MV	08/13/20 08:00	OP81538	S6F253
Run #2							

	Initial Weight	Final Volume
Run #1	30.3 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	260	27	ug/kg	
208-96-8	Acenaphthylene	232	260	26	ug/kg	J
120-12-7	Anthracene	403	260	29	ug/kg	
56-55-3	Benzo(a)anthracene	491	260	26	ug/kg	
50-32-8	Benzo(a)pyrene	473	260	30	ug/kg	
205-99-2	Benzo(b)fluoranthene	1310	260	28	ug/kg	
191-24-2	Benzo(g,h,i)perylene	305	260	26	ug/kg	
207-08-9	Benzo(k)fluoranthene	399	260	34	ug/kg	
218-01-9	Chrysene	828	260	26	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	87.7	260	32	ug/kg	J
206-44-0	Fluoranthene	933	260	26	ug/kg	
86-73-7	Fluorene	56.8	260	27	ug/kg	J
193-39-5	Indeno(1,2,3-cd)pyrene	414	260	31	ug/kg	
90-12-0	1-Methylnaphthalene	ND	260	26	ug/kg	
91-57-6	2-Methylnaphthalene	ND	260	26	ug/kg	
91-20-3	Naphthalene	ND	260	26	ug/kg	
85-01-8	Phenanthrene	123	260	26	ug/kg	J
129-00-0	Pyrene	1320	260	29	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	55%		40-105%
321-60-8	2-Fluorobiphenyl	62%		43-107%
1718-51-0	Terphenyl-d14	72%		45-119%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	DUP-03		
Lab Sample ID:	FA77689-10	**Date Sampled:**	08/08/20
Matrix:	SO - Soil	**Date Received:**	08/12/20
Method:	SW846 8270E BY SIM SW846 3550C	**Percent Solids:**	64.6
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7G11171.D	1	08/13/20 18:22	FS	08/13/20 08:00	OP81539	S7G484
Run #2							

	Initial Weight	Final Volume
Run #1	30.3 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	100	13	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
7297-45-2	2-Methylnaphthalene-d10	103%		50-150%
93951-69-0	Fluoranthene-d10	102%		50-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-49		
Lab Sample ID:	FA77689-11	**Date Sampled:**	08/08/20
Matrix:	SO - Soil	**Date Received:**	08/12/20
Method:	SW846 8270E SW846 3550C	**Percent Solids:**	68.8
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6F06565.D	1	08/13/20 23:46	MV	08/13/20 08:00	OP81538	S6F253
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	240	26	ug/kg	
208-96-8	Acenaphthylene	87.6	240	24	ug/kg	J
120-12-7	Anthracene	94.0	240	27	ug/kg	J
56-55-3	Benzo(a)anthracene	56.1	240	24	ug/kg	J
50-32-8	Benzo(a)pyrene	50.5	240	29	ug/kg	J
205-99-2	Benzo(b)fluoranthene	138	240	27	ug/kg	J
191-24-2	Benzo(g,h,i)perylene	40.6	240	25	ug/kg	J
207-08-9	Benzo(k)fluoranthene	43.4	240	32	ug/kg	J
218-01-9	Chrysene	93.7	240	25	ug/kg	J
53-70-3	Dibenzo(a,h)anthracene	ND	240	30	ug/kg	
206-44-0	Fluoranthene	91.4	240	24	ug/kg	J
86-73-7	Fluorene	ND	240	26	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	52.4	240	30	ug/kg	J
90-12-0	1-Methylnaphthalene	ND	240	24	ug/kg	
91-57-6	2-Methylnaphthalene	ND	240	24	ug/kg	
91-20-3	Naphthalene	ND	240	24	ug/kg	
85-01-8	Phenanthrene	ND	240	24	ug/kg	
129-00-0	Pyrene	123	240	28	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	45%		40-105%
321-60-8	2-Fluorobiphenyl	55%		43-107%
1718-51-0	Terphenyl-d14	70%		45-119%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-49		
Lab Sample ID:	FA77689-11	**Date Sampled:**	08/08/20
Matrix:	SO - Soil	**Date Received:**	08/12/20
Method:	SW846 8270E BY SIM SW846 3550C	**Percent Solids:**	68.8
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7G11172.D	1	08/13/20 18:46	FS	08/13/20 08:00	OP81539	S7G484
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	97	12	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
7297-45-2	2-Methylnaphthalene-d10	92%		50-150%
93951-69-0	Fluoranthene-d10	101%		50-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	EB-07		
Lab Sample ID:	FA77689-12	**Date Sampled:**	08/08/20
Matrix:	AQ - Equipment Blank	**Date Received:**	08/12/20
Method:	SW846 8270E SW846 3510C	**Percent Solids:**	n/a
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X072415.D	1	08/14/20 00:46	MV	08/13/20 11:00	OP81545	SX2952
Run #2							

	Initial Volume	Final Volume
Run #1	250 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	20	2.5	ug/l	
208-96-8	Acenaphthylene	ND	20	2.6	ug/l	
120-12-7	Anthracene	ND	20	3.2	ug/l	
56-55-3	Benzo(a)anthracene	ND	20	3.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	20	3.1	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	20	3.1	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	20	3.3	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	20	3.4	ug/l	
218-01-9	Chrysene	ND	20	3.4	ug/l	
53-70-3	Dibenzo(a,h)anthracene [a]	ND	20	3.2	ug/l	
206-44-0	Fluoranthene	ND	20	2.2	ug/l	
86-73-7	Fluorene	ND	20	2.8	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	20	2.9	ug/l	
90-12-0	1-Methylnaphthalene	ND	20	2.1	ug/l	
91-57-6	2-Methylnaphthalene	ND	20	2.4	ug/l	
91-20-3	Naphthalene	ND	20	2.0	ug/l	
85-01-8	Phenanthrene	ND	20	3.5	ug/l	
129-00-0	Pyrene	ND	20	2.7	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	78%		42-108%
321-60-8	2-Fluorobiphenyl	81%		40-106%
1718-51-0	Terphenyl-d14	89%		39-121%

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	EB-07		
Lab Sample ID:	FA77689-12	**Date Sampled:**	08/08/20
Matrix:	AQ - Equipment Blank	**Date Received:**	08/12/20
Method:	SW846 8270D BY SIM SW846 3510C	**Percent Solids:**	n/a
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	T050183.D	1	08/13/20 18:39	NJ	08/13/20 11:00	OP81544	ST1749
Run #2							

	Initial Volume	Final Volume
Run #1	250 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol [a]	ND	0.80	0.20	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
7297-45-2	2-Methylnaphthalene-d10	73%		50-150%
93951-69-0	Fluoranthene-d10	99%		50-150%

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

FA77689: Chain of Custody
Page 1 of 2

FA77689 Rush - 3-day TAT
OUI

SGS

SGS North America Inc - Orlando
Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 FAX: 407-425-0707
www.sgs.com

SGS - ORLANDO JOB # : PAGE 1 OF 1

SGS - ORLANDO Quote # | SKIFF #

Client / Reporting Information

Company Name: EarthCon
Address: 1880 W. Oak Pkwy
City: Marietta State: GA Zip: 30062
Project Contact: M. Brookshire Email: mbrookshire@earthcon.com
Phone #: 404-317-7148
Sampler(s) Name(s) (Printed)
Sampler 1: S. Tyler Sampler 2: D. Fulton

Project Information

Project Name: KMCC Navassa
Street 120 Quality Dr
City Navassa State NC
Project # 02.20200007.00
Fax #
Client Purchase Order #

Analytical Information

PAHs(8270)+PCP(8270SIM)

Matrix Codes
DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid

SGS Orlando Sample #	Field ID / Point of Collection	COLLECTION DATE	TIME	SAMPLED BY:	MATRIX	TOTAL # OF BOTTLES	OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NAOH+ZNAC	DI WATER	MEOH	PAHs(8270)+PCP(8270SIM)	LAB USE ONLY
1	CS-55	8/7/20	1502	ST	SO	1	MB	1								1	
2	CS-50	8/7/20	1715	ST	SO	1		1								1	
3	CS-51	8/7/20	1705	DF	SO	1		1								1	
4	FB-02	8/8/20	0830	DF	AQ	2		2								2	
5	EB-02	8/8/20	0920	CT	AQ	2		2								2	
6	EB-03	8/8/20	0835	DF	AQ	2		2								2	
7	EB-04	8/8/20	0845	DF	AQ	2		2								2	
8	CS-48	8/8/20	0900	ST	SO	1		1								1	
9	CS-52	8/8/20	0930	DF	SO	1		1								1	
10	DUP-03	8/8/20	—	ST	SO	1		1								1	
11	CS-49	8/8/20	0840	ST	SO	1		1								1	
12	EB-07	8/8/20	1430	CT	AQ	2		2								2	

INITIALASESSMENT DO
LABELVERIFICATION

Turnaround Time (Business days)

10 Day (Business) Approved By: / Date:
7 Day
5 Day
3 Day *RUSH*
2 Day *RUSH*
1 Day *RUSH*
Other
Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- [ ] COMMERCIAL "A" (RESULTS ONLY)
- [ ] COMMERCIAL "B" (RESULTS PLUS QC)
- [ ] REDT1 (EPA LEVEL 3)
- [ ] FULLT1 (EPA LEVEL 4)
- [ ] EDD'S

Comments / Remarks

Rush - 3 DAY TAT

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
1 Mark A. Brooks	8/8/20 1700	2 Jeanne Michollet	3 Jeanne Michollet	8-10-2020 1435	4 FX
5 Mayalee Kell 8/12/20 9:45		6	7		8

Lab Use Only : Cooler Temperature (s) Celsius (corrected): -0.1 4.6

http://www.sgs.com/en/terms-and-conditions

SGS Sample Receipt Summary

Job Number: FA77689 **Client:** EARTH CON **Project:** KMCC NAVASSA

Date / Time Received: 8/12/2020 9:45:00 AM **Delivery Method:** FEDEX **Airbill #'s:** 900433723626

Therm ID: IR 1; **Therm CF:** -0.2; **# of Coolers:** 2

Cooler Temps (Raw Measured) °C: Cooler 1: (0.3); Cooler 2: (4.8);

Cooler Temps (Corrected) °C: Cooler 1: (0.1); Cooler 2: (4.6);

Cooler Information	Y	or	N
1. Custody Seals Present	☑		☐
2. Custody Seals Intact	☑		☐
3. Temp criteria achieved	☑		☐
4. Cooler temp verification	IR Gun		
5. Cooler media	Ice (Bag)		

Trip Blank Information	Y	or	N	N/A
1. Trip Blank present / cooler	☐		☐	☑
2. Trip Blank listed on COC	☐		☐	☑

	W	or	S	N/A
3. Type Of TB Received	☐		☐	☑

Sample Information	Y	or	N	N/A
1. Sample labels present on bottles	☑		☐	
2. Samples preserved properly	☑		☐	
3. Sufficient volume/containers recvd for analysis:	☑		☐	
4. Condition of sample	Intact			
5. Sample recvd within HT	☑		☐	
6. Dates/Times/IDs on COC match Sample Label	☑		☐	
7. VOCs have headspace	☐		☐	☑
8. Bottles received for unspecified tests	☐		☑	
9. Compositing instructions clear	☐		☐	☑
10. Voa Soil Kits/Jars received past 48hrs?	☐		☐	☑
11. % Solids Jar received?	☐		☐	☑
12. Residual Chlorine Present?	☐		☐	☑

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____ Number of 5035 Field Kits: _____ Number of Lab Filtered Metals: _____

Test Strip Lot #s: pH 0-3 230315 pH 10-12 219813A Other: (Specify) _____ _____

Residual Chlorine Test Strip Lot #: _____

Comments

SM001
Rev. Date 05/24/17

Technician: MAGALEAK Date: 8/12/2020 9:45:00 AM Reviewer: _____ Date: _____

FA77689: Chain of Custody
Page 2 of 2

MS Semi-volatiles

6

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (DFTPP)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries
- Run Sequence Reports

Method Blank Summary

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP81538-MB	6F06546.D	1	08/13/20	MV	08/13/20	OP81538	S6F253

The QC reported here applies to the following samples: **Method:** SW846 8270E

FA77689-1, FA77689-2, FA77689-3, FA77689-8, FA77689-9, FA77689-10, FA77689-11

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	170	18	ug/kg	
208-96-8	Acenaphthylene	ND	170	17	ug/kg	
120-12-7	Anthracene	ND	170	19	ug/kg	
56-55-3	Benzo(a)anthracene	ND	170	17	ug/kg	
50-32-8	Benzo(a)pyrene	ND	170	20	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	170	18	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	170	17	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	170	22	ug/kg	
218-01-9	Chrysene	ND	170	17	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	170	21	ug/kg	
206-44-0	Fluoranthene	ND	170	17	ug/kg	
86-73-7	Fluorene	ND	170	18	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	170	20	ug/kg	
90-12-0	1-Methylnaphthalene	ND	170	17	ug/kg	
91-57-6	2-Methylnaphthalene	ND	170	17	ug/kg	
91-20-3	Naphthalene	ND	170	17	ug/kg	
85-01-8	Phenanthrene	ND	170	17	ug/kg	
129-00-0	Pyrene	ND	170	19	ug/kg	

CAS No.	Surrogate Recoveries		Limits
4165-60-0	Nitrobenzene-d5	53%	40-105%
321-60-8	2-Fluorobiphenyl	58%	43-107%
1718-51-0	Terphenyl-d14	71%	45-119%

Method Blank Summary

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP81545-MB	X072410.D	1	08/13/20	MV	08/13/20	OP81545	SX2952

The QC reported here applies to the following samples: **Method:** SW846 8270E

FA77689-4, FA77689-5, FA77689-6, FA77689-7, FA77689-12

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	20	2.5	ug/l	
208-96-8	Acenaphthylene	ND	20	2.6	ug/l	
120-12-7	Anthracene	ND	20	3.2	ug/l	
56-55-3	Benzo(a)anthracene	ND	20	3.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	20	3.1	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	20	3.1	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	20	3.3	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	20	3.4	ug/l	
218-01-9	Chrysene	ND	20	3.4	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	20	3.2	ug/l	
206-44-0	Fluoranthene	ND	20	2.2	ug/l	
86-73-7	Fluorene	ND	20	2.8	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	20	2.9	ug/l	
90-12-0	1-Methylnaphthalene	ND	20	2.1	ug/l	
91-57-6	2-Methylnaphthalene	ND	20	2.4	ug/l	
91-20-3	Naphthalene	ND	20	2.0	ug/l	
85-01-8	Phenanthrene	ND	20	3.5	ug/l	
129-00-0	Pyrene	ND	20	2.7	ug/l	

CAS No.	Surrogate Recoveries		Limits
4165-60-0	Nitrobenzene-d5	81%	42-108%
321-60-8	2-Fluorobiphenyl	81%	40-106%
1718-51-0	Terphenyl-d14	83%	39-121%

Method Blank Summary

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP81539-MB	7G11165.D	1	08/13/20	FS	08/13/20	OP81539	S7G484

The QC reported here applies to the following samples: **Method:** SW846 8270E BY SIM

FA77689-1, FA77689-2, FA77689-3, FA77689-8, FA77689-9, FA77689-10, FA77689-11

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	67	8.3	ug/kg	

CAS No.	Surrogate Recoveries		Limits
7297-45-2	2-Methylnaphthalene-d10	87%	50-150%
93951-69-0	Fluoranthene-d10	98%	50-150%

Method Blank Summary

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP81544-MB	T050178.D	1	08/13/20	NJ	08/13/20	OP81544	ST1749

The QC reported here applies to the following samples: **Method:** SW846 8270D BY SIM

FA77689-4, FA77689-5, FA77689-6, FA77689-7, FA77689-12

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	0.80	0.20	ug/l	

CAS No.	Surrogate Recoveries		Limits
7297-45-2	2-Methylnaphthalene-d10	113%	50-150%
93951-69-0	Fluoranthene-d10	101%	50-150%

Blank Spike Summary

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP81538-BS	6F06545.D	1	08/13/20	MV	08/13/20	OP81538	S6F253

The QC reported here applies to the following samples: **Method:** SW846 8270E

FA77689-1, FA77689-2, FA77689-3, FA77689-8, FA77689-9, FA77689-10, FA77689-11

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
83-32-9	Acenaphthene	1670	1240	74	56-109
208-96-8	Acenaphthylene	1670	1370	82	56-106
120-12-7	Anthracene	1670	1260	76	61-110
56-55-3	Benzo(a)anthracene	1670	1320	79	66-111
50-32-8	Benzo(a)pyrene	1670	1340	80	59-104
205-99-2	Benzo(b)fluoranthene	1670	1330	80	67-113
191-24-2	Benzo(g,h,i)perylene	1670	1600	96	67-113
207-08-9	Benzo(k)fluoranthene	1670	1320	79	67-114
218-01-9	Chrysene	1670	1380	83	65-112
53-70-3	Dibenzo(a,h)anthracene	1670	1500	90	68-115
206-44-0	Fluoranthene	1670	1260	76	60-108
86-73-7	Fluorene	1670	1280	77	58-109
193-39-5	Indeno(1,2,3-cd)pyrene	1670	1580	95	66-116
90-12-0	1-Methylnaphthalene	1670	1130	68	49-106
91-57-6	2-Methylnaphthalene	1670	1190	71	47-106
91-20-3	Naphthalene	1670	1170	70	44-104
85-01-8	Phenanthrene	1670	1290	77	63-111
129-00-0	Pyrene	1670	1470	88	65-115

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	65%	40-105%
321-60-8	2-Fluorobiphenyl	73%	43-107%
1718-51-0	Terphenyl-d14	77%	45-119%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP81545-BS	X072409.D	1	08/13/20	MV	08/13/20	OP81545	SX2952

The QC reported here applies to the following samples: **Method:** SW846 8270E

FA77689-4, FA77689-5, FA77689-6, FA77689-7, FA77689-12

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
83-32-9	Acenaphthene	200	149	75	61-107
208-96-8	Acenaphthylene	200	162	81	60-104
120-12-7	Anthracene	200	148	74	65-108
56-55-3	Benzo(a)anthracene	200	153	77	66-111
50-32-8	Benzo(a)pyrene	200	163	82	62-107
205-99-2	Benzo(b)fluoranthene	200	173	87	65-114
191-24-2	Benzo(g,h,i)perylene	200	185	93	66-116
207-08-9	Benzo(k)fluoranthene	200	148	74	65-114
218-01-9	Chrysene	200	161	81	66-111
53-70-3	Dibenzo(a,h)anthracene	200	215	108	66-119
206-44-0	Fluoranthene	200	149	75	63-106
86-73-7	Fluorene	200	154	77	62-108
193-39-5	Indeno(1,2,3-cd)pyrene	200	220	110	64-119
90-12-0	1-Methylnaphthalene	200	129	65	53-102
91-57-6	2-Methylnaphthalene	200	139	70	51-102
91-20-3	Naphthalene	200	142	71	47-100
85-01-8	Phenanthrene	200	151	76	66-110
129-00-0	Pyrene	200	149	75	64-113

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	72%	42-108%
321-60-8	2-Fluorobiphenyl	76%	40-106%
1718-51-0	Terphenyl-d14	71%	39-121%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP81539-BS	7G11164.D	1	08/13/20	FS	08/13/20	OP81539	S7G484

The QC reported here applies to the following samples: **Method:** SW846 8270E BY SIM

FA77689-1, FA77689-2, FA77689-3, FA77689-8, FA77689-9, FA77689-10, FA77689-11

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
87-86-5	Pentachlorophenol	667	371	56	46-135

CAS No.	Surrogate Recoveries	BSP	Limits
7297-45-2	2-Methylnaphthalene-d10	102%	50-150%
93951-69-0	Fluoranthene-d10	99%	50-150%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP81544-BS [a]	T050177.D	1	08/13/20	NJ	08/13/20	OP81544	ST1749

The QC reported here applies to the following samples: **Method:** SW846 8270D BY SIM

FA77689-4, FA77689-5, FA77689-6, FA77689-7, FA77689-12

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
87-86-5	Pentachlorophenol	16	16.5	103	43-110

CAS No.	Surrogate Recoveries	BSP	Limits
7297-45-2	2-Methylnaphthalene-d10	81%	50-150%
93951-69-0	Fluoranthene-d10	101%	50-150%

(a) Insufficient sample for MS/MSD.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP81538-MS	6F06589.D	5	08/14/20	MV	08/13/20	OP81538	S6F254
OP81538-MSD	6F06590.D	5	08/14/20	MV	08/13/20	OP81538	S6F254
FA77698-5	6F06550.D	1	08/13/20	MV	08/13/20	OP81538	S6F253
FA77698-5	6F06588.D	5	08/14/20	MV	08/13/20	OP81538	S6F254

The QC reported here applies to the following samples: **Method:** SW846 8270E

FA77689-1, FA77689-2, FA77689-3, FA77689-8, FA77689-9, FA77689-10, FA77689-11

CAS No.	Compound	FA77698-5 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	45.9	J	2050	1490	70	2060	884	41*	51*	56-109/23
208-96-8	Acenaphthylene	761		2050	2060	63	2060	1310	27*	45*	56-106/23
120-12-7	Anthracene	1970		2050	2220	12*	2060	1480	-24*	40*	61-110/21
56-55-3	Benzo(a)anthracene	2740		2050	3490	37*	2060	2410	-16*	37*	66-111/23
50-32-8	Benzo(a)pyrene	2510		2050	3180	33*	2060	2070	-21*	42*	59-104/23
205-99-2	Benzo(b)fluoranthene	5650 [b]		2050	6100	22* [a]	2060	3940	-83* [a]	43*	67-113/24
191-24-2	Benzo(g,h,i)perylene	1320		2050	2660	65*	2060	1640	16*	47*	67-113/21
207-08-9	Benzo(k)fluoranthene	2000		2050	2860	42*	2060	1890	-5*	41*	67-114/22
218-01-9	Chrysene	3810		2050	4170	18*	2060	2850	-47*	38*	65-112/25
53-70-3	Dibenzo(a,h)anthracene	437		2050	1860	69	2060	1110	33*	51*	68-115/23
206-44-0	Fluoranthene	3390		2050	4120	36*	2060	3010	-18*	31*	60-108/25
86-73-7	Fluorene	157	J	2050	1580	69	2060	968	39*	48*	58-109/21
193-39-5	Indeno(1,2,3-cd)pyrene	1840		2050	2990	56*	2060	1880	2*	46*	66-116/22
90-12-0	1-Methylnaphthalene	ND		2050	1330	65	2060	795	39*	50*	49-106/26
91-57-6	2-Methylnaphthalene	ND		2050	1370	67	2060	819	40*	50*	47-106/27
91-20-3	Naphthalene	ND		2050	1380	67	2060	834	40*	49*	44-104/27
85-01-8	Phenanthrene	405		2050	1670	62*	2060	1050	31*	46*	63-111/22
129-00-0	Pyrene	6160 [b]		2050	6640	23* [a]	2060	4660	-73* [a]	35*	65-115/25

CAS No.	Surrogate Recoveries	MS	MSD	FA77698-5	FA77698-5	Limits
4165-60-0	Nitrobenzene-d5	59%	36%*	66%	57%	40-105%
321-60-8	2-Fluorobiphenyl	67%	40%*	76%	65%	43-107%
1718-51-0	Terphenyl-d14	69%	43%*	85%	71%	45-119%

(a) Outside control limits due to high level in sample relative to spike amount.
(b) Result is from Run #2.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP81539-MS [a]	7G11196.D	4	08/14/20	FS	08/13/20	OP81539	S7G485
OP81539-MSD [a]	7G11197.D	4	08/14/20	FS	08/13/20	OP81539	S7G485
FA77698-5	7G11175.D	1	08/13/20	FS	08/13/20	OP81539	S7G484

The QC reported here applies to the following samples: **Method:** SW846 8270E BY SIM

FA77689-1, FA77689-2, FA77689-3, FA77689-8, FA77689-9, FA77689-10, FA77689-11

CAS No.	Compound	FA77698-5 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
87-86-5	Pentachlorophenol	ND		817	736	90	809	764	94	4	46-135/30

CAS No.	Surrogate Recoveries	MS	MSD	FA77698-5	Limits
7297-45-2	2-Methylnaphthalene-d10	98%	100%	127%	50-150%
93951-69-0	Fluoranthene-d10	108%	113%	140%	50-150%

(a) Dilution required due to matrix interference; extract was viscous.

* = Outside of Control Limits.

Instrument Performance Check (DFTPP)

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: S6F248-DFTPP
Lab File ID: 6F06435.D
Instrument ID: GCMS6F
Injection Date: 07/29/20
Injection Time: 12:37

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	99720	37.9		Pass
68	Less than 2.0% of mass 69	1843	0.70	(1.69) [a]	Pass
69	Mass 69 relative abundance	109212	41.5		Pass
70	Less than 2.0% of mass 69	588	0.22	(0.54) [a]	Pass
127	40.0 - 60.0% of mass 198	130053	49.4		Pass
197	Less than 1.0% of mass 198	1470	0.56		Pass
198	Base peak, 100% relative abundance	263083	100.0		Pass
199	5.0 - 9.0% of mass 198	17833	6.78		Pass
275	10.0 - 30.0% of mass 198	67861	25.8		Pass
365	1.0 - 100.0% of mass 198	8361	3.18		Pass
441	Present, but less than mass 443	35832	13.6	(77.9) [b]	Pass
442	40.0 - 100.0% of mass 198	242163	92.0		Pass
443	17.0 - 23.0% of mass 442	46013	17.5	(19.0) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
S6F248-IC248	6F06436.D	07/29/20	12:53	00:16	Initial cal 1
S6F248-IC248	6F06437.D	07/29/20	13:19	00:42	Initial cal 5
S6F248-IC248	6F06438.D	07/29/20	13:45	01:08	Initial cal 10
S6F248-IC248	6F06439.D	07/29/20	14:10	01:33	Initial cal 25
S6F248-ICC248	6F06440.D	07/29/20	14:36	01:59	Initial cal 50
S6F248-IC248	6F06441.D	07/29/20	15:02	02:25	Initial cal 60
S6F248-IC248	6F06442.D	07/29/20	15:28	02:51	Initial cal 75
S6F248-IC248	6F06443.D	07/29/20	15:54	03:17	Initial cal 100
S6F248-ICV248	6F06444.D	07/29/20	16:20	03:43	Initial cal verification 50
S6F248-ICV248	6F06445.D	07/29/20	16:46	04:09	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: S6F253-DFTPP
Lab File ID: 6F06540.D
Instrument ID: GCMS6F
Injection Date: 08/13/20
Injection Time: 13:09

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	117285	38.4		Pass
68	Less than 2.0% of mass 69	2405	0.79	(1.82) [a]	Pass
69	Mass 69 relative abundance	132213	43.3		Pass
70	Less than 2.0% of mass 69	629	0.21	(0.48) [a]	Pass
127	40.0 - 60.0% of mass 198	154155	50.5		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	305280	100.0		Pass
199	5.0 - 9.0% of mass 198	21102	6.91		Pass
275	10.0 - 30.0% of mass 198	78245	25.6		Pass
365	1.0 - 100.0% of mass 198	9775	3.20		Pass
441	Present, but less than mass 443	39182	12.8	(78.0) [b]	Pass
442	40.0 - 100.0% of mass 198	258819	84.8		Pass
443	17.0 - 23.0% of mass 442	50251	16.5	(19.4) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
S6F253-CC248	6F06541.D	08/13/20	13:25	00:16	Continuing cal 50
OP81540-BS	6F06542.D	08/13/20	13:51	00:42	Blank Spike
OP81540-MB	6F06543.D	08/13/20	14:16	01:07	Method Blank
ZZZZZZ	6F06544.D	08/13/20	14:42	01:33	(unrelated sample)
OP81538-BS	6F06545.D	08/13/20	15:08	01:59	Blank Spike
OP81538-MB	6F06546.D	08/13/20	15:34	02:25	Method Blank
FA77698-11	6F06547.D	08/13/20	16:00	02:51	(used for QC only; not part of job FA77689)
FA77698-5	6F06550.D	08/13/20	17:18	04:09	(used for QC only; not part of job FA77689)
ZZZZZZ	6F06553.D	08/13/20	18:36	05:27	(unrelated sample)
ZZZZZZ	6F06554.D	08/13/20	19:02	05:53	(unrelated sample)
ZZZZZZ	6F06555.D	08/13/20	19:28	06:19	(unrelated sample)
ZZZZZZ	6F06556.D	08/13/20	19:54	06:45	(unrelated sample)
ZZZZZZ	6F06557.D	08/13/20	20:20	07:11	(unrelated sample)
FA77689-1	6F06559.D	08/13/20	21:12	08:03	CS-55
FA77689-2	6F06560.D	08/13/20	21:37	08:28	CS-50
FA77689-3	6F06561.D	08/13/20	22:03	08:54	CS-51
FA77689-8	6F06562.D	08/13/20	22:29	09:20	CS-48
FA77689-9	6F06563.D	08/13/20	22:54	09:45	CS-52
FA77689-10	6F06564.D	08/13/20	23:20	10:11	DUP-03

Instrument Performance Check (DFTPP)

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample:	S6F253-DFTPP	**Injection Date:**	08/13/20
Lab File ID:	6F06540.D	**Injection Time:**	13:09
Instrument ID:	GCMS6F		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
FA77689-11	6F06565.D	08/13/20	23:46	10:37	CS-49
ZZZZZZ	6F06566.D	08/14/20	00:11	11:02	(unrelated sample)
ZZZZZZ	6F06567.D	08/14/20	00:36	11:27	(unrelated sample)
ZZZZZZ	6F06568.D	08/14/20	01:02	11:53	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: S6F254-DFTPP
Lab File ID: 6F06572.D
Instrument ID: GCMS6F
Injection Date: 08/14/20
Injection Time: 12:30

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	59315	33.8		Pass
68	Less than 2.0% of mass 69	399	0.23	(0.56) [a]	Pass
69	Mass 69 relative abundance	71416	40.7		Pass
70	Less than 2.0% of mass 69	405	0.23	(0.57) [a]	Pass
127	40.0 - 60.0% of mass 198	86805	49.5		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	175488	100.0		Pass
199	5.0 - 9.0% of mass 198	11627	6.63		Pass
275	10.0 - 30.0% of mass 198	48077	27.4		Pass
365	1.0 - 100.0% of mass 198	6195	3.53		Pass
441	Present, but less than mass 443	25833	14.7	(78.8) [b]	Pass
442	40.0 - 100.0% of mass 198	169416	96.5		Pass
443	17.0 - 23.0% of mass 442	32768	18.7	(19.3) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
S6F254-CC248	6F06573.D	08/14/20	12:47	00:17	Continuing cal 50
ZZZZZZ	6F06574.D	08/14/20	13:13	00:43	(unrelated sample)
ZZZZZZ	6F06575.D	08/14/20	13:38	01:08	(unrelated sample)
FA77512-1	6F06576.D	08/14/20	14:04	01:34	(used for QC only; not part of job FA77689)
ZZZZZZ	6F06577.D	08/14/20	14:30	02:00	(unrelated sample)
ZZZZZZ	6F06578.D	08/14/20	14:56	02:26	(unrelated sample)
ZZZZZZ	6F06579.D	08/14/20	15:22	02:52	(unrelated sample)
ZZZZZZ	6F06580.D	08/14/20	15:48	03:18	(unrelated sample)
FA77698-11	6F06581.D	08/14/20	16:14	03:44	(used for QC only; not part of job FA77689)
OP81540-MS	6F06582.D	08/14/20	16:40	04:10	Matrix Spike
OP81540-MSD	6F06583.D	08/14/20	17:06	04:36	Matrix Spike Duplicate
ZZZZZZ	6F06584.D	08/14/20	17:33	05:03	(unrelated sample)
ZZZZZZ	6F06585.D	08/14/20	17:58	05:28	(unrelated sample)
ZZZZZZ	6F06586.D	08/14/20	18:25	05:55	(unrelated sample)
ZZZZZZ	6F06587.D	08/14/20	18:50	06:20	(unrelated sample)
FA77698-5	6F06588.D	08/14/20	19:16	06:46	(used for QC only; not part of job FA77689)
OP81538-MS	6F06589.D	08/14/20	19:42	07:12	Matrix Spike
OP81538-MSD	6F06590.D	08/14/20	20:08	07:38	Matrix Spike Duplicate

Instrument Performance Check (DFTPP)

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: S7G472-DFTPP
Lab File ID: 7G10822.D
Instrument ID: GCMS7G
Injection Date: 07/21/20
Injection Time: 08:44

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	4908	32.6		Pass
68	Less than 2.0% of mass 69	91	0.60	(1.60) [a]	Pass
69	Mass 69 relative abundance	5683	37.7		Pass
70	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
127	40.0 - 60.0% of mass 198	6380	42.3		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	15078	100.0		Pass
199	5.0 - 9.0% of mass 198	953	6.32		Pass
275	10.0 - 30.0% of mass 198	3550	23.5		Pass
365	1.0 - 100.0% of mass 198	473	3.14		Pass
441	Present, but less than mass 443	1808	12.0	(84.1) [b]	Pass
442	40.0 - 100.0% of mass 198	11474	76.1		Pass
443	17.0 - 23.0% of mass 442	2149	14.3	(18.7) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
S7G472-IC472	7G10833.D	07/21/20	13:31	04:47	Initial cal 1
S7G472-IC472	7G10834.D	07/21/20	13:55	05:11	Initial cal 2
S7G472-IC472	7G10835.D	07/21/20	14:19	05:35	Initial cal 3
S7G472-ICC472	7G10836.D	07/21/20	14:43	05:59	Initial cal 4
S7G472-IC472	7G10837.D	07/21/20	15:07	06:23	Initial cal 5
S7G472-IC472	7G10838.D	07/21/20	15:31	06:47	Initial cal 6
S7G472-IC472	7G10839.D	07/21/20	15:55	07:11	Initial cal 7
S7G472-ICV472	7G10840.D	07/21/20	16:19	07:35	Initial cal verification 4

Instrument Performance Check (DFTPP)

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: S7G484-DFTPP
Lab File ID: 7G11162.D
Instrument ID: GCMS7G
Injection Date: 08/13/20
Injection Time: 14:28

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	3317	32.5		Pass
68	Less than 2.0% of mass 69	43	0.42	(1.07) [a]	Pass
69	Mass 69 relative abundance	4036	39.5		Pass
70	Less than 2.0% of mass 69	36	0.35	(0.89) [a]	Pass
127	40.0 - 60.0% of mass 198	4497	44.0		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	10216	100.0		Pass
199	5.0 - 9.0% of mass 198	662	6.48		Pass
275	10.0 - 30.0% of mass 198	2529	24.8		Pass
365	1.0 - 100.0% of mass 198	346	3.39		Pass
441	Present, but less than mass 443	1263	12.4	(88.6) [b]	Pass
442	40.0 - 100.0% of mass 198	7314	71.6		Pass
443	17.0 - 23.0% of mass 442	1426	14.0	(19.5) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
S7G484-CC472	7G11163.D	08/13/20	15:10	00:42	Continuing cal 4
OP81539-BS	7G11164.D	08/13/20	15:34	01:06	Blank Spike
OP81539-MB	7G11165.D	08/13/20	15:58	01:30	Method Blank
FA77689-1	7G11166.D	08/13/20	16:22	01:54	CS-55
FA77689-2	7G11167.D	08/13/20	16:46	02:18	CS-50
FA77689-3	7G11168.D	08/13/20	17:10	02:42	CS-51
FA77689-8	7G11169.D	08/13/20	17:34	03:06	CS-48
FA77689-9	7G11170.D	08/13/20	17:58	03:30	CS-52
FA77689-10	7G11171.D	08/13/20	18:22	03:54	DUP-03
FA77689-11	7G11172.D	08/13/20	18:46	04:18	CS-49
ZZZZZZ	7G11173.D	08/13/20	19:10	04:42	(unrelated sample)
ZZZZZZ	7G11174.D	08/13/20	19:34	05:06	(unrelated sample)
FA77698-5	7G11175.D	08/13/20	19:58	05:30	(used for QC only; not part of job FA77689)
ZZZZZZ	7G11179.D	08/13/20	21:33	07:05	(unrelated sample)
ZZZZZZ	7G11180.D	08/13/20	21:57	07:29	(unrelated sample)
ZZZZZZ	7G11181.D	08/13/20	22:21	07:53	(unrelated sample)
ZZZZZZ	7G11182.D	08/13/20	22:44	08:16	(unrelated sample)
ZZZZZZ	7G11183.D	08/13/20	23:08	08:40	(unrelated sample)
ZZZZZZ	7G11184.D	08/13/20	23:32	09:04	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample:	S7G484-DFTPP	**Injection Date:**	08/13/20
Lab File ID:	7G11162.D	**Injection Time:**	14:28
Instrument ID:	GCMS7G		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	7G11186.D	08/14/20	00:19	09:51	(unrelated sample)
ZZZZZZ	7G11187.D	08/14/20	00:42	10:14	(unrelated sample)
ZZZZZZ	7G11188.D	08/14/20	01:06	10:38	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: S7G485-DFTPP
Lab File ID: 7G11192.D
Instrument ID: GCMS7G
Injection Date: 08/14/20
Injection Time: 10:01

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	3190	32.6		Pass
68	Less than 2.0% of mass 69	34	0.35	(0.91) [a]	Pass
69	Mass 69 relative abundance	3718	38.0		Pass
70	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
127	40.0 - 60.0% of mass 198	4224	43.2		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	9781	100.0		Pass
199	5.0 - 9.0% of mass 198	669	6.84		Pass
275	10.0 - 30.0% of mass 198	2422	24.8		Pass
365	1.0 - 100.0% of mass 198	347	3.55		Pass
441	Present, but less than mass 443	1209	12.4	(87.6) [b]	Pass
442	40.0 - 100.0% of mass 198	7496	76.6		Pass
443	17.0 - 23.0% of mass 442	1380	14.1	(18.4) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
S7G485-CC472	7G11193.D	08/14/20	10:20	00:19	Continuing cal 4
OP81541-BS	7G11194.D	08/14/20	10:47	00:46	Blank Spike
OP81541-MB	7G11195.D	08/14/20	11:11	01:10	Method Blank
OP81539-MS	7G11196.D	08/14/20	11:34	01:33	Matrix Spike
OP81539-MSD	7G11197.D	08/14/20	11:58	01:57	Matrix Spike Duplicate
OP81541-MS	7G11199.D	08/14/20	12:46	02:45	Matrix Spike
OP81541-MSD	7G11200.D	08/14/20	13:09	03:08	Matrix Spike Duplicate
ZZZZZZ	7G11202.D	08/14/20	13:57	03:56	(unrelated sample)
ZZZZZZ	7G11203.D	08/14/20	14:21	04:20	(unrelated sample)
ZZZZZZ	7G11204.D	08/14/20	14:46	04:45	(unrelated sample)
ZZZZZZ	7G11205.D	08/14/20	15:10	05:09	(unrelated sample)
ZZZZZZ	7G11206.D	08/14/20	15:34	05:33	(unrelated sample)
ZZZZZZ	7G11208.D	08/14/20	16:22	06:21	(unrelated sample)
ZZZZZZ	7G11209.D	08/14/20	16:46	06:45	(unrelated sample)
FA77698-11	7G11211.D	08/14/20	17:34	07:33	(used for QC only; not part of job FA77689)

Instrument Performance Check (DFTPP)

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: ST1745-DFTPP
Lab File ID: T050024.D
Instrument ID: GCMST
Injection Date: 07/17/20
Injection Time: 09:06

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	42797	45.2		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	44644	47.1		Pass
70	Less than 2.0% of mass 69	190	0.20	(0.43) [a]	Pass
127	40.0 - 60.0% of mass 198	48000	50.7		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	94690	100.0		Pass
199	5.0 - 9.0% of mass 198	6714	7.09		Pass
275	10.0 - 30.0% of mass 198	21578	22.8		Pass
365	1.0 - 100.0% of mass 198	2021	2.13		Pass
441	Present, but less than mass 443	8687	9.17	(77.6) [b]	Pass
442	40.0 - 100.0% of mass 198	56584	59.8		Pass
443	17.0 - 23.0% of mass 442	11194	11.8	(19.8) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ST1745-IC1745	T050025.D	07/17/20	09:27	00:21	Initial cal 1
ST1745-IC1745	T050026.D	07/17/20	09:56	00:50	Initial cal 8
ST1745-IC1745	T050027.D	07/17/20	10:25	01:19	Initial cal 2
ST1745-IC1745	T050028.D	07/17/20	10:55	01:49	Initial cal 3
ST1745-ICC1745	T050029.D	07/17/20	11:24	02:18	Initial cal 4
ST1745-IC1745	T050030.D	07/17/20	11:54	02:48	Initial cal 5
ST1745-IC1745	T050031.D	07/17/20	12:23	03:17	Initial cal 6
ST1745-IC1745	T050032.D	07/17/20	12:53	03:47	Initial cal 7
ST1745-ICV1745	T050033.D	07/17/20	13:23	04:17	Initial cal verification 4

Instrument Performance Check (DFTPP)

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: ST1749-DFTPP
Lab File ID: T050175.D
Instrument ID: GCMST
Injection Date: 08/13/20
Injection Time: 14:20

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	37253	41.0		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	38747	42.6		Pass
70	Less than 2.0% of mass 69	216	0.24	(0.56) [a]	Pass
127	40.0 - 60.0% of mass 198	45411	49.9		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	90920	100.0		Pass
199	5.0 - 9.0% of mass 198	6761	7.44		Pass
275	10.0 - 30.0% of mass 198	21774	23.9		Pass
365	1.0 - 100.0% of mass 198	2044	2.25		Pass
441	Present, but less than mass 443	8649	9.51	(79.6) [b]	Pass
442	40.0 - 100.0% of mass 198	55304	60.8		Pass
443	17.0 - 23.0% of mass 442	10861	11.9	(19.6) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ST1749-CC1745	T050176.D	08/13/20	14:42	00:22	Continuing cal 4
OP81544-BS	T050177.D	08/13/20	15:33	01:13	Blank Spike
OP81544-MB	T050178.D	08/13/20	16:03	01:43	Method Blank
FA77689-4	T050179.D	08/13/20	16:34	02:14	FB-02
FA77689-5	T050180.D	08/13/20	17:06	02:46	EB-02
FA77689-6	T050181.D	08/13/20	17:37	03:17	EB-03
FA77689-7	T050182.D	08/13/20	18:08	03:48	EB-04
FA77689-12	T050183.D	08/13/20	18:39	04:19	EB-07
ZZZZZZ	T050184.D	08/13/20	19:09	04:49	(unrelated sample)
ZZZZZZ	T050185.D	08/13/20	19:39	05:19	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-DFTPP
Lab File ID: X071355.D
Instrument ID: GCMSX
Injection Date: 06/23/20
Injection Time: 09:47

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	48227	49.7		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	42739	44.1		Pass
70	Less than 2.0% of mass 69	206	0.21	(0.48) [a]	Pass
127	40.0 - 60.0% of mass 198	50221	51.8		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	96957	100.0		Pass
199	5.0 - 9.0% of mass 198	6460	6.66		Pass
275	10.0 - 30.0% of mass 198	22665	23.4		Pass
365	1.0 - 100.0% of mass 198	1798	1.85		Pass
441	Present, but less than mass 443	12438	12.8	(74.3) [b]	Pass
442	40.0 - 100.0% of mass 198	83123	85.7		Pass
443	17.0 - 23.0% of mass 442	16733	17.3	(20.1) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
SX2918-IC2918	X071356.D	06/23/20	10:04	00:17	Initial cal 1
SX2918-IC2918	X071357.D	06/23/20	10:30	00:43	Initial cal 5
SX2918-IC2918	X071358.D	06/23/20	10:55	01:08	Initial cal 10
SX2918-IC2918	X071359.D	06/23/20	11:21	01:34	Initial cal 25
SX2918-IC2918	X071360.D	06/23/20	11:46	01:59	Initial cal 50
SX2918-IC2918	X071361.D	06/23/20	12:12	02:25	Initial cal 60
SX2918-IC2918	X071362.D	06/23/20	12:37	02:50	Initial cal 75
SX2918-IC2918	X071363.D	06/23/20	13:03	03:16	Initial cal 100
SX2918-IC2918	X071364.D	06/23/20	13:29	03:42	Initial cal 1
SX2918-IC2918	X071365.D	06/23/20	13:54	04:07	Initial cal 5
SX2918-IC2918	X071366.D	06/23/20	14:20	04:33	Initial cal 10
SX2918-IC2918	X071367.D	06/23/20	14:46	04:59	Initial cal 25
SX2918-ICC2918	X071368.D	06/23/20	15:12	05:25	Initial cal 50
SX2918-IC2918	X071369.D	06/23/20	15:39	05:52	Initial cal 60
SX2918-IC2918	X071370.D	06/23/20	16:05	06:18	Initial cal 75
SX2918-IC2918	X071371.D	06/23/20	16:31	06:44	Initial cal 100
SX2918-ICV2918	X071372.D	06/23/20	16:58	07:11	Initial cal verification 50
SX2918-ICV2918	X071373.D	06/23/20	17:25	07:38	Initial cal verification 50
SX2918-ICV2918	X071374.D	06/23/20	17:51	08:04	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample:	SX2918-DFTPP	**Injection Date:**	06/23/20
Lab File ID:	X071355.D	**Injection Time:**	09:47
Instrument ID:	GCMSX		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
SX2918-ICV2918	X071375.D	06/23/20	18:17	08:30	Initial cal verification 50
SX2918-ICV2918	X071376.D	06/23/20	18:43	08:56	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2919-DFTPP
Lab File ID: X071415.D
Instrument ID: GCMSX
Injection Date: 06/24/20
Injection Time: 15:04

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	34387	50.4		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	32027	47.0		Pass
70	Less than 2.0% of mass 69	101	0.15	(0.32) [a]	Pass
127	40.0 - 60.0% of mass 198	36939	54.2		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	68165	100.0		Pass
199	5.0 - 9.0% of mass 198	4563	6.69		Pass
275	10.0 - 30.0% of mass 198	16125	23.7		Pass
365	1.0 - 100.0% of mass 198	1684	2.47		Pass
441	Present, but less than mass 443	9013	13.2	(75.9) [b]	Pass
442	40.0 - 100.0% of mass 198	59211	86.9		Pass
443	17.0 - 23.0% of mass 442	11869	17.4	(20.0) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
SX2918-ICV2918	X071416.D	06/24/20	15:22	00:18	Initial cal verification 50
SX2919-CC2918	X071417.D	06/24/20	15:48	00:44	Continuing cal 50
SX2919-CC2918	X071418.D	06/24/20	16:15	01:11	Continuing cal 50
OP80770-BS	X071419.D	06/24/20	16:41	01:37	Blank Spike
OP80770-MB	X071420.D	06/24/20	17:08	02:04	Method Blank
OP80804-BS1	X071421.D	06/24/20	17:34	02:30	Blank Spike
OP80804-BS2	X071422.D	06/24/20	18:00	02:56	Blank Spike
ZZZZZZ	X071424.D	06/24/20	18:53	03:49	(unrelated sample)
FA75495-3	X071425.D	06/24/20	19:19	04:15	(used for QC only; not part of job FA77689)
FA75495-4	X071426.D	06/24/20	19:45	04:41	(used for QC only; not part of job FA77689)
FA76058-1	X071427.D	06/24/20	20:11	05:07	(used for QC only; not part of job FA77689)
ZZZZZZ	X071428.D	06/24/20	20:37	05:33	(unrelated sample)
ZZZZZZ	X071429.D	06/24/20	21:02	05:58	(unrelated sample)
ZZZZZZ	X071430.D	06/24/20	21:28	06:24	(unrelated sample)
OP80770-MS	X071432.D	06/24/20	22:19	07:15	Matrix Spike
OP80770-MSD	X071433.D	06/24/20	22:45	07:41	Matrix Spike Duplicate
ZZZZZZ	X071434.D	06/24/20	23:10	08:06	(unrelated sample)
ZZZZZZ	X071435.D	06/24/20	23:36	08:32	(unrelated sample)
ZZZZZZ	X071436.D	06/25/20	00:01	08:57	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample:	SX2919-DFTPP	**Injection Date:**	06/24/20
Lab File ID:	X071415.D	**Injection Time:**	15:04
Instrument ID:	GCMSX		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	X071437.D	06/25/20	00:26	09:22	(unrelated sample)
ZZZZZZ	X071438.D	06/25/20	00:52	09:48	(unrelated sample)
SX2919-ECC2918	X071440.D	06/25/20	01:43	10:39	Ending cal 50
SX2919-ECC2918	X071441.D	06/25/20	02:08	11:04	Ending cal 50

Instrument Performance Check (DFTPP)

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2952-DFTPP
Lab File ID: X072388.D
Instrument ID: GCMSX
Injection Date: 08/13/20
Injection Time: 13:21

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	24905	47.7		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	22939	43.9		Pass
70	Less than 2.0% of mass 69	111	0.21	(0.48) [a]	Pass
127	40.0 - 60.0% of mass 198	25242	48.3		Pass
197	Less than 1.0% of mass 198	109	0.21		Pass
198	Base peak, 100% relative abundance	52253	100.0		Pass
199	5.0 - 9.0% of mass 198	3476	6.65		Pass
275	10.0 - 30.0% of mass 198	12102	23.2		Pass
365	1.0 - 100.0% of mass 198	1098	2.10		Pass
441	Present, but less than mass 443	7270	13.9	(84.6) [b]	Pass
442	40.0 - 100.0% of mass 198	44123	84.4		Pass
443	17.0 - 23.0% of mass 442	8592	16.4	(19.5) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
SX2952-CC2918	X072389.D	08/13/20	13:38	00:17	Continuing cal 50
SX2952-CC2918	X072390.D	08/13/20	14:03	00:42	Continuing cal 5
OP81519-BS	X072391.D	08/13/20	14:29	01:08	Blank Spike
OP81519-MB	X072392.D	08/13/20	14:55	01:34	Method Blank
FA77503-1	X072393.D	08/13/20	15:21	02:00	(used for QC only; not part of job FA77689)
OP81519-MS	X072394.D	08/13/20	15:47	02:26	Matrix Spike
OP81519-MSD	X072395.D	08/13/20	16:13	02:52	Matrix Spike Duplicate
OP81516-BS	X072396.D	08/13/20	16:39	03:18	Blank Spike
OP81516-MB	X072397.D	08/13/20	17:05	03:44	Method Blank
ZZZZZZ	X072398.D	08/13/20	17:31	04:10	(unrelated sample)
ZZZZZZ	X072399.D	08/13/20	17:56	04:35	(unrelated sample)
OP81455-MS	X072400.D	08/13/20	18:22	05:01	Matrix Spike
OP81455-MSD	X072401.D	08/13/20	18:48	05:27	Matrix Spike Duplicate
ZZZZZZ	X072403.D	08/13/20	19:40	06:19	(unrelated sample)
OP81545-BS	X072409.D	08/13/20	22:14	08:53	Blank Spike
OP81545-MB	X072410.D	08/13/20	22:39	09:18	Method Blank
FA77689-4	X072411.D	08/13/20	23:05	09:44	FB-02
FA77689-5	X072412.D	08/13/20	23:30	10:09	EB-02
FA77689-6	X072413.D	08/13/20	23:56	10:35	EB-03

Instrument Performance Check (DFTPP)

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample:	SX2952-DFTPP	**Injection Date:**	08/13/20
Lab File ID:	X072388.D	**Injection Time:**	13:21
Instrument ID:	GCMSX		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
FA77689-7	X072414.D	08/14/20	00:21	11:00	EB-04
FA77689-12	X072415.D	08/14/20	00:46	11:25	EB-07
ZZZZZZ	X072416.D	08/14/20	01:12	11:51	(unrelated sample)

Internal Standard Area Summary

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Check Std:	S6F253-CC248	**Injection Date:**	08/13/20
Lab File ID:	6F06541.D	**Injection Time:**	13:25
Instrument ID:	GCMS6F	**Method:**	SW846 8270E

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Initial Cal [a]	302884	6.05	1170478	7.48	637579	9.53	1169544	11.29	1074260	14.59	1069323	16.95
Check Std [b]	402551	6.02	1382487	7.46	667405	9.52	1057047	11.27	984775	14.57	963172	16.92
Upper Limit [c]	805102	6.19	2764974	7.63	1334810	9.69	2114094	11.44	1969550	14.74	1926344	17.09
Lower Limit [d]	201276	5.85	691244	7.29	333703	9.35	528524	11.10	492388	14.40	481586	16.75

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP81540-BS	442622	6.02	1369761	7.46	733620	9.51	1058435	11.27	785374	14.57	731464	16.92
OP81540-MB	369451	6.02	1467872	7.46	630787	9.51	1053724	11.27	792488	14.56	894019	16.92
ZZZZZZ	386086	6.02	1338048	7.46	641857	9.51	1065669	11.27	807931	14.56	907306	16.92
OP81538-BS	397644	6.02	1244035	7.46	598082	9.51	1013646	11.27	771358	14.57	709104	16.92
OP81538-MB	365153	6.02	1289751	7.46	642644	9.51	1049060	11.27	799614	14.56	754550	16.91
FA77698-11	363576	6.02	1310781	7.46	663113	9.51	1127398	11.27	653634	14.60	717244	16.98
FA77698-5	257258	6.03	968259	7.46	504858	9.52	878596	11.27	617725	14.59	609689	16.96
ZZZZZZ	264843	6.03	979169	7.46	516161	9.52	925478	11.27	694763	14.58	653630	16.94
ZZZZZZ	274459	6.03	996955	7.46	527527	9.52	946010	11.27	714595	14.58	679713	16.94
ZZZZZZ	267213	6.03	978322	7.46	514255	9.52	920530	11.27	692495	14.58	665889	16.94
ZZZZZZ	279097	6.03	1019450	7.46	532857	9.52	941082	11.28	672089	14.59	658683	16.96
ZZZZZZ	279152	6.03	1026302	7.46	529481	9.52	931173	11.27	669122	14.59	660164	16.96
FA77689-1	272051	6.03	992787	7.46	512218	9.52	897814	11.28	675509	14.58	856505	16.95
FA77689-2	275670	6.03	1017445	7.46	672572	9.52	949077	11.27	706093	14.58	688681	16.95
FA77689-3	293628	6.03	1067582	7.46	538572	9.52	985069	11.27	739308	14.58	715682	16.95
FA77689-8	280855	6.03	1031060	7.46	529715	9.52	948450	11.28	669836	14.59	673312	16.96
FA77689-9	283748	6.03	1034292	7.46	537481	9.52	950544	11.28	709392	14.58	887860	16.95
FA77689-10	263766	6.03	961756	7.46	509408	9.52	904470	11.28	633909	14.59	639713	16.96
FA77689-11	275195	6.03	1008744	7.46	528183	9.52	940068	11.28	733139	14.58	704806	16.94
ZZZZZZ	278901	6.03	1012455	7.46	521644	9.52	923210	11.28	688302	14.59	672001	16.96
ZZZZZZ	285288	6.03	1040216	7.46	532515	9.52	936850	11.28	674537	14.59	678470	16.96
ZZZZZZ	276610	6.03	1017139	7.46	532811	9.52	940002	11.28	703656	14.58	689676	16.95

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Initial Cal is: S6F248-ICC248 6F06440.D 07/29/20 14:36
(b) Check Std Limit = -50 to + 100% of initial cal area.
(c) Upper Limit = + 100% of check standard area; Retention time + 0.167 minutes.

Internal Standard Area Summary

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Check Std:	S6F253-CC248	**Injection Date:**	08/13/20
Lab File ID:	6F06541.D	**Injection Time:**	13:25
Instrument ID:	GCMS6F	**Method:**	SW846 8270E

Lab	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
Sample ID	**AREA**	**RT**	**AREA**	**RT**	**AREA**	**RT**	**AREA**	**RT**	**AREA**	**RT**	**AREA**	**RT**

(d) Lower Limit = -50% of check standard area; Retention time -0.167 minutes.

Internal Standard Area Summary

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Check Std:	S6F254-CC248	**Injection Date:**	08/14/20
Lab File ID:	6F06573.D	**Injection Time:**	12:47
Instrument ID:	GCMS6F	**Method:**	SW846 8270E

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Initial Cal [a]	302884	6.05	1170478	7.48	637579	9.53	1169544	11.29	1074260	14.59	1069323	16.95
Check Std [b]	244618	6.01	888239	7.45	463309	9.51	829636	11.26	660438	14.57	640184	16.92
Upper Limit [c]	489236	6.18	1776478	7.62	926618	9.68	1659272	11.43	1320876	14.74	1280368	17.09
Lower Limit [d]	122309	5.84	444120	7.28	231655	9.34	414818	11.09	330219	14.40	320092	16.75

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
ZZZZZZ	337839	6.01	1230296	7.45	615684	9.50	1041875	11.26	798198	14.56	747280	16.92
ZZZZZZ	332312	6.01	1229337	7.45	612545	9.50	1069686	11.26	839627	14.56	795852	16.92
FA77512-1	299427	6.01	1068705	7.45	551877	9.50	973190	11.26	771740	14.55	720551	16.92
ZZZZZZ	305178	6.01	1129911	7.45	587969	9.50	1061134	11.26	868510	14.56	807718	16.92
ZZZZZZ	308639	6.01	1134468	7.45	592007	9.50	1055470	11.26	836259	14.56	772706	16.92
ZZZZZZ	375456	6.01	1298657	7.45	599262	9.50	950099	11.26	607805	14.56	584576	16.92
ZZZZZZ	377718	6.01	1323850	7.45	646922	9.50	1140110	11.26	892884	14.56	854760	16.92
FA77698-11	296225	6.01	1054519	7.45	520334	9.50	909234	11.26	697399	14.56	665458	16.92
OP81540-MS	295597	6.01	1040059	7.45	523643	9.50	913729	11.26	681188	14.57	664638	16.92
OP81540-MSD	310269	6.01	1097762	7.45	546552	9.50	945092	11.26	731440	14.56	707907	16.92
ZZZZZZ	311734	6.01	1102213	7.45	564961	9.50	993110	11.26	760247	14.56	724631	16.92
ZZZZZZ	306432	6.01	1101312	7.45	560786	9.50	982155	11.26	725421	14.57	706404	16.93
ZZZZZZ	299075	6.01	1054952	7.45	542645	9.50	953035	11.26	709485	14.56	683865	16.92
ZZZZZZ	296956	6.01	1065323	7.45	539572	9.50	947826	11.26	729352	14.56	692952	16.92
FA77698-5	302050	6.01	1103730	7.45	571539	9.50	996142	11.26	765005	14.56	726271	16.92
OP81538-MS	311335	6.01	1100775	7.45	561116	9.50	999992	11.26	767400	14.56	735911	16.92
OP81538-MSD	319223	6.01	1092575	7.45	552231	9.50	959718	11.26	757400	14.56	733755	16.92

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Initial Cal is: S6F248-ICC248 6F06440.D 07/29/20 14:36
(b) Check Std Limit = -50 to + 100% of initial cal area.
(c) Upper Limit = + 100% of check standard area; Retention time + 0.167 minutes.
(d) Lower Limit = -50% of check standard area; Retention time -0.167 minutes.

Internal Standard Area Summary

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Check Std:	S7G484-CC472	**Injection Date:**	08/13/20
Lab File ID:	7G11163.D	**Injection Time:**	15:10
Instrument ID:	GCMS7G	**Method:**	SW846 8270D BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Initial Cal [a]	25300	4.75	14609	6.24	26093	7.53	42851	9.87	37551	11.64
Check Std [b]	29846	4.63	21211	6.11	39345	7.40	61940	9.73	53721	11.47
Upper Limit [c]	59692	4.80	42422	6.28	78690	7.57	123880	9.90	107442	11.64
Lower Limit [d]	14923	4.46	10606	5.94	19673	7.23	30970	9.56	26861	11.30

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
OP81539-BS	25791	4.63	17802	6.11	33281	7.40	53242	9.72	46399	11.47
OP81539-MB	27377	4.63	19533	6.12	37332	7.40	55775	9.73	47761	11.47
FA77689-1	24780	4.63	16488	6.12	32425	7.40	55374	9.75	42165	11.49
FA77689-2	23549	4.63	16885	6.11	31609	7.40	54008	9.73	42405	11.48
FA77689-3	24202	4.62	18150	6.11	32997	7.39	55521	9.73	39706	11.47
FA77689-8	23095	4.63	17020	6.11	30881	7.40	177034*	9.75	35731	11.51
FA77689-9	23996	4.62	15738	6.11	30697	7.39	52112	9.73	40847	11.49
FA77689-10	23047	4.63	15571	6.12	29996	7.40	299948*	9.76	34971	11.53
FA77689-11	22571	4.63	16247	6.11	28425	7.39	48599	9.72	37382	11.47
ZZZZZZ	23516	4.62	17379	6.11	31283	7.39	52743	9.74	34994	11.50
ZZZZZZ	24316	4.62	18163	6.11	33702	7.39	70928	9.77	29833	11.52
FA77698-5	23089	4.62	16611	6.10	30683	7.39	67216	9.76	23415*	11.51
ZZZZZZ	26852	4.62	18277	6.11	34210	7.39	58987	9.72	26369*	11.47
ZZZZZZ	23851	4.62	16966	6.11	32337	7.39	56245	9.73	22055*	11.48
ZZZZZZ	29788	4.63	20383	6.11	37267	7.40	62405	9.73	27988	11.47
ZZZZZZ	24978	4.63	17008	6.11	31403	7.40	52998	9.73	22912*	11.48
ZZZZZZ	24843	4.63	17283	6.11	32085	7.40	55506	9.73	23212*	11.48
ZZZZZZ	25219	4.63	17208	6.12	32275	7.40	51542	9.73	21317*	11.48
ZZZZZZ	21676	4.63	14175	6.11	26715	7.40	40800	9.72	16790*	11.48
ZZZZZZ	21353	4.63	14153	6.11	26225	7.40	40243	9.73	16677*	11.48
ZZZZZZ	21233	4.62	14253	6.11	26228	7.39	39778	9.72	16115*	11.47

IS 1 = Naphthalene-d8
IS 2 = Acenaphthene-d10
IS 3 = Phenanthrene-d10
IS 4 = Chrysene-d12
IS 5 = Perylene-d12

(a) Initial Cal is: S7G472-ICC472 7G10836.D 07/21/20 14:43
(b) Check Std Limit = -50 to + 100% of initial cal area.
(c) Upper Limit = + 100% of check standard area; Retention time + 0.167 minutes.
(d) Lower Limit = -50% of check standard area; Retention time -0.167 minutes.

Internal Standard Area Summary

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Check Std:	S7G485-CC472	**Injection Date:**	08/14/20
Lab File ID:	7G11193.D	**Injection Time:**	10:20
Instrument ID:	GCMS7G	**Method:**	SW846 8270E BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Initial Cal [a]	25300	4.75	14609	6.24	26093	7.53	42851	9.87	37551	11.64
Check Std [b]	24995	4.63	17353	6.11	34222	7.40	57110	9.72	52293	11.46
Upper Limit [c]	49990	4.80	34706	6.28	68444	7.57	114220	9.89	104586	11.63
Lower Limit [d]	12498	4.46	8677	5.94	17111	7.23	28555	9.55	26147	11.29

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
OP81541-BS	23401	4.63	16448	6.12	31700	7.40	53550	9.73	49108	11.47
OP81541-MB	28326	4.65	19385	6.13	36401	7.42	60170	9.74	53124	11.48
OP81539-MS [e]	25579	4.62	18104	6.10	34840	7.38	69079	9.72	61504	11.47
OP81539-MSD [e]	24966	4.62	18250	6.11	35846	7.39	71178	9.73	58848	11.48
OP81541-MS	24048	4.64	18353	6.13	36340	7.41	83219	9.79	27593	11.54
OP81541-MSD	24939	4.64	18969	6.12	37861	7.40	89422	9.78	31232	11.53
ZZZZZZ	29134	4.65	20569	6.13	39523	7.41	66092	9.74	50007	11.48
ZZZZZZ	26504	4.62	19122	6.10	37169	7.38	65106	9.71	46129	11.46
ZZZZZZ	33039	4.63	24106	6.11	45960	7.40	82970	9.73	58870	11.47
ZZZZZZ	30299	4.62	22280	6.10	42114	7.38	78108	9.72	54732	11.46
ZZZZZZ	29158	4.63	22481	6.11	43368	7.40	90866	9.77	34350	11.52
ZZZZZZ	31293	4.62	24285	6.10	46542	7.39	96589	9.76	31189	11.51
ZZZZZZ	20499	4.63	15580	6.11	29760	7.40	53988	9.73	32172	11.49
FA77698-11	27290	4.62	22349	6.10	45548	7.40	57755	9.80	11606[f]	11.53

IS 1 = Naphthalene-d8
IS 2 = Acenaphthene-d10
IS 3 = Phenanthrene-d10
IS 4 = Chrysene-d12
IS 5 = Perylene-d12

(a) Initial Cal is: S7G472-ICC472 7G10836.D 07/21/20 14:43
(b) Check Std Limit = -50 to + 100% of initial cal area.
(c) Upper Limit = + 100% of check standard area; Retention time + 0.167 minutes.
(d) Lower Limit = -50% of check standard area; Retention time -0.167 minutes.
(e) Dilution required due to matrix interference; extract was viscous.
(f) Outside control limits. Internal standard does not reference target analyte.

Internal Standard Area Summary

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Check Std:	ST1749-CC1745	**Injection Date:**	08/13/20
Lab File ID:	T050176.D	**Injection Time:**	14:42
Instrument ID:	GCMST	**Method:**	SW846 8270D BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Initial Cal [a]	199294	7.17	132212	8.72	232870	10.05	81633	13.02	64685	15.68
Check Std [b]	277199	7.17	162432	8.72	189136	10.05	111673	13.04	85771	15.71
Upper Limit [c]	554398	7.34	324864	8.89	378272	10.22	223346	13.21	171542	15.88
Lower Limit [d]	138600	7.00	81216	8.55	94568	9.88	55837	12.87	42886	15.54

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
OP81544-BS [e]	274789	7.17	143077	8.73	210610	10.05	127021	13.05	100107	15.72
OP81544-MB	207080	7.17	188388	8.72	215722	10.05	125438	13.04	90251	15.71
FA77689-4	186309	7.17	122091	8.72	222525	10.05	130948	13.04	95652	15.70
FA77689-5	297740	7.17	195301	8.72	227078	10.05	131902	13.04	96209	15.71
FA77689-6	176824	7.17	116754	8.72	216539	10.05	124314	13.04	90107	15.71
FA77689-7	301738	7.17	197213	8.72	224439	10.05	127800	13.04	93497	15.71
FA77689-12	262154	7.17	118062	8.72	214106	10.05	123050	13.04	88977	15.71
ZZZZZZ	385262	7.17	268424	8.72	314430	10.05	245473[f]	13.04	180673[f]	15.71
ZZZZZZ	214616	7.17	123879	8.72	231215	10.05	137945	13.04	103264	15.70

IS 1 = Naphthalene-d8
IS 2 = Acenaphthene-D10
IS 3 = Phenanthrene-d10
IS 4 = Chrysene-d12
IS 5 = Perylene-d12

(a) Initial Cal is: ST1745-ICC1745 T050029.D 07/17/20 11:24
(b) Check Std Limit = -50 to + 100% of initial cal area.
(c) Upper Limit = + 100% of check standard area; Retention time + 0.167 minutes.
(d) Lower Limit = -50% of check standard area; Retention time -0.167 minutes.
(e) Insufficient sample for MS/MSD.
(f) Outside control limits. Internal standard does not reference target analyte.

Internal Standard Area Summary

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Check Std:	SX2952-CC2918	**Injection Date:**	08/13/20
Lab File ID:	X072389.D	**Injection Time:**	13:38
Instrument ID:	GCMSX	**Method:**	SW846 8270E

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Initial Cal [a]	170190	6.01	730199	7.43	379384	9.48	636433	11.22	474373	14.50	348798	16.81
Check Std [b]	166017	5.63	649488	7.06	321937	9.10	541016	10.84	424734	14.05	307492	16.23
Upper Limit [c]	332034	5.80	1298976	7.23	643874	9.27	1082032	11.01	849468	14.22	614984	16.40
Lower Limit [d]	83009	5.46	324744	6.89	160969	8.93	270508	10.67	212367	13.88	153746	16.06

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP81519-BS	175432	5.64	654400	7.06	300231	9.10	473800	10.84	326837	14.05	247554	16.23
OP81519-MB	159116	5.63	590401	7.06	283664	9.09	490525	10.84	371475	14.04	297758	16.22
FA77503-1	141042	5.63	524209	7.06	254355	9.09	433145	10.84	322334	14.04	258828	16.23
OP81519-MS	158773	5.63	599216	7.06	277284	9.10	424421	10.84	291907	14.04	226137	16.22
OP81519-MSD	165364	5.64	613940	7.06	284426	9.09	445241	10.84	305305	14.04	236114	16.22
OP81516-BS	140651	5.63	529815	7.06	251693	9.09	414465	10.84	297958	14.04	234857	16.22
OP81516-MB	138899	5.63	528027	7.06	258101	9.09	438063	10.84	318987	14.04	255304	16.22
ZZZZZZ	149993	5.63	565813	7.07	320851	9.10	547669	10.85	400981	14.05	274204	16.23
ZZZZZZ	181397	5.63	668212	7.06	319808	9.09	539420	10.84	453390	14.05	345642	16.24
OP81455-MS	208718	5.64	781570	7.06	393214	9.10	629576	10.84	467310	14.05	333299	16.23
OP81455-MSD	214202	5.64	755432	7.06	393703	9.10	630760	10.84	458611	14.05	337985	16.23
ZZZZZZ	174962	5.63	636553	7.06	305213	9.10	512044	10.84	399759	14.05	305600	16.23
OP81545-BS	188273	5.64	707991	7.06	324729	9.10	510866	10.84	362980	14.05	291500	16.23
OP81545-MB	187920	5.64	678437	7.06	322407	9.10	547185	10.84	389648	14.04	297201	16.23
FA77689-4	173592	5.63	639006	7.06	304520	9.10	515585	10.84	369873	14.04	283019	16.23
FA77689-5	191311	5.63	698131	7.06	330287	9.10	554328	10.84	392555	14.05	300707	16.23
FA77689-6	172392	5.63	628426	7.06	296405	9.09	497625	10.84	351352	14.04	270896	16.23
FA77689-7	169939	5.63	624564	7.06	296460	9.09	493857	10.84	348076	14.04	263936	16.23
FA77689-12	193480	5.63	706781	7.06	332503	9.09	553329	10.84	396254	14.04	299172	16.23
ZZZZZZ	186727	5.63	685234	7.06	321310	9.09	537977	10.84	387695	14.04	292544	16.23

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Initial Cal is: SX2918-ICC2918 X071368.D 06/23/20 15:12
(b) Check Std Limit = -50 to + 100% of initial cal area.
(c) Upper Limit = + 100% of check standard area; Retention time + 0.167 minutes.
(d) Lower Limit = -50% of check standard area; Retention time -0.167 minutes.

Surrogate Recovery Summary

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Method: SW846 8270E **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
FA77689-4	X072411.D	69	70	79
FA77689-5	X072412.D	77	78	86
FA77689-6	X072413.D	78	80	85
FA77689-7	X072414.D	73	76	85
FA77689-12	X072415.D	78	81	89
OP81545-BS	X072409.D	72	76	71
OP81545-MB	X072410.D	81	81	83

Surrogate Compounds	Recovery Limits
S1 = Nitrobenzene-d5	42-108%
S2 = 2-Fluorobiphenyl	40-106%
S3 = Terphenyl-d14	39-121%

Surrogate Recovery Summary

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Method: SW846 8270E **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
FA77689-1	6F06559.D	51	64	74
FA77689-2	6F06560.D	49	44	67
FA77689-3	6F06561.D	47	56	62
FA77689-8	6F06562.D	54	66	75
FA77689-9	6F06563.D	49	58	69
FA77689-10	6F06564.D	55	62	72
FA77689-11	6F06565.D	45	55	70
OP81538-BS	6F06545.D	65	73	77
OP81538-MB	6F06546.D	53	58	71
OP81538-MS	6F06589.D	59	67	69
OP81538-MSD	6F06590.D	36*	40*	43*

Surrogate Compounds	Recovery Limits
S1 = Nitrobenzene-d5	40-105%
S2 = 2-Fluorobiphenyl	43-107%
S3 = Terphenyl-d14	45-119%

Surrogate Recovery Summary

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Method: SW846 8270E BY SIM **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2
FA77689-1	7G11166.D	97	118
FA77689-2	7G11167.D	89	97
FA77689-3	7G11168.D	98	99
FA77689-8	7G11169.D	111	117
FA77689-9	7G11170.D	96	107
FA77689-10	7G11171.D	103	102
FA77689-11	7G11172.D	92	101
OP81539-BS	7G11164.D	102	99
OP81539-MB	7G11165.D	87	98
OP81539-MS	7G11196.D	98	108
OP81539-MSD	7G11197.D	100	113

Surrogate Compounds	Recovery Limits
S1 = 2-Methylnaphthalene-d10	50-150%
S2 = Fluoranthene-d10	50-150%

Surrogate Recovery Summary

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Method: SW846 8270D BY SIM **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2
FA77689-4	T050179.D	70	90
FA77689-5	T050180.D	77	97
FA77689-6	T050181.D	77	98
FA77689-7	T050182.D	68	85
FA77689-12	T050183.D	73	99
OP81544-BS	T050177.D	81	101
OP81544-MB	T050178.D	113	101

Surrogate Compounds	Recovery Limits
S1 = 2-Methylnaphthalene-d10	50-150%
S2 = Fluoranthene-d10	50-150%

Initial Calibration Summary

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: S6F248-ICC248
Lab FileID: 6F06440.D

Response Factor Report MSBNA10

Method : C:\msdchem\1\met...\8270D6F072920.m (RTE Integrator)
Title : SW846 8270D OR EPA 625
Last Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

Calibration Files
5 =6F06437.D 10 =6F06438.D 25 =6F06439.D 50 =6F06440.D
60 =6F06441.D 75 =6F06442.D 100 =6F06443.D 1 =6F06436.D

Compound	5	10	25	50	60	75	100	1	Avg	%RSD
1) I 1,4-Dichlorobenzene-d	ISTD									
2) 1,4-Dioxane	0.575	0.563	0.558	0.580	0.597	0.597	0.682	0.608	0.595	6.61
3) N-nitrosodim	0.783	0.798	0.785	0.815	0.824	0.825	0.938	0.724	0.812	7.45
4) Pyridine	1.464	1.512	1.474	1.545	1.574	1.572	1.807	1.309	1.532	9.13
5) Benzaldehyde	1.207	1.201	1.207	1.272	1.273	1.229	1.212	1.199	1.225	2.51
6) Aniline	2.298	2.273	2.256	2.356	2.394	2.388	2.679	2.121	2.346	6.87
7) 2-Fluorophen	1.444	1.457	1.458	1.530	1.560	1.562	1.774	1.307	1.511	8.89
8) bis(2-Chloro	1.521	1.496	1.461	1.523	1.559	1.541	1.747	1.443	1.536	6.09
9) Phenol-d5	1.741	1.740	1.725	1.811	1.836	1.837	2.060	1.604	1.794	7.33
10) Phenol	2.043	2.032	2.003	2.096	2.119	2.111	2.373	1.912	2.086	6.44
11) 2-Chlorophen	1.489	1.513	1.482	1.559	1.577	1.582	1.806	1.383	1.549	7.90
12) 1,3-Dichloro	1.639	1.621	1.611	1.677	1.704	1.690	1.913	1.544	1.675	6.51
13) 1,4-Dichloro	1.680	1.659	1.631	1.696	1.726	1.706	1.926	1.559	1.698	6.24
14) 1,2-Dichloro	1.575	1.545	1.549	1.600	1.626	1.622	1.835	1.467	1.602	6.69
15) Benzyl alcoh	0.915	0.891	0.908	0.961	0.958	0.979	1.109	0.844	0.945	8.38
16) bis(2-chloro	1.930	1.913	1.850	1.893	1.913	1.901	2.112	1.859	1.921	4.26
17) 2-Methylphen	1.393	1.355	1.325	1.390	1.413	1.409	1.583	1.289	1.395	6.27
18) Acetophenone	2.023	2.042	1.991	2.104	2.110	2.099	2.212	1.962	2.068	3.86
19) Hexachloroet	0.687	0.681	0.671	0.694	0.711	0.697	0.794	0.610	0.693	7.34
20) N-Nitroso-di	1.097	1.078	1.033	1.085	1.091	1.091	1.233	1.073	1.098	5.32
21) 3&4-Methylph	1.443	1.413	1.383	1.442	1.445	1.453	1.646	1.371	1.450	5.87
22) I Naphthalene-d8	ISTD									
23) Nitrobenzene	0.428	0.421	0.421	0.434	0.452	0.448	0.498	0.409	0.439	6.30
24) Nitrobenzene	0.425	0.410	0.416	0.421	0.432	0.431	0.477	0.407	0.427	5.11
25) Isophorone	0.768	0.738	0.732	0.750	0.776	0.774	0.858	0.747	0.768	5.20
26) 2-Nitropheno	0.196	0.195	0.205	0.216	0.223	0.225	0.253	0.170	0.210	11.77
27) 2,4-Dimethyl	0.361	0.351	0.346	0.360	0.370	0.371	0.409	0.347	0.364	5.63
28) O,O,O-Trieth	0.185	0.180	0.182	0.189	0.193	0.195	0.200	0.180	0.188	3.99
29) bis(2-Chloro	0.476	0.452	0.455	0.458	0.473	0.475	0.514	0.459	0.470	4.27
30) Benzoic Acid	0.242	0.270	0.292	0.326	0.339	0.341	0.384	0.129	0.290	27.26
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9995										
Response Ratio = 0.00000 + 0.25630 *A + 0.05047 *A^2										
31) 2,4-Dichloro	0.319	0.309	0.314	0.323	0.330	0.331	0.365	0.301	0.324	6.06
32) 1,2,4-Trichl	0.355	0.343	0.346	0.356	0.369	0.366	0.406	0.341	0.360	5.91
33) alpha-Terpin									0.000	-1.00
34) Naphthalene	1.149	1.110	1.100	1.102	1.136	1.123	1.216	1.118	1.132	3.36
35) 4-Chloroanil	0.491	0.477	0.475	0.490	0.497	0.498	0.542	0.477	0.493	4.42
36) 2,6-Dichloro	0.310	0.303	0.302	0.311	0.320	0.322	0.354	0.297	0.315	5.70
37) Hexachlorobu	0.193	0.187	0.189	0.196	0.200	0.201	0.218	0.198	0.198	4.82
38) Caprolactam	0.122	0.123	0.123	0.130	0.134	0.133	0.138	0.109	0.126	7.30
39) 4-Chloro-3-m	0.326	0.319	0.322	0.336	0.341	0.343	0.381	0.304	0.334	6.86
40) 2-Methylnaph	0.667	0.643	0.644	0.655	0.665	0.665	0.724	0.630	0.662	4.28
41) 1-Methylnaph	0.726	0.701	0.699	0.716	0.740	0.737	0.799	0.701	0.727	4.57
42) 1,2,4,5-Tetr	0.343	0.330	0.328	0.344	0.353	0.354	0.389	0.337	0.347	5.57

Initial Calibration Summary

Job Number: FA77689 **Sample:** S6F248-ICC248
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** 6F06440.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

43) I Acenaphthene-d10 ----------ISTD----------
44) Hexachlorocy 0.361 0.379 0.413 0.432 0.459 0.459 0.509 0.321 0.417 14.62
45) 2,4,6-Trichl 0.417 0.416 0.430 0.436 0.458 0.455 0.502 0.378 0.436 8.36
46) 2,4,5-Trichl 0.441 0.446 0.449 0.463 0.488 0.485 0.534 0.414 0.465 7.93
47) 2-Fluorobiph 1.558 1.507 1.533 1.521 1.576 1.555 1.683 1.575 1.563 3.47
48) 1,1'-Bipheny 1.625 1.630 1.655 1.655 1.733 1.708 1.706 1.652 1.671 2.38
49) 2-Chloronaph 1.303 1.276 1.279 1.271 1.339 1.327 1.439 1.281 1.314 4.28
50) 2-Nitroanili 0.386 0.390 0.409 0.417 0.438 0.436 0.475 0.341 0.412 9.82
51) p-Dinitroben 0.216 0.233 0.257 0.272 0.292 0.291 0.324 0.183 0.258 17.76
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9996
Response Ratio = 0.00000 + 0.22511 *A + 0.03904 *A^2

52) Acenaphthyle 1.987 1.947 1.962 1.947 2.035 2.000 2.165 1.949 1.999 3.69
53) Dimethylphth 1.482 1.436 1.452 1.454 1.521 1.509 1.629 1.460 1.493 4.18
54) m-Dinitroben 0.227 0.237 0.251 0.264 0.281 0.279 0.310 0.166 0.252 17.35
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9996
Response Ratio = 0.00000 + 0.22519 *A + 0.03294 *A^2

55) 2,6-Dinitrot 0.327 0.332 0.344 0.354 0.371 0.368 0.402 0.275 0.347 10.88
56) o-Dinitroben 0.257 0.259 0.258 0.251 0.262 0.255 0.279 0.238 0.257 4.38
57) Acenaphthene 1.341 1.282 1.285 1.277 1.337 1.325 1.437 1.337 1.328 3.90
58) 3-Nitroanili 0.381 0.389 0.396 0.403 0.419 0.424 0.464 0.324 0.400 10.00
59) 2,4-Dinitrop 0.078 0.114 0.166 0.203 0.225 0.233 0.270 0.016 0.163 53.37
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9985
Response Ratio = 0.00000 + 0.11955 *A + 0.06203 *A^2

60) Dibenzofuran 1.870 1.791 1.800 1.775 1.845 1.821 1.962 1.817 1.835 3.25
61) 2,4-Dinitrot 0.423 0.437 0.455 0.475 0.499 0.501 0.541 0.321 0.456 14.67
62) 4-Nitropheno 0.212 0.200 0.213 0.237 0.251 0.249 0.277 0.190 0.229 13.08
63) 2,3,5,6-Tetr 0.318 0.329 0.358 0.372 0.395 0.398 0.436 0.264 0.359 15.14
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9997
Response Ratio = 0.00000 + 0.31902 *A + 0.04612 *A^2

64) 2,3,4,6-Tetr 0.344 0.355 0.370 0.380 0.406 0.401 0.444 0.302 0.375 11.55
65) Fluorene 1.472 1.443 1.454 1.449 1.525 1.504 1.617 1.424 1.486 4.21
66) 4-Chlorophen 0.743 0.705 0.715 0.706 0.738 0.744 0.813 0.716 0.735 4.81
67) Diethylphtha 1.504 1.473 1.464 1.476 1.547 1.541 1.679 1.433 1.514 5.07
68) Thionazin 0.337 0.339 0.347 0.352 0.360 0.355 0.351 0.316 0.345 4.05
69) 4-Nitroanili 0.379 0.389 0.407 0.408 0.429 0.429 0.473 0.320 0.404 11.08

70) I Phenanthrene-d10 ----------ISTD----------
71) 4,6-Dinitro- 0.090 0.112 0.137 0.155 0.167 0.167 0.190 0.047 0.133 35.53
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9991
Response Ratio = 0.00000 + 0.11243 *A + 0.03151 *A^2

72) n-Nitrosodip 0.572 0.563 0.558 0.677 0.588 0.579 0.761 0.676 0.622 11.89
73) Diphenylamin 0.687 0.676 0.669 0.677 0.706 0.695 0.761 0.676 0.693 4.30
74) 1,2-Diphenyl 0.894 0.886 0.869 0.862 0.888 0.871 0.938 0.886 0.887 2.64
75) 2,4,6-Tribro 0.125 0.127 0.132 0.136 0.143 0.142 0.158 0.114 0.135 9.95
76) Sulfotep 0.141 0.146 0.144 0.146 0.150 0.148 0.148 0.135 0.145 3.34
77) Phorate 0.462 0.483 0.488 0.497 0.516 0.513 0.513 0.420 0.487 6.67
78) 4-Bromopheny 0.225 0.225 0.219 0.229 0.238 0.237 0.261 0.232 0.233 5.54
79) Hexachlorobe 0.264 0.254 0.253 0.257 0.268 0.268 0.297 0.272 0.267 5.28
80) Dimethoate 0.314 0.337 0.336 0.349 0.361 0.350 0.355 0.276 0.335 8.37
81) Simazine 0.137 0.139 0.138 0.138 0.142 0.140 0.153 0.129 0.140 4.68
82) Atrazine 0.226 0.230 0.228 0.235 0.245 0.238 0.267 0.216 0.236 6.48
83) Pentachlorop 0.071 0.100 0.127 0.149 0.160 0.160 0.186 0.136 28.94
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9984
Response Ratio = 0.00000 + 0.10221 *A + 0.03362 *A^2

Initial Calibration Summary

Job Number: FA77689 **Sample:** S6F248-ICC248
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** 6F06440.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

```
 84) Phenanthrene 1.199 1.162 1.147 1.157 1.201 1.173 1.261 1.284 1.198   4.17
 85) Anthracene   1.214 1.190 1.183 1.193 1.236 1.203 1.310 1.207 1.217   3.37
 86) Disulfoton   0.489 0.501 0.517 0.516 0.534 0.526 0.534 0.456 0.509   5.20
 87) Carbazole    1.086 1.065 1.068 1.078 1.104 1.101 1.202 1.070 1.097   4.10
 88) Methyl Parat 0.222 0.245 0.270 0.292 0.302 0.296 0.301 0.161 0.261  19.08
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9991
               Response Ratio = 0.00000 + 0.26072 *A + 0.01867 *A^2

 89) Di-n-butylph 1.350 1.347 1.361 1.389 1.435 1.396 1.503 1.277 1.382   4.85
 90) Ethyl Parath 0.142 0.160 0.173 0.185 0.194 0.191 0.195 0.106 0.168  18.50
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9993
               Response Ratio = 0.00000 + 0.16581 *A + 0.01307 *A^2

 91) Fluoranthene 1.229 1.226 1.223 1.250 1.290 1.277 1.398 1.195 1.261   5.01

 92) I   Chrysene-d12          ----------------ISTD--------------------
 93) Benzidine    0.853 0.866 0.839 0.821 0.844 0.815 0.824 0.819 0.835   2.19
 94) Pyrene       1.420 1.400 1.395 1.388 1.440 1.418 1.554 1.447 1.433   3.71
 95) Terphenyl-d1 1.085 1.086 1.089 1.088 1.140 1.143 1.244 1.120 1.124   4.82
 96) Famphur      0.490 0.504 0.480 0.460 0.452 0.420 0.380 0.449 0.454   8.79
 97) Butylbenzylp 0.652 0.655 0.673 0.676 0.713 0.709 0.769 0.644 0.686   6.12
 98) 3,3'-Dichlor 0.494 0.509 0.523 0.523 0.539 0.528 0.562 0.471 0.519   5.35
 99) Benzo[a]anth 1.284 1.296 1.282 1.303 1.364 1.354 1.460 1.379 1.340   4.58
100) Chrysene     1.306 1.271 1.252 1.242 1.294 1.288 1.398 1.353 1.300   4.02
101) bis(2-Ethylh 0.937 0.918 0.929 0.933 0.987 0.975 1.057 0.935 0.959   4.82

102) I   Perylene-d12          ----------------ISTD--------------------
103) Di-n-octylph 1.434 1.464 1.508 1.576 1.693 1.712 1.899 1.371 1.582  11.08
104) Benzo[b]fluo 1.194 1.193 1.213 1.255 1.341 1.366 1.515 1.194 1.284   9.00
105) Benzo[k]fluo 1.300 1.274 1.298 1.317 1.378 1.356 1.492 1.267 1.335   5.54
106) Benzo[a]pyre 1.128 1.112 1.146 1.175 1.238 1.241 1.371 1.127 1.192   7.33
107) Indeno[1,2,3 1.055 1.056 1.070 1.085 1.134 1.145 1.285 1.050 1.110   7.14
108) Dibenz[a,h]a 1.124 1.128 1.139 1.199 1.234 1.224 1.368 1.067 1.185   7.84
109) Benzo[g,h,i] 1.178 1.184 1.168 1.166 1.191 1.183 1.321 1.194 1.198   4.22
 ----------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

           8270D6F072920.m        Thu Jul 30 12:56:54 2020
```

Initial Calibration Verification

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: S6F248-ICV248
Lab FileID: 6F06444.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\S6F248_072920\6F06444.D Vial: 10
Acq On : 29 Jul 2020 4:20 pm Operator: marthav
Sample : icv248-50 Inst : MSBNA10
Misc : op81256,S6F248,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\msdchem\1\met...\8270D6F072920.m (RTE Integrator)
Title : SW846 8270D OR EPA 625
Last Update : Wed Jul 29 16:22:51 2020
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	127	0.00	6.05
2		1,4-Dioxane	50.000	46.216	7.6	121	0.03	2.90
3		N-nitrosodimethylamine	50.000	43.903	12.2	111	0.02	3.22
4		Pyridine		----------NA----------				
5	P	Benzaldehyde	50.000	44.828	10.3	110	0.00	5.57
6		Aniline		----------NA----------				
7	S	2-Fluorophenol		----------NA----------				
8	P	bis(2-Chloroethyl)ether	50.000	44.559	10.9	114	0.00	5.77
9	S	Phenol-d5		----------NA----------				
10	P	Phenol	50.000	39.595	20.8#	100	0.00	5.69
11	P	2-Chlorophenol	50.000	44.471	11.1	112	0.00	5.82
12		1,3-Dichlorobenzene	50.000	45.857	8.3	117	0.00	5.98
13		1,4-Dichlorobenzene	50.000	45.437	9.1	116	0.00	6.06
14		1,2-Dichlorobenzene	50.000	45.284	9.4	115	0.00	6.23
15		Benzyl alcohol		----------NA----------				
16	P	bis(2-chloroisopropyl)eth	50.000	44.816	10.4	116	0.00	6.36
17	P	2-Methylphenol	50.000	40.425	19.2	103	0.00	6.35
18	P	Acetophenone	50.000	43.446	13.1	109	0.00	6.49
19	P	Hexachloroethane	50.000	45.143	9.7	115	0.00	6.60
20	P	N-Nitroso-di-n-propylamin	50.000	42.791	14.4	110	0.00	6.51
21	P	3&4-Methylphenol	100.000	83.784	16.2	103	0.00	6.53
22	I	Naphthalene-d8	40.000	40.000	0.0	121	0.00	7.48
23	S	Nitrobenzene-d5		----------NA----------				
24	P	Nitrobenzene	50.000	44.480	11.0	109	0.00	6.68
25	P	Isophorone	50.000	45.582	8.8	113	0.00	6.96
26	P	2-Nitrophenol	50.000	47.780	4.4	113	0.00	7.05
27	P	2,4-Dimethylphenol	50.000	41.860	16.3	103	0.00	7.12
28		O,O,O-Triethylphosphoroth		----------NA----------				
29	P	bis(2-Chloroethoxy)methan	50.000	42.725	14.5	106	0.00	7.22
		----------	Amount	Calc.	%Drift	----------		
30		Benzoic Acid	100.000	81.252	18.7	100	0.05	7.31
		----------	Amount	Calc.	%Drift	----------		
31	P	2,4-Dichlorophenol	50.000	44.946	10.1	109	0.00	7.33
32		1,2,4-Trichlorobenzene	50.000	46.107	7.8	113	0.00	7.41
33		alpha-Terpineol		----------NA----------				
34	P	Naphthalene	50.000	44.412	11.2	110	0.00	7.51
35	P	4-Chloroaniline		----------NA----------				
36		2,6-Dichlorophenol	50.000	44.311	11.4	108	0.00	7.59
37	P	Hexachlorobutadiene	50.000	47.942	4.1	117	0.00	7.66

Initial Calibration Verification

Job Number: FA77689 **Sample:** S6F248-ICV248
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** 6F06444.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

38	P	Caprolactam	50.000	42.439	15.1	100	0.00	8.00
39	P	4-Chloro-3-methylphenol	50.000	43.093	13.8	104	0.00	8.17
40	P	2-Methylnaphthalene		----------NA----------				
41		1-Methylnaphthalene	50.000	42.797	14.4	105	0.00	8.43
42	P	1,2,4,5-Tetrachlorobenzen	50.000	44.871	10.3	110	0.00	8.51
43	I	Acenaphthene-d10	40.000	40.000	0.0	114	0.00	9.53
44	P	Hexachlorocyclopentadiene	50.000	54.534	-9.1	120	0.00	8.50
45	P	2,4,6-Trichlorophenol	50.000	47.264	5.5	108	0.00	8.65
46	P	2,4,5-Trichlorophenol	50.000	47.628	4.7	109	0.00	8.70
47	S	2-Fluorobiphenyl		----------NA----------				
48	P	1,1'-Biphenyl	50.000	45.739	8.5	105	0.00	8.86
49	P	2-Chloronaphthalene	50.000	45.110	9.8	106	0.00	8.88
50	P	2-Nitroaniline		----------NA----------				

			Amount	Calc.	%Drift			
51		p-Dinitrobenzene		----------NA----------				

			Amount	Calc.	%Drift			
52	P	Acenaphthylene	50.000	49.165	1.7	115	0.00	9.36
53	P	Dimethylphthalate	50.000	44.087	11.8	103	0.00	9.24

			Amount	Calc.	%Drift			
54		m-Dinitrobenzene		----------NA----------				

			Amount	Calc.	%Drift			
55	P	2,6-Dinitrotoluene	50.000	44.436	11.1	99	0.00	9.31
56		o-Dinitrobenzene		----------NA----------				
57	P	Acenaphthene	50.000	44.705	10.6	106	0.00	9.57
58	P	3-Nitroaniline		----------NA----------				

			Amount	Calc.	%Drift			
59	P	2,4-Dinitrophenol	100.000	82.230	17.8	94	0.00	9.62

			Amount	Calc.	%Drift			
60	P	Dibenzofuran		----------NA----------				
61	P	2,4-Dinitrotoluene	50.000	47.506	5.0	104	0.00	9.78
62	P	4-Nitrophenol	100.000	87.747	12.3	90	0.00	9.75

			Amount	Calc.	%Drift			
63		2,3,5,6-Tetrachlorophenol		----------NA----------				

			Amount	Calc.	%Drift			
64	P	2,3,4,6-Tetrachlorophenol	50.000	44.338	11.3	100	0.00	9.93
65	P	Fluorene	50.000	45.537	8.9	107	0.00	10.19
66	P	4-Chlorophenyl-phenylethe	50.000	44.165	11.7	105	0.00	10.20
67	P	Diethylphthalate	50.000	44.593	10.8	104	0.00	10.09
68		Thionazin		----------NA----------				
69	P	4-Nitroaniline		----------NA----------				
70	I	Phenanthrene-d10	40.000	40.000	0.0	109	0.00	11.29

			Amount	Calc.	%Drift			
71	P	4,6-Dinitro-2-methylpheno	100.000	88.804	11.2	100	0.00	10.25

			Amount	Calc.	%Drift			
72	P	n-Nitrosodiphenylamine	50.000	41.363	17.3	83	0.00	10.34
73		Diphenylamine		----------NA----------				
74		1,2-Diphenylhydrazine	50.000	44.895	10.2	100	0.00	10.38
75	S	2,4,6-Tribromophenol		----------NA----------				

Initial Calibration Verification

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: S6F248-ICV248
Lab FileID: 6F06444.D

76		Sulfotep		----------NA----------					
77		Phorate		----------NA----------					
78	P	4-Bromophenyl-phenylether	50.000	47.065	5.9	104	0.00	10.77
79	P	Hexachlorobenzene	50.000	45.472	9.1	103	0.00	10.83
80		Dimethoate		----------NA----------					
81		Simazine		----------NA----------					
82	P	Atrazine	50.000	44.646	10.7	97	0.00	11.00
		----------	Amount	Calc.	%Drift		----------		
83	P	Pentachlorophenol	100.000	87.054	12.9	97	0.00	11.07
		----------	Amount	Calc.	%Drift		----------		
84	P	Phenanthrene	50.000	44.999	10.0	101	0.00	11.32
85	P	Anthracene	50.000	43.934	12.1	97	0.00	11.38
86		Disulfoton		----------NA----------					
87	P	Carbazole		----------NA----------					
		----------	Amount	Calc.	%Drift		----------		
88		Methyl Parathion		----------NA----------					
		----------	Amount	Calc.	%Drift		----------		
89	P	Di-n-butylphthalate	50.000	45.321	9.4	98	0.00	12.04
		----------	Amount	Calc.	%Drift		----------		
90		Ethyl Parathion		----------NA----------					
		----------	Amount	Calc.	%Drift		----------		
91	P	Fluoranthene	50.000	44.168	11.7	97	0.00	12.73
92	I	Chrysene-d12	40.000	40.000	0.0	98	0.00	14.59
93		Benzidine		----------NA----------					
94	P	Pyrene	50.000	48.366	3.3	98	0.00	12.99
95	S	Terphenyl-d14		----------NA----------					
96		Famphur		----------NA----------					
97	P	Butylbenzylphthalate	50.000	47.452	5.1	94	0.00	13.88
98	P	3,3'-Dichlorobenzidine		----------NA----------					
99	P	Benzo[a]anthracene	50.000	45.797	8.4	92	0.00	14.58
100	P	Chrysene	50.000	46.737	6.5	96	0.00	14.63
101	P	bis(2-Ethylhexyl)phthalat	50.000	47.144	5.7	95	0.00	14.73
102	I	Perylene-d12	40.000	40.000	0.0	94	0.00	16.95
103	P	Di-n-octylphthalate	50.000	49.690	0.6	93	0.00	15.80
104	P	Benzo[b]fluoranthene	50.000	46.616	6.8	89	0.00	16.31
105	P	Benzo[k]fluoranthene	50.000	47.600	4.8	90	0.00	16.36
106	P	Benzo[a]pyrene	50.000	46.589	6.8	88	0.00	16.86
107	P	Indeno[1,2,3-cd]pyrene	50.000	44.889	10.2	86	0.00	18.58
108	P	Dibenz[a,h]anthracene	50.000	44.387	11.2	82	0.00	18.63
109	P	Benzo[g,h,i]perylene	50.000	44.815	10.4	86	0.00	18.95

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6F06440.D 8270D6F072920.m Thu Jul 30 12:08:40 2020

Initial Calibration Verification

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: S6F248-ICV248
Lab FileID: 6F06445.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\S6F248_072920\6F06445.D Vial: 11
Acq On : 29 Jul 2020 4:46 pm Operator: marthav
Sample : icv248-50 Inst : MSBNA10
Misc : op81256,S6F248,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\msdchem\1\met...\8270D6F072920.m (RTE Integrator)
Title : SW846 8270D OR EPA 625
Last Update : Wed Jul 29 16:22:51 2020
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	107	0.00	6.04
2		1,4-Dioxane		----------NA----------				
3		N-nitrosodimethylamine		----------NA----------				
4		Pyridine	50.000	46.795	6.4	100	0.00	3.23
5	P	Benzaldehyde		----------NA----------				
6		Aniline	50.000	42.333	15.3	91	0.00	5.69
7	S	2-Fluorophenol		----------NA----------				
8	P	bis(2-Chloroethyl)ether		----------NA----------				
9	S	Phenol-d5		----------NA----------				
10	P	Phenol		----------NA----------				
11	P	2-Chlorophenol		----------NA----------				
12		1,3-Dichlorobenzene		----------NA----------				
13		1,4-Dichlorobenzene		----------NA----------				
14		1,2-Dichlorobenzene		----------NA----------				
15		Benzyl alcohol	50.000	47.296	5.4	100	0.00	6.21
16	P	bis(2-chloroisopropyl)eth		----------NA----------				
17	P	2-Methylphenol		----------NA----------				
18	P	Acetophenone		----------NA----------				
19	P	Hexachloroethane		----------NA----------				
20	P	N-Nitroso-di-n-propylamin		----------NA----------				
21	P	3&4-Methylphenol		----------NA----------				
22	I	Naphthalene-d8	40.000	40.000	0.0	109	0.00	7.47
23	S	Nitrobenzene-d5		----------NA----------				
24	P	Nitrobenzene		----------NA----------				
25	P	Isophorone		----------NA----------				
26	P	2-Nitrophenol		----------NA----------				
27	P	2,4-Dimethylphenol		----------NA----------				
28		O,O,O-Triethylphosphoroth		----------NA----------				
29	P	bis(2-Chloroethoxy)methan		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
30		Benzoic Acid		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
31	P	2,4-Dichlorophenol		----------NA----------				
32		1,2,4-Trichlorobenzene		----------NA----------				
33		alpha-Terpineol		----------NA----------				
34	P	Naphthalene		----------NA----------				
35	P	4-Chloroaniline	50.000	44.395	11.2	97	0.00	7.58
36		2,6-Dichlorophenol		----------NA----------				
37	P	Hexachlorobutadiene		----------NA----------				

Initial Calibration Verification

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: S6F248-ICV248
Lab FileID: 6F06445.D

38	P	Caprolactam		----------NA----------					
39	P	4-Chloro-3-methylphenol		----------NA----------					
40	P	2-Methylnaphthalene	50.000	43.358	13.3	95	0.00	8.31	
41		1-Methylnaphthalene		----------NA----------					
42	P	1,2,4,5-Tetrachlorobenzen		----------NA----------					
43	I	Acenaphthene-d10	40.000	40.000	0.0	108	0.00	9.53	
44	P	Hexachlorocyclopentadiene		----------NA----------					
45	P	2,4,6-Trichlorophenol		----------NA----------					
46	P	2,4,5-Trichlorophenol		----------NA----------					
47	S	2-Fluorobiphenyl		----------NA----------					
48	P	1,1'-Biphenyl		----------NA----------					
49	P	2-Chloronaphthalene		----------NA----------					
50	P	2-Nitroaniline	50.000	57.272	-14.5	121	0.00	9.01	
		---------- Amount	Calc.	%Drift	----------				
51		p-Dinitrobenzene		----------NA----------					
		---------- Amount	Calc.	%Drift	----------				
52	P	Acenaphthylene		----------NA----------					
53	P	Dimethylphthalate		----------NA----------					
		---------- Amount	Calc.	%Drift	----------				
54		m-Dinitrobenzene	50.000	44.477	11.0	95	-0.01	9.26	
		---------- Amount	Calc.	%Drift	----------				
55	P	2,6-Dinitrotoluene		----------NA----------					
56		o-Dinitrobenzene		----------NA----------					
57	P	Acenaphthene		----------NA----------					
58	P	3-Nitroaniline	50.000	47.397	5.2	101	0.00	9.50	
		---------- Amount	Calc.	%Drift	----------				
59	P	2,4-Dinitrophenol		----------NA----------					
		---------- Amount	Calc.	%Drift	----------				
60	P	Dibenzofuran	50.000	43.783	12.4	97	0.00	9.78	
61	P	2,4-Dinitrotoluene		----------NA----------					
62	P	4-Nitrophenol		----------NA----------					
		---------- Amount	Calc.	%Drift	----------				
63		2,3,5,6-Tetrachlorophenol		----------NA----------					
		---------- Amount	Calc.	%Drift	----------				
64	P	2,3,4,6-Tetrachlorophenol		----------NA----------					
65	P	Fluorene		----------NA----------					
66	P	4-Chlorophenyl-phenylethe		----------NA----------					
67	P	Diethylphthalate		----------NA----------					
68		Thionazin		----------NA----------					
69	P	4-Nitroaniline	50.000	46.067	7.9	98	-0.02	10.22	
70	I	Phenanthrene-d10	40.000	40.000	0.0	109	0.00	11.29	
		---------- Amount	Calc.	%Drift	----------				
71	P	4,6-Dinitro-2-methylpheno		----------NA----------					
		---------- Amount	Calc.	%Drift	----------				
72	P	n-Nitrosodiphenylamine	50.000	54.035	-8.1	108	0.00	10.34	
73		Diphenylamine	50.000	48.461	3.1	108	0.00	10.34	
74		1,2-Diphenylhydrazine		----------NA----------					
75	S	2,4,6-Tribromophenol		----------NA----------					

Initial Calibration Verification

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: S6F248-ICV248
Lab FileID: 6F06445.D

76		Sulfotep			NA				
77		Phorate			NA				
78	P	4-Bromophenyl-phenylether			NA				
79	P	Hexachlorobenzene			NA				
80		Dimethoate			NA				
81		Simazine			NA				
82	P	Atrazine			NA				
			Amount	Calc.	%Drift				
83	P	Pentachlorophenol			NA				
			Amount	Calc.	%Drift				
84	P	Phenanthrene			NA				
85	P	Anthracene			NA				
86		Disulfoton			NA				
87	P	Carbazole	50.000	44.980	10.0	99	0.00	11.58	
			Amount	Calc.	%Drift				
88		Methyl Parathion			NA				
			Amount	Calc.	%Drift				
89	P	Di-n-butylphthalate			NA				
			Amount	Calc.	%Drift				
90		Ethyl Parathion			NA				
			Amount	Calc.	%Drift				
91	P	Fluoranthene			NA				
92	I	Chrysene-d12	40.000	40.000	0.0	108	0.00	14.59	
93		Benzidine	50.000	54.478	-9.0	119	0.00	12.91	
94	P	Pyrene			NA				
95	S	Terphenyl-d14			NA				
96		Famphur			NA				
97	P	Butylbenzylphthalate			NA				
98	P	3,3'-Dichlorobenzidine	50.000	48.599	2.8	104	0.00	14.57	
99	P	Benzo[a]anthracene			NA				
100	P	Chrysene			NA				
101	P	bis(2-Ethylhexyl)phthalat			NA				
102	I	Perylene-d12	40.000	40.000	0.0	105	0.00	16.95	
103	P	Di-n-octylphthalate			NA				
104	P	Benzo[b]fluoranthene			NA				
105	P	Benzo[k]fluoranthene			NA				
106	P	Benzo[a]pyrene			NA				
107	P	Indeno[1,2,3-cd]pyrene			NA				
108	P	Dibenz[a,h]anthracene			NA				
109	P	Benzo[g,h,i]perylene			NA				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6F06440.D 8270D6F072920.m Thu Jul 30 12:08:42 2020

Continuing Calibration Summary

Job Number: FA77689 **Sample:** S6F253-CC248
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** 6F06541.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\ed...2020\s6f253\6F06541.d Vial: 2
Acq On : 13 Aug 2020 1:25 pm Operator: marthav
Sample : cc248-50 Inst : MSBNA10
Misc : op81484,S6F253,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\msdchem\1\met...\8270D6F072920.m (RTE Integrator)
Title : SW846 8270D OR EPA 625
Last Update : Wed Jul 29 16:22:51 2020
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	133	0.00	6.02
2		1,4-Dioxane	0.595	0.641	-7.7	147	0.00	2.85
3		N-nitrosodimethylamine	0.812	0.657	19.1	107	0.00	3.18
4		Pyridine	1.532	1.610	-5.1	139	0.00	3.22
5	P	Benzaldehyde	1.225	1.125	8.2	118	0.00	5.55
6		Aniline	2.346	2.108	10.1	119	0.00	5.67
7	S	2-Fluorophenol	1.511	1.497	0.9	130	0.00	4.65
8	P	bis(2-Chloroethyl)ether	1.536	1.464	4.7	128	0.00	5.75
9	S	Phenol-d5	1.794	1.629	9.2	120	0.00	5.67
10	P	Phenol	2.086	1.883	9.7	119	0.00	5.68
11	P	2-Chlorophenol	1.549	1.497	3.4	128	0.00	5.80
12		1,3-Dichlorobenzene	1.675	1.652	1.4	131	0.00	5.96
13		1,4-Dichlorobenzene	1.698	1.661	2.2	130	0.00	6.05
14		1,2-Dichlorobenzene	1.602	1.562	2.5	130	0.00	6.21
15		Benzyl alcohol	0.945	0.880	6.9	122	0.00	6.19
16	P	bis(2-chloroisopropyl)eth	1.921	1.803	6.1	127	0.00	6.34
17	P	2-Methylphenol	1.395	1.259	9.7	120	0.00	6.33
18	P	Acetophenone	2.068	1.860	10.1	118	0.00	6.48
19	P	Hexachloroethane	0.693	0.665	4.0	127	0.00	6.59
20	P	N-Nitroso-di-n-propylamin	1.098	0.962	12.4	118	0.00	6.49
21	P	3&4-Methylphenol	1.450	1.286	11.3	119	0.00	6.51
22	I	Naphthalene-d8	1.000	1.000	0.0	118	0.00	7.46
23	S	Nitrobenzene-d5	0.439	0.438	0.2	119	0.00	6.64
24	P	Nitrobenzene	0.427	0.424	0.7	119	0.00	6.67
25	P	Isophorone	0.768	0.743	3.3	117	0.00	6.94
26	P	2-Nitrophenol	0.210	0.231	-10.0	127	0.00	7.02
27	P	2,4-Dimethylphenol	0.364	0.354	2.7	116	0.00	7.10
28		O,O,O-Triethylphosphoroth	0.188	0.195	-3.7	122	0.00	7.17
29	P	bis(2-Chloroethoxy)methan	0.470	0.469	0.2	121	0.00	7.21
			True	Calc.	% Drift			
30		Benzoic Acid	50.000	42.174	15.7	95	0.00	7.23
			AvgRF	CCRF	% Dev			
31	P	2,4-Dichlorophenol	0.324	0.317	2.2	116	0.00	7.32
32		1,2,4-Trichlorobenzene	0.360	0.370	-2.8	123	0.00	7.40
33		alpha-Terpineol		----------NA----------				
34	P	Naphthalene	1.132	1.121	1.0	120	0.00	7.48
35	P	4-Chloroaniline	0.493	0.457	7.3	110	0.00	7.56
36		2,6-Dichlorophenol	0.315	0.306	2.9	116	0.00	7.57
37	P	Hexachlorobutadiene	0.198	0.204	-3.0	123	0.00	7.63

Continuing Calibration Summary

Job Number: FA77689 **Sample:** S6F253-CC248
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** 6F06541.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

38	P	Caprolactam	0.126	0.118	6.3	107	0.00	7.99
39	P	4-Chloro-3-methylphenol	0.334	0.306	8.4	108	0.00	8.15
40	P	2-Methylnaphthalene	0.662	0.635	4.1	115	0.00	8.29
41		1-Methylnaphthalene	0.727	0.687	5.5	113	0.00	8.40
42	P	1,2,4,5-Tetrachlorobenzen	0.347	0.336	3.2	115	0.00	8.49
43	I	Acenaphthene-d10	1.000	1.000	0.0	105	0.00	9.52
44	P	Hexachlorocyclopentadiene	0.417	0.453	-8.6	110	0.00	8.48
45	P	2,4,6-Trichlorophenol	0.436	0.462	-6.0	111	0.00	8.63
46	P	2,4,5-Trichlorophenol	0.465	0.480	-3.2	108	0.00	8.68
47	S	2-Fluorobiphenyl	1.563	1.634	-4.5	112	0.00	8.74
48	P	1,1'-Biphenyl	1.671	1.729	-3.5	109	0.00	8.85
49	P	2-Chloronaphthalene	1.314	1.347	-2.5	111	0.00	8.86
50	P	2-Nitroaniline	0.412	0.386	6.3	97	0.00	8.99
			True	Calc.	% Drift			
51		p-Dinitrobenzene	50.000	49.491	1.0	104	0.00	9.16
			AvgRF	CCRF	% Dev			
52	P	Acenaphthylene	1.999	2.014	-0.8	108	0.00	9.35
53	P	Dimethylphthalate	1.493	1.474	1.3	106	0.00	9.23
			True	Calc.	% Drift			
54		m-Dinitrobenzene	50.000	51.072	-2.1	108	0.00	9.25
			AvgRF	CCRF	% Dev			
55	P	2,6-Dinitrotoluene	0.347	0.361	-4.0	107	0.00	9.29
56		o-Dinitrobenzene	0.257	0.214	16.7	89	0.00	9.35
57	P	Acenaphthene	1.328	1.310	1.4	107	0.00	9.55
58	P	3-Nitroaniline	0.400	0.390	2.5	101	0.00	9.48
			True	Calc.	% Drift			
59	P	2,4-Dinitrophenol	50.000	42.420	15.2	81	0.00	9.60
			AvgRF	CCRF	% Dev			
60	P	Dibenzofuran	1.835	1.640	10.6	97	0.00	9.76
61	P	2,4-Dinitrotoluene	0.456	0.417	8.6	92	0.00	9.76
62	P	4-Nitrophenol	0.229	0.176	23.1#	78	0.00	9.73
			True	Calc.	% Drift			
63		2,3,5,6-Tetrachlorophenol	50.000	47.689	4.6	100	0.00	9.86
			AvgRF	CCRF	% Dev			
64	P	2,3,4,6-Tetrachlorophenol	0.375	0.365	2.7	101	0.00	9.91
65	P	Fluorene	1.486	1.286	13.5	93	0.00	10.16
66	P	4-Chlorophenyl-phenylethe	0.735	0.663	9.8	98	0.00	10.18
67	P	Diethylphthalate	1.514	1.302	14.0	92	0.00	10.07
68		Thionazin	0.345	0.282	18.3	84	0.00	10.16
69	P	4-Nitroaniline	0.404	0.361	10.6	93	0.00	10.21
70	I	Phenanthrene-d10	1.000	1.000	0.0	90	0.00	11.27
			True	Calc.	% Drift			
71	P	4,6-Dinitro-2-methylpheno	50.000	50.526	-1.1	90	0.00	10.24
			AvgRF	CCRF	% Dev			
72	P	n-Nitrosodiphenylamine	0.622	0.718	-15.4	96	0.00	10.32
73		Diphenylamine	0.693	0.718	-3.6	96	0.00	10.32
74		1,2-Diphenylhydrazine	0.887	0.817	7.9	86	0.00	10.37
75	S	2,4,6-Tribromophenol	0.135	0.145	-7.4	97	0.00	10.45

Continuing Calibration Summary

Job Number: FA77689 **Sample:** S6F253-CC248
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** 6F06541.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

76		Sulfotep	0.145	0.135	6.9	83	0.00	10.54
77		Phorate	0.487	0.486	0.2	88	0.00	10.68
78	P	4-Bromophenyl-phenylether	0.233	0.246	-5.6	97	0.00	10.76
79	P	Hexachlorobenzene	0.267	0.279	-4.5	98	0.00	10.81
80		Dimethoate	0.335	0.328	2.1	85	0.00	10.88
81		Simazine	0.140	0.142	-1.4	93	0.00	10.94
82	P	Atrazine	0.236	0.239	-1.3	92	0.00	10.99
		----------	True	Calc.	% Drift	----------		
83	P	Pentachlorophenol	50.000	56.182	-12.4	102	0.00	11.06
		----------	AvgRF	CCRF	% Dev	----------		
84	P	Phenanthrene	1.198	1.145	4.4	89	0.00	11.30
85	P	Anthracene	1.217	1.201	1.3	91	0.00	11.36
86		Disulfoton	0.509	0.503	1.2	88	0.00	11.31
87	P	Carbazole	1.097	1.055	3.8	88	0.00	11.57
		----------	True	Calc.	% Drift	----------		
88		Methyl Parathion	50.000	48.706	2.6	86	0.00	11.75
		----------	AvgRF	CCRF	% Dev	----------		
89	P	Di-n-butylphthalate	1.382	1.325	4.1	86	0.00	12.02
		----------	True	Calc.	% Drift	----------		
90		Ethyl Parathion	50.000	51.276	-2.6	92	0.00	12.22
		----------	AvgRF	CCRF	% Dev	----------		
91	P	Fluoranthene	1.261	1.217	3.5	88	0.00	12.71
92	I	Chrysene-d12	1.000	1.000	0.0	92	0.00	14.57
93		Benzidine	0.835	0.695	16.8	78	0.00	12.89
94	P	Pyrene	1.433	1.351	5.7	89	0.00	12.97
95	S	Terphenyl-d14	1.124	1.034	8.0	87	0.00	13.20
96		Famphur	0.454	0.399	12.1	79	0.00	13.76
97	P	Butylbenzylphthalate	0.686	0.592	13.7	80	0.00	13.85
98	P	3,3'-Dichlorobenzidine	0.519	0.525	-1.2	92	0.00	14.55
99	P	Benzo[a]anthracene	1.340	1.334	0.4	94	0.00	14.55
100	P	Chrysene	1.300	1.303	-0.2	96	0.00	14.61
101	P	bis(2-Ethylhexyl)phthalat	0.959	0.954	0.5	94	0.00	14.70
102	I	Perylene-d12	1.000	1.000	0.0	90	0.00	16.92
103	P	Di-n-octylphthalate	1.582	1.601	-1.2	92	0.00	15.77
104	P	Benzo[b]fluoranthene	1.284	1.251	2.6	90	0.00	16.28
105	P	Benzo[k]fluoranthene	1.335	1.303	2.4	89	0.00	16.34
106	P	Benzo[a]pyrene	1.192	1.199	-0.6	92	0.00	16.83
107	P	Indeno[1,2,3-cd]pyrene	1.110	1.195	-7.7	99	0.00	18.56
108	P	Dibenz[a,h]anthracene	1.185	1.252	-5.7	94	0.00	18.61
109	P	Benzo[g,h,i]perylene	1.198	1.289	-7.6	100	0.00	18.92

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6F06440.D 8270D6F072920.m Fri Aug 14 04:41:16 2020

Continuing Calibration Summary

Job Number: FA77689 **Sample:** S6F254-CC248
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** 6F06573.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\S6F254_081420\6F06573.D Vial: 2
Acq On : 14 Aug 2020 12:47 pm Operator: marthav
Sample : cc248-50 Inst : MSBNA10
Misc : op81484,S6F254,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\msdchem\1\met...\8270D6F072920.m (RTE Integrator)
Title : SW846 8270D OR EPA 625
Last Update : Wed Jul 29 16:22:51 2020
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	81	0.00	6.01
2		1,4-Dioxane	0.595	0.606	-1.8	84	-0.02	2.83
3		N-nitrosodimethylamine	0.812	0.591	27.2#	59	-0.01	3.17
4		Pyridine	1.532	1.564	-2.1	82	-0.01	3.21
5	P	Benzaldehyde	1.225	1.251	-2.1	79	0.00	5.54
6		Aniline	2.346	2.214	5.6	76	0.00	5.66
7	S	2-Fluorophenol	1.511	1.566	-3.6	83	0.00	4.64
8	P	bis(2-Chloroethyl)ether	1.536	1.529	0.5	81	0.00	5.74
9	S	Phenol-d5	1.794	1.731	3.5	77	0.00	5.66
10	P	Phenol	2.086	2.018	3.3	78	0.00	5.68
11	P	2-Chlorophenol	1.549	1.604	-3.6	83	0.00	5.79
12		1,3-Dichlorobenzene	1.675	1.723	-2.9	83	0.00	5.95
13		1,4-Dichlorobenzene	1.698	1.732	-2.0	82	0.00	6.03
14		1,2-Dichlorobenzene	1.602	1.634	-2.0	83	0.00	6.20
15		Benzyl alcohol	0.945	0.983	-4.0	83	0.00	6.18
16	P	bis(2-chloroisopropyl)eth	1.921	1.612	16.1	69	0.00	6.33
17	P	2-Methylphenol	1.395	1.331	4.6	77	0.01	6.33
18	P	Acetophenone	2.068	1.992	3.7	76	0.00	6.47
19	P	Hexachloroethane	0.693	0.668	3.6	78	0.00	6.57
20	P	N-Nitroso-di-n-propylamin	1.098	0.997	9.2	74	0.00	6.48
21	P	3&4-Methylphenol	1.450	1.416	2.3	79	0.01	6.51
22	I	Naphthalene-d8	1.000	1.000	0.0	76	0.00	7.45
23	S	Nitrobenzene-d5	0.439	0.435	0.9	76	0.00	6.63
24	P	Nitrobenzene	0.427	0.414	3.0	75	0.00	6.66
25	P	Isophorone	0.768	0.749	2.5	76	0.00	6.93
26	P	2-Nitrophenol	0.210	0.242	-15.2	85	0.00	7.02
27	P	2,4-Dimethylphenol	0.364	0.374	-2.7	79	0.00	7.10
28		O,O,O-Triethylphosphoroth	0.188	0.199	-5.9	80	0.00	7.16
29	P	bis(2-Chloroethoxy)methan	0.470	0.472	-0.4	78	0.00	7.20
		----------	Amount	Calc.	%Drift	----------		
30		Benzoic Acid	50.000	49.110	1.8	73	0.00	7.23
		----------	AvgRF	CCRF	%Dev	----------		
31	P	2,4-Dichlorophenol	0.324	0.341	-5.2	80	0.00	7.31
32		1,2,4-Trichlorobenzene	0.360	0.380	-5.6	81	0.00	7.39
33		alpha-Terpineol		----------NA----------				
34	P	Naphthalene	1.132	1.148	-1.4	79	0.00	7.47
35	P	4-Chloroaniline	0.493	0.494	-0.2	77	0.00	7.55
36		2,6-Dichlorophenol	0.315	0.325	-3.2	79	0.00	7.56
37	P	Hexachlorobutadiene	0.198	0.214	-8.1	83	0.00	7.62

Continuing Calibration Summary

Job Number: FA77689 **Sample:** S6F254-CC248
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** 6F06573.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

38	P	Caprolactam	0.126	0.131	-4.0	77	0.00	7.99
39	P	4-Chloro-3-methylphenol	0.334	0.347	-3.9	78	0.00	8.15
40	P	2-Methylnaphthalene	0.662	0.675	-2.0	78	0.00	8.28
41		1-Methylnaphthalene	0.727	0.736	-1.2	78	0.00	8.40
42	P	1,2,4,5-Tetrachlorobenzen	0.347	0.361	-4.0	80	0.00	8.48
43	I	Acenaphthene-d10	1.000	1.000	0.0	73	0.00	9.51
44	P	Hexachlorocyclopentadiene	0.417	0.491	-17.7	83	0.00	8.47
45	P	2,4,6-Trichlorophenol	0.436	0.483	-10.8	80	0.00	8.63
46	P	2,4,5-Trichlorophenol	0.465	0.511	-9.9	80	0.00	8.68
47	S	2-Fluorobiphenyl	1.563	1.631	-4.4	78	0.00	8.73
48	P	1,1'-Biphenyl	1.671	1.719	-2.9	75	0.00	8.84
49	P	2-Chloronaphthalene	1.314	1.357	-3.3	78	0.00	8.85
50	P	2-Nitroaniline	0.412	0.396	3.9	69	0.00	8.99
		----------	Amount	Calc.	%Drift	----------		
51		p-Dinitrobenzene	50.000	50.704	-1.4	74	0.00	9.16
		----------	AvgRF	CCRF	%Dev	----------		
52	P	Acenaphthylene	1.999	2.056	-2.9	77	0.00	9.33
53	P	Dimethylphthalate	1.493	1.565	-4.8	78	0.00	9.22
		----------	Amount	Calc.	%Drift	----------		
54		m-Dinitrobenzene	50.000	54.420	-8.8	81	0.00	9.24
		----------	AvgRF	CCRF	%Dev	----------		
55	P	2,6-Dinitrotoluene	0.347	0.390	-12.4	80	0.00	9.28
56		o-Dinitrobenzene	0.257	0.207	19.5	60	0.00	9.34
57	P	Acenaphthene	1.328	1.349	-1.6	77	0.00	9.54
58	P	3-Nitroaniline	0.400	0.426	-6.5	77	0.00	9.48
		----------	Amount	Calc.	%Drift	----------		
59	P	2,4-Dinitrophenol	50.000	58.877	-17.8	89	0.00	9.60
		----------	AvgRF	CCRF	%Dev	----------		
60	P	Dibenzofuran	1.835	1.850	-0.8	76	0.00	9.75
61	P	2,4-Dinitrotoluene	0.456	0.497	-9.0	76	0.00	9.76
62	P	4-Nitrophenol	0.229	0.219	4.4	67	0.00	9.73
		----------	Amount	Calc.	%Drift	----------		
63		2,3,5,6-Tetrachlorophenol	50.000	54.477	-9.0	81	0.00	9.85
		----------	AvgRF	CCRF	%Dev	----------		
64	P	2,3,4,6-Tetrachlorophenol	0.375	0.422	-12.5	81	0.00	9.91
65	P	Fluorene	1.486	1.472	0.9	74	0.00	10.15
66	P	4-Chlorophenyl-phenylethe	0.735	0.754	-2.6	78	0.00	10.17
67	P	Diethylphthalate	1.514	1.571	-3.8	77	0.00	10.06
68		Thionazin	0.345	0.329	4.6	68	0.00	10.15
69	P	4-Nitroaniline	0.404	0.429	-6.2	76	0.00	10.21
70	I	Phenanthrene-d10	1.000	1.000	0.0	71	0.00	11.26
		----------	Amount	Calc.	%Drift	----------		
71	P	4,6-Dinitro-2-methylpheno	50.000	58.044	-16.1	84	0.00	10.24
		----------	AvgRF	CCRF	%Dev	----------		
72	P	n-Nitrosodiphenylamine	0.622	0.732	-17.7	77	0.00	10.32
73		Diphenylamine	0.693	0.732	-5.6	77	0.00	10.32
74		1,2-Diphenylhydrazine	0.887	0.818	7.8	67	0.00	10.36
75	S	2,4,6-Tribromophenol	0.135	0.151	-11.9	79	0.00	10.45

Continuing Calibration Summary

Job Number: FA77689 **Sample:** S6F254-CC248
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** 6F06573.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

76		Sulfotep	0.145	0.137	5.5	66	0.00	10.53
77		Phorate	0.487	0.483	0.8	69	0.00	10.67
78	P	4-Bromophenyl-phenylether	0.233	0.253	-8.6	78	0.00	10.75
79	P	Hexachlorobenzene	0.267	0.287	-7.5	79	0.00	10.80
80		Dimethoate	0.335	0.341	-1.8	69	0.00	10.88
81		Simazine	0.140	0.147	-5.0	75	0.00	10.94
82	P	Atrazine	0.236	0.248	-5.1	75	0.00	10.98
		----------	Amount	Calc.	%Drift	----------		
83	P	Pentachlorophenol	50.000	56.133	-12.3	80	0.00	11.05
		----------	AvgRF	CCRF	%Dev	----------		
84	P	Phenanthrene	1.198	1.179	1.6	72	0.00	11.29
85	P	Anthracene	1.217	1.246	-2.4	74	0.00	11.35
86		Disulfoton	0.509	0.508	0.2	70	0.00	11.30
87	P	Carbazole	1.097	1.114	-1.5	73	0.00	11.56
		----------	Amount	Calc.	%Drift	----------		
88		Methyl Parathion	50.000	51.731	-3.5	72	0.00	11.74
		----------	AvgRF	CCRF	%Dev	----------		
89	P	Di-n-butylphthalate	1.382	1.418	-2.6	72	0.00	12.01
		----------	Amount	Calc.	%Drift	----------		
90		Ethyl Parathion	50.000	48.604	2.8	68	0.00	12.21
		----------	AvgRF	CCRF	%Dev	----------		
91	P	Fluoranthene	1.261	1.294	-2.6	73	0.00	12.70
92	I	Chrysene-d12	1.000	1.000	0.0	61	0.00	14.57
93		Benzidine	0.835	0.898	-7.5	67	0.00	12.89
94	P	Pyrene	1.433	1.609	-12.3	71	0.00	12.97
95	S	Terphenyl-d14	1.124	1.292	-14.9	73	0.00	13.19
96		Famphur	0.454	0.492	-8.4	66	0.00	13.75
97	P	Butylbenzylphthalate	0.686	0.762	-11.1	69	0.00	13.84
98	P	3,3'-Dichlorobenzidine	0.519	0.558	-7.5	66	0.00	14.54
99	P	Benzo[a]anthracene	1.340	1.396	-4.2	66	0.00	14.55
100	P	Chrysene	1.300	1.354	-4.2	67	0.00	14.60
101	P	bis(2-Ethylhexyl)phthalat	0.959	1.016	-5.9	67	0.00	14.70
102	I	Perylene-d12	1.000	1.000	0.0	60	0.00	16.92
103	P	Di-n-octylphthalate	1.582	1.747	-10.4	66	-0.01	15.76
104	P	Benzo[b]fluoranthene	1.284	1.347	-4.9	64	0.00	16.28
105	P	Benzo[k]fluoranthene	1.335	1.356	-1.6	62	0.00	16.33
106	P	Benzo[a]pyrene	1.192	1.268	-6.4	65	0.00	16.82
107	P	Indeno[1,2,3-cd]pyrene	1.110	1.317	-18.6	73	0.01	18.56
108	P	Dibenz[a,h]anthracene	1.185	1.363	-15.0	68	0.00	18.61
109	P	Benzo[g,h,i]perylene	1.198	1.325	-10.6	68	0.00	18.92

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6F06440.D 8270D6F072920.m Fri Aug 14 14:25:48 2020

Initial Calibration Summary

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: S7G472-ICC472
Lab FileID: 7G10836.D

Response Factor Report MSBNA8

Method : C:\msdchem\1\met...pahf7gD0072120.m (RTE Integrator)
Title : PAH's by 8270 SIM
Last Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

Calibration Files
L1 =7G10833.D L2 =7G10834.D L3 =7G10835.D L4 =7G10836.D
L5 =7G10837.D L6 =7G10838.D L7 =7G10839.D

Compound	L1	L2	L3	L4	L5	L6	L7	Avg	%RSD
1) I Naphthalene-d8	ISTD								
2)P Naphthalene	1.788	1.149	1.123	1.177	1.176	1.182	1.252	1.264	18.55
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9999									
Response Ratio = 0.00000 + 1.12694 *A + 0.01247 *A^2									
3)P 2-Methylnaphthale	1.042	0.771	0.794	0.867	0.873	0.908	0.973	0.890	10.71
4)s 2-Methylnaphthale	0.874	0.545	0.557	0.602	0.614	0.624	0.669	0.641	17.36
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9999									
Response Ratio = 0.00000 + 0.57628 *A + 0.00934 *A^2									
5)P 1-Methylnaphthale	1.294	0.799	0.779	0.829	0.824	0.846	0.913	0.898	20.03
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9999									
Response Ratio = 0.00000 + 0.78065 *A + 0.01318 *A^2									
6) I Acenaphthene-d10	ISTD								
7)P Acenaphthylene	3.327	2.218	2.216	2.419	2.341	2.384	2.491	2.485	15.48
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9998									
Response Ratio = 0.00000 + 2.28588 *A + 0.02049 *A^2									
8)P Acenaphthene	2.268	1.471	1.460	1.575	1.548	1.557	1.652	1.647	17.08
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9999									
Response Ratio = 0.00000 + 1.48716 *A + 0.01640 *A^2									
9)P Dibenzofuran	1.560	1.051	1.032	1.113	1.089	1.076	1.140	1.152	15.96
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9998									
Response Ratio = 0.00000 + 1.04854 *A + 0.00901 *A^2									
10)P Fluorene	2.436	1.605	1.570	1.689	1.676	1.701	1.778	1.779	16.71
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9999									
Response Ratio = 0.00000 + 1.62233 *A + 0.01563 *A^2									
11) I Phenanthrene-d10	ISTD								
12)P Pentachlorophenol	0.084	0.080	0.117	0.151	0.178	0.197	0.233	0.149	39.03
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9987									
Response Ratio = 0.00000 + 0.14189 *A + 0.00368 *A^2									
13)P Phenanthrene	2.007	1.282	1.303	1.371	1.336	1.382	1.439	1.446	17.50
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9999									
Response Ratio = 0.00000 + 1.30979 *A + 0.01292 *A^2									
14)P Anthracene	2.174	1.335	1.305	1.353	1.340	1.365	1.396	1.467	21.35
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9999									
Response Ratio = 0.00000 + 1.32278 *A + 0.01470 *A^2									

Initial Calibration Summary

Job Number: FA77689 **Sample:** S7G472-ICC472
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** 7G10836.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

```
15)P Carbazole          3.180 2.159 2.195 2.326 2.267 2.295 2.316 2.391  14.77
16)P Fluoranthene       3.786 2.408 2.453 2.600 2.542 2.608 2.743 2.734  17.43
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9999
              Response Ratio = 0.00000 + 2.46832 *A + 0.02745 *A^2

17)s Fluoranthene-d10  3.033 1.977 2.025 2.147 2.071 2.136 2.194 2.226  16.33
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9998
              Response Ratio = 0.00000 + 2.05640 *A + 0.01374 *A^2


18) I   Chrysene-d12           ----------------ISTD---------------------
19)P Pyrene             2.490 1.553 1.540 1.619 1.610 1.629 1.672 1.730  19.54
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9999
              Response Ratio = 0.00000 + 1.57982 *A + 0.00925 *A^2

20)P Benzo[a]anthracen 1.818 1.195 1.210 1.275 1.268 1.268 1.312 1.335  16.22
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9999
              Response Ratio = 0.00000 + 1.23579 *A + 0.01515 *A^2

21)P Chrysene           2.438 1.458 1.376 1.447 1.376 1.368 1.385 1.550  25.39
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9997
              Response Ratio = 0.00000 + 1.38698 *A + -0.00072 *A^2


22) I   Perylene-d12           ----------------ISTD---------------------
23)P Benzo[b]fluoranth 1.677 1.174 1.240 1.363 1.337 1.329 1.383 1.358  11.71
24)P Benzo[k]fluoranth 2.395 1.507 1.422 1.504 1.430 1.470 1.515 1.606  21.78
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9998
              Response Ratio = 0.00000 + 1.42711 *A + 0.01741 *A^2

25)P Benzo[a]pyrene     1.657 1.212 1.202 1.293 1.268 1.287 1.342 1.323  11.71
26)P Indeno[1,2,3-cd]p 0.889 0.670 0.773 0.892 0.895 0.905 1.021 0.863  12.93
27)P Dibenz[a,h]anthra 1.091 0.768 0.828 0.940 0.961 1.000 1.118 0.958  13.38
28)P Benzo[g,h,i]peryl 1.292 0.877 0.912 1.008 1.013 1.042 1.143 1.041  13.53
----------------------------------------------------------------------------
(#) = Out of Range

          simpahf7gD0072120.m       Wed Jul 22 13:15:14 2020
```

Initial Calibration Verification

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: S7G472-ICV472
Lab FileID: 7G10840.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\072120_7G472\7G10840.D Vial: 10
Acq On : 21 Jul 2020 4:19 pm Operator: fouads
Sample : icv472-4 Inst : MSBNA8
Misc : op80679,S7G472,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\met...pahf7gD0072120.m (RTE Integrator)
Title : PAH's by 8270 SIM
Last Update : Tue Jul 21 16:46:17 2020
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	R.T.
1	I	Naphthalene-d8	4.000	4.000	0.0	98	0.00	4.73
			Amount	Calc.	%Drift			
2	P	Naphthalene	10.000	9.543	4.6	92	0.00	4.75
			Amount	Calc.	%Drift			
3	P	2-Methylnaphthalene	10.000	8.171	18.3	82	0.00	5.34
			Amount	Calc.	%Drift			
4	s	2-Methylnaphthalene-d10			NA			
5	P	1-Methylnaphthalene	10.000	9.875	1.3	95	0.00	5.42
			Amount	Calc.	%Drift			
6	I	Acenaphthene-d10	4.000	4.000	0.0	99	0.00	6.22
			Amount	Calc.	%Drift			
7	P	Acenaphthylene	10.000	9.065	9.4	87	0.00	6.10
8	P	Acenaphthene	10.000	9.628	3.7	93	0.00	6.25
9	P	Dibenzofuran	10.000	18.813	-88.1#	183	0.00	6.41
10	P	Fluorene	10.000	9.705	2.9	95	0.00	6.70
			Amount	Calc.	%Drift			
11	I	Phenanthrene-d10	4.000	4.000	0.0	100	0.00	7.51
			Amount	Calc.	%Drift			
12	P	Pentachlorophenol	20.000	14.755	26.2#	61	0.00	7.38
13	P	Phenanthrene	10.000	9.479	5.2	93	0.00	7.53
14	P	Anthracene	5.000	4.255	14.9	84	0.00	7.58
			Amount	Calc.	%Drift			
15	P	Carbazole	5.000	2.375	52.5#	49	0.00	7.75
			Amount	Calc.	%Drift			
16	P	Fluoranthene	10.000	8.721	12.8	85	-0.01	8.56
17	s	Fluoranthene-d10			NA			
			Amount	Calc.	%Drift			
18	I	Chrysene-d12	4.000	4.000	0.0	97	0.00	9.85

Initial Calibration Verification

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: S7G472-ICV472
Lab FileID: 7G10840.D

			Amount	Calc.	%Drift			
19	P	Pyrene	10.000	9.176	8.2	88	0.00	8.75
20	P	Benzo[a]anthracene	5.000	4.494	10.1	86	0.00	9.84
21	P	Chrysene	5.000	5.042	-0.8	94	0.00	9.88

			Amount	Calc.	%Drift			
22	I	Perylene-d12	4.000	4.000	0.0	97	0.00	11.62
23	P	Benzo[b]fluoranthene	5.000	4.666	6.7	90	0.00	11.10

			Amount	Calc.	%Drift			
24	P	Benzo[k]fluoranthene	5.000	4.742	5.2	88	0.00	11.13

			Amount	Calc.	%Drift			
25	P	Benzo[a]pyrene	5.000	4.510	9.8	89	0.00	11.54
26	P	Indeno[1,2,3-cd]pyrene	5.000	4.449	11.0	83	-0.01	13.38
27	P	Dibenz[a,h]anthracene	5.000	4.399	12.0	87	0.00	13.44
28	P	Benzo[g,h,i]perylene	5.000	4.244	15.1	85	0.00	13.85

(#) = Out of Range SPCC's out = 0 CCC's out = 0
7G10836.D simpahf7gD0072120.m Wed Jul 22 13:16:09 2020

Continuing Calibration Summary

Job Number: FA77689 **Sample:** S7G484-CC472
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** 7G11163.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\ed...2020\s7g484\7G11163.d Vial: 2
Acq On : 13 Aug 2020 3:10 pm Operator: FOUADS
Sample : CC472-4 Inst : MSBNA8
Misc : op81342,S7G484,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\met...pahf7gD0072120.m (RTE Integrator)
Title : PAH's by 8270 SIM
Last Update : Tue Jul 21 16:46:17 2020
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Naphthalene-d8	1.000	1.000	0.0	118	0.00	4.63
		---------- True	Calc.	% Drift	----------			
2	P	Naphthalene	10.000	9.490	5.1	110	0.00	4.65
		---------- AvgRF	CCRF	% Dev	----------			
3	P	2-Methylnaphthalene	0.890	0.948	-6.5	129	0.00	5.23
		---------- True	Calc.	% Drift	----------			
4	s	2-Methylnaphthalene-d10	10.000	11.117	-11.2	131	0.00	5.21
5	P	1-Methylnaphthalene	10.000	10.730	-7.3	125	0.00	5.31
		---------- AvgRF	CCRF	% Dev	----------			
6	I	Acenaphthene-d10	1.000	1.000	0.0	145	0.00	6.11
		---------- True	Calc.	% Drift	----------			
7	P	Acenaphthylene	10.000	9.252	7.5	130	0.00	5.99
8	P	Acenaphthene	10.000	9.198	8.0	129	0.00	6.14
9	P	Dibenzofuran	10.000	10.016	-0.2	140	0.00	6.30
10	P	Fluorene	10.000	9.410	5.9	134	0.00	6.59
		---------- AvgRF	CCRF	% Dev	----------			
11	I	Phenanthrene-d10	1.000	1.000	0.0	151	0.00	7.40
		---------- True	Calc.	% Drift	----------			
12	P	Pentachlorophenol	25.000	26.900	-7.6	179	0.00	7.26
13	P	Phenanthrene	10.000	8.692	13.1	128	0.00	7.42
14	P	Anthracene	5.000	4.549	9.0	136	0.00	7.47
		---------- AvgRF	CCRF	% Dev	----------			
15	P	Carbazole	2.391	2.063	13.7	134	0.00	7.63
		---------- True	Calc.	% Drift	----------			
16	P	Fluoranthene	10.000	8.697	13.0	128	0.00	8.45
17	s	Fluoranthene-d10	10.000	9.271	7.3	136	0.00	8.44
		---------- AvgRF	CCRF	% Dev	----------			
18	I	Chrysene-d12	1.000	1.000	0.0	145	0.00	9.73

Continuing Calibration Summary

Job Number: FA77689 **Sample:** S7G484-CC472
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** 7G11163.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

			True	Calc.	% Drift			
19	P	Pyrene	10.000	9.004	10.0	129	0.00	8.64
20	P	Benzo[a]anthracene	5.000	4.868	2.6	138	0.00	9.71
21	P	Chrysene	5.000	4.552	9.0	126	0.00	9.75

			AvgRF	CCRF	% Dev			
22	I	Perylene-d12	1.000	1.000	0.0	143	0.00	11.47
23	P	Benzo[b]fluoranthene	1.358	1.178	13.3	124	0.00	10.95

			True	Calc.	% Drift			
24	P	Benzo[k]fluoranthene	5.000	4.707	5.9	130	0.00	10.99

			AvgRF	CCRF	% Dev			
25	P	Benzo[a]pyrene	1.323	1.154	12.8	128	0.00	11.38
26	P	Indeno[1,2,3-cd]pyrene	0.863	0.908	-5.2	146	0.00	13.20
27	P	Dibenz[a,h]anthracene	0.958	0.970	-1.3	148	0.00	13.25
28	P	Benzo[g,h,i]perylene	1.041	0.975	6.3	138	0.00	13.66

(#) = Out of Range SPCC's out = 0 CCC's out = 0
7G10836.D simpahf7gD0072120.m Fri Aug 14 04:06:52 2020

Continuing Calibration Summary

Job Number: FA77689 **Sample:** S7G485-CC472
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** 7G11193.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\Je...2020\S7G485\7G11193.d Vial: 2
Acq On : 14 Aug 2020 10:20 am Operator: FOUADS
Sample : CC472-4 Inst : MSBNA8
Misc : op81342,S7G485,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\met...pahf7gD0072120.m (RTE Integrator)
Title : PAH's by 8270 SIM
Last Update : Tue Jul 21 16:46:17 2020
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Naphthalene-d8	1.000	1.000	0.0	99	0.00	4.63
		---------- True	Calc.	% Drift	----------			
2	P	Naphthalene	10.000	9.181	8.2	89	0.00	4.65
		---------- AvgRF	CCRF	% Dev	----------			
3	P	2-Methylnaphthalene	0.890	0.893	-0.3	102	0.00	5.23
		---------- True	Calc.	% Drift	----------			
4	s	2-Methylnaphthalene-d10	10.000	10.843	-8.4	107	0.00	5.21
5	P	1-Methylnaphthalene	10.000	10.278	-2.8	100	0.00	5.31
		---------- AvgRF	CCRF	% Dev	----------			
6	I	Acenaphthene-d10	1.000	1.000	0.0	119	0.00	6.11
		---------- True	Calc.	% Drift	----------			
7	P	Acenaphthylene	10.000	9.088	9.1	104	0.00	5.99
8	P	Acenaphthene	10.000	8.972	10.3	103	0.00	6.14
9	P	Dibenzofuran	10.000	10.103	-1.0	116	0.00	6.30
10	P	Fluorene	10.000	9.150	8.5	107	0.00	6.59
		---------- AvgRF	CCRF	% Dev	----------			
11	I	Phenanthrene-d10	1.000	1.000	0.0	131	0.00	7.40
		---------- True	Calc.	% Drift	----------			
12	P	Pentachlorophenol	25.000	25.518	-2.1	146	0.00	7.26
13	P	Phenanthrene	10.000	8.512	14.9	109	0.00	7.42
14	P	Anthracene	5.000	4.233	15.3	110	0.00	7.46
		---------- AvgRF	CCRF	% Dev	----------			
15	P	Carbazole	2.391	2.160	9.7	122	0.00	7.63
		---------- True	Calc.	% Drift	----------			
16	P	Fluoranthene	10.000	9.137	8.6	117	0.00	8.45
17	s	Fluoranthene-d10	10.000	9.491	5.1	121	0.00	8.43
		---------- AvgRF	CCRF	% Dev	----------			
18	I	Chrysene-d12	1.000	1.000	0.0	133	0.00	9.72

Continuing Calibration Summary

Job Number: FA77689 **Sample:** S7G485-CC472
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** 7G11193.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

			True	Calc.	% Drift			
19	P	Pyrene	10.000	8.490	15.1	112	0.00	8.64
20	P	Benzo[a]anthracene	5.000	4.653	6.9	122	0.00	9.71
21	P	Chrysene	5.000	4.386	12.3	112	0.00	9.75

			AvgRF	CCRF	% Dev			
22	I	Perylene-d12	1.000	1.000	0.0	139	0.00	11.46
23	P	Benzo[b]fluoranthene	1.358	1.185	12.7	121	0.00	10.95

			True	Calc.	% Drift			
24	P	Benzo[k]fluoranthene	5.000	4.193	16.1	112	0.00	10.98

			AvgRF	CCRF	% Dev			
25	P	Benzo[a]pyrene	1.323	1.097	17.1	118	0.00	11.38
26	P	Indeno[1,2,3-cd]pyrene	0.863	0.978	-13.3	153	0.00	13.19
27	P	Dibenz[a,h]anthracene	0.958	1.039	-8.5	154	0.00	13.24
28	P	Benzo[g,h,i]perylene	1.041	1.067	-2.5	147	0.00	13.65

(#) = Out of Range SPCC's out = 0 CCC's out = 0
7G10836.D simpahf7gD0072120.m Sun Aug 16 22:47:08 2020

6.7.9

6

Initial Calibration Summary

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: ST1745-ICC1745
Lab FileID: T050029.D

Response Factor Report MSBNA06

Method : C:\msdchem\1\MET...\SIM_LVT071720.M (RTE Integrator)
Title : PAH's by 8270 SIM
Last Update : Fri Jul 17 13:46:08 2020
Response via : Initial Calibration

Calibration Files
L1 =T050025.D L2 =T050027.D L3 =T050028.D L4 =T050029.D
L5 =T050030.D L6 =T050031.D L7 =T050032.D L8 =T050026.D

Compound	L1	L2	L3	L4	L5	L6	L7	L8	Avg	%RSD
1) I Naphthalene-d8	ISTD									
2) Naphthalene	1.326	1.290	1.284	1.255	1.286	1.172	1.086		1.243	6.78
3) 2-Methylnaph	1.132	1.160	1.107	1.114	1.167	1.105	1.066		1.122	3.10
4) 2-Methylnaph	0.857	0.881	0.842	0.840	0.863	0.799	0.786		0.838	4.09
5) 1-Methylnaph	1.021	1.056	1.012	1.019	1.072	1.019	1.002		1.029	2.46
6) I Acenaphthene-d10	ISTD									
7) Acenaphthyle	2.581	2.536	2.459	2.451	2.510	2.257	2.082		2.411	7.39
8) Acenaphthene	1.562	1.566	1.535	1.506	1.527	1.379	1.382		1.494	5.36
9) Dibenzofuran	2.031	2.093	2.035	2.013	2.015	1.912	1.695		1.971	6.74
10) Fluorene	1.495	1.735	1.714	1.698	1.739	1.578	1.538		1.642	6.23
11) I Phenanthrene-d10	ISTD									
12) Pentachlorop	0.294	0.065	0.071	0.083	0.099	0.102	0.119		0.119	66.73
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9995										
Response Ratio = 0.00000 + 0.08679 *A + 0.00064 *A^2										
13) Phenanthrene	1.359	1.344	1.315	1.292	1.312	1.168	1.069		1.266	8.44
14) Anthracene	1.260	1.197	1.208	1.210	1.262	1.162	1.175		1.211	3.19
15) Carbazole	1.190	1.053	1.155	1.144	1.223	1.125	1.095		1.140	4.99
16) Fluoranthene	1.291	0.738	1.244	1.186	1.219	1.104	1.037		1.117	16.80
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9997										
Response Ratio = 0.00000 + 1.19848 *A + -0.00812 *A^2										
17) Fluoranthene	1.016	0.587	0.982	0.934	0.974	0.870	0.873		0.891	16.27
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9994										
Response Ratio = 0.00000 + 0.90965 *A + -0.00191 *A^2										
18) I Chrysene-d12	ISTD									
19) Pyrene	2.137	2.099	2.290	3.089	2.300	2.035	1.903		2.265	17.18
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9975										
Response Ratio = 0.00000 + 2.32260 *A + -0.02137 *A^2										
20) Benzo[a]anth	1.684	1.583	1.595	1.565	1.666	1.542	1.578		1.602	3.31
21) Chrysene	1.628	1.573	1.605	1.545	1.636	1.519	1.539		1.578	2.93
22) I Perylene-d12	ISTD									
23) Benzo[b]fluo	1.684	1.570	1.599	1.613	1.671	2.225	2.512	1.611	1.811	19.60
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9975										
Response Ratio = 0.00000 + 1.58152 *A + 0.09793 *A^2										
24) Benzo[k]fluo	1.760	1.697	1.694	1.708	1.790	2.248	2.624	1.732	1.907	18.02
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9990										
Response Ratio = 0.00000 + 1.68176 *A + 0.09615 *A^2										

Initial Calibration Summary

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: ST1745-ICC1745
Lab FileID: T050029.D

```
25) Benzo[a]pyre 1.514 1.420 1.420 1.455 1.541 1.468 1.570       1.484   3.97
26) Indeno[1,2,3 1.371 1.168 1.203 1.229 1.335 1.292 1.323       1.274   5.93
27) Dibenz[a,h]a 1.288 1.179 1.196 1.247 1.348 1.297 1.322       1.268   5.00
28) Benzo[g,h,i] 2.183 1.461 1.431 1.433 1.519 1.423 1.425       1.553  18.00
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9998
              Response Ratio = 0.00000 + 1.45593 *A + -0.00324 *A^2

--------------------------------------------------------------------------------
(#) = Out of Range  ###  Number of calibration levels exceeded format  ###

          SIM_LVT071720.M        Fri Jul 17 14:48:21 2020
```

Initial Calibration Verification

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: ST1745-ICV1745
Lab FileID: T050033.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\st1745\T050033.D Vial: 10
Acq On : 17 Jul 2020 1:23 pm Operator: nareshj
Sample : icv1745-4 Inst : MSBNA06
Misc : OP81034,st1745,250,,,1,1,water Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\MET...\SIM_LVT071720.M (RTE Integrator)
Title : PAH's by 8270 SIM
Last Update : Fri Jul 17 13:46:08 2020
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	R.T.
1	I	Naphthalene-d8	500.000	500.000	0.0	107	0.00	7.16
2	P	Naphthalene	1000.000	867.750	13.2	92	0.00	7.18
3	P	2-Methylnaphthalene	1000.000	826.398	17.4	89	0.00	7.79
4	S	2-Methylnaphthalene-d10		----------NA----------				
5	P	1-Methylnaphthalene	1000.000	894.673	10.5	96	0.00	7.88
6	I	Acenaphthene-d10	500.000	500.000	0.0	106	0.00	8.72
7	P	Acenaphthylene	1000.000	866.328	13.4	91	0.00	8.60
8	P	Acenaphthene	1000.000	893.459	10.7	94	0.00	8.75
9		Dibenzofuran	1000.000	925.663	7.4	96	-0.01	8.90
10	P	Fluorene	1000.000	926.199	7.4	95	0.00	9.21
11	I	Phenanthrene-d10	500.000	500.000	0.0	108	0.00	10.05
		---------- Amount Calc. %Drift ----------						
12	P	Pentachlorophenol	2000.000	1763.315	11.9	82	0.00	9.87
		---------- Amount Calc. %Drift ----------						
13	P	Phenanthrene	1000.000	889.538	11.0	94	0.00	10.06
14	P	Anthracene	500.000	420.001	16.0	91	0.00	10.11
15		Carbazole	500.000	464.829	7.0	100	0.00	10.24
		---------- Amount Calc. %Drift ----------						
16	P	Fluoranthene	1000.000	861.238	13.9	93	0.00	11.17
17	S	Fluoranthene-d10		----------NA----------				
		---------- Amount Calc. %Drift ----------						
18	I	Chrysene-d12	500.000	500.000	0.0	106	-0.02	13.02
		---------- Amount Calc. %Drift ----------						
19	P	Pyrene	1000.000	1354.713	-35.5#	105	0.00	11.41
		---------- Amount Calc. %Drift ----------						
20	P	Benzo[a]anthracene	500.000	406.660	18.7	88	0.00	13.00
21	P	Chrysene	500.000	428.333	14.3	92	0.00	13.06
22	I	Perylene-d12	500.000	500.000	0.0	103	-0.01	15.68
		---------- Amount Calc. %Drift ----------						
23	P	Benzo[b]fluoranthene	500.000	413.298	17.3	88	0.00	14.92
24	P	Benzo[k]fluoranthene	500.000	414.848	17.0	88	-0.02	14.98

Initial Calibration Verification

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: ST1745-ICV1745
Lab FileID: T050033.D

			Amount	Calc.	%Drift			
25	P	Benzo[a]pyrene	500.000	417.970	16.4	88	-0.01	15.56
26	P	Indeno[1,2,3-cd]pyrene	500.000	405.697	18.9	87	-0.01	18.01
27	P	Dibenz[a,h]anthracene	500.000	411.003	17.8	86	-0.02	18.08

			Amount	Calc.	%Drift			
28	P	Benzo[g,h,i]perylene	500.000	413.449	17.3	87	-0.02	18.48

(#) = Out of Range SPCC's out = 0 CCC's out = 0
T050029.D SIM_LVT071720.M Fri Jul 17 14:47:35 2020

Continuing Calibration Summary

Job Number: FA77689 **Sample:** ST1749-CC1745
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** T050176.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\Je...2020\ST1749\T050176.D Vial: 2
Acq On : 13 Aug 2020 2:42 pm Operator: nareshj
Sample : cc1745-4 Inst : MSBNA06
Misc : OP81487,st1749,250,,,1,1,water Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\met...\SIM_LVT071720.M (RTE Integrator)
Title : PAH's by 8270 SIM
Last Update : Fri Aug 14 01:35:08 2020
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Naphthalene-d8	1.000	1.000	0.0	139	0.00	7.17
2	P	Naphthalene	1.243	1.191	4.2	132	0.00	7.19
3	P	2-Methylnaphthalene	1.122	0.997	11.1	125	0.00	7.80
4	S	2-Methylnaphthalene-d10	0.838	0.764	8.8	127	0.00	7.77
5	P	1-Methylnaphthalene	1.029	0.921	10.5	126	0.00	7.89
6	I	Acenaphthene-d10	1.000	1.000	0.0	123	0.00	8.72
7	P	Acenaphthylene	2.411	2.360	2.1	118	0.00	8.60
8	P	Acenaphthene	1.494	1.381	7.6	113	0.00	8.75
9		Dibenzofuran	1.971	1.723	12.6	105	0.00	8.91
10	P	Fluorene	1.642	1.016	38.1#	74	0.00	9.22
11	I	Phenanthrene-d10	1.000	1.000	0.0	81	0.00	10.05
		---------- True	Calc.	% Drift	----------			
12	P	Pentachlorophenol	2500.000	3496.213	-39.8#	125	0.00	9.88
		---------- AvgRF	CCRF	% Dev	----------			
13	P	Phenanthrene	1.266	1.204	4.9	76	0.00	10.07
14	P	Anthracene	1.211	1.147	5.3	77	0.00	10.12
15		Carbazole	1.140	1.057	7.3	75	0.00	10.26
		---------- True	Calc.	% Drift	----------			
16	P	Fluoranthene	1000.000	1023.068	-2.3	83	0.00	11.18
17	S	Fluoranthene-d10	1000.000	1103.061	-10.3	87	0.00	11.16
		---------- AvgRF	CCRF	% Dev	----------			
18	I	Chrysene-d12	1.000	1.000	0.0	137	0.00	13.04
		---------- True	Calc.	% Drift	----------			
19	P	Pyrene	1000.000	927.018	7.3	94	0.00	11.43
		---------- AvgRF	CCRF	% Dev	----------			
20	P	Benzo[a]anthracene	1.602	1.474	8.0	129	0.00	13.02
21	P	Chrysene	1.578	1.484	6.0	131	0.00	13.08
22	I	Perylene-d12	1.000	1.000	0.0	133	0.00	15.71
		---------- True	Calc.	% Drift	----------			
23	P	Benzo[b]fluoranthene	500.000	456.035	8.8	125	0.00	14.95
24	P	Benzo[k]fluoranthene	500.000	456.921	8.6	126	0.00	15.00

Continuing Calibration Summary

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: ST1749-CC1745
Lab FileID: T050176.D

			AvgRF	CCRF	% Dev			
25	P	Benzo[a]pyrene	1.484	1.351	9.0	123	0.00	15.59
26	P	Indeno[1,2,3-cd]pyrene	1.274	1.057	17.0	114	0.00	18.04
27	P	Dibenz[a,h]anthracene	1.268	0.982	22.6#	104	0.00	18.12

			True	Calc.	% Drift			
28	P	Benzo[g,h,i]perylene	500.000	445.287	10.9	120	0.00	18.52

(#) = Out of Range SPCC's out = 0 CCC's out = 0
T050029.D SIM_LVT071720.M Fri Aug 14 01:35:58 2020

Initial Calibration Summary

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICC2918
Lab FileID: X071368.D

Response Factor Report MSBNA05

Method : C:\msdchem\1\MET...DApp9SX-062320.m (RTE Integrator)
Title : SW846 8270D OR EPA 625
Last Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration

Calibration Files
5 =x071365.D 10 =x071366.D 25 =x071367.D 50 =x071368.D
60 =x071369.D 75 =x071370.D 100 =x071363.D 1 =x071364.D

Compound	5	10	25	50	60	75	100	1	Avg	%RSD
1) I 1,4-Dichlorobenzene-d	ISTD									
2) 1,4-Dioxane	0.711	0.724	0.687	0.636	0.644	0.662	0.662	0.758	0.686	6.21
3) N-nitrosodim	1.190	1.266	1.222	1.164	1.205	1.200	1.225	1.265	1.217	2.92
4) Pyridine	1.577	1.700	1.694	1.633	1.650	1.727	1.789	1.572	1.668	4.46
5) Benzaldehyde	1.252	1.271	1.203	1.150	1.174	1.195	1.199	1.094	1.192	4.67
6) Aniline	2.189	2.279	2.301	2.433	2.498	2.578	2.594	2.152	2.378	7.23
7) 2-Fluorophen	1.423	1.476	1.418	1.367	1.408	1.439	1.473	1.470	1.434	2.66
8) bis(2-Chloro	1.365	1.441	1.440	1.458	1.497	1.530	1.541	1.467	1.468	3.85
9) Phenol-d5	1.626	1.725	1.686	1.650	1.700	1.780	1.834	1.649	1.706	4.17
10) Phenol	1.750	1.907	1.935	2.105	2.182	2.263	2.234	1.815	2.024	9.76
11) 2-Chlorophen	1.355	1.482	1.495	1.556	1.601	1.673	1.694	1.387	1.530	8.10
12) 1,3-Dichloro	1.509	1.572	1.555	1.562	1.604	1.641	1.662	1.614	1.590	3.14
13) 1,4-Dichloro	1.614	1.663	1.648	1.669	1.695	1.732	1.741	1.698	1.682	2.52
14) 1,2-Dichloro	1.497	1.568	1.560	1.591	1.631	1.678	1.694	1.566	1.598	4.11
15) Benzyl alcoh	0.940	1.027	1.049	1.061	1.086	1.118	1.131		1.059	6.06
16) 2,2'-Oxybis(	3.082	3.186	3.158	3.042	3.023	3.037	2.907	3.238	3.084	3.44
17) 2-Methylphen	1.363	1.447	1.467	1.488	1.503	1.535	1.564	1.281	1.456	6.39
18) Acetophenone	2.226	2.265	2.217	2.156	2.165	2.173	2.176	1.858	2.154	5.83
19) Hexachloroet	0.595	0.626	0.633	0.627	0.636	0.652	0.669	0.615	0.632	3.50
20) N-Nitroso-di	1.126	1.161	1.180	1.155	1.147	1.135	1.123	1.075	1.138	2.78
21) 3&4-Methylph	1.434	1.542	1.573	1.532	1.553	1.549	1.523	1.334	1.505	5.35
22) I Naphthalene-d8	ISTD									
23) Nitrobenzene	0.388	0.409	0.411	0.407	0.423	0.424	0.433	0.410	0.413	3.30
24) Nitrobenzene	0.390	0.405	0.412	0.406	0.419	0.417	0.422	0.400	0.409	2.64
25) Isophorone	0.713	0.751	0.733	0.710	0.733	0.729	0.741	0.729	0.730	1.84
26) 2-Nitropheno	0.166	0.185	0.197	0.196	0.207	0.211	0.220	0.173	0.194	9.64
27) 2,4-Dimethyl	0.344	0.367	0.359	0.360	0.376	0.375	0.379	0.326	0.361	5.02
28) O,O,O-Trieth	0.150	0.156	0.152	0.151	0.157	0.157	0.162	0.139	0.153	4.56
29) bis(2-Chloro	0.404	0.424	0.433	0.421	0.436	0.436	0.427	0.434	0.427	2.52
30) Benzoic Acid	0.149	0.220	0.274	0.309	0.333	0.341	0.351		0.282	26.36
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9977										
Response Ratio = 0.00000 + 0.24212 *A + 0.04845 *A^2										
31) 2,4-Dichloro	0.264	0.288	0.288	0.295	0.309	0.310	0.318	0.255	0.291	7.58
32) 1,2,4-Trichl	0.280	0.292	0.291	0.289	0.302	0.303	0.312	0.309	0.297	3.74
33) alpha-Terpin									0.000	-1.00
34) Naphthalene	1.046	1.101	1.085	1.072	1.094	1.085	1.086	1.109	1.085	1.77
35) 4-Chloroanil	0.442	0.466	0.467	0.458	0.468	0.461	0.452	0.450	0.458	2.04
36) 2,6-Dichloro	0.279	0.302	0.300	0.296	0.304	0.301	0.304	0.287	0.297	3.08
37) Hexachlorobu	0.136	0.145	0.142	0.143	0.150	0.152	0.156	0.148	0.147	4.34
38) Caprolactam	0.124	0.131	0.123	0.119	0.125	0.124	0.127	0.093	0.121	9.60
39) 4-Chloro-3-m	0.292	0.322	0.312	0.308	0.321	0.321	0.328	0.277	0.310	5.59
40) 2-Methylnaph	0.702	0.739	0.705	0.699	0.717	0.722	0.728	0.726	0.717	1.96
41) 1-Methylnaph	0.667	0.702	0.671	0.671	0.698	0.692	0.695	0.697	0.687	2.09
42) 1,2,4,5-Tetr	0.281	0.291	0.290	0.296	0.306	0.312	0.312	0.300	0.298	3.73

```
43) I   Acenaphthene-d10      ----------------ISTD---------------------
44) Hexachlorocy 0.229 0.260 0.295 0.325 0.338 0.355 0.370 0.218 0.299  19.32
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9995
              Response Ratio = 0.00000 + 0.26566 *A + 0.04434 *A^2

45) 2,4,6-Trichl 0.331 0.351 0.366 0.380 0.389 0.395 0.401 0.324 0.367   7.92
46) 2,4,5-Trichl 0.355 0.395 0.402 0.413 0.431 0.437 0.446 0.345 0.403   9.19
47) 2-Fluorobiph 1.375 1.424 1.416 1.450 1.485 1.499 1.490 1.444 1.448   2.94
48) 1,1'-Bipheny 1.712 1.692 1.626 1.633 1.671 1.655 1.625 1.452 1.633   4.88
49) 2-Chloronaph 1.160 1.220 1.228 1.239 1.265 1.265 1.239 1.190 1.226   2.93
50) 2-Nitroanili 0.423 0.458 0.466 0.458 0.471 0.471 0.467 0.396 0.451   6.00
51) p-Dinitroben 0.215 0.247 0.263 0.266 0.278 0.276 0.282 0.196 0.253  12.42
52) Acenaphthyle 1.886 2.017 2.013 2.031 2.066 2.065 2.012 1.893 1.998   3.51
53) Dimethylphth 1.378 1.419 1.388 1.374 1.427 1.420 1.416 1.467 1.411   2.18
54) m-Dinitroben 0.211 0.229 0.244 0.248 0.255 0.262 0.263 0.169 0.235  13.54
55) 2,6-Dinitrot 0.314 0.327 0.330 0.342 0.349 0.355 0.355 0.293 0.333   6.50
56) o-Dinitroben 0.323 0.343 0.328 0.311 0.312 0.300 0.290 0.344 0.319   6.08
57) Acenaphthene 1.292 1.345 1.321 1.312 1.346 1.333 1.310 1.370 1.329   1.88
58) 3-Nitroanili 0.345 0.363 0.377 0.380 0.390 0.393 0.392 0.292 0.366   9.34
59) 2,4-Dinitrop 0.073 0.109 0.151 0.176 0.193 0.200 0.209       0.159  32.16
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9971
              Response Ratio = 0.00000 + 0.12676 *A + 0.03612 *A^2

60) Dibenzofuran 1.728 1.800 1.775 1.734 1.783 1.753 1.720 1.894 1.773   3.18
61) 2,4-Dinitrot 0.411 0.429 0.434 0.433 0.446 0.443 0.444 0.357 0.425   6.98
62) 4-Nitropheno 0.168 0.192 0.209 0.209 0.219 0.218 0.218       0.205   9.05
63) 2,3,5,6-Tetr 0.254 0.285 0.304 0.314 0.329 0.335 0.339 0.217 0.297  14.44
64) 2,3,4,6-Tetr 0.278 0.302 0.311 0.317 0.331 0.334 0.341 0.274 0.311   8.06
65) Fluorene     1.351 1.431 1.384 1.362 1.389 1.397 1.352 1.402 1.384   2.00
66) 4-Chlorophen 0.642 0.669 0.666 0.667 0.692 0.680 0.665 0.662 0.668   2.12
67) Diethylphtha 1.341 1.431 1.411 1.398 1.451 1.446 1.441 1.357 1.409   2.94
68) Thionazin    0.310 0.327 0.310 0.301 0.310 0.290 0.280 0.267 0.299   6.43
69) 4-Nitroanili 0.377 0.407 0.426 0.414 0.433 0.430 0.426 0.349 0.408   7.33

70) I   Phenanthrene-d10      ----------------ISTD---------------------
71) 4,6-Dinitro- 0.081 0.110 0.135 0.149 0.159 0.166 0.173 0.043 0.127  36.13
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9986
              Response Ratio = 0.00000 + 0.11526 *A + 0.02503 *A^2

72) n-Nitrosodip 0.565 0.595 0.614 0.612 0.634 0.639 0.654 0.659 0.622   5.05
73) Diphenylamin 0.678 0.714 0.737 0.734 0.761 0.767 0.785 0.659 0.729   5.99
74) 1,2-Diphenyl 0.851 0.900 0.909 0.903 0.925 0.925 0.923 0.836 0.896   3.85
75) 2,4,6-Tribro 0.068 0.075 0.083 0.089 0.094 0.098 0.106 0.063 0.084  17.77
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9999
              Response Ratio = 0.00000 + 0.07262 *A + 0.00671 *A^2

76) Sulfotep     0.130 0.137 0.136 0.138 0.142 0.140 0.139 0.091 0.132  12.72
77) Phorate      0.447 0.480 0.486 0.484 0.501 0.496 0.501 0.299 0.462  14.76
78) 4-Bromopheny 0.174 0.183 0.189 0.192 0.203 0.211 0.220 0.164 0.192   9.84
79) Hexachlorobe 0.168 0.176 0.178 0.190 0.198 0.205 0.217 0.202 0.192   8.83
80) Dimethoate   0.288 0.310 0.321 0.319 0.333 0.327 0.329 0.195 0.303  15.11
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9997
              Response Ratio = 0.00000 + 0.31064 *A + 0.00877 *A^2

81) Simazine     0.128 0.137 0.139 0.139 0.145 0.148 0.152       0.141   5.71
82) Atrazine     0.225 0.230 0.233 0.234 0.248 0.249 0.281 0.169 0.234  13.47
83) Pentachlorop 0.074 0.098 0.114 0.129 0.137 0.141 0.146       0.120  21.87
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9987
              Response Ratio = 0.00000 + 0.10286 *A + 0.01886 *A^2
```

Initial Calibration Summary

Job Number: FA77689 **Sample:** SX2918-ICC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X071368.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

```
 84) Phenanthrene 1.182 1.201 1.201 1.202 1.220 1.221 1.207 1.237 1.209   1.39
 85) Anthracene   1.186 1.242 1.266 1.279 1.313 1.323 1.308 1.162 1.260   4.73
 86) Disulfoton   0.478 0.505 0.514 0.505 0.518 0.504 0.481 0.360 0.483  10.69
 87) Carbazole    1.042 1.108 1.122 1.110 1.156 1.160 1.177 1.018 1.112   5.07
 88) Methyl Parat 0.237 0.267 0.277 0.275 0.285 0.281 0.281 0.129 0.254  20.77
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9996
               Response Ratio = 0.00000 + 0.26658 *A + 0.00720 *A^2

 89) Di-n-butylph 1.126 1.246 1.291 1.303 1.346 1.354 1.364 0.897 1.241  12.82
 90) Ethyl Parath 0.128 0.145 0.156 0.159 0.170 0.169 0.174 0.066 0.146  24.35
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9995
               Response Ratio = 0.00000 + 0.14462 *A + 0.01269 *A^2

 91) Fluoranthene 1.039 1.104 1.114 1.125 1.183 1.198 1.226 0.984 1.121   7.27

 92) I   Chrysene-d12          ----------------ISTD--------------------
 93) Benzidine    0.479 0.644 0.768 0.799 0.838 0.837 0.830 0.311 0.688  28.62
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9980
               Response Ratio = 0.00000 + 0.70508 *A + 0.06135 *A^2

 94) Pyrene       1.601 1.685 1.664 1.632 1.720 1.729 1.778 1.477 1.661   5.61
 95) Terphenyl-d1 0.982 1.041 1.070 1.066 1.107 1.134 1.181 0.922 1.063   7.78
 96) Famphur      0.386 0.427 0.374 0.288 0.273 0.248 0.213 0.212 0.303  27.31
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9960
               Response Ratio = 0.00000 + 0.39855 *A + -0.07727 *A^2

 97) Butylbenzylp 0.558 0.646 0.694 0.682 0.720 0.721 0.741 0.383 0.643  18.60
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9995
               Response Ratio = 0.00000 + 0.63866 *A + 0.04308 *A^2

 98) 3,3'-Dichlor 0.308 0.359 0.405 0.426 0.444 0.453 0.462 0.236 0.387  20.72
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9994
               Response Ratio = 0.00000 + 0.37193 *A + 0.03988 *A^2

 99) Benzo[a]anth 1.168 1.236 1.242 1.247 1.293 1.316 1.337 1.218 1.257   4.38
100) Chrysene     1.241 1.323 1.327 1.320 1.380 1.376 1.405 1.340 1.339   3.75
101) bis(2-Ethylh 0.646 0.797 0.924 0.958 1.001 0.999 1.031 0.365 0.840  27.50
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9991
               Response Ratio = 0.00000 + 0.83541 *A + 0.08609 *A^2


102) I   Perylene-d12          ----------------ISTD--------------------
103) Di-n-octylph 1.335 0.994 1.396 1.627 1.765 1.831 1.930 1.181 1.507  22.09
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9981
               Response Ratio = 0.00000 + 1.23657 *A + 0.29737 *A^2

104) Benzo[b]fluo 0.973 0.917 1.098 1.164 1.243 1.263 1.304 0.787 1.094  16.94
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9995
               Response Ratio = 0.00000 + 1.06371 *A + 0.09950 *A^2

105) Benzo[k]fluo 1.269 1.317 1.401 1.411 1.503 1.538 1.590 1.331 1.420   8.05
106) Benzo[a]pyre 0.862 0.904 1.078 1.121 1.189 1.207 1.262 0.677 1.037  19.61
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9997
               Response Ratio = 0.00000 + 1.01363 *A + 0.10108 *A^2

107) Indeno[1,2,3 0.504 0.549 0.711 0.768 0.844 0.911 0.995 0.311 0.699  32.88
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9994
               Response Ratio = 0.00000 + 0.55750 *A + 0.18016 *A^2
```

Initial Calibration Summary

Job Number: FA77689 **Sample:** SX2918-ICC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X071368.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

```
108) Dibenz[a,h]a 0.532 0.713 0.820 0.873 0.961 1.008 1.191 0.492 0.824  28.93
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9991
               Response Ratio = 0.00000 + 0.61590 *A + 0.22433 *A^2

109) Benzo[g,h,i] 0.833 0.963 1.038 1.080 1.165 1.209 1.315 0.793 1.049  17.29
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9998
               Response Ratio = 0.00000 + 0.90101 *A + 0.16537 *A^2


110)     1,4-Dichlorobenzene-d ----------------ISTD--------------------
111) 2-Picoline   1.874 1.896 1.870 1.997 1.959 1.901 1.883 1.882 1.908   2.40
112) N-Nitrosomet 1.223 1.268 1.258 1.375 1.364 1.326 1.315 1.483 1.327   6.20
113) Methyl metha 0.891 0.907 0.907 0.990 0.966 0.949 0.928 0.904 0.930   3.77
114) N-Nitrosodie 0.726 0.747 0.754 0.837 0.817 0.812 0.794 0.712 0.775   5.97
115) Ethyl methan 1.208 1.246 1.243 1.371 1.341 1.317 1.293 1.234 1.281   4.51
116) Pentachloroe 0.516 0.519 0.526 0.579 0.572 0.565 0.555 0.533 0.546   4.58
117) N-Nitrosopyr 0.645 0.686 0.695 0.778 0.754 0.749 0.733 0.566 0.701   9.89
118) N-Nitrosomor 1.209 1.237 1.269 1.404 1.350 1.339 1.260 1.160 1.279   6.29
119) O-Toluidine  2.430 2.487 2.531 2.899 2.822 2.786 2.681 2.313 2.619   7.99

120)     Naphthalene-d8A       ----------------ISTD--------------------
121) N-Nitrosopip 0.362 0.370 0.369 0.387 0.374 0.365 0.351 0.367 0.368   2.74
122) A,A-Dimethyl 1.434 1.467 1.501 1.579 1.541 1.522 1.516 1.177 1.467   8.53
123) Hexachloropr 0.139 0.153 0.167 0.190 0.190 0.187 0.186 0.132 0.168  14.23
124) N-Nitrosodi- 0.247 0.249 0.249 0.344 0.339 0.327 0.315 0.229 0.287  16.73
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9932
               Response Ratio = 0.00000 + 0.28665 *A + 0.01834 *A^2

125) p-Phenylened 0.414 0.416 0.424 0.419 0.389 0.357 0.305 0.313 0.380  12.80
126) Isosafrole   0.259 0.267 0.270 0.290 0.289 0.281 0.272 0.253 0.273   4.87

127)     Acenaphthene-d10A     ----------------ISTD--------------------
128) Safrole      0.477 0.499 0.505 0.563 0.562 0.563 0.555 0.484 0.526   7.26
129) 1-Chloronaph 1.146 1.193 1.214 1.345 1.339 1.316 1.263 1.207 1.253   5.94
130) Diphenyl Eth 0.793 0.848 0.861 0.935 0.927 0.914 0.878 0.846 0.875   5.54
131) 1,4-Naphthoq 0.431 0.487 0.535 0.559 0.555 0.508       0.354 0.490  15.24
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9972
               Response Ratio = 0.00000 + 0.52072 *A + 0.00793 *A^2

132) Pentachlorob 0.412 0.426 0.425 0.454 0.447 0.454 0.446 0.462 0.441   3.99
133) 1-Naphthylam 1.327 1.368 1.363 1.451 1.453 1.431 1.415 1.307 1.389   4.05
134) 2-Naphthylam 1.401 1.479 1.475 1.570 1.540 1.549 1.492 1.373 1.485   4.70
135) 5-Nitro-o-to 0.339 0.381 0.414 0.462 0.461 0.463 0.463 0.285 0.409  16.64
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9989
               Response Ratio = 0.00000 + 0.40695 *A + 0.02715 *A^2


136)     Phenanthrene-d10A     ----------------ISTD--------------------
137) 1,3,5-Trinit 0.094 0.134 0.169 0.209 0.214 0.215 0.216 0.067 0.165  36.38
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9954
               Response Ratio = 0.00000 + 0.15899 *A + 0.02711 *A^2

138) Diallate     0.624 0.636 0.633 0.651 0.634 0.612 0.593 0.631 0.627   2.76
139) Phenacetin   0.339 0.366 0.388 0.430 0.427 0.423 0.423 0.284 0.385  13.64
140) 4-Aminobiphe 0.808 0.842 0.858 0.877 0.820 0.786 0.730 0.769 0.811   6.01
141) Pronamide    0.281 0.309 0.322 0.352 0.347 0.339 0.332 0.232 0.314  12.86
142) Pentachloron 0.074 0.075 0.079 0.085 0.082 0.082 0.080 0.063 0.078   9.11
143) 4-Nitroquino 0.018 0.030 0.053 0.075 0.076 0.073 0.068 0.012 0.051  53.03
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9905
               Response Ratio = 0.00000 + 0.07354 *A + -0.00135 *A^2
```

Initial Calibration Summary

Job Number: FA77689 **Sample:** SX2918-ICC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X071368.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

```
144) Methapyrilen 0.181 0.214 0.234 0.232 0.224 0.213 0.202 0.142 0.205  14.93
145) Isodrin      0.111 0.115 0.110 0.117 0.114 0.112 0.111 0.117 0.113   2.55

146) I   Chrysene-d12A         ----------------ISTD--------------------
147) Aramite      0.104 0.124 0.149 0.178 0.181 0.184 0.182 0.063 0.146  30.73
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9970
               Response Ratio = 0.00000 + 0.14341 *A + 0.01870 *A^2

148) p-(Dimethyla 0.363 0.426 0.456 0.517 0.518 0.515 0.504 0.277 0.447  19.70
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9989
               Response Ratio = 0.00000 + 0.50583 *A + 0.00152 *A^2

149) Chlorobenzil 0.445 0.483 0.521 0.594 0.600 0.596 0.580 0.356 0.522  16.99
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9981
               Response Ratio = 0.00000 + 0.53019 *A + 0.02834 *A^2

150) Kepone                                              0.018       0.018   0.00
151) 3,3'-Dimethy 0.603 0.685 0.699 0.742 0.708 0.658 0.599 0.475 0.646  13.16
152) 2-Acetylamin 0.341 0.437 0.533 0.619 0.627 0.632 0.632 0.223 0.506  30.99
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9971
               Response Ratio = 0.00000 + 0.50255 *A + 0.06226 *A^2


153) I   Perylene-d12A         ----------------ISTD--------------------
154) 7,12-Dimethy 0.478 0.510 0.548 0.614 0.612 0.611 0.607 0.461 0.555  11.68
155) Hexachloroph 0.018 0.046 0.084 0.113 0.115 0.121 0.123       0.089  46.87
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9919
               Response Ratio = 0.00000 + 0.07118 *A + 0.00238 *A^2

156) 3-Methylchol 0.397 0.451 0.491 0.557 0.565 0.575 0.588 0.378 0.500  16.70
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9995
               Response Ratio = 0.00000 + 0.50722 *A + 0.03377 *A^2

157) Dibenz(a,j)a 0.559 0.566 0.633 0.755 0.777 0.804 0.865 0.307 0.658  27.54
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9995
               Response Ratio = 0.00000 + 0.57753 *A + 0.12012 *A^2

 ------------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

           8270DApp9SX-062320.m        Wed Jun 24 13:09:08 2020
```

Initial Calibration Verification

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071372.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\0623_sx2918\x071372.D Vial: 18
Acq On : 23 Jun 2020 4:58 pm Operator: marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\MET...DApp9SX-062320.m (RTE Integrator)
Title : SW846 8270D OR EPA 625
Last Update : Wed Jun 24 12:54:05 2020
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	108	0.00	6.01
2		1,4-Dioxane	50.000	47.566	4.9	111	0.01	2.85
3		N-nitrosodimethylamine	50.000	46.264	7.5	104	0.00	3.18
4		Pyridine		----------NA----------				
5	P	Benzaldehyde	50.000	37.510	25.0#	84	0.00	5.53
6		Aniline		----------NA----------				
7	S	2-Fluorophenol		----------NA----------				
8	P	bis(2-Chloroethyl)ether	50.000	42.881	14.2	93	0.00	5.73
9	S	Phenol-d5		----------NA----------				
10	P	Phenol	50.000	40.785	18.4	84	0.00	5.62
11	P	2-Chlorophenol	50.000	45.244	9.5	96	0.00	5.77
12		1,3-Dichlorobenzene	50.000	47.671	4.7	105	0.00	5.95
13		1,4-Dichlorobenzene	50.000	47.894	4.2	104	0.00	6.03
14		1,2-Dichlorobenzene	50.000	46.632	6.7	101	0.00	6.19
15		Benzyl alcohol		----------NA----------				
16	P	2,2'-Oxybis(1-chloropropa	50.000	46.757	6.5	102	0.00	6.33
17	P	2-Methylphenol	50.000	44.371	11.3	94	0.00	6.29
18	P	Acetophenone	50.000	45.454	9.1	98	0.00	6.45
19	P	Hexachloroethane	50.000	49.837	0.3	108	0.00	6.57
20	P	N-Nitroso-di-n-propylamin	50.000	45.372	9.3	96	0.00	6.46
21	P	3&4-Methylphenol	100.000	92.840	7.2	86	0.00	6.46
22	I	Naphthalene-d8	40.000	40.000	0.0	104	0.00	7.43
23	S	Nitrobenzene-d5		----------NA----------				
24	P	Nitrobenzene	50.000	46.237	7.5	97	0.00	6.64
25	P	Isophorone	50.000	42.340	15.3	91	0.00	6.92
26	P	2-Nitrophenol	50.000	48.035	3.9	99	0.00	7.00
27	P	2,4-Dimethylphenol	50.000	43.260	13.5	91	0.00	7.06
28		O,O,O-Triethylphosphoroth		----------NA----------				
29	P	bis(2-Chloroethoxy)methan	50.000	46.392	7.2	98	0.00	7.18
		----------	Amount	Calc.	%Drift	----------		
30		Benzoic Acid	100.000	85.627	14.4	75	0.05	7.23
		----------	Amount	Calc.	%Drift	----------		
31	P	2,4-Dichlorophenol	50.000	48.603	2.8	100	0.00	7.28
32		1,2,4-Trichlorobenzene	50.000	48.057	3.9	103	0.00	7.37
33		alpha-Terpineol		----------NA----------				
34	P	Naphthalene	50.000	46.476	7.0	98	0.00	7.46
35	P	4-Chloroaniline		----------NA----------				
36		2,6-Dichlorophenol	50.000	46.579	6.8	97	0.00	7.53
37	P	Hexachlorobutadiene	50.000	49.106	1.8	105	0.00	7.61

Initial Calibration Verification

Job Number: FA77689 **Sample:** SX2918-ICV2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X071372.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

38	P	Caprolactam	50.000	41.944	16.1	89	-0.01	7.95
39	P	4-Chloro-3-methylphenol	50.000	43.610	12.8	92	0.00	8.10
40	P	2-Methylnaphthalene		----------NA----------				
41		1-Methylnaphthalene	50.000	41.547	16.9	89	0.00	8.37
42	P	1,2,4,5-Tetrachlorobenzen	50.000	43.915	12.2	92	0.00	8.45
43	I	Acenaphthene-d10	40.000	40.000	0.0	97	0.00	9.48
		---------- Amount	Calc.	%Drift	----------			
44	P	Hexachlorocyclopentadiene	50.000	48.130	3.7	91	0.00	8.45
		---------- Amount	Calc.	%Drift	----------			
45	P	2,4,6-Trichlorophenol	50.000	51.185	-2.4	95	0.00	8.59
46	P	2,4,5-Trichlorophenol	50.000	52.484	-5.0	99	0.00	8.63
47	S	2-Fluorobiphenyl		----------NA----------				
48	P	1,1'-Biphenyl	50.000	47.048	5.9	91	0.00	8.81
49	P	2-Chloronaphthalene	50.000	50.632	-1.3	97	0.00	8.83
50	P	2-Nitroaniline		----------NA----------				
51		p-Dinitrobenzene		----------NA----------				
52	P	Acenaphthylene	50.000	51.239	-2.5	97	0.00	9.31
53	P	Dimethylphthalate	50.000	47.010	6.0	93	0.00	9.19
54		m-Dinitrobenzene		----------NA----------				
55	P	2,6-Dinitrotoluene	50.000	45.174	9.7	85	0.00	9.25
56		o-Dinitrobenzene		----------NA----------				
57	P	Acenaphthene	50.000	47.244	5.5	92	0.00	9.51
58	P	3-Nitroaniline		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
59	P	2,4-Dinitrophenol	100.000	93.332	6.7	78	0.00	9.56
		---------- Amount	Calc.	%Drift	----------			
60	P	Dibenzofuran		----------NA----------				
61	P	2,4-Dinitrotoluene	50.000	49.367	1.3	93	0.00	9.72
62	P	4-Nitrophenol	100.000	96.190	3.8	74	0.00	9.65
63		2,3,5,6-Tetrachlorophenol		----------NA----------				
64	P	2,3,4,6-Tetrachlorophenol	50.000	45.098	9.8	85	0.00	9.87
65	P	Fluorene	50.000	48.561	2.9	95	0.00	10.12
66	P	4-Chlorophenyl-phenylethe	50.000	49.551	0.9	96	0.00	10.14
67	P	Diethylphthalate	50.000	47.789	4.4	93	0.00	10.03
68		Thionazin		----------NA----------				
69	P	4-Nitroaniline		----------NA----------				
70	I	Phenanthrene-d10	40.000	40.000	0.0	93	0.00	11.22
		---------- Amount	Calc.	%Drift	----------			
71	P	4,6-Dinitro-2-methylpheno	100.000	94.066	5.9	77	0.00	10.19
		---------- Amount	Calc.	%Drift	----------			
72	P	n-Nitrosodiphenylamine		----------NA----------				
73		Diphenylamine		----------NA----------				
74		1,2-Diphenylhydrazine	50.000	47.822	4.4	88	0.00	10.33
		---------- Amount	Calc.	%Drift	----------			
75	S	2,4,6-Tribromophenol		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
76		Sulfotep		----------NA----------				
77		Phorate		----------NA----------				
78	P	4-Bromophenyl-phenylether	50.000	49.458	1.1	92	0.00	10.72
79	P	Hexachlorobenzene	50.000	45.838	8.3	86	0.00	10.77

Initial Calibration Verification

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071372.D

			Amount	Calc.	%Drift			
80		Dimethoate		NA				
81		Simazine		NA				
82	P	Atrazine	50.000	43.244	13.5	80	0.00	10.94
83	P	Pentachlorophenol	100.000	89.053	10.9	72	0.00	11.01
84	P	Phenanthrene	50.000	47.649	4.7	89	0.00	11.25
85	P	Anthracene	50.000	46.781	6.4	86	0.00	11.32
86		Disulfoton		NA				
87	P	Carbazole		NA				
88		Methyl Parathion		NA				
89	P	Di-n-butylphthalate	50.000	49.309	1.4	87	0.00	11.97
90		Ethyl Parathion		NA				
91	P	Fluoranthene	50.000	45.798	8.4	85	0.00	12.66
92	I	Chrysene-d12	40.000	40.000	0.0	80	0.00	14.49
93		Benzidine		NA				
94	P	Pyrene	50.000	49.982	0.0	82	0.00	12.92
95	S	Terphenyl-d14		NA				
96		Famphur		NA				
97	P	Butylbenzylphthalate	50.000	50.948	-1.9	83	0.00	13.79
98	P	3,3'-Dichlorobenzidine		NA				
99	P	Benzo[a]anthracene	50.000	47.538	4.9	77	0.00	14.48
100	P	Chrysene	50.000	49.114	1.8	80	0.00	14.53
101	P	bis(2-Ethylhexyl)phthalat	50.000	50.757	-1.5	80	0.00	14.64
102	I	Perylene-d12	40.000	40.000	0.0	89	0.00	16.81
103	P	Di-n-octylphthalate	50.000	46.197	7.6	79	0.00	15.68
104	P	Benzo[b]fluoranthene	50.000	47.853	4.3	86	0.00	16.17
105	P	Benzo[k]fluoranthene	50.000	47.749	4.5	85	0.00	16.22

Initial Calibration Verification

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Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

			Amount	Calc.	%Drift			
106	P	Benzo[a]pyrene	50.000	48.306	3.4	87	0.00	16.71
107	P	Indeno[1,2,3-cd]pyrene	50.000	51.104	-2.2	93	0.00	18.45
108	P	Dibenz[a,h]anthracene	50.000	50.722	-1.4	93	0.00	18.50
109	P	Benzo[g,h,i]perylene	50.000	51.848	-3.7	95	0.00	18.80

		Amount	Calc.	%Drift			
110	1,4-Dichlorobenzene-d4A	40.000	40.000	0.0	121	0.00	6.01
111	2-Picoline		NA				
112	N-Nitrosomethylethylamine		NA				
113	Methyl methanesulfonate		NA				
114	N-Nitrosodiethylamine		NA				
115	Ethyl methanesulfonate		NA				
116	Pentachloroethane		NA				
117	N-Nitrosopyrrolidine		NA				
118	N-Nitrosomorpholine		NA				
119	O-Toluidine		NA				
120	Naphthalene-d8A	40.000	40.000	0.0	116	0.00	7.43
121	N-Nitrosopiperidine		NA				
122	A,A-Dimethylphenethylamin		NA				
123	Hexachloropropene		NA				

		Amount	Calc.	%Drift			
124	N-Nitrosodi-n-butylamine		NA				

		Amount	Calc.	%Drift			
125	p-Phenylenediamine		NA				
126	Isosafrole		NA				
127	Acenaphthene-d10A	40.000	40.000	0.0	105	0.00	9.48
128	Safrole		NA				
129	1-Chloronaphthalene		NA				
130	Diphenyl Ether		NA				

		Amount	Calc.	%Drift			
131	1,4-Naphthoquinone		NA				

		Amount	Calc.	%Drift			
132	Pentachlorobenzene		NA				
133	1-Naphthylamine		NA				
134	2-Naphthylamine		NA				

		Amount	Calc.	%Drift			
135	5-Nitro-o-toluidine		NA				

		Amount	Calc.	%Drift			
136	Phenanthrene-d10A	40.000	40.000	0.0	93	0.00	11.22

		Amount	Calc.	%Drift			
137	1,3,5-Trinitrobenzene		NA				

		Amount	Calc.	%Drift			
138	Diallate		NA				
139	Phenacetin		NA				
140	4-Aminobiphenyl		NA				
141	Pronamide		NA				

Initial Calibration Verification

Job Number: FA77689 **Sample:** SX2918-ICV2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X071372.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

142		Pentachloronitrobenzene		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
143		4-Nitroquinoline 1-Oxide		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
144		Methapyrilene		----------NA----------				
145		Isodrin		----------NA----------				
146	I	Chrysene-d12A	40.000	40.000	0.0	94	0.00	14.49
		---------- Amount	Calc.	%Drift	----------			
147		Aramite		----------NA----------				
148		p-(Dimethylamine)azobenze		----------NA----------				
149		Chlorobenzilate		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
150		Kepone		----------NA----------				
151		3,3'-Dimethylbenzidine		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
152		2-Acetylaminofluorene		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
153	I	Perylene-d12A	40.000	40.000	0.0	91	-0.02	16.81
154		7,12-Dimethylbenz(a)anthr		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
155		Hexachlorophene		----------NA----------				
156		3-Methylcholanthrene		----------NA----------				
157		Dibenz(a,j)acridine		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
x071368.D 8270DApp9SX-062320.m Wed Jun 24 13:03:01 2020

Initial Calibration Verification

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071373.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\0623_sx2918\x071373.D Vial: 19
Acq On : 23 Jun 2020 5:25 pm Operator: marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\MET...DApp9SX-062320.m (RTE Integrator)
Title : SW846 8270D OR EPA 625
Last Update : Tue Jun 23 17:15:34 2020
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	88	0.00	6.00
2		1,4-Dioxane		----------NA----------				
3		N-nitrosodimethylamine		----------NA----------				
4		Pyridine	50.000	62.306	-24.6#	112	0.00	3.20
5	P	Benzaldehyde		----------NA----------				
6		Aniline	50.000	48.306	3.4	83	0.00	5.65
7	S	2-Fluorophenol		----------NA----------				
8	P	bis(2-Chloroethyl)ether		----------NA----------				
9	S	Phenol-d5		----------NA----------				
10	P	Phenol		----------NA----------				
11	P	2-Chlorophenol		----------NA----------				
12		1,3-Dichlorobenzene		----------NA----------				
13		1,4-Dichlorobenzene		----------NA----------				
14		1,2-Dichlorobenzene		----------NA----------				
15		Benzyl alcohol	50.000	52.065	-4.1	92	0.00	6.16
16	P	2,2'-Oxybis(1-chloropropa		----------NA----------				
17	P	2-Methylphenol		----------NA----------				
18	P	Acetophenone		----------NA----------				
19	P	Hexachloroethane		----------NA----------				
20	P	N-Nitroso-di-n-propylamin		----------NA----------				
21	P	3&4-Methylphenol		----------NA----------				
22	I	Naphthalene-d8	40.000	40.000	0.0	84	0.00	7.43
23	S	Nitrobenzene-d5		----------NA----------				
24	P	Nitrobenzene		----------NA----------				
25	P	Isophorone		----------NA----------				
26	P	2-Nitrophenol		----------NA----------				
27	P	2,4-Dimethylphenol		----------NA----------				
28		O,O,O-Triethylphosphoroth		----------NA----------				
29	P	bis(2-Chloroethoxy)methan		----------NA----------				
		----------	Amount	Calc.	%Drift		----------	
30		Benzoic Acid		----------NA----------				
		----------	Amount	Calc.	%Drift		----------	
31	P	2,4-Dichlorophenol		----------NA----------				
32		1,2,4-Trichlorobenzene		----------NA----------				
33		alpha-Terpineol		----------NA----------				
34	P	Naphthalene		----------NA----------				
35	P	4-Chloroaniline	50.000	57.182	-14.4	96	0.00	7.53
36		2,6-Dichlorophenol		----------NA----------				
37	P	Hexachlorobutadiene		----------NA----------				

Initial Calibration Verification

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071373.D

38	P	Caprolactam		----------NA----------				
39	P	4-Chloro-3-methylphenol		----------NA----------				
40	P	2-Methylnaphthalene	50.000	54.134	-8.3	94	0.00	8.26
41		1-Methylnaphthalene		----------NA----------				
42	P	1,2,4,5-Tetrachlorobenzen		----------NA----------				
43	I	Acenaphthene-d10	40.000	40.000	0.0	96	0.00	9.48
		---------- Amount	Calc.	%Drift	----------			
44	P	Hexachlorocyclopentadiene		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
45	P	2,4,6-Trichlorophenol		----------NA----------				
46	P	2,4,5-Trichlorophenol		----------NA----------				
47	S	2-Fluorobiphenyl		----------NA----------				
48	P	1,1'-Biphenyl		----------NA----------				
49	P	2-Chloronaphthalene		----------NA----------				
50	P	2-Nitroaniline	50.000	62.603	-25.2#	119	0.00	8.96
51		p-Dinitrobenzene		----------NA----------				
52	P	Acenaphthylene		----------NA----------				
53	P	Dimethylphthalate		----------NA----------				
54		m-Dinitrobenzene	50.000	52.160	-4.3	95	0.00	9.21
55	P	2,6-Dinitrotoluene		----------NA----------				
56		o-Dinitrobenzene		----------NA----------				
57	P	Acenaphthene		----------NA----------				
58	P	3-Nitroaniline	50.000	56.804	-13.6	106	0.00	9.44
		---------- Amount	Calc.	%Drift	----------			
59	P	2,4-Dinitrophenol		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
60	P	Dibenzofuran	50.000	51.041	-2.1	100	0.00	9.72
61	P	2,4-Dinitrotoluene		----------NA----------				
62	P	4-Nitrophenol		----------NA----------				
63		2,3,5,6-Tetrachlorophenol		----------NA----------				
64	P	2,3,4,6-Tetrachlorophenol		----------NA----------				
65	P	Fluorene		----------NA----------				
66	P	4-Chlorophenyl-phenylethe		----------NA----------				
67	P	Diethylphthalate		----------NA----------				
68		Thionazin		----------NA----------				
69	P	4-Nitroaniline	50.000	49.051	1.9	93	-0.01	10.16
70	I	Phenanthrene-d10	40.000	40.000	0.0	94	0.00	11.22
		---------- Amount	Calc.	%Drift	----------			
71	P	4,6-Dinitro-2-methylpheno		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
72	P	n-Nitrosodiphenylamine	60.000	55.026	8.3	88	0.00	10.28
73		Diphenylamine	50.000	46.890	6.2	88	0.00	10.28
74		1,2-Diphenylhydrazine		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
75	S	2,4,6-Tribromophenol		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
76		Sulfotep		----------NA----------				
77		Phorate		----------NA----------				
78	P	4-Bromophenyl-phenylether		----------NA----------				
79	P	Hexachlorobenzene		----------NA----------				

			Amount	Calc.	%Drift			
80		Dimethoate		NA				
			Amount	Calc.	%Drift			
81		Simazine		NA				
82	P	Atrazine		NA				
			Amount	Calc.	%Drift			
83	P	Pentachlorophenol		NA				
			Amount	Calc.	%Drift			
84	P	Phenanthrene		NA				
85	P	Anthracene		NA				
86		Disulfoton		NA				
87	P	Carbazole	50.000	52.855	-5.7	100	0.00	11.51
			Amount	Calc.	%Drift			
88		Methyl Parathion		NA				
			Amount	Calc.	%Drift			
89	P	Di-n-butylphthalate		NA				
			Amount	Calc.	%Drift			
90		Ethyl Parathion		NA				
			Amount	Calc.	%Drift			
91	P	Fluoranthene		NA				
92	I	Chrysene-d12	40.000	40.000	0.0	90	0.00	14.49
			Amount	Calc.	%Drift			
93		Benzidine	50.000	57.661	-15.3	103	0.00	12.84
			Amount	Calc.	%Drift			
94	P	Pyrene		NA				
95	S	Terphenyl-d14		NA				
			Amount	Calc.	%Drift			
96		Famphur		NA				
97	P	Butylbenzylphthalate		NA				
98	P	3,3'-Dichlorobenzidine	50.000	46.383	7.2	82	0.00	14.48
			Amount	Calc.	%Drift			
99	P	Benzo[a]anthracene		NA				
100	P	Chrysene		NA				
			Amount	Calc.	%Drift			
101	P	bis(2-Ethylhexyl)phthalat		NA				
			Amount	Calc.	%Drift			
102	I	Perylene-d12	40.000	40.000	0.0	92	0.00	16.81
			Amount	Calc.	%Drift			
103	P	Di-n-octylphthalate		NA				
104	P	Benzo[b]fluoranthene		NA				
			Amount	Calc.	%Drift			
105	P	Benzo[k]fluoranthene		NA				

Initial Calibration Verification

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071373.D

			Amount	Calc.	%Drift			
106	P	Benzo[a]pyrene		NA				
107	P	Indeno[1,2,3-cd]pyrene		NA				
108	P	Dibenz[a,h]anthracene		NA				
109	P	Benzo[g,h,i]perylene		NA				

		Amount	Calc.	%Drift			
110	1,4-Dichlorobenzene-d4A	40.000	40.000	0.0	99	0.00	6.00
111	2-Picoline		NA				
112	N-Nitrosomethylethylamine		NA				
113	Methyl methanesulfonate		NA				
114	N-Nitrosodiethylamine		NA				
115	Ethyl methanesulfonate		NA				
116	Pentachloroethane		NA				
117	N-Nitrosopyrrolidine		NA				
118	N-Nitrosomorpholine		NA				
119	O-Toluidine		NA				
120	Naphthalene-d8A	40.000	40.000	0.0	94	0.00	7.43
121	N-Nitrosopiperidine		NA				
122	A,A-Dimethylphenethylamin		NA				
123	Hexachloropropene		NA				

		Amount	Calc.	%Drift			
124	N-Nitrosodi-n-butylamine		NA				

		Amount	Calc.	%Drift			
125	p-Phenylenediamine		NA				
126	Isosafrole		NA				
127	Acenaphthene-d10A	40.000	40.000	0.0	104	0.00	9.48
128	Safrole		NA				
129	1-Chloronaphthalene		NA				
130	Diphenyl Ether		NA				

		Amount	Calc.	%Drift			
131	1,4-Naphthoquinone		NA				

		Amount	Calc.	%Drift			
132	Pentachlorobenzene		NA				
133	1-Naphthylamine		NA				
134	2-Naphthylamine		NA				

		Amount	Calc.	%Drift			
135	5-Nitro-o-toluidine		NA				

		Amount	Calc.	%Drift			
136	Phenanthrene-d10A	40.000	40.000	0.0	94	0.00	11.22

		Amount	Calc.	%Drift			
137	1,3,5-Trinitrobenzene		NA				

		Amount	Calc.	%Drift			
138	Diallate		NA				
139	Phenacetin		NA				
140	4-Aminobiphenyl		NA				
141	Pronamide		NA				

Initial Calibration Verification

Job Number: FA77689 **Sample:** SX2918-ICV2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X071373.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

142		Pentachloronitrobenzene		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
143		4-Nitroquinoline 1-Oxide		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
144		Methapyrilene		----------NA----------				
145		Isodrin		----------NA----------				
146	I	Chrysene-d12A	40.000	40.000	0.0	104	0.00	14.49
		---------- Amount	Calc.	%Drift	----------			
147		Aramite		----------NA----------				
148		p-(Dimethylamine)azobenze		----------NA----------				
149		Chlorobenzilate		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
150		Kepone		----------NA----------				
151		3,3'-Dimethylbenzidine		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
152		2-Acetylaminofluorene		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
153	I	Perylene-d12A	40.000	40.000	0.0	94	-0.02	16.81
154		7,12-Dimethylbenz(a)anthr		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
155		Hexachlorophene		----------NA----------				
156		3-Methylcholanthrene		----------NA----------				
157		Dibenz(a,j)acridine		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
x071368.D 8270DApp9SX-062320.m Tue Jun 23 19:08:22 2020

Initial Calibration Verification

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071374.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\0623_sx2918\x071374.D Vial: 20
Acq On : 23 Jun 2020 5:51 pm Operator: marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\MET...DApp9SX-062320.m (RTE Integrator)
Title : SW846 8270D OR EPA 625
Last Update : Wed Jun 24 09:47:58 2020
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	87	0.00	6.00
2		1,4-Dioxane		----------NA----------				
3		N-nitrosodimethylamine		----------NA----------				
4		Pyridine		----------NA----------				
5	P	Benzaldehyde		----------NA----------				
6		Aniline		----------NA----------				
7	S	2-Fluorophenol		----------NA----------				
8	P	bis(2-Chloroethyl)ether		----------NA----------				
9	S	Phenol-d5		----------NA----------				
10	P	Phenol		----------NA----------				
11	P	2-Chlorophenol		----------NA----------				
12		1,3-Dichlorobenzene		----------NA----------				
13		1,4-Dichlorobenzene		----------NA----------				
14		1,2-Dichlorobenzene		----------NA----------				
15		Benzyl alcohol		----------NA----------				
16	P	2,2'-Oxybis(1-chloropropa		----------NA----------				
17	P	2-Methylphenol		----------NA----------				
18	P	Acetophenone		----------NA----------				
19	P	Hexachloroethane		----------NA----------				
20	P	N-Nitroso-di-n-propylamin		----------NA----------				
21	P	3&4-Methylphenol		----------NA----------				
22	I	Naphthalene-d8	40.000	40.000	0.0	85	0.00	7.43
23	S	Nitrobenzene-d5		----------NA----------				
24	P	Nitrobenzene		----------NA----------				
25	P	Isophorone		----------NA----------				
26	P	2-Nitrophenol		----------NA----------				
27	P	2,4-Dimethylphenol		----------NA----------				
28		O,O,O-Triethylphosphoroth	50.000	44.450	11.1	77	-0.01	7.14
29	P	bis(2-Chloroethoxy)methan		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
30		Benzoic Acid		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
31	P	2,4-Dichlorophenol		----------NA----------				
32		1,2,4-Trichlorobenzene		----------NA----------				
33		alpha-Terpineol		----------NA----------				
34	P	Naphthalene		----------NA----------				
35	P	4-Chloroaniline		----------NA----------				
36		2,6-Dichlorophenol		----------NA----------				
37	P	Hexachlorobutadiene		----------NA----------				

Initial Calibration Verification

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071374.D

38	P	Caprolactam			NA				
39	P	4-Chloro-3-methylphenol			NA				
40	P	2-Methylnaphthalene			NA				
41		1-Methylnaphthalene			NA				
42	P	1,2,4,5-Tetrachlorobenzen			NA				
43	I	Acenaphthene-d10	40.000	40.000	0.0	84	0.00	9.48	
			Amount	Calc.	%Drift				
44	P	Hexachlorocyclopentadiene			NA				
			Amount	Calc.	%Drift				
45	P	2,4,6-Trichlorophenol			NA				
46	P	2,4,5-Trichlorophenol			NA				
47	S	2-Fluorobiphenyl			NA				
48	P	1,1'-Biphenyl			NA				
49	P	2-Chloronaphthalene			NA				
50	P	2-Nitroaniline			NA				
51		p-Dinitrobenzene			NA				
52	P	Acenaphthylene			NA				
53	P	Dimethylphthalate			NA				
54		m-Dinitrobenzene			NA				
55	P	2,6-Dinitrotoluene			NA				
56		o-Dinitrobenzene			NA				
57	P	Acenaphthene			NA				
58	P	3-Nitroaniline			NA				
			Amount	Calc.	%Drift				
59	P	2,4-Dinitrophenol			NA				
			Amount	Calc.	%Drift				
60	P	Dibenzofuran			NA				
61	P	2,4-Dinitrotoluene			NA				
62	P	4-Nitrophenol			NA				
63		2,3,5,6-Tetrachlorophenol			NA				
64	P	2,3,4,6-Tetrachlorophenol			NA				
65	P	Fluorene			NA				
66	P	4-Chlorophenyl-phenylethe			NA				
67	P	Diethylphthalate			NA				
68		Thionazin	50.000	50.655	-1.3	85	-0.01	10.12	
69	P	4-Nitroaniline			NA				
70	I	Phenanthrene-d10	40.000	40.000	0.0	96	0.00	11.22	
			Amount	Calc.	%Drift				
71	P	4,6-Dinitro-2-methylpheno			NA				
			Amount	Calc.	%Drift				
72	P	n-Nitrosodiphenylamine			NA				
73		Diphenylamine			NA				
74		1,2-Diphenylhydrazine			NA				
			Amount	Calc.	%Drift				
75	S	2,4,6-Tribromophenol			NA				
			Amount	Calc.	%Drift				
76		Sulfotep	50.000	43.006	14.0	79	0.00	10.50	
77		Phorate	50.000	45.279	9.4	83	0.00	10.64	
78	P	4-Bromophenyl-phenylether			NA				
79	P	Hexachlorobenzene			NA				

Initial Calibration Verification

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071374.D

			Amount	Calc.	%Drift			
80		Dimethoate	50.000	43.900	12.2	85	0.00	10.83
81		Simazine		NA				
82	P	Atrazine		NA				
83	P	Pentachlorophenol		NA				
84	P	Phenanthrene		NA				
85	P	Anthracene		NA				
86		Disulfoton	50.000	37.153	25.7#	68	0.00	11.26
87	P	Carbazole		NA				
88		Methyl Parathion	50.000	45.131	9.7	87	0.00	11.70
89	P	Di-n-butylphthalate		NA				
90		Ethyl Parathion	50.000	45.602	8.8	88	0.00	12.17
91	P	Fluoranthene		NA				
92	I	Chrysene-d12	40.000	40.000	0.0	87	0.00	14.49
93		Benzidine		NA				
94	P	Pyrene		NA				
95	S	Terphenyl-d14		NA				
96		Famphur	50.000	81.906	-63.8#	149	0.00	13.70
97	P	Butylbenzylphthalate		NA				
98	P	3,3'-Dichlorobenzidine		NA				
99	P	Benzo[a]anthracene		NA				
100	P	Chrysene		NA				
101	P	bis(2-Ethylhexyl)phthalat		NA				
102	I	Perylene-d12	40.000	40.000	0.0	93	0.00	16.81
103	P	Di-n-octylphthalate		NA				
104	P	Benzo[b]fluoranthene		NA				
105	P	Benzo[k]fluoranthene		NA				

Initial Calibration Verification

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071374.D

			Amount	Calc.	%Drift			
106	P	Benzo[a]pyrene		NA				
107	P	Indeno[1,2,3-cd]pyrene		NA				
108	P	Dibenz[a,h]anthracene		NA				
109	P	Benzo[g,h,i]perylene		NA				

		Amount	Calc.	%Drift			
110	1,4-Dichlorobenzene-d4A	40.000	40.000	0.0	98	0.00	6.00
111	2-Picoline		NA				
112	N-Nitrosomethylethylamine		NA				
113	Methyl methanesulfonate		NA				
114	N-Nitrosodiethylamine		NA				
115	Ethyl methanesulfonate		NA				
116	Pentachloroethane		NA				
117	N-Nitrosopyrrolidine		NA				
118	N-Nitrosomorpholine		NA				
119	O-Toluidine		NA				
120	Naphthalene-d8A	40.000	40.000	0.0	95	0.00	7.43
121	N-Nitrosopiperidine		NA				
122	A,A-Dimethylphenethylamin		NA				
123	Hexachloropropene		NA				

		Amount	Calc.	%Drift
124	N-Nitrosodi-n-butylamine		NA	

		Amount	Calc.	%Drift
125	p-Phenylenediamine		NA	
126	Isosafrole		NA	

		Amount	Calc.	%Drift			
127	Acenaphthene-d10A	40.000	40.000	0.0	91	0.00	9.48
128	Safrole		NA				
129	1-Chloronaphthalene		NA				
130	Diphenyl Ether		NA				

		Amount	Calc.	%Drift
131	1,4-Naphthoquinone		NA	

		Amount	Calc.	%Drift
132	Pentachlorobenzene		NA	
133	1-Naphthylamine		NA	
134	2-Naphthylamine		NA	

		Amount	Calc.	%Drift
135	5-Nitro-o-toluidine		NA	

		Amount	Calc.	%Drift			
136	Phenanthrene-d10A	40.000	40.000	0.0	96	0.00	11.22

		Amount	Calc.	%Drift
137	1,3,5-Trinitrobenzene		NA	

		Amount	Calc.	%Drift
138	Diallate		NA	
139	Phenacetin		NA	
140	4-Aminobiphenyl		NA	
141	Pronamide		NA	

Initial Calibration Verification

Job Number: FA77689 **Sample:** SX2918-ICV2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X071374.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

142		Pentachloronitrobenzene		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
143		4-Nitroquinoline 1-Oxide		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
144		Methapyrilene		----------NA----------				
145		Isodrin		----------NA----------				
146	I	Chrysene-d12A	40.000	40.000	0.0	101	0.00	14.49
		----------	Amount	Calc.	%Drift	----------		
147		Aramite		----------NA----------				
148		p-(Dimethylamine)azobenze		----------NA----------				
149		Chlorobenzilate		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
150		Kepone		----------NA----------				
151		3,3'-Dimethylbenzidine		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
152		2-Acetylaminofluorene		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
153	I	Perylene-d12A	40.000	40.000	0.0	96	-0.02	16.81
154		7,12-Dimethylbenz(a)anthr		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
155		Hexachlorophene		----------NA----------				
156		3-Methylcholanthrene		----------NA----------				
157		Dibenz(a,j)acridine		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
x071368.D 8270DApp9SX-062320.m Wed Jun 24 09:48:26 2020

Initial Calibration Verification

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071375.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\0623_sx2918\x071375.D Vial: 21
Acq On : 23 Jun 2020 6:17 pm Operator: marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\MET...DApp9SX-062320.m (RTE Integrator)
Title : SW846 8270D OR EPA 625
Last Update : Tue Jun 23 17:15:34 2020
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	101	0.00	6.00
2		1,4-Dioxane		----------	NA	----------		
3		N-nitrosodimethylamine		----------	NA	----------		
4		Pyridine		----------	NA	----------		
5	P	Benzaldehyde		----------	NA	----------		
6		Aniline		----------	NA	----------		
7	S	2-Fluorophenol		----------	NA	----------		
8	P	bis(2-Chloroethyl)ether		----------	NA	----------		
9	S	Phenol-d5		----------	NA	----------		
10	P	Phenol		----------	NA	----------		
11	P	2-Chlorophenol		----------	NA	----------		
12		1,3-Dichlorobenzene		----------	NA	----------		
13		1,4-Dichlorobenzene		----------	NA	----------		
14		1,2-Dichlorobenzene		----------	NA	----------		
15		Benzyl alcohol		----------	NA	----------		
16	P	2,2'-Oxybis(1-chloropropa		----------	NA	----------		
17	P	2-Methylphenol		----------	NA	----------		
18	P	Acetophenone		----------	NA	----------		
19	P	Hexachloroethane		----------	NA	----------		
20	P	N-Nitroso-di-n-propylamin		----------	NA	----------		
21	P	3&4-Methylphenol		----------	NA	----------		
22	I	Naphthalene-d8	40.000	40.000	0.0	109	0.00	7.43
23	S	Nitrobenzene-d5		----------	NA	----------		
24	P	Nitrobenzene		----------	NA	----------		
25	P	Isophorone		----------	NA	----------		
26	P	2-Nitrophenol		----------	NA	----------		
27	P	2,4-Dimethylphenol		----------	NA	----------		
28		O,O,O-Triethylphosphoroth		----------	NA	----------		
29	P	bis(2-Chloroethoxy)methan		----------	NA	----------		
		----------	Amount	Calc.	%Drift	----------		
30		Benzoic Acid		----------	NA	----------		
		----------	Amount	Calc.	%Drift	----------		
31	P	2,4-Dichlorophenol		----------	NA	----------		
32		1,2,4-Trichlorobenzene		----------	NA	----------		
33		alpha-Terpineol		----------	NA	----------		
34	P	Naphthalene		----------	NA	----------		
35	P	4-Chloroaniline		----------	NA	----------		
36		2,6-Dichlorophenol		----------	NA	----------		
37	P	Hexachlorobutadiene		----------	NA	----------		

Initial Calibration Verification

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071375.D

38	P	Caprolactam			NA				
39	P	4-Chloro-3-methylphenol			NA				
40	P	2-Methylnaphthalene			NA				
41		1-Methylnaphthalene			NA				
42	P	1,2,4,5-Tetrachlorobenzen			NA				
43	I	Acenaphthene-d10	40.000	40.000	0.0	104	0.00	9.48	
			Amount	Calc.	%Drift				
44	P	Hexachlorocyclopentadiene			NA				
			Amount	Calc.	%Drift				
45	P	2,4,6-Trichlorophenol			NA				
46	P	2,4,5-Trichlorophenol			NA				
47	S	2-Fluorobiphenyl			NA				
48	P	1,1'-Biphenyl			NA				
49	P	2-Chloronaphthalene			NA				
50	P	2-Nitroaniline			NA				
51		p-Dinitrobenzene			NA				
52	P	Acenaphthylene			NA				
53	P	Dimethylphthalate			NA				
54		m-Dinitrobenzene			NA				
55	P	2,6-Dinitrotoluene			NA				
56		o-Dinitrobenzene			NA				
57	P	Acenaphthene			NA				
58	P	3-Nitroaniline			NA				
			Amount	Calc.	%Drift				
59	P	2,4-Dinitrophenol			NA				
			Amount	Calc.	%Drift				
60	P	Dibenzofuran			NA				
61	P	2,4-Dinitrotoluene			NA				
62	P	4-Nitrophenol			NA				
63		2,3,5,6-Tetrachlorophenol			NA				
64	P	2,3,4,6-Tetrachlorophenol			NA				
65	P	Fluorene			NA				
66	P	4-Chlorophenyl-phenylethe			NA				
67	P	Diethylphthalate			NA				
68		Thionazin			NA				
69	P	4-Nitroaniline			NA				
70	I	Phenanthrene-d10	40.000	40.000	0.0	115	0.00	11.22	
			Amount	Calc.	%Drift				
71	P	4,6-Dinitro-2-methylpheno			NA				
			Amount	Calc.	%Drift				
72	P	n-Nitrosodiphenylamine			NA				
73		Diphenylamine			NA				
74		1,2-Diphenylhydrazine			NA				
			Amount	Calc.	%Drift				
75	S	2,4,6-Tribromophenol			NA				
			Amount	Calc.	%Drift				
76		Sulfotep			NA				
77		Phorate			NA				
78	P	4-Bromophenyl-phenylether			NA				
79	P	Hexachlorobenzene			NA				

Initial Calibration Verification

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071375.D

			Amount	Calc.	%Drift			
80		Dimethoate		NA				
81		Simazine		NA				
82	P	Atrazine		NA				
83	P	Pentachlorophenol		NA				
84	P	Phenanthrene		NA				
85	P	Anthracene		NA				
86		Disulfoton		NA				
87	P	Carbazole		NA				
88		Methyl Parathion		NA				
89	P	Di-n-butylphthalate		NA				
90		Ethyl Parathion		NA				
91	P	Fluoranthene		NA				
92	I	Chrysene-d12	40.000	40.000	0.0	98	0.00	14.49
93		Benzidine		NA				
94	P	Pyrene		NA				
95	S	Terphenyl-d14		NA				
96		Famphur		NA				
97	P	Butylbenzylphthalate		NA				
98	P	3,3'-Dichlorobenzidine		NA				
99	P	Benzo[a]anthracene		NA				
100	P	Chrysene		NA				
101	P	bis(2-Ethylhexyl)phthalat		NA				
102	I	Perylene-d12	40.000	40.000	0.0	113	0.01	16.82
103	P	Di-n-octylphthalate		NA				
104	P	Benzo[b]fluoranthene		NA				
105	P	Benzo[k]fluoranthene		NA				

Initial Calibration Verification

Job Number: FA77689 **Sample:** SX2918-ICV2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X071375.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

			Amount	Calc.	%Drift			
106	P	Benzo[a]pyrene		NA				
107	P	Indeno[1,2,3-cd]pyrene		NA				
108	P	Dibenz[a,h]anthracene		NA				
109	P	Benzo[g,h,i]perylene		NA				

		Amount	Calc.	%Drift			
110	1,4-Dichlorobenzene-d4A	40.000	40.000	0.0	113	0.00	6.00
111	2-Picoline	50.000	41.736	16.5	90	0.00	3.98
112	N-Nitrosomethylethylamine	50.000	39.497	21.0#	86	0.00	4.11
113	Methyl methanesulfonate	50.000	42.243	15.5	90	0.00	4.44
114	N-Nitrosodiethylamine	50.000	41.727	16.5	88	0.00	4.85
115	Ethyl methanesulfonate	50.000	39.975	20.0#	85	0.00	5.18
116	Pentachloroethane	50.000	39.110	21.8#	84	0.00	5.70
117	N-Nitrosopyrrolidine	50.000	43.888	12.2	90	-0.01	6.43
118	N-Nitrosomorpholine	50.000	41.815	16.4	86	0.00	6.48
119	O-Toluidine	50.000	43.117	13.8	88	0.00	6.50
120	Naphthalene-d8A	40.000	40.000	0.0	121	0.00	7.43
121	N-Nitrosopiperidine	50.000	36.632	26.7#	85	0.00	6.81
122	A,A-Dimethylphenethylamin	50.000	38.452	23.1#	87	-0.06	7.35
123	Hexachloropropene	50.000	47.157	5.7	101	0.00	7.56

		Amount	Calc.	%Drift			
124	N-Nitrosodi-n-butylamine	50.000	32.169	35.7#	68	0.00	7.94

		Amount	Calc.	%Drift			
125	p-Phenylenediamine	50.000	41.295	17.4	91	0.00	7.93
126	Isosafrole	50.000	37.985	24.0#	87	0.00	8.18
127	Acenaphthene-d10A	40.000	40.000	0.0	112	0.00	9.48
128	Safrole	50.000	46.801	6.4	98	0.00	8.78
129	1-Chloronaphthalene	50.000	45.691	8.6	96	0.00	8.85
130	Diphenyl Ether		NA				

		Amount	Calc.	%Drift			
131	1,4-Naphthoquinone	50.000	29.961	40.1#	63	0.00	9.04

		Amount	Calc.	%Drift			
132	Pentachlorobenzene	50.000	42.419	15.2	93	0.00	9.67
133	1-Naphthylamine	50.000	41.445	17.1	89	0.00	9.81
134	2-Naphthylamine	50.000	42.556	14.9	91	0.00	9.91

		Amount	Calc.	%Drift			
135	5-Nitro-o-toluidine	50.000	40.969	18.1	87	0.00	10.14

		Amount	Calc.	%Drift			
136	Phenanthrene-d10A	40.000	40.000	0.0	115	0.00	11.22

		Amount	Calc.	%Drift			
137	1,3,5-Trinitrobenzene	50.000	44.216	11.6	92	0.00	10.59

		Amount	Calc.	%Drift			
138	Diallate	50.000	38.309	23.4#	85	0.00	10.64
139	Phenacetin	50.000	43.996	12.0	90	0.00	10.67
140	4-Aminobiphenyl	50.000	40.445	19.1	86	0.00	11.02
141	Pronamide	50.000	44.783	10.4	92	0.00	11.12

Initial Calibration Verification

Job Number: FA77689 **Sample:** SX2918-ICV2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X071375.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

			Amount	Calc.	%Drift			
142		Pentachloronitrobenzene	50.000	41.791	16.4	87	0.00	11.02
			Amount	Calc.	%Drift			
143		4-Nitroquinoline 1-Oxide	50.000	36.493	27.0#	80	0.00	12.18
			Amount	Calc.	%Drift			
144		Methapyrilene			NA			
145		Isodrin	50.000	41.381	17.2	92	0.00	12.48
146	I	Chrysene-d12A	40.000	40.000	0.0	114	0.00	14.49
			Amount	Calc.	%Drift			
147		Aramite	50.000	41.761	16.5	87	0.00	13.25
148		p-(Dimethylamine)azobenze	50.000	40.070	19.9	89	0.00	13.32
149		Chlorobenzilate	50.000	41.307	17.4	88	0.00	13.39
			Amount	Calc.	%Drift			
150		Kepone	50.000	23.045	53.9#	0	0.00	13.78
151		3,3'-Dimethylbenzidine	50.000	60.240	-20.5#	119	0.00	13.75
			Amount	Calc.	%Drift			
152		2-Acetylaminofluorene	50.000	41.969	16.1	88	0.00	14.08
			Amount	Calc.	%Drift			
153	I	Perylene-d12A	40.000	40.000	0.0	116	0.00	16.82
154		7,12-Dimethylbenz(a)anthr	50.000	46.532	6.9	98	0.00	16.18
			Amount	Calc.	%Drift			
155		Hexachlorophene	500.000	469.073	6.2	95	0.00	16.59
156		3-Methylcholanthrene	50.000	39.832	20.3#	90	0.00	17.33
157		Dibenz(a,j)acridine	50.000	40.348	19.3	87	0.00	18.23

(#) = Out of Range SPCC's out = 0 CCC's out = 0
x071368.D 8270DApp9SX-062320.m Tue Jun 23 19:09:56 2020

Initial Calibration Verification

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071376.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\0623_sx2918\x071376.D Vial: 22
Acq On : 23 Jun 2020 6:43 pm Operator: marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\MET...DApp9SX-062320.m (RTE Integrator)
Title : SW846 8270D OR EPA 625
Last Update : Tue Jun 23 17:15:34 2020
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	96	0.00	6.00
2		1,4-Dioxane		----------	NA	----------		
3		N-nitrosodimethylamine		----------	NA	----------		
4		Pyridine		----------	NA	----------		
5	P	Benzaldehyde		----------	NA	----------		
6		Aniline		----------	NA	----------		
7	S	2-Fluorophenol		----------	NA	----------		
8	P	bis(2-Chloroethyl)ether		----------	NA	----------		
9	S	Phenol-d5		----------	NA	----------		
10	P	Phenol		----------	NA	----------		
11	P	2-Chlorophenol		----------	NA	----------		
12		1,3-Dichlorobenzene		----------	NA	----------		
13		1,4-Dichlorobenzene		----------	NA	----------		
14		1,2-Dichlorobenzene		----------	NA	----------		
15		Benzyl alcohol		----------	NA	----------		
16	P	2,2'-Oxybis(1-chloropropa		----------	NA	----------		
17	P	2-Methylphenol		----------	NA	----------		
18	P	Acetophenone		----------	NA	----------		
19	P	Hexachloroethane		----------	NA	----------		
20	P	N-Nitroso-di-n-propylamin		----------	NA	----------		
21	P	3&4-Methylphenol		----------	NA	----------		
22	I	Naphthalene-d8	40.000	40.000	0.0	94	0.00	7.43
23	S	Nitrobenzene-d5		----------	NA	----------		
24	P	Nitrobenzene		----------	NA	----------		
25	P	Isophorone		----------	NA	----------		
26	P	2-Nitrophenol		----------	NA	----------		
27	P	2,4-Dimethylphenol		----------	NA	----------		
28		O,O,O-Triethylphosphoroth		----------	NA	----------		
29	P	bis(2-Chloroethoxy)methan		----------	NA	----------		
		----------	Amount	Calc.	%Drift	----------		
30		Benzoic Acid		----------	NA	----------		
		----------	Amount	Calc.	%Drift	----------		
31	P	2,4-Dichlorophenol		----------	NA	----------		
32		1,2,4-Trichlorobenzene		----------	NA	----------		
33		alpha-Terpineol		----------	NA	----------		
34	P	Naphthalene		----------	NA	----------		
35	P	4-Chloroaniline		----------	NA	----------		
36		2,6-Dichlorophenol		----------	NA	----------		
37	P	Hexachlorobutadiene		----------	NA	----------		

Initial Calibration Verification

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071376.D

38	P	Caprolactam			NA				
39	P	4-Chloro-3-methylphenol			NA				
40	P	2-Methylnaphthalene			NA				
41		1-Methylnaphthalene			NA				
42	P	1,2,4,5-Tetrachlorobenzen			NA				
43	I	Acenaphthene-d10	40.000	40.000	0.0	109	0.00	9.48	
			Amount	Calc.	%Drift				
44	P	Hexachlorocyclopentadiene			NA				
			Amount	Calc.	%Drift				
45	P	2,4,6-Trichlorophenol			NA				
46	P	2,4,5-Trichlorophenol			NA				
47	S	2-Fluorobiphenyl			NA				
48	P	1,1'-Biphenyl			NA				
49	P	2-Chloronaphthalene			NA				
50	P	2-Nitroaniline			NA				
51		p-Dinitrobenzene			NA				
52	P	Acenaphthylene			NA				
53	P	Dimethylphthalate			NA				
54		m-Dinitrobenzene			NA				
55	P	2,6-Dinitrotoluene			NA				
56		o-Dinitrobenzene			NA				
57	P	Acenaphthene			NA				
58	P	3-Nitroaniline			NA				
			Amount	Calc.	%Drift				
59	P	2,4-Dinitrophenol			NA				
			Amount	Calc.	%Drift				
60	P	Dibenzofuran			NA				
61	P	2,4-Dinitrotoluene			NA				
62	P	4-Nitrophenol			NA				
63		2,3,5,6-Tetrachlorophenol			NA				
64	P	2,3,4,6-Tetrachlorophenol			NA				
65	P	Fluorene			NA				
66	P	4-Chlorophenyl-phenylethe			NA				
67	P	Diethylphthalate			NA				
68		Thionazin			NA				
69	P	4-Nitroaniline			NA				
70	I	Phenanthrene-d10	40.000	40.000	0.0	105	0.00	11.22	
			Amount	Calc.	%Drift				
71	P	4,6-Dinitro-2-methylpheno			NA				
			Amount	Calc.	%Drift				
72	P	n-Nitrosodiphenylamine			NA				
73		Diphenylamine			NA				
74		1,2-Diphenylhydrazine			NA				
			Amount	Calc.	%Drift				
75	S	2,4,6-Tribromophenol			NA				
			Amount	Calc.	%Drift				
76		Sulfotep			NA				
77		Phorate			NA				
78	P	4-Bromophenyl-phenylether			NA				
79	P	Hexachlorobenzene			NA				

Initial Calibration Verification

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071376.D

			Amount	Calc.	%Drift			
80		Dimethoate		NA				
81		Simazine		NA				
82	P	Atrazine		NA				
83	P	Pentachlorophenol		NA				
84	P	Phenanthrene		NA				
85	P	Anthracene		NA				
86		Disulfoton		NA				
87	P	Carbazole		NA				
88		Methyl Parathion		NA				
89	P	Di-n-butylphthalate		NA				
90		Ethyl Parathion		NA				
91	P	Fluoranthene		NA				
92	I	Chrysene-d12	40.000	40.000	0.0	93	0.00	14.49
93		Benzidine		NA				
94	P	Pyrene		NA				
95	S	Terphenyl-d14		NA				
96		Famphur		NA				
97	P	Butylbenzylphthalate		NA				
98	P	3,3'-Dichlorobenzidine		NA				
99	P	Benzo[a]anthracene		NA				
100	P	Chrysene		NA				
101	P	bis(2-Ethylhexyl)phthalat		NA				
102	I	Perylene-d12	40.000	40.000	0.0	103	0.00	16.81
103	P	Di-n-octylphthalate		NA				
104	P	Benzo[b]fluoranthene		NA				
105	P	Benzo[k]fluoranthene		NA				

Initial Calibration Verification

Job Number: FA77689 **Sample:** SX2918-ICV2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X071376.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

			Amount	Calc.	%Drift			
106	P	Benzo[a]pyrene		NA				
107	P	Indeno[1,2,3-cd]pyrene		NA				
108	P	Dibenz[a,h]anthracene		NA				
109	P	Benzo[g,h,i]perylene		NA				

		Amount	Calc.	%Drift			
110	1,4-Dichlorobenzene-d4A	40.000	40.000	0.0	108	0.00	6.00
111	2-Picoline		NA				
112	N-Nitrosomethylethylamine		NA				
113	Methyl methanesulfonate		NA				
114	N-Nitrosodiethylamine		NA				
115	Ethyl methanesulfonate		NA				
116	Pentachloroethane		NA				
117	N-Nitrosopyrrolidine		NA				
118	N-Nitrosomorpholine		NA				
119	O-Toluidine		NA				
120	Naphthalene-d8A	40.000	40.000	0.0	105	0.00	7.43
121	N-Nitrosopiperidine		NA				
122	A,A-Dimethylphenethylamin		NA				
123	Hexachloropropene		NA				

		Amount	Calc.	%Drift			
124	N-Nitrosodi-n-butylamine		NA				

		Amount	Calc.	%Drift			
125	p-Phenylenediamine		NA				
126	Isosafrole		NA				
127	Acenaphthene-d10A	40.000	40.000	0.0	118	0.00	9.48
128	Safrole		NA				
129	1-Chloronaphthalene		NA				
130	Diphenyl Ether	50.000	41.376	17.2	92	0.00	8.95

		Amount	Calc.	%Drift			
131	1,4-Naphthoquinone		NA				

		Amount	Calc.	%Drift			
132	Pentachlorobenzene		NA				
133	1-Naphthylamine		NA				
134	2-Naphthylamine		NA				

		Amount	Calc.	%Drift			
135	5-Nitro-o-toluidine		NA				

		Amount	Calc.	%Drift			
136	Phenanthrene-d10A	40.000	40.000	0.0	105	0.00	11.22

		Amount	Calc.	%Drift			
137	1,3,5-Trinitrobenzene	50.000	44.822	10.4	85	0.00	10.59

		Amount	Calc.	%Drift			
138	Diallate		NA				
139	Phenacetin		NA				
140	4-Aminobiphenyl		NA				
141	Pronamide		NA				

Initial Calibration Verification

Job Number: FA77689 **Sample:** SX2918-ICV2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X071376.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

142		Pentachloronitrobenzene		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
143		4-Nitroquinoline 1-Oxide		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
144		Methapyrilene	50.000	128.026	-156.1#	237	0.00	12.29
145		Isodrin		----------NA----------				
146	I	Chrysene-d12A	40.000	40.000	0.0	109	0.00	14.49
		---------- Amount	Calc.	%Drift	----------			
147		Aramite		----------NA----------				
148		p-(Dimethylamine)azobenze		----------NA----------				
149		Chlorobenzilate		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
150		Kepone		----------NA----------				
151		3,3'-Dimethylbenzidine		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
152		2-Acetylaminofluorene		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
153	I	Perylene-d12A	40.000	40.000	0.0	106	-0.01	16.81
154		7,12-Dimethylbenz(a)anthr		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
155		Hexachlorophene		----------NA----------				
156		3-Methylcholanthrene		----------NA----------				
157		Dibenz(a,j)acridine		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
x071368.D 8270DApp9SX-062320.m Tue Jun 23 19:08:29 2020

Initial Calibration Verification

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071416.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\jo...2020\sx2919\x071416.d Vial: 2
Acq On : 24 Jun 2020 3:22 pm Operator: marthav
Sample : icv2918-50 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\met...DApp9SX-062320.m (RTE Integrator)
Title : SW846 8270D OR EPA 625
Last Update : Tue Jun 23 17:15:34 2020
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	94	0.00	5.99
2		1,4-Dioxane		----------	NA	----------		
3		N-nitrosodimethylamine		----------	NA	----------		
4		Pyridine		----------	NA	----------		
5	P	Benzaldehyde		----------	NA	----------		
6		Aniline		----------	NA	----------		
7	S	2-Fluorophenol		----------	NA	----------		
8	P	bis(2-Chloroethyl)ether		----------	NA	----------		
9	S	Phenol-d5		----------	NA	----------		
10	P	Phenol		----------	NA	----------		
11	P	2-Chlorophenol		----------	NA	----------		
12		1,3-Dichlorobenzene		----------	NA	----------		
13		1,4-Dichlorobenzene		----------	NA	----------		
14		1,2-Dichlorobenzene		----------	NA	----------		
15		Benzyl alcohol		----------	NA	----------		
16	P	2,2'-Oxybis(1-chloropropa		----------	NA	----------		
17	P	2-Methylphenol		----------	NA	----------		
18	P	Acetophenone		----------	NA	----------		
19	P	Hexachloroethane		----------	NA	----------		
20	P	N-Nitroso-di-n-propylamin		----------	NA	----------		
21	P	3&4-Methylphenol		----------	NA	----------		
22	I	Naphthalene-d8	1.000	1.000	0.0	92	0.00	7.42
23	S	Nitrobenzene-d5		----------	NA	----------		
24	P	Nitrobenzene		----------	NA	----------		
25	P	Isophorone		----------	NA	----------		
26	P	2-Nitrophenol		----------	NA	----------		
27	P	2,4-Dimethylphenol		----------	NA	----------		
28		O,O,O-Triethylphosphoroth		----------	NA	----------		
29	P	bis(2-Chloroethoxy)methan		----------	NA	----------		
		----------	True	Calc.	% Drift	----------		
30		Benzoic Acid		----------	NA	----------		
		----------	AvgRF	CCRF	% Dev	----------		
31	P	2,4-Dichlorophenol		----------	NA	----------		
32		1,2,4-Trichlorobenzene		----------	NA	----------		
33		alpha-Terpineol		----------	NA	----------		
34	P	Naphthalene		----------	NA	----------		
35	P	4-Chloroaniline		----------	NA	----------		
36		2,6-Dichlorophenol		----------	NA	----------		
37	P	Hexachlorobutadiene		----------	NA	----------		

Initial Calibration Verification

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071416.D

38	P	Caprolactam		----------NA----------				
39	P	4-Chloro-3-methylphenol		----------NA----------				
40	P	2-Methylnaphthalene		----------NA----------				
41		1-Methylnaphthalene		----------NA----------				
42	P	1,2,4,5-Tetrachlorobenzen		----------NA----------				
43	I	Acenaphthene-d10	1.000	1.000	0.0	84	0.00	9.47
		----------	True	Calc.	% Drift	----------		
44	P	Hexachlorocyclopentadiene		----------NA----------				
		----------	AvgRF	CCRF	% Dev	----------		
45	P	2,4,6-Trichlorophenol		----------NA----------				
46	P	2,4,5-Trichlorophenol		----------NA----------				
47	S	2-Fluorobiphenyl		----------NA----------				
48	P	1,1'-Biphenyl		----------NA----------				
49	P	2-Chloronaphthalene		----------NA----------				
50	P	2-Nitroaniline		----------NA----------				
51		p-Dinitrobenzene		----------NA----------				
52	P	Acenaphthylene		----------NA----------				
53	P	Dimethylphthalate		----------NA----------				
54		m-Dinitrobenzene		----------NA----------				
55	P	2,6-Dinitrotoluene		----------NA----------				
56		o-Dinitrobenzene		----------NA----------				
57	P	Acenaphthene		----------NA----------				
58	P	3-Nitroaniline		----------NA----------				
		----------	True	Calc.	% Drift	----------		
59	P	2,4-Dinitrophenol		----------NA----------				
		----------	AvgRF	CCRF	% Dev	----------		
60	P	Dibenzofuran		----------NA----------				
61	P	2,4-Dinitrotoluene		----------NA----------				
62	P	4-Nitrophenol		----------NA----------				
63		2,3,5,6-Tetrachlorophenol		----------NA----------				
64	P	2,3,4,6-Tetrachlorophenol		----------NA----------				
65	P	Fluorene		----------NA----------				
66	P	4-Chlorophenyl-phenylethe		----------NA----------				
67	P	Diethylphthalate		----------NA----------				
68		Thionazin		----------NA----------				
69	P	4-Nitroaniline		----------NA----------				
70	I	Phenanthrene-d10	1.000	1.000	0.0	90	0.00	11.21
		----------	True	Calc.	% Drift	----------		
71	P	4,6-Dinitro-2-methylpheno		----------NA----------				
		----------	AvgRF	CCRF	% Dev	----------		
72	P	n-Nitrosodiphenylamine		----------NA----------				
73		Diphenylamine		----------NA----------				
74		1,2-Diphenylhydrazine		----------NA----------				
		----------	True	Calc.	% Drift	----------		
75	S	2,4,6-Tribromophenol		----------NA----------				
		----------	AvgRF	CCRF	% Dev	----------		
76		Sulfotep		----------NA----------				
77		Phorate		----------NA----------				
78	P	4-Bromophenyl-phenylether		----------NA----------				
79	P	Hexachlorobenzene		----------NA----------				

Initial Calibration Verification

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2918-ICV2918
Lab FileID: X071416.D

			True	Calc.	% Drift				
80		Dimethoate		NA					
			AvgRF	CCRF	% Dev				
81		Simazine		NA					
82	P	Atrazine		NA					
			True	Calc.	% Drift				
83	P	Pentachlorophenol		NA					
			AvgRF	CCRF	% Dev				
84	P	Phenanthrene		NA					
85	P	Anthracene		NA					
86		Disulfoton		NA					
87	P	Carbazole		NA					
			True	Calc.	% Drift				
88		Methyl Parathion		NA					
			AvgRF	CCRF	% Dev				
89	P	Di-n-butylphthalate		NA					
			True	Calc.	% Drift				
90		Ethyl Parathion		NA					
			AvgRF	CCRF	% Dev				
91	P	Fluoranthene		NA					
92	I	Chrysene-d12	1.000	1.000	0.0	85	0.00	14.48	
			True	Calc.	% Drift				
93		Benzidine		NA					
			AvgRF	CCRF	% Dev				
94	P	Pyrene		NA					
95	S	Terphenyl-d14		NA					
			True	Calc.	% Drift				
96		Famphur		NA					
97	P	Butylbenzylphthalate		NA					
98	P	3,3'-Dichlorobenzidine		NA					
			AvgRF	CCRF	% Dev				
99	P	Benzo[a]anthracene		NA					
100	P	Chrysene		NA					
			True	Calc.	% Drift				
101	P	bis(2-Ethylhexyl)phthalat		NA					
			AvgRF	CCRF	% Dev				
102	I	Perylene-d12	1.000	1.000	0.0	110	0.00	16.80	
			True	Calc.	% Drift				
103	P	Di-n-octylphthalate		NA					
104	P	Benzo[b]fluoranthene		NA					
			AvgRF	CCRF	% Dev				
105	P	Benzo[k]fluoranthene		NA					

Initial Calibration Verification

Job Number: FA77689 **Sample:** SX2918-ICV2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X071416.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

			True	Calc.	% Drift			
106	P	Benzo[a]pyrene		----------NA----------				
107	P	Indeno[1,2,3-cd]pyrene		----------NA----------				
108	P	Dibenz[a,h]anthracene		----------NA----------				
109	P	Benzo[g,h,i]perylene		----------NA----------				

		AvgRF	CCRF	% Dev			
110	1,4-Dichlorobenzene-d4A	1.000	1.000	0.0	105	0.00	5.99
111	2-Picoline	1.908	1.986	-4.1	105	0.00	3.97
112	N-Nitrosomethylethylamine	1.327	1.308	1.4	100	0.00	4.10
113	Methyl methanesulfonate	0.930	0.887	4.6	94	0.00	4.42
114	N-Nitrosodiethylamine	0.775	0.796	-2.7	100	0.00	4.84
115	Ethyl methanesulfonate	1.281	1.128	11.9	87	0.00	5.17
116	Pentachloroethane	0.546	0.509	6.8	92	0.00	5.68
117	N-Nitrosopyrrolidine	0.701	0.718	-2.4	97	0.00	6.42
118	N-Nitrosomorpholine	1.279	1.230	3.8	92	0.00	6.46
119	O-Toluidine	2.619	2.702	-3.2	98	0.00	6.48
120	Naphthalene-d8A	1.000	1.000	0.0	103	0.00	7.42
121	N-Nitrosopiperidine	0.368	0.334	9.2	89	0.00	6.80
122	A,A-Dimethylphenethylamin	1.467	1.128	23.1#	74	-0.01	7.31
123	Hexachloropropene	0.168	0.199	-18.5	108	0.00	7.55

		True	Calc.	% Drift			
124	N-Nitrosodi-n-butylamine	50.000	39.533	20.9#	72	0.00	7.92

		AvgRF	CCRF	% Dev			
125	p-Phenylenediamine	0.380	0.398	-4.7	98	0.00	7.92
126	Isosafrole	0.273	0.238	12.8	84	0.00	8.16
127	Acenaphthene-d10A	1.000	1.000	0.0	91	0.00	9.47
128	Safrole	0.526	0.586	-11.4	94	0.00	8.77
129	1-Chloronaphthalene	1.253	1.375	-9.7	93	0.00	8.84
130	Diphenyl Ether		----------NA----------				

		True	Calc.	% Drift			
131	1,4-Naphthoquinone	50.000	30.427	39.1#	52	0.00	9.03

		AvgRF	CCRF	% Dev			
132	Pentachlorobenzene	0.441	0.441	0.0	88	0.00	9.66
133	1-Naphthylamine	1.389	1.483	-6.8	93	0.00	9.80
134	2-Naphthylamine	1.485	1.563	-5.3	90	0.00	9.90

		True	Calc.	% Drift			
135	5-Nitro-o-toluidine	50.000	51.687	-3.4	90	0.00	10.13

		AvgRF	CCRF	% Dev			
136	Phenanthrene-d10A	1.000	1.000	0.0	90	0.00	11.21

		True	Calc.	% Drift			
137	1,3,5-Trinitrobenzene	50.000	52.543	-5.1	88	0.00	10.59

		AvgRF	CCRF	% Dev			
138	Diallate	0.627	0.580	7.5	80	0.00	10.62
139	Phenacetin	0.385	0.425	-10.4	89	0.00	10.66
140	4-Aminobiphenyl	0.811	0.863	-6.4	89	0.00	11.01
141	Pronamide	0.314	0.347	-10.5	89	0.00	11.11

Initial Calibration Verification

Job Number: FA77689 **Sample:** SX2918-ICV2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X071416.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

142	Pentachloronitrobenzene	0.078	0.078	0.0	82	0.00	11.01
	----------	True	Calc.	% Drift	----------		
143	4-Nitroquinoline 1-Oxide	50.000	50.367	-0.7	87	0.00	12.17
	----------	AvgRF	CCRF	% Dev	----------		
144	Methapyrilene		----------NA----------				
145	Isodrin	0.113	0.114	-0.9	88	0.00	12.47
146 I	Chrysene-d12A	1.000	1.000	0.0	99	0.00	14.48
	----------	True	Calc.	% Drift	----------		
147	Aramite	50.000	49.694	0.6	92	0.00	13.24
148	p-(Dimethylamine)azobenze	50.000	49.472	1.1	96	0.00	13.31
149	Chlorobenzilate	50.000	46.515	7.0	87	0.00	13.38
	----------	AvgRF	CCRF	% Dev	----------		
150	Kepone	0.018	0.029	-61.1#	0#	0.00	13.76
151	3,3'-Dimethylbenzidine	0.646	1.071	-65.8#	143	0.00	13.74
	----------	True	Calc.	% Drift	----------		
152	2-Acetylaminofluorene	50.000	58.747	-17.5	112	0.00	14.07
	----------	AvgRF	CCRF	% Dev	----------		
153 I	Perylene-d12A	1.000	1.000	0.0	114	0.00	16.80
154	7,12-Dimethylbenz(a)anthr	0.555	0.596	-7.4	111	0.00	16.16
	----------	True	Calc.	% Drift	----------		
155	Hexachlorophene	500.000	520.124	-4.0	107	0.00	16.57
156	3-Methylcholanthrene	50.000	50.150	-0.3	113	0.00	17.31
157	Dibenz(a,j)acridine	50.000	56.312	-12.6	127	0.00	18.21

(#) = Out of Range SPCC's out = 54 CCC's out = 0
x071368.D 8270DApp9SX-062320.m Thu Jun 25 03:53:12 2020

Continuing Calibration Summary

Job Number: FA77689 **Sample:** SX2952-CC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072389.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\Je...2020\SX2952\x072389.d Vial: 2
Acq On : 13 Aug 2020 1:38 pm Operator: marthav
Sample : cc2918-50 8270 Inst : MSBNA05
Misc : op81484,sx2952,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\met...DApp9SX-062320.m (RTE Integrator)
Title : SW846 8270D OR EPA 625
Last Update : Tue Jun 23 17:15:34 2020
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	98	0.00	5.63
2		1,4-Dioxane	0.686	0.617	10.1	95	0.00	2.45
3		N-nitrosodimethylamine	1.217	0.994	18.3	83	0.00	2.79
4		Pyridine	1.668	1.705	-2.2	102	0.00	2.82
5	P	Benzaldehyde	1.192	1.096	8.1	93	0.00	5.17
6		Aniline	2.378	2.019	15.1	81	0.00	5.29
7	S	2-Fluorophenol	1.434	1.396	2.6	100	0.00	4.29
8	P	bis(2-Chloroethyl)ether	1.468	1.440	1.9	96	0.00	5.37
9	S	Phenol-d5	1.706	1.674	1.9	99	0.00	5.32
10	P	Phenol	2.024	1.903	6.0	88	0.00	5.33
11	P	2-Chlorophenol	1.530	1.565	-2.3	98	0.00	5.42
12		1,3-Dichlorobenzene	1.590	1.592	-0.1	99	0.00	5.57
13		1,4-Dichlorobenzene	1.682	1.677	0.3	98	0.00	5.65
14		1,2-Dichlorobenzene	1.598	1.504	5.9	92	0.00	5.81
15		Benzyl alcohol	1.059	0.975	7.9	90	0.00	5.82
16	P	2,2'-Oxybis(1-chloropropa	3.084	2.526	18.1	81	0.00	5.96
17	P	2-Methylphenol	1.456	1.384	4.9	91	0.00	5.98
18	P	Acetophenone	2.154	1.987	7.8	90	0.00	6.09
19	P	Hexachloroethane	0.632	0.631	0.2	98	0.00	6.18
20	P	N-Nitroso-di-n-propylamin	1.138	1.068	6.2	90	0.00	6.11
21	P	3&4-Methylphenol	1.505	1.466	2.6	93	0.00	6.15
22	I	Naphthalene-d8	1.000	1.000	0.0	89	0.00	7.06
23	S	Nitrobenzene-d5	0.413	0.419	-1.5	91	0.00	6.26
24	P	Nitrobenzene	0.409	0.406	0.7	89	0.00	6.28
25	P	Isophorone	0.730	0.670	8.2	84	0.00	6.56
26	P	2-Nitrophenol	0.194	0.206	-6.2	94	0.00	6.64
27	P	2,4-Dimethylphenol	0.361	0.326	9.7	81	0.00	6.73
28		O,O,O-Triethylphosphoroth	0.153	0.151	1.3	89	0.00	6.79
29	P	bis(2-Chloroethoxy)methan	0.427	0.416	2.6	88	0.00	6.82
		----------	True	Calc.	% Drift	----------		
30		Benzoic Acid	50.000	42.929	14.1	73	0.00	6.90
		----------	AvgRF	CCRF	% Dev	----------		
31	P	2,4-Dichlorophenol	0.291	0.294	-1.0	89	0.00	6.94
32		1,2,4-Trichlorobenzene	0.297	0.305	-2.7	94	0.00	7.00
33		alpha-Terpineol		----------NA----------				
34	P	Naphthalene	1.085	1.069	1.5	89	0.00	7.08
35	P	4-Chloroaniline	0.458	0.441	3.7	86	0.00	7.17
36		2,6-Dichlorophenol	0.297	0.287	3.4	86	0.00	7.18
37	P	Hexachlorobutadiene	0.147	0.153	-4.1	95	0.00	7.23

Continuing Calibration Summary

Job Number: FA77689 **Sample:** SX2952-CC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072389.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

38	P	Caprolactam	0.121	0.113	6.6	85	0.00	7.62
39	P	4-Chloro-3-methylphenol	0.310	0.291	6.1	84	0.00	7.79
40	P	2-Methylnaphthalene	0.717	0.685	4.5	87	0.00	7.89
41		1-Methylnaphthalene	0.687	0.666	3.1	88	0.00	8.00
42	P	1,2,4,5-Tetrachlorobenzen	0.298	0.292	2.0	88	0.00	8.08
43	I	Acenaphthene-d10	1.000	1.000	0.0	85	0.00	9.10
		----------	True	Calc.	% Drift	----------		
44	P	Hexachlorocyclopentadiene	50.000	33.216	33.6#	52	0.00	8.07
		----------	AvgRF	CCRF	% Dev	----------		
45	P	2,4,6-Trichlorophenol	0.367	0.389	-6.0	87	0.00	8.24
46	P	2,4,5-Trichlorophenol	0.402	0.417	-3.7	86	0.00	8.31
47	S	2-Fluorobiphenyl	1.448	1.532	-5.8	90	0.00	8.33
48	P	1,1'-Biphenyl	1.633	1.632	0.1	85	0.00	8.44
49	P	2-Chloronaphthalene	1.226	1.252	-2.1	86	0.00	8.45
50	P	2-Nitroaniline	0.451	0.450	0.2	83	0.00	8.60
51		p-Dinitrobenzene	0.253	0.263	-4.0	84	0.00	8.78
52	P	Acenaphthylene	1.998	2.040	-2.1	85	0.00	8.93
53	P	Dimethylphthalate	1.411	1.383	2.0	85	0.00	8.84
54		m-Dinitrobenzene	0.235	0.253	-7.7	87	0.00	8.87
55	P	2,6-Dinitrotoluene	0.333	0.343	-3.0	85	0.00	8.90
56		o-Dinitrobenzene	0.319	0.317	0.6	86	0.00	8.95
57	P	Acenaphthene	1.329	1.339	-0.8	87	0.00	9.14
58	P	3-Nitroaniline	0.366	0.390	-6.6	87	0.00	9.09
		----------	True	Calc.	% Drift	----------		
59	P	2,4-Dinitrophenol	50.000	51.672	-3.3	86	0.00	9.22
		----------	AvgRF	CCRF	% Dev	----------		
60	P	Dibenzofuran	1.773	1.731	2.4	85	0.00	9.35
61	P	2,4-Dinitrotoluene	0.425	0.453	-6.6	89	0.00	9.37
62	P	4-Nitrophenol	0.205	0.160	22.0#	65	0.00	9.38
63		2,3,5,6-Tetrachlorophenol	0.297	0.285	4.0	77	0.00	9.46
64	P	2,3,4,6-Tetrachlorophenol	0.308	0.313	-1.6	84	0.00	9.51
65	P	Fluorene	1.384	1.402	-1.3	87	0.00	9.75
66	P	4-Chlorophenyl-phenylethe	0.668	0.674	-0.9	86	0.00	9.77
67	P	Diethylphthalate	1.409	1.351	4.1	82	0.00	9.67
68		Thionazin	0.299	0.310	-3.7	87	0.00	9.76
69	P	4-Nitroaniline	0.408	0.414	-1.5	85	0.00	9.82
70	I	Phenanthrene-d10	1.000	1.000	0.0	85	0.00	10.84
		----------	True	Calc.	% Drift	----------		
71	P	4,6-Dinitro-2-methylpheno	50.000	53.671	-7.3	91	0.00	9.85
		----------	AvgRF	CCRF	% Dev	----------		
72	P	n-Nitrosodiphenylamine	0.622	0.618	0.6	86	0.00	9.92
73		Diphenylamine	0.729	0.741	-1.6	86	0.00	9.92
74		1,2-Diphenylhydrazine	0.896	0.891	0.6	84	0.00	9.95
		----------	True	Calc.	% Drift	----------		
75	S	2,4,6-Tribromophenol	100.000	99.871	0.1	86	0.00	10.04
		----------	AvgRF	CCRF	% Dev	----------		
76		Sulfotep	0.132	0.133	-0.8	82	0.00	10.14
77		Phorate	0.462	0.487	-5.4	86	0.00	10.27
78	P	4-Bromophenyl-phenylether	0.192	0.195	-1.6	86	0.00	10.34
79	P	Hexachlorobenzene	0.192	0.198	-3.1	89	0.00	10.39

Continuing Calibration Summary

Job Number: FA77689 **Sample:** SX2952-CC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072389.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

			True	Calc.	% Drift			
80		Dimethoate	50.000	52.905	-5.8	91	0.00	10.48
			AvgRF	CCRF	% Dev			
81		Simazine	0.141	0.134	5.0	82	0.00	10.55
82	P	Atrazine	0.234	0.237	-1.3	86	0.00	10.59
			True	Calc.	% Drift			
83	P	Pentachlorophenol	50.000	35.044	29.9#	55	0.00	10.65
			AvgRF	CCRF	% Dev			
84	P	Phenanthrene	1.209	1.200	0.7	85	0.00	10.87
85	P	Anthracene	1.260	1.280	-1.6	85	0.00	10.93
86		Disulfoton	0.483	0.536	-11.0	90	0.00	10.89
87	P	Carbazole	1.112	1.123	-1.0	86	0.00	11.15
			True	Calc.	% Drift			
88		Methyl Parathion	50.000	51.227	-2.5	87	0.00	11.33
			AvgRF	CCRF	% Dev			
89	P	Di-n-butylphthalate	1.241	1.290	-3.9	84	0.00	11.61
			True	Calc.	% Drift			
90		Ethyl Parathion	50.000	51.065	-2.1	88	0.00	11.80
			AvgRF	CCRF	% Dev			
91	P	Fluoranthene	1.121	1.155	-3.0	87	0.00	12.28
92	I	Chrysene-d12	1.000	1.000	0.0	90	0.00	14.05
			True	Calc.	% Drift			
93		Benzidine	50.000	51.923	-3.8	91	0.00	12.47
			AvgRF	CCRF	% Dev			
94	P	Pyrene	1.661	1.585	4.6	87	0.00	12.53
95	S	Terphenyl-d14	1.063	1.082	-1.8	91	0.00	12.76
			True	Calc.	% Drift			
96		Famphur	50.000	75.382	-50.8#	119	0.00	13.30
97	P	Butylbenzylphthalate	50.000	49.053	1.9	89	0.00	13.39
98	P	3,3'-Dichlorobenzidine	50.000	51.982	-4.0	93	0.00	14.04
			AvgRF	CCRF	% Dev			
99	P	Benzo[a]anthracene	1.257	1.236	1.7	89	0.00	14.04
100	P	Chrysene	1.339	1.350	-0.8	92	0.00	14.08
			True	Calc.	% Drift			
101	P	bis(2-Ethylhexyl)phthalat	50.000	51.130	-2.3	90	0.00	14.20
			AvgRF	CCRF	% Dev			
102	I	Perylene-d12	1.000	1.000	0.0	88	0.00	16.23
			True	Calc.	% Drift			
103	P	Di-n-octylphthalate	50.000	58.216	-16.4	105	0.00	15.15
104	P	Benzo[b]fluoranthene	50.000	56.691	-13.4	103	0.00	15.59
			AvgRF	CCRF	% Dev			
105	P	Benzo[k]fluoranthene	1.420	1.430	-0.7	89	0.00	15.64

Continuing Calibration Summary

Job Number: FA77689 **Sample:** SX2952-CC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072389.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

			True	Calc.	% Drift			
106	P	Benzo[a]pyrene	50.000	52.137	-4.3	94	0.00	16.14
107	P	Indeno[1,2,3-cd]pyrene	50.000	59.640	-19.3	113	0.00	17.91
108	P	Dibenz[a,h]anthracene	50.000	60.081	-20.2#	116	0.00	17.96
109	P	Benzo[g,h,i]perylene	50.000	50.690	-1.4	92	0.00	18.27

		AvgRF	CCRF	% Dev			
110	1,4-Dichlorobenzene-d4A	1.000	1.000	0.0	110	0.00	5.63
111	2-Picoline		NA				
112	N-Nitrosomethylethylamine		NA				
113	Methyl methanesulfonate		NA				
114	N-Nitrosodiethylamine		NA				
115	Ethyl methanesulfonate		NA				
116	Pentachloroethane		NA				
117	N-Nitrosopyrrolidine		NA				
118	N-Nitrosomorpholine		NA				
119	O-Toluidine		NA				
120	Naphthalene-d8A	1.000	1.000	0.0	99	0.00	7.06
121	N-Nitrosopiperidine		NA				
122	A,A-Dimethylphenethylamin		NA				
123	Hexachloropropene		NA				

		True	Calc.	% Drift			
124	N-Nitrosodi-n-butylamine		NA				

		AvgRF	CCRF	% Dev			
125	p-Phenylenediamine		NA				
126	Isosafrole		NA				
127	Acenaphthene-d10A	1.000	1.000	0.0	92	0.00	9.10
128	Safrole		NA				
129	1-Chloronaphthalene		NA				
130	Diphenyl Ether		NA				

		True	Calc.	% Drift			
131	1,4-Naphthoquinone		NA				

		AvgRF	CCRF	% Dev			
132	Pentachlorobenzene		NA				
133	1-Naphthylamine		NA				
134	2-Naphthylamine		NA				

		True	Calc.	% Drift			
135	5-Nitro-o-toluidine		NA				

		AvgRF	CCRF	% Dev			
136	Phenanthrene-d10A	1.000	1.000	0.0	85	0.00	10.84

		True	Calc.	% Drift			
137	1,3,5-Trinitrobenzene		NA				

		AvgRF	CCRF	% Dev			
138	Diallate		NA				
139	Phenacetin		NA				
140	4-Aminobiphenyl		NA				
141	Pronamide		NA				

Continuing Calibration Summary

Job Number: FA77689 **Sample:** SX2952-CC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072389.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

142		Pentachloronitrobenzene			NA				
		----------	True	Calc.	% Drift				
143		4-Nitroquinoline 1-Oxide			NA				
		----------	AvgRF	CCRF	% Dev				
144		Methapyrilene			NA				
145		Isodrin			NA				
146	I	Chrysene-d12A	1.000	1.000	0.0	104	0.00	14.05	
		----------	True	Calc.	% Drift				
147		Aramite			NA				
148		p-(Dimethylamine)azobenze			NA				
149		Chlorobenzilate			NA				
		----------	AvgRF	CCRF	% Dev				
150		Kepone			NA				
151		3,3'-Dimethylbenzidine			NA				
		----------	True	Calc.	% Drift				
152		2-Acetylaminofluorene			NA				
		----------	AvgRF	CCRF	% Dev				
153	I	Perylene-d12A	1.000	1.000	0.0	91	0.00	16.23	
154		7,12-Dimethylbenz(a)anthr			NA				
		----------	True	Calc.	% Drift				
155		Hexachlorophene			NA				
156		3-Methylcholanthrene			NA				
157		Dibenz(a,j)acridine			NA				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
x071368.D 8270DApp9SX-062320.m Fri Aug 14 02:18:26 2020

Continuing Calibration Summary

Job Number: FA77689 **Sample:** SX2952-CC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072390.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\Je...2020\SX2952\x072390.d Vial: 3
Acq On : 13 Aug 2020 2:03 pm Operator: marthav
Sample : cc2918-5 8270 Inst : MSBNA05
Misc : op81484,sx2952,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\met...DApp9SX-062320.m (RTE Integrator)
Title : SW846 8270D OR EPA 625
Last Update : Tue Jun 23 17:15:34 2020
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	106	0.00	5.63
2		1,4-Dioxane	0.686	0.675	1.6	101	0.00	2.46
3		N-nitrosodimethylamine	1.217	1.032	15.2	92	0.00	2.79
4		Pyridine	1.668	1.741	-4.4	117	0.01	2.83
5	P	Benzaldehyde	1.192	1.176	1.3	100	0.00	5.16
6		Aniline	2.378	2.060	13.4	100	0.00	5.29
7	S	2-Fluorophenol	1.434	1.455	-1.5	109	0.00	4.29
8	P	bis(2-Chloroethyl)ether	1.468	1.354	7.8	106	0.00	5.37
9	S	Phenol-d5	1.706	1.650	3.3	108	0.00	5.32
10	P	Phenol	2.024	1.803	10.9	110	0.00	5.33
11	P	2-Chlorophenol	1.530	1.431	6.5	112	0.00	5.42
12		1,3-Dichlorobenzene	1.590	1.578	0.8	111	0.00	5.57
13		1,4-Dichlorobenzene	1.682	1.628	3.2	107	0.00	5.65
14		1,2-Dichlorobenzene	1.598	1.494	6.5	106	0.00	5.81
15		Benzyl alcohol	1.059	0.899	15.1	102	-0.01	5.81
16	P	2,2'-Oxybis(1-chloropropa	3.084	2.617	15.1	90	0.00	5.96
17	P	2-Methylphenol	1.456	1.313	9.8	103	0.00	5.97
18	P	Acetophenone	2.154	1.931	10.4	92	0.00	6.09
19	P	Hexachloroethane	0.632	0.617	2.4	110	0.00	6.18
20	P	N-Nitroso-di-n-propylamin	1.138	1.027	9.8	97	-0.02	6.10
21	P	3&4-Methylphenol	1.505	1.379	8.4	102	0.00	6.15
22	I	Naphthalene-d8	1.000	1.000	0.0	99	0.00	7.06
23	S	Nitrobenzene-d5	0.413	0.409	1.0	104	0.00	6.25
24	P	Nitrobenzene	0.409	0.404	1.2	102	-0.01	6.27
25	P	Isophorone	0.730	0.683	6.4	95	-0.01	6.55
26	P	2-Nitrophenol	0.194	0.200	-3.1	119	0.00	6.63
27	P	2,4-Dimethylphenol	0.361	0.327	9.4	94	0.00	6.73
28		O,O,O-Triethylphosphoroth	0.153	0.143	6.5	94	-0.01	6.78
29	P	bis(2-Chloroethoxy)methan	0.427	0.405	5.2	99	0.00	6.81
		----------	True	Calc.	% Drift	----------		
30		Benzoic Acid	5.000	3.408	31.8#	111	-0.06	6.84
		----------	AvgRF	CCRF	% Dev	----------		
31	P	2,4-Dichlorophenol	0.291	0.278	4.5	104	0.00	6.94
32		1,2,4-Trichlorobenzene	0.297	0.299	-0.7	105	0.00	7.00
33		alpha-Terpineol	----------	----------	NA	----------		
34	P	Naphthalene	1.085	1.071	1.3	101	0.00	7.08
35	P	4-Chloroaniline	0.458	0.437	4.6	98	0.00	7.17
36		2,6-Dichlorophenol	0.297	0.282	5.1	100	-0.01	7.17
37	P	Hexachlorobutadiene	0.147	0.152	-3.4	110	0.00	7.23

Continuing Calibration Summary

Job Number: FA77689 **Sample:** SX2952-CC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072390.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

38	P	Caprolactam	0.121	0.110	9.1	87	-0.07	7.55
39	P	4-Chloro-3-methylphenol	0.310	0.291	6.1	98	0.00	7.79
40	P	2-Methylnaphthalene	0.717	0.696	2.9	98	0.00	7.88
41		1-Methylnaphthalene	0.687	0.659	4.1	97	0.00	8.00
42	P	1,2,4,5-Tetrachlorobenzen	0.298	0.275	7.7	97	0.00	8.08
43	I	Acenaphthene-d10	1.000	1.000	0.0	95	0.00	9.10
		----------	True	Calc.	% Drift	----------		
44	P	Hexachlorocyclopentadiene	5.000	1.039	79.2#	23	0.00	8.07
		----------	AvgRF	CCRF	% Dev	----------		
45	P	2,4,6-Trichlorophenol	0.367	0.352	4.1	101	0.00	8.24
46	P	2,4,5-Trichlorophenol	0.402	0.368	8.5	101	0.00	8.30
47	S	2-Fluorobiphenyl	1.448	1.406	2.9	97	0.00	8.33
48	P	1,1'-Biphenyl	1.633	1.554	4.8	86	0.00	8.44
49	P	2-Chloronaphthalene	1.226	1.161	5.3	95	0.00	8.45
50	P	2-Nitroaniline	0.451	0.412	8.6	93	-0.01	8.59
51		p-Dinitrobenzene	0.253	0.232	8.3	102	-0.01	8.77
52	P	Acenaphthylene	1.998	1.811	9.4	91	0.00	8.93
53	P	Dimethylphthalate	1.411	1.290	8.6	89	-0.01	8.83
54		m-Dinitrobenzene	0.235	0.217	7.7	98	-0.01	8.86
55	P	2,6-Dinitrotoluene	0.333	0.307	7.8	93	-0.01	8.89
56		o-Dinitrobenzene	0.319	0.289	9.4	85	-0.02	8.94
57	P	Acenaphthene	1.329	1.248	6.1	92	0.00	9.13
58	P	3-Nitroaniline	0.366	0.354	3.3	98	-0.01	9.08
		----------	True	Calc.	% Drift	----------		
59	P	2,4-Dinitrophenol	5.000	1.770	64.6#	59	0.00	9.22
		----------	AvgRF	CCRF	% Dev	----------		
60	P	Dibenzofuran	1.773	1.674	5.6	92	0.00	9.34
61	P	2,4-Dinitrotoluene	0.425	0.398	6.4	92	-0.01	9.36
62	P	4-Nitrophenol	0.205	0.124	39.5#	70	0.00	9.38
63		2,3,5,6-Tetrachlorophenol	0.297	0.228	23.2#	85	0.00	9.46
64	P	2,3,4,6-Tetrachlorophenol	0.308	0.245	20.5#	92	0.00	9.51
65	P	Fluorene	1.384	1.321	4.6	93	0.00	9.74
66	P	4-Chlorophenyl-phenylethe	0.668	0.608	9.0	90	0.00	9.76
67	P	Diethylphthalate	1.409	1.266	10.1	90	-0.01	9.66
68		Thionazin	0.299	0.284	5.0	87	-0.01	9.75
69	P	4-Nitroaniline	0.408	0.357	12.5	90	-0.03	9.79
70	I	Phenanthrene-d10	1.000	1.000	0.0	93	0.00	10.84
		----------	True	Calc.	% Drift	----------		
71	P	4,6-Dinitro-2-methylpheno	5.000	3.541	29.2#	96	-0.01	9.84
		----------	AvgRF	CCRF	% Dev	----------		
72	P	n-Nitrosodiphenylamine	0.622	0.557	10.5	92	-0.01	9.91
73		Diphenylamine	0.729	0.669	8.2	92	-0.01	9.91
74		1,2-Diphenylhydrazine	0.896	0.795	11.3	87	-0.01	9.94
		----------	True	Calc.	% Drift	----------		
75	S	2,4,6-Tribromophenol	10.000	9.500	5.0	97	-0.01	10.03
		----------	AvgRF	CCRF	% Dev	----------		
76		Sulfotep	0.132	0.122	7.6	87	0.00	10.13
77		Phorate	0.462	0.435	5.8	91	0.00	10.26
78	P	4-Bromophenyl-phenylether	0.192	0.174	9.4	93	0.00	10.33
79	P	Hexachlorobenzene	0.192	0.168	12.5	93	0.00	10.38

Continuing Calibration Summary

Job Number: FA77689 **Sample:** SX2952-CC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072390.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

			True	Calc.	% Drift			
80		Dimethoate	5.000	4.746	5.1	96	-0.02	10.46
			AvgRF	CCRF	% Dev			
81		Simazine	0.141	0.117	17.0	85	-0.03	10.53
82	P	Atrazine	0.234	0.206	12.0	86	-0.02	10.57
			True	Calc.	% Drift			
83	P	Pentachlorophenol	5.000	1.257	74.9#	33	0.00	10.64
			AvgRF	CCRF	% Dev			
84	P	Phenanthrene	1.209	1.117	7.6	88	-0.01	10.86
85	P	Anthracene	1.260	1.143	9.3	90	-0.01	10.92
86		Disulfoton	0.483	0.453	6.2	88	0.00	10.89
87	P	Carbazole	1.112	1.038	6.7	93	-0.01	11.14
			True	Calc.	% Drift			
88		Methyl Parathion	5.000	4.405	11.9	92	0.00	11.32
			AvgRF	CCRF	% Dev			
89	P	Di-n-butylphthalate	1.241	1.175	5.3	97	0.00	11.61
			True	Calc.	% Drift			
90		Ethyl Parathion	5.000	4.798	4.0	102	0.00	11.79
			AvgRF	CCRF	% Dev			
91	P	Fluoranthene	1.121	1.069	4.6	96	-0.01	12.27
92	I	Chrysene-d12	1.000	1.000	0.0	101	0.00	14.05
			True	Calc.	% Drift			
93		Benzidine	5.000	5.008	-0.2	150	0.00	12.46
			AvgRF	CCRF	% Dev			
94	P	Pyrene	1.661	1.464	11.9	92	0.00	12.53
95	S	Terphenyl-d14	1.063	0.995	6.4	102	0.00	12.76
			True	Calc.	% Drift			
96		Famphur	5.000	5.761	-15.2	117	0.00	13.30
97	P	Butylbenzylphthalate	5.000	4.828	3.4	112	0.00	13.39
98	P	3,3'-Dichlorobenzidine	5.000	5.197	-3.9	128	0.00	14.04
			AvgRF	CCRF	% Dev			
99	P	Benzo[a]anthracene	1.257	1.156	8.0	100	0.00	14.03
100	P	Chrysene	1.339	1.218	9.0	99	-0.01	14.07
			True	Calc.	% Drift			
101	P	bis(2-Ethylhexyl)phthalat	5.000	4.964	0.7	131	0.00	14.19
			AvgRF	CCRF	% Dev			
102	I	Perylene-d12	1.000	1.000	0.0	98	0.00	16.23
			True	Calc.	% Drift			
103	P	Di-n-octylphthalate	5.000	5.794	-15.9	109	0.00	15.15
104	P	Benzo[b]fluoranthene	5.000	5.134	-2.7	111	-0.02	15.58
			AvgRF	CCRF	% Dev			
105	P	Benzo[k]fluoranthene	1.420	1.202	15.4	93	-0.02	15.62

Continuing Calibration Summary

Job Number: FA77689 **Sample:** SX2952-CC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072390.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

			True	Calc.	% Drift			
106	P	Benzo[a]pyrene	5.000	4.818	3.6	112	-0.02	16.12
107	P	Indeno[1,2,3-cd]pyrene	5.000	7.627	-52.5#	176	-0.02	17.89
108	P	Dibenz[a,h]anthracene	5.000	6.970	-39.4#	168	-0.02	17.94
109	P	Benzo[g,h,i]perylene	5.000	5.754	-15.1	125	-0.02	18.24

		AvgRF	CCRF	% Dev			
110	1,4-Dichlorobenzene-d4A	1.000	1.000	0.0	109	0.00	5.63
111	2-Picoline		NA				
112	N-Nitrosomethylethylamine		NA				
113	Methyl methanesulfonate		NA				
114	N-Nitrosodiethylamine		NA				
115	Ethyl methanesulfonate		NA				
116	Pentachloroethane		NA				
117	N-Nitrosopyrrolidine		NA				
118	N-Nitrosomorpholine		NA				
119	O-Toluidine		NA				
120	Naphthalene-d8A	1.000	1.000	0.0	103	0.00	7.06
121	N-Nitrosopiperidine		NA				
122	A,A-Dimethylphenethylamin		NA				
123	Hexachloropropene		NA				

		True	Calc.	% Drift
124	N-Nitrosodi-n-butylamine		NA	

		AvgRF	CCRF	% Dev			
125	p-Phenylenediamine		NA				
126	Isosafrole		NA				
127	Acenaphthene-d10A	1.000	1.000	0.0	99	0.00	9.10
128	Safrole		NA				
129	1-Chloronaphthalene		NA				
130	Diphenyl Ether		NA				

		True	Calc.	% Drift
131	1,4-Naphthoquinone		NA	

		AvgRF	CCRF	% Dev			
132	Pentachlorobenzene		NA				
133	1-Naphthylamine		NA				
134	2-Naphthylamine		NA				

		True	Calc.	% Drift
135	5-Nitro-o-toluidine		NA	

		AvgRF	CCRF	% Dev			
136	Phenanthrene-d10A	1.000	1.000	0.0	95	0.00	10.84

		True	Calc.	% Drift
137	1,3,5-Trinitrobenzene		NA	

		AvgRF	CCRF	% Dev			
138	Diallate		NA				
139	Phenacetin		NA				
140	4-Aminobiphenyl		NA				
141	Pronamide		NA				

Continuing Calibration Summary

Job Number: FA77689 **Sample:** SX2952-CC2918
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072390.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

142		Pentachloronitrobenzene			NA			
		---------- True	Calc.	% Drift	----------			
143		4-Nitroquinoline 1-Oxide			NA			
		---------- AvgRF	CCRF	% Dev	----------			
144		Methapyrilene			NA			
145		Isodrin			NA			
146	I	Chrysene-d12A	1.000	1.000	0.0	103	0.00	14.05
		---------- True	Calc.	% Drift	----------			
147		Aramite			NA			
148		p-(Dimethylamine)azobenze			NA			
149		Chlorobenzilate			NA			
		---------- AvgRF	CCRF	% Dev	----------			
150		Kepone			NA			
151		3,3'-Dimethylbenzidine			NA			
		---------- True	Calc.	% Drift	----------			
152		2-Acetylaminofluorene			NA			
		---------- AvgRF	CCRF	% Dev	----------			
153	I	Perylene-d12A	1.000	1.000	0.0	98	0.00	16.23
154		7,12-Dimethylbenz(a)anthr			NA			
		---------- True	Calc.	% Drift	----------			
155		Hexachlorophene			NA			
156		3-Methylcholanthrene			NA			
157		Dibenz(a,j)acridine			NA			

(#) = Out of Range SPCC's out = 0 CCC's out = 0
x071365.D 8270DApp9SX-062320.m Fri Aug 14 02:21:43 2020

Run Sequence Report

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Run ID: S6F248	**Method:** SW846 8270D	**Instrument ID:** GCMS6F

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
S6F248-DFTPP	6F06435.D	07/29/20 12:37	n/a	DFTPP Tune
S6F248-IC248	6F06436.D	07/29/20 12:53	n/a	Initial cal 1
S6F248-IC248	6F06437.D	07/29/20 13:19	n/a	Initial cal 5
S6F248-IC248	6F06438.D	07/29/20 13:45	n/a	Initial cal 10
S6F248-IC248	6F06439.D	07/29/20 14:10	n/a	Initial cal 25
S6F248-ICC248	6F06440.D	07/29/20 14:36	n/a	Initial cal 50
S6F248-IC248	6F06441.D	07/29/20 15:02	n/a	Initial cal 60
S6F248-IC248	6F06442.D	07/29/20 15:28	n/a	Initial cal 75
S6F248-IC248	6F06443.D	07/29/20 15:54	n/a	Initial cal 100
S6F248-ICV248	6F06444.D	07/29/20 16:20	n/a	Initial cal verification 50
S6F248-ICV248	6F06445.D	07/29/20 16:46	n/a	Initial cal verification 50

Run Sequence Report

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Run ID: S6F253	**Method:** SW846 8270E	**Instrument ID:** GCMS6F

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
S6F253-DFTPP	6F06540.D	08/13/20 13:09	n/a	DFTPP Tune
S6F253-CC248	6F06541.D	08/13/20 13:25	n/a	Continuing cal 50
OP81540-BS	6F06542.D	08/13/20 13:51	OP81540	Blank Spike
OP81540-MB	6F06543.D	08/13/20 14:16	OP81540	Method Blank
ZZZZZZ	6F06544.D	08/13/20 14:42	OP81540	(unrelated sample)
OP81538-BS	6F06545.D	08/13/20 15:08	OP81538	Blank Spike
OP81538-MB	6F06546.D	08/13/20 15:34	OP81538	Method Blank
FA77698-11	6F06547.D	08/13/20 16:00	OP81540	(used for QC only; not part of job FA77689)
FA77698-5	6F06550.D	08/13/20 17:18	OP81538	(used for QC only; not part of job FA77689)
ZZZZZZ	6F06553.D	08/13/20 18:36	OP81540	(unrelated sample)
ZZZZZZ	6F06554.D	08/13/20 19:02	OP81540	(unrelated sample)
ZZZZZZ	6F06555.D	08/13/20 19:28	OP81540	(unrelated sample)
ZZZZZZ	6F06556.D	08/13/20 19:54	OP81540	(unrelated sample)
ZZZZZZ	6F06557.D	08/13/20 20:20	OP81540	(unrelated sample)
FA77689-1	6F06559.D	08/13/20 21:12	OP81538	CS-55
FA77689-2	6F06560.D	08/13/20 21:37	OP81538	CS-50
FA77689-3	6F06561.D	08/13/20 22:03	OP81538	CS-51
FA77689-8	6F06562.D	08/13/20 22:29	OP81538	CS-48
FA77689-9	6F06563.D	08/13/20 22:54	OP81538	CS-52
FA77689-10	6F06564.D	08/13/20 23:20	OP81538	DUP-03
FA77689-11	6F06565.D	08/13/20 23:46	OP81538	CS-49
ZZZZZZ	6F06566.D	08/14/20 00:11	OP81538	(unrelated sample)
ZZZZZZ	6F06567.D	08/14/20 00:36	OP81538	(unrelated sample)
ZZZZZZ	6F06568.D	08/14/20 01:02	OP81538	(unrelated sample)

Run Sequence Report

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Run ID: S6F254	**Method:** SW846 8270E	**Instrument ID:** GCMS6F

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
S6F254-DFTPP	6F06572.D	08/14/20 12:30	n/a	DFTPP Tune
S6F254-CC248	6F06573.D	08/14/20 12:47	n/a	Continuing cal 50
ZZZZZZ	6F06574.D	08/14/20 13:13	OP81538	(unrelated sample)
ZZZZZZ	6F06575.D	08/14/20 13:38	OP81538	(unrelated sample)
FA77512-1	6F06576.D	08/14/20 14:04	OP81455	(used for QC only; not part of job FA77689)
ZZZZZZ	6F06577.D	08/14/20 14:30	OP81538	(unrelated sample)
ZZZZZZ	6F06578.D	08/14/20 14:56	OP81538	(unrelated sample)
ZZZZZZ	6F06579.D	08/14/20 15:22	OP81538	(unrelated sample)
ZZZZZZ	6F06580.D	08/14/20 15:48	OP81545	(unrelated sample)
FA77698-11	6F06581.D	08/14/20 16:14	OP81540	(used for QC only; not part of job FA77689)
OP81540-MS	6F06582.D	08/14/20 16:40	OP81540	Matrix Spike
OP81540-MSD	6F06583.D	08/14/20 17:06	OP81540	Matrix Spike Duplicate
ZZZZZZ	6F06584.D	08/14/20 17:33	OP81540	(unrelated sample)
ZZZZZZ	6F06585.D	08/14/20 17:58	OP81540	(unrelated sample)
ZZZZZZ	6F06586.D	08/14/20 18:25	OP81540	(unrelated sample)
ZZZZZZ	6F06587.D	08/14/20 18:50	OP81538	(unrelated sample)
FA77698-5	6F06588.D	08/14/20 19:16	OP81538	(used for QC only; not part of job FA77689)
OP81538-MS	6F06589.D	08/14/20 19:42	OP81538	Matrix Spike
OP81538-MSD	6F06590.D	08/14/20 20:08	OP81538	Matrix Spike Duplicate

Run Sequence Report

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Run ID: S7G472 **Method:** SW846 8270D BY SIM **Instrument ID:** GCMS7G

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
S7G472-DFTPP	7G10822.D	07/21/20 08:44	n/a	DFTPP Tune
S7G472-IC472	7G10833.D	07/21/20 13:31	n/a	Initial cal 1
S7G472-IC472	7G10834.D	07/21/20 13:55	n/a	Initial cal 2
S7G472-IC472	7G10835.D	07/21/20 14:19	n/a	Initial cal 3
S7G472-ICC472	7G10836.D	07/21/20 14:43	n/a	Initial cal 4
S7G472-IC472	7G10837.D	07/21/20 15:07	n/a	Initial cal 5
S7G472-IC472	7G10838.D	07/21/20 15:31	n/a	Initial cal 6
S7G472-IC472	7G10839.D	07/21/20 15:55	n/a	Initial cal 7
S7G472-ICV472	7G10840.D	07/21/20 16:19	n/a	Initial cal verification 4
S7G472-DFTPP	7G10841.D	07/21/20 16:43	n/a	DFTPP Tune
S7G472-CC472	7G10842.D	07/21/20 17:01	n/a	Continuing cal 4
OP81120-MB	7G10843.D	07/21/20 17:25	OP81120	Method Blank
OP81126-MB	7G10845.D	07/21/20 18:13	OP81126	Method Blank
OP81126-BS	7G10846.D	07/21/20 18:38	OP81126	Blank Spike
ZZZZZZ	7G10847.D	07/21/20 19:02	OP81120	(unrelated sample)
ZZZZZZ	7G10848.D	07/21/20 19:26	OP81120	(unrelated sample)
ZZZZZZ	7G10849.D	07/21/20 19:50	OP81120	(unrelated sample)
ZZZZZZ	7G10850.D	07/21/20 20:14	OP81120	(unrelated sample)
ZZZZZZ	7G10851.D	07/21/20 20:37	OP81120	(unrelated sample)
FA76888-6	7G10852.D	07/21/20 21:01	OP81120	(used for QC only; not part of job FA77689)
OP81120-MS	7G10853.D	07/21/20 21:25	OP81120	Matrix Spike
OP81120-MSD	7G10854.D	07/21/20 21:48	OP81120	Matrix Spike Duplicate
ZZZZZZ	7G10855.D	07/21/20 22:12	OP81126	(unrelated sample)
ZZZZZZ	7G10856.D	07/21/20 22:35	OP81126	(unrelated sample)
ZZZZZZ	7G10857.D	07/21/20 22:59	OP81126	(unrelated sample)
FA76878-1	7G10858.D	07/21/20 23:23	OP81126	(used for QC only; not part of job FA77689)
OP81126-MS	7G10859.D	07/21/20 23:47	OP81126	Matrix Spike
OP81126-MSD	7G10860.D	07/22/20 00:10	OP81126	Matrix Spike Duplicate
ZZZZZZ	7G10861.D	07/22/20 00:34	OP81126	(unrelated sample)
ZZZZZZ	7G10862.D	07/22/20 00:58	OP81126	(unrelated sample)
ZZZZZZ	7G10863.D	07/22/20 01:22	OP81126	(unrelated sample)
ZZZZZZ	7G10864.D	07/22/20 01:45	OP81126	(unrelated sample)
ZZZZZZ	7G10865.D	07/22/20 02:09	OP81126	(unrelated sample)
ZZZZZZ	7G10867.D	07/22/20 02:56	OP81126	(unrelated sample)
ZZZZZZ	7G10868.D	07/22/20 03:20	OP81126	(unrelated sample)

Run Sequence Report

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Run ID: S7G484 **Method:** SW846 8270E BY SIM **Instrument ID:** GCMS7G

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
S7G484-DFTPP	7G11162.D	08/13/20 14:28	n/a	DFTPP Tune
S7G484-CC472	7G11163.D	08/13/20 15:10	n/a	Continuing cal 4
OP81539-BS	7G11164.D	08/13/20 15:34	OP81539	Blank Spike
OP81539-MB	7G11165.D	08/13/20 15:58	OP81539	Method Blank
FA77689-1	7G11166.D	08/13/20 16:22	OP81539	CS-55
FA77689-2	7G11167.D	08/13/20 16:46	OP81539	CS-50
FA77689-3	7G11168.D	08/13/20 17:10	OP81539	CS-51
FA77689-8	7G11169.D	08/13/20 17:34	OP81539	CS-48
FA77689-9	7G11170.D	08/13/20 17:58	OP81539	CS-52
FA77689-10	7G11171.D	08/13/20 18:22	OP81539	DUP-03
FA77689-11	7G11172.D	08/13/20 18:46	OP81539	CS-49
ZZZZZZ	7G11173.D	08/13/20 19:10	OP81539	(unrelated sample)
ZZZZZZ	7G11174.D	08/13/20 19:34	OP81539	(unrelated sample)
FA77698-5	7G11175.D	08/13/20 19:58	OP81539	(used for QC only; not part of job FA77689)
ZZZZZZ	7G11179.D	08/13/20 21:33	OP81539	(unrelated sample)
ZZZZZZ	7G11180.D	08/13/20 21:57	OP81539	(unrelated sample)
ZZZZZZ	7G11181.D	08/13/20 22:21	OP81539	(unrelated sample)
ZZZZZZ	7G11182.D	08/13/20 22:44	OP81539	(unrelated sample)
ZZZZZZ	7G11183.D	08/13/20 23:08	OP81539	(unrelated sample)
ZZZZZZ	7G11184.D	08/13/20 23:32	OP81539	(unrelated sample)
ZZZZZZ	7G11186.D	08/14/20 00:19	OP81523	(unrelated sample)
ZZZZZZ	7G11187.D	08/14/20 00:42	OP81523	(unrelated sample)
ZZZZZZ	7G11188.D	08/14/20 01:06	OP81523	(unrelated sample)

Run Sequence Report

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Run ID: S7G485 **Method:** SW846 8270E BY SIM **Instrument ID:** GCMS7G

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
S7G485-DFTPP	7G11192.D	08/14/20 10:01	n/a	DFTPP Tune
S7G485-CC472	7G11193.D	08/14/20 10:20	n/a	Continuing cal 4
OP81541-BS	7G11194.D	08/14/20 10:47	OP81541	Blank Spike
OP81541-MB	7G11195.D	08/14/20 11:11	OP81541	Method Blank
OP81539-MS	7G11196.D	08/14/20 11:34	OP81539	Matrix Spike
OP81539-MSD	7G11197.D	08/14/20 11:58	OP81539	Matrix Spike Duplicate
OP81541-MS	7G11199.D	08/14/20 12:46	OP81541	Matrix Spike
OP81541-MSD	7G11200.D	08/14/20 13:09	OP81541	Matrix Spike Duplicate
ZZZZZZ	7G11202.D	08/14/20 13:57	OP81541	(unrelated sample)
ZZZZZZ	7G11203.D	08/14/20 14:21	OP81541	(unrelated sample)
ZZZZZZ	7G11204.D	08/14/20 14:46	OP81541	(unrelated sample)
ZZZZZZ	7G11205.D	08/14/20 15:10	OP81541	(unrelated sample)
ZZZZZZ	7G11206.D	08/14/20 15:34	OP81541	(unrelated sample)
ZZZZZZ	7G11208.D	08/14/20 16:22	OP81541	(unrelated sample)
ZZZZZZ	7G11209.D	08/14/20 16:46	OP81541	(unrelated sample)
FA77698-11	7G11211.D	08/14/20 17:34	OP81541	(used for QC only; not part of job FA77689)

Run Sequence Report

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Run ID: ST1745 **Method:** SW846 8270D BY SIM **Instrument ID:** GCMST

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
ST1745-DFTPP	T050024.D	07/17/20 09:06	n/a	DFTPP Tune
ST1745-IC1745	T050025.D	07/17/20 09:27	n/a	Initial cal 1
ST1745-IC1745	T050026.D	07/17/20 09:56	n/a	Initial cal 8
ST1745-IC1745	T050027.D	07/17/20 10:25	n/a	Initial cal 2
ST1745-IC1745	T050028.D	07/17/20 10:55	n/a	Initial cal 3
ST1745-ICC1745	T050029.D	07/17/20 11:24	n/a	Initial cal 4
ST1745-IC1745	T050030.D	07/17/20 11:54	n/a	Initial cal 5
ST1745-IC1745	T050031.D	07/17/20 12:23	n/a	Initial cal 6
ST1745-IC1745	T050032.D	07/17/20 12:53	n/a	Initial cal 7
ST1745-ICV1745	T050033.D	07/17/20 13:23	n/a	Initial cal verification 4
ST1745-DFTPP	T050034.D	07/17/20 13:49	n/a	DFTPP Tune
ST1745-CC1745	T050035.D	07/17/20 14:11	n/a	Continuing cal 4
OP81055-BS	T050036.D	07/17/20 14:42	OP81055	Blank Spike
OP81055-MB	T050037.D	07/17/20 15:13	OP81055	Method Blank
ZZZZZZ	T050038.D	07/17/20 15:43	OP81055	(unrelated sample)
FA76686-2	T050039.D	07/17/20 16:14	OP81055	(used for QC only; not part of job FA77689)
OP81055-MS	T050040.D	07/17/20 16:45	OP81055	Matrix Spike
OP81055-MSD	T050041.D	07/17/20 17:17	OP81055	Matrix Spike Duplicate
ZZZZZZ	T050042.D	07/17/20 17:48	OP81055	(unrelated sample)
OP81095-MB	T050043.D	07/17/20 18:19	OP81095	Method Blank
OP81095-BS	T050044.D	07/17/20 18:50	OP81095	Blank Spike
ZZZZZZ	T050048.D	07/17/20 20:54	OP81115	(unrelated sample)
ZZZZZZ	T050049.D	07/17/20 21:24	OP81115	(unrelated sample)
ZZZZZZ	T050050.D	07/17/20 21:54	OP81115	(unrelated sample)
ZZZZZZ	T050051.D	07/17/20 22:24	OP81115	(unrelated sample)
ZZZZZZ	T050052.D	07/17/20 22:54	OP81115	(unrelated sample)
ZZZZZZ	T050053.D	07/17/20 23:23	OP81115	(unrelated sample)
ZZZZZZ	T050054.D	07/17/20 23:53	OP81115	(unrelated sample)
ZZZZZZ	T050055.D	07/18/20 00:22	OP81115	(unrelated sample)
ZZZZZZ	T050056.D	07/18/20 00:52	OP81115	(unrelated sample)
ST1745-CC1745	T050058.D	07/18/20 01:50	n/a	Continuing cal 4
ST1745-DFTPP	T050059.D	07/18/20 02:16	n/a	DFTPP Tune
ST1745-CC1745	T050060.D	07/18/20 02:36	n/a	Continuing cal 4
ZZZZZZ	T050061.D	07/18/20 03:05	OP81115	(unrelated sample)
ZZZZZZ	T050062.D	07/18/20 03:34	OP81115	(unrelated sample)
FA76852-13	T050063.D	07/18/20 04:03	OP81115	(used for QC only; not part of job FA77689)
OP81115-MS	T050064.D	07/18/20 04:32	OP81115	Matrix Spike
OP81115-MSD	T050065.D	07/18/20 05:01	OP81115	Matrix Spike Duplicate
ZZZZZZ	T050066.D	07/18/20 05:30	OP81115	(unrelated sample)
ZZZZZZ	T050068.D	07/18/20 06:28	OP81115	(unrelated sample)
ZZZZZZ	T050069.D	07/18/20 06:56	OP81115	(unrelated sample)
OP81115-BS	T050071.D	07/18/20 12:37	OP81115	Blank Spike
OP81115-MB	T050072.D	07/18/20 13:06	OP81115	Method Blank
ZZZZZZ	T050073.D	07/18/20 13:35	OP81095	(unrelated sample)
ST1745-ECC1745	T050075.D	07/18/20 14:34	n/a	Ending cal 4

Run Sequence Report

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Run ID: ST1749 **Method:** SW846 8270D BY SIM **Instrument ID:** GCMST

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
ST1749-DFTPP	T050175.D	08/13/20 14:20	n/a	DFTPP Tune
ST1749-CC1745	T050176.D	08/13/20 14:42	n/a	Continuing cal 4
OP81544-BS	T050177.D	08/13/20 15:33	OP81544	Blank Spike
OP81544-MB	T050178.D	08/13/20 16:03	OP81544	Method Blank
FA77689-4	T050179.D	08/13/20 16:34	OP81544	FB-02
FA77689-5	T050180.D	08/13/20 17:06	OP81544	EB-02
FA77689-6	T050181.D	08/13/20 17:37	OP81544	EB-03
FA77689-7	T050182.D	08/13/20 18:08	OP81544	EB-04
FA77689-12	T050183.D	08/13/20 18:39	OP81544	EB-07
ZZZZZZ	T050184.D	08/13/20 19:09	OP81544	(unrelated sample)
ZZZZZZ	T050185.D	08/13/20 19:39	OP81544	(unrelated sample)

Run Sequence Report

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Run ID: SX2918 **Method:** EPA 625.1 **Instrument ID:** GCMSX

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
SX2918-DFTPP	X071355.D	06/23/20 09:47	n/a	DFTPP Tune
SX2918-IC2918	X071356.D	06/23/20 10:04	n/a	Initial cal 1
SX2918-IC2918	X071357.D	06/23/20 10:30	n/a	Initial cal 5
SX2918-IC2918	X071358.D	06/23/20 10:55	n/a	Initial cal 10
SX2918-IC2918	X071359.D	06/23/20 11:21	n/a	Initial cal 25
SX2918-IC2918	X071360.D	06/23/20 11:46	n/a	Initial cal 50
SX2918-IC2918	X071361.D	06/23/20 12:12	n/a	Initial cal 60
SX2918-IC2918	X071362.D	06/23/20 12:37	n/a	Initial cal 75
SX2918-IC2918	X071363.D	06/23/20 13:03	n/a	Initial cal 100
SX2918-IC2918	X071364.D	06/23/20 13:29	n/a	Initial cal 1
SX2918-IC2918	X071365.D	06/23/20 13:54	n/a	Initial cal 5
SX2918-IC2918	X071366.D	06/23/20 14:20	n/a	Initial cal 10
SX2918-IC2918	X071367.D	06/23/20 14:46	n/a	Initial cal 25
SX2918-ICC2918	X071368.D	06/23/20 15:12	n/a	Initial cal 50
SX2918-IC2918	X071369.D	06/23/20 15:39	n/a	Initial cal 60
SX2918-IC2918	X071370.D	06/23/20 16:05	n/a	Initial cal 75
SX2918-IC2918	X071371.D	06/23/20 16:31	n/a	Initial cal 100
SX2918-ICV2918	X071372.D	06/23/20 16:58	n/a	Initial cal verification 50
SX2918-ICV2918	X071373.D	06/23/20 17:25	n/a	Initial cal verification 50
SX2918-ICV2918	X071374.D	06/23/20 17:51	n/a	Initial cal verification 50
SX2918-ICV2918	X071375.D	06/23/20 18:17	n/a	Initial cal verification 50
SX2918-ICV2918	X071376.D	06/23/20 18:43	n/a	Initial cal verification 50
SX2918-DFTPP	X071377.D	06/23/20 19:06	n/a	DFTPP Tune
SX2918-CC2918	X071378.D	06/23/20 19:24	n/a	Continuing cal 50
SX2918-CC2918	X071379.D	06/23/20 19:50	n/a	Continuing cal 50
OP80558-BS	X071380.D	06/23/20 20:15	OP80558	Blank Spike
OP80558-BS2	X071381.D	06/23/20 20:41	OP80558	Blank Spike
OP80558-MB	X071382.D	06/23/20 21:07	OP80558	Method Blank
ZZZZZZ	X071383.D	06/23/20 21:32	OP80558	(unrelated sample)
ZZZZZZ	X071384.D	06/23/20 21:58	OP80558	(unrelated sample)
ZZZZZZ	X071385.D	06/23/20 22:24	OP80558	(unrelated sample)
ZZZZZZ	X071386.D	06/23/20 22:49	OP80558	(unrelated sample)
OP80508-BS	X071387.D	06/23/20 23:15	OP80508	Blank Spike
OP80508-BS2	X071388.D	06/23/20 23:40	OP80508	Blank Spike
OP80508-MB	X071389.D	06/24/20 00:06	OP80508	Method Blank
ZZZZZZ	X071391.D	06/24/20 00:56	OP80508	(unrelated sample)
OP80508-MS	X071393.D	06/24/20 01:47	OP80508	Matrix Spike
OP80508-MSD	X071394.D	06/24/20 02:12	OP80508	Matrix Spike Duplicate
OP80508-MS2	X071396.D	06/24/20 03:03	OP80508	Matrix Spike
OP80508-MSD2	X071397.D	06/24/20 03:28	OP80508	Matrix Spike Duplicate
ZZZZZZ	X071398.D	06/24/20 03:54	OP80508	(unrelated sample)
ZZZZZZ	X071399.D	06/24/20 04:19	OP80508	(unrelated sample)
SX2918-ICV2918	X071416.D	06/24/20 15:22	n/a	Initial cal verification 50

Run Sequence Report

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Run ID: SX2952 **Method:** SW846 8270E **Instrument ID:** GCMSX

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
SX2952-DFTPP	X072388.D	08/13/20 13:21	n/a	DFTPP Tune
SX2952-CC2918	X072389.D	08/13/20 13:38	n/a	Continuing cal 50
SX2952-CC2918	X072390.D	08/13/20 14:03	n/a	Continuing cal 5
OP81519-BS	X072391.D	08/13/20 14:29	OP81519	Blank Spike
OP81519-MB	X072392.D	08/13/20 14:55	OP81519	Method Blank
FA77503-1	X072393.D	08/13/20 15:21	OP81519	(used for QC only; not part of job FA77689)
OP81519-MS	X072394.D	08/13/20 15:47	OP81519	Matrix Spike
OP81519-MSD	X072395.D	08/13/20 16:13	OP81519	Matrix Spike Duplicate
OP81516-BS	X072396.D	08/13/20 16:39	OP81516	Blank Spike
OP81516-MB	X072397.D	08/13/20 17:05	OP81516	Method Blank
ZZZZZZ	X072398.D	08/13/20 17:31	OP81516	(unrelated sample)
ZZZZZZ	X072399.D	08/13/20 17:56	OP81484	(unrelated sample)
OP81455-MS	X072400.D	08/13/20 18:22	OP81455	Matrix Spike
OP81455-MSD	X072401.D	08/13/20 18:48	OP81455	Matrix Spike Duplicate
ZZZZZZ	X072403.D	08/13/20 19:40	OP81538	(unrelated sample)
OP81545-BS	X072409.D	08/13/20 22:14	OP81545	Blank Spike
OP81545-MB	X072410.D	08/13/20 22:39	OP81545	Method Blank
FA77689-4	X072411.D	08/13/20 23:05	OP81545	FB-02
FA77689-5	X072412.D	08/13/20 23:30	OP81545	EB-02
FA77689-6	X072413.D	08/13/20 23:56	OP81545	EB-03
FA77689-7	X072414.D	08/14/20 00:21	OP81545	EB-04
FA77689-12	X072415.D	08/14/20 00:46	OP81545	EB-07
ZZZZZZ	X072416.D	08/14/20 01:12	OP81545	(unrelated sample)

MS Semi-volatiles

Raw Data

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan
08/17/20 12:51

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s6f253\
Data File : 6F06559.d
Acq On : 13 Aug 2020 9:12 pm
Operator : marthav
Sample : fa77689-1 E
Misc : op81538,S6F253,30.1,,,1,1,soil
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Aug 14 05:17:44 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

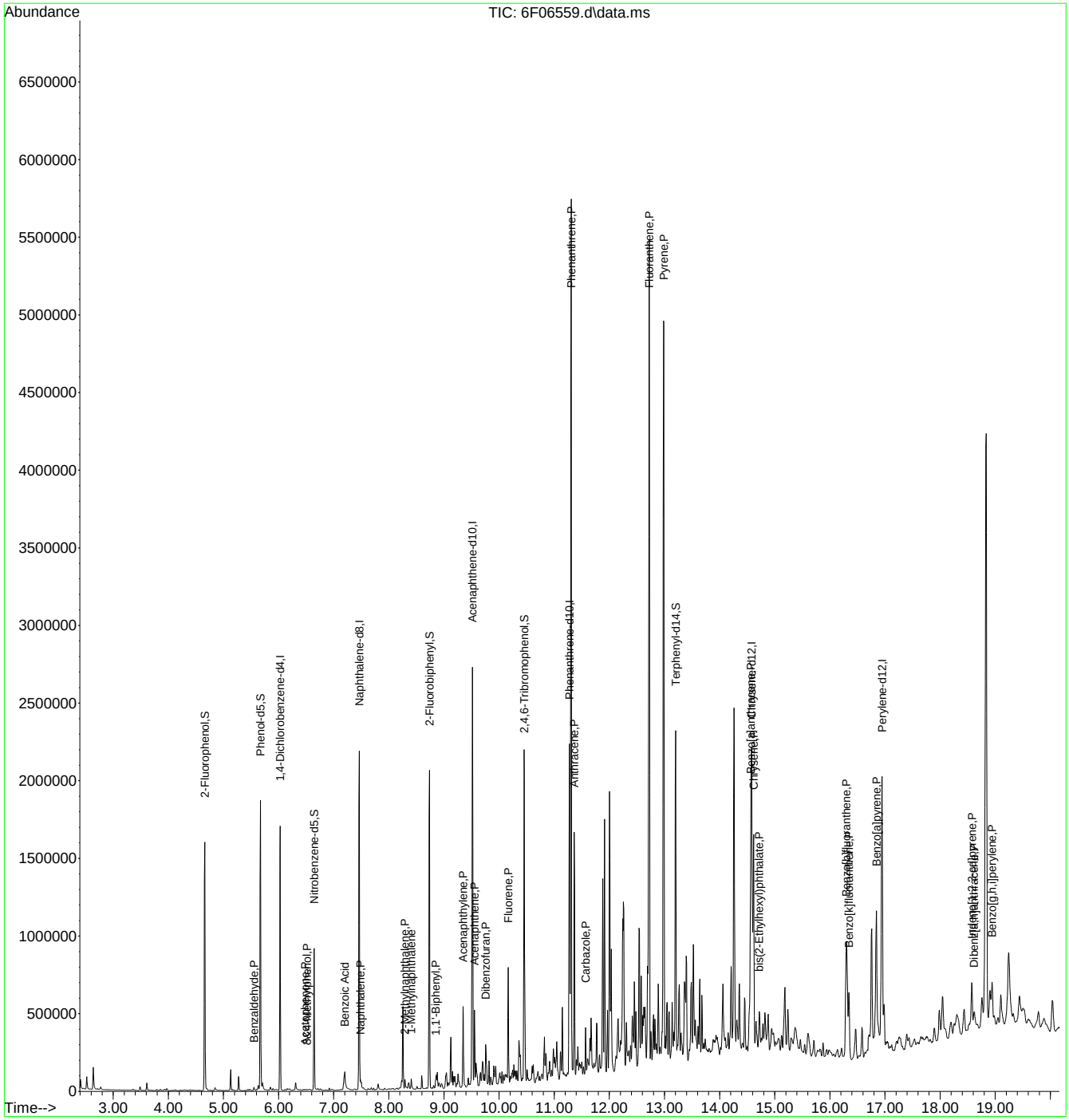
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.029	152	272051	40.00	ppm	0.00
22) Naphthalene-d8	7.463	136	992787	40.00	ppm	0.00
43) Acenaphthene-d10	9.517	164	512218	40.00	ppm	0.00
70) Phenanthrene-d10	11.276	188	897814	40.00	ppm	0.00
92) Chrysene-d12	14.582	240	675509	40.00	ppm	0.01
102) Perylene-d12	16.946	264	856505	40.00	ppm	0.02
System Monitoring Compounds						
7) 2-Fluorophenol	4.660	112	497562	48.40	ppm	0.01
Spiked Amount 100.000	Range 40 - 102		Recovery = 48.40%			
9) Phenol-d5	5.671	99	684430	56.09	ppm	0.00
Spiked Amount 100.000	Range 41 - 100		Recovery = 56.09%			
23) Nitrobenzene-d5	6.644	82	277730	25.50	ppm	0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 51.00%			
47) 2-Fluorobiphenyl	8.736	172	638992	31.92	ppm	0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 63.84%			
75) 2,4,6-Tribromophenol	10.458	330	237832	78.71	ppm	0.00
Spiked Amount 100.000	Range 42 - 108		Recovery = 78.71%			
95) Terphenyl-d14	13.202	244	702733	37.01	ppm	0.00
Spiked Amount 50.000	Range 45 - 119		Recovery = 74.02%			
Target Compounds						Qvalue
5) Benzaldehyde	5.553	106	5673	0.68	ppm	94
18) Acetophenone	6.479	105	2599	0.18	ppm	78
21) 3&4-Methylphenol	6.516	108	1622m	0.16	ppm	
30) Benzoic Acid	7.201	105	48756	7.40	ppm	96
34) Naphthalene	7.484	128	19076	0.68	ppm	91
40) 2-Methylnaphthalene	8.292	141	14457	0.88	ppm	96
41) 1-Methylnaphthalene	8.404	142	18201	1.01	ppm	97
48) 1,1'-Biphenyl	8.848	154	10850	0.51	ppm	96
52) Acenaphthylene	9.345	152	189082	7.39	ppm	100
57) Acenaphthene	9.554	153	107824	6.34	ppm	99
60) Dibenzofuran	9.757	168	91913	3.91	ppm	99
65) Fluorene	10.164	166	188248	9.89	ppm	99
84) Phenanthrene	11.308	178	2173076	80.83	ppm	99
85) Anthracene	11.362	178	615689	22.54	ppm	99
87) Carbazole	11.570	167	101595	4.13	ppm	99
91) Fluoranthene	12.726	202	2435651	86.05	ppm	98
94) Pyrene	12.988	202	2120829	87.66	ppm	96
99) Benzo[a]anthracene	14.566	228	627869	27.74	ppm	100
100) Chrysene	14.619	228	693078	31.56	ppm	98
101) bis(2-Ethylhexyl)phtha...	14.715	149	3869	0.24	ppm	100
104) Benzo[b]fluoranthene	16.299	252	605063	22.01	ppm	97
105) Benzo[k]fluoranthene	16.347	252	195700	6.84	ppm	97
106) Benzo[a]pyrene	16.844	252	425226	16.65	ppm	100
107) Indeno[1,2,3-cd]pyrene	18.577	276	179796m	7.56	ppm	
108) Dibenz[a,h]anthracene	18.615	278	46864	1.85	ppm	98
109) Benzo[g,h,i]perylene	18.941	276	170035	6.63	ppm	97

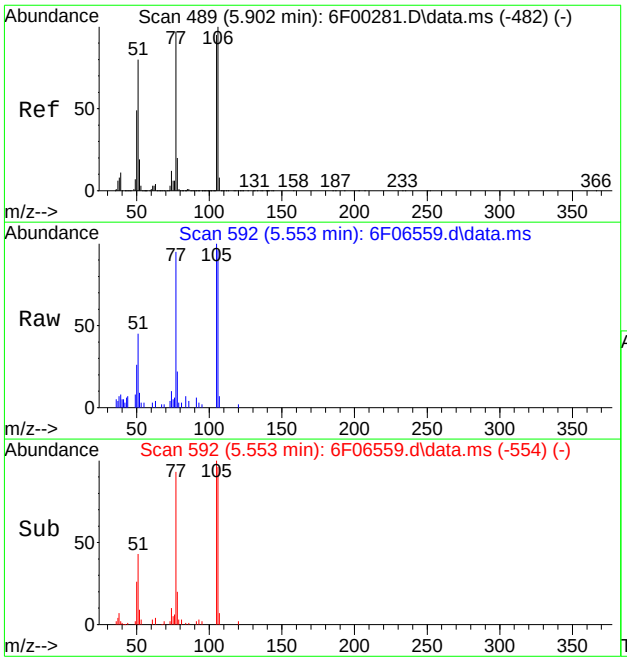
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s6f253\
Data File : 6F06559.d
Acq On : 13 Aug 2020 9:12 pm
Operator : marthav
Sample : fa77689-1 E
Misc : op81538,S6F253,30.1,,,1,1,soil
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Aug 14 05:17:44 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

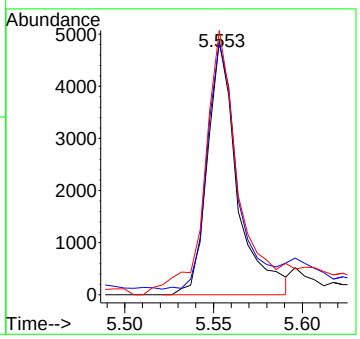


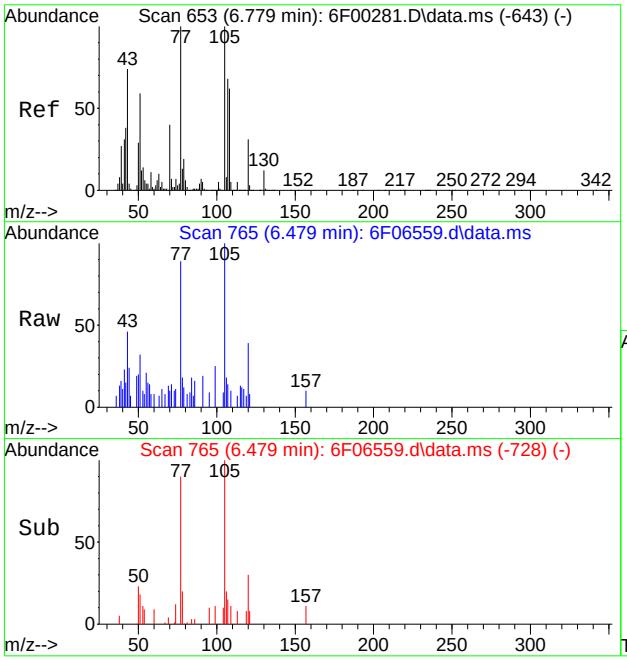


#5
Benzaldehyde
Concen: 0.68 ppm
RT: 5.553 min Scan# 592
Delta R.T. 0.005 min
Lab File: 6F06559.d
Acq: 13 Aug 2020 9:12 pm

Tgt Ion:106 Resp: 5673

Ion	Ratio	Lower	Upper
106	100		
77	95.0	74.8	134.8
105	99.4	70.7	130.7

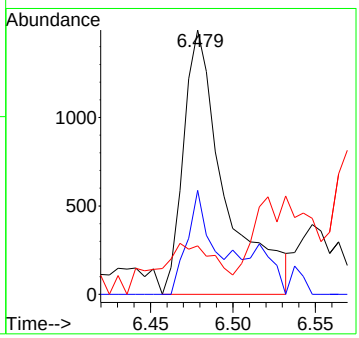


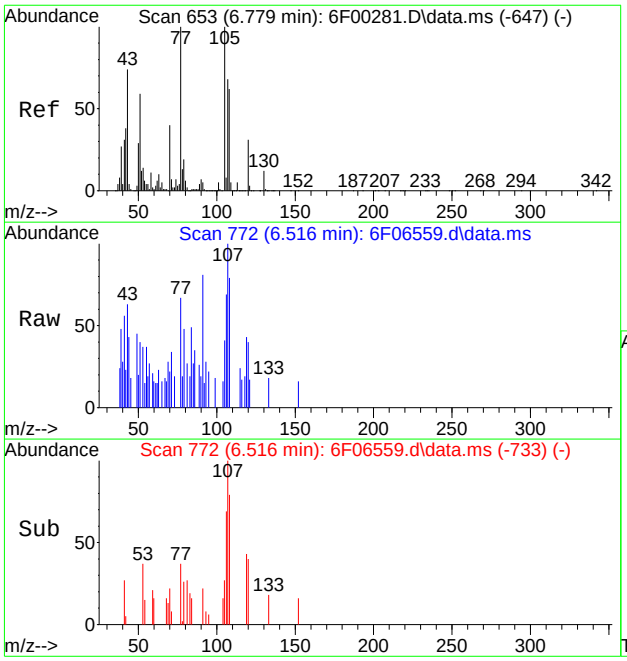


#18
Acetophenone
Concen: 0.18 ppm
RT: 6.479 min Scan# 765
Delta R.T. 0.000 min
Lab File: 6F06559.d
Acq: 13 Aug 2020 9:12 pm

Tgt Ion:105 Resp: 2599

Ion	Ratio	Lower	Upper
105	100		
120	42.6	0.5	60.5
106	0.0	0.0	37.8

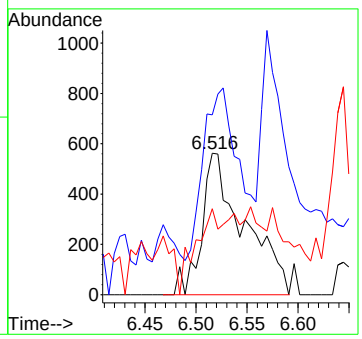


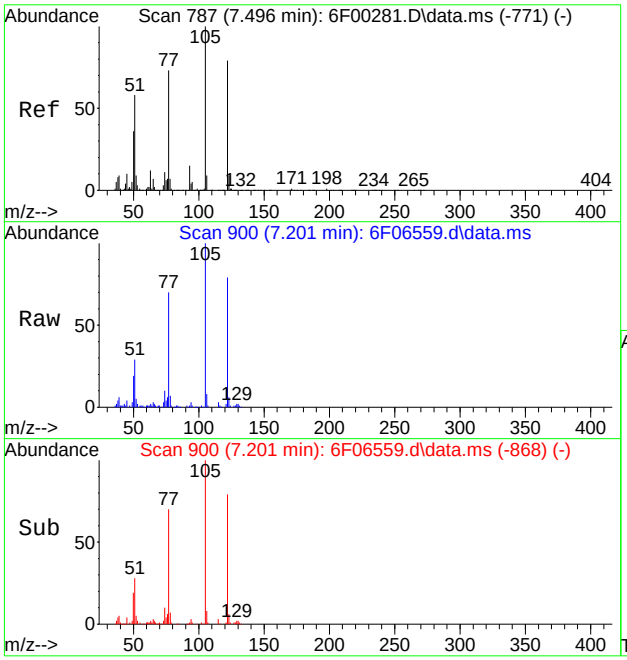


#21
3&4-Methylphenol
Concen: 0.16 ppm m
RT: 6.516 min Scan# 772
Delta R.T. 0.011 min
Lab File: 6F06559.d
Acq: 13 Aug 2020 9:12 pm

Tgt Ion:108 Resp: 1622

Ion	Ratio	Lower	Upper
108	100		
107	127.2	80.2	140.2
79	60.9	0.1	60.1#

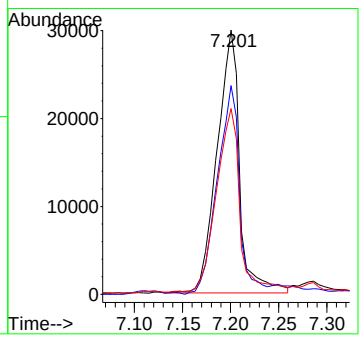


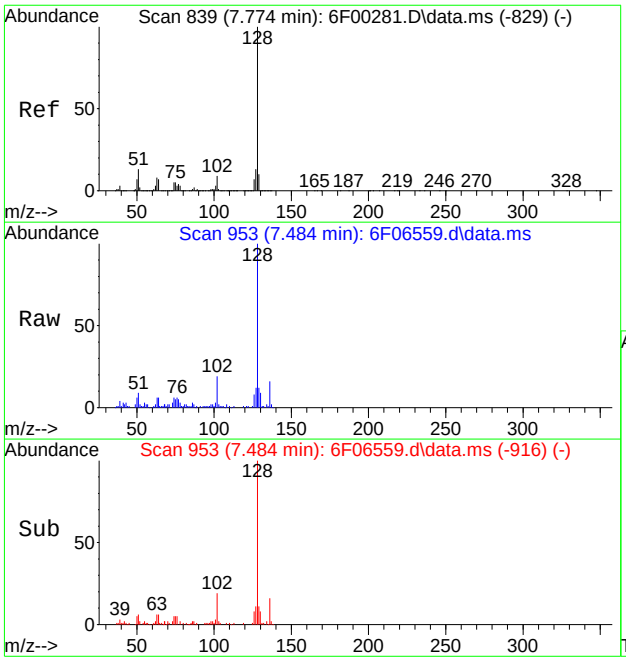


#30
Benzoic Acid
Concen: 7.40 ppm
RT: 7.201 min Scan# 900
Delta R.T. -0.027 min
Lab File: 6F06559.d
Acq: 13 Aug 2020 9:12 pm

Tgt Ion:105 Resp: 48756

Ion	Ratio	Lower	Upper
105	100		
122	78.3	51.7	111.7
77	69.7	42.8	102.8

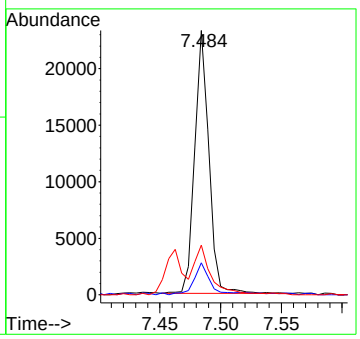


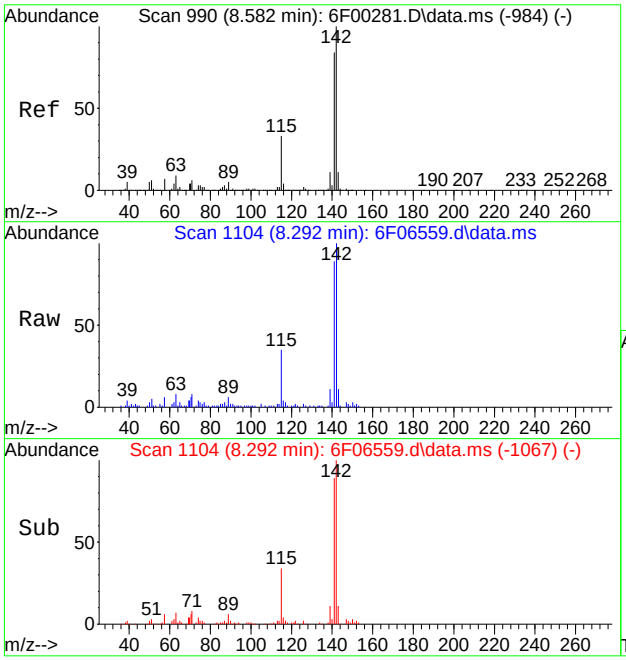


#34
Naphthalene
Concen: 0.68 ppm
RT: 7.484 min Scan# 953
Delta R.T. 0.000 min
Lab File: 6F06559.d
Acq: 13 Aug 2020 9:12 pm

Tgt Ion:128 Resp: 19076

Ion	Ratio	Lower	Upper
128	100		
129	11.4	0.0	41.3
102	15.8	0.0	38.9

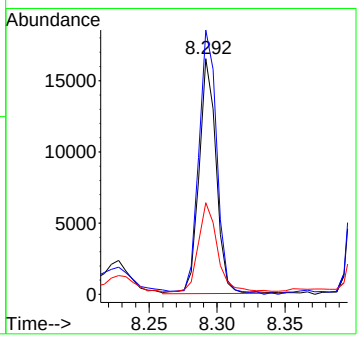


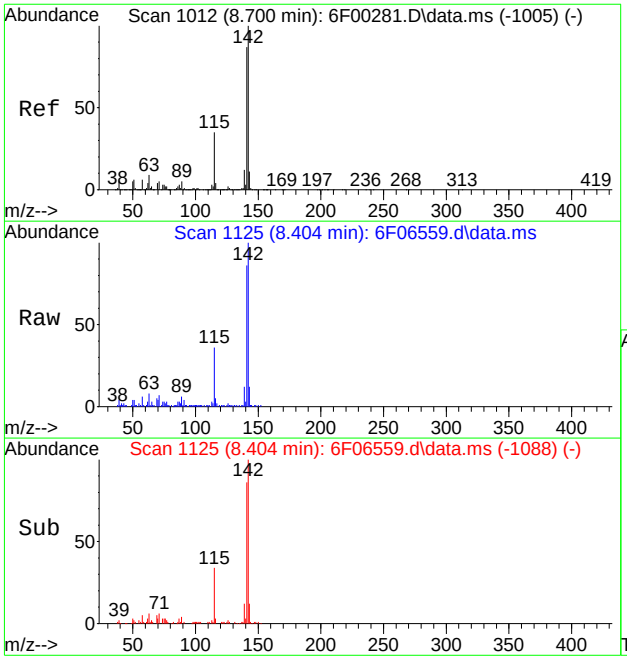


#40
2-Methylnaphthalene
Concen: 0.88 ppm
RT: 8.292 min Scan# 1104
Delta R.T. 0.000 min
Lab File: 6F06559.d
Acq: 13 Aug 2020 9:12 pm

Tgt Ion:141 Resp: 14457

Ion	Ratio	Lower	Upper
141	100		
142	111.6	87.4	147.4
115	37.8	8.3	68.3

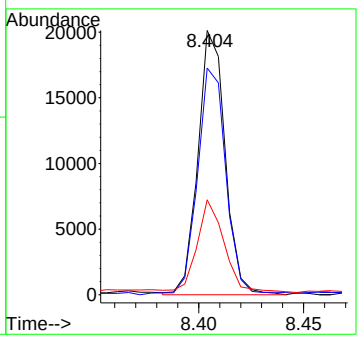


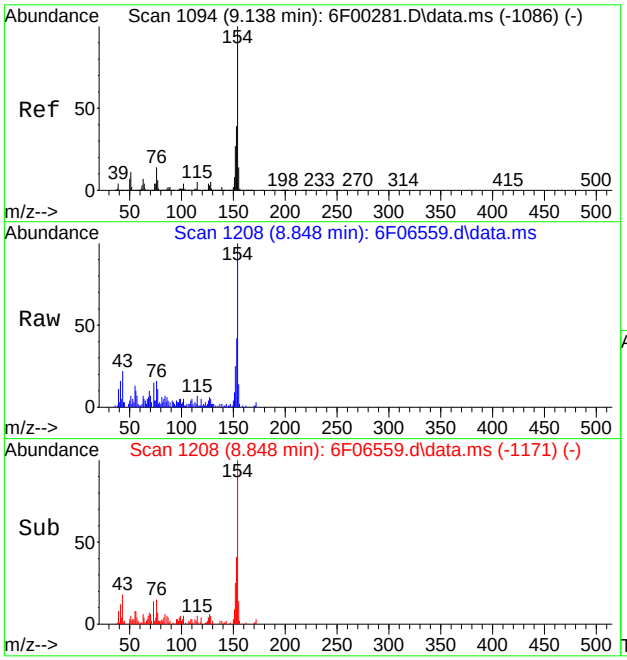


#41
1-Methylnaphthalene
Concen: 1.01 ppm
RT: 8.404 min Scan# 1125
Delta R.T. 0.000 min
Lab File: 6F06559.d
Acq: 13 Aug 2020 9:12 pm

Tgt Ion:142 Resp: 18201

Ion	Ratio	Lower	Upper
142	100		
141	85.3	58.9	118.9
115	34.6	3.8	63.8

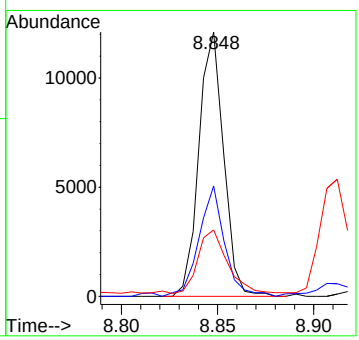


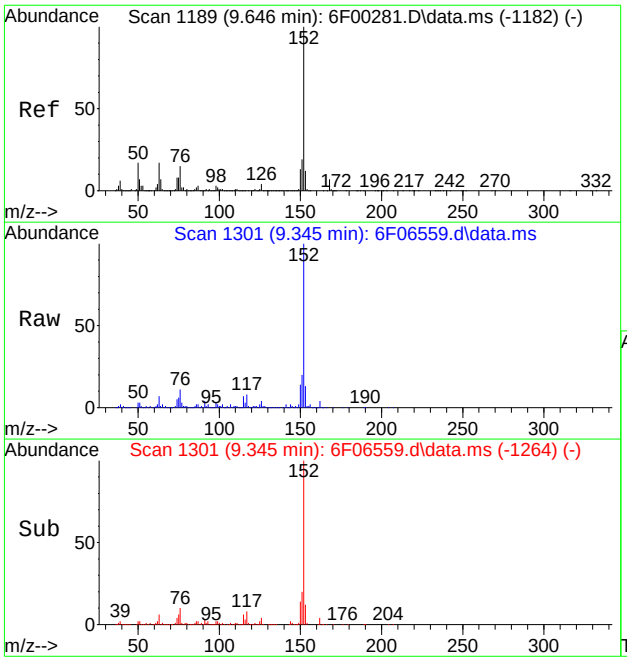


#48
1,1'-Biphenyl
Concen: 0.51 ppm
RT: 8.848 min Scan# 1208
Delta R.T. 0.000 min
Lab File: 6F06559.d
Acq: 13 Aug 2020 9:12 pm

Tgt Ion:154 Resp: 10850

Ion	Ratio	Lower	Upper
154	100		
153	41.3	10.4	70.4
152	23.5	0.0	57.6

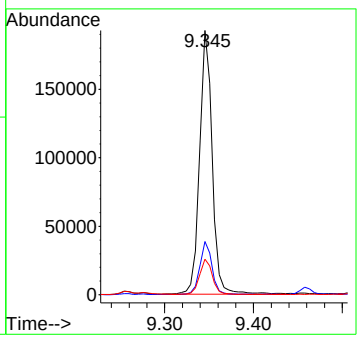


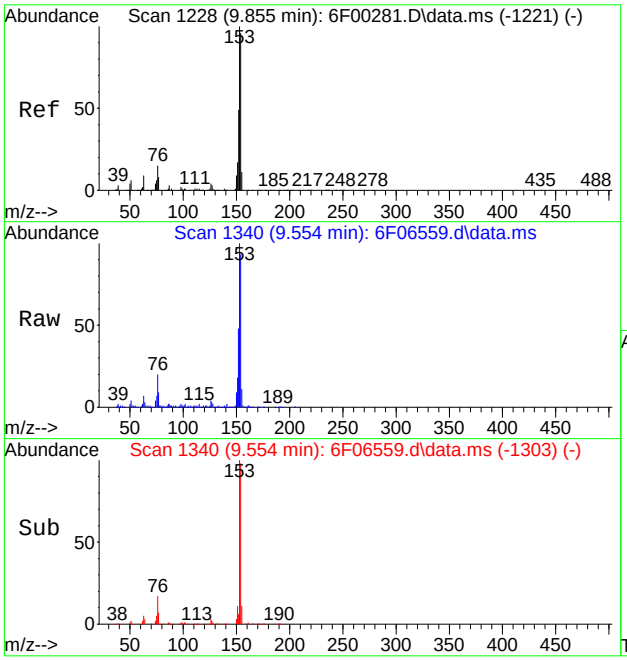


#52
Acenaphthylene
Concen: 7.39 ppm
RT: 9.345 min Scan# 1301
Delta R.T. 0.000 min
Lab File: 6F06559.d
Acq: 13 Aug 2020 9:12 pm

Tgt Ion:152 Resp: 189082

Ion	Ratio	Lower	Upper
152	100		
151	20.2	0.0	49.9
153	13.3	0.0	43.2

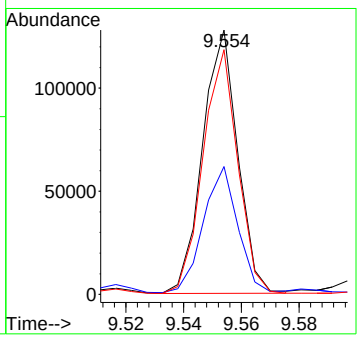


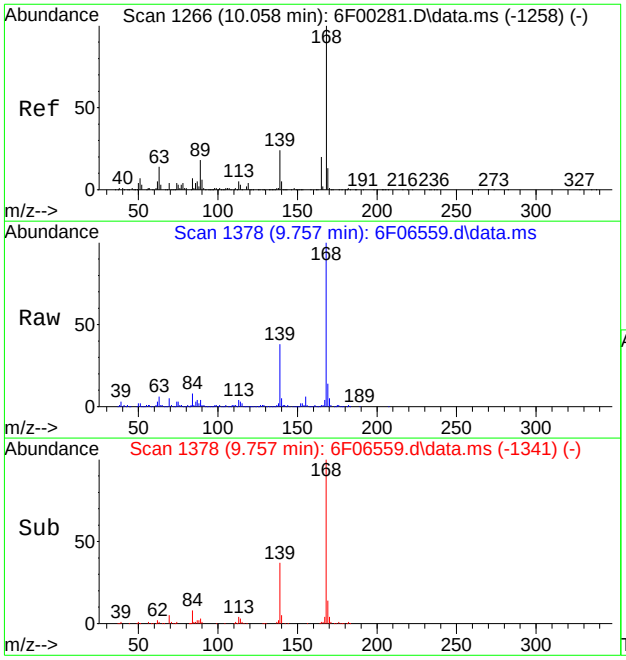


#57
Acenaphthene
Concen: 6.34 ppm
RT: 9.554 min Scan# 1340
Delta R.T. 0.000 min
Lab File: 6F06559.d
Acq: 13 Aug 2020 9:12 pm

Tgt Ion:153 Resp: 107824

Ion	Ratio	Lower	Upper
153	100		
152	47.7	16.2	76.2
154	92.9	63.3	123.3

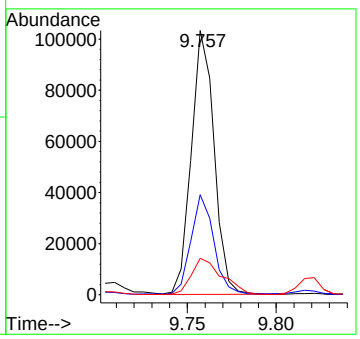


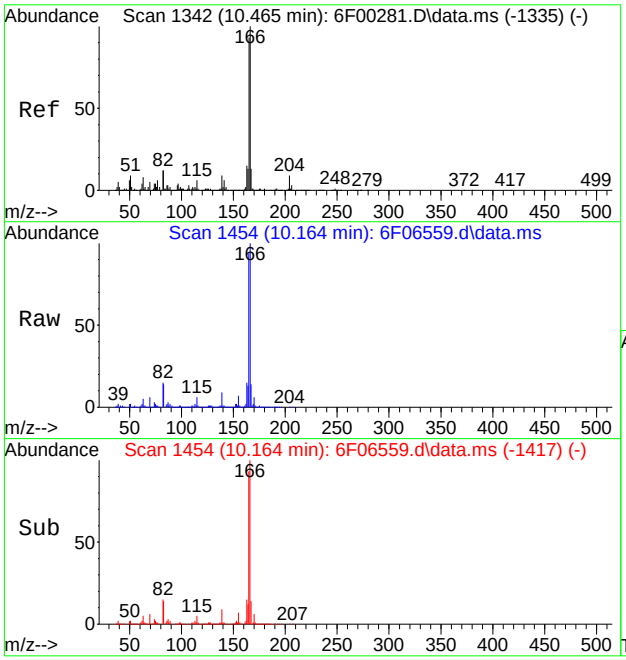


#60
Dibenzofuran
Concen: 3.91 ppm
RT: 9.757 min Scan# 1378
Delta R.T. 0.000 min
Lab File: 6F06559.d
Acq: 13 Aug 2020 9:12 pm

Tgt Ion:168 Resp: 91913

Ion	Ratio	Lower	Upper
168	100		
139	37.5	7.1	67.1
169	13.5	0.0	43.6

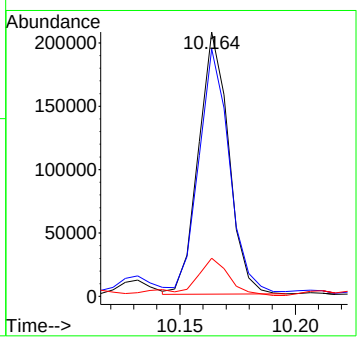


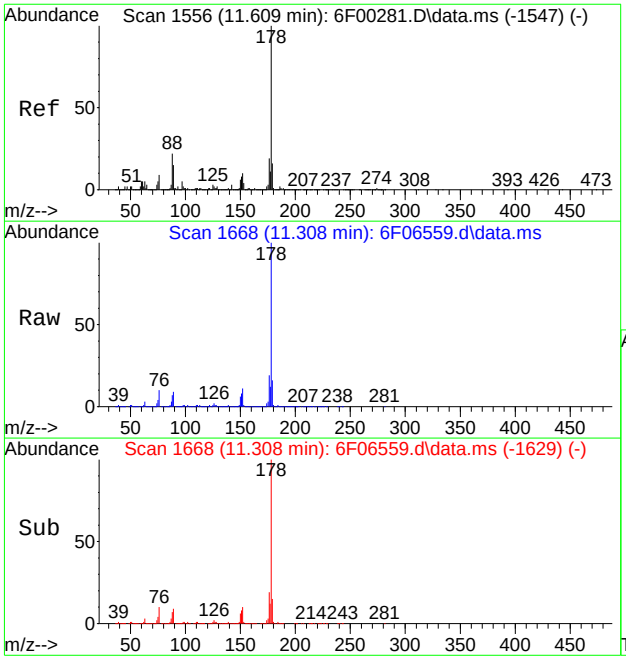


#65
Fluorene
Concen: 9.89 ppm
RT: 10.164 min Scan# 1454
Delta R.T. 0.000 min
Lab File: 6F06559.d
Acq: 13 Aug 2020 9:12 pm

Tgt Ion:166 Resp: 188248

Ion	Ratio	Lower	Upper
166	100		
165	92.4	63.2	123.2
167	13.2	0.0	43.3

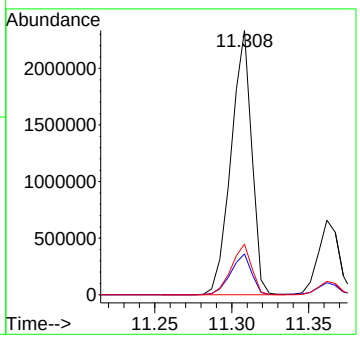


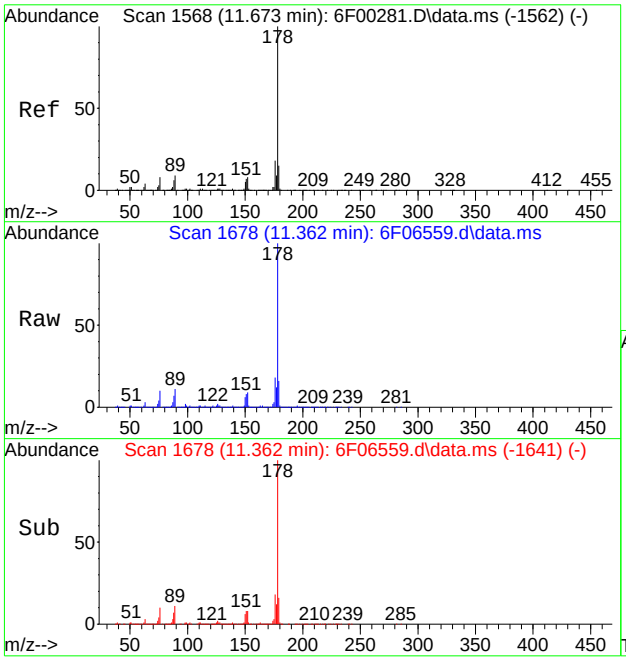


#84
Phenanthrene
Concen: 80.83 ppm
RT: 11.308 min Scan# 1668
Delta R.T. 0.011 min
Lab File: 6F06559.d
Acq: 13 Aug 2020 9:12 pm

Tgt Ion:178 Resp: 2173076

Ion	Ratio	Lower	Upper
178	100		
179	15.4	0.0	45.6
176	19.2	0.0	48.6

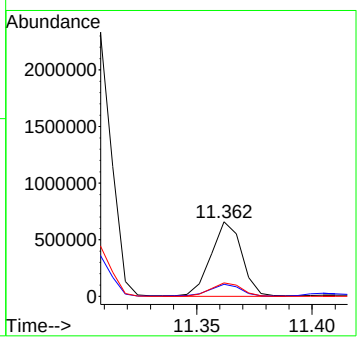


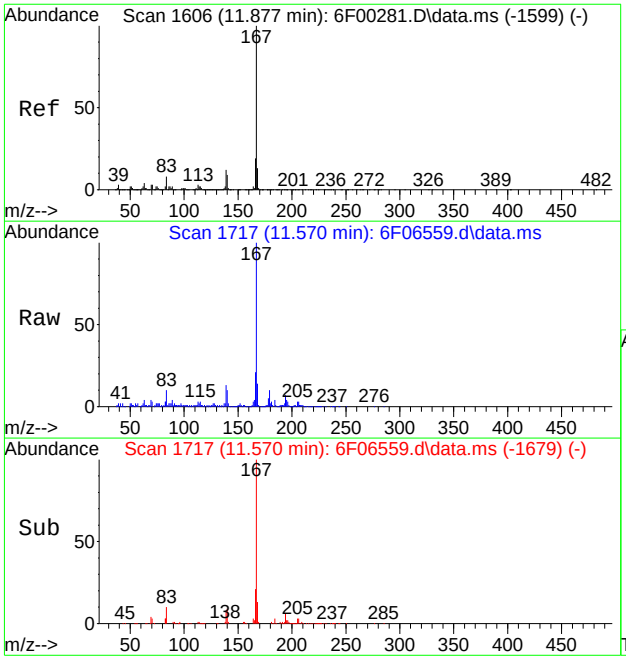


#85
Anthracene
Concen: 22.54 ppm
RT: 11.362 min Scan# 1678
Delta R.T. 0.000 min
Lab File: 6F06559.d
Acq: 13 Aug 2020 9:12 pm

Tgt Ion:178 Resp: 615689

Ion	Ratio	Lower	Upper
178	100		
179	15.8	0.0	45.4
176	18.3	0.0	48.2

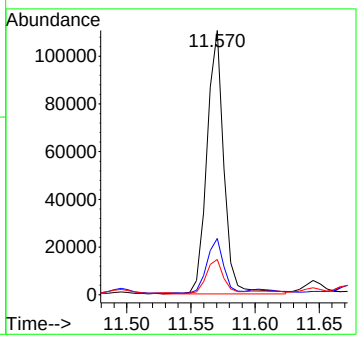


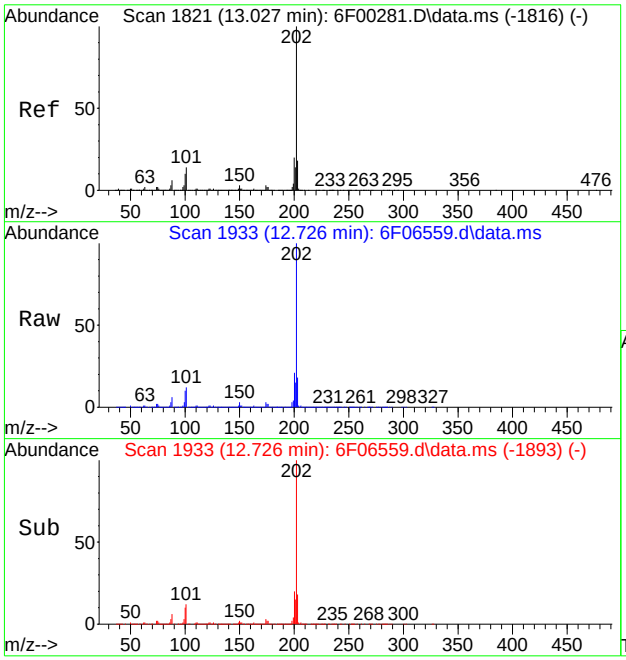


#87
Carbazole
Concen: 4.13 ppm
RT: 11.570 min Scan# 1717
Delta R.T. 0.005 min
Lab File: 6F06559.d
Acq: 13 Aug 2020 9:12 pm

Tgt Ion:167 Resp: 101595

Ion	Ratio	Lower	Upper
167	100		
166	20.5	0.0	50.9
139	12.7	0.0	43.2

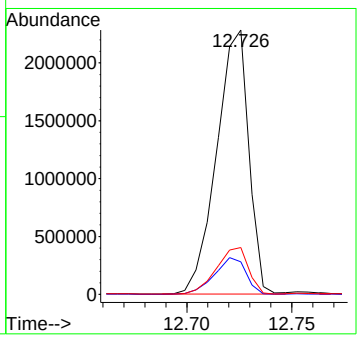


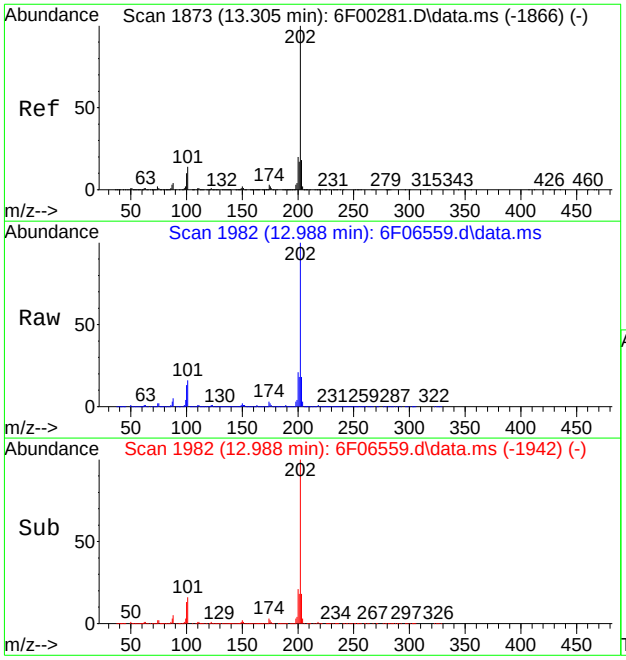


#91
Fluoranthene
Concen: 86.05 ppm
RT: 12.726 min Scan# 1933
Delta R.T. 0.016 min
Lab File: 6F06559.d
Acq: 13 Aug 2020 9:12 pm

Tgt Ion:202 Resp: 2435651

Ion	Ratio	Lower	Upper
202	100		
101	12.3	0.0	44.4
203	17.6	0.0	47.5

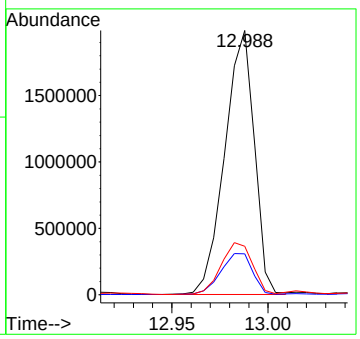


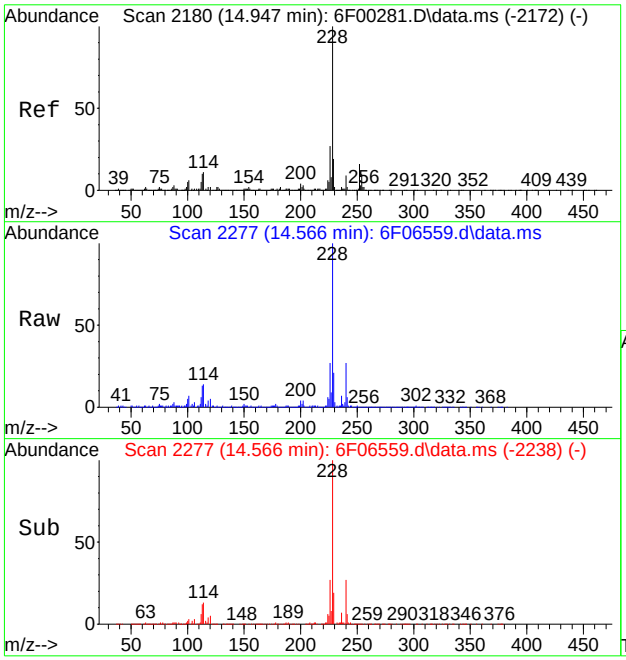


#94
Pyrene
Concen: 87.66 ppm
RT: 12.988 min Scan# 1982
Delta R.T. 0.016 min
Lab File: 6F06559.d
Acq: 13 Aug 2020 9:12 pm

Tgt Ion:202 Resp: 2120829

Ion	Ratio	Lower	Upper
202	100		
101	15.4	0.0	48.6
203	17.8	0.0	48.3

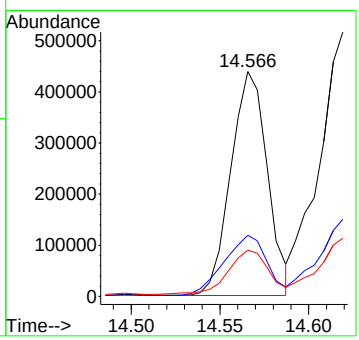


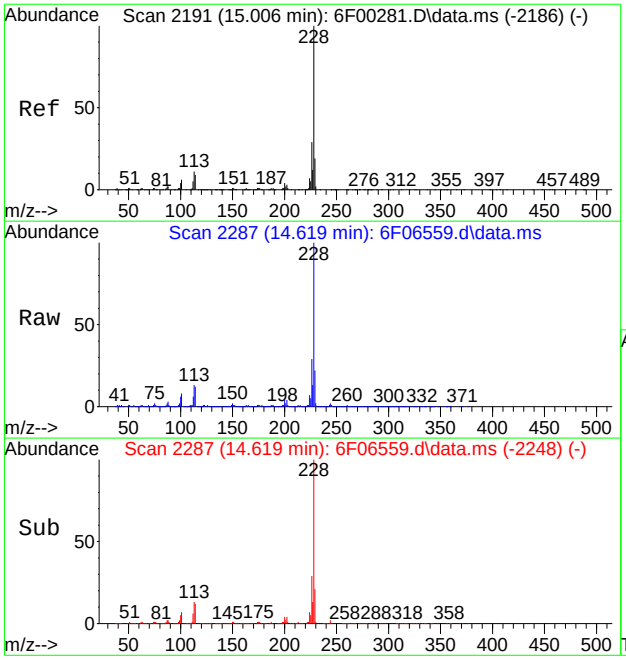


#99
Benzo[a]anthracene
Concen: 27.74 ppm
RT: 14.566 min Scan# 2277
Delta R.T. 0.011 min
Lab File: 6F06559.d
Acq: 13 Aug 2020 9:12 pm

Tgt Ion:228 Resp: 627869

Ion	Ratio	Lower	Upper
228	100		
226	26.9	0.0	56.8
229	19.5	0.0	49.8

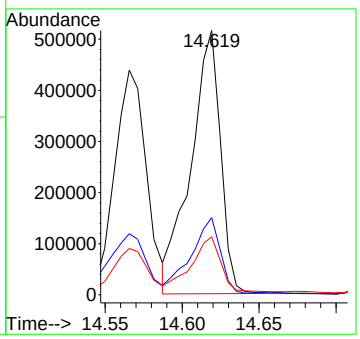


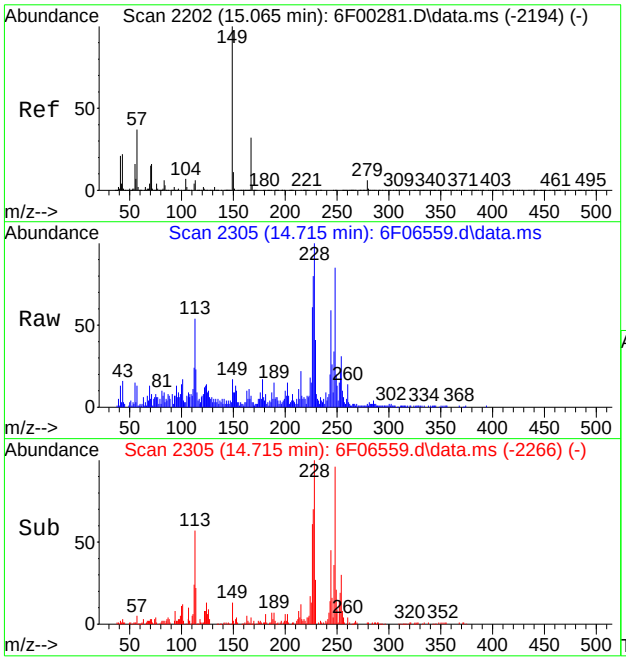


#100
Chrysene
Concen: 31.56 ppm
RT: 14.619 min Scan# 2287
Delta R.T. 0.011 min
Lab File: 6F06559.d
Acq: 13 Aug 2020 9:12 pm

Tgt Ion:228 Resp: 693078

Ion	Ratio	Lower	Upper
228	100		
226	28.8	0.0	59.3
229	21.0	0.0	49.8

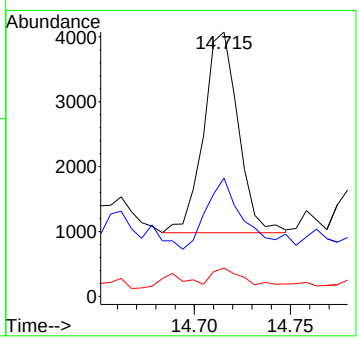


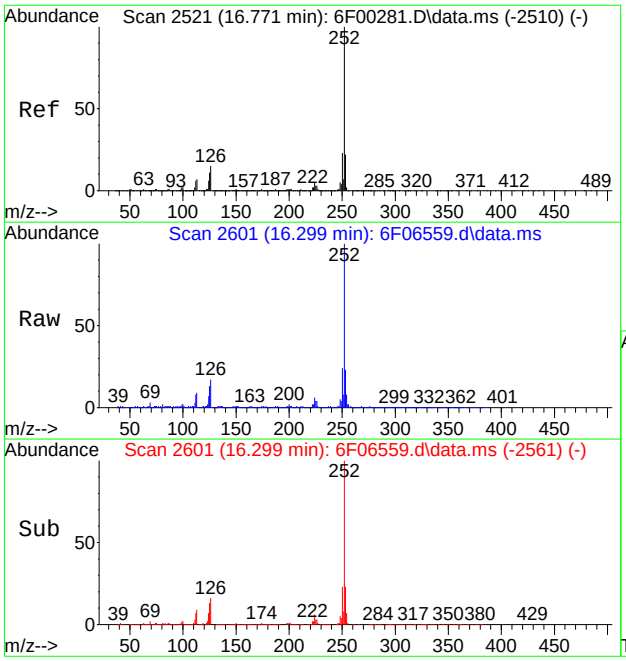


#101
bis(2-Ethylhexyl)phthalate
Concen: 0.24 ppm
RT: 14.715 min Scan# 2305
Delta R.T. 0.011 min
Lab File: 6F06559.d
Acq: 13 Aug 2020 9:12 pm

Tgt Ion:149 Resp: 3869

Ion	Ratio	Lower	Upper
149	100		
167	29.9	0.0	59.9
279	6.6	0.0	36.7

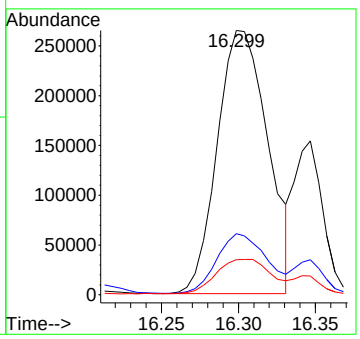


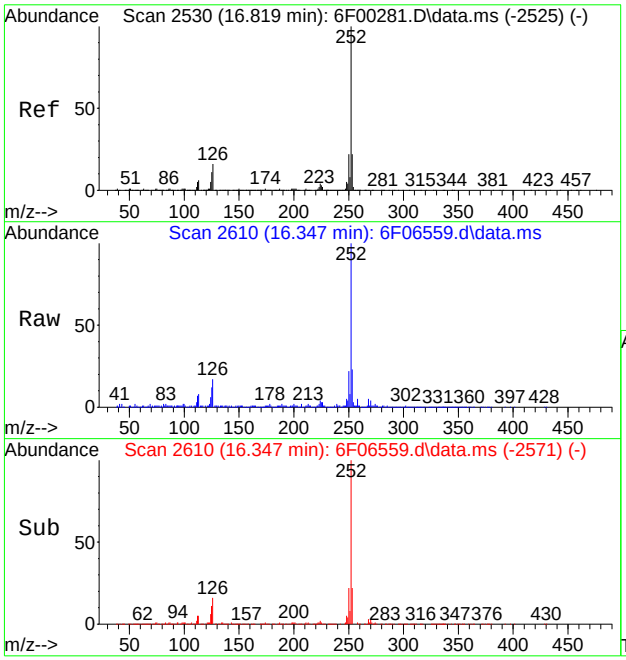


#104
Benzo[b]fluoranthene
Concen: 22.01 ppm
RT: 16.299 min Scan# 2601
Delta R.T. 0.016 min
Lab File: 6F06559.d
Acq: 13 Aug 2020 9:12 pm

Tgt Ion:252 Resp: 605063

Ion	Ratio	Lower	Upper
252	100		
253	23.0	0.0	51.7
125	12.5	0.0	44.0

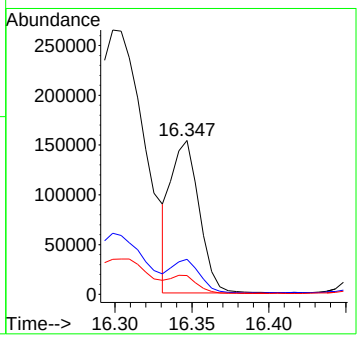


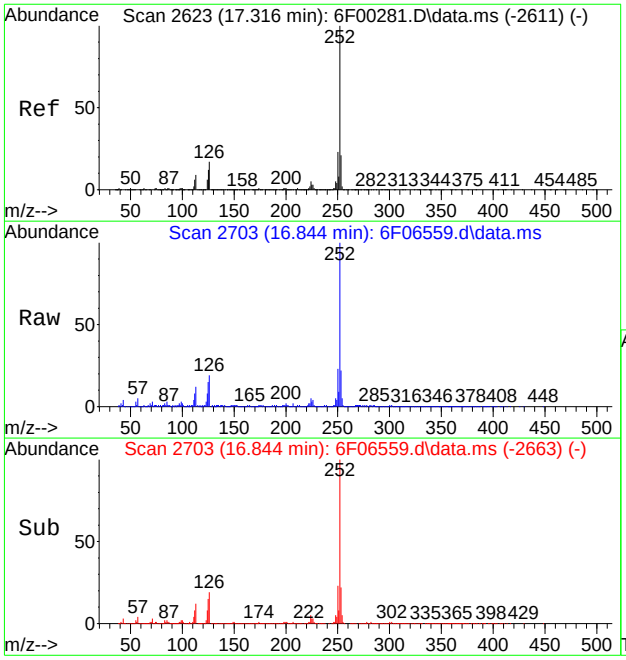


#105
Benzo[k]fluoranthene
Concen: 6.84 ppm
RT: 16.347 min Scan# 2610
Delta R.T. 0.011 min
Lab File: 6F06559.d
Acq: 13 Aug 2020 9:12 pm

Tgt Ion:252 Resp: 195700

Ion	Ratio	Lower	Upper
252	100		
253	22.3	0.0	51.9
125	10.4	0.0	43.3

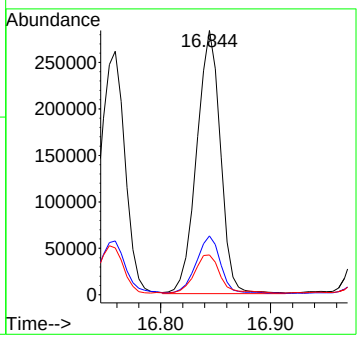


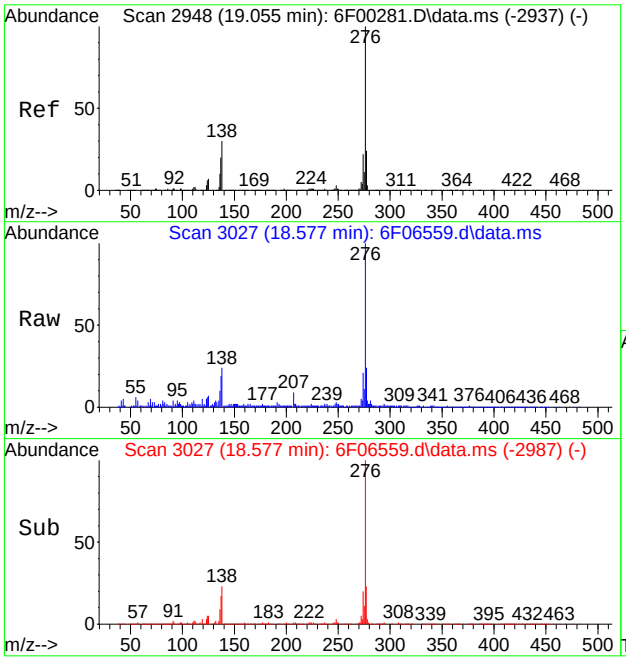


#106
Benzo[a]pyrene
Concen: 16.65 ppm
RT: 16.844 min Scan# 2703
Delta R.T. 0.016 min
Lab File: 6F06559.d
Acq: 13 Aug 2020 9:12 pm

Tgt Ion:252 Resp: 425226

Ion	Ratio	Lower	Upper
252	100		
253	21.8	0.0	52.0
125	14.5	0.0	44.6

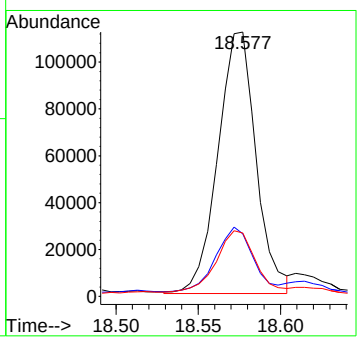


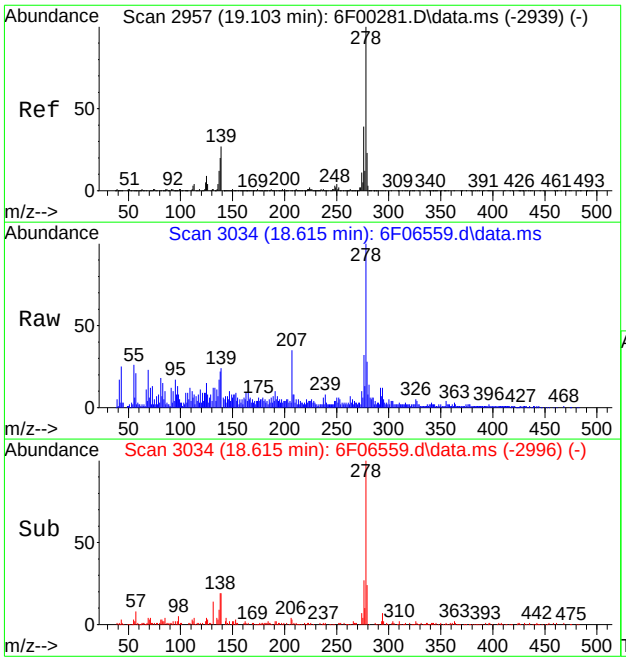


#107
Indeno[1,2,3-cd]pyrene
Concen: 7.56 ppm m
RT: 18.577 min Scan# 3027
Delta R.T. 0.016 min
Lab File: 6F06559.d
Acq: 13 Aug 2020 9:12 pm

Tgt Ion:276 Resp: 179796

Ion	Ratio	Lower	Upper
276	100		
138	23.6	0.0	56.9
277	23.9	0.0	53.9

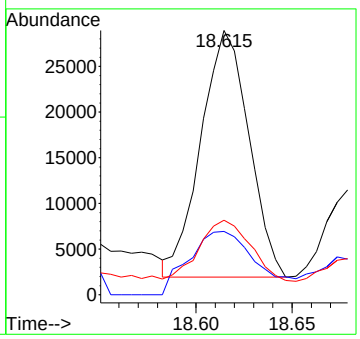


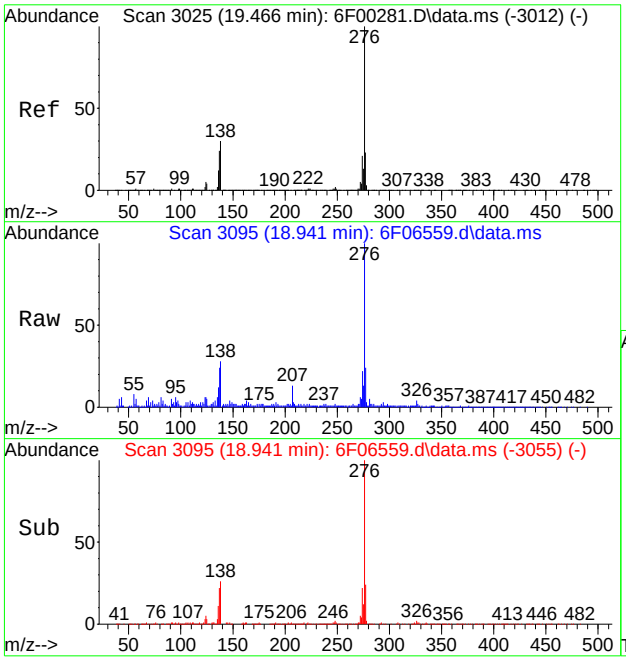


#108
Dibenz[a,h]anthracene
Concen: 1.85 ppm
RT: 18.615 min Scan# 3034
Delta R.T. 0.005 min
Lab File: 6F06559.d
Acq: 13 Aug 2020 9:12 pm

Tgt Ion:278 Resp: 46864

Ion	Ratio	Lower	Upper
278	100		
139	22.8	0.0	51.9
279	25.0	0.0	54.3

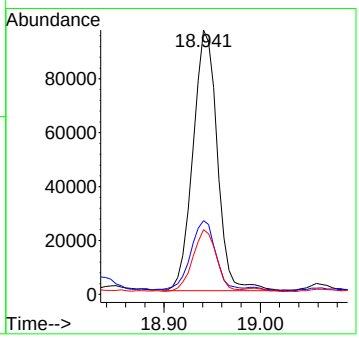




#109
Benzo[g,h,i]perylene
Concen: 6.63 ppm
RT: 18.941 min Scan# 3095
Delta R.T. 0.016 min
Lab File: 6F06559.d
Acq: 13 Aug 2020 9:12 pm

Tgt Ion:276 Resp: 170035

Ion	Ratio	Lower	Upper
276	100		
138	26.4	0.0	59.3
277	23.7	0.0	53.8



Manual Integration Approval Summary

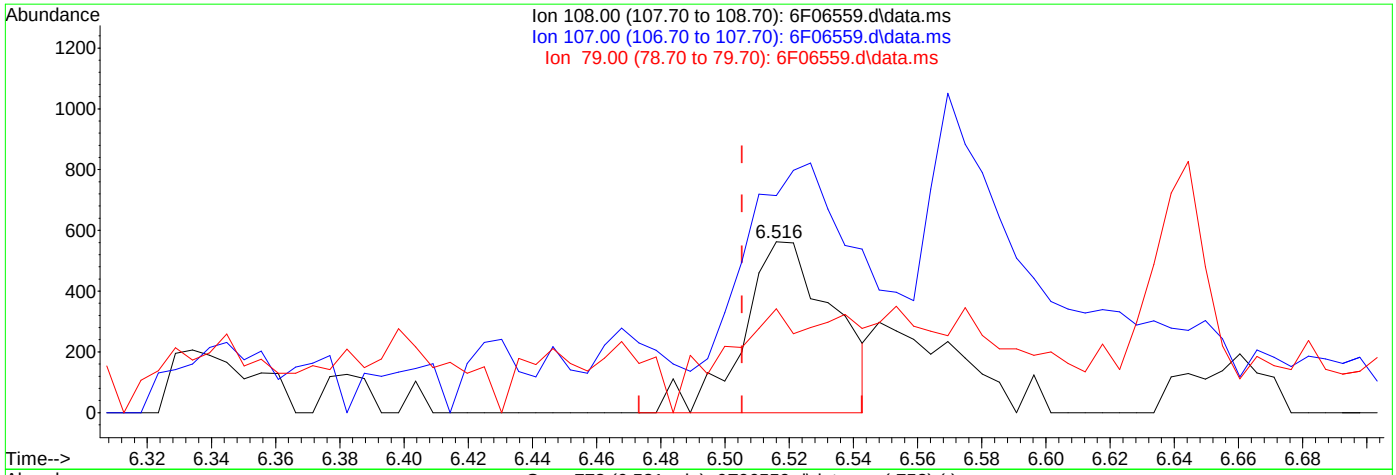
Sample Number: FA77689-1
Lab FileID: 6F06559.D
Injection Time: 08/13/20 21:12
Method: SW846 8270E
Analyst approved: 08/17/20 11:34 Martha Valls
Supervisor approved: 08/17/20 12:51 Naresh Jiawan

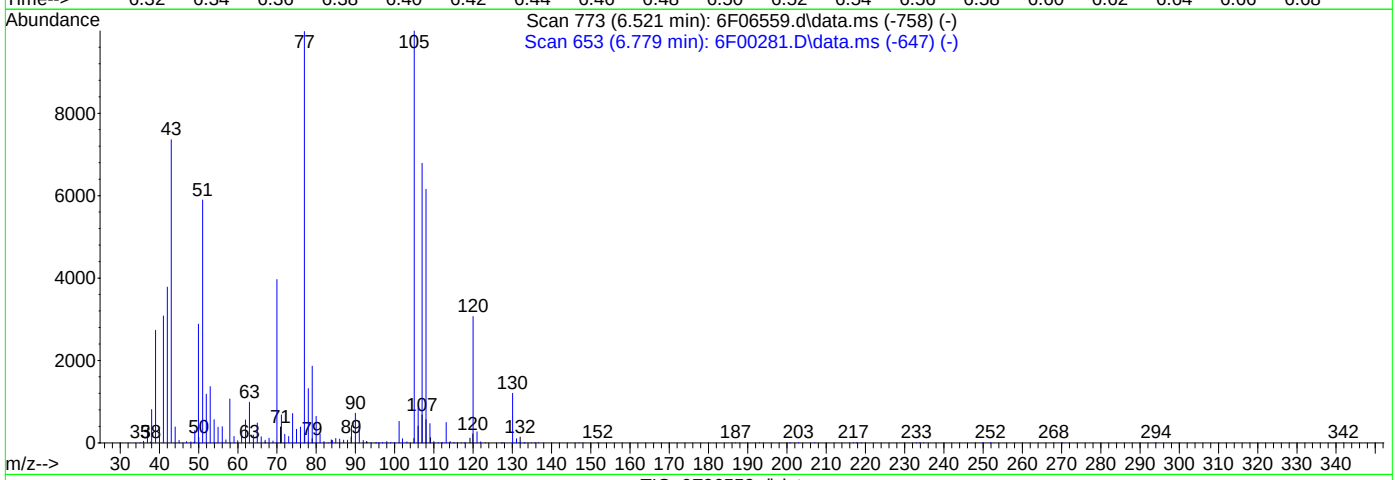
Parameter	CAS	Sig#	R.T. (min.)	Reason
3&4-Methylphenol			6.52	Poor instrument integration
Indeno(1,2,3-cd)pyrene	193-39-5		18.58	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s6f253\
Data File : 6F06559.d
Acq On : 13 Aug 2020 9:12 pm
Operator : marthav
Sample : fa77689-1 E
Misc : op81538,S6F253,30.1,,,1,1,soil
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Aug 14 04:42:38 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration





TIC: 6F06559.d\data.ms

(21) 3&4-Methylphenol (P)

6.516min (+0.011) 0.11ppm

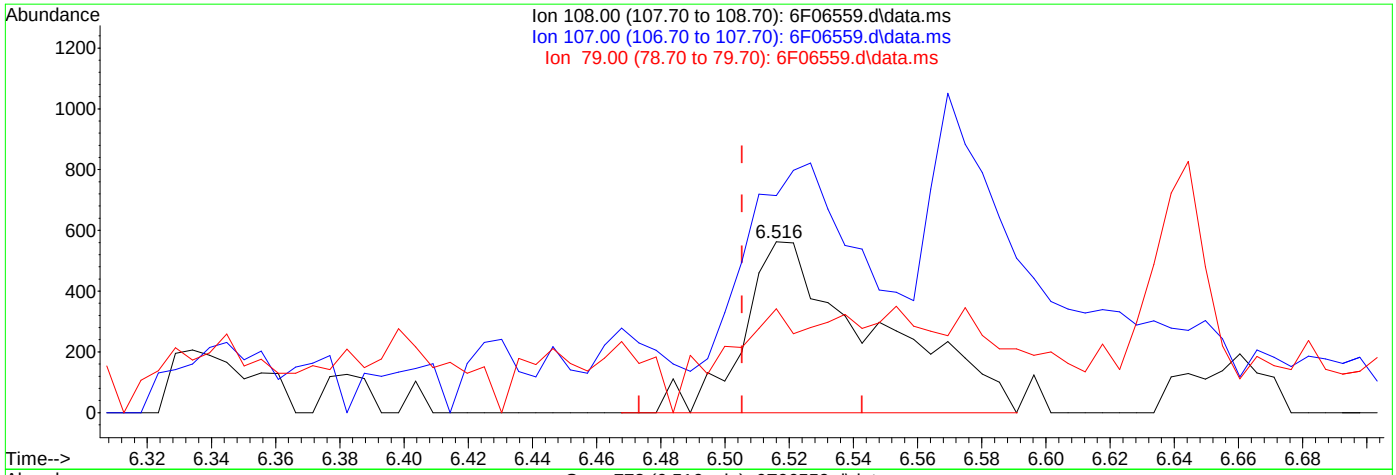
response 1095

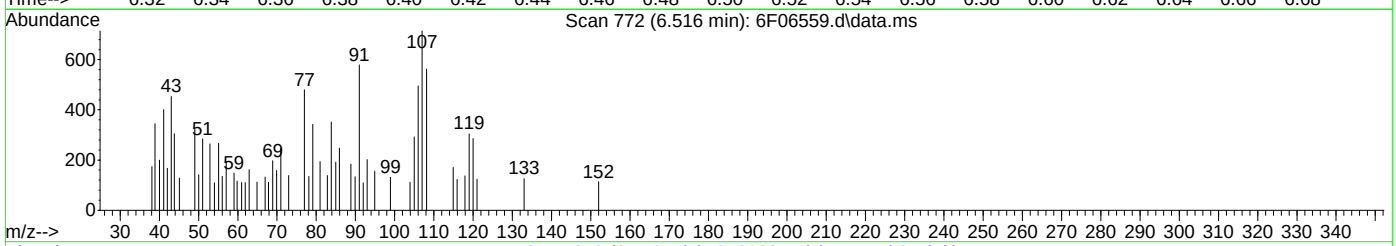
Ion	Exp%	Act%
108.00	100	100
107.00	110.20	74.00#
79.00	30.10	27.34
0.00	0.00	0.00

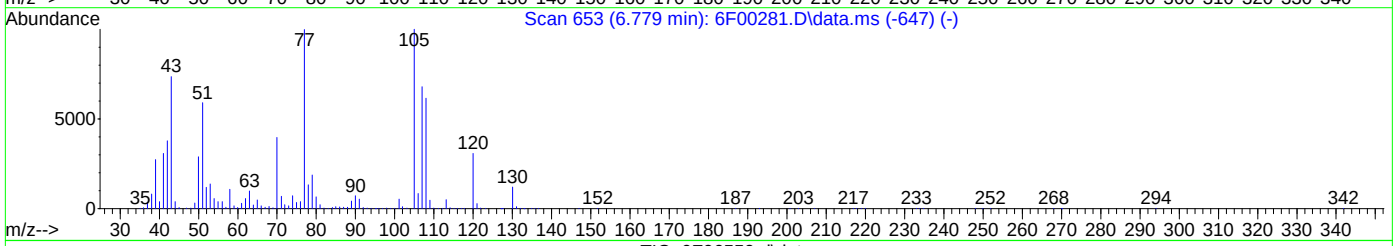
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s6f253\
Data File : 6F06559.d
Acq On : 13 Aug 2020 9:12 pm
Operator : marthav
Sample : fa77689-1 E
Misc : op81538,S6F253,30.1,,,1,1,soil
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Aug 14 04:42:38 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration







TIC: 6F06559.d\data.ms

(21) 3&4-Methylphenol (P)

6.516min (+0.011) 0.16ppm m

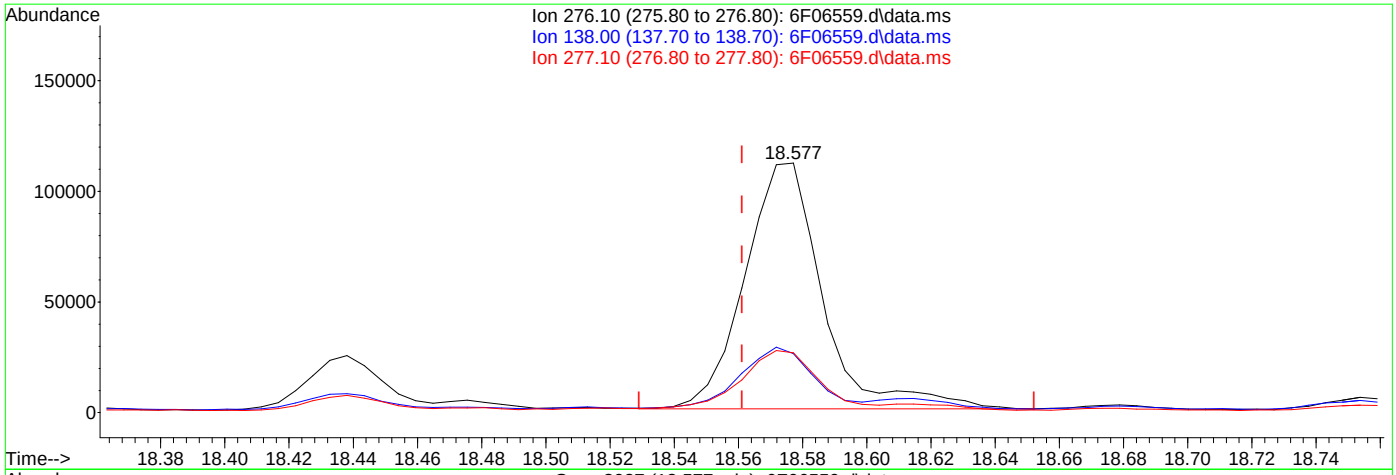
response 1622

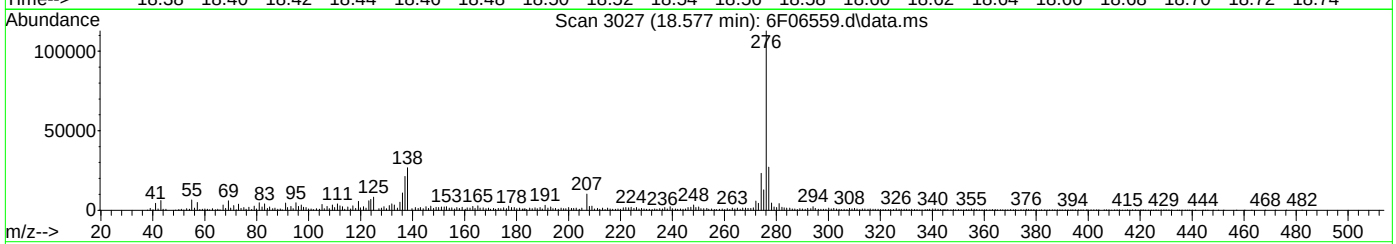
Ion	Exp%	Act%
108.00	100	100
107.00	110.20	127.22
79.00	30.10	60.85#
0.00	0.00	0.00

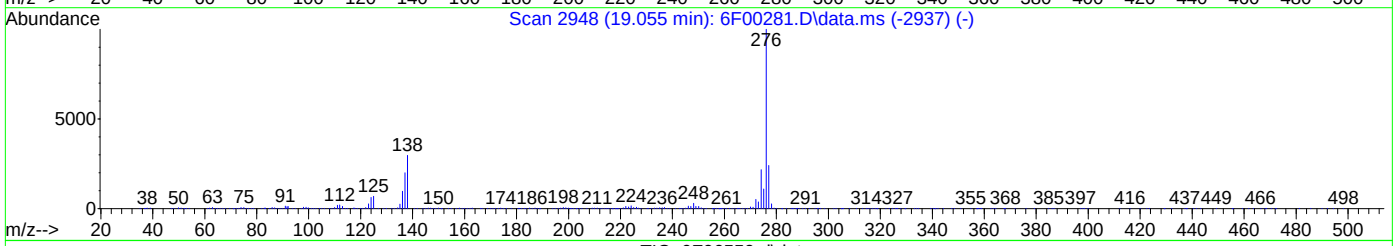
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s6f253\
Data File : 6F06559.d
Acq On : 13 Aug 2020 9:12 pm
Operator : marthav
Sample : fa77689-1 E
Misc : op81538,S6F253,30.1,,,1,1,soil
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Aug 14 04:42:38 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration







TIC: 6F06559.d\data.ms

(107) Indeno[1,2,3-cd]pyrene (P)

18.577min (+0.016) 7.91ppm

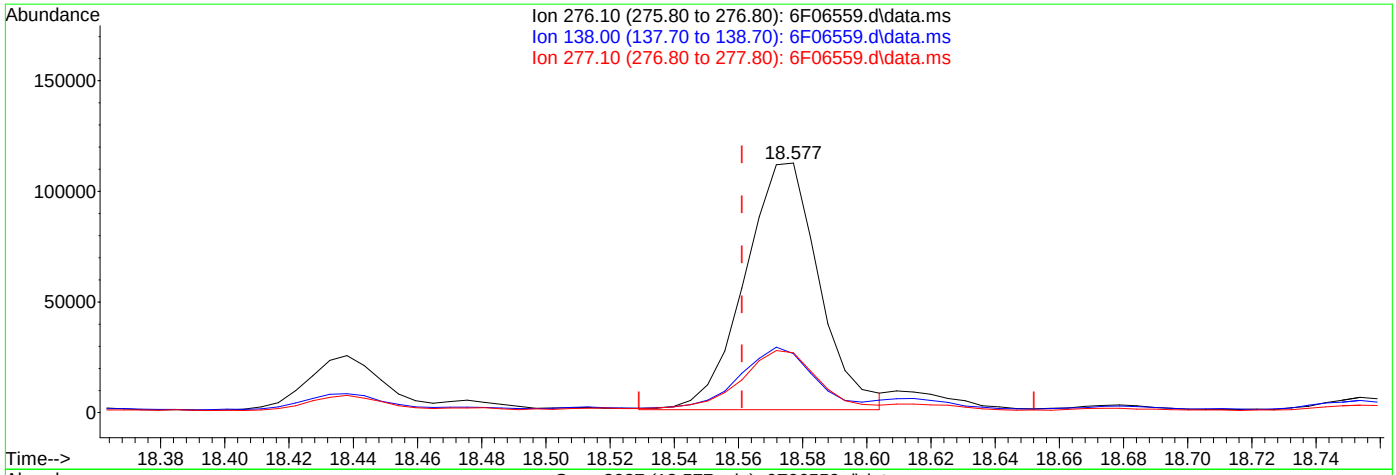
response 188087

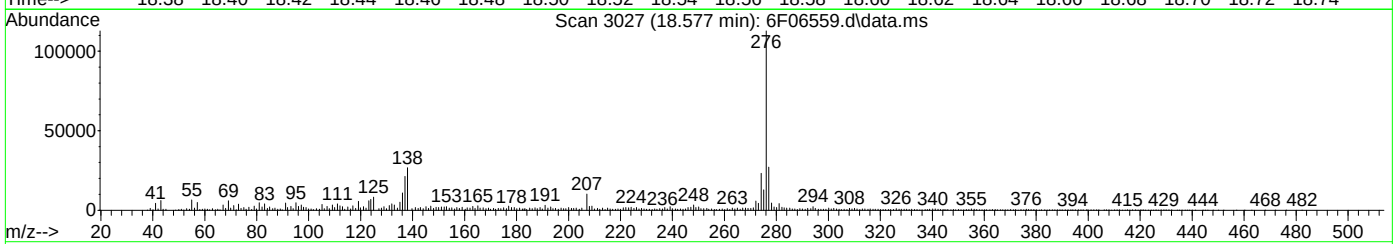
Ion	Exp%	Act%
276.10	100	100
138.00	26.90	22.41
277.10	23.90	22.93
0.00	0.00	0.00

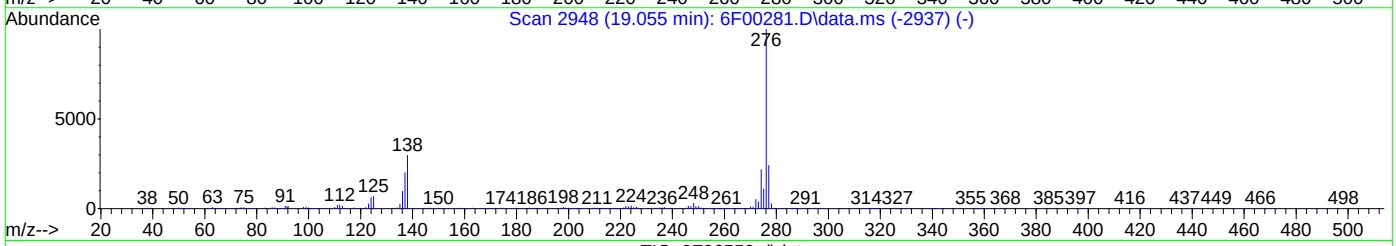
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s6f253\
Data File : 6F06559.d
Acq On : 13 Aug 2020 9:12 pm
Operator : marthav
Sample : fa77689-1 E
Misc : op81538,S6F253,30.1,,,1,1,soil
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Aug 14 04:42:38 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration







TIC: 6F06559.d\data.ms

(107) Indeno[1,2,3-cd]pyrene (P)

18.577min (+0.016) 7.56ppm m

response 179796

Ion	Exp%	Act%
276.10	100	100
138.00	26.90	23.61
277.10	23.90	23.94
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 08/14/20 14:57

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s6f253\
Data File : 6F06560.d
Acq On : 13 Aug 2020 9:37 pm
Operator : marthav
Sample : fa77689-2 E
Misc : op81538,S6F253,30.0,,,1,1,soil
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Aug 14 05:19:32 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

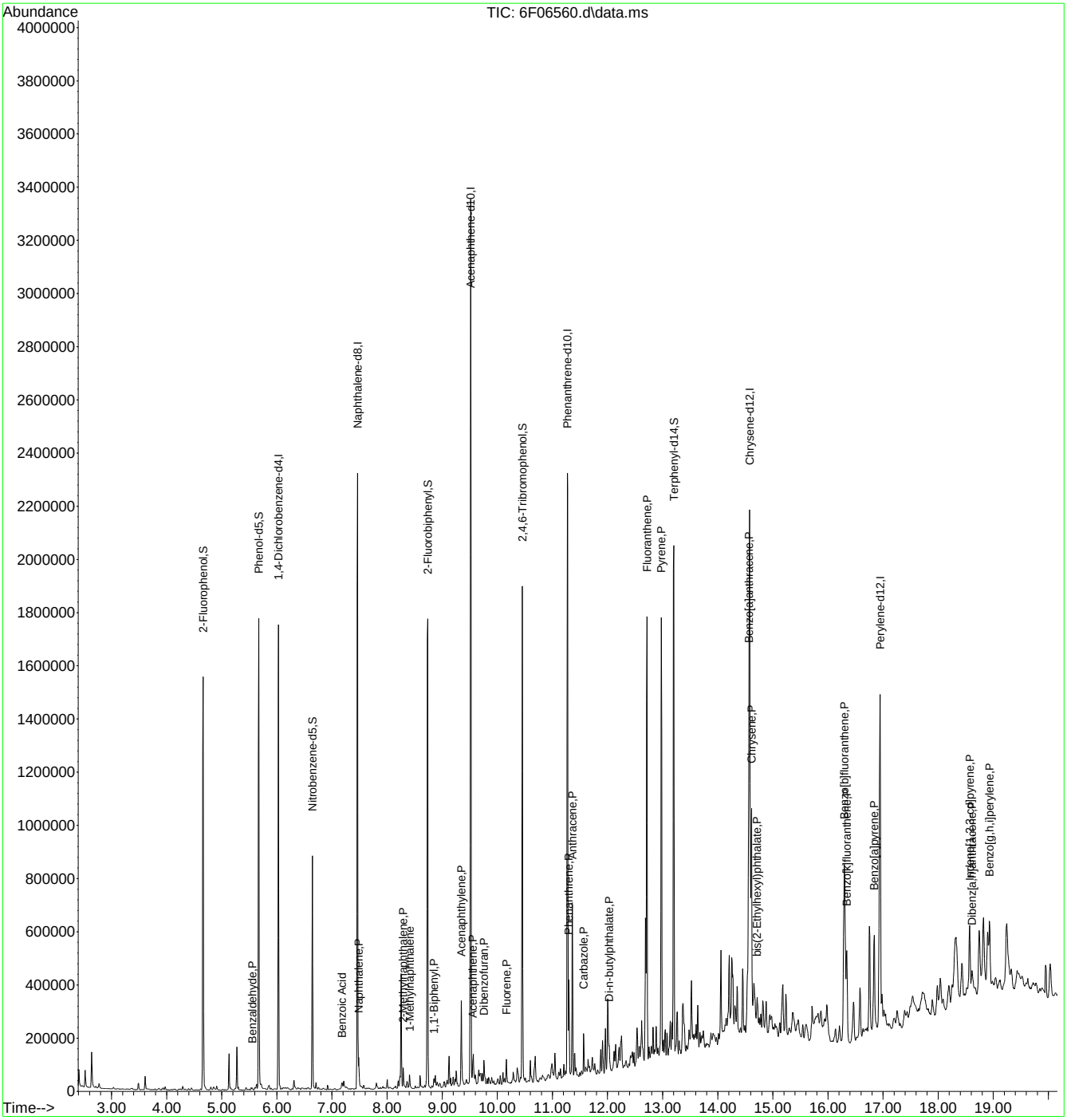
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.029	152	275670	40.00	ppm	0.00
22) Naphthalene-d8	7.463	136	1017445	40.00	ppm	0.00
43) Acenaphthene-d10	9.517	164	672572	40.00	ppm	0.00
70) Phenanthrene-d10	11.271	188	949077	40.00	ppm	0.00
92) Chrysene-d12	14.576	240	706093	40.00	ppm	0.00
102) Perylene-d12	16.946	264	688681	40.00	ppm	0.02
System Monitoring Compounds						
7) 2-Fluorophenol	4.660	112	487184	46.77	ppm	0.01
Spiked Amount 100.000	Range 40 - 102		Recovery = 46.77%			
9) Phenol-d5	5.671	99	643601	52.05	ppm	0.00
Spiked Amount 100.000	Range 41 - 100		Recovery = 52.05%			
23) Nitrobenzene-d5	6.644	82	271404	24.31	ppm	0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 48.62%			
47) 2-Fluorobiphenyl	8.736	172	578996	22.03	ppm	0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 44.06%			
75) 2,4,6-Tribromophenol	10.453	330	227843	71.33	ppm	0.00
Spiked Amount 100.000	Range 42 - 108		Recovery = 71.33%			
95) Terphenyl-d14	13.202	244	668959	33.70	ppm	0.00
Spiked Amount 50.000	Range 45 - 119		Recovery = 67.40%			
Target Compounds						Qvalue
5) Benzaldehyde	5.553	106	1787	0.21	ppm	92
30) Benzoic Acid	7.179	105	8414	1.28	ppm	94
34) Naphthalene	7.484	128	34002	1.18	ppm	95
40) 2-Methylnaphthalene	8.292	141	17330	1.03	ppm	99
41) 1-Methylnaphthalene	8.409	142	14265	0.77	ppm	90
48) 1,1'-Biphenyl	8.848	154	5327	0.19	ppm	95
52) Acenaphthylene	9.345	152	146435	4.36	ppm	99
57) Acenaphthene	9.554	153	11269	0.50	ppm	98
60) Dibenzofuran	9.757	168	31724	1.03	ppm	98
65) Fluorene	10.164	166	23466	0.94	ppm	98
84) Phenanthrene	11.298	178	133200	4.69	ppm	99
85) Anthracene	11.362	178	259726	8.99	ppm	99
87) Carbazole	11.565	167	60638	2.33	ppm	99
89) Di-n-butylphthalate	12.025	149	2792	0.09	ppm	77
91) Fluoranthene	12.715	202	657338	21.97	ppm	98
94) Pyrene	12.977	202	626154	24.76	ppm	97
99) Benzo[a]anthracene	14.566	228	343298	14.51	ppm	99
100) Chrysene	14.614	228	398932	17.38	ppm	99
101) bis(2-Ethylhexyl)phtha...	14.710	149	3903	0.23	ppm	83
104) Benzo[b]fluoranthene	16.299	252	494801	22.38	ppm	98
105) Benzo[k]fluoranthene	16.341	252	164946	7.17	ppm	97
106) Benzo[a]pyrene	16.839	252	190436	9.28	ppm	98
107) Indeno[1,2,3-cd]pyrene	18.572	276	160487m	8.40	ppm	
108) Dibenz[a,h]anthracene	18.615	278	39366	1.93	ppm	97
109) Benzo[g,h,i]perylene	18.930	276	145904	7.07	ppm	96

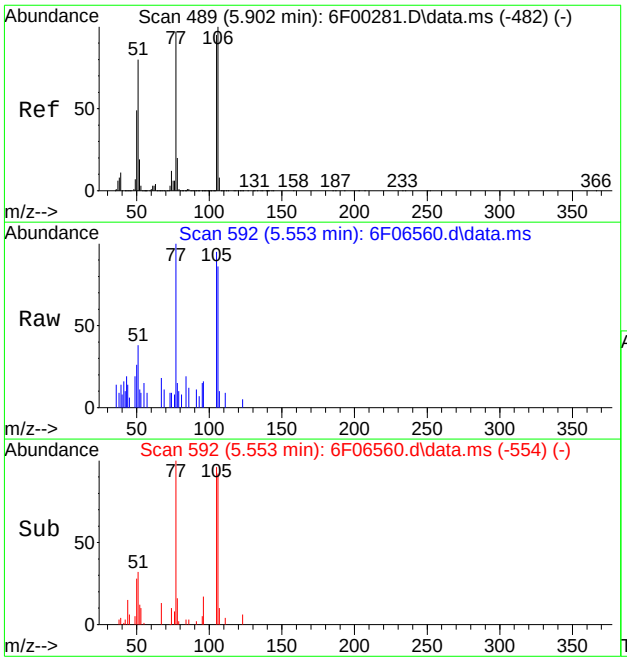
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s6f253\
Data File : 6F06560.d
Acq On : 13 Aug 2020 9:37 pm
Operator : marthav
Sample : fa77689-2 E
Misc : op81538,S6F253,30.0,,,1,1,soil
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Aug 14 05:19:32 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

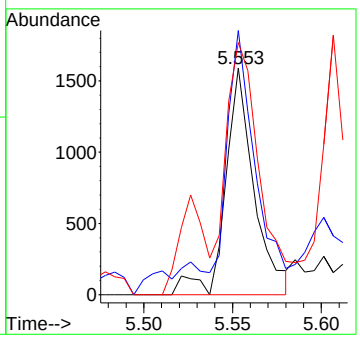


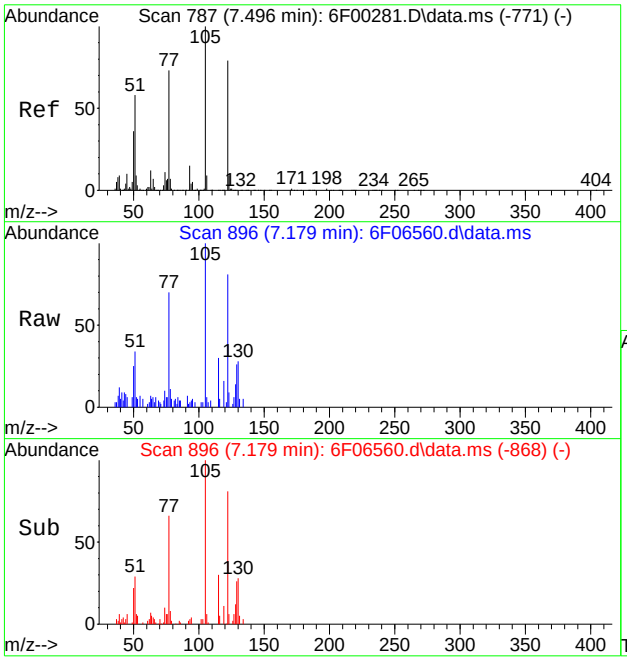


#5
Benzaldehyde
Concen: 0.21 ppm
RT: 5.553 min Scan# 592
Delta R.T. 0.005 min
Lab File: 6F06560.d
Acq: 13 Aug 2020 9:37 pm

Tgt Ion:106 Resp: 1787

Ion	Ratio	Lower	Upper
106	100		
77	111.6	74.8	134.8
105	109.8	70.7	130.7

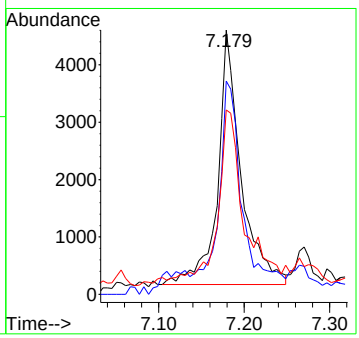


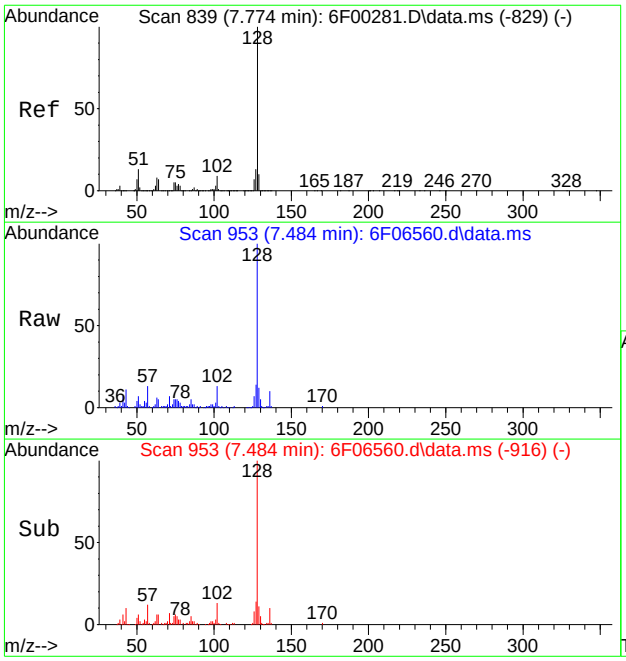


#30
Benzoic Acid
Concen: 1.28 ppm
RT: 7.179 min Scan# 896
Delta R.T. -0.048 min
Lab File: 6F06560.d
Acq: 13 Aug 2020 9:37 pm

Tgt Ion:105 Resp: 8414

Ion	Ratio	Lower	Upper
105	100		
122	78.5	51.7	111.7
77	64.7	42.8	102.8

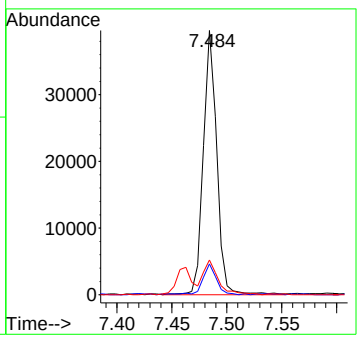


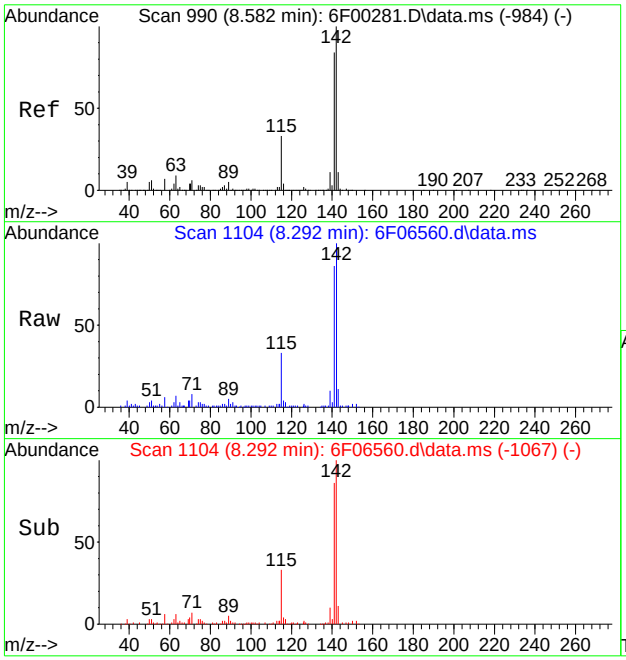


#34
Naphthalene
Concen: 1.18 ppm
RT: 7.484 min Scan# 953
Delta R.T. 0.000 min
Lab File: 6F06560.d
Acq: 13 Aug 2020 9:37 pm

Tgt Ion:128 Resp: 34002

Ion	Ratio	Lower	Upper
128	100		
129	11.5	0.0	41.3
102	12.8	0.0	38.9

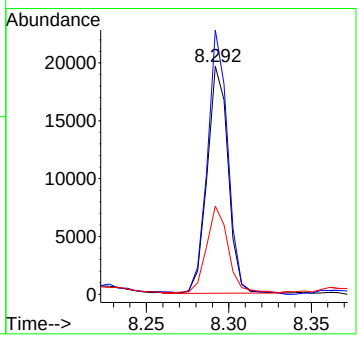


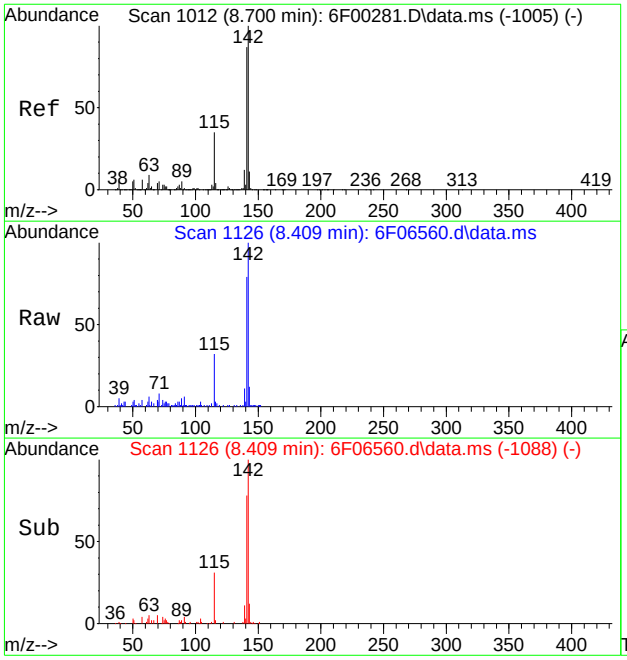


#40
2-Methylnaphthalene
Concen: 1.03 ppm
RT: 8.292 min Scan# 1104
Delta R.T. 0.000 min
Lab File: 6F06560.d
Acq: 13 Aug 2020 9:37 pm

Tgt Ion:141 Resp: 17330

Ion	Ratio	Lower	Upper
141	100		
142	115.9	87.4	147.4
115	37.8	8.3	68.3

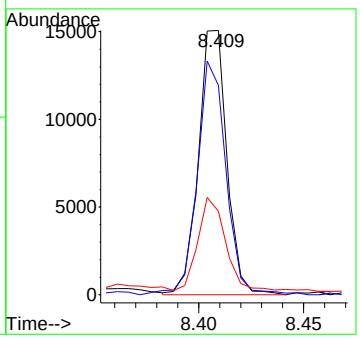


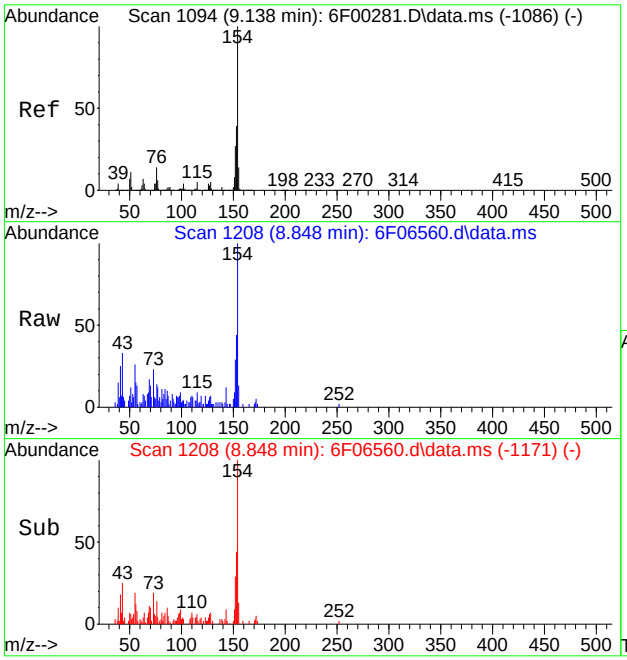


#41
1-Methylnaphthalene
Concen: 0.77 ppm
RT: 8.409 min Scan# 1126
Delta R.T. 0.005 min
Lab File: 6F06560.d
Acq: 13 Aug 2020 9:37 pm

Tgt Ion:142 Resp: 14265

Ion	Ratio	Lower	Upper
142	100		
141	78.4	58.9	118.9
115	29.2	3.8	63.8

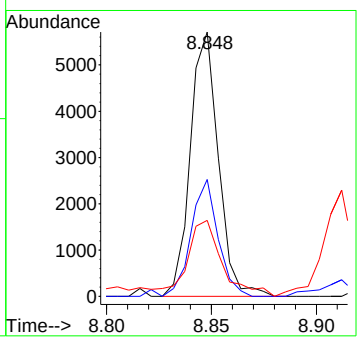


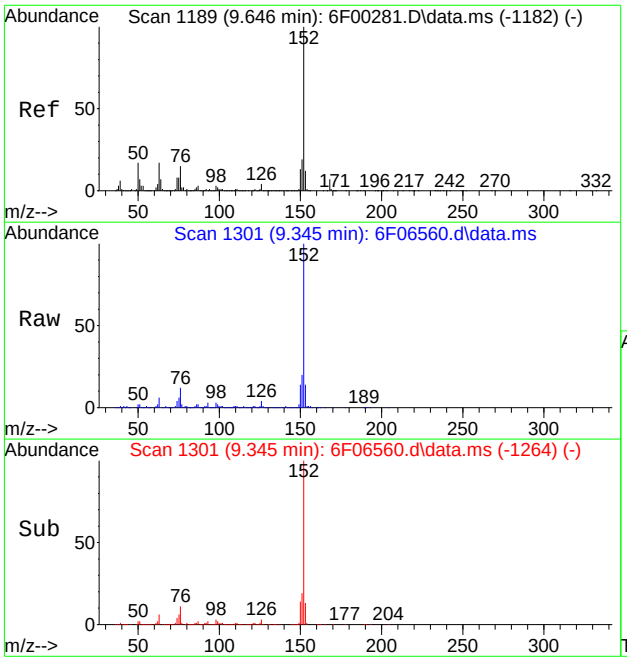


#48
1,1'-Biphenyl
Concen: 0.19 ppm
RT: 8.848 min Scan# 1208
Delta R.T. 0.000 min
Lab File: 6F06560.d
Acq: 13 Aug 2020 9:37 pm

Tgt Ion:154 Resp: 5327

Ion	Ratio	Lower	Upper
154	100		
153	44.2	10.4	70.4
152	26.4	0.0	57.6

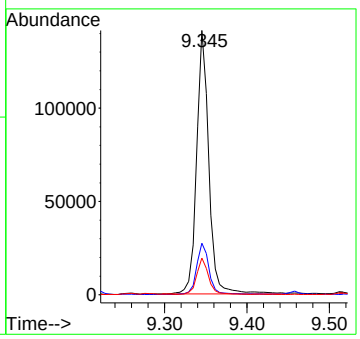


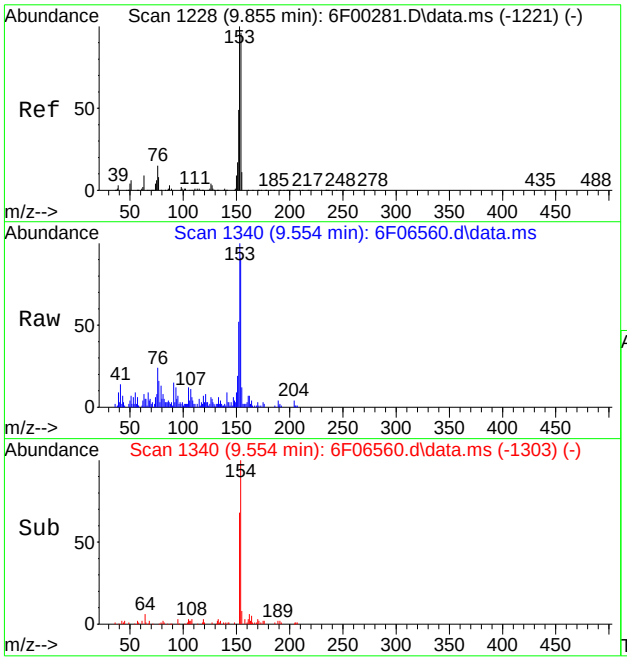


#52
Acenaphthylene
Concen: 4.36 ppm
RT: 9.345 min Scan# 1301
Delta R.T. 0.000 min
Lab File: 6F06560.d
Acq: 13 Aug 2020 9:37 pm

Tgt Ion:152 Resp: 146435

Ion	Ratio	Lower	Upper
152	100		
151	19.4	0.0	49.9
153	13.8	0.0	43.2

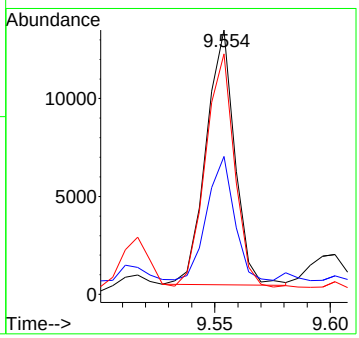


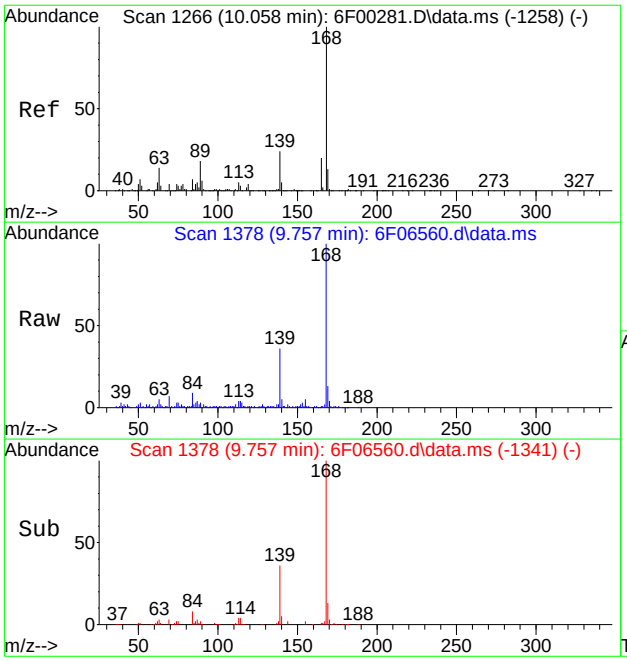


#57
Acenaphthene
Concen: 0.50 ppm
RT: 9.554 min Scan# 1340
Delta R.T. 0.000 min
Lab File: 6F06560.d
Acq: 13 Aug 2020 9:37 pm

Tgt Ion:153 Resp: 11269

Ion	Ratio	Lower	Upper
153	100		
152	47.2	16.2	76.2
154	91.1	63.3	123.3

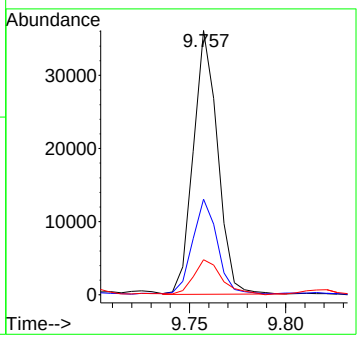


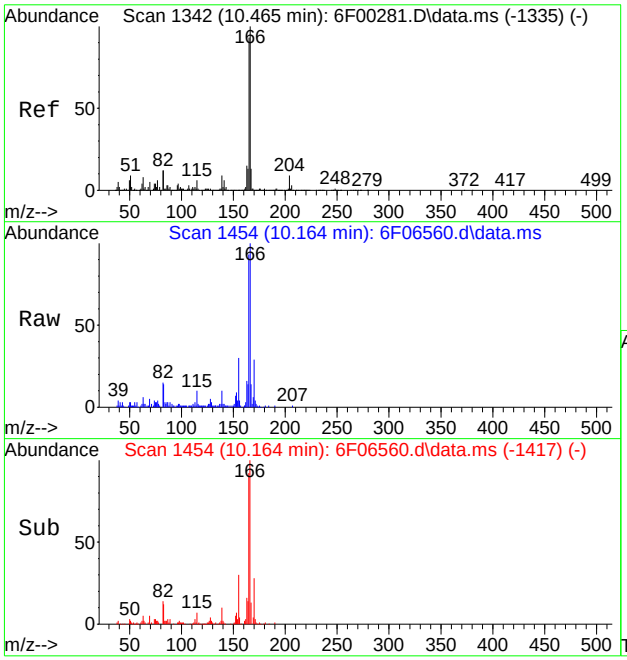


#60
Dibenzofuran
Concen: 1.03 ppm
RT: 9.757 min Scan# 1378
Delta R.T. 0.000 min
Lab File: 6F06560.d
Acq: 13 Aug 2020 9:37 pm

Tgt Ion:168 Resp: 31724

Ion	Ratio	Lower	Upper
168	100		
139	35.8	7.1	67.1
169	12.8	0.0	43.6

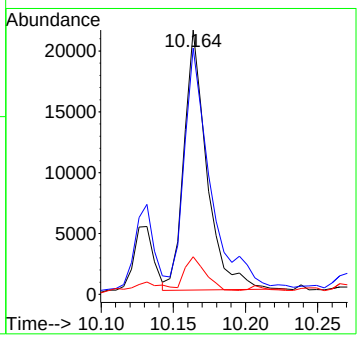


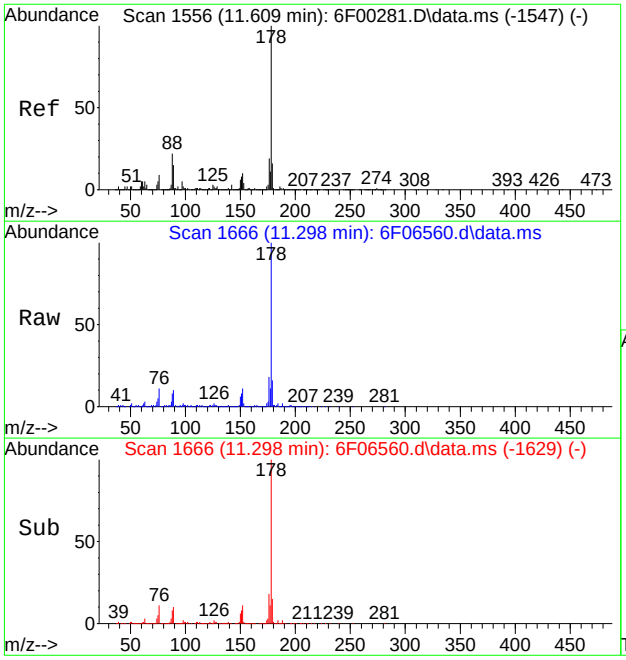


#65
Fluorene
Concen: 0.94 ppm
RT: 10.164 min Scan# 1454
Delta R.T. 0.000 min
Lab File: 6F06560.d
Acq: 13 Aug 2020 9:37 pm

Tgt Ion:166 Resp: 23466

Ion	Ratio	Lower	Upper
166	100		
165	90.9	63.2	123.2
167	12.1	0.0	43.3

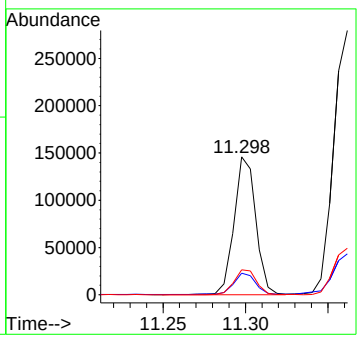


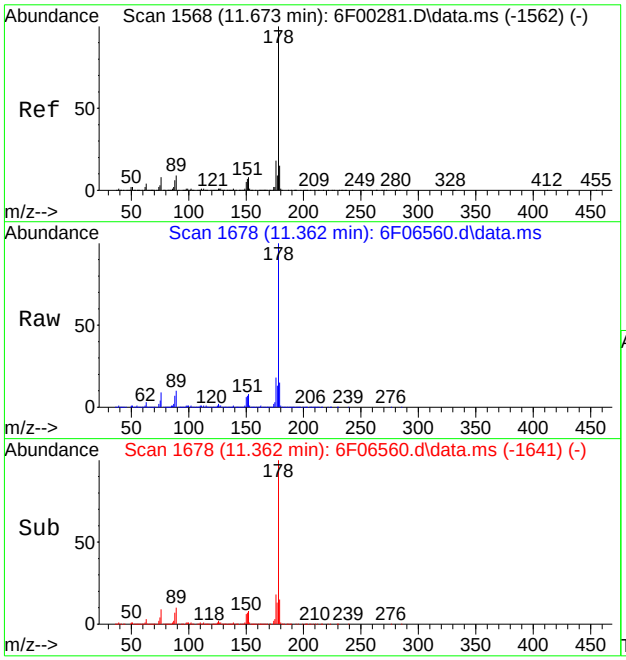


#84
Phenanthrene
Concen: 4.69 ppm
RT: 11.298 min Scan# 1666
Delta R.T. 0.000 min
Lab File: 6F06560.d
Acq: 13 Aug 2020 9:37 pm

Tgt Ion:178 Resp: 133200

Ion	Ratio	Lower	Upper
178	100		
179	15.4	0.0	45.6
176	18.1	0.0	48.6

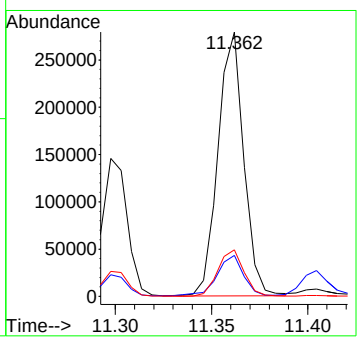


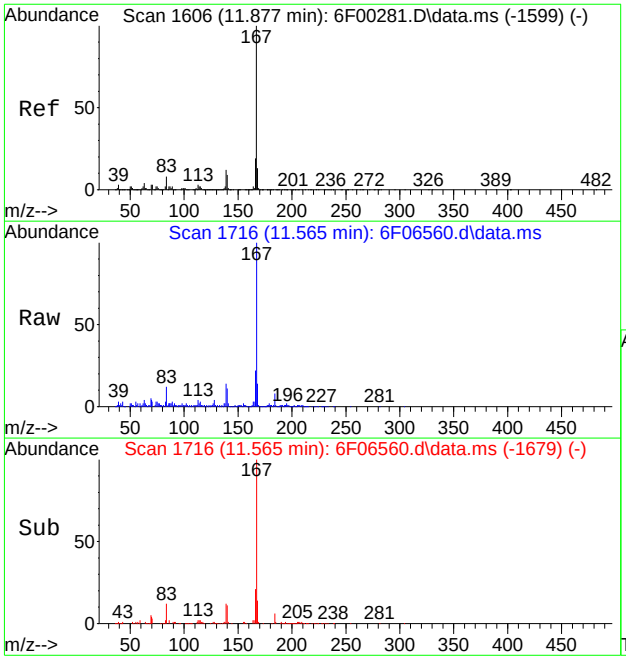


#85
Anthracene
Concen: 8.99 ppm
RT: 11.362 min Scan# 1678
Delta R.T. 0.000 min
Lab File: 6F06560.d
Acq: 13 Aug 2020 9:37 pm

Tgt Ion:178 Resp: 259726

Ion	Ratio	Lower	Upper
178	100		
179	15.1	0.0	45.4
176	17.5	0.0	48.2

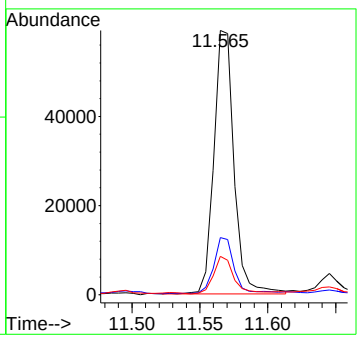


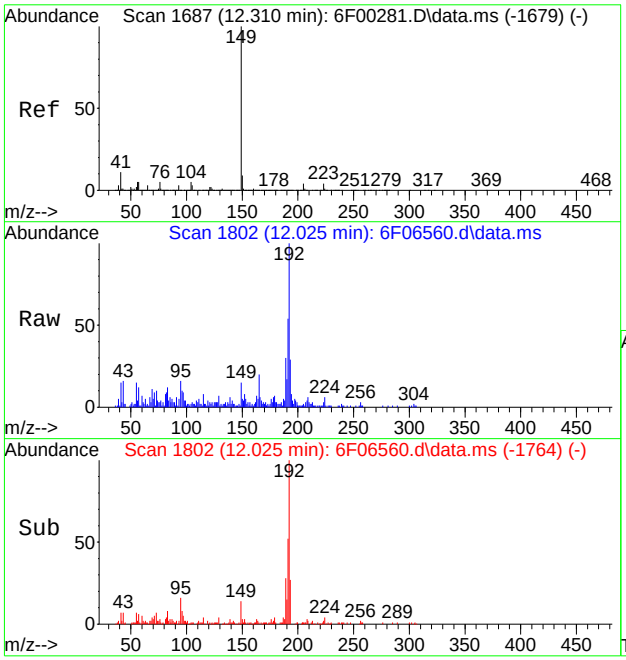


#87
Carbazole
Concen: 2.33 ppm
RT: 11.565 min Scan# 1716
Delta R.T. 0.000 min
Lab File: 6F06560.d
Acq: 13 Aug 2020 9:37 pm

Tgt Ion:167 Resp: 60638

Ion	Ratio	Lower	Upper
167	100		
166	21.0	0.0	50.9
139	13.7	0.0	43.2

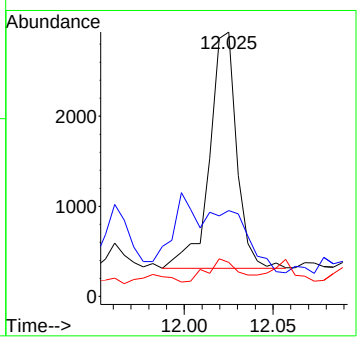


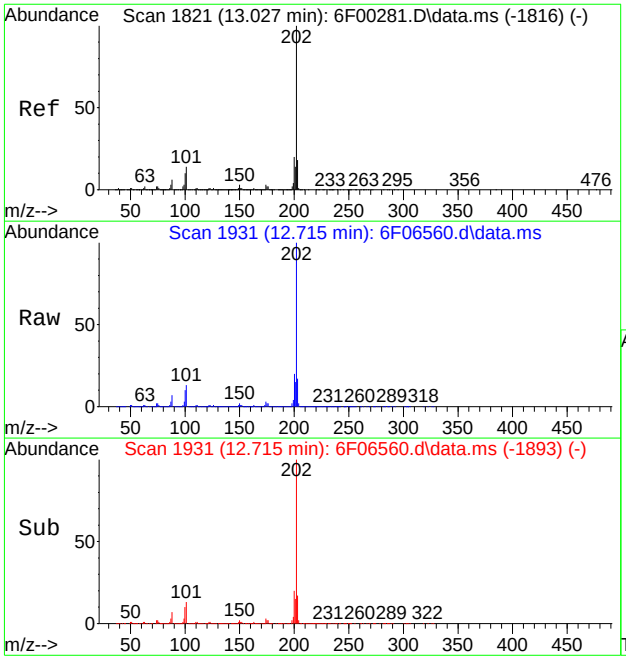


#89
Di-n-butylphthalate
Concen: 0.09 ppm
RT: 12.025 min Scan# 1802
Delta R.T. 0.005 min
Lab File: 6F06560.d
Acq: 13 Aug 2020 9:37 pm

Tgt Ion:149 Resp: 2792

Ion	Ratio	Lower	Upper
149	100		
150	20.7	0.0	39.2
104	2.3	0.0	34.7

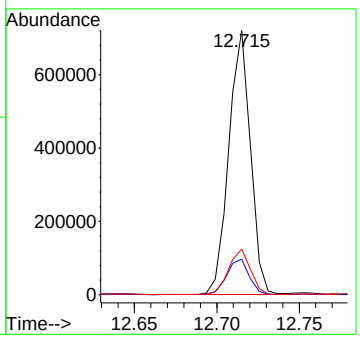


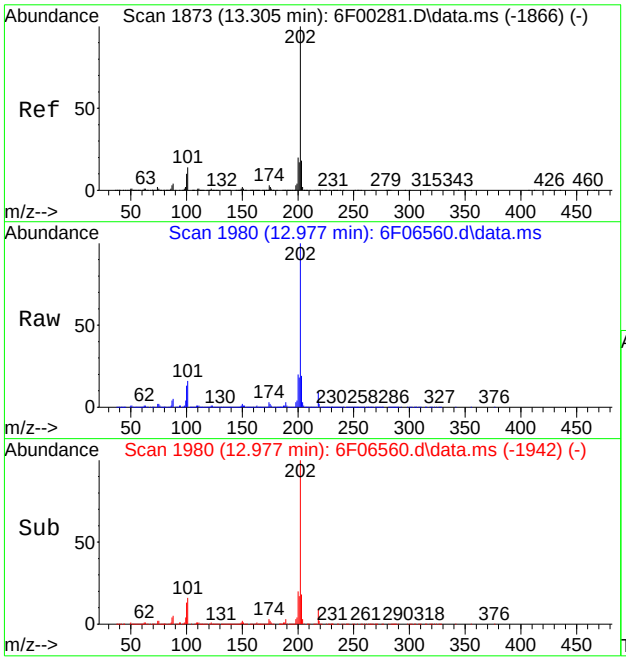


#91
Fluoranthene
Concen: 21.97 ppm
RT: 12.715 min Scan# 1931
Delta R.T. 0.005 min
Lab File: 6F06560.d
Acq: 13 Aug 2020 9:37 pm

Tgt Ion:202 Resp: 657338

Ion	Ratio	Lower	Upper
202	100		
101	13.4	0.0	44.4
203	17.2	0.0	47.5

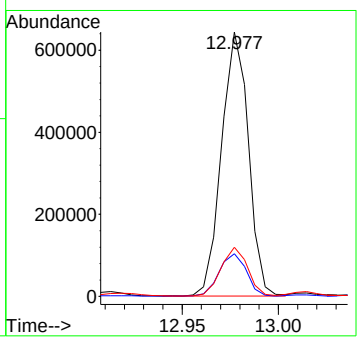


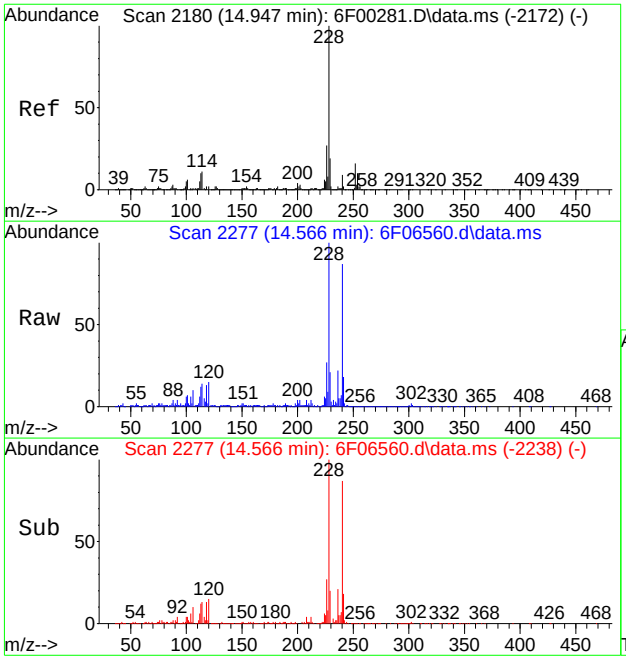


#94
Pyrene
Concen: 24.76 ppm
RT: 12.977 min Scan# 1980
Delta R.T. 0.005 min
Lab File: 6F06560.d
Acq: 13 Aug 2020 9:37 pm

Tgt Ion:202 Resp: 626154

Ion	Ratio	Lower	Upper
202	100		
101	15.9	0.0	48.6
203	18.2	0.0	48.3

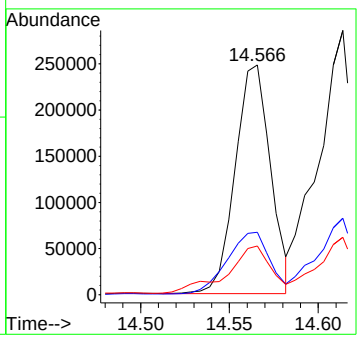


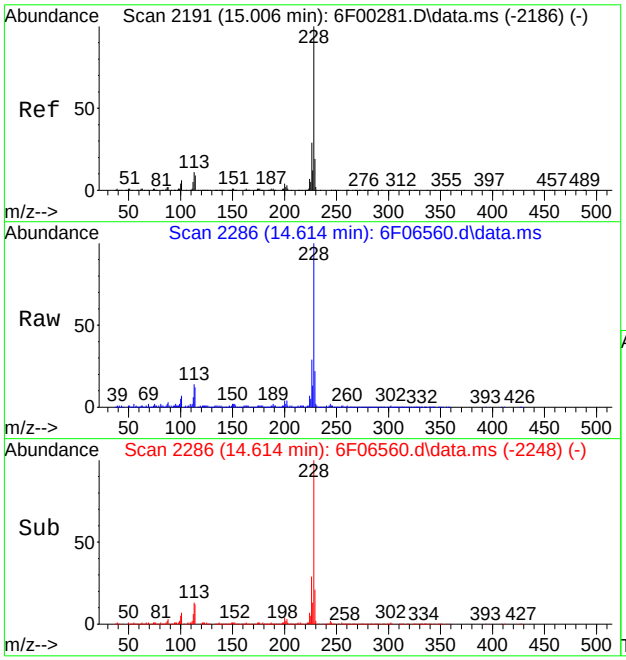


#99
Benzo[a]anthracene
Concen: 14.51 ppm
RT: 14.566 min Scan# 2277
Delta R.T. 0.011 min
Lab File: 6F06560.d
Acq: 13 Aug 2020 9:37 pm

Tgt Ion:228 Resp: 343298

Ion	Ratio	Lower	Upper
228	100		
226	26.9	0.0	56.8
229	20.4	0.0	49.8

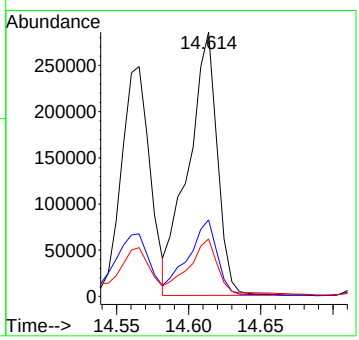


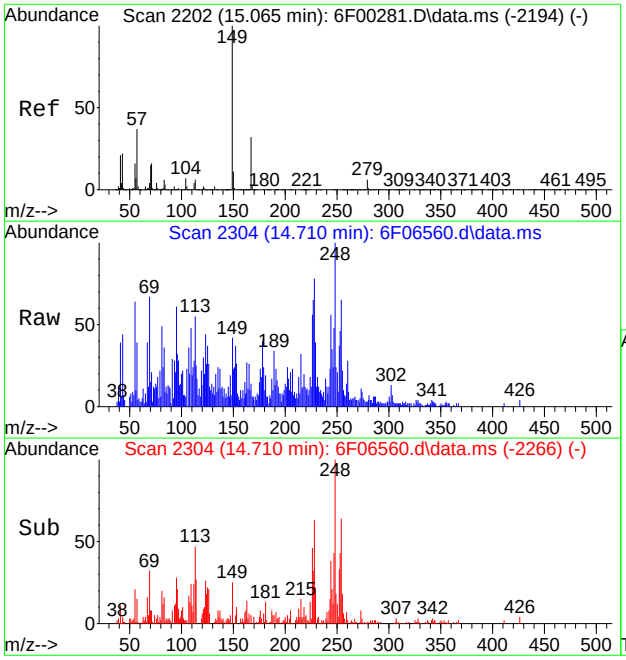


#100
Chrysene
Concen: 17.38 ppm
RT: 14.614 min Scan# 2286
Delta R.T. 0.005 min
Lab File: 6F06560.d
Acq: 13 Aug 2020 9:37 pm

Tgt Ion:228 Resp: 398932

Ion	Ratio	Lower	Upper
228	100		
226	28.8	0.0	59.3
229	20.8	0.0	49.8

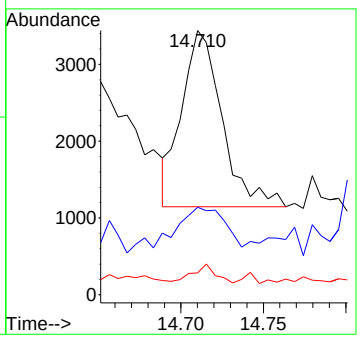


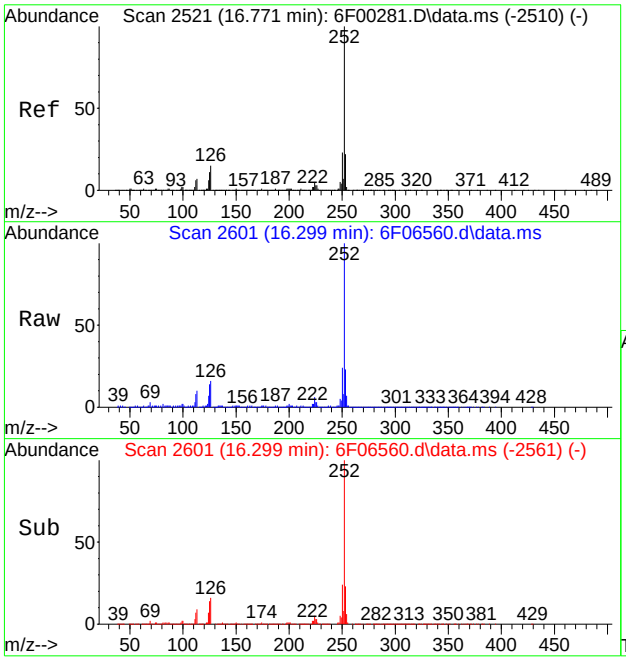


#101
bis(2-Ethylhexyl)phthalate
Concen: 0.23 ppm
RT: 14.710 min Scan# 2304
Delta R.T. 0.005 min
Lab File: 6F06560.d
Acq: 13 Aug 2020 9:37 pm

Tgt Ion:149 Resp: 3903

Ion	Ratio	Lower	Upper
149	100		
167	19.2	0.0	59.9
279	4.5	0.0	36.7

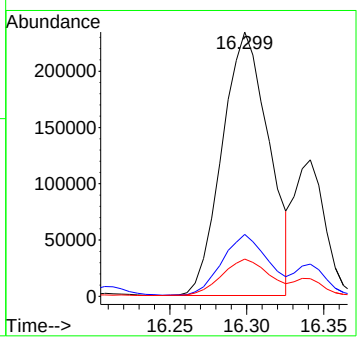


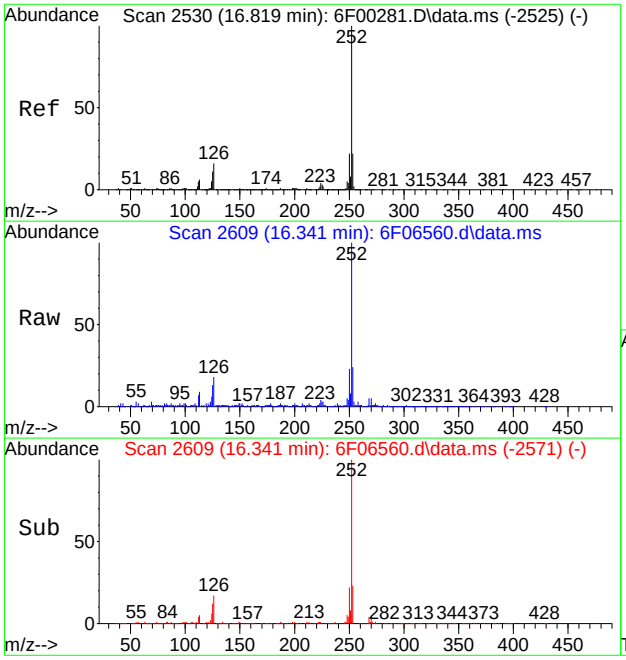


#104
Benzo[b]fluoranthene
Concen: 22.38 ppm
RT: 16.299 min Scan# 2601
Delta R.T. 0.016 min
Lab File: 6F06560.d
Acq: 13 Aug 2020 9:37 pm

Tgt Ion:252 Resp: 494801

Ion	Ratio	Lower	Upper
252	100		
253	23.3	0.0	51.7
125	13.8	0.0	44.0

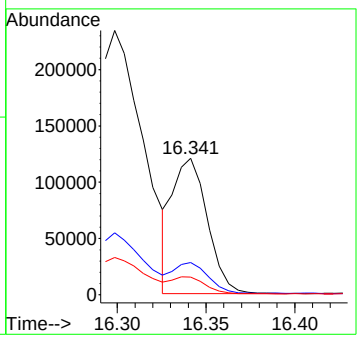


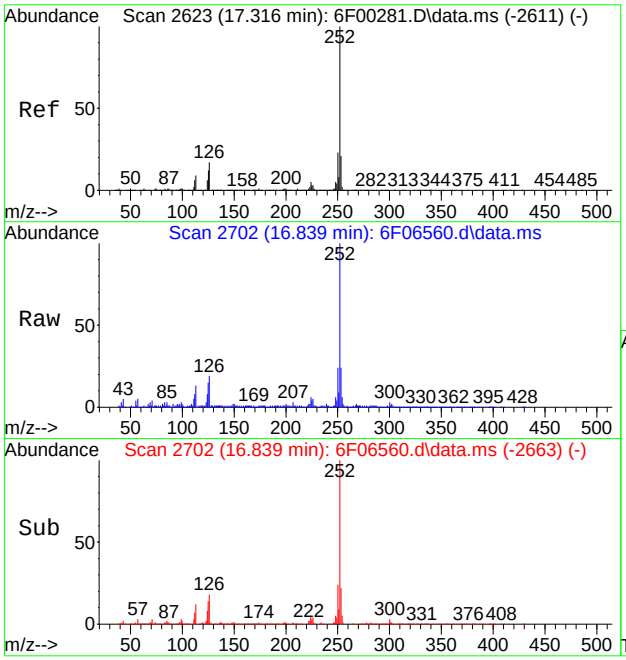


#105
Benzo[k]fluoranthene
Concen: 7.17 ppm
RT: 16.341 min Scan# 2609
Delta R.T. 0.005 min
Lab File: 6F06560.d
Acq: 13 Aug 2020 9:37 pm

Tgt Ion:252 Resp: 164946

Ion	Ratio	Lower	Upper
252	100		
253	23.2	0.0	51.9
125	11.6	0.0	43.3

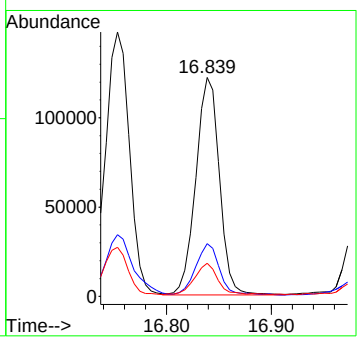


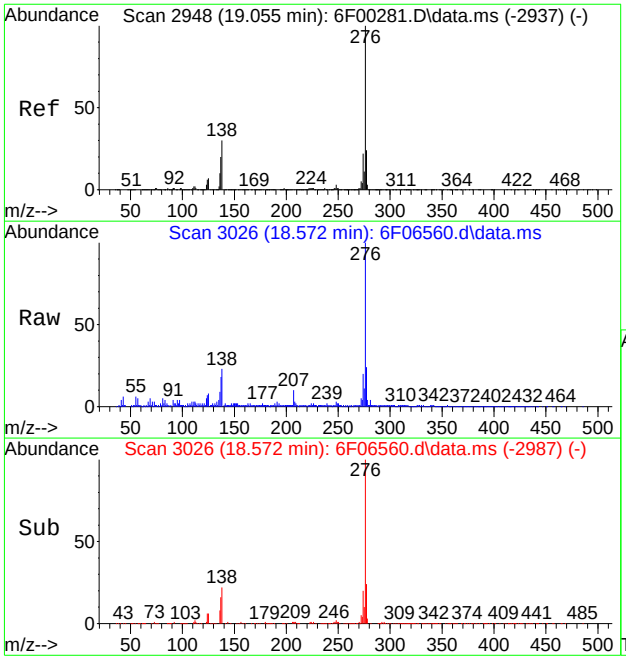


#106
Benzo[a]pyrene
Concen: 9.28 ppm
RT: 16.839 min Scan# 2702
Delta R.T. 0.011 min
Lab File: 6F06560.d
Acq: 13 Aug 2020 9:37 pm

Tgt Ion:252 Resp: 190436

Ion	Ratio	Lower	Upper
252	100		
253	23.2	0.0	52.0
125	14.4	0.0	44.6

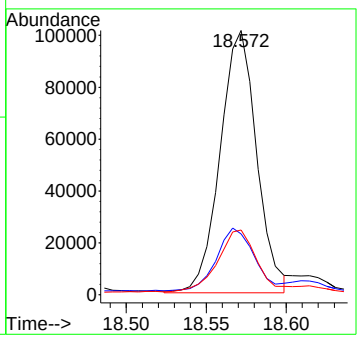


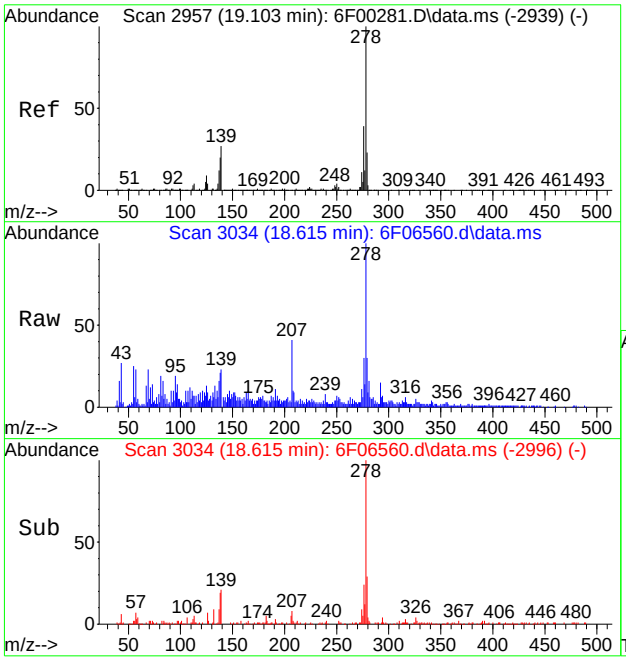


#107
Indeno[1,2,3-cd]pyrene
Concen: 8.40 ppm m
RT: 18.572 min Scan# 3026
Delta R.T. 0.011 min
Lab File: 6F06560.d
Acq: 13 Aug 2020 9:37 pm

Tgt Ion:276 Resp: 160487

Ion	Ratio	Lower	Upper
276	100		
138	23.1	0.0	56.9
277	24.5	0.0	53.9

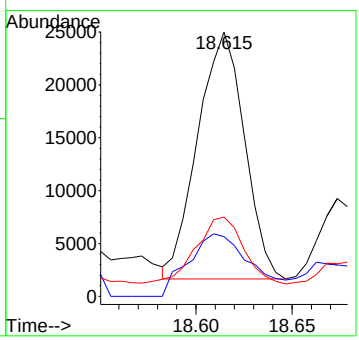


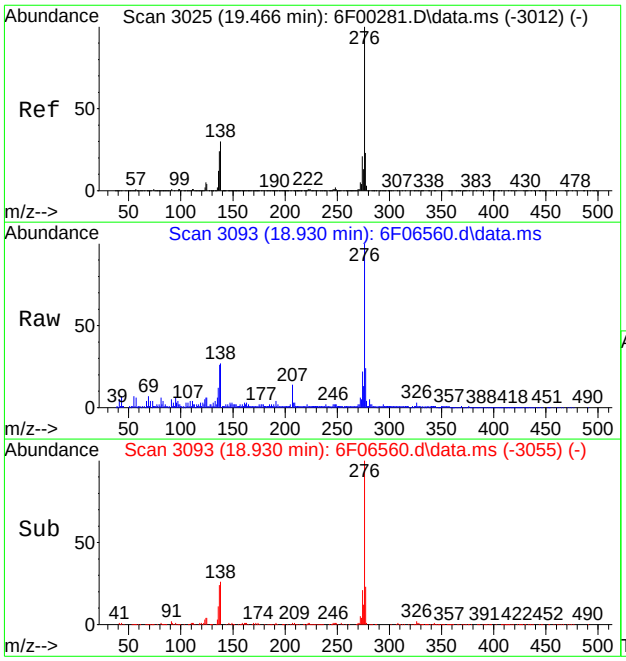


#108
Dibenz[a,h]anthracene
Concen: 1.93 ppm
RT: 18.615 min Scan# 3034
Delta R.T. 0.005 min
Lab File: 6F06560.d
Acq: 13 Aug 2020 9:37 pm

Tgt Ion:278 Resp: 39366

Ion	Ratio	Lower	Upper
278	100		
139	21.4	0.0	51.9
279	26.8	0.0	54.3

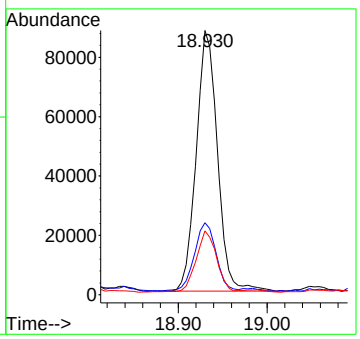




#109
Benzo[g,h,i]perylene
Concen: 7.07 ppm
RT: 18.930 min Scan# 3093
Delta R.T. 0.005 min
Lab File: 6F06560.d
Acq: 13 Aug 2020 9:37 pm

Tgt Ion:276 Resp: 145904

Ion	Ratio	Lower	Upper
276	100		
138	26.2	0.0	59.3
277	23.4	0.0	53.8



Manual Integration Approval Summary

Sample Number: FA77689-2
Lab FileID: 6F06560.D
Injection Time: 08/13/20 21:37

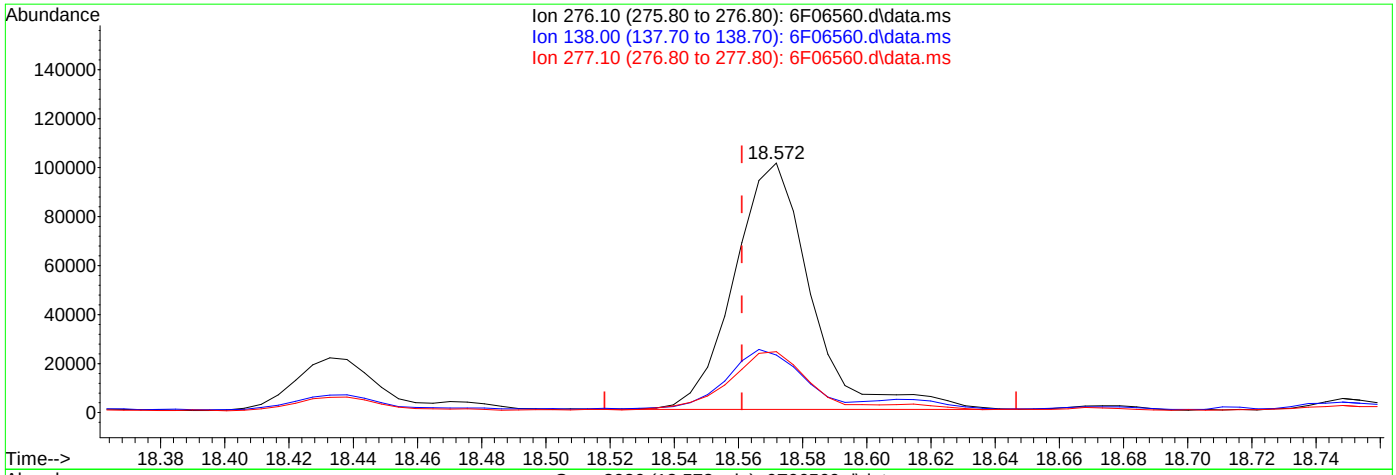
Method: SW846 8270E
Analyst approved: 08/14/20 10:45 Martha Valls
Supervisor approved: 08/14/20 14:57 Nicole McCampbell

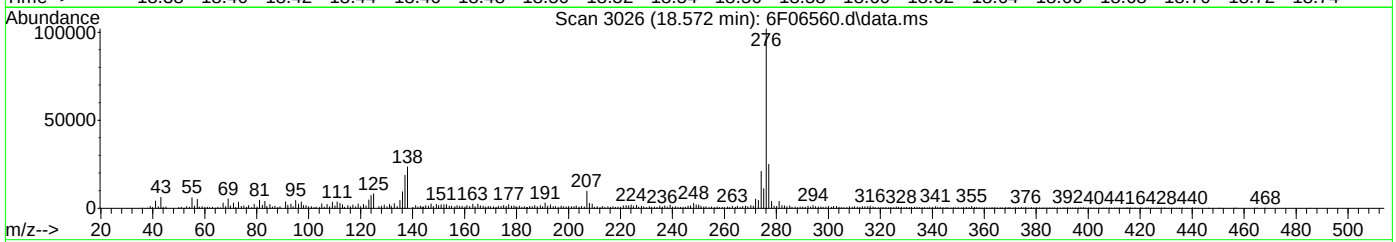
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		18.57	Overlapping peak

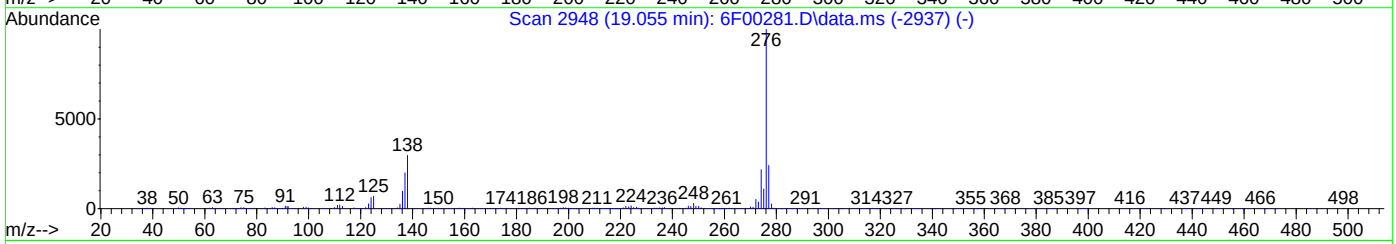
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s6f253\
Data File : 6F06560.d
Acq On : 13 Aug 2020 9:37 pm
Operator : marthav
Sample : fa77689-2 E
Misc : op81538,S6F253,30.0,,,1,1,soil
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Aug 14 04:42:41 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration







TIC: 6F06560.d\data.ms

(107) Indeno[1,2,3-cd]pyrene (P)

18.572min (+0.011) 8.77ppm

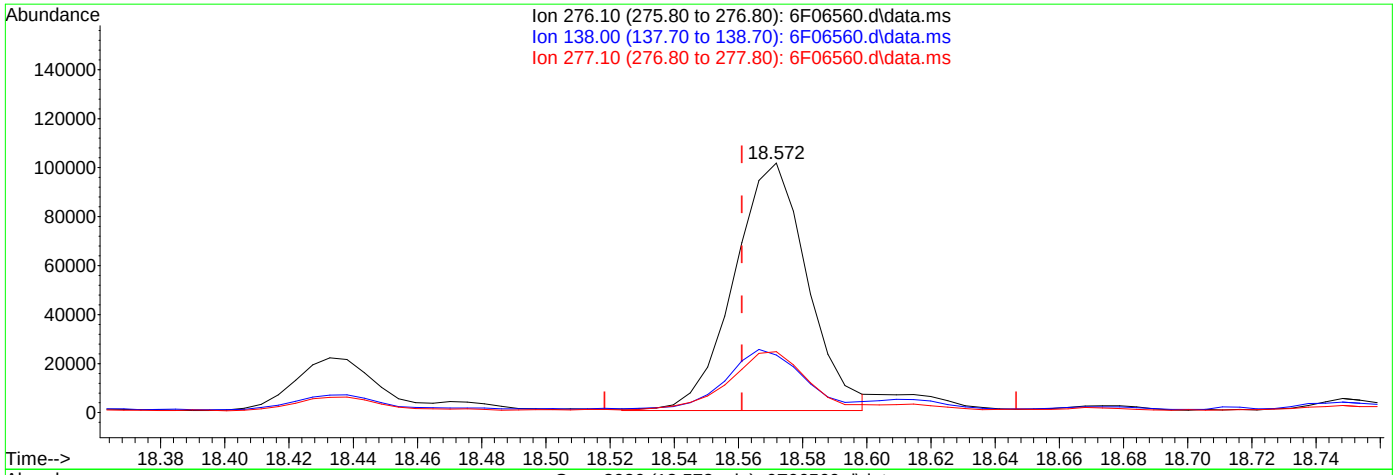
response 167589

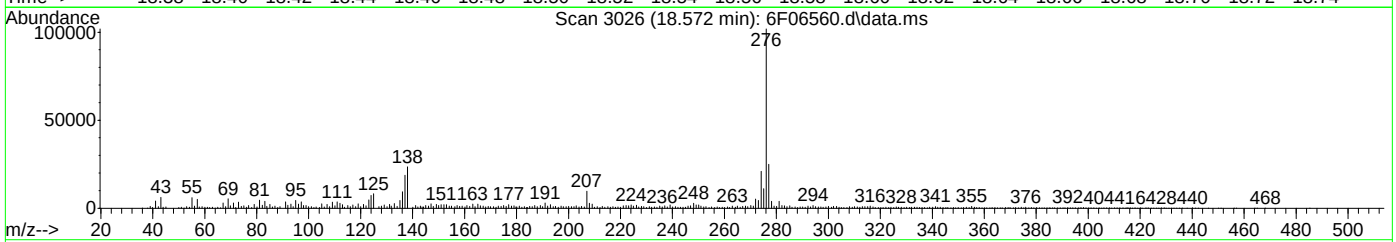
Ion	Exp%	Act%
276.10	100	100
138.00	26.90	21.76
277.10	23.90	23.39
0.00	0.00	0.00

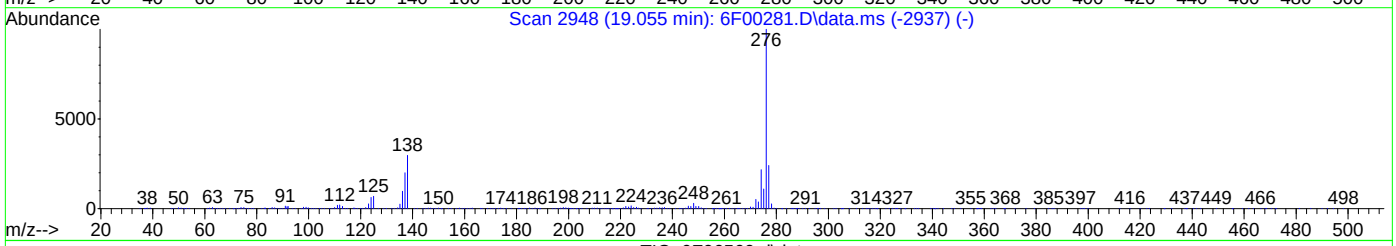
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s6f253\
Data File : 6F06560.d
Acq On : 13 Aug 2020 9:37 pm
Operator : marthav
Sample : fa77689-2 E
Misc : op81538,S6F253,30.0,,,1,1,soil
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Aug 14 04:42:41 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration







TIC: 6F06560.d\data.ms

(107) Indeno[1,2,3-cd]pyrene (P)

18.572min (+0.011) 8.40ppm m

response 160487

Ion	Exp%	Act%
276.10	100	100
138.00	26.90	23.07
277.10	23.90	24.46
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s6f253\
Data File : 6F06561.d
Acq On : 13 Aug 2020 10:03 pm
Operator : marthav
Sample : fa77689-3 E
Misc : op81538,S6F253,30.3,,,1,1,soil
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Aug 14 05:21:12 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

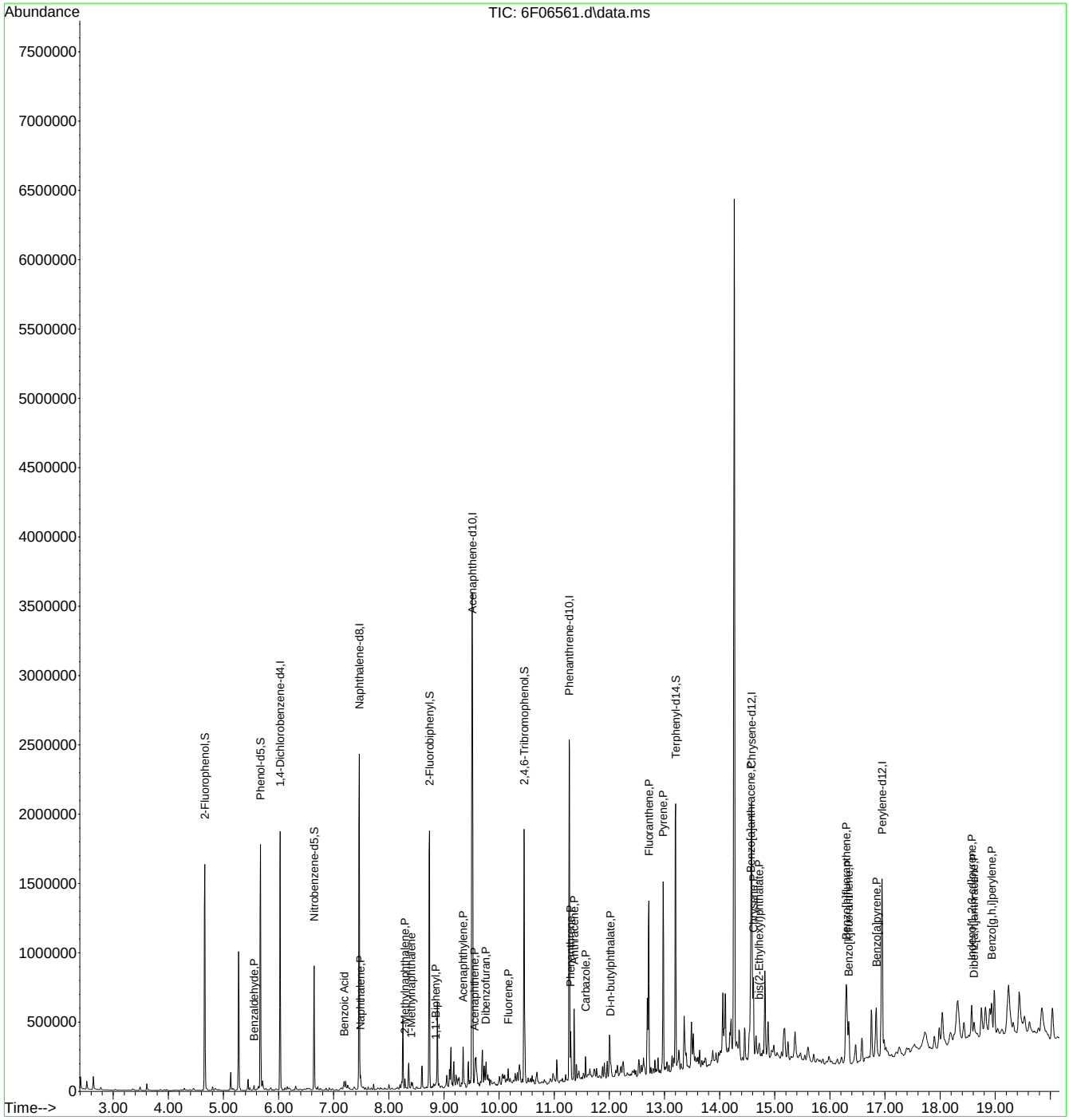
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.029	152	293628	40.00	ppm	0.00
22) Naphthalene-d8	7.463	136	1067582	40.00	ppm	0.00
43) Acenaphthene-d10	9.516	164	538572	40.00	ppm	0.00
70) Phenanthrene-d10	11.271	188	985069	40.00	ppm	0.00
92) Chrysene-d12	14.582	240	739308	40.00	ppm	0.01
102) Perylene-d12	16.946	264	715682	40.00	ppm	0.02
System Monitoring Compounds						
7) 2-Fluorophenol	4.660	112	499154	44.99	ppm	0.01
Spiked Amount 100.000	Range 40 - 102		Recovery = 44.99%			
9) Phenol-d5	5.671	99	652672	49.55	ppm	0.00
Spiked Amount 100.000	Range 41 - 100		Recovery = 49.55%			
23) Nitrobenzene-d5	6.644	82	276349	23.59	ppm	0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 47.18%			
47) 2-Fluorobiphenyl	8.736	172	584965	27.79	ppm	0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 55.58%			
75) 2,4,6-Tribromophenol	10.452	330	216092	65.18	ppm	0.00
Spiked Amount 100.000	Range 42 - 108		Recovery = 65.18%			
95) Terphenyl-d14	13.202	244	640560	30.82	ppm	0.00
Spiked Amount 50.000	Range 45 - 119		Recovery = 61.64%			
Target Compounds						Qvalue
5) Benzaldehyde	5.553	106	9054	1.01	ppm	90
30) Benzoic Acid	7.190	105	19329	2.79	ppm	99
34) Naphthalene	7.484	128	28289	0.94	ppm	94
40) 2-Methylnaphthalene	8.292	141	15769	0.89	ppm	98
41) 1-Methylnaphthalene	8.404	142	13760	0.71	ppm	97
48) 1,1'-Biphenyl	8.848	154	5336	0.24	ppm	97
52) Acenaphthylene	9.345	152	130401	4.84	ppm	100
57) Acenaphthene	9.554	153	7733	0.43	ppm	97
60) Dibenzofuran	9.757	168	21769	0.88	ppm	95
65) Fluorene	10.164	166	26920	1.35	ppm	97
84) Phenanthrene	11.298	178	128067	4.34	ppm	100
85) Anthracene	11.362	178	214964	7.17	ppm	98
87) Carbazole	11.570	167	66711	2.47	ppm	98
89) Di-n-butylphthalate	12.020	149	3947	0.12	ppm	82
91) Fluoranthene	12.715	202	495150	15.94	ppm	98
94) Pyrene	12.977	202	482030	18.20	ppm	97
99) Benzo[a]anthracene	14.566	228	258505	10.43	ppm	99
100) Chrysene	14.614	228	308130	12.82	ppm	98
101) bis(2-Ethylhexyl)phtha...	14.715	149	3589	0.20	ppm	86
104) Benzo[b]fluoranthene	16.299	252	421485	18.35	ppm	98
105) Benzo[k]fluoranthene	16.341	252	145167	6.08	ppm	96
106) Benzo[a]pyrene	16.844	252	183342	8.59	ppm	98
107) Indeno[1,2,3-cd]pyrene	18.572	276	145611	7.33	ppm	95
108) Dibenz[a,h]anthracene	18.614	278	33957	1.60	ppm	88
109) Benzo[g,h,i]perylene	18.935	276	130599	6.09	ppm	95

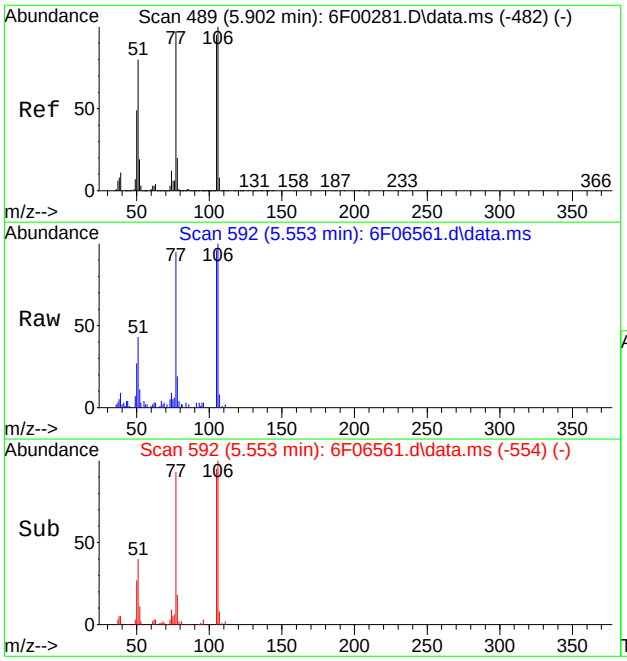
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s6f253\
Data File : 6F06561.d
Acq On : 13 Aug 2020 10:03 pm
Operator : marthav
Sample : fa77689-3 E
Misc : op81538,S6F253,30.3,,,1,1,soil
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Aug 14 05:21:12 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

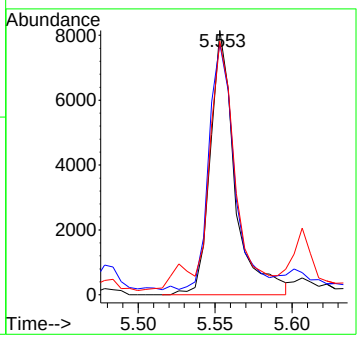


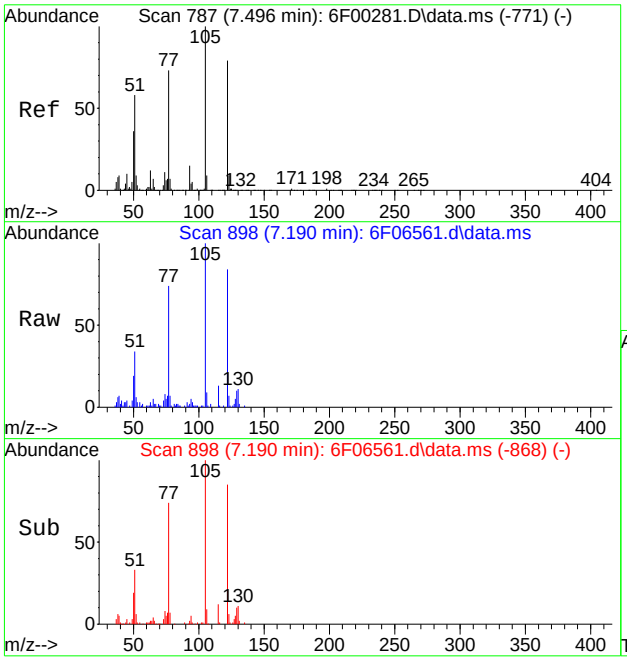


#5
Benzaldehyde
Concen: 1.01 ppm
RT: 5.553 min Scan# 592
Delta R.T. 0.005 min
Lab File: 6F06561.d
Acq: 13 Aug 2020 10:03 pm

Tgt Ion:106 Resp: 9054

Ion	Ratio	Lower	Upper
106	100		
77	92.4	74.8	134.8
105	91.9	70.7	130.7

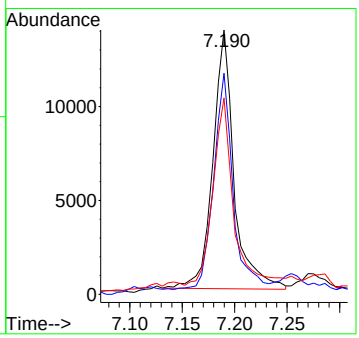


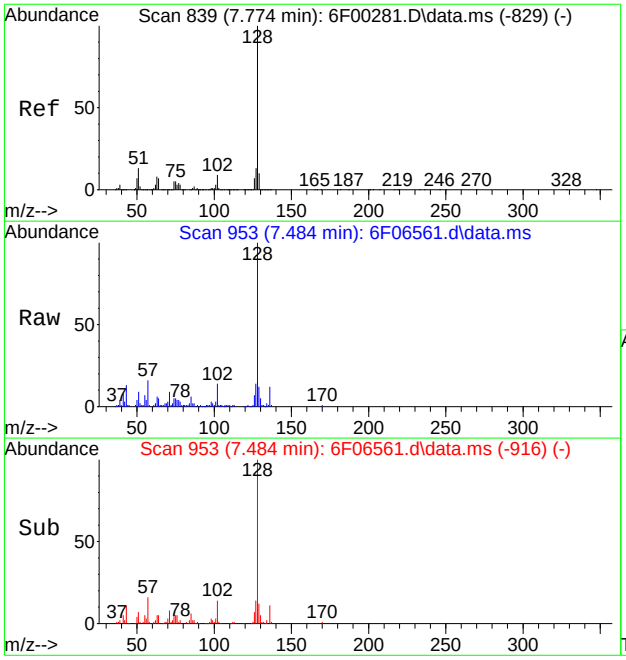


#30
Benzoic Acid
Concen: 2.79 ppm
RT: 7.190 min Scan# 898
Delta R.T. -0.038 min
Lab File: 6F06561.d
Acq: 13 Aug 2020 10:03 pm

Tgt Ion:105 Resp: 19329

Ion	Ratio	Lower	Upper
105	100		
122	81.4	51.7	111.7
77	71.7	42.8	102.8

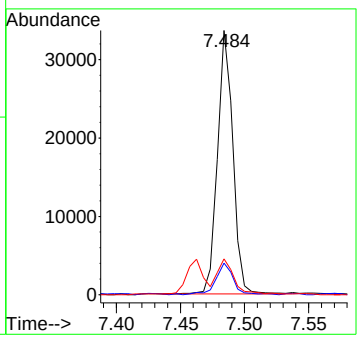


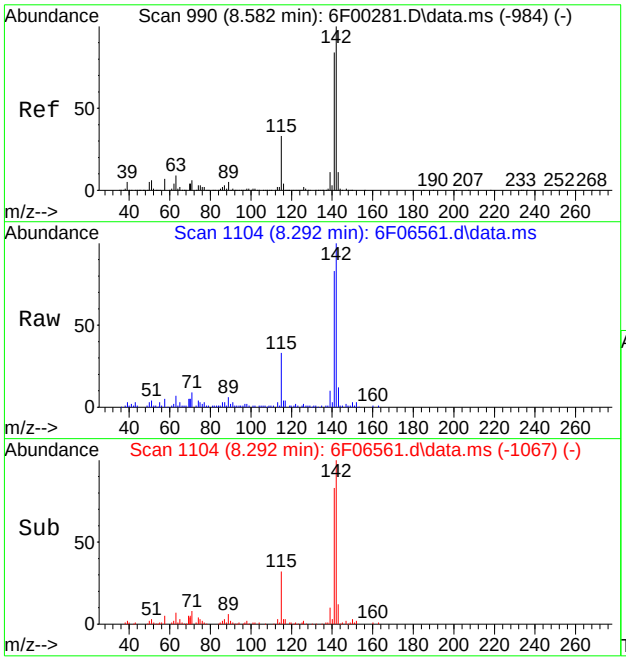


#34
Naphthalene
Concen: 0.94 ppm
RT: 7.484 min Scan# 953
Delta R.T. -0.000 min
Lab File: 6F06561.d
Acq: 13 Aug 2020 10:03 pm

Tgt Ion:128 Resp: 28289

Ion	Ratio	Lower	Upper
128	100		
129	11.7	0.0	41.3
102	13.3	0.0	38.9

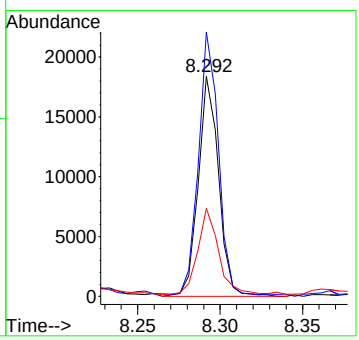


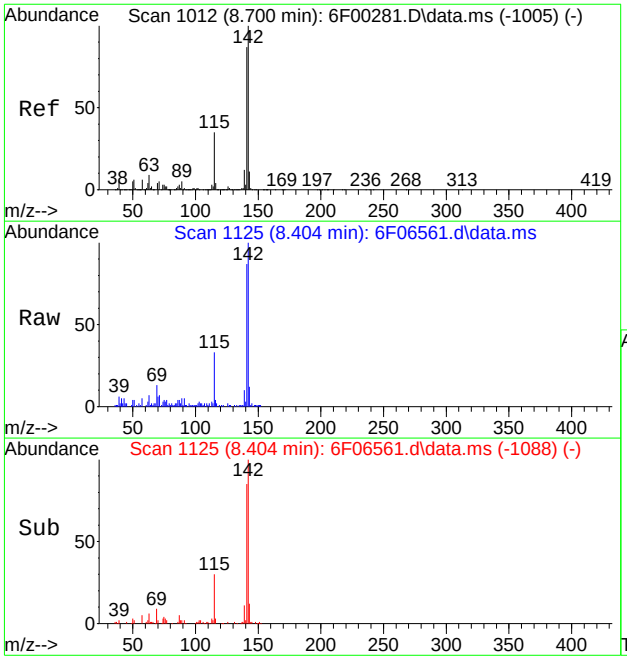


#40
2-Methylnaphthalene
Concen: 0.89 ppm
RT: 8.292 min Scan# 1104
Delta R.T. -0.000 min
Lab File: 6F06561.d
Acq: 13 Aug 2020 10:03 pm

Tgt Ion:141 Resp: 15769

Ion	Ratio	Lower	Upper
141	100		
142	119.9	87.4	147.4
115	39.3	8.3	68.3

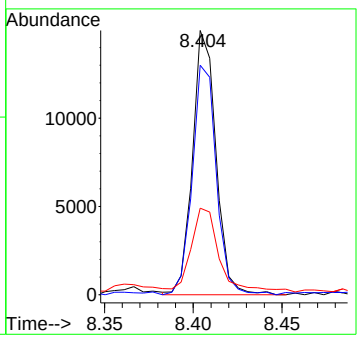


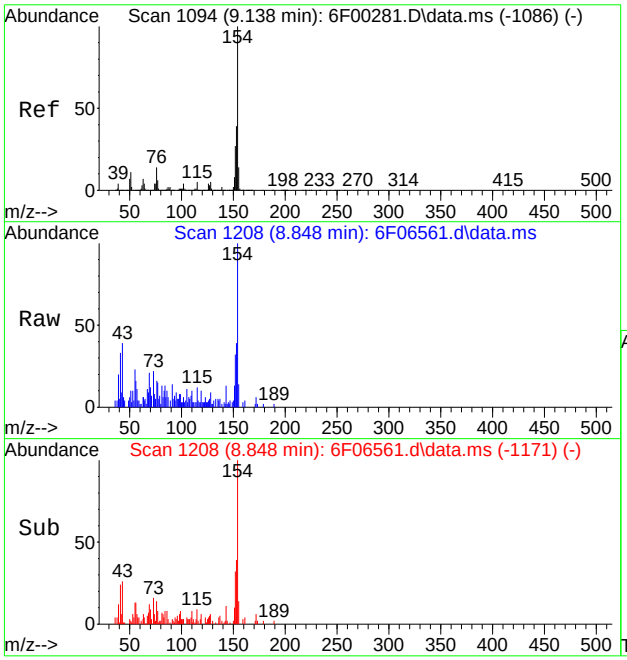


#41
1-Methylnaphthalene
Concen: 0.71 ppm
RT: 8.404 min Scan# 1125
Delta R.T. -0.000 min
Lab File: 6F06561.d
Acq: 13 Aug 2020 10:03 pm

Tgt Ion:142 Resp: 13760

Ion	Ratio	Lower	Upper
142	100		
141	86.8	58.9	118.9
115	30.7	3.8	63.8

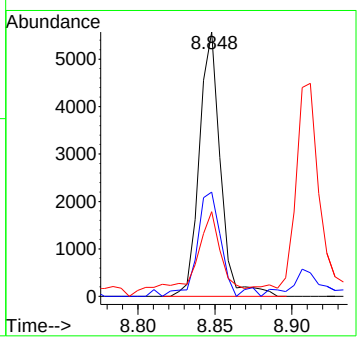


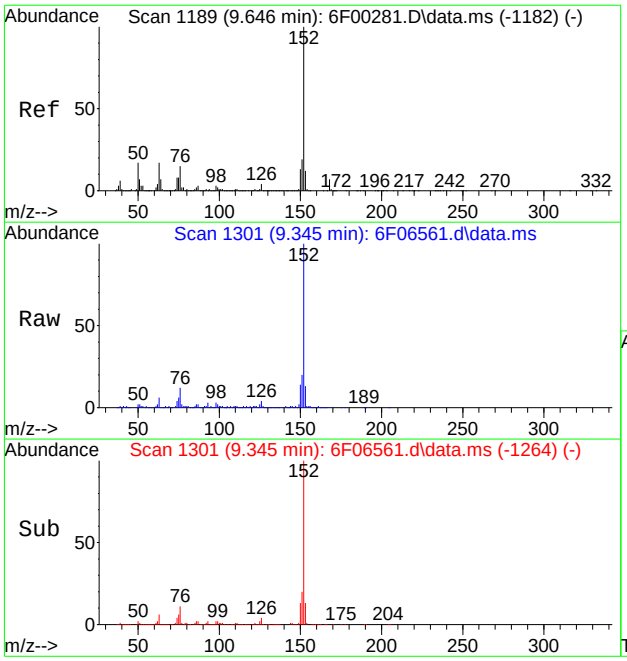


#48
1,1'-Biphenyl
Concen: 0.24 ppm
RT: 8.848 min Scan# 1208
Delta R.T. -0.000 min
Lab File: 6F06561.d
Acq: 13 Aug 2020 10:03 pm

Tgt Ion:154 Resp: 5336

Ion	Ratio	Lower	Upper
154	100		
153	38.6	10.4	70.4
152	26.1	0.0	57.6

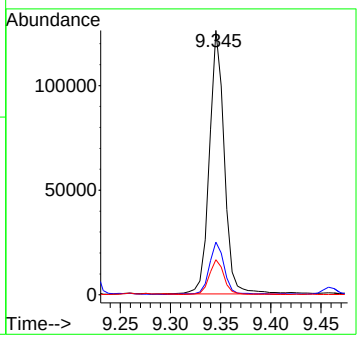


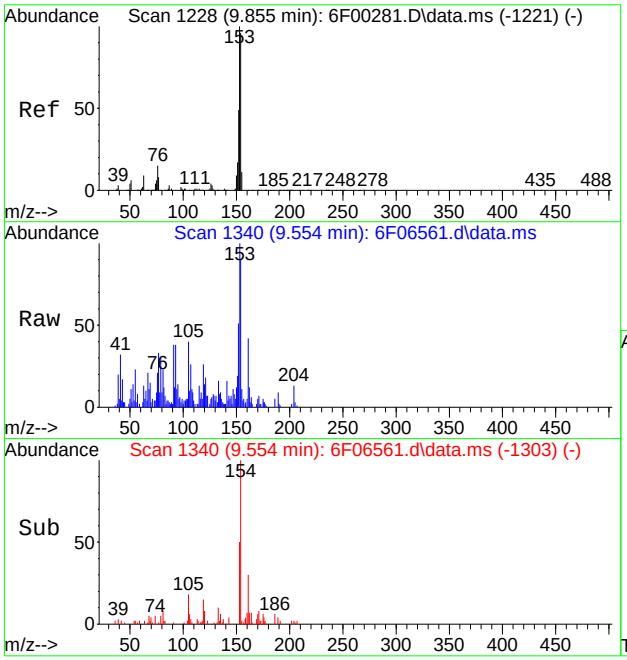


#52
Acenaphthylene
Concen: 4.84 ppm
RT: 9.345 min Scan# 1301
Delta R.T. -0.000 min
Lab File: 6F06561.d
Acq: 13 Aug 2020 10:03 pm

Tgt Ion:152 Resp: 130401

Ion	Ratio	Lower	Upper
152	100		
151	19.8	0.0	49.9
153	13.1	0.0	43.2

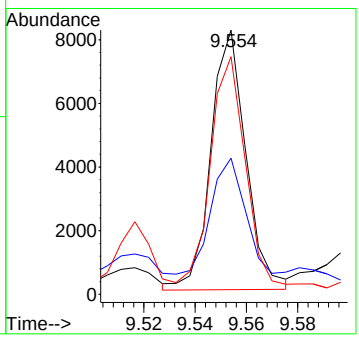


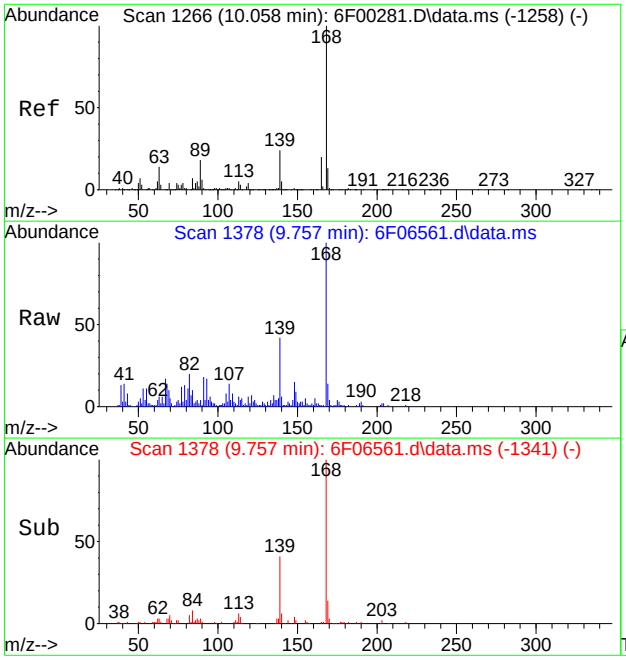


#57
Acenaphthene
Concen: 0.43 ppm
RT: 9.554 min Scan# 1340
Delta R.T. -0.000 min
Lab File: 6F06561.d
Acq: 13 Aug 2020 10:03 pm

Tgt Ion:153 Resp: 7733

Ion	Ratio	Lower	Upper
153	100		
152	45.5	16.2	76.2
154	89.4	63.3	123.3

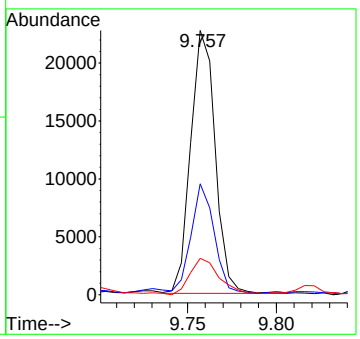


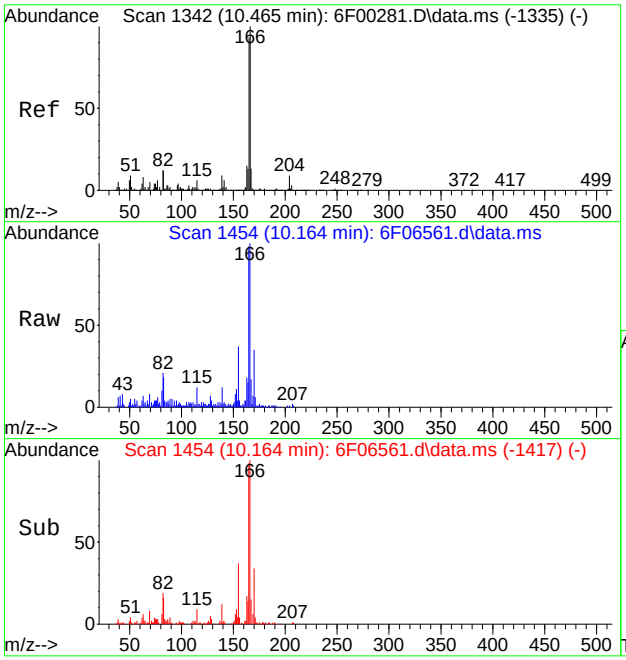


#60
Dibenzofuran
Concen: 0.88 ppm
RT: 9.757 min Scan# 1378
Delta R.T. -0.000 min
Lab File: 6F06561.d
Acq: 13 Aug 2020 10:03 pm

Tgt Ion:168 Resp: 21769

Ion	Ratio	Lower	Upper
168	100		
139	41.1	7.1	67.1
169	13.2	0.0	43.6

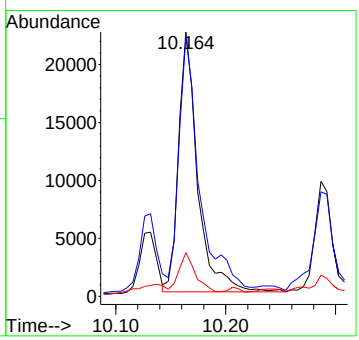


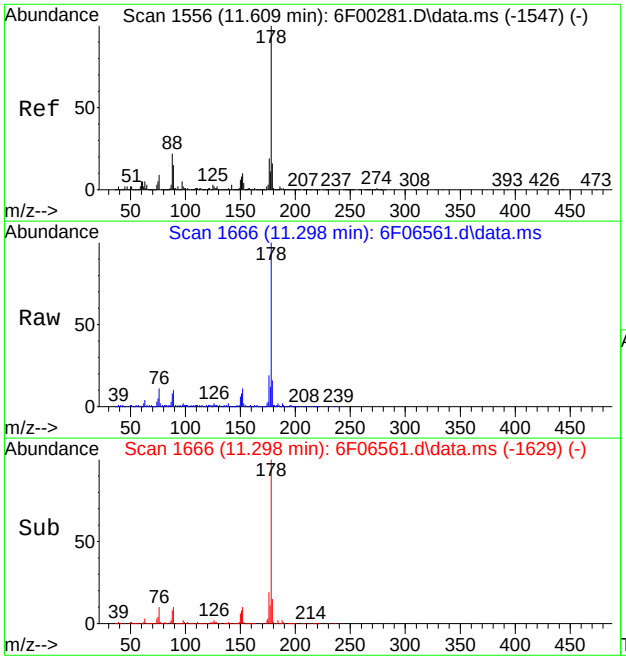


#65
Fluorene
Concen: 1.35 ppm
RT: 10.164 min Scan# 1454
Delta R.T. -0.000 min
Lab File: 6F06561.d
Acq: 13 Aug 2020 10:03 pm

Tgt Ion:166 Resp: 26920

Ion	Ratio	Lower	Upper
166	100		
165	96.0	63.2	123.2
167	13.9	0.0	43.3

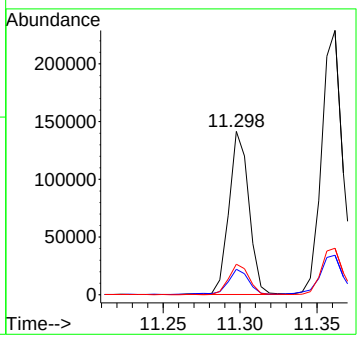


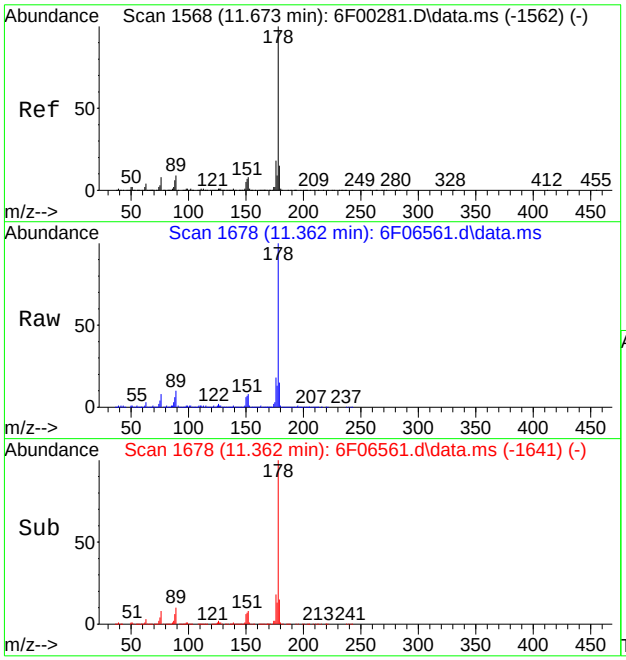


#84
Phenanthrene
Concen: 4.34 ppm
RT: 11.298 min Scan# 1666
Delta R.T. -0.000 min
Lab File: 6F06561.d
Acq: 13 Aug 2020 10:03 pm

Tgt Ion:178 Resp: 128067

Ion	Ratio	Lower	Upper
178	100		
179	15.4	0.0	45.6
176	18.6	0.0	48.6

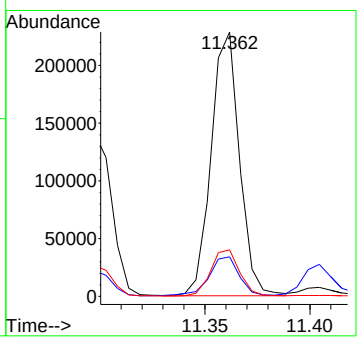


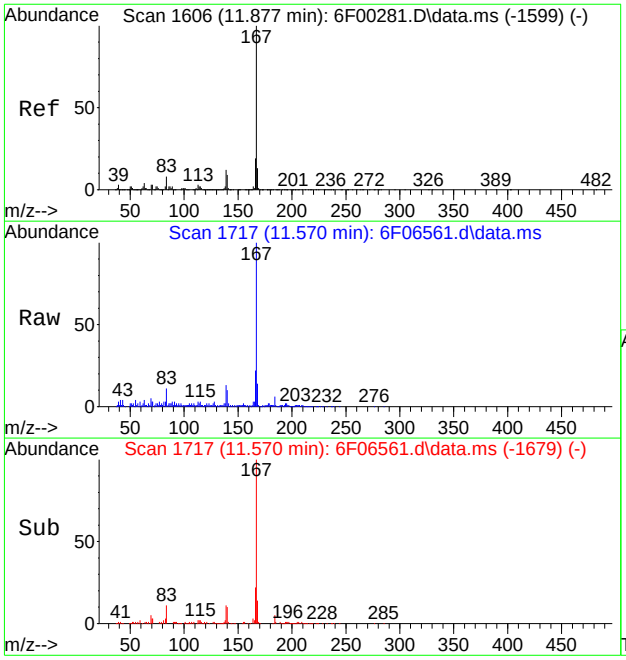


#85
Anthracene
Concen: 7.17 ppm
RT: 11.362 min Scan# 1678
Delta R.T. -0.000 min
Lab File: 6F06561.d
Acq: 13 Aug 2020 10:03 pm

Tgt Ion:178 Resp: 214964

Ion	Ratio	Lower	Upper
178	100		
179	14.5	0.0	45.4
176	17.5	0.0	48.2

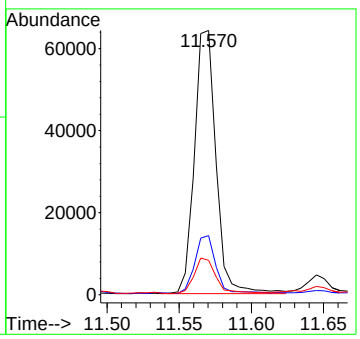


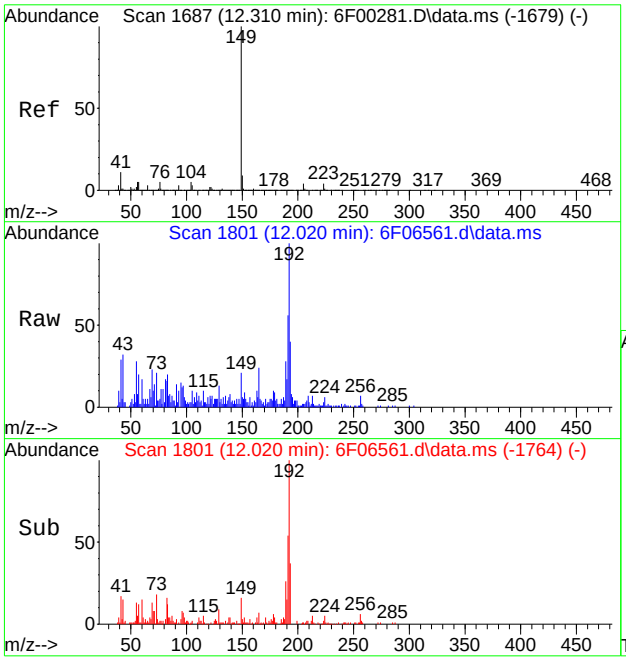


#87
Carbazole
Concen: 2.47 ppm
RT: 11.570 min Scan# 1717
Delta R.T. 0.005 min
Lab File: 6F06561.d
Acq: 13 Aug 2020 10:03 pm

Tgt Ion:167 Resp: 66711

Ion	Ratio	Lower	Upper
167	100		
166	21.8	0.0	50.9
139	12.3	0.0	43.2

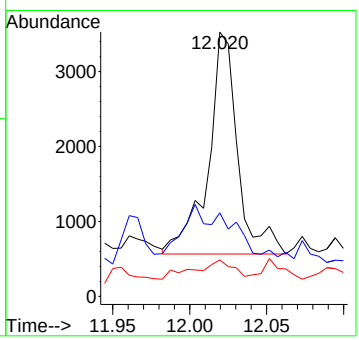


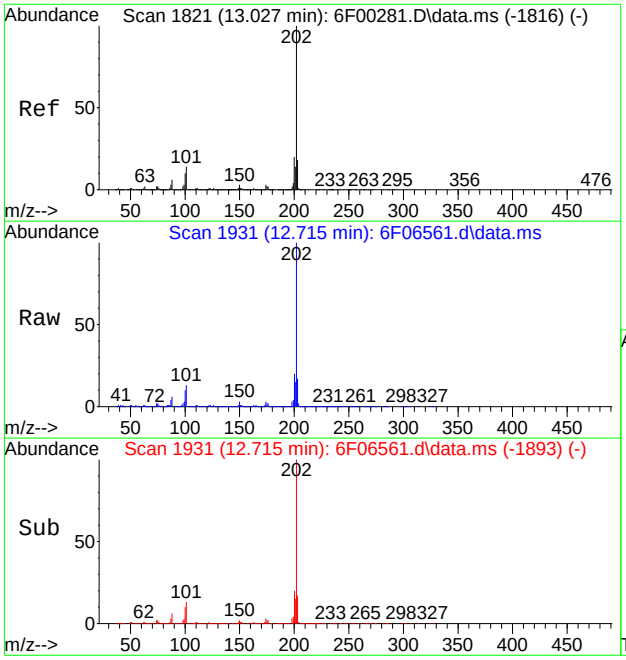


#89
Di-n-butylphthalate
Concen: 0.12 ppm
RT: 12.020 min Scan# 1801
Delta R.T. -0.000 min
Lab File: 6F06561.d
Acq: 13 Aug 2020 10:03 pm

Tgt Ion:149 Resp: 3947

Ion	Ratio	Lower	Upper
149	100		
150	18.3	0.0	39.2
104	6.5	0.0	34.7

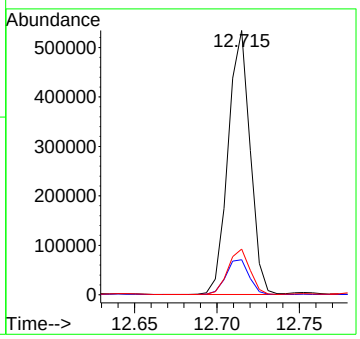


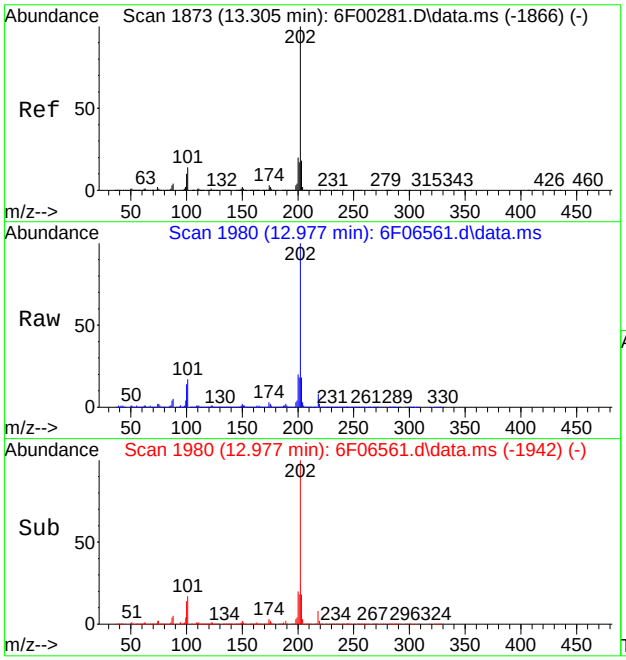


#91
Fluoranthene
Concen: 15.94 ppm
RT: 12.715 min Scan# 1931
Delta R.T. 0.005 min
Lab File: 6F06561.d
Acq: 13 Aug 2020 10:03 pm

Tgt Ion:202 Resp: 495150

Ion	Ratio	Lower	Upper
202	100		
101	13.2	0.0	44.4
203	17.2	0.0	47.5

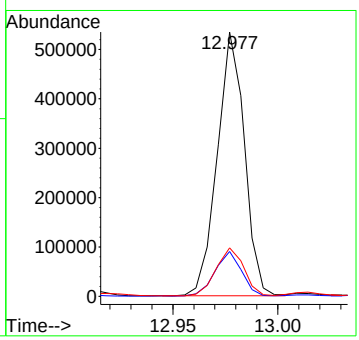


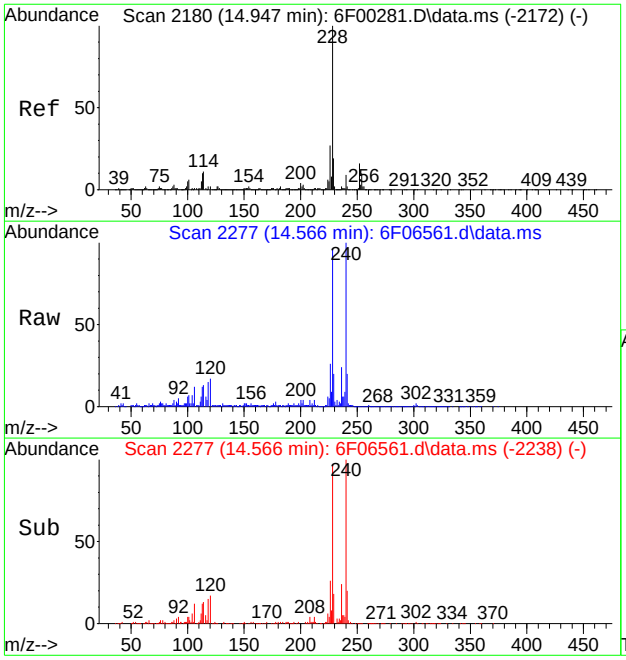


#94
Pyrene
Concen: 18.20 ppm
RT: 12.977 min Scan# 1980
Delta R.T. 0.005 min
Lab File: 6F06561.d
Acq: 13 Aug 2020 10:03 pm

Tgt Ion:202 Resp: 482030

Ion	Ratio	Lower	Upper
202	100		
101	16.7	0.0	48.6
203	18.0	0.0	48.3

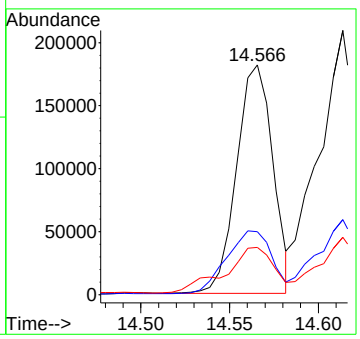


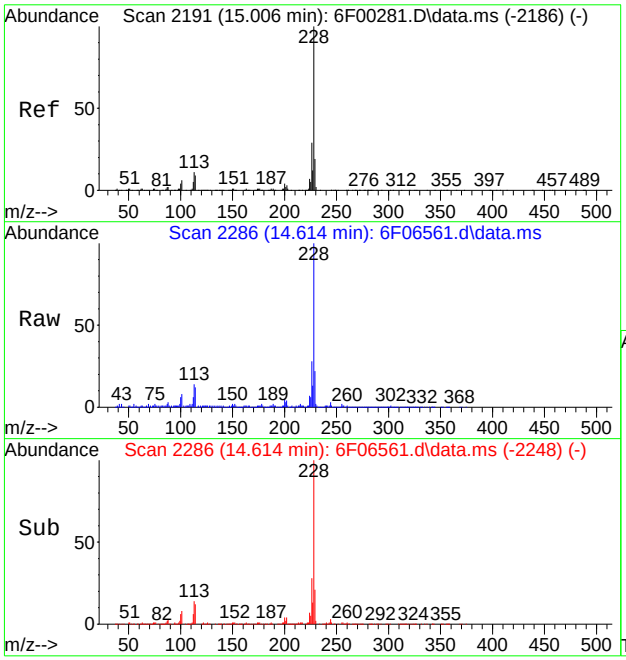


#99
Benzo[a]anthracene
Concen: 10.43 ppm
RT: 14.566 min Scan# 2277
Delta R.T. 0.011 min
Lab File: 6F06561.d
Acq: 13 Aug 2020 10:03 pm

Tgt Ion:228 Resp: 258505

Ion	Ratio	Lower	Upper
228	100		
226	27.1	0.0	56.8
229	19.3	0.0	49.8

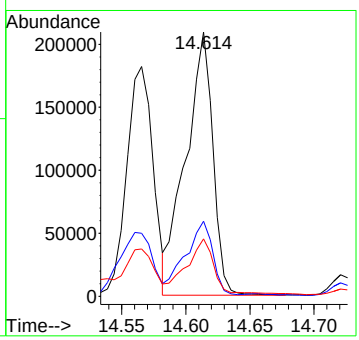


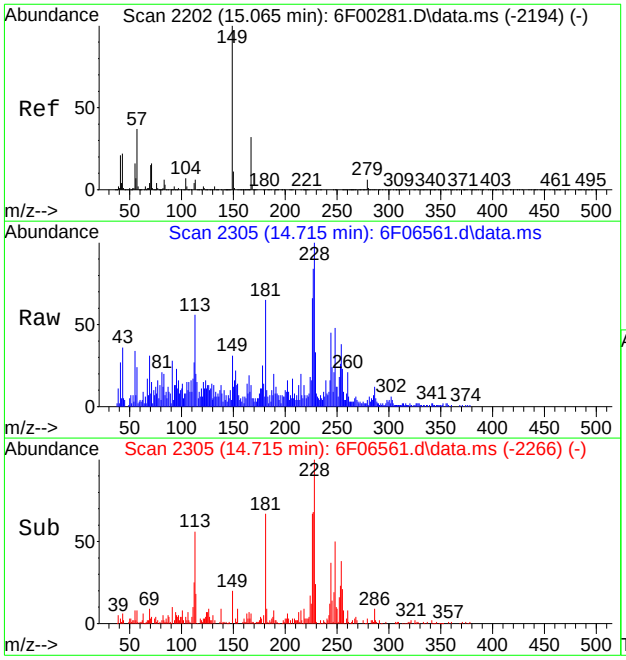


#100
Chrysene
Concen: 12.82 ppm
RT: 14.614 min Scan# 2286
Delta R.T. 0.005 min
Lab File: 6F06561.d
Acq: 13 Aug 2020 10:03 pm

Tgt Ion:228 Resp: 308130

Ion	Ratio	Lower	Upper
228	100		
226	28.1	0.0	59.3
229	20.6	0.0	49.8

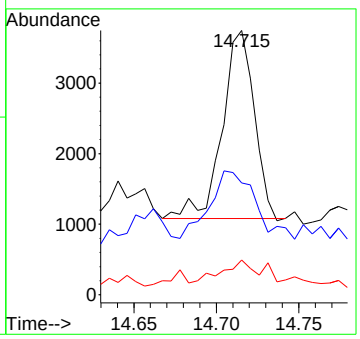


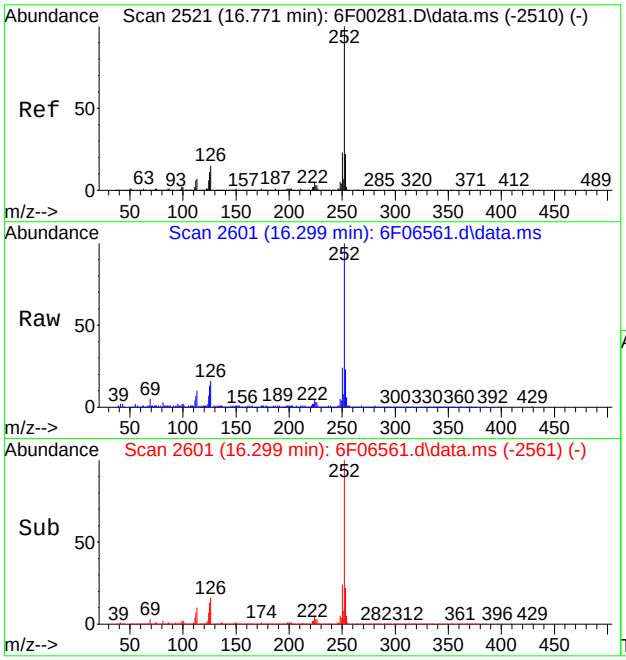


#101
bis(2-Ethylhexyl)phthalate
Concen: 0.20 ppm
RT: 14.715 min Scan# 2305
Delta R.T. 0.011 min
Lab File: 6F06561.d
Acq: 13 Aug 2020 10:03 pm

Tgt Ion:149 Resp: 3589

Ion	Ratio	Lower	Upper
149	100		
167	22.4	0.0	59.9
279	10.8	0.0	36.7

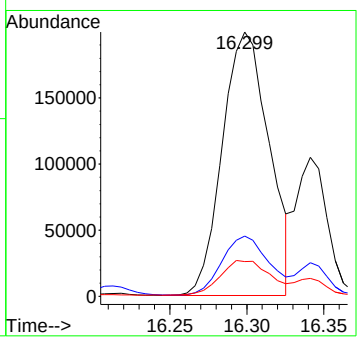


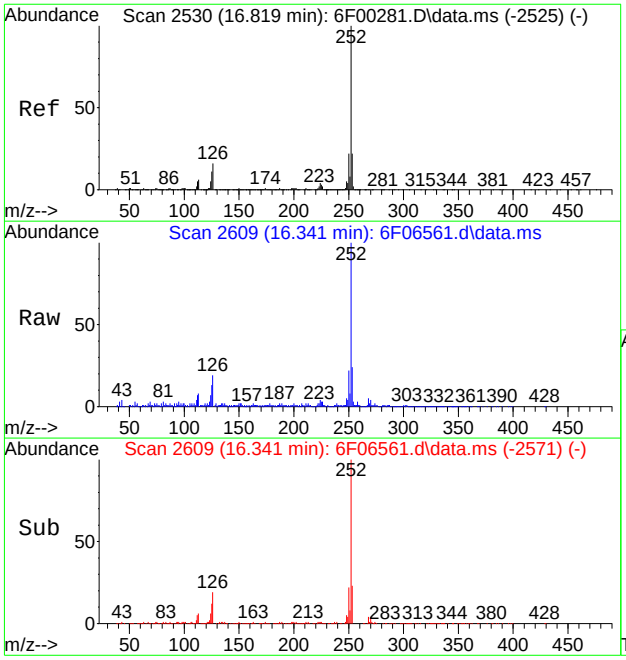


#104
Benzo[b]fluoranthene
Concen: 18.35 ppm
RT: 16.299 min Scan# 2601
Delta R.T. 0.016 min
Lab File: 6F06561.d
Acq: 13 Aug 2020 10:03 pm

Tgt Ion:252 Resp: 421485

Ion	Ratio	Lower	Upper
252	100		
253	22.3	0.0	51.7
125	12.6	0.0	44.0

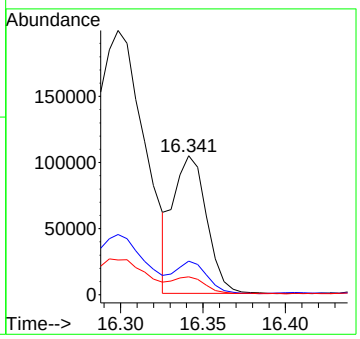


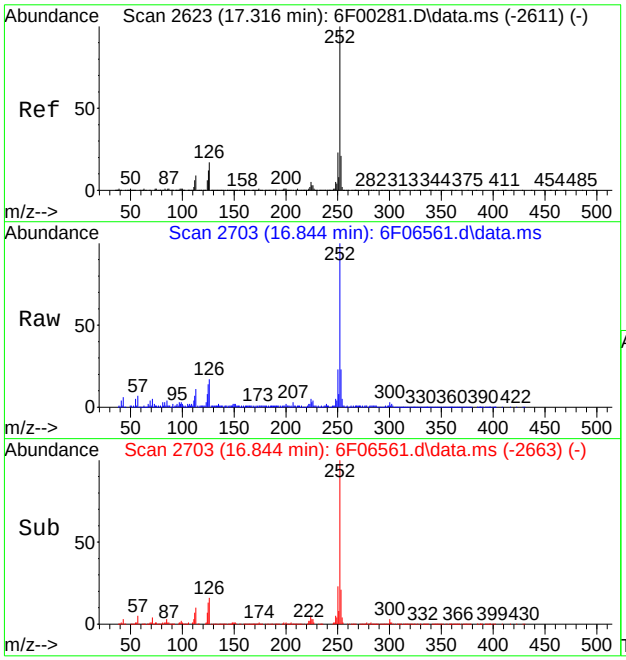


#105
Benzo[k]fluoranthene
Concen: 6.08 ppm
RT: 16.341 min Scan# 2609
Delta R.T. 0.005 min
Lab File: 6F06561.d
Acq: 13 Aug 2020 10:03 pm

Tgt Ion:252 Resp: 145167

Ion	Ratio	Lower	Upper
252	100		
253	23.8	0.0	51.9
125	11.4	0.0	43.3

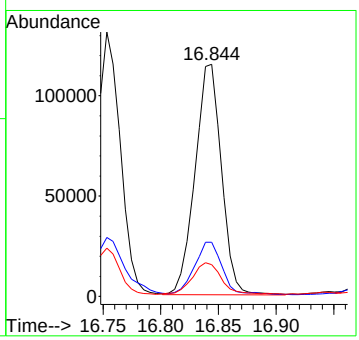


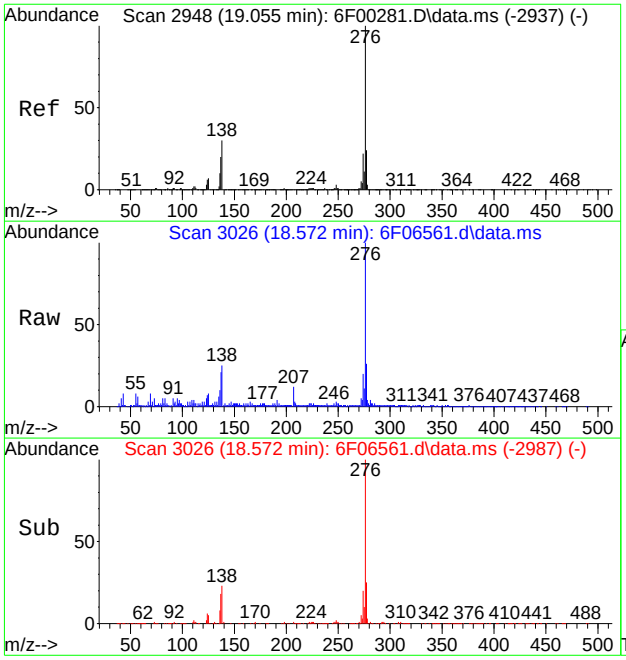


#106
Benzo[a]pyrene
Concen: 8.59 ppm
RT: 16.844 min Scan# 2703
Delta R.T. 0.016 min
Lab File: 6F06561.d
Acq: 13 Aug 2020 10:03 pm

Tgt Ion:252 Resp: 183342

Ion	Ratio	Lower	Upper
252	100		
253	22.4	0.0	52.0
125	12.8	0.0	44.6

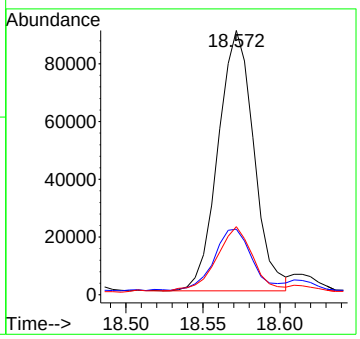


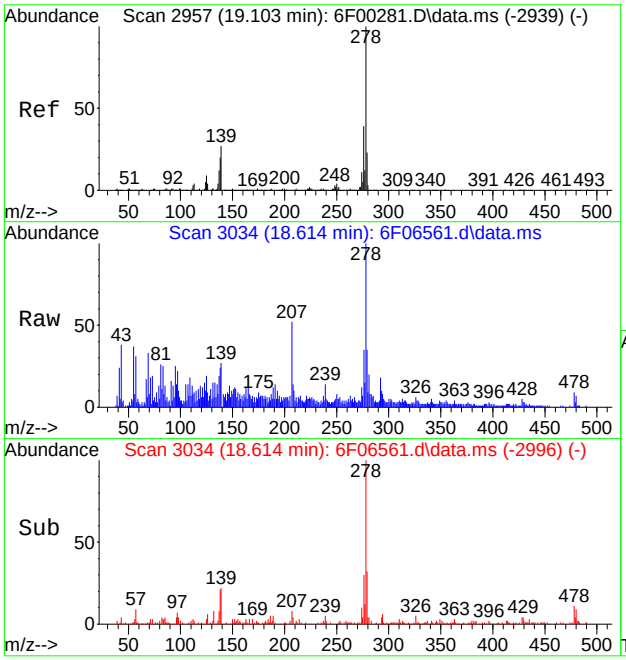


#107
Indeno[1,2,3-cd]pyrene
Concen: 7.33 ppm
RT: 18.572 min Scan# 3026
Delta R.T. 0.011 min
Lab File: 6F06561.d
Acq: 13 Aug 2020 10:03 pm

Tgt Ion:276 Resp: 145611

Ion	Ratio	Lower	Upper
276	100		
138	22.6	0.0	56.9
277	24.5	0.0	53.9

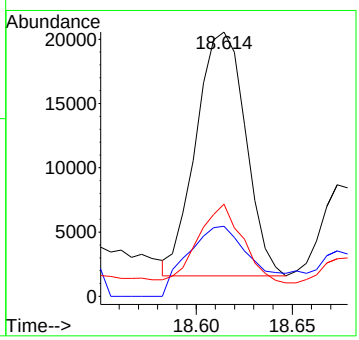


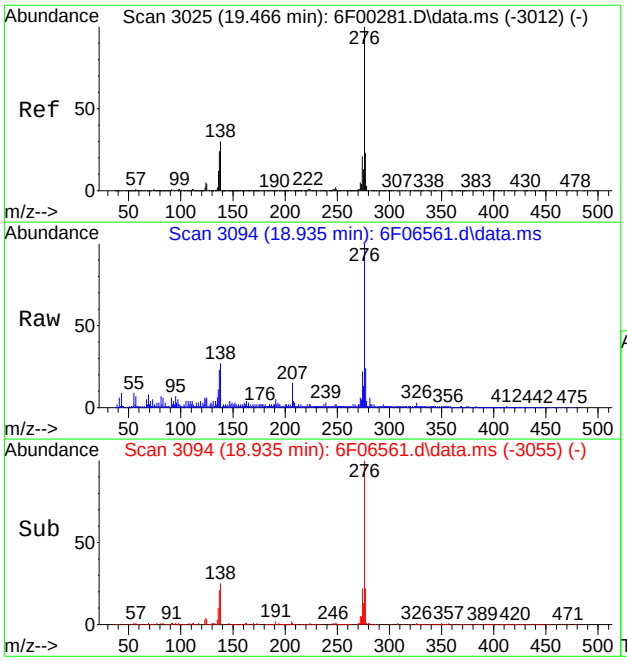


#108
Dibenz[a,h]anthracene
Concen: 1.60 ppm
RT: 18.614 min Scan# 3034
Delta R.T. 0.005 min
Lab File: 6F06561.d
Acq: 13 Aug 2020 10:03 pm

Tgt Ion:278 Resp: 33957

Ion	Ratio	Lower	Upper
278	100		
139	24.9	0.0	51.9
279	32.6	0.0	54.3

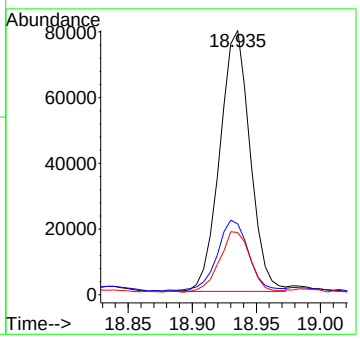




#109
Benzo[g,h,i]perylene
Concen: 6.09 ppm
RT: 18.935 min Scan# 3094
Delta R.T. 0.011 min
Lab File: 6F06561.d
Acq: 13 Aug 2020 10:03 pm

Tgt Ion:276 Resp: 130599

Ion	Ratio	Lower	Upper
276	100		
138	25.4	0.0	59.3
277	22.6	0.0	53.8



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\Jenniferf\AUGUST 2020\08-14-2020\SX2952\
Data File : x072411.d
Acq On : 13 Aug 2020 11:05 pm
Operator : marthav
Sample : fa77689-4 E
Misc : op81545,sx2952,250,,,1,1,water
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Aug 14 03:19:52 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

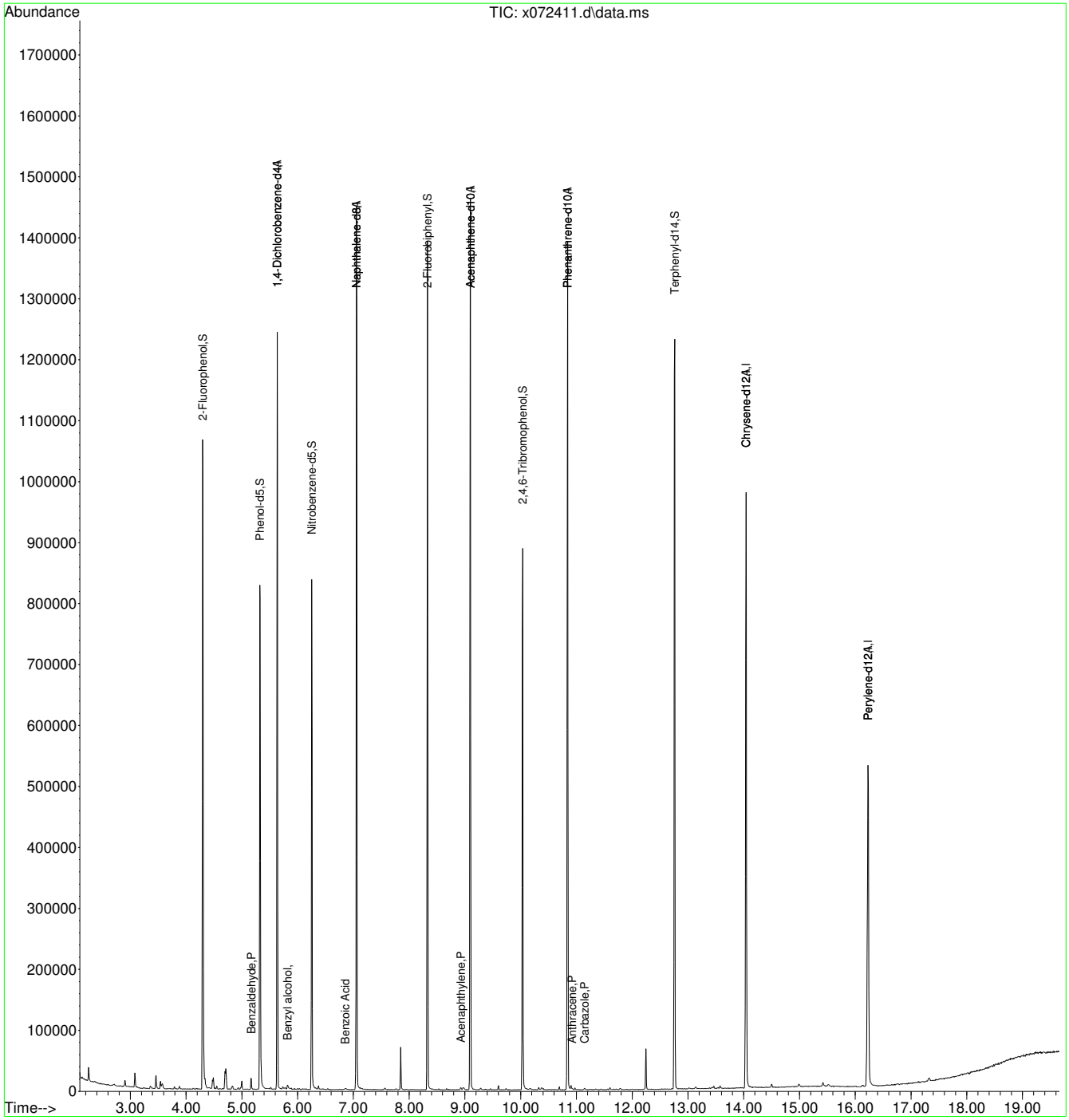
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.633	152	173592	40.00	ppm	0.00
22) Naphthalene-d8	7.056	136	639006	40.00	ppm	0.00
43) Acenaphthene-d10	9.099	164	304520	40.00	ppm	0.00
70) Phenanthrene-d10	10.843	188	515585	40.00	ppm	0.00
92) Chrysene-d12	14.041	240	369873	40.00	ppm	-0.01
102) Perylene-d12	16.229	264	283019	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	5.633	152	173592	40.00	ppm	0.00
120) Naphthalene-d8A	7.056	136	639006	40.00	ppm	0.00
127) Acenaphthene-d10A	9.099	164	304520	40.00	ppm	0.00
136) Phenanthrene-d10A	10.843	188	515585	40.00	ppm	0.00
146) Chrysene-d12A	14.041	240	369873	40.00	ppm	-0.01
153) Perylene-d12A	16.229	264	283019	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	4.301	112	292741	47.03	ppm	0.01
Spiked Amount 100.000	Range 14 - 67		Recovery = 47.03%			
9) Phenol-d5	5.323	99	278075	37.55	ppm	0.00
Spiked Amount 100.000	Range 10 - 50		Recovery = 37.55%			
23) Nitrobenzene-d5	6.254	82	226450	34.31	ppm	0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 68.62%			
47) 2-Fluorobiphenyl	8.329	172	387486	35.15	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 70.30%			
75) 2,4,6-Tribromophenol	10.035	330	73535	67.91	ppm	0.00
Spiked Amount 100.000	Range 33 - 118		Recovery = 67.91%			
95) Terphenyl-d14	12.763	244	387735	39.45	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 78.90%			
Target Compounds						Qvalue
5) Benzaldehyde	5.168	106	3535	0.68	ppm	94
15) Benzyl alcohol	5.820	108	1721	0.37	ppm	96
30) Benzoic Acid	6.853	105	876	0.23	ppm	# 73
52) Acenaphthylene	8.928	152	2835	0.19	ppm	94
85) Anthracene	10.923	178	840	0.05	ppm	94
87) Carbazole	11.148	167	1482	0.10	ppm	95

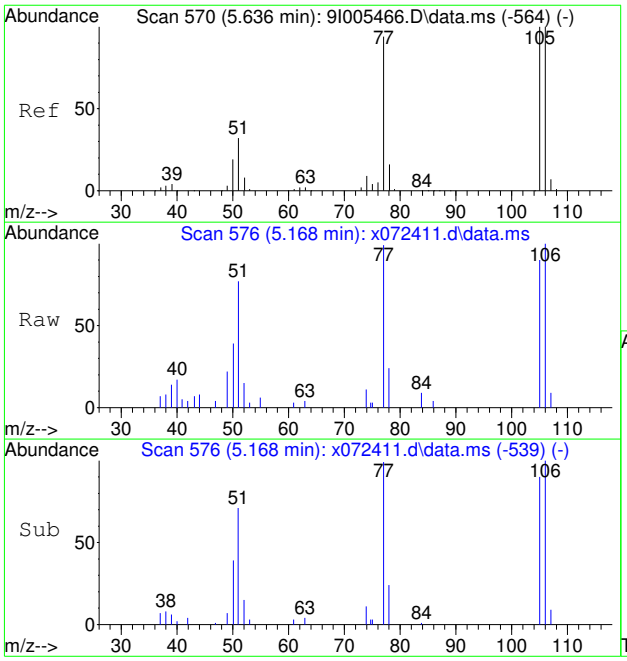
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\Jenniferf\AUGUST 2020\08-14-2020\SX2952\
Data File : x072411.d
Acq On : 13 Aug 2020 11:05 pm
Operator : marthav
Sample : fa77689-4 E
Misc : op81545,sx2952,250,,,1,1,water
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Aug 14 03:19:52 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

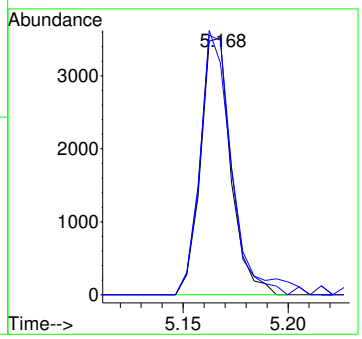


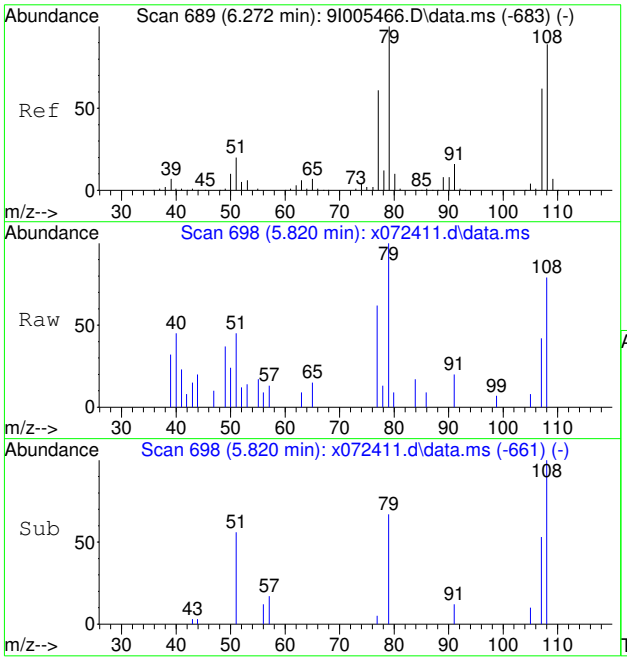


#5
Benzaldehyde
Concen: 0.68 ppm
RT: 5.168 min Scan# 576
Delta R.T. -0.000 min
Lab File: x072411.d
Acq: 13 Aug 2020 11:05 pm

Tgt Ion:106 Resp: 3535

Ion	Ratio	Lower	Upper
106	100		
77	96.5	63.9	123.9
105	90.2	70.0	130.0

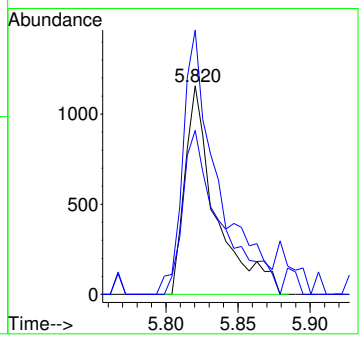


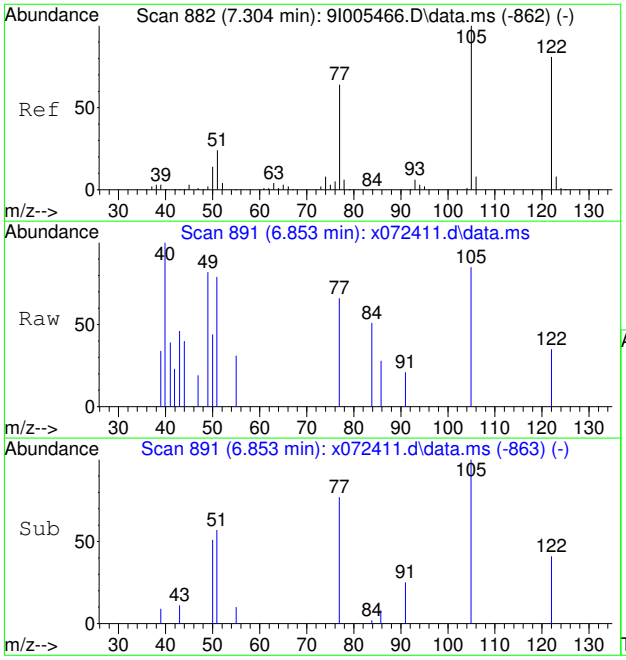


#15
Benzyl alcohol
Concen: 0.37 ppm
RT: 5.820 min Scan# 698
Delta R.T. -0.000 min
Lab File: x072411.d
Acq: 13 Aug 2020 11:05 pm

Tgt Ion:108 Resp: 1721

Ion	Ratio	Lower	Upper
108	100		
79	115.6	81.8	141.8
77	72.3	38.6	98.6

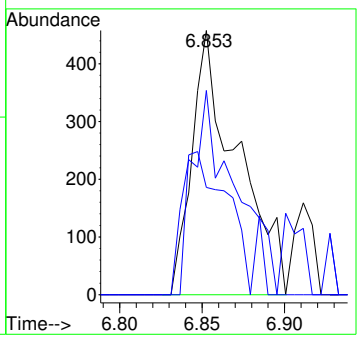


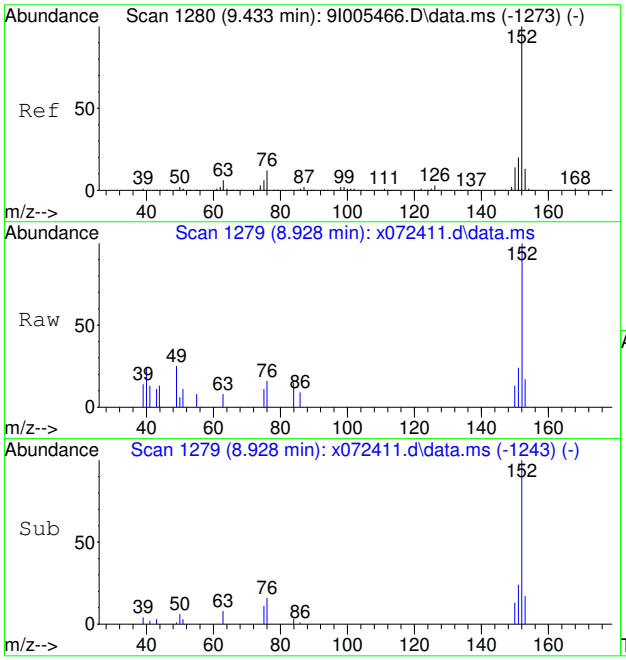


#30
Benzoic Acid
Concen: 0.23 ppm
RT: 6.853 min Scan# 891
Delta R.T. -0.048 min
Lab File: x072411.d
Acq: 13 Aug 2020 11:05 pm

Tgt Ion:105 Resp: 876

Ion	Ratio	Lower	Upper
105	100		
122	40.6	51.2	111.2#
77	61.9	34.1	94.1

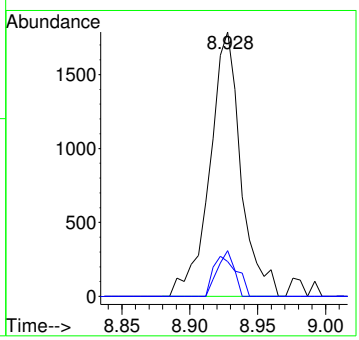


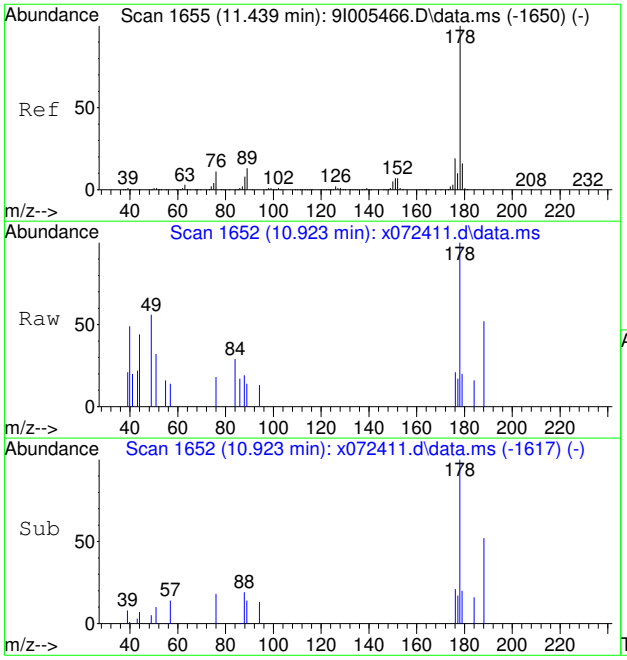


#52
Acenaphthylene
Concen: 0.19 ppm
RT: 8.928 min Scan# 1279
Delta R.T. -0.005 min
Lab File: x072411.d
Acq: 13 Aug 2020 11:05 pm

Tgt Ion:152 Resp: 2835

Ion	Ratio	Lower	Upper
152	100		
150	13.2	0.0	44.3
153	17.3	0.0	43.3

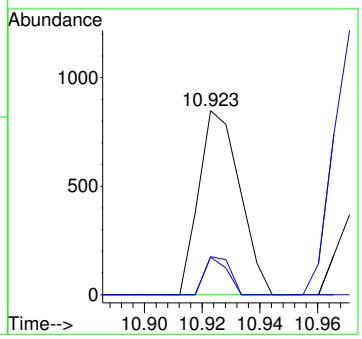


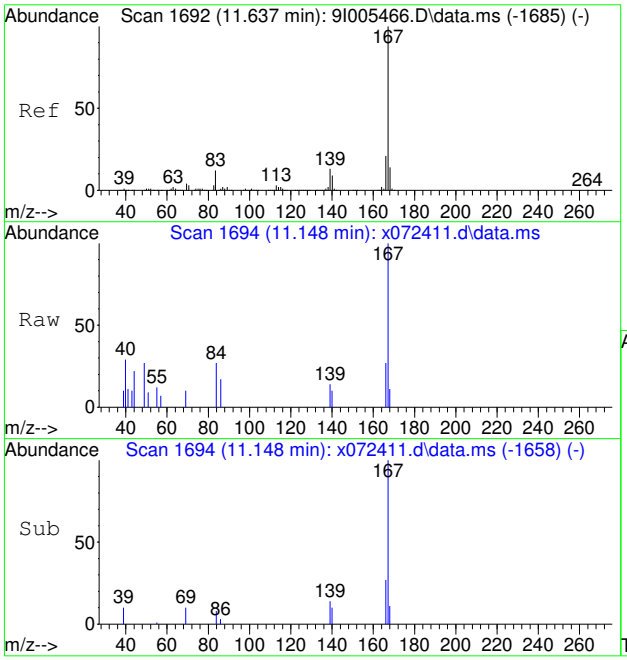


#85
Anthracene
Concen: 0.05 ppm
RT: 10.923 min Scan# 1652
Delta R.T. -0.011 min
Lab File: x072411.d
Acq: 13 Aug 2020 11:05 pm

Tgt Ion:178 Resp: 840

Ion	Ratio	Lower	Upper
178	100		
179	20.4	0.0	46.0
176	20.8	0.0	49.3

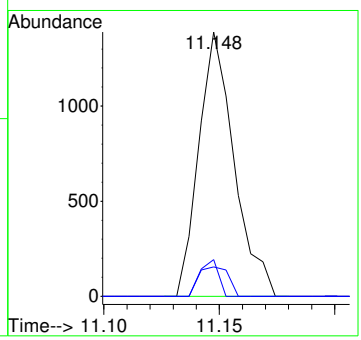




#87
Carbazole
Concen: 0.10 ppm
RT: 11.148 min Scan# 1694
Delta R.T. -0.005 min
Lab File: x072411.d
Acq: 13 Aug 2020 11:05 pm

Tgt Ion:167 Resp: 1482

Ion	Ratio	Lower	Upper
167	100		
168	11.1	0.0	43.9
139	13.9	0.0	42.7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\Jenniferf\AUGUST 2020\08-14-2020\SX2952\
Data File : x072412.d
Acq On : 13 Aug 2020 11:30 pm
Operator : marthav
Sample : fa77689-5 E
Misc : op81545,sx2952,250,,,1,1,water
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Aug 14 03:20:53 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

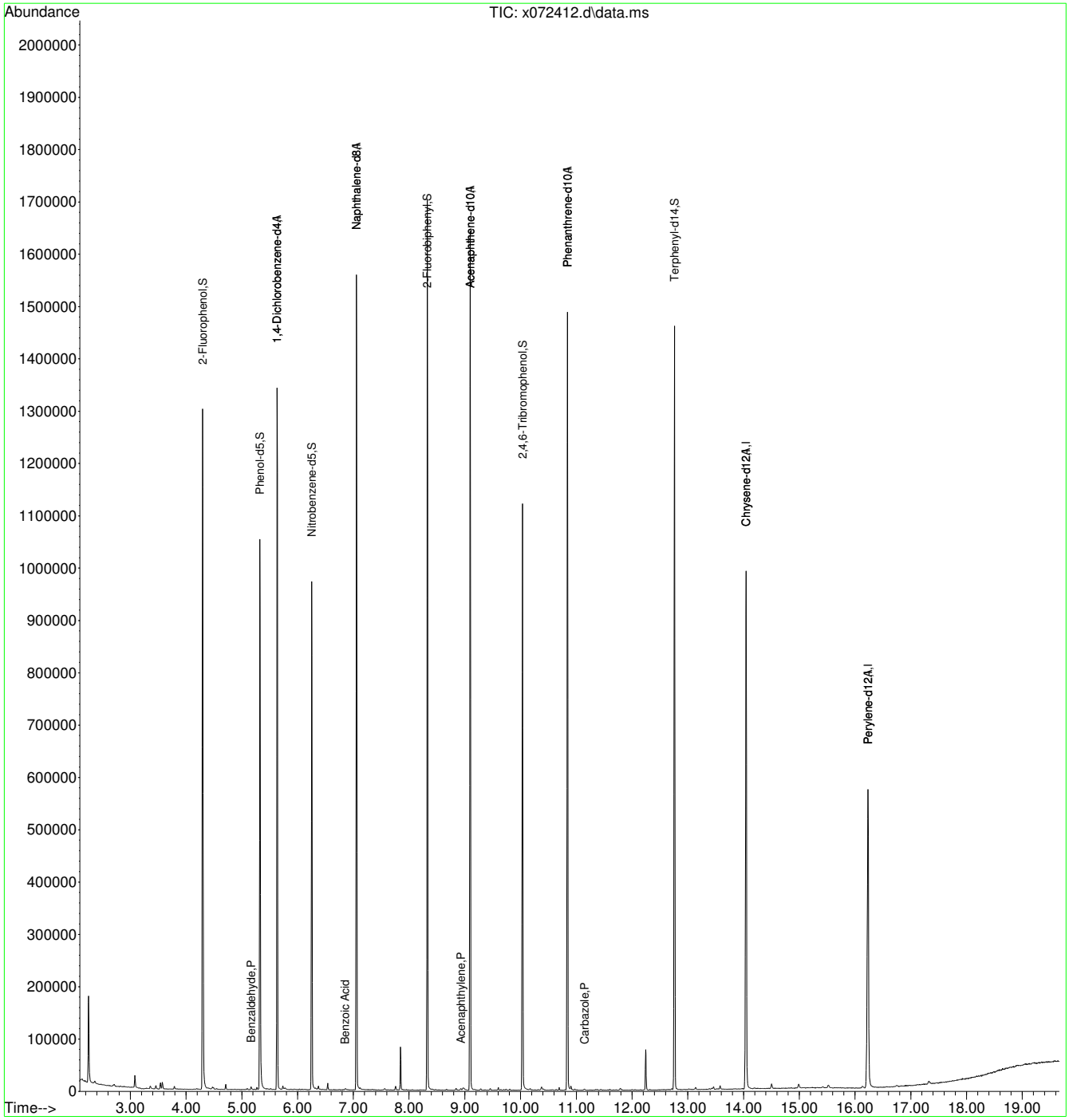
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.633	152	191311	40.00	ppm	0.00
22) Naphthalene-d8	7.056	136	698131	40.00	ppm	0.00
43) Acenaphthene-d10	9.099	164	330287	40.00	ppm	0.00
70) Phenanthrene-d10	10.843	188	554328	40.00	ppm	0.00
92) Chrysene-d12	14.046	240	392555	40.00	ppm	0.00
102) Perylene-d12	16.234	264	300707	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	5.633	152	191311	40.00	ppm	0.00
120) Naphthalene-d8A	7.056	136	698131	40.00	ppm	0.00
127) Acenaphthene-d10A	9.099	164	330287	40.00	ppm	0.00
136) Phenanthrene-d10A	10.843	188	554328	40.00	ppm	0.00
146) Chrysene-d12A	14.046	240	392555	40.00	ppm	0.00
153) Perylene-d12A	16.234	264	300707	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	4.296	112	346041	50.45	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 50.45%			
9) Phenol-d5	5.323	99	324187	39.72	ppm	0.00
Spiked Amount 100.000	Range 10 - 50		Recovery = 39.72%			
23) Nitrobenzene-d5	6.253	82	276402	38.34	ppm	0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 76.68%			
47) 2-Fluorobiphenyl	8.329	172	468805	39.21	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 78.42%			
75) 2,4,6-Tribromophenol	10.035	330	91819	77.40	ppm	0.00
Spiked Amount 100.000	Range 33 - 118		Recovery = 77.40%			
95) Terphenyl-d14	12.763	244	449102	43.06	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 86.12%			
Target Compounds						Qvalue
5) Benzaldehyde	5.168	106	1114	0.20	ppm	89
30) Benzoic Acid	6.852	105	677	0.16	ppm	83
52) Acenaphthylene	8.928	152	2336	0.14	ppm	94
87) Carbazole	11.147	167	1233	0.08	ppm	96

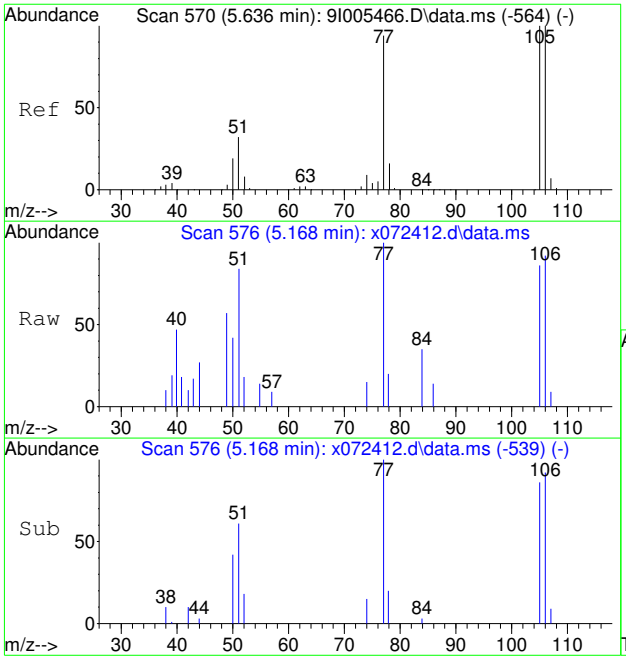
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\Jenniferf\AUGUST 2020\08-14-2020\SX2952\
Data File : x072412.d
Acq On : 13 Aug 2020 11:30 pm
Operator : marthav
Sample : fa77689-5 E
Misc : op81545,sx2952,250,,,1,1,water
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Aug 14 03:20:53 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

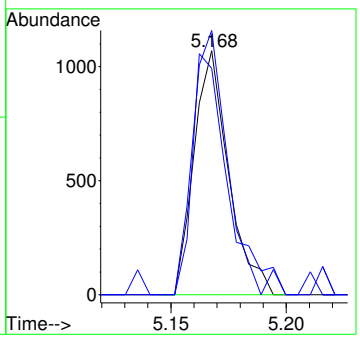


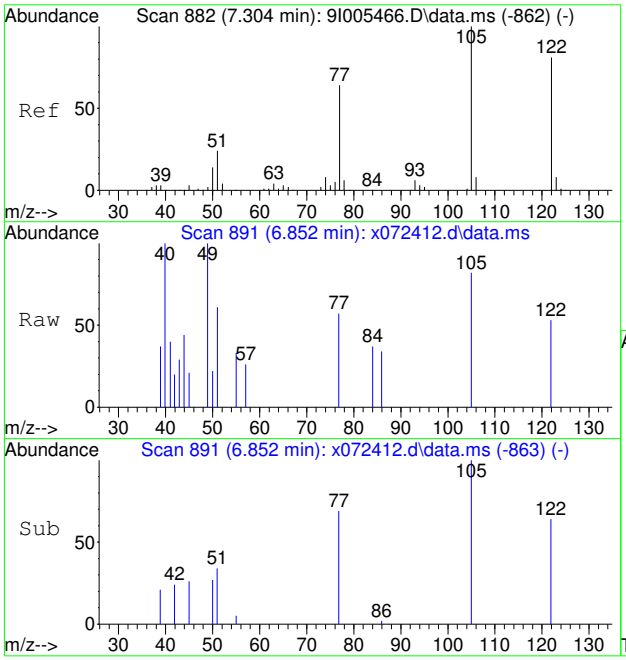


#5
Benzaldehyde
Concen: 0.20 ppm
RT: 5.168 min Scan# 576
Delta R.T. -0.000 min
Lab File: x072412.d
Acq: 13 Aug 2020 11:30 pm

Tgt Ion:106 Resp: 1114

Ion	Ratio	Lower	Upper
106	100		
77	108.3	63.9	123.9
105	92.8	70.0	130.0

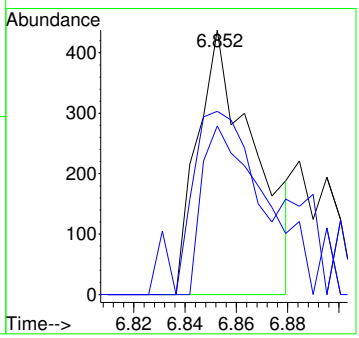


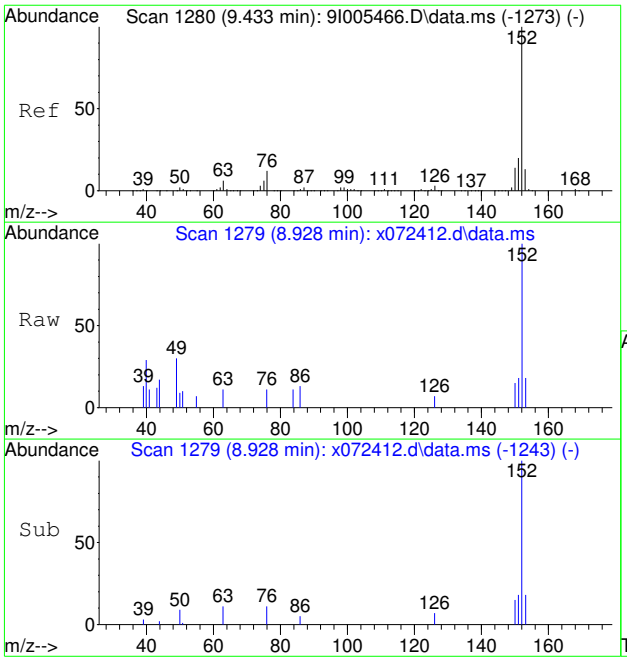


#30
Benzoic Acid
Concen: 0.16 ppm
RT: 6.852 min Scan# 891
Delta R.T. -0.048 min
Lab File: x072412.d
Acq: 13 Aug 2020 11:30 pm

Tgt Ion:105 Resp: 677

Ion	Ratio	Lower	Upper
105	100		
122	66.4	51.2	111.2
77	49.9	34.1	94.1

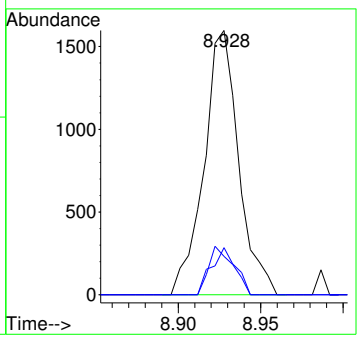


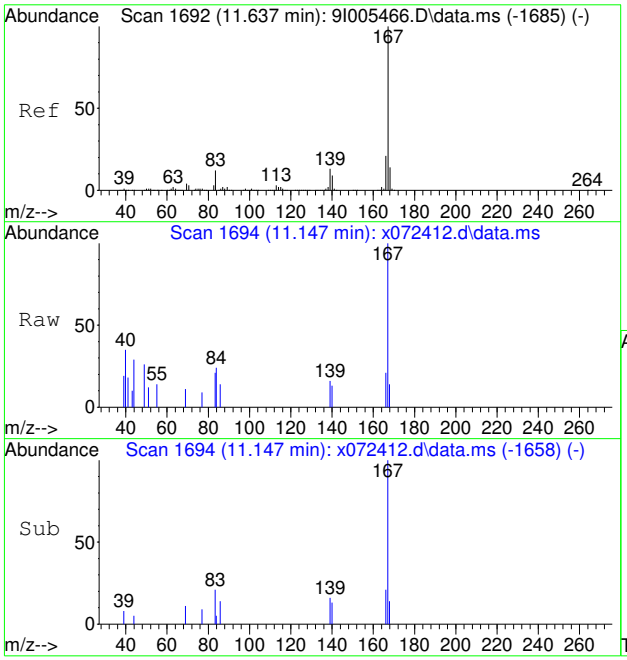


#52
Acenaphthylene
Concen: 0.14 ppm
RT: 8.928 min Scan# 1279
Delta R.T. -0.005 min
Lab File: x072412.d
Acq: 13 Aug 2020 11:30 pm

Tgt Ion:152 Resp: 2336

Ion	Ratio	Lower	Upper
152	100		
150	14.5	0.0	44.3
153	17.8	0.0	43.3

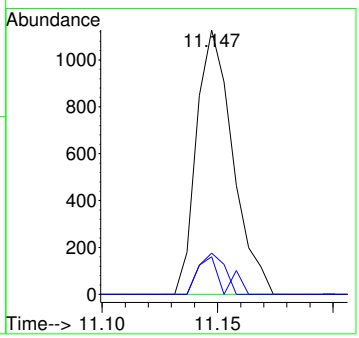




#87
Carbazole
Concen: 0.08 ppm
RT: 11.147 min Scan# 1694
Delta R.T. -0.005 min
Lab File: x072412.d
Acq: 13 Aug 2020 11:30 pm

Tgt Ion:167 Resp: 1233

Ion	Ratio	Lower	Upper
167	100		
168	14.2	0.0	43.9
139	15.6	0.0	42.7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\Jenniferf\AUGUST 2020\08-14-2020\SX2952\
Data File : x072413.d
Acq On : 13 Aug 2020 11:56 pm
Operator : marthav
Sample : fa77689-6 E
Misc : op81545,sx2952,250,,,1,1,water
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Aug 14 03:22:01 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

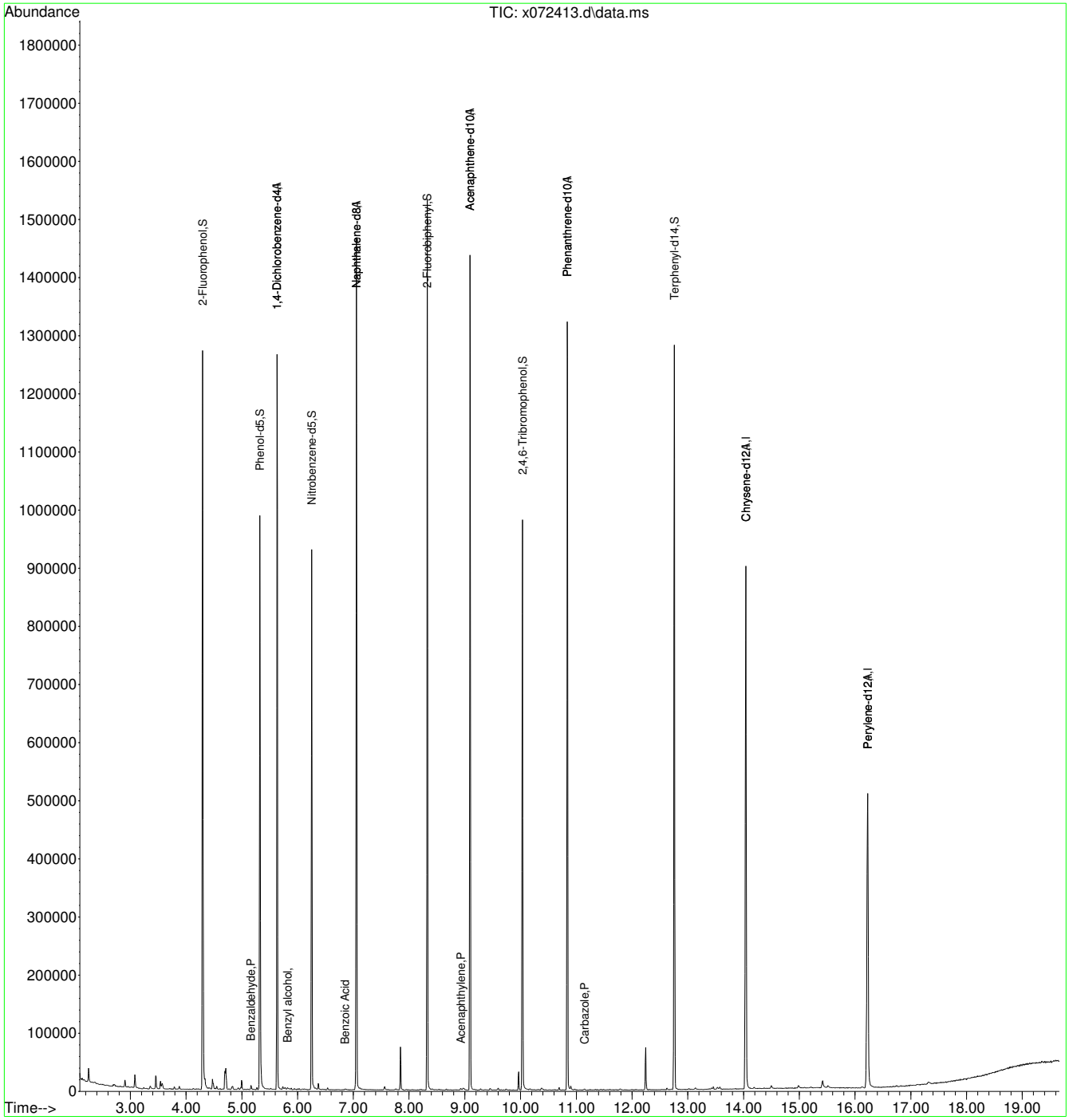
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.633	152	172392	40.00	ppm	0.00
22) Naphthalene-d8	7.056	136	628426	40.00	ppm	0.00
43) Acenaphthene-d10	9.094	164	296405	40.00	ppm	0.00
70) Phenanthrene-d10	10.837	188	497625	40.00	ppm	0.00
92) Chrysene-d12	14.041	240	351352	40.00	ppm	-0.01
102) Perylene-d12	16.229	264	270896	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	5.633	152	172392	40.00	ppm	0.00
120) Naphthalene-d8A	7.056	136	628426	40.00	ppm	0.00
127) Acenaphthene-d10A	9.094	164	296405	40.00	ppm	0.00
136) Phenanthrene-d10A	10.837	188	497625	40.00	ppm	0.00
146) Chrysene-d12A	14.041	240	351352	40.00	ppm	-0.01
153) Perylene-d12A	16.229	264	270896	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	4.296	112	325295	52.63	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 52.63%			
9) Phenol-d5	5.323	99	303917	41.33	ppm	0.00
Spiked Amount 100.000	Range 10 - 50		Recovery = 41.33%			
23) Nitrobenzene-d5	6.253	82	252523	38.91	ppm	0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 77.82%			
47) 2-Fluorobiphenyl	8.329	172	430610	40.13	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 80.26%			
75) 2,4,6-Tribromophenol	10.035	330	80508	75.84	ppm	0.00
Spiked Amount 100.000	Range 33 - 118		Recovery = 75.84%			
95) Terphenyl-d14	12.757	244	398844	42.72	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 85.44%			
Target Compounds						Qvalue
5) Benzaldehyde	5.162	106	1407	0.27	ppm	90
15) Benzyl alcohol	5.820	108	691	0.15	ppm	80
30) Benzoic Acid	6.852	105	660	0.17	ppm #	72
52) Acenaphthylene	8.928	152	2061	0.14	ppm	92
87) Carbazole	11.147	167	1011	0.07	ppm	93

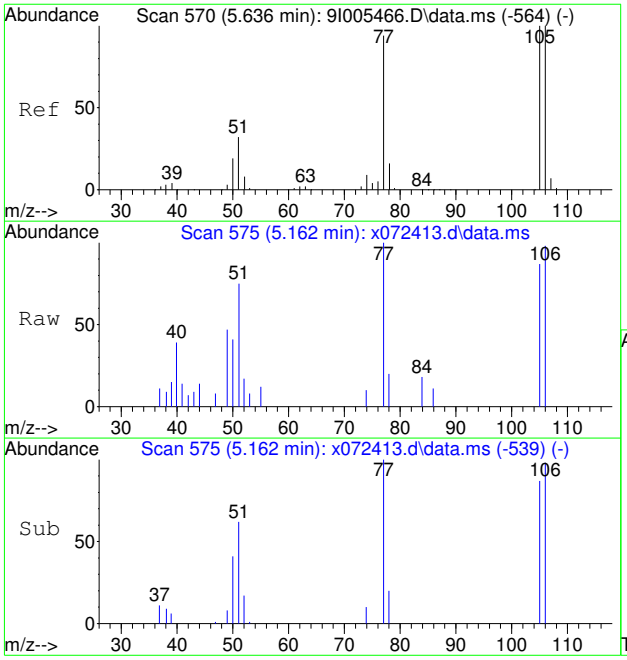
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\Jenniferf\AUGUST 2020\08-14-2020\SX2952\
Data File : x072413.d
Acq On : 13 Aug 2020 11:56 pm
Operator : marthav
Sample : fa77689-6 E
Misc : op81545,sx2952,250,,,1,1,water
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Aug 14 03:22:01 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

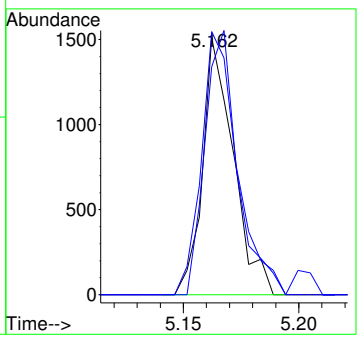


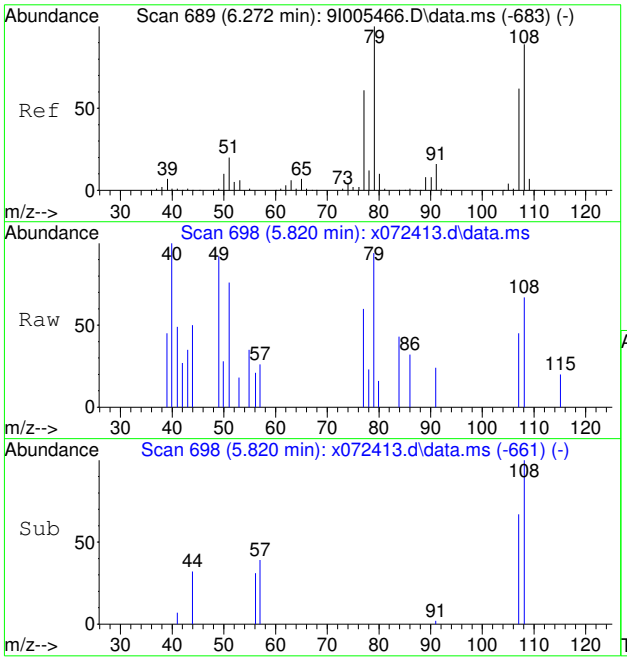


#5
Benzaldehyde
Concen: 0.27 ppm
RT: 5.162 min Scan# 575
Delta R.T. -0.006 min
Lab File: x072413.d
Acq: 13 Aug 2020 11:56 pm

Tgt Ion:106 Resp: 1407

Ion	Ratio	Lower	Upper
106	100		
77	102.4	63.9	123.9
105	88.7	70.0	130.0

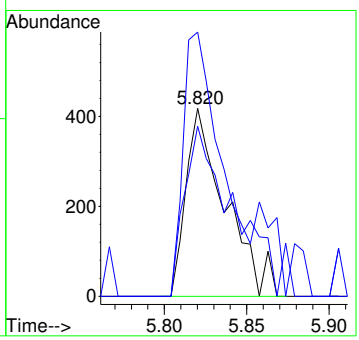


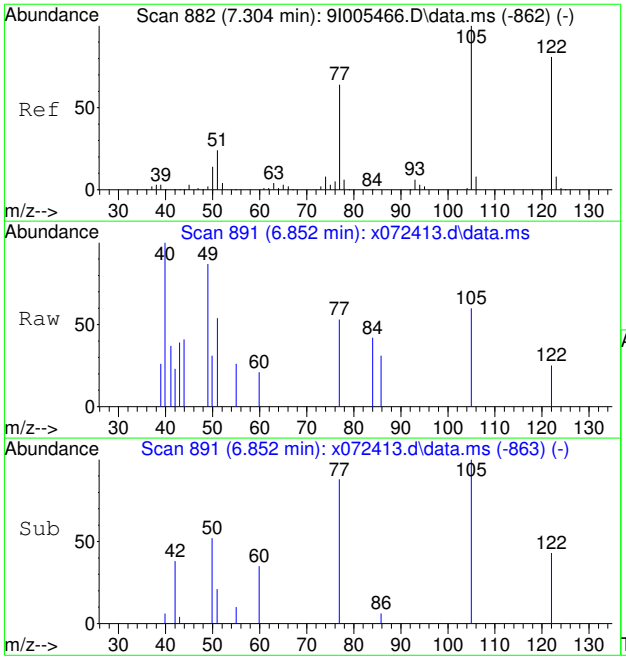


#15
Benzyl alcohol
Concen: 0.15 ppm
RT: 5.820 min Scan# 698
Delta R.T. -0.000 min
Lab File: x072413.d
Acq: 13 Aug 2020 11:56 pm

Tgt Ion:108 Resp: 691

Ion	Ratio	Lower	Upper
108	100		
79	140.7	81.8	141.8
77	76.3	38.6	98.6

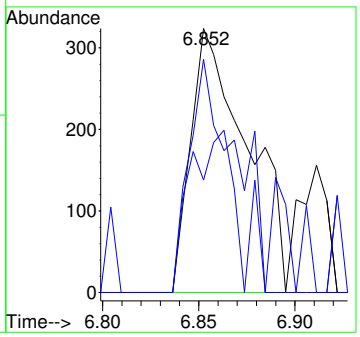


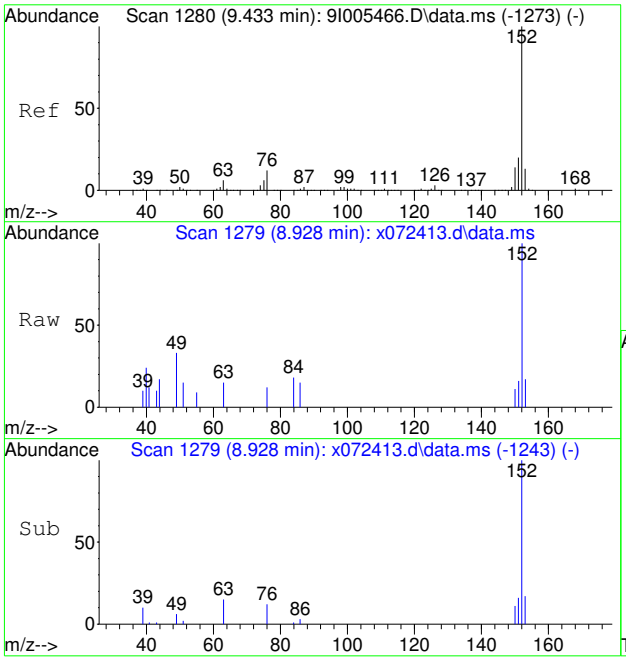


#30
Benzoic Acid
Concen: 0.17 ppm
RT: 6.852 min Scan# 891
Delta R.T. -0.048 min
Lab File: x072413.d
Acq: 13 Aug 2020 11:56 pm

Tgt Ion:105 Resp: 660

Ion	Ratio	Lower	Upper
105	100		
122	42.6	51.2	111.2#
77	71.6	34.1	94.1

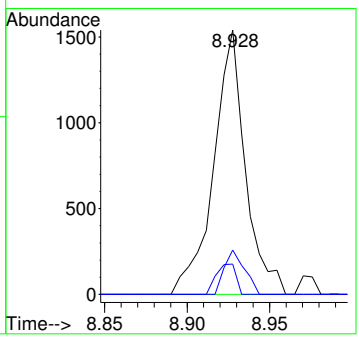


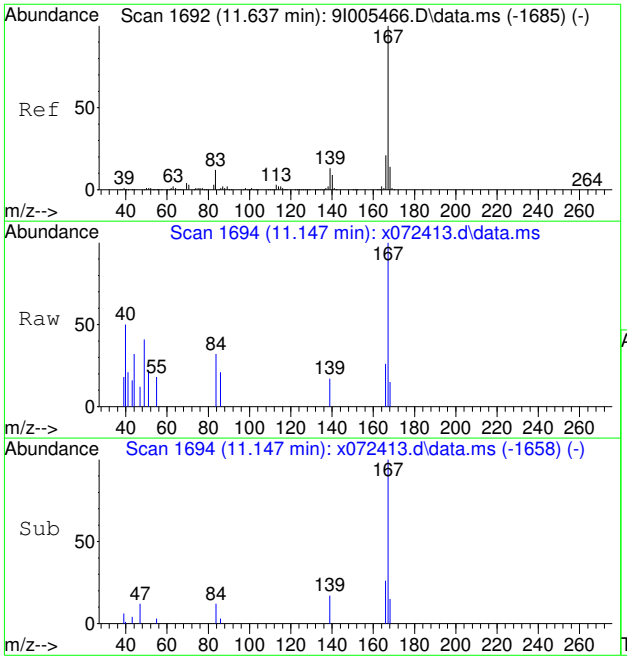


#52
Acenaphthylene
Concen: 0.14 ppm
RT: 8.928 min Scan# 1279
Delta R.T. -0.006 min
Lab File: x072413.d
Acq: 13 Aug 2020 11:56 pm

Tgt Ion:152 Resp: 2061

Ion	Ratio	Lower	Upper
152	100		
150	11.5	0.0	44.3
153	16.8	0.0	43.3

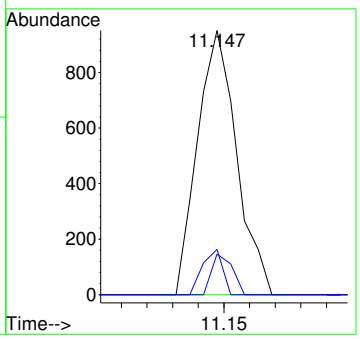




#87
Carbazole
Concen: 0.07 ppm
RT: 11.147 min Scan# 1694
Delta R.T. -0.006 min
Lab File: x072413.d
Acq: 13 Aug 2020 11:56 pm

Tgt Ion:167 Resp: 1011

Ion	Ratio	Lower	Upper
167	100		
168	15.3	0.0	43.9
139	17.1	0.0	42.7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\Jenniferf\AUGUST 2020\08-14-2020\SX2952\
Data File : x072414.d
Acq On : 14 Aug 2020 12:21 am
Operator : marthav
Sample : fa77689-7 E
Misc : op81545,sx2952,250,,,1,1,water
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Aug 14 03:22:46 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

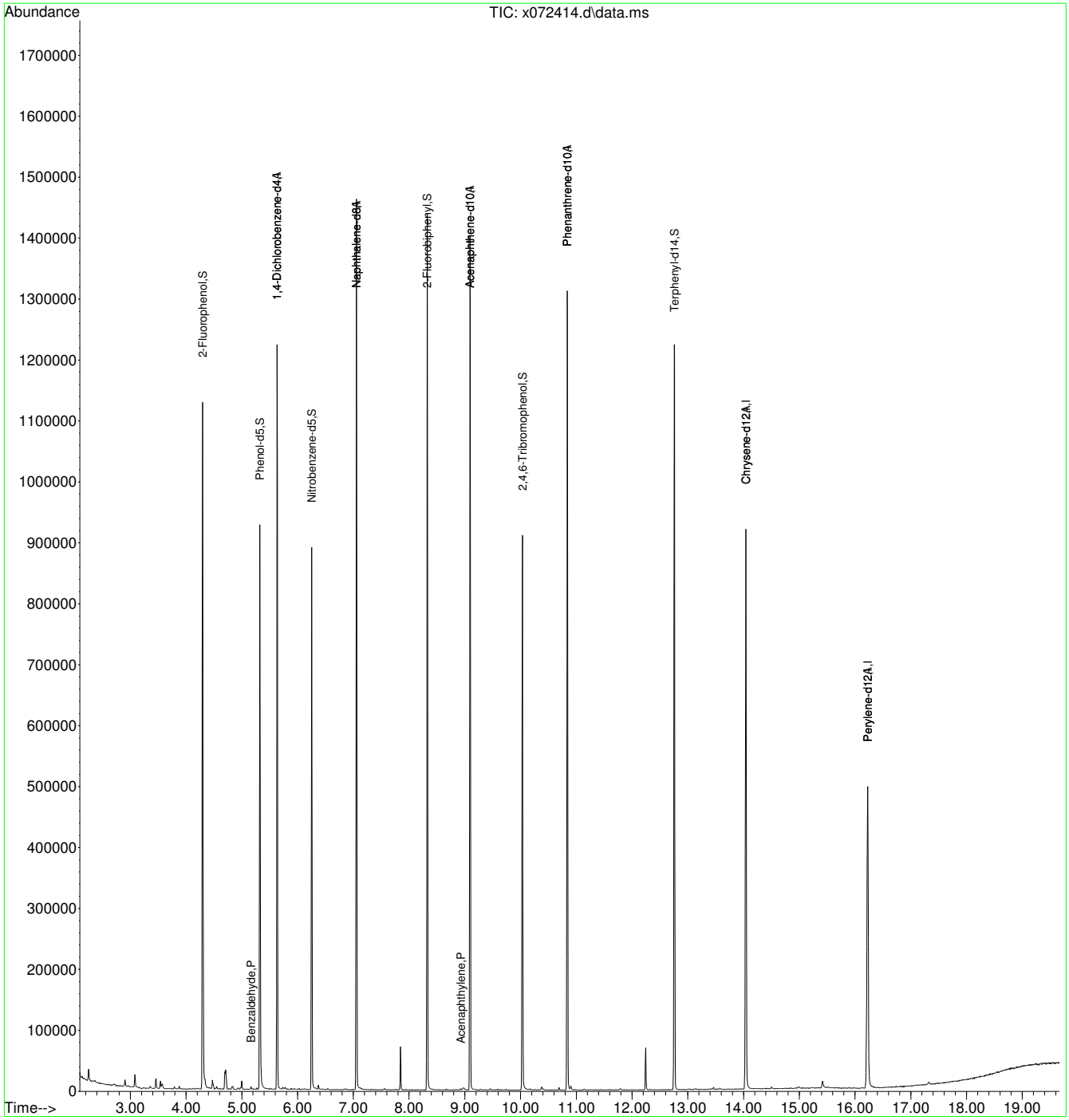
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.633	152	169939	40.00	ppm	0.00
22) Naphthalene-d8	7.056	136	624564	40.00	ppm	0.00
43) Acenaphthene-d10	9.093	164	296460	40.00	ppm	0.00
70) Phenanthrene-d10	10.837	188	493857	40.00	ppm	0.00
92) Chrysene-d12	14.041	240	348076	40.00	ppm	-0.01
102) Perylene-d12	16.229	264	263936	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	5.633	152	169939	40.00	ppm	0.00
120) Naphthalene-d8A	7.056	136	624564	40.00	ppm	0.00
127) Acenaphthene-d10A	9.093	164	296460	40.00	ppm	0.00
136) Phenanthrene-d10A	10.837	188	493857	40.00	ppm	0.00
146) Chrysene-d12A	14.041	240	348076	40.00	ppm	-0.01
153) Perylene-d12A	16.229	264	263936	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	4.296	112	293569	48.18	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 48.18%			
9) Phenol-d5	5.323	99	277918	38.34	ppm	0.00
Spiked Amount 100.000	Range 10 - 50		Recovery = 38.34%			
23) Nitrobenzene-d5	6.253	82	235054	36.44	ppm	0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 72.88%			
47) 2-Fluorobiphenyl	8.329	172	405409	37.78	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 75.56%			
75) 2,4,6-Tribromophenol	10.035	330	76341	72.88	ppm	0.00
Spiked Amount 100.000	Range 33 - 118		Recovery = 72.88%			
95) Terphenyl-d14	12.763	244	394976	42.71	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 85.42%			
Target Compounds						Qvalue
5) Benzaldehyde	5.168	106	888	0.18	ppm	99
52) Acenaphthylene	8.928	152	1664	0.11	ppm	98

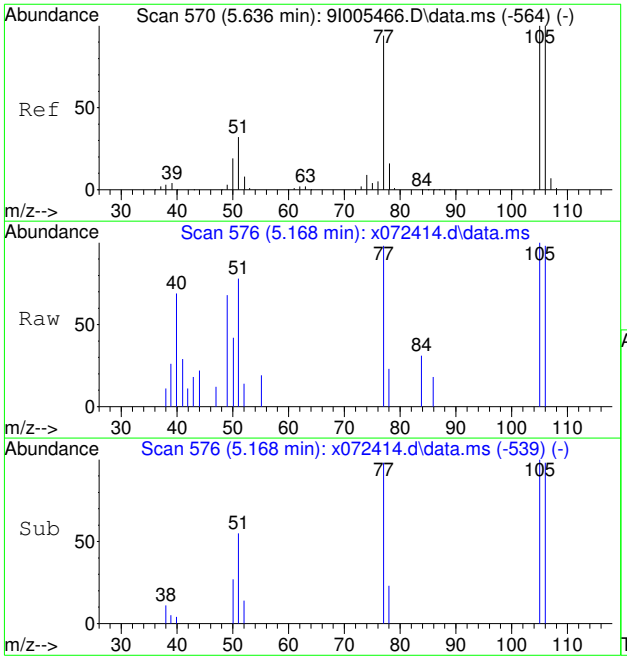
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\Jenniferf\AUGUST 2020\08-14-2020\SX2952\
Data File : x072414.d
Acq On : 14 Aug 2020 12:21 am
Operator : marthav
Sample : fa77689-7 E
Misc : op81545,sx2952,250,,,1,1,water
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Aug 14 03:22:46 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

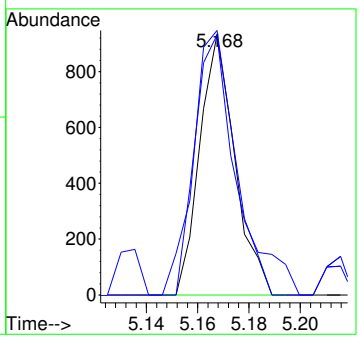


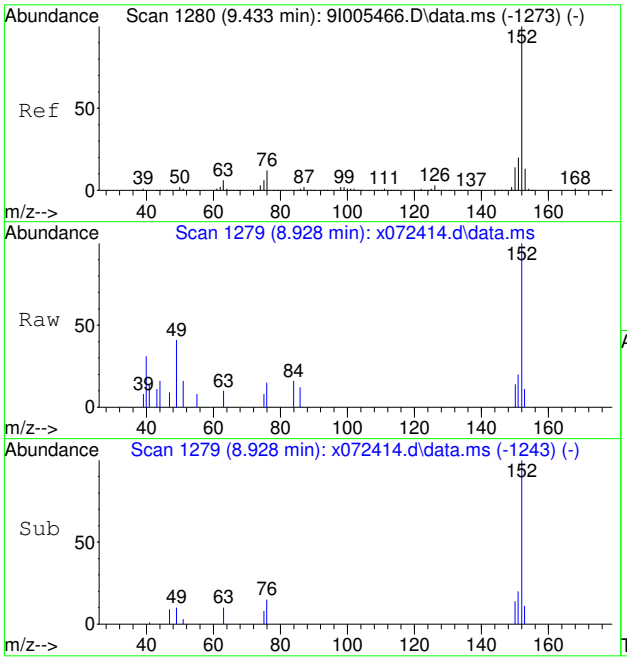


#5
Benzaldehyde
Concen: 0.18 ppm
RT: 5.168 min Scan# 576
Delta R.T. -0.000 min
Lab File: x072414.d
Acq: 14 Aug 2020 12:21 am

Tgt Ion:106 Resp: 888

Ion	Ratio	Lower	Upper
106	100		
77	93.9	63.9	123.9
105	101.6	70.0	130.0

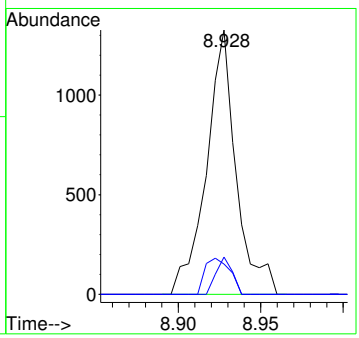




#52
Acenaphthylene
Concen: 0.11 ppm
RT: 8.928 min Scan# 1279
Delta R.T. -0.006 min
Lab File: x072414.d
Acq: 14 Aug 2020 12:21 am

Tgt Ion:152 Resp: 1664

Ion	Ratio	Lower	Upper
152	100		
150	14.1	0.0	44.3
153	11.5	0.0	43.3



Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 08/14/20 14:57

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s6f253\
Data File : 6F06562.d
Acq On : 13 Aug 2020 10:29 pm
Operator : marthav
Sample : fa77689-8 E
Misc : op81538,S6F253,30.1,,,1,1,soil
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Aug 14 05:23:18 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

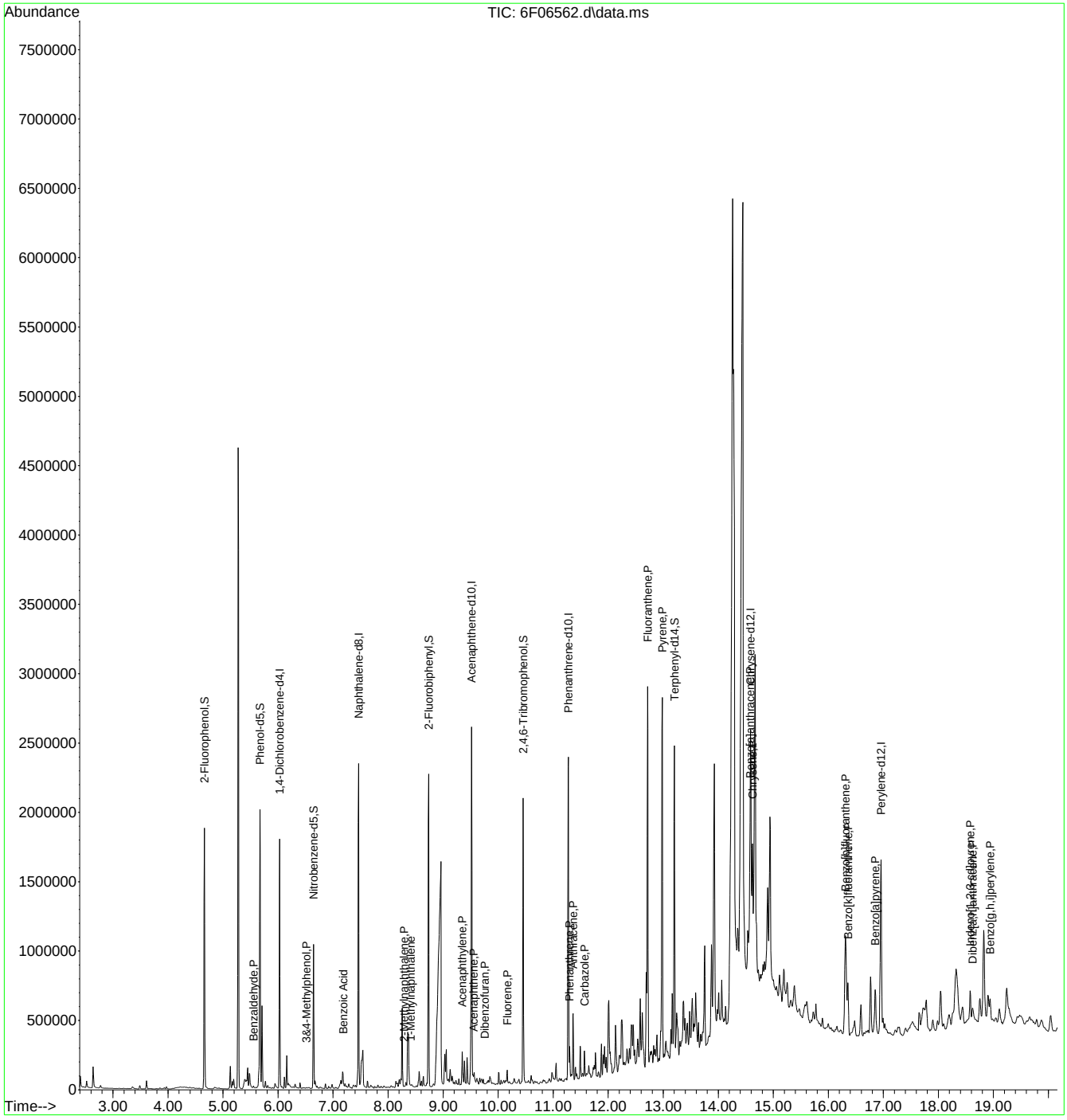
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.029	152	280855	40.00	ppm	0.00
22) Naphthalene-d8	7.463	136	1031060	40.00	ppm	0.00
43) Acenaphthene-d10	9.517	164	529715	40.00	ppm	0.00
70) Phenanthrene-d10	11.276	188	948450	40.00	ppm	0.00
92) Chrysene-d12	14.587	240	669836	40.00	ppm	0.02
102) Perylene-d12	16.957	264	673312	40.00	ppm	0.03
System Monitoring Compounds						
7) 2-Fluorophenol	4.660	112	558832	52.66	ppm	0.01
Spiked Amount 100.000	Range 40 - 102		Recovery = 52.66%			
9) Phenol-d5	5.671	99	760937	60.40	ppm	0.00
Spiked Amount 100.000	Range 41 - 100		Recovery = 60.40%			
23) Nitrobenzene-d5	6.644	82	307065	27.15	ppm	0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 54.30%			
47) 2-Fluorobiphenyl	8.736	172	682246	32.95	ppm	0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 65.90%			
75) 2,4,6-Tribromophenol	10.453	330	244524	76.60	ppm	0.00
Spiked Amount 100.000	Range 42 - 108		Recovery = 76.60%			
95) Terphenyl-d14	13.202	244	706548	37.53	ppm	0.00
Spiked Amount 50.000	Range 45 - 119		Recovery = 75.06%			
Target Compounds						Qvalue
5) Benzaldehyde	5.553	106	3944	0.46	ppm	87
21) 3&4-Methylphenol	6.516	108	1570	0.15	ppm	85
30) Benzoic Acid	7.185	105	12278	1.84	ppm	95
40) 2-Methylnaphthalene	8.292	141	1377	0.08	ppm	86
41) 1-Methylnaphthalene	8.409	142	1418	0.08	ppm	86
52) Acenaphthylene	9.345	152	113231	4.28	ppm	99
57) Acenaphthene	9.554	153	9365	0.53	ppm	95
60) Dibenzofuran	9.757	168	2617	0.11	ppm	97
65) Fluorene	10.164	166	21824	1.11	ppm	100
84) Phenanthrene	11.298	178	87710	3.09	ppm	99
85) Anthracene	11.362	178	196819	6.82	ppm	100
87) Carbazole	11.571	167	80194	3.08	ppm	99
91) Fluoranthene	12.715	202	1149254	38.44	ppm	100
94) Pyrene	12.983	202	1034718	43.13	ppm	96
99) Benzo[a]anthracene	14.576	228	284641	12.68	ppm	99
100) Chrysene	14.625	228	454511	20.87	ppm	99
104) Benzo[b]fluoranthene	16.315	252	545902	25.26	ppm	99
105) Benzo[k]fluoranthene	16.358	252	175512	7.81	ppm	97
106) Benzo[a]pyrene	16.855	252	185883	9.26	ppm	97
107) Indeno[1,2,3-cd]pyrene	18.577	276	133391m	7.14	ppm	
108) Dibenz[a,h]anthracene	18.620	278	31855	1.60	ppm	92
109) Benzo[g,h,i]perylene	18.941	276	105302	5.22	ppm	97

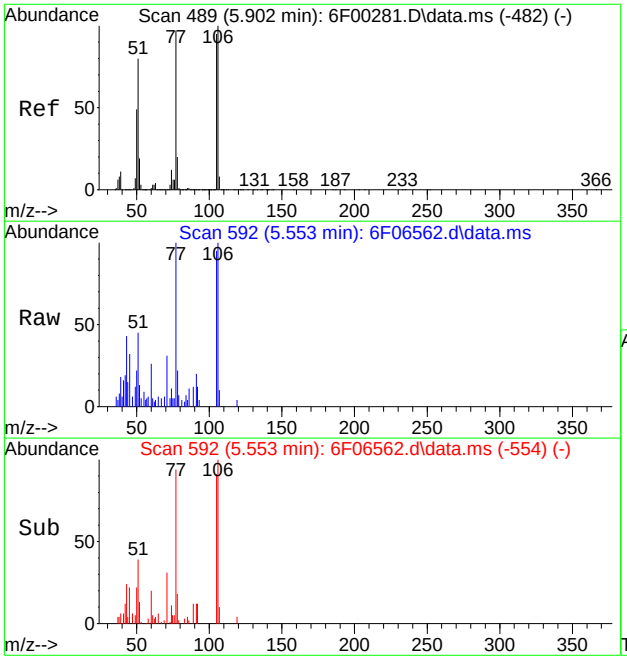
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s6f253\
Data File : 6F06562.d
Acq On : 13 Aug 2020 10:29 pm
Operator : marthav
Sample : fa77689-8 E
Misc : op81538,S6F253,30.1,,,1,1,soil
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Aug 14 05:23:18 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

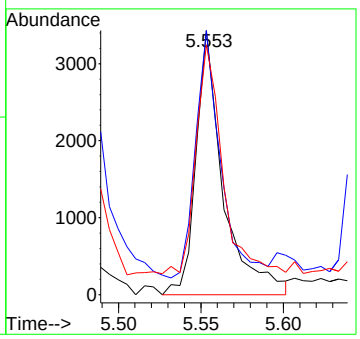


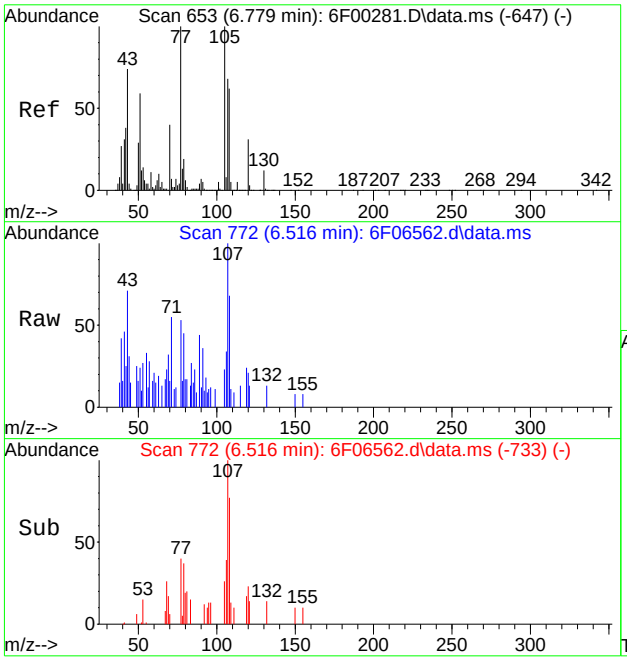


#5
Benzaldehyde
Concen: 0.46 ppm
RT: 5.553 min Scan# 592
Delta R.T. 0.005 min
Lab File: 6F06562.d
Acq: 13 Aug 2020 10:29 pm

Tgt Ion:106 Resp: 3944

Ion	Ratio	Lower	Upper
106	100		
77	91.1	74.8	134.8
105	88.6	70.7	130.7

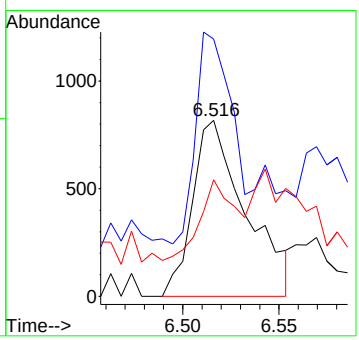


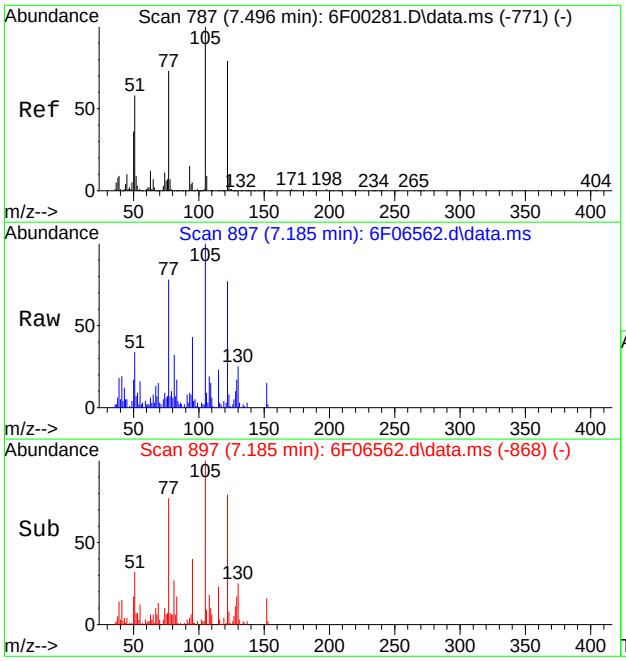


#21
3&4-Methylphenol
Concen: 0.15 ppm
RT: 6.516 min Scan# 772
Delta R.T. 0.011 min
Lab File: 6F06562.d
Acq: 13 Aug 2020 10:29 pm

Tgt Ion:108 Resp: 1570

Ion	Ratio	Lower	Upper
108	100		
107	128.4	80.2	140.2
79	32.7	0.1	60.1

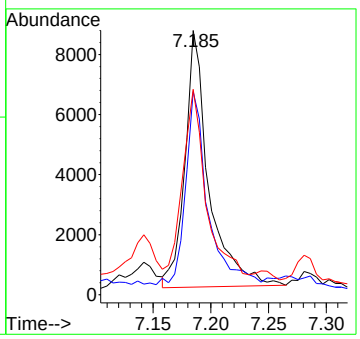


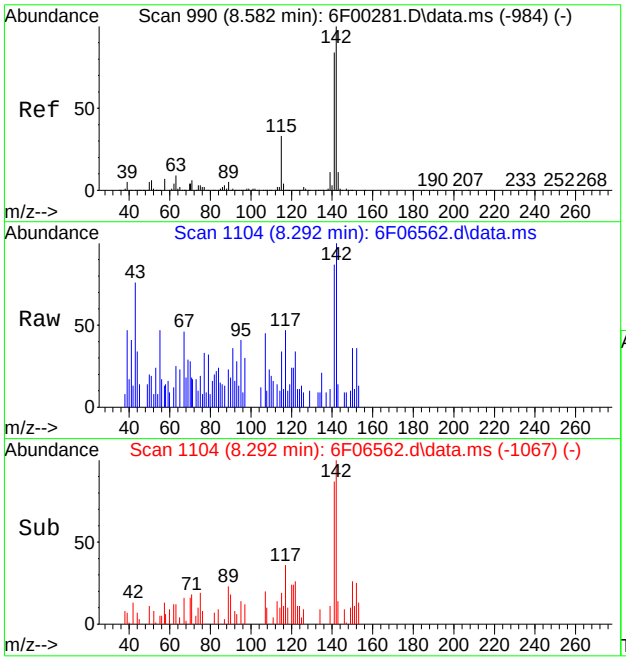


#30
Benzoic Acid
Concen: 1.84 ppm
RT: 7.185 min Scan# 897
Delta R.T. -0.043 min
Lab File: 6F06562.d
Acq: 13 Aug 2020 10:29 pm

Tgt Ion:105 Resp: 12278

Ion	Ratio	Lower	Upper
105	100		
122	74.0	51.7	111.7
77	73.7	42.8	102.8

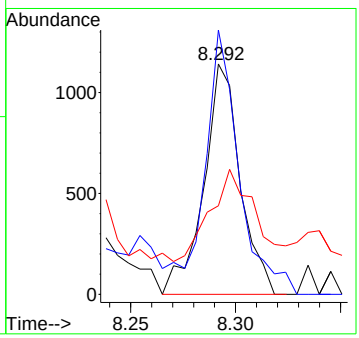


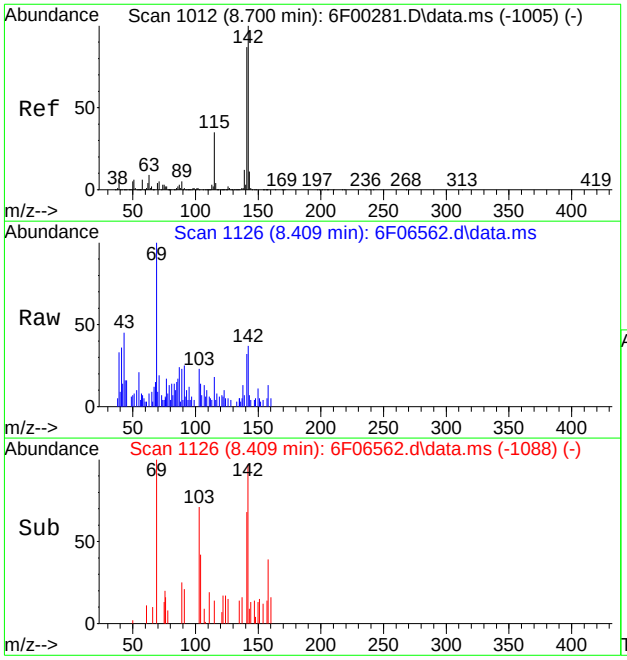


#40
2-Methylnaphthalene
Concen: 0.08 ppm
RT: 8.292 min Scan# 1104
Delta R.T. 0.000 min
Lab File: 6F06562.d
Acq: 13 Aug 2020 10:29 pm

Tgt Ion:141 Resp: 1377

Ion	Ratio	Lower	Upper
141	100		
142	126.5	87.4	147.4
115	19.9	8.3	68.3

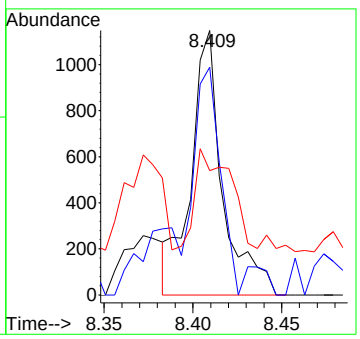


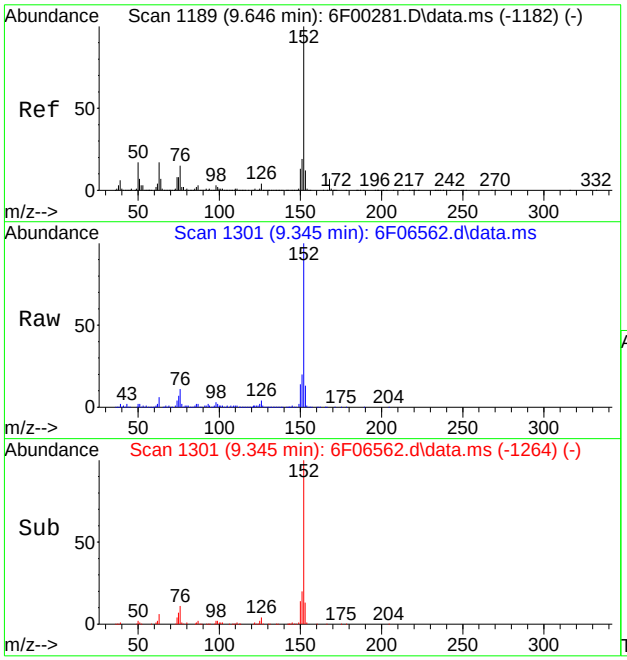


#41
1-Methylnaphthalene
Concen: 0.08 ppm
RT: 8.409 min Scan# 1126
Delta R.T. 0.005 min
Lab File: 6F06562.d
Acq: 13 Aug 2020 10:29 pm

Tgt Ion:142 Resp: 1418

Ion	Ratio	Lower	Upper
142	100		
141	81.8	58.9	118.9
115	17.2	3.8	63.8

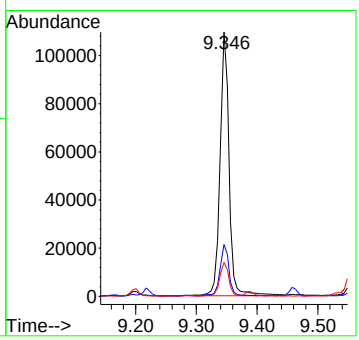


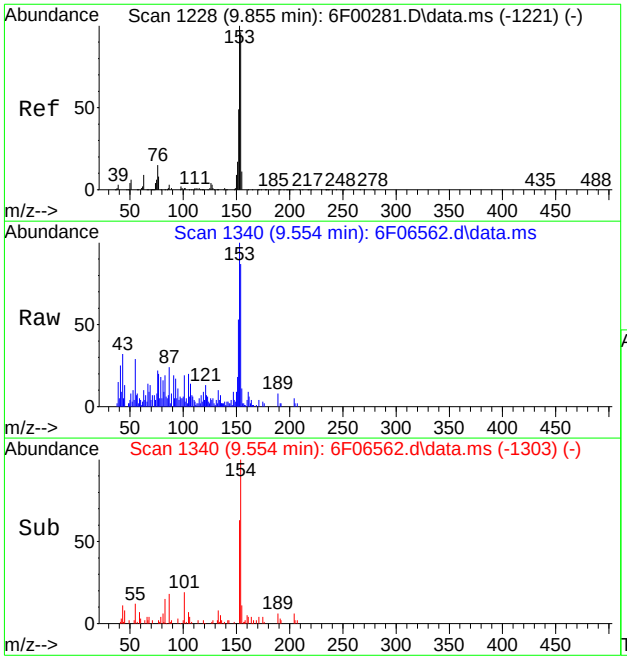


#52
Acenaphthylene
Concen: 4.28 ppm
RT: 9.345 min Scan# 1301
Delta R.T. 0.000 min
Lab File: 6F06562.d
Acq: 13 Aug 2020 10:29 pm

Tgt Ion:152 Resp: 113231

Ion	Ratio	Lower	Upper
152	100		
151	19.4	0.0	49.9
153	12.8	0.0	43.2

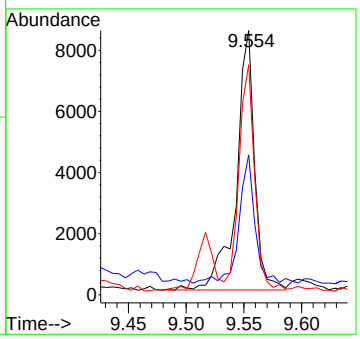


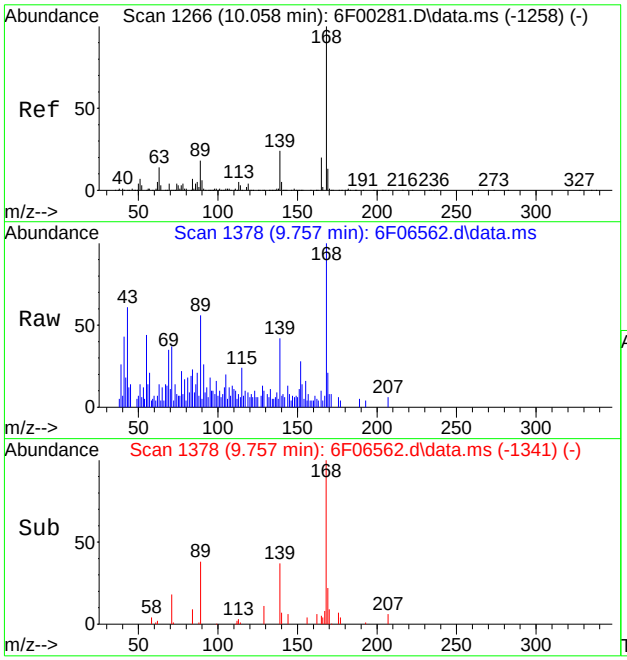


#57
Acenaphthene
Concen: 0.53 ppm
RT: 9.554 min Scan# 1340
Delta R.T. 0.000 min
Lab File: 6F06562.d
Acq: 13 Aug 2020 10:29 pm

Tgt Ion:153 Resp: 9365

Ion	Ratio	Lower	Upper
153	100		
152	48.3	16.2	76.2
154	87.1	63.3	123.3

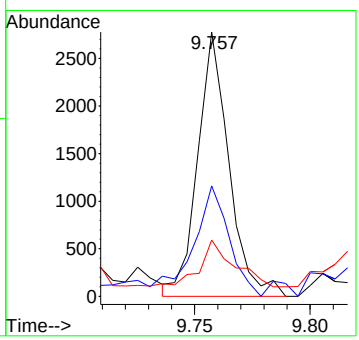


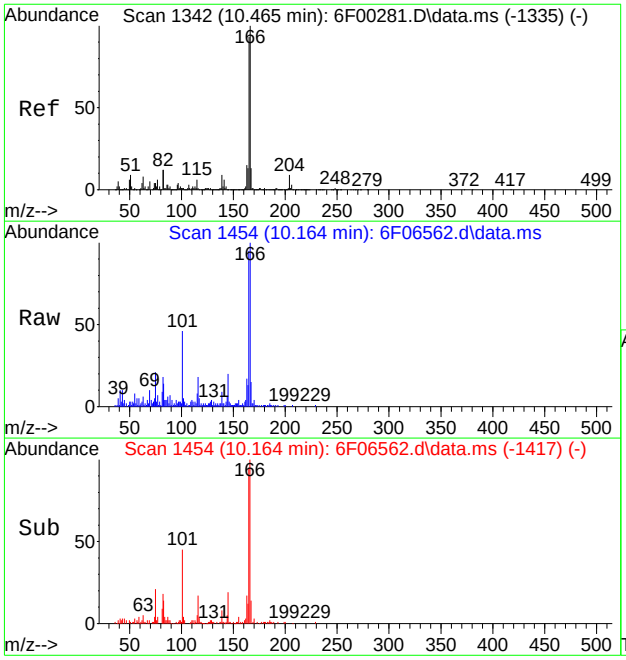


#60
Dibenzofuran
Concen: 0.11 ppm
RT: 9.757 min Scan# 1378
Delta R.T. 0.000 min
Lab File: 6F06562.d
Acq: 13 Aug 2020 10:29 pm

Tgt Ion:168 Resp: 2617

Ion	Ratio	Lower	Upper
168	100		
139	36.4	7.1	67.1
169	17.5	0.0	43.6

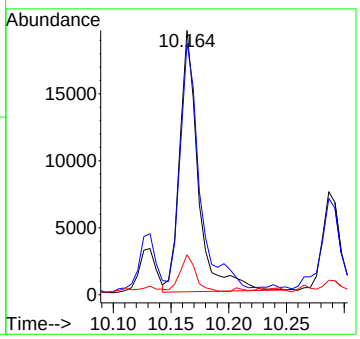


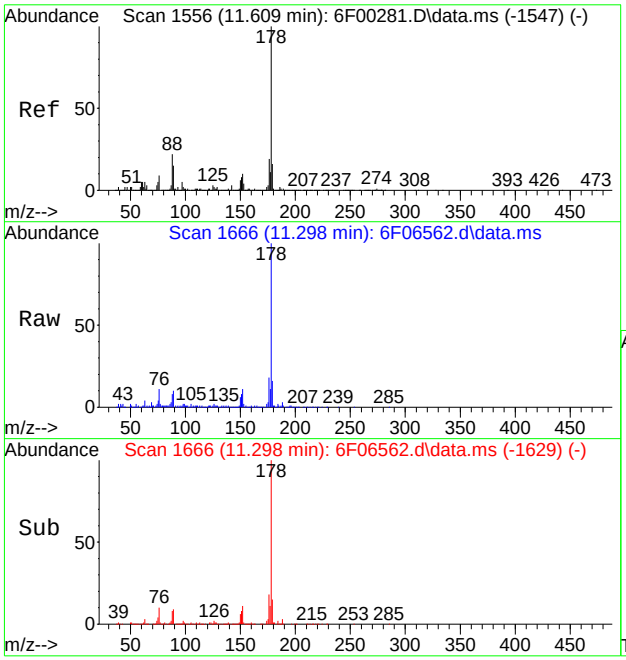


#65
Fluorene
Concen: 1.11 ppm
RT: 10.164 min Scan# 1454
Delta R.T. 0.000 min
Lab File: 6F06562.d
Acq: 13 Aug 2020 10:29 pm

Tgt Ion:166 Resp: 21824

Ion	Ratio	Lower	Upper
166	100		
165	92.8	63.2	123.2
167	13.6	0.0	43.3

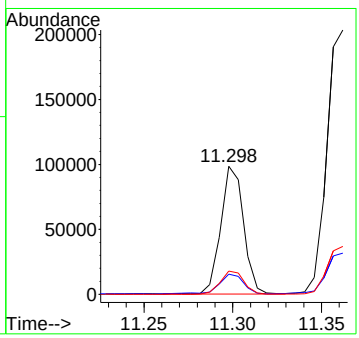


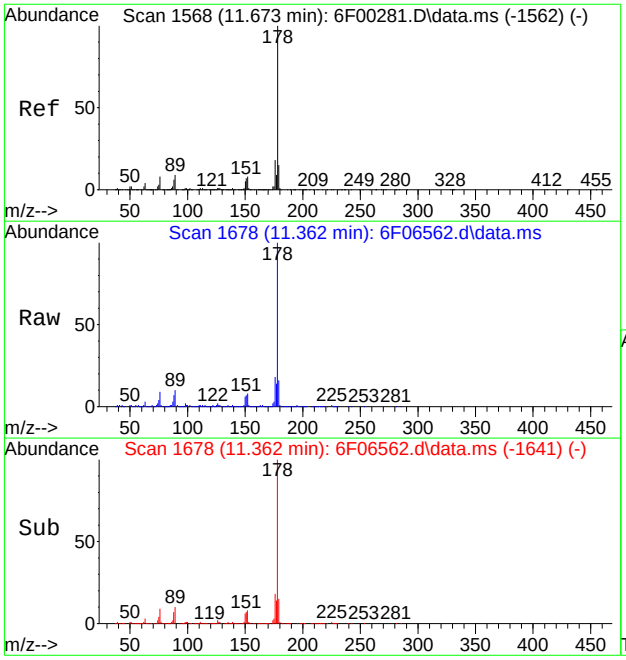


#84
Phenanthrene
Concen: 3.09 ppm
RT: 11.298 min Scan# 1666
Delta R.T. 0.000 min
Lab File: 6F06562.d
Acq: 13 Aug 2020 10:29 pm

Tgt Ion:178 Resp: 87710

Ion	Ratio	Lower	Upper
178	100		
179	15.2	0.0	45.6
176	18.1	0.0	48.6

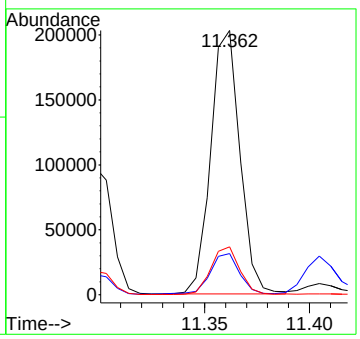


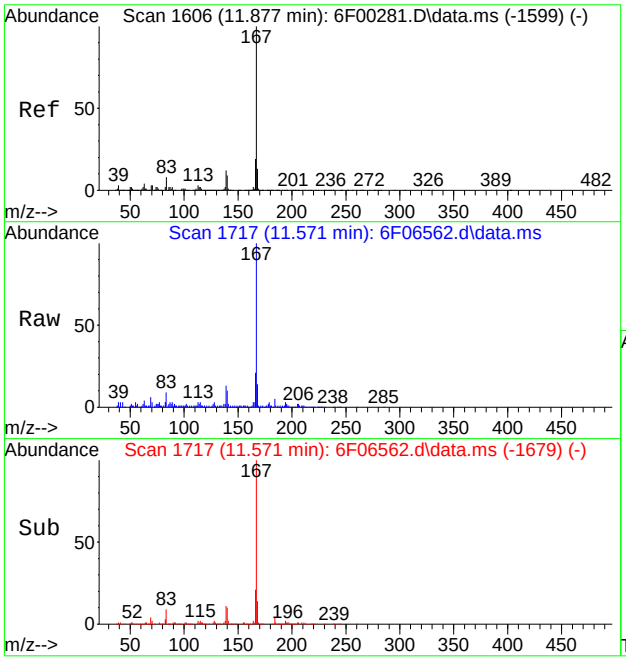


#85
Anthracene
Concen: 6.82 ppm
RT: 11.362 min Scan# 1678
Delta R.T. 0.000 min
Lab File: 6F06562.d
Acq: 13 Aug 2020 10:29 pm

Tgt Ion:178 Resp: 196819

Ion	Ratio	Lower	Upper
178	100		
179	15.1	0.0	45.4
176	18.1	0.0	48.2

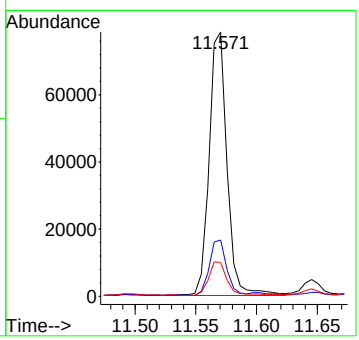


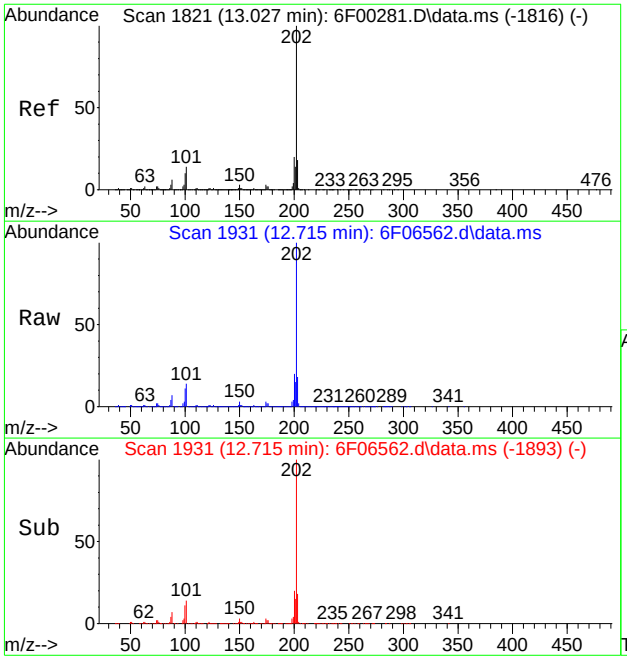


#87
Carbazole
Concen: 3.08 ppm
RT: 11.571 min Scan# 1717
Delta R.T. 0.005 min
Lab File: 6F06562.d
Acq: 13 Aug 2020 10:29 pm

Tgt Ion:167 Resp: 80194

Ion	Ratio	Lower	Upper
167	100		
166	20.9	0.0	50.9
139	12.3	0.0	43.2

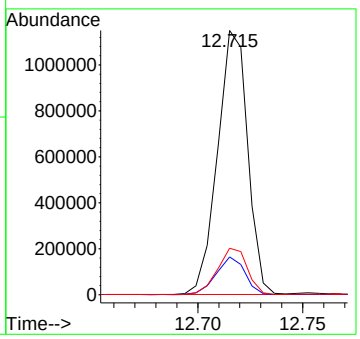


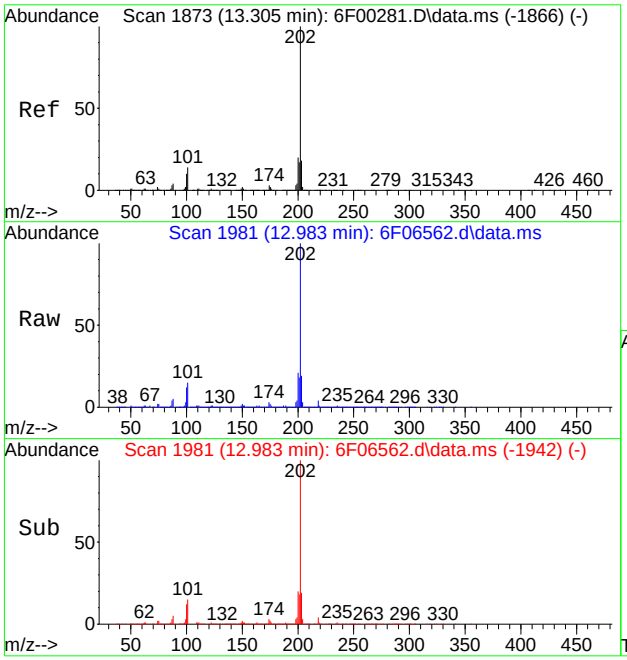


#91
Fluoranthene
Concen: 38.44 ppm
RT: 12.715 min Scan# 1931
Delta R.T. 0.005 min
Lab File: 6F06562.d
Acq: 13 Aug 2020 10:29 pm

Tgt Ion:202 Resp: 1149254

Ion	Ratio	Lower	Upper
202	100		
101	14.2	0.0	44.4
203	17.5	0.0	47.5

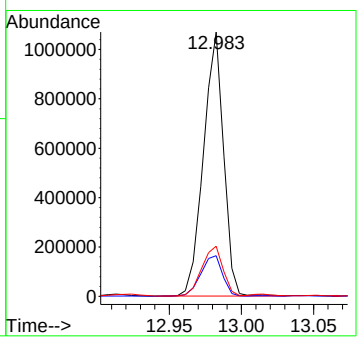


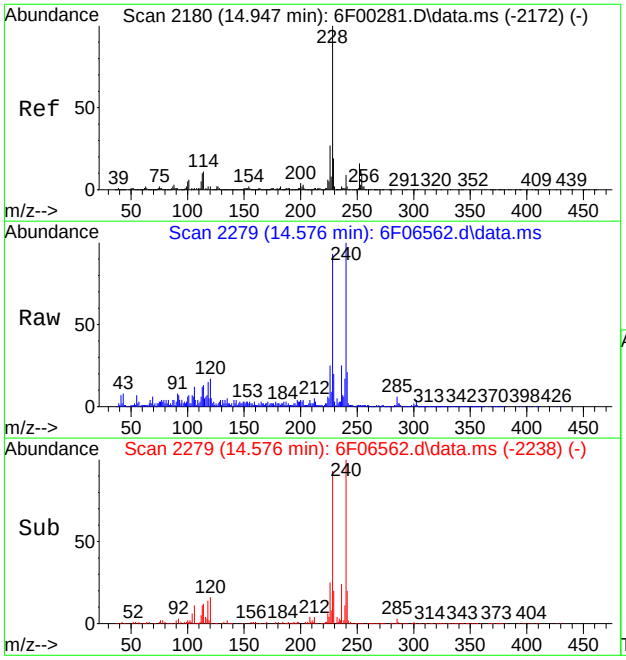


#94
Pyrene
Concen: 43.13 ppm
RT: 12.983 min Scan# 1981
Delta R.T. 0.011 min
Lab File: 6F06562.d
Acq: 13 Aug 2020 10:29 pm

Tgt Ion:202 Resp: 1034718

Ion	Ratio	Lower	Upper
202	100		
101	15.2	0.0	48.6
203	18.8	0.0	48.3

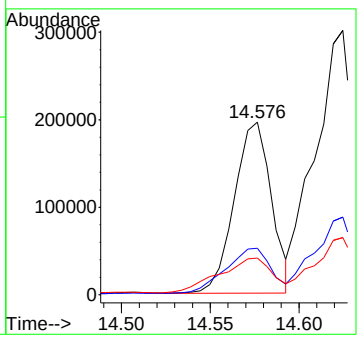


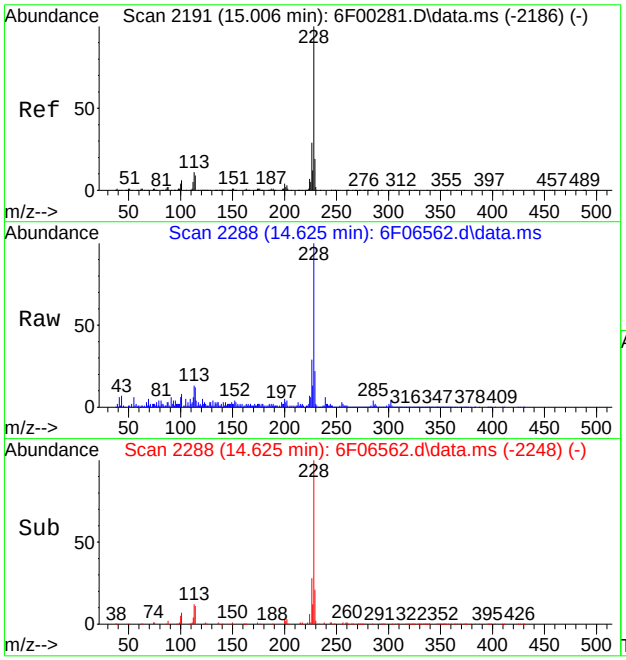


#99
Benzo[a]anthracene
Concen: 12.68 ppm
RT: 14.576 min Scan# 2279
Delta R.T. 0.022 min
Lab File: 6F06562.d
Acq: 13 Aug 2020 10:29 pm

Tgt Ion:228 Resp: 284641

Ion	Ratio	Lower	Upper
228	100		
226	26.3	0.0	56.8
229	19.6	0.0	49.8

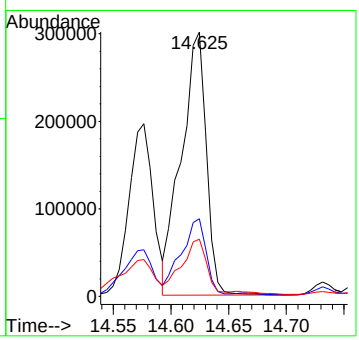


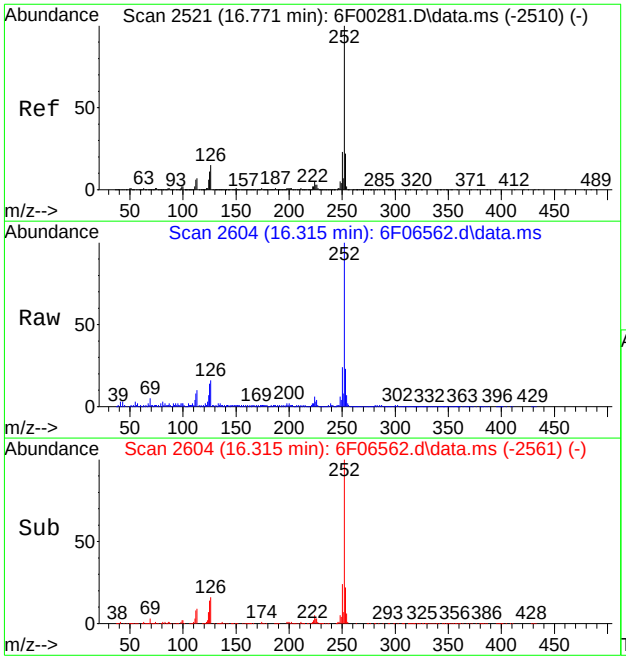


#100
Chrysene
Concen: 20.87 ppm
RT: 14.625 min Scan# 2288
Delta R.T. 0.016 min
Lab File: 6F06562.d
Acq: 13 Aug 2020 10:29 pm

Tgt Ion:228 Resp: 454511

Ion	Ratio	Lower	Upper
228	100		
226	29.0	0.0	59.3
229	20.6	0.0	49.8

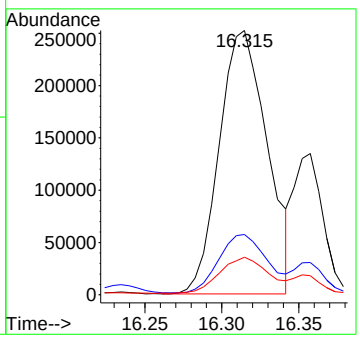


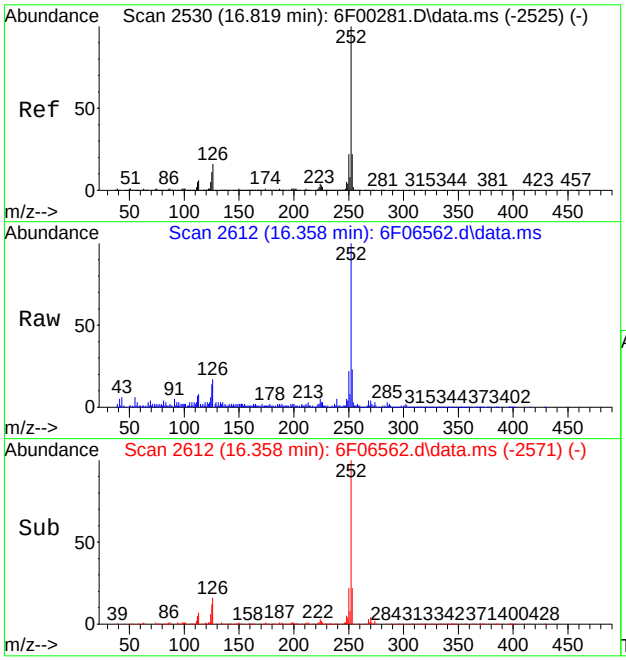


#104
Benzo[b]fluoranthene
Concen: 25.26 ppm
RT: 16.315 min Scan# 2604
Delta R.T. 0.032 min
Lab File: 6F06562.d
Acq: 13 Aug 2020 10:29 pm

Tgt Ion:252 Resp: 545902

Ion	Ratio	Lower	Upper
252	100		
253	22.1	0.0	51.7
125	13.4	0.0	44.0

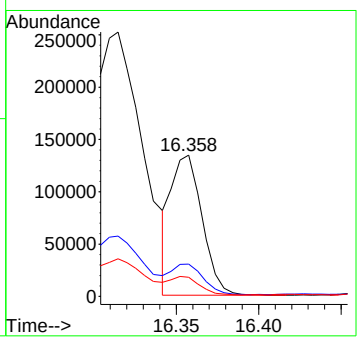


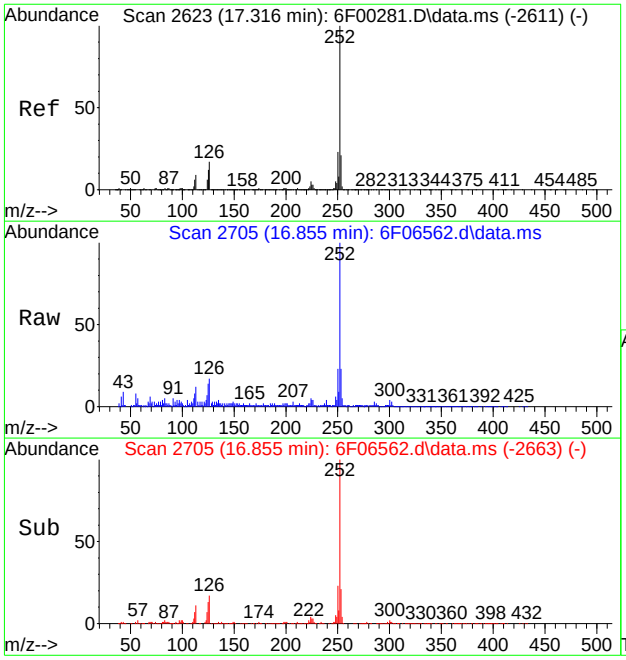


#105
Benzo[k]fluoranthene
Concen: 7.81 ppm
RT: 16.358 min Scan# 2612
Delta R.T. 0.022 min
Lab File: 6F06562.d
Acq: 13 Aug 2020 10:29 pm

Tgt Ion:252 Resp: 175512

Ion	Ratio	Lower	Upper
252	100		
253	21.1	0.0	51.9
125	11.4	0.0	43.3

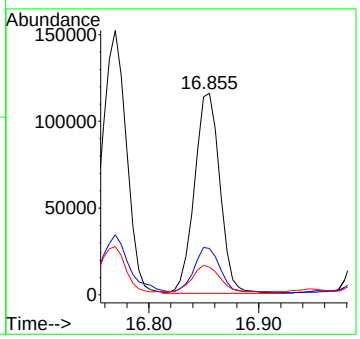


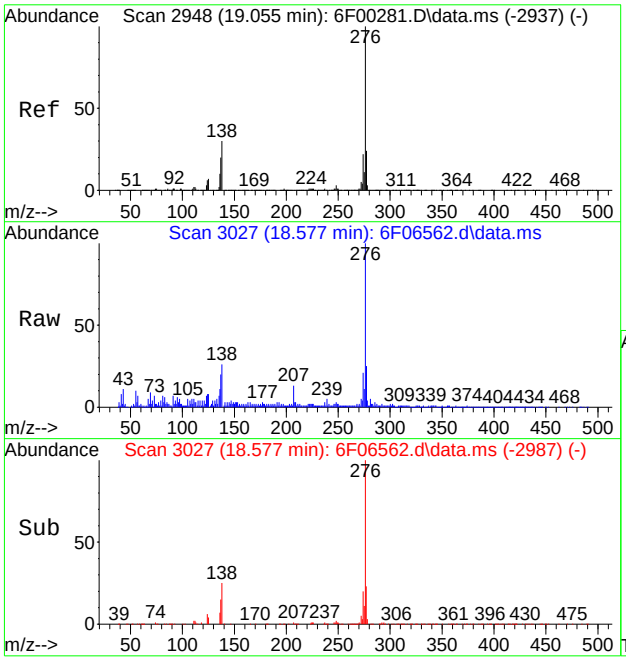


#106
Benzo[a]pyrene
Concen: 9.26 ppm
RT: 16.855 min Scan# 2705
Delta R.T. 0.027 min
Lab File: 6F06562.d
Acq: 13 Aug 2020 10:29 pm

Tgt Ion:252 Resp: 185883

Ion	Ratio	Lower	Upper
252	100		
253	21.5	0.0	52.0
125	12.4	0.0	44.6

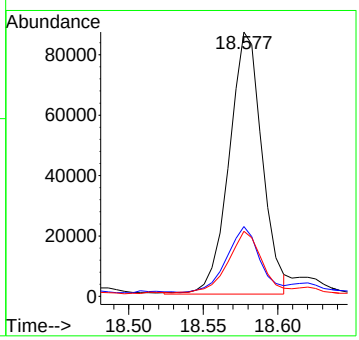


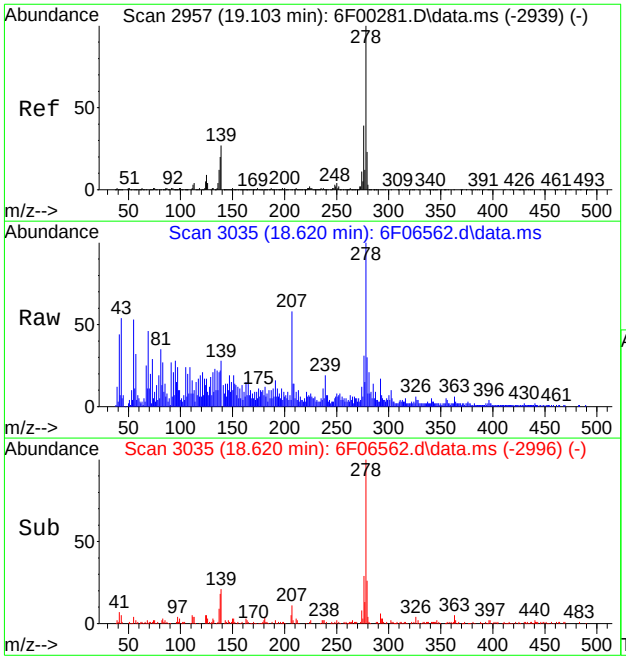


#107
Indeno[1,2,3-cd]pyrene
Concen: 7.14 ppm m
RT: 18.577 min Scan# 3027
Delta R.T. 0.016 min
Lab File: 6F06562.d
Acq: 13 Aug 2020 10:29 pm

Tgt Ion:276 Resp: 133391

Ion	Ratio	Lower	Upper
276	100		
138	26.5	0.0	56.9
277	24.6	0.0	53.9

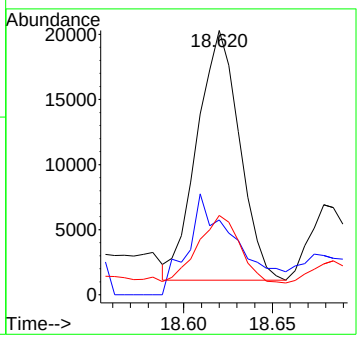


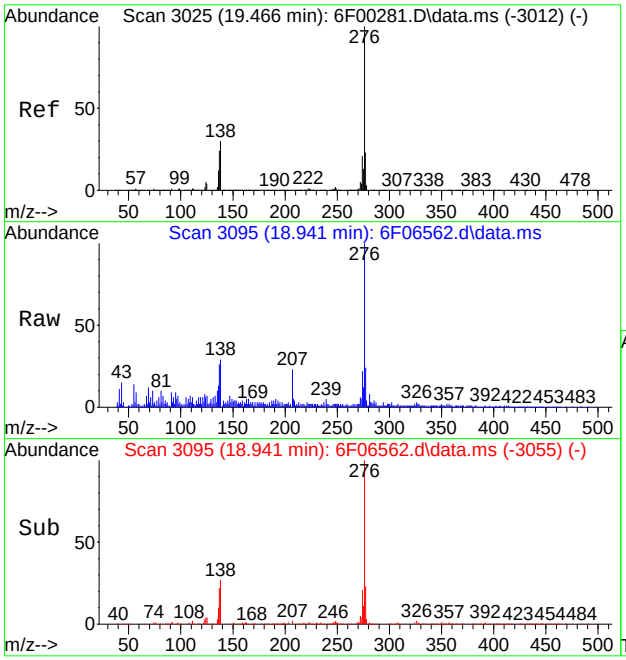


#108
Dibenz[a,h]anthracene
Concen: 1.60 ppm
RT: 18.620 min Scan# 3035
Delta R.T. 0.011 min
Lab File: 6F06562.d
Acq: 13 Aug 2020 10:29 pm

Tgt Ion:278 Resp: 31855

Ion	Ratio	Lower	Upper
278	100		
139	26.2	0.0	51.9
279	27.6	0.0	54.3

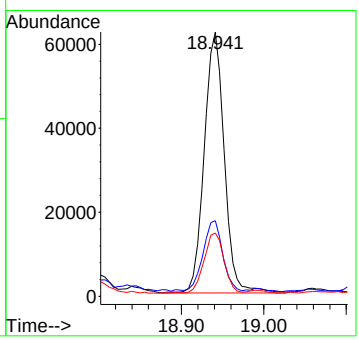




#109
Benzo[g,h,i]perylene
Concen: 5.22 ppm
RT: 18.941 min Scan# 3095
Delta R.T. 0.016 min
Lab File: 6F06562.d
Acq: 13 Aug 2020 10:29 pm

Tgt Ion:276 Resp: 105302

Ion	Ratio	Lower	Upper
276	100		
138	26.7	0.0	59.3
277	23.0	0.0	53.8



Manual Integration Approval Summary

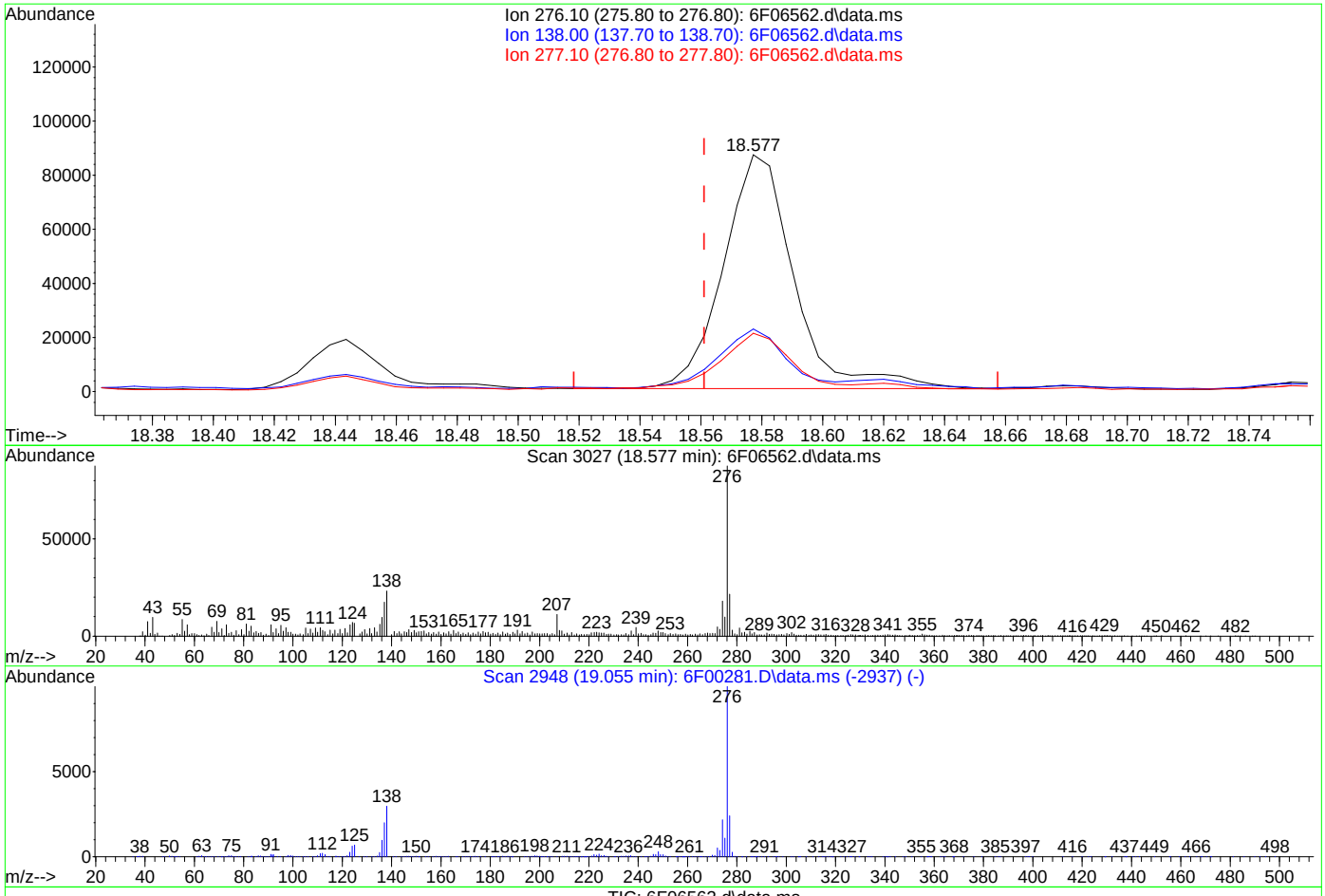
Sample Number: FA77689-8
Lab FileID: 6F06562.D
Injection Time: 08/13/20 22:29
Method: SW846 8270E
Analyst approved: 08/14/20 10:45 Martha Valls
Supervisor approved: 08/14/20 14:57 Nicole McCampbell

Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		18.58	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s6f253\
Data File : 6F06562.d
Acq On : 13 Aug 2020 10:29 pm
Operator : marthav
Sample : fa77689-8 E
Misc : op81538,S6F253,30.1,,,1,1,soil
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Aug 14 04:42:47 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration



TIC: 6F06562.d\data.ms

(107) Indeno[1,2,3-cd]pyrene (P)

18.577min (+0.016) 7.49ppm

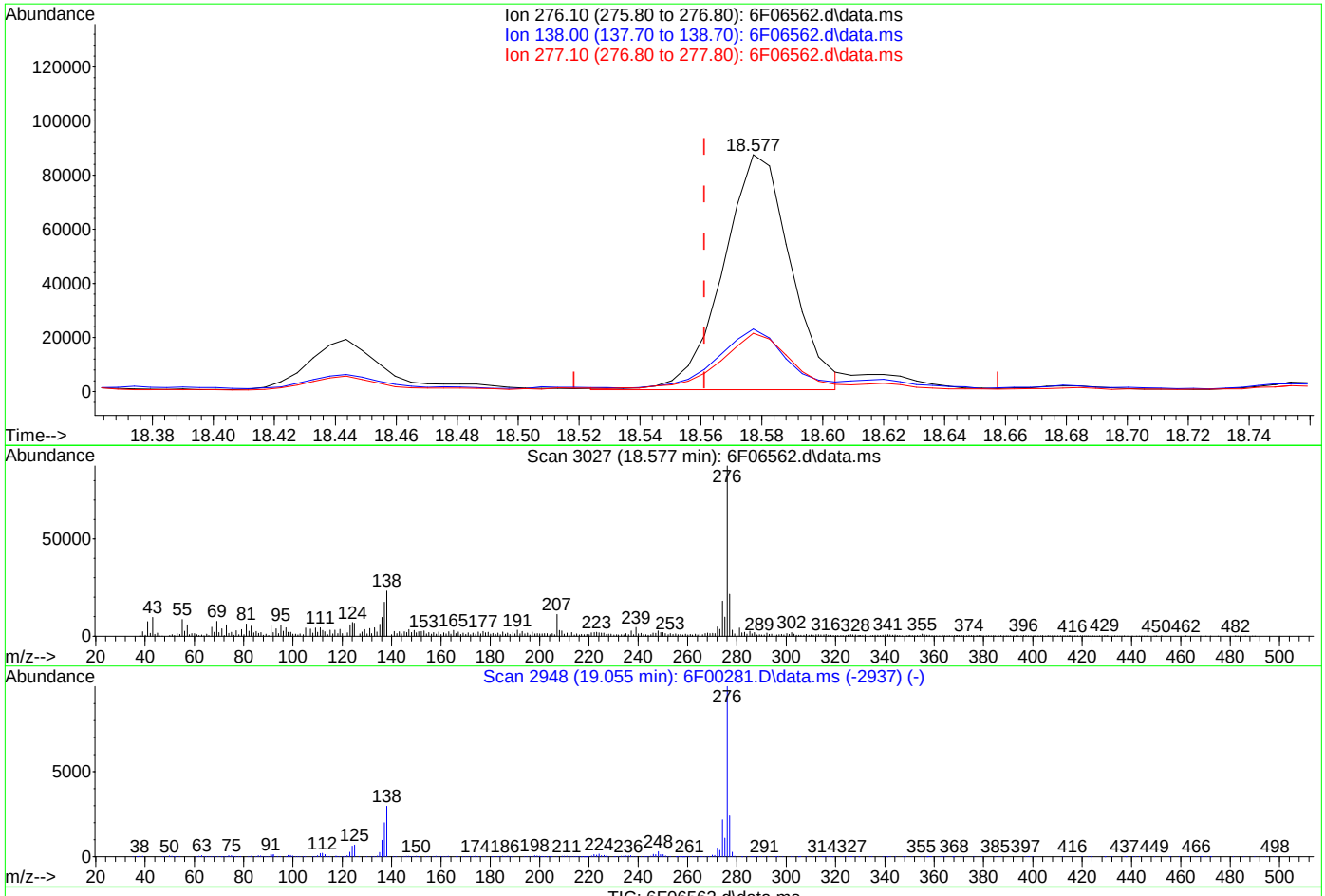
response 139971

Ion	Exp%	Act%
276.10	100	100
138.00	26.90	25.00
277.10	23.90	23.61
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s6f253\
Data File : 6F06562.d
Acq On : 13 Aug 2020 10:29 pm
Operator : marthav
Sample : fa77689-8 E
Misc : op81538,S6F253,30.1,,,1,1,soil
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Aug 14 04:42:47 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration



TIC: 6F06562.d\data.ms

(107) Indeno[1,2,3-cd]pyrene (P)

18.577min (+0.016) 7.14ppm m

response 133391

Ion	Exp%	Act%
276.10	100	100
138.00	26.90	26.46
277.10	23.90	24.59
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 08/14/20 14:57

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s6f253\
Data File : 6F06563.d
Acq On : 13 Aug 2020 10:54 pm
Operator : marthav
Sample : fa77689-9 E
Misc : op81538,S6F253,29.9,,,1,1,soil
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Aug 14 05:24:49 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

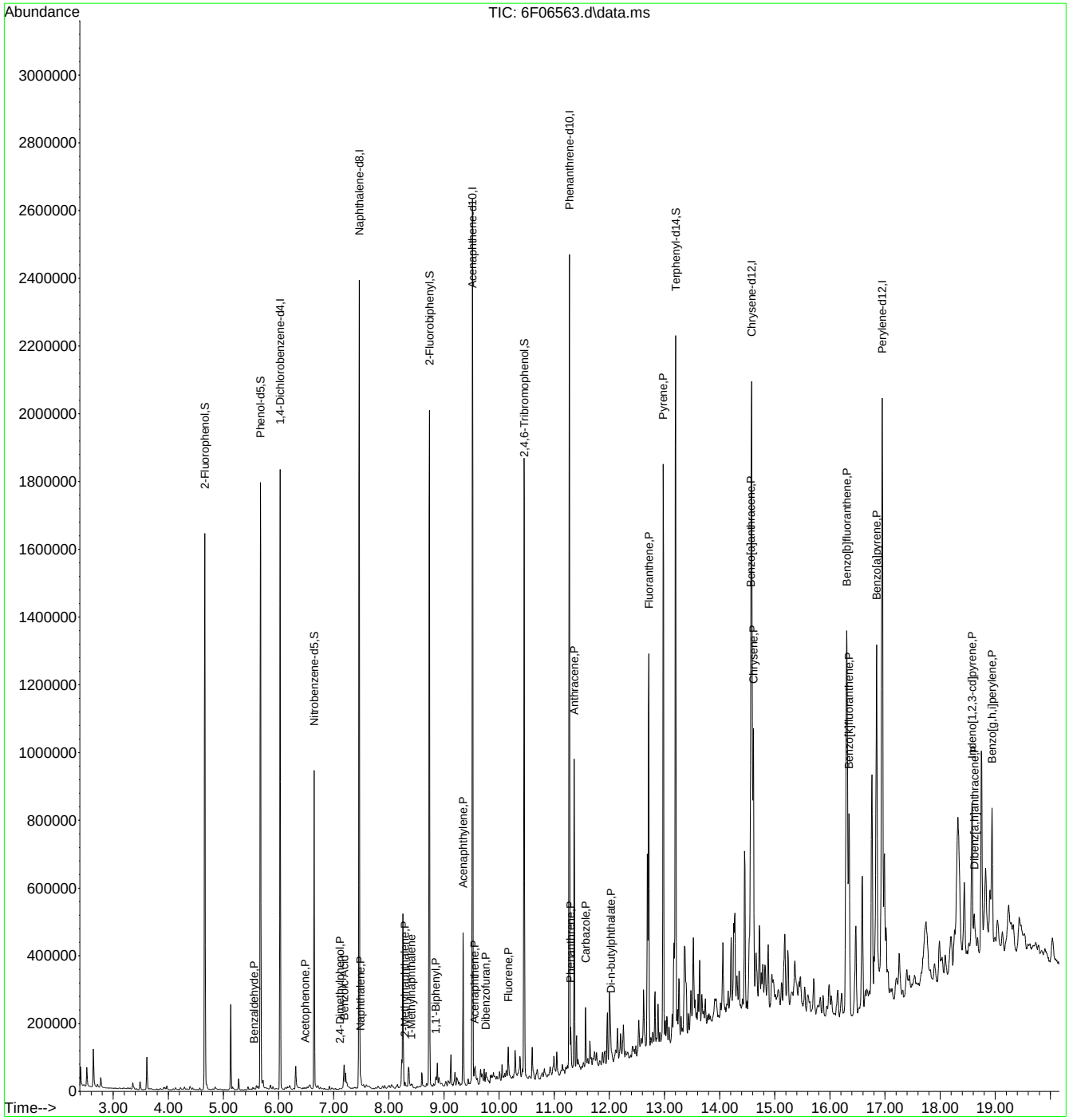
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	6.029	152	283748	40.00	ppm		0.00
22) Naphthalene-d8	7.463	136	1034292	40.00	ppm		0.00
43) Acenaphthene-d10	9.516	164	537481	40.00	ppm		0.00
70) Phenanthrene-d10	11.276	188	950544	40.00	ppm		0.00
92) Chrysene-d12	14.582	240	709392	40.00	ppm		0.01
102) Perylene-d12	16.951	264	887860	40.00	ppm		0.03
System Monitoring Compounds							
7) 2-Fluorophenol	4.660	112	495036	46.17	ppm		0.01
Spiked Amount 100.000	Range 40 - 102		Recovery = 46.17%				
9) Phenol-d5	5.671	99	686032	53.90	ppm		0.00
Spiked Amount 100.000	Range 41 - 100		Recovery = 53.90%				
23) Nitrobenzene-d5	6.644	82	277888	24.49	ppm		0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 48.98%				
47) 2-Fluorobiphenyl	8.736	172	611512	29.11	ppm		0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 58.22%				
75) 2,4,6-Tribromophenol	10.458	330	234669	73.35	ppm		0.00
Spiked Amount 100.000	Range 42 - 108		Recovery = 73.35%				
95) Terphenyl-d14	13.202	244	685915	34.40	ppm		0.00
Spiked Amount 50.000	Range 45 - 119		Recovery = 68.80%				
Target Compounds							Qvalue
5) Benzaldehyde	5.553	106	1601	0.18	ppm	#	76
18) Acetophenone	6.478	105	1168	0.08	ppm		83
27) 2,4-Dimethylphenol	7.110	107	1494	0.16	ppm		75
30) Benzoic Acid	7.190	105	18743	2.79	ppm		95
34) Naphthalene	7.484	128	7283	0.25	ppm	#	50
40) 2-Methylnaphthalene	8.292	141	3660	0.21	ppm		92
41) 1-Methylnaphthalene	8.404	142	2885	0.15	ppm		88
48) 1,1'-Biphenyl	8.848	154	1512	0.07	ppm		93
52) Acenaphthylene	9.345	152	204208	7.60	ppm		99
57) Acenaphthene	9.554	153	9921	0.56	ppm		97
60) Dibenzofuran	9.757	168	6770	0.27	ppm		99
65) Fluorene	10.164	166	32671	1.64	ppm		98
84) Phenanthrene	11.298	178	46039	1.62	ppm		99
85) Anthracene	11.362	178	358151	12.38	ppm		99
87) Carbazole	11.570	167	68991	2.65	ppm		99
89) Di-n-butylphthalate	12.025	149	3198	0.10	ppm		83
91) Fluoranthene	12.715	202	464975	15.52	ppm		98
94) Pyrene	12.977	202	661891	26.05	ppm		98
99) Benzo[a]anthracene	14.566	228	351813	14.80	ppm		100
100) Chrysene	14.614	228	455706	19.76	ppm		99
104) Benzo[b]fluoranthene	16.304	252	842778	29.57	ppm		98
105) Benzo[k]fluoranthene	16.347	252	291411	9.83	ppm		96
106) Benzo[a]pyrene	16.849	252	525231	19.85	ppm		99
107) Indeno[1,2,3-cd]pyrene	18.577	276	287181m	11.66	ppm		
108) Dibenz[a,h]anthracene	18.620	278	64668	2.46	ppm		96
109) Benzo[g,h,i]perylene	18.941	276	259730	9.77	ppm		96

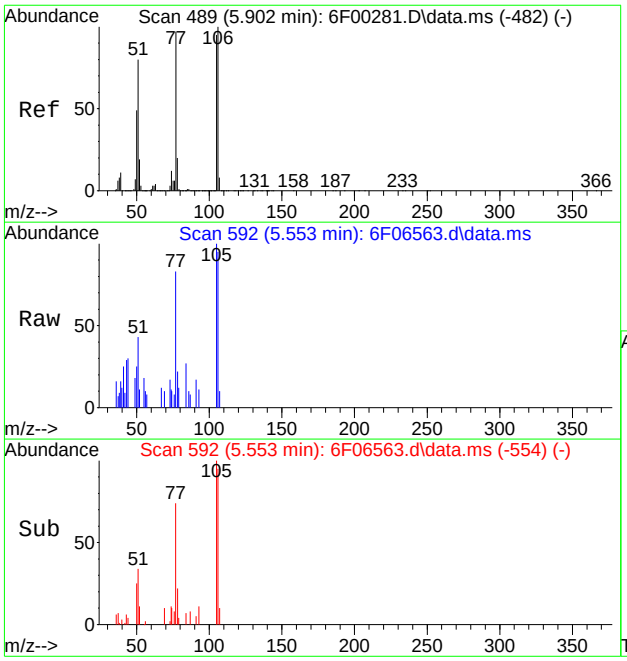
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s6f253\
Data File : 6F06563.d
Acq On : 13 Aug 2020 10:54 pm
Operator : marthav
Sample : fa77689-9 E
Misc : op81538,S6F253,29.9,,,1,1,soil
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Aug 14 05:24:49 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

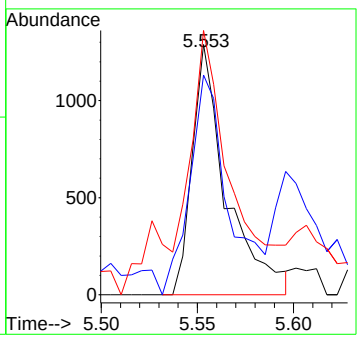


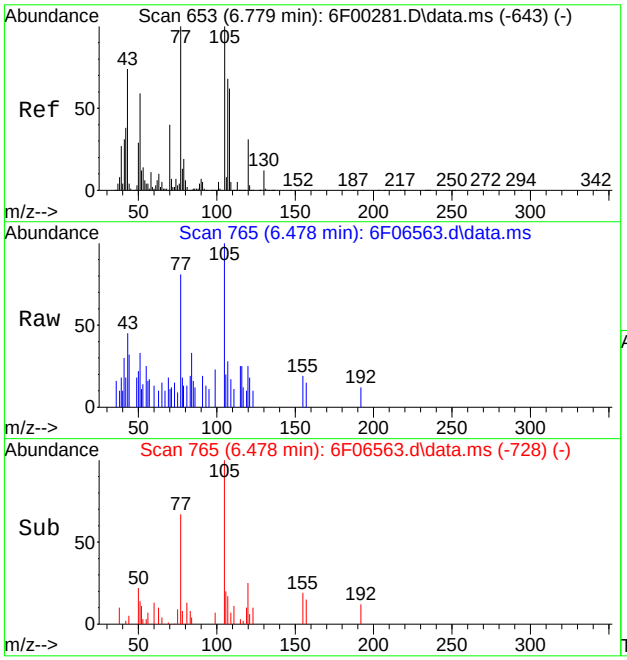


#5
Benzaldehyde
Concen: 0.18 ppm
RT: 5.553 min Scan# 592
Delta R.T. 0.005 min
Lab File: 6F06563.d
Acq: 13 Aug 2020 10:54 pm

Tgt Ion:106 Resp: 1601

Ion	Ratio	Lower	Upper
106	100		
77	66.3	74.8	134.8#
105	89.9	70.7	130.7

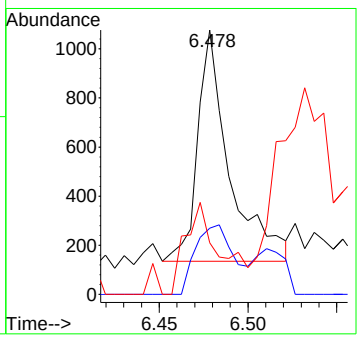


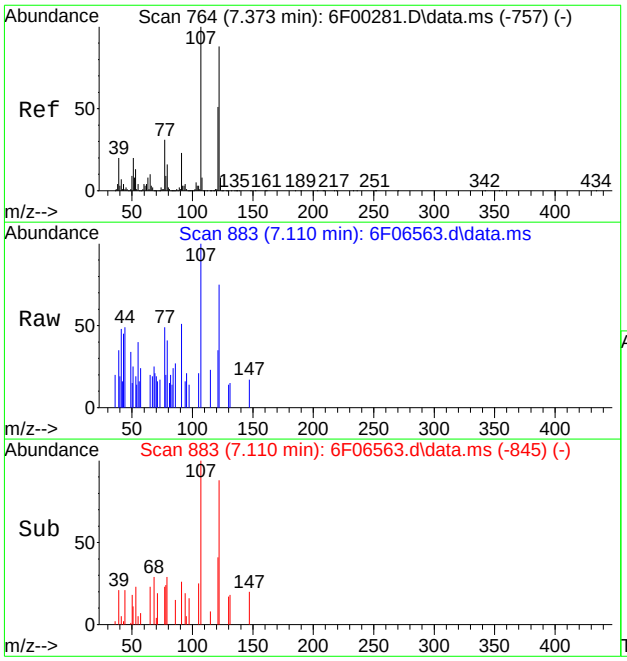


#18
Acetophenone
Concen: 0.08 ppm
RT: 6.478 min Scan# 765
Delta R.T. -0.000 min
Lab File: 6F06563.d
Acq: 13 Aug 2020 10:54 pm

Tgt Ion:105 Resp: 1168

Ion	Ratio	Lower	Upper
105	100		
120	22.0	0.5	60.5
106	0.0	0.0	37.8

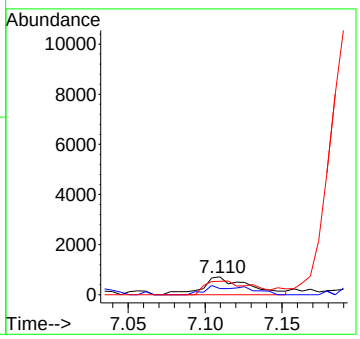


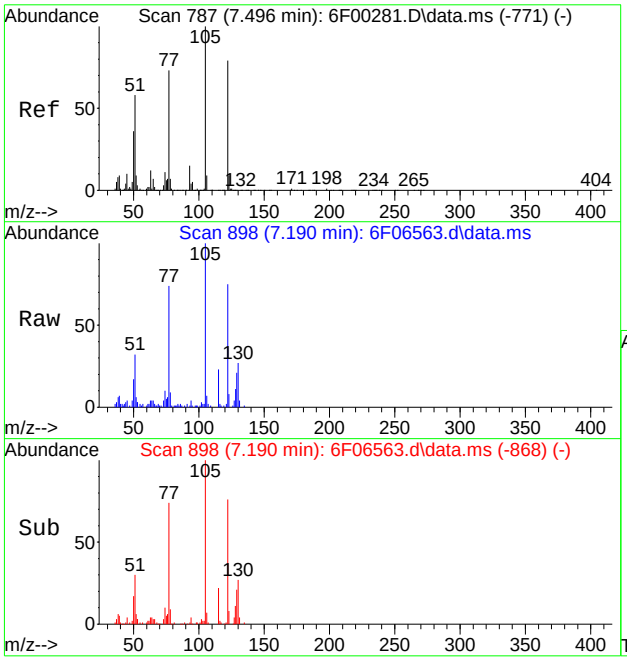


#27
2,4-Dimethylphenol
Concen: 0.16 ppm
RT: 7.110 min Scan# 883
Delta R.T. 0.005 min
Lab File: 6F06563.d
Acq: 13 Aug 2020 10:54 pm

Tgt Ion:107 Resp: 1494

Ion	Ratio	Lower	Upper
107	100		
121	38.6	21.9	81.9
122	64.8	61.6	121.6

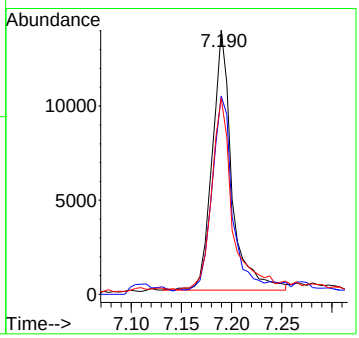


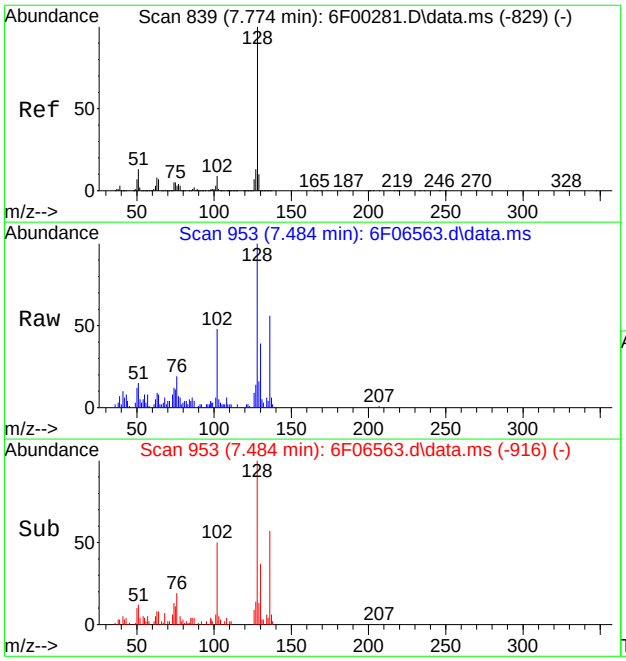


#30
Benzoic Acid
Concen: 2.79 ppm
RT: 7.190 min Scan# 898
Delta R.T. -0.037 min
Lab File: 6F06563.d
Acq: 13 Aug 2020 10:54 pm

Tgt Ion:105 Resp: 18743

Ion	Ratio	Lower	Upper
105	100		
122	73.3	51.7	111.7
77	72.6	42.8	102.8

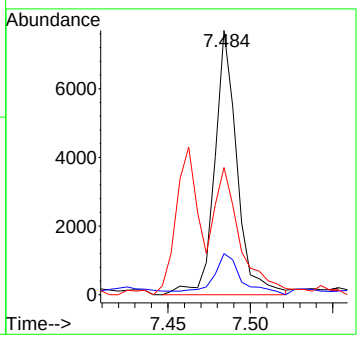


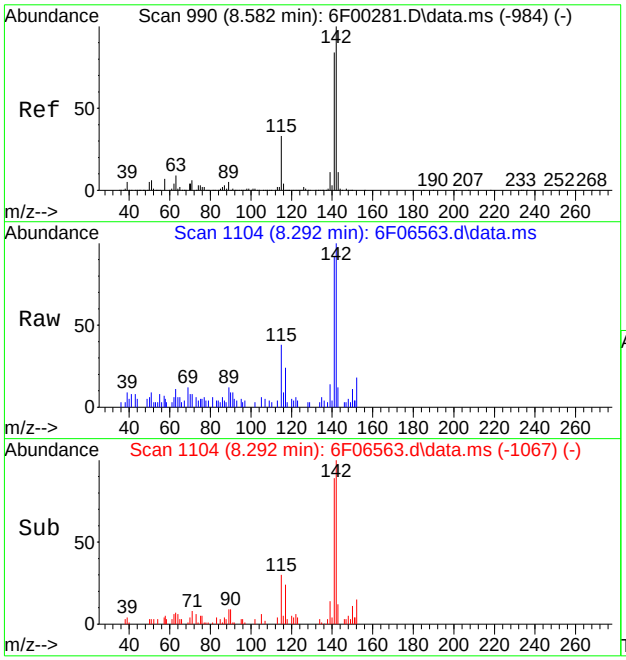


#34
Naphthalene
Concen: 0.25 ppm
RT: 7.484 min Scan# 953
Delta R.T. -0.000 min
Lab File: 6F06563.d
Acq: 13 Aug 2020 10:54 pm

Tgt Ion:128 Resp: 7283

Ion	Ratio	Lower	Upper
128	100		
129	15.1	0.0	41.3
102	45.6	0.0	38.9#

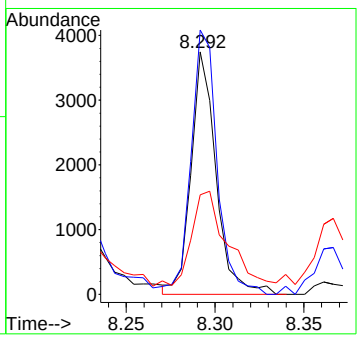


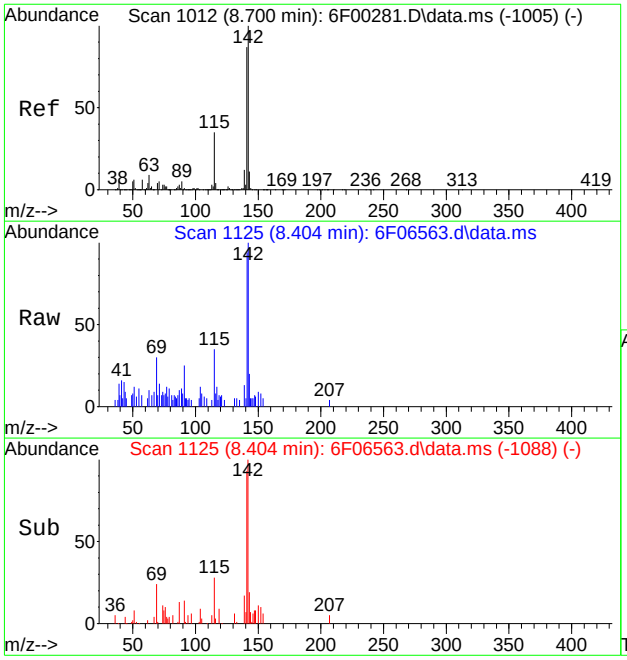


#40
2-Methylnaphthalene
Concen: 0.21 ppm
RT: 8.292 min Scan# 1104
Delta R.T. -0.000 min
Lab File: 6F06563.d
Acq: 13 Aug 2020 10:54 pm

Tgt Ion:141 Resp: 3660

Ion	Ratio	Lower	Upper
141	100		
142	107.9	87.4	147.4
115	34.8	8.3	68.3

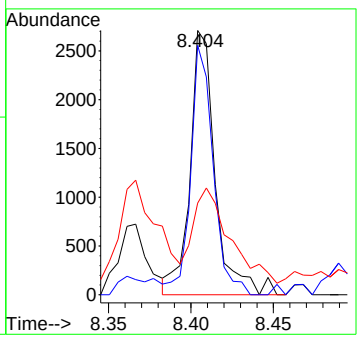


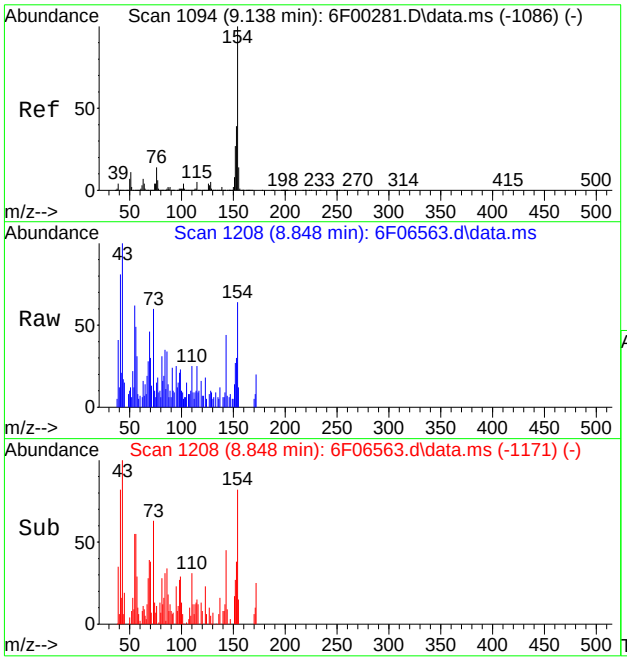


#41
1-Methylnaphthalene
Concen: 0.15 ppm
RT: 8.404 min Scan# 1125
Delta R.T. -0.000 min
Lab File: 6F06563.d
Acq: 13 Aug 2020 10:54 pm

Tgt Ion:142 Resp: 2885

Ion	Ratio	Lower	Upper
142	100		
141	95.3	58.9	118.9
115	19.3	3.8	63.8

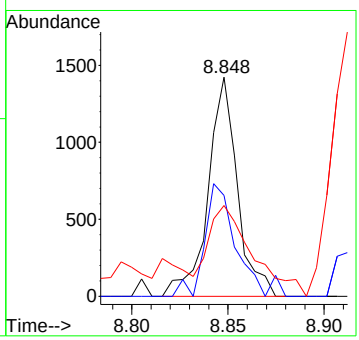


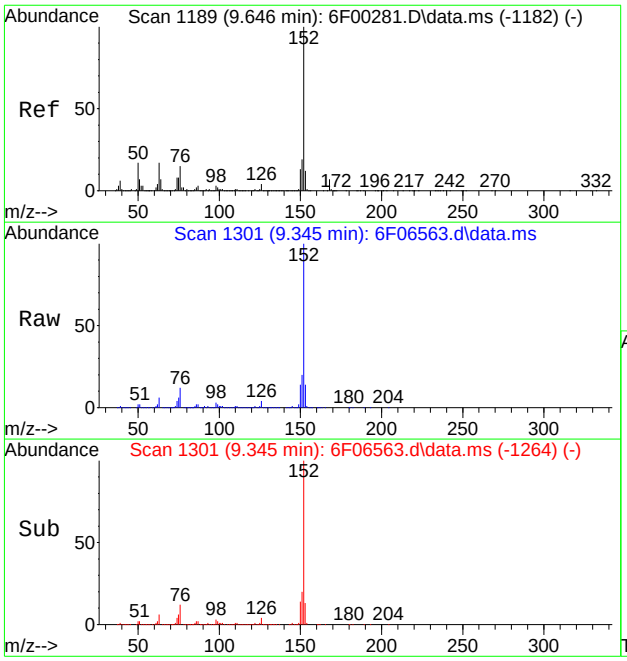


#48
1,1'-Biphenyl
Concen: 0.07 ppm
RT: 8.848 min Scan# 1208
Delta R.T. -0.000 min
Lab File: 6F06563.d
Acq: 13 Aug 2020 10:54 pm

Tgt Ion:154 Resp: 1512

Ion	Ratio	Lower	Upper
154	100		
153	46.1	10.4	70.4
152	29.2	0.0	57.6

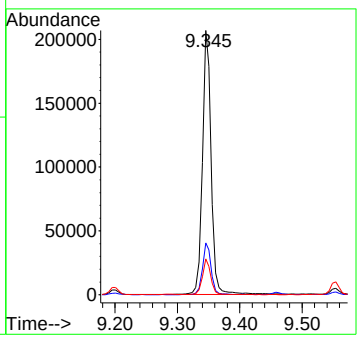


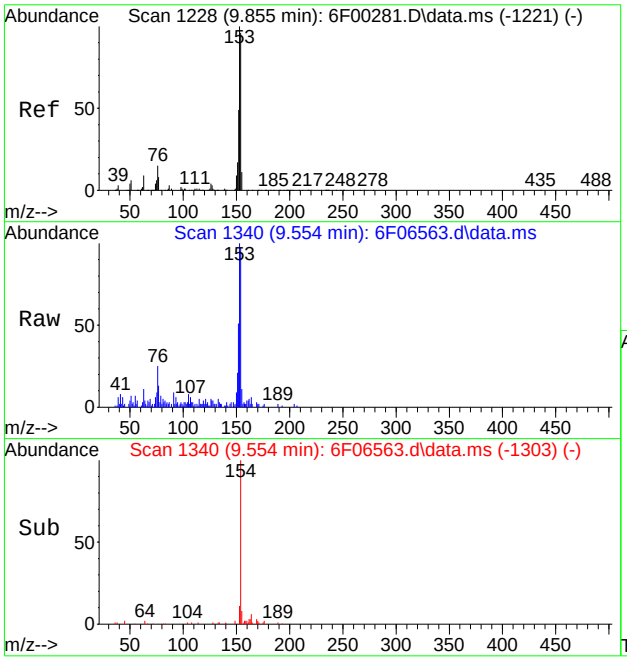


#52
Acenaphthylene
Concen: 7.60 ppm
RT: 9.345 min Scan# 1301
Delta R.T. -0.000 min
Lab File: 6F06563.d
Acq: 13 Aug 2020 10:54 pm

Tgt Ion:152 Resp: 204208

Ion	Ratio	Lower	Upper
152	100		
151	19.5	0.0	49.9
153	13.5	0.0	43.2

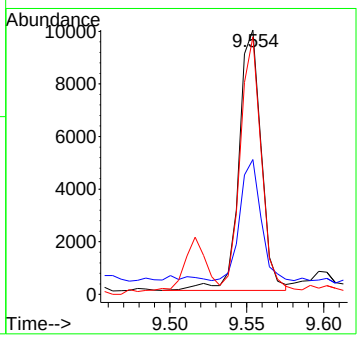


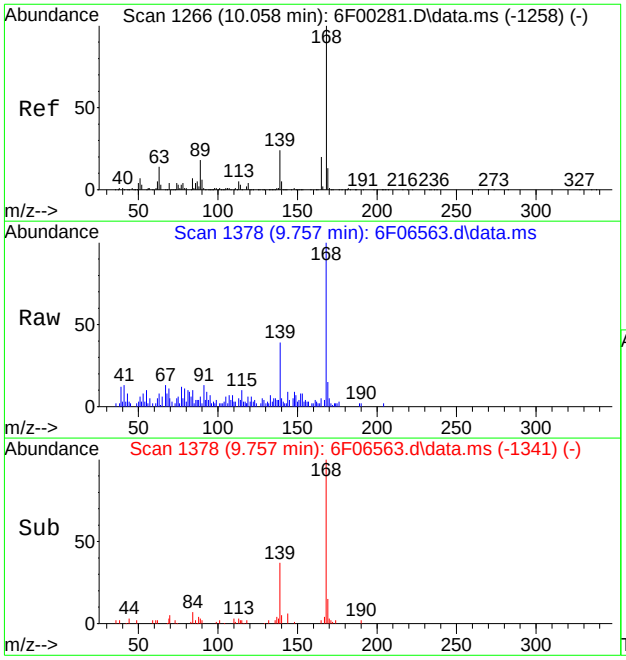


#57
Acenaphthene
Concen: 0.56 ppm
RT: 9.554 min Scan# 1340
Delta R.T. -0.000 min
Lab File: 6F06563.d
Acq: 13 Aug 2020 10:54 pm

Tgt Ion:153 Resp: 9921

Ion	Ratio	Lower	Upper
153	100		
152	46.6	16.2	76.2
154	97.3	63.3	123.3

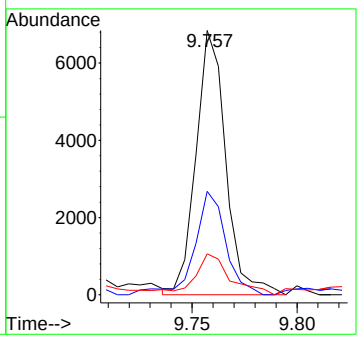


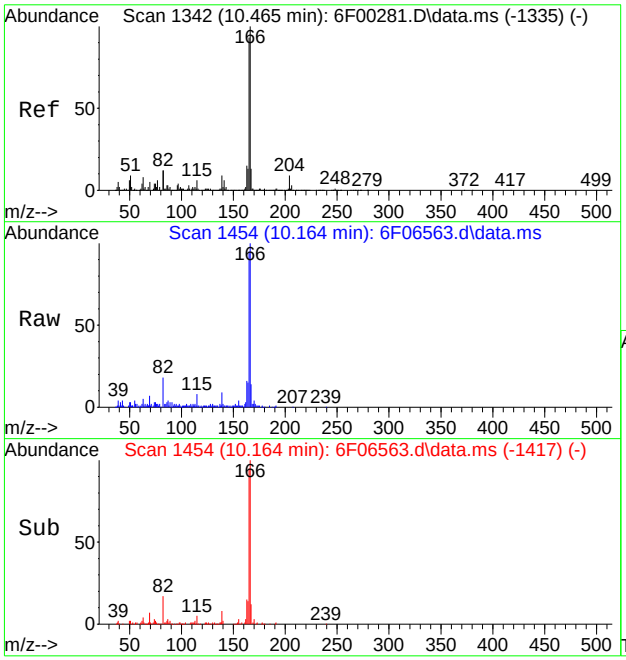


#60
Dibenzofuran
Concen: 0.27 ppm
RT: 9.757 min Scan# 1378
Delta R.T. -0.000 min
Lab File: 6F06563.d
Acq: 13 Aug 2020 10:54 pm

Tgt Ion:168 Resp: 6770

Ion	Ratio	Lower	Upper
168	100		
139	37.6	7.1	67.1
169	13.4	0.0	43.6

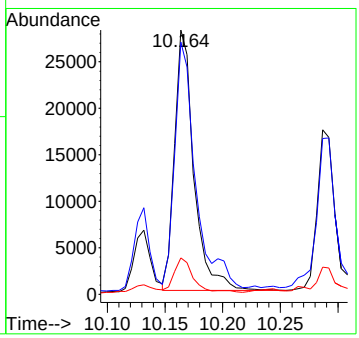


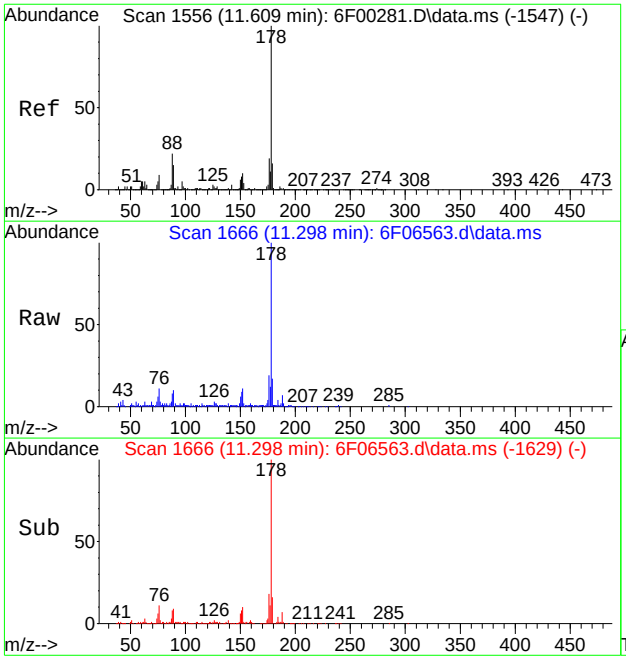


#65
Fluorene
Concen: 1.64 ppm
RT: 10.164 min Scan# 1454
Delta R.T. -0.000 min
Lab File: 6F06563.d
Acq: 13 Aug 2020 10:54 pm

Tgt Ion:166 Resp: 32671

Ion	Ratio	Lower	Upper
166	100		
165	94.9	63.2	123.2
167	12.6	0.0	43.3

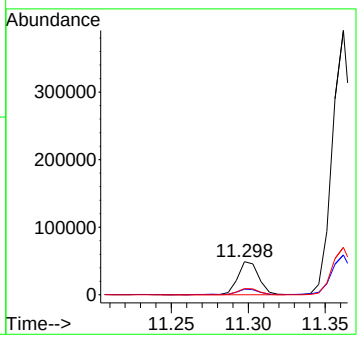


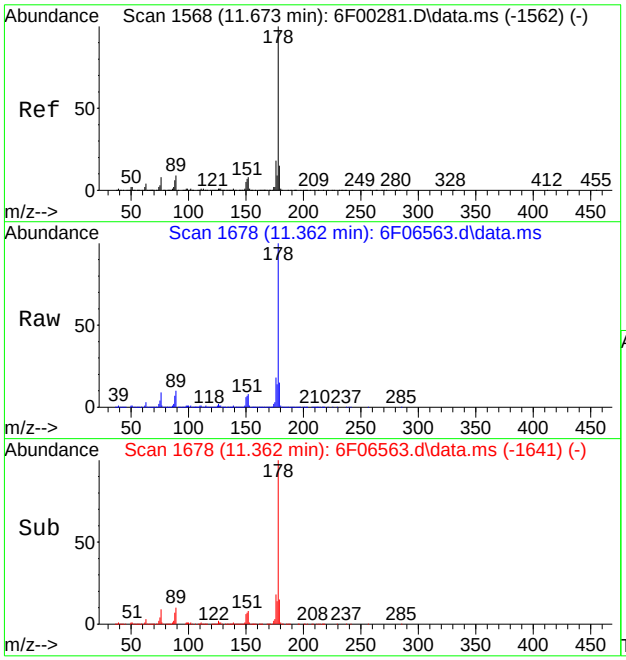


#84
Phenanthrene
Concen: 1.62 ppm
RT: 11.298 min Scan# 1666
Delta R.T. -0.000 min
Lab File: 6F06563.d
Acq: 13 Aug 2020 10:54 pm

Tgt Ion:178 Resp: 46039

Ion	Ratio	Lower	Upper
178	100		
179	16.2	0.0	45.6
176	18.4	0.0	48.6

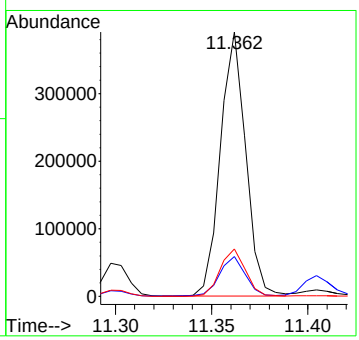


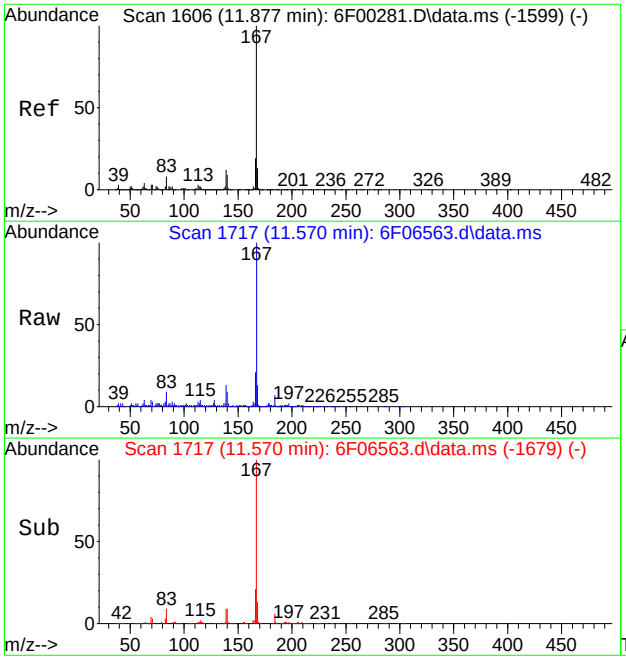


#85
Anthracene
Concen: 12.38 ppm
RT: 11.362 min Scan# 1678
Delta R.T. -0.000 min
Lab File: 6F06563.d
Acq: 13 Aug 2020 10:54 pm

Tgt Ion:178 Resp: 358151

Ion	Ratio	Lower	Upper
178	100		
179	14.8	0.0	45.4
176	18.0	0.0	48.2

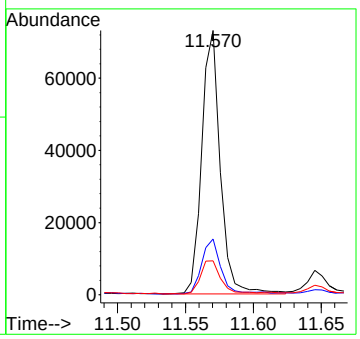


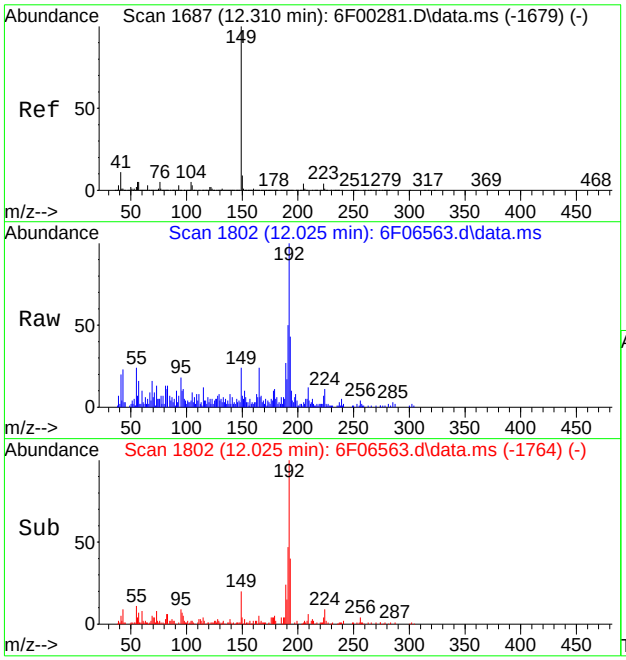


#87
Carbazole
Concen: 2.65 ppm
RT: 11.570 min Scan# 1717
Delta R.T. 0.005 min
Lab File: 6F06563.d
Acq: 13 Aug 2020 10:54 pm

Tgt Ion:167 Resp: 68991

Ion	Ratio	Lower	Upper
167	100		
166	20.7	0.0	50.9
139	12.3	0.0	43.2

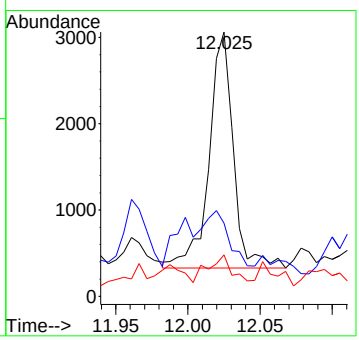


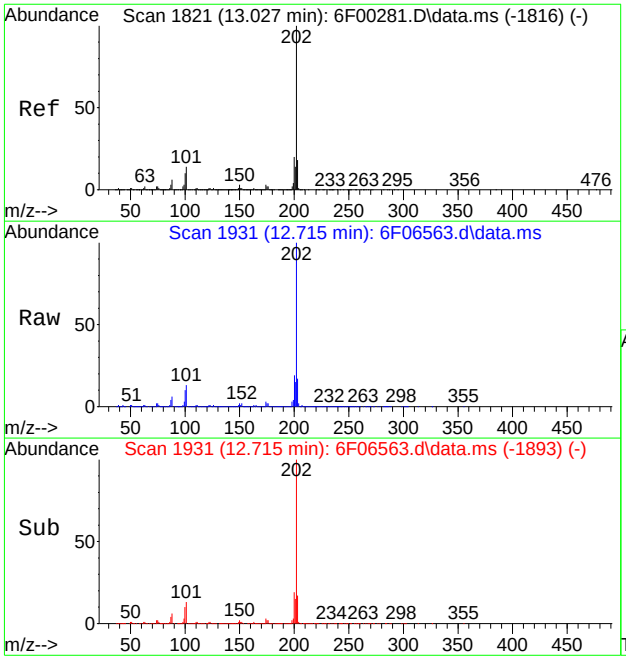


#89
Di-n-butylphthalate
Concen: 0.10 ppm
RT: 12.025 min Scan# 1802
Delta R.T. 0.005 min
Lab File: 6F06563.d
Acq: 13 Aug 2020 10:54 pm

Tgt Ion:149 Resp: 3198

Ion	Ratio	Lower	Upper
149	100		
150	17.5	0.0	39.2
104	6.8	0.0	34.7

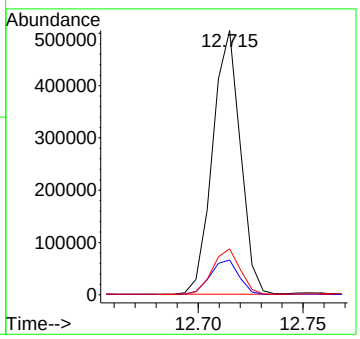


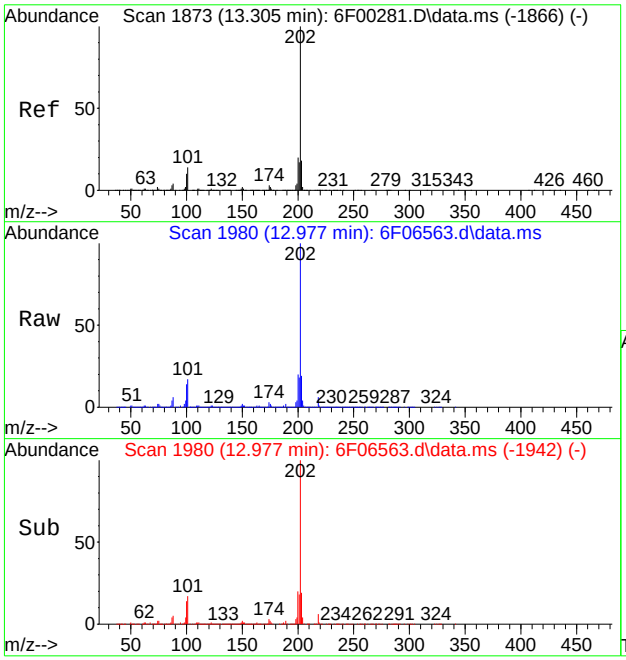


#91
Fluoranthene
Concen: 15.52 ppm
RT: 12.715 min Scan# 1931
Delta R.T. 0.005 min
Lab File: 6F06563.d
Acq: 13 Aug 2020 10:54 pm

Tgt Ion:202 Resp: 464975

Ion	Ratio	Lower	Upper
202	100		
101	13.0	0.0	44.4
203	17.3	0.0	47.5

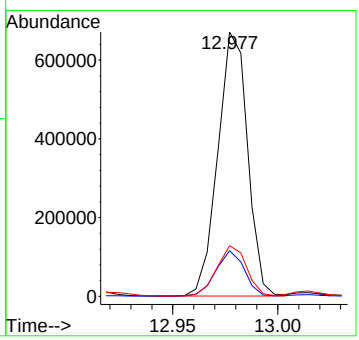


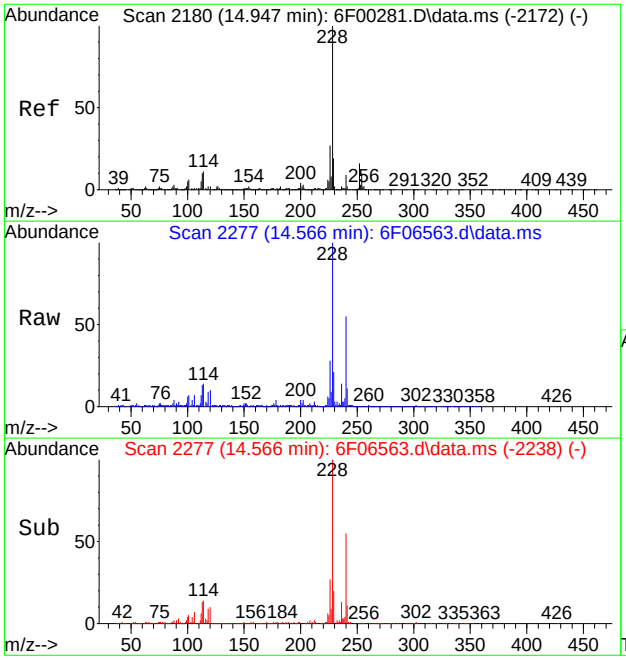


#94
Pyrene
Concen: 26.05 ppm
RT: 12.977 min Scan# 1980
Delta R.T. 0.005 min
Lab File: 6F06563.d
Acq: 13 Aug 2020 10:54 pm

Tgt Ion:202 Resp: 661891

Ion	Ratio	Lower	Upper
202	100		
101	17.2	0.0	48.6
203	18.9	0.0	48.3

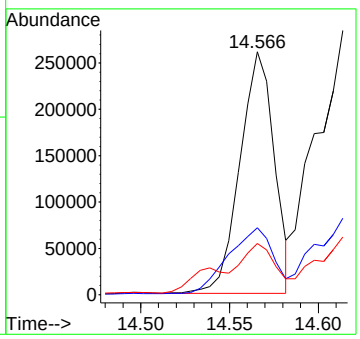


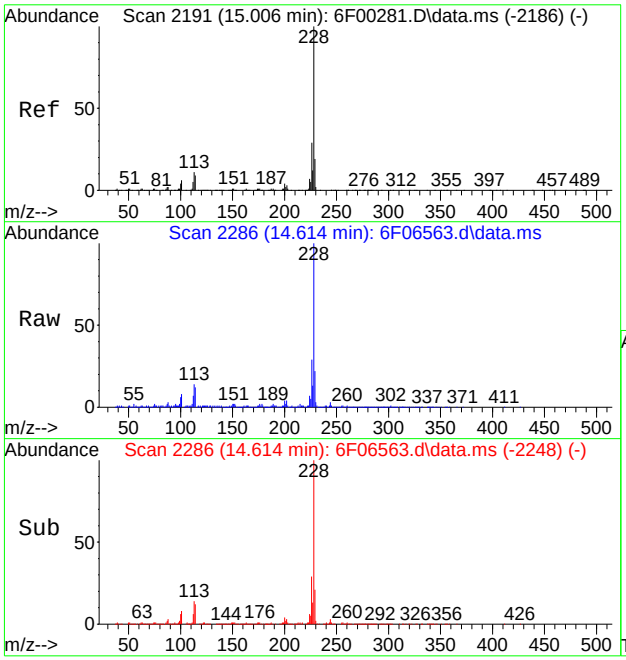


#99
Benzo[a]anthracene
Concen: 14.80 ppm
RT: 14.566 min Scan# 2277
Delta R.T. 0.011 min
Lab File: 6F06563.d
Acq: 13 Aug 2020 10:54 pm

Tgt Ion:228 Resp: 351813

Ion	Ratio	Lower	Upper
228	100		
226	27.2	0.0	56.8
229	19.7	0.0	49.8

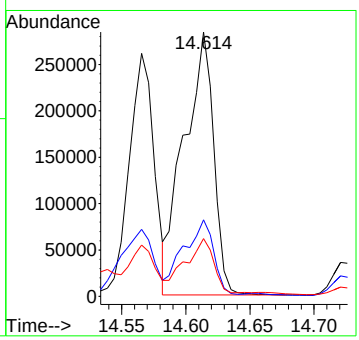


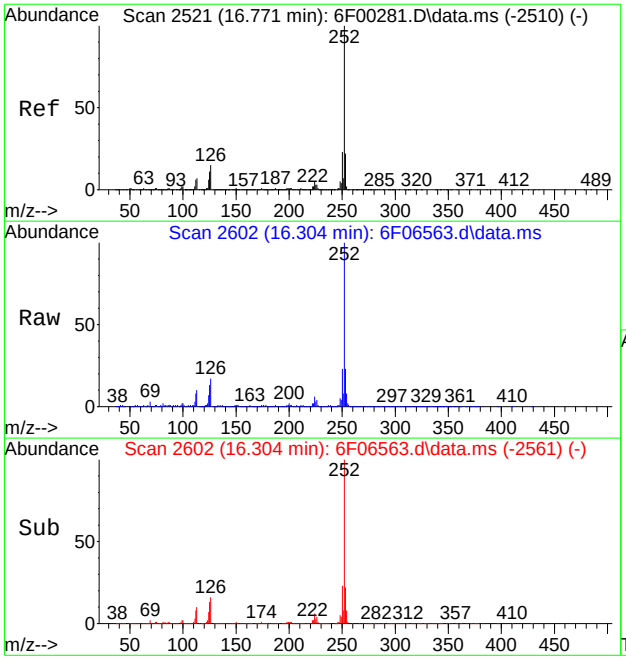


#100
Chrysene
Concen: 19.76 ppm
RT: 14.614 min Scan# 2286
Delta R.T. 0.005 min
Lab File: 6F06563.d
Acq: 13 Aug 2020 10:54 pm

Tgt Ion:228 Resp: 455706

Ion	Ratio	Lower	Upper
228	100		
226	28.7	0.0	59.3
229	20.5	0.0	49.8

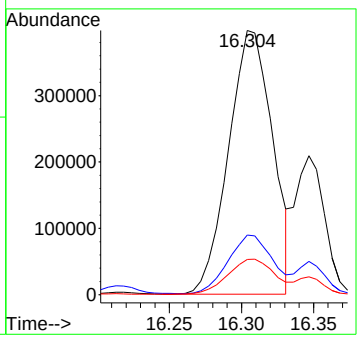


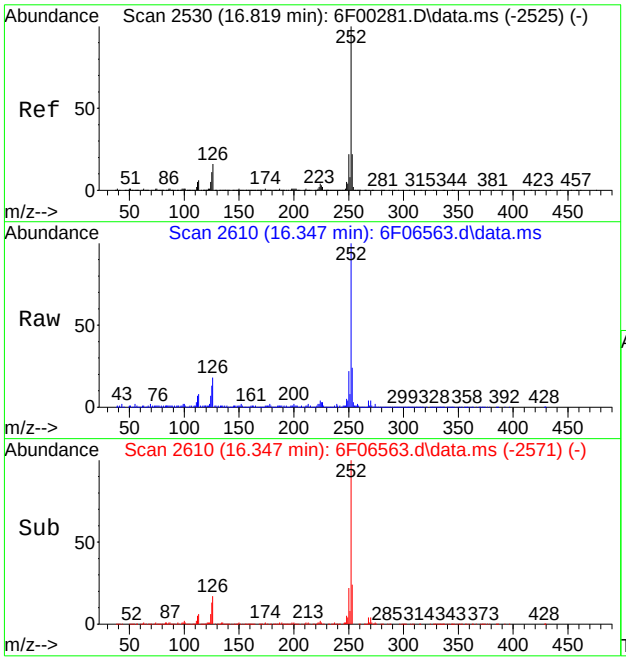


#104
Benzo[b]fluoranthene
Concen: 29.57 ppm
RT: 16.304 min Scan# 2602
Delta R.T. 0.021 min
Lab File: 6F06563.d
Acq: 13 Aug 2020 10:54 pm

Tgt Ion:252 Resp: 842778

Ion	Ratio	Lower	Upper
252	100		
253	22.2	0.0	51.7
125	12.9	0.0	44.0

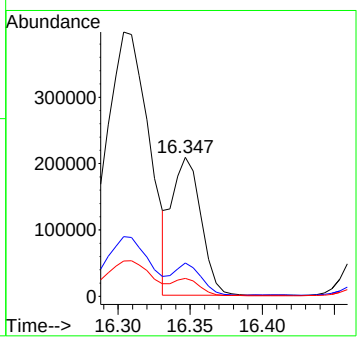


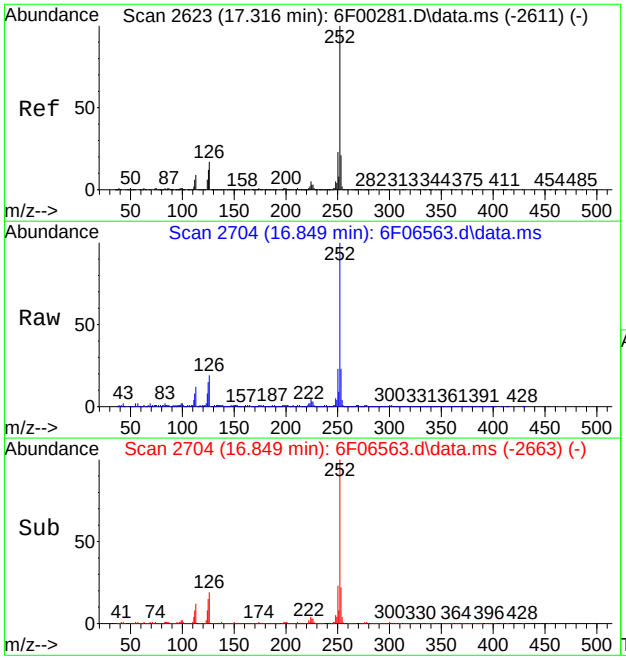


#105
Benzo[k]fluoranthene
Concen: 9.83 ppm
RT: 16.347 min Scan# 2610
Delta R.T. 0.011 min
Lab File: 6F06563.d
Acq: 13 Aug 2020 10:54 pm

Tgt Ion:252 Resp: 291411

Ion	Ratio	Lower	Upper
252	100		
253	23.9	0.0	51.9
125	12.0	0.0	43.3

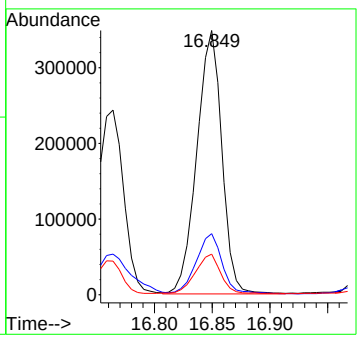


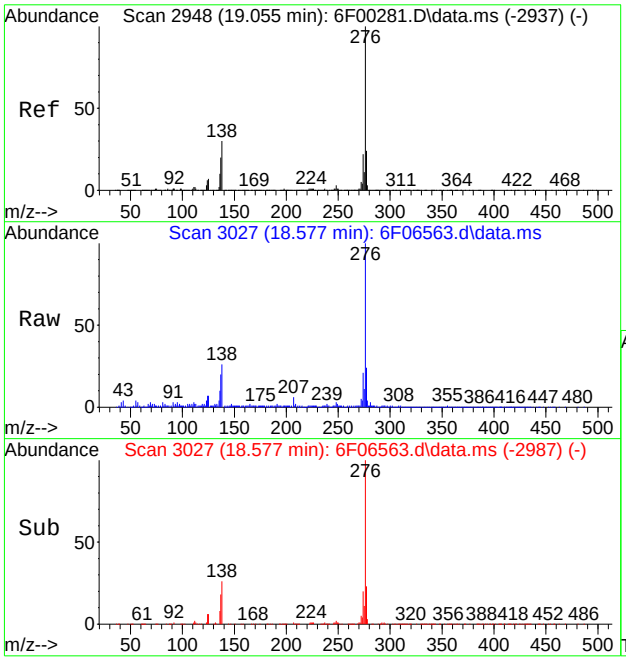


#106
Benzo[a]pyrene
Concen: 19.85 ppm
RT: 16.849 min Scan# 2704
Delta R.T. 0.021 min
Lab File: 6F06563.d
Acq: 13 Aug 2020 10:54 pm

Tgt Ion:252 Resp: 525231

Ion	Ratio	Lower	Upper
252	100		
253	22.5	0.0	52.0
125	15.0	0.0	44.6

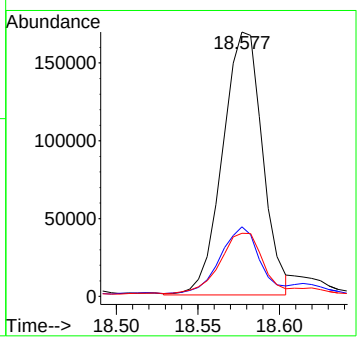


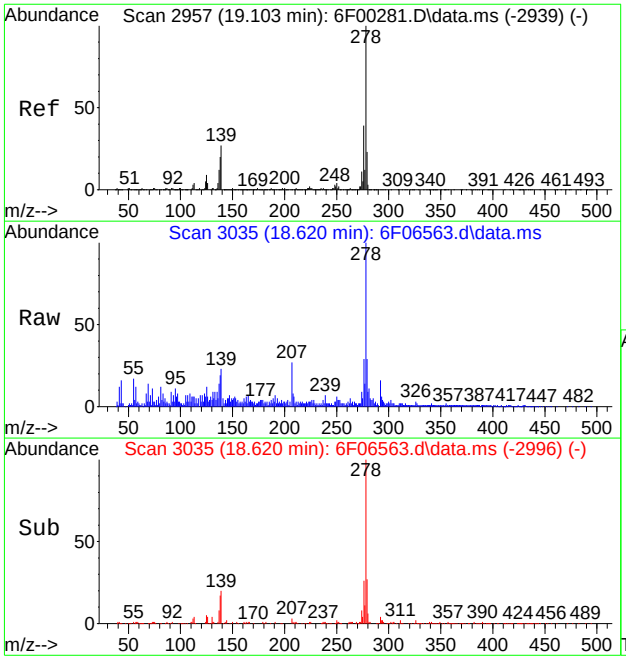


#107
Indeno[1,2,3-cd]pyrene
Concen: 11.66 ppm m
RT: 18.577 min Scan# 3027
Delta R.T. 0.016 min
Lab File: 6F06563.d
Acq: 13 Aug 2020 10:54 pm

Tgt Ion:276 Resp: 287181

Ion	Ratio	Lower	Upper
276	100		
138	26.3	0.0	56.9
277	23.9	0.0	53.9

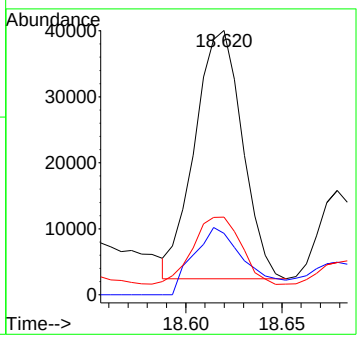


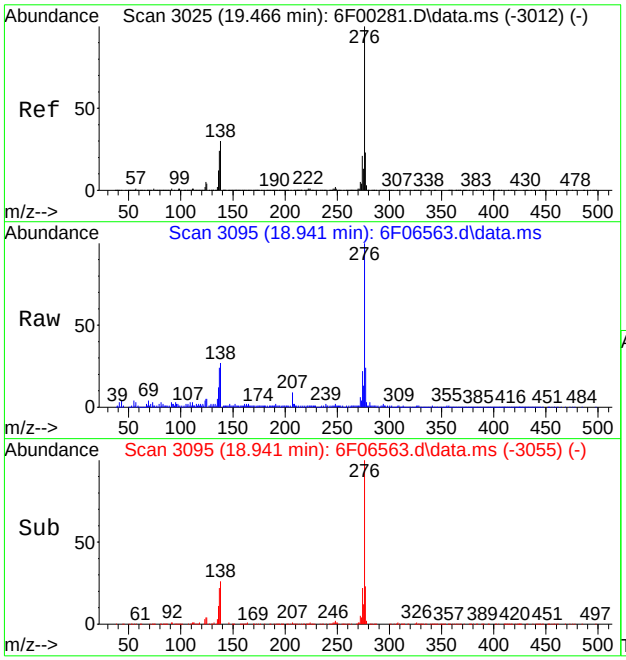


#108
Dibenz[a,h]anthracene
Concen: 2.46 ppm
RT: 18.620 min Scan# 3035
Delta R.T. 0.011 min
Lab File: 6F06563.d
Acq: 13 Aug 2020 10:54 pm

Tgt Ion:278 Resp: 64668

Ion	Ratio	Lower	Upper
278	100		
139	22.7	0.0	51.9
279	27.6	0.0	54.3

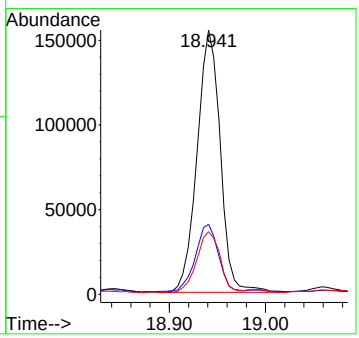




#109
Benzo[g,h,i]perylene
Concen: 9.77 ppm
RT: 18.941 min Scan# 3095
Delta R.T. 0.016 min
Lab File: 6F06563.d
Acq: 13 Aug 2020 10:54 pm

Tgt Ion:276 Resp: 259730

Ion	Ratio	Lower	Upper
276	100		
138	25.7	0.0	59.3
277	23.3	0.0	53.8



Manual Integration Approval Summary

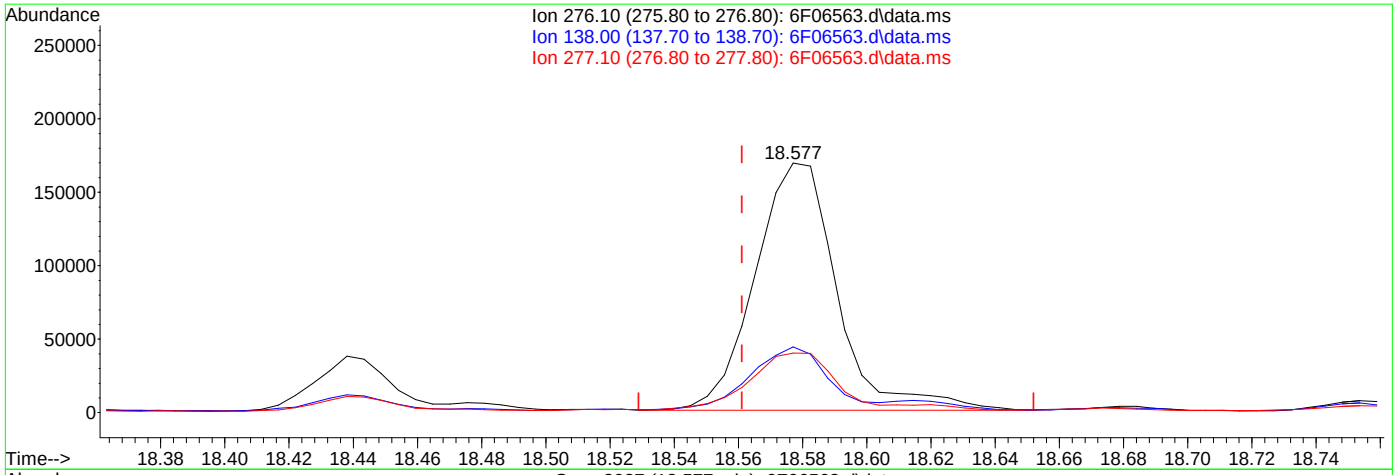
Sample Number: FA77689-9
Lab FileID: 6F06563.D
Injection Time: 08/13/20 22:54
Method: SW846 8270E
Analyst approved: 08/14/20 10:45 Martha Valls
Supervisor approved: 08/14/20 14:57 Nicole McCampbell

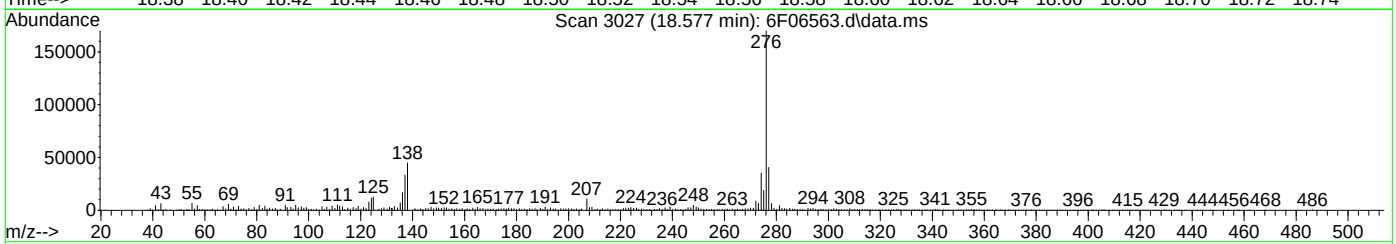
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		18.58	Overlapping peak

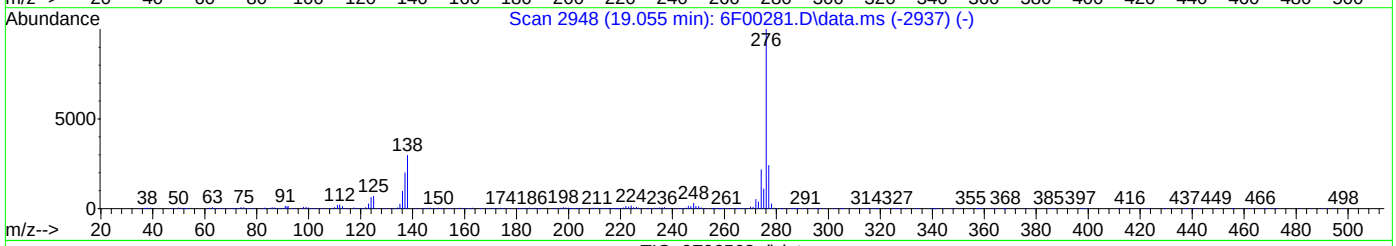
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s6f253\
Data File : 6F06563.d
Acq On : 13 Aug 2020 10:54 pm
Operator : marthav
Sample : fa77689-9 E
Misc : op81538,S6F253,29.9,,,1,1,soil
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Aug 14 04:42:50 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration







TIC: 6F06563.d\data.ms

(107) Indeno[1,2,3-cd]pyrene (P)

18.577min (+0.016) 12.18ppm

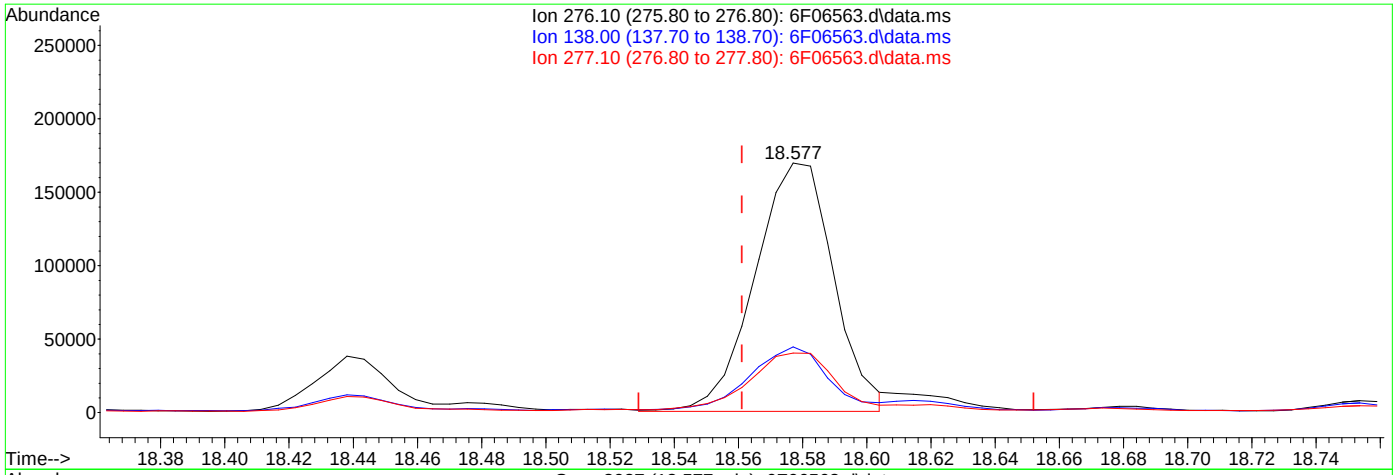
response 300121

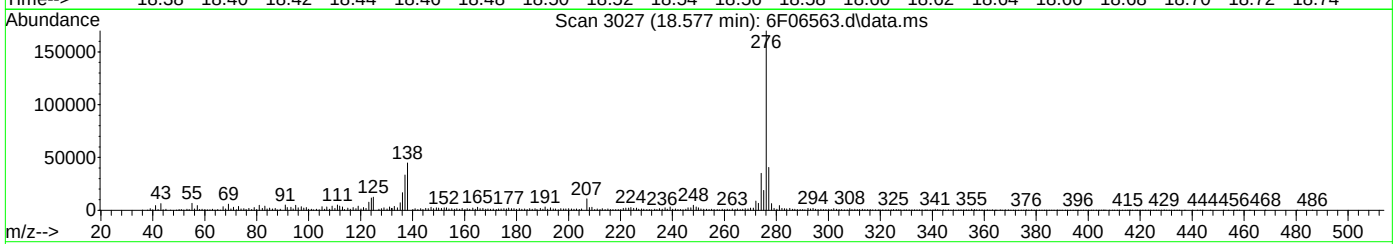
Ion	Exp%	Act%
276.10	100	100
138.00	26.90	25.48
277.10	23.90	23.01
0.00	0.00	0.00

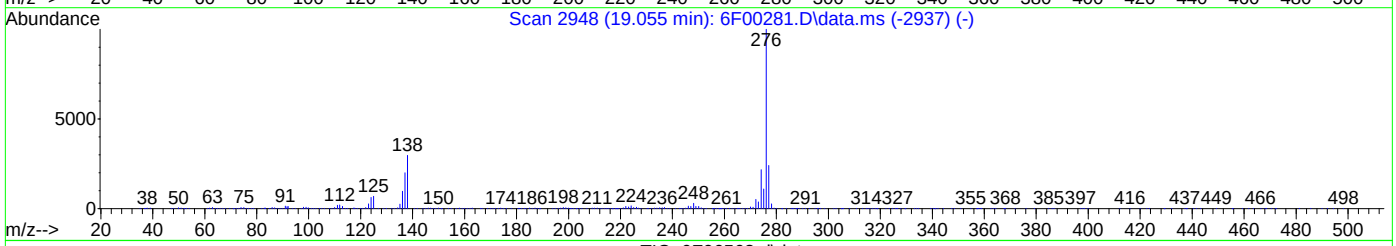
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s6f253\
Data File : 6F06563.d
Acq On : 13 Aug 2020 10:54 pm
Operator : marthav
Sample : fa77689-9 E
Misc : op81538,S6F253,29.9,,,1,1,soil
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Aug 14 04:42:50 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration







TIC: 6F06563.d\data.ms

(107) Indeno[1,2,3-cd]pyrene (P)

18.577min (+0.016) 11.66ppm m

response 287181

Ion	Exp%	Act%
276.10	100	100
138.00	26.90	26.27
277.10	23.90	23.86
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 08/14/20 14:57

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s6f253\
Data File : 6F06564.d
Acq On : 13 Aug 2020 11:20 pm
Operator : marthav
Sample : fa77689-10 E
Misc : op81538,S6F253,30.3,,,1,1,soil
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Aug 14 05:26:29 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

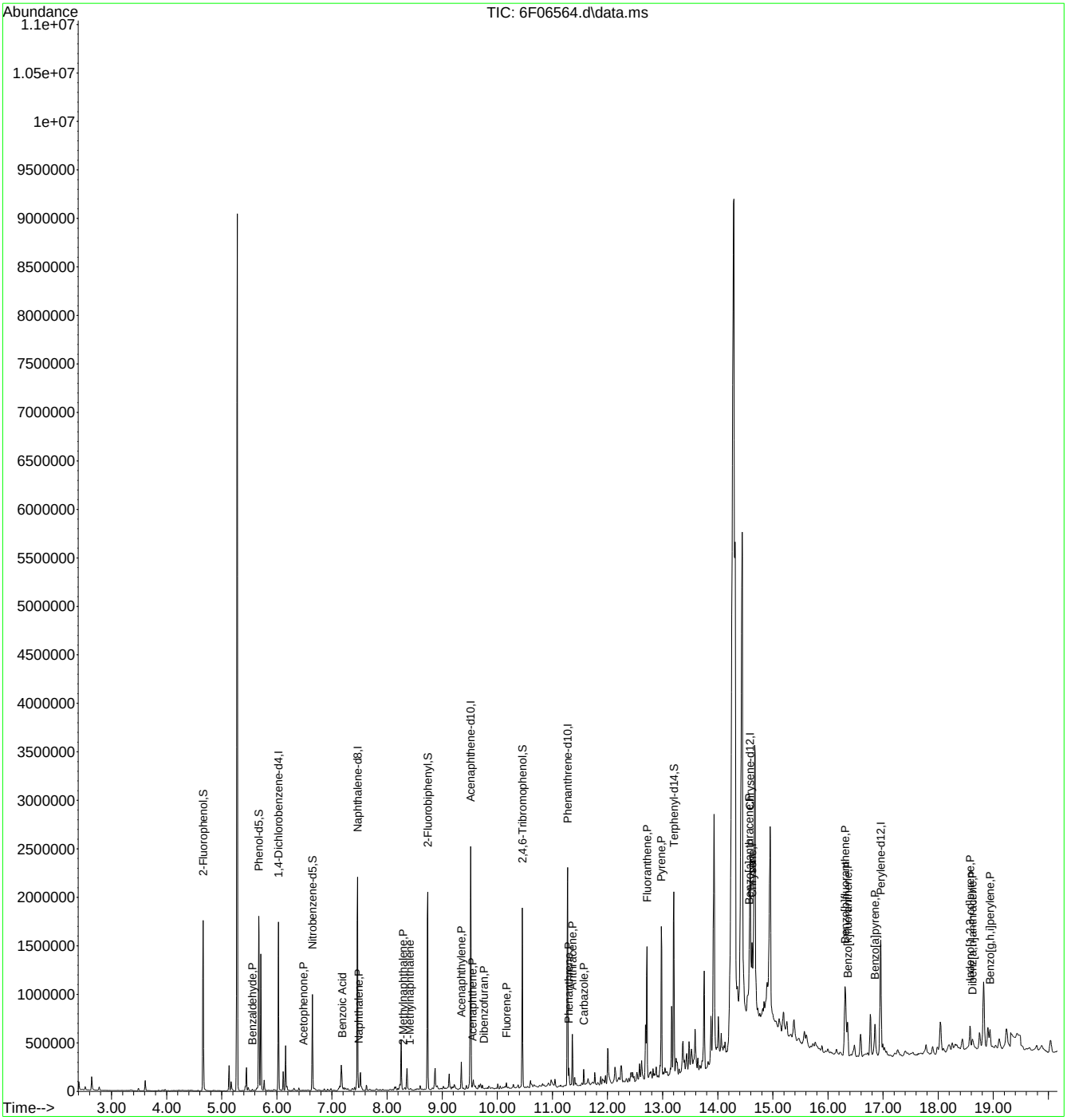
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	6.029	152	263766	40.00	ppm		0.00
22) Naphthalene-d8	7.463	136	961756	40.00	ppm		0.00
43) Acenaphthene-d10	9.517	164	509408	40.00	ppm		0.00
70) Phenanthrene-d10	11.276	188	904470	40.00	ppm		0.00
92) Chrysene-d12	14.587	240	633909	40.00	ppm		0.02
102) Perylene-d12	16.957	264	639713	40.00	ppm		0.03
System Monitoring Compounds							
7) 2-Fluorophenol	4.660	112	530379	53.21	ppm		0.01
Spiked Amount 100.000	Range 40 - 102		Recovery = 53.21%				
9) Phenol-d5	5.671	99	692999	58.57	ppm		0.00
Spiked Amount 100.000	Range 41 - 100		Recovery = 58.57%				
23) Nitrobenzene-d5	6.644	82	290871	27.57	ppm		0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 55.14%				
47) 2-Fluorobiphenyl	8.736	172	621423	31.21	ppm		0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 62.42%				
75) 2,4,6-Tribromophenol	10.453	330	220443	72.42	ppm		0.00
Spiked Amount 100.000	Range 42 - 108		Recovery = 72.42%				
95) Terphenyl-d14	13.202	244	642316	36.05	ppm		0.00
Spiked Amount 50.000	Range 45 - 119		Recovery = 72.10%				
Target Compounds							Qvalue
5) Benzaldehyde	5.553	106	3973	0.49	ppm		84
18) Acetophenone	6.479	105	1497	0.11	ppm		98
30) Benzoic Acid	7.185	105	11960	1.92	ppm		95
34) Naphthalene	7.484	128	2533	0.09	ppm	#	32
40) 2-Methylnaphthalene	8.292	141	1468	0.09	ppm		98
41) 1-Methylnaphthalene	8.409	142	1366	0.08	ppm		91
52) Acenaphthylene	9.345	152	115641	4.54	ppm		100
57) Acenaphthene	9.549	153	6985	0.41	ppm		97
60) Dibenzofuran	9.757	168	2276	0.10	ppm		95
65) Fluorene	10.164	166	21048	1.11	ppm		99
84) Phenanthrene	11.298	178	65409	2.42	ppm		98
85) Anthracene	11.362	178	216973	7.88	ppm		99
87) Carbazole	11.571	167	69599	2.81	ppm		99
91) Fluoranthene	12.715	202	520494	18.25	ppm		98
94) Pyrene	12.977	202	587863	25.89	ppm		97
99) Benzo[a]anthracene	14.571	228	204130	9.61	ppm		98
100) Chrysene	14.625	228	333944	16.20	ppm		99
104) Benzo[b]fluoranthene	16.315	252	527166	25.67	ppm		99
105) Benzo[k]fluoranthene	16.358	252	166666	7.80	ppm		96
106) Benzo[a]pyrene	16.855	252	176417	9.25	ppm		99
107) Indeno[1,2,3-cd]pyrene	18.577	276	143954m	8.11	ppm		
108) Dibenz[a,h]anthracene	18.620	278	32546	1.72	ppm		95
109) Benzo[g,h,i]perylene	18.941	276	114260	5.96	ppm		96

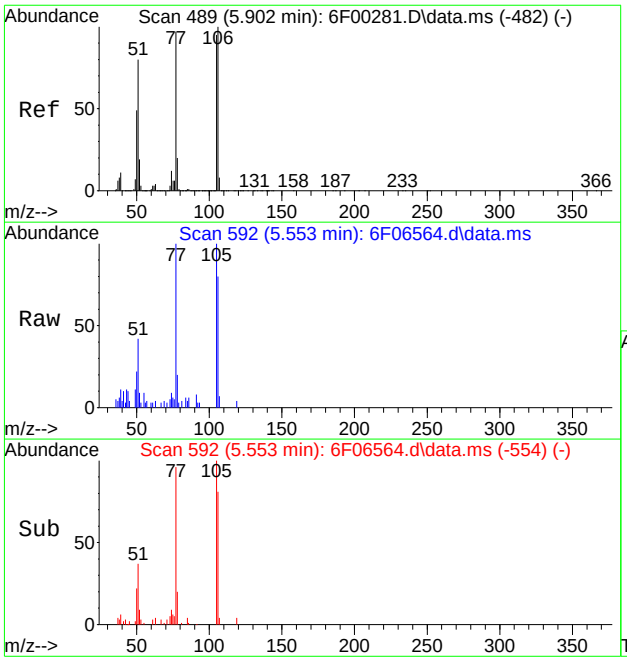
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s6f253\
Data File : 6F06564.d
Acq On : 13 Aug 2020 11:20 pm
Operator : marthav
Sample : fa77689-10 E
Misc : op81538,S6F253,30.3,,,1,1,soil
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Aug 14 05:26:29 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

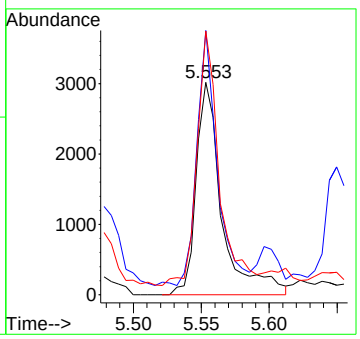


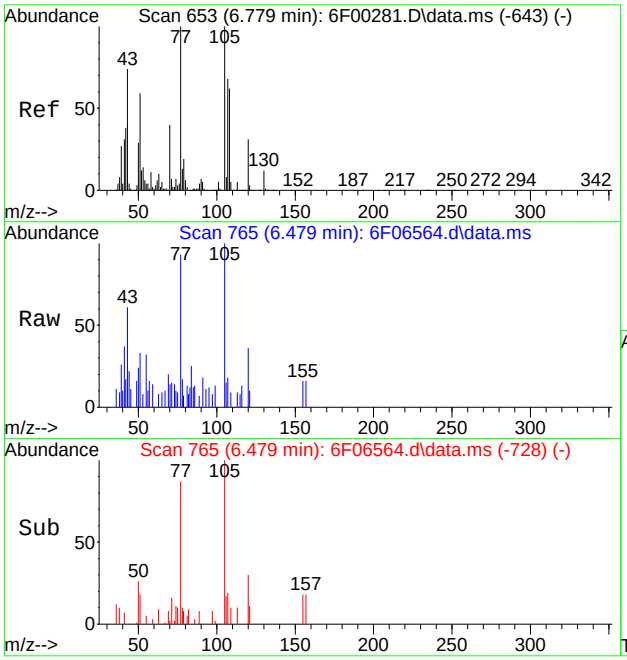


#5
Benzaldehyde
Concen: 0.49 ppm
RT: 5.553 min Scan# 592
Delta R.T. 0.005 min
Lab File: 6F06564.d
Acq: 13 Aug 2020 11:20 pm

Tgt Ion:106 Resp: 3973

Ion	Ratio	Lower	Upper
106	100		
77	120.3	74.8	134.8
105	118.2	70.7	130.7

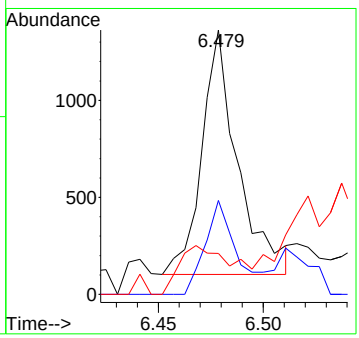


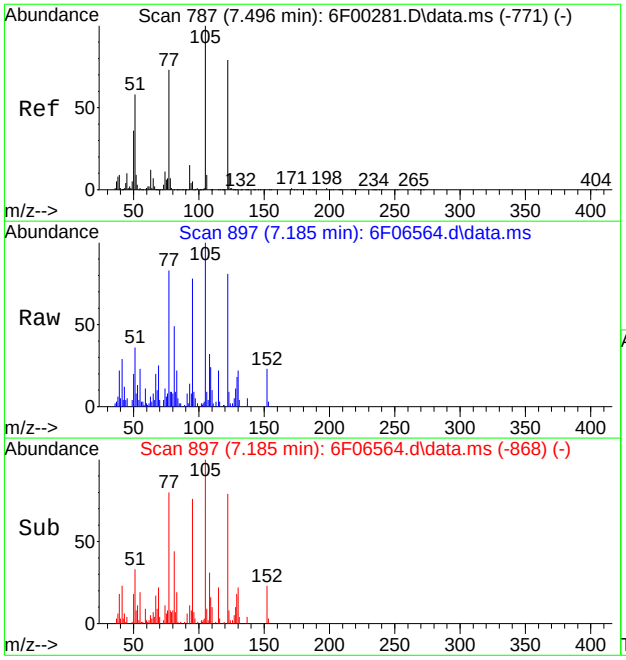


#18
Acetophenone
Concen: 0.11 ppm
RT: 6.479 min Scan# 765
Delta R.T. 0.000 min
Lab File: 6F06564.d
Acq: 13 Aug 2020 11:20 pm

Tgt Ion:105 Resp: 1497

Ion	Ratio	Lower	Upper
105	100		
120	30.8	0.5	60.5
106	4.9	0.0	37.8

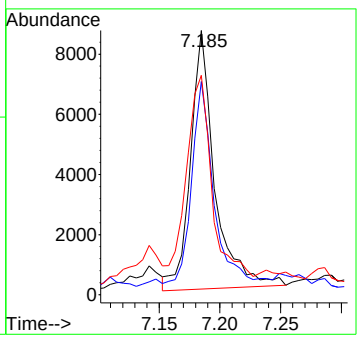


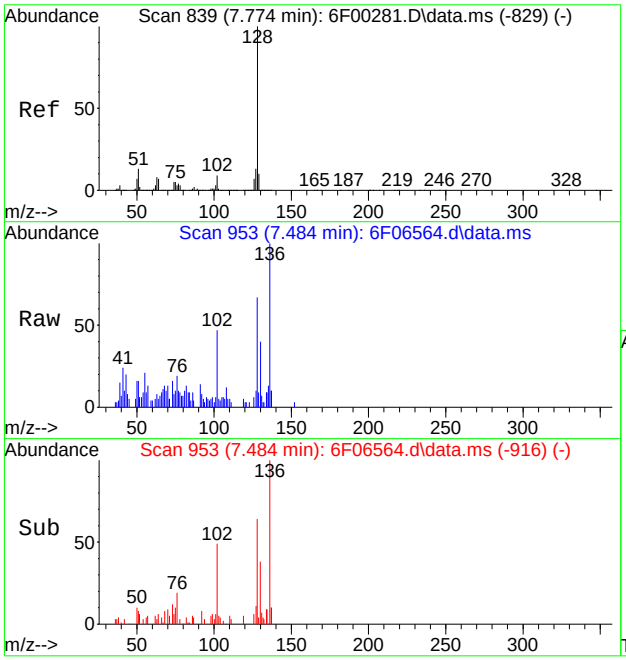


#30
Benzoic Acid
Concen: 1.92 ppm
RT: 7.185 min Scan# 897
Delta R.T. -0.043 min
Lab File: 6F06564.d
Acq: 13 Aug 2020 11:20 pm

Tgt Ion:105 Resp: 11960

Ion	Ratio	Lower	Upper
105	100		
122	78.3	51.7	111.7
77	77.3	42.8	102.8

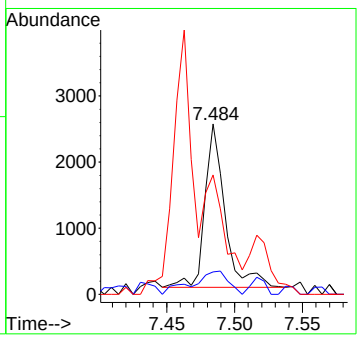


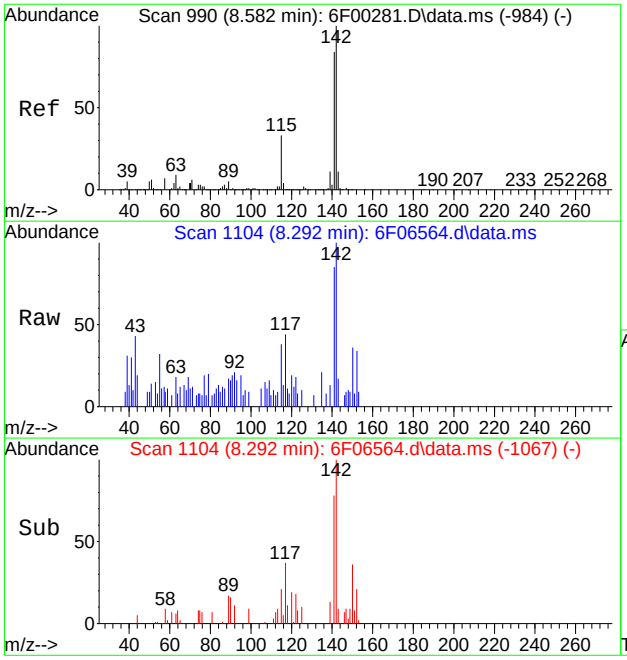


#34
Naphthalene
Concen: 0.09 ppm
RT: 7.484 min Scan# 953
Delta R.T. 0.000 min
Lab File: 6F06564.d
Acq: 13 Aug 2020 11:20 pm

Tgt Ion:128 Resp: 2533

Ion	Ratio	Lower	Upper
128	100		
129	11.3	0.0	41.3
102	64.6	0.0	38.9#

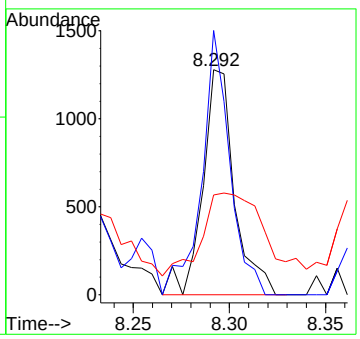


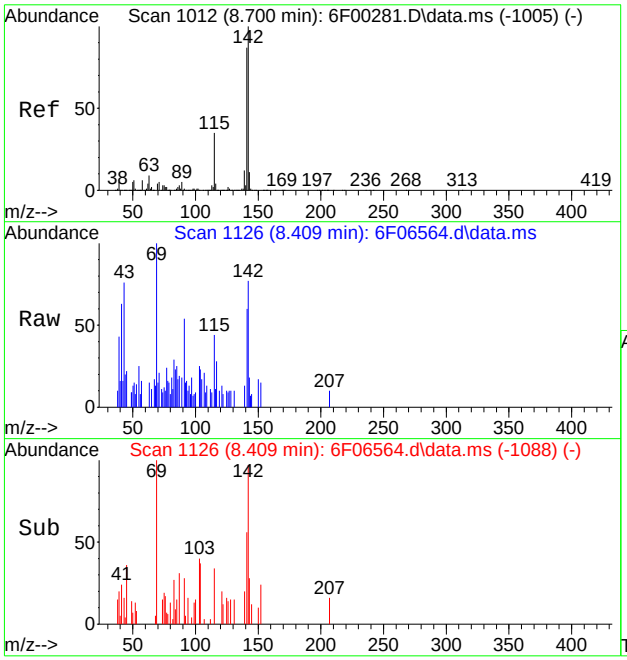


#40
2-Methylnaphthalene
Concen: 0.09 ppm
RT: 8.292 min Scan# 1104
Delta R.T. 0.000 min
Lab File: 6F06564.d
Acq: 13 Aug 2020 11:20 pm

Tgt Ion:141 Resp: 1468

Ion	Ratio	Lower	Upper
141	100		
142	117.5	87.4	147.4
115	32.8	8.3	68.3

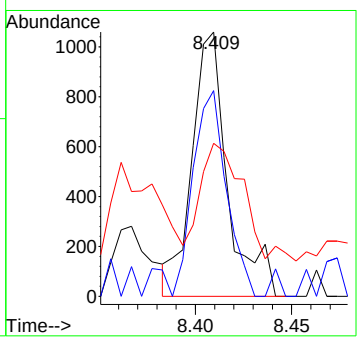


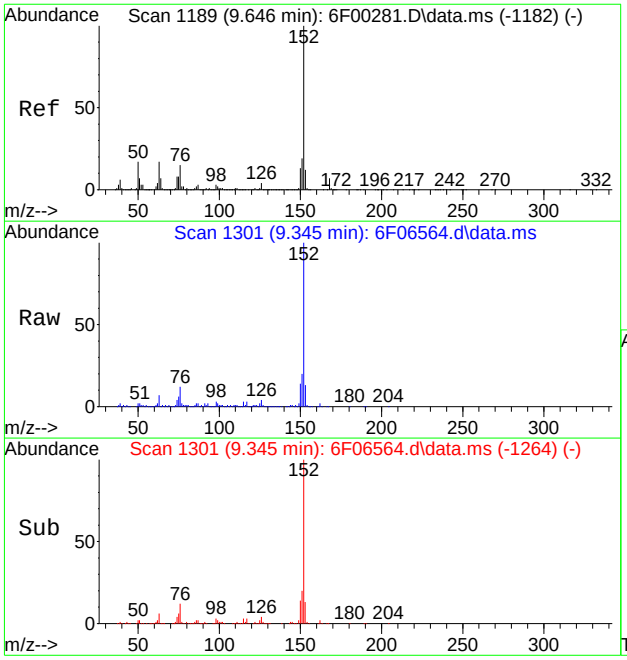


#41
1-Methylnaphthalene
Concen: 0.08 ppm
RT: 8.409 min Scan# 1126
Delta R.T. 0.005 min
Lab File: 6F06564.d
Acq: 13 Aug 2020 11:20 pm

Tgt Ion:142 Resp: 1366

Ion	Ratio	Lower	Upper
142	100		
141	77.5	58.9	118.9
115	34.5	3.8	63.8

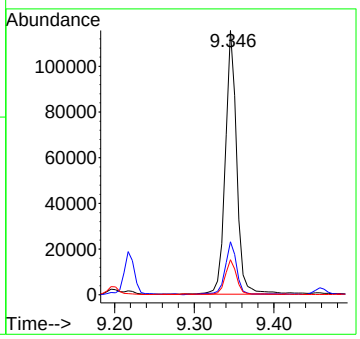


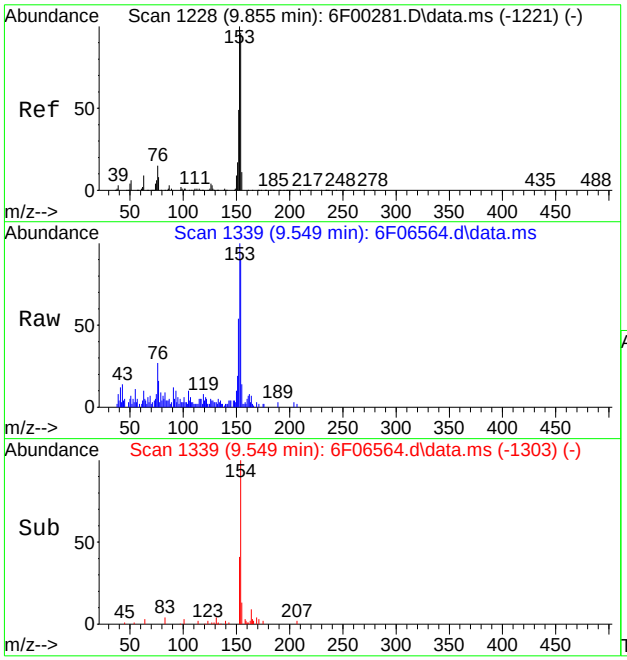


#52
Acenaphthylene
Concen: 4.54 ppm
RT: 9.345 min Scan# 1301
Delta R.T. 0.000 min
Lab File: 6F06564.d
Acq: 13 Aug 2020 11:20 pm

Tgt Ion:152 Resp: 115641

Ion	Ratio	Lower	Upper
152	100		
151	19.9	0.0	49.9
153	13.2	0.0	43.2

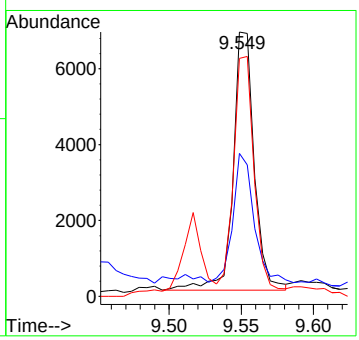


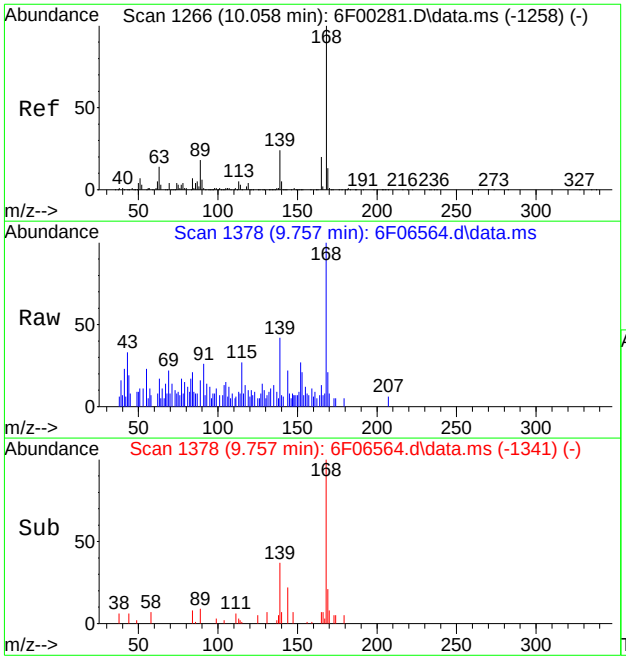


#57
Acenaphthene
Concen: 0.41 ppm
RT: 9.549 min Scan# 1339
Delta R.T. -0.005 min
Lab File: 6F06564.d
Acq: 13 Aug 2020 11:20 pm

Tgt Ion:153 Resp: 6985

Ion	Ratio	Lower	Upper
153	100		
152	47.6	16.2	76.2
154	89.5	63.3	123.3

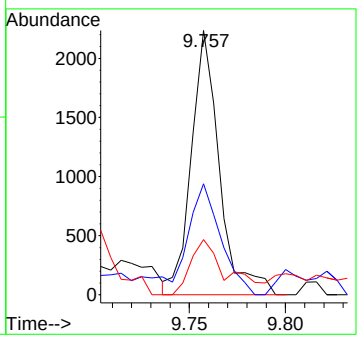


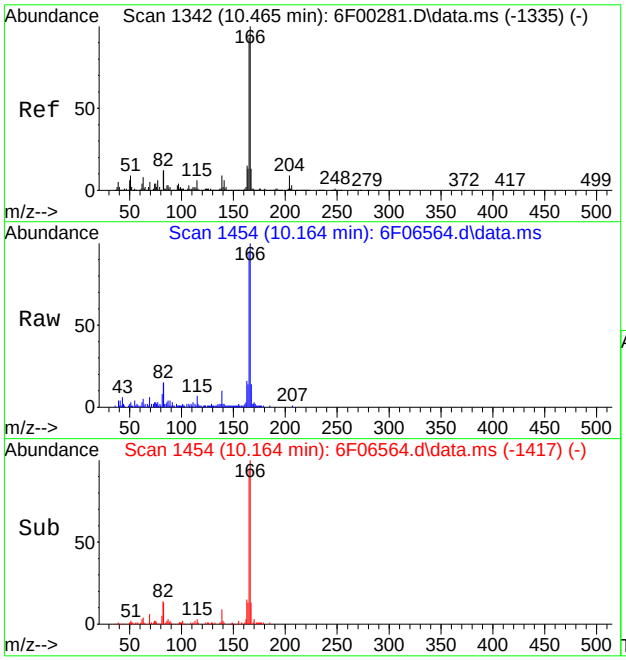


#60
Dibenzofuran
Concen: 0.10 ppm
RT: 9.757 min Scan# 1378
Delta R.T. 0.000 min
Lab File: 6F06564.d
Acq: 13 Aug 2020 11:20 pm

Tgt Ion:168 Resp: 2276

Ion	Ratio	Lower	Upper
168	100		
139	34.7	7.1	67.1
169	17.3	0.0	43.6

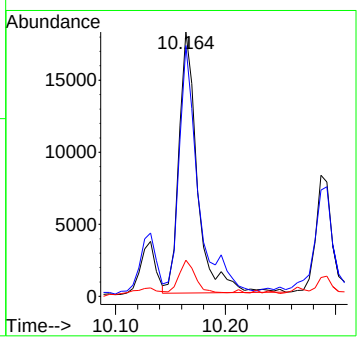


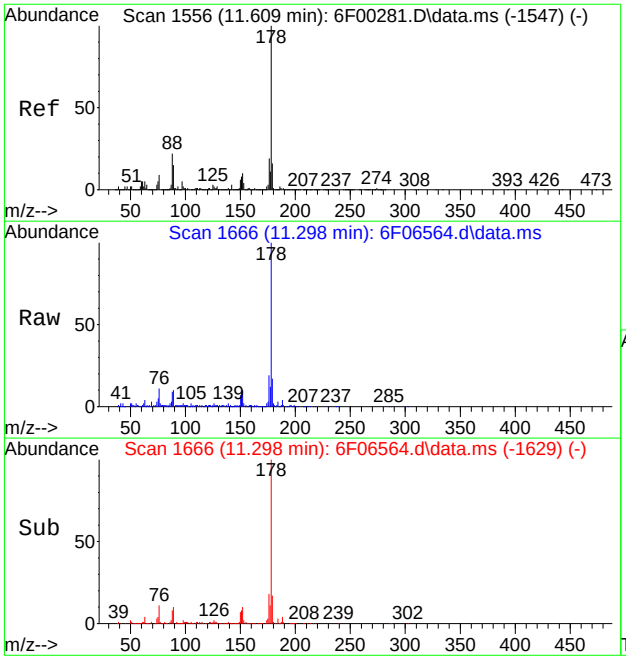


#65
Fluorene
Concen: 1.11 ppm
RT: 10.164 min Scan# 1454
Delta R.T. 0.000 min
Lab File: 6F06564.d
Acq: 13 Aug 2020 11:20 pm

Tgt Ion:166 Resp: 21048

Ion	Ratio	Lower	Upper
166	100		
165	93.9	63.2	123.2
167	12.5	0.0	43.3

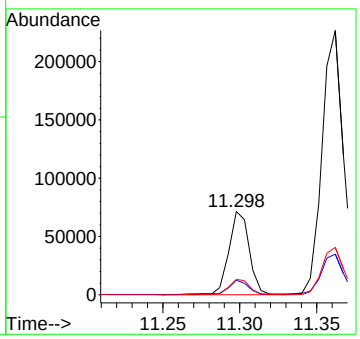


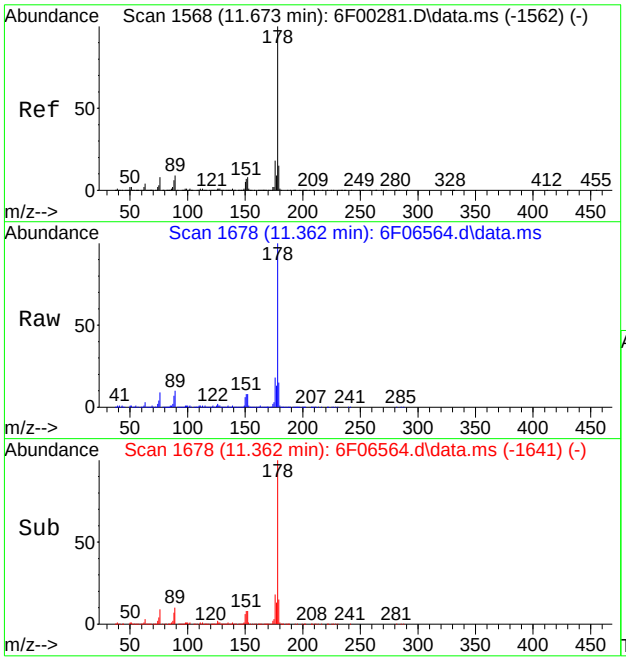


#84
Phenanthrene
Concen: 2.42 ppm
RT: 11.298 min Scan# 1666
Delta R.T. 0.000 min
Lab File: 6F06564.d
Acq: 13 Aug 2020 11:20 pm

Tgt Ion:178 Resp: 65409

Ion	Ratio	Lower	Upper
178	100		
179	17.0	0.0	45.6
176	18.4	0.0	48.6

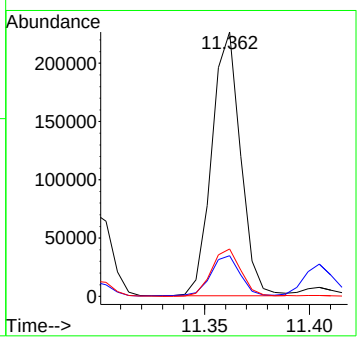


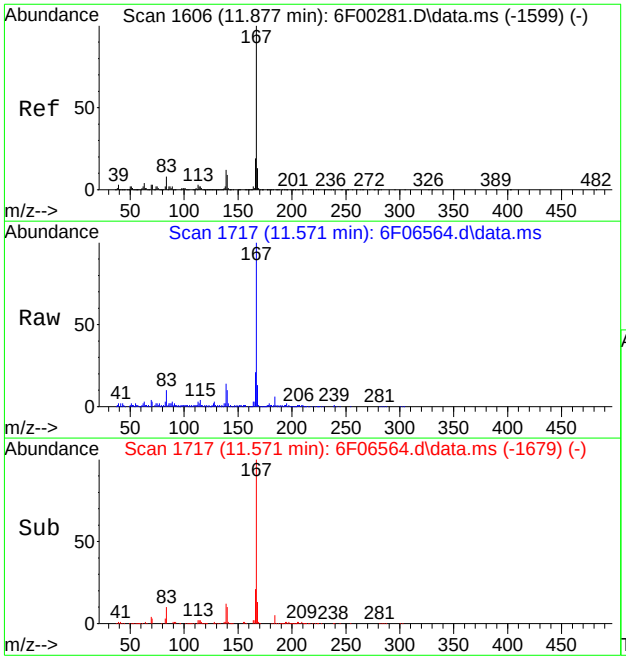


#85
Anthracene
Concen: 7.88 ppm
RT: 11.362 min Scan# 1678
Delta R.T. 0.000 min
Lab File: 6F06564.d
Acq: 13 Aug 2020 11:20 pm

Tgt Ion:178 Resp: 216973

Ion	Ratio	Lower	Upper
178	100		
179	14.9	0.0	45.4
176	17.9	0.0	48.2

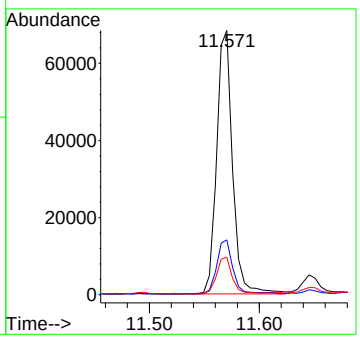


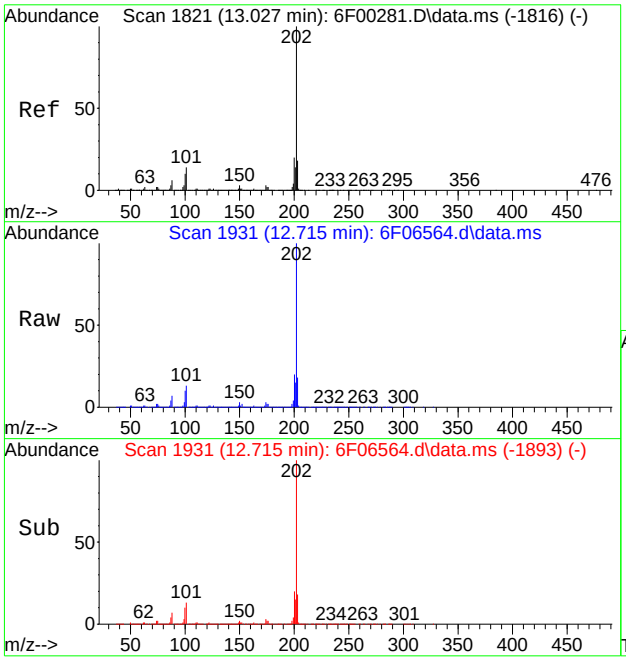


#87
Carbazole
Concen: 2.81 ppm
RT: 11.571 min Scan# 1717
Delta R.T. 0.005 min
Lab File: 6F06564.d
Acq: 13 Aug 2020 11:20 pm

Tgt Ion:167 Resp: 69599

Ion	Ratio	Lower	Upper
167	100		
166	20.6	0.0	50.9
139	13.9	0.0	43.2

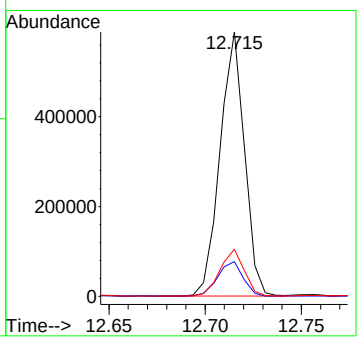


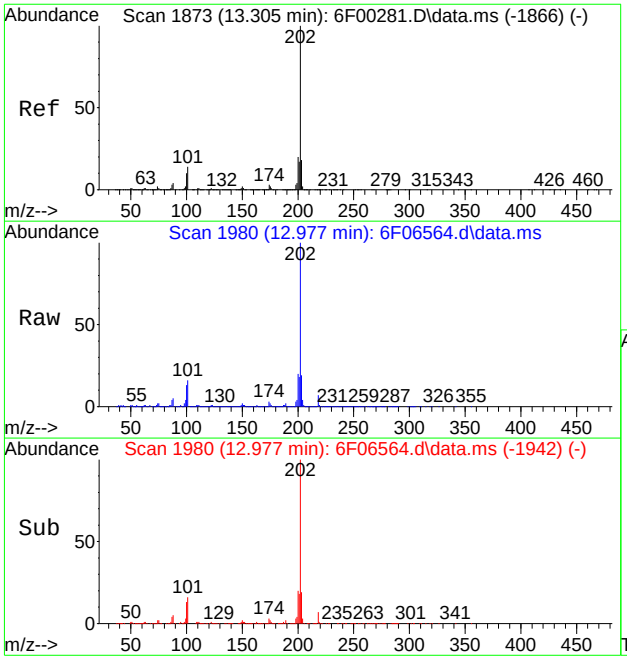


#91
Fluoranthene
Concen: 18.25 ppm
RT: 12.715 min Scan# 1931
Delta R.T. 0.005 min
Lab File: 6F06564.d
Acq: 13 Aug 2020 11:20 pm

Tgt Ion:202 Resp: 520494

Ion	Ratio	Lower	Upper
202	100		
101	13.1	0.0	44.4
203	17.7	0.0	47.5

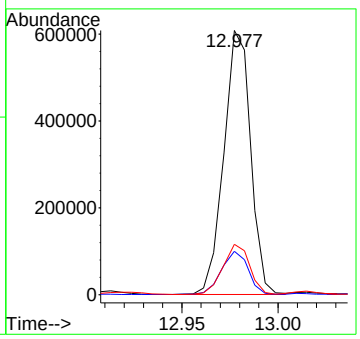


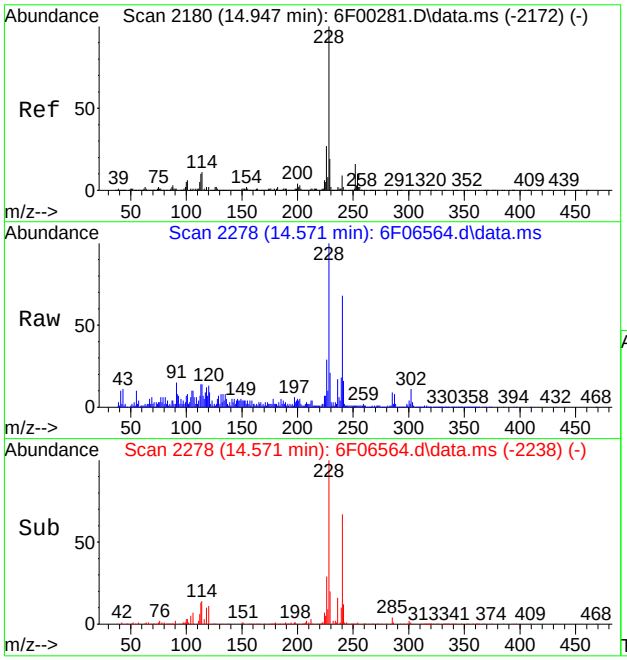


#94
Pyrene
Concen: 25.89 ppm
RT: 12.977 min Scan# 1980
Delta R.T. 0.005 min
Lab File: 6F06564.d
Acq: 13 Aug 2020 11:20 pm

Tgt Ion:202 Resp: 587863

Ion	Ratio	Lower	Upper
202	100		
101	16.3	0.0	48.6
203	18.7	0.0	48.3

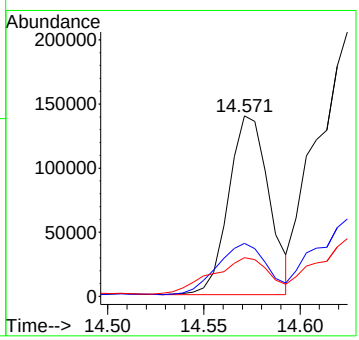


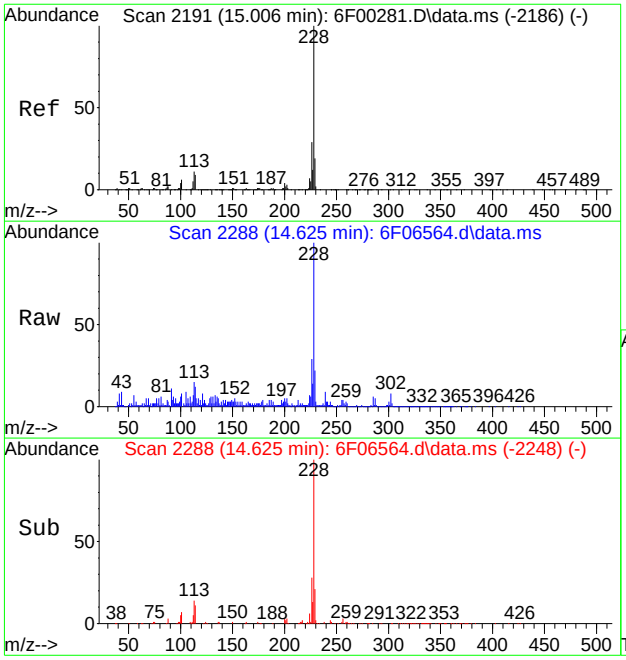


#99
Benzo[a]anthracene
Concen: 9.61 ppm
RT: 14.571 min Scan# 2278
Delta R.T. 0.016 min
Lab File: 6F06564.d
Acq: 13 Aug 2020 11:20 pm

Tgt Ion:228 Resp: 204130

Ion	Ratio	Lower	Upper
228	100		
226	28.6	0.0	56.8
229	19.6	0.0	49.8

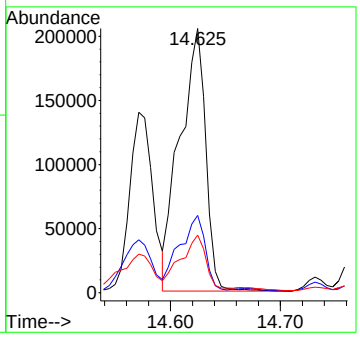


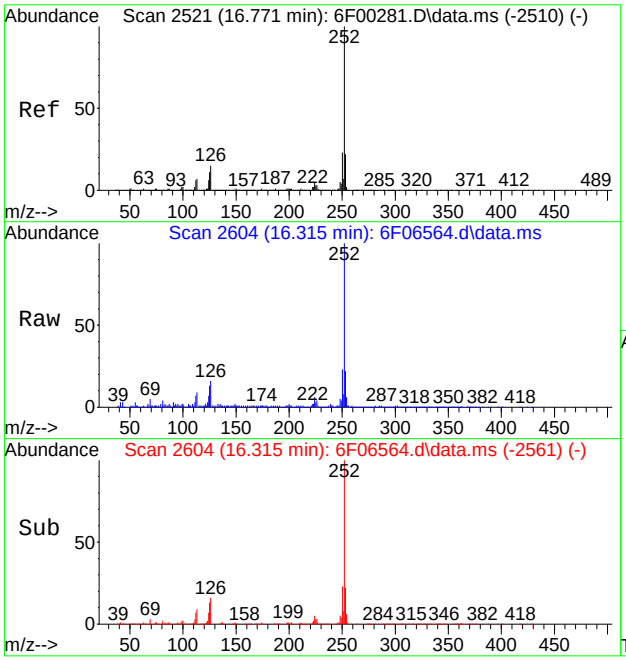


#100
Chrysene
Concen: 16.20 ppm
RT: 14.625 min Scan# 2288
Delta R.T. 0.016 min
Lab File: 6F06564.d
Acq: 13 Aug 2020 11:20 pm

Tgt Ion:228 Resp: 333944

Ion	Ratio	Lower	Upper
228	100		
226	28.8	0.0	59.3
229	20.8	0.0	49.8

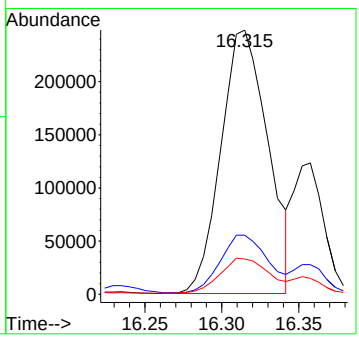


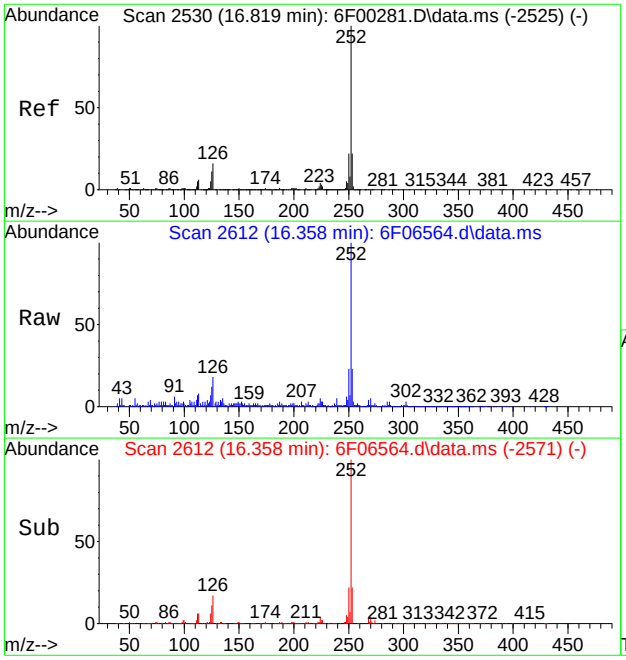


#104
Benzo[b]fluoranthene
Concen: 25.67 ppm
RT: 16.315 min Scan# 2604
Delta R.T. 0.032 min
Lab File: 6F06564.d
Acq: 13 Aug 2020 11:20 pm

Tgt Ion:252 Resp: 527166

Ion	Ratio	Lower	Upper
252	100		
253	21.7	0.0	51.7
125	12.8	0.0	44.0

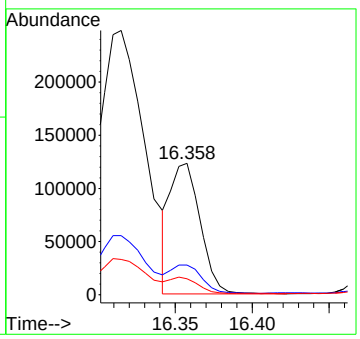


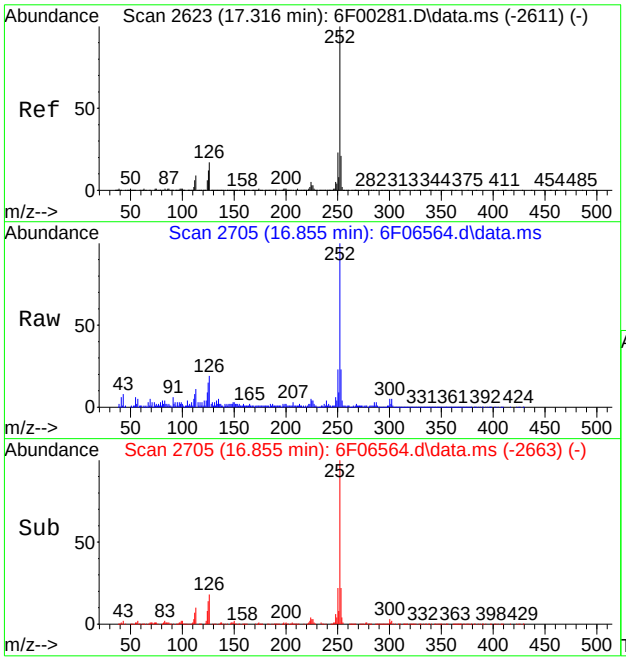


#105
Benzo[k]fluoranthene
Concen: 7.80 ppm
RT: 16.358 min Scan# 2612
Delta R.T. 0.022 min
Lab File: 6F06564.d
Acq: 13 Aug 2020 11:20 pm

Tgt Ion:252 Resp: 166666

Ion	Ratio	Lower	Upper
252	100		
253	21.2	0.0	51.9
125	9.8	0.0	43.3

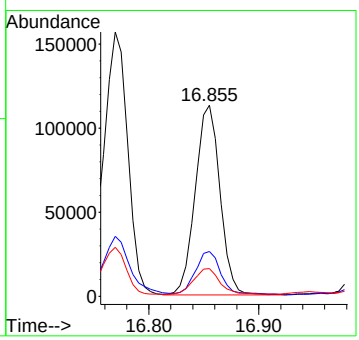


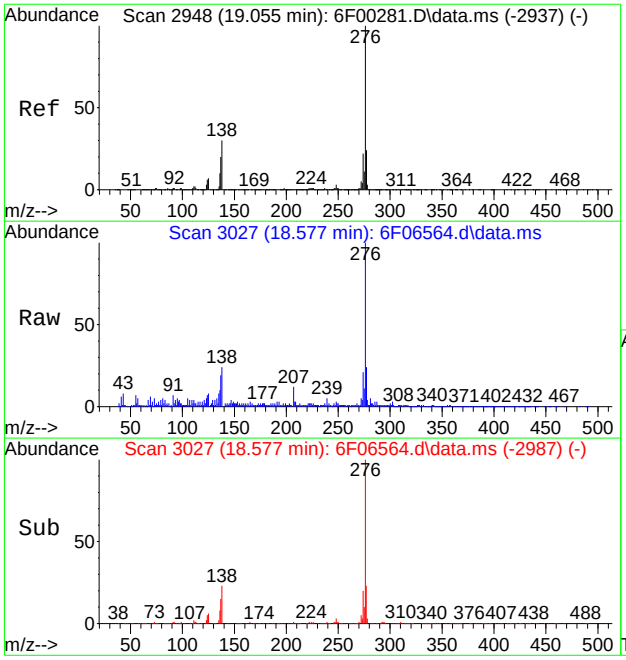


#106
Benzo[a]pyrene
Concen: 9.25 ppm
RT: 16.855 min Scan# 2705
Delta R.T. 0.027 min
Lab File: 6F06564.d
Acq: 13 Aug 2020 11:20 pm

Tgt Ion:252 Resp: 176417

Ion	Ratio	Lower	Upper
252	100		
253	22.1	0.0	52.0
125	13.4	0.0	44.6

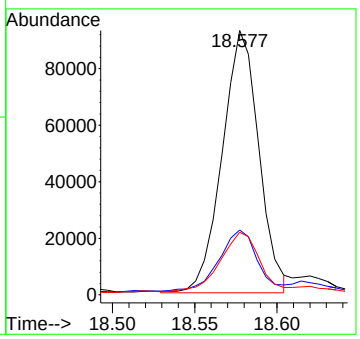


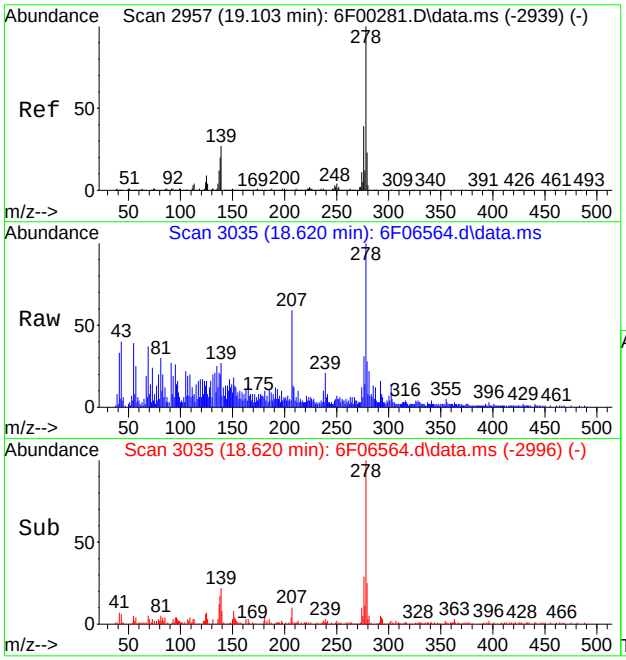


#107
Indeno[1,2,3-cd]pyrene
Concen: 8.11 ppm m
RT: 18.577 min Scan# 3027
Delta R.T. 0.016 min
Lab File: 6F06564.d
Acq: 13 Aug 2020 11:20 pm

Tgt Ion:276 Resp: 143954

Ion	Ratio	Lower	Upper
276	100		
138	24.5	0.0	56.9
277	23.6	0.0	53.9

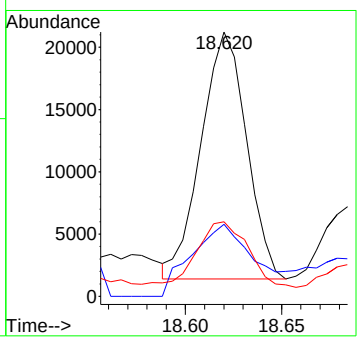


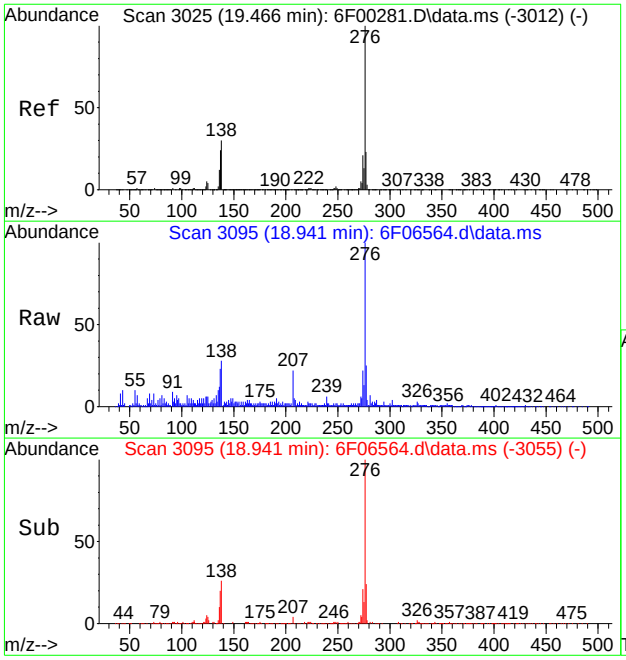


#108
Dibenz[a,h]anthracene
Concen: 1.72 ppm
RT: 18.620 min Scan# 3035
Delta R.T. 0.011 min
Lab File: 6F06564.d
Acq: 13 Aug 2020 11:20 pm

Tgt Ion:278 Resp: 32546

Ion	Ratio	Lower	Upper
278	100		
139	24.9	0.0	51.9
279	26.0	0.0	54.3

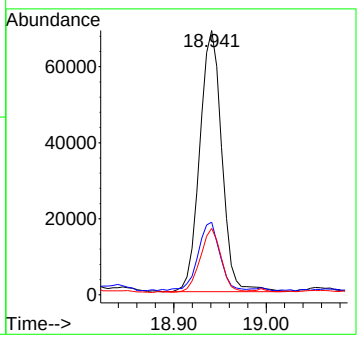




#109
Benzo[g,h,i]perylene
Concen: 5.96 ppm
RT: 18.941 min Scan# 3095
Delta R.T. 0.016 min
Lab File: 6F06564.d
Acq: 13 Aug 2020 11:20 pm

Tgt Ion:276 Resp: 114260

Ion	Ratio	Lower	Upper
276	100		
138	26.0	0.0	59.3
277	24.2	0.0	53.8



Manual Integration Approval Summary

Sample Number: FA77689-10
Lab FileID: 6F06564.D
Injection Time: 08/13/20 23:20

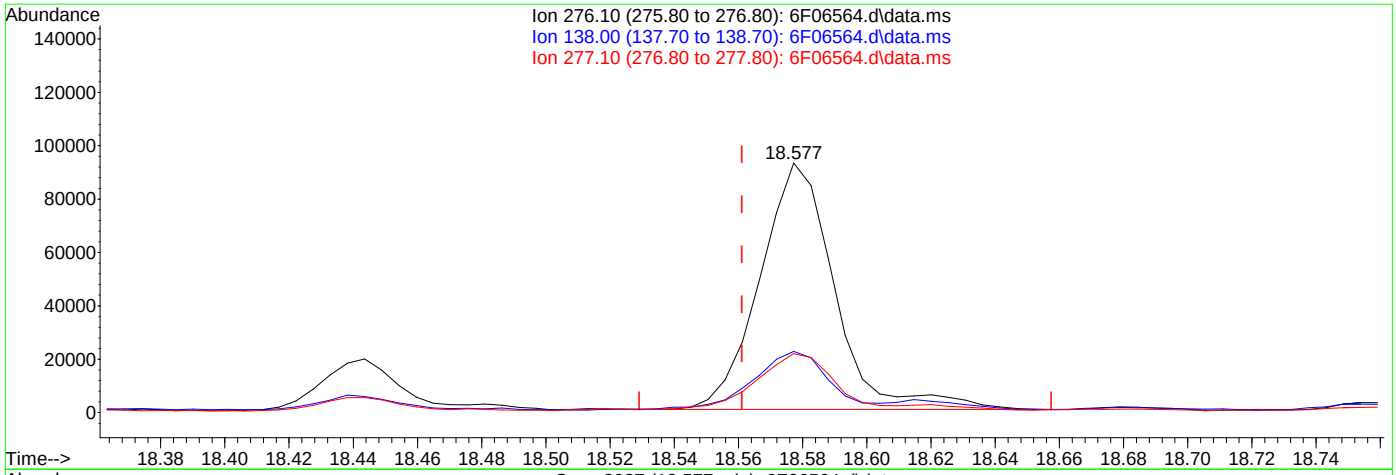
Method: SW846 8270E
Analyst approved: 08/14/20 10:45 Martha Valls
Supervisor approved: 08/14/20 14:57 Nicole McCampbell

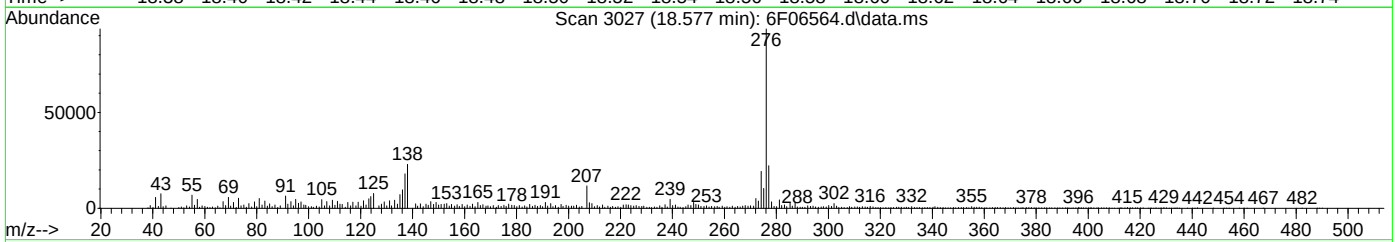
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		18.58	Overlapping peak

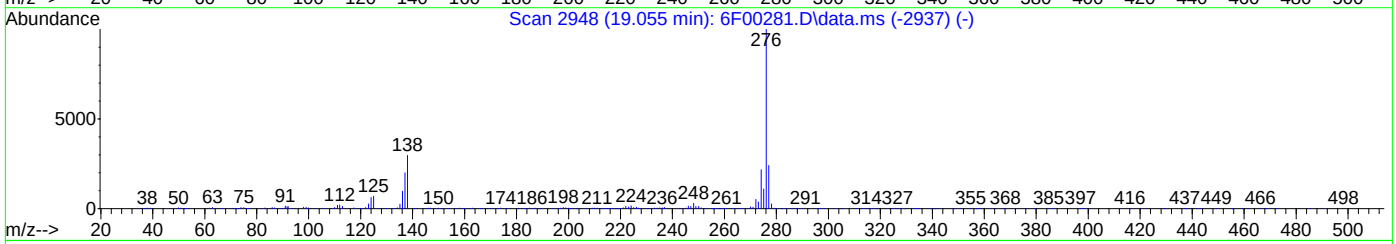
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s6f253\
Data File : 6F06564.d
Acq On : 13 Aug 2020 11:20 pm
Operator : marthav
Sample : fa77689-10 E
Misc : op81538,S6F253,30.3,,,1,1,soil
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Aug 14 04:42:53 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration







TIC: 6F06564.d\data.ms

(107) Indeno[1,2,3-cd]pyrene (P)

18.577min (+0.016) 8.47ppm

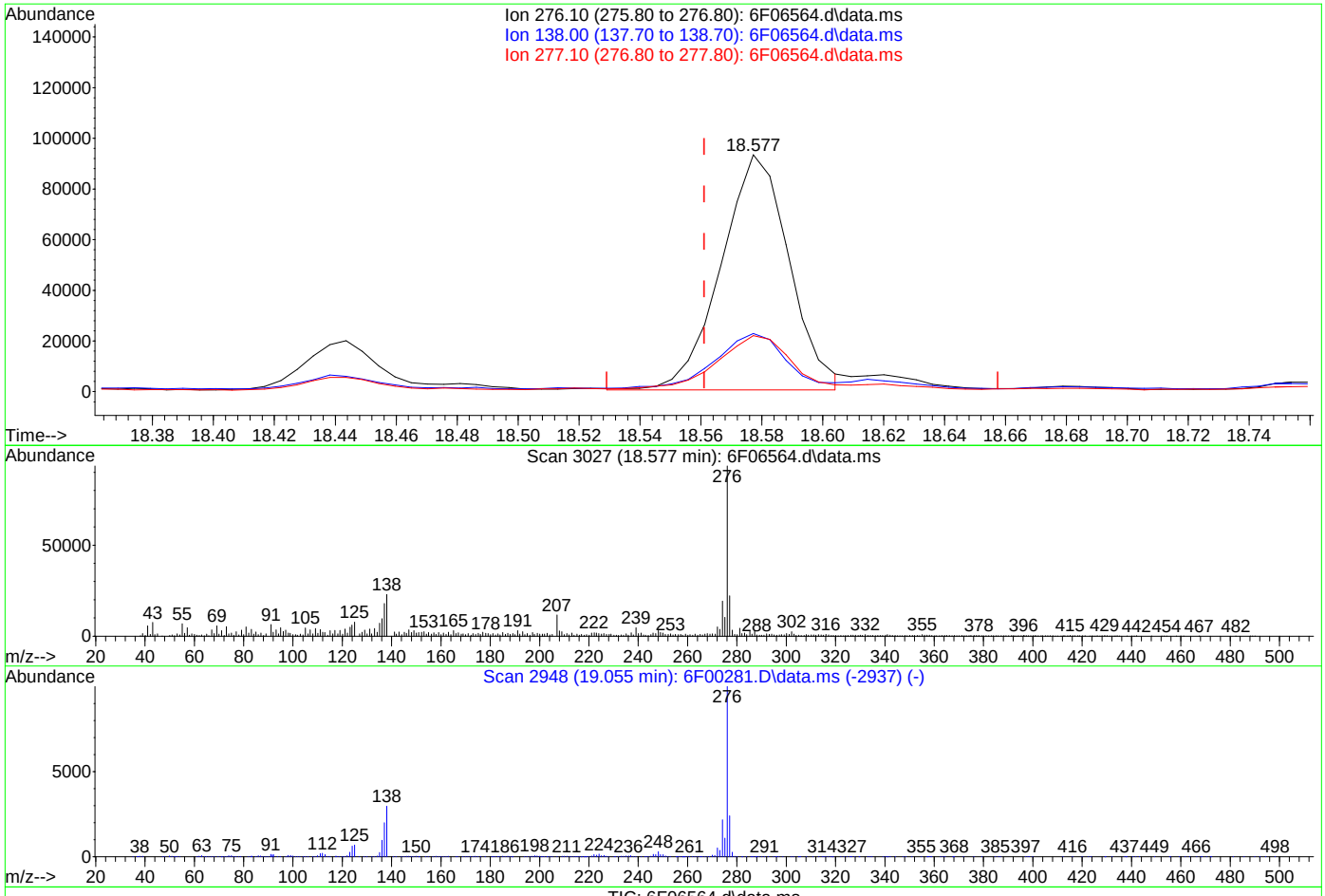
response 150297

Ion	Exp%	Act%
276.10	100	100
138.00	26.90	23.45
277.10	23.90	22.75
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s6f253\
Data File : 6F06564.d
Acq On : 13 Aug 2020 11:20 pm
Operator : marthav
Sample : fa77689-10 E
Misc : op81538,S6F253,30.3,,,1,1,soil
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Aug 14 04:42:53 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration



TIC: 6F06564.d\data.ms

(107) Indeno[1,2,3-cd]pyrene (P)

18.577min (+0.016) 8.11ppm m

response 143954

Ion	Exp%	Act%
276.10	100	100
138.00	26.90	24.47
277.10	23.90	23.63
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 08/14/20 14:57

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s6f253\
Data File : 6F06565.d
Acq On : 13 Aug 2020 11:46 pm
Operator : marthav
Sample : fa77689-11 E
Misc : op81538,S6F253,30.0,,,1,1,soil
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Aug 14 05:27:39 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

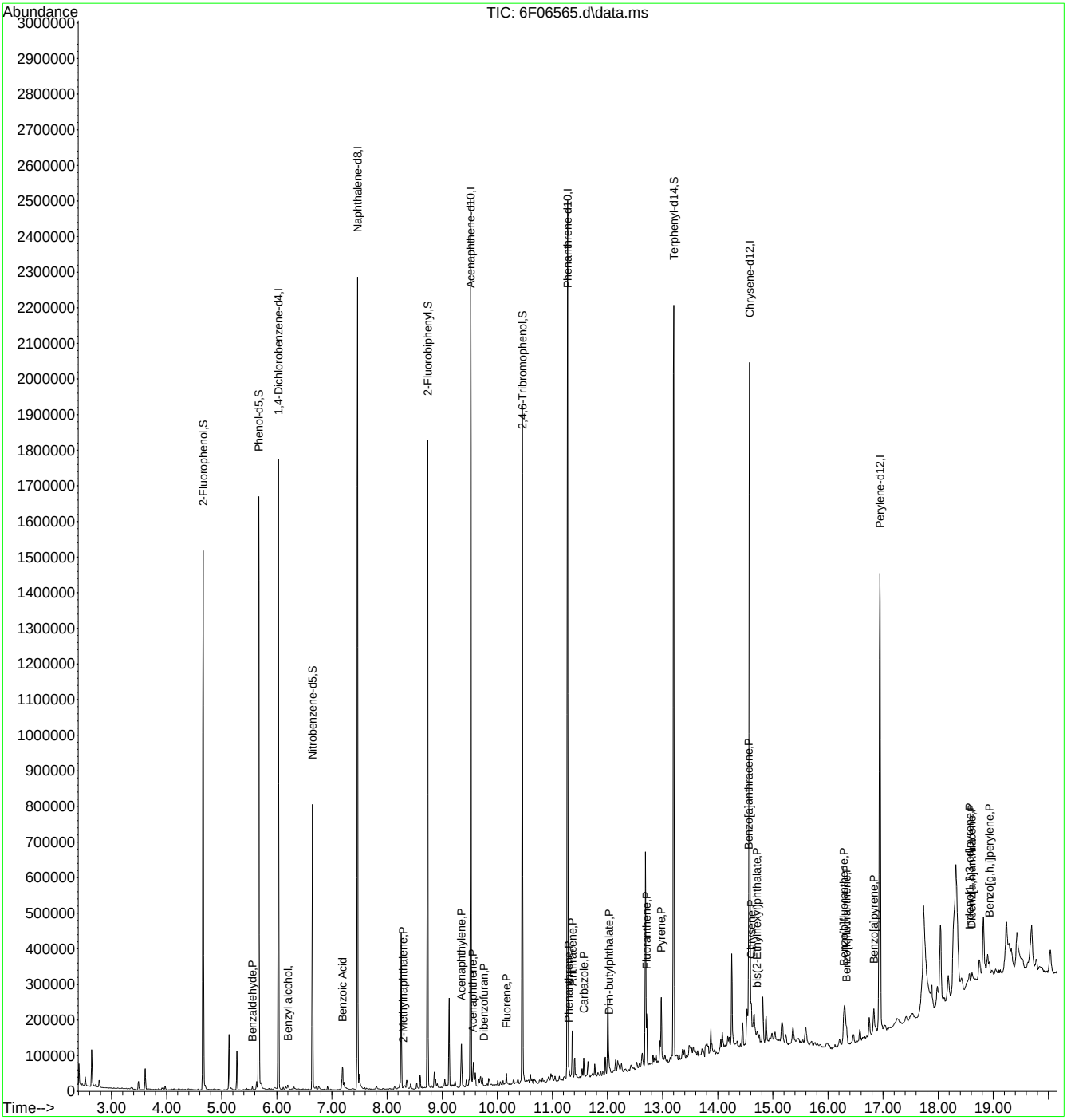
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.029	152	275195	40.00	ppm	0.00
22) Naphthalene-d8	7.463	136	1008744	40.00	ppm	0.00
43) Acenaphthene-d10	9.517	164	528183	40.00	ppm	0.00
70) Phenanthrene-d10	11.276	188	940068	40.00	ppm	0.00
92) Chrysene-d12	14.576	240	733139	40.00	ppm	0.00
102) Perylene-d12	16.941	264	704806	40.00	ppm	0.02
System Monitoring Compounds						
7) 2-Fluorophenol	4.660	112	455503	43.80	ppm	0.01
Spiked Amount 100.000	Range 40 - 102		Recovery = 43.80%			
9) Phenol-d5	5.671	99	618170	50.08	ppm	0.00
Spiked Amount 100.000	Range 41 - 100		Recovery = 50.08%			
23) Nitrobenzene-d5	6.644	82	247982	22.41	ppm	0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 44.82%			
47) 2-Fluorobiphenyl	8.736	172	564286	27.33	ppm	0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 54.66%			
75) 2,4,6-Tribromophenol	10.458	330	238313	75.32	ppm	0.00
Spiked Amount 100.000	Range 42 - 108		Recovery = 75.32%			
95) Terphenyl-d14	13.202	244	717806	34.83	ppm	0.00
Spiked Amount 50.000	Range 45 - 119		Recovery = 69.66%			
Target Compounds						Qvalue
5) Benzaldehyde	5.553	106	2619	0.31	ppm	93
15) Benzyl alcohol	6.200	108	2351	0.36	ppm	# 70
30) Benzoic Acid	7.190	105	23821	3.62	ppm	94
40) 2-Methylnaphthalene	8.292	141	1115	0.07	ppm	91
52) Acenaphthylene	9.345	152	47742	1.81	ppm	98
57) Acenaphthene	9.554	153	4144	0.24	ppm	87
60) Dibenzofuran	9.757	168	1132	0.05	ppm	96
65) Fluorene	10.164	166	10341	0.53	ppm	99
84) Phenanthrene	11.298	178	8339	0.30	ppm	98
85) Anthracene	11.362	178	55495	1.94	ppm	98
87) Carbazole	11.571	167	21543	0.84	ppm	98
89) Di-n-butylphthalate	12.025	149	3044	0.09	ppm	95
91) Fluoranthene	12.710	202	55896	1.89	ppm	99
94) Pyrene	12.977	202	66404	2.53	ppm	95
99) Benzo[a]anthracene	14.560	228	28430	1.16	ppm	93
100) Chrysene	14.609	228	46100	1.93	ppm	97
101) bis(2-Ethylhexyl)phtha...	14.710	149	3099	0.18	ppm	97
104) Benzo[b]fluoranthene	16.288	252	64436	2.85	ppm	96
105) Benzo[k]fluoranthene	16.336	252	21080	0.90	ppm	96
106) Benzo[a]pyrene	16.834	252	21881	1.04	ppm	98
107) Indeno[1,2,3-cd]pyrene	18.567	276	21139m	1.08	ppm	
108) Dibenz[a,h]anthracene	18.609	278	4287	0.21	ppm	97
109) Benzo[g,h,i]perylene	18.930	276	17712	0.84	ppm	97

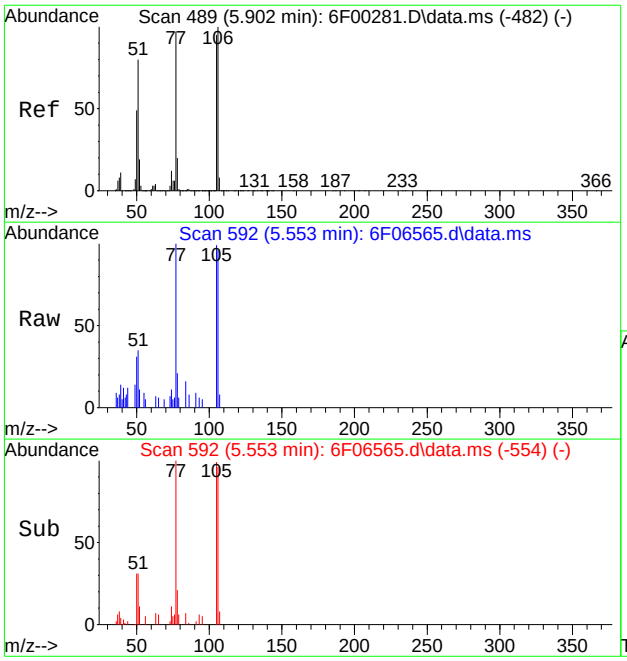
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s6f253\
Data File : 6F06565.d
Acq On : 13 Aug 2020 11:46 pm
Operator : marthav
Sample : fa77689-11 E
Misc : op81538,S6F253,30.0,,,1,1,soil
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Aug 14 05:27:39 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

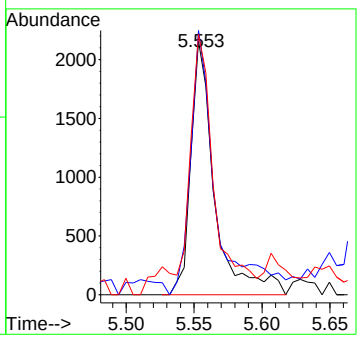


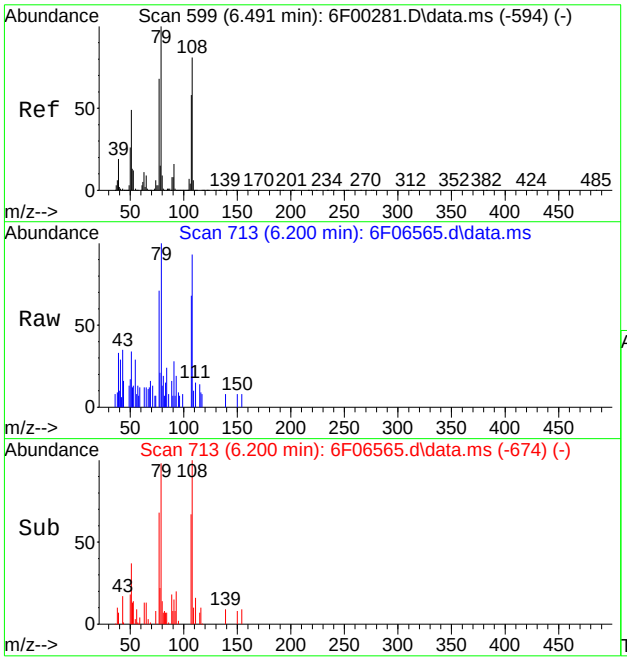


#5
Benzaldehyde
Concen: 0.31 ppm
RT: 5.553 min Scan# 592
Delta R.T. 0.005 min
Lab File: 6F06565.d
Acq: 13 Aug 2020 11:46 pm

Tgt Ion:106 Resp: 2619

Ion	Ratio	Lower	Upper
106	100		
77	98.9	74.8	134.8
105	92.3	70.7	130.7

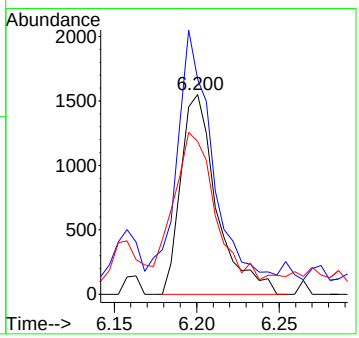


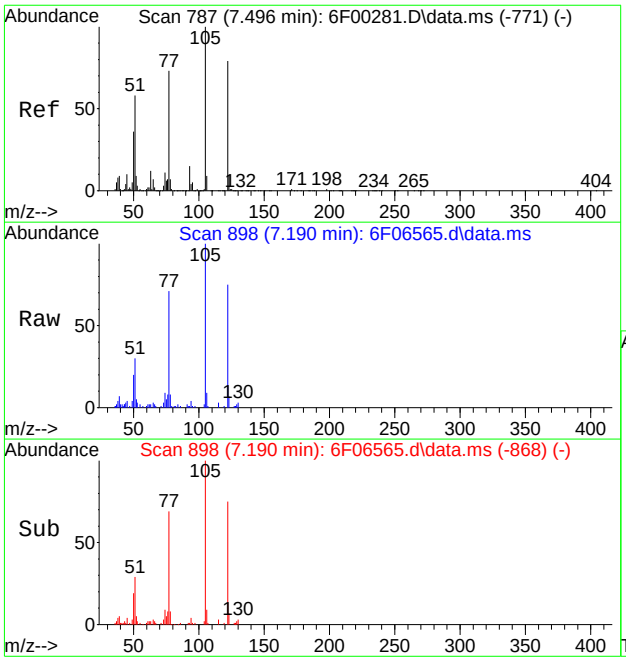


#15
Benzyl alcohol
Concen: 0.36 ppm
RT: 6.200 min Scan# 713
Delta R.T. 0.011 min
Lab File: 6F06565.d
Acq: 13 Aug 2020 11:46 pm

Tgt Ion:108 Resp: 2351

Ion	Ratio	Lower	Upper
108	100		
79	88.3	96.9	156.9#
77	58.4	50.8	110.8

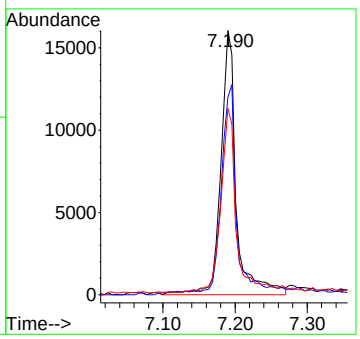


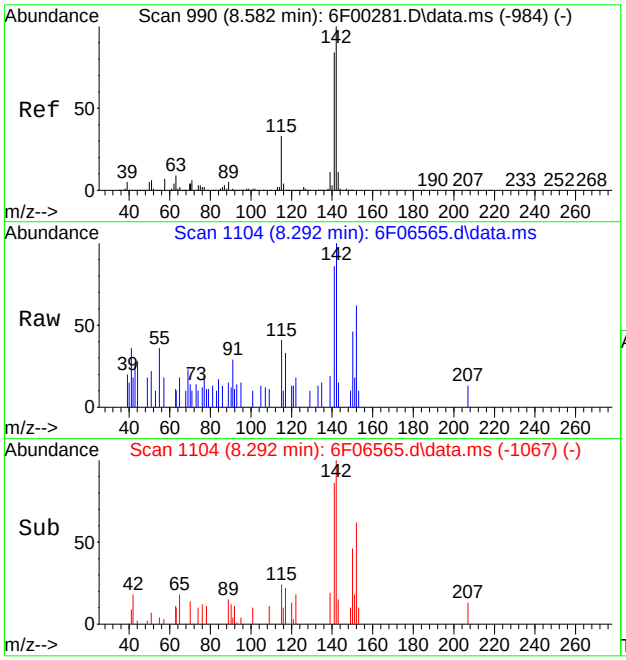


#30
Benzoic Acid
Concen: 3.62 ppm
RT: 7.190 min Scan# 898
Delta R.T. -0.037 min
Lab File: 6F06565.d
Acq: 13 Aug 2020 11:46 pm

Tgt Ion:105 Resp: 23821

Ion	Ratio	Lower	Upper
105	100		
122	74.3	51.7	111.7
77	69.7	42.8	102.8

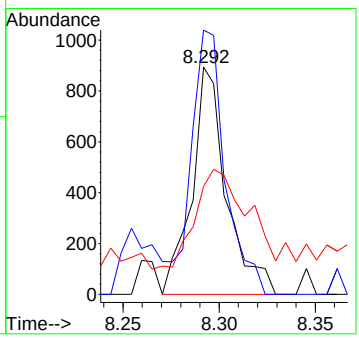


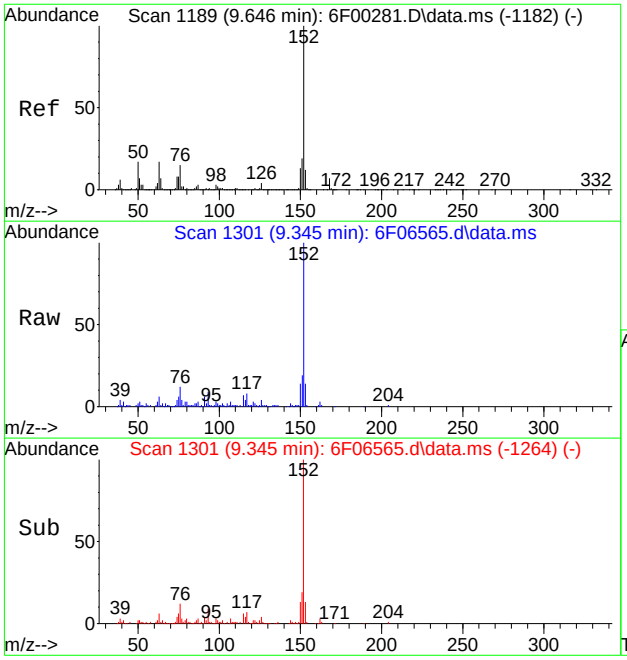


#40
2-Methylnaphthalene
Concen: 0.07 ppm
RT: 8.292 min Scan# 1104
Delta R.T. 0.000 min
Lab File: 6F06565.d
Acq: 13 Aug 2020 11:46 pm

Tgt Ion:141 Resp: 1115

Ion	Ratio	Lower	Upper
141	100		
142	109.1	87.4	147.4
115	29.9	8.3	68.3

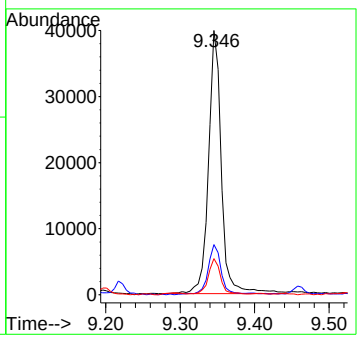


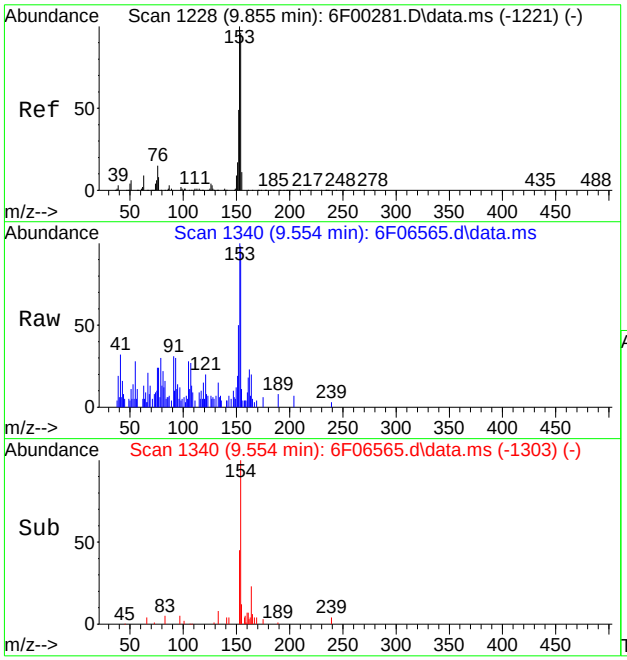


#52
Acenaphthylene
Concen: 1.81 ppm
RT: 9.345 min Scan# 1301
Delta R.T. 0.000 min
Lab File: 6F06565.d
Acq: 13 Aug 2020 11:46 pm

Tgt Ion:152 Resp: 47742

Ion	Ratio	Lower	Upper
152	100		
151	18.8	0.0	49.9
153	13.3	0.0	43.2

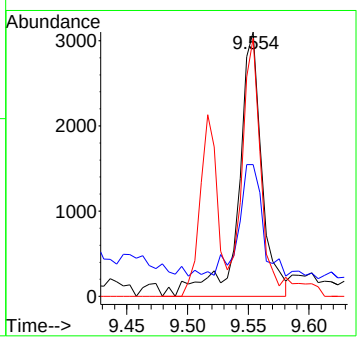


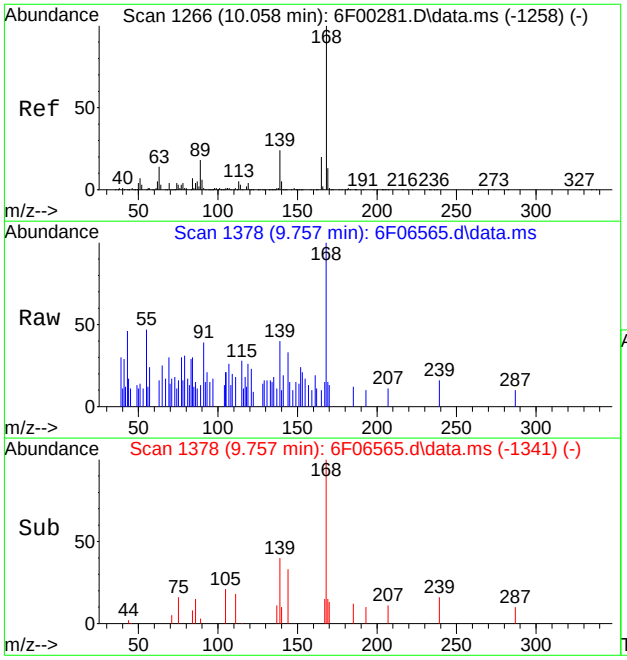


#57
Acenaphthene
Concen: 0.24 ppm
RT: 9.554 min Scan# 1340
Delta R.T. 0.000 min
Lab File: 6F06565.d
Acq: 13 Aug 2020 11:46 pm

Tgt Ion:153 Resp: 4144

Ion	Ratio	Lower	Upper
153	100		
152	41.0	16.2	76.2
154	108.1	63.3	123.3

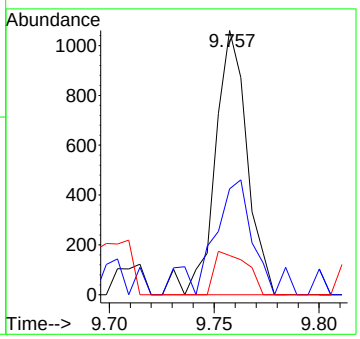


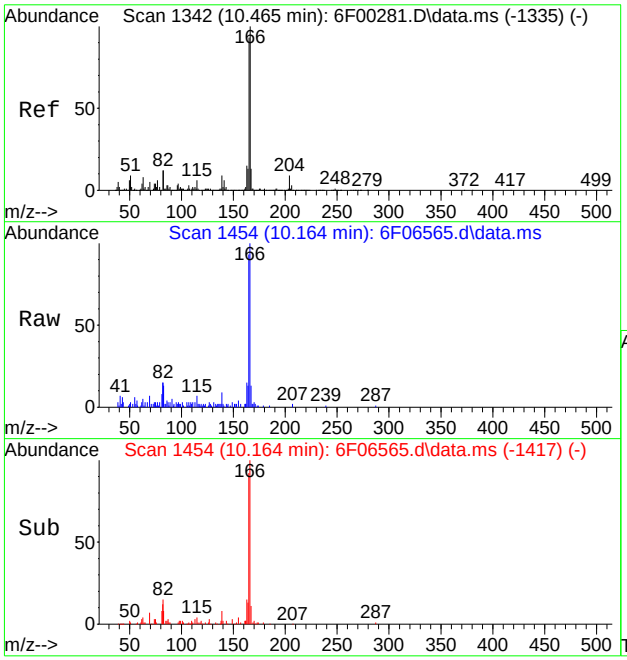


#60
Dibenzofuran
Concen: 0.05 ppm
RT: 9.757 min Scan# 1378
Delta R.T. 0.000 min
Lab File: 6F06565.d
Acq: 13 Aug 2020 11:46 pm

Tgt Ion:168 Resp: 1132

Ion	Ratio	Lower	Upper
168	100		
139	34.9	7.1	67.1
169	14.9	0.0	43.6

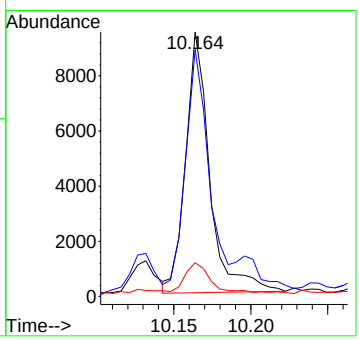


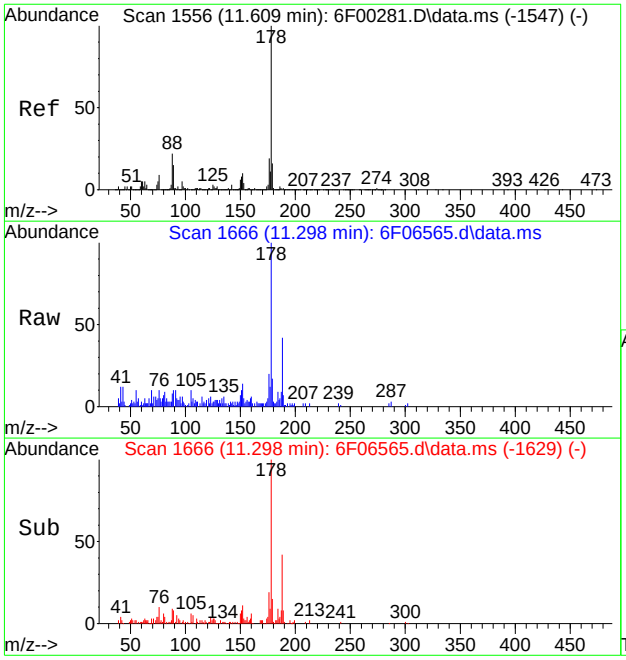


#65
Fluorene
Concen: 0.53 ppm
RT: 10.164 min Scan# 1454
Delta R.T. 0.000 min
Lab File: 6F06565.d
Acq: 13 Aug 2020 11:46 pm

Tgt Ion:166 Resp: 10341

Ion	Ratio	Lower	Upper
166	100		
165	93.2	63.2	123.2
167	11.6	0.0	43.3

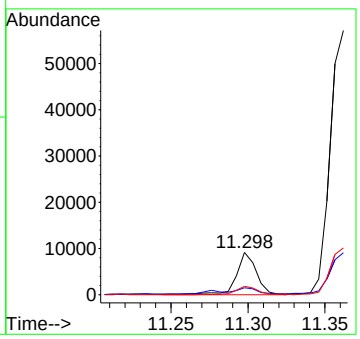


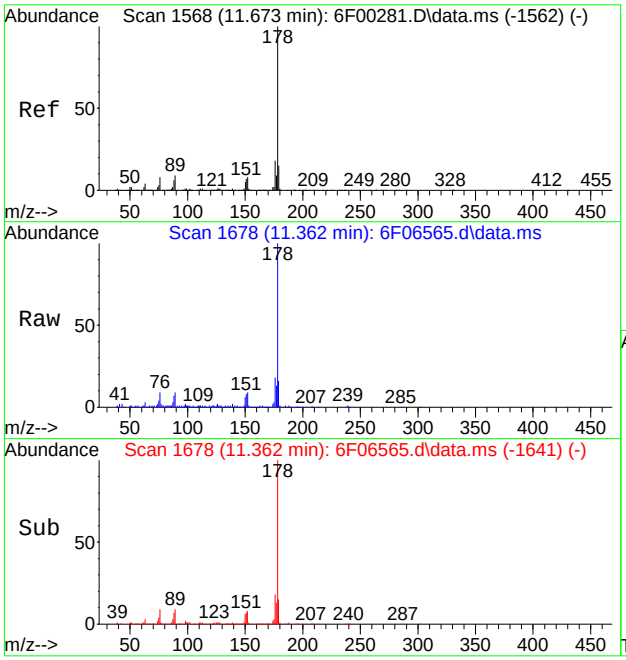


#84
Phenanthrene
Concen: 0.30 ppm
RT: 11.298 min Scan# 1666
Delta R.T. 0.000 min
Lab File: 6F06565.d
Acq: 13 Aug 2020 11:46 pm

Tgt Ion:178 Resp: 8339

Ion	Ratio	Lower	Upper
178	100		
179	14.3	0.0	45.6
176	19.4	0.0	48.6

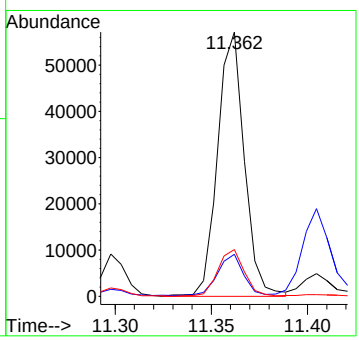


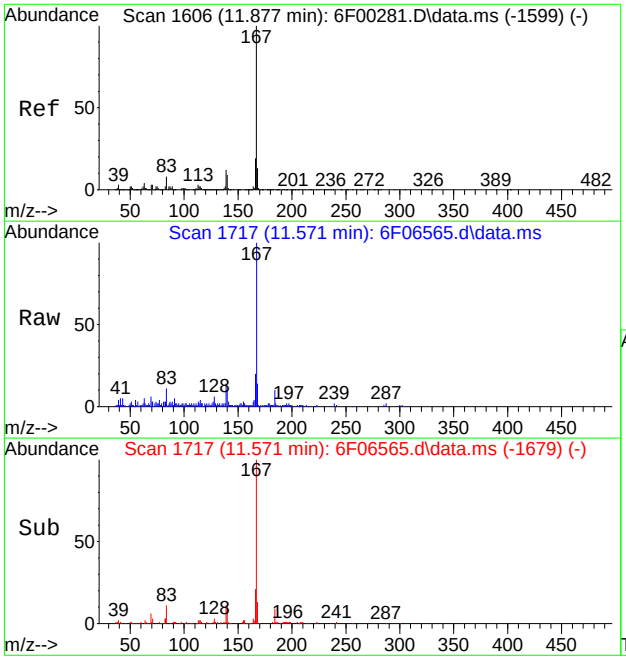


#85
Anthracene
Concen: 1.94 ppm
RT: 11.362 min Scan# 1678
Delta R.T. 0.000 min
Lab File: 6F06565.d
Acq: 13 Aug 2020 11:46 pm

Tgt Ion:178 Resp: 55495

Ion	Ratio	Lower	Upper
178	100		
179	14.6	0.0	45.4
176	17.4	0.0	48.2

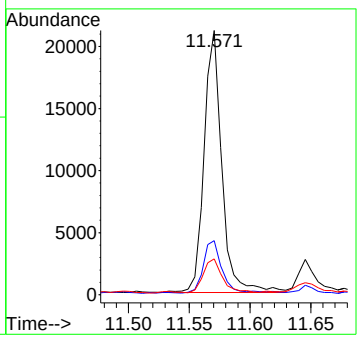


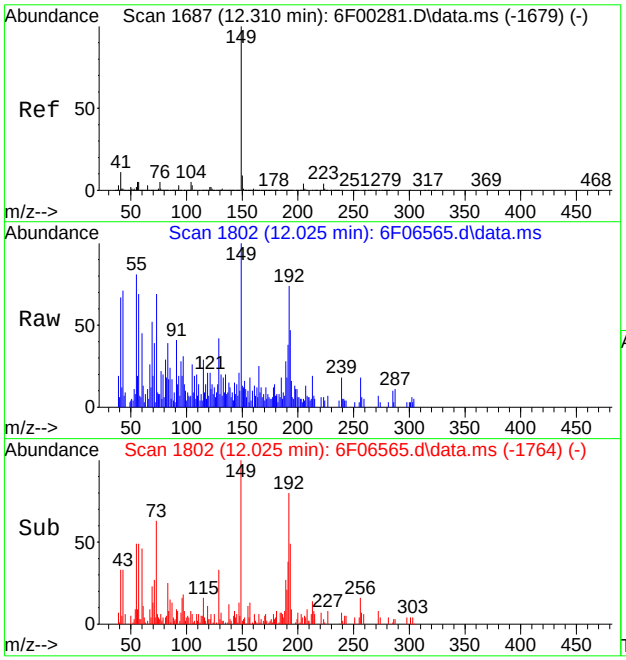


#87
Carbazole
Concen: 0.84 ppm
RT: 11.571 min Scan# 1717
Delta R.T. 0.005 min
Lab File: 6F06565.d
Acq: 13 Aug 2020 11:46 pm

Tgt Ion:167 Resp: 21543

Ion	Ratio	Lower	Upper
167	100		
166	19.8	0.0	50.9
139	12.6	0.0	43.2

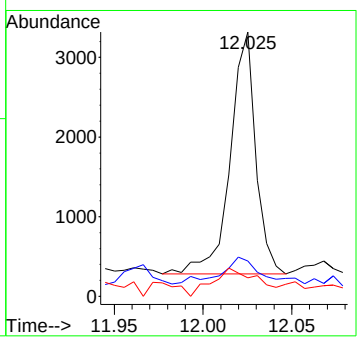


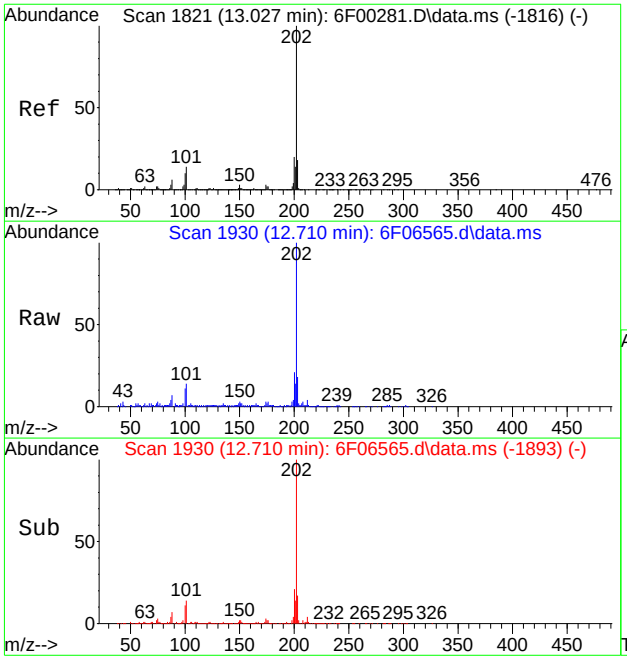


#89
Di-n-butylphthalate
Concen: 0.09 ppm
RT: 12.025 min Scan# 1802
Delta R.T. 0.005 min
Lab File: 6F06565.d
Acq: 13 Aug 2020 11:46 pm

Tgt Ion:149 Resp: 3044

Ion	Ratio	Lower	Upper
149	100		
150	7.6	0.0	39.2
104	2.4	0.0	34.7

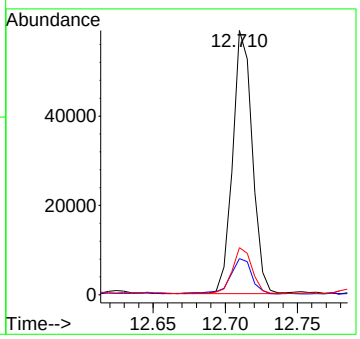


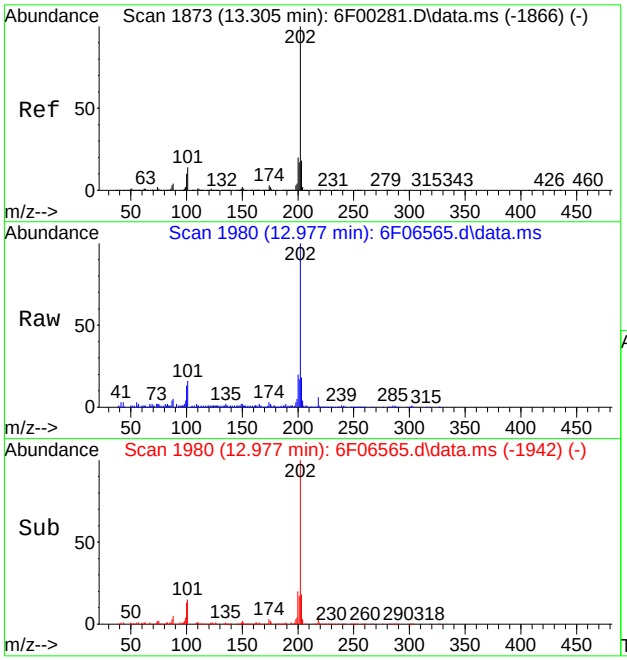


#91
Fluoranthene
Concen: 1.89 ppm
RT: 12.710 min Scan# 1930
Delta R.T. 0.000 min
Lab File: 6F06565.d
Acq: 13 Aug 2020 11:46 pm

Tgt Ion:202 Resp: 55896

Ion	Ratio	Lower	Upper
202	100		
101	13.2	0.0	44.4
203	17.4	0.0	47.5

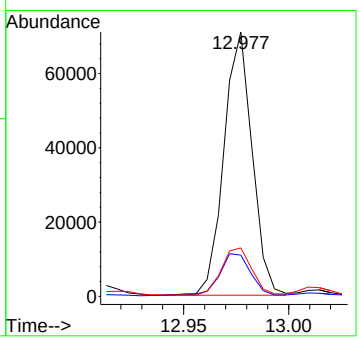


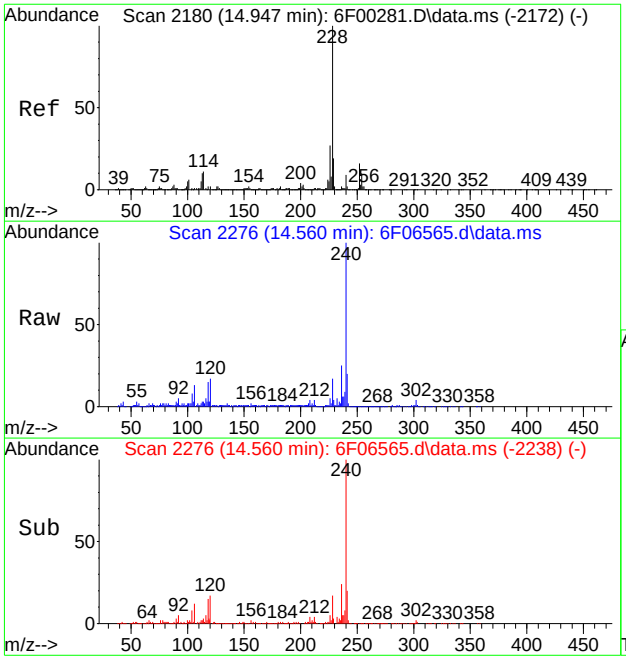


#94
Pyrene
Concen: 2.53 ppm
RT: 12.977 min Scan# 1980
Delta R.T. 0.005 min
Lab File: 6F06565.d
Acq: 13 Aug 2020 11:46 pm

Tgt Ion:202 Resp: 66404

Ion	Ratio	Lower	Upper
202	100		
101	15.1	0.0	48.6
203	17.8	0.0	48.3

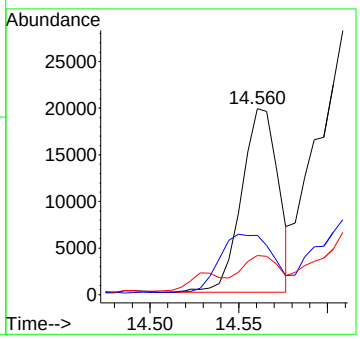


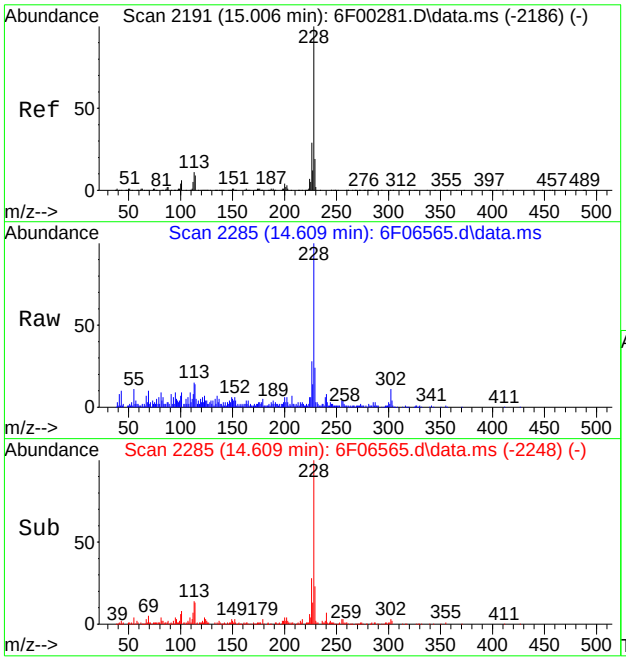


#99
Benzo[a]anthracene
Concen: 1.16 ppm
RT: 14.560 min Scan# 2276
Delta R.T. 0.005 min
Lab File: 6F06565.d
Acq: 13 Aug 2020 11:46 pm

Tgt Ion:228 Resp: 28430

Ion	Ratio	Lower	Upper
228	100		
226	32.2	0.0	56.8
229	18.3	0.0	49.8

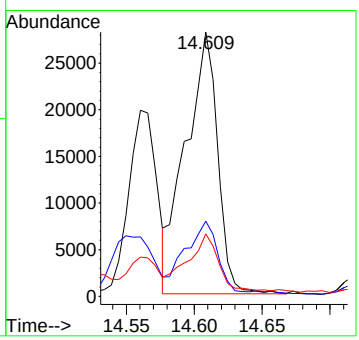


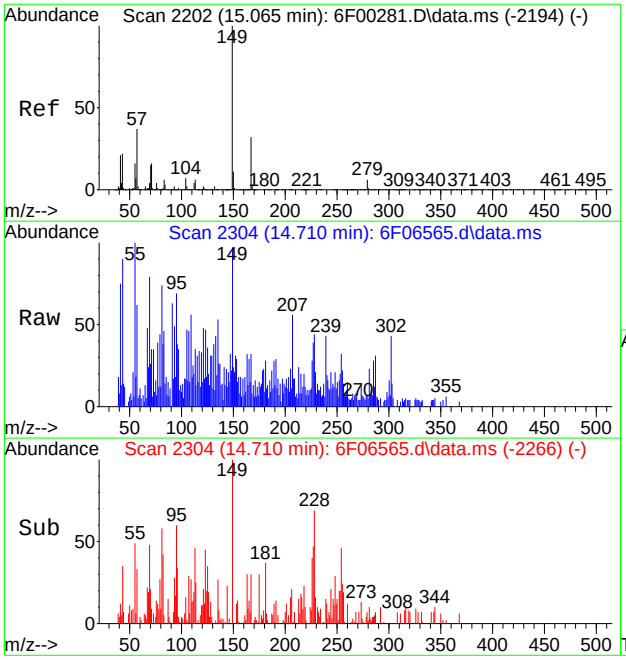


#100
Chrysene
Concen: 1.93 ppm
RT: 14.609 min Scan# 2285
Delta R.T. 0.000 min
Lab File: 6F06565.d
Acq: 13 Aug 2020 11:46 pm

Tgt Ion:228 Resp: 46100

Ion	Ratio	Lower	Upper
228	100		
226	27.8	0.0	59.3
229	21.8	0.0	49.8

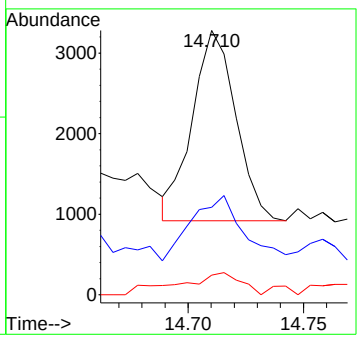


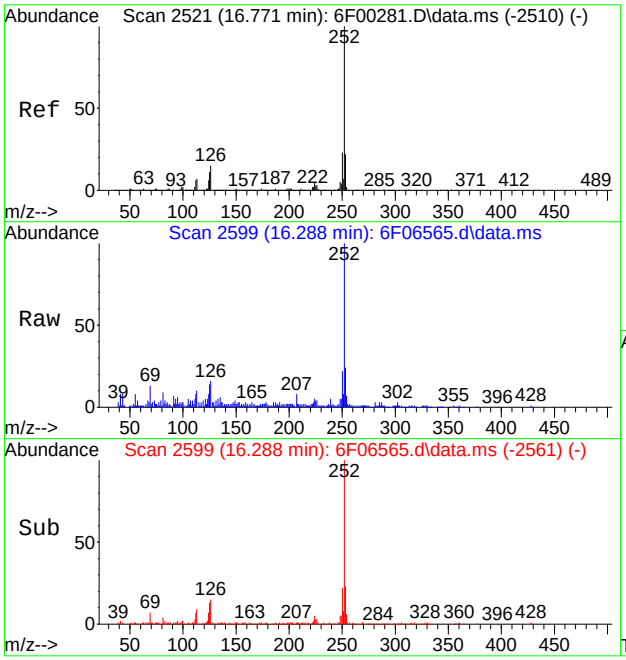


#101
bis(2-Ethylhexyl)phthalate
Concen: 0.18 ppm
RT: 14.710 min Scan# 2304
Delta R.T. 0.005 min
Lab File: 6F06565.d
Acq: 13 Aug 2020 11:46 pm

Tgt Ion:149 Resp: 3099

Ion	Ratio	Lower	Upper
149	100		
167	28.2	0.0	59.9
279	5.9	0.0	36.7

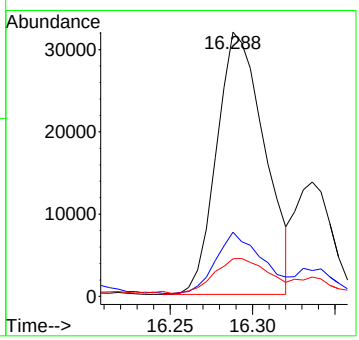


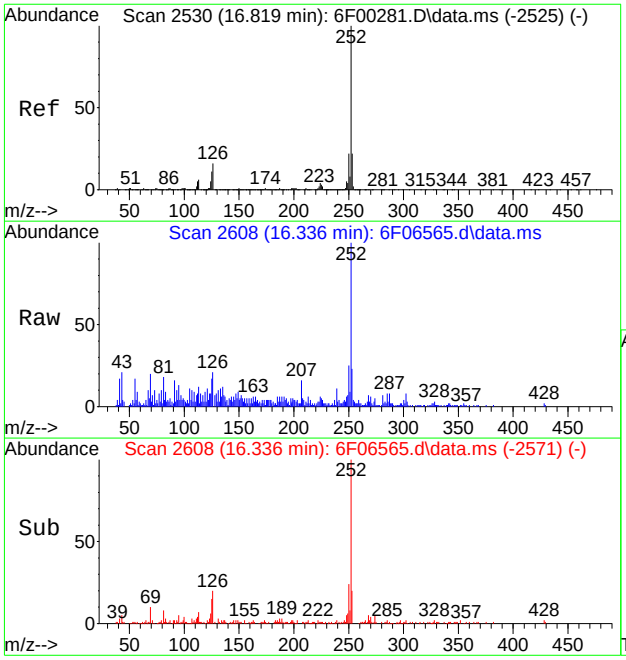


#104
Benzo[b]fluoranthene
Concen: 2.85 ppm
RT: 16.288 min Scan# 2599
Delta R.T. 0.005 min
Lab File: 6F06565.d
Acq: 13 Aug 2020 11:46 pm

Tgt Ion:252 Resp: 64436

Ion	Ratio	Lower	Upper
252	100		
253	23.2	0.0	51.7
125	12.2	0.0	44.0

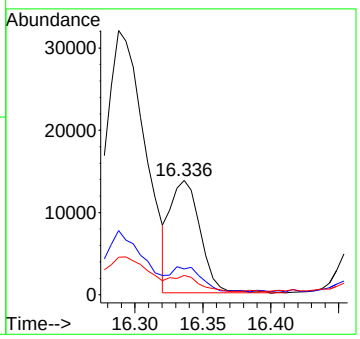


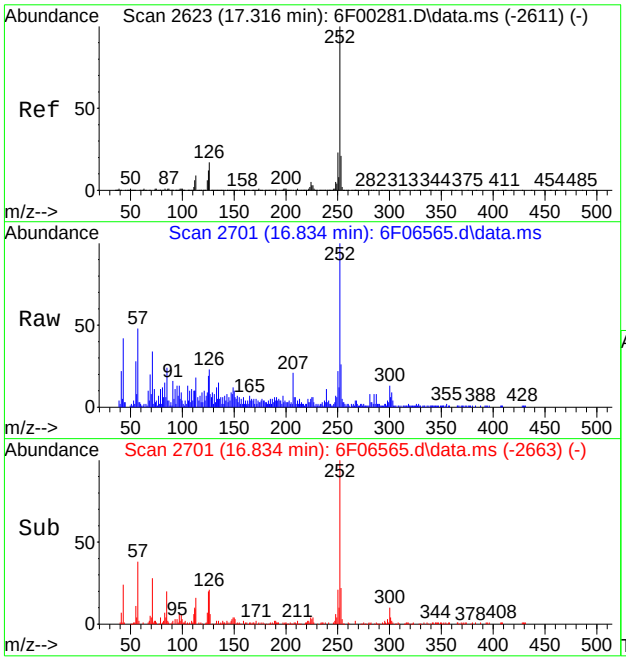


#105
Benzo[k]fluoranthene
Concen: 0.90 ppm
RT: 16.336 min Scan# 2608
Delta R.T. 0.000 min
Lab File: 6F06565.d
Acq: 13 Aug 2020 11:46 pm

Tgt Ion:252 Resp: 21080

Ion	Ratio	Lower	Upper
252	100		
253	18.7	0.0	51.9
125	13.2	0.0	43.3

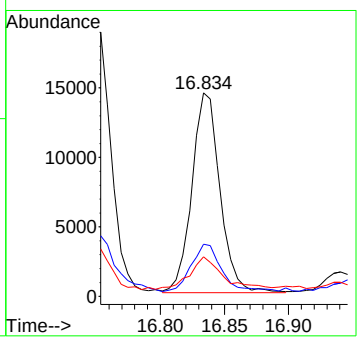


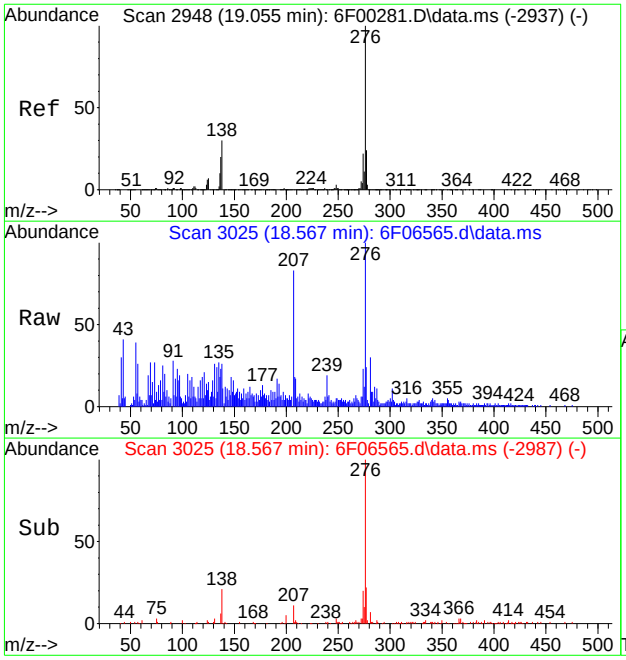


#106
Benzo[a]pyrene
Concen: 1.04 ppm
RT: 16.834 min Scan# 2701
Delta R.T. 0.005 min
Lab File: 6F06565.d
Acq: 13 Aug 2020 11:46 pm

Tgt Ion:252 Resp: 21881

Ion	Ratio	Lower	Upper
252	100		
253	23.0	0.0	52.0
125	15.2	0.0	44.6

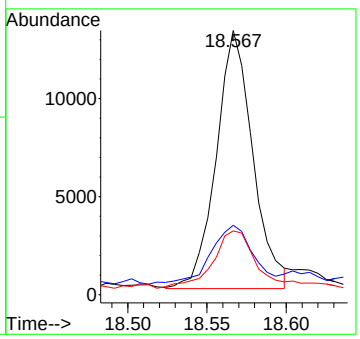


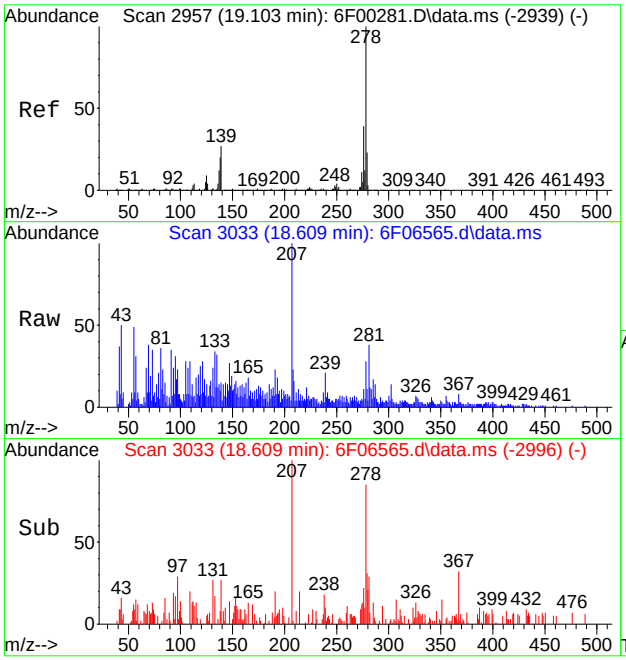


#107
Indeno[1,2,3-cd]pyrene
Concen: 1.08 ppm m
RT: 18.567 min Scan# 3025
Delta R.T. 0.005 min
Lab File: 6F06565.d
Acq: 13 Aug 2020 11:46 pm

Tgt Ion:276 Resp: 21139

Ion	Ratio	Lower	Upper
276	100		
138	26.3	0.0	56.9
277	24.2	0.0	53.9

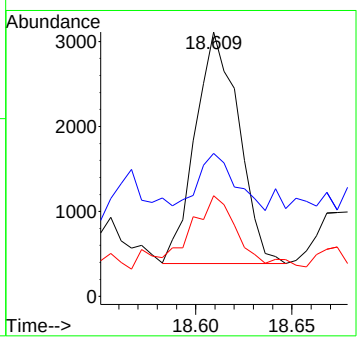


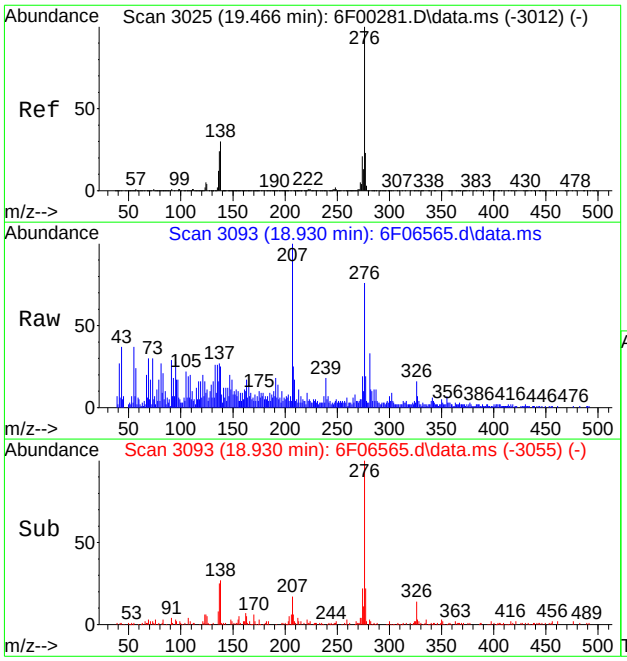


#108
Dibenz[a,h]anthracene
Concen: 0.21 ppm
RT: 18.609 min Scan# 3033
Delta R.T. 0.000 min
Lab File: 6F06565.d
Acq: 13 Aug 2020 11:46 pm

Tgt Ion:278 Resp: 4287

Ion	Ratio	Lower	Upper
278	100		
139	21.6	0.0	51.9
279	27.2	0.0	54.3

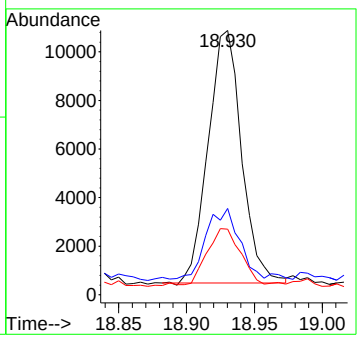




#109
Benzo[g,h,i]perylene
Concen: 0.84 ppm
RT: 18.930 min Scan# 3093
Delta R.T. 0.005 min
Lab File: 6F06565.d
Acq: 13 Aug 2020 11:46 pm

Tgt Ion:276 Resp: 17712

Ion	Ratio	Lower	Upper
276	100		
138	27.7	0.0	59.3
277	22.1	0.0	53.8



Manual Integration Approval Summary

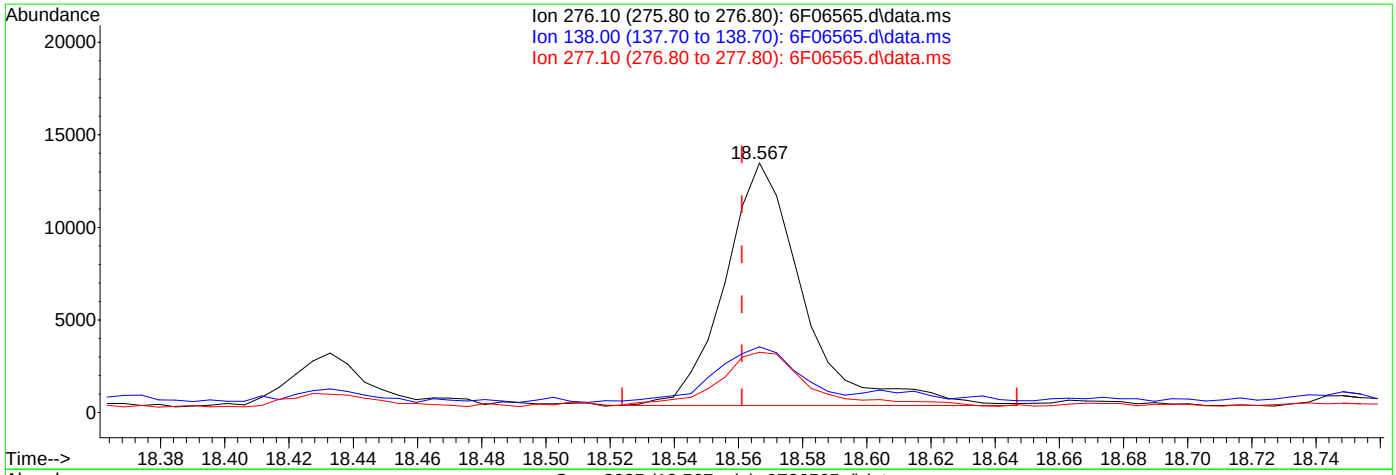
Sample Number: FA77689-11
Lab FileID: 6F06565.D
Injection Time: 08/13/20 23:46
Method: SW846 8270E
Analyst approved: 08/14/20 10:45 Martha Valls
Supervisor approved: 08/14/20 14:57 Nicole McCampbell

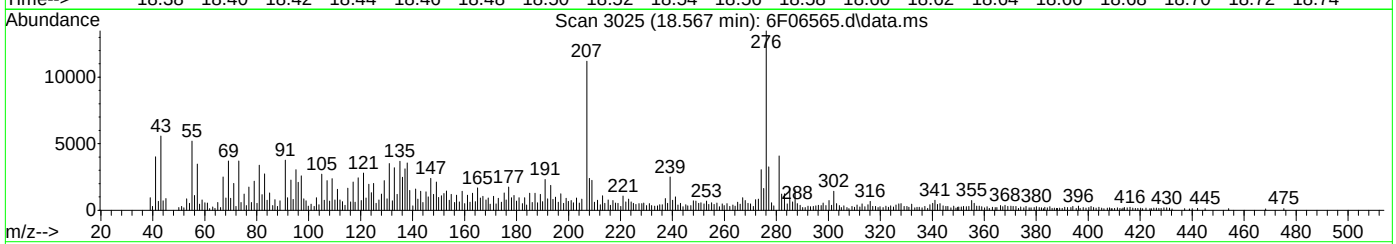
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		18.57	Overlapping peak

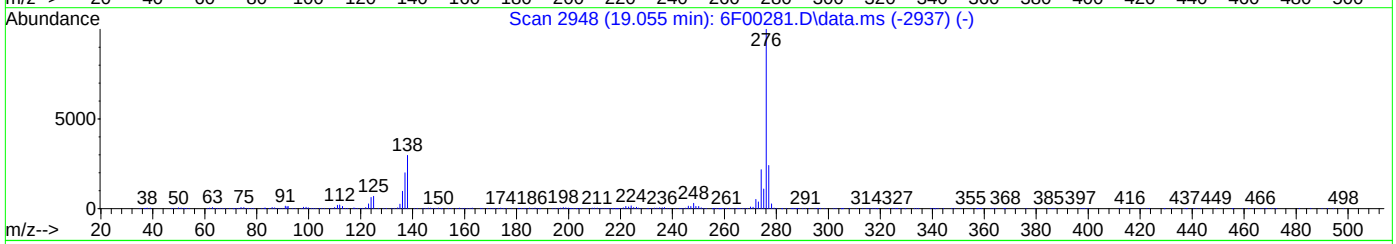
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s6f253\
Data File : 6F06565.d
Acq On : 13 Aug 2020 11:46 pm
Operator : marthav
Sample : fa77689-11 E
Misc : op81538,S6F253,30.0,,,1,1,soil
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Aug 14 04:42:56 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration







TIC: 6F06565.d\data.ms

(107) Indeno[1,2,3-cd]pyrene (P)

18.567min (+0.005) 1.14ppm

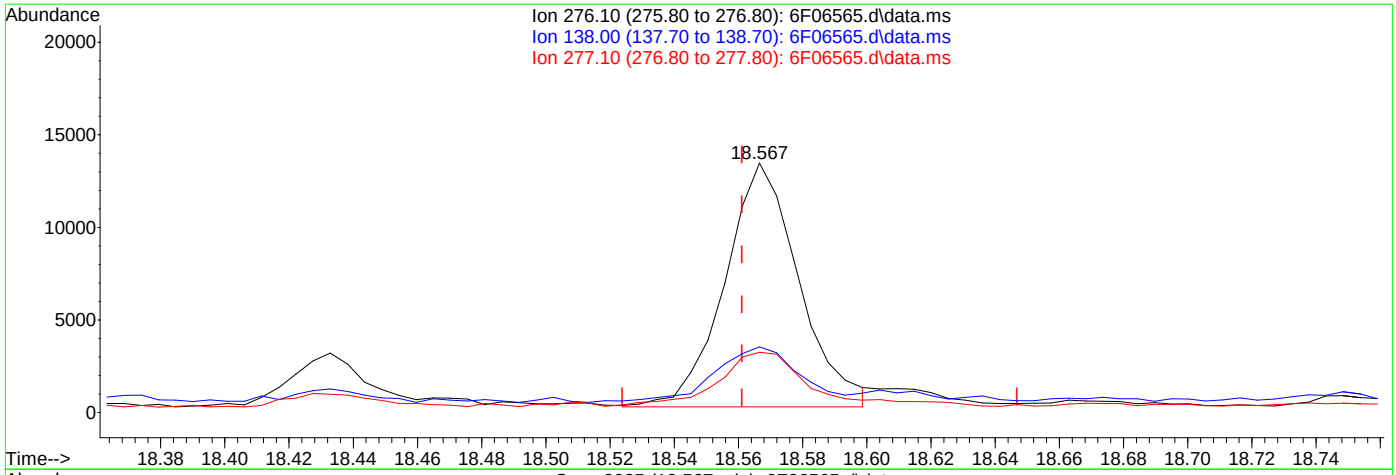
response 22247

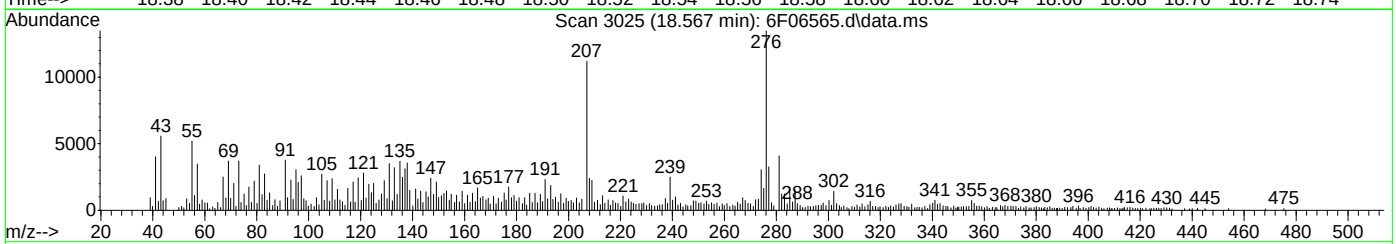
Ion	Exp%	Act%
276.10	100	100
138.00	26.90	22.29
277.10	23.90	21.78
0.00	0.00	0.00

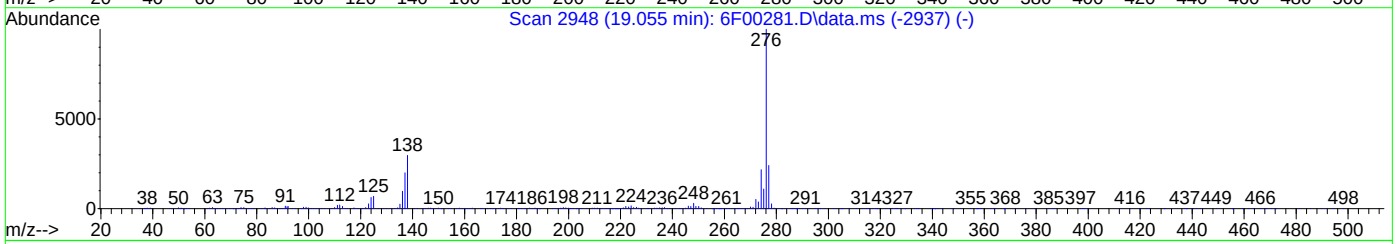
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s6f253\
Data File : 6F06565.d
Acq On : 13 Aug 2020 11:46 pm
Operator : marthav
Sample : fa77689-11 E
Misc : op81538,S6F253,30.0,,,1,1,soil
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Aug 14 04:42:56 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration







TIC: 6F06565.d\data.ms

(107) Indeno[1,2,3-cd]pyrene (P)

18.567min (+0.005) 1.08ppm m

response 21139

Ion	Exp%	Act%
276.10	100	100
138.00	26.90	26.30
277.10	23.90	24.21
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\Jenniferf\AUGUST 2020\08-14-2020\SX2952\
Data File : x072415.d
Acq On : 14 Aug 2020 12:46 am
Operator : marthav
Sample : fa77689-12 E
Misc : op81545,sx2952,250,,,1,1,water
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Aug 14 03:23:36 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

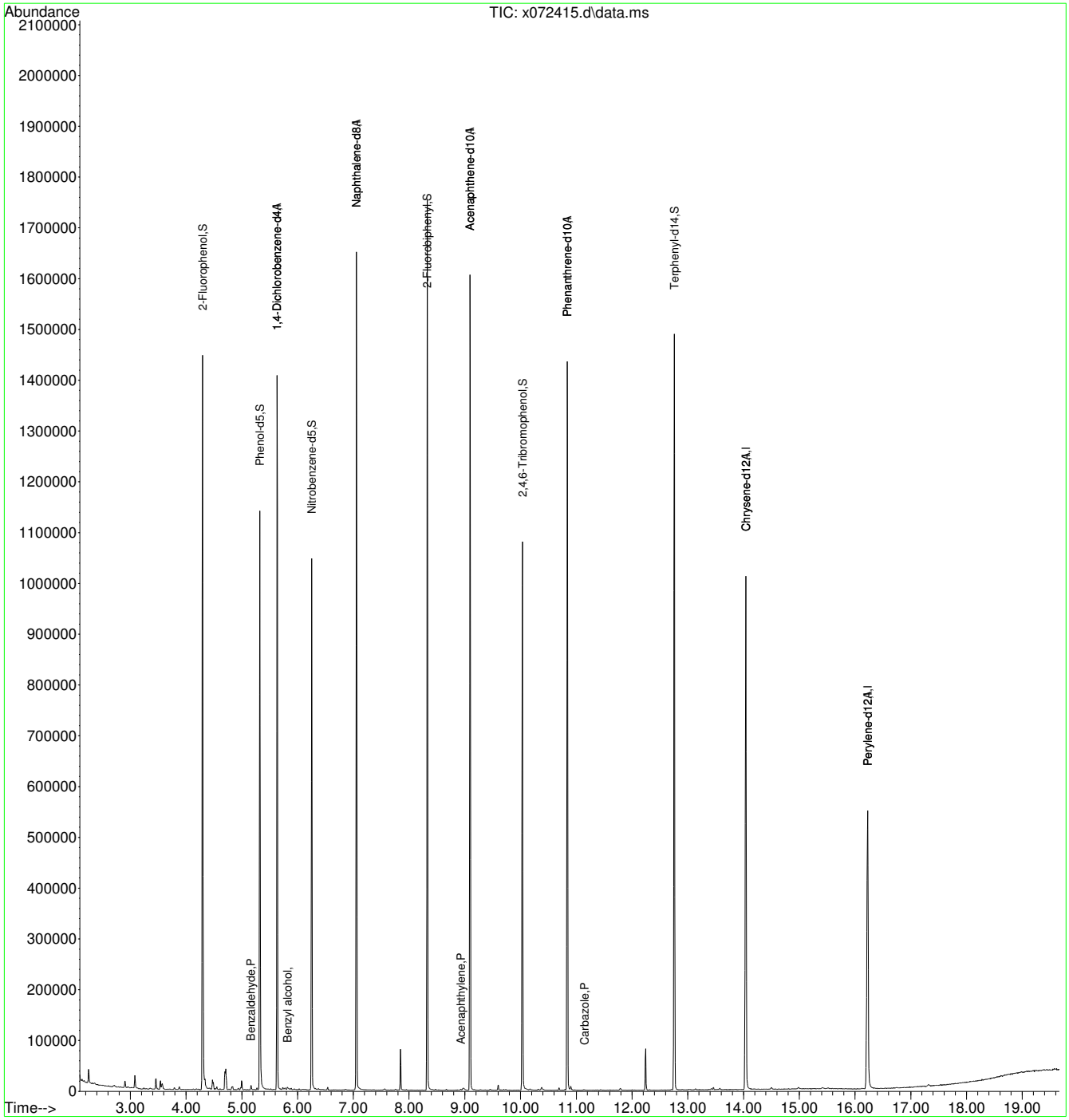
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.633	152	193480	40.00	ppm	0.00
22) Naphthalene-d8	7.056	136	706781	40.00	ppm	0.00
43) Acenaphthene-d10	9.094	164	332503	40.00	ppm	0.00
70) Phenanthrene-d10	10.837	188	553329	40.00	ppm	0.00
92) Chrysene-d12	14.041	240	396254	40.00	ppm	-0.01
102) Perylene-d12	16.229	264	299172	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	5.633	152	193480	40.00	ppm	0.00
120) Naphthalene-d8A	7.056	136	706781	40.00	ppm	0.00
127) Acenaphthene-d10A	9.094	164	332503	40.00	ppm	0.00
136) Phenanthrene-d10A	10.837	188	553329	40.00	ppm	0.00
146) Chrysene-d12A	14.041	240	396254	40.00	ppm	-0.01
153) Perylene-d12A	16.229	264	299172	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	4.296	112	363815	52.44	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 52.44%			
9) Phenol-d5	5.323	99	340957	41.31	ppm	0.00
Spiked Amount 100.000	Range 10 - 50		Recovery = 41.31%			
23) Nitrobenzene-d5	6.253	82	286488	39.25	ppm	0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 78.50%			
47) 2-Fluorobiphenyl	8.329	172	489674	40.68	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 81.36%			
75) 2,4,6-Tribromophenol	10.035	330	93652	78.87	ppm	0.00
Spiked Amount 100.000	Range 33 - 118		Recovery = 78.87%			
95) Terphenyl-d14	12.757	244	468899	44.54	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 89.08%			
Target Compounds						Qvalue
5) Benzaldehyde	5.162	106	1708	0.30	ppm	91
15) Benzyl alcohol	5.820	108	1037	0.20	ppm	# 68
52) Acenaphthylene	8.928	152	1489	0.09	ppm	92
87) Carbazole	11.147	167	728	0.05	ppm	94

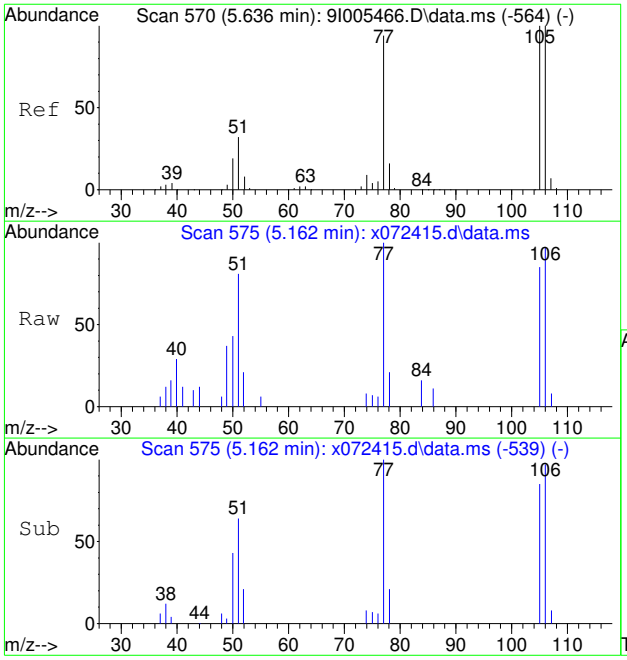
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\Jenniferf\AUGUST 2020\08-14-2020\SX2952\
Data File : x072415.d
Acq On : 14 Aug 2020 12:46 am
Operator : marthav
Sample : fa77689-12 E
Misc : op81545,sx2952,250,,,1,1,water
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Aug 14 03:23:36 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

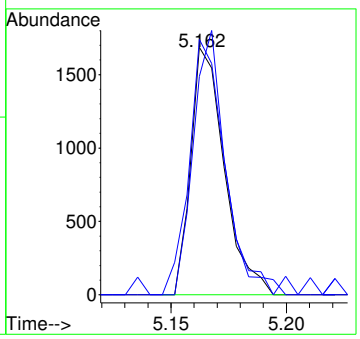


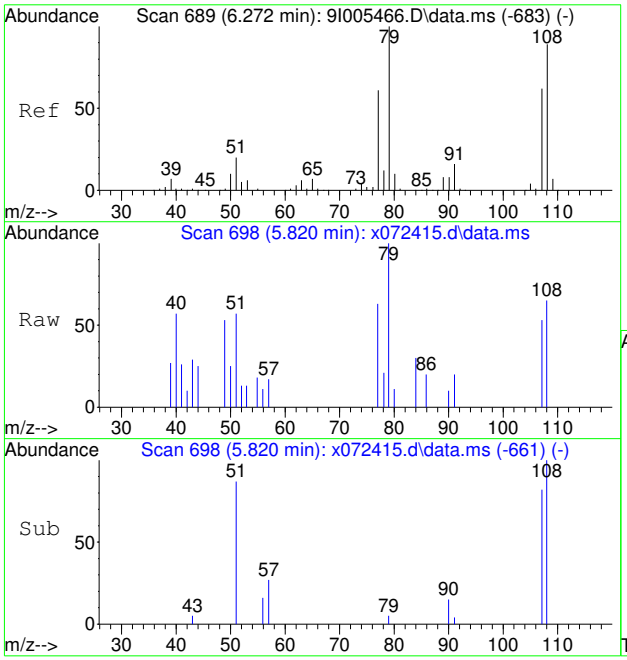


#5
Benzaldehyde
Concen: 0.30 ppm
RT: 5.162 min Scan# 575
Delta R.T. -0.006 min
Lab File: x072415.d
Acq: 14 Aug 2020 12:46 am

Tgt Ion:106 Resp: 1708

Ion	Ratio	Lower	Upper
106	100		
77	99.4	63.9	123.9
105	88.1	70.0	130.0

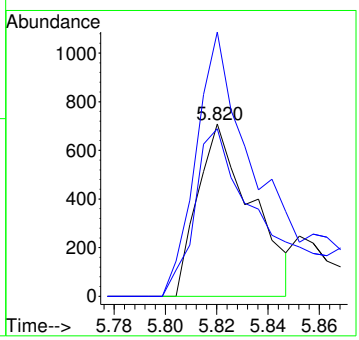


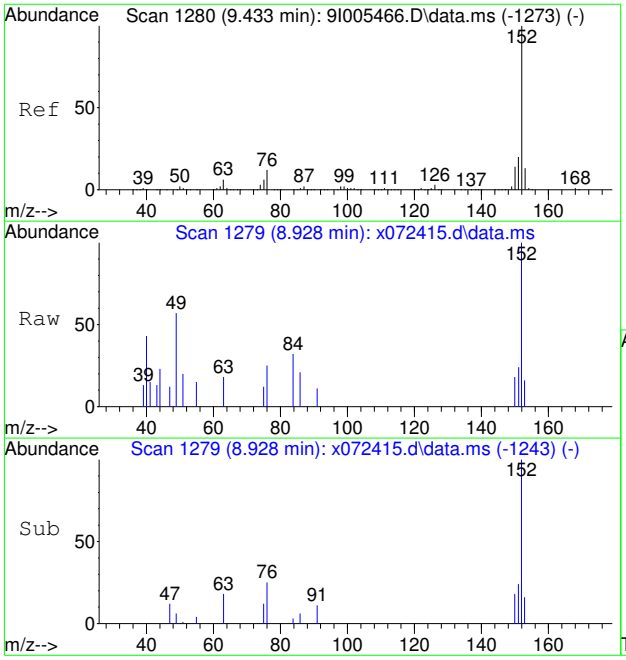


#15
Benzyl alcohol
Concen: 0.20 ppm
RT: 5.820 min Scan# 698
Delta R.T. -0.000 min
Lab File: x072415.d
Acq: 14 Aug 2020 12:46 am

Tgt Ion:108 Resp: 1037

Ion	Ratio	Lower	Upper
108	100		
79	147.3	81.8	141.8#
77	93.2	38.6	98.6

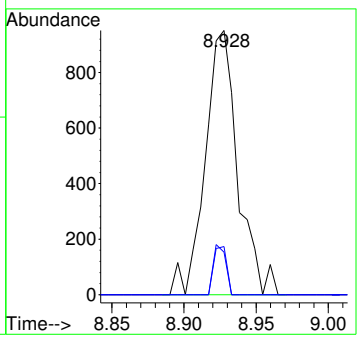


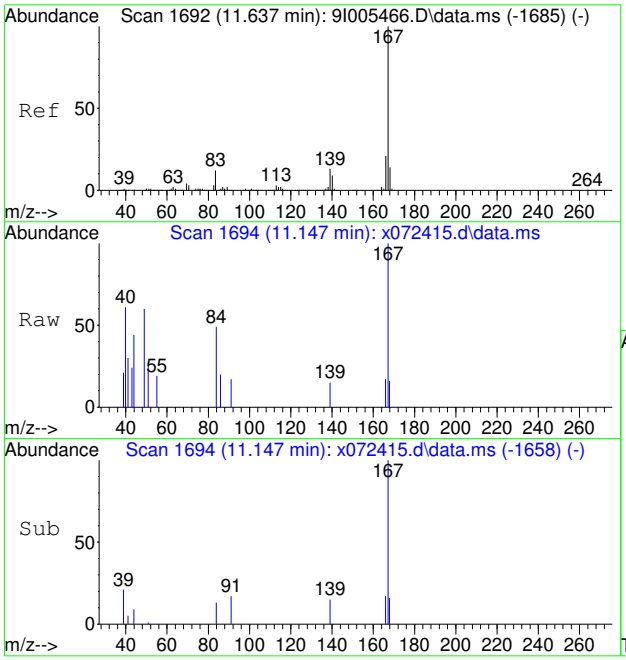


#52
Acenaphthylene
Concen: 0.09 ppm
RT: 8.928 min Scan# 1279
Delta R.T. -0.006 min
Lab File: x072415.d
Acq: 14 Aug 2020 12:46 am

Tgt Ion:152 Resp: 1489

Ion	Ratio	Lower	Upper
152	100		
150	18.2	0.0	44.3
153	16.1	0.0	43.3

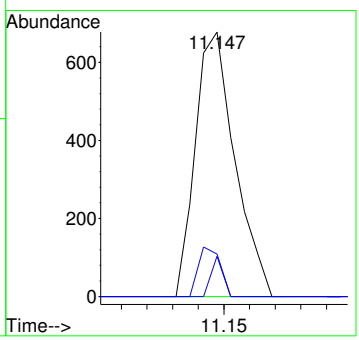




#87
Carbazole
Concen: 0.05 ppm
RT: 11.147 min Scan# 1694
Delta R.T. -0.006 min
Lab File: x072415.d
Acq: 14 Aug 2020 12:46 am

Tgt Ion:167 Resp: 728

Ion	Ratio	Lower	Upper
167	100		
168	16.1	0.0	43.9
139	15.2	0.0	42.7



Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan
08/17/20 12:19

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
Data File : 7G11166.d
Acq On : 13 Aug 2020 4:22 pm
Operator : FOUADS
Sample : fa77689-1 e
Misc : op81539,S7G484,30.1,,,1,1,soil
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 14 03:39:02 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.634	136	24780	4.00	ppm	0.00
6) Acenaphthene-d10	6.118	164	16488	4.00	ppm	0.00
11) Phenanthrene-d10	7.403	188	32425	4.00	ppm	0.00
18) Chrysene-d12	9.746	240	55374	4.00	ppm	0.02
22) Perylene-d12	11.491	264	42165	4.00	ppm	0.02
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.211	152	35943	9.69	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 96.90%			
17) Fluoranthene-d10	8.448	212	201183	11.83	ppm	0.01
Spiked Amount 10.000	Range 50 - 150		Recovery = 118.30%			
Target Compounds						Qvalue
2) Naphthalene	4.652	128	4401	0.63	ppm	100
3) 2-Methylnaphthalene	5.235	142	4746	0.86	ppm	90
5) 1-Methylnaphthalene	5.317	142	5243	1.08	ppm	91
7) Acenaphthylene	5.997	152	31707	3.34	ppm	98
8) Acenaphthene	6.143	153	37850	6.07	ppm	97
9) Dibenzofuran	6.302	168	34001	7.74	ppm	88
10) Fluorene	6.597	166	62189	9.10	ppm	98
12) Pentachlorophenol	7.285	266	130m	0.11	ppm	
13) Phenanthrene	7.438	178	1045823	81.94	ppm	99
14) Anthracene	7.473	178	180153	16.08	ppm	100
15) Carbazole	7.640	167	28295	1.46	ppm	97
16) Fluoranthene	8.476	202	2053692	83.33	ppm	97
19) Pyrene	8.667	202	1773017	73.22	ppm	92
20) Benzo[a]anthracene	9.736	228	551426	29.56	ppm	98
21) Chrysene	9.775	228	609275	31.86	ppm	98
23) Benzo[b]fluoranthene	10.986	252	447038	31.24	ppm	99
24) Benzo[k]fluoranthene	11.011	252	159180m	10.26	ppm	
25) Benzo[a]pyrene	11.413	252	224331	16.09	ppm	99
26) Indeno[1,2,3-cd]pyrene	13.238	276	58214	6.40	ppm	99
27) Dibenz[a,h]anthracene	13.291	278	16911m	1.67	ppm	
28) Benzo[g,h,i]perylene	13.685	276	44291	4.04	ppm	99

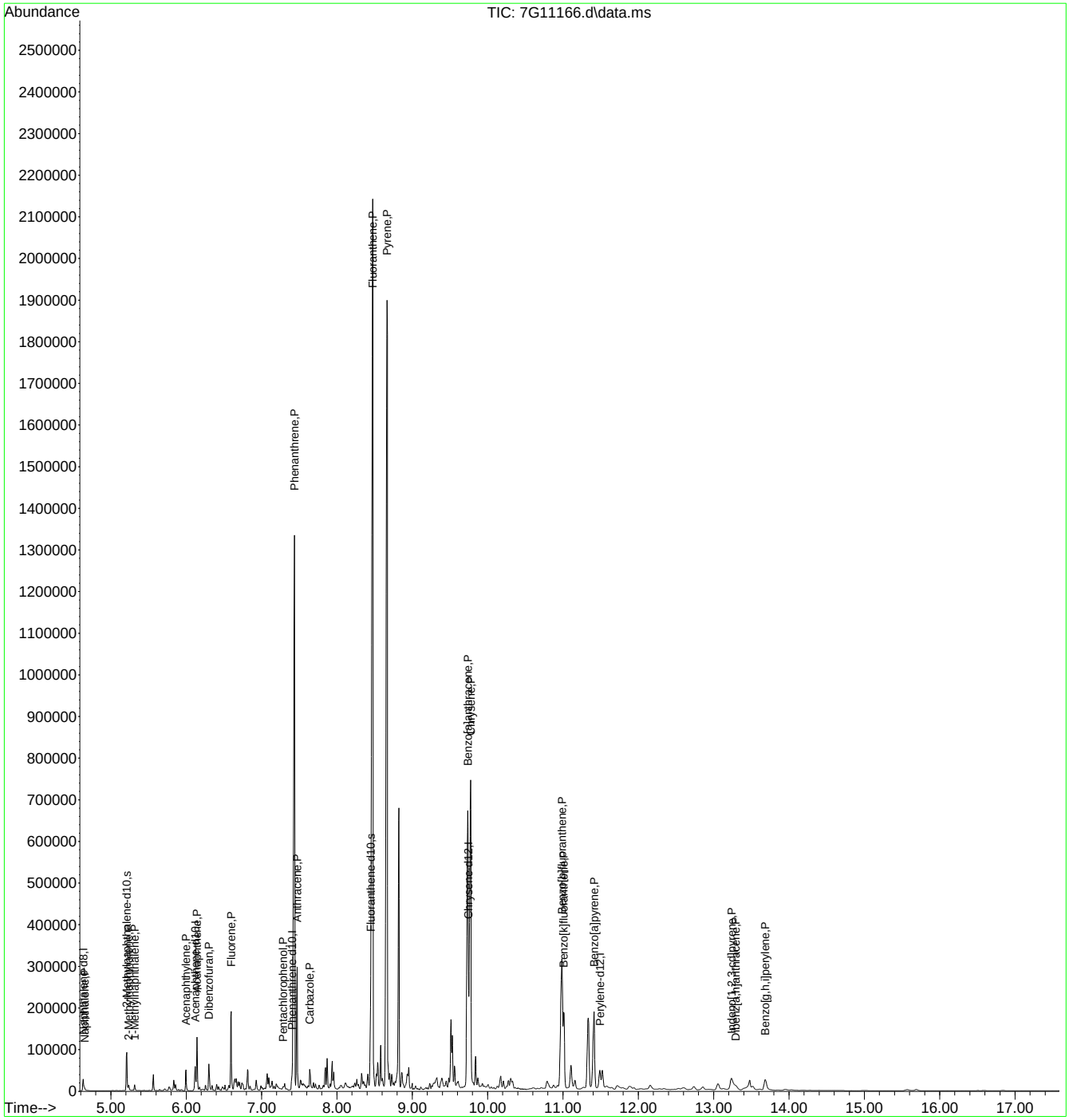
(#) = qualifier out of range (m) = manual integration (+) = signals summed

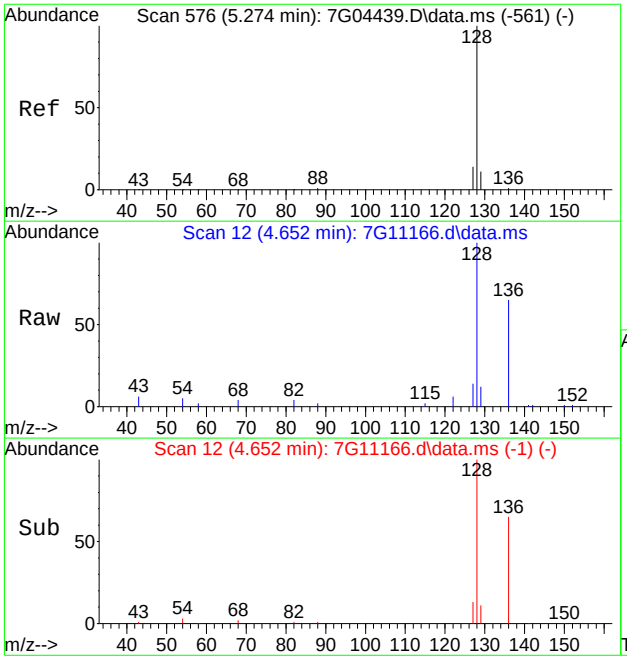
7.1.13
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
Data File : 7G11166.d
Acq On : 13 Aug 2020 4:22 pm
Operator : FOUADS
Sample : fa77689-1 e
Misc : op81539,S7G484,30.1,,,1,1,soil
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 14 03:39:02 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

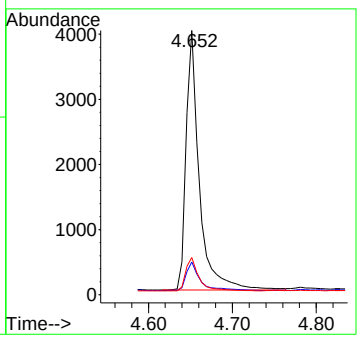


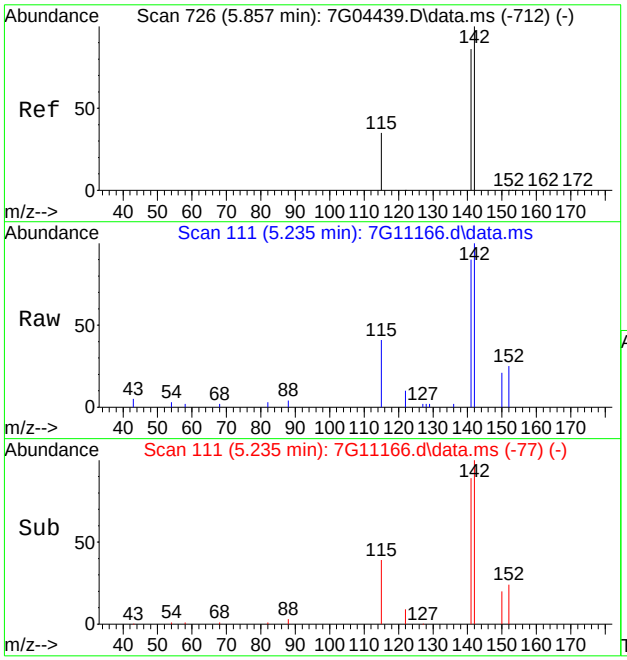


#2
Naphthalene
Concen: 0.63 ppm
RT: 4.652 min Scan# 12
Delta R.T. 0.006 min
Lab File: 7G11166.d
Acq: 13 Aug 2020 4:22 pm

Tgt Ion:128 Resp: 4401

Ion	Ratio	Lower	Upper
128	100		
129	11.0	0.0	41.1
127	12.9	0.0	43.0

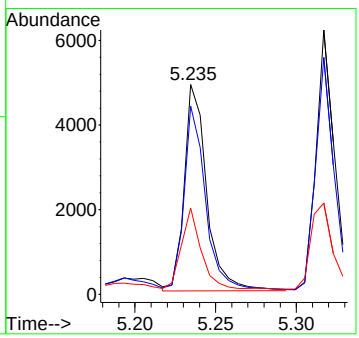


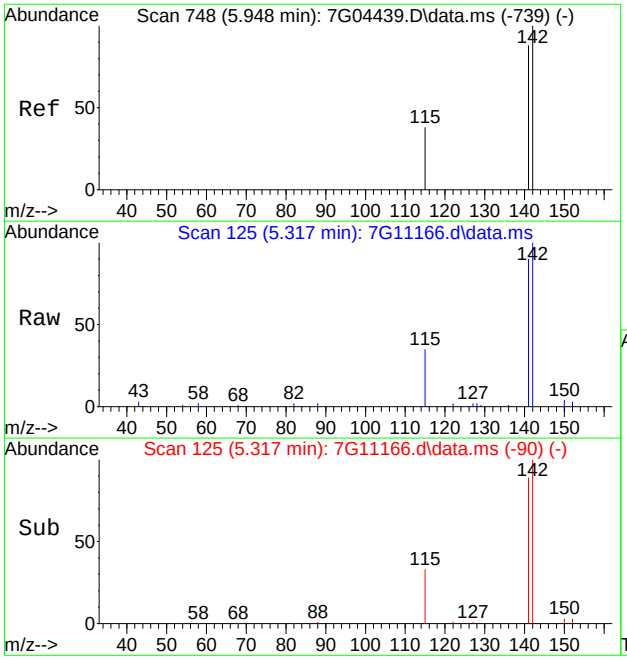


#3
2-Methylnaphthalene
Concen: 0.86 ppm
RT: 5.235 min Scan# 111
Delta R.T. -0.000 min
Lab File: 7G11166.d
Acq: 13 Aug 2020 4:22 pm

Tgt Ion:142 Resp: 4746

Ion	Ratio	Lower	Upper
142	100		
141	89.7	54.2	114.2
115	39.7	0.0	57.6

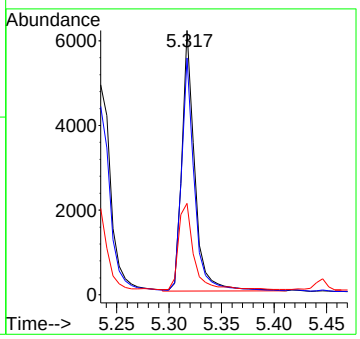


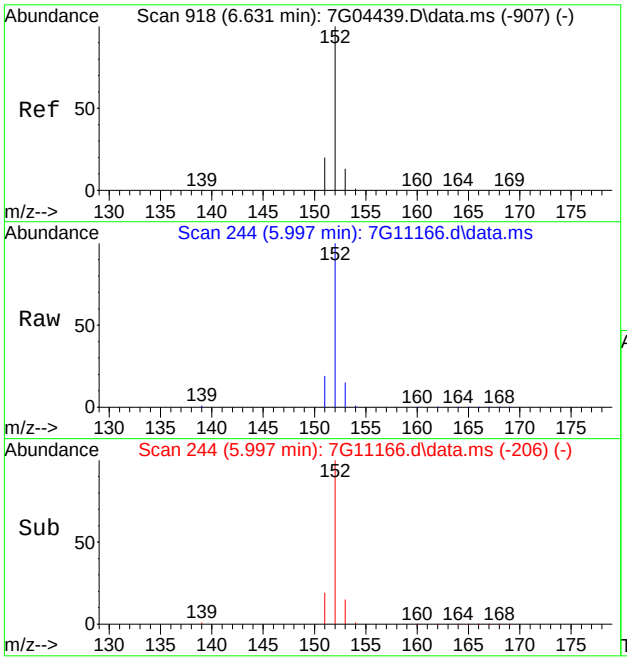


#5
1-Methylnaphthalene
Concen: 1.08 ppm
RT: 5.317 min Scan# 125
Delta R.T. 0.006 min
Lab File: 7G11166.d
Acq: 13 Aug 2020 4:22 pm

Tgt Ion:142 Resp: 5243

Ion	Ratio	Lower	Upper
142	100		
141	89.3	63.7	123.7
115	33.2	14.6	74.6

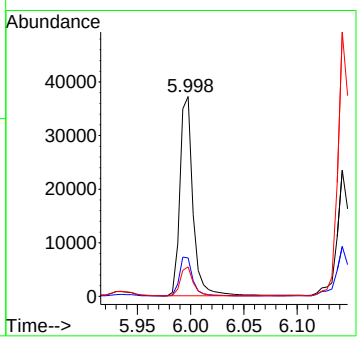


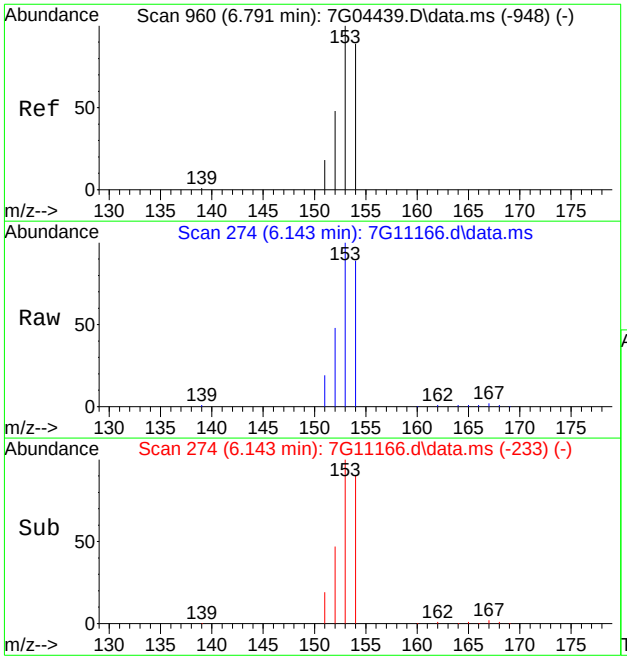


#7
Acenaphthylene
Concen: 3.34 ppm
RT: 5.997 min Scan# 244
Delta R.T. 0.005 min
Lab File: 7G11166.d
Acq: 13 Aug 2020 4:22 pm

Tgt Ion:152 Resp: 31707

Ion	Ratio	Lower	Upper
152	100		
151	19.1	0.0	49.8
153	14.5	0.0	43.7

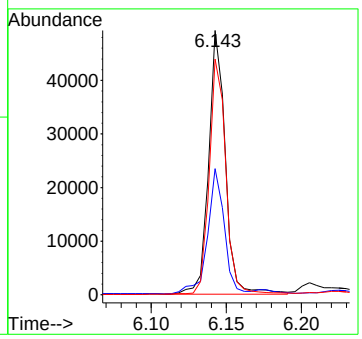


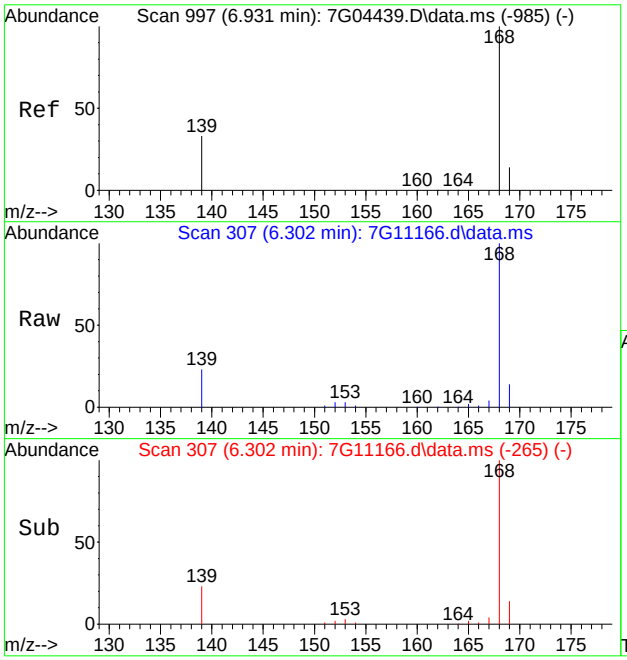


#8
Acenaphthene
Concen: 6.07 ppm
RT: 6.143 min Scan# 274
Delta R.T. -0.000 min
Lab File: 7G11166.d
Acq: 13 Aug 2020 4:22 pm

Tgt Ion:153 Resp: 37850

Ion	Ratio	Lower	Upper
153	100		
152	47.4	15.9	75.9
154	89.3	62.4	122.4

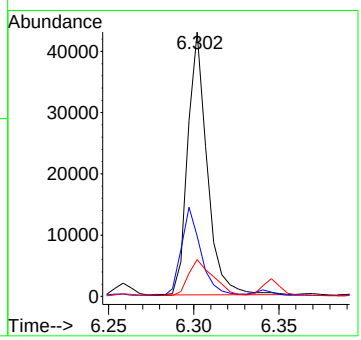


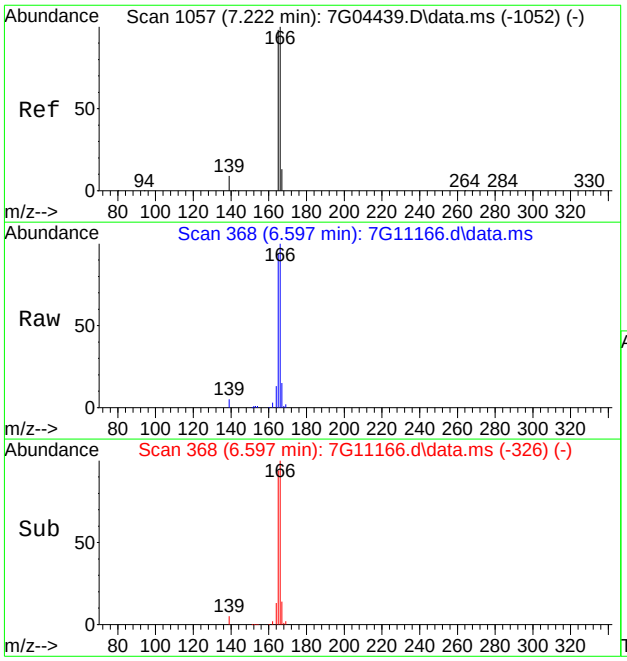


#9
Dibenzofuran
Concen: 7.74 ppm
RT: 6.302 min Scan# 307
Delta R.T. 0.005 min
Lab File: 7G11166.d
Acq: 13 Aug 2020 4:22 pm

Tgt Ion:168 Resp: 34001

Ion	Ratio	Lower	Upper
168	100		
139	22.6	11.9	51.9
169	13.2	0.0	33.1

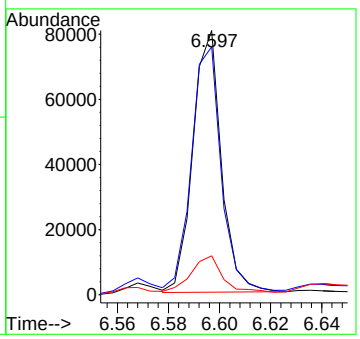


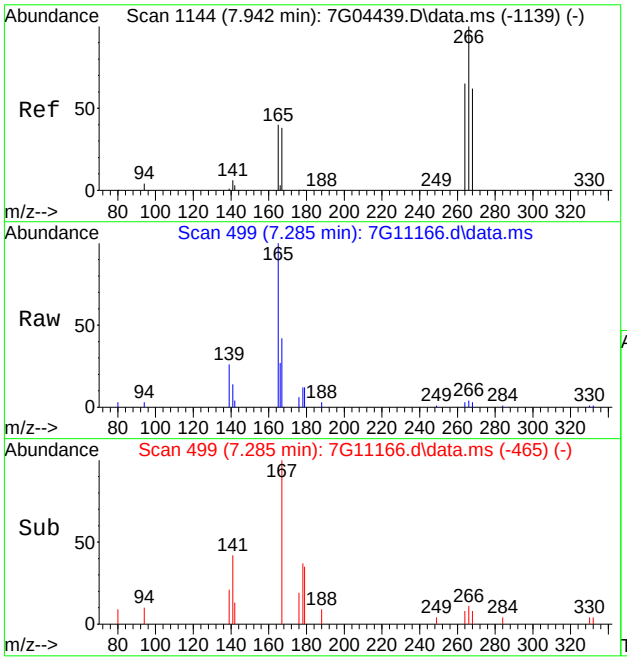


#10
Fluorene
Concen: 9.10 ppm
RT: 6.597 min Scan# 368
Delta R.T. 0.005 min
Lab File: 7G11166.d
Acq: 13 Aug 2020 4:22 pm

Tgt Ion:166 Resp: 62189

Ion	Ratio	Lower	Upper
166	100		
165	93.0	65.2	125.2
167	13.8	0.0	43.9

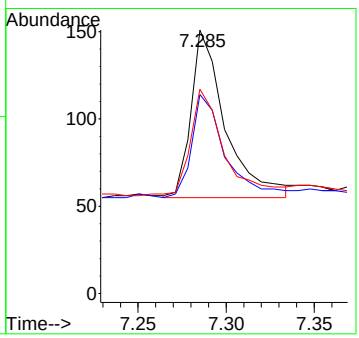


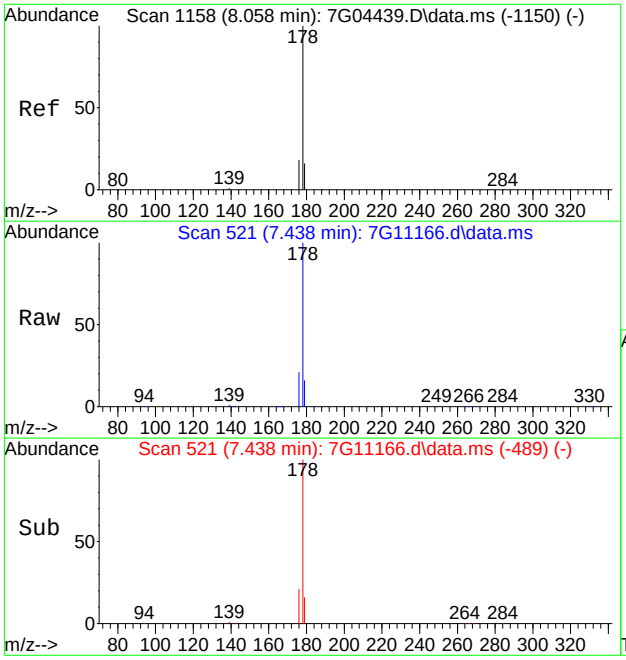


#12
Pentachlorophenol
Concen: 0.11 ppm m
RT: 7.285 min Scan# 499
Delta R.T. 0.021 min
Lab File: 7G11166.d
Acq: 13 Aug 2020 4:22 pm

Tgt Ion:266 Resp: 130

Ion	Ratio	Lower	Upper
266	100		
268	75.5	42.9	82.9
264	77.5	42.8	82.8

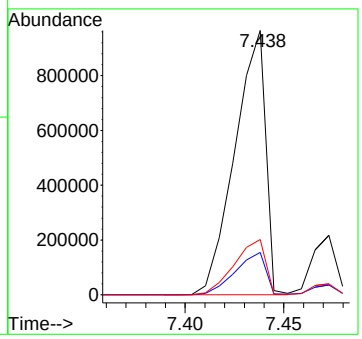


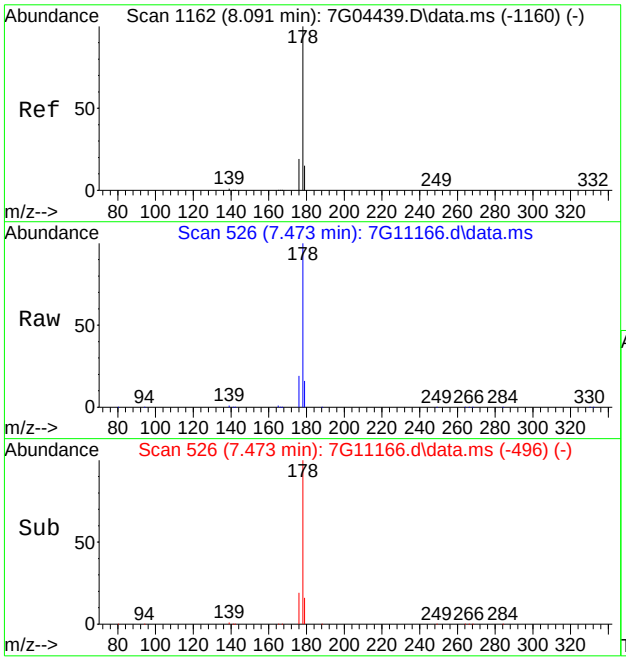


#13
Phenanthrene
Concen: 81.94 ppm
RT: 7.438 min Scan# 521
Delta R.T. 0.021 min
Lab File: 7G11166.d
Acq: 13 Aug 2020 4:22 pm

Tgt Ion:178 Resp: 1045823

Ion	Ratio	Lower	Upper
178	100		
179	15.9	0.0	45.2
176	20.9	0.0	50.4

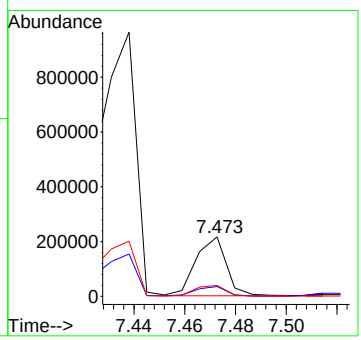


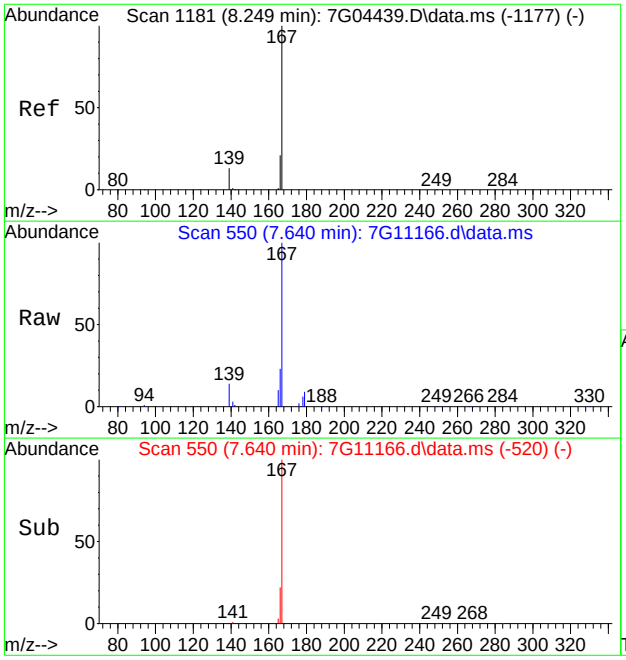


#14
Anthracene
Concen: 16.08 ppm
RT: 7.473 min Scan# 526
Delta R.T. 0.007 min
Lab File: 7G11166.d
Acq: 13 Aug 2020 4:22 pm

Tgt Ion:178 Resp: 180153

Ion	Ratio	Lower	Upper
178	100		
179	16.0	0.0	46.1
176	18.5	0.0	48.2

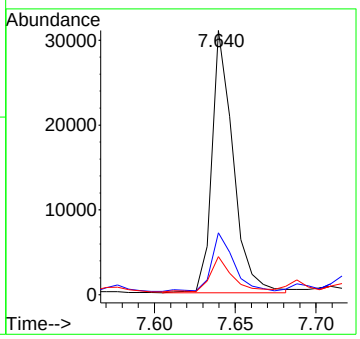


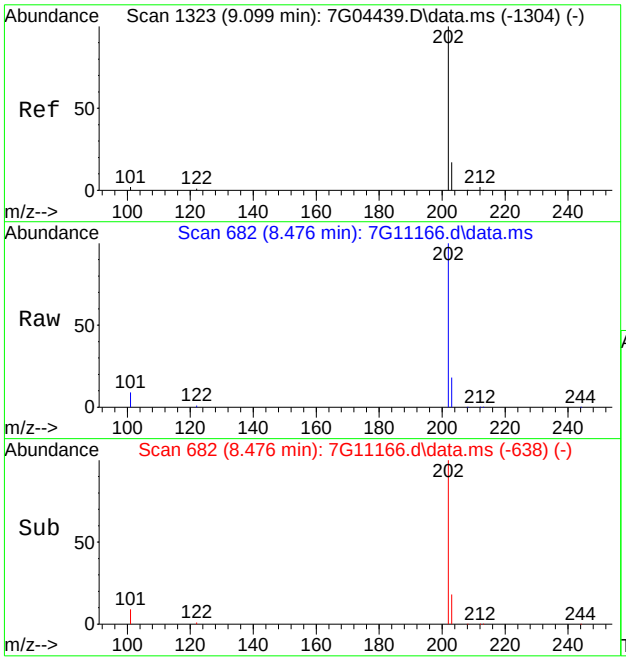


#15
Carbazole
Concen: 1.46 ppm
RT: 7.640 min Scan# 550
Delta R.T. 0.007 min
Lab File: 7G11166.d
Acq: 13 Aug 2020 4:22 pm

Tgt Ion:167 Resp: 28295

Ion	Ratio	Lower	Upper
167	100		
166	22.0	0.2	40.2
139	12.5	0.0	32.8

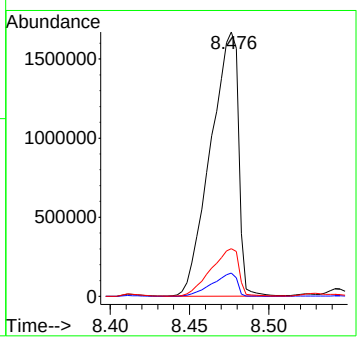


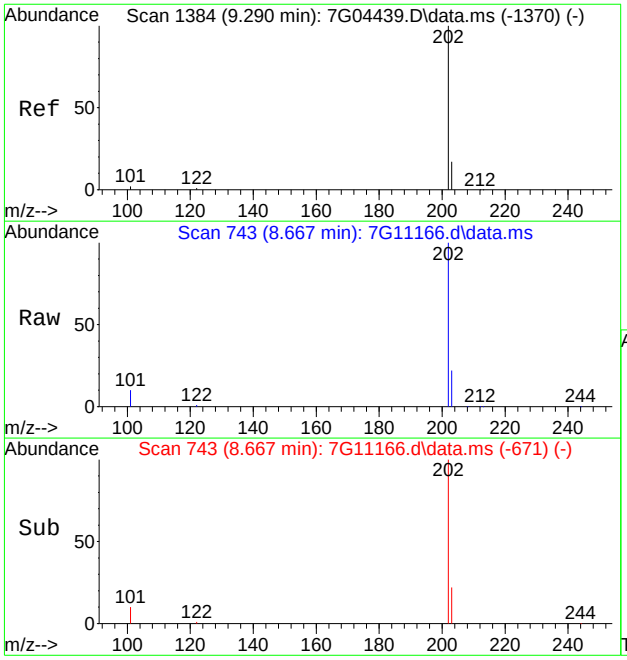


#16
Fluoranthene
Concen: 83.33 ppm
RT: 8.476 min Scan# 682
Delta R.T. 0.025 min
Lab File: 7G11166.d
Acq: 13 Aug 2020 4:22 pm

Tgt Ion:202 Resp: 2053692

Ion	Ratio	Lower	Upper
202	100		
101	8.8	0.0	36.5
203	18.0	0.0	47.5

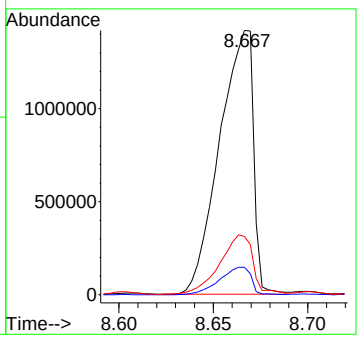


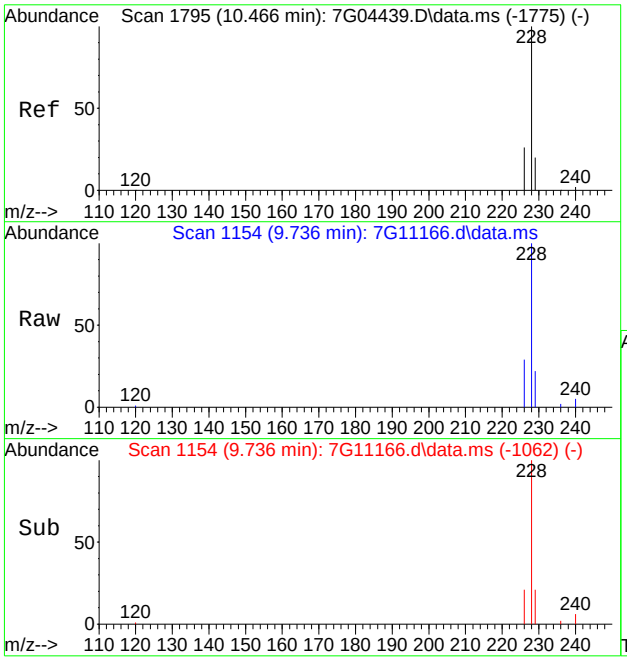


#19
Pyrene
Concen: 73.22 ppm
RT: 8.667 min Scan# 743
Delta R.T. 0.025 min
Lab File: 7G11166.d
Acq: 13 Aug 2020 4:22 pm

Tgt Ion:202 Resp: 1773017

Ion	Ratio	Lower	Upper
202	100		
101	10.3	0.0	37.5
203	21.8	0.0	48.3

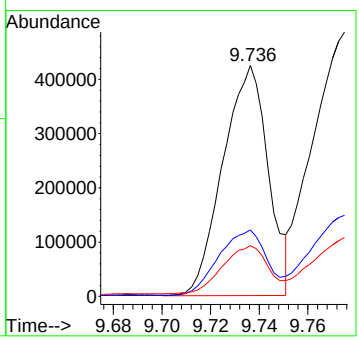


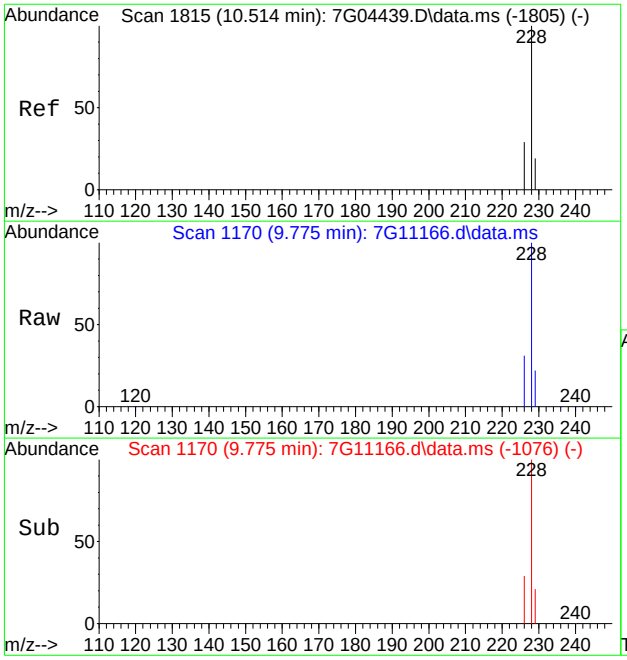


#20
Benzo[a]anthracene
Concen: 29.56 ppm
RT: 9.736 min Scan# 1154
Delta R.T. 0.022 min
Lab File: 7G11166.d
Acq: 13 Aug 2020 4:22 pm

Tgt Ion:228 Resp: 551426

Ion	Ratio	Lower	Upper
228	100		
226	28.1	0.0	57.2
229	20.8	0.0	49.7

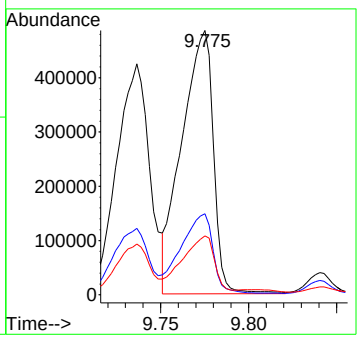


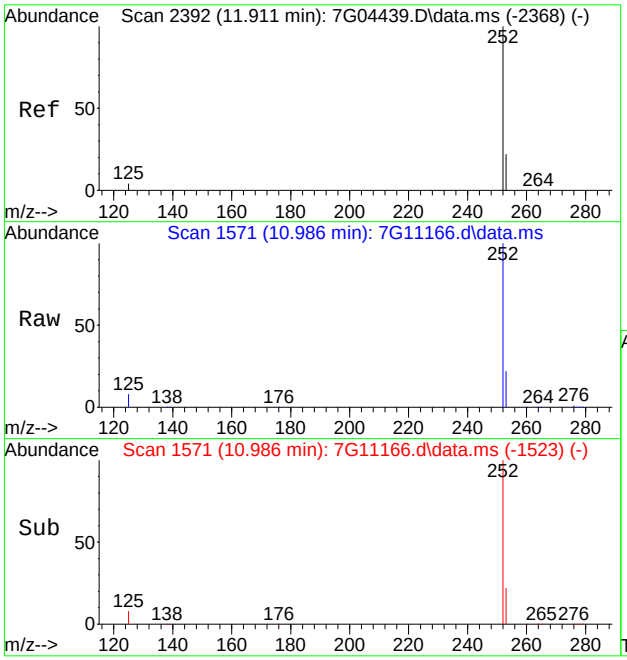


#21
Chrysene
Concen: 31.86 ppm
RT: 9.775 min Scan# 1170
Delta R.T. 0.027 min
Lab File: 7G11166.d
Acq: 13 Aug 2020 4:22 pm

Tgt Ion:228 Resp: 609275

Ion	Ratio	Lower	Upper
228	100		
226	30.2	0.0	59.8
229	21.3	0.0	49.5

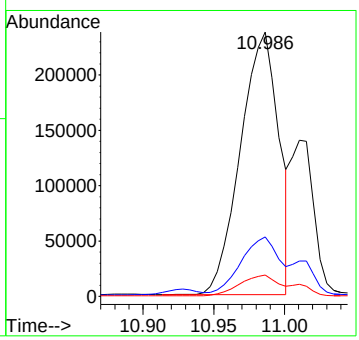


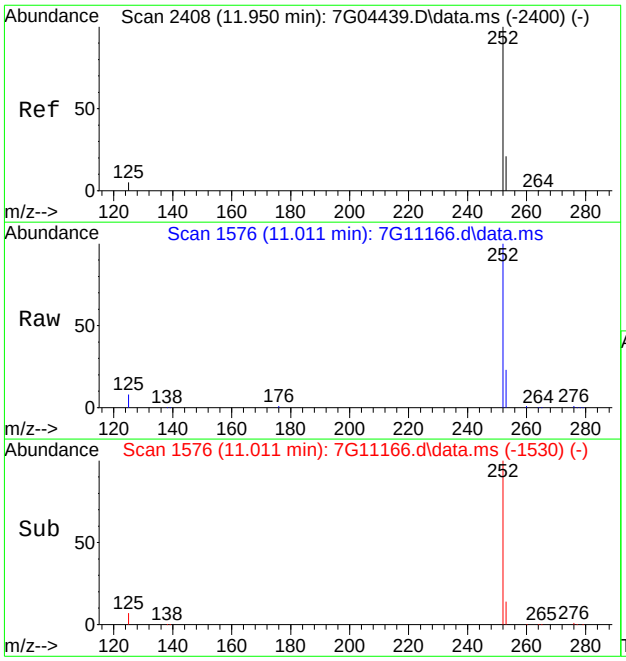


#23
Benzo[b]fluoranthene
Concen: 31.24 ppm
RT: 10.986 min Scan# 1571
Delta R.T. 0.034 min
Lab File: 7G11166.d
Acq: 13 Aug 2020 4:22 pm

Tgt Ion:252 Resp: 447038

Ion	Ratio	Lower	Upper
252	100		
253	21.2	0.0	51.7
125	8.0	0.0	37.1

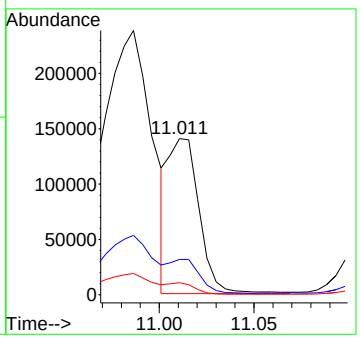


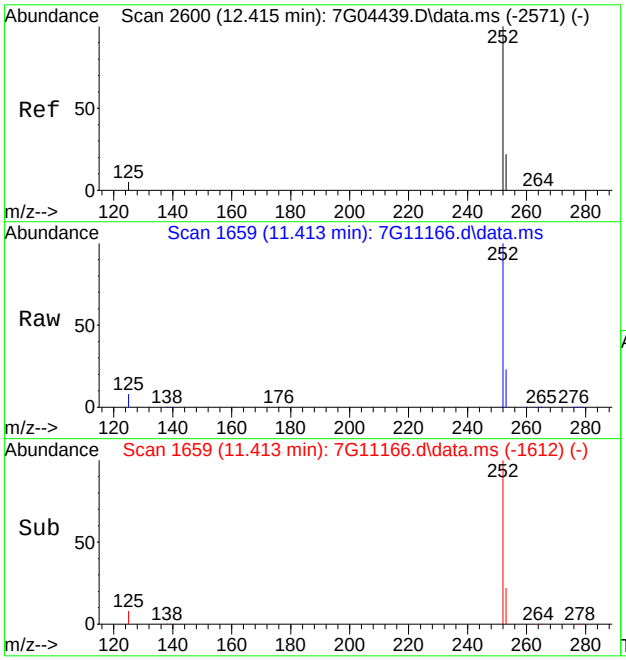


#24
Benzo[k]fluoranthene
Concen: 10.26 ppm m
RT: 11.011 min Scan# 1576
Delta R.T. 0.024 min
Lab File: 7G11166.d
Acq: 13 Aug 2020 4:22 pm

Tgt Ion:252 Resp: 159180

Ion	Ratio	Lower	Upper
252	100		
253	22.6	0.0	51.8
125	7.7	0.0	37.5

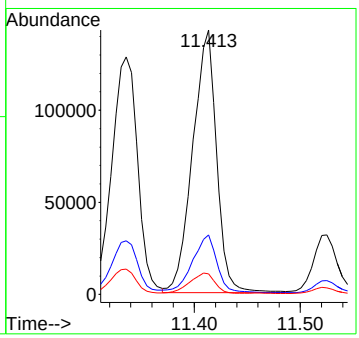


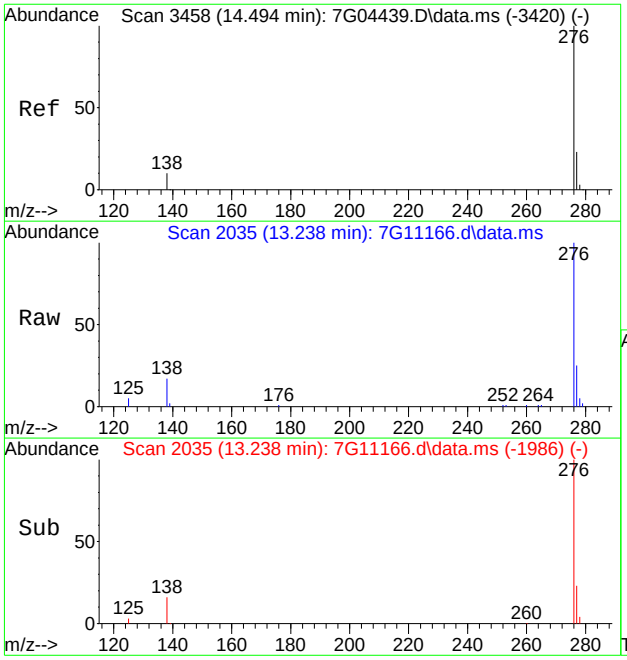


#25
Benzo[a]pyrene
Concen: 16.09 ppm
RT: 11.413 min Scan# 1659
Delta R.T. 0.029 min
Lab File: 7G11166.d
Acq: 13 Aug 2020 4:22 pm

Tgt Ion:252 Resp: 224331

Ion	Ratio	Lower	Upper
252	100		
253	21.7	0.0	51.8
125	7.4	0.0	38.3

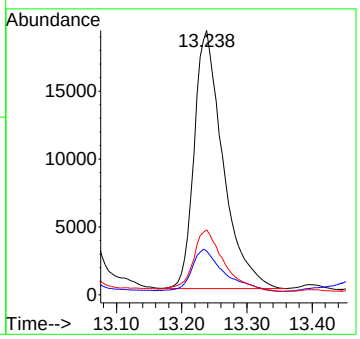


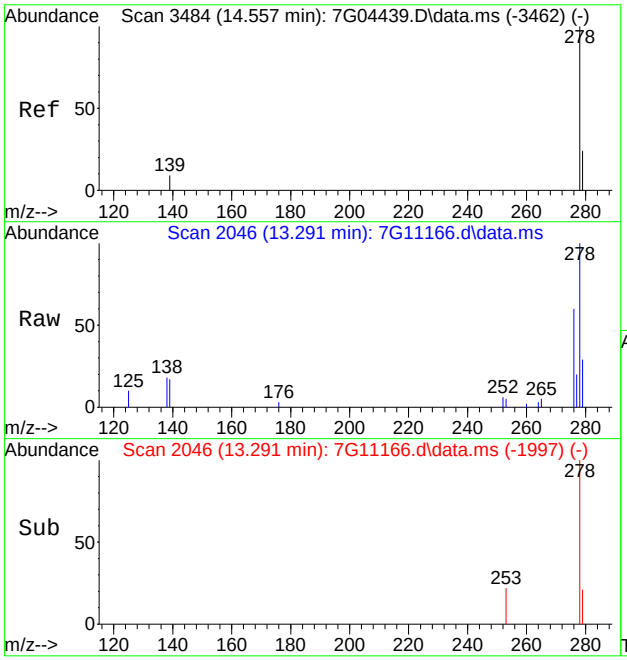


#26
Indeno[1,2,3-cd]pyrene
Concen: 6.40 ppm
RT: 13.238 min Scan# 2035
Delta R.T. 0.039 min
Lab File: 7G11166.d
Acq: 13 Aug 2020 4:22 pm

Tgt Ion:276 Resp: 58214

Ion	Ratio	Lower	Upper
276	100		
138	15.4	0.0	46.1
277	23.4	0.0	53.8

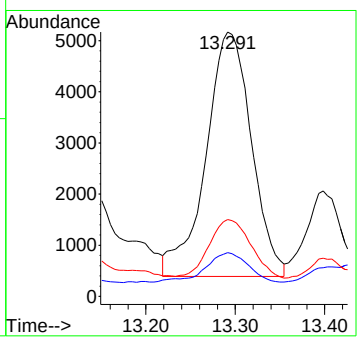


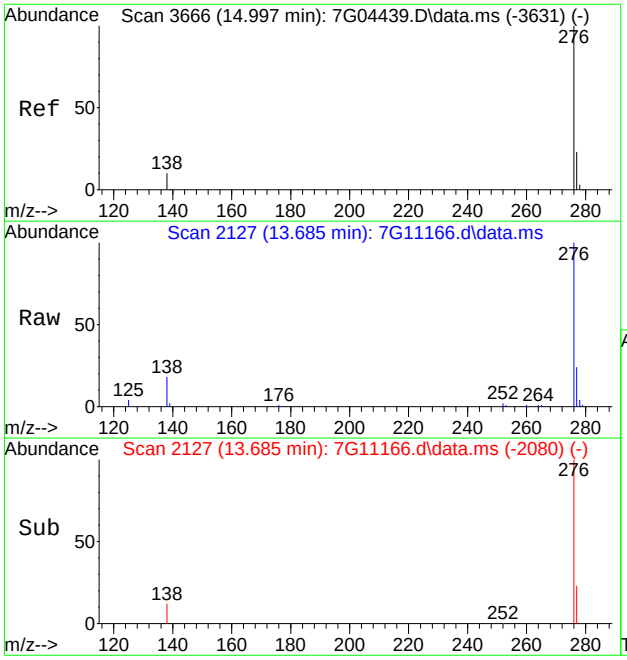


#27
Dibenz[a,h]anthracene
Concen: 1.67 ppm m
RT: 13.291 min Scan# 2046
Delta R.T. 0.039 min
Lab File: 7G11166.d
Acq: 13 Aug 2020 4:22 pm

Tgt Ion:278 Resp: 16911

Ion	Ratio	Lower	Upper
278	100		
139	16.6	0.0	43.8
279	29.1	0.0	54.2

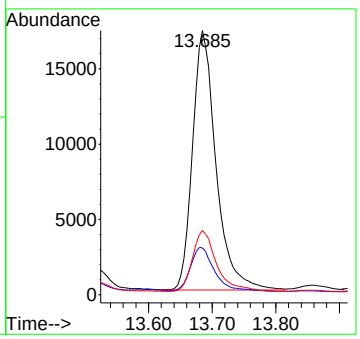




#28
Benzo[g,h,i]perylene
Concen: 4.04 ppm
RT: 13.685 min Scan# 2127
Delta R.T. 0.029 min
Lab File: 7G11166.d
Acq: 13 Aug 2020 4:22 pm

Tgt Ion:276 Resp: 44291

Ion	Ratio	Lower	Upper
276	100		
138	16.5	0.0	47.7
277	23.6	0.0	53.9



Manual Integration Approval Summary

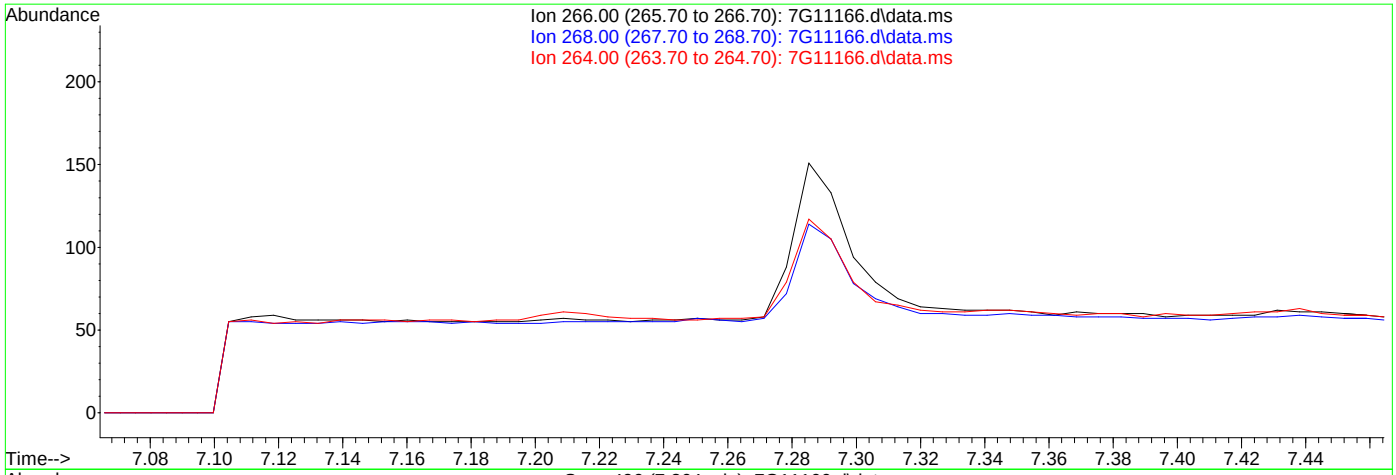
Sample Number: FA77689-1
Lab FileID: 7G11166.D
Injection Time: 08/13/20 16:22
Method: SW846 8270E BY SIM
Analyst approved: 08/17/20 10:46 Fouad Sekkar
Supervisor approved: 08/17/20 12:19 Naresh Jiawan

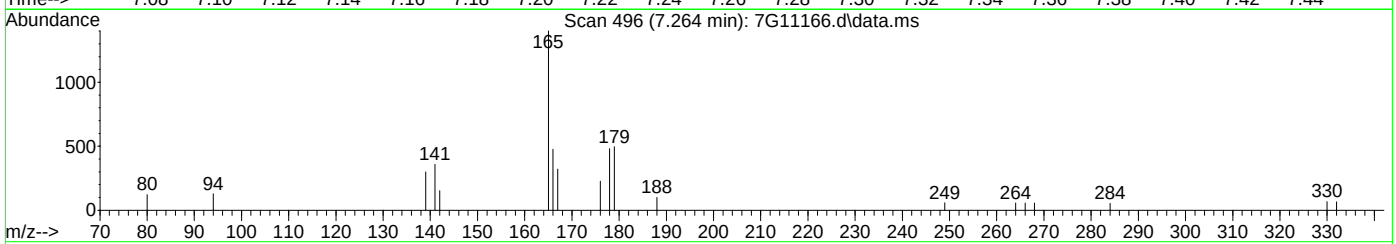
Parameter	CAS	Sig#	R.T. (min.)	Reason
Pentachlorophenol	87-86-5		7.29	Missed peak
Benzo(k)fluoranthene	207-08-9		11.01	Missed peak
Dibenzo(a,h)anthracene	53-70-3		13.29	Poor instrument integration

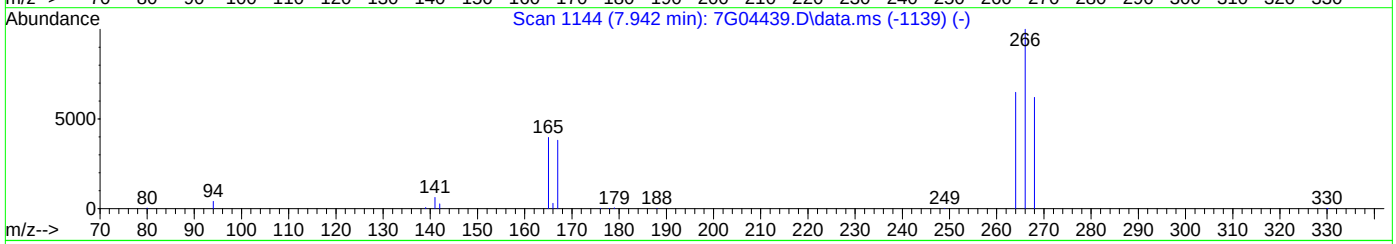
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
Data File : 7G11166.d
Acq On : 13 Aug 2020 4:22 pm
Operator : FOUADS
Sample : fa77689-1 e
Misc : op81539,S7G484,30.1,,,1,1,soil
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 14 03:10:09 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11166.d\data.ms

(12) Pentachlorophenol (P)

7.264min (-7.264) 0.00ppm

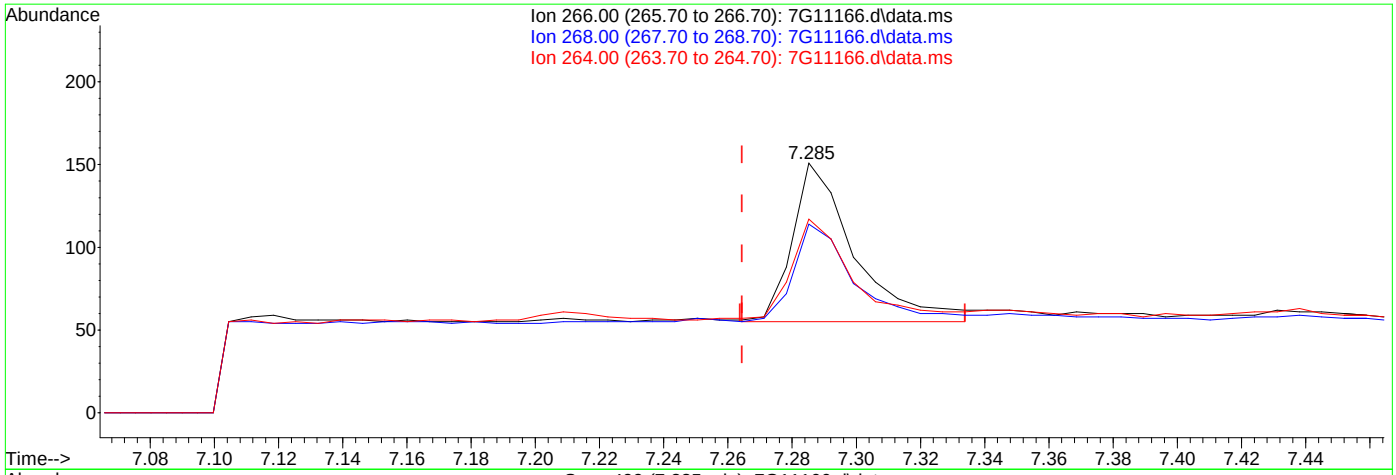
response 0

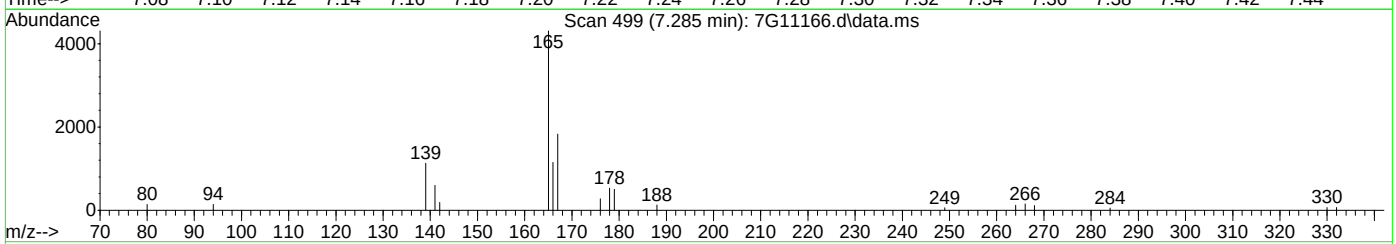
Ion	Exp%	Act%
266.00	100	0.00
268.00	62.90	0.00#
264.00	62.80	0.00#
0.00	0.00	0.00

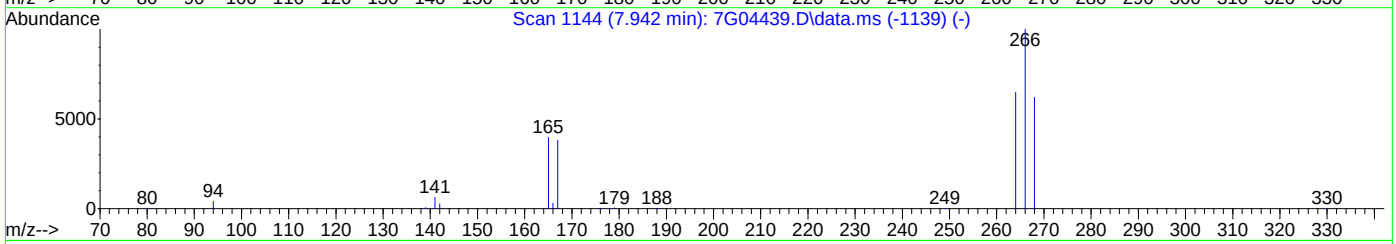
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
Data File : 7G11166.d
Acq On : 13 Aug 2020 4:22 pm
Operator : FOUADS
Sample : fa77689-1 e
Misc : op81539,S7G484,30.1,,,1,1,soil
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 14 03:10:09 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11166.d\data.ms

(12) Pentachlorophenol (P)

7.285min (+0.021) 0.11ppm m

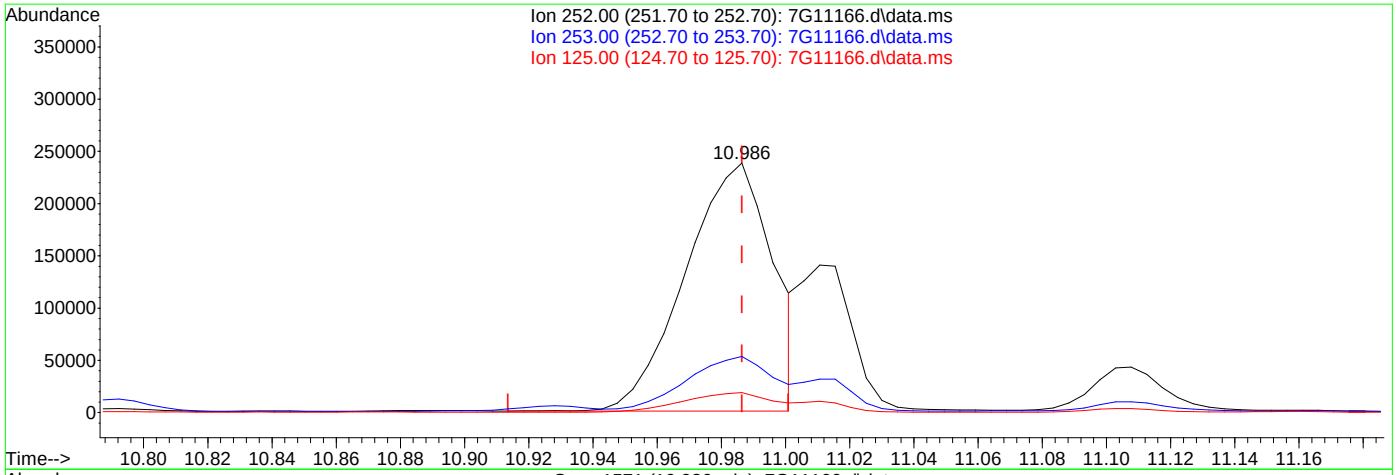
response 130

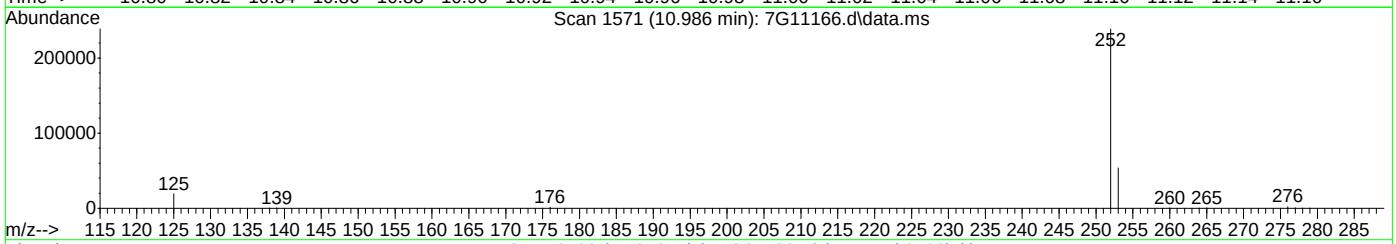
Ion	Exp%	Act%
266.00	100	100
268.00	62.90	75.50
264.00	62.80	77.48
0.00	0.00	0.00

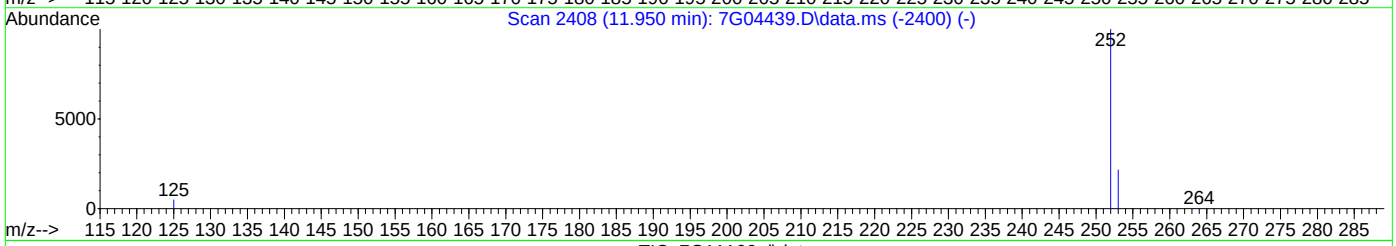
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
Data File : 7G11166.d
Acq On : 13 Aug 2020 4:22 pm
Operator : FOUADS
Sample : fa77689-1 e
Misc : op81539,S7G484,30.1,,,1,1,soil
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 14 03:10:09 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11166.d\data.ms

(24) Benzo[k]fluoranthene (P)

10.986min (-0.000) 27.42ppm

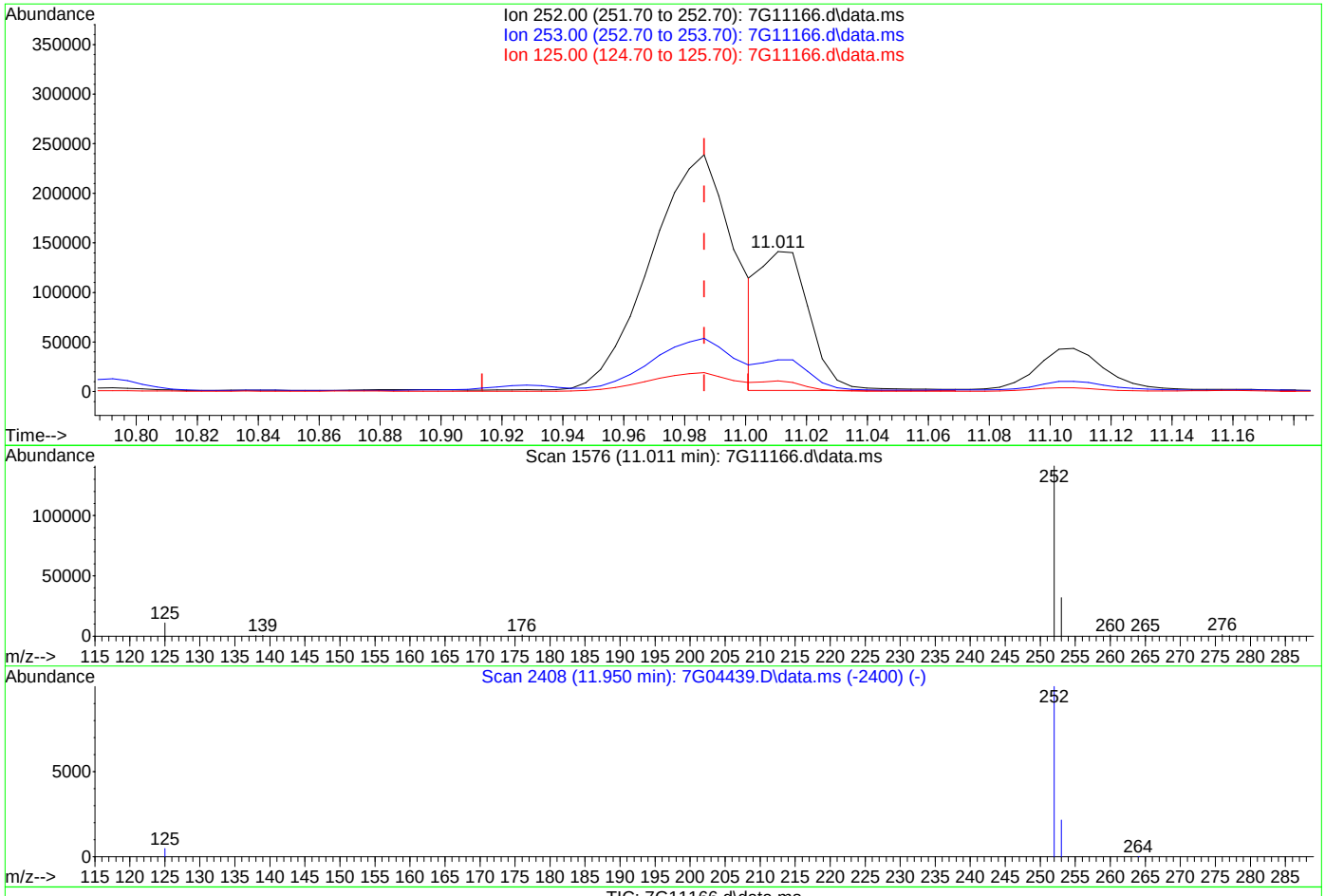
response 447038

Ion	Exp%	Act%
252.00	100	100
253.00	21.80	21.24
125.00	7.50	7.99
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
Data File : 7G11166.d
Acq On : 13 Aug 2020 4:22 pm
Operator : FOUADS
Sample : fa77689-1 e
Misc : op81539,S7G484,30.1,,,1,1,soil
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 14 03:10:09 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration



TIC: 7G11166.d\data.ms

(24) Benzo[k]fluoranthene (P)

11.011min (+0.024) 10.26ppm m

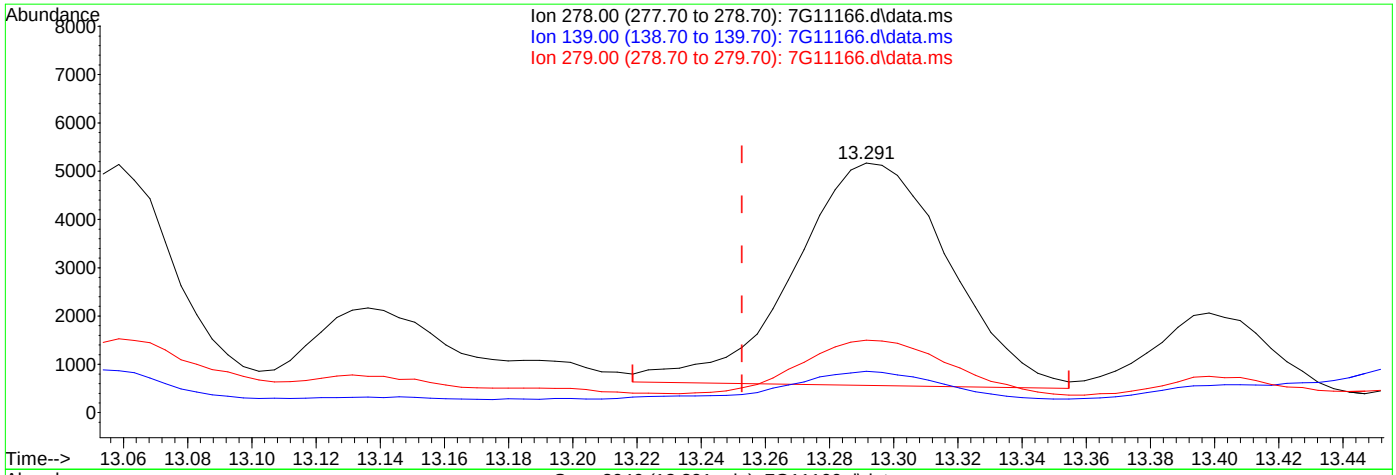
response 159180

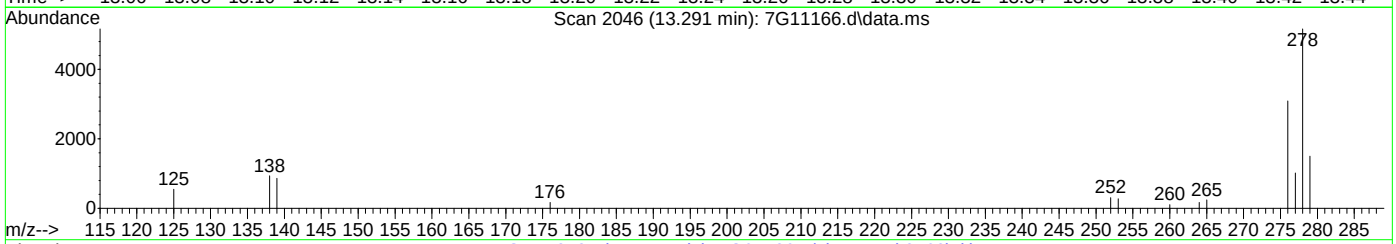
Ion	Exp%	Act%
252.00	100	100
253.00	21.80	22.64
125.00	7.50	7.68
0.00	0.00	0.00

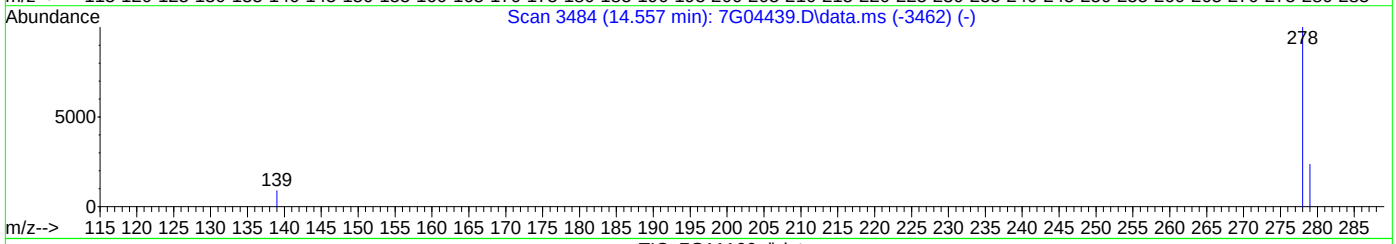
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
Data File : 7G11166.d
Acq On : 13 Aug 2020 4:22 pm
Operator : FOUADS
Sample : fa77689-1 e
Misc : op81539,S7G484,30.1,,,1,1,soil
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 14 03:16:40 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11166.d\data.ms

(27) Dibenz[a,h]anthracene (P)

13.291min (+0.039) 1.53ppm

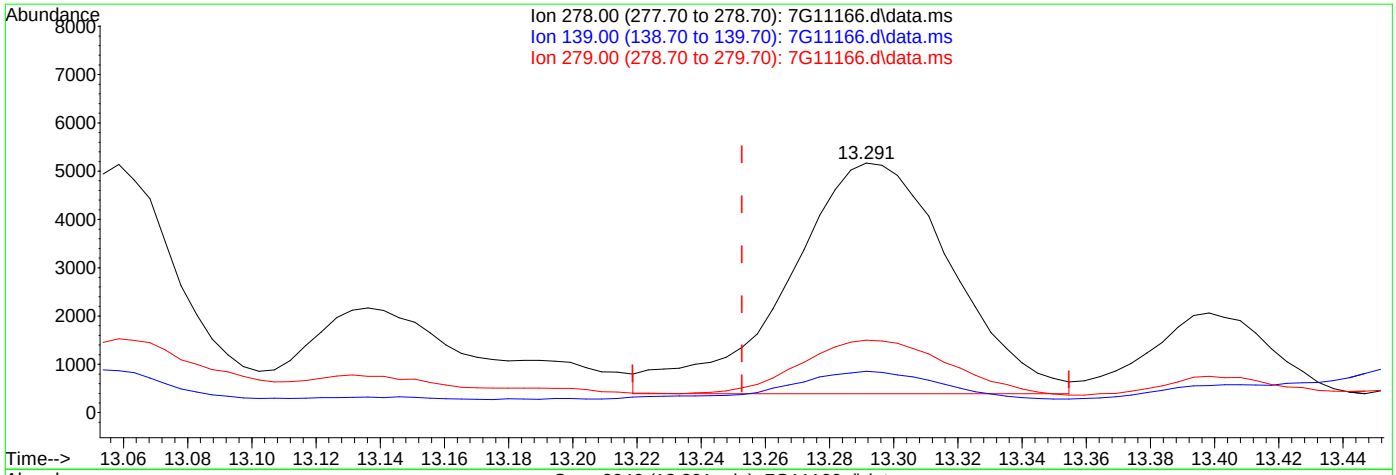
response 15472

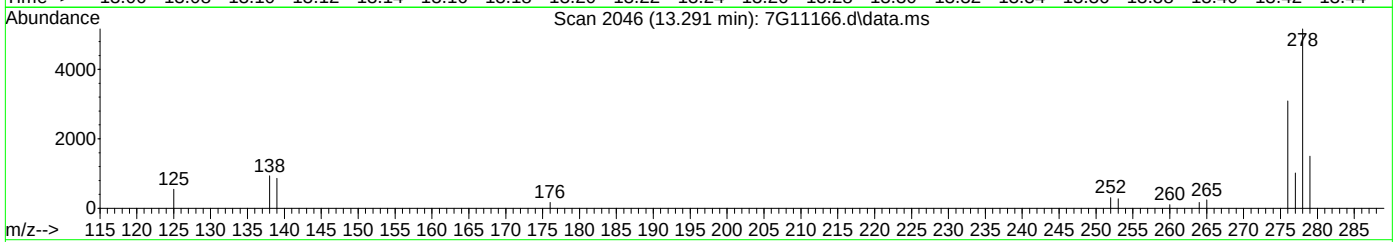
Ion	Exp%	Act%
278.00	100	100
139.00	13.80	12.49
279.00	24.20	25.18
0.00	0.00	0.00

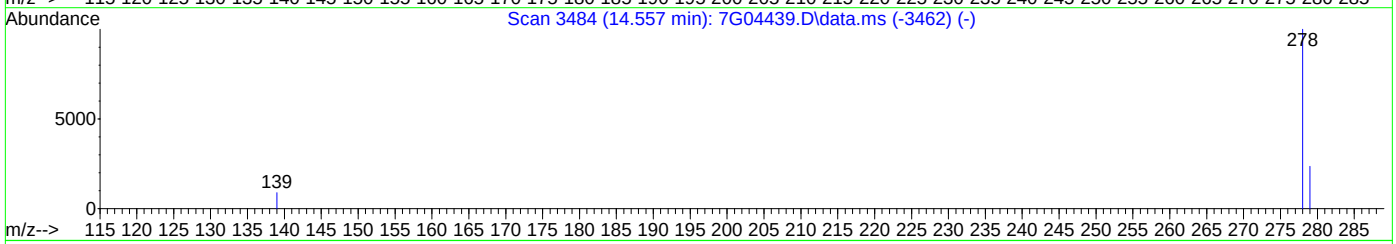
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
Data File : 7G11166.d
Acq On : 13 Aug 2020 4:22 pm
Operator : FOUADS
Sample : fa77689-1 e
Misc : op81539,S7G484,30.1,,,1,1,soil
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 14 03:16:40 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11166.d\data.ms

(27) Dibenz[a,h]anthracene (P)

13.291min (+0.039) 1.67ppm m

response 16911

Ion	Exp%	Act%
278.00	100	100
139.00	13.80	16.57
279.00	24.20	29.07
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan
08/14/20 11:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
Data File : 7G11167.d
Acq On : 13 Aug 2020 4:46 pm
Operator : FOUADS
Sample : fa77689-2 e
Misc : op81539,S7G484,30.0,,,1,1,soil
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 14 03:20:18 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

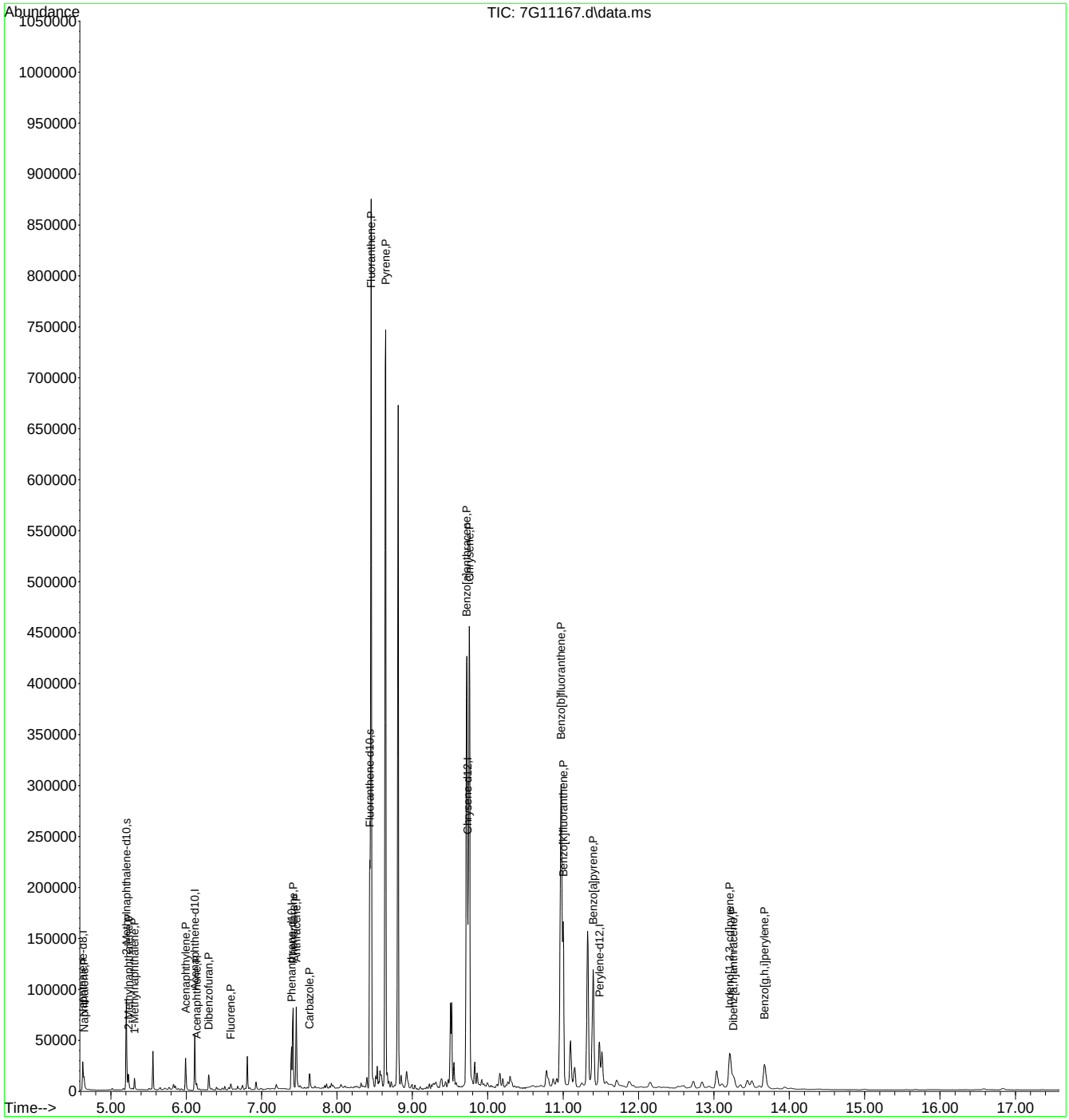
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.628	136	23549	4.00	ppm	0.00
6) Acenaphthene-d10	6.114	164	16885	4.00	ppm	0.00
11) Phenanthrene-d10	7.396	188	31609	4.00	ppm	0.00
18) Chrysene-d12	9.732	240	54008	4.00	ppm	0.00
22) Perylene-d12	11.481	264	42405	4.00	ppm	0.01
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.205	152	31339	8.92	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 89.20%			
17) Fluoranthene-d10	8.433	212	160702	9.73	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 97.30%			
Target Compounds						Qvalue
2) Naphthalene	4.646	128	7767	1.17	ppm	99
3) 2-Methylnaphthalene	5.235	142	6181	1.18	ppm	99
5) 1-Methylnaphthalene	5.311	142	4424	0.96	ppm	98
7) Acenaphthylene	5.993	152	21098	2.18	ppm	99
8) Acenaphthene	6.138	153	1826	0.29	ppm	95
9) Dibenzofuran	6.297	168	9545	2.15	ppm	97
10) Fluorene	6.592	166	2159	0.32	ppm	95
13) Phenanthrene	7.417	178	51181	4.89	ppm	98
14) Anthracene	7.459	178	53410	5.04	ppm	98
15) Carbazole	7.633	167	12538	0.66	ppm	97
16) Fluoranthene	8.455	202	522445	25.04	ppm	99
19) Pyrene	8.645	202	506461	22.97	ppm	100
20) Benzo[a]anthracene	9.719	228	289532	16.52	ppm	94
21) Chrysene	9.756	228	352400	18.86	ppm	99
23) Benzo[b]fluoranthene	10.972	252	417589m	29.01	ppm	
24) Benzo[k]fluoranthene	11.001	252	127789m	8.24	ppm	
25) Benzo[a]pyrene	11.399	252	141399	10.08	ppm	98
26) Indeno[1,2,3-cd]pyrene	13.209	276	62670	6.85	ppm	100
27) Dibenz[a,h]anthracene	13.258	278	14104	1.39	ppm	97
28) Benzo[g,h,i]perylene	13.670	276	44253	4.01	ppm	100

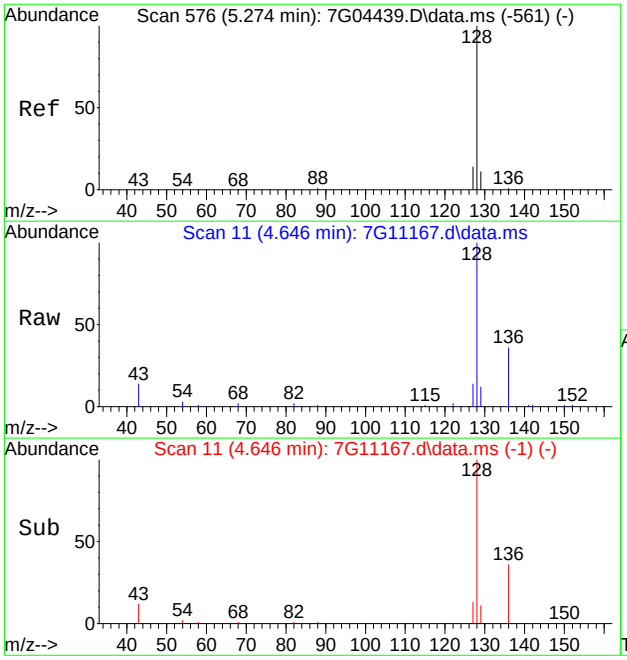
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
Data File : 7G11167.d
Acq On : 13 Aug 2020 4:46 pm
Operator : FOUADS
Sample : fa77689-2 e
Misc : op81539,S7G484,30.0,,,1,1,soil
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 14 03:20:18 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

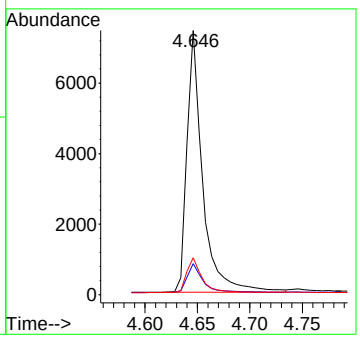


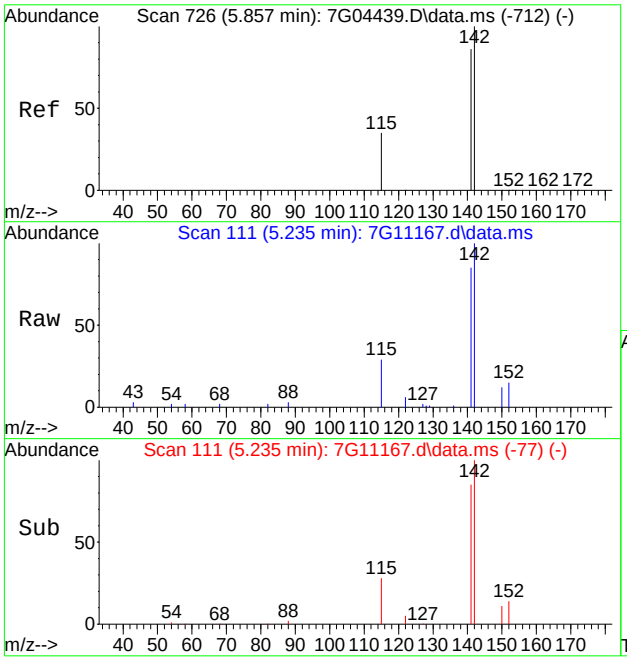


#2
Naphthalene
Concen: 1.17 ppm
RT: 4.646 min Scan# 11
Delta R.T. -0.000 min
Lab File: 7G11167.d
Acq: 13 Aug 2020 4:46 pm

Tgt Ion:128 Resp: 7767

Ion	Ratio	Lower	Upper
128	100		
129	11.0	0.0	41.1
127	13.3	0.0	43.0

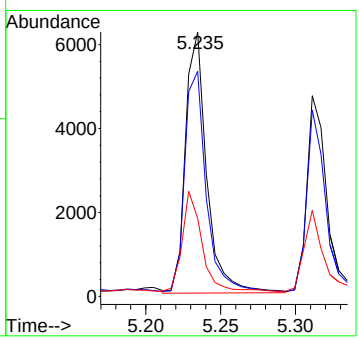


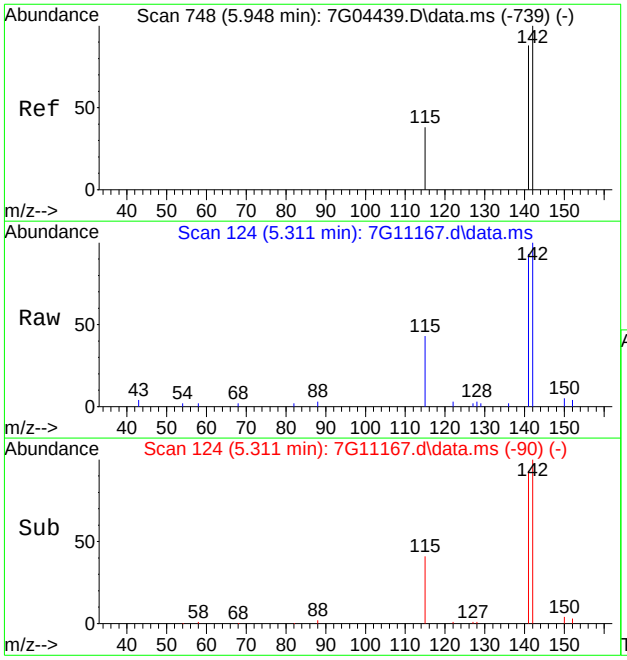


#3
2-Methylnaphthalene
Concen: 1.18 ppm
RT: 5.235 min Scan# 111
Delta R.T. -0.000 min
Lab File: 7G11167.d
Acq: 13 Aug 2020 4:46 pm

Tgt Ion:142 Resp: 6181

Ion	Ratio	Lower	Upper
142	100		
141	85.1	54.2	114.2
115	28.1	0.0	57.6

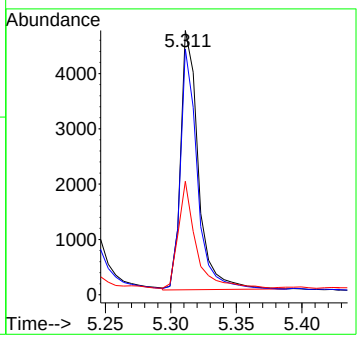


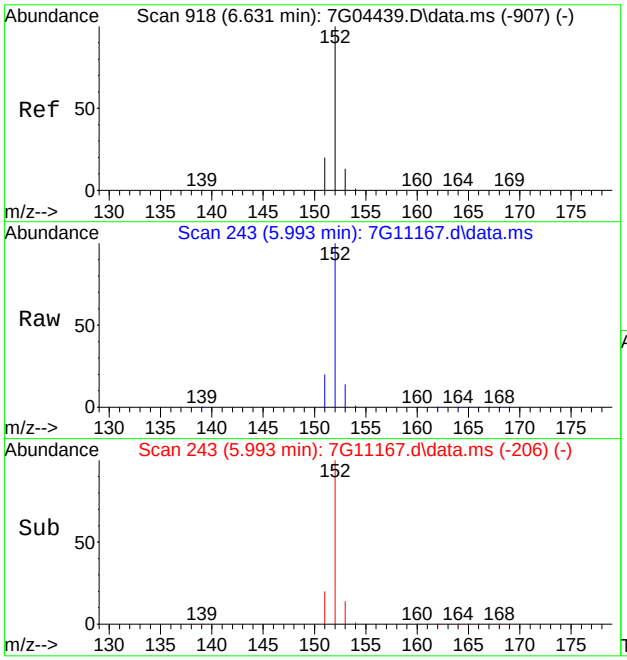


#5
1-Methylnaphthalene
Concen: 0.96 ppm
RT: 5.311 min Scan# 124
Delta R.T. -0.000 min
Lab File: 7G11167.d
Acq: 13 Aug 2020 4:46 pm

Tgt Ion:142 Resp: 4424

Ion	Ratio	Lower	Upper
142	100		
141	92.9	63.7	123.7
115	41.2	14.6	74.6

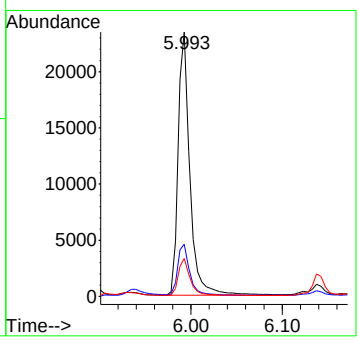


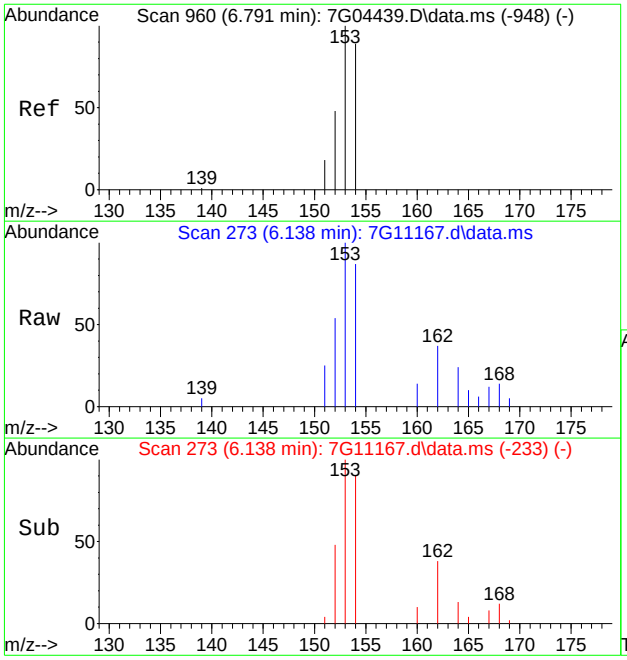


#7
Acenaphthylene
Concen: 2.18 ppm
RT: 5.993 min Scan# 243
Delta R.T. -0.000 min
Lab File: 7G11167.d
Acq: 13 Aug 2020 4:46 pm

Tgt Ion:152 Resp: 21098

Ion	Ratio	Lower	Upper
152	100		
151	19.3	0.0	49.8
153	14.0	0.0	43.7

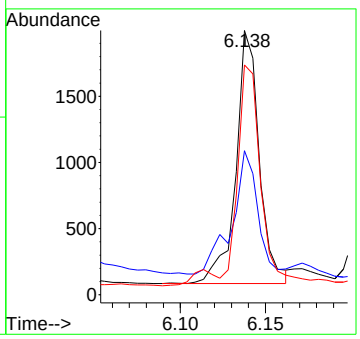


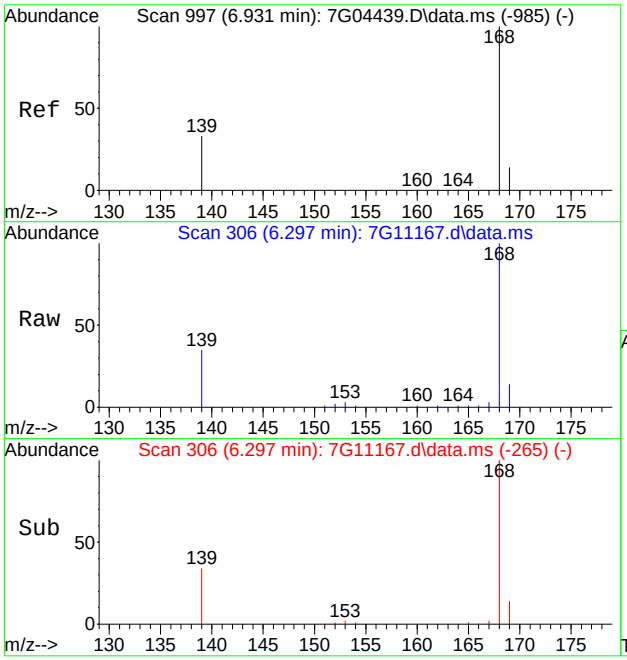


#8
Acenaphthene
Concen: 0.29 ppm
RT: 6.138 min Scan# 273
Delta R.T. -0.005 min
Lab File: 7G11167.d
Acq: 13 Aug 2020 4:46 pm

Tgt Ion:153 Resp: 1826

Ion	Ratio	Lower	Upper
153	100		
152	48.8	15.9	75.9
154	87.4	62.4	122.4

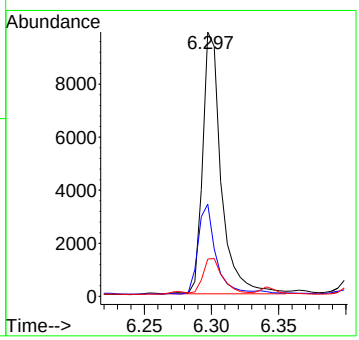


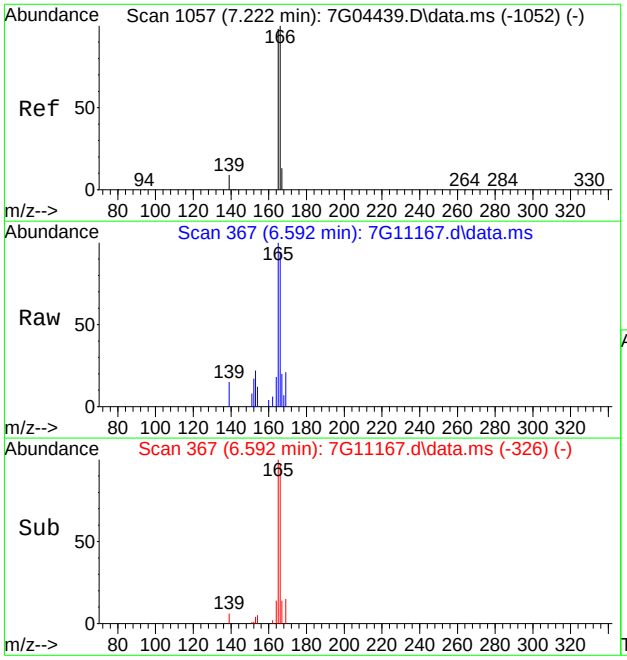


#9
Dibenzofuran
Concen: 2.15 ppm
RT: 6.297 min Scan# 306
Delta R.T. -0.000 min
Lab File: 7G11167.d
Acq: 13 Aug 2020 4:46 pm

Tgt Ion:168 Resp: 9545

Ion	Ratio	Lower	Upper
168	100		
139	34.3	11.9	51.9
169	13.3	0.0	33.1

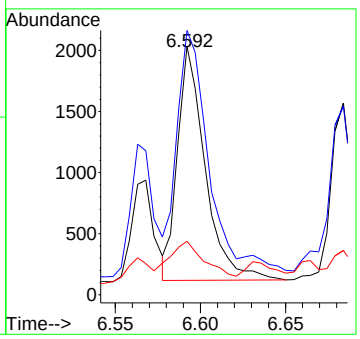


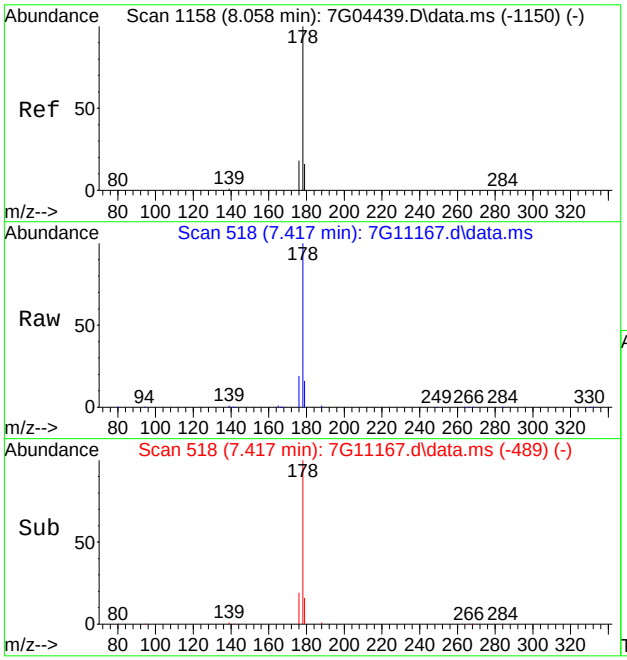


#10
Fluorene
Concen: 0.32 ppm
RT: 6.592 min Scan# 367
Delta R.T. -0.000 min
Lab File: 7G11167.d
Acq: 13 Aug 2020 4:46 pm

Tgt Ion:166 Resp: 2159

Ion	Ratio	Lower	Upper
166	100		
165	100.7	65.2	125.2
167	12.1	0.0	43.9

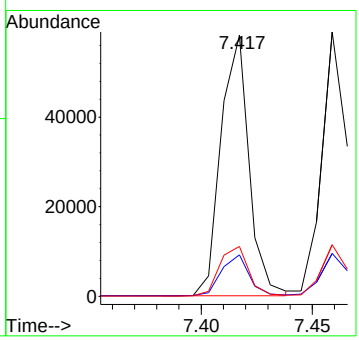


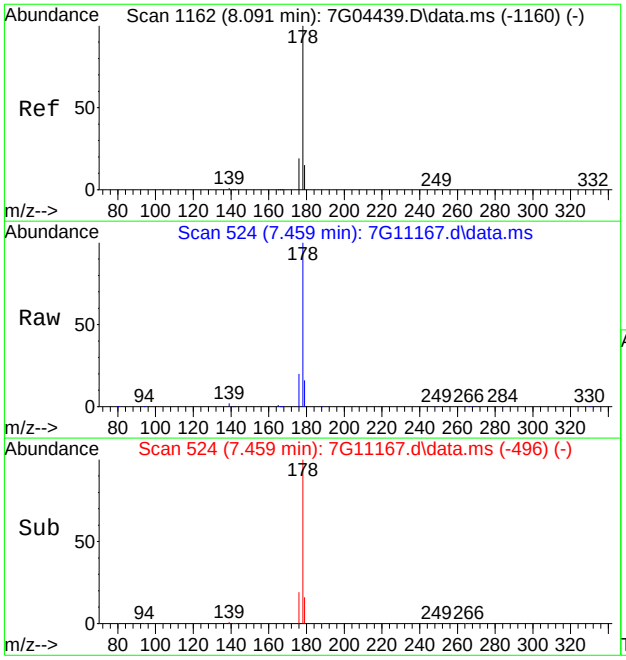


#13
Phenanthrene
Concen: 4.89 ppm
RT: 7.417 min Scan# 518
Delta R.T. -0.000 min
Lab File: 7G11167.d
Acq: 13 Aug 2020 4:46 pm

Tgt Ion:178 Resp: 51181

Ion	Ratio	Lower	Upper
178	100		
179	15.7	0.0	45.2
176	19.0	0.0	50.4

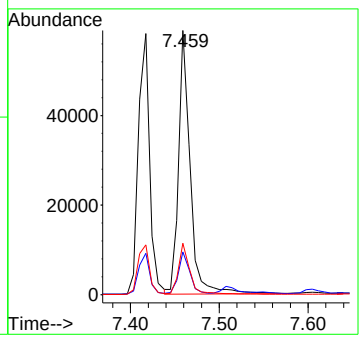


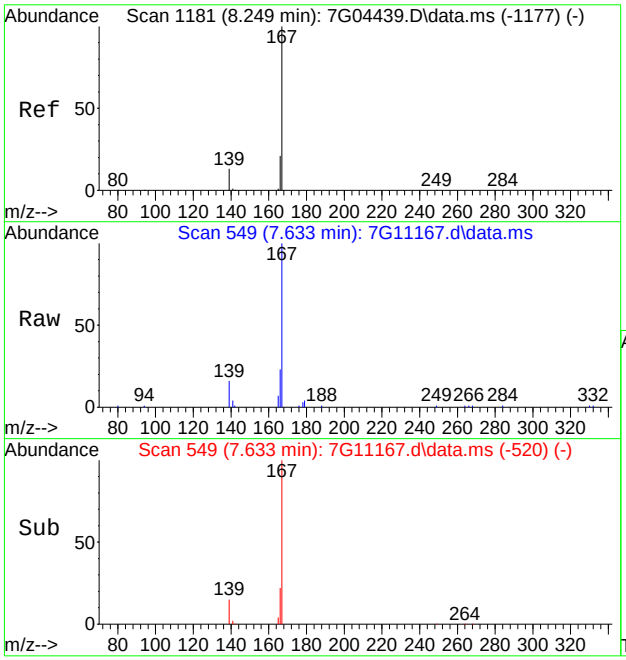


#14
Anthracene
Concen: 5.04 ppm
RT: 7.459 min Scan# 524
Delta R.T. -0.007 min
Lab File: 7G11167.d
Acq: 13 Aug 2020 4:46 pm

Tgt Ion:178 Resp: 53410

Ion	Ratio	Lower	Upper
178	100		
179	16.0	0.0	46.1
176	19.4	0.0	48.2

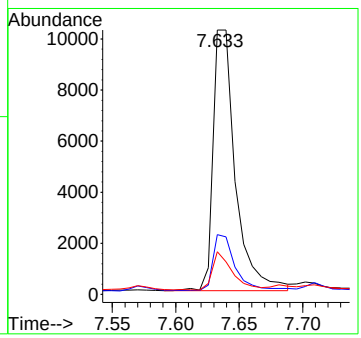


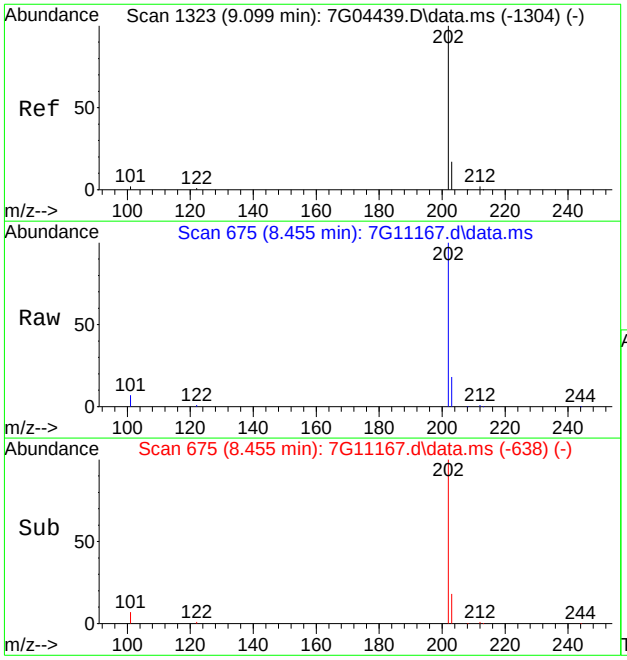


#15
Carbazole
Concen: 0.66 ppm
RT: 7.633 min Scan# 549
Delta R.T. -0.000 min
Lab File: 7G11167.d
Acq: 13 Aug 2020 4:46 pm

Tgt Ion:167 Resp: 12538

Ion	Ratio	Lower	Upper
167	100		
166	21.3	0.2	40.2
139	14.1	0.0	32.8

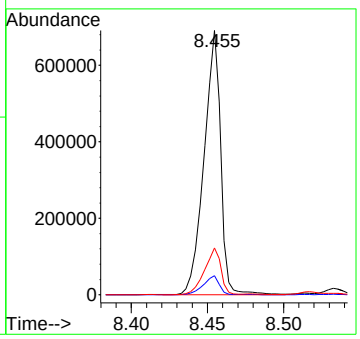


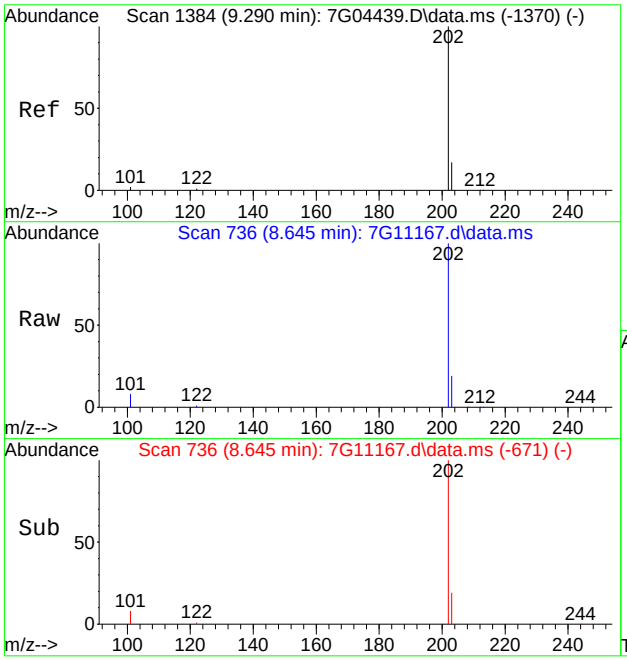


#16
Fluoranthene
Concen: 25.04 ppm
RT: 8.455 min Scan# 675
Delta R.T. 0.003 min
Lab File: 7G11167.d
Acq: 13 Aug 2020 4:46 pm

Tgt Ion:202 Resp: 522445

Ion	Ratio	Lower	Upper
202	100		
101	7.2	0.0	36.5
203	17.7	0.0	47.5

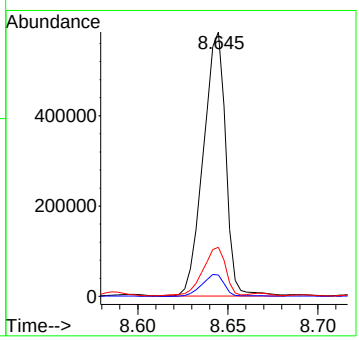


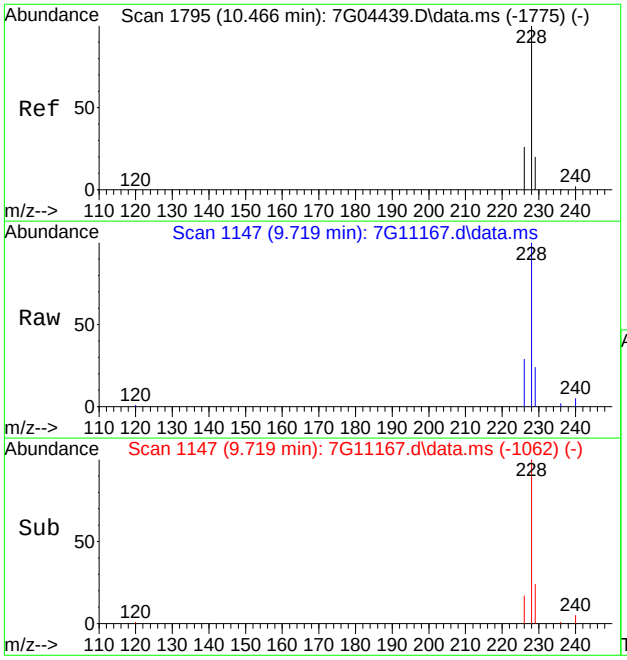


#19
Pyrene
Concen: 22.97 ppm
RT: 8.645 min Scan# 736
Delta R.T. 0.003 min
Lab File: 7G11167.d
Acq: 13 Aug 2020 4:46 pm

Tgt Ion:202 Resp: 506461

Ion	Ratio	Lower	Upper
202	100		
101	8.0	0.0	37.5
203	18.3	0.0	48.3

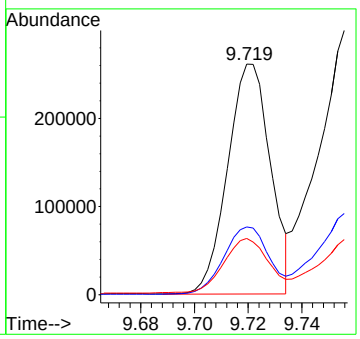


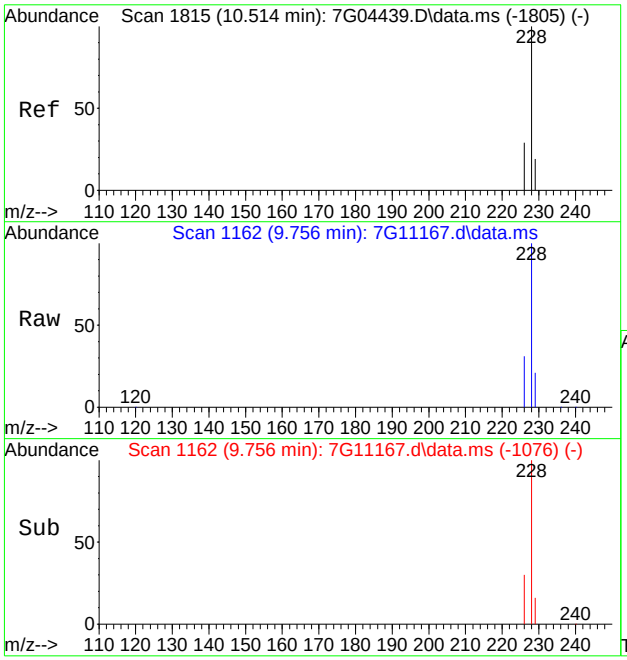


#20
Benzo[a]anthracene
Concen: 16.52 ppm
RT: 9.719 min Scan# 1147
Delta R.T. 0.005 min
Lab File: 7G11167.d
Acq: 13 Aug 2020 4:46 pm

Tgt Ion:228 Resp: 289532

Ion	Ratio	Lower	Upper
228	100		
226	29.2	0.0	57.2
229	23.8	0.0	49.7

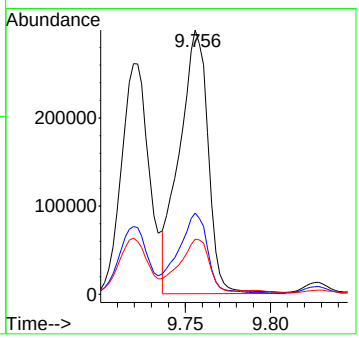


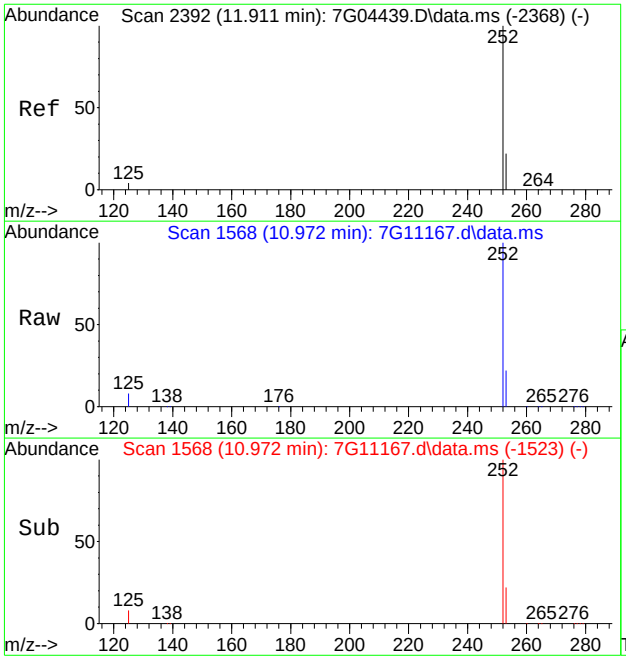


#21
Chrysene
Concen: 18.86 ppm
RT: 9.756 min Scan# 1162
Delta R.T. 0.007 min
Lab File: 7G11167.d
Acq: 13 Aug 2020 4:46 pm

Tgt Ion:228 Resp: 352400

Ion	Ratio	Lower	Upper
228	100		
226	30.4	0.0	59.8
229	20.1	0.0	49.5

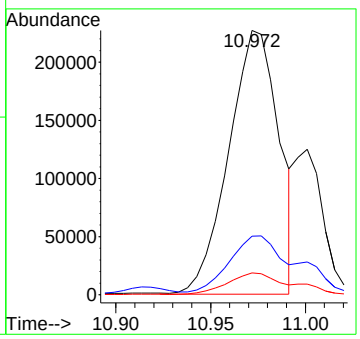


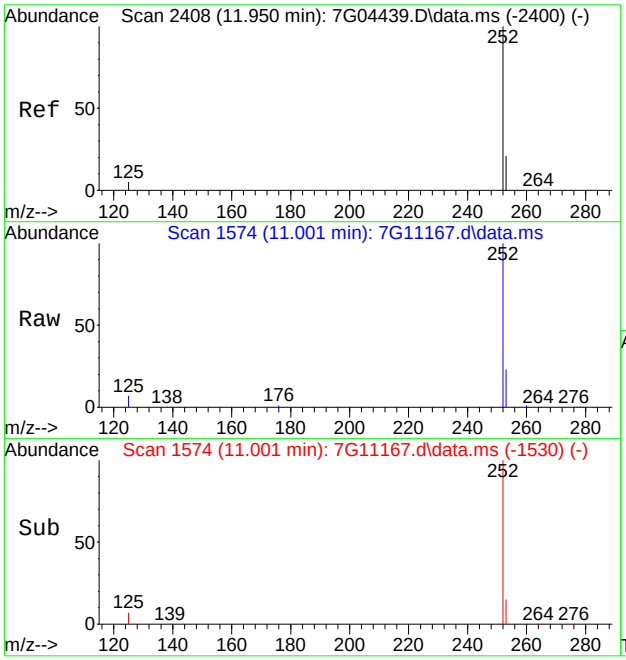


#23
Benzo[b]fluoranthene
Concen: 29.01 ppm m
RT: 10.972 min Scan# 1568
Delta R.T. 0.019 min
Lab File: 7G11167.d
Acq: 13 Aug 2020 4:46 pm

Tgt Ion:252 Resp: 417589

Ion	Ratio	Lower	Upper
252	100		
253	22.2	0.0	51.7
125	8.3	0.0	37.1

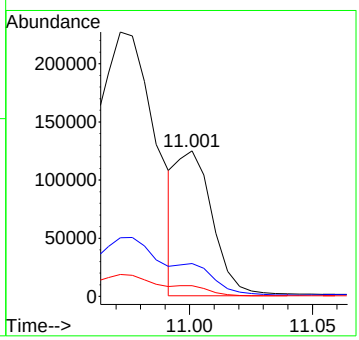


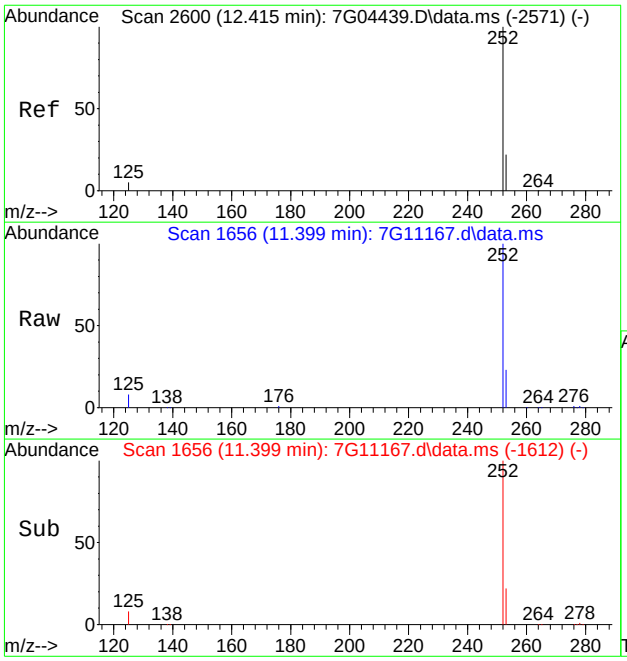


#24
Benzo[k]fluoranthene
Concen: 8.24 ppm m
RT: 11.001 min Scan# 1574
Delta R.T. 0.015 min
Lab File: 7G11167.d
Acq: 13 Aug 2020 4:46 pm

Tgt Ion:252 Resp: 127789

Ion	Ratio	Lower	Upper
252	100		
253	22.7	0.0	51.8
125	7.3	0.0	37.5

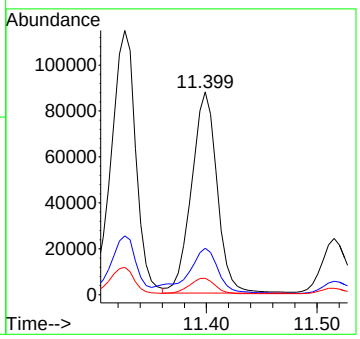


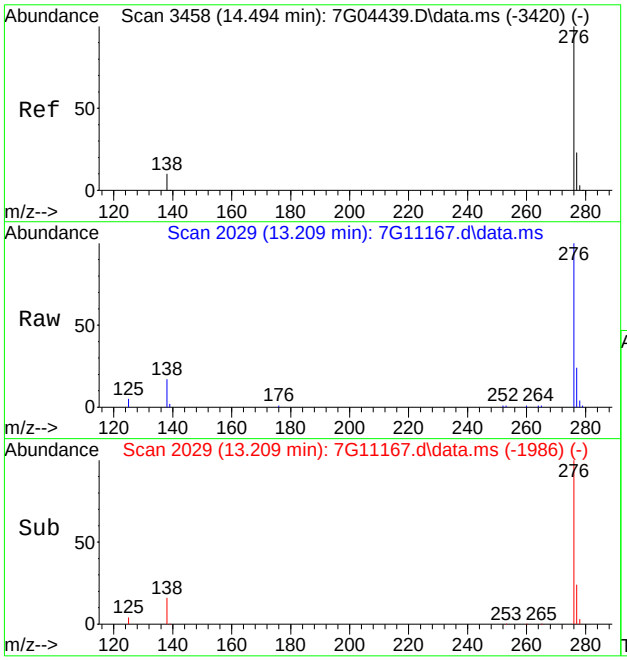


#25
Benzo[a]pyrene
Concen: 10.08 ppm
RT: 11.399 min Scan# 1656
Delta R.T. 0.015 min
Lab File: 7G11167.d
Acq: 13 Aug 2020 4:46 pm

Tgt Ion:252 Resp: 141399

Ion	Ratio	Lower	Upper
252	100		
253	20.5	0.0	51.8
125	7.7	0.0	38.3

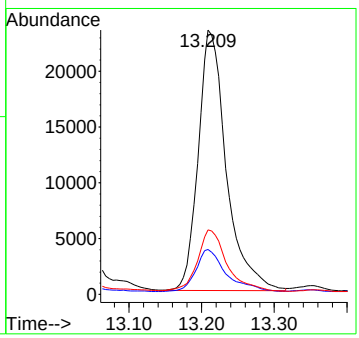


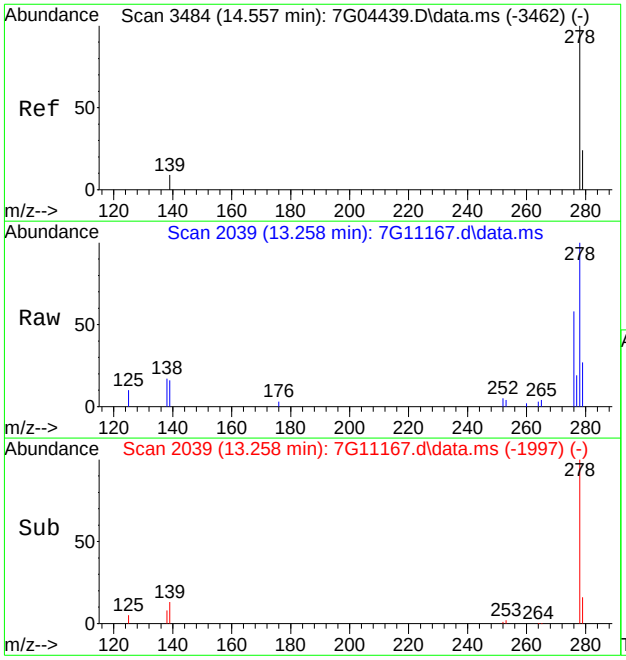


#26
Indeno[1,2,3-cd]pyrene
Concen: 6.85 ppm
RT: 13.209 min Scan# 2029
Delta R.T. 0.010 min
Lab File: 7G11167.d
Acq: 13 Aug 2020 4:46 pm

Tgt Ion:276 Resp: 62670

Ion	Ratio	Lower	Upper
276	100		
138	16.2	0.0	46.1
277	23.5	0.0	53.8

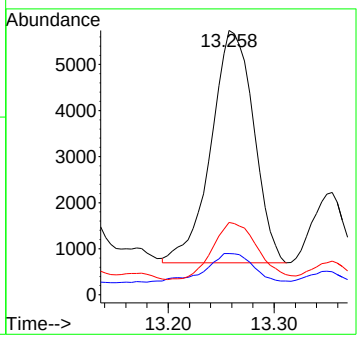


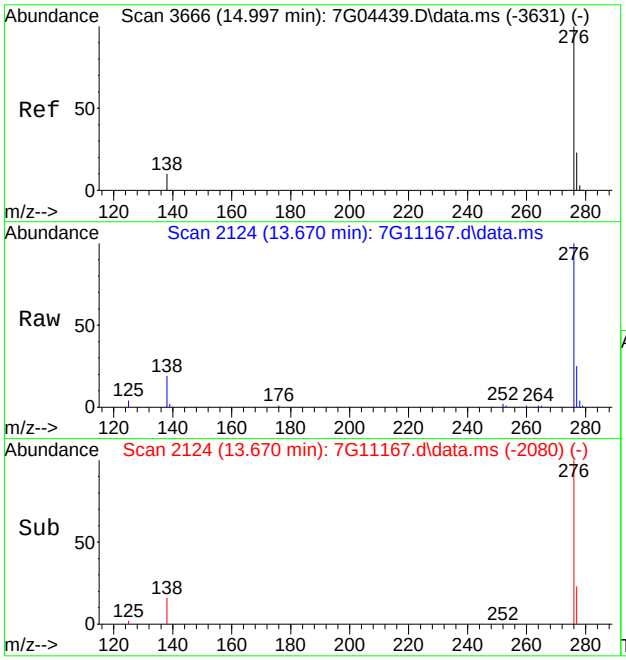


#27
Dibenz[a,h]anthracene
Concen: 1.39 ppm
RT: 13.258 min Scan# 2039
Delta R.T. 0.005 min
Lab File: 7G11167.d
Acq: 13 Aug 2020 4:46 pm

Tgt Ion:278 Resp: 14104

Ion	Ratio	Lower	Upper
278	100		
139	11.8	0.0	43.8
279	23.6	0.0	54.2

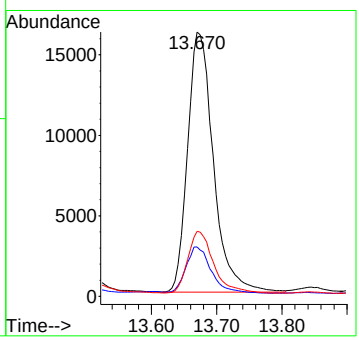




#28
Benzo[g,h,i]perylene
Concen: 4.01 ppm
RT: 13.670 min Scan# 2124
Delta R.T. 0.015 min
Lab File: 7G11167.d
Acq: 13 Aug 2020 4:46 pm

Tgt Ion:276 Resp: 44253

Ion	Ratio	Lower	Upper
276	100		
138	17.5	0.0	47.7
277	23.8	0.0	53.9



Manual Integration Approval Summary

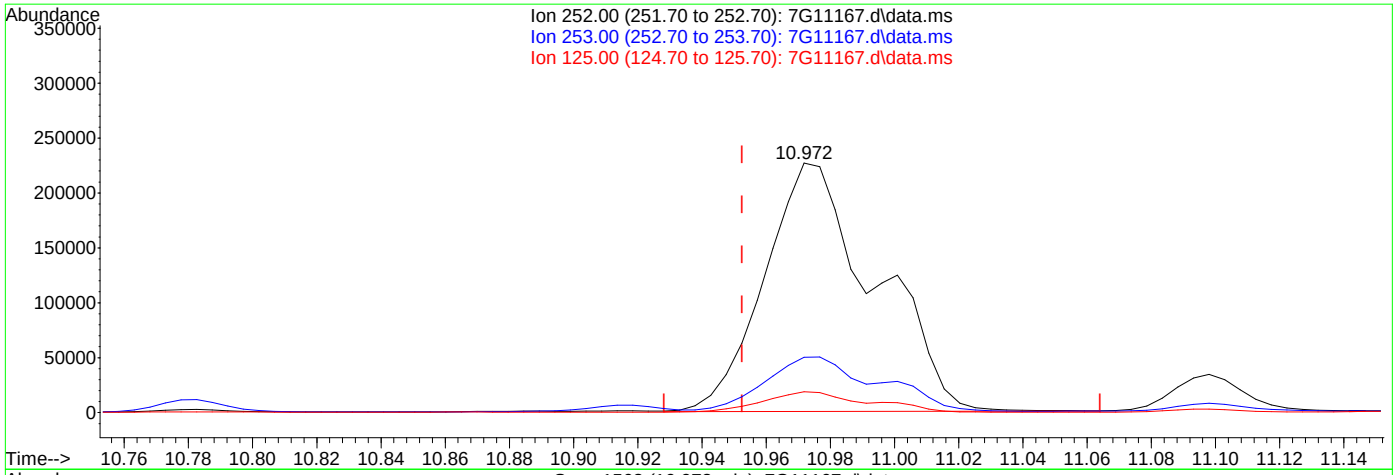
Sample Number: FA77689-2
Lab FileID: 7G11167.D
Injection Time: 08/13/20 16:46
Method: SW846 8270E BY SIM
Analyst approved: 08/14/20 11:02 Fouad Sekkar
Supervisor approved: 08/14/20 11:43 Naresh Jiawan

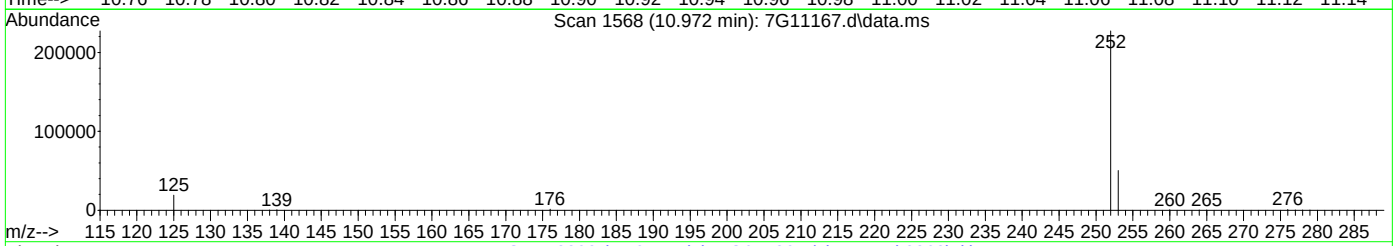
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(b)fluoranthene	205-99-2		10.97	Overlapping peak
Benzo(k)fluoranthene	207-08-9		11.00	Overlapping peak

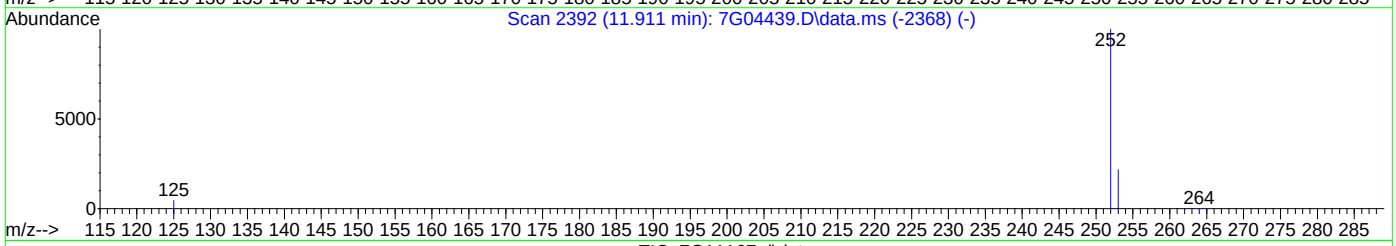
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
Data File : 7G11167.d
Acq On : 13 Aug 2020 4:46 pm
Operator : FOUADS
Sample : fa77689-2 e
Misc : op81539,S7G484,30.0,,,1,1,soil
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 14 03:10:11 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11167.d\data.ms

(23) Benzo[b]fluoranthene (P)

10.972min (+0.019) 37.71ppm

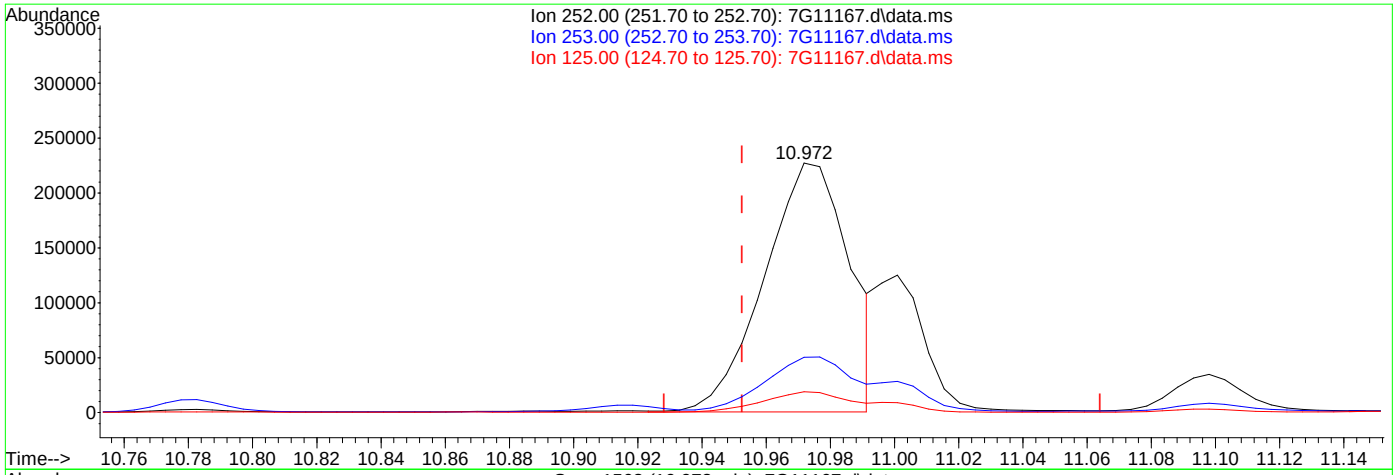
response 542827

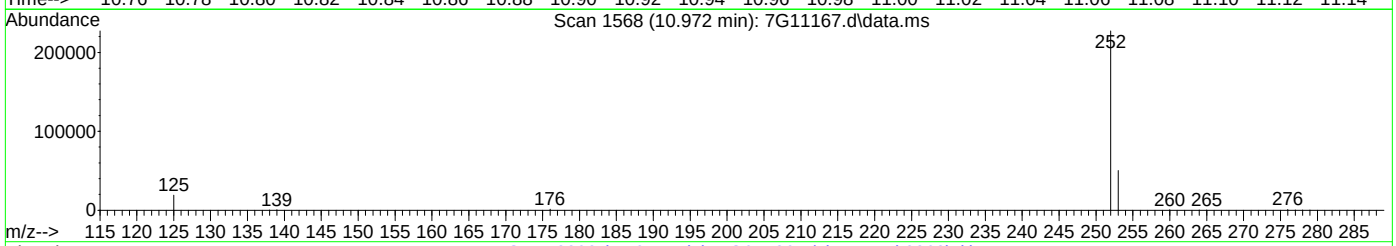
Ion	Exp%	Act%
252.00	100	100
253.00	21.70	21.22
125.00	7.10	8.18
0.00	0.00	0.00

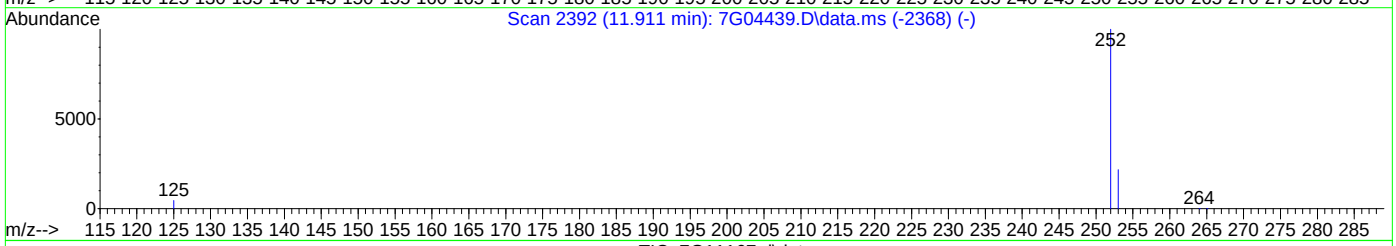
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
Data File : 7G11167.d
Acq On : 13 Aug 2020 4:46 pm
Operator : FOUADS
Sample : fa77689-2 e
Misc : op81539,S7G484,30.0,,,1,1,soil
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 14 03:10:11 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11167.d\data.ms

(23) Benzo[b]fluoranthene (P)

10.972min (+0.019) 29.01ppm m

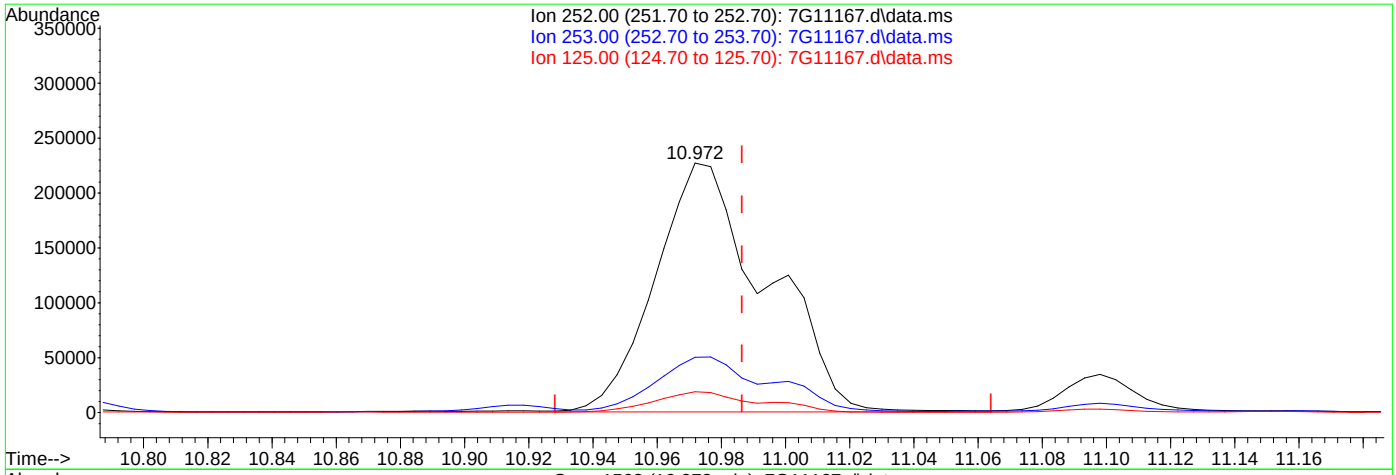
response 417589

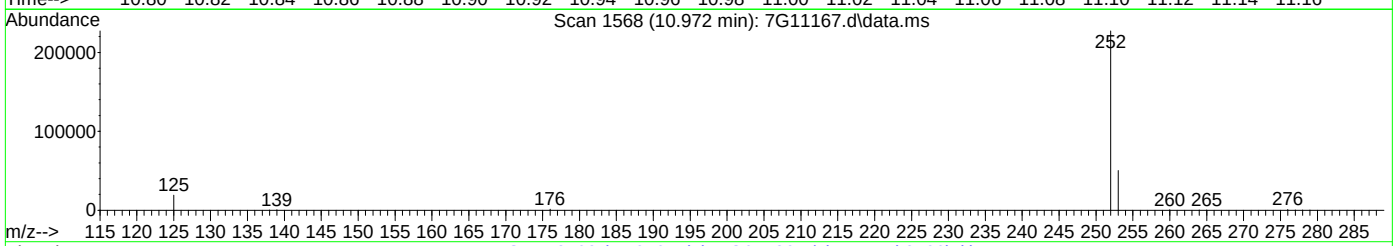
Ion	Exp%	Act%
252.00	100	100
253.00	21.70	22.19
125.00	7.10	8.32
0.00	0.00	0.00

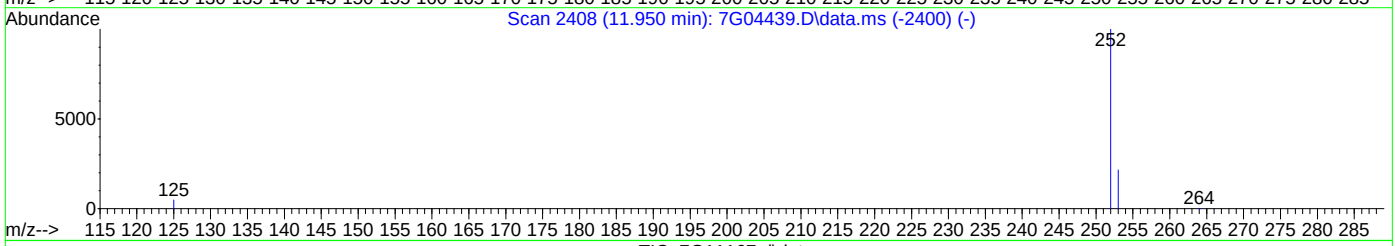
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
Data File : 7G11167.d
Acq On : 13 Aug 2020 4:46 pm
Operator : FOUADS
Sample : fa77689-2 e
Misc : op81539,S7G484,30.0,,,1,1,soil
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 14 03:10:11 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11167.d\data.ms

(24) Benzo[k]fluoranthene (P)

10.972min (-0.015) 32.80ppm

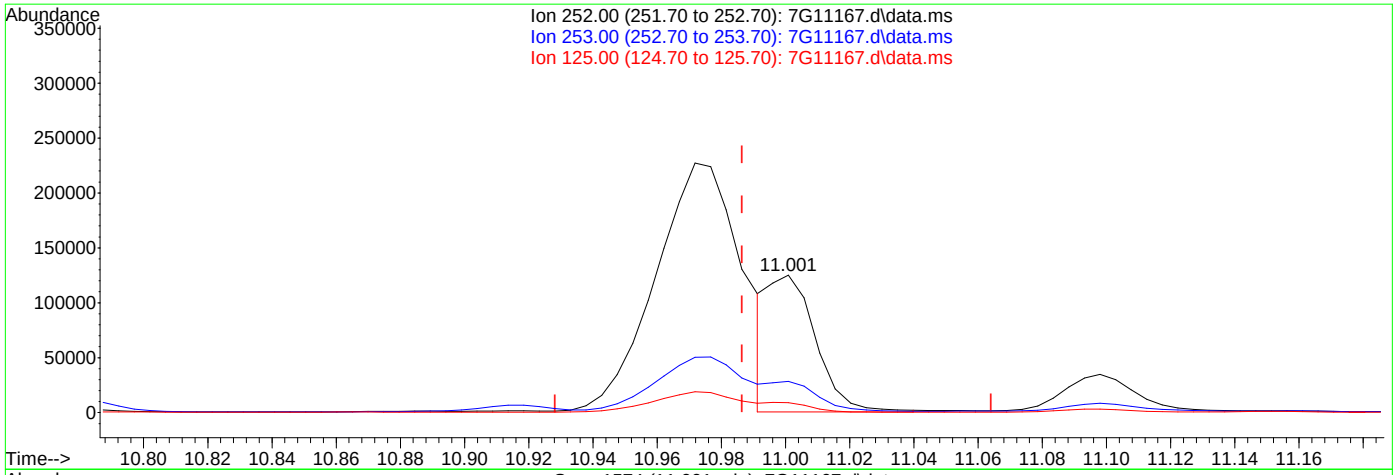
response 545909

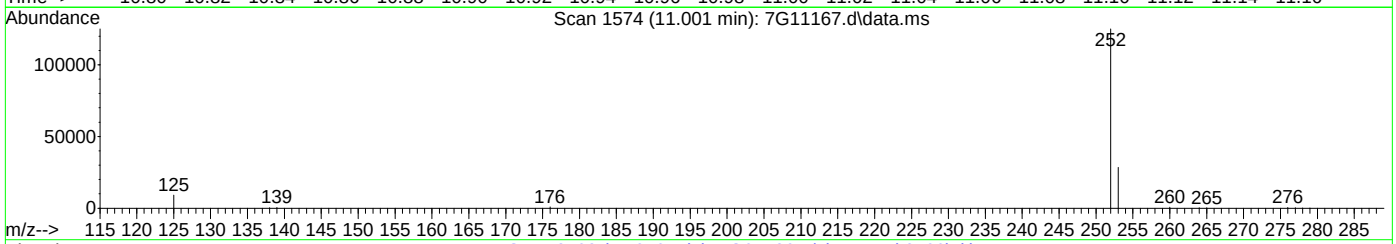
Ion	Exp%	Act%
252.00	100	100
253.00	21.80	21.22
125.00	7.50	8.18
0.00	0.00	0.00

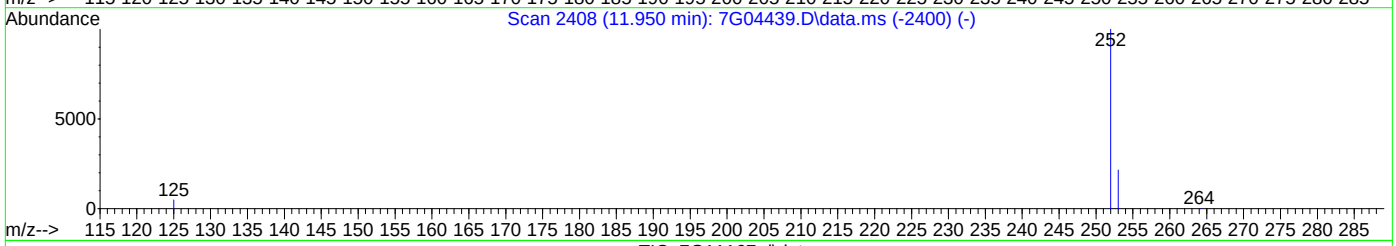
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
Data File : 7G11167.d
Acq On : 13 Aug 2020 4:46 pm
Operator : FOUADS
Sample : fa77689-2 e
Misc : op81539,S7G484,30.0,,,1,1,soil
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 14 03:10:11 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11167.d\data.ms

(24) Benzo[k]fluoranthene (P)

11.001min (+0.015) 8.24ppm m

response 127789

Ion	Exp%	Act%
252.00	100	100
253.00	21.80	22.68
125.00	7.50	7.27
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan
08/14/20 11:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
Data File : 7G11168.d
Acq On : 13 Aug 2020 5:10 pm
Operator : FOUADS
Sample : fa77689-3 e
Misc : op81539,S7G484,30.3,,,1,1,soil
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 14 03:21:58 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.622	136	24202	4.00	ppm	0.00
6) Acenaphthene-d10	6.109	164	18150	4.00	ppm	0.00
11) Phenanthrene-d10	7.389	188	32997	4.00	ppm	0.00
18) Chrysene-d12	9.729	240	55521	4.00	ppm	0.00
22) Perylene-d12	11.472	264	39706	4.00	ppm	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.199	152	35391	9.76	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 97.60%			
17) Fluoranthene-d10	8.426	212	171592	9.95	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 99.50%			
Target Compounds						Qvalue
2) Naphthalene	4.634	128	6877	1.01	ppm	99
3) 2-Methylnaphthalene	5.223	142	5623	1.04	ppm	95
5) 1-Methylnaphthalene	5.305	142	4358	0.92	ppm	90
7) Acenaphthylene	5.983	152	20595	1.98	ppm	99
8) Acenaphthene	6.133	153	1430	0.21	ppm	95
9) Dibenzofuran	6.292	168	8800	1.84	ppm	85
10) Fluorene	6.582	166	2014	0.27	ppm	93
13) Phenanthrene	7.403	178	50840	4.65	ppm	100
14) Anthracene	7.452	178	47333	4.29	ppm	99
15) Carbazole	7.626	167	16803	0.85	ppm	99
16) Fluoranthene	8.445	202	429245	19.97	ppm	100
19) Pyrene	8.632	202	390026	17.35	ppm	99
20) Benzo[a]anthracene	9.719	228	237403	13.30	ppm	92
21) Chrysene	9.753	228	274957	14.31	ppm	99
23) Benzo[b]fluoranthene	10.967	252	358663	26.61	ppm	99
24) Benzo[k]fluoranthene	10.996	252	98276m	6.80	ppm	
25) Benzo[a]pyrene	11.389	252	127507	9.71	ppm	99
26) Indeno[1,2,3-cd]pyrene	13.209	276	49802	5.81	ppm	99
27) Dibenz[a,h]anthracene	13.253	278	11649	1.22	ppm	98
28) Benzo[g,h,i]perylene	13.670	276	35593	3.44	ppm	98

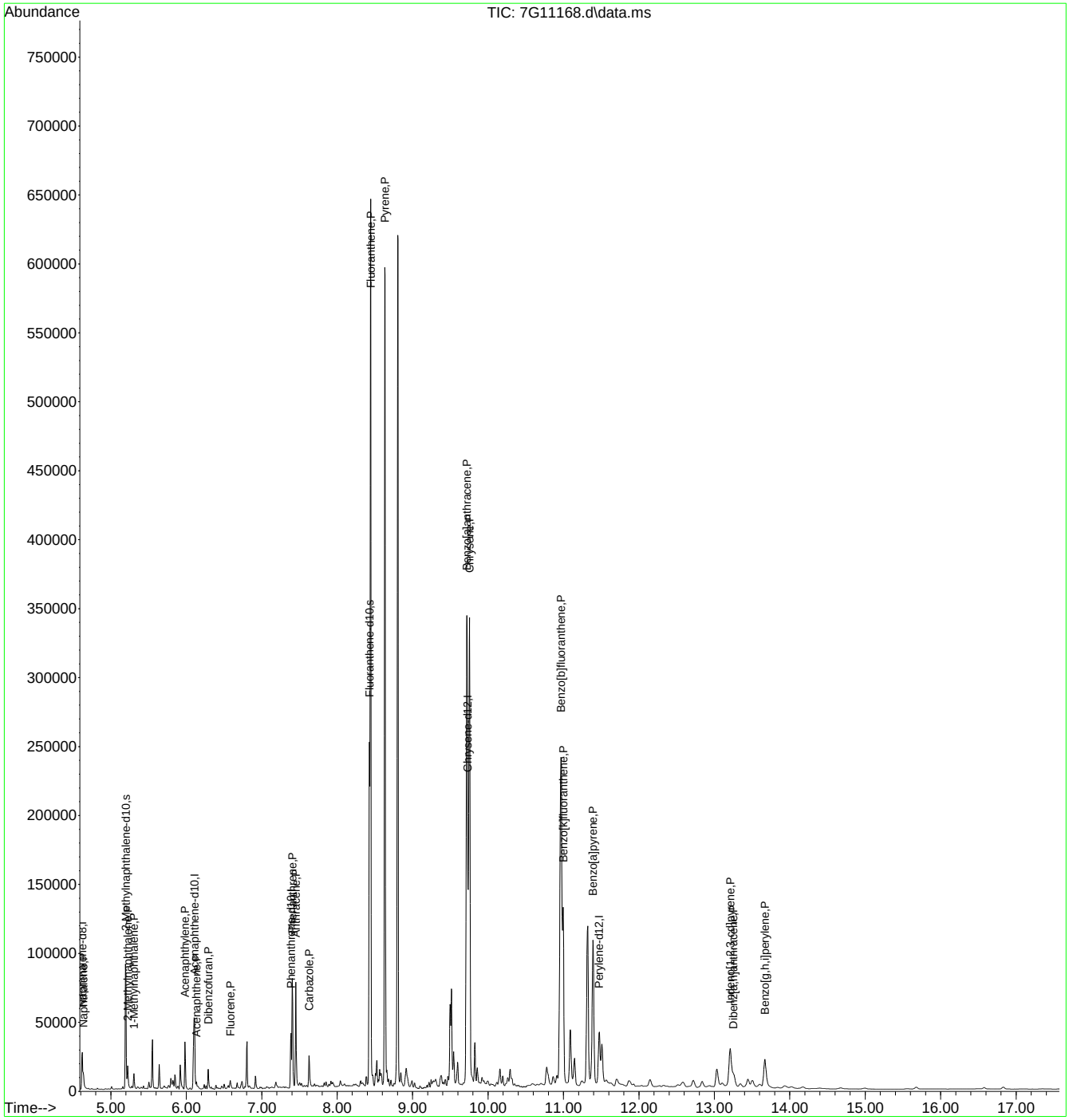
(#) = qualifier out of range (m) = manual integration (+) = signals summed

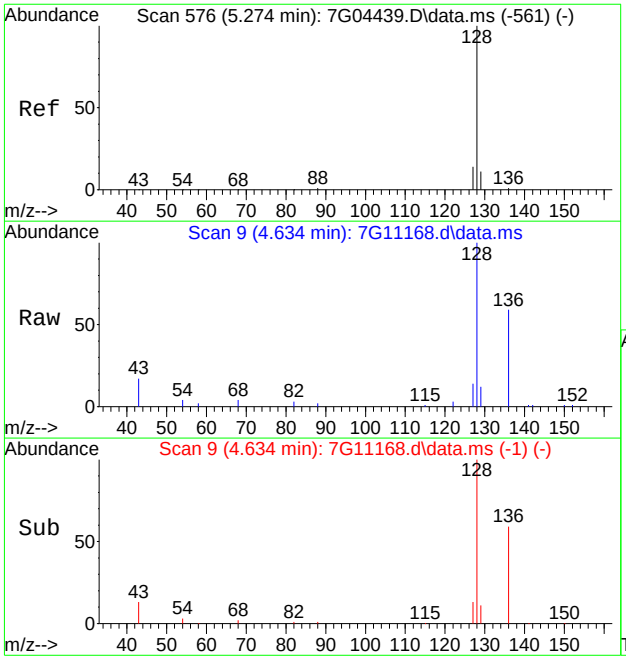
7.1.15
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
Data File : 7G11168.d
Acq On : 13 Aug 2020 5:10 pm
Operator : FOUADS
Sample : fa77689-3 e
Misc : op81539,S7G484,30.3,,,1,1,soil
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 14 03:21:58 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

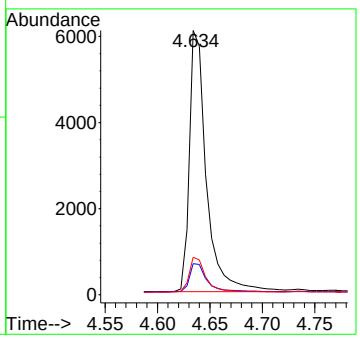


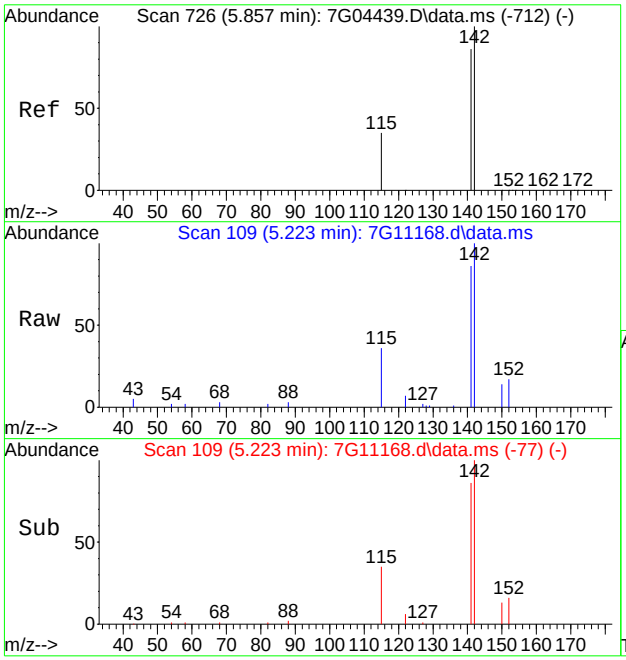


#2
Naphthalene
Concen: 1.01 ppm
RT: 4.634 min Scan# 9
Delta R.T. -0.012 min
Lab File: 7G11168.d
Acq: 13 Aug 2020 5:10 pm

Tgt Ion:128 Resp: 6877

Ion	Ratio	Lower	Upper
128	100		
129	10.8	0.0	41.1
127	13.4	0.0	43.0

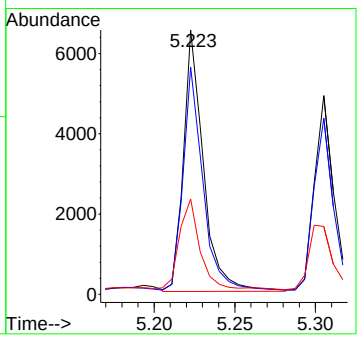


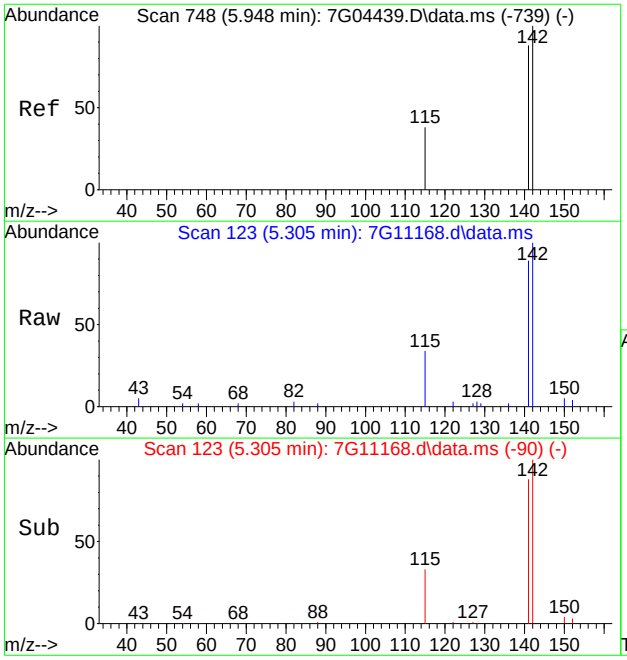


#3
2-Methylnaphthalene
Concen: 1.04 ppm
RT: 5.223 min Scan# 109
Delta R.T. -0.012 min
Lab File: 7G11168.d
Acq: 13 Aug 2020 5:10 pm

Tgt Ion:142 Resp: 5623

Ion	Ratio	Lower	Upper
142	100		
141	85.9	54.2	114.2
115	34.5	0.0	57.6

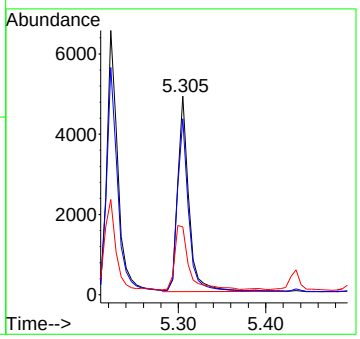


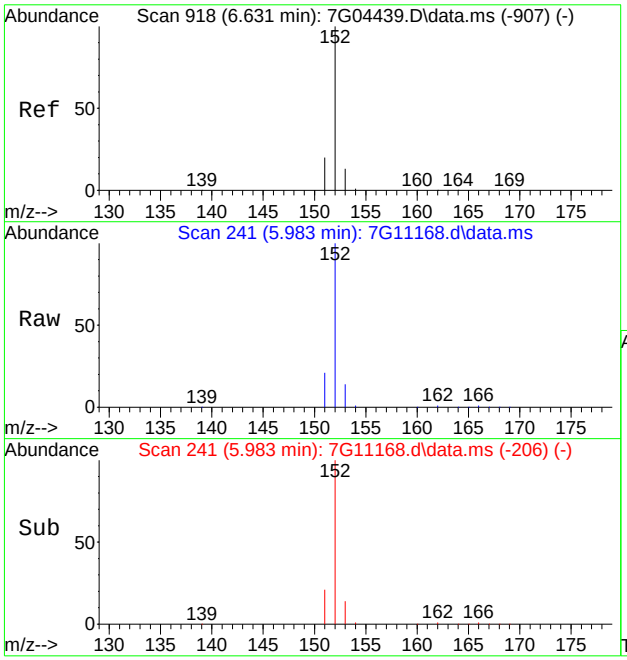


#5
1-Methylnaphthalene
Concen: 0.92 ppm
RT: 5.305 min Scan# 123
Delta R.T. -0.006 min
Lab File: 7G11168.d
Acq: 13 Aug 2020 5:10 pm

Tgt Ion:142 Resp: 4358

Ion	Ratio	Lower	Upper
142	100		
141	88.4	63.7	123.7
115	31.7	14.6	74.6

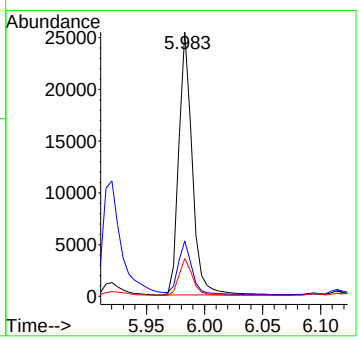


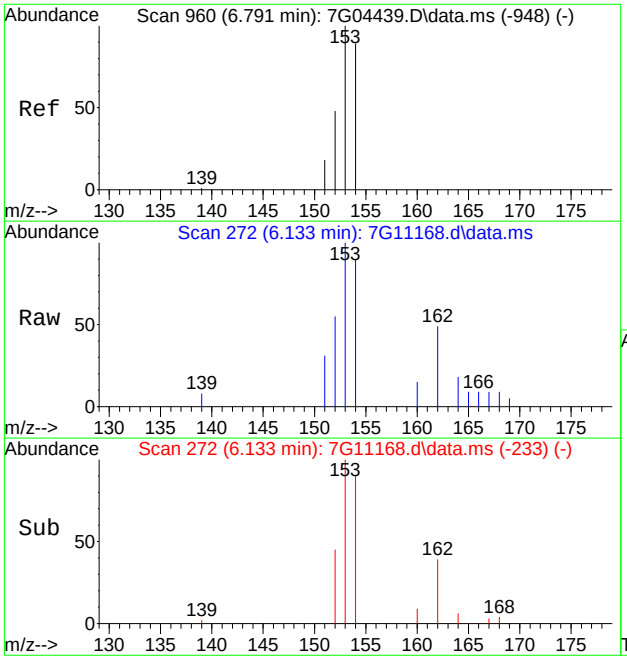


#7
Acenaphthylene
Concen: 1.98 ppm
RT: 5.983 min Scan# 241
Delta R.T. -0.010 min
Lab File: 7G11168.d
Acq: 13 Aug 2020 5:10 pm

Tgt Ion:152 Resp: 20595

Ion	Ratio	Lower	Upper
152	100		
151	20.0	0.0	49.8
153	14.0	0.0	43.7

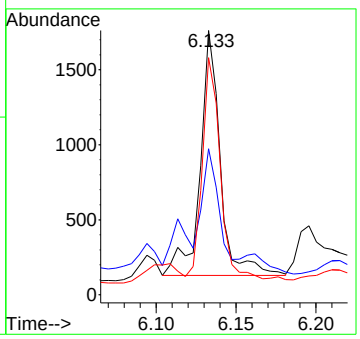


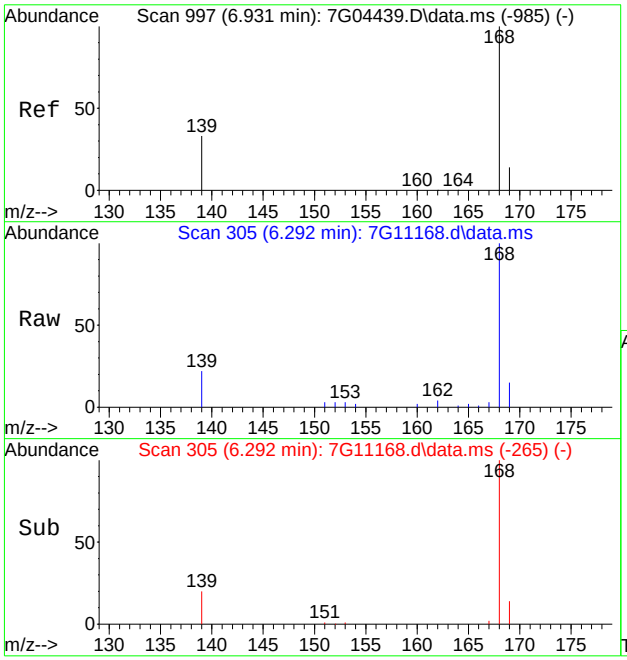


#8
Acenaphthene
Concen: 0.21 ppm
RT: 6.133 min Scan# 272
Delta R.T. -0.010 min
Lab File: 7G11168.d
Acq: 13 Aug 2020 5:10 pm

Tgt Ion:153 Resp: 1430

Ion	Ratio	Lower	Upper
153	100		
152	49.2	15.9	75.9
154	87.8	62.4	122.4

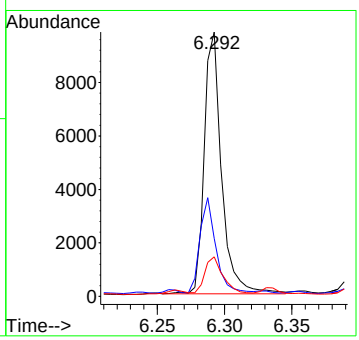


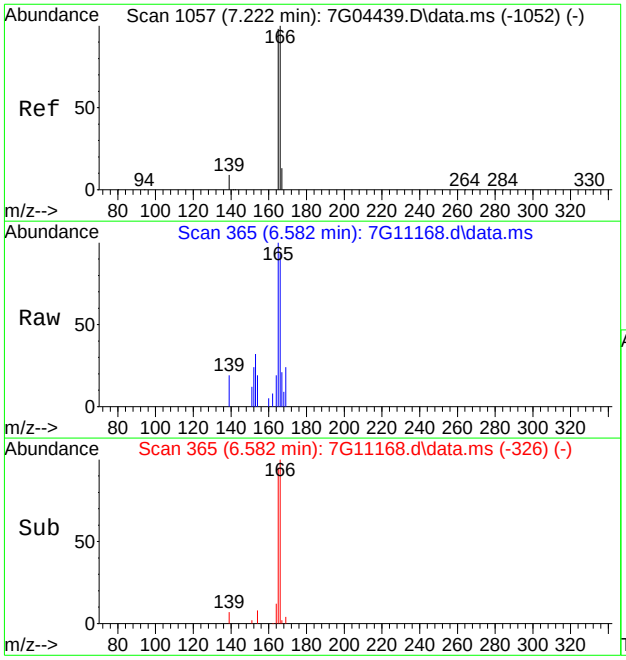


#9
Dibenzofuran
Concen: 1.84 ppm
RT: 6.292 min Scan# 305
Delta R.T. -0.005 min
Lab File: 7G11168.d
Acq: 13 Aug 2020 5:10 pm

Tgt Ion:168 Resp: 8800

Ion	Ratio	Lower	Upper
168	100		
139	20.7	11.9	51.9
169	14.0	0.0	33.1

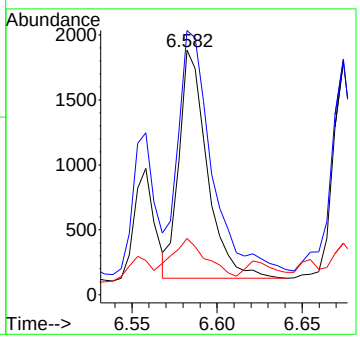


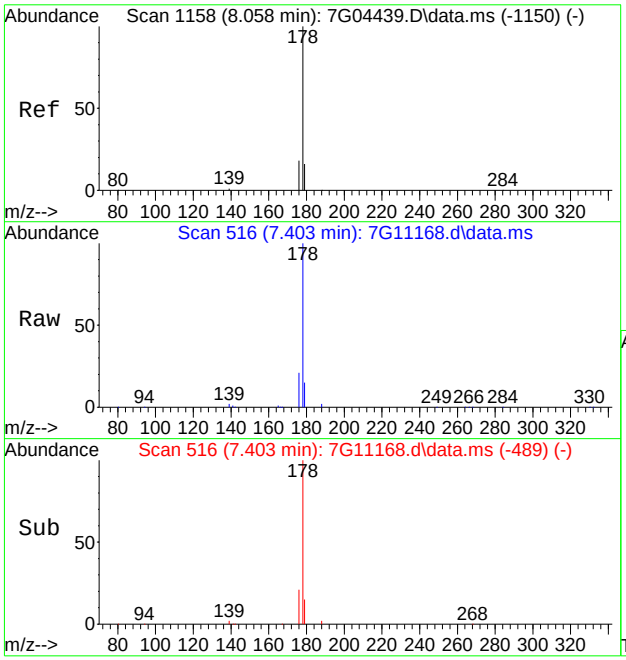


#10
Fluorene
Concen: 0.27 ppm
RT: 6.582 min Scan# 365
Delta R.T. -0.010 min
Lab File: 7G11168.d
Acq: 13 Aug 2020 5:10 pm

Tgt Ion:166 Resp: 2014

Ion	Ratio	Lower	Upper
166	100		
165	102.5	65.2	125.2
167	13.6	0.0	43.9

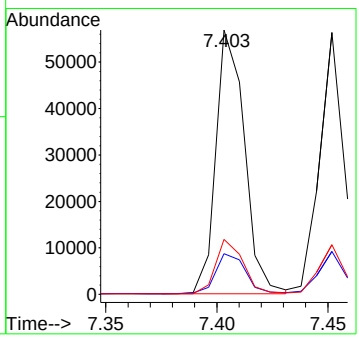


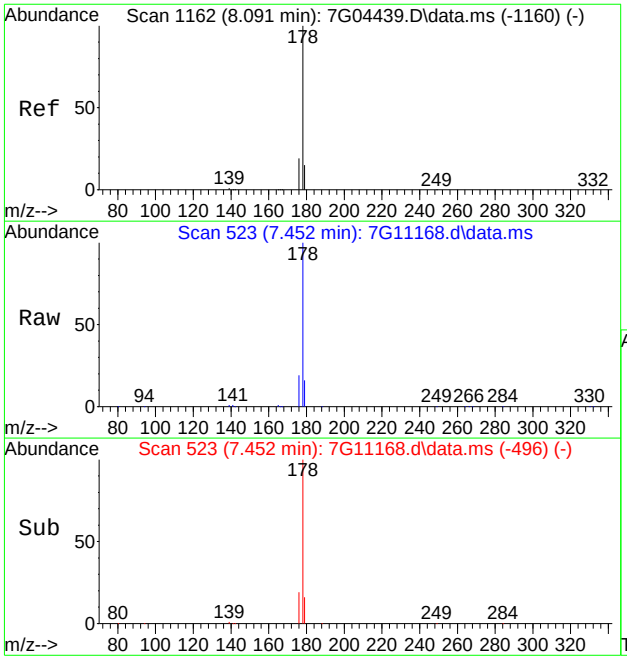


#13
Phenanthrene
Concen: 4.65 ppm
RT: 7.403 min Scan# 516
Delta R.T. -0.014 min
Lab File: 7G11168.d
Acq: 13 Aug 2020 5:10 pm

Tgt Ion:178 Resp: 50840

Ion	Ratio	Lower	Upper
178	100		
179	15.1	0.0	45.2
176	20.7	0.0	50.4

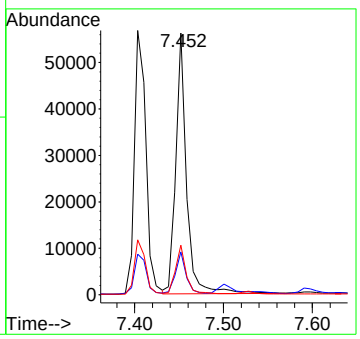


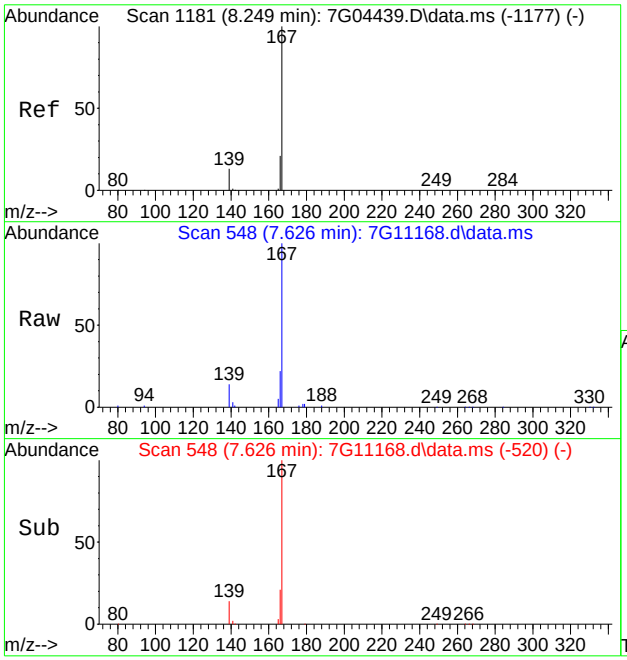


#14
Anthracene
Concen: 4.29 ppm
RT: 7.452 min Scan# 523
Delta R.T. -0.014 min
Lab File: 7G11168.d
Acq: 13 Aug 2020 5:10 pm

Tgt Ion:178 Resp: 47333

Ion	Ratio	Lower	Upper
178	100		
179	16.1	0.0	46.1
176	18.8	0.0	48.2

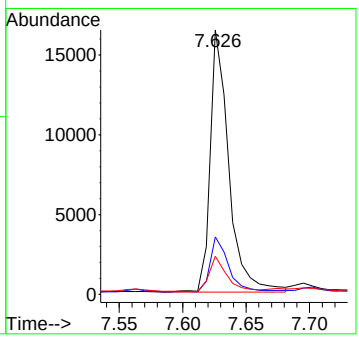


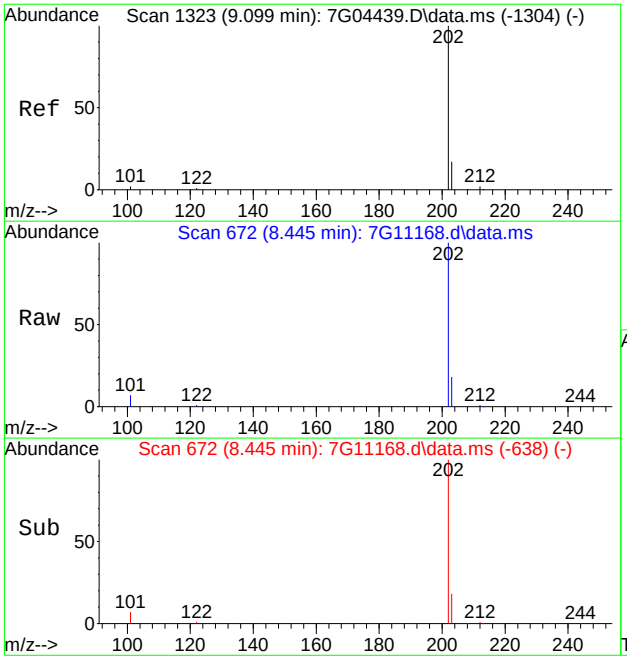


#15
Carbazole
Concen: 0.85 ppm
RT: 7.626 min Scan# 548
Delta R.T. -0.007 min
Lab File: 7G11168.d
Acq: 13 Aug 2020 5:10 pm

Tgt Ion:167 Resp: 16803

Ion	Ratio	Lower	Upper
167	100		
166	20.9	0.2	40.2
139	13.1	0.0	32.8

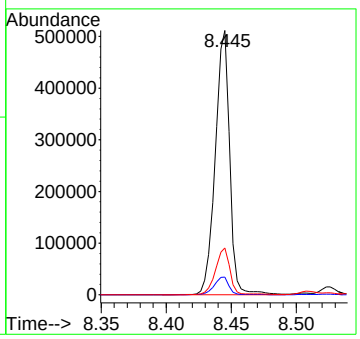


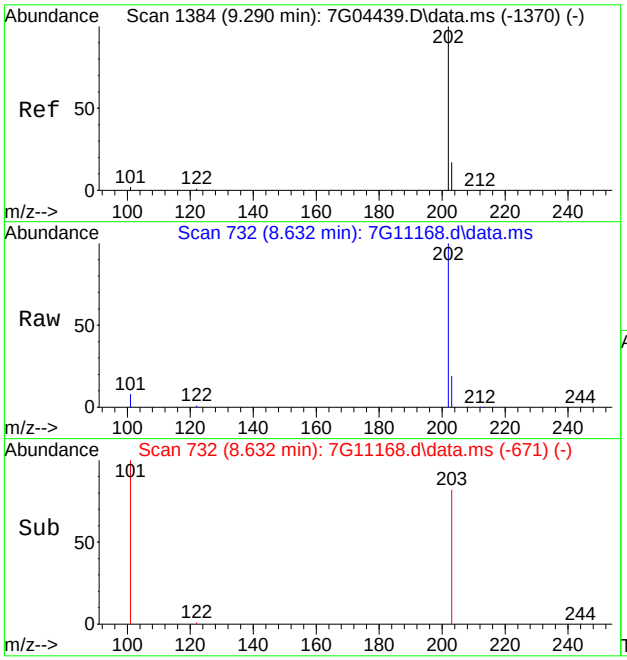


#16
Fluoranthene
Concen: 19.97 ppm
RT: 8.445 min Scan# 672
Delta R.T. -0.006 min
Lab File: 7G11168.d
Acq: 13 Aug 2020 5:10 pm

Tgt Ion:202 Resp: 429245

Ion	Ratio	Lower	Upper
202	100		
101	6.6	0.0	36.5
203	17.7	0.0	47.5

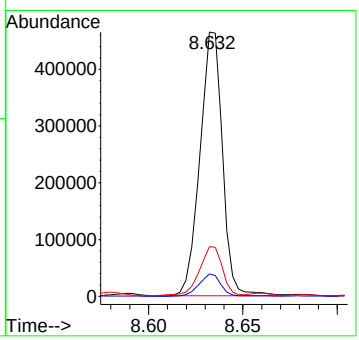


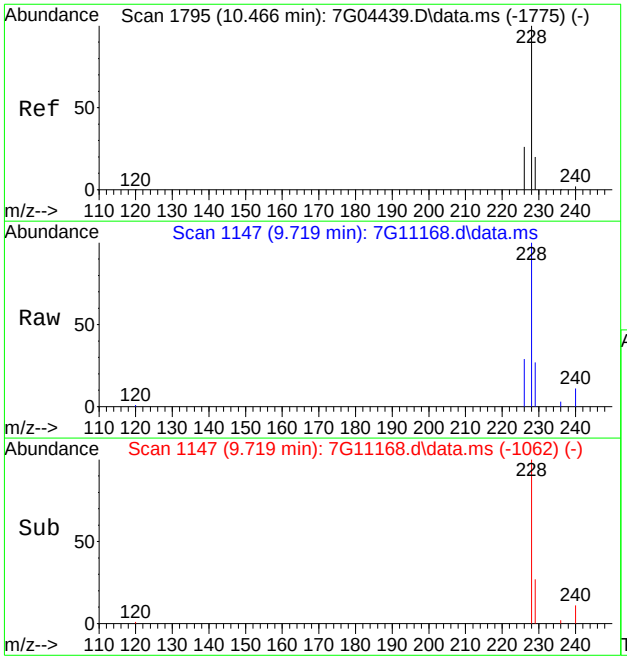


#19
Pyrene
Concen: 17.35 ppm
RT: 8.632 min Scan# 732
Delta R.T. -0.009 min
Lab File: 7G11168.d
Acq: 13 Aug 2020 5:10 pm

Tgt Ion:202 Resp: 390026

Ion	Ratio	Lower	Upper
202	100		
101	8.4	0.0	37.5
203	18.4	0.0	48.3

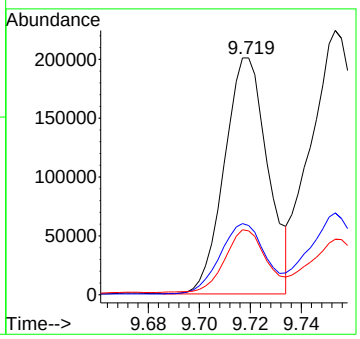


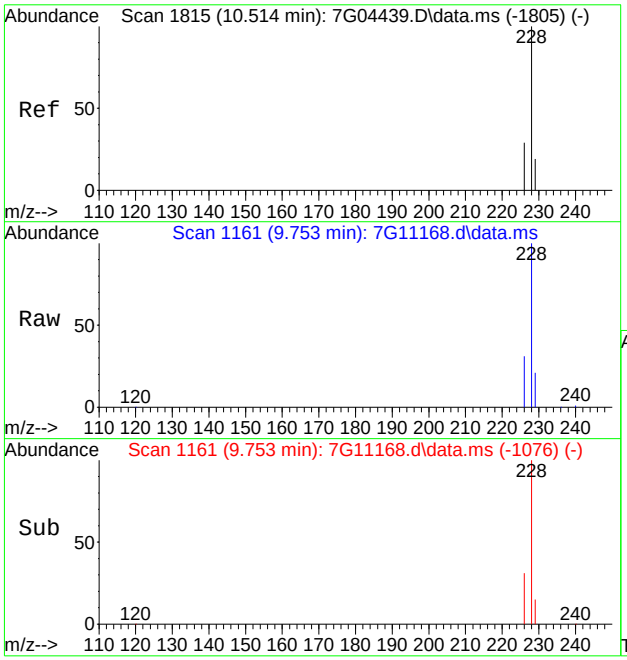


#20
Benzo[a]anthracene
Concen: 13.30 ppm
RT: 9.719 min Scan# 1147
Delta R.T. 0.005 min
Lab File: 7G11168.d
Acq: 13 Aug 2020 5:10 pm

Tgt Ion:228 Resp: 237403

Ion	Ratio	Lower	Upper
228	100		
226	28.7	0.0	57.2
229	26.5	0.0	49.7

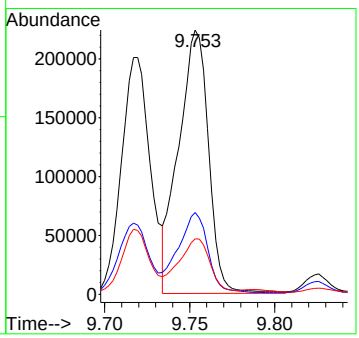


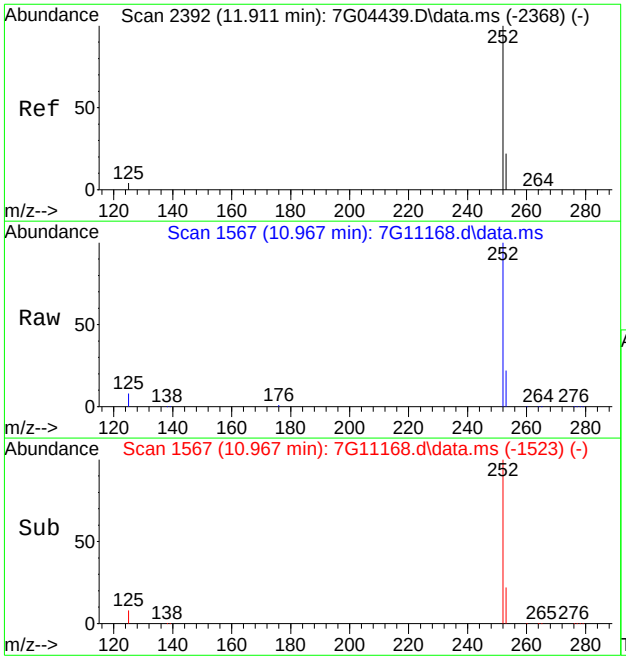


#21
Chrysene
Concen: 14.31 ppm
RT: 9.753 min Scan# 1161
Delta R.T. 0.005 min
Lab File: 7G11168.d
Acq: 13 Aug 2020 5:10 pm

Tgt Ion:228 Resp: 274957

Ion	Ratio	Lower	Upper
228	100		
226	30.6	0.0	59.8
229	19.9	0.0	49.5

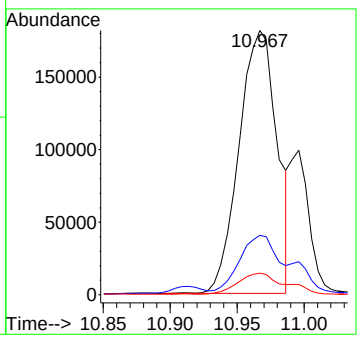


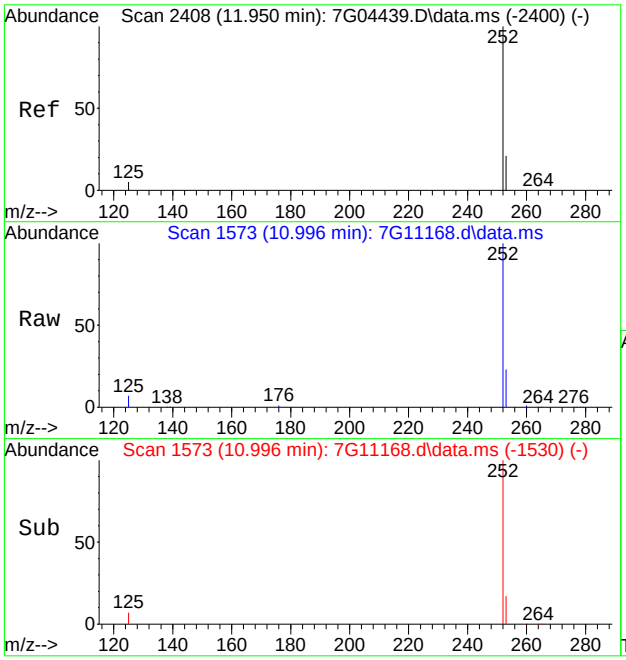


#23
Benzo[b]fluoranthene
Concen: 26.61 ppm
RT: 10.967 min Scan# 1567
Delta R.T. 0.014 min
Lab File: 7G11168.d
Acq: 13 Aug 2020 5:10 pm

Tgt Ion:252 Resp: 358663

Ion	Ratio	Lower	Upper
252	100		
253	21.7	0.0	51.7
125	8.1	0.0	37.1

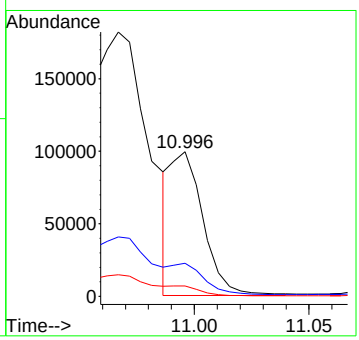


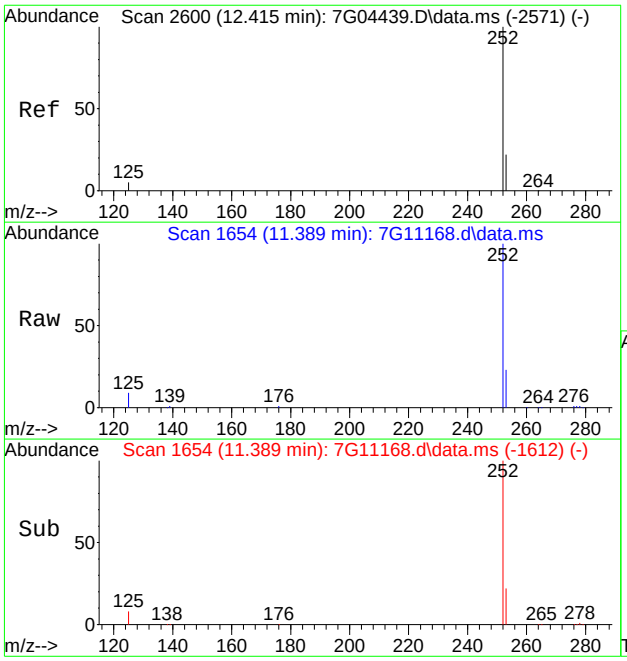


#24
Benzo[k]fluoranthene
Concen: 6.80 ppm m
RT: 10.996 min Scan# 1573
Delta R.T. 0.010 min
Lab File: 7G11168.d
Acq: 13 Aug 2020 5:10 pm

Tgt Ion:252 Resp: 98276

Ion	Ratio	Lower	Upper
252	100		
253	22.8	0.0	51.8
125	7.2	0.0	37.5

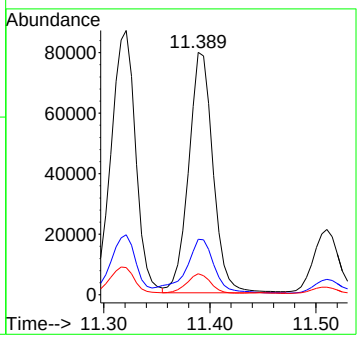


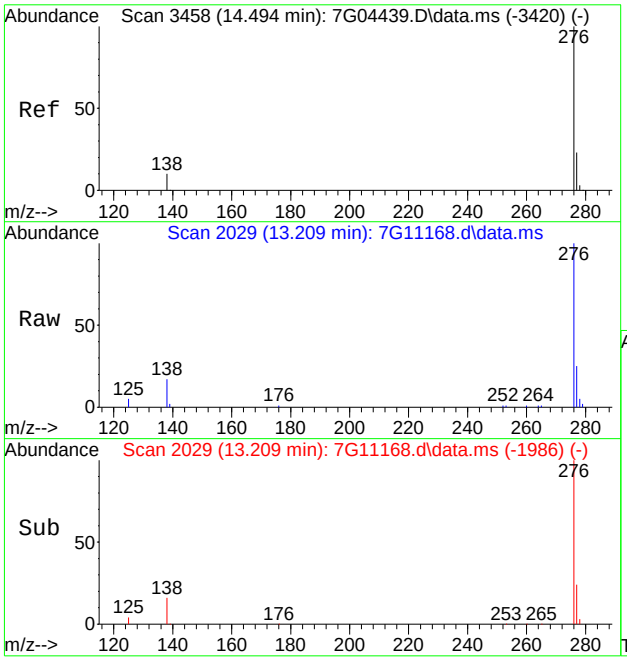


#25
Benzo[a]pyrene
Concen: 9.71 ppm
RT: 11.389 min Scan# 1654
Delta R.T. 0.005 min
Lab File: 7G11168.d
Acq: 13 Aug 2020 5:10 pm

Tgt Ion:252 Resp: 127507

Ion	Ratio	Lower	Upper
252	100		
253	21.0	0.0	51.8
125	8.1	0.0	38.3

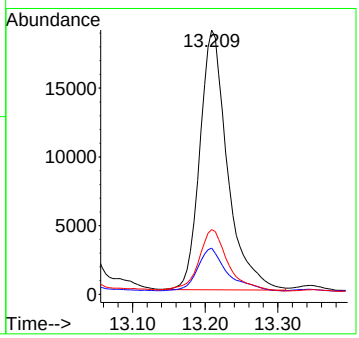


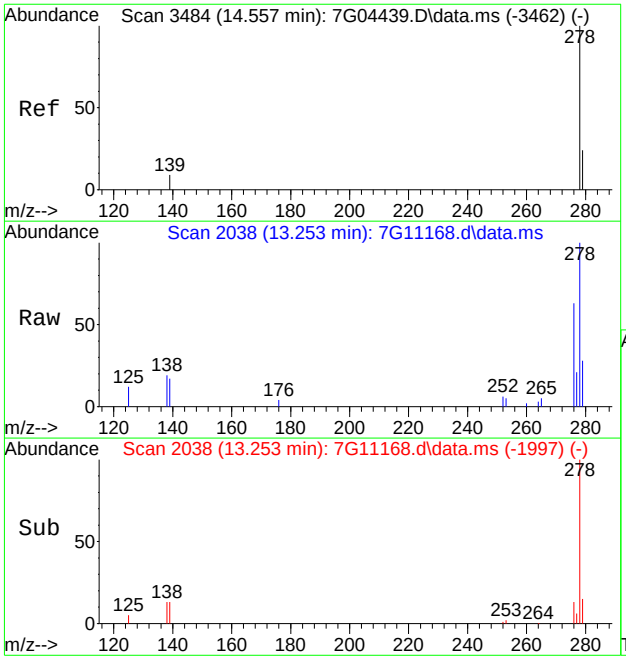


#26
Indeno[1,2,3-cd]pyrene
Concen: 5.81 ppm
RT: 13.209 min Scan# 2029
Delta R.T. 0.010 min
Lab File: 7G11168.d
Acq: 13 Aug 2020 5:10 pm

Tgt Ion:276 Resp: 49802

Ion	Ratio	Lower	Upper
276	100		
138	16.4	0.0	46.1
277	23.5	0.0	53.8

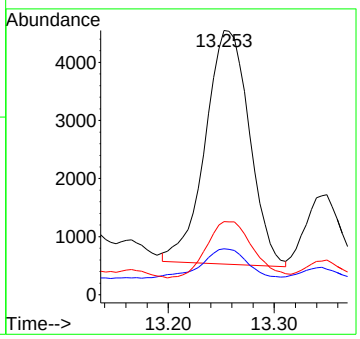


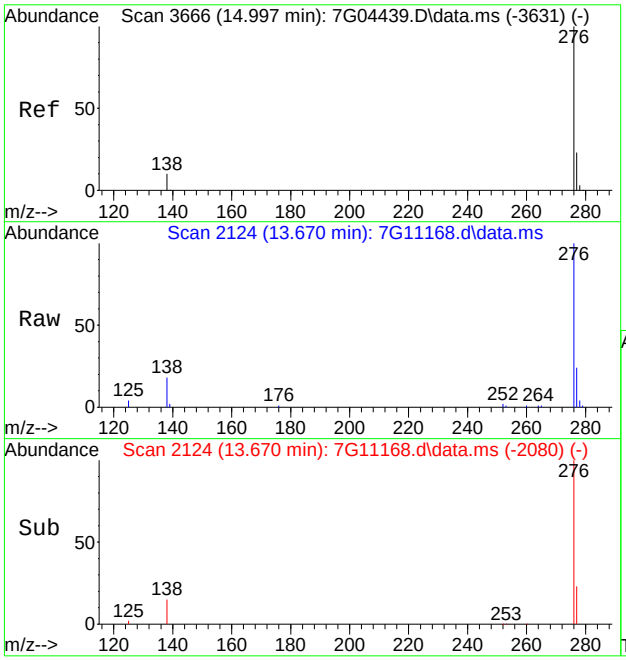


#27
Dibenz[a,h]anthracene
Concen: 1.22 ppm
RT: 13.253 min Scan# 2038
Delta R.T. -0.000 min
Lab File: 7G11168.d
Acq: 13 Aug 2020 5:10 pm

Tgt Ion:278 Resp: 11649

Ion	Ratio	Lower	Upper
278	100		
139	12.1	0.0	43.8
279	23.6	0.0	54.2

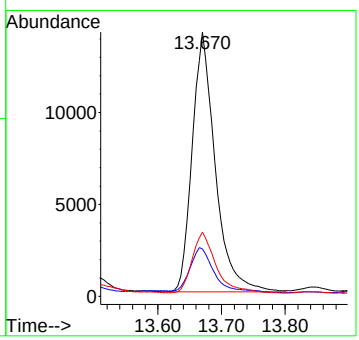




#28
Benzo[g,h,i]perylene
Concen: 3.44 ppm
RT: 13.670 min Scan# 2124
Delta R.T. 0.014 min
Lab File: 7G11168.d
Acq: 13 Aug 2020 5:10 pm

Tgt Ion:276 Resp: 35593

Ion	Ratio	Lower	Upper
276	100		
138	16.4	0.0	47.7
277	23.4	0.0	53.9



Manual Integration Approval Summary

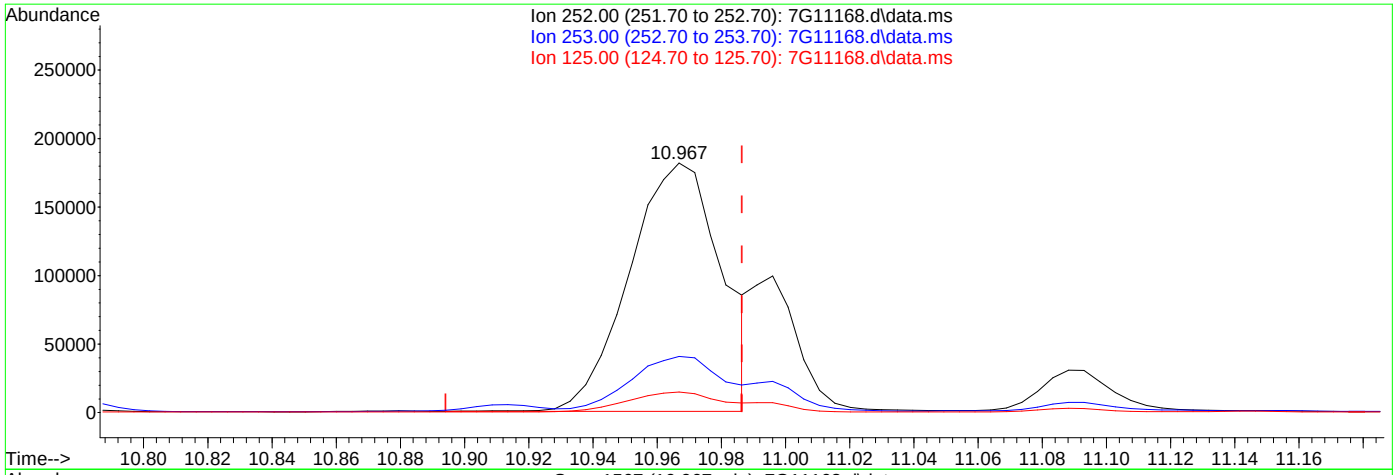
Sample Number: FA77689-3
Lab FileID: 7G11168.D
Injection Time: 08/13/20 17:10
Method: SW846 8270E BY SIM
Analyst approved: 08/14/20 11:02 Fouad Sekkar
Supervisor approved: 08/14/20 11:43 Naresh Jiawan

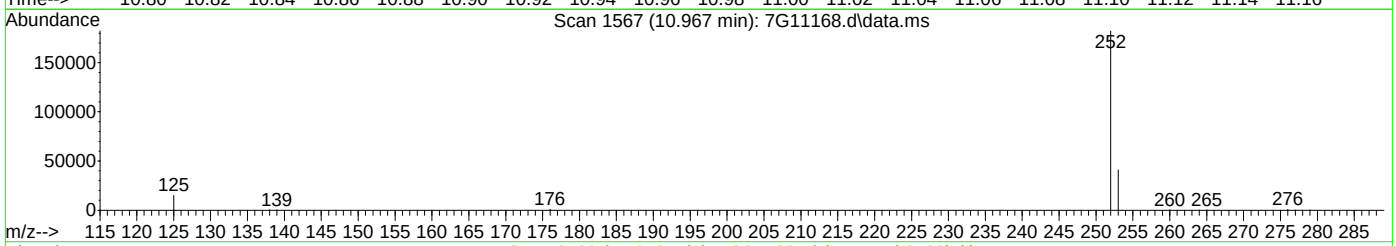
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(k)fluoranthene	207-08-9		11.00	Missed peak

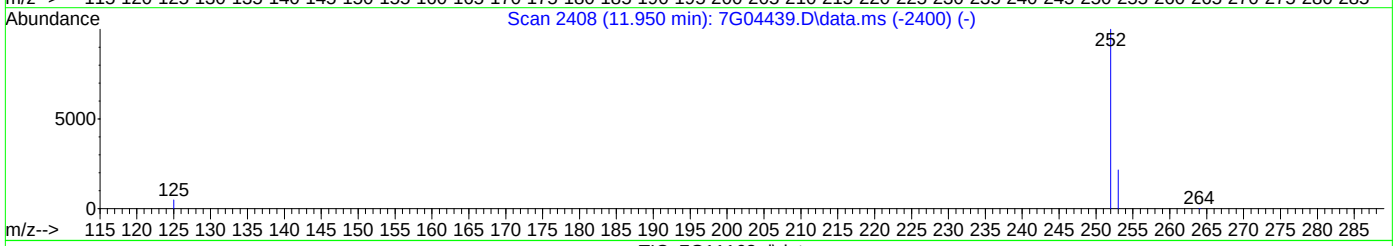
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
Data File : 7G11168.d
Acq On : 13 Aug 2020 5:10 pm
Operator : FOUADS
Sample : fa77689-3 e
Misc : op81539,S7G484,30.3,,,1,1,soil
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 14 03:10:13 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11168.d\data.ms

(24) Benzo[k]fluoranthene (P)

10.967min (-0.020) 23.62ppm

response 358663

Ion	Exp%	Act%
252.00	100	100
253.00	21.80	21.67
125.00	7.50	8.08
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
Data File : 7G11168.d
Acq On : 13 Aug 2020 5:10 pm
Operator : FOUADS
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Misc : op81539,S7G484,30.3,,,1,1,soil
ALS Vial : 7 Sample Multiplier: 1

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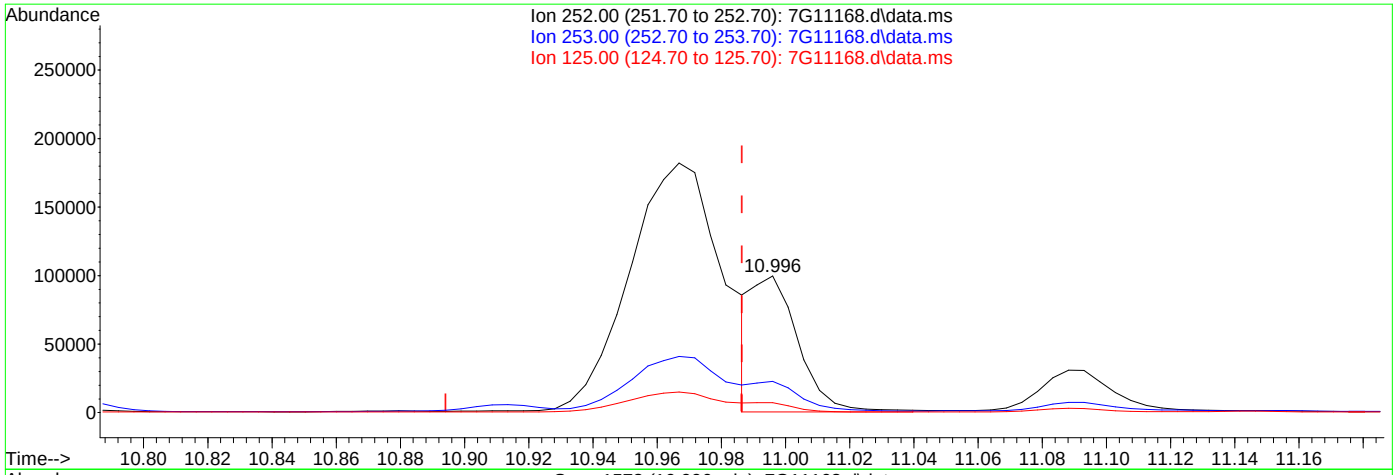

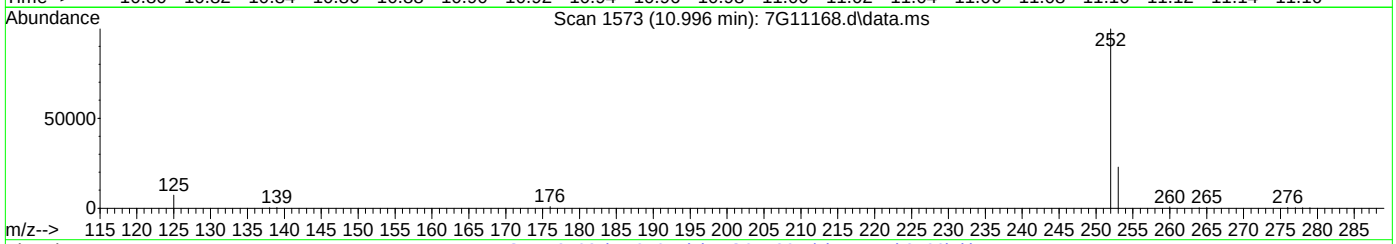

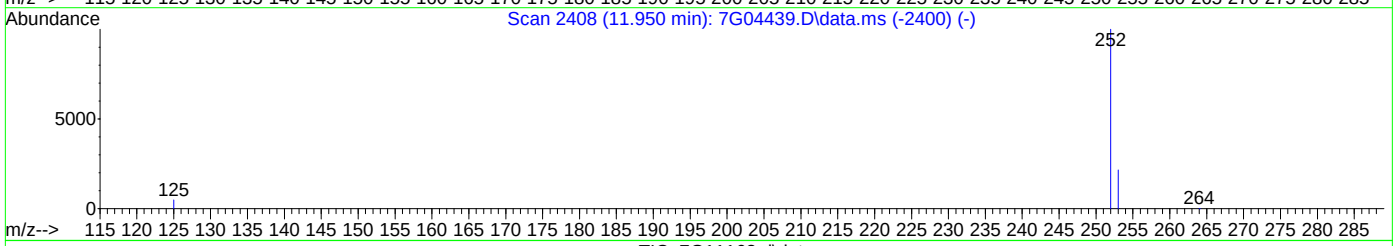

TIC: 7G11168.d\data.ms

(24) Benzo[k]fluoranthene (P)

10.996min (+0.010) 6.80ppm m

response 98276

Ion	Exp%	Act%
252.00	100	100
253.00	21.80	22.83
125.00	7.50	7.23
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan
08/14/20 11:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
Data File : 7G11169.d
Acq On : 13 Aug 2020 5:34 pm
Operator : FOUADS
Sample : fa77689-8 e
Misc : op81539,S7G484,30.1,,,1,1,soil
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 14 03:25:51 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.634	136	23095	4.00	ppm	0.00
6) Acenaphthene-d10	6.114	164	17020	4.00	ppm	0.00
11) Phenanthrene-d10	7.396	188	30881	4.00	ppm	0.00
18) Chrysene-d12	9.751	240	177034m	4.00	ppm	0.02
22) Perylene-d12	11.511	264	35731	4.00	ppm	0.04
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.205	152	38728	11.14	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery =	111.40%		
17) Fluoranthene-d10	8.442	212	188744	11.66	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery =	116.60%		
Target Compounds						Qvalue
2) Naphthalene	4.652	128	414	0.06	ppm	98
3) 2-Methylnaphthalene	5.235	142	275m	0.05	ppm	
5) 1-Methylnaphthalene	5.317	142	301	0.07	ppm	90
7) Acenaphthylene	5.993	152	17915	1.83	ppm	99
8) Acenaphthene	6.143	153	1261	0.20	ppm	95
9) Dibenzofuran	6.302	168	818	0.18	ppm	85
10) Fluorene	6.592	166	1911	0.28	ppm	93
13) Phenanthrene	7.417	178	32566	3.20	ppm	99
14) Anthracene	7.466	178	42422	4.11	ppm	100
15) Carbazole	7.640	167	21284	1.15	ppm	98
16) Fluoranthene	8.464	202	935419	43.76	ppm	99
19) Pyrene	8.654	202	872325	12.26	ppm	97
20) Benzo[a]anthracene	9.744	228	300752	5.41	ppm	96
21) Chrysene	9.783	228	467283	7.62	ppm	99
23) Benzo[b]fluoranthene	11.011	252	472719m	38.98	ppm	
24) Benzo[k]fluoranthene	11.035	252	111155m	8.50	ppm	
25) Benzo[a]pyrene	11.433	252	120877	10.23	ppm	99
26) Indeno[1,2,3-cd]pyrene	13.238	276	34599	4.49	ppm	99
27) Dibenz[a,h]anthracene	13.287	278	7779	0.91	ppm	97
28) Benzo[g,h,i]perylene	13.694	276	19625	2.11	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
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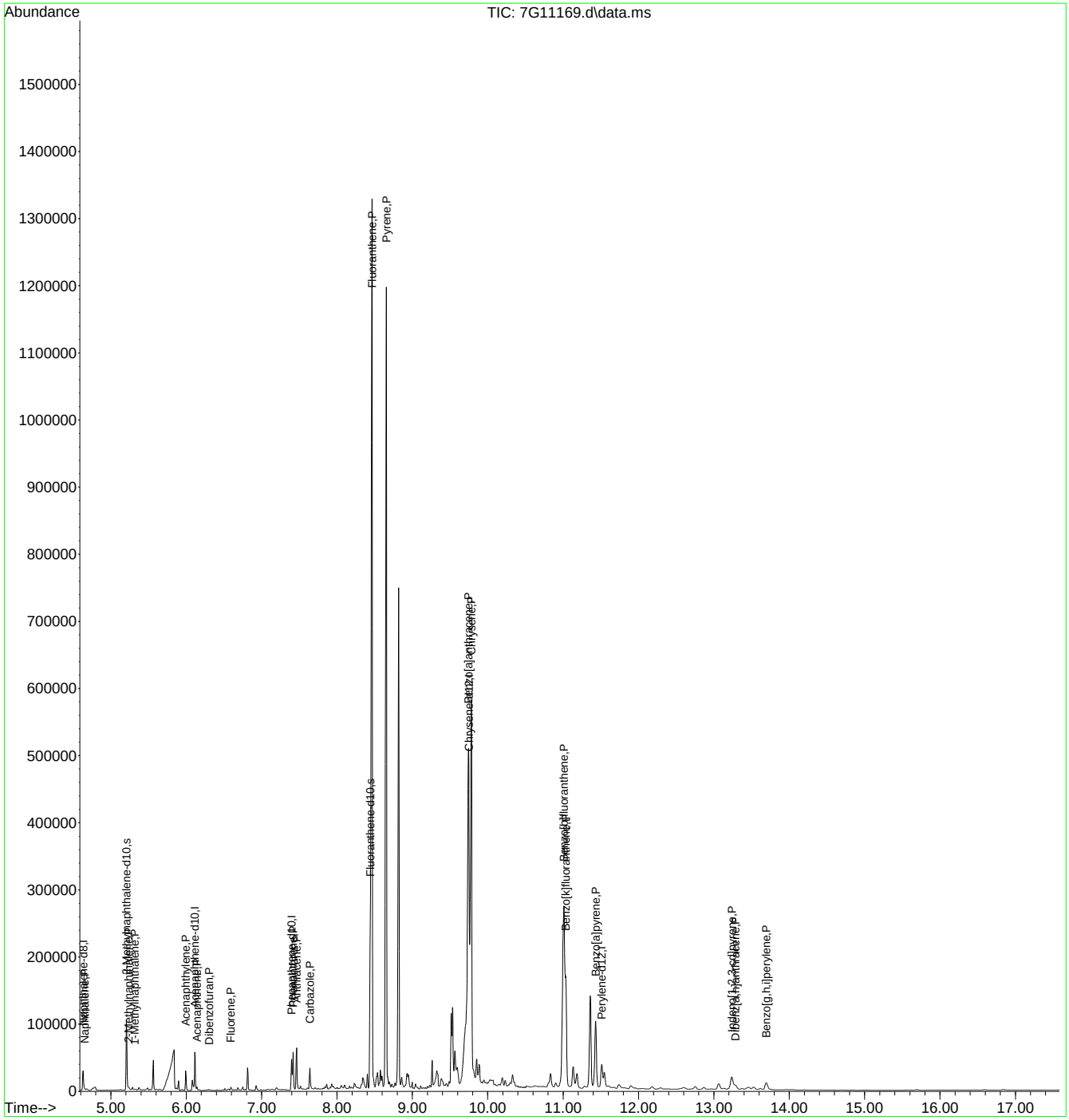
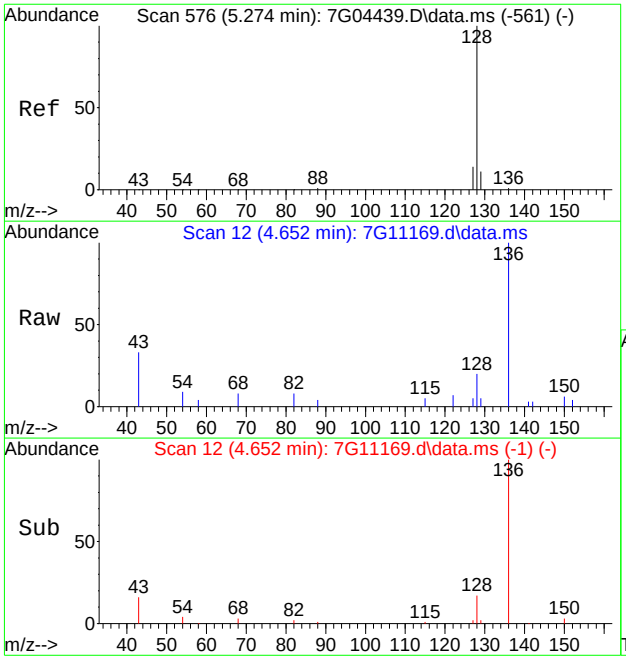
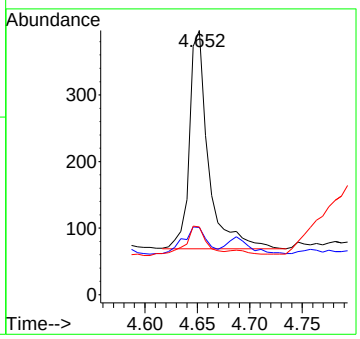


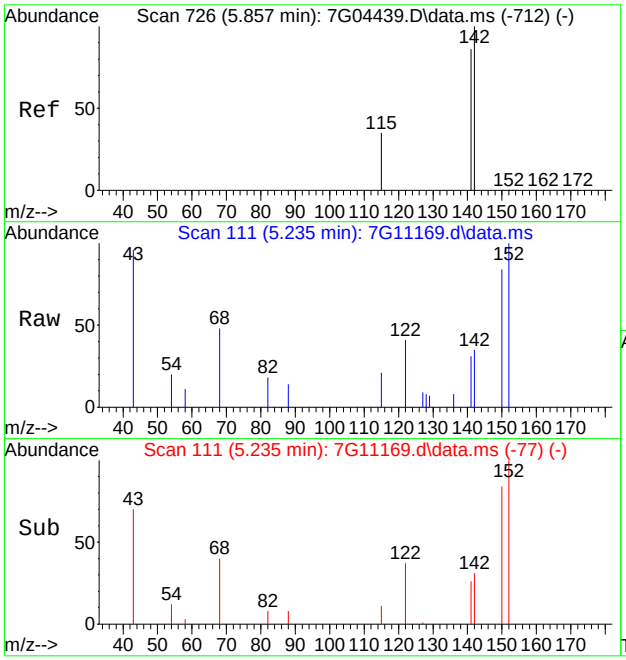


#2
Naphthalene
Concen: 0.06 ppm
RT: 4.652 min Scan# 12
Delta R.T. 0.006 min
Lab File: 7G11169.d
Acq: 13 Aug 2020 5:34 pm

Tgt Ion:128 Resp: 414

Ion	Ratio	Lower	Upper
128	100		
129	11.9	0.0	41.1
127	12.4	0.0	43.0

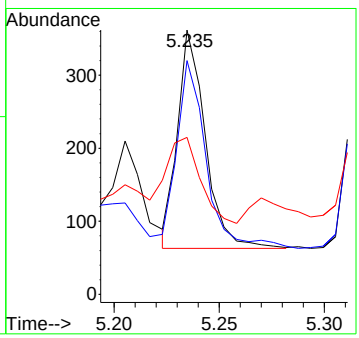


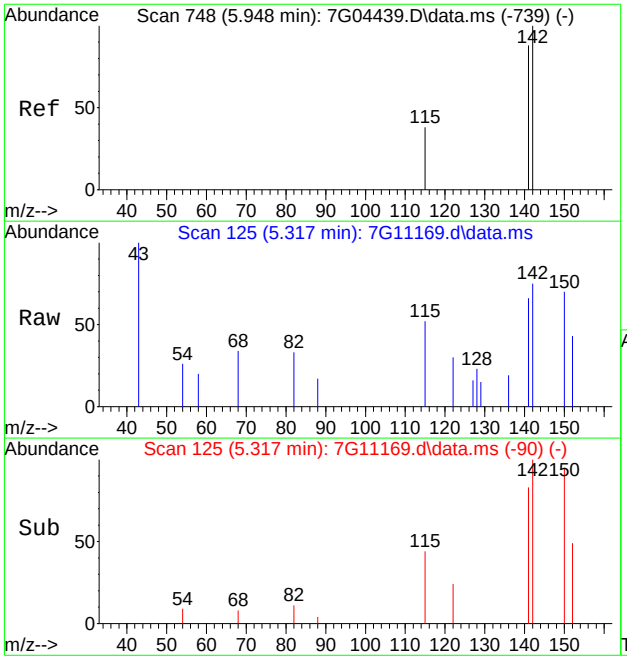


#3
2-Methylnaphthalene
Concen: 0.05 ppm m
RT: 5.235 min Scan# 111
Delta R.T. 0.000 min
Lab File: 7G11169.d
Acq: 13 Aug 2020 5:34 pm

Tgt Ion:142 Resp: 275

Ion	Ratio	Lower	Upper
142	100		
141	88.4	54.2	114.2
115	59.4	0.0	57.6#

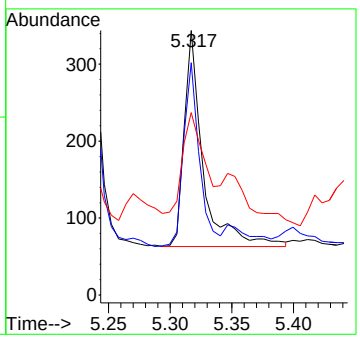


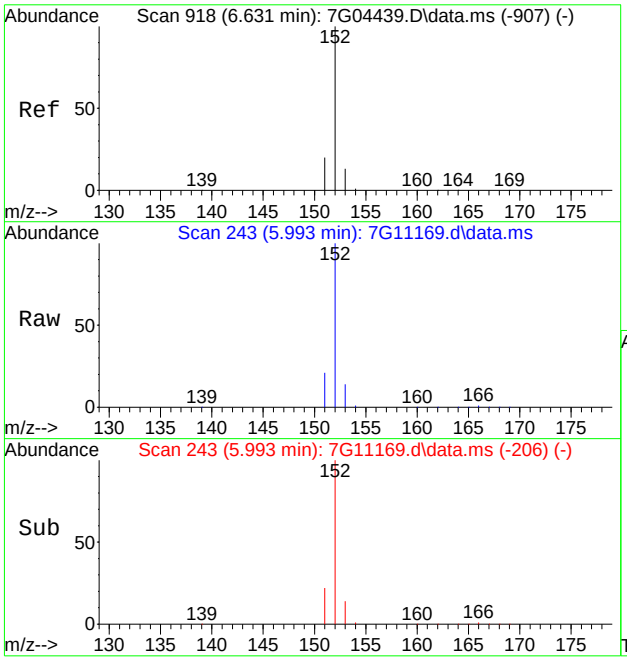


#5
1-Methylnaphthalene
Concen: 0.07 ppm
RT: 5.317 min Scan# 125
Delta R.T. 0.006 min
Lab File: 7G11169.d
Acq: 13 Aug 2020 5:34 pm

Tgt Ion:142 Resp: 301

Ion	Ratio	Lower	Upper
142	100		
141	82.2	63.7	123.7
115	48.6	14.6	74.6

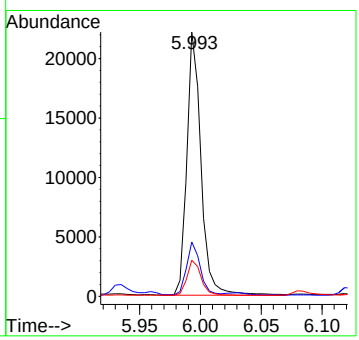


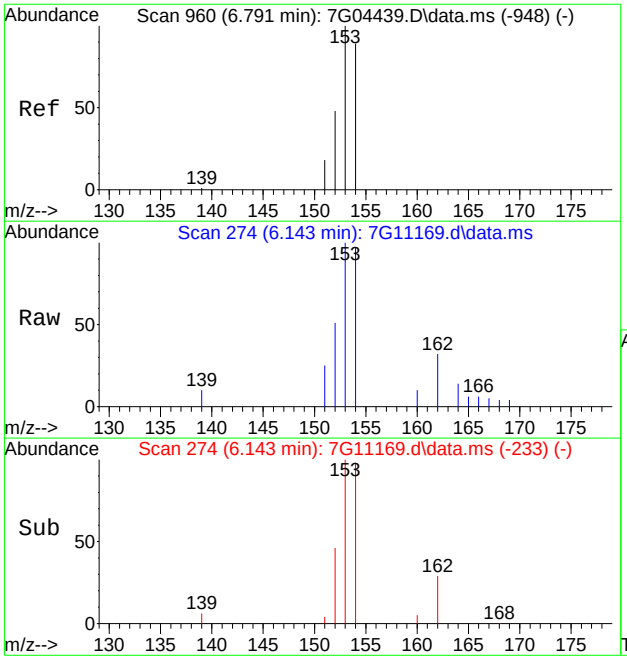


#7
Acenaphthylene
Concen: 1.83 ppm
RT: 5.993 min Scan# 243
Delta R.T. 0.000 min
Lab File: 7G11169.d
Acq: 13 Aug 2020 5:34 pm

Tgt Ion:152 Resp: 17915

Ion	Ratio	Lower	Upper
152	100		
151	20.1	0.0	49.8
153	13.4	0.0	43.7

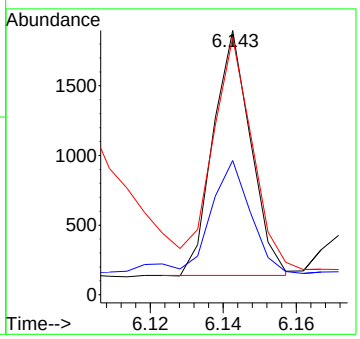


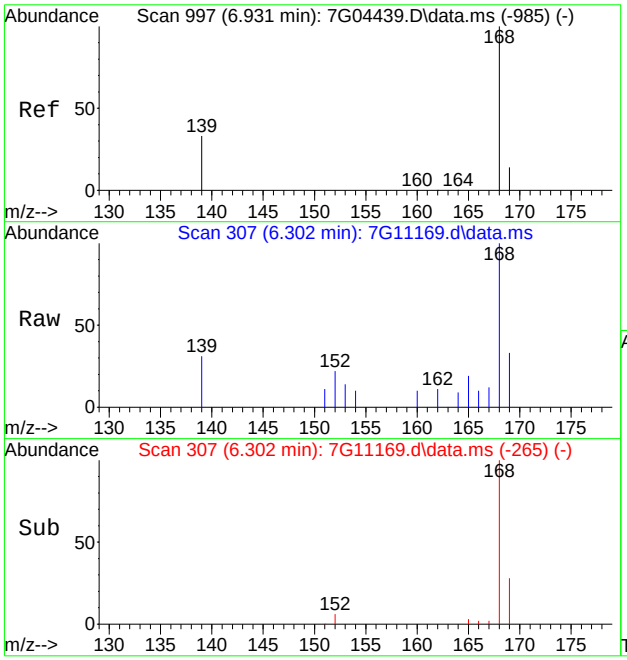


#8
Acenaphthene
Concen: 0.20 ppm
RT: 6.143 min Scan# 274
Delta R.T. 0.000 min
Lab File: 7G11169.d
Acq: 13 Aug 2020 5:34 pm

Tgt Ion:153 Resp: 1261

Ion	Ratio	Lower	Upper
153	100		
152	44.1	15.9	75.9
154	86.5	62.4	122.4

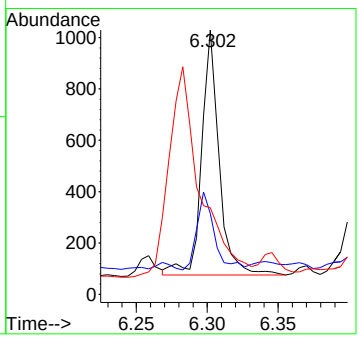


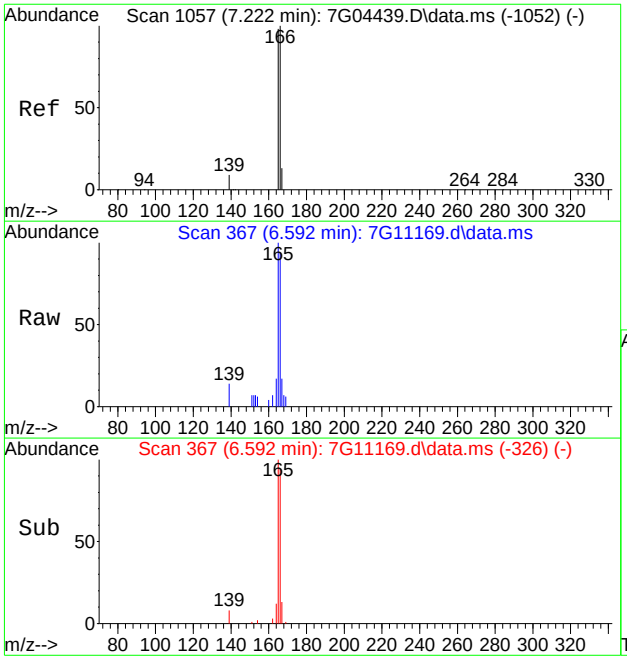


#9
Dibenzofuran
Concen: 0.18 ppm
RT: 6.302 min Scan# 307
Delta R.T. 0.005 min
Lab File: 7G11169.d
Acq: 13 Aug 2020 5:34 pm

Tgt Ion:168 Resp: 818

Ion	Ratio	Lower	Upper
168	100		
139	20.7	11.9	51.9
169	14.7	0.0	33.1

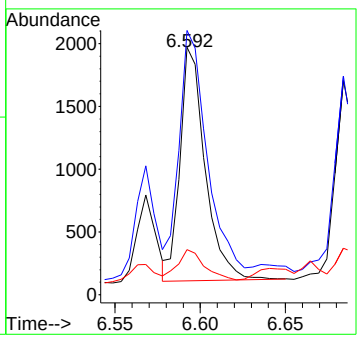


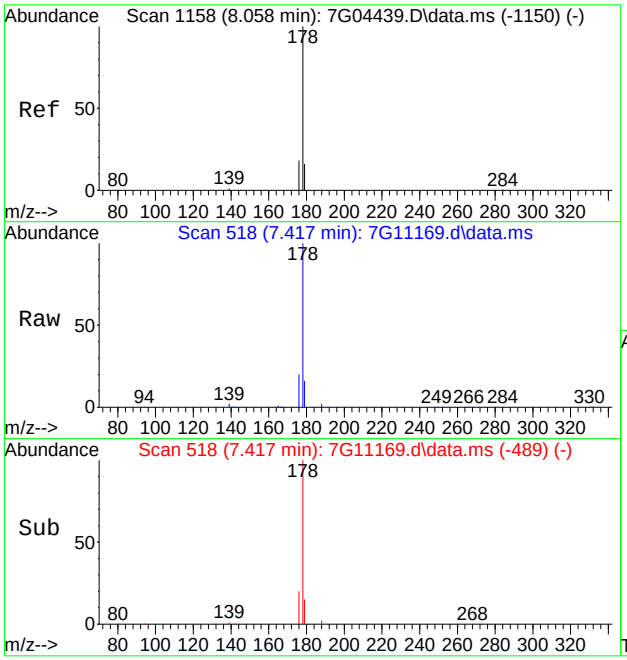


#10
Fluorene
Concen: 0.28 ppm
RT: 6.592 min Scan# 367
Delta R.T. 0.000 min
Lab File: 7G11169.d
Acq: 13 Aug 2020 5:34 pm

Tgt Ion:166 Resp: 1911

Ion	Ratio	Lower	Upper
166	100		
165	102.3	65.2	125.2
167	10.3	0.0	43.9

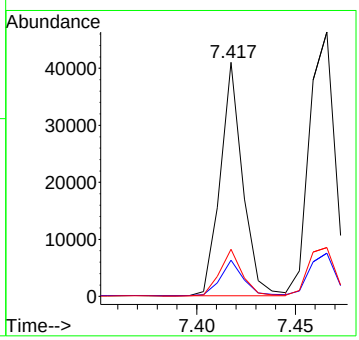


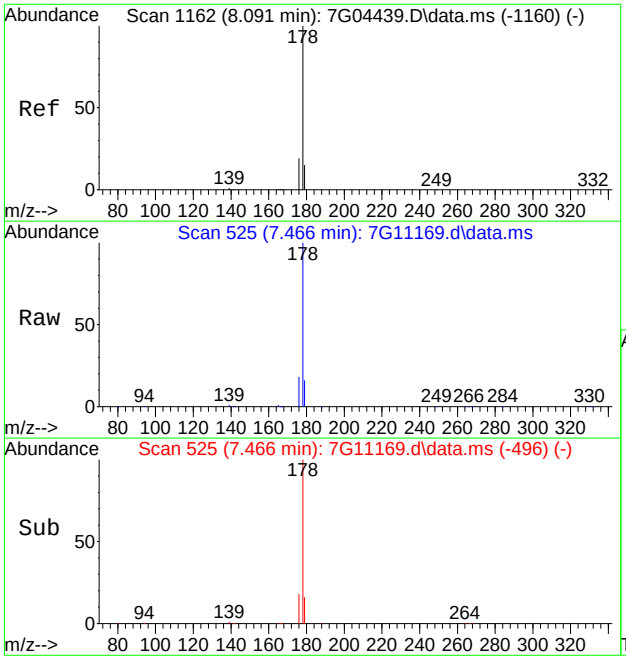


#13
Phenanthrene
Concen: 3.20 ppm
RT: 7.417 min Scan# 518
Delta R.T. 0.000 min
Lab File: 7G11169.d
Acq: 13 Aug 2020 5:34 pm

Tgt Ion:178 Resp: 32566

Ion	Ratio	Lower	Upper
178	100		
179	15.1	0.0	45.2
176	19.9	0.0	50.4

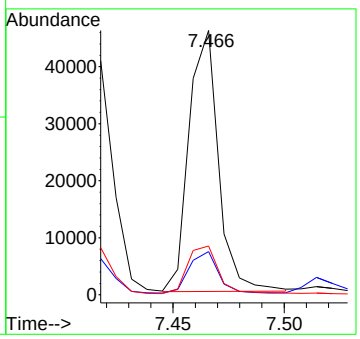


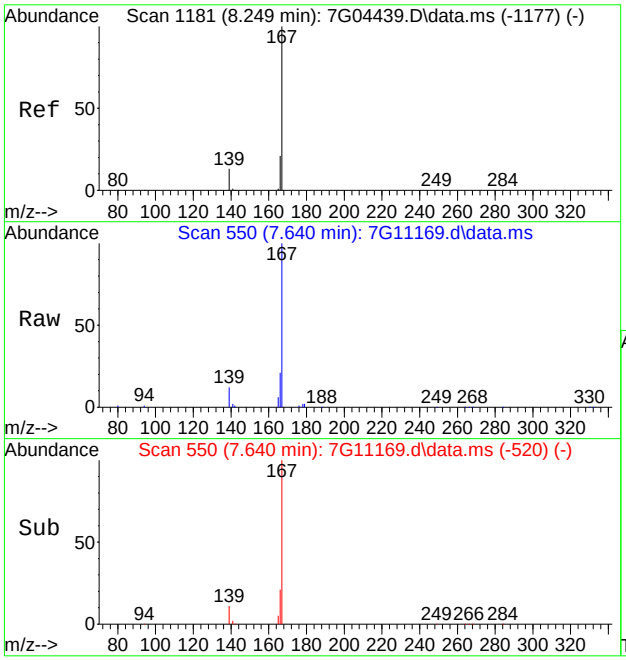


#14
Anthracene
Concen: 4.11 ppm
RT: 7.466 min Scan# 525
Delta R.T. 0.000 min
Lab File: 7G11169.d
Acq: 13 Aug 2020 5:34 pm

Tgt Ion:178 Resp: 42422

Ion	Ratio	Lower	Upper
178	100		
179	15.9	0.0	46.1
176	18.3	0.0	48.2

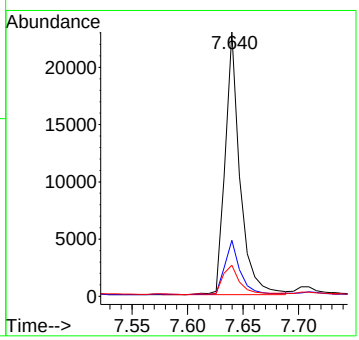


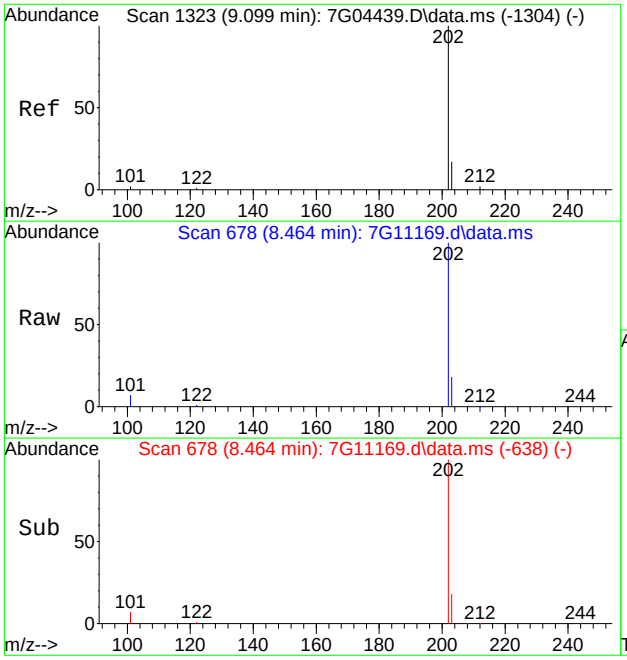


#15
Carbazole
Concen: 1.15 ppm
RT: 7.640 min Scan# 550
Delta R.T. 0.007 min
Lab File: 7G11169.d
Acq: 13 Aug 2020 5:34 pm

Tgt Ion:167 Resp: 21284

Ion	Ratio	Lower	Upper
167	100		
166	20.5	0.2	40.2
139	10.8	0.0	32.8

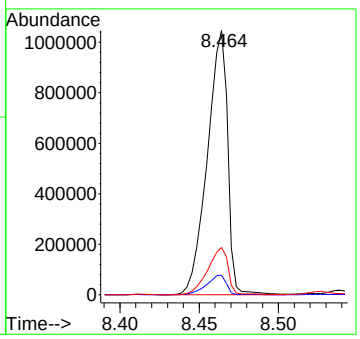


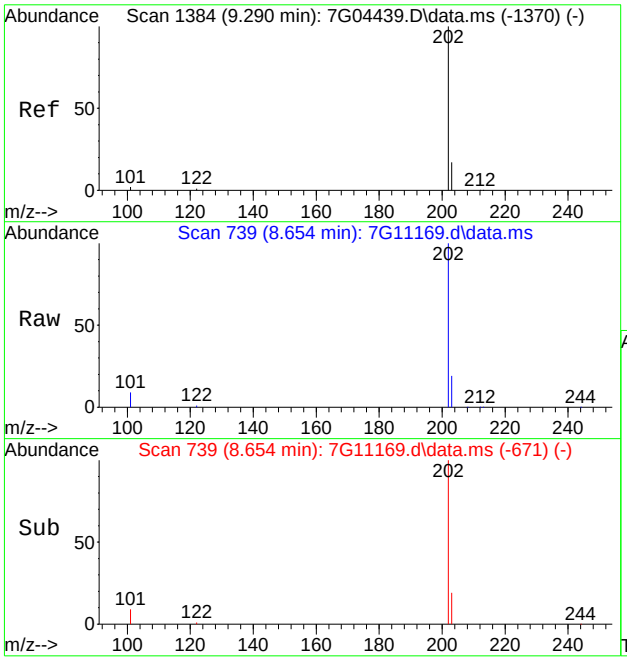


#16
Fluoranthene
Concen: 43.76 ppm
RT: 8.464 min Scan# 678
Delta R.T. 0.013 min
Lab File: 7G11169.d
Acq: 13 Aug 2020 5:34 pm

Tgt Ion:202 Resp: 935419

Ion	Ratio	Lower	Upper
202	100		
101	7.5	0.0	36.5
203	17.9	0.0	47.5

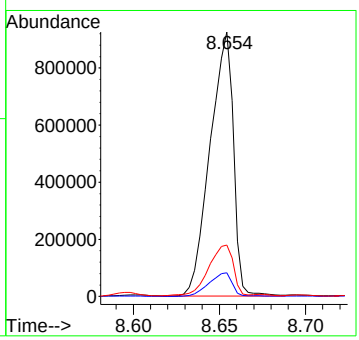


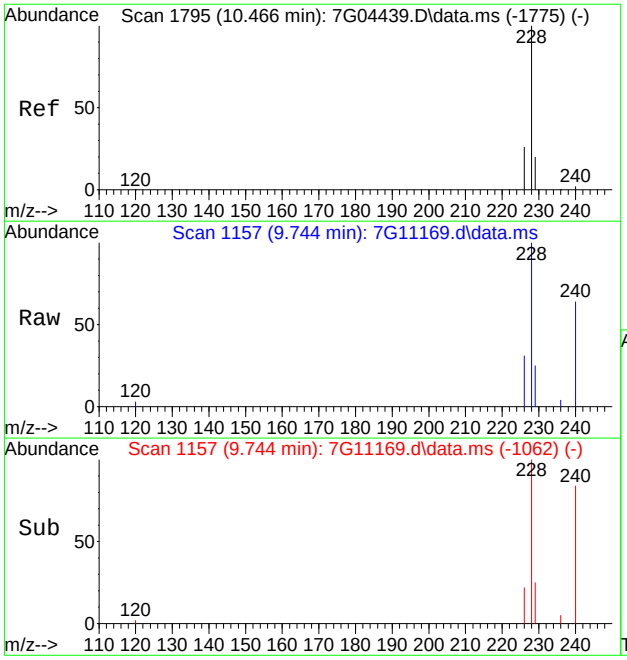


#19
Pyrene
Concen: 12.26 ppm
RT: 8.654 min Scan# 739
Delta R.T. 0.013 min
Lab File: 7G11169.d
Acq: 13 Aug 2020 5:34 pm

Tgt Ion:202 Resp: 872325

Ion	Ratio	Lower	Upper
202	100		
101	8.8	0.0	37.5
203	19.2	0.0	48.3

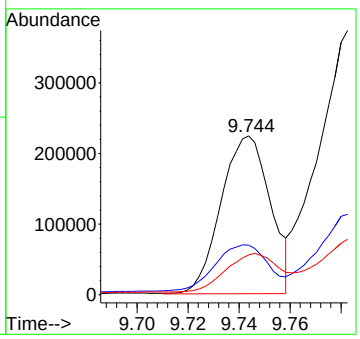


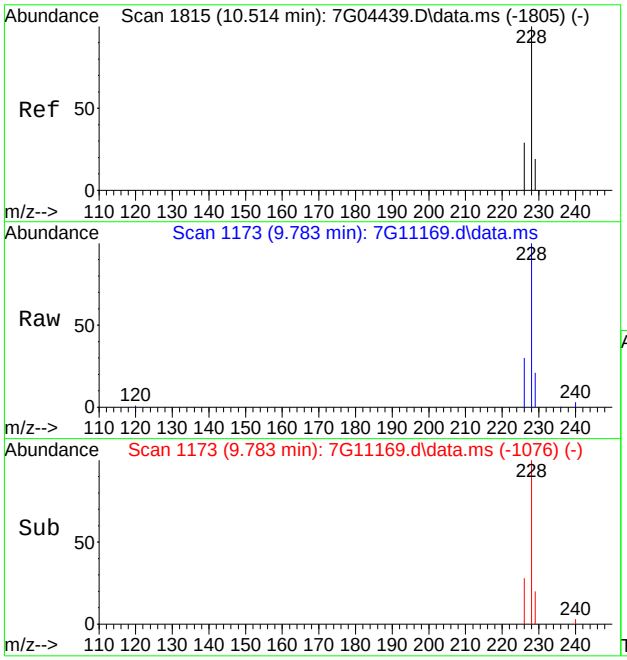


#20
Benzo[a]anthracene
Concen: 5.41 ppm
RT: 9.744 min Scan# 1157
Delta R.T. 0.029 min
Lab File: 7G11169.d
Acq: 13 Aug 2020 5:34 pm

Tgt Ion:228 Resp: 300752

Ion	Ratio	Lower	Upper
228	100		
226	29.8	0.0	57.2
229	20.8	0.0	49.7

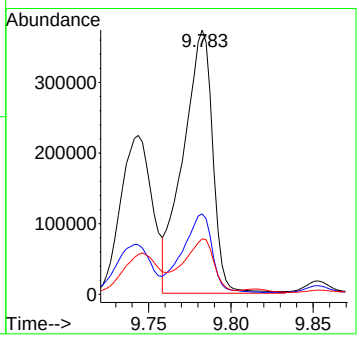


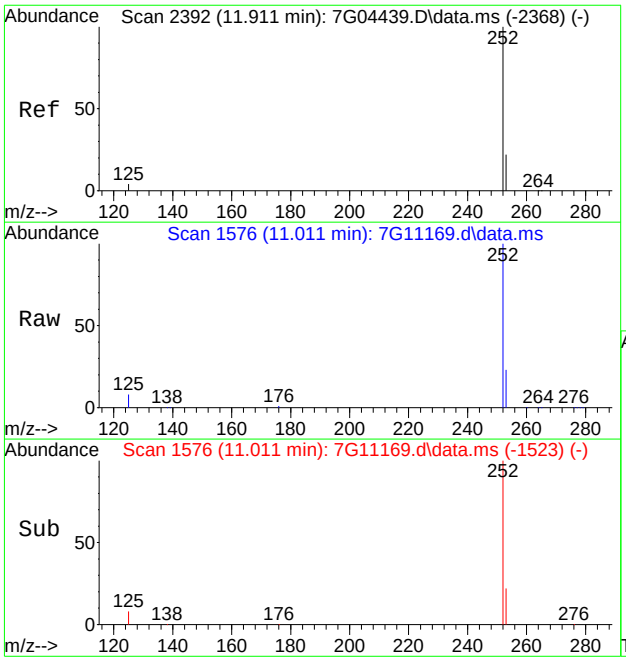


#21
Chrysene
Concen: 7.62 ppm
RT: 9.783 min Scan# 1173
Delta R.T. 0.034 min
Lab File: 7G11169.d
Acq: 13 Aug 2020 5:34 pm

Tgt Ion:228 Resp: 467283

Ion	Ratio	Lower	Upper
228	100		
226	30.0	0.0	59.8
229	18.5	0.0	49.5

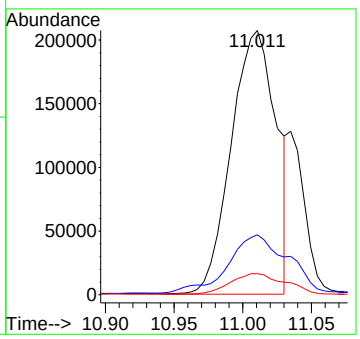


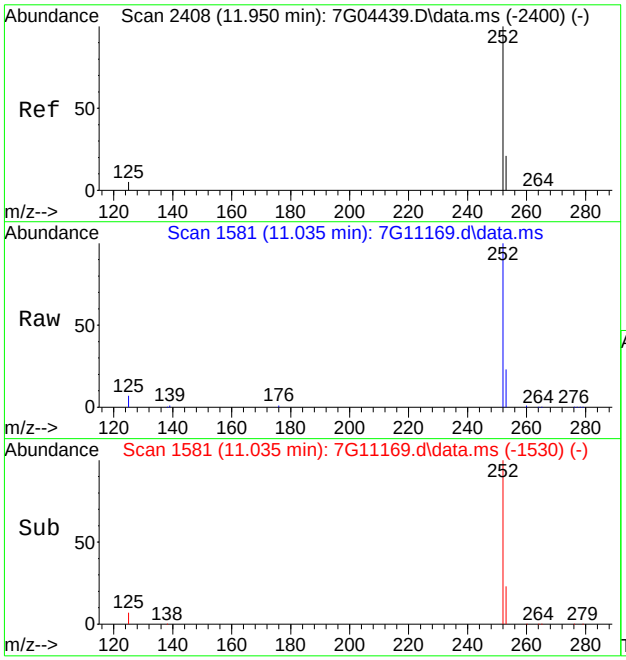


#23
Benzo[b]fluoranthene
Concen: 38.98 ppm m
RT: 11.011 min Scan# 1576
Delta R.T. 0.058 min
Lab File: 7G11169.d
Acq: 13 Aug 2020 5:34 pm

Tgt Ion:252 Resp: 472719

Ion	Ratio	Lower	Upper
252	100		
253	22.7	0.0	51.7
125	7.9	0.0	37.1

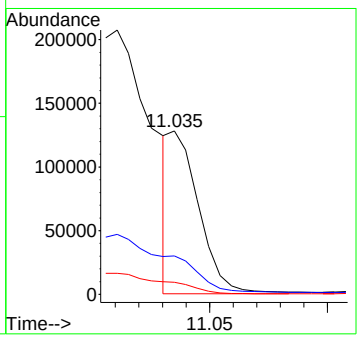


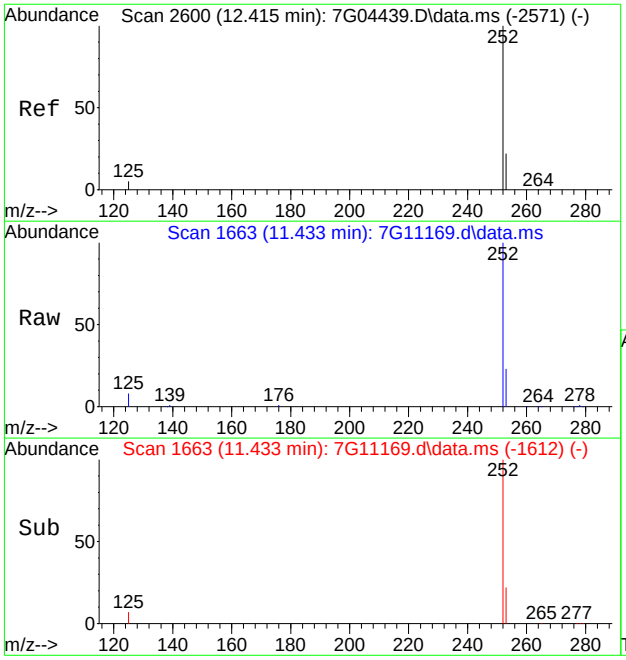


#24
Benzo[k]fluoranthene
Concen: 8.50 ppm m
RT: 11.035 min Scan# 1581
Delta R.T. 0.049 min
Lab File: 7G11169.d
Acq: 13 Aug 2020 5:34 pm

Tgt Ion:252 Resp: 111155

Ion	Ratio	Lower	Upper
252	100		
253	23.5	0.0	51.8
125	7.5	0.0	37.5

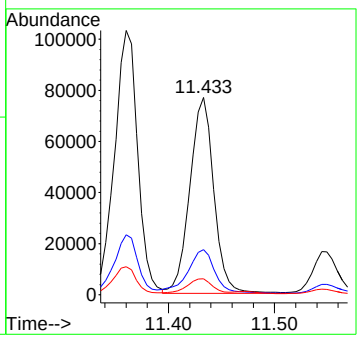


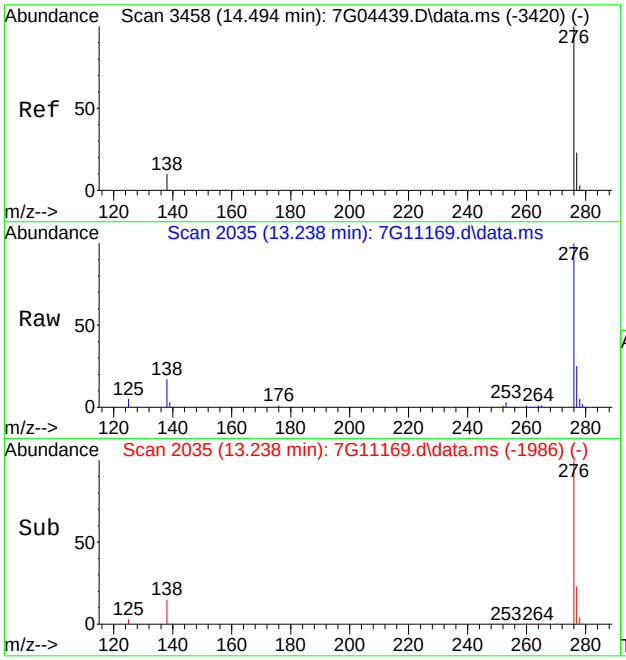


#25
Benzo[a]pyrene
Concen: 10.23 ppm
RT: 11.433 min Scan# 1663
Delta R.T. 0.049 min
Lab File: 7G11169.d
Acq: 13 Aug 2020 5:34 pm

Tgt Ion:252 Resp: 120877

Ion	Ratio	Lower	Upper
252	100		
253	21.5	0.0	51.8
125	7.4	0.0	38.3

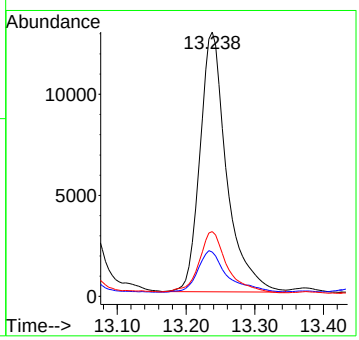


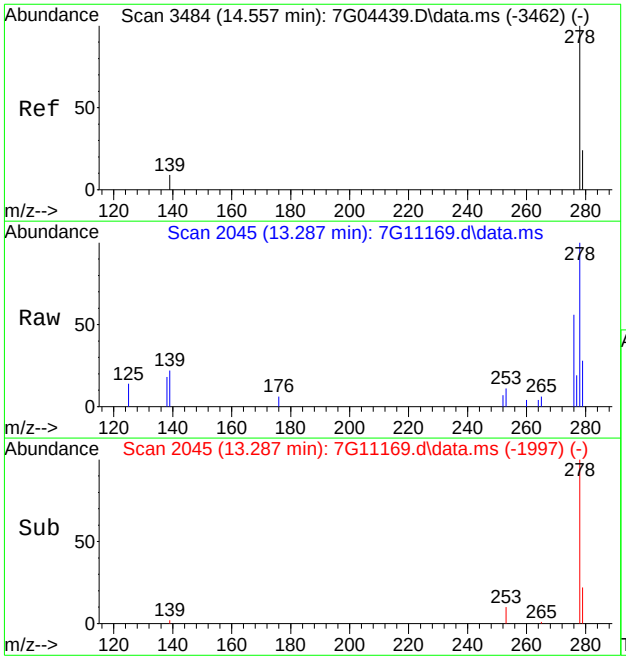


#26
Indeno[1,2,3-cd]pyrene
Concen: 4.49 ppm
RT: 13.238 min Scan# 2035
Delta R.T. 0.039 min
Lab File: 7G11169.d
Acq: 13 Aug 2020 5:34 pm

Tgt Ion:276 Resp: 34599

Ion	Ratio	Lower	Upper
276	100		
138	15.4	0.0	46.1
277	23.5	0.0	53.8

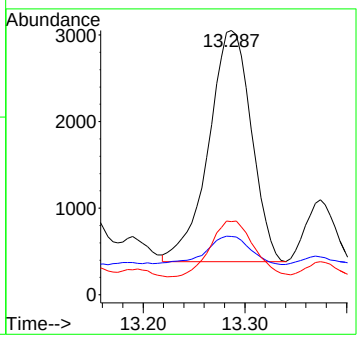


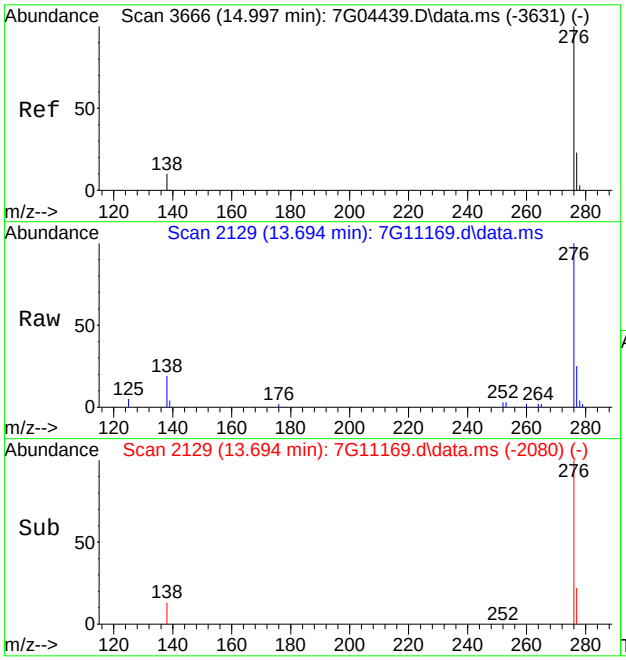


#27
Dibenz[a,h]anthracene
Concen: 0.91 ppm
RT: 13.287 min Scan# 2045
Delta R.T. 0.034 min
Lab File: 7G11169.d
Acq: 13 Aug 2020 5:34 pm

Tgt Ion:278 Resp: 7779

Ion	Ratio	Lower	Upper
278	100		
139	12.0	0.0	43.8
279	23.4	0.0	54.2

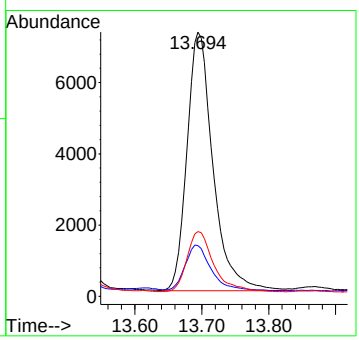




#28
Benzo[g,h,i]perylene
Concen: 2.11 ppm
RT: 13.694 min Scan# 2129
Delta R.T. 0.039 min
Lab File: 7G11169.d
Acq: 13 Aug 2020 5:34 pm

Tgt Ion:276 Resp: 19625

Ion	Ratio	Lower	Upper
276	100		
138	17.3	0.0	47.7
277	23.3	0.0	53.9



Manual Integration Approval Summary

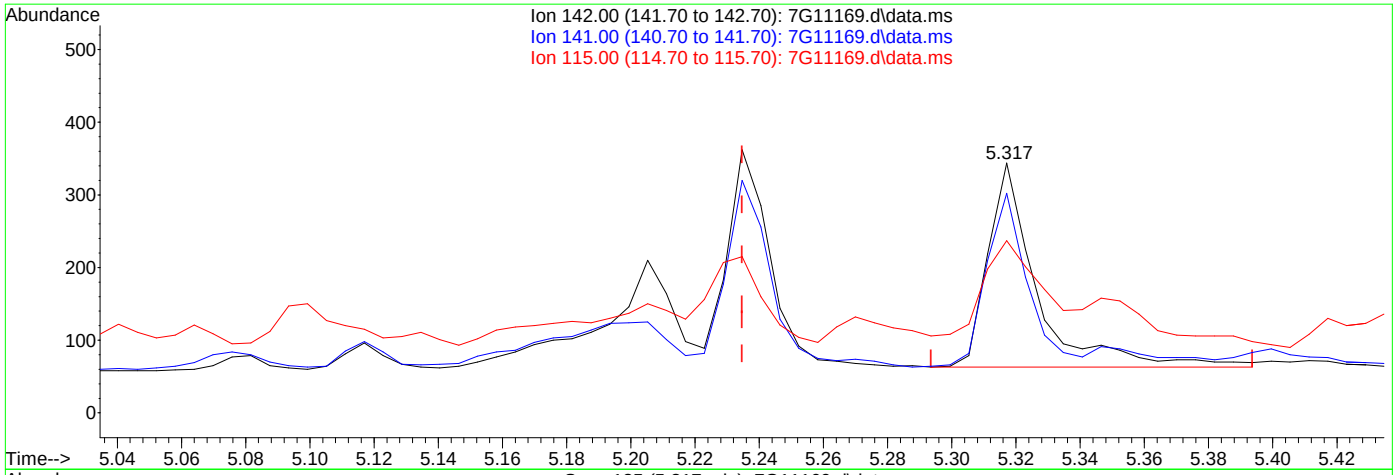
Sample Number: FA77689-8
Lab FileID: 7G11169.D
Injection Time: 08/13/20 17:34
Method: SW846 8270E BY SIM
Analyst approved: 08/14/20 11:02 Fouad Sekkar
Supervisor approved: 08/14/20 11:43 Naresh Jiawan

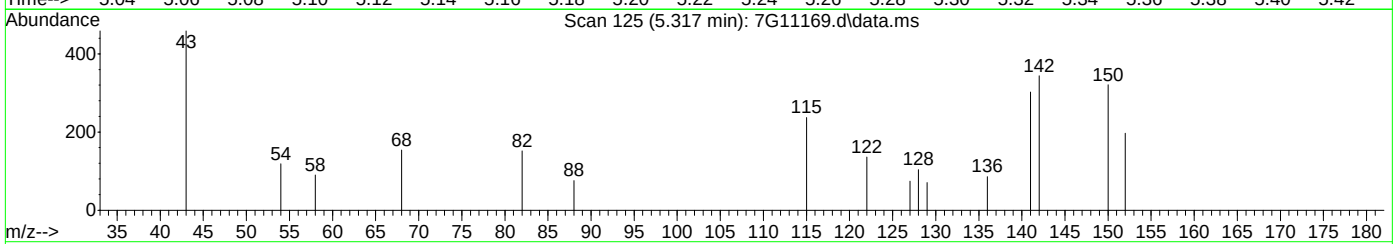
Parameter	CAS	Sig#	R.T. (min.)	Reason
2-Methylnaphthalene	91-57-6		5.23	Missed peak
Chrysene-d12	1719-03-5		9.75	Poor instrument integration
Benzo(b)fluoranthene	205-99-2		11.01	Overlapping peak
Benzo(k)fluoranthene	207-08-9		11.04	Overlapping peak

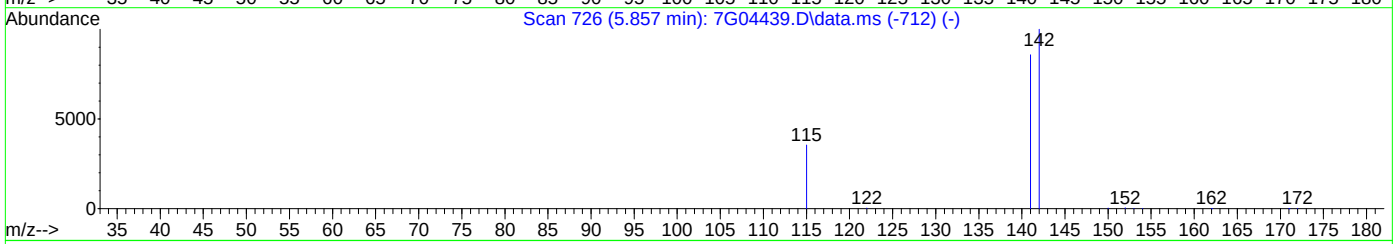
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
Data File : 7G11169.d
Acq On : 13 Aug 2020 5:34 pm
Operator : FOUADS
Sample : fa77689-8 e
Misc : op81539,S7G484,30.1,,,1,1,soil
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 14 03:10:15 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11169.d\data.ms

(3) 2-Methylnaphthalene (P)

5.317min (+0.083) 0.06ppm

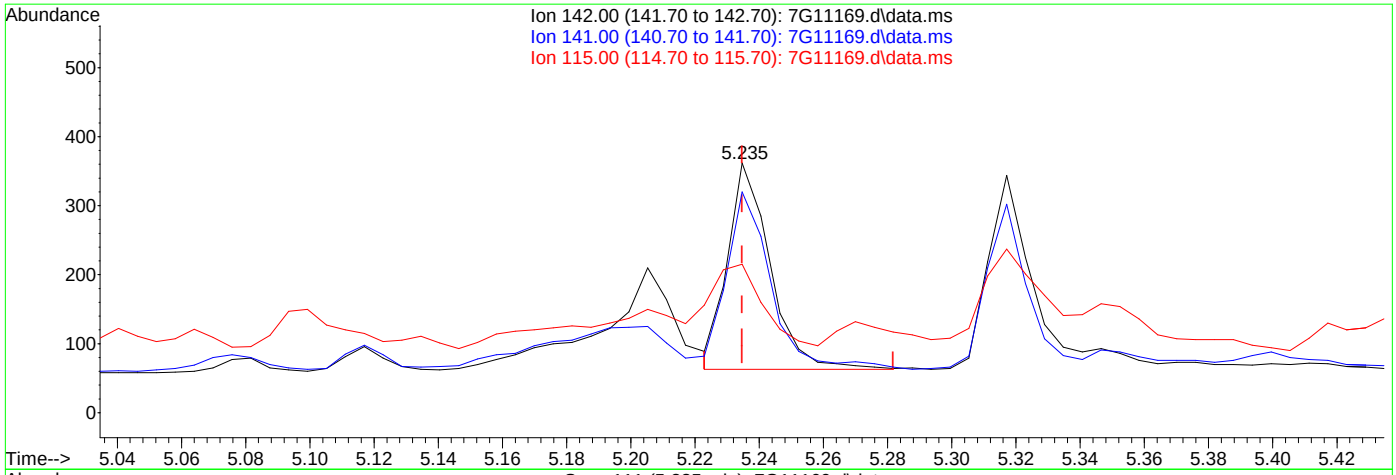
response 301

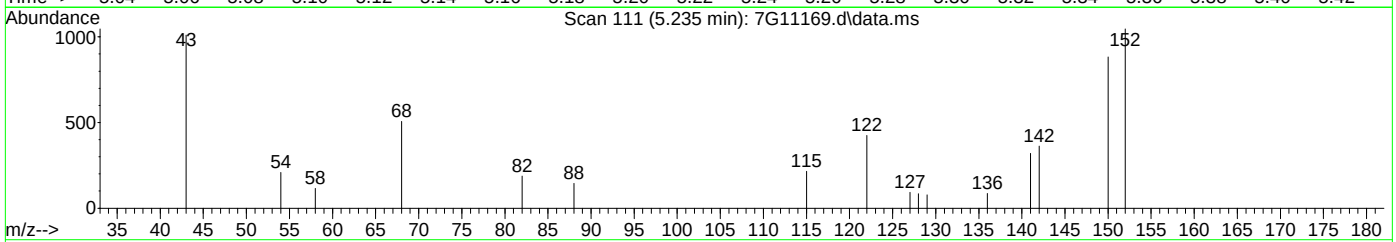
Ion	Exp%	Act%
142.00	100	100
141.00	84.20	82.19
115.00	27.60	48.56
0.00	0.00	0.00

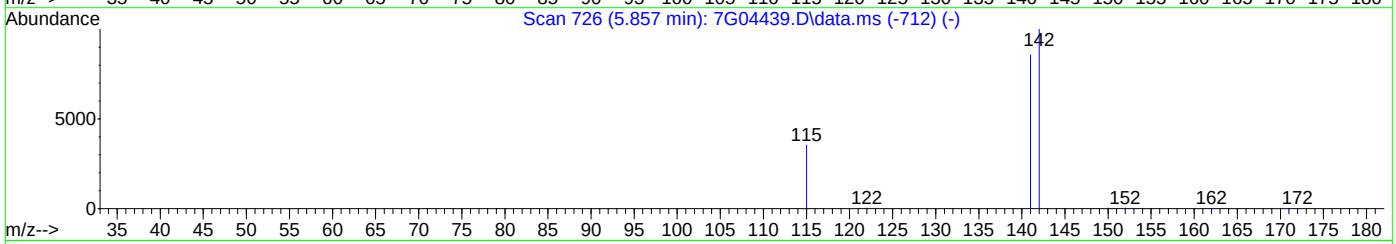
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
Data File : 7G11169.d
Acq On : 13 Aug 2020 5:34 pm
Operator : FOUADS
Sample : fa77689-8 e
Misc : op81539,S7G484,30.1,,,1,1,soil
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 14 03:10:15 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11169.d\data.ms

(3) 2-Methylnaphthalene (P)

5.235min (+0.000) 0.05ppm m

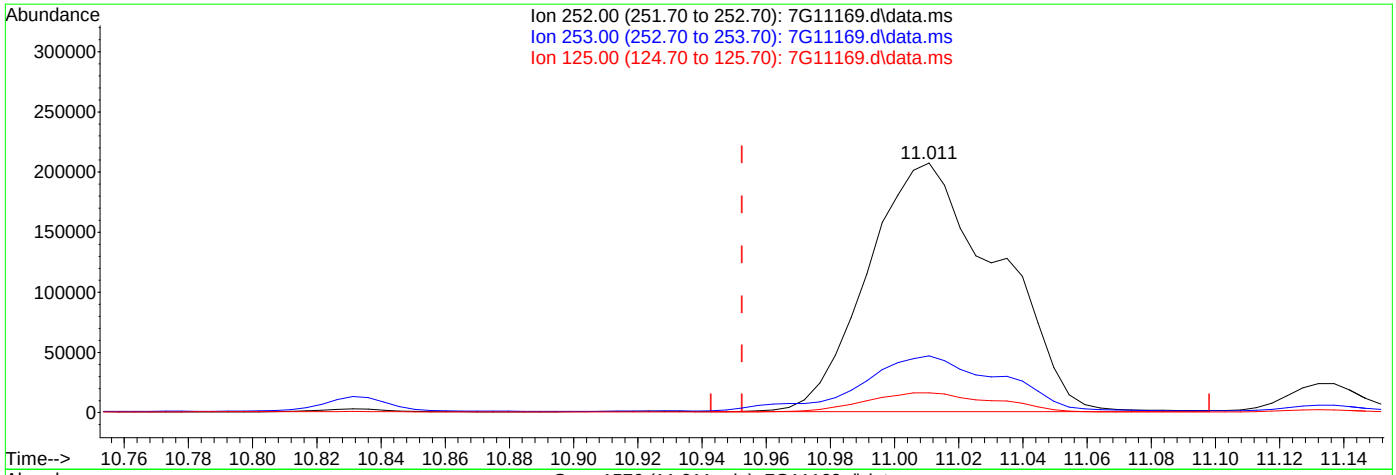
response 275

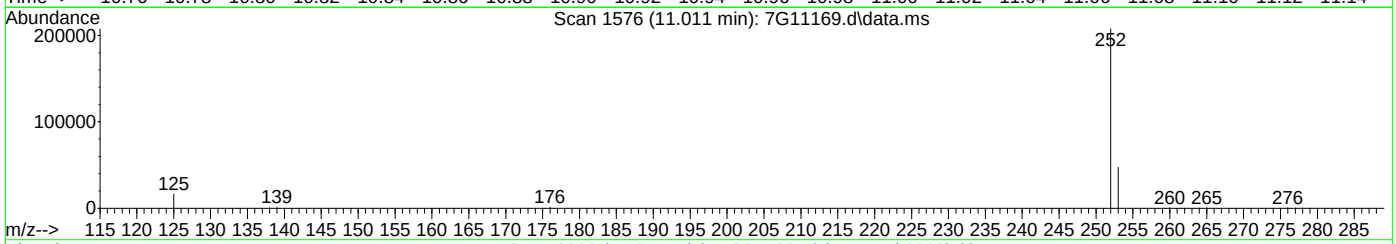
Ion	Exp%	Act%
142.00	100	100
141.00	84.20	88.40
115.00	27.60	59.39#
0.00	0.00	0.00

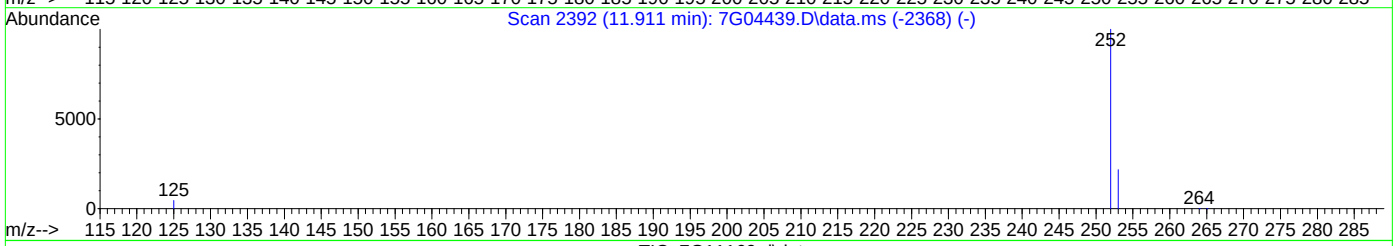
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
Data File : 7G11169.d
Acq On : 13 Aug 2020 5:34 pm
Operator : FOUADS
Sample : fa77689-8 e
Misc : op81539,S7G484,30.1,,,1,1,soil
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 14 03:10:15 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11169.d\data.ms

(23) Benzo[b]fluoranthene (P)

11.011min (+0.058) 48.03ppm

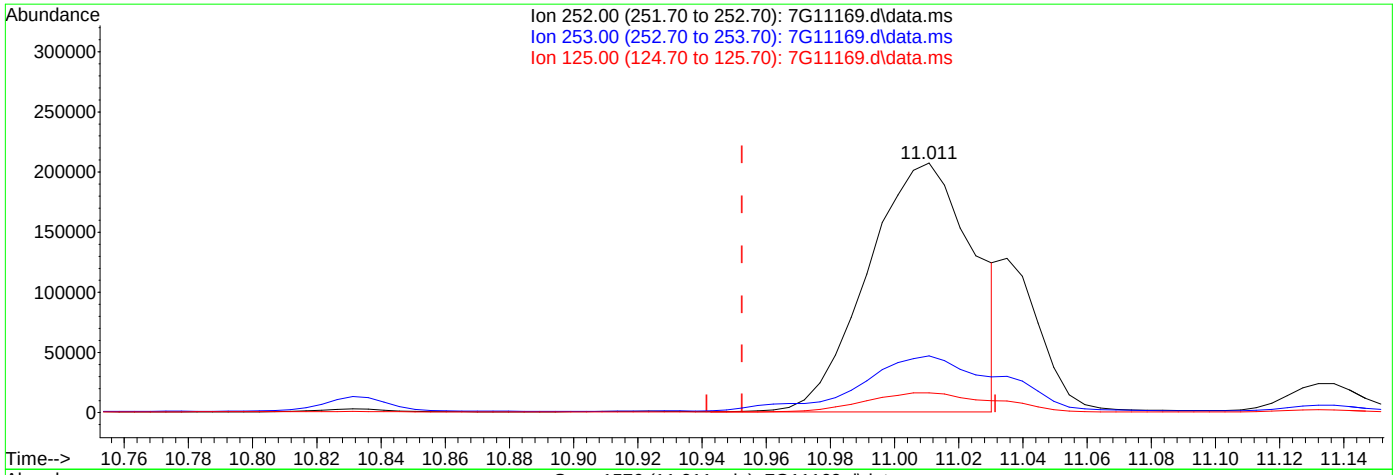
response 582538

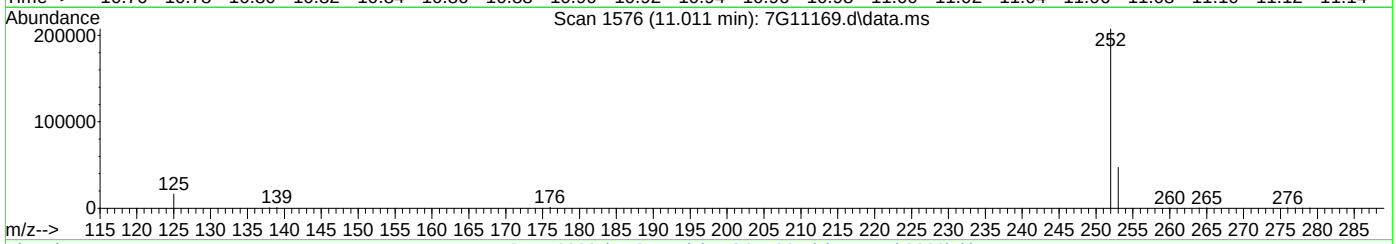
Ion	Exp%	Act%
252.00	100	100
253.00	21.70	22.15
125.00	7.10	7.71
0.00	0.00	0.00

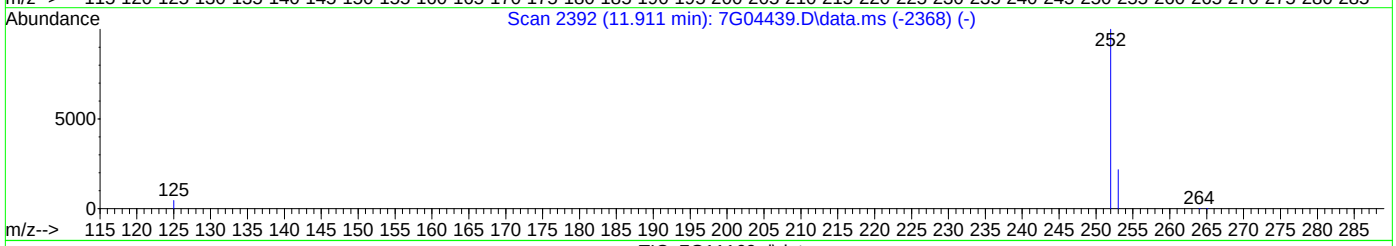
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
Data File : 7G11169.d
Acq On : 13 Aug 2020 5:34 pm
Operator : FOUADS
Sample : fa77689-8 e
Misc : op81539,S7G484,30.1,,,1,1,soil
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 14 03:10:15 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11169.d\data.ms

(23) Benzo[b]fluoranthene (P)

11.011min (+0.058) 38.98ppm m

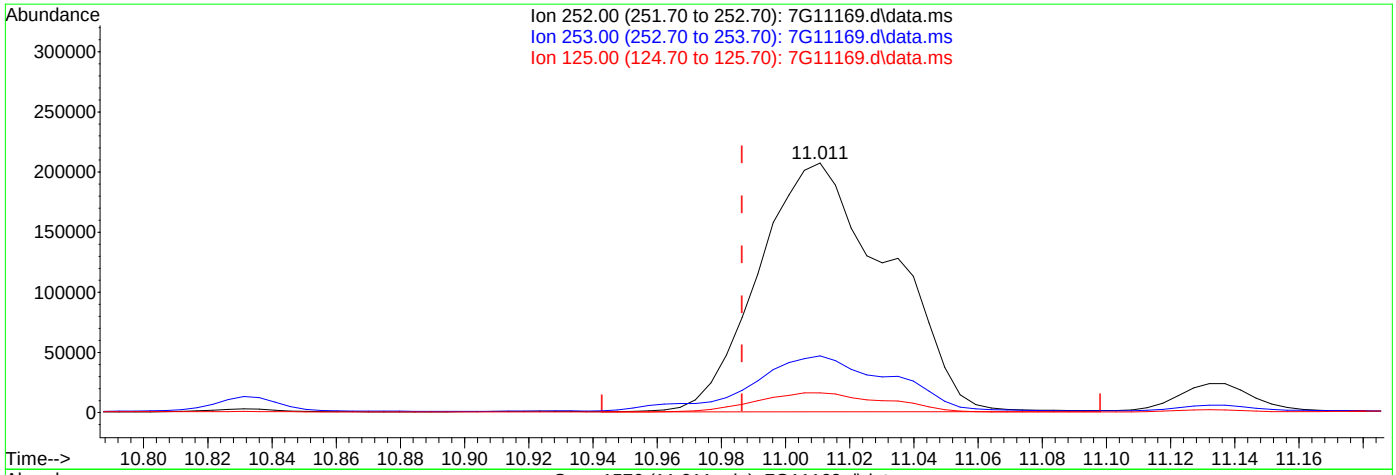
response 472719

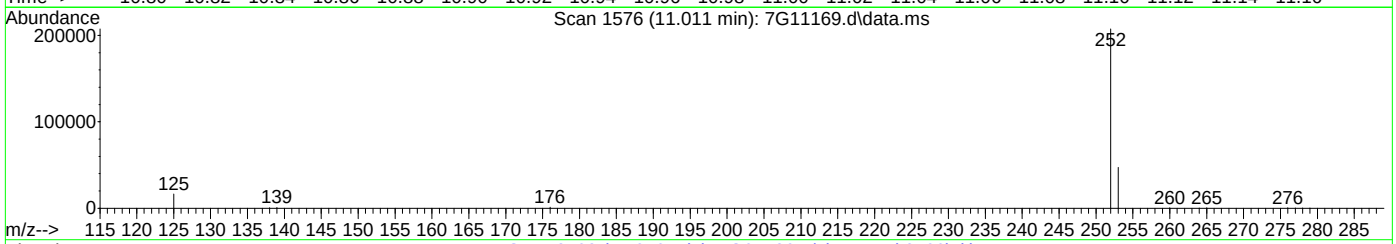
Ion	Exp%	Act%
252.00	100	100
253.00	21.70	22.74
125.00	7.10	7.93
0.00	0.00	0.00

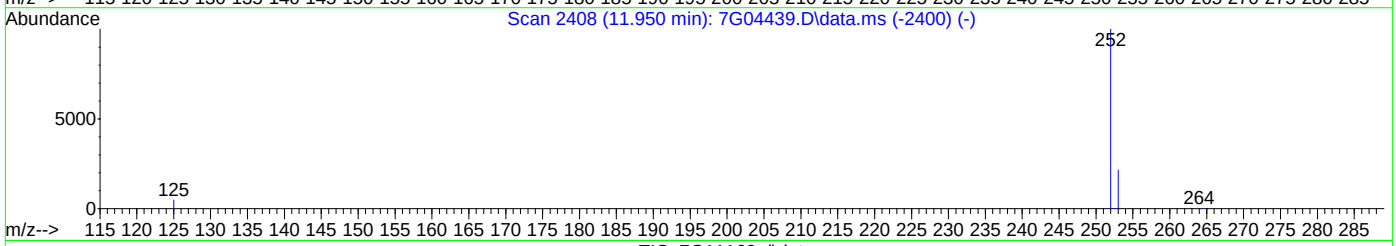
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
Data File : 7G11169.d
Acq On : 13 Aug 2020 5:34 pm
Operator : FOUADS
Sample : fa77689-8 e
Misc : op81539,S7G484,30.1,,,1,1,soil
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 14 03:10:15 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11169.d\data.ms

(24) Benzo[k]fluoranthene (P)

11.011min (+0.024) 40.73ppm

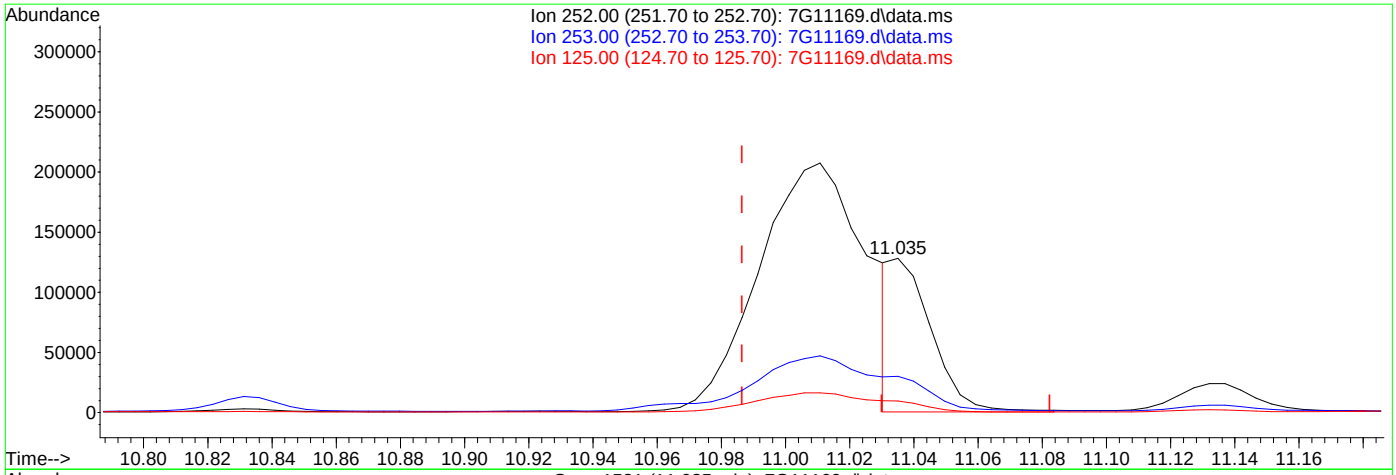
response 583763

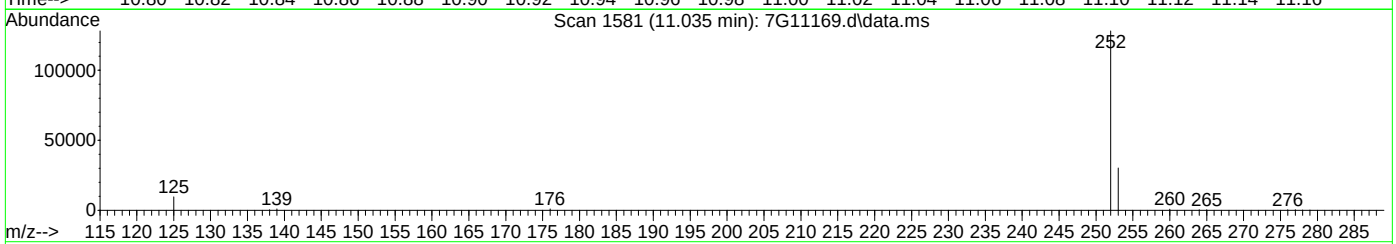
Ion	Exp%	Act%
252.00	100	100
253.00	21.80	22.15
125.00	7.50	7.71
0.00	0.00	0.00

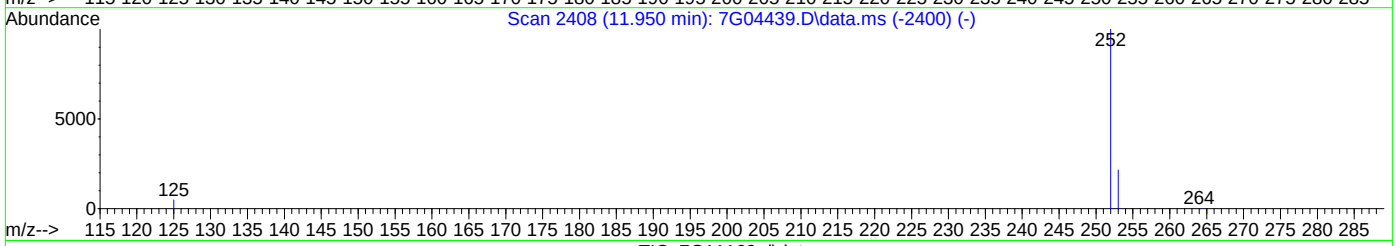
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
Data File : 7G11169.d
Acq On : 13 Aug 2020 5:34 pm
Operator : FOUADS
Sample : fa77689-8 e
Misc : op81539,S7G484,30.1,,,1,1,soil
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 14 03:10:15 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11169.d\data.ms

(24) Benzo[k]fluoranthene (P)

11.035min (+0.049) 8.50ppm m

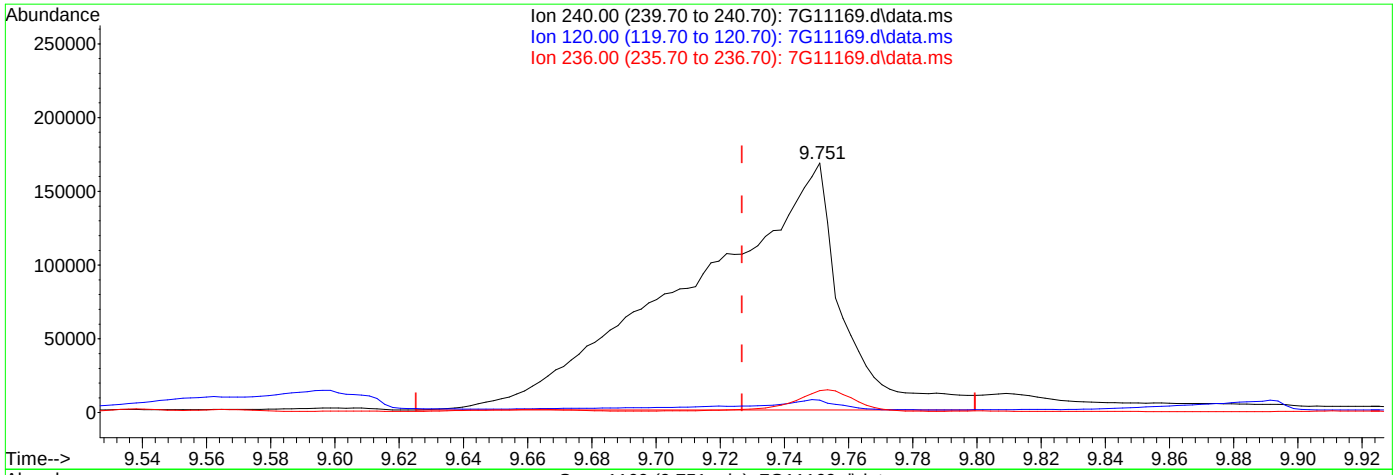
response 111155

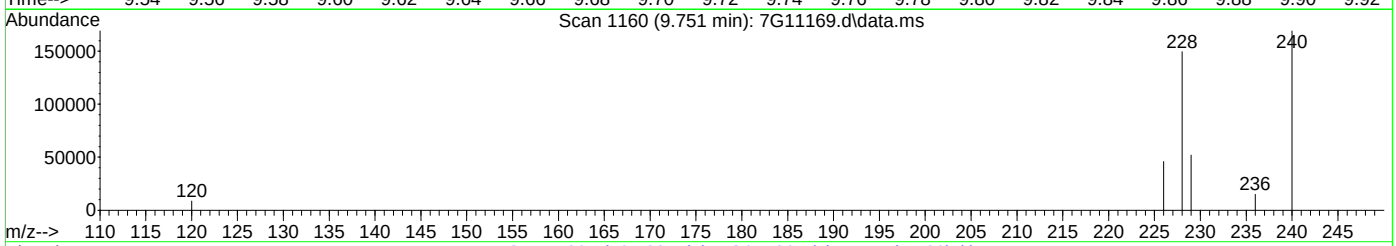
Ion	Exp%	Act%
252.00	100	100
253.00	21.80	23.47
125.00	7.50	7.48
0.00	0.00	0.00

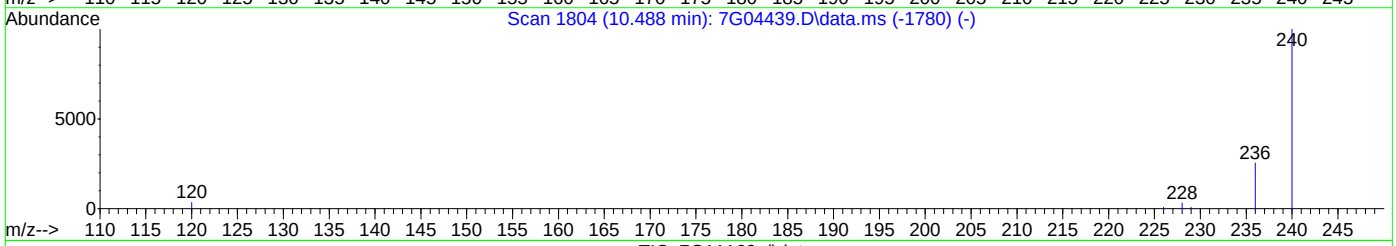
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
Data File : 7G11169.d
Acq On : 13 Aug 2020 5:34 pm
Operator : FOUADS
Sample : fa77689-8 e
Misc : op81539,S7G484,30.1,,,1,1,soil
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 14 03:10:15 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11169.d\data.ms

(18) Chrysene-d12 (I)

9.751min (+0.024) 4.00ppm

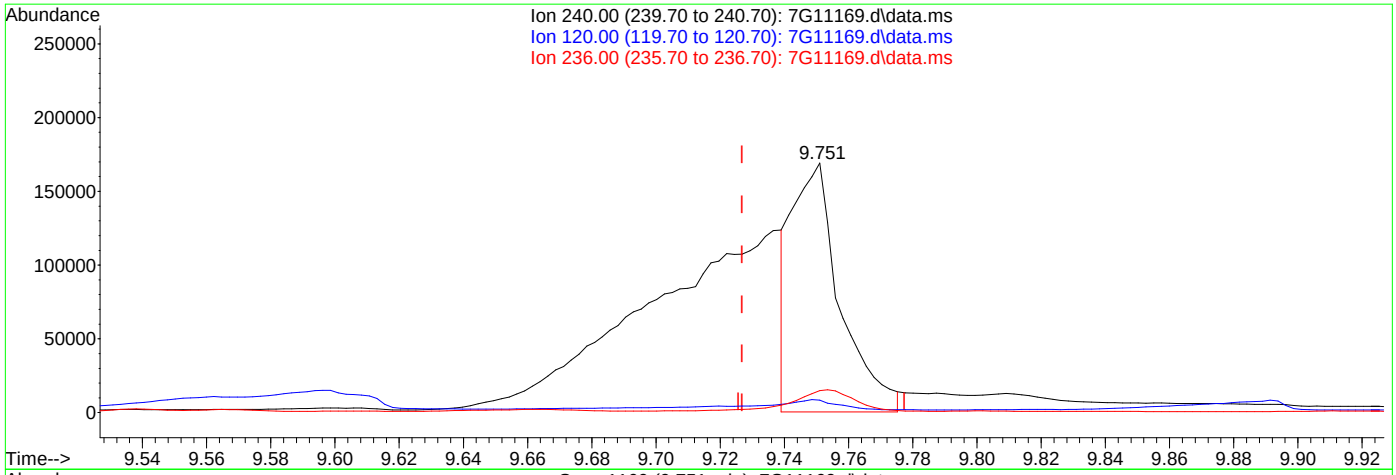
response 544185

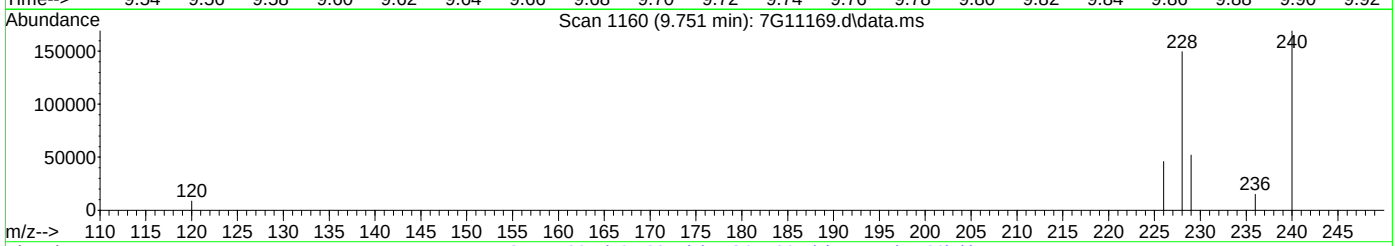
Ion	Exp%	Act%
240.00	100	100
120.00	7.70	3.82
236.00	26.10	8.61
0.00	0.00	0.00

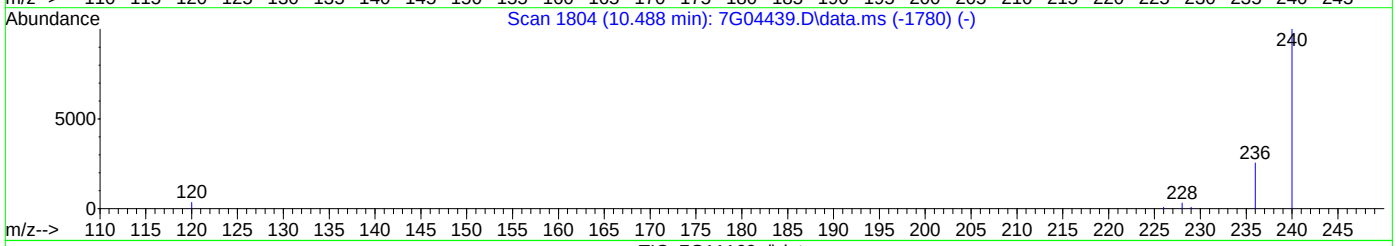
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
Data File : 7G11169.d
Acq On : 13 Aug 2020 5:34 pm
Operator : FOUADS
Sample : fa77689-8 e
Misc : op81539,S7G484,30.1,,,1,1,soil
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 14 03:10:15 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11169.d\data.ms

(18) Chrysene-d12 (I)

9.751min (+0.024) 4.00ppm m

response 177034

Ion	Exp%	Act%
240.00	100	100
120.00	7.70	5.04
236.00	26.10	8.86
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan
08/14/20 11:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
Data File : 7G11170.d
Acq On : 13 Aug 2020 5:58 pm
Operator : FOUADS
Sample : fa77689-9 e
Misc : op81539,S7G484,29.9,,,1,1,soil
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 14 03:31:28 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

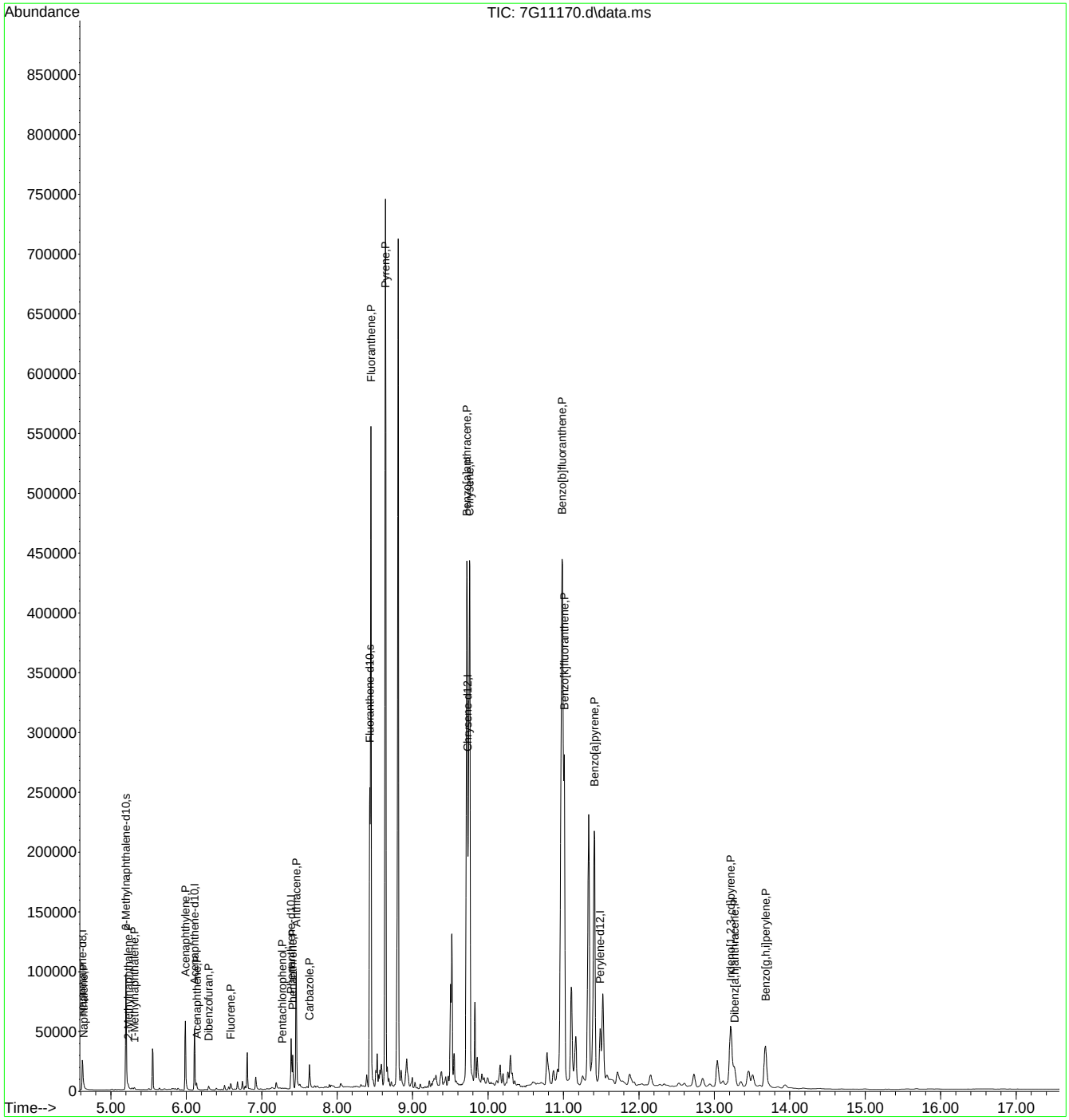
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.622	136	23996	4.00	ppm	0.00
6) Acenaphthene-d10	6.109	164	15738	4.00	ppm	0.00
11) Phenanthrene-d10	7.389	188	30697	4.00	ppm	0.00
18) Chrysene-d12	9.729	240	52112	4.00	ppm	0.00
22) Perylene-d12	11.486	264	40847	4.00	ppm	0.02
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.199	152	34451	9.59	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 95.90%			
17) Fluoranthene-d10	8.433	212	172134	10.72	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 107.20%			
Target Compounds						Qvalue
2) Naphthalene	4.640	128	1530	0.23	ppm	100
3) 2-Methylnaphthalene	5.229	142	978	0.18	ppm	95
5) 1-Methylnaphthalene	5.311	142	740	0.16	ppm	88
7) Acenaphthylene	5.988	152	36061	3.97	ppm	99
8) Acenaphthene	6.138	153	1689	0.29	ppm	99
9) Dibenzofuran	6.297	168	2123	0.51	ppm	89
10) Fluorene	6.587	166	2332	0.37	ppm	97
12) Pentachlorophenol	7.271	266	204m	0.19	ppm	
13) Phenanthrene	7.410	178	16541	1.64	ppm	99
14) Anthracene	7.459	178	71343	6.90	ppm	100
15) Carbazole	7.633	167	14461	0.79	ppm	98
16) Fluoranthene	8.448	202	338557	17.06	ppm	99
19) Pyrene	8.642	202	493145	23.17	ppm	99
20) Benzo[a]anthracene	9.720	228	309050	18.18	ppm	91
21) Chrysene	9.756	228	377393	20.94	ppm	99
23) Benzo[b]fluoranthene	10.982	252	740792m	53.43	ppm	
24) Benzo[k]fluoranthene	11.011	252	209760m	13.81	ppm	
25) Benzo[a]pyrene	11.409	252	267111	19.77	ppm	98
26) Indeno[1,2,3-cd]pyrene	13.214	276	92470	10.49	ppm	99
27) Dibenz[a,h]anthracene	13.267	278	19898	2.03	ppm	97
28) Benzo[g,h,i]perylene	13.680	276	62263	5.86	ppm	99

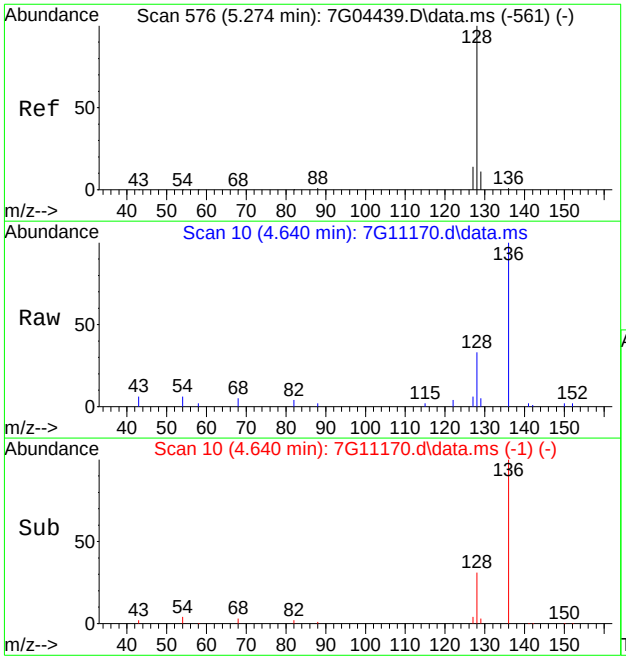
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
Data File : 7G11170.d
Acq On : 13 Aug 2020 5:58 pm
Operator : FOUADS
Sample : fa77689-9 e
Misc : op81539,S7G484,29.9,,,1,1,soil
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 14 03:31:28 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

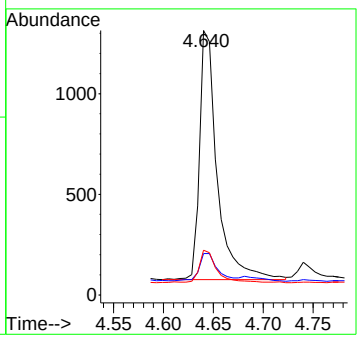


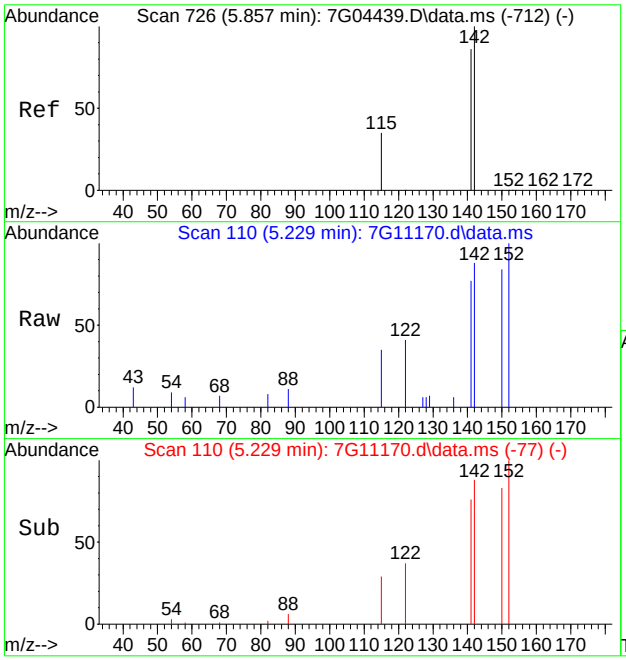


#2
Naphthalene
Concen: 0.23 ppm
RT: 4.640 min Scan# 10
Delta R.T. -0.006 min
Lab File: 7G11170.d
Acq: 13 Aug 2020 5:58 pm

Tgt Ion:128 Resp: 1530

Ion	Ratio	Lower	Upper
128	100		
129	11.0	0.0	41.1
127	13.0	0.0	43.0

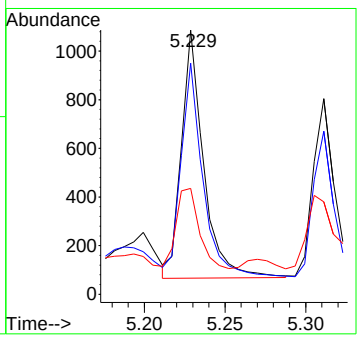


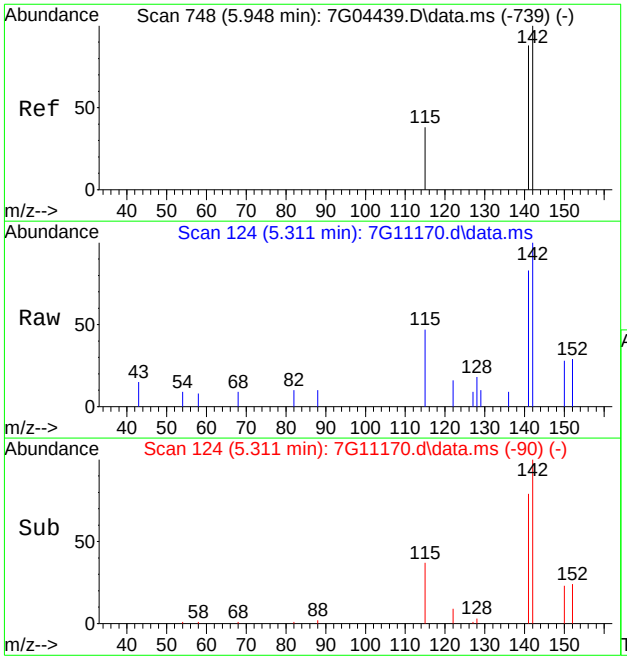


#3
2-Methylnaphthalene
Concen: 0.18 ppm
RT: 5.229 min Scan# 110
Delta R.T. -0.006 min
Lab File: 7G11170.d
Acq: 13 Aug 2020 5:58 pm

Tgt Ion:142 Resp: 978

Ion	Ratio	Lower	Upper
142	100		
141	86.7	54.2	114.2
115	33.0	0.0	57.6

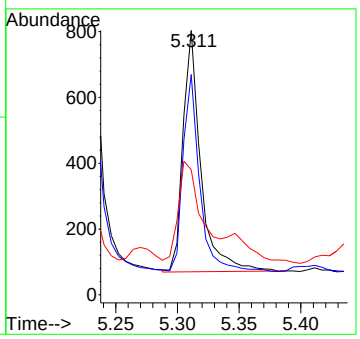


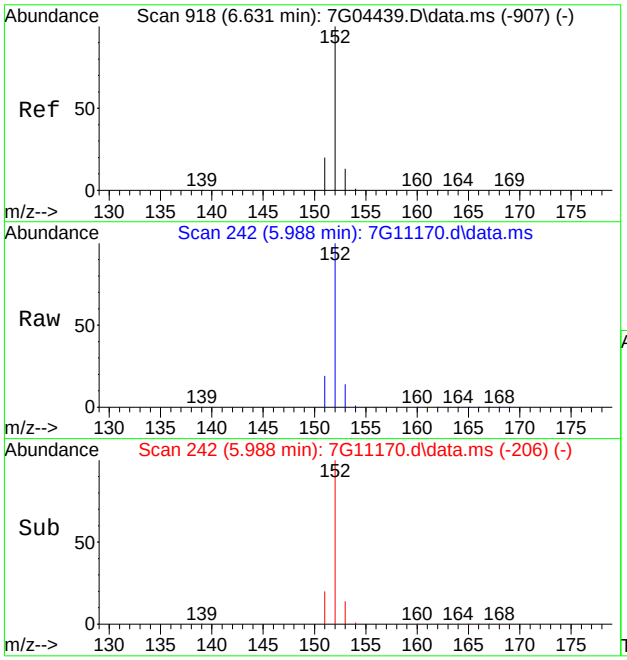


#5
1-Methylnaphthalene
Concen: 0.16 ppm
RT: 5.311 min Scan# 124
Delta R.T. 0.000 min
Lab File: 7G11170.d
Acq: 13 Aug 2020 5:58 pm

Tgt Ion:142 Resp: 740

Ion	Ratio	Lower	Upper
142	100		
141	81.7	63.7	123.7
115	37.7	14.6	74.6

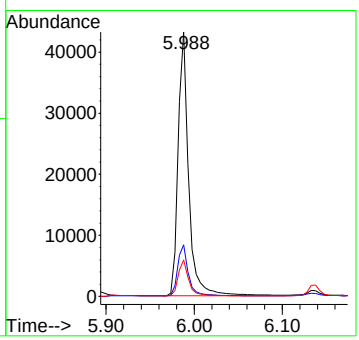


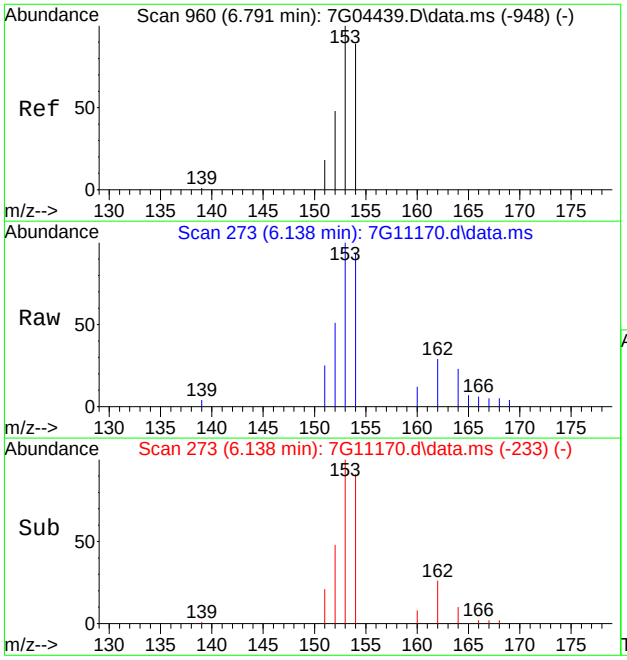


#7
Acenaphthylene
Concen: 3.97 ppm
RT: 5.988 min Scan# 242
Delta R.T. -0.005 min
Lab File: 7G11170.d
Acq: 13 Aug 2020 5:58 pm

Tgt Ion:152 Resp: 36061

Ion	Ratio	Lower	Upper
152	100		
151	19.3	0.0	49.8
153	13.7	0.0	43.7

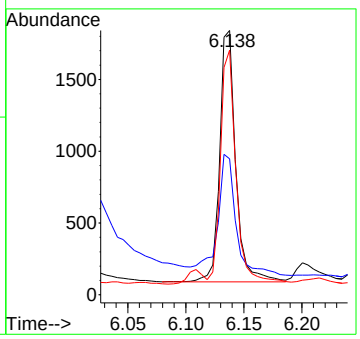


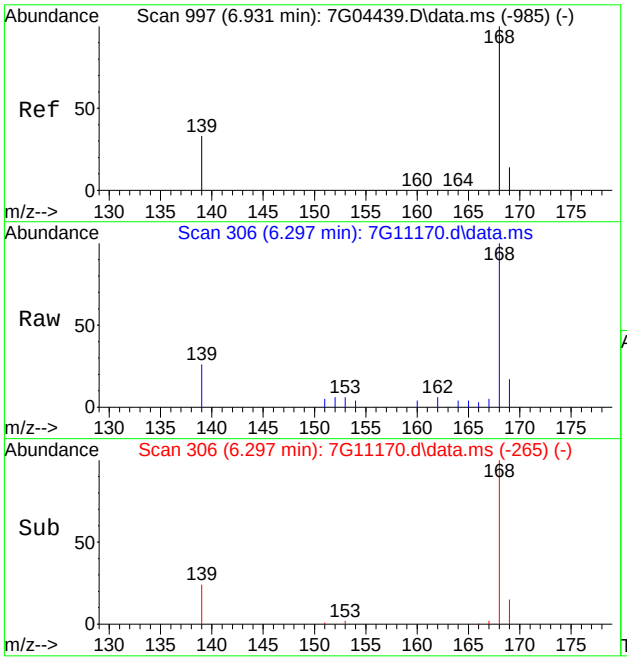


#8
Acenaphthene
Concen: 0.29 ppm
RT: 6.138 min Scan# 273
Delta R.T. -0.005 min
Lab File: 7G11170.d
Acq: 13 Aug 2020 5:58 pm

Tgt Ion:153 Resp: 1689

Ion	Ratio	Lower	Upper
153	100		
152	43.9	15.9	75.9
154	92.8	62.4	122.4

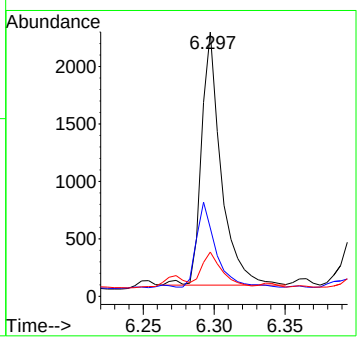


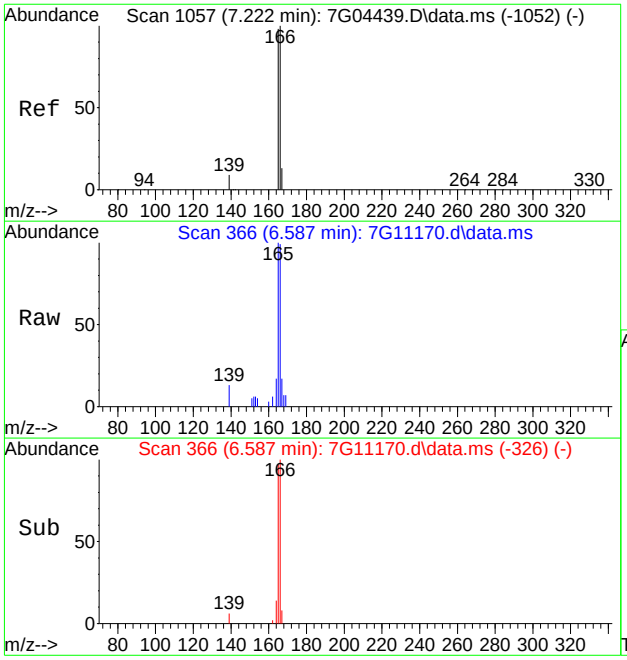


#9
Dibenzofuran
Concen: 0.51 ppm
RT: 6.297 min Scan# 306
Delta R.T. 0.000 min
Lab File: 7G11170.d
Acq: 13 Aug 2020 5:58 pm

Tgt Ion:168 Resp: 2123

Ion	Ratio	Lower	Upper
168	100		
139	23.0	11.9	51.9
169	13.0	0.0	33.1

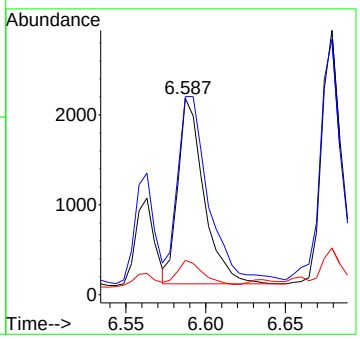


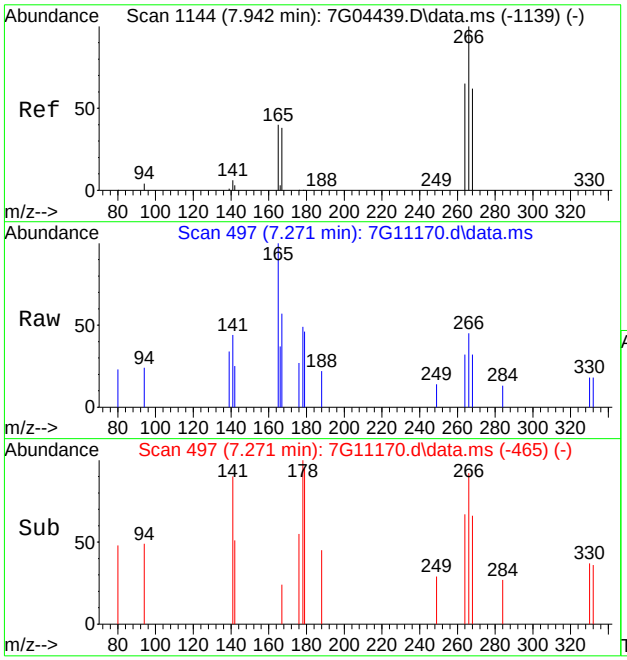


#10
Fluorene
Concen: 0.37 ppm
RT: 6.587 min Scan# 366
Delta R.T. -0.005 min
Lab File: 7G11170.d
Acq: 13 Aug 2020 5:58 pm

Tgt Ion:166 Resp: 2332

Ion	Ratio	Lower	Upper
166	100		
165	98.1	65.2	125.2
167	12.3	0.0	43.9

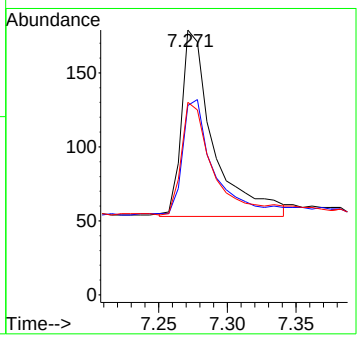


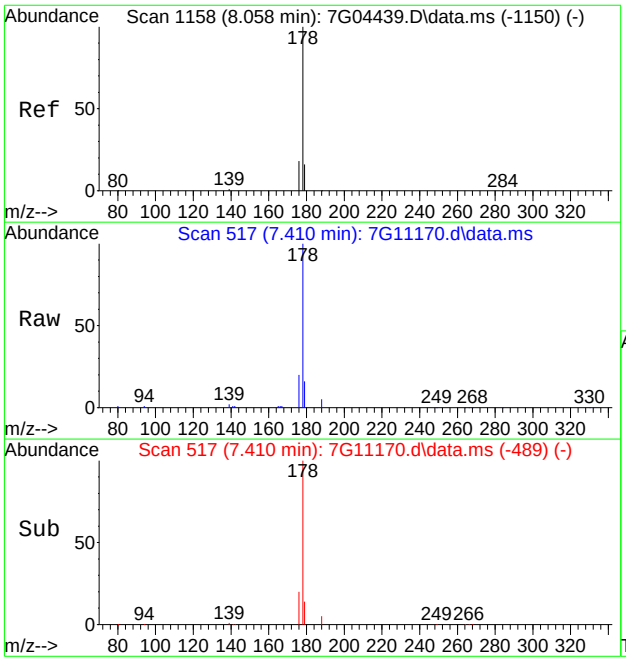


#12
Pentachlorophenol
Concen: 0.19 ppm m
RT: 7.271 min Scan# 497
Delta R.T. 0.007 min
Lab File: 7G11170.d
Acq: 13 Aug 2020 5:58 pm

Tgt Ion:266 Resp: 204

Ion	Ratio	Lower	Upper
266	100		
268	71.5	42.9	82.9
264	72.6	42.8	82.8

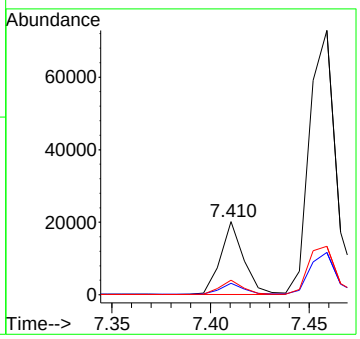


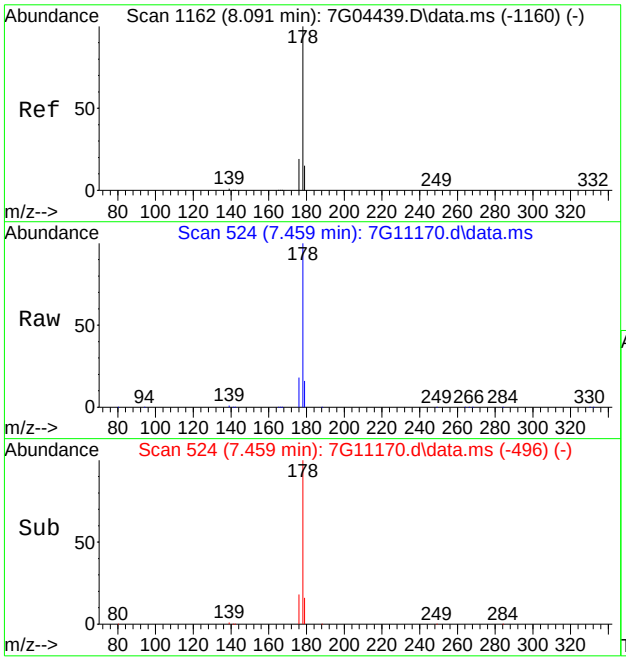


#13
Phenanthrene
Concen: 1.64 ppm
RT: 7.410 min Scan# 517
Delta R.T. -0.007 min
Lab File: 7G11170.d
Acq: 13 Aug 2020 5:58 pm

Tgt Ion:178 Resp: 16541

Ion	Ratio	Lower	Upper
178	100		
179	15.1	0.0	45.2
176	19.7	0.0	50.4

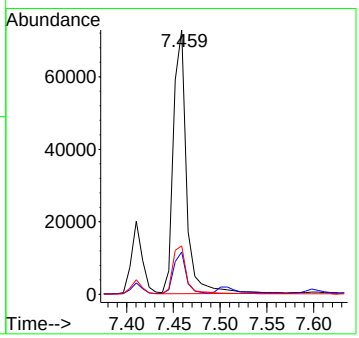


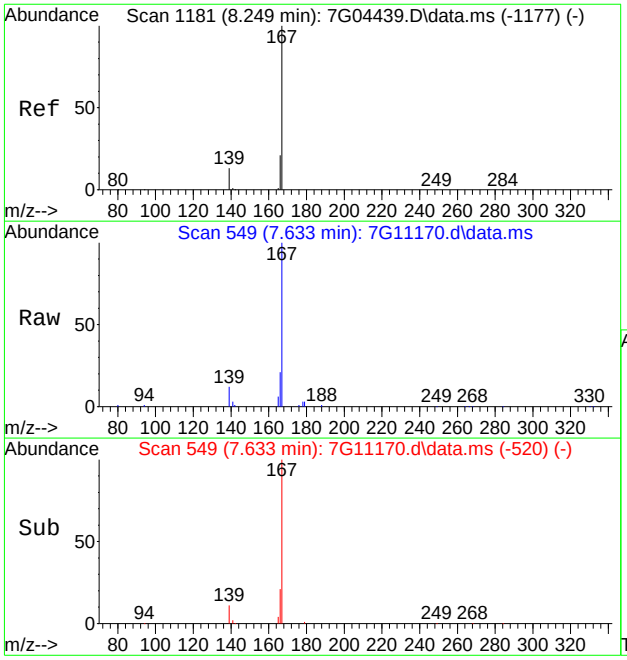


#14
Anthracene
Concen: 6.90 ppm
RT: 7.459 min Scan# 524
Delta R.T. -0.007 min
Lab File: 7G11170.d
Acq: 13 Aug 2020 5:58 pm

Tgt Ion:178 Resp: 71343

Ion	Ratio	Lower	Upper
178	100		
179	15.8	0.0	46.1
176	18.3	0.0	48.2

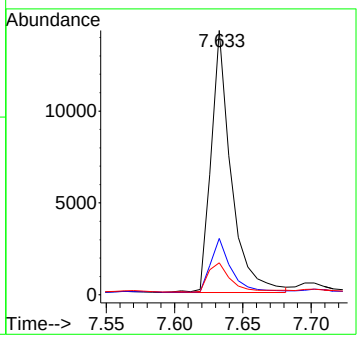


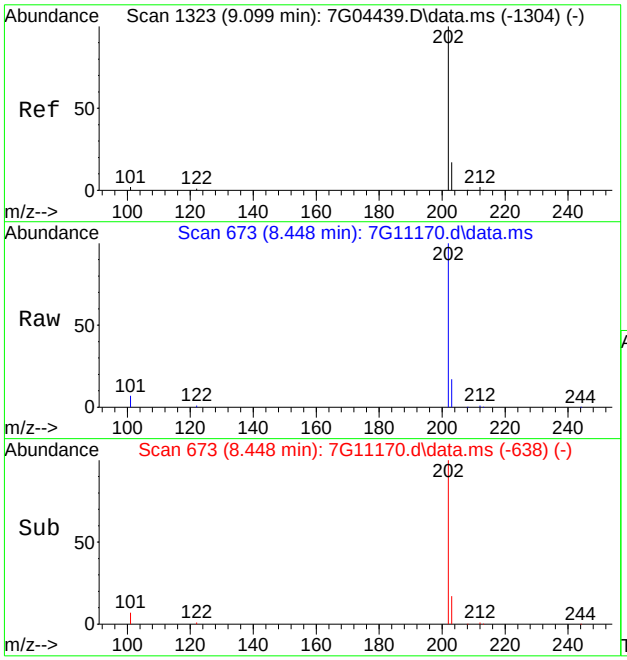


#15
Carbazole
Concen: 0.79 ppm
RT: 7.633 min Scan# 549
Delta R.T. 0.000 min
Lab File: 7G11170.d
Acq: 13 Aug 2020 5:58 pm

Tgt Ion:167 Resp: 14461

Ion	Ratio	Lower	Upper
167	100		
166	20.5	0.2	40.2
139	10.9	0.0	32.8

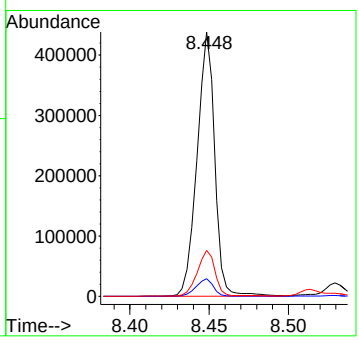


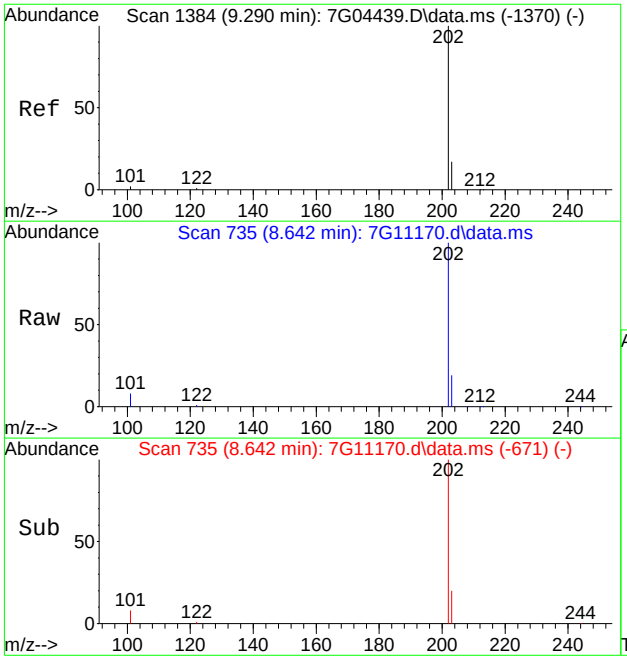


#16
Fluoranthene
Concen: 17.06 ppm
RT: 8.448 min Scan# 673
Delta R.T. -0.003 min
Lab File: 7G11170.d
Acq: 13 Aug 2020 5:58 pm

Tgt Ion:202 Resp: 338557

Ion	Ratio	Lower	Upper
202	100		
101	6.7	0.0	36.5
203	17.2	0.0	47.5

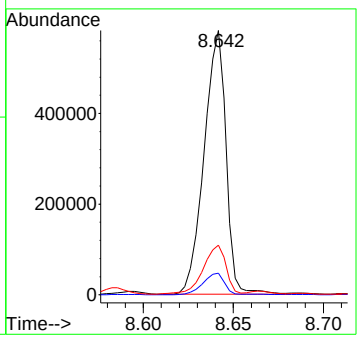


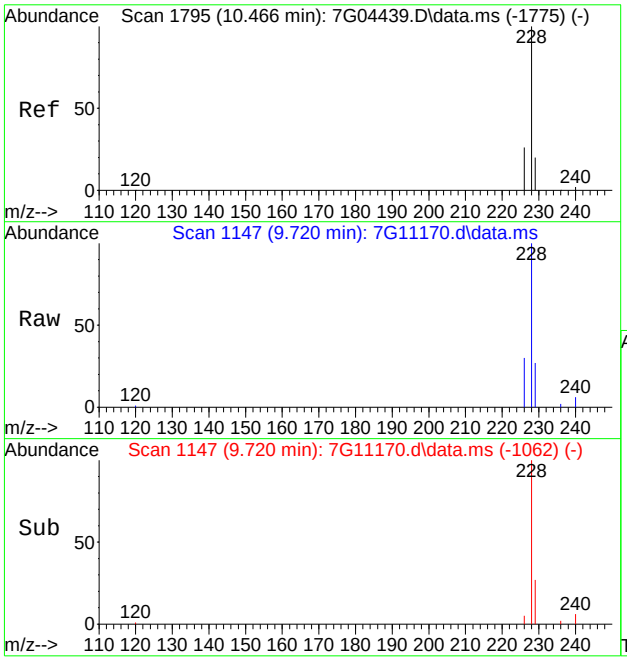


#19
Pyrene
Concen: 23.17 ppm
RT: 8.642 min Scan# 735
Delta R.T. 0.000 min
Lab File: 7G11170.d
Acq: 13 Aug 2020 5:58 pm

Tgt Ion:202 Resp: 493145

Ion	Ratio	Lower	Upper
202	100		
101	8.1	0.0	37.5
203	18.5	0.0	48.3

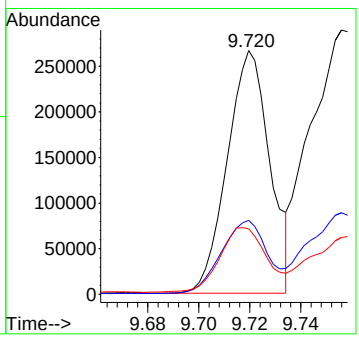


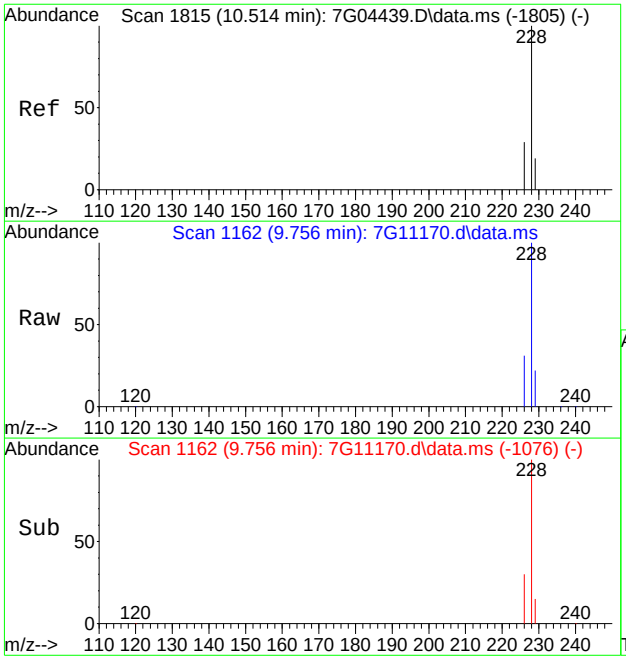


#20
Benzo[a]anthracene
Concen: 18.18 ppm
RT: 9.720 min Scan# 1147
Delta R.T. 0.005 min
Lab File: 7G11170.d
Acq: 13 Aug 2020 5:58 pm

Tgt Ion:228 Resp: 309050

Ion	Ratio	Lower	Upper
228	100		
226	29.9	0.0	57.2
229	26.5	0.0	49.7

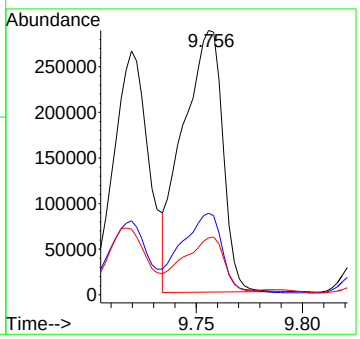


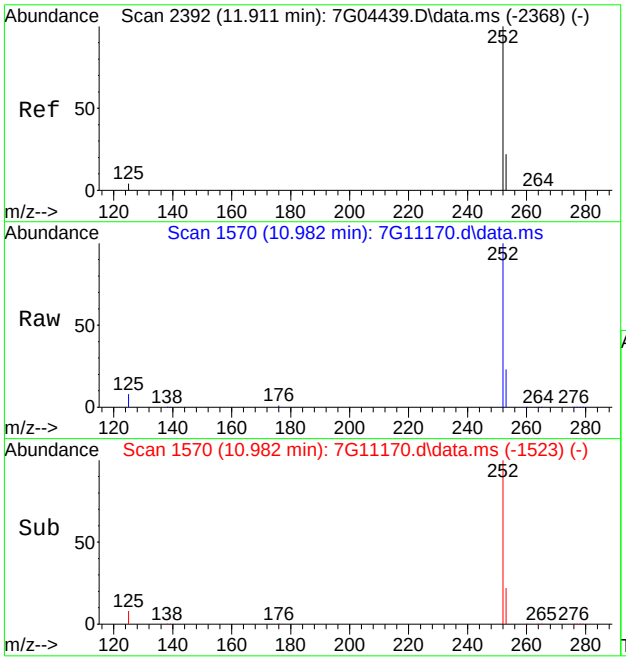


#21
Chrysene
Concen: 20.94 ppm
RT: 9.756 min Scan# 1162
Delta R.T. 0.007 min
Lab File: 7G11170.d
Acq: 13 Aug 2020 5:58 pm

Tgt Ion:228 Resp: 377393

Ion	Ratio	Lower	Upper
228	100		
226	30.5	0.0	59.8
229	19.9	0.0	49.5

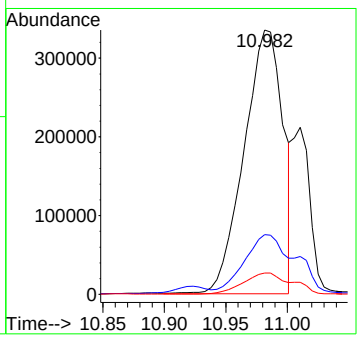


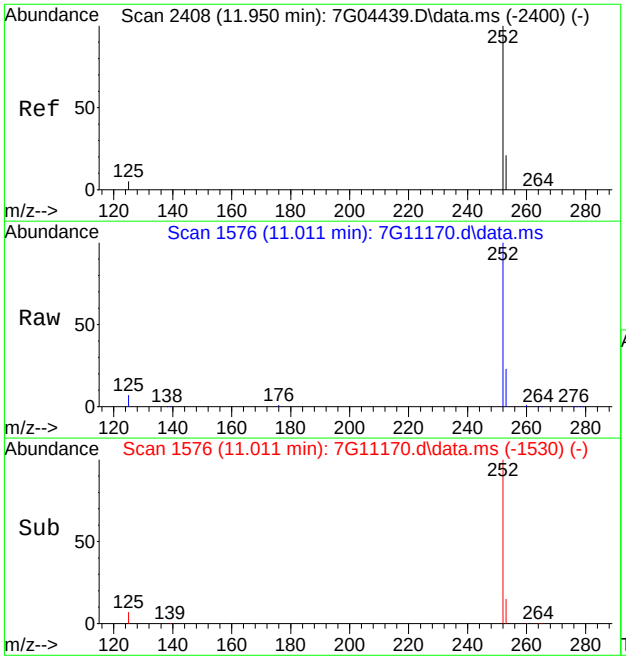


#23
Benzo[b]fluoranthene
Concen: 53.43 ppm m
RT: 10.982 min Scan# 1570
Delta R.T. 0.029 min
Lab File: 7G11170.d
Acq: 13 Aug 2020 5:58 pm

Tgt Ion:252 Resp: 740792

Ion	Ratio	Lower	Upper
252	100		
253	22.6	0.0	51.7
125	8.1	0.0	37.1

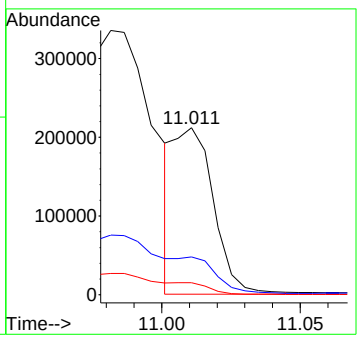


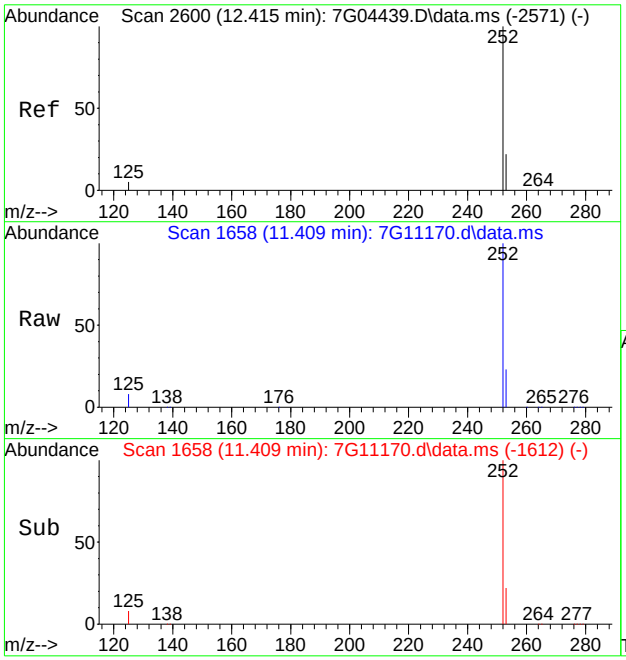


#24
Benzo[k]fluoranthene
Concen: 13.81 ppm m
RT: 11.011 min Scan# 1576
Delta R.T. 0.024 min
Lab File: 7G11170.d
Acq: 13 Aug 2020 5:58 pm

Tgt Ion:252 Resp: 209760

Ion	Ratio	Lower	Upper
252	100		
253	22.7	0.0	51.8
125	7.3	0.0	37.5

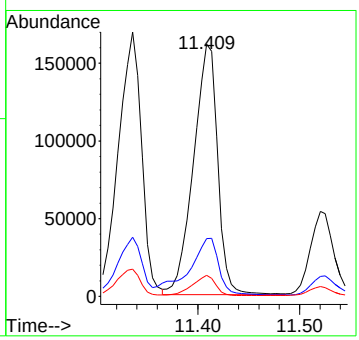


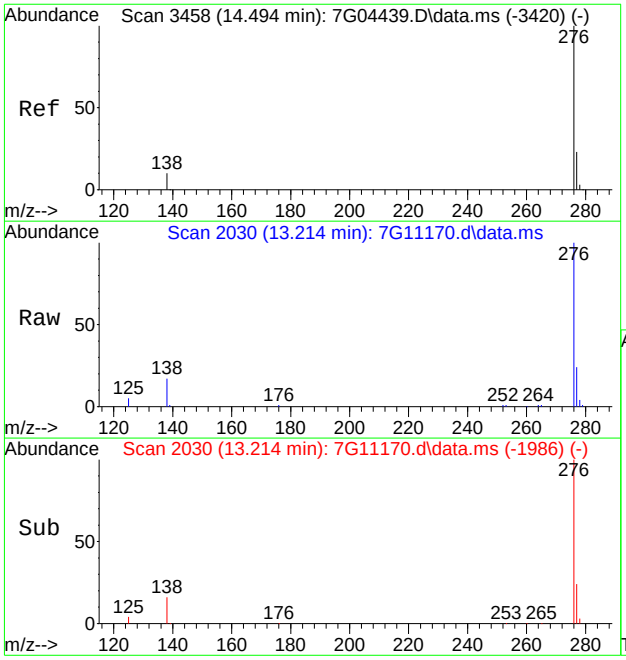


#25
Benzo[a]pyrene
Concen: 19.77 ppm
RT: 11.409 min Scan# 1658
Delta R.T. 0.024 min
Lab File: 7G11170.d
Acq: 13 Aug 2020 5:58 pm

Tgt Ion:252 Resp: 267111

Ion	Ratio	Lower	Upper
252	100		
253	20.4	0.0	51.8
125	8.1	0.0	38.3

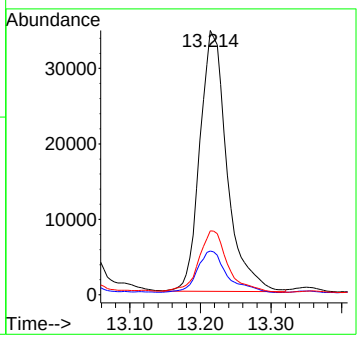


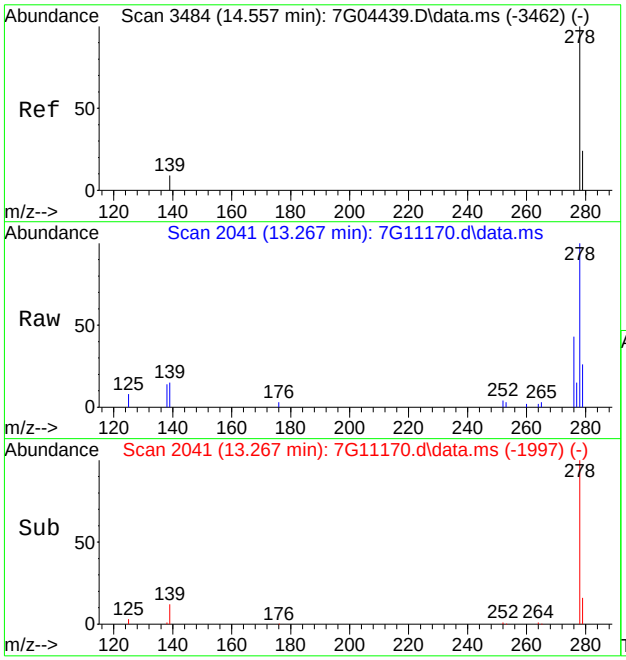


#26
Indeno[1,2,3-cd]pyrene
Concen: 10.49 ppm
RT: 13.214 min Scan# 2030
Delta R.T. 0.015 min
Lab File: 7G11170.d
Acq: 13 Aug 2020 5:58 pm

Tgt Ion:276 Resp: 92470

Ion	Ratio	Lower	Upper
276	100		
138	15.8	0.0	46.1
277	23.4	0.0	53.8

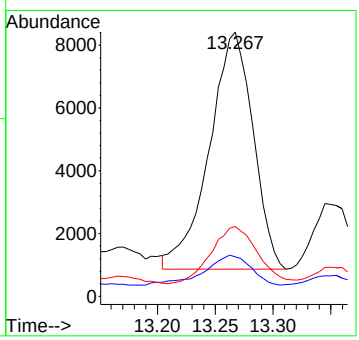


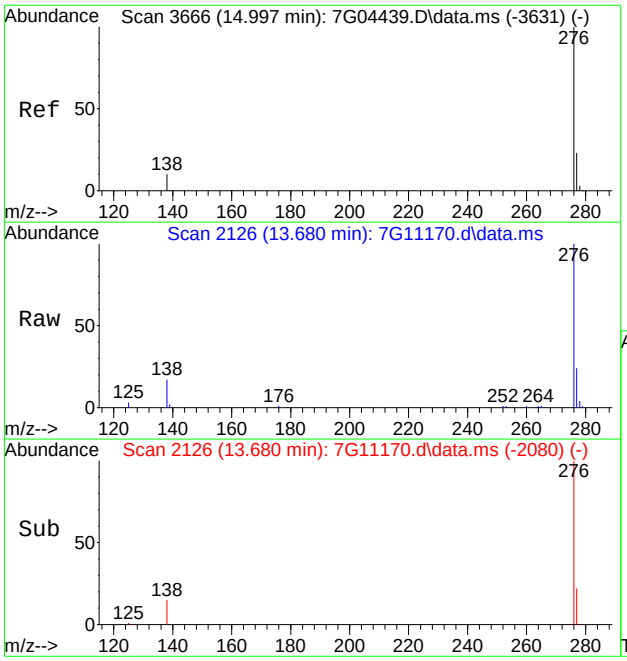


#27
Dibenz[a,h]anthracene
Concen: 2.03 ppm
RT: 13.267 min Scan# 2041
Delta R.T. 0.015 min
Lab File: 7G11170.d
Acq: 13 Aug 2020 5:58 pm

Tgt Ion:278 Resp: 19898

Ion	Ratio	Lower	Upper
278	100		
139	11.6	0.0	43.8
279	23.7	0.0	54.2

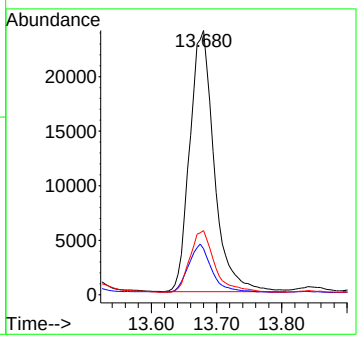




#28
Benzo[g,h,i]perylene
Concen: 5.86 ppm
RT: 13.680 min Scan# 2126
Delta R.T. 0.024 min
Lab File: 7G11170.d
Acq: 13 Aug 2020 5:58 pm

Tgt Ion:276 Resp: 62263

Ion	Ratio	Lower	Upper
276	100		
138	16.6	0.0	47.7
277	23.7	0.0	53.9



Manual Integration Approval Summary

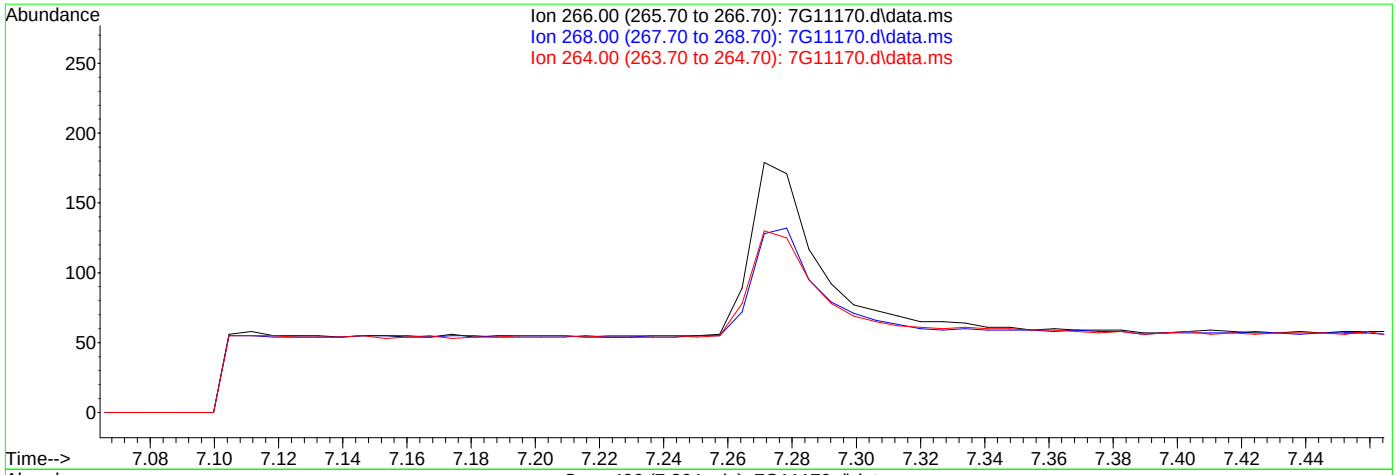
Sample Number: FA77689-9
Lab FileID: 7G11170.D
Injection Time: 08/13/20 17:58
Method: SW846 8270E BY SIM
Analyst approved: 08/14/20 11:02 Fouad Sekkar
Supervisor approved: 08/14/20 11:43 Naresh Jiawan

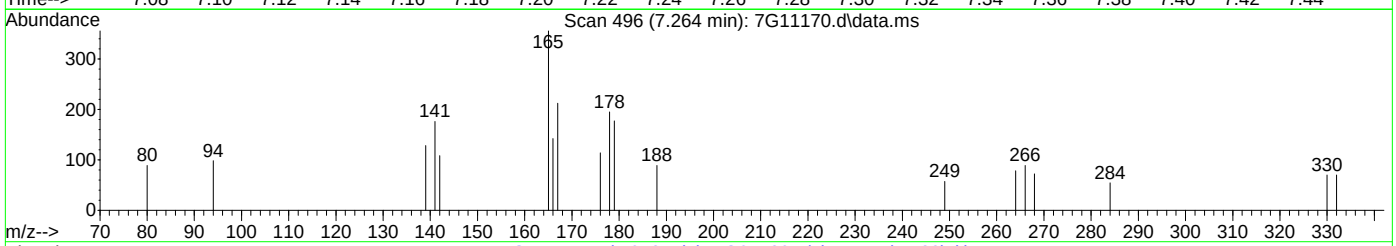
Parameter	CAS	Sig#	R.T. (min.)	Reason
Pentachlorophenol	87-86-5		7.27	Missed peak
Benzo(b)fluoranthene	205-99-2		10.98	Overlapping peak
Benzo(k)fluoranthene	207-08-9		11.01	Overlapping peak

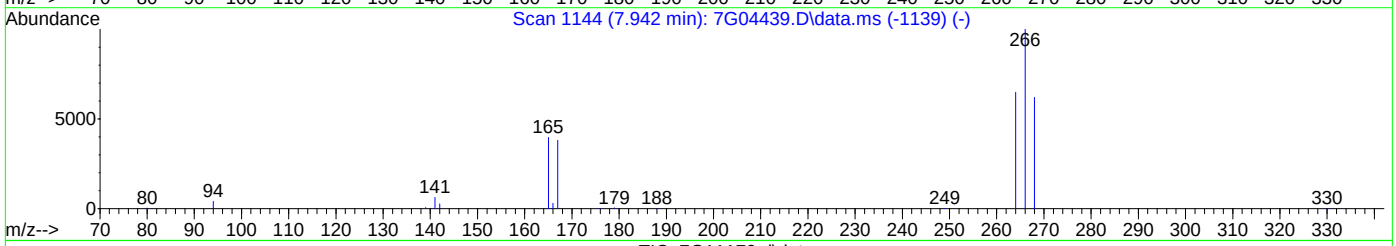
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
Data File : 7G11170.d
Acq On : 13 Aug 2020 5:58 pm
Operator : FOUADS
Sample : fa77689-9 e
Misc : op81539,S7G484,29.9,,,1,1,soil
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 14 03:10:17 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11170.d\data.ms

(12) Pentachlorophenol (P)

7.264min (-7.264) 0.00ppm

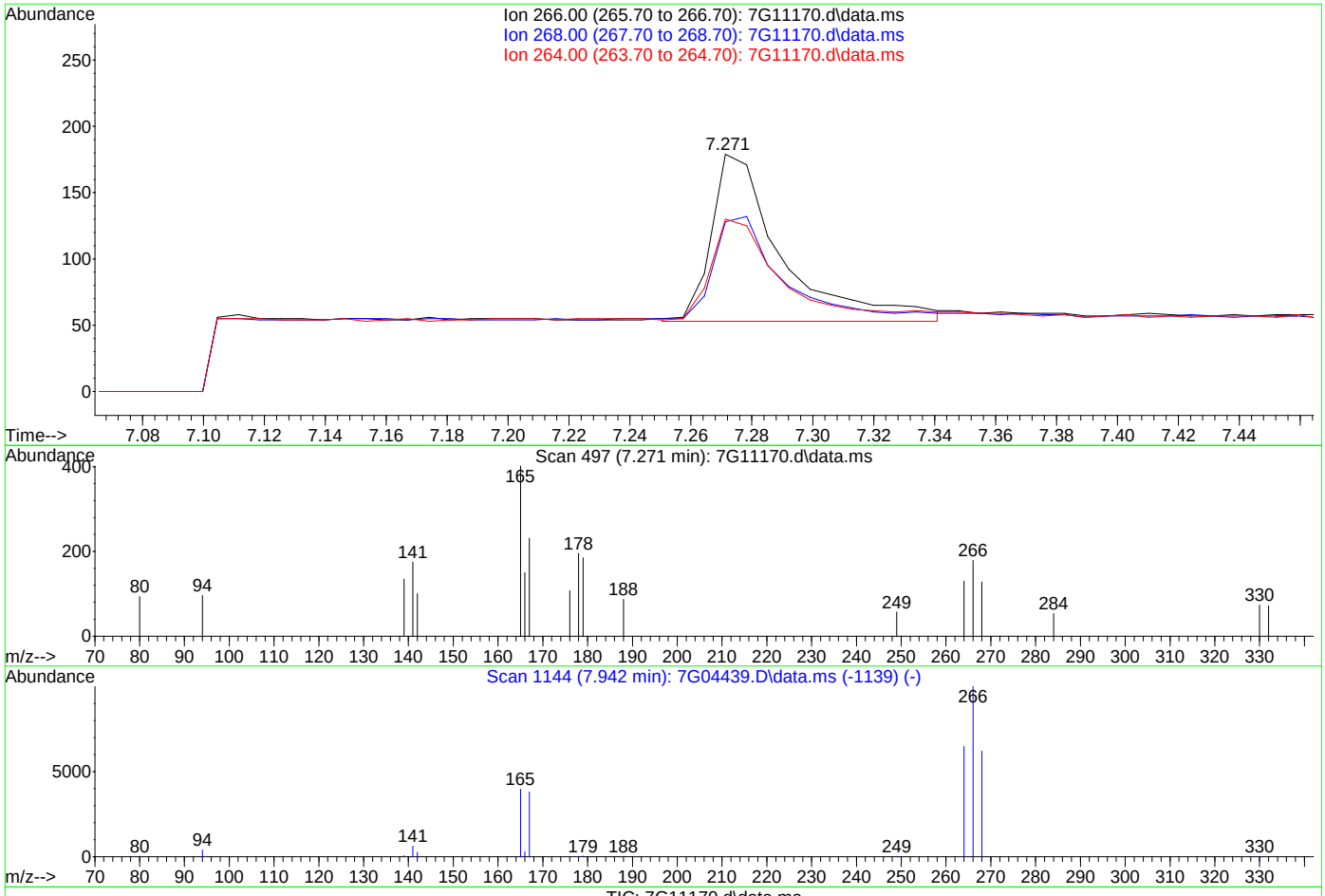
response 0

Ion	Exp%	Act%
266.00	100	0.00
268.00	62.90	0.00#
264.00	62.80	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
Data File : 7G11170.d
Acq On : 13 Aug 2020 5:58 pm
Operator : FOUADS
Sample : fa77689-9 e
Misc : op81539,S7G484,29.9,,,1,1,soil
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 14 03:10:17 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration



TIC: 7G11170.d\data.ms

(12) Pentachlorophenol (P)

7.271min (+0.007) 0.19ppm m

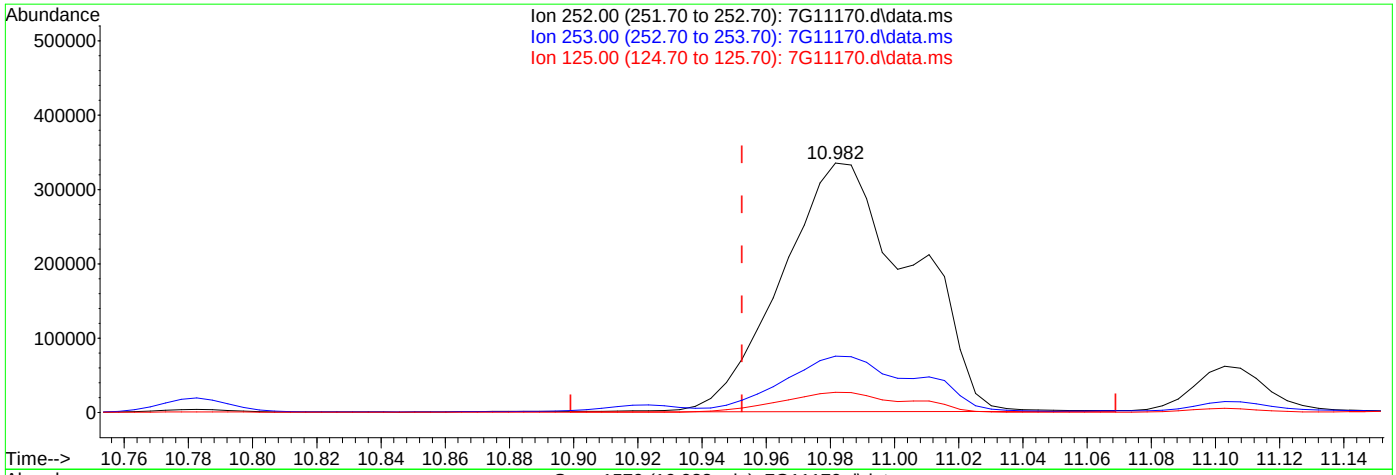
response 204

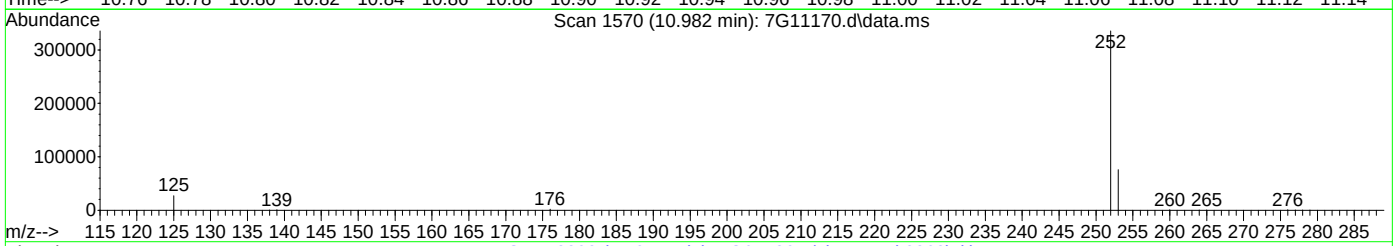
Ion	Exp%	Act%
266.00	100	100
268.00	62.90	71.51
264.00	62.80	72.63
0.00	0.00	0.00

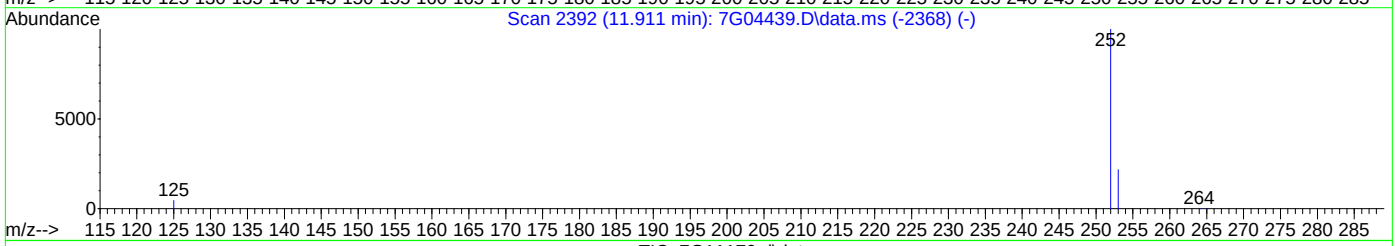
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
Data File : 7G11170.d
Acq On : 13 Aug 2020 5:58 pm
Operator : FOUADS
Sample : fa77689-9 e
Misc : op81539,S7G484,29.9,,,1,1,soil
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 14 03:10:17 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11170.d\data.ms

(23) Benzo[b]fluoranthene (P)

10.982min (+0.029) 68.34ppm

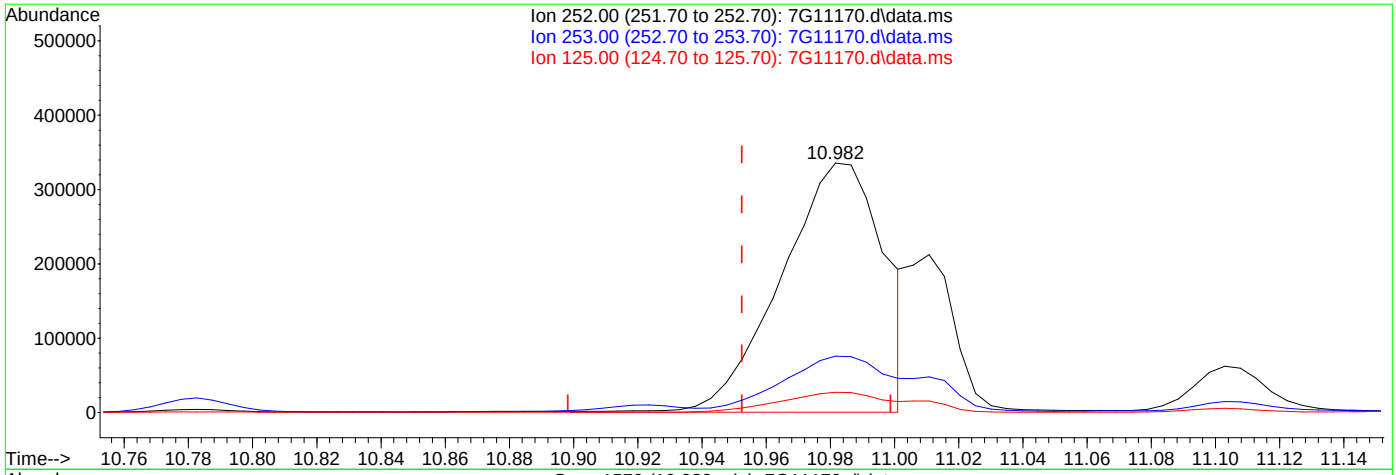
response 947510

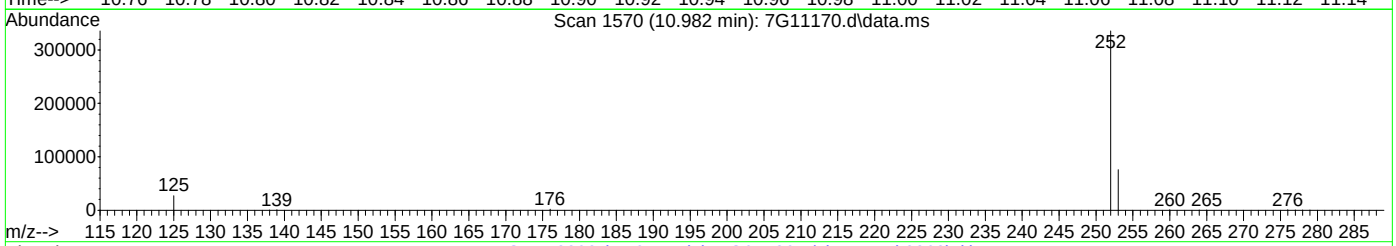
Ion	Exp%	Act%
252.00	100	100
253.00	21.70	22.02
125.00	7.10	8.01
0.00	0.00	0.00

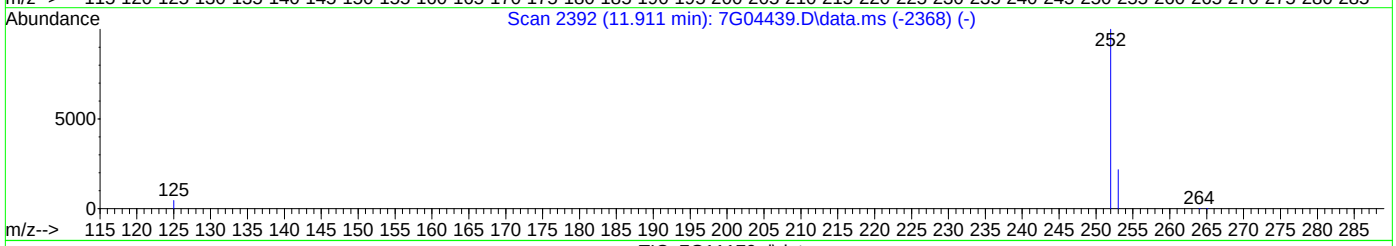
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
Data File : 7G11170.d
Acq On : 13 Aug 2020 5:58 pm
Operator : FOUADS
Sample : fa77689-9 e
Misc : op81539,S7G484,29.9,,,1,1,soil
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 14 03:10:17 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11170.d\data.ms

(23) Benzo[b]fluoranthene (P)

10.982min (+0.029) 53.43ppm m

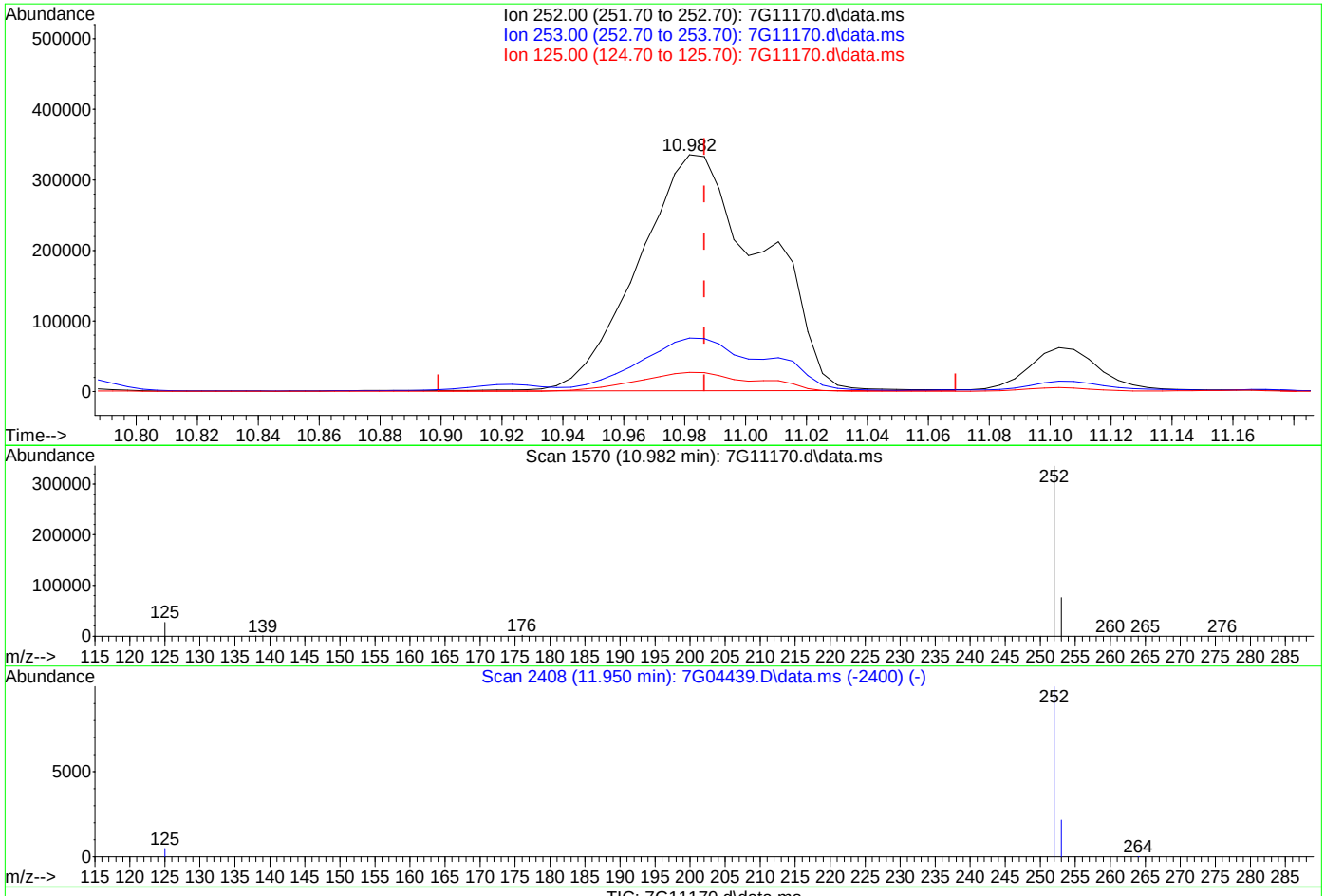
response 740792

Ion	Exp%	Act%
252.00	100	100
253.00	21.70	22.65
125.00	7.10	8.13
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
Data File : 7G11170.d
Acq On : 13 Aug 2020 5:58 pm
Operator : FOUADS
Sample : fa77689-9 e
Misc : op81539,S7G484,29.9,,,1,1,soil
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 14 03:10:17 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration



TIC: 7G11170.d\data.ms

(24) Benzo[k]fluoranthene (P)

10.982min (-0.005) 55.59ppm

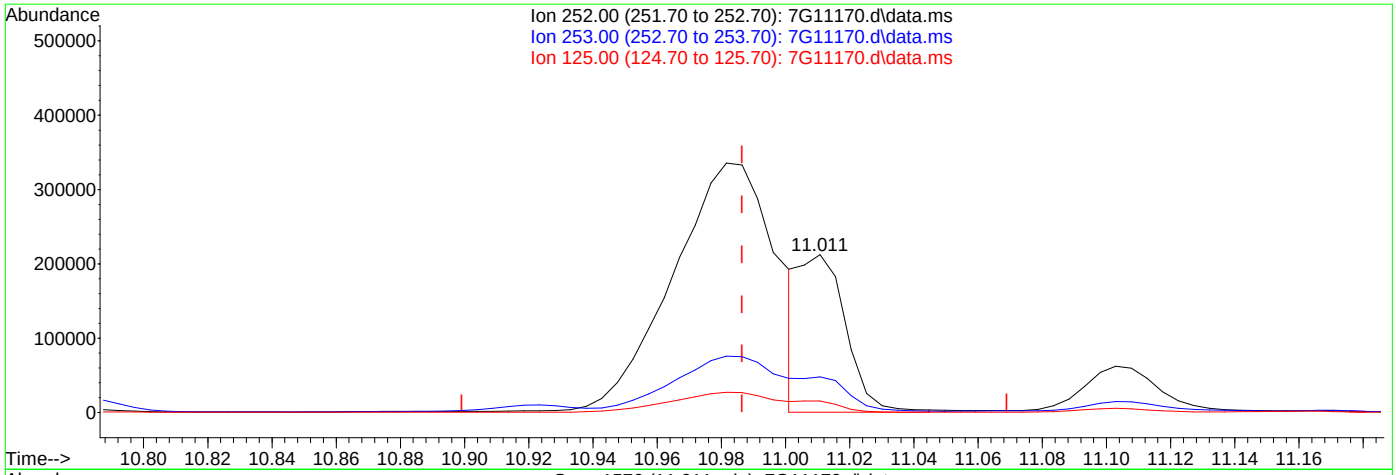
response 947541

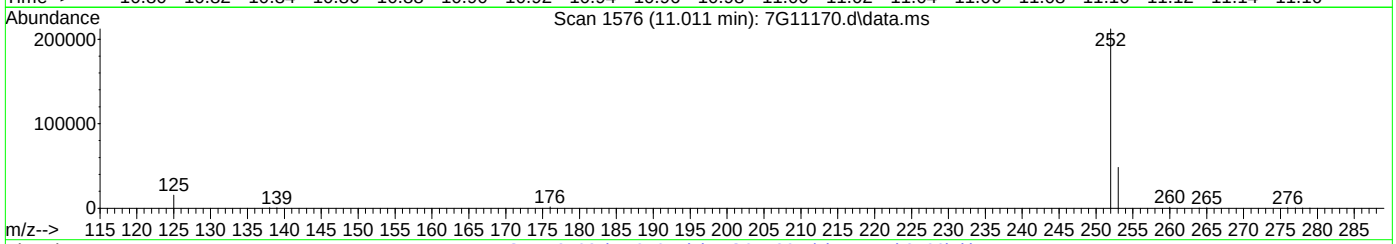
Ion	Exp%	Act%
252.00	100	100
253.00	21.80	22.02
125.00	7.50	8.01
0.00	0.00	0.00

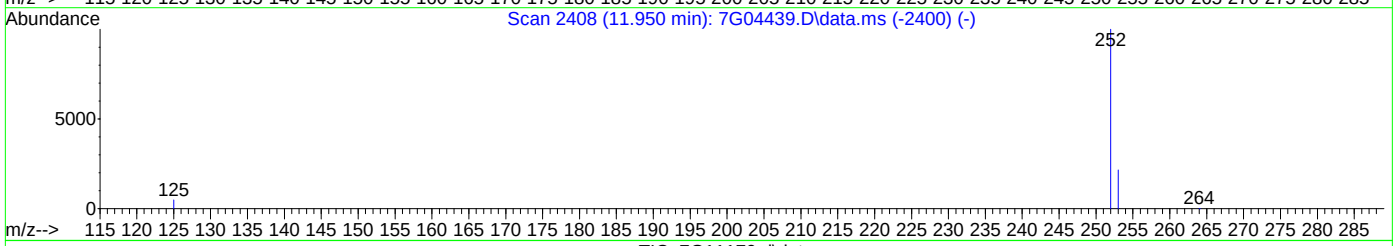
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
Data File : 7G11170.d
Acq On : 13 Aug 2020 5:58 pm
Operator : FOUADS
Sample : fa77689-9 e
Misc : op81539,S7G484,29.9,,,1,1,soil
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 14 03:10:17 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11170.d\data.ms

(24) Benzo[k]fluoranthene (P)

11.011min (+0.024) 13.81ppm m

response 209760

Ion	Exp%	Act%
252.00	100	100
253.00	21.80	22.66
125.00	7.50	7.28
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan
08/14/20 11:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
Data File : 7G11171.d
Acq On : 13 Aug 2020 6:22 pm
Operator : FOUADS
Sample : fa77689-10 e
Misc : op81539,S7G484,30.3,,,1,1,soil
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 14 03:35:08 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

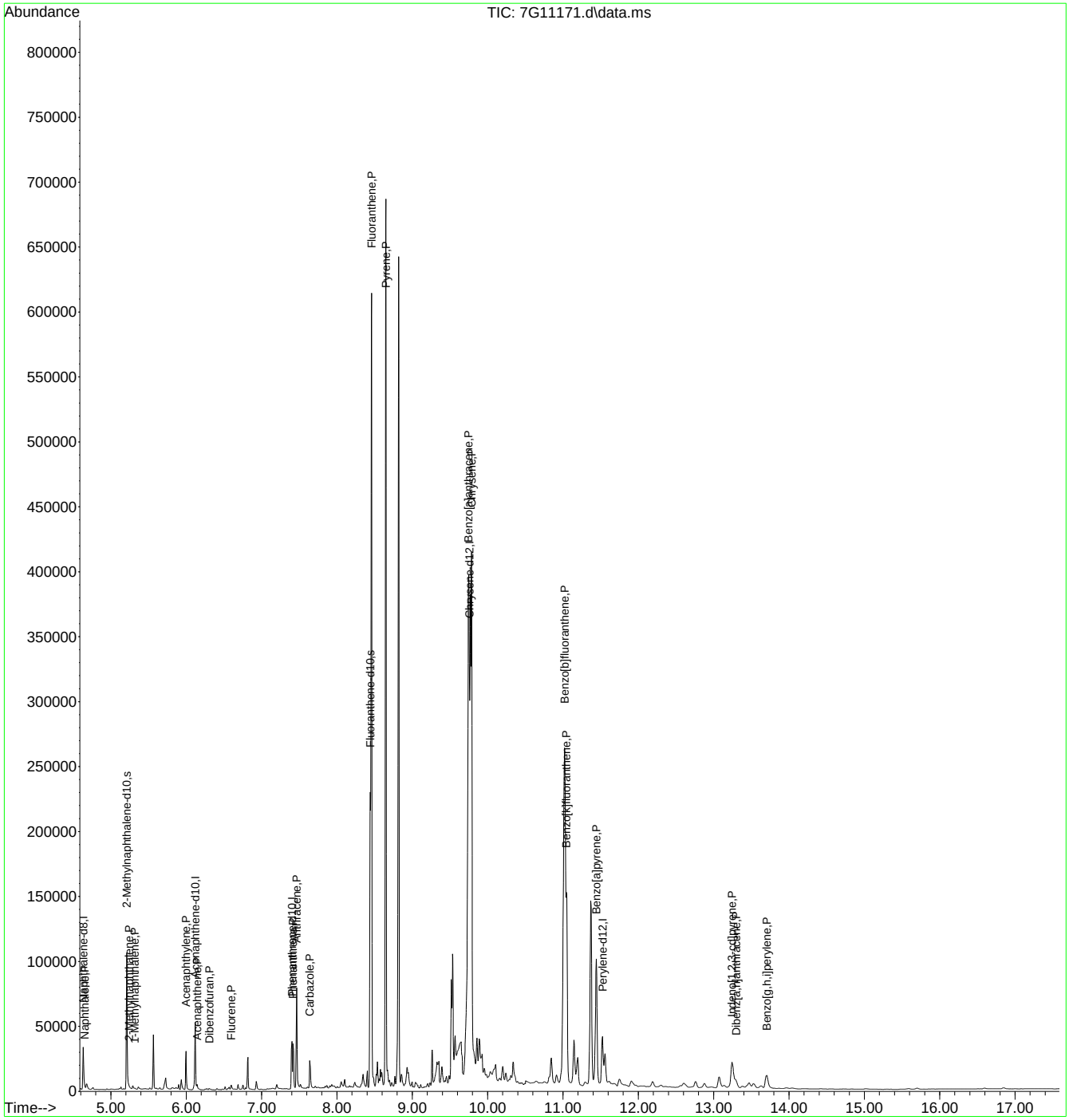
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.634	136	23047	4.00	ppm	0.00
6) Acenaphthene-d10	6.118	164	15571	4.00	ppm	0.00
11) Phenanthrene-d10	7.403	188	29996	4.00	ppm	0.00
18) Chrysene-d12	9.758	240	299948m	4.00	ppm	0.03
22) Perylene-d12	11.525	264	34971	4.00	ppm	0.06
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.211	152	35788	10.34	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery =	103.40%		
17) Fluoranthene-d10	8.442	212	160454	10.23	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery =	102.30%		
Target Compounds						Qvalue
2) Naphthalene	4.652	128	546	0.08	ppm	99
3) 2-Methylnaphthalene	5.240	142	296m	0.06	ppm	
5) 1-Methylnaphthalene	5.317	142	240m	0.05	ppm	
7) Acenaphthylene	5.998	152	17907	2.00	ppm	100
8) Acenaphthene	6.147	153	1025	0.18	ppm	97
9) Dibenzofuran	6.307	168	669	0.16	ppm	83
10) Fluorene	6.597	166	1609	0.25	ppm	97
13) Phenanthrene	7.417	178	23464	2.37	ppm	100
14) Anthracene	7.466	178	48912	4.87	ppm	98
15) Carbazole	7.640	167	16109	0.90	ppm	99
16) Fluoranthene	8.461	202	390759	20.00	ppm	99
19) Pyrene	8.651	202	455830	3.83	ppm	99
20) Benzo[a]anthracene	9.746	228	212184	2.27	ppm	95
21) Chrysene	9.787	228	350610	3.37	ppm	98
23) Benzo[b]fluoranthene	11.020	252	426500m	35.93	ppm	
24) Benzo[k]fluoranthene	11.045	252	118908m	9.27	ppm	
25) Benzo[a]pyrene	11.443	252	114414	9.89	ppm	98
26) Indeno[1,2,3-cd]pyrene	13.243	276	35114	4.65	ppm	100
27) Dibenz[a,h]anthracene	13.296	278	7691	0.92	ppm	98
28) Benzo[g,h,i]perylene	13.704	276	19592	2.15	ppm	98

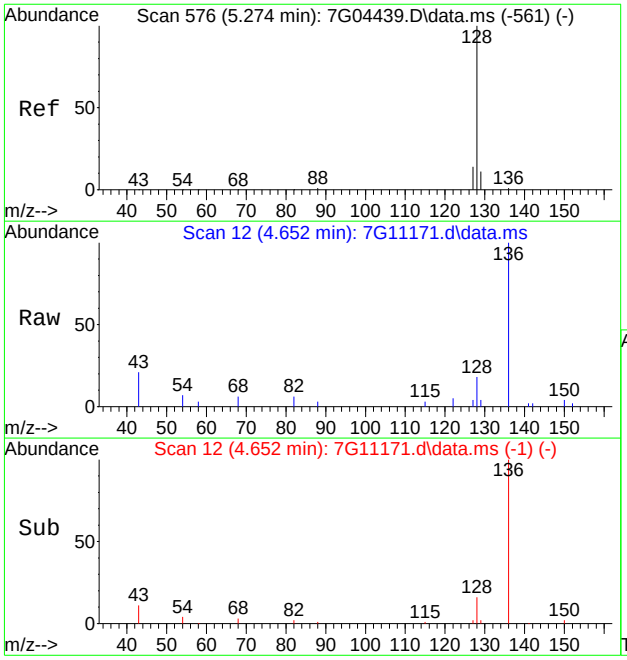
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
Data File : 7G11171.d
Acq On : 13 Aug 2020 6:22 pm
Operator : FOUADS
Sample : fa77689-10 e
Misc : op81539,S7G484,30.3,,,1,1,soil
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 14 03:35:08 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

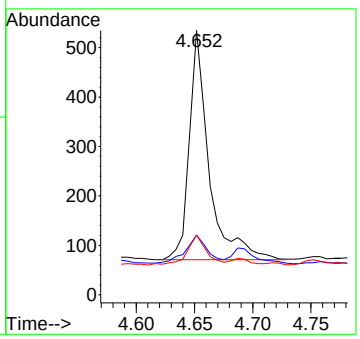


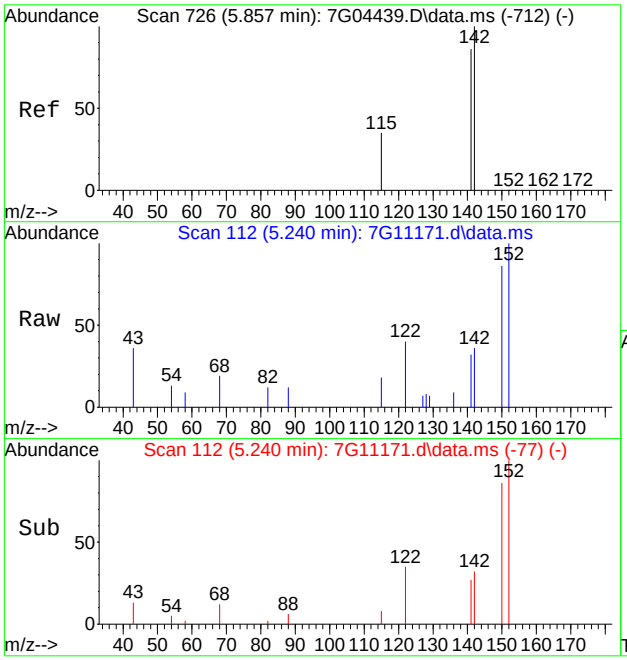


#2
Naphthalene
Concen: 0.08 ppm
RT: 4.652 min Scan# 12
Delta R.T. 0.006 min
Lab File: 7G11171.d
Acq: 13 Aug 2020 6:22 pm

Tgt Ion:128 Resp: 546

Ion	Ratio	Lower	Upper
128	100		
129	12.1	0.0	41.1
127	12.8	0.0	43.0

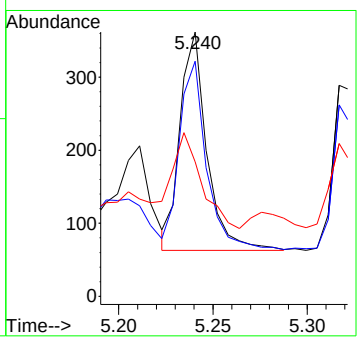


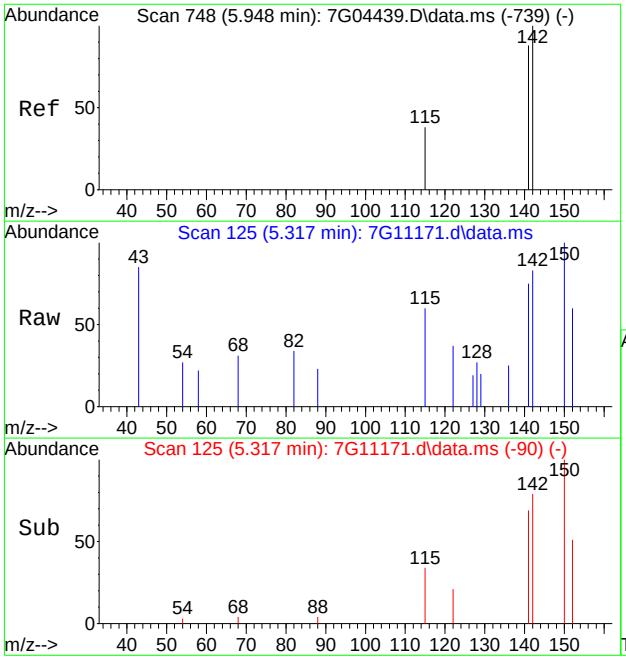


#3
2-Methylnaphthalene
Concen: 0.06 ppm m
RT: 5.240 min Scan# 112
Delta R.T. 0.006 min
Lab File: 7G11171.d
Acq: 13 Aug 2020 6:22 pm

Tgt Ion:142 Resp: 296

Ion	Ratio	Lower	Upper
142	100		
141	89.0	54.2	114.2
115	50.8	0.0	57.6

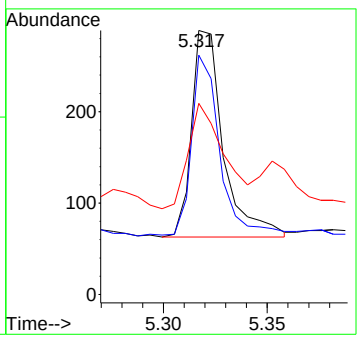


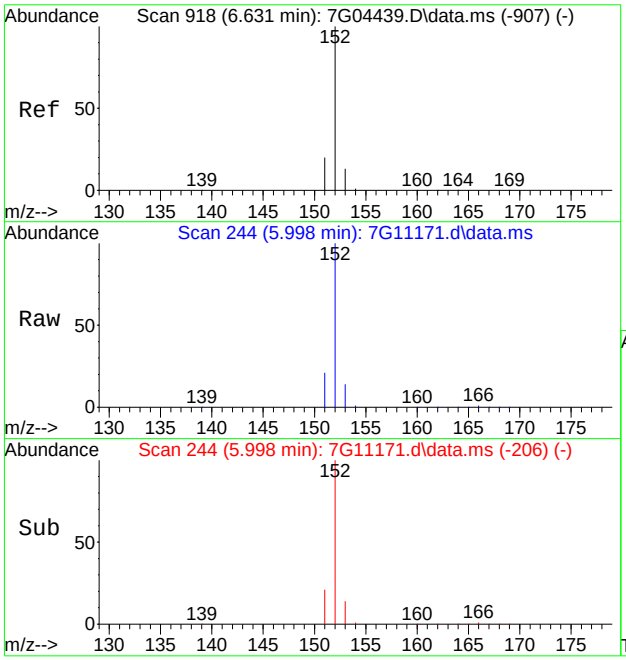


#5
1-Methylnaphthalene
Concen: 0.05 ppm m
RT: 5.317 min Scan# 125
Delta R.T. 0.006 min
Lab File: 7G11171.d
Acq: 13 Aug 2020 6:22 pm

Tgt Ion:142 Resp: 240

Ion	Ratio	Lower	Upper
142	100		
141	90.7	63.7	123.7
115	72.3	14.6	74.6

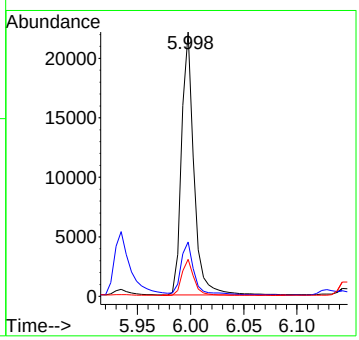


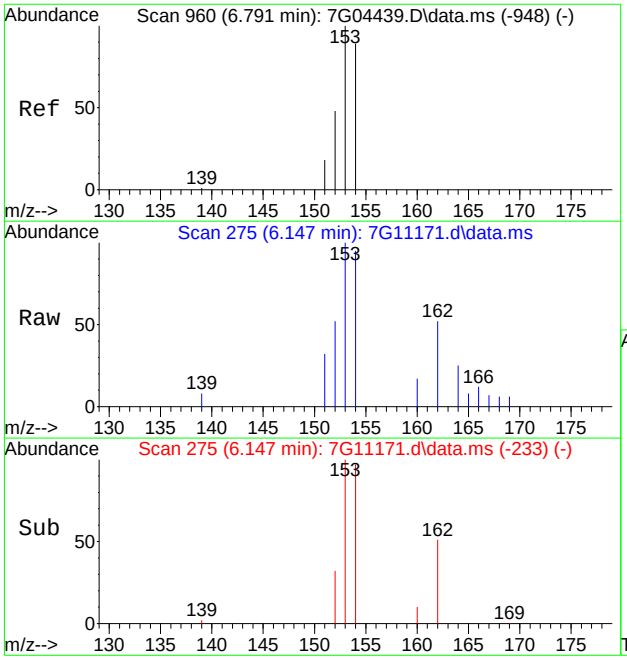


#7
Acenaphthylene
Concen: 2.00 ppm
RT: 5.998 min Scan# 244
Delta R.T. 0.005 min
Lab File: 7G11171.d
Acq: 13 Aug 2020 6:22 pm

Tgt Ion:152 Resp: 17907

Ion	Ratio	Lower	Upper
152	100		
151	19.7	0.0	49.8
153	13.7	0.0	43.7

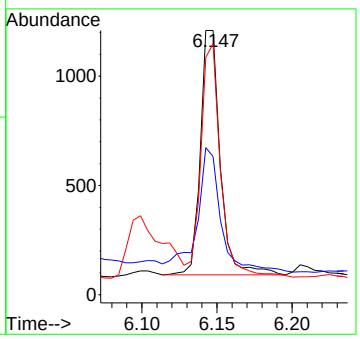


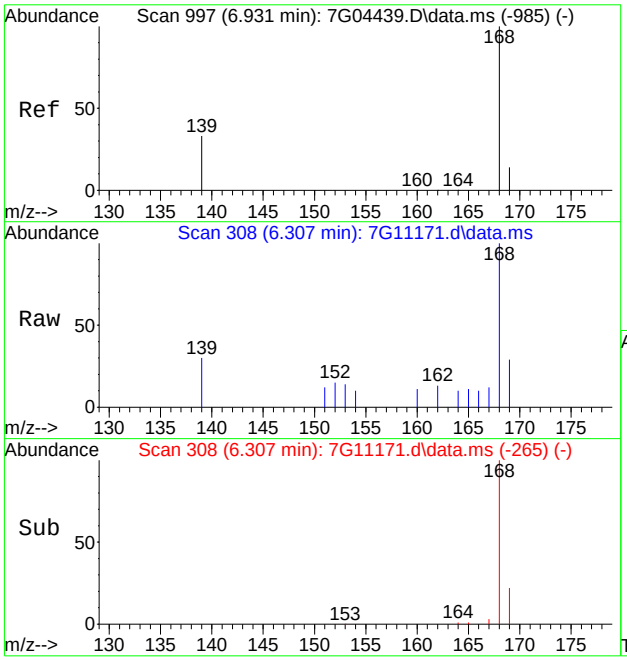


#8
Acenaphthene
Concen: 0.18 ppm
RT: 6.147 min Scan# 275
Delta R.T. 0.005 min
Lab File: 7G11171.d
Acq: 13 Aug 2020 6:22 pm

Tgt Ion:153 Resp: 1025

Ion	Ratio	Lower	Upper
153	100		
152	45.3	15.9	75.9
154	88.1	62.4	122.4

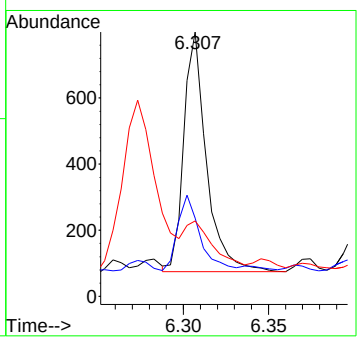


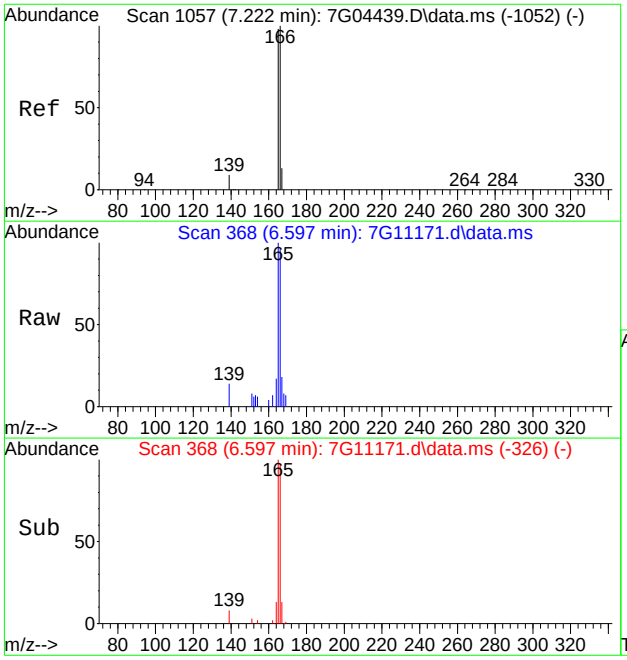


#9
Dibenzofuran
Concen: 0.16 ppm
RT: 6.307 min Scan# 308
Delta R.T. 0.010 min
Lab File: 7G11171.d
Acq: 13 Aug 2020 6:22 pm

Tgt Ion:168 Resp: 669

Ion	Ratio	Lower	Upper
168	100		
139	21.7	11.9	51.9
169	8.2	0.0	33.1

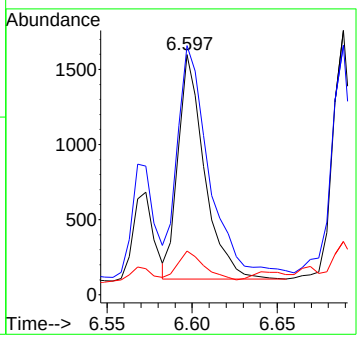


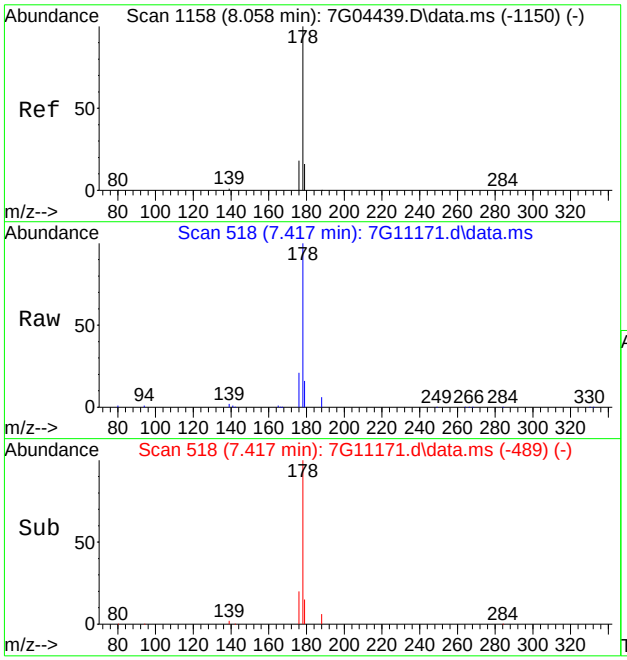


#10
Fluorene
Concen: 0.25 ppm
RT: 6.597 min Scan# 368
Delta R.T. 0.005 min
Lab File: 7G11171.d
Acq: 13 Aug 2020 6:22 pm

Tgt Ion:166 Resp: 1609

Ion	Ratio	Lower	Upper
166	100		
165	98.1	65.2	125.2
167	11.5	0.0	43.9

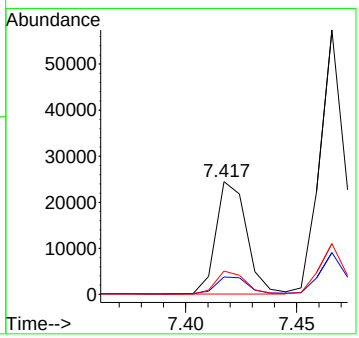


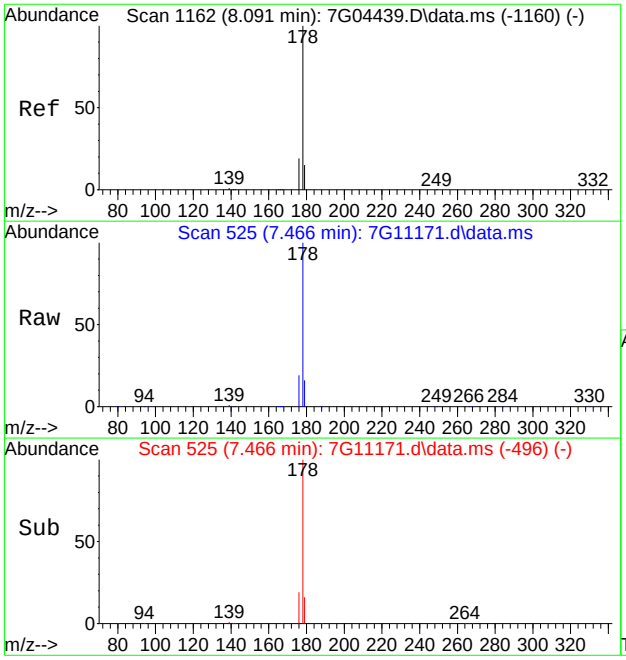


#13
Phenanthrene
Concen: 2.37 ppm
RT: 7.417 min Scan# 518
Delta R.T. 0.000 min
Lab File: 7G11171.d
Acq: 13 Aug 2020 6:22 pm

Tgt Ion:178 Resp: 23464

Ion	Ratio	Lower	Upper
178	100		
179	15.0	0.0	45.2
176	20.5	0.0	50.4

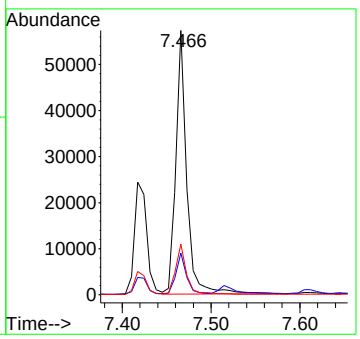


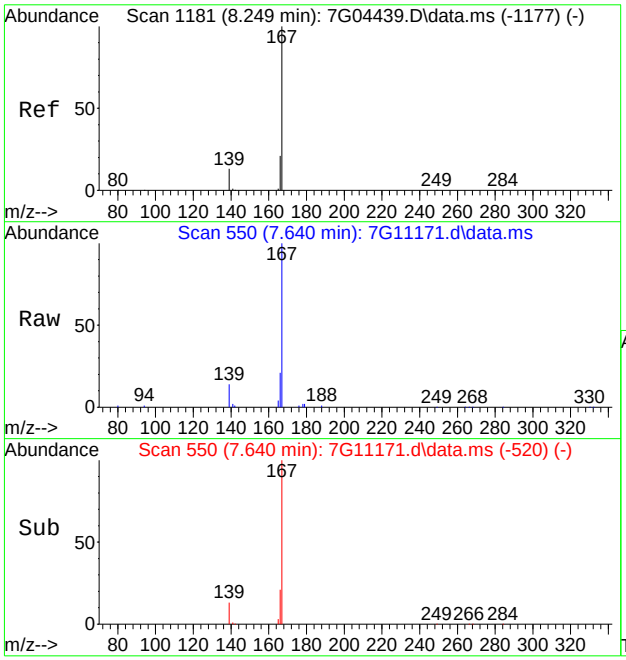


#14
Anthracene
Concen: 4.87 ppm
RT: 7.466 min Scan# 525
Delta R.T. 0.000 min
Lab File: 7G11171.d
Acq: 13 Aug 2020 6:22 pm

Tgt Ion:178 Resp: 48912

Ion	Ratio	Lower	Upper
178	100		
179	15.5	0.0	46.1
176	19.1	0.0	48.2

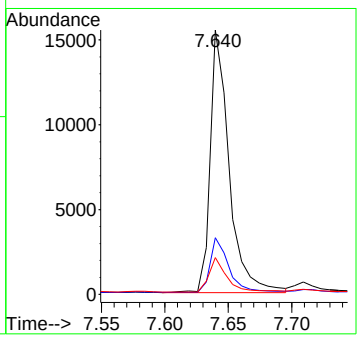


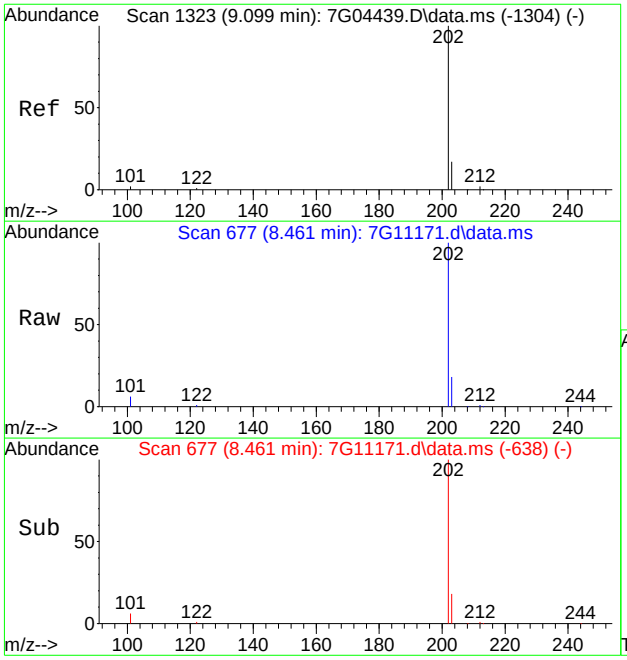


#15
Carbazole
Concen: 0.90 ppm
RT: 7.640 min Scan# 550
Delta R.T. 0.007 min
Lab File: 7G11171.d
Acq: 13 Aug 2020 6:22 pm

Tgt Ion:167 Resp: 16109

Ion	Ratio	Lower	Upper
167	100		
166	20.8	0.2	40.2
139	13.0	0.0	32.8

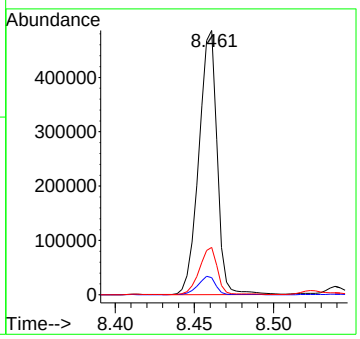


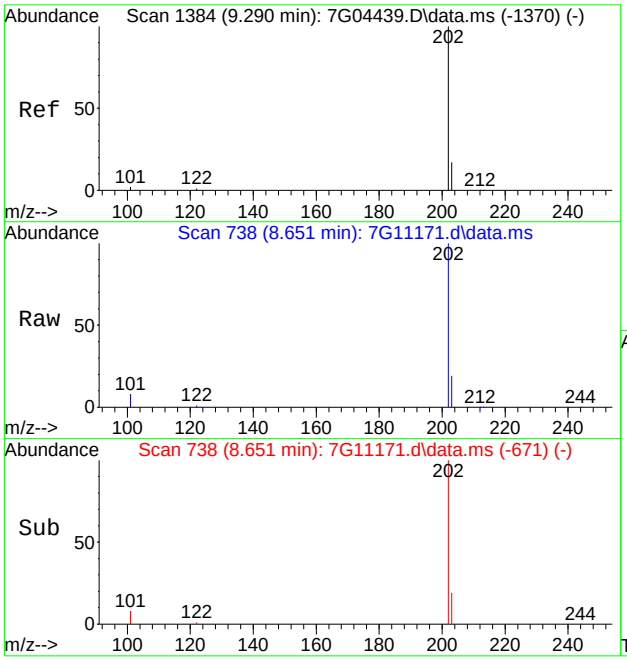


#16
Fluoranthene
Concen: 20.00 ppm
RT: 8.461 min Scan# 677
Delta R.T. 0.009 min
Lab File: 7G11171.d
Acq: 13 Aug 2020 6:22 pm

Tgt Ion:202 Resp: 390759

Ion	Ratio	Lower	Upper
202	100		
101	6.4	0.0	36.5
203	17.8	0.0	47.5

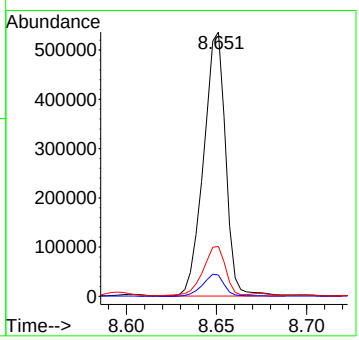


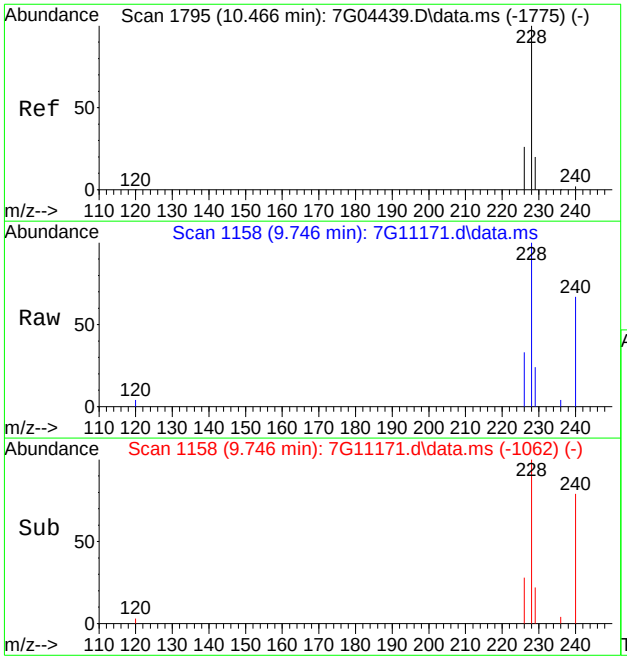


#19
Pyrene
Concen: 3.83 ppm
RT: 8.651 min Scan# 738
Delta R.T. 0.009 min
Lab File: 7G11171.d
Acq: 13 Aug 2020 6:22 pm

Tgt Ion:202 Resp: 455830

Ion	Ratio	Lower	Upper
202	100		
101	8.1	0.0	37.5
203	18.6	0.0	48.3

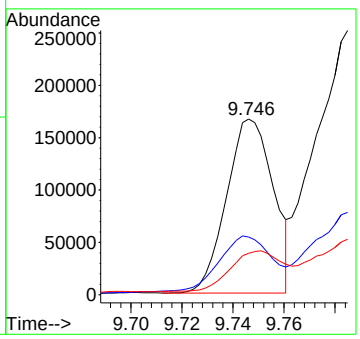


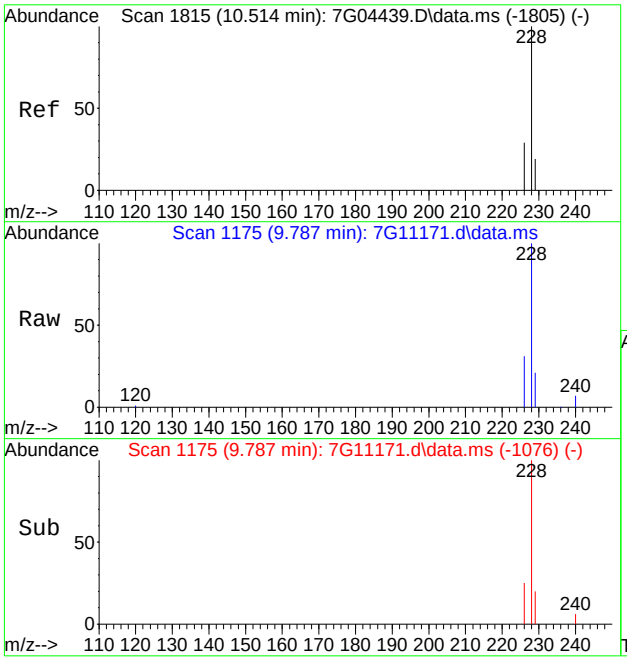


#20
Benzo[a]anthracene
Concen: 2.27 ppm
RT: 9.746 min Scan# 1158
Delta R.T. 0.031 min
Lab File: 7G11171.d
Acq: 13 Aug 2020 6:22 pm

Tgt Ion:228 Resp: 212184

Ion	Ratio	Lower	Upper
228	100		
226	30.6	0.0	57.2
229	17.9	0.0	49.7

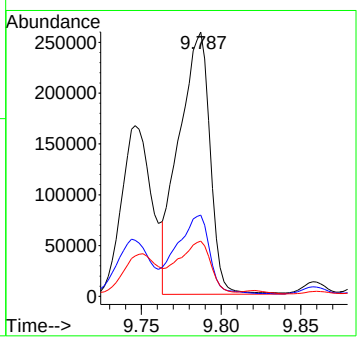


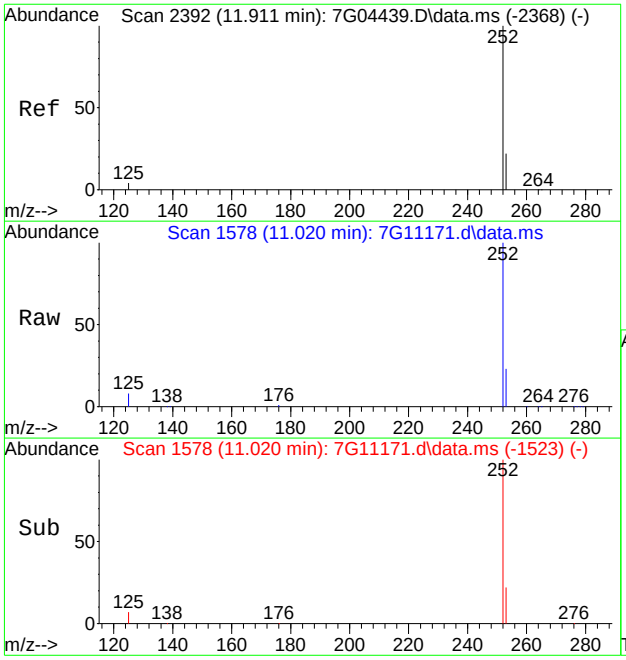


#21
Chrysene
Concen: 3.37 ppm
RT: 9.787 min Scan# 1175
Delta R.T. 0.039 min
Lab File: 7G11171.d
Acq: 13 Aug 2020 6:22 pm

Tgt Ion:228 Resp: 350610

Ion	Ratio	Lower	Upper
228	100		
226	29.1	0.0	59.8
229	17.8	0.0	49.5

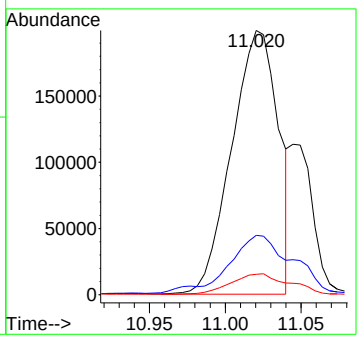


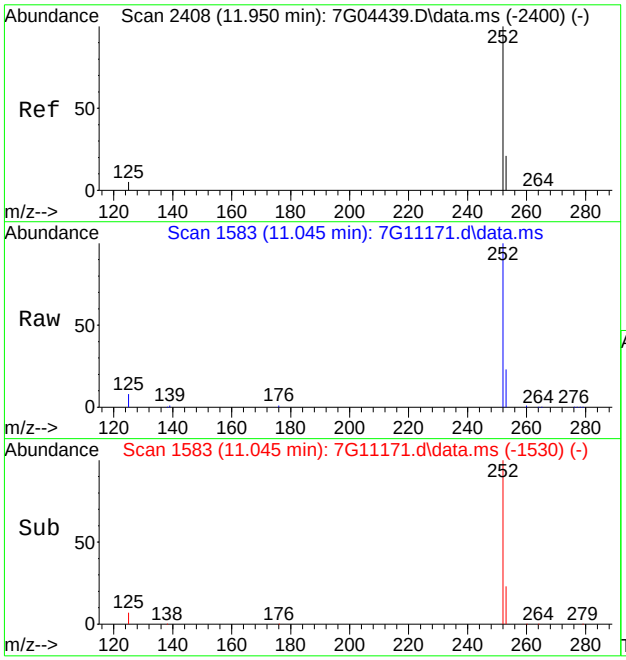


#23
Benzo[b]fluoranthene
Concen: 35.93 ppm m
RT: 11.020 min Scan# 1578
Delta R.T. 0.068 min
Lab File: 7G11171.d
Acq: 13 Aug 2020 6:22 pm

Tgt Ion:252 Resp: 426500

Ion	Ratio	Lower	Upper
252	100		
253	22.5	0.0	51.7
125	7.7	0.0	37.1

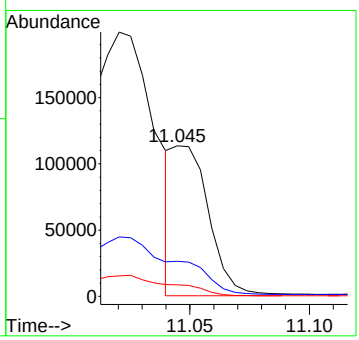


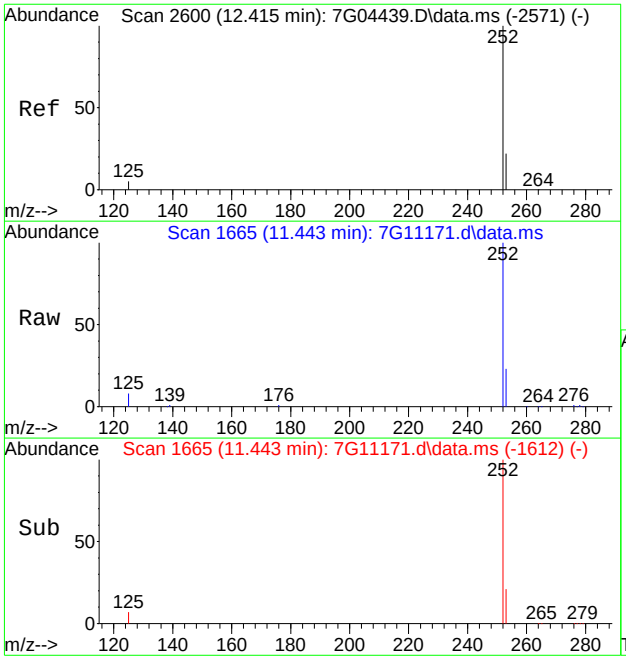


#24
Benzo[k]fluoranthene
Concen: 9.27 ppm m
RT: 11.045 min Scan# 1583
Delta R.T. 0.058 min
Lab File: 7G11171.d
Acq: 13 Aug 2020 6:22 pm

Tgt Ion:252 Resp: 118908

Ion	Ratio	Lower	Upper
252	100		
253	23.4	0.0	51.8
125	7.7	0.0	37.5

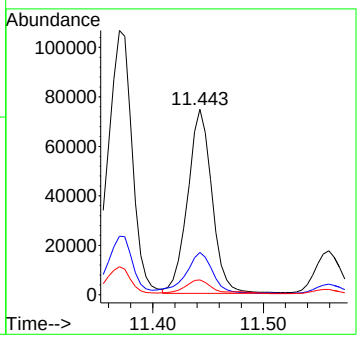


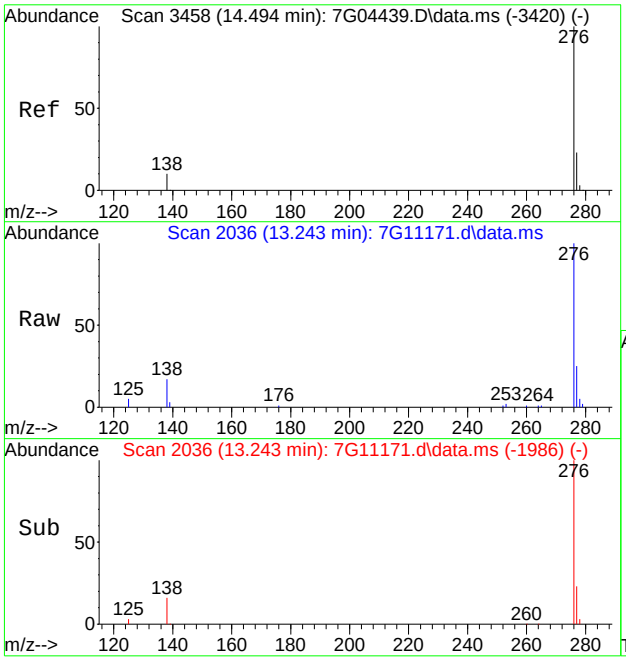


#25
Benzo[a]pyrene
Concen: 9.89 ppm
RT: 11.443 min Scan# 1665
Delta R.T. 0.058 min
Lab File: 7G11171.d
Acq: 13 Aug 2020 6:22 pm

Tgt Ion:252 Resp: 114414

Ion	Ratio	Lower	Upper
252	100		
253	21.3	0.0	51.8
125	7.2	0.0	38.3

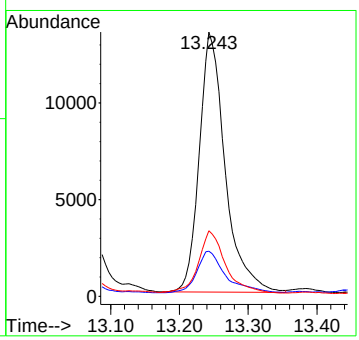


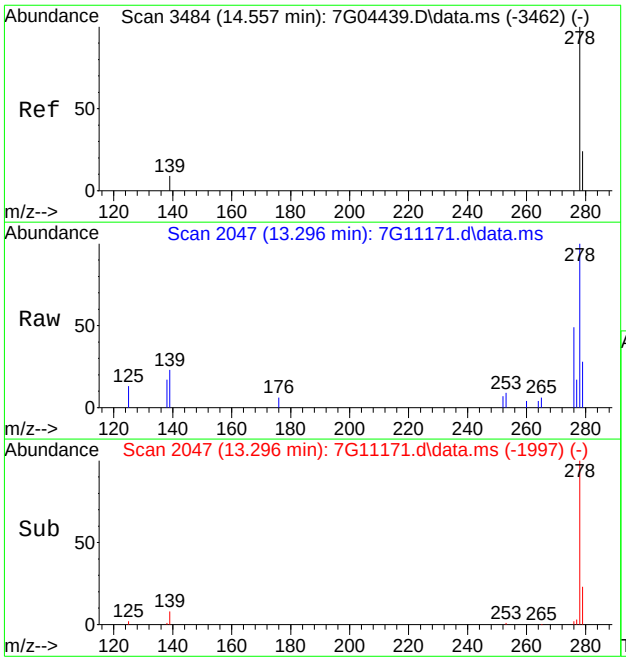


#26
Indeno[1,2,3-cd]pyrene
Concen: 4.65 ppm
RT: 13.243 min Scan# 2036
Delta R.T. 0.044 min
Lab File: 7G11171.d
Acq: 13 Aug 2020 6:22 pm

Tgt Ion:276 Resp: 35114

Ion	Ratio	Lower	Upper
276	100		
138	15.9	0.0	46.1
277	23.9	0.0	53.8

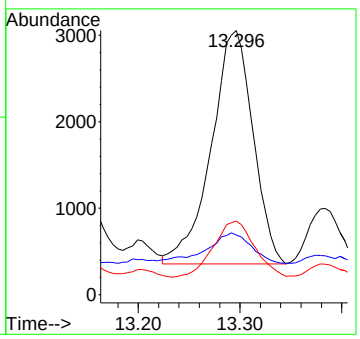


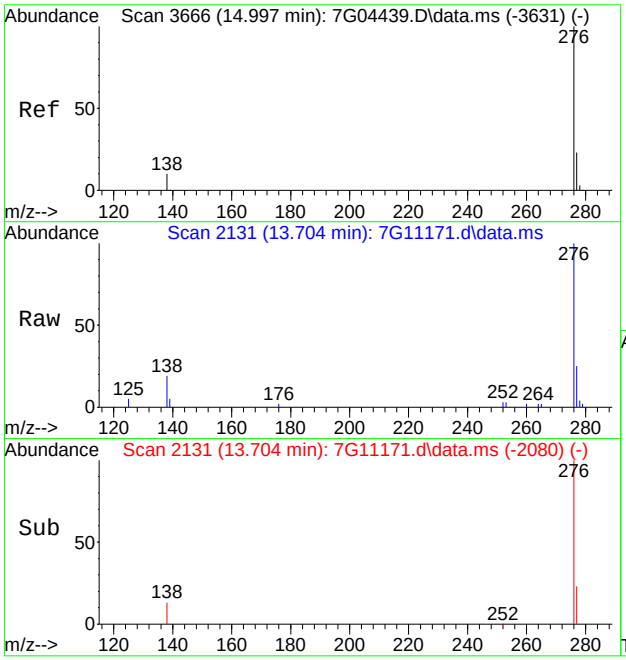


#27
Dibenz[a,h]anthracene
Concen: 0.92 ppm
RT: 13.296 min Scan# 2047
Delta R.T. 0.044 min
Lab File: 7G11171.d
Acq: 13 Aug 2020 6:22 pm

Tgt Ion:278 Resp: 7691

Ion	Ratio	Lower	Upper
278	100		
139	11.5	0.0	43.8
279	23.9	0.0	54.2

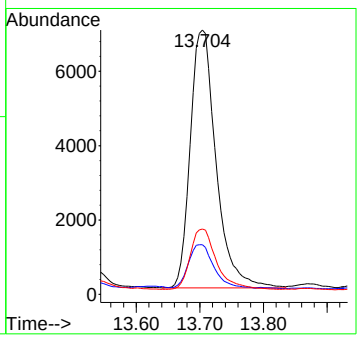




#28
Benzo[g,h,i]perylene
Concen: 2.15 ppm
RT: 13.704 min Scan# 2131
Delta R.T. 0.049 min
Lab File: 7G11171.d
Acq: 13 Aug 2020 6:22 pm

Tgt Ion:276 Resp: 19592

Ion	Ratio	Lower	Upper
276	100		
138	16.6	0.0	47.7
277	23.3	0.0	53.9



Manual Integration Approval Summary

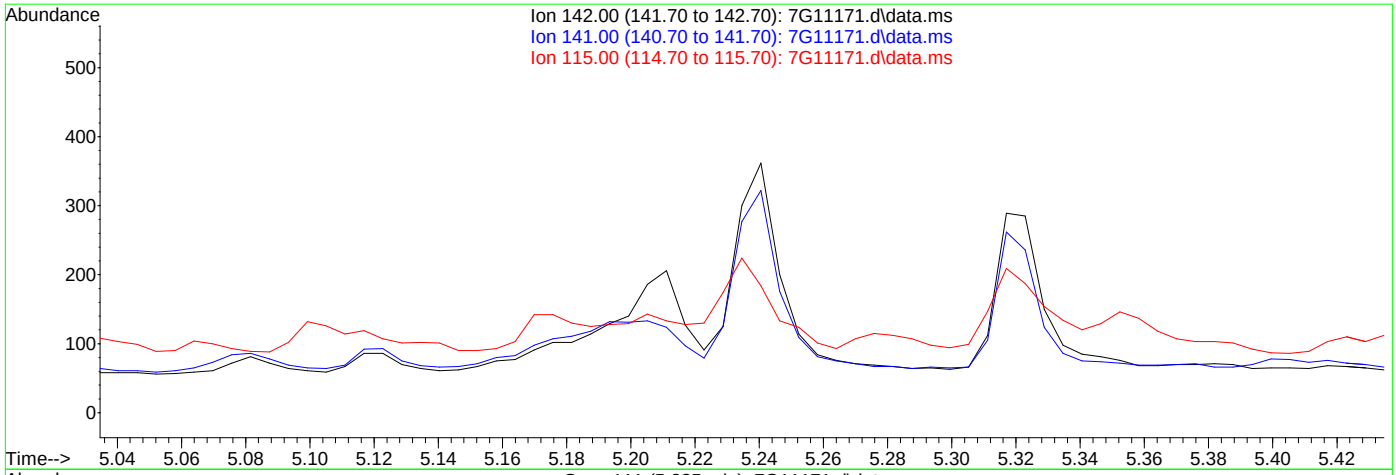
Sample Number: FA77689-10
Lab FileID: 7G11171.D
Injection Time: 08/13/20 18:22
Method: SW846 8270E BY SIM
Analyst approved: 08/14/20 11:02 Fouad Sekkar
Supervisor approved: 08/14/20 11:43 Naresh Jiawan

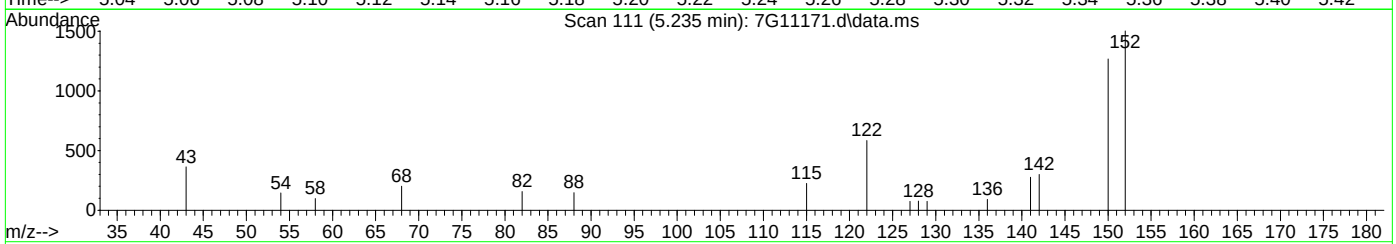
Parameter	CAS	Sig#	R.T. (min.)	Reason
2-Methylnaphthalene	91-57-6		5.24	Missed peak
1-Methylnaphthalene	90-12-0		5.32	Missed peak
Chrysene-d12	1719-03-5		9.76	Poor instrument integration
Benzo(b)fluoranthene	205-99-2		11.02	Overlapping peak
Benzo(k)fluoranthene	207-08-9		11.04	Overlapping peak

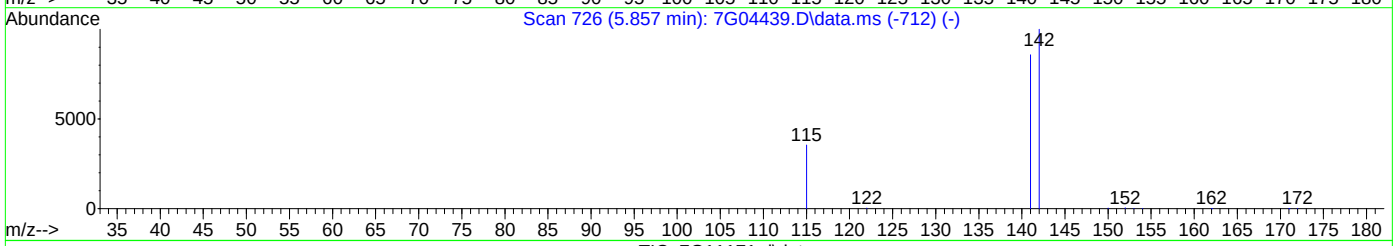
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
Data File : 7G11171.d
Acq On : 13 Aug 2020 6:22 pm
Operator : FOUADS
Sample : fa77689-10 e
Misc : op81539,S7G484,30.3,,,1,1,soil
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 14 03:10:19 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11171.d\data.ms

(3) 2-Methylnaphthalene (P)

5.235min (-5.235) 0.00ppm

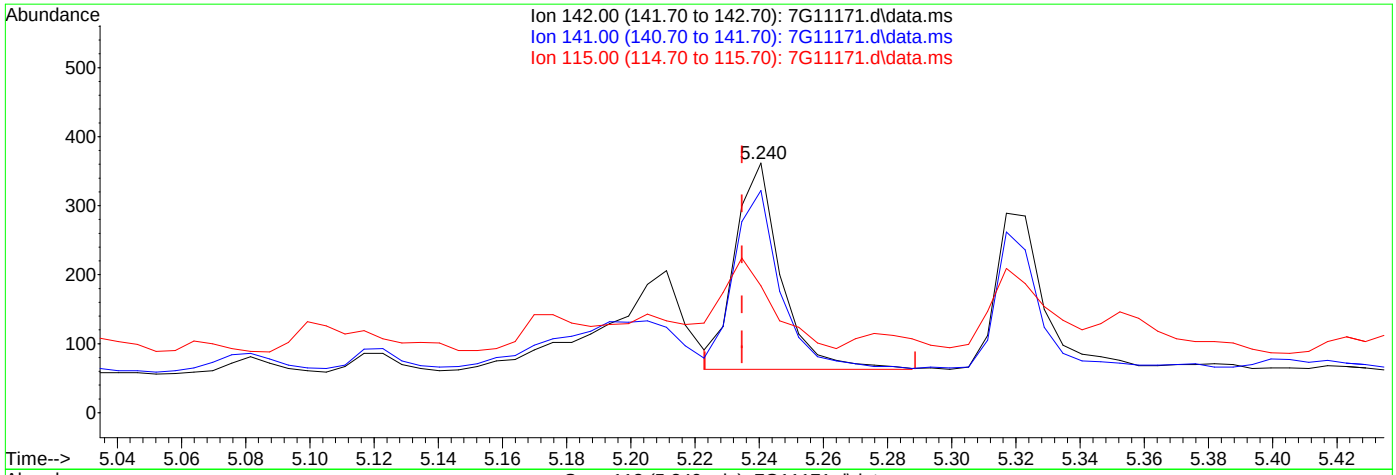
response 0

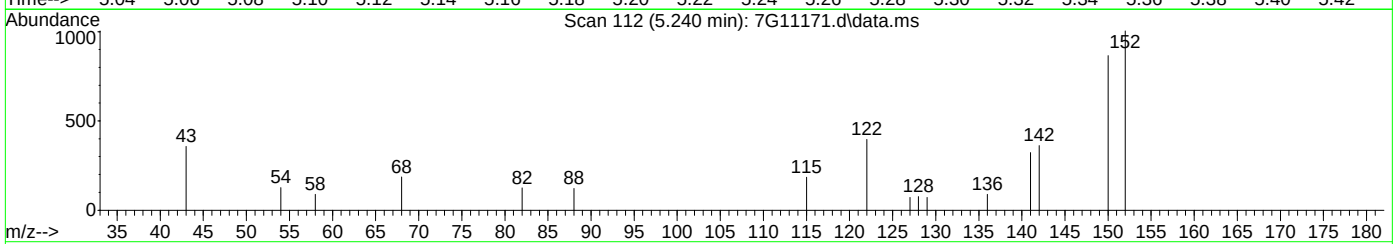
Ion	Exp%	Act%
142.00	100	0.00
141.00	84.20	0.00#
115.00	27.60	0.00
0.00	0.00	0.00

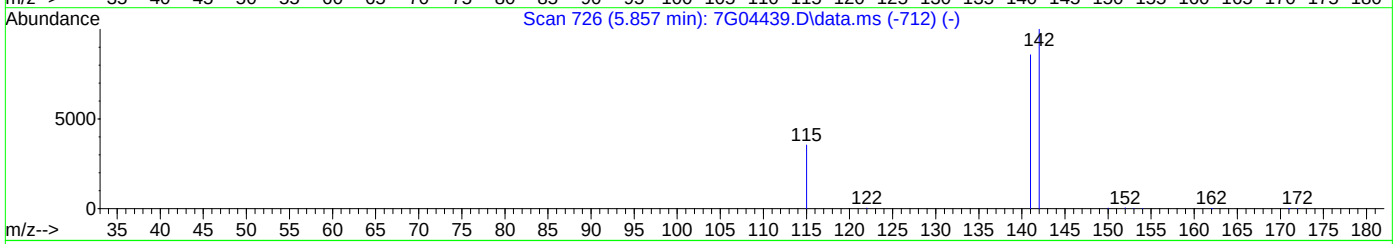
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
Data File : 7G11171.d
Acq On : 13 Aug 2020 6:22 pm
Operator : FOUADS
Sample : fa77689-10 e
Misc : op81539,S7G484,30.3,,,1,1,soil
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 14 03:10:19 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11171.d\data.ms

(3) 2-Methylnaphthalene (P)

5.240min (+0.006) 0.06ppm m

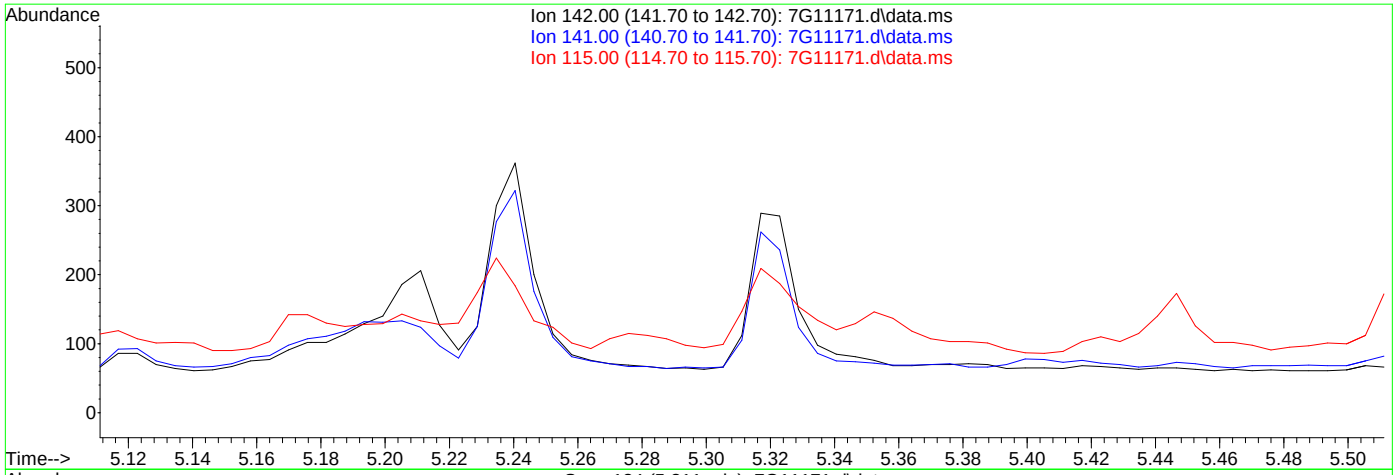
response 296

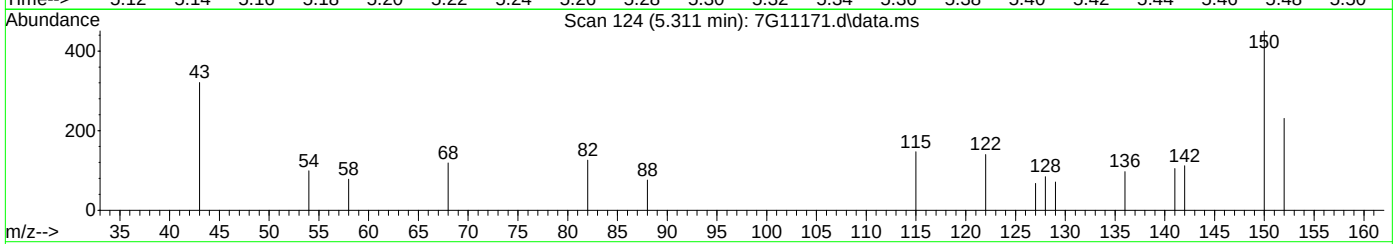
Ion	Exp%	Act%
142.00	100	100
141.00	84.20	88.95
115.00	27.60	50.83
0.00	0.00	0.00

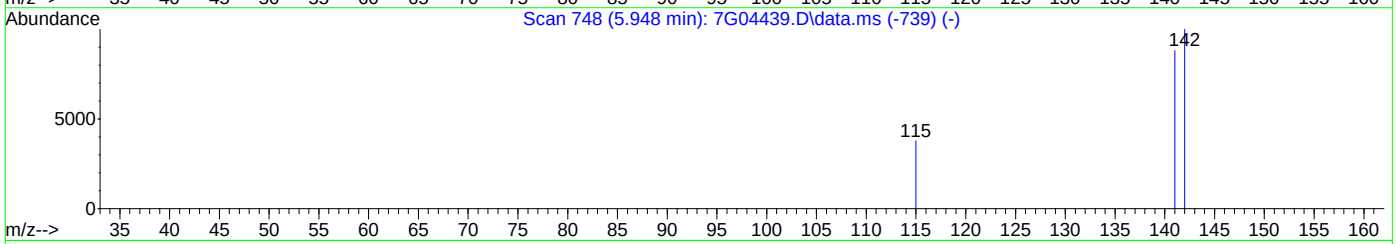
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
Data File : 7G11171.d
Acq On : 13 Aug 2020 6:22 pm
Operator : FOUADS
Sample : fa77689-10 e
Misc : op81539,S7G484,30.3,,,1,1,soil
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 14 03:10:19 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11171.d\data.ms

(5) 1-Methylnaphthalene (P)

5.311min (-5.311) 0.00ppm

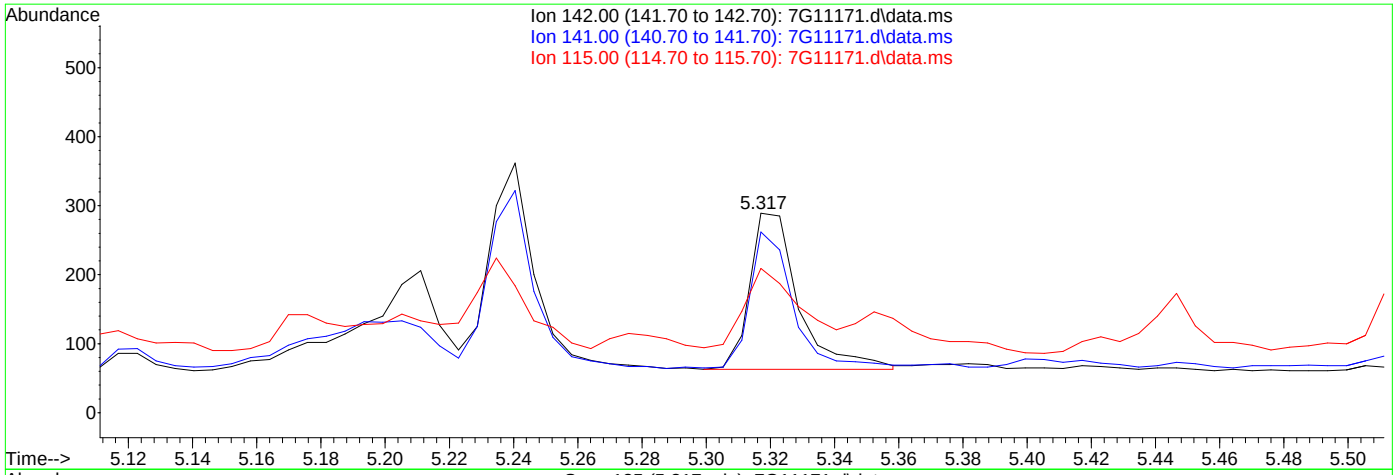
response 0

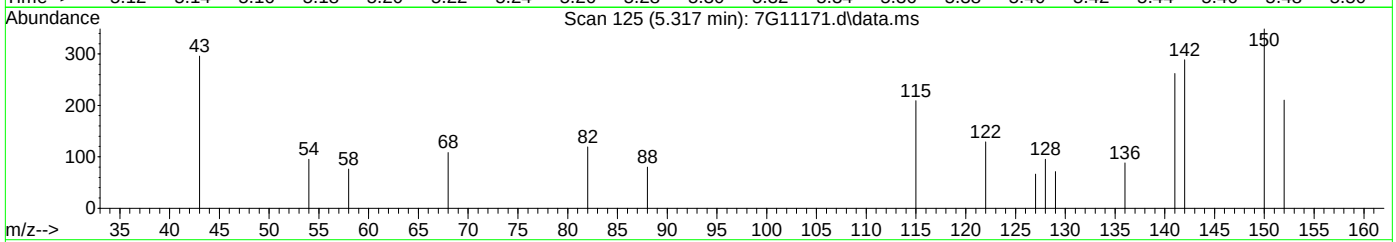
Ion	Exp%	Act%
142.00	100	0.00
141.00	93.70	0.00#
115.00	44.60	0.00#
0.00	0.00	0.00

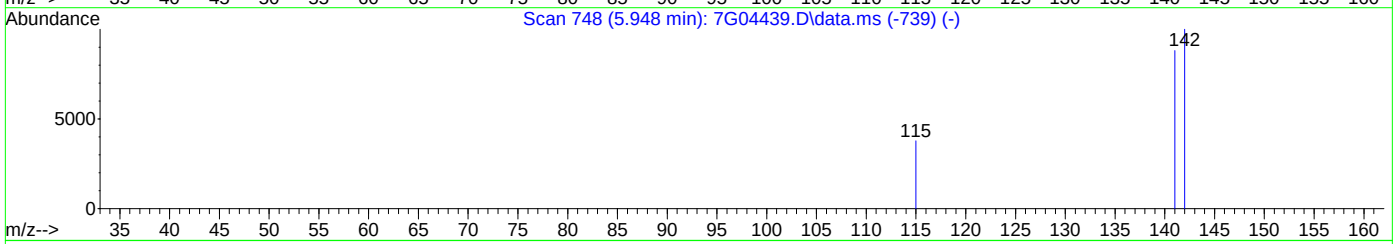
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
Data File : 7G11171.d
Acq On : 13 Aug 2020 6:22 pm
Operator : FOUADS
Sample : fa77689-10 e
Misc : op81539,S7G484,30.3,,,1,1,soil
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 14 03:10:19 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11171.d\data.ms

(5) 1-Methylnaphthalene (P)

5.317min (+0.006) 0.05ppm m

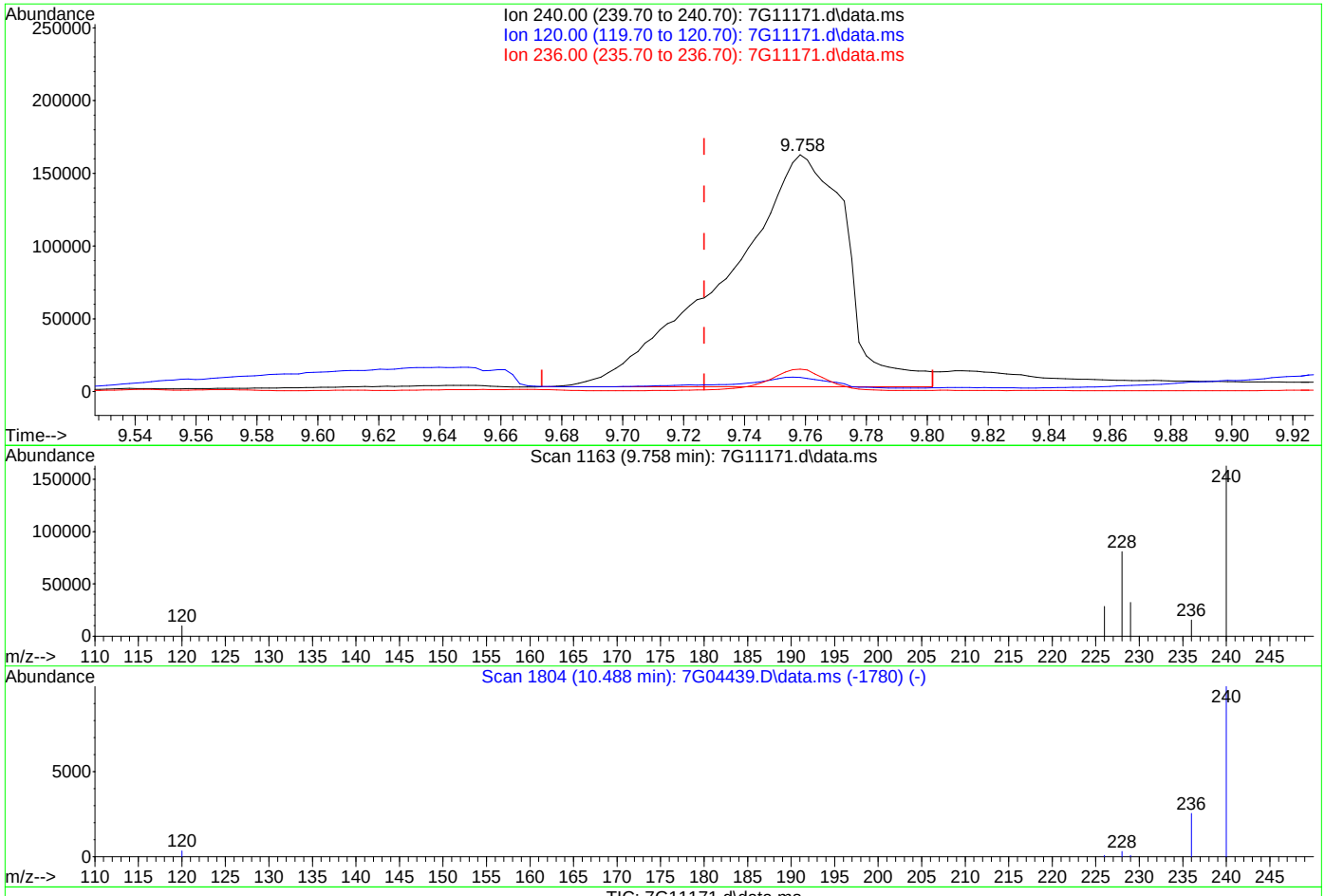
response 240

Ion	Exp%	Act%
142.00	100	100
141.00	93.70	90.66
115.00	44.60	72.32
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
Data File : 7G11171.d
Acq On : 13 Aug 2020 6:22 pm
Operator : FOUADS
Sample : fa77689-10 e
Misc : op81539,S7G484,30.3,,,1,1,soil
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 14 03:10:19 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration



TIC: 7G11171.d\data.ms

(18) Chrysene-d12 (I)

9.758min (+0.031) 4.00ppm

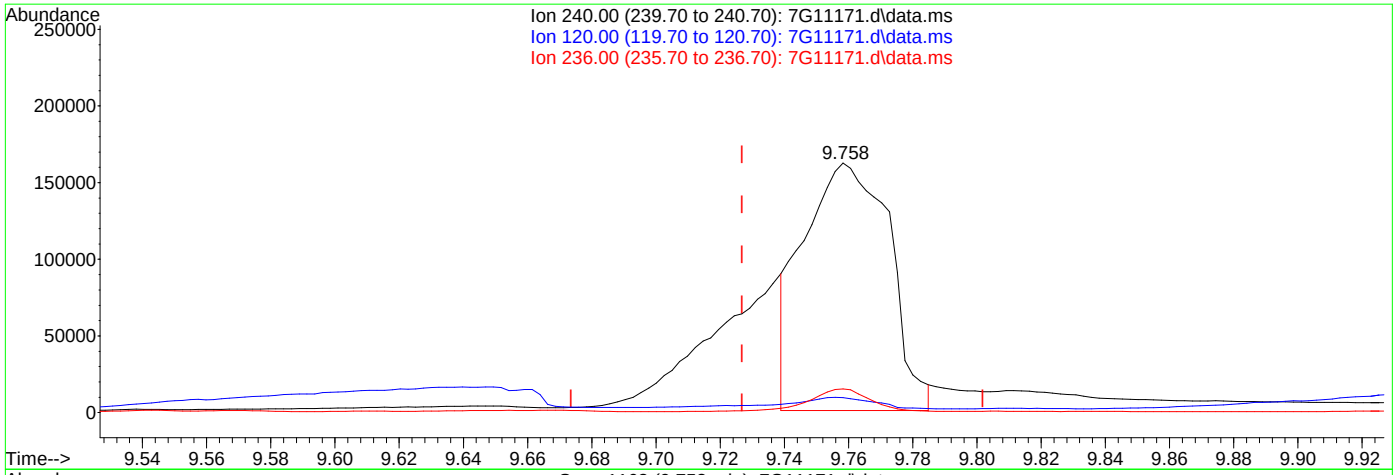
response 437088

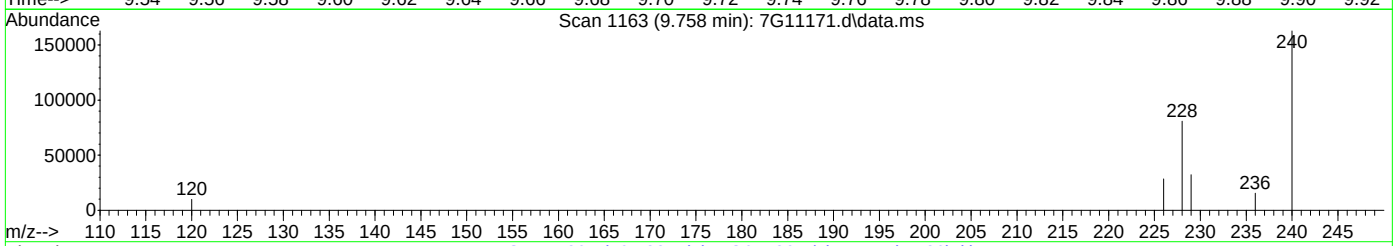
Ion	Exp%	Act%
240.00	100	100
120.00	7.70	4.38
236.00	26.10	9.29
0.00	0.00	0.00

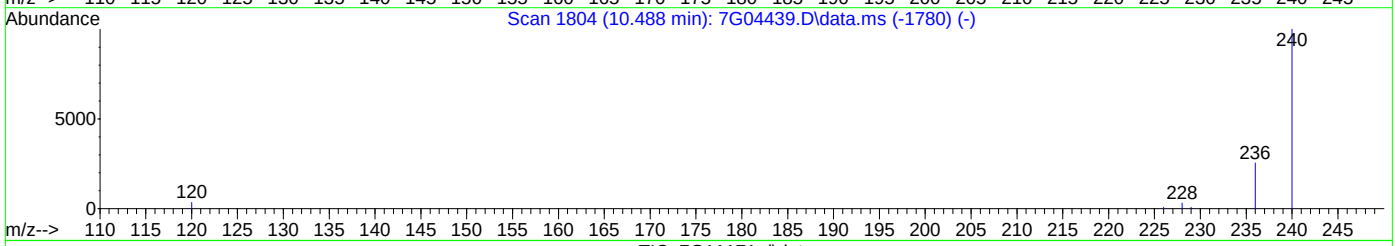
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
Data File : 7G11171.d
Acq On : 13 Aug 2020 6:22 pm
Operator : FOUADS
Sample : fa77689-10 e
Misc : op81539,S7G484,30.3,,,1,1,soil
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 14 03:10:19 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11171.d\data.ms

(18) Chrysene-d12 (I)

9.758min (+0.031) 4.00ppm m

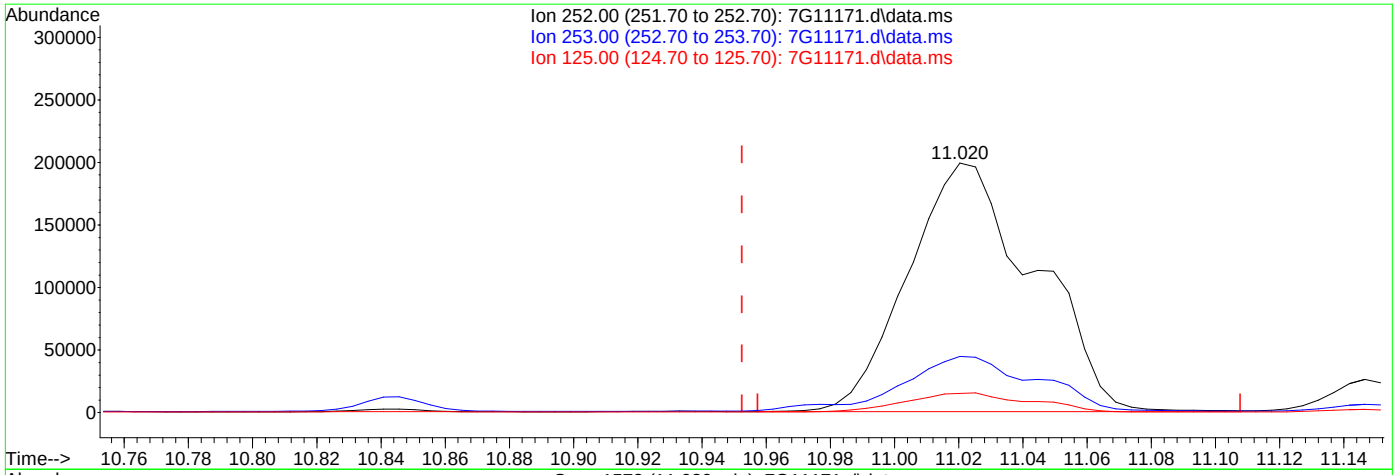
response 299948

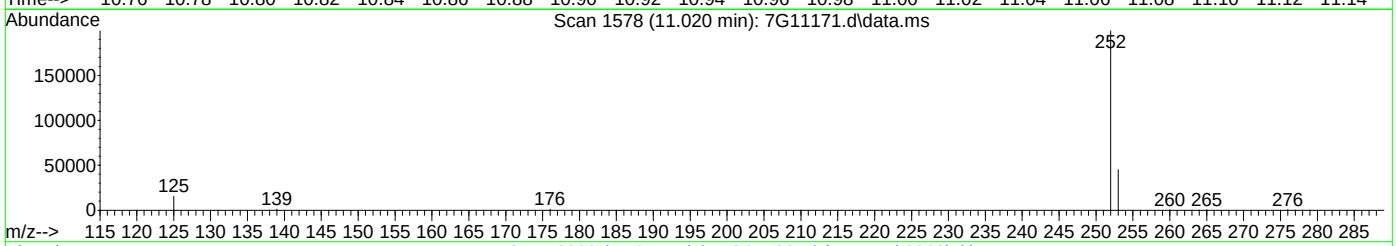
Ion	Exp%	Act%
240.00	100	100
120.00	7.70	6.06
236.00	26.10	9.52
0.00	0.00	0.00

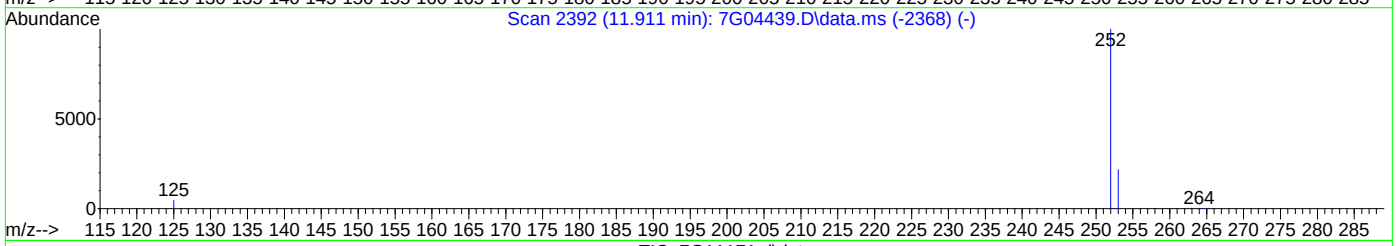
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
Data File : 7G11171.d
Acq On : 13 Aug 2020 6:22 pm
Operator : FOUADS
Sample : fa77689-10 e
Misc : op81539,S7G484,30.3,,,1,1,soil
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 14 03:10:19 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11171.d\data.ms

(23) Benzo[b]fluoranthene (P)

11.020min (+0.068) 45.89ppm

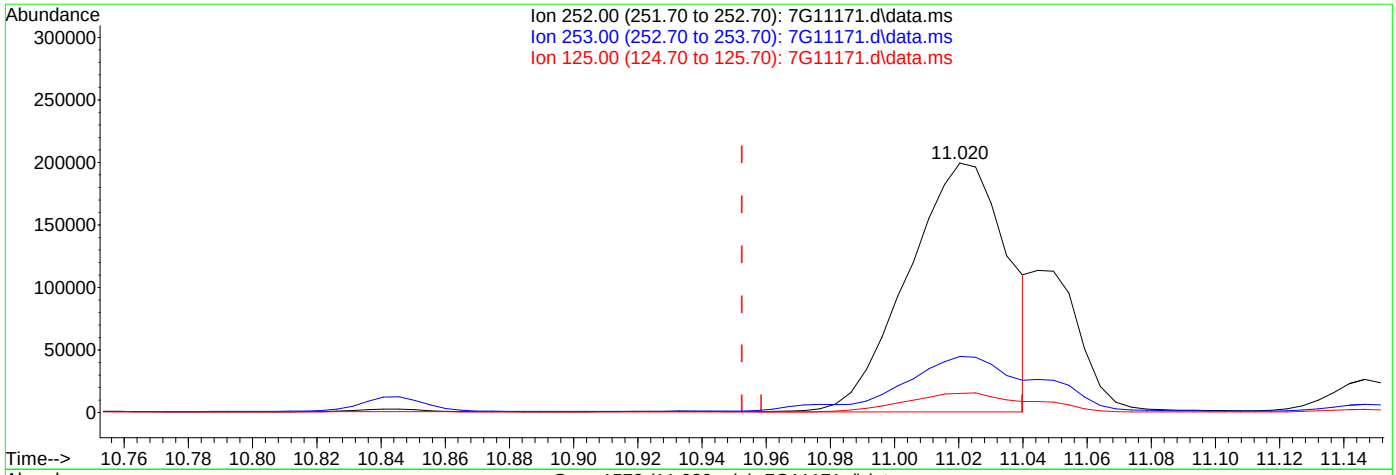
response 544689

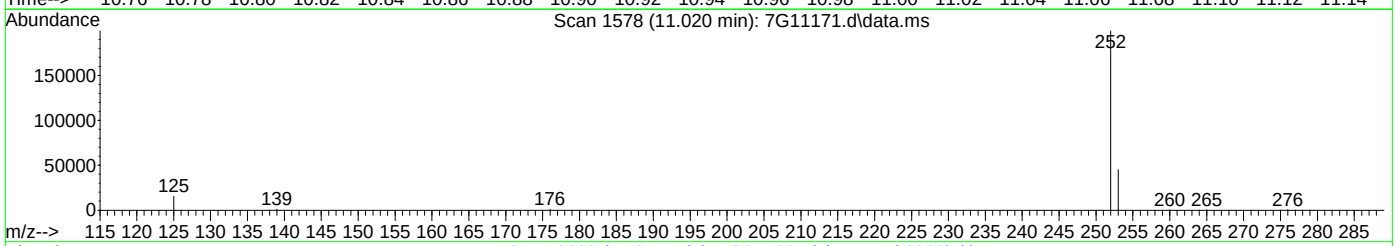
Ion	Exp%	Act%
252.00	100	100
253.00	21.70	21.91
125.00	7.10	7.52
0.00	0.00	0.00

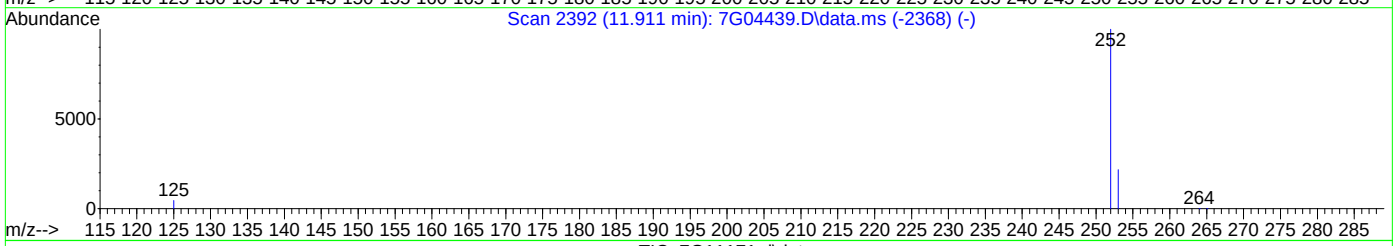
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
Data File : 7G11171.d
Acq On : 13 Aug 2020 6:22 pm
Operator : FOUADS
Sample : fa77689-10 e
Misc : op81539,S7G484,30.3,,,1,1,soil
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 14 03:10:19 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11171.d\data.ms

(23) Benzo[b]fluoranthene (P)

11.020min (+0.068) 35.93ppm m

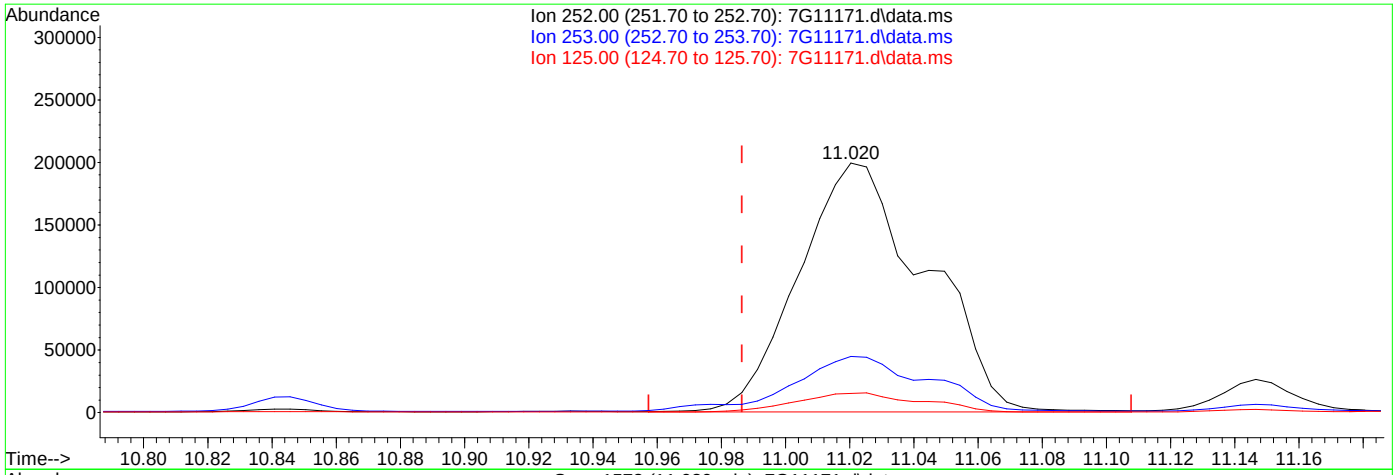
response 426500

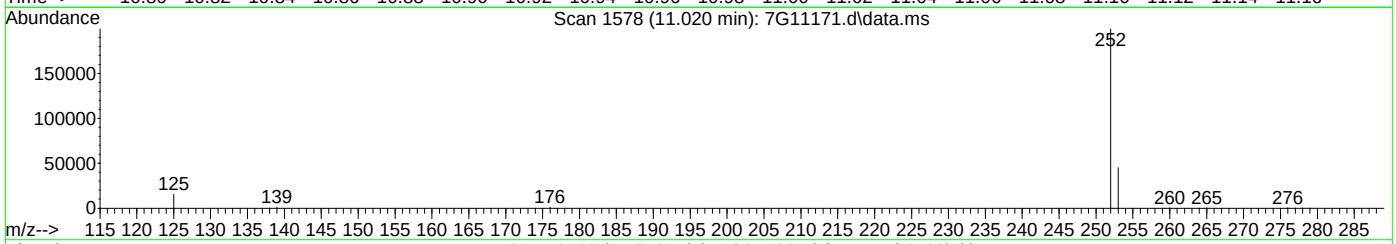
Ion	Exp%	Act%
252.00	100	100
253.00	21.70	22.51
125.00	7.10	7.72
0.00	0.00	0.00

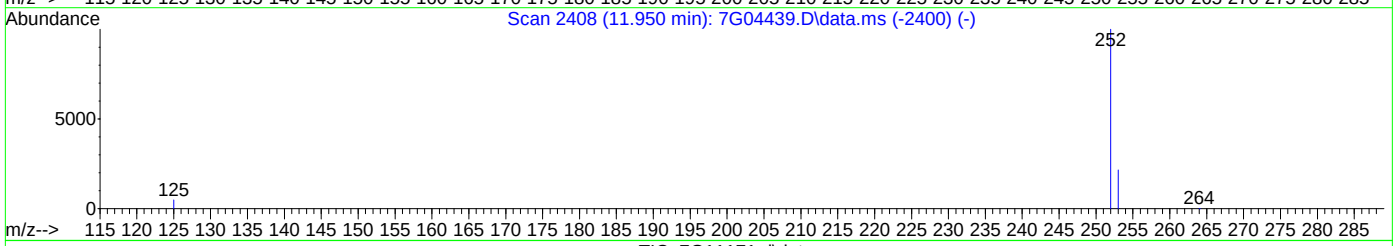
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
Data File : 7G11171.d
Acq On : 13 Aug 2020 6:22 pm
Operator : FOUADS
Sample : fa77689-10 e
Misc : op81539,S7G484,30.3,,,1,1,soil
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 14 03:10:19 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11171.d\data.ms

(24) Benzo[k]fluoranthene (P)

11.020min (+0.034) 39.09ppm

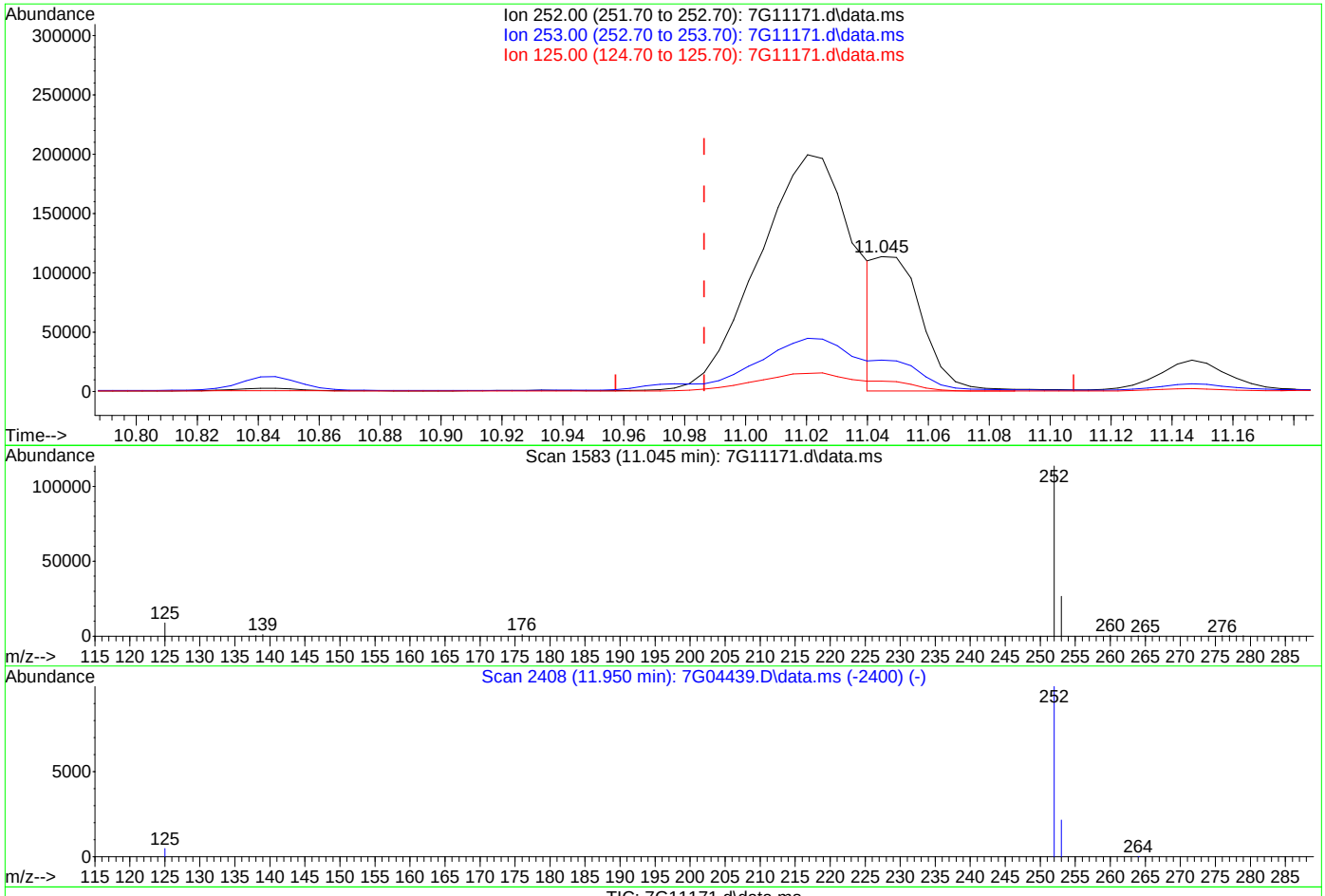
response 545831

Ion	Exp%	Act%
252.00	100	100
253.00	21.80	21.91
125.00	7.50	7.52
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
Data File : 7G11171.d
Acq On : 13 Aug 2020 6:22 pm
Operator : FOUADS
Sample : fa77689-10 e
Misc : op81539,S7G484,30.3,,,1,1,soil
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 14 03:10:19 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration



TIC: 7G11171.d\data.ms

(24) Benzo[k]fluoranthene (P)

11.045min (+0.058) 9.27ppm m

response 118908

Ion	Exp%	Act%
252.00	100	100
253.00	21.80	23.35
125.00	7.50	7.69
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan
08/14/20 11:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
Data File : 7G11172.d
Acq On : 13 Aug 2020 6:46 pm
Operator : FOUADS
Sample : fa77689-11 e
Misc : op81539,S7G484,30.0,,,1,1,soil
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 14 03:38:36 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

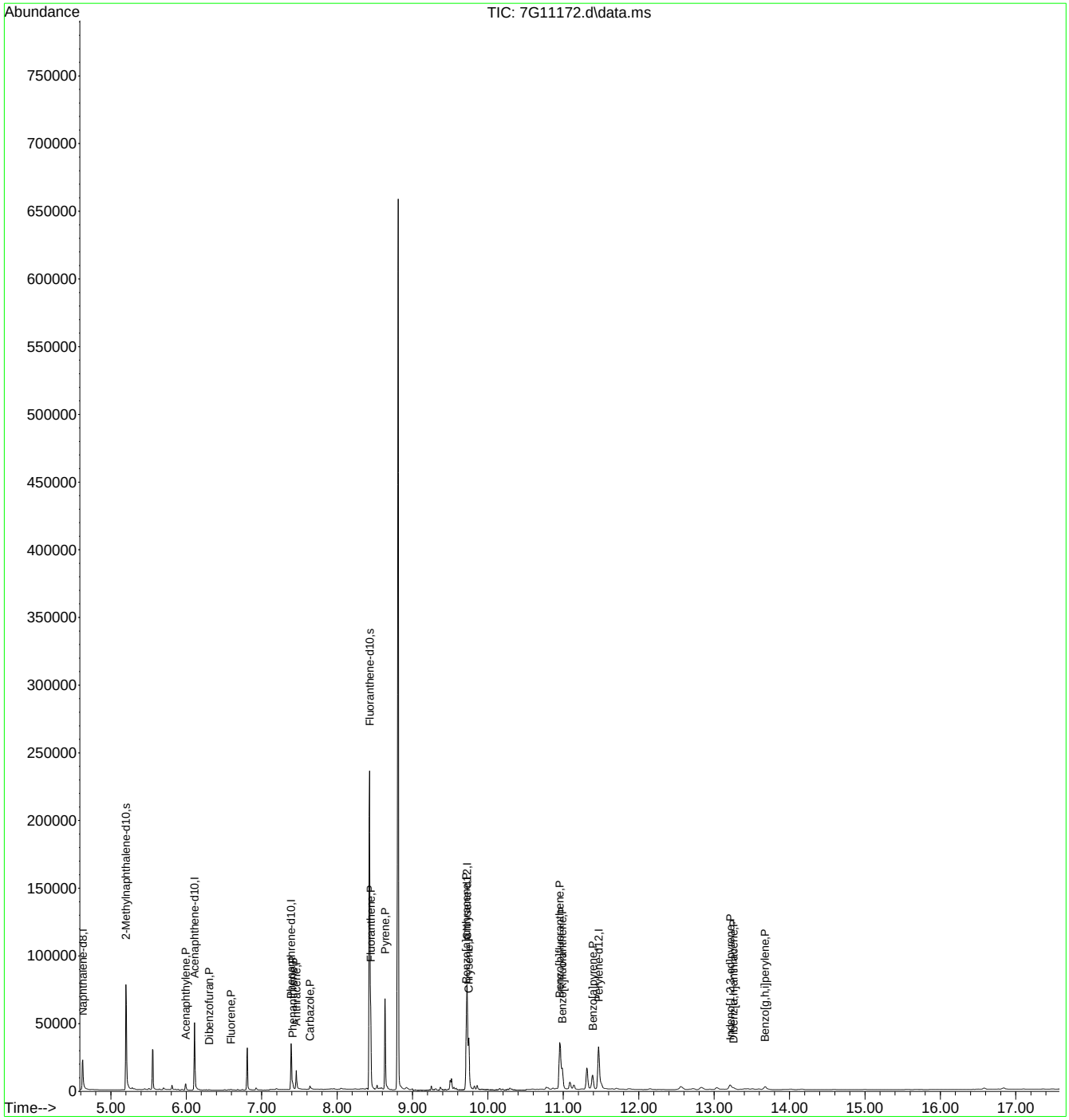
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.628	136	22571	4.00	ppm	0.00
6) Acenaphthene-d10	6.109	164	16247	4.00	ppm	0.00
11) Phenanthrene-d10	7.390	188	28425	4.00	ppm	0.00
18) Chrysene-d12	9.724	240	48599	4.00	ppm	0.00
22) Perylene-d12	11.467	264	37382	4.00	ppm	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.199	152	31032	9.20	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 92.00%			
17) Fluoranthene-d10	8.430	212	150659	10.14	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 101.40%			
Target Compounds						Qvalue
7) Acenaphthylene	5.993	152	3583	0.39	ppm	99
9) Dibenzofuran	6.302	168	284m	0.07	ppm	
10) Fluorene	6.592	166	316	0.05	ppm	91
13) Phenanthrene	7.410	178	2184	0.23	ppm	99
14) Anthracene	7.459	178	10009	1.06	ppm	98
15) Carbazole	7.640	167	2601	0.15	ppm	99
16) Fluoranthene	8.445	202	39404	2.23	ppm	100
19) Pyrene	8.636	202	45614	2.37	ppm	98
20) Benzo[a]anthracene	9.712	228	19360	1.28	ppm	88
21) Chrysene	9.746	228	36141m	2.15	ppm	
23) Benzo[b]fluoranthene	10.953	252	47464m	3.74	ppm	
24) Benzo[k]fluoranthene	10.986	252	15881m	1.19	ppm	
25) Benzo[a]pyrene	11.389	252	13499	1.09	ppm	99
26) Indeno[1,2,3-cd]pyrene	13.214	276	6447	0.80	ppm	99
27) Dibenz[a,h]anthracene	13.258	278	1606m	0.18	ppm	
28) Benzo[g,h,i]perylene	13.675	276	4428	0.46	ppm	98

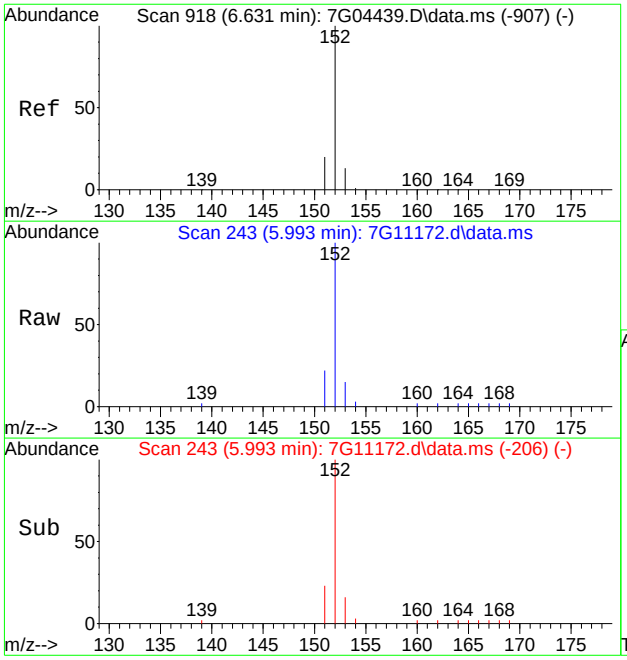
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
Data File : 7G11172.d
Acq On : 13 Aug 2020 6:46 pm
Operator : FOUADS
Sample : fa77689-11 e
Misc : op81539,S7G484,30.0,,,1,1,soil
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 14 03:38:36 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

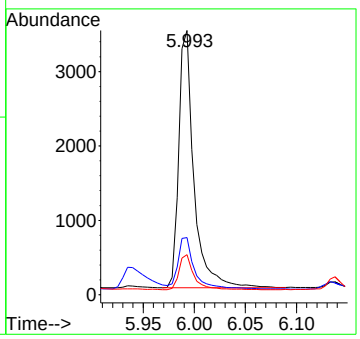


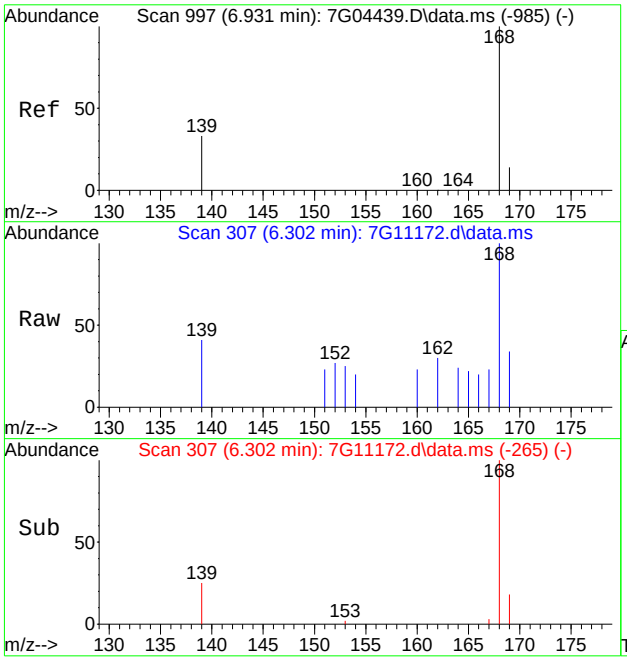


#7
Acenaphthylene
Concen: 0.39 ppm
RT: 5.993 min Scan# 243
Delta R.T. 0.000 min
Lab File: 7G11172.d
Acq: 13 Aug 2020 6:46 pm

Tgt Ion:152 Resp: 3583

Ion	Ratio	Lower	Upper
152	100		
151	19.2	0.0	49.8
153	13.5	0.0	43.7

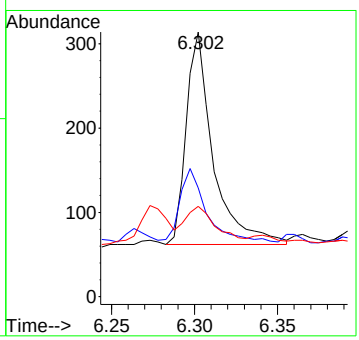


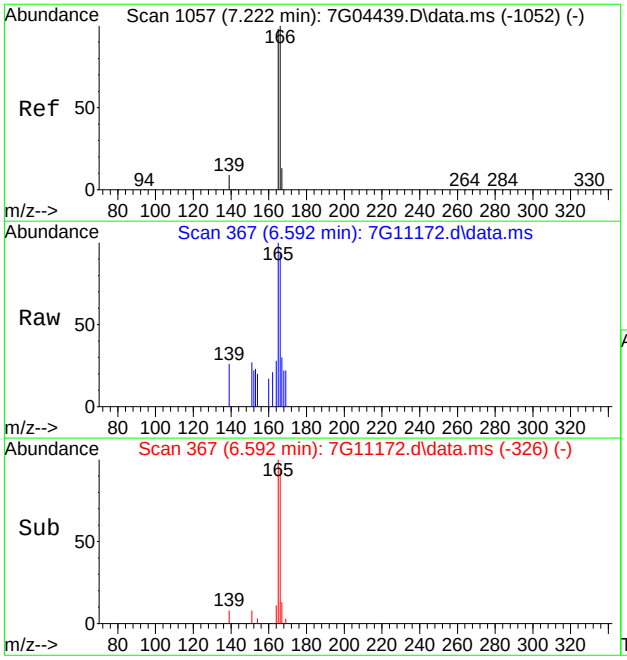


#9
Dibenzofuran
Concen: 0.07 ppm m
RT: 6.302 min Scan# 307
Delta R.T. 0.005 min
Lab File: 7G11172.d
Acq: 13 Aug 2020 6:46 pm

Tgt Ion:168 Resp: 284

Ion	Ratio	Lower	Upper
168	100		
139	41.1	11.9	51.9
169	34.1	0.0	33.1#

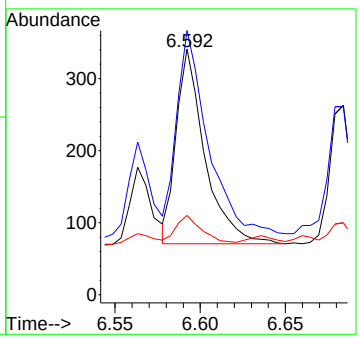


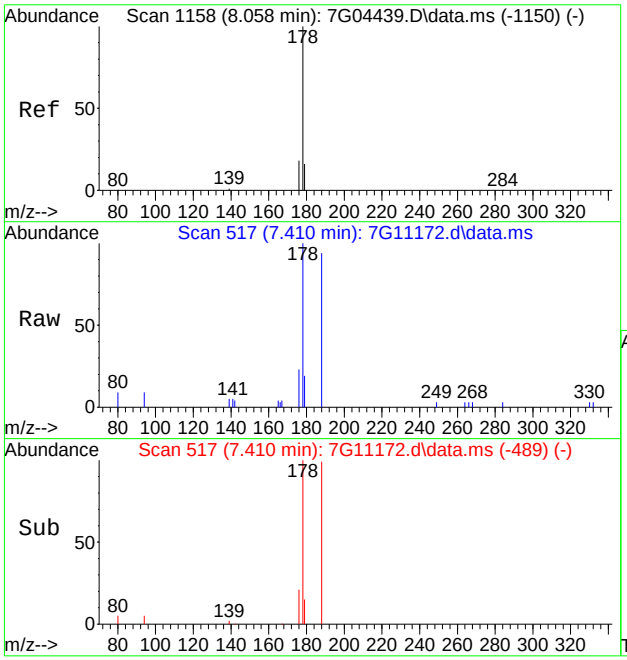


#10
Fluorene
Concen: 0.05 ppm
RT: 6.592 min Scan# 367
Delta R.T. 0.000 min
Lab File: 7G11172.d
Acq: 13 Aug 2020 6:46 pm

Tgt Ion:166 Resp: 316

Ion	Ratio	Lower	Upper
166	100		
165	105.3	65.2	125.2
167	13.6	0.0	43.9

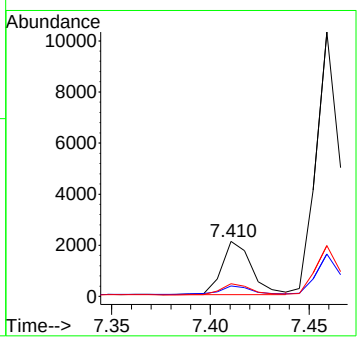


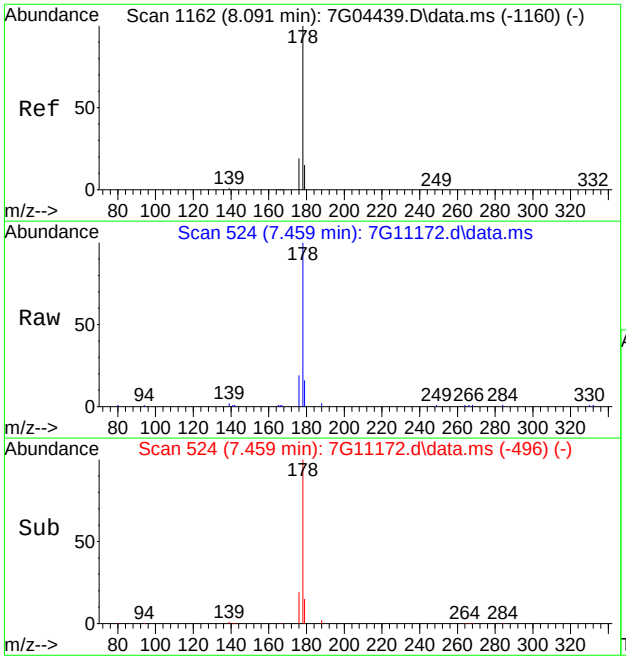


#13
Phenanthrene
Concen: 0.23 ppm
RT: 7.410 min Scan# 517
Delta R.T. -0.007 min
Lab File: 7G11172.d
Acq: 13 Aug 2020 6:46 pm

Tgt Ion:178 Resp: 2184

Ion	Ratio	Lower	Upper
178	100		
179	15.5	0.0	45.2
176	20.8	0.0	50.4

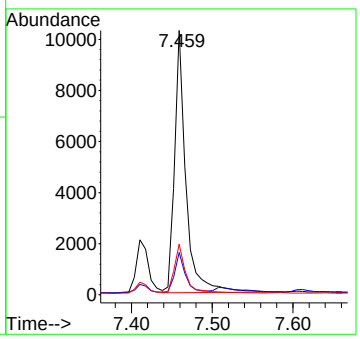


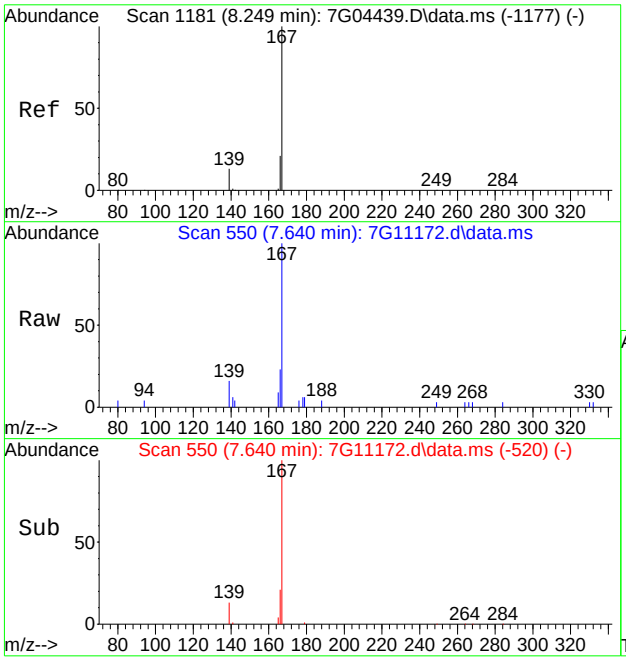


#14
Anthracene
Concen: 1.06 ppm
RT: 7.459 min Scan# 524
Delta R.T. -0.007 min
Lab File: 7G11172.d
Acq: 13 Aug 2020 6:46 pm

Tgt Ion:178 Resp: 10009

Ion	Ratio	Lower	Upper
178	100		
179	15.2	0.0	46.1
176	18.7	0.0	48.2

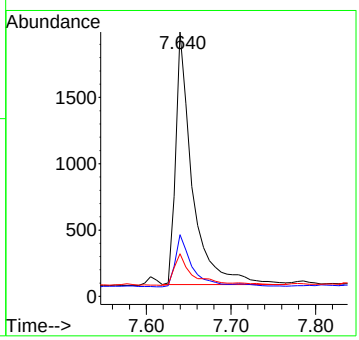


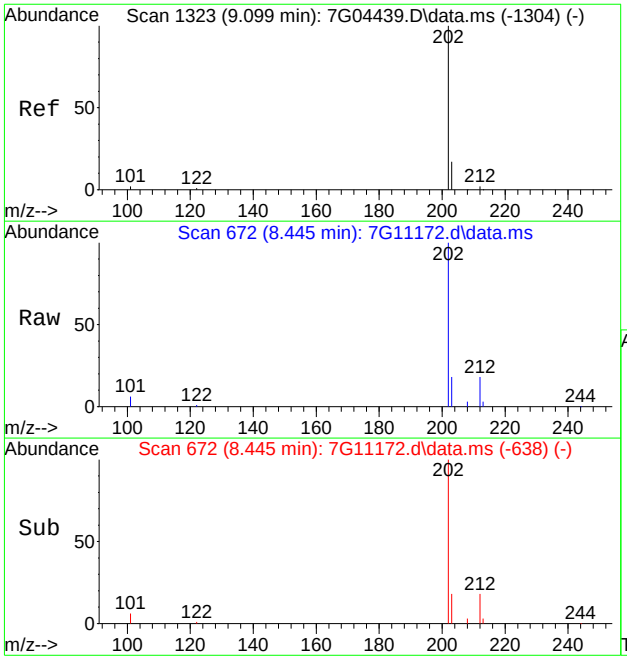


#15
Carbazole
Concen: 0.15 ppm
RT: 7.640 min Scan# 550
Delta R.T. 0.007 min
Lab File: 7G11172.d
Acq: 13 Aug 2020 6:46 pm

Tgt Ion:167 Resp: 2601

Ion	Ratio	Lower	Upper
167	100		
166	20.6	0.2	40.2
139	12.4	0.0	32.8

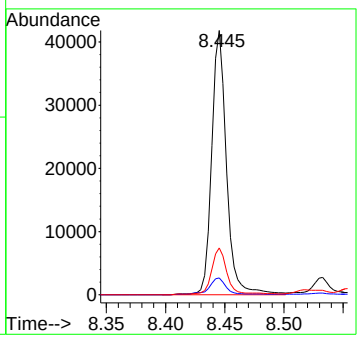


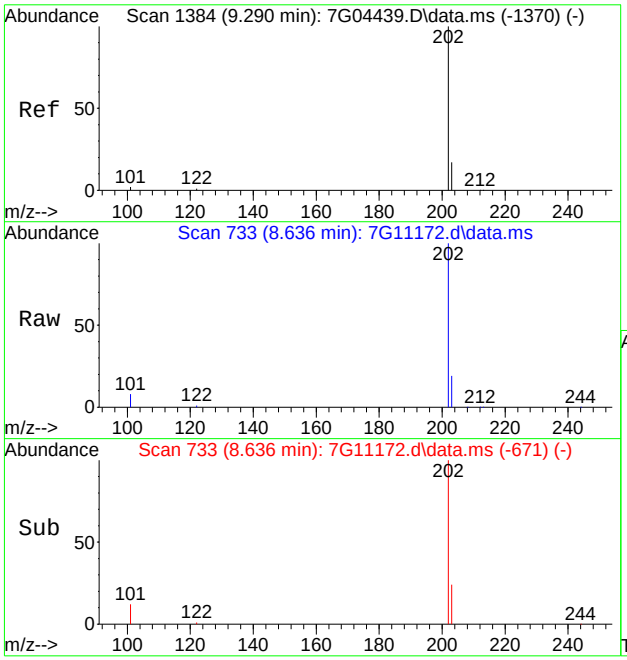


#16
Fluoranthene
Concen: 2.23 ppm
RT: 8.445 min Scan# 672
Delta R.T. -0.006 min
Lab File: 7G11172.d
Acq: 13 Aug 2020 6:46 pm

Tgt Ion:202 Resp: 39404

Ion	Ratio	Lower	Upper
202	100		
101	6.3	0.0	36.5
203	17.6	0.0	47.5

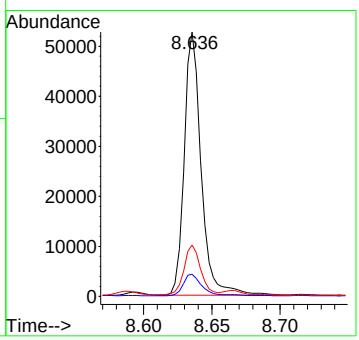


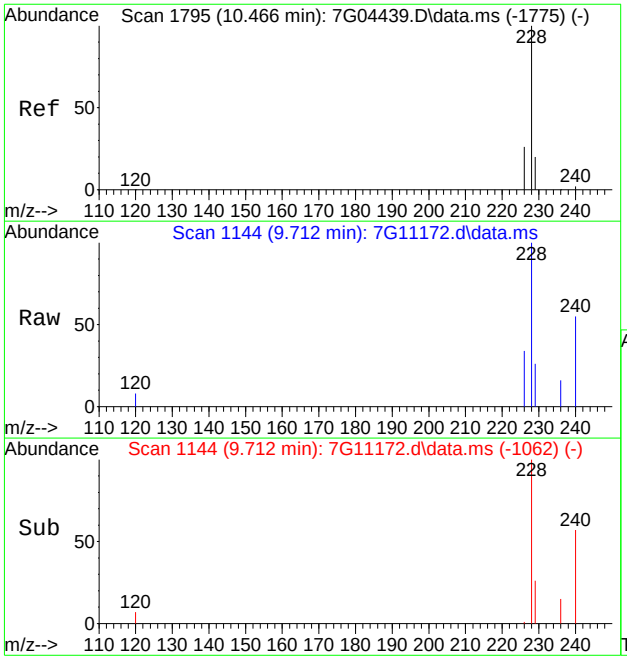


#19
Pyrene
Concen: 2.37 ppm
RT: 8.636 min Scan# 733
Delta R.T. -0.006 min
Lab File: 7G11172.d
Acq: 13 Aug 2020 6:46 pm

Tgt Ion:202 Resp: 45614

Ion	Ratio	Lower	Upper
202	100		
101	8.2	0.0	37.5
203	18.9	0.0	48.3

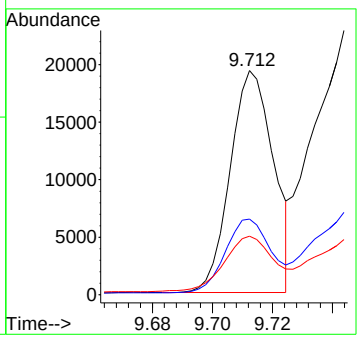


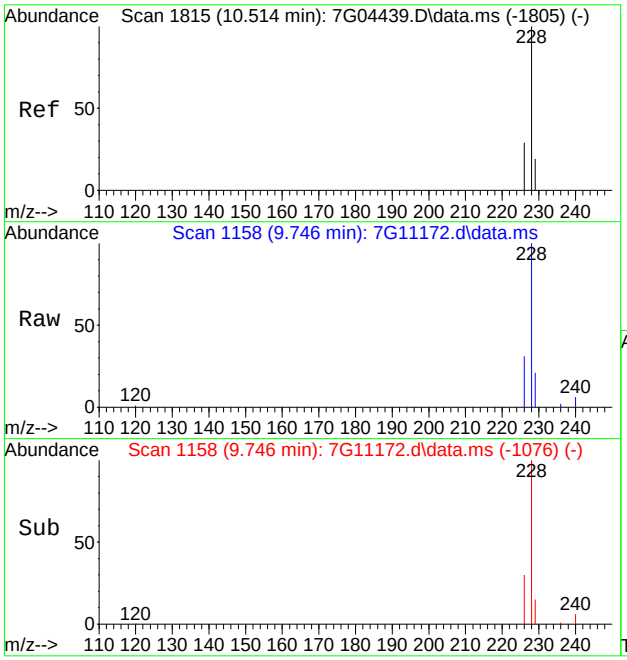


#20
Benzo[a]anthracene
Concen: 1.28 ppm
RT: 9.712 min Scan# 1144
Delta R.T. -0.002 min
Lab File: 7G11172.d
Acq: 13 Aug 2020 6:46 pm

Tgt Ion:228 Resp: 19360

Ion	Ratio	Lower	Upper
228	100		
226	34.0	0.0	57.2
229	24.8	0.0	49.7

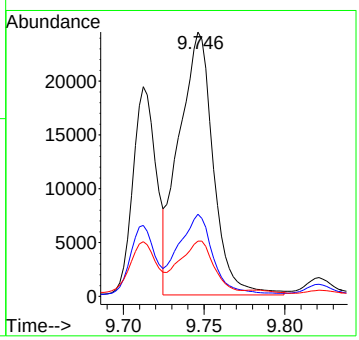


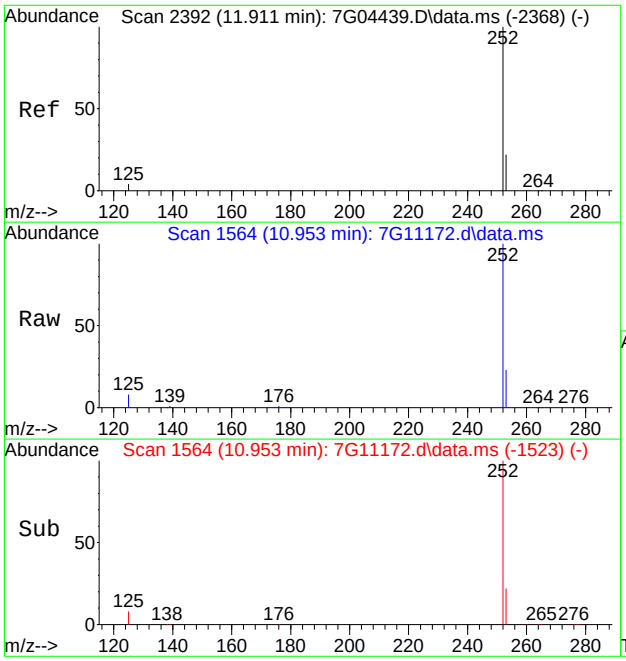


#21
Chrysene
Concen: 2.15 ppm m
RT: 9.746 min Scan# 1158
Delta R.T. -0.002 min
Lab File: 7G11172.d
Acq: 13 Aug 2020 6:46 pm

Tgt Ion:228 Resp: 36141

Ion	Ratio	Lower	Upper
228	100		
226	31.1	0.0	59.8
229	20.9	0.0	49.5

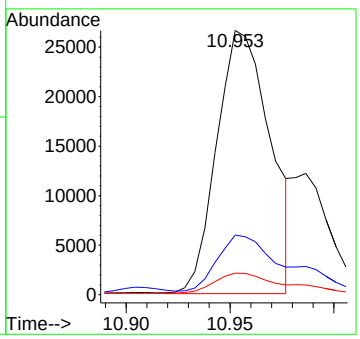


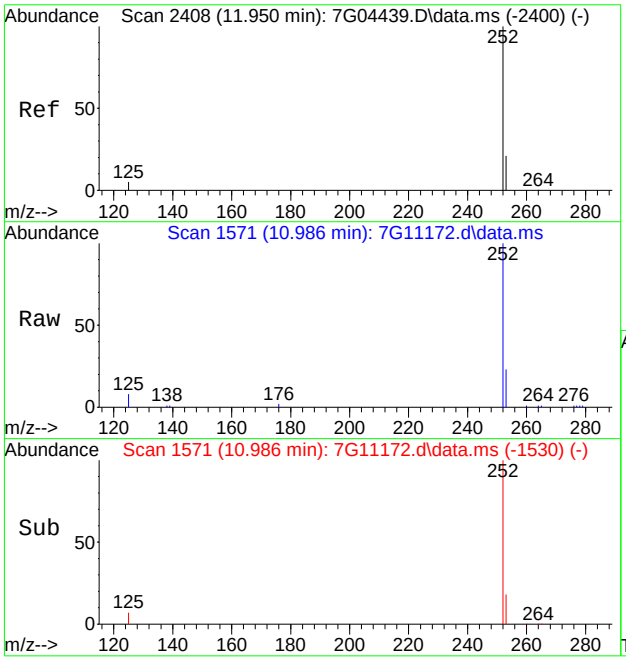


#23
Benzo[b]fluoranthene
Concen: 3.74 ppm m
RT: 10.953 min Scan# 1564
Delta R.T. 0.000 min
Lab File: 7G11172.d
Acq: 13 Aug 2020 6:46 pm

Tgt Ion:252 Resp: 47464

Ion	Ratio	Lower	Upper
252	100		
253	22.6	0.0	51.7
125	8.1	0.0	37.1

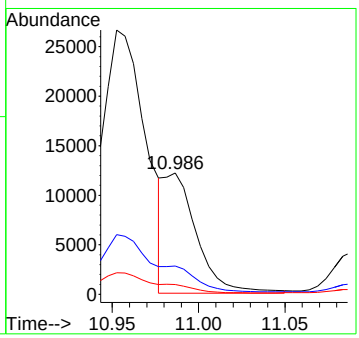


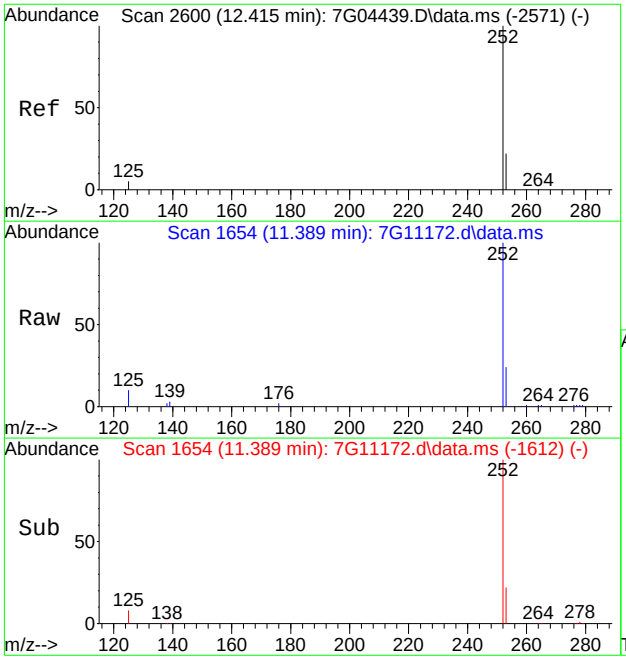


#24
Benzo[k]fluoranthene
Concen: 1.19 ppm m
RT: 10.986 min Scan# 1571
Delta R.T. 0.000 min
Lab File: 7G11172.d
Acq: 13 Aug 2020 6:46 pm

Tgt Ion:252 Resp: 15881

Ion	Ratio	Lower	Upper
252	100		
253	23.4	0.0	51.8
125	8.2	0.0	37.5

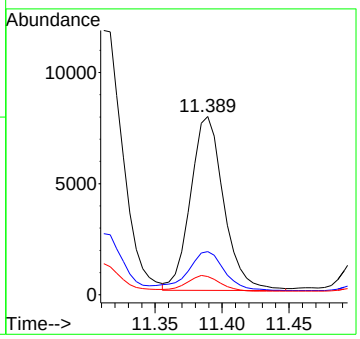


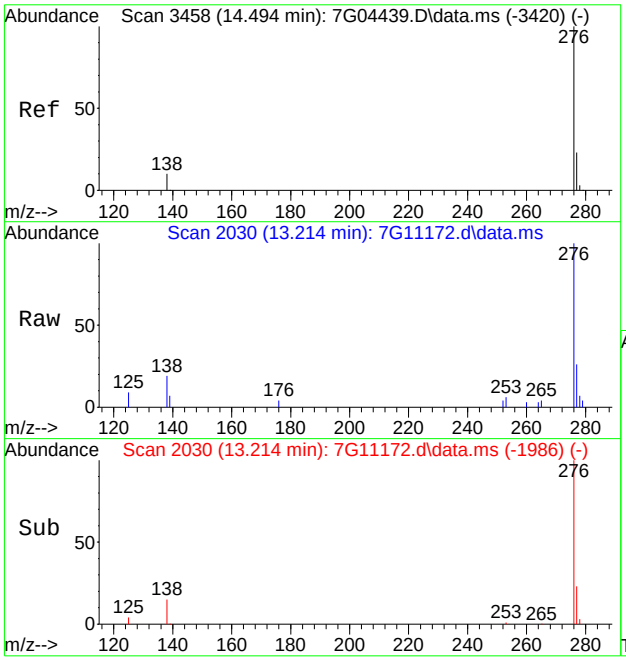


#25
Benzo[a]pyrene
Concen: 1.09 ppm
RT: 11.389 min Scan# 1654
Delta R.T. 0.005 min
Lab File: 7G11172.d
Acq: 13 Aug 2020 6:46 pm

Tgt Ion:252 Resp: 13499

Ion	Ratio	Lower	Upper
252	100		
253	21.3	0.0	51.8
125	8.1	0.0	38.3

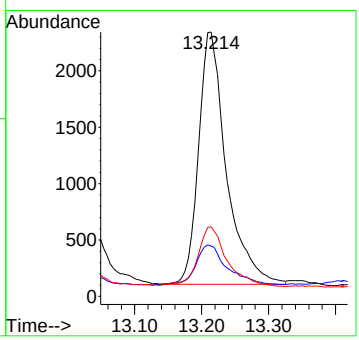


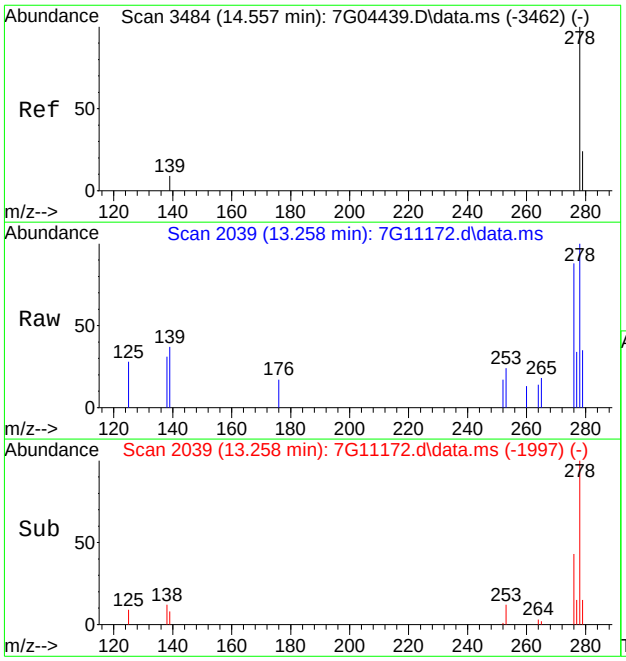


#26
Indeno[1,2,3-cd]pyrene
Concen: 0.80 ppm
RT: 13.214 min Scan# 2030
Delta R.T. 0.015 min
Lab File: 7G11172.d
Acq: 13 Aug 2020 6:46 pm

Tgt Ion:276 Resp: 6447

Ion	Ratio	Lower	Upper
276	100		
138	15.2	0.0	46.1
277	23.4	0.0	53.8

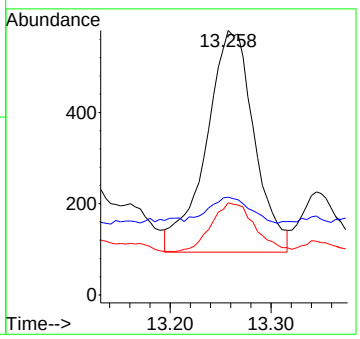


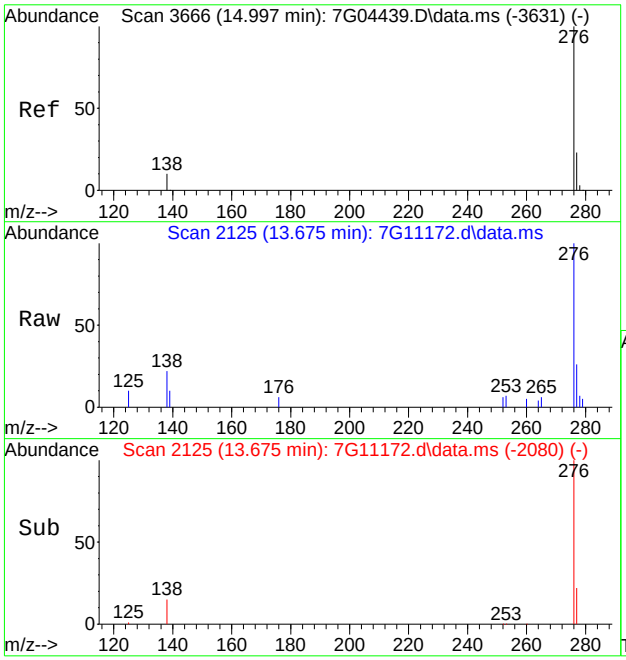


#27
Dibenz[a,h]anthracene
Concen: 0.18 ppm m
RT: 13.258 min Scan# 2039
Delta R.T. 0.005 min
Lab File: 7G11172.d
Acq: 13 Aug 2020 6:46 pm

Tgt Ion:278 Resp: 1606

Ion	Ratio	Lower	Upper
278	100		
139	36.9	0.0	43.8
279	34.8	0.0	54.2

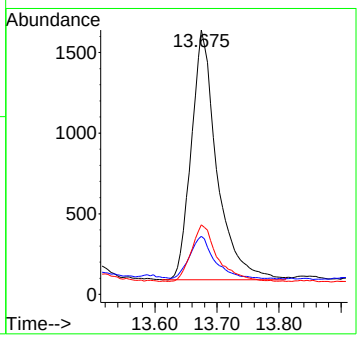




#28
Benzo[g,h,i]perylene
Concen: 0.46 ppm
RT: 13.675 min Scan# 2125
Delta R.T. 0.020 min
Lab File: 7G11172.d
Acq: 13 Aug 2020 6:46 pm

Tgt Ion:276 Resp: 4428

Ion	Ratio	Lower	Upper
276	100		
138	16.8	0.0	47.7
277	22.7	0.0	53.9



Manual Integration Approval Summary

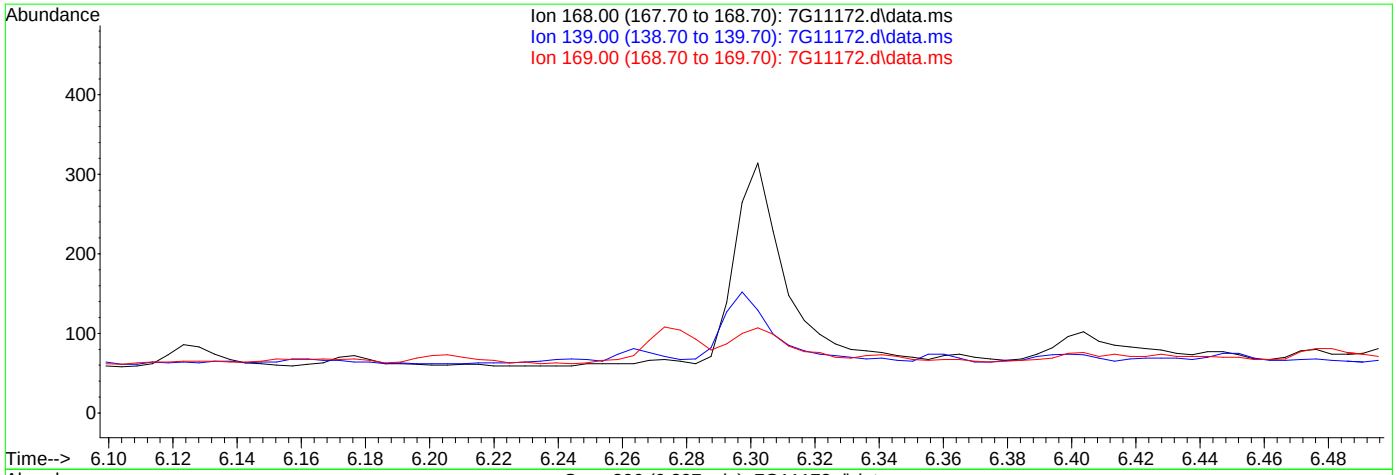
Sample Number: FA77689-11
Lab FileID: 7G11172.D
Injection Time: 08/13/20 18:46
Method: SW846 8270E BY SIM
Analyst approved: 08/14/20 11:02 Fouad Sekkar
Supervisor approved: 08/14/20 11:43 Naresh Jiawan

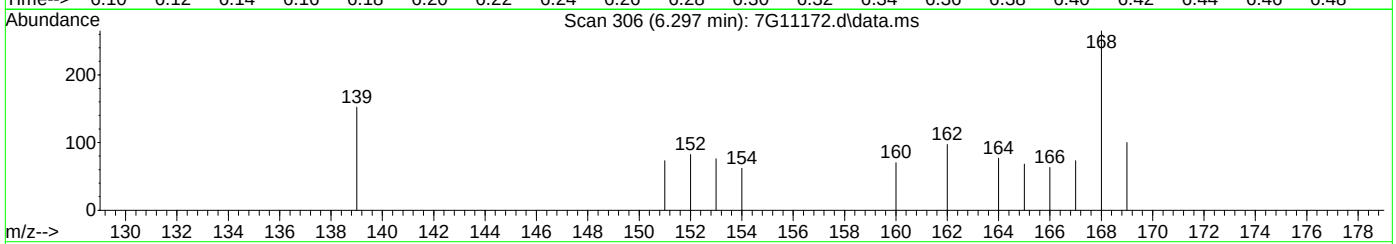
Parameter	CAS	Sig#	R.T. (min.)	Reason
Dibenzofuran	132-64-9		6.30	Missed peak
Chrysene	218-01-9		9.75	Poor instrument integration
Benzo(b)fluoranthene	205-99-2		10.95	Overlapping peak
Benzo(k)fluoranthene	207-08-9		10.99	Overlapping peak
Dibenzo(a,h)anthracene	53-70-3		13.26	Poor instrument integration

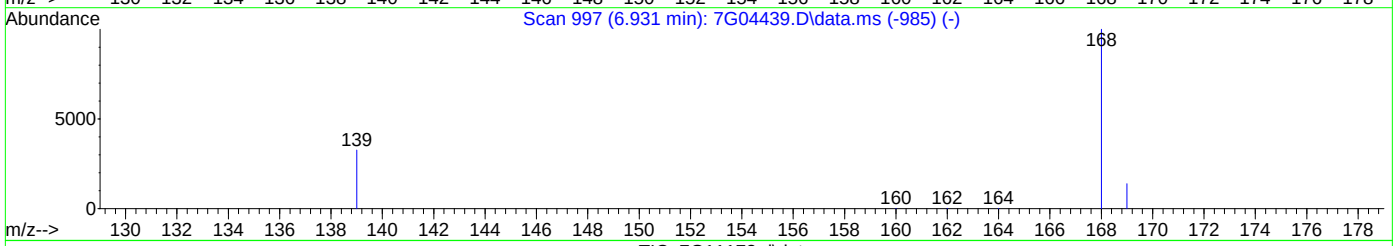
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
Data File : 7G11172.d
Acq On : 13 Aug 2020 6:46 pm
Operator : FOUADS
Sample : fa77689-11 e
Misc : op81539,S7G484,30.0,,,1,1,soil
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 14 03:10:21 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11172.d\data.ms

(9) Dibenzofuran (P)

6.297min (-6.297) 0.00ppm

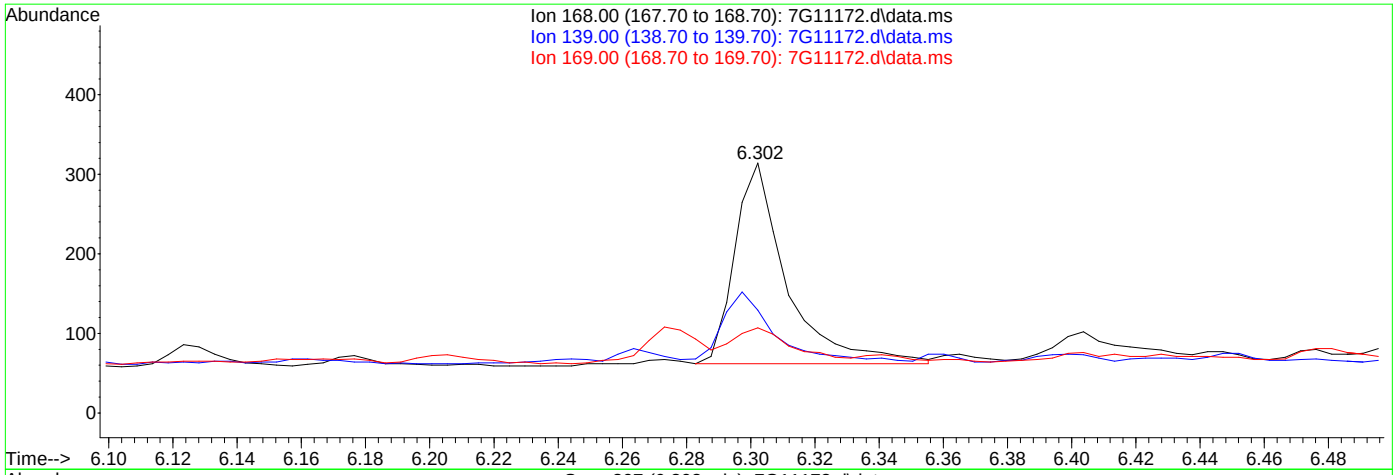
response 0

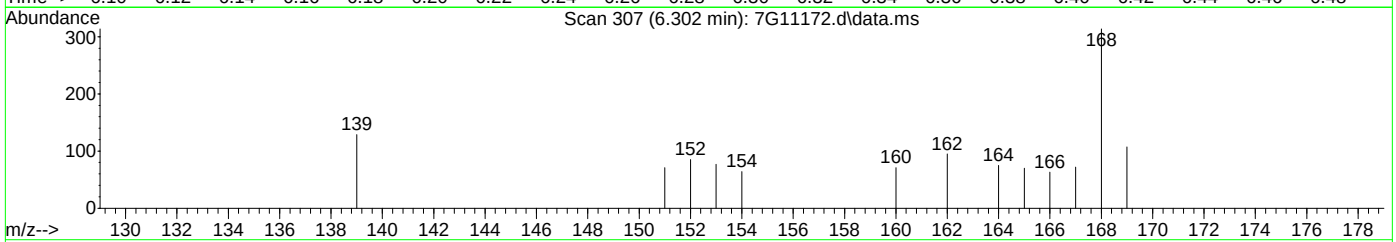
Ion	Exp%	Act%
168.00	100	0.00
139.00	31.90	0.00#
169.00	13.10	0.00
0.00	0.00	0.00

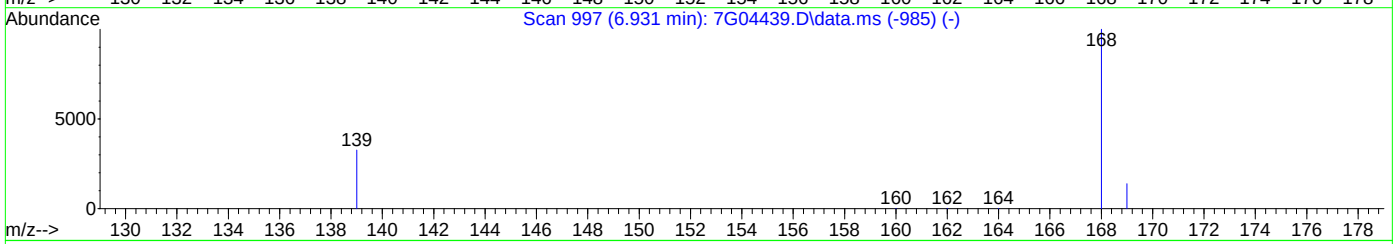
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
Data File : 7G11172.d
Acq On : 13 Aug 2020 6:46 pm
Operator : FOUADS
Sample : fa77689-11 e
Misc : op81539,S7G484,30.0,,,1,1,soil
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 14 03:10:21 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11172.d\data.ms

(9) Dibenzofuran (P)

6.302min (+0.005) 0.07ppm m

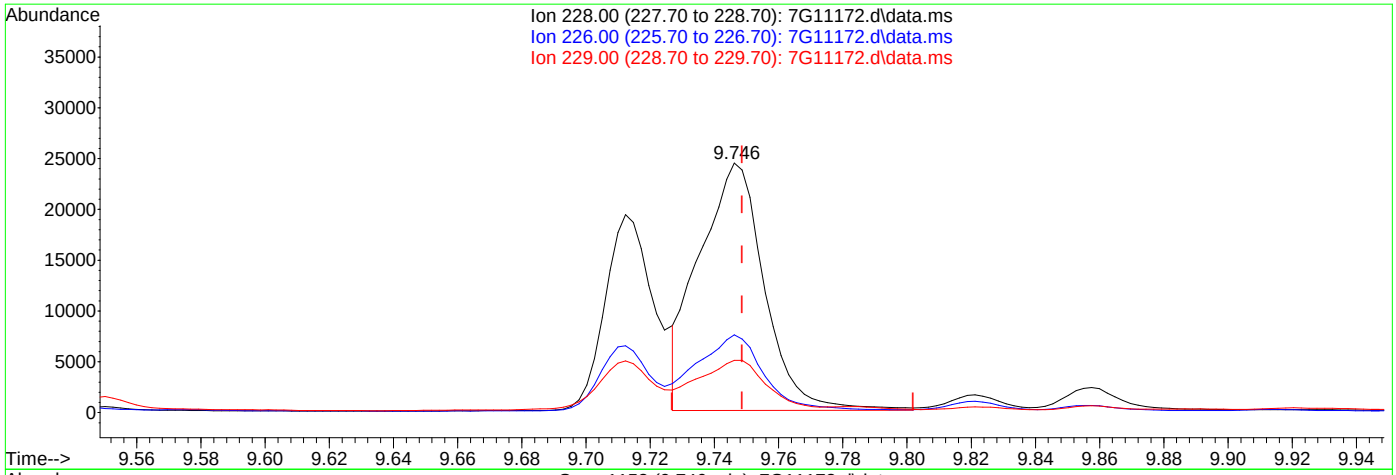
response 284

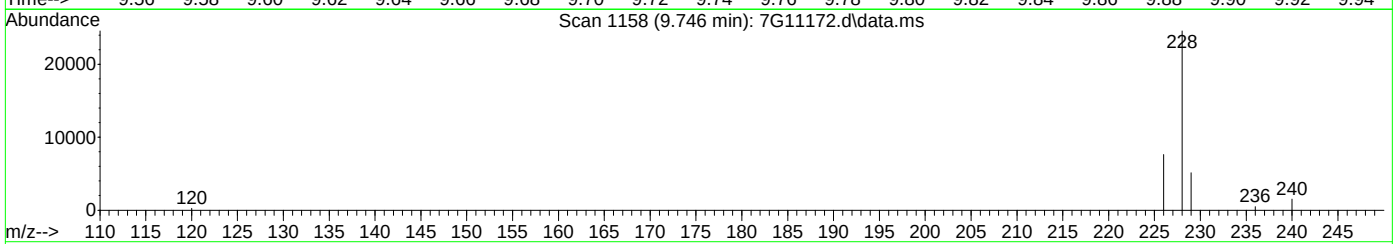
Ion	Exp%	Act%
168.00	100	100
139.00	31.90	41.08
169.00	13.10	34.08#
0.00	0.00	0.00

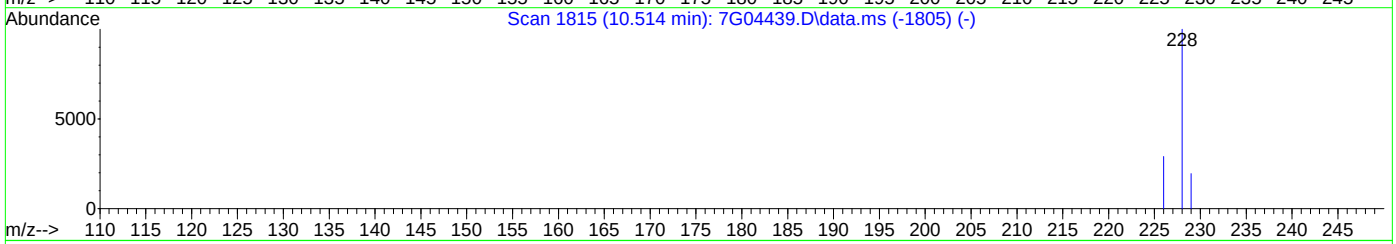
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
Data File : 7G11172.d
Acq On : 13 Aug 2020 6:46 pm
Operator : FOUADS
Sample : fa77689-11 e
Misc : op81539,S7G484,30.0,,,1,1,soil
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 14 03:10:21 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11172.d\data.ms

(21) Chrysene (P)

9.746min (-0.002) 2.05ppm

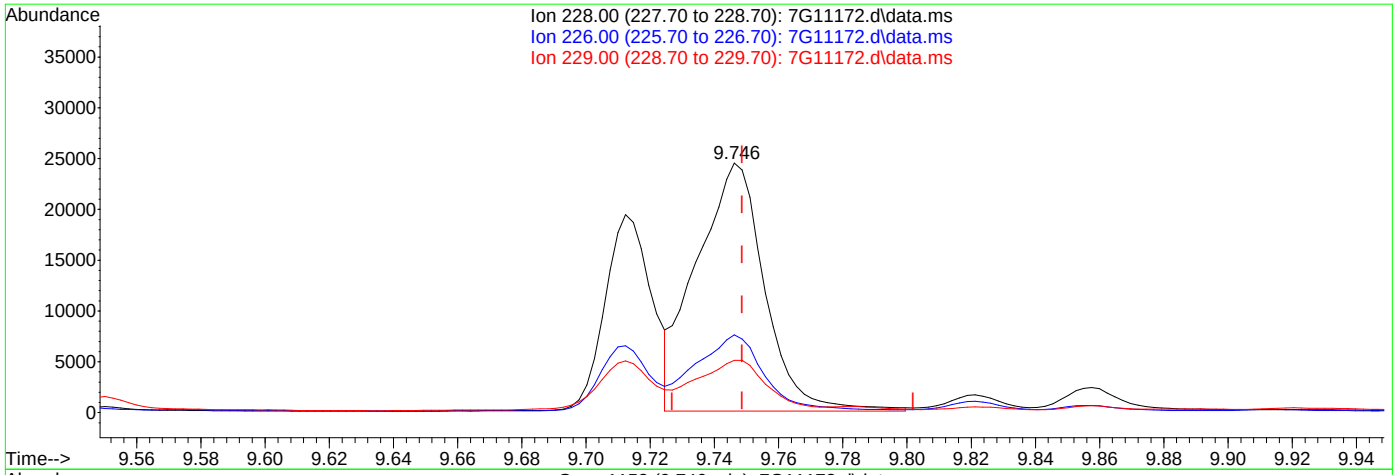
response 34593

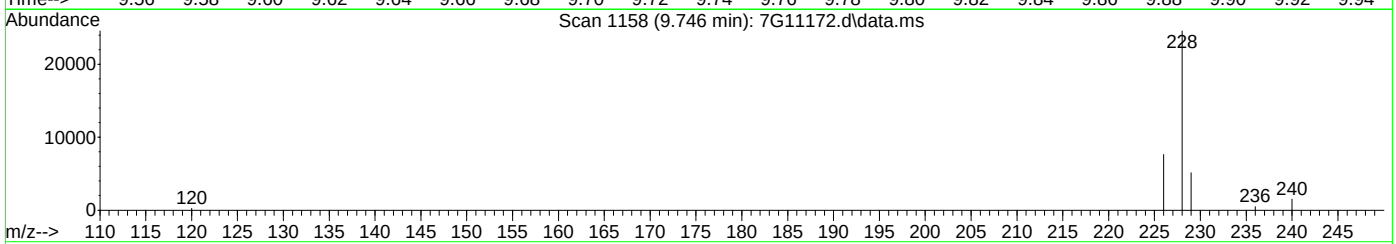
Ion	Exp%	Act%
228.00	100	100
226.00	29.80	30.23
229.00	19.50	19.33
0.00	0.00	0.00

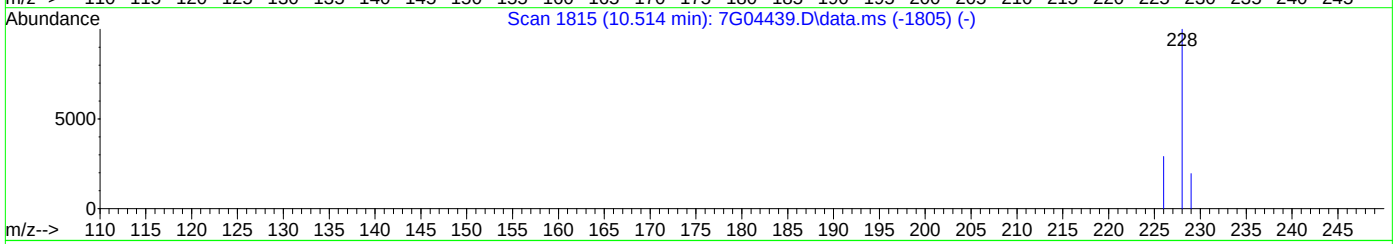
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
Data File : 7G11172.d
Acq On : 13 Aug 2020 6:46 pm
Operator : FOUADS
Sample : fa77689-11 e
Misc : op81539,S7G484,30.0,,,1,1,soil
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 14 03:10:21 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11172.d\data.ms

(21) Chrysene (P)

9.746min (-0.002) 2.15ppm m

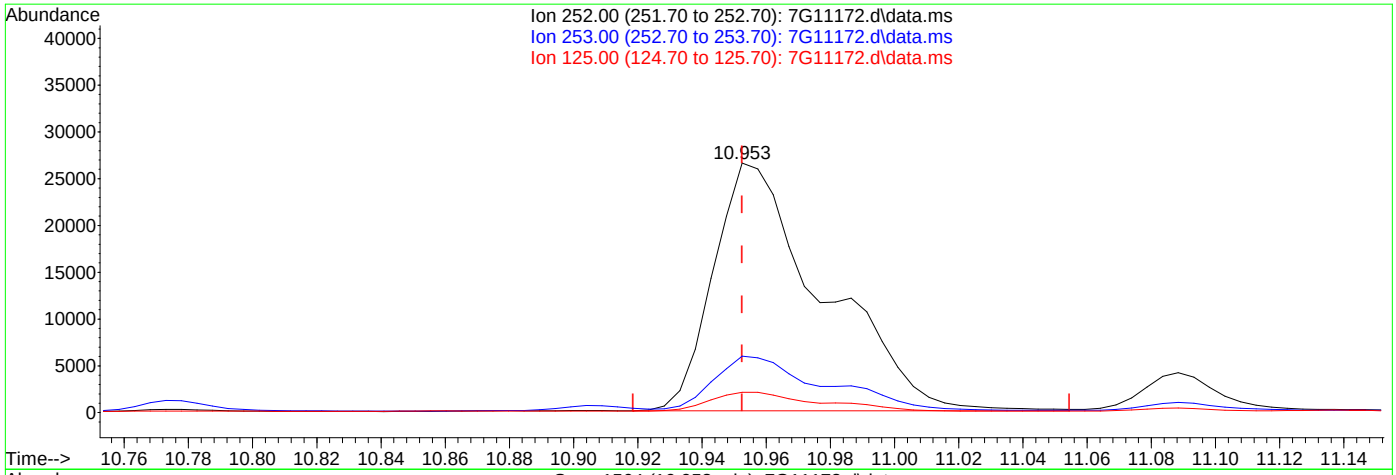
response 36141

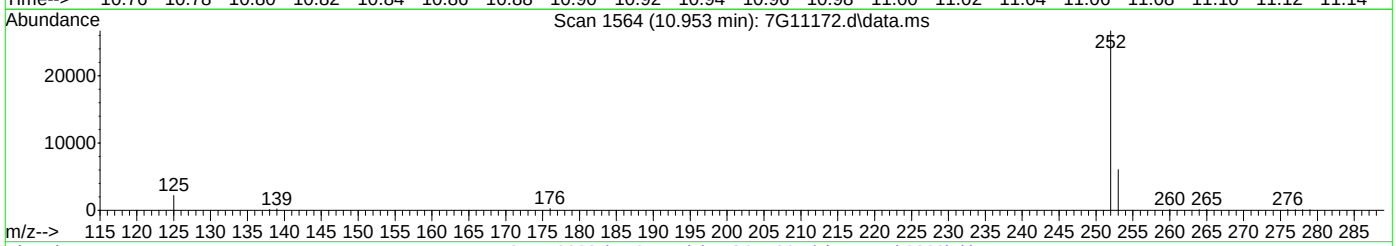
Ion	Exp%	Act%
228.00	100	100
226.00	29.80	31.10
229.00	19.50	20.94
0.00	0.00	0.00

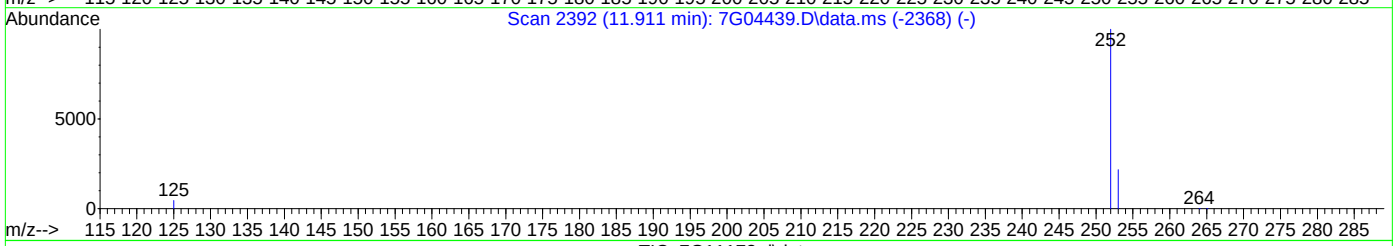
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
Data File : 7G11172.d
Acq On : 13 Aug 2020 6:46 pm
Operator : FOUADS
Sample : fa77689-11 e
Misc : op81539,S7G484,30.0,,,1,1,soil
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 14 03:10:21 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11172.d\data.ms

(23) Benzo[b]fluoranthene (P)

10.953min (+0.000) 4.95ppm

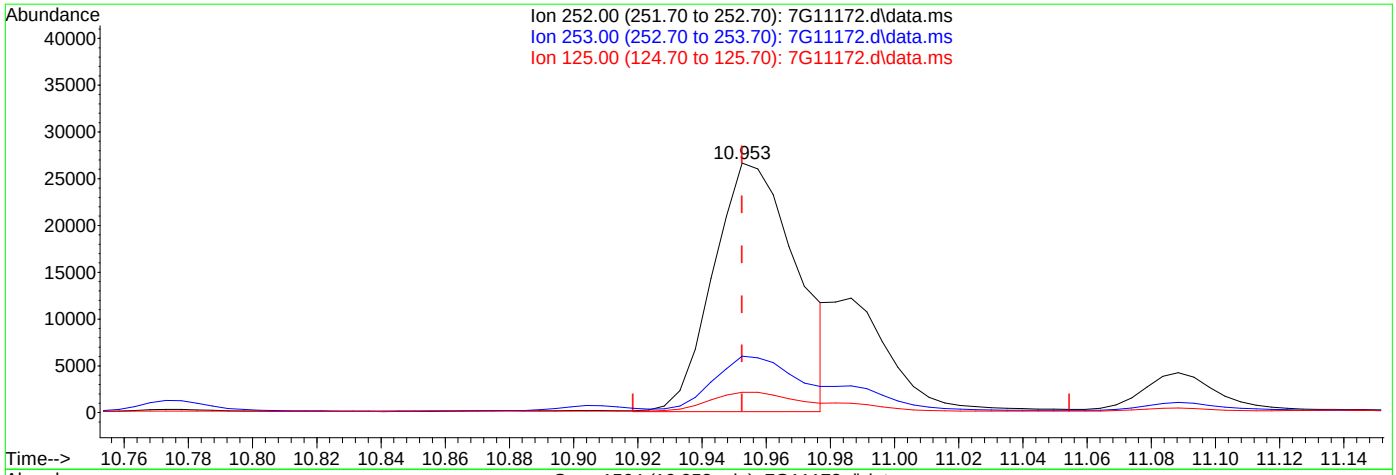
response 62794

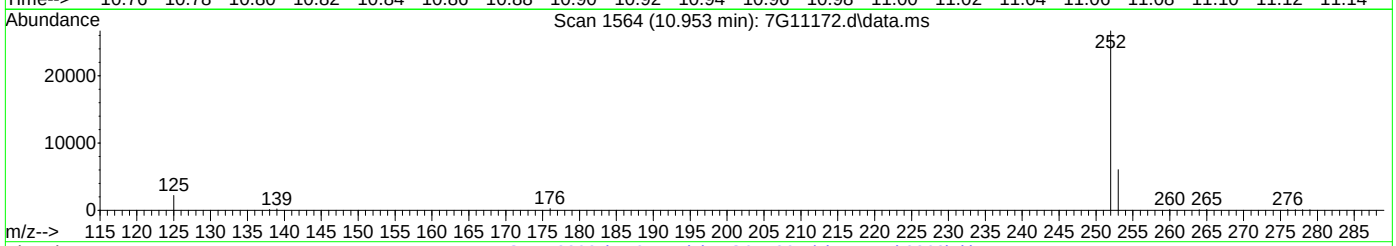
Ion	Exp%	Act%
252.00	100	100
253.00	21.70	21.43
125.00	7.10	7.61
0.00	0.00	0.00

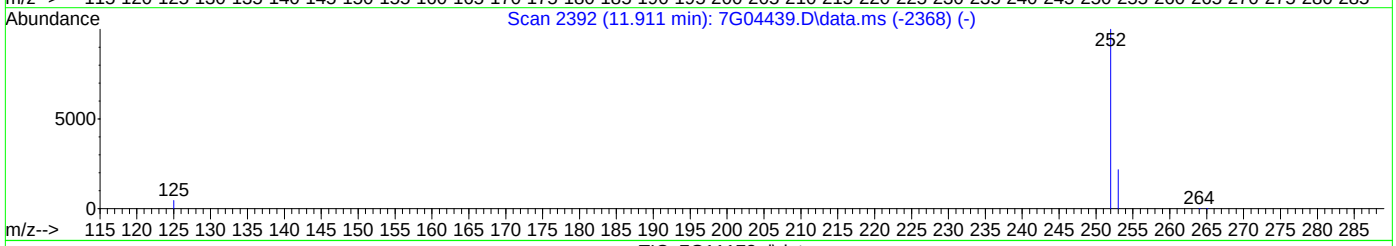
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
Data File : 7G11172.d
Acq On : 13 Aug 2020 6:46 pm
Operator : FOUADS
Sample : fa77689-11 e
Misc : op81539,S7G484,30.0,,,1,1,soil
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 14 03:10:21 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11172.d\data.ms

(23) Benzo[b]fluoranthene (P)

10.953min (+0.000) 3.74ppm m

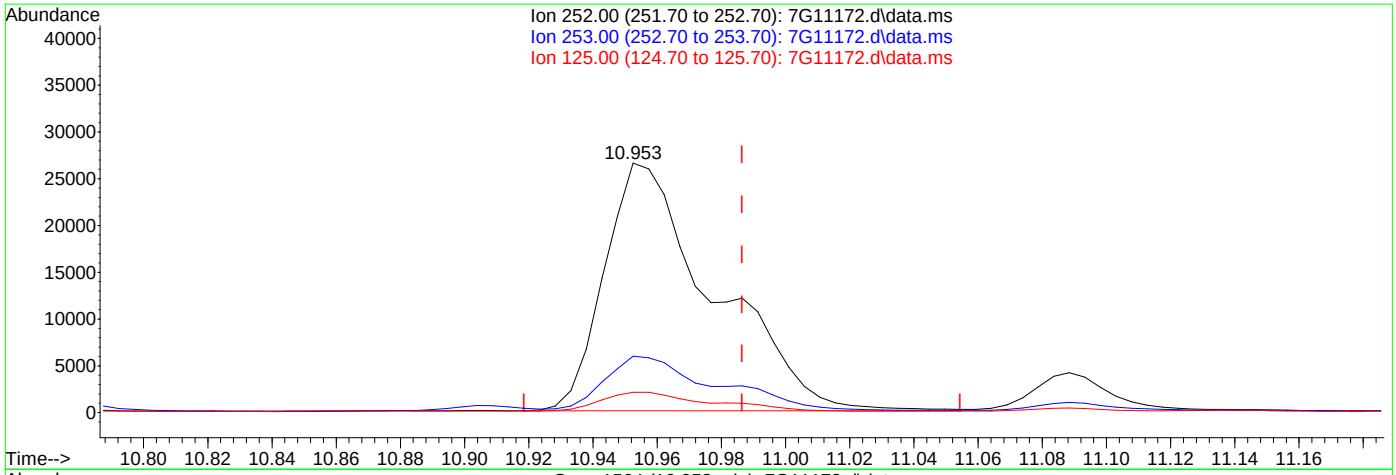
response 47464

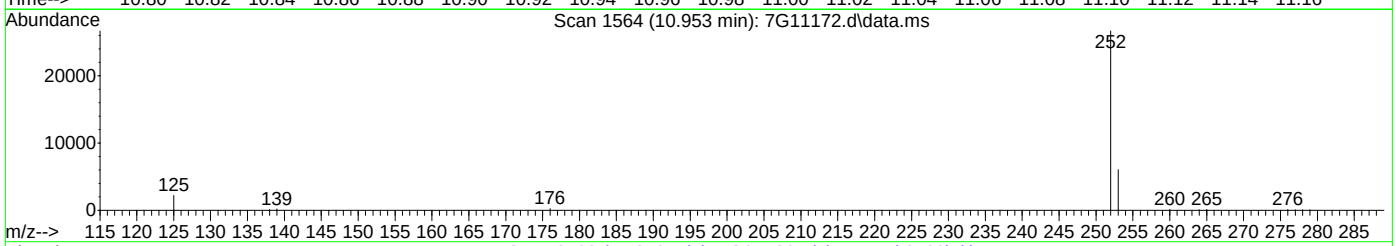
Ion	Exp%	Act%
252.00	100	100
253.00	21.70	22.61
125.00	7.10	8.13
0.00	0.00	0.00

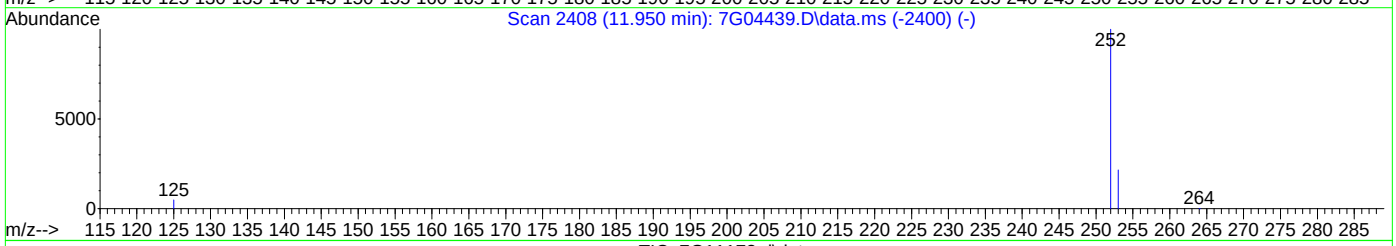
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
Data File : 7G11172.d
Acq On : 13 Aug 2020 6:46 pm
Operator : FOUADS
Sample : fa77689-11 e
Misc : op81539,S7G484,30.0,,,1,1,soil
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 14 03:10:21 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11172.d\data.ms

(24) Benzo[k]fluoranthene (P)

10.953min (-0.034) 4.64ppm

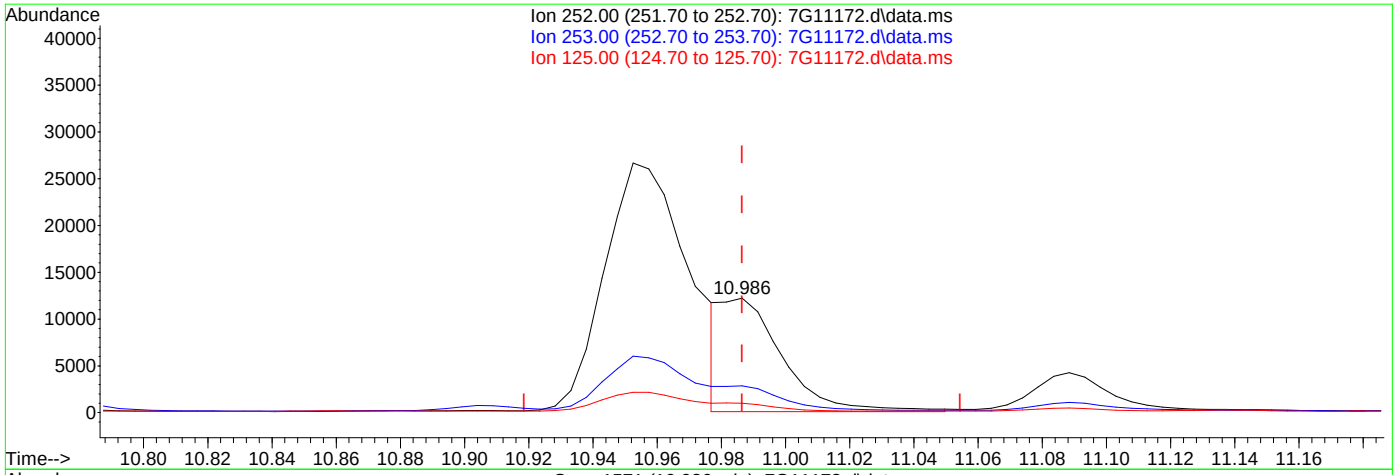
response 62794

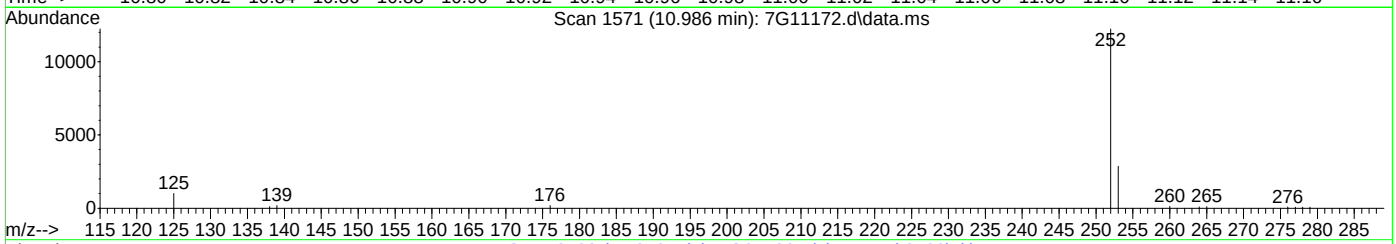
Ion	Exp%	Act%
252.00	100	100
253.00	21.80	21.43
125.00	7.50	7.61
0.00	0.00	0.00

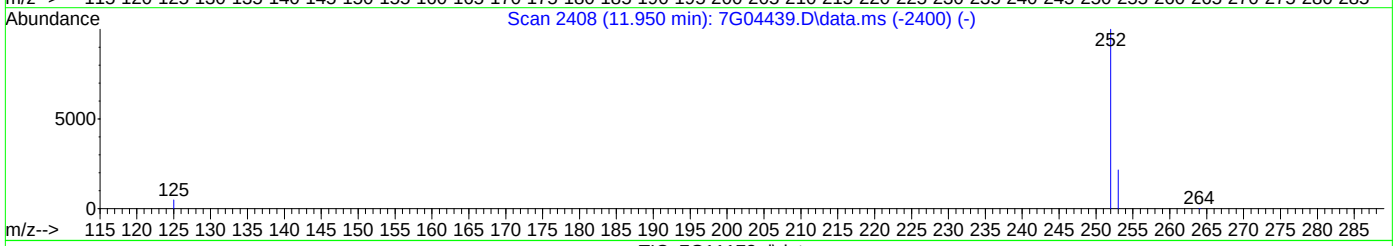
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
Data File : 7G11172.d
Acq On : 13 Aug 2020 6:46 pm
Operator : FOUADS
Sample : fa77689-11 e
Misc : op81539,S7G484,30.0,,,1,1,soil
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 14 03:10:21 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11172.d\data.ms

(24) Benzo[k]fluoranthene (P)

10.986min (+0.000) 1.19ppm m

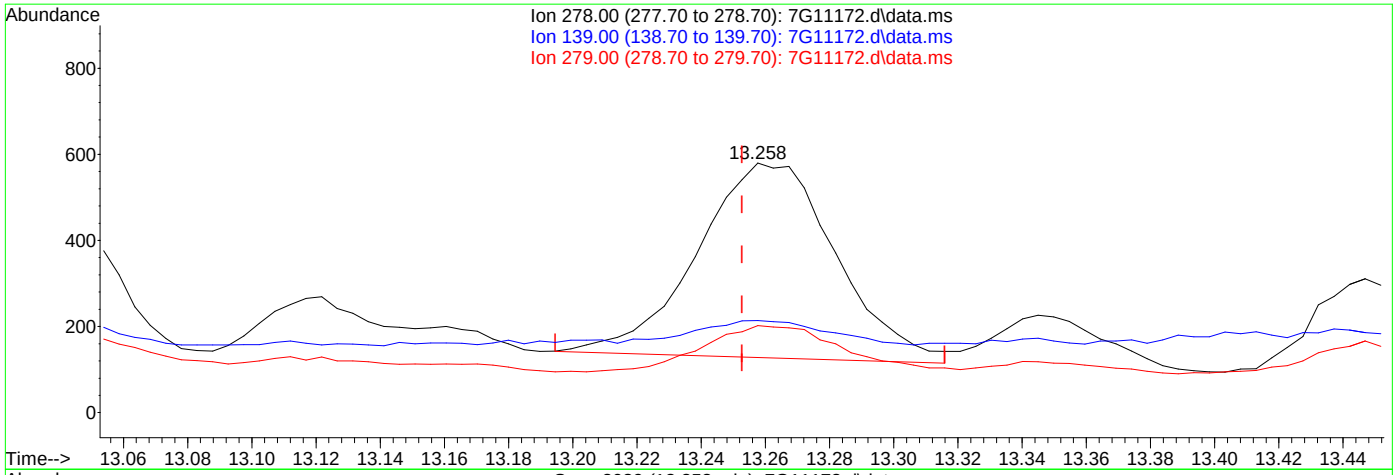
response 15881

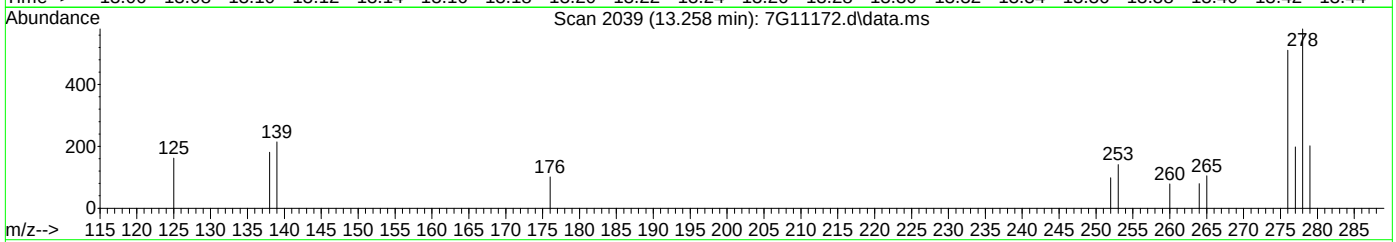
Ion	Exp%	Act%
252.00	100	100
253.00	21.80	23.44
125.00	7.50	8.21
0.00	0.00	0.00

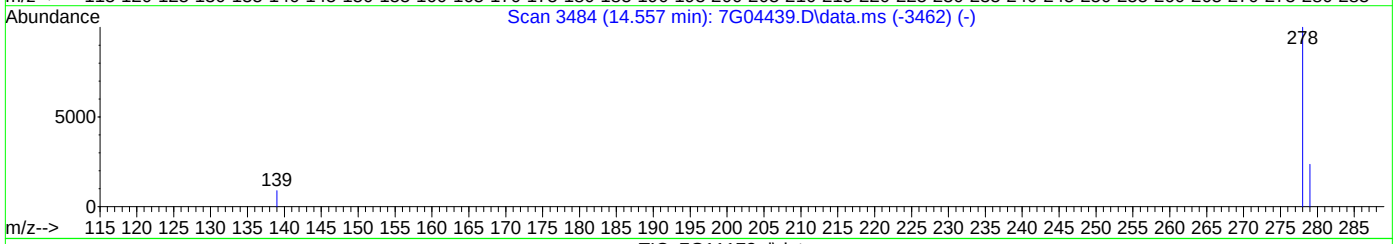
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
Data File : 7G11172.d
Acq On : 13 Aug 2020 6:46 pm
Operator : FOUADS
Sample : fa77689-11 e
Misc : op81539,S7G484,30.0,,,1,1,soil
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 14 03:10:21 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11172.d\data.ms

(27) Dibenz[a,h]anthracene (P)

13.258min (+0.005) 0.15ppm

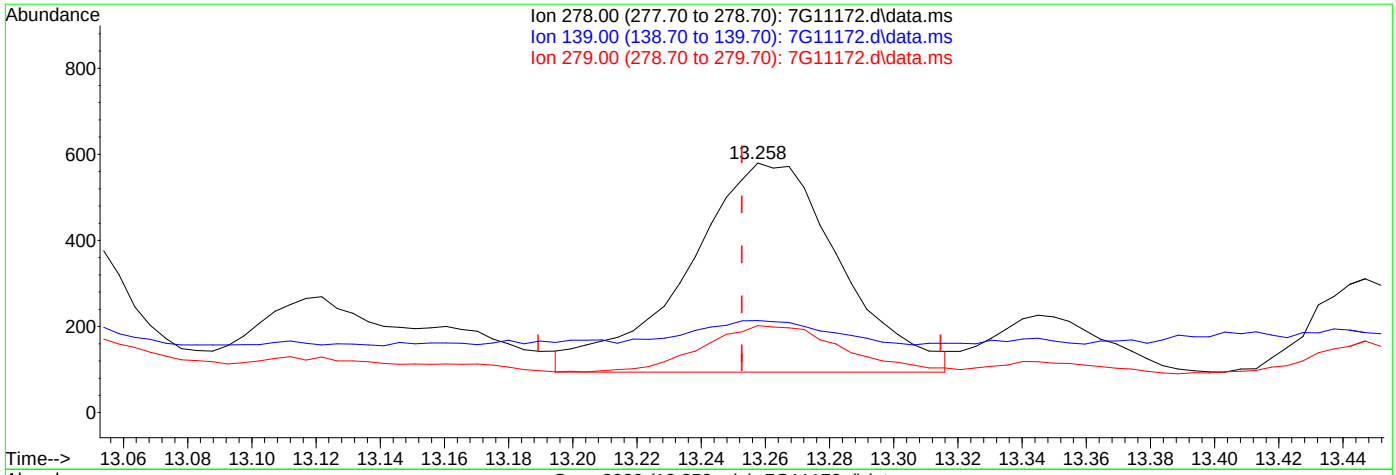
response 1355

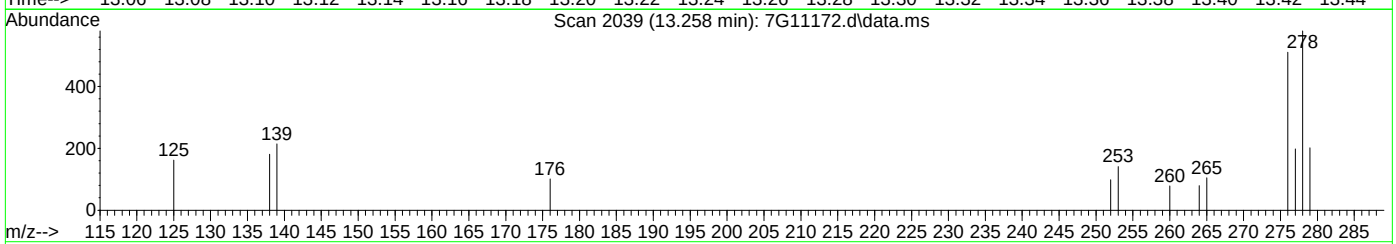
Ion	Exp%	Act%
278.00	100	100
139.00	13.80	11.89
279.00	24.20	23.43
0.00	0.00	0.00

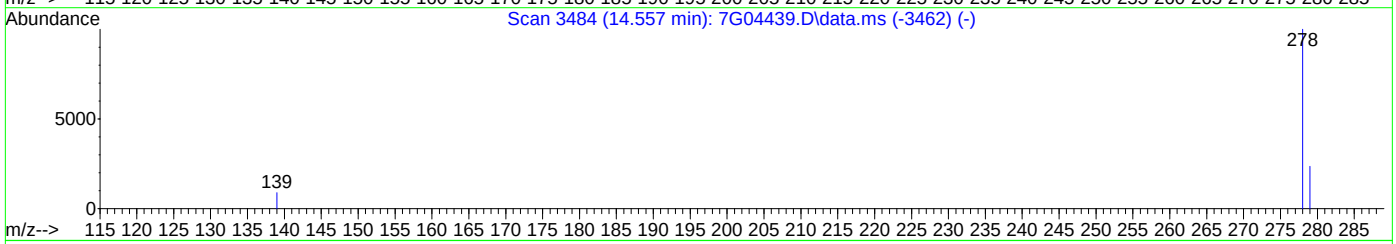
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
Data File : 7G11172.d
Acq On : 13 Aug 2020 6:46 pm
Operator : FOUADS
Sample : fa77689-11 e
Misc : op81539,S7G484,30.0,,,1,1,soil
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 14 03:10:21 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11172.d\data.ms

(27) Dibenz[a,h]anthracene (P)

13.258min (+0.005) 0.18ppm m

response 1606

Ion	Exp%	Act%
278.00	100	100
139.00	13.80	36.90
279.00	24.20	34.83
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\Jenniferf\AUGUST 2020\08-14-2020\ST1749\
Data File : T050179.D
Acq On : 13 Aug 2020 4:34 pm
Operator : nareshj
Sample : fa77689-4 e
Misc : OP81544,st1749,250,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 14 01:45:17 2020
Quant Method : C:\msdchem\1\methods\SIM_LVT071720.M
Quant Title : PAH's by 8270 SIM
QLast Update : Fri Aug 14 01:35:08 2020
Response via : Initial Calibration

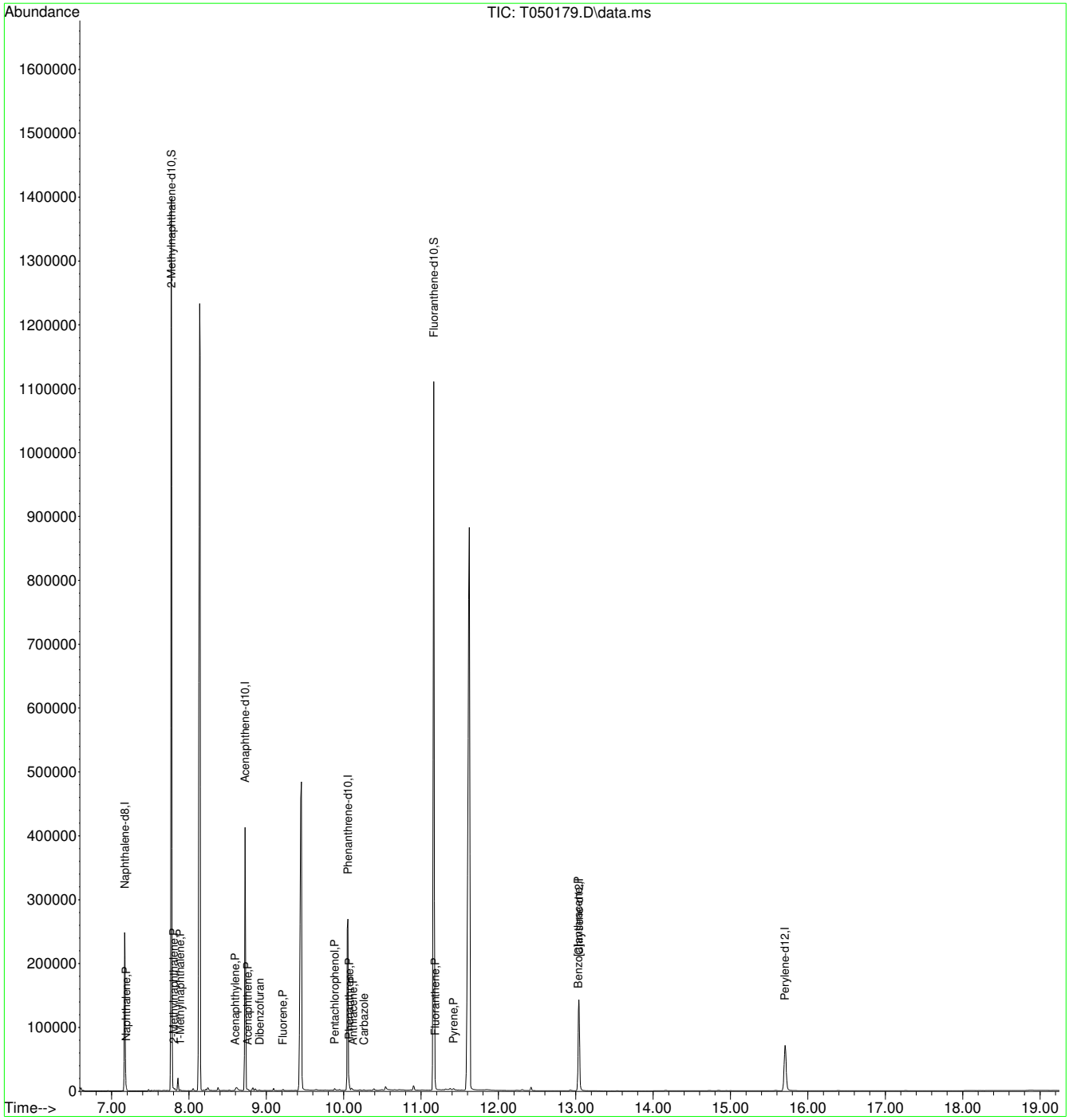
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Naphthalene-d8	7.170	136	186309	500.00	ppb		0.00
6) Acenaphthene-d10	8.725	162	122091	500.00	ppb		0.00
11) Phenanthrene-d10	10.054	188	222525	500.00	ppb		0.00
18) Chrysene-d12	13.038	240	130948	500.00	ppb		0.00
22) Perylene-d12	15.702	264	95652	500.00	ppb		0.00
System Monitoring Compounds							
4) 2-Methylnaphthalene-d10	7.772	152	438027	1402.64	ppb		0.00
Spiked Amount 2000.000			Recovery =	70.13%			
17) Fluoranthene-d10	11.164	212	725420	1805.53	ppb		0.00
Spiked Amount 2000.000			Recovery =	90.28%			
Target Compounds							Qvalue
2) Naphthalene	7.187	128	2012	4.35	ppb		97
3) 2-Methylnaphthalene	7.801	142	933	2.23	ppb		96
5) 1-Methylnaphthalene	7.887	142	499	1.30	ppb		94
7) Acenaphthylene	8.596	152	1516	2.58	ppb	#	32
8) Acenaphthene	8.759	153	756	2.07	ppb	#	41
9) Dibenzofuran	8.913	168	794	1.65	ppm		87
10) Fluorene	9.213	166	859	2.14	ppb		83
12) Pentachlorophenol	9.882	266	958	24.79	ppb		94
13) Phenanthrene	10.071	178	5166	9.17	ppb		99
14) Anthracene	10.120	178	1029	1.91	ppb		95
15) Carbazole	10.260	167	765	1.51	ppm		98
16) Fluoranthene	11.180	202	2947	5.53	ppb		97
19) Pyrene	11.418	202	1470	2.42	ppb		89
20) Benzo[a]anthracene	13.031	228	670	1.60	ppb		90

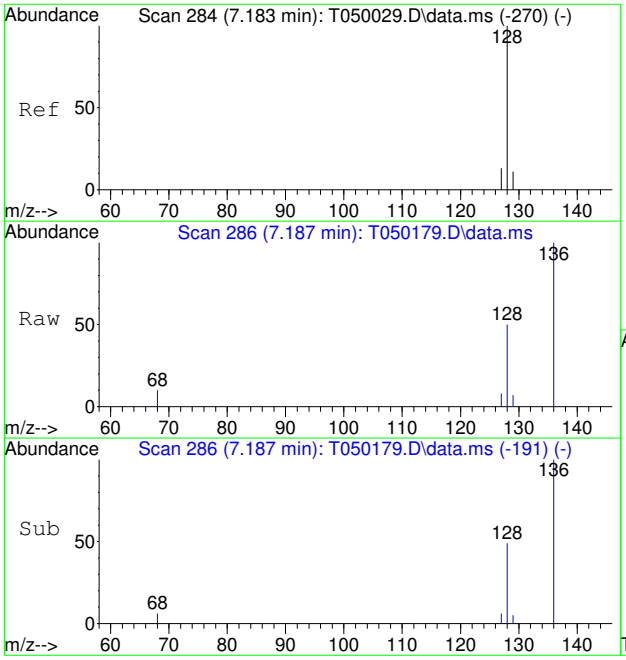
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\Jenniferf\AUGUST 2020\08-14-2020\ST1749\
Data File : T050179.D
Acq On : 13 Aug 2020 4:34 pm
Operator : nareshj
Sample : fa77689-4 e
Misc : OP81544,st1749,250,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 14 01:45:17 2020
Quant Method : C:\msdchem\1\methods\SIM_LVT071720.M
Quant Title : PAH's by 8270 SIM
QLast Update : Fri Aug 14 01:35:08 2020
Response via : Initial Calibration

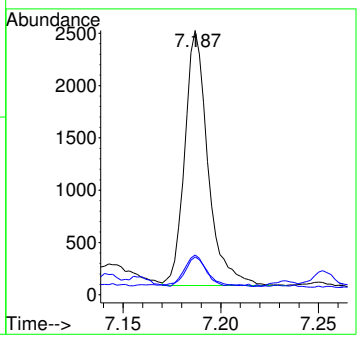


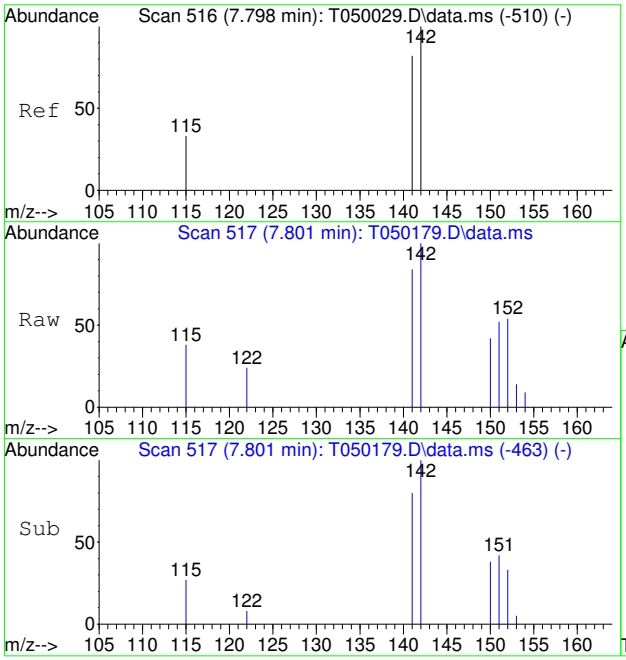


#2
Naphthalene
Concen: 4.35 ppb
RT: 7.187 min Scan# 286
Delta R.T. -0.000 min
Lab File: T050179.D
Acq: 13 Aug 2020 4:34 pm

Tgt Ion:128 Resp: 2012

Ion	Ratio	Lower	Upper
128	100		
129	11.2	0.0	40.8
127	11.1	0.0	42.7

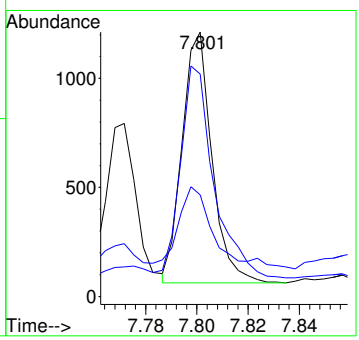


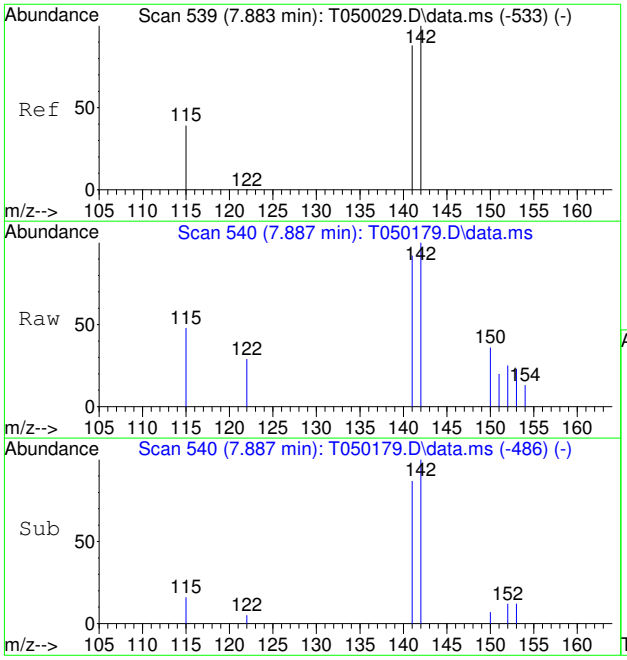


#3
2-Methylnaphthalene
Concen: 2.23 ppb
RT: 7.801 min Scan# 517
Delta R.T. -0.000 min
Lab File: T050179.D
Acq: 13 Aug 2020 4:34 pm

Tgt Ion:142 Resp: 933

Ion	Ratio	Lower	Upper
142	100		
141	81.2	52.0	112.0
115	27.8	3.5	63.5

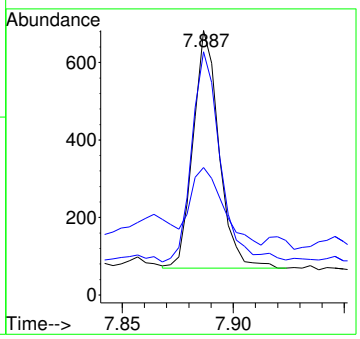


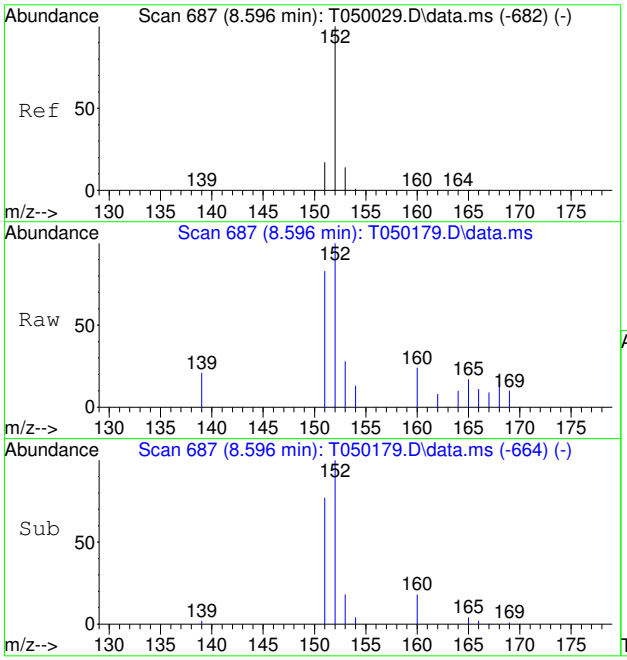


#5
1-Methylnaphthalene
Concen: 1.30 ppb
RT: 7.887 min Scan# 540
Delta R.T. -0.000 min
Lab File: T050179.D
Acq: 13 Aug 2020 4:34 pm

Tgt Ion:142 Resp: 499

Ion	Ratio	Lower	Upper
142	100		
141	88.5	58.1	118.1
115	26.4	8.7	68.7

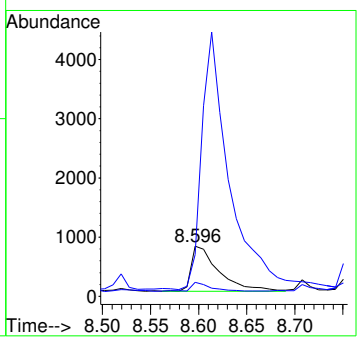


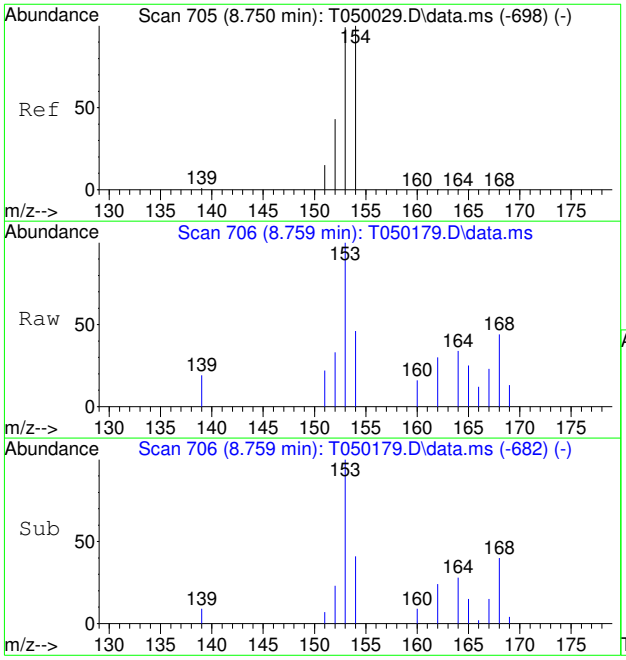


#7
Acenaphthylene
Concen: 2.58 ppb
RT: 8.596 min Scan# 687
Delta R.T. -0.000 min
Lab File: T050179.D
Acq: 13 Aug 2020 4:34 pm

Tgt Ion:152 Resp: 1516

Ion	Ratio	Lower	Upper
152	100		
151	66.8	0.0	47.1#
153	19.0	0.0	44.1

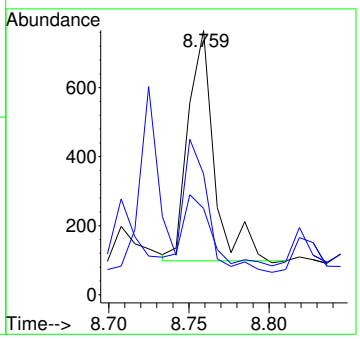


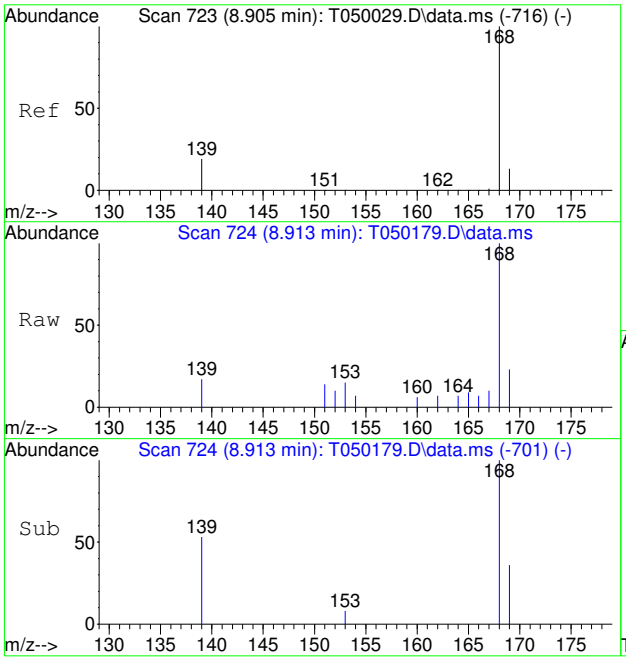


#8
Acenaphthene
Concen: 2.07 ppb
RT: 8.759 min Scan# 706
Delta R.T. 0.008 min
Lab File: T050179.D
Acq: 13 Aug 2020 4:34 pm

Tgt Ion:153 Resp: 756

Ion	Ratio	Lower	Upper
153	100		
152	22.5	13.6	73.6
154	30.3	70.9	130.9#

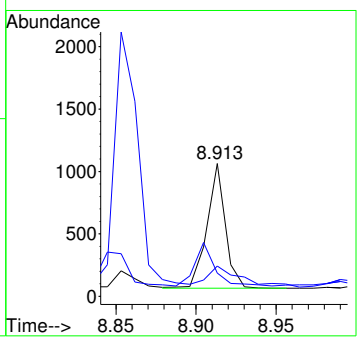


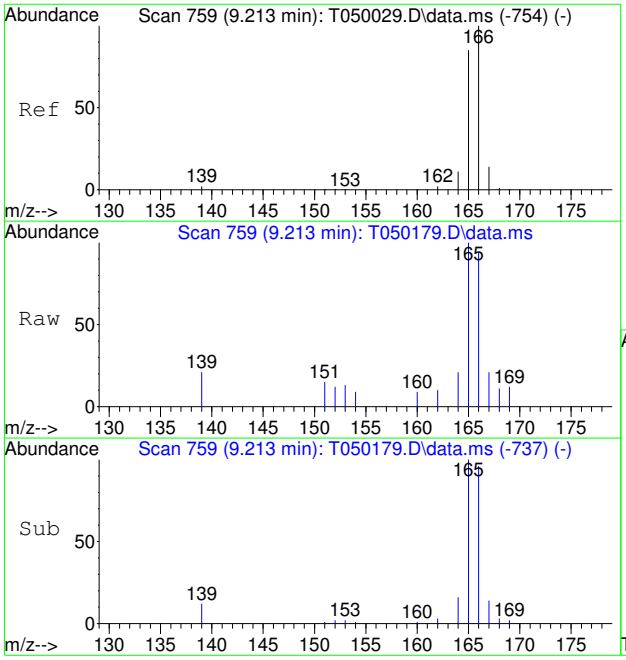


#9
Dibenzofuran
Concen: 1.65 ppm
RT: 8.913 min Scan# 724
Delta R.T. -0.000 min
Lab File: T050179.D
Acq: 13 Aug 2020 4:34 pm

Tgt Ion:168 Resp: 794

Ion	Ratio	Lower	Upper
168	100		
139	9.5	0.0	49.2
169	12.6	0.0	42.9

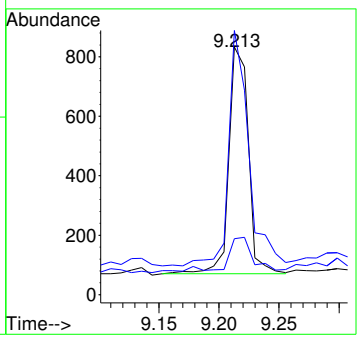


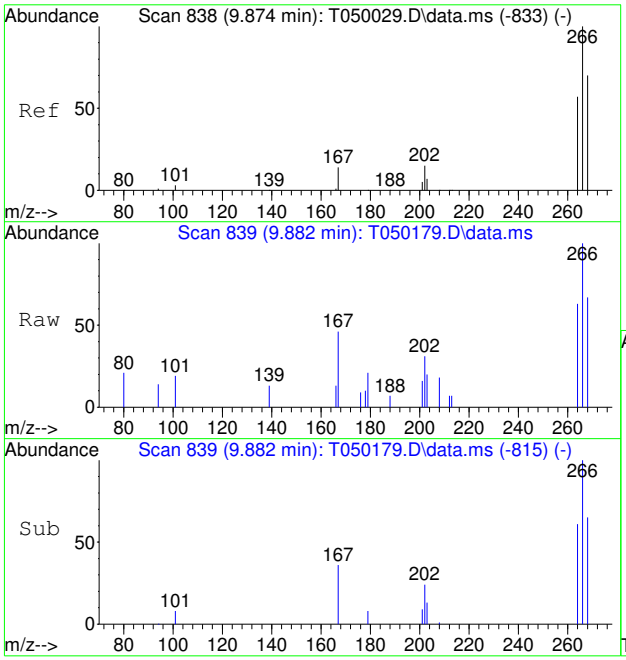


#10
Fluorene
Concen: 2.14 ppb
RT: 9.213 min Scan# 759
Delta R.T. -0.009 min
Lab File: T050179.D
Acq: 13 Aug 2020 4:34 pm

Tgt Ion:166 Resp: 859

Ion	Ratio	Lower	Upper
166	100		
165	103.4	55.1	115.1
167	13.8	0.0	43.8

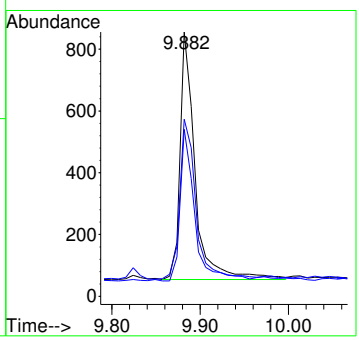


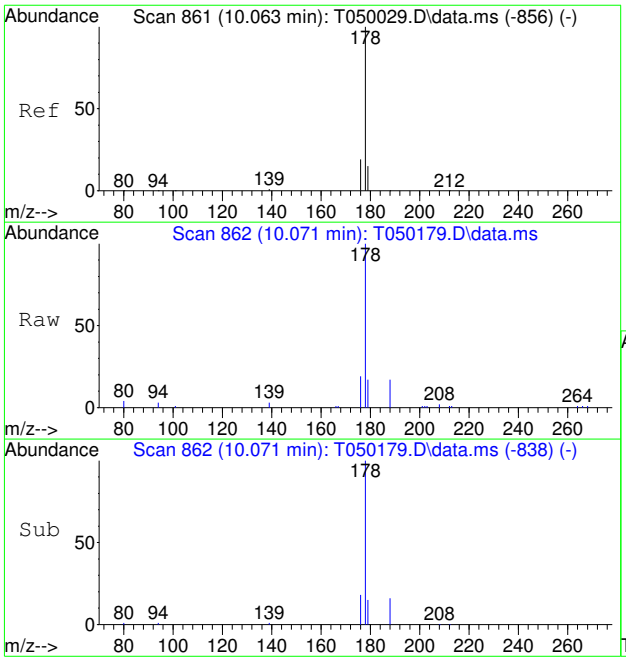


#12
Pentachlorophenol
Concen: 24.79 ppb
RT: 9.882 min Scan# 839
Delta R.T. -0.000 min
Lab File: T050179.D
Acq: 13 Aug 2020 4:34 pm

Tgt Ion:266 Resp: 958

Ion	Ratio	Lower	Upper
266	100		
264	60.9	36.9	76.9
268	64.3	49.8	89.8

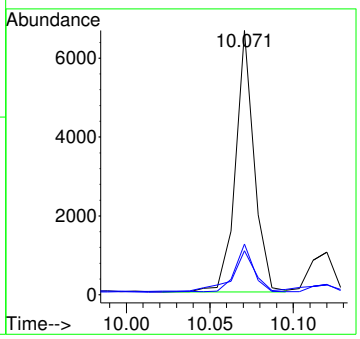


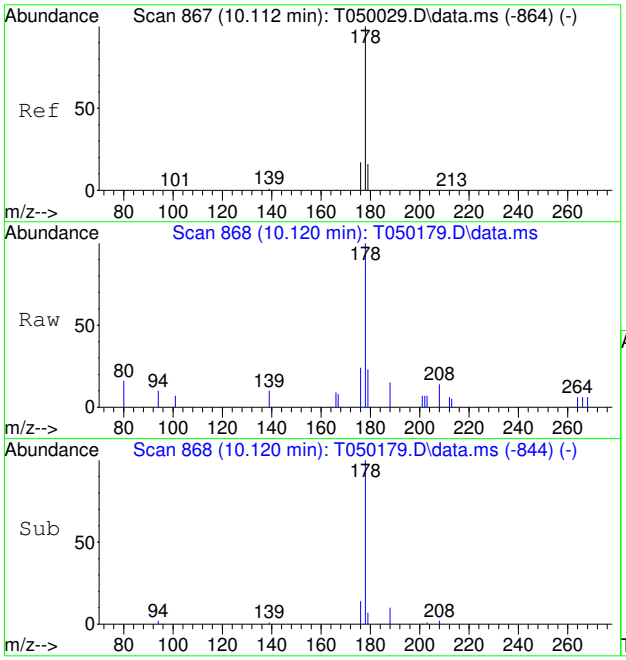


#13
Phenanthrene
Concen: 9.17 ppb
RT: 10.071 min Scan# 862
Delta R.T. -0.000 min
Lab File: T050179.D
Acq: 13 Aug 2020 4:34 pm

Tgt Ion:178 Resp: 5166

Ion	Ratio	Lower	Upper
178	100		
179	15.1	0.0	44.9
176	18.3	0.0	48.6

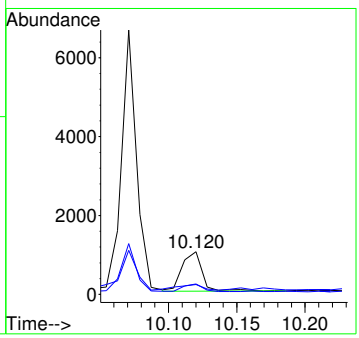


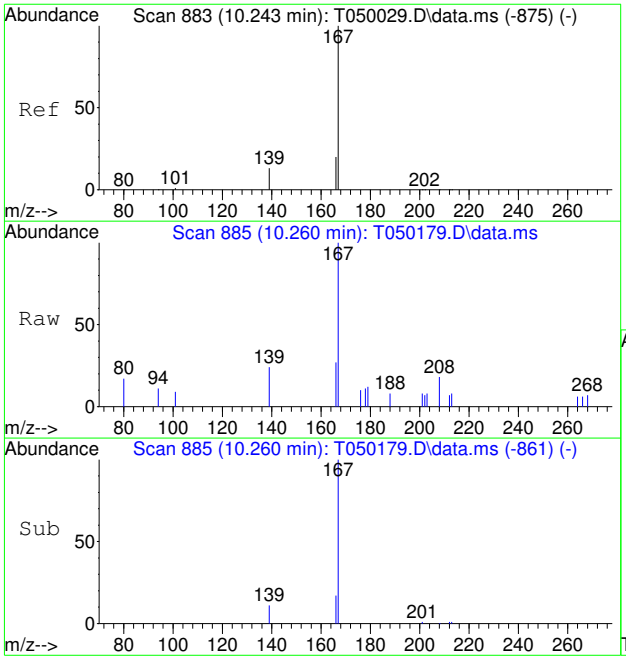


#14
Anthracene
Concen: 1.91 ppb
RT: 10.120 min Scan# 868
Delta R.T. -0.000 min
Lab File: T050179.D
Acq: 13 Aug 2020 4:34 pm

Tgt Ion:178 Resp: 1029

Ion	Ratio	Lower	Upper
178	100		
179	12.8	0.0	45.6
176	18.6	0.0	46.8

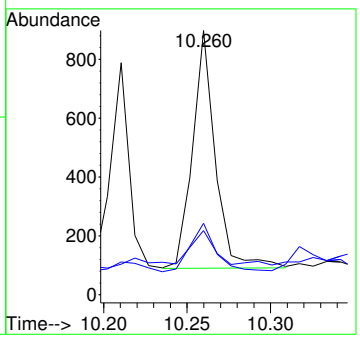


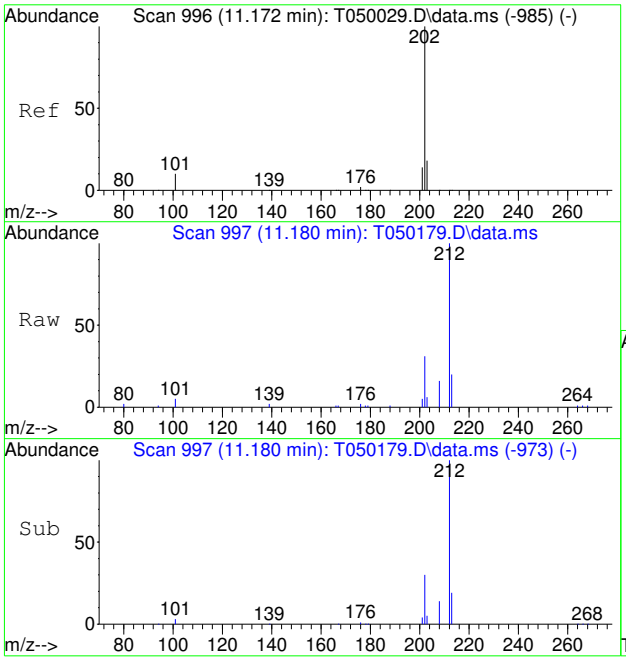


#15
Carbazole
Concen: 1.51 ppm
RT: 10.260 min Scan# 885
Delta R.T. -0.000 min
Lab File: T050179.D
Acq: 13 Aug 2020 4:34 pm

Tgt Ion:167 Resp: 765

Ion	Ratio	Lower	Upper
167	100		
166	18.9	0.0	50.1
139	13.2	0.0	43.4

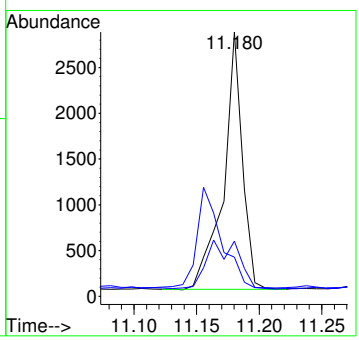


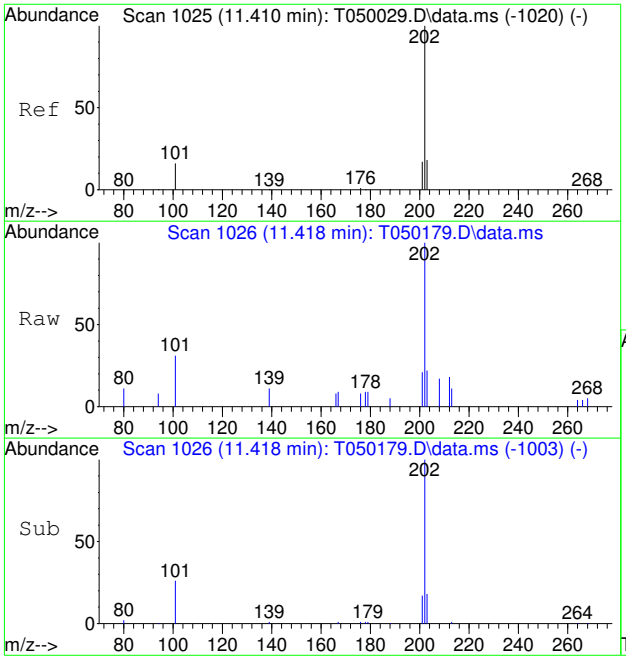


#16
Fluoranthene
Concen: 5.53 ppb
RT: 11.180 min Scan# 997
Delta R.T. -0.000 min
Lab File: T050179.D
Acq: 13 Aug 2020 4:34 pm

Tgt Ion:202 Resp: 2947

Ion	Ratio	Lower	Upper
202	100		
101	11.8	0.0	39.9
203	18.3	0.0	47.5

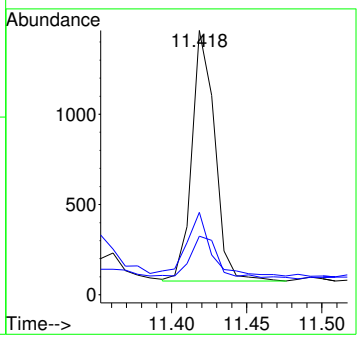


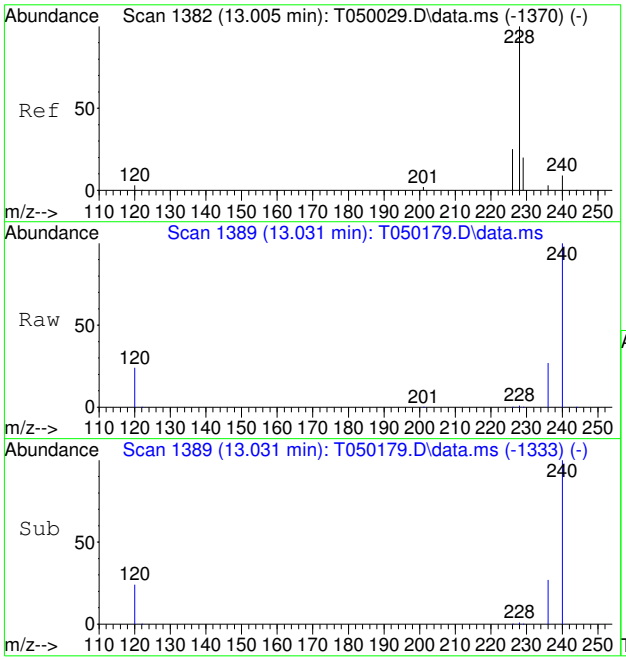


#19
Pyrene
Concen: 2.42 ppb
RT: 11.418 min Scan# 1026
Delta R.T. -0.008 min
Lab File: T050179.D
Acq: 13 Aug 2020 4:34 pm

Tgt Ion:202 Resp: 1470

Ion	Ratio	Lower	Upper
202	100		
101	24.4	0.0	46.2
203	16.1	0.0	47.5

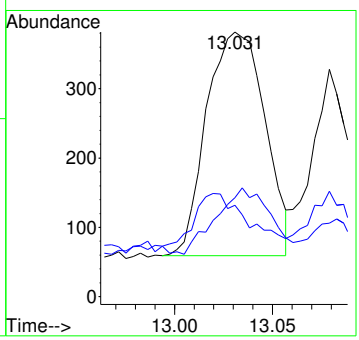




#20
Benzo[a]anthracene
Concen: 1.60 ppb
RT: 13.031 min Scan# 1389
Delta R.T. 0.007 min
Lab File: T050179.D
Acq: 13 Aug 2020 4:34 pm

Tgt Ion:228 Resp: 670

Ion	Ratio	Lower	Upper
228	100		
226	18.4	0.0	55.3
229	22.1	0.0	49.6



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\Jenniferf\AUGUST 2020\08-14-2020\ST1749\
Data File : T050180.D
Acq On : 13 Aug 2020 5:06 pm
Operator : nareshj
Sample : fa77689-5 e
Misc : OP81544,st1749,250,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 14 01:46:55 2020
Quant Method : C:\msdchem\1\methods\SIM_LVT071720.M
Quant Title : PAH's by 8270 SIM
QLast Update : Fri Aug 14 01:35:08 2020
Response via : Initial Calibration

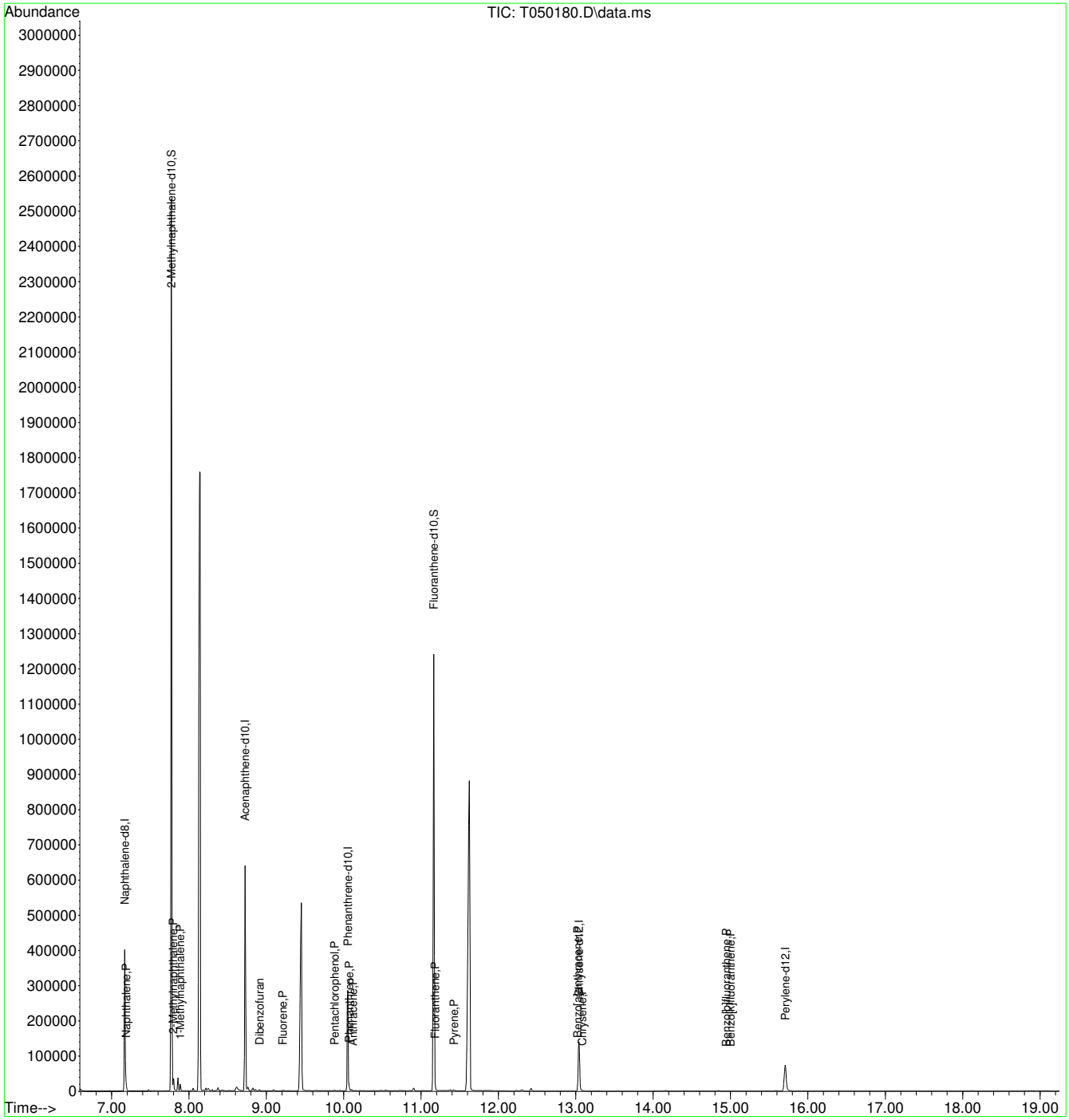
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	7.170	136	297740	500.00	ppb	0.00
6) Acenaphthene-d10	8.725	162	195301	500.00	ppb	0.00
11) Phenanthrene-d10	10.054	188	227078	500.00	ppb	0.00
18) Chrysene-d12	13.042	240	131902	500.00	ppb	0.00
22) Perylene-d12	15.707	264	96209	500.00	ppb	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	7.772	152	772726	1548.34	ppb	0.00
Spiked Amount 2000.000			Recovery =	77.42%		
17) Fluoranthene-d10	11.164	212	793273	1935.89	ppb	0.00
Spiked Amount 2000.000			Recovery =	96.79%		
Target Compounds						Qvalue
2) Naphthalene	7.187	128	10066	13.60	ppb	99
3) 2-Methylnaphthalene	7.798	142	11499	17.22	ppb	94
5) 1-Methylnaphthalene	7.887	142	6105	9.97	ppb	98
9) Dibenzofuran	8.913	168	1996	2.59	ppm	78
10) Fluorene	9.213	166	1063	1.66	ppb	87
12) Pentachlorophenol	9.882	266	724	18.36	ppb	98
13) Phenanthrene	10.071	178	5370	9.34	ppb	99
14) Anthracene	10.120	178	603	1.10	ppb	96
16) Fluoranthene	11.180	202	3251	5.97	ppb	97
19) Pyrene	11.427	202	1363	2.22	ppb	94
20) Benzo[a]anthracene	13.023	228	966	2.29	ppb	96
21) Chrysene	13.083	228	684	1.64	ppb	97
23) Benzo[b]fluoranthene	14.946	252	602	1.98	ppb	98
24) Benzo[k]fluoranthene	15.000	252	549	1.70	ppb	88

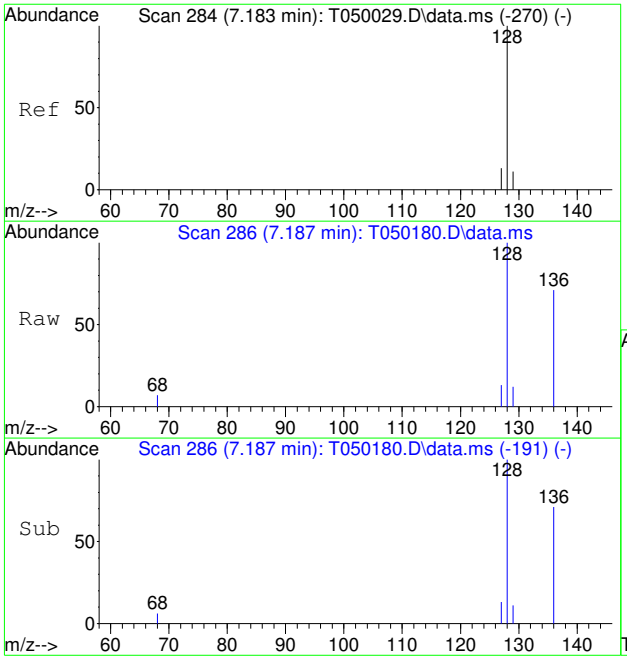
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\Jenniferf\AUGUST 2020\08-14-2020\ST1749\
Data File : T050180.D
Acq On : 13 Aug 2020 5:06 pm
Operator : nareshj
Sample : fa77689-5 e
Misc : OP81544,st1749,250,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 14 01:46:55 2020
Quant Method : C:\msdchem\1\methods\SIM_LVT071720.M
Quant Title : PAH's by 8270 SIM
QLast Update : Fri Aug 14 01:35:08 2020
Response via : Initial Calibration

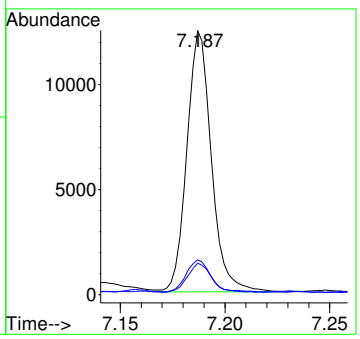


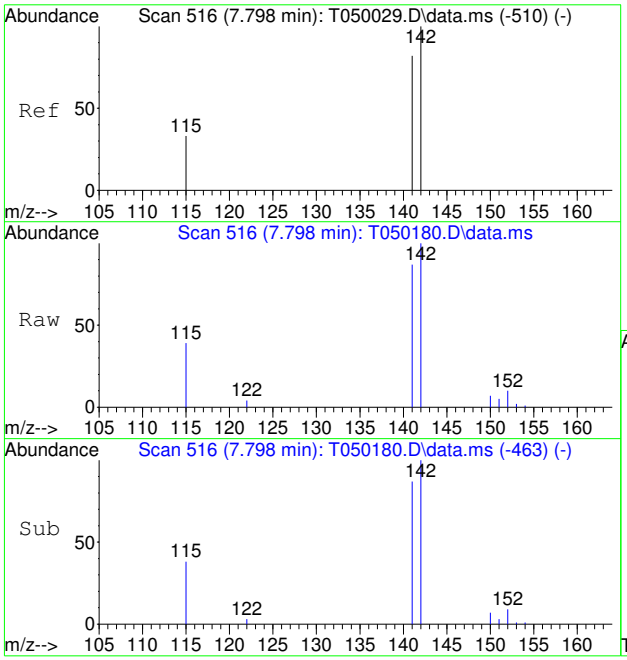


#2
Naphthalene
Concen: 13.60 ppb
RT: 7.187 min Scan# 286
Delta R.T. -0.000 min
Lab File: T050180.D
Acq: 13 Aug 2020 5:06 pm

Tgt Ion:128 Resp: 10066

Ion	Ratio	Lower	Upper
128	100		
129	11.1	0.0	40.8
127	12.3	0.0	42.7

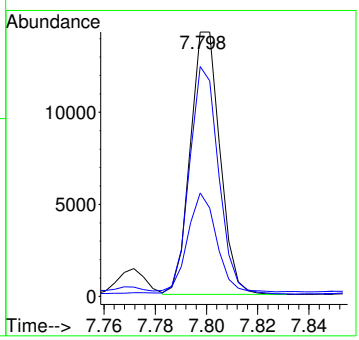


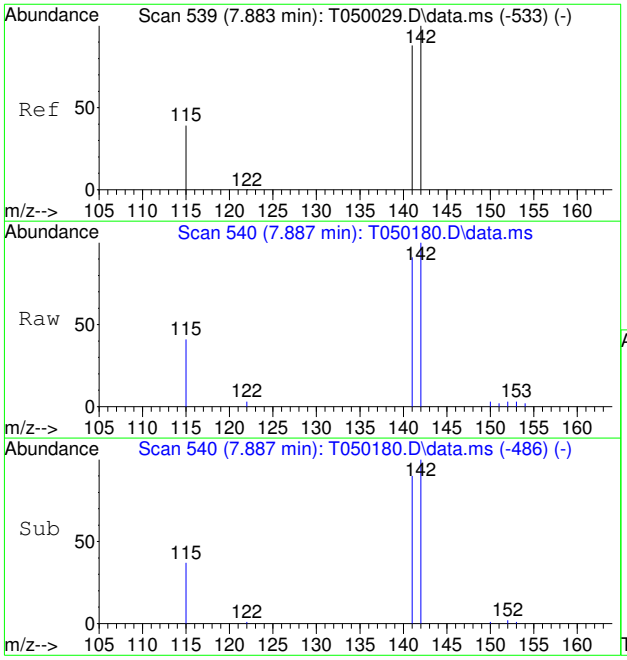


#3
2-Methylnaphthalene
Concen: 17.22 ppb
RT: 7.798 min Scan# 516
Delta R.T. -0.004 min
Lab File: T050180.D
Acq: 13 Aug 2020 5:06 pm

Tgt Ion:142 Resp: 11499

Ion	Ratio	Lower	Upper
142	100		
141	86.7	52.0	112.0
115	37.5	3.5	63.5

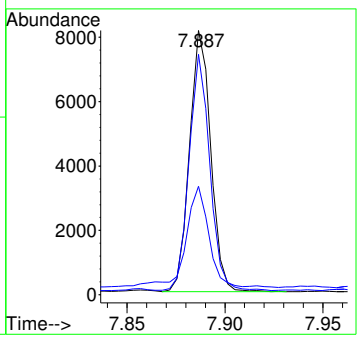


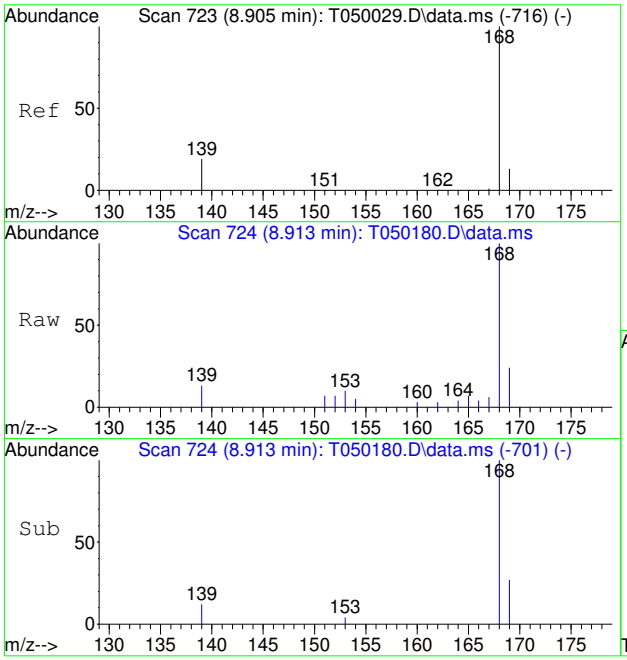


#5
1-Methylnaphthalene
Concen: 9.97 ppb
RT: 7.887 min Scan# 540
Delta R.T. -0.000 min
Lab File: T050180.D
Acq: 13 Aug 2020 5:06 pm

Tgt Ion:142 Resp: 6105

Ion	Ratio	Lower	Upper
142	100		
141	90.2	58.1	118.1
115	37.6	8.7	68.7

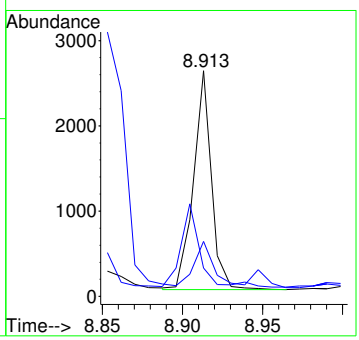


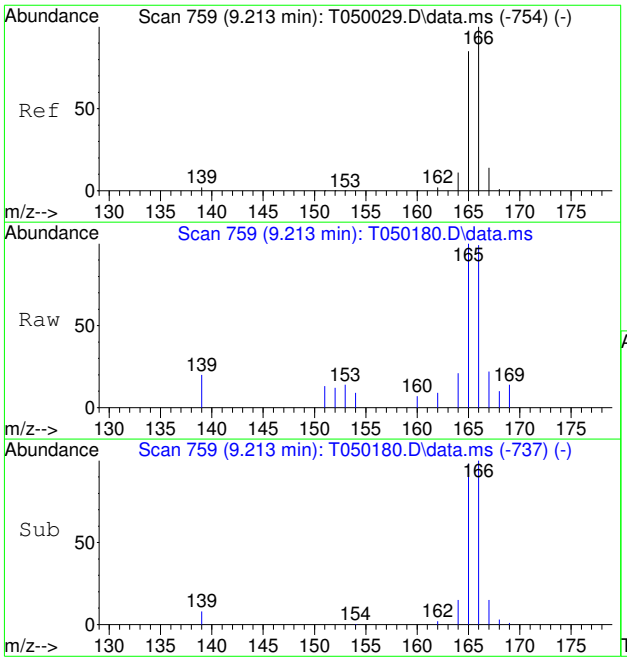


#9
Dibenzofuran
Concen: 2.59 ppm
RT: 8.913 min Scan# 724
Delta R.T. -0.000 min
Lab File: T050180.D
Acq: 13 Aug 2020 5:06 pm

Tgt Ion:168 Resp: 1996

Ion	Ratio	Lower	Upper
168	100		
139	8.6	0.0	49.2
169	20.4	0.0	42.9

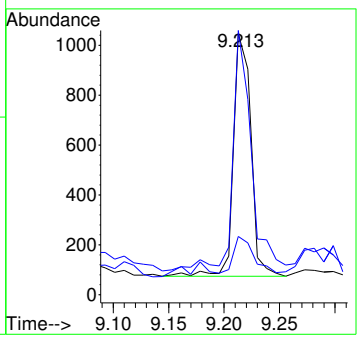


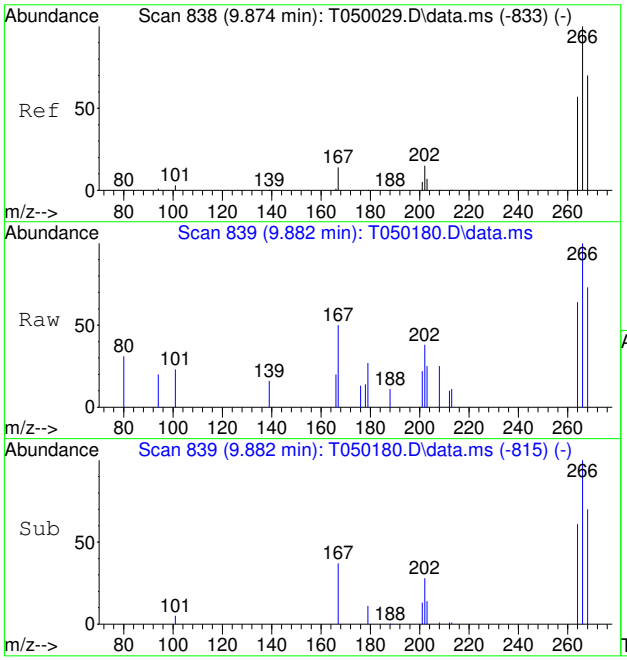


#10
Fluorene
Concen: 1.66 ppb
RT: 9.213 min Scan# 759
Delta R.T. -0.009 min
Lab File: T050180.D
Acq: 13 Aug 2020 5:06 pm

Tgt Ion:166 Resp: 1063

Ion	Ratio	Lower	Upper
166	100		
165	97.9	55.1	115.1
167	15.6	0.0	43.8

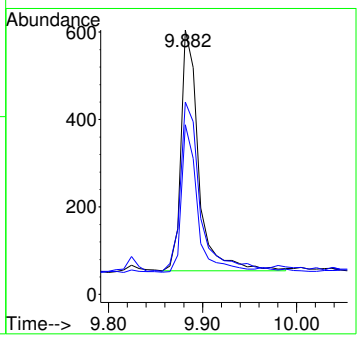


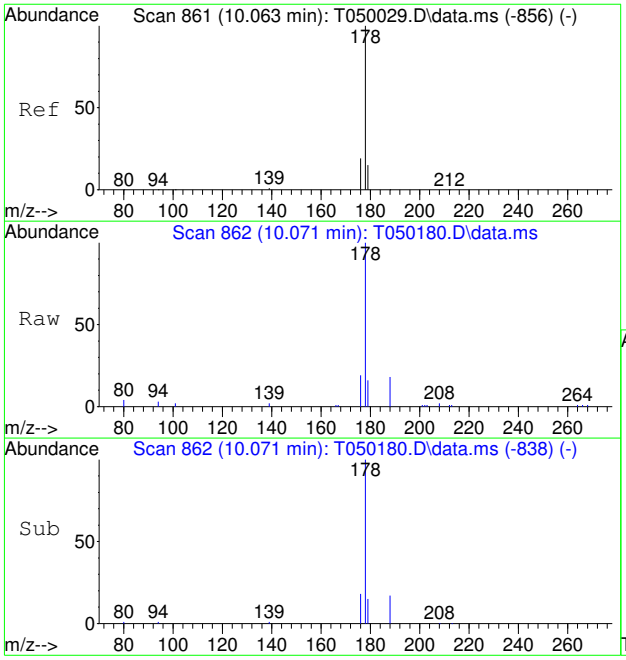


#12
Pentachlorophenol
Concen: 18.36 ppb
RT: 9.882 min Scan# 839
Delta R.T. -0.000 min
Lab File: T050180.D
Acq: 13 Aug 2020 5:06 pm

Tgt Ion:266 Resp: 724

Ion	Ratio	Lower	Upper
266	100		
264	60.8	36.9	76.9
268	69.6	49.8	89.8

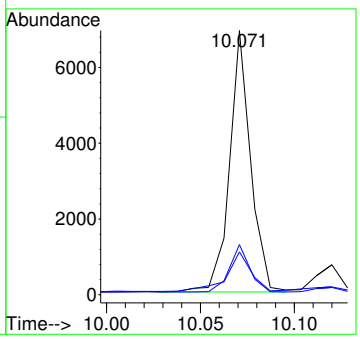


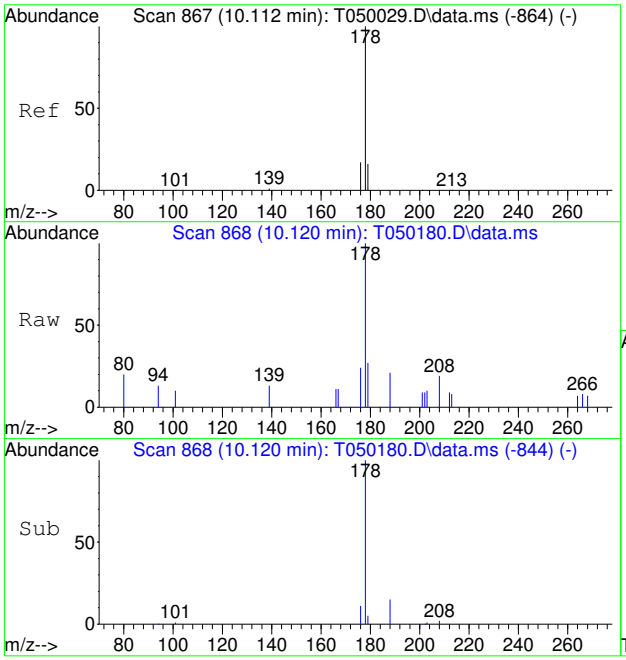


#13
Phenanthrene
Concen: 9.34 ppb
RT: 10.071 min Scan# 862
Delta R.T. -0.000 min
Lab File: T050180.D
Acq: 13 Aug 2020 5:06 pm

Tgt Ion:178 Resp: 5370

Ion	Ratio	Lower	Upper
178	100		
179	15.0	0.0	44.9
176	18.2	0.0	48.6

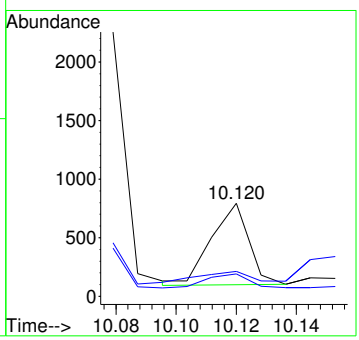


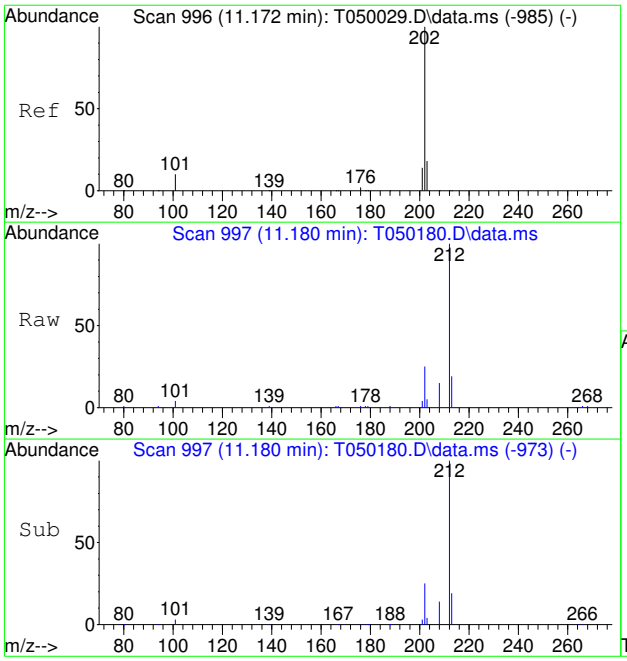


#14
Anthracene
Concen: 1.10 ppb
RT: 10.120 min Scan# 868
Delta R.T. -0.000 min
Lab File: T050180.D
Acq: 13 Aug 2020 5:06 pm

Tgt Ion:178 Resp: 603

Ion	Ratio	Lower	Upper
178	100		
179	12.8	0.0	45.6
176	17.4	0.0	46.8

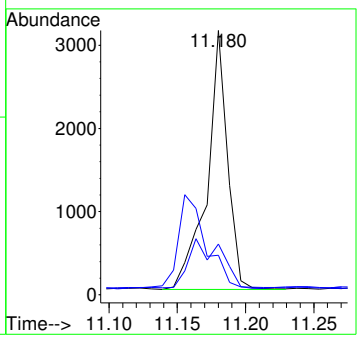


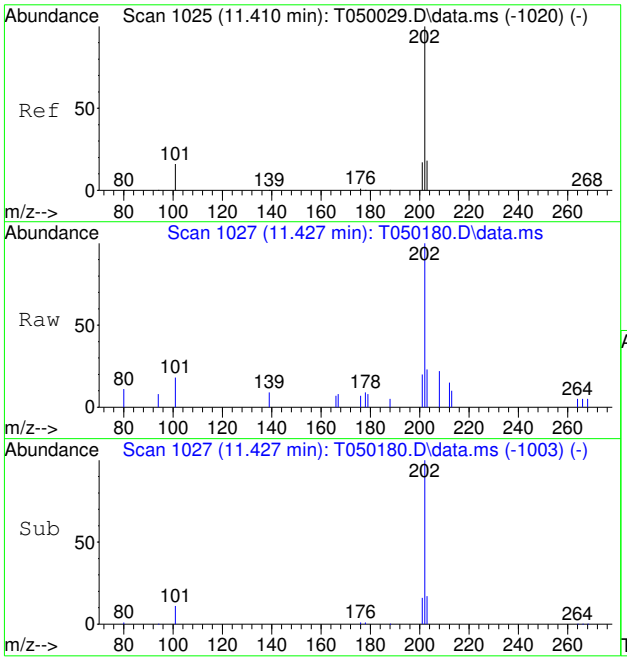


#16
Fluoranthene
Concen: 5.97 ppb
RT: 11.180 min Scan# 997
Delta R.T. -0.000 min
Lab File: T050180.D
Acq: 13 Aug 2020 5:06 pm

Tgt Ion:202 Resp: 3251

Ion	Ratio	Lower	Upper
202	100		
101	12.0	0.0	39.9
203	16.9	0.0	47.5

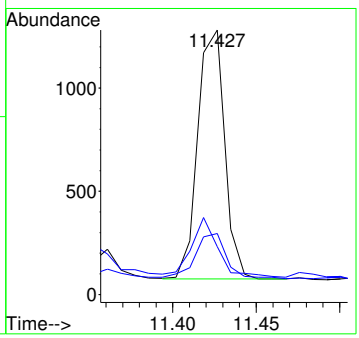


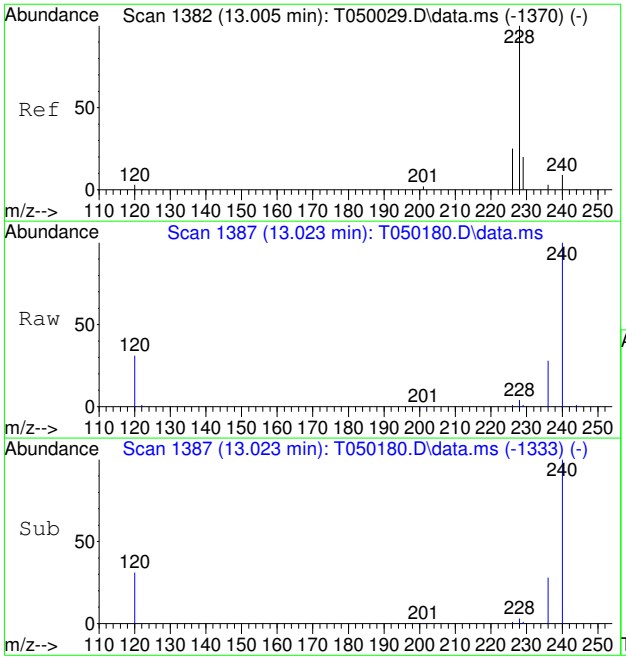


#19
Pyrene
Concen: 2.22 ppb
RT: 11.427 min Scan# 1027
Delta R.T. -0.000 min
Lab File: T050180.D
Acq: 13 Aug 2020 5:06 pm

Tgt Ion:202 Resp: 1363

Ion	Ratio	Lower	Upper
202	100		
101	11.7	0.0	46.2
203	17.9	0.0	47.5

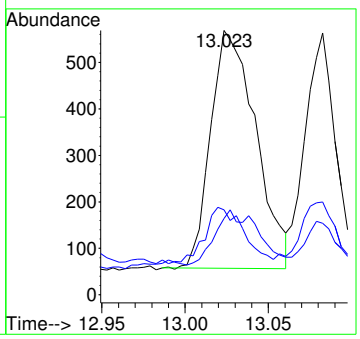


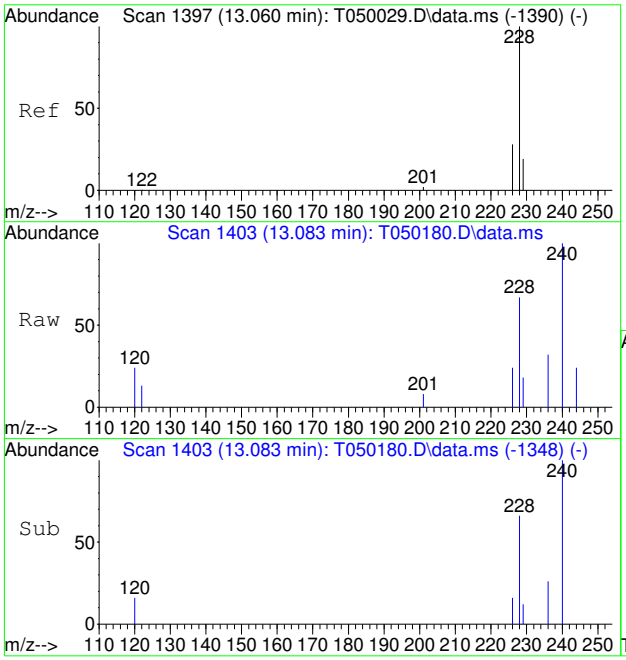


#20
Benzo[a]anthracene
Concen: 2.29 ppb
RT: 13.023 min Scan# 1387
Delta R.T. -0.000 min
Lab File: T050180.D
Acq: 13 Aug 2020 5:06 pm

Tgt Ion:228 Resp: 966

Ion	Ratio	Lower	Upper
228	100		
226	22.0	0.0	55.3
229	18.9	0.0	49.6

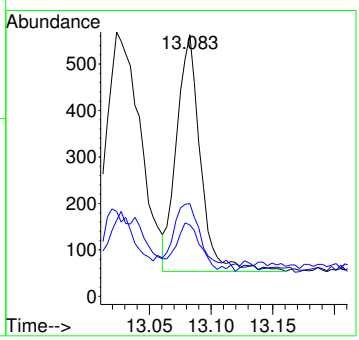


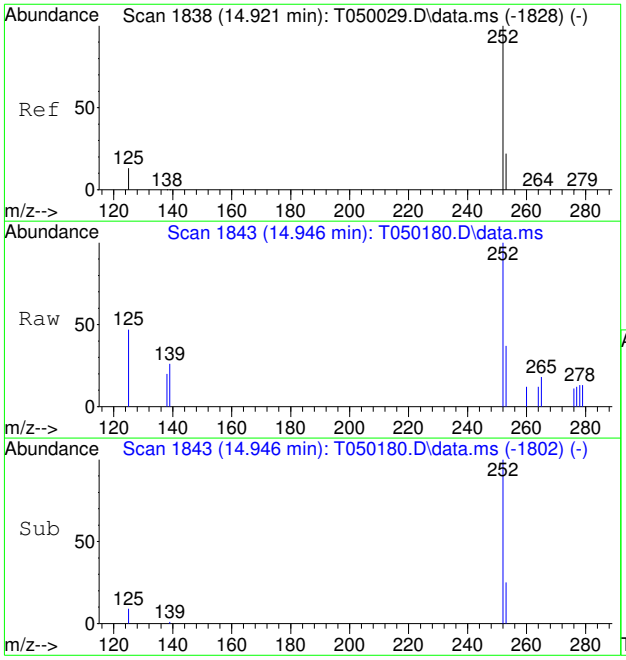


#21
Chrysene
Concen: 1.64 ppb
RT: 13.083 min Scan# 1403
Delta R.T. 0.004 min
Lab File: T050180.D
Acq: 13 Aug 2020 5:06 pm

Tgt Ion:228 Resp: 684

Ion	Ratio	Lower	Upper
228	100		
226	26.8	0.0	58.1
229	17.7	0.0	49.4

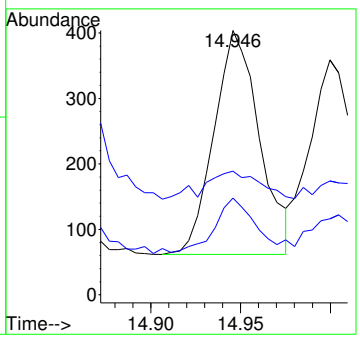


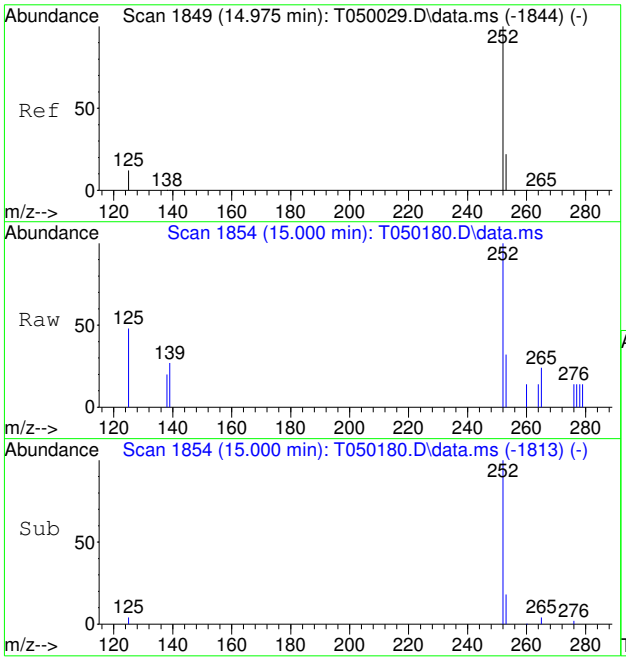


#23
Benzo[b]fluoranthene
Concen: 1.98 ppb
RT: 14.946 min Scan# 1843
Delta R.T. -0.000 min
Lab File: T050180.D
Acq: 13 Aug 2020 5:06 pm

Tgt Ion:252 Resp: 602

Ion	Ratio	Lower	Upper
252	100		
253	23.0	0.0	51.6
125	13.4	0.0	42.8

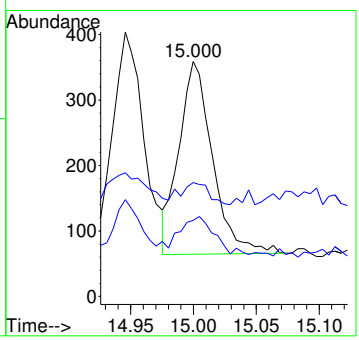




#24
Benzo[k]fluoranthene
Concen: 1.70 ppb
RT: 15.000 min Scan# 1854
Delta R.T. -0.000 min
Lab File: T050180.D
Acq: 13 Aug 2020 5:06 pm

Tgt Ion:252 Resp: 549

Ion	Ratio	Lower	Upper
252	100		
253	16.2	0.0	51.5
125	7.1	0.0	42.5



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\Jenniferf\AUGUST 2020\08-14-2020\ST1749\
Data File : T050181.D
Acq On : 13 Aug 2020 5:37 pm
Operator : nareshj
Sample : fa77689-6 e
Misc : OP81544,st1749,250,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 14 01:47:46 2020
Quant Method : C:\msdchem\1\methods\SIM_LVT071720.M
Quant Title : PAH's by 8270 SIM
QLast Update : Fri Aug 14 01:35:08 2020
Response via : Initial Calibration

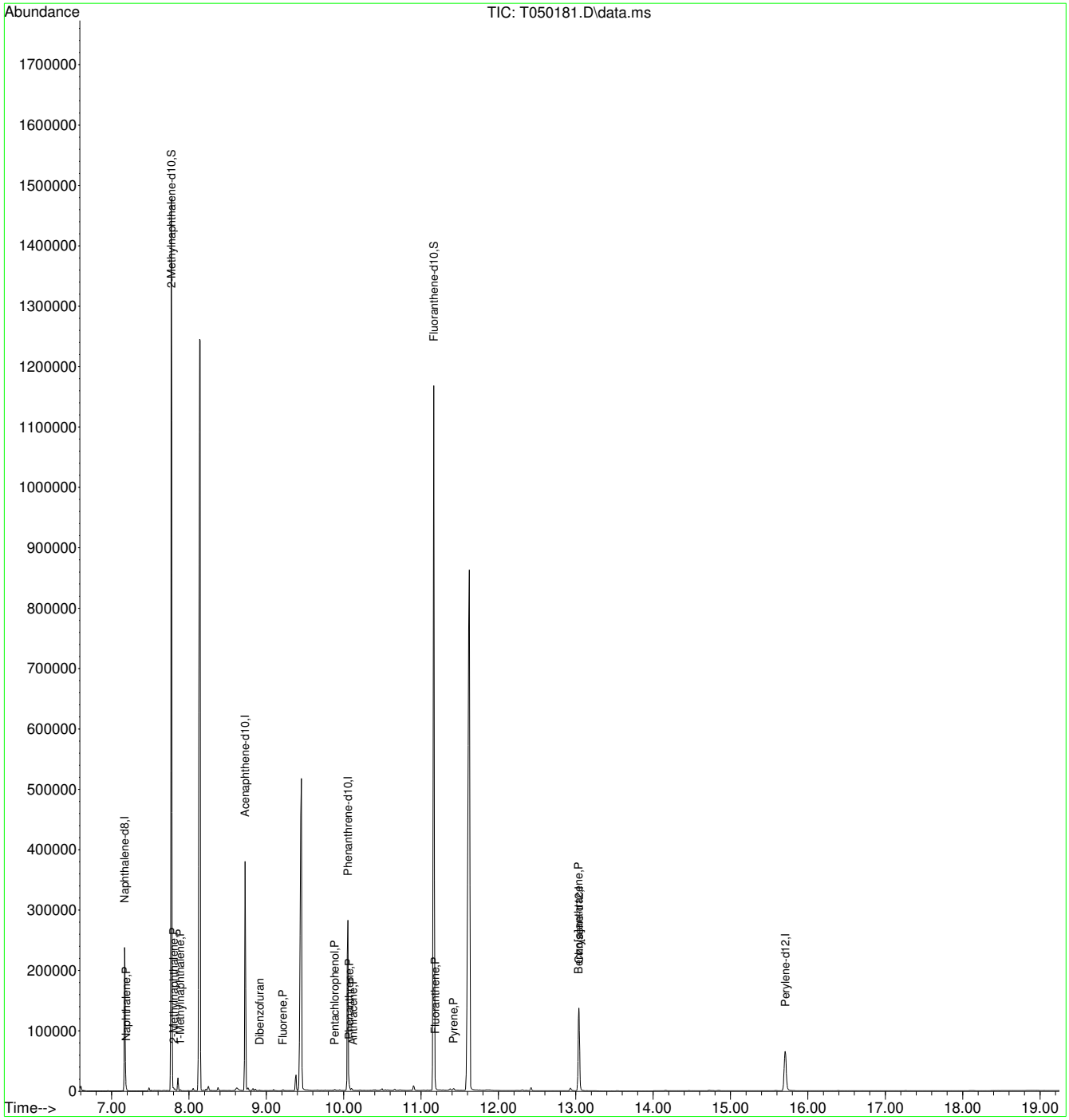
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Naphthalene-d8	7.168	136	176824	500.00	ppb		0.00
6) Acenaphthene-d10	8.725	162	116754	500.00	ppb		0.00
11) Phenanthrene-d10	10.054	188	216539	500.00	ppb		0.00
18) Chrysene-d12	13.038	240	124314	500.00	ppb		0.00
22) Perylene-d12	15.707	264	90107	500.00	ppb		0.00
System Monitoring Compounds							
4) 2-Methylnaphthalene-d10	7.772	152	459259	1549.51	ppb		0.00
Spiked Amount 2000.000			Recovery =	77.48%			
17) Fluoranthene-d10	11.164	212	767389	1964.10	ppb		0.00
Spiked Amount 2000.000			Recovery =	98.20%			
Target Compounds							Qvalue
2) Naphthalene	7.187	128	1801	4.10	ppb		94
3) 2-Methylnaphthalene	7.801	142	1248	3.15	ppb		98
5) 1-Methylnaphthalene	7.887	142	647	1.78	ppb		92
9) Dibenzofuran	8.913	168	708	1.54	ppm		88
10) Fluorene	9.213	166	727	1.90	ppb		83
12) Pentachlorophenol	9.882	266	645	17.16	ppb		94
13) Phenanthrene	10.071	178	4890	8.92	ppb		99
14) Anthracene	10.120	178	435	0.83	ppb		95
16) Fluoranthene	11.180	202	2720	5.24	ppb		97
19) Pyrene	11.418	202	1059	1.83	ppb	#	45
20) Benzo[a]anthracene	13.034	228	474	1.19	ppb		76

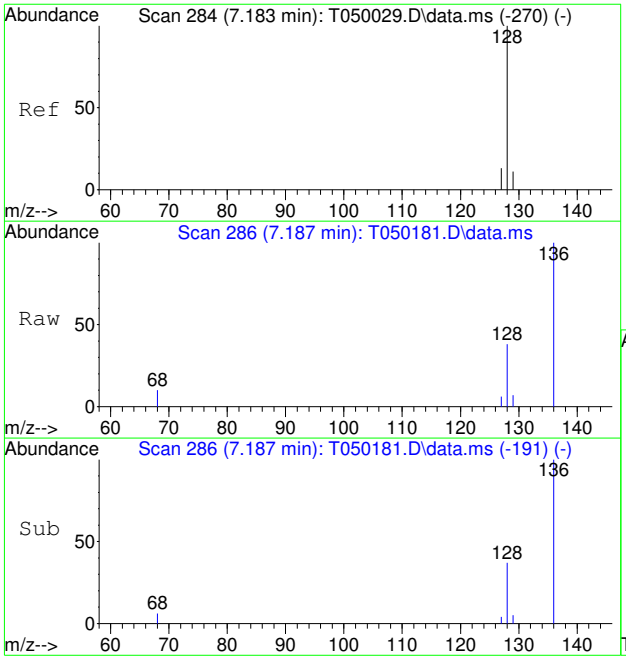
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\Jenniferf\AUGUST 2020\08-14-2020\ST1749\
Data File : T050181.D
Acq On : 13 Aug 2020 5:37 pm
Operator : nareshj
Sample : fa77689-6 e
Misc : OP81544,st1749,250,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 14 01:47:46 2020
Quant Method : C:\msdchem\1\methods\SIM_LVT071720.M
Quant Title : PAH's by 8270 SIM
QLast Update : Fri Aug 14 01:35:08 2020
Response via : Initial Calibration

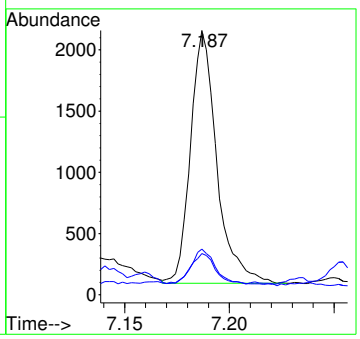


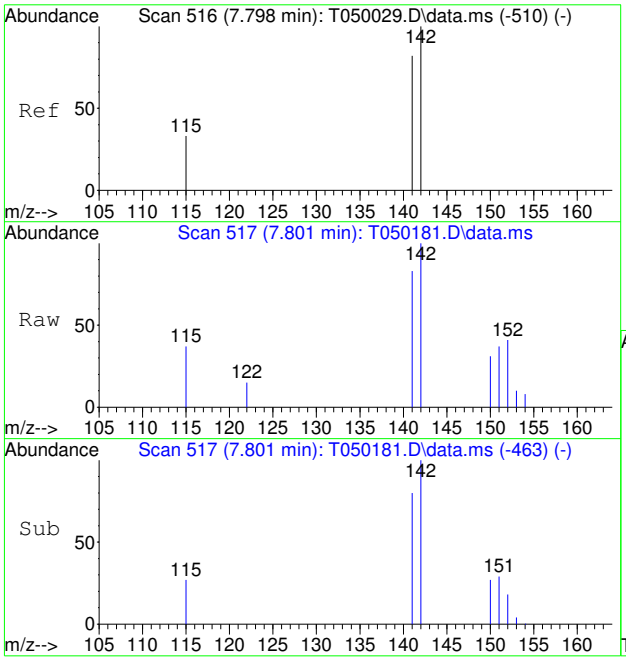


#2
Naphthalene
Concen: 4.10 ppb
RT: 7.187 min Scan# 286
Delta R.T. -0.000 min
Lab File: T050181.D
Acq: 13 Aug 2020 5:37 pm

Tgt Ion:128 Resp: 1801

Ion	Ratio	Lower	Upper
128	100		
129	13.9	0.0	40.8
127	11.2	0.0	42.7

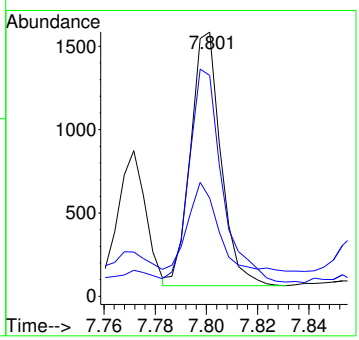


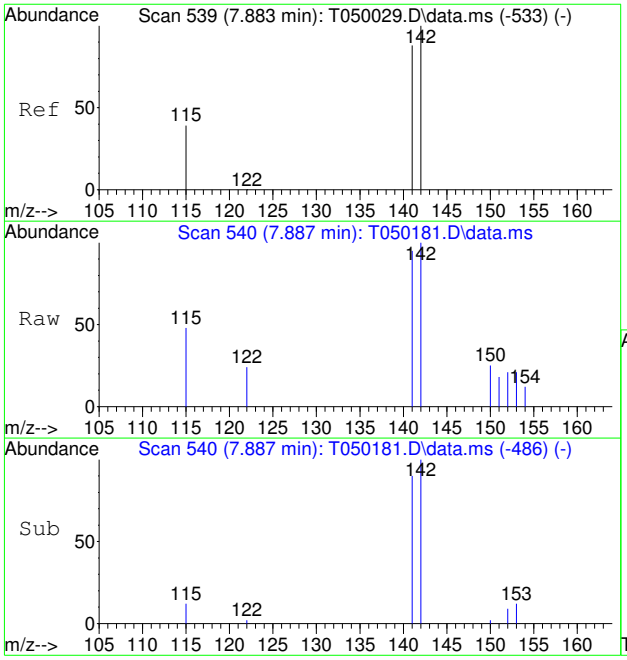


#3
2-Methylnaphthalene
Concen: 3.15 ppb
RT: 7.801 min Scan# 517
Delta R.T. -0.000 min
Lab File: T050181.D
Acq: 13 Aug 2020 5:37 pm

Tgt Ion:142 Resp: 1248

Ion	Ratio	Lower	Upper
142	100		
141	82.0	52.0	112.0
115	28.9	3.5	63.5

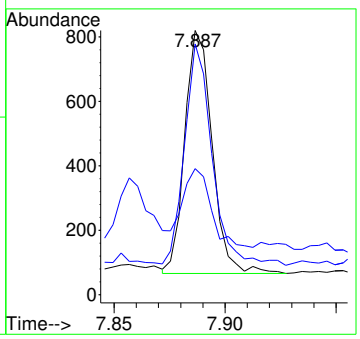


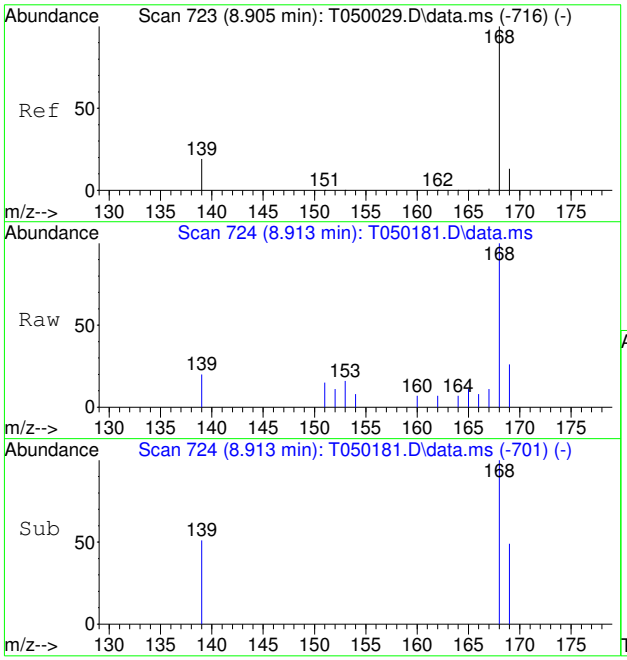


#5
1-Methylnaphthalene
Concen: 1.78 ppb
RT: 7.887 min Scan# 540
Delta R.T. -0.000 min
Lab File: T050181.D
Acq: 13 Aug 2020 5:37 pm

Tgt Ion:142 Resp: 647

Ion	Ratio	Lower	Upper
142	100		
141	91.6	58.1	118.1
115	28.6	8.7	68.7

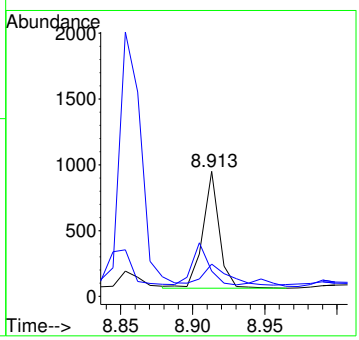


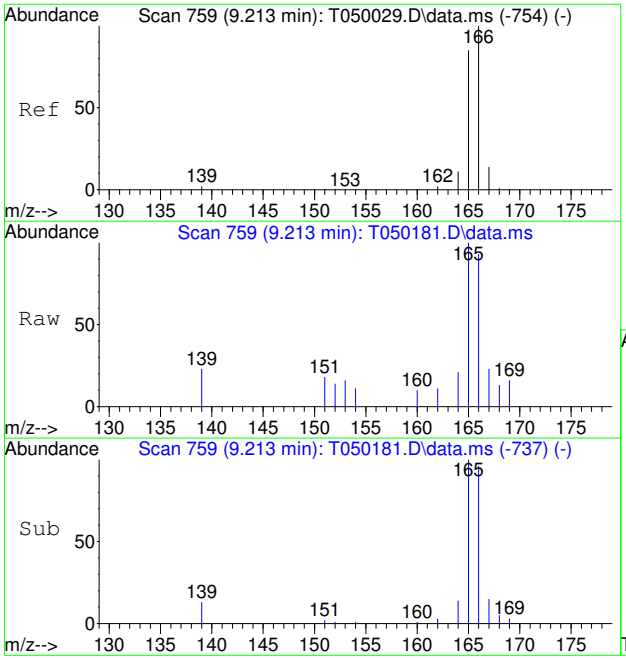


#9
Dibenzofuran
Concen: 1.54 ppm
RT: 8.913 min Scan# 724
Delta R.T. -0.000 min
Lab File: T050181.D
Acq: 13 Aug 2020 5:37 pm

Tgt Ion:168 Resp: 708

Ion	Ratio	Lower	Upper
168	100		
139	11.6	0.0	49.2
169	15.1	0.0	42.9

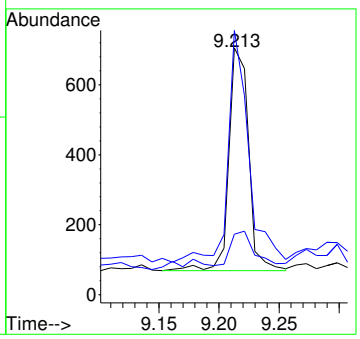


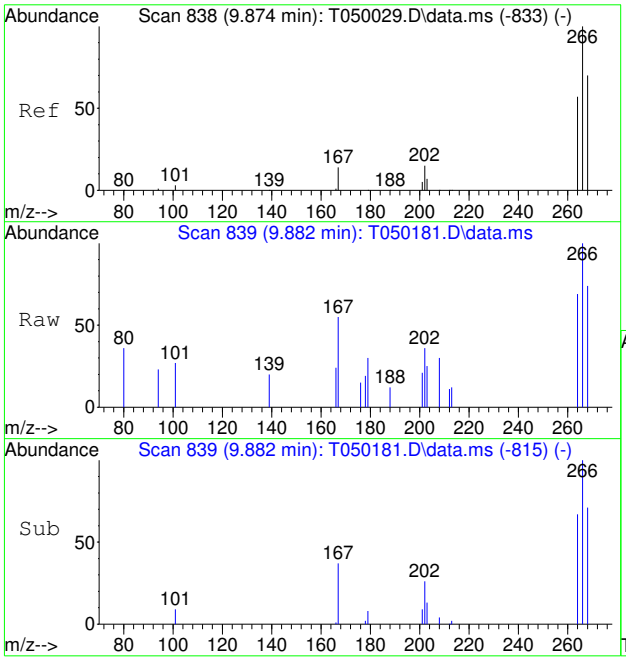


#10
Fluorene
Concen: 1.90 ppb
RT: 9.213 min Scan# 759
Delta R.T. -0.009 min
Lab File: T050181.D
Acq: 13 Aug 2020 5:37 pm

Tgt Ion:166 Resp: 727

Ion	Ratio	Lower	Upper
166	100		
165	103.0	55.1	115.1
167	13.9	0.0	43.8

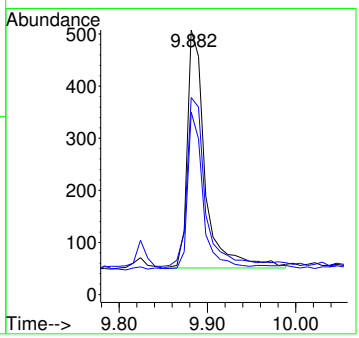


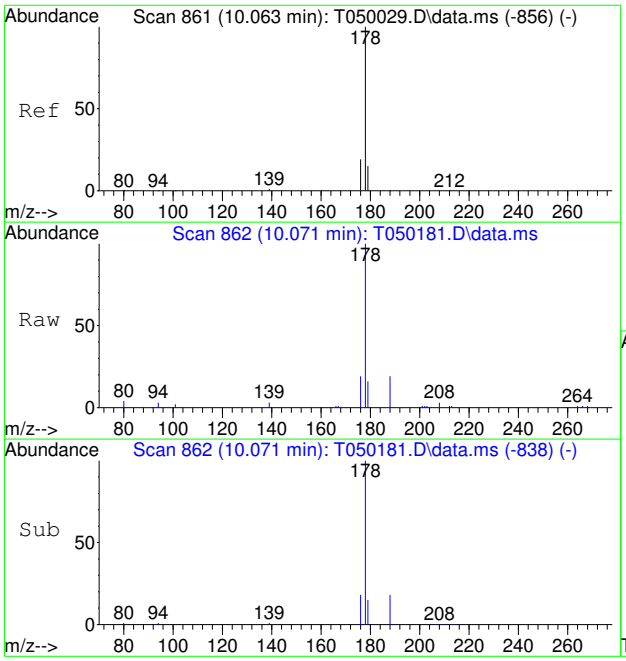


#12
Pentachlorophenol
Concen: 17.16 ppb
RT: 9.882 min Scan# 839
Delta R.T. -0.000 min
Lab File: T050181.D
Acq: 13 Aug 2020 5:37 pm

Tgt Ion:266 Resp: 645

Ion	Ratio	Lower	Upper
266	100		
264	65.5	36.9	76.9
268	70.7	49.8	89.8

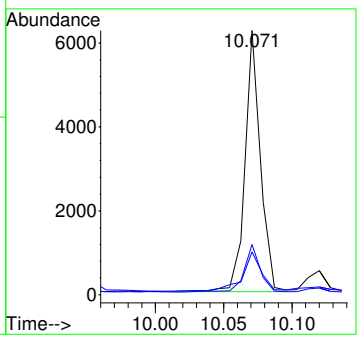


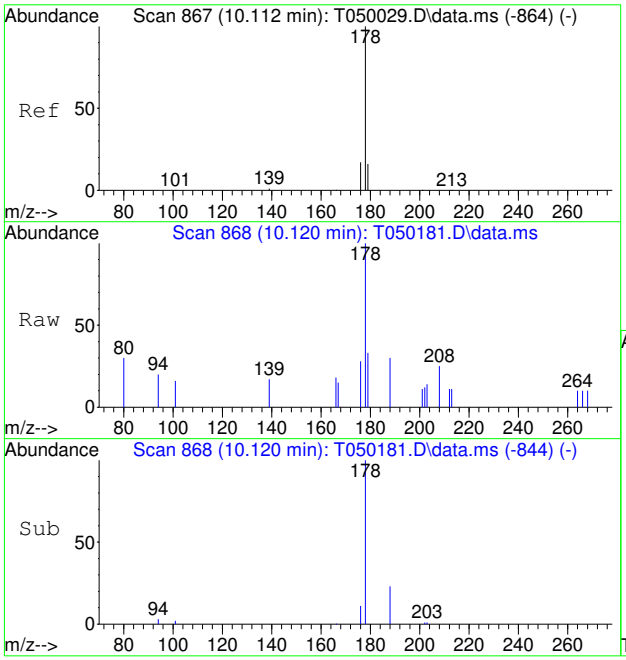


#13
Phenanthrene
Concen: 8.92 ppb
RT: 10.071 min Scan# 862
Delta R.T. -0.000 min
Lab File: T050181.D
Acq: 13 Aug 2020 5:37 pm

Tgt Ion:178 Resp: 4890

Ion	Ratio	Lower	Upper
178	100		
179	14.9	0.0	44.9
176	18.1	0.0	48.6

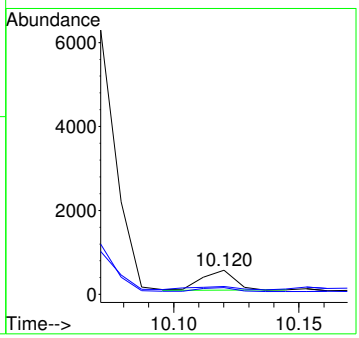


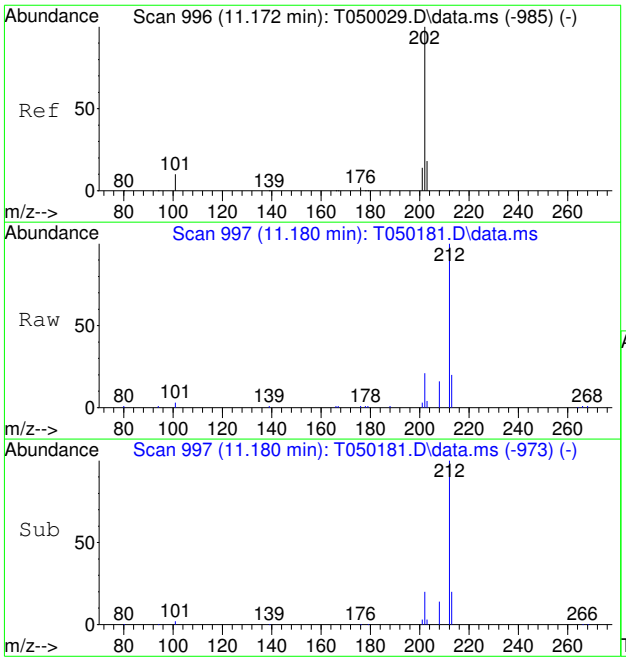


#14
Anthracene
Concen: 0.83 ppb
RT: 10.120 min Scan# 868
Delta R.T. -0.000 min
Lab File: T050181.D
Acq: 13 Aug 2020 5:37 pm

Tgt Ion:178 Resp: 435

Ion	Ratio	Lower	Upper
178	100		
179	14.7	0.0	45.6
176	20.1	0.0	46.8

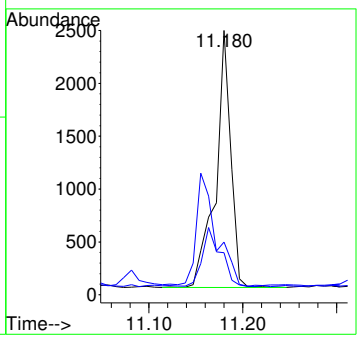


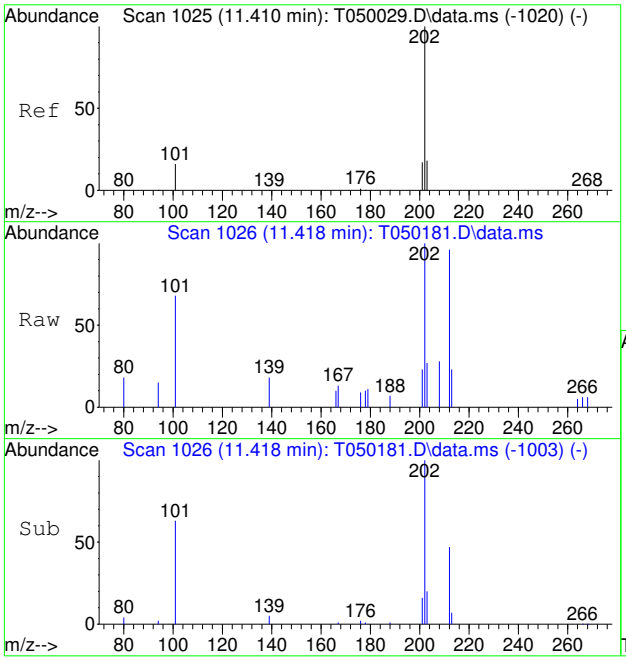


#16
Fluoranthene
Concen: 5.24 ppb
RT: 11.180 min Scan# 997
Delta R.T. -0.000 min
Lab File: T050181.D
Acq: 13 Aug 2020 5:37 pm

Tgt Ion:202 Resp: 2720

Ion	Ratio	Lower	Upper
202	100		
101	12.4	0.0	39.9
203	16.9	0.0	47.5

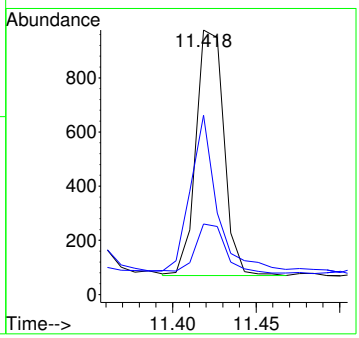


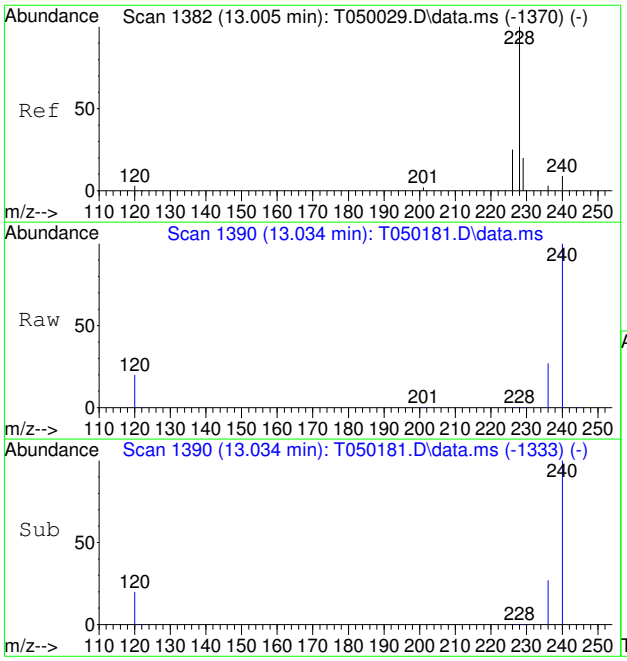


#19
Pyrene
Concen: 1.83 ppb
RT: 11.418 min Scan# 1026
Delta R.T. -0.008 min
Lab File: T050181.D
Acq: 13 Aug 2020 5:37 pm

Tgt Ion:202 Resp: 1059

Ion	Ratio	Lower	Upper
202	100		
101	63.3	0.0	46.2#
203	19.5	0.0	47.5

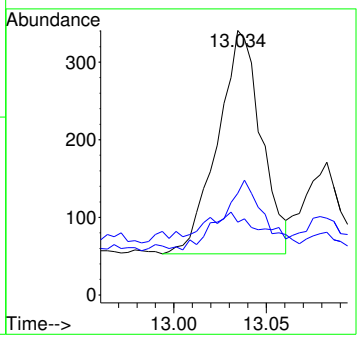




#20
Benzo[a]anthracene
Concen: 1.19 ppb
RT: 13.034 min Scan# 1390
Delta R.T. 0.011 min
Lab File: T050181.D
Acq: 13 Aug 2020 5:37 pm

Tgt Ion:228 Resp: 474

Ion	Ratio	Lower	Upper
228	100		
226	6.4	0.0	55.3
229	22.7	0.0	49.6



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\Jenniferf\AUGUST 2020\08-14-2020\ST1749\
Data File : T050182.D
Acq On : 13 Aug 2020 6:08 pm
Operator : nareshj
Sample : fa77689-7 e
Misc : OP81544,st1749,250,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 14 01:48:42 2020
Quant Method : C:\msdchem\1\methods\SIM_LVT071720.M
Quant Title : PAH's by 8270 SIM
QLast Update : Fri Aug 14 01:35:08 2020
Response via : Initial Calibration

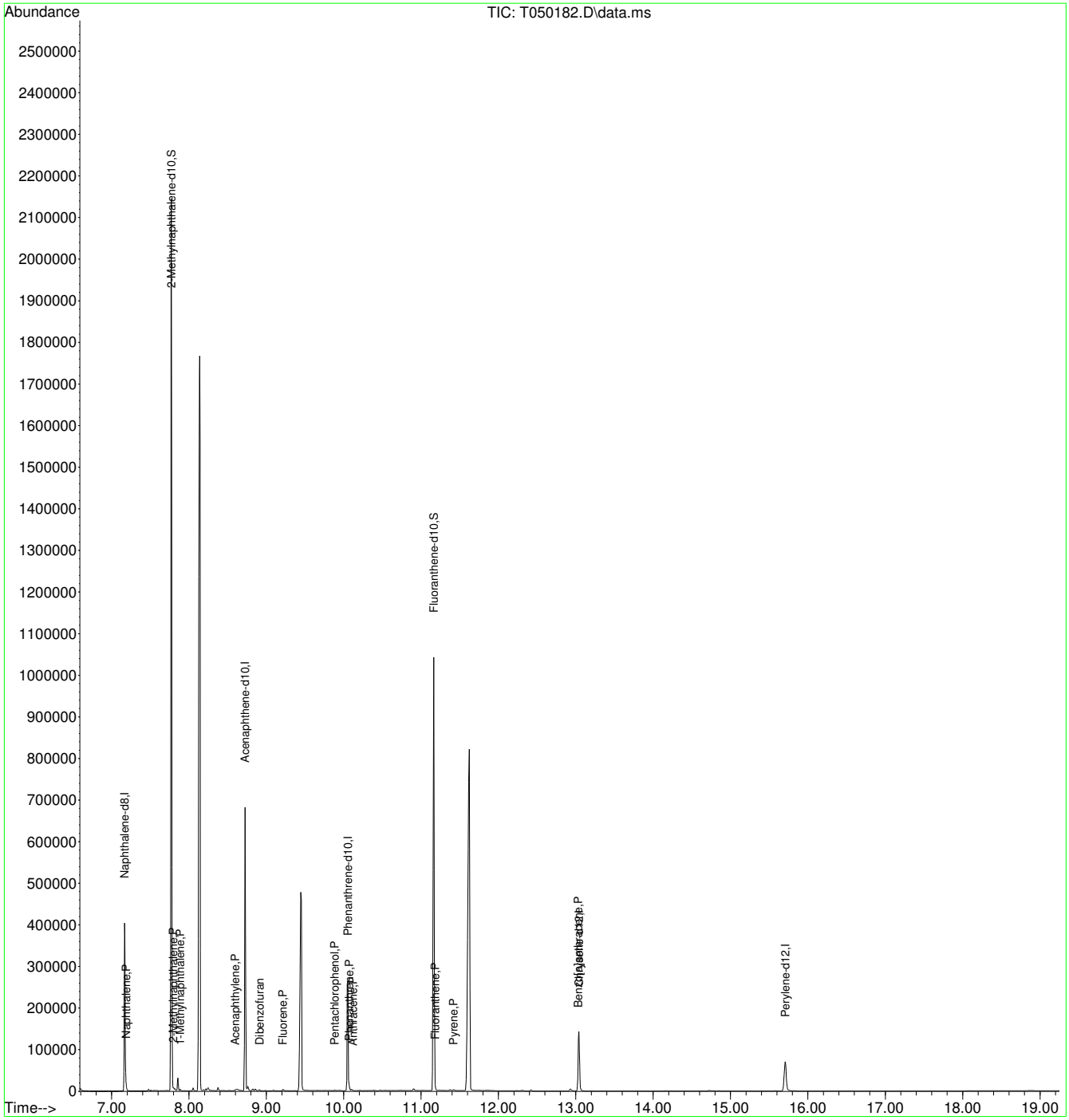
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	7.168	136	301738	500.00	ppb	0.00
6) Acenaphthene-d10	8.725	162	197213	500.00	ppb	0.00
11) Phenanthrene-d10	10.055	188	224439	500.00	ppb	0.00
18) Chrysene-d12	13.038	240	127800	500.00	ppb	0.00
22) Perylene-d12	15.707	264	93497	500.00	ppb	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	7.772	152	689081	1362.44	ppb	0.00
Spiked Amount 2000.000			Recovery =	68.12%		
17) Fluoranthene-d10	11.164	212	691550	1705.83	ppb	0.00
Spiked Amount 2000.000			Recovery =	85.29%		
Target Compounds						Qvalue
2) Naphthalene	7.187	128	5718	7.63	ppb	98
3) 2-Methylnaphthalene	7.798	142	1876	2.77	ppb	95
5) 1-Methylnaphthalene	7.887	142	1126	1.81	ppb	96
7) Acenaphthylene	8.597	152	1414	1.49	ppb	67
9) Dibenzofuran	8.913	168	1661	2.14	ppm	86
10) Fluorene	9.213	166	1432	2.21	ppb	90
12) Pentachlorophenol	9.882	266	565	14.50	ppb	97
13) Phenanthrene	10.071	178	6342	11.16	ppb	99
14) Anthracene	10.120	178	732	1.35	ppb	93
16) Fluoranthene	11.180	202	3422	6.36	ppb	98
19) Pyrene	11.419	202	1558	2.62	ppb	93
20) Benzo[a]anthracene	13.031	228	575	1.40	ppb	81

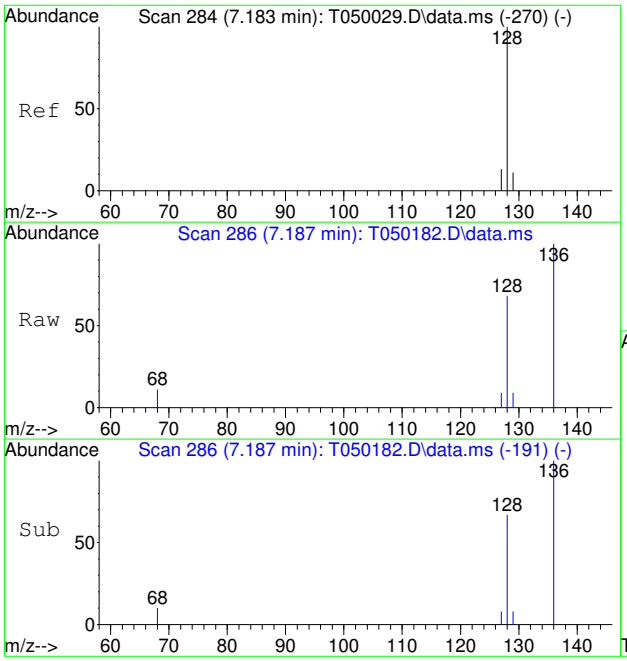
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\Jenniferf\AUGUST 2020\08-14-2020\ST1749\
Data File : T050182.D
Acq On : 13 Aug 2020 6:08 pm
Operator : nareshj
Sample : fa77689-7 e
Misc : OP81544,st1749,250,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 14 01:48:42 2020
Quant Method : C:\msdchem\1\methods\SIM_LVT071720.M
Quant Title : PAH's by 8270 SIM
QLast Update : Fri Aug 14 01:35:08 2020
Response via : Initial Calibration

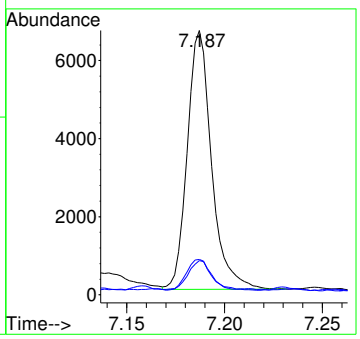


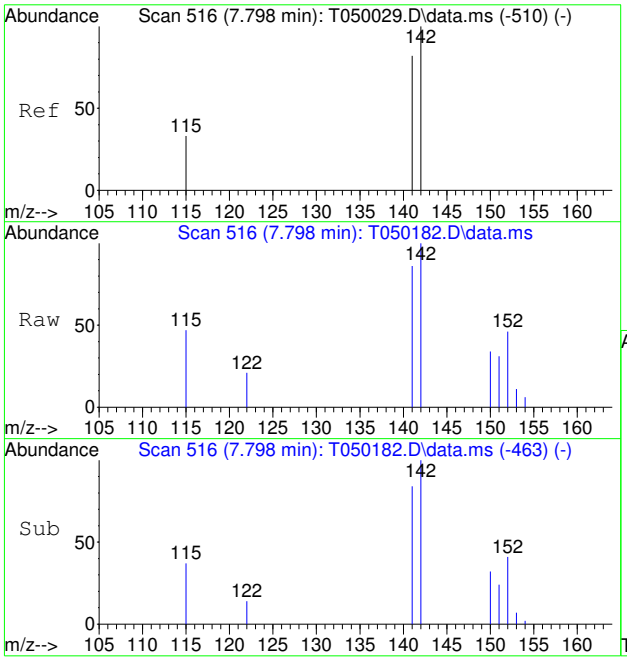


#2
Naphthalene
Concen: 7.63 ppb
RT: 7.187 min Scan# 286
Delta R.T. 0.000 min
Lab File: T050182.D
Acq: 13 Aug 2020 6:08 pm

Tgt Ion:128 Resp: 5718

Ion	Ratio	Lower	Upper
128	100		
129	11.1	0.0	40.8
127	11.2	0.0	42.7

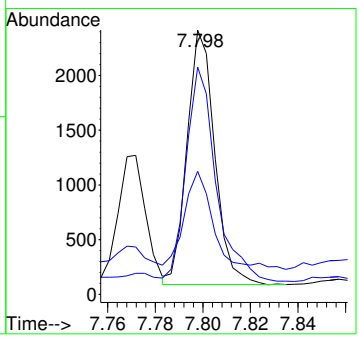


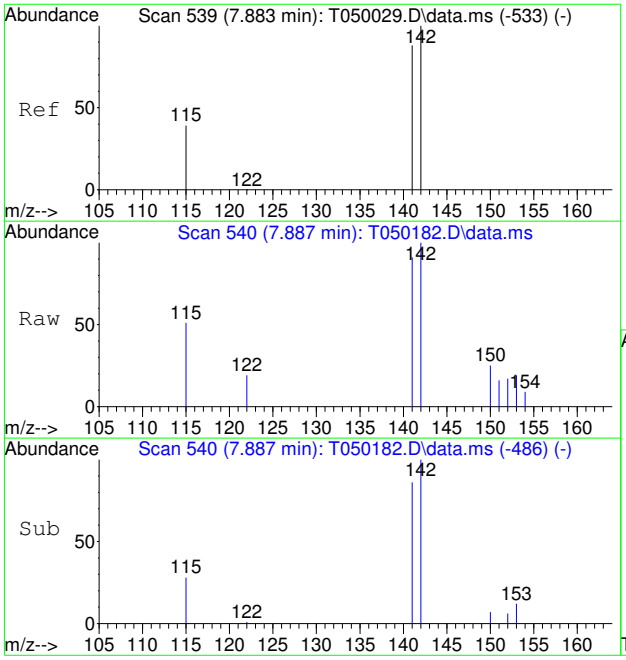


#3
2-Methylnaphthalene
Concen: 2.77 ppb
RT: 7.798 min Scan# 516
Delta R.T. -0.004 min
Lab File: T050182.D
Acq: 13 Aug 2020 6:08 pm

Tgt Ion:142 Resp: 1876

Ion	Ratio	Lower	Upper
142	100		
141	84.9	52.0	112.0
115	38.4	3.5	63.5

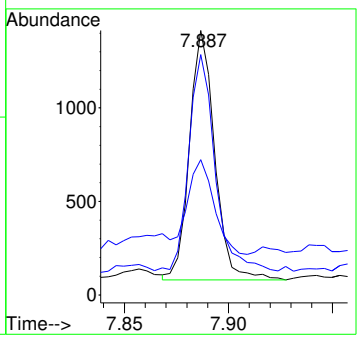


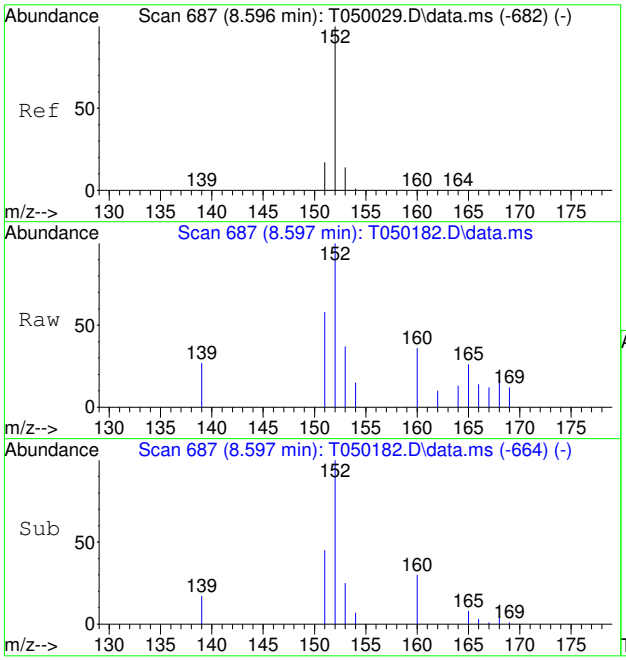


#5
1-Methylnaphthalene
Concen: 1.81 ppb
RT: 7.887 min Scan# 540
Delta R.T. 0.000 min
Lab File: T050182.D
Acq: 13 Aug 2020 6:08 pm

Tgt Ion:142 Resp: 1126

Ion	Ratio	Lower	Upper
142	100		
141	86.0	58.1	118.1
115	33.7	8.7	68.7

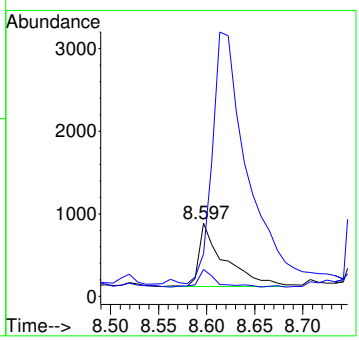


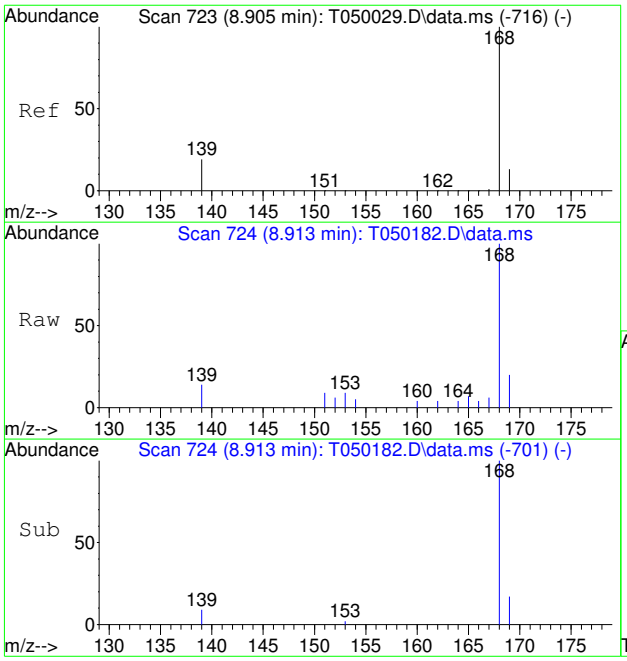


#7
Acenaphthylene
Concen: 1.49 ppb
RT: 8.597 min Scan# 687
Delta R.T. 0.000 min
Lab File: T050182.D
Acq: 13 Aug 2020 6:08 pm

Tgt Ion:152 Resp: 1414

Ion	Ratio	Lower	Upper
152	100		
151	31.2	0.0	47.1
153	27.6	0.0	44.1

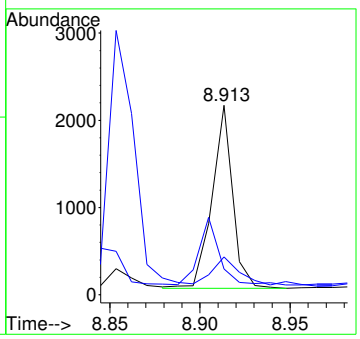


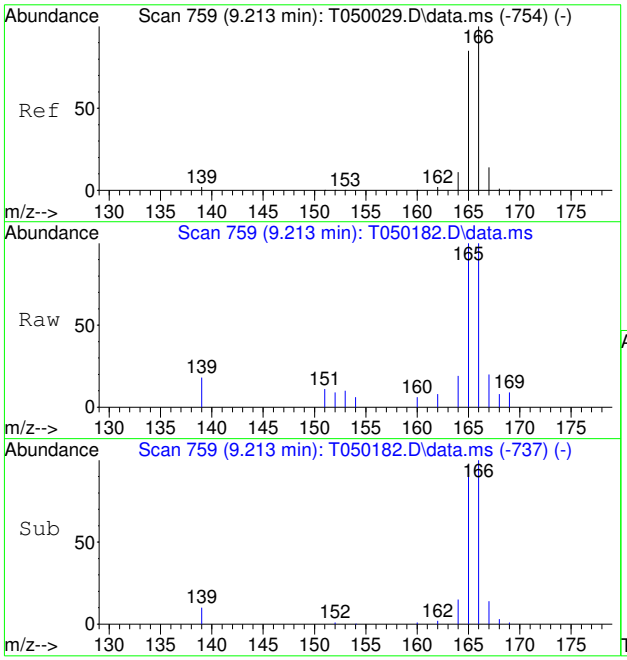


#9
Dibenzofuran
Concen: 2.14 ppm
RT: 8.913 min Scan# 724
Delta R.T. 0.000 min
Lab File: T050182.D
Acq: 13 Aug 2020 6:08 pm

Tgt Ion:168 Resp: 1661

Ion	Ratio	Lower	Upper
168	100		
139	8.5	0.0	49.2
169	12.5	0.0	42.9

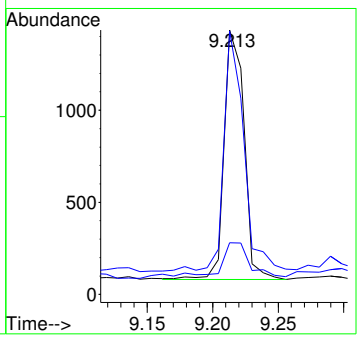


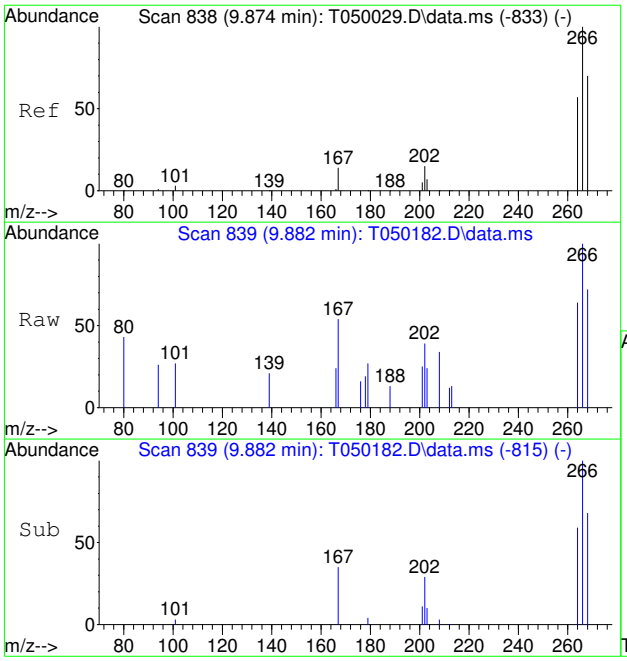


#10
Fluorene
Concen: 2.21 ppb
RT: 9.213 min Scan# 759
Delta R.T. -0.008 min
Lab File: T050182.D
Acq: 13 Aug 2020 6:08 pm

Tgt Ion:166 Resp: 1432

Ion	Ratio	Lower	Upper
166	100		
165	96.0	55.1	115.1
167	13.1	0.0	43.8

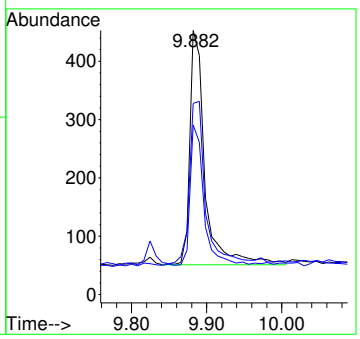


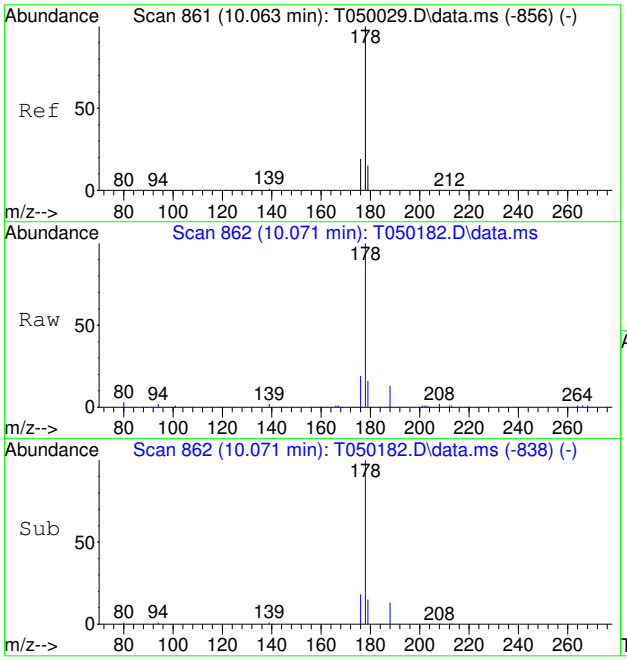


#12
Pentachlorophenol
Concen: 14.50 ppb
RT: 9.882 min Scan# 839
Delta R.T. 0.000 min
Lab File: T050182.D
Acq: 13 Aug 2020 6:08 pm

Tgt Ion:266 Resp: 565

Ion	Ratio	Lower	Upper
266	100		
264	59.8	36.9	76.9
268	67.9	49.8	89.8

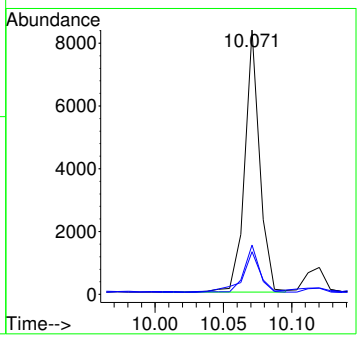


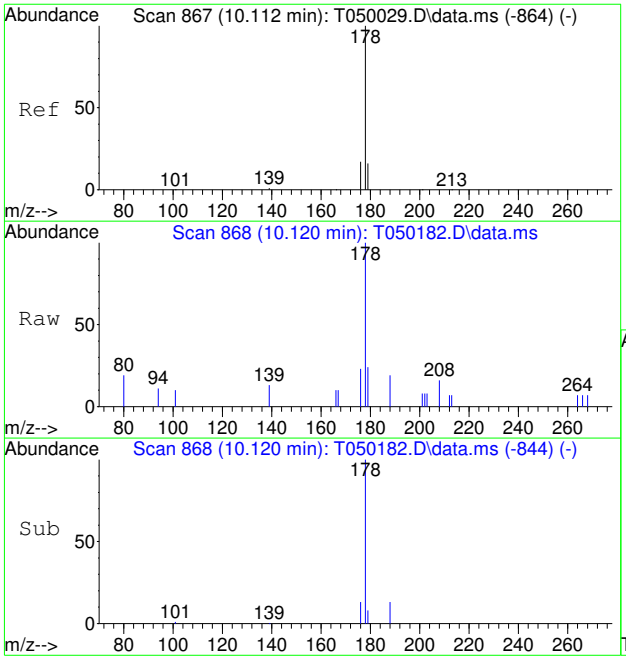


#13
Phenanthrene
Concen: 11.16 ppb
RT: 10.071 min Scan# 862
Delta R.T. 0.000 min
Lab File: T050182.D
Acq: 13 Aug 2020 6:08 pm

Tgt Ion:178 Resp: 6342

Ion	Ratio	Lower	Upper
178	100		
179	15.0	0.0	44.9
176	18.0	0.0	48.6

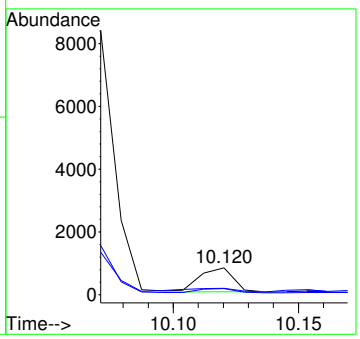


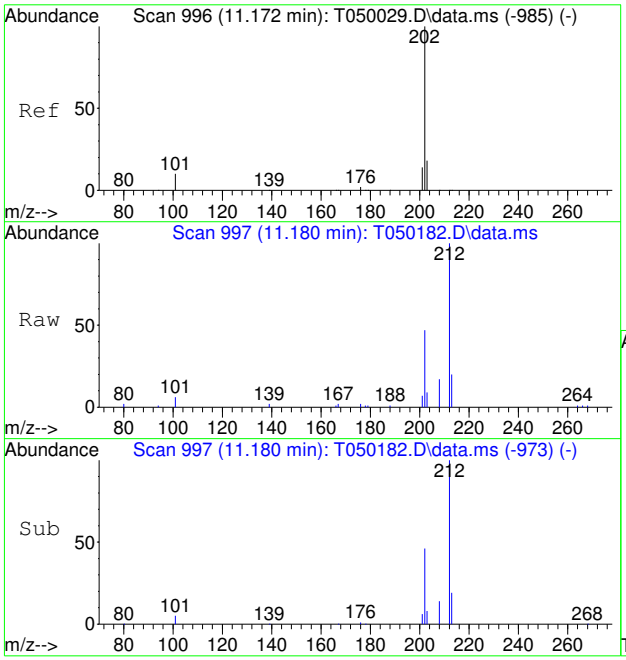


#14
Anthracene
Concen: 1.35 ppb
RT: 10.120 min Scan# 868
Delta R.T. 0.000 min
Lab File: T050182.D
Acq: 13 Aug 2020 6:08 pm

Tgt Ion:178 Resp: 732

Ion	Ratio	Lower	Upper
178	100		
179	9.2	0.0	45.6
176	16.9	0.0	46.8

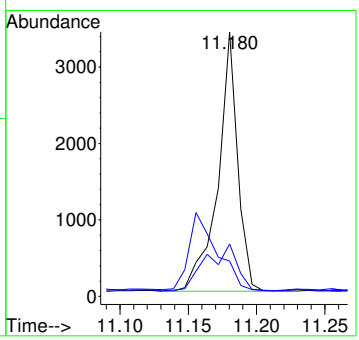


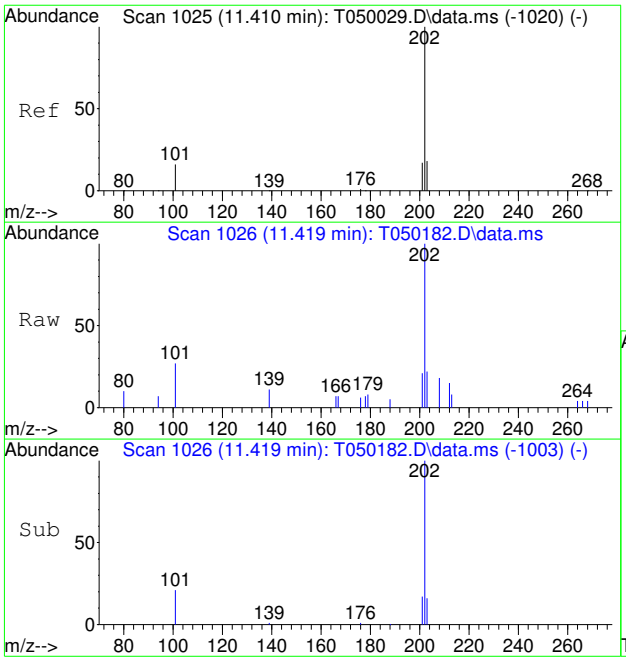


#16
Fluoranthene
Concen: 6.36 ppb
RT: 11.180 min Scan# 997
Delta R.T. 0.000 min
Lab File: T050182.D
Acq: 13 Aug 2020 6:08 pm

Tgt Ion:202 Resp: 3422

Ion	Ratio	Lower	Upper
202	100		
101	11.3	0.0	39.9
203	17.9	0.0	47.5

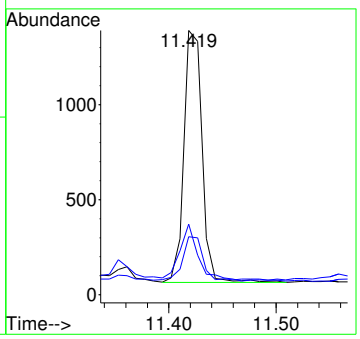


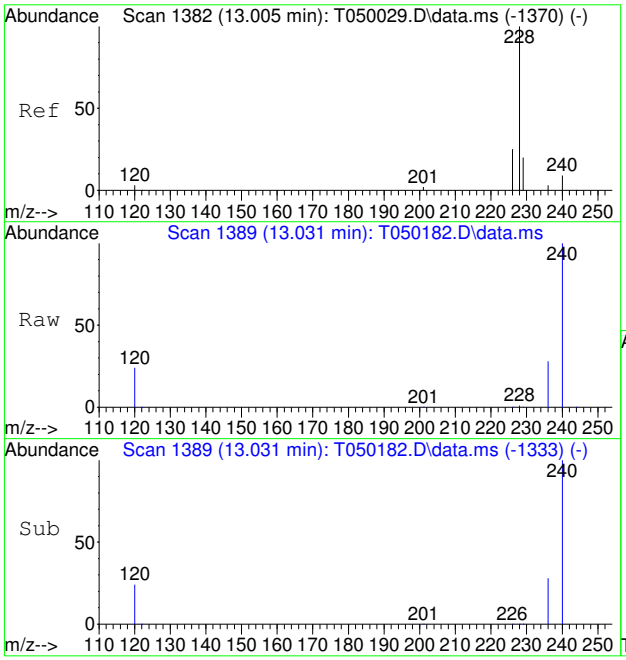


#19
Pyrene
Concen: 2.62 ppb
RT: 11.419 min Scan# 1026
Delta R.T. -0.008 min
Lab File: T050182.D
Acq: 13 Aug 2020 6:08 pm

Tgt Ion:202 Resp: 1558

Ion	Ratio	Lower	Upper
202	100		
101	21.8	0.0	46.2
203	17.3	0.0	47.5

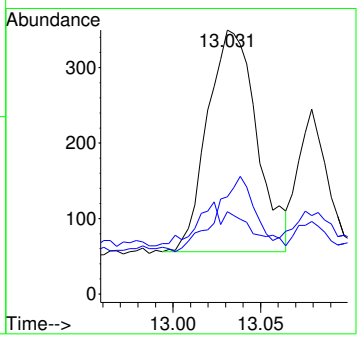




#20
Benzo[a]anthracene
Concen: 1.40 ppb
RT: 13.031 min Scan# 1389
Delta R.T. 0.008 min
Lab File: T050182.D
Acq: 13 Aug 2020 6:08 pm

Tgt Ion:228 Resp: 575

Ion	Ratio	Lower	Upper
228	100		
226	12.7	0.0	55.3
229	24.7	0.0	49.6



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\Jenniferf\AUGUST 2020\08-14-2020\ST1749\
Data File : T050183.D
Acq On : 13 Aug 2020 6:39 pm
Operator : nareshj
Sample : fa77689-12 e
Misc : OP81544,st1749,250,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 14 01:49:19 2020
Quant Method : C:\msdchem\1\methods\SIM_LVT071720.M
Quant Title : PAH's by 8270 SIM
QLast Update : Fri Aug 14 01:35:08 2020
Response via : Initial Calibration

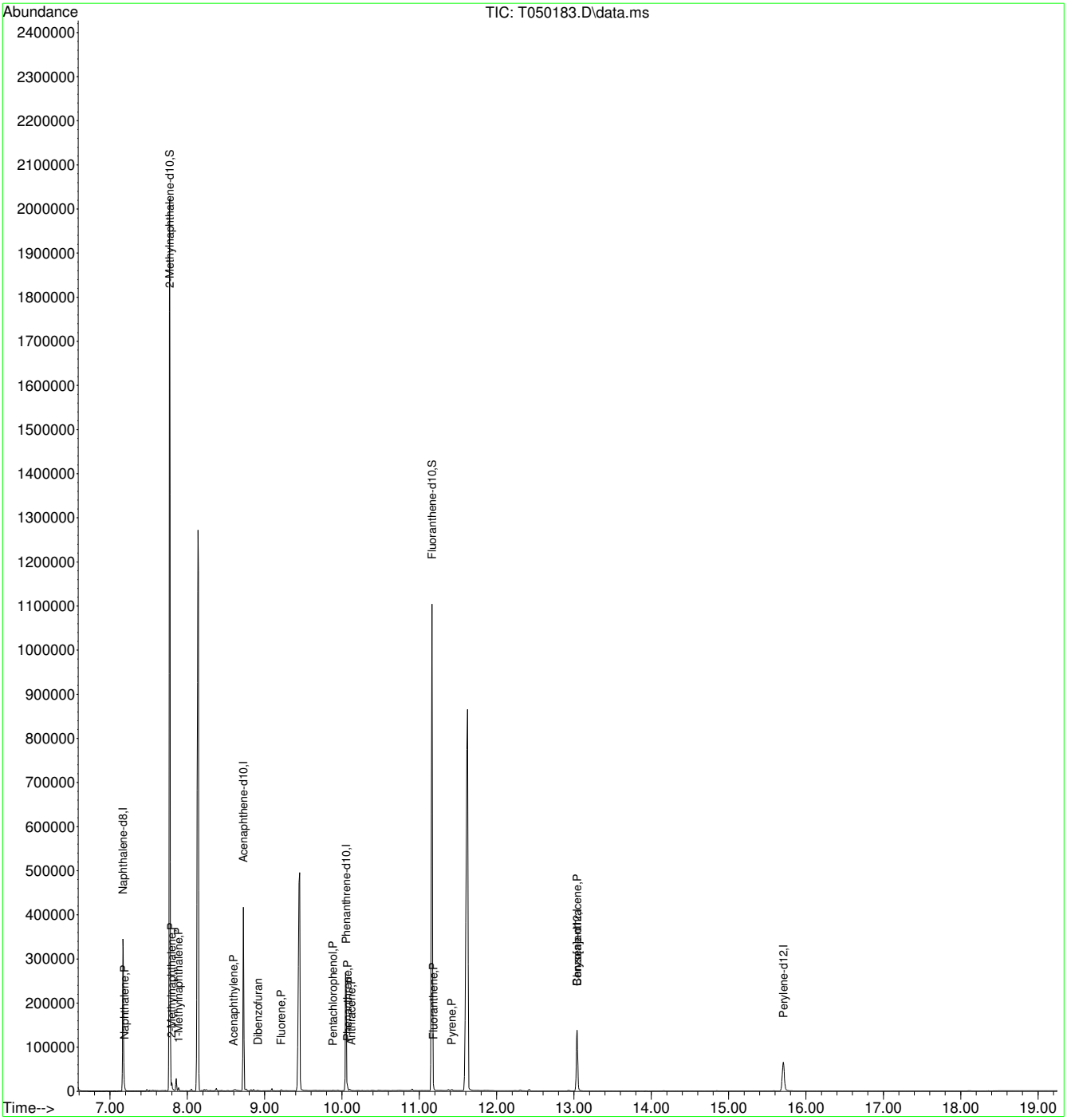
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	7.168	136	262154	500.00	ppb	0.00
6) Acenaphthene-d10	8.725	162	118062	500.00	ppb	0.00
11) Phenanthrene-d10	10.055	188	214106	500.00	ppb	0.00
18) Chrysene-d12	13.038	240	123050	500.00	ppb	0.00
22) Perylene-d12	15.707	264	88977	500.00	ppb	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	7.772	152	645328	1468.59	ppb	0.00
Spiked Amount 2000.000			Recovery =	73.43%		
17) Fluoranthene-d10	11.164	212	761838	1972.12	ppb	0.00
Spiked Amount 2000.000			Recovery =	98.61%		
Target Compounds						Qvalue
2) Naphthalene	7.187	128	4220	6.48	ppb	98
3) 2-Methylnaphthalene	7.798	142	5505	9.36	ppb	92
5) 1-Methylnaphthalene	7.887	142	2348	4.35	ppb	97
7) Acenaphthylene	8.597	152	1195	2.10	ppb	51
9) Dibenzofuran	8.913	168	909	1.95	ppm	73
10) Fluorene	9.213	166	1123	2.90	ppb	84
12) Pentachlorophenol	9.882	266	518	13.94	ppb	94
13) Phenanthrene	10.071	178	5499	10.15	ppb	99
14) Anthracene	10.120	178	905	1.75	ppb	97
16) Fluoranthene	11.180	202	3047	5.94	ppb	97
19) Pyrene	11.419	202	1697	2.97	ppb	94
20) Benzo[a]anthracene	13.038	228	634	1.61	ppb	72

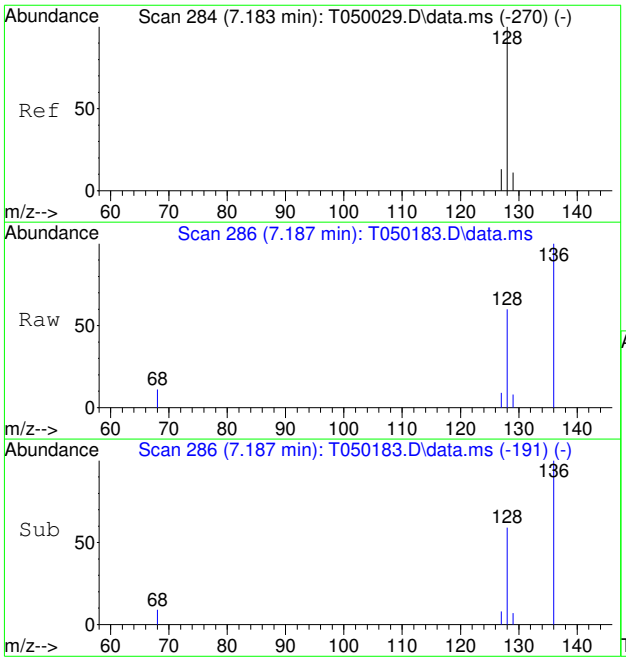
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\Jenniferf\AUGUST 2020\08-14-2020\ST1749\
Data File : T050183.D
Acq On : 13 Aug 2020 6:39 pm
Operator : nareshj
Sample : fa77689-12 e
Misc : OP81544,st1749,250,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 14 01:49:19 2020
Quant Method : C:\msdchem\1\methods\SIM_LVT071720.M
Quant Title : PAH's by 8270 SIM
QLast Update : Fri Aug 14 01:35:08 2020
Response via : Initial Calibration

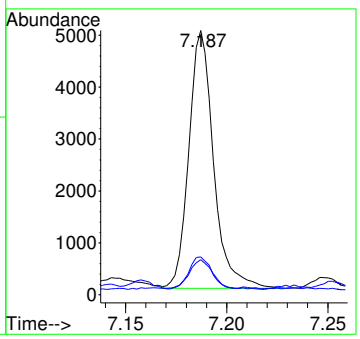


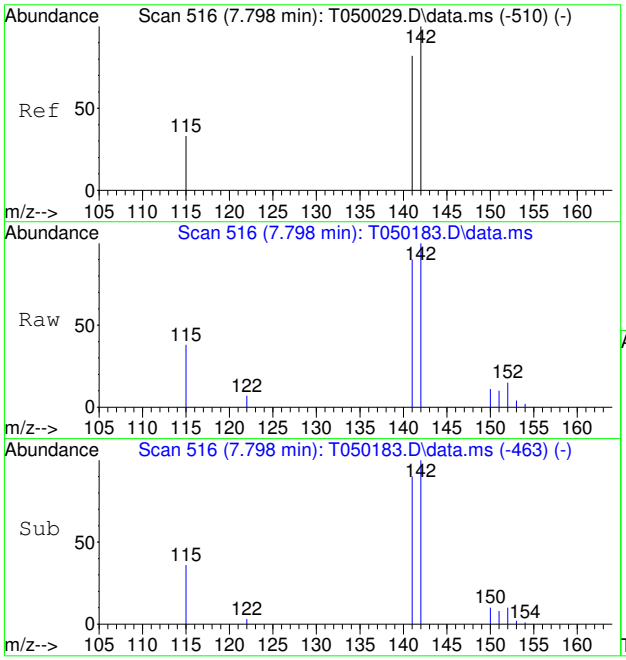


#2
Naphthalene
Concen: 6.48 ppb
RT: 7.187 min Scan# 286
Delta R.T. 0.000 min
Lab File: T050183.D
Acq: 13 Aug 2020 6:39 pm

Tgt Ion:128 Resp: 4220

Ion	Ratio	Lower	Upper
128	100		
129	11.1	0.0	40.8
127	11.5	0.0	42.7

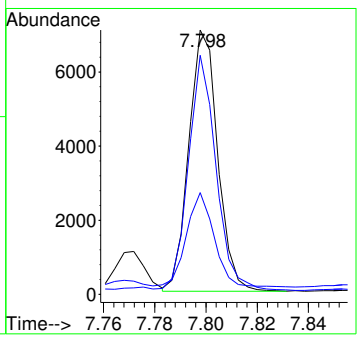


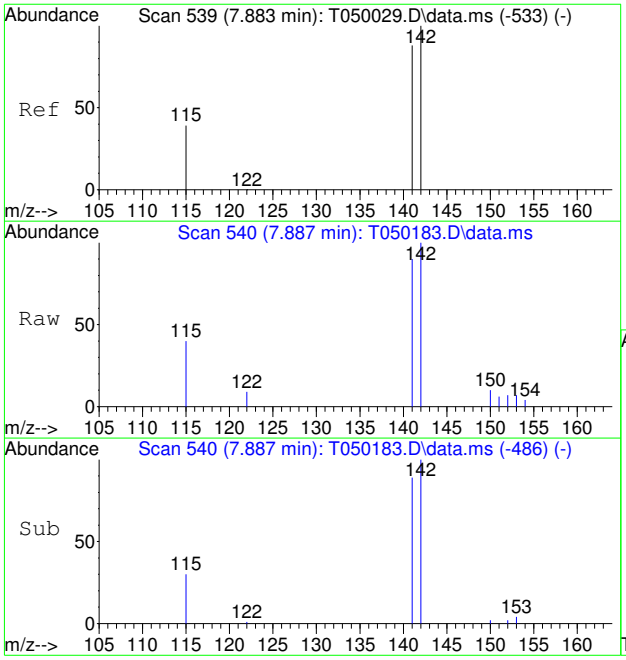


#3
2-Methylnaphthalene
Concen: 9.36 ppb
RT: 7.798 min Scan# 516
Delta R.T. -0.004 min
Lab File: T050183.D
Acq: 13 Aug 2020 6:39 pm

Tgt Ion:142 Resp: 5505

Ion	Ratio	Lower	Upper
142	100		
141	90.1	52.0	112.0
115	35.9	3.5	63.5

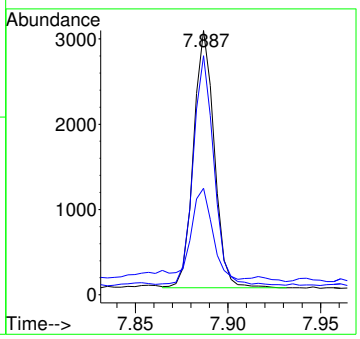


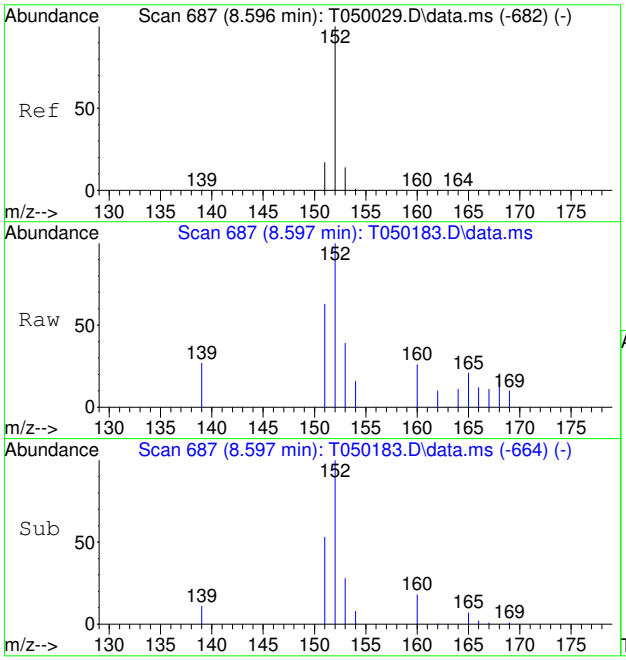


#5
1-Methylnaphthalene
Concen: 4.35 ppb
RT: 7.887 min Scan# 540
Delta R.T. 0.000 min
Lab File: T050183.D
Acq: 13 Aug 2020 6:39 pm

Tgt Ion:142 Resp: 2348

Ion	Ratio	Lower	Upper
142	100		
141	89.1	58.1	118.1
115	34.1	8.7	68.7

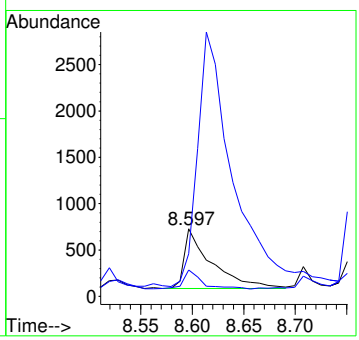


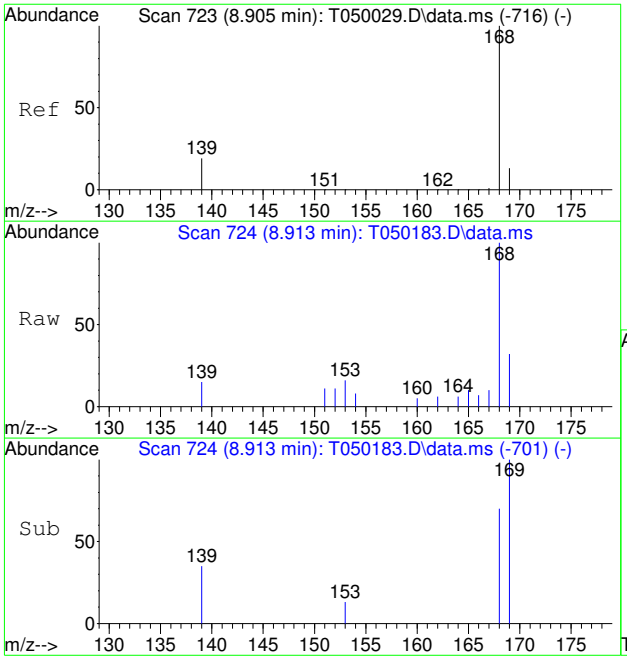


#7
Acenaphthylene
Concen: 2.10 ppb
RT: 8.597 min Scan# 687
Delta R.T. 0.000 min
Lab File: T050183.D
Acq: 13 Aug 2020 6:39 pm

Tgt Ion:152 Resp: 1195

Ion	Ratio	Lower	Upper
152	100		
151	41.5	0.0	47.1
153	30.7	0.0	44.1

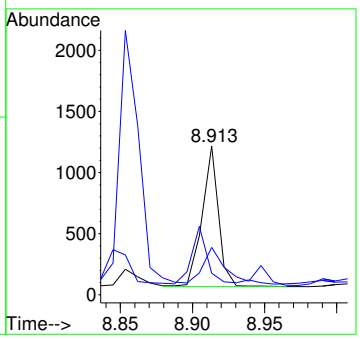


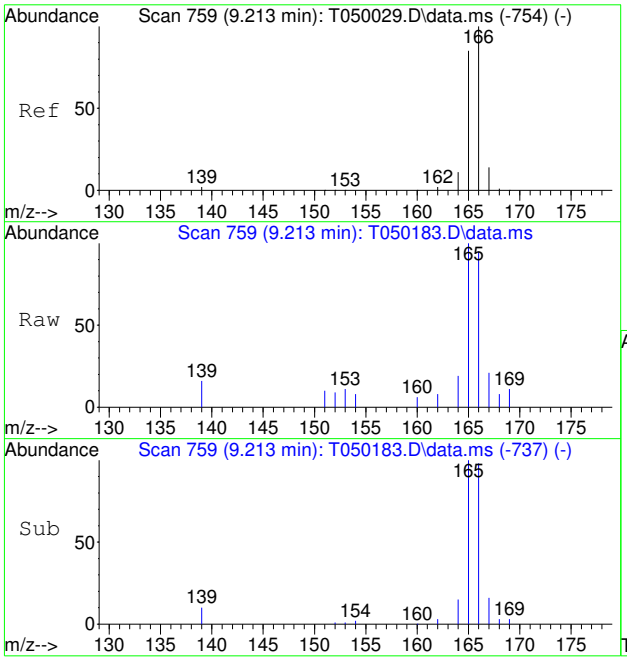


#9
Dibenzofuran
Concen: 1.95 ppm
RT: 8.913 min Scan# 724
Delta R.T. 0.000 min
Lab File: T050183.D
Acq: 13 Aug 2020 6:39 pm

Tgt Ion:168 Resp: 909

Ion	Ratio	Lower	Upper
168	100		
139	7.4	0.0	49.2
169	24.2	0.0	42.9

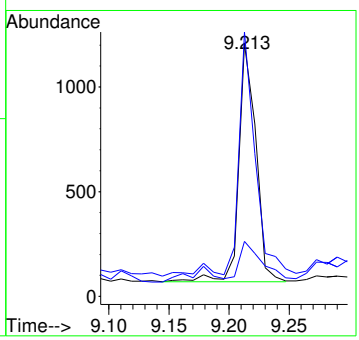


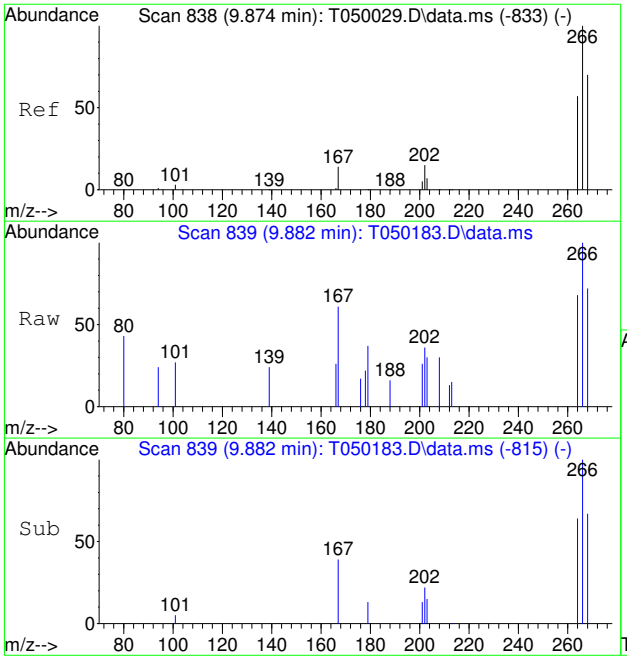


#10
Fluorene
Concen: 2.90 ppb
RT: 9.213 min Scan# 759
Delta R.T. -0.008 min
Lab File: T050183.D
Acq: 13 Aug 2020 6:39 pm

Tgt Ion:166 Resp: 1123

Ion	Ratio	Lower	Upper
166	100		
165	101.4	55.1	115.1
167	16.2	0.0	43.8

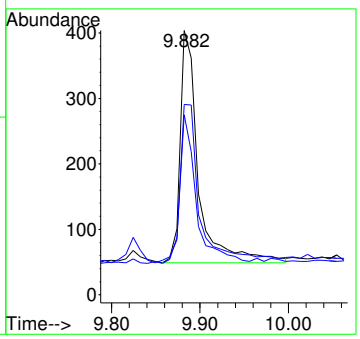


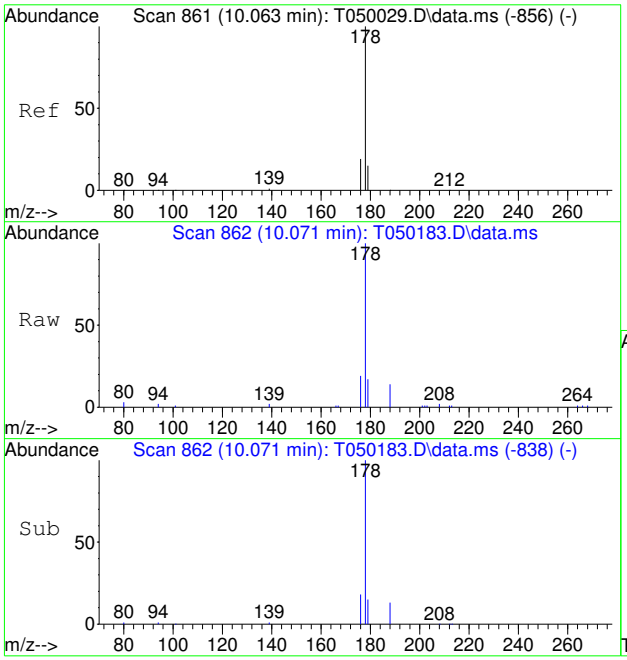


#12
Pentachlorophenol
Concen: 13.94 ppb
RT: 9.882 min Scan# 839
Delta R.T. 0.000 min
Lab File: T050183.D
Acq: 13 Aug 2020 6:39 pm

Tgt Ion:266 Resp: 518

Ion	Ratio	Lower	Upper
266	100		
264	64.2	36.9	76.9
268	67.1	49.8	89.8

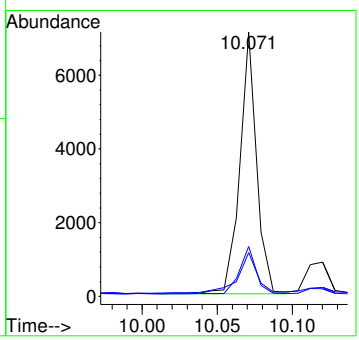


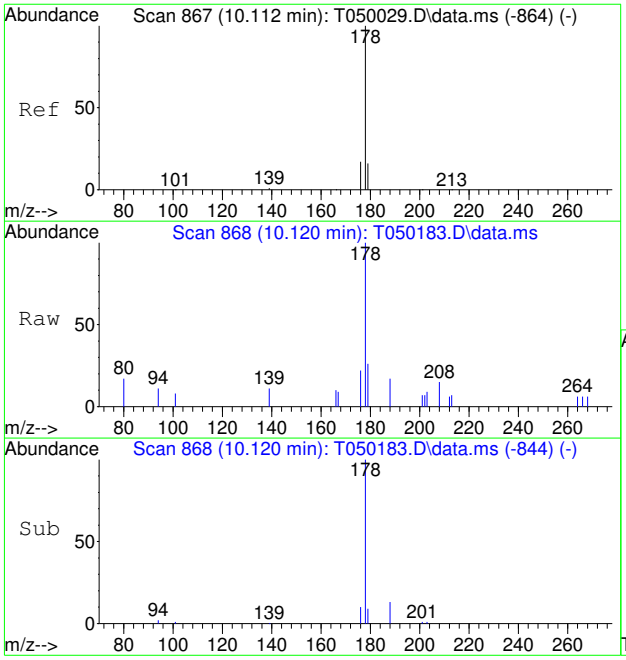


#13
Phenanthrene
Concen: 10.15 ppb
RT: 10.071 min Scan# 862
Delta R.T. 0.000 min
Lab File: T050183.D
Acq: 13 Aug 2020 6:39 pm

Tgt Ion:178 Resp: 5499

Ion	Ratio	Lower	Upper
178	100		
179	15.3	0.0	44.9
176	18.1	0.0	48.6

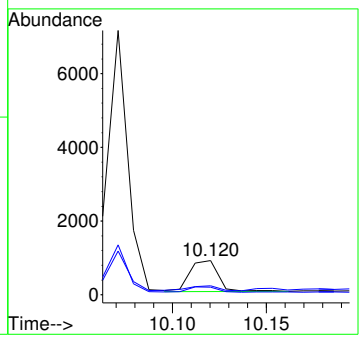


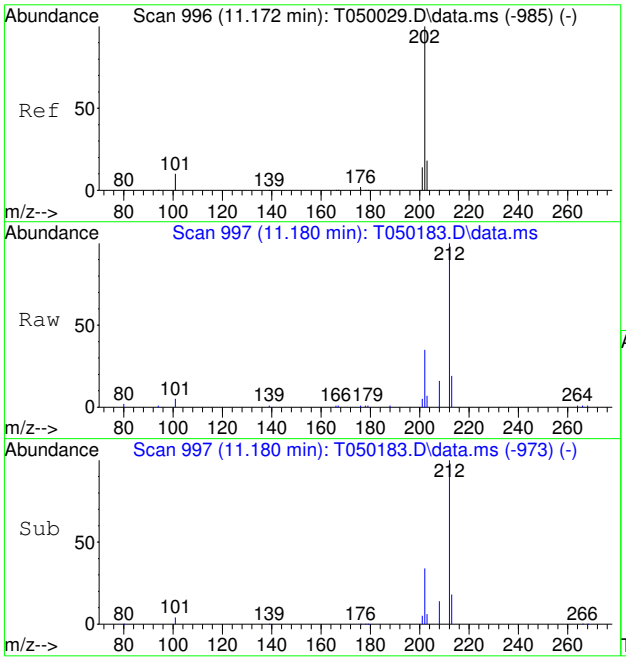


#14
Anthracene
Concen: 1.75 ppb
RT: 10.120 min Scan# 868
Delta R.T. 0.000 min
Lab File: T050183.D
Acq: 13 Aug 2020 6:39 pm

Tgt Ion:178 Resp: 905

Ion	Ratio	Lower	Upper
178	100		
179	14.3	0.0	45.6
176	15.4	0.0	46.8

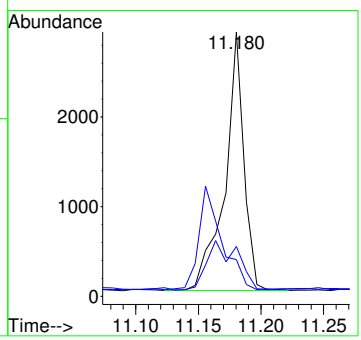


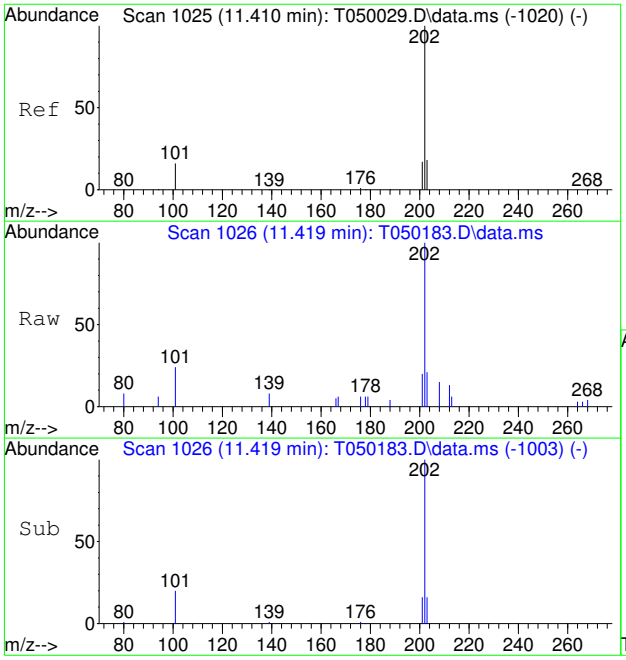


#16
Fluoranthene
Concen: 5.94 ppb
RT: 11.180 min Scan# 997
Delta R.T. 0.000 min
Lab File: T050183.D
Acq: 13 Aug 2020 6:39 pm

Tgt Ion:202 Resp: 3047

Ion	Ratio	Lower	Upper
202	100		
101	11.5	0.0	39.9
203	16.2	0.0	47.5

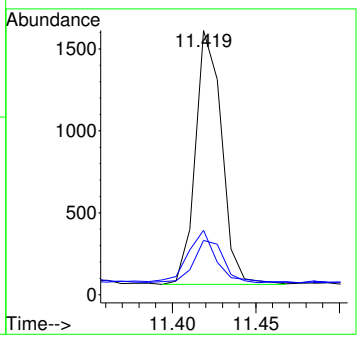


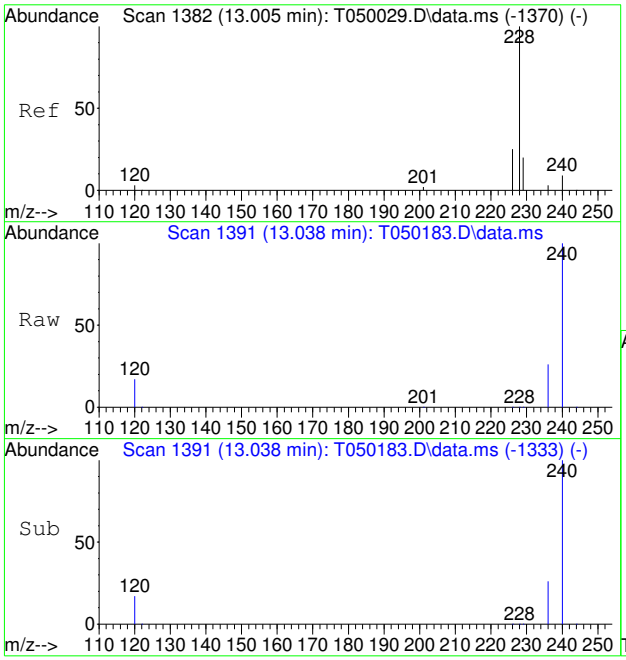


#19
Pyrene
Concen: 2.97 ppb
RT: 11.419 min Scan# 1026
Delta R.T. -0.008 min
Lab File: T050183.D
Acq: 13 Aug 2020 6:39 pm

Tgt Ion:202 Resp: 1697

Ion	Ratio	Lower	Upper
202	100		
101	20.0	0.0	46.2
203	16.2	0.0	47.5

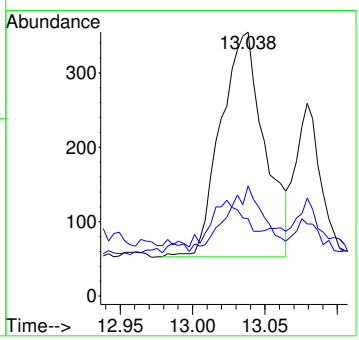




#20
Benzo[a]anthracene
Concen: 1.61 ppb
RT: 13.038 min Scan# 1391
Delta R.T. 0.015 min
Lab File: T050183.D
Acq: 13 Aug 2020 6:39 pm

Tgt Ion:228 Resp: 634

Ion	Ratio	Lower	Upper
228	100		
226	10.3	0.0	55.3
229	31.8	0.0	49.6



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s6f253\
Data File : 6F06546.d
Acq On : 13 Aug 2020 3:34 pm
Operator : marthav
Sample : op81538-mb E
Misc : op81538,S6F253,30.0,,,1,1,soil
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 14 04:49:29 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.024	152	365153	40.00	ppm	0.00
22) Naphthalene-d8	7.457	136	1289751	40.00	ppm	0.00
43) Acenaphthene-d10	9.511	164	642644	40.00	ppm	0.00
70) Phenanthrene-d10	11.265	188	1049060	40.00	ppm	0.00
92) Chrysene-d12	14.560	240	799614	40.00	ppm	-0.01
102) Perylene-d12	16.914	264	754550	40.00	ppm	-0.01
System Monitoring Compounds						
7) 2-Fluorophenol	4.649	112	691764	50.13	ppm	0.00
Spiked Amount 100.000	Range 40 - 102		Recovery = 50.13%			
9) Phenol-d5	5.655	99	874856	53.41	ppm	-0.01
Spiked Amount 100.000	Range 41 - 100		Recovery = 53.41%			
23) Nitrobenzene-d5	6.639	82	374429	26.46	ppm	0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 52.92%			
47) 2-Fluorobiphenyl	8.730	172	729542	29.05	ppm	0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 58.10%			
75) 2,4,6-Tribromophenol	10.447	330	223697	63.36	ppm	0.00
Spiked Amount 100.000	Range 42 - 108		Recovery = 63.36%			
95) Terphenyl-d14	13.191	244	793097	35.29	ppm	0.00
Spiked Amount 50.000	Range 45 - 119		Recovery = 70.58%			
Target Compounds						Qvalue
21) 3&4-Methylphenol	6.500	108	1457	0.11	ppm	94
25) Isophorone	6.933	82	1614	0.07	ppm	93
30) Benzoic Acid	7.152	105	3008	0.36	ppm	93
34) Naphthalene	7.479	128	2323	0.06	ppm	85
40) 2-Methylnaphthalene	8.286	141	1368	0.06	ppm	98
41) 1-Methylnaphthalene	8.399	142	1411	0.06	ppm	93
48) 1,1'-Biphenyl	8.842	154	1945	0.07	ppm	95
49) 2-Chloronaphthalene	8.853	162	1425	0.07	ppm	93
52) Acenaphthylene	9.340	152	2616	0.08	ppm	96
53) Dimethylphthalate	9.217	163	2037	0.08	ppm	97
57) Acenaphthene	9.543	153	1489	0.07	ppm	98
60) Dibenzofuran	9.752	168	2048	0.07	ppm	91
65) Fluorene	10.158	166	1680	0.07	ppm	97
67) Diethylphthalate	10.057	149	1962	0.08	ppm	99
72) n-Nitrosodiphenylamine	10.313	169	1240	0.08	ppm	94
73) Diphenylamine	10.313	169	1240	0.07	ppm	94
74) 1,2-Diphenylhydrazine	10.356	77	1539	0.07	ppm	94
84) Phenanthrene	11.287	178	3315	0.11	ppm	97
85) Anthracene	11.351	178	2775	0.09	ppm	96
87) Carbazole	11.554	167	2915	0.10	ppm	98
89) Di-n-butylphthalate	12.014	149	4347	0.12	ppm	95
91) Fluoranthene	12.699	202	3816	0.12	ppm	98
94) Pyrene	12.966	202	3737	0.13	ppm	91
97) Butylbenzylphthalate	13.849	149	1398	0.10	ppm	95
99) Benzo[a]anthracene	14.555	228	4245	0.16	ppm	80
100) Chrysene	14.592	228	2475	0.10	ppm	88
101) bis(2-Ethylhexyl)phtha...	14.705	149	3494	0.18	ppm	95
103) Di-n-octylphthalate	15.758	149	1941	0.07	ppm	87
104) Benzo[b]fluoranthene	16.266	252	1954	0.08	ppm	91
105) Benzo[k]fluoranthene	16.309	252	1896	0.08	ppm	88
106) Benzo[a]pyrene	16.812	252	1675	0.07	ppm	88
107) Indeno[1,2,3-cd]pyrene	18.545	276	1941	0.09	ppm	97
108) Dibenz[a,h]anthracene	18.593	278	1736	0.08	ppm	81
109) Benzo[g,h,i]perylene	18.898	276	2030	0.09	ppm	86

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s6f253\
Data File : 6F06546.d
Acq On : 13 Aug 2020 3:34 pm
Operator : marthav
Sample : op81538-mb E
Misc : op81538,S6F253,30.0,,,1,1,soil
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 14 04:49:29 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

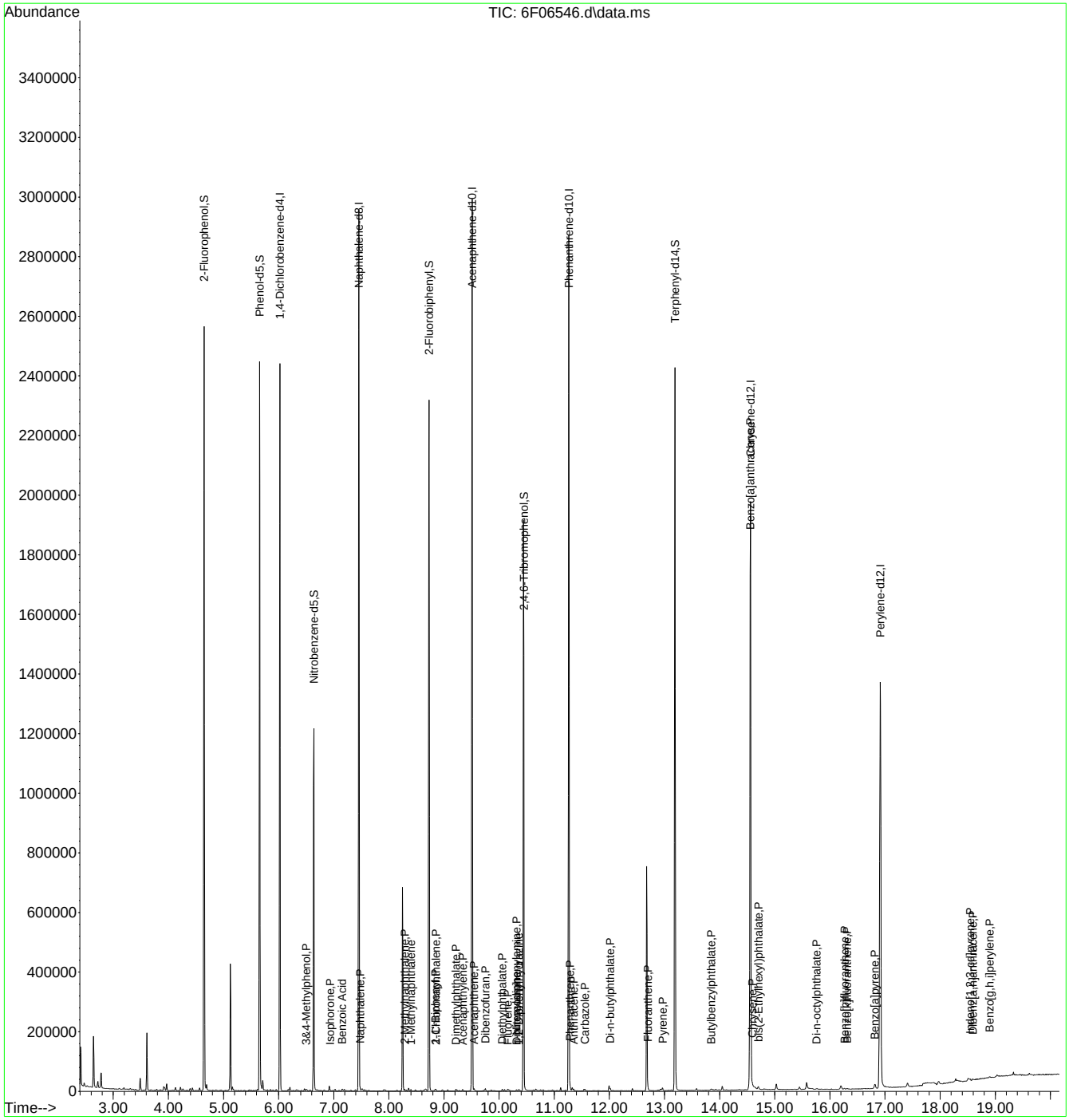
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

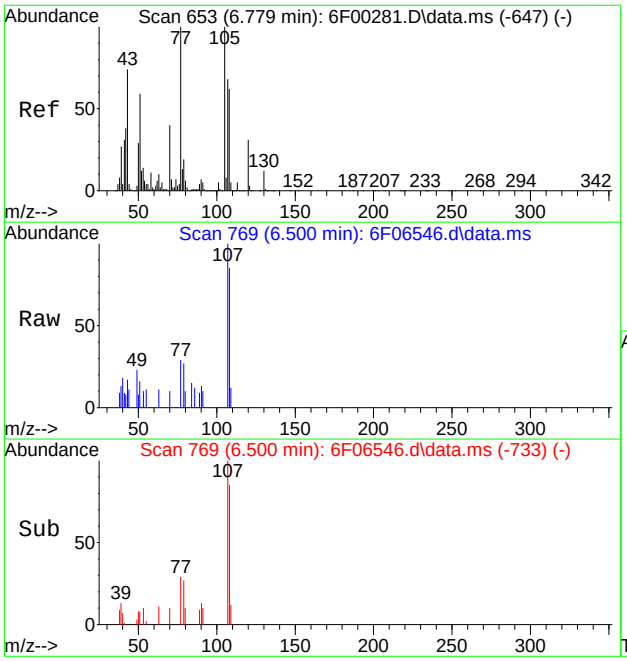
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s6f253\
Data File : 6F06546.d
Acq On : 13 Aug 2020 3:34 pm
Operator : marthav
Sample : op81538-mb E
Misc : op81538,S6F253,30.0,,,1,1,soil
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 14 04:49:29 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

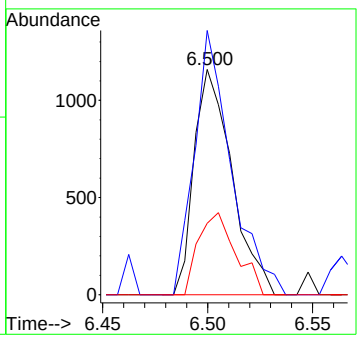


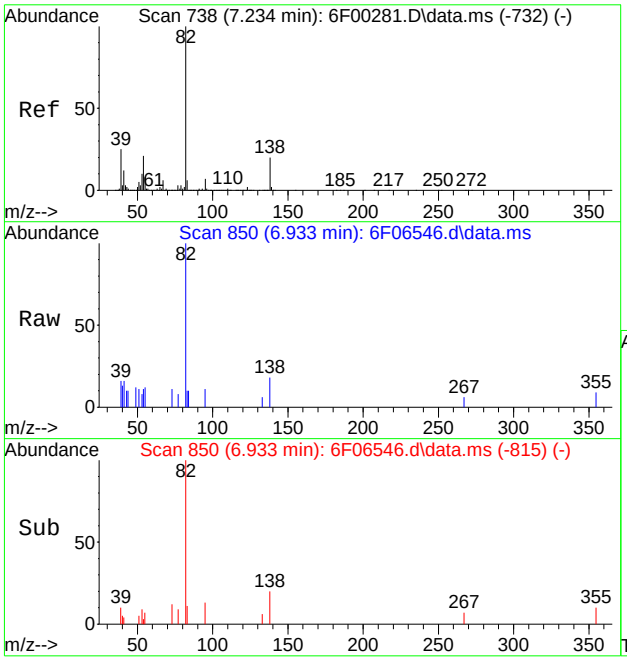


#21
3&4-Methylphenol
Concen: 0.11 ppm
RT: 6.500 min Scan# 769
Delta R.T. -0.006 min
Lab File: 6F06546.d
Acq: 13 Aug 2020 3:34 pm

Tgt Ion:108 Resp: 1457

Ion	Ratio	Lower	Upper
108	100		
107	117.3	80.2	140.2
79	31.7	0.1	60.1

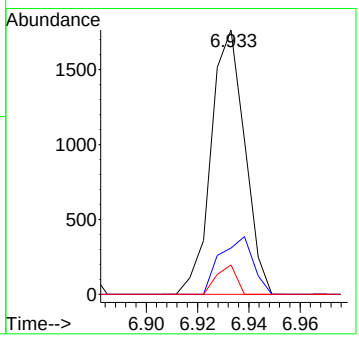


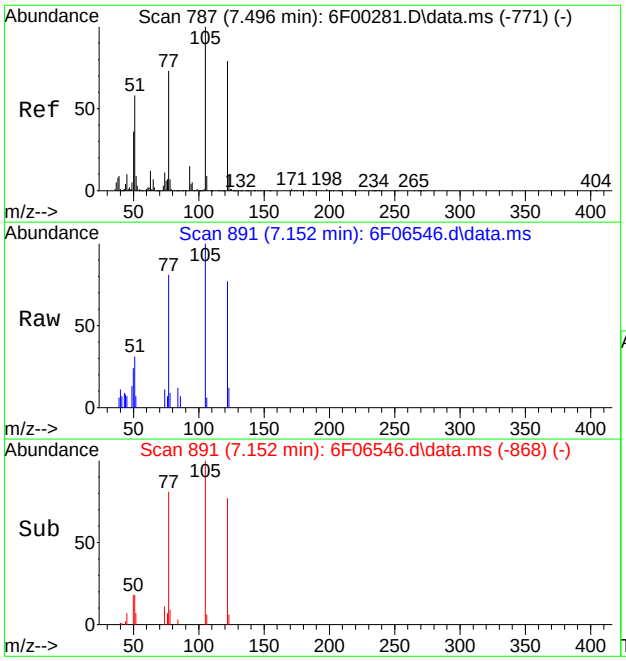


#25
Isophorone
Concen: 0.07 ppm
RT: 6.933 min Scan# 850
Delta R.T. -0.011 min
Lab File: 6F06546.d
Acq: 13 Aug 2020 3:34 pm

Tgt Ion: 82 Resp: 1614

Ion	Ratio	Lower	Upper
82	100		
138	17.5	0.0	49.9
95	11.2	0.0	36.6

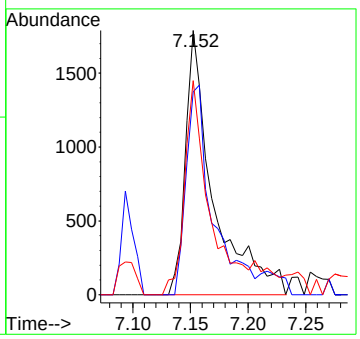


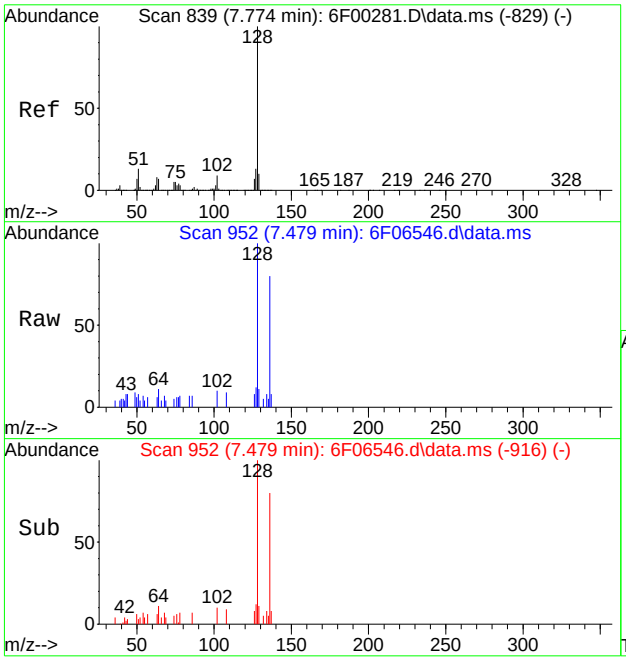


#30
Benzoic Acid
Concen: 0.36 ppm
RT: 7.152 min Scan# 891
Delta R.T. -0.075 min
Lab File: 6F06546.d
Acq: 13 Aug 2020 3:34 pm

Tgt Ion:105 Resp: 3008

Ion	Ratio	Lower	Upper
105	100		
122	73.6	51.7	111.7
77	77.3	42.8	102.8

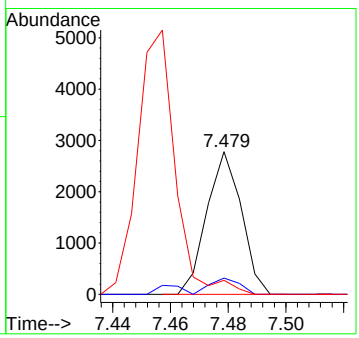


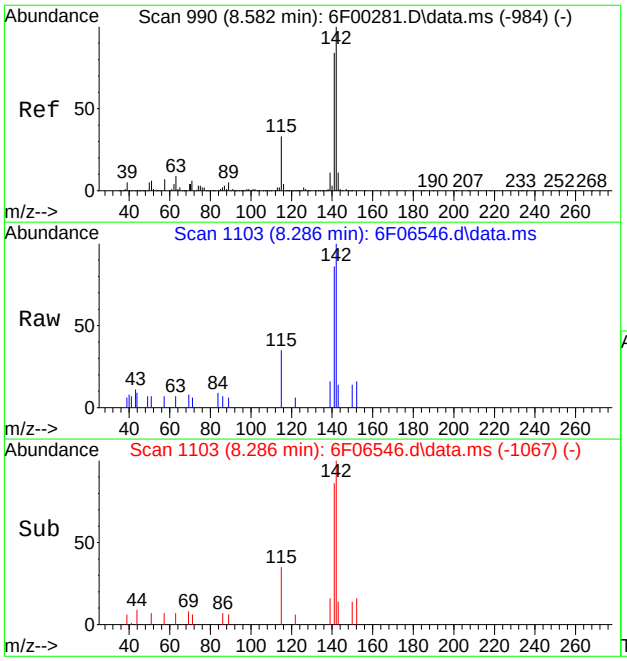


#34
Naphthalene
Concen: 0.06 ppm
RT: 7.479 min Scan# 952
Delta R.T. -0.005 min
Lab File: 6F06546.d
Acq: 13 Aug 2020 3:34 pm

Tgt Ion:128 Resp: 2323

Ion	Ratio	Lower	Upper
128	100		
129	8.2	0.0	41.3
102	0.0	0.0	38.9

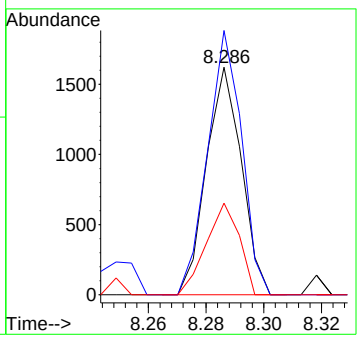


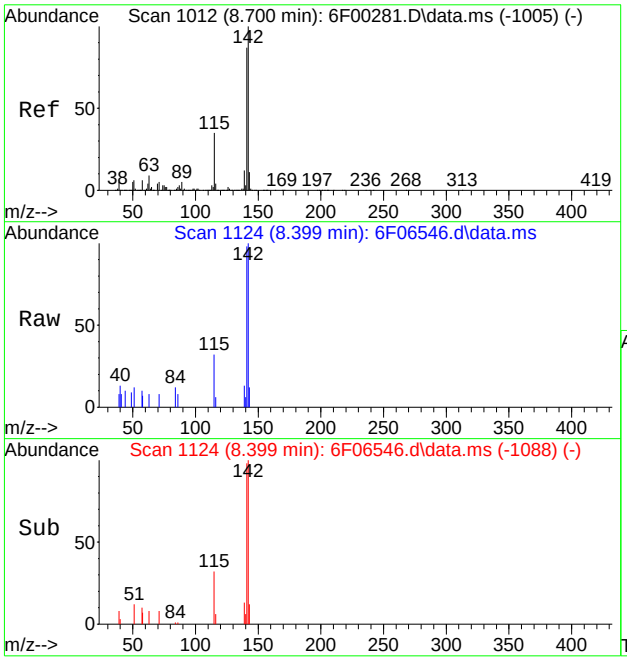


#40
2-Methylnaphthalene
Concen: 0.06 ppm
RT: 8.286 min Scan# 1103
Delta R.T. -0.005 min
Lab File: 6F06546.d
Acq: 13 Aug 2020 3:34 pm

Tgt Ion:141 Resp: 1368

Ion	Ratio	Lower	Upper
141	100		
142	116.2	87.4	147.4
115	40.3	8.3	68.3

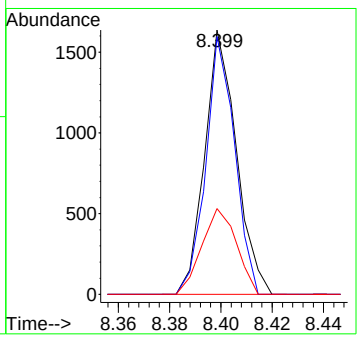


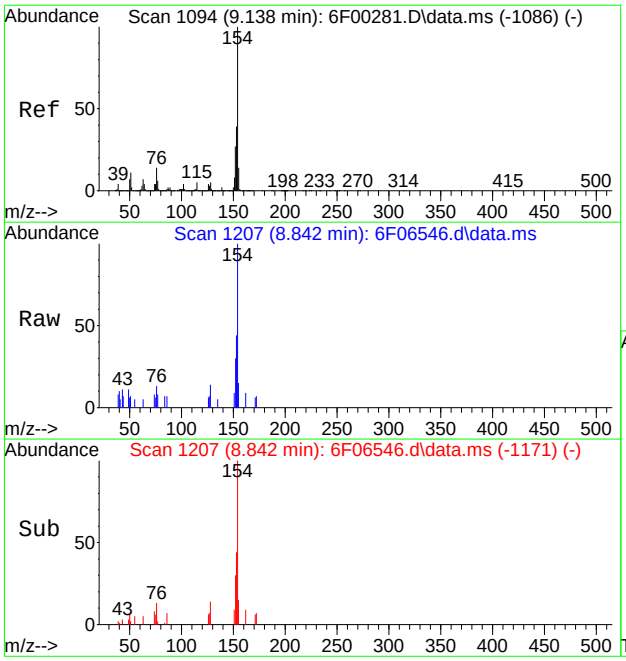


#41
1-Methylnaphthalene
Concen: 0.06 ppm
RT: 8.399 min Scan# 1124
Delta R.T. -0.005 min
Lab File: 6F06546.d
Acq: 13 Aug 2020 3:34 pm

Tgt Ion:142 Resp: 1411

Ion	Ratio	Lower	Upper
142	100		
141	97.6	58.9	118.9
115	32.4	3.8	63.8

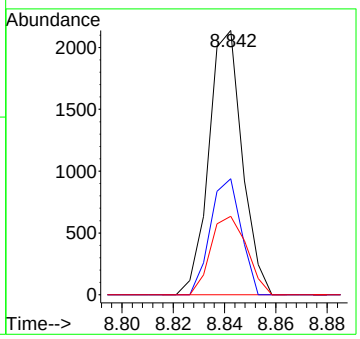


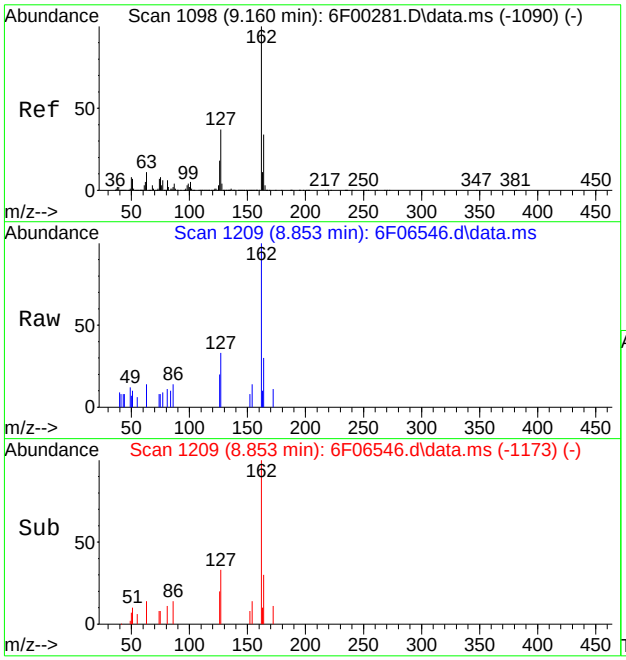


#48
1,1'-Biphenyl
Concen: 0.07 ppm
RT: 8.842 min Scan# 1207
Delta R.T. -0.006 min
Lab File: 6F06546.d
Acq: 13 Aug 2020 3:34 pm

Tgt Ion:154 Resp: 1945

Ion	Ratio	Lower	Upper
154	100		
153	43.9	10.4	70.4
152	29.7	0.0	57.6

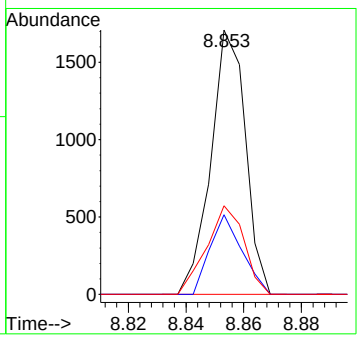


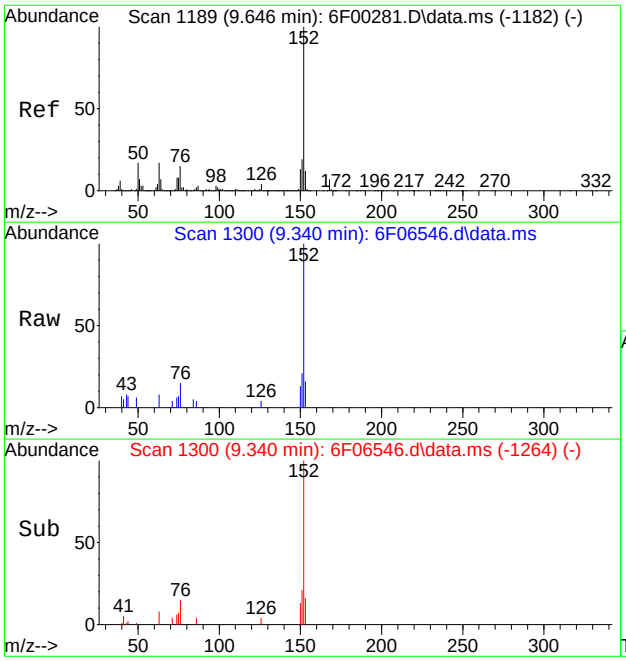


#49
2-Chloronaphthalene
Concen: 0.07 ppm
RT: 8.853 min Scan# 1209
Delta R.T. -0.006 min
Lab File: 6F06546.d
Acq: 13 Aug 2020 3:34 pm

Tgt Ion:162 Resp: 1425

Ion	Ratio	Lower	Upper
162	100		
164	30.1	3.0	63.0
127	33.5	8.9	68.9

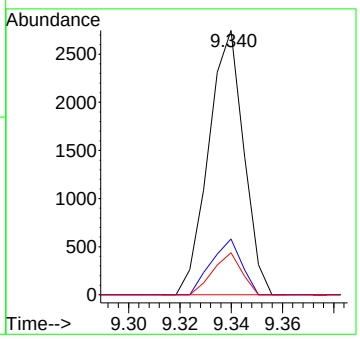


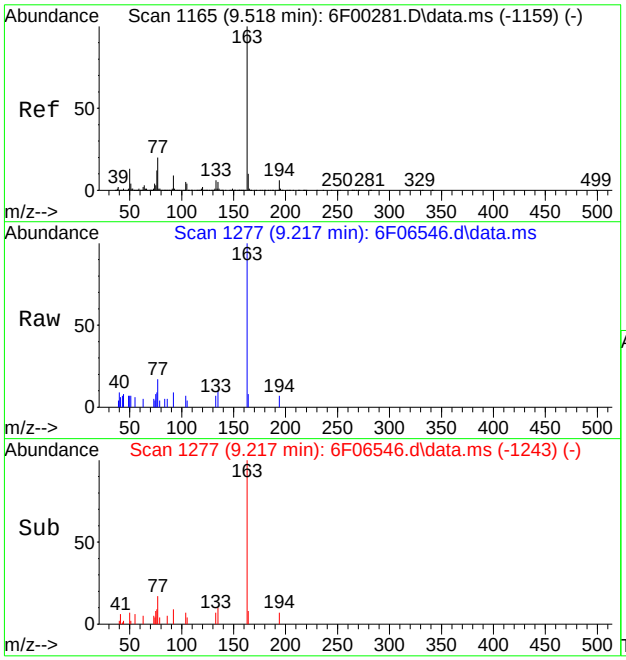


#52
Acenaphthylene
Concen: 0.08 ppm
RT: 9.340 min Scan# 1300
Delta R.T. -0.005 min
Lab File: 6F06546.d
Acq: 13 Aug 2020 3:34 pm

Tgt Ion:152 Resp: 2616

Ion	Ratio	Lower	Upper
152	100		
151	21.1	0.0	49.9
153	15.9	0.0	43.2

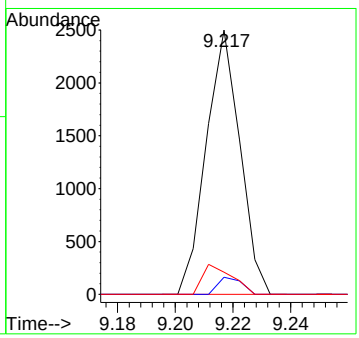


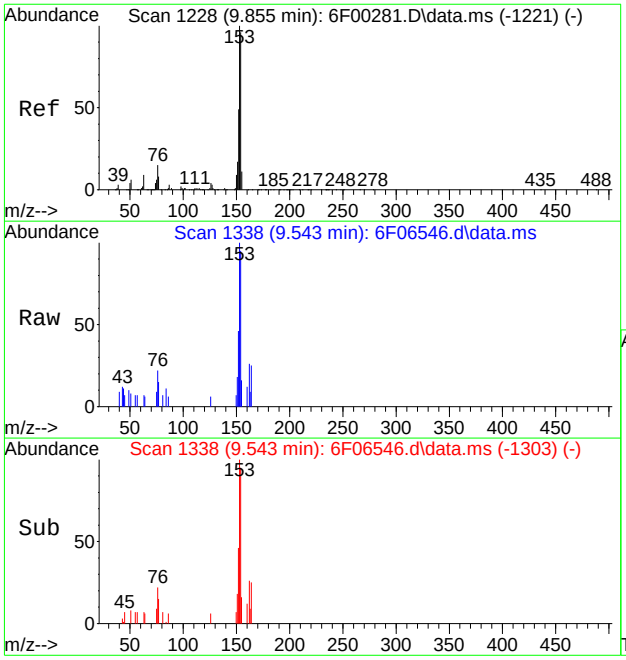


#53
Dimethylphthalate
Concen: 0.08 ppm
RT: 9.217 min Scan# 1277
Delta R.T. -0.016 min
Lab File: 6F06546.d
Acq: 13 Aug 2020 3:34 pm

Tgt Ion:163 Resp: 2037

Ion	Ratio	Lower	Upper
163	100		
194	6.5	0.0	36.4
164	8.4	0.0	39.9

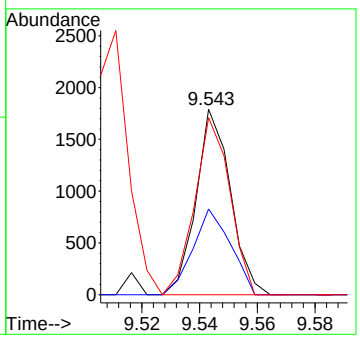


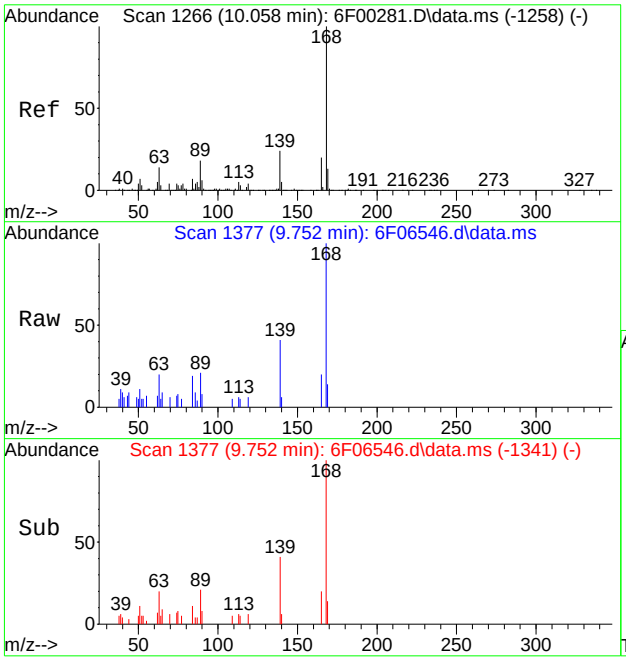


#57
Acenaphthene
Concen: 0.07 ppm
RT: 9.543 min Scan# 1338
Delta R.T. -0.011 min
Lab File: 6F06546.d
Acq: 13 Aug 2020 3:34 pm

Tgt Ion:153 Resp: 1489

Ion	Ratio	Lower	Upper
153	100		
152	46.3	16.2	76.2
154	95.4	63.3	123.3

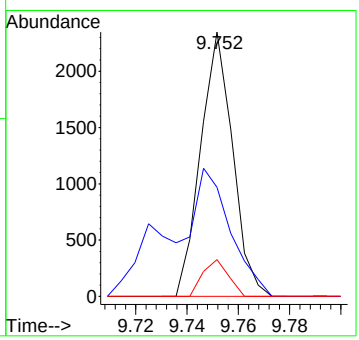


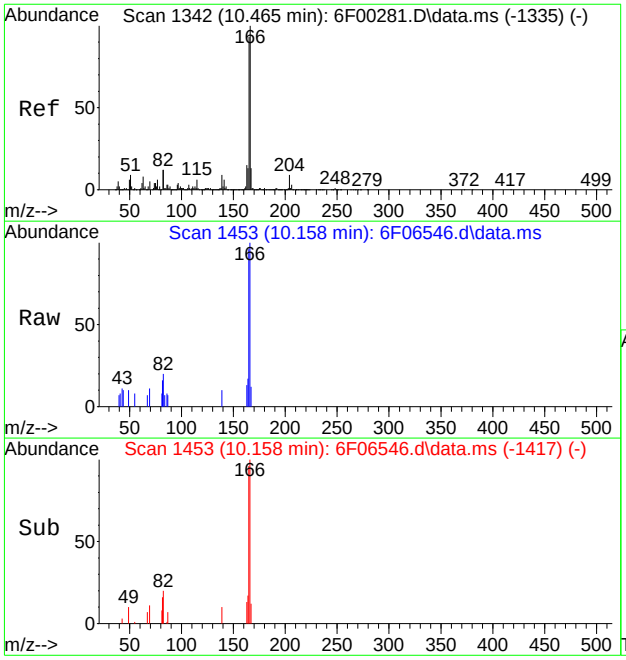


#60
Dibenzofuran
Concen: 0.07 ppm
RT: 9.752 min Scan# 1377
Delta R.T. -0.005 min
Lab File: 6F06546.d
Acq: 13 Aug 2020 3:34 pm

Tgt Ion:168 Resp: 2048

Ion	Ratio	Lower	Upper
168	100		
139	29.9	7.1	67.1
169	14.0	0.0	43.6

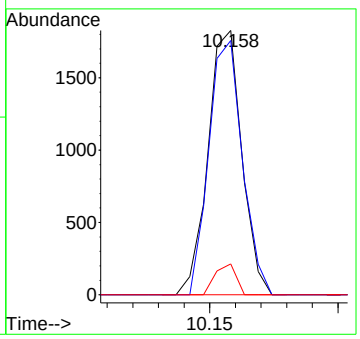


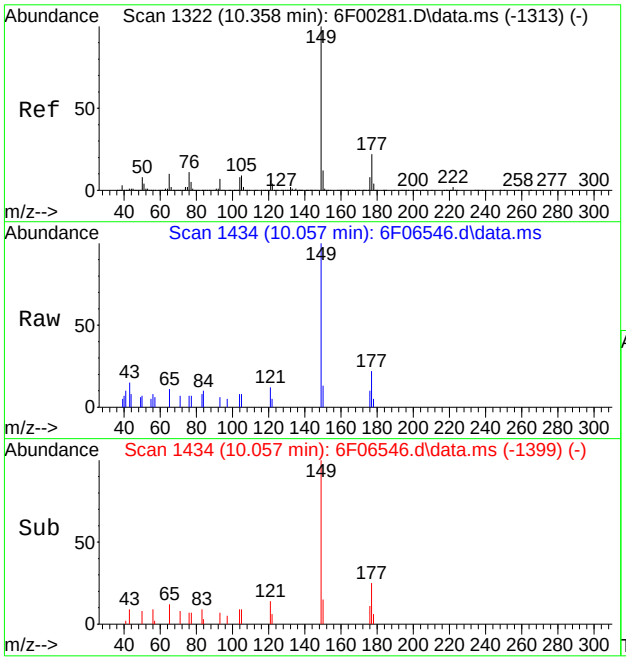


#65
Fluorene
Concen: 0.07 ppm
RT: 10.158 min Scan# 1453
Delta R.T. -0.005 min
Lab File: 6F06546.d
Acq: 13 Aug 2020 3:34 pm

Tgt Ion:166 Resp: 1680

Ion	Ratio	Lower	Upper
166	100		
165	96.2	63.2	123.2
167	11.7	0.0	43.3

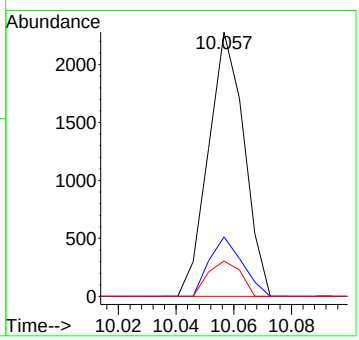


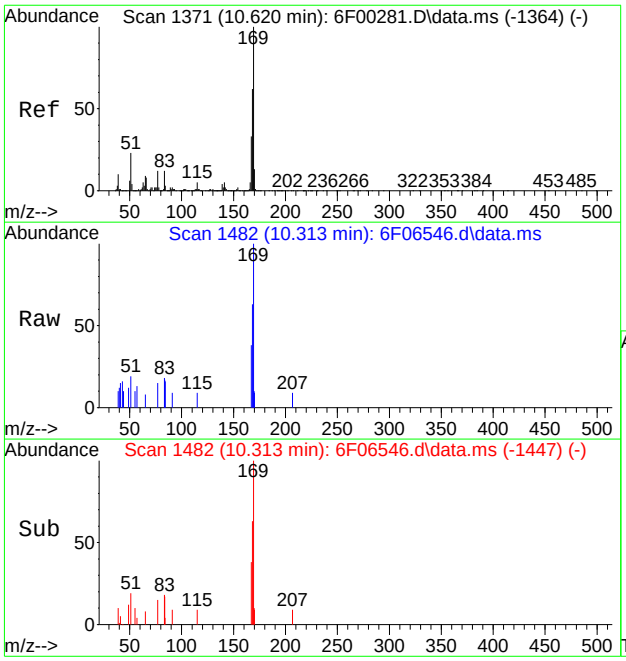


#67
Diethylphthalate
Concen: 0.08 ppm
RT: 10.057 min Scan# 1434
Delta R.T. -0.011 min
Lab File: 6F06546.d
Acq: 13 Aug 2020 3:34 pm

Tgt Ion:149 Resp: 1962

Ion	Ratio	Lower	Upper
149	100		
177	22.5	0.0	52.8
150	13.4	0.0	42.6

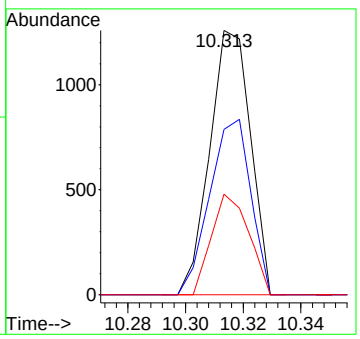


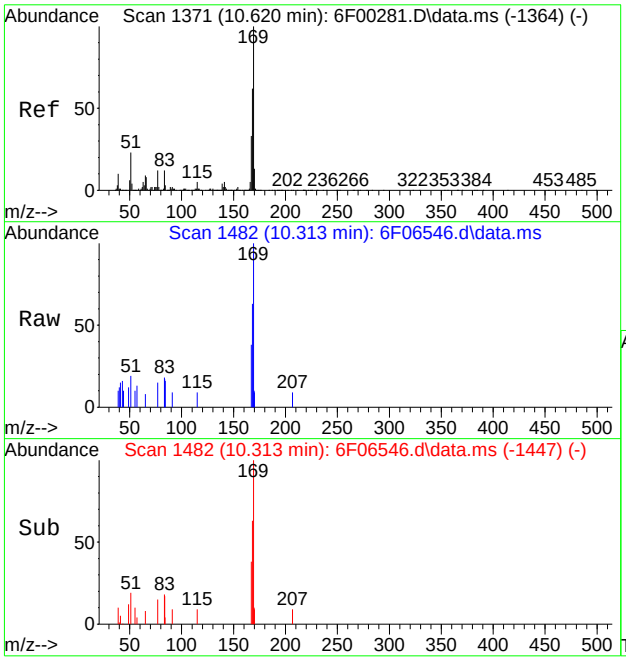


#72
n-Nitrosodiphenylamine
Concen: 0.08 ppm
RT: 10.313 min Scan# 1482
Delta R.T. -0.011 min
Lab File: 6F06546.d
Acq: 13 Aug 2020 3:34 pm

Tgt Ion:169 Resp: 1240

Ion	Ratio	Lower	Upper
169	100		
168	56.8	34.1	94.1
167	34.5	4.7	64.7

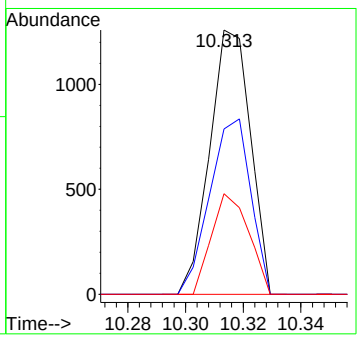


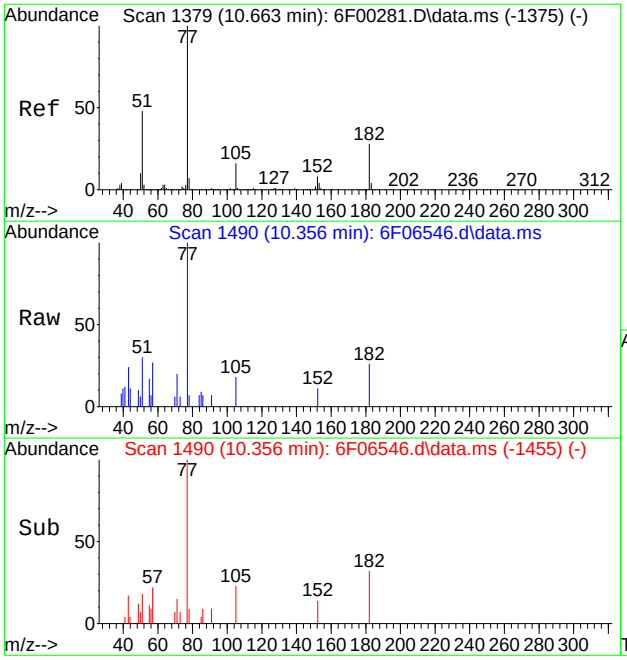


#73
Diphenylamine
Concen: 0.07 ppm
RT: 10.313 min Scan# 1482
Delta R.T. -0.011 min
Lab File: 6F06546.d
Acq: 13 Aug 2020 3:34 pm

Tgt Ion:169 Resp: 1240

Ion	Ratio	Lower	Upper
169	100		
168	56.8	34.1	94.1
167	34.5	4.7	64.7

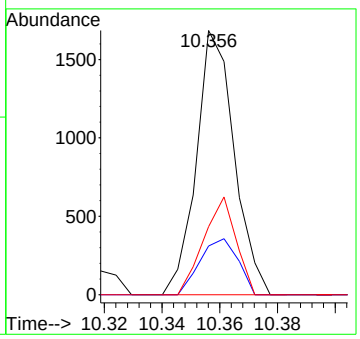


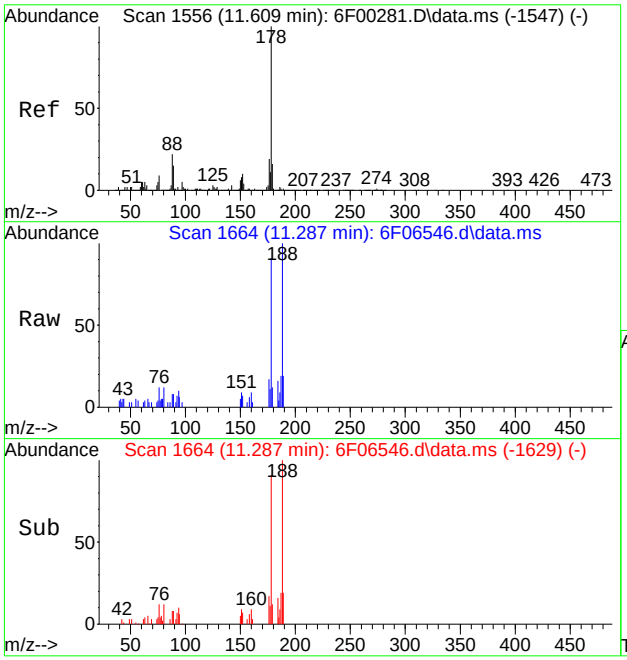


#74
1,2-Diphenylhydrazine
Concen: 0.07 ppm
RT: 10.356 min Scan# 1490
Delta R.T. -0.011 min
Lab File: 6F06546.d
Acq: 13 Aug 2020 3:34 pm

Tgt Ion: 77 Resp: 1539

Ion	Ratio	Lower	Upper
77	100		
105	18.4	0.0	48.4
182	25.8	0.8	60.8

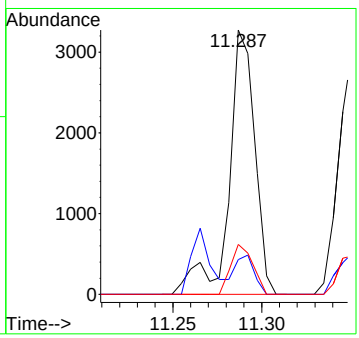


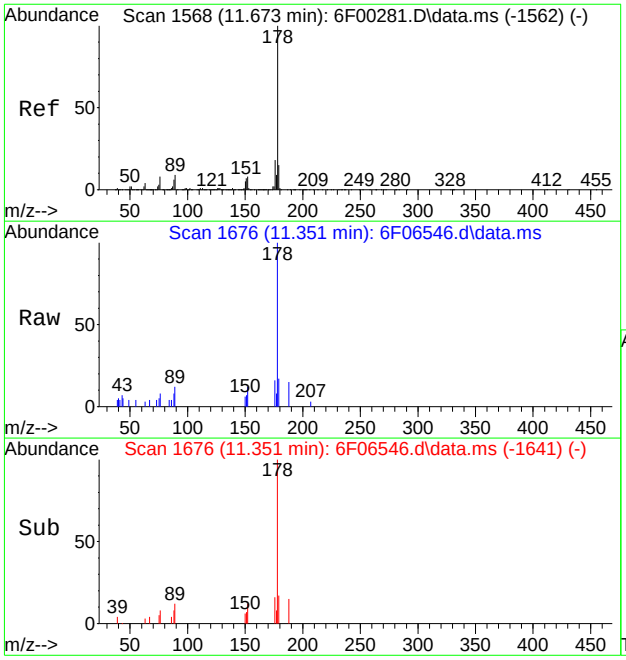


#84
Phenanthrene
Concen: 0.11 ppm
RT: 11.287 min Scan# 1664
Delta R.T. -0.011 min
Lab File: 6F06546.d
Acq: 13 Aug 2020 3:34 pm

Tgt Ion:178 Resp: 3315

Ion	Ratio	Lower	Upper
178	100		
179	13.2	0.0	45.6
176	18.9	0.0	48.6

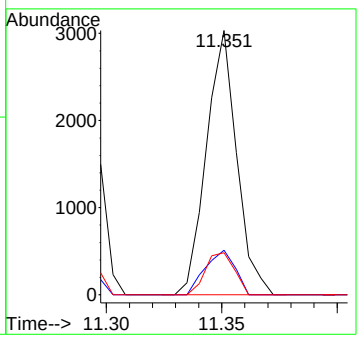


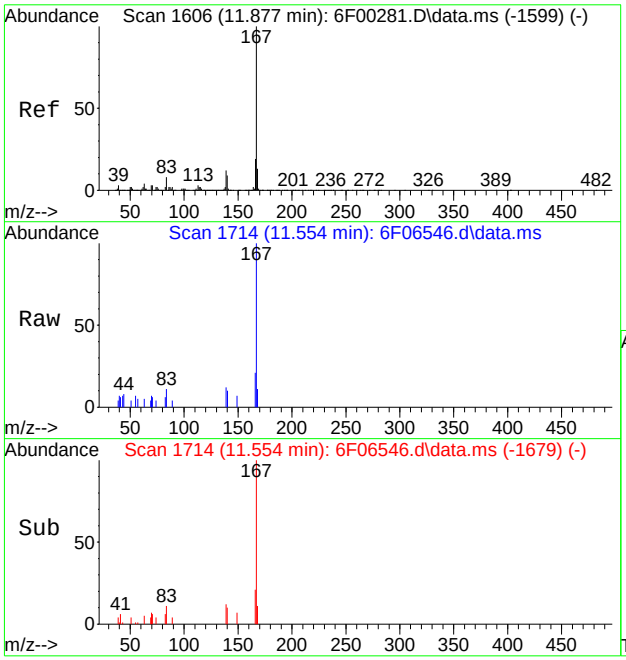


#85
Anthracene
Concen: 0.09 ppm
RT: 11.351 min Scan# 1676
Delta R.T. -0.011 min
Lab File: 6F06546.d
Acq: 13 Aug 2020 3:34 pm

Tgt Ion:178 Resp: 2775

Ion	Ratio	Lower	Upper
178	100		
179	16.8	0.0	45.4
176	15.9	0.0	48.2

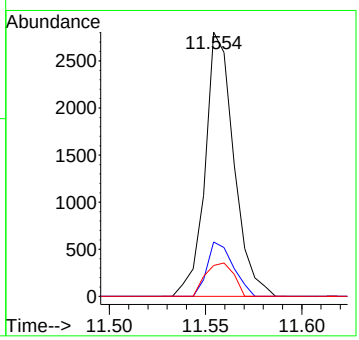


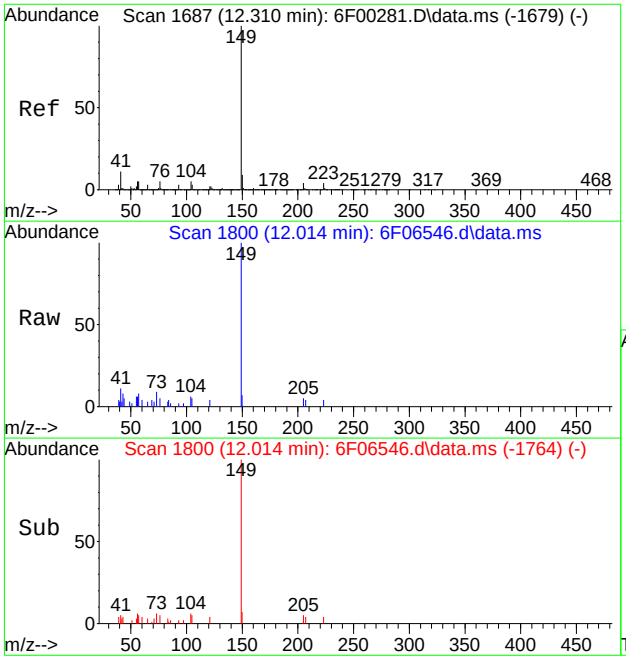


#87
Carbazole
Concen: 0.10 ppm
RT: 11.554 min Scan# 1714
Delta R.T. -0.011 min
Lab File: 6F06546.d
Acq: 13 Aug 2020 3:34 pm

Tgt Ion:167 Resp: 2915

Ion	Ratio	Lower	Upper
167	100		
166	20.6	0.0	50.9
139	11.7	0.0	43.2

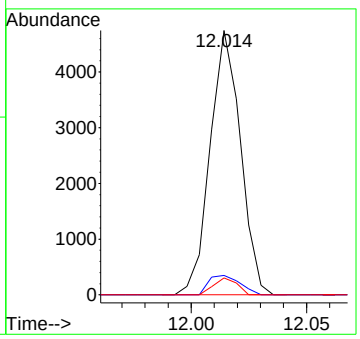


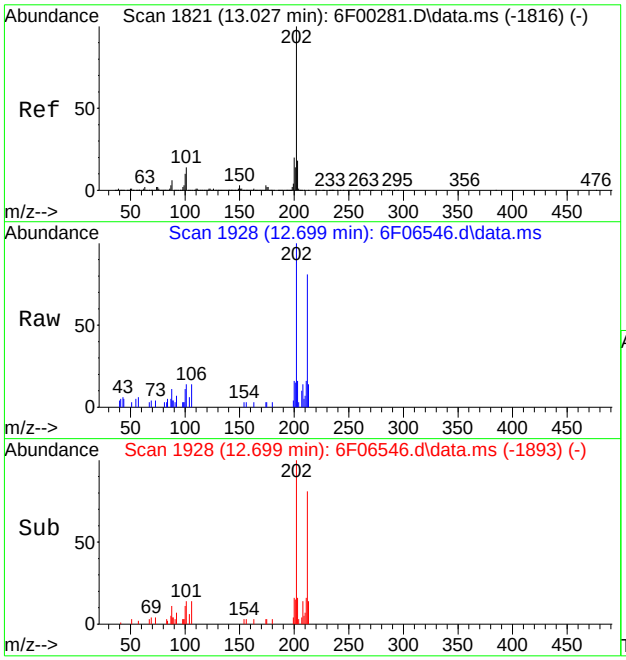


#89
Di-n-butylphthalate
Concen: 0.12 ppm
RT: 12.014 min Scan# 1800
Delta R.T. -0.005 min
Lab File: 6F06546.d
Acq: 13 Aug 2020 3:34 pm

Tgt Ion:149 Resp: 4347

Ion	Ratio	Lower	Upper
149	100		
150	7.4	0.0	39.2
104	6.4	0.0	34.7

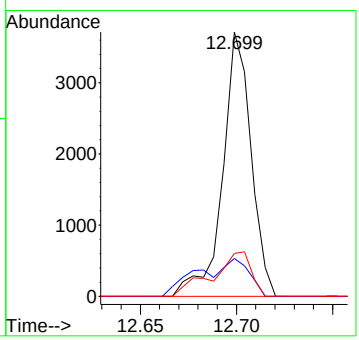


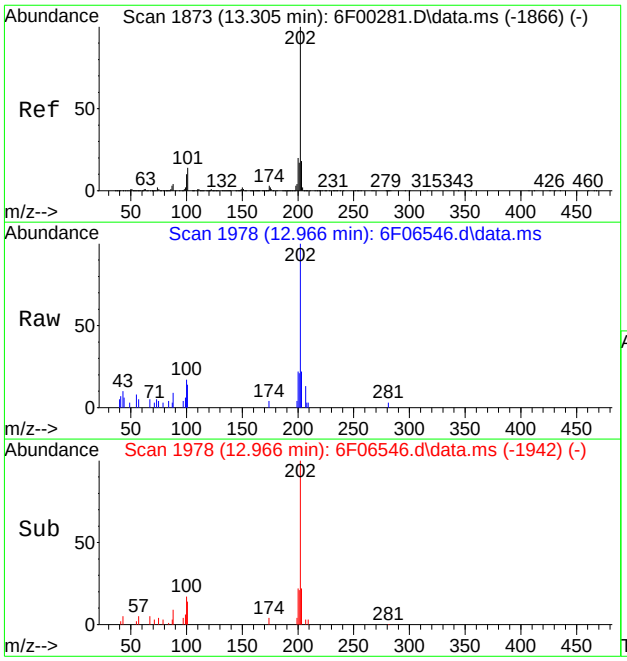


#91
Fluoranthene
Concen: 0.12 ppm
RT: 12.699 min Scan# 1928
Delta R.T. -0.011 min
Lab File: 6F06546.d
Acq: 13 Aug 2020 3:34 pm

Tgt Ion:202 Resp: 3816

Ion	Ratio	Lower	Upper
202	100		
101	14.4	0.0	44.4
203	16.3	0.0	47.5

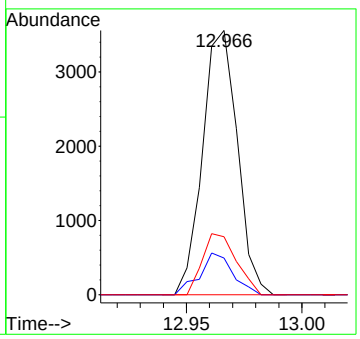


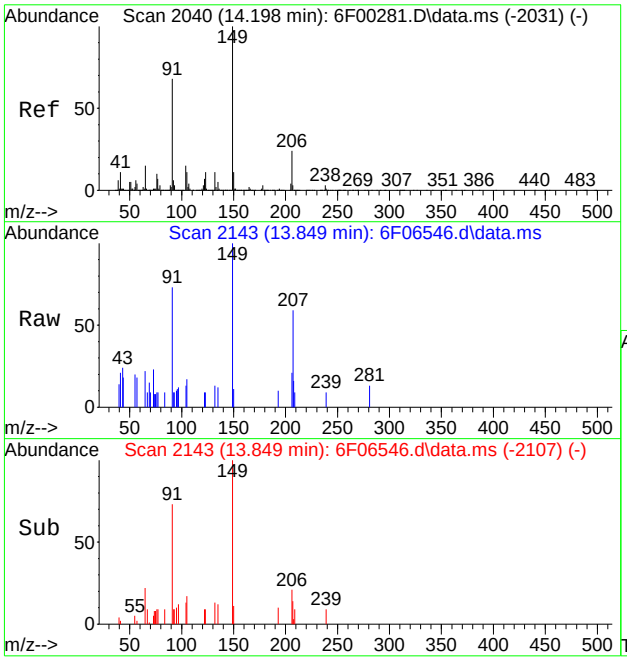


#94
Pyrene
Concen: 0.13 ppm
RT: 12.966 min Scan# 1978
Delta R.T. -0.005 min
Lab File: 6F06546.d
Acq: 13 Aug 2020 3:34 pm

Tgt Ion:202 Resp: 3737

Ion	Ratio	Lower	Upper
202	100		
101	13.9	0.0	48.6
203	22.0	0.0	48.3

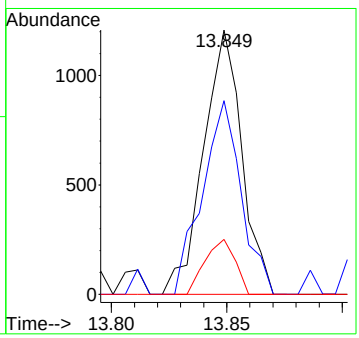


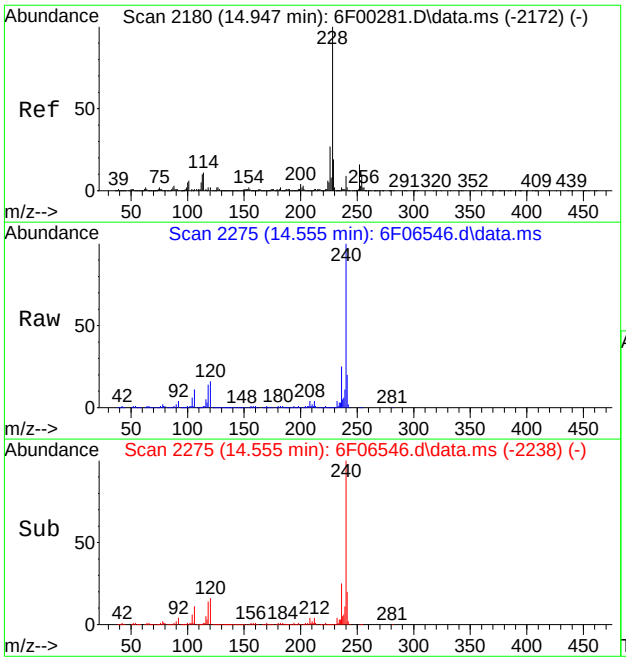


#97
Butylbenzylphthalate
Concen: 0.10 ppm
RT: 13.849 min Scan# 2143
Delta R.T. -0.005 min
Lab File: 6F06546.d
Acq: 13 Aug 2020 3:34 pm

Tgt Ion:149 Resp: 1398

Ion	Ratio	Lower	Upper
149	100		
91	73.3	38.4	98.4
206	20.8	0.0	51.7

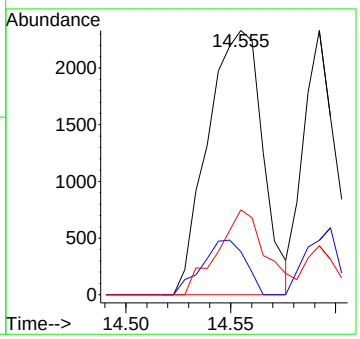


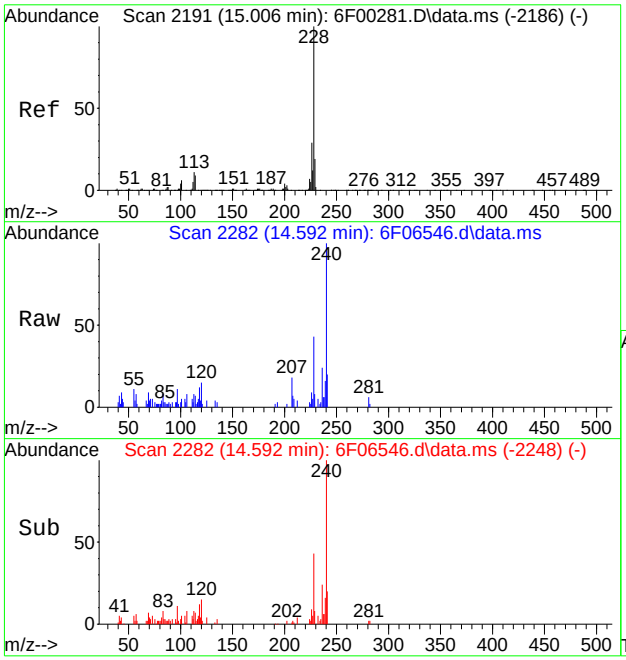


#99
Benzo[a]anthracene
Concen: 0.16 ppm
RT: 14.555 min Scan# 2275
Delta R.T. -0.000 min
Lab File: 6F06546.d
Acq: 13 Aug 2020 3:34 pm

Tgt Ion:228 Resp: 4245

Ion	Ratio	Lower	Upper
228	100		
226	17.5	0.0	56.8
229	30.1	0.0	49.8

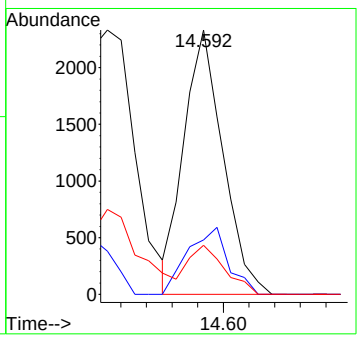


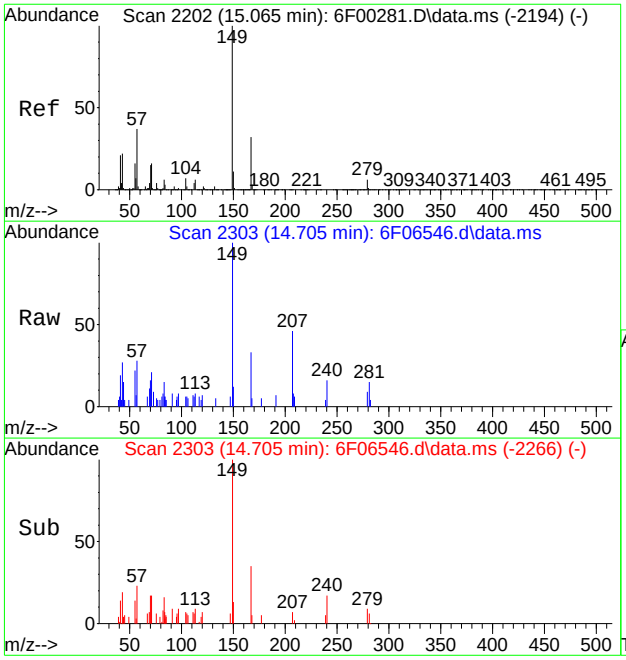


#100
Chrysene
Concen: 0.10 ppm
RT: 14.592 min Scan# 2282
Delta R.T. -0.016 min
Lab File: 6F06546.d
Acq: 13 Aug 2020 3:34 pm

Tgt Ion:228 Resp: 2475

Ion	Ratio	Lower	Upper
228	100		
226	22.0	0.0	59.3
229	15.6	0.0	49.8

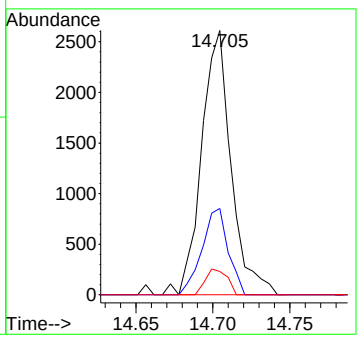


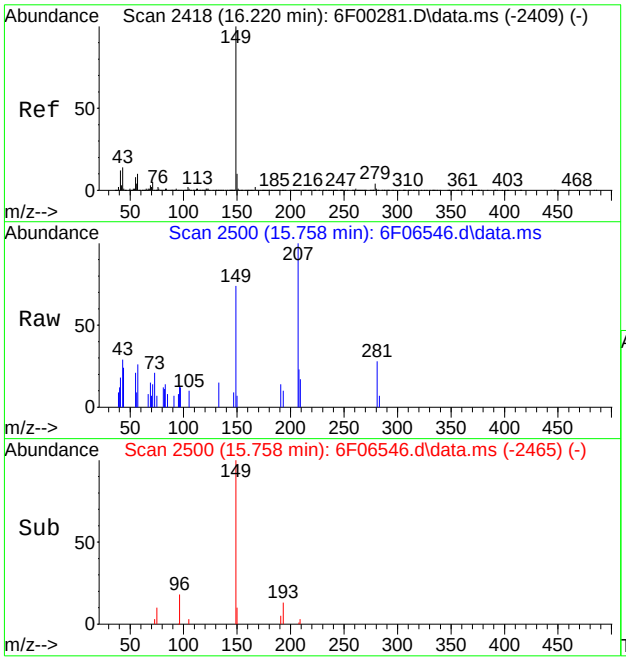


#101
bis(2-Ethylhexyl)phthalate
Concen: 0.18 ppm
RT: 14.705 min Scan# 2303
Delta R.T. -0.000 min
Lab File: 6F06546.d
Acq: 13 Aug 2020 3:34 pm

Tgt Ion:149 Resp: 3494

Ion	Ratio	Lower	Upper
149	100		
167	32.7	0.0	59.9
279	8.8	0.0	36.7

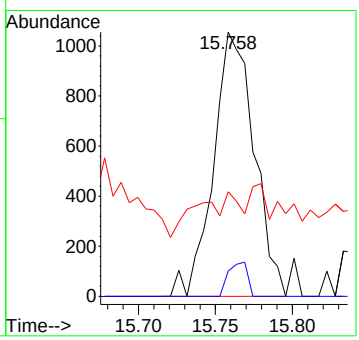


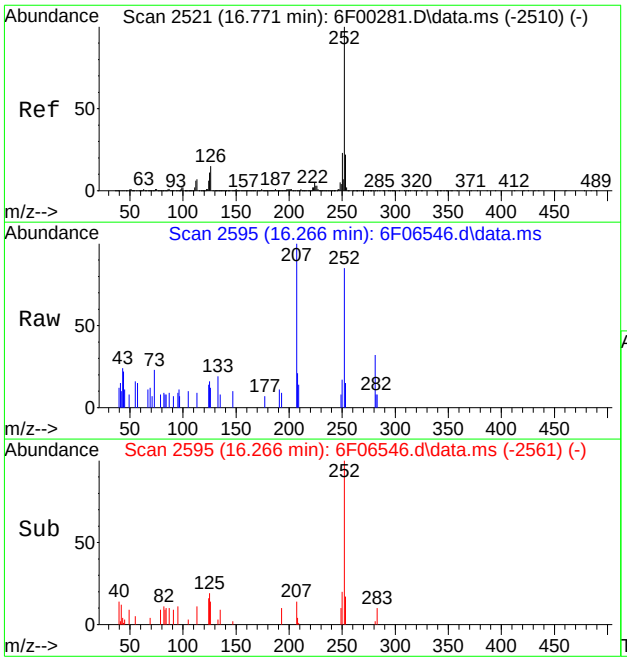


#103
Di-n-octylphthalate
Concen: 0.07 ppm
RT: 15.758 min Scan# 2500
Delta R.T. -0.011 min
Lab File: 6F06546.d
Acq: 13 Aug 2020 3:34 pm

Tgt Ion:149 Resp: 1941

Ion	Ratio	Lower	Upper
149	100		
150	9.6	0.0	40.2
43	0.0	0.0	39.4

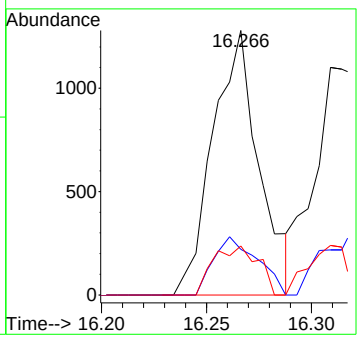


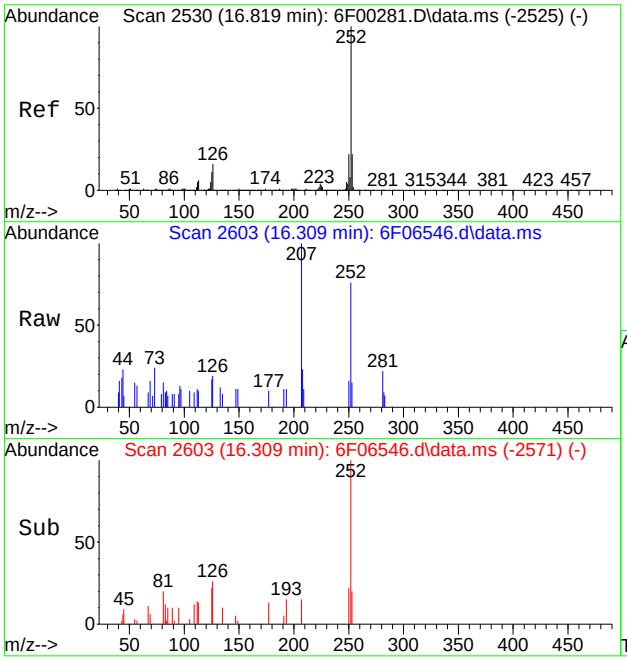


#104
Benzo[b]fluoranthene
Concen: 0.08 ppm
RT: 16.266 min Scan# 2595
Delta R.T. -0.016 min
Lab File: 6F06546.d
Acq: 13 Aug 2020 3:34 pm

Tgt Ion:252 Resp: 1954

Ion	Ratio	Lower	Upper
252	100		
253	19.5	0.0	51.7
125	20.9	0.0	44.0

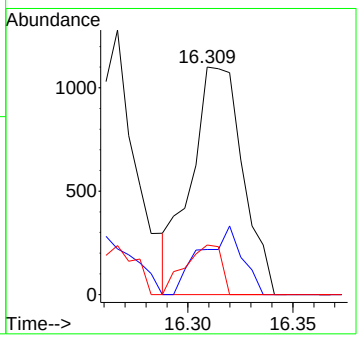


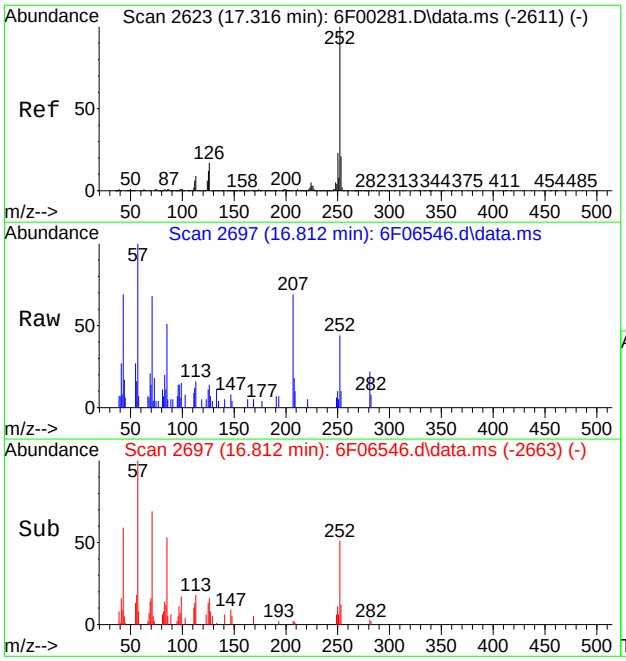


#105
Benzo[k]fluoranthene
Concen: 0.08 ppm
RT: 16.309 min Scan# 2603
Delta R.T. -0.027 min
Lab File: 6F06546.d
Acq: 13 Aug 2020 3:34 pm

Tgt Ion:252 Resp: 1896

Ion	Ratio	Lower	Upper
252	100		
253	22.9	0.0	51.9
125	25.2	0.0	43.3

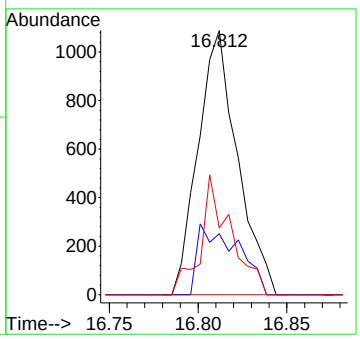


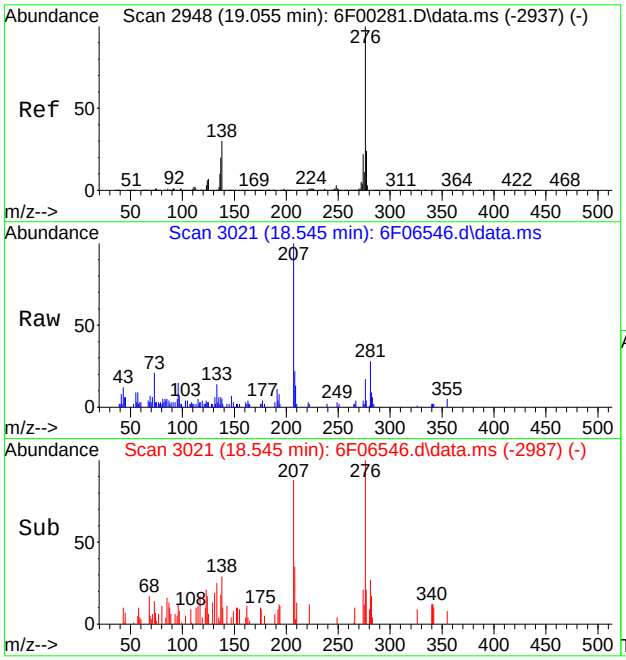


#106
Benzo[a]pyrene
Concen: 0.07 ppm
RT: 16.812 min Scan# 2697
Delta R.T. -0.016 min
Lab File: 6F06546.d
Acq: 13 Aug 2020 3:34 pm

Tgt Ion:252 Resp: 1675

Ion	Ratio	Lower	Upper
252	100		
253	23.1	0.0	52.0
125	25.3	0.0	44.6

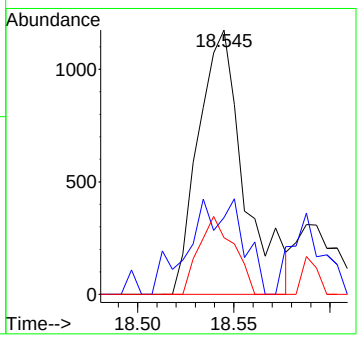


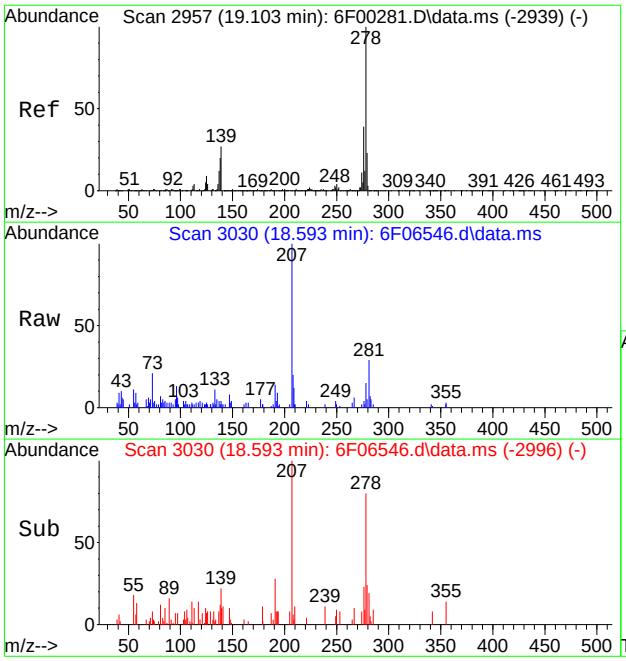


#107
Indeno[1,2,3-cd]pyrene
Concen: 0.09 ppm
RT: 18.545 min Scan# 3021
Delta R.T. -0.016 min
Lab File: 6F06546.d
Acq: 13 Aug 2020 3:34 pm

Tgt Ion:276 Resp: 1941

Ion	Ratio	Lower	Upper
276	100		
138	24.1	0.0	56.9
277	23.3	0.0	53.9

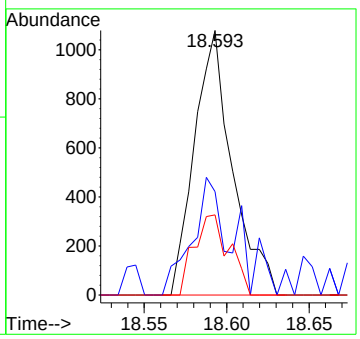


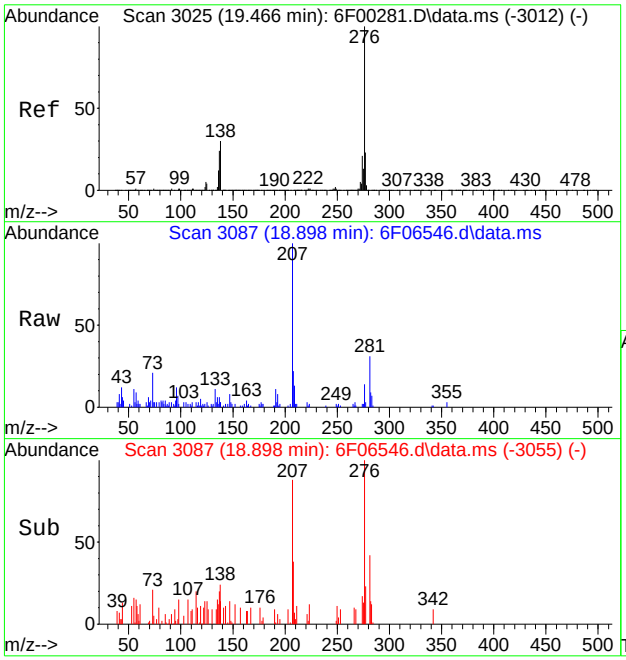


#108
Dibenz[a,h]anthracene
Concen: 0.08 ppm
RT: 18.593 min Scan# 3030
Delta R.T. -0.016 min
Lab File: 6F06546.d
Acq: 13 Aug 2020 3:34 pm

Tgt Ion:278 Resp: 1736

Ion	Ratio	Lower	Upper
278	100		
139	34.2	0.0	51.9
279	30.3	0.0	54.3

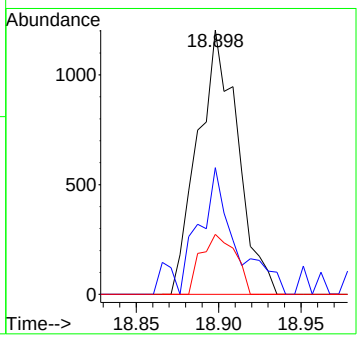




#109
Benzo[g,h,i]perylene
Concen: 0.09 ppm
RT: 18.898 min Scan# 3087
Delta R.T. -0.027 min
Lab File: 6F06546.d
Acq: 13 Aug 2020 3:34 pm

Tgt Ion:276 Resp: 2030

Ion	Ratio	Lower	Upper
276	100		
138	41.9	0.0	59.3
277	22.7	0.0	53.8



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\Jenniferf\AUGUST 2020\08-14-2020\SX2952\
Data File : x072410.d
Acq On : 13 Aug 2020 10:39 pm
Operator : marthav
Sample : op81545-mb E
Misc : op81545,sx2952,250,,,1,1,water
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Aug 14 03:18:40 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

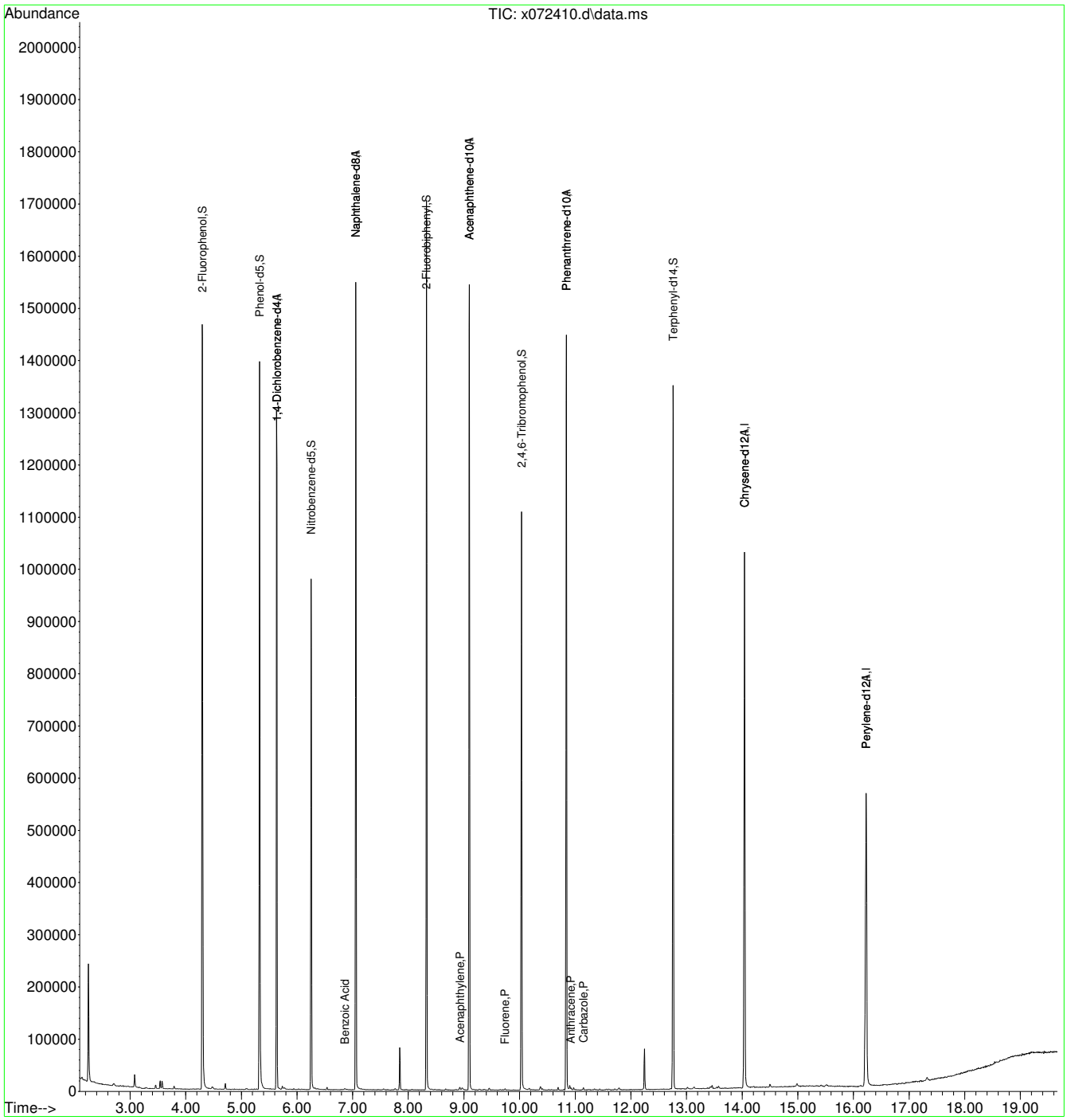
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.638	152	187920	40.00	ppm	0.00
22) Naphthalene-d8	7.056	136	678437	40.00	ppm	0.00
43) Acenaphthene-d10	9.099	164	322407	40.00	ppm	0.00
70) Phenanthrene-d10	10.843	188	547185	40.00	ppm	0.00
92) Chrysene-d12	14.041	240	389648	40.00	ppm	-0.01
102) Perylene-d12	16.229	264	297201	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	5.638	152	187920	40.00	ppm	0.00
120) Naphthalene-d8A	7.056	136	678437	40.00	ppm	0.00
127) Acenaphthene-d10A	9.099	164	322407	40.00	ppm	0.00
136) Phenanthrene-d10A	10.843	188	547185	40.00	ppm	0.00
146) Chrysene-d12A	14.041	240	389648	40.00	ppm	-0.01
153) Perylene-d12A	16.229	264	297201	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	4.301	112	407569	60.49	ppm	0.01
Spiked Amount 100.000	Range 14 - 67		Recovery = 60.49%			
9) Phenol-d5	5.328	99	416272	51.93	ppm	0.00
Spiked Amount 100.000	Range 10 - 50		Recovery = 51.93%#			
23) Nitrobenzene-d5	6.253	82	282466	40.32	ppm	0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 80.64%			
47) 2-Fluorobiphenyl	8.329	172	474336	40.64	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 81.28%			
75) 2,4,6-Tribromophenol	10.035	330	91658	78.16	ppm	0.00
Spiked Amount 100.000	Range 33 - 118		Recovery = 78.16%			
95) Terphenyl-d14	12.757	244	430623	41.59	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 83.18%			
Target Compounds						Qvalue
30) Benzoic Acid	6.858	105	1040	0.25	ppm	85
52) Acenaphthylene	8.928	152	3637	0.23	ppm	92
65) Fluorene	9.741	166	846	0.08	ppm	87
85) Anthracene	10.923	178	1499	0.09	ppm	97
87) Carbazole	11.147	167	2265	0.15	ppm	97

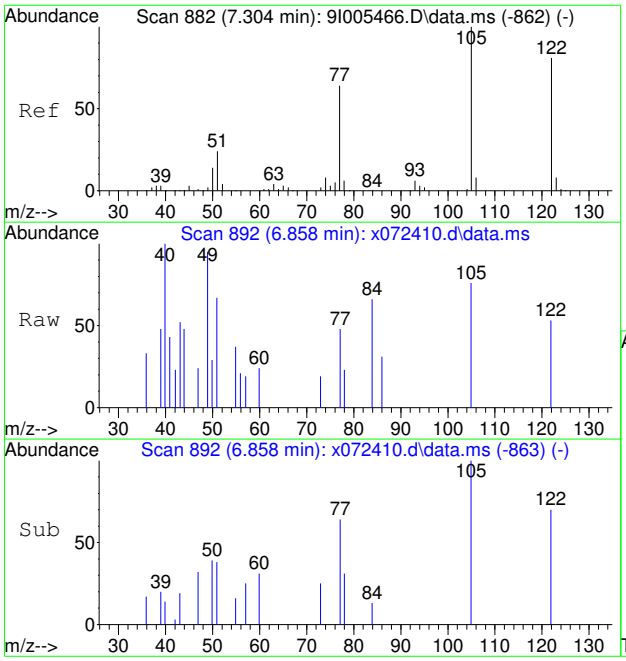
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\Jenniferf\AUGUST 2020\08-14-2020\SX2952\
Data File : x072410.d
Acq On : 13 Aug 2020 10:39 pm
Operator : marthav
Sample : op81545-mb E
Misc : op81545,sx2952,250,,,1,1,water
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Aug 14 03:18:40 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

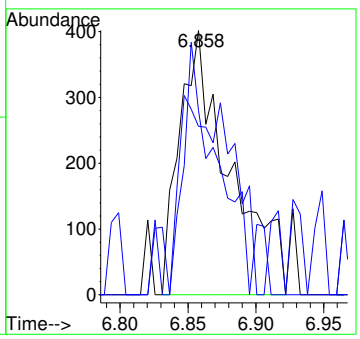


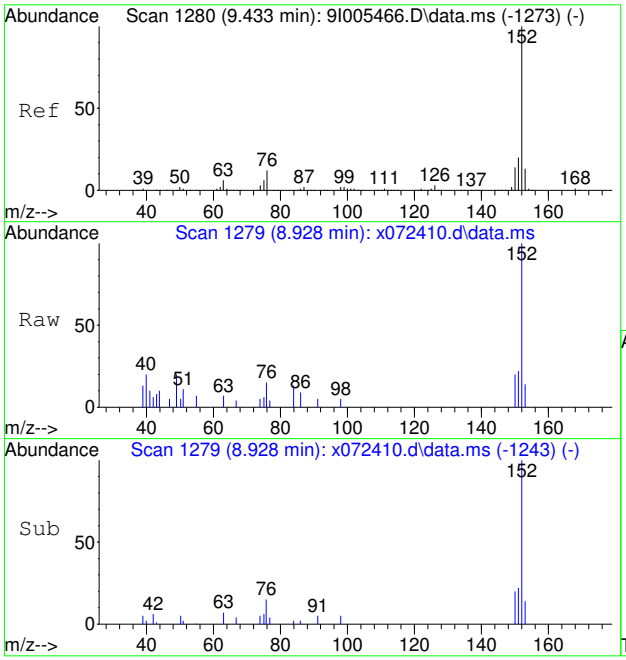


#30
Benzoic Acid
Concen: 0.25 ppm
RT: 6.858 min Scan# 892
Delta R.T. -0.043 min
Lab File: x072410.d
Acq: 13 Aug 2020 10:39 pm

Tgt Ion:105 Resp: 1040

Ion	Ratio	Lower	Upper
105	100		
122	69.7	51.2	111.2
77	50.9	34.1	94.1

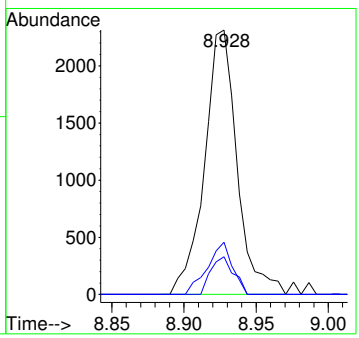


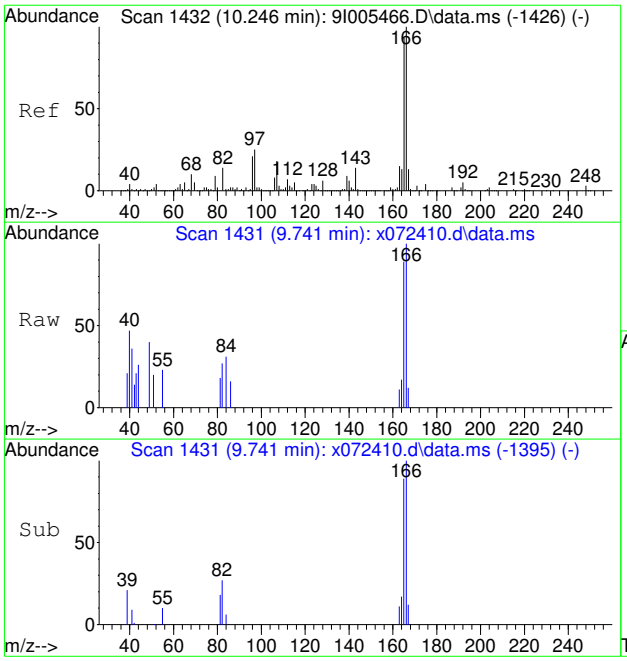


#52
Acenaphthylene
Concen: 0.23 ppm
RT: 8.928 min Scan# 1279
Delta R.T. -0.006 min
Lab File: x072410.d
Acq: 13 Aug 2020 10:39 pm

Tgt Ion:152 Resp: 3637

Ion	Ratio	Lower	Upper
152	100		
150	19.7	0.0	44.3
153	14.2	0.0	43.3

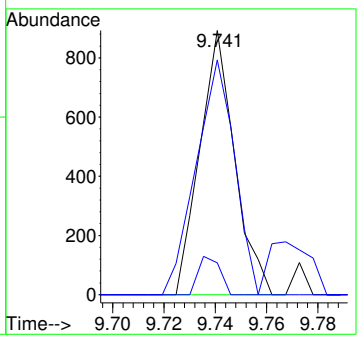


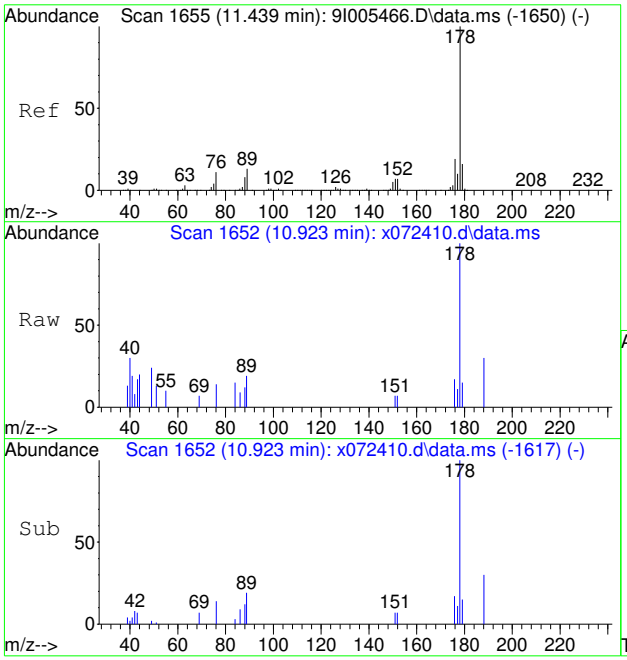


#65
Fluorene
Concen: 0.08 ppm
RT: 9.741 min Scan# 1431
Delta R.T. -0.006 min
Lab File: x072410.d
Acq: 13 Aug 2020 10:39 pm

Tgt Ion:166 Resp: 846

Ion	Ratio	Lower	Upper
166	100		
165	78.8	62.7	122.7
167	12.1	0.0	43.5

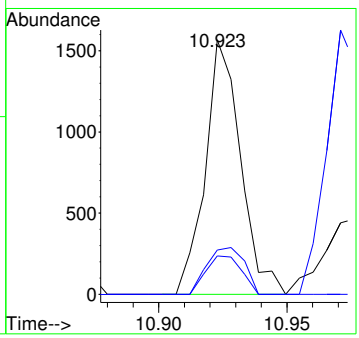


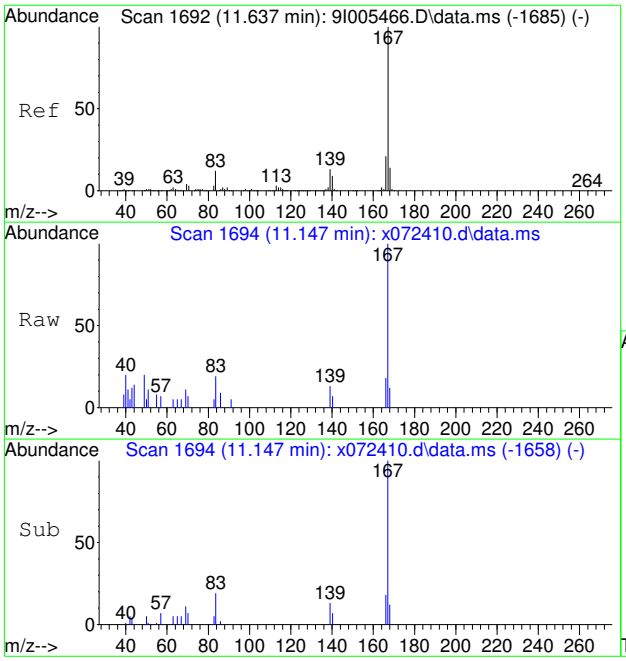


#85
Anthracene
Concen: 0.09 ppm
RT: 10.923 min Scan# 1652
Delta R.T. -0.011 min
Lab File: x072410.d
Acq: 13 Aug 2020 10:39 pm

Tgt Ion:178 Resp: 1499

Ion	Ratio	Lower	Upper
178	100		
179	15.1	0.0	46.0
176	17.4	0.0	49.3

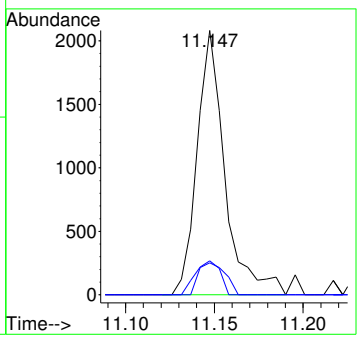




#87
Carbazole
Concen: 0.15 ppm
RT: 11.147 min Scan# 1694
Delta R.T. -0.006 min
Lab File: x072410.d
Acq: 13 Aug 2020 10:39 pm

Tgt Ion:167 Resp: 2265

Ion	Ratio	Lower	Upper
167	100		
168	12.1	0.0	43.9
139	12.9	0.0	42.7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
Data File : 7G11165.d
Acq On : 13 Aug 2020 3:58 pm
Operator : FOUADS
Sample : op81539-mb e
Misc : op81539,S7G484,30.0,,,1,1,soil
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 14 03:15:09 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

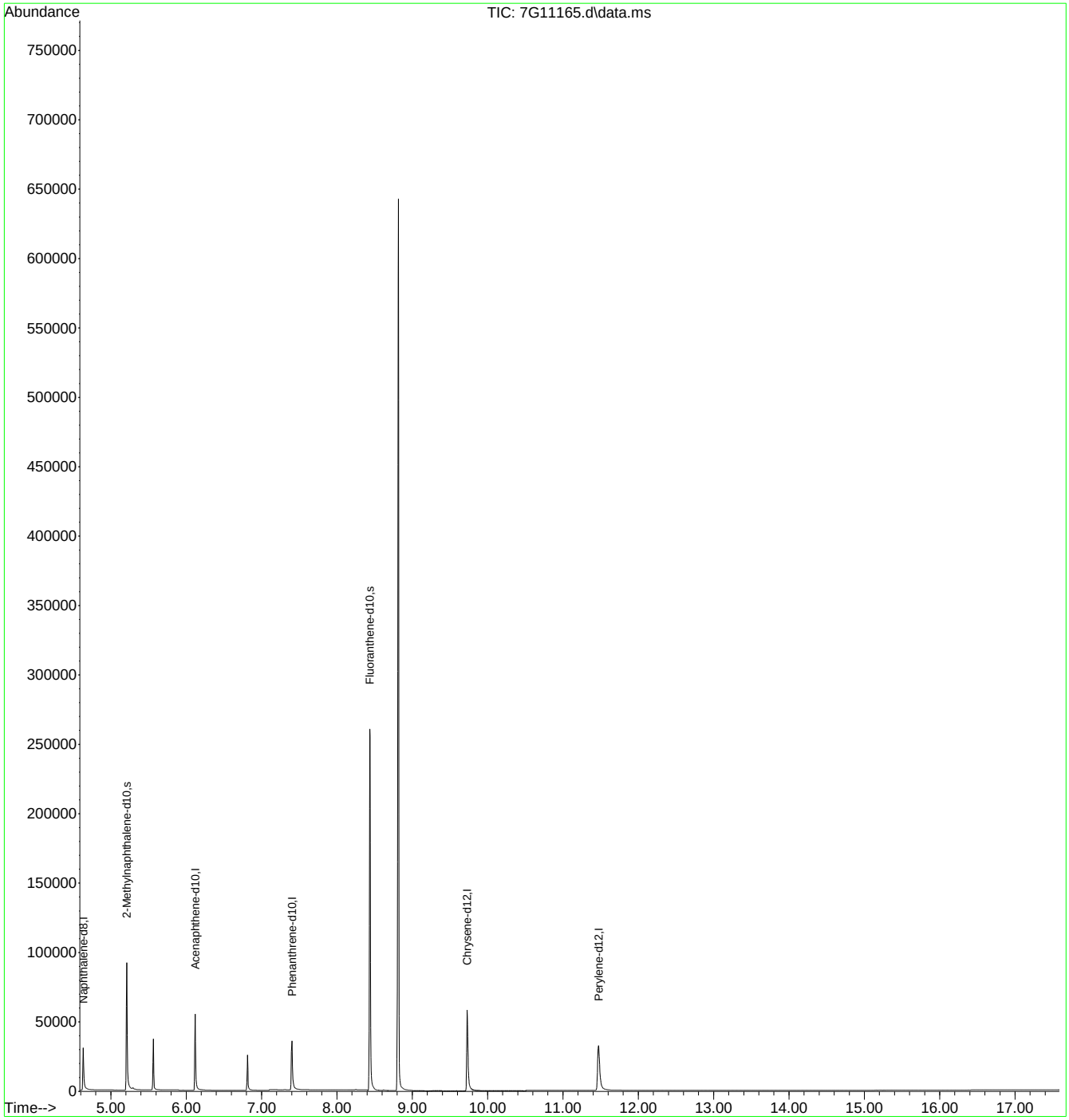
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.634	136	27377	4.00	ppm	0.00
6) Acenaphthene-d10	6.118	164	19533	4.00	ppm	0.00
11) Phenanthrene-d10	7.403	188	37332	4.00	ppm	0.00
18) Chrysene-d12	9.729	240	55775	4.00	ppm	0.00
22) Perylene-d12	11.472	264	47761	4.00	ppm	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.211	152	35637	8.73	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 87.30%			
17) Fluoranthene-d10	8.436	212	191722	9.83	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 98.30%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
Data File : 7G11165.d
Acq On : 13 Aug 2020 3:58 pm
Operator : FOUADS
Sample : op81539-mb e
Misc : op81539,S7G484,30.0,,,1,1,soil
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 14 03:15:09 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\Jenniferf\AUGUST 2020\08-14-2020\ST1749\
Data File : T050178.D
Acq On : 13 Aug 2020 4:03 pm
Operator : nareshj
Sample : op81544-mb e
Misc : OP81544,st1749,250,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 14 01:40:20 2020
Quant Method : C:\msdchem\1\methods\SIM_LVT071720.M
Quant Title : PAH's by 8270 SIM
QLast Update : Fri Aug 14 01:35:08 2020
Response via : Initial Calibration

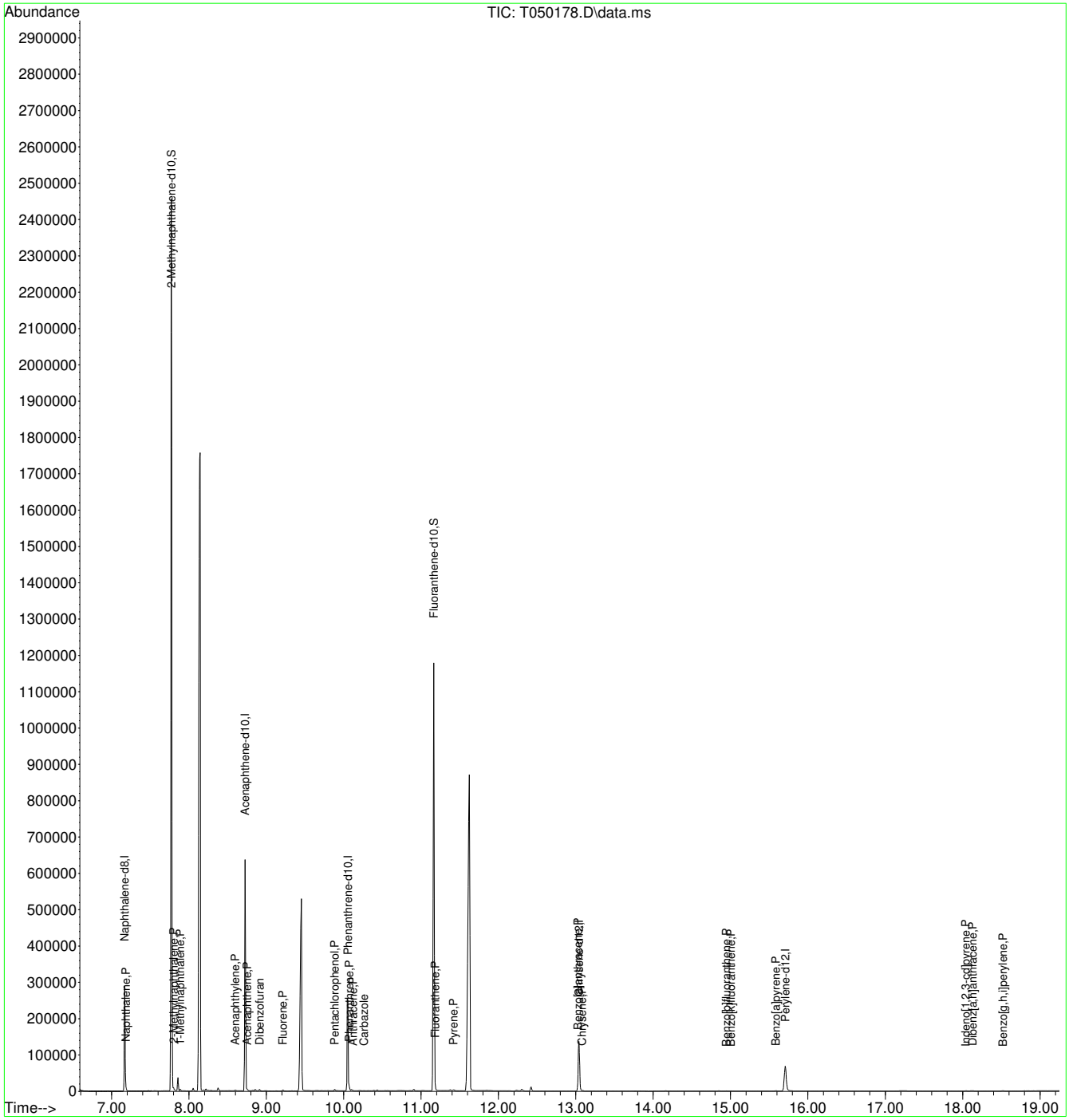
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	7.168	136	207080	500.00	ppb	0.00
6) Acenaphthene-d10	8.725	162	188388	500.00	ppb	0.00
11) Phenanthrene-d10	10.054	188	215722	500.00	ppb	0.00
18) Chrysene-d12	13.038	240	125438	500.00	ppb	0.00
22) Perylene-d12	15.707	264	90251	500.00	ppb	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	7.772	152	781031	2250.13	ppb	0.00
Spiked Amount 2000.000			Recovery = 112.51%			
17) Fluoranthene-d10	11.164	212	787805	2024.51	ppb	0.00
Spiked Amount 2000.000			Recovery = 101.23%			
Target Compounds						Qvalue
2) Naphthalene	7.185	128	2679	5.21	ppb	97
3) 2-Methylnaphthalene	7.801	142	2321	5.00	ppb	98
5) 1-Methylnaphthalene	7.887	142	1393	3.27	ppb	99
7) Acenaphthylene	8.596	152	1228	1.35	ppb	92
8) Acenaphthene	8.750	153	1352	2.40	ppb	89
9) Dibenzofuran	8.913	168	2402	3.23	ppm	87
10) Fluorene	9.213	166	1258	2.03	ppb	83
12) Pentachlorophenol	9.882	266	1414	37.74	ppb	89
13) Phenanthrene	10.071	178	6280	11.50	ppb	98
14) Anthracene	10.120	178	979	1.87	ppb	98
15) Carbazole	10.260	167	470	0.96	ppm	96
16) Fluoranthene	11.180	202	3501	6.77	ppb	97
19) Pyrene	11.418	202	1645	2.82	ppb	91
20) Benzo[a]anthracene	13.027	228	1022	2.54	ppb	92
21) Chrysene	13.079	228	704	1.78	ppb	99
23) Benzo[b]fluoranthene	14.946	252	627	2.20	ppb	97
24) Benzo[k]fluoranthene	15.005	252	591	1.95	ppb	100
25) Benzo[a]pyrene	15.584	252	645	2.41	ppb #	1
26) Indeno[1,2,3-cd]pyrene	18.040	276	636	2.76	ppb	89
27) Dibenz[a,h]anthracene	18.129	278	745	3.26	ppb	87
28) Benzo[g,h,i]perylene	18.522	276	604	2.30	ppb	92

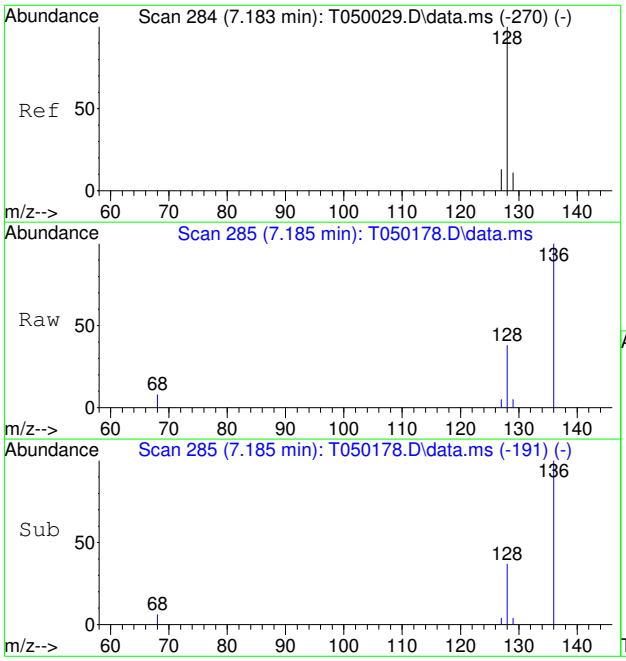
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\Jenniferf\AUGUST 2020\08-14-2020\ST1749\
Data File : T050178.D
Acq On : 13 Aug 2020 4:03 pm
Operator : nareshj
Sample : op81544-mb e
Misc : OP81544,st1749,250,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 14 01:40:20 2020
Quant Method : C:\msdchem\1\methods\SIM_LVT071720.M
Quant Title : PAH's by 8270 SIM
QLast Update : Fri Aug 14 01:35:08 2020
Response via : Initial Calibration

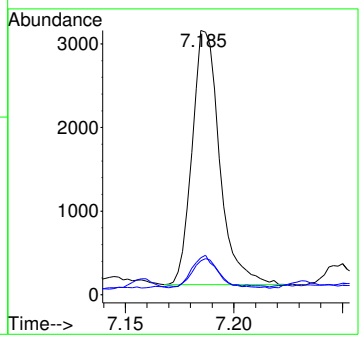


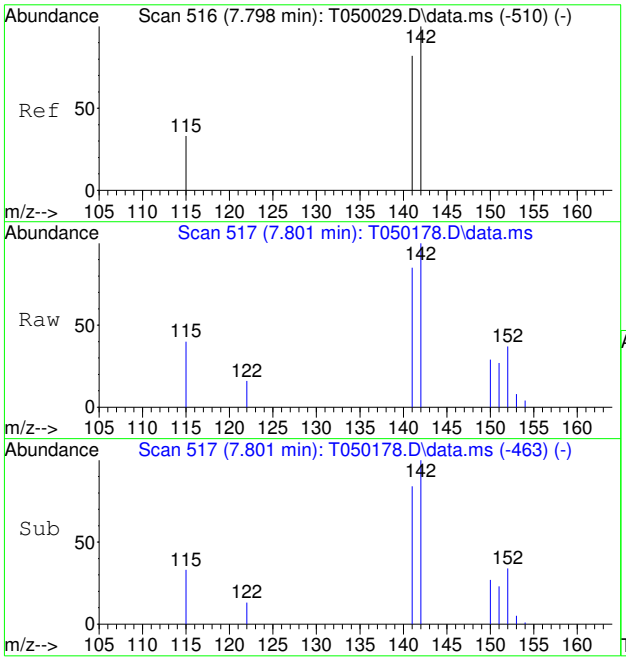


#2
Naphthalene
Concen: 5.21 ppb
RT: 7.185 min Scan# 285
Delta R.T. -0.002 min
Lab File: T050178.D
Acq: 13 Aug 2020 4:03 pm

Tgt Ion:128 Resp: 2679

Ion	Ratio	Lower	Upper
128	100		
129	9.9	0.0	40.8
127	11.0	0.0	42.7

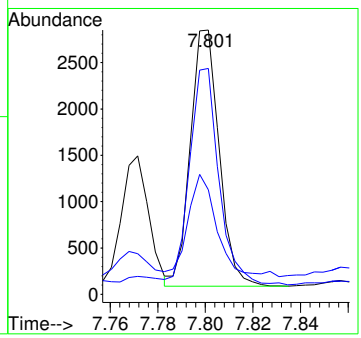


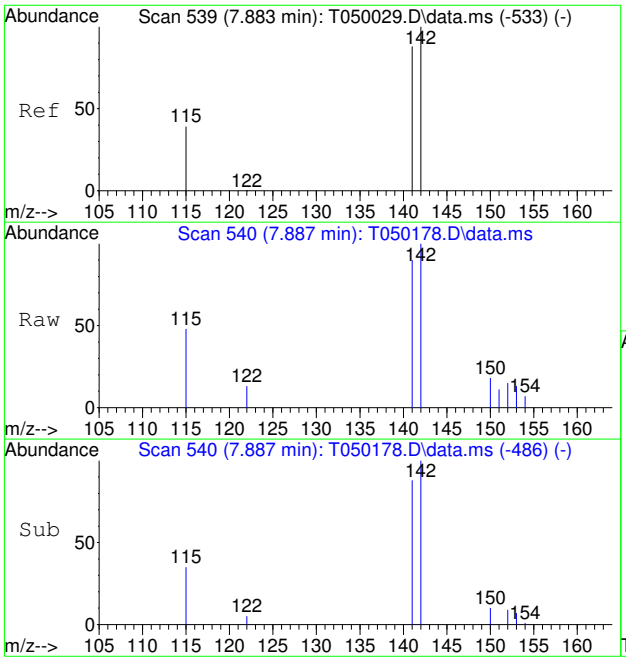


#3
2-Methylnaphthalene
Concen: 5.00 ppb
RT: 7.801 min Scan# 517
Delta R.T. -0.000 min
Lab File: T050178.D
Acq: 13 Aug 2020 4:03 pm

Tgt Ion:142 Resp: 2321

Ion	Ratio	Lower	Upper
142	100		
141	85.0	52.0	112.0
115	33.4	3.5	63.5

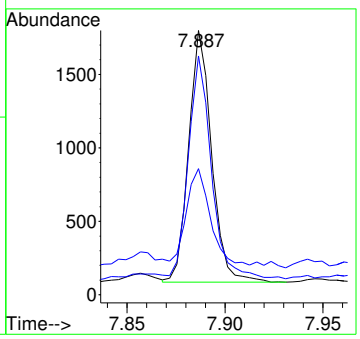


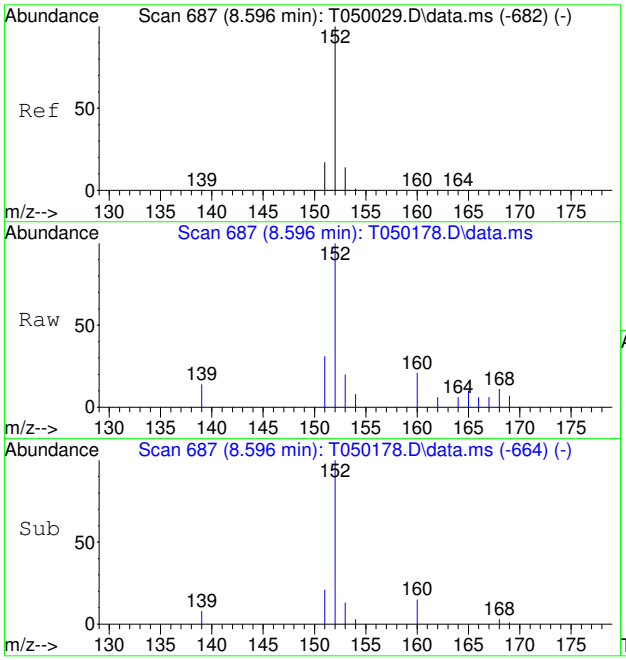


#5
1-Methylnaphthalene
Concen: 3.27 ppb
RT: 7.887 min Scan# 540
Delta R.T. -0.000 min
Lab File: T050178.D
Acq: 13 Aug 2020 4:03 pm

Tgt Ion:142 Resp: 1393

Ion	Ratio	Lower	Upper
142	100		
141	88.2	58.1	118.1
115	37.8	8.7	68.7

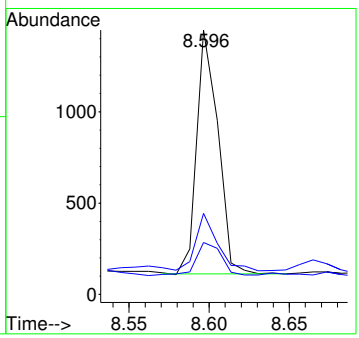


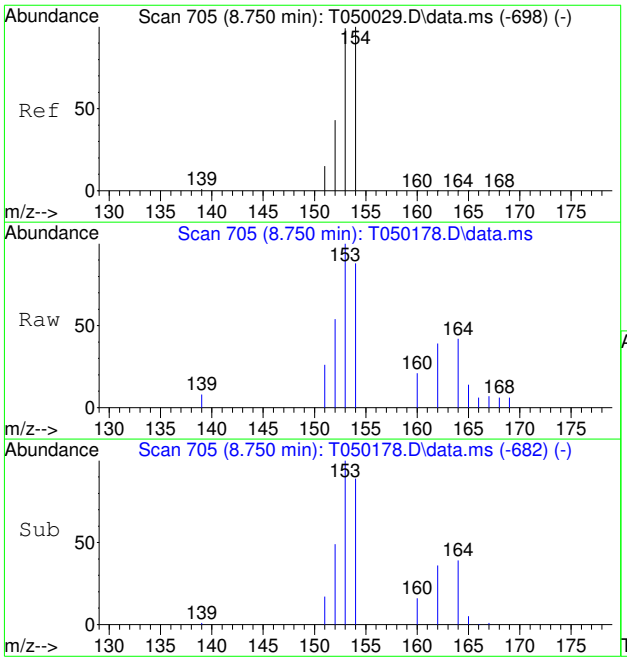


#7
Acenaphthylene
Concen: 1.35 ppb
RT: 8.596 min Scan# 687
Delta R.T. -0.000 min
Lab File: T050178.D
Acq: 13 Aug 2020 4:03 pm

Tgt Ion:152 Resp: 1228

Ion	Ratio	Lower	Upper
152	100		
151	22.8	0.0	47.1
153	13.1	0.0	44.1

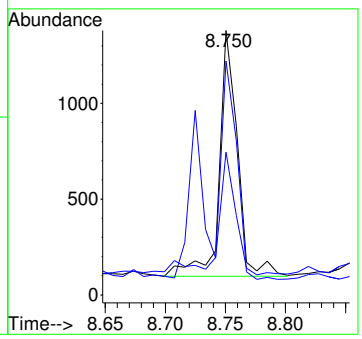


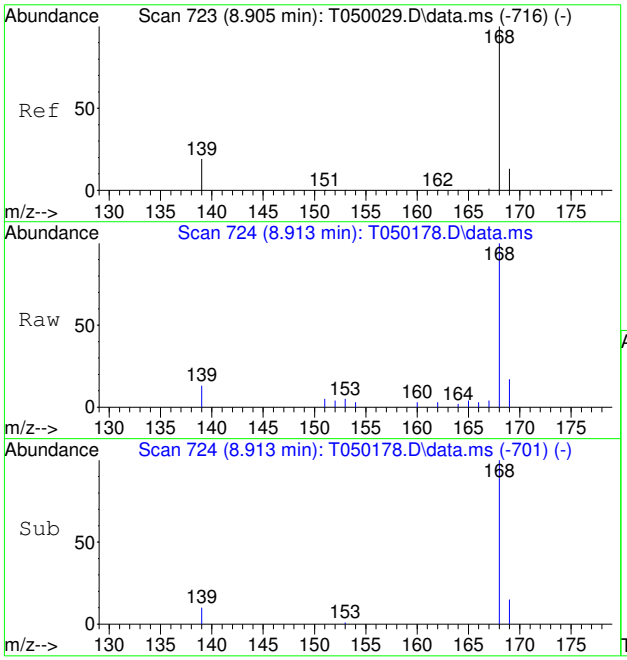


#8
Acenaphthene
Concen: 2.40 ppb
RT: 8.750 min Scan# 705
Delta R.T. -0.000 min
Lab File: T050178.D
Acq: 13 Aug 2020 4:03 pm

Tgt Ion:153 Resp: 1352

Ion	Ratio	Lower	Upper
153	100		
152	49.2	13.6	73.6
154	88.3	70.9	130.9

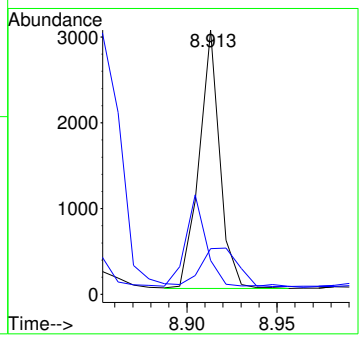


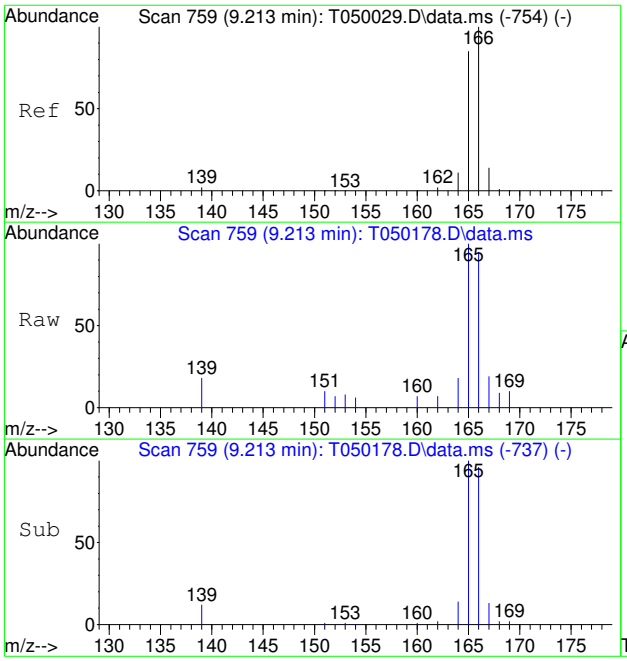


#9
Dibenzofuran
Concen: 3.23 ppm
RT: 8.913 min Scan# 724
Delta R.T. -0.000 min
Lab File: T050178.D
Acq: 13 Aug 2020 4:03 pm

Tgt Ion:168 Resp: 2402

Ion	Ratio	Lower	Upper
168	100		
139	10.1	0.0	49.2
169	14.0	0.0	42.9

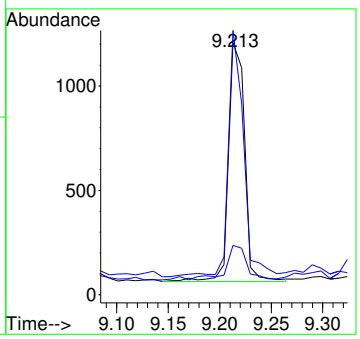


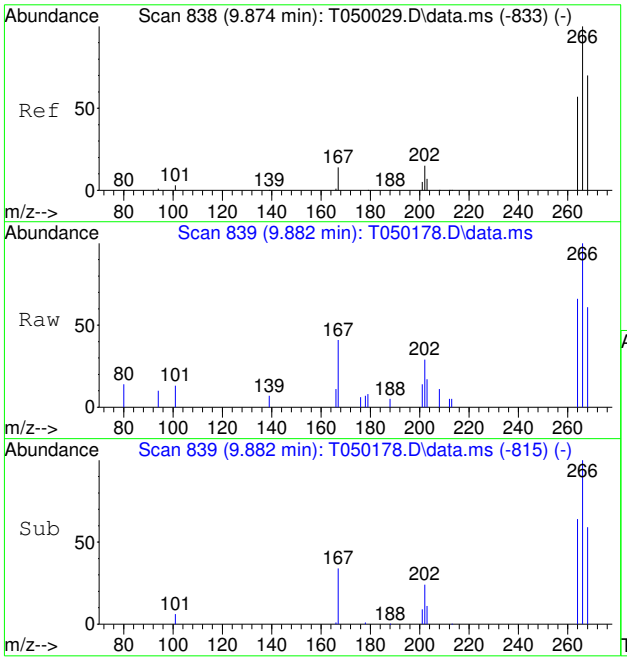


#10
Fluorene
Concen: 2.03 ppb
RT: 9.213 min Scan# 759
Delta R.T. -0.009 min
Lab File: T050178.D
Acq: 13 Aug 2020 4:03 pm

Tgt Ion:166 Resp: 1258

Ion	Ratio	Lower	Upper
166	100		
165	102.8	55.1	115.1
167	13.9	0.0	43.8

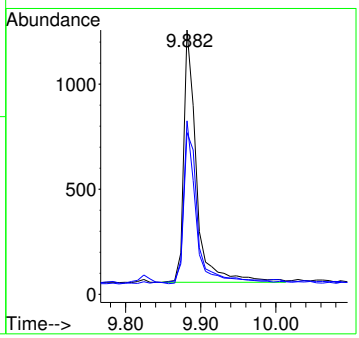


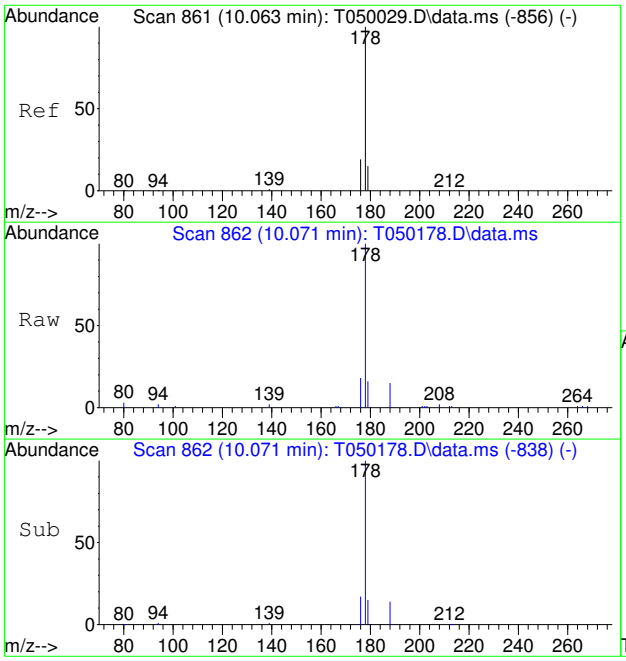


#12
Pentachlorophenol
Concen: 37.74 ppb
RT: 9.882 min Scan# 839
Delta R.T. -0.000 min
Lab File: T050178.D
Acq: 13 Aug 2020 4:03 pm

Tgt Ion:266 Resp: 1414

Ion	Ratio	Lower	Upper
266	100		
264	64.2	36.9	76.9
268	59.4	49.8	89.8

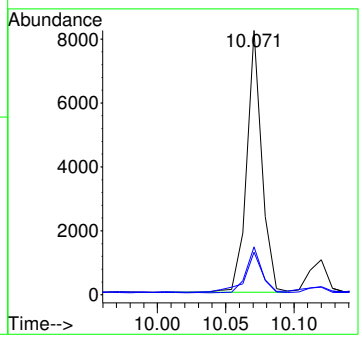


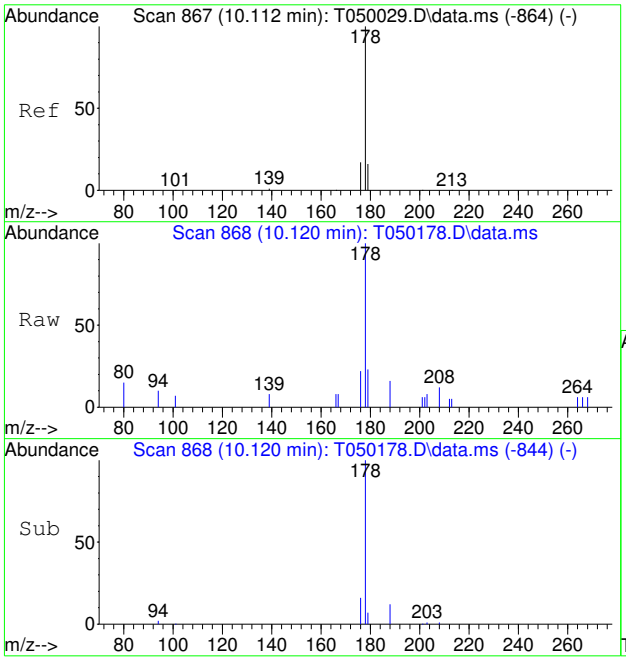


#13
Phenanthrene
Concen: 11.50 ppb
RT: 10.071 min Scan# 862
Delta R.T. -0.000 min
Lab File: T050178.D
Acq: 13 Aug 2020 4:03 pm

Tgt Ion:178 Resp: 6280

Ion	Ratio	Lower	Upper
178	100		
179	15.0	0.0	44.9
176	17.4	0.0	48.6

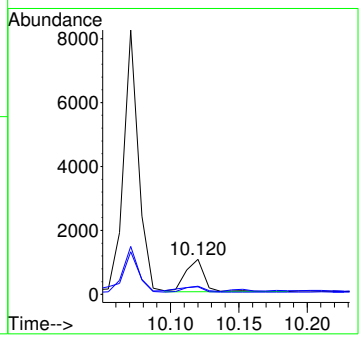


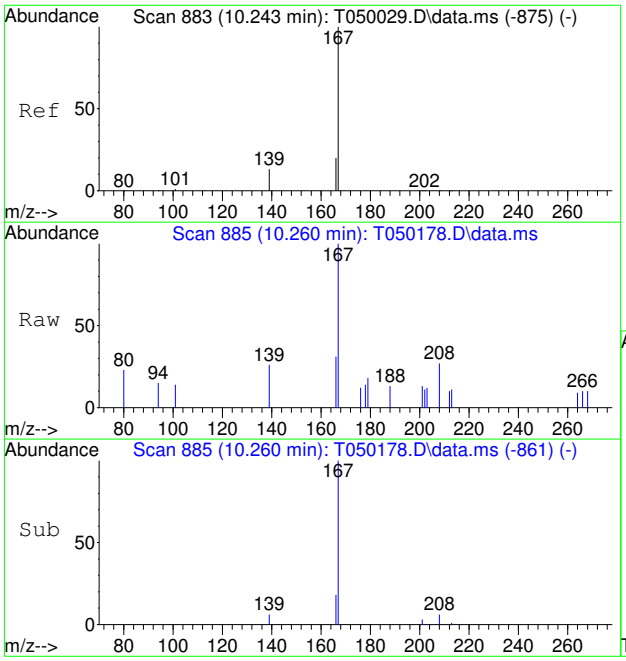


#14
Anthracene
Concen: 1.87 ppb
RT: 10.120 min Scan# 868
Delta R.T. -0.000 min
Lab File: T050178.D
Acq: 13 Aug 2020 4:03 pm

Tgt Ion:178 Resp: 979

Ion	Ratio	Lower	Upper
178	100		
179	14.0	0.0	45.6
176	16.9	0.0	46.8

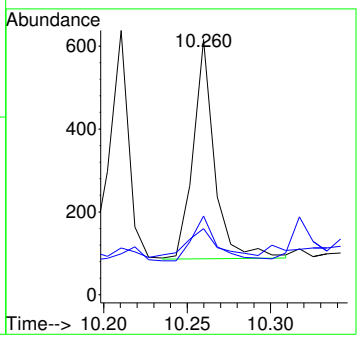


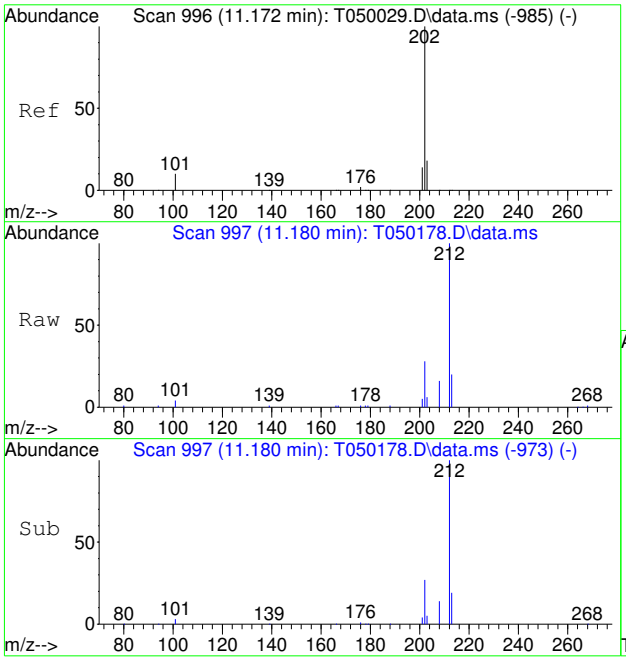


#15
Carbazole
Concen: 0.96 ppm
RT: 10.260 min Scan# 885
Delta R.T. -0.000 min
Lab File: T050178.D
Acq: 13 Aug 2020 4:03 pm

Tgt Ion:167 Resp: 470

Ion	Ratio	Lower	Upper
167	100		
166	18.8	0.0	50.1
139	11.2	0.0	43.4

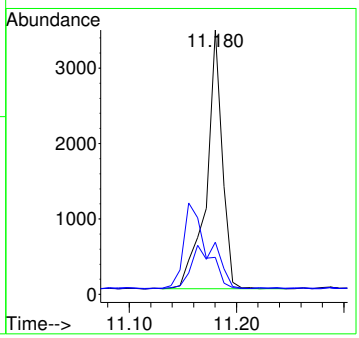


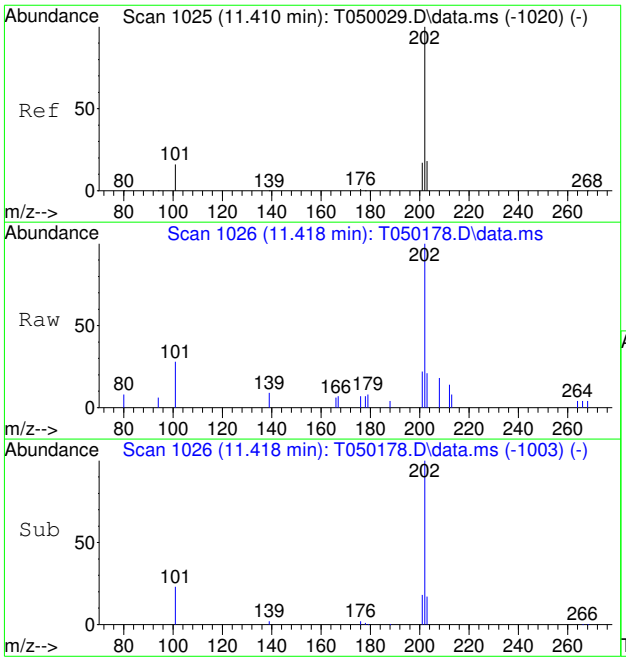


#16
Fluoranthene
Concen: 6.77 ppb
RT: 11.180 min Scan# 997
Delta R.T. -0.000 min
Lab File: T050178.D
Acq: 13 Aug 2020 4:03 pm

Tgt Ion:202 Resp: 3501

Ion	Ratio	Lower	Upper
202	100		
101	11.9	0.0	39.9
203	17.9	0.0	47.5

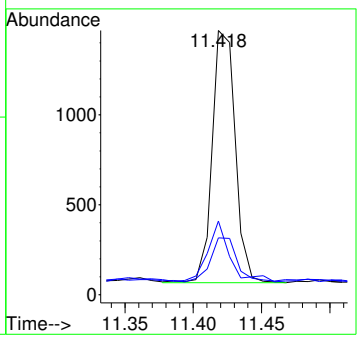


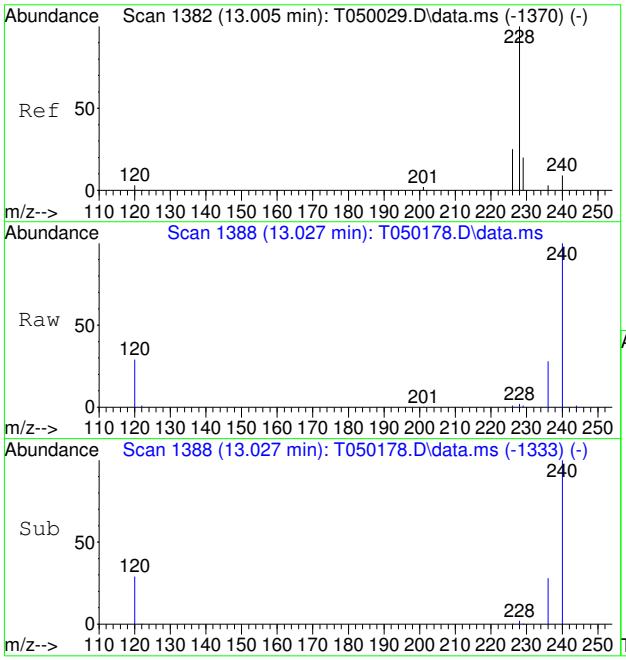


#19
Pyrene
Concen: 2.82 ppb
RT: 11.418 min Scan# 1026
Delta R.T. -0.008 min
Lab File: T050178.D
Acq: 13 Aug 2020 4:03 pm

Tgt Ion:202 Resp: 1645

Ion	Ratio	Lower	Upper
202	100		
101	23.5	0.0	46.2
203	16.8	0.0	47.5

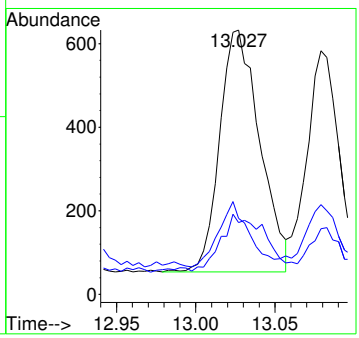


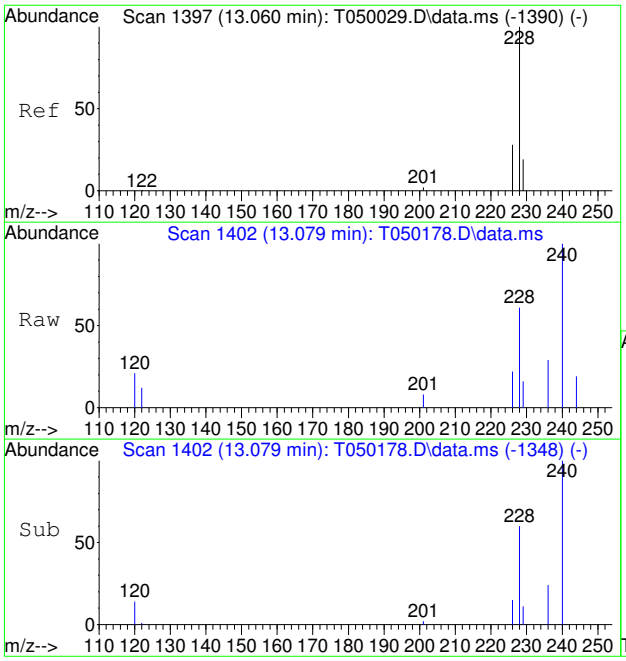


#20
Benzo[a]anthracene
Concen: 2.54 ppb
RT: 13.027 min Scan# 1388
Delta R.T. 0.004 min
Lab File: T050178.D
Acq: 13 Aug 2020 4:03 pm

Tgt Ion:228 Resp: 1022

Ion	Ratio	Lower	Upper
228	100		
226	18.7	0.0	55.3
229	19.4	0.0	49.6

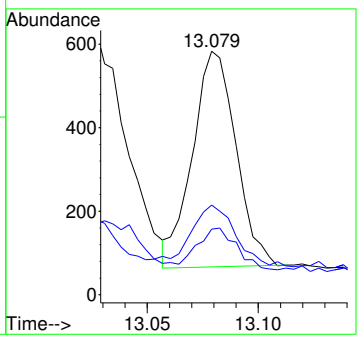


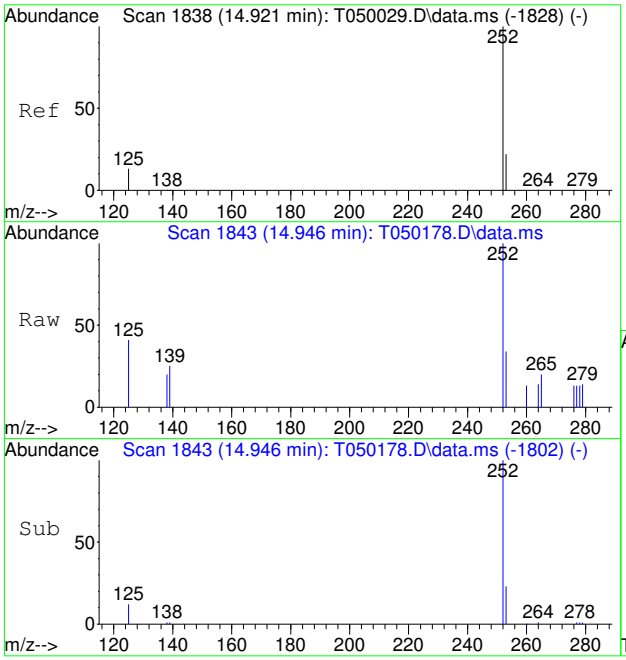


#21
Chrysene
Concen: 1.78 ppb
RT: 13.079 min Scan# 1402
Delta R.T. -0.000 min
Lab File: T050178.D
Acq: 13 Aug 2020 4:03 pm

Tgt Ion:228 Resp: 704

Ion	Ratio	Lower	Upper
228	100		
226	27.9	0.0	58.1
229	18.2	0.0	49.4

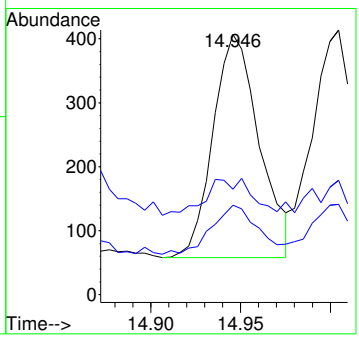


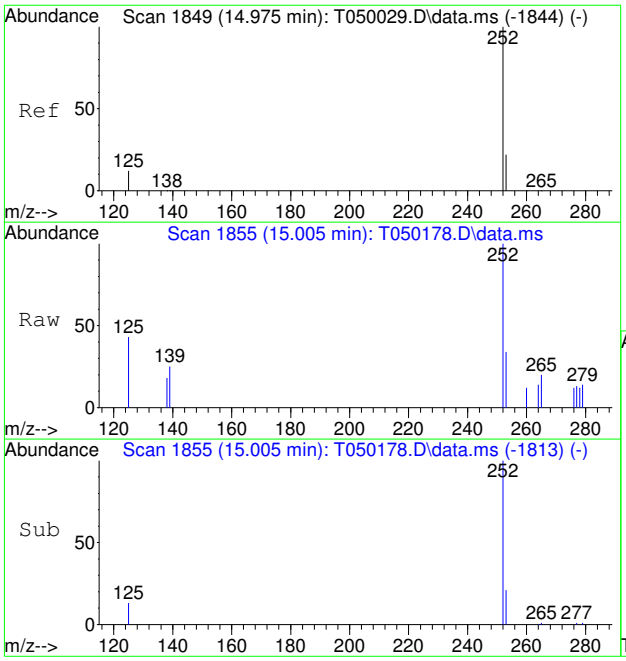


#23
Benzo[b]fluoranthene
Concen: 2.20 ppb
RT: 14.946 min Scan# 1843
Delta R.T. -0.000 min
Lab File: T050178.D
Acq: 13 Aug 2020 4:03 pm

Tgt Ion:252 Resp: 627

Ion	Ratio	Lower	Upper
252	100		
253	22.0	0.0	51.6
125	9.7	0.0	42.8

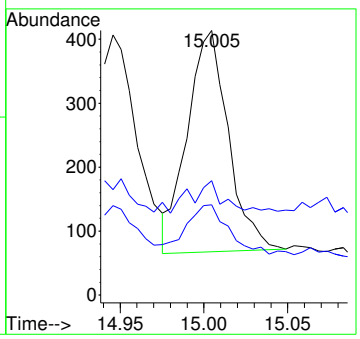


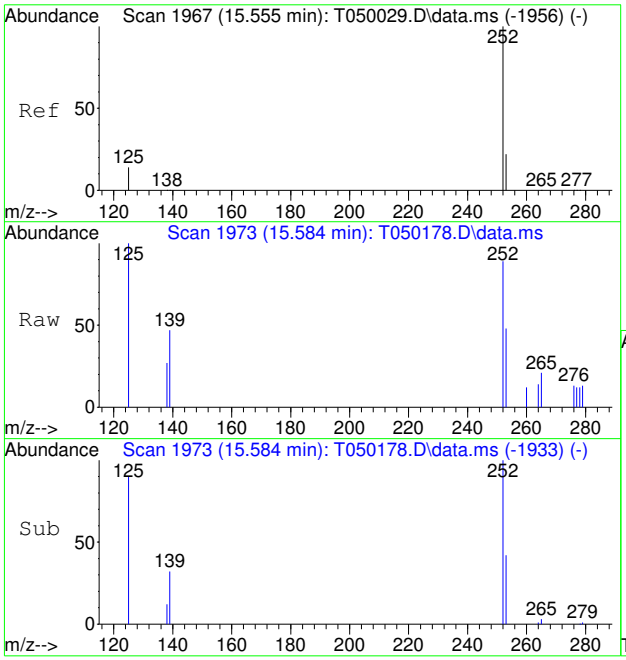


#24
Benzo[k]fluoranthene
Concen: 1.95 ppb
RT: 15.005 min Scan# 1855
Delta R.T. 0.005 min
Lab File: T050178.D
Acq: 13 Aug 2020 4:03 pm

Tgt Ion:252 Resp: 591

Ion	Ratio	Lower	Upper
252	100		
253	21.5	0.0	51.5
125	12.7	0.0	42.5

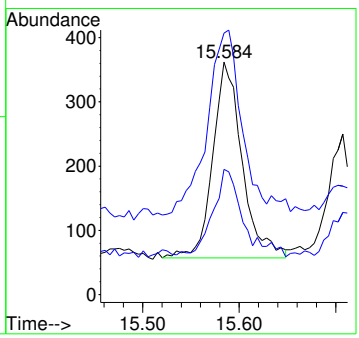


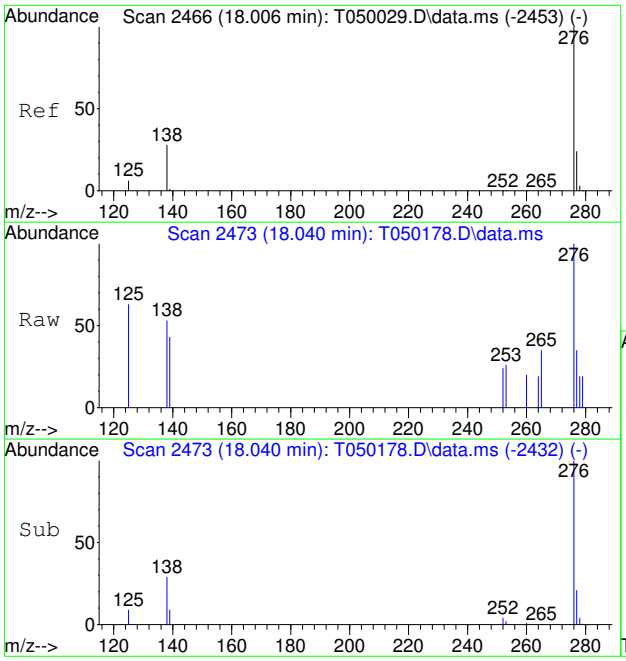


#25
Benzo[a]pyrene
Concen: 2.41 ppb
RT: 15.584 min Scan# 1973
Delta R.T. -0.005 min
Lab File: T050178.D
Acq: 13 Aug 2020 4:03 pm

Tgt Ion:252 Resp: 645

Ion	Ratio	Lower	Upper
252	100		
253	43.7	0.0	51.8
125	90.6	0.0	44.4#

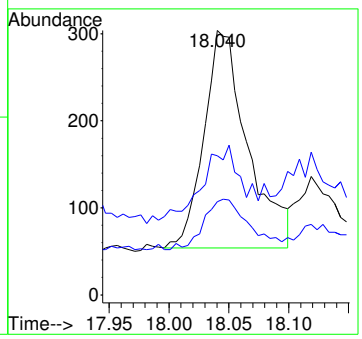


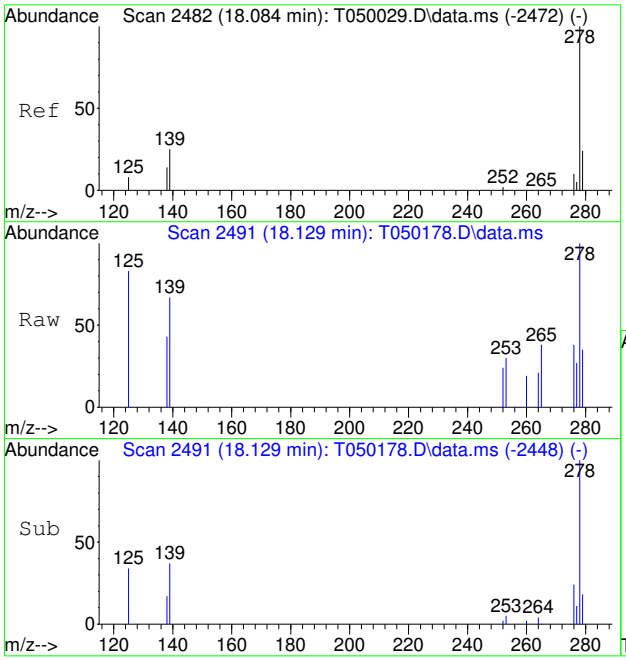


#26
Indeno[1,2,3-cd]pyrene
Concen: 2.76 ppb
RT: 18.040 min Scan# 2473
Delta R.T. -0.000 min
Lab File: T050178.D
Acq: 13 Aug 2020 4:03 pm

Tgt Ion:276 Resp: 636

Ion	Ratio	Lower	Upper
276	100		
138	19.3	0.0	58.1
277	21.1	0.0	53.7

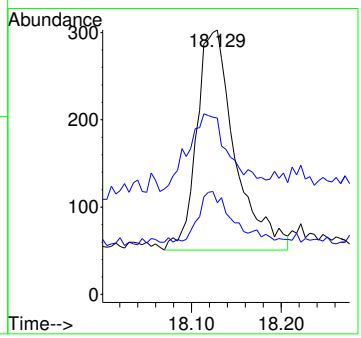


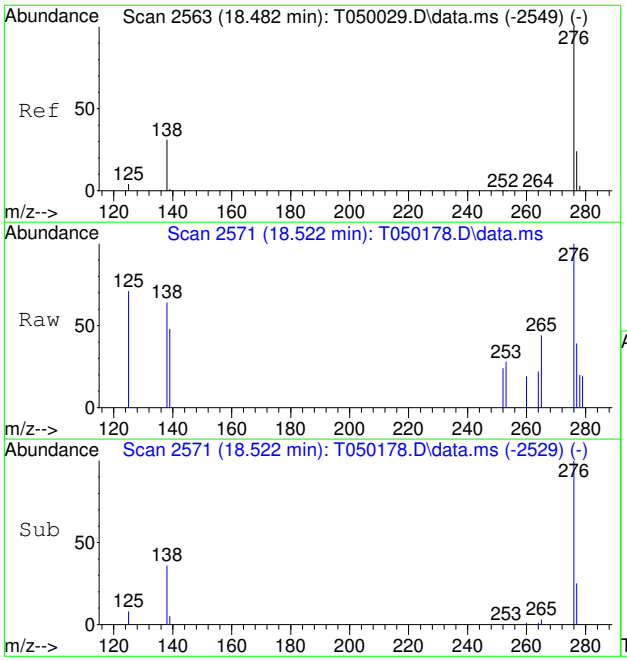


#27
Dibenz[a,h]anthracene
Concen: 3.26 ppb
RT: 18.129 min Scan# 2491
Delta R.T. 0.010 min
Lab File: T050178.D
Acq: 13 Aug 2020 4:03 pm

Tgt Ion:278 Resp: 745

Ion	Ratio	Lower	Upper
278	100		
139	31.8	0.0	55.4
279	17.8	0.0	54.1

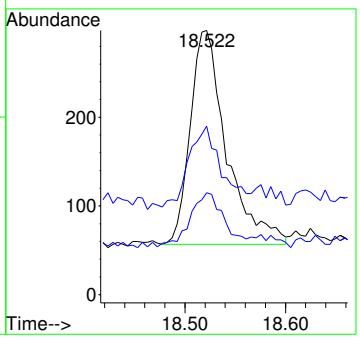




#28
Benzo[g,h,i]perylene
Concen: 2.30 ppb
RT: 18.522 min Scan# 2571
Delta R.T. 0.005 min
Lab File: T050178.D
Acq: 13 Aug 2020 4:03 pm

Tgt Ion:276 Resp: 604

Ion	Ratio	Lower	Upper
276	100		
138	38.0	0.5	60.5
277	23.8	0.0	53.8



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s6f253\
Data File : 6F06545.d
Acq On : 13 Aug 2020 3:08 pm
Operator : marthav
Sample : op81538-bs E
Misc : op81538,S6F253,30.0,,,1,1,soil
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 14 04:48:21 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.024	152	397644	40.00	ppm	0.00
22) Naphthalene-d8	7.457	136	1244035	40.00	ppm	0.00
43) Acenaphthene-d10	9.511	164	598082	40.00	ppm	0.00
70) Phenanthrene-d10	11.266	188	1013646	40.00	ppm	0.00
92) Chrysene-d12	14.566	240	771358	40.00	ppm	0.00
102) Perylene-d12	16.919	264	709104	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	4.655	112	987392	65.71	ppm	0.00
Spiked Amount 100.000	Range 40 - 102		Recovery = 65.71%			
9) Phenol-d5	5.660	99	1075222	60.28	ppm	0.00
Spiked Amount 100.000	Range 41 - 100		Recovery = 60.28%			
23) Nitrobenzene-d5	6.639	82	443678	32.51	ppm	0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 65.02%			
47) 2-Fluorobiphenyl	8.730	172	854253	36.54	ppm	0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 73.08%			
75) 2,4,6-Tribromophenol	10.447	330	272709	79.94	ppm	0.00
Spiked Amount 100.000	Range 42 - 108		Recovery = 79.94%			
95) Terphenyl-d14	13.191	244	838797	38.69	ppm	0.00
Spiked Amount 50.000	Range 45 - 119		Recovery = 77.38%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.863	88	184578	31.21	ppm	99
3) N-nitrosodimethylamine	3.189	42	186652	23.14	ppm	90
4) Pyridine	3.232	79	517688	33.99	ppm	98
5) Benzaldehyde	5.548	106	376779	30.94	ppm	97
6) Aniline	5.666	93	601596	25.80	ppm	98
8) bis(2-Chloroethyl)ether	5.746	93	479697	31.41	ppm	97
10) Phenol	5.676	94	606191	29.23	ppm	94
11) 2-Chlorophenol	5.799	128	481834	31.29	ppm	98
12) 1,3-Dichlorobenzene	5.960	146	538151	32.32	ppm	99
13) 1,4-Dichlorobenzene	6.045	146	540716	32.03	ppm	99
14) 1,2-Dichlorobenzene	6.206	146	497973	31.26	ppm	99
15) Benzyl alcohol	6.190	108	304375	32.38	ppm	93
16) bis(2-chloroisopropyl)...	6.340	45	570045	29.84	ppm	85
17) 2-Methylphenol	6.329	108	394645	28.46	ppm	94
18) Acetophenone	6.473	105	601047	29.24	ppm	99
19) Hexachloroethane	6.580	117	202463	29.38	ppm	93
20) N-Nitroso-di-n-propyla...	6.484	70	303675	27.83	ppm	97
21) 3&4-Methylphenol	6.505	108	832127	57.74	ppm	98
24) Nitrobenzene	6.666	77	447125	33.64	ppm	94
25) Isophorone	6.939	82	843477	35.32	ppm	100
26) 2-Nitrophenol	7.024	139	255362	39.01	ppm	90
27) 2,4-Dimethylphenol	7.099	107	384309	33.91	ppm	98
29) bis(2-Chloroethoxy)met...	7.201	93	545234	37.28	ppm	99
30) Benzoic Acid	7.270	105	689831	65.45	ppm	99
31) 2,4-Dichlorophenol	7.313	162	366275	36.34	ppm	100
32) 1,2,4-Trichlorobenzene	7.393	180	414295	36.98	ppm	99
34) Naphthalene	7.484	128	1232591	35.02	ppm	99
35) 4-Chloroaniline	7.559	127	491018	32.00	ppm	97
36) 2,6-Dichlorophenol	7.570	162	349130	35.64	ppm	99
37) Hexachlorobutadiene	7.634	225	233583	38.00	ppm	99
38) Caprolactam	7.976	113	135927	34.57	ppm	95
39) 4-Chloro-3-methylphenol	8.153	107	403338	38.83	ppm	96
40) 2-Methylnaphthalene	8.292	141	737346	35.83	ppm	99
41) 1-Methylnaphthalene	8.404	142	767119	33.92	ppm	100
42) 1,2,4,5-Tetrachloroben...	8.484	216	386151	35.75	ppm	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s6f253\
Data File : 6F06545.d
Acq On : 13 Aug 2020 3:08 pm
Operator : marthav
Sample : op81538-bs E
Misc : op81538,S6F253,30.0,,,1,1,soil
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 14 04:48:21 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

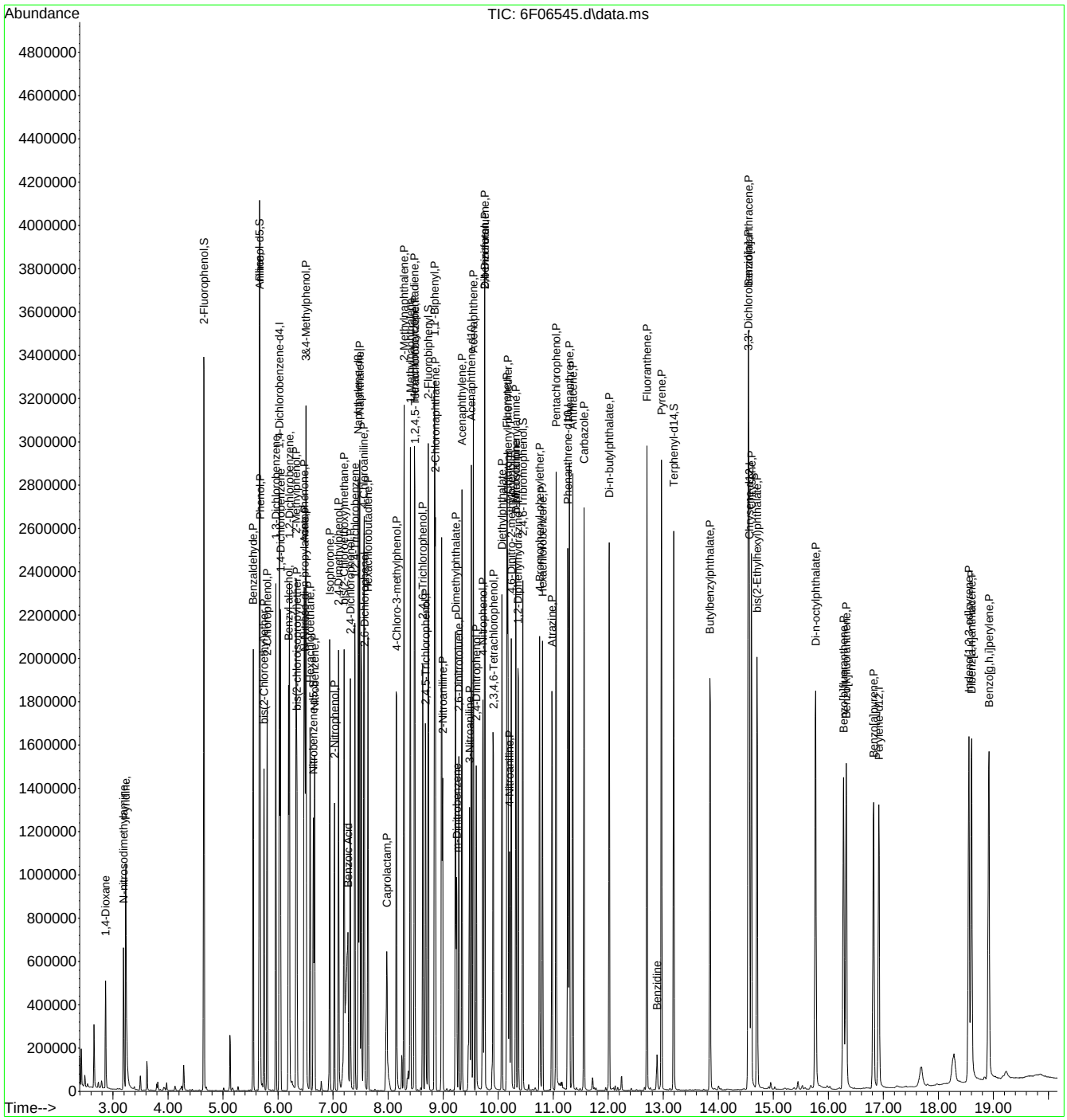
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
44)	Hexachlorocyclopentadiene	8.479	237	276005	44.30	ppm		98
45)	2,4,6-Trichlorophenol	8.629	196	266847	40.89	ppm		99
46)	2,4,5-Trichlorophenol	8.682	196	287094	41.28	ppm		98
48)	1,1'-Biphenyl	8.843	154	947407	37.93	ppm		99
49)	2-Chloronaphthalene	8.859	162	744614	37.89	ppm		99
50)	2-Nitroaniline	8.993	65	265385	43.13	ppm		90
52)	Acenaphthylene	9.340	152	1226417	41.03	ppm		99
53)	Dimethylphthalate	9.228	163	894961	40.10	ppm		99
54)	m-Dinitrobenzene	9.249	168	156018	40.37	ppm		81
55)	2,6-Dinitrotoluene	9.287	165	206811	39.90	ppm		96
57)	Acenaphthene	9.549	153	740584	37.31	ppm		96
58)	3-Nitroaniline	9.479	138	224596	37.56	ppm		100
59)	2,4-Dinitrophenol	9.602	184	236864	69.63	ppm		97
60)	Dibenzofuran	9.757	168	1033602	37.67	ppm		90
61)	2,4-Dinitrotoluene	9.757	165	274408	40.21	ppm		90
62)	4-Nitrophenol	9.725	109	213924	62.55	ppm		98
64)	2,3,4,6-Tetrachlorophenol	9.912	232	218368	38.92	ppm		97
65)	Fluorene	10.159	166	851560	38.33	ppm		100
66)	4-Chlorophenyl-phenyle...	10.175	204	437076	39.77	ppm		98
67)	Diethylphthalate	10.068	149	881039	38.91	ppm		99
69)	4-Nitroaniline	10.207	138	218626	36.18	ppm		99
71)	4,6-Dinitro-2-methylph...	10.239	198	348046	78.73	ppm	#	57
72)	n-Nitrosodiphenylamine	10.319	169	607313	38.55	ppm		99
73)	Diphenylamine	10.319	169	607313	34.57	ppm		99
74)	1,2-Diphenylhydrazine	10.362	77	800184	35.62	ppm		96
78)	4-Bromophenyl-phenylether	10.752	248	259658	43.89	ppm		98
79)	Hexachlorobenzene	10.806	284	274495	40.63	ppm		95
82)	Atrazine	10.977	200	233839	39.16	ppm		94
83)	Pentachlorophenol	11.052	266	341695	79.69	ppm		98
84)	Phenanthrene	11.298	178	1174574	38.70	ppm		100
85)	Anthracene	11.357	178	1161569	37.66	ppm		100
87)	Carbazole	11.560	167	1080767	38.89	ppm		99
89)	Di-n-butylphthalate	12.020	149	1409847	40.25	ppm		100
91)	Fluoranthene	12.704	202	1207944	37.80	ppm		99
93)	Benzidine	12.886	184	69424	4.31	ppm		99
94)	Pyrene	12.967	202	1220377	44.17	ppm		99
97)	Butylbenzylphthalate	13.849	149	581681	43.94	ppm		100
98)	3,3'-Dichlorobenzidine	14.544	252	403562	40.36	ppm		99
99)	Benzo[a]anthracene	14.550	228	1027208	39.74	ppm		100
100)	Chrysene	14.603	228	1036837	41.35	ppm		99
101)	bis(2-Ethylhexyl)phtha...	14.705	149	780942	42.24	ppm		99
103)	Di-n-octylphthalate	15.769	149	1501641	53.54	ppm		99
104)	Benzo[b]fluoranthene	16.277	252	911236	40.04	ppm		99
105)	Benzo[k]fluoranthene	16.326	252	938697	39.65	ppm		100
106)	Benzo[a]pyrene	16.823	252	849293	40.18	ppm		99
107)	Indeno[1,2,3-cd]pyrene	18.556	276	932651	47.39	ppm		97
108)	Dibenz[a,h]anthracene	18.604	278	944655	44.96	ppm		100
109)	Benzo[g,h,i]perylene	18.920	276	1019524	48.00	ppm		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s6f253\
Data File : 6F06545.d
Acq On : 13 Aug 2020 3:08 pm
Operator : marthav
Sample : op81538-bs E
Misc : op81538,S6F253,30.0,,,1,1,soil
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 14 04:48:21 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\Jenniferf\AUGUST 2020\08-14-2020\SX2952\
Data File : x072409.d
Acq On : 13 Aug 2020 10:14 pm
Operator : marthav
Sample : op81545-bs E
Misc : op81545,sx2952,250,,,1,1,water
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Aug 14 03:17:32 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.638	152	188273	40.00	ppm	0.00
22) Naphthalene-d8	7.061	136	707991	40.00	ppm	0.00
43) Acenaphthene-d10	9.099	164	324729	40.00	ppm	0.00
70) Phenanthrene-d10	10.842	188	510866	40.00	ppm	0.00
92) Chrysene-d12	14.052	240	362980	40.00	ppm	0.00
102) Perylene-d12	16.234	264	291500	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	5.638	152	188273	40.00	ppm	0.00
120) Naphthalene-d8A	7.061	136	707991	40.00	ppm	0.00
127) Acenaphthene-d10A	9.099	164	324729	40.00	ppm	0.00
136) Phenanthrene-d10A	10.842	188	510866	40.00	ppm	0.00
146) Chrysene-d12A	14.052	240	362980	40.00	ppm	0.00
153) Perylene-d12A	16.234	264	291500	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	4.301	112	350168	51.87	ppm	0.01
Spiked Amount 100.000	Range 14 - 67		Recovery = 51.87%			
9) Phenol-d5	5.328	99	363546	45.27	ppm	0.00
Spiked Amount 100.000	Range 10 - 50		Recovery = 45.27%			
23) Nitrobenzene-d5	6.259	82	261537	35.77	ppm	0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 71.54%			
47) 2-Fluorobiphenyl	8.329	172	449546	38.24	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 76.48%			
75) 2,4,6-Tribromophenol	10.040	330	81151	74.64	ppm	0.00
Spiked Amount 100.000	Range 33 - 118		Recovery = 74.64%			
95) Terphenyl-d14	12.763	244	343261	35.59	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 71.18%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.467	88	81433	25.24	ppm	# 42
3) N-nitrosodimethylamine	2.798	42	155537	27.15	ppm	# 39
4) Pyridine	2.830	79	220040	28.03	ppm	# 28
5) Benzaldehyde	5.168	106	178384	31.78	ppm	93
6) Aniline	5.291	93	263746	23.56	ppm	96
8) bis(2-Chloroethyl)ether	5.371	93	230564	33.38	ppm	77
10) Phenol	5.344	94	205959	21.62	ppm	89
11) 2-Chlorophenol	5.430	128	228328	31.70	ppm	80
12) 1,3-Dichlorobenzene	5.569	146	260537	34.82	ppm	97
13) 1,4-Dichlorobenzene	5.654	146	276447	34.91	ppm	97
14) 1,2-Dichlorobenzene	5.815	146	250013	33.24	ppm	96
15) Benzyl alcohol	5.820	108	162571	32.61	ppm	83
16) 2,2'-Oxybis(1-chloropr...	5.965	45	473761	32.64	ppm	76
17) 2-Methylphenol	5.981	108	196981	28.75	ppm	98
18) Acetophenone	6.093	105	322428	31.80	ppm	96
19) Hexachloroethane	6.184	117	99761	33.55	ppm	92
20) N-Nitroso-di-n-propyla...	6.109	70	179230	33.47	ppm	# 60
21) 3&4-Methylphenol	6.162	108	413036	58.31	ppm	94
24) Nitrobenzene	6.280	77	261388	36.13	ppm	85
25) Isophorone	6.564	82	440225	34.08	ppm	97
26) 2-Nitrophenol	6.638	139	128713	37.43	ppm	76
27) 2,4-Dimethylphenol	6.740	107	200210	31.35	ppm	96
29) bis(2-Chloroethoxy)met...	6.820	93	248288	32.86	ppm	94
30) Benzoic Acid	6.927	105	203478	39.63	ppm	92
31) 2,4-Dichlorophenol	6.943	162	179541	34.87	ppm	96
32) 1,2,4-Trichlorobenzene	7.002	180	192829	36.65	ppm	97
34) Naphthalene	7.082	128	679831	35.41	ppm	99
35) 4-Chloroaniline	7.179	127	249478	30.77	ppm	91
36) 2,6-Dichlorophenol	7.184	162	178566	34.02	ppm	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\Jenniferf\AUGUST 2020\08-14-2020\SX2952\
Data File : x072409.d
Acq On : 13 Aug 2020 10:14 pm
Operator : marthav
Sample : op81545-bs E
Misc : op81545,sx2952,250,,,1,1,water
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Aug 14 03:17:32 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

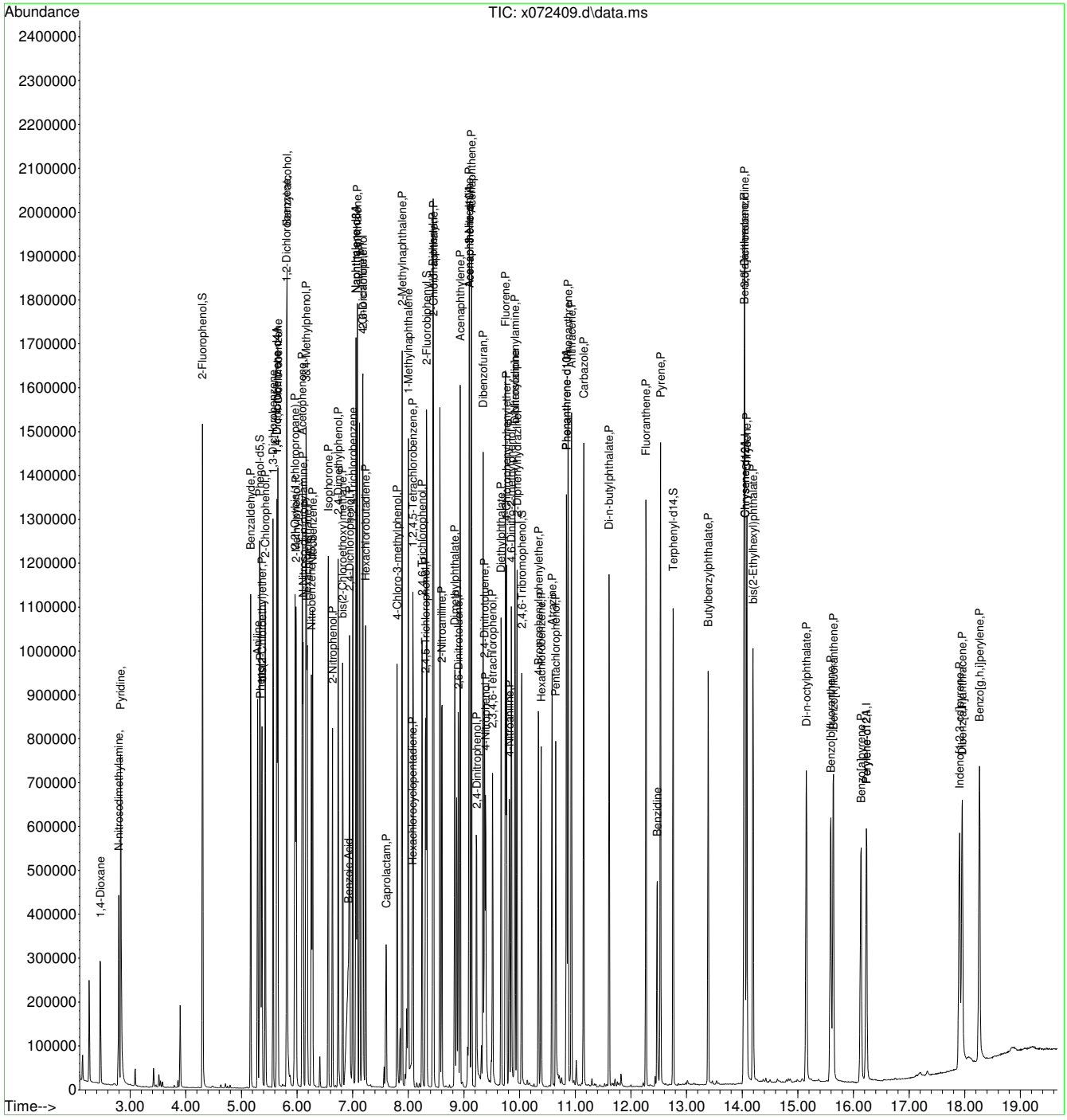
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
37)	Hexachlorobutadiene	7.232	225	100003	38.54	ppm		99
38)	Caprolactam	7.607	113	39360	18.43	ppm	#	57
39)	4-Chloro-3-methylphenol	7.799	107	173008	31.52	ppm		89
40)	2-Methylnaphthalene	7.890	142	439568	34.63	ppm		99
41)	1-Methylnaphthalene	8.002	142	391969	32.25	ppm		99
42)	1,2,4,5-Tetrachloroben...	8.083	216	176409	33.41	ppm		99
44)	Hexachlorocyclopentadiene	8.072	237	34342	14.99	ppm		98
45)	2,4,6-Trichlorophenol	8.248	196	118212	39.66	ppm		99
46)	2,4,5-Trichlorophenol	8.313	196	126900	38.91	ppm		99
48)	1,1'-Biphenyl	8.441	154	487472	36.76	ppm		99
49)	2-Chloronaphthalene	8.452	162	380066	38.19	ppm		95
50)	2-Nitroaniline	8.601	65	154499	42.16	ppm	#	67
52)	Acenaphthylene	8.933	152	657885	40.56	ppm		98
53)	Dimethylphthalate	8.837	163	405022	35.35	ppm		100
55)	2,6-Dinitrotoluene	8.901	165	100482	37.17	ppm		88
57)	Acenaphthene	9.136	153	401839	37.26	ppm		99
58)	3-Nitroaniline	9.094	138	111535	37.50	ppm		94
59)	2,4-Dinitrophenol	9.227	184	87588	59.71	ppm	#	91
60)	Dibenzofuran	9.345	168	541785	37.63	ppm		96
61)	2,4-Dinitrotoluene	9.372	165	139815	40.56	ppm		91
62)	4-Nitrophenol	9.388	109	68966	41.50	ppm	#	63
64)	2,3,4,6-Tetrachlorophenol	9.516	232	82739	33.09	ppm		90
65)	Fluorene	9.746	166	433194	38.57	ppm		99
66)	4-Chlorophenyl-phenyle...	9.767	204	198644	36.64	ppm		93
67)	Diethylphthalate	9.666	149	405794	35.47	ppm		97
69)	4-Nitroaniline	9.821	138	121152	36.61	ppm		92
71)	4,6-Dinitro-2-methylph...	9.853	198	145854	71.40	ppm		74
72)	n-Nitrosodiphenylamine	9.917	169	315137	39.70	ppm		95
73)	Diphenylamine	9.917	169	315137	33.83	ppm		95
74)	1,2-Diphenylhydrazine	9.955	77	437921	38.25	ppm		94
78)	4-Bromophenyl-phenylether	10.340	248	91534	37.32	ppm		88
79)	Hexachlorobenzene	10.388	284	89913	36.74	ppm		78
82)	Atrazine	10.586	200	101593	34.06	ppm		85
83)	Pentachlorophenol	10.650	266	84338	51.87	ppm		98
84)	Phenanthrene	10.869	178	583649	37.81	ppm		99
85)	Anthracene	10.933	178	595379	37.00	ppm		98
87)	Carbazole	11.153	167	571904	40.28	ppm		98
89)	Di-n-butylphthalate	11.607	149	614518	38.78	ppm		99
91)	Fluoranthene	12.271	202	534145	37.29	ppm		98
93)	Benzidine	12.474	184	197565	29.04	ppm		96
94)	Pyrene	12.533	202	562095	37.30	ppm		99
97)	Butylbenzylphthalate	13.388	149	246124	39.80	ppm		88
98)	3,3'-Dichlorobenzidine	14.041	252	171336	45.27	ppm		96
99)	Benzo[a]anthracene	14.036	228	437404	38.34	ppm		99
100)	Chrysene	14.084	228	488084	40.17	ppm		97
101)	bis(2-Ethylhexyl)phtha...	14.196	149	355274	42.26	ppm		97
103)	Di-n-octylphthalate	15.153	149	523285	45.58	ppm		93
104)	Benzo[b]fluoranthene	15.592	252	369610	43.30	ppm		96
105)	Benzo[k]fluoranthene	15.640	252	382901	37.00	ppm		97
106)	Benzo[a]pyrene	16.138	252	331083	40.69	ppm		96
107)	Indeno[1,2,3-cd]pyrene	17.908	276	322244	54.93	ppm		88
108)	Dibenz[a,h]anthracene	17.956	278	359792	53.80	ppm		91
109)	Benzo[g,h,i]perylene	18.266	276	367768	46.21	ppm		86

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\Jenniferf\AUGUST 2020\08-14-2020\SX2952\
Data File : x072409.d
Acq On : 13 Aug 2020 10:14 pm
Operator : marthav
Sample : op81545-bs E
Misc : op81545,sx2952,250,,,1,1,water
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Aug 14 03:17:32 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan
08/14/20 11:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
Data File : 7G11164.d
Acq On : 13 Aug 2020 3:34 pm
Operator : FOUADS
Sample : op81539-bs e
Misc : op81539,S7G484,30.0,,,1,1,soil
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 14 03:14:53 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

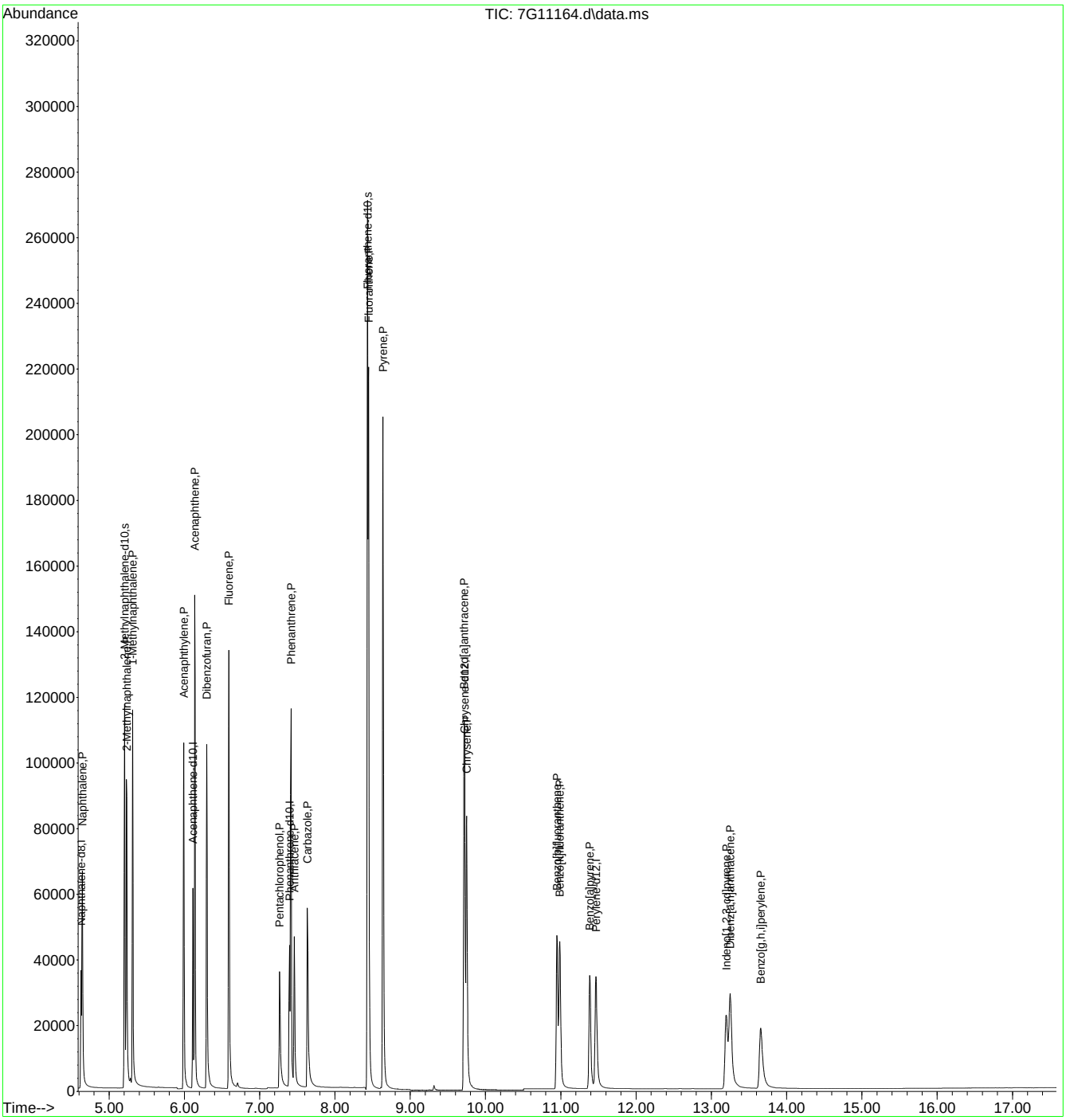
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.628	136	25791	4.00	ppm	0.00
6) Acenaphthene-d10	6.113	164	17802	4.00	ppm	0.00
11) Phenanthrene-d10	7.396	188	33281	4.00	ppm	0.00
18) Chrysene-d12	9.724	240	53242	4.00	ppm	0.00
22) Perylene-d12	11.467	264	46399	4.00	ppm	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.205	152	39275	10.15	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 101.50%			
17) Fluoranthene-d10	8.433	212	172193	9.90	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 99.00%			
Target Compounds						Qvalue
2) Naphthalene	4.646	128	49420	6.68	ppm	100
3) 2-Methylnaphthalene	5.234	142	38823	6.77	ppm	97
5) 1-Methylnaphthalene	5.311	142	41632	8.00	ppm	94
7) Acenaphthylene	5.993	152	67368	6.53	ppm	99
8) Acenaphthene	6.138	153	46097	6.84	ppm	97
9) Dibenzofuran	6.297	168	65477	13.63	ppm	97
10) Fluorene	6.592	166	53079	7.23	ppm	100
12) Pentachlorophenol	7.264	266	14067	11.12	ppm	99
13) Phenanthrene	7.417	178	76022	6.86	ppm	98
14) Anthracene	7.459	178	35027	3.15	ppm	97
15) Carbazole	7.633	167	51479	2.59	ppm	99
16) Fluoranthene	8.448	202	149053	7.12	ppm	100
19) Pyrene	8.638	202	146068	6.88	ppm	99
20) Benzo[a]anthracene	9.715	228	59786	3.60	ppm	99
21) Chrysene	9.751	228	69970	3.79	ppm	99
23) Benzo[b]fluoranthene	10.947	252	53172	3.38	ppm	99
24) Benzo[k]fluoranthene	10.986	252	61890	3.70	ppm	99
25) Benzo[a]pyrene	11.384	252	47894	3.12	ppm	100
26) Indeno[1,2,3-cd]pyrene	13.199	276	40929m	4.09	ppm	
27) Dibenz[a,h]anthracene	13.248	278	43195	3.89	ppm	99
28) Benzo[g,h,i]perylene	13.655	276	41768	3.46	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
Data File : 7G11164.d
Acq On : 13 Aug 2020 3:34 pm
Operator : FOUADS
Sample : op81539-bs e
Misc : op81539,S7G484,30.0,,,1,1,soil
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 14 03:14:53 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration



Manual Integration Approval Summary

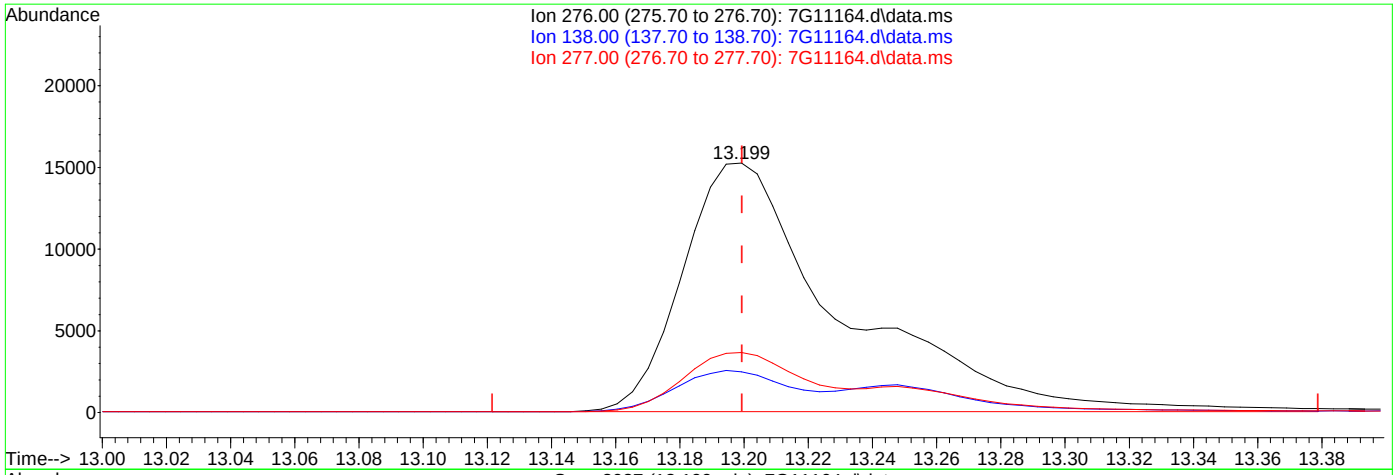
Sample Number: OP81539-BS
Lab FileID: 7G11164.D
Injection Time: 08/13/20 15:34
Method: SW846 8270E BY SIM
Analyst approved: 08/14/20 04:24 Edessa Sumagaysay
Supervisor approved: 08/14/20 11:43 Naresh Jiawan

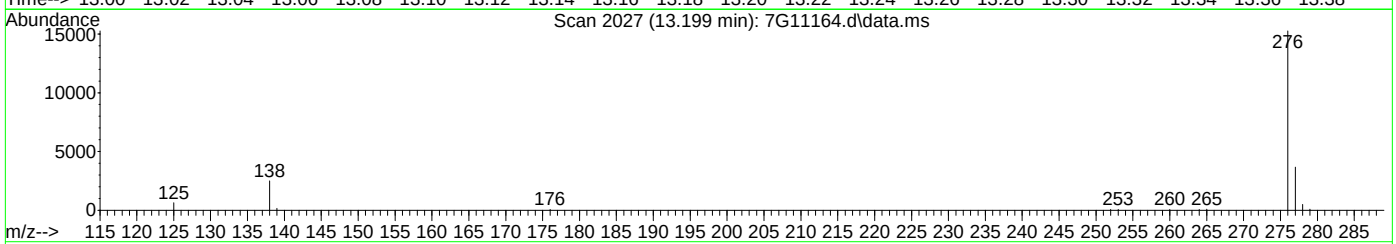
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		13.20	Overlapping peak

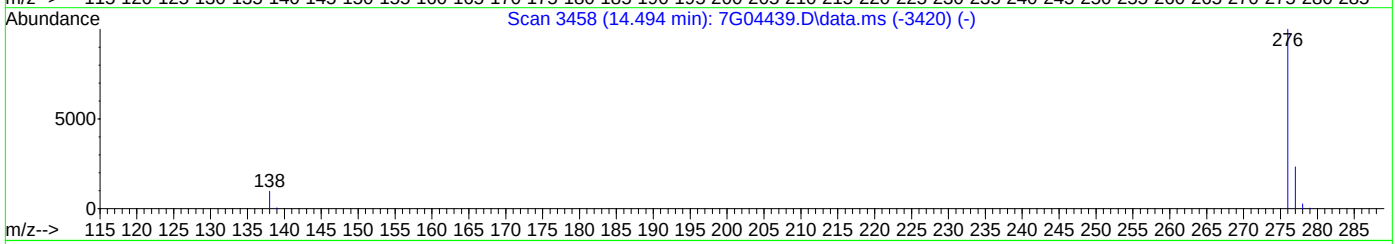
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
Data File : 7G11164.d
Acq On : 13 Aug 2020 3:34 pm
Operator : FOUADS
Sample : op81539-bs e
Misc : op81539,S7G484,30.0,,,1,1,soil
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 14 03:10:04 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11164.d\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.199min (-0.000) 5.31ppm

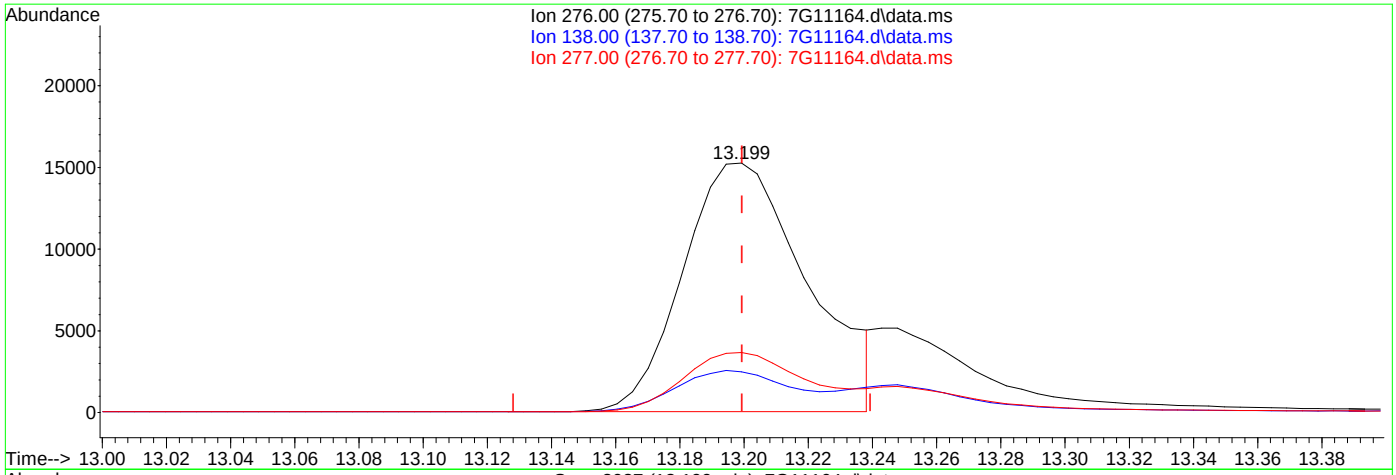
response 53236

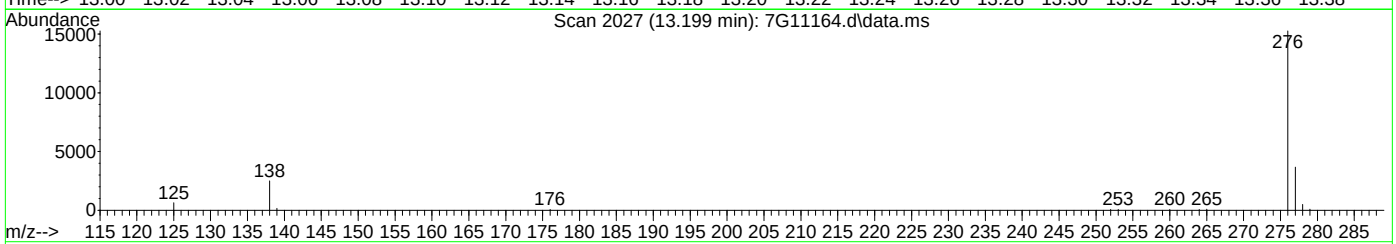
Ion	Exp%	Act%
276.00	100	100
138.00	16.10	15.99
277.00	23.80	23.75
0.00	0.00	0.00

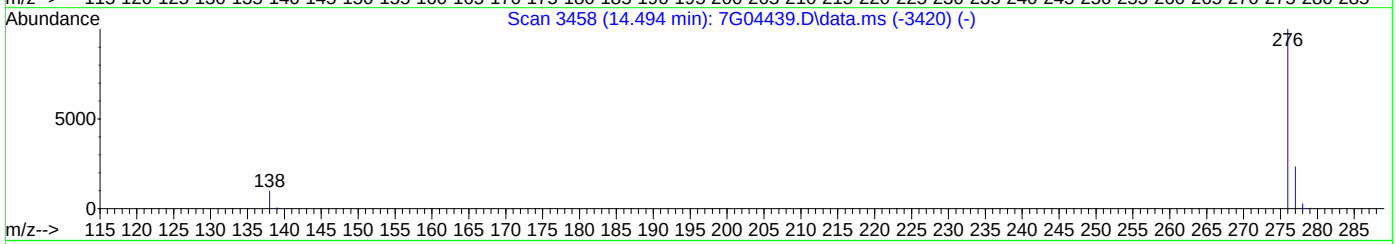
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
Data File : 7G11164.d
Acq On : 13 Aug 2020 3:34 pm
Operator : FOUADS
Sample : op81539-bs e
Misc : op81539,S7G484,30.0,,,1,1,soil
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 14 03:10:04 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11164.d\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.199min (-0.000) 4.09ppm m

response 40929

Ion	Exp%	Act%
276.00	100	100
138.00	16.10	16.36
277.00	23.80	24.03
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\Jenniferf\AUGUST 2020\08-14-2020\ST1749\
Data File : T050177.D
Acq On : 13 Aug 2020 3:33 pm
Operator : nareshj
Sample : op81544-bs e
Misc : OP81544,st1749,250,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 14 01:40:18 2020
Quant Method : C:\msdchem\1\methods\SIM_LVT071720.M
Quant Title : PAH's by 8270 SIM
QLast Update : Fri Aug 14 01:35:08 2020
Response via : Initial Calibration

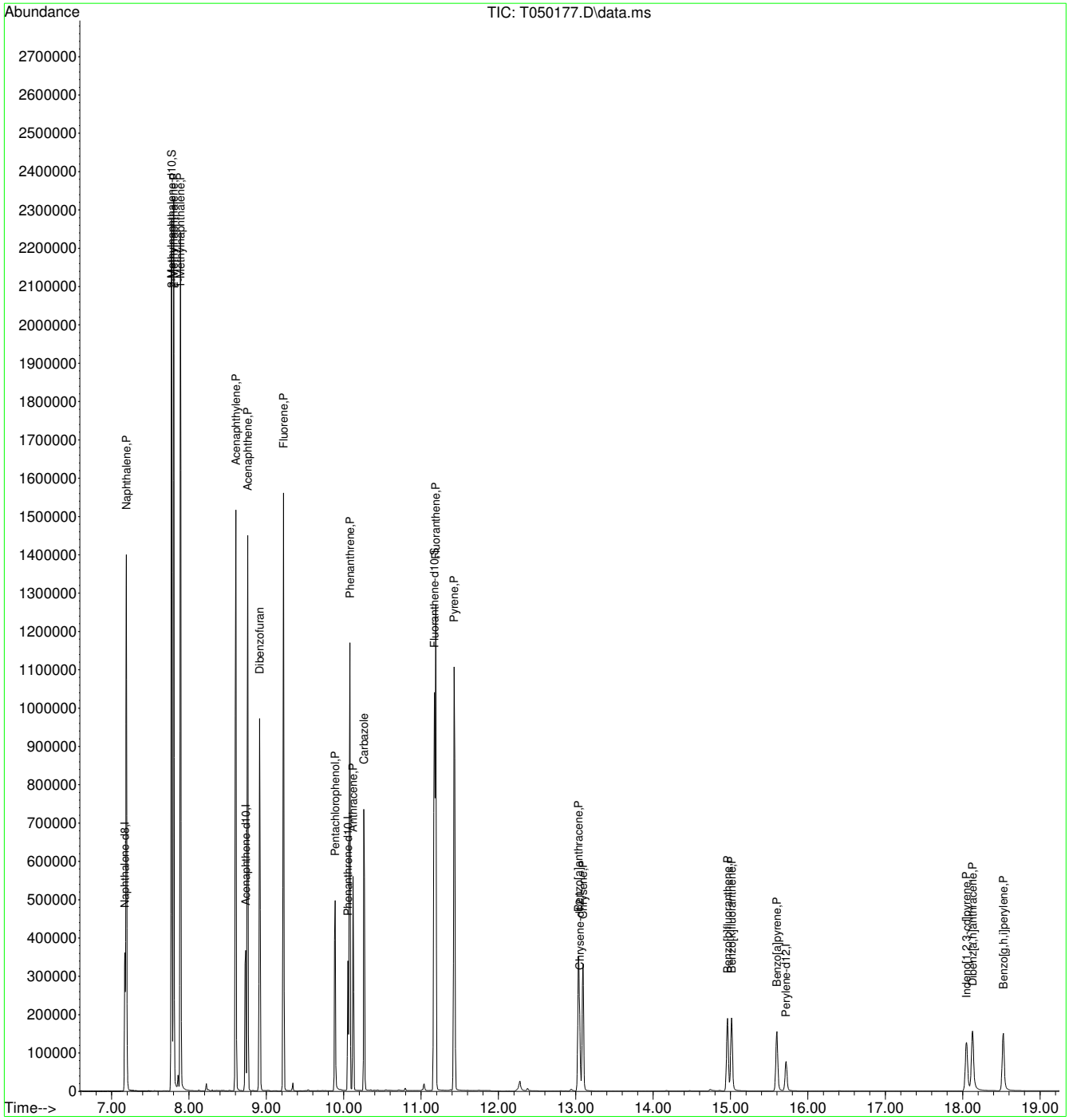
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	7.170	136	274789	500.00	ppb	0.00
6) Acenaphthene-d10	8.733	162	143077	500.00	ppb	0.00
11) Phenanthrene-d10	10.054	188	210610	500.00	ppb	0.00
18) Chrysene-d12	13.049	240	127021	500.00	ppb	0.01
22) Perylene-d12	15.717	264	100107	500.00	ppb	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	7.775	152	747929	1623.82	ppb	0.00
Spiked Amount 2000.000			Recovery = 81.19%			
17) Fluoranthene-d10	11.172	212	764039	2010.98	ppb	0.00
Spiked Amount 2000.000			Recovery = 100.55%			
Target Compounds						Qvalue
2) Naphthalene	7.189	128	899050	1316.50	ppb	100
3) 2-Methylnaphthalene	7.801	142	795230	1290.21	ppb	96
5) 1-Methylnaphthalene	7.890	142	799661	1414.50	ppb	97
7) Acenaphthylene	8.605	152	1036403	1502.27	ppb	99
8) Acenaphthene	8.759	153	466094	1090.28	ppb	98
9) Dibenzofuran	8.913	168	605048	1072.92	ppm	89
10) Fluorene	9.221	166	539545	1148.01	ppb	97
12) Pentachlorophenol	9.890	266	159803	4122.71	ppb	98
13) Phenanthrene	10.079	178	744526	1396.62	ppb	97
14) Anthracene	10.120	178	337703	662.30	ppb	98
15) Carbazole	10.260	167	526509	1096.02	ppm	99
16) Fluoranthene	11.188	202	745537	1507.62	ppb	98
19) Pyrene	11.427	202	780248	1356.22	ppb	97
20) Benzo[a]anthracene	13.034	228	290421	713.69	ppb	100
21) Chrysene	13.094	228	293943	733.28	ppb	100
23) Benzo[b]fluoranthene	14.960	252	236191	687.41	ppb	100
24) Benzo[k]fluoranthene	15.014	252	244257	673.55	ppb	100
25) Benzo[a]pyrene	15.599	252	211429	711.60	ppb	99
26) Indeno[1,2,3-cd]pyrene	18.050	276	170615	668.69	ppb	99
27) Dibenz[a,h]anthracene	18.129	278	162260	639.16	ppb	99
28) Benzo[g,h,i]perylene	18.526	276	191483	658.83	ppb	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\Jenniferf\AUGUST 2020\08-14-2020\ST1749\
Data File : T050177.D
Acq On : 13 Aug 2020 3:33 pm
Operator : nareshj
Sample : op81544-bs e
Misc : OP81544,st1749,250,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 14 01:40:18 2020
Quant Method : C:\msdchem\1\methods\SIM_LVT071720.M
Quant Title : PAH's by 8270 SIM
QLast Update : Fri Aug 14 01:35:08 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-17-2020\s6f254\
Data File : 6F06589.d
Acq On : 14 Aug 2020 7:42 pm
Operator : marthav
Sample : op81538-ms E,5
Misc : op81538,S6F254,30.0,,,1,5,soil
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Aug 16 20:18:08 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.013	152	311335	40.00	ppm	0.00
22) Naphthalene-d8	7.447	136	1100775	40.00	ppm	0.00
43) Acenaphthene-d10	9.501	164	561116	40.00	ppm	0.00
70) Phenanthrene-d10	11.260	188	999992	40.00	ppm	0.00
92) Chrysene-d12	14.560	240	767400	40.00	ppm	0.00
102) Perylene-d12	16.925	264	735911	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	4.644	112	135393	11.51	ppm	0.00
Spiked Amount 100.000	Range 40 - 102		Recovery = 11.51%#			
9) Phenol-d5	5.655	99	170082	12.18	ppm	0.00
Spiked Amount 100.000	Range 41 - 100		Recovery = 12.18%#			
23) Nitrobenzene-d5	6.628	82	70683	5.85	ppm	0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 11.70%#			
47) 2-Fluorobiphenyl	8.720	172	147162	6.71	ppm	0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 13.42%#			
75) 2,4,6-Tribromophenol	10.437	330	47955	14.25	ppm	-0.01
Spiked Amount 100.000	Range 42 - 108		Recovery = 14.25%#			
95) Terphenyl-d14	13.181	244	149266	6.92	ppm	0.00
Spiked Amount 50.000	Range 45 - 119		Recovery = 13.84%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.842	88	23531	5.08	ppm	# 64
3) N-nitrosodimethylamine	3.173	42	26242	4.15	ppm	# 31
4) Pyridine	3.243	79	33918	2.84	ppm	# 55
5) Benzaldehyde	5.537	106	60430	6.34	ppm	96
6) Aniline	5.660	93	55032	3.01	ppm	# 47
8) bis(2-Chloroethyl)ether	5.730	93	75369	6.30	ppm	84
10) Phenol	5.671	94	94675	5.83	ppm	92
11) 2-Chlorophenol	5.794	128	76705	6.36	ppm	85
12) 1,3-Dichlorobenzene	5.949	146	81913	6.28	ppm	98
13) 1,4-Dichlorobenzene	6.029	146	82607	6.25	ppm	96
14) 1,2-Dichlorobenzene	6.195	146	76759	6.15	ppm	100
15) Benzyl alcohol	6.179	108	48014	6.52	ppm	93
16) bis(2-chloroisopropyl)...	6.329	45	84361	5.64	ppm	61
17) 2-Methylphenol	6.324	108	63135	5.82	ppm	94
18) Acetophenone	6.463	105	98561	6.12	ppm	97
19) Hexachloroethane	6.570	117	27981	5.19	ppm	98
20) N-Nitroso-di-n-propyla...	6.468	70	48512	5.68	ppm	# 60
21) 3&4-Methylphenol	6.500	108	138755	12.30	ppm	97
24) Nitrobenzene	6.650	77	73339	6.24	ppm	97
25) Isophorone	6.928	82	138434	6.55	ppm	99
26) 2-Nitrophenol	7.014	139	41513	7.17	ppm	87
27) 2,4-Dimethylphenol	7.088	107	65224	6.50	ppm	98
29) bis(2-Chloroethoxy)met...	7.185	93	89780	6.94	ppm	99
30) Benzoic Acid	7.206	105	117771	15.51	ppm	97
31) 2,4-Dichlorophenol	7.302	162	60025	6.73	ppm	94
32) 1,2,4-Trichlorobenzene	7.383	180	67321	6.79	ppm	99
34) Naphthalene	7.468	128	209705	6.73	ppm	98
35) 4-Chloroaniline	7.548	127	65393	4.82	ppm	93
36) 2,6-Dichlorophenol	7.554	162	59198	6.83	ppm	95
37) Hexachlorobutadiene	7.623	225	38179	7.02	ppm	99
38) Caprolactam	7.939	113	22907	6.58	ppm	# 55
39) 4-Chloro-3-methylphenol	8.142	107	63109	6.87	ppm	98
40) 2-Methylnaphthalene	8.281	141	122064	6.70	ppm	97
41) 1-Methylnaphthalene	8.393	142	129846	6.49	ppm	97
42) 1,2,4,5-Tetrachloroben...	8.474	216	65646	6.87	ppm	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-17-2020\s6f254\
Data File : 6F06589.d
Acq On : 14 Aug 2020 7:42 pm
Operator : marthav
Sample : op81538-ms E,5
Misc : op81538,S6F254,30.0,,,1,5,soil
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Aug 16 20:18:08 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

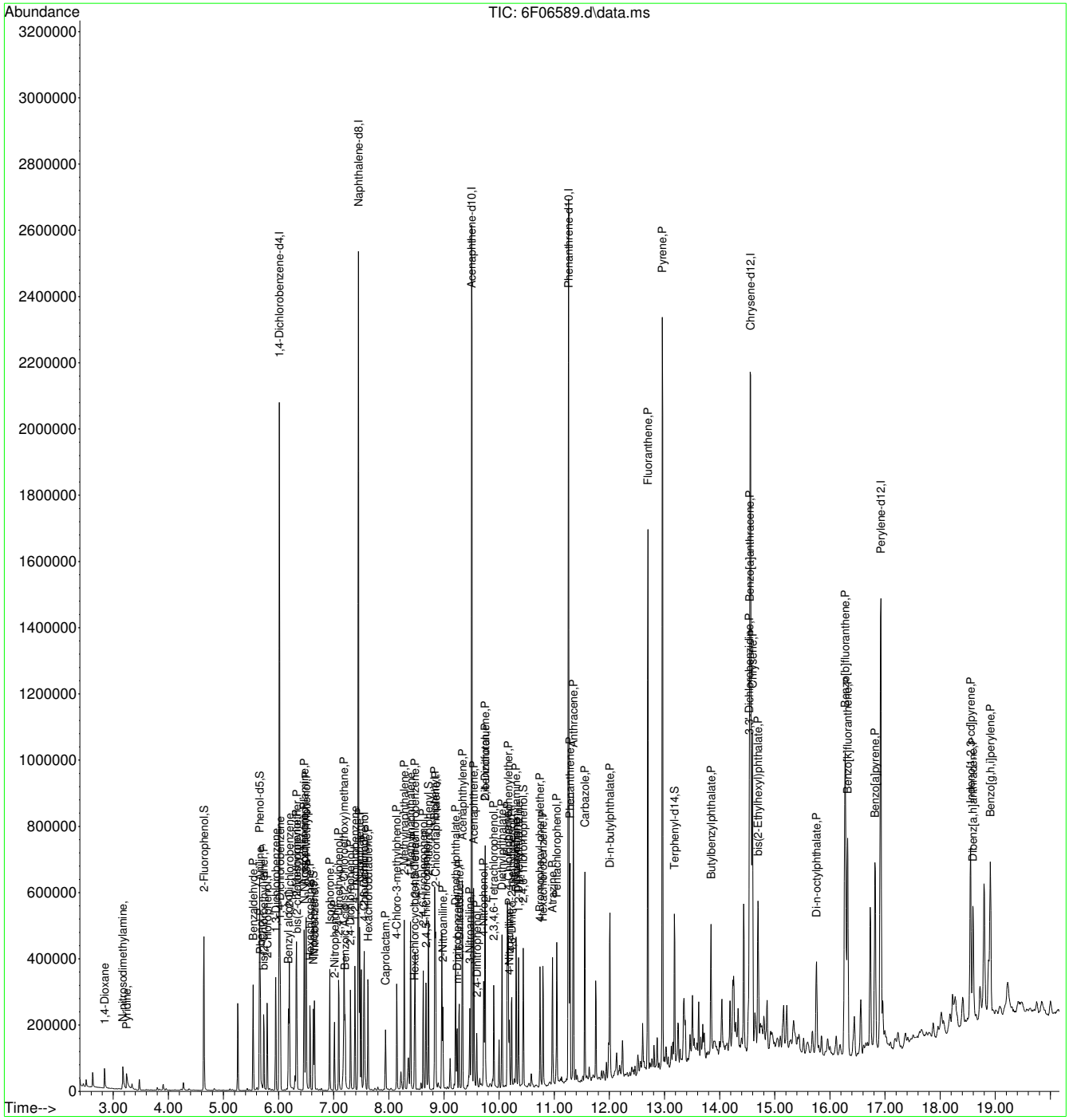
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
44)	Hexachlorocyclopentadiene	8.463	237	20447	3.50	ppm		97
45)	2,4,6-Trichlorophenol	8.623	196	46270	7.56	ppm		97
46)	2,4,5-Trichlorophenol	8.677	196	49859	7.64	ppm		96
48)	1,1'-Biphenyl	8.832	154	165989	7.08	ppm		98
49)	2-Chloronaphthalene	8.848	162	129660	7.03	ppm		97
50)	2-Nitroaniline	8.982	65	45867	7.95	ppm	#	65
52)	Acenaphthylene	9.335	152	281961	10.05	ppm		98
53)	Dimethylphthalate	9.212	163	157553	7.52	ppm		99
54)	m-Dinitrobenzene	9.239	168	25254	7.77	ppm		73
55)	2,6-Dinitrotoluene	9.276	165	35964	7.40	ppm		85
57)	Acenaphthene	9.538	153	135615	7.28	ppm		95
58)	3-Nitroaniline	9.469	138	37747	6.73	ppm		100
59)	2,4-Dinitrophenol	9.597	184	26436	13.43	ppm	#	73
60)	Dibenzofuran	9.747	168	184851	7.18	ppm		82
61)	2,4-Dinitrotoluene	9.747	165	48973	7.65	ppm		91
62)	4-Nitrophenol	9.720	109	38441	11.98	ppm	#	78
64)	2,3,4,6-Tetrachlorophenol	9.902	232	37070	7.04	ppm		98
65)	Fluorene	10.148	166	160406	7.69	ppm		99
66)	4-Chlorophenyl-phenyle...	10.164	204	76106	7.38	ppm		93
67)	Diethylphthalate	10.052	149	159238	7.50	ppm		98
69)	4-Nitroaniline	10.185	138	35990	6.35	ppm		92
71)	4,6-Dinitro-2-methylph...	10.228	198	44159	14.28	ppm	#	66
72)	n-Nitrosodiphenylamine	10.308	169	107036	6.89	ppm		96
73)	Diphenylamine	10.308	169	107036	6.18	ppm		96
74)	1,2-Diphenylhydrazine	10.351	77	135520	6.11	ppm		97
78)	4-Bromophenyl-phenylether	10.742	248	44517	7.63	ppm		97
79)	Hexachlorobenzene	10.795	284	48721	7.31	ppm		81
82)	Atrazine	10.966	200	40260	6.84	ppm		87
83)	Pentachlorophenol	11.046	266	51899	17.73	ppm		97
84)	Phenanthrene	11.287	178	244415	8.16	ppm		99
85)	Anthracene	11.346	178	329773	10.84	ppm		99
87)	Carbazole	11.555	167	240873	8.79	ppm		98
89)	Di-n-butylphthalate	12.009	149	254495	7.36	ppm		99
91)	Fluoranthene	12.699	202	633619	20.10	ppm		100
94)	Pyrene	12.961	202	890854	32.41	ppm		95
97)	Butylbenzylphthalate	13.844	149	106685	8.10	ppm		96
98)	3,3'-Dichlorobenzidine	14.539	252	26411	2.65	ppm		98
99)	Benzo[a]anthracene	14.544	228	437529	17.02	ppm		99
100)	Chrysene	14.598	228	508011	20.36	ppm		98
101)	bis(2-Ethylhexyl)phtha...	14.694	149	145160	7.89	ppm		94
103)	Di-n-octylphthalate	15.759	149	221186	7.60	ppm		89
104)	Benzo[b]fluoranthene	16.277	252	703154	29.77	ppm		98
105)	Benzo[k]fluoranthene	16.320	252	342182	13.93	ppm		98
106)	Benzo[a]pyrene	16.818	252	340127	15.50	ppm		96
107)	Indeno[1,2,3-cd]pyrene	18.551	276	297373	14.56	ppm		93
108)	Dibenz[a,h]anthracene	18.593	278	198119	9.09	ppm		94
109)	Benzo[g,h,i]perylene	18.909	276	285592	12.96	ppm		96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-17-2020\s6f254\
Data File : 6F06589.d
Acq On : 14 Aug 2020 7:42 pm
Operator : marthav
Sample : op81538-ms E,5
Misc : op81538,S6F254,30.0,,,1,5,soil
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Aug 16 20:18:08 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-17-2020\s6f254\
Data File : 6F06590.d
Acq On : 14 Aug 2020 8:08 pm
Operator : marthav
Sample : op81538-msd E,5
Misc : op81538,S6F254,29.8,,,1,5,soil
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Aug 16 20:19:08 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	6.013	152	319223	40.00	ppm		0.00
22) Naphthalene-d8	7.447	136	1092575	40.00	ppm		0.00
43) Acenaphthene-d10	9.501	164	552231	40.00	ppm		0.00
70) Phenanthrene-d10	11.260	188	959718	40.00	ppm		0.00
92) Chrysene-d12	14.560	240	757400	40.00	ppm		0.00
102) Perylene-d12	16.919	264	733755	40.00	ppm		0.00
System Monitoring Compounds							
7) 2-Fluorophenol	4.644	112	83064	6.89	ppm		0.00
Spiked Amount 100.000	Range 40 - 102		Recovery = 6.89%#				
9) Phenol-d5	5.655	99	103260	7.21	ppm		0.00
Spiked Amount 100.000	Range 41 - 100		Recovery = 7.21%#				
23) Nitrobenzene-d5	6.628	82	43284	3.61	ppm		0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 7.22%#				
47) 2-Fluorobiphenyl	8.720	172	87211	4.04	ppm		0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 8.08%#				
75) 2,4,6-Tribromophenol	10.437	330	28747	8.90	ppm		-0.01
Spiked Amount 100.000	Range 42 - 108		Recovery = 8.90%#				
95) Terphenyl-d14	13.180	244	91159	4.28	ppm		0.00
Spiked Amount 50.000	Range 45 - 119		Recovery = 8.56%#				
Target Compounds							Qvalue
2) 1,4-Dioxane	2.841	88	14607	3.08	ppm	#	68
3) N-nitrosodimethylamine	3.178	42	15441	2.38	ppm	#	30
4) Pyridine	3.248	79	20033	1.64	ppm	#	56
5) Benzaldehyde	5.537	106	35993	3.68	ppm		94
6) Aniline	5.655	93	33242	1.78	ppm		71
8) bis(2-Chloroethyl)ether	5.730	93	45713	3.73	ppm		85
10) Phenol	5.666	94	56252	3.38	ppm		95
11) 2-Chlorophenol	5.794	128	45502	3.68	ppm		83
12) 1,3-Dichlorobenzene	5.949	146	49302	3.69	ppm		100
13) 1,4-Dichlorobenzene	6.029	146	49883	3.68	ppm		98
14) 1,2-Dichlorobenzene	6.195	146	46831	3.66	ppm		98
15) Benzyl alcohol	6.179	108	28019	3.71	ppm		93
16) bis(2-chloroisopropyl)...	6.329	45	49790	3.25	ppm		59
17) 2-Methylphenol	6.318	108	38921	3.50	ppm		97
18) Acetophenone	6.462	105	57851	3.51	ppm		97
19) Hexachloroethane	6.569	117	16759	3.03	ppm		92
20) N-Nitroso-di-n-propyla...	6.468	70	28757	3.28	ppm	#	59
21) 3&4-Methylphenol	6.500	108	81981	7.09	ppm		97
24) Nitrobenzene	6.650	77	43054	3.69	ppm		98
25) Isophorone	6.928	82	81225	3.87	ppm		97
26) 2-Nitrophenol	7.013	139	23918	4.16	ppm		87
27) 2,4-Dimethylphenol	7.088	107	39080	3.93	ppm		98
29) bis(2-Chloroethoxy)met...	7.185	93	52269	4.07	ppm		98
30) Benzoic Acid	7.190	105	66671	9.11	ppm		96
31) 2,4-Dichlorophenol	7.302	162	35946	4.06	ppm		94
32) 1,2,4-Trichlorobenzene	7.382	180	40020	4.07	ppm		96
34) Naphthalene	7.468	128	124956	4.04	ppm		97
35) 4-Chloroaniline	7.548	127	39424	2.93	ppm		93
36) 2,6-Dichlorophenol	7.554	162	35003	4.07	ppm		95
37) Hexachlorobutadiene	7.623	225	22591	4.18	ppm		96
38) Caprolactam	7.933	113	13079	3.79	ppm	#	56
39) 4-Chloro-3-methylphenol	8.142	107	37380	4.10	ppm		98
40) 2-Methylnaphthalene	8.281	141	71750	3.97	ppm		98
41) 1-Methylnaphthalene	8.393	142	76500	3.85	ppm		96
42) 1,2,4,5-Tetrachloroben...	8.474	216	38003	4.01	ppm		96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-17-2020\s6f254\
Data File : 6F06590.d
Acq On : 14 Aug 2020 8:08 pm
Operator : marthav
Sample : op81538-msd E,5
Misc : op81538,S6F254,29.8,,,1,5,soil
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Aug 16 20:19:08 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration

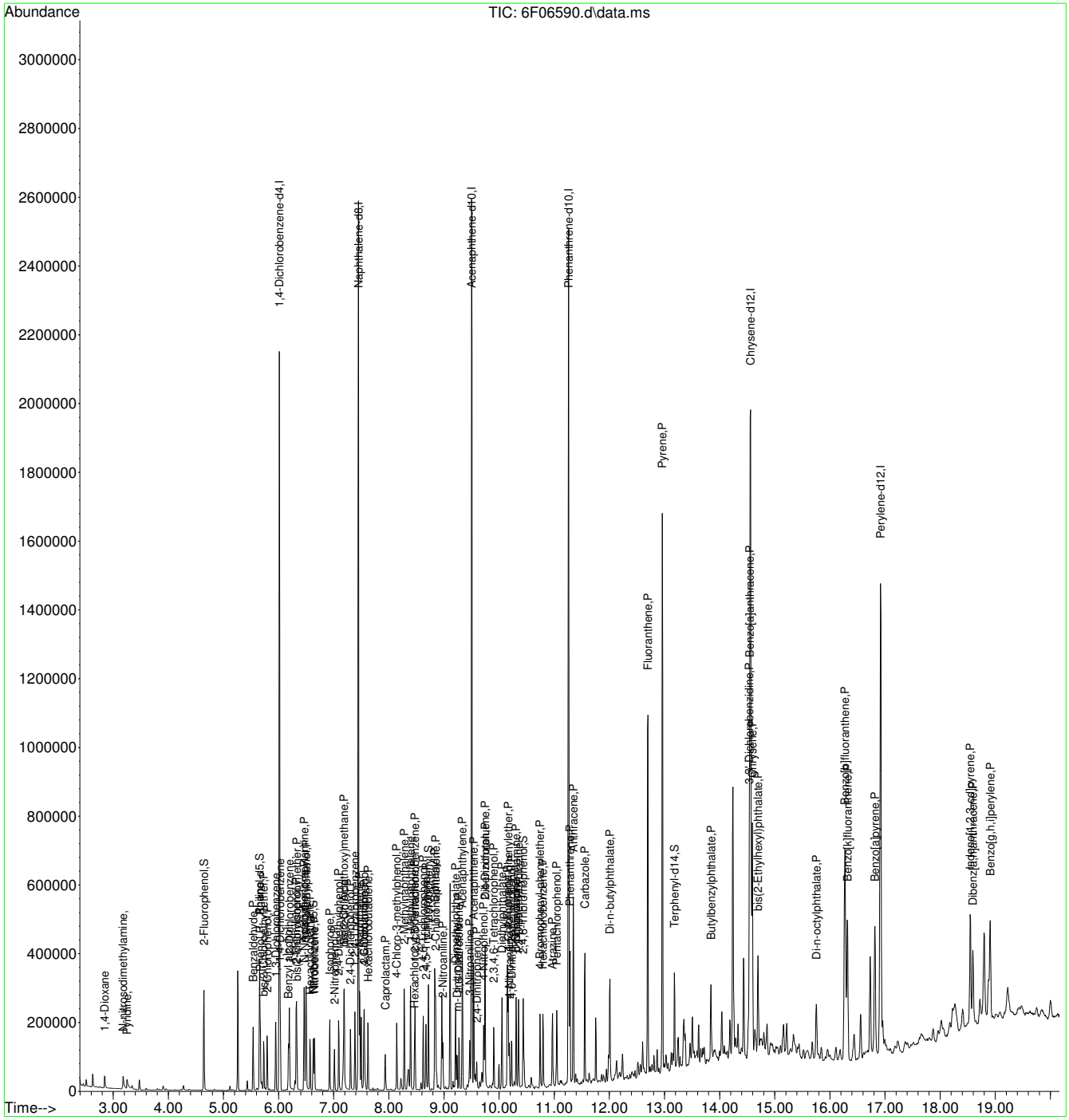
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
44) Hexachlorocyclopentadiene	8.463	237	10822	1.88	ppm		98
45) 2,4,6-Trichlorophenol	8.623	196	27129	4.50	ppm		98
46) 2,4,5-Trichlorophenol	8.671	196	28565	4.45	ppm		99
48) 1,1'-Biphenyl	8.832	154	97454	4.23	ppm		98
49) 2-Chloronaphthalene	8.848	162	76773	4.23	ppm		96
50) 2-Nitroaniline	8.982	65	26435	4.65	ppm	#	64
52) Acenaphthylene	9.329	152	175007	6.34	ppm		98
53) Dimethylphthalate	9.212	163	92321	4.48	ppm		100
54) m-Dinitrobenzene	9.238	168	14357	4.54	ppm	#	72
55) 2,6-Dinitrotoluene	9.271	165	20814	4.35	ppm		98
57) Acenaphthene	9.538	153	78481	4.28	ppm		96
58) 3-Nitroaniline	9.468	138	21924	3.97	ppm		97
59) 2,4-Dinitrophenol	9.597	184	12413	6.90	ppm	#	72
60) Dibenzofuran	9.747	168	106639	4.21	ppm		83
61) 2,4-Dinitrotoluene	9.747	165	27625	4.38	ppm		82
62) 4-Nitrophenol	9.720	109	22711	7.19	ppm	#	79
64) 2,3,4,6-Tetrachlorophenol	9.902	232	21430	4.14	ppm		97
65) Fluorene	10.148	166	96252	4.69	ppm		99
66) 4-Chlorophenyl-phenyle...	10.164	204	45416	4.48	ppm		93
67) Diethylphthalate	10.051	149	95328	4.56	ppm		100
69) 4-Nitroaniline	10.185	138	21765	3.90	ppm		92
71) 4,6-Dinitro-2-methylph...	10.228	198	22439	7.88	ppm	#	67
72) n-Nitrosodiphenylamine	10.308	169	62373	4.18	ppm		97
73) Diphenylamine	10.308	169	62373	3.75	ppm		97
74) 1,2-Diphenylhydrazine	10.351	77	78253	3.68	ppm		95
78) 4-Bromophenyl-phenylether	10.741	248	26439	4.72	ppm		97
79) Hexachlorobenzene	10.795	284	28200	4.41	ppm		82
82) Atrazine	10.966	200	23940	4.23	ppm		90
83) Pentachlorophenol	11.046	266	27376	10.29	ppm		96
84) Phenanthrene	11.287	178	146633	5.10	ppm		98
85) Anthracene	11.346	178	209431	7.17	ppm		99
87) Carbazole	11.554	167	148555	5.65	ppm		97
89) Di-n-butylphthalate	12.009	149	147825	4.46	ppm		98
91) Fluoranthene	12.699	202	441300	14.59	ppm		98
94) Pyrene	12.961	202	612142	22.57	ppm		96
97) Butylbenzylphthalate	13.844	149	62096	4.78	ppm		95
98) 3,3'-Dichlorobenzidine	14.539	252	19830	2.02	ppm		95
99) Benzo[a]anthracene	14.544	228	296934	11.70	ppm		99
100) Chrysene	14.592	228	340191	13.82	ppm		97
101) bis(2-Ethylhexyl)phtha...	14.694	149	83489	4.60	ppm		95
103) Di-n-octylphthalate	15.753	149	128948	4.44	ppm		90
104) Benzo[b]fluoranthene	16.272	252	450092	19.11	ppm		99
105) Benzo[k]fluoranthene	16.320	252	224079	9.15	ppm		98
106) Benzo[a]pyrene	16.817	252	219902	10.05	ppm		97
107) Indeno[1,2,3-cd]pyrene	18.545	276	185878	9.13	ppm		95
108) Dibenz[a,h]anthracene	18.593	278	116537	5.36	ppm		93
109) Benzo[g,h,i]perylene	18.909	276	174803	7.95	ppm		95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\August 2020\08-17-2020\s6f254\
Data File : 6F06590.d
Acq On : 14 Aug 2020 8:08 pm
Operator : marthav
Sample : op81538-msd E,5
Misc : op81538,S6F254,29.8,,,1,5,soil
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Aug 16 20:19:08 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jul 29 16:22:51 2020
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 08/17/20 12:11

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-17-2020\S7G485\
Data File : 7G11196.d
Acq On : 14 Aug 2020 11:34 am
Operator : FOUADS
Sample : op81539-ms e,4 Inst : MSBNA8
Misc : op81539,S7G485,30.1,,,1,4,soil
ALS Vial : 24 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 16 22:56:35 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

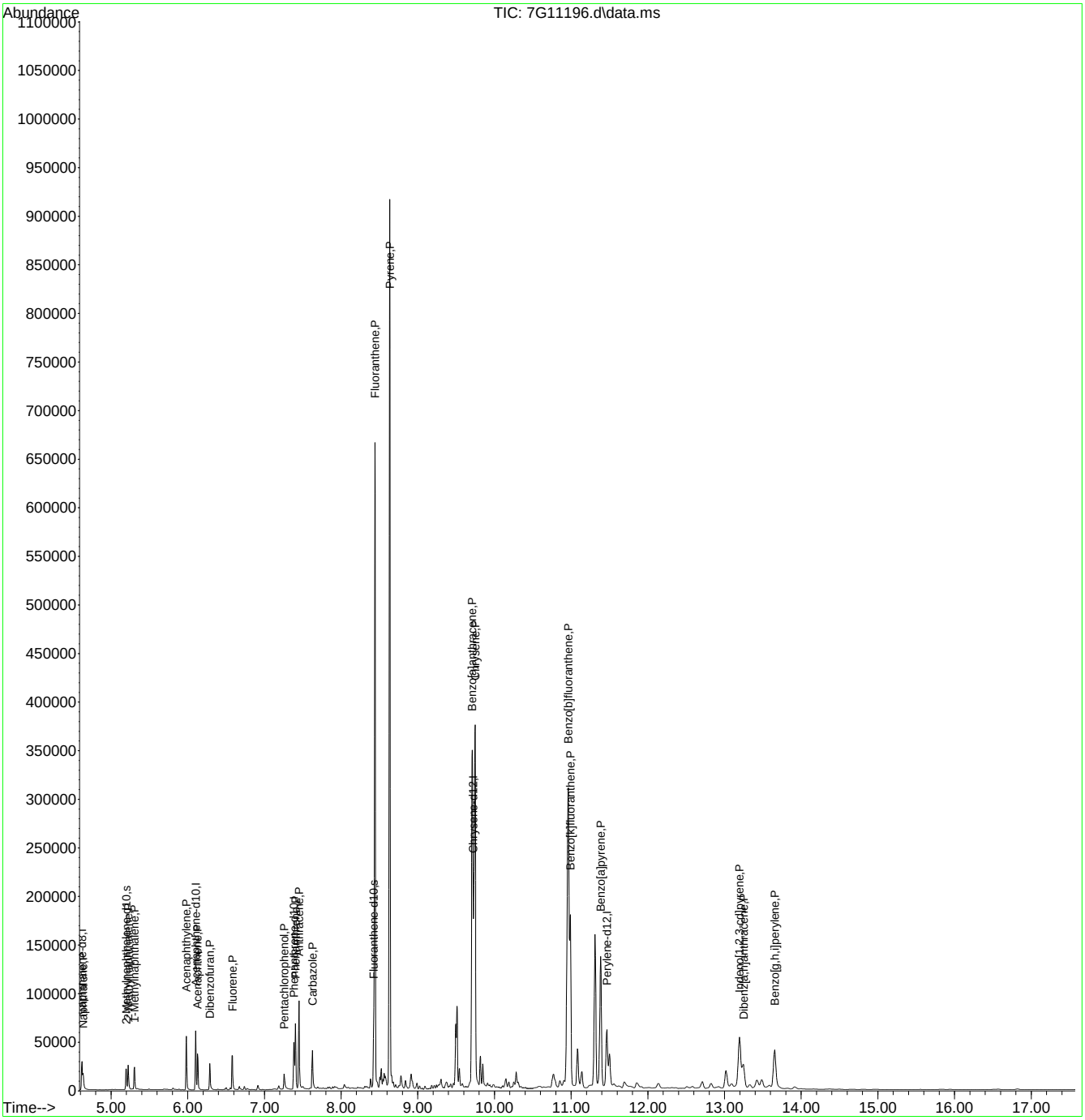
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.622	136	25579	4.00	ppm	0.00
6) Acenaphthene-d10	6.104	164	18104	4.00	ppm	0.00
11) Phenanthrene-d10	7.382	188	34840	4.00	ppm	-0.01
18) Chrysene-d12	9.722	240	69079	4.00	ppm	0.00
22) Perylene-d12	11.467	264	61504	4.00	ppm	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.199	152	9075	2.44	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 24.40%#			
17) Fluoranthene-d10	8.423	212	48739	2.71	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 27.10%#			
Target Compounds						Qvalue
2) Naphthalene	4.634	128	11935	1.65	ppm	99
3) 2-Methylnaphthalene	5.223	142	9204	1.62	ppm	98
5) 1-Methylnaphthalene	5.305	142	9772	1.94	ppm	95
7) Acenaphthylene	5.983	152	34747	3.33	ppm	98
8) Acenaphthene	6.128	153	11760	1.74	ppm	99
9) Dibenzofuran	6.288	168	16575	3.47	ppm	93
10) Fluorene	6.582	166	13533	1.83	ppm	95
12) Pentachlorophenol	7.257	266	5726	4.50	ppm	99
13) Phenanthrene	7.403	178	41512	3.61	ppm	96
14) Anthracene	7.452	178	59632	5.10	ppm	99
15) Carbazole	7.626	167	28089	1.35	ppm	96
16) Fluoranthene	8.442	202	473558	20.82	ppm	98
19) Pyrene	8.635	202	609942	21.67	ppm	96
20) Benzo[a]anthracene	9.707	228	237243	10.76	ppm	89
21) Chrysene	9.748	228	312178	13.06	ppm	98
23) Benzo[b]fluoranthene	10.962	252	472245	22.62	ppm	98
24) Benzo[k]fluoranthene	10.991	252	128457m	5.75	ppm	
25) Benzo[a]pyrene	11.384	252	158156	7.77	ppm	98
26) Indeno[1,2,3-cd]pyrene	13.194	276	91682	6.91	ppm	94
27) Dibenz[a,h]anthracene	13.248	278	29828	2.02	ppm	96
28) Benzo[g,h,i]perylene	13.655	276	66923	4.18	ppm	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-17-2020\S7G485\
Data File : 7G11196.d
Acq On : 14 Aug 2020 11:34 am
Operator : FOUADS
Sample : op81539-ms e,4 Inst : MSBNA8
Misc : op81539,S7G485,30.1,,,1,4,soil
ALS Vial : 24 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 16 22:56:35 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration



Manual Integration Approval Summary

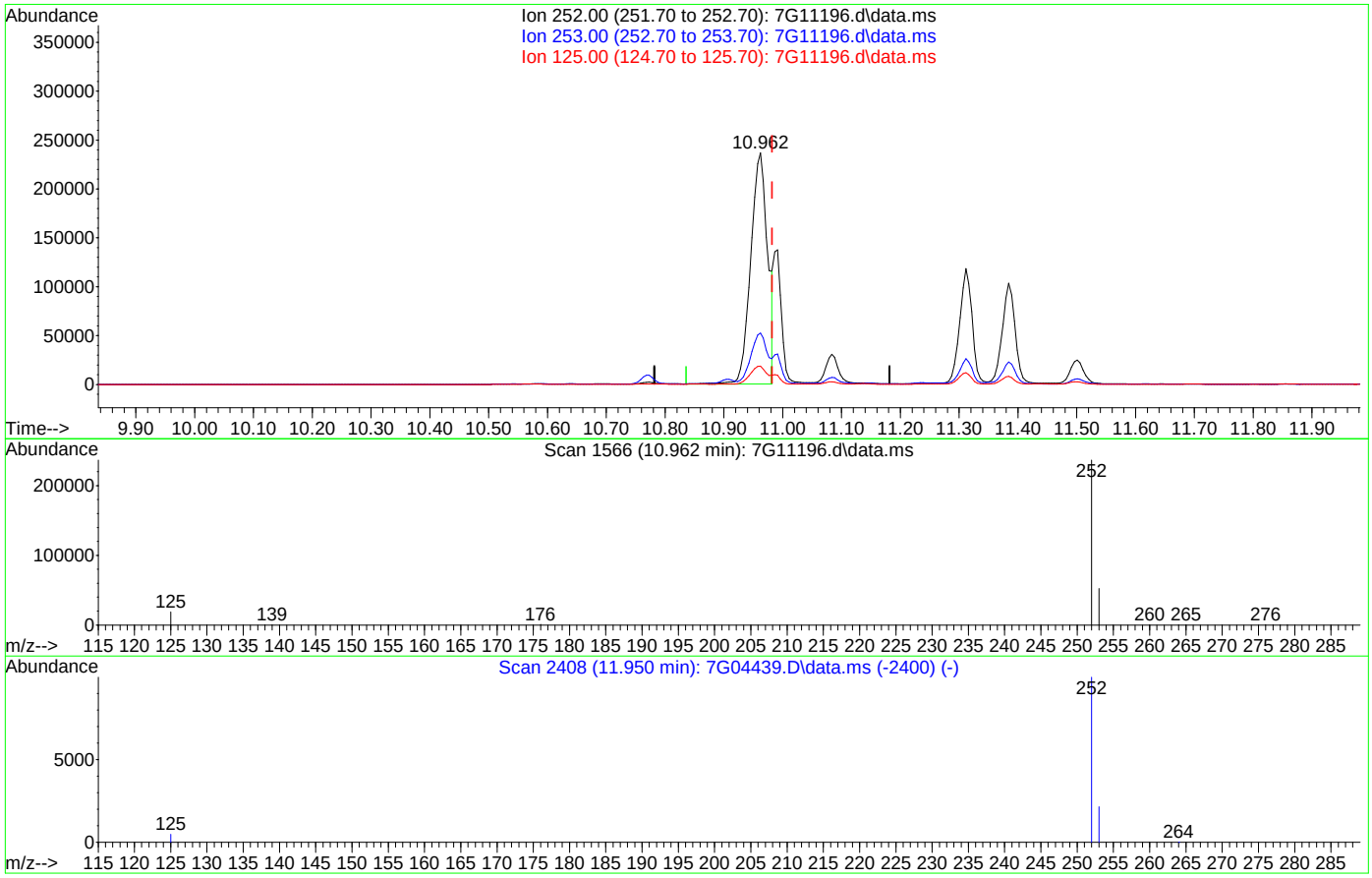
Sample Number: OP81539-MS
Lab FileID: 7G11196.D
Injection Time: 08/14/20 11:34
Method: SW846 8270E BY SIM
Analyst approved: 08/17/20 10:43 Fouad Sekkar
Supervisor approved: 08/17/20 12:11 Nicole McCampbell

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(k)fluoranthene	207-08-9		10.99	Missed peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-17-2020\S7G485\
Data File : 7G11196.d
Acq On : 14 Aug 2020 11:34 am
Operator : FOUADS
Sample : op81539-ms e,4 Inst : MSBNA8
Misc : op81539,S7G485,30.1,,,1,4,soil
ALS Vial : 24 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 16 22:50:20 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration



TIC: 7G11196.d\data.ms

(24) Benzo[k]fluoranthene (P)

10.962min (-0.019) 20.27ppm

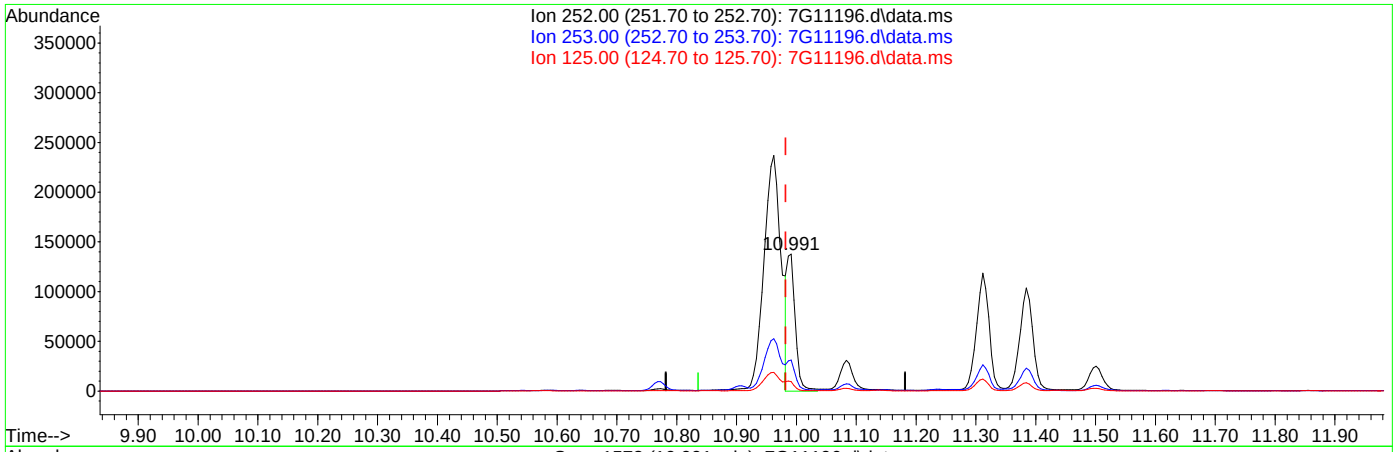
response 472245

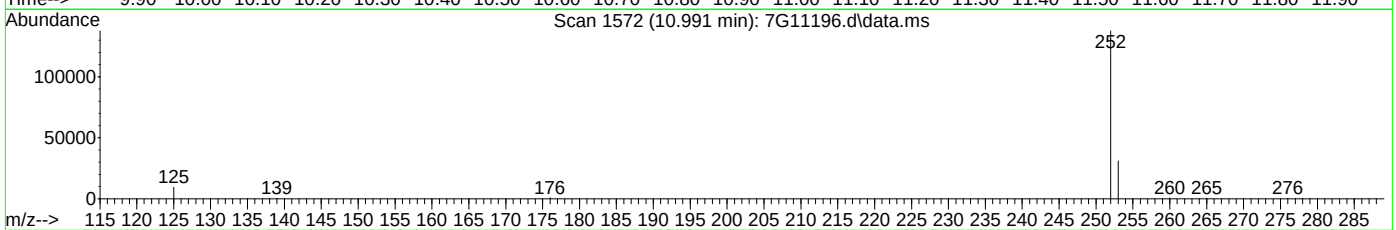
Ion	Exp%	Act%
252.00	100	100
253.00	21.50	21.81
125.00	4.80	7.71
0.00	0.00	0.00

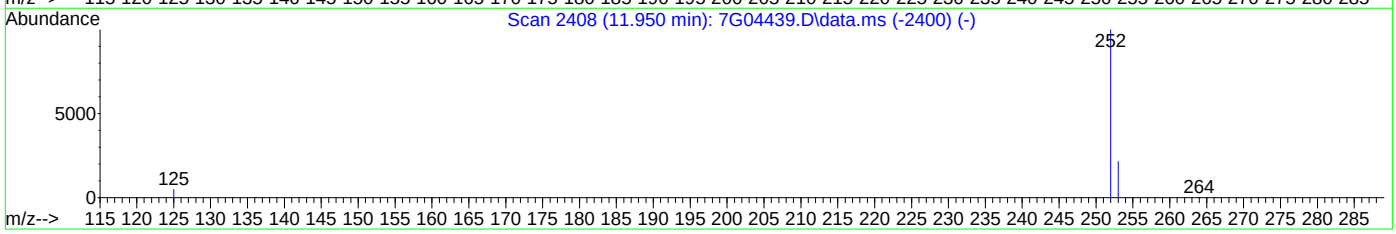
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-17-2020\S7G485\
Data File : 7G11196.d
Acq On : 14 Aug 2020 11:34 am
Operator : FOUADS
Sample : op81539-ms e,4 Inst : MSBNA8
Misc : op81539,S7G485,30.1,,,1,4,soil
ALS Vial : 24 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 16 22:50:20 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11196.d\data.ms

(24) Benzo[k]fluoranthene (P)

10.991min (+0.010) 5.75ppm m

response 128457

Ion	Exp%	Act%
252.00	100	100
253.00	21.50	22.52
125.00	4.80	6.77
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 08/17/20 12:11

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-17-2020\S7G485\
Data File : 7G11197.d
Acq On : 14 Aug 2020 11:58 am
Operator : FOUADS
Sample : op81539-msd e,4 Inst : MSBNA8
Misc : op81539,S7G485,30.4,,,1,4,soil
ALS Vial : 25 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 16 22:58:19 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

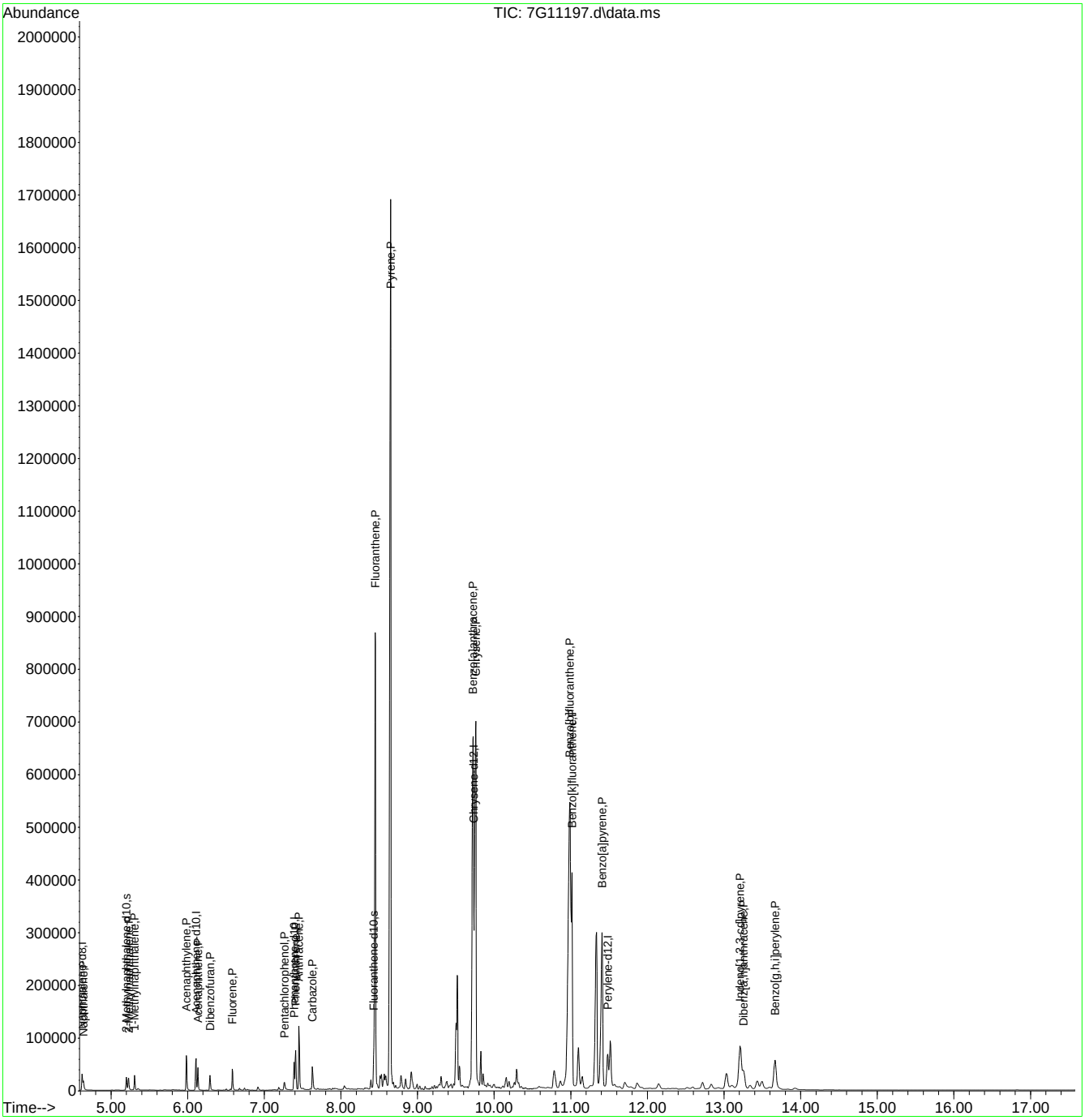
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.622	136	24966	4.00	ppm	0.00
6) Acenaphthene-d10	6.109	164	18250	4.00	ppm	0.00
11) Phenanthrene-d10	7.389	188	35846	4.00	ppm	0.00
18) Chrysene-d12	9.732	240	71178	4.00	ppm	0.00
22) Perylene-d12	11.481	264	58848	4.00	ppm	0.02
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.199	152	9116	2.51	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 25.10%#			
17) Fluoranthene-d10	8.427	212	52180	2.82	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 28.20%#			
Target Compounds						Qvalue
2) Naphthalene	4.640	128	12062	1.71	ppm	99
3) 2-Methylnaphthalene	5.229	142	9508	1.71	ppm	95
5) 1-Methylnaphthalene	5.305	142	10000	2.03	ppm	96
7) Acenaphthylene	5.983	152	39882	3.79	ppm	99
8) Acenaphthene	6.133	153	12244	1.80	ppm	98
9) Dibenzofuran	6.292	168	17887	3.71	ppm	87
10) Fluorene	6.582	166	14289	1.92	ppm	99
12) Pentachlorophenol	7.264	266	6183	4.72	ppm	94
13) Phenanthrene	7.410	178	48950	4.13	ppm	98
14) Anthracene	7.452	178	78031	6.47	ppm	99
15) Carbazole	7.626	167	31691	1.48	ppm	99
16) Fluoranthene	8.448	202	606515	25.60	ppm	98
19) Pyrene	8.648	202	1325085	44.27	ppm	96
20) Benzo[a]anthracene	9.722	228	549374	23.32	ppm	92
21) Chrysene	9.761	228	614907	25.00	ppm	97
23) Benzo[b]fluoranthene	10.986	252	1037253	51.93	ppm	98
24) Benzo[k]fluoranthene	11.015	252	272570m	12.51	ppm	
25) Benzo[a]pyrene	11.409	252	367155	18.86	ppm	98
26) Indeno[1,2,3-cd]pyrene	13.209	276	145494	11.45	ppm	94
27) Dibenz[a,h]anthracene	13.253	278	42881	3.04	ppm	96
28) Benzo[g,h,i]perylene	13.665	276	94013	6.14	ppm	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-17-2020\S7G485\
Data File : 7G11197.d
Acq On : 14 Aug 2020 11:58 am
Operator : FOUADS
Sample : op81539-msd e,4 Inst : MSBNA8
Misc : op81539,S7G485,30.4,,,1,4,soil
ALS Vial : 25 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 16 22:58:19 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration



Manual Integration Approval Summary

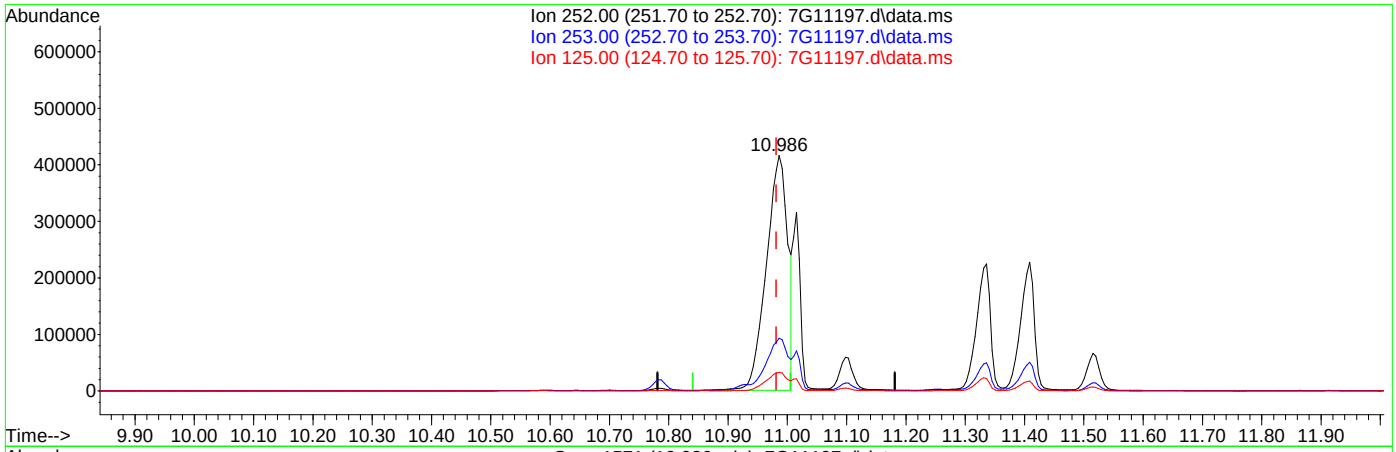
Sample Number:	OP81539-MSD	**Method:**	SW846 8270E BY SIM
Lab FileID:	7G11197.D	**Analyst approved:**	08/17/20 10:43 Fouad Sekkar
Injection Time:	08/14/20 11:58	**Supervisor approved:**	08/17/20 12:11 Nicole McCampbell

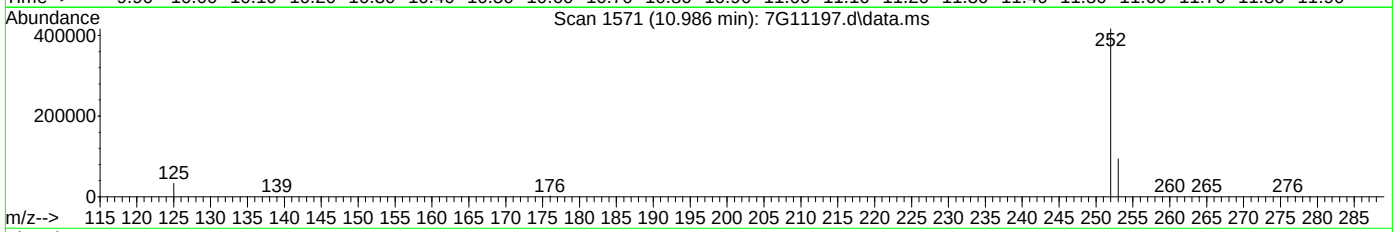
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(k)fluoranthene	207-08-9		11.02	Missed peak

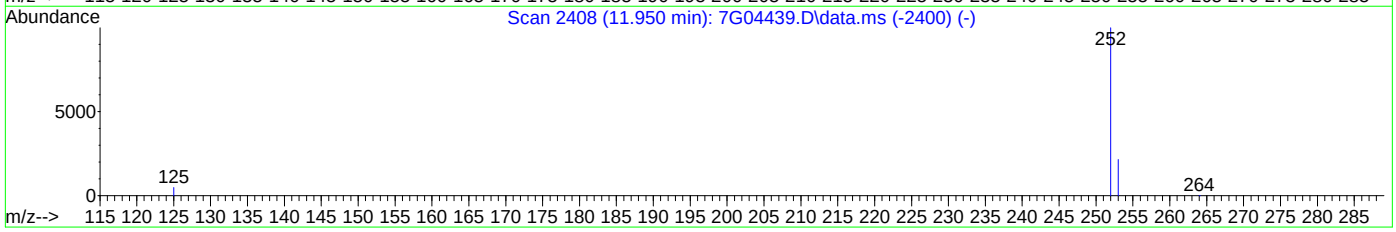
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-17-2020\S7G485\
Data File : 7G11197.d
Acq On : 14 Aug 2020 11:58 am
Operator : FOUADS
Sample : op81539-msd e,4 Inst : MSBNA8
Misc : op81539,S7G485,30.4,,,1,4,soil
ALS Vial : 25 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 16 22:50:23 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11197.d\data.ms

(24) Benzo[k]fluoranthene (P)

10.986min (+0.005) 43.61ppm

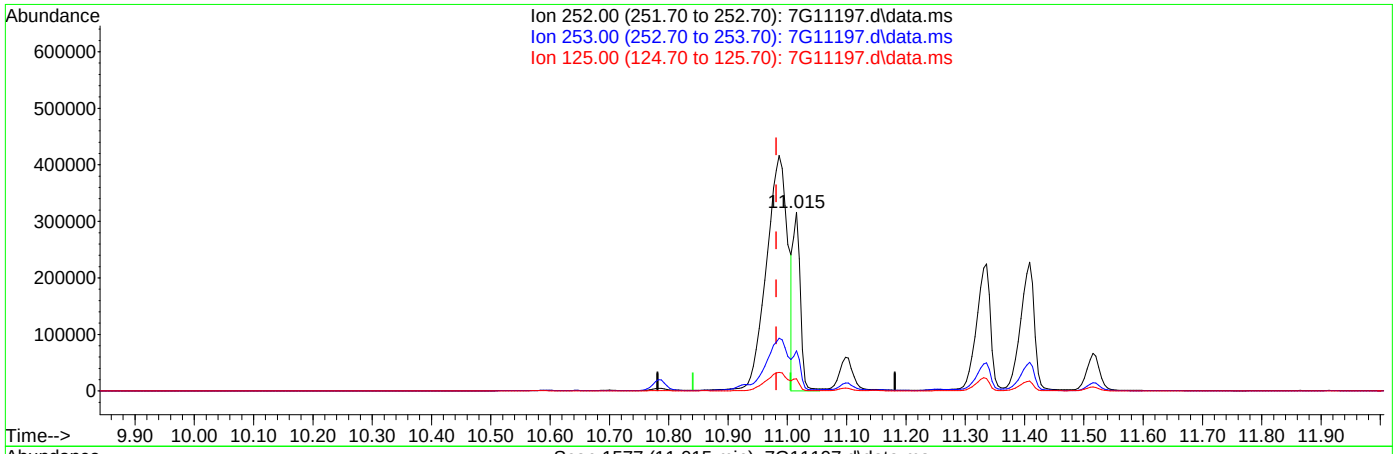
response 1037253

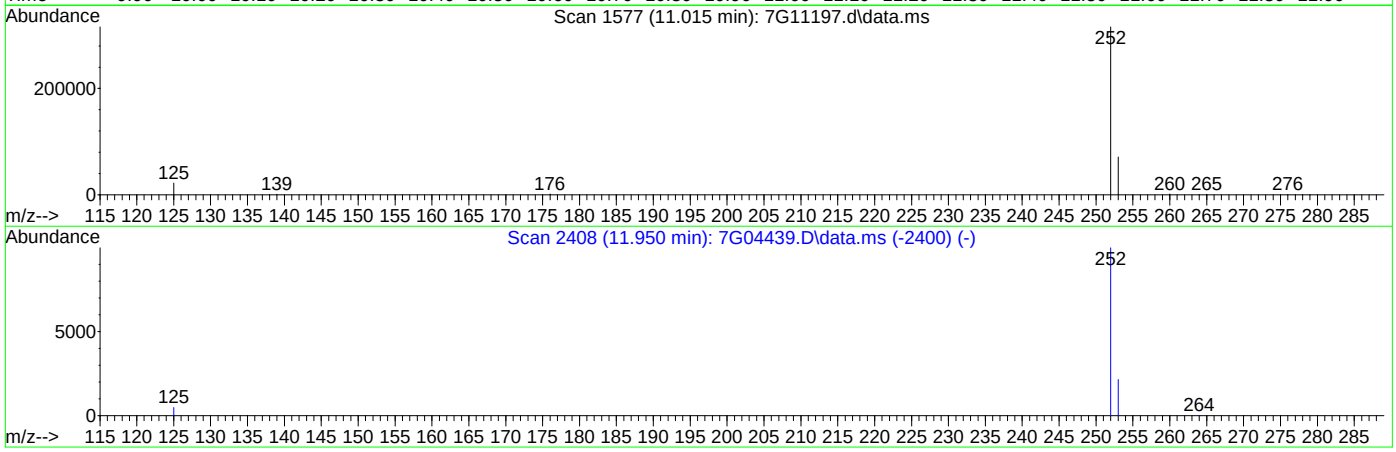
Ion	Exp%	Act%
252.00	100	100
253.00	21.50	21.95
125.00	4.80	7.99
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-17-2020\S7G485\
Data File : 7G11197.d
Acq On : 14 Aug 2020 11:58 am
Operator : FOUADS
Sample : op81539-msd e,4 Inst : MSBNA8
Misc : op81539,S7G485,30.4,,,1,4,soil
ALS Vial : 25 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 16 22:50:23 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration





TIC: 7G11197.d\data.ms

(24) Benzo[k]fluoranthene (P)

11.015min (+0.034) 12.51ppm m

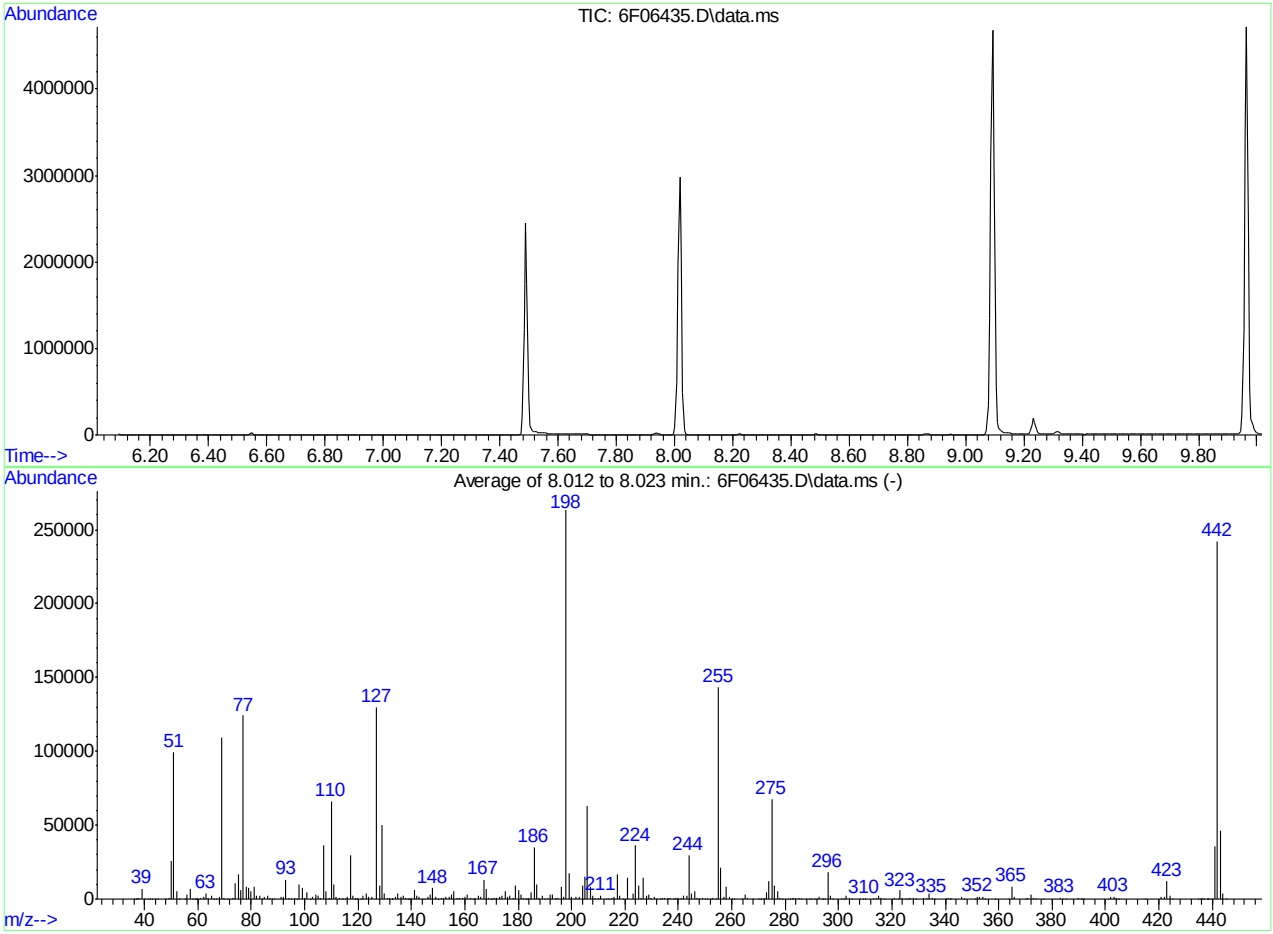
response 272570

Ion	Exp%	Act%
252.00	100	100
253.00	21.50	22.47
125.00	4.80	6.86
0.00	0.00	0.00

SW-846 Method 8270

Data File : C:\msdchem\1\data\S6F248_072920\6F06435.D Vial: 1
Acq On : 29 Jul 2020 12:37 pm Operator: marthav
Sample : DFTPP Inst : MSBNA10
Misc : op81256,S6F248,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\methods\DFTPP.m (RTE Integrator)
Title : Tune Evaluation



AutoFind: Scans 360, 361, 362; Background Corrected with Scan 354

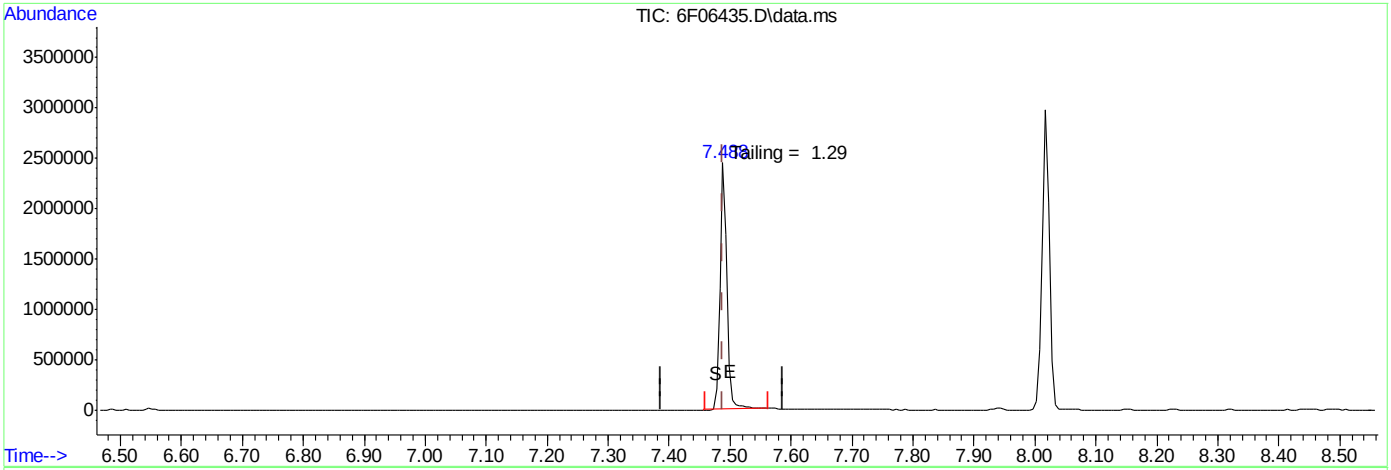
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	37.9	99720	PASS
68	69	0.00	2	1.7	1843	PASS
69	198	0.00	100	41.5	109212	PASS
70	69	0.00	2	0.5	588	PASS
127	198	40	60	49.4	130053	PASS
197	198	0.00	1	0.6	1470	PASS
198	198	100	100	100.0	263083	PASS
199	198	5	9	6.8	17833	PASS
275	198	10	30	25.8	67861	PASS
365	198	1	100	3.2	8361	PASS
441	443	0.01	100	77.9	35832	PASS
442	198	40	100	92.0	242163	PASS
443	442	17	23	19.0	46013	PASS

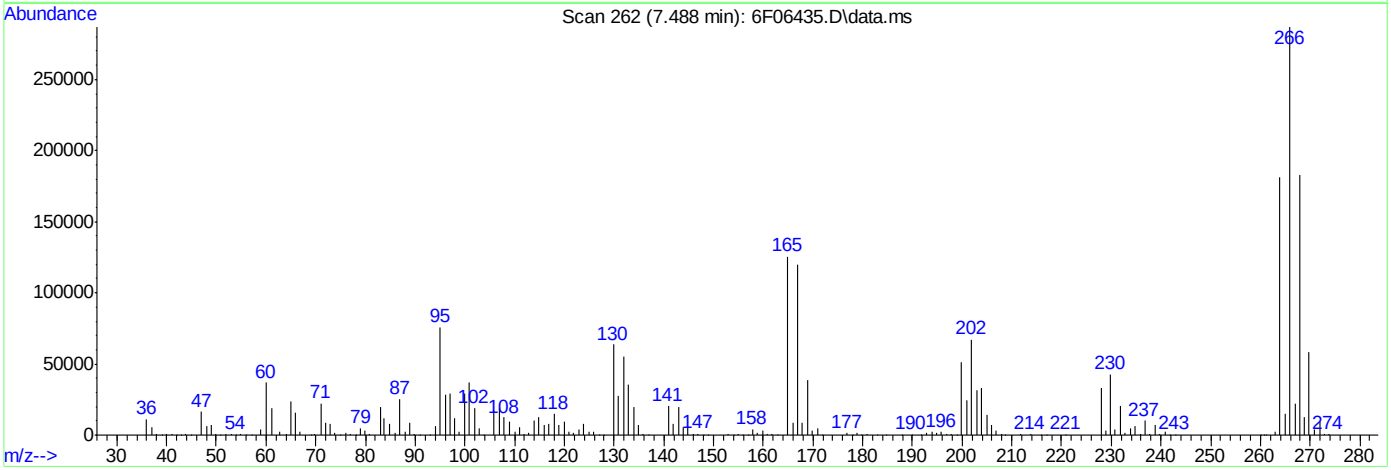
6F06435.D DFTPP.m Thu Jul 30 13:07:25 2020

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06435.D
Sample : DFTPP
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1
Acq On : 29 Jul 2020 12:37 pm Operator: marthav

Quant Time: Jul 30 13:07:27 2020
Quant Method : C:\msdchem\1\methods\DFTPP.m
Quant Title : Tune Evaluation





TIC: 6F06435.D\data.ms

(1) Pentachlorophenol

7.488min (+0.000) 86.71

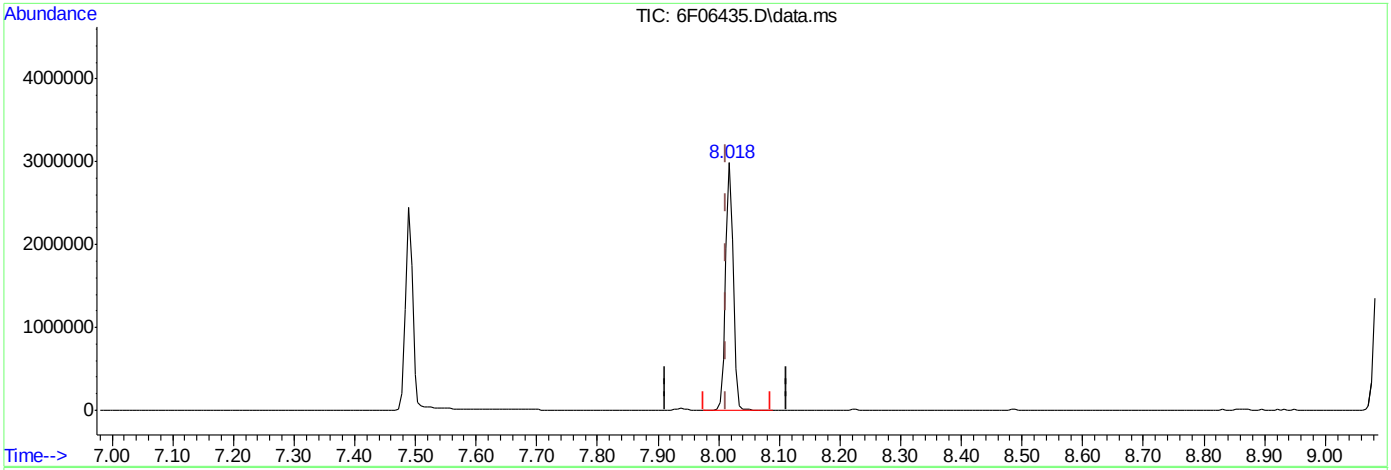
response 2074124

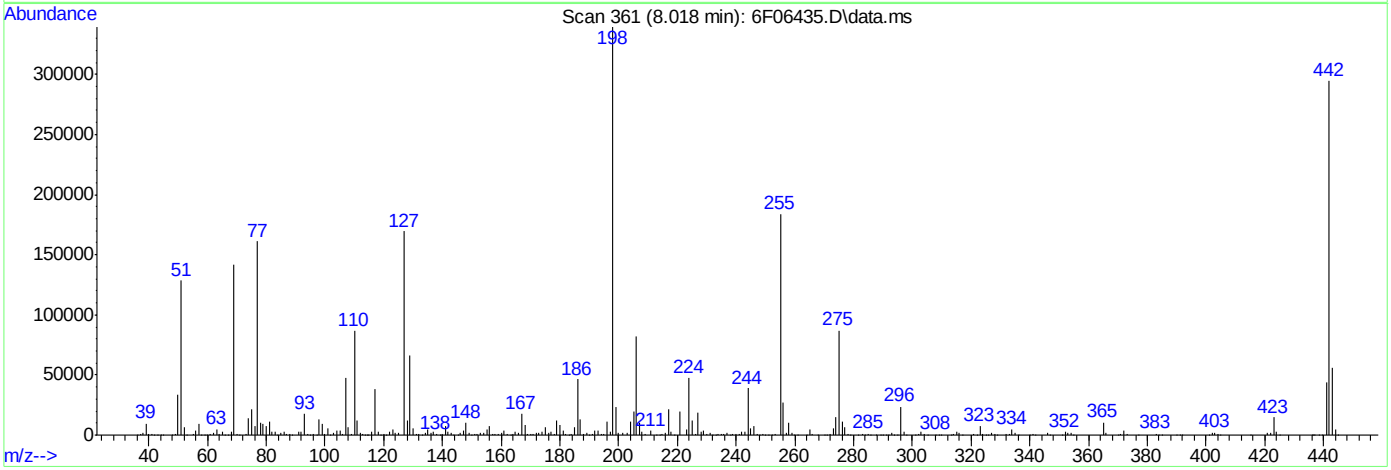
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06435.D
Sample : DFTPP
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1
Acq On : 29 Jul 2020 12:37 pm Operator: marthav

Quant Time: Jul 30 13:07:27 2020
Quant Method : C:\msdchem\1\methods\DFTPP.m
Quant Title : Tune Evaluation





TIC: 6F06435.D\data.ms

(2) DFTPP

8.018min (+0.005) 93.73

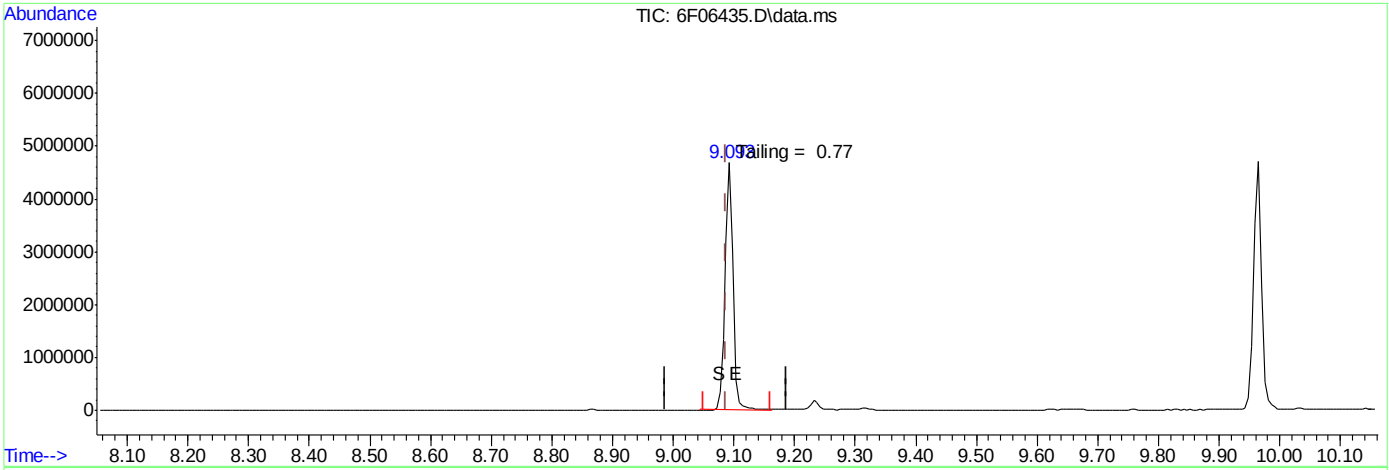
response 2645055

Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06435.D
Sample : DFTPP
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1
Acq On : 29 Jul 2020 12:37 pm Operator: marthav

Quant Time: Jul 30 13:07:27 2020
Quant Method : C:\msdchem\1\methods\DFTPP.m
Quant Title : Tune Evaluation



TIC: 6F06435.D\data.ms

(3) Benzidine

9.093min (+0.005) 103.11

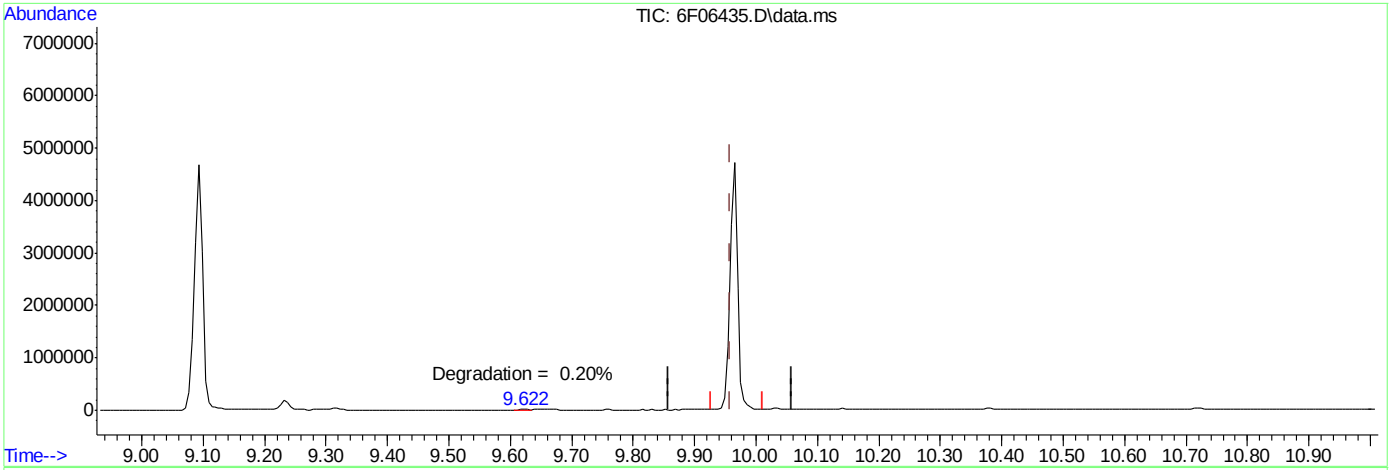
response 4373300

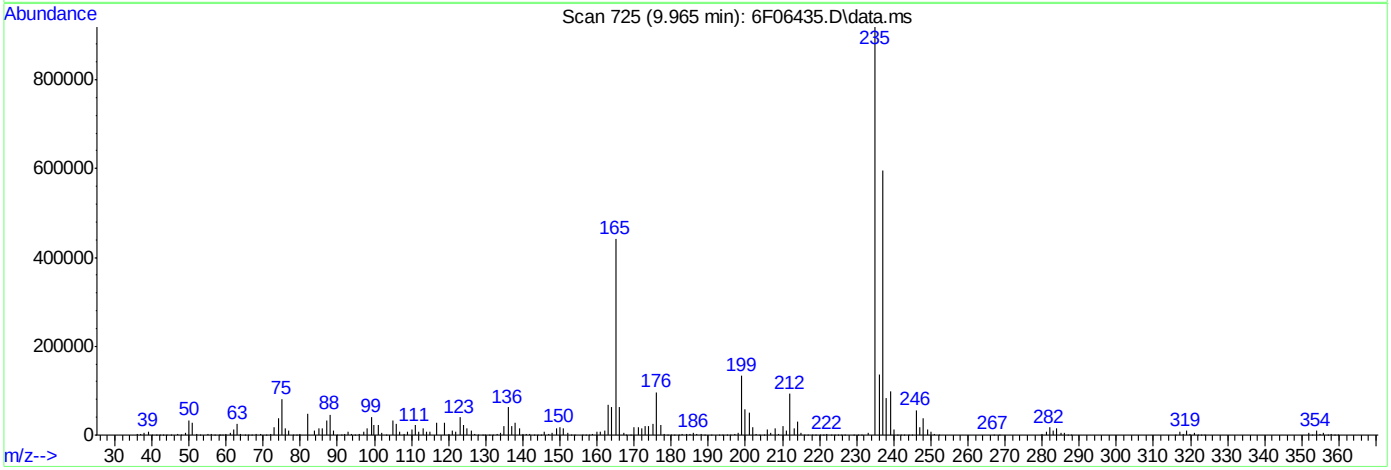
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06435.D
Sample : DFTPP
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1
Acq On : 29 Jul 2020 12:37 pm Operator: marthav

Quant Time: Jul 30 13:07:27 2020
Quant Method : C:\msdchem\1\methods\DFTPP.m
Quant Title : Tune Evaluation





TIC: 6F06435.D\data.ms

(4) DDT

9.965min (+0.005) 118.64

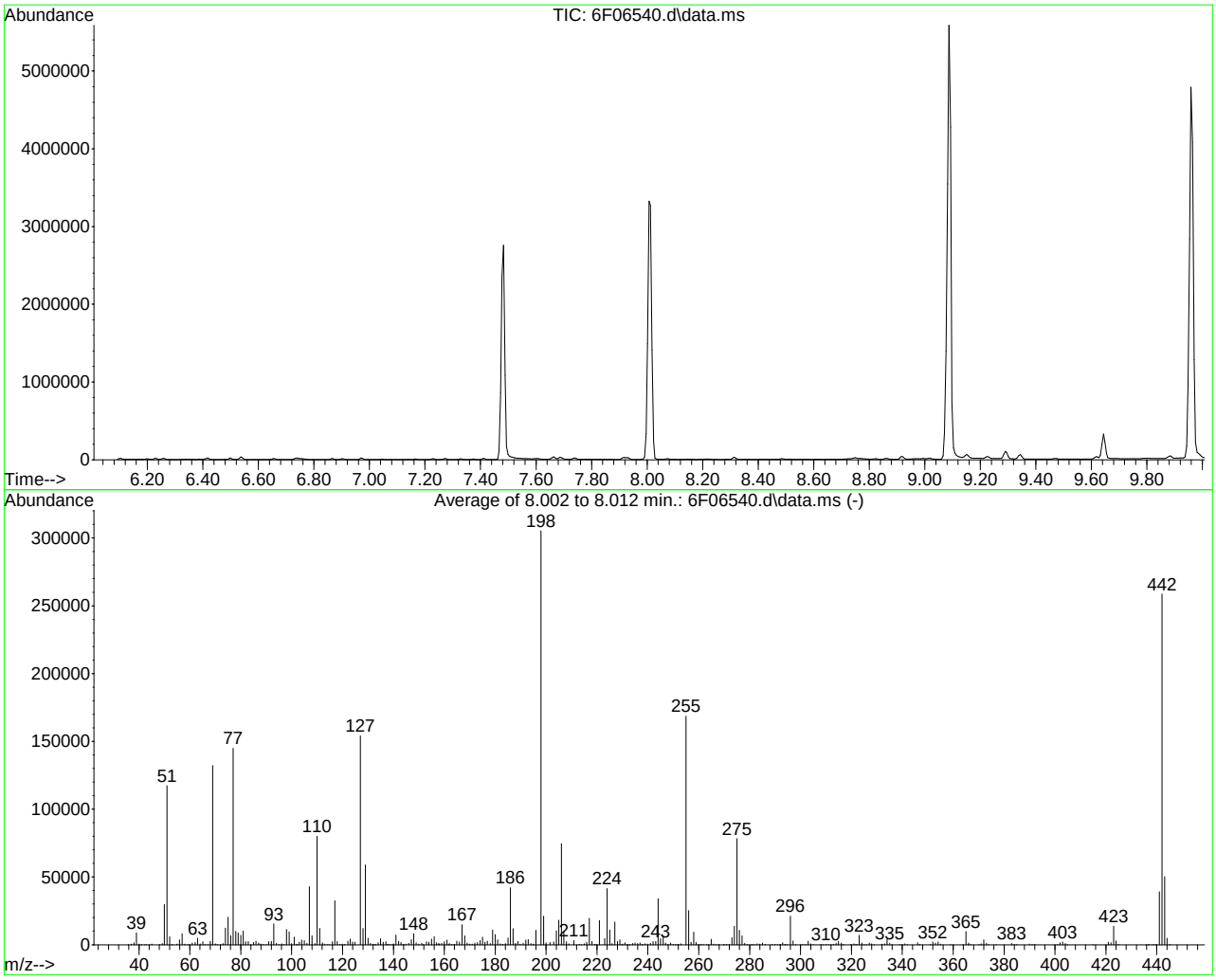
response 4141541

Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

SW-846 Method 8270

Data File : C:\msdchem\1\data\ed...2020\s6f253\6F06540.d Vial: 1
Acq On : 13 Aug 2020 1:09 pm Operator: marthav
Sample : DFTPP Inst : MSBNA10
Misc : op81484,S6F253,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\methods\dftpp.m (RTE Integrator)
Title : Tune Evaluation



AutoFind: Scans 358, 359, 360; Background Corrected with Scan 354

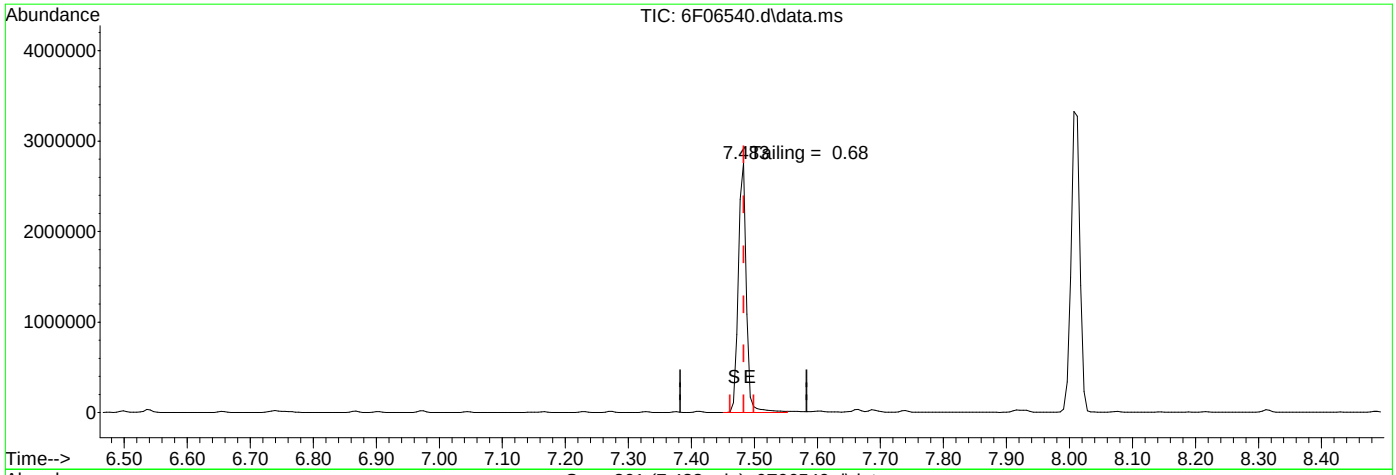
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	38.4	117285	PASS
68	69	0.00	2	1.8	2405	PASS
69	198	0.00	100	43.3	132213	PASS
70	69	0.00	2	0.5	629	PASS
127	198	40	60	50.5	154155	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	305280	PASS
199	198	5	9	6.9	21102	PASS
275	198	10	30	25.6	78245	PASS
365	198	1	100	3.2	9775	PASS
441	443	0.01	100	78.0	39182	PASS
442	198	40	100	84.8	258819	PASS
443	442	17	23	19.4	50251	PASS

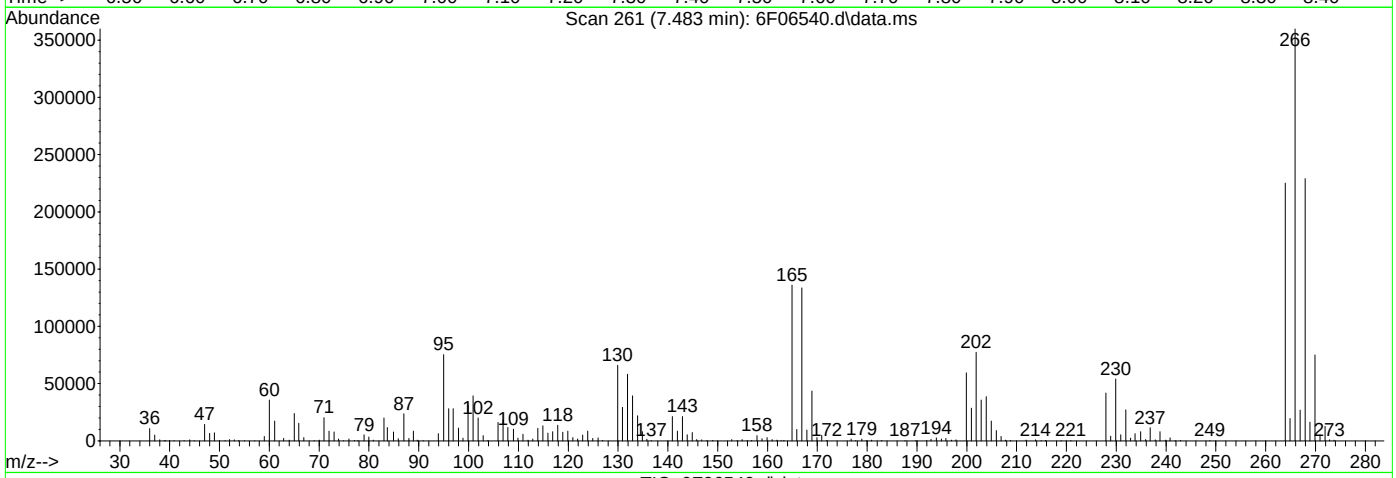
6F06540.d dftpp.m Fri Aug 14 04:31:26 2020

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s6f253\
Data File : 6F06540.d
Acq On : 13 Aug 2020 1:09 pm
Operator : marthav
Sample : DFTPP
Misc : op81484,S6F253,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 04:31:16 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Fri Aug 14 04:31:13 2020
Response via : Initial Calibration





TIC: 6F06540.d\data.ms

(1) Pentachlorophenol

7.483min (0.000) 98.83

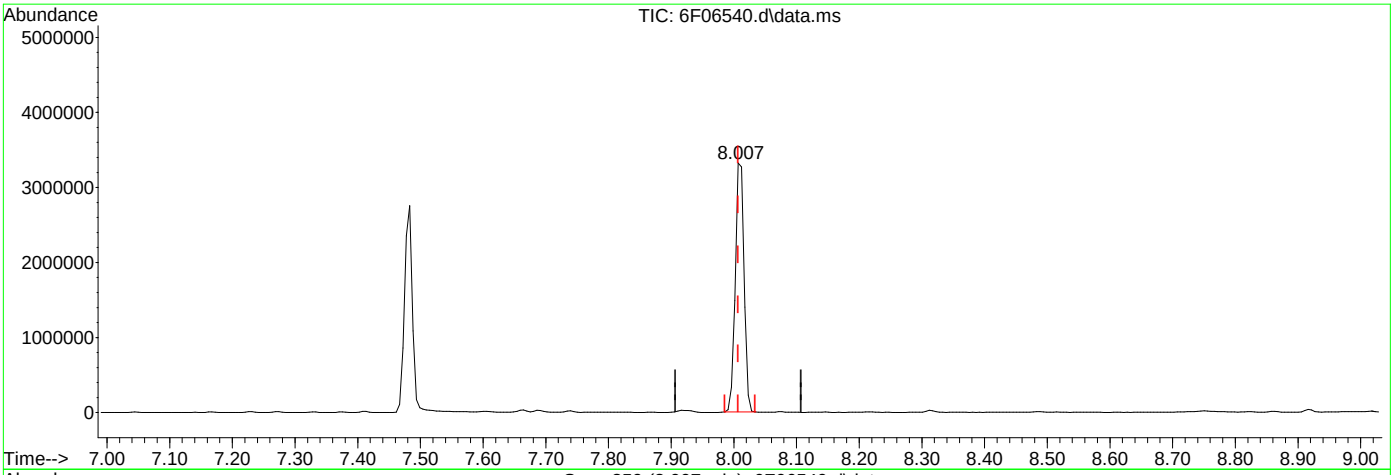
response 2364025

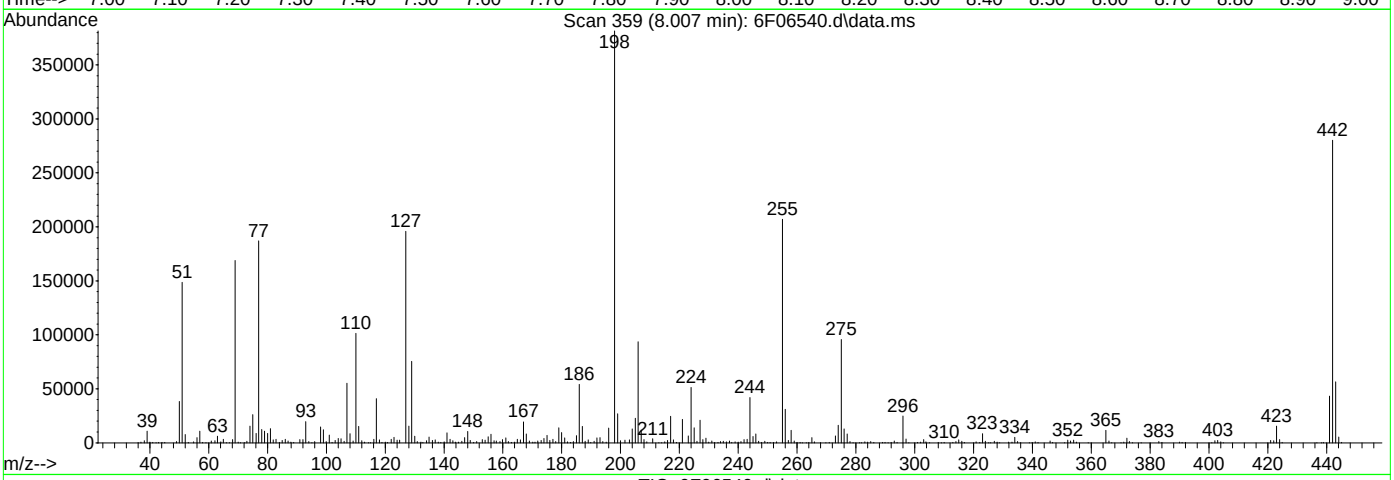
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s6f253\
Data File : 6F06540.d
Acq On : 13 Aug 2020 1:09 pm
Operator : marthav
Sample : DFTPP
Misc : op81484,S6F253,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 04:31:16 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Fri Aug 14 04:31:13 2020
Response via : Initial Calibration





TIC: 6F06540.d\data.ms

(2) DFTPP

8.007min (0.000) 114.54

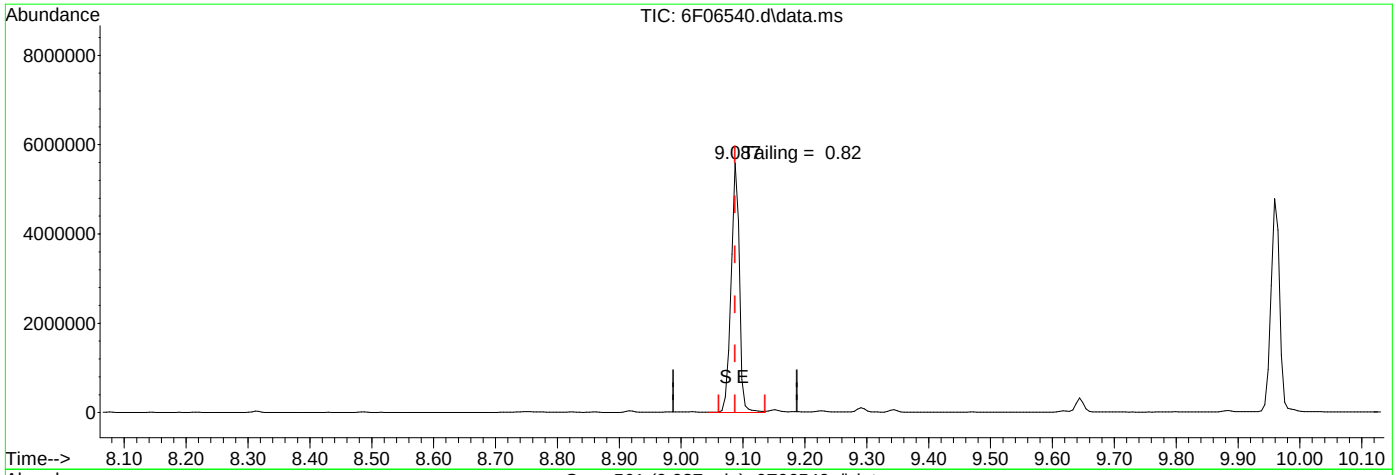
response 3232391

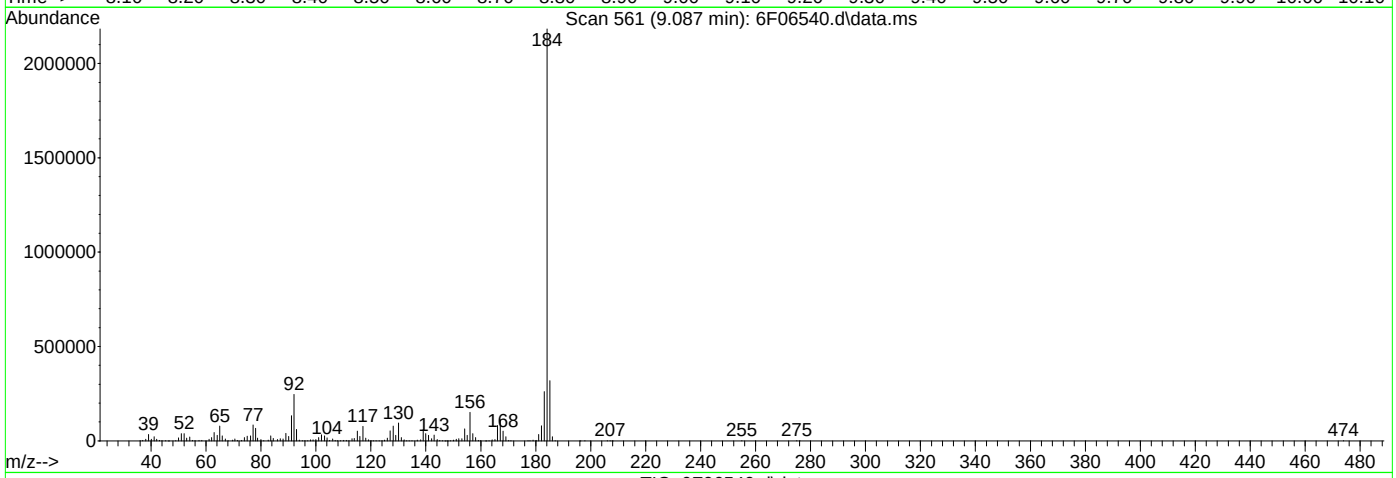
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s6f253\
Data File : 6F06540.d
Acq On : 13 Aug 2020 1:09 pm
Operator : marthav
Sample : DFTPP
Misc : op81484,S6F253,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 04:31:16 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Fri Aug 14 04:31:13 2020
Response via : Initial Calibration





TIC: 6F06540.d\data.ms

(3) Benzidine

9.087min (0.000) 122.99

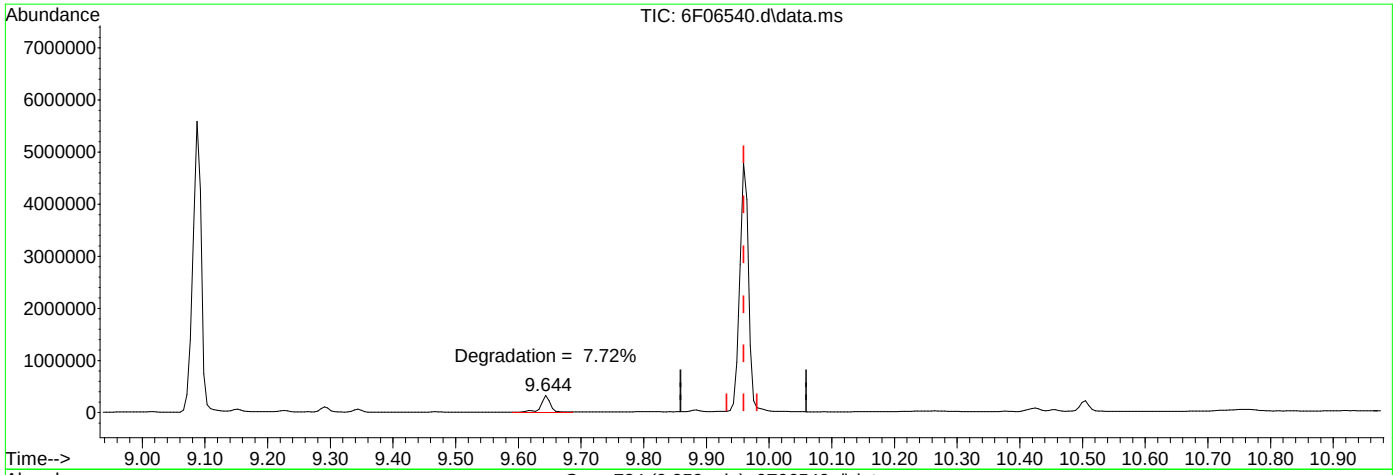
response 5216719

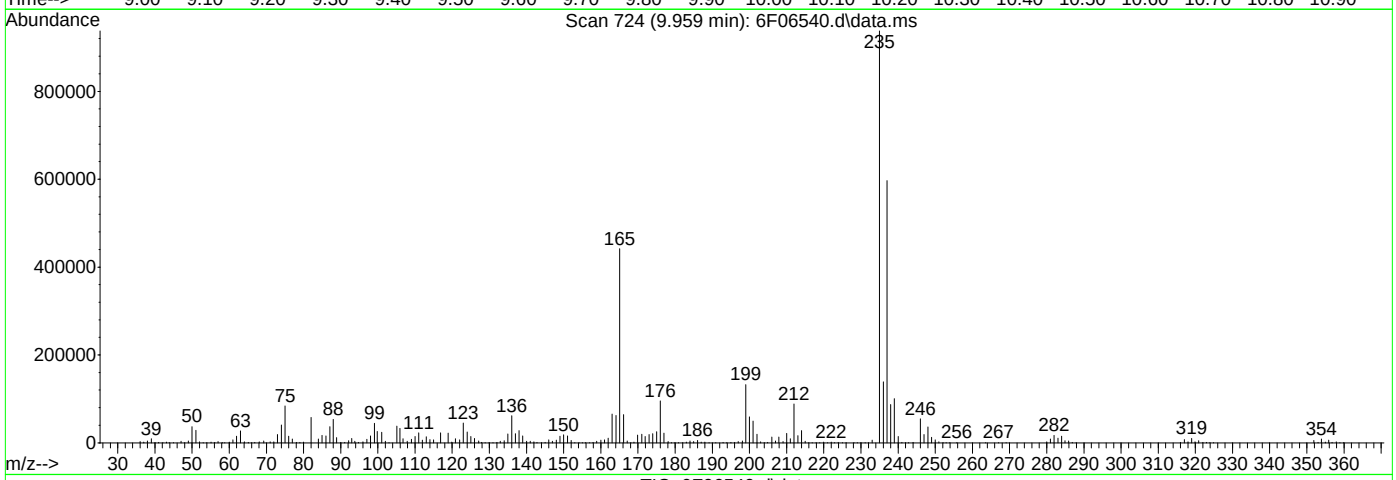
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s6f253\
Data File : 6F06540.d
Acq On : 13 Aug 2020 1:09 pm
Operator : marthav
Sample : DFTPP
Misc : op81484,S6F253,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 04:31:16 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Fri Aug 14 04:31:13 2020
Response via : Initial Calibration





TIC: 6F06540.d\data.ms

(4) DDT

9.959min (0.000) 131.40

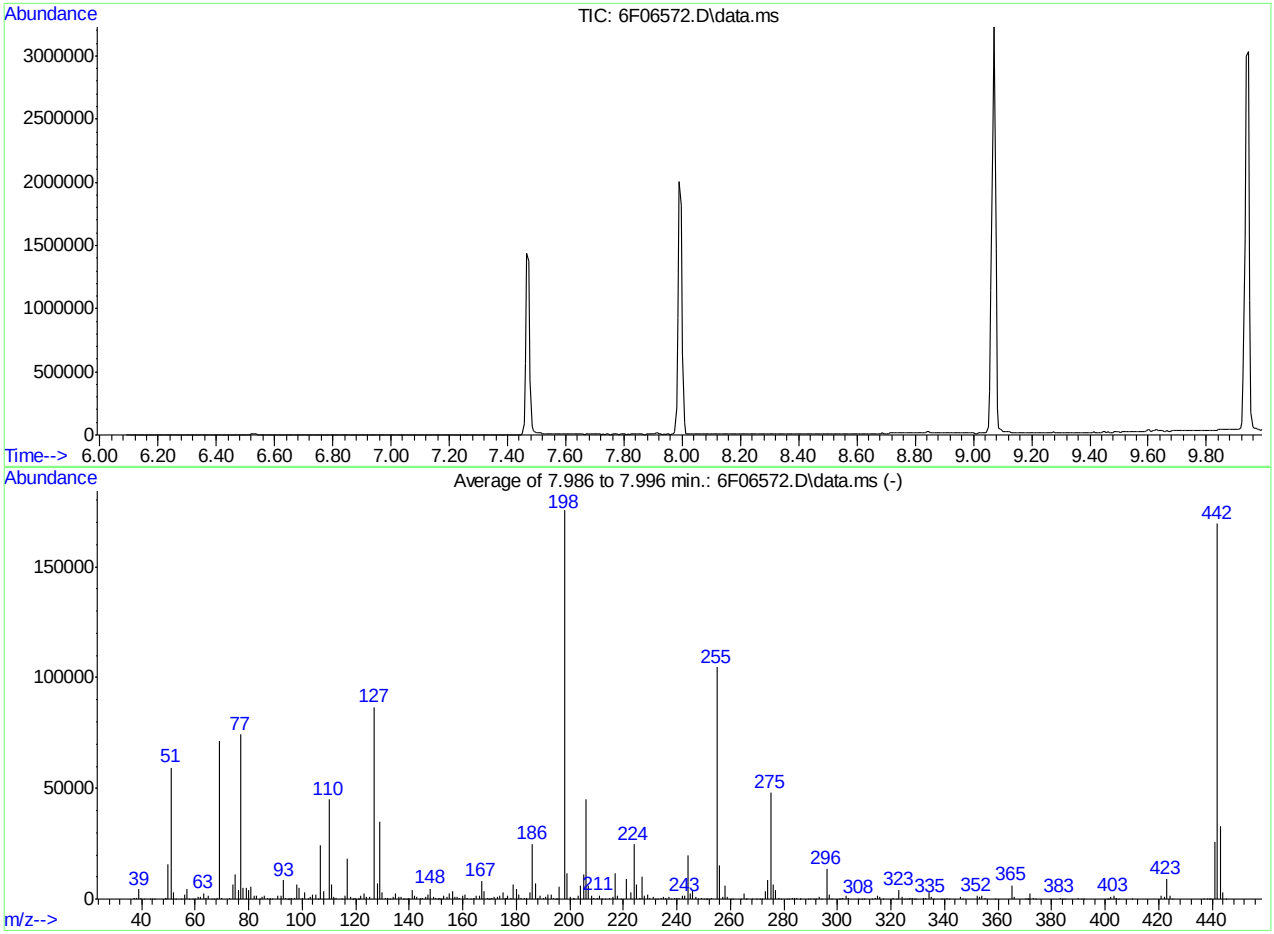
response 4586970

Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

SW-846 Method 8270

Data File : C:\msdchem\1\data\S6F254_081420\6F06572.D Vial: 1
Acq On : 14 Aug 2020 12:30 pm Operator: marthav
Sample : DFTPP Inst : MSBNA10
Misc : op81484,S6F254,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\methods\DFTPP.m (RTE Integrator)
Title : Tune Evaluation



AutoFind: Scans 355, 356, 357; Background Corrected with Scan 349

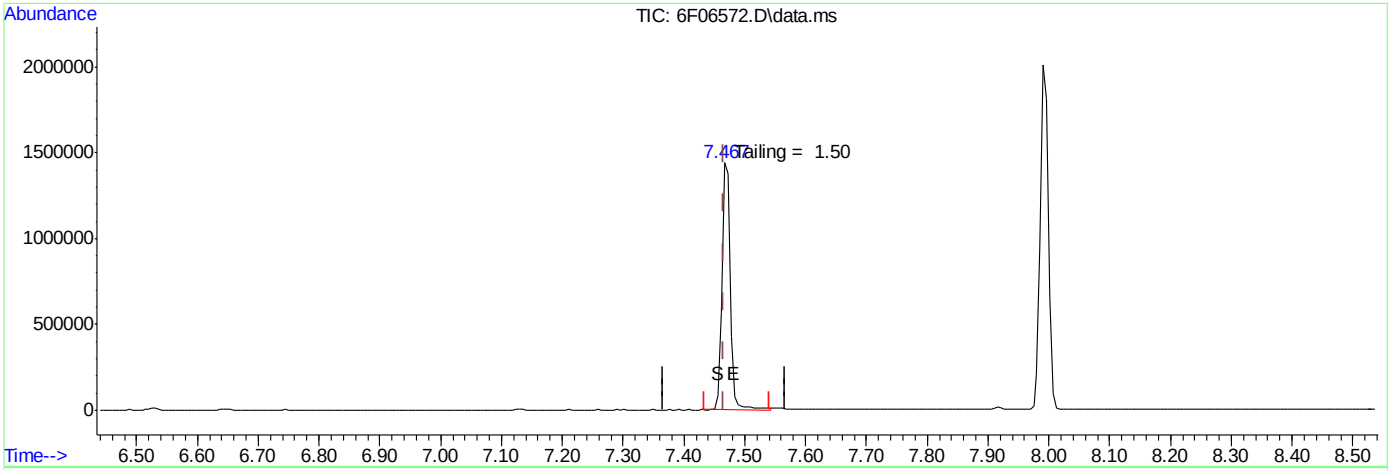
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	33.8	59315	PASS
68	69	0.00	2	0.6	399	PASS
69	198	0.00	100	40.7	71416	PASS
70	69	0.00	2	0.6	405	PASS
127	198	40	60	49.5	86805	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	175488	PASS
199	198	5	9	6.6	11627	PASS
275	198	10	30	27.4	48077	PASS
365	198	1	100	3.5	6195	PASS
441	443	0.01	100	78.8	25833	PASS
442	198	40	100	96.5	169416	PASS
443	442	17	23	19.3	32768	PASS

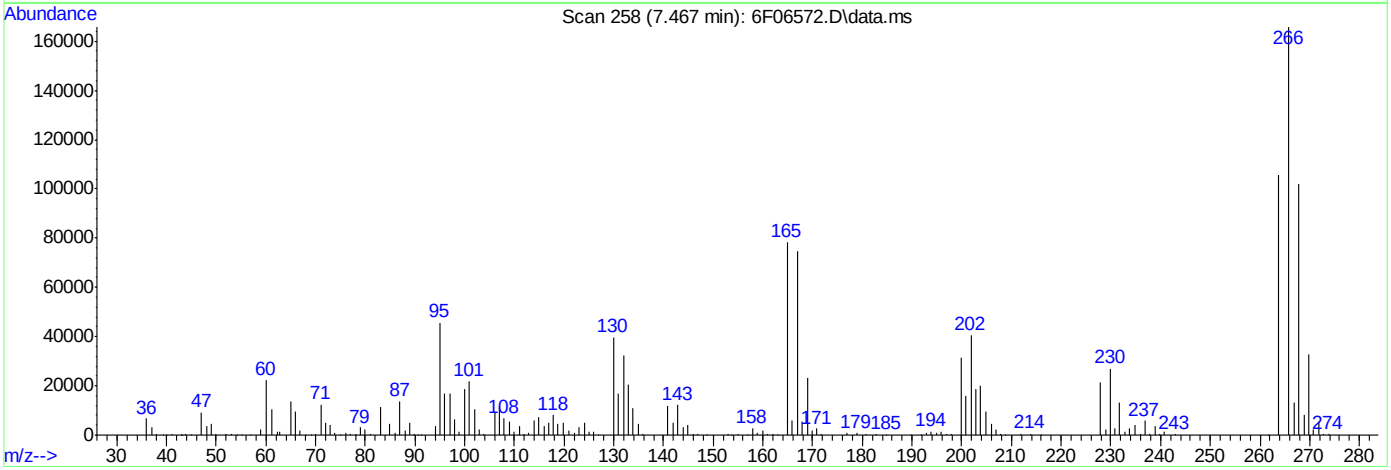
6F06572.D DFTPP.m Fri Aug 14 14:07:04 2020

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F254_081420\6F06572.D
Sample : DFTPP
Misc : op81484,S6F254,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1
Acq On : 14 Aug 2020 12:30 pm Operator: marthav

Quant Time: Aug 14 14:06:58 2020
Quant Method : C:\msdchem\1\methods\DFTPP.m
Quant Title : Tune Evaluation





TIC: 6F06572.D\data.ms

(1) Pentachlorophenol

7.467min (0.000) 55.40

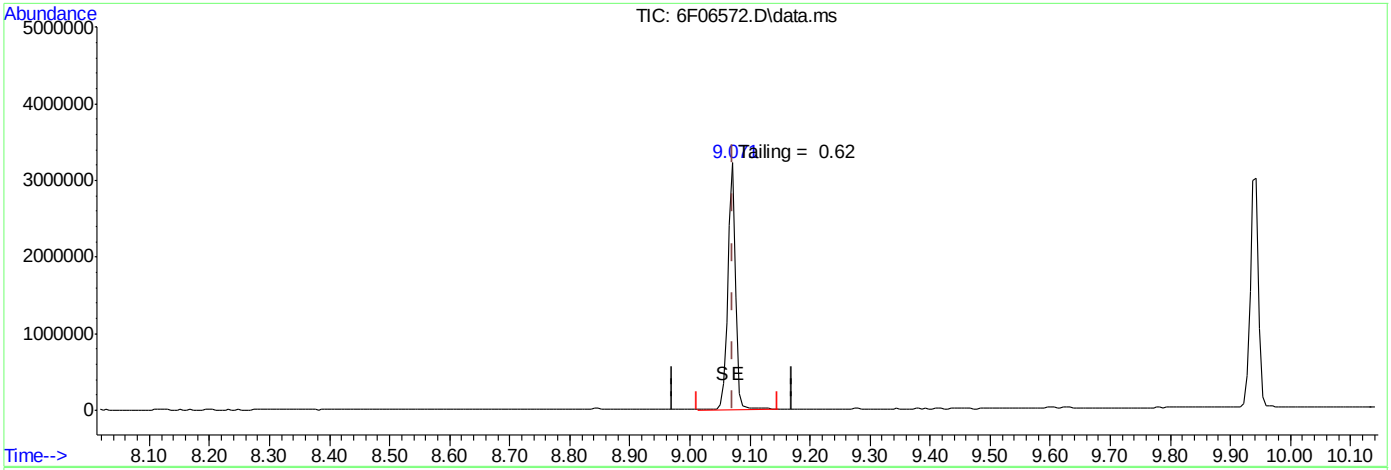
response 1325115

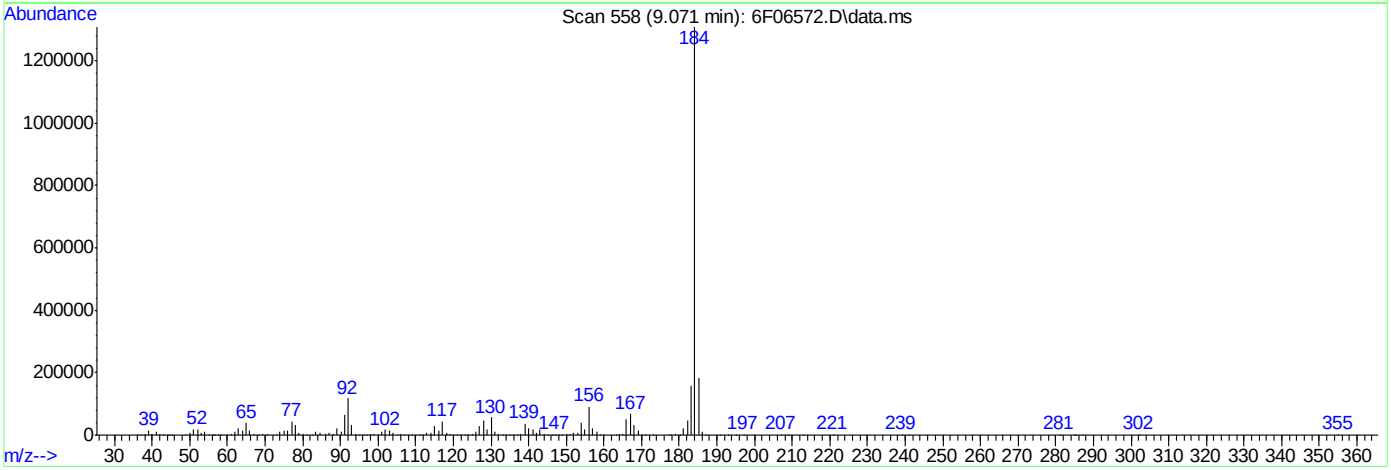
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F254_081420\6F06572.D
Sample : DFTPP
Misc : op81484,S6F254,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1
Acq On : 14 Aug 2020 12:30 pm Operator: marthav

Quant Time: Aug 14 14:06:58 2020
Quant Method : C:\msdchem\1\methods\DFTPP.m
Quant Title : Tune Evaluation





TIC: 6F06572.D\data.ms

(3) Benzidine

9.071min (0.000) 68.07

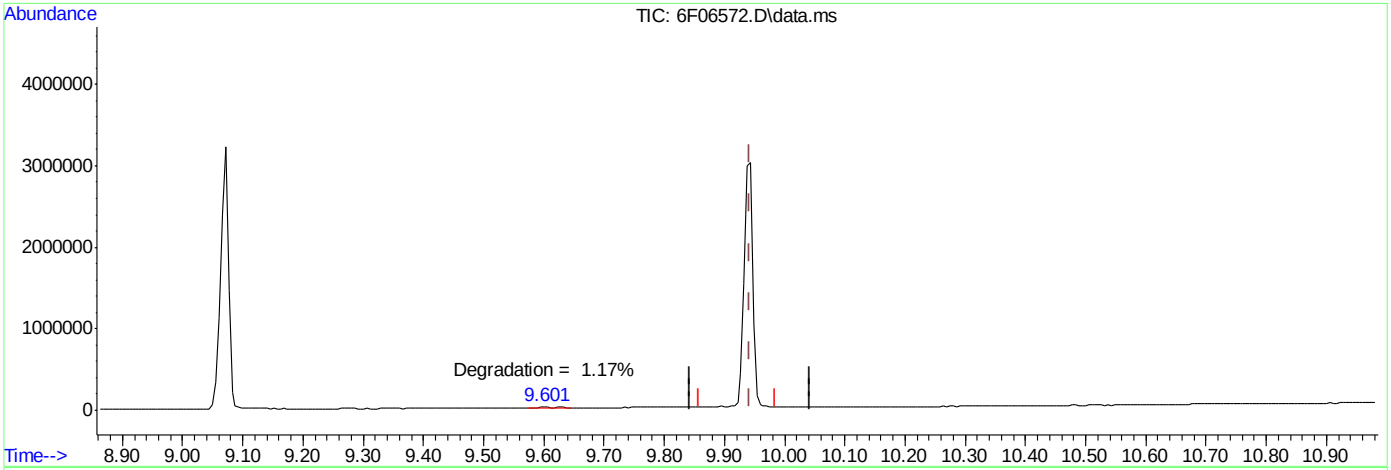
response 2887038

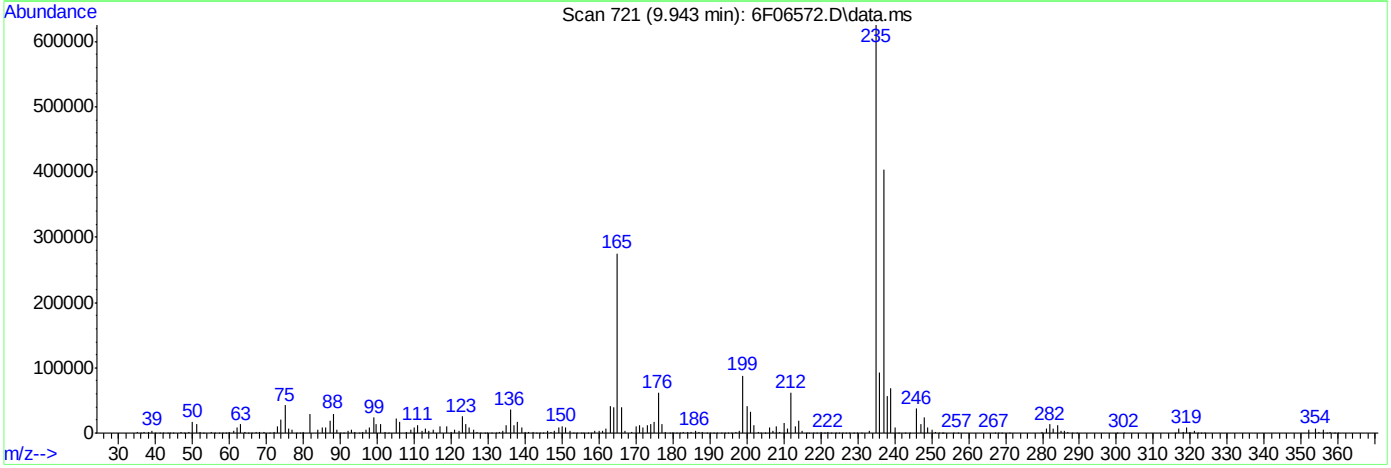
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F254_081420\6F06572.D
Sample : DFTPP
Misc : op81484,S6F254,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1
Acq On : 14 Aug 2020 12:30 pm Operator: marthav

Quant Time: Aug 14 14:06:58 2020
Quant Method : C:\msdchem\1\methods\DFTPP.m
Quant Title : Tune Evaluation





TIC: 6F06572.D\data.ms

(4) DDT

9.943min (0.000) 84.78

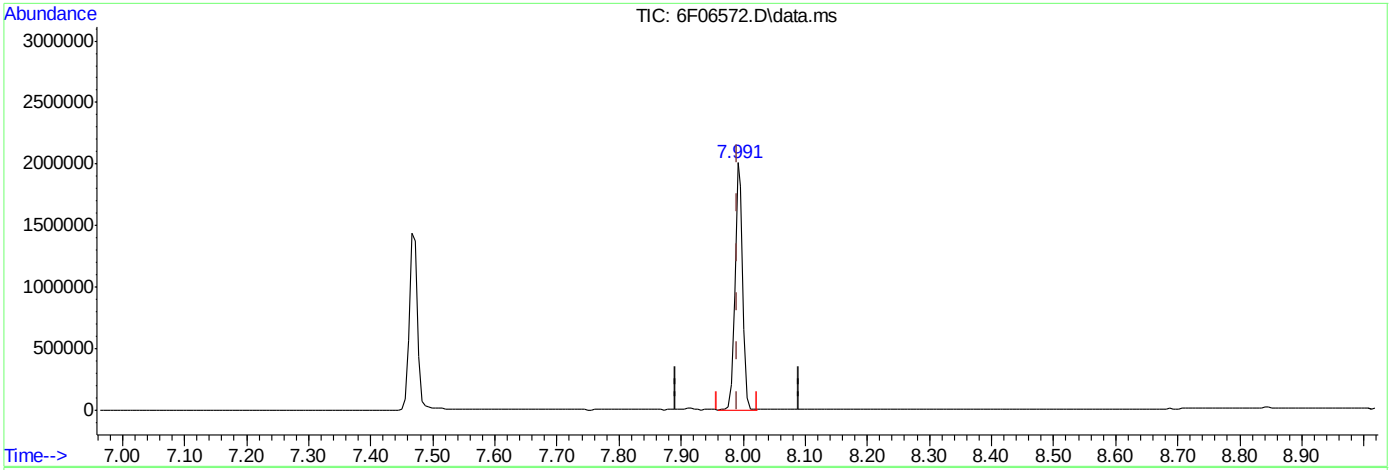
response 2959372

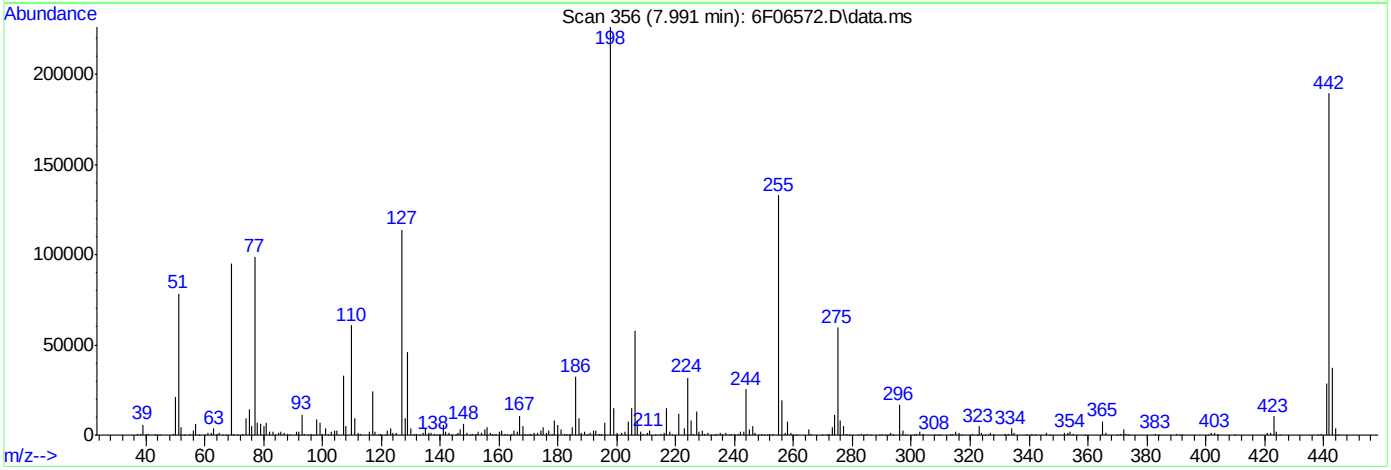
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F254_081420\6F06572.D
Sample : DFTPP
Misc : op81484,S6F254,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1
Acq On : 14 Aug 2020 12:30 pm Operator: marthav

Quant Time: Aug 14 14:06:58 2020
Quant Method : C:\msdchem\1\methods\DFTPP.m
Quant Title : Tune Evaluation





TIC: 6F06572.D\data.ms

(2) DFTPP

7.991min (0.000) 65.20

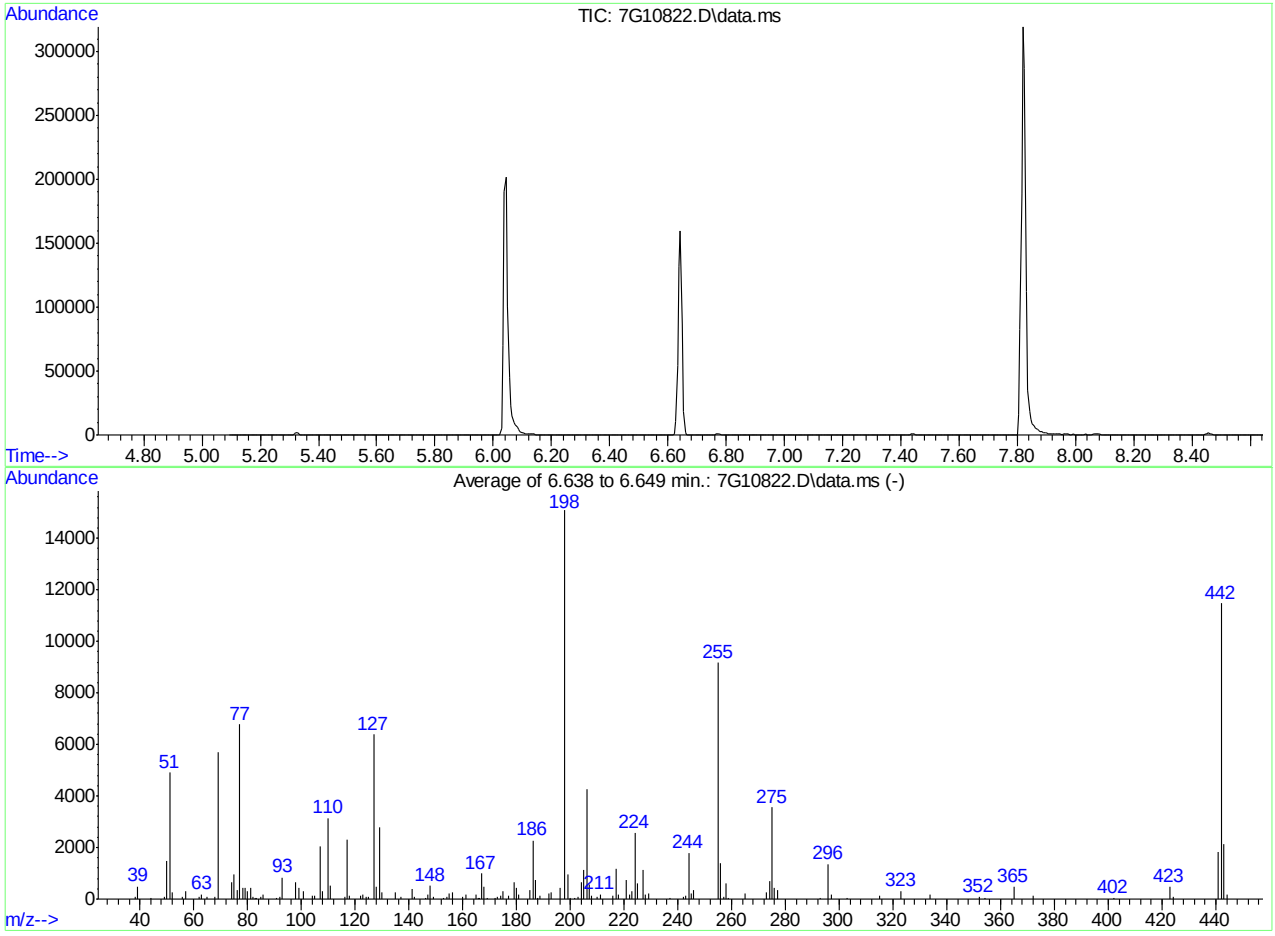
response 1839943

Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

SW-846 Method 8270

Data File : C:\msdchem\1\data\072120_7G472\7G10822.D Vial: 1
Acq On : 21 Jul 2020 8:44 am Operator: fouads
Sample : dftpp Inst : MSBNA8
Misc : op80679,S7G472,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\methods\dftpp.m (RTE Integrator)
Title : Tune Evaluation



AutoFind: Scans 290, 291, 292; Background Corrected with Scan 285

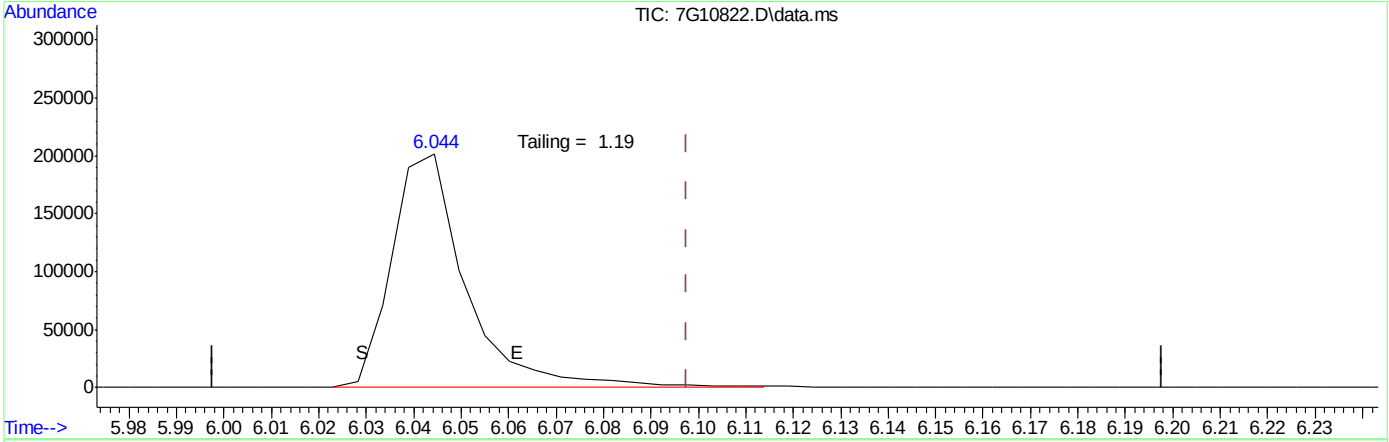
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	32.6	4908	PASS
68	69	0.00	2	1.6	91	PASS
69	198	0.00	100	37.7	5683	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	42.3	6380	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	15078	PASS
199	198	5	9	6.3	953	PASS
275	198	10	30	23.5	3550	PASS
365	198	1	100	3.1	473	PASS
441	443	0.01	100	84.1	1808	PASS
442	198	40	100	76.1	11474	PASS
443	442	17	23	18.7	2149	PASS

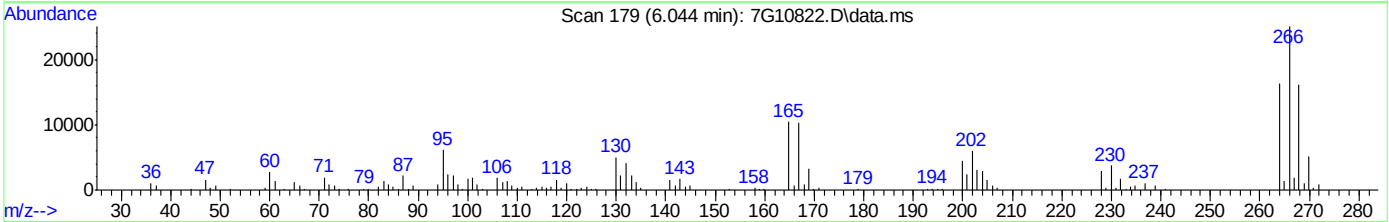
7G10822.D dftpp.m Wed Jul 22 13:20:11 2020

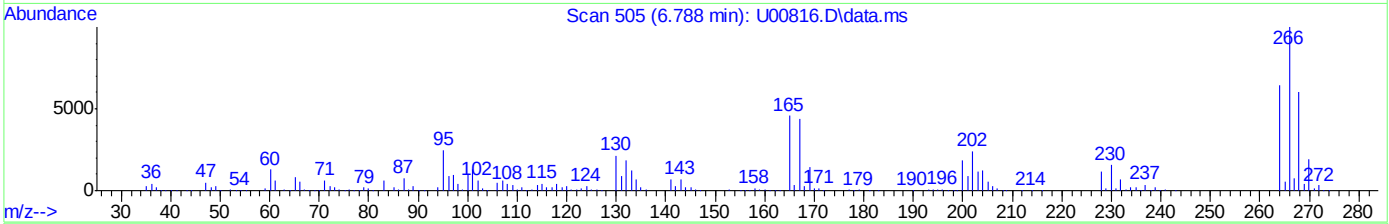
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10822.D
Acq On : 21 Jul 2020 8:44 am
Operator : fouads
Sample : dftpp
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 21 08:58:05 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Tue Jun 23 13:15:39 2020
Response via : Initial Calibration







TIC: 7G10822.D\data.ms

(1) Pentachlorophenol

6.044min (-0.053) 9.28

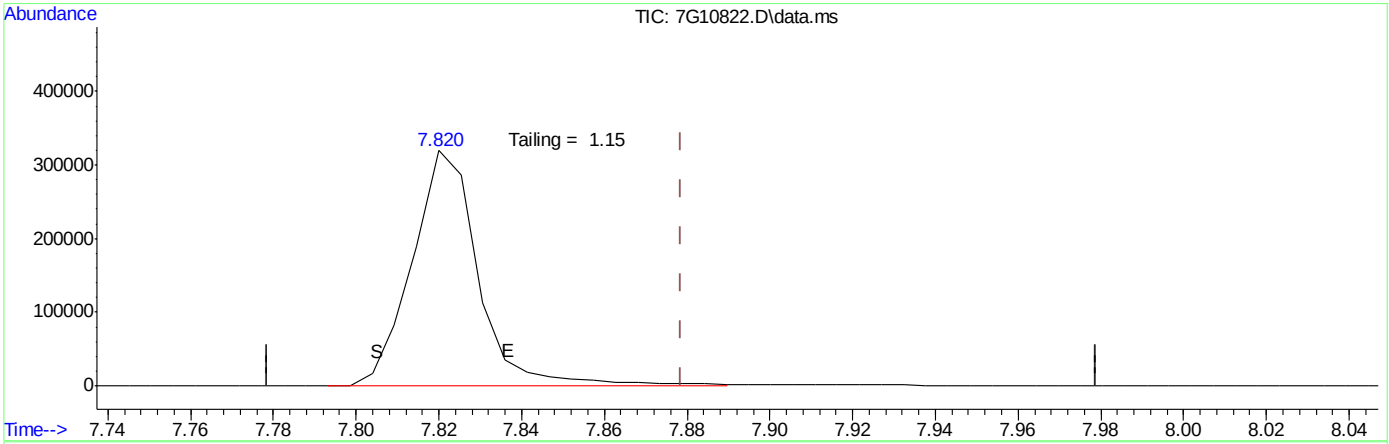
response 221934

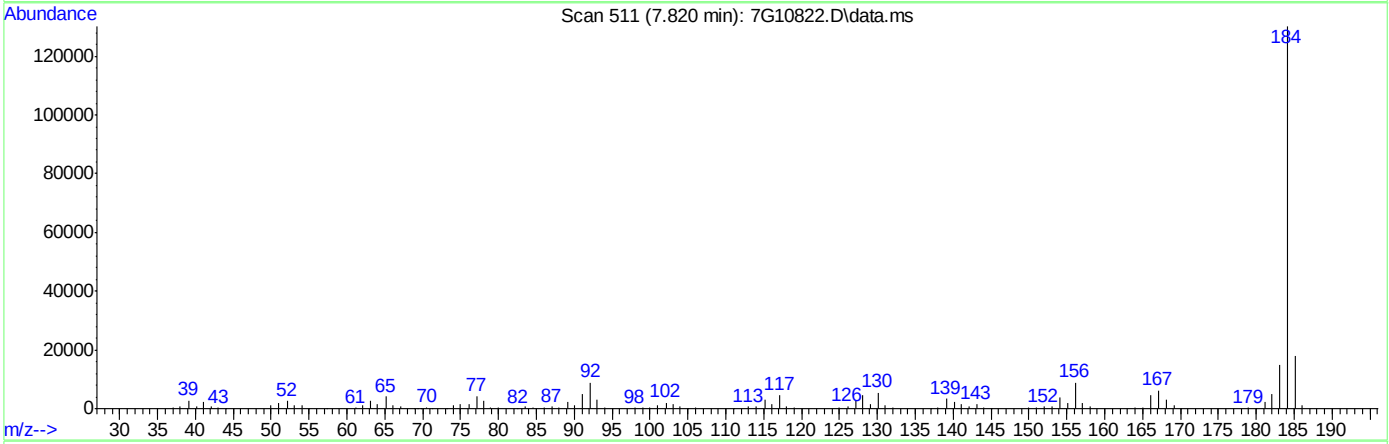
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10822.D
Acq On : 21 Jul 2020 8:44 am
Operator : fouads
Sample : dftpp
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 21 08:58:05 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Tue Jun 23 13:15:39 2020
Response via : Initial Calibration





TIC: 7G10822.D\data.ms

(3) Benzidine

7.820min (-0.059) 8.36

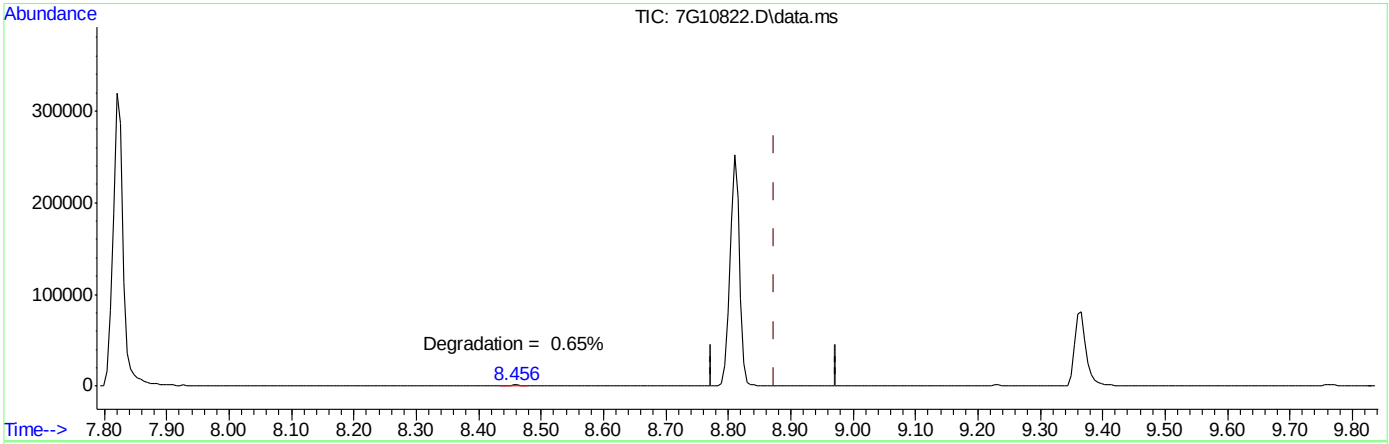
response 354536

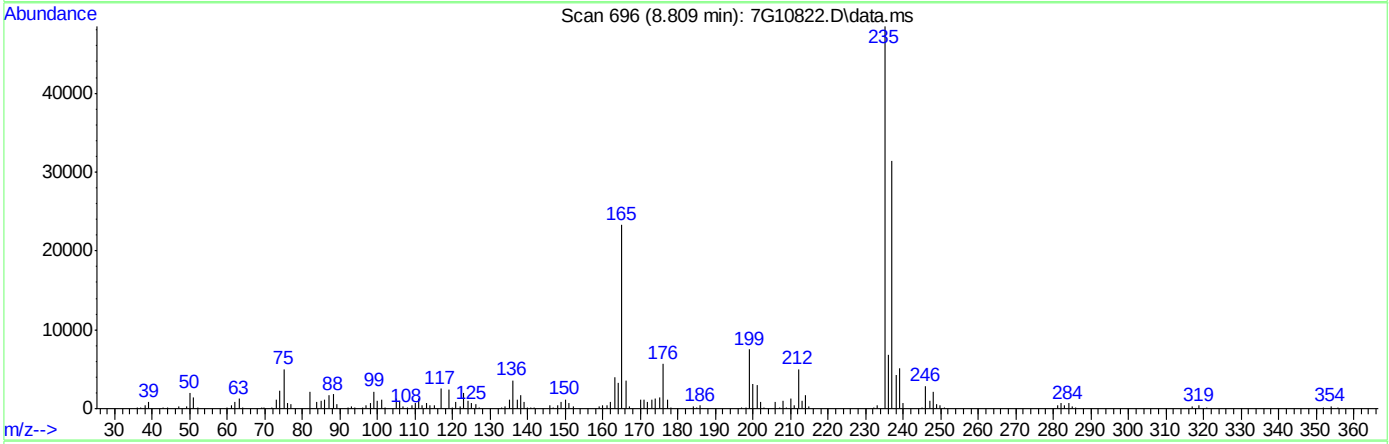
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10822.D
Acq On : 21 Jul 2020 8:44 am
Operator : fouads
Sample : dftpp
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 21 08:58:05 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Tue Jun 23 13:15:39 2020
Response via : Initial Calibration





TIC: 7G10822.D\data.ms

(4) DDT

8.809min (-0.064) 7.86

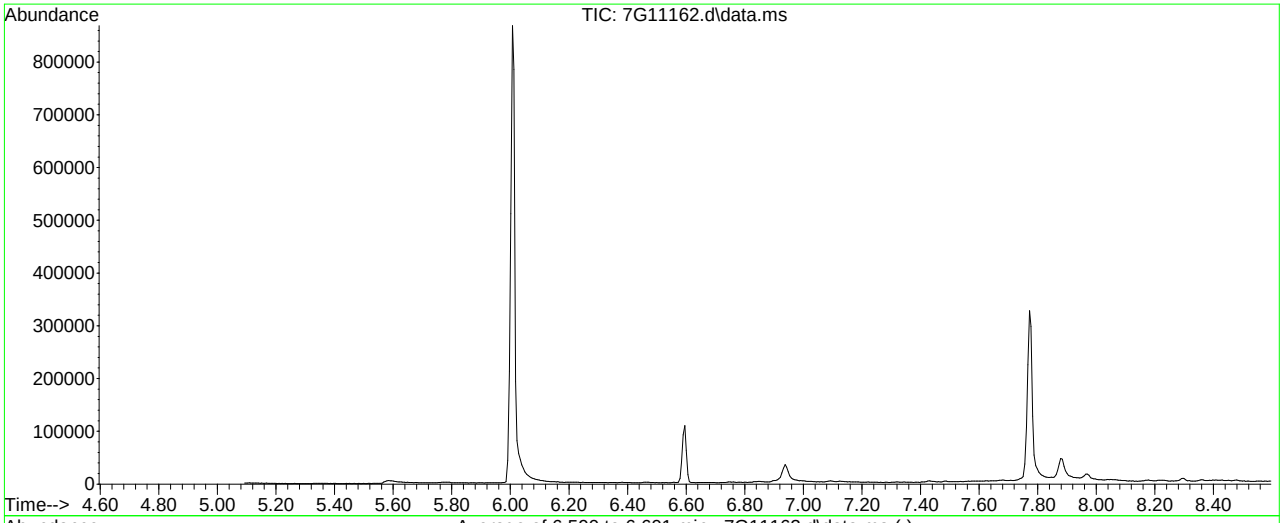
response 274297

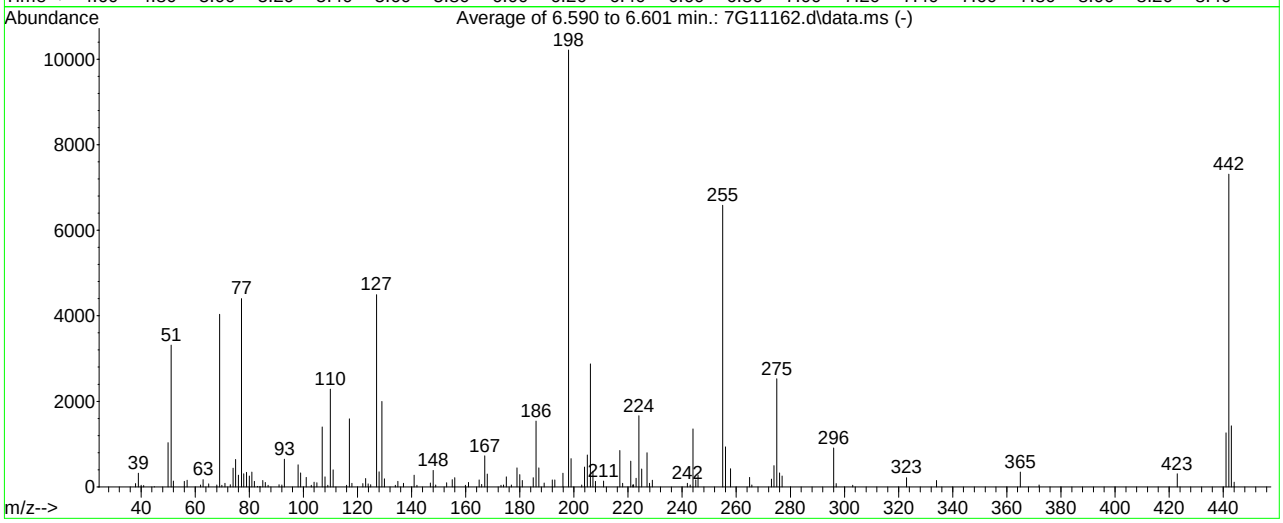
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

SW-846 Method 8270

Data File : C:\msdchem\1\data\ed...2020\s7g484\7G11162.d Vial: 1
Acq On : 13 Aug 2020 2:28 pm Operator: FOUADS
Sample : dftpp Inst : MSBNA8
Misc : op81342,S7G484,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\methods\dftpp.m (RTE Integrator)
Title : Tune Evaluation





AutoFind: Scans 281, 282, 283; Background Corrected with Scan 276

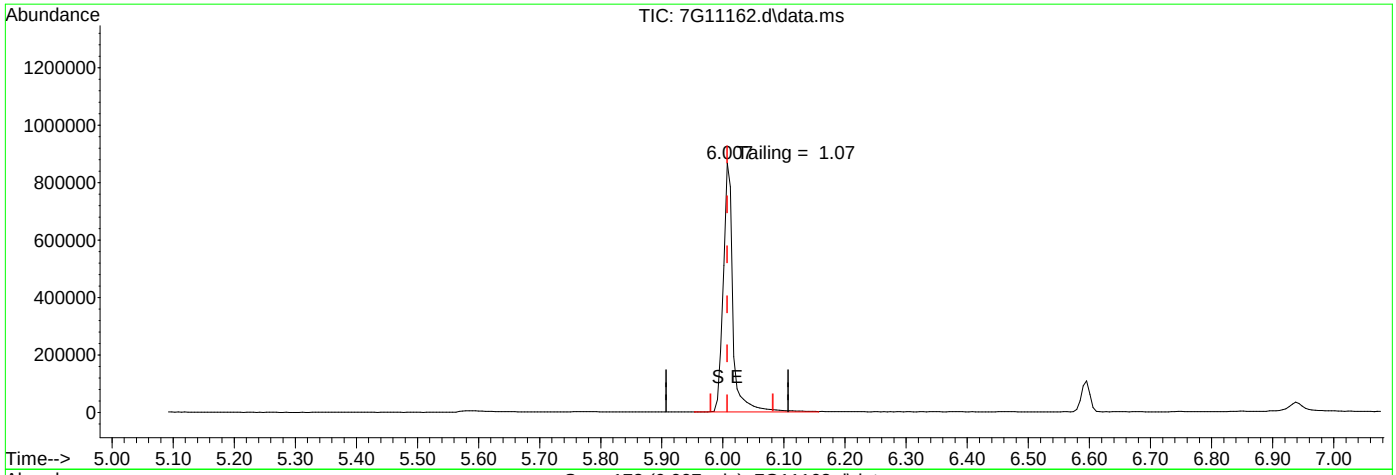
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	32.5	3317	PASS
68	69	0.00	2	1.1	43	PASS
69	198	0.00	100	39.5	4036	PASS
70	69	0.00	2	0.9	36	PASS
127	198	40	60	44.0	4497	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	10216	PASS
199	198	5	9	6.5	662	PASS
275	198	10	30	24.8	2529	PASS
365	198	1	100	3.4	346	PASS
441	443	0.01	100	88.6	1263	PASS
442	198	40	100	71.6	7314	PASS
443	442	17	23	19.5	1426	PASS

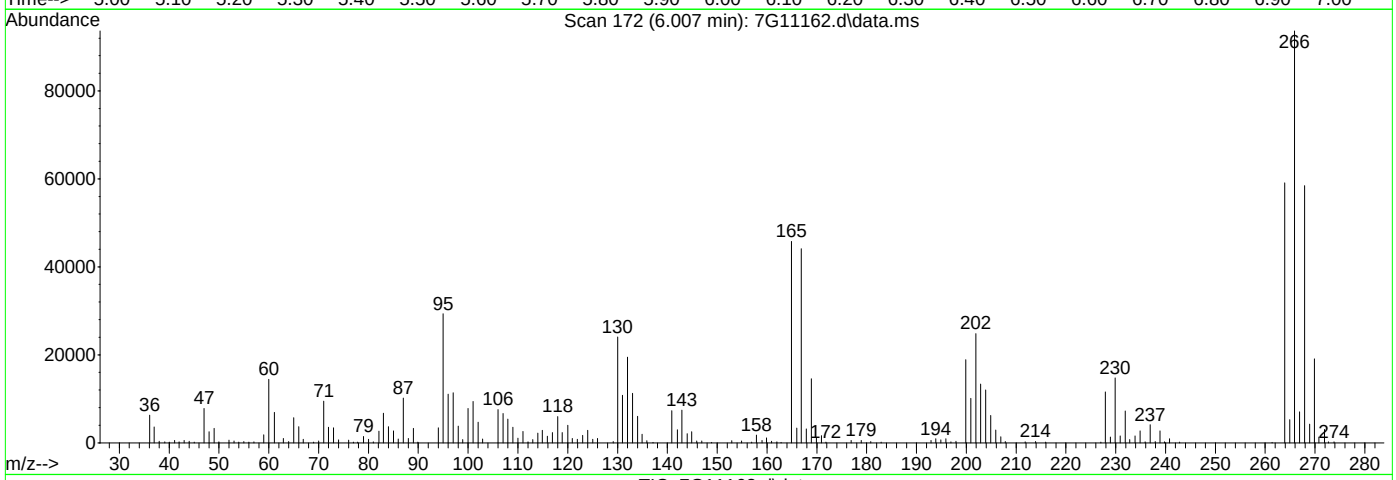
7G11162.d dftpp.m Fri Aug 14 03:05:21 2020

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
Data File : 7G11162.d
Acq On : 13 Aug 2020 2:28 pm
Operator : FOUADS
Sample : dftpp
Misc : op81342,S7G484,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 03:09:14 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Fri Aug 14 03:02:49 2020
Response via : Initial Calibration





TIC: 7G11162.d\data.ms

(1) Pentachlorophenol

6.007min (0.000) 39.23

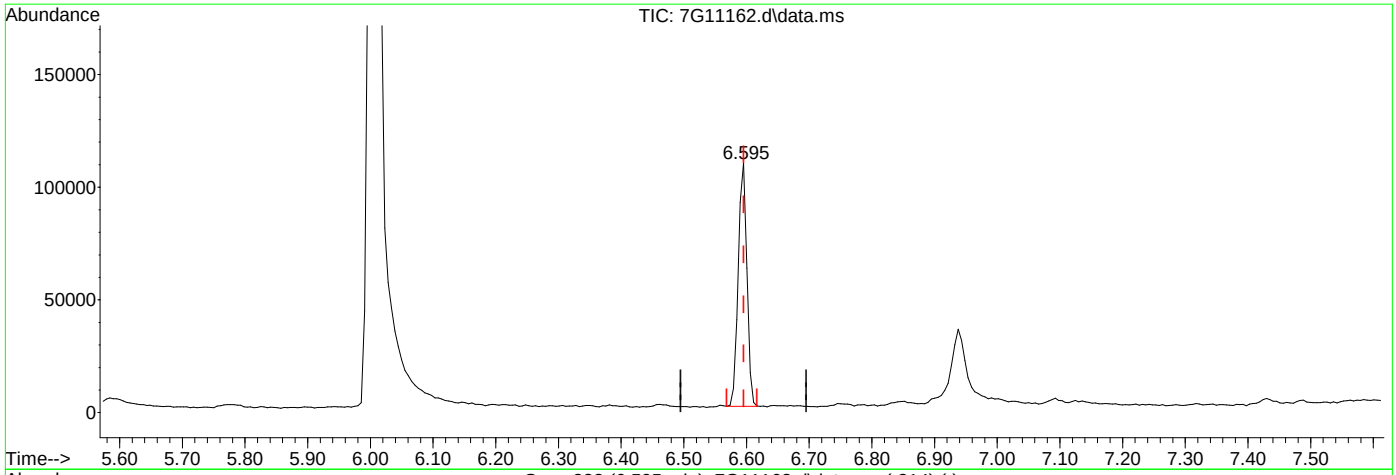
response 938313

Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
Data File : 7G11162.d
Acq On : 13 Aug 2020 2:28 pm
Operator : FOUADS
Sample : dftpp
Misc : op81342,S7G484,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 03:09:14 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Fri Aug 14 03:02:49 2020
Response via : Initial Calibration



TIC: 7G11162.d\data.ms

(2) DFTPP

6.595min (0.000) 3.68

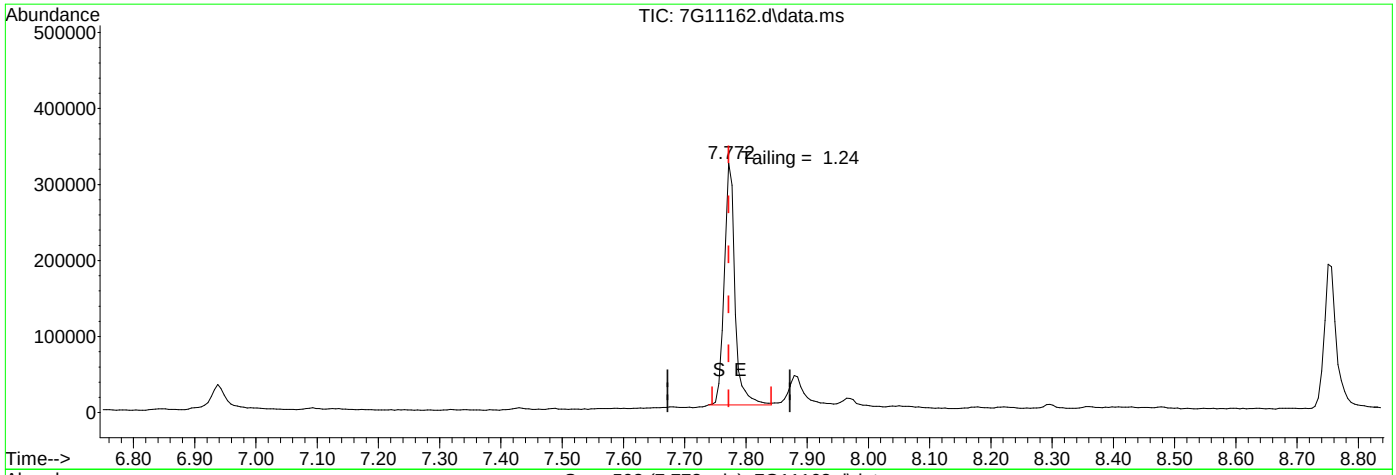
response 103764

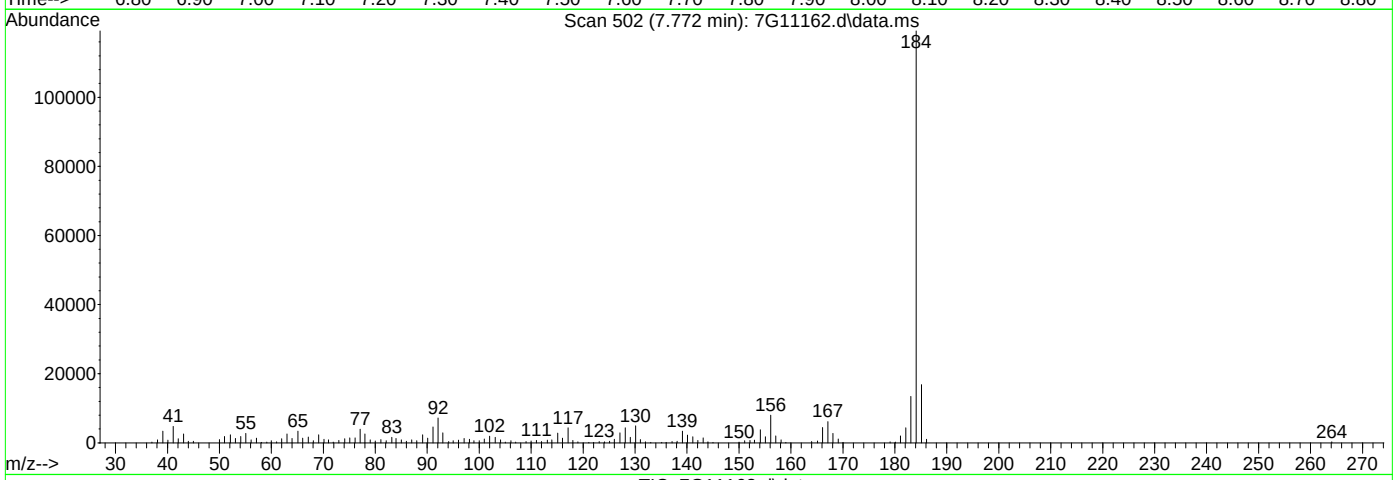
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
Data File : 7G11162.d
Acq On : 13 Aug 2020 2:28 pm
Operator : FOUADS
Sample : dftpp
Misc : op81342,S7G484,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 03:09:14 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Fri Aug 14 03:02:49 2020
Response via : Initial Calibration





TIC: 7G11162.d\data.ms

(3) Benzidine

7.772min (0.000) 8.95

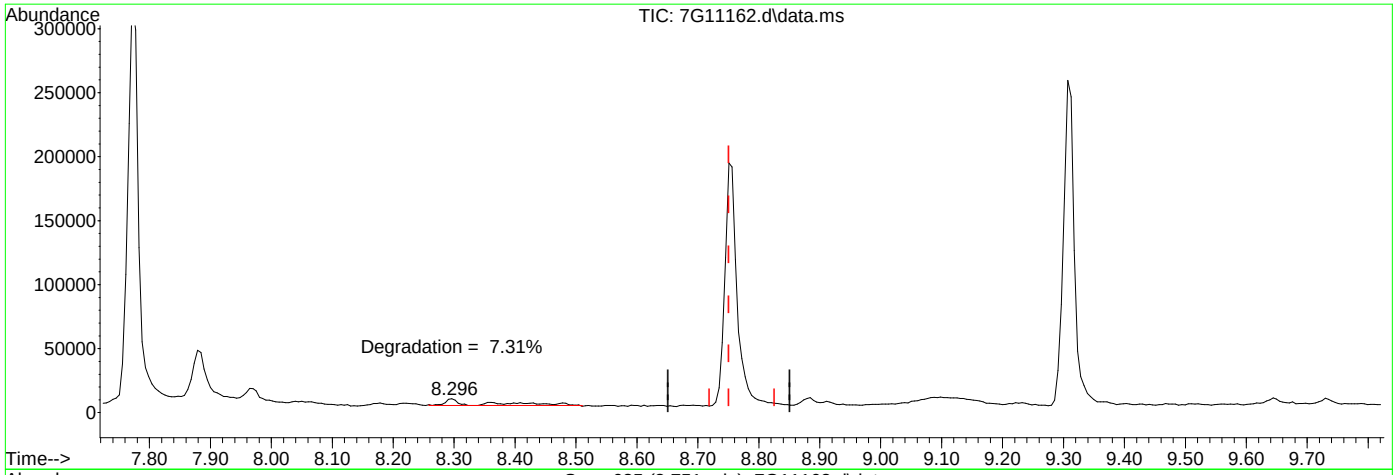
response 379435

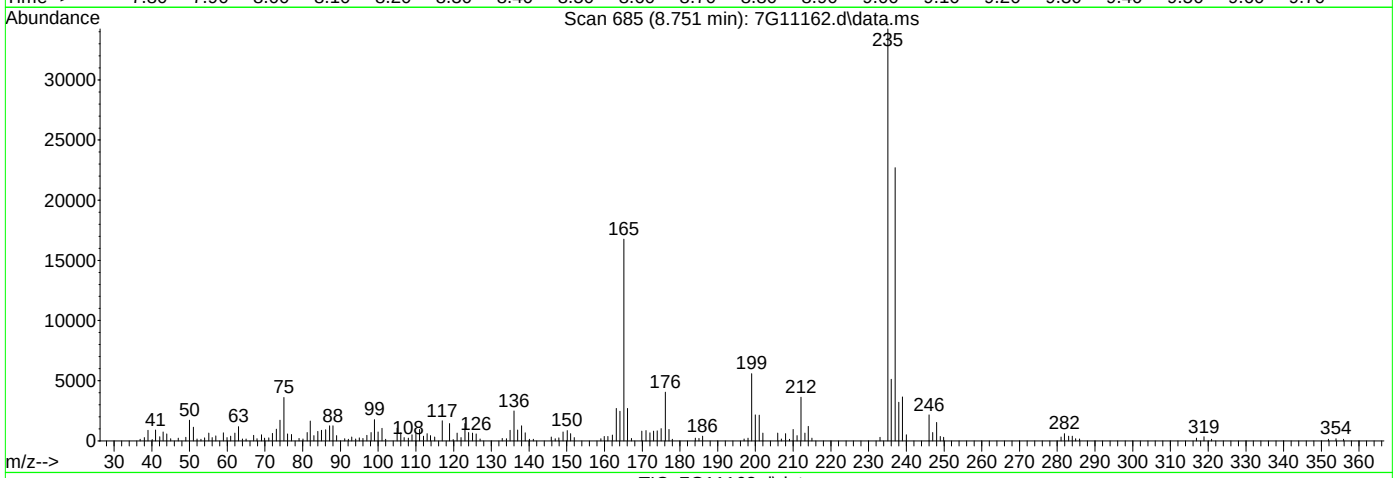
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
Data File : 7G11162.d
Acq On : 13 Aug 2020 2:28 pm
Operator : FOUADS
Sample : dftpp
Misc : op81342,S7G484,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 03:09:14 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Fri Aug 14 03:02:49 2020
Response via : Initial Calibration





TIC: 7G11162.d\data.ms

(4) DDT

8.751min (0.000) 7.72

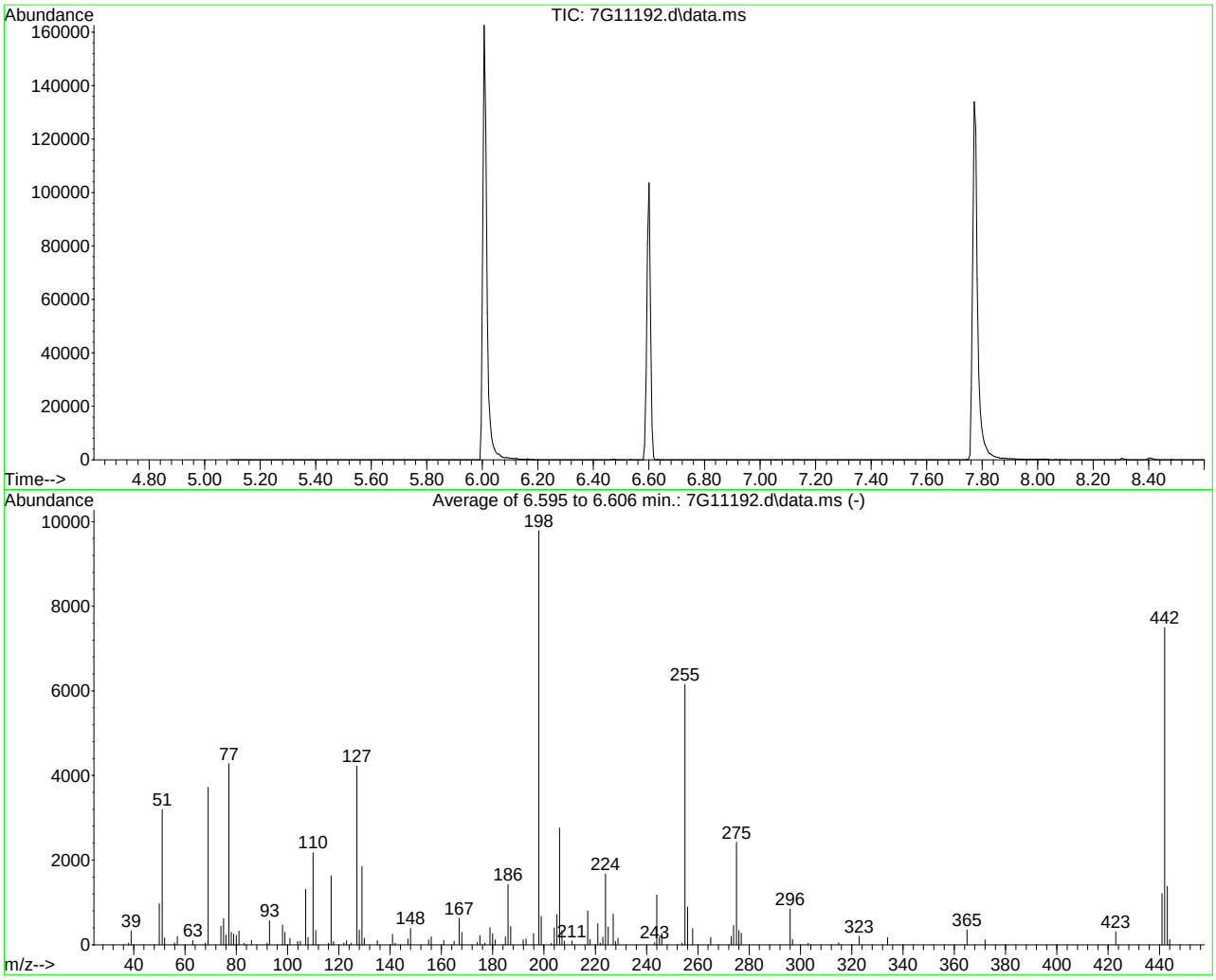
response 269517

Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

SW-846 Method 8270

Data File : C:\msdchem\1\data\Je...2020\S7G485\7G11192.d Vial: 1
Acq On : 14 Aug 2020 10:01 am Operator: FOUADS
Sample : dftpp Inst : MSBNA8
Misc : op81342,S7G485,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\methods\dftpp.m (RTE Integrator)
Title : Tune Evaluation



AutoFind: Scans 282, 283, 284; Background Corrected with Scan 278

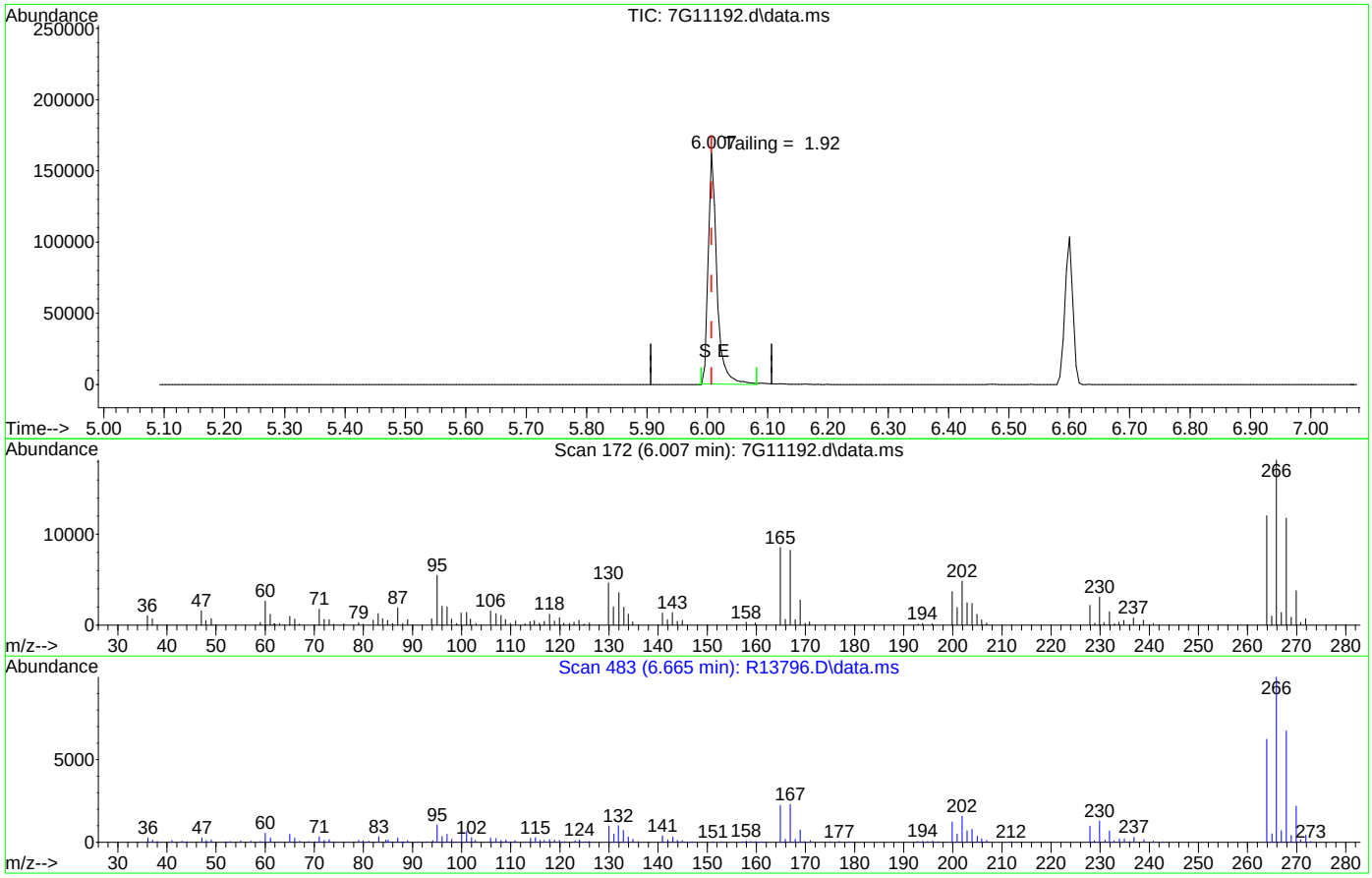
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	32.6	3190	PASS
68	69	0.00	2	0.9	34	PASS
69	198	0.00	100	38.0	3718	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	43.2	4224	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	9781	PASS
199	198	5	9	6.8	669	PASS
275	198	10	30	24.8	2422	PASS
365	198	1	100	3.5	347	PASS
441	443	0.01	100	87.6	1209	PASS
442	198	40	100	76.6	7496	PASS
443	442	17	23	18.4	1380	PASS

7G11192.d dftpp.m Sun Aug 16 22:40:53 2020

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-17-2020\S7G485\
Data File : 7G11192.d
Acq On : 14 Aug 2020 10:01 am
Operator : FOUADS
Sample : dftpp Inst : MSBNA8
Misc : op81342,S7G485,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Results File: dftpp.RES
Quant Time: Aug 16 22:40:38 2020
Quant Title : Tune Evaluation
QLast Update : Sun Aug 16 22:40:35 2020
Response via : Initial Calibration



TIC: 7G11192.d\data.ms

(1) Pentachlorophenol

6.007min (0.000) 6.89

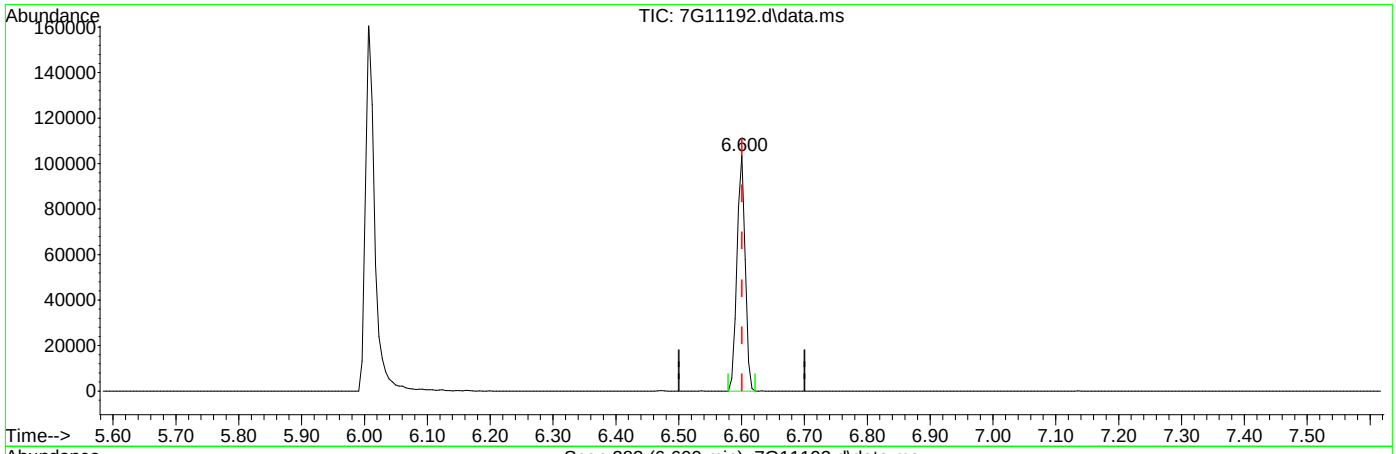
response 164758

Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-17-2020\S7G485\
Data File : 7G11192.d
Acq On : 14 Aug 2020 10:01 am
Operator : FOUADS
Sample : dftpp Inst : MSBNA8
Misc : op81342,S7G485,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Results File: dftpp.RES
Quant Time: Aug 16 22:40:38 2020
Quant Title : Tune Evaluation
QLast Update : Sun Aug 16 22:40:35 2020
Response via : Initial Calibration



TIC: 7G11192.d\data.ms

(2) DFTPP

6.600min (0.000) 3.33

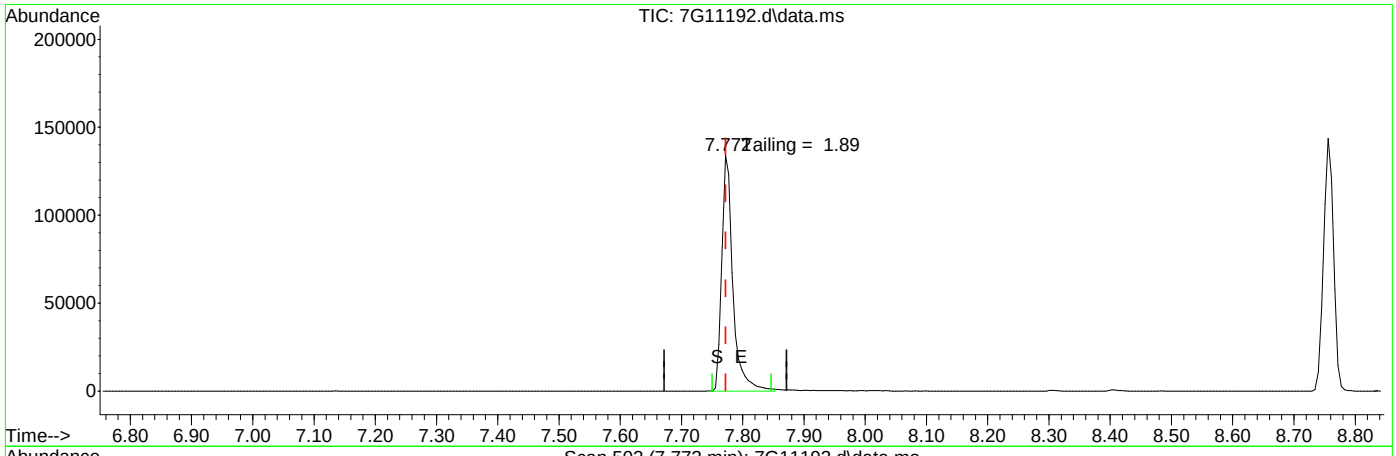
response 94104

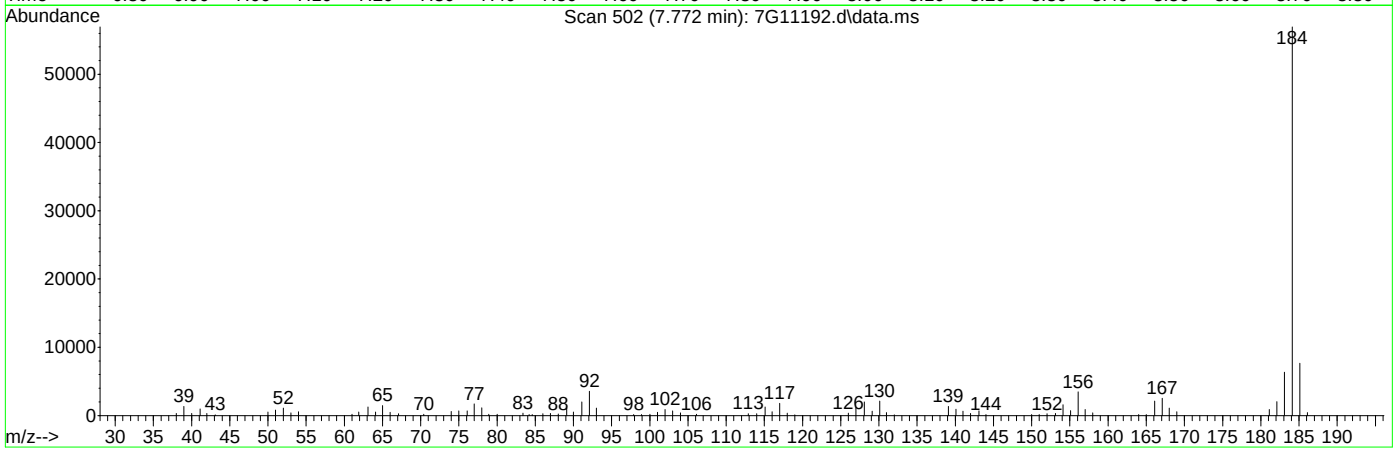
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-17-2020\S7G485\
Data File : 7G11192.d
Acq On : 14 Aug 2020 10:01 am
Operator : FOUADS
Sample : dftpp Inst : MSBNA8
Misc : op81342,S7G485,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Results File: dftpp.RES
Quant Time: Aug 16 22:40:38 2020
Quant Title : Tune Evaluation
QLast Update : Sun Aug 16 22:40:35 2020
Response via : Initial Calibration





TIC: 7G11192.d\data.ms

(3) Benzidine

7.772min (0.000) 3.99

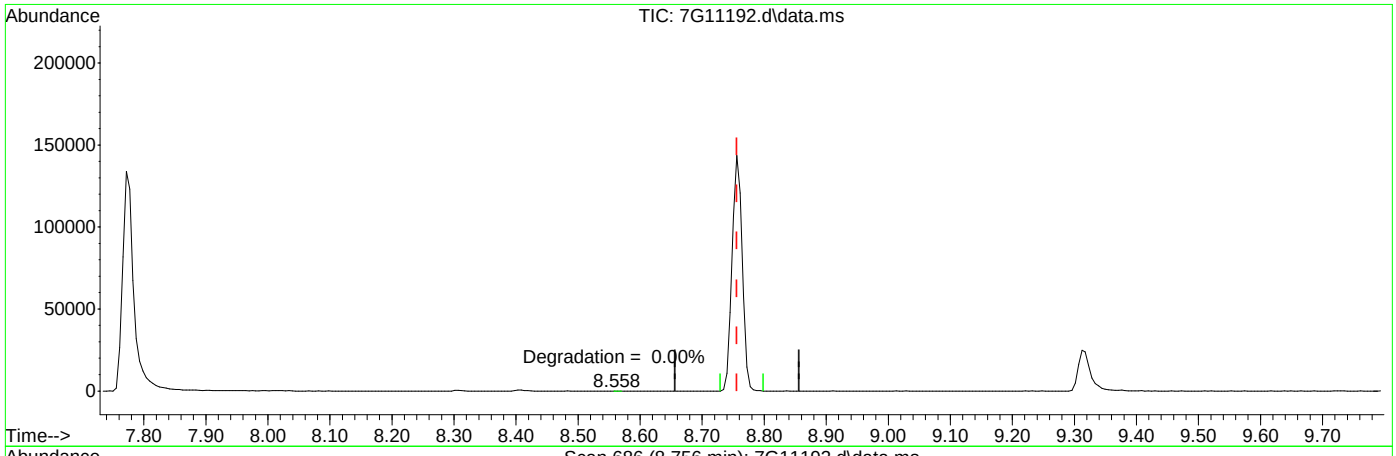
response 169389

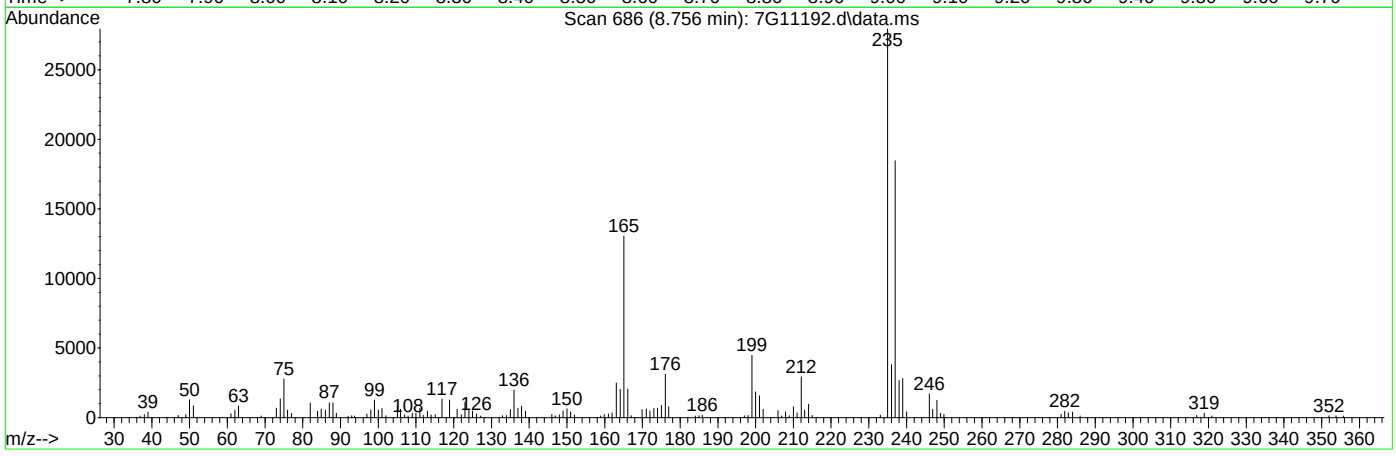
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-17-2020\S7G485\
Data File : 7G11192.d
Acq On : 14 Aug 2020 10:01 am
Operator : FOUADS
Sample : dftpp Inst : MSBNA8
Misc : op81342,S7G485,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Results File: dftpp.RES
Quant Time: Aug 16 22:40:38 2020
Quant Title : Tune Evaluation
QLast Update : Sun Aug 16 22:40:35 2020
Response via : Initial Calibration





TIC: 7G11192.d\data.ms

(4) DDT

8.756min (0.000) 4.66

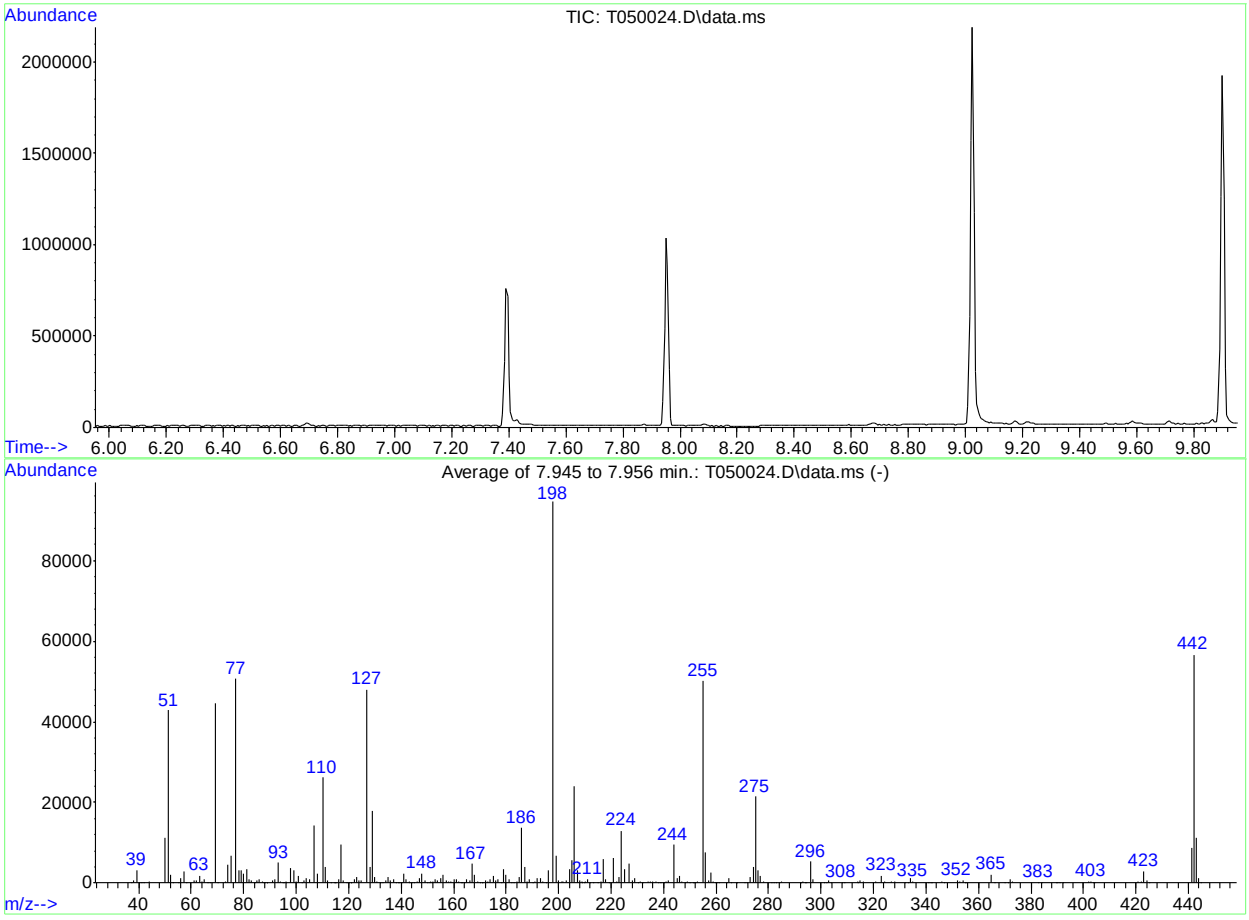
response 162618

Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

SW-846 Method 8270

Data File : C:\msdchem\1\DATA\st1745\T050024.D Vial: 1
Acq On : 17 Jul 2020 9:06 am Operator: nareshj
Sample : dftpp Inst : MSBNA06
Misc : OP81034,st1745,250,,,1,1,water Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\METHODS\dftpp.m (RTE Integrator)
Title : Tune Evaluation



AutoFind: Scans 536, 537, 538; Background Corrected with Scan 532

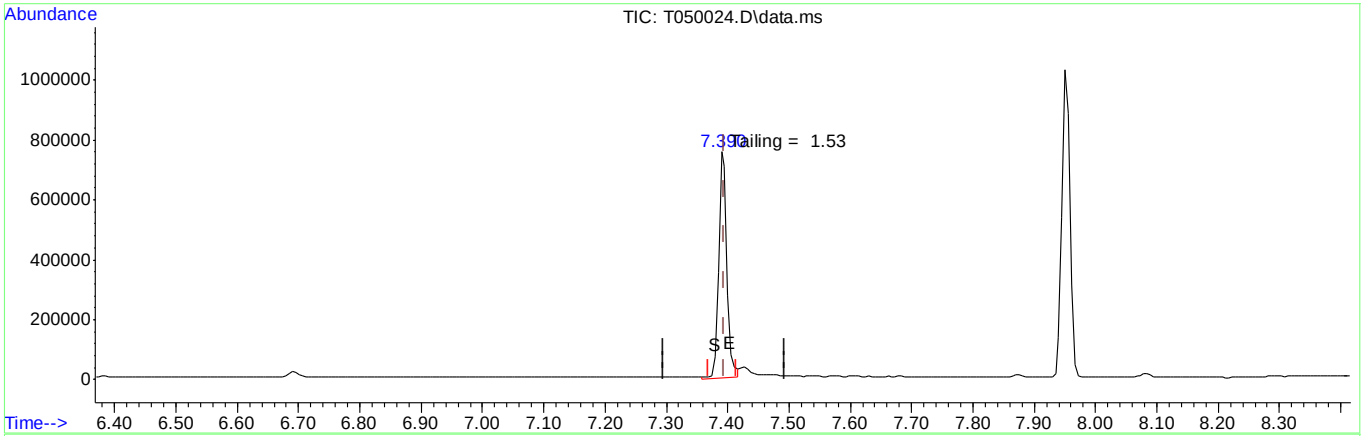
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	45.2	42797	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	47.1	44644	PASS
70	69	0.00	2	0.4	190	PASS
127	198	40	60	50.7	48000	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	94690	PASS
199	198	5	9	7.1	6714	PASS
275	198	10	30	22.8	21578	PASS
365	198	1	100	2.1	2021	PASS
441	443	0.01	100	77.6	8687	PASS
442	198	40	100	59.8	56584	PASS
443	442	17	23	19.8	11194	PASS

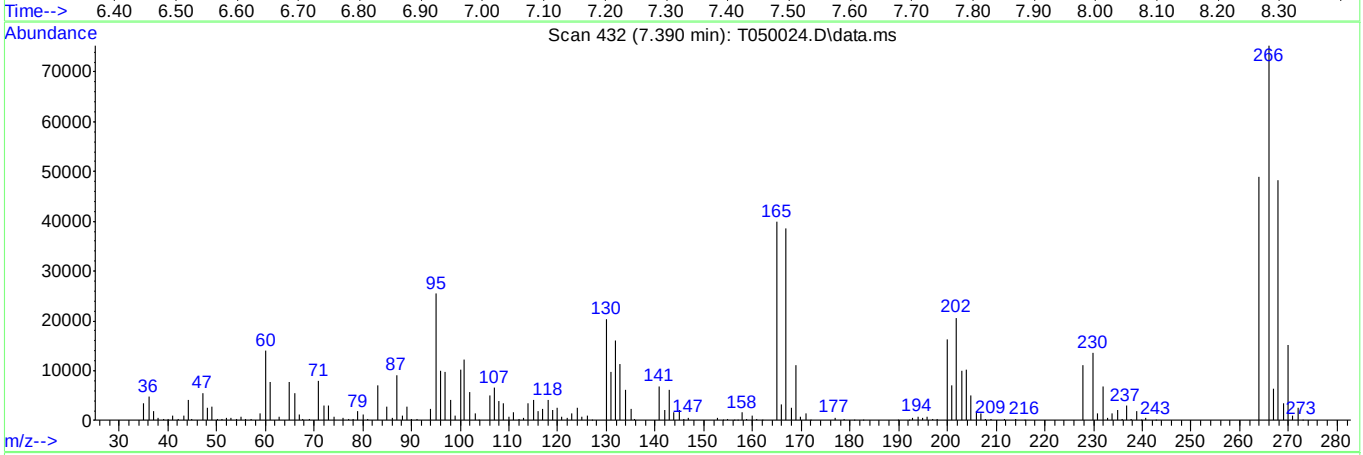
T050024.D dftpp.m Fri Jul 17 12:03:23 2020

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\st1745\
Data File : T050024.D
Acq On : 17 Jul 2020 9:06 am
Operator : nareshj
Sample : dftpp Inst : MSBNA06
Misc : OP81034,st1745,250,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 17 12:03:25 2020
Quant Method : C:\msdchem\1\METHODS\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Thu Jul 16 17:53:10 2020
Response via : Initial Calibration





TIC: T050024.D\data.ms

(1) Pentachlorophenol

7.390min (-0.005) 10053.68

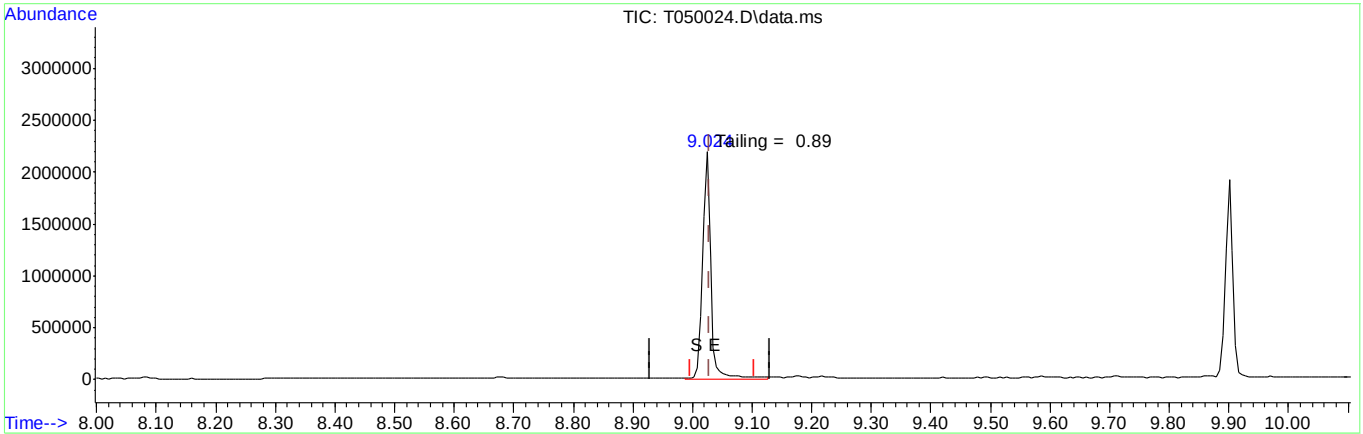
response 734522

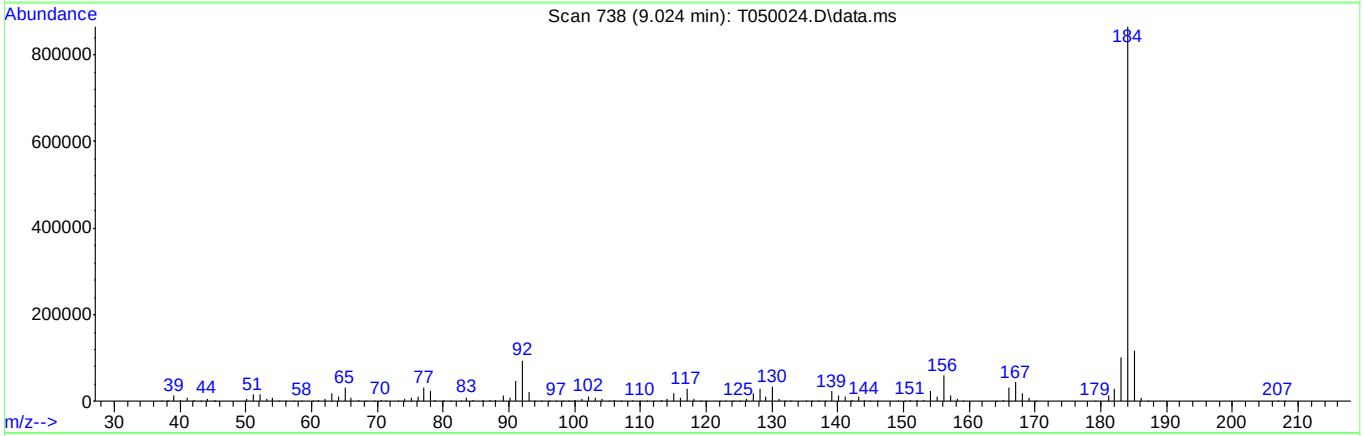
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\st1745\
Data File : T050024.D
Acq On : 17 Jul 2020 9:06 am
Operator : nareshj
Sample : dftpp Inst : MSBNA06
Misc : OP81034,st1745,250,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 17 12:03:25 2020
Quant Method : C:\msdchem\1\METHODS\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Thu Jul 16 17:53:10 2020
Response via : Initial Calibration





TIC: T050024.D\data.ms

(3) Benzidine

9.024min (-0.005) 6.61

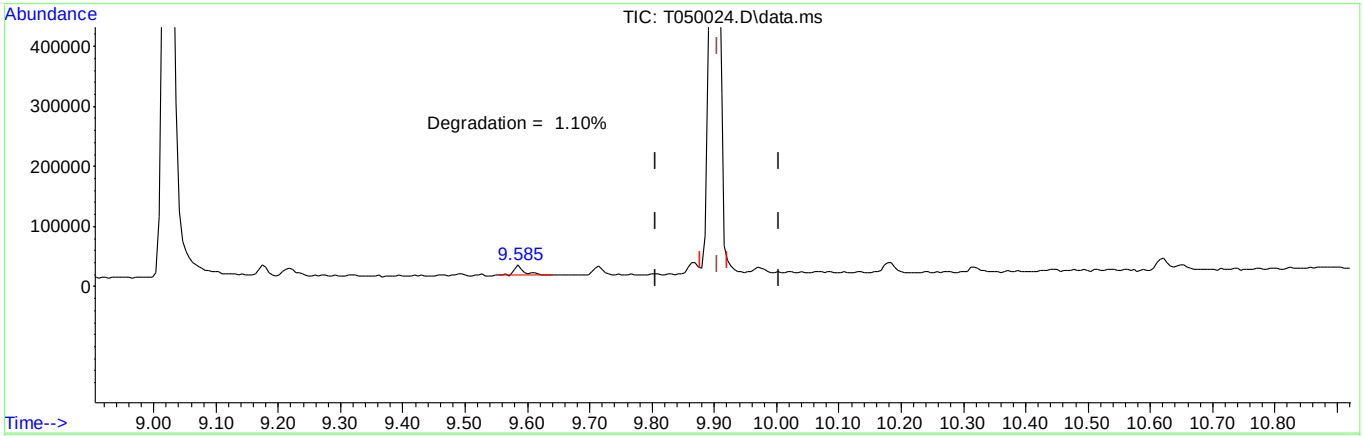
response 2006143

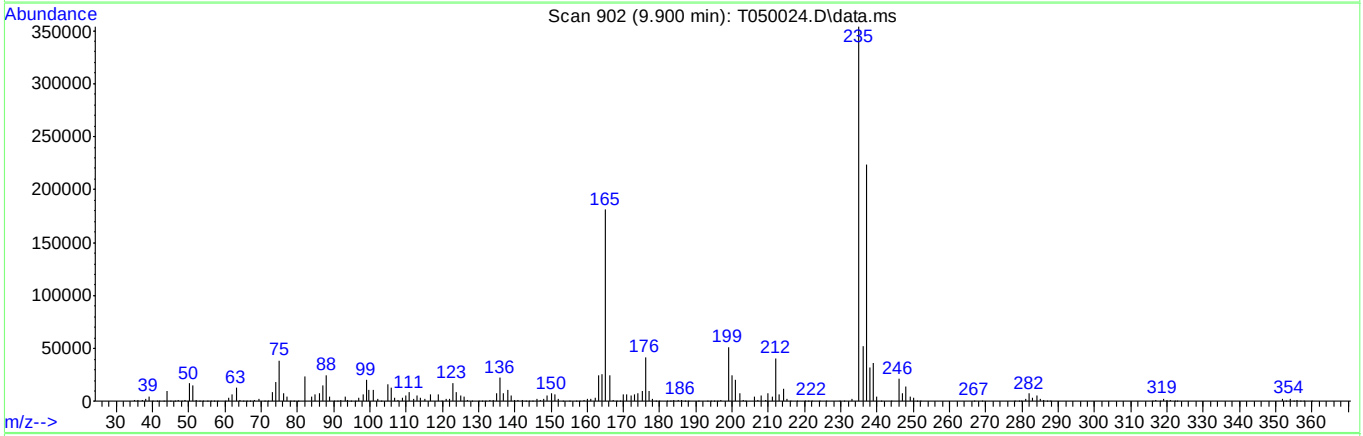
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\st1745\
Data File : T050024.D
Acq On : 17 Jul 2020 9:06 am
Operator : nareshj
Sample : dftpp Inst : MSBNA06
Misc : OP81034,st1745,250,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 17 12:03:25 2020
Quant Method : C:\msdchem\1\METHODS\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Thu Jul 16 17:53:10 2020
Response via : Initial Calibration





TIC: T050024.D\data.ms

(4) DDT

9.900min (-0.005) 12795.05

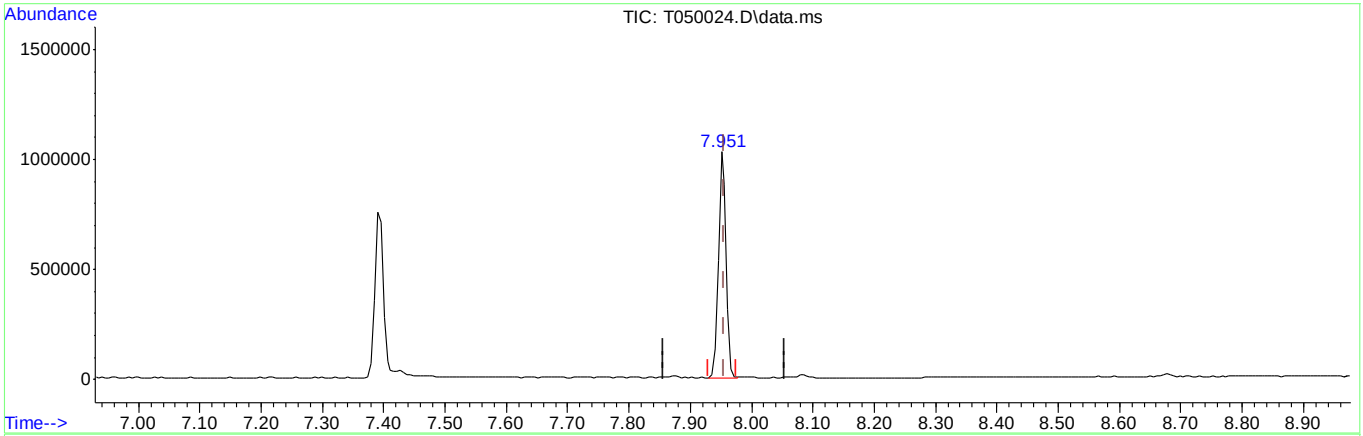
response 1648258

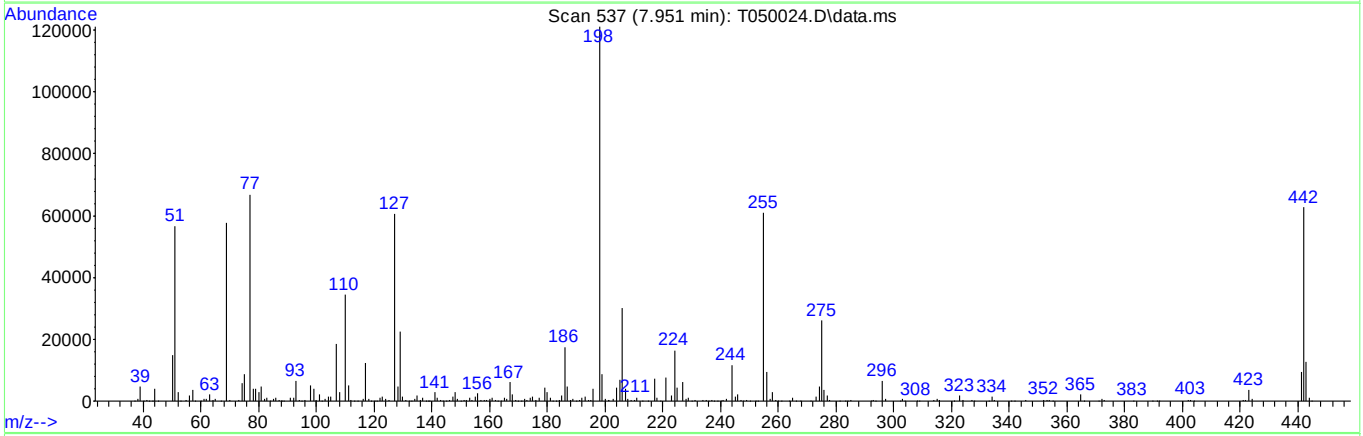
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\st1745\
Data File : T050024.D
Acq On : 17 Jul 2020 9:06 am
Operator : nareshj
Sample : dftpp Inst : MSBNA06
Misc : OP81034,st1745,250,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 17 12:03:25 2020
Quant Method : C:\msdchem\1\METHODS\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Thu Jul 16 17:53:10 2020
Response via : Initial Calibration





TIC: T050024.D\data.ms

(2) DFTPP

7.951min (-0.005) 3.10

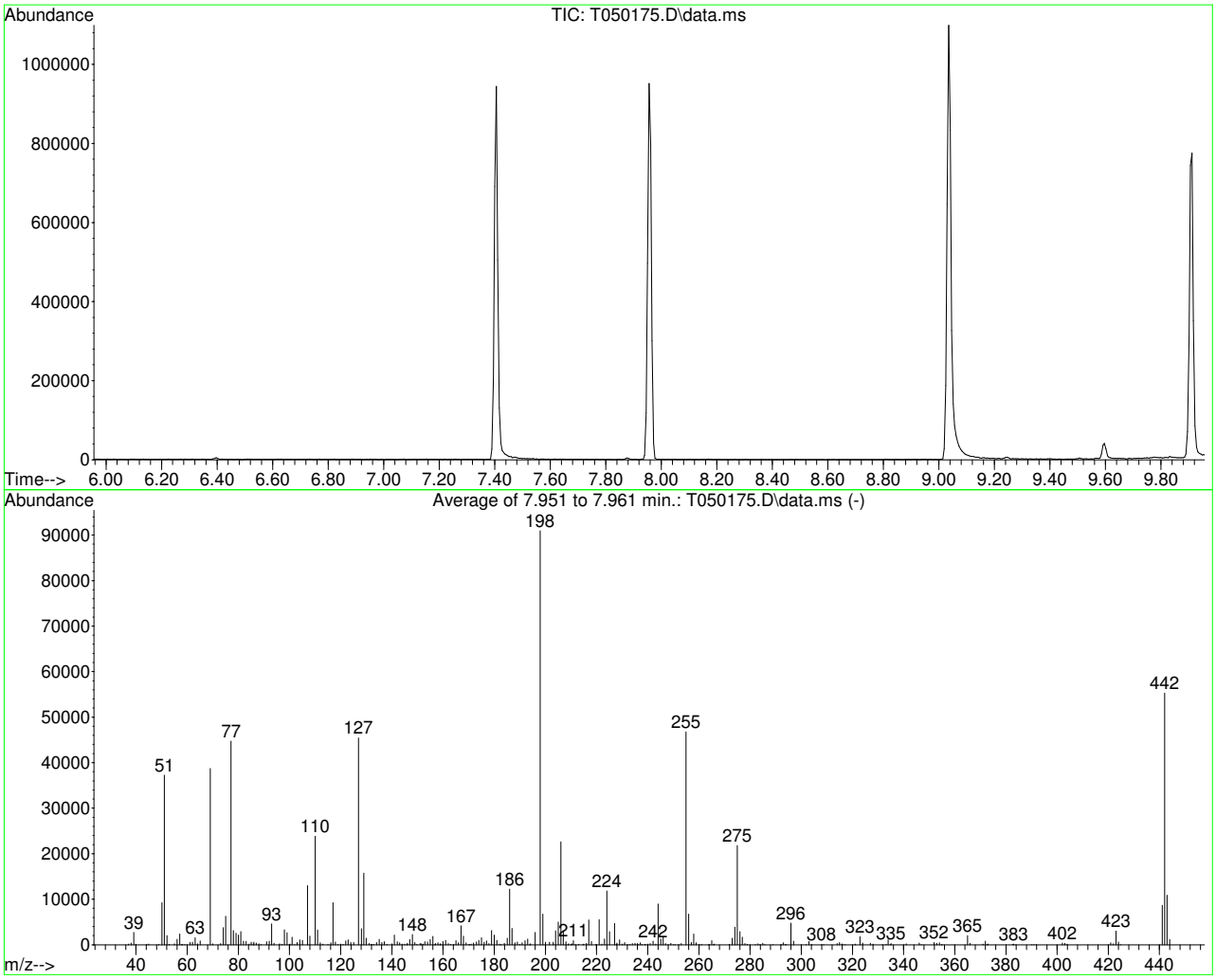
response 939934

Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

SW-846 Method 8270

Data File : C:\msdchem\1\data\Je...2020\ST1749\T050175.D Vial: 1
Acq On : 13 Aug 2020 2:20 pm Operator: nareshj
Sample : dftpp Inst : MSBNA06
Misc : OP81487,st1749,250,,,1,1,water Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\methods\dftpp.m (RTE Integrator)
Title : Tune Evaluation



AutoFind: Scans 537, 538, 539; Background Corrected with Scan 533

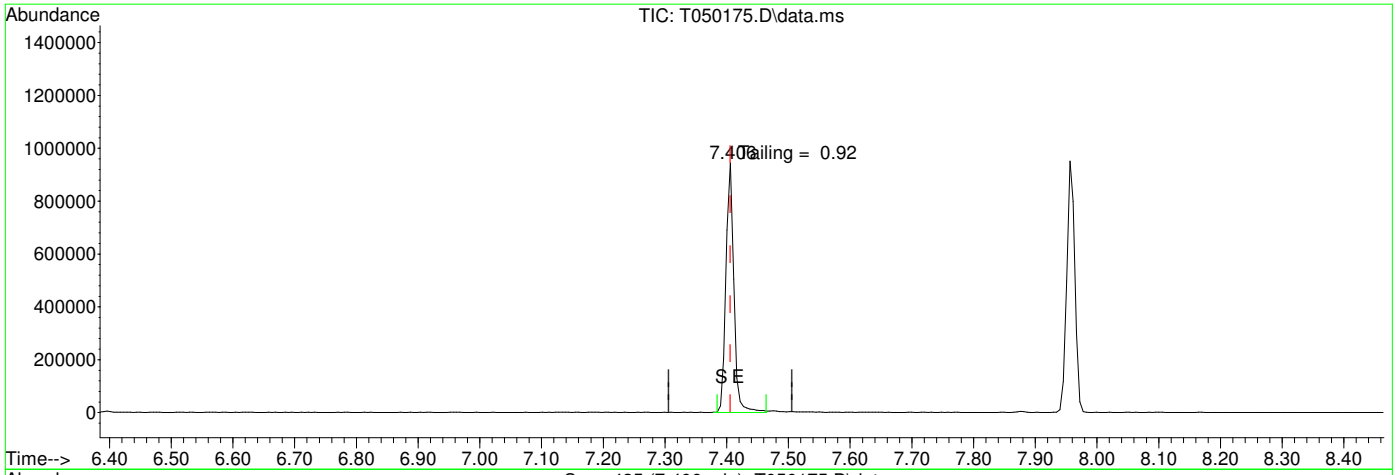
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	41.0	37253	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	42.6	38747	PASS
70	69	0.00	2	0.6	216	PASS
127	198	40	60	49.9	45411	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	90920	PASS
199	198	5	9	7.4	6761	PASS
275	198	10	30	23.9	21774	PASS
365	198	1	100	2.2	2044	PASS
441	443	0.01	100	79.6	8649	PASS
442	198	40	100	60.8	55304	PASS
443	442	17	23	19.6	10861	PASS

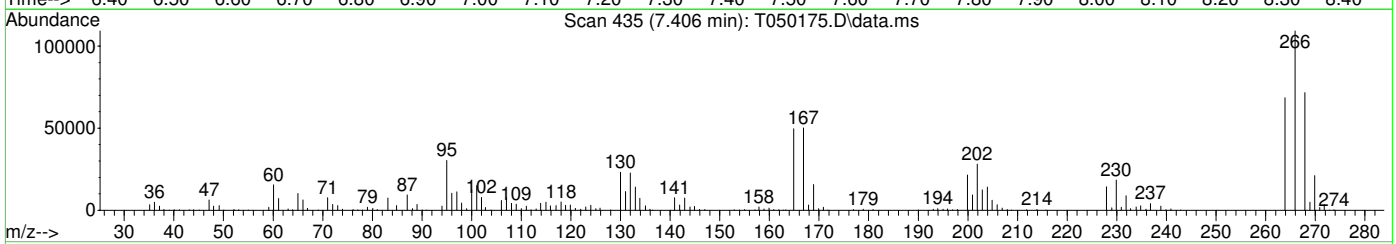
T050175.D dftpp.m Fri Aug 14 00:55:24 2020

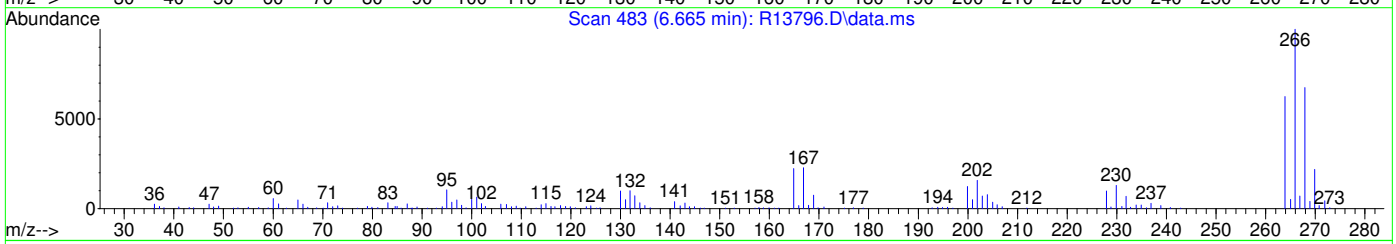
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\Jenniferf\AUGUST 2020\08-14-2020\ST1749\
Data File : T050175.D
Acq On : 13 Aug 2020 2:20 pm
Operator : nareshj
Sample : dftpp
Misc : OP81487,st1749,250,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 00:55:15 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Fri Aug 14 00:55:13 2020
Response via : Initial Calibration







TIC: T050175.D\data.ms

(1) Pentachlorophenol

7.406min (0.000) 35.21

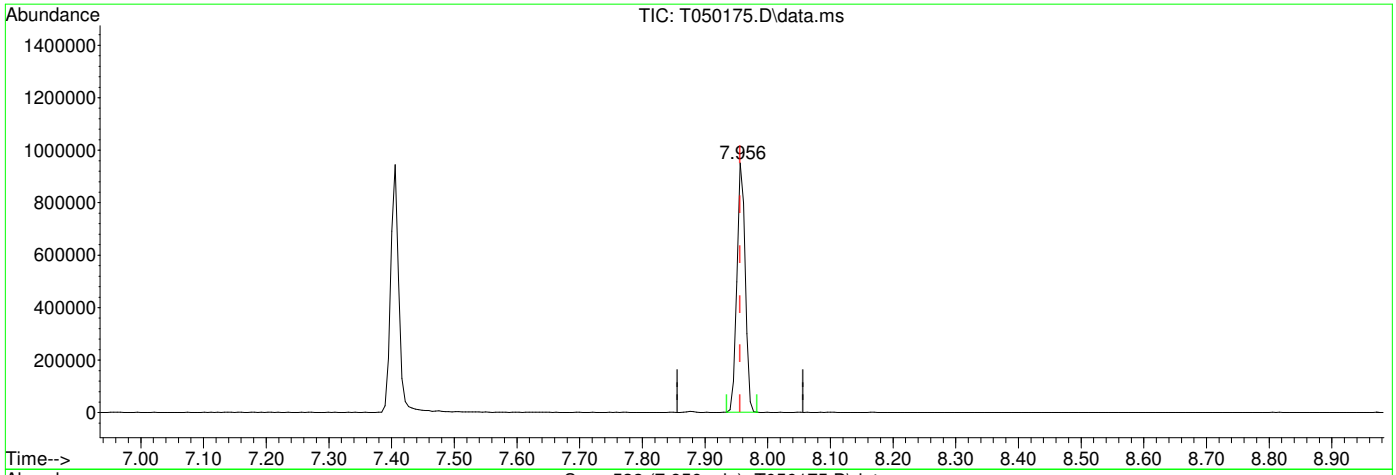
response 842164

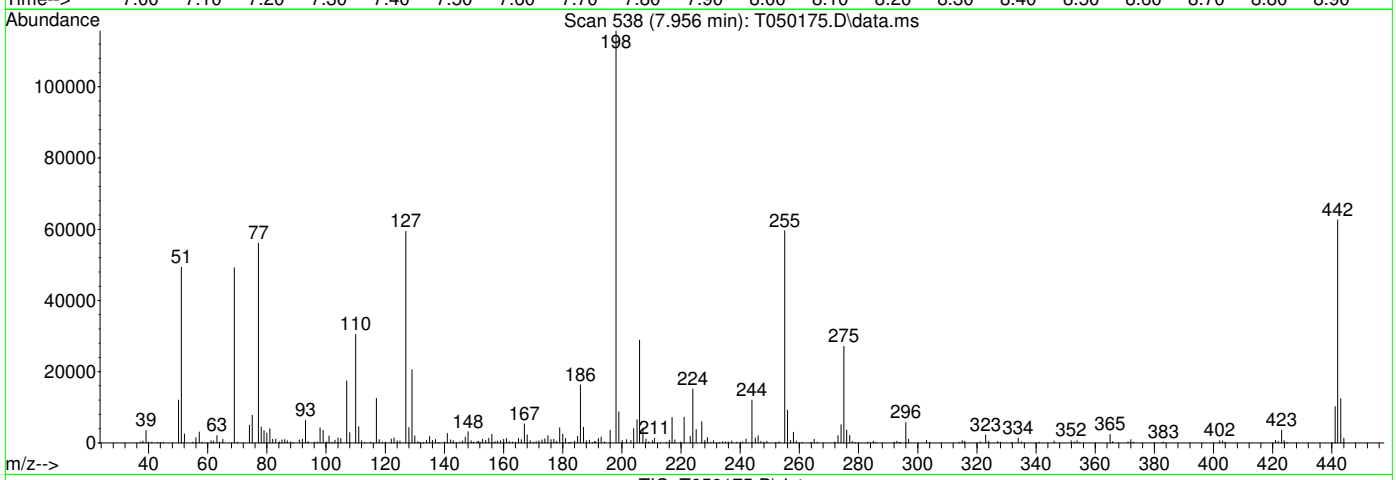
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\Jenniferf\AUGUST 2020\08-14-2020\ST1749\
Data File : T050175.D
Acq On : 13 Aug 2020 2:20 pm
Operator : nareshj
Sample : dftpp
Misc : OP81487,st1749,250,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 00:55:15 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Fri Aug 14 00:55:13 2020
Response via : Initial Calibration





TIC: T050175.D\data.ms

(2) DFTPP

7.956min (0.000) 30.85

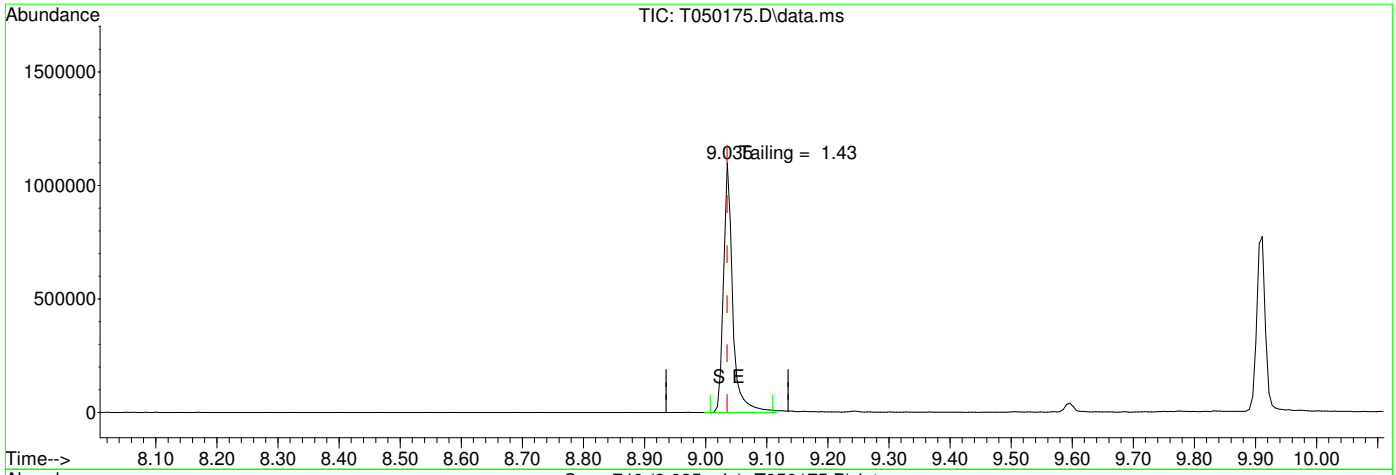
response 870724

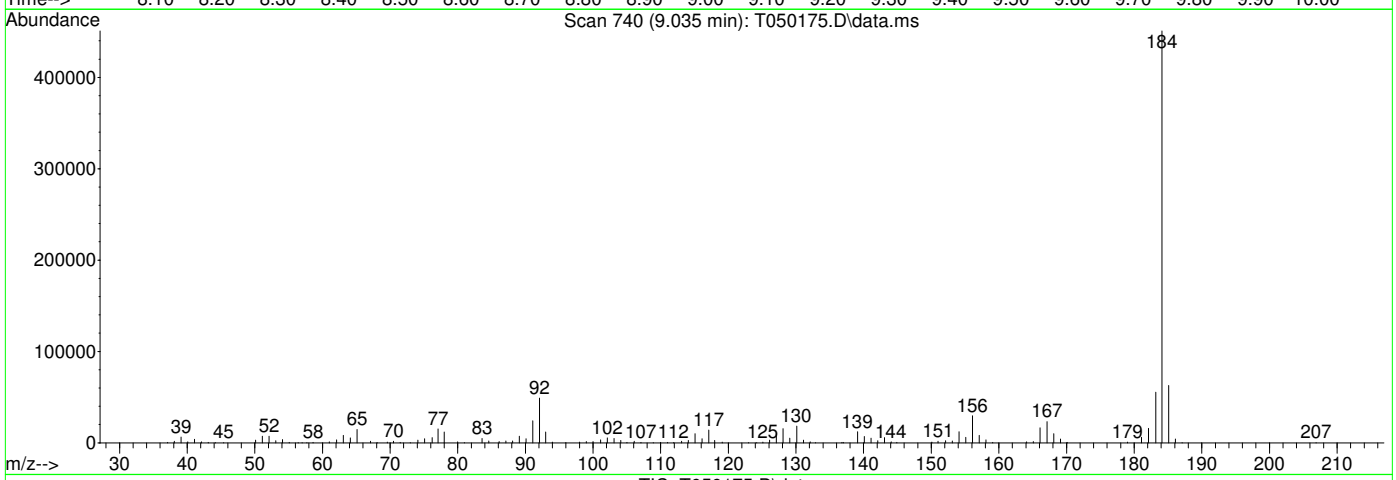
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\Jenniferf\AUGUST 2020\08-14-2020\ST1749\
Data File : T050175.D
Acq On : 13 Aug 2020 2:20 pm
Operator : nareshj
Sample : dftpp
Misc : OP81487,st1749,250,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 00:55:15 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Fri Aug 14 00:55:13 2020
Response via : Initial Calibration





TIC: T050175.D\data.ms

(3) Benzidine

9.035min (0.000) 27.14

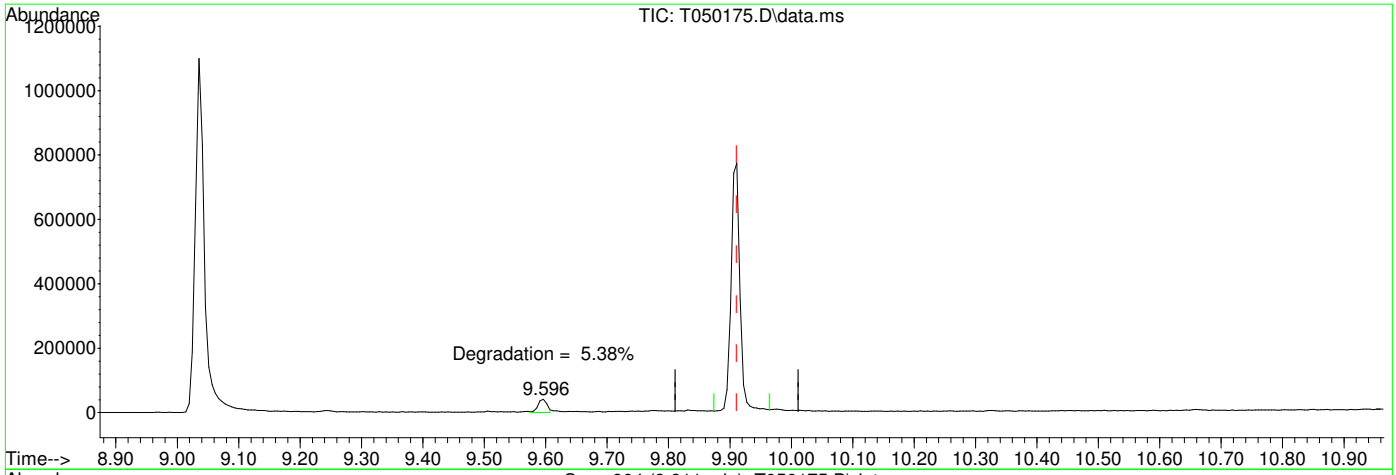
response 1151130

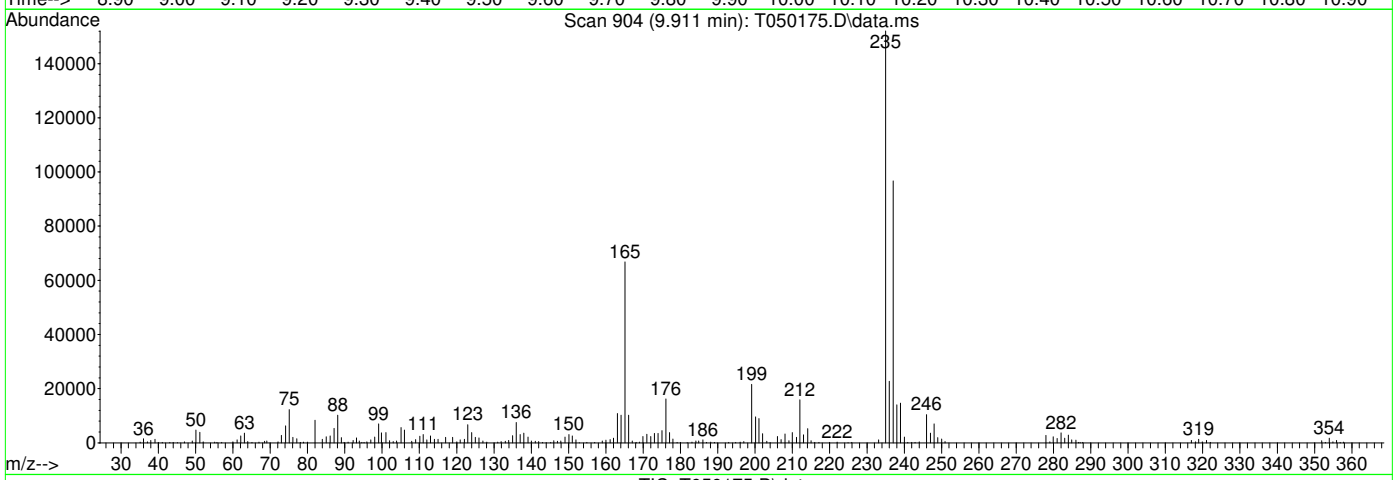
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\Jenniferf\AUGUST 2020\08-14-2020\ST1749\
Data File : T050175.D
Acq On : 13 Aug 2020 2:20 pm
Operator : nareshj
Sample : dftpp
Misc : OP81487,st1749,250,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 00:55:15 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Fri Aug 14 00:55:13 2020
Response via : Initial Calibration





TIC: T050175.D\data.ms

(4) DDT

9.911min (0.000) 22.09

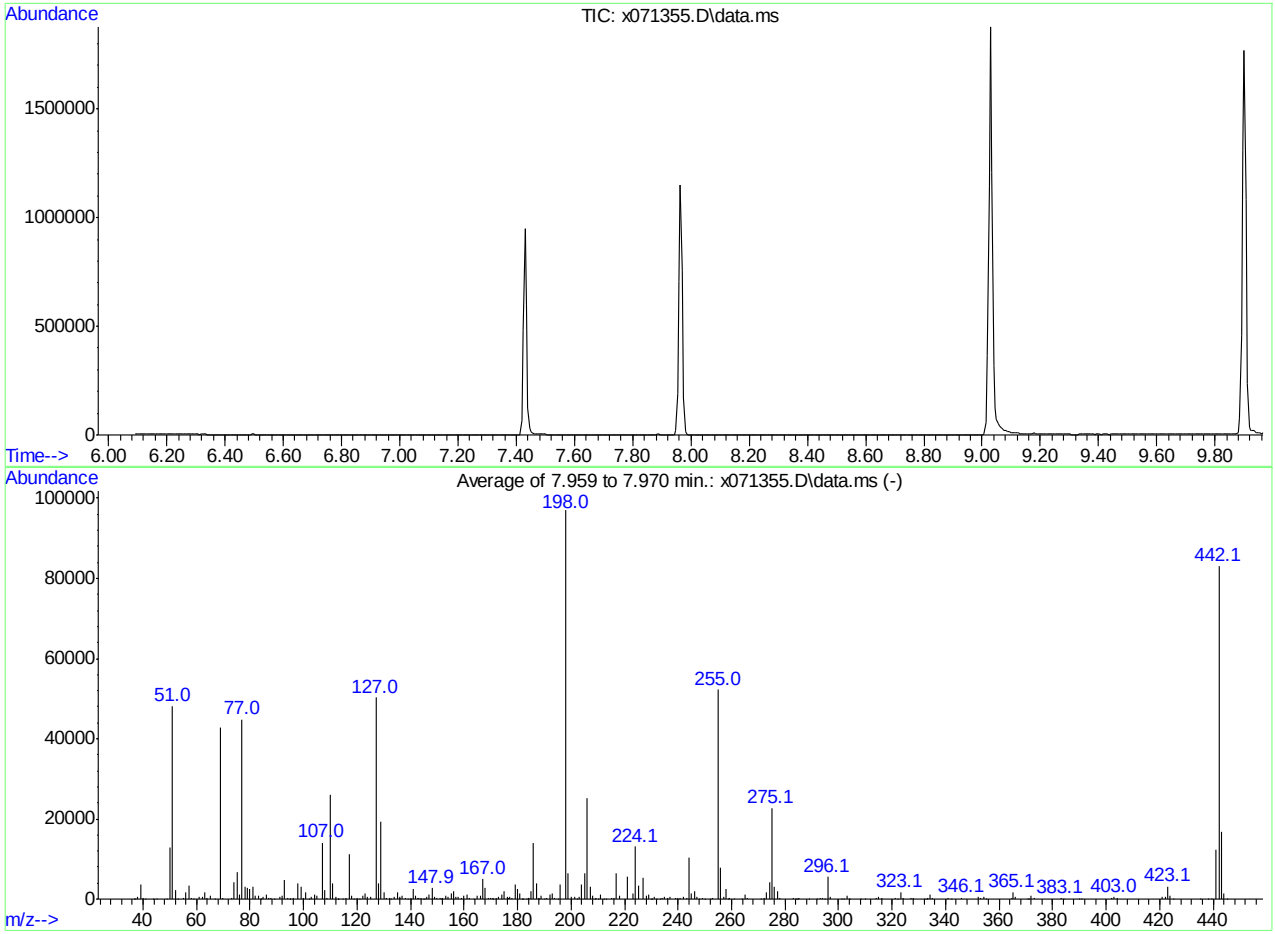
response 770968

Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

SW-846 Method 8270

Data File : C:\msdchem\1\DATA\0623_sx2918\x071355.D Vial: 1
Acq On : 23 Jun 2020 9:47 am Operator: marthav
Sample : dftpp Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\METHODS\dftpp.m (RTE Integrator)
Title : Tune Evaluation



AutoFind: Scans 350, 351, 352; Background Corrected with Scan 344

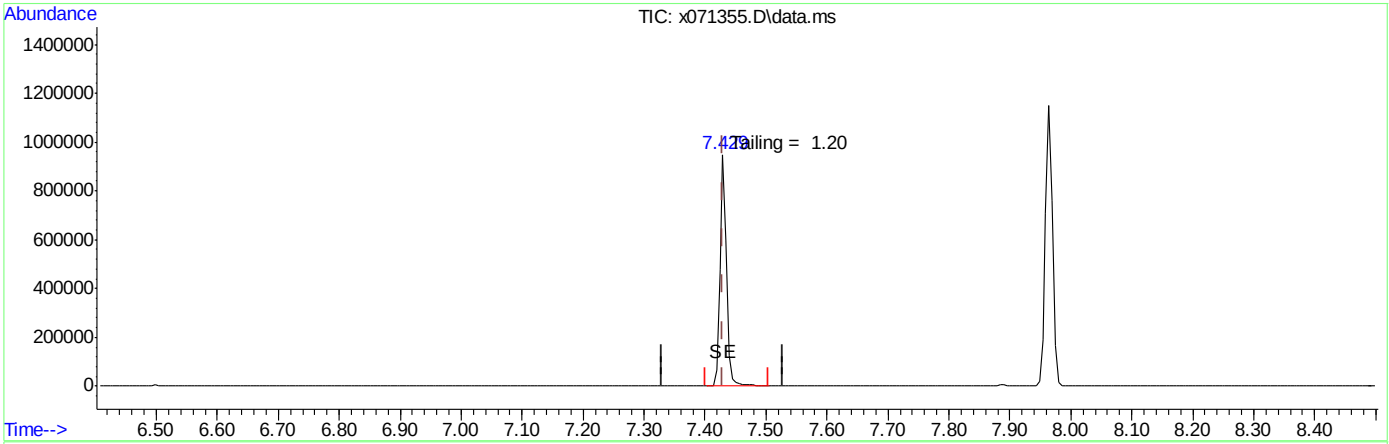
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	49.7	48227	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	44.1	42739	PASS
70	69	0.00	2	0.5	206	PASS
127	198	40	60	51.8	50221	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	96957	PASS
199	198	5	9	6.7	6460	PASS
275	198	10	30	23.4	22665	PASS
365	198	1	100	1.9	1798	PASS
441	443	0.01	100	74.3	12438	PASS
442	198	40	100	85.7	83123	PASS
443	442	17	23	20.1	16733	PASS

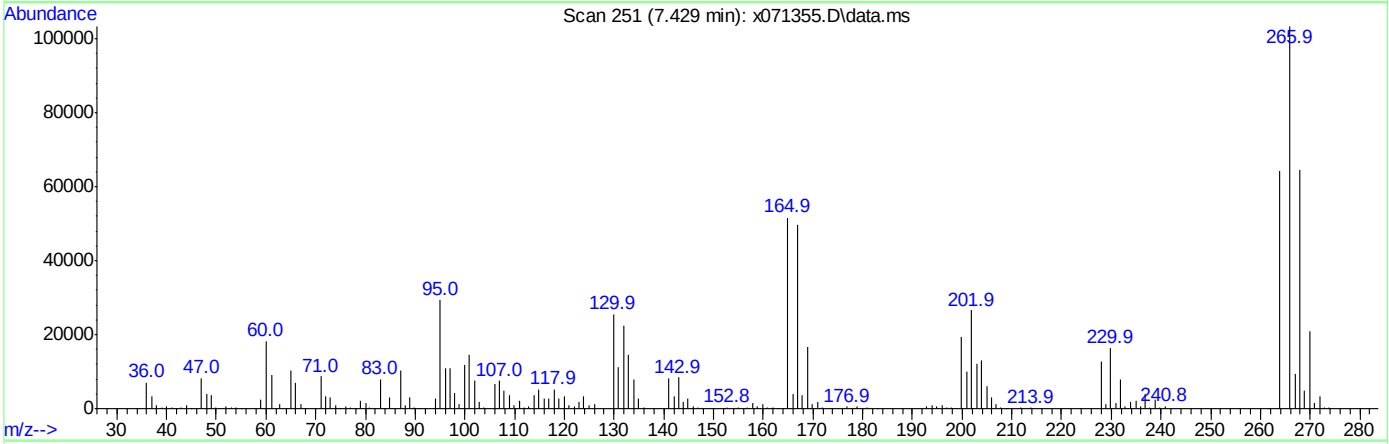
x071355.D dftpp.m Tue Jun 23 16:05:39 2020

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071355.D
Acq On : 23 Jun 2020 9:47 am
Operator : marthav
Sample : dftpp Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 23 16:05:35 2020
Quant Method : C:\msdchem\1\METHODS\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Tue Jun 23 16:05:31 2020
Response via : Initial Calibration





TIC: x071355.D\data.ms

(1) Pentachlorophenol

7.429min (0.000) 30.90

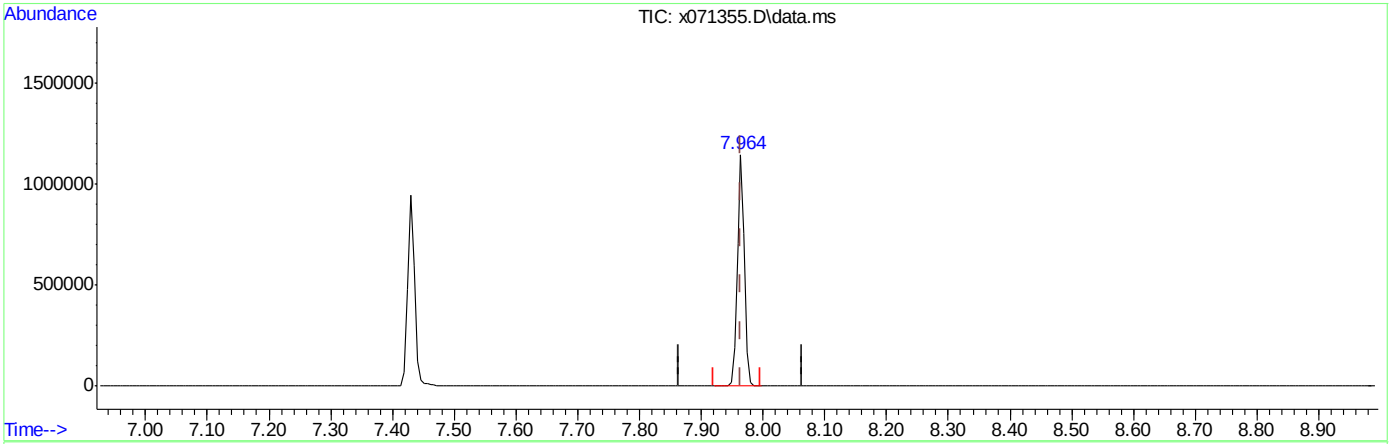
response 739095

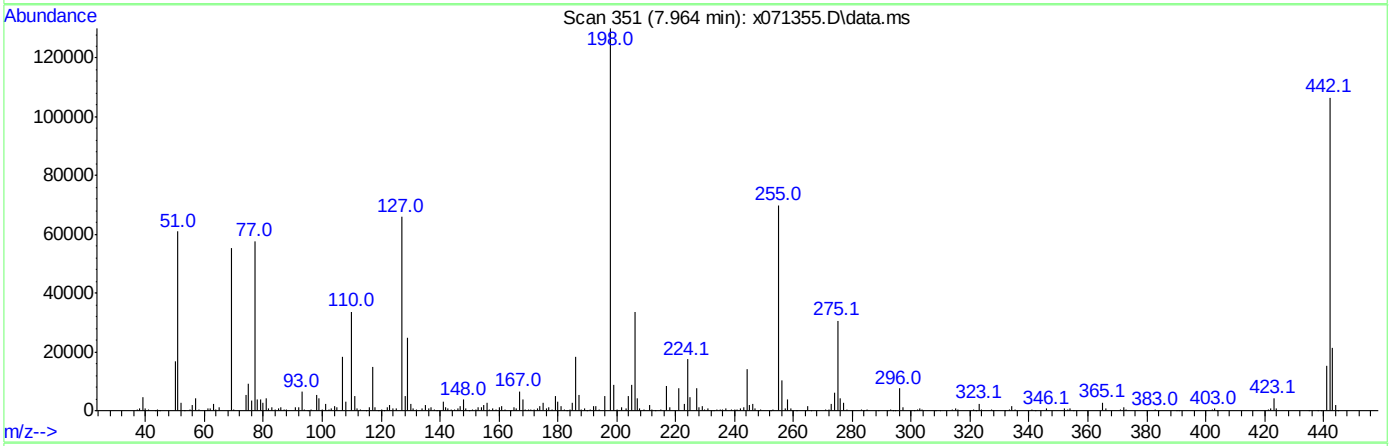
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071355.D
Acq On : 23 Jun 2020 9:47 am
Operator : marthav
Sample : dftpp Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 23 16:05:35 2020
Quant Method : C:\msdchem\1\METHODS\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Tue Jun 23 16:05:31 2020
Response via : Initial Calibration





TIC: x071355.D\data.ms

(2) DFTPP

7.964min (0.000) 34.25

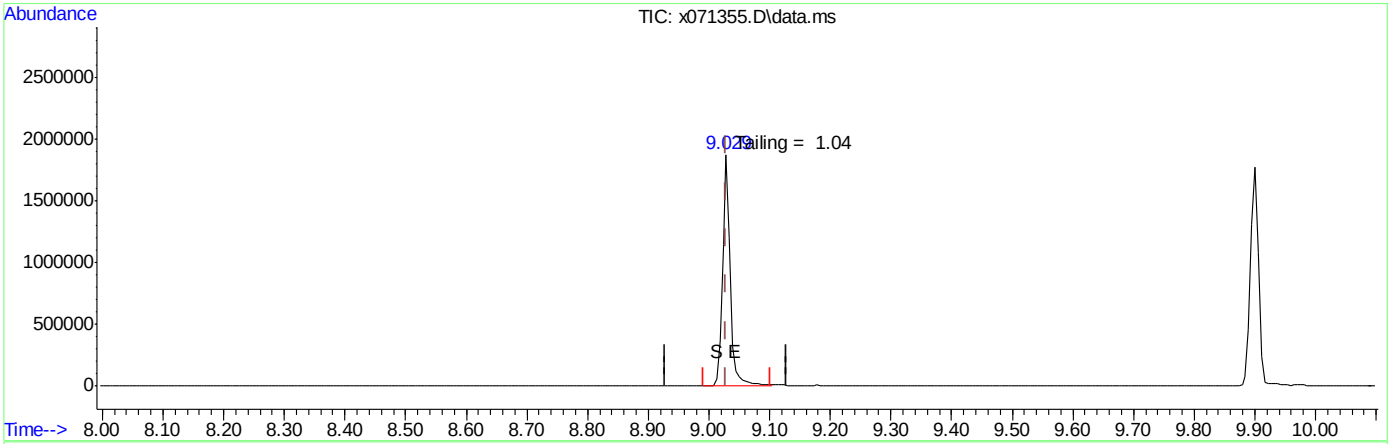
response 966439

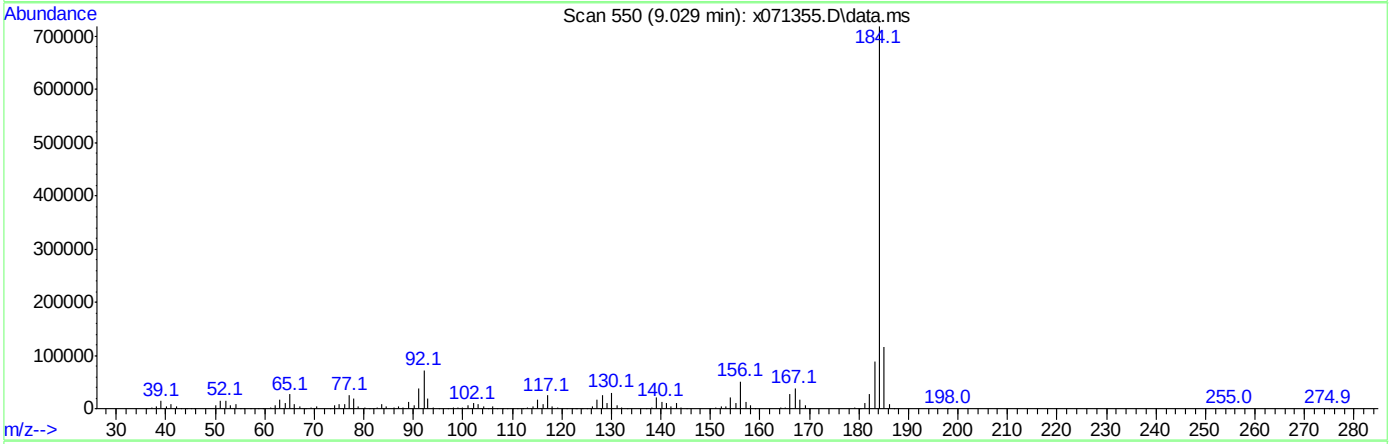
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071355.D
Acq On : 23 Jun 2020 9:47 am
Operator : marthav
Sample : dftpp Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 23 16:05:35 2020
Quant Method : C:\msdchem\1\METHODS\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Tue Jun 23 16:05:31 2020
Response via : Initial Calibration





TIC: x071355.D\data.ms

(3) Benzidine

9.029min (0.000) 40.81

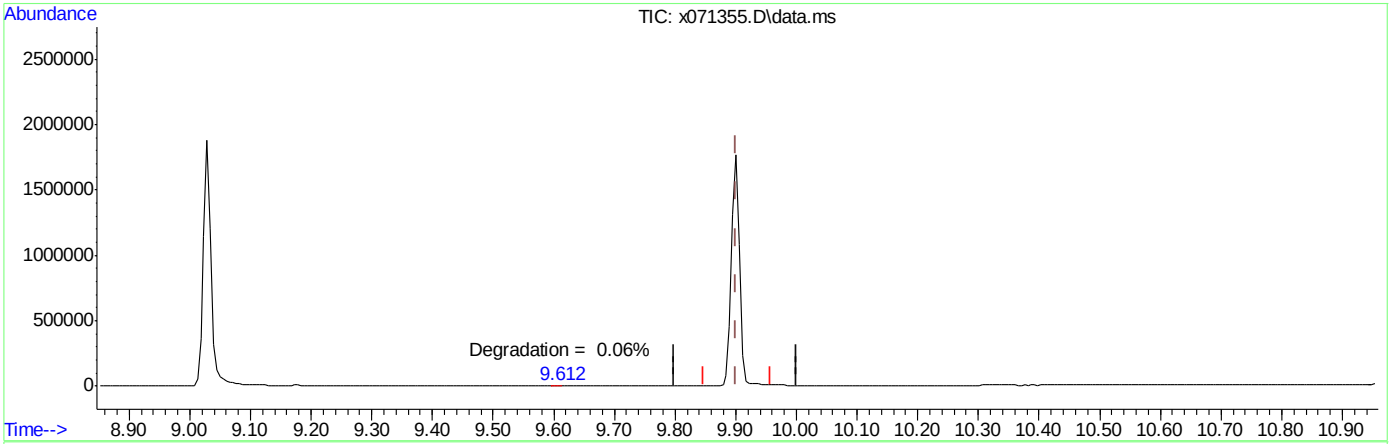
response 1730836

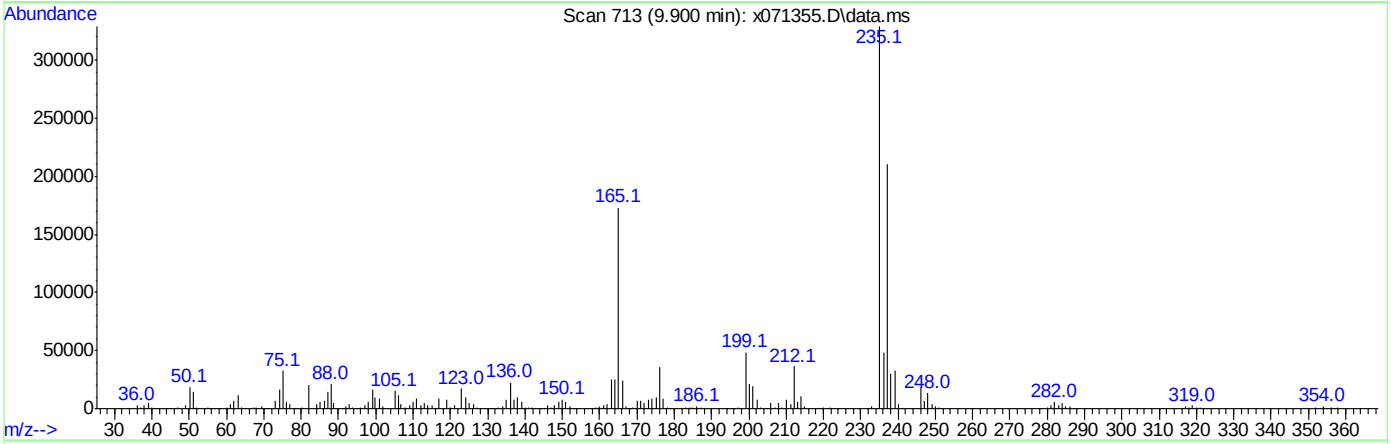
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071355.D
Acq On : 23 Jun 2020 9:47 am
Operator : marthav
Sample : dftpp Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 23 16:05:35 2020
Quant Method : C:\msdchem\1\METHODS\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Tue Jun 23 16:05:31 2020
Response via : Initial Calibration





TIC: x071355.D\data.ms

(4) DDT

9.900min (0.000) 46.28

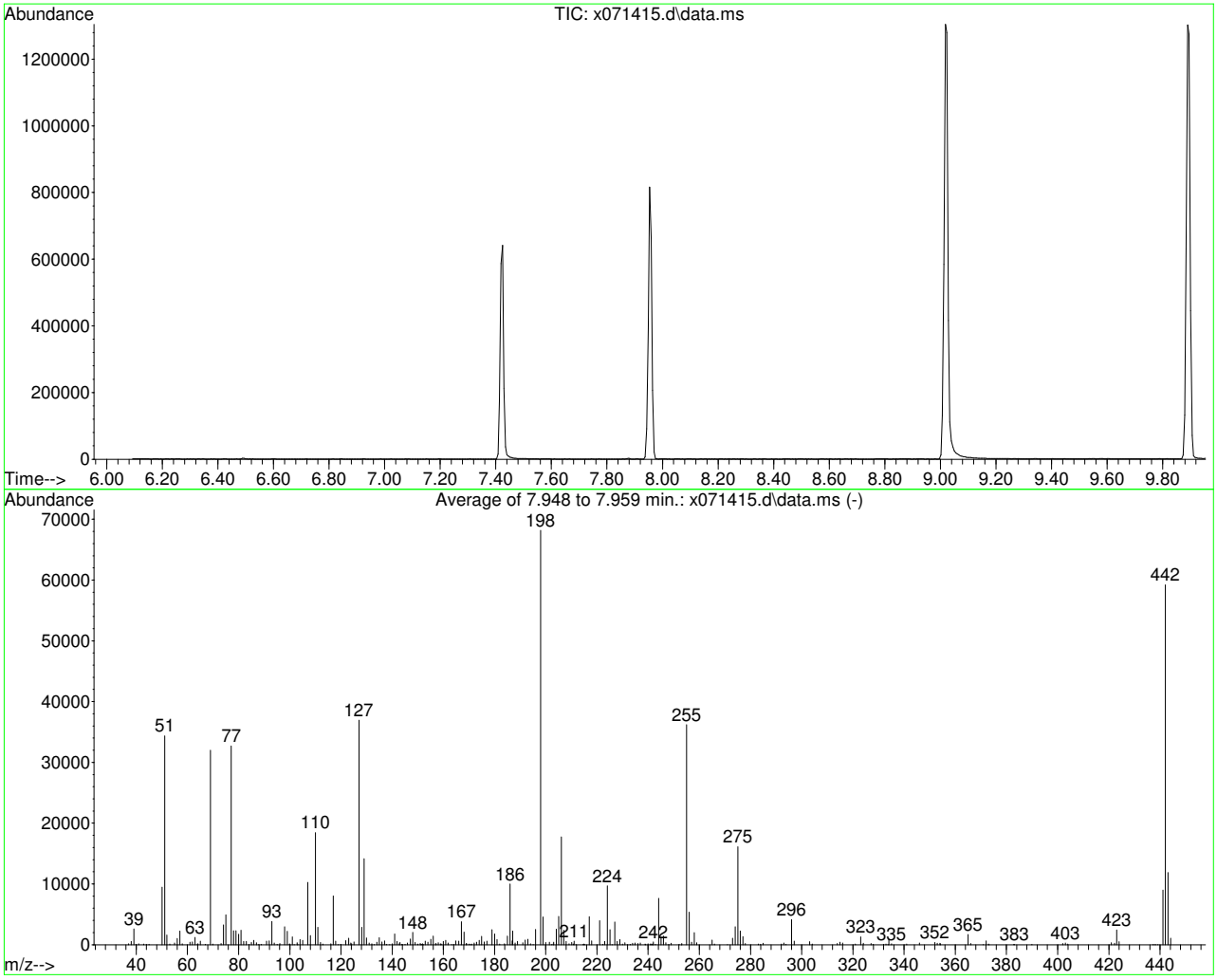
response 1615385

Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

SW-846 Method 8270

Data File : C:\msdchem\1\data\jo...2020\sx2919\x071415.d Vial: 1
Acq On : 24 Jun 2020 3:04 pm Operator: marthav
Sample : dftpp Inst : MSBNA05
Misc : op80508,sx2919,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\methods\dftpp.m (RTE Integrator)
Title : Tune Evaluation



AutoFind: Scans 348, 349, 350; Background Corrected with Scan 344

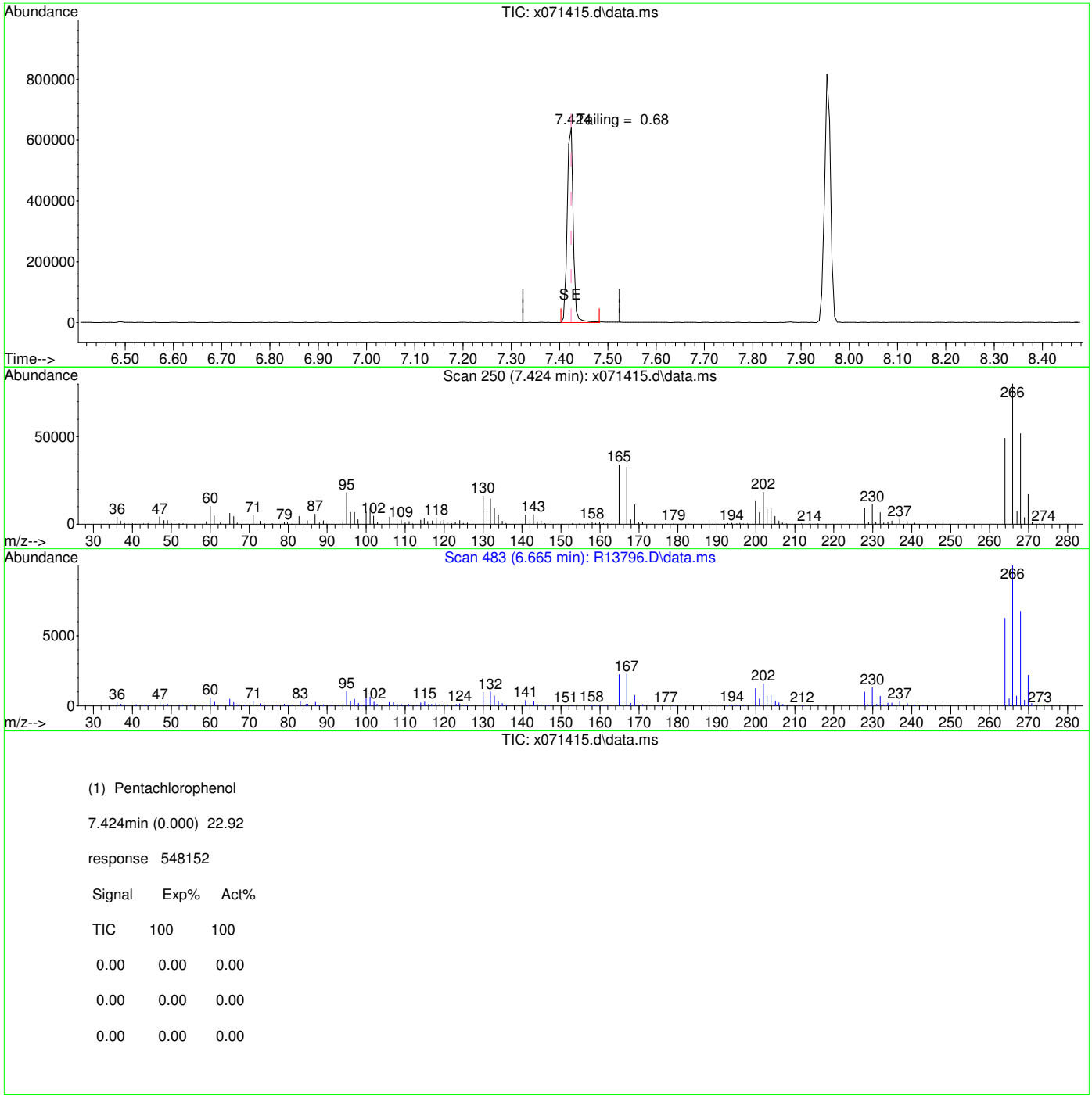
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	50.4	34387	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	47.0	32027	PASS
70	69	0.00	2	0.3	101	PASS
127	198	40	60	54.2	36939	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	68165	PASS
199	198	5	9	6.7	4563	PASS
275	198	10	30	23.7	16125	PASS
365	198	1	100	2.5	1684	PASS
441	443	0.01	100	75.9	9013	PASS
442	198	40	100	86.9	59211	PASS
443	442	17	23	20.0	11869	PASS

x071415.d dftpp.m Thu Jun 25 04:11:49 2020

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\June 2020\06-25-2020\sx2919\
Data File : x071415.d
Acq On : 24 Jun 2020 3:04 pm
Operator : marthav
Sample : dftpp
Misc : op80508,sx2919,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 25 02:42:47 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Thu Jun 25 02:42:45 2020
Response via : Initial Calibration



TIC: x071415.d\data.ms

(1) Pentachlorophenol

7.424min (0.000) 22.92

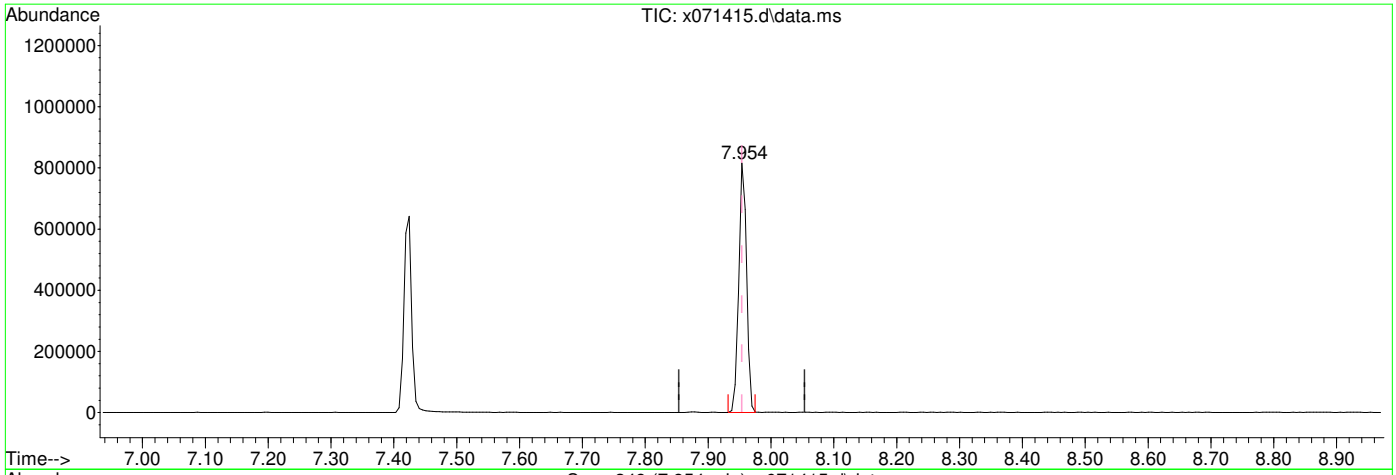
response 548152

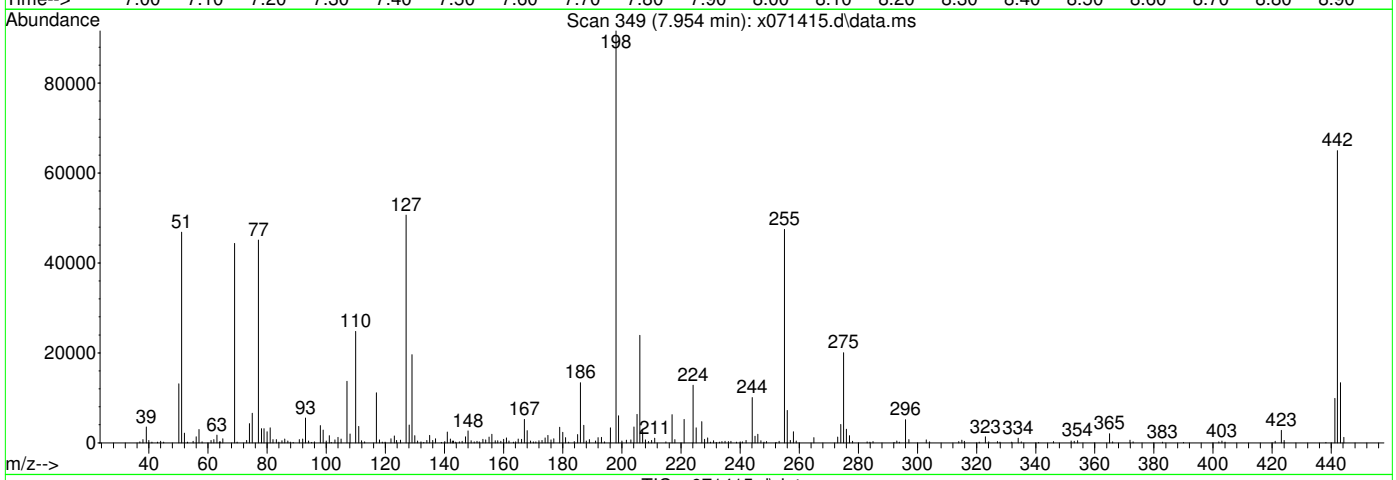
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\June 2020\06-25-2020\sx2919\
Data File : x071415.d
Acq On : 24 Jun 2020 3:04 pm
Operator : marthav
Sample : dftpp
Misc : op80508,sx2919,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 25 02:42:47 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Thu Jun 25 02:42:45 2020
Response via : Initial Calibration





TIC: x071415.d\data.ms

(2) DFTPP

7.954min (0.000) 24.97

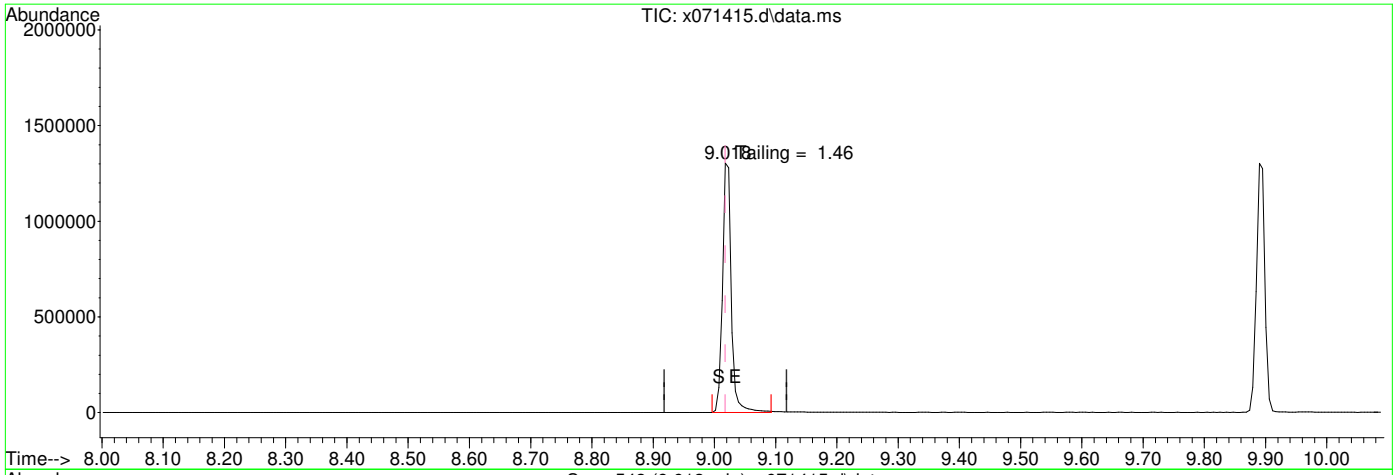
response 704578

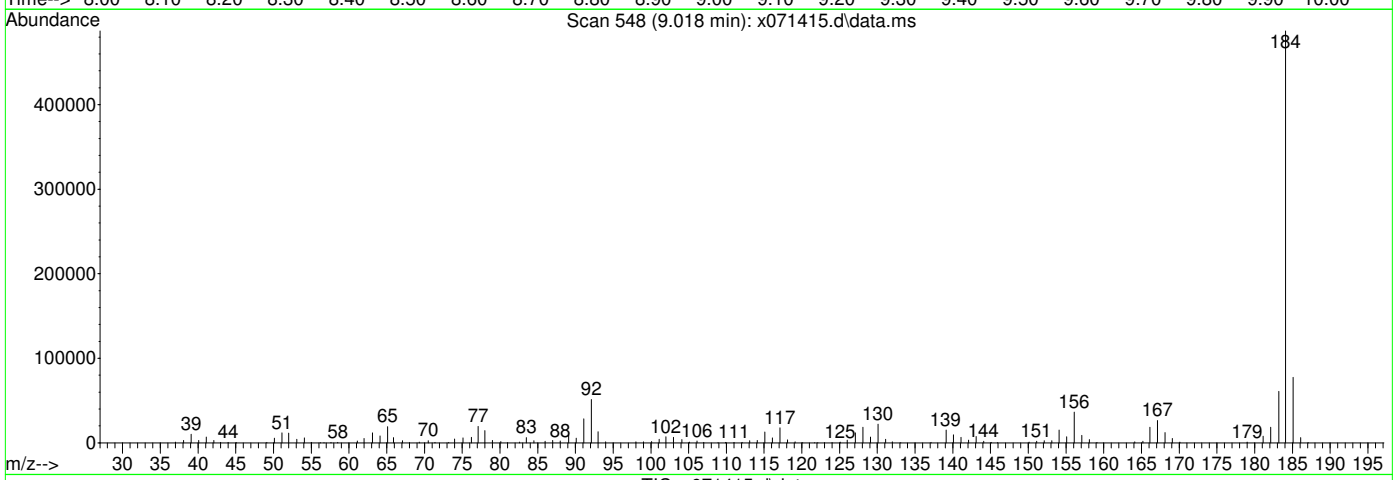
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\June 2020\06-25-2020\sx2919\
Data File : x071415.d
Acq On : 24 Jun 2020 3:04 pm
Operator : marthav
Sample : dftpp
Misc : op80508,sx2919,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 25 02:42:47 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Thu Jun 25 02:42:45 2020
Response via : Initial Calibration





TIC: x071415.d\data.ms

(3) Benzidine

9.018min (0.000) 30.47

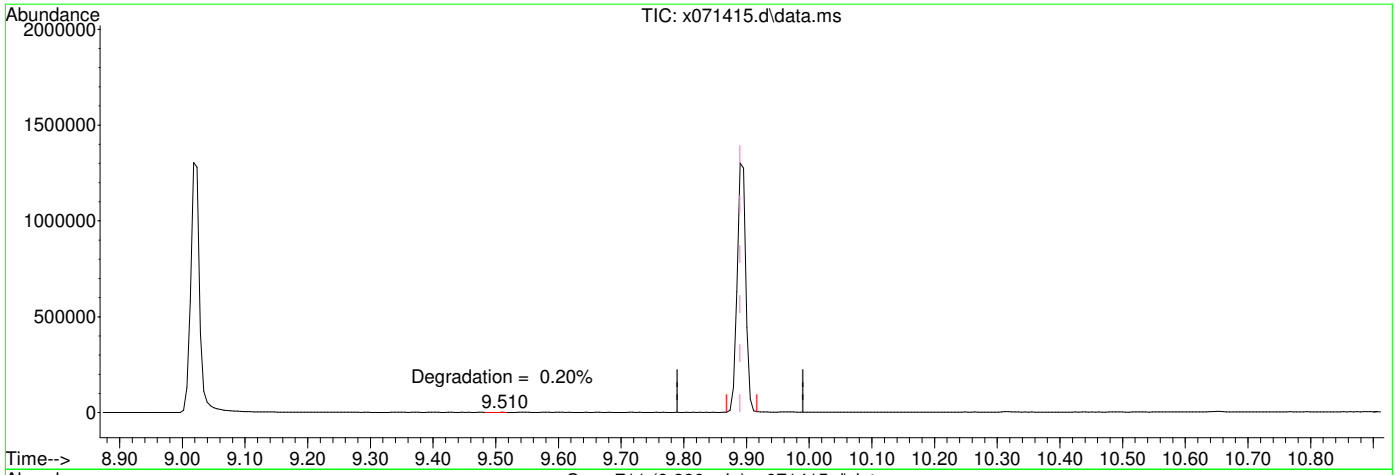
response 1292283

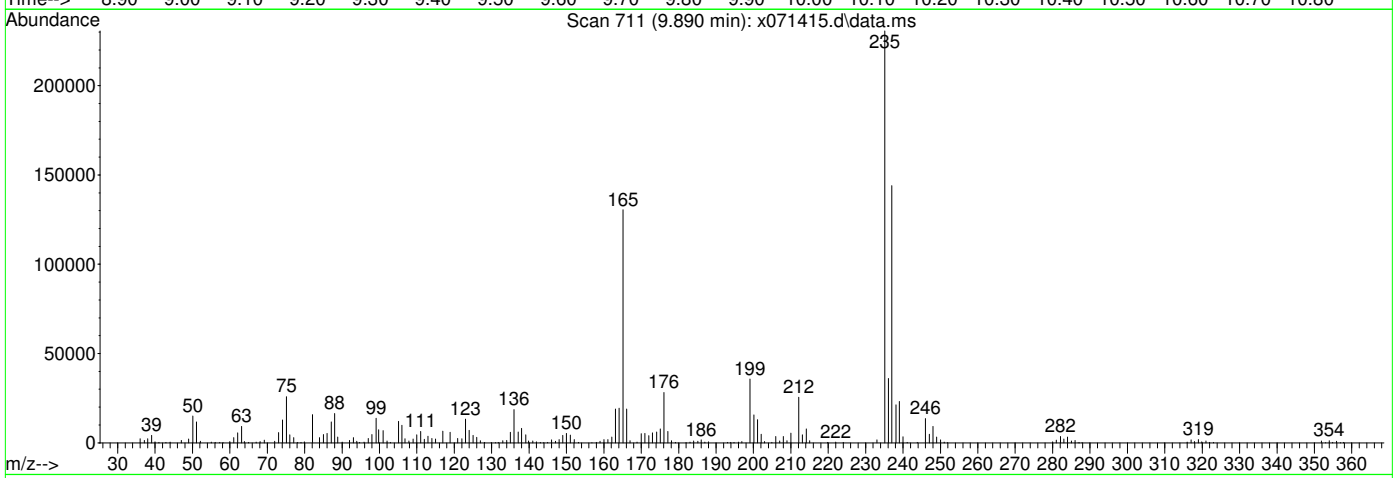
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\June 2020\06-25-2020\sx2919\
Data File : x071415.d
Acq On : 24 Jun 2020 3:04 pm
Operator : marthav
Sample : dftpp
Misc : op80508,sx2919,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 25 02:42:47 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Thu Jun 25 02:42:45 2020
Response via : Initial Calibration





TIC: x071415.d\data.ms

(4) DDT

9.890min (0.000) 35.58

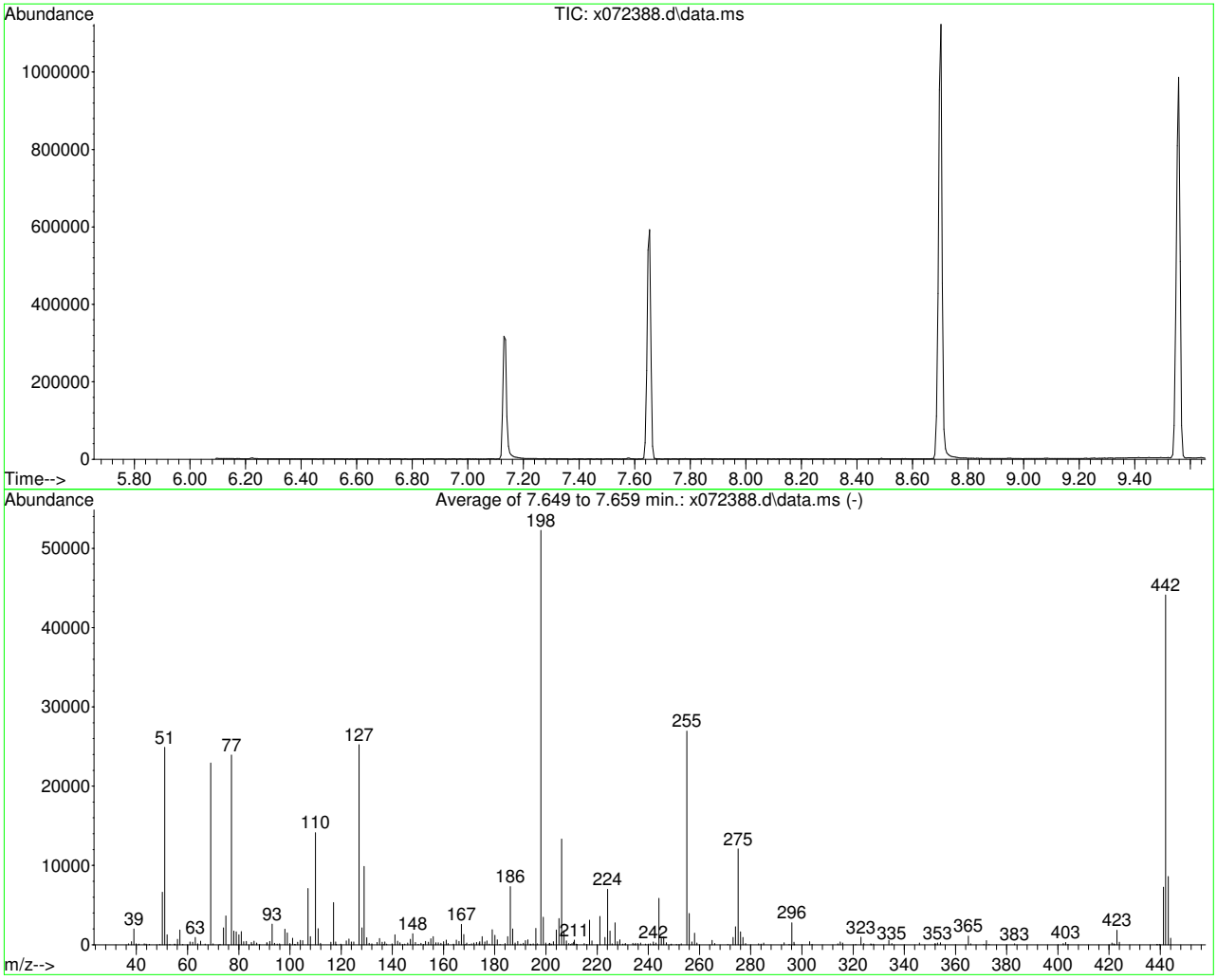
response 1241968

Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

SW-846 Method 8270

Data File : C:\msdchem\1\data\Je...2020\SX2952\x072388.d Vial: 1
Acq On : 13 Aug 2020 1:21 pm Operator: marthav
Sample : dftpp Inst : MSBNA05
Misc : op81484,sx2952,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\methods\dftpp.m (RTE Integrator)
Title : Tune Evaluation



AutoFind: Scans 292, 293, 294; Background Corrected with Scan 287

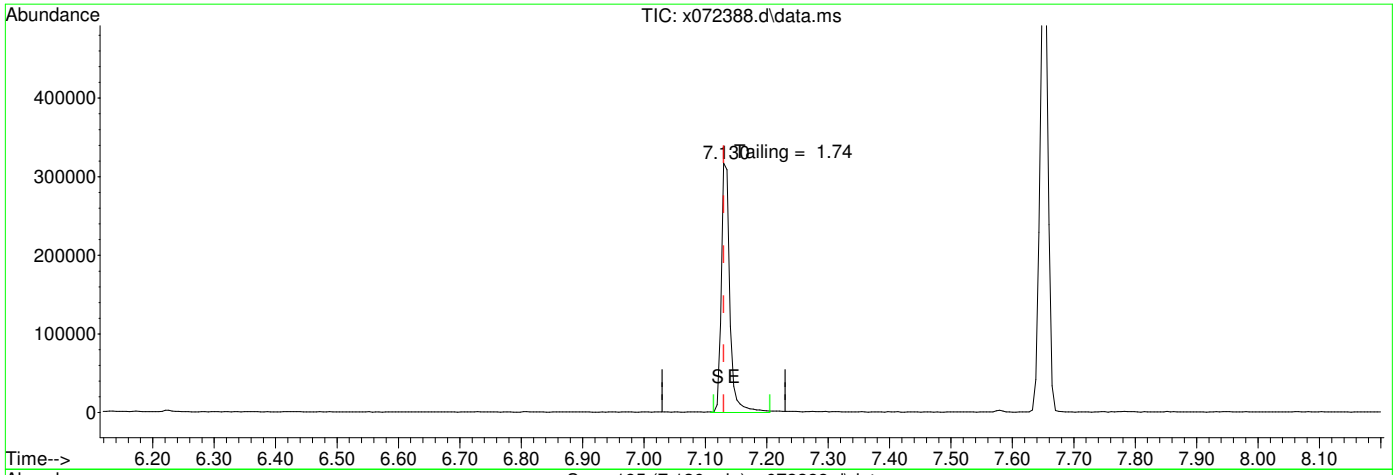
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	47.7	24905	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	43.9	22939	PASS
70	69	0.00	2	0.5	111	PASS
127	198	40	60	48.3	25242	PASS
197	198	0.00	1	0.2	109	PASS
198	198	100	100	100.0	52253	PASS
199	198	5	9	6.7	3476	PASS
275	198	10	30	23.2	12102	PASS
365	198	1	100	2.1	1098	PASS
441	443	0.01	100	84.6	7270	PASS
442	198	40	100	84.4	44123	PASS
443	442	17	23	19.5	8592	PASS

x072388.d dftpp.m Fri Aug 14 01:59:01 2020

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\Jenniferf\AUGUST 2020\08-14-2020\SX2952\
Data File : x072388.d
Acq On : 13 Aug 2020 1:21 pm
Operator : marthav
Sample : dftpp
Misc : op81484,sx2952,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 01:58:00 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Fri Aug 14 01:57:58 2020
Response via : Initial Calibration



TIC: x072388.d\data.ms

(1) Pentachlorophenol

7.130min (0.000) 12.72

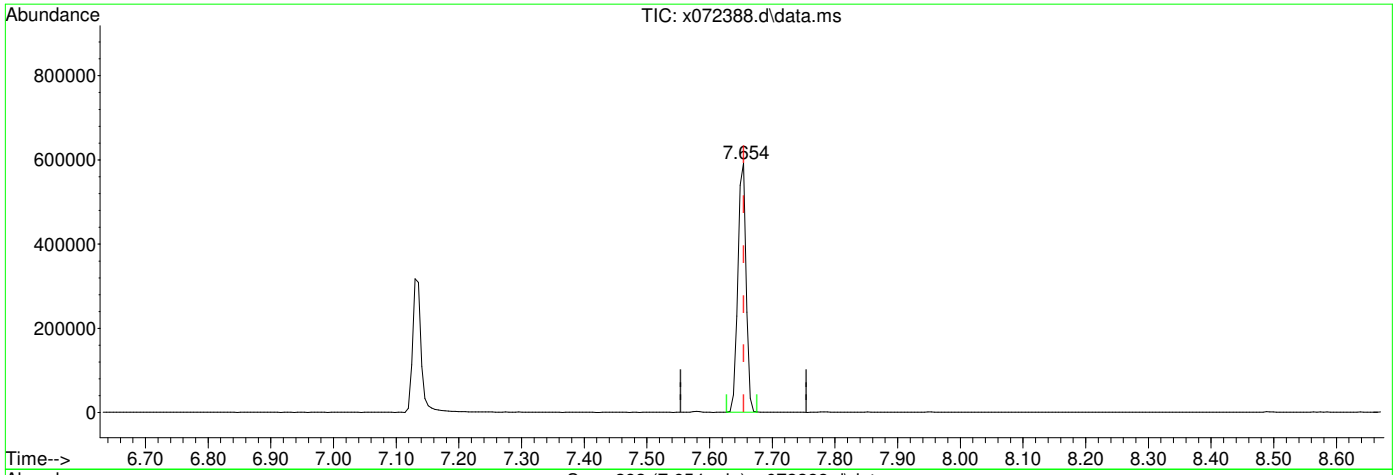
response 304378

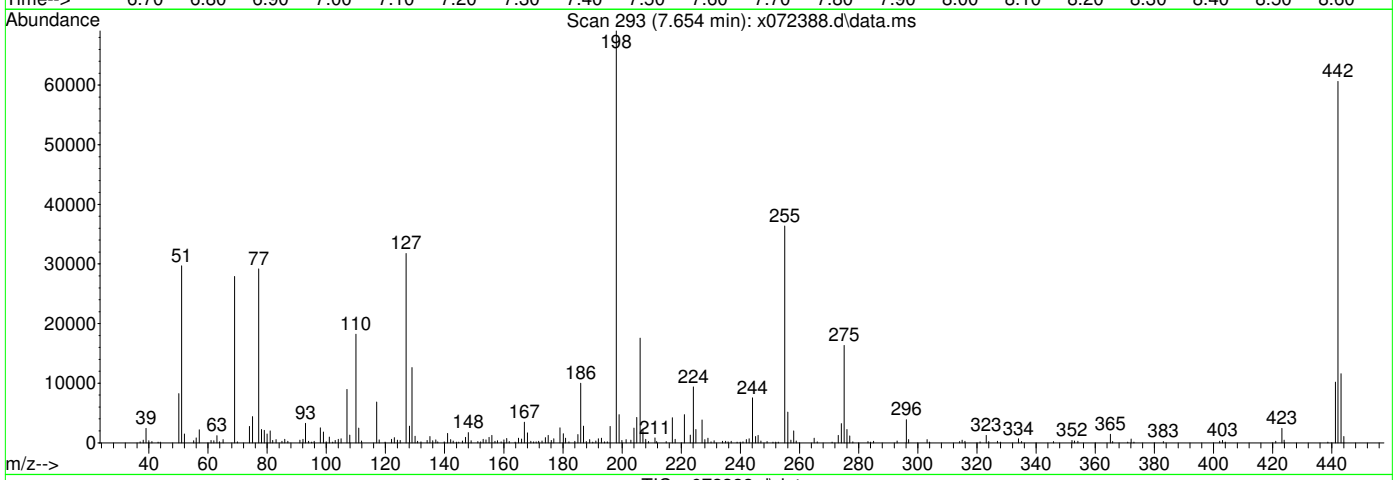
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\Jenniferf\AUGUST 2020\08-14-2020\SX2952\
Data File : x072388.d
Acq On : 13 Aug 2020 1:21 pm
Operator : marthav
Sample : dftpp
Misc : op81484,sx2952,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 01:58:00 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Fri Aug 14 01:57:58 2020
Response via : Initial Calibration





TIC: x072388.d\data.ms

(2) DFTPP

7.654min (0.000) 19.08

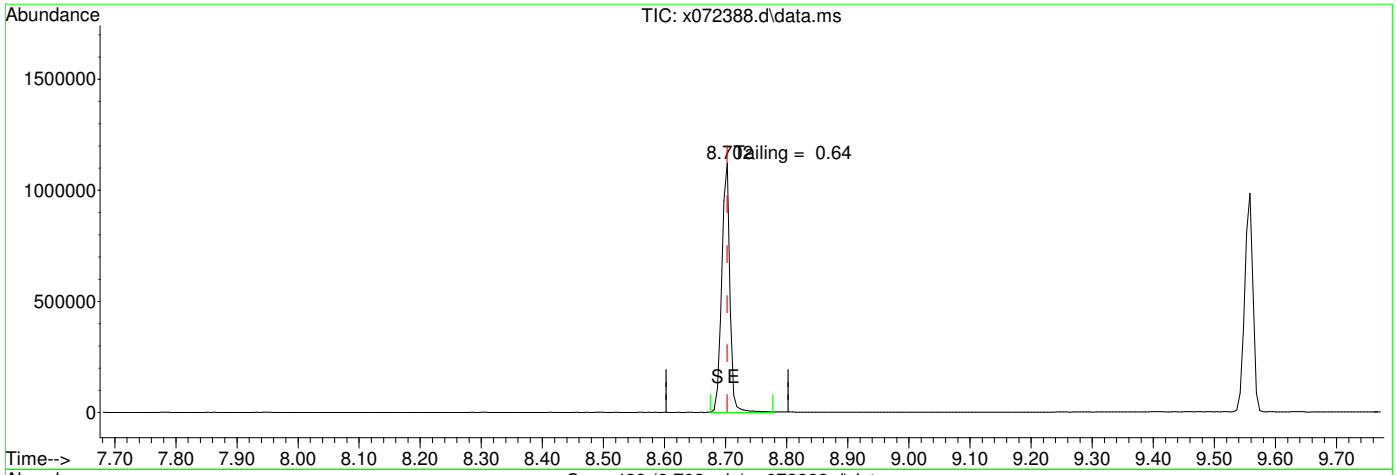
response 538361

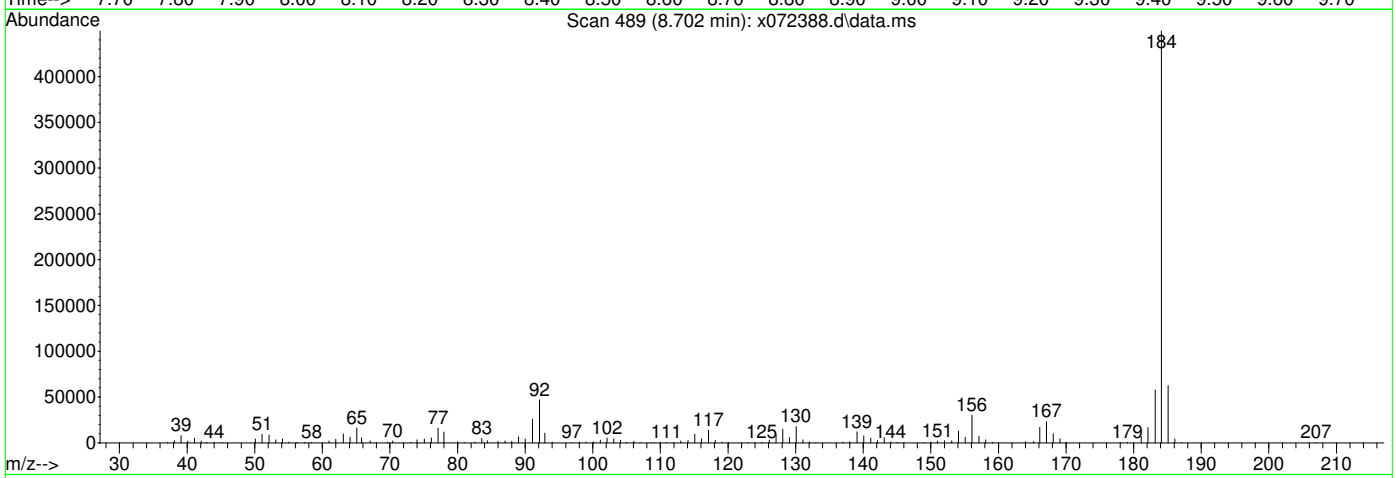
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\Jenniferf\AUGUST 2020\08-14-2020\SX2952\
Data File : x072388.d
Acq On : 13 Aug 2020 1:21 pm
Operator : marthav
Sample : dftpp
Misc : op81484,sx2952,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 01:58:00 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Fri Aug 14 01:57:58 2020
Response via : Initial Calibration





TIC: x072388.d\data.ms

(3) Benzidine

8.702min (0.000) 24.51

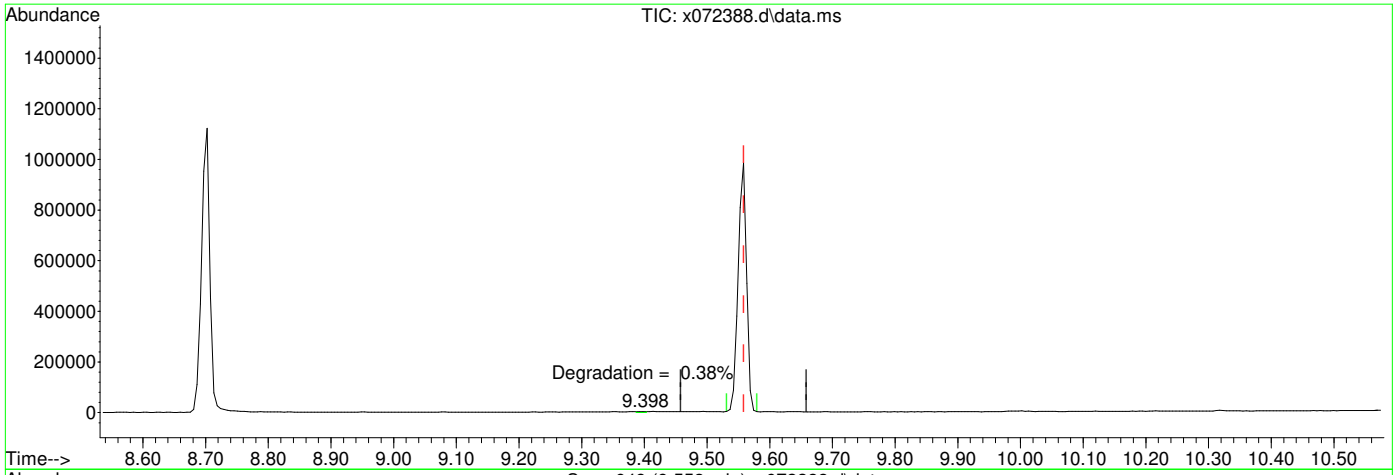
response 1039782

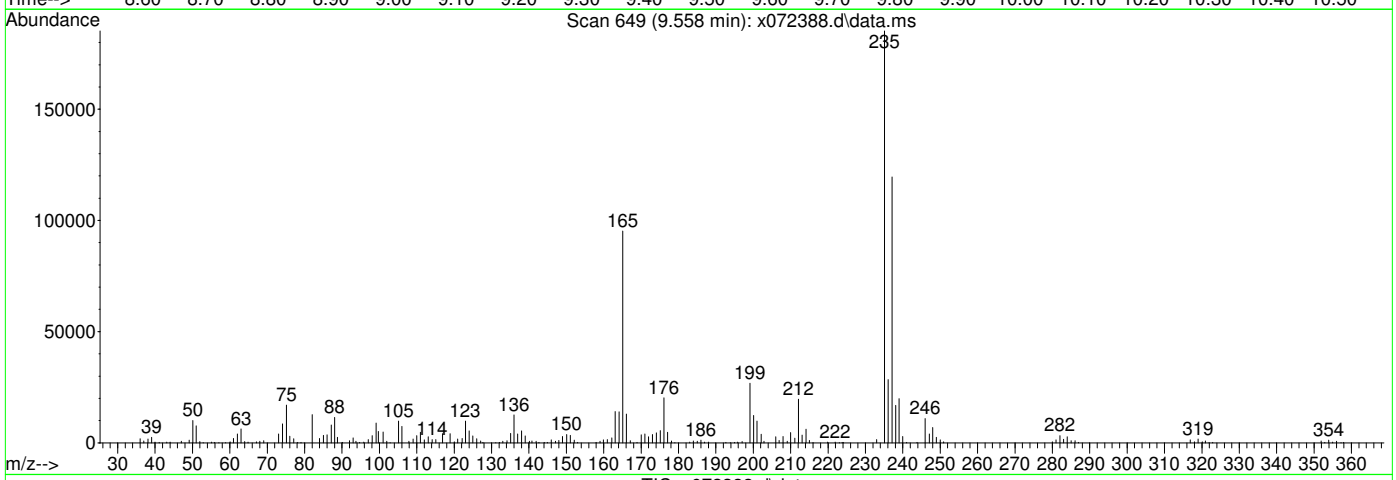
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\Jenniferf\AUGUST 2020\08-14-2020\SX2952\
Data File : x072388.d
Acq On : 13 Aug 2020 1:21 pm
Operator : marthav
Sample : dftpp
Misc : op81484,sx2952,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 14 01:58:00 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Fri Aug 14 01:57:58 2020
Response via : Initial Calibration





TIC: x072388.d\data.ms

(4) DDT

9.558min (0.000) 26.21

response 914903

Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 07/30/20 14:11

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06436.D
Sample : ic248-1
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1
Acq On : 29 Jul 2020 12:53 pm Operator: marthav

Quant Time: Jul 29 13:54:40 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	6.045	152	339395	40.00	ppm		-0.04
22) Naphthalene-d8	7.473	136	1294127	40.00	ppm		0.00
43) Acenaphthene-d10	9.527	164	688296	40.00	ppm		0.00
70) Phenanthrene-d10	11.282	188	1218446	40.00	ppm		0.00
92) Chrysene-d12	14.582	240	1031190	40.00	ppm		-0.01
102) Perylene-d12	16.946	264	1045930	40.00	ppm		0.00
System Monitoring Compounds							
7) 2-Fluorophenol	4.665	112	22185	1.84	ppm		0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 1.84%#				
9) Phenol-d5	5.676	99	27217	1.97	ppm		-0.01
Spiked Amount 100.000	Range 10 - 50		Recovery = 1.97%#				
23) Nitrobenzene-d5	6.655	82	13248	1.49	ppm		0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 2.98%#				
47) 2-Fluorobiphenyl	8.746	172	27098	1.05	ppm		0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 2.10%#				
75) 2,4,6-Tribromophenol	10.463	330	6975	2.36	ppm		0.00
Spiked Amount 100.000	Range 33 - 118		Recovery = 2.36%#				
95) Terphenyl-d14	13.207	244	28881	1.09	ppm		0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 2.18%#				
Target Compounds							Qvalue
2) 1,4-Dioxane	2.879	88	5162	1.421	ppm		98
3) N-nitrosodimethylamine	3.221	42	6146	0.943	ppm		93
4) Pyridine	3.285	79	11106	0.906	ppm		100
5) Benzaldehyde	5.564	106	10174	1.027	ppm		96
6) Aniline	5.687	93	17993	0.986	ppm		74
8) bis(2-Chloroethyl)ether	5.762	93	12244	0.995	ppm		96
10) Phenol	5.687	94	16224	1.010	ppm	#	58
11) 2-Chlorophenol	5.815	128	11735	0.965	ppm		98
12) 1,3-Dichlorobenzene	5.976	146	13101	0.954	ppm		96
13) 1,4-Dichlorobenzene	6.061	146	13230	0.951	ppm		94
14) 1,2-Dichlorobenzene	6.227	146	12445	0.949	ppm		97
15) Benzyl alcohol	6.206	108	7157	1.228	ppm		93
16) bis(2-chloroisopropyl)...	6.356	45	15773	1.010	ppm	#	66
17) 2-Methylphenol	6.345	108	10936	1.023	ppm		94
18) Acetophenone	6.489	105	16648	1.009	ppm		99
19) Hexachloroethane	6.602	117	5176	0.949	ppm		96
20) N-Nitroso-di-n-propyla...	6.495	70	9104	1.087	ppm		99
21) 3&4-Methylphenol	6.521	108	11630	1.065	ppm		91
24) Nitrobenzene	6.676	77	13177	1.379	ppm		92
25) Isophorone	6.955	82	24175	1.063	ppm		98
26) 2-Nitrophenol	7.040	139	5500	2.738	ppm		92
27) 2,4-Dimethylphenol	7.115	107	11229	1.056	ppm		100
28) O,O,O-Triethylphosphor...	7.185	198	5815	0.999	ppm		93
29) bis(2-Chloroethoxy)met...	7.217	93	14846	1.042	ppm		99
30) Benzoic Acid	7.174	105	4169	3.146	ppm		93
31) 2,4-Dichlorophenol	7.329	162	9727	1.253	ppm		98
32) 1,2,4-Trichlorobenzene	7.415	180	11030	0.968	ppm		94
34) Naphthalene	7.500	128	36157	1.030	ppm		96
35) 4-Chloroaniline	7.575	127	15421	1.051	ppm		97
36) 2,6-Dichlorophenol	7.580	162	9614	1.259	ppm		99
37) Hexachlorobutadiene	7.650	225	6405	0.998	ppm		93

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06436.D
Sample : ic248-1
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1
Acq On : 29 Jul 2020 12:53 pm Operator: marthav

Quant Time: Jul 29 13:54:40 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38)	Caprolactam	7.939	113	3531	1.051	ppm	90
39)	4-Chloro-3-methylphenol	8.163	107	9846	1.033	ppm	96
40)	2-Methylnaphthalene	8.308	141	20379	1.003	ppm	97
41)	1-Methylnaphthalene	8.420	142	22671	1.016	ppm	99
42)	1,2,4,5-Tetrachloroben...	8.500	216	10899	0.997	ppm	97
44)	Hexachlorocyclopentadiene	8.495	237	5524	1.600	ppm	98
45)	2,4,6-Trichlorophenol	8.645	196	6513	1.287	ppm	98
46)	2,4,5-Trichlorophenol	8.693	196	7129	1.239	ppm	94
48)	1,1'-Biphenyl	8.859	154	28432	1.027	ppm	99
49)	2-Chloronaphthalene	8.875	162	22036	1.029	ppm	100
50)	2-Nitroaniline	9.003	65	5875	1.994	ppm	96
51)	p-Dinitrobenzene	9.174	75	3156	1.812	ppm	96
52)	Acenaphthylene	9.356	152	33532	1.042	ppm	99
53)	Dimethylphthalate	9.233	163	25118	1.090	ppm	99
54)	m-Dinitrobenzene	9.260	168	2855m	1.484	ppm	
55)	2,6-Dinitrotoluene	9.297	165	4724	1.443	ppm	97
56)	o-Dinitrobenzene	9.351	50	4097	1.510	ppm	90
57)	Acenaphthene	9.565	153	23009	1.082	ppm	99
58)	3-Nitroaniline	9.490	138	5580	1.221	ppm	91
59)	2,4-Dinitrophenol	9.618	184	278m	4.967	ppm	
60)	Dibenzofuran	9.768	168	31271	1.057	ppm	98
61)	2,4-Dinitrotoluene	9.768	165	5516	1.327	ppm	77
62)	4-Nitrophenol	9.731	109	3271	1.581	ppm	85
63)	2,3,5,6-Tetrachlorophenol	9.875	232	4546	1.231	ppm	90
64)	2,3,4,6-Tetrachlorophenol	9.928	232	5204	1.215	ppm	96
65)	Fluorene	10.175	166	24501	1.037	ppm	99
66)	4-Chlorophenyl-phenyle...	10.191	204	12321	1.033	ppm	98
67)	Diethylphthalate	10.078	149	24651	1.094	ppm	99
68)	Thionazin	10.169	97	5437	1.307	ppm	97
69)	4-Nitroaniline	10.207	138	5502	1.247	ppm	86
71)	4,6-Dinitro-2-methylph...	10.244	198	1446	1.962	ppm	62
72)	n-Nitrosodiphenylamine	10.335	169	20583	1.167	ppm	99
73)	Diphenylamine	10.335	169	20583	1.031	ppm	99
74)	1,2-Diphenylhydrazine	10.378	77	27000	1.104	ppm	99
76)	Sulfotep	10.549	97	4112	1.219	ppm	81
77)	Phorate	10.699	75	12800	1.197	ppm	99
78)	4-Bromophenyl-phenylether	10.768	248	7073	1.034	ppm	94
79)	Hexachlorobenzene	10.822	284	8297	1.045	ppm	96
80)	Dimethoate	10.886	87	8394	1.289	ppm	94
81)	Simazine	10.945	201	3925	1.019	ppm	99
82)	Atrazine	10.988	200	6589	0.990	ppm	97
83)	Pentachlorophenol	11.068	266	880m	0.412	ppm	
84)	Phenanthrene	11.308	178	39097	1.159	ppm	99
85)	Anthracene	11.367	178	36776	1.057	ppm	99
86)	Disulfoton	11.319	88	13894	1.094	ppm	93
87)	Carbazole	11.576	167	32589	1.063	ppm	99
88)	Methyl Parathion	11.758	109	4906	1.301	ppm	91
89)	Di-n-butylphthalate	12.036	149	38905	1.086	ppm	98
90)	Ethyl Parathion	12.228	97	3228	1.631	ppm	93
91)	Fluoranthene	12.720	202	36388	1.029	ppm	99
93)	Benzidine	12.908	184	21124	1.356	ppm	99
94)	Pyrene	12.983	202	37315	1.097	ppm	99
96)	Famphur	13.774	218	11566	1.344	ppm	96
97)	Butylbenzylphthalate	13.870	149	16601	1.463	ppm	94

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06436.D
Sample : ic248-1
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1
Acq On : 29 Jul 2020 12:53 pm Operator: marthav

Quant Time: Jul 29 13:54:40 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

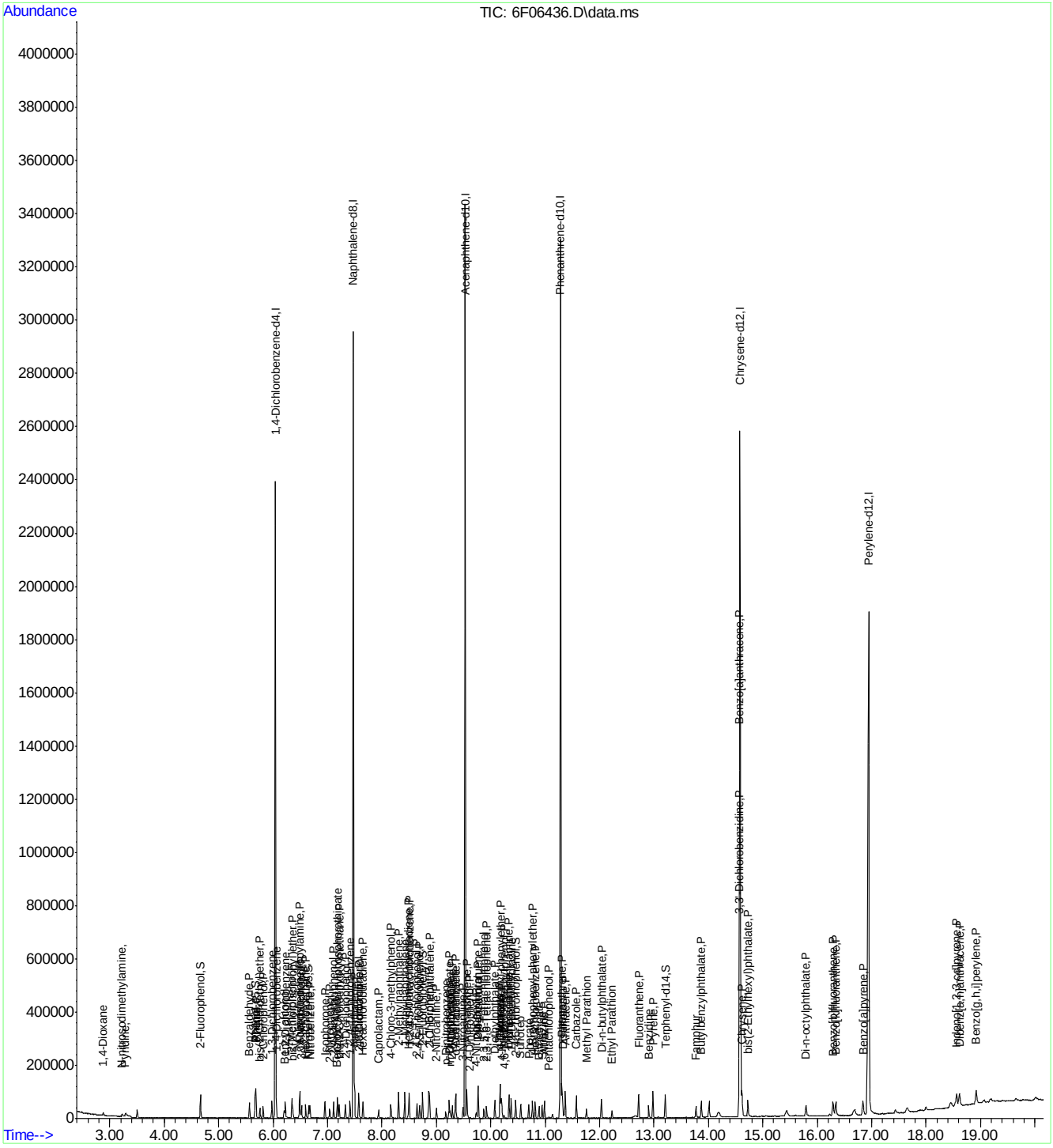
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
98)	3,3'-Dichlorobenzidine	14.566	252	12155	1.200	ppm	97
99)	Benzo[a]anthracene	14.571	228	35545	1.136	ppm	97
100)	Chrysene	14.614	228	34871	1.125	ppm	100
101)	bis(2-Ethylhexyl)phtha...	14.726	149	24107	1.490	ppm	100
103)	Di-n-octylphthalate	15.791	149	35856	1.561	ppm	97
104)	Benzo[b]fluoranthene	16.293	252	31213	1.114	ppm	99
105)	Benzo[k]fluoranthene	16.341	252	33122m	1.007	ppm	
106)	Benzo[a]pyrene	16.839	252	29481	1.037	ppm	98
107)	Indeno[1,2,3-cd]pyrene	18.561	276	27465	1.267	ppm	98
108)	Dibenz[a,h]anthracene	18.615	278	27903	1.145	ppm	94
109)	Benzo[g,h,i]perylene	18.920	276	31234	1.049	ppm	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06436.D
Sample : ic248-1
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1
Acq On : 29 Jul 2020 12:53 pm Operator: marthav

Quant Time: Jul 29 13:54:40 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625



Manual Integration Approval Summary

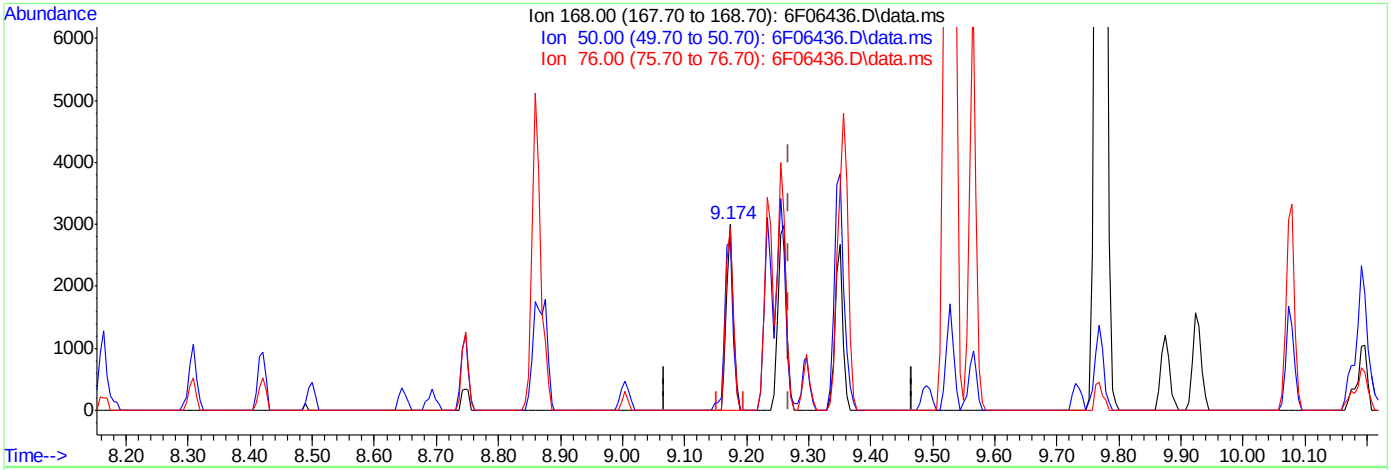
Sample Number: S6F248-IC248
Lab FileID: 6F06436.D
Injection Time: 07/29/20 12:53
Method: SW846 8270D
Analyst approved: 07/30/20 13:11 Martha Valls
Supervisor approved: 07/30/20 14:11 Nicole McCampbell

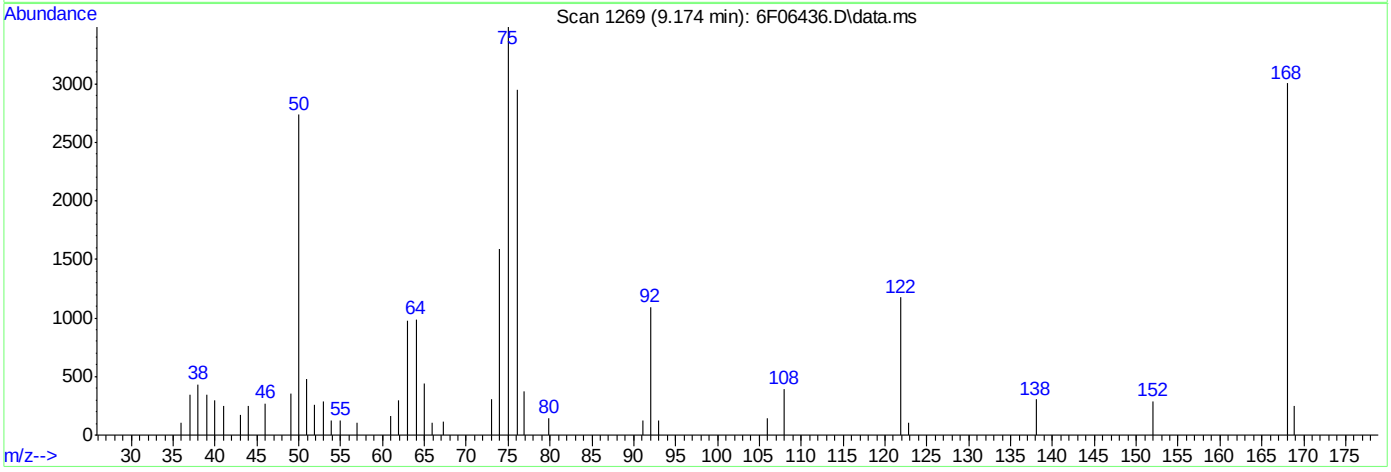
Parameter	CAS	Sig#	R.T. (min.)	Reason
m-Dinitrobenzene	99-65-0		9.26	Missed peak
2,4-Dinitrophenol	51-28-5		9.62	Missed peak
Pentachlorophenol	87-86-5		11.07	Missed peak
Benzo(k)fluoranthene	207-08-9		16.34	Poorly defined baseline

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06436.D
Sample : ic248-1
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1
Acq On : 29 Jul 2020 12:53 pm Operator: marthav

Quant Time: Jul 29 13:51:58 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625





TIC: 6F06436.D\data.ms

(54) m-Dinitrobenzene

9.174min (-0.094) 1.23ppm

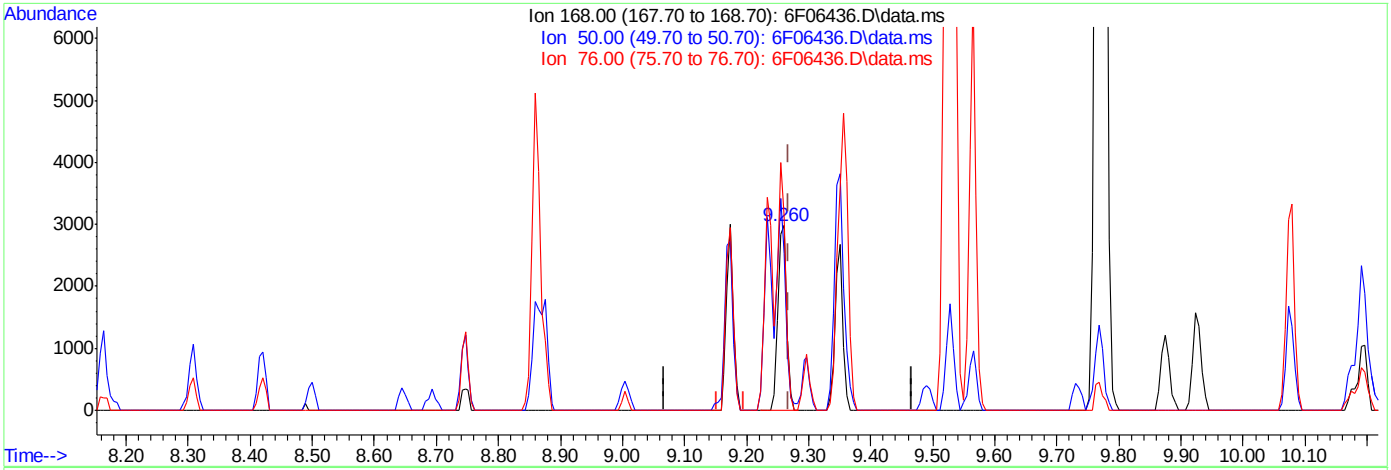
response 2354

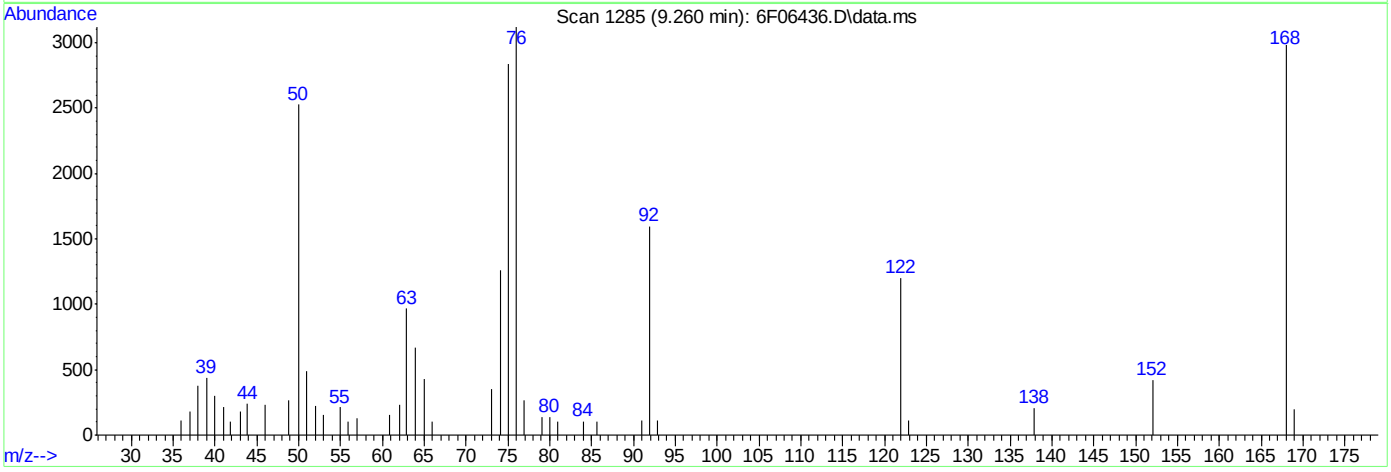
Ion	Exp%	Act%
168.00	100	100
50.00	94.70	88.87
76.00	116.40	98.10
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06436.D
Sample : ic248-1
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1
Acq On : 29 Jul 2020 12:53 pm Operator: marthav

Quant Time: Jul 29 13:51:58 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625





TIC: 6F06436.D\data.ms

(54) m-Dinitrobenzene

9.260min (-0.008) 1.48ppm m

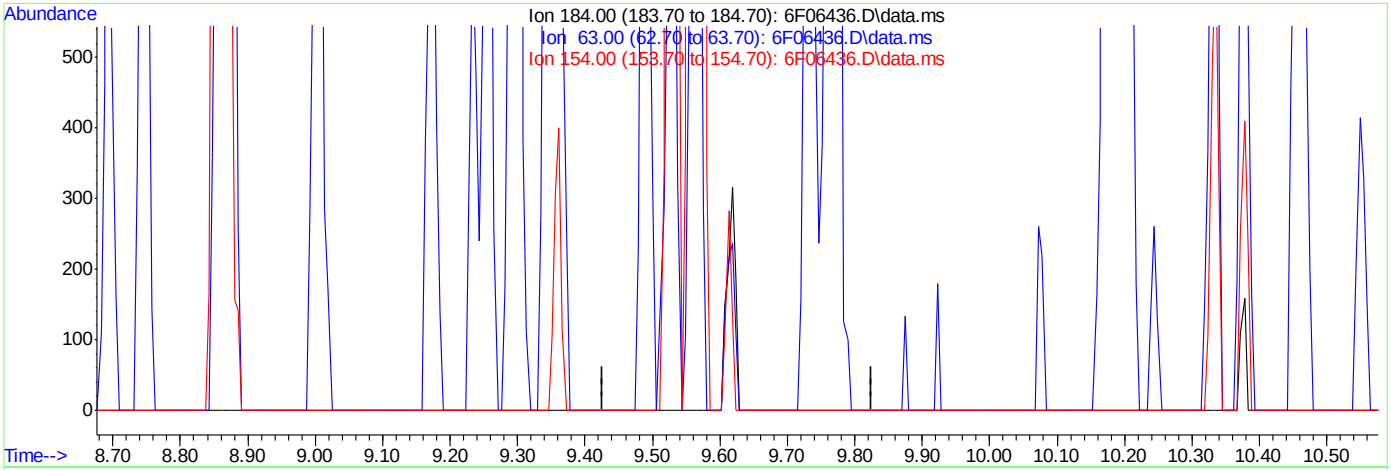
response 2855

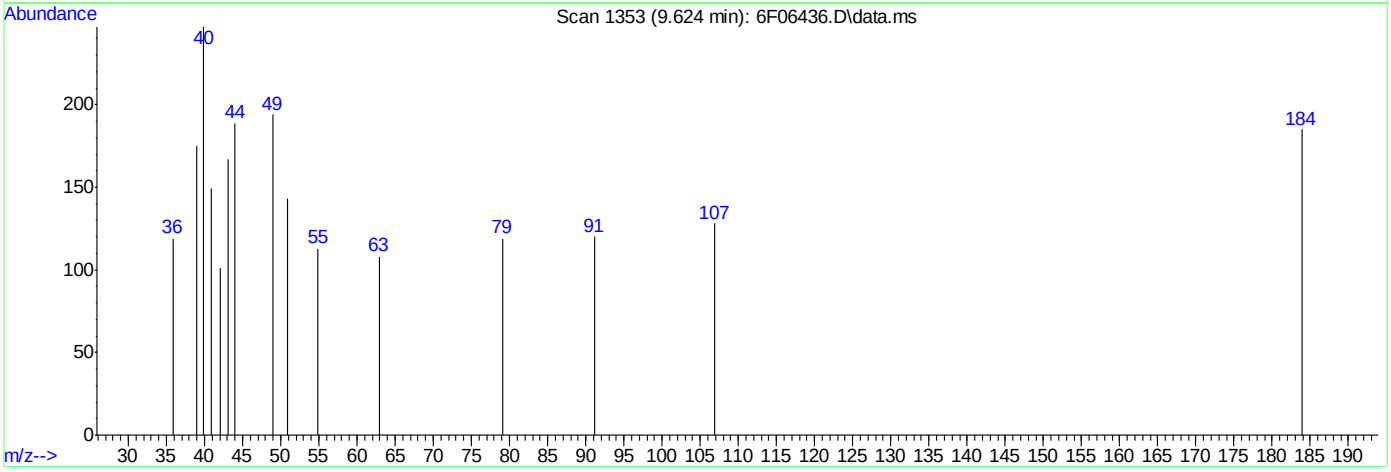
Ion	Exp%	Act%
168.00	100	100
50.00	94.70	84.86
76.00	116.40	104.73
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06436.D
Sample : ic248-1
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1
Acq On : 29 Jul 2020 12:53 pm Operator: marthav

Quant Time: Jul 29 13:51:58 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625





TIC: 6F06436.D\data.ms

(59) 2,4-Dinitrophenol (P)

9.626min (-9.626) 0.00ppm

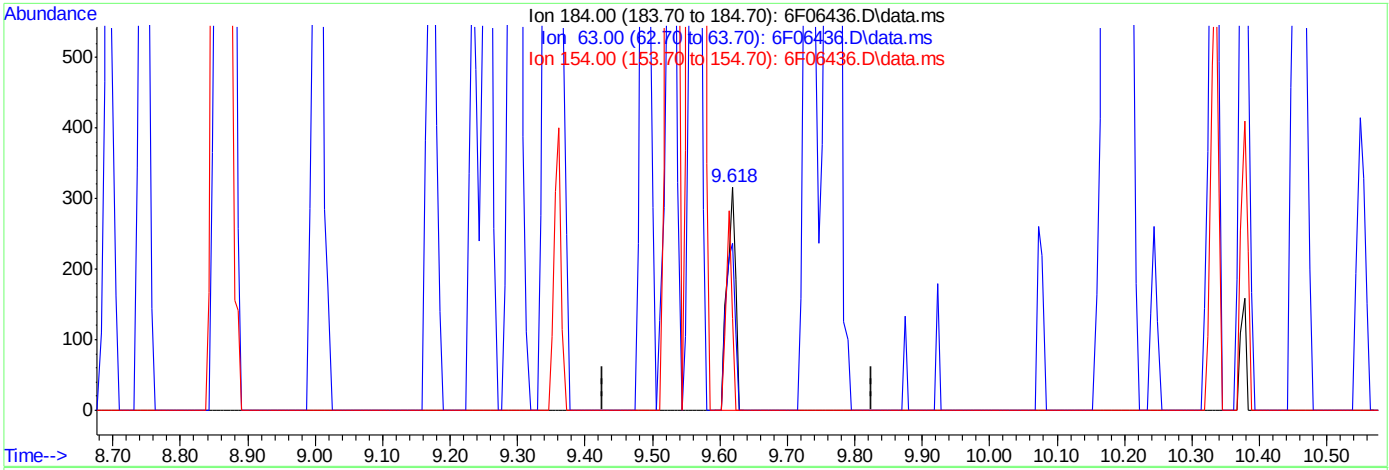
response 0

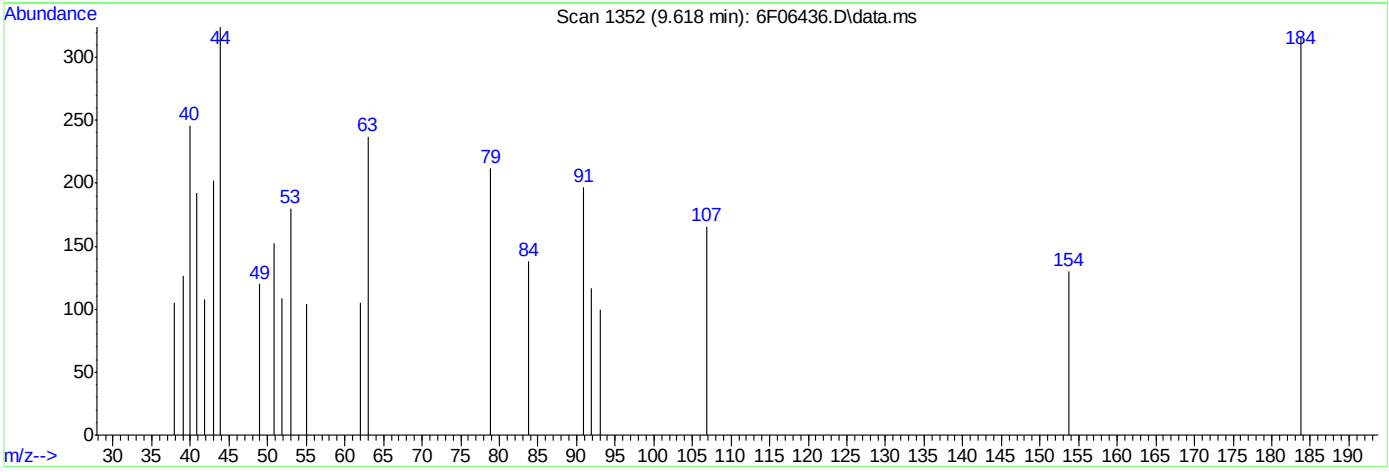
Ion	Exp%	Act%
184.00	100	0.00
63.00	60.50	0.00#
154.00	48.80	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06436.D
Sample : ic248-1
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1
Acq On : 29 Jul 2020 12:53 pm Operator: marthav

Quant Time: Jul 29 13:51:58 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625





TIC: 6F06436.D\data.ms

(59) 2,4-Dinitrophenol (P)

9.618min (-0.008) 4.97ppm m

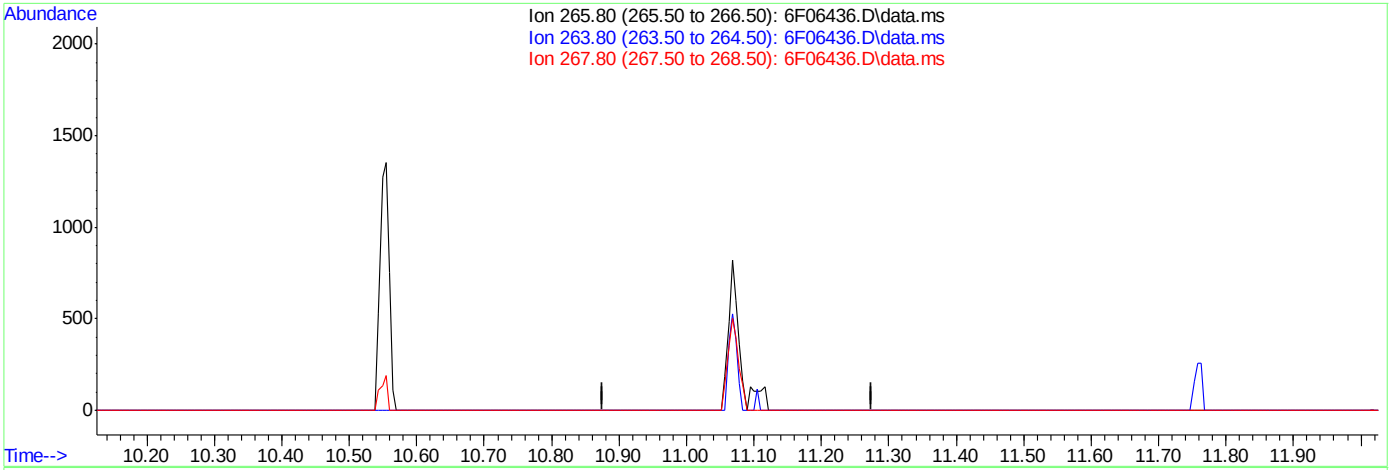
response 278

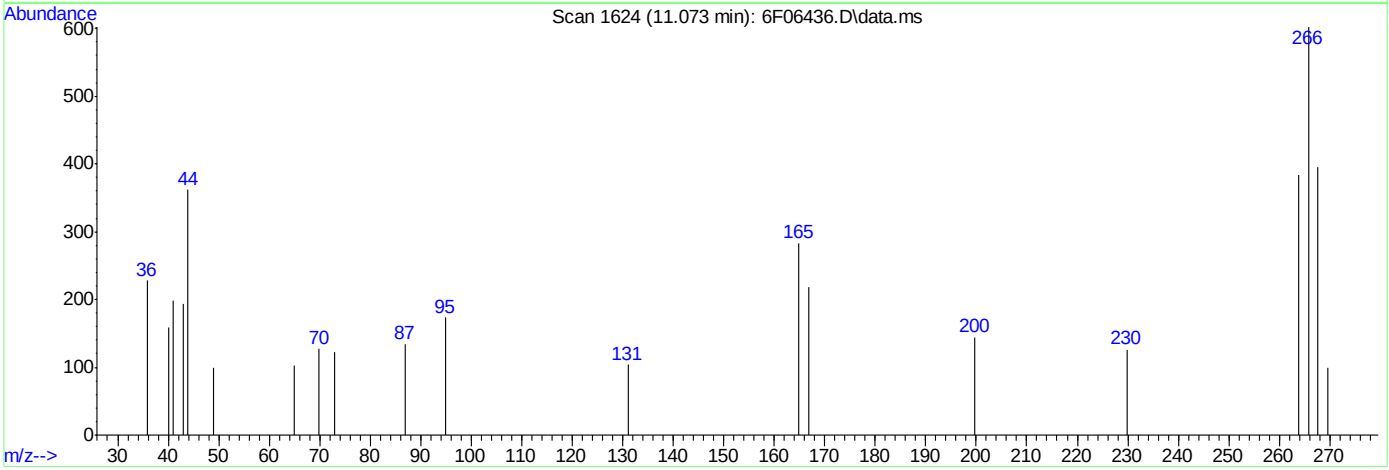
Ion	Exp%	Act%
184.00	100	100
63.00	60.50	75.00
154.00	48.80	41.14
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06436.D
Sample : ic248-1
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1
Acq On : 29 Jul 2020 12:53 pm Operator: marthav

Quant Time: Jul 29 13:51:58 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625





TIC: 6F06436.D\data.ms

(83) Pentachlorophenol (P)

11.076min (-11.076) 0.00ppm

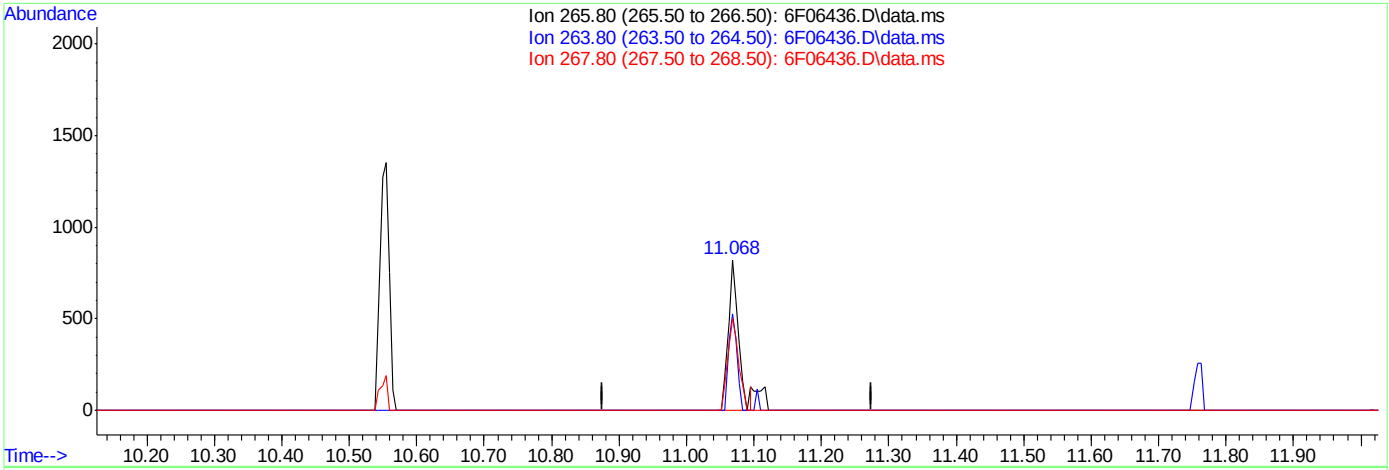
response 0

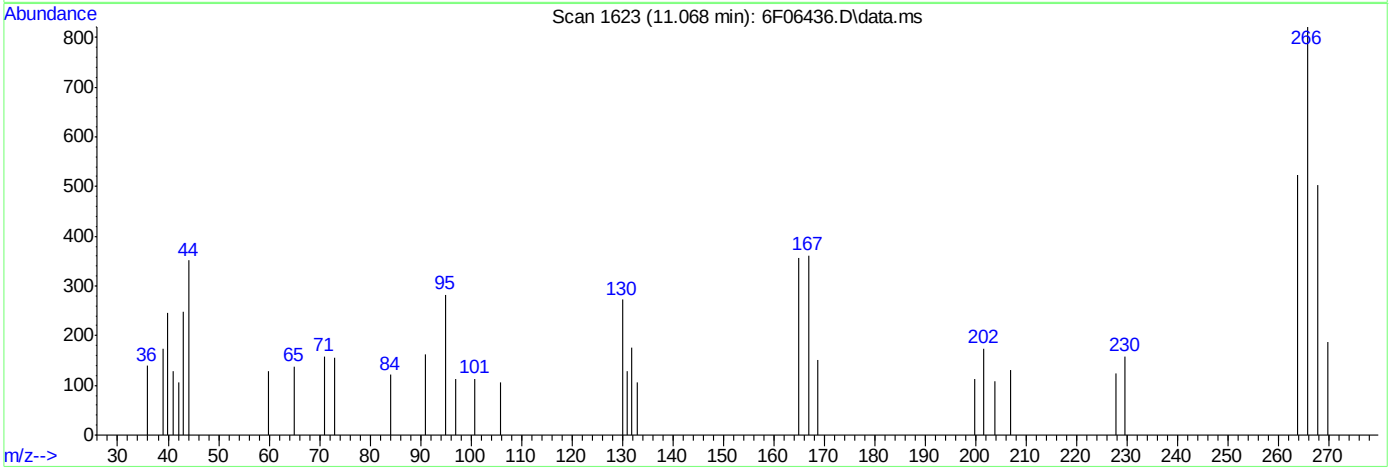
Ion	Exp%	Act%
265.80	100	0.00
263.80	65.00	0.00#
267.80	64.10	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06436.D
Sample : ic248-1
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1
Acq On : 29 Jul 2020 12:53 pm Operator: marthav

Quant Time: Jul 29 13:51:58 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625





TIC: 6F06436.D\data.ms

(83) Pentachlorophenol (P)

11.068min (-0.008) 0.41ppm m

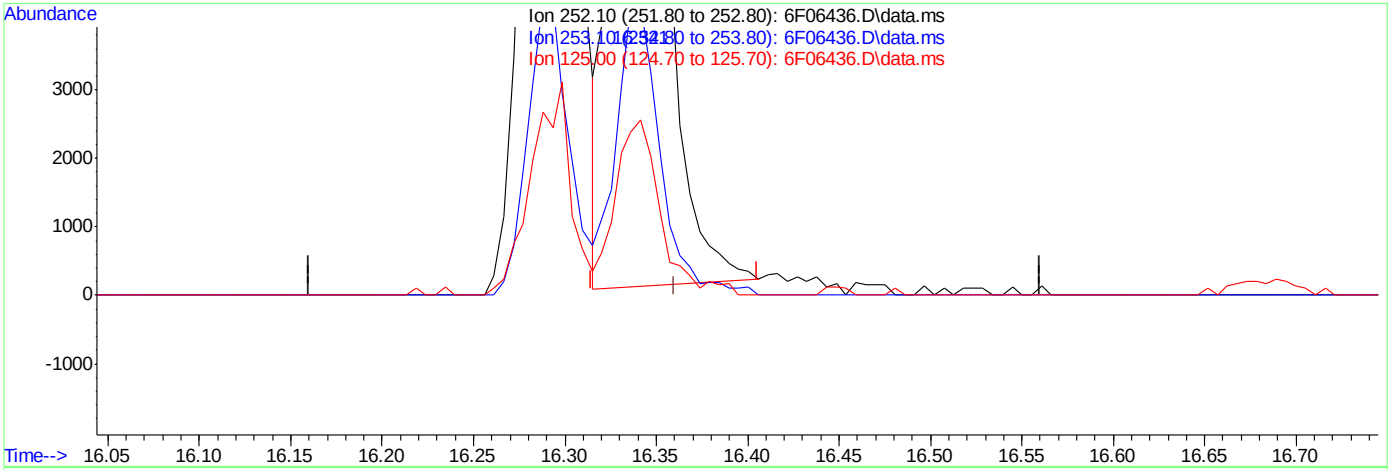
response 880

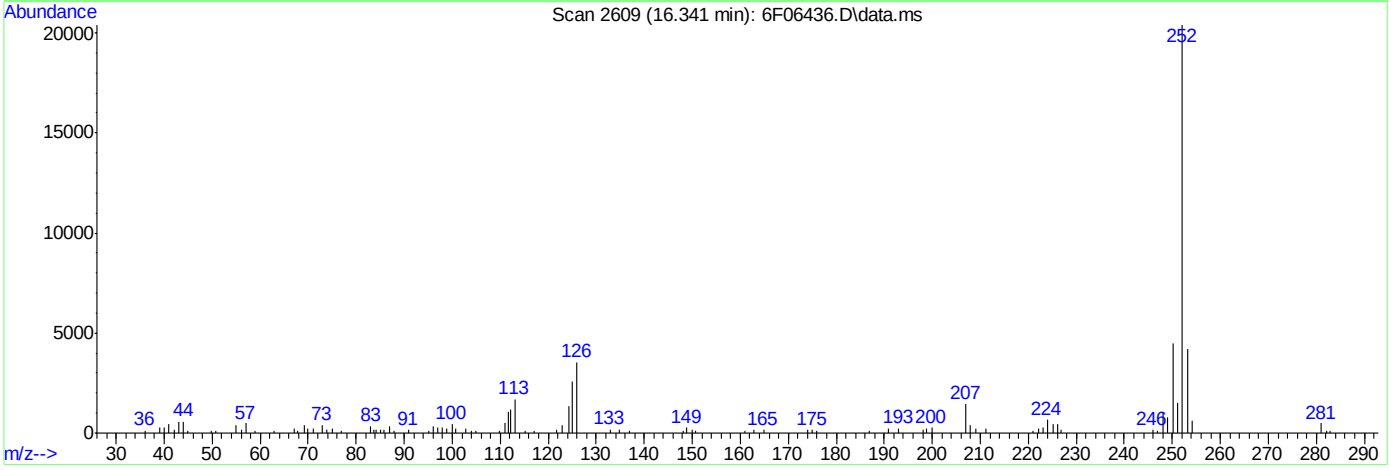
Ion	Exp%	Act%
265.80	100	100
263.80	65.00	63.82
267.80	64.10	61.14
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06436.D
Sample : ic248-1
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1
Acq On : 29 Jul 2020 12:53 pm Operator: marthav

Quant Time: Jul 29 13:51:58 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625





TIC: 6F06436.D\data.ms

(105) Benzo[k]fluoranthene (P)

16.341min (-0.019) 0.98ppm

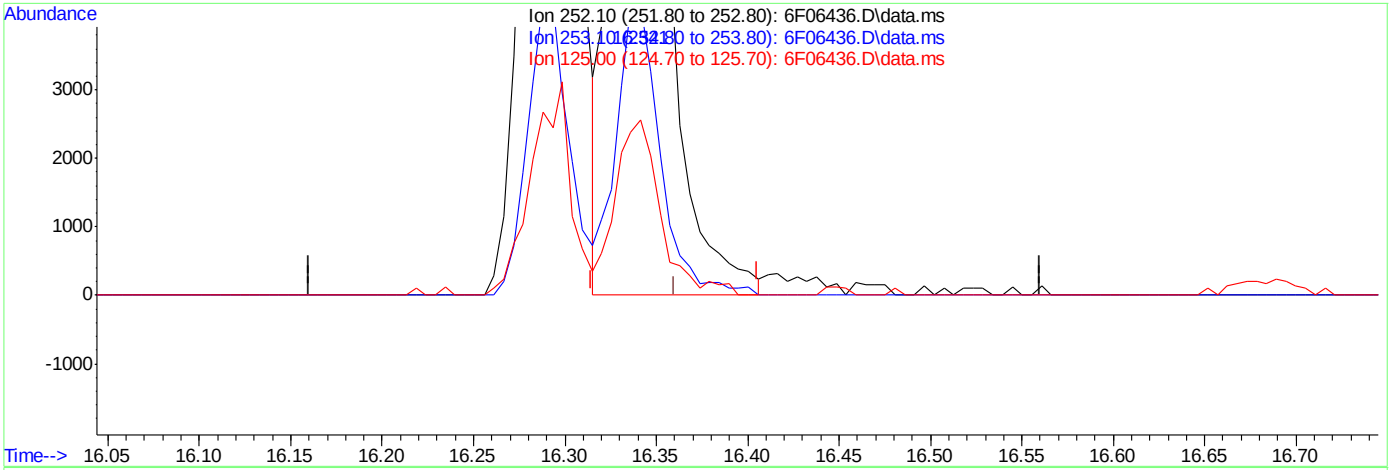
response 32225

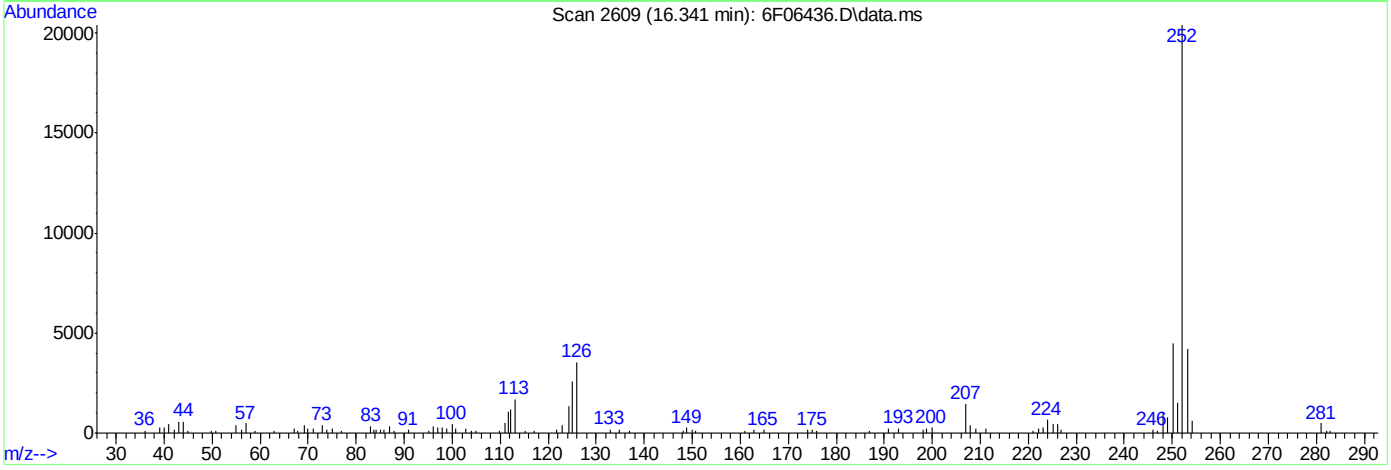
Ion	Exp%	Act%
252.10	100	100
253.10	22.00	20.63
125.00	13.40	12.82
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06436.D
Sample : ic248-1
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1
Acq On : 29 Jul 2020 12:53 pm Operator: marthav

Quant Time: Jul 29 13:51:58 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625





TIC: 6F06436.D\data.ms

(105) Benzo[k]fluoranthene (P)

16.341min (-0.019) 1.01ppm m

response 33122

Ion	Exp%	Act%
252.10	100	100
253.10	22.00	20.70
125.00	13.40	12.60
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 07/30/20 14:11

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06437.D
Sample : ic248-5
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1
Acq On : 29 Jul 2020 1:19 pm Operator: marthav

Quant Time: Jul 29 14:30:48 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.045	152	318455	40.00	ppm	-0.04
22) Naphthalene-d8	7.474	136	1222979	40.00	ppm	0.00
43) Acenaphthene-d10	9.527	164	669440	40.00	ppm	0.00
70) Phenanthrene-d10	11.282	188	1233747	40.00	ppm	0.00
92) Chrysene-d12	14.582	240	1104905	40.00	ppm	-0.01
102) Perylene-d12	16.946	264	1105990	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	4.666	112	114999	10.19	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 10.19%#			
9) Phenol-d5	5.676	99	138610	10.68	ppm	-0.01
Spiked Amount 100.000	Range 10 - 50		Recovery = 10.68%			
23) Nitrobenzene-d5	6.655	82	65442	7.46	ppm	0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 14.92%#			
47) 2-Fluorobiphenyl	8.747	172	130403	5.22	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 10.44%#			
75) 2,4,6-Tribromophenol	10.463	330	38509	12.49	ppm	0.00
Spiked Amount 100.000	Range 33 - 118		Recovery = 12.49%#			
95) Terphenyl-d14	13.207	244	149889	5.28	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 10.56%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.874	88	22885	6.497	ppm	97
3) N-nitrosodimethylamine	3.205	42	31179	5.099	ppm	97
4) Pyridine	3.254	79	58266	5.065	ppm	96
5) Benzaldehyde	5.564	106	48057	5.171	ppm	97
6) Aniline	5.687	93	91490	5.343	ppm	69
8) bis(2-Chloroethyl)ether	5.757	93	60547	5.246	ppm	100
10) Phenol	5.687	94	81309	5.394	ppm	69
11) 2-Chlorophenol	5.816	128	59278	5.197	ppm	99
12) 1,3-Dichlorobenzene	5.976	146	65233	5.062	ppm	98
13) 1,4-Dichlorobenzene	6.062	146	66893	5.122	ppm	99
14) 1,2-Dichlorobenzene	6.222	146	62700	5.095	ppm	98
15) Benzyl alcohol	6.201	108	36420	6.483	ppm	96
16) bis(2-chloroisopropyl)...	6.356	45	76836	5.245	ppm #	68
17) 2-Methylphenol	6.345	108	55458	5.531	ppm	92
18) Acetophenone	6.489	105	80514	5.199	ppm	98
19) Hexachloroethane	6.602	117	27332	5.342	ppm	96
20) N-Nitroso-di-n-propyla...	6.495	70	43676	5.555	ppm	97
21) 3&4-Methylphenol	6.516	108	57450	5.607	ppm	97
24) Nitrobenzene	6.677	77	65006	6.980	ppm	96
25) Isophorone	6.955	82	117360	5.463	ppm	98
26) 2-Nitrophenol	7.040	139	29995	12.423	ppm	95
27) 2,4-Dimethylphenol	7.115	107	55257	5.499	ppm	97
28) O,O,O-Triethylphosphor...	7.185	198	28230	5.130	ppm	91
29) bis(2-Chloroethoxy)met...	7.217	93	72731	5.401	ppm	98
30) Benzoic Acid	7.185	105	36925	15.690	ppm	95
31) 2,4-Dichlorophenol	7.329	162	48759	6.477	ppm	99
32) 1,2,4-Trichlorobenzene	7.415	180	54274	5.039	ppm	98
34) Naphthalene	7.500	128	175592	5.293	ppm	99
35) 4-Chloroaniline	7.575	127	75120	5.418	ppm	99
36) 2,6-Dichlorophenol	7.581	162	47439	6.412	ppm	98
37) Hexachlorobutadiene	7.650	225	29548	4.873	ppm	97

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06437.D
Sample : ic248-5
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1
Acq On : 29 Jul 2020 1:19 pm Operator: marthav

Quant Time: Jul 29 14:30:48 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Caprolactam	7.944	113	18656	5.811	ppm	97
39) 4-Chloro-3-methylphenol	8.164	107	49821	5.530	ppm	99
40) 2-Methylnaphthalene	8.308	141	102000	5.310	ppm	98
41) 1-Methylnaphthalene	8.420	142	111007	5.263	ppm	97
42) 1,2,4,5-Tetrachloroben...	8.501	216	52507	5.082	ppm	99
44) Hexachlorocyclopentadiene	8.495	237	30184	8.181	ppm	99
45) 2,4,6-Trichlorophenol	8.650	196	34878	6.826	ppm	96
46) 2,4,5-Trichlorophenol	8.693	196	36905	6.408	ppm	96
48) 1,1'-Biphenyl	8.859	154	135983	5.052	ppm	99
49) 2-Chloronaphthalene	8.875	162	109000	5.233	ppm	100
50) 2-Nitroaniline	9.003	65	32288	10.027	ppm	97
51) p-Dinitrobenzene	9.174	75	18053	9.357	ppm	99
52) Acenaphthylene	9.356	152	166305	5.314	ppm	99
53) Dimethylphthalate	9.239	163	124000	5.533	ppm	100
54) m-Dinitrobenzene	9.255	168	18954m	9.042	ppm	
55) 2,6-Dinitrotoluene	9.297	165	27373	8.042	ppm	95
56) o-Dinitrobenzene	9.351	50	21528	7.901	ppm	94
57) Acenaphthene	9.565	153	112210	5.423	ppm	97
58) 3-Nitroaniline	9.490	138	31892	6.949	ppm	97
59) 2,4-Dinitrophenol	9.613	184	6514	16.419	ppm	93
60) Dibenzofuran	9.774	168	156514	5.437	ppm	96
61) 2,4-Dinitrotoluene	9.768	165	35389	8.132	ppm	91
62) 4-Nitrophenol	9.731	109	17722	8.278	ppm	95
63) 2,3,5,6-Tetrachlorophenol	9.875	232	26572	6.995	ppm	97
64) 2,3,4,6-Tetrachlorophenol	9.923	232	28770	6.626	ppm	92
65) Fluorene	10.175	166	123147	5.360	ppm	96
66) 4-Chlorophenyl-phenyle...	10.191	204	62136	5.354	ppm	99
67) Diethylphthalate	10.078	149	125875	5.742	ppm	99
68) Thionazin	10.169	97	28170	6.830	ppm	97
69) 4-Nitroaniline	10.207	138	31694	7.113	ppm	94
71) 4,6-Dinitro-2-methylph...	10.244	198	13898	11.980	ppm	89
72) n-Nitrosodiphenylamine	10.335	169	105929	5.929	ppm	100
73) Diphenylamine	10.335	169	105929	5.241	ppm	100
74) 1,2-Diphenylhydrazine	10.378	77	137796	5.563	ppm	100
76) Sulfotep	10.549	97	21741	6.287	ppm	88
77) Phorate	10.699	75	71284	6.450	ppm	99
78) 4-Bromophenyl-phenylether	10.768	248	34734	5.013	ppm	98
79) Hexachlorobenzene	10.822	284	40699	5.064	ppm	97
80) Dimethoate	10.886	87	48422	7.124	ppm	97
81) Simazine	10.945	201	21176	5.427	ppm	98
82) Atrazine	10.988	200	34790	5.162	ppm	97
83) Pentachlorophenol	11.068	266	10992	4.749	ppm	98
84) Phenanthrene	11.309	178	184831	5.412	ppm	99
85) Anthracene	11.367	178	187257	5.318	ppm	98
86) Disulfoton	11.319	88	75443	5.805	ppm	97
87) Carbazole	11.576	167	167513	5.397	ppm	100
88) Methyl Parathion	11.758	109	34168	8.283	ppm	95
89) Di-n-butylphthalate	12.036	149	208225	5.740	ppm	98
90) Ethyl Parathion	12.229	97	21964	9.720	ppm	95
91) Fluoranthene	12.721	202	189552	5.295	ppm	98
93) Benzidine	12.902	184	117825	6.952	ppm	97
94) Pyrene	12.983	202	196154	5.383	ppm	99
96) Famphur	13.774	218	67743	7.330	ppm	96
97) Butylbenzylphthalate	13.871	149	90089	7.168	ppm	99

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06437.D
Sample : ic248-5
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1
Acq On : 29 Jul 2020 1:19 pm Operator: marthav

Quant Time: Jul 29 14:30:48 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

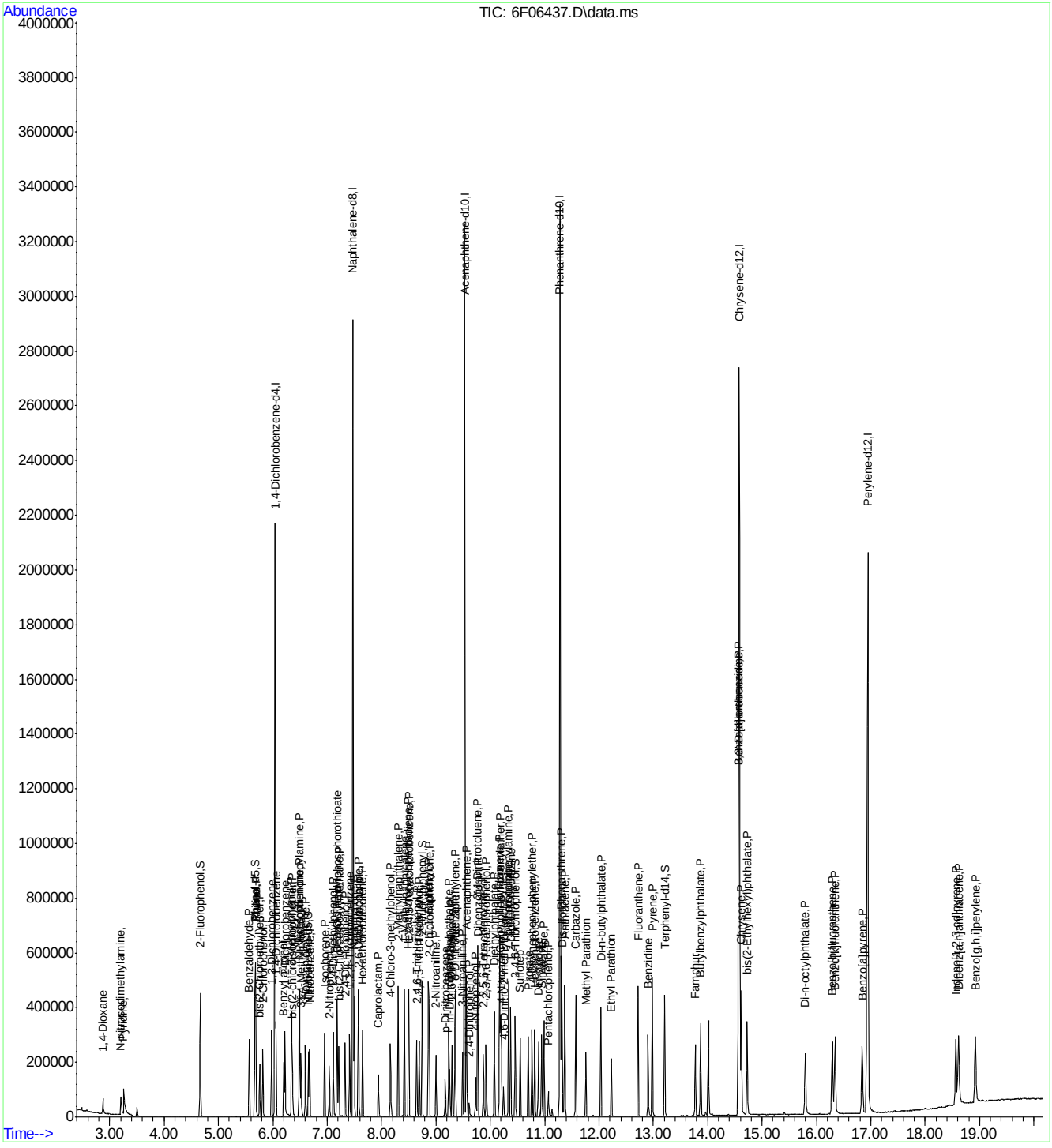
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
98)	3,3'-Dichlorobenzidine	14.566	252	68160	6.172	ppm	100
99)	Benzo[a]anthracene	14.566	228	177388	5.291	ppm	98
100)	Chrysene	14.614	228	180416	5.433	ppm	98
101)	bis(2-Ethylhexyl)phtha...	14.726	149	129395	7.232	ppm	98
103)	Di-n-octylphthalate	15.796	149	198245	7.740	ppm	99
104)	Benzo[b]fluoranthene	16.294	252	165127	5.509	ppm	98
105)	Benzo[k]fluoranthene	16.342	252	179743	5.170	ppm	99
106)	Benzo[a]pyrene	16.839	252	155979	5.189	ppm	99
107)	Indeno[1,2,3-cd]pyrene	18.567	276	145827	6.197	ppm	96
108)	Dibenz[a,h]anthracene	18.615	278	155425	5.903	ppm	97
109)	Benzo[g,h,i]perylene	18.925	276	162812	5.169	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06437.D
Sample : ic248-5
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1
Acq On : 29 Jul 2020 1:19 pm Operator: marthav

Quant Time: Jul 29 14:30:48 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625



Manual Integration Approval Summary

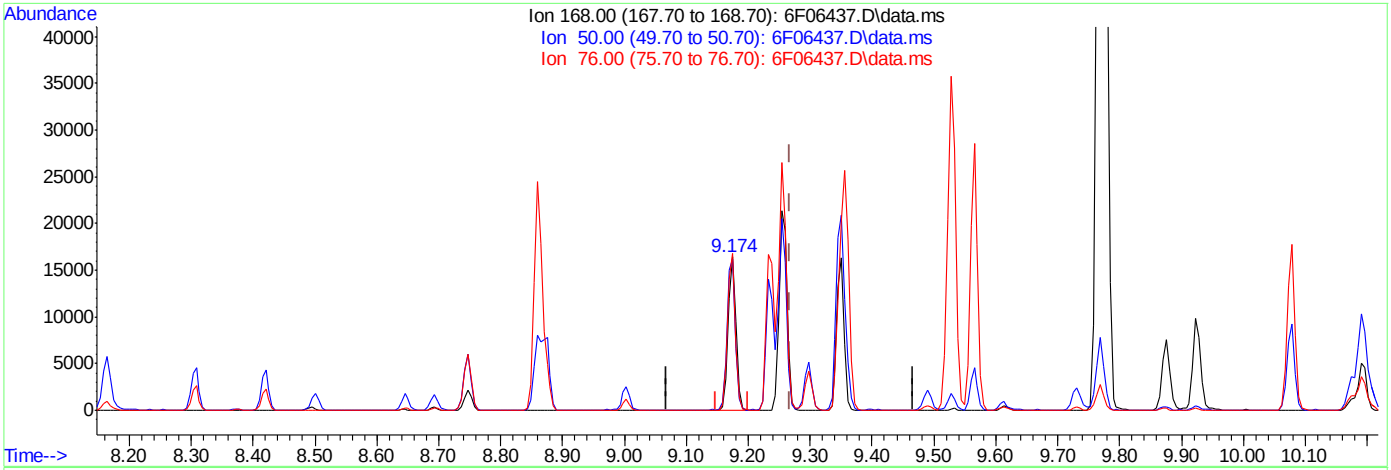
Sample Number:	S6F248-IC248	**Method:**	SW846 8270D
Lab FileID:	6F06437.D	**Analyst approved:**	07/30/20 13:11 Martha Valls
Injection Time:	07/29/20 13:19	**Supervisor approved:**	07/30/20 14:11 Nicole McCampbell

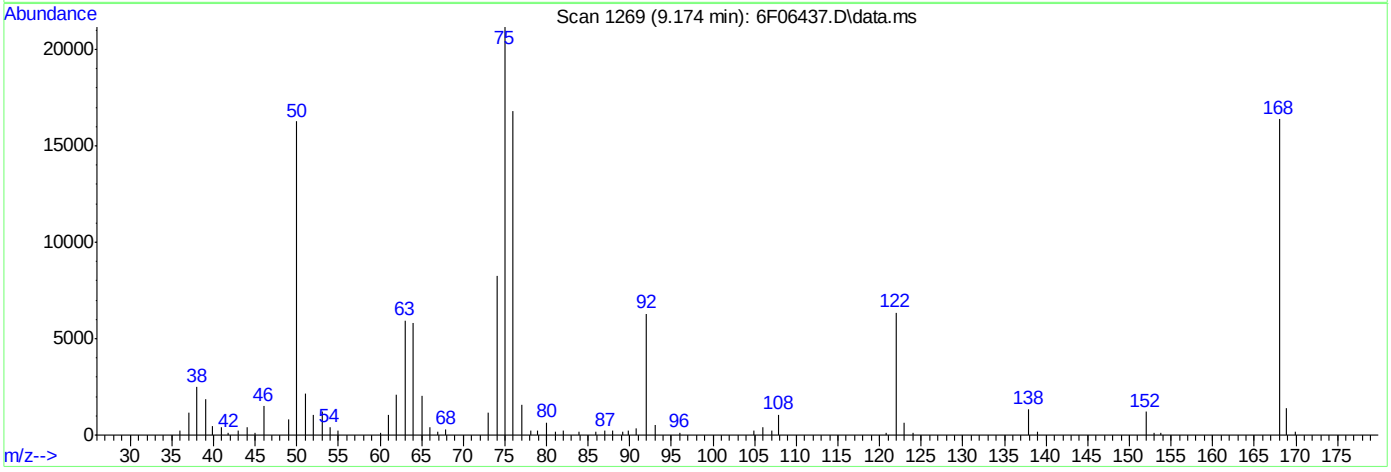
Parameter	CAS	Sig#	R.T. (min.)	Reason
m-Dinitrobenzene	99-65-0		9.25	Missed peak

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06437.D
Sample : ic248-5
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1
Acq On : 29 Jul 2020 1:19 pm Operator: marthav

Quant Time: Jul 29 13:52:01 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625





TIC: 6F06437.D\data.ms

(54) m-Dinitrobenzene

9.174min (-0.093) 6.95ppm

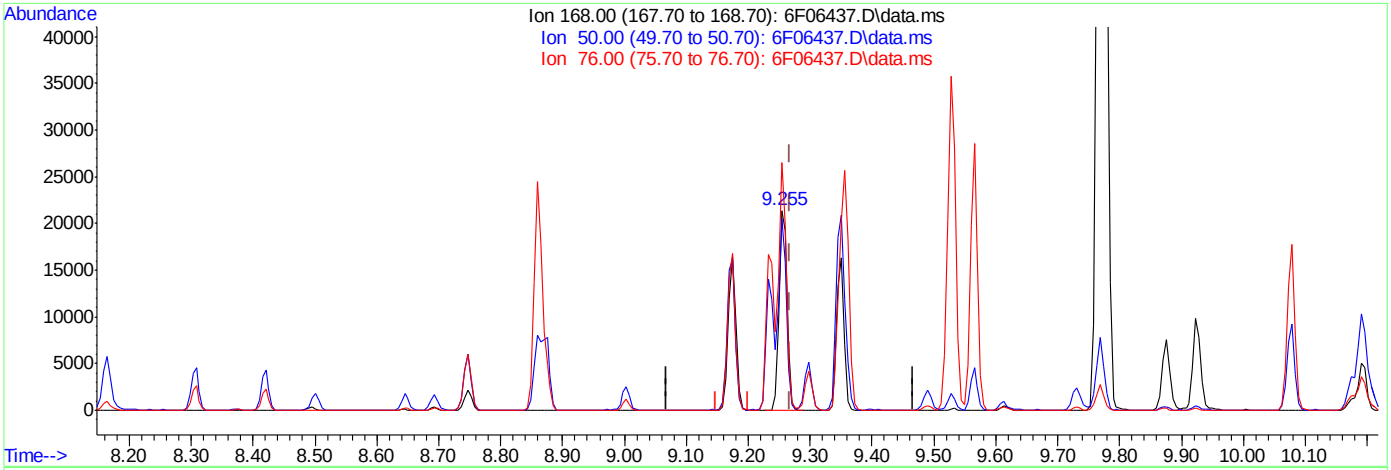
response 14130

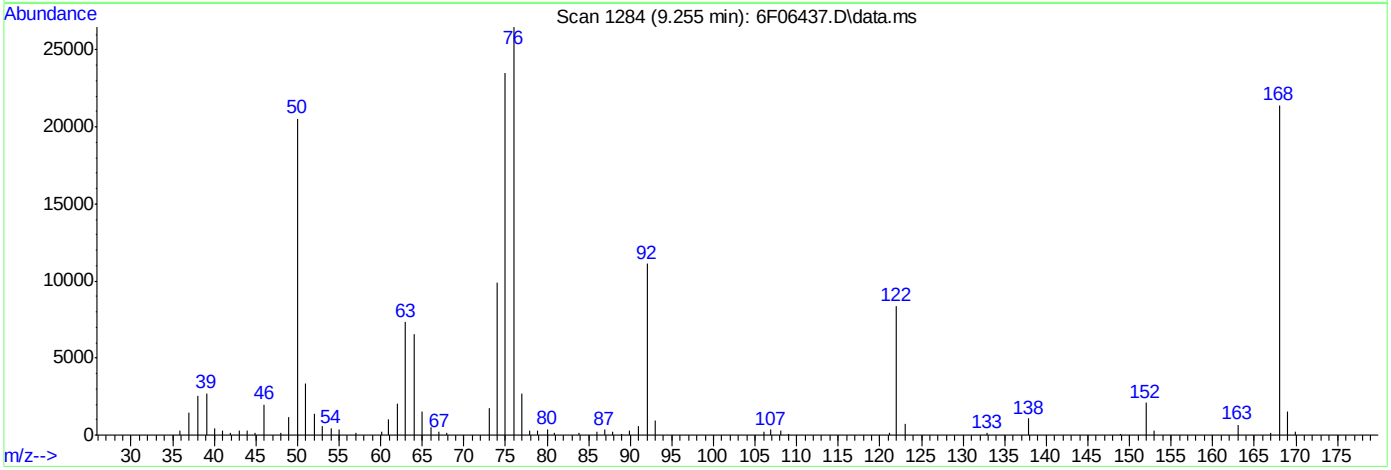
Ion	Exp%	Act%
168.00	100	100
50.00	94.70	99.22
76.00	116.40	102.48
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06437.D
Sample : ic248-5
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1
Acq On : 29 Jul 2020 1:19 pm Operator: marthav

Quant Time: Jul 29 13:52:01 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625





TIC: 6F06437.D\data.ms

(54) m-Dinitrobenzene

9.255min (-0.013) 9.04ppm m

response 18954

Ion	Exp%	Act%
168.00	100	100
50.00	94.70	96.07
76.00	116.40	123.79
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06438.D
Sample : ic248-10
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1
Acq On : 29 Jul 2020 1:45 pm Operator: marthav

Quant Time: Jul 29 14:36:04 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	6.045	152	328143	40.00	ppm		0.00
22) Naphthalene-d8	7.479	136	1282707	40.00	ppm		0.00
43) Acenaphthene-d10	9.533	164	695695	40.00	ppm		0.00
70) Phenanthrene-d10	11.287	188	1269574	40.00	ppm		0.00
92) Chrysene-d12	14.582	240	1134139	40.00	ppm		0.00
102) Perylene-d12	16.946	264	1144729	40.00	ppm		0.00
System Monitoring Compounds							
7) 2-Fluorophenol	4.665	112	239059	20.56	ppm		0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 20.56%				
9) Phenol-d5	5.676	99	285463	21.35	ppm		0.00
Spiked Amount 100.000	Range 10 - 50		Recovery = 21.35%				
23) Nitrobenzene-d5	6.655	82	135148	12.18	ppm		0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 24.36%#				
47) 2-Fluorobiphenyl	8.746	172	262028	10.09	ppm		0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 20.18%#				
75) 2,4,6-Tribromophenol	10.463	330	80435	21.45	ppm		0.00
Spiked Amount 100.000	Range 33 - 118		Recovery = 21.45%#				
95) Terphenyl-d14	13.207	244	307791	10.56	ppm		0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 21.12%#				
Target Compounds							Qvalue
2) 1,4-Dioxane	2.868	88	46153	9.860	ppm		99
3) N-nitrosodimethylamine	3.200	42	65504	10.396	ppm		98
4) Pyridine	3.248	79	124024	10.463	ppm		100
5) Benzaldehyde	5.564	106	98510	10.287	ppm		99
6) Aniline	5.687	93	186463	10.568	ppm	#	38
8) bis(2-Chloroethyl)ether	5.762	93	122731	10.319	ppm		89
10) Phenol	5.687	94	166709	10.733	ppm	#	56
11) 2-Chlorophenol	5.821	128	124160	10.564	ppm		87
12) 1,3-Dichlorobenzene	5.976	146	132981	10.014	ppm		98
13) 1,4-Dichlorobenzene	6.061	146	136087	10.113	ppm		97
14) 1,2-Dichlorobenzene	6.227	146	126782	9.998	ppm		97
15) Benzyl alcohol	6.206	108	73092	10.437	ppm		97
16) bis(2-chloroisopropyl)...	6.356	45	156912	10.395	ppm		74
17) 2-Methylphenol	6.345	108	111196	10.763	ppm		97
18) Acetophenone	6.489	105	167555	10.500	ppm		99
19) Hexachloroethane	6.602	117	55899	10.602	ppm		95
20) N-Nitroso-di-n-propyla...	6.495	70	88424	10.915	ppm	#	70
21) 3&4-Methylphenol	6.521	108	115952	10.982	ppm		95
24) Nitrobenzene	6.677	77	131446	11.441	ppm		96
25) Isophorone	6.955	82	236664	10.504	ppm		99
26) 2-Nitrophenol	7.040	139	62567	14.627	ppm		97
27) 2,4-Dimethylphenol	7.115	107	112441	10.669	ppm		100
28) O,O,O-Triethylphosphor...	7.185	198	57594	9.979	ppm		85
29) bis(2-Chloroethoxy)met...	7.217	93	144973	10.264	ppm		99
30) Benzoic Acid	7.201	105	86511	16.620	ppm		97
31) 2,4-Dichlorophenol	7.329	162	99117	10.590	ppm		99
32) 1,2,4-Trichlorobenzene	7.415	180	109873	9.727	ppm		96
34) Naphthalene	7.500	128	356000	10.232	ppm		99
35) 4-Chloroaniline	7.575	127	153055	10.524	ppm		99
36) 2,6-Dichlorophenol	7.580	162	97270	10.635	ppm		99
37) Hexachlorobutadiene	7.655	225	59857	9.412	ppm		98

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06438.D
Sample : ic248-10
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1
Acq On : 29 Jul 2020 1:45 pm Operator: marthav

Quant Time: Jul 29 14:36:04 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38)	Caprolactam	7.949	113	39308	11.830	ppm		98
39)	4-Chloro-3-methylphenol	8.163	107	102298	10.827	ppm		100
40)	2-Methylnaphthalene	8.308	141	206277	10.239	ppm		99
41)	1-Methylnaphthalene	8.420	142	224775	10.160	ppm		98
42)	1,2,4,5-Tetrachloroben...	8.500	216	105843	9.766	ppm		99
44)	Hexachlorocyclopentadiene	8.495	237	65993	11.601	ppm		98
45)	2,4,6-Trichlorophenol	8.650	196	72277	11.033	ppm		98
46)	2,4,5-Trichlorophenol	8.693	196	77596	10.817	ppm		98
48)	1,1'-Biphenyl	8.859	154	283510	10.136	ppm		99
49)	2-Chloronaphthalene	8.875	162	221914	10.253	ppm		100
50)	2-Nitroaniline	9.003	65	67789	14.357	ppm		96
51)	p-Dinitrobenzene	9.174	75	40563	13.258	ppm		99
52)	Acenaphthylene	9.362	152	338693	10.414	ppm		99
53)	Dimethylphthalate	9.239	163	249742	10.723	ppm		99
54)	m-Dinitrobenzene	9.260	168	41210	13.166	ppm		76
55)	2,6-Dinitrotoluene	9.297	165	57812	12.598	ppm		94
56)	o-Dinitrobenzene	9.351	50	45068	13.717	ppm		89
57)	Acenaphthene	9.565	153	223048	10.374	ppm		98
58)	3-Nitroaniline	9.490	138	67629	12.570	ppm		100
59)	2,4-Dinitrophenol	9.613	184	19805	14.310	ppm		90
60)	Dibenzofuran	9.773	168	311502	10.413	ppm		97
61)	2,4-Dinitrotoluene	9.768	165	75933	12.822	ppm		93
62)	4-Nitrophenol	9.731	109	34740	12.256	ppm	#	78
63)	2,3,5,6-Tetrachlorophenol	9.875	232	57153	11.065	ppm		99
64)	2,3,4,6-Tetrachlorophenol	9.928	232	61665	10.846	ppm		98
65)	Fluorene	10.175	166	250963	10.511	ppm		100
66)	4-Chlorophenyl-phenyle...	10.196	204	122569	10.163	ppm		97
67)	Diethylphthalate	10.078	149	256201	11.246	ppm		99
68)	Thionazin	10.169	97	58897	12.817	ppm		95
69)	4-Nitroaniline	10.212	138	67589	12.313	ppm		100
71)	4,6-Dinitro-2-methylph...	10.244	198	35453	13.808	ppm		93
72)	n-Nitrosodiphenylamine	10.335	169	214520	11.668	ppm		99
73)	Diphenylamine	10.335	169	214520	10.315	ppm		99
74)	1,2-Diphenylhydrazine	10.378	77	281121	11.028	ppm		98
76)	Sulfotep	10.554	97	46219	12.643	ppm		91
77)	Phorate	10.699	75	153204	12.594	ppm		100
78)	4-Bromophenyl-phenylether	10.774	248	71386	10.011	ppm		95
79)	Hexachlorobenzene	10.822	284	80721	9.760	ppm		99
80)	Dimethoate	10.886	87	107034	13.944	ppm		98
81)	Simazine	10.950	201	44229	11.016	ppm		98
82)	Atrazine	10.993	200	73114	10.543	ppm		94
83)	Pentachlorophenol	11.068	266	31791	8.709	ppm		97
84)	Phenanthrene	11.308	178	368751	10.493	ppm		99
85)	Anthracene	11.373	178	377686	10.423	ppm		98
86)	Disulfoton	11.319	88	158988	11.445	ppm		96
87)	Carbazole	11.576	167	337900	10.580	ppm		100
88)	Methyl Parathion	11.758	109	77633	14.226	ppm		97
89)	Di-n-butylphthalate	12.036	149	427585	11.455	ppm		98
90)	Ethyl Parathion	12.234	97	50797	15.400	ppm		92
91)	Fluoranthene	12.720	202	389163	10.565	ppm		99
93)	Benzidine	12.908	184	245451	13.141	ppm		99
94)	Pyrene	12.983	202	396885	10.610	ppm		100
96)	Famphur	13.774	218	142860	16.082	ppm		98
97)	Butylbenzylphthalate	13.870	149	185599	12.629	ppm		99

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06438.D
Sample : ic248-10
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1
Acq On : 29 Jul 2020 1:45 pm Operator: marthav

Quant Time: Jul 29 14:36:04 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

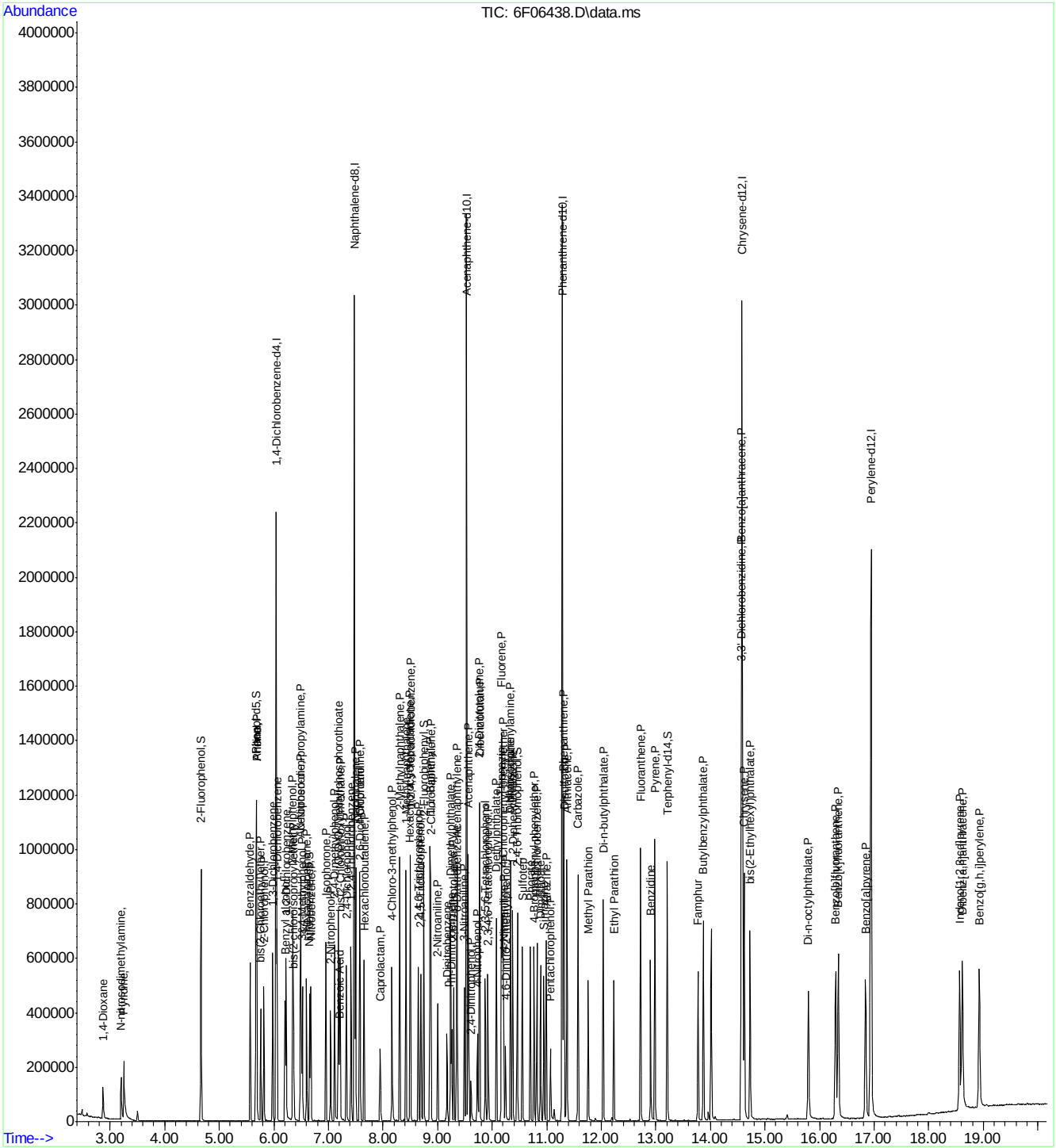
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
98)	3,3'-Dichlorobenzidine	14.566	252	144315	11.475	ppm	98
99)	Benzo[a]anthracene	14.571	228	367572	10.681	ppm	99
100)	Chrysene	14.619	228	360309	10.571	ppm	99
101)	bis(2-Ethylhexyl)phtha...	14.726	149	260224	12.584	ppm	100
103)	Di-n-octylphthalate	15.796	149	419014	12.819	ppm	99
104)	Benzo[b]fluoranthene	16.299	252	341475	10.216	ppm	98
105)	Benzo[k]fluoranthene	16.347	252	364688	10.135	ppm	99
106)	Benzo[a]pyrene	16.844	252	318308	10.232	ppm	100
107)	Indeno[1,2,3-cd]pyrene	18.567	276	302248	10.419	ppm	97
108)	Dibenz[a,h]anthracene	18.615	278	322765	10.183	ppm	98
109)	Benzo[g,h,i]perylene	18.930	276	338780	10.392	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06438.D
Sample : ic248-10
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1
Acq On : 29 Jul 2020 1:45 pm Operator: marthav

Quant Time: Jul 29 14:36:04 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625



Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06439.D
Sample : ic248-25
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1
Acq On : 29 Jul 2020 2:10 pm Operator: marthav

Quant Time: Jul 29 14:38:45 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	6.045	152	338981	40.00	ppm		0.00
22) Naphthalene-d8	7.479	136	1292284	40.00	ppm		0.00
43) Acenaphthene-d10	9.533	164	685433	40.00	ppm		0.00
70) Phenanthrene-d10	11.287	188	1263350	40.00	ppm		0.00
92) Chrysene-d12	14.587	240	1130091	40.00	ppm		0.00
102) Perylene-d12	16.946	264	1147834	40.00	ppm		0.00
System Monitoring Compounds							
7) 2-Fluorophenol	4.665	112	617588	51.41	ppm		0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 51.41%				
9) Phenol-d5	5.676	99	730747	52.90	ppm		0.00
Spiked Amount 100.000	Range 10 - 50		Recovery = 52.90%#				
23) Nitrobenzene-d5	6.660	82	339775	30.39	ppm		0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 60.78%				
47) 2-Fluorobiphenyl	8.752	172	656630	25.66	ppm		0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 51.32%				
75) 2,4,6-Tribromophenol	10.469	330	208148	55.79	ppm		0.00
Spiked Amount 100.000	Range 33 - 118		Recovery = 55.79%				
95) Terphenyl-d14	13.207	244	769179	26.48	ppm		0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 52.96%				
Target Compounds							Qvalue
2) 1,4-Dioxane	2.868	88	118155	24.436	ppm		100
3) N-nitrosodimethylamine	3.195	42	166240	25.541	ppm		100
4) Pyridine	3.237	79	312237	25.500	ppm		100
5) Benzaldehyde	5.564	106	255705	25.849	ppm		100
6) Aniline	5.687	93	477999	26.225	ppm		52
8) bis(2-Chloroethyl)ether	5.762	93	309583	25.197	ppm		90
10) Phenol	5.692	94	424411	26.452	ppm		79
11) 2-Chlorophenol	5.821	128	314072	25.868	ppm		88
12) 1,3-Dichlorobenzene	5.981	146	341406	24.887	ppm		99
13) 1,4-Dichlorobenzene	6.061	146	345520	24.857	ppm		97
14) 1,2-Dichlorobenzene	6.227	146	328104	25.048	ppm		98
15) Benzyl alcohol	6.206	108	192376	26.592	ppm		98
16) bis(2-chloroisopropyl)...	6.361	45	391954	25.135	ppm		75
17) 2-Methylphenol	6.345	108	280808	26.311	ppm		94
18) Acetophenone	6.495	105	421785	25.587	ppm		98
19) Hexachloroethane	6.602	117	142139	26.097	ppm		92
20) N-Nitroso-di-n-propyla...	6.500	70	218806	26.146	ppm	#	71
21) 3&4-Methylphenol	6.521	108	293024	26.865	ppm		97
24) Nitrobenzene	6.682	77	336060	29.034	ppm		98
25) Isophorone	6.955	82	591153	26.042	ppm		100
26) 2-Nitrophenol	7.040	139	165852	38.485	ppm		95
27) 2,4-Dimethylphenol	7.115	107	279420	26.317	ppm		95
28) O,O,O-Triethylphosphor...	7.190	198	147000	25.282	ppm		95
29) bis(2-Chloroethoxy)met...	7.217	93	367516	25.826	ppm		99
30) Benzoic Acid	7.227	105	235467	44.901	ppm		95
31) 2,4-Dichlorophenol	7.329	162	253701	26.904	ppm		99
32) 1,2,4-Trichlorobenzene	7.415	180	279267	24.539	ppm		99
34) Naphthalene	7.500	128	888371	25.344	ppm		100
35) 4-Chloroaniline	7.575	127	383374	26.166	ppm		99
36) 2,6-Dichlorophenol	7.580	162	243517	26.426	ppm		99
37) Hexachlorobutadiene	7.655	225	152699	23.833	ppm		99

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06439.D
Sample : ic248-25
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1
Acq On : 29 Jul 2020 2:10 pm Operator: marthav

Quant Time: Jul 29 14:38:45 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Caprolactam	7.976	113	99057	29.592	ppm	95
39) 4-Chloro-3-methylphenol	8.169	107	259869	27.300	ppm	99
40) 2-Methylnaphthalene	8.308	141	520299	25.635	ppm	100
41) 1-Methylnaphthalene	8.420	142	564290	25.318	ppm	99
42) 1,2,4,5-Tetrachloroben...	8.506	216	264872	24.259	ppm	99
44) Hexachlorocyclopentadiene	8.495	237	177131	31.606	ppm	99
45) 2,4,6-Trichlorophenol	8.650	196	184046	28.515	ppm	98
46) 2,4,5-Trichlorophenol	8.698	196	192337	27.213	ppm	99
48) 1,1'-Biphenyl	8.864	154	708980	25.726	ppm	100
49) 2-Chloronaphthalene	8.875	162	547707	25.684	ppm	99
50) 2-Nitroaniline	9.008	65	175123	37.644	ppm	99
51) p-Dinitrobenzene	9.174	75	109957	36.478	ppm	97
52) Acenaphthylene	9.362	152	840567	26.232	ppm	99
53) Dimethylphthalate	9.244	163	621964	27.104	ppm	100
54) m-Dinitrobenzene	9.260	168	107529	34.869	ppm	96
55) 2,6-Dinitrotoluene	9.303	165	147501	32.623	ppm	97
56) o-Dinitrobenzene	9.356	50	110330	34.084	ppm	93
57) Acenaphthene	9.570	153	550275	25.976	ppm	97
58) 3-Nitroaniline	9.495	138	169701	32.015	ppm	97
59) 2,4-Dinitrophenol	9.618	184	71222	52.230	ppm	91
60) Dibenzofuran	9.773	168	770970	26.159	ppm	96
61) 2,4-Dinitrotoluene	9.773	165	194996	33.421	ppm	98
62) 4-Nitrophenol	9.736	109	91146	32.638	ppm	88
63) 2,3,5,6-Tetrachlorophenol	9.875	232	153420	30.147	ppm	97
64) 2,3,4,6-Tetrachlorophenol	9.928	232	158544	28.303	ppm	96
65) Fluorene	10.180	166	623097	26.487	ppm	99
66) 4-Chlorophenyl-phenyle...	10.196	204	306415	25.788	ppm	98
67) Diethylphthalate	10.084	149	627131	27.941	ppm	99
68) Thionazin	10.175	97	148862	32.880	ppm	97
69) 4-Nitroaniline	10.217	138	174394	32.246	ppm	97
71) 4,6-Dinitro-2-methylph...	10.249	198	108370	42.417	ppm	92
72) n-Nitrosodiphenylamine	10.340	169	528298	28.877	ppm	99
73) Diphenylamine	10.340	169	528298	25.528	ppm	99
74) 1,2-Diphenylhydrazine	10.383	77	685870	27.039	ppm	98
76) Sulfotep	10.554	97	114071	31.357	ppm	98
77) Phorate	10.699	75	385179	31.818	ppm	98
78) 4-Bromophenyl-phenylether	10.774	248	173279	24.420	ppm	97
79) Hexachlorobenzene	10.822	284	199776	24.273	ppm	94
80) Dimethoate	10.891	87	265322	34.737	ppm	98
81) Simazine	10.955	201	109012	27.285	ppm	98
82) Atrazine	10.998	200	180247	26.119	ppm	93
83) Pentachlorophenol	11.073	266	100261	27.602	ppm	98
84) Phenanthrene	11.314	178	905615	25.898	ppm	100
85) Anthracene	11.373	178	933964	25.900	ppm	99
86) Disulfoton	11.324	88	407836	29.503	ppm	96
87) Carbazole	11.581	167	843644	26.544	ppm	100
88) Methyl Parathion	11.763	109	213457	39.308	ppm	95
89) Di-n-butylphthalate	12.036	149	1074462	28.927	ppm	99
90) Ethyl Parathion	12.234	97	136383	41.551	ppm	97
91) Fluoranthene	12.726	202	965906	26.352	ppm	98
93) Benzidine	12.908	184	592731	31.848	ppm	98
94) Pyrene	12.988	202	985310	26.436	ppm	98
96) Famphur	13.779	218	338944	38.293	ppm	94
97) Butylbenzylphthalate	13.870	149	475575	32.476	ppm	99

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06439.D
Sample : ic248-25
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1
Acq On : 29 Jul 2020 2:10 pm Operator: marthav

Quant Time: Jul 29 14:38:45 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

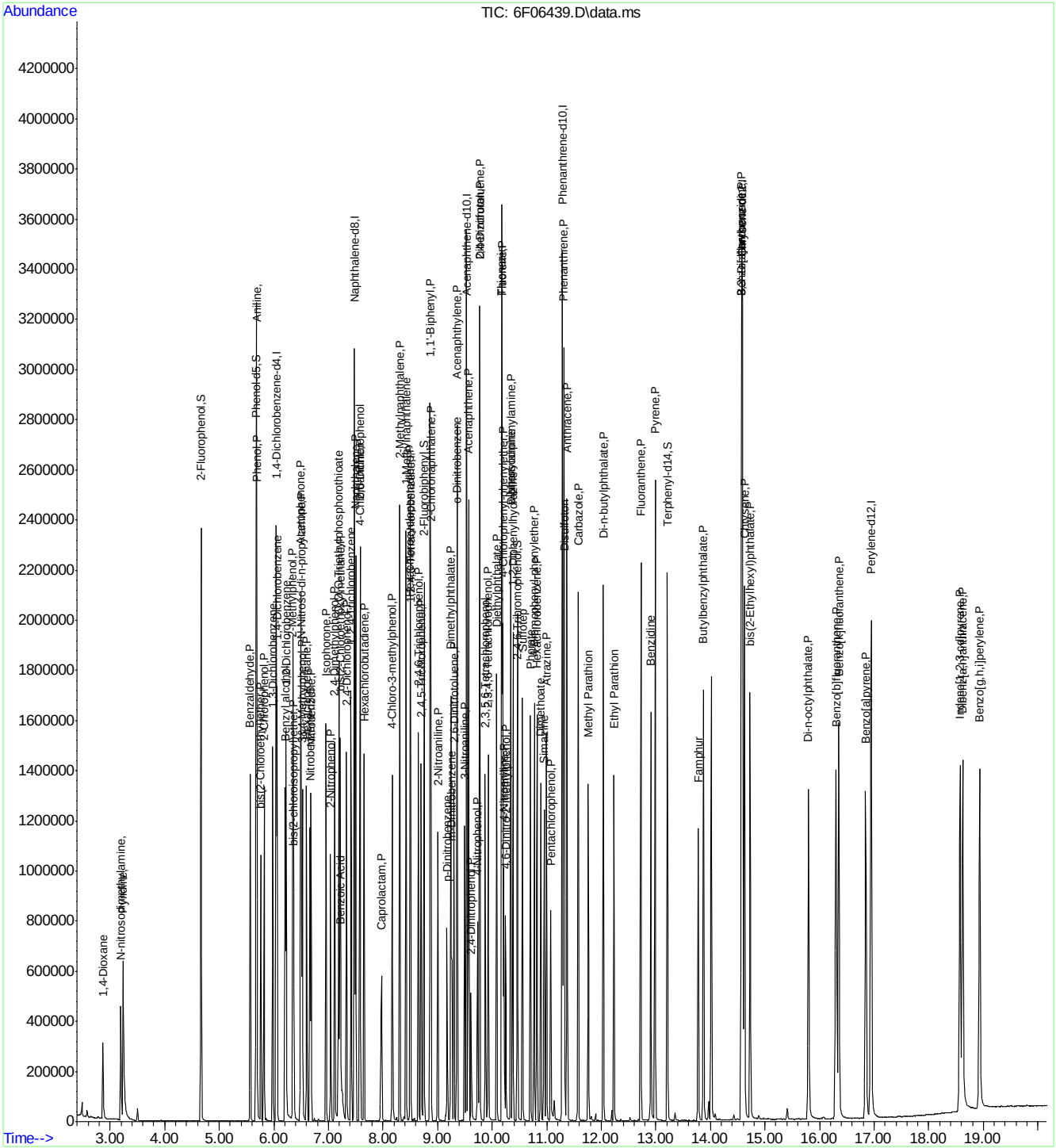
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
98)	3,3'-Dichlorobenzidine	14.571	252	369323	29.471	ppm	99
99)	Benzo[a]anthracene	14.571	228	905609	26.410	ppm	99
100)	Chrysene	14.625	228	884420	26.040	ppm	99
101)	bis(2-Ethylhexyl)phtha...	14.726	149	655979	31.835	ppm	99
103)	Di-n-octylphthalate	15.796	149	1082087	33.016	ppm	100
104)	Benzo[b]fluoranthene	16.304	252	870288	25.967	ppm	98
105)	Benzo[k]fluoranthene	16.352	252	931207	25.809	ppm	99
106)	Benzo[a]pyrene	16.844	252	822487	26.366	ppm	98
107)	Indeno[1,2,3-cd]pyrene	18.572	276	767722	26.392	ppm	99
108)	Dibenz[a,h]anthracene	18.625	278	817093	25.709	ppm	98
109)	Benzo[g,h,i]perylene	18.936	276	837929	25.635	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06439.D
Sample : ic248-25
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1
Acq On : 29 Jul 2020 2:10 pm Operator: marthav

Quant Time: Jul 29 14:38:45 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625



8270D6F072920.m Thu Jul 30 12:55:04 2020 Page: 4

Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 07/30/20 14:11

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06440.D
Sample : icc248-50
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1
Acq On : 29 Jul 2020 2:36 pm Operator: marthav

Quant Time: Jul 29 15:41:07 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	6.045	152	302884	40.00	ppm		0.00
22) Naphthalene-d8	7.479	136	1170478	40.00	ppm		0.00
43) Acenaphthene-d10	9.533	164	637579	40.00	ppm		0.00
70) Phenanthrene-d10	11.287	188	1169544	40.00	ppm		0.00
92) Chrysene-d12	14.593	240	1074260	40.00	ppm		0.00
102) Perylene-d12	16.951	264	1069323	40.00	ppm		0.00
System Monitoring Compounds							
7) 2-Fluorophenol	4.671	112	1158365	107.92	ppm		0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 107.92%#				
9) Phenol-d5	5.682	99	1371442	111.12	ppm		0.00
Spiked Amount 100.000	Range 10 - 50		Recovery = 111.12%#				
23) Nitrobenzene-d5	6.661	82	634627	62.67	ppm		0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 125.34%#				
47) 2-Fluorobiphenyl	8.752	172	1212362	50.92	ppm		0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 101.84%				
75) 2,4,6-Tribromophenol	10.469	330	396960	114.92	ppm		0.00
Spiked Amount 100.000	Range 33 - 118		Recovery = 114.92%				
95) Terphenyl-d14	13.213	244	1460555	52.89	ppm		0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 105.78%				
Target Compounds							Qvalue
2) 1,4-Dioxane	2.863	88	219459	50.795	ppm		99
3) N-nitrosodimethylamine	3.195	42	308424	53.034	ppm		98
4) Pyridine	3.232	79	584958	53.466	ppm		99
5) Benzaldehyde	5.569	106	481409	54.465	ppm		98
6) Aniline	5.687	93	891958	54.769	ppm		73
8) bis(2-Chloroethyl)ether	5.767	93	576542	52.517	ppm		87
10) Phenol	5.698	94	793480	55.348	ppm		94
11) 2-Chlorophenol	5.821	128	590080	54.392	ppm		90
12) 1,3-Dichlorobenzene	5.981	146	634754	51.784	ppm		99
13) 1,4-Dichlorobenzene	6.061	146	642006	51.690	ppm		96
14) 1,2-Dichlorobenzene	6.227	146	605586	51.741	ppm		100
15) Benzyl alcohol	6.211	108	363729	56.269	ppm		98
16) bis(2-chloroisopropyl)...	6.361	45	716763	51.441	ppm		70
17) 2-Methylphenol	6.350	108	526393	55.199	ppm		98
18) Acetophenone	6.495	105	796504	54.077	ppm		99
19) Hexachloroethane	6.602	117	262937	54.030	ppm		90
20) N-Nitroso-di-n-propyla...	6.505	70	410873	54.949	ppm	#	68
21) 3&4-Methylphenol	6.527	108	545880	56.012	ppm		94
24) Nitrobenzene	6.687	77	615441	58.705	ppm		100
25) Isophorone	6.960	82	1097838	53.396	ppm		99
26) 2-Nitrophenol	7.046	139	315749	80.892	ppm		98
27) 2,4-Dimethylphenol	7.120	107	526525	54.752	ppm		98
28) O,O,O-Triethylphosphor...	7.195	198	276548	52.513	ppm		98
29) bis(2-Chloroethoxy)met...	7.222	93	670164	51.995	ppm		99
30) Benzoic Acid	7.249	105	476621m	100.345	ppm		
31) 2,4-Dichlorophenol	7.334	162	472604	55.334	ppm		99
32) 1,2,4-Trichlorobenzene	7.415	180	520718	50.516	ppm		98
34) Naphthalene	7.506	128	1612327	50.785	ppm		100
35) 4-Chloroaniline	7.580	127	716867	54.020	ppm		98
36) 2,6-Dichlorophenol	7.586	162	455458	54.570	ppm		98
37) Hexachlorobutadiene	7.655	225	286188	49.315	ppm		100

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06440.D
Sample : icc248-50
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1
Acq On : 29 Jul 2020 2:36 pm Operator: marthav

Quant Time: Jul 29 15:41:07 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) Caprolactam	8.003	113	190019	62.672	ppm	99
39) 4-Chloro-3-methylphenol	8.169	107	491320	56.986	ppm	97
40) 2-Methylnaphthalene	8.313	141	958674	52.148	ppm	98
41) 1-Methylnaphthalene	8.426	142	1047144	51.871	ppm	99
42) 1,2,4,5-Tetrachloroben...	8.506	216	503590	50.923	ppm	99
44) Hexachlorocyclopentadiene	8.500	237	344021	65.991	ppm	99
45) 2,4,6-Trichlorophenol	8.650	196	347603	57.897	ppm	98
46) 2,4,5-Trichlorophenol	8.704	196	369002	56.127	ppm	100
48) 1,1'-Biphenyl	8.864	154	1319141	51.458	ppm	98
49) 2-Chloronaphthalene	8.880	162	1012998	51.068	ppm	99
50) 2-Nitroaniline	9.014	65	332508	76.841	ppm	97
51) p-Dinitrobenzene	9.180	75	216510	77.218	ppm	98
52) Acenaphthylene	9.367	152	1551740	52.061	ppm	99
53) Dimethylphthalate	9.249	163	1158539	54.276	ppm	100
54) m-Dinitrobenzene	9.265	168	210331	73.324	ppm	92
55) 2,6-Dinitrotoluene	9.308	165	282289	67.120	ppm	96
56) o-Dinitrobenzene	9.362	50	200385	66.550	ppm	93
57) Acenaphthene	9.570	153	1017544	51.638	ppm	98
58) 3-Nitroaniline	9.501	138	321096	65.123	ppm	99
59) 2,4-Dinitrophenol	9.618	184	161618	127.417	ppm	91
60) Dibenzofuran	9.779	168	1414469	51.595	ppm	96
61) 2,4-Dinitrotoluene	9.779	165	378169	69.680	ppm	94
62) 4-Nitrophenol	9.741	109	189197	72.834	ppm	97
63) 2,3,5,6-Tetrachlorophenol	9.880	232	296325	62.598	ppm	98
64) 2,3,4,6-Tetrachlorophenol	9.929	232	302727	58.099	ppm	95
65) Fluorene	10.185	166	1155042	52.784	ppm	99
66) 4-Chlorophenyl-phenyle...	10.196	204	563047	50.944	ppm	98
67) Diethylphthalate	10.089	149	1175941	56.325	ppm	100
68) Thionazin	10.185	97	280191	66.532	ppm	99
69) 4-Nitroaniline	10.233	138	325091	64.622	ppm	99
71) 4,6-Dinitro-2-methylph...	10.260	198	226572	95.794	ppm	88
72) n-Nitrosodiphenylamine	10.346	169	989717	58.437	ppm	99
73) Diphenylamine	10.346	169	989717	51.659	ppm	99
74) 1,2-Diphenylhydrazine	10.383	77	1259631	53.641	ppm	100
76) Sulfotep	10.560	97	214064	63.564	ppm	81
77) Phorate	10.704	75	727157	64.886	ppm	99
78) 4-Bromophenyl-phenylether	10.774	248	335268	51.039	ppm	97
79) Hexachlorobenzene	10.827	284	375140	49.236	ppm	100
80) Dimethoate	10.897	87	509961	72.120	ppm	98
81) Simazine	10.966	201	202283	54.692	ppm	98
82) Atrazine	11.004	200	343315	53.739	ppm	97
83) Pentachlorophenol	11.073	266	218237	64.901	ppm	98
84) Phenanthrene	11.319	178	1691143	52.240	ppm	100
85) Anthracene	11.378	178	1744432	52.256	ppm	100
86) Disulfoton	11.325	88	753938	58.914	ppm	98
87) Carbazole	11.581	167	1575784	53.557	ppm	100
88) Methyl Parathion	11.763	109	426294	84.799	ppm	98
89) Di-n-butylphthalate	12.041	149	2030151	59.041	ppm	99
90) Ethyl Parathion	12.234	97	270282	88.949	ppm	99
91) Fluoranthene	12.726	202	1828129	53.875	ppm	100
93) Benzidine	12.913	184	1101962	62.286	ppm	99
94) Pyrene	12.993	202	1863222	52.588	ppm	96
96) Famphur	13.780	218	618110	73.462	ppm	97
97) Butylbenzylphthalate	13.876	149	907704	65.206	ppm	96

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06440.D
Sample : icc248-50
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1
Acq On : 29 Jul 2020 2:36 pm Operator: marthav

Quant Time: Jul 29 15:41:07 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

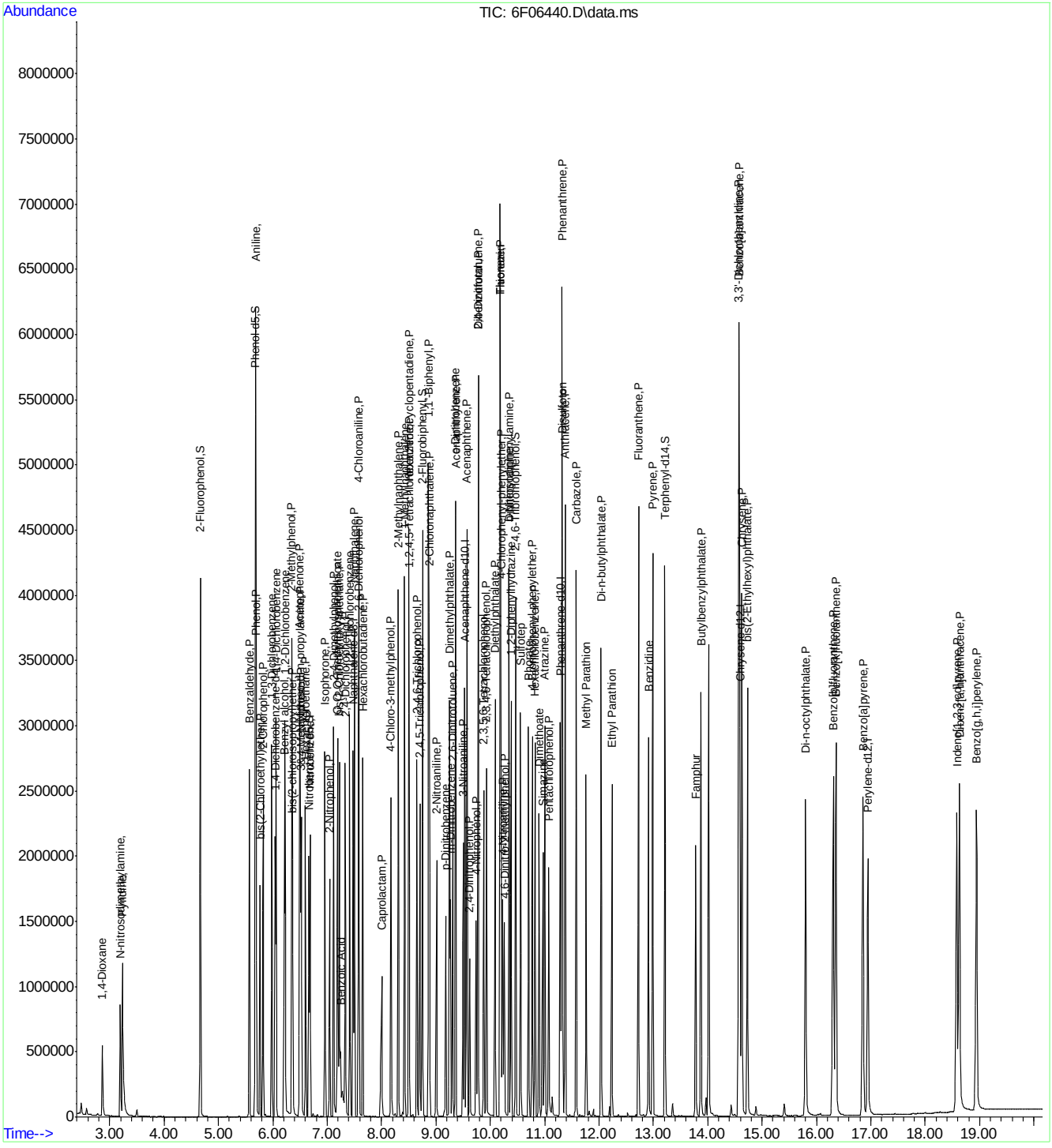
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
98)	3,3'-Dichlorobenzidine	14.571	252	701774	58.910	ppm	99
99)	Benzo[a]anthracene	14.576	228	1749149	53.662	ppm	100
100)	Chrysene	14.630	228	1667303	51.642	ppm	100
101)	bis(2-Ethylhexyl)phtha...	14.732	149	1252787	63.958	ppm	99
103)	Di-n-octylphthalate	15.801	149	2106608	68.994	ppm	99
104)	Benzo[b]fluoranthene	16.309	252	1677650	53.732	ppm	99
105)	Benzo[k]fluoranthene	16.358	252	1760852	52.386	ppm	100
106)	Benzo[a]pyrene	16.855	252	1570308	54.035	ppm	100
107)	Indeno[1,2,3-cd]pyrene	18.583	276	1450692	53.533	ppm	97
108)	Dibenz[a,h]anthracene	18.631	278	1602436	54.121	ppm	99
109)	Benzo[g,h,i]perylene	18.946	276	1559067	51.199	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06440.D
Sample : icc248-50
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1
Acq On : 29 Jul 2020 2:36 pm Operator: marthav

Quant Time: Jul 29 15:41:07 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625



Manual Integration Approval Summary

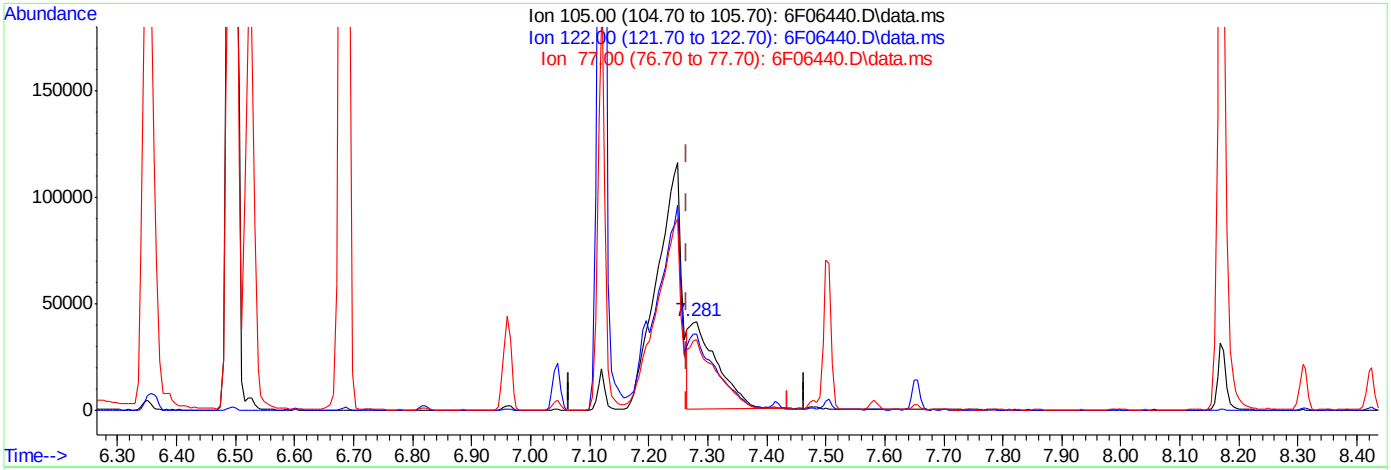
Sample Number:	S6F248-ICC248	**Method:**	SW846 8270D
Lab FileID:	6F06440.D	**Analyst approved:**	07/30/20 13:11 Martha Valls
Injection Time:	07/29/20 14:36	**Supervisor approved:**	07/30/20 14:11 Nicole McCampbell

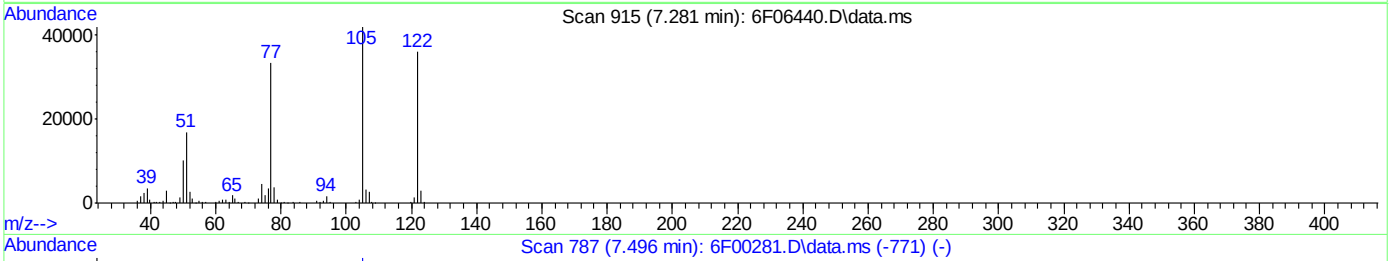
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic Acid	65-85-0		7.25	Split peak

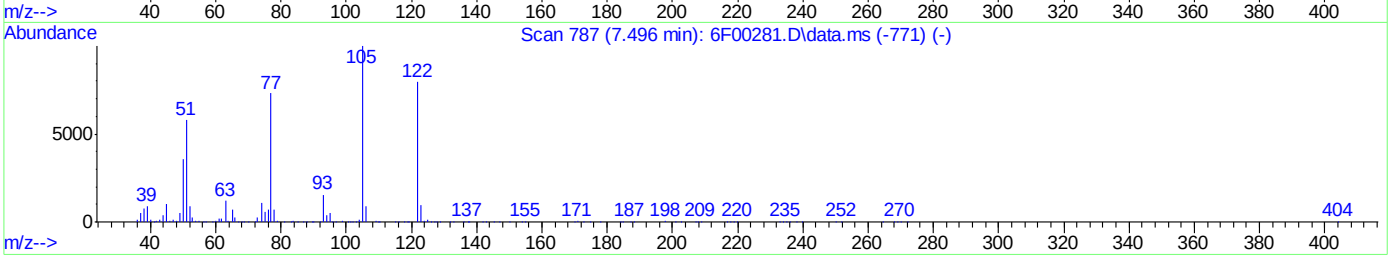
Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06440.D
Sample : icc248-50
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1
Acq On : 29 Jul 2020 2:36 pm Operator: marthav

Quant Time: Jul 29 15:40:25 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625







TIC: 6F06440.D\data.ms

(30) Benzoic Acid

7.281min (+0.016) 28.05ppm

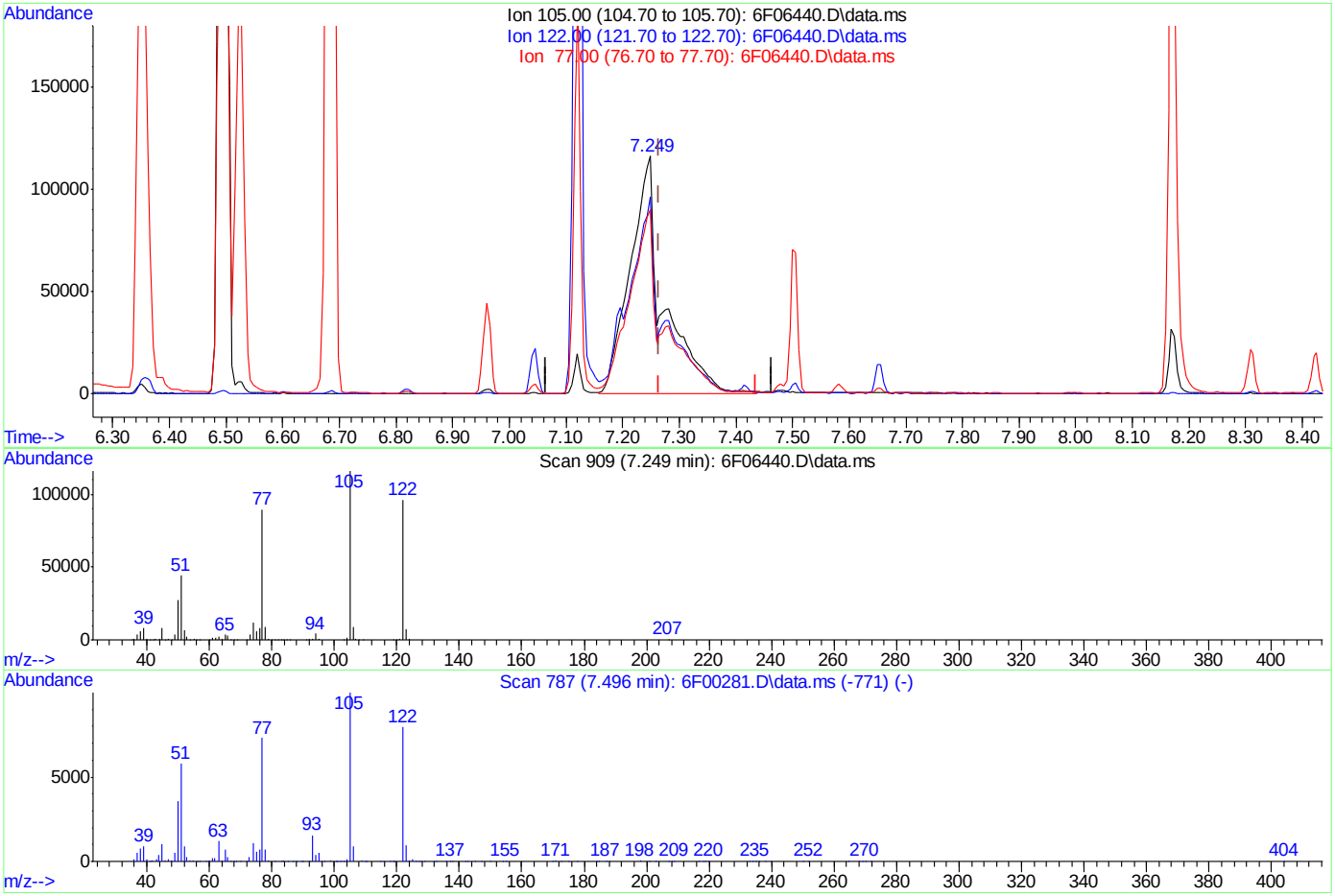
response 133235

Ion	Exp%	Act%
105.00	100	100
122.00	81.90	91.59
77.00	77.70	83.14
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06440.D
Sample : icc248-50
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1
Acq On : 29 Jul 2020 2:36 pm Operator: marthav

Quant Time: Jul 29 15:40:25 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625



TIC: 6F06440.D\data.ms

(30) Benzoic Acid

7.249min (-0.016) 100.35ppm m

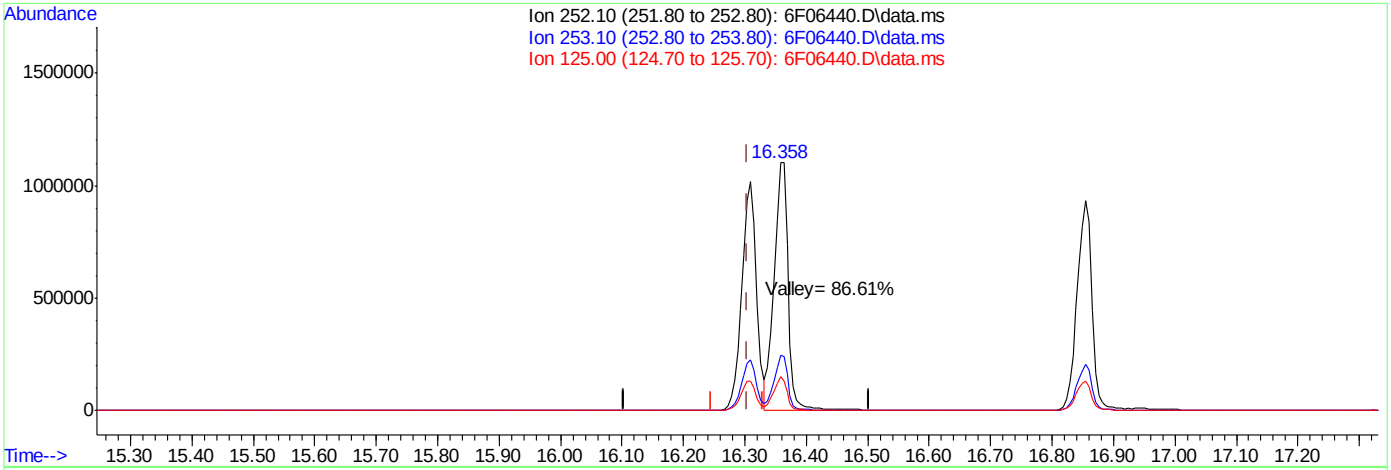
response 476621

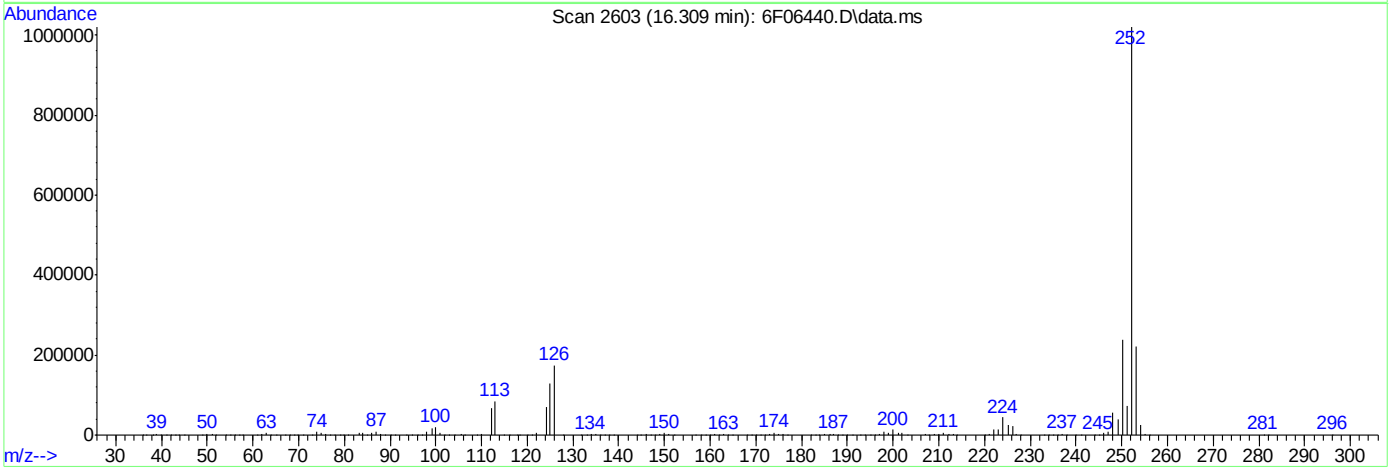
Ion	Exp%	Act%
105.00	100	100
122.00	81.90	83.05
77.00	77.70	77.28
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06440.D
Sample : icc248-50
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1
Acq On : 29 Jul 2020 2:36 pm Operator: marthav

Quant Time: Jul 29 15:41:07 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625





TIC: 6F06440.D\data.ms

(104) Benzo[b]fluoranthene (P)

16.309min (+0.005) 53.73ppm

response 1677650

Ion	Exp%	Act%
252.10	100	100
253.10	22.40	21.80
125.00	13.30	12.80
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 07/30/20 14:11

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06441.D
Sample : ic248-60
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1
Acq On : 29 Jul 2020 3:02 pm Operator: marthav

Quant Time: Jul 29 15:47:41 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	6.045	152	313687	40.00	ppm		0.00
22) Naphthalene-d8	7.479	136	1196299	40.00	ppm		0.00
43) Acenaphthene-d10	9.533	164	638048	40.00	ppm		0.00
70) Phenanthrene-d10	11.287	188	1185294	40.00	ppm		0.00
92) Chrysene-d12	14.593	240	1081339	40.00	ppm		0.00
102) Perylene-d12	16.951	264	1054339	40.00	ppm		0.00
System Monitoring Compounds							
7) 2-Fluorophenol	4.671	112	1467791	132.04	ppm		0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 132.04%#				
9) Phenol-d5	5.687	99	1728253	135.20	ppm		0.01
Spiked Amount 100.000	Range 10 - 50		Recovery = 135.20%#				
23) Nitrobenzene-d5	6.666	82	810432	78.30	ppm		0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 156.60%#				
47) 2-Fluorobiphenyl	8.752	172	1508400	63.31	ppm		0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 126.62%#				
75) 2,4,6-Tribromophenol	10.474	330	507940	145.10	ppm		0.00
Spiked Amount 100.000	Range 33 - 118		Recovery = 145.10%#				
95) Terphenyl-d14	13.213	244	1849036	66.52	ppm		0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 133.04%#				
Target Compounds							Qvalue
2) 1,4-Dioxane	2.863	88	280871	62.771	ppm		99
3) N-nitrosodimethylamine	3.195	42	387788	64.384	ppm		98
4) Pyridine	3.232	79	740510	65.353	ppm		99
5) Benzaldehyde	5.569	106	599187	65.455	ppm		97
6) Aniline	5.692	93	1126658	66.798	ppm		63
8) bis(2-Chloroethyl)ether	5.767	93	733419	64.506	ppm		87
10) Phenol	5.698	94	997274	67.168	ppm		87
11) 2-Chlorophenol	5.821	128	742039	66.044	ppm		91
12) 1,3-Dichlorobenzene	5.981	146	801907	63.168	ppm		99
13) 1,4-Dichlorobenzene	6.067	146	811904	63.118	ppm		97
14) 1,2-Dichlorobenzene	6.227	146	765076	63.116	ppm		99
15) Benzyl alcohol	6.211	108	450660	67.316	ppm		98
16) bis(2-chloroisopropyl)...	6.361	45	900279	62.387	ppm		65
17) 2-Methylphenol	6.350	108	664944	67.327	ppm		97
18) Acetophenone	6.500	105	992920	65.091	ppm		99
19) Hexachloroethane	6.602	117	334507	66.369	ppm		90
20) N-Nitroso-di-n-propyla...	6.511	70	513194	66.269	ppm	#	67
21) 3&4-Methylphenol	6.527	108	679850	67.356	ppm		97
24) Nitrobenzene	6.687	77	775090	72.337	ppm		99
25) Isophorone	6.965	82	1392390	66.260	ppm		98
26) 2-Nitrophenol	7.046	139	400979	100.510	ppm		98
27) 2,4-Dimethylphenol	7.120	107	664303	67.588	ppm		96
28) O,O,O-Triethylphosphor...	7.195	198	345579	64.204	ppm		95
29) bis(2-Chloroethoxy)met...	7.222	93	849093	64.455	ppm		100
30) Benzoic Acid	7.260	105	608998m	125.448	ppm		
31) 2,4-Dichlorophenol	7.334	162	591581	67.769	ppm		99
32) 1,2,4-Trichlorobenzene	7.415	180	661287	62.769	ppm		99
34) Naphthalene	7.506	128	2037624	62.796	ppm		100
35) 4-Chloroaniline	7.580	127	890965	65.690	ppm		99
36) 2,6-Dichlorophenol	7.586	162	575028	67.409	ppm		100
37) Hexachlorobutadiene	7.655	225	359147	60.552	ppm		99

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06441.D
Sample : ic248-60
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1
Acq On : 29 Jul 2020 3:02 pm Operator: marthav

Quant Time: Jul 29 15:47:41 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38)	Caprolactam	8.014	113	239634	77.331	ppm		100
39)	4-Chloro-3-methylphenol	8.174	107	611603	69.406	ppm		99
40)	2-Methylnaphthalene	8.313	141	1192839	63.486	ppm		99
41)	1-Methylnaphthalene	8.426	142	1327232	64.327	ppm		100
42)	1,2,4,5-Tetrachloroben...	8.506	216	632783	62.606	ppm		99
44)	Hexachlorocyclopentadiene	8.500	237	439521	84.248	ppm		99
45)	2,4,6-Trichlorophenol	8.656	196	438334	72.956	ppm		99
46)	2,4,5-Trichlorophenol	8.704	196	467397	71.041	ppm		99
48)	1,1'-Biphenyl	8.870	154	1658775	64.659	ppm		100
49)	2-Chloronaphthalene	8.880	162	1281669	64.565	ppm		99
50)	2-Nitroaniline	9.014	65	419044	96.768	ppm		100
51)	p-Dinitrobenzene	9.185	75	279148	99.485	ppm		93
52)	Acenaphthylene	9.367	152	1947651	65.296	ppm		100
53)	Dimethylphthalate	9.249	163	1455304	68.128	ppm		99
54)	m-Dinitrobenzene	9.271	168	268831	93.648	ppm		84
55)	2,6-Dinitrotoluene	9.308	165	354956	84.336	ppm		94
56)	o-Dinitrobenzene	9.367	50	251112	83.336	ppm		95
57)	Acenaphthene	9.576	153	1279871	64.903	ppm		99
58)	3-Nitroaniline	9.506	138	400686	81.206	ppm		95
59)	2,4-Dinitrophenol	9.624	184	215304	169.618	ppm		98
60)	Dibenzofuran	9.779	168	1765413	64.348	ppm		92
61)	2,4-Dinitrotoluene	9.779	165	477858	87.984	ppm		95
62)	4-Nitrophenol	9.741	109	240560	92.539	ppm		97
63)	2,3,5,6-Tetrachlorophenol	9.880	232	378328	79.862	ppm		99
64)	2,3,4,6-Tetrachlorophenol	9.934	232	388434	74.493	ppm		98
65)	Fluorene	10.185	166	1459593	66.652	ppm		99
66)	4-Chlorophenyl-phenyle...	10.201	204	706497	63.876	ppm		97
67)	Diethylphthalate	10.094	149	1480592	70.865	ppm		99
68)	Thionazin	10.185	97	344882	81.833	ppm		99
69)	4-Nitroaniline	10.239	138	410506	81.541	ppm		99
71)	4,6-Dinitro-2-methylph...	10.260	198	296376	123.642	ppm	#	54
72)	n-Nitrosodiphenylamine	10.346	169	1255183	73.126	ppm		99
73)	Diphenylamine	10.346	169	1255183	64.645	ppm		99
74)	1,2-Diphenylhydrazine	10.389	77	1578337	66.320	ppm		97
76)	Sulfotep	10.560	97	267021	78.235	ppm		89
77)	Phorate	10.704	75	916738	80.716	ppm		99
78)	4-Bromophenyl-phenylether	10.779	248	423125	63.558	ppm		96
79)	Hexachlorobenzene	10.827	284	476331	61.687	ppm		95
80)	Dimethoate	10.902	87	642598	89.671	ppm		98
81)	Simazine	10.972	201	251635	67.131	ppm		99
82)	Atrazine	11.009	200	435589	67.277	ppm		91
83)	Pentachlorophenol	11.078	266	283930	83.315	ppm		99
84)	Phenanthrene	11.319	178	2134541	65.061	ppm		100
85)	Anthracene	11.383	178	2198297	64.977	ppm		99
86)	Disulfoton	11.325	88	949858	73.237	ppm		98
87)	Carbazole	11.587	167	1962659	65.820	ppm		99
88)	Methyl Parathion	11.768	109	537451	105.490	ppm		94
89)	Di-n-butylphthalate	12.041	149	2551480	73.216	ppm		99
90)	Ethyl Parathion	12.239	97	344068	111.727	ppm		94
91)	Fluoranthene	12.731	202	2293584	66.694	ppm		98
93)	Benzidine	12.913	184	1369070	76.878	ppm		98
94)	Pyrene	12.993	202	2335139	65.476	ppm		99
96)	Famphur	13.785	218	733759	86.636	ppm		93
97)	Butylbenzylphthalate	13.876	149	1156661	82.546	ppm		99

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06441.D
Sample : ic248-60
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1
Acq On : 29 Jul 2020 3:02 pm Operator: marthav

Quant Time: Jul 29 15:47:41 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

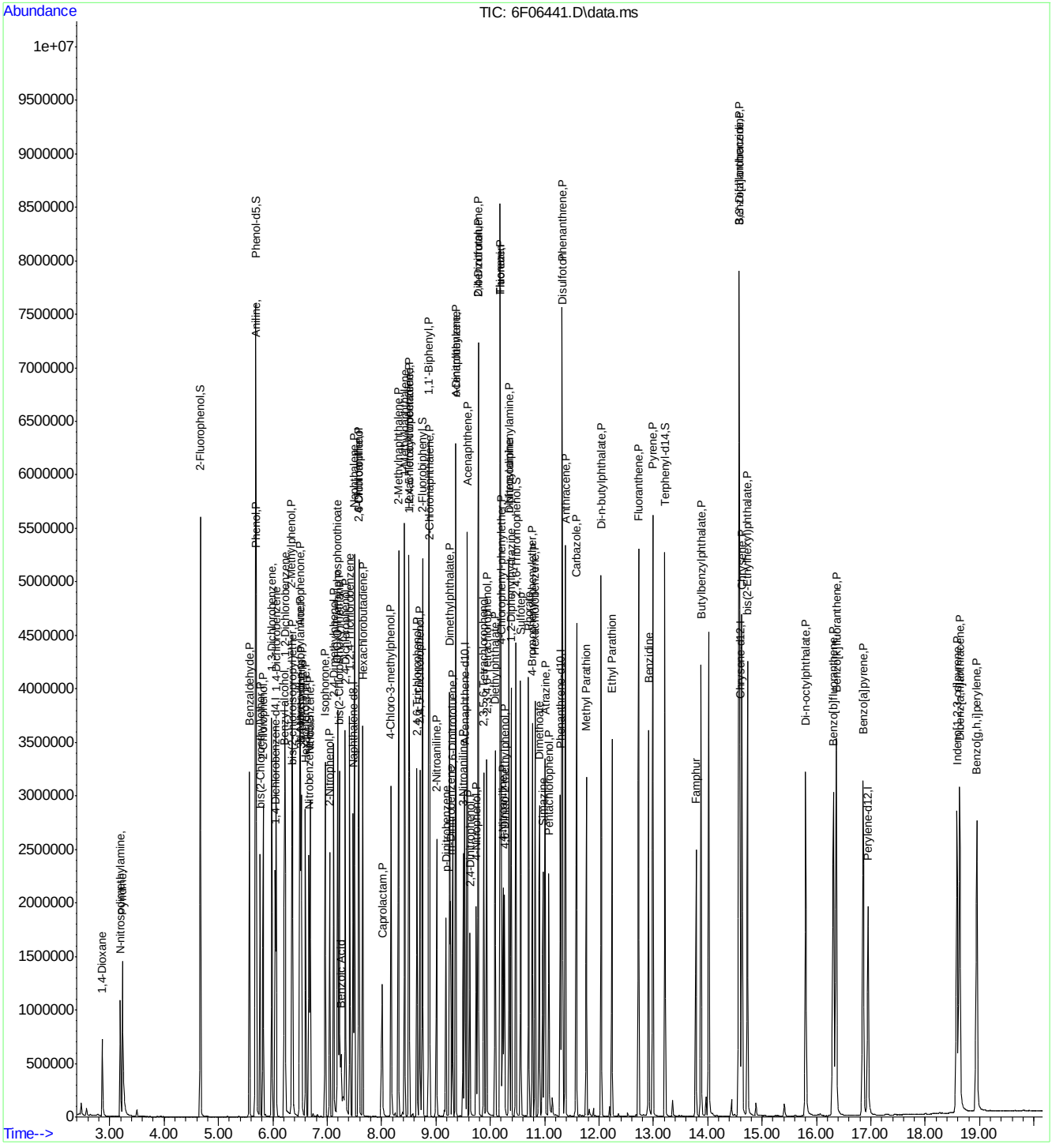
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
98)	3,3'-Dichlorobenzidine	14.576	252	873562	72.850	ppm	100
99)	Benzo[a]anthracene	14.576	228	2212758	67.440	ppm	100
100)	Chrysene	14.635	228	2098961	64.587	ppm	100
101)	bis(2-Ethylhexyl)phtha...	14.732	149	1601480	81.224	ppm	99
103)	Di-n-octylphthalate	15.801	149	2678244	88.963	ppm	99
104)	Benzo[b]fluoranthene	16.315	252	2121346	68.908	ppm	98
105)	Benzo[k]fluoranthene	16.368	252	2178875	65.744	ppm	99
106)	Benzo[a]pyrene	16.860	252	1957739	68.324	ppm	100
107)	Indeno[1,2,3-cd]pyrene	18.588	276	1793215	67.113	ppm	97
108)	Dibenz[a,h]anthracene	18.636	278	1950896	66.826	ppm	98
109)	Benzo[g,h,i]perylene	18.952	276	1884136	62.753	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06441.D
Sample : ic248-60
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1
Acq On : 29 Jul 2020 3:02 pm Operator: marthav

Quant Time: Jul 29 15:47:41 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625



Manual Integration Approval Summary

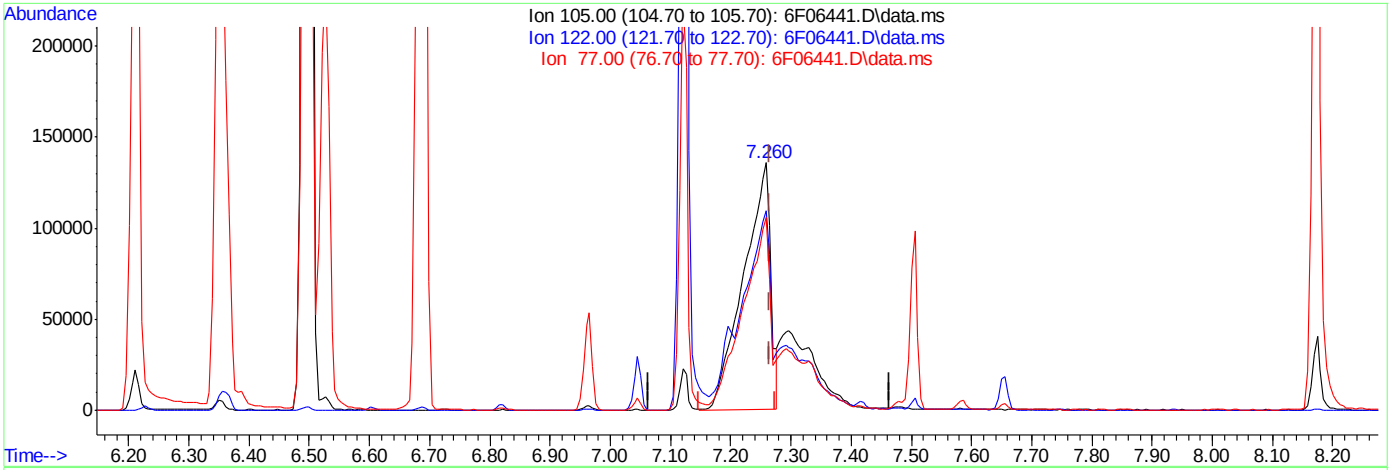
Sample Number:	S6F248-IC248	**Method:**	SW846 8270D
Lab FileID:	6F06441.D	**Analyst approved:**	07/30/20 13:11 Martha Valls
Injection Time:	07/29/20 15:02	**Supervisor approved:**	07/30/20 14:11 Nicole McCampbell

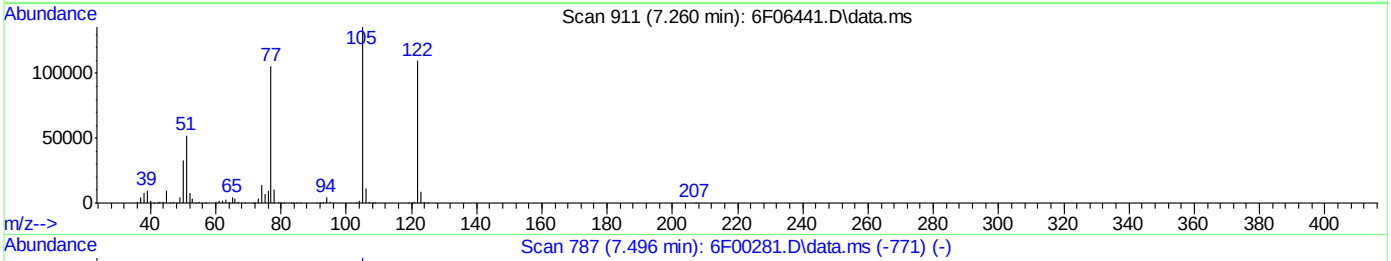
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic Acid	65-85-0		7.26	Split peak

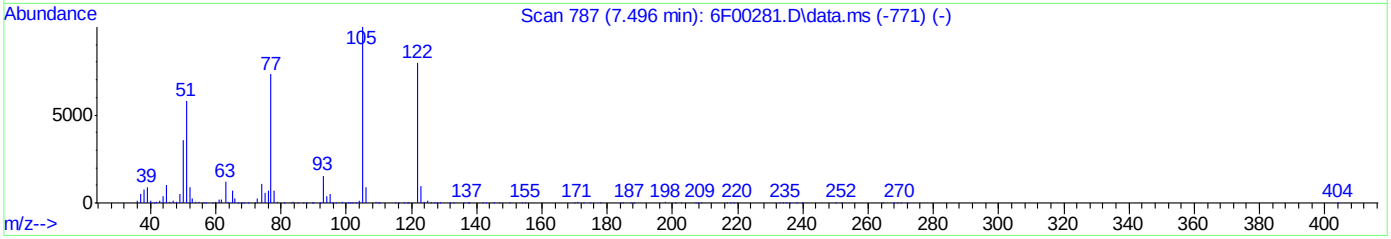
Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06441.D
Sample : ic248-60
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1
Acq On : 29 Jul 2020 3:02 pm Operator: marthav

Quant Time: Jul 29 15:46:07 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625







TIC: 6F06441.D\data.ms

(30) Benzoic Acid

7.260min (-0.005) 87.24ppm

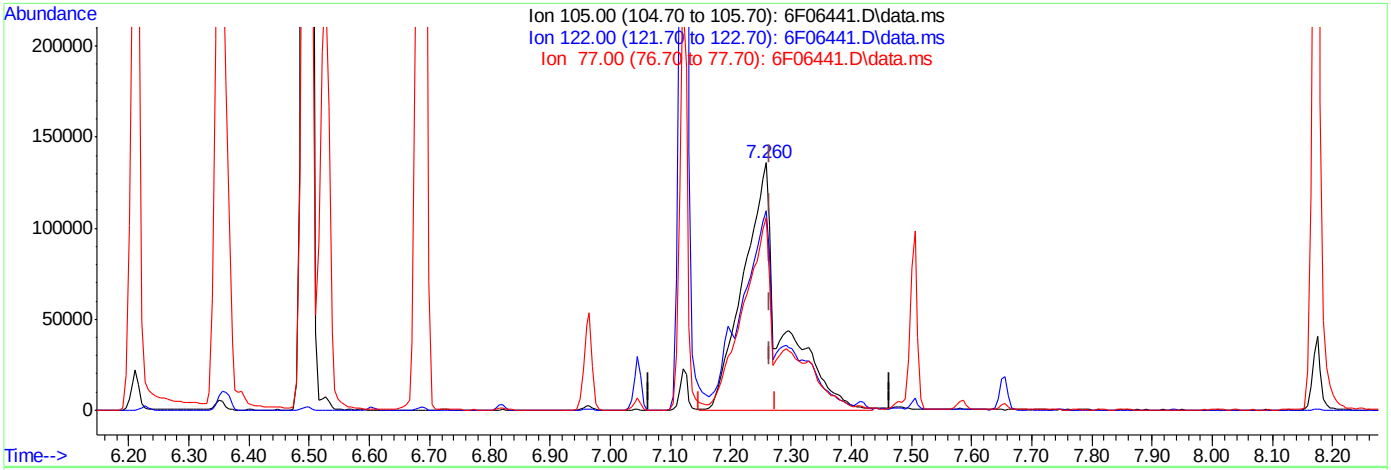
response 423495

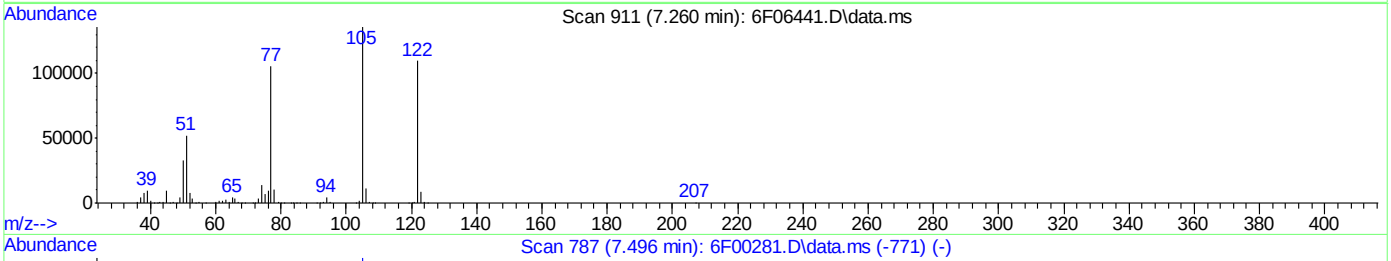
Ion	Exp%	Act%
105.00	100	100
122.00	81.90	73.83
77.00	77.70	75.68
0.00	0.00	0.00

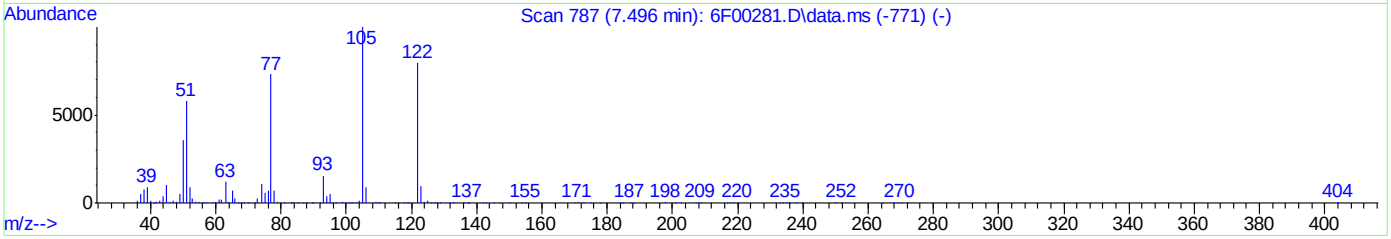
Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06441.D
Sample : ic248-60
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1
Acq On : 29 Jul 2020 3:02 pm Operator: marthav

Quant Time: Jul 29 15:46:07 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625







TIC: 6F06441.D\data.ms

(30) Benzoic Acid

7.260min (-0.005) 125.45ppm m

response 608998

Ion	Exp%	Act%
105.00	100	100
122.00	81.90	80.64
77.00	77.70	77.78
0.00	0.00	0.00

6F06442.D

Manual Integrations APPROVED (compounds with "m" flag)

Nicole McCampbell 07/30/20 14:11

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06442.D
Sample : ic248-75
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1
Acq On : 29 Jul 2020 3:28 pm Operator: marthav

Quant Time: Jul 29 15:50:01 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.045	152	311921	40.00	ppm	0.00
22) Naphthalene-d8	7.479	136	1183929	40.00	ppm	0.00
43) Acenaphthene-d10	9.533	164	634974	40.00	ppm	0.00
70) Phenanthrene-d10	11.292	188	1180183	40.00	ppm	0.00
92) Chrysene-d12	14.598	240	1061055	40.00	ppm	0.01
102) Perylene-d12	16.951	264	1024599	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	4.671	112	1826643	165.25	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 165.25%#			
9) Phenol-d5	5.687	99	2149007	169.07	ppm	0.01
Spiked Amount 100.000	Range 10 - 50		Recovery = 169.07%#			
23) Nitrobenzene-d5	6.666	82	994594	97.10	ppm	0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 194.20%#			
47) 2-Fluorobiphenyl	8.757	172	1851031	78.07	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 156.14%#			
75) 2,4,6-Tribromophenol	10.474	330	629853	180.70	ppm	0.00
Spiked Amount 100.000	Range 33 - 118		Recovery = 180.70%#			
95) Terphenyl-d14	13.212	244	2273959	83.37	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 166.74%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.863	88	349434	78.536	ppm	99
3) N-nitrosodimethylamine	3.200	42	482569	80.574	ppm	96
4) Pyridine	3.232	79	919153	81.578	ppm	99
5) Benzaldehyde	5.569	106	718996	78.988	ppm	99
6) Aniline	5.692	93	1396654	83.274	ppm	73
8) bis(2-Chloroethyl)ether	5.767	93	901081	79.701	ppm	89
10) Phenol	5.703	94	1234356	83.606	ppm	99
11) 2-Chlorophenol	5.826	128	925434	82.833	ppm	88
12) 1,3-Dichlorobenzene	5.981	146	988347	78.295	ppm	99
13) 1,4-Dichlorobenzene	6.067	146	998004	78.025	ppm	98
14) 1,2-Dichlorobenzene	6.227	146	948522	78.693	ppm	98
15) Benzyl alcohol	6.216	108	572549	86.007	ppm	98
16) bis(2-chloroisopropyl)...	6.361	45	1111663	77.471	ppm	59
17) 2-Methylphenol	6.350	108	823864	83.890	ppm	95
18) Acetophenone	6.500	105	1227427	80.920	ppm	99
19) Hexachloroethane	6.607	117	407620	81.334	ppm	98
20) N-Nitroso-di-n-propyla...	6.516	70	638274	82.888	ppm #	65
21) 3&4-Methylphenol	6.527	108	850037	84.694	ppm	99
24) Nitrobenzene	6.687	77	956344	90.186	ppm	98
25) Isophorone	6.965	82	1717350	82.578	ppm	99
26) 2-Nitrophenol	7.045	139	499893	126.613	ppm	96
27) 2,4-Dimethylphenol	7.126	107	822669	84.575	ppm	98
28) O,O,O-Triethylphosphor...	7.195	198	432186	81.134	ppm	91
29) bis(2-Chloroethoxy)met...	7.227	93	1054141	80.857	ppm	99
30) Benzoic Acid	7.270	105	757042m	157.573	ppm	
31) 2,4-Dichlorophenol	7.340	162	735556	85.143	ppm	98
32) 1,2,4-Trichlorobenzene	7.420	180	813186	77.993	ppm	98
34) Naphthalene	7.505	128	2492044	77.602	ppm	99
35) 4-Chloroaniline	7.586	127	1104727	82.301	ppm	98
36) 2,6-Dichlorophenol	7.591	162	714431	84.626	ppm	98
37) Hexachlorobutadiene	7.655	225	445669	75.924	ppm	99

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06442.D
Sample : ic248-75
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1
Acq On : 29 Jul 2020 3:28 pm Operator: marthav

Quant Time: Jul 29 15:50:01 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38)	Caprolactam	8.030	113	295766	96.442	ppm	94
39)	4-Chloro-3-methylphenol	8.174	107	761276	87.294	ppm	98
40)	2-Methylnaphthalene	8.313	141	1475647	79.358	ppm	99
41)	1-Methylnaphthalene	8.425	142	1635977	80.119	ppm	99
42)	1,2,4,5-Tetrachloroben...	8.511	216	785716	78.549	ppm	100
44)	Hexachlorocyclopentadiene	8.500	237	546544	105.269	ppm	98
45)	2,4,6-Trichlorophenol	8.655	196	542140	90.670	ppm	99
46)	2,4,5-Trichlorophenol	8.704	196	577098	88.140	ppm	99
48)	1,1'-Biphenyl	8.869	154	2033706	79.658	ppm	99
49)	2-Chloronaphthalene	8.885	162	1580469	80.002	ppm	99
50)	2-Nitroaniline	9.014	65	518967	120.422	ppm	97
51)	p-Dinitrobenzene	9.185	75	345931	123.883	ppm	98
52)	Acenaphthylene	9.367	152	2381291	80.220	ppm	99
53)	Dimethylphthalate	9.254	163	1796451	84.506	ppm	99
54)	m-Dinitrobenzene	9.271	168	332353	116.337	ppm	89
55)	2,6-Dinitrotoluene	9.313	165	437547	104.462	ppm	92
56)	o-Dinitrobenzene	9.372	50	303517	101.215	ppm	98
57)	Acenaphthene	9.575	153	1577280	80.372	ppm	99
58)	3-Nitroaniline	9.511	138	504585	102.758	ppm	91
59)	2,4-Dinitrophenol	9.629	184	277086	219.347	ppm	95
60)	Dibenzofuran	9.779	168	2167977	79.404	ppm	94
61)	2,4-Dinitrotoluene	9.784	165	596818	110.419	ppm	92
62)	4-Nitrophenol	9.747	109	296797	114.725	ppm	98
63)	2,3,5,6-Tetrachlorophenol	9.886	232	474197	100.584	ppm	97
64)	2,3,4,6-Tetrachlorophenol	9.934	232	476958	91.913	ppm	95
65)	Fluorene	10.185	166	1790175	82.144	ppm	98
66)	4-Chlorophenyl-phenyle...	10.201	204	886142	80.506	ppm	97
67)	Diethylphthalate	10.094	149	1834588	88.233	ppm	100
68)	Thionazin	10.190	97	422507	100.737	ppm	99
69)	4-Nitroaniline	10.244	138	510832	101.960	ppm	99
71)	4,6-Dinitro-2-methylph...	10.265	198	370555	155.258	ppm	77
72)	n-Nitrosodiphenylamine	10.351	169	1537243	89.946	ppm	99
73)	Diphenylamine	10.351	169	1537243	79.515	ppm	99
74)	1,2-Diphenylhydrazine	10.388	77	1927519	81.343	ppm	98
76)	Sulfotep	10.560	97	327321	96.318	ppm	98
77)	Phorate	10.704	75	1135599	100.419	ppm	98
78)	4-Bromophenyl-phenylether	10.779	248	524530	79.132	ppm	97
79)	Hexachlorobenzene	10.832	284	592591	77.075	ppm	98
80)	Dimethoate	10.907	87	775394	108.670	ppm	99
81)	Simazine	10.977	201	309746	82.992	ppm	97
82)	Atrazine	11.009	200	525593	81.530	ppm	99
83)	Pentachlorophenol	11.078	266	353272	104.111	ppm	98
84)	Phenanthrene	11.319	178	2596380	79.481	ppm	100
85)	Anthracene	11.383	178	2663084	79.056	ppm	100
86)	Disulfoton	11.330	88	1164170	90.150	ppm	97
87)	Carbazole	11.586	167	2436518	82.065	ppm	100
88)	Methyl Parathion	11.768	109	655301	129.178	ppm	96
89)	Di-n-butylphthalate	12.041	149	3088931	89.022	ppm	100
90)	Ethyl Parathion	12.239	97	423578	138.142	ppm	98
91)	Fluoranthene	12.731	202	2825696	82.523	ppm	99
93)	Benzidine	12.913	184	1621724	92.806	ppm	98
94)	Pyrene	12.993	202	2821418	80.624	ppm	100
96)	Famphur	13.785	218	835781	100.568	ppm	94
97)	Butylbenzylphthalate	13.876	149	1410454	102.583	ppm	100

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06442.D
Sample : ic248-75
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1
Acq On : 29 Jul 2020 3:28 pm Operator: marthav

Quant Time: Jul 29 15:50:01 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
98)	3,3'-Dichlorobenzidine	14.576	252	1050616	89.291	ppm	100
99)	Benzo[a]anthracene	14.582	228	2694409	83.690	ppm	100
100)	Chrysene	14.635	228	2561949	80.340	ppm	99
101)	bis(2-Ethylhexyl)phtha...	14.731	149	1939774	100.263	ppm	99
103)	Di-n-octylphthalate	15.807	149	3289205	112.428	ppm	99
104)	Benzo[b]fluoranthene	16.320	252	2623555	87.695	ppm	98
105)	Benzo[k]fluoranthene	16.368	252	2604598	80.870	ppm	99
106)	Benzo[a]pyrene	16.866	252	2383575	85.600	ppm	100
107)	Indeno[1,2,3-cd]pyrene	18.593	276	2200247	84.736	ppm	96
108)	Dibenz[a,h]anthracene	18.641	278	2350737	82.859	ppm	99
109)	Benzo[g,h,i]perylene	18.957	276	2271964	77.867	ppm	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06442.D
Sample : ic248-75
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1
Acq On : 29 Jul 2020 3:28 pm Operator: marthav

Quant Time: Jul 29 15:50:01 2020
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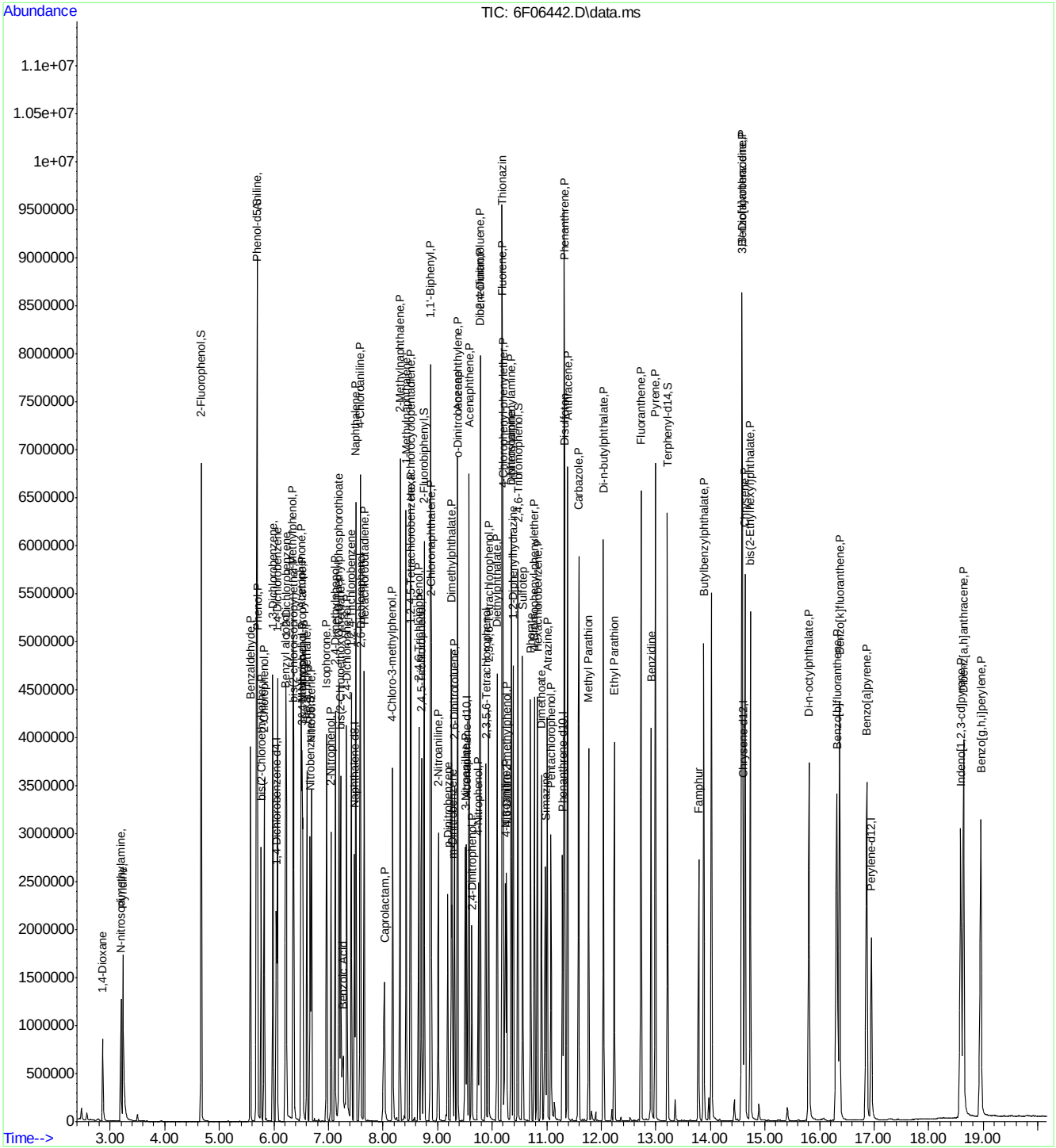
Quant Title : SW846 8270D OR EPA 625



Manual Integration Approval Summary

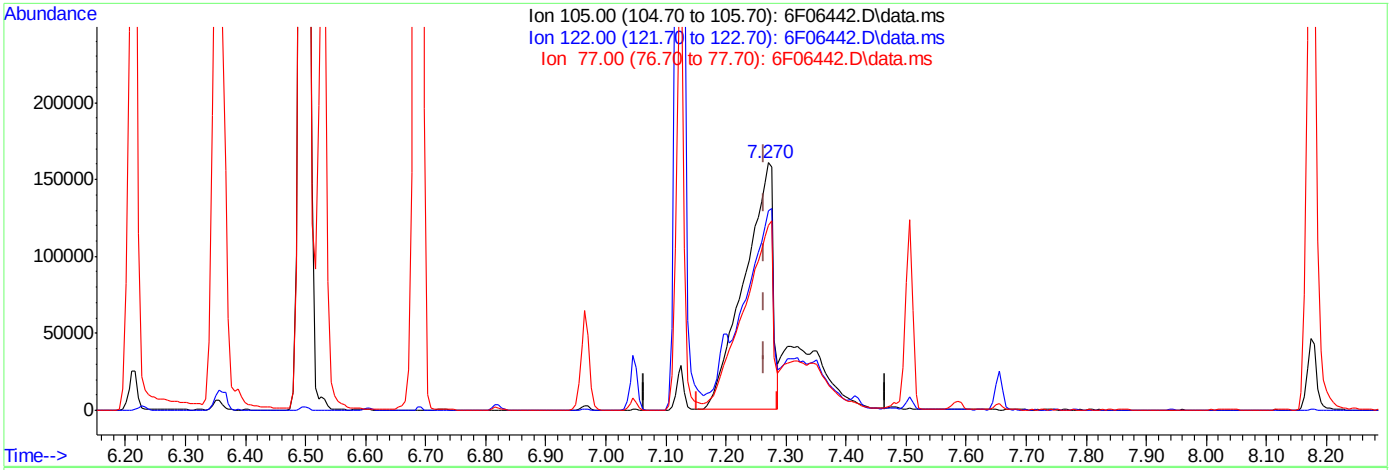
Sample Number:	S6F248-IC248	**Method:**	SW846 8270D
Lab FileID:	6F06442.D	**Analyst approved:**	07/30/20 13:11 Martha Valls
Injection Time:	07/29/20 15:28	**Supervisor approved:**	07/30/20 14:11 Nicole McCampbell

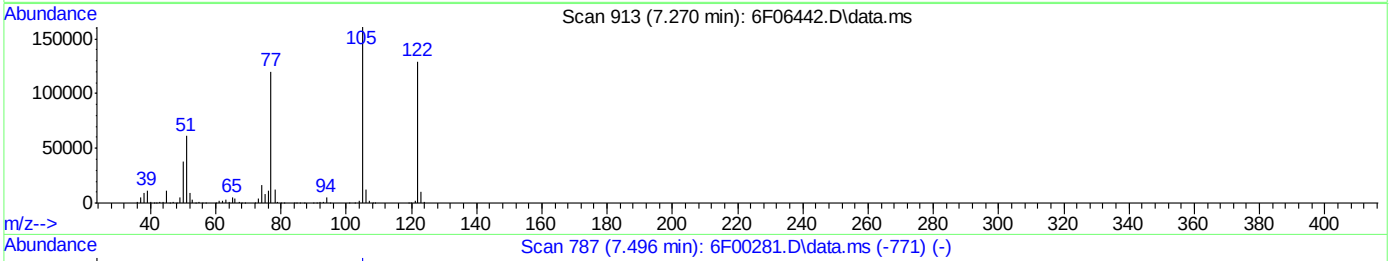
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic Acid	65-85-0		7.27	Split peak

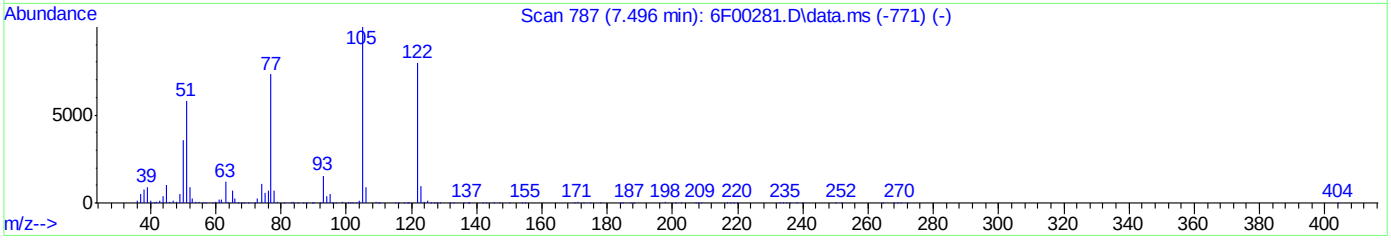
Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06442.D
Sample : ic248-75
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1
Acq On : 29 Jul 2020 3:28 pm Operator: marthav

Quant Time: Jul 29 15:49:07 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625







TIC: 6F06442.D\data.ms

(30) Benzoic Acid

7.270min (+0.005) 111.27ppm

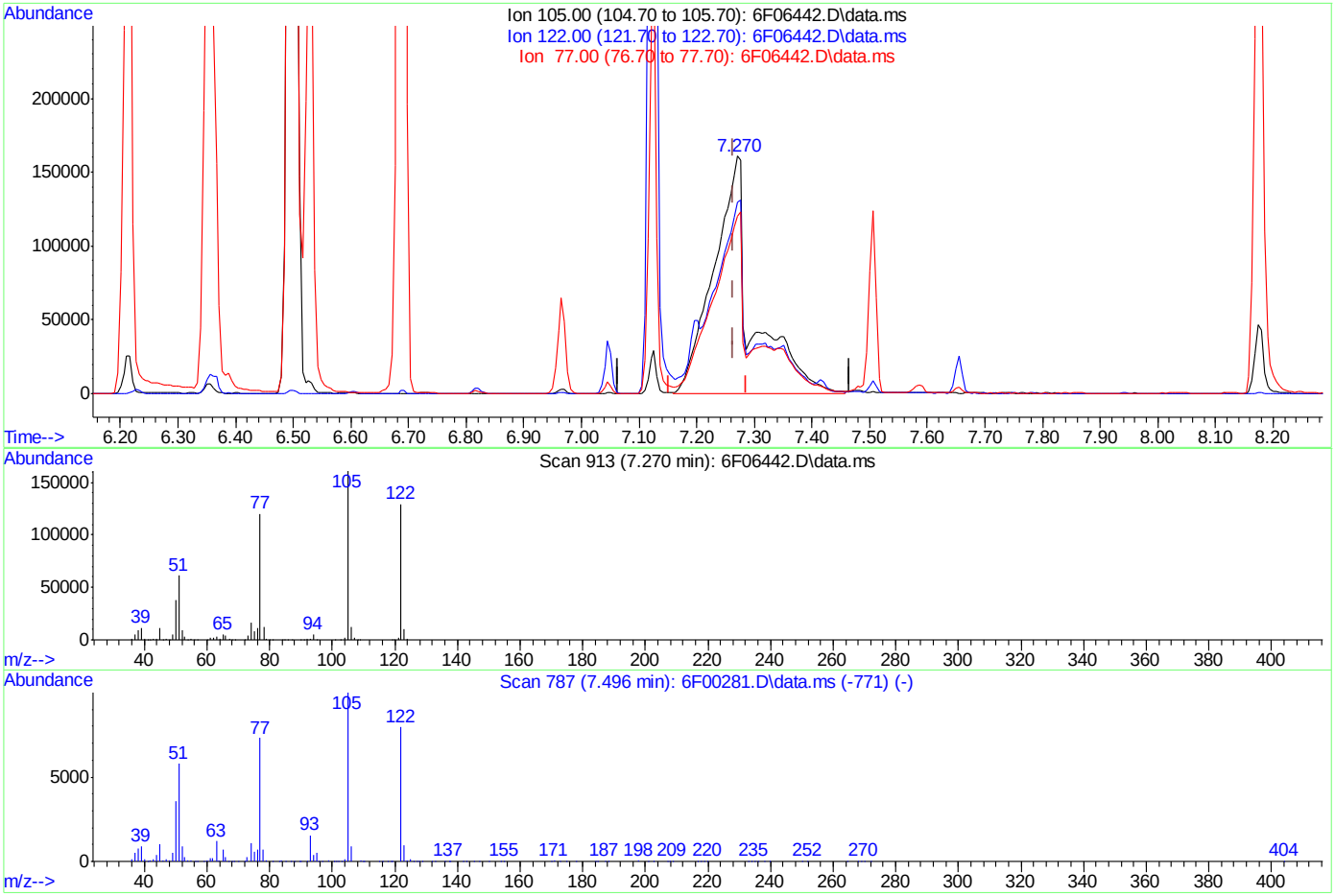
response 534590

Ion	Exp%	Act%
105.00	100	100
122.00	81.90	75.52
77.00	77.70	72.66
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06442.D
Sample : ic248-75
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1
Acq On : 29 Jul 2020 3:28 pm Operator: marthav

Quant Time: Jul 29 15:49:07 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625



TIC: 6F06442.D\data.ms

(30) Benzoic Acid

7.270min (+0.005) 157.57ppm m

response 757042

Ion	Exp%	Act%
105.00	100	100
122.00	81.90	80.55
77.00	77.70	74.77
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 07/30/20 14:11

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06443.D
Sample : ic248-100
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1
Acq On : 29 Jul 2020 3:54 pm Operator: marthav

Quant Time: Jul 29 16:15:52 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.045	152	277100	40.00	ppm	0.00
22) Naphthalene-d8	7.479	136	1078145	40.00	ppm	0.00
43) Acenaphthene-d10	9.538	164	583080	40.00	ppm	0.00
70) Phenanthrene-d10	11.292	188	1080623	40.00	ppm	0.00
92) Chrysene-d12	14.598	240	986480	40.00	ppm	0.01
102) Perylene-d12	16.956	264	938564	40.00	ppm	0.01
System Monitoring Compounds						
7) 2-Fluorophenol	4.676	112	2458510	250.36	ppm	0.01
Spiked Amount 100.000	Range 14 - 67		Recovery = 250.36%#			
9) Phenol-d5	5.692	99	2853599	252.72	ppm	0.02
Spiked Amount 100.000	Range 10 - 50		Recovery = 252.72%#			
23) Nitrobenzene-d5	6.671	82	1341418	143.81	ppm	0.01
Spiked Amount 50.000	Range 42 - 108		Recovery = 287.62%#			
47) 2-Fluorobiphenyl	8.757	172	2452744	112.65	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 225.30%#			
75) 2,4,6-Tribromophenol	10.479	330	854748	267.81	ppm	0.01
Spiked Amount 100.000	Range 33 - 118		Recovery = 267.81%#			
95) Terphenyl-d14	13.218	244	3068288	121.00	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 242.00%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.863	88	472373	119.507	ppm	99
3) N-nitrosodimethylamine	3.200	42	649744	122.120	ppm	98
4) Pyridine	3.232	79	1251468	125.030	ppm	100
5) Benzaldehyde	5.569	106	839334	103.795	ppm	99
6) Aniline	5.692	93	1855874	124.560	ppm	80
8) bis(2-Chloroethyl)ether	5.772	93	1210059	120.480	ppm	87
10) Phenol	5.708	94	1644148	125.357	ppm	95
11) 2-Chlorophenol	5.826	128	1251068	126.051	ppm	89
12) 1,3-Dichlorobenzene	5.981	146	1325268	118.178	ppm	97
13) 1,4-Dichlorobenzene	6.067	146	1334364	117.431	ppm	97
14) 1,2-Dichlorobenzene	6.227	146	1271488	118.743	ppm	98
15) Benzyl alcohol	6.216	108	768317	129.919	ppm	98
16) bis(2-chloroisopropyl)...	6.366	45	1463406	114.800	ppm	64
17) 2-Methylphenol	6.355	108	1096575	125.691	ppm	97
18) Acetophenone	6.505	105	1532532	113.731	ppm	99
19) Hexachloroethane	6.607	117	550110	123.558	ppm	98
20) N-Nitroso-di-n-propyla...	6.516	70	854339	124.888	ppm #	67
21) 3&4-Methylphenol	6.532	108	1140360	127.898	ppm	97
24) Nitrobenzene	6.692	77	1284434	133.010	ppm	99
25) Isophorone	6.971	82	2312721	122.117	ppm	98
26) 2-Nitrophenol	7.051	139	681075	189.428	ppm	98
27) 2,4-Dimethylphenol	7.126	107	1103239	124.548	ppm	97
28) O,O,O-Triethylphosphor...	7.201	198	538749	111.062	ppm	95
29) bis(2-Chloroethoxy)met...	7.227	93	1385727	116.719	ppm	99
30) Benzoic Acid	7.297	105	1034003m	236.337	ppm	
31) 2,4-Dichlorophenol	7.340	162	985036	125.208	ppm	99
32) 1,2,4-Trichlorobenzene	7.420	180	1095436	115.373	ppm	99
34) Naphthalene	7.505	128	3278445	112.108	ppm	98
35) 4-Chloroaniline	7.586	127	1461859	119.593	ppm	99
36) 2,6-Dichlorophenol	7.591	162	953685	124.050	ppm	99
37) Hexachlorobutadiene	7.655	225	586726	109.762	ppm	99

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06443.D
Sample : ic248-100
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1
Acq On : 29 Jul 2020 3:54 pm Operator: marthav

Quant Time: Jul 29 16:15:52 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38) Caprolactam	8.040	113	372604m	133.418	ppm		
39) 4-Chloro-3-methylphenol	8.179	107	1027372	129.366	ppm		99
40) 2-Methylnaphthalene	8.313	141	1950816	115.205	ppm		98
41) 1-Methylnaphthalene	8.431	142	2153353	115.804	ppm		99
42) 1,2,4,5-Tetrachloroben...	8.511	216	1048649	115.120	ppm		100
44) Hexachlorocyclopentadiene	8.506	237	741570	155.545	ppm		100
45) 2,4,6-Trichlorophenol	8.655	196	731456	133.219	ppm		98
46) 2,4,5-Trichlorophenol	8.709	196	779129	129.587	ppm		100
48) 1,1'-Biphenyl	8.869	154	2486458	106.060	ppm		98
49) 2-Chloronaphthalene	8.885	162	2096953	115.594	ppm		100
50) 2-Nitroaniline	9.019	65	692782	175.062	ppm		99
51) p-Dinitrobenzene	9.190	75	472833	184.398	ppm		93
52) Acenaphthylene	9.372	152	3155426	115.760	ppm		100
53) Dimethylphthalate	9.260	163	2374541	121.641	ppm		99
54) m-Dinitrobenzene	9.281	168	451783	172.217	ppm		78
55) 2,6-Dinitrotoluene	9.319	165	586224	152.414	ppm		86
56) o-Dinitrobenzene	9.377	50	406080	147.469	ppm		90
57) Acenaphthene	9.581	153	2094156	116.207	ppm		96
58) 3-Nitroaniline	9.511	138	675866	149.889	ppm		97
59) 2,4-Dinitrophenol	9.629	184	394091	339.735	ppm		92
60) Dibenzofuran	9.784	168	2860476	114.092	ppm		94
61) 2,4-Dinitrotoluene	9.789	165	789277	159.023	ppm		89
62) 4-Nitrophenol	9.752	109	404490	170.268	ppm		100
63) 2,3,5,6-Tetrachlorophenol	9.886	232	636152	146.947	ppm		99
64) 2,3,4,6-Tetrachlorophenol	9.939	232	647944	135.975	ppm		98
65) Fluorene	10.190	166	2357646	117.811	ppm		99
66) 4-Chlorophenyl-phenyle...	10.201	204	1185514	117.289	ppm		98
67) Diethylphthalate	10.100	149	2446906	128.155	ppm		100
68) Thionazin	10.190	97	511146	132.717	ppm		100
69) 4-Nitroaniline	10.255	138	689865	149.949	ppm		99
71) 4,6-Dinitro-2-methylph...	10.276	198	513306	234.883	ppm	#	56
72) n-Nitrosodiphenylamine	10.356	169	2055283	131.337	ppm		99
73) Diphenylamine	10.356	169	2055283	116.105	ppm		99
74) 1,2-Diphenylhydrazine	10.394	77	2532777	116.733	ppm		94
76) Sulfotep	10.565	97	400034	128.560	ppm		78
77) Phorate	10.709	75	1385515	133.806	ppm		100
78) 4-Bromophenyl-phenylether	10.784	248	706190	116.353	ppm		93
79) Hexachlorobenzene	10.832	284	801527	113.855	ppm		97
80) Dimethoate	10.913	87	957831	146.606	ppm		99
81) Simazine	10.982	201	412316	120.652	ppm		96
82) Atrazine	11.014	200	721329	122.201	ppm		98
83) Pentachlorophenol	11.078	266	501324	161.354	ppm		99
84) Phenanthrene	11.324	178	3405606	113.858	ppm		98
85) Anthracene	11.389	178	3538648	114.727	ppm		99
86) Disulfoton	11.330	88	1442831	122.022	ppm		98
87) Carbazole	11.592	167	3246819	119.432	ppm		99
88) Methyl Parathion	11.768	109	812740	174.974	ppm		99
89) Di-n-butylphthalate	12.046	149	4061180	127.825	ppm		99
90) Ethyl Parathion	12.244	97	525467	187.160	ppm		91
91) Fluoranthene	12.731	202	3776024	120.437	ppm		98
93) Benzidine	12.918	184	2032206	125.088	ppm		99
94) Pyrene	12.998	202	3831594	117.767	ppm		99
96) Famphur	13.785	218	937459	121.331	ppm		95
97) Butylbenzylphthalate	13.881	149	1897243	148.418	ppm		97

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06443.D
Sample : ic248-100
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1
Acq On : 29 Jul 2020 3:54 pm Operator: marthav

Quant Time: Jul 29 16:15:52 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

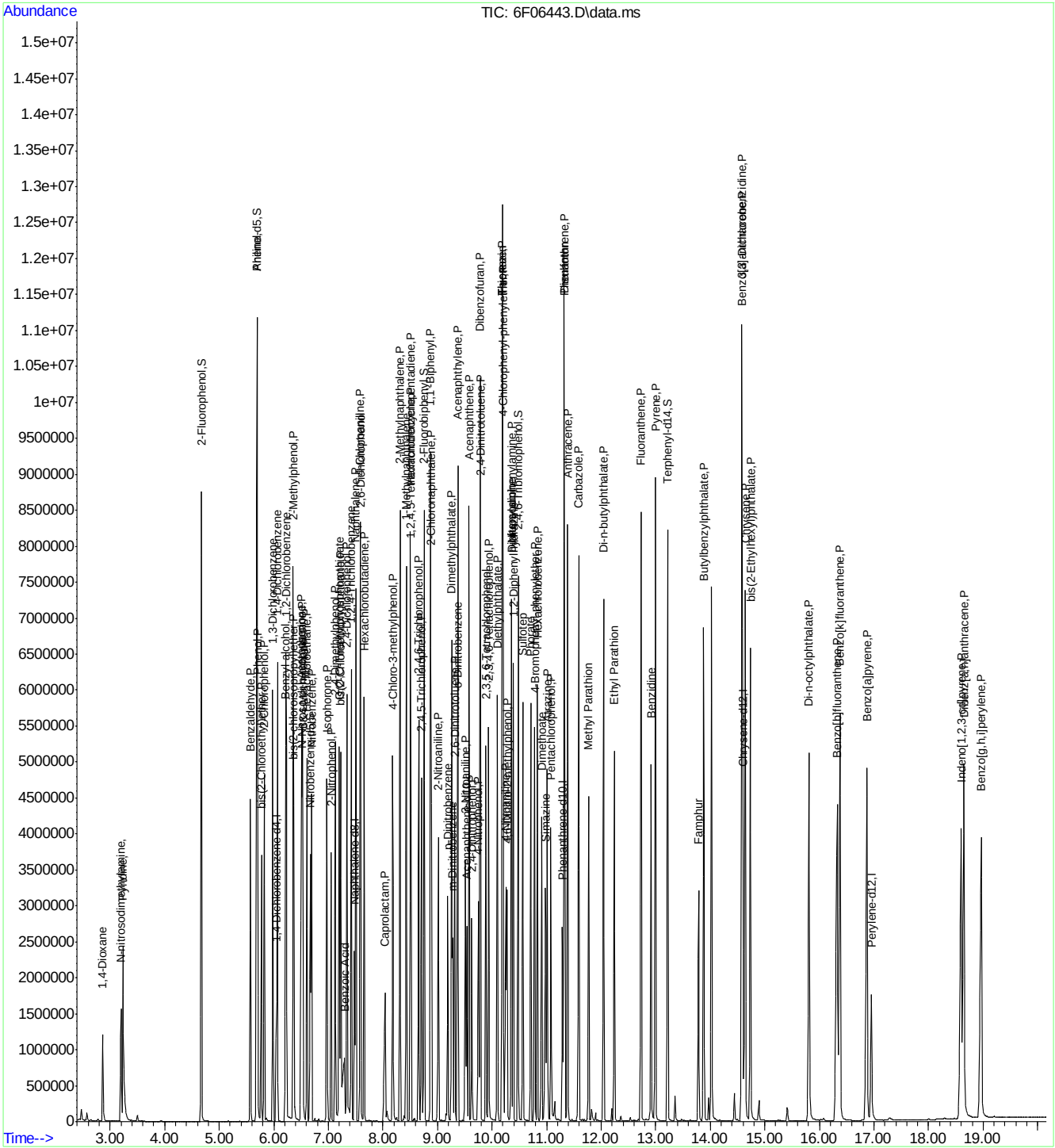
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
98)	3,3'-Dichlorobenzidine	14.582	252	1387107	126.801	ppm	99
99)	Benzo[a]anthracene	14.587	228	3600138	120.276	ppm	99
100)	Chrysene	14.640	228	3447796	116.293	ppm	98
101)	bis(2-Ethylhexyl)phtha...	14.737	149	2605547	144.856	ppm	97
103)	Di-n-octylphthalate	15.807	149	4454812	166.227	ppm	99
104)	Benzo[b]fluoranthene	16.325	252	3554017	129.686	ppm	100
105)	Benzo[k]fluoranthene	16.379	252	3501782	118.694	ppm	100
106)	Benzo[a]pyrene	16.871	252	3216889	126.116	ppm	99
107)	Indeno[1,2,3-cd]pyrene	18.599	276	3014217	126.725	ppm	96
108)	Dibenz[a,h]anthracene	18.647	278	3209398	123.495	ppm	98
109)	Benzo[g,h,i]perylene	18.968	276	3099442	115.964	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06443.D
Sample : ic248-100
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1
Acq On : 29 Jul 2020 3:54 pm Operator: marthav

Quant Time: Jul 29 16:15:52 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625



Manual Integration Approval Summary

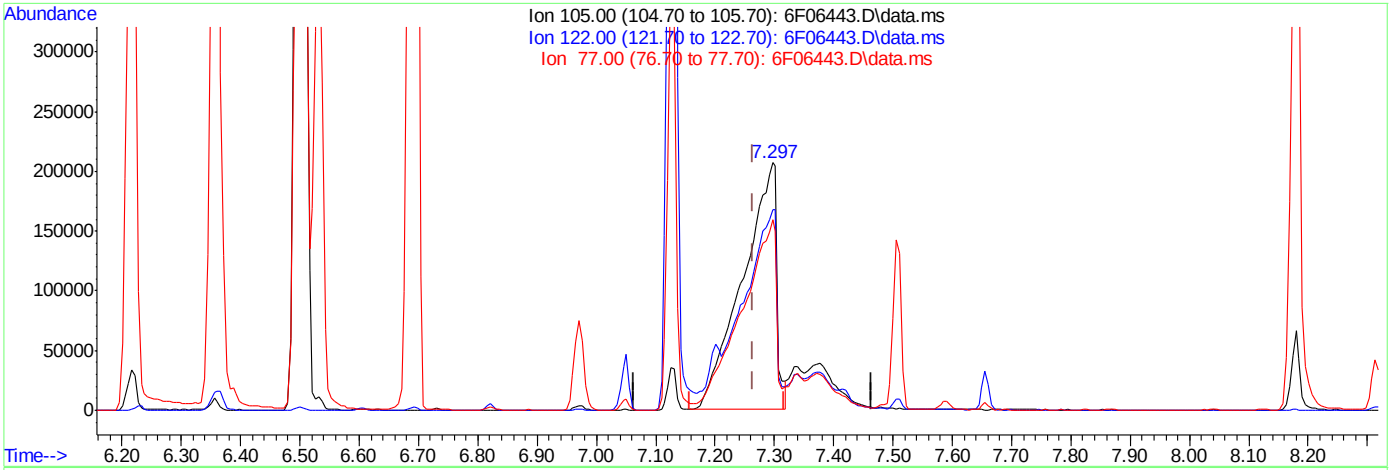
Sample Number:	S6F248-IC248	**Method:**	SW846 8270D
Lab FileID:	6F06443.D	**Analyst approved:**	07/30/20 13:11 Martha Valls
Injection Time:	07/29/20 15:54	**Supervisor approved:**	07/30/20 14:11 Nicole McCampbell

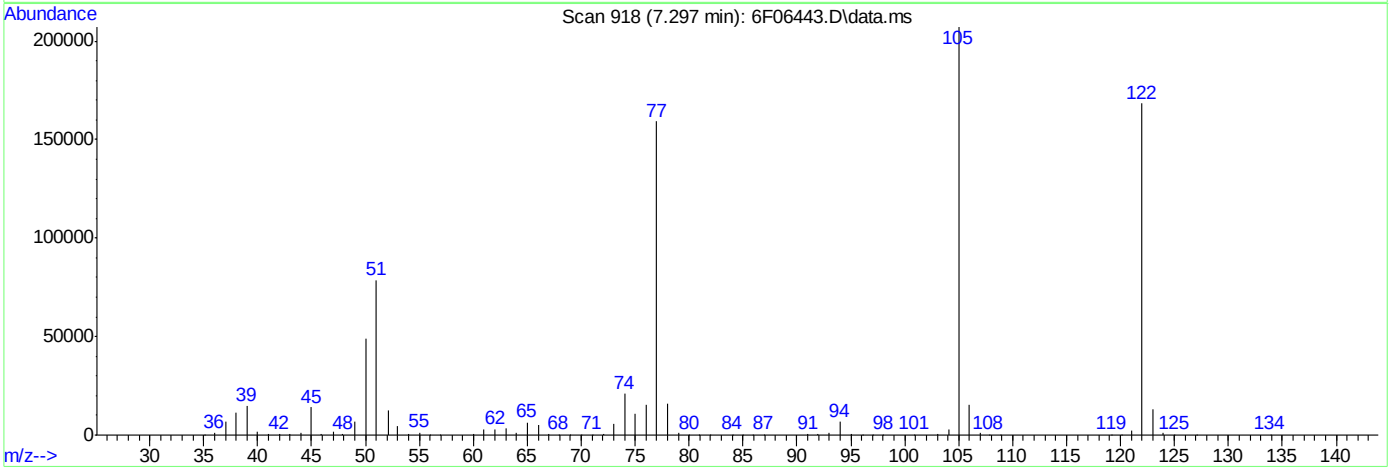
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic Acid	65-85-0		7.30	Split peak
Caprolactam	105-60-2		8.04	Split peak

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06443.D
Sample : ic248-100
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1
Acq On : 29 Jul 2020 3:54 pm Operator: marthav

Quant Time: Jul 29 16:15:19 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625





TIC: 6F06443.D\data.ms

(30) Benzoic Acid

7.297min (+0.032) 190.03ppm

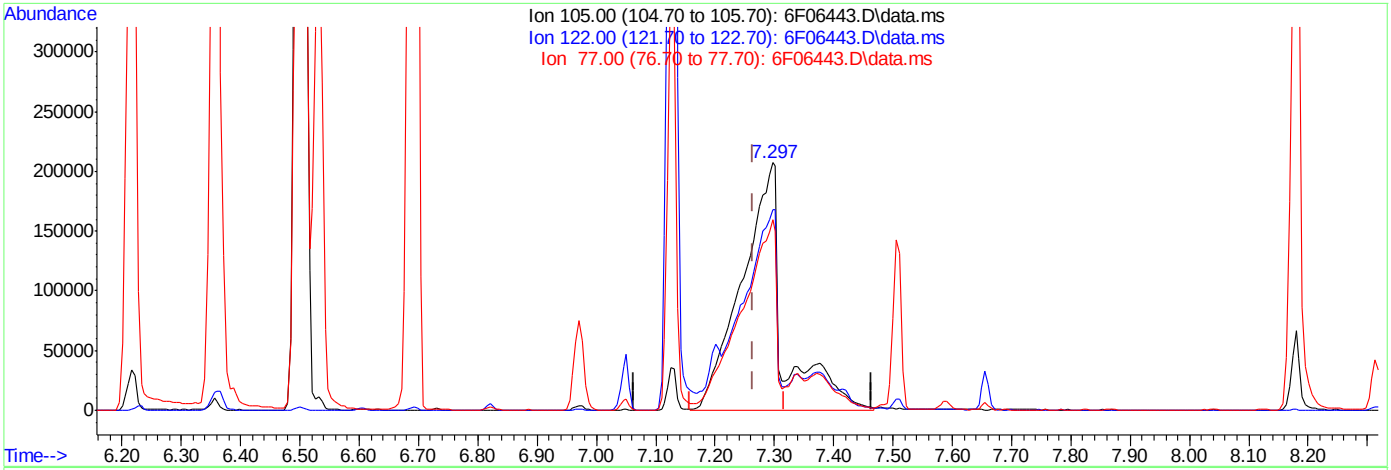
response 831418

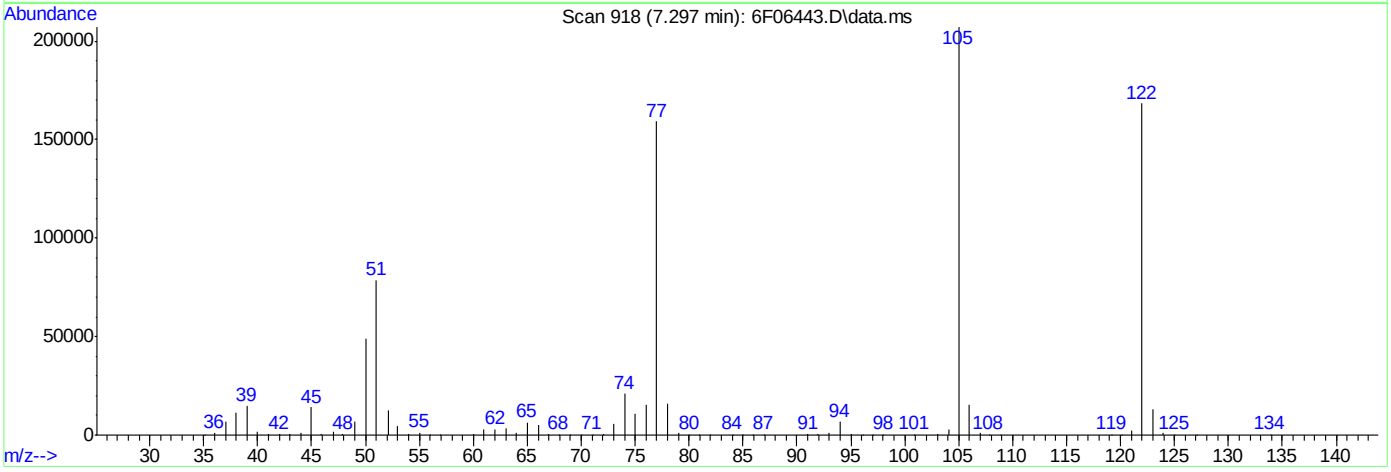
Ion	Exp%	Act%
105.00	100	100
122.00	81.90	77.12
77.00	77.70	75.23
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06443.D
Sample : ic248-100
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1
Acq On : 29 Jul 2020 3:54 pm Operator: marthav

Quant Time: Jul 29 16:15:19 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625





TIC: 6F06443.D\data.ms

(30) Benzoic Acid

7.297min (+0.032) 236.34ppm m

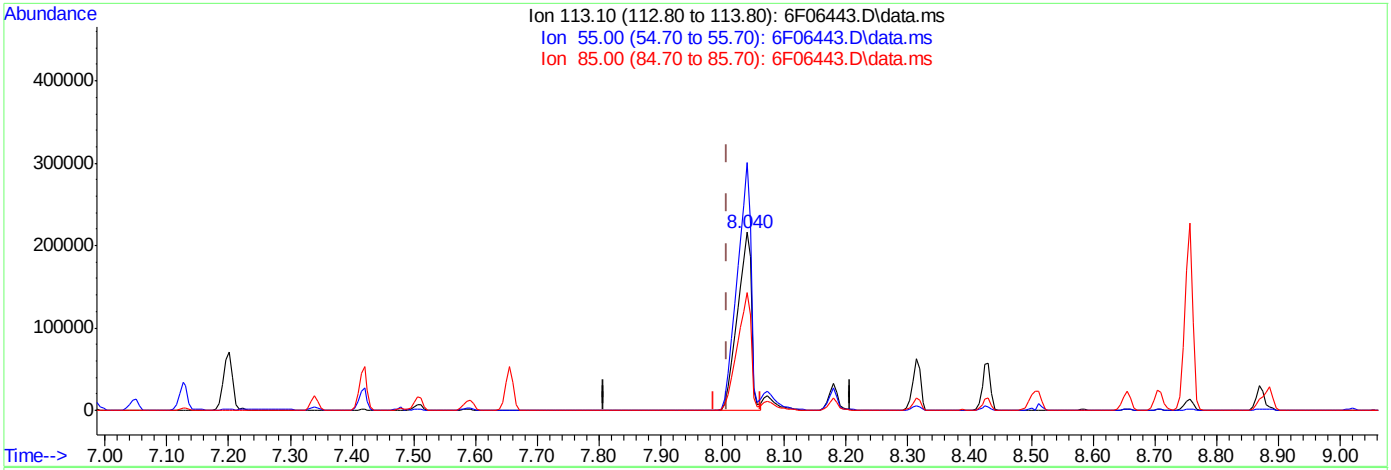
response 1034003

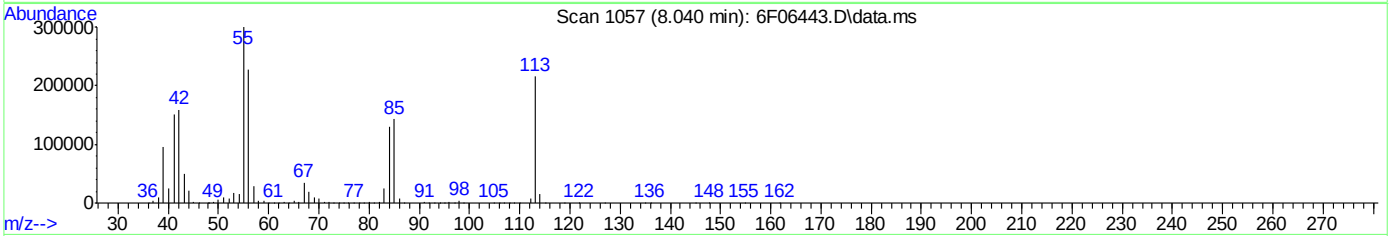
Ion	Exp%	Act%
105.00	100	100
122.00	81.90	81.24
77.00	77.70	76.92
0.00	0.00	0.00

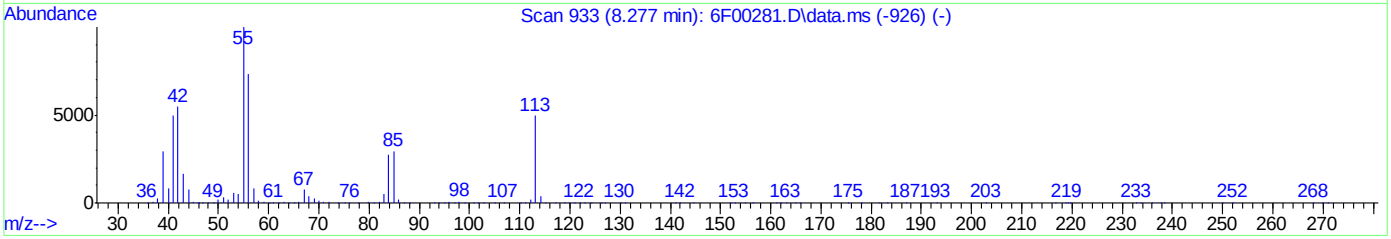
Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06443.D
Sample : ic248-100
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1
Acq On : 29 Jul 2020 3:54 pm Operator: marthav

Quant Time: Jul 29 16:15:19 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625







TIC: 6F06443.D\data.ms

(38) Caprolactam (P)

8.040min (+0.032) 124.79ppm

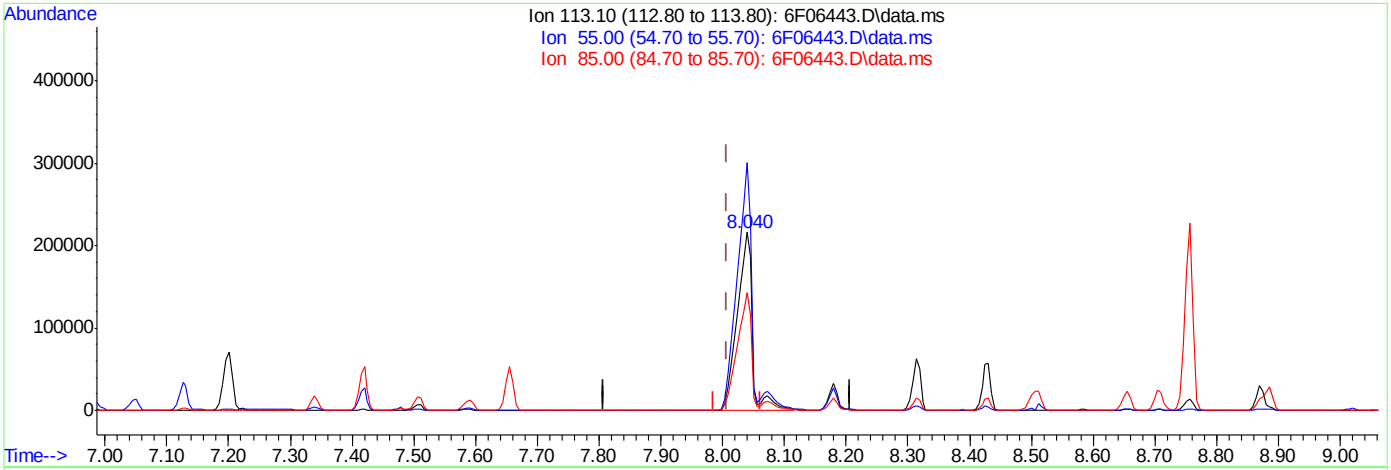
response 348513

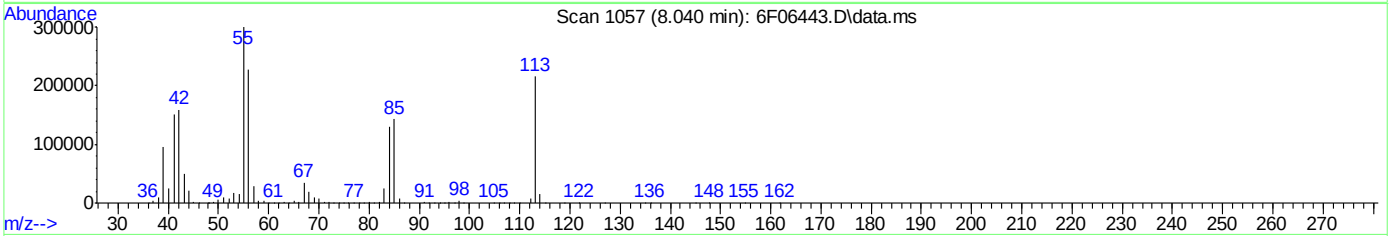
Ion	Exp%	Act%
113.10	100	100
55.00	141.10	138.63
85.00	65.10	65.86
0.00	0.00	0.00

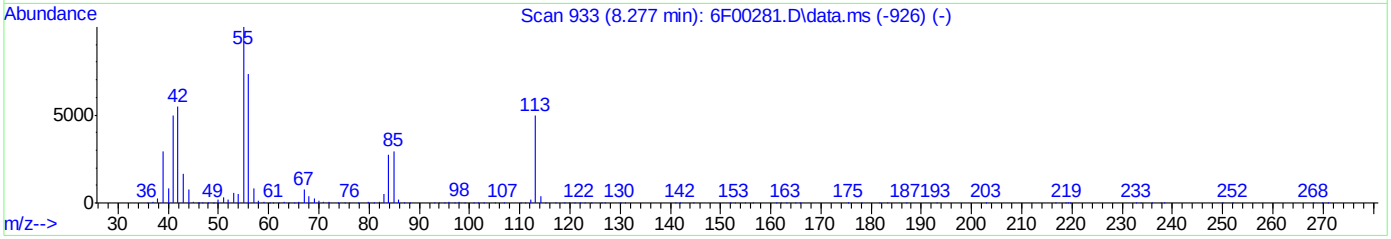
Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F248_072920\6F06443.D
Sample : ic248-100
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1
Acq On : 29 Jul 2020 3:54 pm Operator: marthav

Quant Time: Jul 29 16:15:19 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625







TIC: 6F06443.D\data.ms

(38) Caprolactam (P)

8.040min (+0.032) 133.42ppm m

response 372604

Ion	Exp%	Act%
113.10	100	100
55.00	141.10	138.93
85.00	65.10	65.96
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06444.D
Sample : icv248-50
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1
Acq On : 29 Jul 2020 4:20 pm Operator: marthav

Quant Time: Jul 30 12:06:54 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.045	152	385259	40.00	ppm	0.00
22) Naphthalene-d8	7.479	136	1416043	40.00	ppm	0.00
43) Acenaphthene-d10	9.533	164	727675	40.00	ppm	0.00
70) Phenanthrene-d10	11.287	188	1272017	40.00	ppm	0.00
92) Chrysene-d12	14.593	240	1051891	40.00	ppm	0.00
102) Perylene-d12	16.951	264	1000077	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#		
9) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#		
23) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#		
47) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#		
75) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#		
95) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#		
Target Compounds						Qvalue
2) 1,4-Dioxane	2.895	88	264826	46.216	ppm	99
3) N-nitrosodimethylamine	3.221	42	343172	43.903	ppm	95
5) Benzaldehyde	5.569	106	528908	44.828	ppm	99
8) bis(2-Chloroethyl)ether	5.767	93	659327	44.559	ppm	98
10) Phenol	5.692	94	795582	39.595	ppm	90
11) 2-Chlorophenol	5.821	128	663471	44.471	ppm	100
12) 1,3-Dichlorobenzene	5.981	146	739739	45.857	ppm	99
13) 1,4-Dichlorobenzene	6.061	146	743039	45.437	ppm	99
14) 1,2-Dichlorobenzene	6.227	146	698868	45.284	ppm	99
16) bis(2-chloroisopropyl)...	6.361	45	829377	44.816	ppm	93
17) 2-Methylphenol	6.350	108	543051	40.425	ppm	94
18) Acetophenone	6.495	105	865293	43.446	ppm	100
19) Hexachloroethane	6.602	117	301391	45.143	ppm	99
20) N-Nitroso-di-n-propyla...	6.505	70	452395	42.791	ppm	99
21) 3&4-Methylphenol	6.527	108	1169763	83.784	ppm	96
24) Nitrobenzene	6.682	77	672844	44.480	ppm	96
25) Isophorone	6.960	82	1239040	45.582	ppm	99
26) 2-Nitrophenol	7.046	139	356008	47.780	ppm	99
27) 2,4-Dimethylphenol	7.120	107	539978	41.860	ppm	97
29) bis(2-Chloroethoxy)met...	7.222	93	711251	42.725	ppm	100
30) Benzoic Acid	7.308	105	1032108	81.252	ppm	97
31) 2,4-Dichlorophenol	7.334	162	515590	44.946	ppm	99
32) 1,2,4-Trichlorobenzene	7.415	180	587915	46.107	ppm	100
34) Naphthalene	7.506	128	1779128	44.412	ppm	100
36) 2,6-Dichlorophenol	7.586	162	494072	44.311	ppm	99
37) Hexachlorobutadiene	7.655	225	335441	47.942	ppm	99
38) Caprolactam	8.003	113	189917	42.439	ppm	98
39) 4-Chloro-3-methylphenol	8.169	107	509473	43.093	ppm	99
41) 1-Methylnaphthalene	8.426	142	1101778	42.797	ppm	99
42) 1,2,4,5-Tetrachloroben...	8.506	216	551642	44.871	ppm	99
44) Hexachlorocyclopentadiene	8.500	237	413366	54.534	ppm	98

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06444.D
Sample : icv248-50
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1
Acq On : 29 Jul 2020 4:20 pm Operator: marthav

Quant Time: Jul 30 12:06:54 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

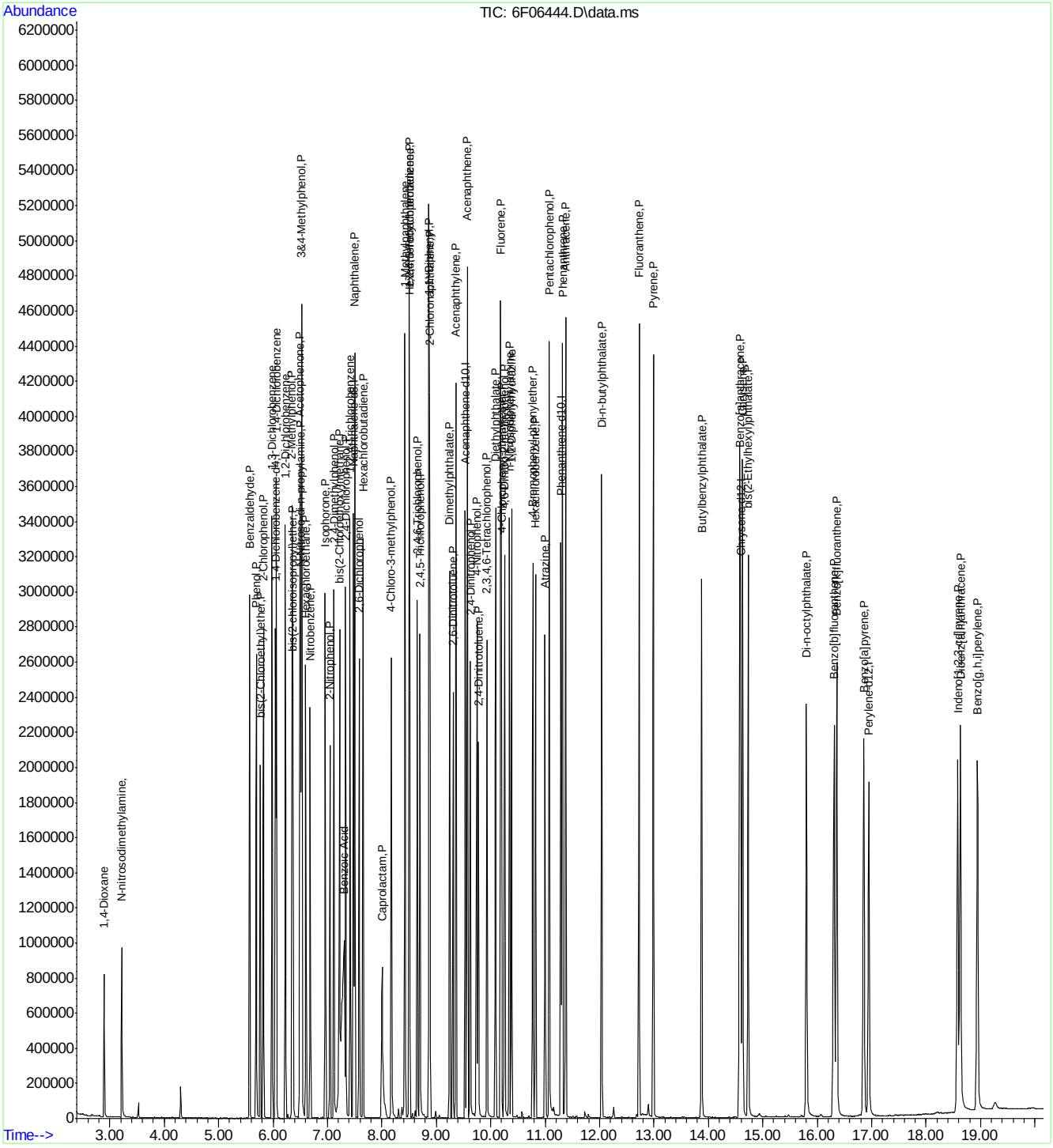
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
45)	2,4,6-Trichlorophenol	8.650	196	375289	47.264	ppm	99
46)	2,4,5-Trichlorophenol	8.698	196	403010	47.628	ppm	98
48)	1,1'-Biphenyl	8.864	154	1390071	45.739	ppm	98
49)	2-Chloronaphthalene	8.880	162	1078516	45.110	ppm	99
52)	Acenaphthylene	9.362	152	1787970	49.165	ppm	99
53)	Dimethylphthalate	9.244	163	1197180	44.087	ppm	100
55)	2,6-Dinitrotoluene	9.308	165	280214	44.436	ppm	99
57)	Acenaphthene	9.570	153	1079664	44.705	ppm	97
59)	2,4-Dinitrophenol	9.624	184	369589	82.230	ppm	90
61)	2,4-Dinitrotoluene	9.779	165	394492	47.506	ppm	84
62)	4-Nitrophenol	9.747	109	365130	87.747	ppm	98
64)	2,3,4,6-Tetrachlorophenol	9.929	232	302640	44.338	ppm	100
65)	Fluorene	10.185	166	1231041	45.537	ppm	99
66)	4-Chlorophenyl-phenyle...	10.201	204	590613	44.165	ppm	93
67)	Diethylphthalate	10.089	149	1228595	44.593	ppm	99
71)	4,6-Dinitro-2-methylph...	10.255	198	515041	88.804	ppm	88
72)	n-Nitrosodiphenylamine	10.340	169	817807	41.363	ppm	98
74)	1,2-Diphenylhydrazine	10.383	77	1265682	44.895	ppm	100
78)	4-Bromophenyl-phenylether	10.774	248	349394	47.065	ppm	98
79)	Hexachlorobenzene	10.827	284	385478	45.472	ppm	99
82)	Atrazine	10.998	200	334511	44.646	ppm	98
83)	Pentachlorophenol	11.073	266	485515	87.054	ppm	98
84)	Phenanthrene	11.319	178	1713954	44.999	ppm	100
85)	Anthracene	11.378	178	1700513	43.934	ppm	100
89)	Di-n-butylphthalate	12.036	149	1992179	45.321	ppm	99
91)	Fluoranthene	12.726	202	1771215	44.168	ppm	100
94)	Pyrene	12.988	202	1822231	48.366	ppm	95
97)	Butylbenzylphthalate	13.876	149	856565	47.452	ppm	99
99)	Benzo[a]anthracene	14.576	228	1614211	45.797	ppm	99
100)	Chrysene	14.630	228	1598280	46.737	ppm	100
101)	bis(2-Ethylhexyl)phtha...	14.732	149	1188674	47.144	ppm	100
103)	Di-n-octylphthalate	15.801	149	1965705	49.690	ppm	100
104)	Benzo[b]fluoranthene	16.309	252	1496383	46.616	ppm	100
105)	Benzo[k]fluoranthene	16.363	252	1589141	47.600	ppm	99
106)	Benzo[a]pyrene	16.855	252	1388867	46.589	ppm	100
107)	Indeno[1,2,3-cd]pyrene	18.583	276	1245848	44.889	ppm	99
108)	Dibenz[a,h]anthracene	18.631	278	1315333	44.387	ppm	99
109)	Benzo[g,h,i]perylene	18.946	276	1342495	44.815	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06444.D
Sample : icv248-50
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1
Acq On : 29 Jul 2020 4:20 pm Operator: marthav

Quant Time: Jul 30 12:06:54 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625



Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06445.D
Sample : icv248-50
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 11 Sample Multiplier: 1
Acq On : 29 Jul 2020 4:46 pm Operator: marthav

Quant Time: Jul 30 12:08:21 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

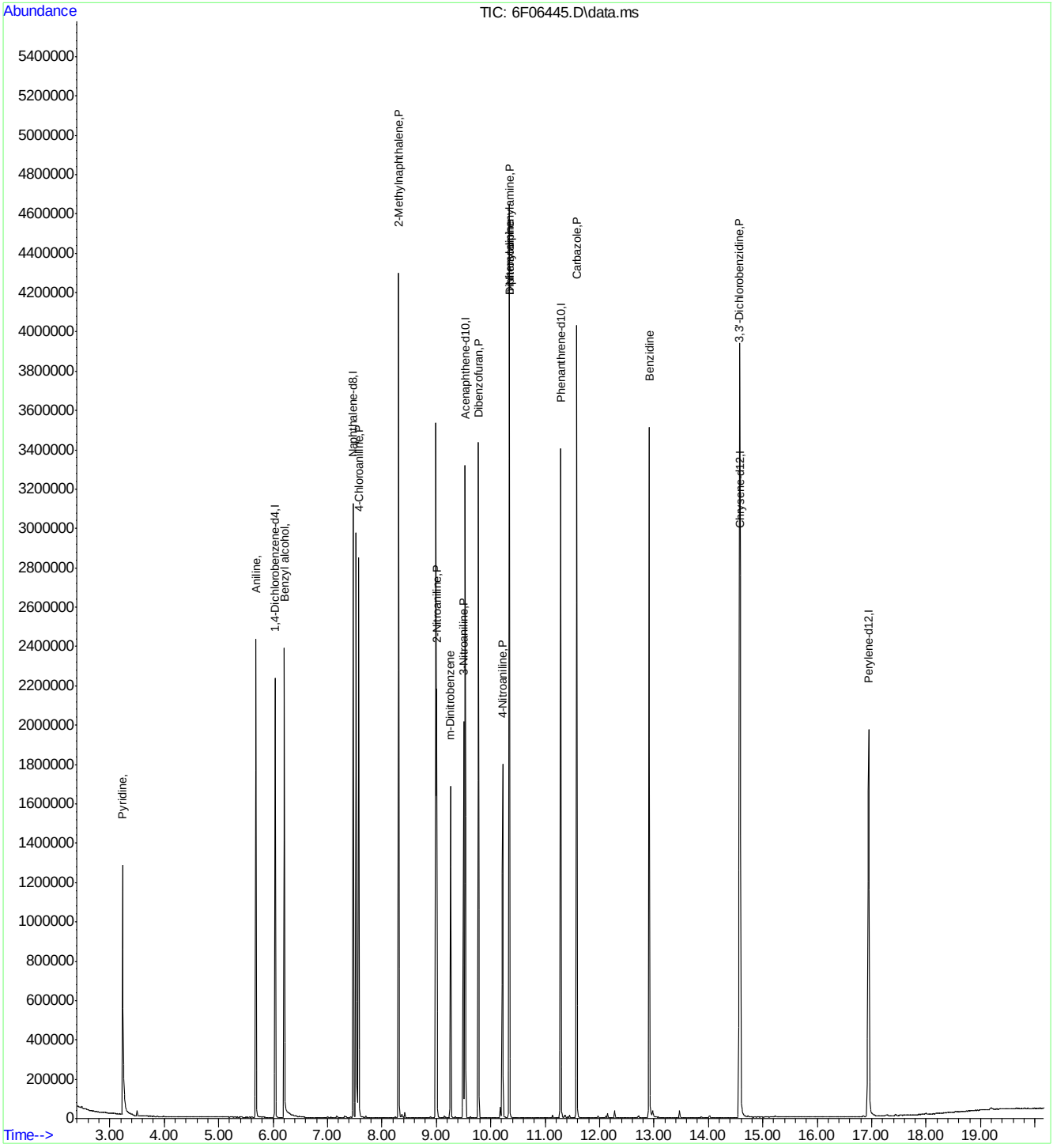
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.040	152	325344	40.00	ppm	0.00
22) Naphthalene-d8	7.473	136	1273253	40.00	ppm	0.00
43) Acenaphthene-d10	9.533	164	685475	40.00	ppm	0.00
70) Phenanthrene-d10	11.287	188	1269859	40.00	ppm	0.00
92) Chrysene-d12	14.587	240	1156122	40.00	ppm	0.00
102) Perylene-d12	16.946	264	1121147	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#		
9) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#		
23) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#		
47) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#		
75) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#		
95) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#		
Target Compounds						Qvalue
4) Pyridine	3.232	79	583055	46.795	ppm	98
6) Aniline	5.687	93	807661	42.333	ppm	83
15) Benzyl alcohol	6.206	108	363715	47.296	ppm	96
35) 4-Chloroaniline	7.575	127	697117	44.395	ppm	98
40) 2-Methylnaphthalene	8.308	141	913152	43.358	ppm	99
50) 2-Nitroaniline	9.008	65	403876	57.272	ppm	92
54) m-Dinitrobenzene	9.260	168	199557	44.477	ppm	92
58) 3-Nitroaniline	9.501	138	324832	47.397	ppm	94
60) Dibenzofuran	9.779	168	1376892	43.783	ppm	95
69) 4-Nitroaniline	10.217	138	319067	46.067	ppm	95
72) n-Nitrosodiphenylamine	10.340	169	1066537	54.035	ppm	99
73) Diphenylamine	10.340	169	1066537	48.461	ppm	99
87) Carbazole	11.581	167	1566082	44.980	ppm	100
93) Benzidine	12.913	184	1315020	54.478	ppm	99
98) 3,3'-Dichlorobenzidine	14.571	252	728427	48.599	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F248_072920\6F06445.D
Sample : icv248-50
Misc : op81256,S6F248,1000,,,1,1,water
ALS Vial : 11 Sample Multiplier: 1
Acq On : 29 Jul 2020 4:46 pm Operator: marthav

Quant Time: Jul 30 12:08:21 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625



Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 08/14/20 14:57

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s6f253\
Data File : 6F06541.d
Acq On : 13 Aug 2020 1:25 pm
Operator : marthav
Sample : cc248-50
Misc : op81484,S6F253,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 14 04:39:59 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Fri Aug 14 04:37:44 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.024	152	402551	40.00	ppm	0.00
22) Naphthalene-d8	7.457	136	1382487	40.00	ppm	0.00
43) Acenaphthene-d10	9.517	164	667405	40.00	ppm	0.00
70) Phenanthrene-d10	11.271	188	1057047	40.00	ppm	0.00
92) Chrysene-d12	14.571	240	984775	40.00	ppm	0.00
102) Perylene-d12	16.924	264	963172	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	4.649	112	1506784	99.06	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 99.06%#			
9) Phenol-d5	5.665	99	1639261	90.78	ppm	0.00
Spiked Amount 100.000	Range 10 - 50		Recovery = 90.78%#			
23) Nitrobenzene-d5	6.644	82	756879	49.90	ppm	0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 99.80%			
47) 2-Fluorobiphenyl	8.736	172	1363286	52.26	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 104.52%			
75) 2,4,6-Tribromophenol	10.453	330	383893	107.91	ppm	0.00
Spiked Amount 100.000	Range 33 - 118		Recovery = 107.91%			
95) Terphenyl-d14	13.196	244	1273003	45.99	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 91.98%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.847	88	322685	53.89	ppm	100
3) N-nitrosodimethylamine	3.178	42	330702	40.49	ppm	100
4) Pyridine	3.216	79	810188	52.55	ppm	100
5) Benzaldehyde	5.548	106	566101	45.92	ppm	100
6) Aniline	5.671	93	1060511	44.92	ppm	100
8) bis(2-Chloroethyl)ether	5.746	93	736639	47.65	ppm	100
10) Phenol	5.682	94	947620	45.14	ppm	100
11) 2-Chlorophenol	5.805	128	753488	48.34	ppm	100
12) 1,3-Dichlorobenzene	5.960	146	831166	49.31	ppm	100
13) 1,4-Dichlorobenzene	6.045	146	835584	48.90	ppm	100
14) 1,2-Dichlorobenzene	6.206	146	785920	48.74	ppm	100
15) Benzyl alcohol	6.190	108	442719	46.53	ppm	100
16) bis(2-chloroisopropyl)...	6.339	45	907312	46.92	ppm	100
17) 2-Methylphenol	6.334	108	633715	45.15	ppm	100
18) Acetophenone	6.479	105	936037	44.98	ppm	100
19) Hexachloroethane	6.585	117	334739	47.98	ppm	100
20) N-Nitroso-di-n-propyla...	6.489	70	484139	43.83	ppm	100
21) 3&4-Methylphenol	6.505	108	646891	44.34	ppm	100
24) Nitrobenzene	6.666	77	732056	49.57	ppm	100
25) Isophorone	6.944	82	1284438	48.40	ppm	100
26) 2-Nitrophenol	7.024	139	399776	54.96	ppm	94
27) 2,4-Dimethylphenol	7.104	107	611108	48.52	ppm	98
28) O,O,O-Triethylphosphor...	7.174	198	336821	51.90	ppm	100
29) bis(2-Chloroethoxy)met...	7.206	93	811301	49.92	ppm	99
30) Benzoic Acid	7.227	105	451161m	42.17	ppm	
31) 2,4-Dichlorophenol	7.318	162	547640	48.90	ppm	100
32) 1,2,4-Trichlorobenzene	7.398	180	640161	51.42	ppm	100
34) Naphthalene	7.484	128	1937766	49.55	ppm	100
35) 4-Chloroaniline	7.559	127	790006	46.34	ppm	100
36) 2,6-Dichlorophenol	7.570	162	528301	48.53	ppm	100
37) Hexachlorobutadiene	7.634	225	353334	51.72	ppm	100
38) Caprolactam	7.987	113	203185	46.51	ppm	100
39) 4-Chloro-3-methylphenol	8.153	107	528628	45.80	ppm	96
40) 2-Methylnaphthalene	8.292	141	1097707	48.00	ppm	100
41) 1-Methylnaphthalene	8.404	142	1187420	47.24	ppm	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s6f253\
Data File : 6F06541.d
Acq On : 13 Aug 2020 1:25 pm
Operator : marthav
Sample : cc248-50
Misc : op81484,S6F253,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 14 04:39:59 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Fri Aug 14 04:37:44 2020
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
42)	1,2,4,5-Tetrachloroben...	8.490	216	581076	48.41	ppm	100
44)	Hexachlorocyclopentadiene	8.479	237	378198	54.40	ppm	100
45)	2,4,6-Trichlorophenol	8.634	196	385807	52.98	ppm	100
46)	2,4,5-Trichlorophenol	8.682	196	400216	51.57	ppm	100
48)	1,1'-Biphenyl	8.848	154	1442304	51.74	ppm	100
49)	2-Chloronaphthalene	8.859	162	1123987	51.26	ppm	100
50)	2-Nitroaniline	8.992	65	321634	46.84	ppm	100
51)	p-Dinitrobenzene	9.164	75	225777	49.49	ppm	100
52)	Acenaphthylene	9.345	152	1680418	50.38	ppm	100
53)	Dimethylphthalate	9.233	163	1229782	49.38	ppm	100
54)	m-Dinitrobenzene	9.249	168	227737	51.07	ppm	91
55)	2,6-Dinitrotoluene	9.292	165	301296	52.09	ppm	98
56)	o-Dinitrobenzene	9.345	50	178901	41.65	ppm	100
57)	Acenaphthene	9.554	153	1093088	49.35	ppm	100
58)	3-Nitroaniline	9.484	138	324944	48.70	ppm	100
59)	2,4-Dinitrophenol	9.602	184	131176	42.42	ppm	100
60)	Dibenzofuran	9.757	168	1367764	44.67	ppm	89
61)	2,4-Dinitrotoluene	9.763	165	348114	45.71	ppm	95
62)	4-Nitrophenol	9.725	109	146886	38.49	ppm	100
63)	2,3,5,6-Tetrachlorophenol	9.864	232	297587	47.69	ppm	100
64)	2,3,4,6-Tetrachlorophenol	9.912	232	304510	48.64	ppm	100
65)	Fluorene	10.164	166	1072973	43.27	ppm	100
66)	4-Chlorophenyl-phenyle...	10.180	204	553034	45.09	ppm	100
67)	Diethylphthalate	10.067	149	1086185	42.98	ppm	100
68)	Thionazin	10.164	97	235581	40.98	ppm	100
69)	4-Nitroaniline	10.212	138	301156	44.66	ppm	100
71)	4,6-Dinitro-2-methylph...	10.239	198	203261	50.53	ppm	97
72)	n-Nitrosodiphenylamine	10.324	169	949250	57.77	ppm	100
73)	Diphenylamine	10.324	169	949250	51.82	ppm	100
74)	1,2-Diphenylhydrazine	10.367	77	1079696	46.09	ppm	100
76)	Sulfotep	10.538	97	178020	46.51	ppm	100
77)	Phorate	10.683	75	642009	49.94	ppm	100
78)	4-Bromophenyl-phenylether	10.757	248	325175	52.71	ppm	100
79)	Hexachlorobenzene	10.806	284	369147	52.40	ppm	100
80)	Dimethoate	10.880	87	433518	49.01	ppm	100
81)	Simazine	10.945	201	187231	50.79	ppm	99
82)	Atrazine	10.987	200	315471	50.67	ppm	100
83)	Pentachlorophenol	11.057	266	221854	56.18	ppm	100
84)	Phenanthrene	11.298	178	1512404	47.78	ppm	100
85)	Anthracene	11.362	178	1586310	49.32	ppm	100
86)	Disulfoton	11.308	88	664447	49.39	ppm	100
87)	Carbazole	11.565	167	1393544	48.08	ppm	100
88)	Methyl Parathion	11.747	109	364831	48.71	ppm	100
89)	Di-n-butylphthalate	12.020	149	1750571	47.92	ppm	100
90)	Ethyl Parathion	12.218	97	247383	51.28	ppm	100
91)	Fluoranthene	12.710	202	1607403	48.24	ppm	100
93)	Benzidine	12.892	184	855458	41.61	ppm	100
94)	Pyrene	12.972	202	1663104	47.15	ppm	100
96)	Famphur	13.763	218	490818	43.87	ppm	100
97)	Butylbenzylphthalate	13.854	149	728517	43.11	ppm	100
98)	3,3'-Dichlorobenzidine	14.555	252	646620	50.65	ppm	100
99)	Benzo[a]anthracene	14.555	228	1642603	49.78	ppm	100
100)	Chrysene	14.608	228	1603929	50.10	ppm	100
101)	bis(2-Ethylhexyl)phtha...	14.705	149	1173913	49.73	ppm	100
103)	Di-n-octylphthalate	15.769	149	1928009	50.60	ppm	100
104)	Benzo[b]fluoranthene	16.283	252	1506200	48.72	ppm	100
105)	Benzo[k]fluoranthene	16.336	252	1569190	48.80	ppm	100
106)	Benzo[a]pyrene	16.828	252	1443514	50.28	ppm	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s6f253\
Data File : 6F06541.d
Acq On : 13 Aug 2020 1:25 pm
Operator : marthav
Sample : cc248-50
Misc : op81484,S6F253,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 14 04:39:59 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Fri Aug 14 04:37:44 2020
Response via : Initial Calibration

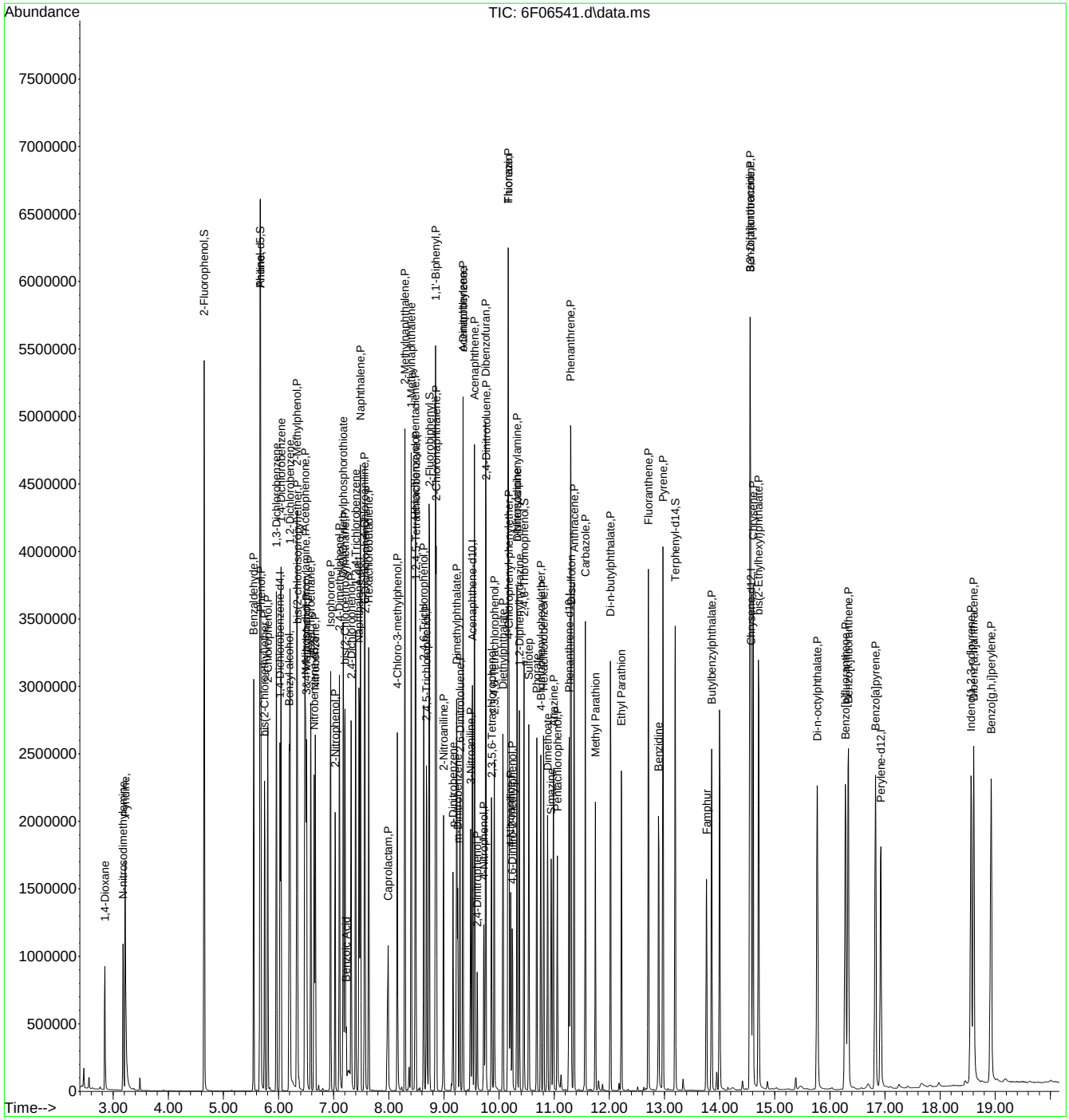
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
107) Indeno[1,2,3-cd]pyrene	18.561	276	1438336	53.81	ppm	99
108) Dibenz[a,h]anthracene	18.609	278	1507780	52.83	ppm	100
109) Benzo[g,h,i]perylene	18.925	276	1552009	53.79	ppm	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s6f253\
Data File : 6F06541.d
Acq On : 13 Aug 2020 1:25 pm
Operator : marthav
Sample : cc248-50
Misc : op81484,S6F253,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 14 04:39:59 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Fri Aug 14 04:37:44 2020
Response via : Initial Calibration



Manual Integration Approval Summary

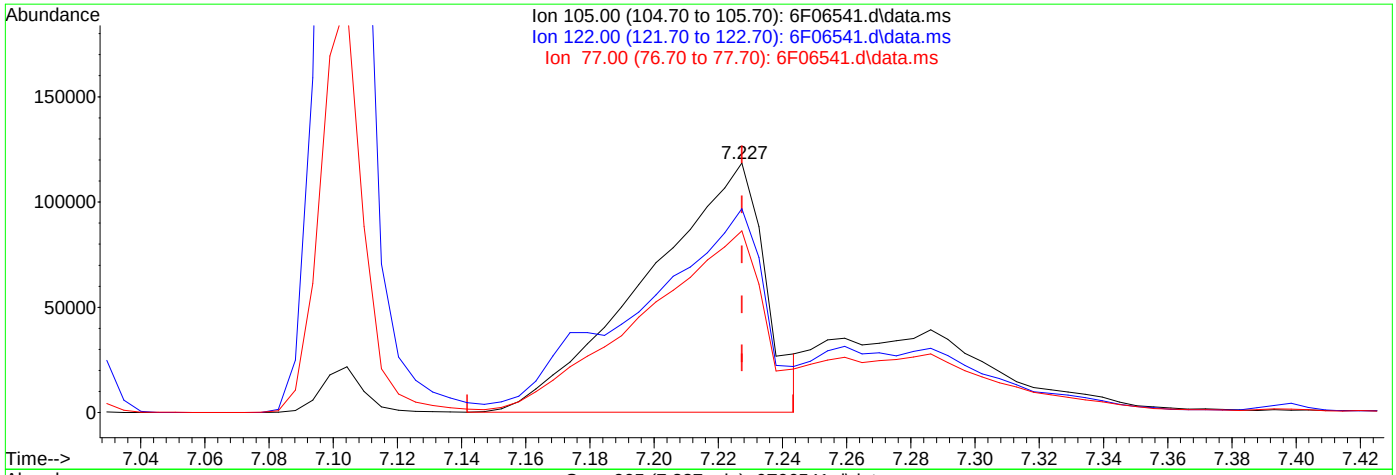
Sample Number:	S6F253-CC248	**Method:**	SW846 8270D
Lab FileID:	6F06541.D	**Analyst approved:**	08/14/20 05:47 Edessa Sumagaysay
Injection Time:	08/13/20 13:25	**Supervisor approved:**	08/14/20 14:57 Nicole McCampbell

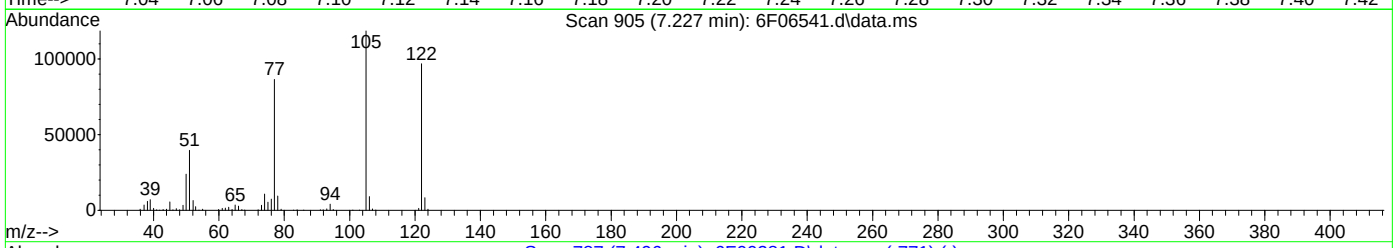
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic Acid	65-85-0		7.23	Split peak

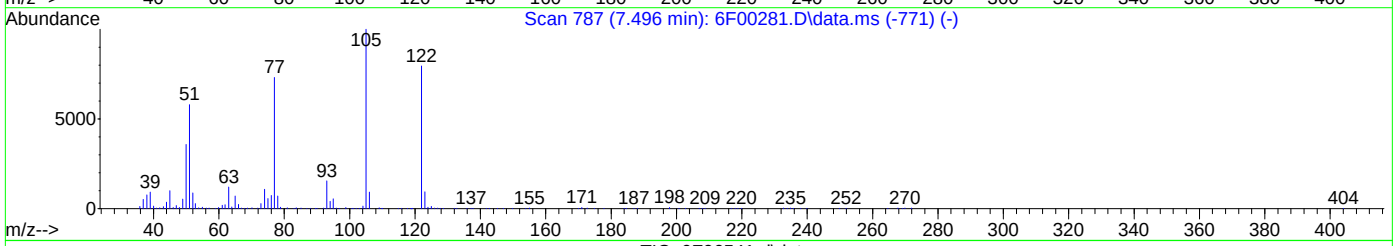
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s6f253\
Data File : 6F06541.d
Acq On : 13 Aug 2020 1:25 pm
Operator : marthav
Sample : cc248-50
Misc : op81484,S6F253,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 14 04:37:48 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Fri Aug 14 04:37:44 2020
Response via : Initial Calibration







TIC: 6F06541.d\data.ms

(30) Benzoic Acid

7.227min (0.000) 29.79ppm

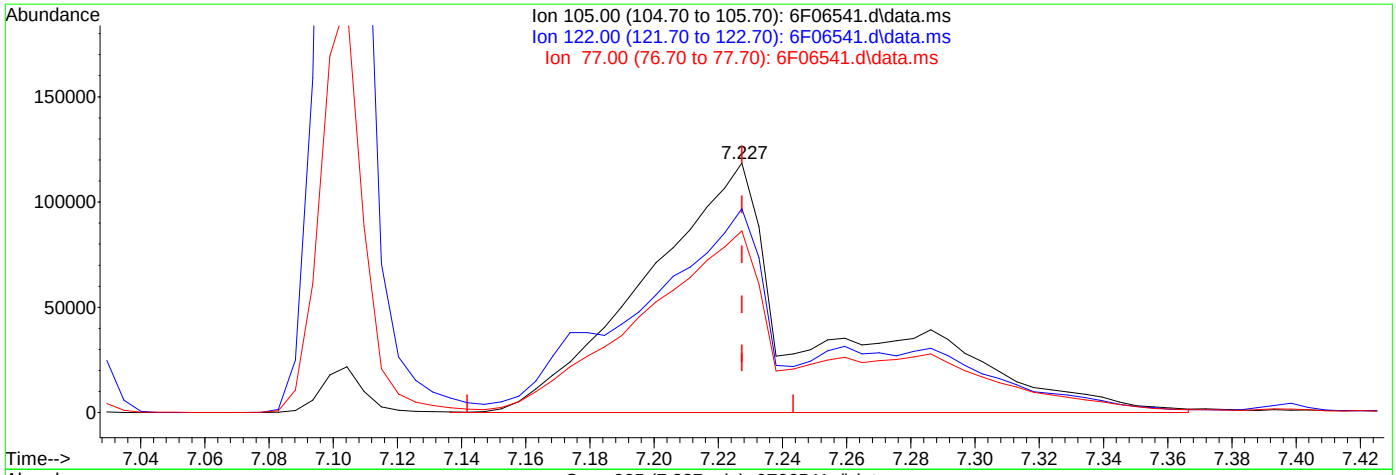
response 302571

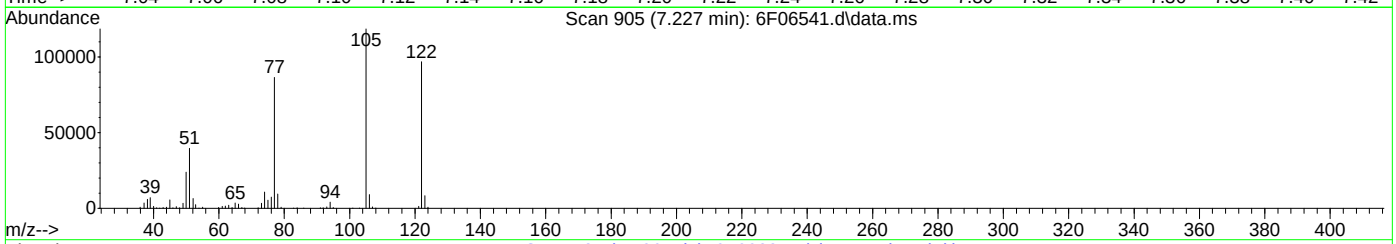
Ion	Exp%	Act%
105.00	100	100
122.00	81.70	79.95
77.00	72.80	71.96
0.00	0.00	0.00

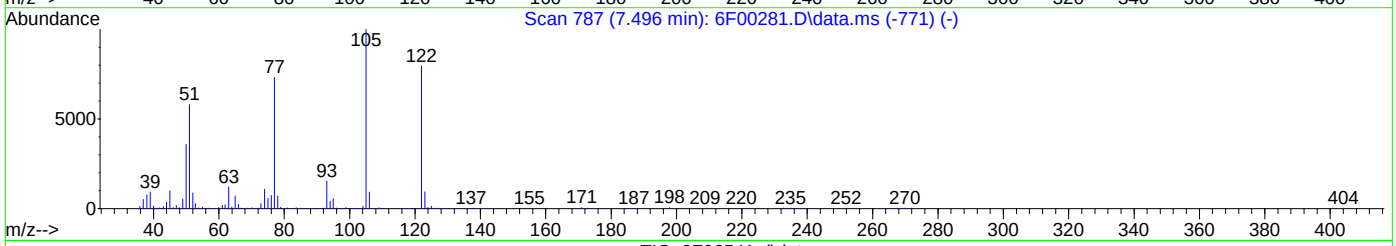
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s6f253\
Data File : 6F06541.d
Acq On : 13 Aug 2020 1:25 pm
Operator : marthav
Sample : cc248-50
Misc : op81484,S6F253,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 14 04:37:48 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Fri Aug 14 04:37:44 2020
Response via : Initial Calibration







TIC: 6F06541.d\data.ms

(30) Benzoic Acid

7.227min (0.000) 42.17ppm m

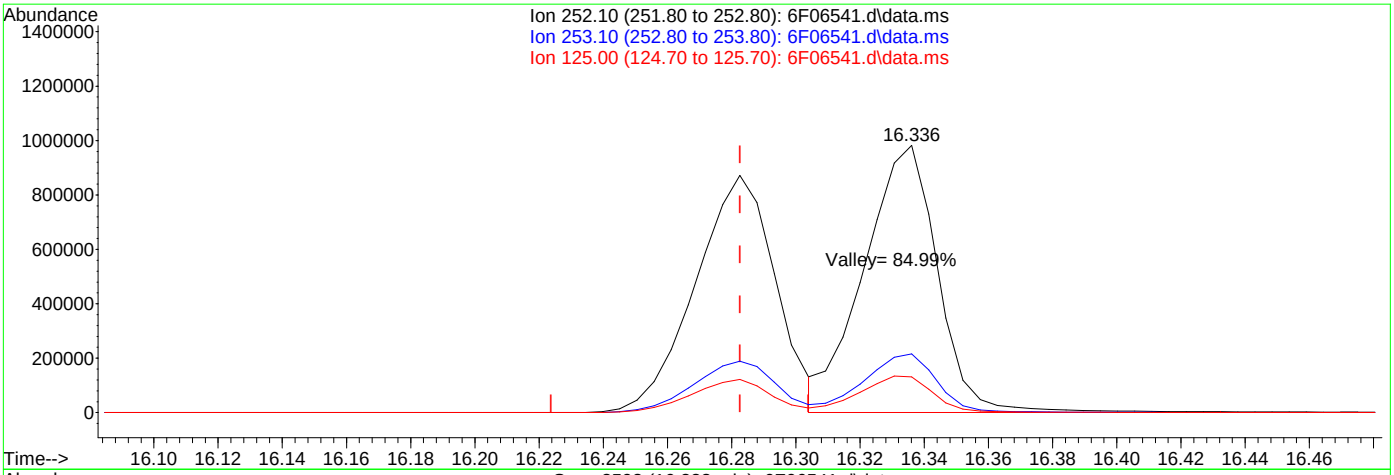
response 451161

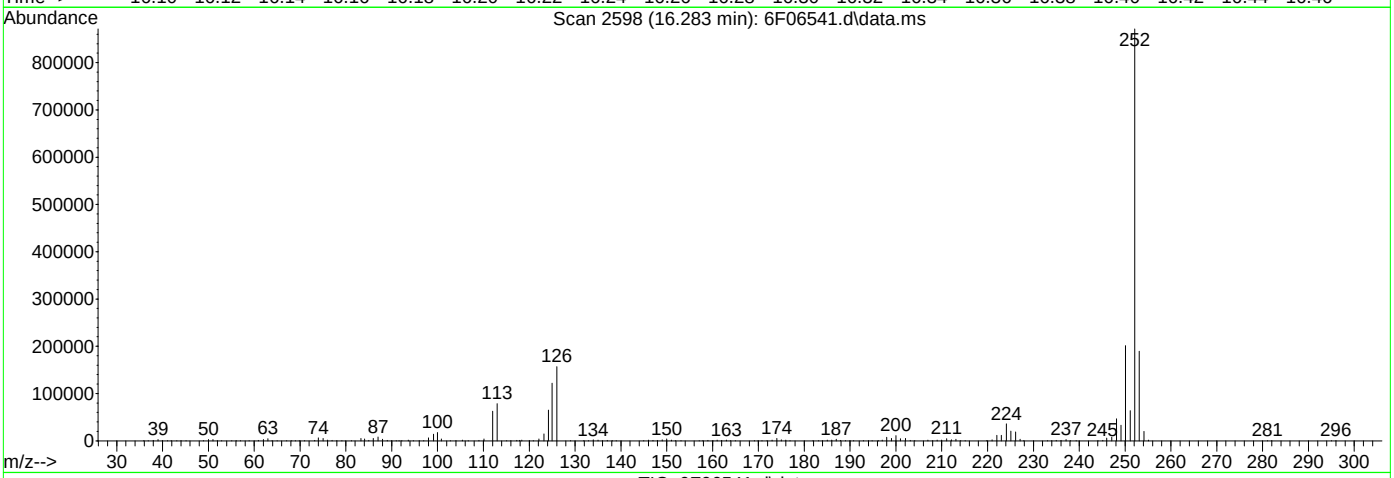
Ion	Exp%	Act%
105.00	100	100
122.00	81.70	81.69
77.00	72.80	72.82
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s6f253\
Data File : 6F06541.d
Acq On : 13 Aug 2020 1:25 pm
Operator : marthav
Sample : cc248-50
Misc : op81484,S6F253,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 14 04:39:59 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Fri Aug 14 04:37:44 2020
Response via : Initial Calibration





TIC: 6F06541.d\data.ms

(104) Benzo[b]fluoranthene (P)

16.283min (0.000) 48.72ppm

response 1506200

Ion	Exp%	Act%
252.10	100	100
253.10	21.70	21.70
125.00	14.00	14.07
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan
08/14/20 14:37

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F254_081420\6F06573.D
Sample : cc248-50
Misc : op81484,S6F254,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1
Acq On : 14 Aug 2020 12:47 pm Operator: marthav

Quant Time: Aug 14 14:25:28 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.013	152	244618	40.00	ppm	0.00
22) Naphthalene-d8	7.452	136	888239	40.00	ppm	0.00
43) Acenaphthene-d10	9.506	164	463309	40.00	ppm	0.00
70) Phenanthrene-d10	11.260	188	829636	40.00	ppm	0.00
92) Chrysene-d12	14.566	240	660438	40.00	ppm	0.00
102) Perylene-d12	16.919	264	640184	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	4.644	112	957475	103.58	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 103.58%#			
9) Phenol-d5	5.660	99	1058352	96.45	ppm	0.00
Spiked Amount 100.000	Range 10 - 50		Recovery = 96.45%#			
23) Nitrobenzene-d5	6.634	82	482672	49.53	ppm	0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 99.06%			
47) 2-Fluorobiphenyl	8.725	172	944382	52.15	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 104.30%			
75) 2,4,6-Tribromophenol	10.447	330	313285	112.20	ppm	0.00
Spiked Amount 100.000	Range 33 - 118		Recovery = 112.20%			
95) Terphenyl-d14	13.186	244	1066955	57.47	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 114.94%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.831	88	185328	50.938	ppm	92
3) N-nitrosodimethylamine	3.168	42	180700	36.409	ppm #	67
4) Pyridine	3.205	79	478281	51.054	ppm	96
5) Benzaldehyde	5.543	106	382488	51.057	ppm	96
6) Aniline	5.660	93	676916	47.189	ppm	89
8) bis(2-Chloroethyl)ether	5.735	93	467515	49.762	ppm	97
10) Phenol	5.676	94	616906	48.355	ppm	86
11) 2-Chlorophenol	5.794	128	490574	51.788	ppm	98
12) 1,3-Dichlorobenzene	5.949	146	526718	51.424	ppm	99
13) 1,4-Dichlorobenzene	6.035	146	529496	50.994	ppm	99
14) 1,2-Dichlorobenzene	6.195	146	499746	51.000	ppm	99
15) Benzyl alcohol	6.184	108	300700	52.005	ppm	97
16) bis(2-chloroisopropyl)...	6.334	45	493014	41.957	ppm	77
17) 2-Methylphenol	6.329	108	407000	47.716	ppm	91
18) Acetophenone	6.468	105	609185	48.172	ppm	99
19) Hexachloroethane	6.570	117	204393	48.216	ppm	94
20) N-Nitroso-di-n-propyla...	6.479	70	304935	45.427	ppm	90
21) 3&4-Methylphenol	6.505	108	433039	48.849	ppm	98
24) Nitrobenzene	6.660	77	459564	48.433	ppm	94
25) Isophorone	6.933	82	832044	48.798	ppm	98
26) 2-Nitrophenol	7.019	139	268143	57.371	ppm	91
27) 2,4-Dimethylphenol	7.099	107	414724	51.254	ppm	96
28) O,O,O-Triethylphosphor...	7.163	198	220850	52.966	ppm	94
29) bis(2-Chloroethoxy)met...	7.195	93	524593	50.238	ppm	98
30) Benzoic Acid	7.233	105	347080m	49.110	ppm	
31) 2,4-Dichlorophenol	7.308	162	378847	52.650	ppm	99
32) 1,2,4-Trichlorobenzene	7.388	180	422217	52.788	ppm	99
34) Naphthalene	7.473	128	1274815	50.733	ppm	99
35) 4-Chloroaniline	7.554	127	548557	50.076	ppm	98
36) 2,6-Dichlorophenol	7.559	162	361389	51.671	ppm	98
37) Hexachlorobutadiene	7.623	225	237204	54.046	ppm	99

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F254_081420\6F06573.D
Sample : cc248-50
Misc : op81484,S6F254,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1
Acq On : 14 Aug 2020 12:47 pm Operator: marthav

Quant Time: Aug 14 14:25:28 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38) Caprolactam	7.987	113	145873	51.966	ppm		85
39) 4-Chloro-3-methylphenol	8.153	107	384912	51.903	ppm		96
40) 2-Methylnaphthalene	8.281	141	748900	50.973	ppm		97
41) 1-Methylnaphthalene	8.399	142	817569	50.628	ppm		99
42) 1,2,4,5-Tetrachloroben...	8.479	216	400540	51.940	ppm		100
44) Hexachlorocyclopentadiene	8.468	237	284288	58.906	ppm		100
45) 2,4,6-Trichlorophenol	8.629	196	279628	55.311	ppm		100
46) 2,4,5-Trichlorophenol	8.677	196	295958	54.935	ppm		97
48) 1,1'-Biphenyl	8.837	154	995424	51.443	ppm		99
49) 2-Chloronaphthalene	8.853	162	785770	51.619	ppm		98
50) 2-Nitroaniline	8.987	65	229406	48.130	ppm		91
51) p-Dinitrobenzene	9.158	75	161270	50.704	ppm		87
52) Acenaphthylene	9.335	152	1190984	51.436	ppm		99
53) Dimethylphthalate	9.222	163	906339	52.422	ppm		100
54) m-Dinitrobenzene	9.244	168	170192	54.420	ppm		83
55) 2,6-Dinitrotoluene	9.281	165	225894	56.262	ppm	#	68
56) o-Dinitrobenzene	9.340	50	120095	40.279	ppm		87
57) Acenaphthene	9.543	153	781184	50.803	ppm		98
58) 3-Nitroaniline	9.479	138	246549	53.225	ppm		91
59) 2,4-Dinitrophenol	9.602	184	143791	58.877	ppm		80
60) Dibenzofuran	9.752	168	1071487	50.409	ppm		99
61) 2,4-Dinitrotoluene	9.757	165	287995	54.470	ppm		79
62) 4-Nitrophenol	9.725	109	126719	47.829	ppm		92
63) 2,3,5,6-Tetrachlorophenol	9.854	232	240926	54.477	ppm		98
64) 2,3,4,6-Tetrachlorophenol	9.907	232	244210	56.192	ppm		96
65) Fluorene	10.153	166	852529	49.530	ppm		100
66) 4-Chlorophenyl-phenyle...	10.169	204	436553	51.272	ppm		96
67) Diethylphthalate	10.062	149	909626	51.855	ppm		99
68) Thionazin	10.153	97	190280	47.683	ppm		98
69) 4-Nitroaniline	10.207	138	248300	53.040	ppm		95
71) 4,6-Dinitro-2-methylph...	10.239	198	190398	58.044	ppm		95
72) n-Nitrosodiphenylamine	10.319	169	758789	58.842	ppm		99
73) Diphenylamine	10.319	169	758789	52.772	ppm		99
74) 1,2-Diphenylhydrazine	10.356	77	848348	46.138	ppm		95
76) Sulfotep	10.528	97	141813	47.209	ppm		96
77) Phorate	10.672	75	500709	49.622	ppm		98
78) 4-Bromophenyl-phenylether	10.747	248	262695	54.255	ppm		96
79) Hexachlorobenzene	10.800	284	297936	53.885	ppm		99
80) Dimethoate	10.875	87	353926	50.976	ppm		97
81) Simazine	10.939	201	152507	52.706	ppm		99
82) Atrazine	10.977	200	257520	52.697	ppm		98
83) Pentachlorophenol	11.052	266	173928	56.133	ppm		100
84) Phenanthrene	11.292	178	1222860	49.224	ppm		99
85) Anthracene	11.351	178	1291667	51.165	ppm		99
86) Disulfoton	11.298	88	526827	49.892	ppm		96
87) Carbazole	11.560	167	1155206	50.785	ppm		99
88) Methyl Parathion	11.736	109	305644	51.731	ppm		99
89) Di-n-butylphthalate	12.009	149	1470180	51.280	ppm		100
90) Ethyl Parathion	12.212	97	183164	48.604	ppm		84
91) Fluoranthene	12.699	202	1342110	51.314	ppm		99
93) Benzidine	12.886	184	741691	53.788	ppm		99
94) Pyrene	12.967	202	1328269	56.152	ppm		98
96) Famphur	13.753	218	406105	54.120	ppm		95
97) Butylbenzylphthalate	13.844	149	629106	55.508	ppm		99

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F254_081420\6F06573.D
Sample : cc248-50
Misc : op81484,S6F254,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1
Acq On : 14 Aug 2020 12:47 pm Operator: marthav

Quant Time: Aug 14 14:25:28 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625

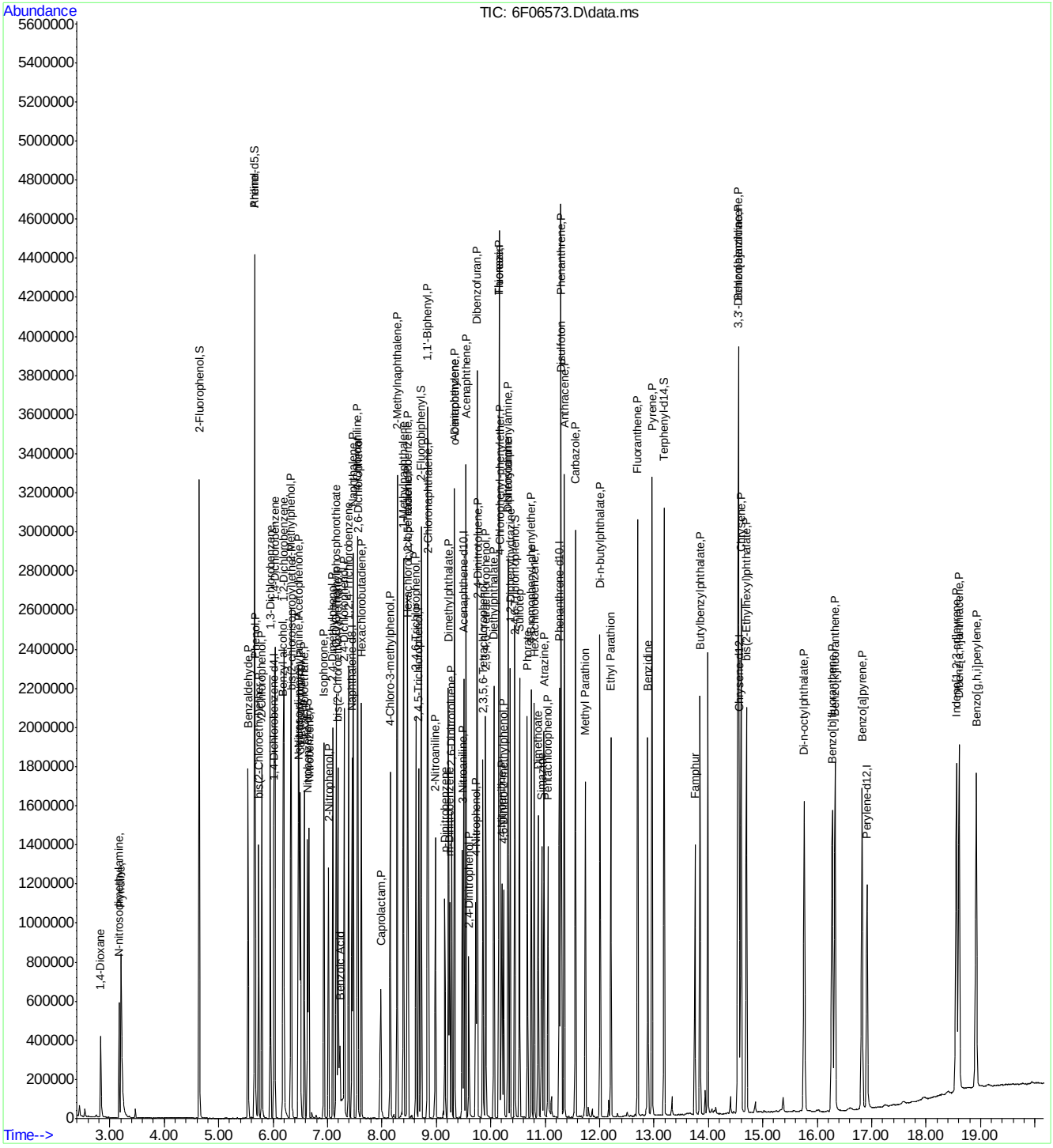
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
98)	3,3'-Dichlorobenzidine	14.544	252	460934	53.834	ppm	99
99)	Benzo[a]anthracene	14.550	228	1152473	52.077	ppm	98
100)	Chrysene	14.603	228	1117731	52.057	ppm	99
101)	bis(2-Ethylhexyl)phtha...	14.699	149	838788	52.985	ppm	99
103)	Di-n-octylphthalate	15.758	149	1397610	55.191	ppm	98
104)	Benzo[b]fluoranthene	16.277	252	1078168	52.470	ppm	100
105)	Benzo[k]fluoranthene	16.331	252	1084797	50.760	ppm	99
106)	Benzo[a]pyrene	16.823	252	1014498	53.162	ppm	99
107)	Indeno[1,2,3-cd]pyrene	18.561	276	1053856	59.318	ppm	98
108)	Dibenz[a,h]anthracene	18.609	278	1090429	57.484	ppm	99
109)	Benzo[g,h,i]perylene	18.925	276	1060001	55.277	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\S6F254_081420\6F06573.D
Sample : cc248-50
Misc : op81484,S6F254,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1
Acq On : 14 Aug 2020 12:47 pm Operator: marthav

Quant Time: Aug 14 14:25:28 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625



Manual Integration Approval Summary

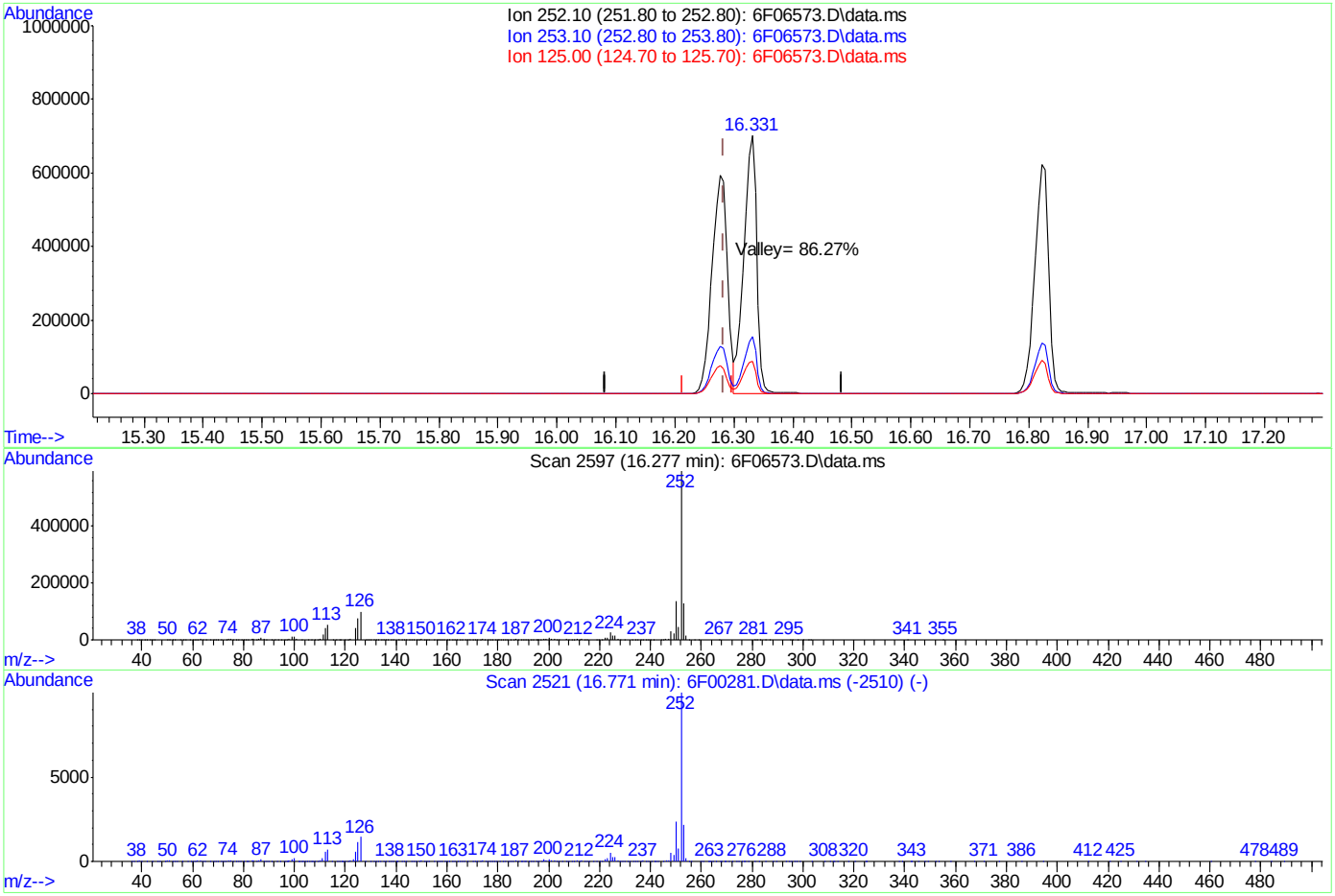
Sample Number:	S6F254-CC248	**Method:**	SW846 8270D
Lab FileID:	6F06573.D	**Analyst approved:**	08/14/20 14:29 Martha Valls
Injection Time:	08/14/20 12:47	**Supervisor approved:**	08/14/20 14:37 Naresh Jiawan

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic Acid	65-85-0		7.23	Split peak

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F254_081420\6F06573.D
Sample : cc248-50
Misc : op81484,S6F254,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1
Acq On : 14 Aug 2020 12:47 pm Operator: marthav

Quant Time: Aug 14 14:08:44 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625



TIC: 6F06573.D\data.ms

(104) Benzo[b]fluoranthene (P)

16.277min (-0.006) 52.47ppm

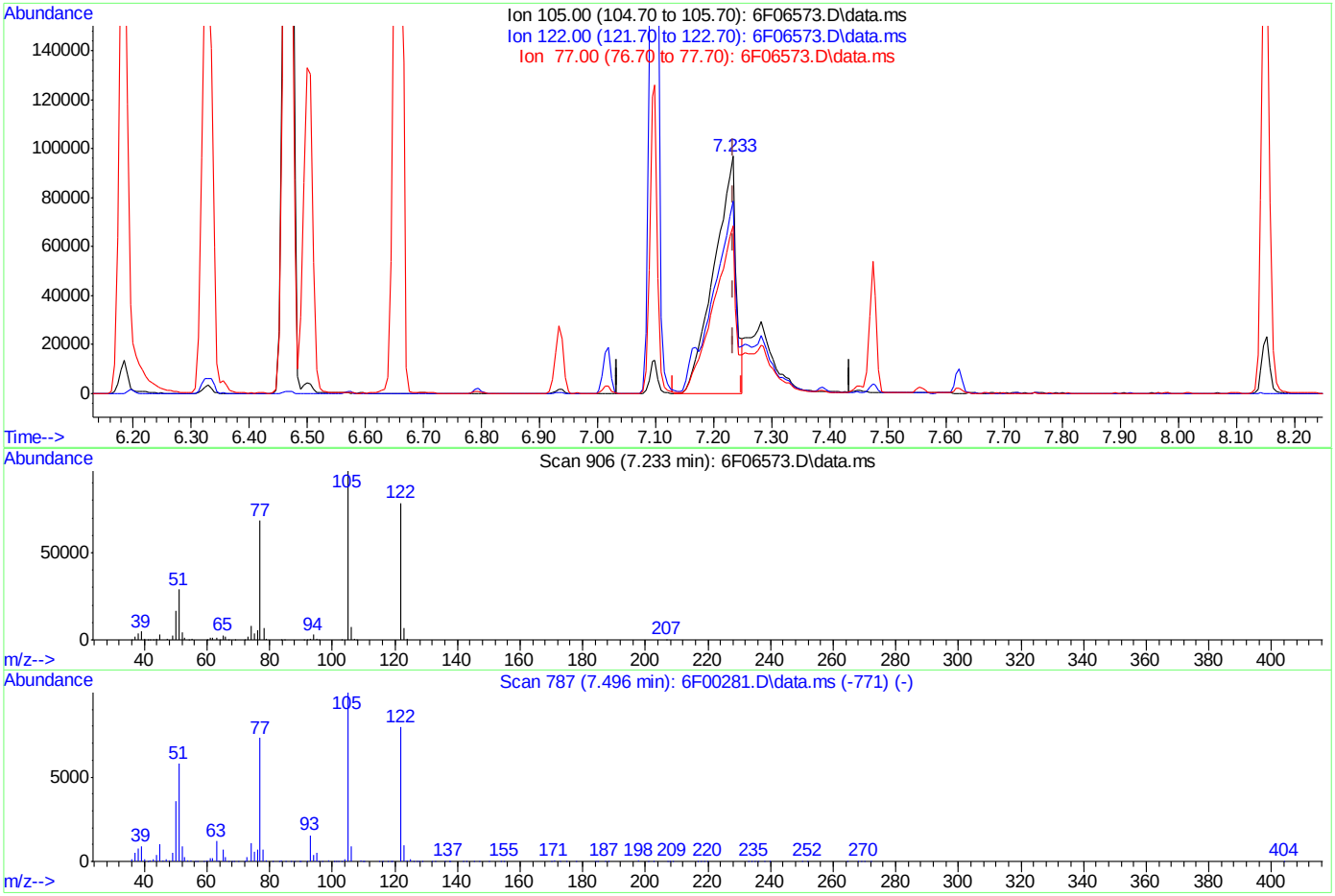
response 1078168

Ion	Exp%	Act%
252.10	100	100
253.10	21.80	21.68
125.00	12.80	12.99
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F254_081420\6F06573.D
Sample : cc248-50
Misc : op81484,S6F254,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1
Acq On : 14 Aug 2020 12:47 pm Operator: marthav

Quant Time: Aug 14 14:25:14 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625



TIC: 6F06573.D\data.ms

(30) Benzoic Acid

7.233min (-0.002) 37.88ppm

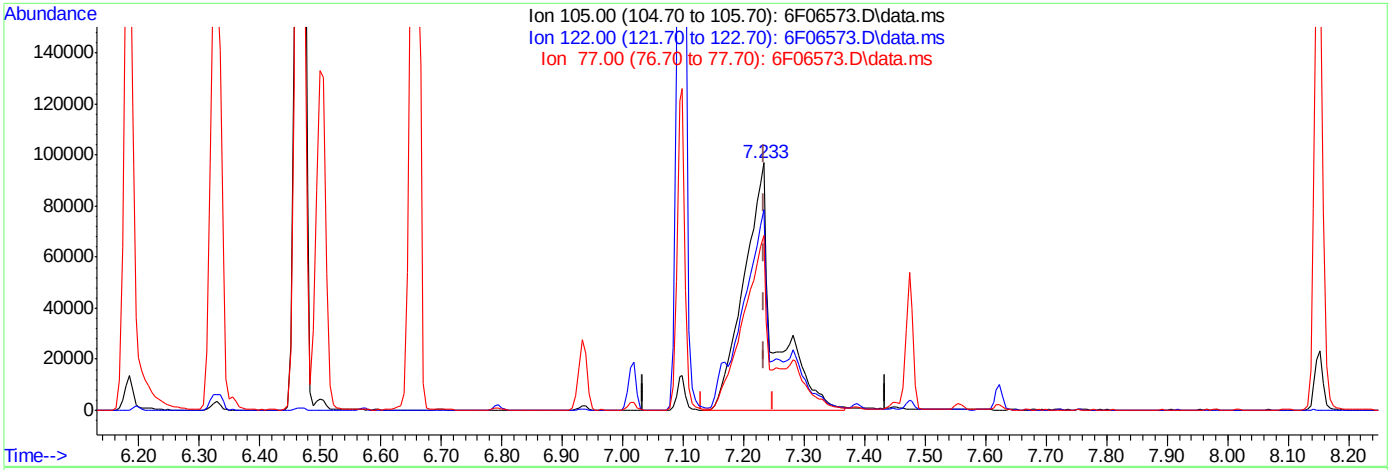
response 255817

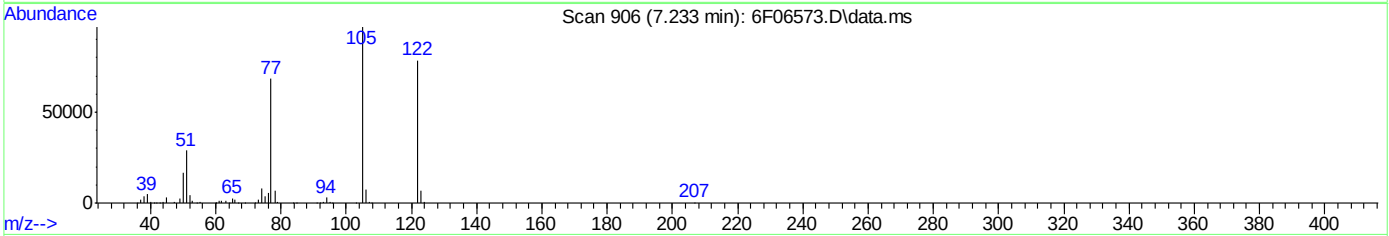
Ion	Exp%	Act%
105.00	100	100
122.00	83.10	79.70
77.00	77.30	70.38
0.00	0.00	0.00

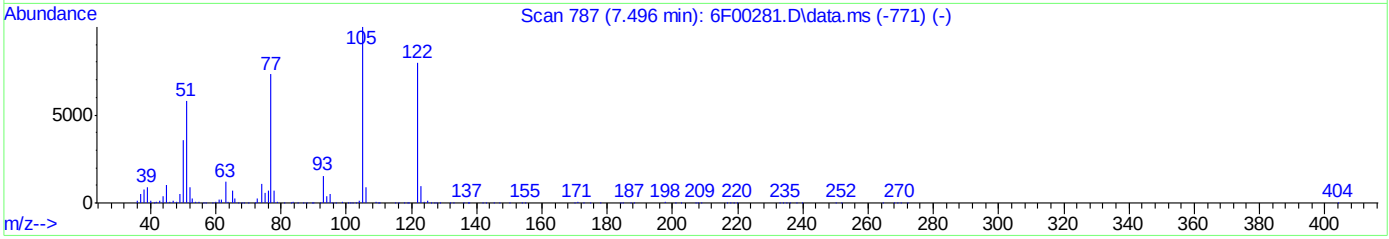
Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F254_081420\6F06573.D
Sample : cc248-50
Misc : op81484,S6F254,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1
Acq On : 14 Aug 2020 12:47 pm Operator: marthav

Quant Time: Aug 14 14:25:14 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625







TIC: 6F06573.D\data.ms

(30) Benzoic Acid

7.233min (-0.002) 49.11ppm m

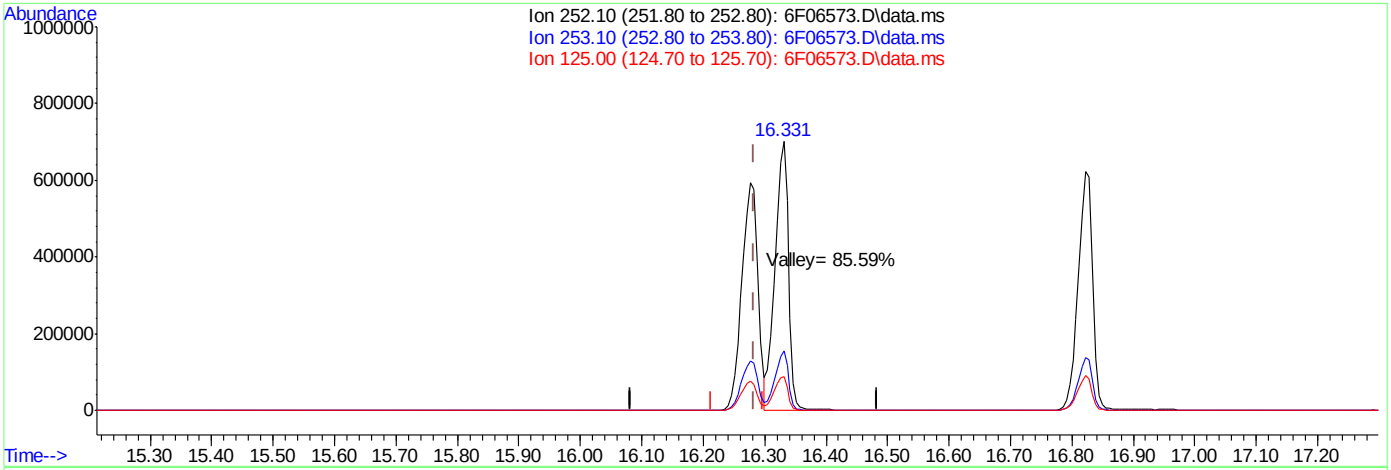
response 347080

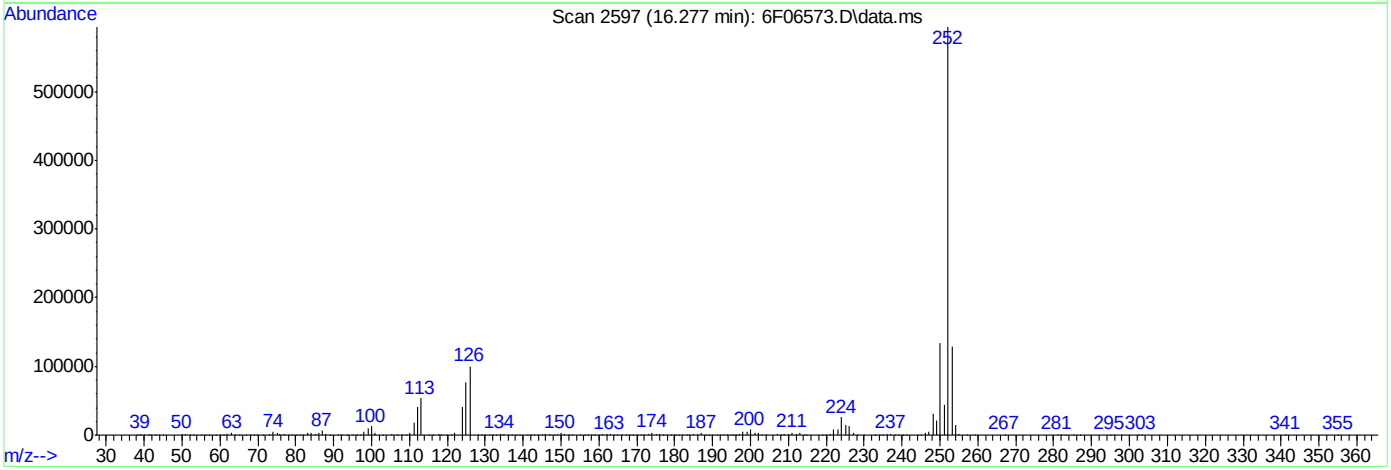
Ion	Exp%	Act%
105.00	100	100
122.00	83.10	81.03
77.00	77.30	70.66
0.00	0.00	0.00

Quantitation Report (Qedit)

Data File: C:\msdchem\1\data\S6F254_081420\6F06573.D
Sample : cc248-50
Misc : op81484,S6F254,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1
Acq On : 14 Aug 2020 12:47 pm Operator: marthav

Quant Time: Aug 14 14:25:28 2020
Quant Method : C:\msdchem\1\methods\8270D6F072920.m
Quant Title : SW846 8270D OR EPA 625





TIC: 6F06573.D\data.ms

(104) Benzo[b]fluoranthene (P)

16.277min (-0.006) 52.47ppm

response 1078168

Ion	Exp%	Act%
252.10	100	100
253.10	21.80	21.68
125.00	12.80	12.99
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 07/22/20 17:04

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10833.D
Acq On : 21 Jul 2020 1:31 pm
Operator : fouads
Sample : ic472-1
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 21 16:22:34 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration

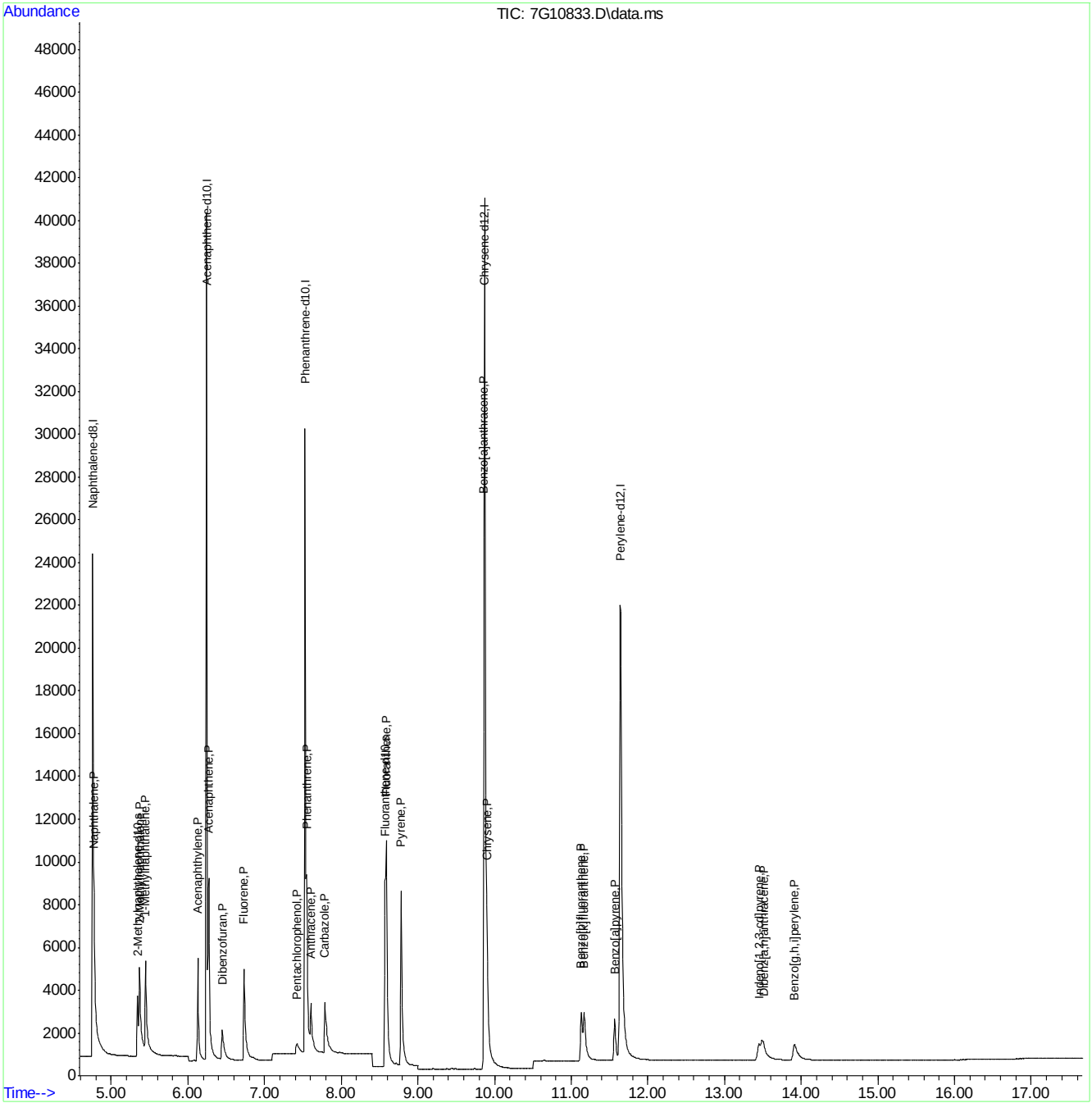
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.758	136	23994	4.00	ppm	-0.01
6) Acenaphthene-d10	6.244	164	13702	4.00	ppm	-0.01
11) Phenanthrene-d10	7.528	188	24543	4.00	ppm	-0.01
18) Chrysene-d12	9.872	240	38114	4.00	ppm	-0.01
22) Perylene-d12	11.639	264	32339	4.00	ppm	-0.02
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.346	152	2098	0.52	ppm	-0.02
Spiked Amount 10.000	Range 50 - 150		Recovery =	5.20%#		
17) Fluoranthene-d10	8.573	212	7444	0.53	ppm	-0.03
Spiked Amount 10.000	Range 50 - 150		Recovery =	5.30%#		
Target Compounds						Qvalue
2) Naphthalene	4.775	128	4289	0.56	ppm	98
3) 2-Methylnaphthalene	5.370	142	2500	0.43	ppm	97
5) 1-Methylnaphthalene	5.447	142	3106	0.56	ppm	91
7) Acenaphthylene	6.128	152	4559	0.52	ppm	99
8) Acenaphthene	6.273	153	3108	0.54	ppm	97
9) Dibenzofuran	6.447	168	2138	0.53	ppm	100
10) Fluorene	6.732	166	3338	0.54	ppm	100
12) Pentachlorophenol	7.424	266	516m	0.70	ppm	
13) Phenanthrene	7.549	178	4926	0.55	ppm	99
14) Anthracene	7.605	178	2668	0.30	ppm	99
15) Carbazole	7.785	167	3902	0.26	ppm	95
16) Fluoranthene	8.588	202	9291	0.54	ppm	99
19) Pyrene	8.782	202	9492	0.53	ppm	100
20) Benzo[a]anthracene	9.862	228	3464	0.26	ppm	98
21) Chrysene	9.898	228	4647	0.32	ppm	100
23) Benzo[b]fluoranthene	11.129	252	2712	0.21	ppm	99
24) Benzo[k]fluoranthene	11.168	252	3873	0.26	ppm	99
25) Benzo[a]pyrene	11.566	252	2679	0.24	ppm	100
26) Indeno[1,2,3-cd]pyrene	13.449	276	1438m	0.29	ppm	
27) Dibenz[a,h]anthracene	13.507	278	1764	0.34	ppm	99
28) Benzo[g,h,i]perylene	13.910	276	2089	0.39	ppm	92

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10833.D
Acq On : 21 Jul 2020 1:31 pm
Operator : fouads
Sample : ic472-1
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 21 16:22:34 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration



Manual Integration Approval Summary

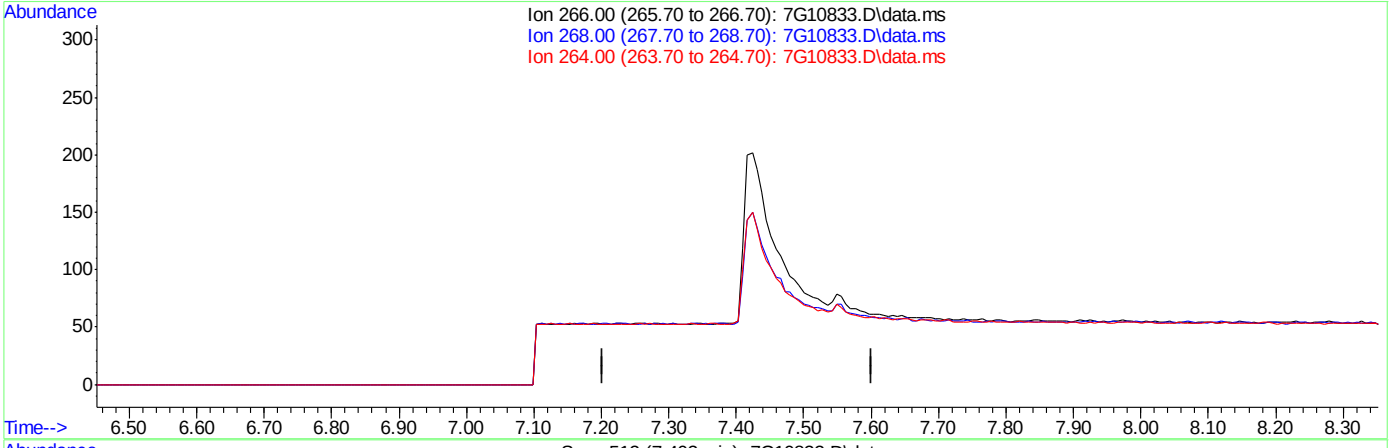
Sample Number: S7G472-IC472
Lab FileID: 7G10833.D
Injection Time: 07/21/20 13:31
Method: SW846 8270D BY SIM
Analyst approved: 07/22/20 13:31 Fouad Sekkar
Supervisor approved: 07/22/20 17:04 Nicole McCampbell

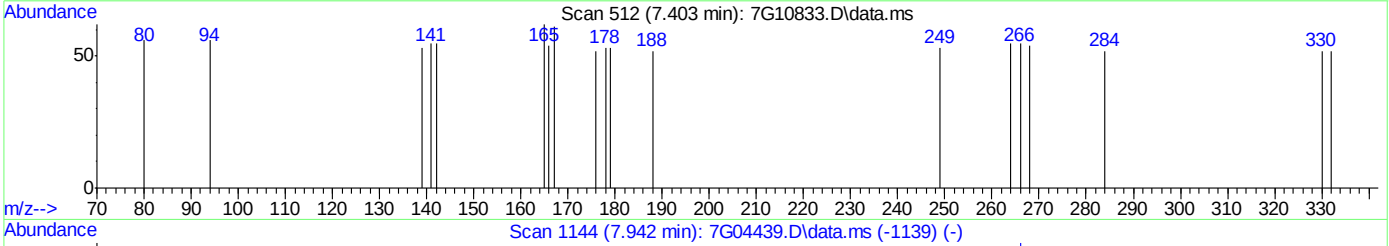
Parameter	CAS	Sig#	R.T. (min.)	Reason
Pentachlorophenol	87-86-5		7.42	Missed peak
Indeno(1,2,3-cd)pyrene	193-39-5		13.45	Missed peak

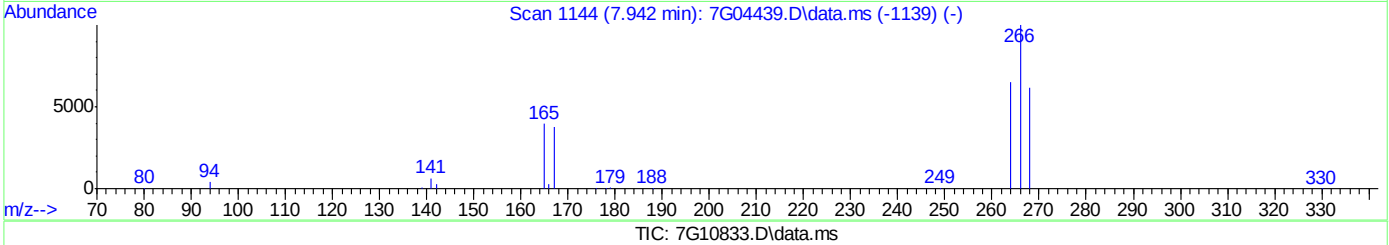
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10833.D
Acq On : 21 Jul 2020 1:31 pm
Operator : fouads
Sample : ic472-1
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 21 16:18:33 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration







TIC: 7G10833.D\data.ms

(12) Pentachlorophenol (P)

7.402min (-7.402) 0.00ppm

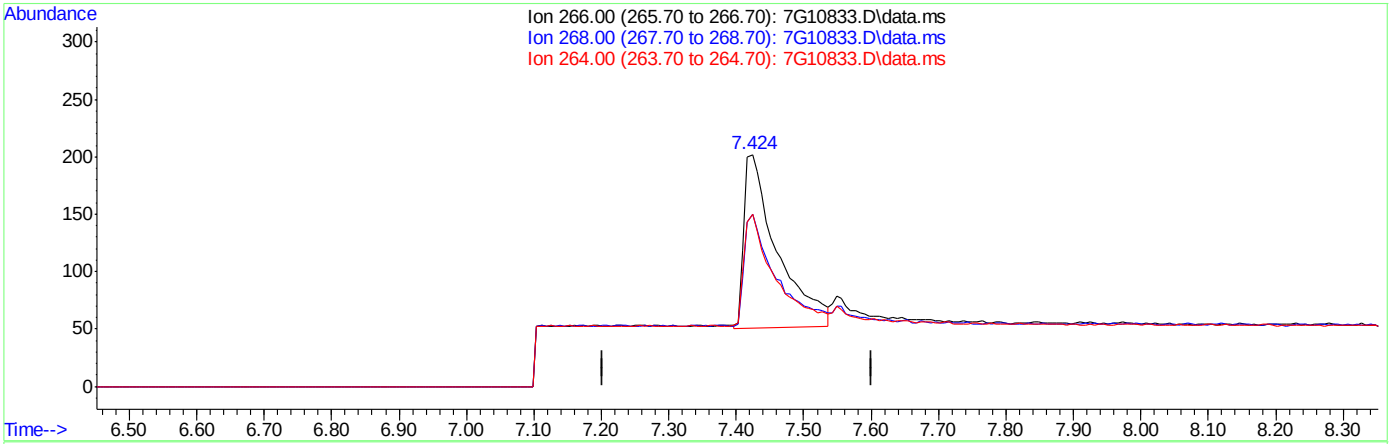
response 0

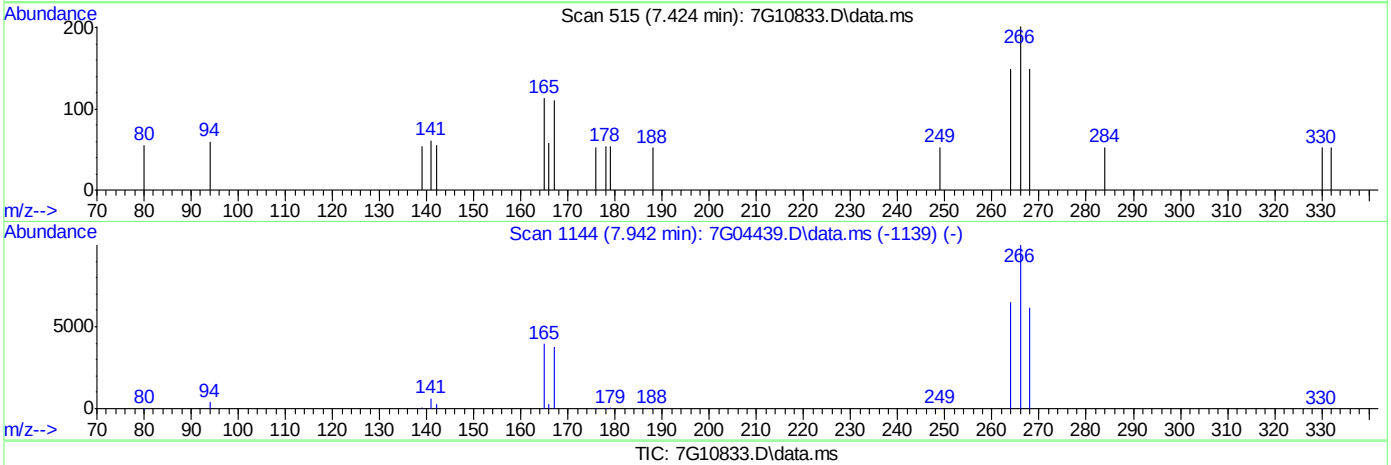
Ion	Exp%	Act%
266.00	100	0.00
268.00	61.80	0.00#
264.00	65.30	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10833.D
Acq On : 21 Jul 2020 1:31 pm
Operator : fouads
Sample : ic472-1
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 21 16:18:33 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration





TIC: 7G10833.D\data.ms

(12) Pentachlorophenol (P)

7.424min (+0.022) 0.70ppm m

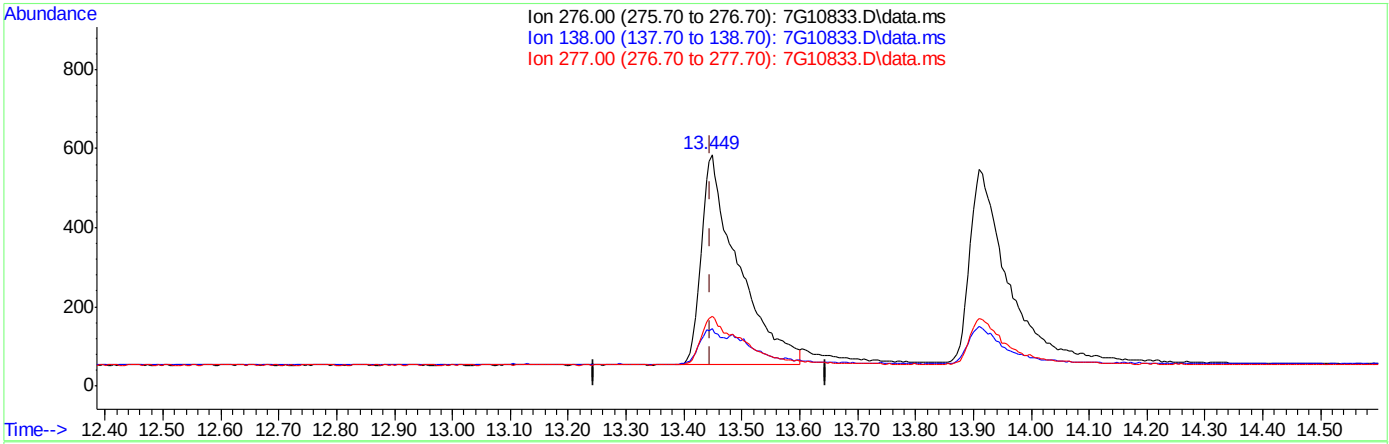
response 516

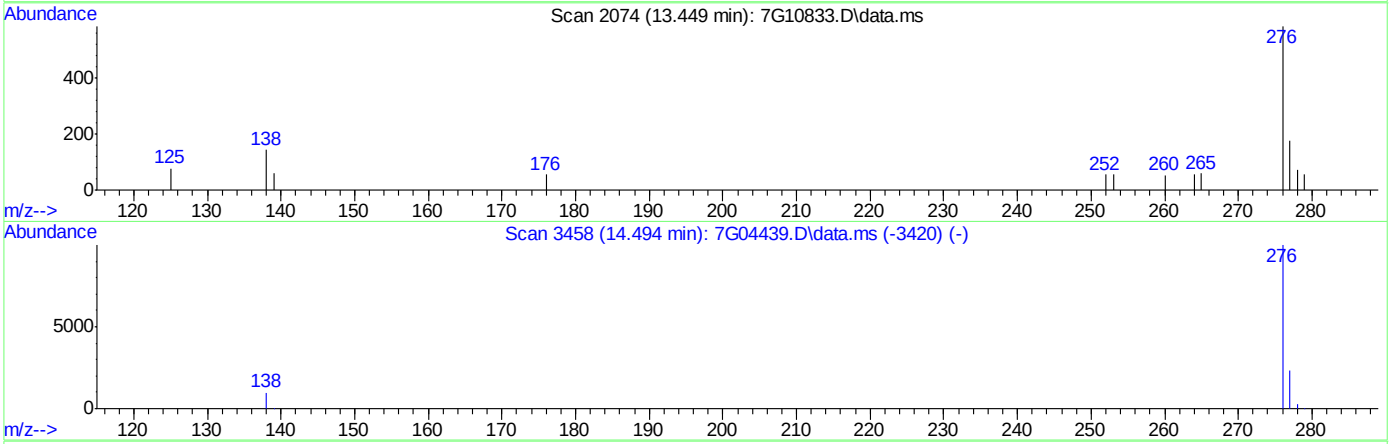
Ion	Exp%	Act%
266.00	100	100
268.00	61.80	74.26
264.00	65.30	74.26
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10833.D
Acq On : 21 Jul 2020 1:31 pm
Operator : fouads
Sample : ic472-1
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 21 16:18:33 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration





TIC: 7G10833.D\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.449min (+0.004) 0.47ppm

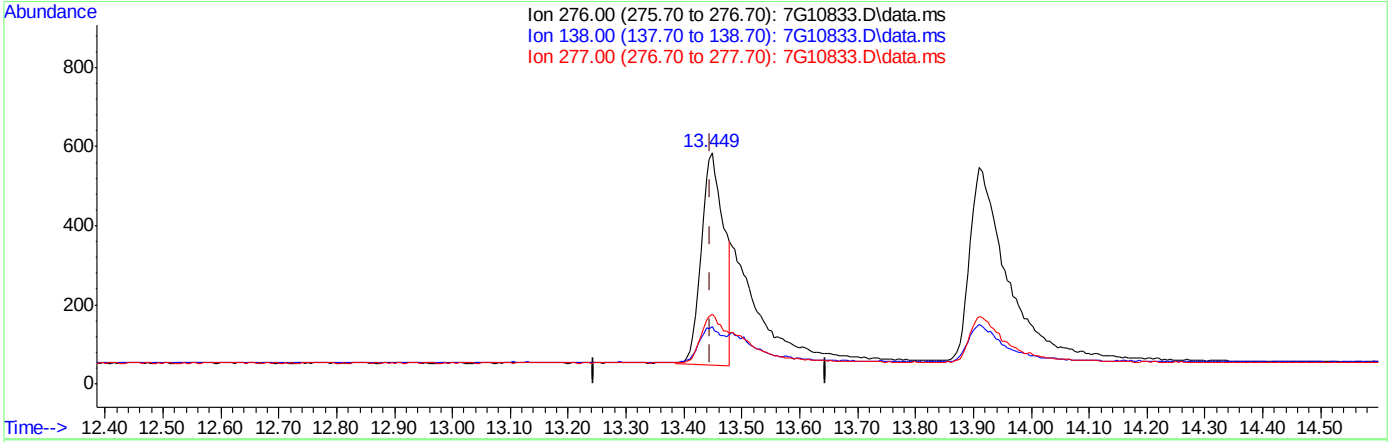
response 2338

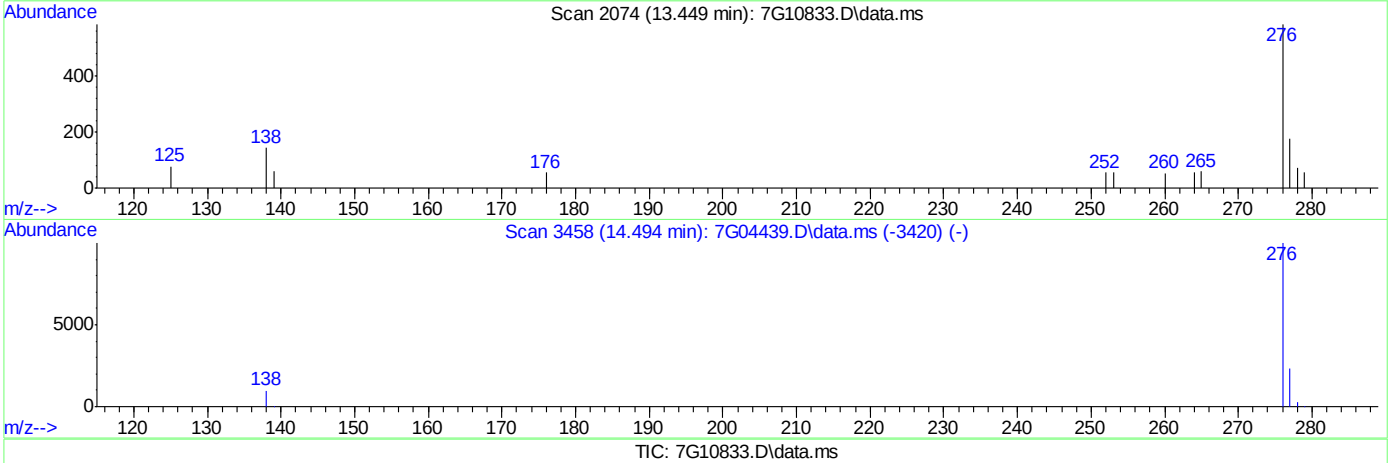
Ion	Exp%	Act%
276.00	100	100
138.00	14.60	16.37
277.00	22.90	23.10
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10833.D
Acq On : 21 Jul 2020 1:31 pm
Operator : fouads
Sample : ic472-1
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 21 16:18:33 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration





TIC: 7G10833.D\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.449min (+0.004) 0.29ppm m

response 1438

Ion	Exp%	Act%
276.00	100	100
138.00	14.60	24.62
277.00	22.90	30.26
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 07/22/20 17:04

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10834.D
Acq On : 21 Jul 2020 1:55 pm
Operator : fouads
Sample : ic472-2
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 21 16:23:38 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration

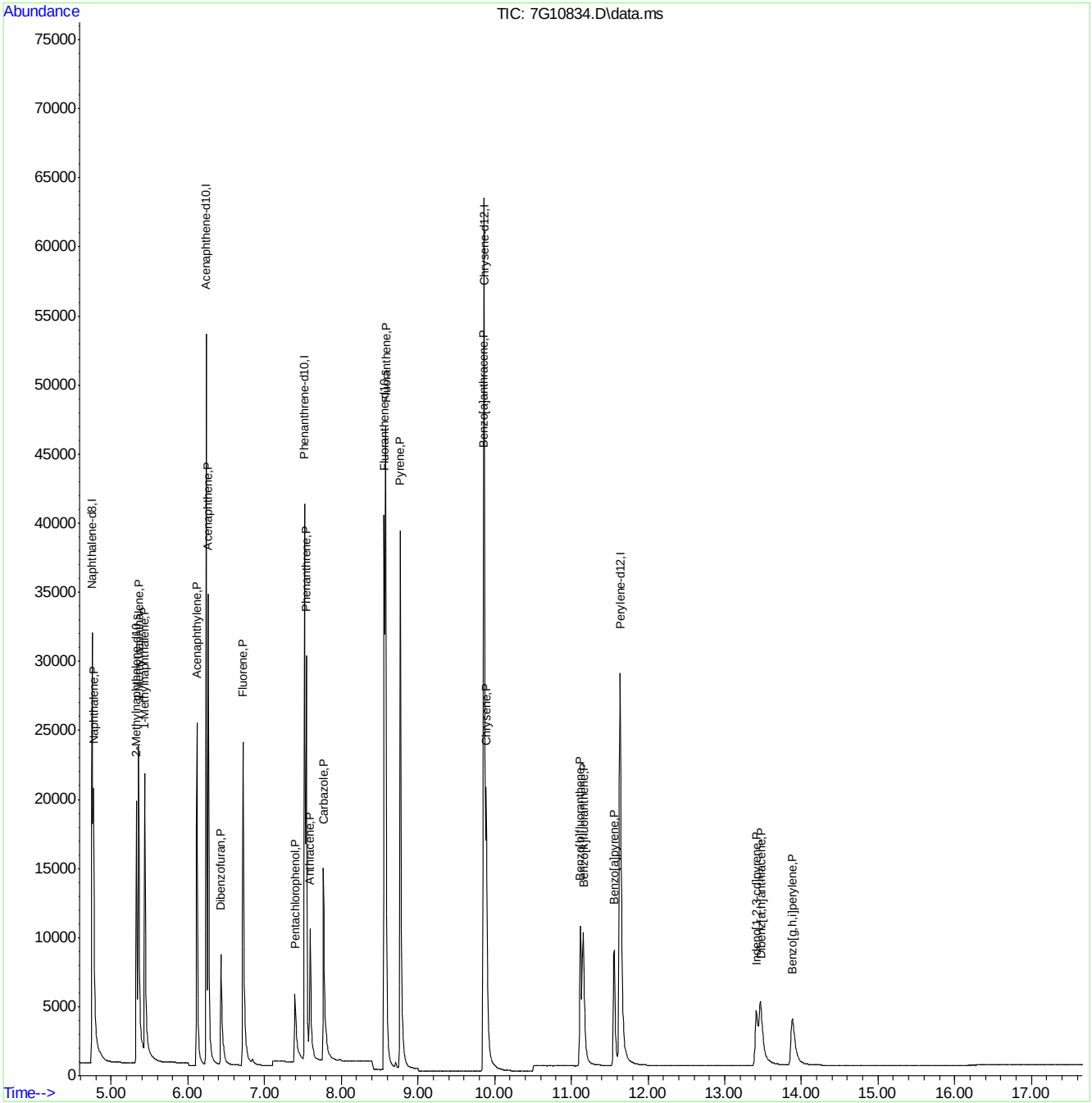
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.752	136	29081	4.00	ppm	-0.02
6) Acenaphthene-d10	6.239	164	16862	4.00	ppm	-0.02
11) Phenanthrene-d10	7.521	188	30203	4.00	ppm	-0.02
18) Chrysene-d12	9.862	240	48257	4.00	ppm	-0.02
22) Perylene-d12	11.636	264	41825	4.00	ppm	-0.03
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.329	152	7918	1.62	ppm	-0.04
Spiked Amount 10.000	Range 50 - 150		Recovery = 16.20%#			
17) Fluoranthene-d10	8.560	212	29862	1.74	ppm	-0.04
Spiked Amount 10.000	Range 50 - 150		Recovery = 17.40%#			
Target Compounds						Qvalue
2) Naphthalene	4.769	128	16703	1.81	ppm	100
3) 2-Methylnaphthalene	5.358	142	11209	1.60	ppm	98
5) 1-Methylnaphthalene	5.435	142	11625	1.74	ppm	84
7) Acenaphthylene	6.118	152	18703	1.74	ppm	99
8) Acenaphthene	6.263	153	12399	1.77	ppm	94
9) Dibenzofuran	6.432	168	8863	1.80	ppm	95
10) Fluorene	6.717	166	13533	1.79	ppm	100
12) Pentachlorophenol	7.396	266	3019	3.31	ppm	98
13) Phenanthrene	7.542	178	19355	1.76	ppm	99
14) Anthracene	7.591	178	10083	0.91	ppm	100
15) Carbazole	7.764	167	16301	0.88	ppm	97
16) Fluoranthene	8.579	202	36358	1.73	ppm	99
19) Pyrene	8.769	202	37461	1.66	ppm	98
20) Benzo[a]anthracene	9.855	228	14421	0.85	ppm	99
21) Chrysene	9.891	228	17593	0.97	ppm	99
23) Benzo[b]fluoranthene	11.117	252	12271	0.74	ppm	99
24) Benzo[k]fluoranthene	11.156	252	15759	0.82	ppm	99
25) Benzo[a]pyrene	11.559	252	12673	0.88	ppm	99
26) Indeno[1,2,3-cd]pyrene	13.412	276	7001m	1.08	ppm	
27) Dibenz[a,h]anthracene	13.471	278	8032	1.18	ppm	100
28) Benzo[g,h,i]perylene	13.883	276	9167	1.33	ppm	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10834.D
Acq On : 21 Jul 2020 1:55 pm
Operator : fouads
Sample : ic472-2
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 21 16:23:38 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration



Manual Integration Approval Summary

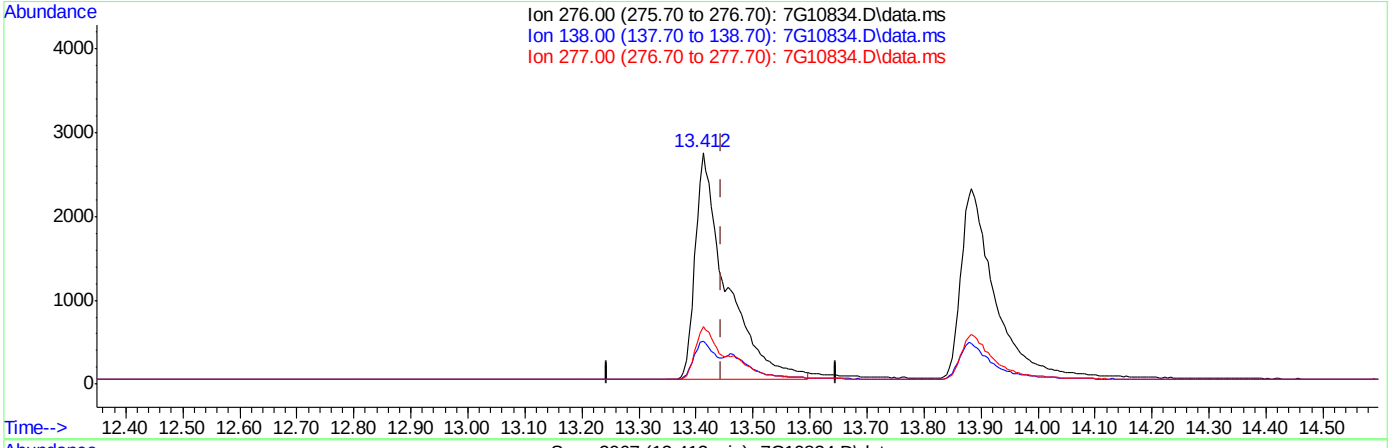
Sample Number: S7G472-IC472
Lab FileID: 7G10834.D
Injection Time: 07/21/20 13:55
Method: SW846 8270D BY SIM
Analyst approved: 07/22/20 13:31 Fouad Sekkar
Supervisor approved: 07/22/20 17:04 Nicole McCampbell

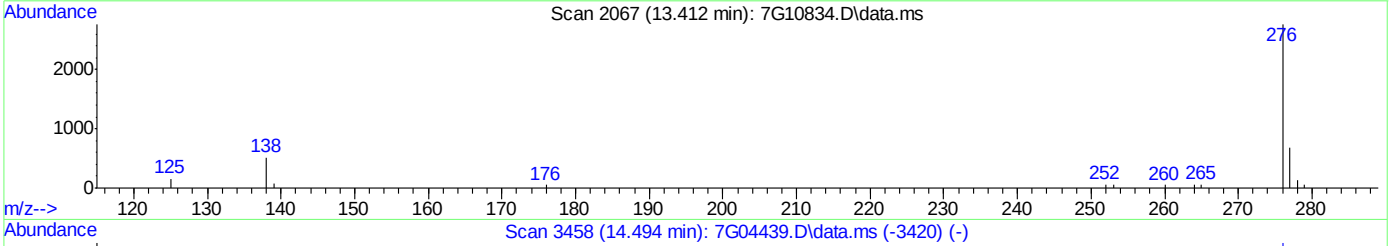
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		13.41	Missed peak

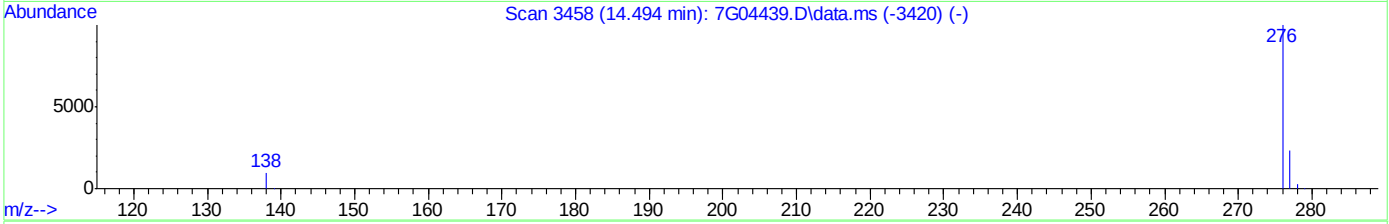
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10834.D
Acq On : 21 Jul 2020 1:55 pm
Operator : fouads
Sample : ic472-2
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 21 16:18:37 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration







TIC: 7G10834.D\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.412min (-0.033) 1.59ppm

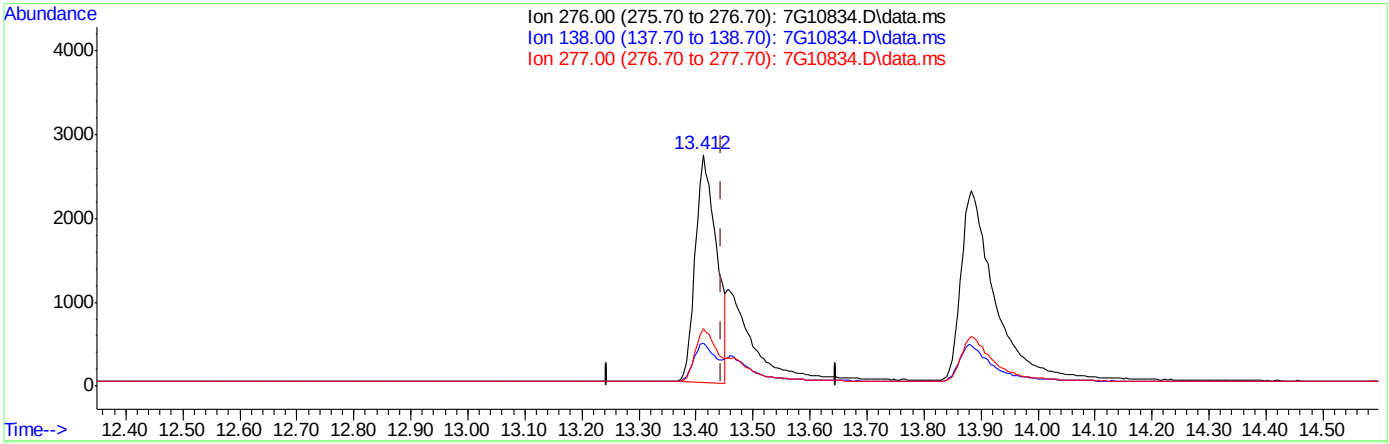
response 10318

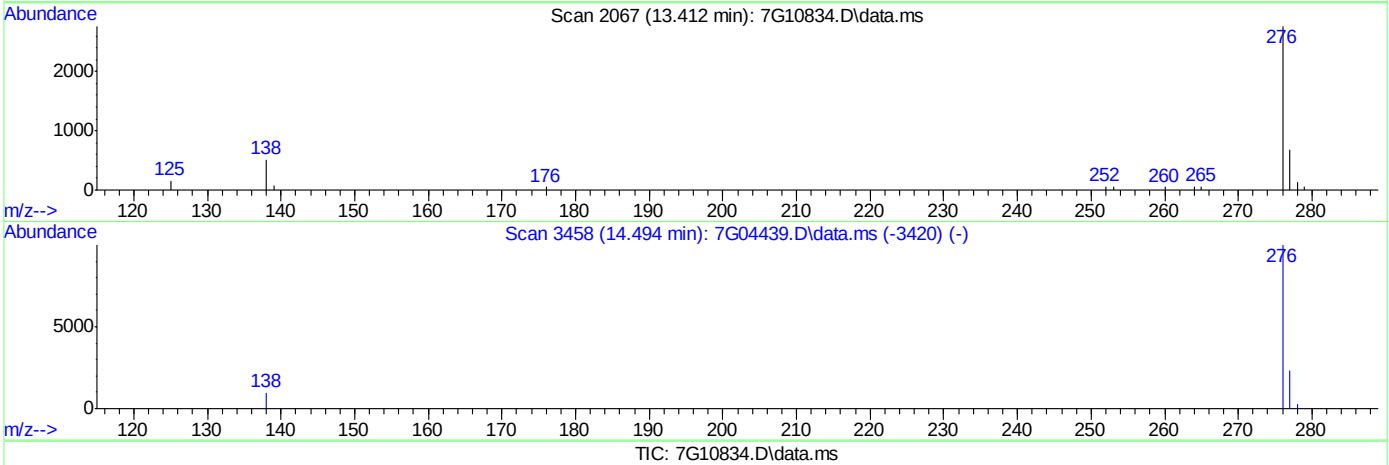
Ion	Exp%	Act%
276.00	100	100
138.00	14.60	16.99
277.00	22.90	23.44
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10834.D
Acq On : 21 Jul 2020 1:55 pm
Operator : fouads
Sample : ic472-2
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 21 16:18:37 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration





TIC: 7G10834.D\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.412min (-0.033) 1.08ppm m

response 7001

Ion	Exp%	Act%
276.00	100	100
138.00	14.60	18.75
277.00	22.90	24.95
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 07/22/20 17:04

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10835.D
Acq On : 21 Jul 2020 2:19 pm
Operator : fouads
Sample : ic472-3
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 21 16:24:24 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration

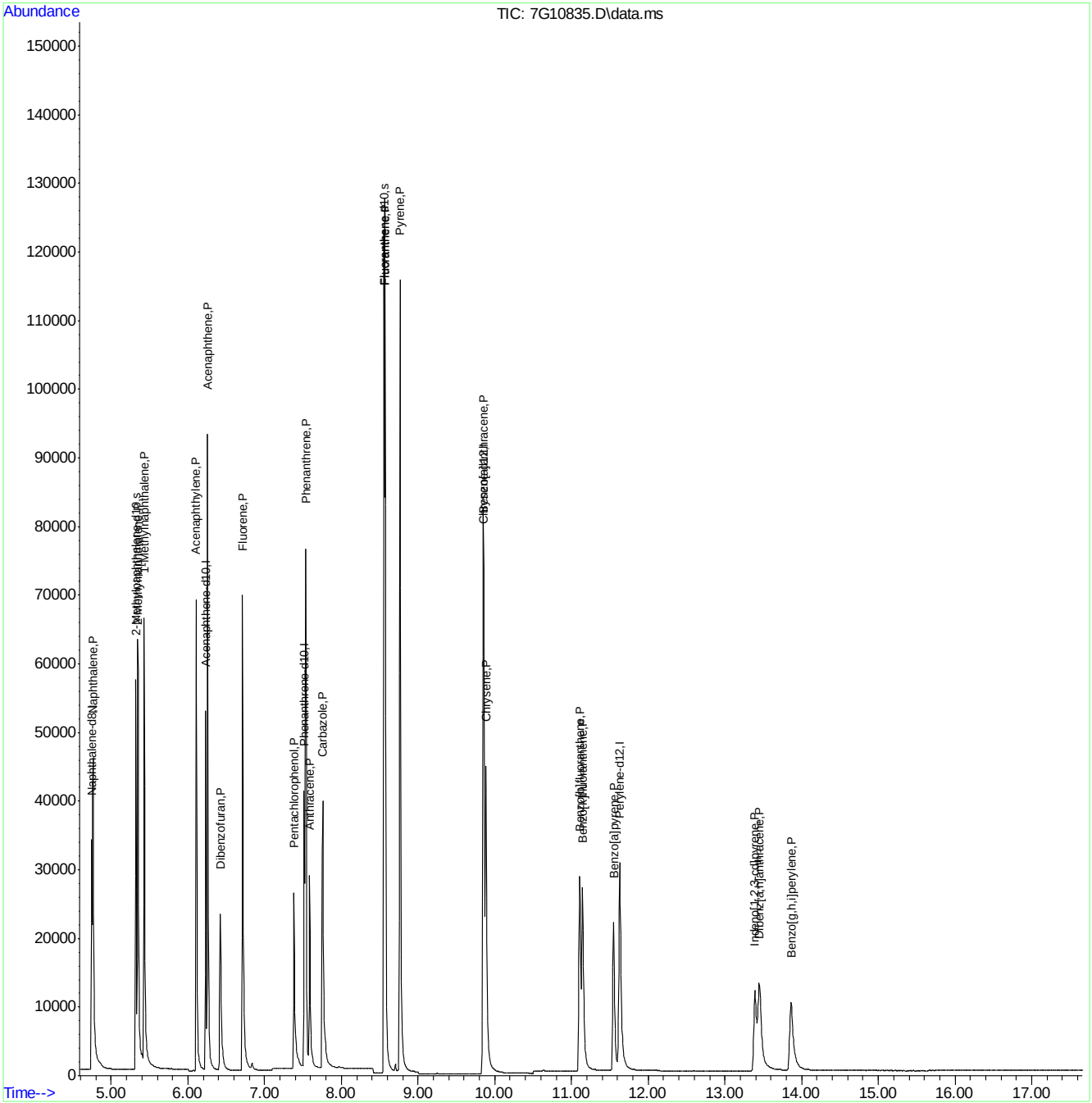
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.746	136	28715	4.00	ppm	-0.02
6) Acenaphthene-d10	6.234	164	16760	4.00	ppm	-0.02
11) Phenanthrene-d10	7.514	188	29264	4.00	ppm	-0.03
18) Chrysene-d12	9.857	240	48140	4.00	ppm	-0.03
22) Perylene-d12	11.627	264	42133	4.00	ppm	-0.04
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.323	152	19987	4.15	ppm	-0.04
Spiked Amount 10.000	Range 50 - 150		Recovery = 41.50%#			
17) Fluoranthene-d10	8.557	212	74078	4.46	ppm	-0.04
Spiked Amount 10.000	Range 50 - 150		Recovery = 44.60%#			
Target Compounds						Qvalue
2) Naphthalene	4.764	128	40296	4.43	ppm	100
3) 2-Methylnaphthalene	5.352	142	28506	4.13	ppm	98
5) 1-Methylnaphthalene	5.429	142	27972	4.23	ppm	89
7) Acenaphthylene	6.108	152	46420	4.35	ppm	98
8) Acenaphthene	6.258	153	30591	4.38	ppm	96
9) Dibenzofuran	6.423	168	21620	4.42	ppm	92
10) Fluorene	6.713	166	32883	4.37	ppm	98
12) Pentachlorophenol	7.382	266	10713	12.12	ppm	97
13) Phenanthrene	7.535	178	47680	4.47	ppm	99
14) Anthracene	7.584	178	23874	2.22	ppm	100
15) Carbazole	7.757	167	40148	2.22	ppm	100
16) Fluoranthene	8.570	202	89721	4.40	ppm	99
19) Pyrene	8.763	202	92682	4.12	ppm	99
20) Benzo[a]anthracene	9.847	228	36400	2.15	ppm	99
21) Chrysene	9.886	228	41406	2.29	ppm	100
23) Benzo[b]fluoranthene	11.107	252	32655	1.96	ppm	99
24) Benzo[k]fluoranthene	11.141	252	37458	1.94	ppm	100
25) Benzo[a]pyrene	11.549	252	31646	2.17	ppm	100
26) Indeno[1,2,3-cd]pyrene	13.393	276	20359m	3.11	ppm	
27) Dibenz[a,h]anthracene	13.446	278	21793	3.19	ppm	99
28) Benzo[g,h,i]perylene	13.864	276	24010	3.45	ppm	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10835.D
Acq On : 21 Jul 2020 2:19 pm
Operator : fouads
Sample : ic472-3
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 21 16:24:24 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration



Manual Integration Approval Summary

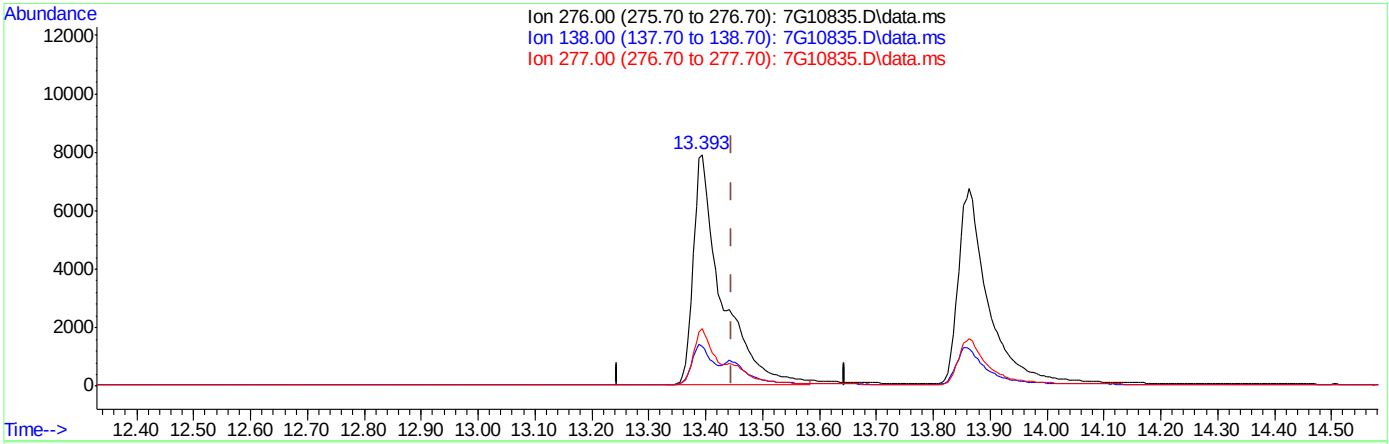
Sample Number: S7G472-IC472
Lab FileID: 7G10835.D
Injection Time: 07/21/20 14:19
Method: SW846 8270D BY SIM
Analyst approved: 07/22/20 13:31 Fouad Sekkar
Supervisor approved: 07/22/20 17:04 Nicole McCampbell

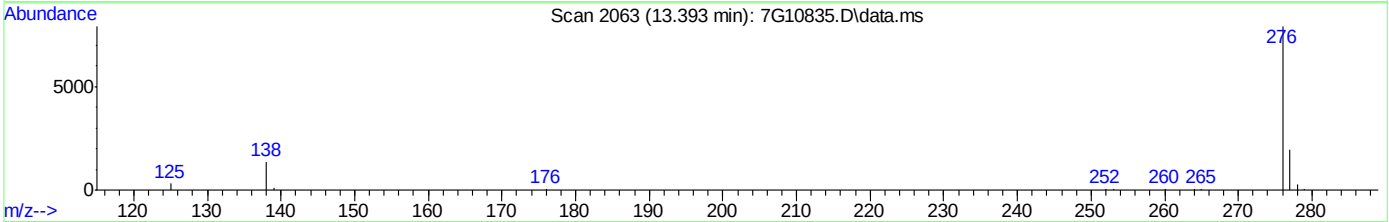
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		13.39	Missed peak

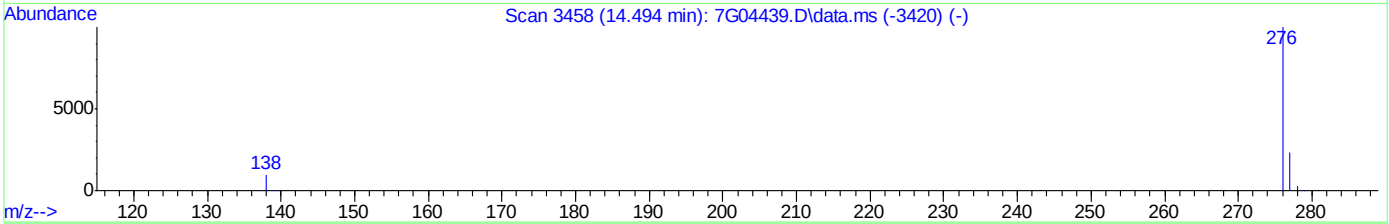
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10835.D
Acq On : 21 Jul 2020 2:19 pm
Operator : fouads
Sample : ic472-3
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 21 16:18:41 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration







TIC: 7G10835.D\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.393min (-0.052) 4.18ppm

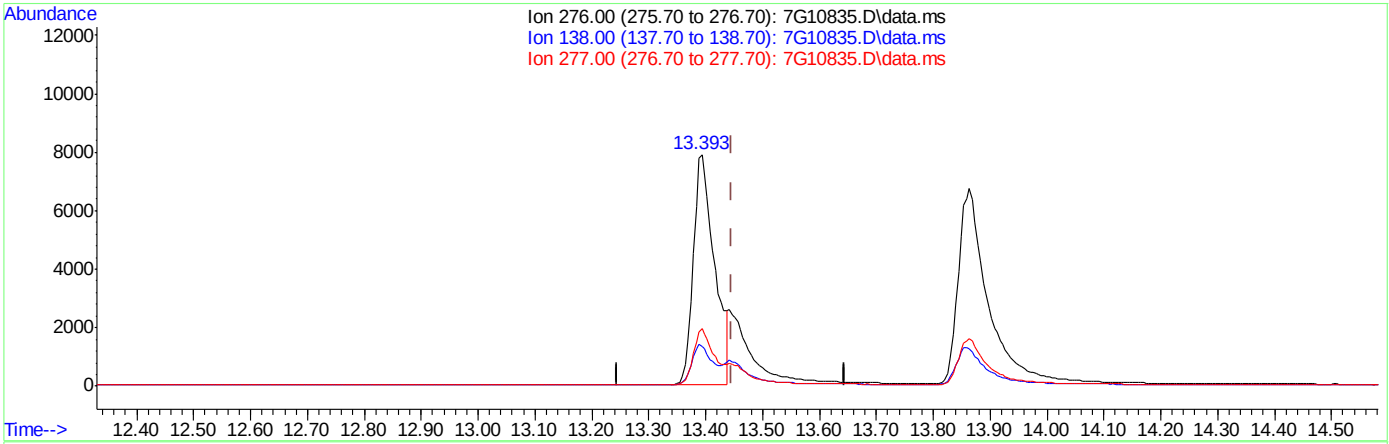
response 27333

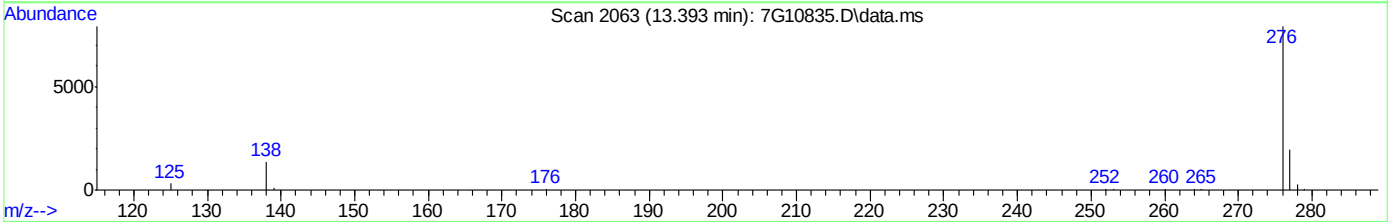
Ion	Exp%	Act%
276.00	100	100
138.00	14.60	16.53
277.00	22.90	24.07
0.00	0.00	0.00

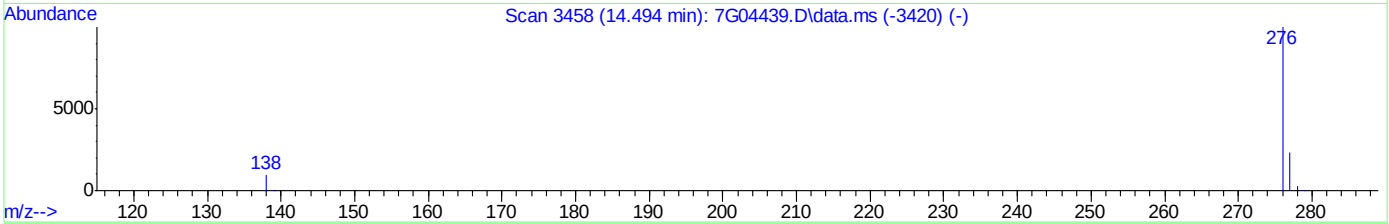
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10835.D
Acq On : 21 Jul 2020 2:19 pm
Operator : fouads
Sample : ic472-3
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 21 16:18:41 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration







TIC: 7G10835.D\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.393min (-0.052) 3.11ppm m

response 20359

Ion	Exp%	Act%
276.00	100	100
138.00	14.60	17.21
277.00	22.90	24.62
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10836.D
Acq On : 21 Jul 2020 2:43 pm
Operator : fouads
Sample : icc472-4
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 21 16:18:45 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration

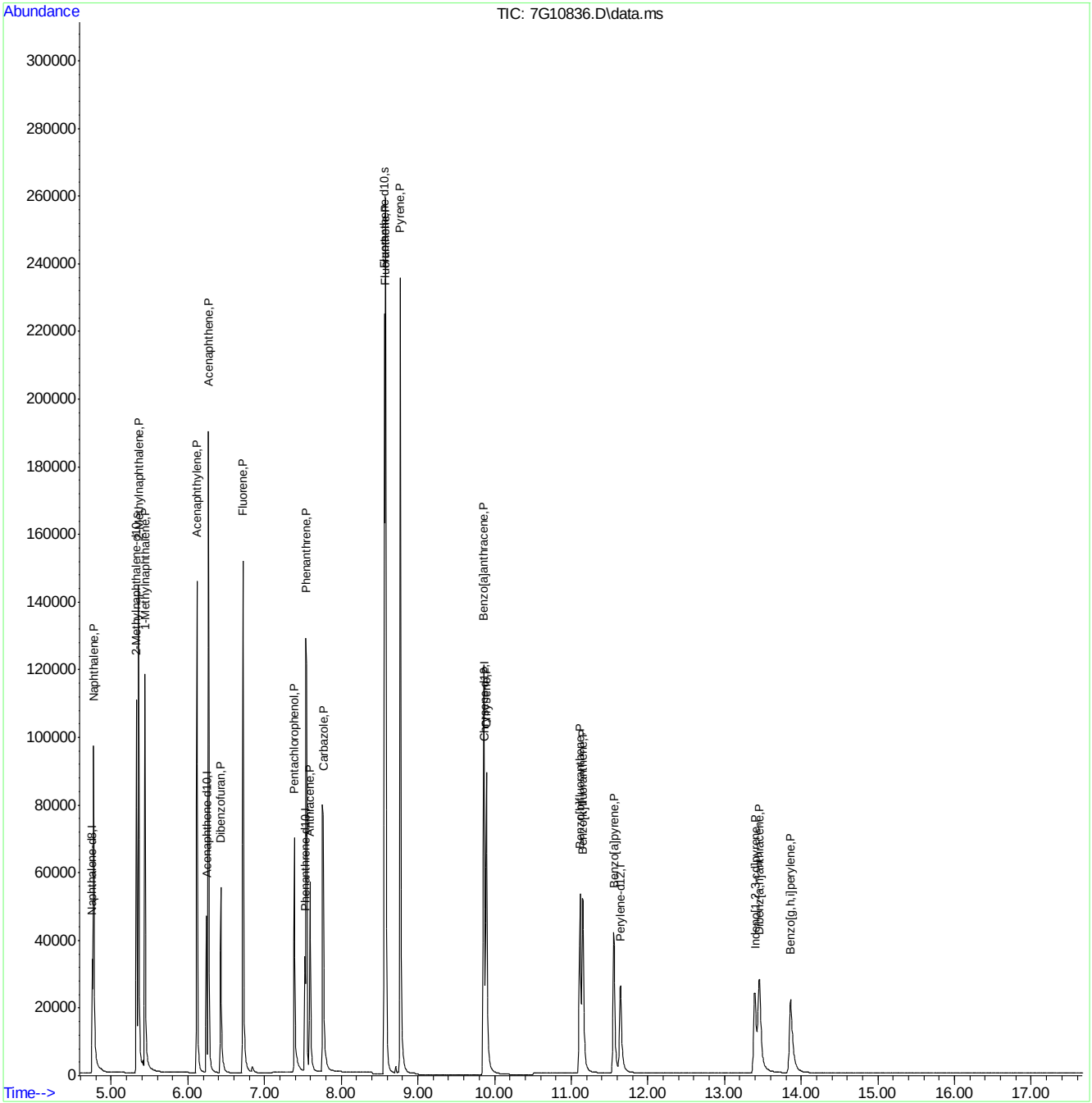
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.752	136	25300	4.00	ppm	-0.02
6) Acenaphthene-d10	6.244	164	14609	4.00	ppm	-0.01
11) Phenanthrene-d10	7.528	188	26093	4.00	ppm	-0.01
18) Chrysene-d12	9.867	240	42851	4.00	ppm	-0.02
22) Perylene-d12	11.644	264	37551	4.00	ppm	-0.02
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.329	152	38049	8.97	ppm	-0.04
Spiked Amount 10.000	Range 50 - 150		Recovery = 89.70%			
17) Fluoranthene-d10	8.567	212	140061	9.46	ppm	-0.03
Spiked Amount 10.000	Range 50 - 150		Recovery = 94.60%			
Target Compounds						Qvalue
2) Naphthalene	4.770	128	74430	9.28	ppm	100
3) 2-Methylnaphthalene	5.358	142	54816	9.01	ppm	99
5) 1-Methylnaphthalene	5.441	142	52432	9.01	ppm	97
7) Acenaphthylene	6.118	152	88343	9.50	ppm	99
8) Acenaphthene	6.268	153	57505	9.45	ppm	98
9) Dibenzofuran	6.428	168	40635	9.53	ppm	95
10) Fluorene	6.718	166	61698	9.42	ppm	98
12) Pentachlorophenol	7.389	266	24644	31.26	ppm	96
13) Phenanthrene	7.542	178	89406	9.41	ppm	98
14) Anthracene	7.591	178	44114	4.59	ppm	100
15) Carbazole	7.764	167	75881	4.72	ppm	100
16) Fluoranthene	8.579	202	169605	9.33	ppm	99
19) Pyrene	8.769	202	173437	8.66	ppm	99
20) Benzo[a]anthracene	9.857	228	68306	4.53	ppm	99
21) Chrysene	9.893	228	77498	4.81	ppm	100
23) Benzo[b]fluoranthene	11.115	252	63976	4.30	ppm	100
24) Benzo[k]fluoranthene	11.149	252	70592	4.10	ppm	99
25) Benzo[a]pyrene	11.556	252	60678	4.68	ppm	100
26) Indeno[1,2,3-cd]pyrene	13.400	276	41853	7.17	ppm	99
27) Dibenz[a,h]anthracene	13.454	278	44122	7.25	ppm	99
28) Benzo[g,h,i]perylene	13.861	276	47313	7.62	ppm	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10836.D
Acq On : 21 Jul 2020 2:43 pm
Operator : fouads
Sample : icc472-4
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

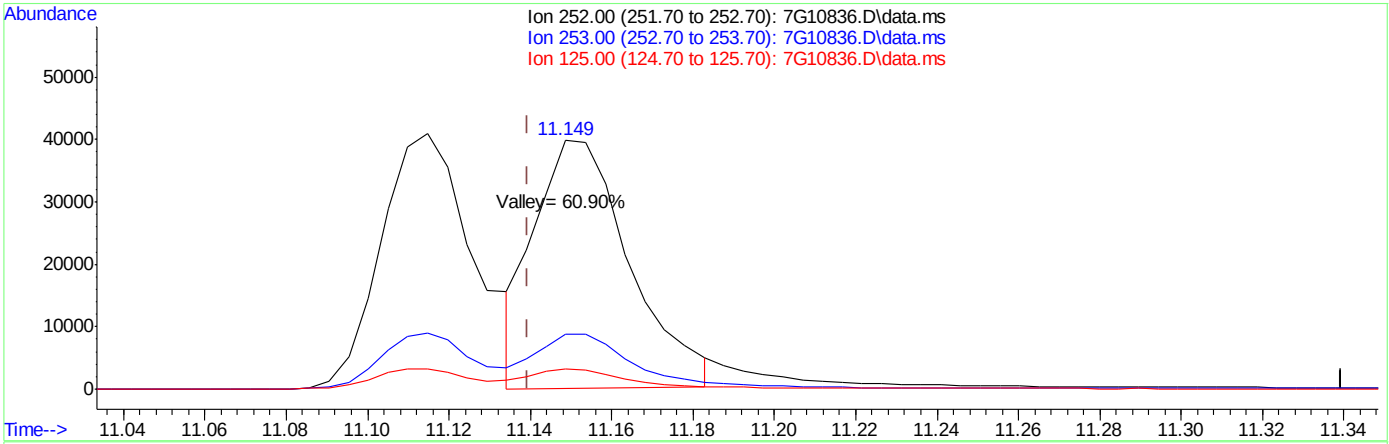
Quant Time: Jul 21 16:18:45 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration

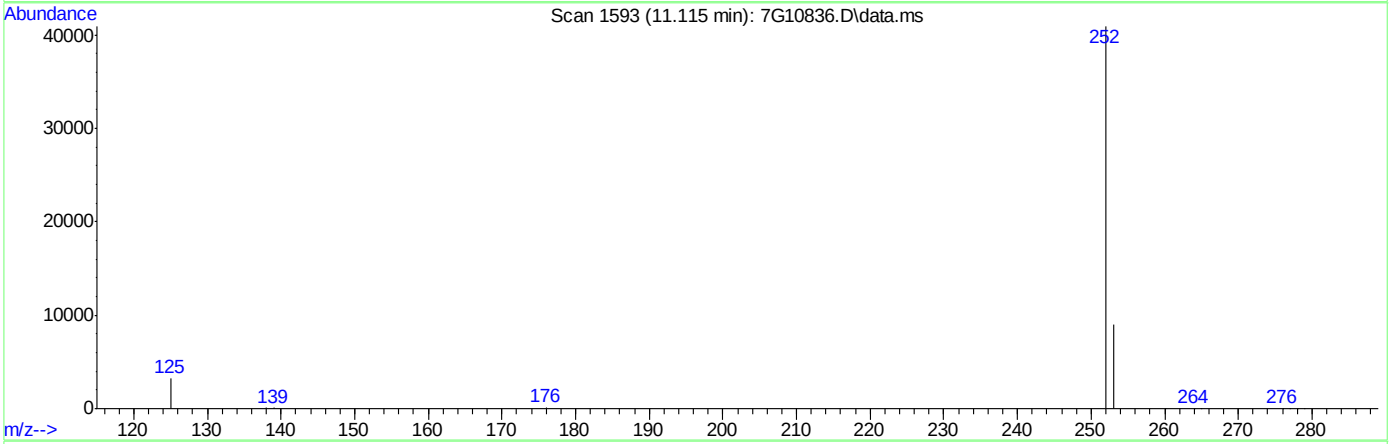


Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10836.D
Acq On : 21 Jul 2020 2:43 pm
Operator : fouads
Sample : icc472-4
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 21 16:18:45 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration





TIC: 7G10836.D\data.ms

(23) Benzo[b]fluoranthene (P)

11.115min (-0.025) 4.30ppm

response 63976

Ion	Exp%	Act%
252.00	100	100
253.00	22.10	22.03
125.00	7.40	7.61
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10837.D
Acq On : 21 Jul 2020 3:07 pm
Operator : fouads
Sample : ic472-5
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 21 16:18:49 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration

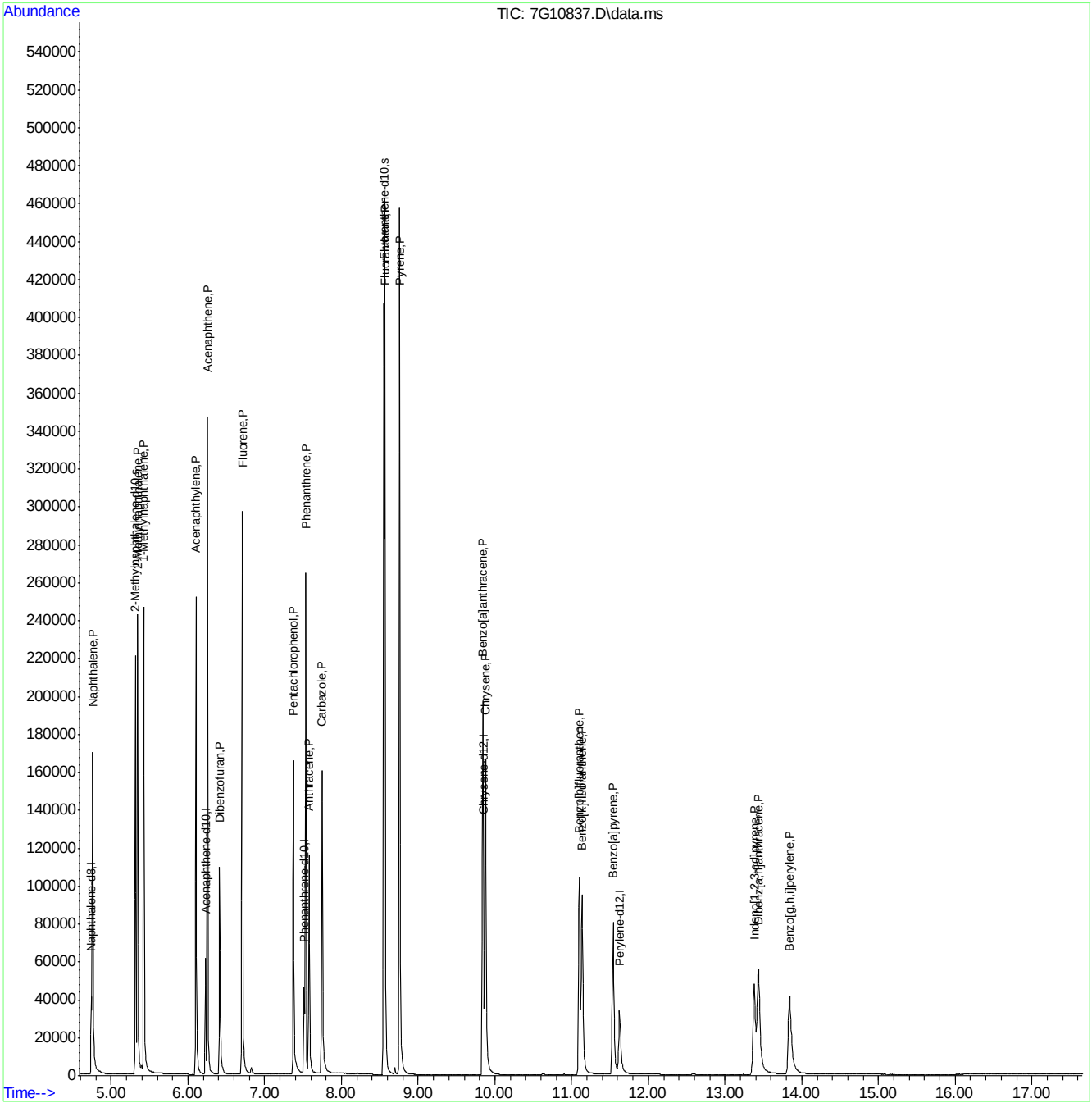
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.740	136	29180	4.00	ppm	-0.03
6) Acenaphthene-d10	6.229	164	17414	4.00	ppm	-0.03
11) Phenanthrene-d10	7.514	188	31347	4.00	ppm	-0.03
18) Chrysene-d12	9.852	240	50970	4.00	ppm	-0.03
22) Perylene-d12	11.624	264	45434	4.00	ppm	-0.04
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.317	152	67210	13.75	ppm	-0.05
Spiked Amount 10.000	Range 50 - 150		Recovery = 137.50%			
17) Fluoranthene-d10	8.554	212	243460	13.69	ppm	-0.04
Spiked Amount 10.000	Range 50 - 150		Recovery = 136.90%			
Target Compounds						Qvalue
2) Naphthalene	4.758	128	128711	13.92	ppm	100
3) 2-Methylnaphthalene	5.347	142	95557	13.62	ppm	97
5) 1-Methylnaphthalene	5.423	142	90151	13.42	ppm	85
7) Acenaphthylene	6.104	152	152885	13.80	ppm	98
8) Acenaphthene	6.253	153	101085	13.94	ppm	95
9) Dibenzofuran	6.413	168	71111	13.99	ppm	91
10) Fluorene	6.708	166	109450	14.01	ppm	97
12) Pentachlorophenol	7.375	266	52326	55.25	ppm	97
13) Phenanthrene	7.535	178	157070	13.76	ppm	99
14) Anthracene	7.577	178	78741	6.82	ppm	100
15) Carbazole	7.744	167	133273	6.89	ppm	93
16) Fluoranthene	8.570	202	298825	13.68	ppm	99
19) Pyrene	8.757	202	307670	12.91	ppm	99
20) Benzo[a]anthracene	9.843	228	121166	6.75	ppm	99
21) Chrysene	9.879	228	131534	6.86	ppm	100
23) Benzo[b]fluoranthene	11.100	252	113926	6.33	ppm	100
24) Benzo[k]fluoranthene	11.134	252	121858	5.85	ppm	98
25) Benzo[a]pyrene	11.542	252	108027	6.88	ppm	100
26) Indeno[1,2,3-cd]pyrene	13.381	276	76251	10.80	ppm	99
27) Dibenz[a,h]anthracene	13.434	278	81827	11.11	ppm	99
28) Benzo[g,h,i]perylene	13.842	276	86286	11.49	ppm	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10837.D
Acq On : 21 Jul 2020 3:07 pm
Operator : fouads
Sample : ic472-5
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 21 16:18:49 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10838.D
Acq On : 21 Jul 2020 3:31 pm
Operator : fouads
Sample : ic472-6
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 21 16:18:53 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration

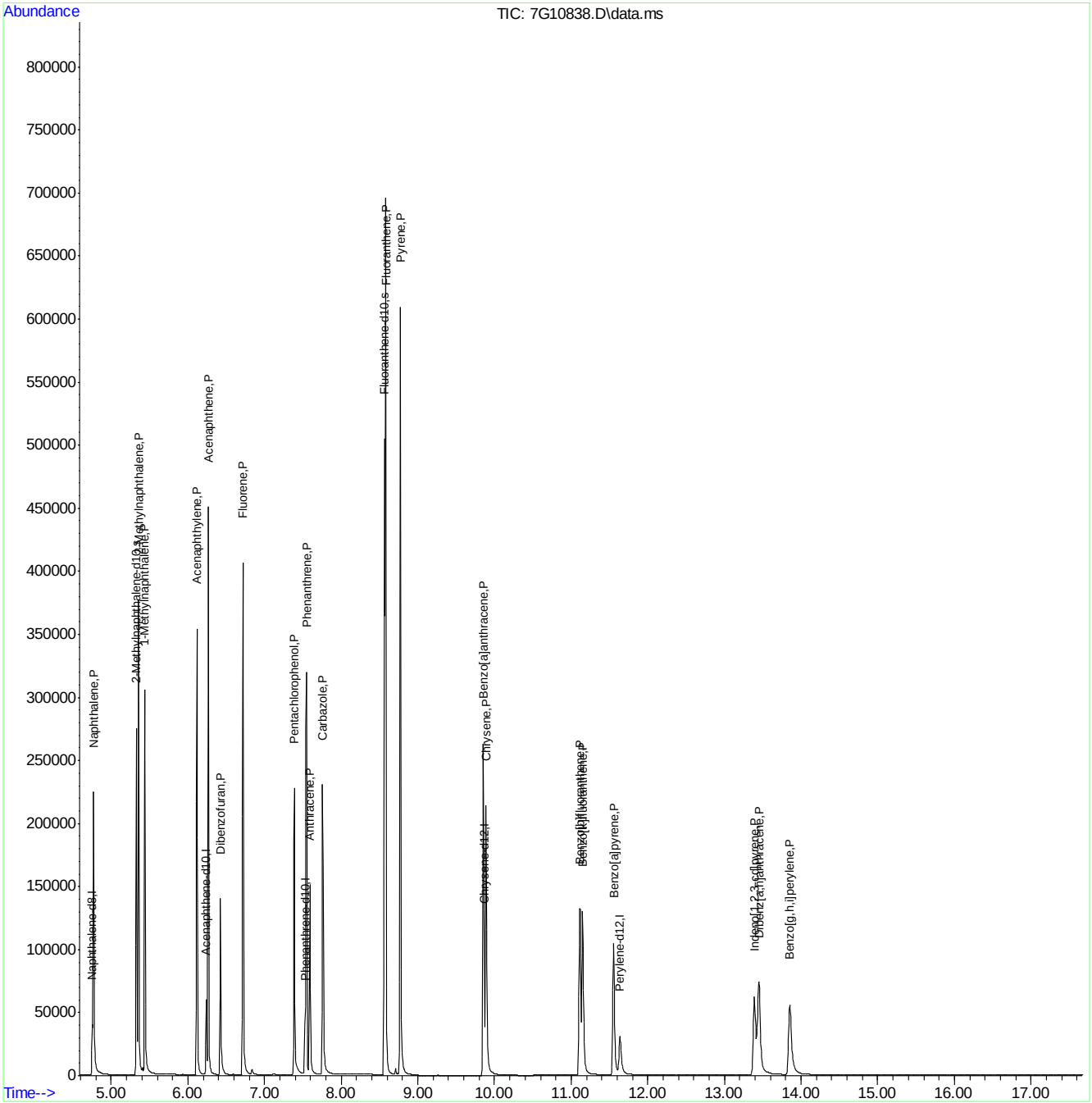
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.752	136	27924	4.00	ppm	-0.02
6) Acenaphthene-d10	6.239	164	16693	4.00	ppm	-0.02
11) Phenanthrene-d10	7.528	188	29642	4.00	ppm	-0.01
18) Chrysene-d12	9.867	240	49529	4.00	ppm	-0.02
22) Perylene-d12	11.636	264	43958	4.00	ppm	-0.03
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.329	152	87127	18.62	ppm	-0.04
Spiked Amount 10.000	Range 50 - 150		Recovery = 186.20%#			
17) Fluoranthene-d10	8.566	212	316580	18.82	ppm	-0.03
Spiked Amount 10.000	Range 50 - 150		Recovery = 188.20%#			
Target Compounds						Qvalue
2) Naphthalene	4.770	128	165015	18.64	ppm	99
3) 2-Methylnaphthalene	5.358	142	126792	18.88	ppm	100
5) 1-Methylnaphthalene	5.435	142	118187	18.39	ppm	82
7) Acenaphthylene	6.118	152	198973	18.73	ppm	99
8) Acenaphthene	6.268	153	129983	18.69	ppm	96
9) Dibenzofuran	6.423	168	89811	18.43	ppm	98
10) Fluorene	6.717	166	141988	18.97	ppm	98
12) Pentachlorophenol	7.389	266	73035	81.55	ppm	95
13) Phenanthrene	7.549	178	204799	18.97	ppm	98
14) Anthracene	7.591	178	101141	9.27	ppm	99
15) Carbazole	7.757	167	170049	9.30	ppm	93
16) Fluoranthene	8.582	202	386576	18.71	ppm	99
19) Pyrene	8.772	202	403389	17.42	ppm	99
20) Benzo[a]anthracene	9.855	228	156963	9.00	ppm	100
21) Chrysene	9.891	228	169372	9.09	ppm	98
23) Benzo[b]fluoranthene	11.112	252	146078	8.39	ppm	99
24) Benzo[k]fluoranthene	11.151	252	161554	8.02	ppm	99
25) Benzo[a]pyrene	11.554	252	141460	9.32	ppm	100
26) Indeno[1,2,3-cd]pyrene	13.393	276	99407	14.56	ppm	98
27) Dibenz[a,h]anthracene	13.451	278	109943	15.42	ppm	99
28) Benzo[g,h,i]perylene	13.854	276	114554	15.76	ppm	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10838.D
Acq On : 21 Jul 2020 3:31 pm
Operator : fouads
Sample : ic472-6
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 21 16:18:53 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10839.D
Acq On : 21 Jul 2020 3:55 pm
Operator : fouads
Sample : ic472-7
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 21 16:18:56 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration

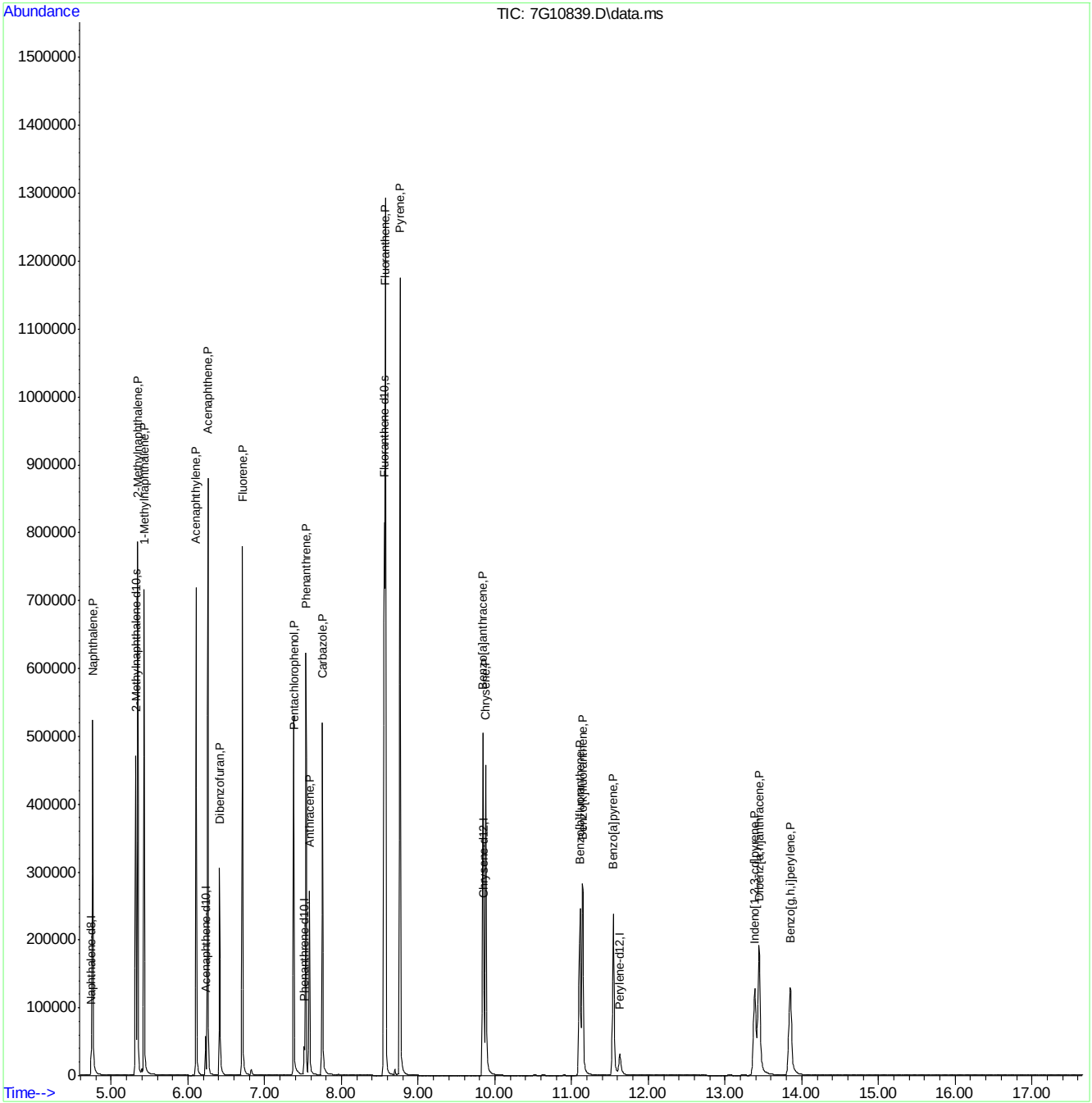
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.740	136	26293	4.00	ppm	-0.03
6) Acenaphthene-d10	6.229	164	15786	4.00	ppm	-0.03
11) Phenanthrene-d10	7.514	188	28087	4.00	ppm	-0.03
18) Chrysene-d12	9.855	240	46860	4.00	ppm	-0.03
22) Perylene-d12	11.629	264	41097	4.00	ppm	-0.03
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.323	152	176001	39.95	ppm	-0.04
Spiked Amount 10.000	Range 50 - 150		Recovery =	399.50%#		
17) Fluoranthene-d10	8.560	212	616116	38.66	ppm	-0.04
Spiked Amount 10.000	Range 50 - 150		Recovery =	386.60%#		
Target Compounds						Qvalue
2) Naphthalene	4.758	128	329242	39.51	ppm	99
3) 2-Methylnaphthalene	5.347	142	255780	40.45	ppm	90
5) 1-Methylnaphthalene	5.429	142	239953	39.66	ppm	92
7) Acenaphthylene	6.108	152	393285	39.15	ppm	98
8) Acenaphthene	6.258	153	260794	39.66	ppm	95
9) Dibenzofuran	6.413	168	179943	39.06	ppm	90
10) Fluorene	6.708	166	280750	39.66	ppm	98
12) Pentachlorophenol	7.382	266	163526	192.69	ppm	92
13) Phenanthrene	7.535	178	404134	39.50	ppm	98
14) Anthracene	7.584	178	196055	18.96	ppm	97
15) Carbazole	7.751	167	325209	18.77	ppm	95
16) Fluoranthene	8.576	202	770477	39.36	ppm	98
19) Pyrene	8.763	202	783512	35.75	ppm	99
20) Benzo[a]anthracene	9.845	228	307361	18.64	ppm	99
21) Chrysene	9.881	228	324523	18.40	ppm	99
23) Benzo[b]fluoranthene	11.110	252	284281	17.47	ppm	99
24) Benzo[k]fluoranthene	11.144	252	311293	16.53	ppm	100
25) Benzo[a]pyrene	11.547	252	275786	19.43	ppm	99
26) Indeno[1,2,3-cd]pyrene	13.391	276	209818	32.86	ppm	99
27) Dibenz[a,h]anthracene	13.444	278	229817	34.49	ppm	99
28) Benzo[g,h,i]perylene	13.852	276	234890	34.57	ppm	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10839.D
Acq On : 21 Jul 2020 3:55 pm
Operator : fouads
Sample : ic472-7
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 21 16:18:56 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 07/22/20 17:04

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10840.D
Acq On : 21 Jul 2020 4:19 pm
Operator : fouads
Sample : icv472-4
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 21 16:47:23 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

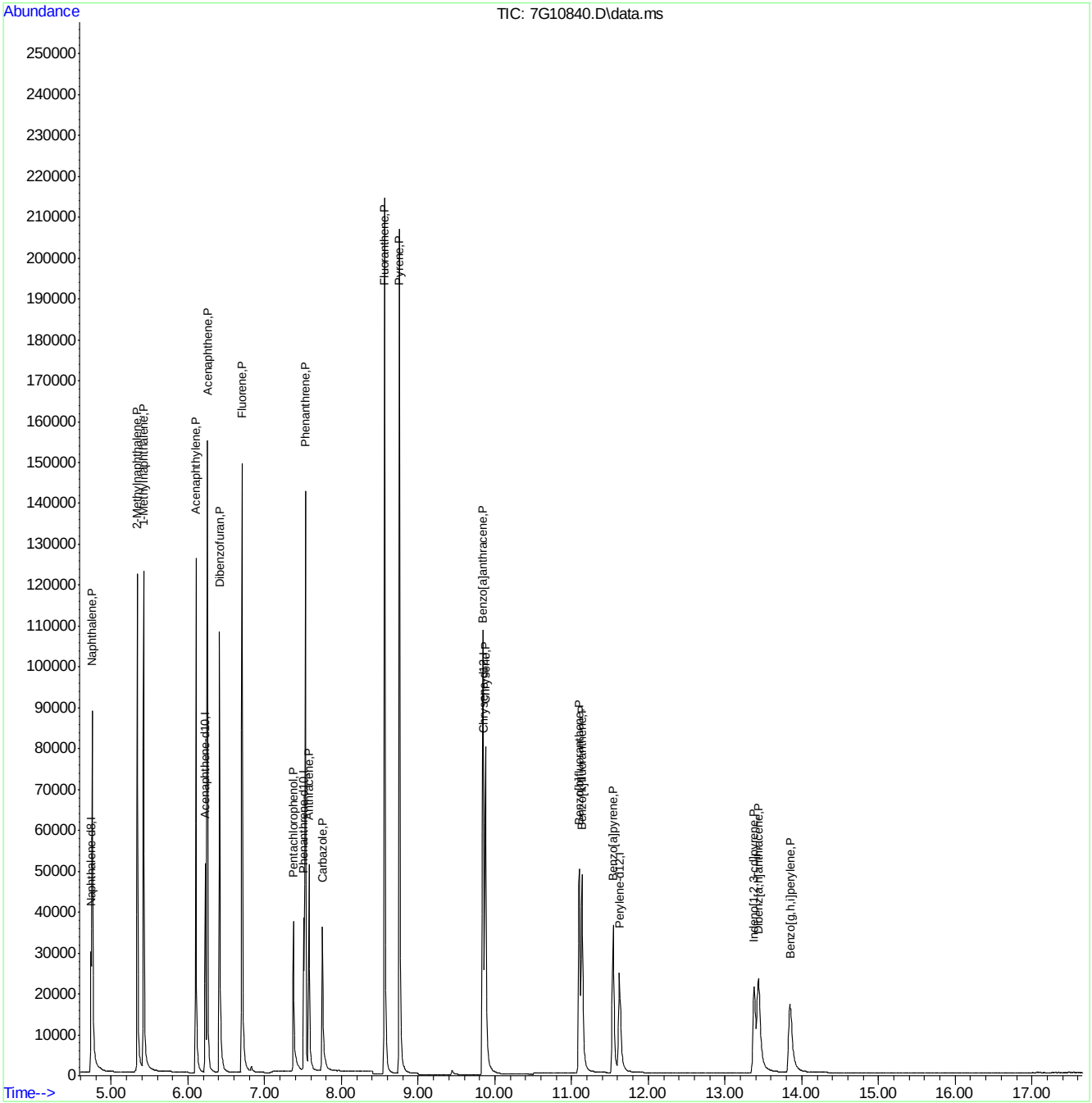
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.734	136	24813	4.00	ppm	0.00
6) Acenaphthene-d10	6.224	164	14478	4.00	ppm	0.00
11) Phenanthrene-d10	7.507	188	26182	4.00	ppm	0.00
18) Chrysene-d12	9.852	240	41612	4.00	ppm	0.00
22) Perylene-d12	11.624	264	36348	4.00	ppm	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	0.000	152	0	0.00	ppm	
Spiked Amount 10.000	Range 50 - 150		Recovery =	0.00%#		
17) Fluoranthene-d10	0.000	212	0d	0.00	ppm	
Spiked Amount 10.000	Range 50 - 150		Recovery =	0.00%#		
Target Compounds						Qvalue
2) Naphthalene	4.752	128	68472	9.54	ppm	99
3) 2-Methylnaphthalene	5.341	142	45097	8.17	ppm	95
5) 1-Methylnaphthalene	5.423	142	49815	9.88	ppm	97
7) Acenaphthylene	6.104	152	76527	9.07	ppm	100
8) Acenaphthene	6.253	153	53203	9.63	ppm	98
9) Dibenzofuran	6.408	168	74284	18.81	ppm	90
10) Fluorene	6.703	166	58318	9.70	ppm	98
12) Pentachlorophenol	7.375	266	15014	14.76	ppm	99
13) Phenanthrene	7.528	178	83170	9.48	ppm	99
14) Anthracene	7.577	178	37274	4.25	ppm	99
15) Carbazole	7.750	167	37176	2.38	ppm	99
16) Fluoranthene	8.563	202	144320	8.72	ppm	100
19) Pyrene	8.753	202	152837	9.18	ppm	99
20) Benzo[a]anthracene	9.840	228	58564	4.49	ppm	99
21) Chrysene	9.879	228	72701	5.04	ppm	100
23) Benzo[b]fluoranthene	11.100	252	57562	4.67	ppm	100
24) Benzo[k]fluoranthene	11.134	252	62383	4.74	ppm	100
25) Benzo[a]pyrene	11.542	252	54221	4.51	ppm	100
26) Indeno[1,2,3-cd]pyrene	13.376	276	34907m	4.45	ppm	
27) Dibenz[a,h]anthracene	13.439	278	38293	4.40	ppm	99
28) Benzo[g,h,i]perylene	13.847	276	40149	4.24	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10840.D
Acq On : 21 Jul 2020 4:19 pm
Operator : fouads
Sample : icv472-4
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 21 16:47:23 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration



Manual Integration Approval Summary

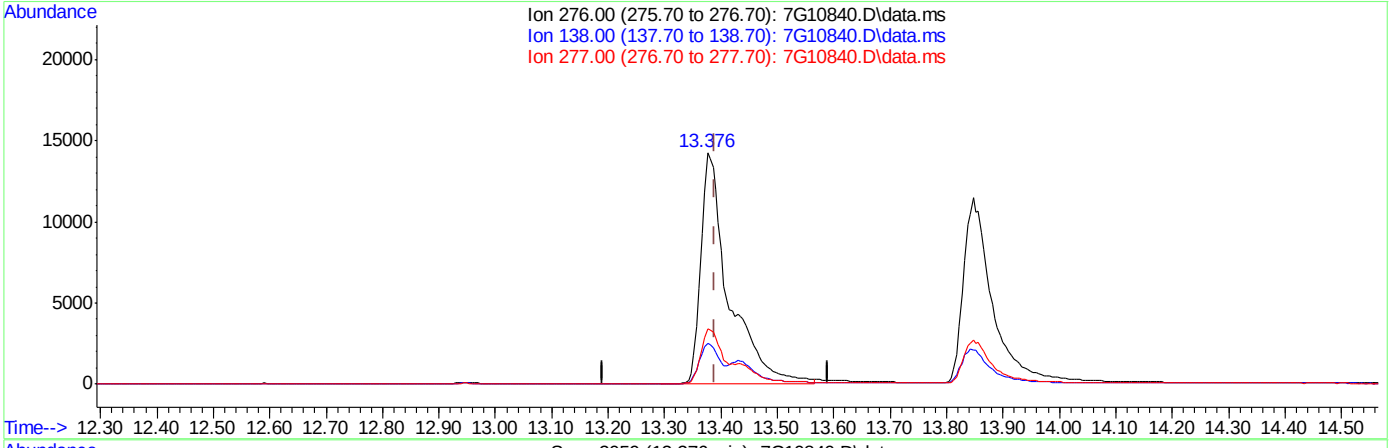
Sample Number: S7G472-ICV472
Lab FileID: 7G10840.D
Injection Time: 07/21/20 16:19
Method: SW846 8270D BY SIM
Analyst approved: 07/22/20 13:31 Fouad Sekkar
Supervisor approved: 07/22/20 17:04 Nicole McCampbell

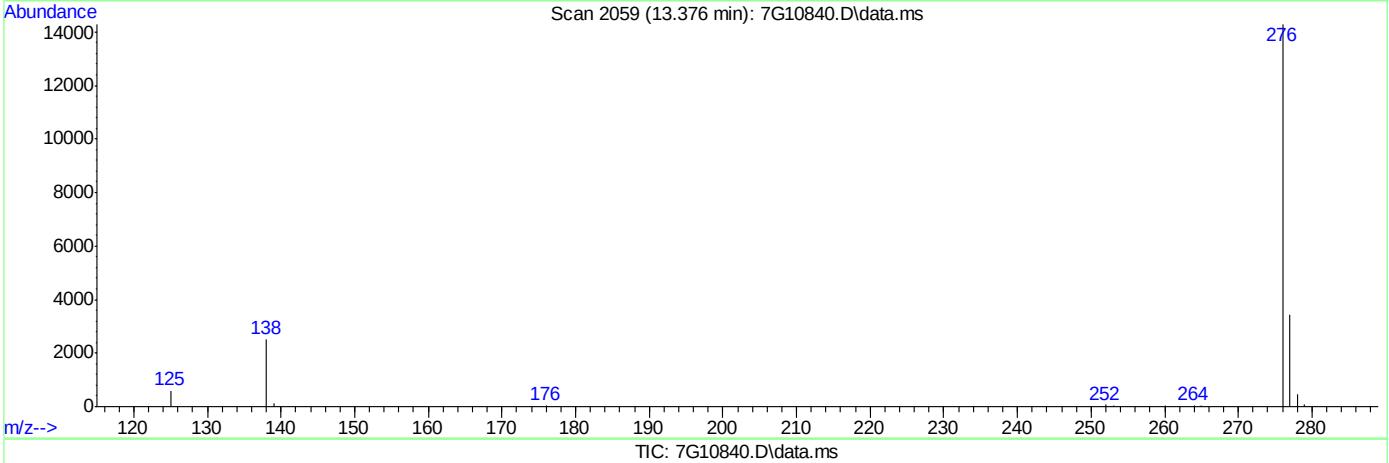
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		13.38	Missed peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10840.D
Acq On : 21 Jul 2020 4:19 pm
Operator : fouads
Sample : icv472-4
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 21 16:46:41 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration





TIC: 7G10840.D\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.376min (-0.015) 6.21ppm

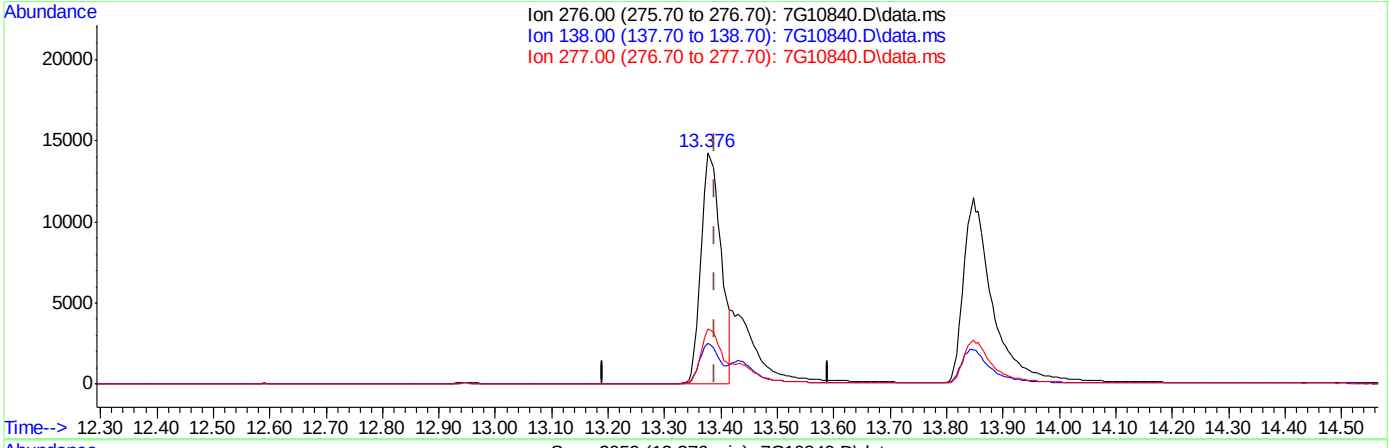
response 48737

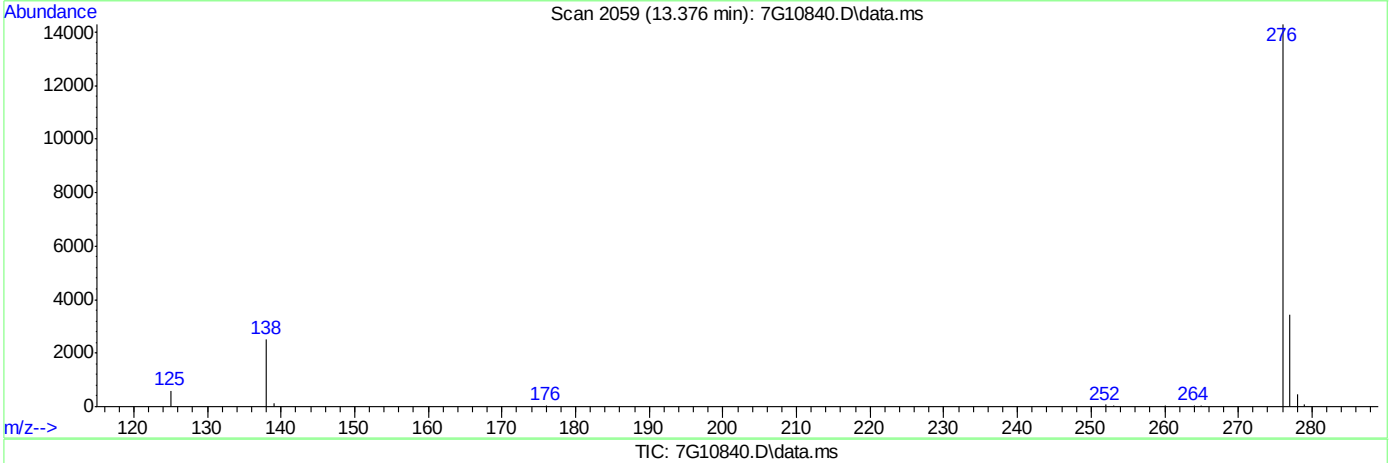
Ion	Exp%	Act%
276.00	100	100
138.00	14.00	17.25
277.00	23.10	23.60
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10840.D
Acq On : 21 Jul 2020 4:19 pm
Operator : fouads
Sample : icv472-4
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 21 16:46:41 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration





TIC: 7G10840.D\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.376min (-0.015) 4.45ppm m

response 34907

Ion	Exp%	Act%
276.00	100	100
138.00	14.00	17.64
277.00	23.10	23.92
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
Data File : 7G11163.d
Acq On : 13 Aug 2020 3:10 pm
Operator : FOUADS
Sample : CC472-4
Misc : op81342,S7G484,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 14 03:09:18 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Fri Aug 14 03:09:13 2020
Response via : Initial Calibration

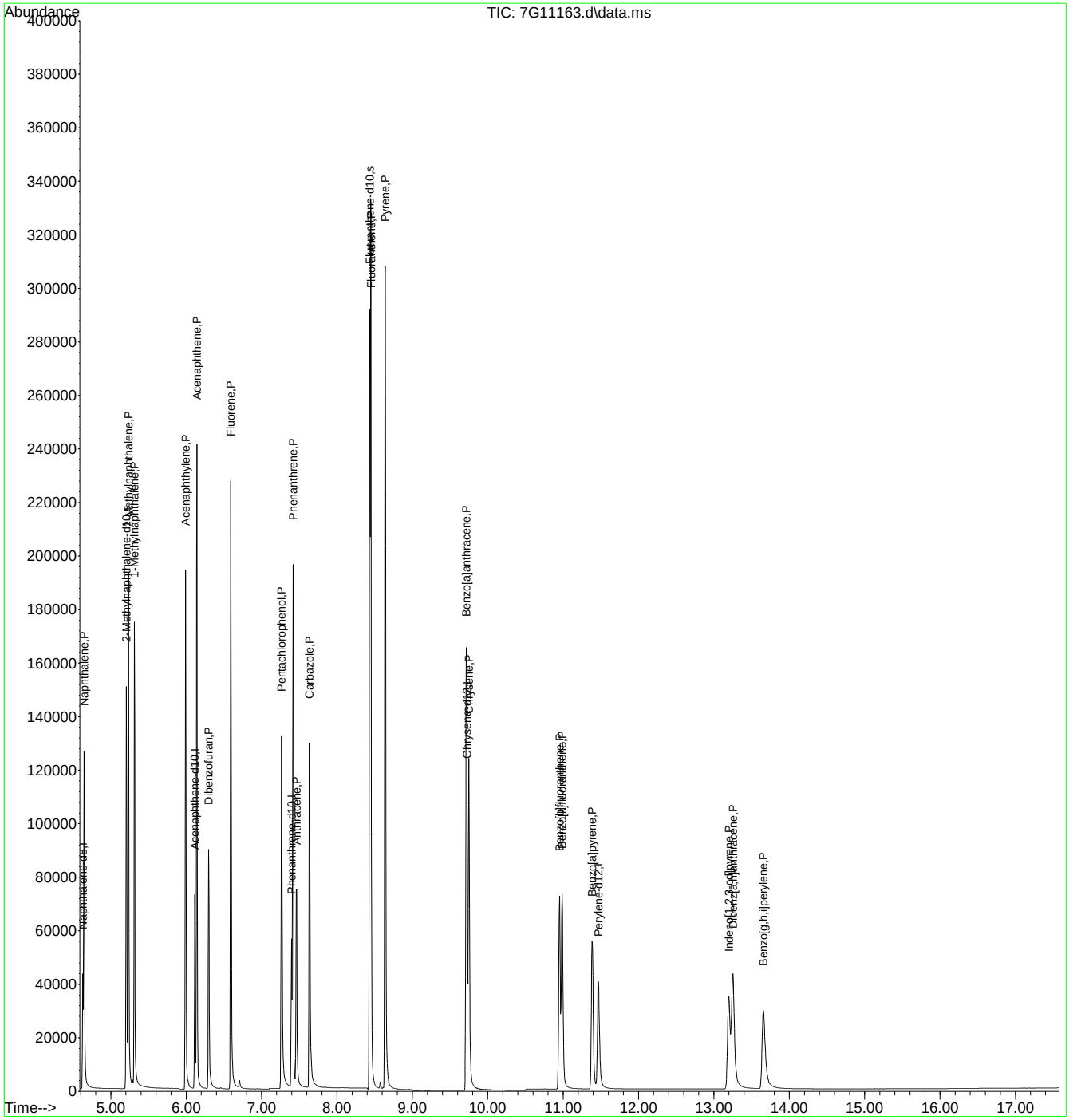
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.628	136	29846	4.00	ppm	0.00
6) Acenaphthene-d10	6.114	164	21211	4.00	ppm	0.00
11) Phenanthrene-d10	7.396	188	39345	4.00	ppm	0.00
18) Chrysene-d12	9.727	240	61940	4.00	ppm	0.00
22) Perylene-d12	11.467	264	53721	4.00	ppm	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.205	152	49952	11.12	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 111.20%			
17) Fluoranthene-d10	8.436	212	190421	9.27	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 92.70%			
Target Compounds						Qvalue
2) Naphthalene	4.646	128	81890	9.49	ppm	100
3) 2-Methylnaphthalene	5.235	142	70727	10.65	ppm	100
5) 1-Methylnaphthalene	5.311	142	65333	10.73	ppm	100
7) Acenaphthylene	5.993	152	114472	9.25	ppm	100
8) Acenaphthene	6.143	153	74373	9.20	ppm	100
9) Dibenzofuran	6.297	168	56887	10.02	ppm	100
10) Fluorene	6.592	166	82786	9.41	ppm	100
12) Pentachlorophenol	7.264	266	44088	26.90	ppm	100
13) Phenanthrene	7.417	178	114388	8.69	ppm	100
14) Anthracene	7.466	178	59935	4.55	ppm	100
15) Carbazole	7.633	167	101463	4.31	ppm	100
16) Fluoranthene	8.452	202	216268	8.70	ppm	100
19) Pyrene	8.642	202	223183	9.00	ppm	100
20) Benzo[a]anthracene	9.715	228	94541	4.87	ppm	100
21) Chrysene	9.749	228	97713	4.55	ppm	100
23) Benzo[b]fluoranthene	10.952	252	79072	4.34	ppm	100
24) Benzo[k]fluoranthene	10.986	252	91517	4.71	ppm	100
25) Benzo[a]pyrene	11.384	252	77503	4.36	ppm	100
26) Indeno[1,2,3-cd]pyrene	13.199	276	60979	5.26	ppm	96
27) Dibenz[a,h]anthracene	13.253	278	65156	5.06	ppm	99
28) Benzo[g,h,i]perylene	13.655	276	65496	4.68	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
Data File : 7G11163.d
Acq On : 13 Aug 2020 3:10 pm
Operator : FOUADS
Sample : CC472-4
Misc : op81342,S7G484,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

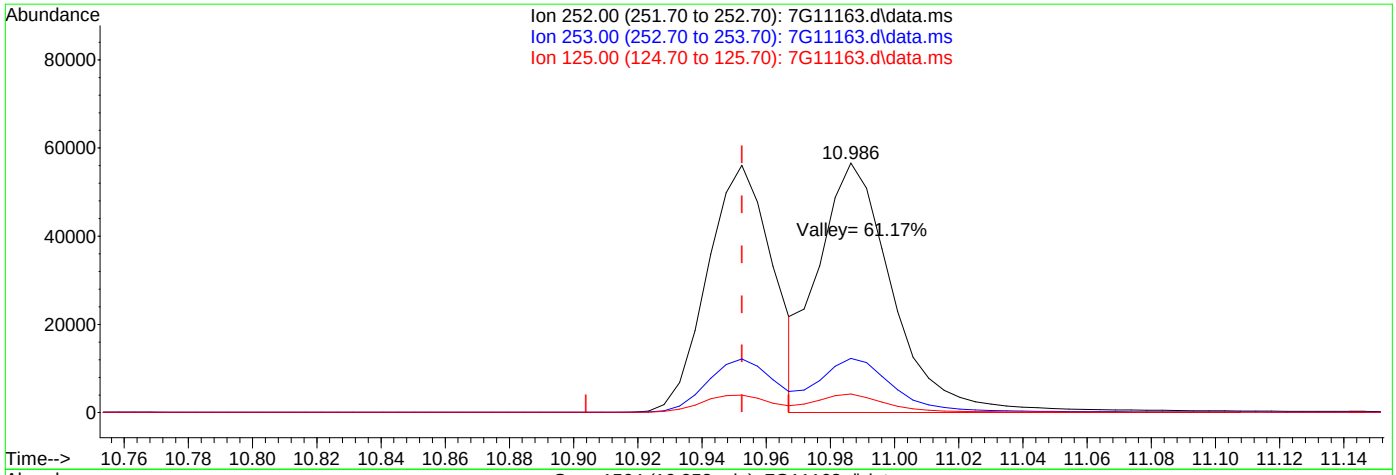
Quant Time: Aug 14 03:09:18 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Fri Aug 14 03:09:13 2020
Response via : Initial Calibration

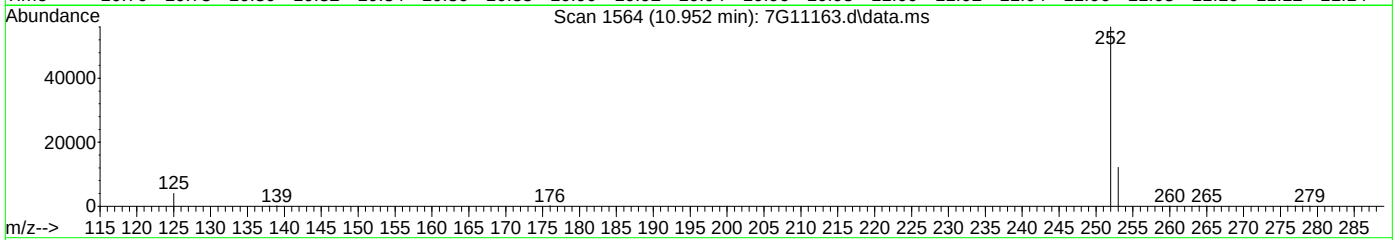


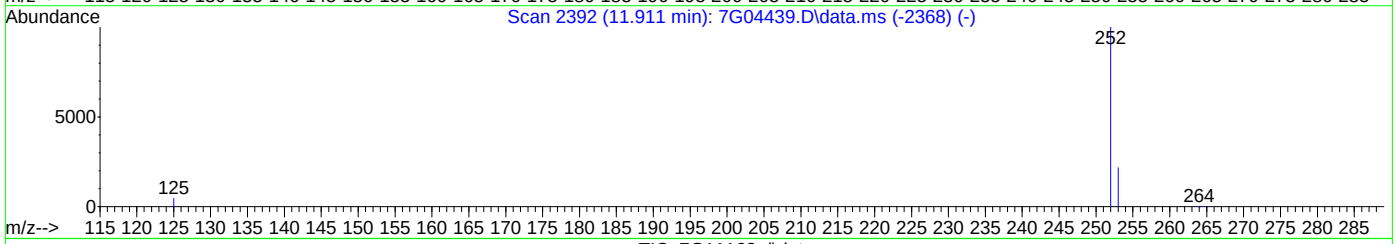
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-14-2020\s7g484\
Data File : 7G11163.d
Acq On : 13 Aug 2020 3:10 pm
Operator : FOUADS
Sample : CC472-4
Misc : op81342,S7G484,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 14 03:09:18 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Fri Aug 14 03:09:13 2020
Response via : Initial Calibration







TIC: 7G11163.d\data.ms

(23) Benzo[b]fluoranthene (P)

10.952min (0.000) 4.34ppm

response 79072

Ion	Exp%	Act%
252.00	100	100
253.00	21.70	21.53
125.00	7.10	6.94
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-17-2020\S7G485\
Data File : 7G11193.d
Acq On : 14 Aug 2020 10:20 am
Operator : FOUADS
Sample : CC472-4 Inst : MSBNA8
Misc : op81342,S7G485,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 16 22:45:44 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Sun Aug 16 22:45:40 2020
Response via : Initial Calibration

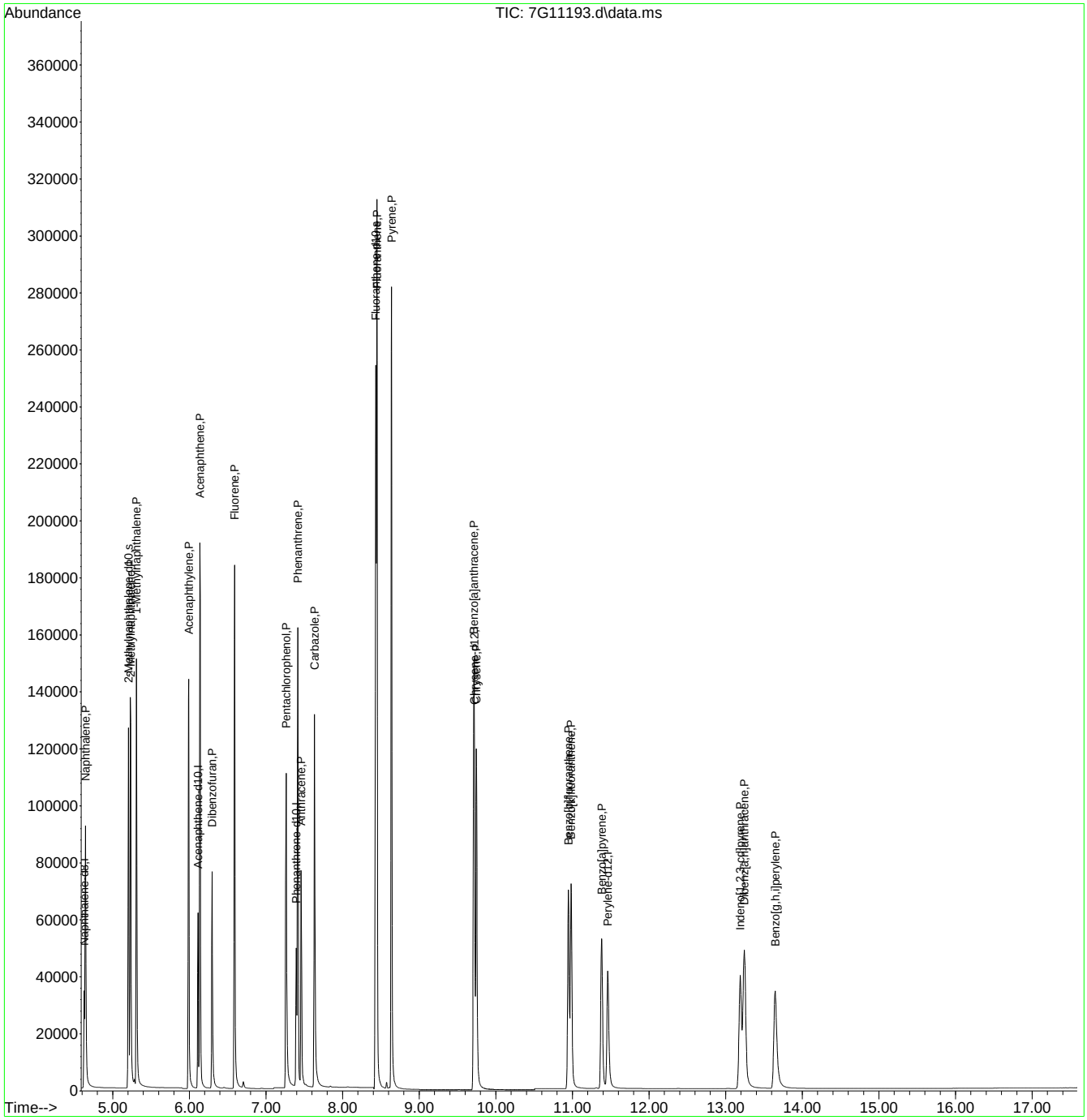
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.628	136	24995	4.00	ppm	0.00
6) Acenaphthene-d10	6.114	164	17353	4.00	ppm	0.00
11) Phenanthrene-d10	7.396	188	34222	4.00	ppm	0.00
18) Chrysene-d12	9.722	240	57110	4.00	ppm	0.00
22) Perylene-d12	11.462	264	52293	4.00	ppm	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.205	152	40762	10.84	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 108.40%			
17) Fluoranthene-d10	8.433	212	169636	9.49	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 94.90%			
Target Compounds						Qvalue
2) Naphthalene	4.646	128	66292	9.18	ppm	99
3) 2-Methylnaphthalene	5.235	142	55814	10.04	ppm	92
5) 1-Methylnaphthalene	5.311	142	52313	10.28	ppm	97
7) Acenaphthylene	5.993	152	91958	9.09	ppm	98
8) Acenaphthene	6.138	153	59313	8.97	ppm	99
9) Dibenzofuran	6.297	168	46952	10.10	ppm	91
10) Fluorene	6.592	166	65818	9.15	ppm	95
12) Pentachlorophenol	7.264	266	36100	25.52	ppm	96
13) Phenanthrene	7.417	178	97388	8.51	ppm	98
14) Anthracene	7.459	178	48466	4.23	ppm	99
15) Carbazole	7.633	167	92391	4.52	ppm	98
16) Fluoranthene	8.448	202	197849	9.14	ppm	98
19) Pyrene	8.639	202	193879	8.49	ppm	96
20) Benzo[a]anthracene	9.712	228	83266	4.65	ppm	99
21) Chrysene	9.746	228	86806	4.39	ppm	99
23) Benzo[b]fluoranthene	10.948	252	77464	4.36	ppm	98
24) Benzo[k]fluoranthene	10.982	252	79232	4.19	ppm	98
25) Benzo[a]pyrene	11.384	252	71737	4.15	ppm	98
26) Indeno[1,2,3-cd]pyrene	13.190	276	63937	5.66	ppm	96
27) Dibenz[a,h]anthracene	13.243	278	67896	5.42	ppm	96
28) Benzo[g,h,i]perylene	13.646	276	69773	5.13	ppm	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-17-2020\S7G485\
Data File : 7G11193.d
Acq On : 14 Aug 2020 10:20 am
Operator : FOUADS
Sample : CC472-4 Inst : MSBNA8
Misc : op81342,S7G485,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

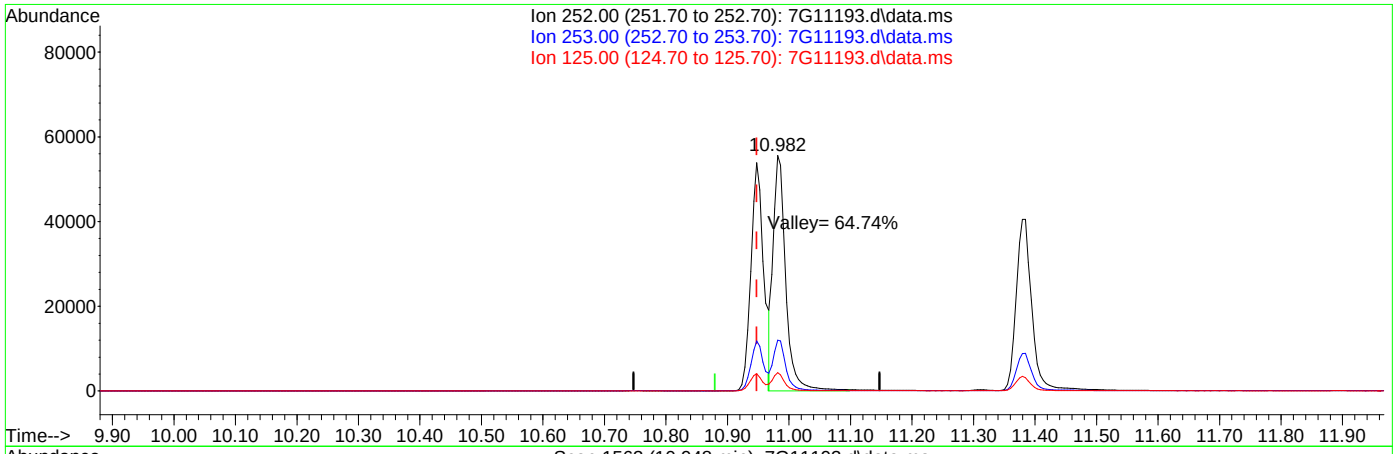
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 16 22:45:44 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Sun Aug 16 22:45:40 2020
Response via : Initial Calibration

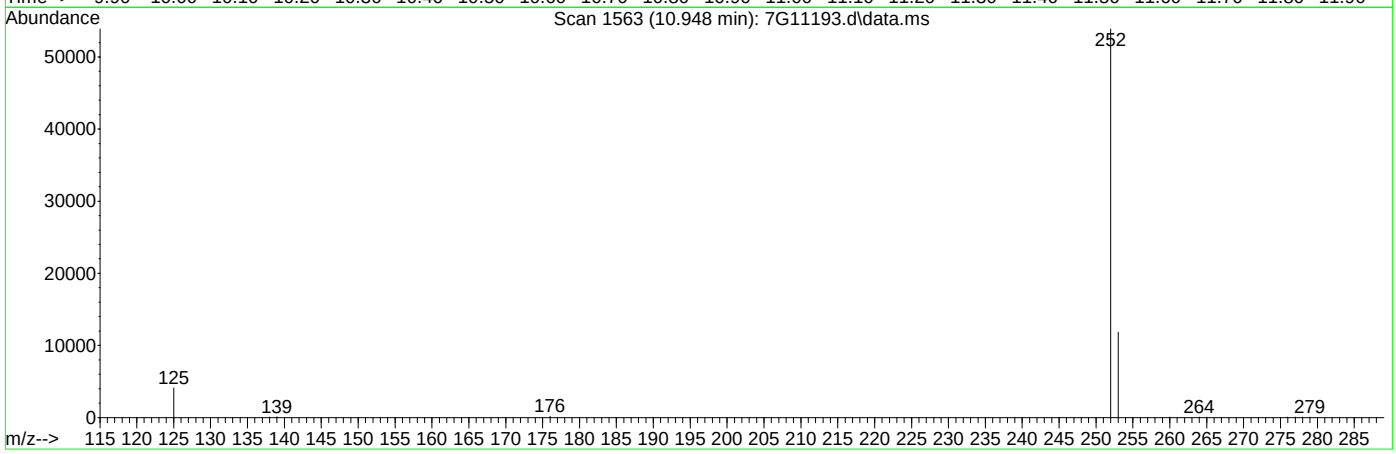


Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\AUGUST 2020\08-17-2020\S7G485\
Data File : 7G11193.d
Acq On : 14 Aug 2020 10:20 am
Operator : FOUADS
Sample : CC472-4 Inst : MSBNA8
Misc : op81342,S7G485,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Results File: simpahf7gD0072120.RES
Quant Time: Aug 16 22:45:44 2020
Quant Title : PAH's by 8270 SIM
QLast Update : Sun Aug 16 22:45:40 2020
Response via : Initial Calibration





TIC: 7G11193.d\data.ms

(23) Benzo[b]fluoranthene (P)

10.948min (0.000) 4.36ppm

response 77464

Ion	Exp%	Act%
252.00	100	100
253.00	21.70	21.85
125.00	4.50	7.33
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\st1745\
Data File : T050025.D
Acq On : 17 Jul 2020 9:27 am
Operator : nareshj
Sample : ic1745-1 Inst : MSBNA06
Misc : OP81034,st1745,250,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 17 12:00:36 2020
Quant Method : C:\msdchem\1\METHODS\SIM_LVT071720.M
Quant Title : PAH's by 8270 SIM
QLast Update : Fri Jul 17 09:28:45 2020
Response via : Initial Calibration

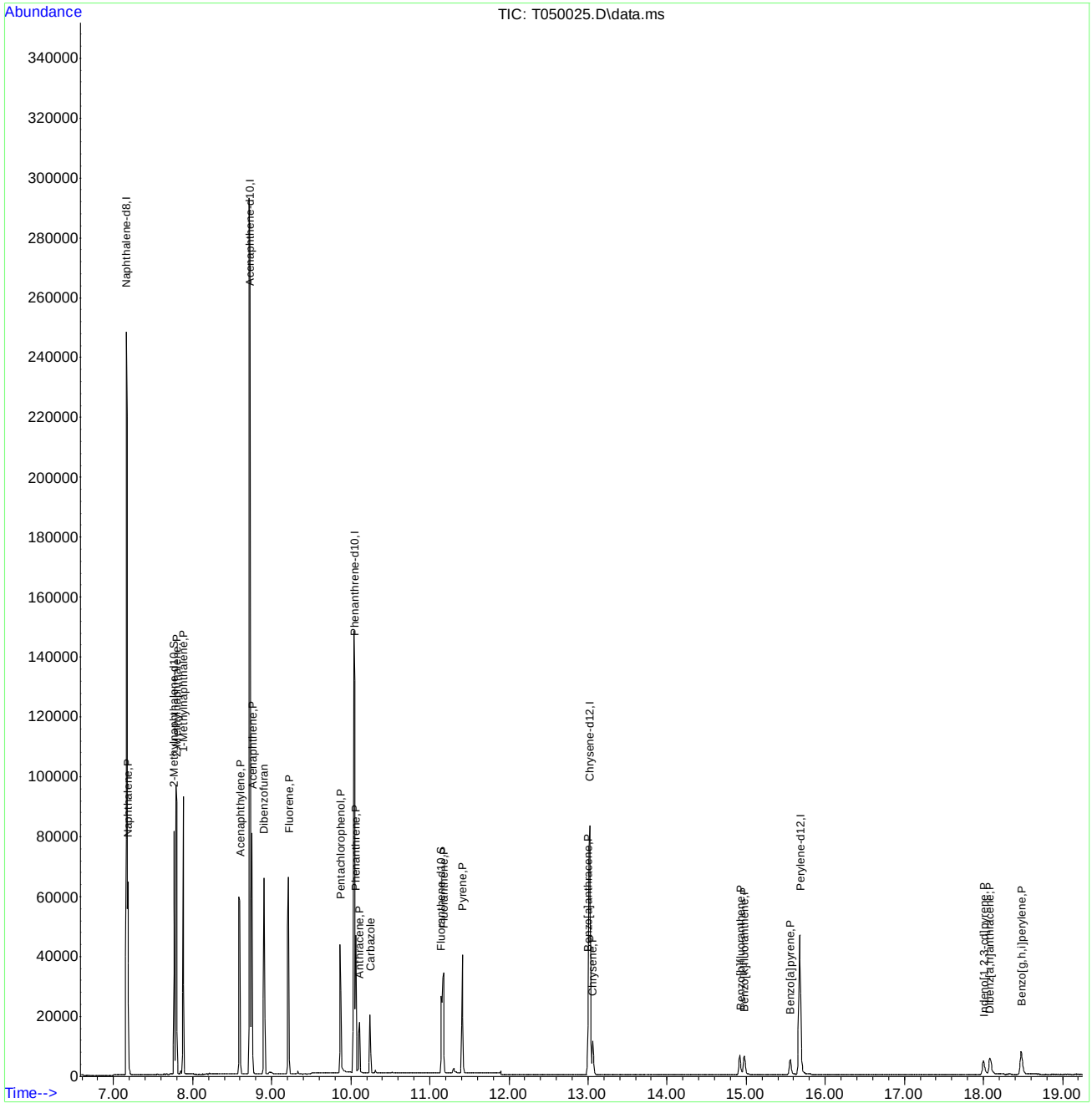
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	7.166	136	183857	500.00	ppb	0.00
6) Acenaphthene-d10	8.716	162	115250	500.00	ppb	0.00
11) Phenanthrene-d10	10.046	188	118059	500.00	ppb	0.00
18) Chrysene-d12	13.020	240	72346	500.00	ppb	-0.02
22) Perylene-d12	15.678	264	58639	500.00	ppb	-0.01
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	7.768	152	25201	77.11	ppb	0.00
Spiked Amount 2000.000			Recovery =	3.86%		
17) Fluoranthene-d10	11.147	212	19194	66.84	ppb	0.00
Spiked Amount 2000.000			Recovery =	3.34%		
Target Compounds						Qvalue
2) Naphthalene	7.183	128	39004	77.29	ppb	98
3) 2-Methylnaphthalene	7.798	142	33303	77.39	ppb	93
5) 1-Methylnaphthalene	7.883	142	30031	77.27	ppb	93
7) Acenaphthylene	8.597	152	47595	80.09	ppb	95
8) Acenaphthene	8.751	153	28795	67.79	ppb	97
9) Dibenzofuran	8.905	168	37457	71.95	ppm	91
10) Fluorene	9.213	166	27575	61.15	ppb	95
12) Pentachlorophenol	9.866	266	13865	395.90	ppb	94
13) Phenanthrene	10.063	178	25669	74.30	ppb	99
14) Anthracene	10.112	178	11901	41.18	ppb	99
15) Carbazole	10.244	167	11236	39.79	ppm	98
16) Fluoranthene	11.172	202	24379	69.54	ppb	96
19) Pyrene	11.410	202	24742	101.81	ppb	93
20) Benzo[a]anthracene	13.005	228	9749	44.33	ppb	98
21) Chrysene	13.061	228	9423	44.85	ppb	99
23) Benzo[b]fluoranthene	14.921	252	7899	52.63	ppb	93
24) Benzo[k]fluoranthene	14.975	252	8255	53.33	ppb	94
25) Benzo[a]pyrene	15.555	252	7103	43.52	ppb	94
26) Indeno[1,2,3-cd]pyrene	18.001	276	6430	42.28	ppb	85
27) Dibenz[a,h]anthracene	18.085	278	6043	39.19	ppb	88
28) Benzo[g,h,i]perylene	18.478	276	10240	65.77	ppb	83

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\st1745\
Data File : T050025.D
Acq On : 17 Jul 2020 9:27 am
Operator : nareshj
Sample : ic1745-1 Inst : MSBNA06
Misc : OP81034,st1745,250,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 17 12:00:36 2020
Quant Method : C:\msdchem\1\METHODS\SIM_LVT071720.M
Quant Title : PAH's by 8270 SIM
QLast Update : Fri Jul 17 09:28:45 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\st1745\
Data File : T050026.D
Acq On : 17 Jul 2020 9:56 am
Operator : nareshj
Sample : ic1745-8 Inst : MSBNA06
Misc : OP81034,st1745,250,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 17 12:04:57 2020
Quant Method : C:\msdchem\1\METHODS\SIM_LVT071720.M
Quant Title : PAH's by 8270 SIM
QLast Update : Fri Jul 17 09:28:45 2020
Response via : Initial Calibration

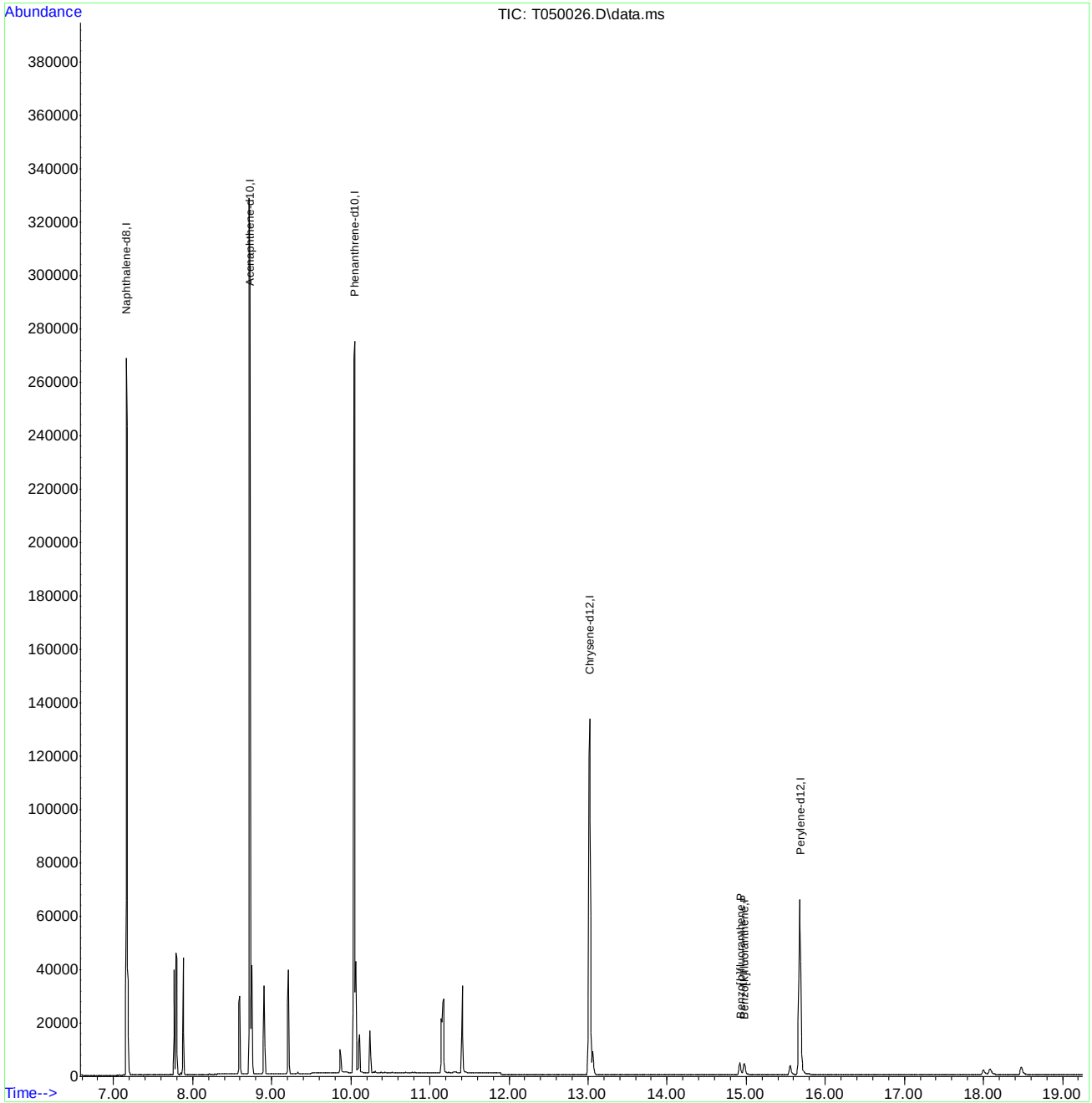
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	7.166	136	196146	500.00	ppb	0.00
6) Acenaphthene-d10	8.716	162	128105	500.00	ppb	0.00
11) Phenanthrene-d10	10.046	188	222883	500.00	ppb	0.00
18) Chrysene-d12	13.020	240	115134	500.00	ppb	-0.02
22) Perylene-d12	15.678	264	84577	500.00	ppb	-0.01
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	0.000	152	0d	0.00	ppb	
Spiked Amount 2000.000			Recovery =	0.00%		
17) Fluoranthene-d10	0.000	212	0d	0.00	ppb	
Spiked Amount 2000.000			Recovery =	0.00%		
Target Compounds						Qvalue
23) Benzo[b]fluoranthene	14.921	252	5451	25.18	ppb	95
24) Benzo[k]fluoranthene	14.975	252	5859	26.25	ppb	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\st1745\
Data File : T050026.D
Acq On : 17 Jul 2020 9:56 am
Operator : nareshj
Sample : ic1745-8 Inst : MSBNA06
Misc : OP81034,st1745,250,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 17 12:04:57 2020
Quant Method : C:\msdchem\1\METHODS\SIM_LVT071720.M
Quant Title : PAH's by 8270 SIM
QLast Update : Fri Jul 17 09:28:45 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\st1745\
Data File : T050027.D
Acq On : 17 Jul 2020 10:25 am
Operator : nareshj
Sample : ic1745-2 Inst : MSBNA06
Misc : OP81034,st1745,250,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 17 12:00:40 2020
Quant Method : C:\msdchem\1\METHODS\SIM_LVT071720.M
Quant Title : PAH's by 8270 SIM
QLast Update : Fri Jul 17 09:28:45 2020
Response via : Initial Calibration

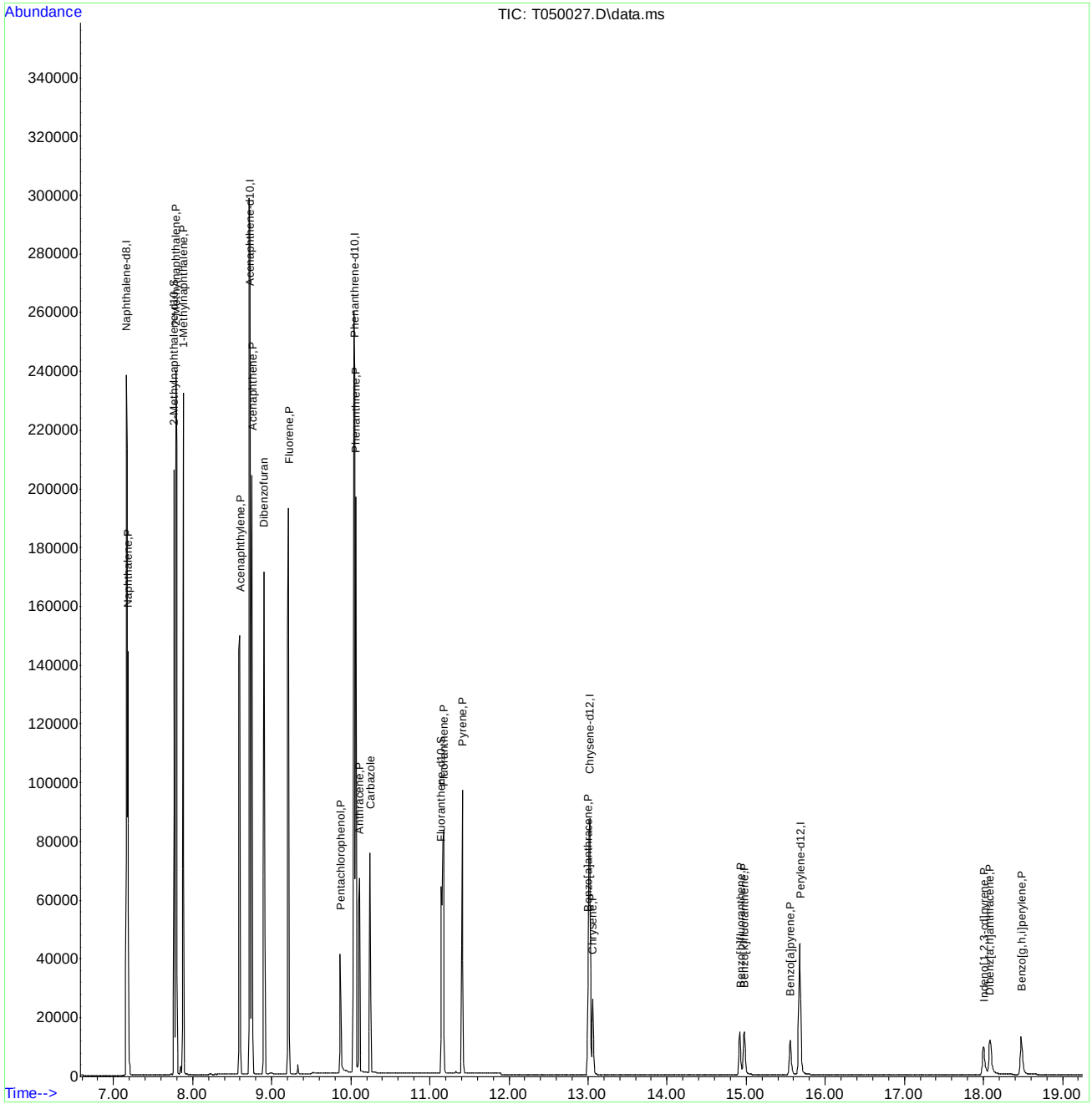
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	7.166	136	178688	500.00	ppb	0.00
6) Acenaphthene-d10	8.716	162	117853	500.00	ppb	0.00
11) Phenanthrene-d10	10.046	188	203128	500.00	ppb	0.00
18) Chrysene-d12	13.020	240	71906	500.00	ppb	-0.02
22) Perylene-d12	15.678	264	57085	500.00	ppb	-0.01
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	7.768	152	62939	198.15	ppb	0.00
Spiked Amount 2000.000			Recovery =	9.91%		
17) Fluoranthene-d10	11.147	212	47657	96.45	ppb	0.00
Spiked Amount 2000.000			Recovery =	4.82%		
Target Compounds						Qvalue
2) Naphthalene	7.183	128	92213	188.01	ppb	98
3) 2-Methylnaphthalene	7.794	142	82916	198.25	ppb	94
5) 1-Methylnaphthalene	7.883	142	75443	199.72	ppb	93
7) Acenaphthylene	8.596	152	119556	196.73	ppb	96
8) Acenaphthene	8.751	153	73843	170.00	ppb	98
9) Dibenzofuran	8.905	168	98658	185.33	ppm	90
10) Fluorene	9.213	166	81805	177.40	ppb	95
12) Pentachlorophenol	9.865	266	13111	217.58	ppb	94
13) Phenanthrene	10.063	178	109191	183.70	ppb	99
14) Anthracene	10.112	178	48611	97.76	ppb	99
15) Carbazole	10.243	167	42779	88.05	ppm	99
16) Fluoranthene	11.172	202	59983	99.45	ppb	96
19) Pyrene	11.410	202	60370	249.93	ppb	94
20) Benzo[a]anthracene	13.005	228	22764	104.15	ppb	98
21) Chrysene	13.060	228	22627	108.36	ppb	98
23) Benzo[b]fluoranthene	14.921	252	17925	122.69	ppb	94
24) Benzo[k]fluoranthene	14.975	252	19369	128.55	ppb	95
25) Benzo[a]pyrene	15.555	252	16207	102.00	ppb	95
26) Indeno[1,2,3-cd]pyrene	18.001	276	13332	90.05	ppb	86
27) Dibenz[a,h]anthracene	18.084	278	13460	89.67	ppb	86
28) Benzo[g,h,i]perylene	18.477	276	16676	110.03	ppb	81

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\st1745\
Data File : T050027.D
Acq On : 17 Jul 2020 10:25 am
Operator : nareshj
Sample : ic1745-2 Inst : MSBNA06
Misc : OP81034,st1745,250,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 17 12:00:40 2020
Quant Method : C:\msdchem\1\METHODS\SIM_LVT071720.M
Quant Title : PAH's by 8270 SIM
QLast Update : Fri Jul 17 09:28:45 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\st1745\
Data File : T050028.D
Acq On : 17 Jul 2020 10:55 am
Operator : nareshj
Sample : ic1745-3 Inst : MSBNA06
Misc : OP81034,st1745,250,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 17 12:00:42 2020
Quant Method : C:\msdchem\1\METHODS\SIM_LVT071720.M
Quant Title : PAH's by 8270 SIM
QLast Update : Fri Jul 17 09:28:45 2020
Response via : Initial Calibration

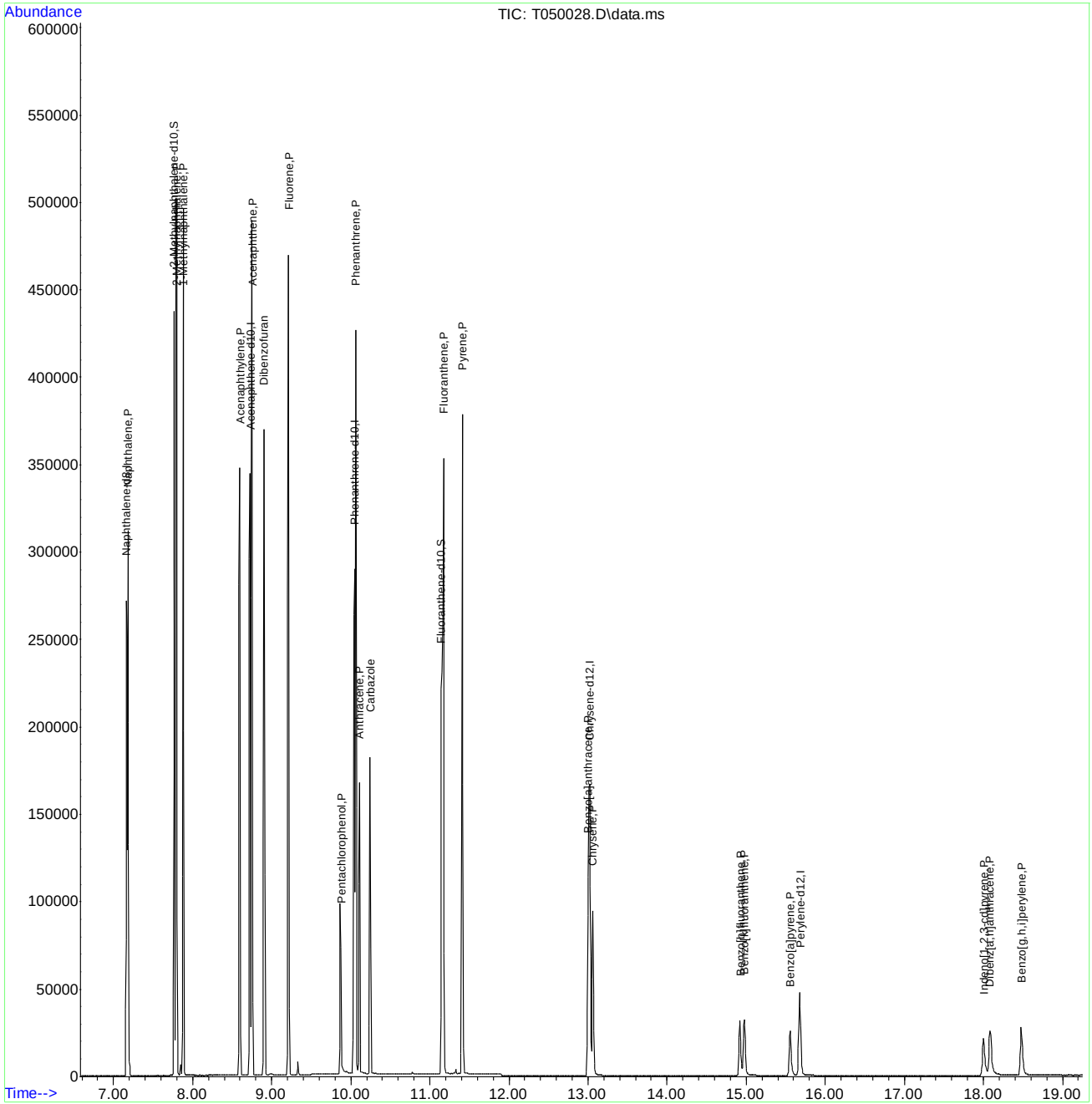
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	7.166	136	199038	500.00	ppb	0.00
6) Acenaphthene-d10	8.725	162	130133	500.00	ppb	0.00
11) Phenanthrene-d10	10.046	188	227593	500.00	ppb	0.00
18) Chrysene-d12	13.020	240	125078	500.00	ppb	-0.02
22) Perylene-d12	15.678	264	60850	500.00	ppb	-0.01
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	7.768	152	134120	379.08	ppb	0.00
Spiked Amount 2000.000			Recovery = 18.95%			
17) Fluoranthene-d10	11.147	212	178769	322.91	ppb	0.00
Spiked Amount 2000.000			Recovery = 16.15%			
Target Compounds						Qvalue
2) Naphthalene	7.185	128	204510	374.33	ppb	97
3) 2-Methylnaphthalene	7.798	142	176293	378.41	ppb	94
5) 1-Methylnaphthalene	7.883	142	161128	382.95	ppb	94
7) Acenaphthylene	8.597	152	256031	381.55	ppb	96
8) Acenaphthene	8.751	153	159836	333.25	ppb	98
9) Dibenzofuran	8.905	168	211892	360.48	ppm	89
10) Fluorene	9.213	166	178393	350.36	ppb	97
12) Pentachlorophenol	9.874	266	32381	479.62	ppb	91
13) Phenanthrene	10.063	178	239452	359.55	ppb	100
14) Anthracene	10.112	178	109958	197.35	ppb	100
15) Carbazole	10.243	167	105136	193.12	ppm	100
16) Fluoranthene	11.172	202	226415	335.02	ppb	98
19) Pyrene	11.410	202	229158	545.41	ppb	92
20) Benzo[a]anthracene	13.005	228	79791	209.87	ppb	99
21) Chrysene	13.061	228	80290	221.05	ppb	99
23) Benzo[b]fluoranthene	14.921	252	38922	249.93	ppb	94
24) Benzo[k]fluoranthene	14.975	252	41241	256.77	ppb	95
25) Benzo[a]pyrene	15.555	252	34560	204.05	ppb	94
26) Indeno[1,2,3-cd]pyrene	18.001	276	29286	185.58	ppb	85
27) Dibenz[a,h]anthracene	18.085	278	29107	181.92	ppb	86
28) Benzo[g,h,i]perylene	18.478	276	34820	215.53	ppb	81

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\st1745\
Data File : T050028.D
Acq On : 17 Jul 2020 10:55 am
Operator : nareshj
Sample : ic1745-3 Inst : MSBNA06
Misc : OP81034,st1745,250,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 17 12:00:42 2020
Quant Method : C:\msdchem\1\METHODS\SIM_LVT071720.M
Quant Title : PAH's by 8270 SIM
QLast Update : Fri Jul 17 09:28:45 2020
Response via : Initial Calibration



SIM_LVT071720.M Fri Jul 17 13:53:59 2020 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\st1745\
Data File : T050029.D
Acq On : 17 Jul 2020 11:24 am
Operator : nareshj
Sample : icc1745-4 Inst : MSBNA06
Misc : OP81034,st1745,250,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 17 12:00:44 2020
Quant Method : C:\msdchem\1\METHODS\SIM_LVT071720.M
Quant Title : PAH's by 8270 SIM
QLast Update : Fri Jul 17 09:28:45 2020
Response via : Initial Calibration

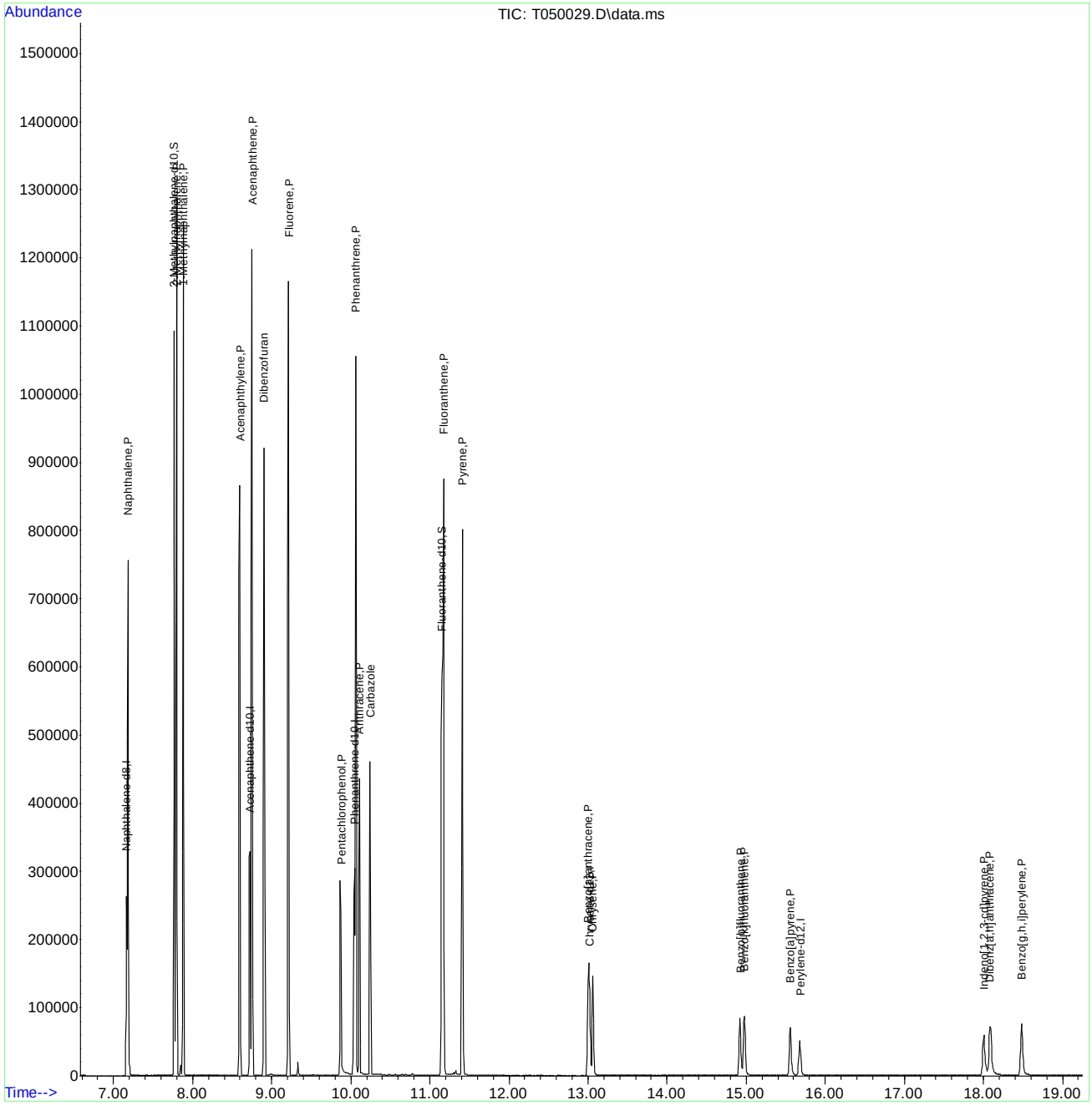
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	7.166	136	199294	500.00	ppb	0.00
6) Acenaphthene-d10	8.716	162	132212	500.00	ppb	0.00
11) Phenanthrene-d10	10.046	188	232870	500.00	ppb	0.00
18) Chrysene-d12	13.020	240	81633	500.00	ppb	-0.02
22) Perylene-d12	15.678	264	64685	500.00	ppb	-0.01
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	7.768	152	334737	944.90	ppb	0.00
Spiked Amount 2000.000			Recovery = 47.24%			
17) Fluoranthene-d10	11.155	212	435141	768.18	ppb	0.00
Spiked Amount 2000.000			Recovery = 38.41%			
Target Compounds						Qvalue
2) Naphthalene	7.183	128	500112	914.23	ppb	98
3) 2-Methylnaphthalene	7.798	142	443974	951.77	ppb	95
5) 1-Methylnaphthalene	7.883	142	406352	964.53	ppb	94
7) Acenaphthylene	8.596	152	648086	950.61	ppb	96
8) Acenaphthene	8.750	153	398210	817.20	ppb	99
9) Dibenzofuran	8.905	168	532307	891.35	ppm	89
10) Fluorene	9.213	166	448883	867.73	ppb	96
12) Pentachlorophenol	9.874	266	96693	1399.73	ppb	91
13) Phenanthrene	10.063	178	601883	883.28	ppb	100
14) Anthracene	10.112	178	281679	494.11	ppb	100
15) Carbazole	10.243	167	266365	478.20	ppm	100
16) Fluoranthene	11.172	202	552433	798.90	ppb	98
19) Pyrene	11.410	202	504284	1838.99	ppb	91
20) Benzo[a]anthracene	13.005	228	127721	514.73	ppb	98
21) Chrysene	13.060	228	126145	532.14	ppb	98
23) Benzo[b]fluoranthene	14.921	252	104320	630.15	ppb	94
24) Benzo[k]fluoranthene	14.975	252	110512	647.27	ppb	95
25) Benzo[a]pyrene	15.555	252	94121	522.77	ppb	94
26) Indeno[1,2,3-cd]pyrene	18.006	276	79471	473.72	ppb	86
27) Dibenz[a,h]anthracene	18.084	278	80631	474.07	ppb	85
28) Benzo[g,h,i]perylene	18.482	276	92684	539.68	ppb	83

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\st1745\
Data File : T050029.D
Acq On : 17 Jul 2020 11:24 am
Operator : nareshj
Sample : icc1745-4 Inst : MSBNA06
Misc : OP81034,st1745,250,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

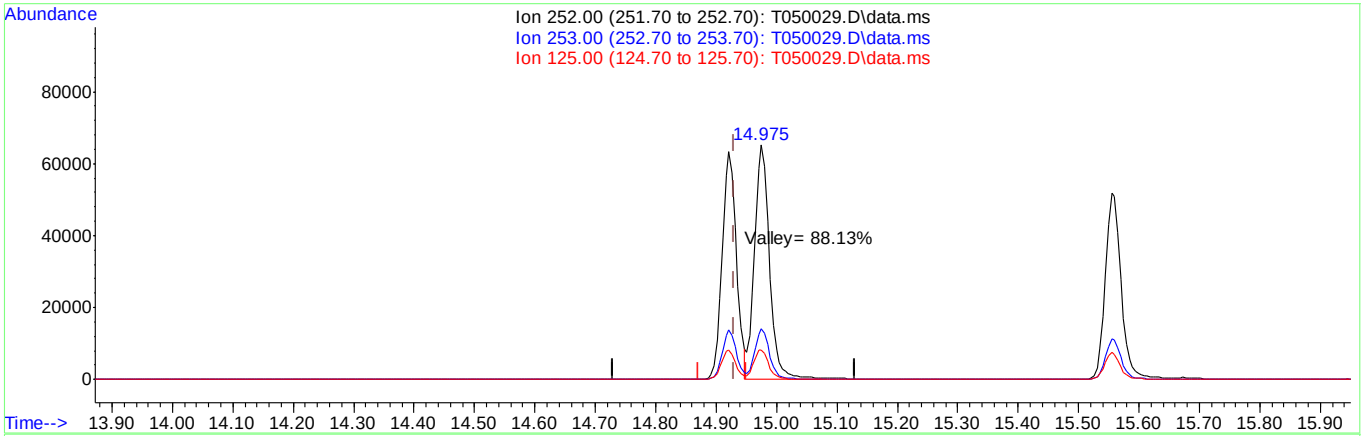
Quant Time: Jul 17 12:00:44 2020
Quant Method : C:\msdchem\1\METHODS\SIM_LVT071720.M
Quant Title : PAH's by 8270 SIM
QLast Update : Fri Jul 17 09:28:45 2020
Response via : Initial Calibration

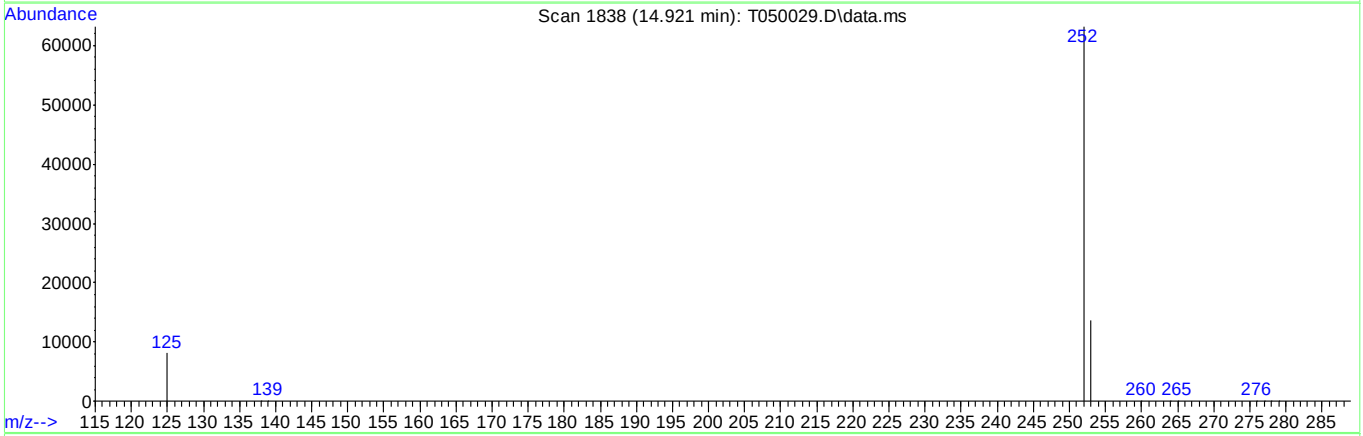


Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\st1745\
Data File : T050029.D
Acq On : 17 Jul 2020 11:24 am
Operator : nareshj
Sample : icc1745-4 Inst : MSBNA06
Misc : OP81034,st1745,250,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 17 12:00:44 2020
Quant Method : C:\msdchem\1\METHODS\SIM_LVT071720.M
Quant Title : PAH's by 8270 SIM
QLast Update : Fri Jul 17 09:28:45 2020
Response via : Initial Calibration





TIC: T050029.D\data.ms

(23) Benzo[b]fluoranthene (P)

14.921min (-0.011) 630.15ppb

response 104320

Ion	Exp%	Act%
252.00	100	100
253.00	20.80	21.59
125.00	4.80	12.73
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\st1745\
Data File : T050030.D
Acq On : 17 Jul 2020 11:54 am
Operator : nareshj
Sample : ic1745-5 Inst : MSBNA06
Misc : OP81034,st1745,250,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 17 12:28:58 2020
Quant Method : C:\msdchem\1\METHODS\SIM_LVT071720.M
Quant Title : PAH's by 8270 SIM
QLast Update : Fri Jul 17 09:28:45 2020
Response via : Initial Calibration

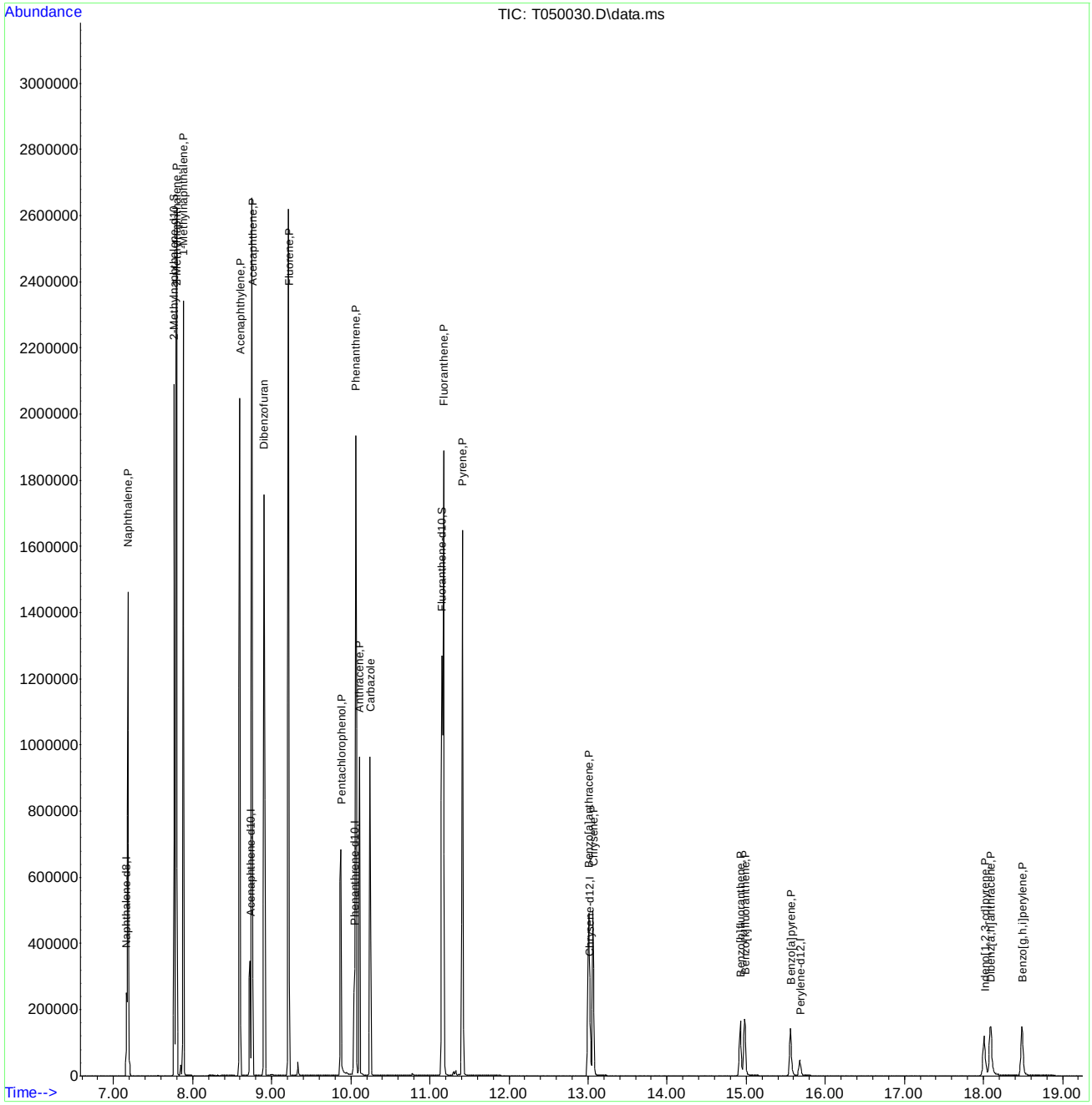
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	7.166	136	191014	500.00	ppb	0.00
6) Acenaphthene-d10	8.725	162	131368	500.00	ppb	0.00
11) Phenanthrene-d10	10.046	188	229215	500.00	ppb	0.00
18) Chrysene-d12	13.023	240	125957	500.00	ppb	-0.01
22) Perylene-d12	15.678	264	60108	500.00	ppb	-0.01
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	7.768	152	659083	1941.12	ppb	0.00
Spiked Amount 2000.000			Recovery =	97.06%		
17) Fluoranthene-d10	11.156	212	892829	1601.30	ppb	0.00
Spiked Amount 2000.000			Recovery =	80.06%		
Target Compounds						Qvalue
2) Naphthalene	7.185	128	982356	1873.64	ppb	97
3) 2-Methylnaphthalene	7.798	142	891344	1993.65	ppb	95
5) 1-Methylnaphthalene	7.887	142	819115	2028.56	ppb	91
7) Acenaphthylene	8.597	152	1319050	1947.22	ppb	97
8) Acenaphthene	8.751	153	802589	1657.65	ppb	99
9) Dibenzofuran	8.905	168	1058864	1784.47	ppm	84
10) Fluorene	9.213	166	913896	1778.00	ppb	100
12) Pentachlorophenol	9.874	266	227078	3339.59	ppb	93
13) Phenanthrene	10.063	178	1203167	1793.84	ppb	99
14) Anthracene	10.112	178	578745	1031.39	ppb	100
15) Carbazole	10.243	167	560504	1022.31	ppm	100
16) Fluoranthene	11.172	202	1117381	1641.67	ppb	95
19) Pyrene	11.410	202	1158887	2738.98	ppb	87
20) Benzo[a]anthracene	13.009	228	419680	1096.17	ppb	98
21) Chrysene	13.064	228	412244	1127.07	ppb	98
23) Benzo[b]fluoranthene	14.926	252	200875	1305.79	ppb	94
24) Benzo[k]fluoranthene	14.980	252	215235	1356.62	ppb	95
25) Benzo[a]pyrene	15.560	252	185282	1107.45	ppb	95
26) Indeno[1,2,3-cd]pyrene	18.011	276	160534	1029.81	ppb	86
27) Dibenz[a,h]anthracene	18.089	278	162050	1025.32	ppb	86
28) Benzo[g,h,i]perylene	18.487	276	182656	1144.56	ppb	83

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\st1745\
Data File : T050030.D
Acq On : 17 Jul 2020 11:54 am
Operator : nareshj
Sample : ic1745-5 Inst : MSBNA06
Misc : OP81034,st1745,250,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 17 12:28:58 2020
Quant Method : C:\msdchem\1\METHODS\SIM_LVT071720.M
Quant Title : PAH's by 8270 SIM
QLast Update : Fri Jul 17 09:28:45 2020
Response via : Initial Calibration



SIM_LVT071720.M Fri Jul 17 13:54:03 2020 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\st1745\
Data File : T050031.D
Acq On : 17 Jul 2020 12:23 pm
Operator : nareshj
Sample : ic1745-6 Inst : MSBNA06
Misc : OP81034,st1745,250,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 17 12:56:57 2020
Quant Method : C:\msdchem\1\METHODS\SIM_LVT071720.M
Quant Title : PAH's by 8270 SIM
QLast Update : Fri Jul 17 09:28:45 2020
Response via : Initial Calibration

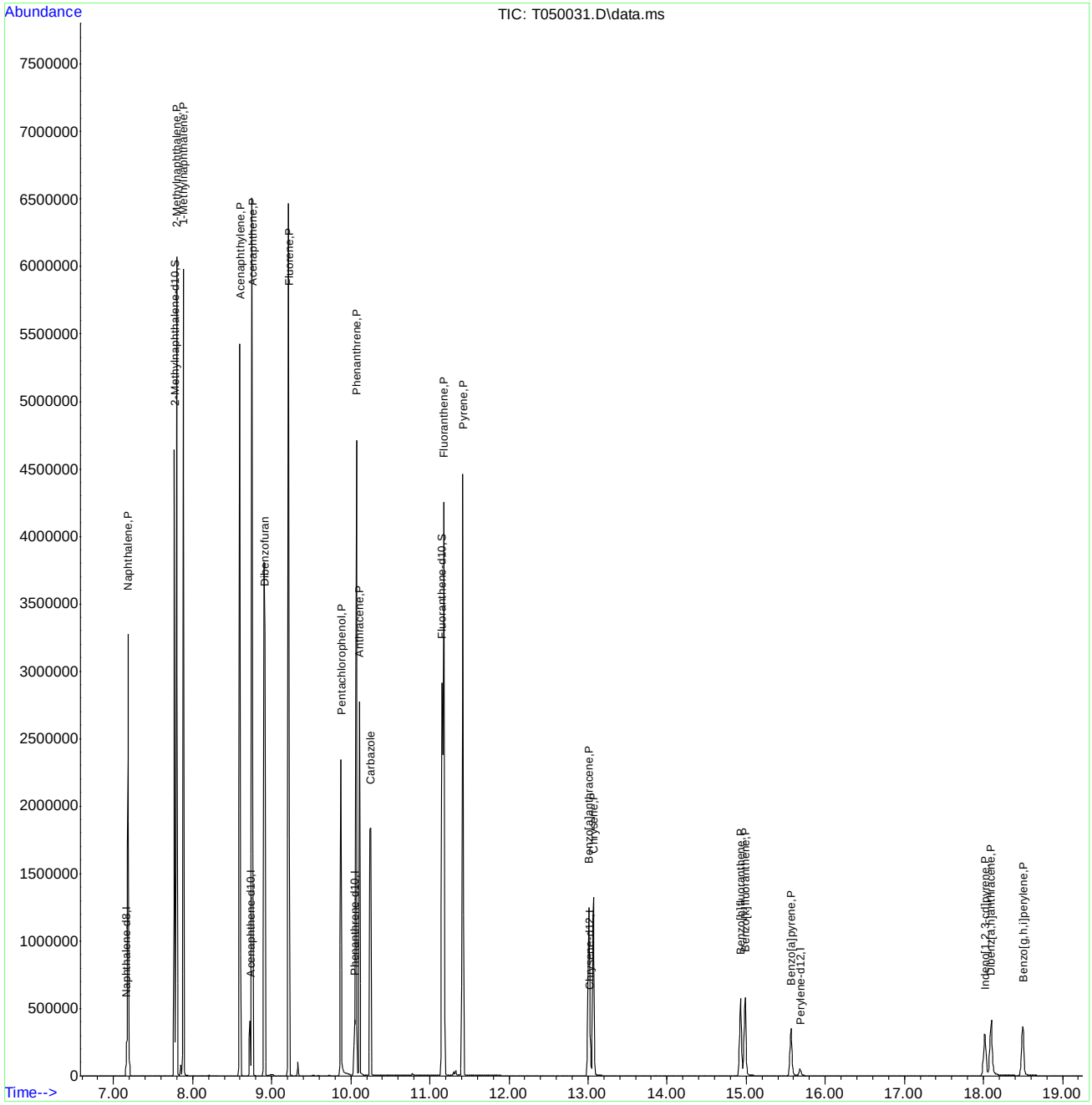
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	7.166	136	196720	500.00	ppb	0.00
6) Acenaphthene-d10	8.725	162	142321	500.00	ppb	0.00
11) Phenanthrene-d10	10.046	188	260320	500.00	ppb	0.00
18) Chrysene-d12	13.027	240	144045	500.00	ppb	0.00
22) Perylene-d12	15.678	264	64708	500.00	ppb	-0.01
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	7.772	152	1572101	4495.84	ppb	0.00
Spiked Amount 2000.000			Recovery = 224.79%			
17) Fluoranthene-d10	11.156	212	2265363	3577.48	ppb	0.00
Spiked Amount 2000.000			Recovery = 178.87%			
Target Compounds						Qvalue
2) Naphthalene	7.185	128	2304908	4268.61	ppb	98
3) 2-Methylnaphthalene	7.801	142	2173366	4720.12	ppb	94
5) 1-Methylnaphthalene	7.887	142	2004381	4819.93	ppb	94
7) Acenaphthylene	8.597	152	3212222	4377.02	ppb	100
8) Acenaphthene	8.751	153	1962666	3741.67	ppb	91
9) Dibenzofuran	8.913	168	2721777	4233.92	ppm	99
10) Fluorene	9.213	166	2245211	4031.93	ppb	94
12) Pentachlorophenol	9.874	266	662623	8580.66	ppb	98
13) Phenanthrene	10.071	178	3040104	3991.00	ppb	98
14) Anthracene	10.112	178	1512572	2373.50	ppb	99
15) Carbazole	10.252	167	1463806	2350.83	ppm	95
16) Fluoranthene	11.180	202	2874646	3718.81	ppb	96
19) Pyrene	11.419	202	2931974	6059.43	ppb	92
20) Benzo[a]anthracene	13.012	228	1110747	2536.87	ppb	98
21) Chrysene	13.068	228	1093663	2614.59	ppb	98
23) Benzo[b]fluoranthene	14.931	252	719886	4346.97	ppb	94
24) Benzo[k]fluoranthene	14.985	252	727398	4258.84	ppb	95
25) Benzo[a]pyrene	15.565	252	475105	2637.89	ppb	94
26) Indeno[1,2,3-cd]pyrene	18.016	276	418024	2490.94	ppb	85
27) Dibenz[a,h]anthracene	18.099	278	419473	2465.40	ppb	88
28) Benzo[g,h,i]perylene	18.497	276	460443	2680.11	ppb	84

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\st1745\
Data File : T050031.D
Acq On : 17 Jul 2020 12:23 pm
Operator : nareshj
Sample : ic1745-6 Inst : MSBNA06
Misc : OP81034,st1745,250,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 17 12:56:57 2020
Quant Method : C:\msdchem\1\METHODS\SIM_LVT071720.M
Quant Title : PAH's by 8270 SIM
QLast Update : Fri Jul 17 09:28:45 2020
Response via : Initial Calibration



SIM_LVT071720.M Fri Jul 17 13:54:05 2020 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\st1745\
Data File : T050032.D
Acq On : 17 Jul 2020 12:53 pm
Operator : nareshj
Sample : ic1745-7 Inst : MSBNA06
Misc : OP81034,st1745,250,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 17 13:14:37 2020
Quant Method : C:\msdchem\1\METHODS\SIM_LVT071720.M
Quant Title : PAH's by 8270 SIM
QLast Update : Fri Jul 17 09:28:45 2020
Response via : Initial Calibration

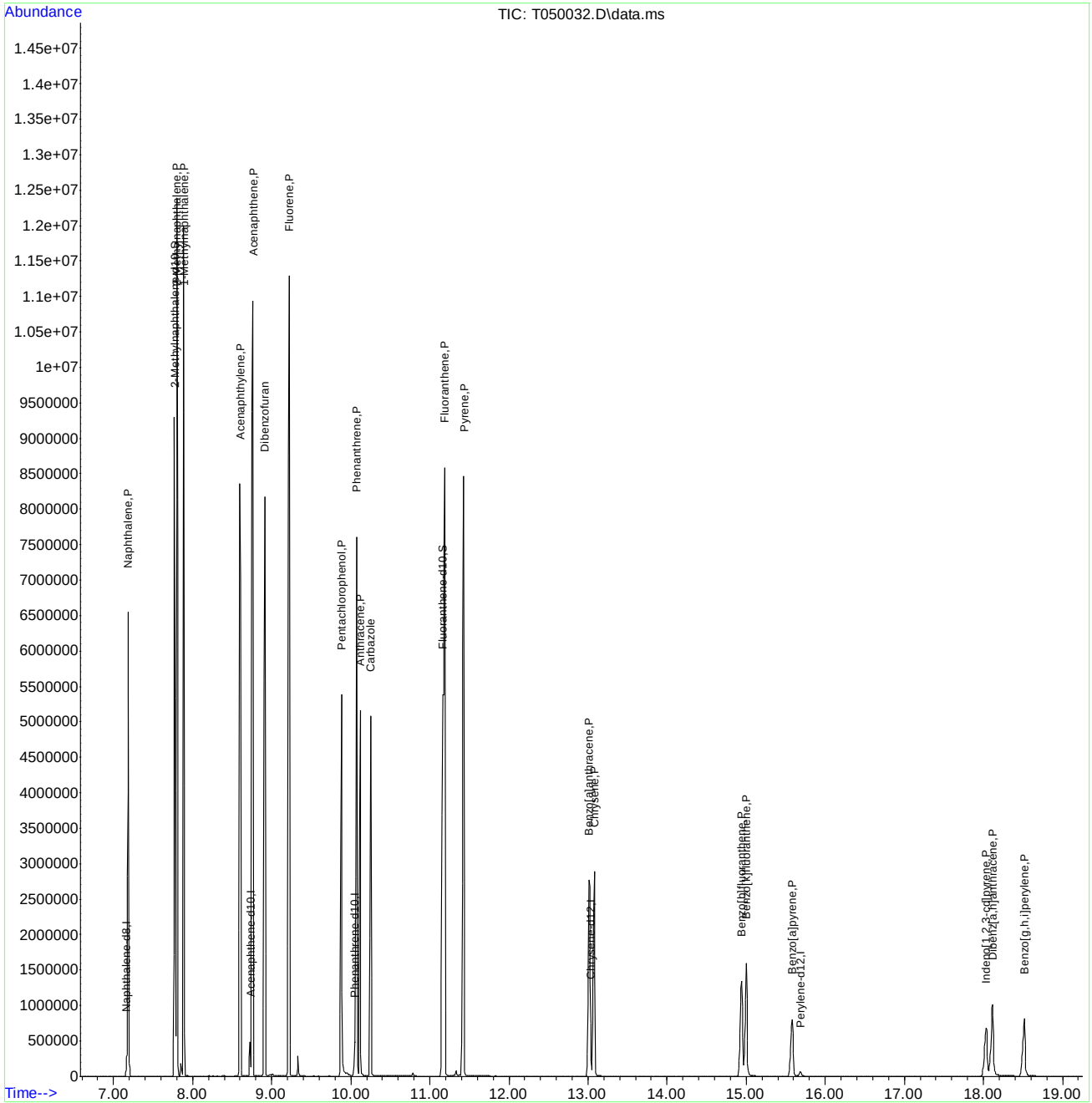
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	7.166	136	218159	500.00	ppb	0.00
6) Acenaphthene-d10	8.725	162	159187	500.00	ppb	0.00
11) Phenanthrene-d10	10.046	188	290333	500.00	ppb	0.00
18) Chrysene-d12	13.031	240	167959	500.00	ppb	0.00
22) Perylene-d12	15.683	264	78964	500.00	ppb	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	7.775	152	3427396	8838.32	ppb	0.01
Spiked Amount 2000.000			Recovery = 441.92%			
17) Fluoranthene-d10	11.164	212	5071963	7181.68	ppb	0.01
Spiked Amount 2000.000			Recovery = 359.08%			
Target Compounds						Qvalue
2) Naphthalene	7.187	128	4737257	7911.08	ppb	98
3) 2-Methylnaphthalene	7.805	142	4651044	9108.48	ppb	93
5) 1-Methylnaphthalene	7.890	142	4371537	9479.15	ppb	93
7) Acenaphthylene	8.596	152	6627300	8073.68	ppb	94
8) Acenaphthene	8.759	153	4399756	7499.10	ppb	99
9) Dibenzofuran	8.913	168	5396156	7504.74	ppm	93
10) Fluorene	9.221	166	4897415	7862.92	ppb	97
12) Pentachlorophenol	9.882	266	1721746	19990.99	ppb	98
13) Phenanthrene	10.071	178	6205954	7304.87	ppb	95
14) Anthracene	10.120	178	3411626	4800.04	ppb	99
15) Carbazole	10.252	167	3177713	4575.77	ppm	100
16) Fluoranthene	11.188	202	6023284	6986.58	ppb	94
19) Pyrene	11.427	202	6392597	11330.37	ppb	87
20) Benzo[a]anthracene	13.016	228	2650142	5190.96	ppb	99
21) Chrysene	13.079	228	2584898	5299.79	ppb	99
23) Benzo[b]fluoranthene	14.941	252	1983915	9816.90	ppb	94
24) Benzo[k]fluoranthene	15.000	252	2072377	9942.98	ppb	94
25) Benzo[a]pyrene	15.579	252	1239429	5639.19	ppb	95
26) Indeno[1,2,3-cd]pyrene	18.035	276	1044759	5101.62	ppb	86
27) Dibenz[a,h]anthracene	18.114	278	1043685	5026.68	ppb	87
28) Benzo[g,h,i]perylene	18.517	276	1125263	5367.35	ppb	84

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\st1745\
Data File : T050032.D
Acq On : 17 Jul 2020 12:53 pm
Operator : nareshj
Sample : ic1745-7 Inst : MSBNA06
Misc : OP81034,st1745,250,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 17 13:14:37 2020
Quant Method : C:\msdchem\1\METHODS\SIM_LVT071720.M
Quant Title : PAH's by 8270 SIM
QLast Update : Fri Jul 17 09:28:45 2020
Response via : Initial Calibration



SIM_LVT071720.M Fri Jul 17 13:54:07 2020 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\st1745\
Data File : T050033.D
Acq On : 17 Jul 2020 1:23 pm
Operator : nareshj
Sample : icv1745-4 Inst : MSBNA06
Misc : OP81034,st1745,250,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 17 14:35:52 2020
Quant Method : C:\msdchem\1\METHODS\SIM_LVT071720.M
Quant Title : PAH's by 8270 SIM
QLast Update : Fri Jul 17 13:46:08 2020
Response via : Initial Calibration

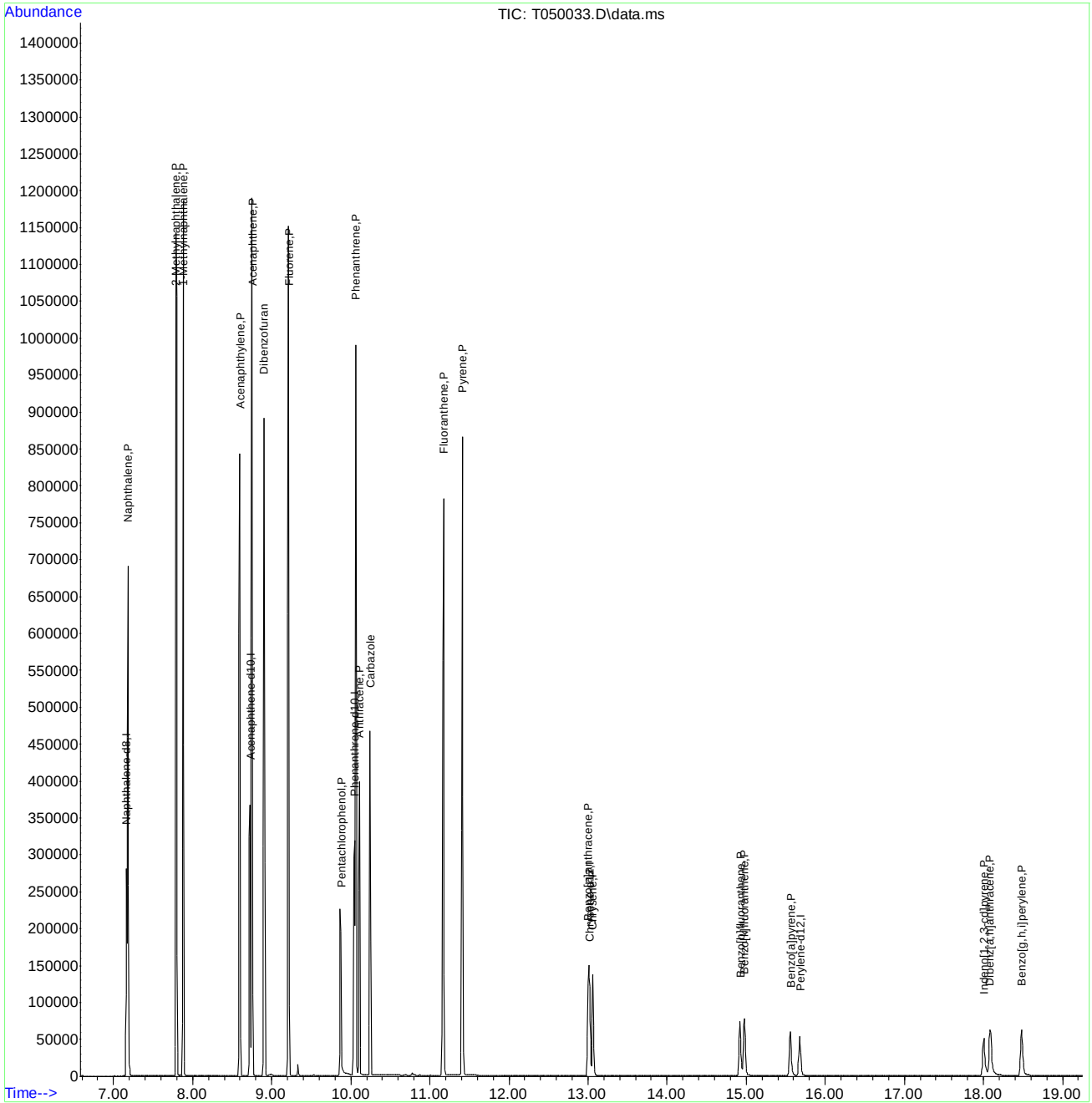
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	7.164	136	212760	500.00	ppb	0.00
6) Acenaphthene-d10	8.725	162	140570	500.00	ppb	0.00
11) Phenanthrene-d10	10.046	188	251866	500.00	ppb	0.00
18) Chrysene-d12	13.020	240	86127	500.00	ppb	-0.02
22) Perylene-d12	15.678	264	66857	500.00	ppb	-0.01
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	0.000	152	0	0.00	ppb	
Spiked Amount 2000.000			Recovery =	0.00%		
17) Fluoranthene-d10	0.000	212	0d	0.00	ppb	
Spiked Amount 2000.000			Recovery =	0.00%		
Target Compounds						Qvalue
2) Naphthalene	7.183	128	458825	867.75	ppb	100
3) 2-Methylnaphthalene	7.794	142	394377	826.40	ppb	94
5) 1-Methylnaphthalene	7.883	142	391614	894.67	ppb	100
7) Acenaphthylene	8.596	152	587198	866.33	ppb	99
8) Acenaphthene	8.751	153	375259	893.46	ppb	100
9) Dibenzofuran	8.905	168	512858	925.66	ppm	99
10) Fluorene	9.213	166	427670	926.20	ppb	100
12) Pentachlorophenol	9.874	266	79076	1763.31	ppb	100
13) Phenanthrene	10.063	178	567094	889.54	ppb	100
14) Anthracene	10.112	178	256108	420.00	ppb	100
15) Carbazole	10.243	167	267036	464.83	ppm	99
16) Fluoranthene	11.172	202	513874	861.24	ppb	99
19) Pyrene	11.410	202	528478	1354.71	ppb	99
20) Benzo[a]anthracene	13.005	228	112206	406.66	ppb	99
21) Chrysene	13.061	228	116423	428.33	ppb	100
23) Benzo[b]fluoranthene	14.921	252	91874	413.30	ppb	100
24) Benzo[k]fluoranthene	14.975	252	97714	414.85	ppb	100
25) Benzo[a]pyrene	15.560	252	82938	417.97	ppb	99
26) Indeno[1,2,3-cd]pyrene	18.006	276	69132	405.70	ppb	98
27) Dibenz[a,h]anthracene	18.085	278	69683	411.00	ppb	100
28) Benzo[g,h,i]perylene	18.482	276	80341	413.45	ppb	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\st1745\
Data File : T050033.D
Acq On : 17 Jul 2020 1:23 pm
Operator : nareshj
Sample : icv1745-4 Inst : MSBNA06
Misc : OP81034,st1745,250,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 17 14:35:52 2020
Quant Method : C:\msdchem\1\METHODS\SIM_LVT071720.M
Quant Title : PAH's by 8270 SIM
QLast Update : Fri Jul 17 13:46:08 2020
Response via : Initial Calibration



SIM_LVT071720.M Fri Jul 17 14:48:01 2020 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\Jenniferf\AUGUST 2020\08-14-2020\ST1749\
Data File : T050176.D
Acq On : 13 Aug 2020 2:42 pm
Operator : nareshj
Sample : cc1745-4
Misc : OP81487,st1749,250,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 14 01:35:10 2020
Quant Method : C:\msdchem\1\methods\SIM_LVT071720.M
Quant Title : PAH's by 8270 SIM
QLast Update : Fri Aug 14 01:35:08 2020
Response via : Initial Calibration

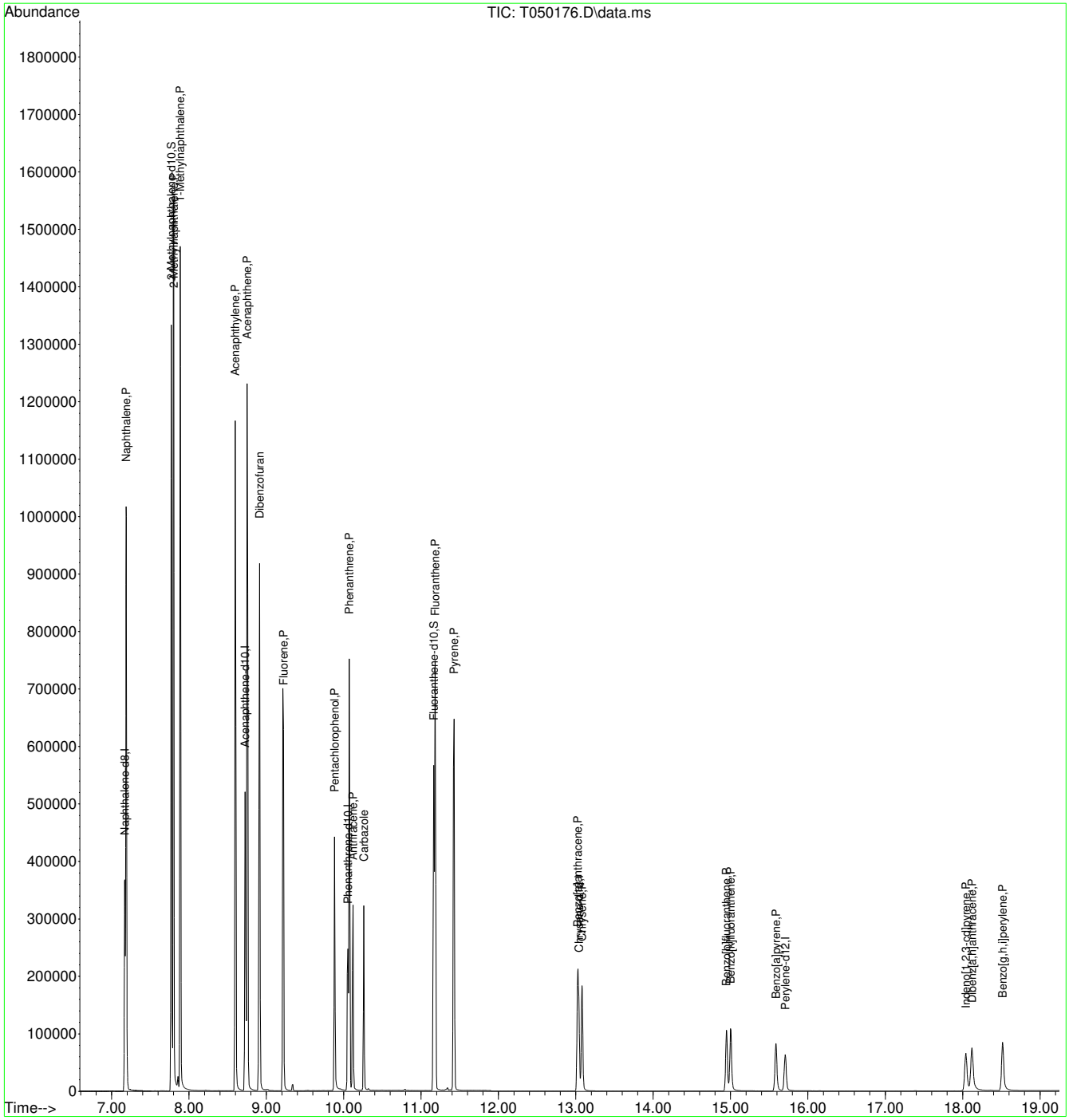
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	7.170	136	277199	500.00	ppb	0.00
6) Acenaphthene-d10	8.725	162	162432	500.00	ppb	0.00
11) Phenanthrene-d10	10.054	188	189136	500.00	ppb	0.00
18) Chrysene-d12	13.038	240	111673	500.00	ppb	0.00
22) Perylene-d12	15.707	264	85771	500.00	ppb	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	7.772	152	423465	911.39	ppb	0.00
Spiked Amount 2000.000			Recovery = 45.57%			
17) Fluoranthene-d10	11.164	212	377804	1103.06	ppb	0.00
Spiked Amount 2000.000			Recovery = 55.15%			
Target Compounds						Qvalue
2) Naphthalene	7.187	128	660099	958.20	ppb	100
3) 2-Methylnaphthalene	7.801	142	552847	889.16	ppb	99
5) 1-Methylnaphthalene	7.887	142	510529	895.21	ppb	99
7) Acenaphthylene	8.597	152	766699	978.91	ppb	94
8) Acenaphthene	8.751	153	448703	924.54	ppb	88
9) Dibenzofuran	8.913	168	559704	874.25	ppm	88
10) Fluorene	9.221	166	330197	618.86	ppb	96
12) Pentachlorophenol	9.882	266	120649	3496.21	ppb	91
13) Phenanthrene	10.071	178	455405	951.27	ppb	99
14) Anthracene	10.120	178	216870	473.61	ppb	100
15) Carbazole	10.260	167	199976	463.55	ppm	97
16) Fluoranthene	11.180	202	457381	1023.07	ppb	96
19) Pyrene	11.427	202	472681	927.02	ppb	93
20) Benzo[a]anthracene	13.023	228	164586	460.04	ppb	100
21) Chrysene	13.079	228	165775	470.38	ppb	100
23) Benzo[b]fluoranthene	14.946	252	130708	456.03	ppb	100
24) Benzo[k]fluoranthene	15.000	252	138705	456.92	ppb	99
25) Benzo[a]pyrene	15.589	252	115858	455.12	ppb	100
26) Indeno[1,2,3-cd]pyrene	18.040	276	90667	414.74	ppb	100
27) Dibenz[a,h]anthracene	18.119	278	84193	387.08	ppb	100
28) Benzo[g,h,i]perylene	18.517	276	110991	445.29	ppb	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\Jenniferf\AUGUST 2020\08-14-2020\ST1749\
Data File : T050176.D
Acq On : 13 Aug 2020 2:42 pm
Operator : nareshj
Sample : cc1745-4
Misc : OP81487,st1749,250,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

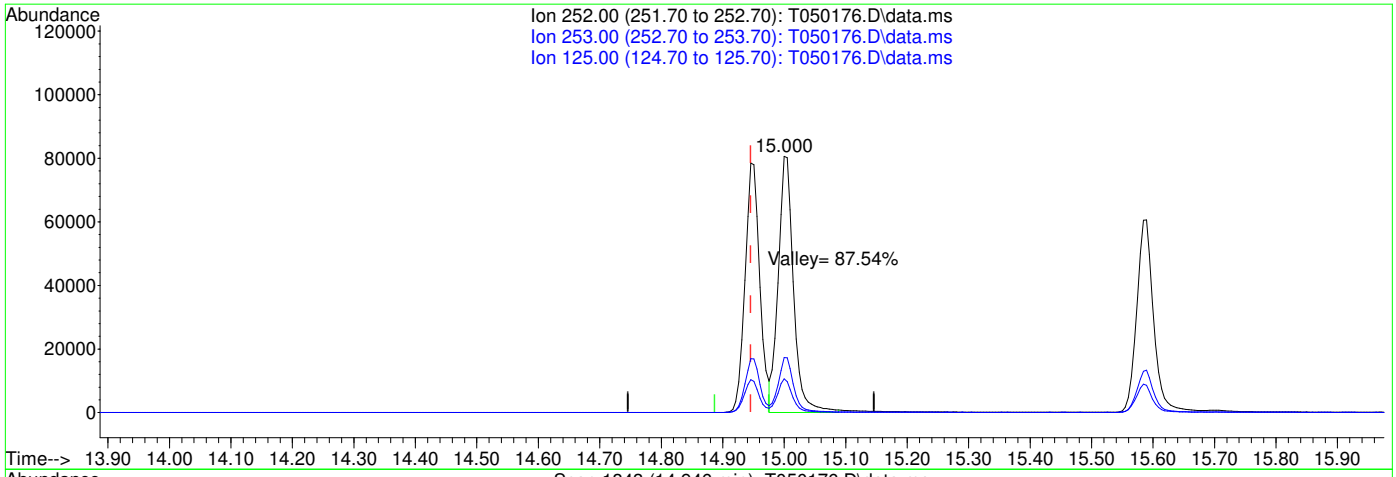
Quant Time: Aug 14 01:35:10 2020
Quant Method : C:\msdchem\1\methods\SIM_LVT071720.M
Quant Title : PAH's by 8270 SIM
QLast Update : Fri Aug 14 01:35:08 2020
Response via : Initial Calibration

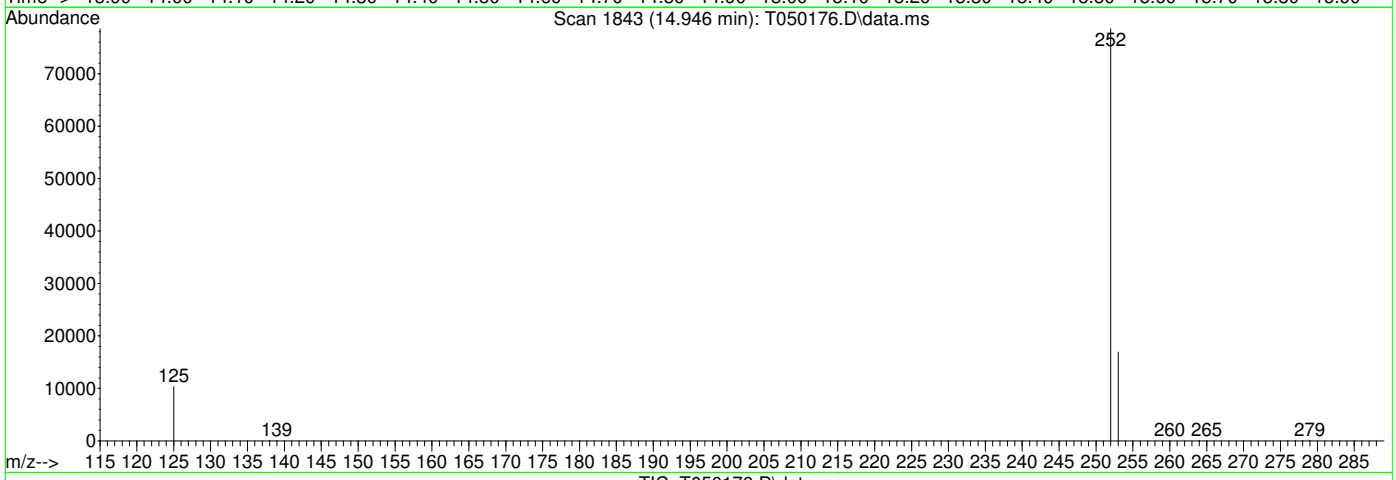


Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\Jenniferf\AUGUST 2020\08-14-2020\ST1749\
Data File : T050176.D
Acq On : 13 Aug 2020 2:42 pm
Operator : nareshj
Sample : cc1745-4
Misc : OP81487,st1749,250,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 14 01:35:10 2020
Quant Method : C:\msdchem\1\methods\SIM_LVT071720.M
Quant Title : PAH's by 8270 SIM
QLast Update : Fri Aug 14 01:35:08 2020
Response via : Initial Calibration





TIC: T050176.D\data.ms

(23) Benzo[b]fluoranthene (P)

14.946min (0.000) 456.03ppb

response 130708

Ion	Exp%	Act%
252.00	100	100
253.00	21.60	21.50
125.00	12.80	13.05
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 06/24/20 14:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071356.D
Acq On : 23 Jun 2020 10:04 am
Operator : marthav
Sample : ic2918-1 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 23 16:54:17 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	0.000	152	0m	40.00	ppm		-6.00
22) Naphthalene-d8	0.000	136	0m	40.00	ppm		-7.43
43) Acenaphthene-d10	0.000	164	0m	40.00	ppm		-9.48
70) Phenanthrene-d10	0.000	188	0m	40.00	ppm		-11.22
92) Chrysene-d12	0.000	240	0m	40.00	ppm		-14.49
102) Perylene-d12	0.000	264	0m	40.00	ppm		-16.82
110) 1,4-Dichlorobenzene-d4A	6.005	152	175495	40.00	ppm		0.00
120) Naphthalene-d8A	7.433	136	686765	40.00	ppm		0.00
127) Acenaphthene-d10A	9.476	164	358350	40.00	ppm		0.00
136) Phenanthrene-d10A	11.225	188	643792	40.00	ppm		0.00
146) Chrysene-d12A	14.493	240	465781	40.00	ppm		0.00
153) Perylene-d12A	16.809	264	402255	40.00	ppm		-0.01
System Monitoring Compounds							
7) 2-Fluorophenol	0.000	112	0d	0.00	ppm		
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#			
9) Phenol-d5	0.000	99	0d	0.00	ppm		
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#			
23) Nitrobenzene-d5	0.000	82	0d	0.00	ppm		
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#			
47) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm		
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#			
75) 2,4,6-Tribromophenol	0.000	330	0d	0.00	ppm		
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#			
95) Terphenyl-d14	0.000	244	0d	0.00	ppm		
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#			
Target Compounds							Qvalue
111) 2-Picoline	3.994	93	8256	0.95	ppm		89
112) N-Nitrosomethylethylamine	4.111	42	6507m	2.11	ppm		
113) Methyl methanesulfonate	4.432	80	3965	0.92	ppm		92
114) N-Nitrosodiethylamine	4.849	102	3125	0.90	ppm	#	7
115) Ethyl methanesulfonate	5.176	79	5412	0.89	ppm		96
116) Pentachloroethane	5.700	167	2337	0.94	ppm		92
117) N-Nitrosopyrrolidine	6.417	100	2483	0.70	ppm	#	1
118) N-Nitrosomorpholine	6.470	56	5091	1.38	ppm	#	70
119) O-Toluidine	6.486	106	10147	0.94	ppm		97
121) N-Nitrosopiperidine	6.807	42	6295	1.67	ppm	#	58
122) A,A-Dimethylphenethyla...	7.267	58	20213m	1.12	ppm		
123) Hexachloropropene	7.561	213	2268	0.62	ppm		94
124) N-Nitrosodi-n-butylamine	7.925	84	3931	0.87	ppm	#	20
125) p-Phenylenediamine	7.930	108	5377	0.96	ppm		88
126) Isosafrole	8.171	162	4342	0.97	ppm		87
128) Safrole	8.775	162	4333	0.93	ppm		90
129) 1-Chloronaphthalene	8.845	162	10813	0.97	ppm		97
130) Diphenyl Ether	8.941	170	7575	1.00	ppm		94
131) 1,4-Naphthoquinone	9.032	158	3169	0.65	ppm		76
132) Pentachlorobenzene	9.663	250	4141	0.80	ppm		92
133) 1-Naphthylamine	9.808	143	11709	1.03	ppm		92

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071356.D
Acq On : 23 Jun 2020 10:04 am
Operator : marthav
Sample : ic2918-1 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 23 16:54:17 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration

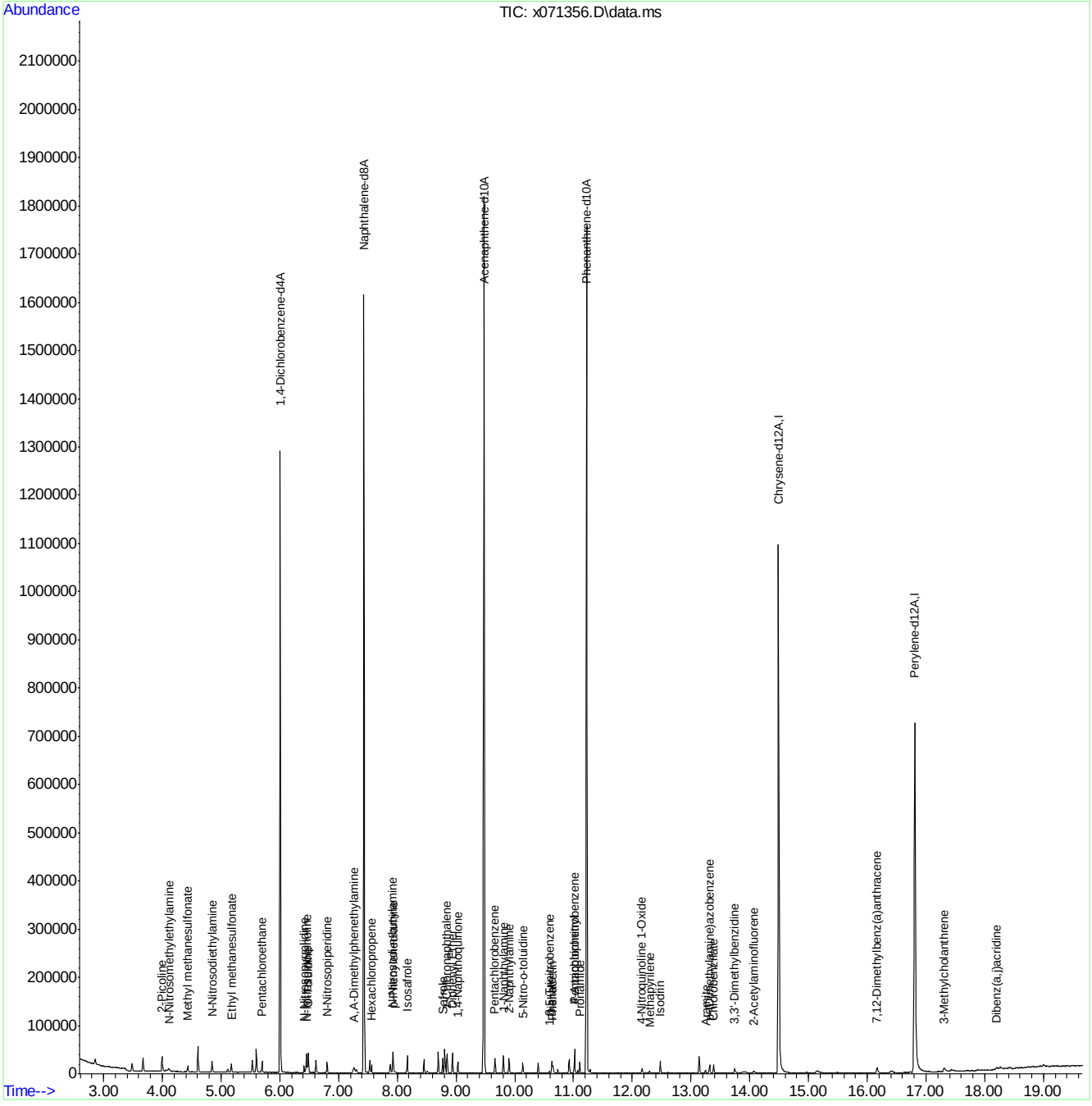
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
134) 2-Naphthylamine	9.904	143	12300	1.06	ppm		96
135) 5-Nitro-o-toluidine	10.134	152	2552	0.69	ppm	#	68
137) 1,3,5-Trinitrobenzene	10.589	75	1080	0.28	ppm	#	76
138) Diallate	10.631	43	10150m	1.43	ppm		
139) Phenacetin	10.647	108	4577	0.71	ppm		85
140) 4-Aminobiphenyl	11.016	169	12376	1.14	ppm		96
141) Pronamide	11.107	173	3728	0.69	ppm		95
142) Pentachloronitrobenzene	11.016	237	1011	0.62	ppm		84
143) 4-Nitroquinoline 1-Oxide	12.166	190	192m	0.47	ppm		
144) Methapyrilene	12.295	58	2289	0.29	ppm	#	66
145) Isodrin	12.477	193	1891	0.85	ppm		82
147) Aramite	13.247	185	738m	0.42	ppm		
148) p-(Dimethylamine)azobe...	13.316	120	3227	0.58	ppm		77
149) Chlorobenzilate	13.386	139	4146	0.75	ppm	#	59
151) 3,3'-Dimethylbenzidine	13.744	212	5535	0.83	ppm		100
152) 2-Acetylaminofluorene	14.065	181	2599	0.46	ppm		84
154) 7,12-Dimethylbenz(a)an...	16.162	256	4637	0.80	ppm		96
156) 3-Methylcholanthrene	17.306	268	3799	0.74	ppm		95
157) Dibenz(a,j)acridine	18.200	279	3086	0.41	ppm		86

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071356.D
Acq On : 23 Jun 2020 10:04 am
Operator : marthav
Sample : ic2918-1 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 23 16:54:17 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration



FA77689

Manual Integration Approval Summary

Sample Number: SX2918-IC2918
Lab FileID: X071356.D
Injection Time: 06/23/20 10:04

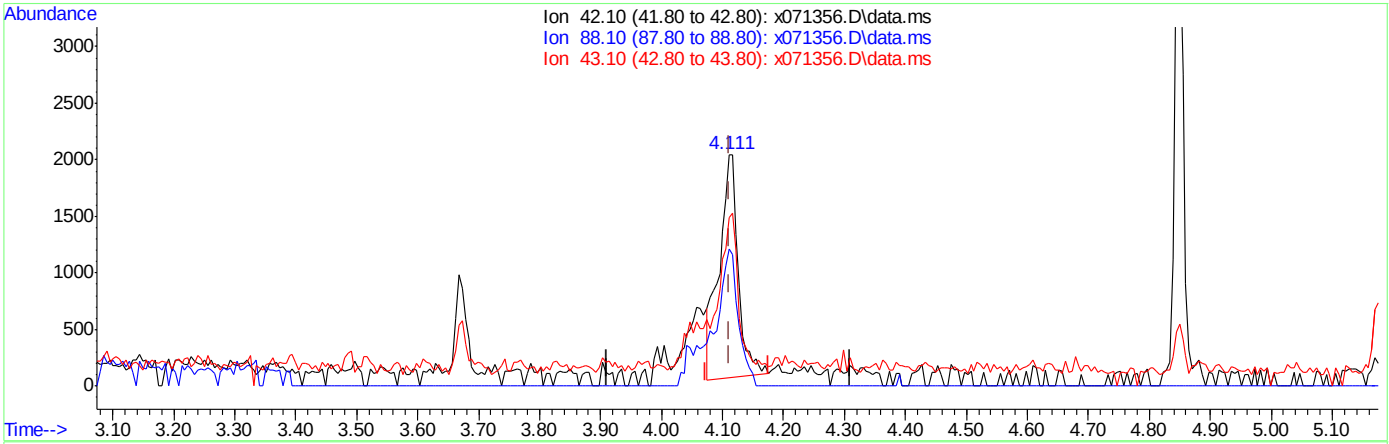
Method: EPA 625.1
Analyst approved: 06/24/20 09:50 Martha Valls
Supervisor approved: 06/24/20 14:07 Naresh Jiawan

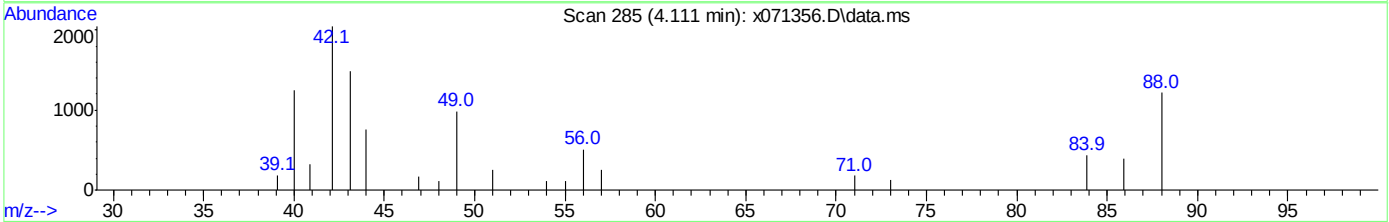
Parameter	CAS	Sig#	R.T. (min.)	Reason
N-Nitrosomethylethylamine	10595-95-6		4.11	Split peak
A,A-Dimethylphenethylamine	122-09-8		7.27	Split peak
Diallate	2303-16-4		10.63	Split peak
4-Nitroquinoline 1-Oxide	56-57-5		12.17	Split peak
Aramite	140-57-8		13.25	Split peak

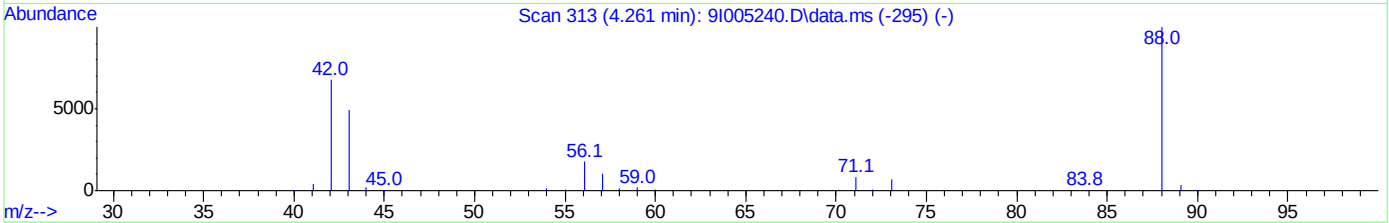
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071356.D
Acq On : 23 Jun 2020 10:04 am
Operator : marthav
Sample : ic2918-1 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 23 14:00:58 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071356.D\data.ms

(112) N-Nitrosomethylethylamine

4.111min (+0.000) 1.40ppm

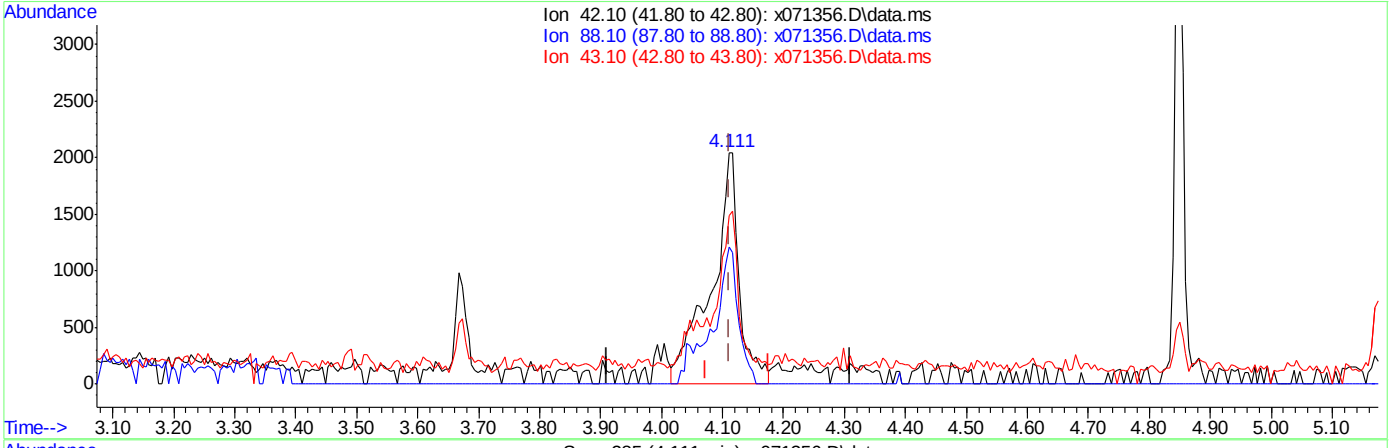
response 4325

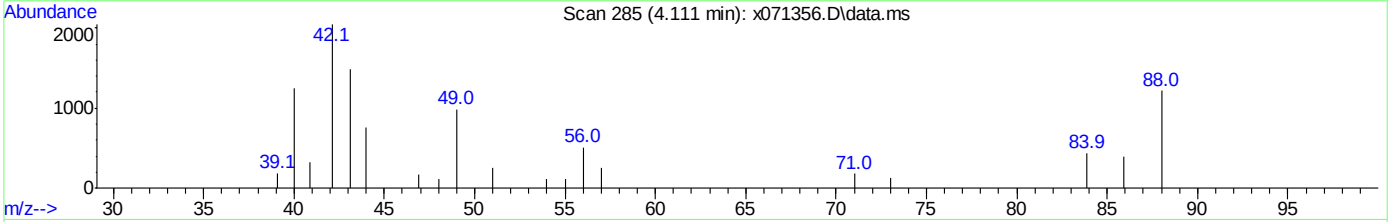
Ion	Exp%	Act%
42.10	100	100
88.10	147.70	62.09#
43.10	72.60	67.64
0.00	0.00	0.00

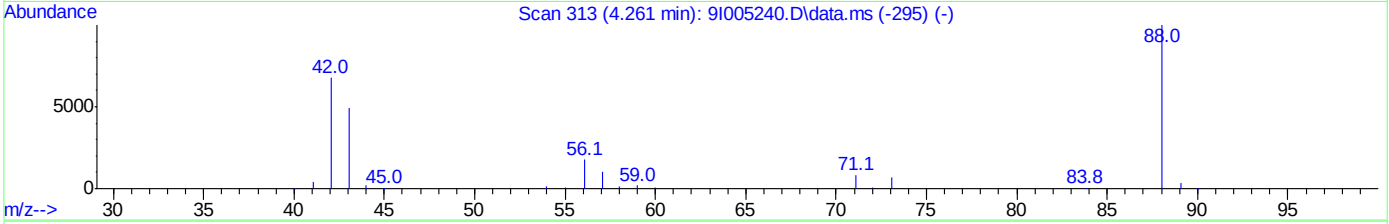
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071356.D
Acq On : 23 Jun 2020 10:04 am
Operator : marthav
Sample : ic2918-1 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 23 14:00:58 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071356.D\data.ms

(112) N-Nitrosomethylethylamine

4.111min (+0.000) 2.11ppm m

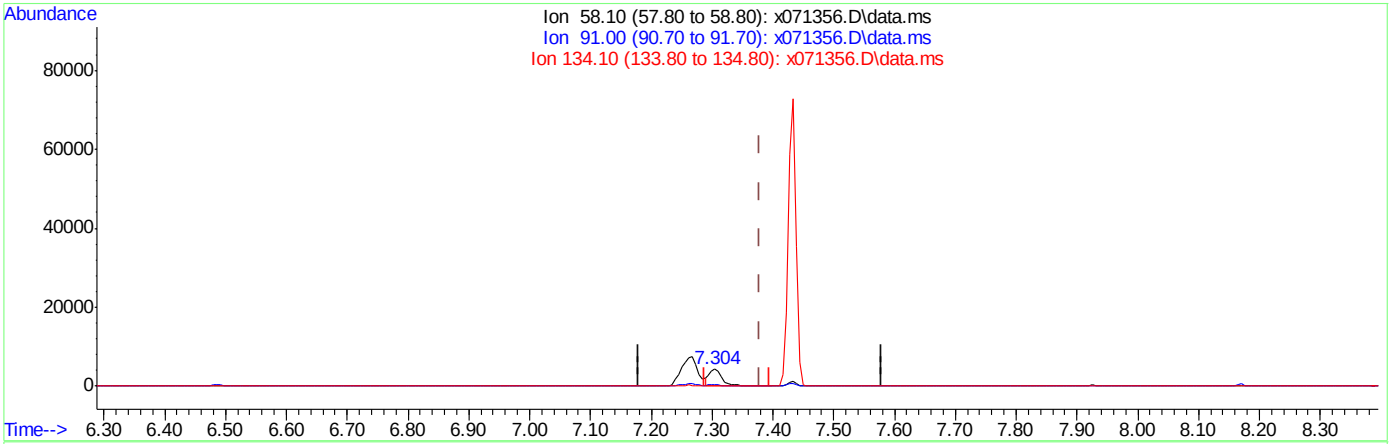
response 6507

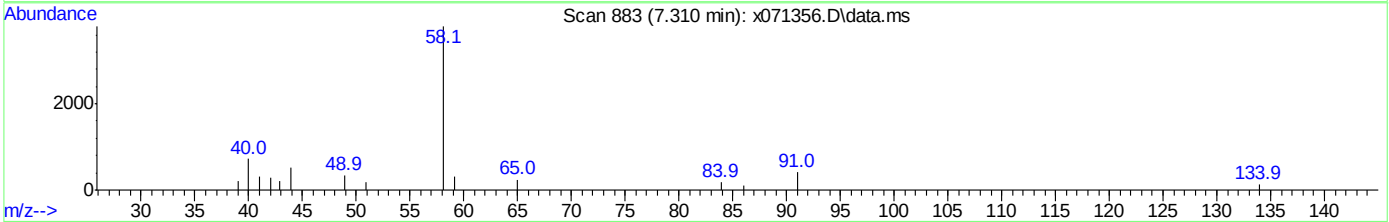
Ion	Exp%	Act%
42.10	100	100
88.10	147.70	59.31#
43.10	72.60	72.84
0.00	0.00	0.00

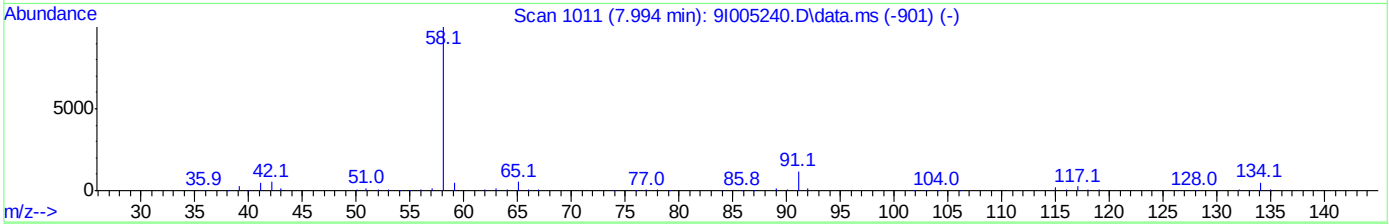
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071356.D
Acq On : 23 Jun 2020 10:04 am
Operator : marthav
Sample : ic2918-1 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 23 14:00:58 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071356.D\data.ms

(122) A,A-Dimethylphenethylamine

7.304min (-0.075) 0.36ppm

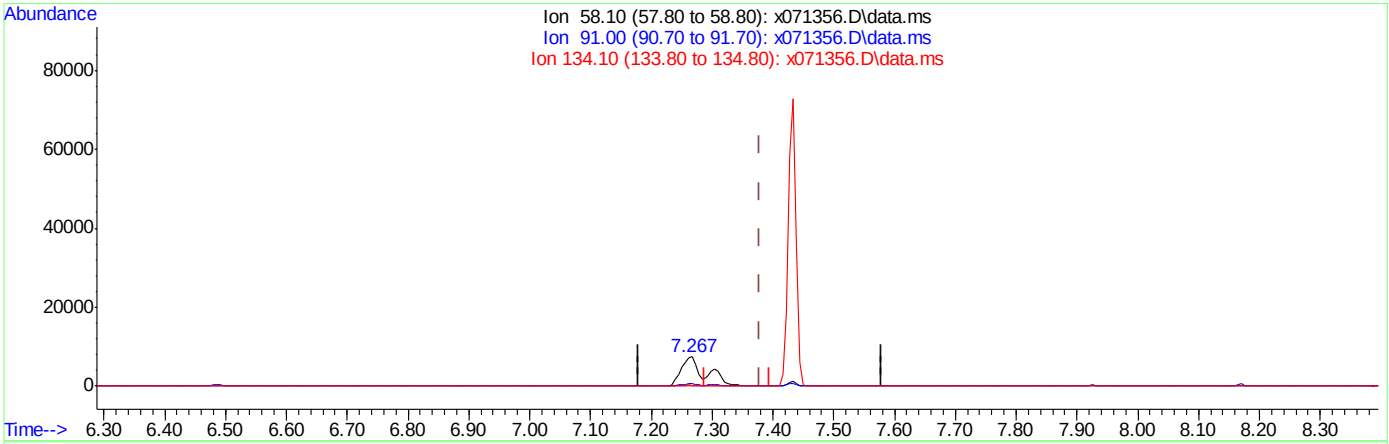
response 6599

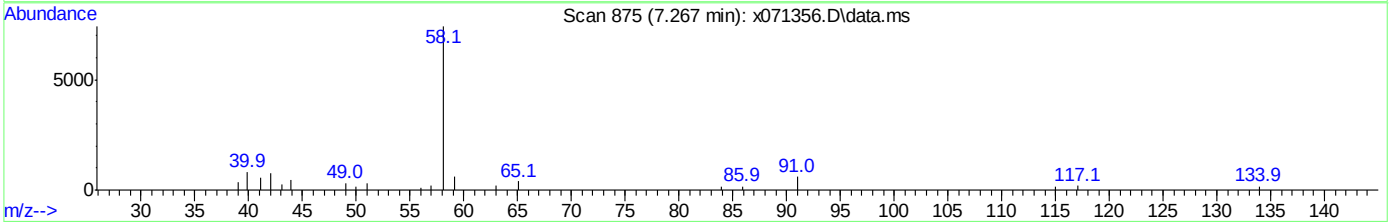
Ion	Exp%	Act%
58.10	100	100
91.00	11.70	9.31
134.10	5.10	4.38
0.00	0.00	0.00

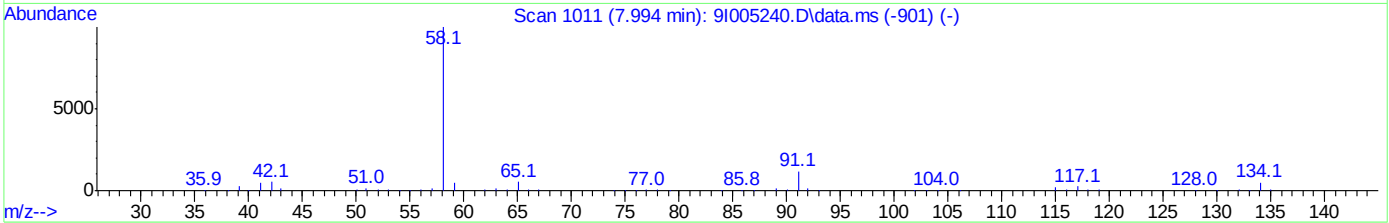
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071356.D
Acq On : 23 Jun 2020 10:04 am
Operator : marthav
Sample : ic2918-1 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 23 14:00:58 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071356.D\data.ms

(122) A,A-Dimethylphenethylamine

7.267min (-0.112) 1.12ppm m

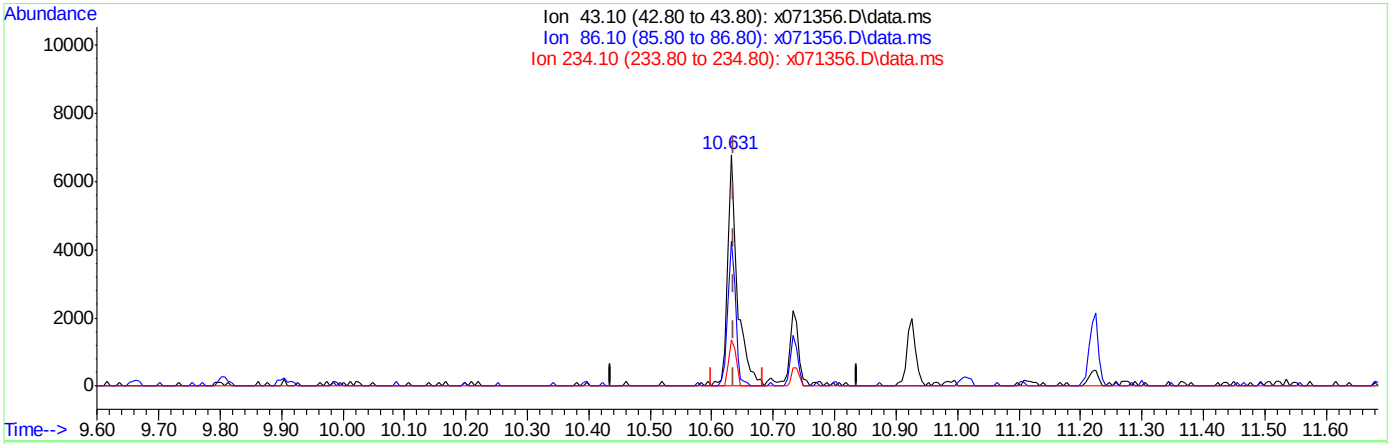
response 20213

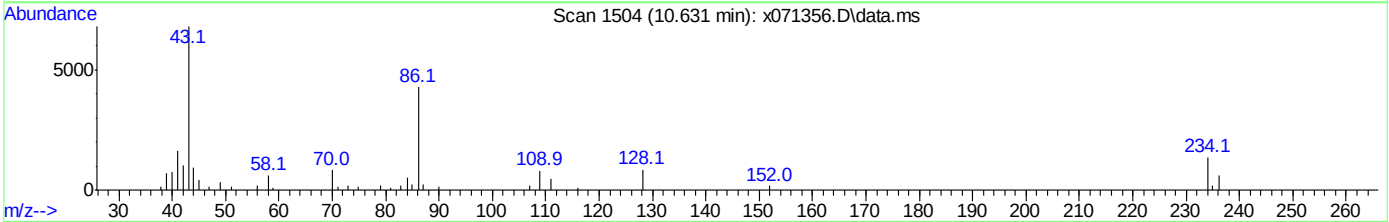
Ion	Exp%	Act%
58.10	100	100
91.00	11.70	8.08
134.10	5.10	2.17
0.00	0.00	0.00

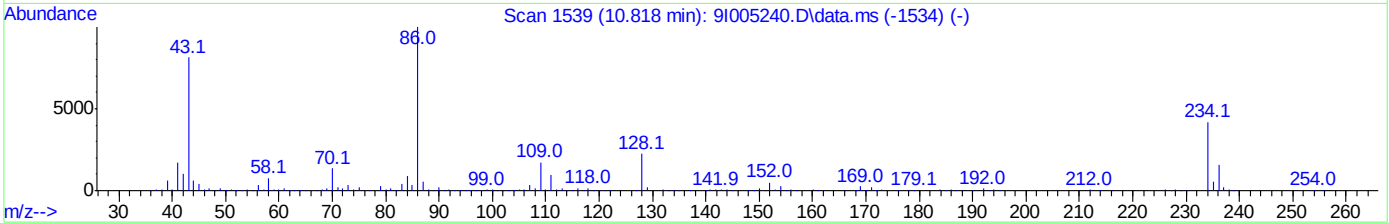
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071356.D
Acq On : 23 Jun 2020 10:04 am
Operator : marthav
Sample : ic2918-1 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 23 14:00:58 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071356.D\data.ms

(138) Diallate

10.631min (-0.005) 1.08ppm

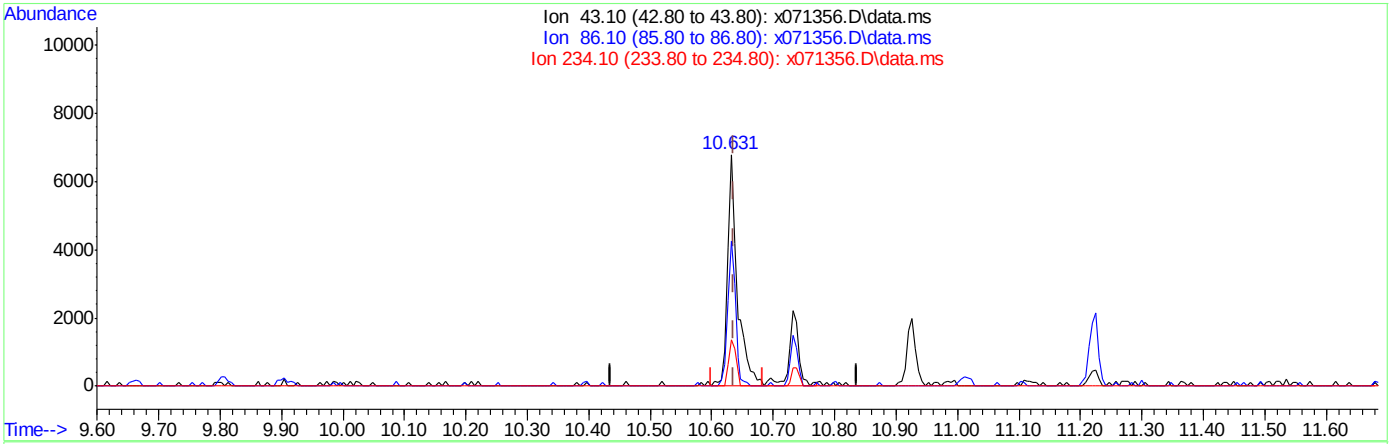
response 7646

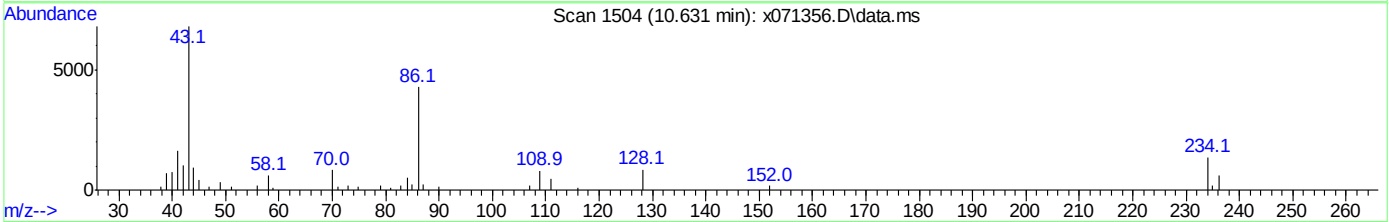
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	62.82#
234.10	51.50	20.16#
0.00	0.00	0.00

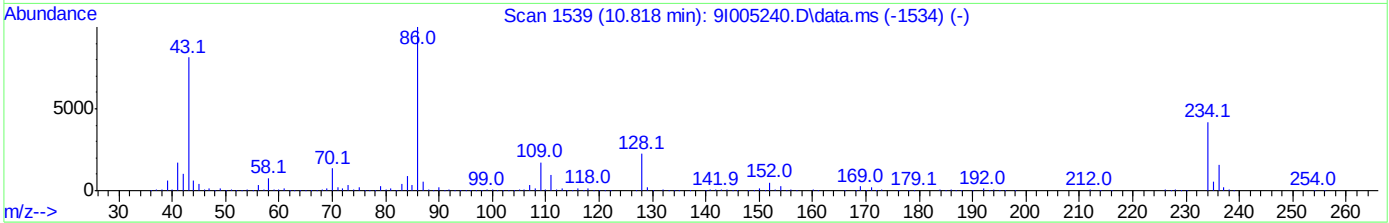
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071356.D
Acq On : 23 Jun 2020 10:04 am
Operator : marthav
Sample : ic2918-1 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 23 14:00:58 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071356.D\data.ms

(138) Diallate

10.631min (-0.005) 1.43ppm m

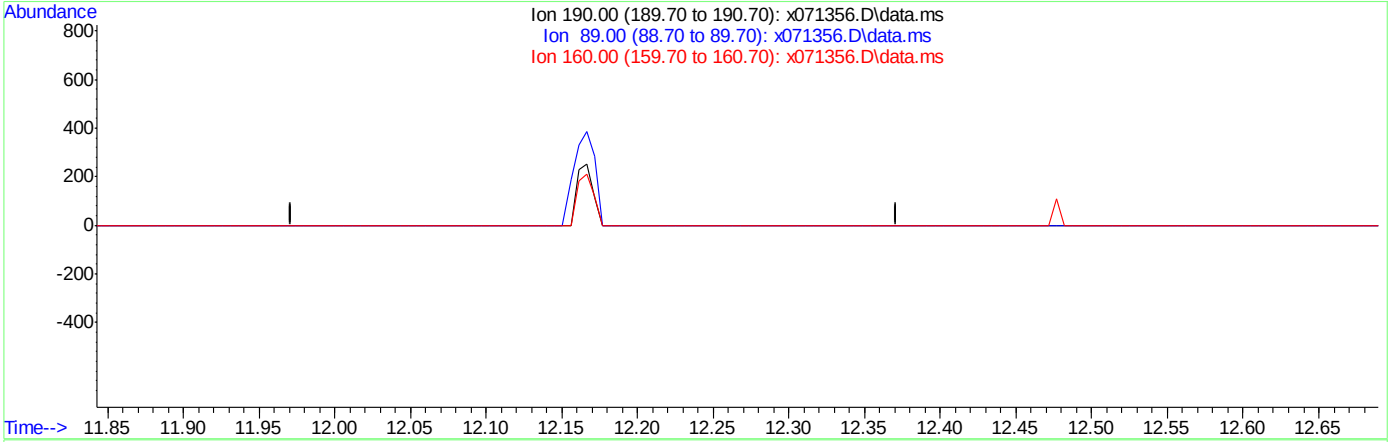
response 10150

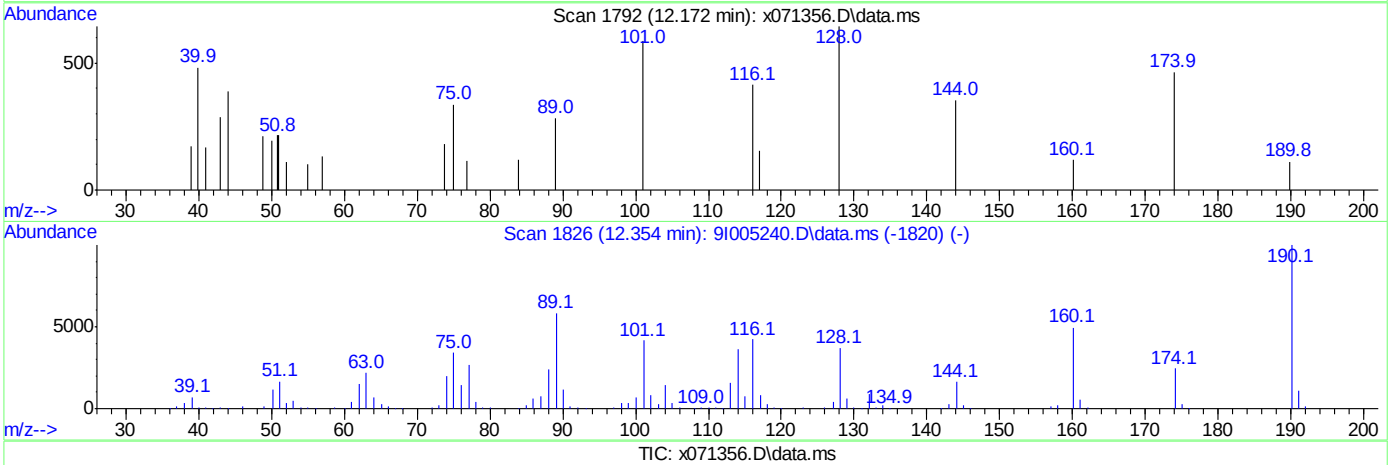
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	62.82#
234.10	51.50	20.16#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071356.D
Acq On : 23 Jun 2020 10:04 am
Operator : marthav
Sample : ic2918-1 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 23 14:00:58 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration





TIC: x071356.D\data.ms

(143) 4-Nitroquinoline 1-Oxide

12.172min (-12.172) 0.00ppm

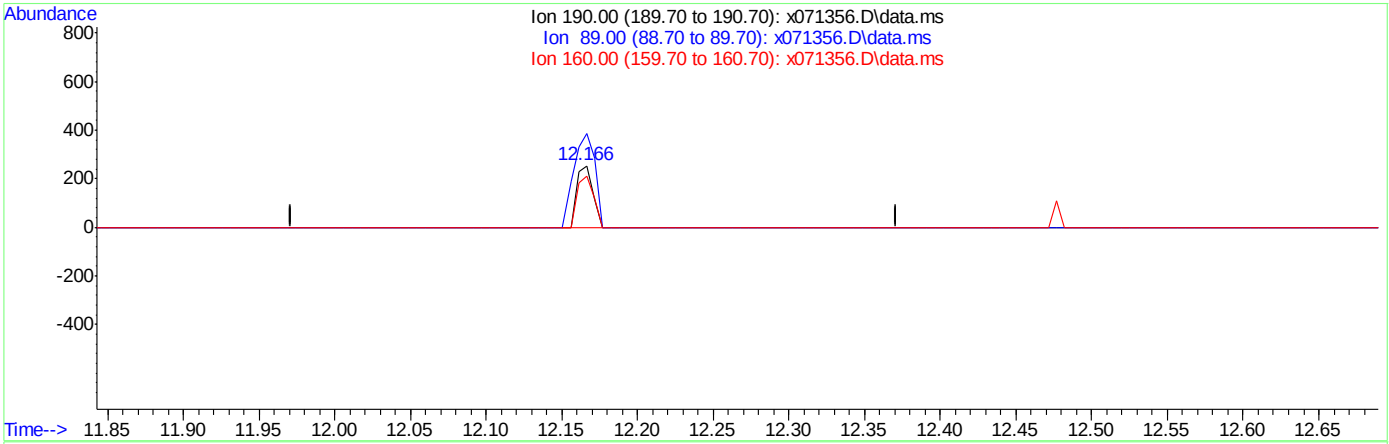
response 0

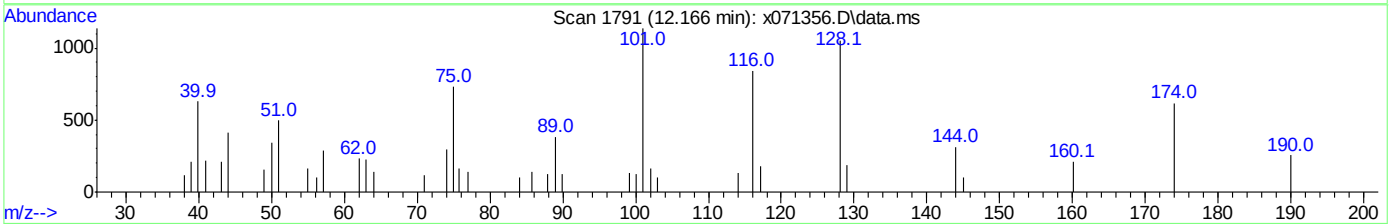
Ion	Exp%	Act%
190.00	100	0.00
89.00	58.20	0.00#
160.00	49.40	0.00#
0.00	0.00	0.00

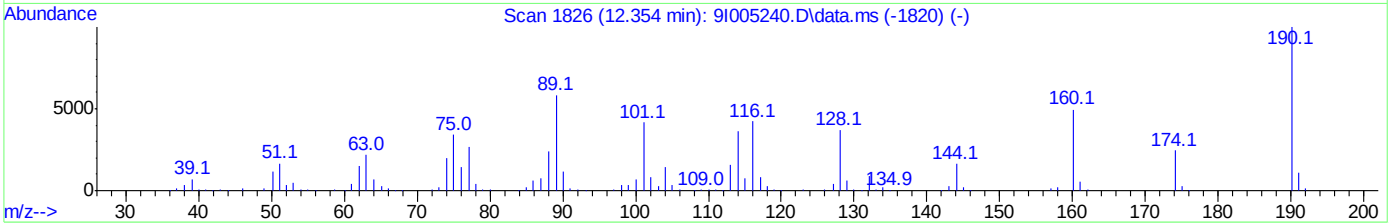
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071356.D
Acq On : 23 Jun 2020 10:04 am
Operator : marthav
Sample : ic2918-1 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 23 14:00:58 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071356.D\data.ms

(143) 4-Nitroquinoline 1-Oxide

12.166min (-0.005) 0.47ppm m

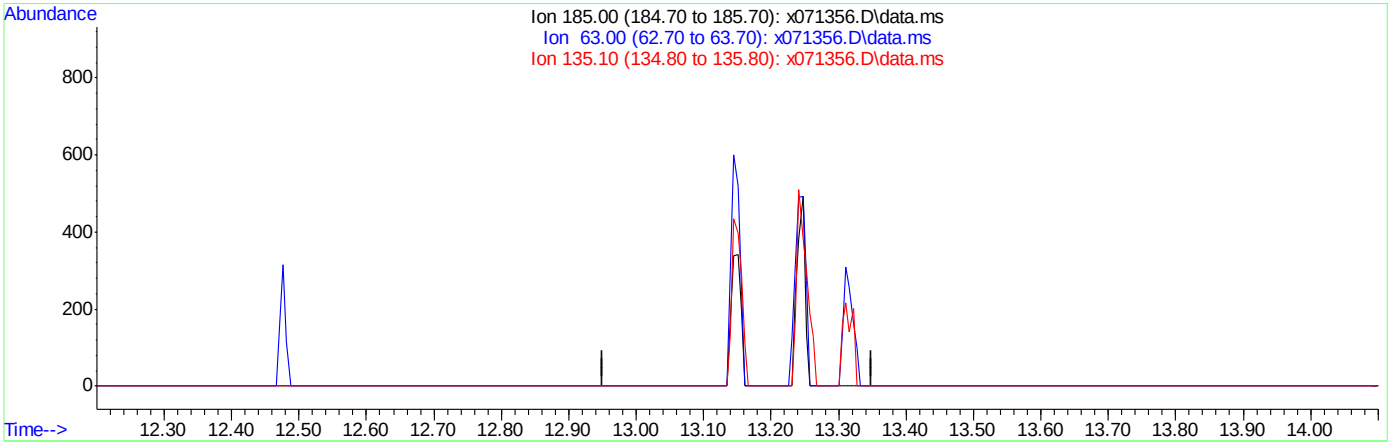
response 192

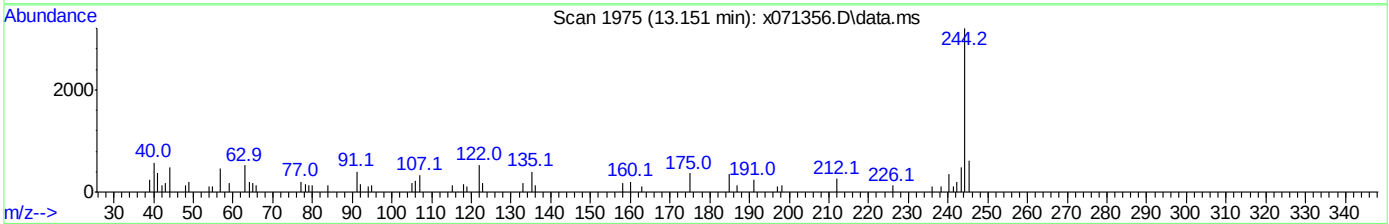
Ion	Exp%	Act%
190.00	100	100
89.00	58.20	150.98#
160.00	49.40	81.96#
0.00	0.00	0.00

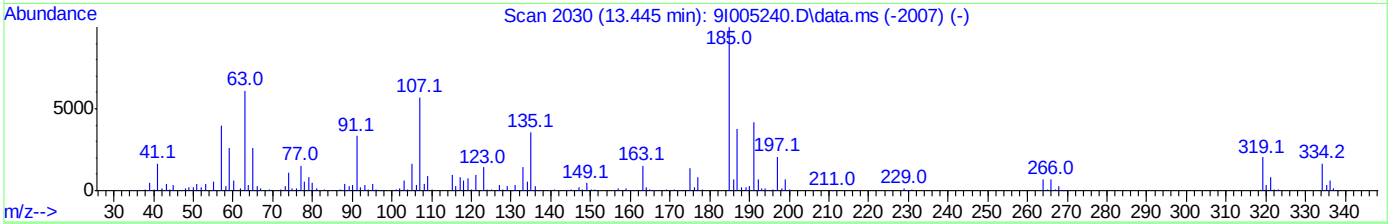
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071356.D
Acq On : 23 Jun 2020 10:04 am
Operator : marthav
Sample : ic2918-1 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 23 14:00:58 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071356.D\data.ms

(147) Aramite

13.150min (-13.150) 0.00ppm

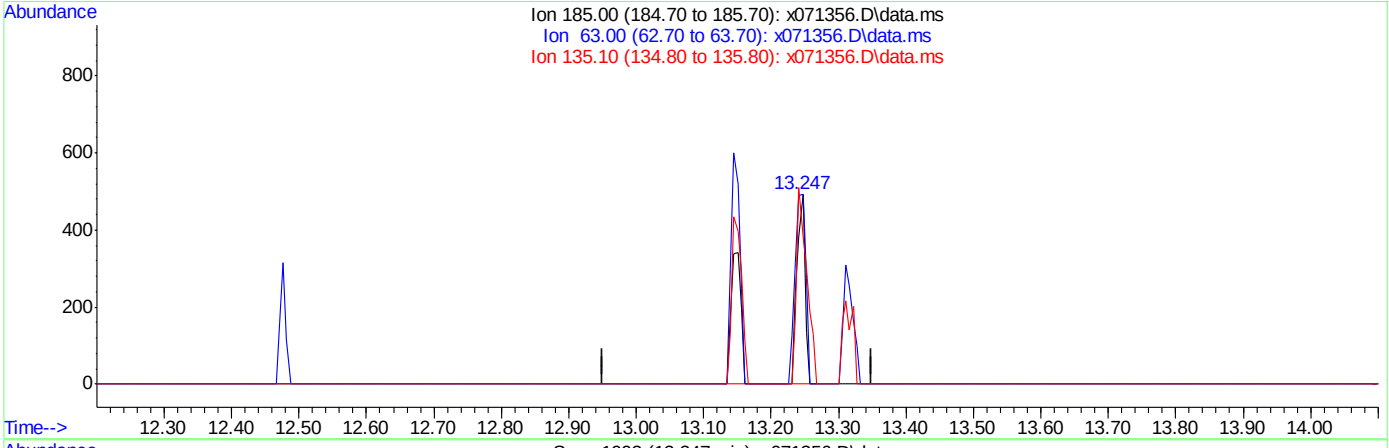
response 0

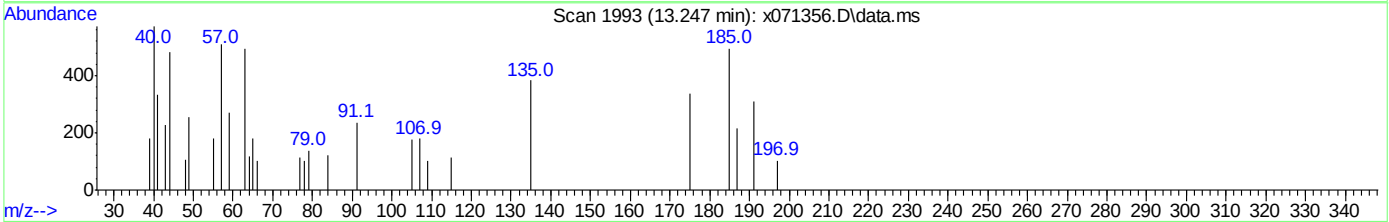
Ion	Exp%	Act%
185.00	100	0.00
63.00	61.10	0.00#
135.10	35.60	0.00#
0.00	0.00	0.00

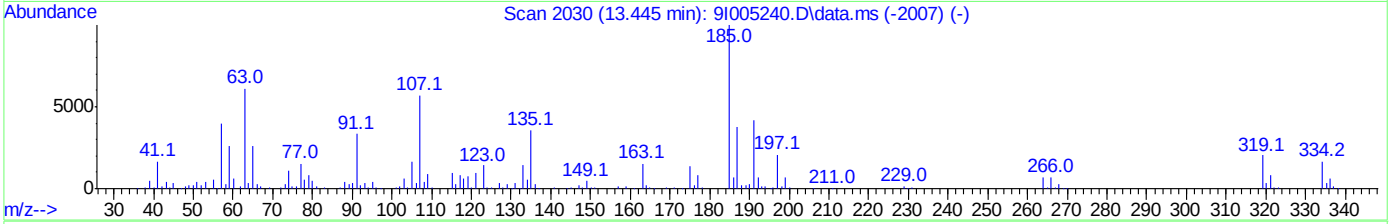
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071356.D
Acq On : 23 Jun 2020 10:04 am
Operator : marthav
Sample : ic2918-1 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 23 14:00:58 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071356.D\data.ms

(147) Aramite

13.247min (+0.096) 0.42ppm m

response 738

Ion	Exp%	Act%
185.00	100	100
63.00	61.10	99.60#
135.10	35.60	77.53#
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 06/24/20 14:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071357.D
Acq On : 23 Jun 2020 10:30 am
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 23 16:54:30 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	0.000	152	0m	40.00	ppm	-6.00
22) Naphthalene-d8	0.000	136	0m	40.00	ppm	-7.43
43) Acenaphthene-d10	0.000	164	0m	40.00	ppm	-9.48
70) Phenanthrene-d10	0.000	188	0m	40.00	ppm	-11.22
92) Chrysene-d12	0.000	240	0m	40.00	ppm	-14.49
102) Perylene-d12	0.000	264	0m	40.00	ppm	-16.82
110) 1,4-Dichlorobenzene-d4A	6.005	152	149418	40.00	ppm	0.00
120) Naphthalene-d8A	7.433	136	609909	40.00	ppm	0.00
127) Acenaphthene-d10A	9.476	164	331998	40.00	ppm	0.00
136) Phenanthrene-d10A	11.219	188	590459	40.00	ppm	0.00
146) Chrysene-d12A	14.487	240	412323	40.00	ppm	0.00
153) Perylene-d12A	16.809	264	356217	40.00	ppm	-0.01
System Monitoring Compounds						
7) 2-Fluorophenol	0.000	112	0d	0.00	ppm	
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#		
9) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#		
23) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#		
47) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#		
75) 2,4,6-Tribromophenol	0.000	330	0d	0.00	ppm	
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#		
95) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#		
Target Compounds						Qvalue
111) 2-Picoline	3.988	93	35007	4.72	ppm	89
112) N-Nitrosomethylethylamine	4.111	42	22841	8.69	ppm #	52
113) Methyl methanesulfonate	4.427	80	16633	4.53	ppm	92
114) N-Nitrosodiethylamine	4.849	102	13558	4.60	ppm #	26
115) Ethyl methanesulfonate	5.175	79	22557	4.34	ppm	99
116) Pentachloroethane	5.700	167	9643	4.56	ppm	96
117) N-Nitrosopyrrolidine	6.416	100	12046	3.99	ppm #	25
118) N-Nitrosomorpholine	6.470	56	22583	7.17	ppm #	66
119) O-Toluidine	6.486	106	45385	4.96	ppm	96
121) N-Nitrosopiperidine	6.807	42	27579	8.25	ppm #	61
122) A,A-Dimethylphenethyla...	7.299	58	109296m	6.74	ppm	
123) Hexachloropropene	7.561	213	10599	3.27	ppm	97
124) N-Nitrosodi-n-butylamine	7.930	84	18823	4.65	ppm #	43
125) p-Phenylenediamine	7.925	108	31553	6.43	ppm	91
126) Isosafrole	8.171	162	19762	4.95	ppm	88
128) Safrole	8.775	162	19808	4.61	ppm	88
129) 1-Chloronaphthalene	8.845	162	47557	4.61	ppm	96
130) Diphenyl Ether	8.941	170	32892	4.70	ppm	93
131) 1,4-Naphthoquinone	9.032	158	17887	3.98	ppm	76
132) Pentachlorobenzene	9.668	250	17118	3.58	ppm	95
133) 1-Naphthylamine	9.807	143	55061	5.20	ppm	93

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071357.D
Acq On : 23 Jun 2020 10:30 am
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 23 16:54:30 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration

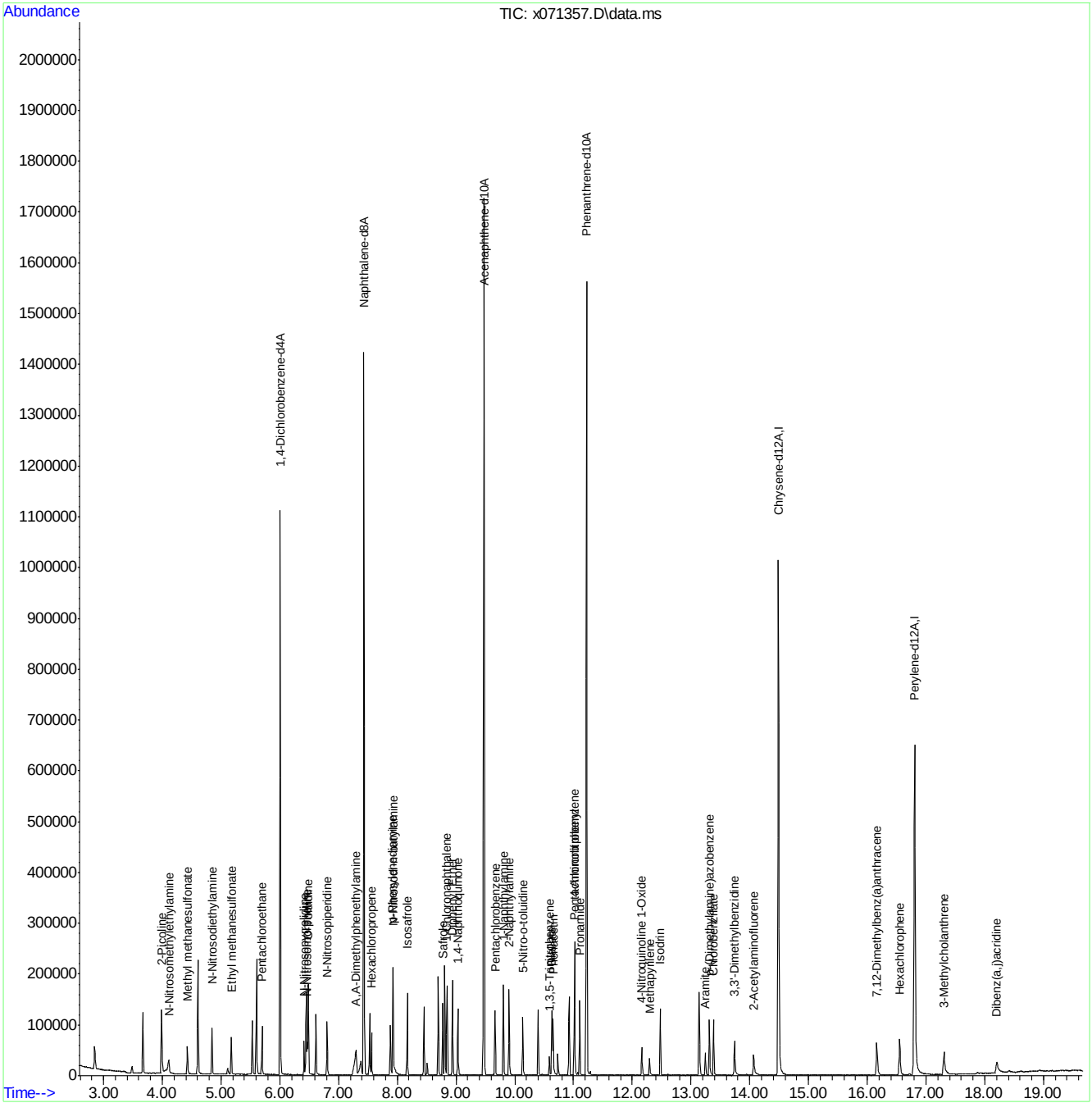
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
134) 2-Naphthylamine	9.904	143	58142	5.40	ppm		99
135) 5-Nitro-o-toluidine	10.134	152	14085	4.07	ppm		71
137) 1,3,5-Trinitrobenzene	10.588	75	6902	1.97	ppm		78
138) Diallate	10.631	43	46068m	7.07	ppm		
139) Phenacetin	10.652	108	25046	4.22	ppm		87
140) 4-Aminobiphenyl	11.016	169	59632	5.99	ppm		96
141) Pronamide	11.107	173	20771	4.18	ppm		96
142) Pentachloronitrobenzene	11.011	237	5479	3.65	ppm		86
143) 4-Nitroquinoline 1-Oxide	12.166	190	1319	3.38	ppm	#	26
144) Methapyrilene	12.294	58	13373	1.83	ppm		71
145) Isodrin	12.476	193	8210	4.01	ppm	#	77
147) Aramite	13.241	185	5359m	3.41	ppm		
148) p-(Dimethylamine)azobe...	13.311	120	18718	3.82	ppm		77
149) Chlorobenzilate	13.386	139	22927	4.66	ppm	#	65
151) 3,3'-Dimethylbenzidine	13.739	212	31071	5.26	ppm		96
152) 2-Acetylaminofluorene	14.065	181	17579	3.50	ppm		88
154) 7,12-Dimethylbenz(a)an...	16.162	256	21270	4.16	ppm		95
155) Hexachlorophene	16.552	196	7994	119.27	ppm		97
156) 3-Methylcholanthrene	17.306	268	17684	3.87	ppm		91
157) Dibenz(a,j)acridine	18.205	279	24909m	3.73	ppm		

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071357.D
Acq On : 23 Jun 2020 10:30 am
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 23 16:54:30 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: SX2918-IC2918
Lab FileID: X071357.D
Injection Time: 06/23/20 10:30

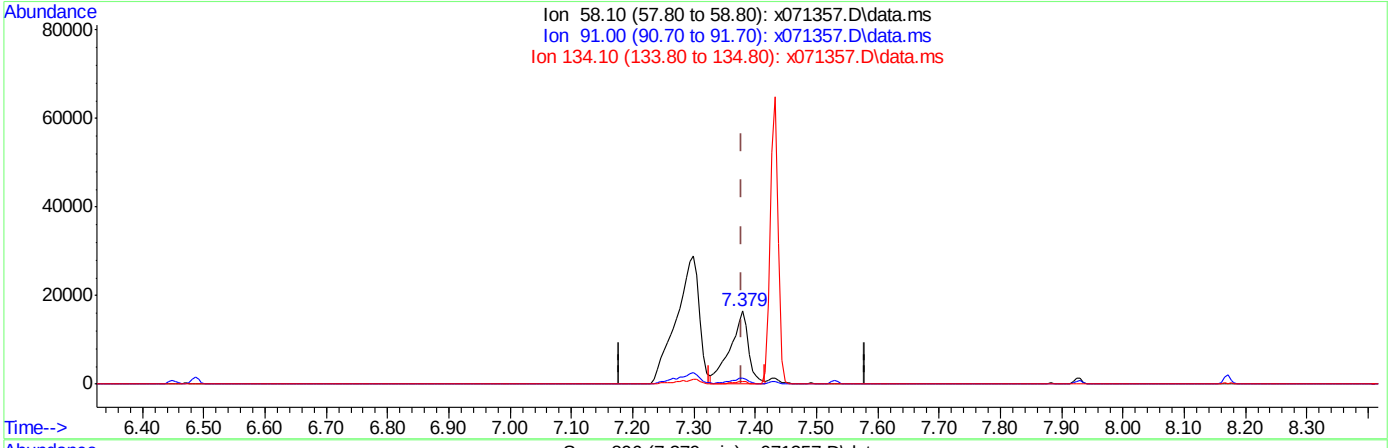
Method: EPA 625.1
Analyst approved: 06/24/20 09:50 Martha Valls
Supervisor approved: 06/24/20 14:07 Naresh Jiawan

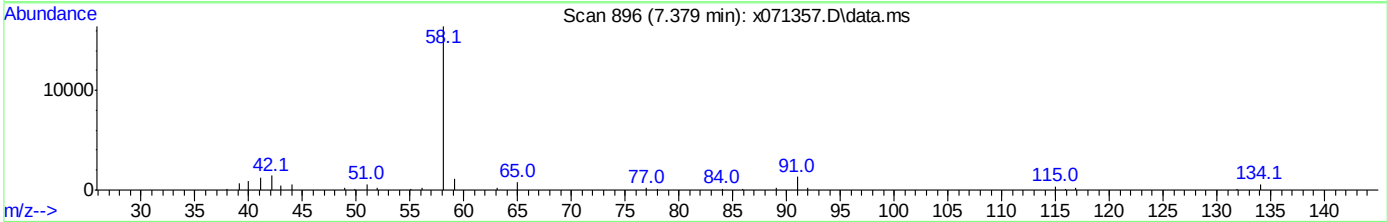
Parameter	CAS	Sig#	R.T. (min.)	Reason
A,A-Dimethylphenethylamine	122-09-8		7.30	Split peak
Diallate	2303-16-4		10.63	Split peak
Aramite	140-57-8		13.24	Split peak
Dibenz(a,j)acridine	224-42-0		18.20	Split peak

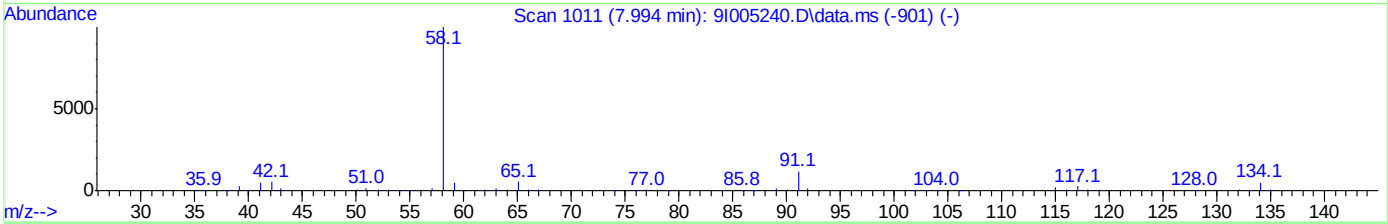
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071357.D
Acq On : 23 Jun 2020 10:30 am
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 23 14:01:00 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071357.D\data.ms

(122) A,A-Dimethylphenethylamine

7.379min (-0.000) 2.08ppm

response 33554

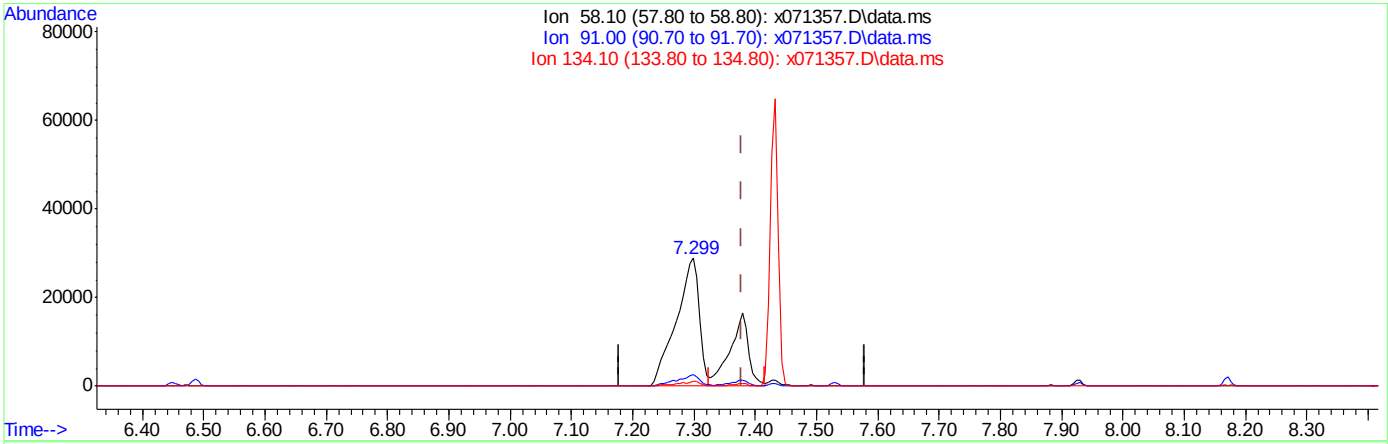
Ion	Exp%	Act%
58.10	100	100
91.00	11.70	7.51
134.10	5.10	0.00
0.00	0.00	0.00

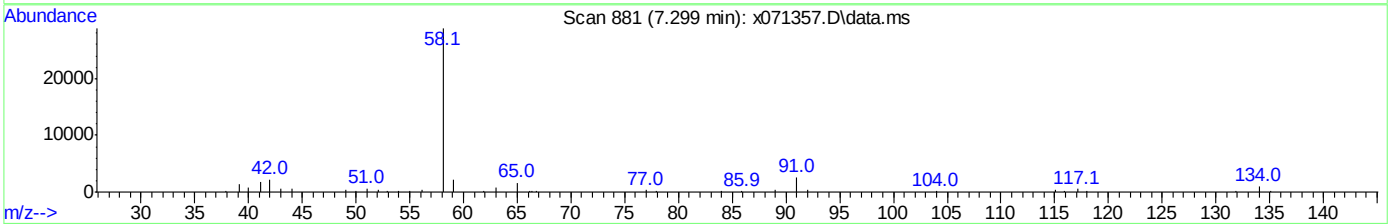
X071357.D edits: A,A-Dimethylphenethylamine

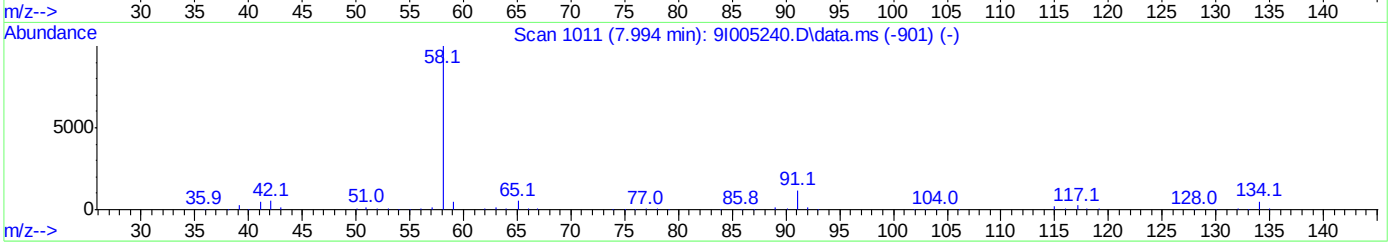
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071357.D
Acq On : 23 Jun 2020 10:30 am
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 23 14:01:00 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071357.D\data.ms

(122) A,A-Dimethylphenethylamine

7.299min (-0.080) 6.74ppm m

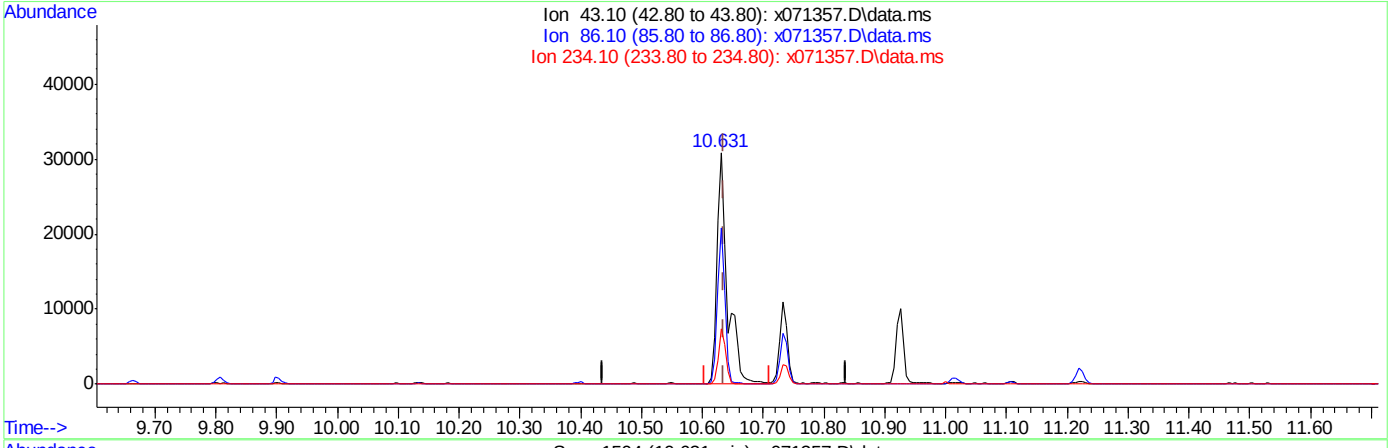
response 109296

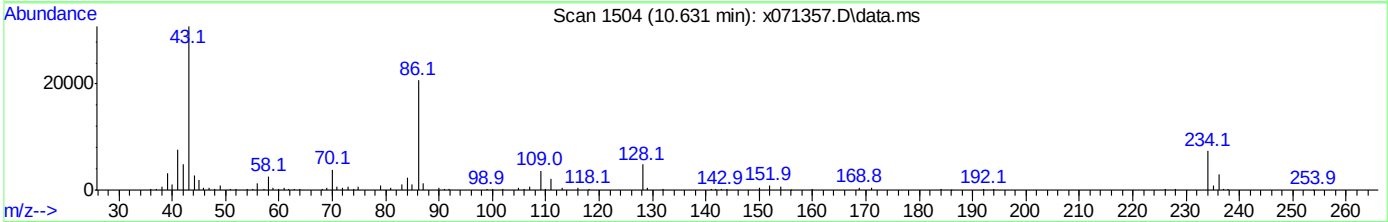
Ion	Exp%	Act%
58.10	100	100
91.00	11.70	8.96
134.10	5.10	3.54
0.00	0.00	0.00

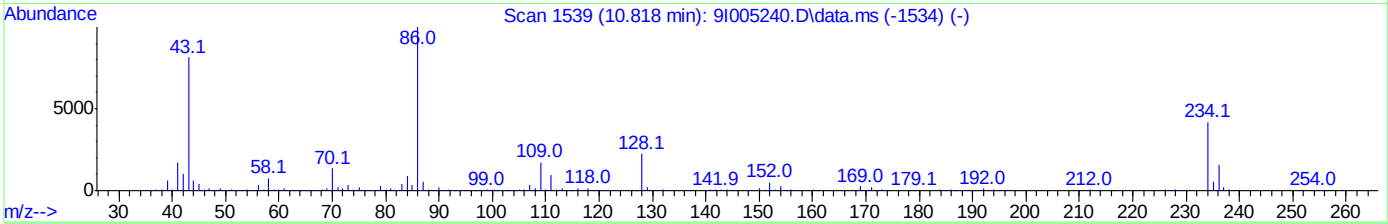
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071357.D
Acq On : 23 Jun 2020 10:30 am
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 23 14:01:00 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071357.D\data.ms

(138) Diallate

10.631min (-0.005) 5.62ppm

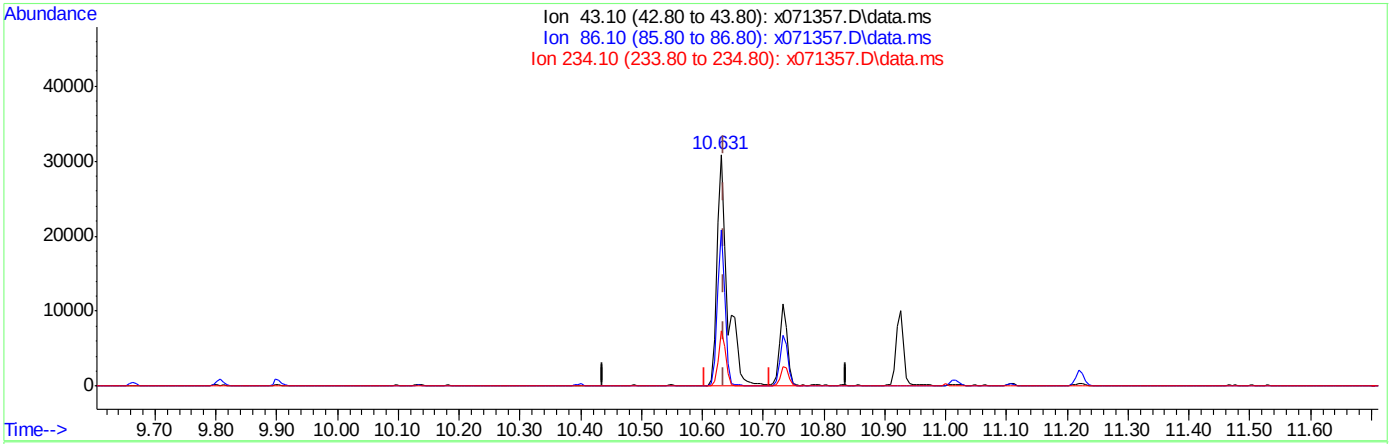
response 36663

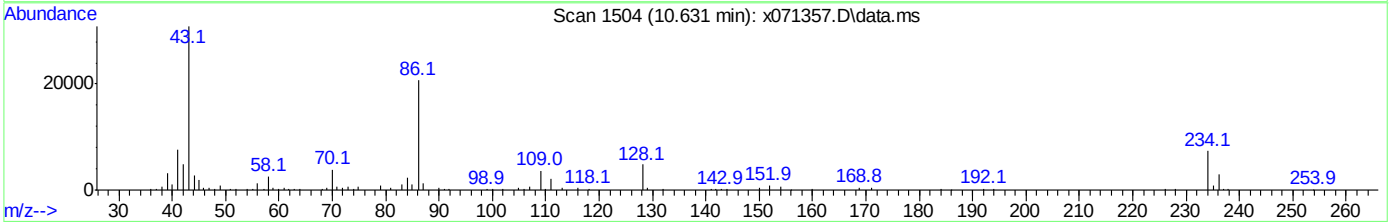
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	67.74#
234.10	51.50	24.04
0.00	0.00	0.00

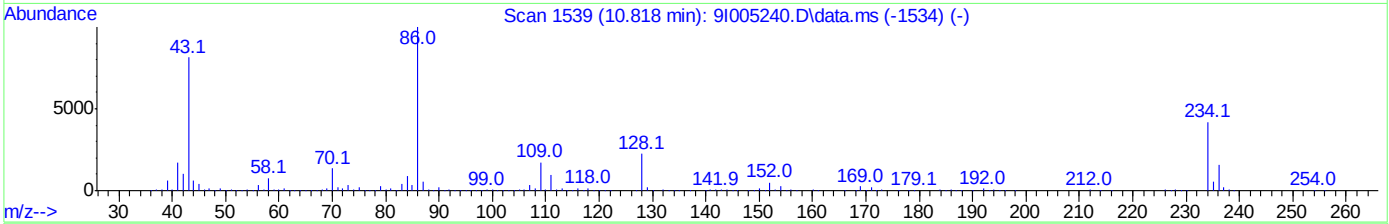
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071357.D
Acq On : 23 Jun 2020 10:30 am
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 23 14:01:00 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071357.D\data.ms

(138) Diallate

10.631min (-0.005) 7.07ppm m

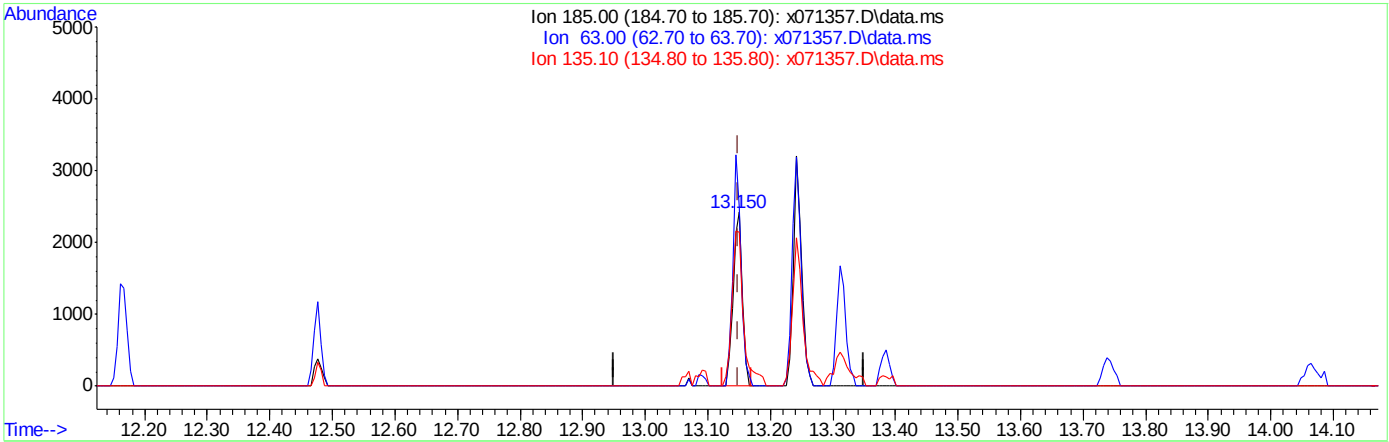
response 46068

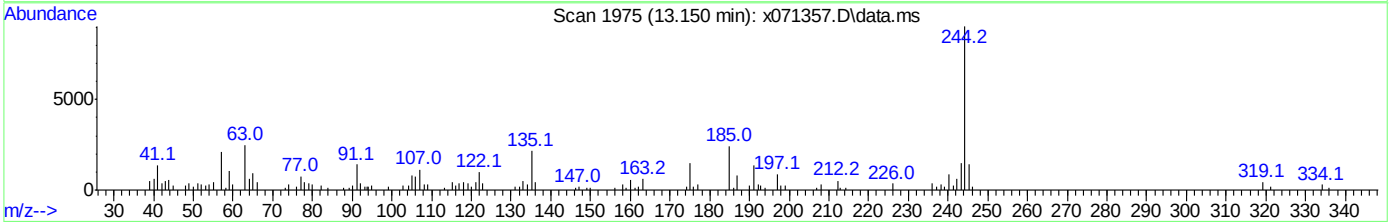
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	67.49#
234.10	51.50	23.95
0.00	0.00	0.00

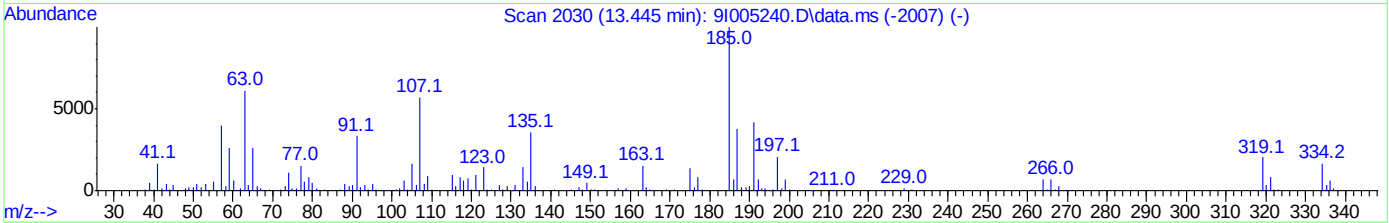
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071357.D
Acq On : 23 Jun 2020 10:30 am
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 23 14:01:00 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071357.D\data.ms

(147) Aramite

13.150min (-0.000) 1.55ppm

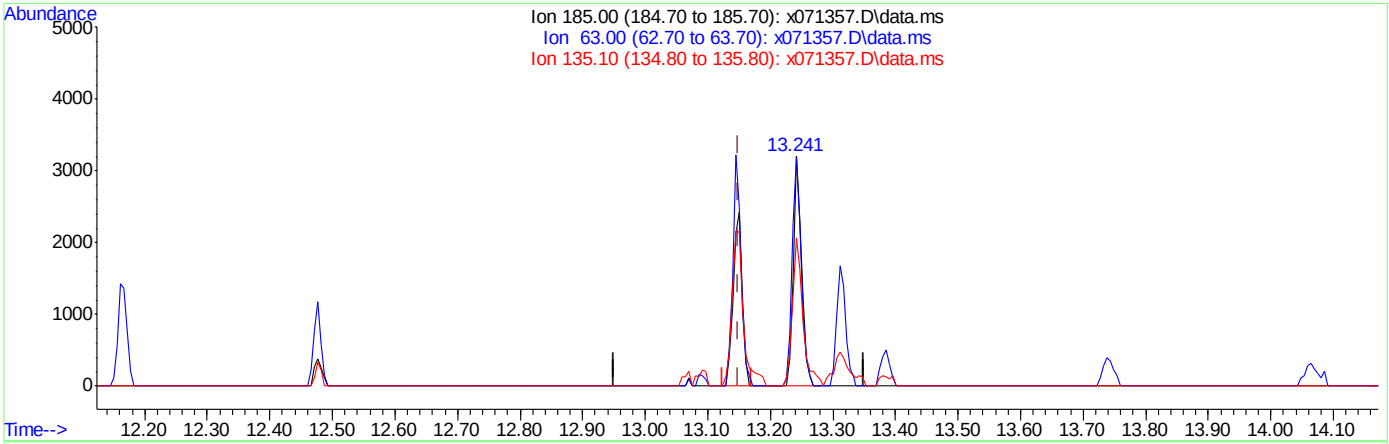
response 2431

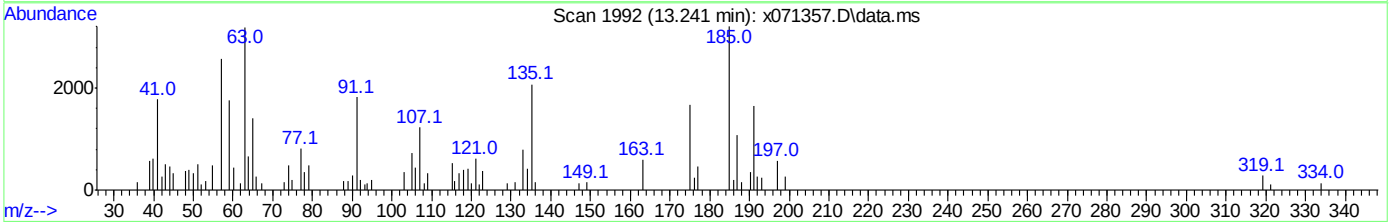
Ion	Exp%	Act%
185.00	100	100
63.00	61.10	102.64#
135.10	35.60	84.51#
0.00	0.00	0.00

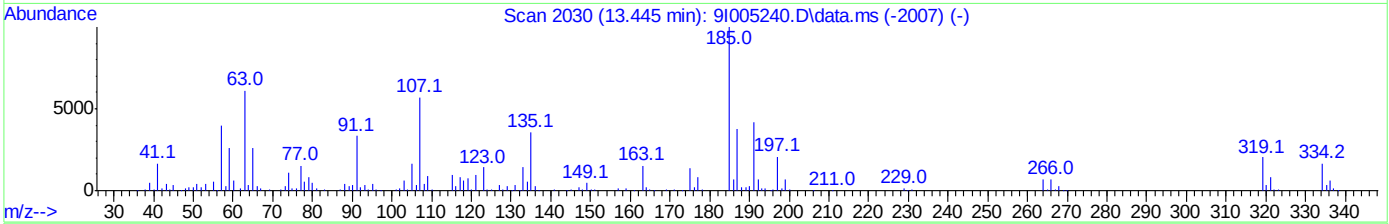
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071357.D
Acq On : 23 Jun 2020 10:30 am
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 23 14:01:00 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071357.D\data.ms

(147) Aramite

13.241min (+0.091) 3.41ppm m

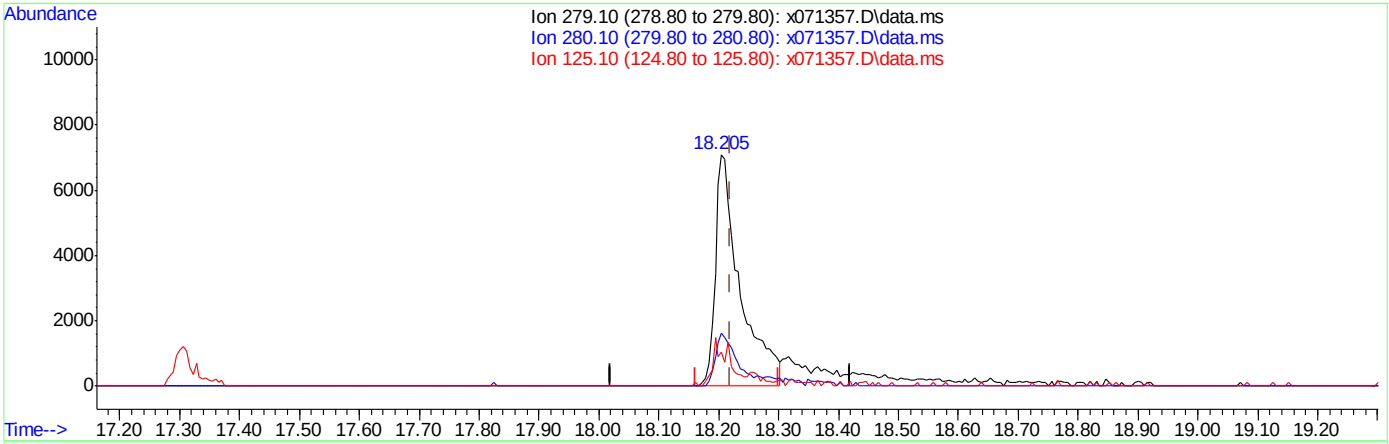
response 5359

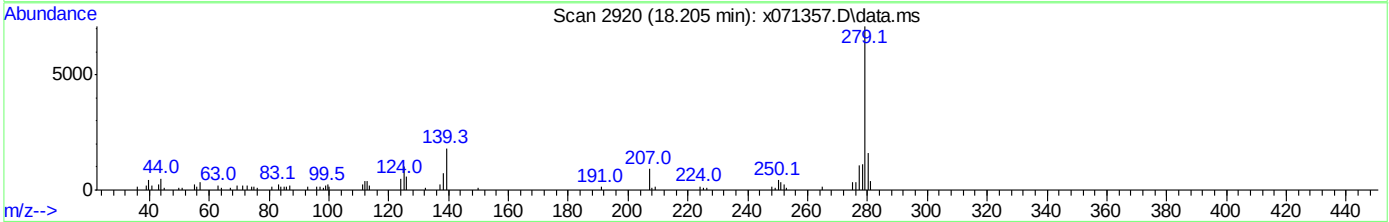
Ion	Exp%	Act%
185.00	100	100
63.00	61.10	99.63#
135.10	35.60	64.66
0.00	0.00	0.00

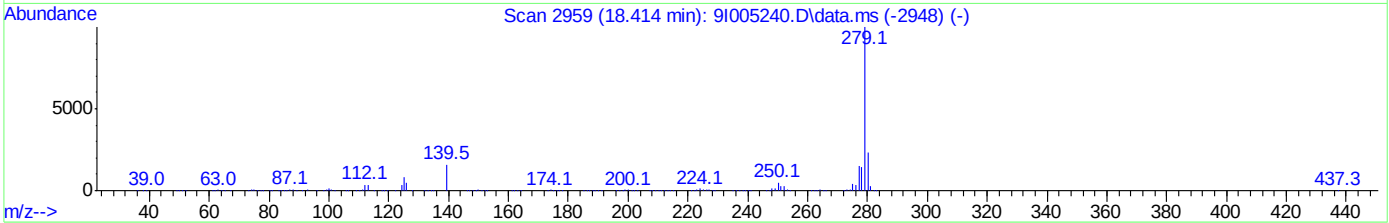
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071357.D
Acq On : 23 Jun 2020 10:30 am
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 23 14:01:00 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071357.D\data.ms

(157) Dibenz(a,j)acridine

18.205min (-0.016) 3.05ppm

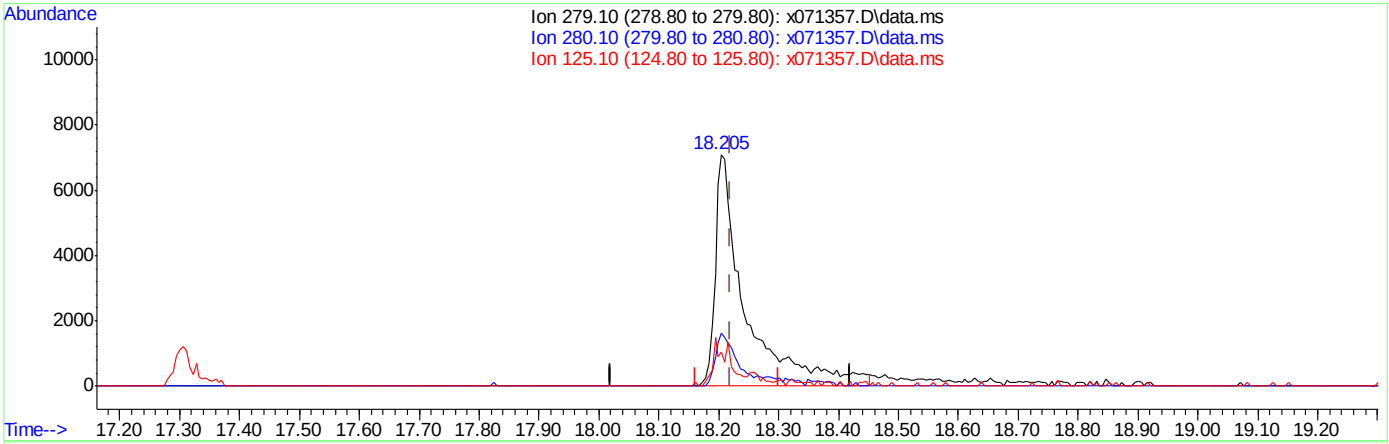
response 20312

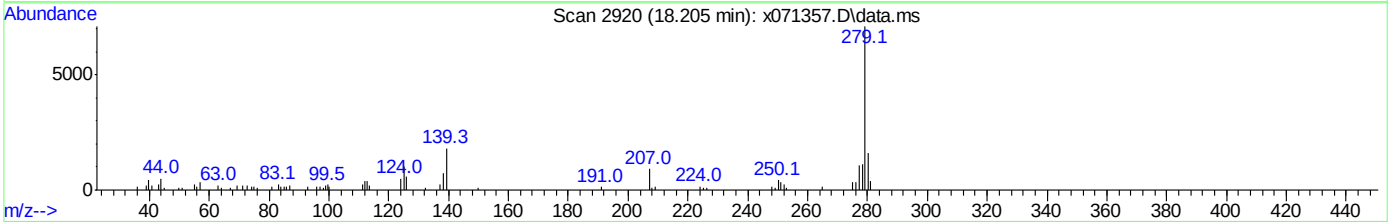
Ion	Exp%	Act%
279.10	100	100
280.10	23.20	22.27
125.10	8.60	13.11
0.00	0.00	0.00

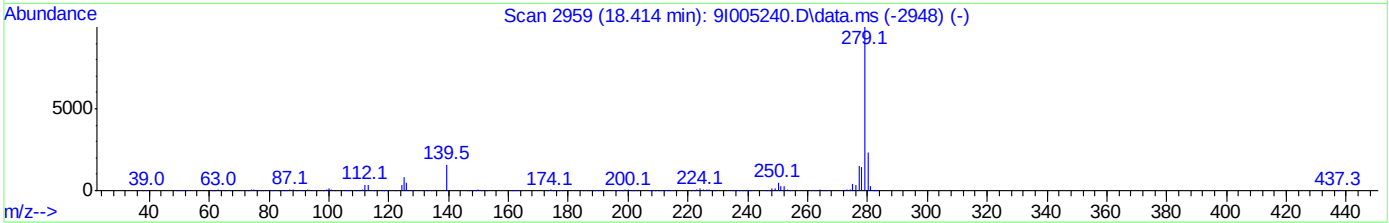
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071357.D
Acq On : 23 Jun 2020 10:30 am
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 23 14:01:00 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071357.D\data.ms

(157) Dibenz(a,j)acridine

18.205min (-0.016) 3.73ppm m

response 24909

Ion	Exp%	Act%
279.10	100	100
280.10	23.20	22.95
125.10	8.60	14.56
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 06/24/20 14:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071358.D
Acq On : 23 Jun 2020 10:55 am
Operator : marthav
Sample : ic2918-10 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 23 16:54:45 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	0.000	152	0m	40.00	ppm	-6.00
22) Naphthalene-d8	0.000	136	0m	40.00	ppm	-7.43
43) Acenaphthene-d10	0.000	164	0m	40.00	ppm	-9.48
70) Phenanthrene-d10	0.000	188	0m	40.00	ppm	-11.22
92) Chrysene-d12	0.000	240	0m	40.00	ppm	-14.49
102) Perylene-d12	0.000	264	0m	40.00	ppm	-16.82
110) 1,4-Dichlorobenzene-d4A	6.005	152	156922	40.00	ppm	0.00
120) Naphthalene-d8A	7.433	136	643577	40.00	ppm	0.00
127) Acenaphthene-d10A	9.476	164	345206	40.00	ppm	0.00
136) Phenanthrene-d10A	11.225	188	622990	40.00	ppm	0.00
146) Chrysene-d12A	14.488	240	421200	40.00	ppm	0.00
153) Perylene-d12A	16.809	264	365416	40.00	ppm	-0.01
System Monitoring Compounds						
7) 2-Fluorophenol	0.000	112	0d	0.00	ppm	
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#		
9) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#		
23) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#		
47) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#		
75) 2,4,6-Tribromophenol	0.000	330	0d	0.00	ppm	
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#		
95) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#		
Target Compounds						Qvalue
111) 2-Picoline	3.983	93	74366	9.54	ppm	87
112) N-Nitrosomethylethylamine	4.106	42	49731	18.02	ppm #	53
113) Methyl methanesulfonate	4.427	80	35567	9.23	ppm	90
114) N-Nitrosodiethylamine	4.849	102	29289	9.46	ppm #	24
115) Ethyl methanesulfonate	5.176	79	48879	8.96	ppm	98
116) Pentachloroethane	5.700	167	20367	9.18	ppm	94
117) N-Nitrosopyrrolidine	6.417	100	26896	8.48	ppm #	19
118) N-Nitrosomorpholine	6.470	56	48542	14.67	ppm #	66
119) O-Toluidine	6.486	106	97569	10.14	ppm	99
121) N-Nitrosopiperidine	6.807	42	59493	16.87	ppm #	59
122) A,A-Dimethylphenethyla...	7.326	58	235966m	13.68	ppm	
123) Hexachloropropene	7.561	213	24561	7.17	ppm	98
124) N-Nitrosodi-n-butylamine	7.930	84	40055	9.28	ppm #	44
125) p-Phenylenediamine	7.925	108	66930	13.14	ppm	92
126) Isosafrole	8.171	162	42968	10.20	ppm	83
128) Safrole	8.775	162	43049	9.64	ppm	89
129) 1-Chloronaphthalene	8.845	162	102922	9.60	ppm	97
130) Diphenyl Ether	8.941	170	73174	10.05	ppm	93
131) 1,4-Naphthoquinone	9.032	158	42030	9.17	ppm	78
132) Pentachlorobenzene	9.669	250	36760	7.39	ppm	98
133) 1-Naphthylamine	9.808	143	118101	10.74	ppm	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071358.D
Acq On : 23 Jun 2020 10:55 am
Operator : marthav
Sample : ic2918-10 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 23 16:54:45 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration

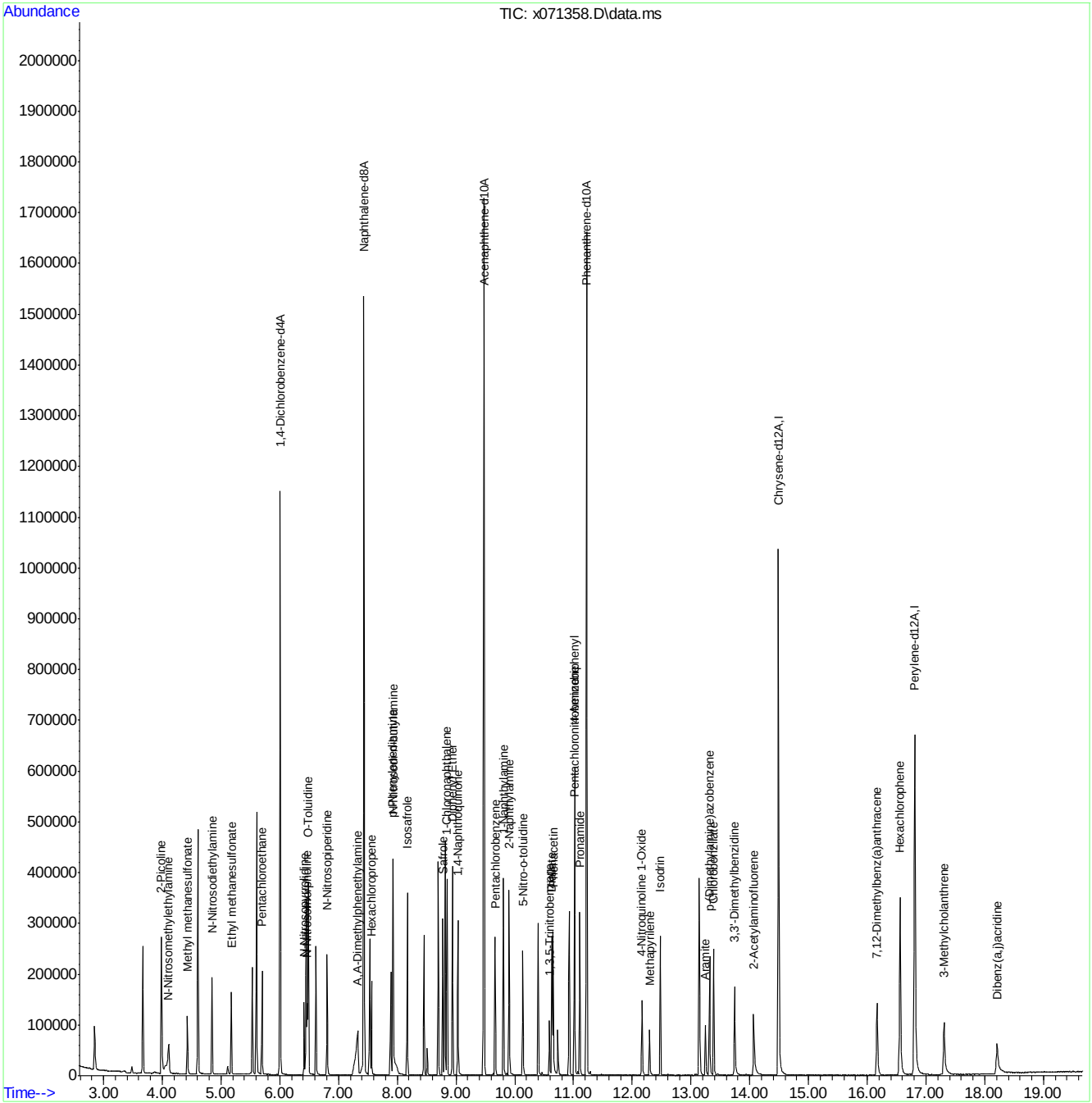
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
134) 2-Naphthylamine	9.904	143	127640	11.39	ppm		98
135) 5-Nitro-o-toluidine	10.134	152	32916	9.09	ppm	#	70
137) 1,3,5-Trinitrobenzene	10.589	75	20814	5.61	ppm		80
138) Diallate	10.631	43	99125m	14.41	ppm		
139) Phenacetin	10.653	108	56928	9.03	ppm		94
140) 4-Aminobiphenyl	11.016	169	131145	12.49	ppm		97
141) Pronamide	11.107	173	48051	9.12	ppm		96
142) Pentachloronitrobenzene	11.011	237	11641	7.34	ppm		86
143) 4-Nitroquinoline 1-Oxide	12.166	190	4741	10.73	ppm	#	62
144) Methapyrilene	12.295	58	33362	4.33	ppm		72
145) Isodrin	12.477	193	17893	8.28	ppm	#	76
147) Aramite	13.241	185	13073m	8.08	ppm		
148) p-(Dimethylamine)azobe...	13.316	120	44838	9.01	ppm		87
149) Chlorobenzilate	13.386	139	50891	10.08	ppm	#	67
151) 3,3'-Dimethylbenzidine	13.744	212	72156	11.91	ppm		98
152) 2-Acetylaminofluorene	14.065	181	46047	8.83	ppm		91
154) 7,12-Dimethylbenz(a)an...	16.167	256	46557	8.85	ppm		94
155) Hexachlorophene	16.558	196	41927	186.26	ppm		96
156) 3-Methylcholanthrene	17.306	268	41211	8.77	ppm		94
157) Dibenz(a,j)acridine	18.210	279	51661	7.45	ppm		89

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071358.D
Acq On : 23 Jun 2020 10:55 am
Operator : marthav
Sample : ic2918-10 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 23 16:54:45 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: SX2918-IC2918
Lab FileID: X071358.D
Injection Time: 06/23/20 10:55

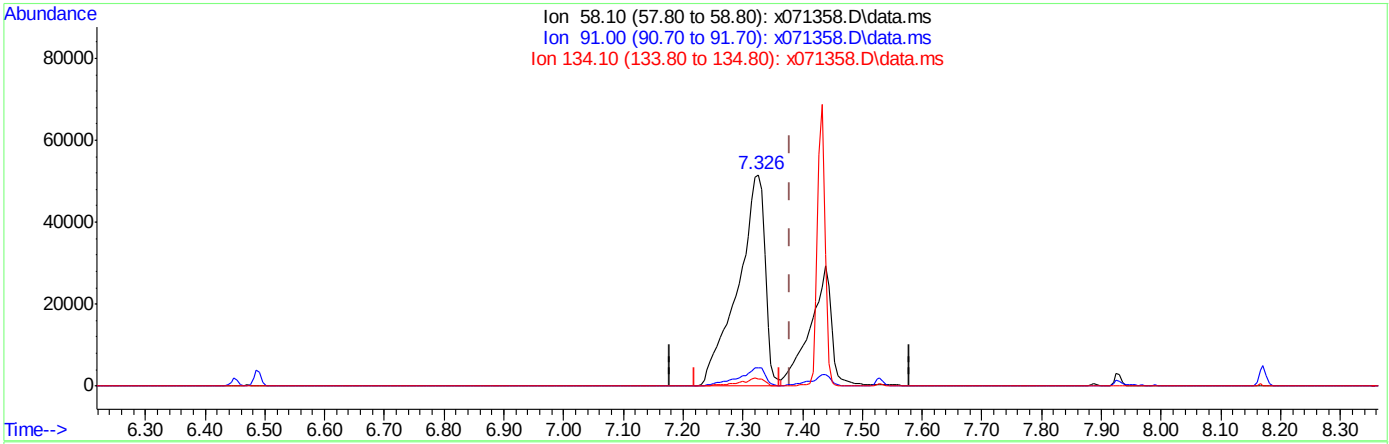
Method: EPA 625.1
Analyst approved: 06/24/20 09:50 Martha Valls
Supervisor approved: 06/24/20 14:07 Naresh Jiawan

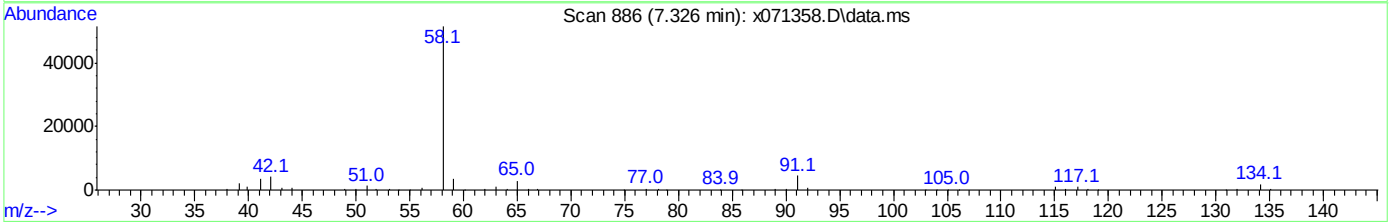
Parameter	CAS	Sig#	R.T. (min.)	Reason
A,A-Dimethylphenethylamine	122-09-8		7.33	Split peak
Diallate	2303-16-4		10.63	Split peak
Aramite	140-57-8		13.24	Split peak

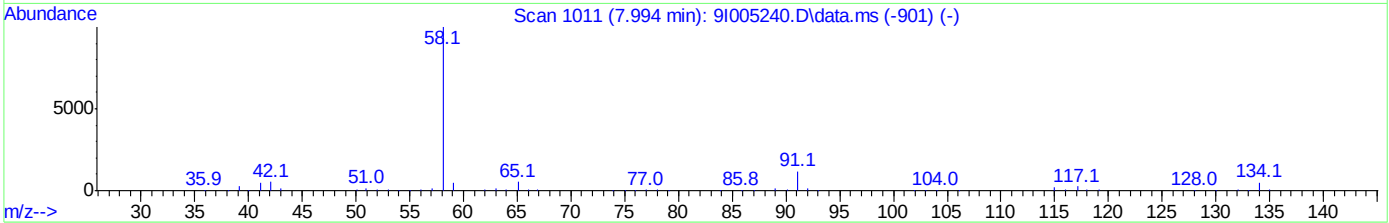
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071358.D
Acq On : 23 Jun 2020 10:55 am
Operator : marthav
Sample : ic2918-10 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 23 14:01:02 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071358.D\data.ms

(122) A,A-Dimethylphenethylamine

7.326min (-0.053) 9.43ppm

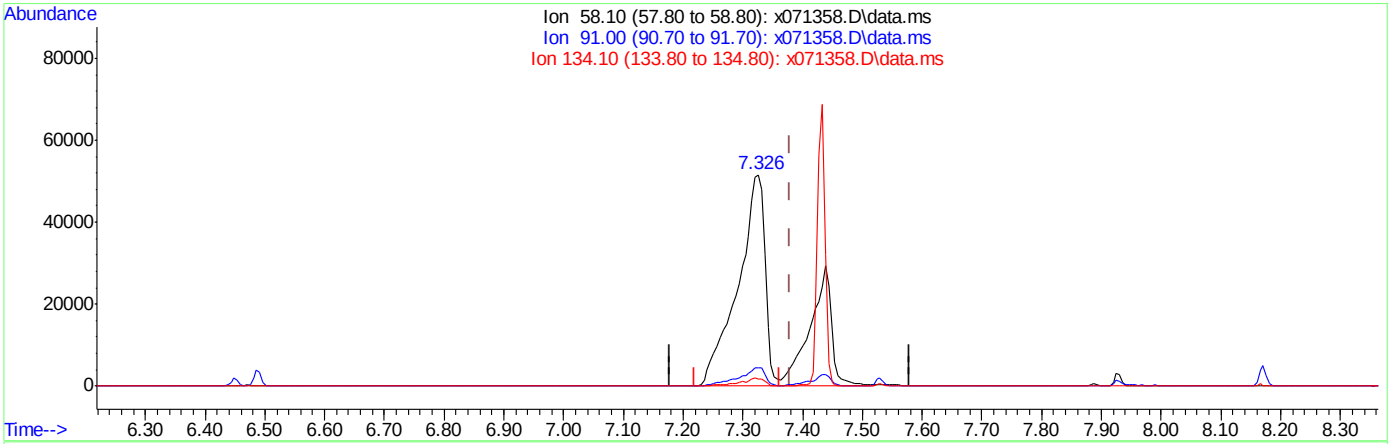
response 161765

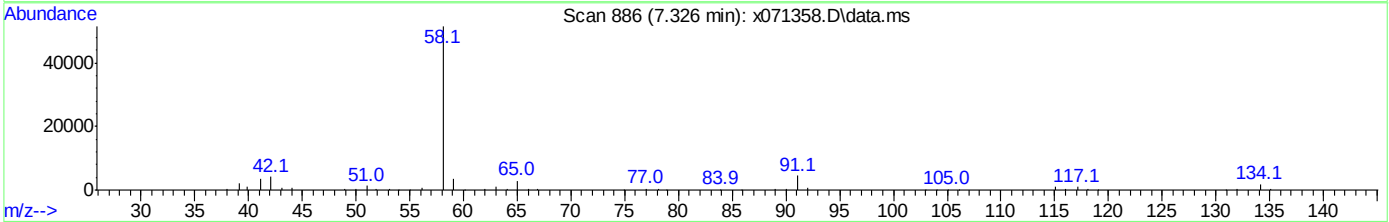
Ion	Exp%	Act%
58.10	100	100
91.00	11.70	8.75
134.10	5.10	3.52
0.00	0.00	0.00

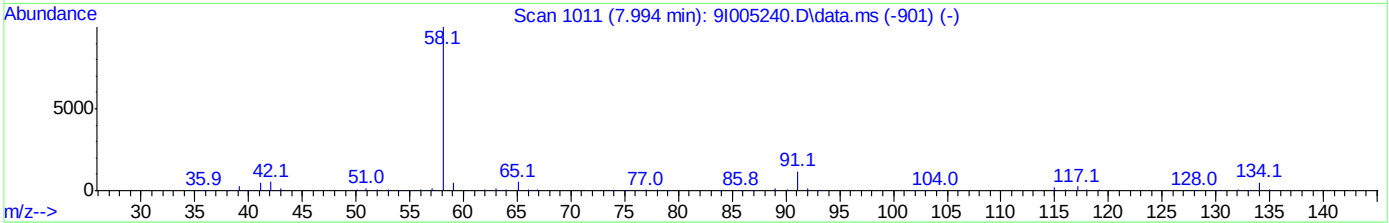
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071358.D
Acq On : 23 Jun 2020 10:55 am
Operator : marthav
Sample : ic2918-10 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 23 14:01:02 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071358.D\data.ms

(122) A,A-Dimethylphenethylamine

7.326min (-0.053) 13.68ppm m

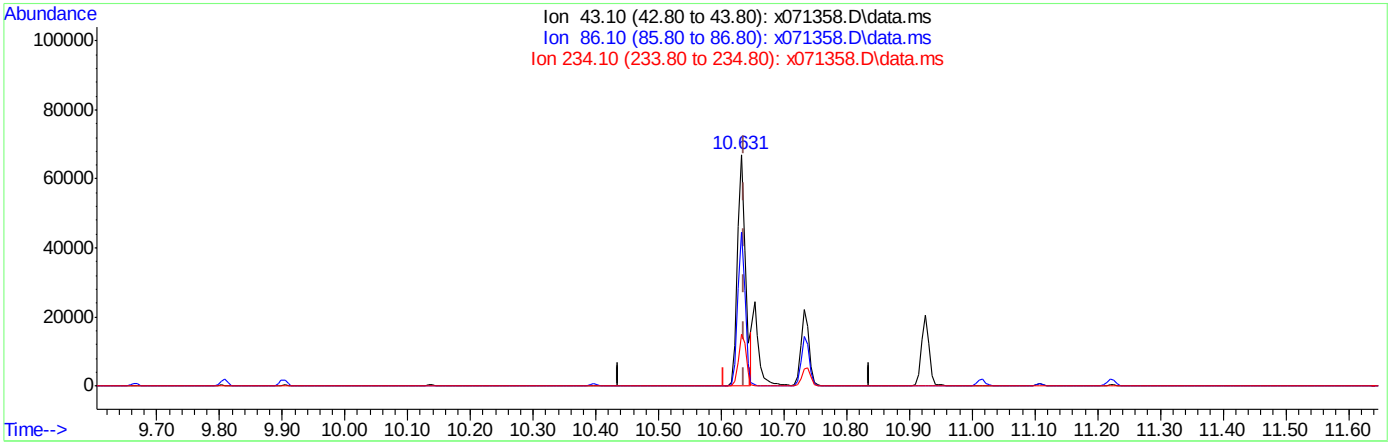
response 235966

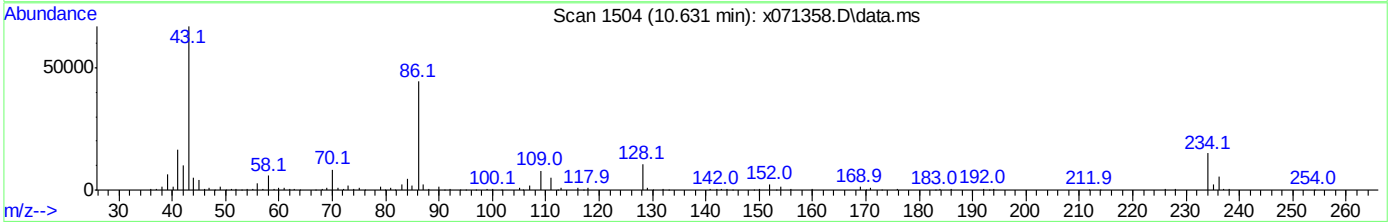
Ion	Exp%	Act%
58.10	100	100
91.00	11.70	8.82
134.10	5.10	3.47
0.00	0.00	0.00

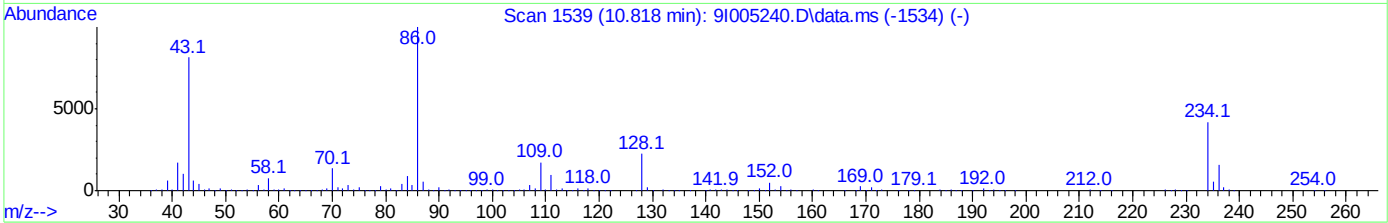
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071358.D
Acq On : 23 Jun 2020 10:55 am
Operator : marthav
Sample : ic2918-10 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 23 14:01:02 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071358.D\data.ms

(138) Diallate

10.631min (-0.005) 9.05ppm

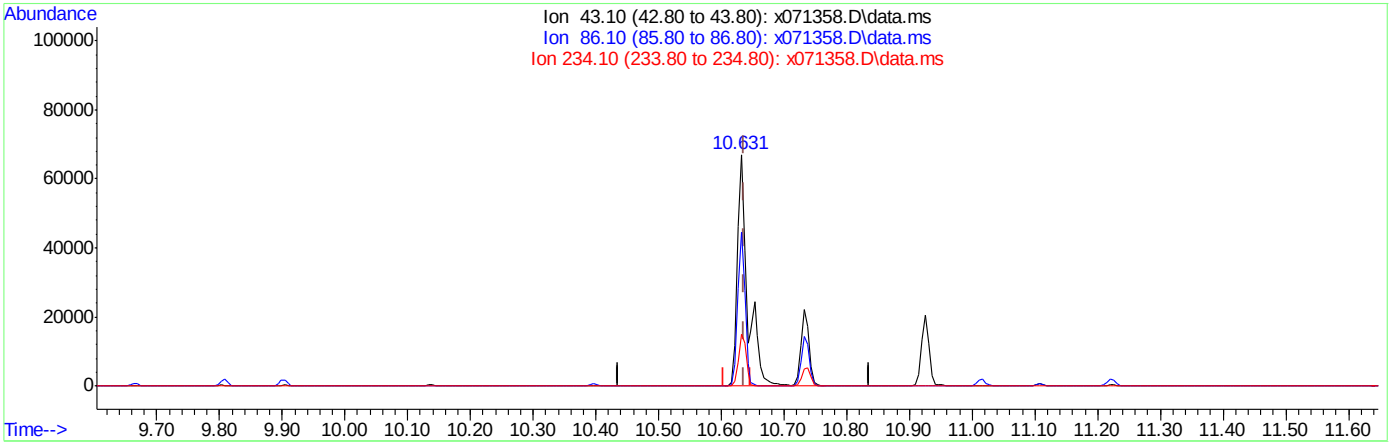
response 62255

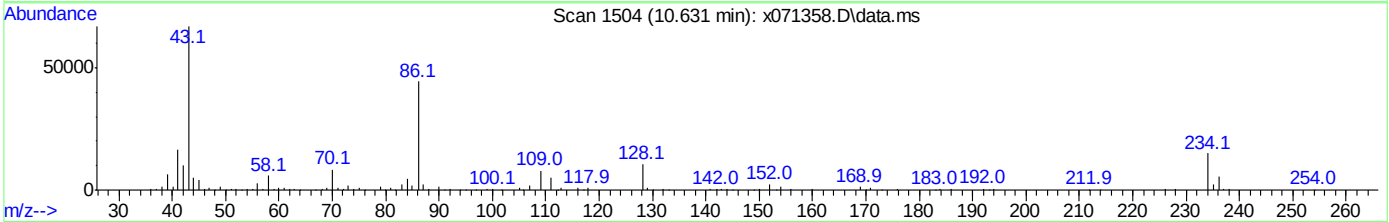
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	74.38#
234.10	51.50	24.76
0.00	0.00	0.00

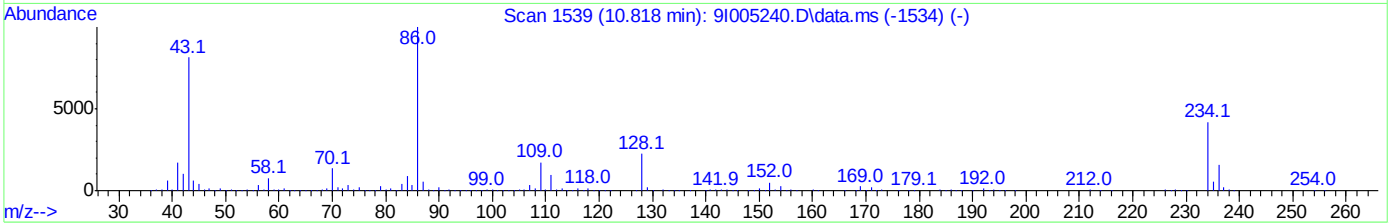
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071358.D
Acq On : 23 Jun 2020 10:55 am
Operator : marthav
Sample : ic2918-10 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 23 14:01:02 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071358.D\data.ms

(138) Diallate

10.631min (-0.005) 14.41ppm m

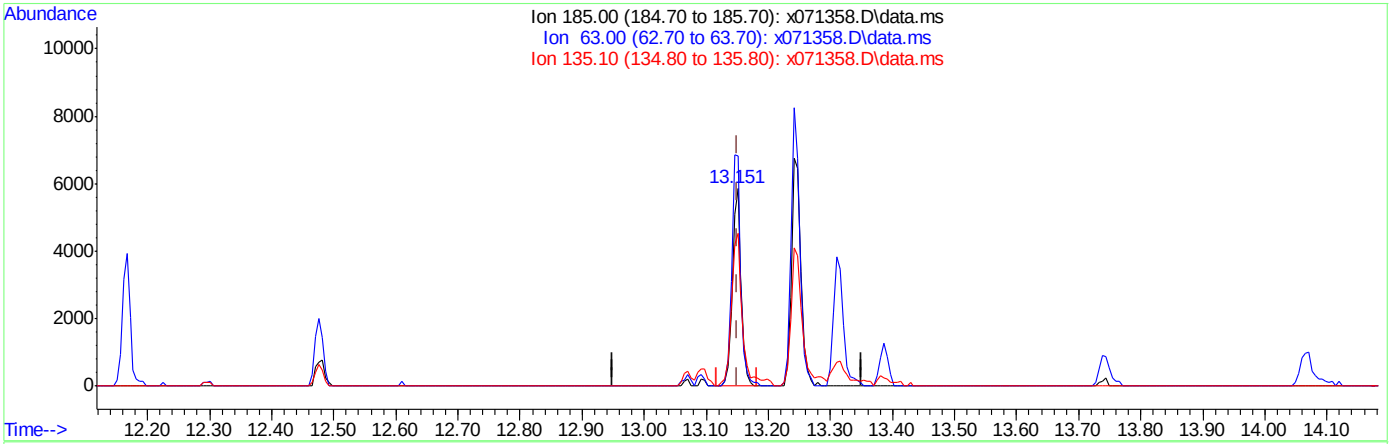
response 99125

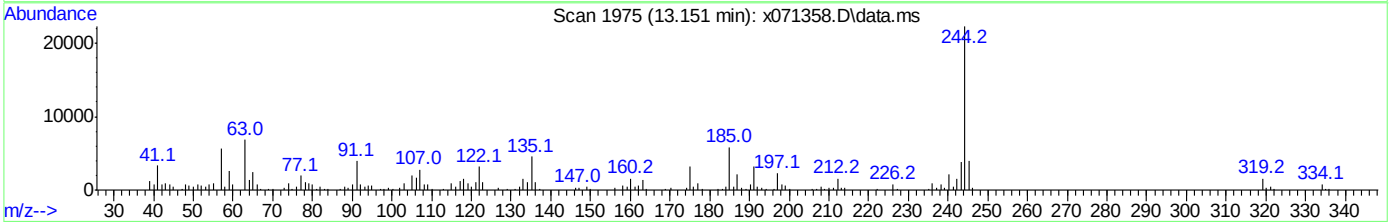
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	66.38#
234.10	51.50	22.30
0.00	0.00	0.00

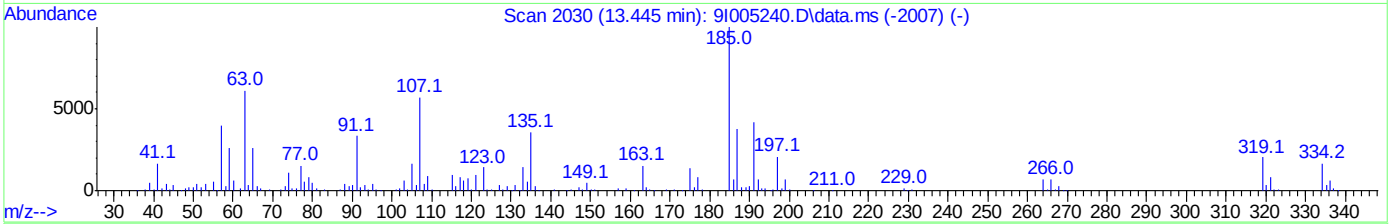
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071358.D
Acq On : 23 Jun 2020 10:55 am
Operator : marthav
Sample : ic2918-10 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 23 14:08:36 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071358.D\data.ms

(147) Aramite

13.151min (+0.000) 3.78ppm

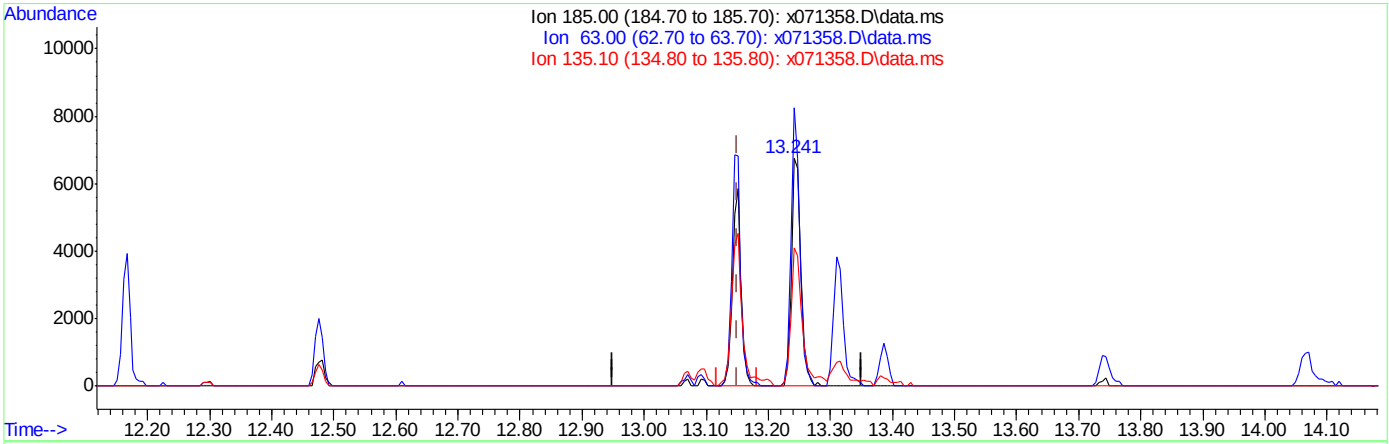
response 6080

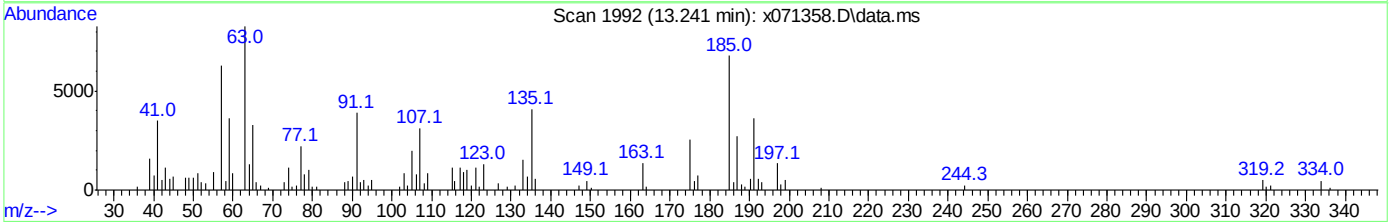
Ion	Exp%	Act%
185.00	100	100
63.00	61.10	115.07#
135.10	35.60	74.78#
0.00	0.00	0.00

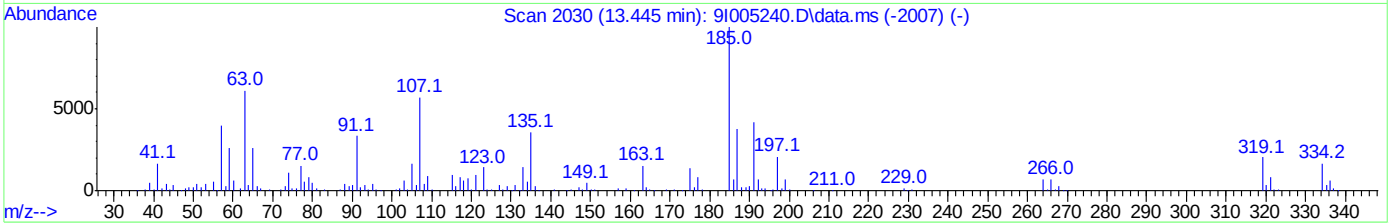
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071358.D
Acq On : 23 Jun 2020 10:55 am
Operator : marthav
Sample : ic2918-10 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 23 14:08:36 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071358.D\data.ms

(147) Aramite

13.241min (+0.091) 8.08ppm m

response 13073

Ion	Exp%	Act%
185.00	100	100
63.00	61.10	122.06#
135.10	35.60	60.55
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 06/24/20 14:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071359.D
Acq On : 23 Jun 2020 11:21 am
Operator : marthav
Sample : ic2918-25 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 23 16:54:59 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	0.000	152	0m	40.00	ppm	-6.00
22) Naphthalene-d8	0.000	136	0m	40.00	ppm	-7.43
43) Acenaphthene-d10	0.000	164	0m	40.00	ppm	-9.48
70) Phenanthrene-d10	0.000	188	0m	40.00	ppm	-11.22
92) Chrysene-d12	0.000	240	0m	40.00	ppm	-14.49
102) Perylene-d12	0.000	264	0m	40.00	ppm	-16.82
110) 1,4-Dichlorobenzene-d4A	6.005	152	158676	40.00	ppm	0.00
120) Naphthalene-d8A	7.433	136	654937	40.00	ppm	0.00
127) Acenaphthene-d10A	9.476	164	355001	40.00	ppm	0.00
136) Phenanthrene-d10A	11.225	188	638763	40.00	ppm	0.00
146) Chrysene-d12A	14.487	240	425269	40.00	ppm	0.00
153) Perylene-d12A	16.814	264	360527	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	0.000	112	0d	0.00	ppm	
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#		
9) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#		
23) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#		
47) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#		
75) 2,4,6-Tribromophenol	0.000	330	0d	0.00	ppm	
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#		
95) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#		
Target Compounds						Qvalue
111) 2-Picoline	3.983	93	185422	23.53	ppm	87
112) N-Nitrosomethylethylamine	4.106	42	124718	44.70	ppm #	53
113) Methyl methanesulfonate	4.432	80	89970	23.09	ppm	91
114) N-Nitrosodiethylamine	4.849	102	74730	23.86	ppm #	18
115) Ethyl methanesulfonate	5.176	79	123287	22.35	ppm	93
116) Pentachloroethane	5.700	167	52204	23.27	ppm	97
117) N-Nitrosopyrrolidine	6.422	100	68904	21.49	ppm #	26
118) N-Nitrosomorpholine	6.475	56	125871	37.61	ppm #	67
119) O-Toluidine	6.491	106	251000	25.81	ppm	98
121) N-Nitrosopiperidine	6.807	42	150841	42.04	ppm #	57
122) A,A-Dimethylphenethyla...	7.352	58	614390m	34.13	ppm	
123) Hexachloropropene	7.561	213	68332	19.62	ppm	100
124) N-Nitrosodi-n-butylamine	7.930	84	101921	22.53	ppm #	41
125) p-Phenylenediamine	7.930	108	173372m	35.56	ppm	
126) Isosafrole	8.171	162	110395	25.75	ppm	81
128) Safrole	8.775	162	112129	24.41	ppm	85
129) 1-Chloronaphthalene	8.850	162	269339	24.44	ppm	98
130) Diphenyl Ether	8.941	170	190986	25.51	ppm	92
131) 1,4-Naphthoquinone	9.037	158	118609	26.87	ppm	87
132) Pentachlorobenzene	9.668	250	94218	18.43	ppm	100
133) 1-Naphthylamine	9.807	143	302346	26.73	ppm	92

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071359.D
Acq On : 23 Jun 2020 11:21 am
Operator : marthav
Sample : ic2918-25 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 23 16:54:59 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration

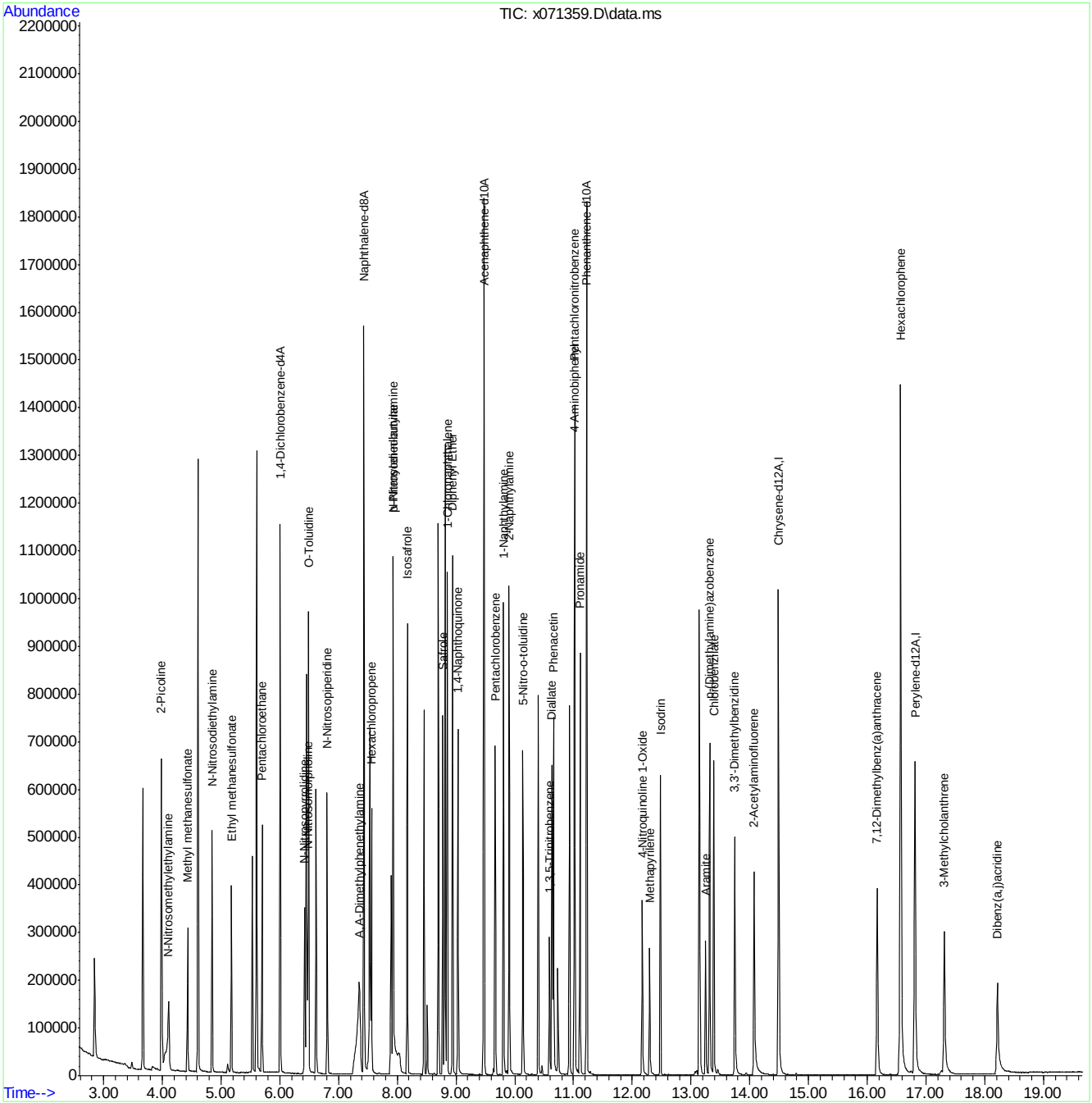
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
134) 2-Naphthylamine	9.904	143	327376	28.41	ppm		96
135) 5-Nitro-o-toluidine	10.139	152	91941	24.27	ppm		80
137) 1,3,5-Trinitrobenzene	10.588	75	67291	17.44	ppm		84
138) Diallate	10.631	43	252842m	35.85	ppm		
139) Phenacetin	10.658	108	154829	23.52	ppm		91
140) 4-Aminobiphenyl	11.022	169	342587	31.81	ppm		98
141) Pronamide	11.112	173	128388	23.47	ppm		98
142) Pentachloronitrobenzene	11.016	237	31448	19.34	ppm		90
143) 4-Nitroquinoline 1-Oxide	12.172	190	21069	37.18	ppm		72
144) Methapyrilene	12.295	58	93392	11.77	ppm	#	70
145) Isodrin	12.482	193	43906	19.81	ppm		85
147) Aramite	13.247	185	39644m	23.75	ppm		
148) p-(Dimethylamine)azobe...	13.316	120	121096	24.52	ppm		82
149) Chlorobenzilate	13.391	139	138411	26.77	ppm		74
151) 3,3'-Dimethylbenzidine	13.744	212	185725	30.03	ppm		99
152) 2-Acetylaminofluorene	14.070	181	141745	25.52	ppm		91
154) 7,12-Dimethylbenz(a)an...	16.167	256	123384	23.57	ppm		95
155) Hexachlorophene	16.568	196	189721	433.83	ppm		99
156) 3-Methylcholanthrene	17.312	268	110629	23.67	ppm		91
157) Dibenz(a,j)acridine	18.215	279	142603	19.95	ppm		97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071359.D
Acq On : 23 Jun 2020 11:21 am
Operator : marthav
Sample : ic2918-25 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 23 16:54:59 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: SX2918-IC2918
Lab FileID: X071359.D
Injection Time: 06/23/20 11:21

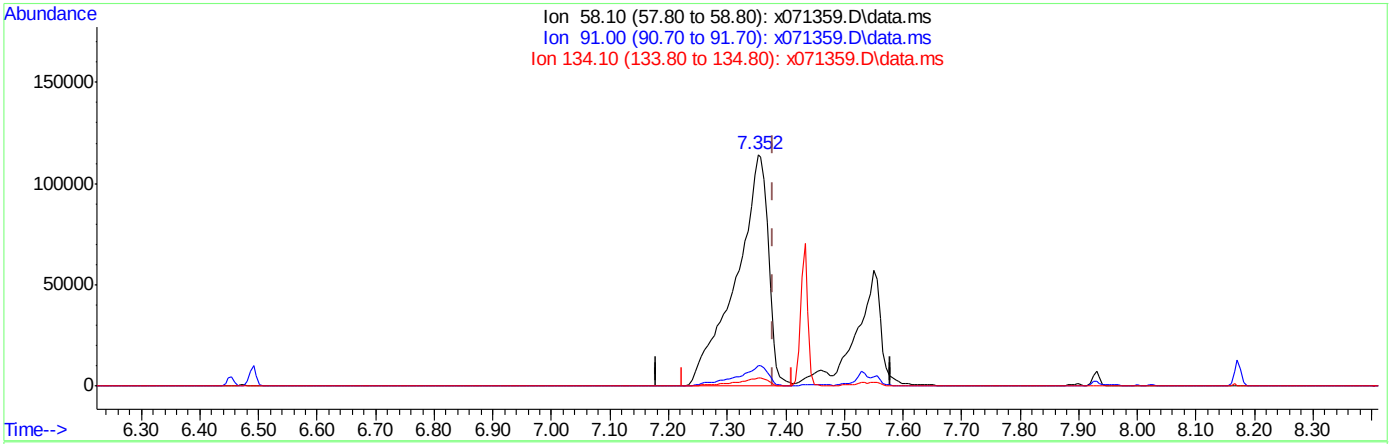
Method: EPA 625.1
Analyst approved: 06/24/20 09:50 Martha Valls
Supervisor approved: 06/24/20 14:07 Naresh Jiawan

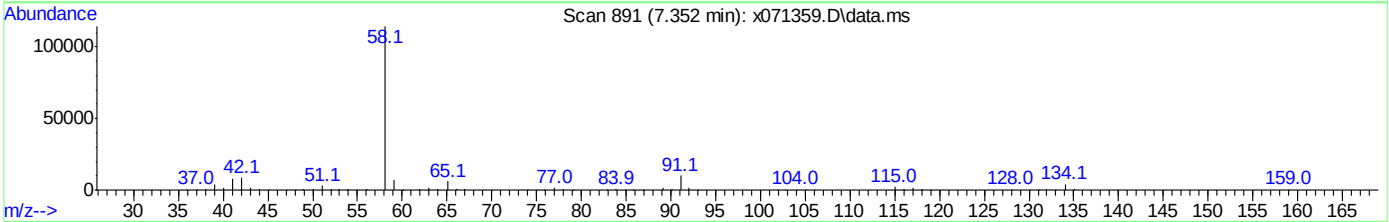
Parameter	CAS	Sig#	R.T. (min.)	Reason
A,A-Dimethylphenethylamine	122-09-8		7.35	Split peak
p-Phenylenediamine	106-50-3		7.93	Split peak
Diallate	2303-16-4		10.63	Split peak
Aramite	140-57-8		13.25	Split peak

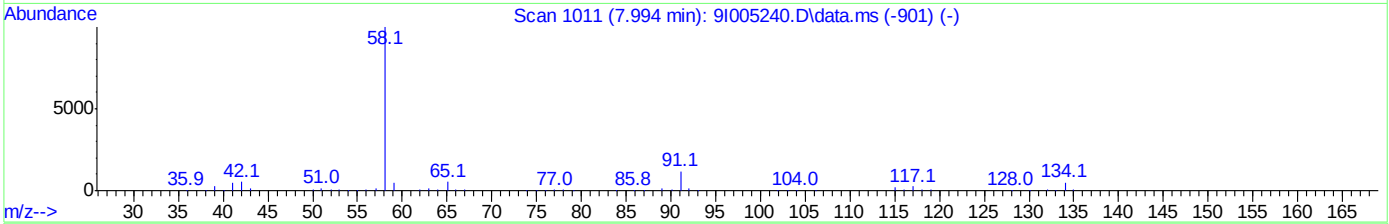
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071359.D
Acq On : 23 Jun 2020 11:21 am
Operator : marthav
Sample : ic2918-25 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 23 14:01:04 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071359.D\data.ms

(122) A,A-Dimethylphenethylamine

7.352min (-0.027) 24.61ppm

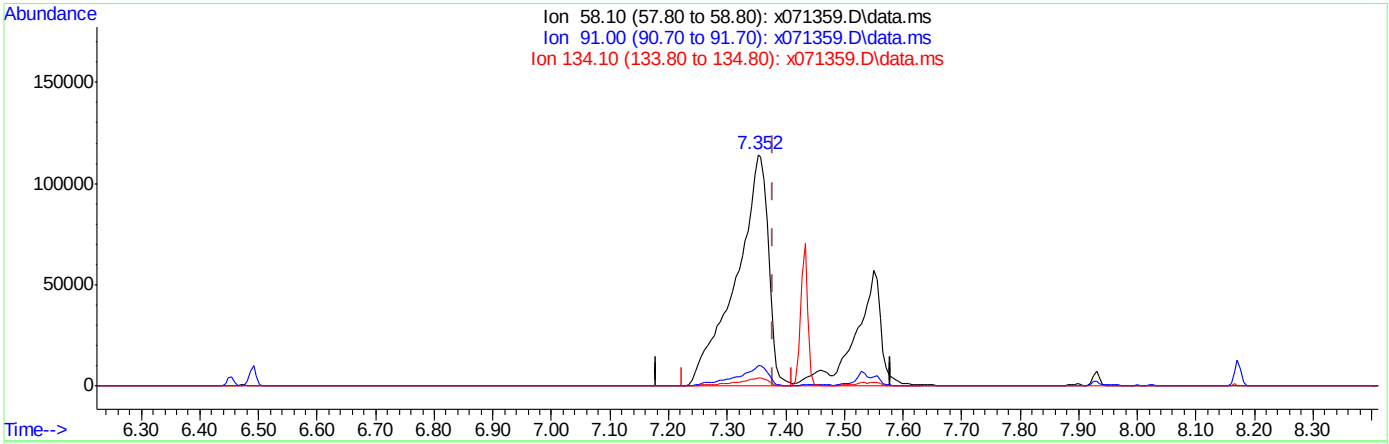
response 437927

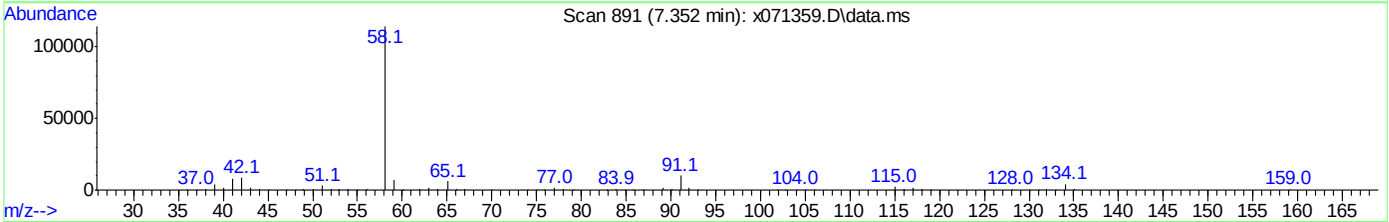
Ion	Exp%	Act%
58.10	100	100
91.00	11.70	8.67
134.10	5.10	3.64
0.00	0.00	0.00

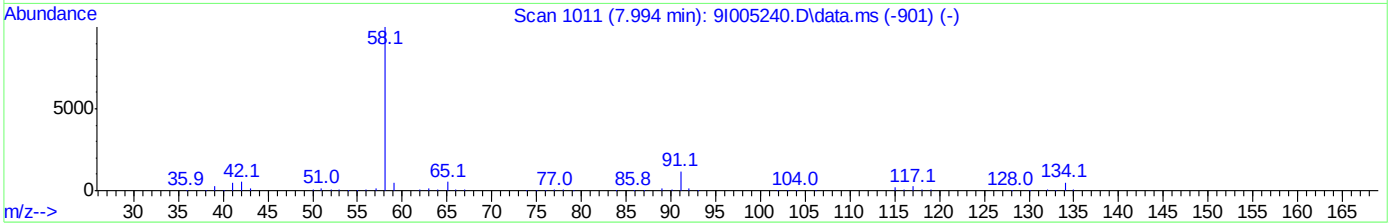
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071359.D
Acq On : 23 Jun 2020 11:21 am
Operator : marthav
Sample : ic2918-25 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 23 14:01:04 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071359.D\data.ms

(122) A,A-Dimethylphenethylamine

7.352min (-0.027) 34.13ppm m

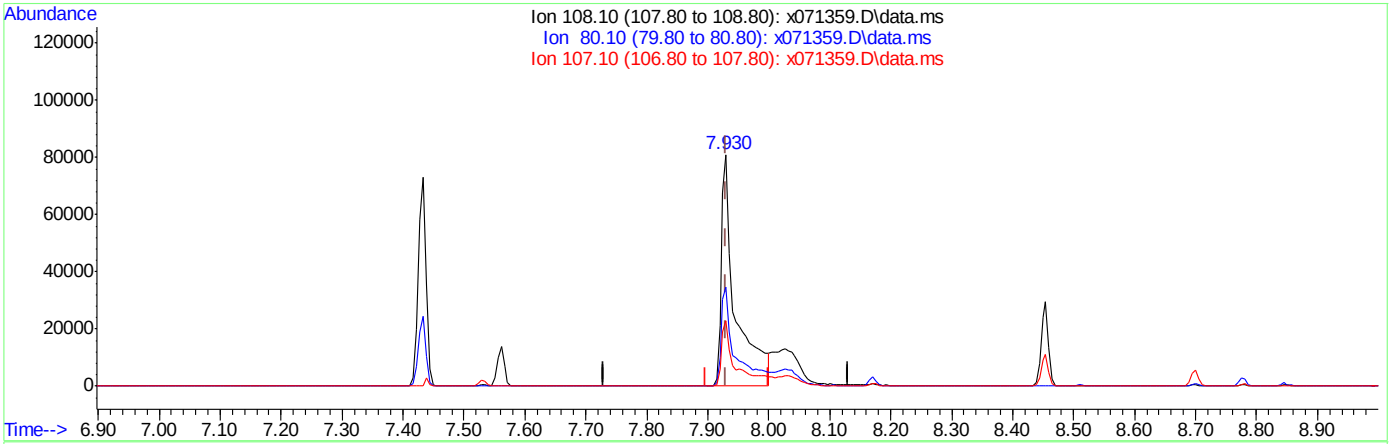
response 614390

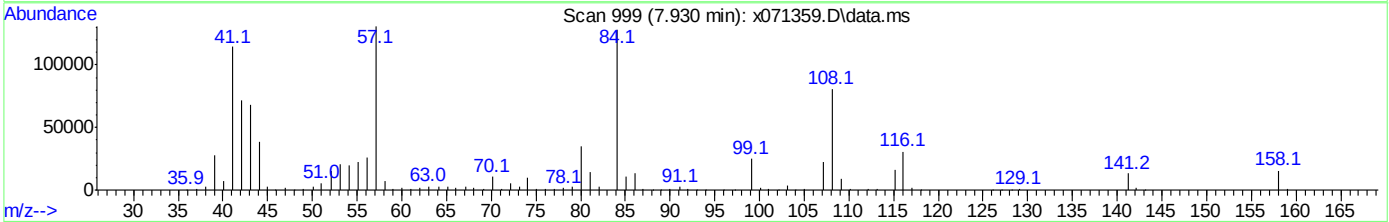
Ion	Exp%	Act%
58.10	100	100
91.00	11.70	8.72
134.10	5.10	3.70
0.00	0.00	0.00

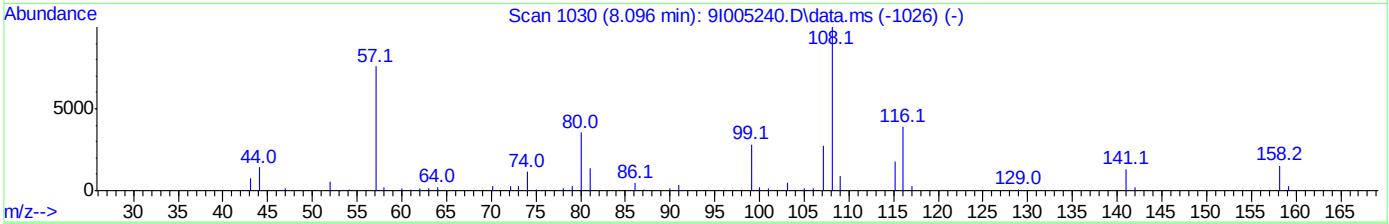
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071359.D
Acq On : 23 Jun 2020 11:21 am
Operator : marthav
Sample : ic2918-25 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 23 14:01:04 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071359.D\data.ms

(125) p-Phenylenediamine

7.930min (0.000) 26.70ppm

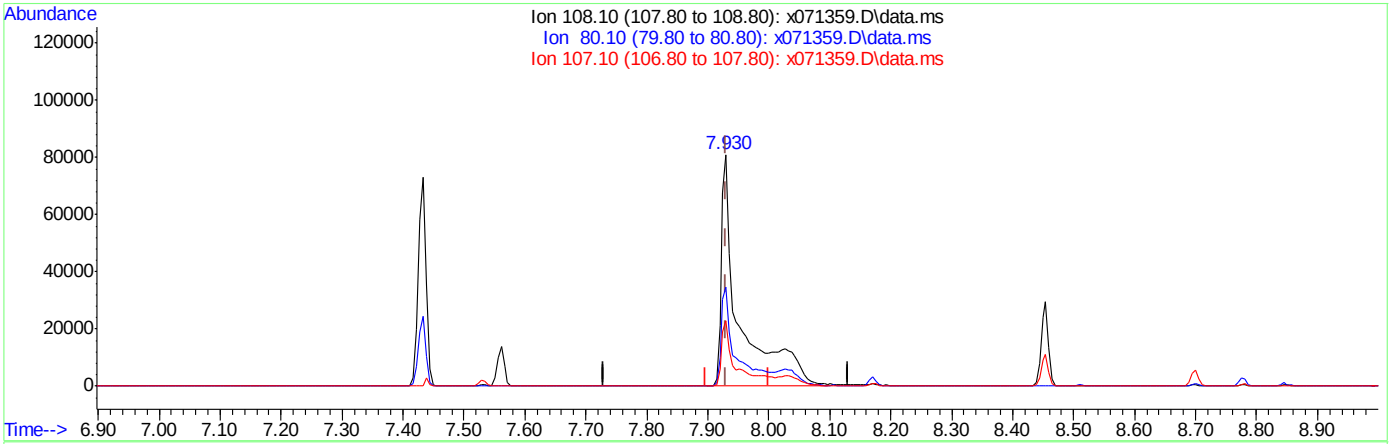
response 133387

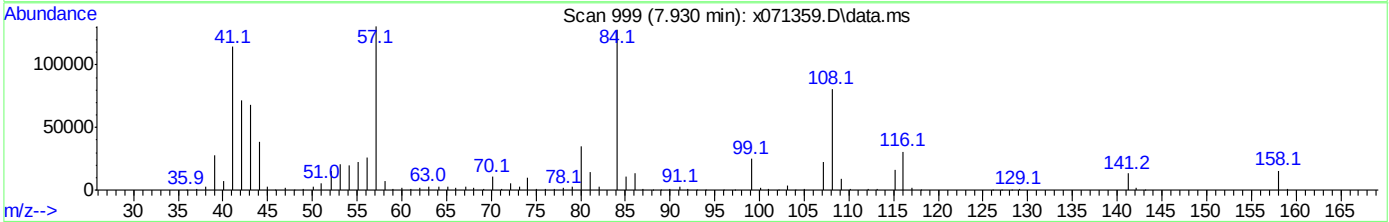
Ion	Exp%	Act%
108.10	100	100
80.10	35.50	42.72
107.10	27.70	28.16
0.00	0.00	0.00

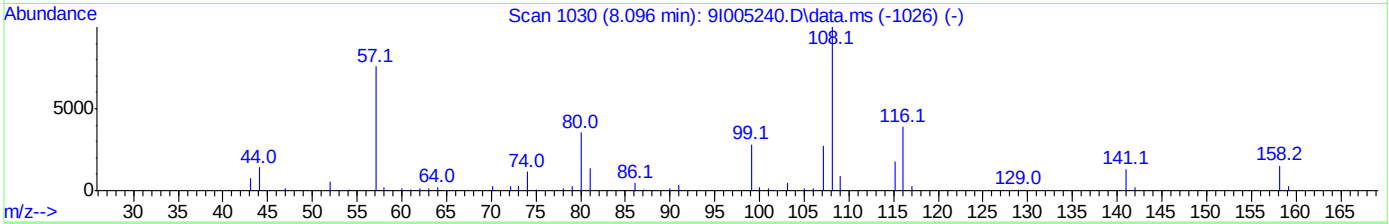
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071359.D
Acq On : 23 Jun 2020 11:21 am
Operator : marthav
Sample : ic2918-25 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 23 14:01:04 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071359.D\data.ms

(125) p-Phenylenediamine

7.930min (0.000) 35.56ppm m

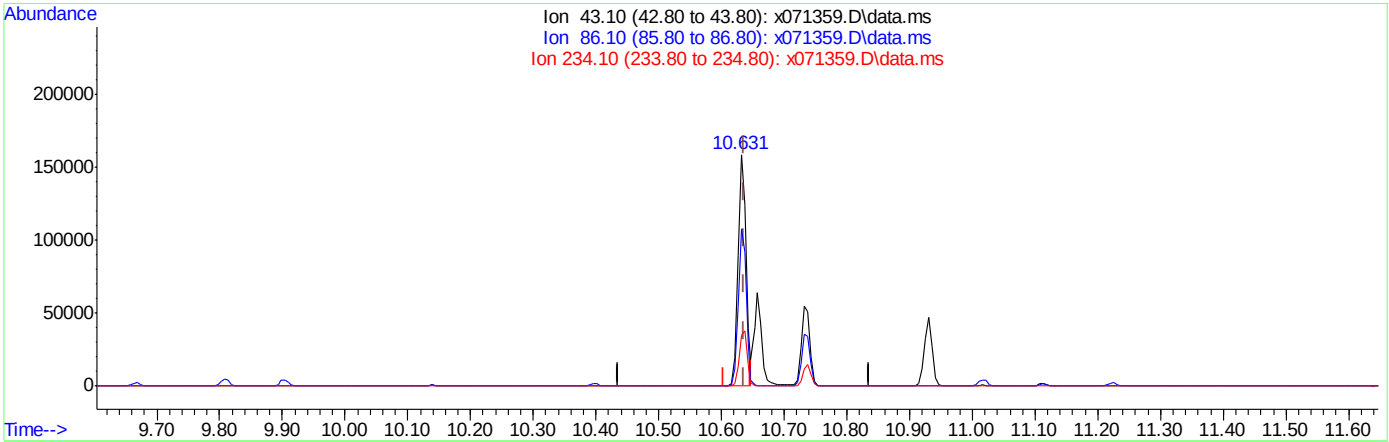
response 173372

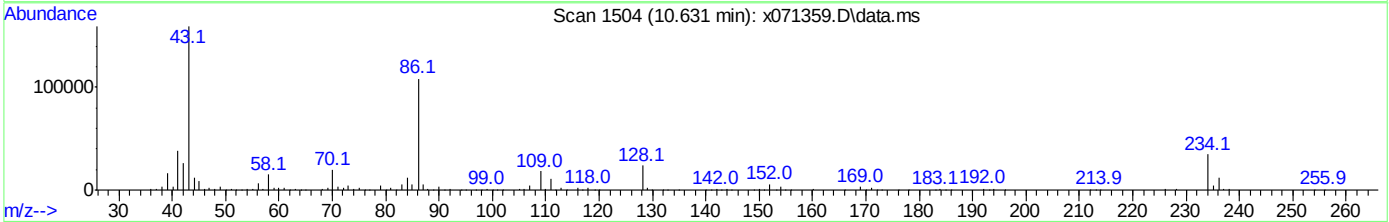
Ion	Exp%	Act%
108.10	100	100
80.10	35.50	42.92
107.10	27.70	28.19
0.00	0.00	0.00

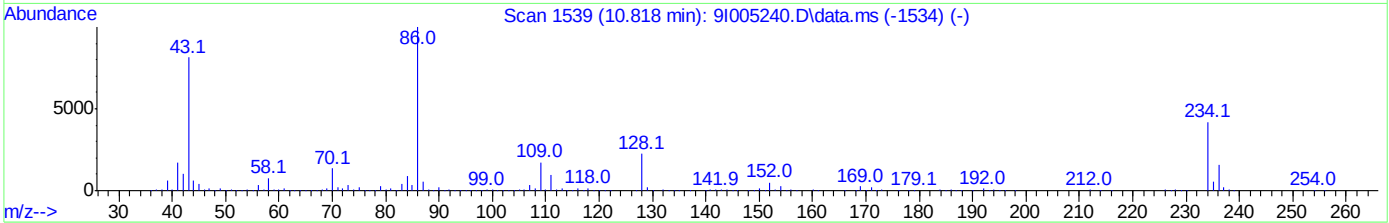
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071359.D
Acq On : 23 Jun 2020 11:21 am
Operator : marthav
Sample : ic2918-25 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 23 14:01:04 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071359.D\data.ms

(138) Diallate

10.631min (-0.005) 20.55ppm

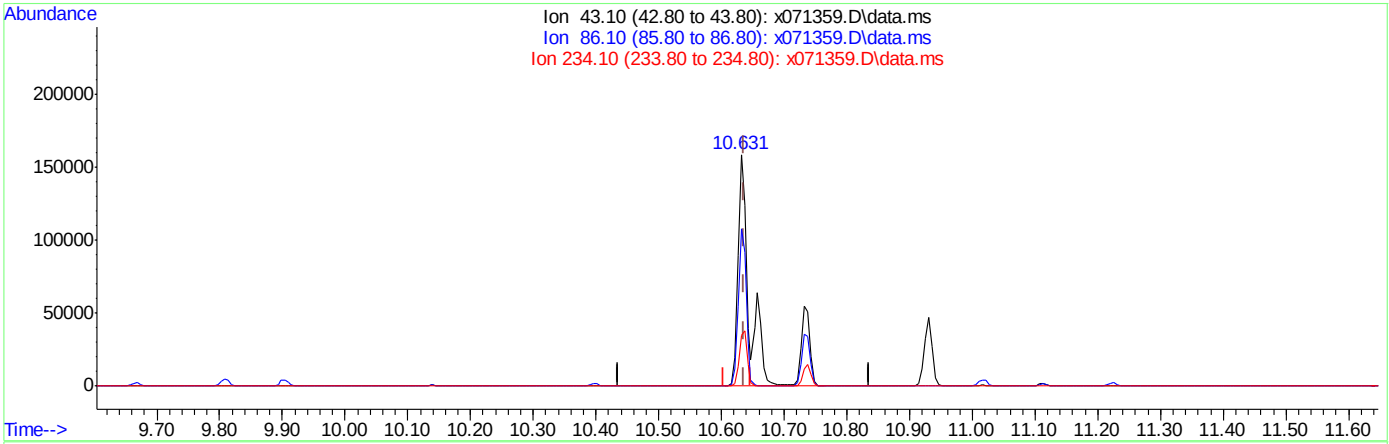
response 144925

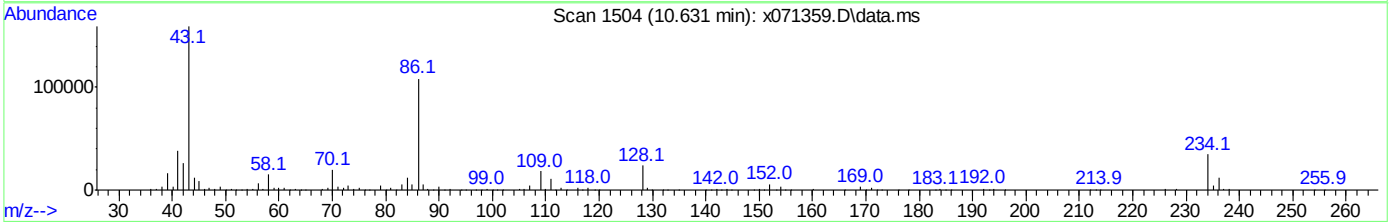
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	70.53#
234.10	51.50	22.40
0.00	0.00	0.00

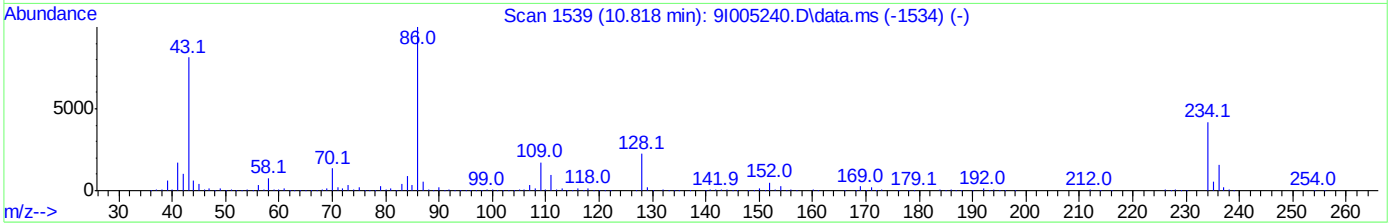
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071359.D
Acq On : 23 Jun 2020 11:21 am
Operator : marthav
Sample : ic2918-25 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 23 14:01:04 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071359.D\data.ms

(138) Diallate

10.631min (-0.005) 35.85ppm m

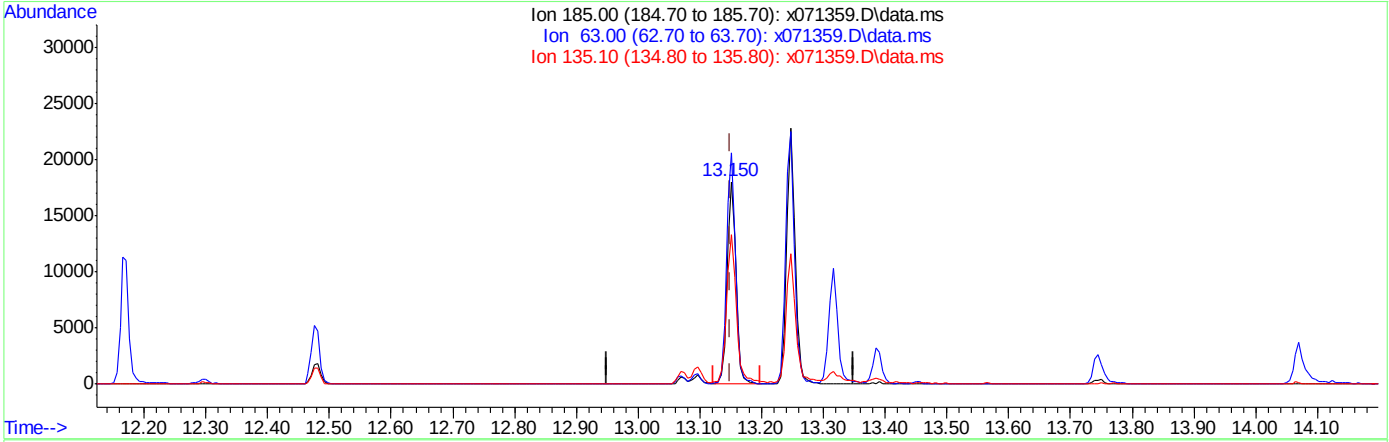
response 252842

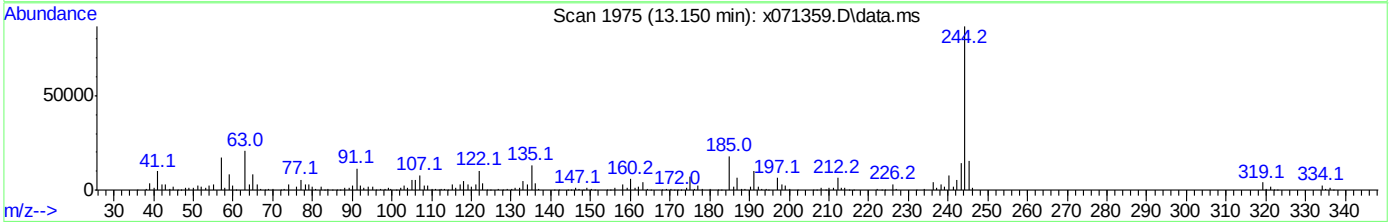
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	67.84#
234.10	51.50	21.87
0.00	0.00	0.00

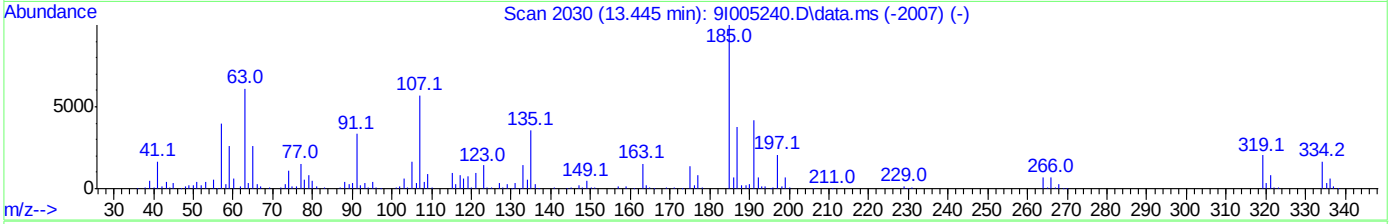
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071359.D
Acq On : 23 Jun 2020 11:21 am
Operator : marthav
Sample : ic2918-25 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 23 14:01:04 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071359.D\data.ms

(147) Aramite

13.150min (0.000) 10.97ppm

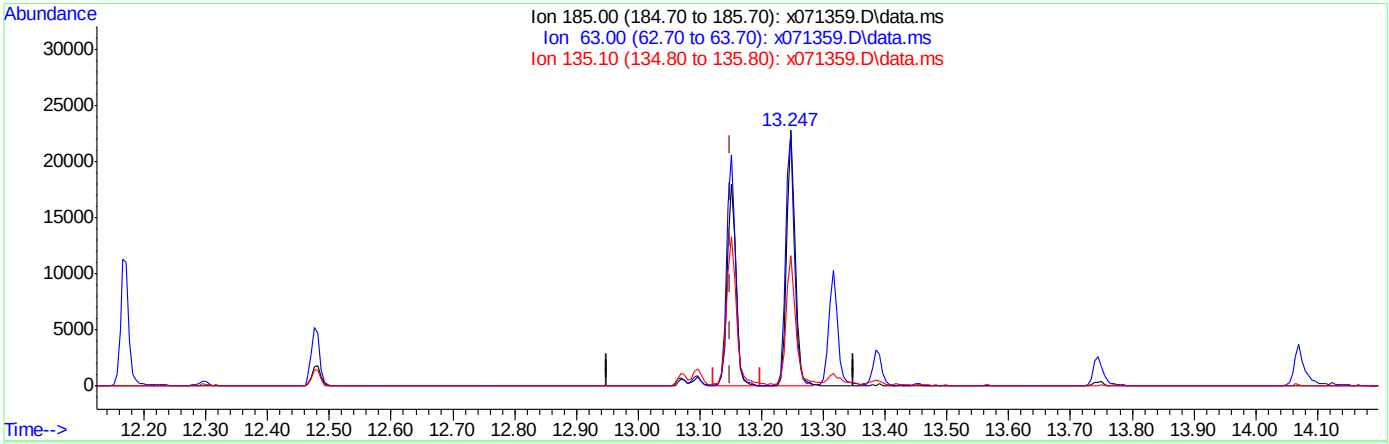
response 17983

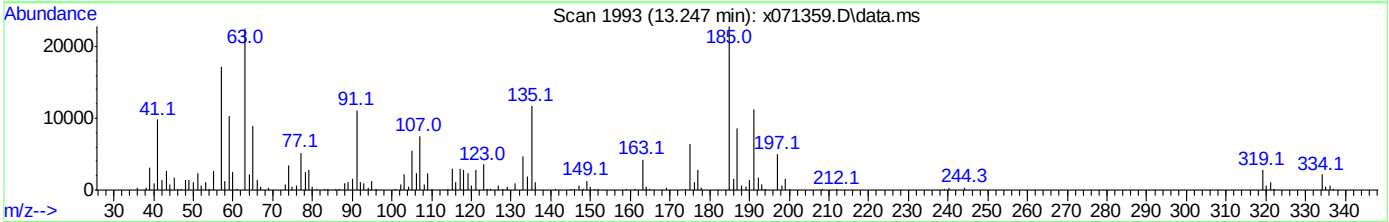
Ion	Exp%	Act%
185.00	100	100
63.00	61.10	114.08#
135.10	35.60	72.34#
0.00	0.00	0.00

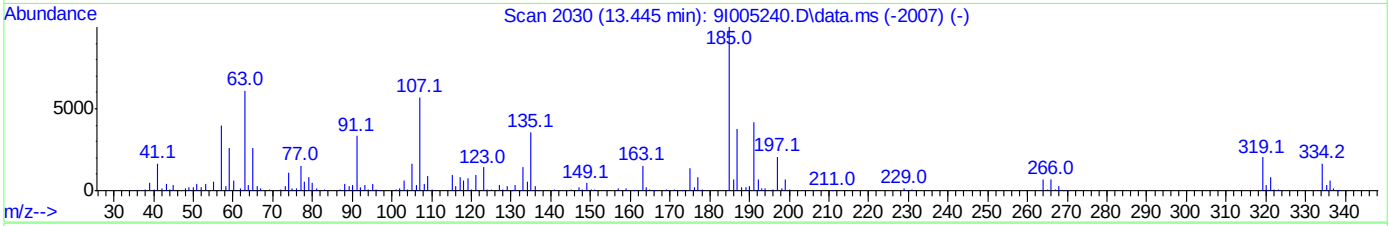
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071359.D
Acq On : 23 Jun 2020 11:21 am
Operator : marthav
Sample : ic2918-25 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 23 14:01:04 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071359.D\data.ms

(147) Aramite

13.247min (+0.096) 23.72ppm m

response 39594

Ion	Exp%	Act%
185.00	100	100
63.00	61.10	98.70#
135.10	35.60	51.18
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 06/24/20 14:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071360.D
Acq On : 23 Jun 2020 11:46 am
Operator : marthav
Sample : ic2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 23 16:55:12 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	0.000	152	0m	40.00	ppm		-6.00
22) Naphthalene-d8	0.000	136	0m	40.00	ppm		-7.43
43) Acenaphthene-d10	0.000	164	0m	40.00	ppm		-9.48
70) Phenanthrene-d10	0.000	188	0m	40.00	ppm		-11.22
92) Chrysene-d12	0.000	240	0m	40.00	ppm		-14.49
102) Perylene-d12	0.000	264	0m	40.00	ppm		-16.82
110) 1,4-Dichlorobenzene-d4A	6.005	152	151564	40.00	ppm		0.00
120) Naphthalene-d8A	7.433	136	655182	40.00	ppm		0.00
127) Acenaphthene-d10A	9.476	164	349855	40.00	ppm		0.00
136) Phenanthrene-d10A	11.225	188	638196	40.00	ppm		0.00
146) Chrysene-d12A	14.487	240	407074	40.00	ppm		0.00
153) Perylene-d12A	16.819	264	338302	40.00	ppm		0.00
System Monitoring Compounds							
7) 2-Fluorophenol	0.000	112	0d	0.00	ppm		
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#			
9) Phenol-d5	0.000	99	0d	0.00	ppm		
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#			
23) Nitrobenzene-d5	0.000	82	0d	0.00	ppm		
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#			
47) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm		
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#			
75) 2,4,6-Tribromophenol	0.000	330	0d	0.00	ppm		
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#			
95) Terphenyl-d14	0.000	244	0d	0.00	ppm		
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#			
Target Compounds							Qvalue
111) 2-Picoline	3.983	93	378323	50.26	ppm		88
112) N-Nitrosomethylethylamine	4.111	42	260501	97.75	ppm	#	52
113) Methyl methanesulfonate	4.437	80	187573	50.40	ppm		91
114) N-Nitrosodiethylamine	4.855	102	158519	52.99	ppm	#	28
115) Ethyl methanesulfonate	5.181	79	259741	49.29	ppm		97
116) Pentachloroethane	5.700	167	109705	51.19	ppm		93
117) N-Nitrosopyrrolidine	6.432	100	147319	48.12	ppm	#	36
118) N-Nitrosomorpholine	6.481	56	265918	83.18	ppm	#	67
119) O-Toluidine	6.497	106	549182	59.12	ppm		98
121) N-Nitrosopiperidine	6.812	42	316635	88.22	ppm	#	58
122) A,A-Dimethylphenethyla...	7.379	58	1293311m	68.93	ppm		
123) Hexachloropropene	7.561	213	155362	44.58	ppm		100
124) N-Nitrosodi-n-butylamine	7.935	84	281690	57.84	ppm	#	52
125) p-Phenylenediamine	7.930	108	342749m	80.37	ppm		
126) Isosafrole	8.176	162	237534	55.38	ppm		84
128) Safrole	8.780	162	246210	54.39	ppm		89
129) 1-Chloronaphthalene	8.850	162	588257	54.17	ppm		96
130) Diphenyl Ether	8.941	170	409072	55.45	ppm		90
131) 1,4-Naphthoquinone	9.037	158	244539	66.13	ppm		80
132) Pentachlorobenzene	9.668	250	198634	39.42	ppm		100
133) 1-Naphthylamine	9.813	143	634517	56.92	ppm		95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071360.D
Acq On : 23 Jun 2020 11:46 am
Operator : marthav
Sample : ic2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 23 16:55:12 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration

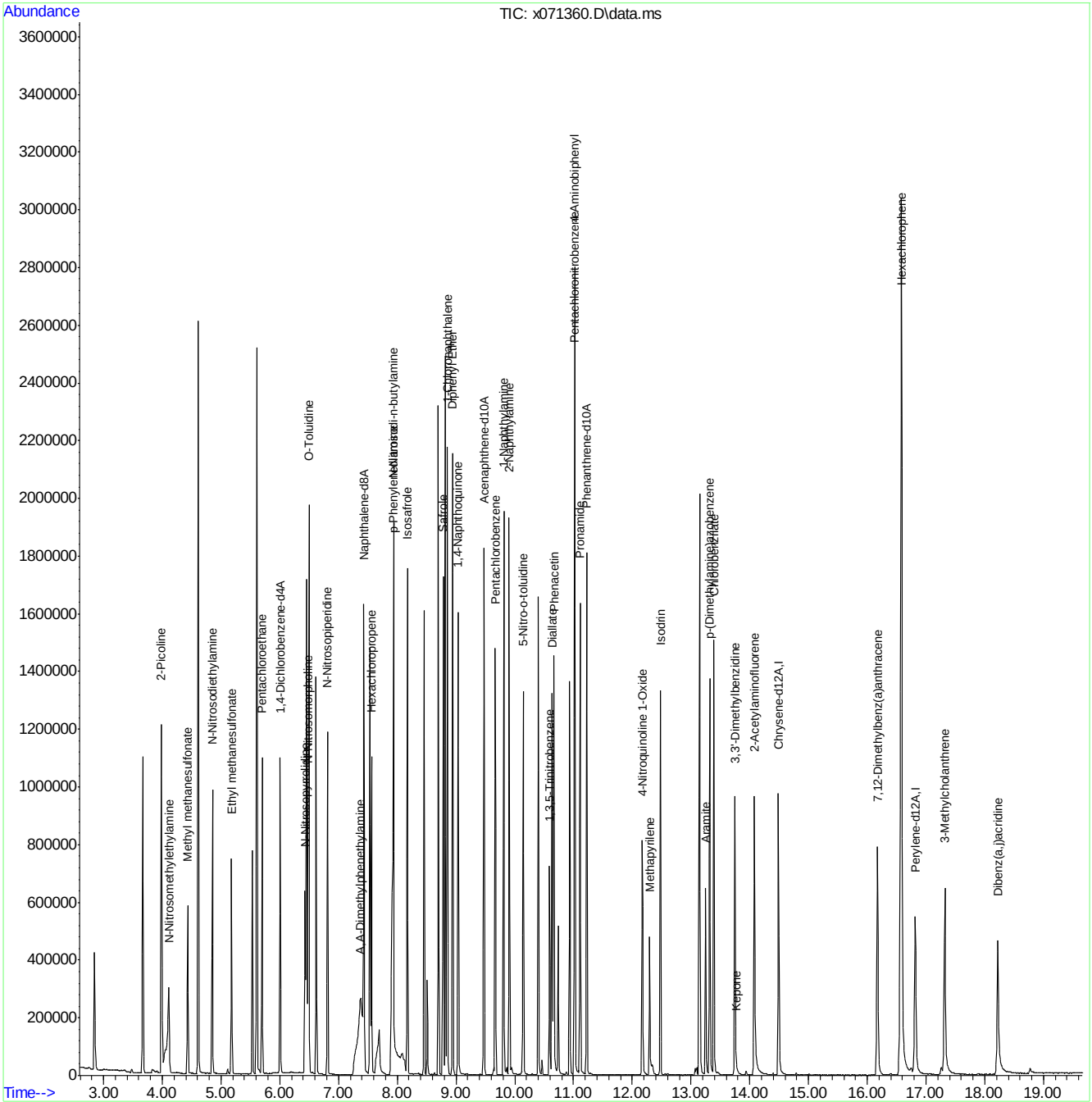
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
134) 2-Naphthylamine	9.904	143	686741	60.48	ppm	95
135) 5-Nitro-o-toluidine	10.144	152	201942	52.44	ppm	78
137) 1,3,5-Trinitrobenzene	10.594	75	166805	42.00	ppm	87
138) Diallate	10.636	43	519071m	73.66	ppm	
139) Phenacetin	10.669	108	343358	50.50	ppm	92
140) 4-Aminobiphenyl	11.022	169	699848	65.04	ppm	99
141) Pronamide	11.118	173	280696	50.21	ppm	98
142) Pentachloronitrobenzene	11.016	237	68116	41.94	ppm	93
143) 4-Nitroquinoline 1-Oxide	12.172	190	60083	80.11	ppm	73
144) Methapyrilene	12.295	58	185003m	23.18	ppm	
145) Isodrin	12.482	193	93557	42.24	ppm	87
147) Aramite	13.247	185	90482m	54.36	ppm	
148) p-(Dimethylamine)azobe...	13.321	120	263027	57.86	ppm	88
149) Chlorobenzilate	13.391	139	302437	59.53	ppm	74
150) Kepone	13.771	272	673	0.46	ppm	86
151) 3,3'-Dimethylbenzidine	13.749	212	377447	62.52	ppm	96
152) 2-Acetylaminofluorene	14.076	181	315144	54.38	ppm	90
154) 7,12-Dimethylbenz(a)an...	16.172	256	259627	51.97	ppm	96
155) Hexachlorophene	16.584	196	479639	831.02	ppm	97
156) 3-Methylcholanthrene	17.322	268	235721	52.86	ppm	95
157) Dibenz(a,j)acridine	18.221	279	319323	44.00	ppm	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071360.D
Acq On : 23 Jun 2020 11:46 am
Operator : marthav
Sample : ic2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 23 16:55:12 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: SX2918-IC2918
Lab FileID: X071360.D
Injection Time: 06/23/20 11:46

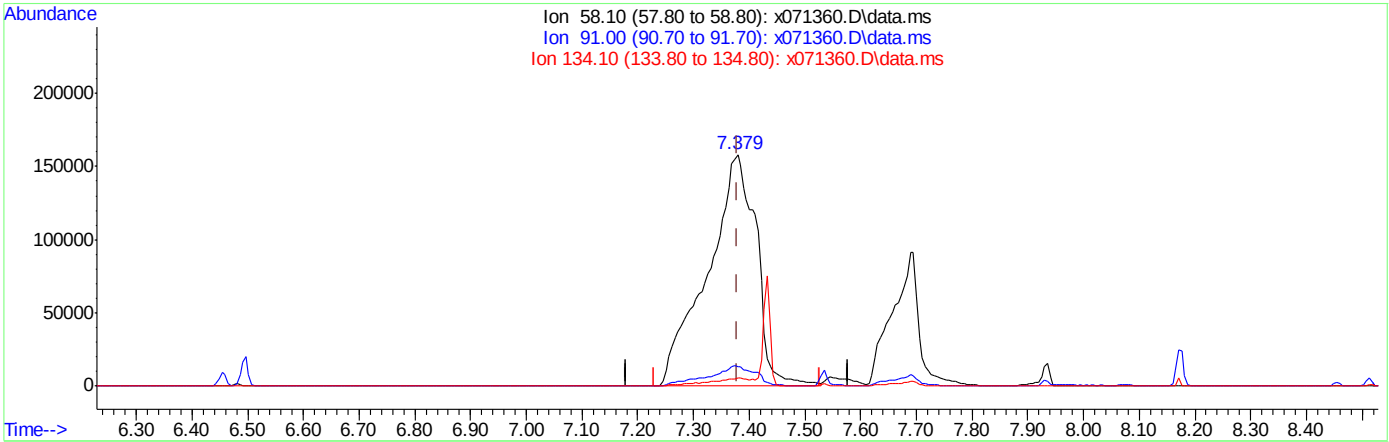
Method: EPA 625.1
Analyst approved: 06/24/20 09:50 Martha Valls
Supervisor approved: 06/24/20 14:07 Naresh Jiawan

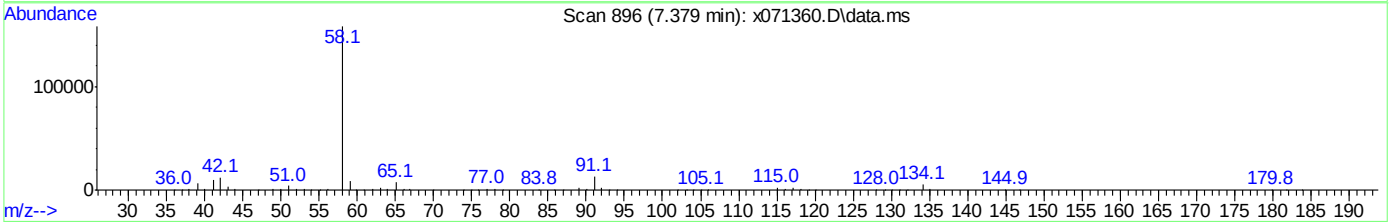
Parameter	CAS	Sig#	R.T. (min.)	Reason
A,A-Dimethylphenethylamine	122-09-8		7.38	Split peak
p-Phenylenediamine	106-50-3		7.93	Split peak
Diallate	2303-16-4		10.64	Split peak
Methapyrilene	91-80-5		12.29	Split peak
Aramite	140-57-8		13.25	Split peak

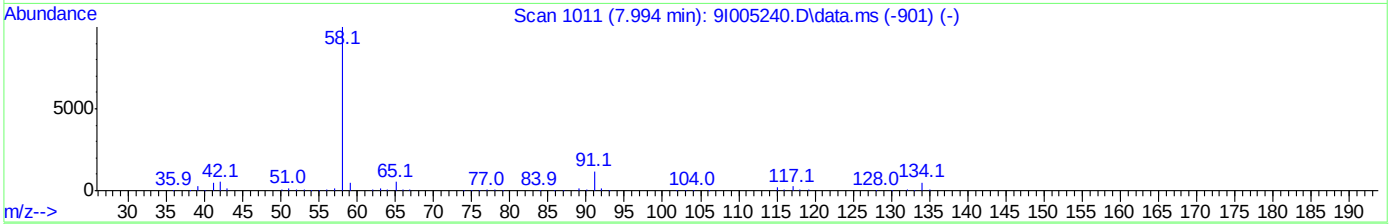
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071360.D
Acq On : 23 Jun 2020 11:46 am
Operator : marthav
Sample : ic2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 23 14:01:06 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071360.D\data.ms

(122) A,A-Dimethylphenethylamine

7.379min (0.000) 52.39ppm

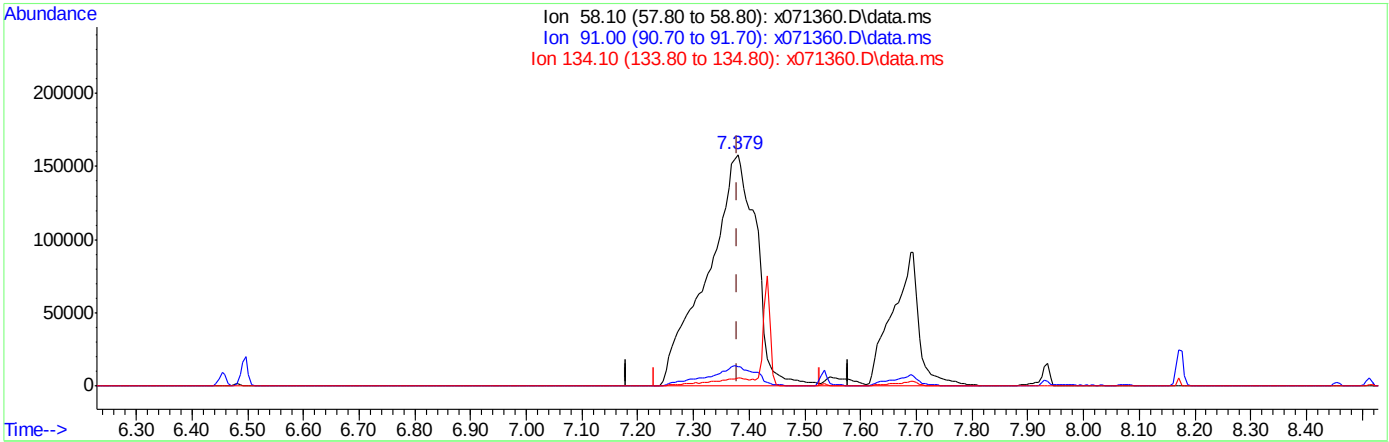
response 964162

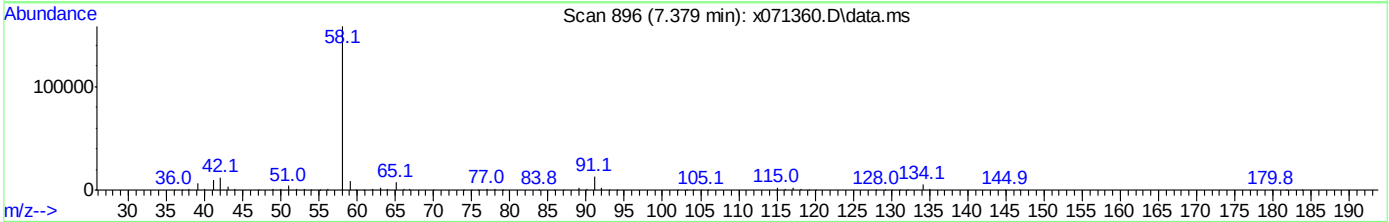
Ion	Exp%	Act%
58.10	100	100
91.00	11.70	6.05
134.10	5.10	3.27
0.00	0.00	0.00

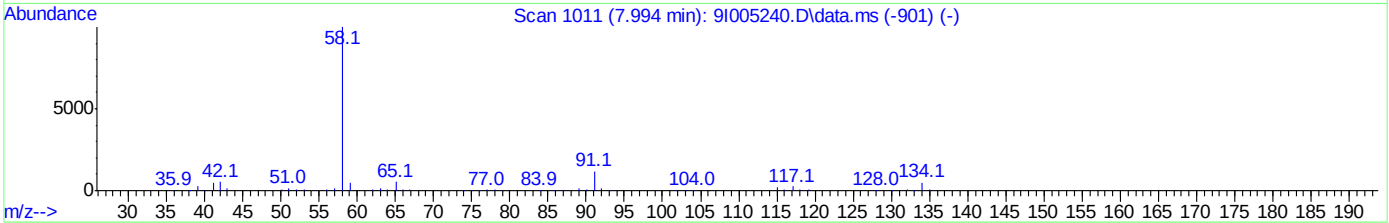
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071360.D
Acq On : 23 Jun 2020 11:46 am
Operator : marthav
Sample : ic2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 23 14:01:06 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071360.D\data.ms

(122) A,A-Dimethylphenethylamine

7.379min (0.000) 68.93ppm m

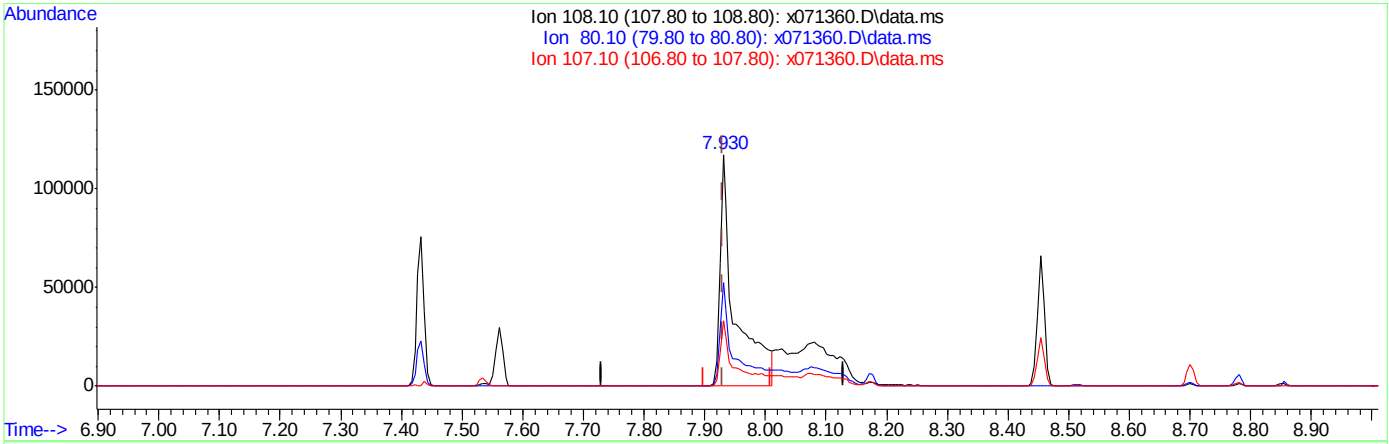
response 1293311

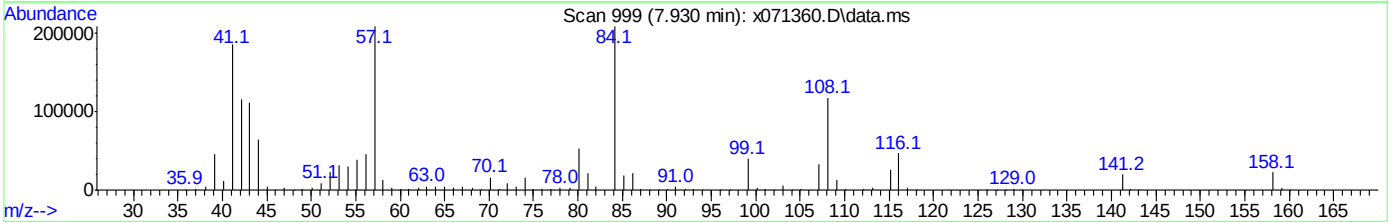
Ion	Exp%	Act%
58.10	100	100
91.00	11.70	8.30
134.10	5.10	3.68
0.00	0.00	0.00

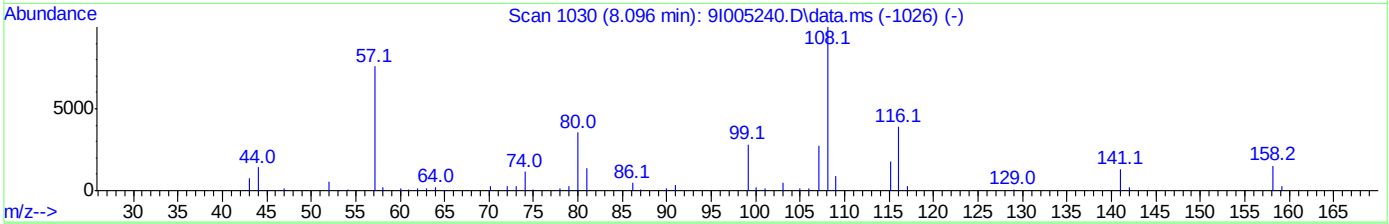
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071360.D
Acq On : 23 Jun 2020 11:46 am
Operator : marthav
Sample : ic2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 23 14:01:06 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071360.D\data.ms

(125) p-Phenylenediamine

7.930min (0.000) 43.42ppm

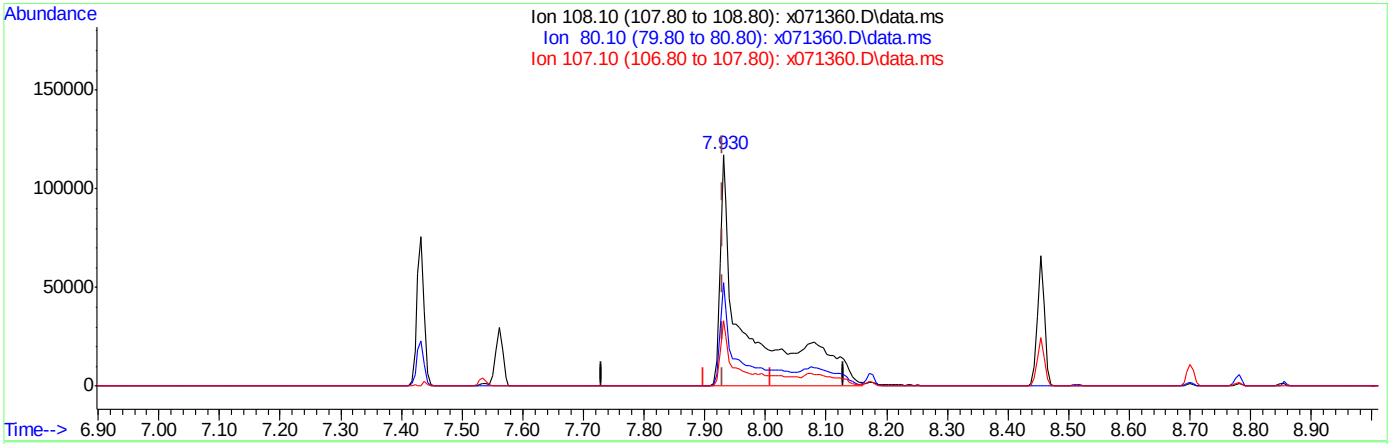
response 207105

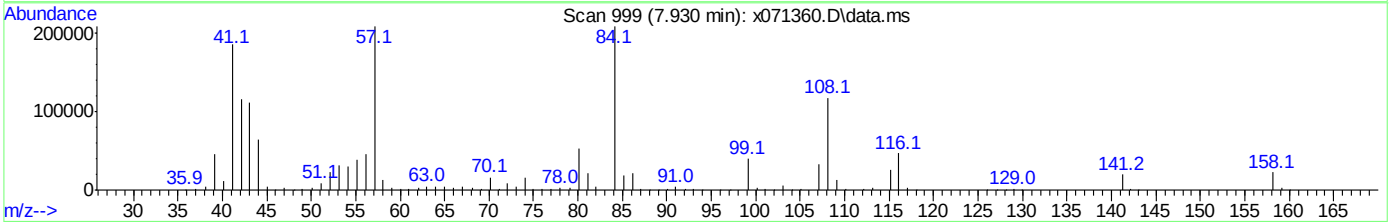
Ion	Exp%	Act%
108.10	100	100
80.10	35.50	44.36
107.10	27.70	28.19
0.00	0.00	0.00

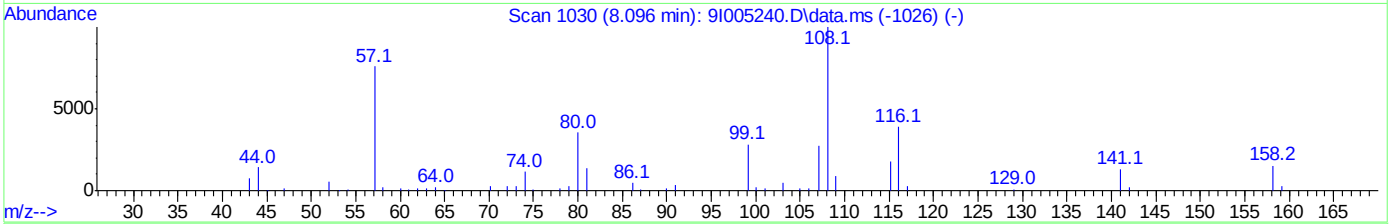
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071360.D
Acq On : 23 Jun 2020 11:46 am
Operator : marthav
Sample : ic2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 23 14:01:06 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071360.D\data.ms

(125) p-Phenylenediamine

7.930min (0.000) 80.37ppm m

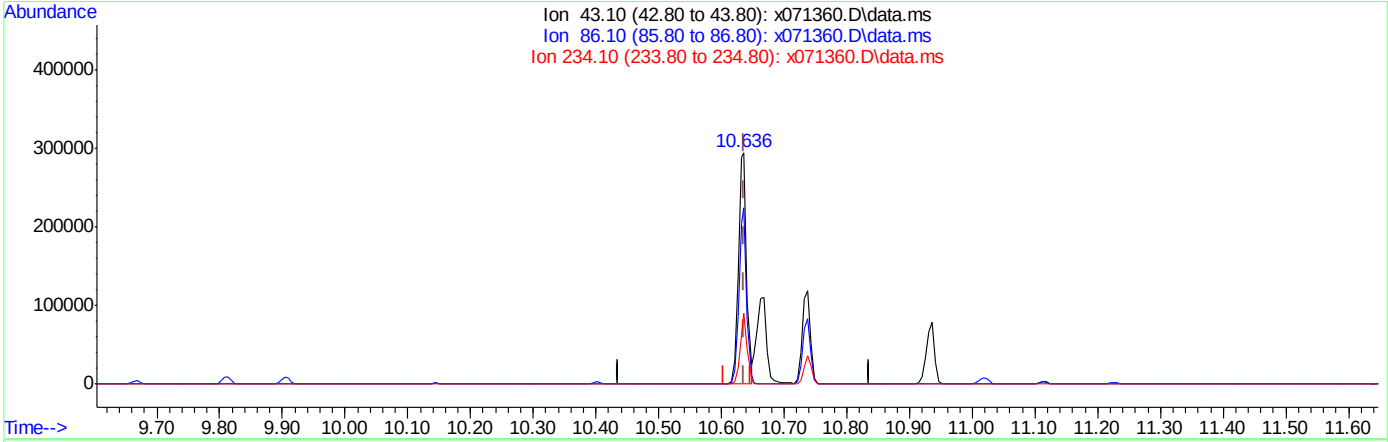
response 342749

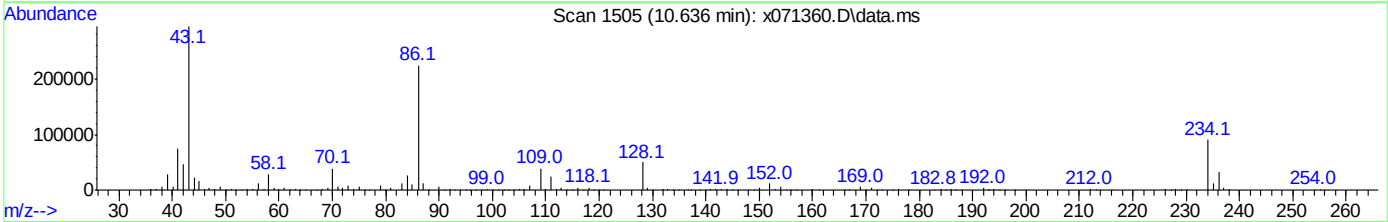
Ion	Exp%	Act%
108.10	100	100
80.10	35.50	44.57
107.10	27.70	28.29
0.00	0.00	0.00

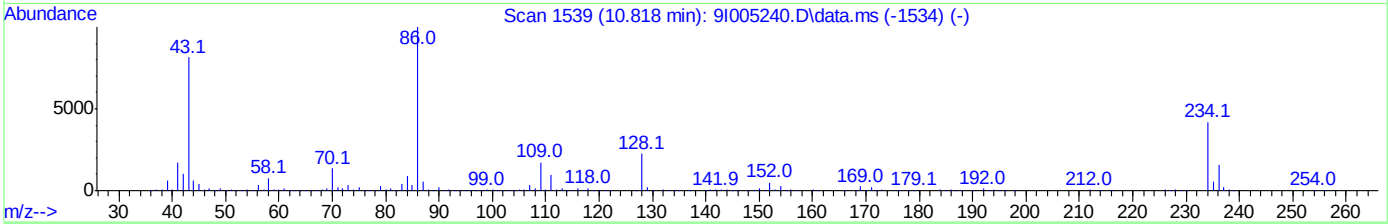
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071360.D
Acq On : 23 Jun 2020 11:46 am
Operator : marthav
Sample : ic2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 23 14:01:06 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071360.D\data.ms

(138) Diallate

10.636min (0.000) 40.34ppm

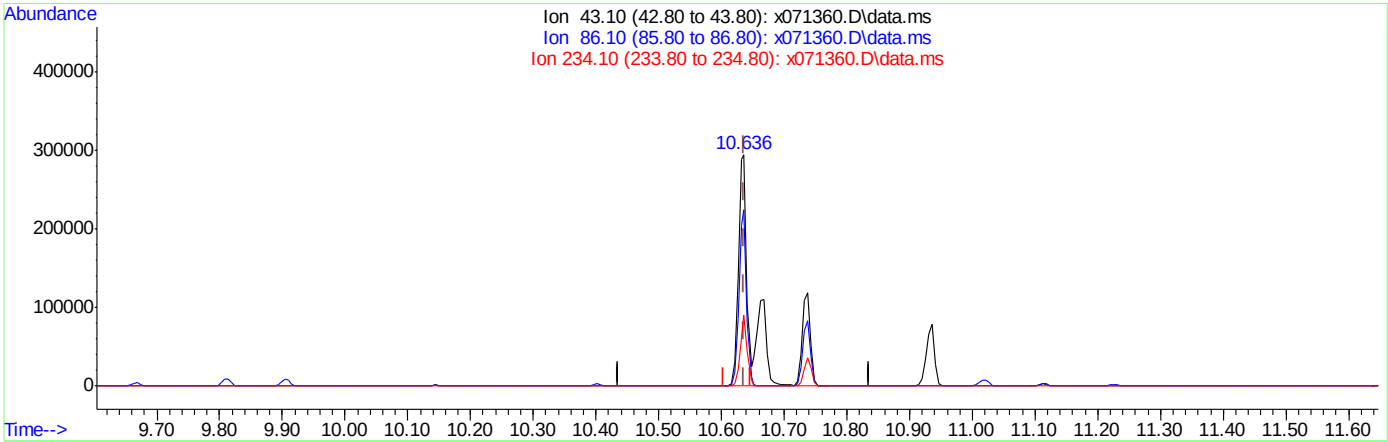
response 284269

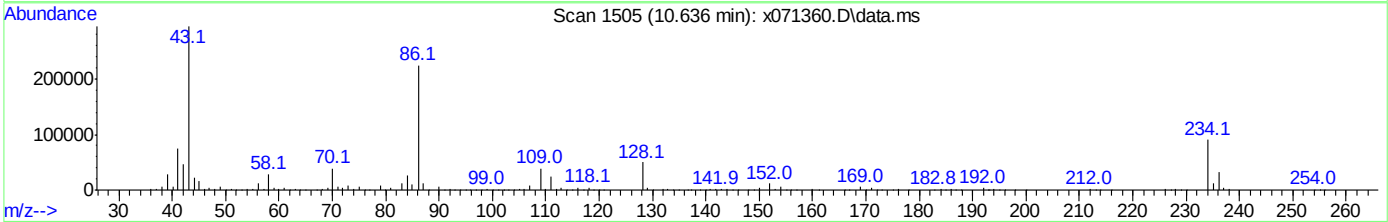
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	77.18#
234.10	51.50	30.56
0.00	0.00	0.00

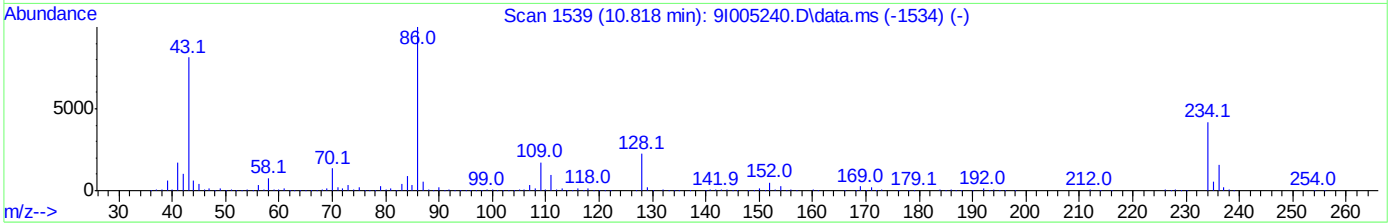
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071360.D
Acq On : 23 Jun 2020 11:46 am
Operator : marthav
Sample : ic2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 23 14:01:06 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071360.D\data.ms

(138) Diallate

10.636min (0.000) 73.66ppm m

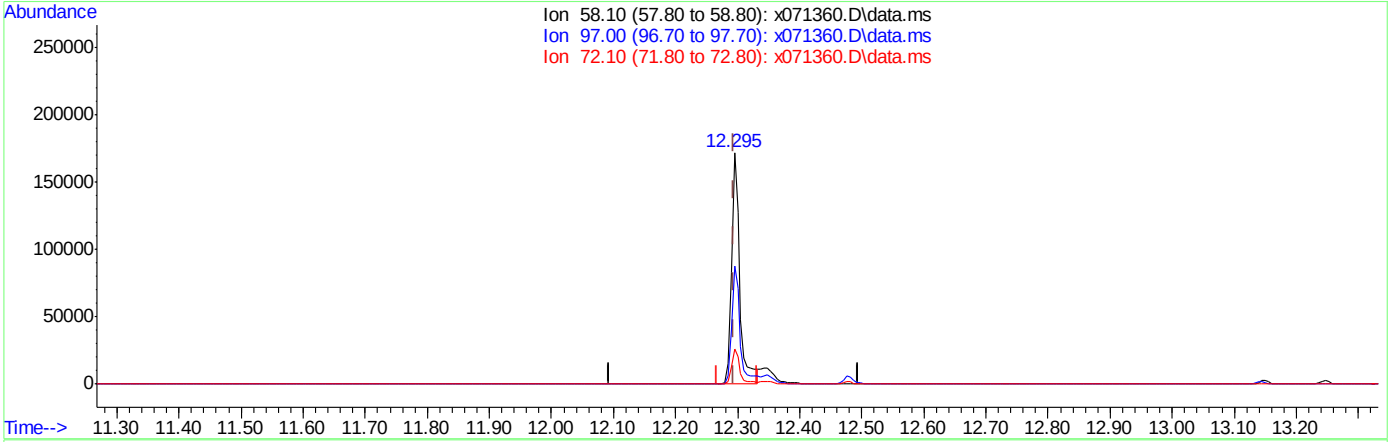
response 519071

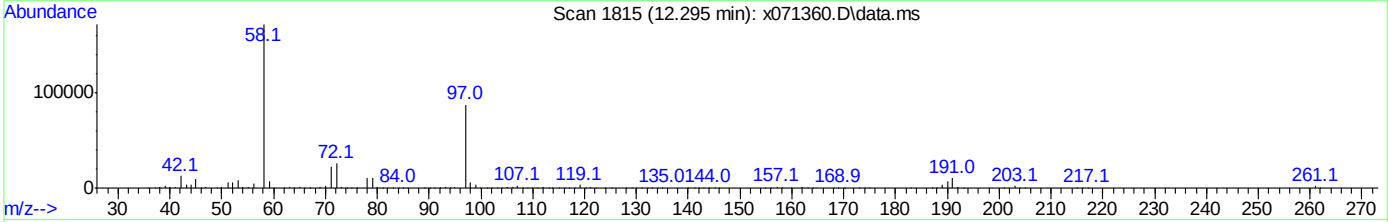
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	76.03#
234.10	51.50	30.57
0.00	0.00	0.00

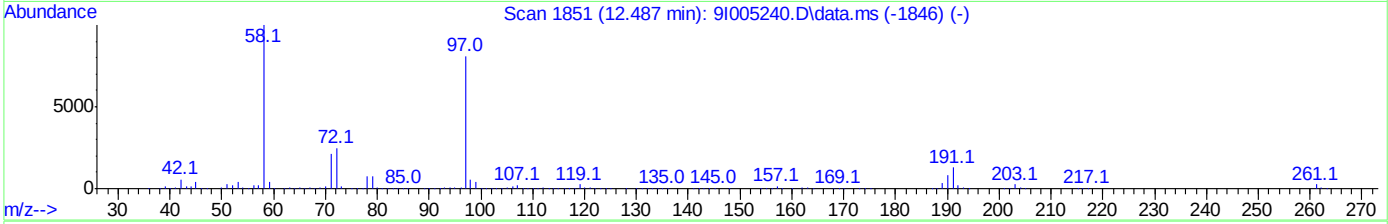
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071360.D
Acq On : 23 Jun 2020 11:46 am
Operator : marthav
Sample : ic2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 23 14:01:06 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071360.D\data.ms

(144) Methapyrilene

12.295min (0.000) 20.65ppm

response 164618

Ion	Exp%	Act%
58.10	100	100
97.00	80.90	50.84#
72.10	24.80	15.37
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071360.D
Acq On : 23 Jun 2020 11:46 am
Operator : marthav
Sample : ic2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 23 14:01:06 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
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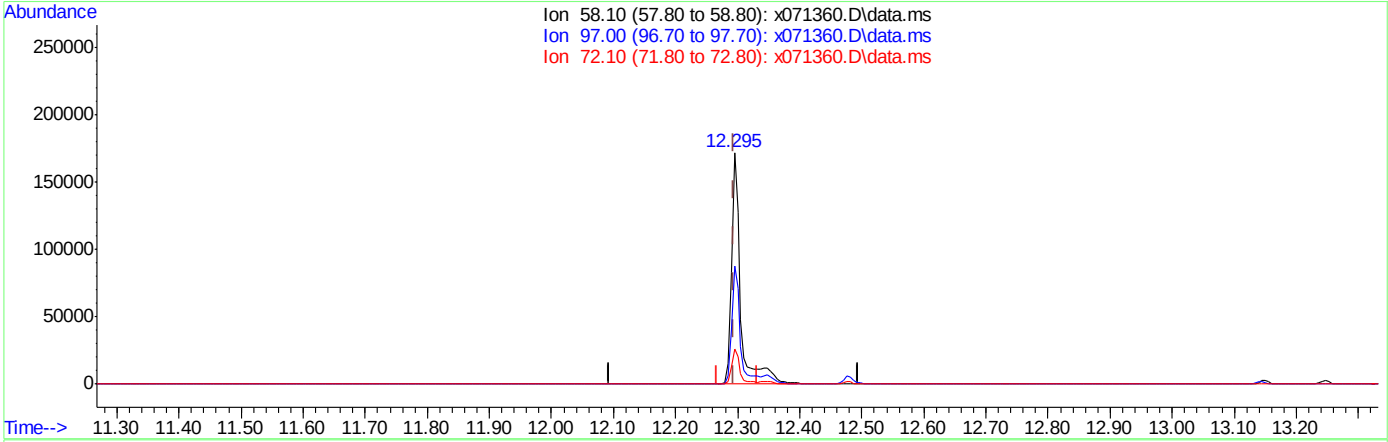

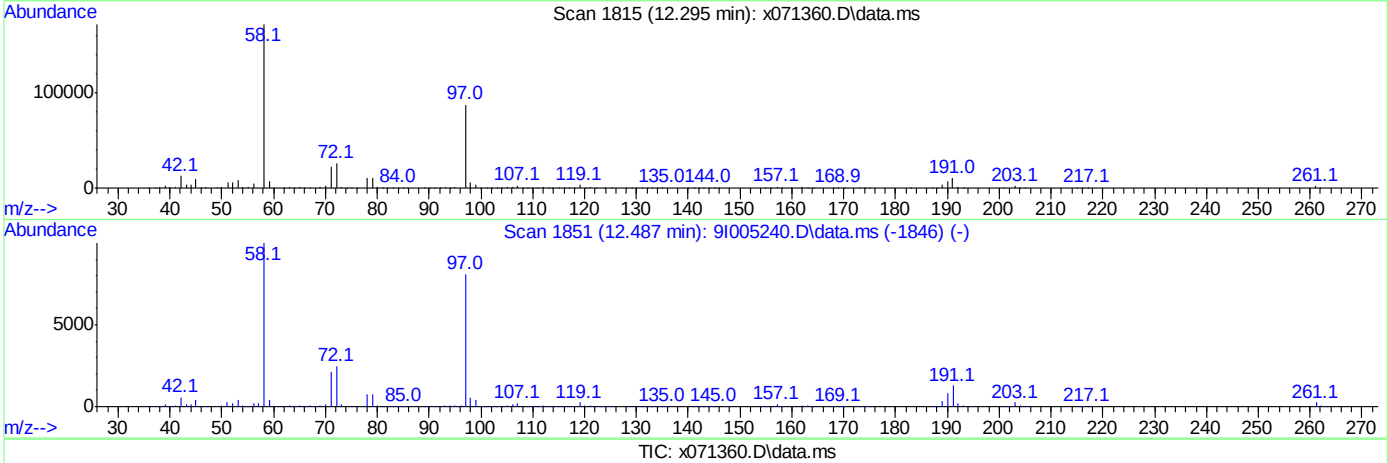

TIC: x071360.D\data.ms

(144) Methapyrilene

12.295min (0.000) 23.18ppm m

response 185003

Ion	Exp%	Act%
58.10	100	100
97.00	80.90	51.00
72.10	24.80	15.30
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071360.D
Acq On : 23 Jun 2020 11:46 am
Operator : marthav
Sample : ic2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 23 14:01:06 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
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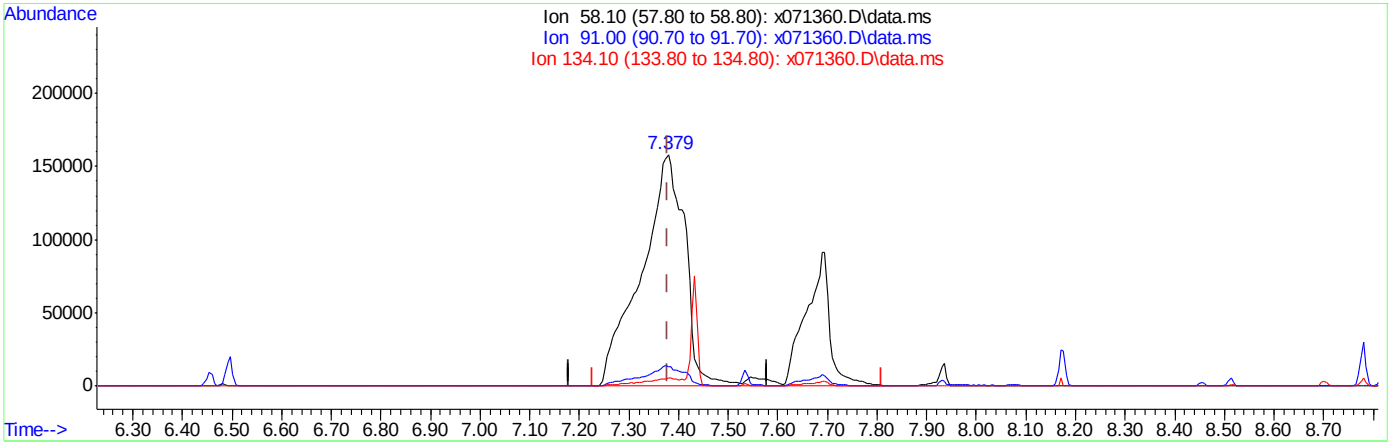
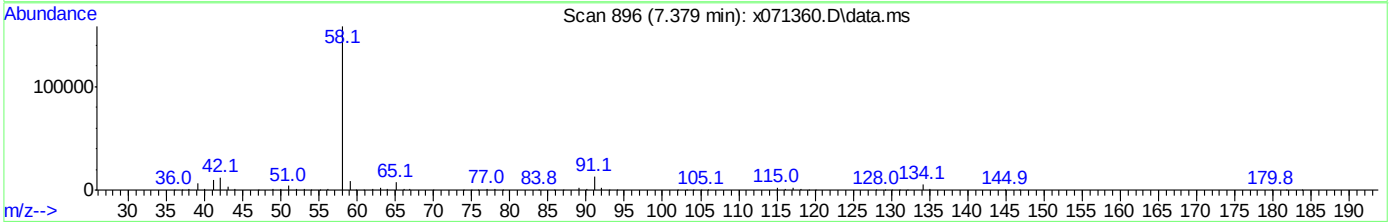
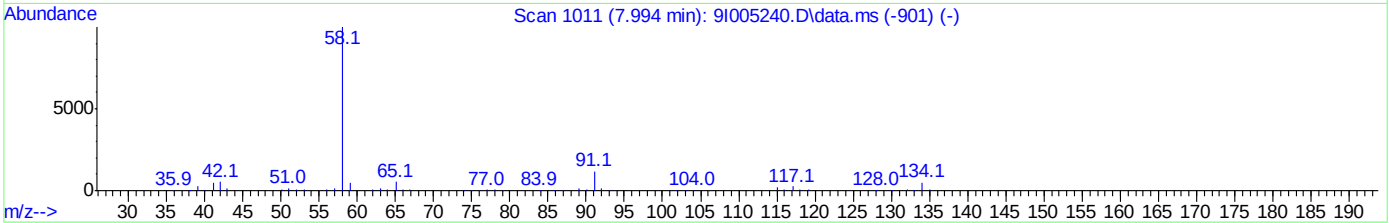






TIC: x071360.D\data.ms

(122) A,A-Dimethylphenethylamine

7.379min (0.000) 68.93ppm m

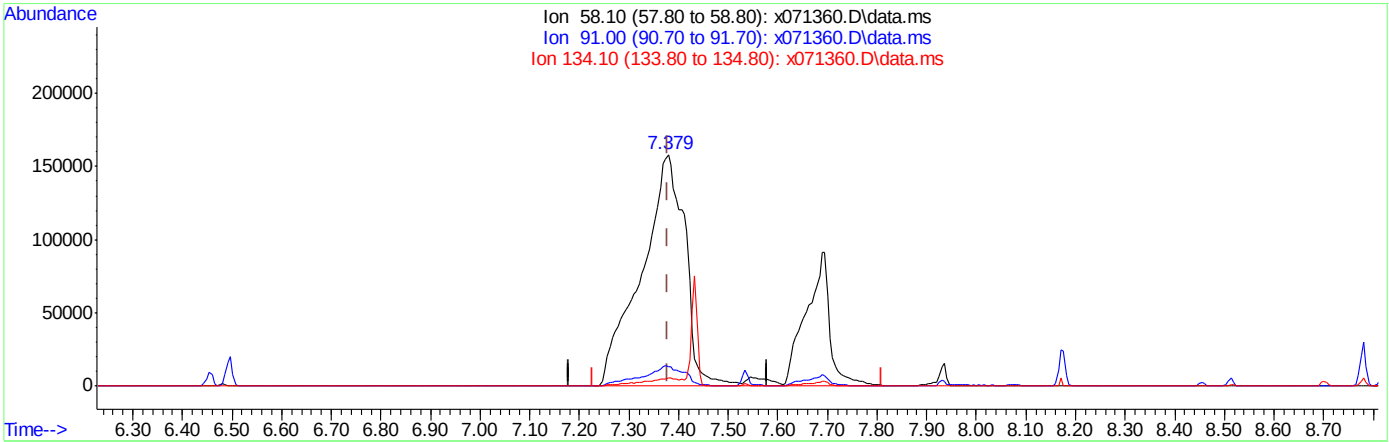
response 1293311

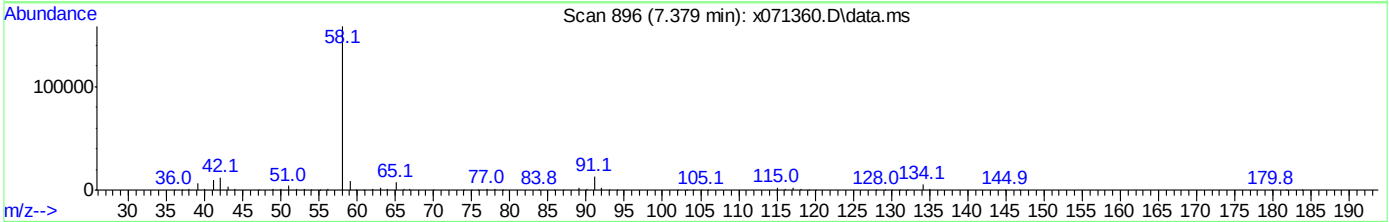
Ion	Exp%	Act%
58.10	100	100
91.00	11.70	8.30
134.10	5.10	3.68
0.00	0.00	0.00

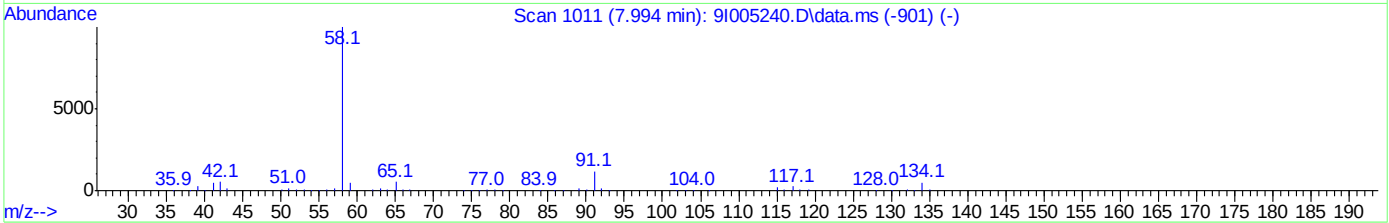
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071360.D
Acq On : 23 Jun 2020 11:46 am
Operator : marthav
Sample : ic2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 23 14:01:06 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071360.D\data.ms

(122) A,A-Dimethylphenethylamine

7.379min (0.000) 68.93ppm m

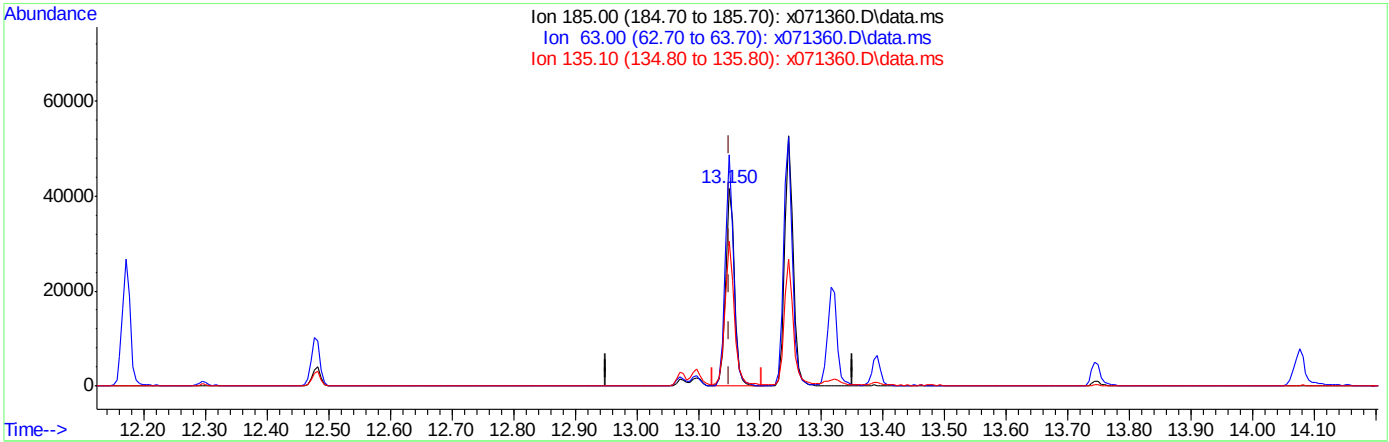
response 1293311

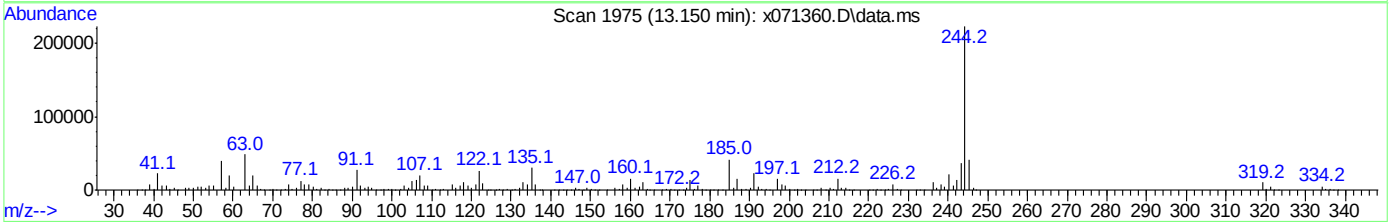
Ion	Exp%	Act%
58.10	100	100
91.00	11.70	8.30
134.10	5.10	3.68
0.00	0.00	0.00

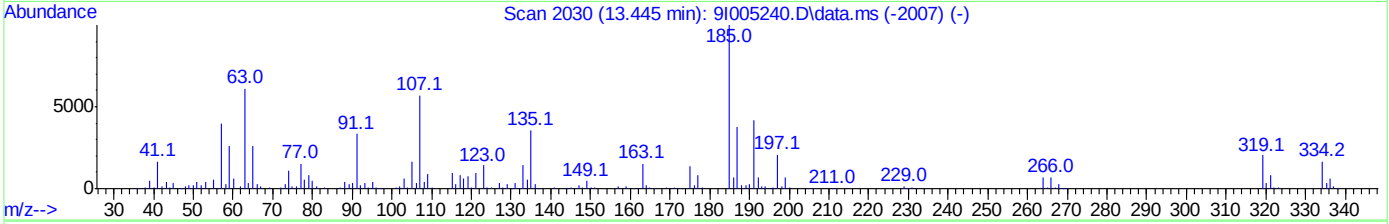
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071360.D
Acq On : 23 Jun 2020 11:46 am
Operator : marthav
Sample : ic2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 23 14:16:35 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071360.D\data.ms

(147) Aramite

13.150min (0.000) 25.40ppm

response 40679

Ion	Exp%	Act%
185.00	100	100
63.00	61.10	116.81#
135.10	35.60	72.41#
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 06/24/20 14:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071361.D
Acq On : 23 Jun 2020 12:12 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 23 16:55:26 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	0.000	152	0m	40.00	ppm		-6.00
22) Naphthalene-d8	0.000	136	0m	40.00	ppm		-7.43
43) Acenaphthene-d10	0.000	164	0m	40.00	ppm		-9.48
70) Phenanthrene-d10	0.000	188	0m	40.00	ppm		-11.22
92) Chrysene-d12	0.000	240	0m	40.00	ppm		-14.49
102) Perylene-d12	0.000	264	0m	40.00	ppm		-16.82
110) 1,4-Dichlorobenzene-d4A	6.005	152	164144	40.00	ppm		0.00
120) Naphthalene-d8A	7.433	136	698026	40.00	ppm		0.00
127) Acenaphthene-d10A	9.476	164	366185	40.00	ppm		0.00
136) Phenanthrene-d10A	11.225	188	677538	40.00	ppm		0.00
146) Chrysene-d12A	14.493	240	429861	40.00	ppm		0.00
153) Perylene-d12A	16.820	264	357481	40.00	ppm		0.00
System Monitoring Compounds							
7) 2-Fluorophenol	0.000	112	0d	0.00	ppm		
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#			
9) Phenol-d5	0.000	99	0d	0.00	ppm		
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#			
23) Nitrobenzene-d5	0.000	82	0d	0.00	ppm		
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#			
47) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm		
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#			
75) 2,4,6-Tribromophenol	0.000	330	0d	0.00	ppm		
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#			
95) Terphenyl-d14	0.000	244	0d	0.00	ppm		
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#			
Target Compounds							Qvalue
111) 2-Picoline	3.983	93	482356	59.18	ppm		88
112) N-Nitrosomethylethylamine	4.111	42	335860	116.37	ppm	#	53
113) Methyl methanesulfonate	4.438	80	237961	59.04	ppm		90
114) N-Nitrosodiethylamine	4.855	102	201274	62.12	ppm	#	22
115) Ethyl methanesulfonate	5.186	79	330136	57.85	ppm		96
116) Pentachloroethane	5.700	167	140826	60.68	ppm		94
117) N-Nitrosopyrrolidine	6.438	100	185562	55.98	ppm	#	47
118) N-Nitrosomorpholine	6.481	56	332467	96.03	ppm	#	66
119) O-Toluidine	6.497	106	694865	69.07	ppm		99
121) N-Nitrosopiperidine	6.818	42	391759	102.45	ppm	#	62
122) A,A-Dimethylphenethyla...	7.401	58	1613562m	79.73	ppm		
123) Hexachloropropene	7.561	213	198594	53.49	ppm		99
124) N-Nitrosodi-n-butylamine	7.936	84	354651	67.10	ppm	#	53
125) p-Phenylenediamine	7.930	108	407415m	93.67	ppm		
126) Isosafrole	8.176	162	302122	66.11	ppm		83
128) Safrole	8.781	162	308936	65.20	ppm		87
129) 1-Chloronaphthalene	8.856	162	735524	64.70	ppm		98
130) Diphenyl Ether	8.946	170	509112	65.94	ppm		92
131) 1,4-Naphthoquinone	9.037	158	305070	86.96	ppm		79
132) Pentachlorobenzene	9.669	250	245692	46.59	ppm		99
133) 1-Naphthylamine	9.813	143	798365	68.42	ppm		94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071361.D
Acq On : 23 Jun 2020 12:12 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 23 16:55:26 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
134) 2-Naphthylamine	9.909	143	845717	71.16	ppm		96
135) 5-Nitro-o-toluidine	10.150	152	253152	62.16	ppm		86
137) 1,3,5-Trinitrobenzene	10.594	75	217752	51.09	ppm		86
138) Diallate	10.631	43	644225m	86.11	ppm		
139) Phenacetin	10.669	108	433725	59.44	ppm		91
140) 4-Aminobiphenyl	11.022	169	833196	72.94	ppm		99
141) Pronamide	11.118	173	353013	59.04	ppm		98
142) Pentachloronitrobenzene	11.016	237	83820	48.61	ppm		90
143) 4-Nitroquinoline 1-Oxide	12.177	190	77483	91.41	ppm		83
144) Methapyrilene	12.295	58	227166m	26.75	ppm		
145) Isodrin	12.482	193	115911	49.30	ppm		87
147) Aramite	13.247	185	116692m	65.43	ppm		
148) p-(Dimethylamine)azobe...	13.322	120	333830	70.62	ppm		86
149) Chlorobenzilate	13.391	139	386556	71.38	ppm	#	72
150) Kepone	13.771	272	3034	1.98	ppm		87
151) 3,3'-Dimethylbenzidine	13.750	212	456299	71.20	ppm		97
152) 2-Acetylaminofluorene	14.081	181	404560	64.28	ppm		93
154) 7,12-Dimethylbenz(a)an...	16.178	256	327919	61.76	ppm		97
155) Hexachlorophene	16.590	196	614267	942.16	ppm		99
156) 3-Methylcholanthrene	17.322	268	302821	63.88	ppm		94
157) Dibenz(a,j)acridine	18.221	279	416799	52.87	ppm		97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

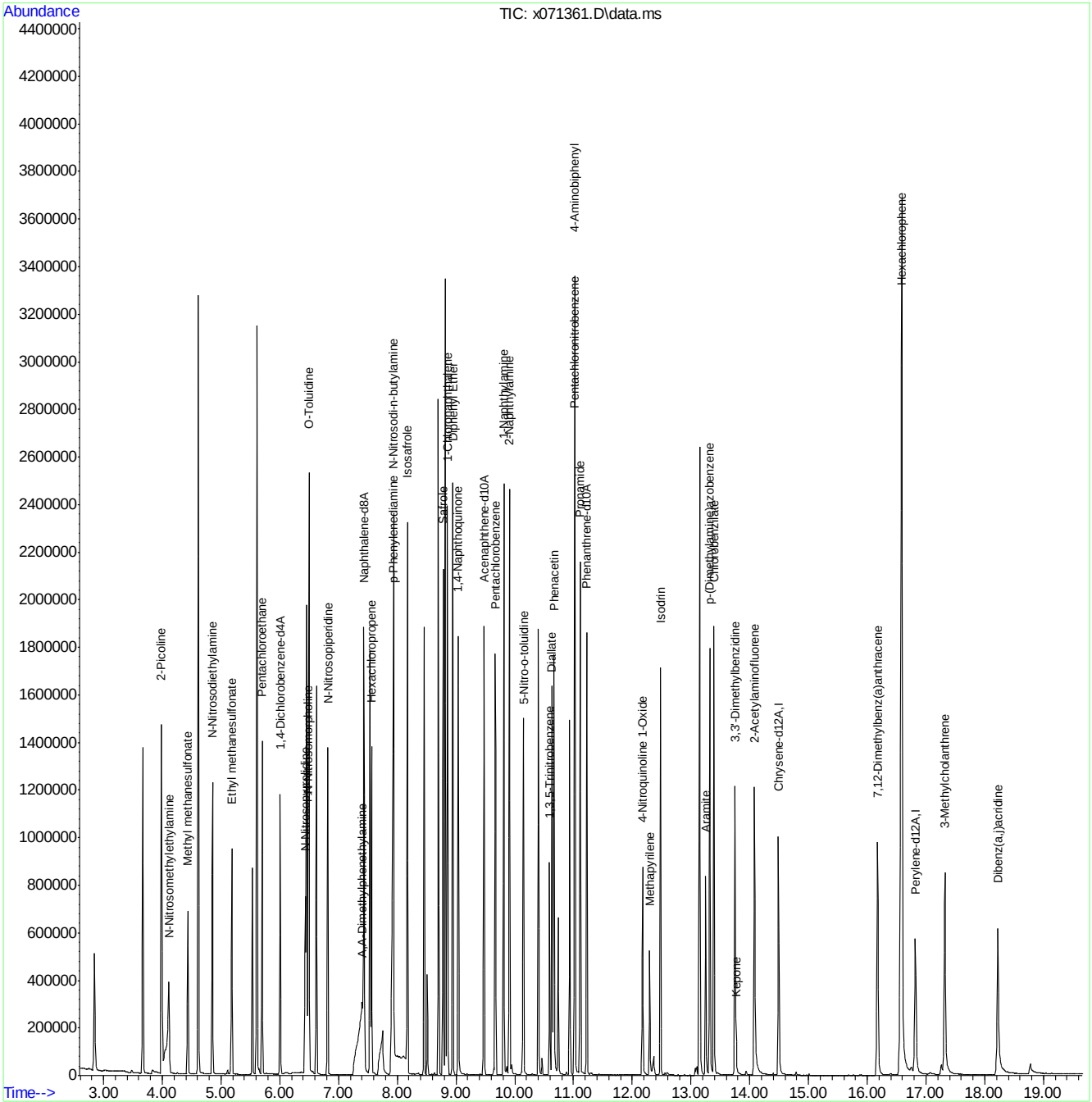
7.6.38

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071361.D
Acq On : 23 Jun 2020 12:12 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 23 16:55:26 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration



SGS FA77689

Manual Integration Approval Summary

Sample Number: SX2918-IC2918
Lab FileID: X071361.D
Injection Time: 06/23/20 12:12

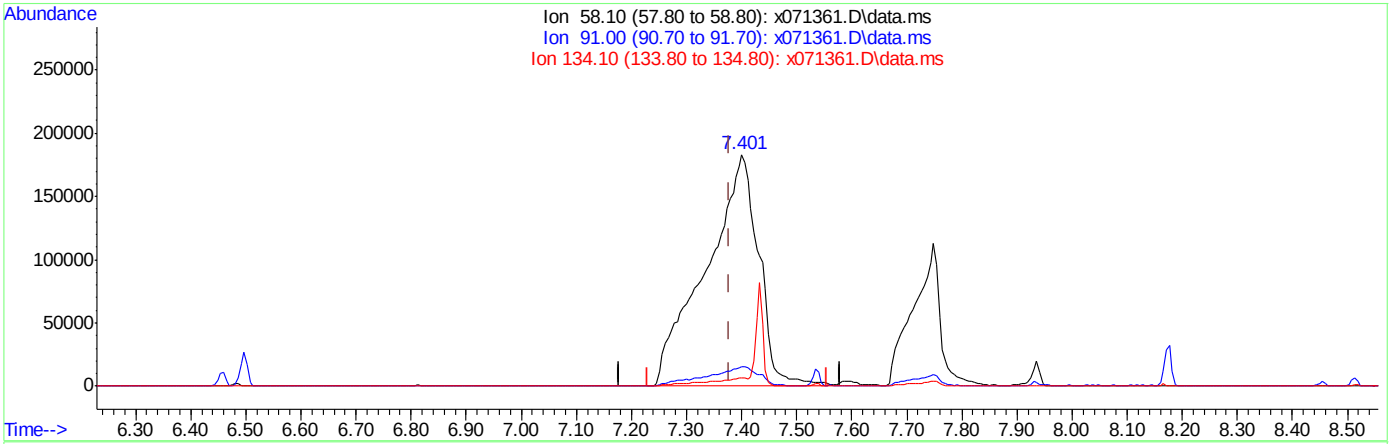
Method: EPA 625.1
Analyst approved: 06/24/20 09:50 Martha Valls
Supervisor approved: 06/24/20 14:07 Naresh Jiawan

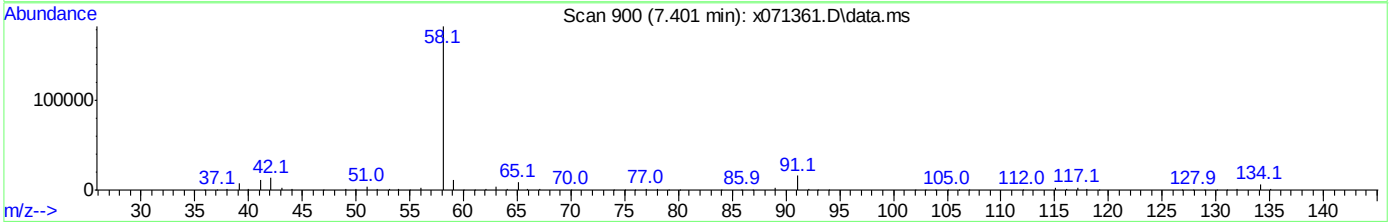
Parameter	CAS	Sig#	R.T. (min.)	Reason
A,A-Dimethylphenethylamine	122-09-8		7.40	Split peak
p-Phenylenediamine	106-50-3		7.93	Split peak
Diallate	2303-16-4		10.63	Split peak
Methapyrilene	91-80-5		12.29	Split peak
Aramite	140-57-8		13.25	Split peak

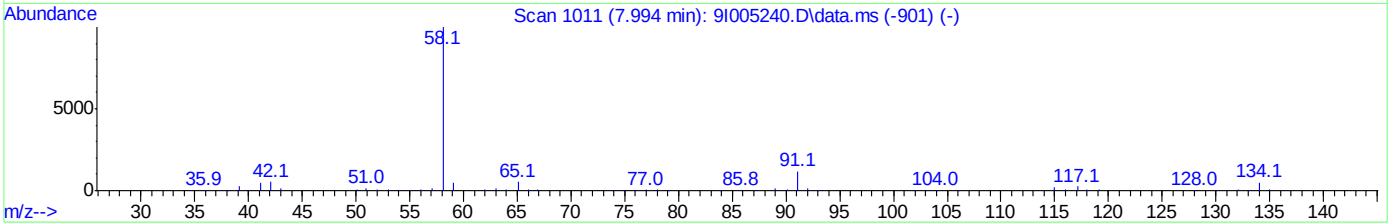
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071361.D
Acq On : 23 Jun 2020 12:12 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 23 14:01:08 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071361.D\data.ms

(122) A,A-Dimethylphenethylamine

7.401min (+0.022) 61.38ppm

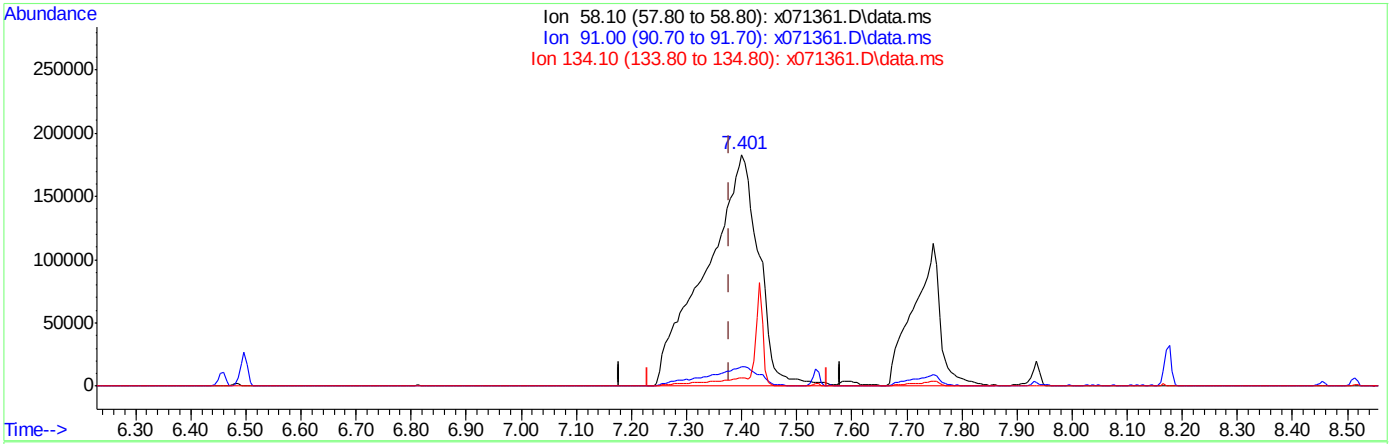
response 1216131

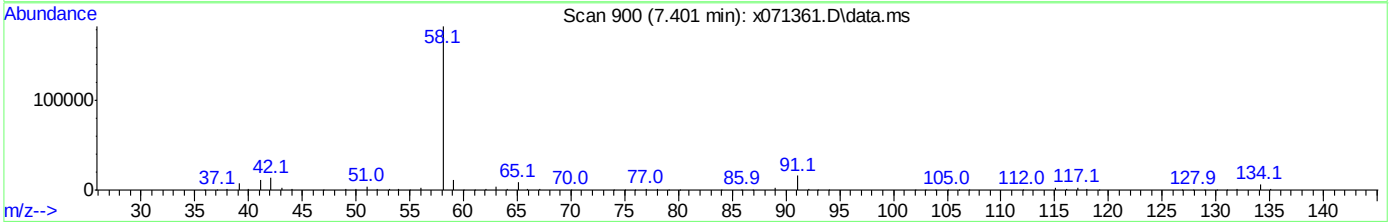
Ion	Exp%	Act%
58.10	100	100
91.00	11.70	8.50
134.10	5.10	3.64
0.00	0.00	0.00

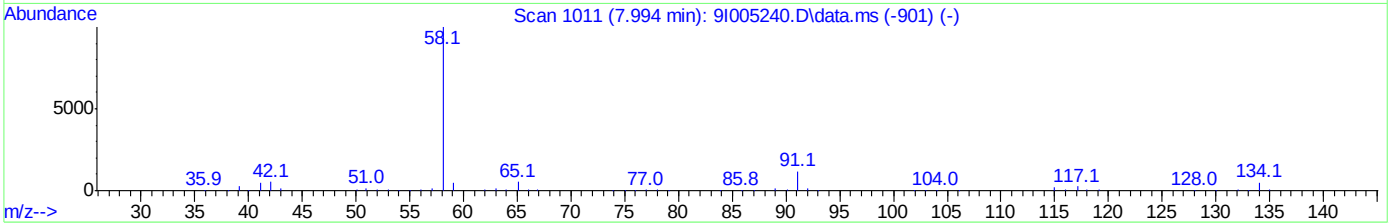
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071361.D
Acq On : 23 Jun 2020 12:12 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 23 14:01:08 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071361.D\data.ms

(122) A,A-Dimethylphenethylamine

7.401min (+0.022) 79.73ppm m

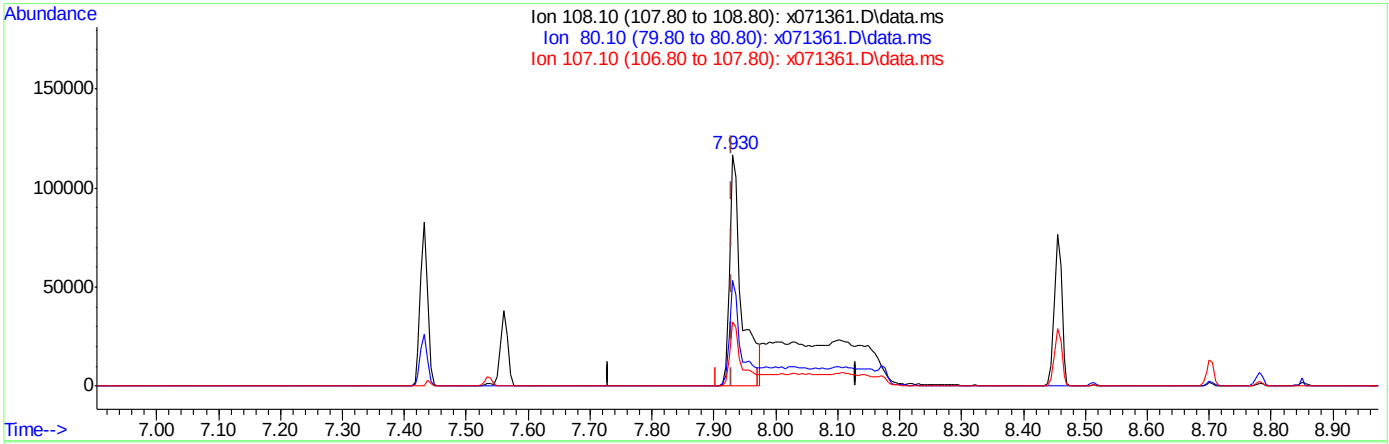
response 1613562

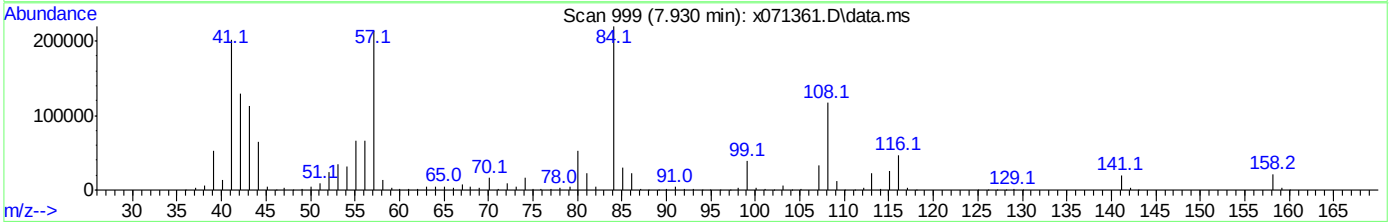
Ion	Exp%	Act%
58.10	100	100
91.00	11.70	8.62
134.10	5.10	3.71
0.00	0.00	0.00

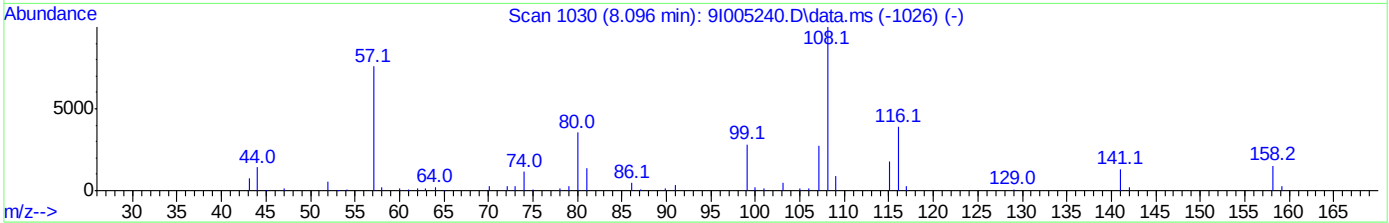
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071361.D
Acq On : 23 Jun 2020 12:12 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 23 14:01:08 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071361.D\data.ms

(125) p-Phenylenediamine

7.930min (+0.000) 29.55ppm

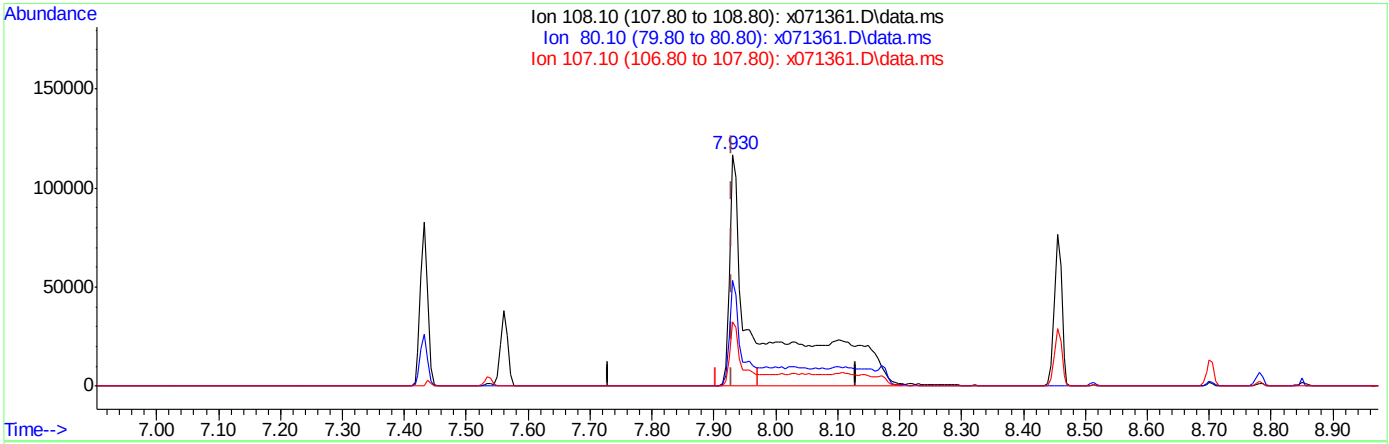
response 156113

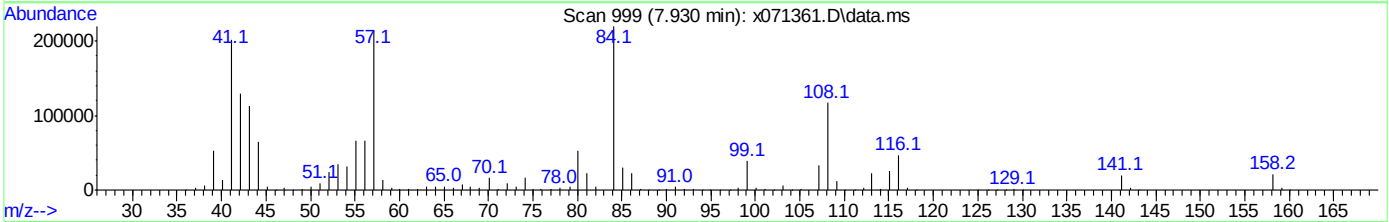
Ion	Exp%	Act%
108.10	100	100
80.10	35.50	45.74
107.10	27.70	27.90
0.00	0.00	0.00

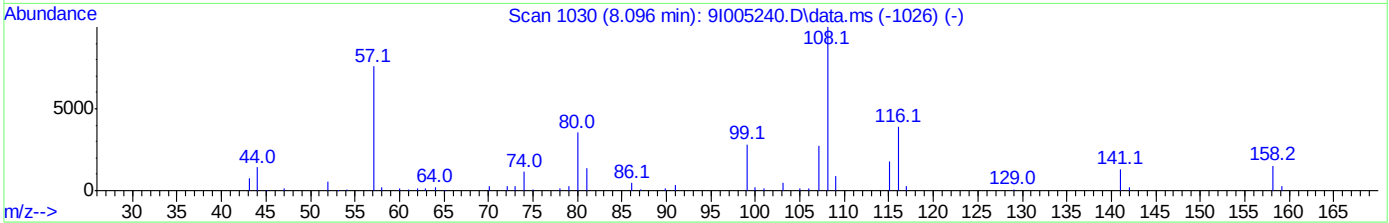
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071361.D
Acq On : 23 Jun 2020 12:12 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 23 14:01:08 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071361.D\data.ms

(125) p-Phenylenediamine

7.930min (+0.000) 93.67ppm m

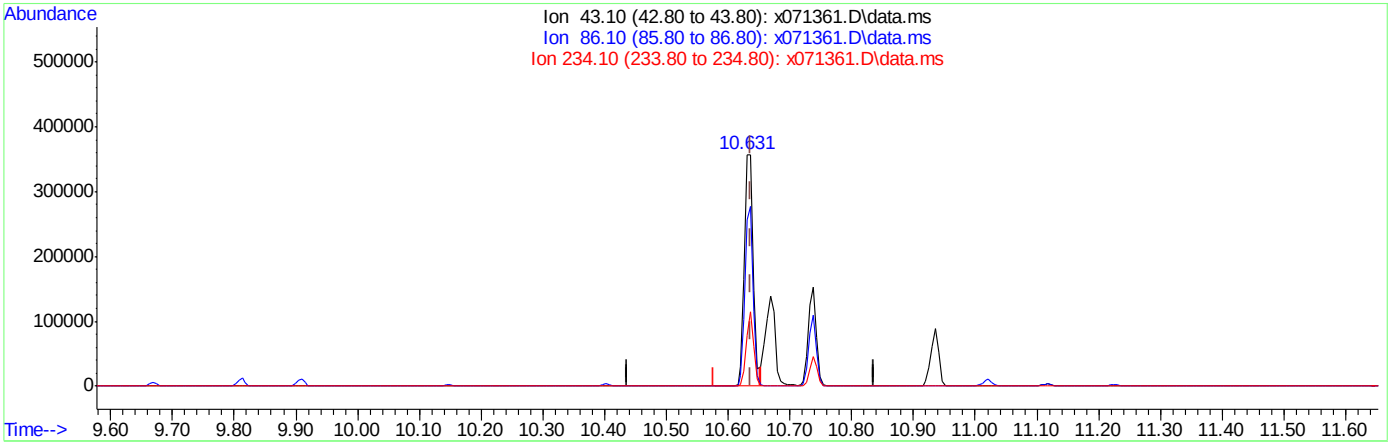
response 407415

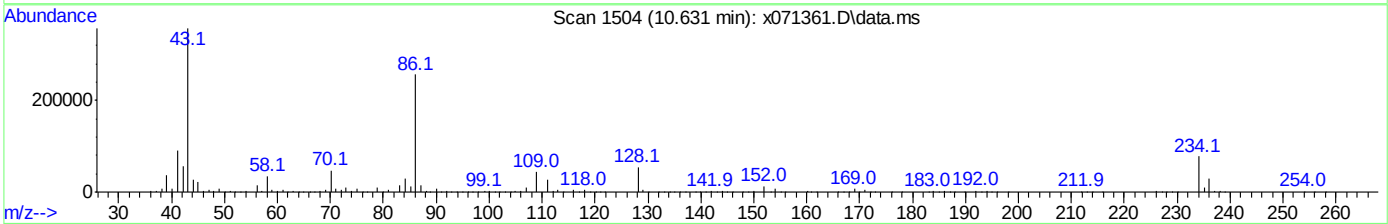
Ion	Exp%	Act%
108.10	100	100
80.10	35.50	45.61
107.10	27.70	27.91
0.00	0.00	0.00

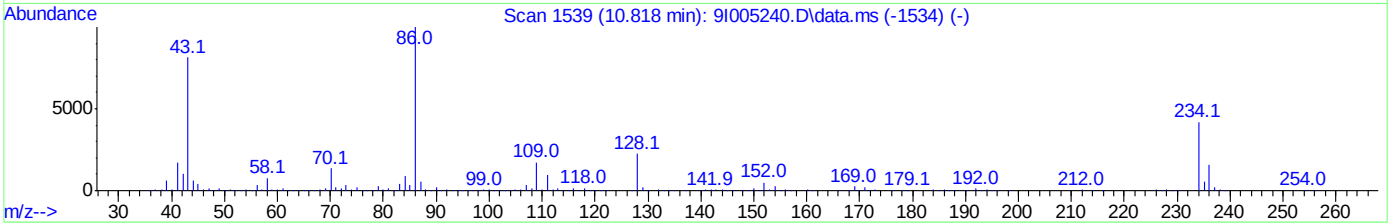
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071361.D
Acq On : 23 Jun 2020 12:12 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 23 14:01:08 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071361.D\data.ms

(138) Diallate

10.631min (-0.005) 47.83ppm

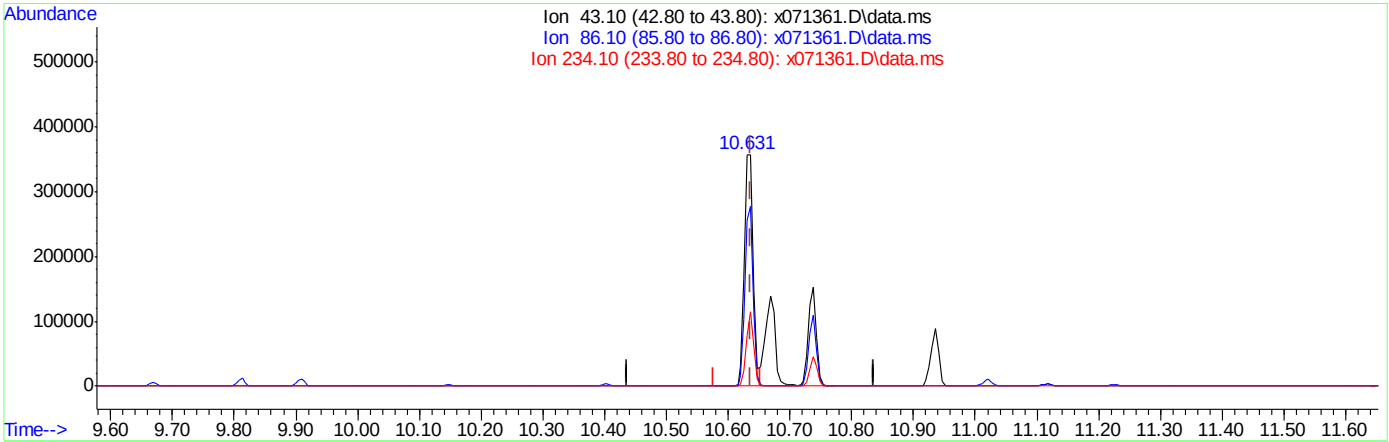
response 357785

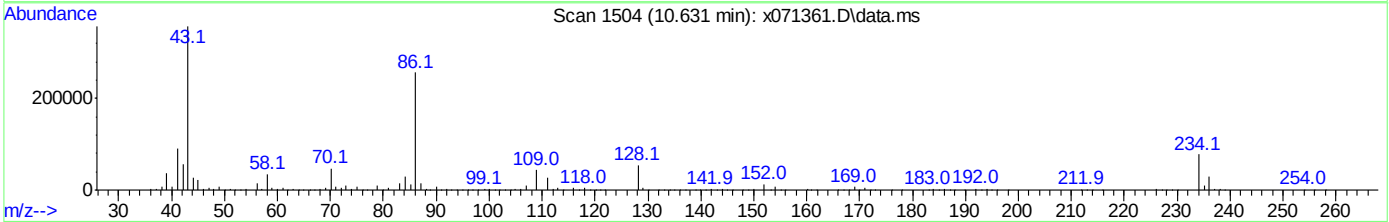
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	74.60#
234.10	51.50	22.72
0.00	0.00	0.00

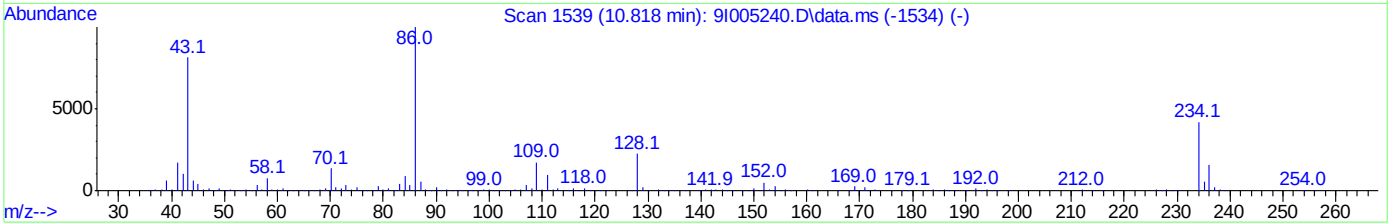
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071361.D
Acq On : 23 Jun 2020 12:12 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 23 14:01:08 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071361.D\data.ms

(138) Diallate

10.631min (-0.005) 86.11ppm m

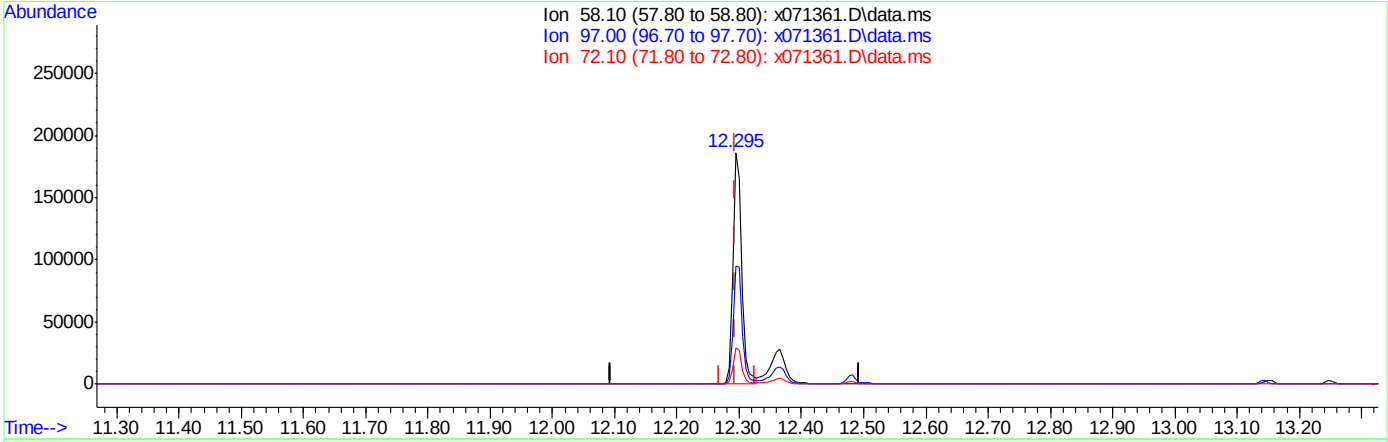
response 644225

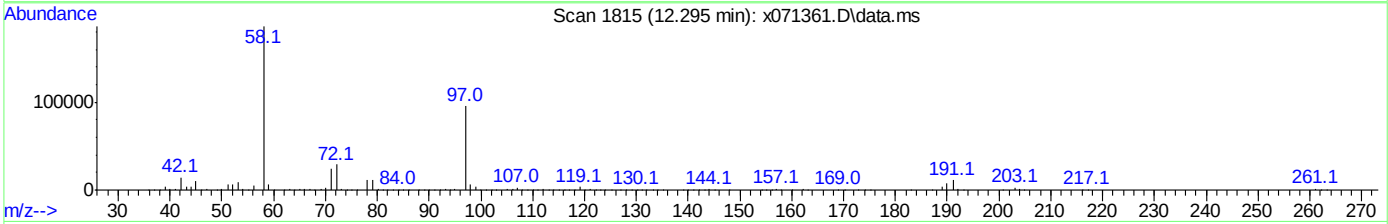
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	71.83#
234.10	51.50	21.85
0.00	0.00	0.00

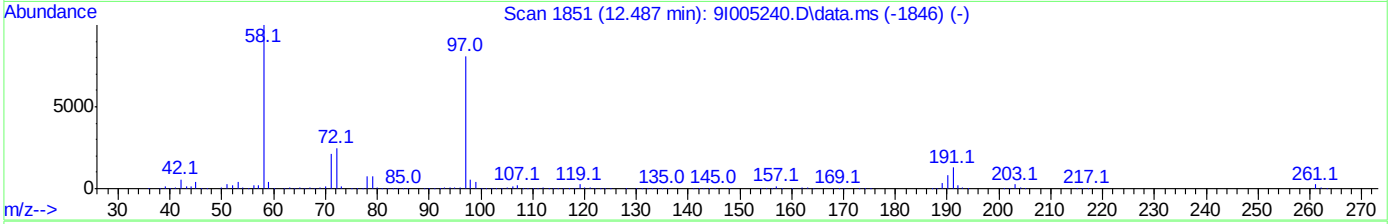
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071361.D
Acq On : 23 Jun 2020 12:12 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 23 14:01:08 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071361.D\data.ms

(144) Methapyrilene

12.295min (+0.000) 21.05ppm

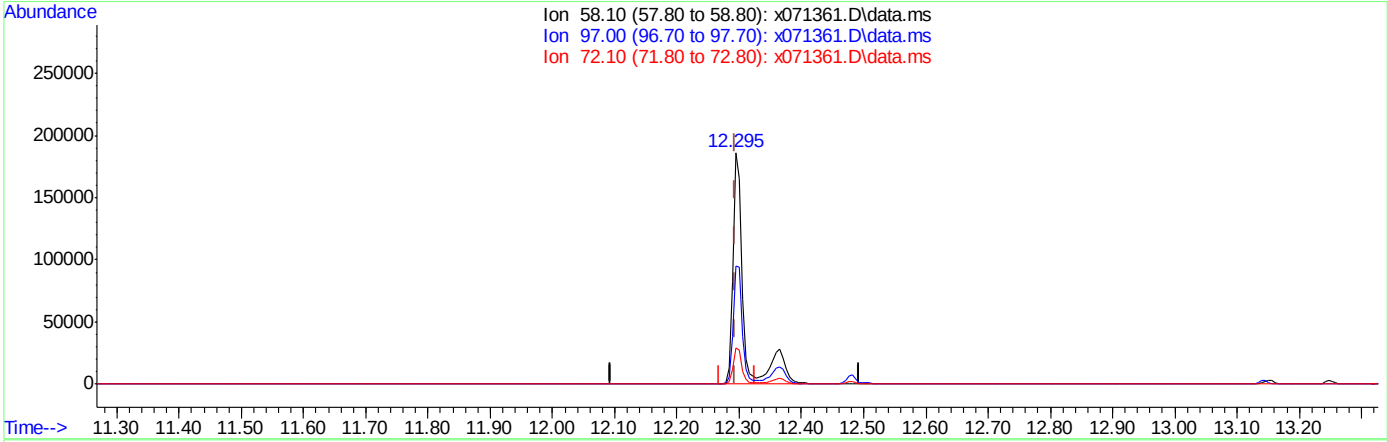
response 178201

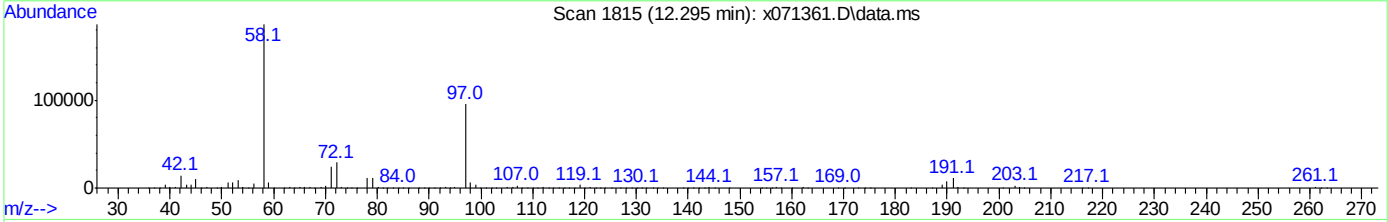
Ion	Exp%	Act%
58.10	100	100
97.00	80.90	51.08
72.10	24.80	15.54
0.00	0.00	0.00

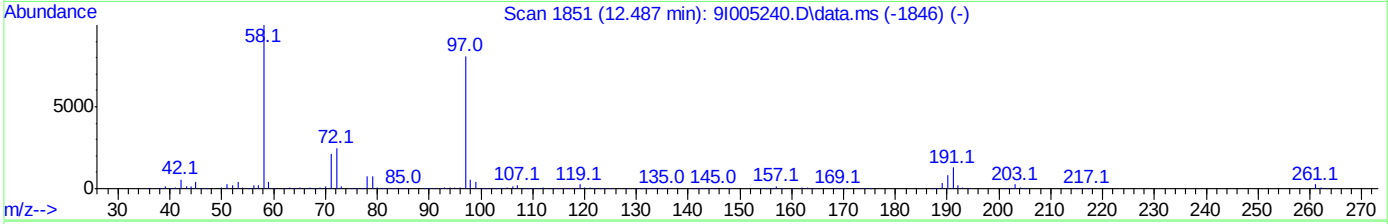
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071361.D
Acq On : 23 Jun 2020 12:12 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 23 14:01:08 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071361.D\data.ms

(144) Methapyrilene

12.295min (+0.000) 26.75ppm m

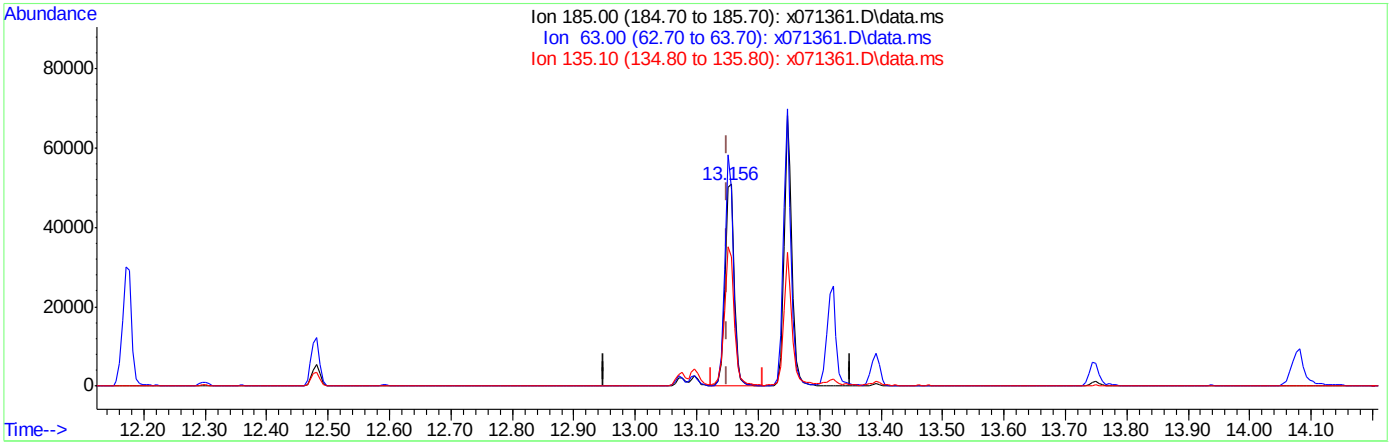
response 227166

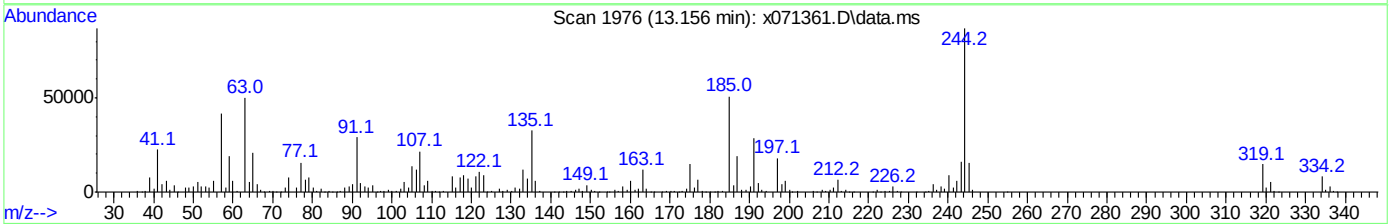
Ion	Exp%	Act%
58.10	100	100
97.00	80.90	51.12
72.10	24.80	15.55
0.00	0.00	0.00

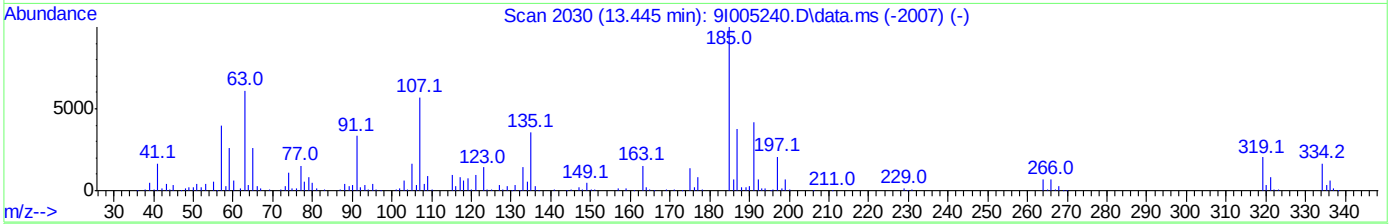
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071361.D
Acq On : 23 Jun 2020 12:12 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 23 14:01:08 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071361.D\data.ms

(147) Aramite

13.156min (+0.006) 30.90ppm

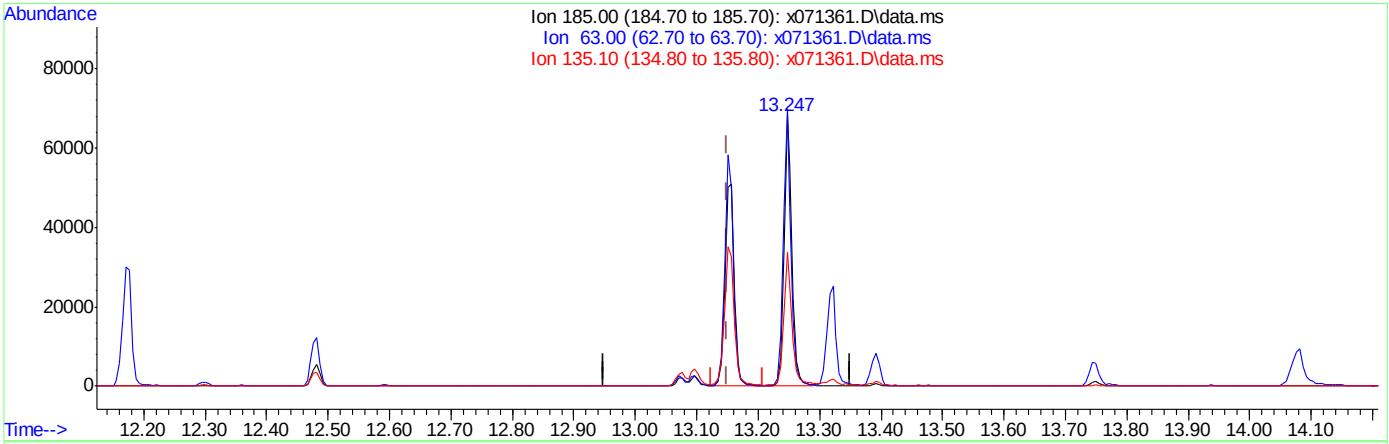
response 52639

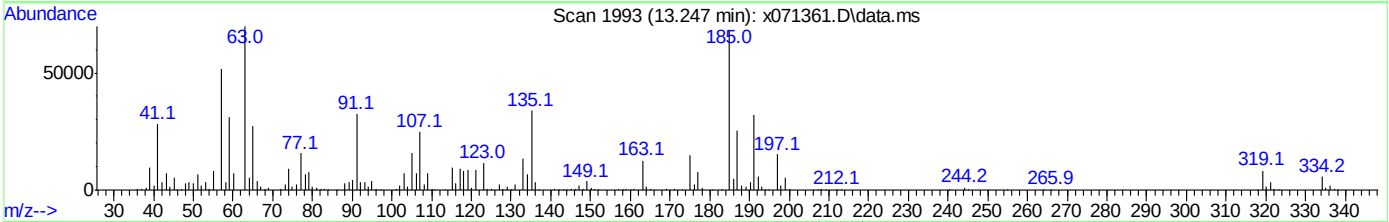
Ion	Exp%	Act%
185.00	100	100
63.00	61.10	97.59#
135.10	35.60	63.72
0.00	0.00	0.00

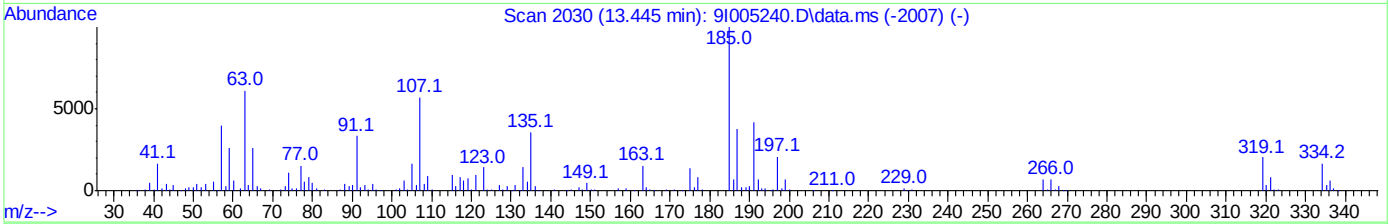
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071361.D
Acq On : 23 Jun 2020 12:12 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 23 14:01:08 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071361.D\data.ms

(147) Aramite

13.247min (+0.096) 65.43ppm m

response 116692

Ion	Exp%	Act%
185.00	100	100
63.00	61.10	102.56#
135.10	35.60	49.62
0.00	0.00	0.00

X071362.D

Manual Integrations APPROVED (compounds with "m" flag)

Naresh Jiawan 06/24/20 14:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071362.D
Acq On : 23 Jun 2020 12:37 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 23 16:55:40 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	0.000	152	0m	40.00	ppm	-6.00
22) Naphthalene-d8	0.000	136	0m	40.00	ppm	-7.43
43) Acenaphthene-d10	0.000	164	0m	40.00	ppm	-9.48
70) Phenanthrene-d10	0.000	188	0m	40.00	ppm	-11.22
92) Chrysene-d12	0.000	240	0m	40.00	ppm	-14.49
102) Perylene-d12	0.000	264	0m	40.00	ppm	-16.82
110) 1,4-Dichlorobenzene-d4A	6.005	152	162385	40.00	ppm	0.00
120) Naphthalene-d8A	7.433	136	698390	40.00	ppm	0.00
127) Acenaphthene-d10A	9.476	164	364024	40.00	ppm	0.00
136) Phenanthrene-d10A	11.225	188	682783	40.00	ppm	0.00
146) Chrysene-d12A	14.493	240	432572	40.00	ppm	0.00
153) Perylene-d12A	16.825	264	357392	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	0.000	112	0d	0.00	ppm	
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#		
9) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#		
23) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#		
47) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#		
75) 2,4,6-Tribromophenol	0.000	330	0d	0.00	ppm	
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#		
95) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#		
Target Compounds						Qvalue
111) 2-Picoline	3.983	93	578839	71.78	ppm	86
112) N-Nitrosomethylethylamine	4.111	42	403837	141.44	ppm #	54
113) Methyl methanesulfonate	4.443	80	288958	72.47	ppm	90
114) N-Nitrosodiethylamine	4.860	102	247345	77.17	ppm #	36
115) Ethyl methanesulfonate	5.186	79	400843	71.00	ppm	95
116) Pentachloroethane	5.700	167	171923	74.88	ppm	93
117) N-Nitrosopyrrolidine	6.438	100	228116	69.58	ppm #	20
118) N-Nitrosomorpholine	6.486	56	407544	118.99	ppm #	70
119) O-Toluidine	6.497	106	848373	85.24	ppm	99
121) N-Nitrosopiperidine	6.818	42	477710	124.86	ppm #	59
122) A,A-Dimethylphenethyla...	7.417	58	1993287m	96.58	ppm	
123) Hexachloropropene	7.561	213	245225	66.01	ppm	99
124) N-Nitrosodi-n-butylamine	7.935	84	428055	79.08	ppm #	53
125) p-Phenylenediamine	7.930	108	467834m	116.33	ppm	
126) Isosafrole	8.176	162	367589	80.39	ppm	83
128) Safrole	8.781	162	384141	81.55	ppm	86
129) 1-Chloronaphthalene	8.855	162	898137	79.48	ppm	97
130) Diphenyl Ether	8.946	170	623653	81.25	ppm	93
131) 1,4-Naphthoquinone	9.043	158	347003	116.71	ppm	85
132) Pentachlorobenzene	9.668	250	309864	59.10	ppm	98
133) 1-Naphthylamine	9.813	143	976524	84.19	ppm	92

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071362.D
Acq On : 23 Jun 2020 12:37 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 23 16:55:40 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration

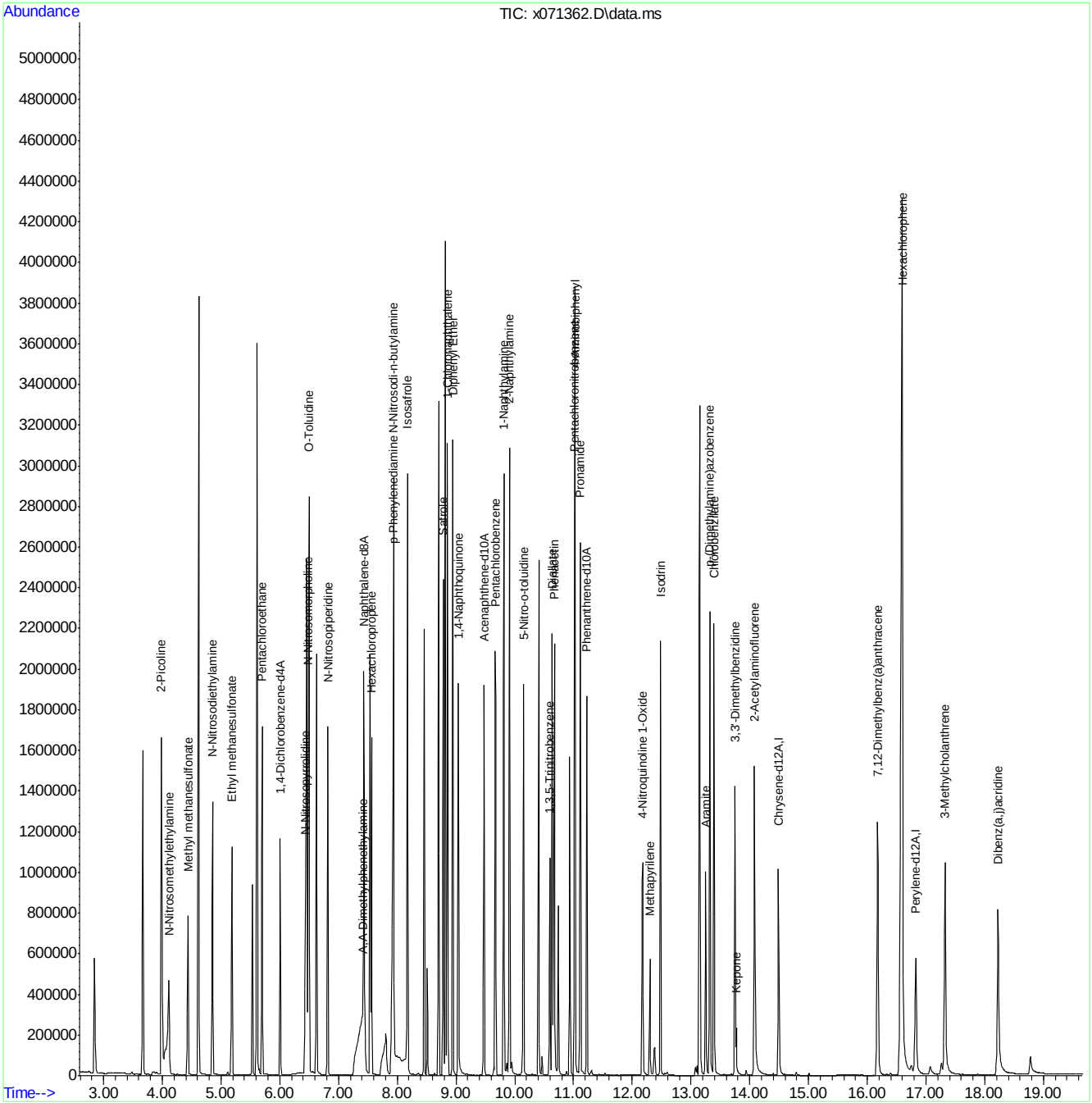
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
134) 2-Naphthylamine	9.909	143	1057229	89.49	ppm	96
135) 5-Nitro-o-toluidine	10.150	152	315750	76.78	ppm	82
137) 1,3,5-Trinitrobenzene	10.599	75	274775	63.07	ppm	90
138) Diallate	10.637	43	784030m	104.00	ppm	
139) Phenacetin	10.674	108	541870	72.54	ppm	90
140) 4-Aminobiphenyl	11.027	169	1005962	87.39	ppm	99
141) Pronamide	11.118	173	434232	71.34	ppm	98
142) Pentachloronitrobenzene	11.016	237	105065	60.46	ppm	91
143) 4-Nitroquinoline 1-Oxide	12.177	190	94011	103.40	ppm	82
144) Methapyrilene	12.295	58	273027m	31.81	ppm	
145) Isodrin	12.482	193	143445	60.54	ppm	87
147) Aramite	13.247	185	149117m	81.41	ppm	
148) p-(Dimethylamine)azobe...	13.322	120	418081	90.01	ppm	84
149) Chlorobenzilate	13.391	139	482994	87.52	ppm	72
150) Kepone	13.776	272	9074	5.86	ppm	93
151) 3,3'-Dimethylbenzidine	13.749	212	533573	82.19	ppm	98
152) 2-Acetylaminofluorene	14.081	181	512353	77.94	ppm	91
154) 7,12-Dimethylbenz(a)an...	16.178	256	409390	76.47	ppm	96
155) Hexachlorophene	16.595	196	808908	1125.67	ppm	100
156) 3-Methylcholanthrene	17.328	268	385313	80.55	ppm	92
157) Dibenz(a,j)acridine	18.226	279	538705	65.75	ppm	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071362.D
Acq On : 23 Jun 2020 12:37 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 23 16:55:40 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration



8270DApp9SX-062320.m Tue Jun 23 19:10:25 2020 Page: 3

Manual Integration Approval Summary

Sample Number: SX2918-IC2918
Lab FileID: X071362.D
Injection Time: 06/23/20 12:37

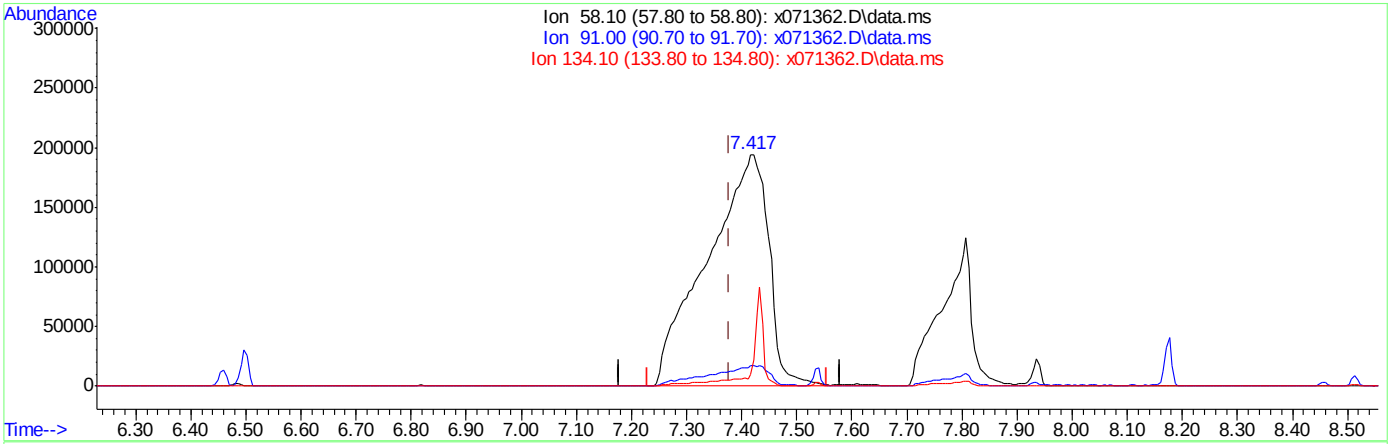
Method: EPA 625.1
Analyst approved: 06/24/20 09:50 Martha Valls
Supervisor approved: 06/24/20 14:07 Naresh Jiawan

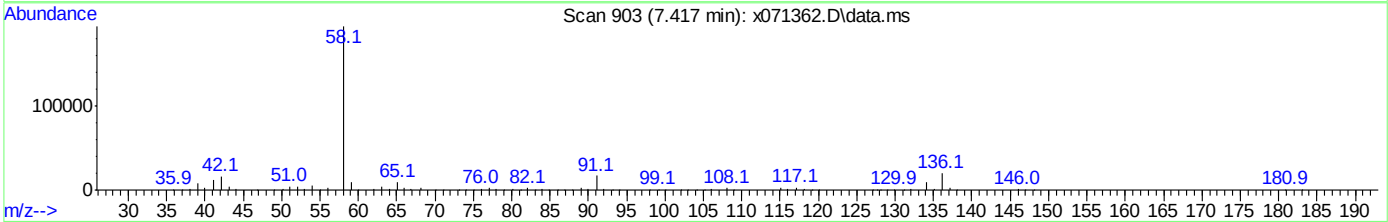
Parameter	CAS	Sig#	R.T. (min.)	Reason
A,A-Dimethylphenethylamine	122-09-8		7.42	Split peak
p-Phenylenediamine	106-50-3		7.93	Split peak
Diallate	2303-16-4		10.64	Split peak
Methapyrilene	91-80-5		12.29	Split peak
Aramite	140-57-8		13.25	Split peak

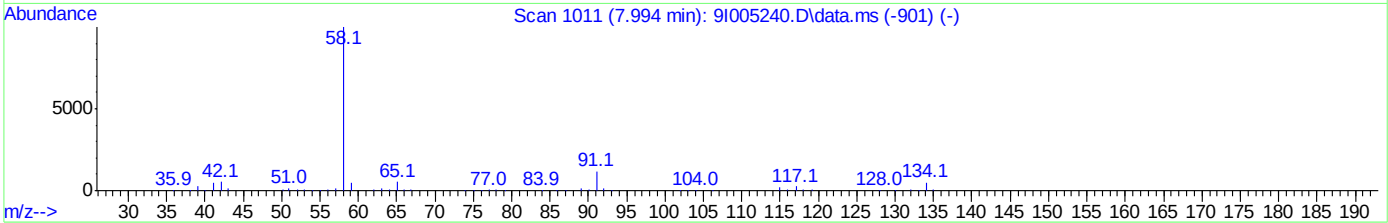
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071362.D
Acq On : 23 Jun 2020 12:37 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 23 14:01:10 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071362.D\data.ms

(122) A,A-Dimethylphenethylamine

7.417min (+0.037) 74.94ppm

response 1509105

Ion	Exp%	Act%
58.10	100	100
91.00	11.70	8.64
134.10	5.10	4.79
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071362.D
Acq On : 23 Jun 2020 12:37 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
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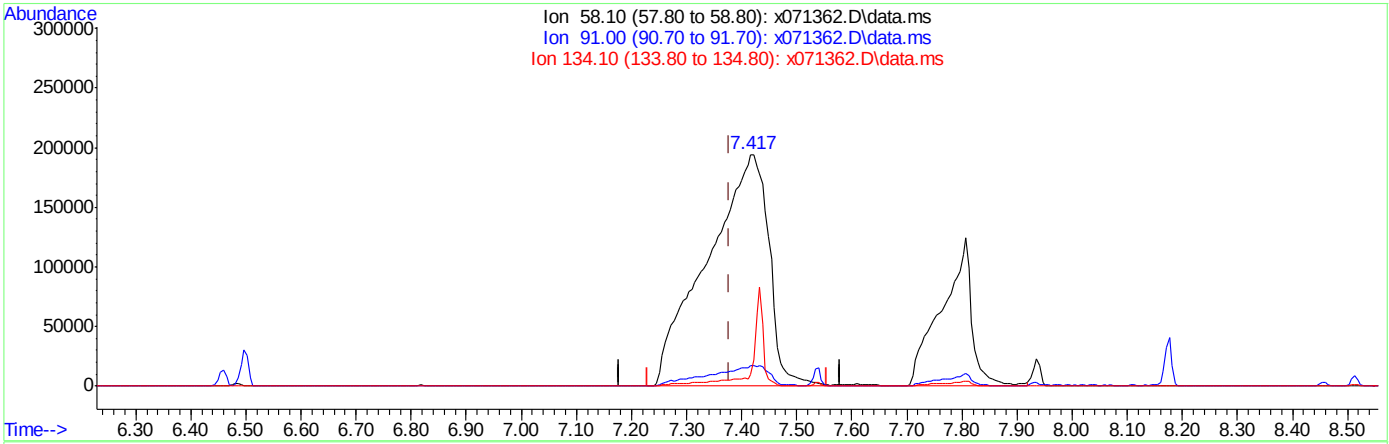

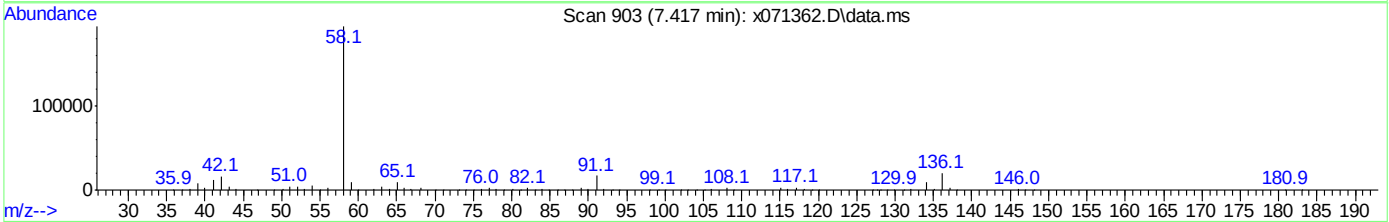

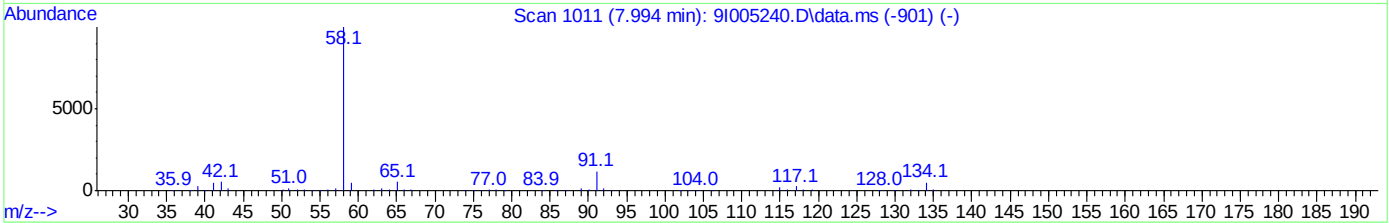

TIC: x071362.D\data.ms

(122) A,A-Dimethylphenethylamine

7.417min (+0.037) 96.58ppm m

response 1993287

Ion	Exp%	Act%
58.10	100	100
91.00	11.70	8.75
134.10	5.10	4.81
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071362.D
Acq On : 23 Jun 2020 12:37 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
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Quant Time: Jun 23 14:01:10 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
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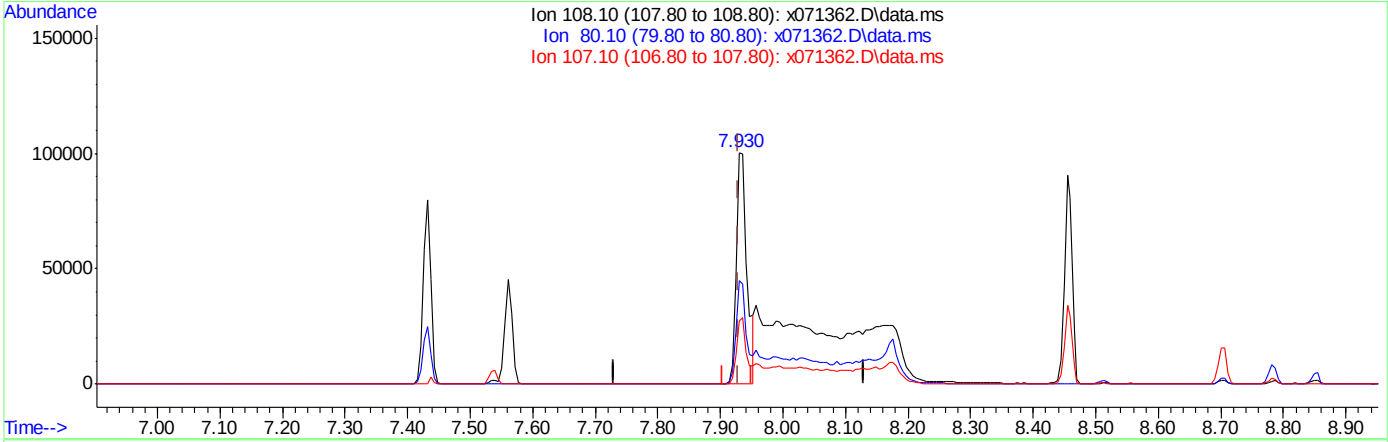
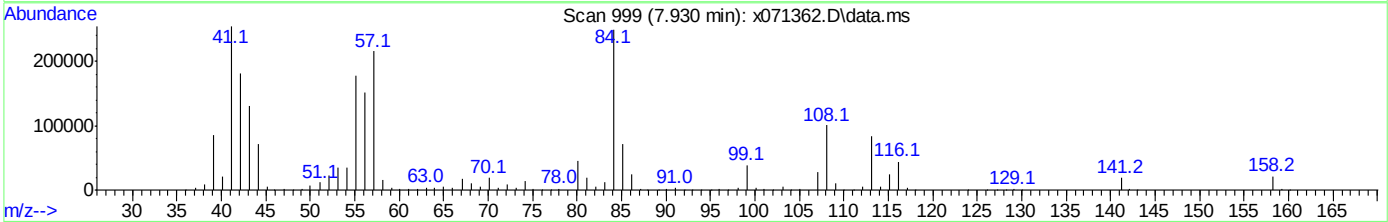
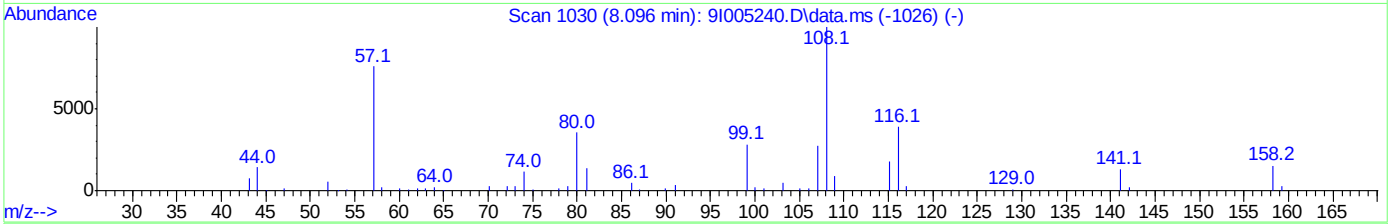
Response via : Initial Calibration







TIC: x071362.D\data.ms

(125) p-Phenylenediamine

7.930min (+0.000) 21.84ppm

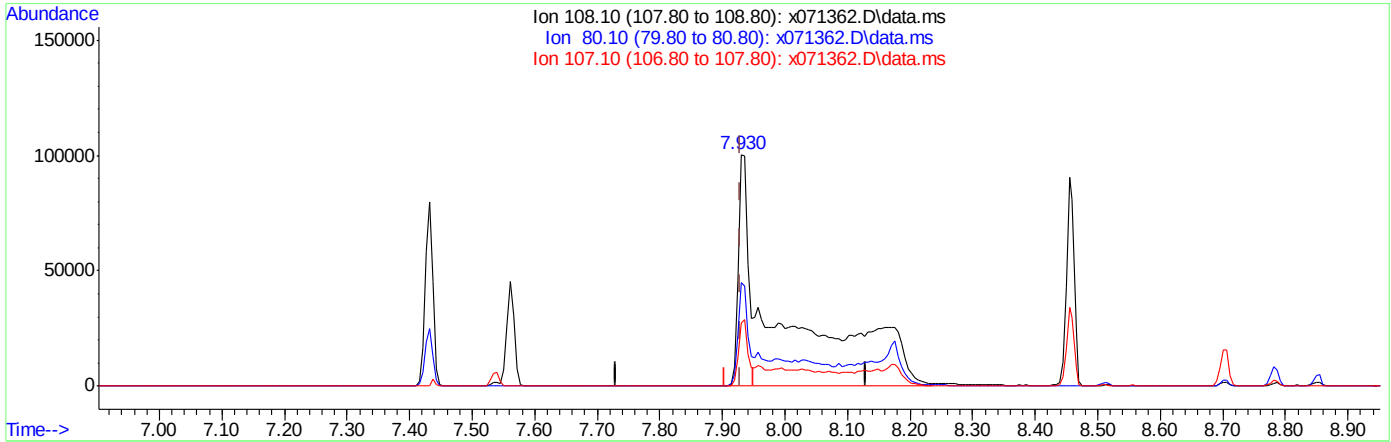
response 117920

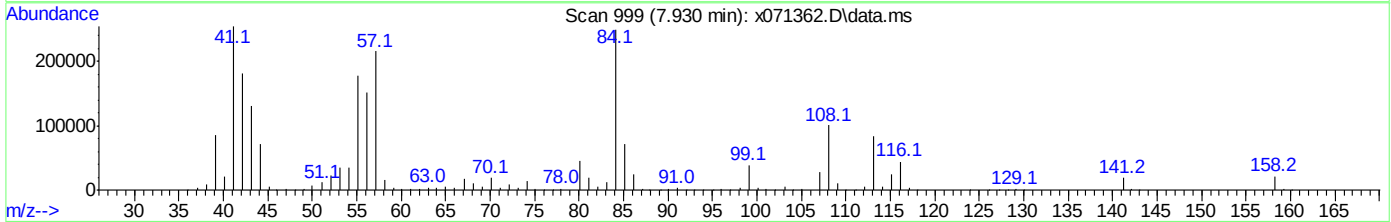
Ion	Exp%	Act%
108.10	100	100
80.10	35.50	45.05
107.10	27.70	27.34
0.00	0.00	0.00

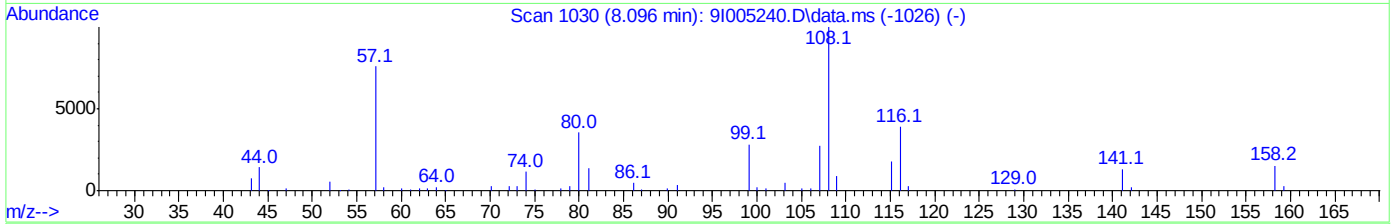
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071362.D
Acq On : 23 Jun 2020 12:37 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 23 14:01:10 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071362.D\data.ms

(125) p-Phenylenediamine

7.930min (+0.000) 116.33ppm m

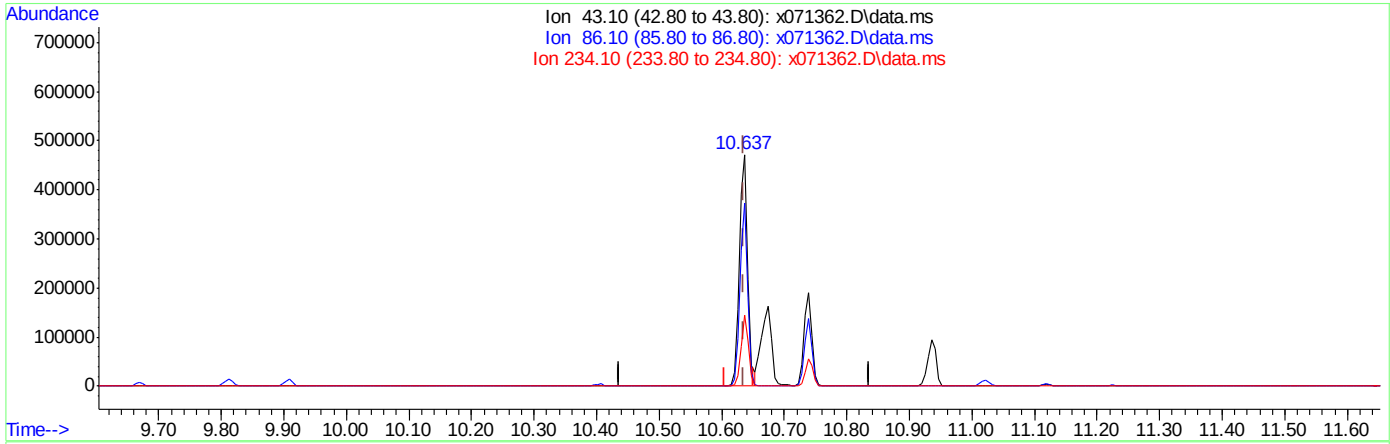
response 467834

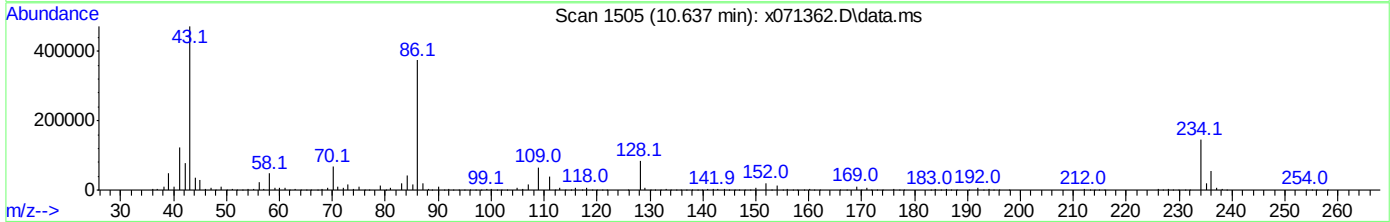
Ion	Exp%	Act%
108.10	100	100
80.10	35.50	44.62
107.10	27.70	27.32
0.00	0.00	0.00

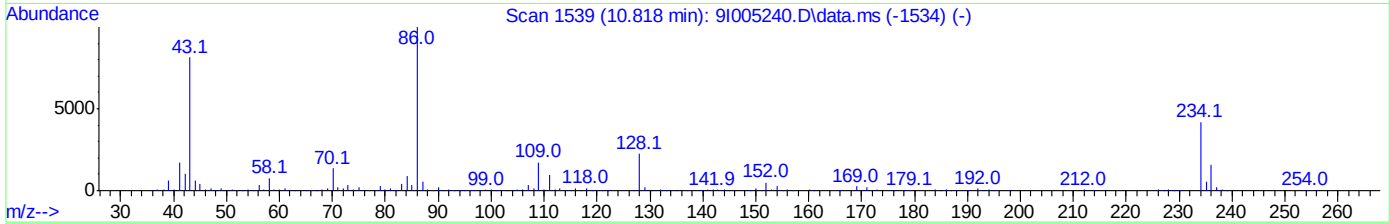
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071362.D
Acq On : 23 Jun 2020 12:37 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 23 14:01:10 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071362.D\data.ms

(138) Diallate

10.637min (+0.000) 56.94ppm

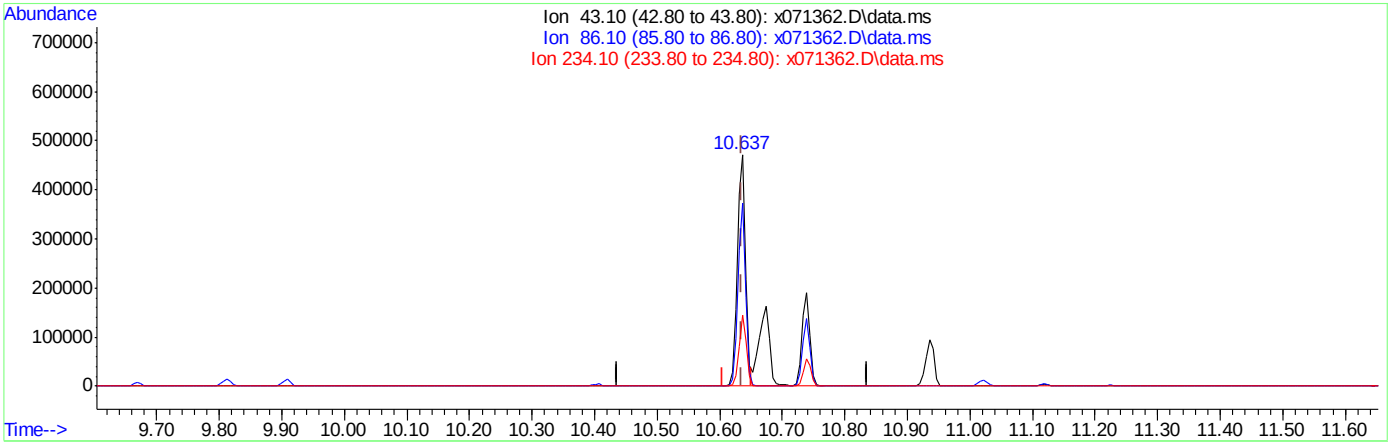
response 429265

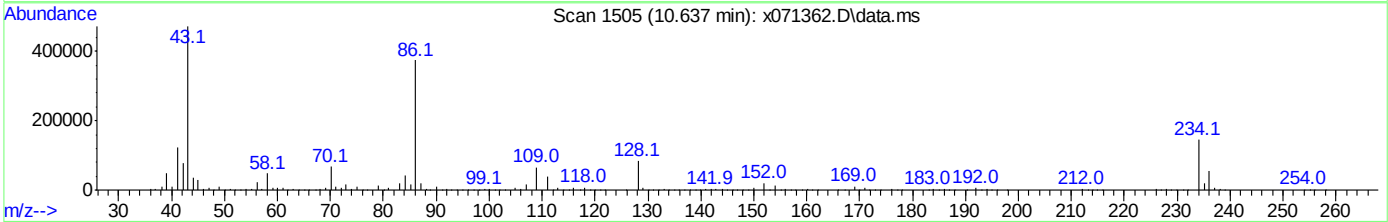
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	81.31#
234.10	51.50	31.39
0.00	0.00	0.00

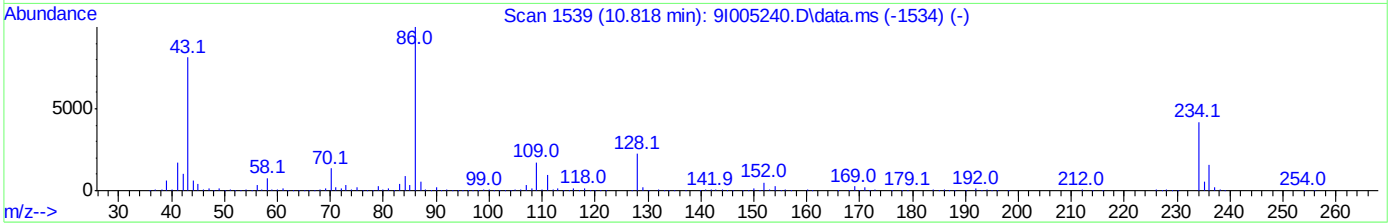
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071362.D
Acq On : 23 Jun 2020 12:37 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 23 14:01:10 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071362.D\data.ms

(138) Diallate

10.637min (+0.000) 104.00ppm m

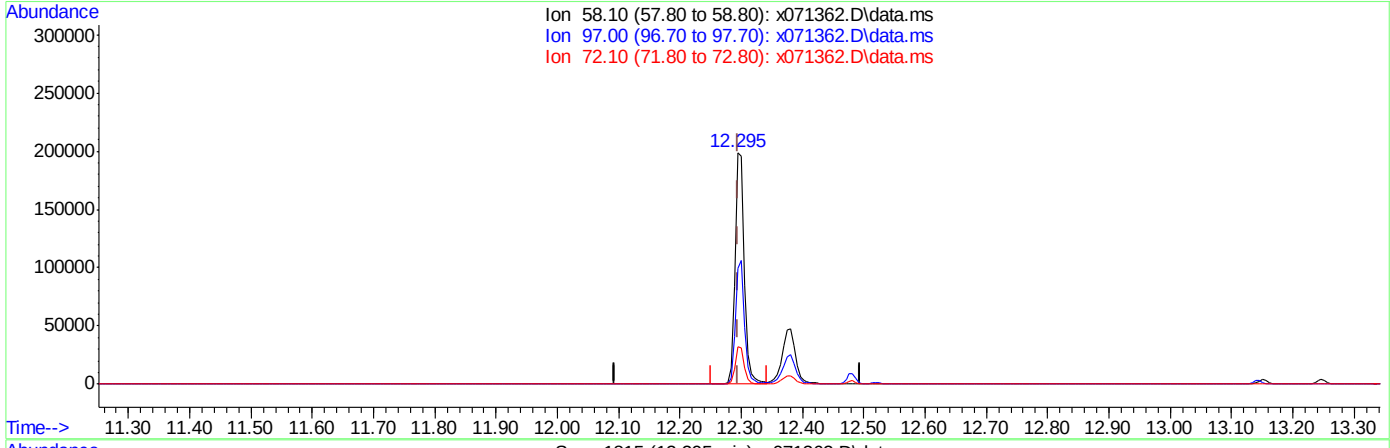
response 784030

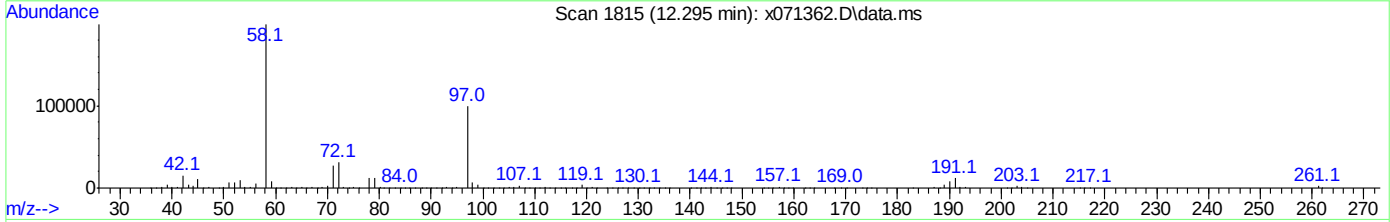
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	79.23#
234.10	51.50	30.56
0.00	0.00	0.00

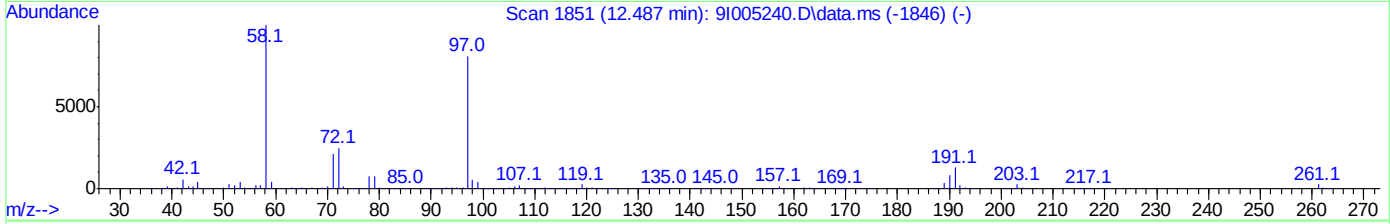
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071362.D
Acq On : 23 Jun 2020 12:37 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 23 14:01:10 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071362.D\data.ms

(144) Methapyrilene

12.295min (+0.000) 23.54ppm

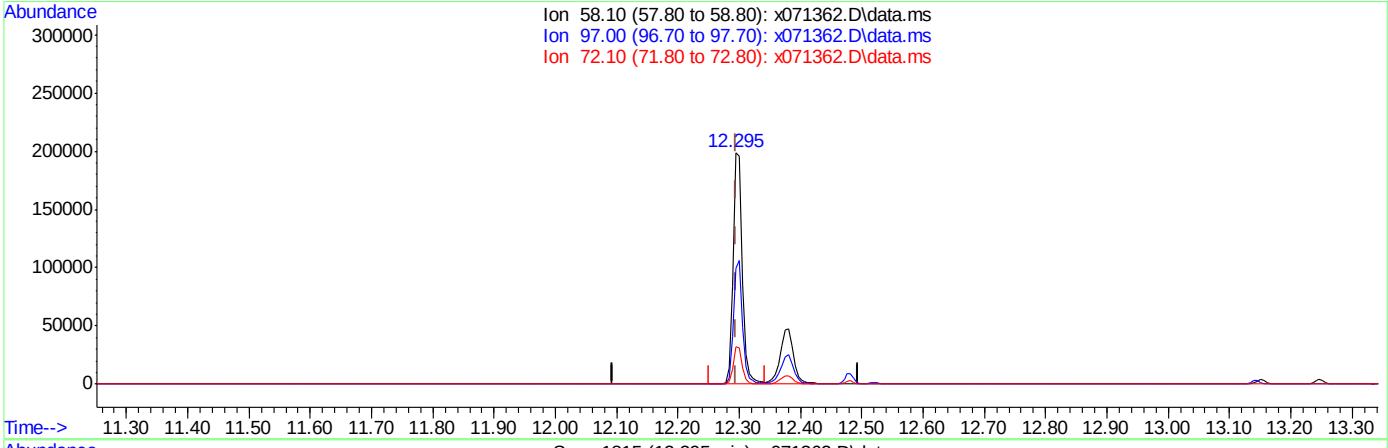
response 201112

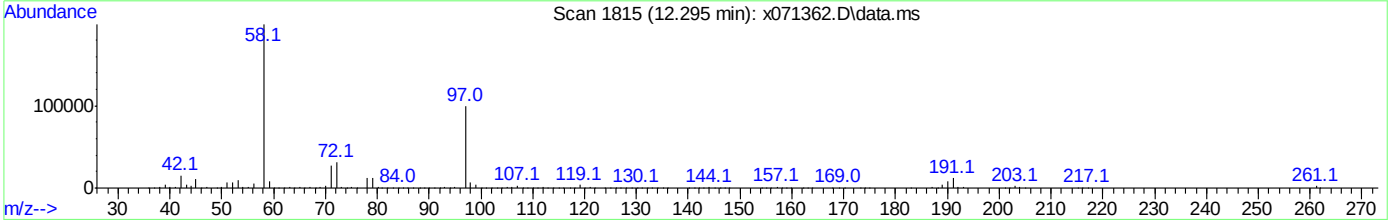
Ion	Exp%	Act%
58.10	100	100
97.00	80.90	50.07#
72.10	24.80	15.89
0.00	0.00	0.00

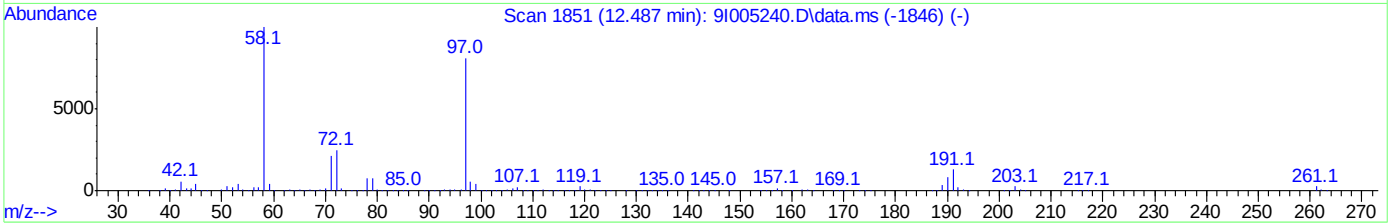
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071362.D
Acq On : 23 Jun 2020 12:37 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 23 14:01:10 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071362.D\data.ms

(144) Methapyrilene

12.295min (+0.000) 31.81ppm m

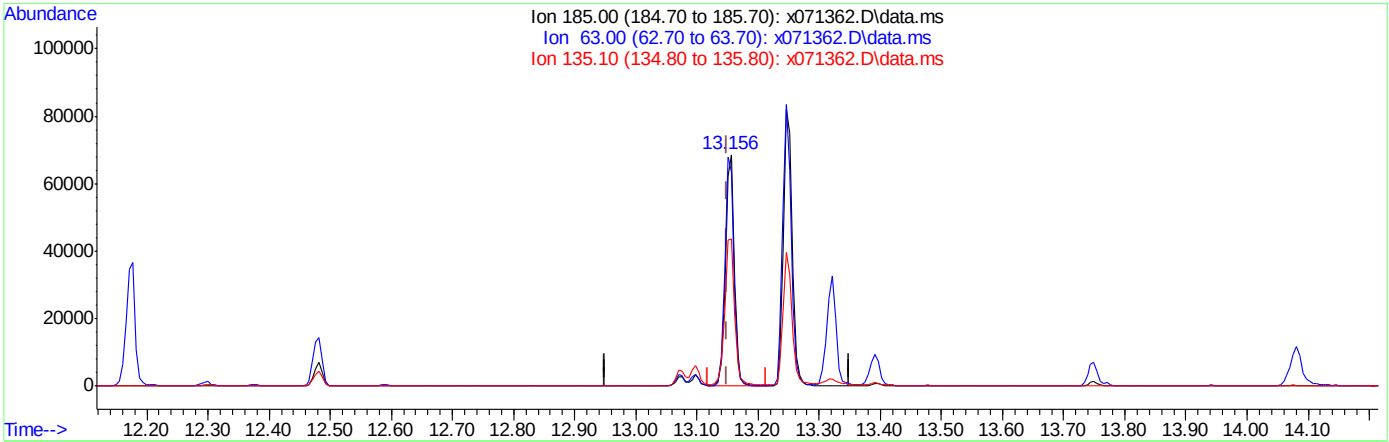
response 273027

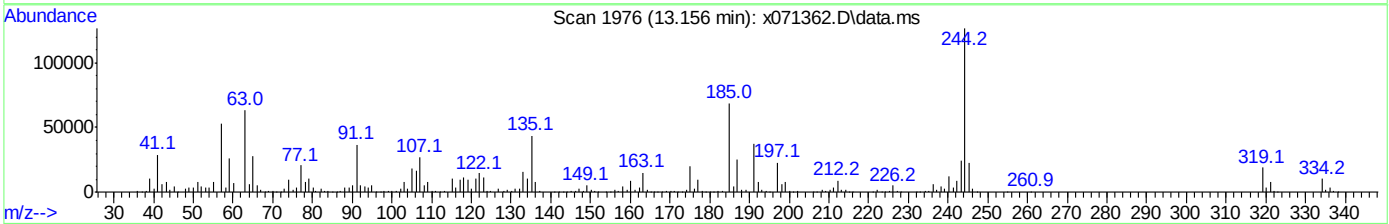
Ion	Exp%	Act%
58.10	100	100
97.00	80.90	50.10#
72.10	24.80	15.93
0.00	0.00	0.00

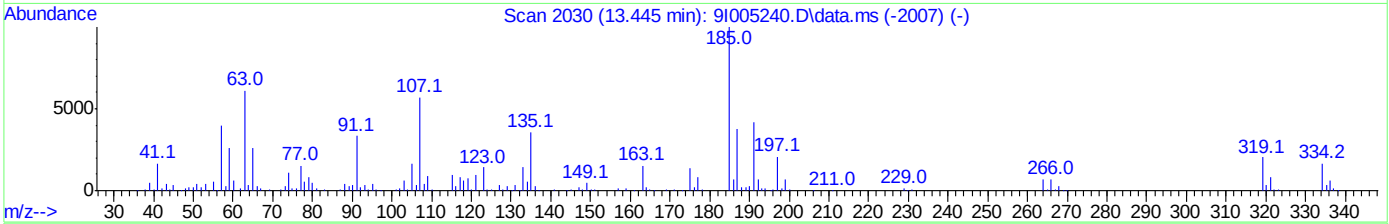
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071362.D
Acq On : 23 Jun 2020 12:37 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 23 14:01:10 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071362.D\data.ms

(147) Aramite

13.156min (+0.005) 39.17ppm

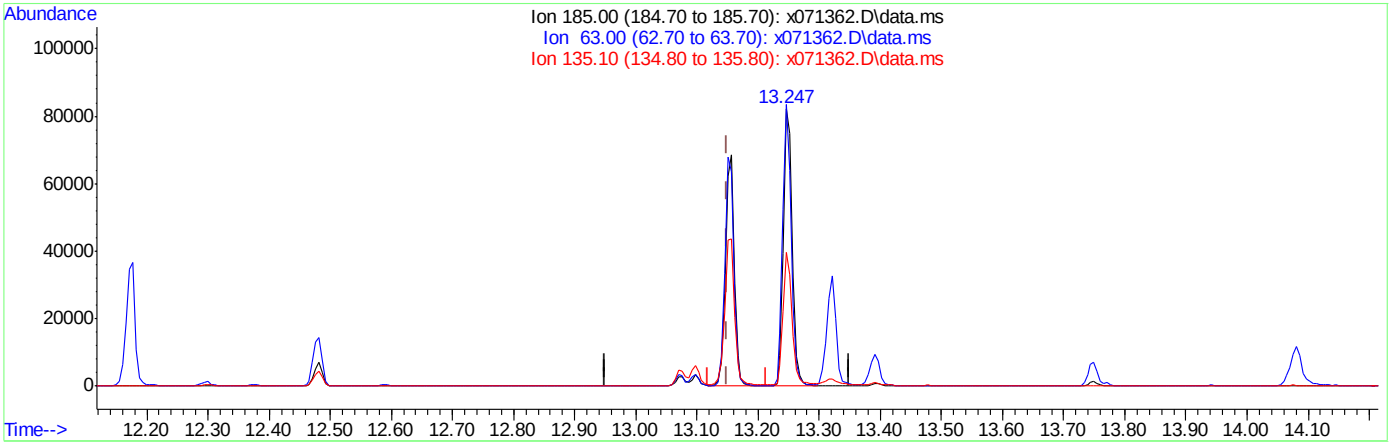
response 67896

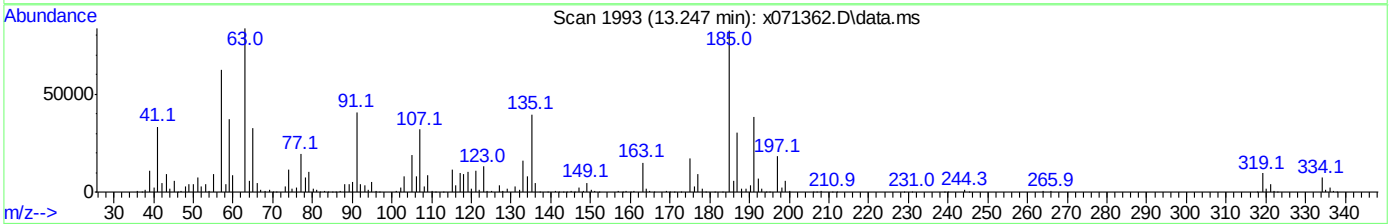
Ion	Exp%	Act%
185.00	100	100
63.00	61.10	92.71#
135.10	35.60	63.15
0.00	0.00	0.00

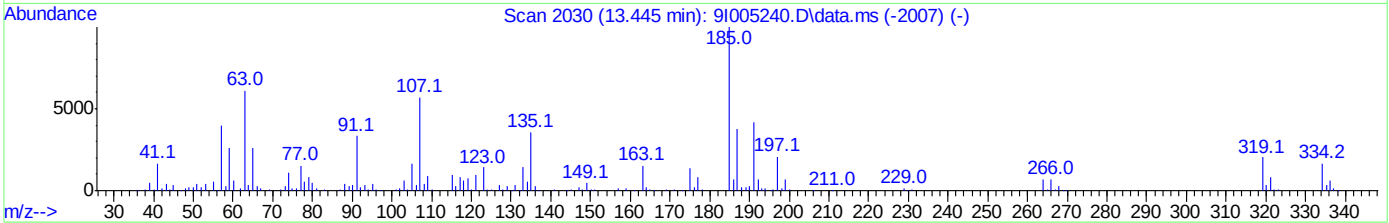
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071362.D
Acq On : 23 Jun 2020 12:37 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 23 14:01:10 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071362.D\data.ms

(147) Aramite

13.247min (+0.096) 81.41ppm m

response 149117

Ion	Exp%	Act%
185.00	100	100
63.00	61.10	101.63#
135.10	35.60	48.30
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 06/24/20 14:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071363.D
Acq On : 23 Jun 2020 1:03 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 23 17:10:52 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	0.000	152	0m	40.00	ppm		-6.00
22) Naphthalene-d8	0.000	136	0m	40.00	ppm		-7.43
43) Acenaphthene-d10	0.000	164	0m	40.00	ppm		-9.48
70) Phenanthrene-d10	0.000	188	0m	40.00	ppm		-11.22
92) Chrysene-d12	0.000	240	0m	40.00	ppm		-14.49
102) Perylene-d12	0.000	264	0m	40.00	ppm		-16.82
110) 1,4-Dichlorobenzene-d4A	6.005	152	163786	40.00	ppm		0.00
120) Naphthalene-d8A	7.433	136	700883	40.00	ppm		0.00
127) Acenaphthene-d10A	9.476	164	365750	40.00	ppm		0.00
136) Phenanthrene-d10A	11.225	188	688047	40.00	ppm		0.00
146) Chrysene-d12A	14.488	240	434561	40.00	ppm		0.00
153) Perylene-d12A	16.836	264	355855	40.00	ppm		0.02
System Monitoring Compounds							
7) 2-Fluorophenol	0.000	112	0d	0.00	ppm		
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#			
9) Phenol-d5	0.000	99	0d	0.00	ppm		
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#			
23) Nitrobenzene-d5	0.000	82	0d	0.00	ppm		
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#			
47) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm		
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#			
75) 2,4,6-Tribromophenol	0.000	330	0d	0.00	ppm		
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#			
95) Terphenyl-d14	0.000	244	0d	0.00	ppm		
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#			
Target Compounds							Qvalue
111) 2-Picoline	3.983	93	770885	94.78	ppm		88
112) N-Nitrosomethylethylamine	4.111	42	538567	187.02	ppm	#	54
113) Methyl methanesulfonate	4.443	80	379784	94.44	ppm		91
114) N-Nitrosodiethylamine	4.860	102	325074	100.55	ppm	#	26
115) Ethyl methanesulfonate	5.192	79	529425	92.97	ppm		96
116) Pentachloroethane	5.700	167	227433	98.21	ppm		94
117) N-Nitrosopyrrolidine	6.449	100	300078	90.78	ppm	#	51
118) N-Nitrosomorpholine	6.491	56	515740	149.30	ppm	#	72
119) O-Toluidine	6.502	106	1097953	109.37	ppm		99
121) N-Nitrosopiperidine	6.818	42	615840	160.39	ppm	#	58
122) A,A-Dimethylphenethyla...	7.449	58	2657015m	124.39	ppm		
123) Hexachloropropene	7.561	213	325540	87.32	ppm		99
124) N-Nitrosodi-n-butylamine	7.941	84	552594	98.13	ppm	#	61
125) p-Phenylenediamine	7.930	108	534166m	152.00	ppm		
126) Isosafrole	8.176	162	476964	103.94	ppm		80
128) Safrole	8.786	162	507081	107.15	ppm		90
129) 1-Chloronaphthalene	8.856	162	1155136	101.74	ppm		97
130) Diphenyl Ether	8.946	170	802823	104.10	ppm		92
131) 1,4-Naphthoquinone	9.043	158	340836m	109.51	ppm		
132) Pentachlorobenzene	9.674	250	407827	77.42	ppm		99
133) 1-Naphthylamine	9.818	143	1293951	111.03	ppm		95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071363.D
Acq On : 23 Jun 2020 1:03 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 23 17:10:52 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration

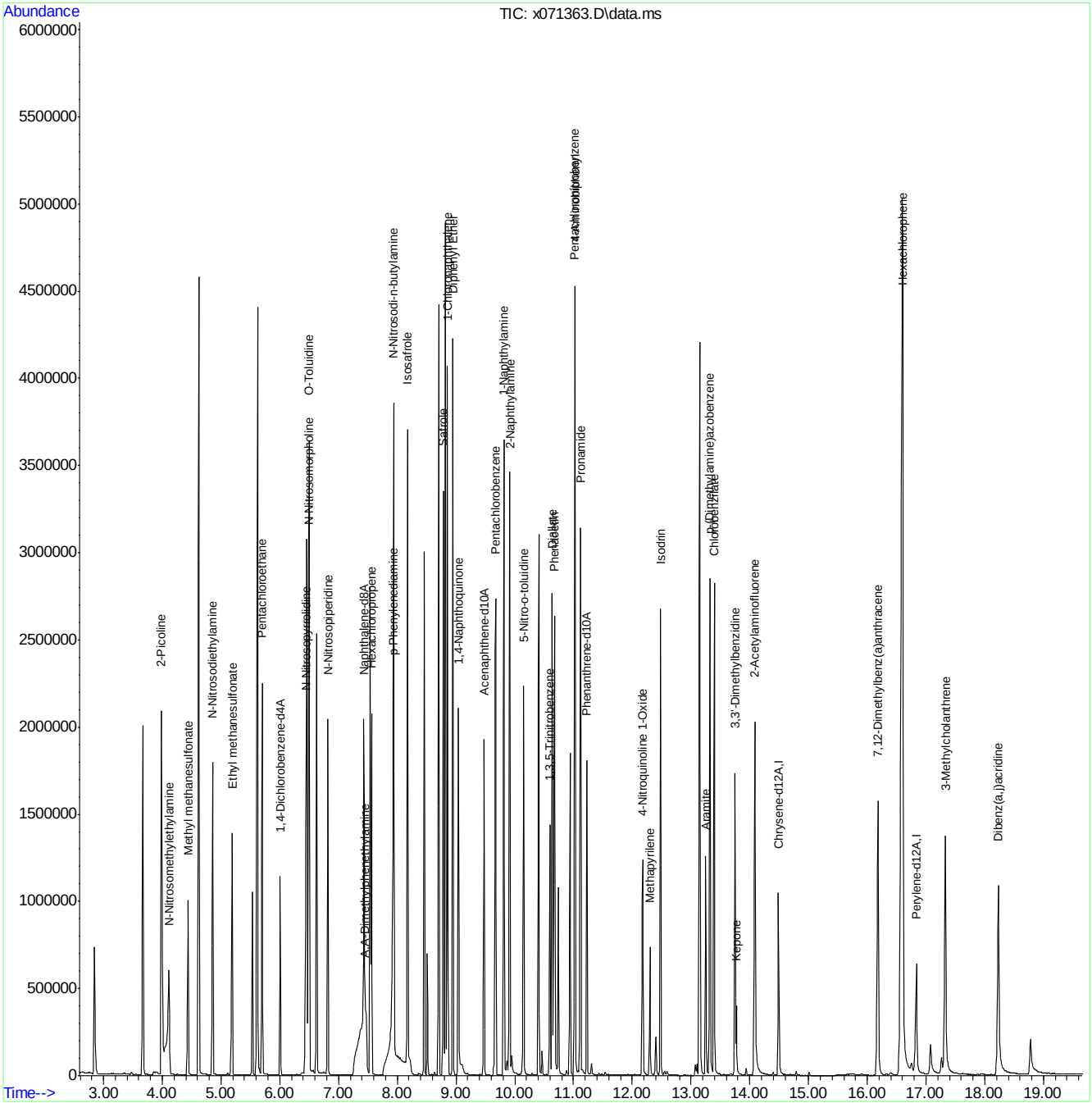
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
134) 2-Naphthylamine	9.915	143	1364529	114.95	ppm	98
135) 5-Nitro-o-toluidine	10.155	152	423615	100.08	ppm	87
137) 1,3,5-Trinitrobenzene	10.599	75	371047	82.63	ppm	87
138) Diallate	10.637	43	1020639m	134.35	ppm	
139) Phenacetin	10.679	108	727692	94.25	ppm	89
140) 4-Aminobiphenyl	11.027	169	1255640	108.24	ppm	99
141) Pronamide	11.123	173	570411	91.47	ppm	98
142) Pentachloronitrobenzene	11.022	237	137647	78.60	ppm	92
143) 4-Nitroquinoline 1-Oxide	12.177	190	117036	118.63	ppm	82
144) Methapyrilene	12.300	58	346867m	39.90	ppm	
145) Isodrin	12.482	193	190850	79.93	ppm	85
147) Aramite	13.252	185	197374m	104.24	ppm	
148) p-(Dimethylamine)azobe...	13.322	120	548044	122.37	ppm	84
149) Chlorobenzilate	13.391	139	629934	111.55	ppm	72
150) Kepone	13.776	272	19564	12.50	ppm	93
151) 3,3'-Dimethylbenzidine	13.750	212	651285	98.88	ppm	98
152) 2-Acetylaminofluorene	14.087	181	686507	98.52	ppm	92
154) 7,12-Dimethylbenz(a)an...	16.183	256	539852	99.92	ppm	95
155) Hexachlorophene	16.600	196	1092597	1366.31	ppm	98
156) 3-Methylcholanthrene	17.333	268	523043	108.16	ppm	94
157) Dibenz(a,j)acridine	18.232	279	769588	88.43	ppm	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071363.D
Acq On : 23 Jun 2020 1:03 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 23 17:10:52 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: SX2918-IC2918
Lab FileID: X071363.D
Injection Time: 06/23/20 13:03

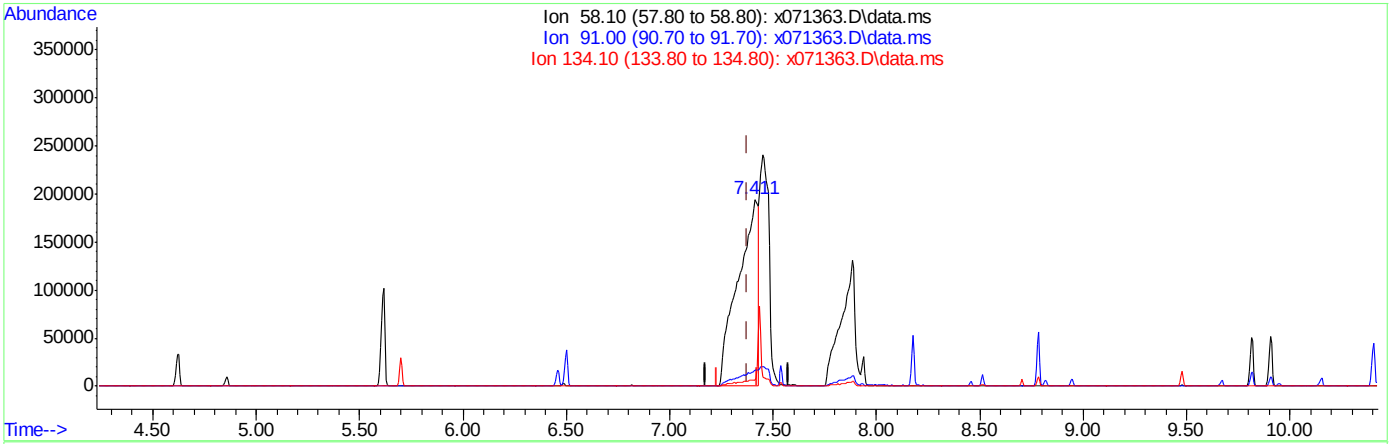
Method: EPA 625.1
Analyst approved: 06/24/20 09:50 Martha Valls
Supervisor approved: 06/24/20 14:07 Naresh Jiawan

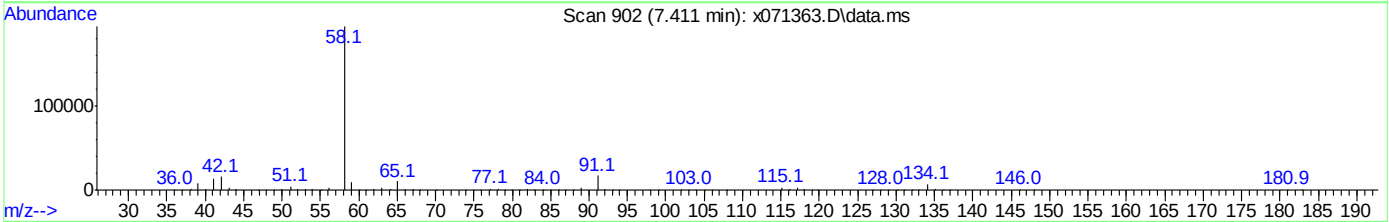
Parameter	CAS	Sig#	R.T. (min.)	Reason
A,A-Dimethylphenethylamine	122-09-8		7.45	Split peak
p-Phenylenediamine	106-50-3		7.93	Split peak
Diallate	2303-16-4		10.64	Split peak
Methapyrilene	91-80-5		12.30	Split peak
Aramite	140-57-8		13.25	Split peak

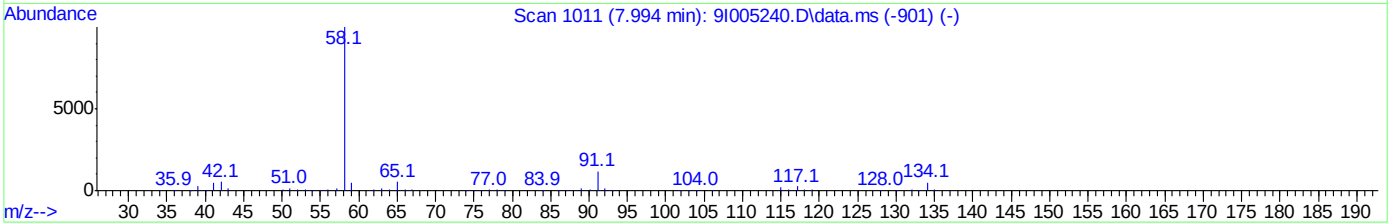
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071363.D
Acq On : 23 Jun 2020 1:03 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 23 14:01:12 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071363.D\data.ms

(122) A,A-Dimethylphenethylamine

7.411min (+0.032) 64.09ppm

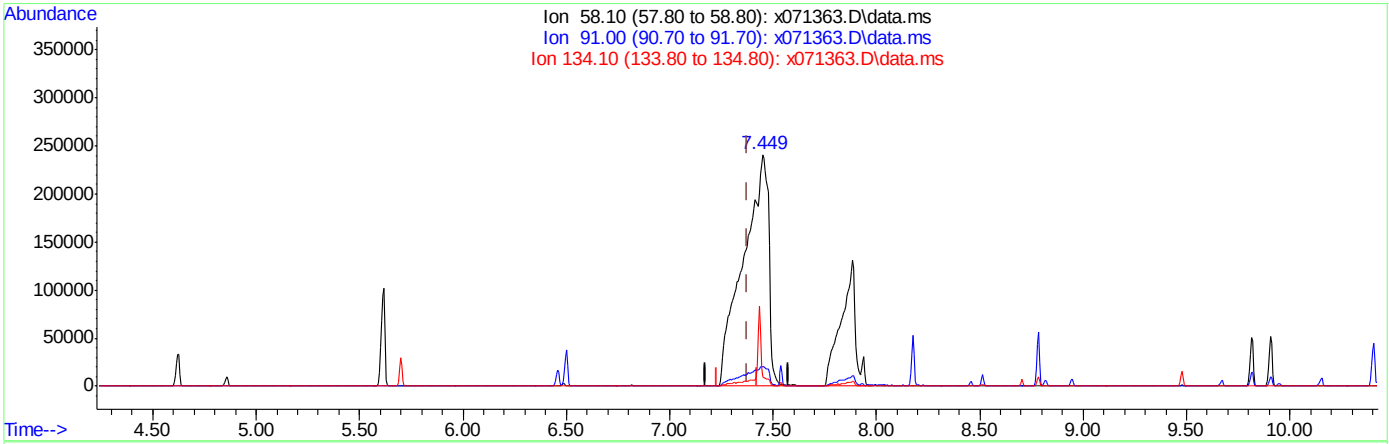
response 1279100

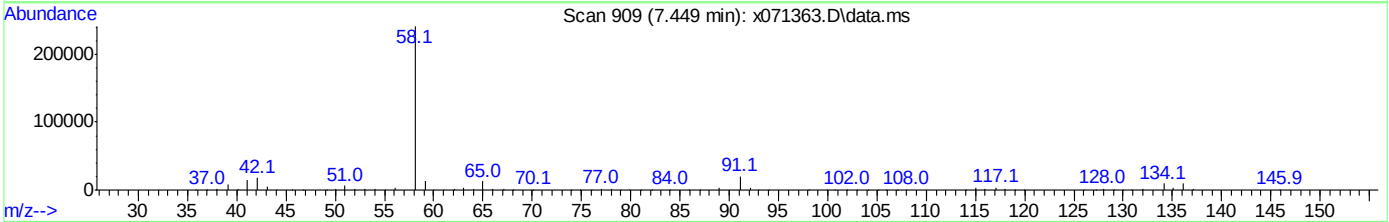
Ion	Exp%	Act%
58.10	100	100
91.00	11.70	8.33
134.10	5.10	0.00
0.00	0.00	0.00

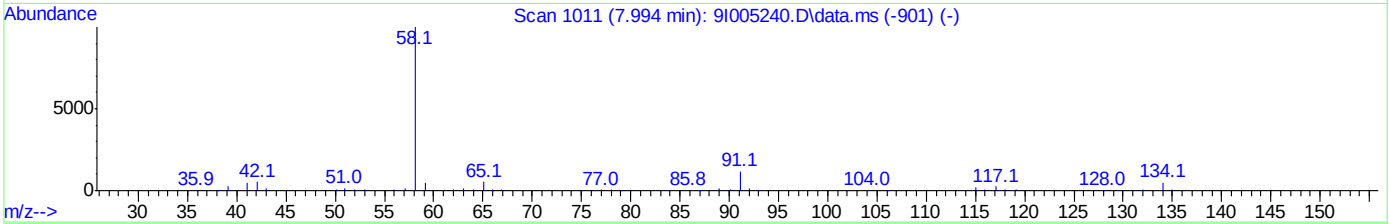
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071363.D
Acq On : 23 Jun 2020 1:03 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 23 14:01:12 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071363.D\data.ms

(122) A,A-Dimethylphenethylamine

7.449min (+0.070) 124.39ppm m

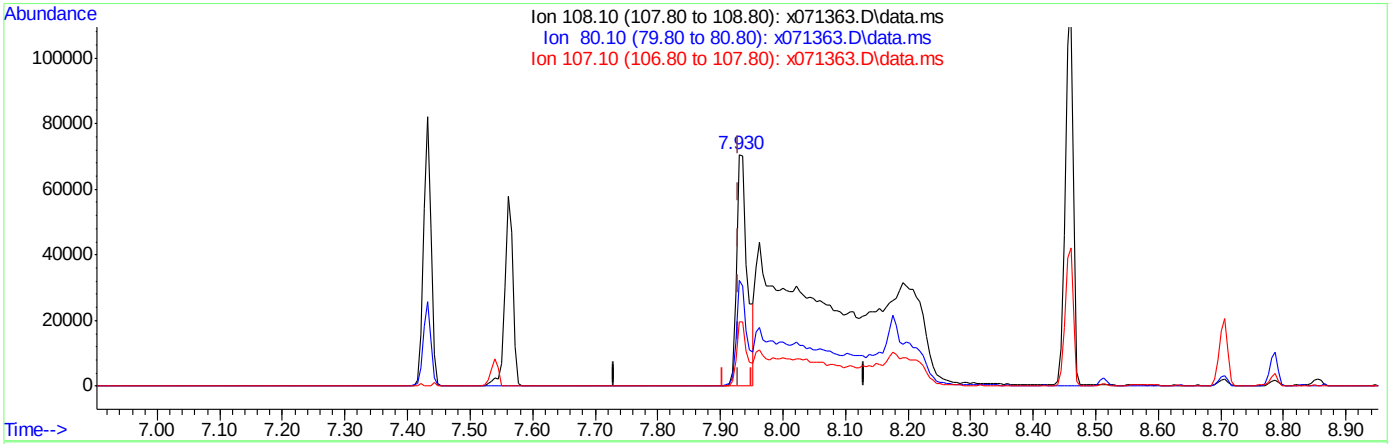
response 2657015

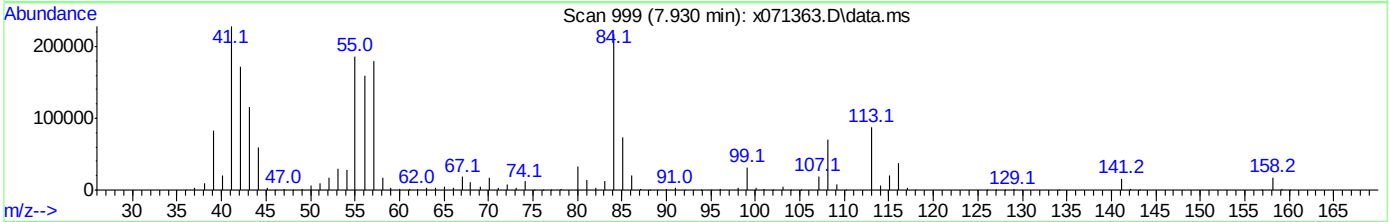
Ion	Exp%	Act%
58.10	100	100
91.00	11.70	8.26
134.10	5.10	4.07
0.00	0.00	0.00

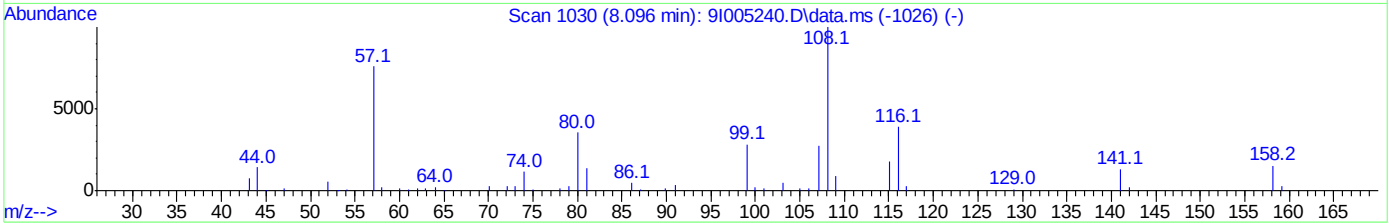
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071363.D
Acq On : 23 Jun 2020 1:03 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 23 14:01:12 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071363.D\data.ms

(125) p-Phenylenediamine

7.930min (+0.000) 15.16ppm

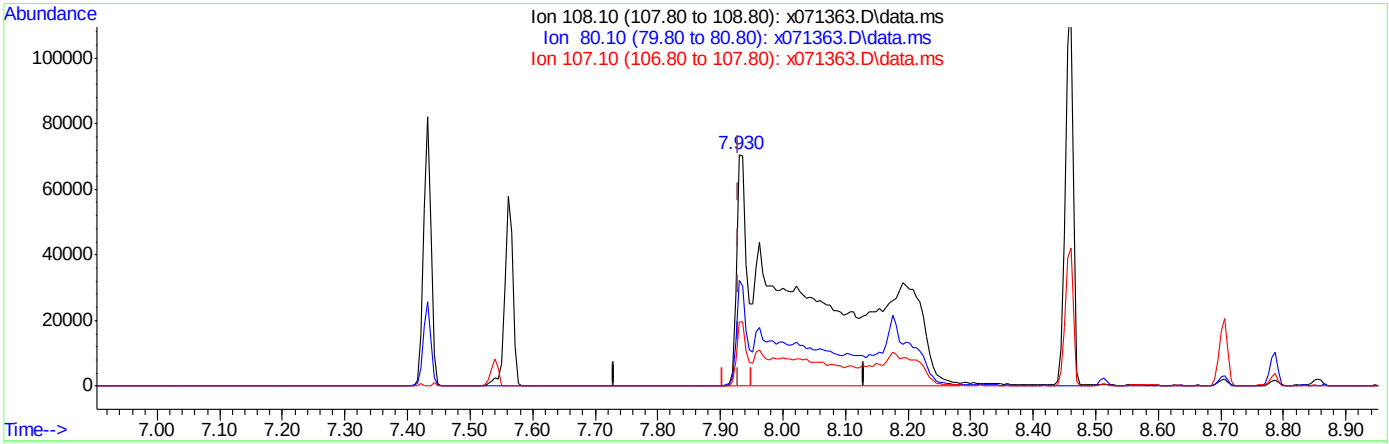
response 83601

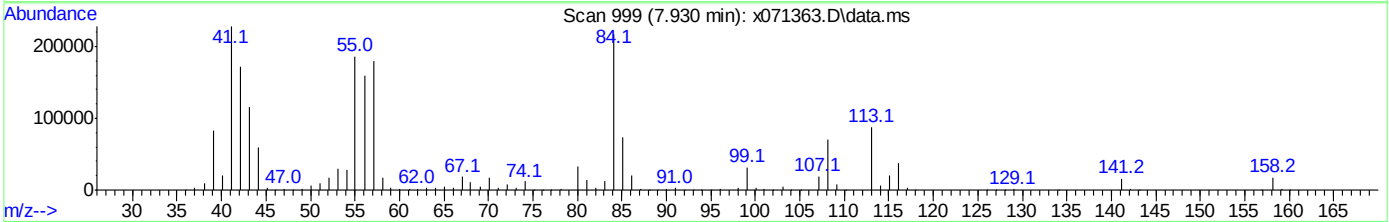
Ion	Exp%	Act%
108.10	100	100
80.10	35.50	46.00
107.10	27.70	27.66
0.00	0.00	0.00

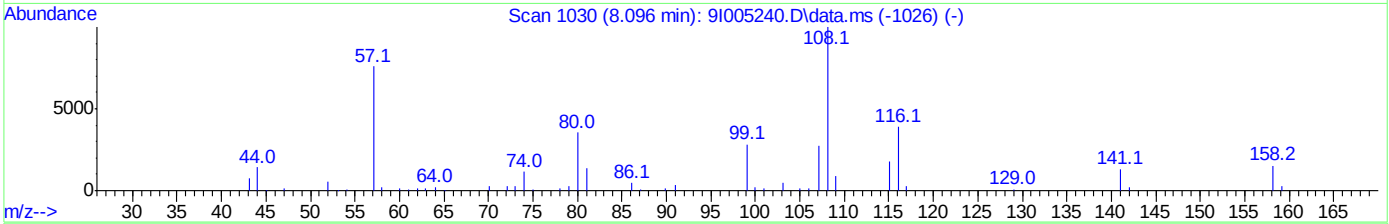
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071363.D
Acq On : 23 Jun 2020 1:03 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 23 14:01:12 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071363.D\data.ms

(125) p-Phenylenediamine

7.930min (+0.000) 152.00ppm m

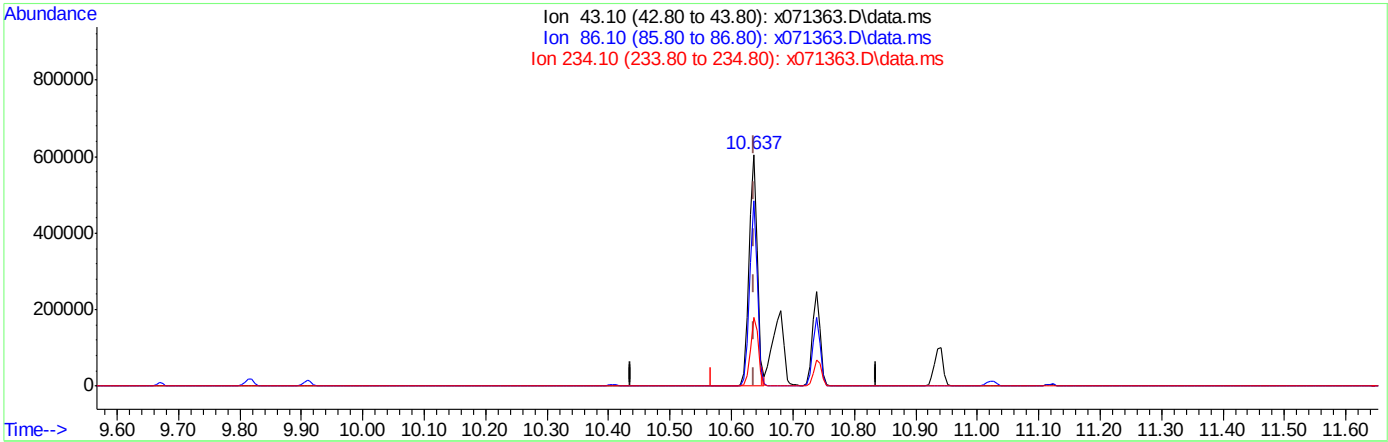
response 534166

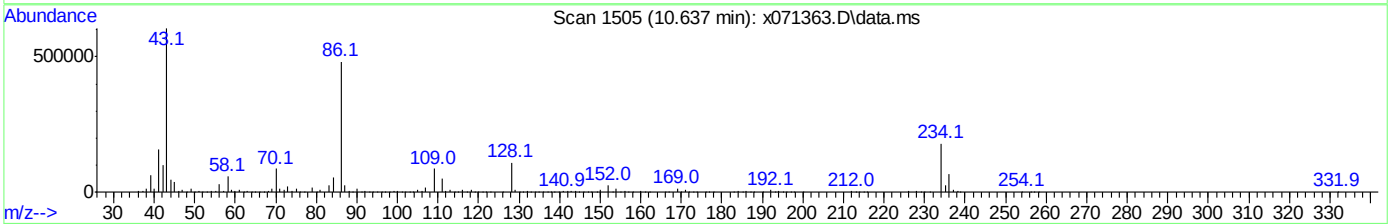
Ion	Exp%	Act%
108.10	100	100
80.10	35.50	45.66
107.10	27.70	27.59
0.00	0.00	0.00

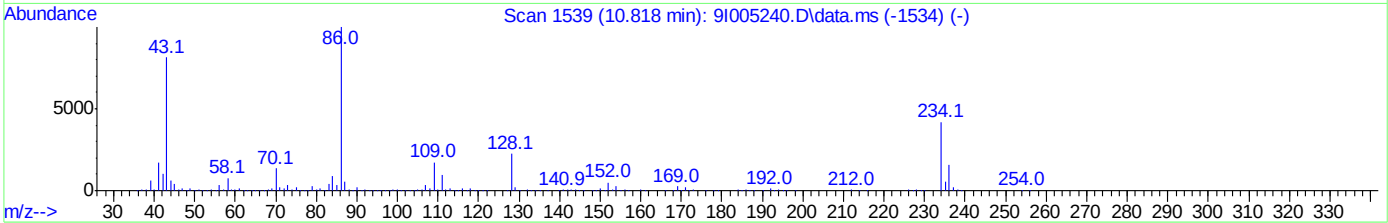
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071363.D
Acq On : 23 Jun 2020 1:03 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 23 14:01:12 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071363.D\data.ms

(138) Diallate

10.637min (+0.000) 72.84ppm

response 553405

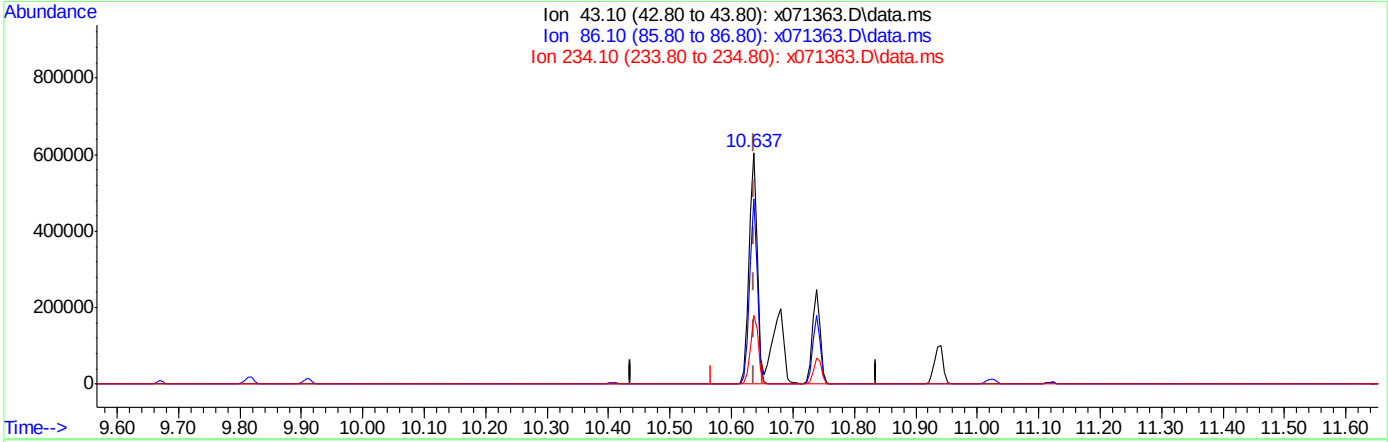
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	80.94#
234.10	51.50	29.93
0.00	0.00	0.00

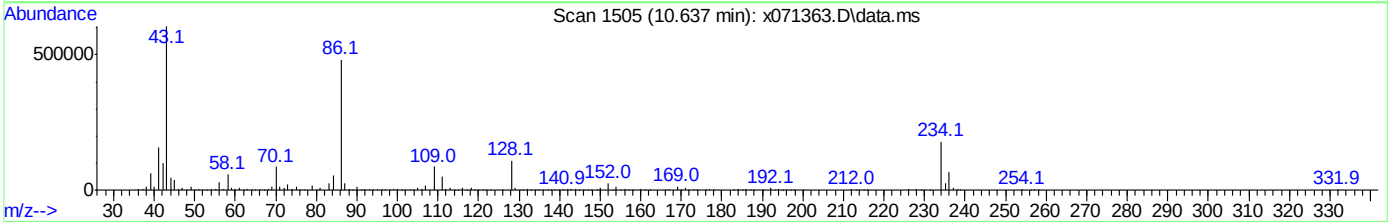
8270DApp9SX-062320.m Tue Jun 23 14:24:52 2020 Page: 1

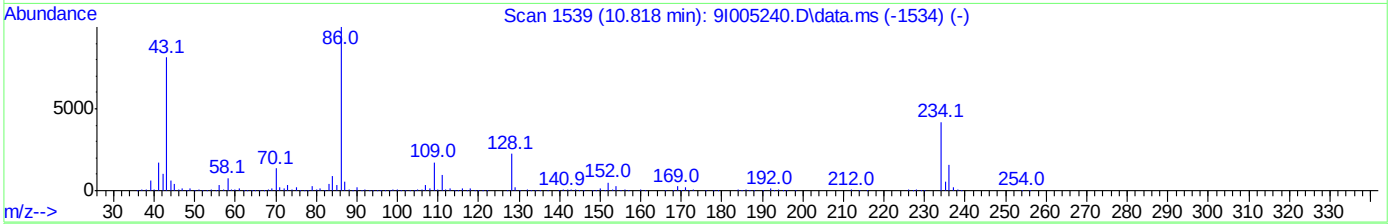
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071363.D
Acq On : 23 Jun 2020 1:03 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 23 14:01:12 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071363.D\data.ms

(138) Diallate

10.637min (+0.000) 134.35ppm m

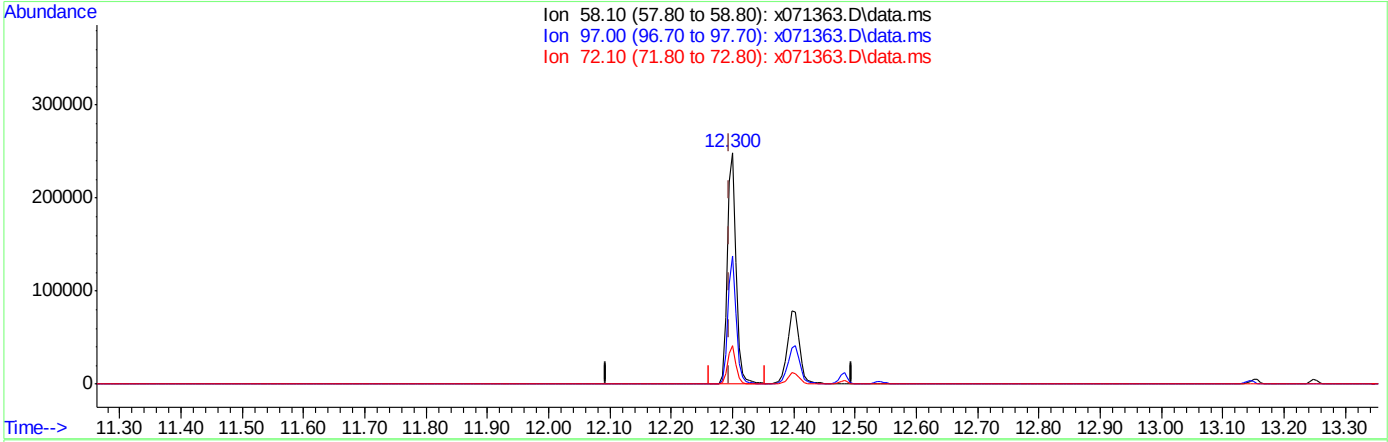
response 1020639

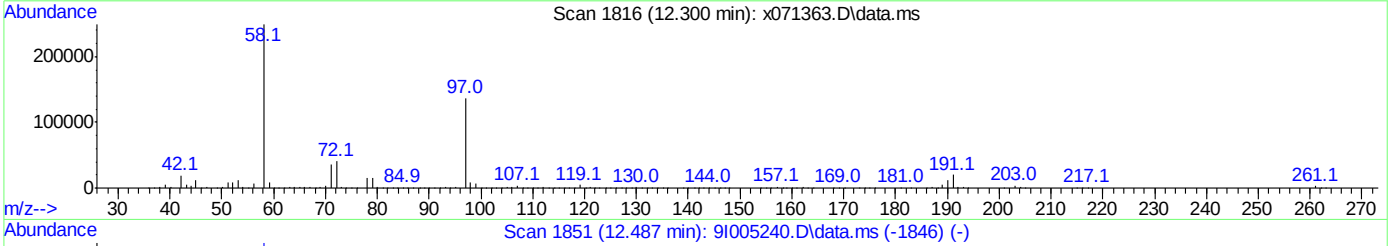
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	79.79#
234.10	51.50	29.55
0.00	0.00	0.00

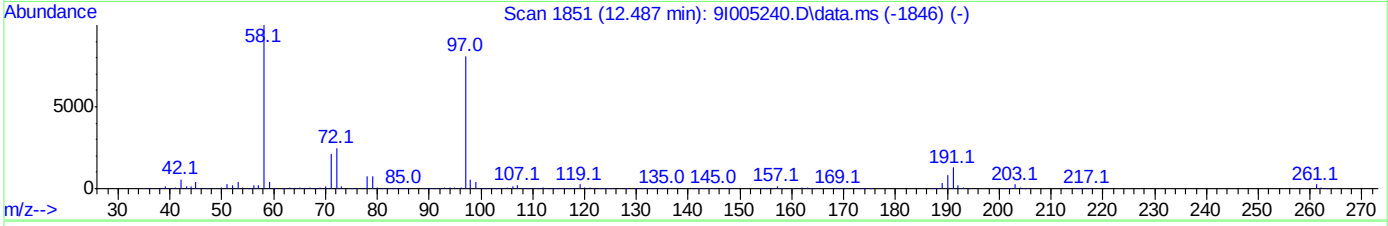
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071363.D
Acq On : 23 Jun 2020 1:03 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 23 14:01:12 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071363.D\data.ms

(144) Methapyrilene

12.300min (+0.006) 27.74ppm

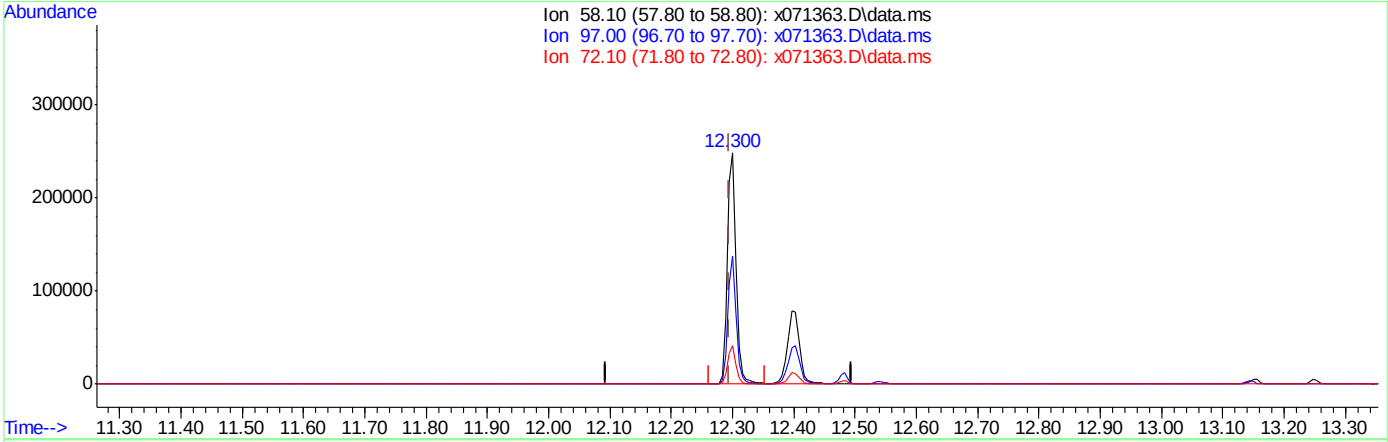
response 239390

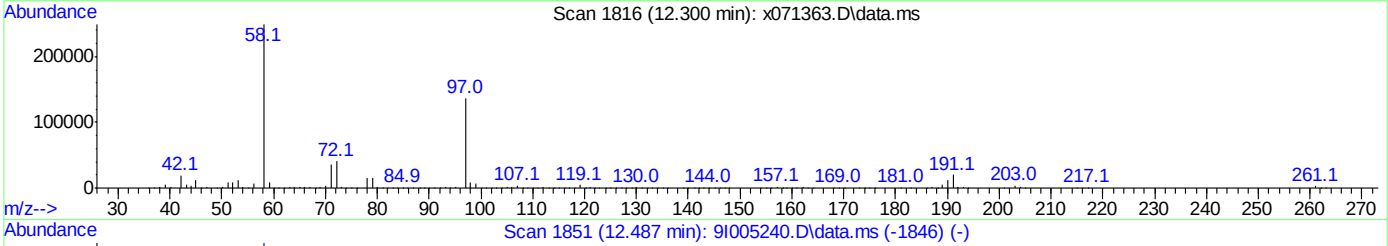
Ion	Exp%	Act%
58.10	100	100
97.00	80.90	55.12
72.10	24.80	16.74
0.00	0.00	0.00

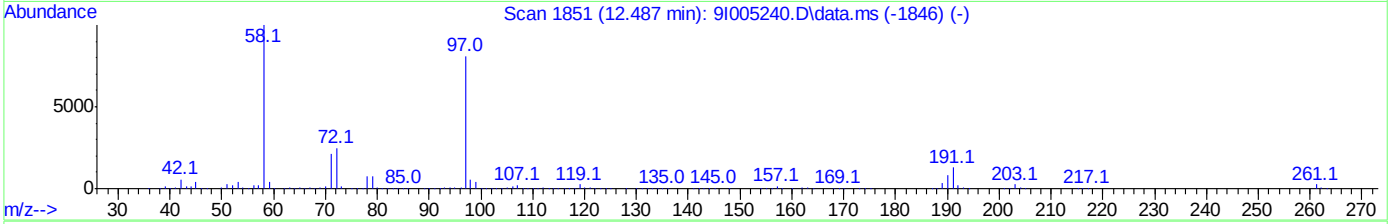
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071363.D
Acq On : 23 Jun 2020 1:03 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 23 14:01:12 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071363.D\data.ms

(144) Methapyrilene

12.300min (+0.006) 39.90ppm m

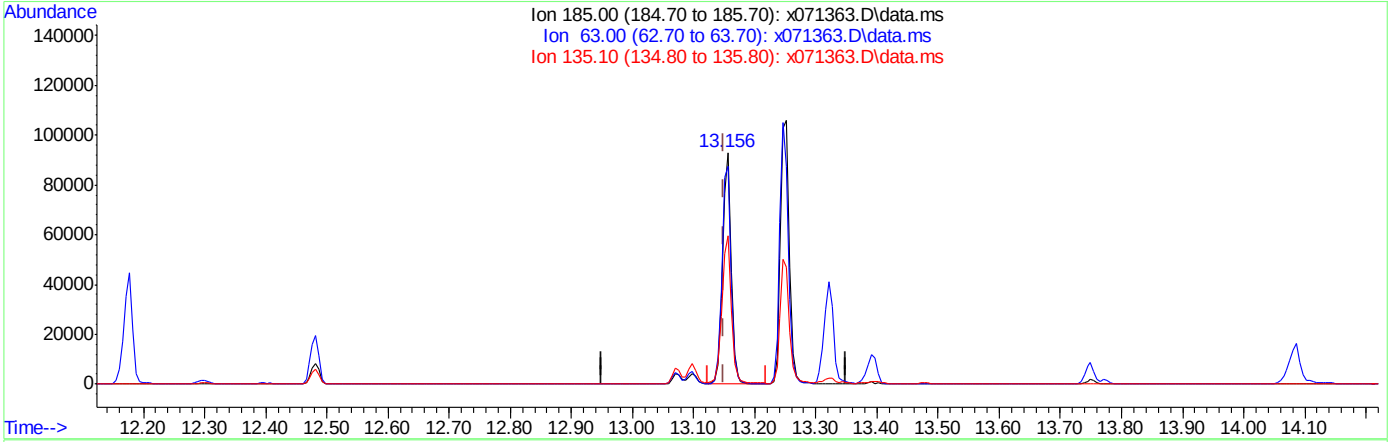
response 346867

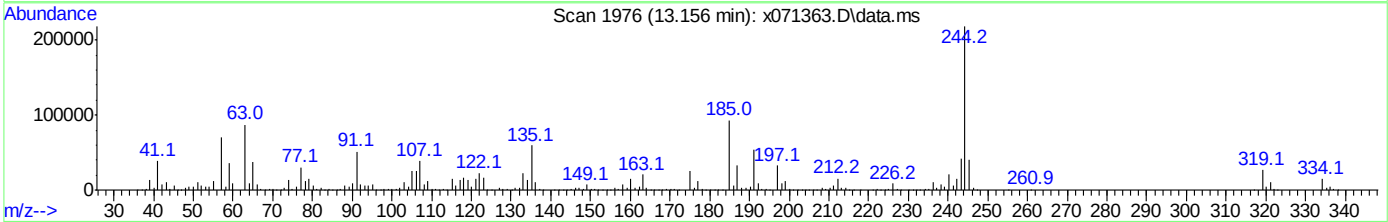
Ion	Exp%	Act%
58.10	100	100
97.00	80.90	55.14
72.10	24.80	16.74
0.00	0.00	0.00

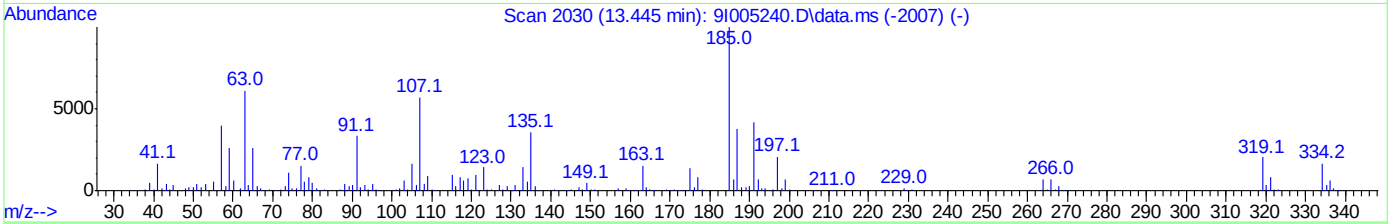
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071363.D
Acq On : 23 Jun 2020 1:03 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 23 14:25:07 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071363.D\data.ms

(147) Aramite

13.156min (+0.006) 50.24ppm

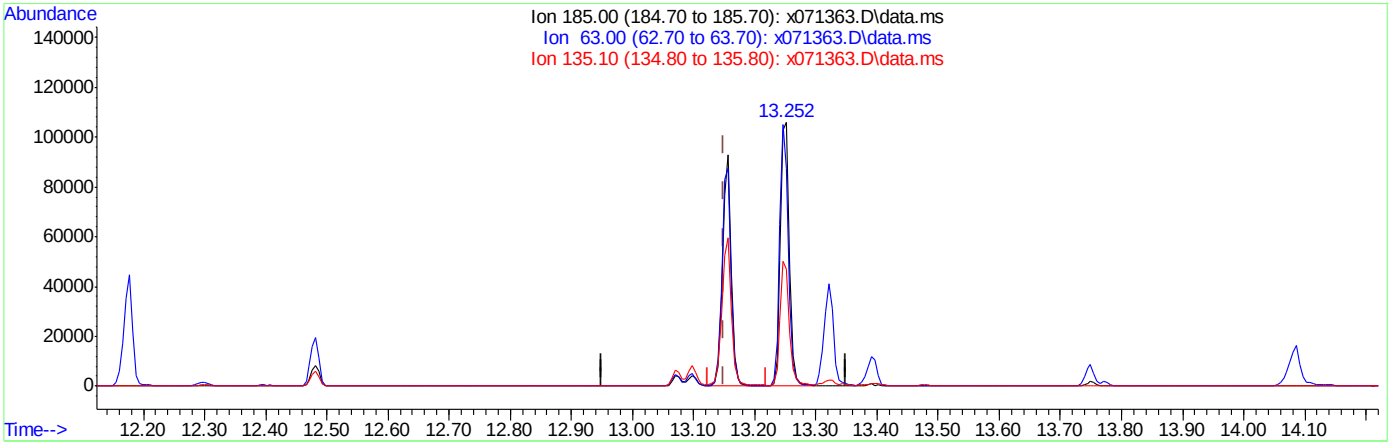
response 88801

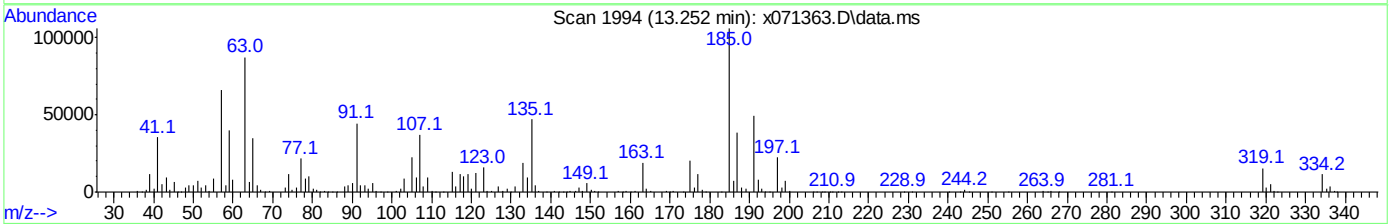
Ion	Exp%	Act%
185.00	100	100
63.00	61.10	93.92#
135.10	35.60	63.61
0.00	0.00	0.00

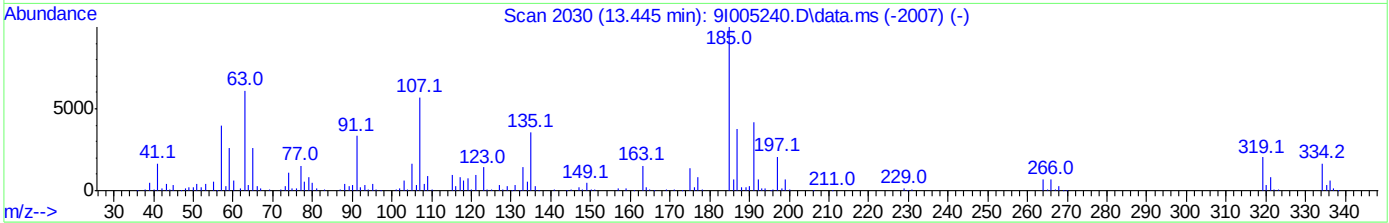
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071363.D
Acq On : 23 Jun 2020 1:03 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 23 14:25:07 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration







TIC: x071363.D\data.ms

(147) Aramite

13.252min (+0.102) 104.24ppm m

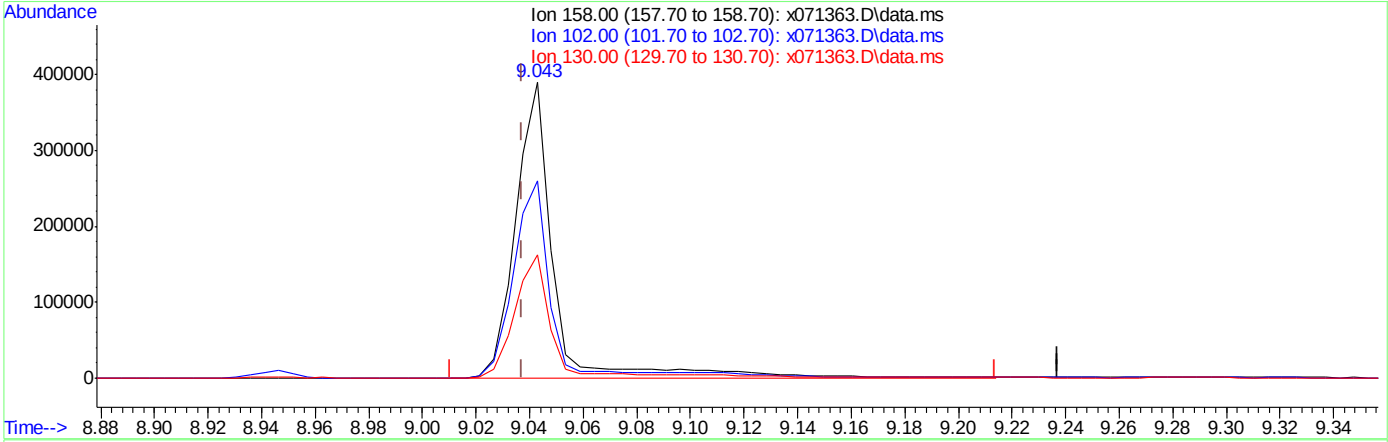
response 197374

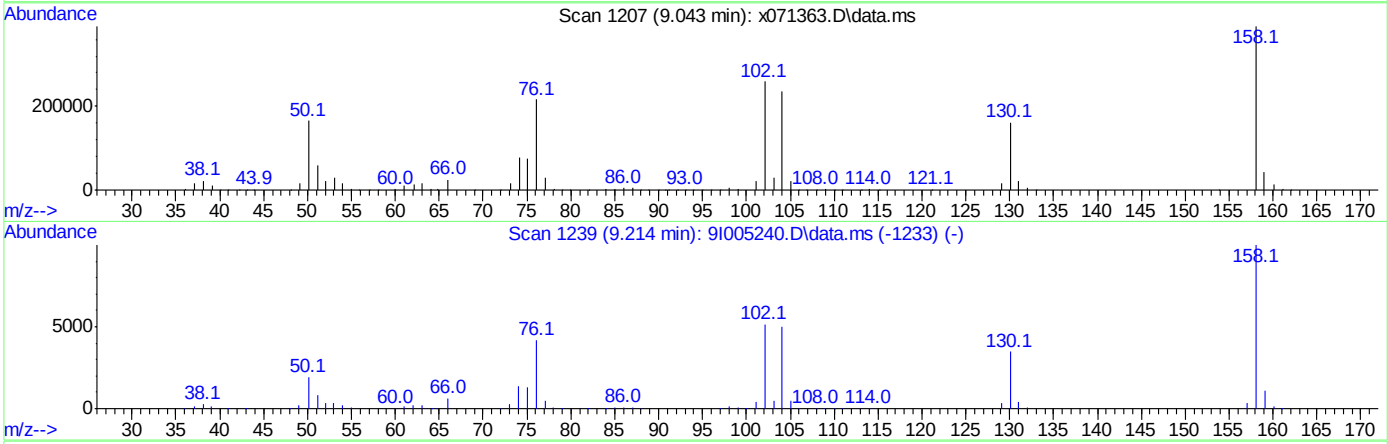
Ion	Exp%	Act%
185.00	100	100
63.00	61.10	82.44
135.10	35.60	44.38
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071363.D
Acq On : 23 Jun 2020 1:03 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 23 16:55:54 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration





TIC: x071363.D\data.ms

(131) 1,4-Naphthoquinone

9.043min (+0.006) -40.00ppm

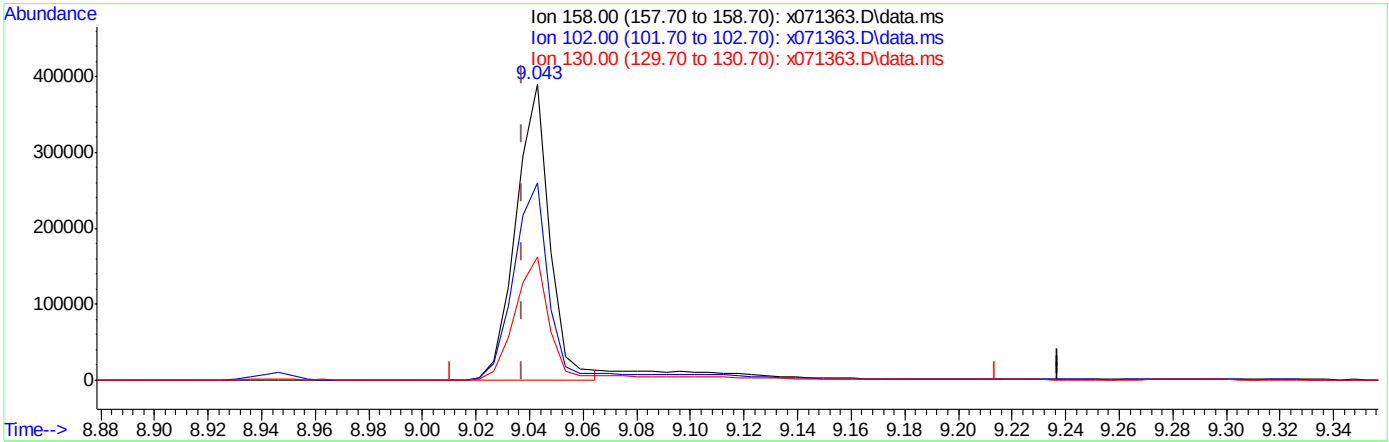
response 385634

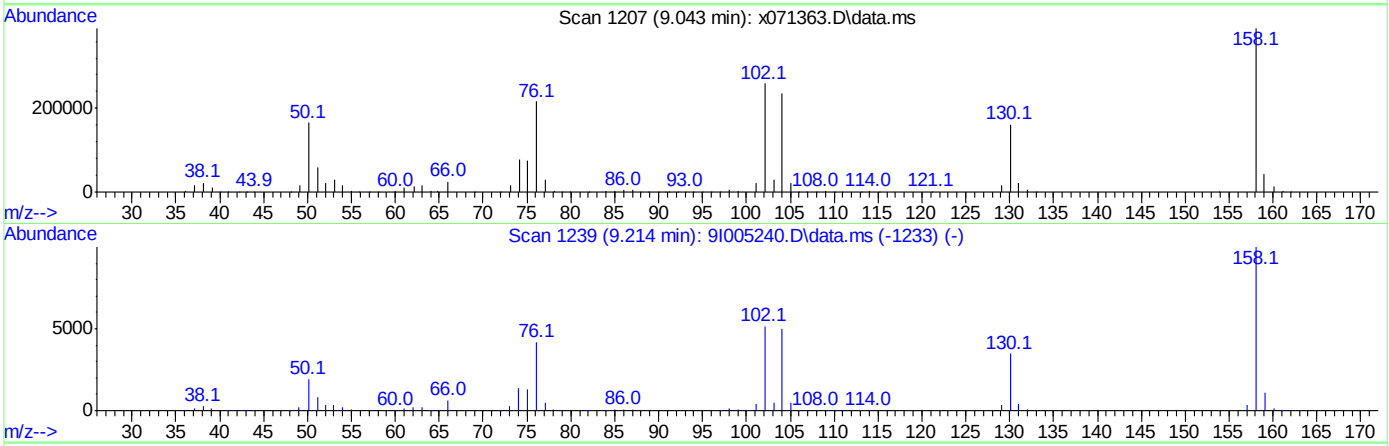
Ion	Exp%	Act%
158.00	100	100
102.00	51.70	66.40
130.00	34.90	41.35
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071363.D
Acq On : 23 Jun 2020 1:03 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 23 16:55:54 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed May 13 14:15:42 2020
Response via : Initial Calibration





TIC: x071363.D\data.ms

(131) 1,4-Naphthoquinone

9.043min (+0.006) 109.51ppm m

response 340836

Ion	Exp%	Act%
158.00	100	100
102.00	51.70	66.40
130.00	34.90	41.34
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 06/24/20 14:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071364.D
Acq On : 23 Jun 2020 1:29 pm
Operator : marthav
Sample : ic2918-1 8270 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 23 16:56:07 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 15:18:55 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.005	152	144015	40.00	ppm	0.00
22) Naphthalene-d8	7.433	136	575045	40.00	ppm	0.00
43) Acenaphthene-d10	9.476	164	313667	40.00	ppm	0.00
70) Phenanthrene-d10	11.219	188	566431	40.00	ppm	0.00
92) Chrysene-d12	14.487	240	391149	40.00	ppm	0.00
102) Perylene-d12	16.809	264	333880	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	0.000	152	0m	40.00	ppm	-6.00
120) Naphthalene-d8A	0.000	136	0m	40.00	ppm	-7.43
127) Acenaphthene-d10A	0.000	164	0m	40.00	ppm	-9.48
136) Phenanthrene-d10A	0.000	188	0m	40.00	ppm	-11.22
146) Chrysene-d12A	0.000	240	0m	40.00	ppm	-14.49
153) Perylene-d12A	0.000	264	0m	40.00	ppm	-16.82
System Monitoring Compounds						
7) 2-Fluorophenol	4.609	112	10582	4.26	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery =	4.26%#		
9) Phenol-d5	5.603	99	11874	4.44	ppm	0.00
Spiked Amount 100.000	Range 10 - 50		Recovery =	4.44%#		
23) Nitrobenzene-d5	6.614	82	5896	2.14	ppm	0.00
Spiked Amount 50.000	Range 42 - 108		Recovery =	4.28%#		
47) 2-Fluorobiphenyl	8.695	172	11323	2.40	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery =	4.80%#		
75) 2,4,6-Tribromophenol	10.401	330	1785	2.38	ppm	0.00
Spiked Amount 100.000	Range 33 - 118		Recovery =	2.38%#		
95) Terphenyl-d14	13.140	244	9017	1.72	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery =	3.44%#		
Target Compounds						Qvalue
2) 1,4-Dioxane	2.849	88	2730	2.27	ppm	# 18
3) N-nitrosodimethylamine	3.180	42	4556	4.29	ppm	# 30
4) Pyridine	3.229	79	5659	2.25	ppm	# 27
5) Benzaldehyde	5.528	106	3940	1.89	ppm	92
6) Aniline	5.641	93	7747	2.05	ppm	96
8) bis(2-Chloroethyl)ether	5.721	93	5283	2.01	ppm	# 69
10) Phenol	5.614	94	6535	1.92	ppm	91
11) 2-Chlorophenol	5.769	128	4992	2.04	ppm	81
12) 1,3-Dichlorobenzene	5.940	146	5811	2.32	ppm	94
13) 1,4-Dichlorobenzene	6.026	146	6113	2.39	ppm	91
14) 1,2-Dichlorobenzene	6.186	146	5638	2.36	ppm	97
15) Benzyl alcohol	6.154	108	3389	2.10	ppm	83
16) 2,2'-Oxybis(1-chloropr...	6.320	45	11659	3.71	ppm	71
17) 2-Methylphenol	6.283	108	4611	2.10	ppm	99
18) Acetophenone	6.448	105	6688	1.93	ppm	95
19) Hexachloroethane	6.566	117	2216	2.04	ppm	91
20) N-Nitroso-di-n-propyla...	6.454	70	3871	2.17	ppm	# 48
21) 3&4-Methylphenol	6.454	108	4803	2.11	ppm	95
24) Nitrobenzene	6.636	77	5746	2.20	ppm	84
25) Isophorone	6.908	82	10485	2.20	ppm	90
26) 2-Nitrophenol	6.999	139	2481	1.97	ppm	75

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071364.D
Acq On : 23 Jun 2020 1:29 pm
Operator : marthav
Sample : ic2918-1 8270 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 23 16:56:07 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 15:18:55 2020
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
27)	2,4-Dimethylphenol	7.053	107	4687	2.16	ppm		90
28)	O,O,O-Triethylphosphor...	7.144	198	2001	1.99	ppm		71
29)	bis(2-Chloroethoxy)met...	7.170	93	6233	2.09	ppm		95
30)	Benzoic Acid	7.090	105	1123	0.69	ppm	#	78
31)	2,4-Dichlorophenol	7.267	162	3672	2.12	ppm		92
32)	1,2,4-Trichlorobenzene	7.368	180	4440	2.27	ppm		95
34)	Naphthalene	7.454	128	15939	2.46	ppm		98
35)	4-Chloroaniline	7.524	127	6467	2.38	ppm		88
36)	2,6-Dichlorophenol	7.529	162	4127	2.33	ppm		93
37)	Hexachlorobutadiene	7.609	225	2132	1.96	ppm		95
38)	Caprolactam	7.882	113	1341	1.86	ppm	#	36
39)	4-Chloro-3-methylphenol	8.090	107	3984	2.11	ppm		97
40)	2-Methylnaphthalene	8.256	142	10437	2.49	ppm		93
41)	1-Methylnaphthalene	8.374	142	10027	2.55	ppm		96
42)	1,2,4,5-Tetrachloroben...	8.454	216	4309	2.12	ppm		96
44)	Hexachlorocyclopentadiene	8.449	237	1709	1.59	ppm		82
45)	2,4,6-Trichlorophenol	8.588	196	2542	1.98	ppm		93
46)	2,4,5-Trichlorophenol	8.625	196	2702	1.97	ppm		97
48)	1,1'-Biphenyl	8.813	154	11390	2.20	ppm		97
49)	2-Chloronaphthalene	8.823	162	9331	2.33	ppm		95
50)	2-Nitroaniline	8.946	65	3109	2.38	ppm	#	62
51)	p-Dinitrobenzene	9.117	75	1540	1.61	ppm	#	53
52)	Acenaphthylene	9.305	152	14844	2.42	ppm		99
53)	Dimethylphthalate	9.182	163	11507	2.50	ppm		99
54)	m-Dinitrobenzene	9.198	168	1329	1.66	ppm	#	70
55)	2,6-Dinitrotoluene	9.240	165	2299	2.06	ppm	#	52
56)	o-Dinitrobenzene	9.289	50	2701	4.08	ppm	#	40
57)	Acenaphthene	9.513	153	10744	2.65	ppm		100
58)	3-Nitroaniline	9.428	138	2290	1.91	ppm		94
59)	2,4-Dinitrophenol	9.556	184	160m	0.30	ppm		
60)	Dibenzofuran	9.716	168	14854	2.67	ppm		95
61)	2,4-Dinitrotoluene	9.711	165	2798	1.98	ppm	#	55
62)	4-Nitrophenol	9.636	109	987	1.74	ppm	#	61
63)	2,3,5,6-Tetrachlorophenol	9.813	232	1704	1.61	ppm	#	73
64)	2,3,4,6-Tetrachlorophenol	9.861	232	2151	1.90	ppm		84
65)	Fluorene	10.118	166	10994	2.53	ppm		100
66)	4-Chlorophenyl-phenyle...	10.139	204	5190	2.38	ppm		88
67)	Diethylphthalate	10.021	149	10638	2.32	ppm		98
68)	Thionazin	10.112	97	2096	1.94	ppm		89
69)	4-Nitroaniline	10.139	138	2736	2.23	ppm		73
71)	4,6-Dinitro-2-methylph...	10.182	198	604	0.77	ppm	#	55
72)	n-Nitrosodiphenylamine	10.273	169	9328	2.99	ppm		88
73)	Diphenylamine	10.273	169	9328	2.56	ppm		88
74)	1,2-Diphenylhydrazine	10.321	77	11835	2.32	ppm		89
76)	Sulfotep	10.497	97	1291	1.62	ppm	#	67
77)	Phorate	10.642	75	4229	1.50	ppm		99
78)	4-Bromophenyl-phenylether	10.711	248	2321	1.78	ppm	#	67
79)	Hexachlorobenzene	10.759	284	2860	1.92	ppm		83
80)	Dimethoate	10.824	87	2766	1.64	ppm		91
81)	Simazine	10.882	201	1601	2.51	ppm		91

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071364.D
Acq On : 23 Jun 2020 1:29 pm
Operator : marthav
Sample : ic2918-1 8270 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 23 16:56:07 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 15:18:55 2020
Response via : Initial Calibration

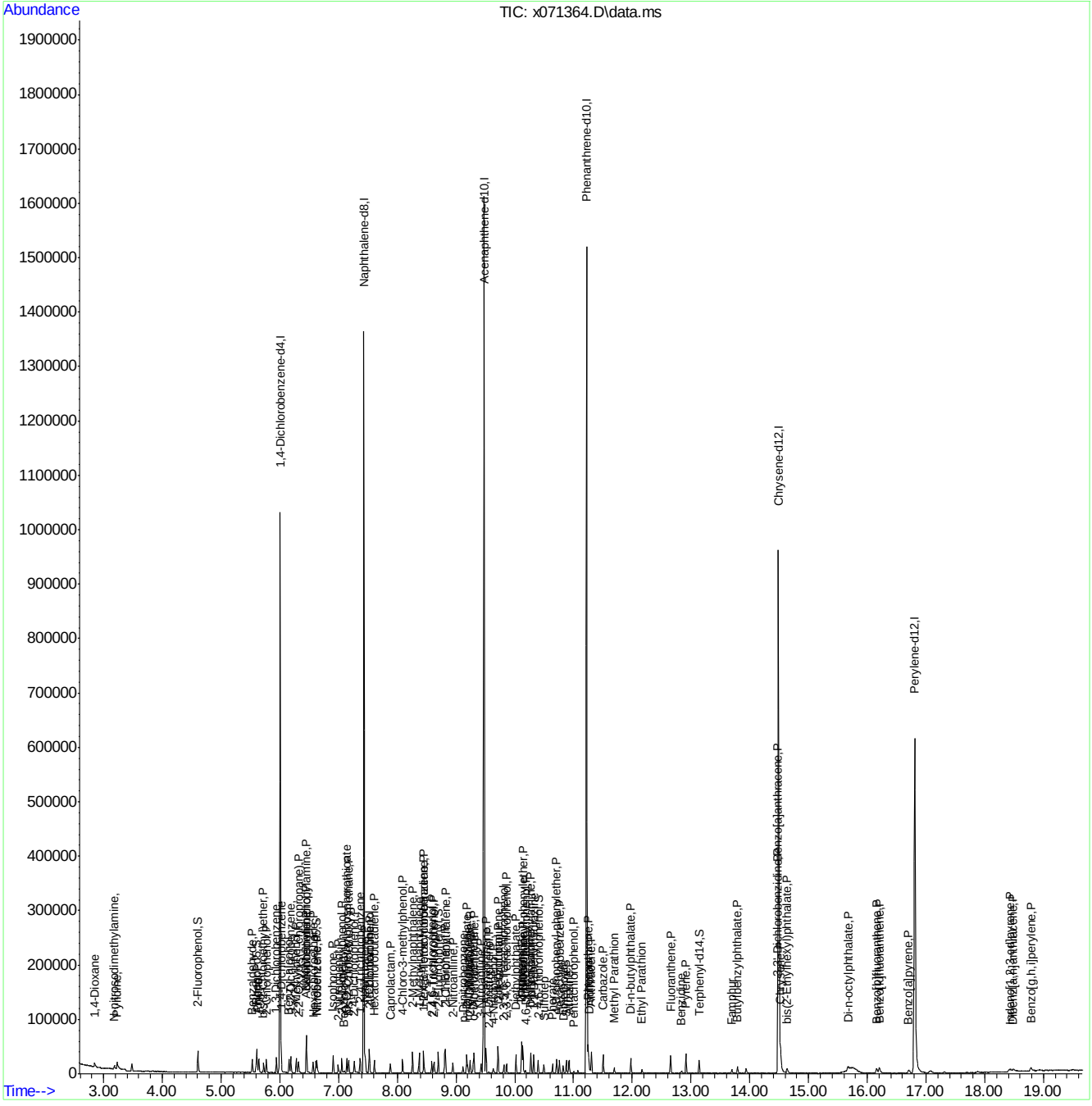
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
82) Atrazine	10.925	200	2395	1.93	ppm	#	73
83) Pentachlorophenol	11.000	266	529	0.71	ppm		99
84) Phenanthrene	11.246	178	17522	2.81	ppm		99
85) Anthracene	11.305	178	16450	2.58	ppm		96
86) Disulfoton	11.262	88	5104	1.76	ppm		75
87) Carbazole	11.508	167	14422	2.54	ppm		98
88) Methyl Parathion	11.695	109	1825	1.28	ppm	#	75
89) Di-n-butylphthalate	11.974	149	12697	1.75	ppm		96
90) Ethyl Parathion	12.166	97	941	1.00	ppm	#	74
91) Fluoranthene	12.653	202	13932	2.10	ppm		96
93) Benzidine	12.835	184	3039	1.29	ppm		99
94) Pyrene	12.915	202	14445	2.04	ppm		96
96) Famphur	13.696	218	2070	1.55	ppm		77
97) Butylbenzylphthalate	13.792	149	3749	1.21	ppm		91
98) 3,3'-Dichlorobenzidine	14.471	252	2309	1.24	ppm		94
99) Benzo[a]anthracene	14.477	228	11906	2.04	ppm		99
100) Chrysene	14.525	228	13100	2.26	ppm		95
101) bis(2-Ethylhexyl)phtha...	14.637	149	3571	0.89	ppm		91
103) Di-n-octylphthalate	15.675	149	9858m	1.57	ppm		
104) Benzo[b]fluoranthene	16.156	252	6565	1.34	ppm		88
105) Benzo[k]fluoranthene	16.210	252	11113m	2.06	ppm		
106) Benzo[a]pyrene	16.702	252	5647	1.15	ppm		93
107) Indeno[1,2,3-cd]pyrene	18.429	276	2595	0.61	ppm		88
108) Dibenz[a,h]anthracene	18.483	278	4110m	0.89	ppm		
109) Benzo[g,h,i]perylene	18.788	276	6615m	1.35	ppm		

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071364.D
Acq On : 23 Jun 2020 1:29 pm
Operator : marthav
Sample : ic2918-1 8270 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 23 16:56:07 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 15:18:55 2020
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: SX2918-IC2918
Lab FileID: X071364.D
Injection Time: 06/23/20 13:29

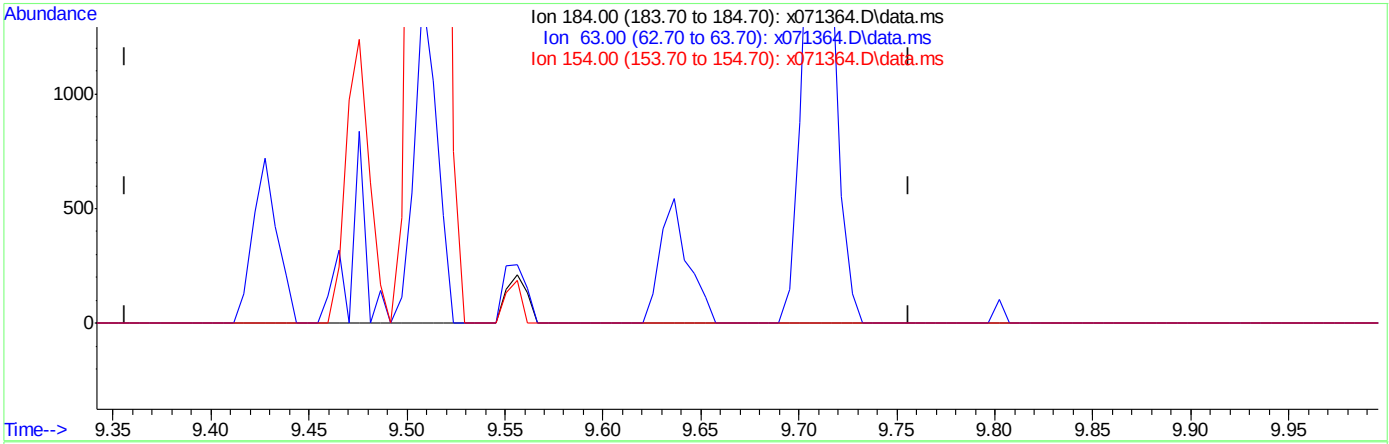
Method: EPA 625.1
Analyst approved: 06/24/20 09:50 Martha Valls
Supervisor approved: 06/24/20 14:07 Naresh Jiawan

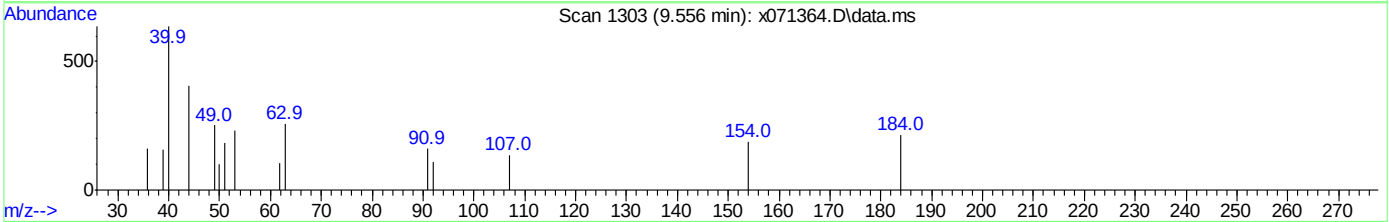
Parameter	CAS	Sig#	R.T. (min.)	Reason
2,4-Dinitrophenol	51-28-5		9.56	Split peak
Di-n-octyl Phthalate	117-84-0		15.67	Split peak
Benzo(k)fluoranthene	207-08-9		16.21	Split peak
Dibenzo(a,h)anthracene	53-70-3		18.48	Split peak
Benzo(g,h,i)perylene	191-24-2		18.79	Split peak

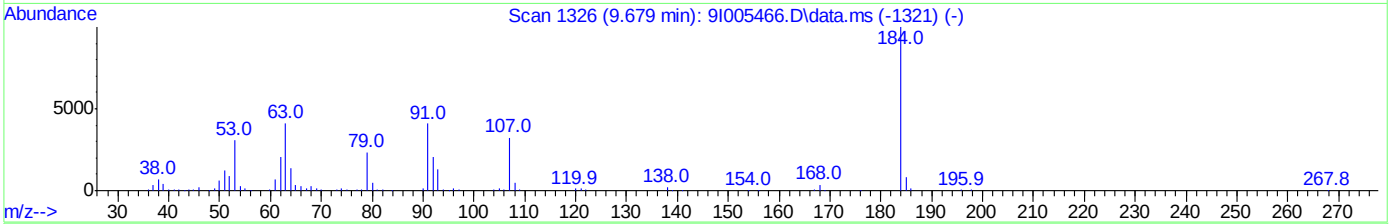
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071364.D
Acq On : 23 Jun 2020 1:29 pm
Operator : marthav
Sample : ic2918-1 8270 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 23 15:19:07 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 15:18:55 2020
Response via : Initial Calibration







TIC: x071364.D\data.ms

(59) 2,4-Dinitrophenol (P)

9.556min (-9.556) 0.00ppm

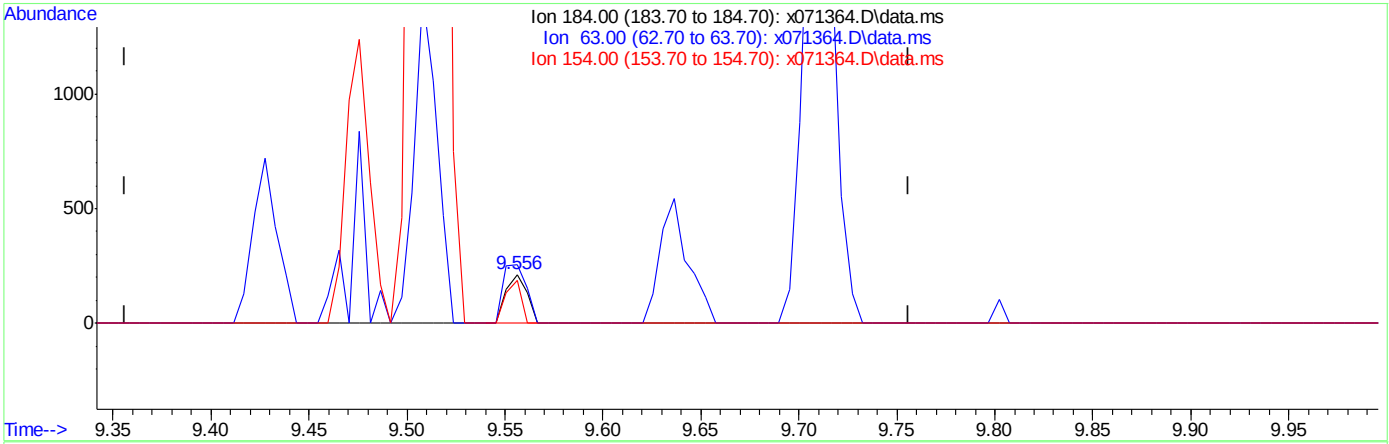
response 0

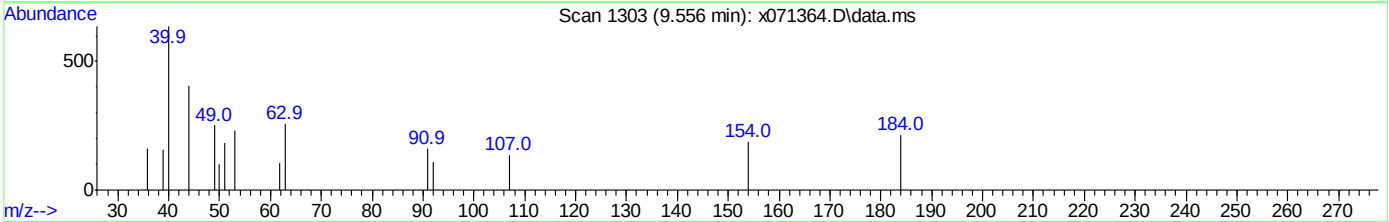
Ion	Exp%	Act%
184.00	100	0.00
63.00	41.30	0.00#
154.00	0.30	0.00
0.00	0.00	0.00

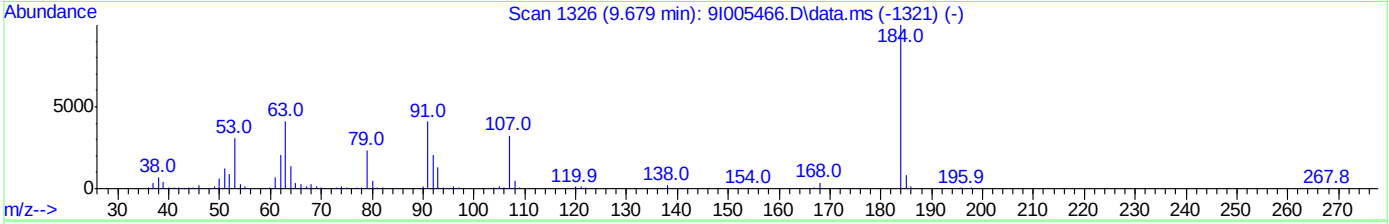
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071364.D
Acq On : 23 Jun 2020 1:29 pm
Operator : marthav
Sample : ic2918-1 8270 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 23 15:19:07 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 15:18:55 2020
Response via : Initial Calibration







TIC: x071364.D\data.ms

(59) 2,4-Dinitrophenol (P)

9.556min (-0.000) 0.30ppm m

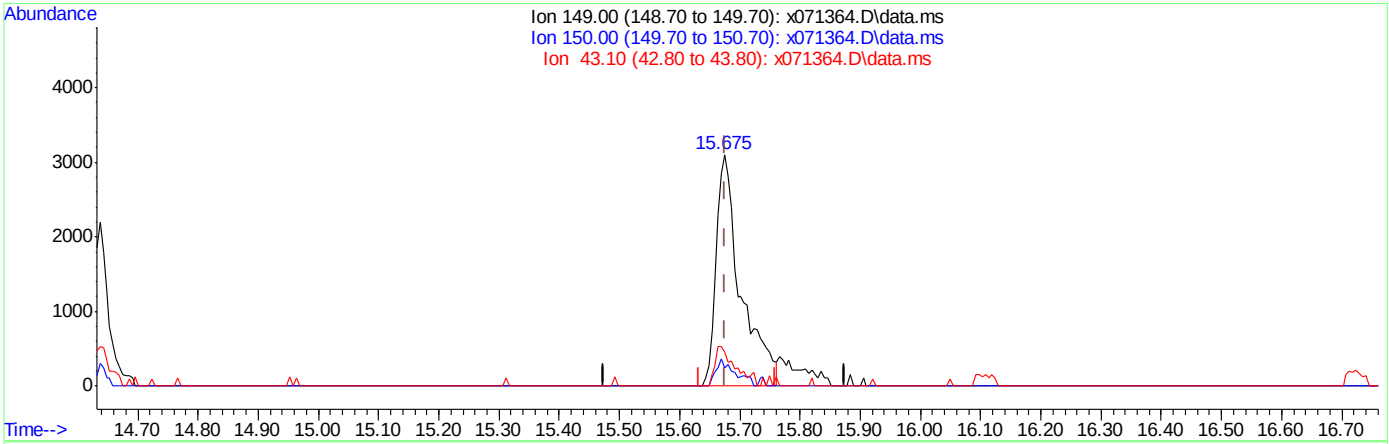
response 160

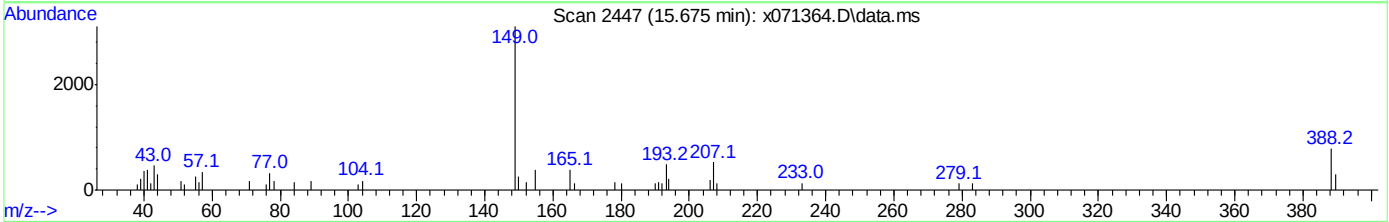
Ion	Exp%	Act%
184.00	100	100
63.00	41.30	119.63#
154.00	0.30	87.38#
0.00	0.00	0.00

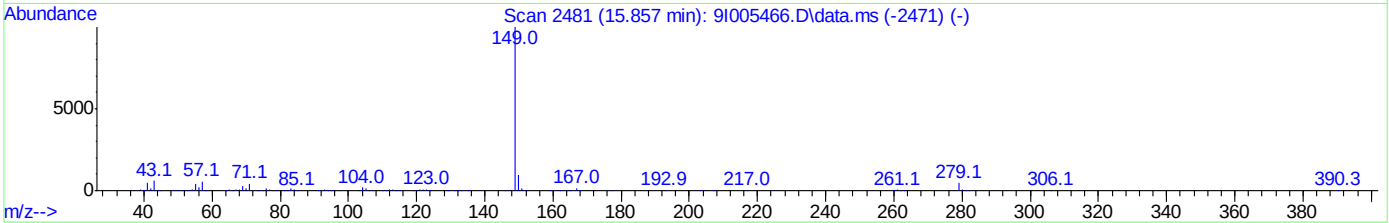
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071364.D
Acq On : 23 Jun 2020 1:29 pm
Operator : marthav
Sample : ic2918-1 8270 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 23 15:19:07 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 15:18:55 2020
Response via : Initial Calibration







TIC: x071364.D\data.ms

(103) Di-n-octylphthalate (P)

15.675min (-0.000) 1.39ppm

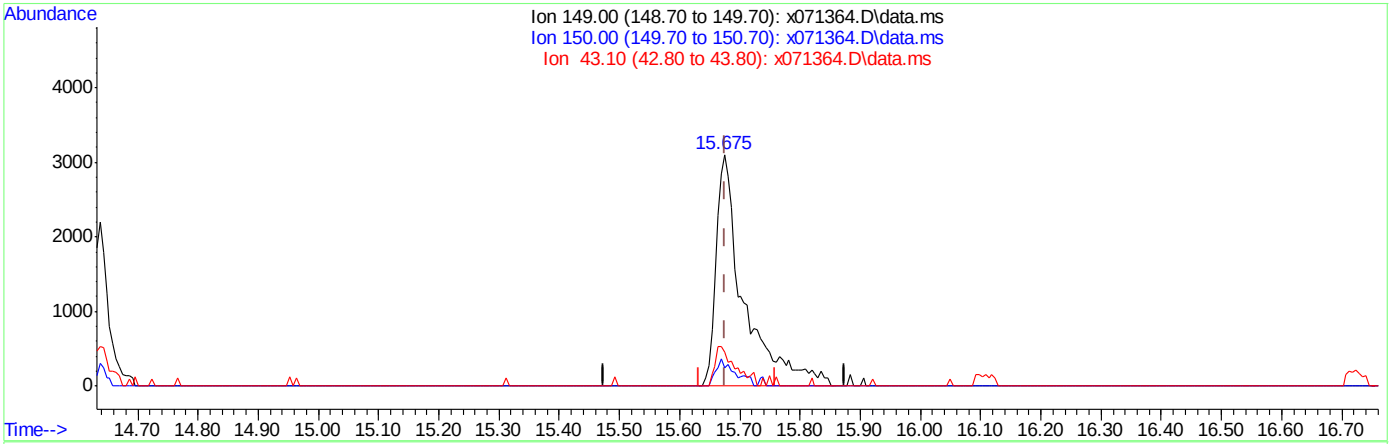
response 8731

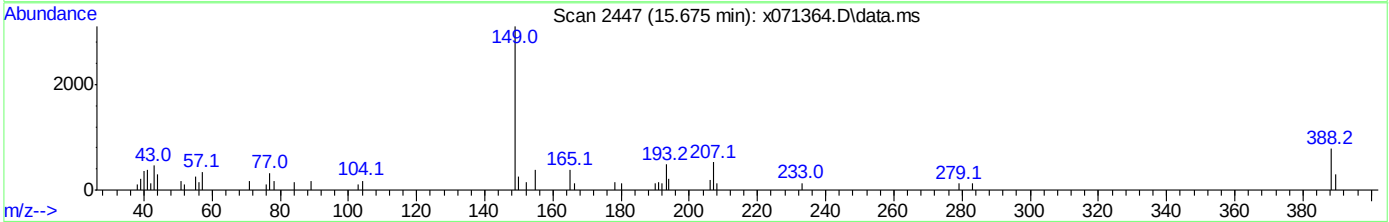
Ion	Exp%	Act%
149.00	100	100
150.00	9.90	8.50
43.10	6.00	13.64
0.00	0.00	0.00

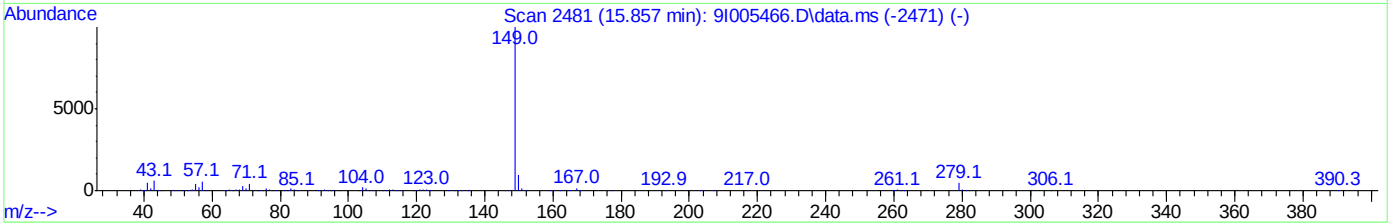
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071364.D
Acq On : 23 Jun 2020 1:29 pm
Operator : marthav
Sample : ic2918-1 8270 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 23 15:19:07 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 15:18:55 2020
Response via : Initial Calibration







TIC: x071364.D\data.ms

(103) Di-n-octylphthalate (P)

15.675min (-0.000) 1.57ppm m

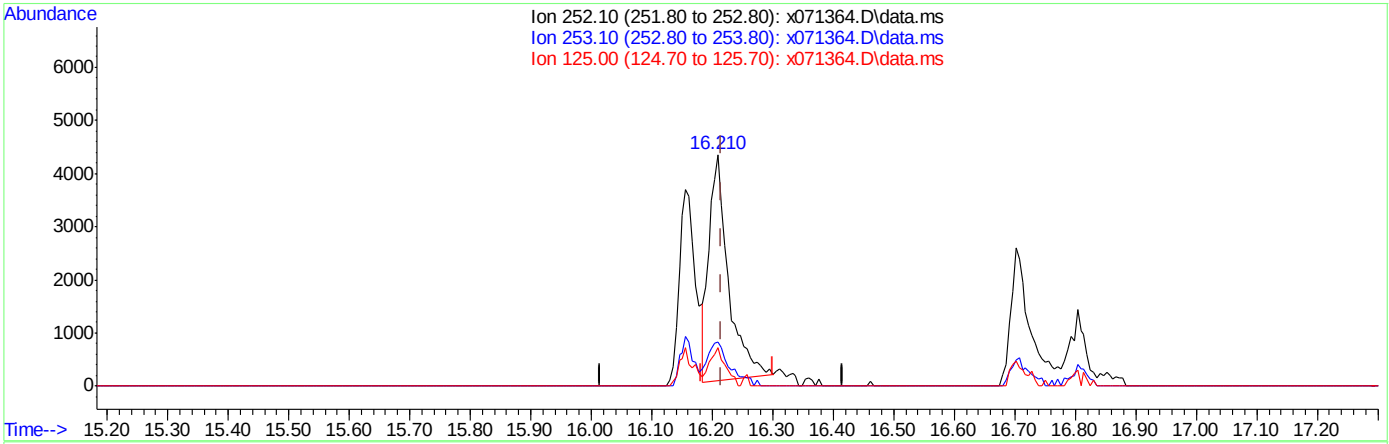
response 9858

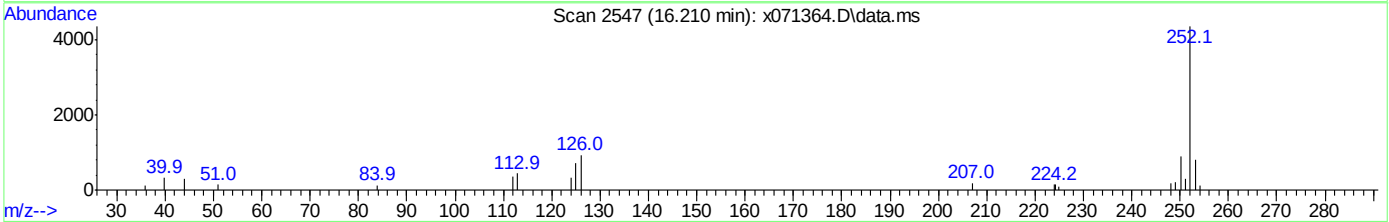
Ion	Exp%	Act%
149.00	100	100
150.00	9.90	8.05
43.10	6.00	14.87
0.00	0.00	0.00

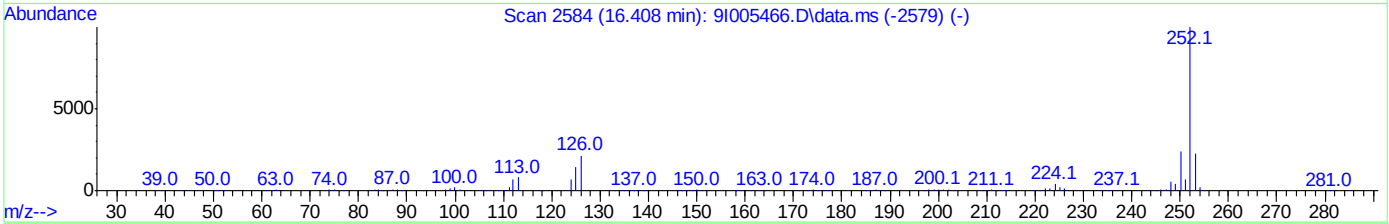
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071364.D
Acq On : 23 Jun 2020 1:29 pm
Operator : marthav
Sample : ic2918-1 8270 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 23 15:19:07 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 15:18:55 2020
Response via : Initial Calibration







TIC: x071364.D\data.ms

(105) Benzo[k]fluoranthene (P)

16.210min (-0.005) 1.77ppm

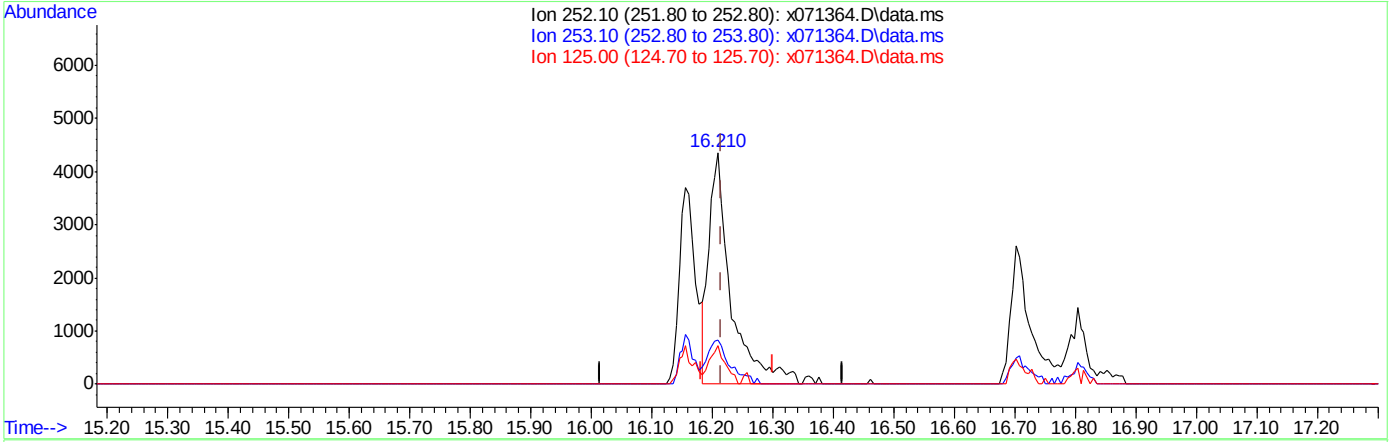
response 9543

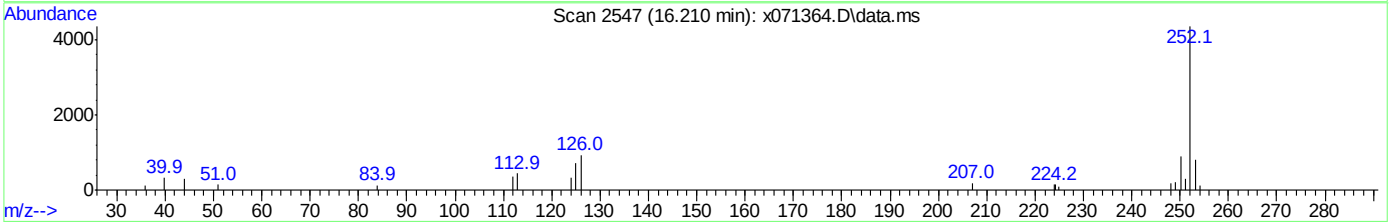
Ion	Exp%	Act%
252.10	100	100
253.10	22.50	19.11
125.00	14.40	17.92
0.00	0.00	0.00

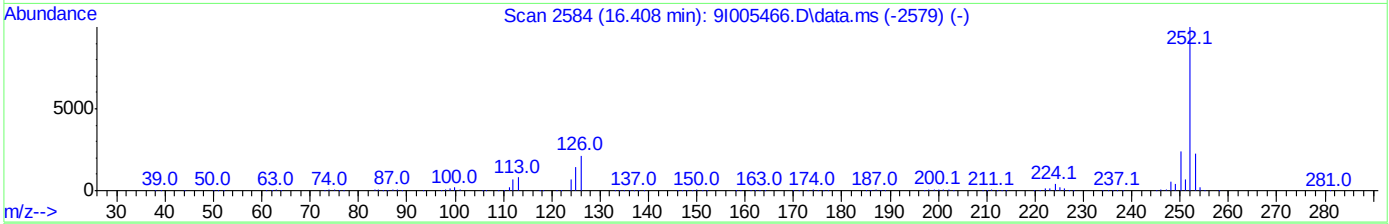
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071364.D
Acq On : 23 Jun 2020 1:29 pm
Operator : marthav
Sample : ic2918-1 8270 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 23 15:19:07 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 15:18:55 2020
Response via : Initial Calibration







TIC: x071364.D\data.ms

(105) Benzo[k]fluoranthene (P)

16.210min (-0.005) 2.06ppm m

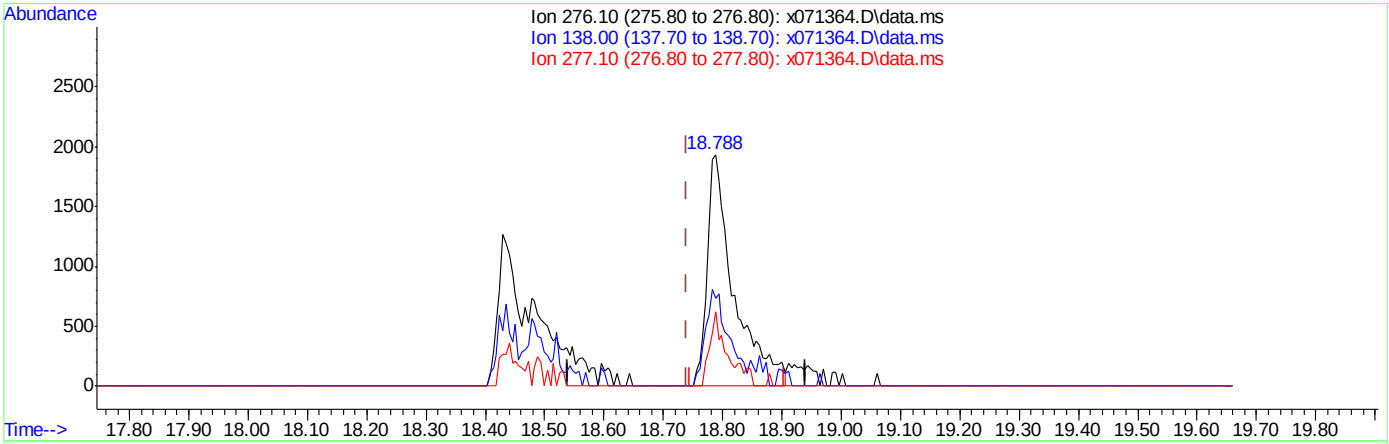
response 11113

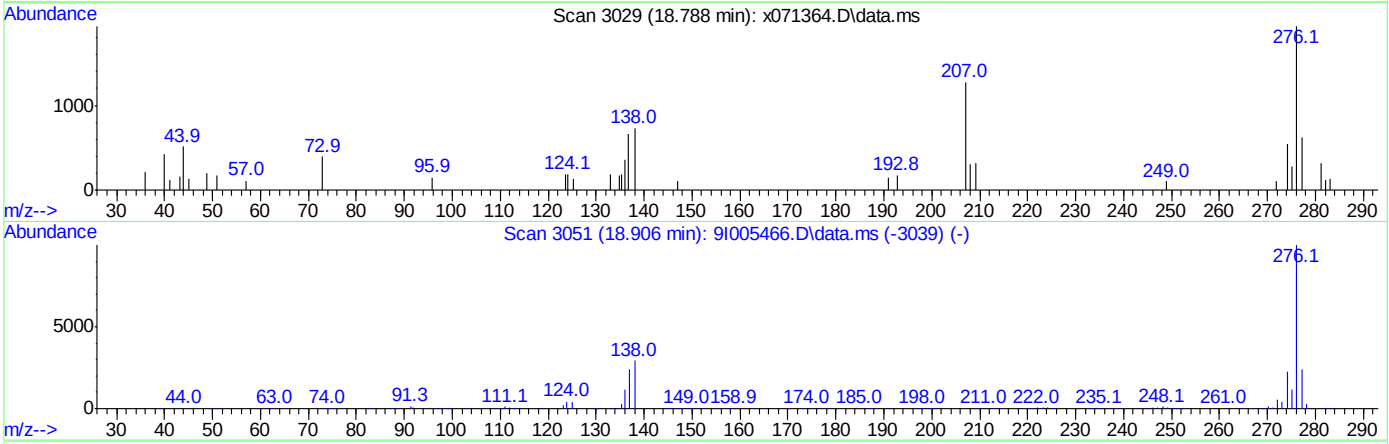
Ion	Exp%	Act%
252.10	100	100
253.10	22.50	18.85
125.00	14.40	16.42
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071364.D
Acq On : 23 Jun 2020 1:29 pm
Operator : marthav
Sample : ic2918-1 8270 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 23 15:19:07 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 15:18:55 2020
Response via : Initial Calibration





TIC: x071364.D\data.ms

(109) Benzo[g,h,i]perylene (P)

18.788min (+0.048) 1.23ppm

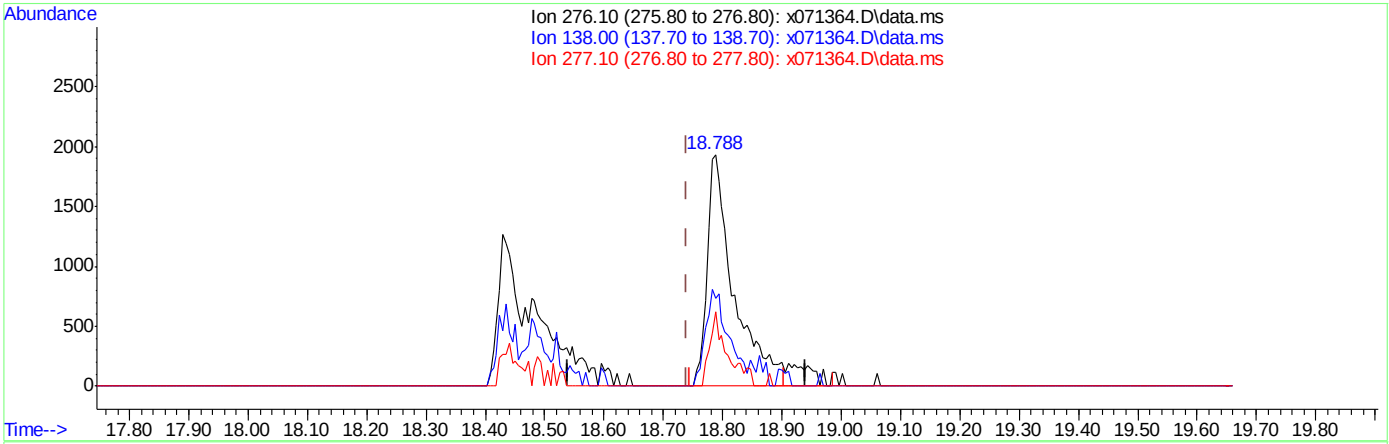
response 6037

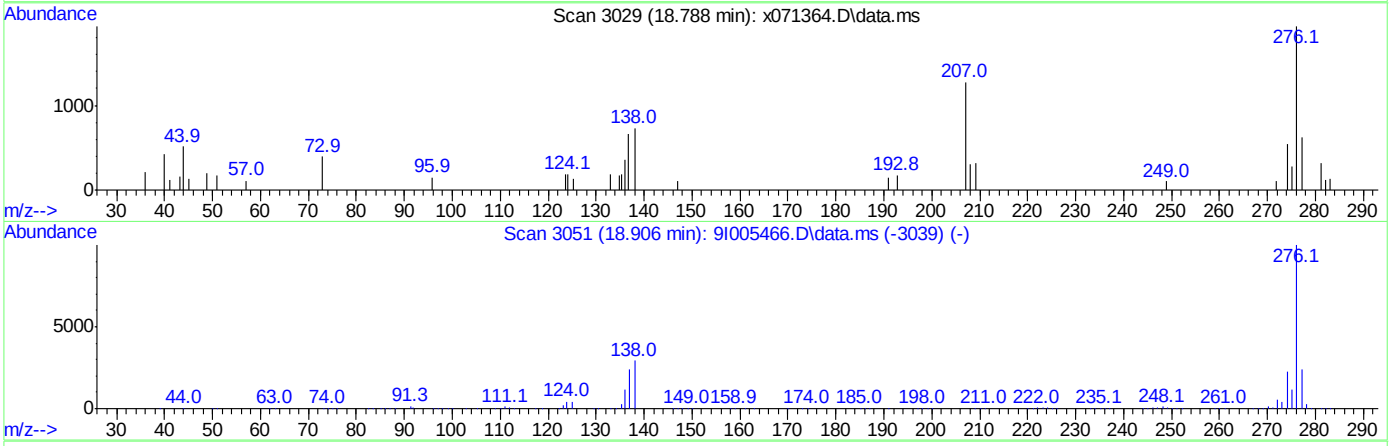
Ion	Exp%	Act%
276.10	100	100
138.00	31.00	36.21
277.10	23.90	33.12
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071364.D
Acq On : 23 Jun 2020 1:29 pm
Operator : marthav
Sample : ic2918-1 8270 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 23 15:19:07 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 15:18:55 2020
Response via : Initial Calibration





TIC: x071364.D\data.ms

(109) Benzo[g,h,i]perylene (P)

18.788min (+0.048) 1.35ppm m

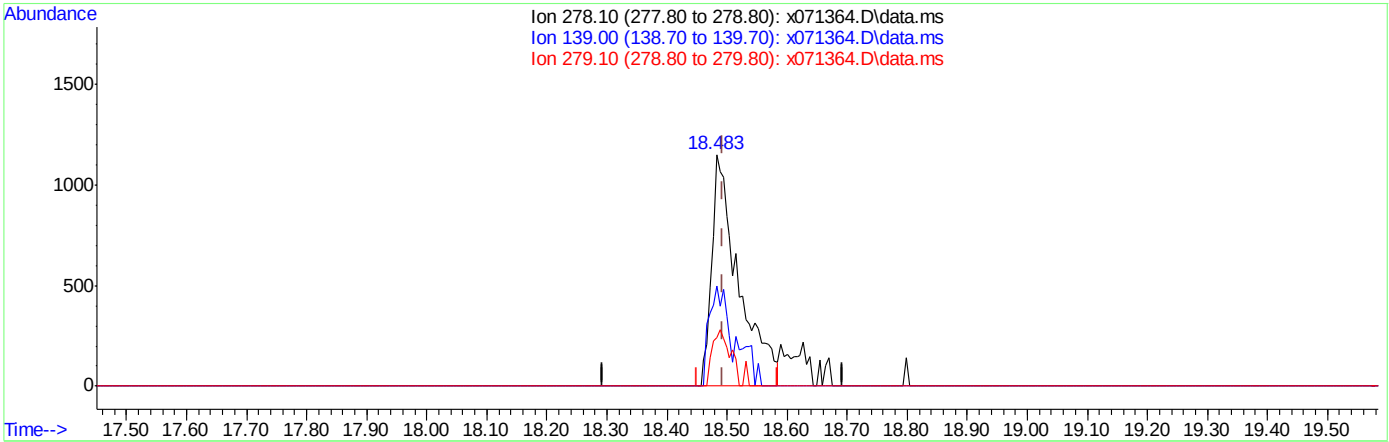
response 6615

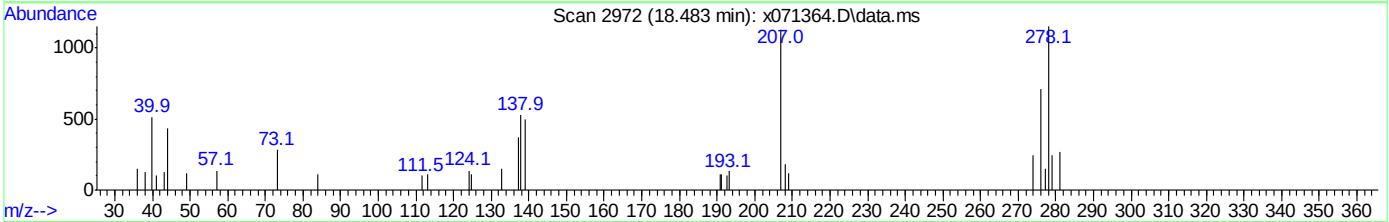
Ion	Exp%	Act%
276.10	100	100
138.00	31.00	37.98
277.10	23.90	32.14
0.00	0.00	0.00

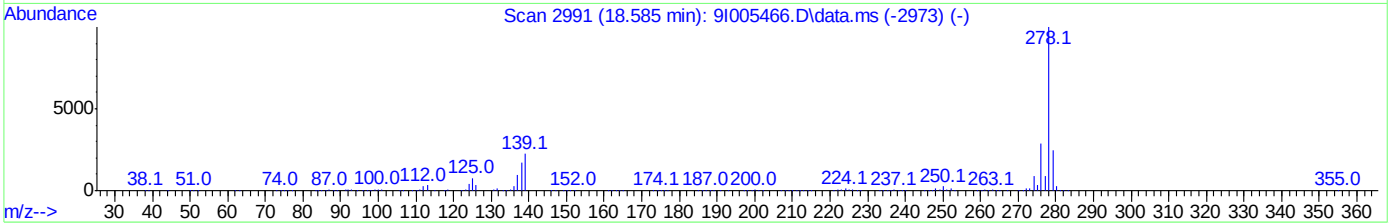
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071364.D
Acq On : 23 Jun 2020 1:29 pm
Operator : marthav
Sample : ic2918-1 8270 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 23 15:19:07 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 15:18:55 2020
Response via : Initial Calibration







TIC: x071364.D\data.ms

(108) Dibenz[a,h]anthracene (P)

18.483min (-0.011) 0.78ppm

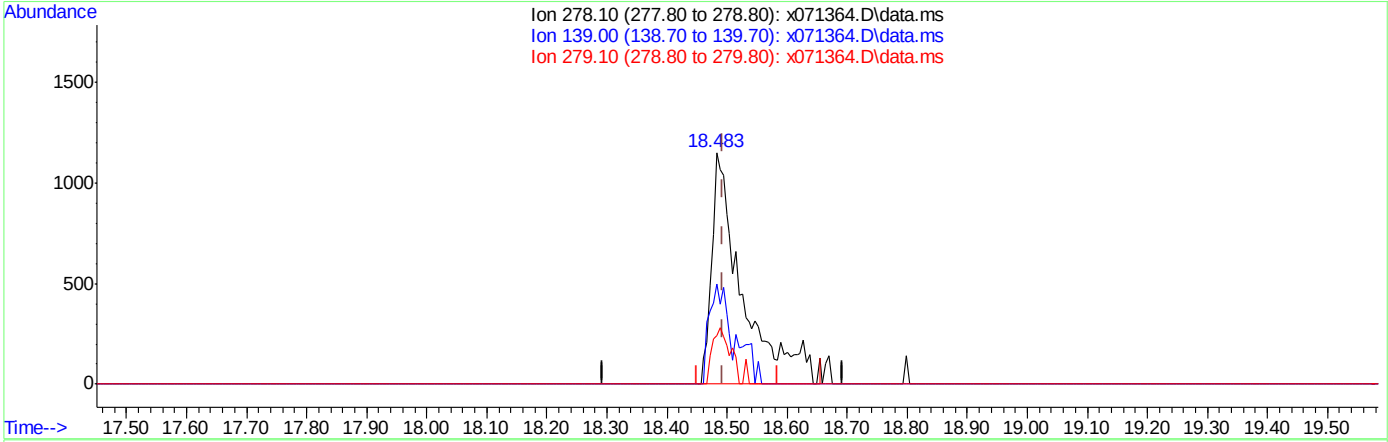
response 3566

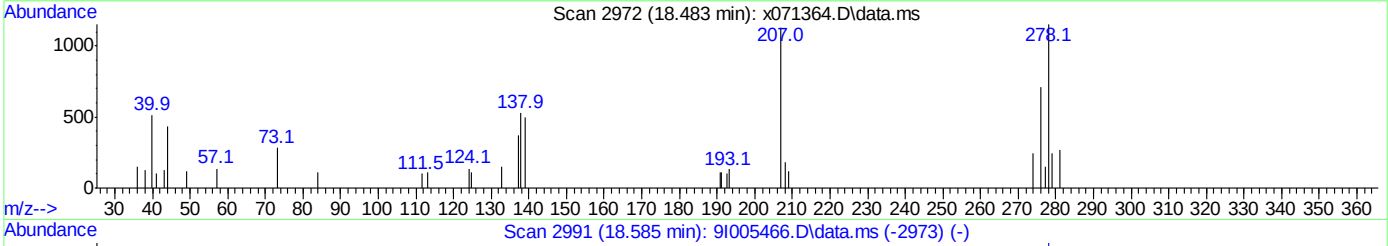
Ion	Exp%	Act%
278.10	100	100
139.00	22.40	45.54
279.10	24.40	22.22
0.00	0.00	0.00

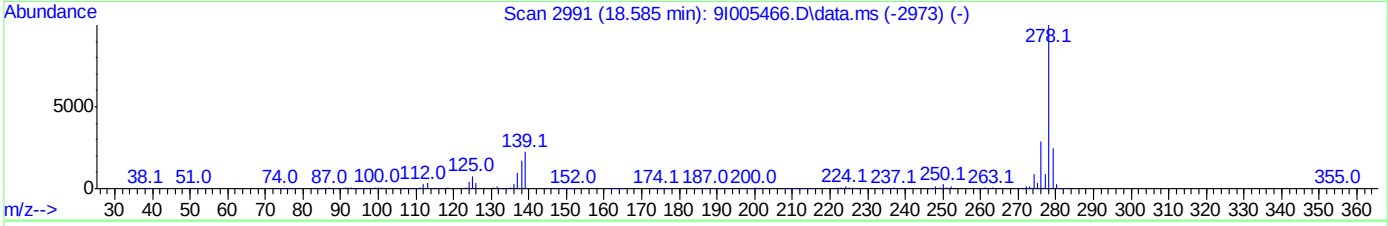
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071364.D
Acq On : 23 Jun 2020 1:29 pm
Operator : marthav
Sample : ic2918-1 8270 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 23 15:19:07 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 15:18:55 2020
Response via : Initial Calibration







TIC: x071364.D\data.ms

(108) Dibenz[a,h]anthracene (P)

18.483min (-0.011) 0.89ppm m

response 4110

Ion	Exp%	Act%
278.10	100	100
139.00	22.40	43.23
279.10	24.40	21.09
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071365.D
Acq On : 23 Jun 2020 1:54 pm
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 24 12:53:43 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.005	152	153213	40.00	ppm	0.00
22) Naphthalene-d8	7.433	136	638047	40.00	ppm	0.00
43) Acenaphthene-d10	9.476	164	345272	40.00	ppm	0.00
70) Phenanthrene-d10	11.225	188	604959	40.00	ppm	0.00
92) Chrysene-d12	14.488	240	419398	40.00	ppm	0.00
102) Perylene-d12	16.809	264	355811	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	0.000	152	0m	40.00	ppm	-6.00
120) Naphthalene-d8A	0.000	136	0m	40.00	ppm	-7.43
127) Acenaphthene-d10A	0.000	164	0m	40.00	ppm	-9.48
136) Phenanthrene-d10A	0.000	188	0m	40.00	ppm	-11.22
146) Chrysene-d12A	0.000	240	0m	40.00	ppm	-14.49
153) Perylene-d12A	0.000	264	0m	40.00	ppm	-16.82
System Monitoring Compounds						
7) 2-Fluorophenol	4.609	112	54506	20.64	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 20.64%			
9) Phenol-d5	5.604	99	62273	21.90	ppm	0.00
Spiked Amount 100.000	Range 10 - 50		Recovery = 21.90%			
23) Nitrobenzene-d5	6.614	82	30954	10.10	ppm	0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 20.20%#			
47) 2-Fluorobiphenyl	8.700	172	59356	11.43	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 22.86%#			
75) 2,4,6-Tribromophenol	10.401	330	10209	12.76	ppm	0.00
Spiked Amount 100.000	Range 33 - 118		Recovery = 12.76%#			
95) Terphenyl-d14	13.140	244	51464	9.16	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 18.32%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.849	88	13616	10.62	ppm	# 33
3) N-nitrosodimethylamine	3.170	42	22798	20.20	ppm	# 34
4) Pyridine	3.213	79	30208	11.30	ppm	# 17
5) Benzaldehyde	5.529	106	23984	10.83	ppm	91
6) Aniline	5.646	93	41928	10.44	ppm	89
8) bis(2-Chloroethyl)ether	5.727	93	26138	9.35	ppm	75
10) Phenol	5.614	94	33511	9.23	ppm	93
11) 2-Chlorophenol	5.769	128	25959	9.97	ppm	77
12) 1,3-Dichlorobenzene	5.940	146	28900	10.83	ppm	96
13) 1,4-Dichlorobenzene	6.026	146	30913	11.34	ppm	97
14) 1,2-Dichlorobenzene	6.187	146	28675	11.28	ppm	97
15) Benzyl alcohol	6.154	108	18012	10.50	ppm	81
16) 2,2'-Oxybis(1-chloropr...	6.315	45	59027	17.67	ppm	72
17) 2-Methylphenol	6.283	108	26103	11.20	ppm	96
18) Acetophenone	6.449	105	42629	11.58	ppm	95
19) Hexachloroethane	6.566	117	11399	9.87	ppm	84
20) N-Nitroso-di-n-propyla...	6.454	70	21567	11.37	ppm	# 52
21) 3&4-Methylphenol	6.454	108	27468	11.32	ppm	94
24) Nitrobenzene	6.636	77	31070	10.71	ppm	83
25) Isophorone	6.909	82	56848	10.73	ppm	95
26) 2-Nitrophenol	7.000	139	13250	9.48	ppm	85

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071365.D
Acq On : 23 Jun 2020 1:54 pm
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 24 12:53:43 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
27)	2,4-Dimethylphenol	7.058	107	27475	11.43	ppm		88
28)	O,O,O-Triethylphosphor...	7.144	198	11974	10.72	ppm		74
29)	bis(2-Chloroethoxy)met...	7.171	93	32252	9.76	ppm		98
30)	Benzoic Acid	7.112	105	11853	6.54	ppm		93
31)	2,4-Dichlorophenol	7.267	162	21072	10.94	ppm		95
32)	1,2,4-Trichlorobenzene	7.369	180	22305	10.29	ppm		96
34)	Naphthalene	7.454	128	83411	11.60	ppm		99
35)	4-Chloroaniline	7.524	127	35261	11.69	ppm		89
36)	2,6-Dichlorophenol	7.529	162	22234	11.31	ppm		97
37)	Hexachlorobutadiene	7.609	225	10837	8.96	ppm		99
38)	Caprolactam	7.893	113	9906	12.39	ppm	#	56
39)	4-Chloro-3-methylphenol	8.091	107	23324	11.14	ppm		93
40)	2-Methylnaphthalene	8.262	142	56022	12.05	ppm		97
41)	1-Methylnaphthalene	8.374	142	53213	12.21	ppm		97
42)	1,2,4,5-Tetrachloroben...	8.454	216	22402	9.94	ppm		100
44)	Hexachlorocyclopentadiene	8.449	237	9902	8.37	ppm		97
45)	2,4,6-Trichlorophenol	8.588	196	14307	10.11	ppm		98
46)	2,4,5-Trichlorophenol	8.625	196	15337m	10.15	ppm		
48)	1,1'-Biphenyl	8.813	154	73891	12.99	ppm		98
49)	2-Chloronaphthalene	8.823	162	50082	11.35	ppm		96
50)	2-Nitroaniline	8.946	65	18263	12.69	ppm	#	66
51)	p-Dinitrobenzene	9.118	75	9297	8.81	ppm	#	59
52)	Acenaphthylene	9.305	152	81401	12.05	ppm		100
53)	Dimethylphthalate	9.187	163	59459	11.72	ppm		99
54)	m-Dinitrobenzene	9.203	168	9085	10.31	ppm	#	72
55)	2,6-Dinitrotoluene	9.246	165	13549	11.04	ppm	#	64
56)	o-Dinitrobenzene	9.294	50	13934	19.10	ppm	#	53
57)	Acenaphthene	9.513	153	55757	12.48	ppm		100
58)	3-Nitroaniline	9.428	138	14873	11.26	ppm		94
59)	2,4-Dinitrophenol	9.556	184	3149	5.37	ppm	#	35
60)	Dibenzofuran	9.717	168	74600	12.18	ppm		92
61)	2,4-Dinitrotoluene	9.711	165	17732	11.40	ppm		70
62)	4-Nitrophenol	9.636	109	7265	11.63	ppm	#	65
63)	2,3,5,6-Tetrachlorophenol	9.813	232	10983	9.40	ppm	#	84
64)	2,3,4,6-Tetrachlorophenol	9.861	232	11983m	9.61	ppm		
65)	Fluorene	10.118	166	58317	12.20	ppm		98
66)	4-Chlorophenyl-phenyle...	10.139	204	27722	11.56	ppm		85
67)	Diethylphthalate	10.021	149	57887	11.48	ppm		96
68)	Thionazin	10.112	97	13361	11.25	ppm		99
69)	4-Nitroaniline	10.139	138	16256	12.02	ppm		83
71)	4,6-Dinitro-2-methylph...	10.187	198	6121	7.31	ppm	#	64
72)	n-Nitrosodiphenylamine	10.273	169	51304	15.42	ppm		95
73)	Diphenylamine	10.273	169	51304	13.16	ppm		95
74)	1,2-Diphenylhydrazine	10.321	77	64320	11.81	ppm		91
76)	Sulfotep	10.498	97	9868	11.58	ppm	#	64
77)	Phorate	10.642	75	33799	11.21	ppm		99
78)	4-Bromophenyl-phenylether	10.711	248	13131	9.44	ppm	#	76
79)	Hexachlorobenzene	10.760	284	12669	7.97	ppm	#	61
80)	Dimethoate	10.824	87	21744	12.09	ppm		94
81)	Simazine	10.883	201	9688	14.23	ppm		95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071365.D
Acq On : 23 Jun 2020 1:54 pm
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 24 12:53:43 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration

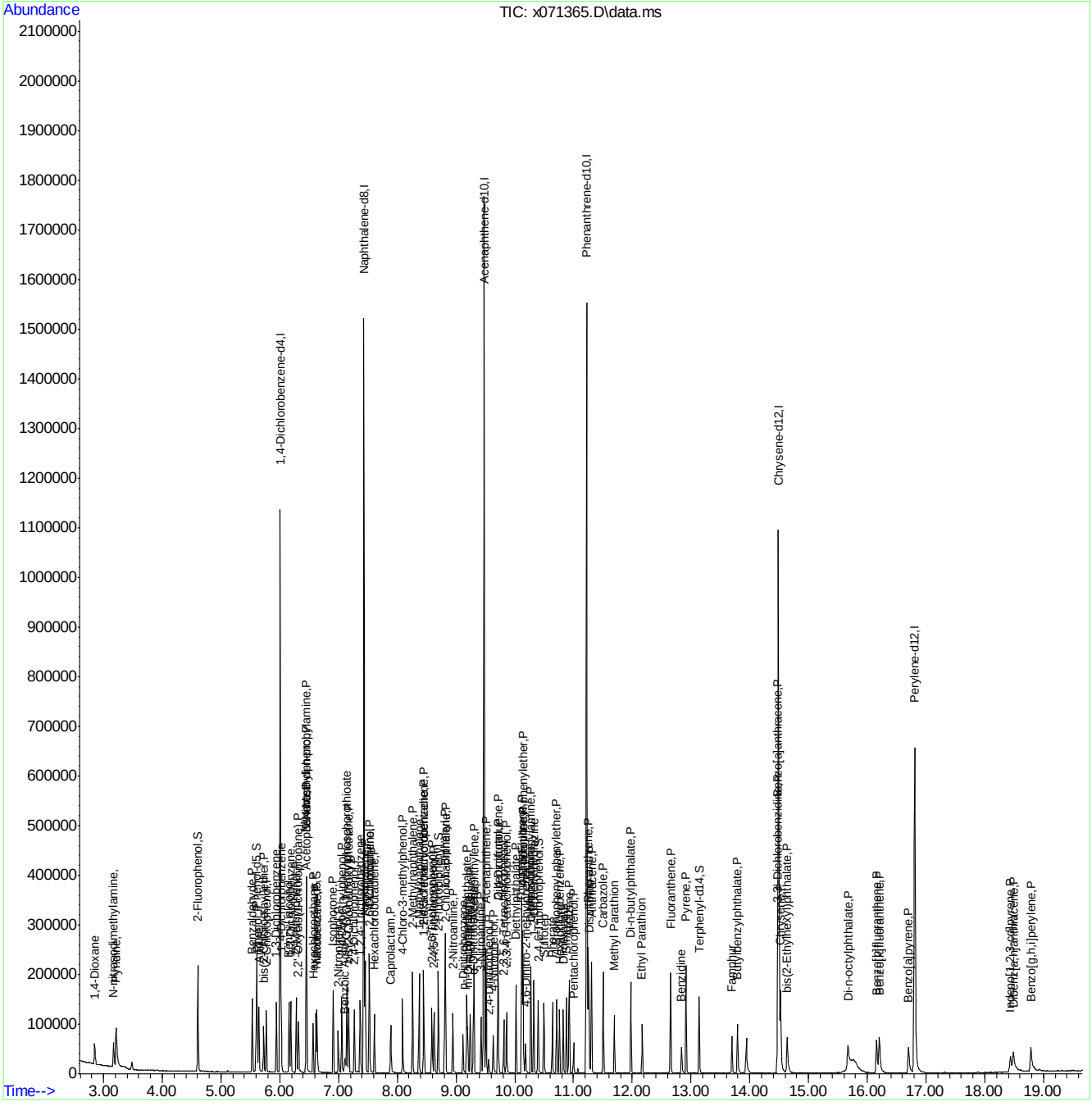
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
82) Atrazine	10.925	200	16977	12.83	ppm	#	74
83) Pentachlorophenol	11.000	266	5568	7.00	ppm		95
84) Phenanthrene	11.246	178	89391	13.41	ppm		99
85) Anthracene	11.310	178	89678	13.17	ppm		97
86) Disulfoton	11.262	88	36118	11.68	ppm		91
87) Carbazole	11.508	167	78812	12.97	ppm		98
88) Methyl Parathion	11.696	109	17952	11.83	ppm	#	82
89) Di-n-butylphthalate	11.974	149	85133	11.01	ppm		98
90) Ethyl Parathion	12.166	97	9653	9.58	ppm		78
91) Fluoranthene	12.653	202	78579	11.09	ppm		97
93) Benzidine	12.835	184	25116	9.97	ppm		93
94) Pyrene	12.915	202	83933	11.06	ppm		98
96) Famphur	13.696	218	20230	14.14	ppm		89
97) Butylbenzylphthalate	13.792	149	29273	8.79	ppm		88
98) 3,3'-Dichlorobenzidine	14.472	252	16143	8.07	ppm		97
99) Benzo[a]anthracene	14.477	228	61251	9.80	ppm		100
100) Chrysene	14.525	228	65072	10.46	ppm		95
101) bis(2-Ethylhexyl)phtha...	14.637	149	33892	7.85	ppm		93
103) Di-n-octylphthalate	15.675	149	59386	8.88	ppm		93
104) Benzo[b]fluoranthene	16.156	252	43287	8.28	ppm		99
105) Benzo[k]fluoranthene	16.210	252	56428	9.80	ppm		98
106) Benzo[a]pyrene	16.702	252	38337	7.31	ppm		94
107) Indeno[1,2,3-cd]pyrene	18.435	276	22408	4.94	ppm		96
108) Dibenz[a,h]anthracene	18.488	278	23664	4.83	ppm		91
109) Benzo[g,h,i]perylene	18.788	276	37051	7.11	ppm		90

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071365.D
Acq On : 23 Jun 2020 1:54 pm
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 11 Sample Multiplier: 1

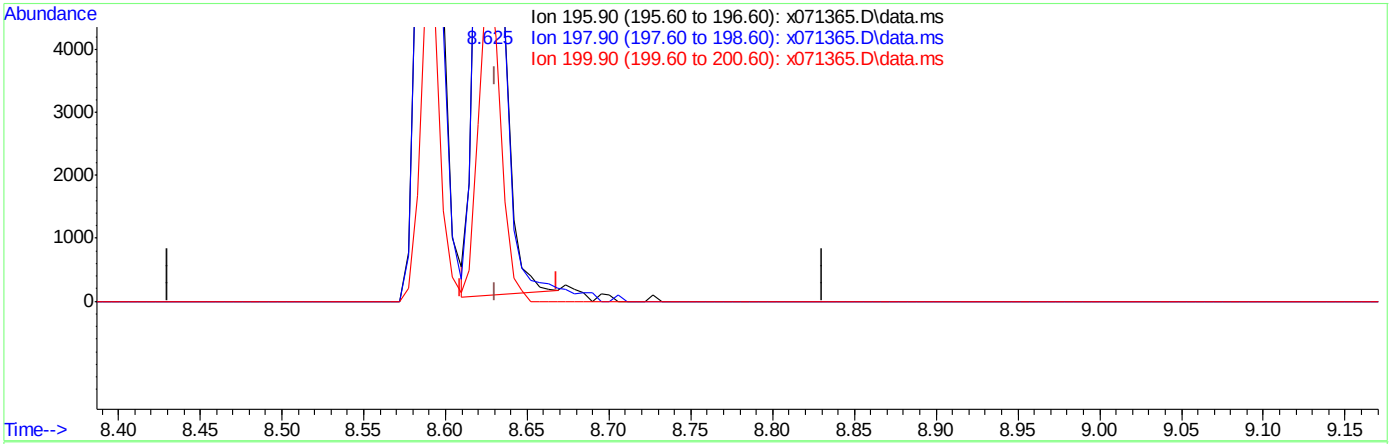
Quant Time: Jun 24 12:53:43 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration

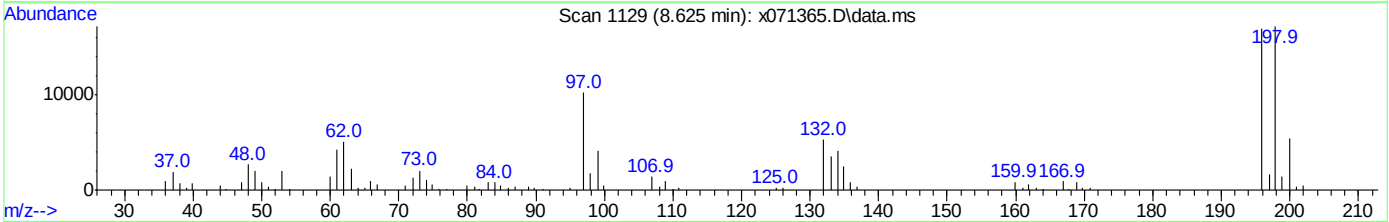


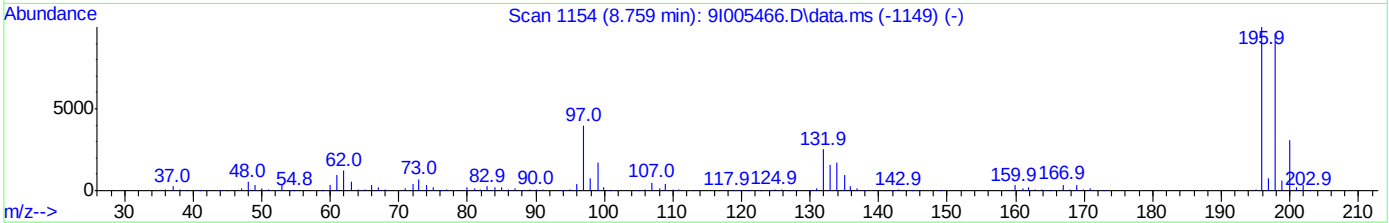
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071365.D
Acq On : 23 Jun 2020 1:54 pm
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 23 16:56:20 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration







TIC: x071365.D\data.ms

(46) 2,4,5-Trichlorophenol (P)

8.625min (-0.005) 9.87ppm

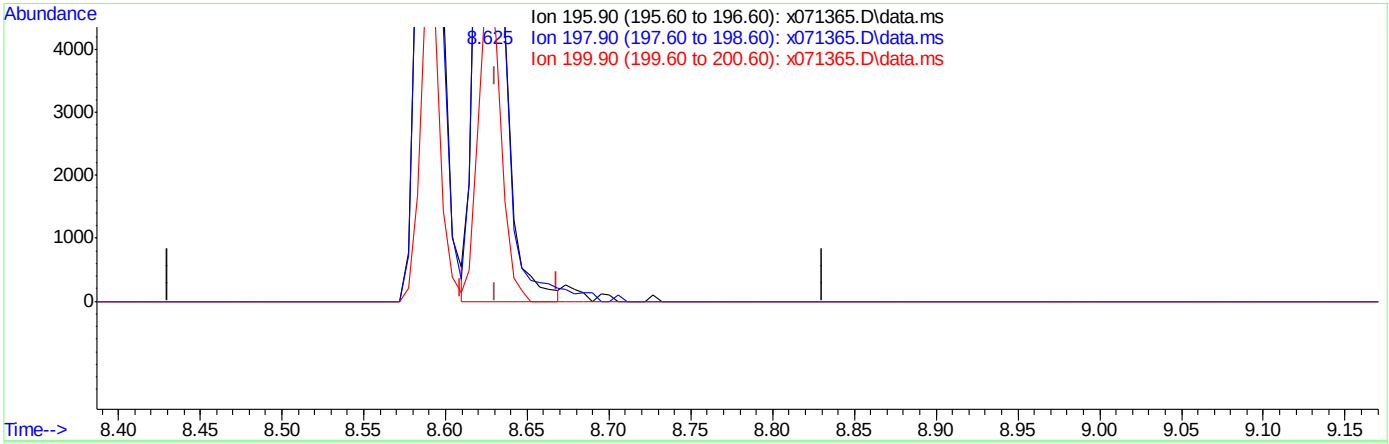
response 14908

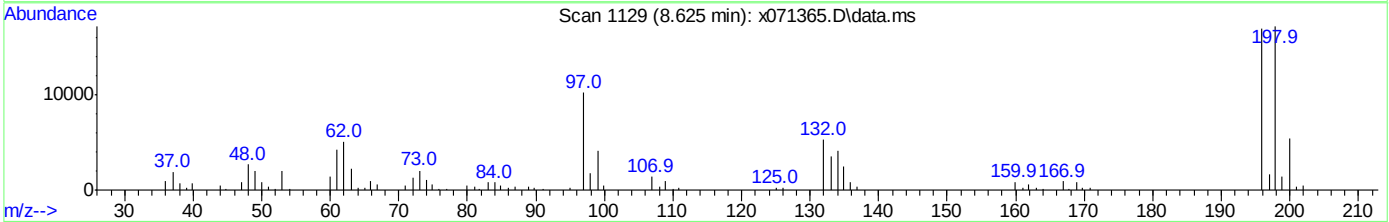
Ion	Exp%	Act%
195.90	100	100
197.90	96.00	101.59
199.90	30.90	32.14
0.00	0.00	0.00

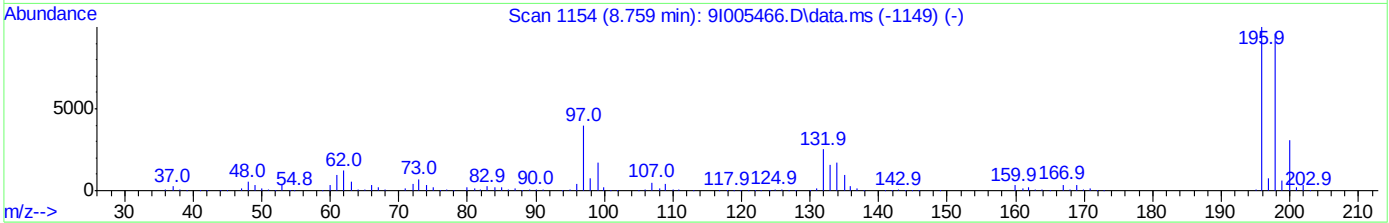
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071365.D
Acq On : 23 Jun 2020 1:54 pm
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 23 16:56:20 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration







TIC: x071365.D\data.ms

(46) 2,4,5-Trichlorophenol (P)

8.625min (-0.005) 10.15ppm m

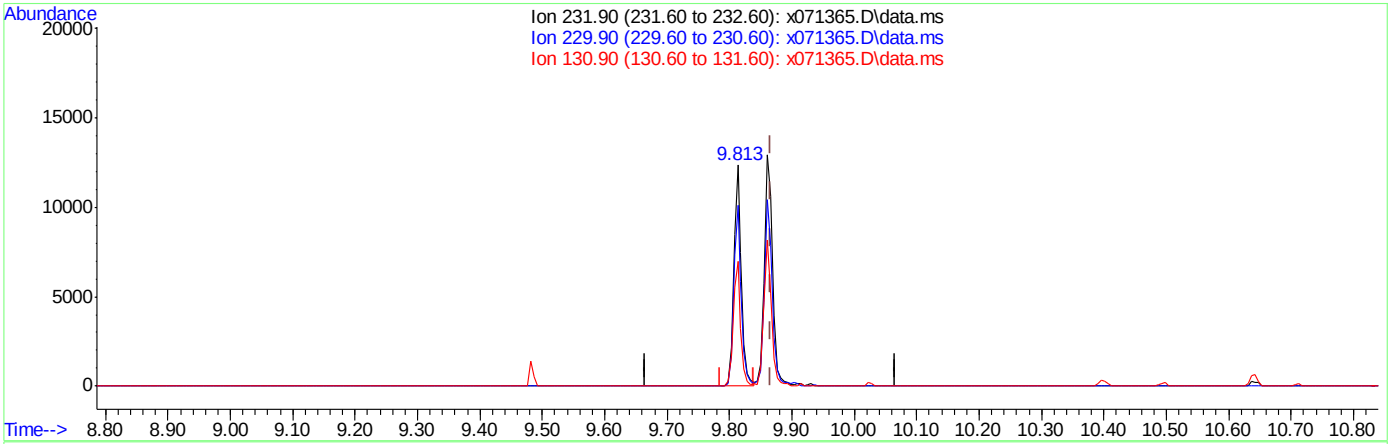
response 15337

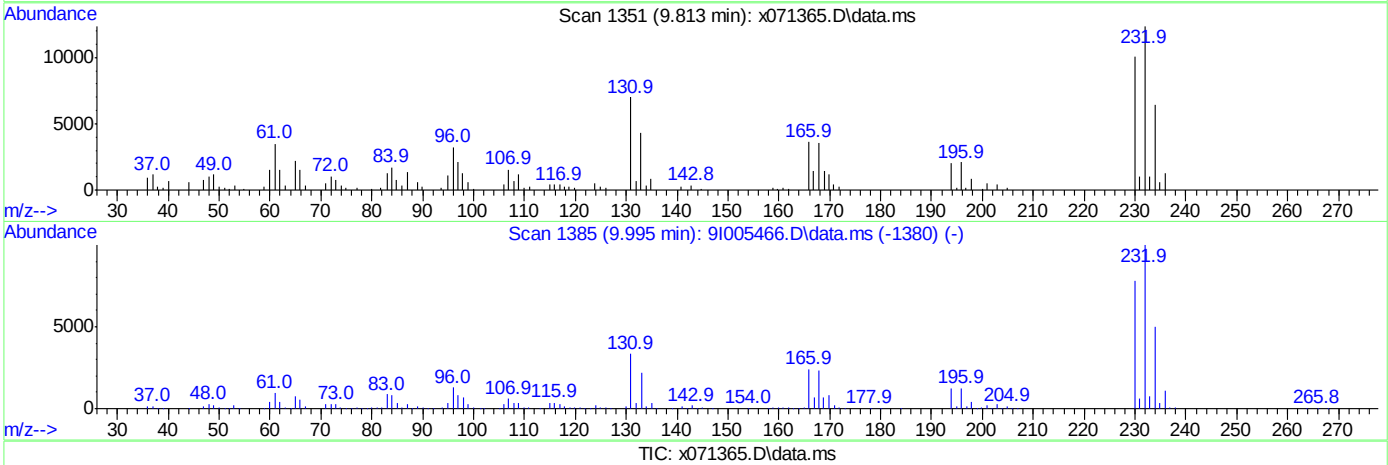
Ion	Exp%	Act%
195.90	100	100
197.90	96.00	101.08
199.90	30.90	31.85
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071365.D
Acq On : 23 Jun 2020 1:54 pm
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 24 12:53:06 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration





TIC: x071365.D\data.ms

(64) 2,3,4,6-Tetrachlorophenol (P)

9.813min (-0.053) 8.81ppm

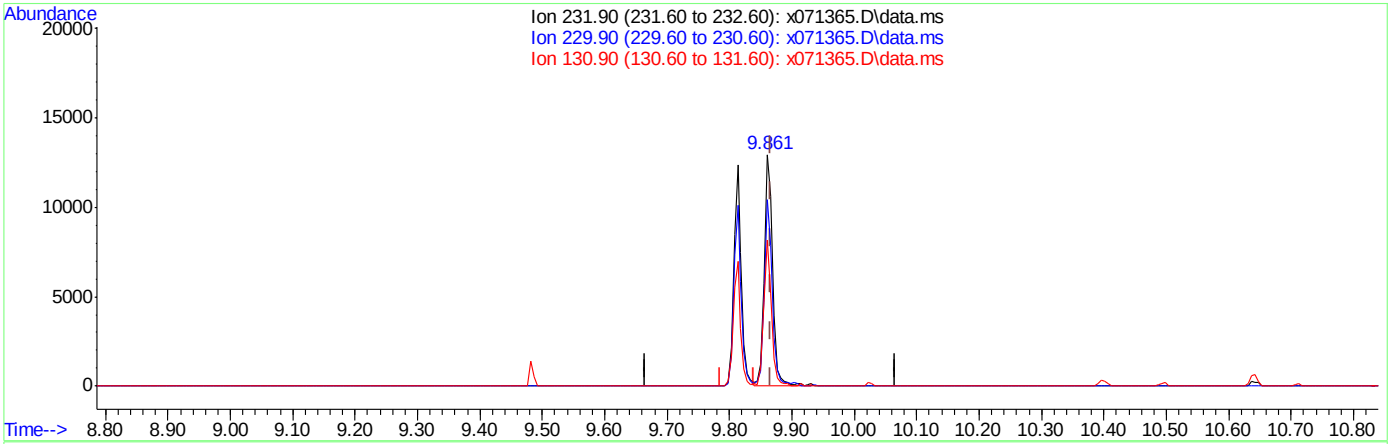
response 10983

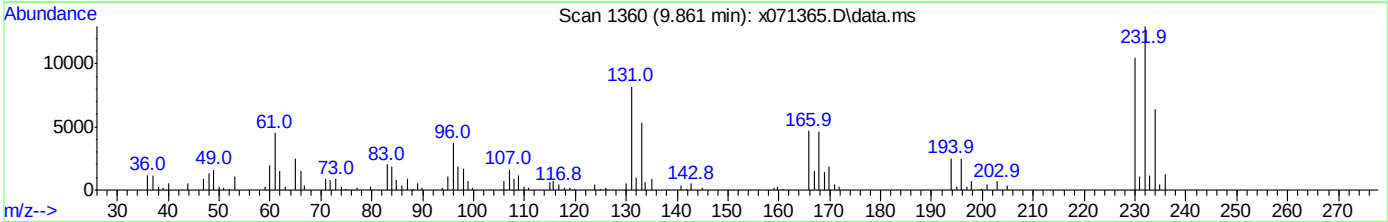
Ion	Exp%	Act%
231.90	100	100
229.90	78.40	81.93
130.90	33.30	56.61
0.00	0.00	0.00

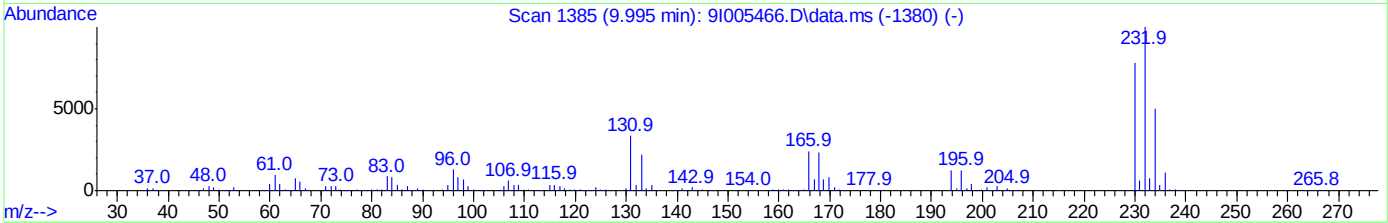
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071365.D
Acq On : 23 Jun 2020 1:54 pm
Operator : marthav
Sample : ic2918-5 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 24 12:53:06 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration







TIC: x071365.D\data.ms

(64) 2,3,4,6-Tetrachlorophenol (P)

9.861min (-0.005) 9.61ppm m

response 11983

Ion	Exp%	Act%
231.90	100	100
229.90	78.40	80.64
130.90	33.30	63.25
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071366.D
Acq On : 23 Jun 2020 2:20 pm
Operator : marthav
Sample : ic2918-10 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 23 16:56:48 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.005	152	155496	40.00	ppm	0.00
22) Naphthalene-d8	7.433	136	654391	40.00	ppm	0.00
43) Acenaphthene-d10	9.476	164	353292	40.00	ppm	0.00
70) Phenanthrene-d10	11.225	188	615230	40.00	ppm	0.00
92) Chrysene-d12	14.493	240	423636	40.00	ppm	0.00
102) Perylene-d12	16.809	264	348672	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	0.000	152	0m	40.00	ppm	-6.00
120) Naphthalene-d8A	0.000	136	0m	40.00	ppm	-7.43
127) Acenaphthene-d10A	0.000	164	0m	40.00	ppm	-9.48
136) Phenanthrene-d10A	0.000	188	0m	40.00	ppm	-11.22
146) Chrysene-d12A	0.000	240	0m	40.00	ppm	-14.49
153) Perylene-d12A	0.000	264	0m	40.00	ppm	-16.82
System Monitoring Compounds						
7) 2-Fluorophenol	4.609	112	114758	42.82	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 42.82%			
9) Phenol-d5	5.603	99	134134	46.48	ppm	0.00
Spiked Amount 100.000	Range 10 - 50		Recovery = 46.48%			
23) Nitrobenzene-d5	6.614	82	66899	21.29	ppm	0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 42.58%			
47) 2-Fluorobiphenyl	8.700	172	125790	23.68	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 47.36%			
75) 2,4,6-Tribromophenol	10.401	330	23184	28.48	ppm	0.00
Spiked Amount 100.000	Range 33 - 118		Recovery = 28.48%#			
95) Terphenyl-d14	13.140	244	110276	19.43	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 38.86%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.849	88	28140	21.62	ppm	# 32
3) N-nitrosodimethylamine	3.170	42	49226	42.97	ppm	# 35
4) Pyridine	3.207	79	66089	24.35	ppm	# 15
5) Benzaldehyde	5.528	106	49405	21.98	ppm	93
6) Aniline	5.646	93	88588	21.73	ppm	86
8) bis(2-Chloroethyl)ether	5.726	93	56030	19.74	ppm	# 74
10) Phenol	5.614	94	74149	20.13	ppm	96
11) 2-Chlorophenol	5.769	128	57618	21.81	ppm	79
12) 1,3-Dichlorobenzene	5.940	146	61108	22.57	ppm	97
13) 1,4-Dichlorobenzene	6.026	146	64641	23.36	ppm	99
14) 1,2-Dichlorobenzene	6.186	146	60961	23.63	ppm	96
15) Benzyl alcohol	6.154	108	39919	22.93	ppm	79
16) 2,2'-Oxybis(1-chloropr...	6.315	45	123847	36.53	ppm	75
17) 2-Methylphenol	6.283	108	56254	23.78	ppm	97
18) Acetophenone	6.448	105	88063	23.58	ppm	96
19) Hexachloroethane	6.566	117	24344	20.77	ppm	89
20) N-Nitroso-di-n-propyla...	6.459	70	45135	23.44	ppm	# 55
21) 3&4-Methylphenol	6.454	108	59928	24.33	ppm	97
24) Nitrobenzene	6.636	77	66335	22.29	ppm	82
25) Isophorone	6.914	82	122821	22.61	ppm	98
26) 2-Nitrophenol	6.999	139	30272	21.13	ppm	86

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071366.D
Acq On : 23 Jun 2020 2:20 pm
Operator : marthav
Sample : ic2918-10 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 23 16:56:48 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
27)	2,4-Dimethylphenol	7.058	107	60041	24.36	ppm		96
28)	O,O,O-Triethylphosphor...	7.144	198	25587	22.34	ppm		67
29)	bis(2-Chloroethoxy)met...	7.176	93	69341	20.45	ppm		97
30)	Benzoic Acid	7.128	105	36022	19.37	ppm		89
31)	2,4-Dichlorophenol	7.272	162	47127	23.86	ppm		98
32)	1,2,4-Trichlorobenzene	7.368	180	47830	21.52	ppm		97
34)	Naphthalene	7.454	128	180087	24.41	ppm		99
35)	4-Chloroaniline	7.524	127	76278	24.65	ppm		89
36)	2,6-Dichlorophenol	7.529	162	49400	24.50	ppm		96
37)	Hexachlorobutadiene	7.609	225	23667	19.08	ppm		99
38)	Caprolactam	7.898	113	21367	26.05	ppm	#	44
39)	4-Chloro-3-methylphenol	8.090	107	52723	24.56	ppm		90
40)	2-Methylnaphthalene	8.262	142	120867	25.34	ppm		97
41)	1-Methylnaphthalene	8.374	142	114860	25.70	ppm		98
42)	1,2,4,5-Tetrachloroben...	8.454	216	47554	20.57	ppm		99
44)	Hexachlorocyclopentadiene	8.449	237	22969	18.98	ppm		98
45)	2,4,6-Trichlorophenol	8.593	196	31015	21.41	ppm		99
46)	2,4,5-Trichlorophenol	8.625	196	34887	22.57	ppm		98
48)	1,1'-Biphenyl	8.813	154	149463	25.69	ppm		99
49)	2-Chloronaphthalene	8.823	162	107769	23.86	ppm		95
50)	2-Nitroaniline	8.946	65	40476	27.48	ppm	#	66
51)	p-Dinitrobenzene	9.117	75	21846	20.22	ppm	#	57
52)	Acenaphthylene	9.305	152	178166	25.78	ppm		100
53)	Dimethylphthalate	9.187	163	125366	24.15	ppm		99
54)	m-Dinitrobenzene	9.203	168	20257	22.47	ppm	#	47
55)	2,6-Dinitrotoluene	9.246	165	28857	22.98	ppm	#	63
56)	o-Dinitrobenzene	9.294	50	30312	40.61	ppm	#	47
57)	Acenaphthene	9.513	153	118768	25.98	ppm		99
58)	3-Nitroaniline	9.433	138	32061	23.73	ppm		98
59)	2,4-Dinitrophenol	9.556	184	9607	16.00	ppm	#	32
60)	Dibenzofuran	9.716	168	158964	25.37	ppm		91
61)	2,4-Dinitrotoluene	9.711	165	37895	23.81	ppm	#	64
62)	4-Nitrophenol	9.636	109	16992	26.57	ppm	#	65
63)	2,3,5,6-Tetrachlorophenol	9.813	232	25132	21.02	ppm		90
64)	2,3,4,6-Tetrachlorophenol	9.861	232	26671	20.90	ppm		83
65)	Fluorene	10.118	166	126410	25.84	ppm		99
66)	4-Chlorophenyl-phenyle...	10.139	204	59056	24.08	ppm		86
67)	Diethylphthalate	10.027	149	126377	24.50	ppm		98
68)	Thionazin	10.118	97	28910	23.78	ppm		98
69)	4-Nitroaniline	10.144	138	35972	26.00	ppm		82
71)	4,6-Dinitro-2-methylph...	10.187	198	16902	19.85	ppm	#	62
72)	n-Nitrosodiphenylamine	10.278	169	109884	32.48	ppm		97
73)	Diphenylamine	10.278	169	109884	27.73	ppm		97
74)	1,2-Diphenylhydrazine	10.321	77	138419	24.99	ppm		89
76)	Sulfotep	10.497	97	21074	24.32	ppm	#	63
77)	Phorate	10.642	75	73892	24.09	ppm		97
78)	4-Bromophenyl-phenylether	10.711	248	28119	19.88	ppm	#	73
79)	Hexachlorobenzene	10.759	284	27000	16.69	ppm	#	61
80)	Dimethoate	10.824	87	47659	26.05	ppm		92
81)	Simazine	10.888	201	21012	30.35	ppm		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071366.D
Acq On : 23 Jun 2020 2:20 pm
Operator : marthav
Sample : ic2918-10 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 23 16:56:48 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration

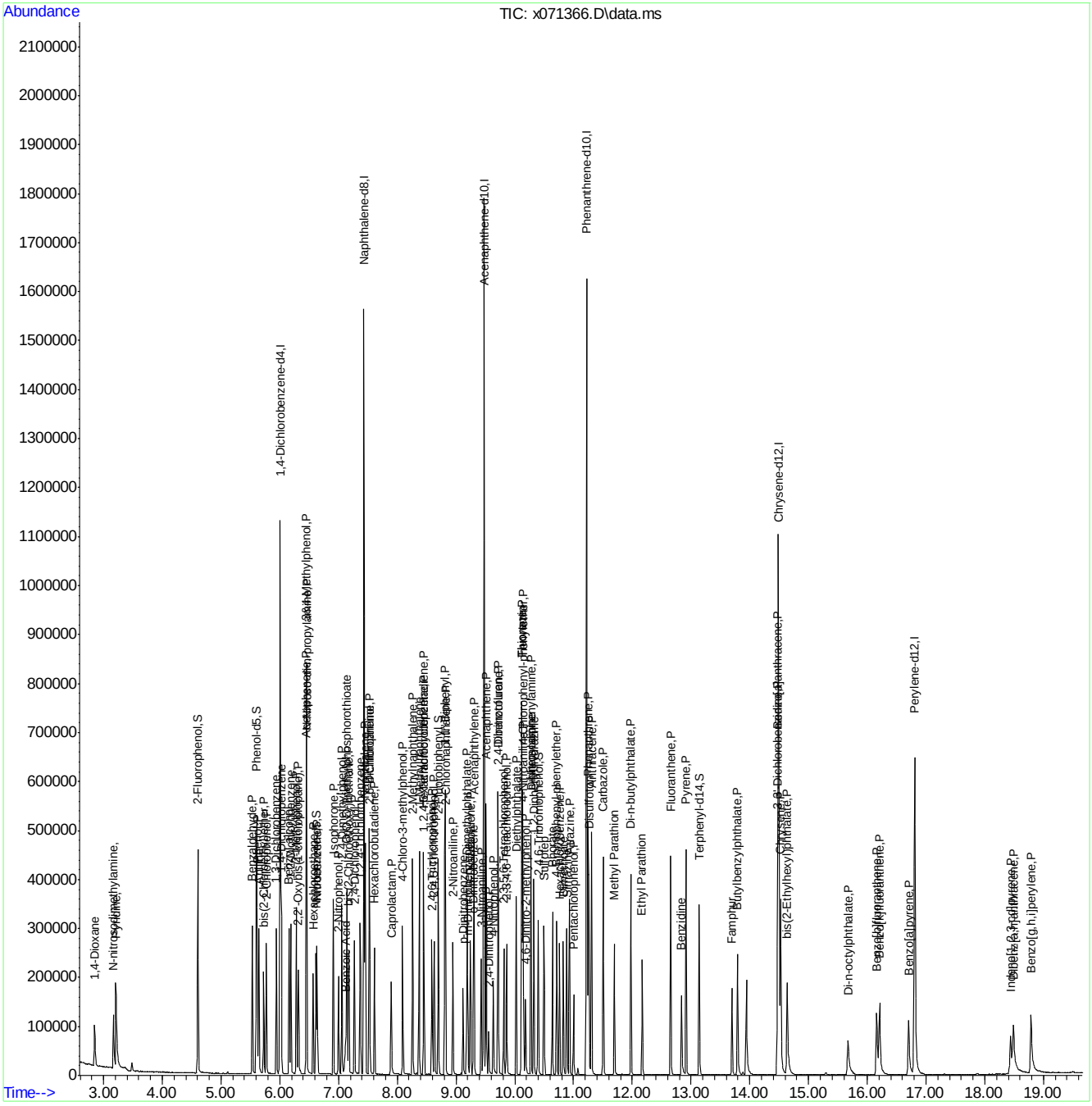
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
82) Atrazine	10.931	200	35344	26.26	ppm		84
83) Pentachlorophenol	11.000	266	15136	18.71	ppm		95
84) Phenanthrene	11.246	178	184650	27.24	ppm		99
85) Anthracene	11.310	178	191041	27.59	ppm		98
86) Disulfoton	11.262	88	77727	24.73	ppm		91
87) Carbazole	11.508	167	170347	27.57	ppm		99
88) Methyl Parathion	11.695	109	41081	26.63	ppm	#	85
89) Di-n-butylphthalate	11.974	149	191605	24.36	ppm		99
90) Ethyl Parathion	12.166	97	22244	21.70	ppm		84
91) Fluoranthene	12.653	202	169848	23.58	ppm		97
93) Benzidine	12.835	184	68168	26.79	ppm		95
94) Pyrene	12.915	202	178407	23.26	ppm		97
96) Famphur	13.696	218	45272	31.33	ppm		85
97) Butylbenzylphthalate	13.792	149	68441	20.35	ppm		87
98) 3,3'-Dichlorobenzidine	14.471	252	38018	18.83	ppm		95
99) Benzo[a]anthracene	14.477	228	130952	20.74	ppm		100
100) Chrysene	14.525	228	140095	22.28	ppm		98
101) bis(2-Ethylhexyl)phtha...	14.637	149	84382	19.34	ppm		96
103) Di-n-octylphthalate	15.675	149	86621	13.22	ppm		93
104) Benzo[b]fluoranthene	16.162	252	79954	15.61	ppm		97
105) Benzo[k]fluoranthene	16.210	252	114793	20.34	ppm		100
106) Benzo[a]pyrene	16.707	252	78804	15.33	ppm		99
107) Indeno[1,2,3-cd]pyrene	18.440	276	47837	10.76	ppm		93
108) Dibenz[a,h]anthracene	18.488	278	62126	12.94	ppm		89
109) Benzo[g,h,i]perylene	18.793	276	83957	16.44	ppm		94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071366.D
Acq On : 23 Jun 2020 2:20 pm
Operator : marthav
Sample : ic2918-10 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 23 16:56:48 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 06/24/20 14:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071367.D
Acq On : 23 Jun 2020 2:46 pm
Operator : marthav
Sample : ic2918-25 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 23 16:57:01 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.010	152	167074	40.00	ppm	0.00
22) Naphthalene-d8	7.433	136	718312	40.00	ppm	0.00
43) Acenaphthene-d10	9.476	164	380711	40.00	ppm	0.00
70) Phenanthrene-d10	11.225	188	643412	40.00	ppm	0.00
92) Chrysene-d12	14.493	240	456853	40.00	ppm	0.00
102) Perylene-d12	16.809	264	354803	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	0.000	152	0m	40.00	ppm	-6.00
120) Naphthalene-d8A	0.000	136	0m	40.00	ppm	-7.43
127) Acenaphthene-d10A	0.000	164	0m	40.00	ppm	-9.48
136) Phenanthrene-d10A	0.000	188	0m	40.00	ppm	-11.22
146) Chrysene-d12A	0.000	240	0m	40.00	ppm	-14.49
153) Perylene-d12A	0.000	264	0m	40.00	ppm	-16.82
System Monitoring Compounds						
7) 2-Fluorophenol	4.609	112	296188	102.86	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 102.86%#			
9) Phenol-d5	5.609	99	352148	113.56	ppm	0.00
Spiked Amount 100.000	Range 10 - 50		Recovery = 113.56%#			
23) Nitrobenzene-d5	6.620	82	184362	53.45	ppm	0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 106.90%			
47) 2-Fluorobiphenyl	8.700	172	337040	58.87	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 117.74%#			
75) 2,4,6-Tribromophenol	10.401	330	66539	78.17	ppm	0.00
Spiked Amount 100.000	Range 33 - 118		Recovery = 78.17%			
95) Terphenyl-d14	13.140	244	305446	49.89	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 99.78%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.844	88	71707	51.29	ppm	# 25
3) N-nitrosodimethylamine	3.164	42	127558	103.64	ppm	# 36
4) Pyridine	3.202	79	176874	60.66	ppm	# 18
5) Benzaldehyde	5.534	106	125669	52.05	ppm	96
6) Aniline	5.646	93	240316	54.85	ppm	84
8) bis(2-Chloroethyl)ether	5.726	93	150380	49.31	ppm	# 74
10) Phenol	5.619	94	202082	51.07	ppm	91
11) 2-Chlorophenol	5.769	128	156153	55.01	ppm	78
12) 1,3-Dichlorobenzene	5.940	146	162398	55.82	ppm	96
13) 1,4-Dichlorobenzene	6.026	146	172045	57.87	ppm	97
14) 1,2-Dichlorobenzene	6.186	146	162906	58.76	ppm	96
15) Benzyl alcohol	6.160	108	109579	58.57	ppm	81
16) 2,2'-Oxybis(1-chloropr...	6.320	45	329775	90.53	ppm	75
17) 2-Methylphenol	6.283	108	153153	60.25	ppm	95
18) Acetophenone	6.454	105	231507	57.68	ppm	97
19) Hexachloroethane	6.566	117	66075	52.47	ppm	90
20) N-Nitroso-di-n-propyla...	6.459	70	123252	59.57	ppm	# 57
21) 3&4-Methylphenol	6.459	108	164224	62.06	ppm	97
24) Nitrobenzene	6.641	77	184755	56.55	ppm	85
25) Isophorone	6.914	82	328957	55.17	ppm	95
26) 2-Nitrophenol	6.999	139	88328	56.16	ppm	74

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071367.D
Acq On : 23 Jun 2020 2:46 pm
Operator : marthav
Sample : ic2918-25 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 23 16:57:01 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
27)	2,4-Dimethylphenol	7.058	107	161238	59.61	ppm		92
28)	O,O,O-Triethylphosphor...	7.149	198	68176	54.22	ppm		81
29)	bis(2-Chloroethoxy)met...	7.176	93	194366	52.22	ppm		95
30)	Benzoic Acid	7.155	105	123126m	60.30	ppm		
31)	2,4-Dichlorophenol	7.272	162	129306	59.63	ppm		97
32)	1,2,4-Trichlorobenzene	7.368	180	130434	53.46	ppm		96
34)	Naphthalene	7.459	128	487020	60.15	ppm		99
35)	4-Chloroaniline	7.524	127	209742	61.76	ppm		89
36)	2,6-Dichlorophenol	7.534	162	134562	60.79	ppm		98
37)	Hexachlorobutadiene	7.609	225	63913	46.95	ppm		99
38)	Caprolactam	7.925	113	55078	61.17	ppm	#	49
39)	4-Chloro-3-methylphenol	8.096	107	140174	59.48	ppm		92
40)	2-Methylnaphthalene	8.262	142	316307	60.41	ppm		97
41)	1-Methylnaphthalene	8.374	142	301274	61.42	ppm		97
42)	1,2,4,5-Tetrachloroben...	8.454	216	130158	51.29	ppm		98
44)	Hexachlorocyclopentadiene	8.449	237	70261	53.87	ppm		96
45)	2,4,6-Trichlorophenol	8.593	196	87035	55.75	ppm		99
46)	2,4,5-Trichlorophenol	8.631	196	95733	57.47	ppm		98
48)	1,1'-Biphenyl	8.813	154	386811	61.69	ppm		100
49)	2-Chloronaphthalene	8.823	162	292275	60.05	ppm		94
50)	2-Nitroaniline	8.946	65	110868	69.86	ppm	#	61
51)	p-Dinitrobenzene	9.123	75	62645	53.81	ppm	#	68
52)	Acenaphthylene	9.310	152	478876	64.29	ppm		99
53)	Dimethylphthalate	9.192	163	330261	59.04	ppm		99
54)	m-Dinitrobenzene	9.203	168	58044	59.74	ppm	#	22
55)	2,6-Dinitrotoluene	9.246	165	78532	58.04	ppm	#	52
56)	o-Dinitrobenzene	9.299	50	77948	96.90	ppm	#	53
57)	Acenaphthene	9.513	153	314387	63.82	ppm		99
58)	3-Nitroaniline	9.433	138	89750	61.64	ppm		91
59)	2,4-Dinitrophenol	9.556	184	35846	55.41	ppm	#	25
60)	Dibenzofuran	9.722	168	422234	62.52	ppm		94
61)	2,4-Dinitrotoluene	9.717	165	103282	60.23	ppm	#	64
62)	4-Nitrophenol	9.642	109	49624	72.02	ppm	#	69
63)	2,3,5,6-Tetrachlorophenol	9.813	232	72401	56.20	ppm		89
64)	2,3,4,6-Tetrachlorophenol	9.866	232	73940	53.77	ppm		88
65)	Fluorene	10.123	166	329261	62.46	ppm		99
66)	4-Chlorophenyl-phenyle...	10.139	204	158495	59.96	ppm		85
67)	Diethylphthalate	10.032	149	335780	60.42	ppm		97
68)	Thionazin	10.118	97	73744	56.30	ppm		100
69)	4-Nitroaniline	10.150	138	101280	67.94	ppm		78
71)	4,6-Dinitro-2-methylph...	10.187	198	54403	61.11	ppm	#	56
72)	n-Nitrosodiphenylamine	10.278	169	296377	83.76	ppm		97
73)	Diphenylamine	10.278	169	296377	71.50	ppm		97
74)	1,2-Diphenylhydrazine	10.326	77	365382	63.08	ppm		92
76)	Sulfotep	10.497	97	54825	60.50	ppm	#	58
77)	Phorate	10.642	75	195293	60.89	ppm		97
78)	4-Bromophenyl-phenylether	10.717	248	76134	51.48	ppm		83
79)	Hexachlorobenzene	10.765	284	71650	42.36	ppm		72
80)	Dimethoate	10.829	87	128904	67.38	ppm		94
81)	Simazine	10.893	201	55700	76.94	ppm		94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071367.D
Acq On : 23 Jun 2020 2:46 pm
Operator : marthav
Sample : ic2918-25 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 23 16:57:01 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration

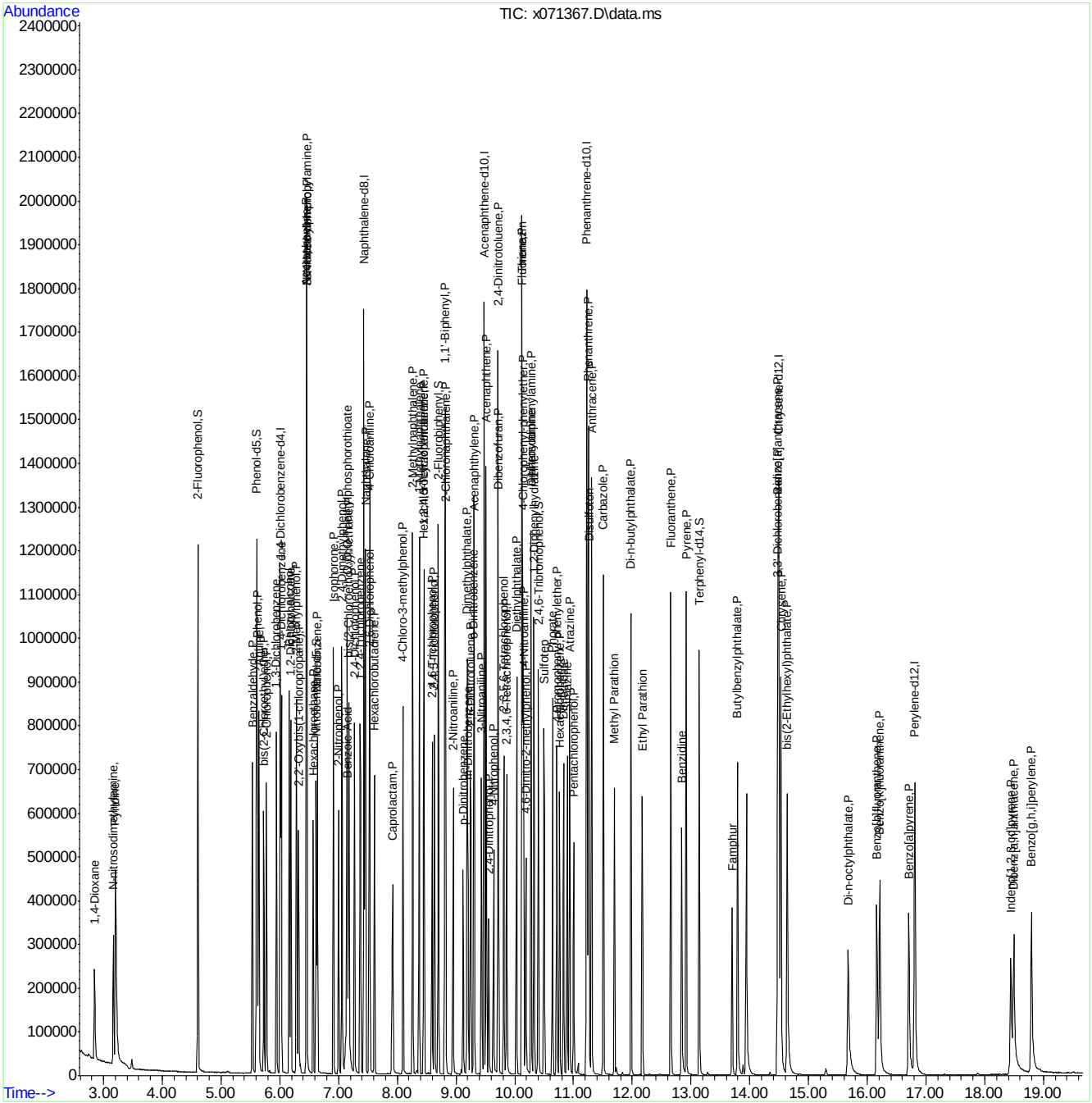
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
82) Atrazine	10.936	200	93870	66.68	ppm		87
83) Pentachlorophenol	11.000	266	45957	54.31	ppm		96
84) Phenanthrene	11.252	178	482902	68.13	ppm		99
85) Anthracene	11.310	178	509170	70.32	ppm		98
86) Disulfoton	11.262	88	206671	62.87	ppm		92
87) Carbazole	11.508	167	451343	69.84	ppm		98
88) Methyl Parathion	11.696	109	111405	69.05	ppm	#	83
89) Di-n-butylphthalate	11.974	149	519074	63.12	ppm		98
90) Ethyl Parathion	12.172	97	62808	58.60	ppm		88
91) Fluoranthene	12.653	202	447785	59.44	ppm		99
93) Benzidine	12.840	184	219352	79.93	ppm		96
94) Pyrene	12.920	202	475210	57.46	ppm		95
96) Famphur	13.701	218	106685	68.46	ppm		93
97) Butylbenzylphthalate	13.792	149	198022	54.61	ppm		88
98) 3,3'-Dichlorobenzidine	14.471	252	115753	53.15	ppm		96
99) Benzo[a]anthracene	14.477	228	354729	52.10	ppm		99
100) Chrysene	14.530	228	378801	55.87	ppm		98
101) bis(2-Ethylhexyl)phtha...	14.637	149	263880	56.09	ppm		95
103) Di-n-octylphthalate	15.675	149	309620	46.43	ppm		92
104) Benzo[b]fluoranthene	16.162	252	243405	46.69	ppm		98
105) Benzo[k]fluoranthene	16.215	252	310730	54.11	ppm		100
106) Benzo[a]pyrene	16.713	252	239153	45.73	ppm		98
107) Indeno[1,2,3-cd]pyrene	18.440	276	157709	34.86	ppm		92
108) Dibenz[a,h]anthracene	18.494	278	181799	37.20	ppm		92
109) Benzo[g,h,i]perylene	18.799	276	230159	44.30	ppm		94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071367.D
Acq On : 23 Jun 2020 2:46 pm
Operator : marthav
Sample : ic2918-25 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 23 16:57:01 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration



8270DApp9SX-062320.m Tue Jun 23 19:10:35 2020 Page: 4

Manual Integration Approval Summary

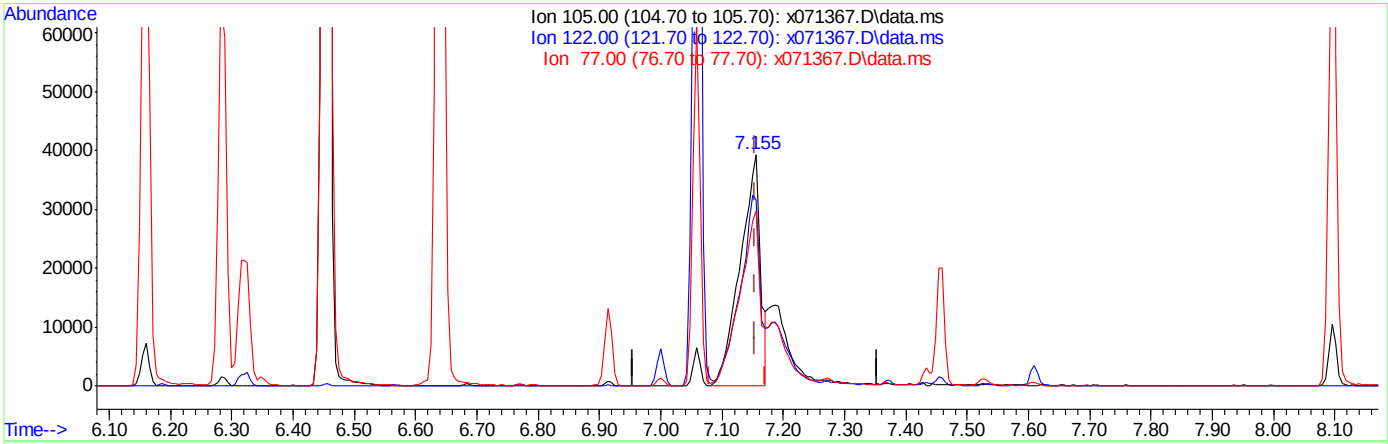
Sample Number:	SX2918-IC2918	**Method:**	EPA 625.1
Lab FileID:	X071367.D	**Analyst approved:**	06/24/20 09:50 Martha Valls
Injection Time:	06/23/20 14:46	**Supervisor approved:**	06/24/20 14:07 Naresh Jiawan

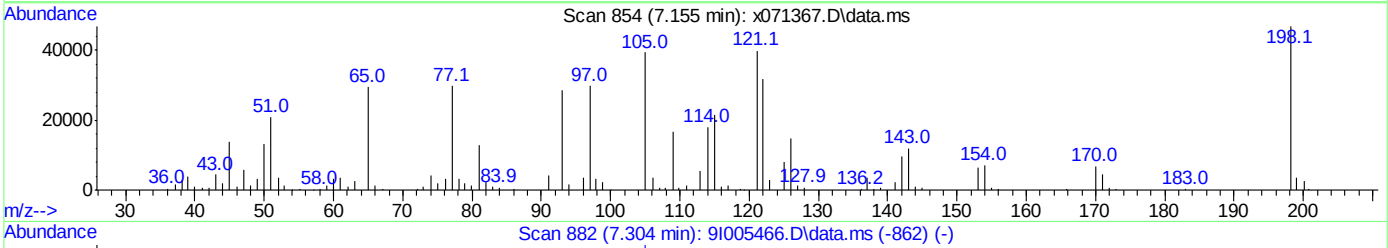
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic Acid	65-85-0		7.15	Split peak

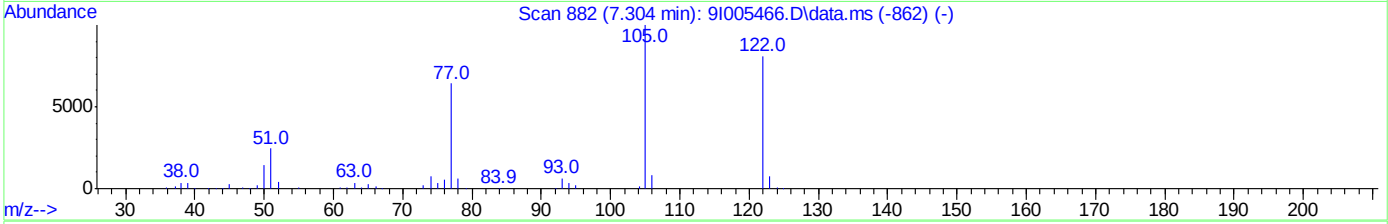
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071367.D
Acq On : 23 Jun 2020 2:46 pm
Operator : marthav
Sample : ic2918-25 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 23 15:19:13 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration







TIC: x071367.D\data.ms

(30) Benzoic Acid

7.155min (0.000) 43.78ppm

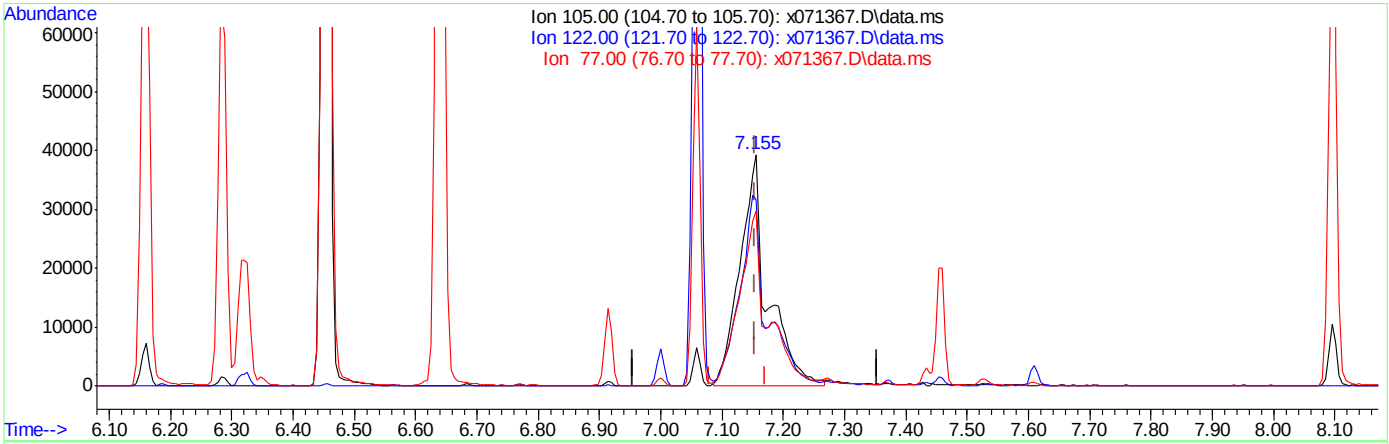
response 89388

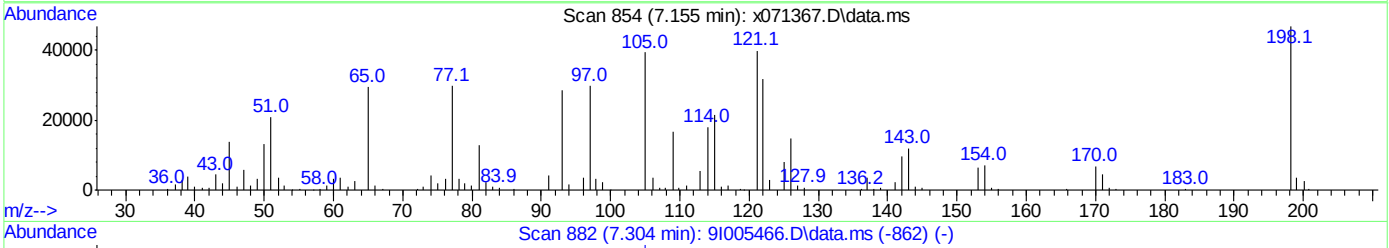
Ion	Exp%	Act%
105.00	100	100
122.00	81.20	79.14
77.00	64.10	74.62
0.00	0.00	0.00

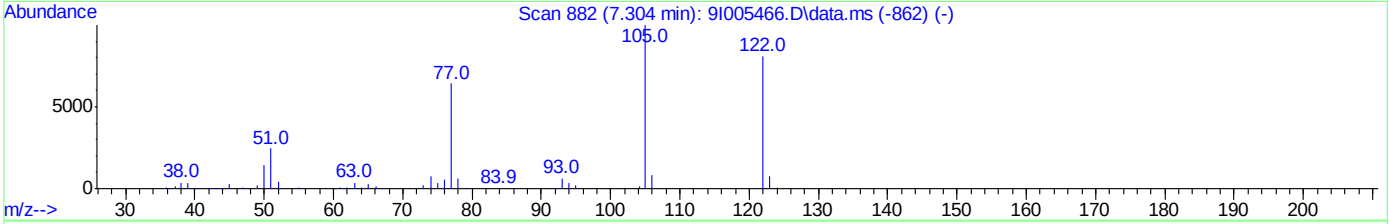
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071367.D
Acq On : 23 Jun 2020 2:46 pm
Operator : marthav
Sample : ic2918-25 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 23 15:19:13 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration







TIC: x071367.D\data.ms

(30) Benzoic Acid

7.155min (0.000) 60.30ppm m

response 123126

Ion	Exp%	Act%
105.00	100	100
122.00	81.20	80.35
77.00	64.10	75.61
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 06/24/20 14:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071368.D
Acq On : 23 Jun 2020 3:12 pm
Operator : marthav
Sample : icc2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 23 16:57:37 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.010	152	170190	40.00	ppm	0.00
22) Naphthalene-d8	7.433	136	730199	40.00	ppm	0.00
43) Acenaphthene-d10	9.481	164	379384	40.00	ppm	0.00
70) Phenanthrene-d10	11.225	188	636433	40.00	ppm	0.00
92) Chrysene-d12	14.498	240	474373	40.00	ppm	0.00
102) Perylene-d12	16.809	264	348798	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	0.000	152	0m	40.00	ppm	-6.00
120) Naphthalene-d8A	0.000	136	0m	40.00	ppm	-7.43
127) Acenaphthene-d10A	0.000	164	0m	40.00	ppm	-9.48
136) Phenanthrene-d10A	0.000	188	0m	40.00	ppm	-11.22
146) Chrysene-d12A	0.000	240	0m	40.00	ppm	-14.49
153) Perylene-d12A	0.000	264	0m	40.00	ppm	-16.82
System Monitoring Compounds						
7) 2-Fluorophenol	4.609	112	581541	198.25	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 198.25%#			
9) Phenol-d5	5.614	99	702165	222.29	ppm	0.00
Spiked Amount 100.000	Range 10 - 50		Recovery = 222.29%#			
23) Nitrobenzene-d5	6.620	82	371628	105.99	ppm	0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 211.98%#			
47) 2-Fluorobiphenyl	8.700	172	687481	120.50	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 241.00%#			
75) 2,4,6-Tribromophenol	10.407	330	141075	167.55	ppm	0.00
Spiked Amount 100.000	Range 33 - 118		Recovery = 167.55%#			
95) Terphenyl-d14	13.140	244	632272	99.47	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 198.94%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.844	88	135258	94.97	ppm	# 29
3) N-nitrosodimethylamine	3.165	42	247597	197.49	ppm	# 34
4) Pyridine	3.202	79	347463	116.98	ppm	# 20
5) Benzaldehyde	5.534	106	244610	99.45	ppm	94
6) Aniline	5.652	93	517495	115.96	ppm	91
8) bis(2-Chloroethyl)ether	5.732	93	310263	99.87	ppm	75
10) Phenol	5.625	94	447918	111.12	ppm	84
11) 2-Chlorophenol	5.775	128	331118	114.52	ppm	81
12) 1,3-Dichlorobenzene	5.941	146	332239	112.10	ppm	96
13) 1,4-Dichlorobenzene	6.026	146	355012	117.23	ppm	97
14) 1,2-Dichlorobenzene	6.187	146	338462	119.85	ppm	95
15) Benzyl alcohol	6.165	108	225749	118.46	ppm	84
16) 2,2'-Oxybis(1-chloropr...	6.326	45	647052	174.37	ppm	77
17) 2-Methylphenol	6.288	108	316556	122.24	ppm	96
18) Acetophenone	6.459	105	458751	112.21	ppm	97
19) Hexachloroethane	6.566	117	133396	104.00	ppm	86
20) N-Nitroso-di-n-propyla...	6.470	70	245638	116.54	ppm	# 66
21) 3&4-Methylphenol	6.465	108	325992	120.95	ppm	97
24) Nitrobenzene	6.647	77	370334	111.50	ppm	86
25) Isophorone	6.919	82	648108	106.92	ppm	96
26) 2-Nitrophenol	7.000	139	179002	111.96	ppm	81

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071368.D
Acq On : 23 Jun 2020 3:12 pm
Operator : marthav
Sample : icc2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 23 16:57:37 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
27)	2,4-Dimethylphenol	7.064	107	328379	119.42	ppm		93
28)	O,O,O-Triethylphosphor...	7.155	198	137643	107.68	ppm		88
29)	bis(2-Chloroethoxy)met...	7.181	93	384175	101.55	ppm		96
30)	Benzoic Acid	7.176	105	281742m	135.74	ppm		
31)	2,4-Dichlorophenol	7.278	162	269208	122.13	ppm		97
32)	1,2,4-Trichlorobenzene	7.374	180	263849	106.37	ppm		97
34)	Naphthalene	7.460	128	978658	118.90	ppm		99
35)	4-Chloroaniline	7.529	127	417641	120.97	ppm		91
36)	2,6-Dichlorophenol	7.534	162	269840	119.92	ppm		97
37)	Hexachlorobutadiene	7.609	225	130690	94.44	ppm		99
38)	Caprolactam	7.952	113	108415	118.45	ppm	#	53
39)	4-Chloro-3-methylphenol	8.101	107	280801	117.22	ppm		93
40)	2-Methylnaphthalene	8.262	142	638104	119.89	ppm		98
41)	1-Methylnaphthalene	8.374	142	612512	122.84	ppm		97
42)	1,2,4,5-Tetrachloroben...	8.460	216	270199	104.75	ppm		97
44)	Hexachlorocyclopentadiene	8.449	237	154031	118.51	ppm		98
45)	2,4,6-Trichlorophenol	8.593	196	180184	115.82	ppm		97
46)	2,4,5-Trichlorophenol	8.636	196	195993	118.08	ppm		99
48)	1,1'-Biphenyl	8.813	154	774415	123.94	ppm		99
49)	2-Chloronaphthalene	8.829	162	587674	121.17	ppm		96
50)	2-Nitroaniline	8.952	65	217159	137.31	ppm	#	65
51)	p-Dinitrobenzene	9.123	75	126328	108.90	ppm	#	60
52)	Acenaphthylene	9.310	152	963028	129.74	ppm		99
53)	Dimethylphthalate	9.198	163	651563	116.88	ppm		99
54)	m-Dinitrobenzene	9.209	168	117437	121.30	ppm	#	25
55)	2,6-Dinitrotoluene	9.251	165	162115	120.23	ppm		76
56)	o-Dinitrobenzene	9.310	50	147548	184.06	ppm	#	63
57)	Acenaphthene	9.519	153	622009	126.70	ppm		98
58)	3-Nitroaniline	9.439	138	180019	124.06	ppm		89
59)	2,4-Dinitrophenol	9.562	184	83541	129.58	ppm	#	41
60)	Dibenzofuran	9.722	168	822372	122.20	ppm		93
61)	2,4-Dinitrotoluene	9.722	165	205436	120.22	ppm	#	67
62)	4-Nitrophenol	9.647	109	98995	144.17	ppm	#	66
63)	2,3,5,6-Tetrachlorophenol	9.818	232	149105	116.15	ppm		93
64)	2,3,4,6-Tetrachlorophenol	9.866	232	150195	109.60	ppm		85
65)	Fluorene	10.123	166	646099	122.99	ppm		98
66)	4-Chlorophenyl-phenyle...	10.145	204	316481	120.15	ppm		92
67)	Diethylphthalate	10.038	149	662960	119.71	ppm		98
68)	Thionazin	10.129	97	142705	109.33	ppm		97
69)	4-Nitroaniline	10.166	138	196264	132.11	ppm		85
71)	4,6-Dinitro-2-methylph...	10.198	198	118222	134.24	ppm		89
72)	n-Nitrosodiphenylamine	10.284	169	584050	166.87	ppm		97
73)	Diphenylamine	10.284	169	584050	142.45	ppm		97
74)	1,2-Diphenylhydrazine	10.326	77	718418	125.39	ppm		91
76)	Sulfotep	10.503	97	109712	122.40	ppm	#	73
77)	Phorate	10.642	75	385046	121.36	ppm		96
78)	4-Bromophenyl-phenylether	10.717	248	152873	104.50	ppm	#	81
79)	Hexachlorobenzene	10.765	284	150881	90.19	ppm		69
80)	Dimethoate	10.835	87	254067	134.25	ppm		94
81)	Simazine	10.904	201	110243	153.95	ppm		95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071368.D
Acq On : 23 Jun 2020 3:12 pm
Operator : marthav
Sample : icc2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 23 16:57:37 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration

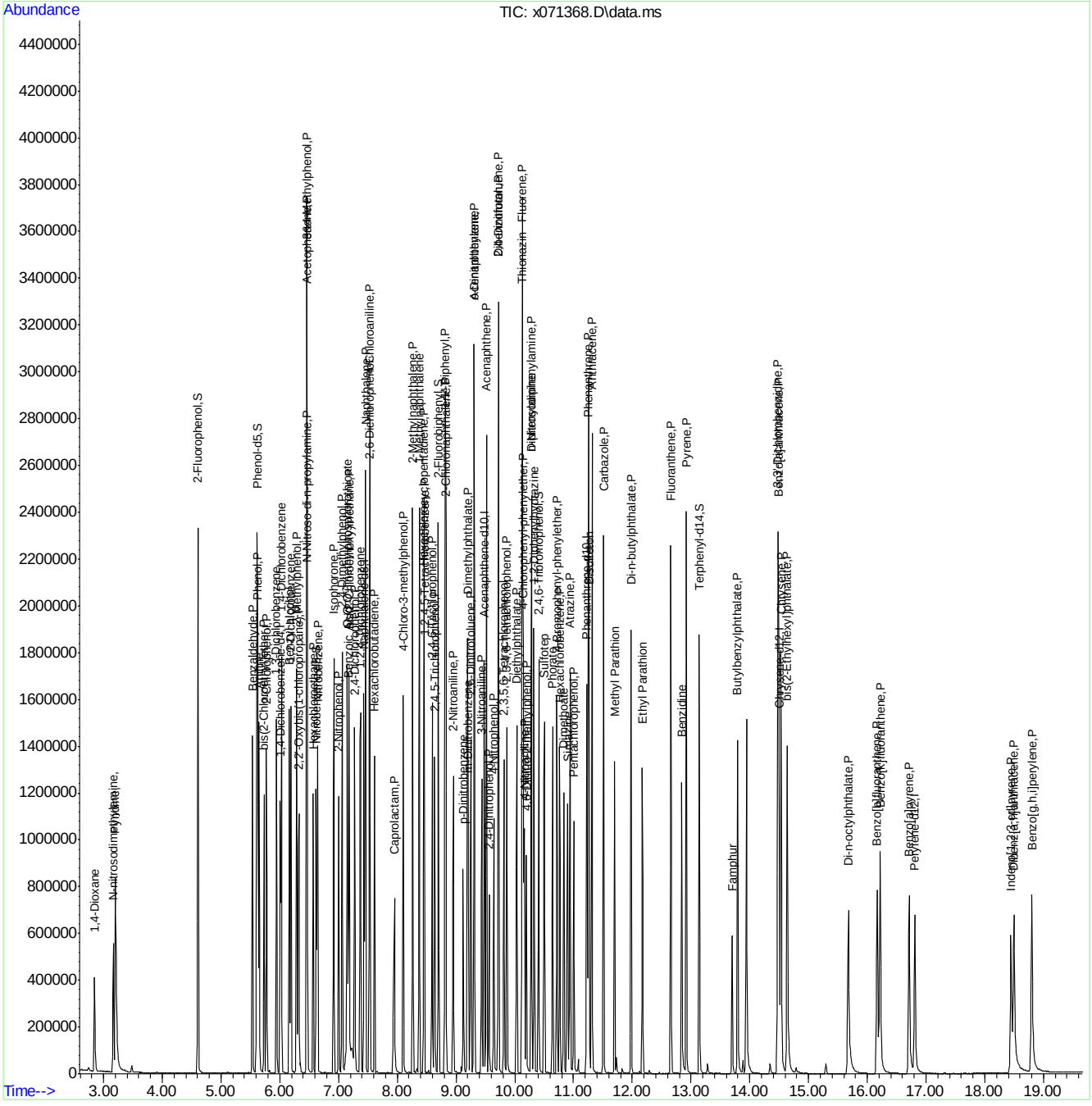
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
82) Atrazine	10.941	200	186308	133.80	ppm		88
83) Pentachlorophenol	11.006	266	102560	122.54	ppm		98
84) Phenanthrene	11.252	178	955958	136.34	ppm		99
85) Anthracene	11.316	178	1017200	142.02	ppm		98
86) Disulfoton	11.268	88	401616	123.51	ppm		90
87) Carbazole	11.514	167	882727	138.09	ppm		98
88) Methyl Parathion	11.701	109	218419	136.86	ppm	#	88
89) Di-n-butylphthalate	11.979	149	1036569	127.42	ppm		98
90) Ethyl Parathion	12.172	97	126325	119.15	ppm		87
91) Fluoranthene	12.658	202	894676	120.07	ppm		97
93) Benzidine	12.840	184	473506	166.17	ppm		98
94) Pyrene	12.920	202	967727	112.69	ppm		97
96) Famphur	13.701	218	170704	105.50	ppm		92
97) Butylbenzylphthalate	13.792	149	404219	107.36	ppm		87
98) 3,3'-Dichlorobenzidine	14.477	252	252309	111.58	ppm		97
99) Benzo[a]anthracene	14.482	228	739664	104.62	ppm		99
100) Chrysene	14.536	228	782608	111.17	ppm		99
101) bis(2-Ethylhexyl)phtha...	14.637	149	568149	116.31	ppm		96
103) Di-n-octylphthalate	15.680	149	709158	108.17	ppm		93
104) Benzo[b]fluoranthene	16.167	252	507571	99.05	ppm		99
105) Benzo[k]fluoranthene	16.221	252	615358	109.00	ppm		99
106) Benzo[a]pyrene	16.718	252	488606	95.04	ppm		99
107) Indeno[1,2,3-cd]pyrene	18.446	276	334683	75.26	ppm		90
108) Dibenz[a,h]anthracene	18.499	278	380638	79.23	ppm		93
109) Benzo[g,h,i]perylene	18.804	276	470714	92.15	ppm		94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071368.D
Acq On : 23 Jun 2020 3:12 pm
Operator : marthav
Sample : icc2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 23 16:57:37 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration



Manual Integration Approval Summary

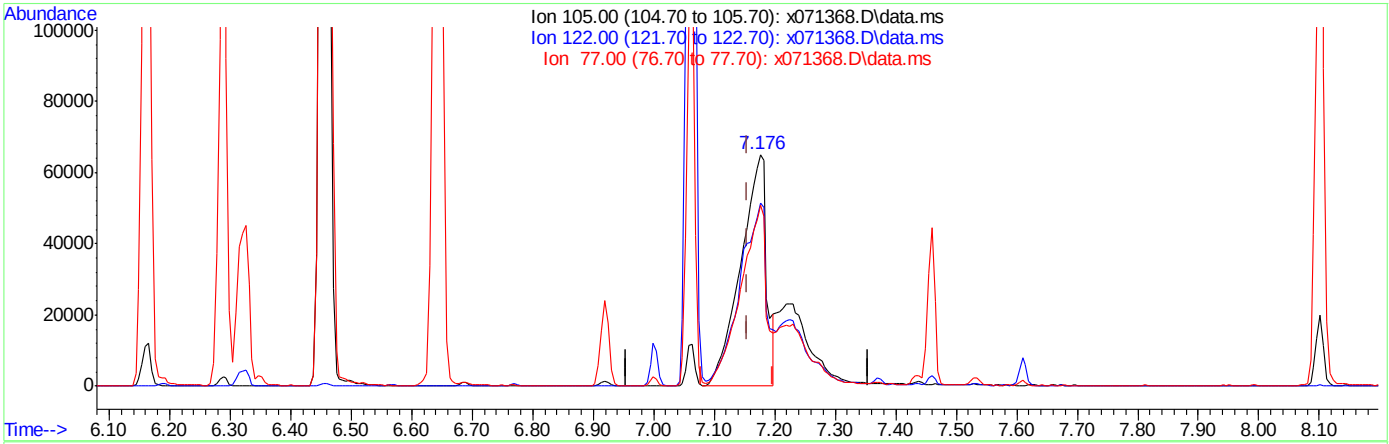
Sample Number:	SX2918-ICC2918	**Method:**	EPA 625.1
Lab FileID:	X071368.D	**Analyst approved:**	06/24/20 09:50 Martha Valls
Injection Time:	06/23/20 15:12	**Supervisor approved:**	06/24/20 14:07 Naresh Jiawan

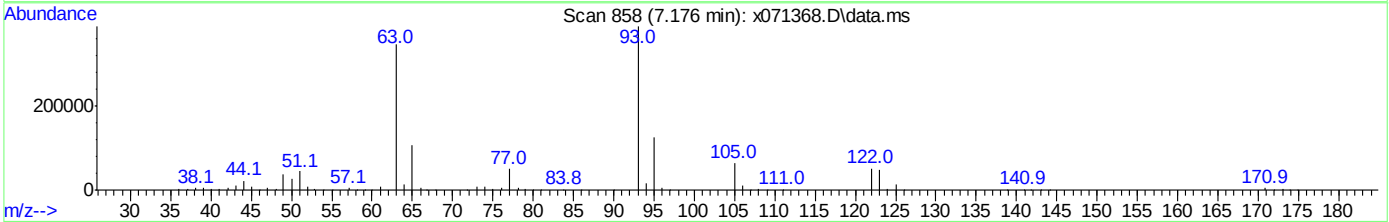
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic Acid	65-85-0		7.18	Split peak

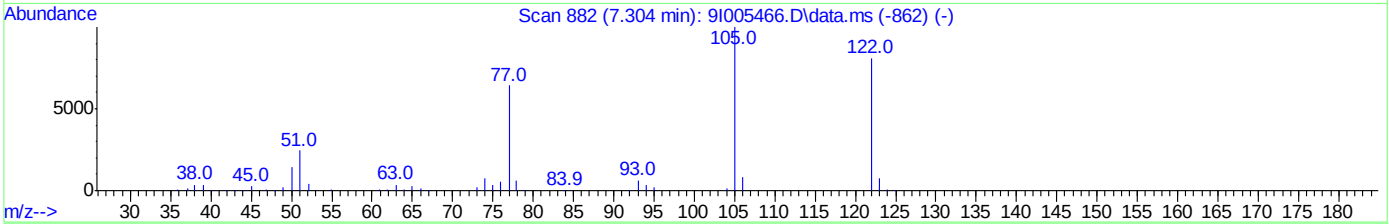
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071368.D
Acq On : 23 Jun 2020 3:12 pm
Operator : marthav
Sample : icc2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 23 15:47:06 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration







TIC: x071368.D\data.ms

(30) Benzoic Acid

7.176min (+0.022) 92.98ppm

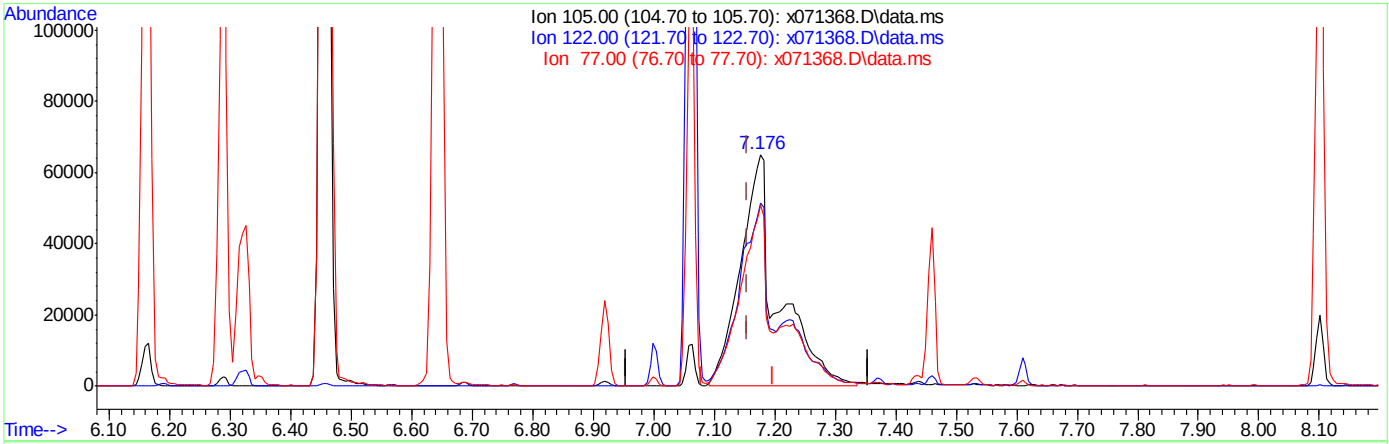
response 192977

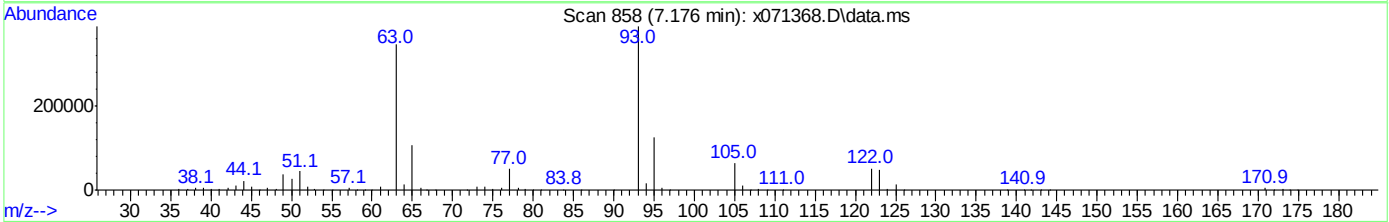
Ion	Exp%	Act%
105.00	100	100
122.00	81.20	77.04
77.00	64.10	77.97
0.00	0.00	0.00

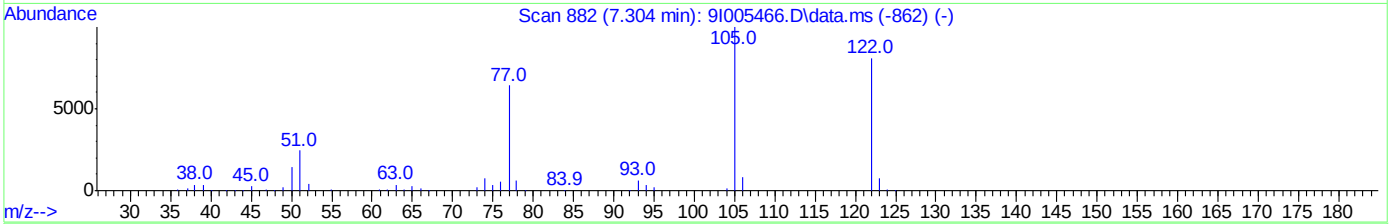
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071368.D
Acq On : 23 Jun 2020 3:12 pm
Operator : marthav
Sample : icc2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 23 15:47:06 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration







TIC: x071368.D\data.ms

(30) Benzoic Acid

7.176min (+0.022) 135.74ppm m

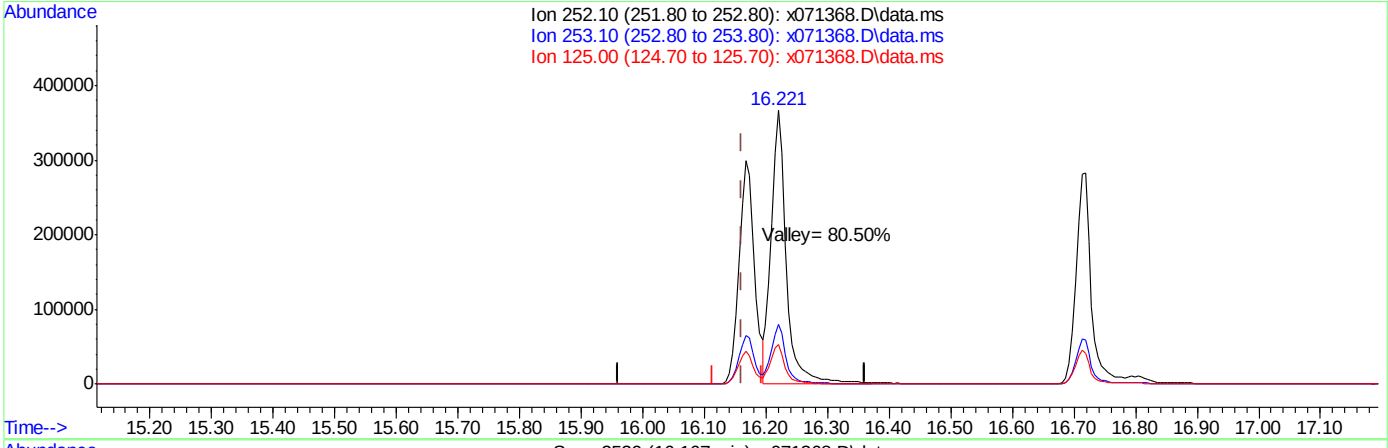
response 281742

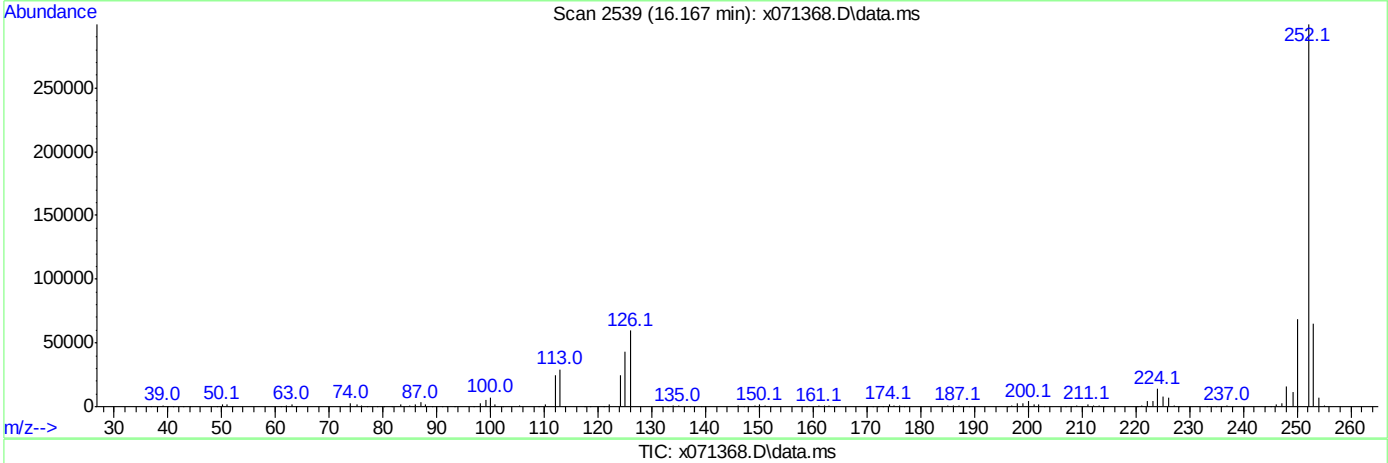
Ion	Exp%	Act%
105.00	100	100
122.00	81.20	79.16
77.00	64.10	77.84
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071368.D
Acq On : 23 Jun 2020 3:12 pm
Operator : marthav
Sample : icc2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 23 16:57:37 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration





TIC: x071368.D\data.ms

(104) Benzo[b]fluoranthene (P)

16.167min (+0.005) 99.05ppm

response 507571

Ion	Exp%	Act%
252.10	100	100
253.10	22.50	21.85
125.00	14.00	14.47
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 06/24/20 14:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071369.D
Acq On : 23 Jun 2020 3:39 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 23 16:57:50 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.010	152	174295	40.00	ppm	0.00
22) Naphthalene-d8	7.438	136	737140	40.00	ppm	0.00
43) Acenaphthene-d10	9.481	164	387286	40.00	ppm	0.00
70) Phenanthrene-d10	11.225	188	649330	40.00	ppm	0.00
92) Chrysene-d12	14.498	240	486162	40.00	ppm	0.00
102) Perylene-d12	16.814	264	350182	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	0.000	152	0m	40.00	ppm	-6.00
120) Naphthalene-d8A	0.000	136	0m	40.00	ppm	-7.43
127) Acenaphthene-d10A	0.000	164	0m	40.00	ppm	-9.48
136) Phenanthrene-d10A	0.000	188	0m	40.00	ppm	-11.22
146) Chrysene-d12A	0.000	240	0m	40.00	ppm	-14.49
153) Perylene-d12A	0.000	264	0m	40.00	ppm	-16.82
System Monitoring Compounds						
7) 2-Fluorophenol	4.608	112	736130	245.04	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 245.04%#			
9) Phenol-d5	5.614	99	889040	274.83	ppm	0.00
Spiked Amount 100.000	Range 10 - 50		Recovery = 274.83%#			
23) Nitrobenzene-d5	6.625	82	467597	132.10	ppm	0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 264.20%#			
47) 2-Fluorobiphenyl	8.705	172	862858	148.15	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 296.30%#			
75) 2,4,6-Tribromophenol	10.412	330	183053	213.09	ppm	0.01
Spiked Amount 100.000	Range 33 - 118		Recovery = 213.09%#			
95) Terphenyl-d14	13.145	244	807081	123.89	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 247.78%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.843	88	168471	115.50	ppm	# 32
3) N-nitrosodimethylamine	3.170	42	314954	245.30	ppm	# 36
4) Pyridine	3.202	79	431489	141.85	ppm	# 17
5) Benzaldehyde	5.534	106	306979	121.87	ppm	93
6) Aniline	5.651	93	653163	142.91	ppm	86
8) bis(2-Chloroethyl)ether	5.732	93	391334	123.00	ppm	75
10) Phenol	5.630	94	570547	138.21	ppm	86
11) 2-Chlorophenol	5.774	128	418524	141.34	ppm	81
12) 1,3-Dichlorobenzene	5.946	146	419455	138.20	ppm	98
13) 1,4-Dichlorobenzene	6.026	146	443073	142.87	ppm	97
14) 1,2-Dichlorobenzene	6.192	146	426380	147.42	ppm	98
15) Benzyl alcohol	6.165	108	283907	145.47	ppm	81
16) 2,2'-Oxybis(1-chloropr...	6.325	45	790430	207.99	ppm	77
17) 2-Methylphenol	6.288	108	392943	148.17	ppm	96
18) Acetophenone	6.459	105	565958	135.17	ppm	96
19) Hexachloroethane	6.566	117	166318	126.61	ppm	86
20) N-Nitroso-di-n-propyla...	6.470	70	299849	138.91	ppm	# 64
21) 3&4-Methylphenol	6.464	108	405941	147.06	ppm	95
24) Nitrobenzene	6.646	77	463119	138.12	ppm	84
25) Isophorone	6.924	82	810323	132.42	ppm	97
26) 2-Nitrophenol	7.005	139	228478	141.56	ppm	76

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071369.D
Acq On : 23 Jun 2020 3:39 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 23 16:57:50 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
27)	2,4-Dimethylphenol	7.063	107	416013	149.86	ppm		92
28)	O,O,O-Triethylphosphor...	7.154	198	173675	134.58	ppm		79
29)	bis(2-Chloroethoxy)met...	7.181	93	482396	126.31	ppm		96
30)	Benzoic Acid	7.192	105	368165m	175.71	ppm		
31)	2,4-Dichlorophenol	7.277	162	341207	153.34	ppm		96
32)	1,2,4-Trichlorobenzene	7.374	180	334150	133.45	ppm		98
34)	Naphthalene	7.459	128	1209565	145.57	ppm		99
35)	4-Chloroaniline	7.529	127	517431	148.46	ppm		89
36)	2,6-Dichlorophenol	7.534	162	336531	148.15	ppm		96
37)	Hexachlorobutadiene	7.614	225	166131	118.92	ppm		99
38)	Caprolactam	7.962	113	138158	149.52	ppm	#	52
39)	4-Chloro-3-methylphenol	8.101	107	354807	146.72	ppm		93
40)	2-Methylnaphthalene	8.262	142	793056	147.60	ppm		98
41)	1-Methylnaphthalene	8.379	142	771536	153.27	ppm		98
42)	1,2,4,5-Tetrachloroben...	8.459	216	337842	129.74	ppm		99
44)	Hexachlorocyclopentadiene	8.454	237	196644	148.21	ppm		98
45)	2,4,6-Trichlorophenol	8.593	196	226012	142.32	ppm		97
46)	2,4,5-Trichlorophenol	8.636	196	250094	147.60	ppm		99
48)	1,1'-Biphenyl	8.818	154	970793	152.20	ppm		99
49)	2-Chloronaphthalene	8.829	162	734690	148.39	ppm		95
50)	2-Nitroaniline	8.957	65	273674	169.52	ppm	#	71
51)	p-Dinitrobenzene	9.128	75	161352	136.26	ppm	#	67
52)	Acenaphthylene	9.315	152	1199982	158.37	ppm		99
53)	Dimethylphthalate	9.198	163	828709	145.62	ppm		99
54)	m-Dinitrobenzene	9.214	168	148275	150.03	ppm	#	40
55)	2,6-Dinitrotoluene	9.256	165	202871	147.39	ppm		78
56)	o-Dinitrobenzene	9.310	50	181502	221.80	ppm	#	59
57)	Acenaphthene	9.518	153	781995	156.04	ppm		98
58)	3-Nitroaniline	9.444	138	226359	152.81	ppm		94
59)	2,4-Dinitrophenol	9.561	184	111911	170.04	ppm	#	26
60)	Dibenzofuran	9.722	168	1035619	150.74	ppm		92
61)	2,4-Dinitrotoluene	9.722	165	259054	148.50	ppm	#	63
62)	4-Nitrophenol	9.652	109	127212	181.48	ppm	#	68
63)	2,3,5,6-Tetrachlorophenol	9.818	232	191147	145.87	ppm		91
64)	2,3,4,6-Tetrachlorophenol	9.871	232	192270	137.44	ppm		90
65)	Fluorene	10.128	166	807040	150.50	ppm		99
66)	4-Chlorophenyl-phenyle...	10.144	204	401786	149.43	ppm		91
67)	Diethylphthalate	10.037	149	842703	149.06	ppm		97
68)	Thionazin	10.134	97	179844	134.97	ppm		97
69)	4-Nitroaniline	10.171	138	251396	165.77	ppm		84
71)	4,6-Dinitro-2-methylph...	10.198	198	155251	172.79	ppm		64
72)	n-Nitrosodiphenylamine	10.289	169	740920	207.48	ppm		97
73)	Diphenylamine	10.289	169	740920	177.13	ppm		97
74)	1,2-Diphenylhydrazine	10.331	77	901177	154.16	ppm		94
76)	Sulfotep	10.503	97	138038	150.95	ppm	#	68
77)	Phorate	10.647	75	488040	150.77	ppm		98
78)	4-Bromophenyl-phenylether	10.717	248	198083	132.71	ppm	#	80
79)	Hexachlorobenzene	10.770	284	192411	112.73	ppm		78
80)	Dimethoate	10.840	87	324379	168.00	ppm		93
81)	Simazine	10.909	201	141563	193.75	ppm		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071369.D
Acq On : 23 Jun 2020 3:39 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 23 16:57:50 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration

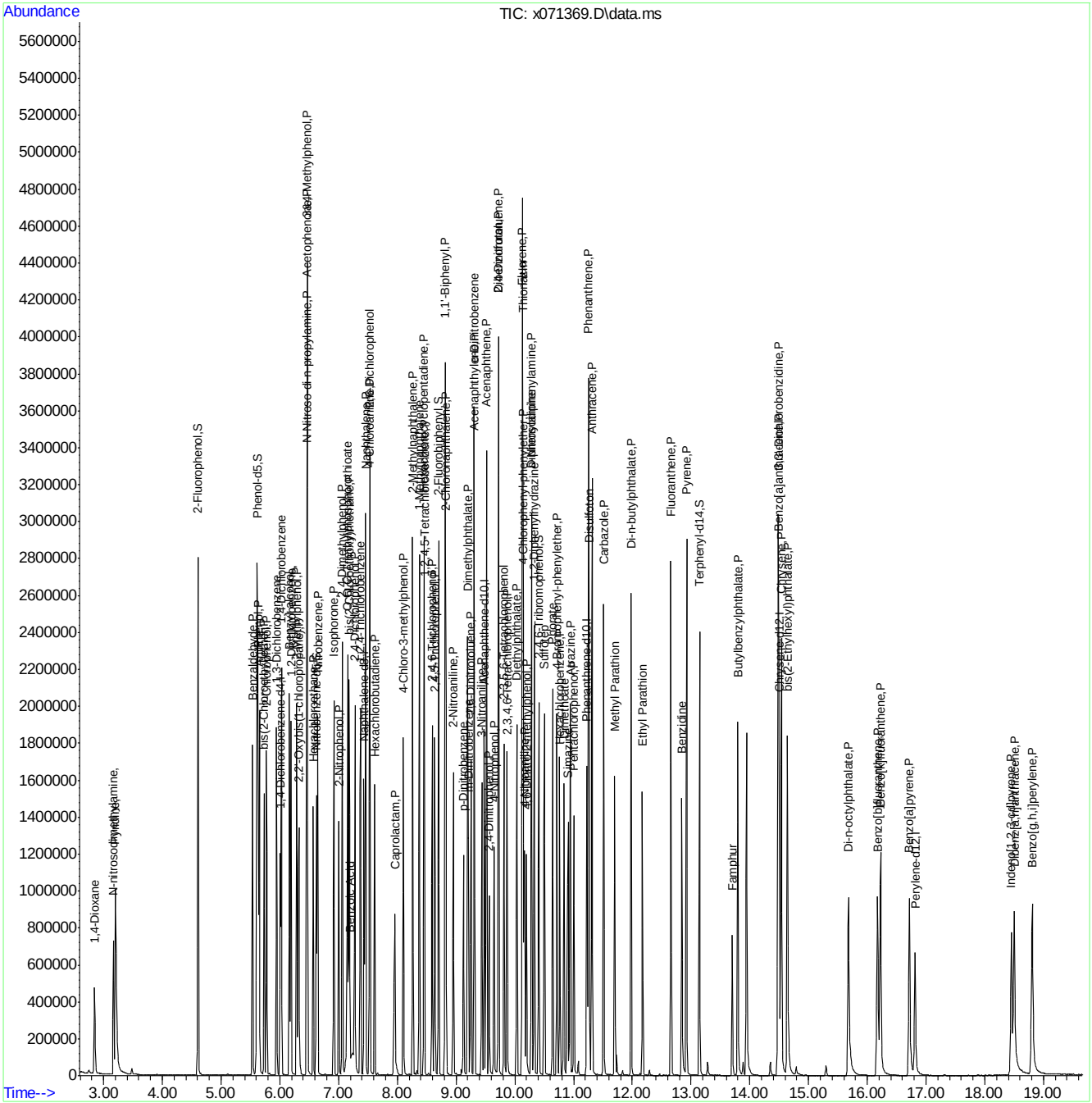
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
82) Atrazine	10.947	200	241370	169.90	ppm		93
83) Pentachlorophenol	11.005	266	132964	155.71	ppm		98
84) Phenanthrene	11.257	178	1187834	166.05	ppm		99
85) Anthracene	11.316	178	1278417	174.94	ppm		98
86) Disulfoton	11.267	88	504419	152.04	ppm		91
87) Carbazole	11.519	167	1125795	172.62	ppm		98
88) Methyl Parathion	11.701	109	277600	170.49	ppm	#	87
89) Di-n-butylphthalate	11.979	149	1311478	158.01	ppm		98
90) Ethyl Parathion	12.171	97	165428	152.93	ppm		86
91) Fluoranthene	12.658	202	1151897	151.51	ppm		98
93) Benzidine	12.845	184	611414	209.37	ppm		98
94) Pyrene	12.926	202	1254185	142.51	ppm		94
96) Famphur	13.701	218	199377	120.23	ppm		86
97) Butylbenzylphthalate	13.797	149	525040	136.07	ppm		92
98) 3,3'-Dichlorobenzidine	14.482	252	323705	139.68	ppm		96
99) Benzo[a]anthracene	14.487	228	942720	130.11	ppm		99
100) Chrysene	14.536	228	1006458	139.50	ppm		98
101) bis(2-Ethylhexyl)phtha...	14.642	149	730142	145.85	ppm		96
103) Di-n-octylphthalate	15.680	149	926997	140.84	ppm		94
104) Benzo[b]fluoranthene	16.172	252	652829	126.89	ppm		98
105) Benzo[k]fluoranthene	16.226	252	789311	139.26	ppm		99
106) Benzo[a]pyrene	16.718	252	624413	120.97	ppm		97
107) Indeno[1,2,3-cd]pyrene	18.451	276	443513	99.33	ppm		91
108) Dibenz[a,h]anthracene	18.504	278	504897	104.68	ppm		93
109) Benzo[g,h,i]perylene	18.814	276	611844	119.31	ppm		96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071369.D
Acq On : 23 Jun 2020 3:39 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 23 16:57:50 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration



Manual Integration Approval Summary

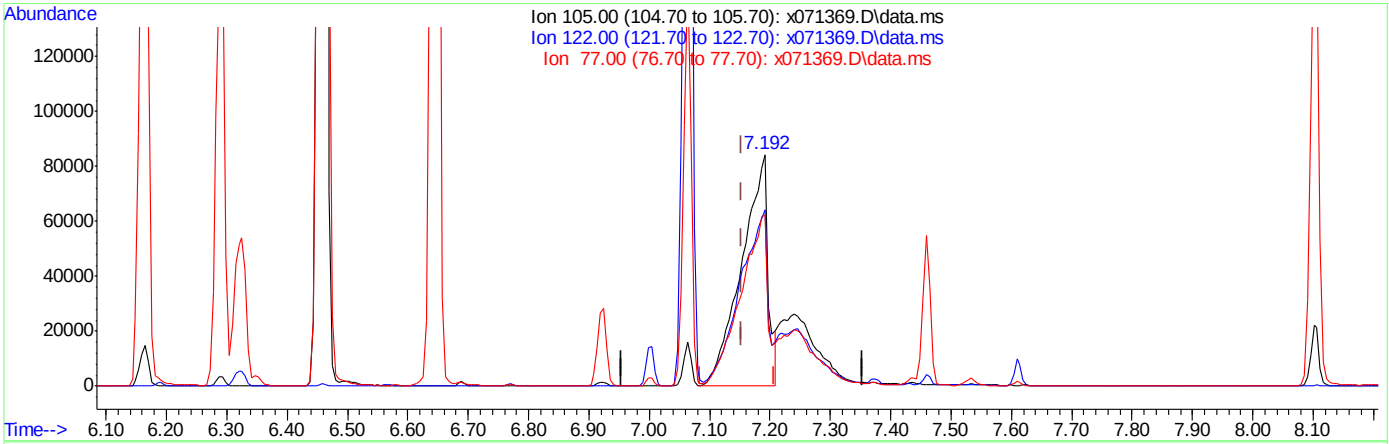
Sample Number:	SX2918-IC2918	**Method:**	EPA 625.1
Lab FileID:	X071369.D	**Analyst approved:**	06/24/20 09:50 Martha Valls
Injection Time:	06/23/20 15:39	**Supervisor approved:**	06/24/20 14:07 Naresh Jiawan

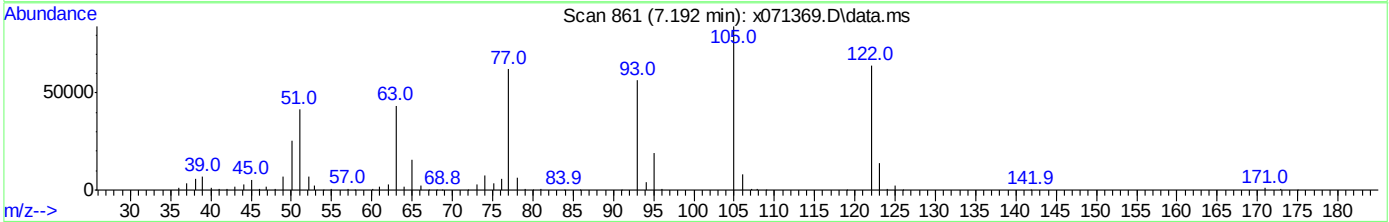
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic Acid	65-85-0		7.19	Split peak

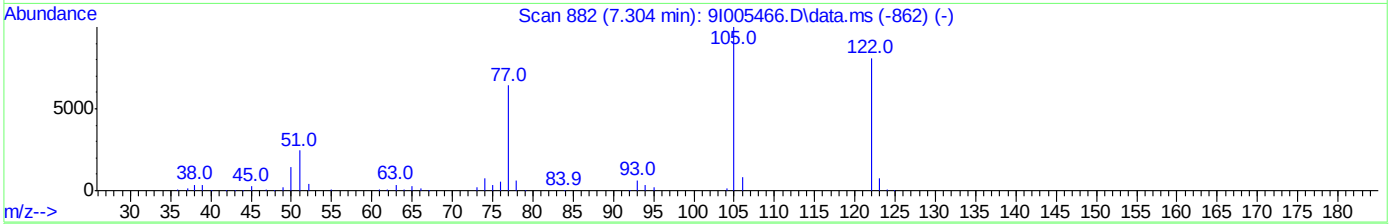
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071369.D
Acq On : 23 Jun 2020 3:39 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 23 16:03:31 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration







TIC: x071369.D\data.ms

(30) Benzoic Acid

7.192min (+0.037) 120.63ppm

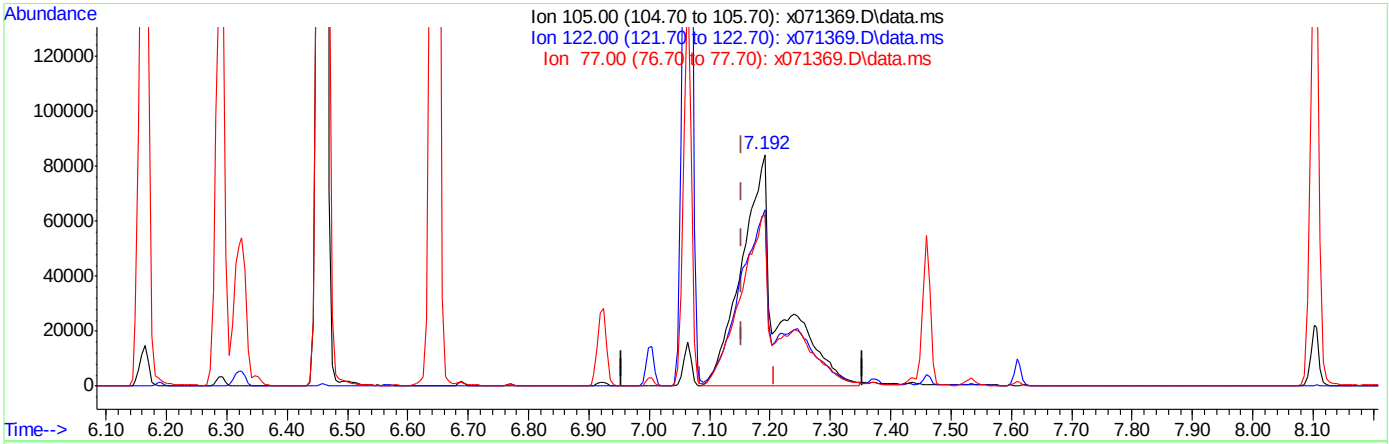
response 252754

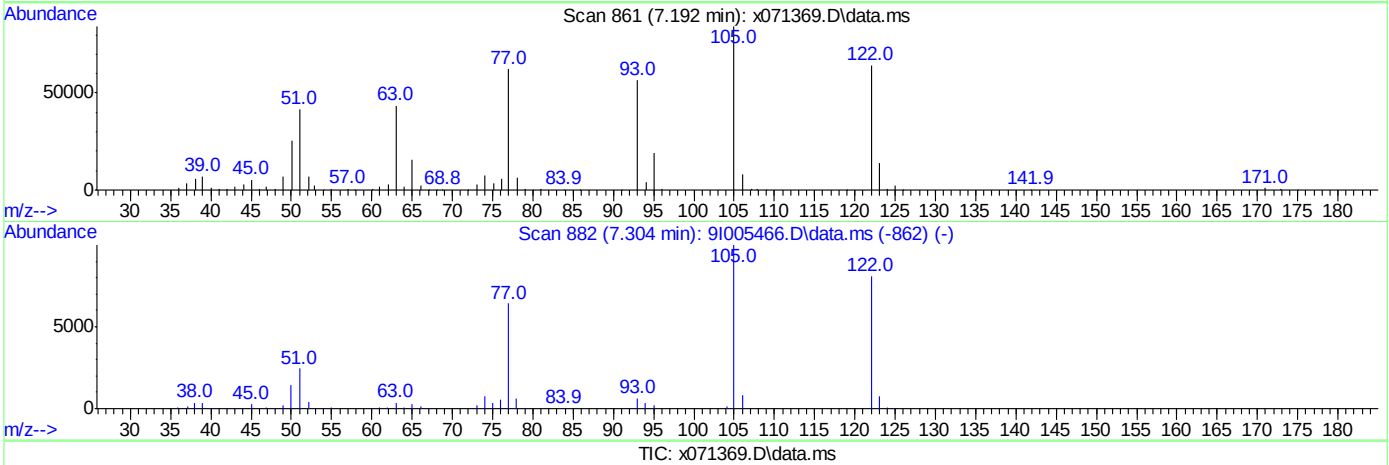
Ion	Exp%	Act%
105.00	100	100
122.00	81.20	74.21
77.00	64.10	72.76
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071369.D
Acq On : 23 Jun 2020 3:39 pm
Operator : marthav
Sample : ic2918-60 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 23 16:03:31 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:42:05 2020
Response via : Initial Calibration





TIC: x071369.D\data.ms

(30) Benzoic Acid

7.192min (+0.037) 175.71ppm m

response 368165

Ion	Exp%	Act%
105.00	100	100
122.00	81.20	76.12
77.00	64.10	73.68
0.00	0.00	0.00

X071370.D

Manual Integrations APPROVED (compounds with "m" flag)

Naresh Jiawan 06/24/20 14:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071370.D
Acq On : 23 Jun 2020 4:05 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jun 23 16:58:06 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:33:00 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.010	152	184182	40.00	ppm	0.00
22) Naphthalene-d8	7.438	136	795596	40.00	ppm	0.00
43) Acenaphthene-d10	9.481	164	415197	40.00	ppm	0.00
70) Phenanthrene-d10	11.225	188	687369	40.00	ppm	0.00
92) Chrysene-d12	14.498	240	513475	40.00	ppm	0.00
102) Perylene-d12	16.814	264	367168	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	0.000	152	0m	40.00	ppm	-6.00
120) Naphthalene-d8A	0.000	136	0m	40.00	ppm	-7.43
127) Acenaphthene-d10A	0.000	164	0m	40.00	ppm	-9.48
136) Phenanthrene-d10A	0.000	188	0m	40.00	ppm	-11.22
146) Chrysene-d12A	0.000	240	0m	40.00	ppm	-14.49
153) Perylene-d12A	0.000	264	0m	40.00	ppm	-16.82
System Monitoring Compounds						
7) 2-Fluorophenol	4.614	112	993932	313.10	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 313.10%#			
9) Phenol-d5	5.620	99	1229702	359.73	ppm	0.01
Spiked Amount 100.000	Range 10 - 50		Recovery = 359.73%#			
23) Nitrobenzene-d5	6.625	82	632075	165.45	ppm	0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 330.90%#			
47) 2-Fluorobiphenyl	8.706	172	1167244	186.94	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 373.88%#			
75) 2,4,6-Tribromophenol	10.412	330	252496	277.66	ppm	0.01
Spiked Amount 100.000	Range 33 - 118		Recovery = 277.66%#			
95) Terphenyl-d14	13.145	244	1091853	158.69	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 317.38%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.844	88	228596	148.31	ppm	# 30
3) N-nitrosodimethylamine	3.170	42	414509	305.50	ppm	# 37
4) Pyridine	3.202	79	596326	185.52	ppm	# 19
5) Benzaldehyde	5.534	106	412817	155.09	ppm	93
6) Aniline	5.652	93	890215	184.32	ppm	97
8) bis(2-Chloroethyl)ether	5.737	93	528529	157.21	ppm	78
10) Phenol	5.630	94	781504	179.15	ppm	82
11) 2-Chlorophenol	5.775	128	577643	184.61	ppm	80
12) 1,3-Dichlorobenzene	5.946	146	566579	176.65	ppm	97
13) 1,4-Dichlorobenzene	6.026	146	597968	182.46	ppm	96
14) 1,2-Dichlorobenzene	6.192	146	579586	189.64	ppm	98
15) Benzyl alcohol	6.165	108	386231	187.27	ppm	78
16) 2,2'-Oxybis(1-chloropr...	6.326	45	1048750	261.15	ppm	78
17) 2-Methylphenol	6.293	108	530008	189.13	ppm	96
18) Acetophenone	6.459	105	750263	169.57	ppm	96
19) Hexachloroethane	6.566	117	225072	162.14	ppm	87
20) N-Nitroso-di-n-propyla...	6.475	70	392032	171.87	ppm	# 67
21) 3&4-Methylphenol	6.470	108	534960	183.40	ppm	97
24) Nitrobenzene	6.646	77	622089	171.90	ppm	83
25) Isophorone	6.925	82	1086778	164.55	ppm	95
26) 2-Nitrophenol	7.005	139	315215	180.94	ppm	84

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071370.D
Acq On : 23 Jun 2020 4:05 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jun 23 16:58:06 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:33:00 2020
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
27)	2,4-Dimethylphenol	7.069	107	558703	186.47	ppm		94
28)	O,O,O-Triethylphosphor...	7.160	198	234536	168.39	ppm		90
29)	bis(2-Chloroethoxy)met...	7.181	93	650917	157.91	ppm		97
30)	Benzoic Acid	7.208	105	509248m	225.18	ppm		
31)	2,4-Dichlorophenol	7.278	162	462509	192.58	ppm		94
32)	1,2,4-Trichlorobenzene	7.374	180	451987	167.24	ppm		97
34)	Naphthalene	7.459	128	1617864	180.41	ppm		99
35)	4-Chloroaniline	7.534	127	687303	182.71	ppm		92
36)	2,6-Dichlorophenol	7.540	162	449742	183.45	ppm		97
37)	Hexachlorobutadiene	7.609	225	226837	150.44	ppm		98
38)	Caprolactam	7.978	113	184819	185.32	ppm	#	57
39)	4-Chloro-3-methylphenol	8.107	107	478341	183.27	ppm		95
40)	2-Methylnaphthalene	8.267	142	1076778	185.68	ppm		98
41)	1-Methylnaphthalene	8.379	142	1032928	190.13	ppm		98
42)	1,2,4,5-Tetrachloroben...	8.460	216	465425	165.60	ppm		98
44)	Hexachlorocyclopentadiene	8.454	237	276347	194.28	ppm		99
45)	2,4,6-Trichlorophenol	8.599	196	307240	180.46	ppm		100
46)	2,4,5-Trichlorophenol	8.636	196	340155	187.25	ppm		99
48)	1,1'-Biphenyl	8.818	154	1288409	188.41	ppm		99
49)	2-Chloronaphthalene	8.829	162	985180	185.60	ppm		94
50)	2-Nitroaniline	8.957	65	366840	211.95	ppm	#	68
51)	p-Dinitrobenzene	9.128	75	214772	169.17	ppm	#	64
52)	Acenaphthylene	9.315	152	1607770	197.92	ppm		99
53)	Dimethylphthalate	9.203	163	1105697	181.24	ppm		99
54)	m-Dinitrobenzene	9.214	168	204112	192.64	ppm	#	30
55)	2,6-Dinitrotoluene	9.257	165	276132	187.13	ppm		70
56)	o-Dinitrobenzene	9.315	50	233849	266.56	ppm	#	61
57)	Acenaphthene	9.519	153	1037545	193.12	ppm		98
58)	3-Nitroaniline	9.449	138	306081	192.74	ppm		100
59)	2,4-Dinitrophenol	9.567	184	155926	220.99	ppm	#	45
60)	Dibenzofuran	9.727	168	1364487	185.26	ppm		95
61)	2,4-Dinitrotoluene	9.727	165	344922	184.43	ppm		74
62)	4-Nitrophenol	9.652	109	169451	225.48	ppm	#	64
63)	2,3,5,6-Tetrachlorophenol	9.818	232	260523	185.44	ppm		90
64)	2,3,4,6-Tetrachlorophenol	9.872	232	260254	173.53	ppm		89
65)	Fluorene	10.128	166	1087568	189.18	ppm		100
66)	4-Chlorophenyl-phenyle...	10.145	204	529204	183.59	ppm		91
67)	Diethylphthalate	10.038	149	1125649	185.72	ppm		97
68)	Thionazin	10.134	97	226094	158.27	ppm		97
69)	4-Nitroaniline	10.177	138	335101	206.12	ppm		85
71)	4,6-Dinitro-2-methylph...	10.209	198	213402	224.37	ppm		81
72)	n-Nitrosodiphenylamine	10.289	169	988849	261.59	ppm		97
73)	Diphenylamine	10.289	169	988849	223.32	ppm		97
74)	1,2-Diphenylhydrazine	10.332	77	1192123	192.65	ppm		93
76)	Sulfotep	10.503	97	180883	186.85	ppm	#	70
77)	Phorate	10.647	75	639802	186.72	ppm		98
78)	4-Bromophenyl-phenylether	10.722	248	272545	172.50	ppm		86
79)	Hexachlorobenzene	10.770	284	264744	146.52	ppm		79
80)	Dimethoate	10.845	87	422017	206.47	ppm		92
81)	Simazine	10.915	201	190208	245.93	ppm		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071370.D
Acq On : 23 Jun 2020 4:05 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jun 23 16:58:06 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:33:00 2020
Response via : Initial Calibration

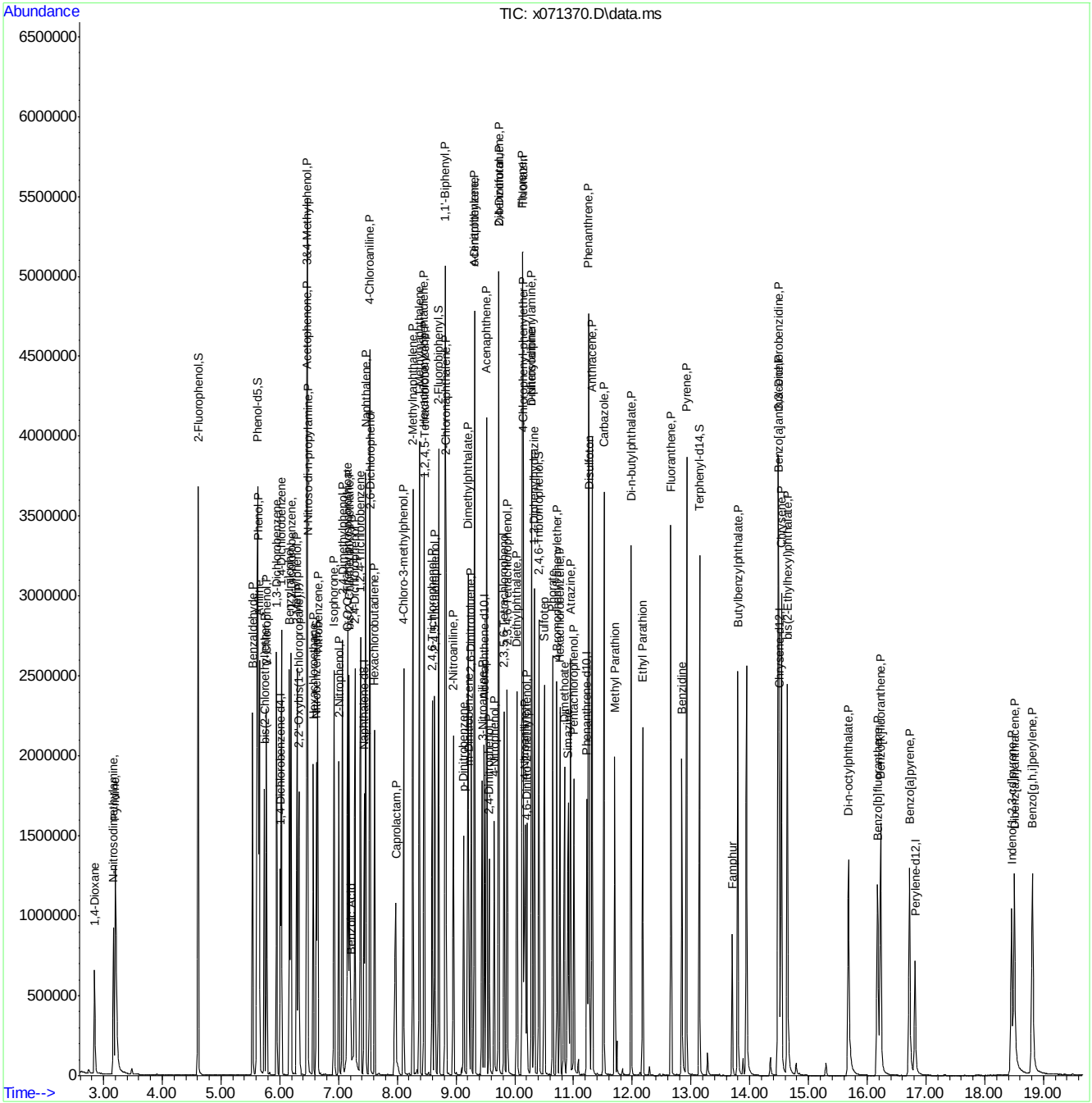
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
82) Atrazine	10.947	200	320374	213.03	ppm		86
83) Pentachlorophenol	11.006	266	181453	200.73	ppm		97
84) Phenanthrene	11.257	178	1573875	207.84	ppm		99
85) Anthracene	11.321	178	1704703	220.37	ppm		98
86) Disulfoton	11.268	88	650007	185.08	ppm		90
87) Carbazole	11.519	167	1494706	216.50	ppm		98
88) Methyl Parathion	11.701	109	362465	210.29	ppm	#	85
89) Di-n-butylphthalate	11.979	149	1744713	198.58	ppm		98
90) Ethyl Parathion	12.177	97	218449	190.77	ppm		91
91) Fluoranthene	12.664	202	1544086	191.86	ppm		95
93) Benzidine	12.846	184	805812	261.26	ppm		97
94) Pyrene	12.926	202	1665026	179.13	ppm		95
96) Famphur	13.701	218	239023	136.47	ppm		91
97) Butylbenzylphthalate	13.798	149	694470	170.40	ppm		91
98) 3,3'-Dichlorobenzidine	14.482	252	436466	178.31	ppm		99
99) Benzo[a]anthracene	14.488	228	1267054	165.57	ppm		99
100) Chrysene	14.541	228	1324468	173.81	ppm		98
101) bis(2-Ethylhexyl)phtha...	14.643	149	961974	181.94	ppm		98
103) Di-n-octylphthalate	15.680	149	1260410	182.63	ppm		94
104) Benzo[b]fluoranthene	16.178	252	869683	161.22	ppm		99
105) Benzo[k]fluoranthene	16.231	252	1058843	178.17	ppm		97
106) Benzo[a]pyrene	16.723	252	831194	153.59	ppm		98
107) Indeno[1,2,3-cd]pyrene	18.456	276	627476	134.03	ppm		94
108) Dibenz[a,h]anthracene	18.504	278	694066	137.24	ppm		91
109) Benzo[g,h,i]perylene	18.815	276	832318	154.79	ppm		94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071370.D
Acq On : 23 Jun 2020 4:05 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jun 23 16:58:06 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:33:00 2020
Response via : Initial Calibration



Manual Integration Approval Summary

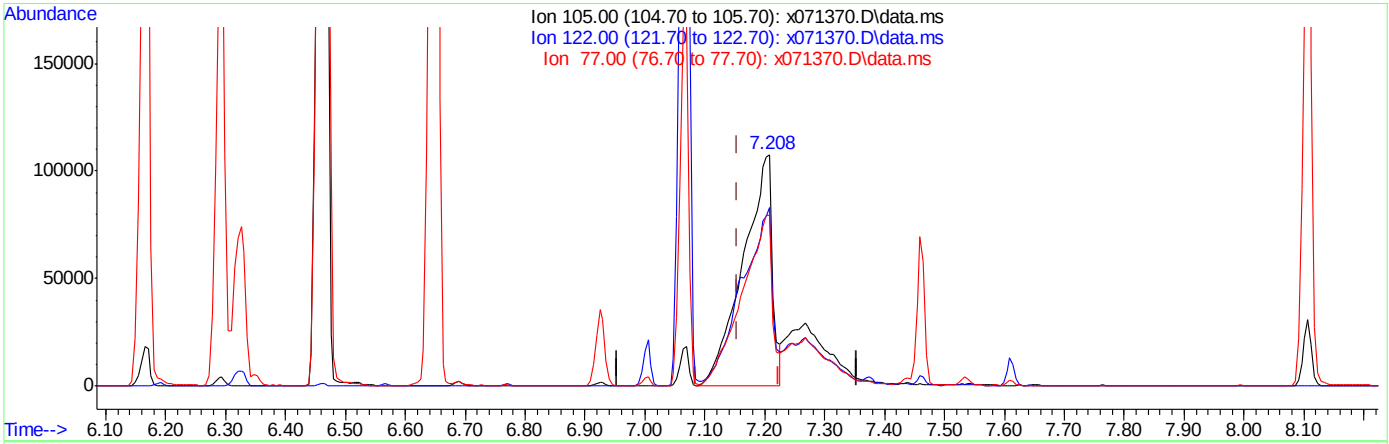
Sample Number:	SX2918-IC2918	**Method:**	EPA 625.1
Lab FileID:	X071370.D	**Analyst approved:**	06/24/20 09:50 Martha Valls
Injection Time:	06/23/20 16:05	**Supervisor approved:**	06/24/20 14:07 Naresh Jiawan

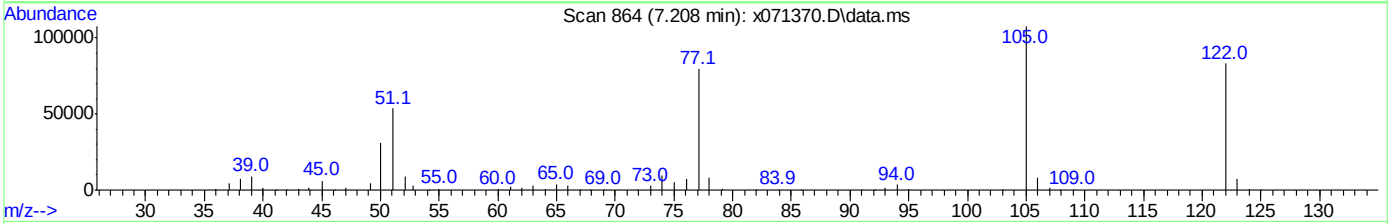
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic Acid	65-85-0		7.21	Split peak

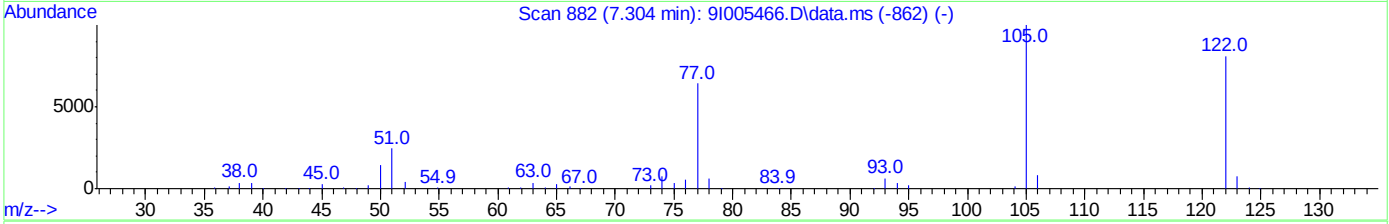
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071370.D
Acq On : 23 Jun 2020 4:05 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jun 23 16:34:49 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:33:00 2020
Response via : Initial Calibration







TIC: x071370.D\data.ms

(30) Benzoic Acid

7.208min (+0.054) 160.19ppm

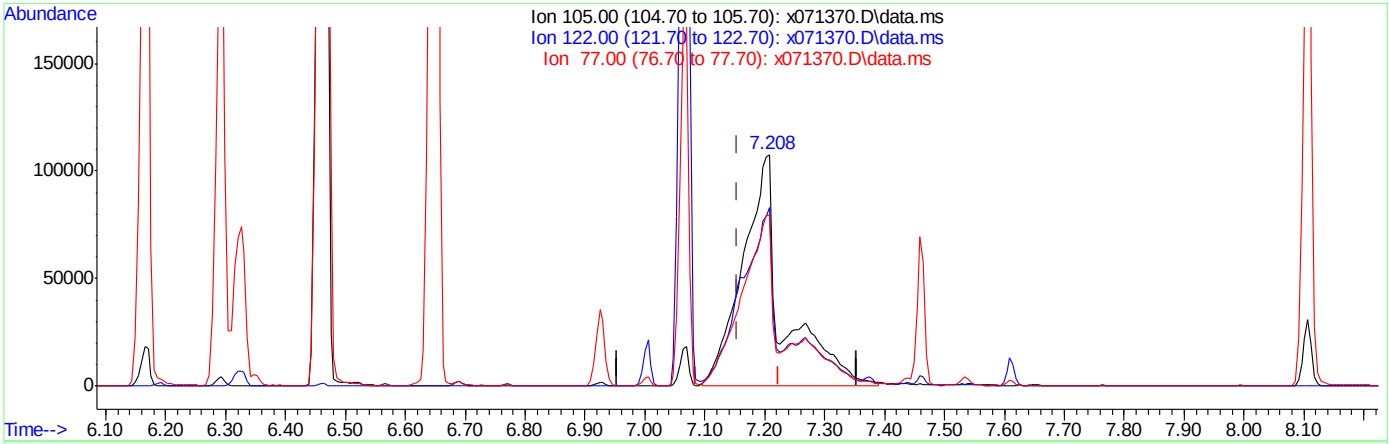
response 362267

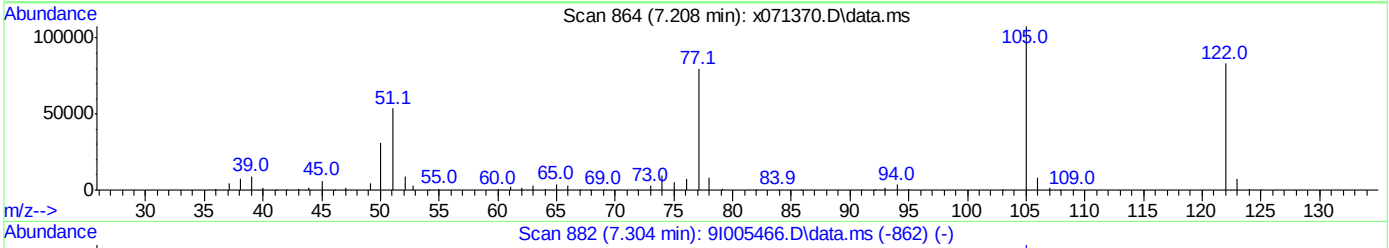
Ion	Exp%	Act%
105.00	100	100
122.00	81.20	75.13
77.00	64.10	72.53
0.00	0.00	0.00

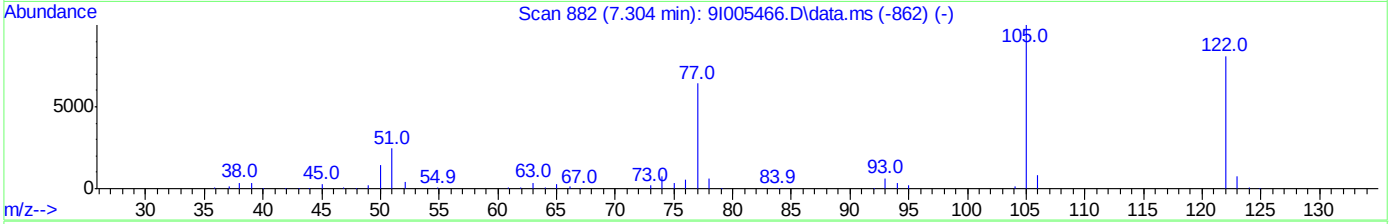
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071370.D
Acq On : 23 Jun 2020 4:05 pm
Operator : marthav
Sample : ic2918-75 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jun 23 16:34:49 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:33:00 2020
Response via : Initial Calibration







TIC: x071370.D\data.ms

(30) Benzoic Acid

7.208min (+0.054) 225.18ppm m

response 509248

Ion	Exp%	Act%
105.00	100	100
122.00	81.20	77.24
77.00	64.10	73.76
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 06/24/20 14:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071371.D
Acq On : 23 Jun 2020 4:31 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jun 23 16:58:19 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:33:00 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.010	152	196466	40.00	ppm	0.00
22) Naphthalene-d8	7.438	136	851386	40.00	ppm	0.00
43) Acenaphthene-d10	9.481	164	445105	40.00	ppm	0.00
70) Phenanthrene-d10	11.230	188	723575	40.00	ppm	0.00
92) Chrysene-d12	14.504	240	534252	40.00	ppm	0.01
102) Perylene-d12	16.820	264	385695	40.00	ppm	0.01
110) 1,4-Dichlorobenzene-d4A	0.000	152	0m	40.00	ppm	-6.00
120) Naphthalene-d8A	0.000	136	0m	40.00	ppm	-7.43
127) Acenaphthene-d10A	0.000	164	0m	40.00	ppm	-9.48
136) Phenanthrene-d10A	0.000	188	0m	40.00	ppm	-11.22
146) Chrysene-d12A	0.000	240	0m	40.00	ppm	-14.49
153) Perylene-d12A	0.000	264	0m	40.00	ppm	-16.82
System Monitoring Compounds						
7) 2-Fluorophenol	4.614	112	1447342	427.42	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 427.42%#			
9) Phenol-d5	5.625	99	1801216	493.97	ppm	0.02
Spiked Amount 100.000	Range 10 - 50		Recovery = 493.97%#			
23) Nitrobenzene-d5	6.631	82	922012	225.52	ppm	0.01
Spiked Amount 50.000	Range 42 - 108		Recovery = 451.04%#			
47) 2-Fluorobiphenyl	8.706	172	1657926	247.68	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 495.36%#			
75) 2,4,6-Tribromophenol	10.417	330	382386	399.45	ppm	0.02
Spiked Amount 100.000	Range 33 - 118		Recovery = 399.45%#			
95) Terphenyl-d14	13.151	244	1577008	220.28	ppm	0.01
Spiked Amount 50.000	Range 39 - 121		Recovery = 440.56%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.844	88	325295	197.85	ppm	# 34
3) N-nitrosodimethylamine	3.175	42	601707	415.75	ppm	# 38
4) Pyridine	3.202	79	878586	256.24	ppm	# 23
5) Benzaldehyde	5.539	106	588752	207.36	ppm	94
6) Aniline	5.657	93	1274273	247.34	ppm	99
8) bis(2-Chloroethyl)ether	5.737	93	756907	211.06	ppm	77
10) Phenol	5.641	94	1097312	235.81	ppm	73
11) 2-Chlorophenol	5.780	128	831993	249.27	ppm	85
12) 1,3-Dichlorobenzene	5.946	146	816430	238.63	ppm	96
13) 1,4-Dichlorobenzene	6.031	146	854881	244.55	ppm	98
14) 1,2-Dichlorobenzene	6.192	146	831789	255.14	ppm	97
15) Benzyl alcohol	6.171	108	555751	252.62	ppm	79
16) 2,2'-Oxybis(1-chloropr...	6.331	45	1427748	333.30	ppm	80
17) 2-Methylphenol	6.294	108	768068	256.94	ppm	96
18) Acetophenone	6.465	105	1068591	226.42	ppm	97
19) Hexachloroethane	6.566	117	328380	221.77	ppm	86
20) N-Nitroso-di-n-propyla...	6.481	70	551620	226.71	ppm	# 68
21) 3&4-Methylphenol	6.475	108	747847	240.35	ppm	97
24) Nitrobenzene	6.652	77	897664	231.79	ppm	85
25) Isophorone	6.930	82	1576566	223.07	ppm	95
26) 2-Nitrophenol	7.005	139	468000	251.04	ppm	80

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071371.D
Acq On : 23 Jun 2020 4:31 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jun 23 16:58:19 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:33:00 2020
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
27)	2,4-Dimethylphenol	7.074	107	807736	251.93	ppm		93
28)	O,O,O-Triethylphosphor...	7.165	198	345847	232.04	ppm		94
29)	bis(2-Chloroethoxy)met...	7.187	93	909033	206.07	ppm		97
30)	Benzoic Acid	7.230	105	746921m	308.64	ppm		
31)	2,4-Dichlorophenol	7.283	162	676134	263.08	ppm		95
32)	1,2,4-Trichlorobenzene	7.374	180	664863	229.89	ppm		96
34)	Naphthalene	7.465	128	2311700	240.88	ppm		99
35)	4-Chloroaniline	7.540	127	963011	239.23	ppm		94
36)	2,6-Dichlorophenol	7.545	162	646414	246.39	ppm		98
37)	Hexachlorobutadiene	7.615	225	332067	205.80	ppm		99
38)	Caprolactam	8.000	113	270490m	253.45	ppm		
39)	4-Chloro-3-methylphenol	8.112	107	697931	249.88	ppm		93
40)	2-Methylnaphthalene	8.267	142	1549268	249.65	ppm		98
41)	1-Methylnaphthalene	8.380	142	1478955	254.39	ppm		98
42)	1,2,4,5-Tetrachloroben...	8.465	216	664043	220.79	ppm		98
44)	Hexachlorocyclopentadiene	8.454	237	411690	269.98	ppm		99
45)	2,4,6-Trichlorophenol	8.599	196	446173	244.45	ppm		97
46)	2,4,5-Trichlorophenol	8.642	196	496266	254.84	ppm		98
48)	1,1'-Biphenyl	8.823	154	1808755	246.74	ppm		99
49)	2-Chloronaphthalene	8.834	162	1379237	242.38	ppm		95
50)	2-Nitroaniline	8.963	65	519455	279.96	ppm	#	71
51)	p-Dinitrobenzene	9.134	75	313814	230.58	ppm	#	68
52)	Acenaphthylene	9.316	152	2239279	257.14	ppm		100
53)	Dimethylphthalate	9.209	163	1575597	240.91	ppm		99
54)	m-Dinitrobenzene	9.225	168	292540	257.54	ppm	#	46
55)	2,6-Dinitrotoluene	9.262	165	394575	249.43	ppm		71
56)	o-Dinitrobenzene	9.321	50	322363	342.76	ppm	#	60
57)	Acenaphthene	9.524	153	1457637	253.08	ppm		97
58)	3-Nitroaniline	9.455	138	435862	256.02	ppm		97
59)	2,4-Dinitrophenol	9.572	184	232415	307.26	ppm	#	57
60)	Dibenzofuran	9.727	168	1913807	242.39	ppm		93
61)	2,4-Dinitrotoluene	9.733	165	494120	246.45	ppm		78
62)	4-Nitrophenol	9.663	109	242809	301.39	ppm	#	67
63)	2,3,5,6-Tetrachlorophenol	9.824	232	377511	250.66	ppm		93
64)	2,3,4,6-Tetrachlorophenol	9.877	232	379105	235.79	ppm		92
65)	Fluorene	10.134	166	1503962	244.03	ppm		99
66)	4-Chlorophenyl-phenyle...	10.145	204	740272	239.55	ppm		91
67)	Diethylphthalate	10.043	149	1603423	246.77	ppm		97
68)	Thionazin	10.139	97	311496	203.40	ppm		98
69)	4-Nitroaniline	10.193	138	473902	271.90	ppm		85
71)	4,6-Dinitro-2-methylph...	10.214	198	312932	312.55	ppm		89
72)	n-Nitrosodiphenylamine	10.294	169	1419678	356.77	ppm		96
73)	Diphenylamine	10.294	169	1419678	304.57	ppm		96
74)	1,2-Diphenylhydrazine	10.337	77	1669778	256.34	ppm		96
76)	Sulfotep	10.508	97	252251	247.54	ppm	#	81
77)	Phorate	10.653	75	905489	251.03	ppm		99
78)	4-Bromophenyl-phenylether	10.722	248	397568	239.04	ppm	#	82
79)	Hexachlorobenzene	10.776	284	392614	206.42	ppm		82
80)	Dimethoate	10.851	87	595879	276.95	ppm		94
81)	Simazine	10.925	201	275623	338.53	ppm		92

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071371.D
Acq On : 23 Jun 2020 4:31 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jun 23 16:58:19 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:33:00 2020
Response via : Initial Calibration

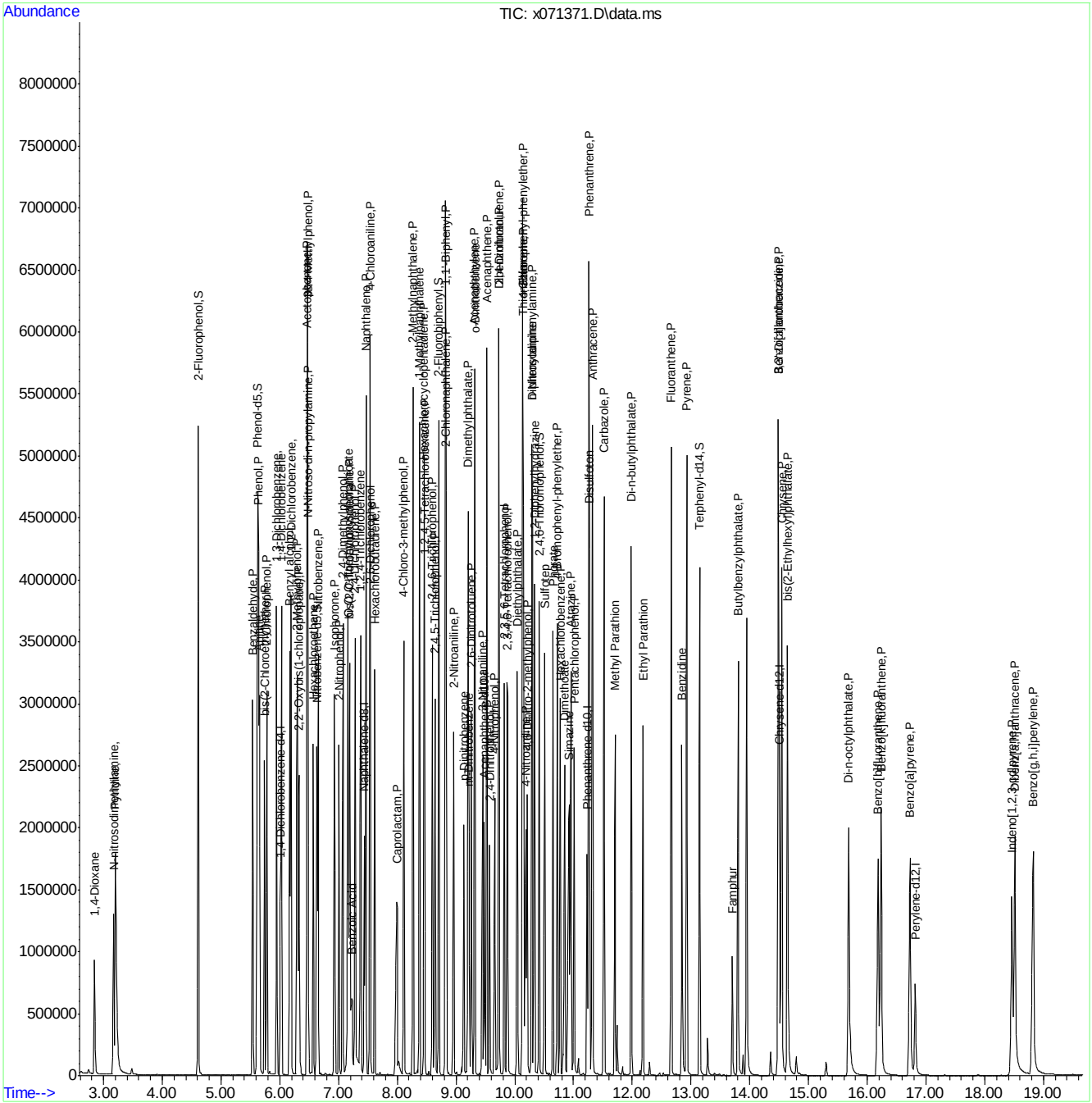
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
82)	Atrazine	10.958	200	508273	321.06	ppm		93
83)	Pentachlorophenol	11.011	266	264451	277.91	ppm		98
84)	Phenanthrene	11.262	178	2183315	273.89	ppm		99
85)	Anthracene	11.327	178	2366894	290.66	ppm		98
86)	Disulfoton	11.273	88	870469	235.45	ppm		90
87)	Carbazole	11.525	167	2129541	293.02	ppm		98
88)	Methyl Parathion	11.706	109	508609	280.32	ppm	#	88
89)	Di-n-butylphthalate	11.985	149	2467839	266.82	ppm		98
90)	Ethyl Parathion	12.182	97	314399	260.82	ppm		93
91)	Fluoranthene	12.664	202	2217272	261.72	ppm		97
93)	Benzidine	12.846	184	1108204	345.33	ppm		99
94)	Pyrene	12.931	202	2375247	245.60	ppm		95
96)	Famphur	13.707	218	284954	156.37	ppm		95
97)	Butylbenzylphthalate	13.803	149	989049	233.25	ppm		95
98)	3,3'-Dichlorobenzidine	14.488	252	617680	242.53	ppm		97
99)	Benzo[a]anthracene	14.488	228	1785259	224.22	ppm		100
100)	Chrysene	14.547	228	1876003	236.62	ppm		98
101)	bis(2-Ethylhexyl)phtha...	14.643	149	1377435	250.38	ppm		98
103)	Di-n-octylphthalate	15.686	149	1860855	256.69	ppm		94
104)	Benzo[b]fluoranthene	16.183	252	1257505	221.92	ppm		98
105)	Benzo[k]fluoranthene	16.242	252	1533403	245.63	ppm		97
106)	Benzo[a]pyrene	16.734	252	1216893	214.05	ppm		99
107)	Indeno[1,2,3-cd]pyrene	18.467	276	959240	195.06	ppm		95
108)	Dibenz[a,h]anthracene	18.515	278	1148615	216.21	ppm		94
109)	Benzo[g,h,i]perylene	18.825	276	1267870	224.47	ppm		96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071371.D
Acq On : 23 Jun 2020 4:31 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jun 23 16:58:19 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:33:00 2020
Response via : Initial Calibration



Manual Integration Approval Summary

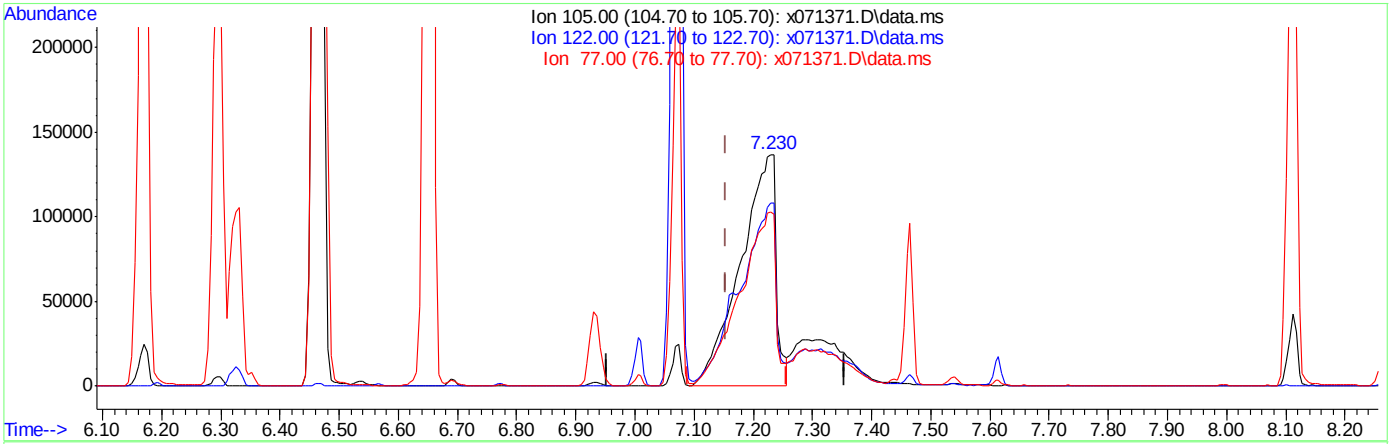
Sample Number:	SX2918-IC2918	**Method:**	EPA 625.1
Lab FileID:	X071371.D	**Analyst approved:**	06/24/20 09:50 Martha Valls
Injection Time:	06/23/20 16:31	**Supervisor approved:**	06/24/20 14:07 Naresh Jiawan

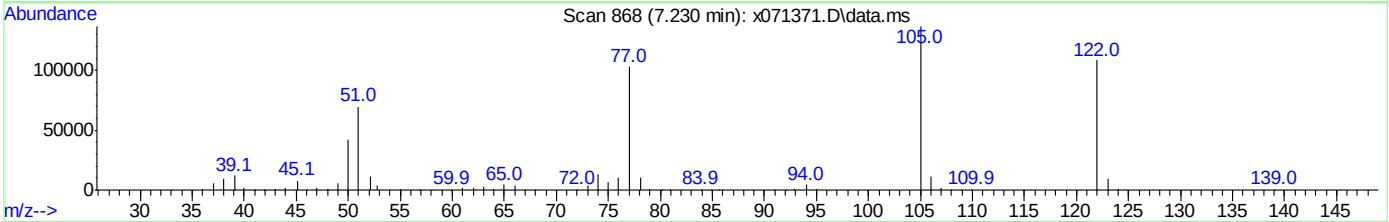
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic Acid	65-85-0		7.23	Split peak
Caprolactam	105-60-2		8.00	Split peak

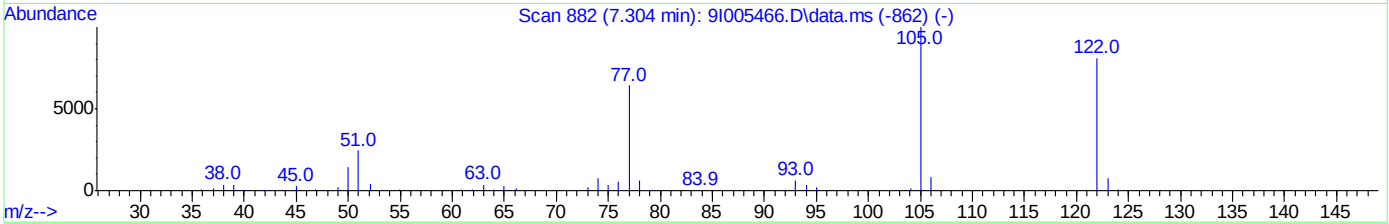
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071371.D
Acq On : 23 Jun 2020 4:31 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jun 23 16:51:36 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:33:00 2020
Response via : Initial Calibration







TIC: x071371.D\data.ms

(30) Benzoic Acid

7.230min (+0.075) 234.38ppm

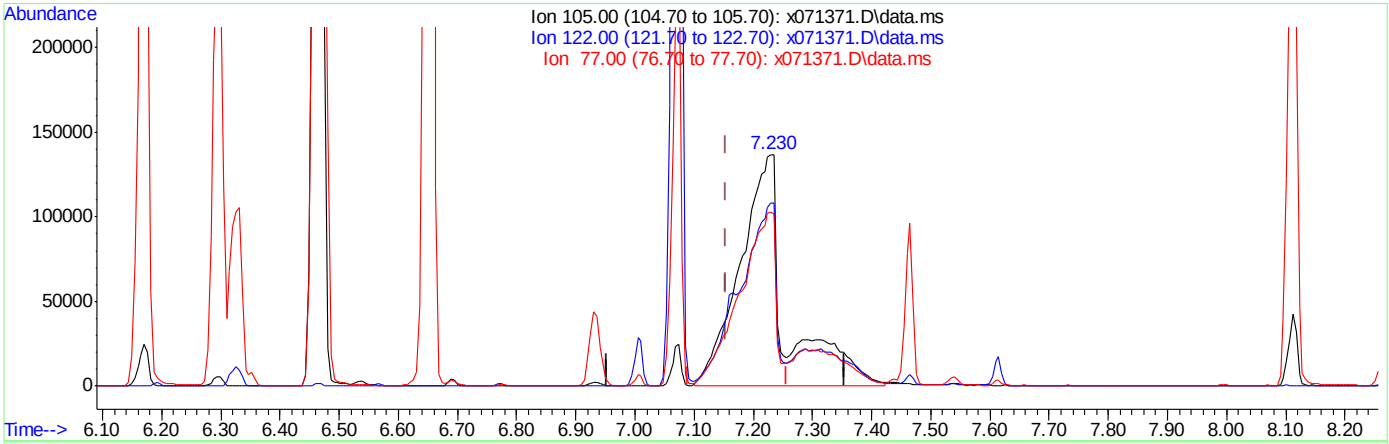
response 567202

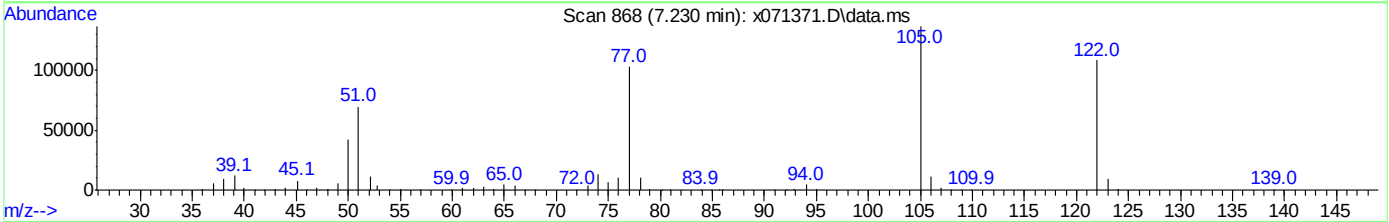
Ion	Exp%	Act%
105.00	100	100
122.00	81.20	77.79
77.00	64.10	74.35
0.00	0.00	0.00

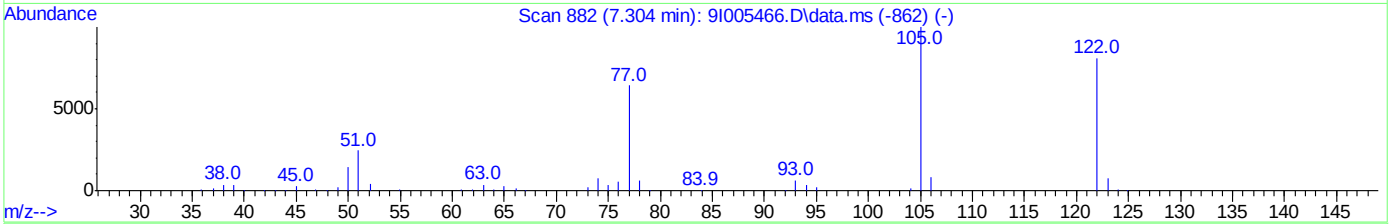
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071371.D
Acq On : 23 Jun 2020 4:31 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jun 23 16:51:36 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:33:00 2020
Response via : Initial Calibration







TIC: x071371.D\data.ms

(30) Benzoic Acid

7.230min (+0.075) 308.64ppm m

response 746921

Ion	Exp%	Act%
105.00	100	100
122.00	81.20	79.27
77.00	64.10	75.09
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071371.D
Acq On : 23 Jun 2020 4:31 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jun 23 16:51:36 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
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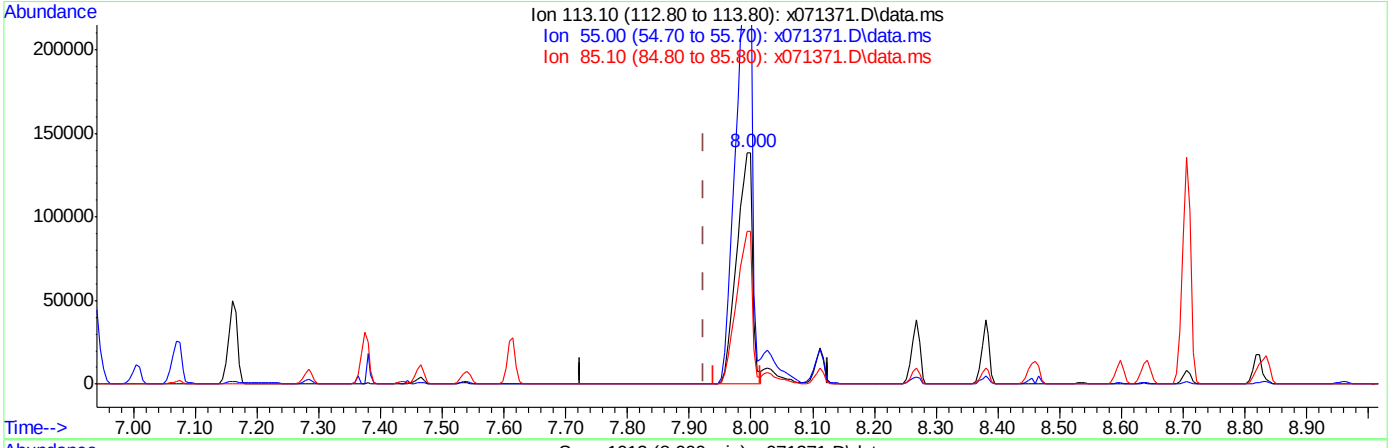
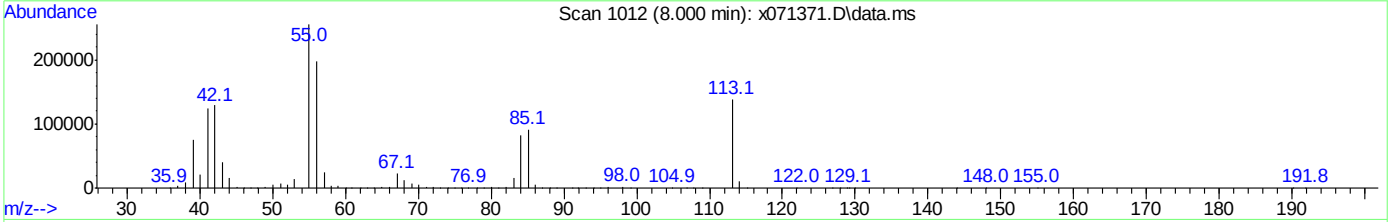
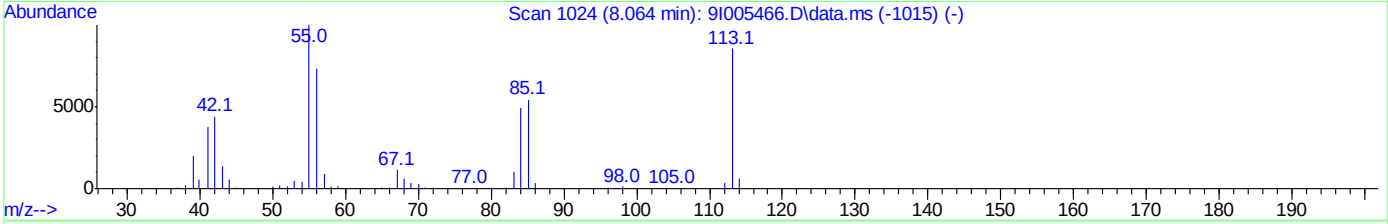






TIC: x071371.D\data.ms

(38) Caprolactam (P)

8.000min (+0.075) 235.97ppm

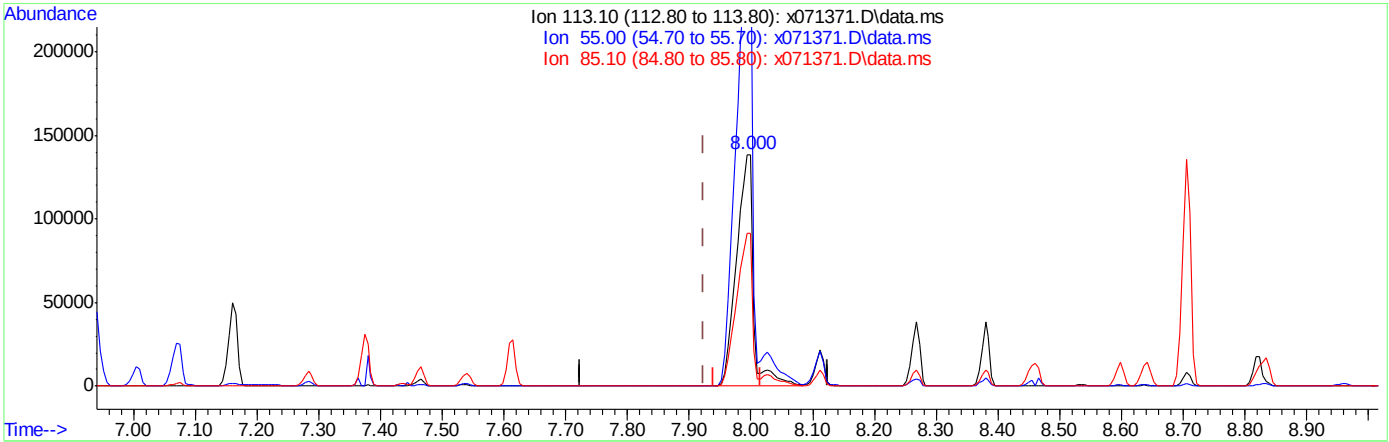
response 251829

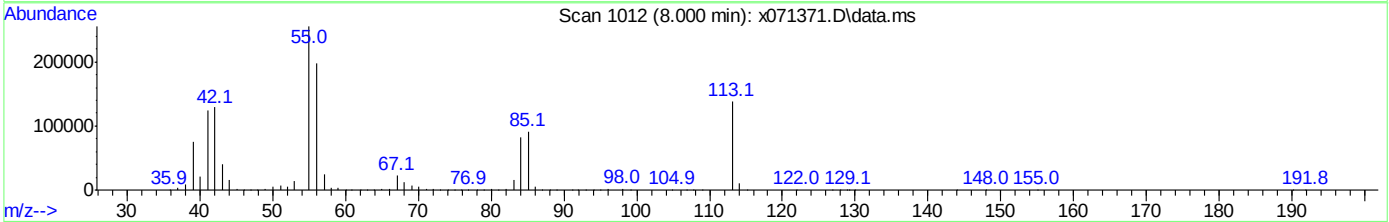
Ion	Exp%	Act%
113.10	100	100
55.00	117.00	183.66#
85.10	63.40	66.16
0.00	0.00	0.00

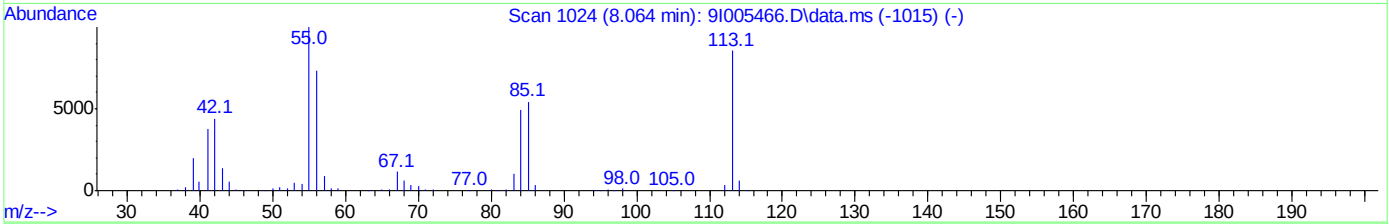
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071371.D
Acq On : 23 Jun 2020 4:31 pm
Operator : marthav
Sample : ic2918-100 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jun 23 16:51:36 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 14:33:00 2020
Response via : Initial Calibration







TIC: x071371.D\data.ms

(38) Caprolactam (P)

8.000min (+0.075) 253.45ppm m

response 270490

Ion	Exp%	Act%
113.10	100	100
55.00	117.00	184.25#
85.10	63.40	66.06
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071372.D
Acq On : 23 Jun 2020 4:58 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jun 24 13:02:09 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.010	152	183379	40.00	ppm	0.00
22) Naphthalene-d8	7.433	136	761641	40.00	ppm	0.00
43) Acenaphthene-d10	9.476	164	366243	40.00	ppm	0.00
70) Phenanthrene-d10	11.225	188	590804	40.00	ppm	0.00
92) Chrysene-d12	14.493	240	381234	40.00	ppm	0.00
102) Perylene-d12	16.809	264	308770	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	6.010	152	183379	40.00	ppm	0.00
120) Naphthalene-d8A	7.433	136	761641	40.00	ppm	0.00
127) Acenaphthene-d10A	9.476	164	366243	40.00	ppm	0.00
136) Phenanthrene-d10A	11.225	188	590804	40.00	ppm	0.00
146) Chrysene-d12A	14.493	240	381234	40.00	ppm	0.00
153) Perylene-d12A	16.809	264	309063	40.00	ppm	-0.02
System Monitoring Compounds						
7) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#		
9) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#		
23) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#		
47) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#		
75) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#		
95) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#		
Target Compounds						Qvalue
2) 1,4-Dioxane	2.854	88	149489	47.57	ppm	98
3) N-nitrosodimethylamine	3.175	42	258160	46.26	ppm	96
5) Benzaldehyde	5.534	106	205047	37.51	ppm	98
8) bis(2-Chloroethyl)ether	5.727	93	288499	42.88	ppm	97
10) Phenol	5.625	94	378450	40.78	ppm	97
11) 2-Chlorophenol	5.775	128	317439	45.24	ppm	98
12) 1,3-Dichlorobenzene	5.946	146	347468	47.67	ppm	98
13) 1,4-Dichlorobenzene	6.026	146	369369	47.89	ppm	99
14) 1,2-Dichlorobenzene	6.187	146	341657	46.63	ppm	99
16) 2,2'-Oxybis(1-chloropr...	6.326	45	661107	46.76	ppm	99
17) 2-Methylphenol	6.288	108	296147	44.37	ppm	99
18) Acetophenone	6.454	105	448943	45.45	ppm	99
19) Hexachloroethane	6.566	117	144318	49.84	ppm	98
20) N-Nitroso-di-n-propyla...	6.465	70	236671	45.37	ppm	98
21) 3&4-Methylphenol	6.465	108	640525	92.84	ppm	98
24) Nitrobenzene	6.641	77	359823	46.24	ppm	98
25) Isophorone	6.919	82	588290	42.34	ppm	99
26) 2-Nitrophenol	7.000	139	177715	48.03	ppm	93
27) 2,4-Dimethylphenol	7.064	107	297230	43.26	ppm	99
29) bis(2-Chloroethoxy)met...	7.176	93	377117	46.39	ppm	100
30) Benzoic Acid	7.235	105	562871	85.51	ppm	94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071372.D
Acq On : 23 Jun 2020 4:58 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jun 24 13:02:09 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration

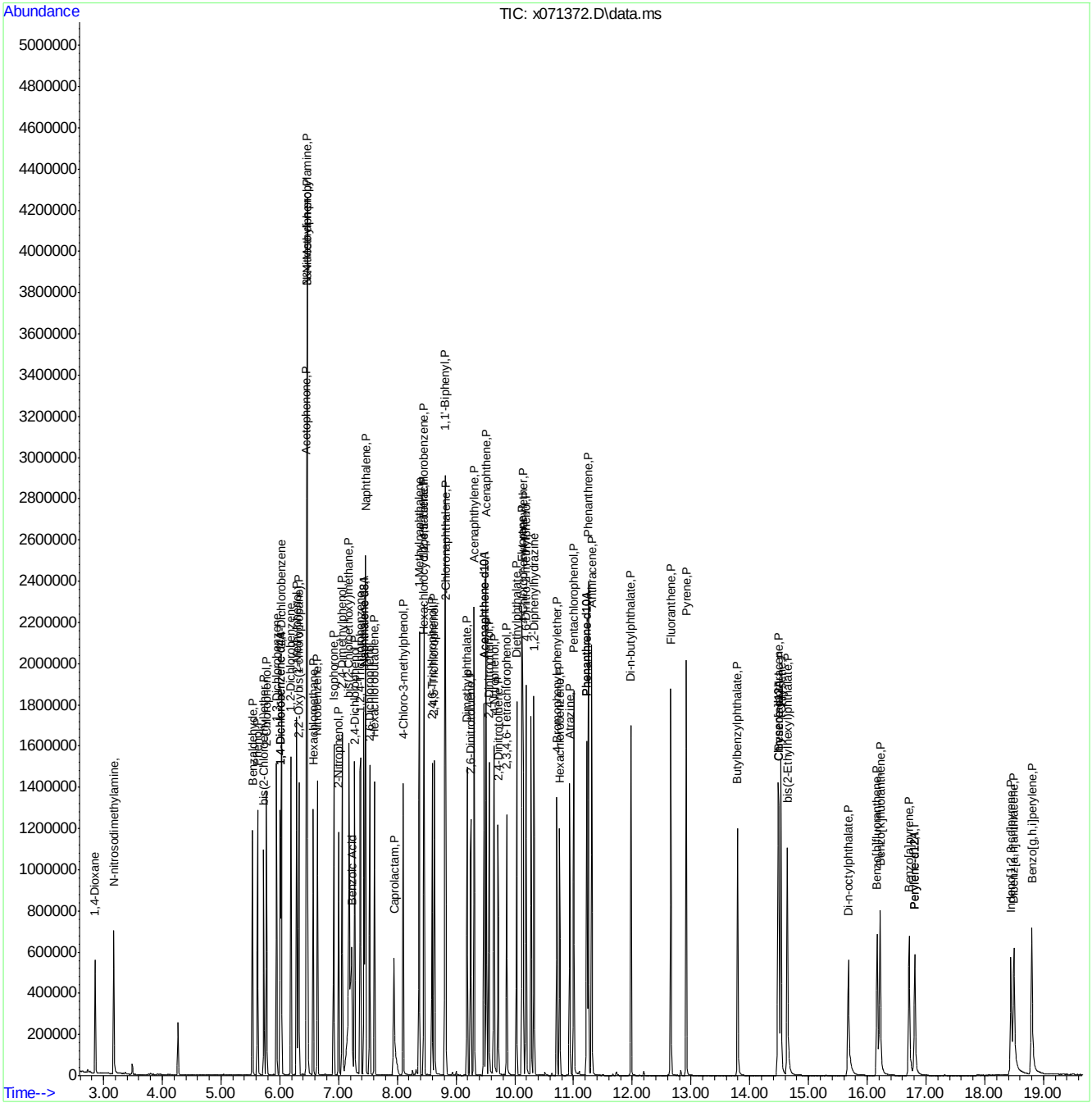
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
31)	2,4-Dichlorophenol	7.278	162	269185	48.60	ppm	98
32)	1,2,4-Trichlorobenzene	7.374	180	272003	48.06	ppm	97
34)	Naphthalene	7.460	128	959832	46.48	ppm	100
36)	2,6-Dichlorophenol	7.534	162	263049	46.58	ppm	98
37)	Hexachlorobutadiene	7.609	225	137064	49.11	ppm	98
38)	Caprolactam	7.946	113	96386	41.94	ppm	98
39)	4-Chloro-3-methylphenol	8.101	107	257540	43.61	ppm	97
41)	1-Methylnaphthalene	8.374	142	543287	41.55	ppm	98
42)	1,2,4,5-Tetrachloroben...	8.454	216	249473	43.92	ppm	98
44)	Hexachlorocyclopentadiene	8.449	237	140580	48.13	ppm	99
45)	2,4,6-Trichlorophenol	8.593	196	172067	51.18	ppm	100
46)	2,4,5-Trichlorophenol	8.631	196	193062	52.32	ppm	98
48)	1,1'-Biphenyl	8.813	154	703618	47.05	ppm	100
49)	2-Chloronaphthalene	8.829	162	568344	50.63	ppm	99
52)	Acenaphthylene	9.310	152	937291	51.24	ppm	99
53)	Dimethylphthalate	9.193	163	607393	47.01	ppm	100
55)	2,6-Dinitrotoluene	9.251	165	137746	45.17	ppm	93
57)	Acenaphthene	9.513	153	574692	47.24	ppm	98
59)	2,4-Dinitrophenol	9.562	184	180349	93.33	ppm	98
61)	2,4-Dinitrotoluene	9.717	165	191936	49.37	ppm	86
62)	4-Nitrophenol	9.652	109	180279	96.19	ppm	93
64)	2,3,4,6-Tetrachlorophenol	9.866	232	128385	45.10	ppm	95
65)	Fluorene	10.123	166	615161	48.56	ppm	99
66)	4-Chlorophenyl-phenyle...	10.139	204	303003	49.55	ppm	93
67)	Diethylphthalate	10.032	149	616706	47.79	ppm	99
71)	4,6-Dinitro-2-methylph...	10.193	198	241924	94.07	ppm	80
74)	1,2-Diphenylhydrazine	10.326	77	633167	47.82	ppm	98
78)	4-Bromophenyl-phenylether	10.717	248	140300	49.46	ppm	97
79)	Hexachlorobenzene	10.765	284	129727	45.84	ppm	97
82)	Atrazine	10.936	200	149174	43.24	ppm	96
83)	Pentachlorophenol	11.006	266	190511	89.05	ppm	99
84)	Phenanthrene	11.252	178	850710	47.65	ppm	99
85)	Anthracene	11.316	178	870452	46.78	ppm	100
89)	Di-n-butylphthalate	11.974	149	903668	49.31	ppm	99
91)	Fluoranthene	12.658	202	758618	45.80	ppm	100
94)	Pyrene	12.921	202	791178	49.98	ppm	99
97)	Butylbenzylphthalate	13.792	149	336762	50.95	ppm	98
99)	Benzo[a]anthracene	14.482	228	569609	47.54	ppm	99
100)	Chrysene	14.530	228	626698	49.11	ppm	99
101)	bis(2-Ethylhexyl)phtha...	14.643	149	456979	50.76	ppm	98
103)	Di-n-octylphthalate	15.680	149	563435	46.20	ppm	99
104)	Benzo[b]fluoranthene	16.167	252	436889	47.85	ppm	99
105)	Benzo[k]fluoranthene	16.221	252	523305	47.74	ppm	99
106)	Benzo[a]pyrene	16.713	252	423489	48.31	ppm	99
107)	Indeno[1,2,3-cd]pyrene	18.446	276	310730	51.10	ppm	99
108)	Dibenz[a,h]anthracene	18.499	278	352524	50.72	ppm	100
109)	Benzo[g,h,i]perylene	18.804	276	446029	51.81	ppm	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071372.D
Acq On : 23 Jun 2020 4:58 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jun 24 13:02:09 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071373.D
Acq On : 23 Jun 2020 5:25 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jun 23 19:01:20 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

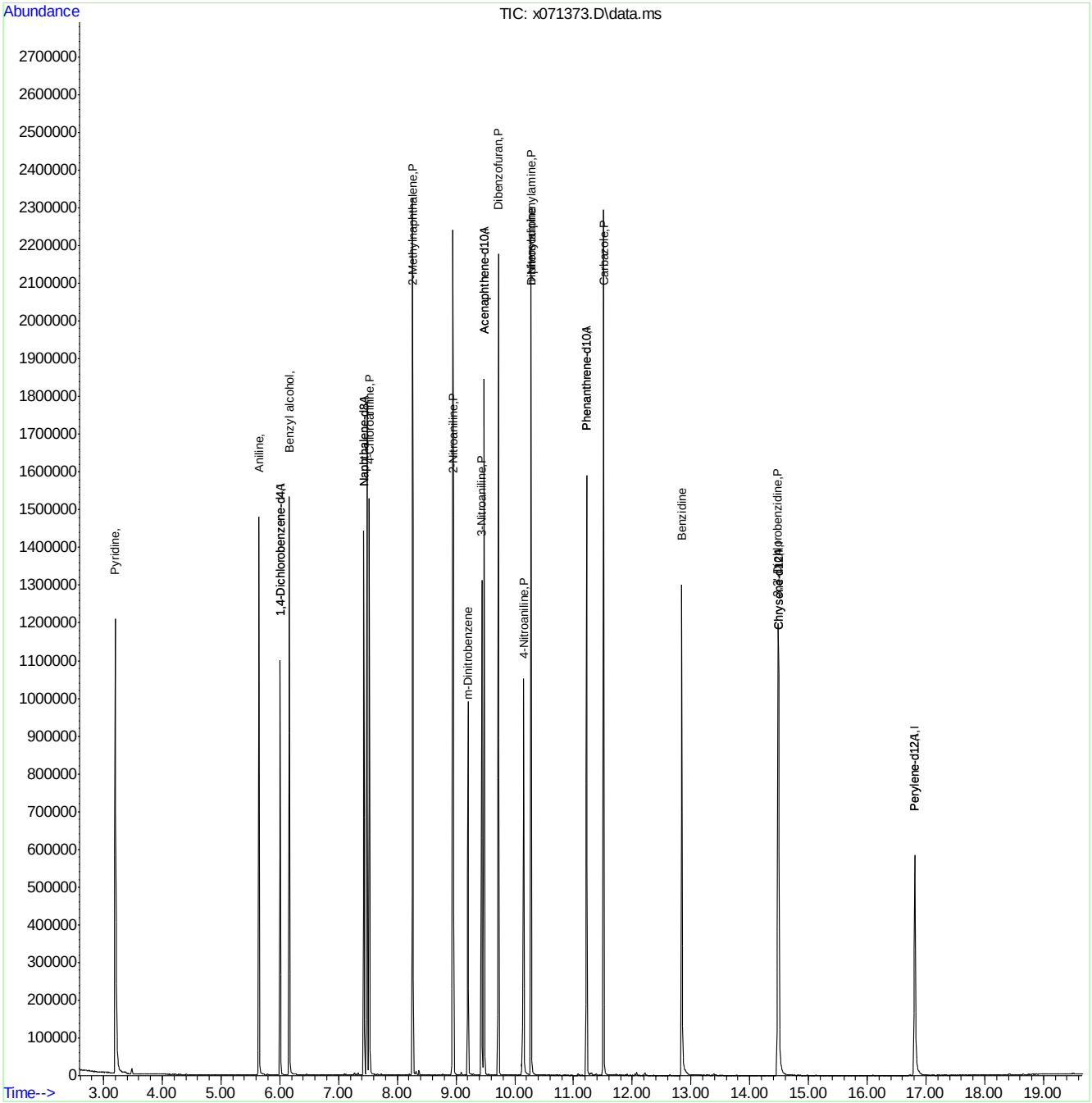
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.005	152	150227	40.00	ppm	0.00
22) Naphthalene-d8	7.433	136	615206	40.00	ppm	0.00
43) Acenaphthene-d10	9.476	164	365093	40.00	ppm	0.00
70) Phenanthrene-d10	11.219	188	599891	40.00	ppm	0.00
92) Chrysene-d12	14.493	240	424744	40.00	ppm	0.00
102) Perylene-d12	16.809	264	319412	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	6.005	152	150227	40.00	ppm	0.00
120) Naphthalene-d8A	7.433	136	615206	40.00	ppm	0.00
127) Acenaphthene-d10A	9.476	164	365093	40.00	ppm	0.00
136) Phenanthrene-d10A	11.219	188	599891	40.00	ppm	0.00
146) Chrysene-d12A	14.493	240	424744	40.00	ppm	0.00
153) Perylene-d12A	16.809	264	319412	40.00	ppm	-0.02
System Monitoring Compounds						
7) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#		
9) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#		
23) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#		
47) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#		
75) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#		
95) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#		
Target Compounds						Qvalue
4) Pyridine	3.196	79	390264	62.31	ppm	99
6) Aniline	5.646	93	431423	48.31	ppm	74
15) Benzyl alcohol	6.160	108	207097	52.06	ppm	94
35) 4-Chloroaniline	7.529	127	402810	57.18	ppm	98
40) 2-Methylnaphthalene	8.262	142	597160	54.13	ppm	99
50) 2-Nitroaniline	8.957	65	257908	62.60	ppm	94
54) m-Dinitrobenzene	9.208	168	111952	52.16	ppm	84
58) 3-Nitroaniline	9.438	138	189950	56.80	ppm	95
60) Dibenzofuran	9.722	168	826121	51.04	ppm	99
69) 4-Nitroaniline	10.155	138	182518	49.05	ppm	97
72) n-Nitrosodiphenylamine	10.278	169	512961	55.03	ppm	99
73) Diphenylamine	10.278	169	512961	46.89	ppm	99
87) Carbazole	11.514	167	881162	52.85	ppm	99
93) Benzidine	12.840	184	485848	57.66	ppm	98
98) 3,3'-Dichlorobenzidine	14.477	252	205960	46.38	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071373.D
Acq On : 23 Jun 2020 5:25 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jun 23 19:01:20 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071374.D
Acq On : 23 Jun 2020 5:51 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jun 24 09:47:41 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 09:47:01 2020
Response via : Initial Calibration

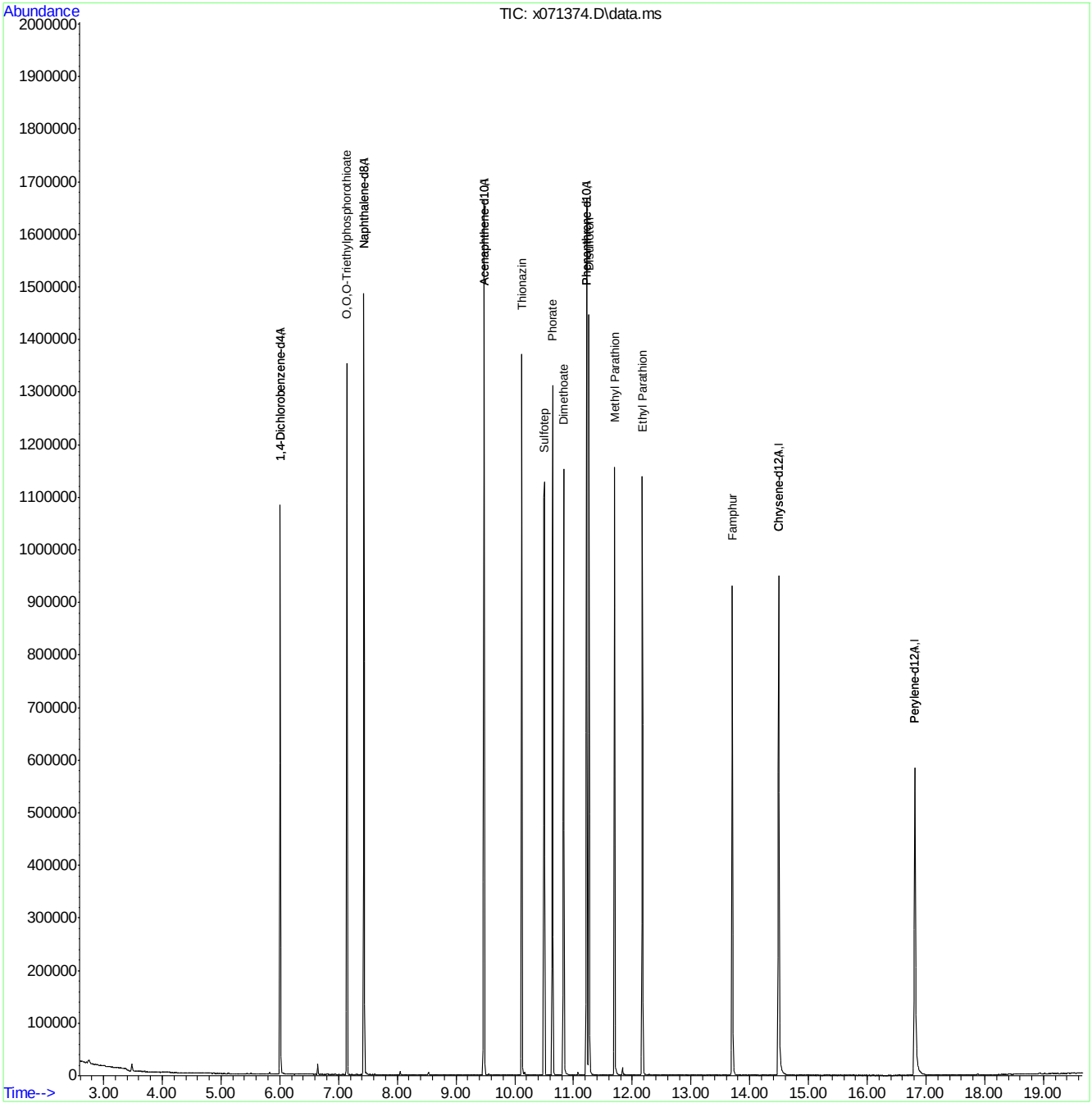
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.005	152	148473	40.00	ppm	0.00
22) Naphthalene-d8	7.433	136	622145	40.00	ppm	0.00
43) Acenaphthene-d10	9.476	164	318777	40.00	ppm	0.00
70) Phenanthrene-d10	11.225	188	611399	40.00	ppm	0.00
92) Chrysene-d12	14.493	240	410353	40.00	ppm	0.00
102) Perylene-d12	16.809	264	324234	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	6.005	152	148473	40.00	ppm	0.00
120) Naphthalene-d8A	7.433	136	622145	40.00	ppm	0.00
127) Acenaphthene-d10A	9.476	164	318777	40.00	ppm	0.00
136) Phenanthrene-d10A	11.225	188	611399	40.00	ppm	0.00
146) Chrysene-d12A	14.493	240	410353	40.00	ppm	0.00
153) Perylene-d12A	16.809	264	324958	40.00	ppm	-0.02
System Monitoring Compounds						
7) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#		
9) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#		
23) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#		
47) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#		
75) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#		
95) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#		
Target Compounds						Qvalue
28) O,O,O-Triethylphosphor...	7.144	198	105879	44.45	ppm	83
68) Thionazin	10.118	97	120853	50.65	ppm	97
76) Sulfotep	10.498	97	86642	43.01	ppm	81
77) Phorate	10.642	75	319548	45.28	ppm	100
80) Dimethoate	10.835	87	214899	43.90	ppm	97
86) Disulfoton	11.262	88	274405	37.15	ppm	98
88) Methyl Parathion	11.701	109	189499	45.13	ppm	99
90) Ethyl Parathion	12.172	97	110890	45.60	ppm	99
96) Famphur	13.701	218	254343	81.91	ppm	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071374.D
Acq On : 23 Jun 2020 5:51 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jun 24 09:47:41 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 09:47:01 2020
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 06/24/20 14:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071375.D
Acq On : 23 Jun 2020 6:17 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jun 23 19:09:37 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.005	152	172015	40.00	ppm	0.00
22) Naphthalene-d8	7.433	136	793987	40.00	ppm	0.00
43) Acenaphthene-d10	9.476	164	393550	40.00	ppm	0.00
70) Phenanthrene-d10	11.225	188	731895	40.00	ppm	0.00
92) Chrysene-d12	14.493	240	462942	40.00	ppm	0.00
102) Perylene-d12	16.825	264	392896	40.00	ppm	0.01
110) 1,4-Dichlorobenzene-d4A	6.005	152	172015	40.00	ppm	0.00
120) Naphthalene-d8A	7.433	136	793987	40.00	ppm	0.00
127) Acenaphthene-d10A	9.476	164	393550	40.00	ppm	0.00
136) Phenanthrene-d10A	11.225	188	731895	40.00	ppm	0.00
146) Chrysene-d12A	14.493	240	462942	40.00	ppm	0.00
153) Perylene-d12A	16.825	264	392896	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#		
9) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#		
23) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#		
47) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#		
75) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#		
95) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#		
Target Compounds						Qvalue
111) 2-Picoline	3.983	93	342381	41.74	ppm	98
112) N-Nitrosomethylethylamine	4.111	42	225307	39.50	ppm	98
113) Methyl methanesulfonate	4.438	80	168971	42.24	ppm	99
114) N-Nitrosodiethylamine	4.855	102	139040	41.73	ppm	97
115) Ethyl methanesulfonate	5.181	79	220292	39.97	ppm	99
116) Pentachloroethane	5.700	167	91780	39.11	ppm	98
117) N-Nitrosopyrrolidine	6.427	100	132223	43.89	ppm	89
118) N-Nitrosomorpholine	6.481	56	229903	41.82	ppm	97
119) O-Toluidine	6.497	106	485556	43.12	ppm	98
121) N-Nitrosopiperidine	6.812	42	267559	36.63	ppm	99
122) A,A-Dimethylphenethyla...	7.347	58	1119809m	38.45	ppm	
123) Hexachloropropene	7.561	213	157157	47.16	ppm	98
124) N-Nitrosodi-n-butylamine	7.936	84	192456	32.17	ppm	98
125) p-Phenylenediamine	7.930	108	311107	41.30	ppm	99
126) Isosafrole	8.176	162	205499	37.99	ppm	99
128) Safrole	8.781	162	242204	46.80	ppm	99
129) 1-Chloronaphthalene	8.850	162	563217	45.69	ppm	99
131) 1,4-Naphthoquinone	9.037	158	155250m	29.96	ppm	
132) Pentachlorobenzene	9.668	250	183989	42.42	ppm	99
133) 1-Naphthylamine	9.813	143	566555	41.45	ppm	98
134) 2-Naphthylamine	9.909	143	621752	42.56	ppm	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071375.D
Acq On : 23 Jun 2020 6:17 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jun 23 19:09:37 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

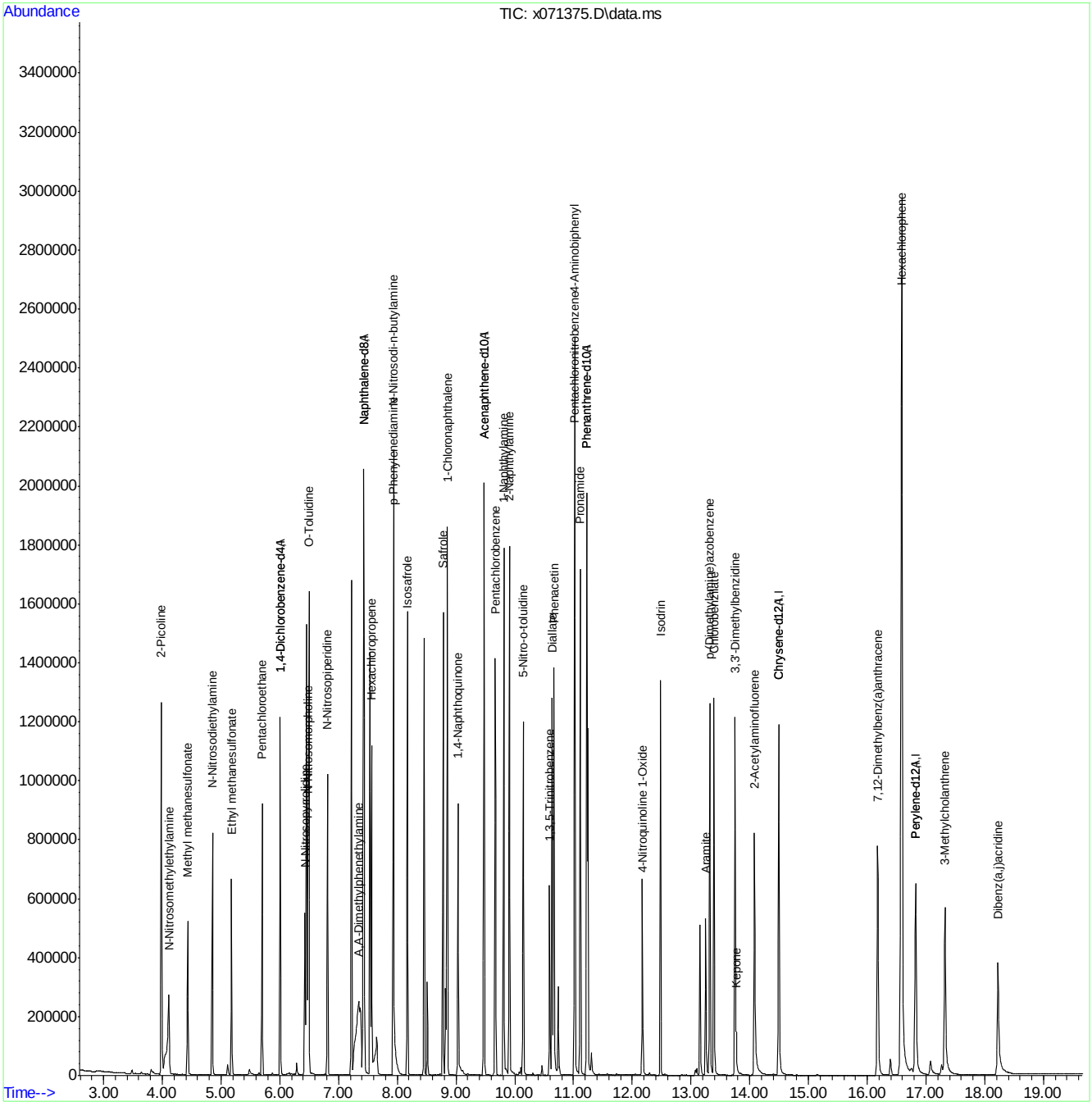
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
135) 5-Nitro-o-toluidine	10.145	152	175241	40.97	ppm	100
137) 1,3,5-Trinitrobenzene	10.594	75	152873	44.22	ppm	97
138) Diallate	10.637	43	439408m	38.31	ppm	
139) Phenacetin	10.669	108	309981	44.00	ppm	100
140) 4-Aminobiphenyl	11.022	169	600349	40.45	ppm	99
141) Pronamide	11.118	173	257415	44.78	ppm	99
142) Pentachloronitrobenzene	11.016	237	59311	41.79	ppm	97
143) 4-Nitroquinoline 1-Oxide	12.177	190	48279	36.49	ppm	90
145) Isodrin	12.482	193	85930	41.38	ppm	95
147) Aramite	13.247	185	78750m	41.76	ppm	
148) p-(Dimethylamine)azobe...	13.322	120	235287	40.07	ppm	96
149) Chlorobenzilate	13.391	139	267455	41.31	ppm	92
150) Kepone	13.776	272	4803	23.05	ppm	90
151) 3,3'-Dimethylbenzidine	13.749	212	450468	60.24	ppm	97
152) 2-Acetylaminofluorene	14.081	181	275835	41.97	ppm	98
154) 7,12-Dimethylbenz(a)an...	16.178	256	253624	46.53	ppm	99
155) Hexachlorophene	16.590	196	456808	469.07	ppm	97
156) 3-Methylcholanthrene	17.328	268	211601	39.83	ppm	98
157) Dibenz(a,j)acridine	18.226	279	276905	40.35	ppm	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071375.D
Acq On : 23 Jun 2020 6:17 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jun 23 19:09:37 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration



Manual Integration Approval Summary

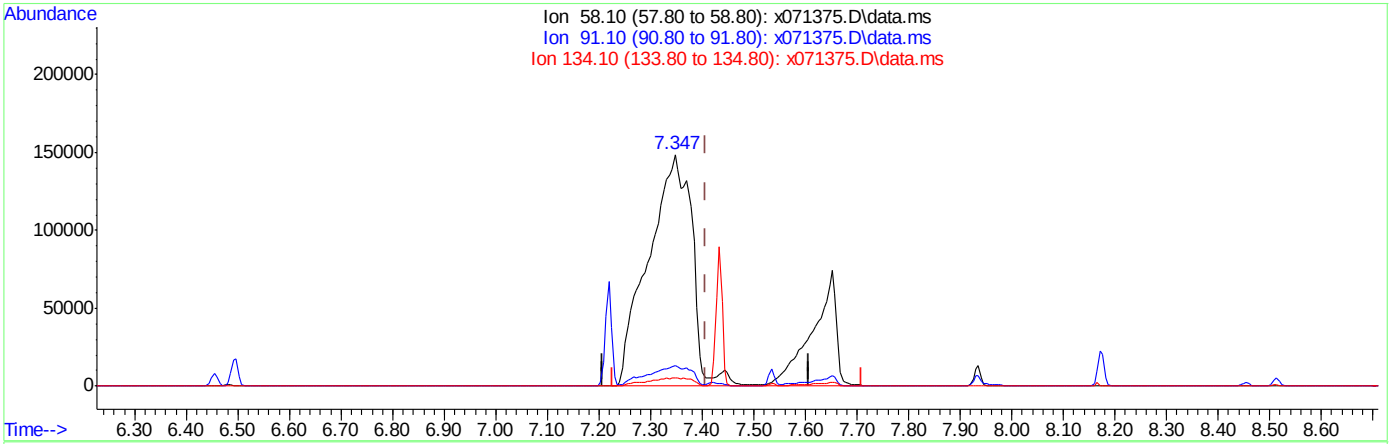
Sample Number: SX2918-ICV2918 **Method:** EPA 625.1
Lab FileID: X071375.D **Analyst approved:** 06/24/20 09:50 Martha Valls
Injection Time: 06/23/20 18:17 **Supervisor approved:** 06/24/20 14:07 Naresh Jiawan

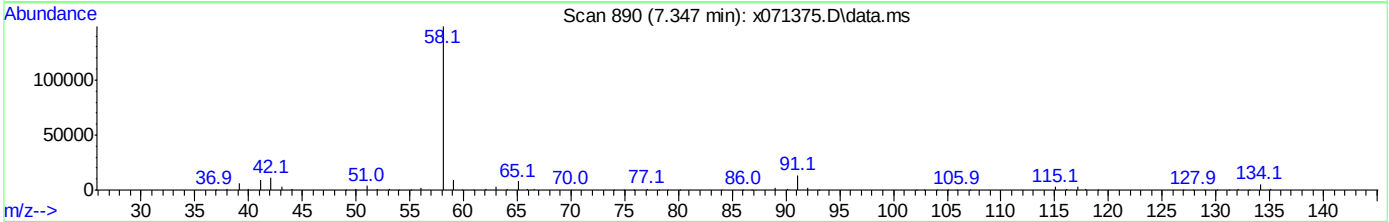
Parameter	CAS	Sig#	R.T. (min.)	Reason
A,A-Dimethylphenethylamine	122-09-8		7.35	Split peak
1,4-Naphthoquinone	130-15-4		9.04	Split peak
Diallate	2303-16-4		10.64	Split peak
Aramite	140-57-8		13.25	Split peak

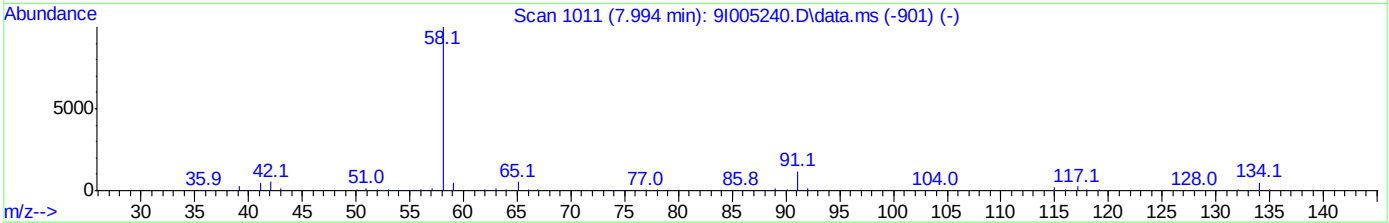
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071375.D
Acq On : 23 Jun 2020 6:17 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jun 23 19:02:41 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration







TIC: x071375.D\data.ms

(122) A,A-Dimethylphenethylamine

7.347min (-0.061) 38.45ppm m

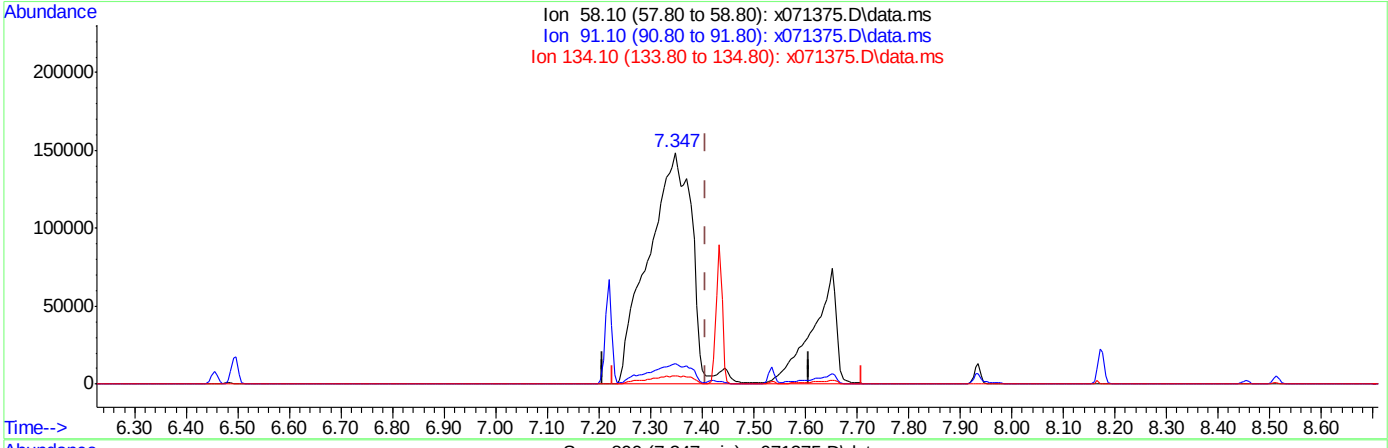
response 1119854

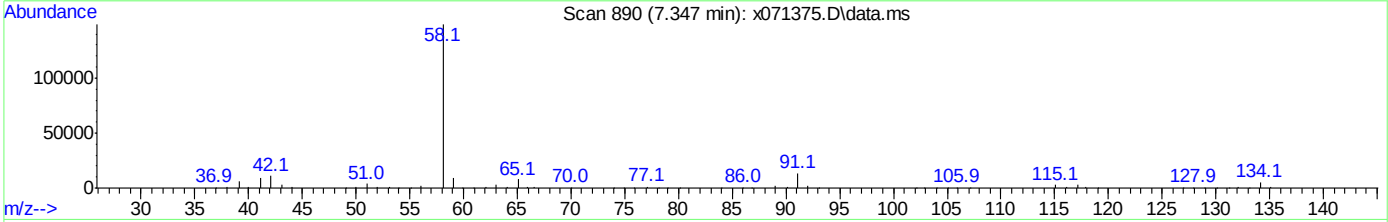
Ion	Exp%	Act%
58.10	100	100
91.10	8.30	9.03
134.10	3.70	3.76
0.00	0.00	0.00

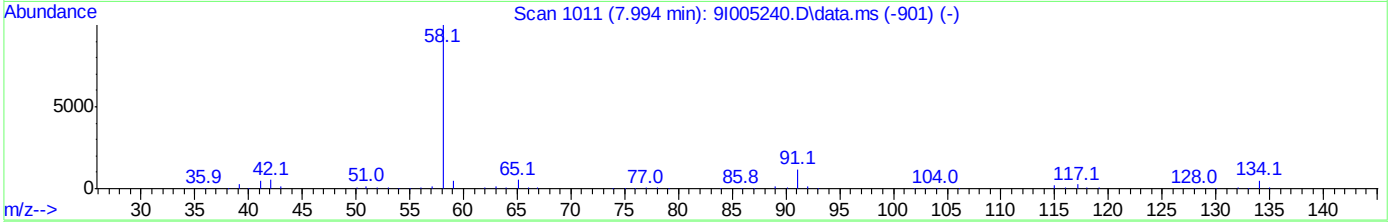
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071375.D
Acq On : 23 Jun 2020 6:17 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jun 23 19:02:41 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration







TIC: x071375.D\data.ms

(122) A,A-Dimethylphenethylamine

7.347min (-0.061) 38.45ppm m

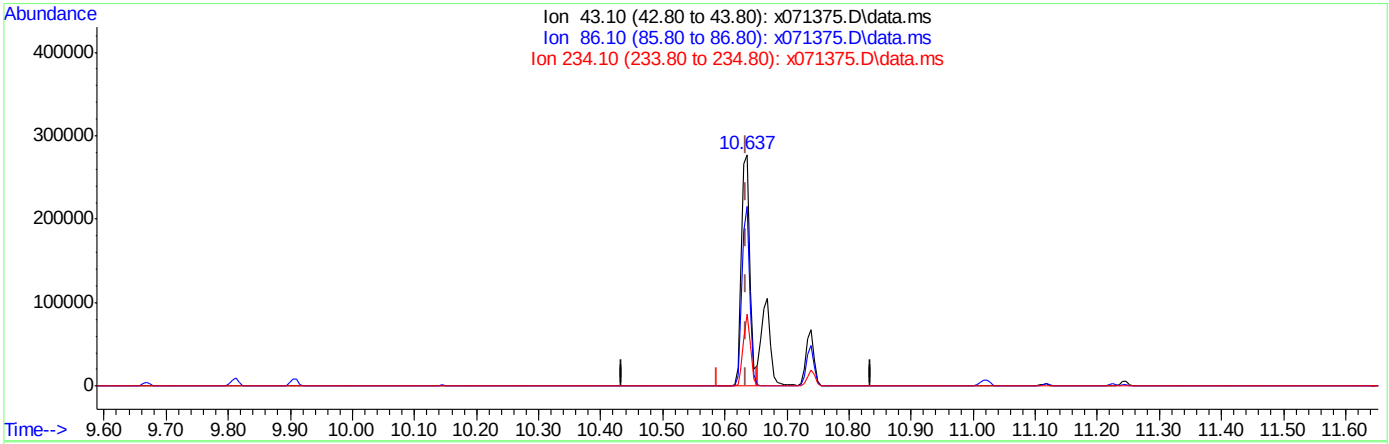
response 1119809

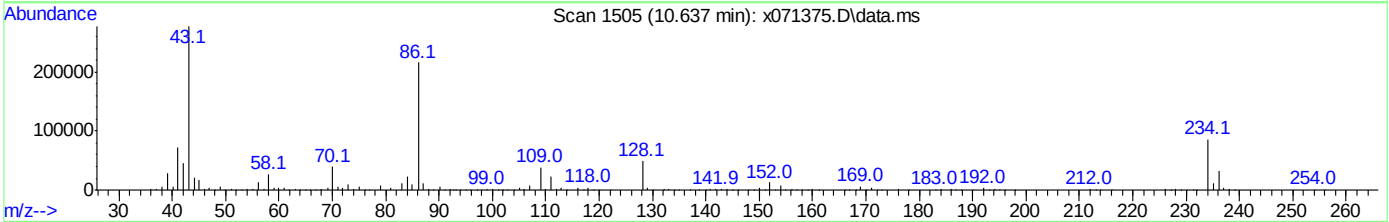
Ion	Exp%	Act%
58.10	100	100
91.10	8.30	9.03
134.10	3.70	3.76
0.00	0.00	0.00

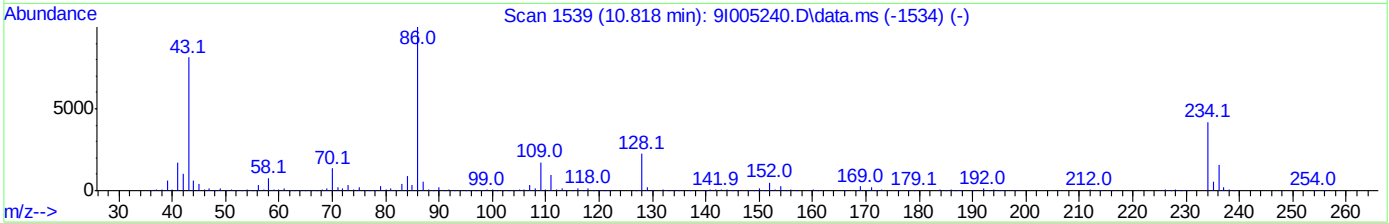
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071375.D
Acq On : 23 Jun 2020 6:17 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jun 23 19:02:41 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration







TIC: x071375.D\data.ms

(138) Diallate

10.637min (+0.002) 23.83ppm

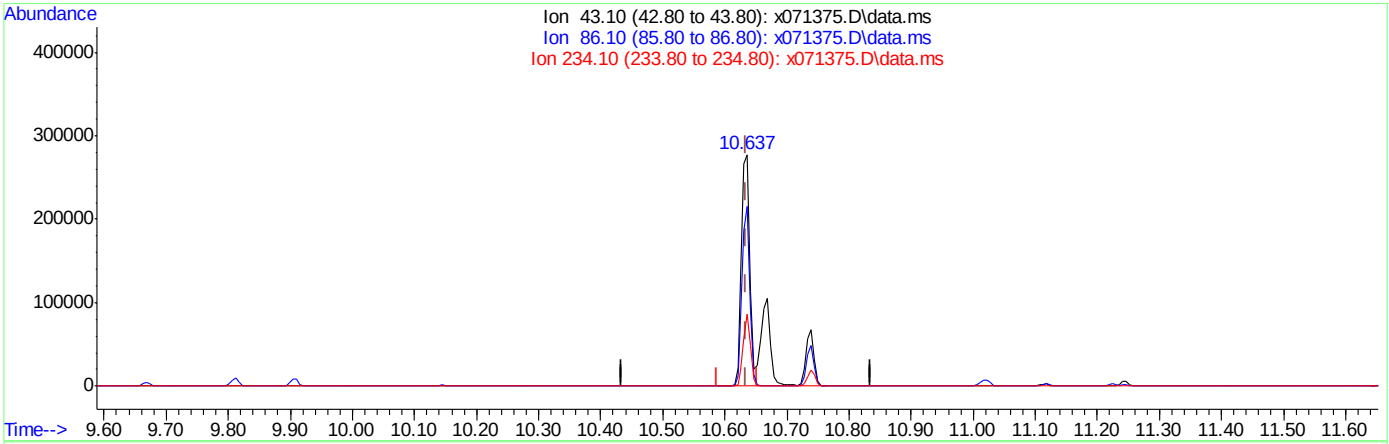
response 273290

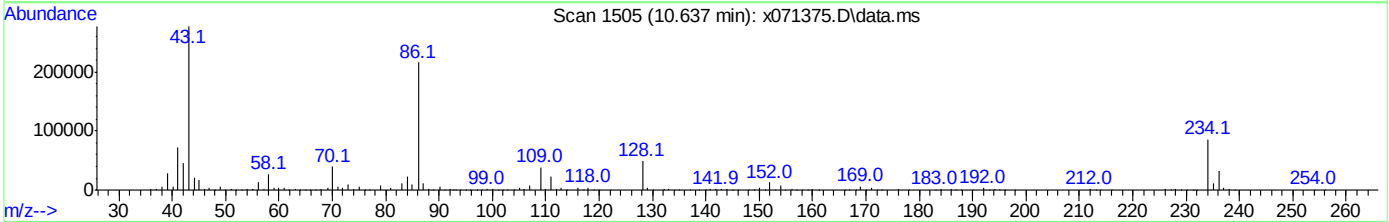
Ion	Exp%	Act%
43.10	100	100
86.10	76.00	80.95
234.10	30.60	32.24
0.00	0.00	0.00

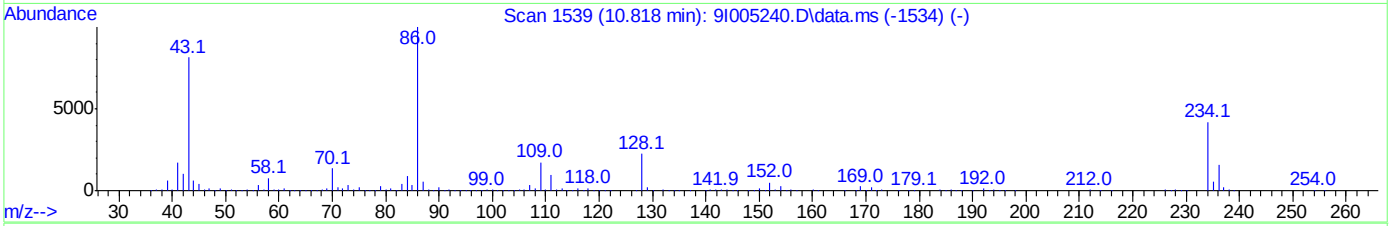
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071375.D
Acq On : 23 Jun 2020 6:17 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jun 23 19:02:41 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration







TIC: x071375.D\data.ms

(138) Diallate

10.637min (+0.002) 38.31ppm m

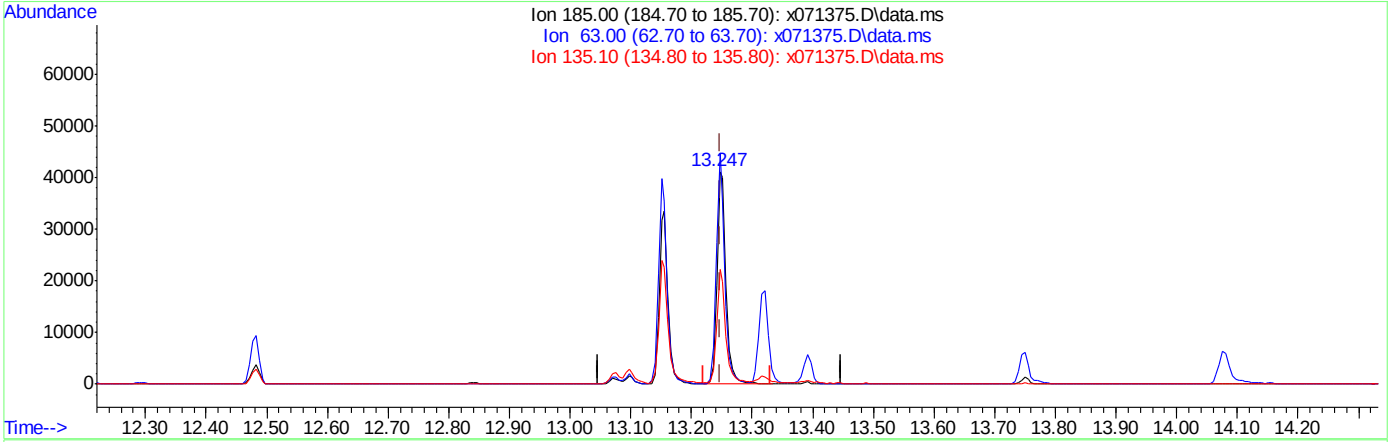
response 439408

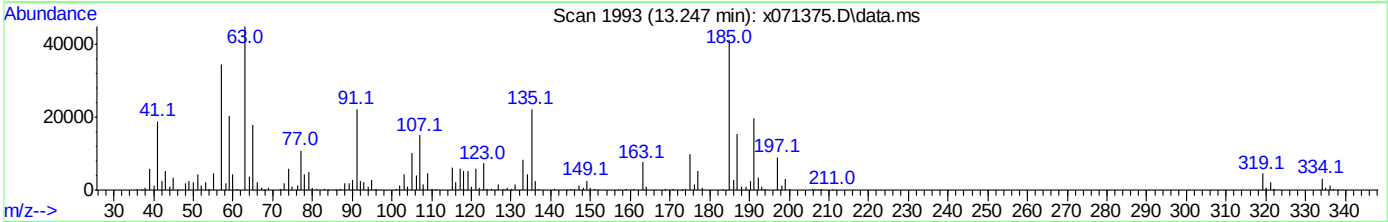
Ion	Exp%	Act%
43.10	100	100
86.10	76.00	77.78
234.10	30.60	31.05
0.00	0.00	0.00

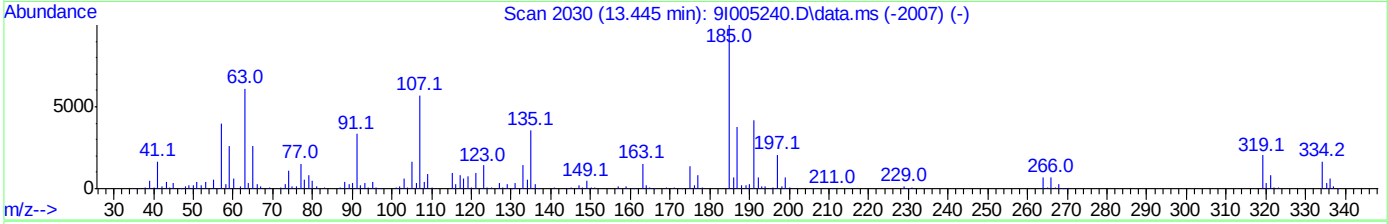
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071375.D
Acq On : 23 Jun 2020 6:17 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jun 23 19:07:08 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration







TIC: x071375.D\data.ms

(147) Aramite

13.247min (-0.001) 24.60ppm

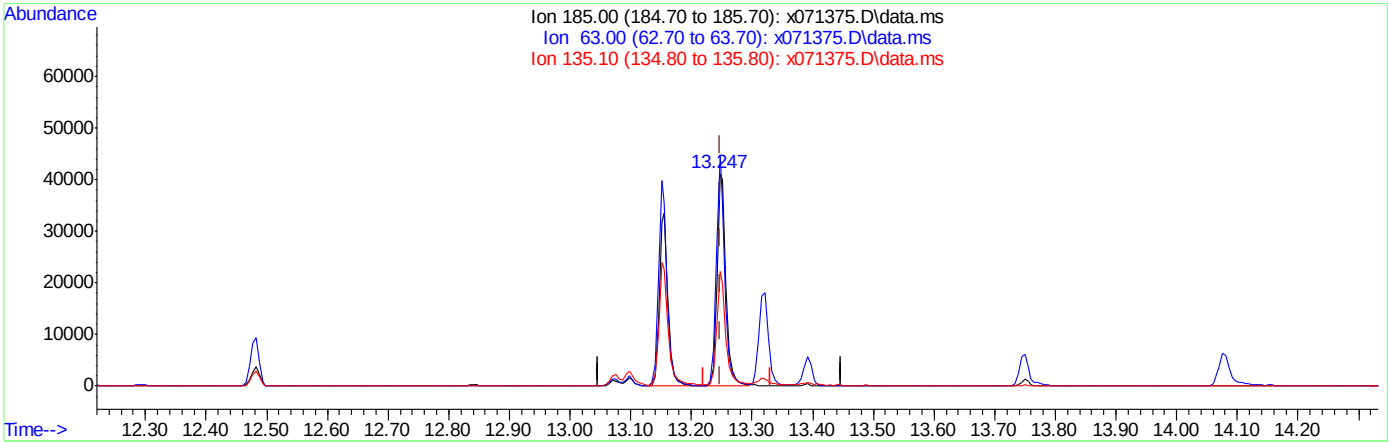
response 44104

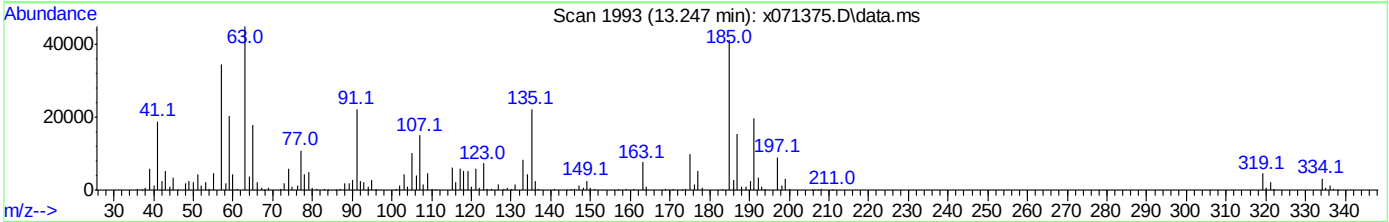
Ion	Exp%	Act%
185.00	100	100
63.00	99.40	105.13
135.10	50.50	53.08
0.00	0.00	0.00

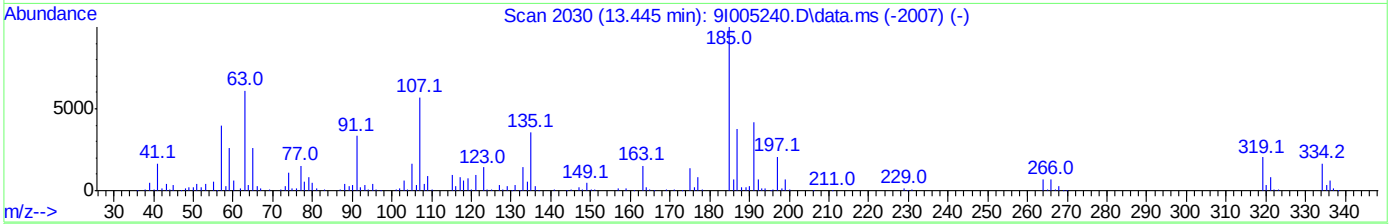
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071375.D
Acq On : 23 Jun 2020 6:17 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jun 23 19:07:08 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration







TIC: x071375.D\data.ms

(147) Aramite

13.247min (-0.001) 41.76ppm m

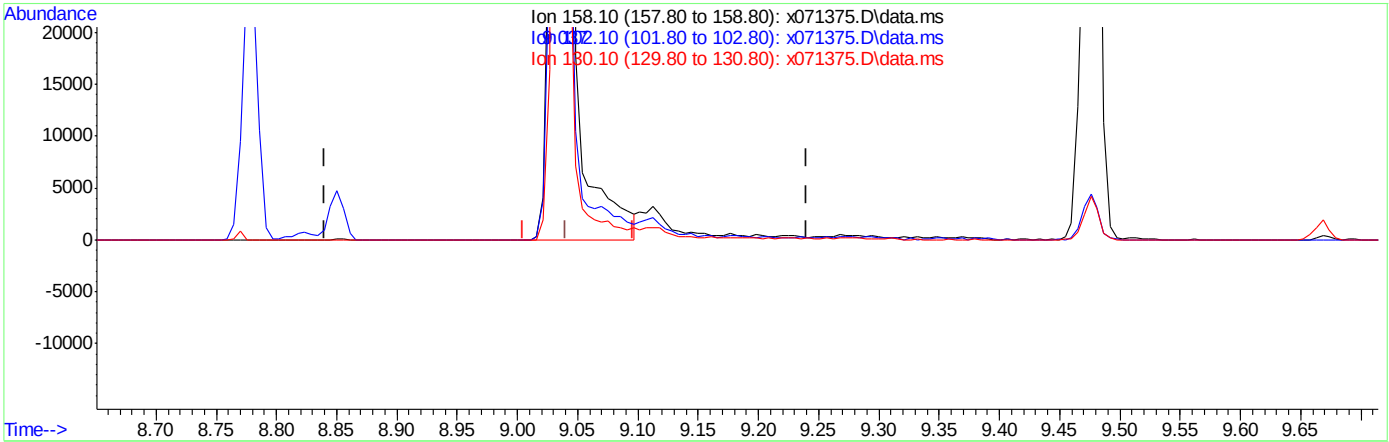
response 78750

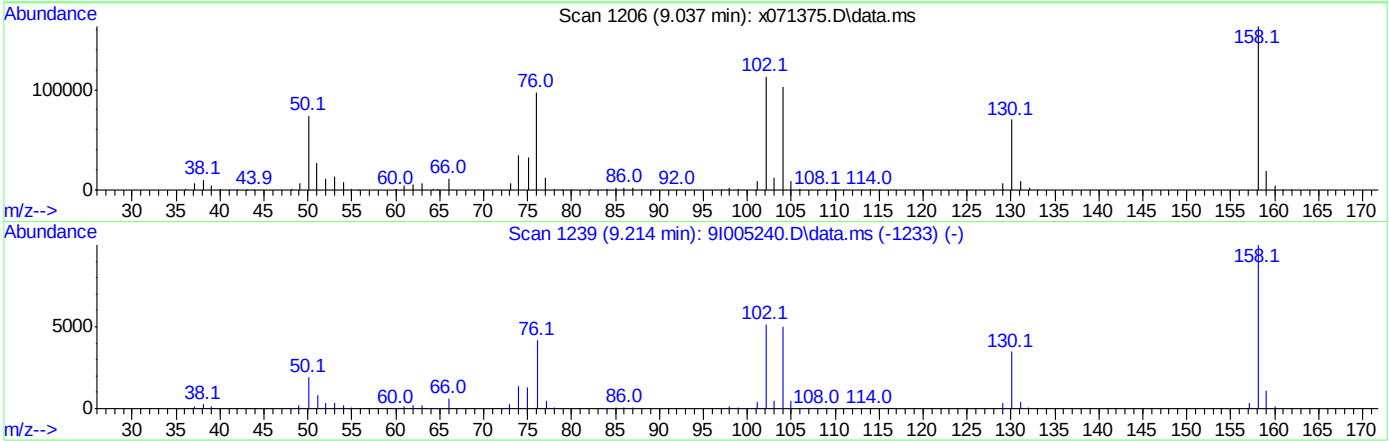
Ion	Exp%	Act%
185.00	100	100
63.00	99.40	108.99
135.10	50.50	54.14
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071375.D
Acq On : 23 Jun 2020 6:17 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jun 23 19:07:08 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration





TIC: x071375.D\data.ms

(131) 1,4-Naphthoquinone

9.037min (-0.003) 28.96ppm

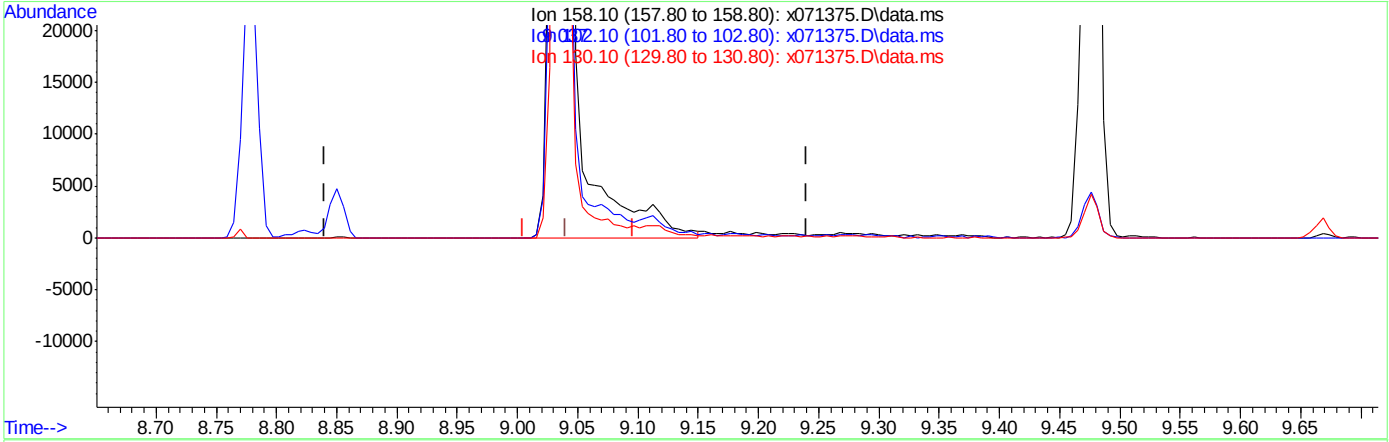
response 149991

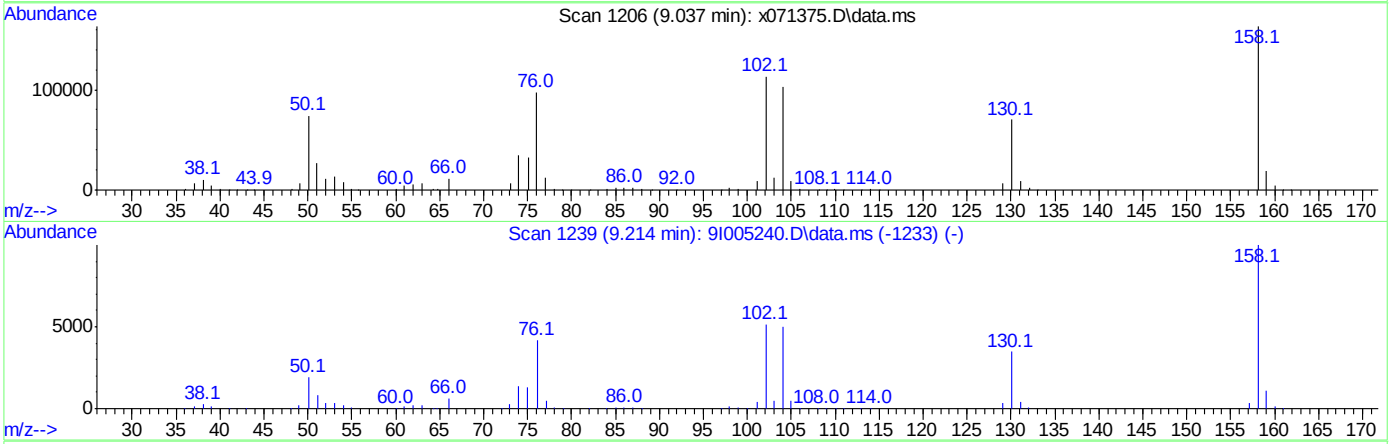
Ion	Exp%	Act%
158.10	100	100
102.10	69.70	69.26
130.10	42.30	43.02
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071375.D
Acq On : 23 Jun 2020 6:17 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jun 23 19:07:08 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration





TIC: x071375.D\data.ms

(131) 1,4-Naphthoquinone

9.037min (-0.003) 29.96ppm m

response 155250

Ion	Exp%	Act%
158.10	100	100
102.10	69.70	69.18
130.10	42.30	43.05
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071376.D
Acq On : 23 Jun 2020 6:43 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jun 23 19:07:50 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

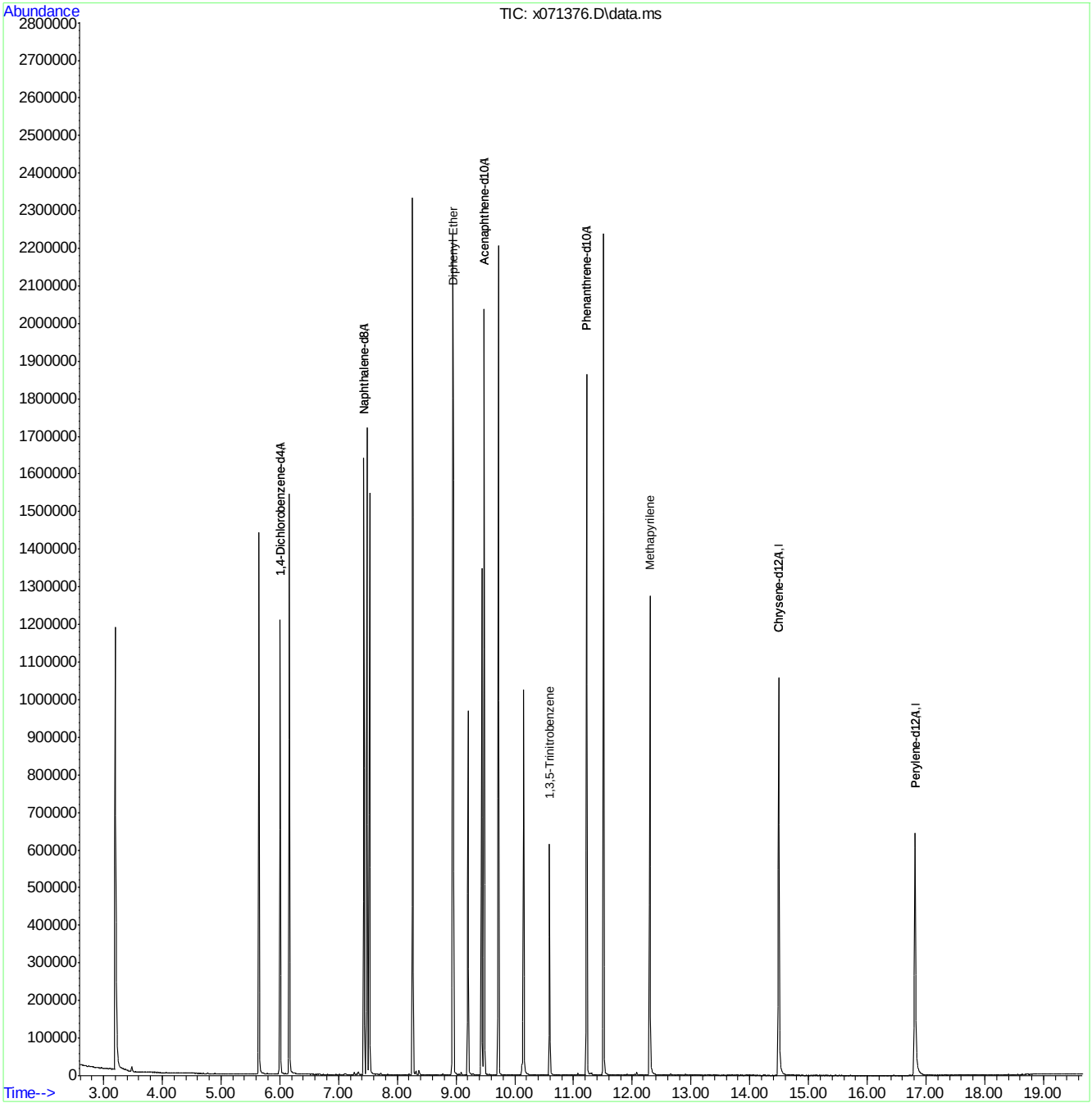
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	6.005	152	162946	40.00	ppm	0.00
22) Naphthalene-d8	7.433	136	686954	40.00	ppm	0.00
43) Acenaphthene-d10	9.476	164	413885	40.00	ppm	0.00
70) Phenanthrene-d10	11.225	188	667116	40.00	ppm	0.00
92) Chrysene-d12	14.493	240	441735	40.00	ppm	0.00
102) Perylene-d12	16.814	264	357783	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	6.005	152	162946	40.00	ppm	0.00
120) Naphthalene-d8A	7.433	136	686954	40.00	ppm	0.00
127) Acenaphthene-d10A	9.476	164	413885	40.00	ppm	0.00
136) Phenanthrene-d10A	11.225	188	667116	40.00	ppm	0.00
146) Chrysene-d12A	14.493	240	441735	40.00	ppm	0.00
153) Perylene-d12A	16.814	264	358466	40.00	ppm	-0.01
System Monitoring Compounds						
7) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#		
9) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#		
23) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#		
47) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#		
75) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#		
95) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#		
Target Compounds						Qvalue
130) Diphenyl Ether	8.946	170	374652	41.38	ppm	98
137) 1,3,5-Trinitrobenzene	10.594	75	141558	44.82	ppm	97
144) Methapyrilene	12.295	58	438223	128.03	ppm	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0623_sx2918\
Data File : x071376.D
Acq On : 23 Jun 2020 6:43 pm
Operator : marthav
Sample : icv2918-50 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jun 23 19:07:50 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan
06/25/20 15:55

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\June 2020\06-25-2020\sx2919\
Data File : x071416.d
Acq On : 24 Jun 2020 3:22 pm
Operator : marthav
Sample : icv2918-50 app9
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 25 02:53:35 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Thu Jun 25 02:50:18 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	5.994	152	159488	40.00	ppm		0.00
22) Naphthalene-d8	7.422	136	675368	40.00	ppm		0.00
43) Acenaphthene-d10	9.465	164	316836	40.00	ppm		0.00
70) Phenanthrene-d10	11.214	188	574623	40.00	ppm		0.00
92) Chrysene-d12	14.477	240	403905	40.00	ppm		0.00
102) Perylene-d12	16.803	264	385155	40.00	ppm		0.00
110) 1,4-Dichlorobenzene-d4A	5.994	152	159488	40.00	ppm		0.00
120) Naphthalene-d8A	7.422	136	675368	40.00	ppm		0.00
127) Acenaphthene-d10A	9.465	164	316836	40.00	ppm		0.00
136) Phenanthrene-d10A	11.214	188	574623	40.00	ppm		0.00
146) Chrysene-d12A	14.477	240	403905	40.00	ppm		0.00
153) Perylene-d12A	16.803	264	385155	40.00	ppm		0.00
System Monitoring Compounds							
7) 2-Fluorophenol	0.000	112	0	0.00	ppm		
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#			
9) Phenol-d5	0.000	99	0d	0.00	ppm		
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#			
23) Nitrobenzene-d5	0.000	82	0	0.00	ppm		
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#			
47) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm		
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#			
75) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm		
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#			
95) Terphenyl-d14	0.000	244	0	0.00	ppm		
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#			
Target Compounds							Qvalue
111) 2-Picoline	3.967	93	395982	52.06	ppm		87
112) N-Nitrosomethylethylamine	4.095	42	260669	49.28	ppm	#	56
113) Methyl methanesulfonate	4.421	80	176859	47.69	ppm		90
114) N-Nitrosodiethylamine	4.839	102	158768	51.39	ppm	#	30
115) Ethyl methanesulfonate	5.170	79	224922	44.02	ppm		96
116) Pentachloroethane	5.684	167	101460	46.63	ppm		91
117) N-Nitrosopyrrolidine	6.416	100	143191	51.26	ppm	#	20
118) N-Nitrosomorpholine	6.465	56	245205	48.10	ppm	#	66
119) O-Toluidine	6.481	106	538729	51.60	ppm		99
121) N-Nitrosopiperidine	6.801	42	281884	45.37	ppm	#	60
122) A,A-Dimethylphenethyla...	7.315	58	951947	38.43	ppm		87
123) Hexachloropropene	7.550	213	167883	59.22	ppm		100
124) N-Nitrosodi-n-butylamine	7.925	84	203432	39.53	ppm	#	54
125) p-Phenylenediamine	7.925	108	336165	52.46	ppm		93
126) Isosafrole	8.160	162	200621	43.60	ppm		78
128) Safrole	8.770	162	232090	55.71	ppm		92
129) 1-Chloronaphthalene	8.839	162	544498	54.87	ppm		97
131) 1,4-Naphthoquinone	9.027	158	126951	30.43	ppm		82
132) Pentachlorobenzene	9.658	250	174738	50.04	ppm		99
133) 1-Naphthylamine	9.802	143	587293	53.36	ppm		94
134) 2-Naphthylamine	9.898	143	619160	52.64	ppm		98
135) 5-Nitro-o-toluidine	10.134	152	180970	51.69	ppm		80
137) 1,3,5-Trinitrobenzene	10.588	75	146886	52.54	ppm		90
138) Diallate	10.620	43	416437m	46.24	ppm		
139) Phenacetin	10.658	108	305531	55.23	ppm		91
140) 4-Aminobiphenyl	11.011	169	619883	53.19	ppm		99
141) Pronamide	11.107	173	248936	55.16	ppm		98
142) Pentachloronitrobenzene	11.006	237	55950	50.21	ppm		91
143) 4-Nitroquinoline 1-Oxide	12.166	190	51977	50.37	ppm		88

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\June 2020\06-25-2020\sx2919\
Data File : x071416.d
Acq On : 24 Jun 2020 3:22 pm
Operator : marthav
Sample : icv2918-50 app9
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 25 02:53:35 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Thu Jun 25 02:50:18 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
145) Isodrin	12.471	193	82017	50.31	ppm	87
147) Aramite	13.236	185	83620m	49.69	ppm	
148) p-(Dimethylamine)azobe...	13.311	120	253632	49.47	ppm	86
149) Chlorobenzilate	13.380	139	264506	46.52	ppm	74
150) Kepone	13.760	272	14639	80.51	ppm	90
151) 3,3'-Dimethylbenzidine	13.739	212	540574	82.86	ppm	97
152) 2-Acetylaminofluorene	14.070	181	352354	58.75	ppm	91
154) 7,12-Dimethylbenz(a)an...	16.162	256	287086	53.73	ppm	96
155) Hexachlorophene	16.568	196	511787	520.12	ppm	99
156) 3-Methylcholanthrene	17.306	268	265370	50.15	ppm	93
157) Dibenz(a,j)acridine	18.210	279	404847	56.31	ppm	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\June 2020\06-25-2020\sx2919\
Data File : x071416.d
Acq On : 24 Jun 2020 3:22 pm
Operator : marthav
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Quant Title : SW846 8270D OR EPA 625
QLast Update : Thu Jun 25 02:50:18 2020
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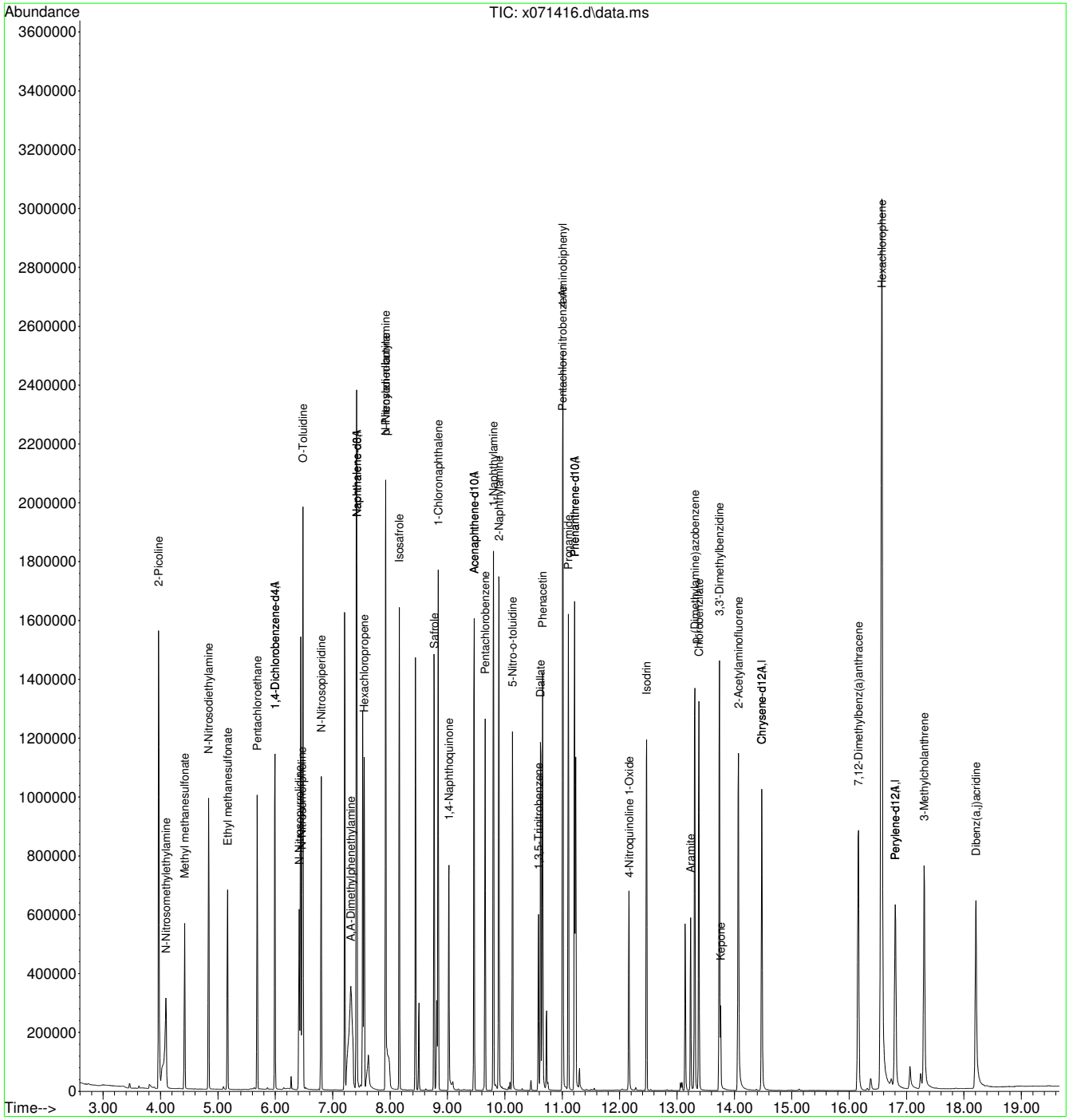


Manual Integration Approval Summary

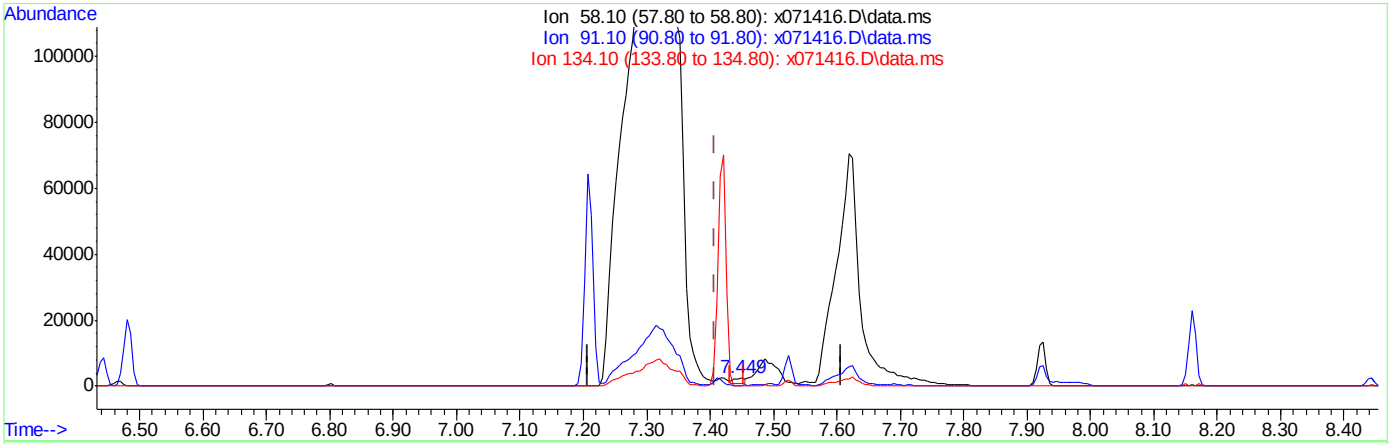
Sample Number: SX2918-ICV2918 **Method:** EPA 625.1
Lab FileID: X071416.D **Analyst approved:** 06/25/20 15:55 Naresh Jiawan
Injection Time: 06/24/20 15:22 **Supervisor approved:** 06/25/20 15:55 Naresh Jiawan

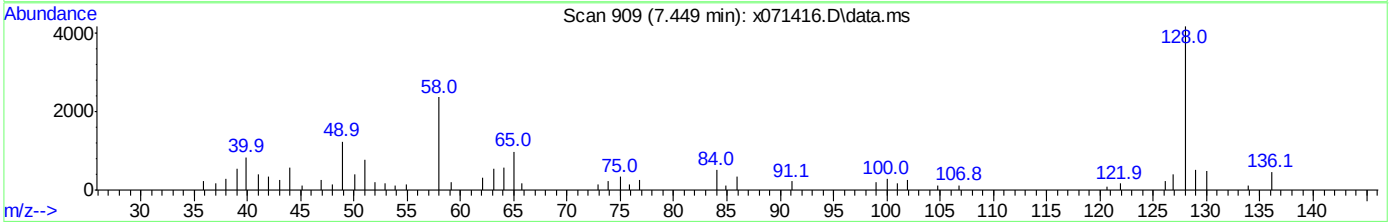
Parameter	CAS	Sig#	R.T. (min.)	Reason
Diallate	2303-16-4		10.62	Split peak
Aramite	140-57-8		13.24	Split peak

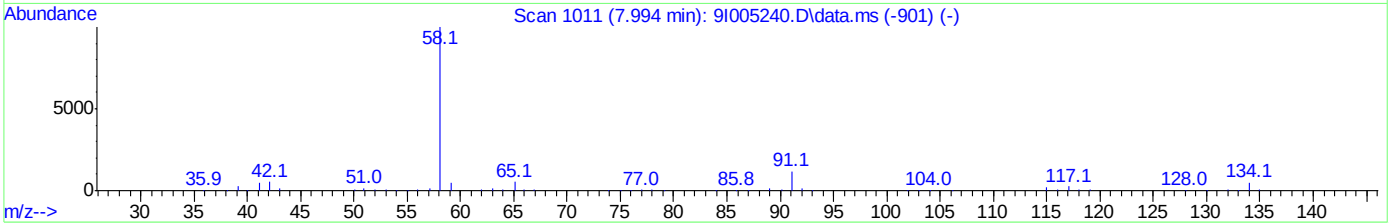
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0624_sx2919\
Data File : x071416.D
Acq On : 24 Jun 2020 3:22 pm
Operator : marthav
Sample : icv2918-50 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 24 15:43:42 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration







TIC: x071416.D\data.ms

(122) A,A-Dimethylphenethylamine

7.449min (+0.041) 0.08ppm

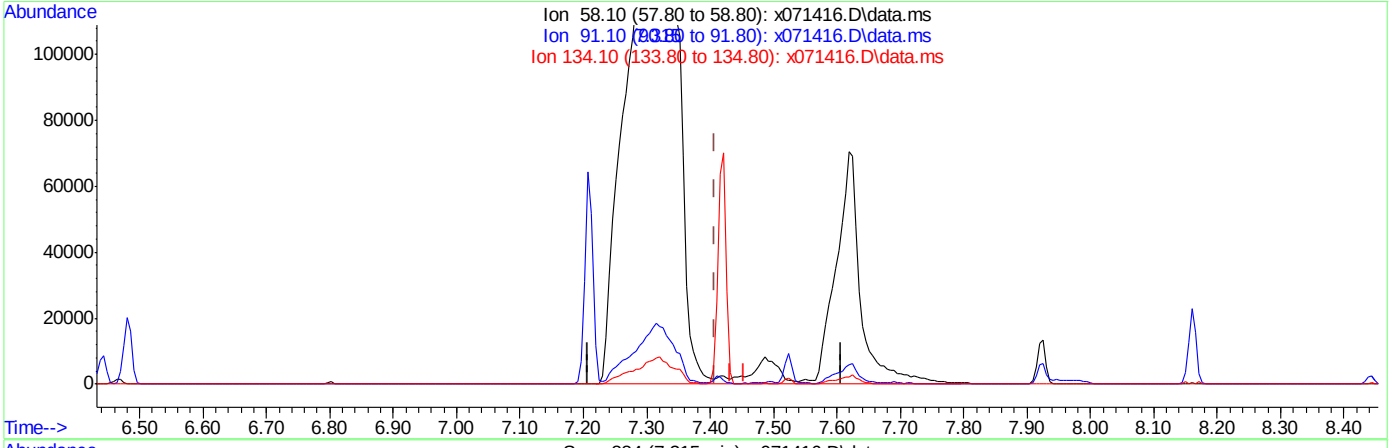
response 1956

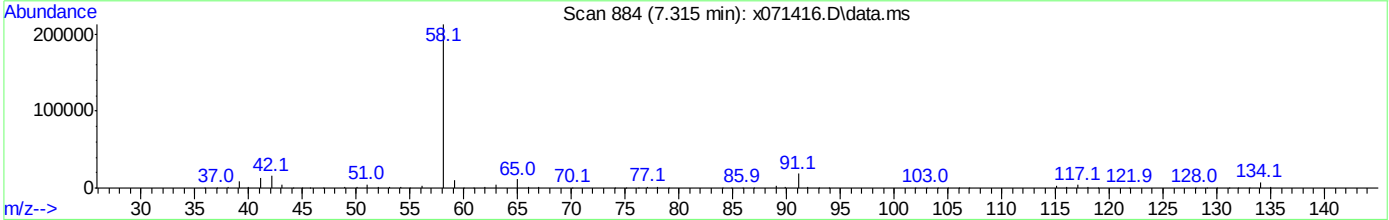
Ion	Exp%	Act%
58.10	100	100
91.10	8.30	0.00
134.10	3.70	0.00
0.00	0.00	0.00

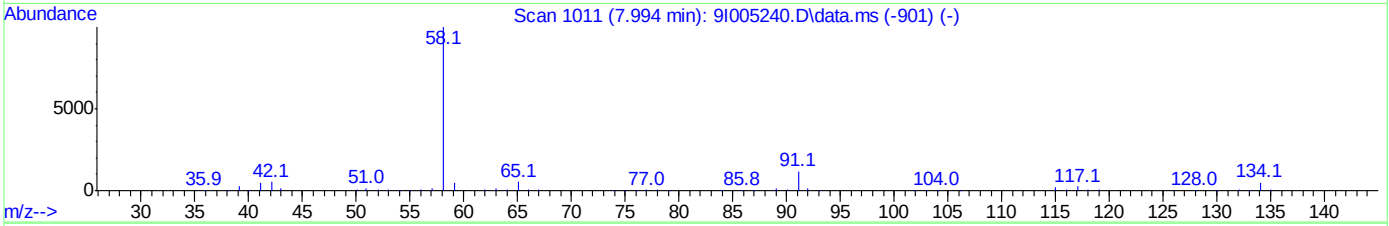
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0624_sx2919\
Data File : x071416.D
Acq On : 24 Jun 2020 3:22 pm
Operator : marthav
Sample : icv2918-50 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 24 15:43:42 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration







TIC: x071416.D\data.ms

(122) A,A-Dimethylphenethylamine

7.315min (-0.093) 47.29ppm m

response 1171334

Ion	Exp%	Act%
58.10	100	100
91.10	8.30	8.67
134.10	3.70	3.66
0.00	0.00	0.00

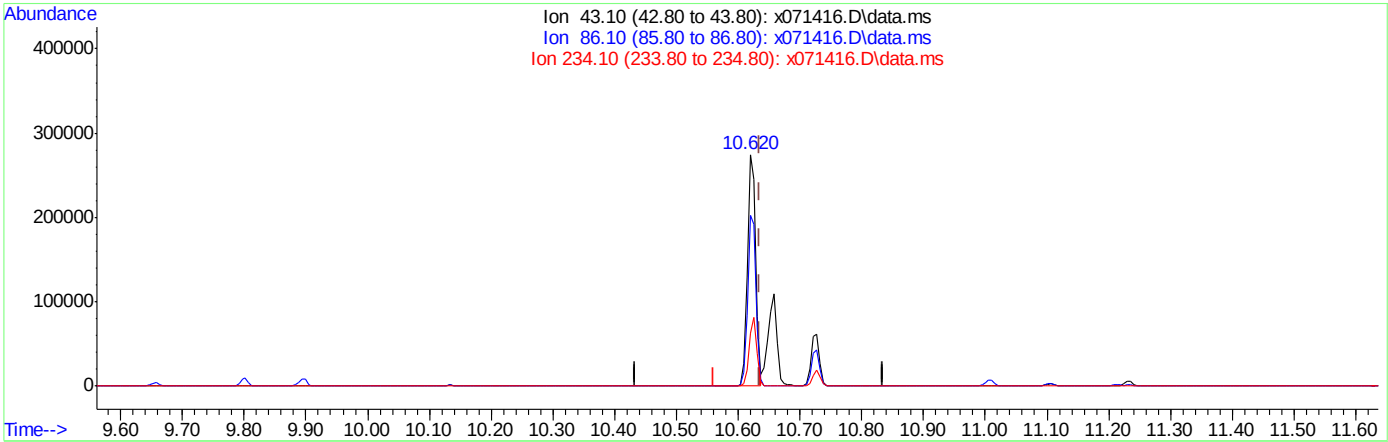
SGS FA77689

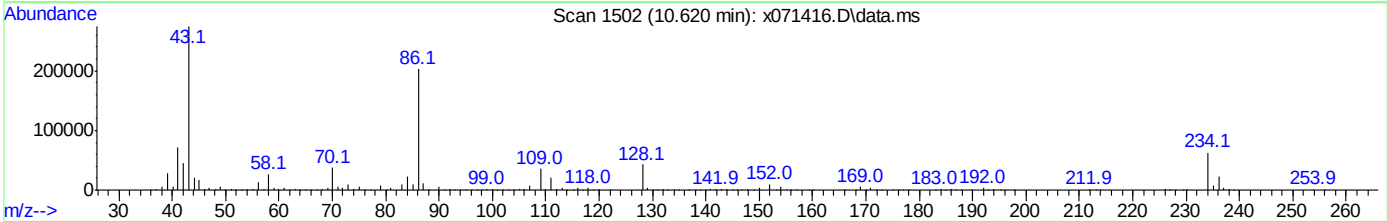
X071416.D edits: A,A-Dimethylphenethylamine

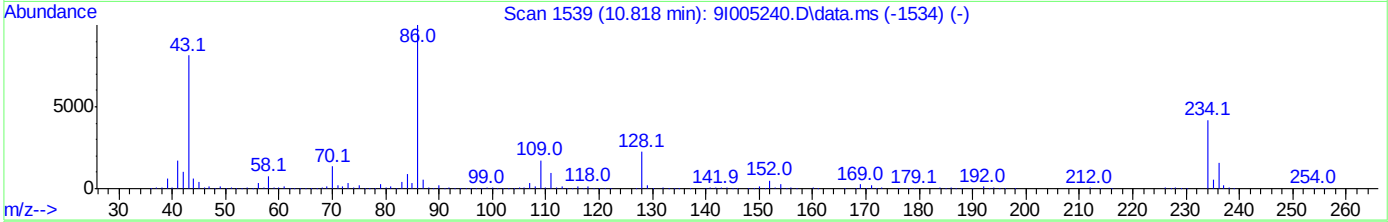
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0624_sx2919\
Data File : x071416.D
Acq On : 24 Jun 2020 3:22 pm
Operator : marthav
Sample : icv2918-50 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 24 15:43:42 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration







TIC: x071416.D\data.ms

(138) Diallate

10.620min (-0.014) 27.71ppm

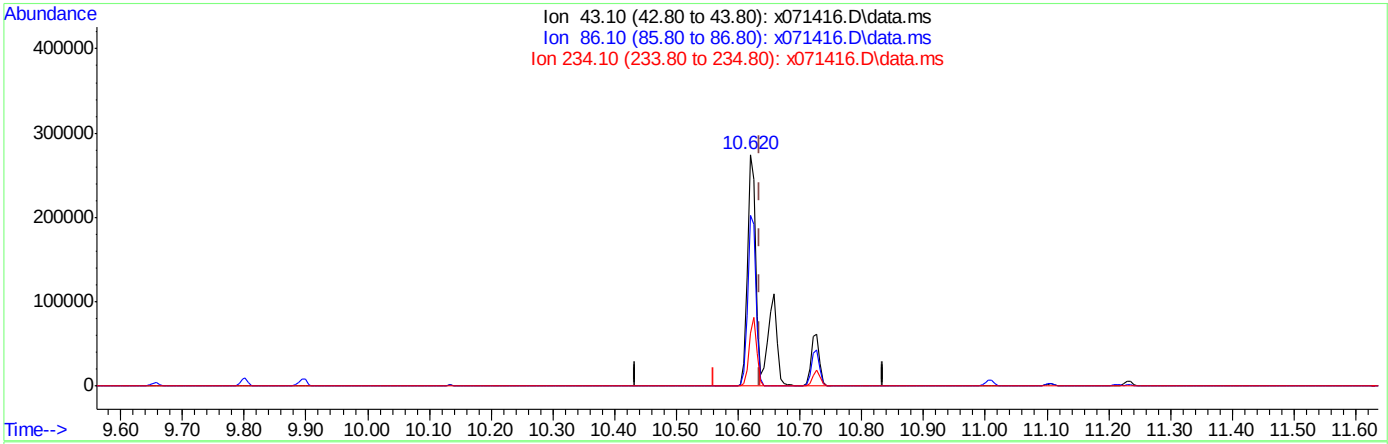
response 249556

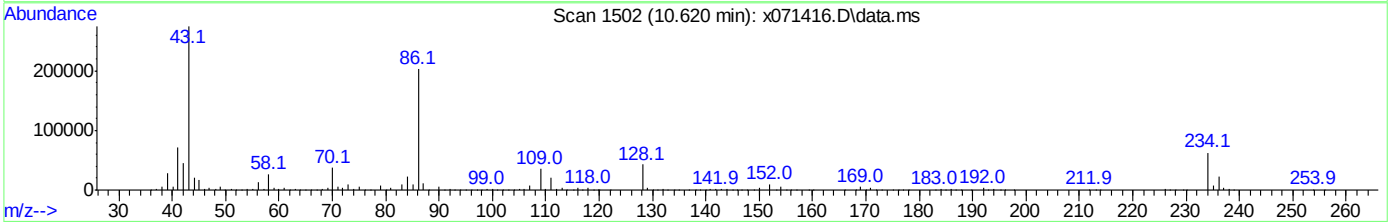
Ion	Exp%	Act%
43.10	100	100
86.10	76.00	74.00
234.10	30.60	22.32
0.00	0.00	0.00

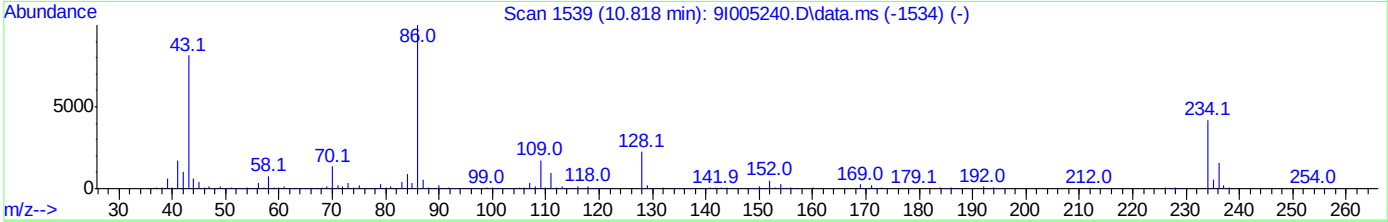
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0624_sx2919\
Data File : x071416.D
Acq On : 24 Jun 2020 3:22 pm
Operator : marthav
Sample : icv2918-50 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 24 15:43:42 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration







TIC: x071416.D\data.ms

(138) Diallate

10.620min (-0.014) 46.24ppm m

response 416360

Ion	Exp%	Act%
43.10	100	100
86.10	76.00	73.74
234.10	30.60	22.86
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0624_sx2919\
Data File : x071416.D
Acq On : 24 Jun 2020 3:22 pm
Operator : marthav
Sample : icv2918-50 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 24 15:43:42 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
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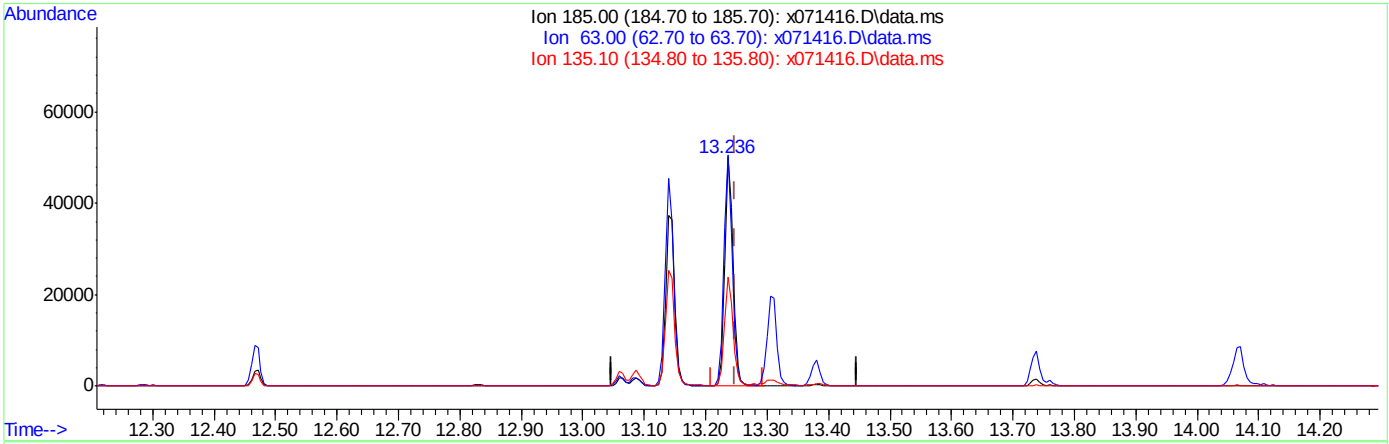

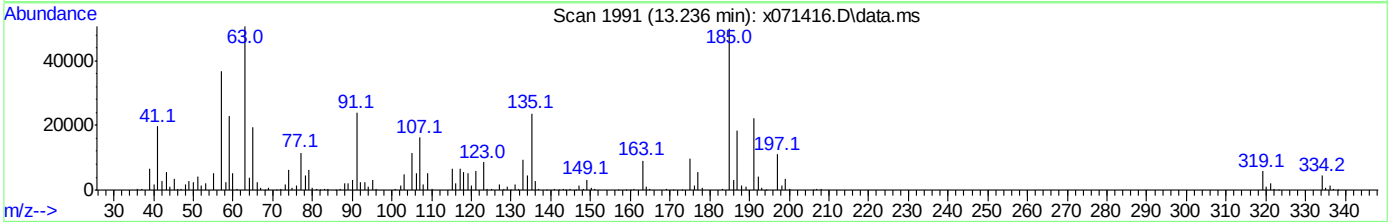

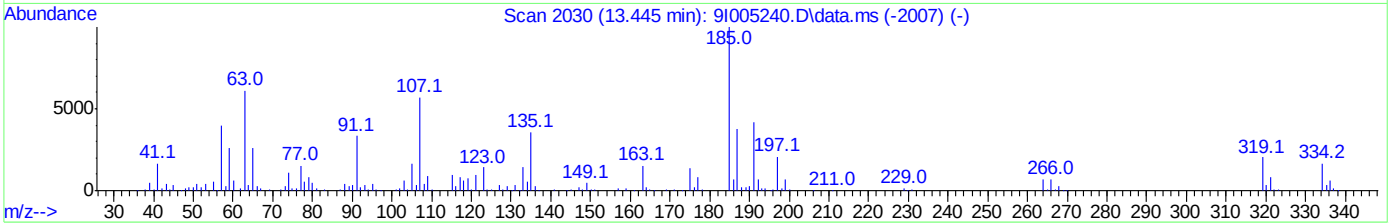

TIC: x071416.D\data.ms

(147) Aramite

13.236min (-0.012) 29.24ppm

response 46379

Ion	Exp%	Act%
185.00	100	100
63.00	99.40	97.60
135.10	50.50	46.70
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0624_sx2919\
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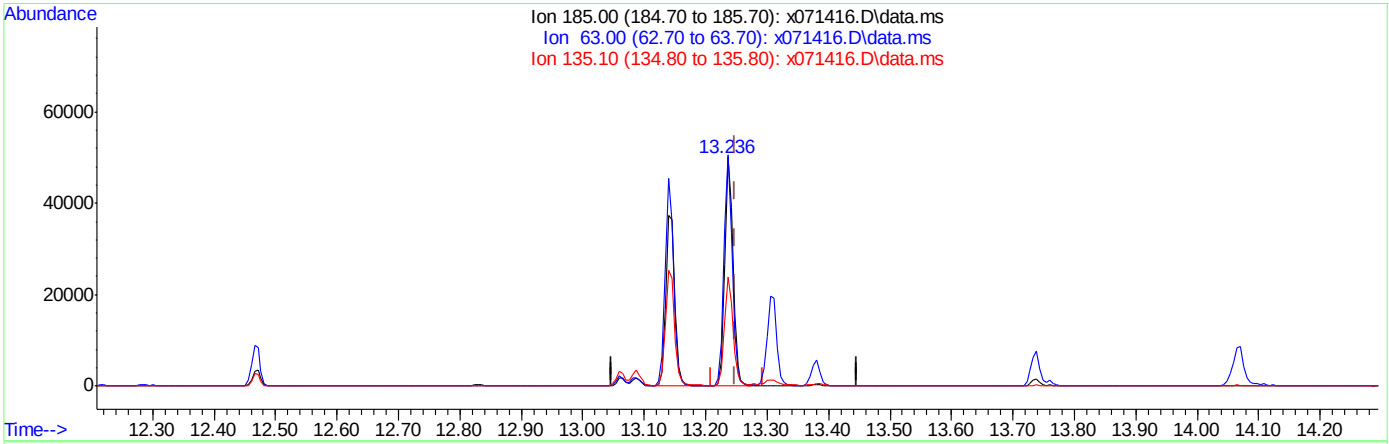
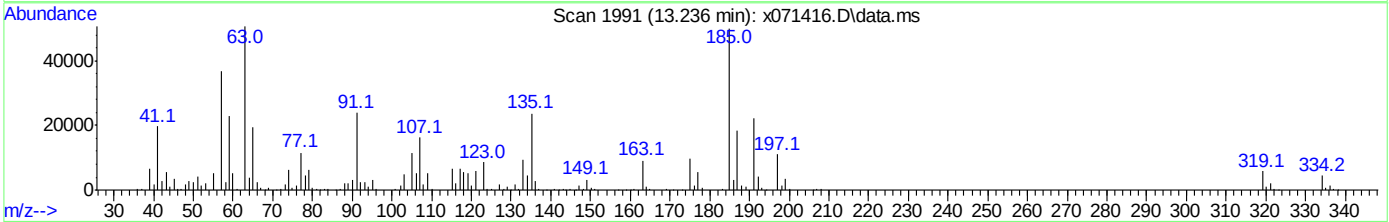
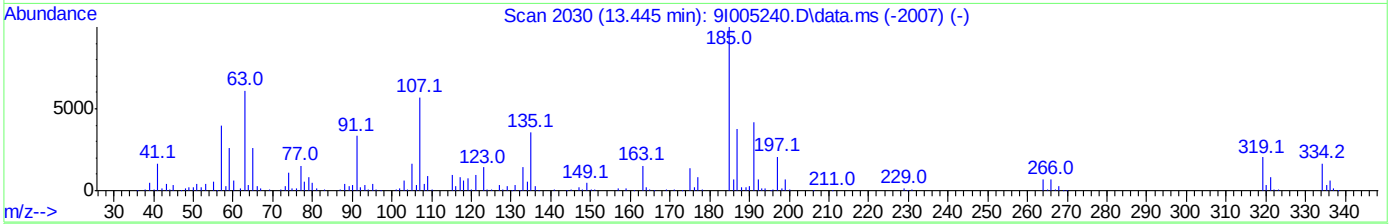
Operator : marthav
Sample : icv2918-50 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 24 15:43:42 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration







TIC: x071416.D\data.ms

(147) Aramite

13.236min (-0.012) 49.65ppm m

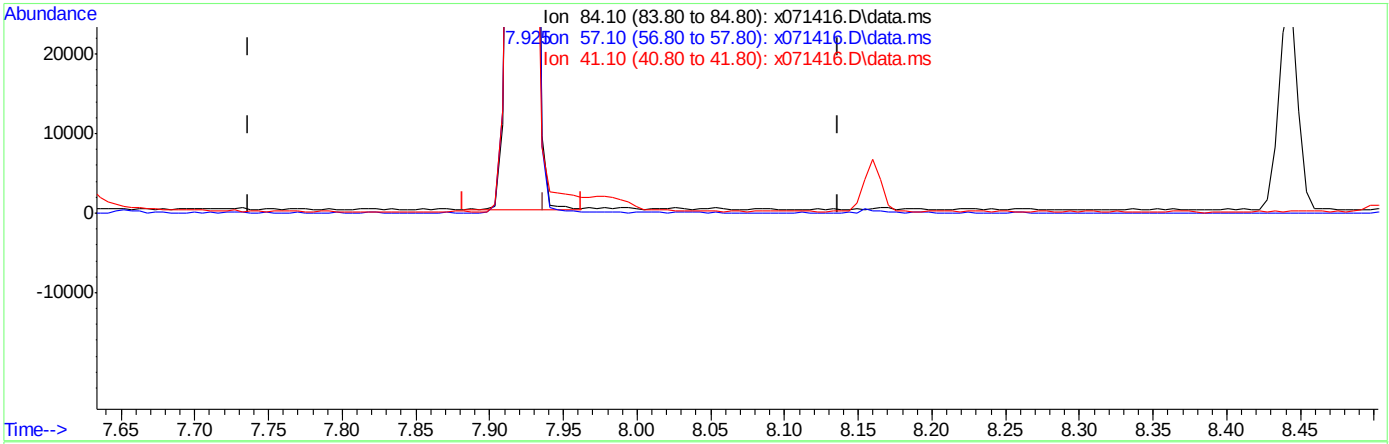
response 83540

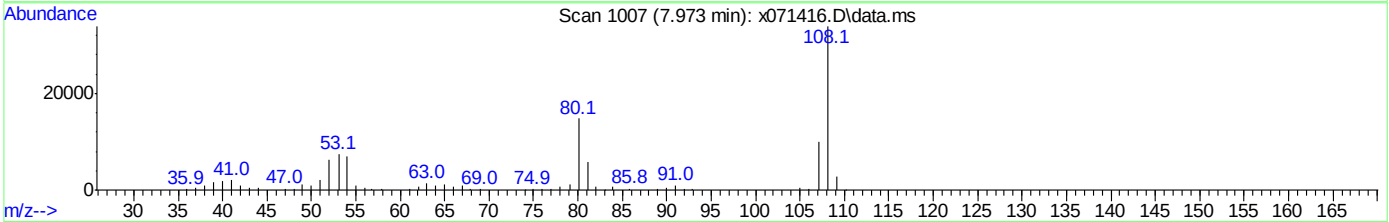
Ion	Exp%	Act%
185.00	100	100
63.00	99.40	101.34
135.10	50.50	47.53
0.00	0.00	0.00

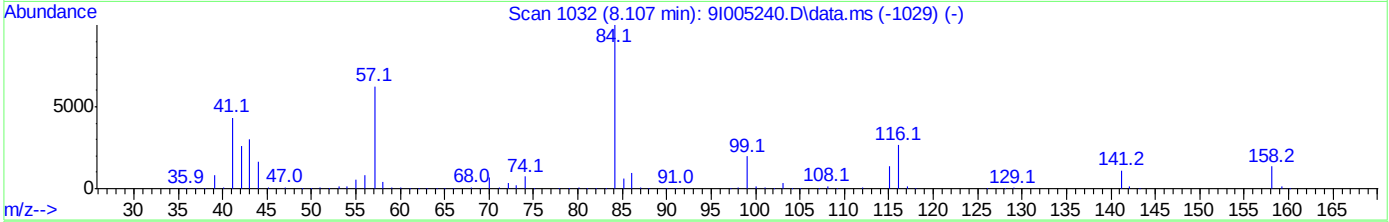
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0624_sx2919\
Data File : x071416.D
Acq On : 24 Jun 2020 3:22 pm
Operator : marthav
Sample : icv2918-50 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 24 15:45:01 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration







TIC: x071416.D\data.ms

(124) N-Nitrosodi-n-butylamine

7.925min (-0.012) 39.53ppm

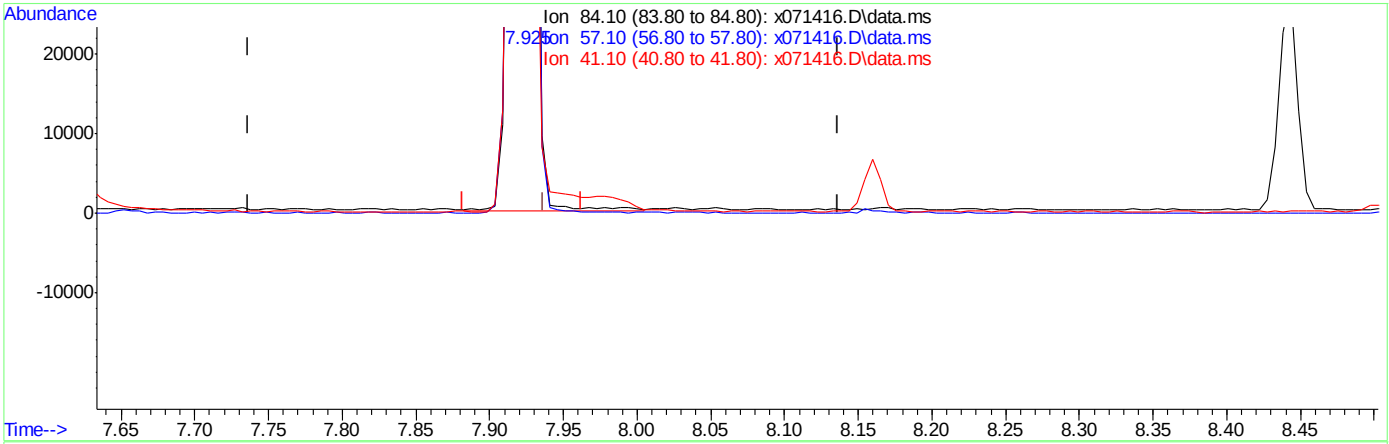
response 203432

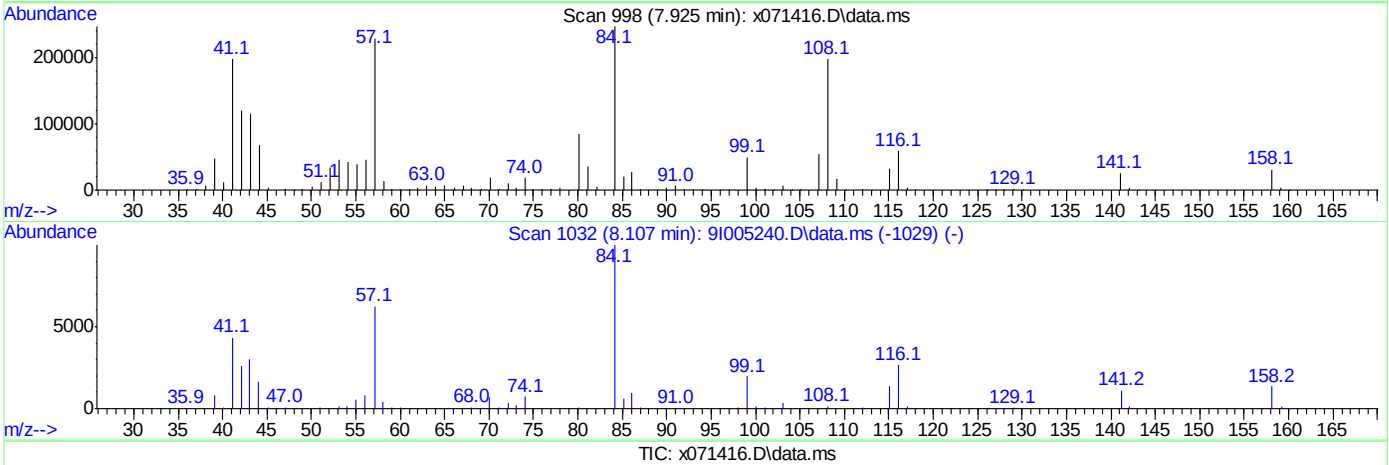
Ion	Exp%	Act%
84.10	100	100
57.10	94.40	92.34
41.10	81.30	79.76
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0624_sx2919\
Data File : x071416.D
Acq On : 24 Jun 2020 3:22 pm
Operator : marthav
Sample : icv2918-50 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 24 15:45:01 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration





TIC: x071416.D\data.ms

(124) N-Nitrosodi-n-butylamine

7.925min (-0.012) 39.74ppm m

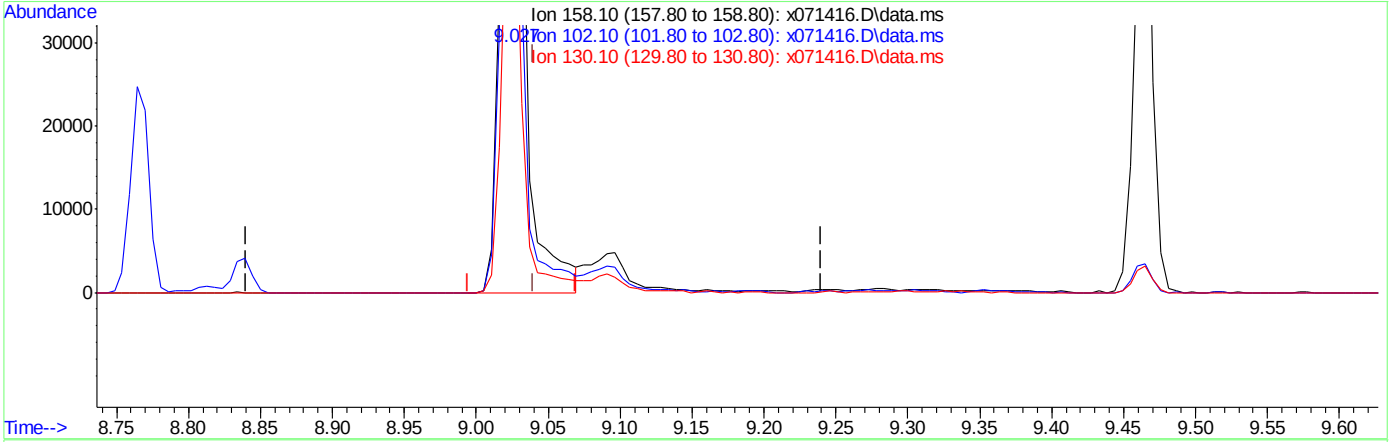
response 204562

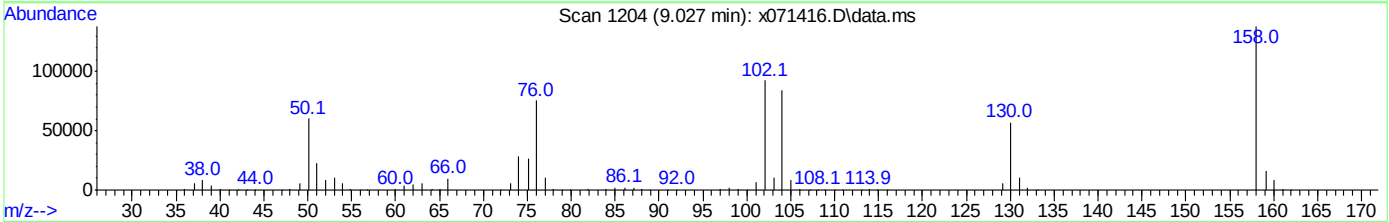
Ion	Exp%	Act%
84.10	100	100
57.10	94.40	92.19
41.10	81.30	80.06
0.00	0.00	0.00

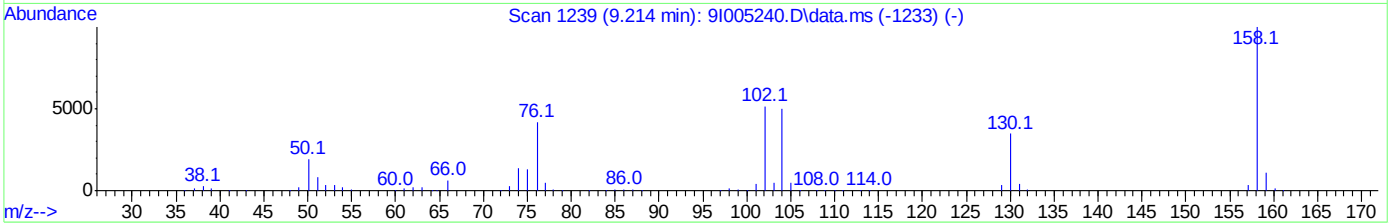
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0624_sx2919\
Data File : x071416.D
Acq On : 24 Jun 2020 3:22 pm
Operator : marthav
Sample : icv2918-50 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 24 15:45:01 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration







TIC: x071416.D\data.ms

(131) 1,4-Naphthoquinone

9.027min (-0.013) 30.43ppm

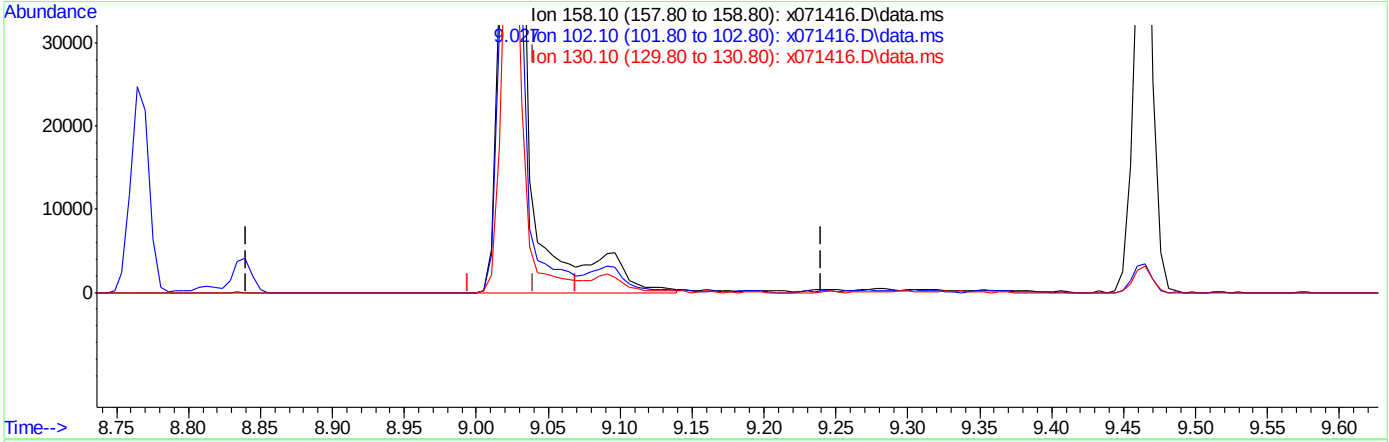
response 126951

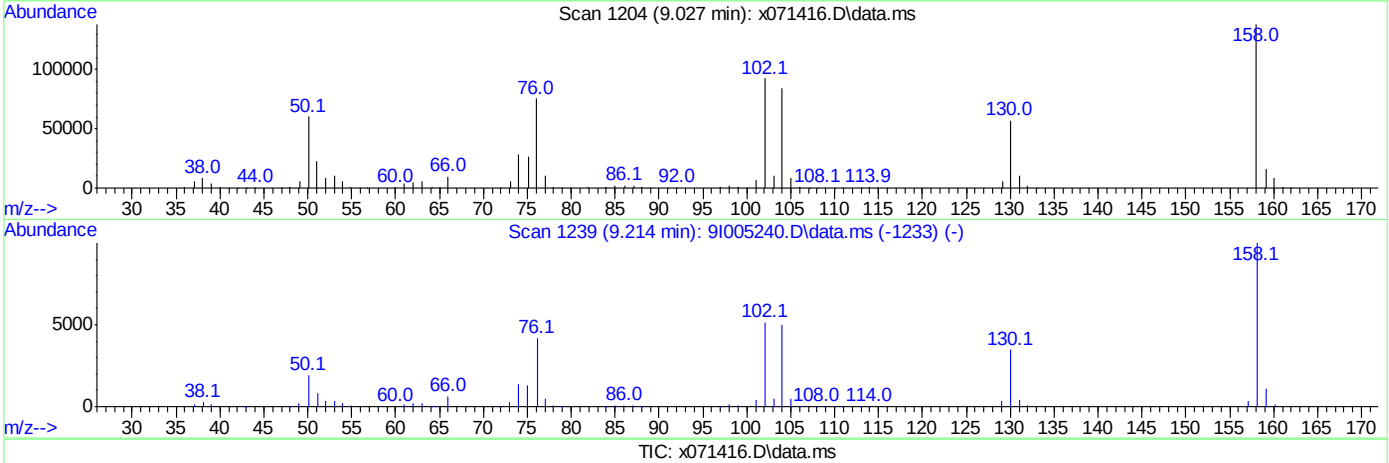
Ion	Exp%	Act%
158.10	100	100
102.10	69.70	67.02
130.10	42.30	41.38
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0624_sx2919\
Data File : x071416.D
Acq On : 24 Jun 2020 3:22 pm
Operator : marthav
Sample : icv2918-50 app9 Inst : MSBNA05
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 24 15:45:01 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration





TIC: x071416.D\data.ms

(131) 1,4-Naphthoquinone

9.027min (-0.013) 32.56ppm m

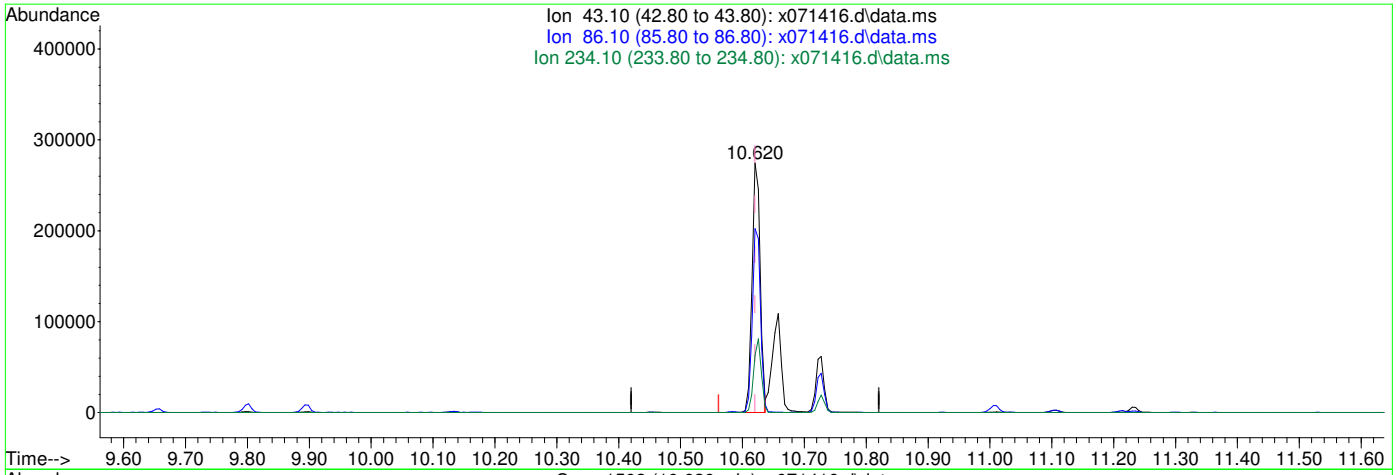
response 135960

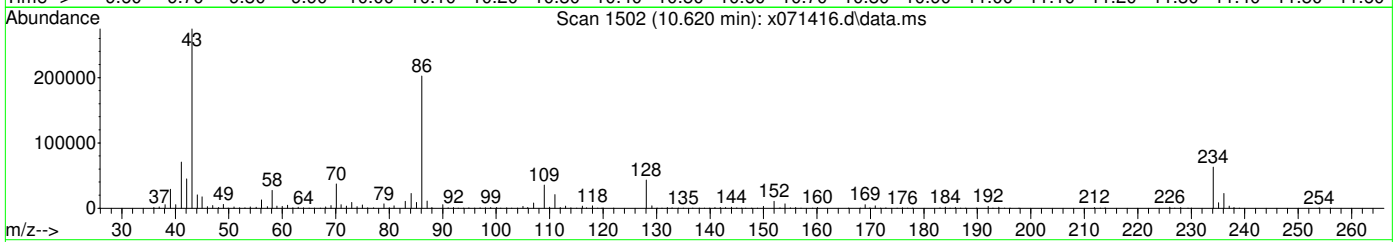
Ion	Exp%	Act%
158.10	100	100
102.10	69.70	67.02
130.10	42.30	41.45
0.00	0.00	0.00

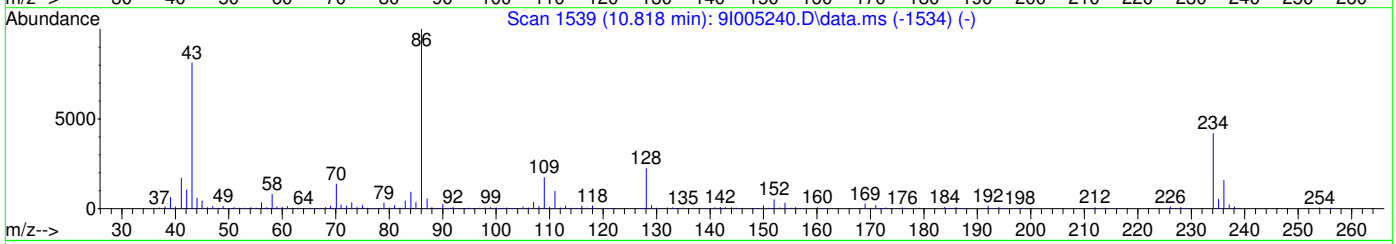
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\June 2020\06-25-2020\sx2919\
Data File : x071416.d
Acq On : 24 Jun 2020 3:22 pm
Operator : marthav
Sample : icv2918-50 app9
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 25 02:50:38 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Thu Jun 25 02:50:18 2020
Response via : Initial Calibration







TIC: x071416.d\data.ms

(138) Diallate

10.620min (0.000) 27.71ppm

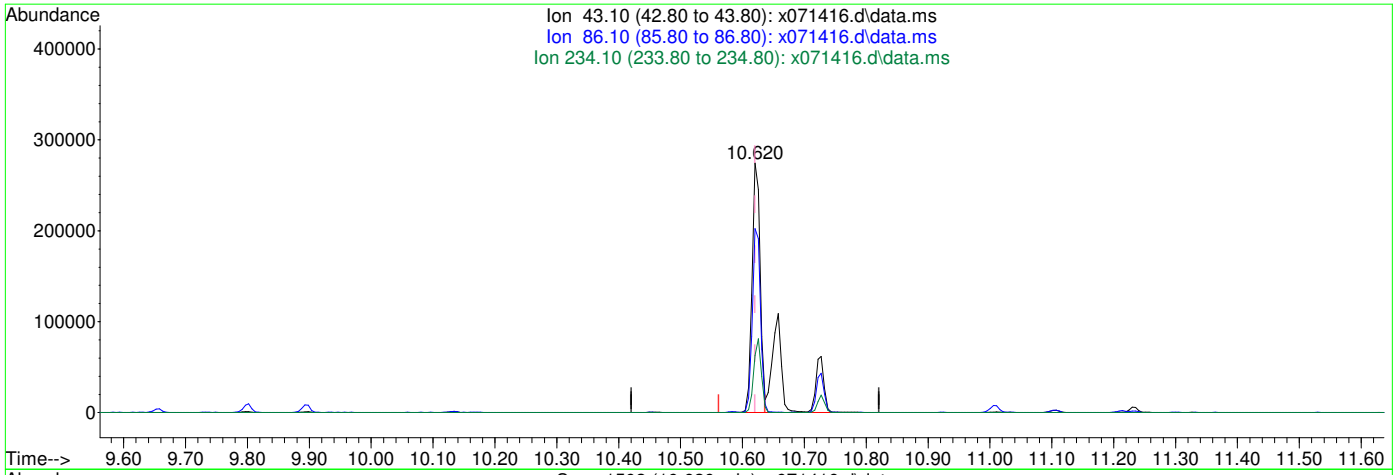
response 249556

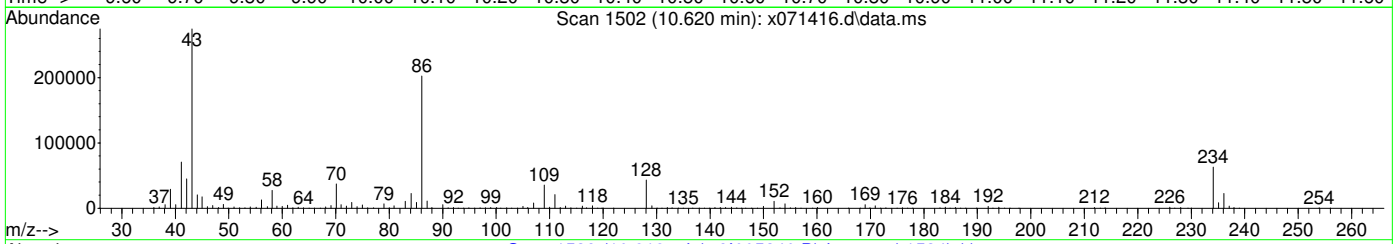
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	74.00#
234.10	51.50	22.32
0.00	0.00	0.00

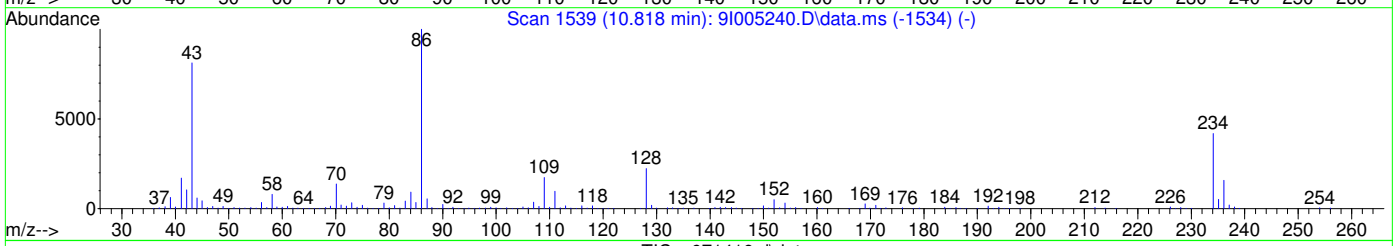
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\June 2020\06-25-2020\sx2919\
Data File : x071416.d
Acq On : 24 Jun 2020 3:22 pm
Operator : marthav
Sample : icv2918-50 app9
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 25 02:50:38 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Thu Jun 25 02:50:18 2020
Response via : Initial Calibration







TIC: x071416.d\data.ms

(138) Diallate

10.620min (0.000) 46.24ppm m

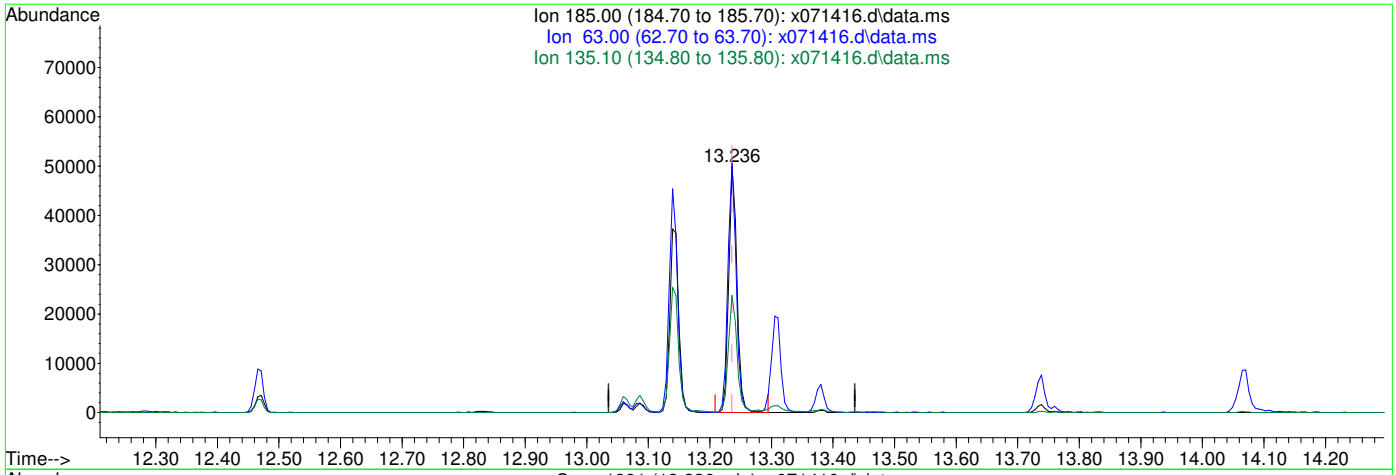
response 416437

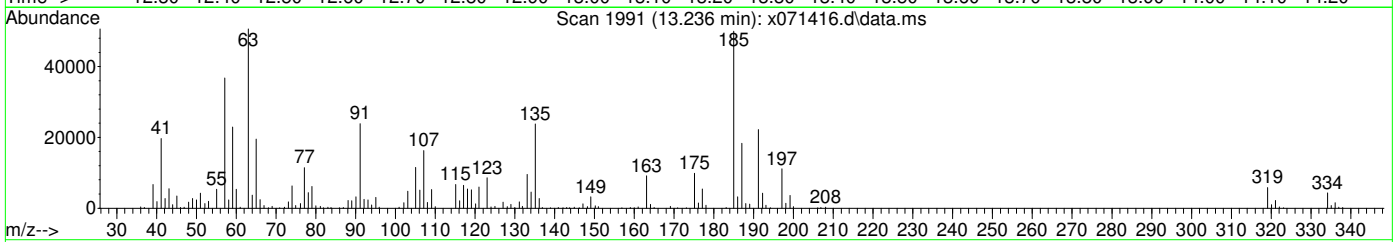
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	73.74#
234.10	51.50	22.86
0.00	0.00	0.00

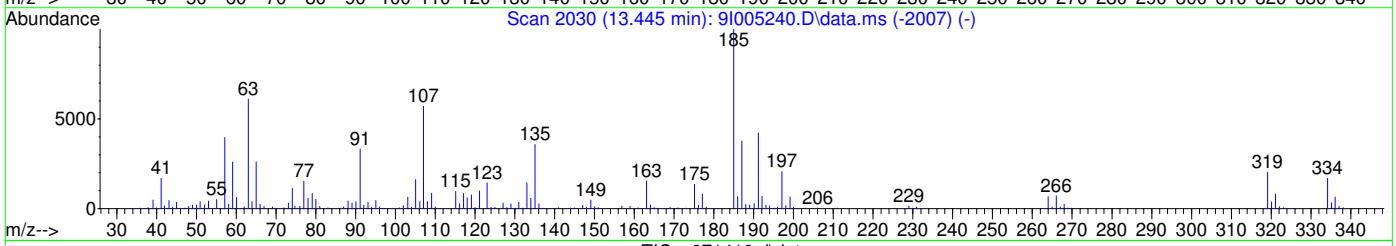
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\June 2020\06-25-2020\sx2919\
Data File : x071416.d
Acq On : 24 Jun 2020 3:22 pm
Operator : marthav
Sample : icv2918-50 app9
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 25 02:50:38 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Thu Jun 25 02:50:18 2020
Response via : Initial Calibration







TIC: x071416.d\data.ms

(147) Aramite

13.236min (0.000) 29.24ppm

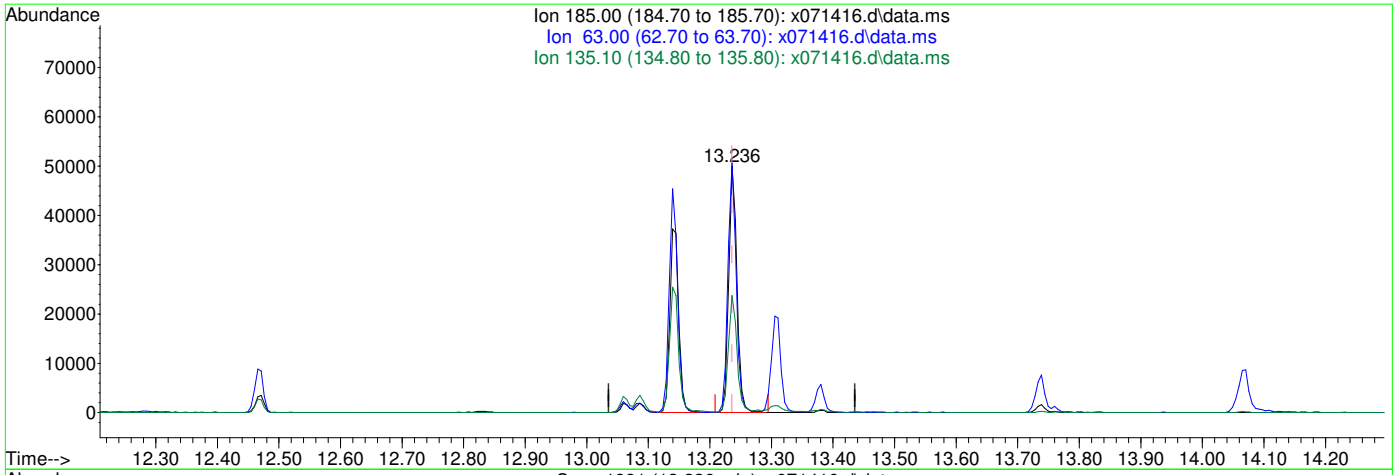
response 46379

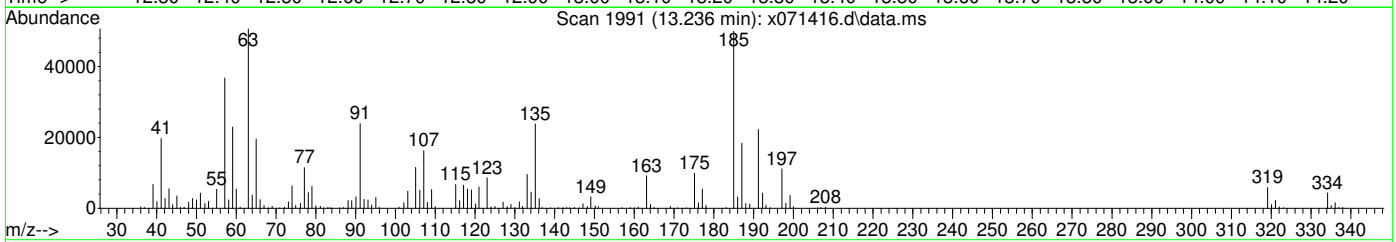
Ion	Exp%	Act%
185.00	100	100
63.00	61.10	97.60#
135.10	35.60	46.70
0.00	0.00	0.00

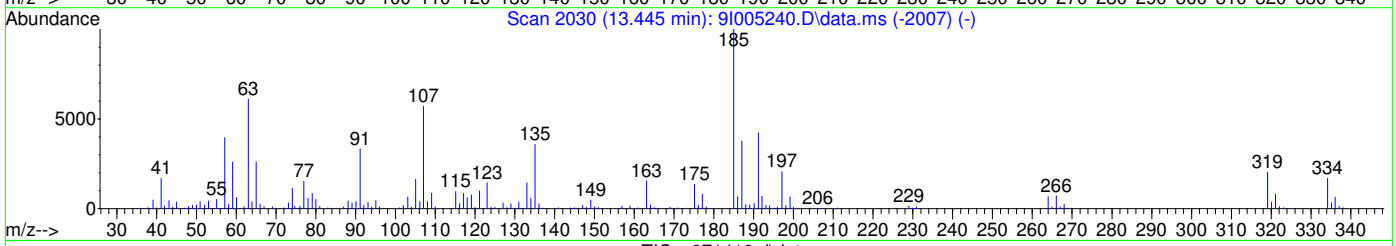
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\June 2020\06-25-2020\sx2919\
Data File : x071416.d
Acq On : 24 Jun 2020 3:22 pm
Operator : marthav
Sample : icv2918-50 app9
Misc : op80734,sx2918,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 25 02:50:38 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Thu Jun 25 02:50:18 2020
Response via : Initial Calibration







TIC: x071416.d\data.ms

(147) Aramite

13.236min (0.000) 49.69ppm m

response 83620

Ion	Exp%	Act%
185.00	100	100
63.00	61.10	101.34#
135.10	35.60	47.53
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 08/14/20 11:17

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\Jenniferf\AUGUST 2020\08-14-2020\SX2952\
Data File : x072389.d
Acq On : 13 Aug 2020 1:38 pm
Operator : marthav
Sample : cc2918-50 8270
Misc : op81484,sx2952,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 14 02:18:02 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Fri Aug 14 02:15:13 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.633	152	166017	40.00	ppm	0.00
22) Naphthalene-d8	7.061	136	649488	40.00	ppm	0.00
43) Acenaphthene-d10	9.099	164	321937	40.00	ppm	0.00
70) Phenanthrene-d10	10.843	188	541016	40.00	ppm	0.00
92) Chrysene-d12	14.052	240	424734	40.00	ppm	0.00
102) Perylene-d12	16.234	264	307492	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	5.633	152	166017	40.00	ppm	0.00
120) Naphthalene-d8A	7.061	136	649488	40.00	ppm	0.00
127) Acenaphthene-d10A	9.099	164	321937	40.00	ppm	0.00
136) Phenanthrene-d10A	10.843	188	541016	40.00	ppm	0.00
146) Chrysene-d12A	14.052	240	424734	40.00	ppm	0.00
153) Perylene-d12A	16.234	264	307492	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	4.291	112	579232	97.31	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 97.31%#			
9) Phenol-d5	5.323	99	694677	98.09	ppm	0.00
Spiked Amount 100.000	Range 10 - 50		Recovery = 98.09%#			
23) Nitrobenzene-d5	6.259	82	340015	50.69	ppm	0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 101.38%			
47) 2-Fluorobiphenyl	8.329	172	616456	52.90	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 105.80%			
75) 2,4,6-Tribromophenol	10.040	330	120712	99.87	ppm	0.00
Spiked Amount 100.000	Range 33 - 118		Recovery = 99.87%			
95) Terphenyl-d14	12.763	244	574332	50.89	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 101.78%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.451	88	128002	44.99	ppm	# 44
3) N-nitrosodimethylamine	2.788	42	206348	40.85	ppm	# 42
4) Pyridine	2.820	79	353811	51.11	ppm	# 38
5) Benzaldehyde	5.168	106	227456	45.96	ppm	95
6) Aniline	5.291	93	419008	42.45	ppm	91
8) bis(2-Chloroethyl)ether	5.371	93	298825	49.06	ppm	79
10) Phenol	5.334	94	394954	47.01	ppm	94
11) 2-Chlorophenol	5.425	128	324764	51.13	ppm	81
12) 1,3-Dichlorobenzene	5.569	146	330349	50.06	ppm	97
13) 1,4-Dichlorobenzene	5.655	146	347994	49.84	ppm	98
14) 1,2-Dichlorobenzene	5.815	146	312102	47.05	ppm	97
15) Benzyl alcohol	5.820	108	202309	46.02	ppm	93
16) 2,2'-Oxybis(1-chloropr...	5.959	45	524245	40.96	ppm	78
17) 2-Methylphenol	5.975	108	287301	47.55	ppm	98
18) Acetophenone	6.093	105	412325	46.11	ppm	97
19) Hexachloroethane	6.184	117	130884	49.92	ppm	95
20) N-Nitroso-di-n-propyla...	6.114	70	221693	46.94	ppm	# 67
21) 3&4-Methylphenol	6.152	108	304162	48.70	ppm	94
24) Nitrobenzene	6.280	77	329450	49.64	ppm	86
25) Isophorone	6.558	82	543862	45.90	ppm	96
26) 2-Nitrophenol	6.639	139	167590	53.12	ppm	81
27) 2,4-Dimethylphenol	6.735	107	264450	45.14	ppm	95
28) O,O,O-Triethylphosphor...	6.794	198	122208	49.15	ppm	88
29) bis(2-Chloroethoxy)met...	6.821	93	338036	48.76	ppm	95
30) Benzoic Acid	6.901	105	205006m	42.93	ppm	
31) 2,4-Dichlorophenol	6.938	162	238785	50.56	ppm	97
32) 1,2,4-Trichlorobenzene	7.002	180	247473	51.27	ppm	98
34) Naphthalene	7.083	128	867944	49.28	ppm	99
35) 4-Chloroaniline	7.174	127	358162	48.16	ppm	90

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\Jenniferf\AUGUST 2020\08-14-2020\SX2952\
Data File : x072389.d
Acq On : 13 Aug 2020 1:38 pm
Operator : marthav
Sample : cc2918-50 8270
Misc : op81484,sx2952,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 14 02:18:02 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Fri Aug 14 02:15:13 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
36) 2,6-Dichlorophenol	7.184	162	232678	48.32	ppm		99
37) Hexachlorobutadiene	7.232	225	124418	52.27	ppm		99
38) Caprolactam	7.623	113	91767	46.83	ppm	#	64
39) 4-Chloro-3-methylphenol	7.794	107	236334	46.93	ppm		86
40) 2-Methylnaphthalene	7.890	142	555871	47.73	ppm		99
41) 1-Methylnaphthalene	7.997	142	540790	48.50	ppm		98
42) 1,2,4,5-Tetrachloroben...	8.083	216	237465	49.02	ppm		99
44) Hexachlorocyclopentadiene	8.072	237	80862	33.22	ppm		98
45) 2,4,6-Trichlorophenol	8.243	196	156410	52.93	ppm		97
46) 2,4,5-Trichlorophenol	8.307	196	167981	51.95	ppm		100
48) 1,1'-Biphenyl	8.441	154	656753	49.96	ppm		99
49) 2-Chloronaphthalene	8.452	162	503646	51.04	ppm		96
50) 2-Nitroaniline	8.602	65	181237	49.89	ppm	#	71
51) p-Dinitrobenzene	8.783	75	105676	51.89	ppm	#	74
52) Acenaphthylene	8.933	152	820826	51.05	ppm		99
53) Dimethylphthalate	8.837	163	556683	49.01	ppm		99
54) m-Dinitrobenzene	8.869	168	101776	53.78	ppm	#	51
55) 2,6-Dinitrotoluene	8.901	165	138016	51.49	ppm		83
56) o-Dinitrobenzene	8.955	50	127534	49.68	ppm	#	51
57) Acenaphthene	9.136	153	538957	50.40	ppm		99
58) 3-Nitroaniline	9.094	138	156864	53.20	ppm		99
59) 2,4-Dinitrophenol	9.222	184	72124	51.67	ppm	#	70
60) Dibenzofuran	9.345	168	696449	48.80	ppm		95
61) 2,4-Dinitrotoluene	9.372	165	182346	53.36	ppm		83
62) 4-Nitrophenol	9.377	109	64281	39.02	ppm	#	54
63) 2,3,5,6-Tetrachlorophenol	9.463	232	114839	48.00	ppm		93
64) 2,3,4,6-Tetrachlorophenol	9.511	232	126114	50.87	ppm		88
65) Fluorene	9.746	166	564293	50.68	ppm		99
66) 4-Chlorophenyl-phenyle...	9.768	204	271093	50.43	ppm		94
67) Diethylphthalate	9.671	149	543491	47.91	ppm		98
68) Thionazin	9.757	97	124638	51.73	ppm		99
69) 4-Nitroaniline	9.821	138	166642	50.79	ppm		91
71) 4,6-Dinitro-2-methylph...	9.853	198	108052	53.67	ppm	#	46
72) n-Nitrosodiphenylamine	9.917	169	501172	59.61	ppm		96
73) Diphenylamine	9.917	169	501172	50.80	ppm		96
74) 1,2-Diphenylhydrazine	9.955	77	602687	49.71	ppm		95
76) Sulfotep	10.137	97	89659	50.29	ppm	#	73
77) Phorate	10.270	75	329573	52.77	ppm		94
78) 4-Bromophenyl-phenylether	10.340	248	131777	50.73	ppm		88
79) Hexachlorobenzene	10.388	284	133652	51.57	ppm		78
80) Dimethoate	10.479	87	230582	52.91	ppm		95
81) Simazine	10.554	201	90563	47.48	ppm		96
82) Atrazine	10.591	200	160329	50.75	ppm		94
83) Pentachlorophenol	10.650	266	56584	35.04	ppm		98
84) Phenanthrene	10.875	178	811820	49.66	ppm		98
85) Anthracene	10.934	178	865950	50.82	ppm		98
86) Disulfoton	10.891	88	362224	55.42	ppm		93
87) Carbazole	11.153	167	759277	50.50	ppm		99
88) Methyl Parathion	11.329	109	191093	51.23	ppm	#	86
89) Di-n-butylphthalate	11.608	149	872516	51.99	ppm		99
90) Ethyl Parathion	11.800	97	111077	51.06	ppm		87
91) Fluoranthene	12.276	202	781105	51.50	ppm		97
93) Benzidine	12.469	184	432637	51.92	ppm		96
94) Pyrene	12.533	202	841357	47.71	ppm		99
96) Famphur	13.303	218	202455	75.38	ppm		95
97) Butylbenzylphthalate	13.389	149	360171	49.05	ppm		90
98) 3,3'-Dichlorobenzidine	14.041	252	233896	51.98	ppm		97
99) Benzo[a]anthracene	14.036	228	656464	49.18	ppm		100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\Jenniferf\AUGUST 2020\08-14-2020\SX2952\
Data File : x072389.d
Acq On : 13 Aug 2020 1:38 pm
Operator : marthav
Sample : cc2918-50 8270
Misc : op81484,sx2952,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 14 02:18:02 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Fri Aug 14 02:15:13 2020
Response via : Initial Calibration

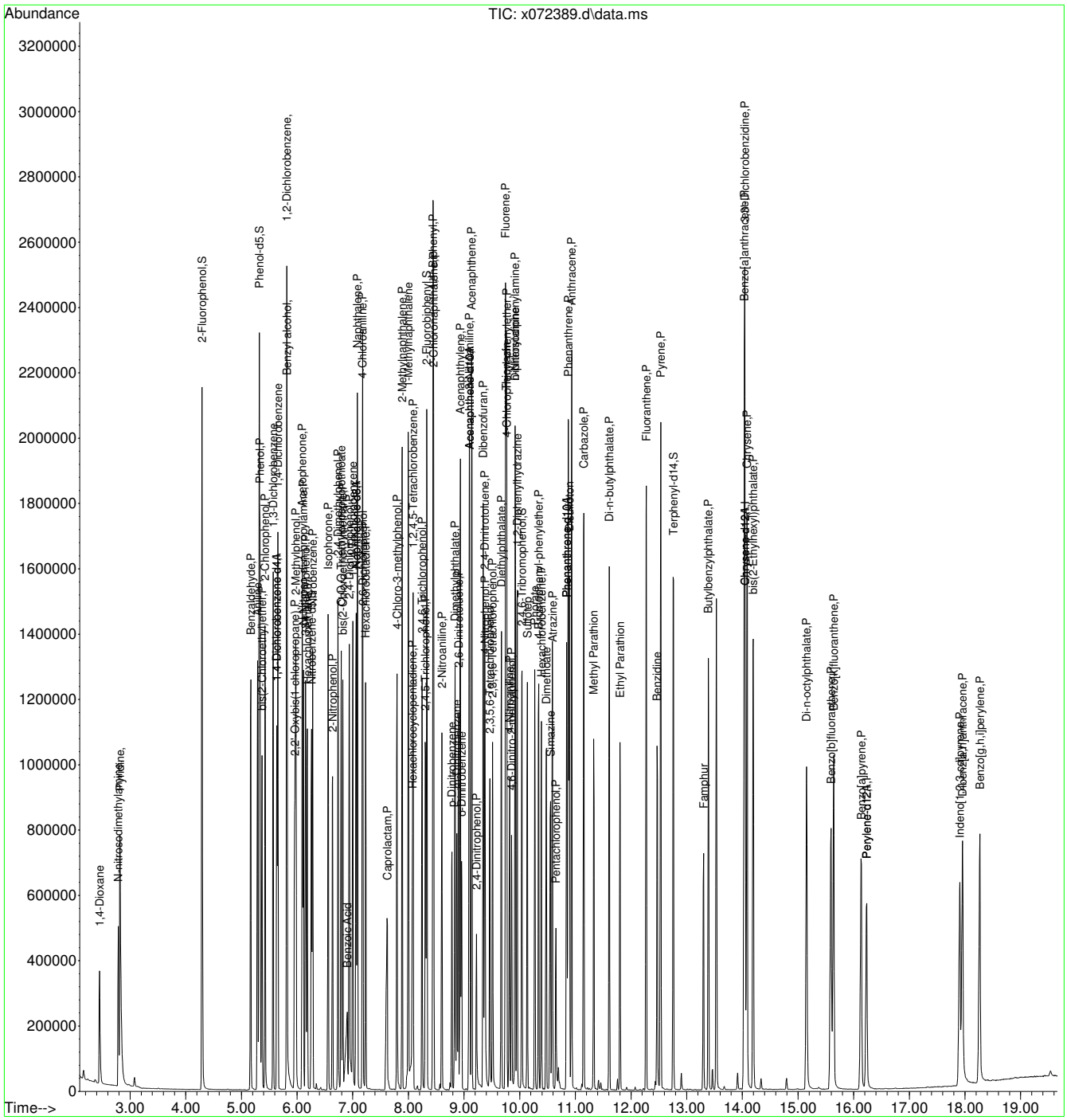
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
100) Chrysene	14.084	228	716961	50.43	ppm	99
101) bis(2-Ethylhexyl)phtha...	14.196	149	513308	51.13	ppm	98
103) Di-n-octylphthalate	15.154	149	747083	58.22	ppm	94
104) Benzo[b]fluoranthene	15.592	252	525024	56.69	ppm	97
105) Benzo[k]fluoranthene	15.640	252	549656	50.35	ppm	97
106) Benzo[a]pyrene	16.138	252	459062	52.14	ppm	96
107) Indeno[1,2,3-cd]pyrene	17.908	276	378752	59.64	ppm	87
108) Dibenz[a,h]anthracene	17.956	278	440088	60.08	ppm	90
109) Benzo[g,h,i]perylene	18.267	276	432758	50.69	ppm	88

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\Jenniferf\AUGUST 2020\08-14-2020\SX2952\
Data File : x072389.d
Acq On : 13 Aug 2020 1:38 pm
Operator : marthav
Sample : cc2918-50 8270
Misc : op81484,sx2952,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 14 02:18:02 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Fri Aug 14 02:15:13 2020
Response via : Initial Calibration



Manual Integration Approval Summary

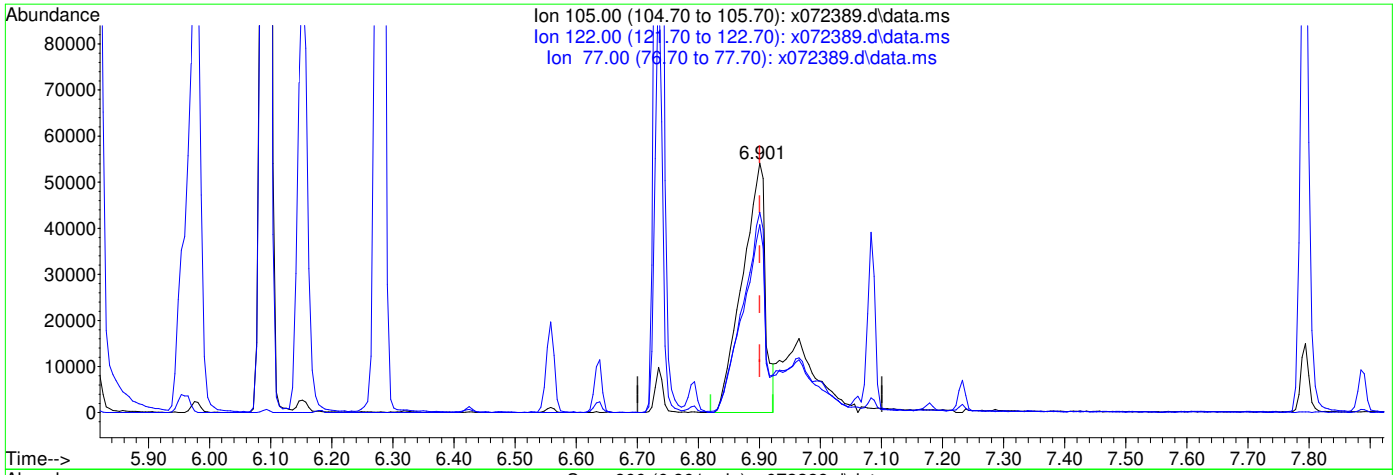
Sample Number: SX2952-CC2918
Lab FileID: X072389.D
Injection Time: 08/13/20 13:38
Method: SW846 8270D
Analyst approved: 08/14/20 02:22 Jennifer Fereira
Supervisor approved: 08/14/20 11:17 Nicole McCampbell

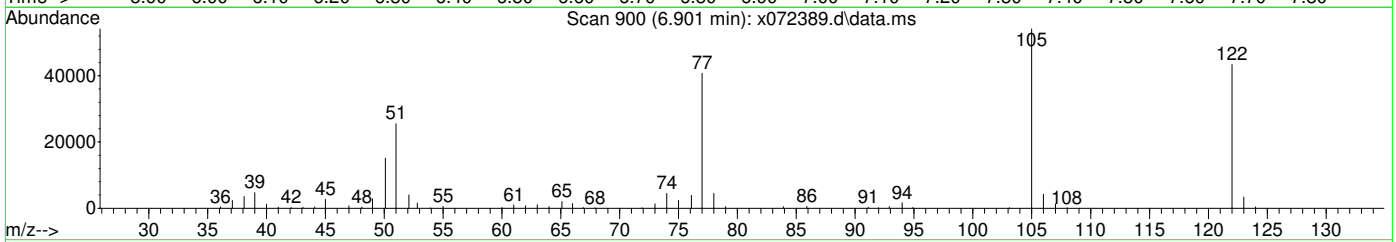
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic Acid	65-85-0		6.90	Split peak

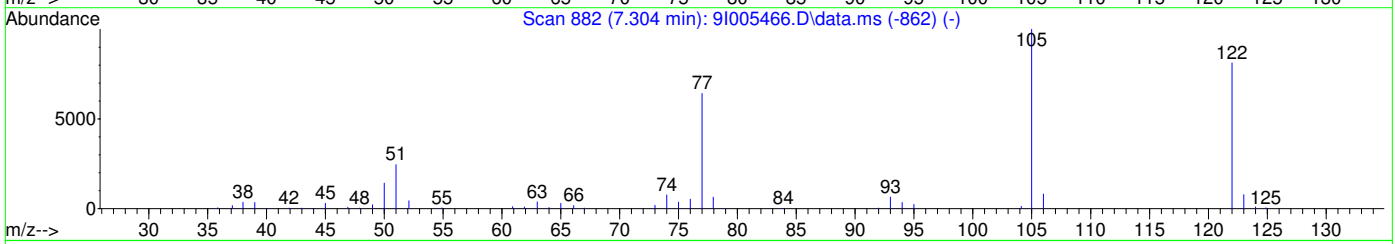
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\Jenniferf\AUGUST 2020\08-14-2020\SX2952\
Data File : x072389.d
Acq On : 13 Aug 2020 1:38 pm
Operator : marthav
Sample : cc2918-50 8270
Misc : op81484,sx2952,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 14 02:15:19 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Fri Aug 14 02:15:13 2020
Response via : Initial Calibration







TIC: x072389.d\data.ms

(30) Benzoic Acid

6.901min (0.000) 31.08ppm

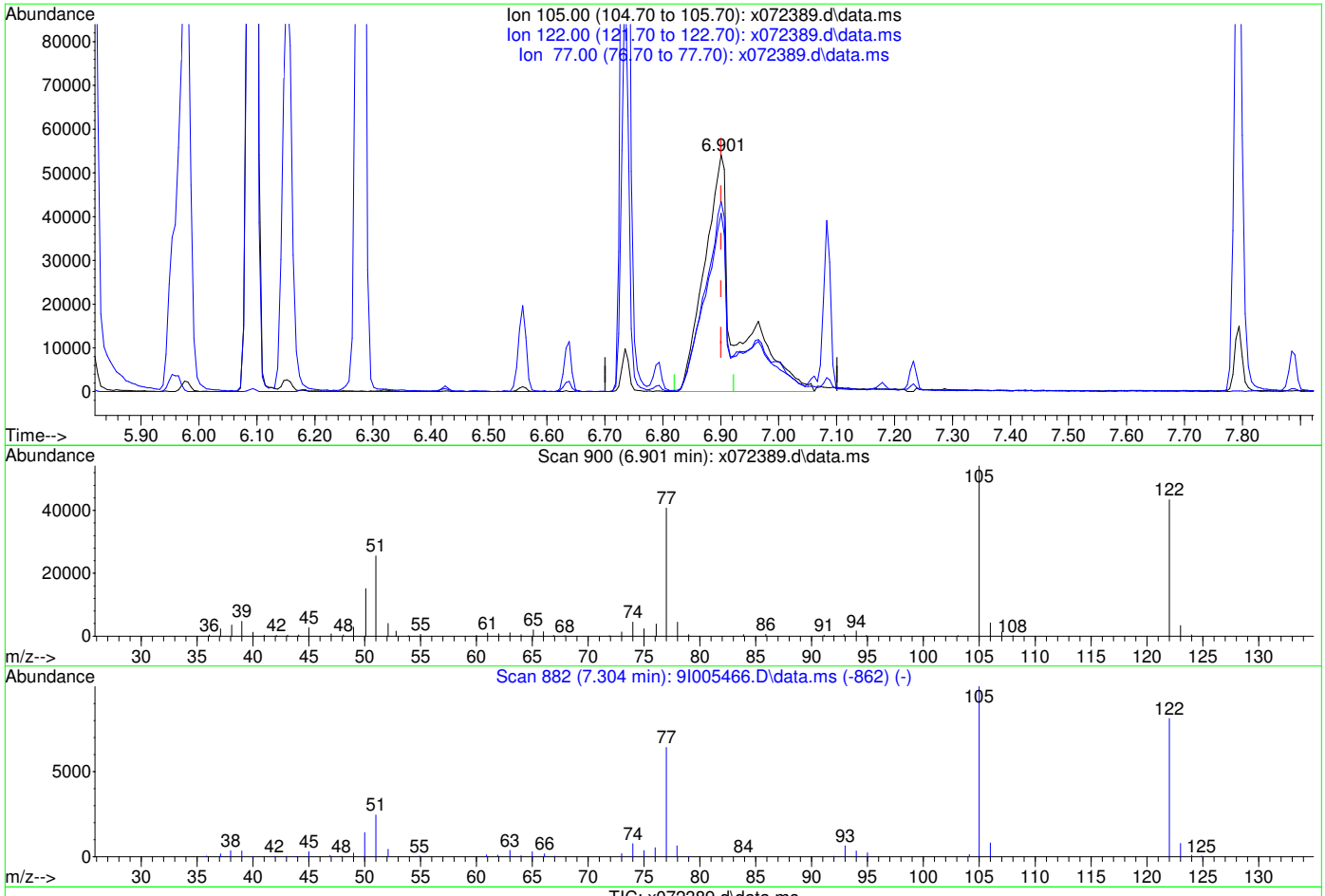
response 141176

Ion	Exp%	Act%
105.00	100	100
122.00	81.20	80.47
77.00	64.10	74.93
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\Jenniferf\AUGUST 2020\08-14-2020\SX2952\
Data File : x072389.d
Acq On : 13 Aug 2020 1:38 pm
Operator : marthav
Sample : cc2918-50 8270
Misc : op81484,sx2952,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 14 02:15:19 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Fri Aug 14 02:15:13 2020
Response via : Initial Calibration



TIC: x072389.d\data.ms

(30) Benzoic Acid

6.901min (0.000) 42.93ppm m

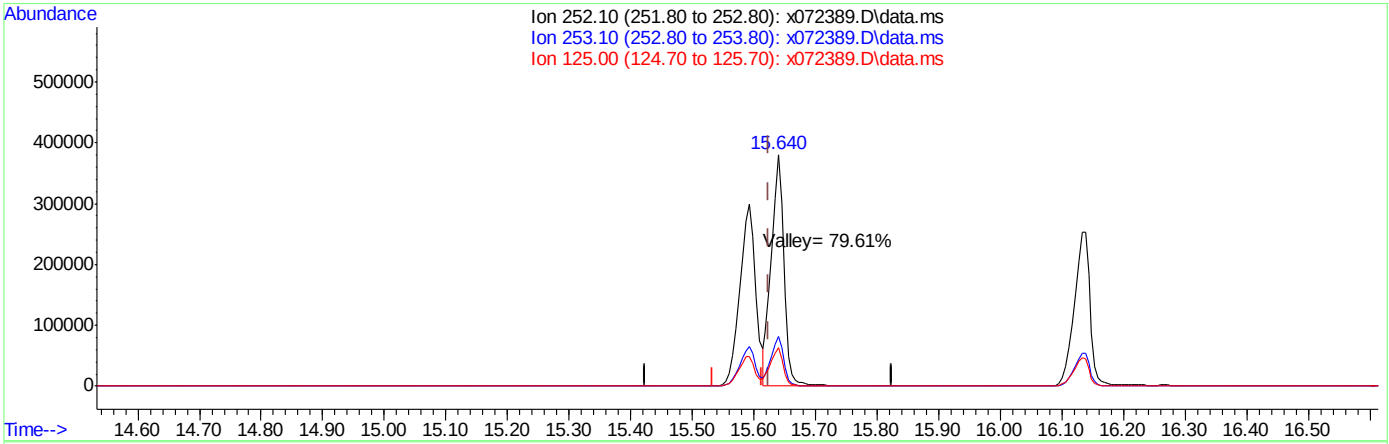
response 205006

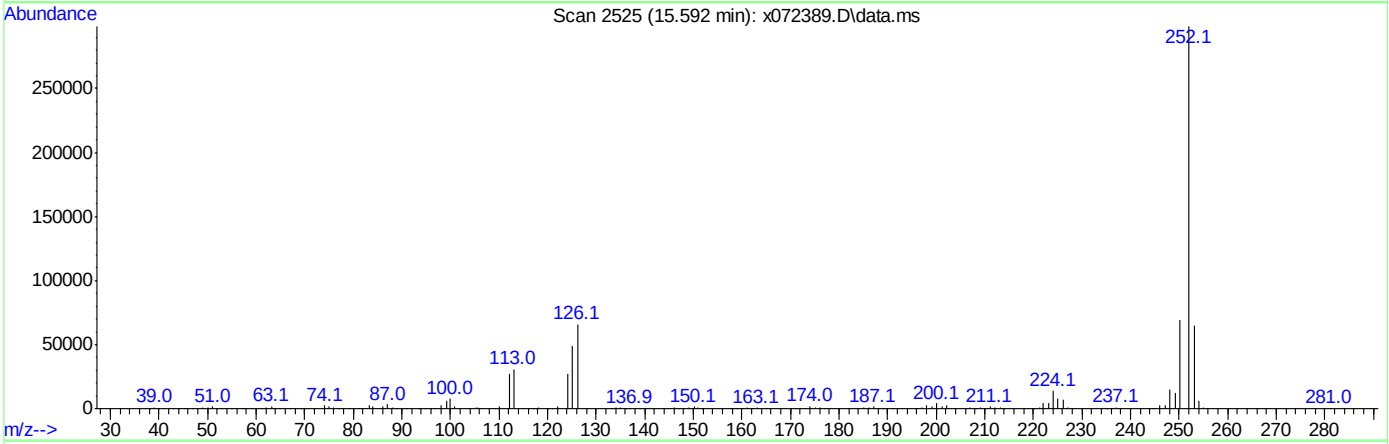
Ion	Exp%	Act%
105.00	100	100
122.00	81.20	80.14
77.00	64.10	75.25
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0813_sx2952\
Data File : x072389.D
Acq On : 13 Aug 2020 1:38 pm
Operator : marthav
Sample : cc2918-50 8270 Inst : MSBNA05
Misc : op81484,sx2952,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 13 13:58:15 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration





TIC: x072389.D\data.ms

(104) Benzo[b]fluoranthene (P)

15.592min (-0.032) 56.69ppm

response 525024

Ion	Exp%	Act%
252.10	100	100
253.10	22.50	21.53
125.00	14.00	16.31
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\Jenniferf\AUGUST 2020\08-14-2020\SX2952\
Data File : x072390.d
Acq On : 13 Aug 2020 2:03 pm
Operator : marthav
Sample : cc2918-5 8270
Misc : op81484,sx2952,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 14 02:21:28 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.633	152	163021	40.00	ppm	0.00
22) Naphthalene-d8	7.056	136	629305	40.00	ppm	0.00
43) Acenaphthene-d10	9.099	164	328157	40.00	ppm	0.00
70) Phenanthrene-d10	10.842	188	563260	40.00	ppm	0.00
92) Chrysene-d12	14.046	240	422957	40.00	ppm	0.00
102) Perylene-d12	16.229	264	348814	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	5.633	152	163021	40.00	ppm	0.00
120) Naphthalene-d8A	7.056	136	629305	40.00	ppm	0.00
127) Acenaphthene-d10A	9.099	164	328157	40.00	ppm	0.00
136) Phenanthrene-d10A	10.842	188	563260	40.00	ppm	0.00
146) Chrysene-d12A	14.046	240	422957	40.00	ppm	0.00
153) Perylene-d12A	16.229	264	348814	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	4.290	112	59312	10.15	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 10.15%#			
9) Phenol-d5	5.317	99	67244	9.67	ppm	0.00
Spiked Amount 100.000	Range 10 - 50		Recovery = 9.67%#			
23) Nitrobenzene-d5	6.253	82	32154	4.95	ppm	0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 9.90%#			
47) 2-Fluorobiphenyl	8.329	172	57685	4.86	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 9.72%#			
75) 2,4,6-Tribromophenol	10.029	330	9928	9.50	ppm	-0.01
Spiked Amount 100.000	Range 33 - 118		Recovery = 9.50%#			
95) Terphenyl-d14	12.757	244	52624	4.68	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 9.36%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.456	88	13760	4.93	ppm	# 42
3) N-nitrosodimethylamine	2.793	42	21022	4.24	ppm	# 43
4) Pyridine	2.830	79	35482	5.22	ppm	# 30
5) Benzaldehyde	5.162	106	23964	4.93	ppm	93
6) Aniline	5.285	93	41984	4.33	ppm	87
8) bis(2-Chloroethyl)ether	5.365	93	27594	4.61	ppm	77
10) Phenol	5.328	94	36747	4.45	ppm	92
11) 2-Chlorophenol	5.424	128	29156	4.67	ppm	79
12) 1,3-Dichlorobenzene	5.569	146	32163	4.96	ppm	98
13) 1,4-Dichlorobenzene	5.654	146	33173	4.84	ppm	99
14) 1,2-Dichlorobenzene	5.815	146	30437	4.67	ppm	97
15) Benzyl alcohol	5.809	108	18328	4.25	ppm	87
16) 2,2'-Oxybis(1-chloropr...	5.959	45	53326	4.24	ppm	79
17) 2-Methylphenol	5.970	108	26762	4.51	ppm	95
18) Acetophenone	6.088	105	39351	4.48	ppm	96
19) Hexachloroethane	6.178	117	12568	4.88	ppm	86
20) N-Nitroso-di-n-propyla...	6.098	70	20930	4.51	ppm	# 64
21) 3&4-Methylphenol	6.152	108	28098	4.58	ppm	96
24) Nitrobenzene	6.269	77	31764	4.94	ppm	82
25) Isophorone	6.547	82	53735	4.68	ppm	96
26) 2-Nitrophenol	6.633	139	15754	5.15	ppm	73
27) 2,4-Dimethylphenol	6.729	107	25750	4.54	ppm	91
28) O,O,O-Triethylphosphor...	6.783	198	11231	4.66	ppm	72
29) bis(2-Chloroethoxy)met...	6.815	93	31855	4.74	ppm	93
30) Benzoic Acid	6.842	105	13204	3.41	ppm	88
31) 2,4-Dichlorophenol	6.938	162	21901	4.79	ppm	97
32) 1,2,4-Trichlorobenzene	6.997	180	23530	5.03	ppm	96
34) Naphthalene	7.082	128	84242	4.94	ppm	99
35) 4-Chloroaniline	7.168	127	34401	4.77	ppm	89

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\Jenniferf\AUGUST 2020\08-14-2020\SX2952\
Data File : x072390.d
Acq On : 13 Aug 2020 2:03 pm
Operator : marthav
Sample : cc2918-5 8270
Misc : op81484,sx2952,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 14 02:21:28 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
36)	2,6-Dichlorophenol	7.173	162	22189	4.76	ppm		97
37)	Hexachlorobutadiene	7.232	225	11953	5.18	ppm		97
38)	Caprolactam	7.553	113	8646	4.55	ppm	#	51
39)	4-Chloro-3-methylphenol	7.788	107	22921	4.70	ppm		98
40)	2-Methylnaphthalene	7.885	142	54781	4.85	ppm		99
41)	1-Methylnaphthalene	7.997	142	51837	4.80	ppm		99
42)	1,2,4,5-Tetrachloroben...	8.083	216	21662	4.62	ppm		97
44)	Hexachlorocyclopentadiene	8.066	237	2275	1.04	ppm		95
45)	2,4,6-Trichlorophenol	8.243	196	14439	4.79	ppm		94
46)	2,4,5-Trichlorophenol	8.302	196	15076	4.57	ppm		94
48)	1,1'-Biphenyl	8.436	154	63730	4.76	ppm		99
49)	2-Chloronaphthalene	8.446	162	47621	4.73	ppm		94
50)	2-Nitroaniline	8.591	65	16915	4.57	ppm	#	66
51)	p-Dinitrobenzene	8.773	75	9514	4.58	ppm	#	61
52)	Acenaphthylene	8.928	152	74283	4.53	ppm		100
53)	Dimethylphthalate	8.826	163	52902	4.57	ppm		100
54)	m-Dinitrobenzene	8.858	168	8891	4.61	ppm	#	57
55)	2,6-Dinitrotoluene	8.890	165	12574	4.60	ppm		84
56)	o-Dinitrobenzene	8.938	50	11875	4.54	ppm	#	48
57)	Acenaphthene	9.131	153	51213	4.70	ppm		99
58)	3-Nitroaniline	9.083	138	14503	4.83	ppm		92
59)	2,4-Dinitrophenol	9.216	184	1864	1.77	ppm	#	29
60)	Dibenzofuran	9.339	168	68659	4.72	ppm		99
61)	2,4-Dinitrotoluene	9.361	165	16306	4.68	ppm		86
62)	4-Nitrophenol	9.377	109	5082	3.03	ppm	#	78
63)	2,3,5,6-Tetrachlorophenol	9.457	232	9343	3.83	ppm		92
64)	2,3,4,6-Tetrachlorophenol	9.511	232	10067	3.98	ppm		89
65)	Fluorene	9.741	166	54169	4.77	ppm		100
66)	4-Chlorophenyl-phenyle...	9.762	204	24946	4.55	ppm		92
67)	Diethylphthalate	9.660	149	51943	4.49	ppm		97
68)	Thionazin	9.746	97	11640	4.74	ppm		97
69)	4-Nitroaniline	9.794	138	14634	4.38	ppm		89
71)	4,6-Dinitro-2-methylph...	9.842	198	5858	3.54	ppm	#	63
72)	n-Nitrosodiphenylamine	9.906	169	47073	5.38	ppm		96
73)	Diphenylamine	9.906	169	47073	4.58	ppm		96
74)	1,2-Diphenylhydrazine	9.944	77	55992	4.44	ppm		89
76)	Sulfotep	10.131	97	8595	4.63	ppm	#	63
77)	Phorate	10.265	75	30601	4.71	ppm		93
78)	4-Bromophenyl-phenylether	10.334	248	12224	4.52	ppm	#	83
79)	Hexachlorobenzene	10.382	284	11804	4.37	ppm		73
80)	Dimethoate	10.463	87	20828	4.75	ppm		97
81)	Simazine	10.527	201	8257	4.16	ppm		93
82)	Atrazine	10.570	200	14524	4.42	ppm		78
83)	Pentachlorophenol	10.645	266	1831	1.26	ppm		91
84)	Phenanthrene	10.864	178	78645	4.62	ppm		98
85)	Anthracene	10.923	178	80506	4.54	ppm		99
86)	Disulfoton	10.885	88	31878	4.69	ppm		89
87)	Carbazole	11.142	167	73057	4.67	ppm		99
88)	Methyl Parathion	11.324	109	16585	4.41	ppm	#	84
89)	Di-n-butylphthalate	11.607	149	82722	4.73	ppm		98
90)	Ethyl Parathion	11.794	97	9873	4.80	ppm		85
91)	Fluoranthene	12.265	202	75248	4.76	ppm		98
93)	Benzidine	12.463	184	37740	5.01	ppm		96
94)	Pyrene	12.527	202	77390	4.41	ppm		99
96)	Famphur	13.297	218	23599	5.76	ppm		93
97)	Butylbenzylphthalate	13.388	149	32869	4.83	ppm		91
98)	3,3'-Dichlorobenzidine	14.036	252	20723	5.20	ppm		95
99)	Benzo[a]anthracene	14.030	228	61097	4.60	ppm		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\Jenniferf\AUGUST 2020\08-14-2020\SX2952\
Data File : x072390.d
Acq On : 13 Aug 2020 2:03 pm
Operator : marthav
Sample : cc2918-5 8270
Misc : op81484,sx2952,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 14 02:21:28 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-062320.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Jun 23 17:15:34 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
100) Chrysene	14.073	228	64371	4.55	ppm	99
101) bis(2-Ethylhexyl)phtha...	14.191	149	44414	4.96	ppm	95
103) Di-n-octylphthalate	15.148	149	64660	5.79	ppm	92
104) Benzo[b]fluoranthene	15.576	252	48192	5.13	ppm	97
105) Benzo[k]fluoranthene	15.619	252	52396	4.23	ppm	97
106) Benzo[a]pyrene	16.116	252	43096	4.82	ppm	96
107) Indeno[1,2,3-cd]pyrene	17.887	276	39363	7.63	ppm	88
108) Dibenz[a,h]anthracene	17.940	278	39813	6.97	ppm	89
109) Benzo[g,h,i]perylene	18.245	276	46404	5.75	ppm	86

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\Jenniferf\AUGUST 2020\08-14-2020\SX2952\
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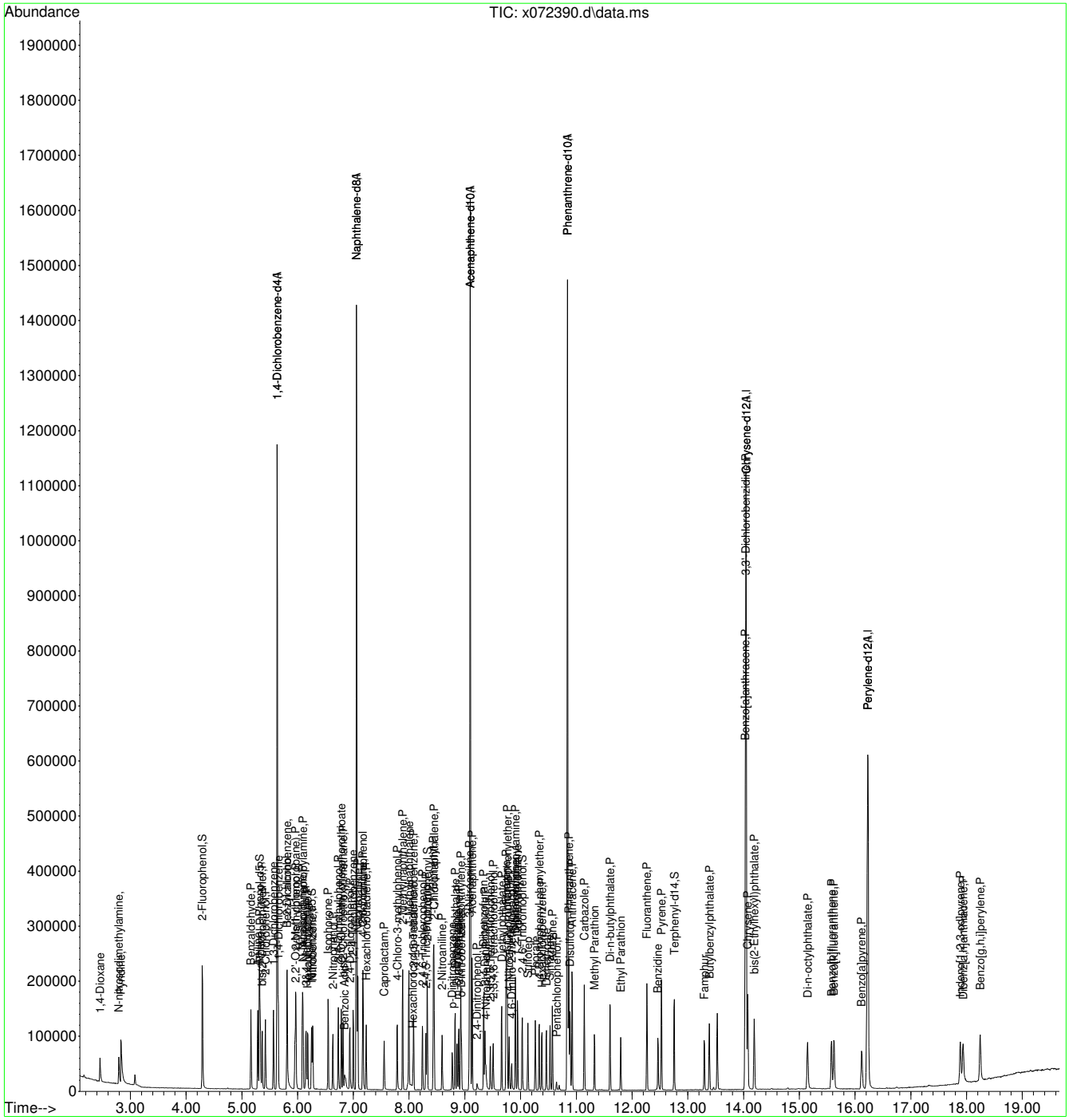

SGS-ORLANDO **MS BNA05-X** **ANALYSIS LOG**

DATE	7/29/2020	**METHODS**	8270D	**IC/ICC STD LOT**	**S6418/S6417**
COLUMN TYPE	DB-5MS	**ACQ. METHOD**	ACQ-BNA	**ICV STD LOT**	**10204A**
AMOUNT INJ	1	**PROC. METHOD**	8270D6F072920	**DFTPP**	**S6384**
INSTRUMENT	MS-6F	**CALIB. DATE**	7/29/2020	**EM VOLTAGE**	**1471V**
ANALYST	M.Valls	**RUN BATCH**	S6F248	**ISTD LOT**	**10132J**

ICV(1) 10204A ICV(2) 9809D + 9782 + 10072D ICV(3) (OP) 9934A

DATA FILE	ALS	SAMPLE NAME	METHOD	DF	MISC. INFO	COMMENTS
6F06431	41	Cond Std	8270	""""""""""""""	op81256,S6F248,1000,,,1,1,water	Conditioning
6F06432	1	DFTPP	DFTPP	1x	op81256,S6F248,1000,,,1,1,water	Pass
6F06433	2	ic248-1	8270	2+2/400	op81256,S6F248,1000,,,1,1,water	ok
6F06434	3	ic248-5	8270	10+10/400	op81256,S6F248,1000,,,1,1,water	rr, lost time
6F06435	1	DFTPP	DFTPP	1x	op81256,S6F248,1000,,,1,1,water	Pass
6F06436	2	ic248-1	8270	2+2/400	op81256,S6F248,1000,,,1,1,water	Level 1 Response fail for PCP, Curve Pass
6F06437	3	ic248-5	8270	10+10/400	op81256,S6F248,1000,,,1,1,water	Curve Pass, Pass DOD
6F06438	4	ic248-10	8270	20+20/400	op81256,S6F248,1000,,,1,1,water	Curve Pass, Pass DOD
6F06439	5	ic248-25	8270	50+50/400	op81256,S6F248,1000,,,1,1,water	Curve Pass, Pass DOD
6F06440	6	icc248-50	8270	100+100/400	op81256,S6F248,1000,,,1,1,water	Curve Pass, Pass DOD
6F06441	7	ic248-60	8270	120+120/400	op81256,S6F248,1000,,,1,1,water	Curve Pass, Pass DOD
6F06442	8	ic248-75	8270	150+150/400	op81256,S6F248,1000,,,1,1,water	Curve Pass, Pass DOD
6F06443	9	ic248-100	8270	200+200	op81256,S6F248,1000,,,1,1,water	Curve Pass, Pass DOD
6F06444	10	icv248-50	8270	2x	op81256,S6F248,1000,,,1,1,water	Pass, Phenol low dod
6F06445	11	icv248-50	8270	20+20+10/400	op81256,S6F248,1000,,,1,1,water	Pass

SGS-ORLANDO **MS BNA05-X** **ANALYSIS LOG**

DATE	8/13/2020	**METHODS**	8270D	**IC/ICC STD LOT**	**S6418/S6417**
COLUMN TYPE	DB-5MS	**ACQ. METHOD**	ACQ-BNA	**ICV STD LOT**	**10204A**
AMOUNT INJ	1	**PROC. METHOD**	8270D6F072920	**DFTPP**	**S6384**
INSTRUMENT	MS-6F	**CALIB. DATE**	7/29/2020	**EM VOLTAGE**	**1471V**
ANALYST	M.Valls	**RUN BATCH**	S6F253	**ISTD LOT**	**10194B**

ICV(1) 10204A ICV(2) 9809D + 9782 + 10072D ICV(3) (OP) 9934A

DATA FILE	ALS	SAMPLE NAME	METHOD	DF	MISC. INFO	COMMENTS
6F06540	1	DFTPP	8270	1X	op81484,S6F253,1000,,,1,1,water	PASS(response:3232391)
6F06541	2	cc248-50	DFTPP	100+100/400	op81484,S6F253,1000,,,1,1,water	OK, 4-NP↓#30(SP)
6F06542	3	op81540-bs E	8270	1X	op81540,S6F253,30.0,,,1,1,soil	Pass #30(SP)
6F06543	4	op81540-mb E	8270	1X	op81540,S6F253,30.0,,,1,1,soil	ND
6F06544	5	fa77700-1 E	8270	1X	op81540,S6F253,30.5,,,1,1,soil	OK, #107(OP)
6F06545	6	op81538-bs E	8270	1X	op81538,S6F253,30.0,,,1,1,soil	OK, Pass #30(SP)
6F06546	7	op81538-mb E	8270	1X	op81538,S6F253,30.0,,,1,1,soil	ND
6F06547	8	fa77698-11 E	8270	1X	op81540,S6F253,30.3,,,1,1,soil	RR10x Pyrene #18(PII)#105(MP)#107(OP)
6F06548	9	op81540-ms E	8270	1X	op81540,S6F253,30.2,,,1,1,soil	OK, #105(MP)#107(OP)
6F06549	10	op81540-msd E	8270	1X	op81540,S6F253,30.1,,,1,1,soil	OK, #105(MP)#107(OP)
6F06550	11	fa77698-5 E	8270	1X	op81538,S6F253,30.5,,,1,1,soil	RR5x Pyrene #107(OP)
6F06551	12	op81538-ms E	8270	1X	op81538,S6F253,30.0,,,1,1,soil	OK
6F06552	13	op81538-msd E	8270	1X	op81538,S6F253,29.8,,,1,1,soil	OK
6F06553	14	fa77700-2 E	8270	1X	op81540,S6F253,30.5,,,1,1,soil	OK, #107(OP)
6F06554	15	fa77700-3 E	8270	1X	op81540,S6F253,30.3,,,1,1,soil	OK, #107(OP)
6F06555	16	fa77700-4 E	8270	1X	op81540,S6F253,30.1,,,1,1,soil	OK
6F06556	17	fa77700-5 E	8270	1X	op81540,S6F253,30.3,,,1,1,soil	RR5x Pyrene #107(OP)
6F06557	18	fa77700-6 E	8270	1X	op81540,S6F253,30.1,,,1,1,soil	RR2x BBF #107(OP)
6F06558	19	fa77700-7 E	8270	1X	op81540,S6F253,30.2,,,1,1,soil	RR1x IS failure #105(PII)#107(OP)
6F06559	20	fa77689-1 E	8270	1X	op81538,S6F253,30.1,,,1,1,soil	OK, #21(PII)#107(OP)
6F06560	21	fa77689-2 E	8270	1X	op81538,S6F253,30.0,,,1,1,soil	OK, #107(OP)
6F06561	22	fa77689-3 E	8270	1X	op81538,S6F253,30.3,,,1,1,soil	OK
6F06562	23	fa77689-8 E	8270	1X	op81538,S6F253,30.1,,,1,1,soil	OK, #107(OP)

6F06563	24	fa77689-9 E	8270	1X	op81538,S6F253,29.9,,,1,1,soil	OK, #107(OP)
6F06564	25	fa77689-10 E	8270	1X	op81538,S6F253,30.3,,,1,1,soil	OK, #107(OP)
6F06565	26	fa77689-11 E	8270	1X	op81538,S6F253,30.0,,,1,1,soil	OK,#107(OP)
6F06566	27	fa77698-1 E	8270	1X	op81538,S6F253,30.0,,,1,1,soil	Ok, #107(OP)
6F06567	28	fa77698-2 E	8270	1X	op81538,S6F253,30.2,,,1,1,soil	RR5x Pyrene #107(OP)
6F06568	29	fa77698-6 E	8270	1X	op81538,S6F253,30.1,,,1,1,soil	OK, #107(OP)

DATE	8/14/2020	METHODS	8270D	IC/ICC STD LOT	S6418/S6417
COLUMN TYPE	DB-5MS	ACQ. METHOD	ACQ-BNA	ICV STD LOT	10204A
AMOUNT INJ	1	PROC. METHOD	8270D6F072920	DFTPP	S6384
INSTRUMENT	MS-6F	CALIB. DATE	7/29/2020	EM VOLTAGE	1471V
ANALYST	M.Valls	RUN BATCH	S6F254	ISTD LOT	10194B

ICV(1) 10204A ICV(2) 9809D + 9782 + 10072D ICV(3) (OP) 9934A

DATA FILE	ALS	SAMPLE NAME	METHOD	DF	MISC. INFO	COMMENTS
6F06569	41	Cond Std	8270	""""""""""""""	op81484,S6F254,1000,,,1,1,water	Lost presure
6F06570	41	Cond Std	DFTPP	""""""""""""""	op81484,S6F254,1000,,,1,1,water	Lost presure
6F06571	41	Cond Std	8270	""""""""""""""	op81484,S6F254,1000,,,1,1,water	Conditioning
6F06572	1	DFTPP	DFTPP	1	op81484,S6F254,1000,,,1,1,water	Pass, response: 1839943
6F06573	2	cc248-50	8270	100+100/400	op81484,S6F254,1000,,,1,1,water	# 30 (SP) N-nitrosodimethylamine low
6F06574	3	fa77698-7 E	8270	1	op81538,S6F254,30.5,,,1,1,soil	
6F06575	4	fa77698-9 E	8270	1	op81538,S6F254,29.9,,,1,1,soil	
6F06576	7	fa77512-1,100	8270	5/500	op81455,S6F254,1000,,,1,1,water	ok, for Benzoic Acid only
6F06577	5	fa77698-10 E	8270	1	op81538,S6F254,30.4,,,1,1,soil	
6F06578	6	fa77698-12 E	8270	1	op81538,S6F254,30.1,,,1,1,soil	
6F06579	15	fa77615-13	8270	1	op81538,S6F254,30.1,,,1,1,soil	ok
6F06580	8	fa77698-4	8270		op81545,S6F254,240,,,1,1,water	
6F06581	9	fa77698-11 E,10	8270		op81540,S6F254,30.3,,,1,10,soil	
6F06582	10	op81540-ms E,10	8270		op81540,S6F254,30.2,,,1,10,soil	
6F06583	11	op81540-msd E,10	8270		op81540,S6F254,30.1,,,1,10,soil	
6F06584	12	fa77700-5 E,5	8270		op81540,S6F254,30.3,,,1,5,soil	
6F06585	13	fa77700-6 E,2	8270		op81540,S6F254,30.1,,,1,2,soil	
6F06586	14	fa77700-7 E	8270		op81540,S6F254,30.2,,,1,1,soil	
6F06587	16	fa77698-2 E,5	8270		op81538,S6F254,30.2,,,1,5,soil	
6F06588	17	fa77698-5 E,5	8270		op81538,S6F254,30.5,,,1,5,soil	
6F06589	18	op81538-ms E,5	8270		op81538,S6F254,30.0,,,1,5,soil	
6F06590	19	op81538-msd E,5	8270		op81538,S6F254,29.8,,,1,5,soil	

DATE	7/21/2020	METHODS	8270D Simpah	IC/ICC STD LOT	s6349
COLUMN TYPE	ZB5-MS	ACQ. METHOD	FASTPAH	ICV STD LOT	E6624
AMOUNT INJ	1ul	PROC. METHOD	SIMPAHF7GD072120.M	DFTPP	s6313
INSTRUMENT	MSBNA-S7G	CALIB. DATE	7/21/2020	EM VOLTAGE	ev1376
ANALYST	fouads	RUN BATCH	S7G472	ISTD LOT	s6358

DATA FILE	ALS	SAMPLE NAME	METHOD	DF	MISC. INFO	COMMENTS
7G10821	1	dftpp	DFTPP	1	op80679,S7G472,1000,,,1,1,water	
7G10822	1	dftpp	DFTPP	1	op80679,S7G472,1000,,,1,1,water	tune passed, response(148973)
7G10823	2	cc470-4	FASTPAH	100/400	op80679,S7G472,1000,,,1,1,water	failed
7G10824	3	ic472-1	FASTPAH	na	op80679,S7G472,1000,,,1,1,water	
7G10825	4	ic472-2	FASTPAH	na	op80679,S7G472,1000,,,1,1,water	
7G10826	5	ic472-3	FASTPAH	na	op80679,S7G472,1000,,,1,1,water	
7G10827	6	icc472-4	FASTPAH	na	op80679,S7G472,1000,,,1,1,water	na
7G10828	7	ic472-5	FASTPAH	na	op80679,S7G472,1000,,,1,1,water	
7G10829	8	ic472-6	FASTPAH	na	op80679,S7G472,1000,,,1,1,water	
7G10830	9	ic472-7	FASTPAH	na	op80679,S7G472,1000,,,1,1,water	
7G10831	10	ic472-4	FASTPAH	na	op80679,S7G472,1000,,,1,1,water	
7G10832	2	cc472-1	FASTPAH	na	op80679,S7G472,1000,,,1,1,water	na
7G10833	3	ic472-1	FASTPAH	5+495	op80679,S7G472,1000,,,1,1,water	
7G10834	4	ic472-2	FASTPAH	20+380	op80679,S7G472,1000,,,1,1,water	
7G10835	5	ic472-3	FASTPAH	50+350	op80679,S7G472,1000,,,1,1,water	
7G10836	6	icc472-4	FASTPAH	100+300	op80679,S7G472,1000,,,1,1,water	curve passed
7G10837	7	ic472-5	FASTPAH	150+250	op80679,S7G472,1000,,,1,1,water	
7G10838	8	ic472-6	FASTPAH	200+200	op80679,S7G472,1000,,,1,1,water	
7G10839	9	ic472-7	FASTPAH	1X	op80679,S7G472,1000,,,1,1,water	
7G10840	10	icV472-4	FASTPAH	2X SPK	op80679,S7G472,1000,,,1,1,water	passed dibenzo high,carbz low ,pcp less30%
7G10841	1	dftpp	DFTPP	1	op80679,S7G472,1000,,,1,1,water	tune passed
7G10842	2	cc472-4	FASTPAH	100+300	op81126-,s7G472,1000,,,1,1,water	ccv passed
7G10843	3	op71120-mb	FASTPAH	1	op81120,s7G472,1000,,,1,1,water	nd
7G10844	4	op71120-bs	FASTPAH	1	op81120,s7G472,1000,,,1,1,water	8270 spk used rr@1x
7G10845	5	op71126-mb	FASTPAH	1	op81126,s7G472,15.0,,,1,1,soil	nd
7G10846	6	op71126-bs	FASTPAH	1	op81126,s7G472,15.0,,,1,1,soil	ok
7G10847	7	fa76888-1	FASTPAH	1	op81120,s7G472,1050,,,1,1,water	nd
7G10848	8	fa76888-2	FASTPAH	1	op81120,s7G472,1050,,,1,1,water	nd
7G10849	9	fa76888-3	FASTPAH	1	op81120,s7G472,1050,,,1,1,water	nd
7G10850	10	fa76888-4	FASTPAH	1	op81120,s7G472,1050,,,1,1,water	nd
7G10851	11	fa76888-5	FASTPAH	1	op81120,s7G472,1050,,,1,1,water	nd
7G10852	12	fa76888-6	FASTPAH	1	op81120,s7G472,1050,,,1,1,water	nd
7G10853	13	op81120-ms	FASTPAH	1	op81120,s7G472,520,,,1,1,water	ok
7G10854	14	op81120-msd	FASTPAH	1	op81120,s7G472,520,,,1,1,water	ok
7G10855	15	fa76853-2	FASTPAH	1	op81126,s7G472,15.0,,,1,1,soil	ok
7G10856	16	fa76854-2	FASTPAH	1	op81126,s7G472,15.0,,,1,1,soil	ok
7G10857	17	fa76825-1a,5	FASTPAH	5	op81126,s7G472,15.3,,,1,5,soil	ok,dl req matrix viscous
7G10858	18	fa76878-1	FASTPAH	1	op81126,s7G472,15.1,,,1,1,soil	ok
7G10859	19	op81126-ms	FASTPAH	1	op81126,s7G472,15.2,,,1,1,soil	ok
7G10860	20	op81126-msd	FASTPAH	1	op81126,s7G472,14.9,,,1,1,soil	ok
7G10861	21	fa76878-2	FASTPAH	1	op81126,s7G472,14.9,,,1,1,soil	ok
7G10862	22	fa76878-3	FASTPAH	1	op81126,s7G472,15.2,,,1,1,soil	ok
7G10863	23	fa76886-1,5	FASTPAH	5	op81126,s7G472,15.2,,,1,1,soil	ok,dl req matrix viscous
7G10864	24	fa76886-2,5	FASTPAH	5	op81126,s7G472,15.0,,,2,5,soil	ok,dl req matrix viscous
7G10865	25	fa76886-3,5	FASTPAH	5	op81126,s7G472,15.4,,,1,5,soil	ok,dl req matrix viscous
7G10866	26	fa76886-4,5	FASTPAH	5	op81126,s7G472,15.1,,,1,5,soil	surrg low rr@5x
7G10867	27	fa76886-5,5	FASTPAH	5	op81126,s7G472,15.2,,,1,5,soil	ok.dl req matrix viscous
7G10868	28	fa76886-6	FASTPAH	1	op81126,s7G472,15.3,,,1,1,soil	ok
7G10869	3	blk	FASTPAH	1	op81126,s7G472,15.3,,,1,1,soil	na

DATE	8/13/2020	**METHODS**	8270D Simpah	**IC/ICC STD LOT**	**s6420**
COLUMN TYPE	ZB5-MS	**ACQ. METHOD**	FASTPAH	**ICV STD LOT**	**E6750**
AMOUNT INJ	1ul	**PROC. METHOD**	SIMPAHF7GD0072120.M	**DFTPP**	**s6313**
INSTRUMENT	MSBNA-S7G	**CALIB. DATE**	7/21/2020	**EM VOLTAGE**	**ev1376**
ANALYST	fouads	**RUN BATCH**	S7G484	**ISTD LOT**	**s6415**

DATA FILE	ALS	SAMPLE NAME	METHOD	DF	MISC. INFO	COMMENTS
7G11161	1	dftpp	DFTPP	1	op81342,S7G484,1000,,,1,1,water	
7G11162	1	dftpp	DFTPP	1	op81342,S7G484,1000,,,1,1,water	PASS(response:103764)
7G11163	2	CC472-4	8270	100/400	op81342,S7G484,1000,,,1,1,water	
7G11164	3	op81539-bs e	8270	1	op81539,S7G484,30.0,,,1,1,soil	OK, #26(OP)
7G11165	4	op81539-mb e	8270	1	op81539,S7G484,30.0,,,1,1,soil	ND
7G11166	5	fa77689-1 e	8270	1	op81539,S7G484,30.1,,,1,1,soil	ND, #12,24(MP)#27(PII)
7G11167	6	fa77689-2 e	8270	1	op81539,S7G484,30.0,,,1,1,soil	ND, #23,24(OP)
7G11168	7	fa77689-3 e	8270	1	op81539,S7G484,30.3,,,1,1,soil	ND, #24(MP)
7G11169	8	fa77689-8 e	8270	1	op81539,S7G484,30.1,,,1,1,soil	ND, #3(MP)#18(PII) #23,24(OP) IS FAIED=NA
7G11170	9	fa77689-9 e	8270	1	op81539,S7G484,29.9,,,1,1,soil	ND, #12(MP)#23,24(OP)
7G11171	10	fa77689-10 e	8270	1	op81539,S7G484,30.3,,,1,1,soil	D, #3,5(MP)#18(PII)#23,24(OP) IS FAILED =N
7G11172	11	fa77689-11 e	8270	1	op81539,S7G484,30.0,,,1,1,soil	ND, #9(MP)#21,27(PII)#23,24(OP)
7G11173	12	fa77698-1 e	8270	1	op81539,S7G484,30.0,,,1,1,soil	ND, #21(PII)#23,24(OP)
7G11174	13	fa77698-2 e	8270	1	op81539,S7G484,30.2,,,1,1,soil	OK, #21(PII)#23,24(OP)
7G11175	14	fa77698-5 e	8270	1	op81539,S7G484,30.5,,,1,1,soil	ND, #21(PII)#23,24(OP)
7G11176	15	op81539-ms e	8270	1	op81539,S7G484,30.1,,,1,1,soil	no surr #18,21,24(MP)#26,(RR@4x
7G11177	16	op81539-msd e	8270	1	op81539,S7G484,30.4,,,1,1,soil	OK, #18,21(MP)#23,24,26(OP)
7G11178	4	blk	8270	1	op81539,S7G484,30.1,,,1,1,soil	NA
7G11179	17	fa77698-6 e	8270	1	op81539,S7G484,30.1,,,1,1,soil	ND, #24(MP)#27(PII)
7G11180	18	fa77698-7 e	8270	1	op81539,S7G484,30.5,,,1,1,soil	ND, #21,27(PII)#24(MP)
7G11181	19	fa77698-8 e	8270	1	op81539,S7G484,29.9,,,1,1,soil	ND, #24(MP)
7G11182	20	fa77698-9 e	8270	1	op81539,S7G484,30.0,,,1,1,soil	ND, #24(MP)#27(PII)
7G11183	21	fa77698-10 e	8270	1	op81539,S7G484,30.4,,,1,1,soil	ND, #24(MP)#27(PII)
7G11184	22	fa77698-12 e	8270	1	op81539,S7G484,30.1,,,1,1,soil	ND, #24(MP)#27(PII)
7G11185	4	blk	8270	1	op81539,S7G484,30.1,,,1,1,soil	NA
7G11186	23	fa77586-14	8270	1	op81523,S7G484,15.1,,,1,1,soil	ND
7G11187	24	fa77586-15	8270	1	op81523,S7G484,14.7,,,1,1,soil	ND, #16(OP)
7G11188	25	fa77586-16	8270	1	op81523,S7G484,15.1,,,1,1,soil	ND
7G11189	4	blk	FASTPAH	1	op81539,S7G484,15.1,,,1,1,soil	

DATE	8/14/2020	**METHODS**	8270D Simpah	**IC/ICC STD LOT**	**s6420**
COLUMN TYPE	ZB5-MS	**ACQ. METHOD**	FASTPAH	**ICV STD LOT**	**E6750**
AMOUNT INJ	1ul	**PROC. METHOD**	SIMPAHF7GD0072120.M	**DFTPP**	**s6313**
INSTRUMENT	MSBNA-S7G	**CALIB. DATE**	7/21/2020	**EM VOLTAGE**	**ev1376**
ANALYST	fouads	**RUN BATCH**	S7G485	**ISTD LOT**	**s6415**

DATA FILE	ALS	SAMPLE NAME	METHOD	DF	MISC. INFO	COMMENTS
7G11191	1	dftpp	DFTPP	1	op81342,S7G485,1000,,,1,1,water	-
7G11192	1	dftpp	DFTPP	1	op81342,S7G485,1000,,,1,1,water	Passed (Response: 94104)
7G11193	2	CC472-4	8270	100/400	op81342,S7G485,1000,,,1,1,water	Passed
7G11194	3	op81541-bs e	8270	1	op81541,S7G485,30.0,,,1,1,soil	Passed
7G11195	4	op81541-mb e	8270	1	op81541,S7G485,30.0,,,1,1,soil	ND
7G11196	24	op81539-ms e,4	8270	4	op81539,S7G485,30.1,,,1,4,soil	#24(MP), Passed
7G11197	25	op81539-msd e,4	8270	4	op81539,S7G485,30.4,,,1,4,soil	#24(MP), Passed
7G11198	5	fa77698-11 e,2	8270	2	op81541,S7G485,30.3,,,1,2,soil	16,18,19,21,25(MP) #22,23,24(OP); IS Fail=n
7G11199	6	op81541-ms e,2	8270	2	op81541,S7G485,29.8,,,1,2,soil	#18,20,21,25(MP) #23,24(OP), Passed
7G11200	7	op81541-msd e,2	8270	2	op81541,S7G485,30.1,,,1,2,soil	#18,21,25(MP) #23,24(OP), Passed
7G11201	8	blk	8270	1	op81541,S7G485,30.1,,,1,1,soil	-
7G11202	9	fa77700-1 e	8270	1	op81541,S7G485,30.5,,,1,1,soil	#23,24(OP), Ok
7G11203	10	fa77700-2 e	8270	1	op81541,S7G485,30.5,,,1,1,soil	#23,24(OP), Ok
7G11204	11	fa77700-3 e	8270	1	op81541,S7G485,30.3,,,1,1,soil	#24(MP), Ok
7G11205	12	fa77700-4 e	8270	1	op81541,S7G485,30.1,,,1,1,soil	#23,24(OP), Ok
7G11206	13	fa77700-5 e	8270	1	op81541,S7G485,30.3,,,1,1,soil	#23,24(OP) #25(MP), Ok
7G11207	8	blk	8270	1	op81541,S7G485,30.1,,,1,1,soil	-
7G11208	14	fa77700-6 e	8270	1	op81541,S7G485,30.1,,,1,1,soil	#23,24(OP) #25(MP), Ok
7G11209	15	fa77700-7 e	8270	1	op81541,S7G485,30.2,,,1,1,soil	#24(MP), Ok
7G11210	8	blk	8270	1	op81541,S7G485,30.1,,,1,1,soil	-
7G11211	16	fa77698-11 e	8270	1	op81541,S7G485,30.3,,,1,1,soil	#18,25(MP) #23,24(OP); IS Fail =na
7G11212	8	blk	8270	1	op81541,S7G485,30.1,,,1,1,soil	-

DATE	7/17/2020	**METHODS**	8270D	**IC/ICC STD LOT**	**S6417**
COLUMN TYPE	ZB-5MS	**ACQ. METHOD**	ACQ-LVF	**ICV STD LOT**	**E6750B**
AMOUNT INJ	3ul	**PROC. METHOD**	SIM_LVT071720	**DFTPP**	**S6393A**
INSTRUMENT	MS-T	**CALIB. DATE**	7/17/2020	**EM VOLTAGE**	**ev-1106**
ANALYST	NJ	**RUN BATCH**	ST1745	**ISTD LOT**	**s6422**

DATA FILE	ALS	SAMPLE NAME	METHOD	DF	MISC. INFO	COMMENTS
T050024	1	dftpp	DFTPPF	1	OP81034,st1745,250,,,1,1,water	pass
T050025	2	ic1745-1	8270	4/500	OP81034,st1745,250,,,1,1,water	ok
T050026	3	ic1745-8	8270	4/1000	OP81034,st1745,250,,,1,1,water	ok
T050027	4	ic1745-2	8270	10/500	OP81034,st1745,250,,,1,1,water	ok
T050028	5	ic1745-3	8270	20/500	OP81034,st1745,250,,,1,1,water	ok
T050029	6	icc1745-4	8270	50/500	OP81034,st1745,250,,,1,1,water	ok
T050030	7	ic1745-5	8270	100/500	OP81034,st1745,250,,,1,1,water	ok
T050031	8	ic1745-6	8270	250/500	OP81034,st1745,250,,,1,1,water	ok
T050032	9	ic1745-7	8270	1	OP81034,st1745,250,,,1,1,water	ok
T050033	10	icv1745-4	8270	25/500	OP81034,st1745,250,,,1,1,water	pass
T050034	1	dftpp	DFTPPF	1	OP81034,st1745,250,,,1,1,water	ok (response:958292)
T050035	6	cc1745-4	8270	50/500	OP81034,st1745,250,,,1,1,water	OK, PCP,Pyrene high
T050036	11	op81055-bs	8270	1	OP81055,st1745,250,,,1,1,water	OK, PCP low
T050037	12	op81055-mb	8270	1	OP81055,st1745,250,,,1,1,water	ND
T050038	13	fa76686-1	8270	1	OP81055,st1745,240,,,1,1,water	RR5x IS4 failed hgih
T050039	14	fa76686-2	8270	1	OP81055,st1745,250,,,1,1,water	OK
T050040	15	op81055-ms	8270	1	OP81055,st1745,120,,,1,1,water	OK
T050041	16	op81055-msd	8270	1	OP81055,st1745,120,,,1,1,water	OK
T050042	17	fa76686-3	8270	1	OP81055,st1745,240,,,1,1,water	OK
T050043	18	op81095-mb	8270	1	OP81095,st1745,250,,,1,1,water	ND
T050044	19	op81095-bs	8270	1	OP81095,st1745,250,,,1,1,water	PASS
T050045	20	fa76815-1	8270	1	OP81095,st1745,250,,,1,1,water	RR@25x IS failure #11,17(MP)
T050046	21	op81115-bs	8270	1	OP81115,st1745,250,,,1,1,water	xNot used, IS4 failed high
T050047	22	op81115-mb	8270	1	OP81115,st1745,250,,,1,1,water	xNot used, with hits
T050048	23	fa76852-1	8270	1	OP81115,st1745,260,,,1,1,water	RR10x
T050049	24	fa76852-2	8270	1	OP81115,st1745,260,,,1,1,water	RR10x
T050050	25	fa76852-3	8270	1	OP81115,st1745,260,,,1,1,water	RR10x
T050051	26	fa76852-4	8270	1	OP81115,st1745,260,,,1,1,water	ok
T050052	27	fa76852-5	8270	1	OP81115,st1745,260,,,1,1,water	RR10x
T050053	28	fa76852-6	8270	1	OP81115,st1745,260,,,1,1,water	RR10x
T050054	29	fa76852-7	8270	1	OP81115,st1745,260,,,1,1,water	ok
T050055	30	fa76852-8	8270	1	OP81115,st1745,260,,,1,1,water	OK

T050056	31	fa76852-9	8270	1	OP81115,st1745,260,,,1,1,water	OK
T050057	32	fa76852-10	8270	1	OP81115,st1745,260,,,1,1,water	rr1x,10x IS fail
T050058	6	cc1745-4	8270	50/500	OP81034,st1745,250,,,1,1,water	PASS
T050059	1	dftpp	DFTPPF	1	OP81034,st1745,250,,,1,1,water	PASS(response:659619)
T050060	6	cc1745-4	8270	50/500	OP81034,st1745,250,,,1,1,water	OK, PCP high
T050061	33	fa76852-11	8270	1	OP81115,st1745,260,,,1,1,water	ND
T050062	34	fa76852-12	8270	1	OP81115,st1745,260,,,1,1,water	RR@20x Nap #6,7,8,11,13(MP)
T050063	35	fa76852-13	8270	1	OP81115,st1745,260,,,1,1,water	RR10x
T050064	36	op81115-ms	8270	1	OP81115,st1745,130,,,1,1,water	OK
T050065	37	op81115-msd	8270	1	OP81115,st1745,130,,,1,1,water	surr high
T050066	38	fa76852-14	8270	1	OP81115,st1745,260,,,1,1,water	RR@10x Nap
T050067	39	fa76852-15	8270	1	OP81115,st1745,260,,,1,1,water	RR@10x Nap/IS failed high
T050068	40	fa76852-16	8270	1	OP81115,st1745,260,,,1,1,water	OK
T050069	41	fa76852-17	8270	1	OP81115,st1745,260,,,1,1,water	OK
T050070	42	fa76859-2	8270	1	OP81115,st1745,260,,,1,1,water	RR@1x Surr high
T050071	21	op81115-bs	8270	1	OP81115,st1745,250,,,1,1,water	OK,PCP high
T050072	22	op81115-mb	8270	1	OP81115,st1745,250,,,1,1,water	With hits below 1/2 RL
T050073	43	fa76815-1,25	8270	20/500	OP81095,st1745,250,,,1,25,water	ok dil matrix IS
T050074	44	blank	8270	1	OP81095,st1745,250,,,1,1,water	nd
T050075	6	ecc1745-4	8270	50/500	OP81034,st1745,250,,,1,1,water	ok

DATE	8/13/2020	**METHODS**	8270D	**IC/ICC STD LOT**	**S6417**
COLUMN TYPE	ZB-5MS	**ACQ. METHOD**	ACQ-LVF	**ICV STD LOT**	**E6750B**
AMOUNT INJ	3ul	**PROC. METHOD**	SIM_LVT071720	**DFTPP**	**S6393A**
INSTRUMENT	MS-T	**CALIB. DATE**	7/17/2020	**EM VOLTAGE**	**ev-1106**
ANALYST	NJ	**RUN BATCH**	ST1749	**ISTD LOT**	**s6422**

DATA FILE	ALS	SAMPLE NAME	METHOD	DF	MISC. INFO	COMMENTS
T050174	100	cond std	ACQ_LVF		OP81487,st1749,250,,,1,1,water	-
T050175	1	dftpp	DFTPPF	1	OP81487,st1749,250,,,1,1,water	Passed (Response: 870724)
T050176	2	cc1745-4	8270	50/500	OP81487,st1749,250,,,1,1,water	pcp only, #12↑
T050177	3	op81544-bs e	8270	1	OP81544,st1749,250,,,1,1,water	pcp only ok
T050178	4	op81544-mb e	8270	1	OP81544,st1749,250,,,1,1,water	pcp only nd
T050179	5	fa77689-4 e	8270	1	OP81544,st1749,250,,,1,1,water	pcp only nd
T050180	6	fa77689-5 e	8270	1	OP81544,st1749,250,,,1,1,water	pcp only nd
T050181	7	fa77689-6 e	8270	1	OP81544,st1749,250,,,1,1,water	pcp only nd
T050182	8	fa77689-7 e	8270	1	OP81544,st1749,250,,,1,1,water	pcp only nd
T050183	9	fa77689-12 e	8270	1	OP81544,st1749,250,,,1,1,water	pcp only nd
T050184	10	fa77698-3 e	8270	1	OP81544,st1749,250,,,1,1,water	pcp only nd IS fail non Target
T050185	11	fa77698-4 e	8270	1	OP81544,st1749,240,,,1,1,water	pcp only nd

SGS-ORLANDO **MS BNA05-X** **ANALYSIS LOG**

DATE	6/23/2020	**METHODS**	8270D	**IC/ICC STD LOT**	**S6387/S6388**
COLUMN TYPE	DB-5MS	**ACQ. METHOD**	ACQ-BNA	**ICV STD LOT**	**9821D**
AMOUNT INJ	2	**PROC. METHOD**	8270DAPP9SX-062320	**DFTPP**	**S6384**
INSTRUMENT	MS-SX	**CALIB. DATE**	6/23/2020	**EM VOLTAGE**	**1000V**
ANALYST	MV	**RUN BATCH**	SX2918	**ISTD LOT**	**1011OE**

ICV(1) 9821HD ICV(2) 9809A + 9782 + 10072D ICV(3) (OP) 9934A

DATA FILE	ALS	SAMPLE NAME	METHOD	DF	MISC. INFO	COMMENTS
x071355	1	dftpp	DFTPP	1x	op80734,sx2918,1000,,,1,1,water	Pass
x071356	2	ic2918-1 app9	8270	2/400	op80734,sx2918,1000,,,1,1,water	Curve Pass, no Kepone
x071357	3	ic2918-5	8270	10+4/400	op80734,sx2918,1000,,,1,1,water	Curve Pass, no Kepone
x071358	4	ic2918-10	8270	20+8/400	op80734,sx2918,1000,,,1,1,water	Curve Pass, no Kepone
x071359	5	ic2918-25	8270	50+20/400	op80734,sx2918,1000,,,1,1,water	Curve Pass, no Kepone
x071360	6	ic2918-50	8270	100+40/400	op80734,sx2918,1000,,,1,1,water	Curve Pass, no Kepone
x071361	7	ic2918-60	8270	120+48/400	op80734,sx2918,1000,,,1,1,water	Curve Pass, no Kepone
x071362	8	ic2918-75	8270	150+60/400	op80734,sx2918,1000,,,1,1,water	Curve Pass, no Kepone
x071363	9	ic2918-100	8270	200+80/400	op80734,sx2918,1000,,,1,1,water	Curve Pass, no Kepone
x071364	10	ic2918-1 8270	8270	2+2/400	op80734,sx2918,1000,,,1,1,water	Curve Pass
x071365	11	ic2918-5	8270	10+10/400	op80734,sx2918,1000,,,1,1,water	Curve Pass
x071366	12	ic2918-10	8270	20+20/400	op80734,sx2918,1000,,,1,1,water	Curve Pass
x071367	13	ic2918-25	8270	50+50/400	op80734,sx2918,1000,,,1,1,water	Curve Pass
x071368	14	icc2918-50	8270	100+100/400	op80734,sx2918,1000,,,1,1,water	Curve Pass
x071369	15	ic2918-60	8270	120+120/400	op80734,sx2918,1000,,,1,1,water	Curve Pass
x071370	16	ic2918-75	8270	150+150/400	op80734,sx2918,1000,,,1,1,water	Curve Pass
x071371	17	ic2918-100	8270	200+200	op80734,sx2918,1000,,,1,1,water	Curve Pass
x071372	18	icv2918-50	8270	200/400	op80734,sx2918,1000,,,1,1,water	Benzaldehyde low dod
x071373	19	icv2918-50	8270	20+20+10/400	op80734,sx2918,1000,,,1,1,water	Pyridine, 2-Nitroaniline high dod
x071374	20	icv2918-50	8270	10/400	op80734,sx2918,1000,,,1,1,water	Disulfoton low dod, Famphur fail high
x071375	21	icv2918-50	8270	10+20+100/400	op80734,sx2918,1000,,,1,1,water	Low for dod, RR for DOD
x071376	22	icv2918-50	8270	20+20+20/400	op80734,sx2918,1000,,,1,1,water	Methapyr fail high
x071377	1	dftpp	DFTPP	1x	op80734,sx2918,1000,,,1,1,water	Passed (Response: 777585)

x071378	6	cc2918-50 app9	8270	100+40/400	op80734,sx2918,1000,,,1,1,water	Pass, #122,138,147(SP) #125(PII);
x071379	14	cc2918-50 8270	8270	100+100/400	op80734,sx2918,1000,,,1,1,water	#30(SP); Passed
x071380	23	op80558-bs	8270	1x	op80558,sx2918,1000,,,1,1,water	OP compounds fail high
x071381	24	op80558-bs2	8270	1x	op80558,sx2918,1000,,,1,1,water	#122,138,147(SP) #125(PII)
x071382	25	op80558-mb	8270	1x	op80558,sx2918,1000,,,1,1,water	ND
x071383	26	fa75495-7	8270	1x	op80558,sx2918,960,,,1,1,water	**ND, surr high**
x071384	27	fa75495-8	8270	1x	op80558,sx2918,980,,,1,1,water	Ok
x071385	28	fa75495-9	8270	1x	op80558,sx2918,1000,,,1,1,water	Ok
x071386	29	fa75495-10	8270	1x	op80558,sx2918,1000,,,1,1,water	Ok
x071387	30	op80508-bs	8270	1x	op80508,sx2918,1000,,,1,1,water	Fail high
x071388	31	op80508-bs2	8270	1x	op80508,sx2918,1000,,,1,1,water	Fail high, #122,138,147(SP)
x071389	32	op80508-mb	8270	1x	op80508,sx2918,1000,,,1,1,water	ND, 2-Fluorobiphenyl high
x071390	33	fa75495-1	8270	1x	op80508,sx2918,1000,,,1,1,water	**IS,SS Fail RR@1x**
x071391	34	fa75495-2	8270	1x	op80508,sx2918,1000,,,1,1,water	**SS Fail RR@1x**
x071392	35	fa75495-3	8270	1x	op80508,sx2918,1000,,,1,1,water	**SS Fail RR@1x**
x071393	36	op80508-ms	8270	1x	op80508,sx2918,500,,,1,1,water	rr
x071394	37	op80508-msd	8270	1x	op80508,sx2918,500,,,1,1,water	rr
x071395	38	fa75495-4	8270	1x	op80508,sx2918,1000,,,1,1,water	**SS Fail RR@1x**
x071396	39	op80508-ms2	8270	1x	op80508,sx2918,500,,,1,1,water	#122,138,147(SP) #150(PII);rr
x071397	40	op80508-msd2	8270	1x	op80508,sx2918,500,,,1,1,water	#122,138,147(SP); rr
x071398	41	fa75495-5	8270	1x	op80508,sx2918,1000,,,1,1,water	**SS Fail RR@1x**
x071399	42	fa75495-6	8270	1x	op80508,sx2918,1000,,,1,1,water	**SS Fail RR@1x**
x071400	1	dftpp	DFTPP	1x	op80789,sx2918,1000,,,1,1,water	Tune fail
x071401	6	cc2918-50 app9	8270	100+40/400	op80789,sx2918,1000,,,1,1,water	Screen run
x071402	14	cc2918-50 8270	8270	100+100/400	op80789,sx2918,1000,,,1,1,water	Screen run
x071403	60	op80804-bs1	8270	1x	op80804,sx2918,30.0,,,1,1,soil	RR 1x
x071404	61	op80804-bs2	8270	1x	op80804,sx2918,30.0,,,1,1,soil	RR 1x
x071405	62	op80804-mb	8270	1x	op80804,sx2918,30.0,,,1,1,soil	RR 1x
x071406	63	fa76166-5,4	8270	100/400	op80804,sx2918,29.8,,,1,4,soil	RR 1x

x071407	64	fa76166-6,4	8270	100/400	op80804,sx2918,30.4,,,1,4,soil	RR 1x
x071408	65	fa75873-1,10	8270	50/500	op80804,sx2918,30.2,,,1,10,soil	RR 1x
x071409	66	fa75873-32,4	8270	100/400	op80804,sx2918,30.0,,,1,4,soil	RR 1x
x071410	67	fa76070-4,20	8270	25/500	op80804,sx2918,3.7,,,1,1,soil	RR 20x
x071411	68	fa76100-1	8270	1x	op80804,sx2918,3.7,,,1,1,soil	RR 1x
x071412	6	ecc2918-50 app9	8270	100+40/400	op80734,sx2918,1000,,,1,1,water	RR 1x
x071413	14	ecc2918-50 8270	8270	100+100/400	op80734,sx2918,1000,,,1,1,water	RR 1x

SGS-ORLANDO **MS BNA05-X** **ANALYSIS LOG**

DATE	8/13/2020	**METHODS**	8270D	**IC/ICC STD LOT**	**S6387/S6388**
COLUMN TYPE	DB-5MS	**ACQ. METHOD**	ACQ-BNA	**ICV STD LOT**	**9821D**
AMOUNT INJ	2	**PROC. METHOD**	8270DAPP9SX-062320	**DFTPP**	**S6384**
INSTRUMENT	MS-SX	**CALIB. DATE**	6/23/2020	**EM VOLTAGE**	**1000V**
ANALYST	MV	**RUN BATCH**	SX2952	**ISTD LOT**	**10194B**

ICV(1) 9821HD ICV(2) 9809A + 9782 + 10072D ICV(3) (OP) 9934A

DATA FILE	ALS	SAMPLE NAME	METHOD	DF	MISC. INFO	COMMENTS
x072387	100	Cond Std	8270	""""""""""	op81484,sx2952,1000,,,1,1,water	Conditioning
x072388	1	dftpp	DFTPP	1X	op81484,sx2952,1000,,,1,1,water	Passed (Response: 538361)
x072389	2	cc2918-50 8270	8270	100+100/400	op81484,sx2952,1000,,,1,1,water	Passed, #30(SP), #44,62,83↓ 96,108↑
x072390	3	cc2918-5 8270	8270	10+10/400	op81484,sx2952,1000,,,1,1,water	ccv low peaks present
x072391	4	op81519-bs E	8270	1X	op81519,sx2952,30.0,,,1,1,soil	PCP low
x072392	5	op81519-mb E	8270	1X	op81519,sx2952,30.0,,,1,1,soil	ND
x072393	6	fa77503-1 E	8270	1X	op81519,sx2952,30.0,,,1,1,soil	Ok
x072394	7	op81519-ms E	8270	1X	op81519,sx2952,30.2,,,1,1,soil	Passed
x072395	8	op81519-msd E	8270	1X	op81519,sx2952,30.4,,,1,1,soil	Passed
x072396	9	op81516-bs	8270	1X	op81516,sx2952,1.00,,,10,1,soil	Capro, Phenol,Dz(a,h)a, 1,4 Diox, Indeno, Pyne high
x072397	10	op81516-mb	8270	1X	op81516,sx2952,1.00,,,10,1,soil	ND
x072398	11	fa77416-1L,10	8270	50/500	op81516,sx2952,1.00,,,10,10,soil	Ok
x072399	12	fa77615-10 E,5	8270	1X	op81484,sx2952,30.3,,,1,5,soil	ok, For ecombine
x072400	13	op81455-ms,5	8270	100/500	op81455,sx2952,500,,,1,5,water	#30(SP) ok
x072401	14	op81455-ms,5	8270	100/500	op81455,sx2952,500,,,1,5,water	#30(SP) ok
x072402	15	fa77698-7 E	8270	1X	op81538,sx2952,30.5,,,1,1,soil	ccv hit for Dibenz (a,h) For ecombine
x072403	16	fa77698-8 E	8270	1X	op81538,sx2952,29.9,,,1,1,soil	ok
x072404	17	fa77698-9 E	8270	1X	op81538,sx2952,30.0,,,1,1,soil	**ccv hit for Dibenz (a,h) RR1x**
x072405	18	fa77698-10 E	8270	1X	op81538,sx2952,30.4,,,1,1,soil	**ccv hit for Dibenz (a,h) RR1x**
x072406	19	fa77698-12 E	8270	1X	op81538,sx2952,30.1,,,1,1,soil	**ccv hit for Dibenz (a,h) RR1x**
x072407	20	fa77615-13 E	8270	1X	op81538,sx2952,30.1,,,1,1,soil	Ok
x072408	21	fa77615-13 E,10	8270	10X	op81538,sx2952,30.1,,,1,10,soil	Ok
x072409	22	op81545-bs E	8270	1X	op81545,sx2952,250,,,1,1,water	PCP, Hccp fail low

x072410	23	op81545-mb E	8270	1X	op81545,sx2952,250,,,1,1,water	ND
x072411	24	fa77689-4 E	8270	1X	op81545,sx2952,250,,,1,1,water	ND
x072412	25	fa77689-5 E	8270	1X	op81545,sx2952,250,,,1,1,water	ND
x072413	26	fa77689-6 E	8270	1X	op81545,sx2952,250,,,1,1,water	ND
x072414	27	fa77689-7 E	8270	1X	op81545,sx2952,250,,,1,1,water	ND
x072415	28	fa77689-12 E	8270	1X	op81545,sx2952,250,,,1,1,water	ND
x072416	29	fa77698-3 E	8270	1x	op81545,sx2952,250,,,1,1,water	ND
x072417	30	fa77698-4 E	8270	1x	op81545,sx2952,240,,,1,1,water	RR > 12hr

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SOLID SAMPLE PREP REPORT

Date/Time Started: 8/13/20 8:00 {mm/dd/yy 24:00}

Date/Time Finished: 8/13/2020 12:30 {mm/dd/yy 24:00}

Prep Method: ✓ 3550C ____ 3580A

Analytical Method: 8270

Batch No: OP81538

Ext. By: GT JM Conc. By: EA Vialed By: AN Balance ID: Nav 5

Sample ID	Bottle Number	Amount Extracted (g)	Surrogate Amount	Spike Amount	Final Volume (ml)	Comments
OP81538-MB	-	30.0	0.5		1.0ml	
OP81538-BS	-	30.0	0.5	0.5 + 0.5		
FA77689-1	1	30.1				
FA77689-2	1	30.0				
FA77689-3	1	30.3				
FA77689-8	1	30.1				
FA77689-9	1	29.9				
FA77689-10	1	30.3				
FA77689-11	1	30.0				
FA77698-1	1	30.0				
FA77698-2	1	30.2				
FA77698-5	1	30.5				
FA77698-6	1	30.1				
FA77698-7	1	30.5				
FA77698-8	1	29.9				
FA77698-9	1	30.0				
FA77698-10	1	30.4				
FA77698-12	1	30.1				
FA77615-13	1	30.1	JM .5 8/13/2020		1.0mL	
FA77698-5 MS	1	30.0	0.5	0.5 + 0.5	1.0ml	
FA77698-5 MSD	1	29.9	0.5	0.5 + 0.5		
DUP						

Comments:

Surr ID: E6743 Conc: 100/200 PPM Exp. Date: 12/30/20 Inj. By: JM Ver. By: GT

Spk ID: 10129 Conc: Varied Exp. Date: 12/31/20 Inj. By: JM Ver. By: GT

Spk ID2: E6746 Conc: 100 PPM Exp. Date: 1/1/21 Inj. By: JM Ver. By: GT

Initial Bath Temp (Therm ID): #14 Exchange Bath/N-Evap Temp (Therm ID): —

Observed Temp °C: 45°C Observed Temp °C: — Corr. Temp °C: —

CH_2Cl_2 Lot#	201444	Hexane Lot #	X	Na_2SO_4 Lot#	SS2551
CH_3CN Lot #	X	Methanol Lot #	X	Acetone Lot#	197447
Filter Paper Lot#	231019	pH Paper #	X	Reagent #	X

Copper Lot # X If Sulfur Cleaning is performed in Extractions (3660B)

Relinquished By: Date: 8/13/2020

Accepted By: Date: 8/18/20

NF 02/16

SGS - ORLANDO

SOLID SAMPLE PREP REPORT

Date/Time Started: 8/13/20 9:00 {mm/dd/yy 24:00}

Date/Time Finished: 8/13/2020 12:30 {mm/dd/yy 24:00}

Prep Method: ✓ 3550C _____ 3580A

Analytical Method: SIM PCP

Batch No: OP81539

Ext. By: GT JM Conc. By: EA Vialed By: AN Balance ID: Nav 5

Sample ID	Bottle Number	Amount Extracted (g)	Surrogate Amount	Spike Amount	Final Volume (ml)	Comments
OP81539-MB	-	30.0	0.1		1.0ml	
OP81539-BS	-	30.0	0.1	0.5		
FA77689-1	1	30.1				
FA77689-2	1	30.0				
FA77689-3	1	30.3				
FA77689-8	1	30.1				
FA77689-9	1	29.9				
FA77689-10	1	30.3				
FA77689-11	1	30.0				
FA77698-1	1	30.0				
FA77698-2	1	30.2				
FA77698-5	1	30.5				
FA77698-6	1	30.1				
FA77698-7	1	30.5				
FA77698-8	1	29.9				
FA77698-9	1	30.0				
FA77698-10	1	30.4				
FA77698-12	1	30.1				
FA77698-5 MS	1	30.1	0.5	0.1	1.0ml	
FA77698-5 MSD	1	30.4	0.5	0.1		
DUP						

8/13/2020

Comments: SONICATION

Surr ID: E6699 Conc: 100ppm Exp. Date: 10/2/20 Inj. By: JM Ver. By: GT

Spk ID: E6752 Conc: 20/40·4ppm Exp. Date: 1/9/21 Inj. By: JM Ver. By: GT

Spk ID2: _____ Conc: _____ Exp. Date: _____ Inj. By: _____ Ver. By: _____

Initial Bath Temp (Therm ID): IR#54 Exchange Bath/N-Evap Temp (Therm ID): —

Observed Temp °C: 45°C Observed Temp °C: — Corr. Temp °C: —

CH_2Cl_2 Lot#	201444	Hexane Lot #	X	Na_2SO_4 Lot#	SS2551
CH_3CN Lot #	X	Methanol Lot #	X	Acetone Lot#	197447
Filter Paper Lot#	231019	pH Paper #	X	Reagent #	X

Copper Lot # X If Sulfur Cleaning is performed in Extractions (3660B)

Relinquished By: _____ Date: 8/13/2020

Accepted By: _____ Date: 8/13/20

7.8.2

7

SGS - ORLANDO

LIQUID SAMPLE PREP REPORT

Date/Time Started: 8/13/2020 ~~8:57~~ 11:00 {mm/dd/yy 24:00}

Date/Time Finished: 8-13-2020 13:40 {mm/dd/yy 24:00}

Prep Method: 3510C ✓ 3580A -

Analytical Method: ~~SIM~~ GC/MS PCP

Batch#: **OP81544** Ext. By: JC UK Conc. By: _____ Vialed By: _____

Sample ID	Bottle Number	Amount Extracted (ml)	Initial pH	Adjusted pH	Surrogate Amount	Spike Amount	Final Volume (ml)	Comments
OP81544-MB	-	250	6	<2>11	0.1+0.5		1.0mL	
OP81544-BS	-	250	6	<2>11	0.1	0.1		
FA77689-4	2	250			0.1+0.5			
fa77689-5	1	250						
fa77689-6	1	250						
fa77689-7	1	250						
fa77689-12	2	250						
FA77698-3	2	250						
FA77698-4	1	240						
MS								JC 08/13/20
MSD								
DUP								

GC/MS 8-13-2020

Comments:

Surr ID: E6725-C Conc: 20 ppm Exp. Date: 10/02/20 Inj. By: JC Ver. By: UK

Spk ID: E6750 b Conc: 20/10 ppm Exp. Date: 01/09/202 Inj. By: JC Ver. By: UK

Initial Bath Temp (Therm ID): IVH3 Exchange Bath/N-Evap Temp (Therm ID): —

Observed Temp °C: 45c Observed Temp °C: — Corr. Temp °C: —

CH2CL2 Lot# 201444 Hexane Lot # X H2SO4 Lot# 49/0-136

Syr Filter Lot# X pH Paper # 193034 NaOH Lot # 919121-BK

Copper Lot # X If Sulfur Cleaning is performed in Extractions (3660B)

Relinquished By: _____ Date: 8-13-2020

Accepted By: _____ Date: 08/13/2020 14:10

ORLD-EXT-0001-1-06-FORM-extwater.xls 032718

SGS - ORLANDO

LIQUID SAMPLE PREP REPORT

Date/Time Started: 8/13/2020 ~~8:53~~ 11:00 {mm/dd/yy 24:00}

Date/Time Finished: 8/13/2020 13:40 {mm/dd/yy 24:00}

Prep Method: 3510C - 3580A -

Analytical Method: 8270 X VH 08-13-2020

Batch#: **OP81545** Ext. By: JC, VH Conc. By: EA Vialed By: AM

Sample ID	Bottle Number	Amount Extracted (ml)	Initial pH	Adjusted pH	Surrogate Amount	Spike Amount	Final Volume (ml)	Comments
OP81545-MB	-	250	6	<2>11	0.5+0.1		1.0ml	
OP81545-BS	-	250	6	<2>11	0.5	0.5+0.5		
FA77689-4	2	250			0.1+0.5			
fa77689-5	1	250						
fa77689-6	1	250						
fa77689-7	1	250						
fa77689-12	2	250						
FA77698-3	2	250						
~~FA77689-4~~ X	1	240						FA77698-4
MS					0.5	0.5+0.5	08/13/20	
~~MSD~~					~~0.5~~	~~0.5+0.5~~		
DUP								

AM 8/13/2020

Comments:

Surr ID: E6743-6 Conc: 100/200 ppm Exp. Date: 12/30/20 Inj. By: JC Ver. By: VH

Spk ID: E6746 Conc: 100 ppm Exp. Date: 01/01/20 Inj. By: JC Ver. By: VH

Spk ID: 101270 Conc: Various Exp. Date: 12/31/20 Inj. By: X Ver. By: VH

Initial Bath Temp (Therm ID): TH3 Exchange Bath/N-Evap Temp (Therm ID): —

Observed Temp °C: 45C Observed Temp °C: — Corr. Temp °C: —

CH2CL2 Lot# 201444 Hexane Lot # X H2SO4 Lot# 4910J36

Syr Filter Lot# X pH Paper # 186434 NaOh Lot # 919121-BK

Copper Lot # X If Sulfur Cleaning is performed in Extractions (3660B)

Relinquished By: AM Date: 8/13/2020

Accepted By: [signature] Date: 08/13/2020 14:10

ORLD-EXT-0001-1-06-FORM-extwater.xls 032718

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Percent Solids Raw Data Summary

Percent Solids Raw Data Summary

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: FA77689-1 **Analyzed:** 12-AUG-20 by AC **Method:** SM19 2540G
ClientID: CS-55

Wet Weight (Total)	11.36	g
Tare Weight	2.54	g
Dry Weight (Total)	10.16	g
Solids, Percent	86.4	%

Sample: FA77689-2 **Analyzed:** 13-AUG-20 by AC **Method:** SM19 2540G
ClientID: CS-50

Wet Weight (Total)	11.28	g
Tare Weight	2.53	g
Dry Weight (Total)	10.12	g
Solids, Percent	86.7	%

Sample: FA77689-3 **Analyzed:** 13-AUG-20 by AC **Method:** SM19 2540G
ClientID: CS-51

Wet Weight (Total)	9.25	g
Tare Weight	2.56	g
Dry Weight (Total)	7.66	g
Solids, Percent	76.2	%

Sample: FA77689-8 **Analyzed:** 13-AUG-20 by AC **Method:** SM19 2540G
ClientID: CS-48

Wet Weight (Total)	13.59	g
Tare Weight	2.52	g
Dry Weight (Total)	9.76	g
Solids, Percent	65.4	%

Sample: FA77689-9 **Analyzed:** 13-AUG-20 by AC **Method:** SM19 2540G
ClientID: CS-52

Wet Weight (Total)	10.6	g
Tare Weight	2.58	g
Dry Weight (Total)	9.24	g
Solids, Percent	83	%

Sample: FA77689-10 **Analyzed:** 13-AUG-20 by AC **Method:** SM19 2540G
ClientID: DUP-03

Wet Weight (Total)	20.2	g
Tare Weight	2.56	g
Dry Weight (Total)	13.95	g
Solids, Percent	64.6	%

Percent Solids Raw Data Summary

Job Number: FA77689
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: FA77689-11 **Analyzed:** 13-AUG-20 by AC **Method:** SM19 2540G
ClientID: CS-49

Wet Weight (Total)	13.43	g
Tare Weight	2.48	g
Dry Weight (Total)	10.01	g
Solids, Percent	68.8	%

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

EarthCon Consultants, Inc

KMCC Navassa Site; 120 Quality Dr, Navassa, NC

02.20180051.00

SGS Job Number: FA78194

Sampling Date: 08/25/20



Report to:

EarthCon Consultants, Inc
1880 W Oak Pkwy Bldg 100, Suite 106
Marietta, GA 30062
mbrookshire@earthcon.com; bhatfield@earthcon.com

ATTN: Mary Ann Brookshire

Total number of pages in report: **508**

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Norm Farmer
Technical Director

Client Service contact: Muna Mohammed 407-425-6700

Certifications: FL(E83510), LA(03051), KS(E-10327), IL(200063), NC(573), NJ(FL002), NY(12022), SC(96038001) DoD ELAP(ANAB L2229), AZ(AZ0806), CA(2937), TX(T104704404), PA(68-03573), VA(460177), AK, AR, IA, KY, MA, MS, ND, NH, NV, OK, OR, UT, WA, WV

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SGS North America Inc.

Sample Summary

EarthCon Consultants, Inc

Job No: FA78194

KMCC Navassa Site; 120 Quality Dr, Navassa, NC
Project No: 02.20180051.00

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA78194-1	08/25/20	15:50	TM	08/27/20	SO	Soil	CS-TB-16A
FA78194-2	08/25/20	16:30	TM	08/27/20	SO	Soil	CS-53

This report contains results reported as ND = Not detected. The following applies:
Organics ND = Not detected above the MDL

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: EarthCon Consultants, Inc **Job No:** FA78194

Site: KMCC Navassa Site; 120 Quality Dr, Navassa, NC **Report Date** 8/31/2020 4:59:00

2 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were collected on 08/25/2020 and were received at SGS North America Inc - Orlando on 08/27/2020 properly preserved, at 1.2 Deg. C and intact. These Samples received an SGS Orlando job number of FA78194. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section. Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

MS Semi-volatiles By Method SW846 8270E

Matrix: SO **Batch ID:** OP81781

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

Sample(s) FA78193-8MS, FA78193-8MSD were used as the QC samples indicated.

All method blanks for this batch meet method specific criteria.

MS Semi-volatiles By Method SW846 8270E BY SIM

Matrix: SO **Batch ID:** OP81782

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

Sample(s) FA78193-8MS, FA78193-8MSD were used as the QC samples indicated.

All method blanks for this batch meet method specific criteria.

FA78194-1: Dilution required due to matrix interference; extract was viscous.

General Chemistry By Method SM19 2540G

Matrix: SO **Batch ID:** GN86077

Sample(s) FA78193-8DUP were used as the QC samples for Solids, Percent.

SGS Orlando certifies that this report meets the project requirements for analytical data produced for the samples as received at SGS Orlando and as stated on the COC. SGS Orlando certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the SGS Orlando Quality Manual except as noted above. This report is to be used in its entirety. SGS Orlando is not responsible for any assumptions of data quality if partial data packages are used.

Narrative prepared by:

_____

Ariel Hartney, Client Services *(Signature on File)*

Summary of Hits

Job Number: FA78194
Account: EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC
Collected: 08/25/20

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FA78194-1	**CS-TB-16A**					
Acenaphthene		30.5 J	200	22	ug/kg	SW846 8270E
Acenaphthylene		508	200	20	ug/kg	SW846 8270E
Anthracene		1120	200	23	ug/kg	SW846 8270E
Benzo(a)anthracene		3880	200	20	ug/kg	SW846 8270E
Benzo(a)pyrene		2780	200	24	ug/kg	SW846 8270E
Benzo(b)fluoranthene		8660	1000	110	ug/kg	SW846 8270E
Benzo(g,h,i)perylene		1060	200	21	ug/kg	SW846 8270E
Benzo(k)fluoranthene		1570	200	27	ug/kg	SW846 8270E
Chrysene		3880	200	21	ug/kg	SW846 8270E
Dibenzo(a,h)anthracene		334	200	26	ug/kg	SW846 8270E
Fluoranthene		8780	1000	100	ug/kg	SW846 8270E
Fluorene		46.7 J	200	22	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene		1660	200	25	ug/kg	SW846 8270E
2-Methylnaphthalene		21.8 J	200	20	ug/kg	SW846 8270E
Naphthalene		35.5 J	200	20	ug/kg	SW846 8270E
Phenanthrene		122 J	200	20	ug/kg	SW846 8270E
Pyrene		12600	1000	120	ug/kg	SW846 8270E
FA78194-2	**CS-53**					
Acenaphthylene		68.1 J	200	20	ug/kg	SW846 8270E
Anthracene		160 J	200	22	ug/kg	SW846 8270E
Benzo(a)anthracene		158 J	200	20	ug/kg	SW846 8270E
Benzo(a)pyrene		122 J	200	23	ug/kg	SW846 8270E
Benzo(b)fluoranthene		294	200	22	ug/kg	SW846 8270E
Benzo(g,h,i)perylene		92.0 J	200	20	ug/kg	SW846 8270E
Benzo(k)fluoranthene		79.5 J	200	26	ug/kg	SW846 8270E
Chrysene		192 J	200	20	ug/kg	SW846 8270E
Fluoranthene		255	200	20	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene		123 J	200	24	ug/kg	SW846 8270E
Phenanthrene		51.6 J	200	20	ug/kg	SW846 8270E
Pyrene		260	200	23	ug/kg	SW846 8270E

Sample Results

Report of Analysis

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-TB-16A		
Lab Sample ID:	FA78194-1	**Date Sampled:**	08/25/20
Matrix:	SO - Soil	**Date Received:**	08/27/20
Method:	SW846 8270E SW846 3550C	**Percent Solids:**	82.2
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X072604.D	1	08/28/20 22:48	MV	08/28/20 09:00	OP81781	SX2960
Run #2	X072618.D	5	08/29/20 13:23	MV	08/28/20 09:00	OP81781	SX2961

	Initial Weight	Final Volume
Run #1	29.8 g	1.0 ml
Run #2	29.8 g	1.0 ml

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	30.5	200	22	ug/kg	J
208-96-8	Acenaphthylene	508	200	20	ug/kg	
120-12-7	Anthracene	1120	200	23	ug/kg	
56-55-3	Benzo(a)anthracene	3880	200	20	ug/kg	
50-32-8	Benzo(a)pyrene	2780	200	24	ug/kg	
205-99-2	Benzo(b)fluoranthene	8660 [a]	1000	110	ug/kg	
191-24-2	Benzo(g,h,i)perylene	1060	200	21	ug/kg	
207-08-9	Benzo(k)fluoranthene	1570	200	27	ug/kg	
218-01-9	Chrysene	3880	200	21	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	334	200	26	ug/kg	
206-44-0	Fluoranthene	8780 [a]	1000	100	ug/kg	
86-73-7	Fluorene	46.7	200	22	ug/kg	J
193-39-5	Indeno(1,2,3-cd)pyrene	1660	200	25	ug/kg	
90-12-0	1-Methylnaphthalene	ND	200	20	ug/kg	
91-57-6	2-Methylnaphthalene	21.8	200	20	ug/kg	J
91-20-3	Naphthalene	35.5	200	20	ug/kg	J
85-01-8	Phenanthrene	122	200	20	ug/kg	J
129-00-0	Pyrene	12600 [a]	1000	120	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	49%	58%	40-105%
321-60-8	2-Fluorobiphenyl	47%	61%	43-107%
1718-51-0	Terphenyl-d14	51%	62%	45-119%

(a) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-TB-16A		
Lab Sample ID:	FA78194-1	**Date Sampled:**	08/25/20
Matrix:	SO - Soil	**Date Received:**	08/27/20
Method:	SW846 8270E BY SIM SW846 3550C	**Percent Solids:**	82.2
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	7G11426.D	2	08/29/20 15:59	FS	08/28/20 09:00	OP81782	S7G494
Run #2							

	Initial Weight	Final Volume
Run #1	29.8 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	160	20	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
7297-45-2	2-Methylnaphthalene-d10	66%		50-150%
93951-69-0	Fluoranthene-d10	82%		50-150%

(a) Dilution required due to matrix interference; extract was viscous.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-53		
Lab Sample ID:	FA78194-2	**Date Sampled:**	08/25/20
Matrix:	SO - Soil	**Date Received:**	08/27/20
Method:	SW846 8270E SW846 3550C	**Percent Solids:**	85.1
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X072605.D	1	08/28/20 23:14	MV	08/28/20 09:00	OP81781	SX2960
Run #2							

	Initial Weight	Final Volume
Run #1	29.9 g	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	200	21	ug/kg	
208-96-8	Acenaphthylene	68.1	200	20	ug/kg	J
120-12-7	Anthracene	160	200	22	ug/kg	J
56-55-3	Benzo(a)anthracene	158	200	20	ug/kg	J
50-32-8	Benzo(a)pyrene	122	200	23	ug/kg	J
205-99-2	Benzo(b)fluoranthene	294	200	22	ug/kg	
191-24-2	Benzo(g,h,i)perylene	92.0	200	20	ug/kg	J
207-08-9	Benzo(k)fluoranthene	79.5	200	26	ug/kg	J
218-01-9	Chrysene	192	200	20	ug/kg	J
53-70-3	Dibenzo(a,h)anthracene	ND	200	25	ug/kg	
206-44-0	Fluoranthene	255	200	20	ug/kg	
86-73-7	Fluorene	ND	200	21	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	123	200	24	ug/kg	J
90-12-0	1-Methylnaphthalene	ND	200	20	ug/kg	
91-57-6	2-Methylnaphthalene	ND	200	20	ug/kg	
91-20-3	Naphthalene	ND	200	20	ug/kg	
85-01-8	Phenanthrene	51.6	200	20	ug/kg	J
129-00-0	Pyrene	260	200	23	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	51%		40-105%
321-60-8	2-Fluorobiphenyl	48%		43-107%
1718-51-0	Terphenyl-d14	53%		45-119%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	CS-53		
Lab Sample ID:	FA78194-2	**Date Sampled:**	08/25/20
Matrix:	SO - Soil	**Date Received:**	08/27/20
Method:	SW846 8270E BY SIM SW846 3550C	**Percent Solids:**	85.1
Project:	KMCC Navassa Site; 120 Quality Dr, Navassa, NC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7G11427.D	1	08/29/20 16:22	FS	08/28/20 09:00	OP81782	S7G494
Run #2							

	Initial Weight	Final Volume
Run #1	29.9 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	ND	79	9.8	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
7297-45-2	2-Methylnaphthalene-d10	79%		50-150%
93951-69-0	Fluoranthene-d10	95%		50-150%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

FA78194

SGS

SGS North America Inc - Orlando
Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 FAX: 407-425-0707
www.sgs.com

Composites
Rush - 3 day TAT ~~DUE~~

SGS - ORLANDO JOB # : PAGE 1 OF 1

SGS - ORLANDO Quote # | SKIFF #

Client / Reporting Information

Company Name: EarthCon
Address: 1880 W. Oak Pkwy #106
City: Marietta State: GA Zip: 30062
Project Contact: M. Brookshire Email: mbrookshire@earthcon.com
Phone #: 404-317-7748
Sampler(s) Name(s) (Printed) Sampler 1: T. Messier Sampler 2:

Project Information

Project Name: KMCC Navassa
Street: 120 Quality Drive
City: Navassa State: NC
Project #: 02.20200007.20
Fax #:
Client Purchase Order #:

Analytical Information

SGS Orlando Sample #	Field ID / Point of Collection	COLLECTION DATE	TIME	SAMPLED BY:	MATRIX	TOTAL # OF BOTTLES	OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NAOH+ZNAC	DI WATER	MEOH	PAHs (8270)/PCP (8270 SIM)	LAB USE ONLY
1	CS-TB-16A	8.25.20	1550	TM	SO	1		1								1	
2	CS-53	8.25.20	1630	TM	SO	1		1								1	

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid

Turnaround Time (Business days)

10 Day (Business) Approved By: / Date:
7 Day
5 Day
3 Day *RUSH*
2 Day *RUSH*
1 Day *RUSH*
Other
Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- [ ] COMMERCIAL "A" (RESULTS ONLY)
- [ ] COMMERCIAL "B" (RESULTS PLUS QC)
- [ ] REDT1 (EPA LEVEL 3)
- [ ] FULLT1 (EPA LEVEL 4)
- [ ] EDD'S

Comments / Remarks

INITIAL ASSESSMENT DO
ARFI VERIFICATION AE

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
1	Rocky Hatfield/Earthcon	8-26-20 0924	2 Ashley Owens SGS-TLW 0.3°C	3 Ashley Owens	8/26/20 16:30	Fedex
5	Fedex	8/27/20	6	7		8

Lab Use Only : Cooler Temperature (s) Celsius (corrected): 1.2

http://www.sgs.com/en/terms-and-conditions

ORLD-SMT-0001-03-FORM-COC (4).xls Rev 031318

5.1 5

FA78194: Chain of Custody
Page 1 of 2

SGS Sample Receipt Summary

Job Number: FA78194 **Client:** EARTHCON **Project:** KMCC NAVASSA

Date / Time Received: 8/27/2020 10:20:00 AM **Delivery Method:** FEDEX **Airbill #'s:** 900433724265

Therm ID: IR 1; **Therm CF:** -0.2; **# of Coolers:** 1

Cooler Temps (Raw Measured) °C: Cooler 1: (1.4);

Cooler Temps (Corrected) °C: Cooler 1: (1.2);

Cooler Information	Y	or	N
1. Custody Seals Present	☑		☐
2. Custody Seals Intact	☑		☐
3. Temp criteria achieved	☑		☐
4. Cooler temp verification	IR Gun		
5. Cooler media	Ice (Bag)		

Trip Blank Information	Y	or	N	N/A
1. Trip Blank present / cooler	☐		☐	☑
2. Trip Blank listed on COC	☐		☐	☑

	W	or	S	N/A
3. Type Of TB Received	☐		☐	☑

Sample Information	Y	or	N	N/A
1. Sample labels present on bottles	☑		☐	
2. Samples preserved properly	☑		☐	
3. Sufficient volume/containers recvd for analysis:	☑		☐	
4. Condition of sample	Intact			
5. Sample recvd within HT	☑		☐	
6. Dates/Times/IDs on COC match Sample Label	☑		☐	
7. VOCs have headspace	☐		☐	☑
8. Bottles received for unspecified tests	☐		☑	
9. Compositing instructions clear	☐		☐	☑
10. Voa Soil Kits/Jars received past 48hrs?	☐		☐	☑
11. % Solids Jar received?	☐		☐	☑
12. Residual Chlorine Present?	☐		☐	☑

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____ Number of 5035 Field Kits: _____ Number of Lab Filtered Metals: _____

Test Strip Lot #s: pH 0-3 230315 pH 10-12 219813A Other: (Specify) _____ _____

Residual Chlorine Test Strip Lot #: _____

Comments

SM001
Rev. Date 05/24/17

Technician: BRYANG Date: 8/27/2020 10:20:00 A Reviewer: _____ Date: _____

MS Semi-volatiles

6

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (DFTPP)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries
- Run Sequence Reports

Method Blank Summary

Job Number: FA78194
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP81781-MB	X072586.D	1	08/28/20	MV	08/28/20	OP81781	SX2960

The QC reported here applies to the following samples: **Method:** SW846 8270E

FA78194-1, FA78194-2

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	170	18	ug/kg	
208-96-8	Acenaphthylene	ND	170	17	ug/kg	
120-12-7	Anthracene	ND	170	19	ug/kg	
56-55-3	Benzo(a)anthracene	ND	170	17	ug/kg	
50-32-8	Benzo(a)pyrene	ND	170	20	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	170	18	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	170	17	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	170	22	ug/kg	
218-01-9	Chrysene	ND	170	17	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	170	21	ug/kg	
206-44-0	Fluoranthene	ND	170	17	ug/kg	
86-73-7	Fluorene	ND	170	18	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	170	20	ug/kg	
90-12-0	1-Methylnaphthalene	ND	170	17	ug/kg	
91-57-6	2-Methylnaphthalene	ND	170	17	ug/kg	
91-20-3	Naphthalene	ND	170	17	ug/kg	
85-01-8	Phenanthrene	ND	170	17	ug/kg	
129-00-0	Pyrene	ND	170	19	ug/kg	

CAS No.	Surrogate Recoveries		Limits
4165-60-0	Nitrobenzene-d5	60%	40-105%
321-60-8	2-Fluorobiphenyl	54%	43-107%
1718-51-0	Terphenyl-d14	59%	45-119%

Method Blank Summary

Job Number: FA78194
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP81782-MB	7G11410.D	1	08/29/20	FS	08/28/20	OP81782	S7G494

The QC reported here applies to the following samples: **Method:** SW846 8270E BY SIM

FA78194-1, FA78194-2

CAS No.	Compound	Result	RL	MDL	Units	Q
87-86-5	Pentachlorophenol	14.9	67	8.3	ug/kg	J

CAS No.	Surrogate Recoveries		Limits
7297-45-2	2-Methylnaphthalene-d10	85%	50-150%
93951-69-0	Fluoranthene-d10	118%	50-150%

Blank Spike Summary

Job Number: FA78194
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP81781-BS	X072585.D	1	08/28/20	MV	08/28/20	OP81781	SX2960

The QC reported here applies to the following samples: **Method:** SW846 8270E

FA78194-1, FA78194-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
83-32-9	Acenaphthene	1670	1340	80	56-109
208-96-8	Acenaphthylene	1670	1450	87	56-106
120-12-7	Anthracene	1670	1340	80	61-110
56-55-3	Benzo(a)anthracene	1670	1370	82	66-111
50-32-8	Benzo(a)pyrene	1670	1410	85	59-104
205-99-2	Benzo(b)fluoranthene	1670	1390	83	67-113
191-24-2	Benzo(g,h,i)perylene	1670	1430	86	67-113
207-08-9	Benzo(k)fluoranthene	1670	1440	86	67-114
218-01-9	Chrysene	1670	1440	86	65-112
53-70-3	Dibenzo(a,h)anthracene	1670	1350	81	68-115
206-44-0	Fluoranthene	1670	1330	80	60-108
86-73-7	Fluorene	1670	1400	84	58-109
193-39-5	Indeno(1,2,3-cd)pyrene	1670	1390	83	66-116
90-12-0	1-Methylnaphthalene	1670	1210	73	49-106
91-57-6	2-Methylnaphthalene	1670	1290	77	47-106
91-20-3	Naphthalene	1670	1220	73	44-104
85-01-8	Phenanthrene	1670	1380	83	63-111
129-00-0	Pyrene	1670	1390	83	65-115

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	72%	40-105%
321-60-8	2-Fluorobiphenyl	77%	43-107%
1718-51-0	Terphenyl-d14	75%	45-119%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA78194
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP81782-BS	7G11409.D	1	08/29/20	FS	08/28/20	OP81782	S7G494

The QC reported here applies to the following samples: **Method:** SW846 8270E BY SIM

FA78194-1, FA78194-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
87-86-5	Pentachlorophenol	667	512	77	46-135

CAS No.	Surrogate Recoveries	BSP	Limits
7297-45-2	2-Methylnaphthalene-d10	92%	50-150%
93951-69-0	Fluoranthene-d10	105%	50-150%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA78194
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP81781-MS	X072599.D	1	08/28/20	MV	08/28/20	OP81781	SX2960
OP81781-MSD	X072600.D	1	08/28/20	MV	08/28/20	OP81781	SX2960
FA78193-8	X072598.D	1	08/28/20	MV	08/28/20	OP81781	SX2960

The QC reported here applies to the following samples: **Method:** SW846 8270E

FA78194-1, FA78194-2

CAS No.	Compound	FA78193-8 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	ND		1910	1340	70	1890	1450	77	8	56-109/23
208-96-8	Acenaphthylene	ND		1910	1450	76	1890	1560	83	7	56-106/23
120-12-7	Anthracene	ND		1910	1330	70	1890	1430	76	7	61-110/21
56-55-3	Benzo(a)anthracene	ND		1910	1400	73	1890	1520	80	8	66-111/23
50-32-8	Benzo(a)pyrene	ND		1910	1390	73	1890	1540	82	10	59-104/23
205-99-2	Benzo(b)fluoranthene	ND		1910	1330	70	1890	1540	82	15	67-113/24
191-24-2	Benzo(g,h,i)perylene	ND		1910	1460	77	1890	1620	86	10	67-113/21
207-08-9	Benzo(k)fluoranthene	ND		1910	1350	71	1890	1470	78	9	67-114/22
218-01-9	Chrysene	ND		1910	1420	74	1890	1570	83	10	65-112/25
53-70-3	Dibenzo(a,h)anthracene	ND		1910	1450	76	1890	1600	85	10	68-115/23
206-44-0	Fluoranthene	ND		1910	1350	71	1890	1450	77	7	60-108/25
86-73-7	Fluorene	ND		1910	1370	72	1890	1500	79	9	58-109/21
193-39-5	Indeno(1,2,3-cd)pyrene	ND		1910	1500	79	1890	1680	89	11	66-116/22
90-12-0	1-Methylnaphthalene	ND		1910	1210	63	1890	1290	68	6	49-106/26
91-57-6	2-Methylnaphthalene	ND		1910	1300	68	1890	1370	73	5	47-106/27
91-20-3	Naphthalene	ND		1910	1270	67	1890	1320	70	4	44-104/27
85-01-8	Phenanthrene	ND		1910	1370	72	1890	1480	78	8	63-111/22
129-00-0	Pyrene	ND		1910	1350	71	1890	1480	78	9	65-115/25

CAS No.	Surrogate Recoveries	MS	MSD	FA78193-8	Limits
4165-60-0	Nitrobenzene-d5	67%	69%	41%	40-105%
321-60-8	2-Fluorobiphenyl	69%	73%	46%	43-107%
1718-51-0	Terphenyl-d14	63%	69%	51%	45-119%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA78194
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP81782-MS	7G11421.D	1	08/29/20	FS	08/28/20	OP81782	S7G494
OP81782-MSD	7G11422.D	1	08/29/20	FS	08/28/20	OP81782	S7G494
FA78193-8	7G11420.D	1	08/29/20	FS	08/28/20	OP81782	S7G494

The QC reported here applies to the following samples: **Method:** SW846 8270E BY SIM

FA78194-1, FA78194-2

CAS No.	Compound	FA78193-8 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
87-86-5	Pentachlorophenol	ND		771	745	97	768	815	106	9	46-135/30

CAS No.	Surrogate Recoveries	MS	MSD	FA78193-8	Limits
7297-45-2	2-Methylnaphthalene-d10	89%	101%	82%	50-150%
93951-69-0	Fluoranthene-d10	91%	106%	95%	50-150%

* = Outside of Control Limits.

Instrument Performance Check (DFTPP)

Job Number: FA78194
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: S7G472-DFTPP
Lab File ID: 7G10822.D
Instrument ID: GCMS7G
Injection Date: 07/21/20
Injection Time: 08:44

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	4908	32.6		Pass
68	Less than 2.0% of mass 69	91	0.60	(1.60) [a]	Pass
69	Mass 69 relative abundance	5683	37.7		Pass
70	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
127	40.0 - 60.0% of mass 198	6380	42.3		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	15078	100.0		Pass
199	5.0 - 9.0% of mass 198	953	6.32		Pass
275	10.0 - 30.0% of mass 198	3550	23.5		Pass
365	1.0 - 100.0% of mass 198	473	3.14		Pass
441	Present, but less than mass 443	1808	12.0	(84.1) [b]	Pass
442	40.0 - 100.0% of mass 198	11474	76.1		Pass
443	17.0 - 23.0% of mass 442	2149	14.3	(18.7) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
S7G472-IC472	7G10833.D	07/21/20	13:31	04:47	Initial cal 1
S7G472-IC472	7G10834.D	07/21/20	13:55	05:11	Initial cal 2
S7G472-IC472	7G10835.D	07/21/20	14:19	05:35	Initial cal 3
S7G472-ICC472	7G10836.D	07/21/20	14:43	05:59	Initial cal 4
S7G472-IC472	7G10837.D	07/21/20	15:07	06:23	Initial cal 5
S7G472-IC472	7G10838.D	07/21/20	15:31	06:47	Initial cal 6
S7G472-IC472	7G10839.D	07/21/20	15:55	07:11	Initial cal 7
S7G472-ICV472	7G10840.D	07/21/20	16:19	07:35	Initial cal verification 4

Instrument Performance Check (DFTPP)

Job Number: FA78194
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: S7G494-DFTPP
Lab File ID: 7G11407.D
Instrument ID: GCMS7G
Injection Date: 08/29/20
Injection Time: 08:21

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	3538	31.9		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	4205	38.0		Pass
70	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
127	40.0 - 60.0% of mass 198	4753	42.9		Pass
197	Less than 1.0% of mass 198	71	0.64		Pass
198	Base peak, 100% relative abundance	11078	100.0		Pass
199	5.0 - 9.0% of mass 198	732	6.61		Pass
275	10.0 - 30.0% of mass 198	2826	25.5		Pass
365	1.0 - 100.0% of mass 198	376	3.39		Pass
441	Present, but less than mass 443	1352	12.2	(83.7) [b]	Pass
442	40.0 - 100.0% of mass 198	8781	79.3		Pass
443	17.0 - 23.0% of mass 442	1615	14.6	(18.4) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
S7G494-CC472	7G11408.D	08/29/20	08:39	00:18	Continuing cal 4
OP81782-BS	7G11409.D	08/29/20	09:04	00:43	Blank Spike
OP81782-MB	7G11410.D	08/29/20	09:27	01:06	Method Blank
ZZZZZZ	7G11411.D	08/29/20	10:05	01:44	(unrelated sample)
ZZZZZZ	7G11412.D	08/29/20	10:28	02:07	(unrelated sample)
ZZZZZZ	7G11413.D	08/29/20	10:52	02:31	(unrelated sample)
OP81787-LBS	7G11414.D	08/29/20	11:15	02:54	Blank Spike
OP81787-LB	7G11415.D	08/29/20	11:39	03:18	Leachate Blank
ZZZZZZ	7G11416.D	08/29/20	12:02	03:41	(unrelated sample)
ZZZZZZ	7G11417.D	08/29/20	12:26	04:05	(unrelated sample)
ZZZZZZ	7G11418.D	08/29/20	12:49	04:28	(unrelated sample)
ZZZZZZ	7G11419.D	08/29/20	13:13	04:52	(unrelated sample)
FA78193-8	7G11420.D	08/29/20	13:37	05:16	(used for QC only; not part of job FA78194)
OP81782-MS	7G11421.D	08/29/20	14:00	05:39	Matrix Spike
OP81782-MSD	7G11422.D	08/29/20	14:24	06:03	Matrix Spike Duplicate
ZZZZZZ	7G11423.D	08/29/20	14:48	06:27	(unrelated sample)
ZZZZZZ	7G11424.D	08/29/20	15:11	06:50	(unrelated sample)
ZZZZZZ	7G11425.D	08/29/20	15:35	07:14	(unrelated sample)
FA78194-1	7G11426.D	08/29/20	15:59	07:38	CS-TB-16A

Instrument Performance Check (DFTPP)

Job Number: FA78194
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample:	S7G494-DFTPP	**Injection Date:**	08/29/20
Lab File ID:	7G11407.D	**Injection Time:**	08:21
Instrument ID:	GCMS7G		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
FA78194-2	7G11427.D	08/29/20	16:22	08:01	CS-53
FA78157-1	7G11428.D	08/29/20	16:46	08:25	(used for QC only; not part of job FA78194)
OP81787-MS	7G11429.D	08/29/20	17:10	08:49	Matrix Spike
OP81787-MSD	7G11430.D	08/29/20	17:33	09:12	Matrix Spike Duplicate
ZZZZZZ	7G11431.D	08/29/20	17:57	09:36	(unrelated sample)
ZZZZZZ	7G11432.D	08/29/20	18:20	09:59	(unrelated sample)
ZZZZZZ	7G11433.D	08/29/20	18:44	10:23	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: FA78194
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2953-DFTPP
Lab File ID: X072418.D
Instrument ID: GCMSX
Injection Date: 08/17/20
Injection Time: 10:03

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	44499	49.4		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	41125	45.6		Pass
70	Less than 2.0% of mass 69	260	0.29	(0.63) [a]	Pass
127	40.0 - 60.0% of mass 198	45755	50.8		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	90149	100.0		Pass
199	5.0 - 9.0% of mass 198	5996	6.65		Pass
275	10.0 - 30.0% of mass 198	19625	21.8		Pass
365	1.0 - 100.0% of mass 198	1969	2.18		Pass
441	Present, but less than mass 443	11426	12.7	(84.4) [b]	Pass
442	40.0 - 100.0% of mass 198	70792	78.5		Pass
443	17.0 - 23.0% of mass 442	13534	15.0	(19.1) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
SX2953-IC2953	X072419.D	08/17/20	10:20	00:17	Initial cal 1
SX2953-IC2953	X072420.D	08/17/20	10:46	00:43	Initial cal 5
SX2953-IC2953	X072421.D	08/17/20	11:11	01:08	Initial cal 10
SX2953-IC2953	X072422.D	08/17/20	11:37	01:34	Initial cal 25
SX2953-ICC2953	X072423.D	08/17/20	12:03	02:00	Initial cal 50
SX2953-IC2953	X072424.D	08/17/20	12:28	02:25	Initial cal 60
SX2953-IC2953	X072425.D	08/17/20	12:54	02:51	Initial cal 75
SX2953-IC2953	X072426.D	08/17/20	13:20	03:17	Initial cal 100
SX2953-IC2953	X072427.D	08/17/20	13:46	03:43	Initial cal 1
SX2953-IC2953	X072428.D	08/17/20	14:12	04:09	Initial cal 5
SX2953-IC2953	X072429.D	08/17/20	14:38	04:35	Initial cal 10
SX2953-IC2953	X072430.D	08/17/20	15:04	05:01	Initial cal 25
SX2953-IC2953	X072431.D	08/17/20	15:30	05:27	Initial cal 50
SX2953-IC2953	X072432.D	08/17/20	15:55	05:52	Initial cal 60
SX2953-IC2953	X072433.D	08/17/20	16:21	06:18	Initial cal 75
SX2953-IC2953	X072434.D	08/17/20	16:46	06:43	Initial cal 100
SX2953-ICV2953	X072435.D	08/17/20	17:12	07:09	Initial cal verification 50
SX2953-ICV2953	X072436.D	08/17/20	17:38	07:35	Initial cal verification 50
SX2953-ICV2953	X072437.D	08/17/20	18:03	08:00	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: FA78194
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample:	SX2953-DFTPP	**Injection Date:**	08/17/20
Lab File ID:	X072418.D	**Injection Time:**	10:03
Instrument ID:	GCMSX		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
SX2953-ICV2953	X072438.D	08/17/20	18:29	08:26	Initial cal verification 50
SX2953-ICV2953	X072439.D	08/17/20	18:54	08:51	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: FA78194
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2960-DFTPP
Lab File ID: X072583.D
Instrument ID: GCMSX
Injection Date: 08/28/20
Injection Time: 13:53

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	44035	55.8		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	40253	51.0		Pass
70	Less than 2.0% of mass 69	212	0.27	(0.53) [a]	Pass
127	40.0 - 60.0% of mass 198	42792	54.2		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	78949	100.0		Pass
199	5.0 - 9.0% of mass 198	5218	6.61		Pass
275	10.0 - 30.0% of mass 198	16406	20.8		Pass
365	1.0 - 100.0% of mass 198	1608	2.04		Pass
441	Present, but less than mass 443	8766	11.1	(83.5) [b]	Pass
442	40.0 - 100.0% of mass 198	53467	67.7		Pass
443	17.0 - 23.0% of mass 442	10499	13.3	(19.6) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
SX2960-CC2953	X072584.D	08/28/20	14:10	00:17	Continuing cal 50
OP81781-BS	X072585.D	08/28/20	14:38	00:45	Blank Spike
OP81781-MB	X072586.D	08/28/20	15:04	01:11	Method Blank
ZZZZZZ	X072587.D	08/28/20	15:30	01:37	(unrelated sample)
OP81775-BS	X072588.D	08/28/20	15:56	02:03	Blank Spike
OP81775-MB	X072589.D	08/28/20	16:22	02:29	Method Blank
ZZZZZZ	X072590.D	08/28/20	16:47	02:54	(unrelated sample)
ZZZZZZ	X072591.D	08/28/20	17:14	03:21	(unrelated sample)
ZZZZZZ	X072592.D	08/28/20	17:39	03:46	(unrelated sample)
ZZZZZZ	X072593.D	08/28/20	18:05	04:12	(unrelated sample)
ZZZZZZ	X072594.D	08/28/20	18:31	04:38	(unrelated sample)
ZZZZZZ	X072595.D	08/28/20	18:57	05:04	(unrelated sample)
ZZZZZZ	X072596.D	08/28/20	19:23	05:30	(unrelated sample)
ZZZZZZ	X072597.D	08/28/20	19:49	05:56	(unrelated sample)
FA78193-8	X072598.D	08/28/20	20:14	06:21	(used for QC only; not part of job FA78194)
OP81781-MS	X072599.D	08/28/20	20:40	06:47	Matrix Spike
OP81781-MSD	X072600.D	08/28/20	21:06	07:13	Matrix Spike Duplicate
ZZZZZZ	X072601.D	08/28/20	21:31	07:38	(unrelated sample)
ZZZZZZ	X072602.D	08/28/20	21:57	08:04	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: FA78194
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample:	SX2960-DFTPP	**Injection Date:**	08/28/20
Lab File ID:	X072583.D	**Injection Time:**	13:53
Instrument ID:	GCMSX		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	X072603.D	08/28/20	22:23	08:30	(unrelated sample)
FA78194-1	X072604.D	08/28/20	22:48	08:55	CS-TB-16A
FA78194-2	X072605.D	08/28/20	23:14	09:21	CS-53
FA78191-1	X072606.D	08/28/20	23:39	09:46	(used for QC only; not part of job FA78194)
OP81775-MS	X072607.D	08/29/20	00:05	10:12	Matrix Spike
OP81775-MSD	X072608.D	08/29/20	00:30	10:37	Matrix Spike Duplicate
ZZZZZZ	X072609.D	08/29/20	00:55	11:02	(unrelated sample)
ZZZZZZ	X072610.D	08/29/20	01:21	11:28	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: FA78194
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2961-DFTPP
Lab File ID: X072613.D
Instrument ID: GCMSX
Injection Date: 08/29/20
Injection Time: 11:24

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	30640	51.3		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	27794	46.5		Pass
70	Less than 2.0% of mass 69	168	0.28	(0.60) [a]	Pass
127	40.0 - 60.0% of mass 198	29955	50.2		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	59717	100.0		Pass
199	5.0 - 9.0% of mass 198	4006	6.71		Pass
275	10.0 - 30.0% of mass 198	13316	22.3		Pass
365	1.0 - 100.0% of mass 198	1327	2.22		Pass
441	Present, but less than mass 443	8160	13.7	(89.5) [b]	Pass
442	40.0 - 100.0% of mass 198	48741	81.6		Pass
443	17.0 - 23.0% of mass 442	9115	15.3	(18.7) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
SX2961-CC2953	X072614.D	08/29/20	11:41	00:17	Continuing cal 50
ZZZZZZ	X072615.D	08/29/20	12:07	00:43	(unrelated sample)
OP81786-LBS	X072616.D	08/29/20	12:32	01:08	Blank Spike
OP81786-LB	X072617.D	08/29/20	12:57	01:33	Leachate Blank
FA78194-1	X072618.D	08/29/20	13:23	01:59	CS-TB-16A
ZZZZZZ	X072619.D	08/29/20	13:49	02:25	(unrelated sample)
ZZZZZZ	X072620.D	08/29/20	14:14	02:50	(unrelated sample)
ZZZZZZ	X072621.D	08/29/20	14:40	03:16	(unrelated sample)
ZZZZZZ	X072622.D	08/29/20	15:05	03:41	(unrelated sample)
ZZZZZZ	X072623.D	08/29/20	15:31	04:07	(unrelated sample)
ZZZZZZ	X072624.D	08/29/20	15:56	04:32	(unrelated sample)
FA78133-7L	X072625.D	08/29/20	16:22	04:58	(used for QC only; not part of job FA78194)
OP81786-MS	X072626.D	08/29/20	16:48	05:24	Matrix Spike
OP81786-MSD	X072627.D	08/29/20	17:13	05:49	Matrix Spike Duplicate
ZZZZZZ	X072628.D	08/29/20	17:39	06:15	(unrelated sample)
ZZZZZZ	X072629.D	08/29/20	18:04	06:40	(unrelated sample)
ZZZZZZ	X072630.D	08/29/20	18:30	07:06	(unrelated sample)
ZZZZZZ	X072631.D	08/29/20	18:55	07:31	(unrelated sample)
FA78196-2L	X072632.D	08/29/20	19:21	07:57	(used for QC only; not part of job FA78194)

Instrument Performance Check (DFTPP)

Job Number: FA78194
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample:	SX2961-DFTPP	**Injection Date:**	08/29/20
Lab File ID:	X072613.D	**Injection Time:**	11:24
Instrument ID:	GCMSX		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
OP81786-DUP	X072633.D	08/29/20	19:46	08:22	Duplicate
ZZZZZZ	X072634.D	08/29/20	20:11	08:47	(unrelated sample)

Internal Standard Area Summary

Job Number: FA78194
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Check Std:	S7G494-CC472	**Injection Date:**	08/29/20
Lab File ID:	7G11408.D	**Injection Time:**	08:39
Instrument ID:	GCMS7G	**Method:**	SW846 8270E BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Initial Cal [a]	25300	4.75	14609	6.24	26093	7.53	42851	9.87	37551	11.64
Check Std [b]	17369	4.56	10600	6.05	21043	7.33	36799	9.65	33303	11.37
Upper Limit [c]	34738	4.73	21200	6.22	42086	7.50	73598	9.82	66606	11.54
Lower Limit [d]	8685	4.39	5300	5.88	10522	7.16	18400	9.48	16652	11.20

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
OP81782-BS	18652	4.56	11435	6.04	23070	7.33	39206	9.65	36045	11.37
OP81782-MB	18585	4.56	11306	6.04	21885	7.33	37111	9.65	32802	11.37
ZZZZZZ	19306	4.57	12072	6.05	24963	7.33	52079	9.67	45019	11.42
ZZZZZZ	17211	4.57	11185	6.05	22344	7.33	38214	9.66	36540	11.38
ZZZZZZ	17932	4.56	11516	6.04	22915	7.33	38082	9.65	36211	11.37
OP81787-LBS	18250	4.56	11687	6.05	23082	7.33	39702	9.66	36211	11.38
OP81787-LB	18844	4.56	11833	6.04	22729	7.33	39693	9.66	37082	11.37
ZZZZZZ	16753	4.57	10474	6.05	20348	7.34	35001	9.66	32344	11.38
ZZZZZZ	20306	4.57	12919	6.05	25580	7.33	55632	9.67	46722	11.41
ZZZZZZ	17011	4.56	11007	6.04	21817	7.33	39282	9.65	36894	11.38
ZZZZZZ	18405	4.57	12156	6.05	23939	7.33	40148	9.66	37357	11.38
FA78193-8	19043	4.56	12472	6.04	24556	7.33	41450	9.65	38128	11.37
OP81782-MS	19074	4.56	12303	6.05	24370	7.33	41347	9.65	37924	11.38
OP81782-MSD	18468	4.56	11862	6.05	23793	7.33	40442	9.66	36679	11.38
ZZZZZZ	18589	4.56	11867	6.04	23994	7.33	42312	9.65	37894	11.38
ZZZZZZ	18464	4.57	11921	6.05	23832	7.33	43614	9.66	38497	11.39
ZZZZZZ	18674	4.57	12053	6.05	23972	7.34	40370	9.66	37233	11.39
FA78194-1 [e]	21431	4.56	14044	6.05	28282	7.33	67371	9.68	52475	11.42
FA78194-2	21226	4.58	13666	6.06	27443	7.34	51591	9.67	46795	11.39
FA78157-1	23514	4.63	17933	6.07	40856	7.35	65778	9.69	42716	11.41
OP81787-MS [f]	38750*	4.60	21696*	6.06	37810	7.34	52562	9.68	39775	11.40
OP81787-MSD [g]	36567*	4.60	20719	6.06	35013	7.35	50611	9.68	38527	11.40
ZZZZZZ	20664	4.56	13852	6.05	26612	7.33	43360	9.65	36315	11.38
ZZZZZZ	23766	4.58	14405	6.05	27984	7.34	43367	9.66	34773	11.39
ZZZZZZ	20305	4.57	14570	6.05	25169	7.33	41007	9.66	33861	11.39

IS 1 = Naphthalene-d8
IS 2 = Acenaphthene-D10
IS 3 = Phenanthrene-d10
IS 4 = Chrysene-d12
IS 5 = Perylene-d12

(a) Initial Cal is: S7G472-ICC472 7G10836.D 07/21/20 14:43

Internal Standard Area Summary

Job Number: FA78194
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Check Std:	S7G494-CC472	**Injection Date:**	08/29/20
Lab File ID:	7G11408.D	**Injection Time:**	08:39
Instrument ID:	GCMS7G	**Method:**	SW846 8270E BY SIM

Lab	IS 1		IS 2		IS 3		IS 4		IS 5	
Sample ID	**AREA**	**RT**	**AREA**	**RT**	**AREA**	**RT**	**AREA**	**RT**	**AREA**	**RT**

(b) Check Std Limit = -50 to + 100% of initial cal area.
(c) Upper Limit = + 100% of check standard area; Retention time + 0.167 minutes.
(d) Lower Limit = -50% of check standard area; Retention time -0.167 minutes.
(e) Dilution required due to matrix interference; extract was viscous.
(f) RR10x FOR ANTRACENE
(g) RR10x FOR ANTRACENEN

Internal Standard Area Summary

Job Number: FA78194
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Check Std:	SX2960-CC2953	**Injection Date:**	08/28/20
Lab File ID:	X072584.D	**Injection Time:**	14:10
Instrument ID:	GCMSX	**Method:**	SW846 8270E

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Initial Cal [a]	155540	5.62	601149	7.04	289917	9.08	486107	10.82	374416	14.02	278810	16.19
Check Std [b]	158778	5.56	642911	6.99	312269	9.02	527531	10.76	393869	13.95	279073	16.09
Upper Limit [c]	317556	5.73	1285822	7.16	624538	9.19	1055062	10.93	787738	14.12	558146	16.26
Lower Limit [d]	79389	5.39	321456	6.82	156135	8.85	263766	10.59	196935	13.78	139537	15.92

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP81781-BS	163444	5.56	643596	6.99	300966	9.02	478938	10.76	333319	13.94	256037	16.08
OP81781-MB	136585	5.56	542267	6.98	309469	9.02	544305	10.76	437145	13.94	337693	16.09
ZZZZZZ	176203	5.56	701857	6.98	345365	9.02	563389	10.76	422573	13.94	334206	16.09
OP81775-BS	159990	5.56	638683	6.99	301702	9.02	487873	10.76	351880	13.95	265949	16.09
OP81775-MB	140767	5.56	560497	6.99	280172	9.02	463018	10.76	323137	13.94	247657	16.09
ZZZZZZ	147997	5.56	612928	6.99	284393	9.02	468965	10.76	308323	13.94	230491	16.09
ZZZZZZ	144034	5.56	571286	6.98	282751	9.02	472810	10.76	320905	13.94	242326	16.09
ZZZZZZ	163883	5.56	687695	6.99	346600	9.02	588988	10.76	399896	13.94	307671	16.09
ZZZZZZ	161427	5.56	677504	6.99	348040	9.02	588407	10.76	402889	13.94	312979	16.09
ZZZZZZ	160031	5.56	678407	6.99	344429	9.02	580023	10.76	402072	13.94	311467	16.09
ZZZZZZ	175572	5.56	715540	6.99	359145	9.02	588336	10.76	456028	13.96	377693	16.12
ZZZZZZ	194471	5.56	753646	6.99	382979	9.02	641709	10.76	473076	13.95	378516	16.09
ZZZZZZ	184330	5.56	756868	6.99	378431	9.02	640536	10.76	448436	13.94	363383	16.09
FA78193-8	175344	5.56	731832	6.99	375778	9.02	633214	10.76	442735	13.94	352957	16.09
OP81781-MS	169673	5.56	649978	6.99	292162	9.02	454021	10.76	332538	13.95	275195	16.09
OP81781-MSD	168360	5.56	657440	6.99	295952	9.02	470551	10.76	338915	13.96	269589	16.09
ZZZZZZ	195199	5.56	804330	6.99	409958	9.02	696787	10.76	486914	13.95	382476	16.10
ZZZZZZ	183365	5.56	763925	6.99	391162	9.02	658549	10.76	471269	13.95	377532	16.11
ZZZZZZ	187682	5.56	777518	6.99	391508	9.02	661158	10.76	460276	13.95	371138	16.10
FA78194-1	218083	5.56	875969	6.99	454039	9.02	778094	10.76	599117	13.98	504410	16.14
FA78194-2	179412	5.56	762146	6.99	404431	9.02	692477	10.76	509467	13.95	412450	16.11
FA78191-1	164216	5.56	626525	6.99	301356	9.02	497091	10.76	338343	13.95	272875	16.10
OP81775-MS	170517	5.57	667084	6.99	304760	9.02	492864	10.77	353630	13.96	280023	16.10
OP81775-MSD	171789	5.57	676794	6.99	313990	9.02	506081	10.76	355060	13.96	280296	16.10
ZZZZZZ	155374	5.56	605775	6.99	290085	9.02	469427	10.76	317033	13.95	247345	16.09
ZZZZZZ	155039	5.56	602958	6.99	290105	9.02	473510	10.76	314872	13.94	248952	16.10

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

Internal Standard Area Summary

Job Number: FA78194
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Check Std:	SX2960-CC2953	**Injection Date:**	08/28/20
Lab File ID:	X072584.D	**Injection Time:**	14:10
Instrument ID:	GCMSX	**Method:**	SW846 8270E

Lab Sample ID	IS 1 AREA	IS 1 RT	IS 2 AREA	IS 2 RT	IS 3 AREA	IS 3 RT	IS 4 AREA	IS 4 RT	IS 5 AREA	IS 5 RT	IS 6 AREA	IS 6 RT

(a) Initial Cal is: SX2953-ICC2953 X072423.D 08/17/20 12:03
(b) Check Std Limit = -50 to + 100% of initial cal area.
(c) Upper Limit = + 100% of check standard area; Retention time + 0.167 minutes.
(d) Lower Limit = -50% of check standard area; Retention time -0.167 minutes.

Internal Standard Area Summary

Job Number: FA78194
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Check Std: SX2961-CC2953 **Injection Date:** 08/29/20
Lab File ID: X072614.D **Injection Time:** 11:41
Instrument ID: GCMSX **Method:** SW846 8270E

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Initial Cal [a]	155540	5.62	601149	7.04	289917	9.08	486107	10.82	374416	14.02	278810	16.19
Check Std [b]	149018	5.55	596345	6.98	286750	9.01	489662	10.75	387000	13.94	290893	16.08
Upper Limit [c]	298036	5.72	1192690	7.15	573500	9.18	979324	10.92	774000	14.11	581786	16.25
Lower Limit [d]	74509	5.38	298173	6.81	143375	8.84	244831	10.58	193500	13.77	145447	15.91

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
ZZZZZZ	135825	5.55	536959	6.98	257531	9.01	445900	10.75	336169	13.93	276527	16.07
OP81786-LBS	144430	5.55	591272	6.98	286354	9.01	477073	10.75	362883	13.94	283867	16.08
OP81786-LB	134520	5.55	523554	6.98	258163	9.01	447897	10.75	338970	13.93	277850	16.07
FA78194-1	132607	5.55	513704	6.98	252416	9.01	437417	10.75	376578	13.94	278895	16.08
ZZZZZZ	131265	5.55	509266	6.97	247031	9.01	434973	10.75	328952	13.93	265421	16.07
ZZZZZZ	133970	5.55	512447	6.98	252751	9.01	432166	10.75	330962	13.93	265979	16.07
ZZZZZZ	135274	5.55	520826	6.97	256402	9.01	442007	10.75	336263	13.93	267960	16.07
ZZZZZZ	136078	5.55	528753	6.98	260805	9.01	449641	10.75	338484	13.93	271567	16.07
ZZZZZZ	137062	5.55	531052	6.98	260544	9.01	446934	10.75	336988	13.93	270288	16.07
ZZZZZZ	135489	5.55	529199	6.97	260626	9.01	445096	10.75	338370	13.93	269052	16.07
FA78133-7L	135606	5.55	526507	6.98	261375	9.01	462347	10.75	336334	13.93	263560	16.07
OP81786-MS	148726	5.55	596415	6.98	289613	9.01	492711	10.76	375028	13.94	287951	16.07
OP81786-MSD	161060	5.55	644851	6.98	306560	9.01	505944	10.76	376033	13.94	285618	16.08
ZZZZZZ	139157	5.55	537069	6.97	264153	9.01	456605	10.75	344875	13.93	271977	16.07
ZZZZZZ	138173	5.55	531214	6.97	261909	9.01	455115	10.75	341441	13.93	271419	16.07
ZZZZZZ	138338	5.55	533127	6.97	260082	9.01	454013	10.75	339839	13.93	267311	16.07
ZZZZZZ	141160	5.55	545748	6.97	265913	9.01	460674	10.75	345922	13.93	273089	16.07
FA78196-2L	140430	5.55	535107	6.97	261451	9.01	449808	10.75	338568	13.93	269323	16.07
OP81786-DUP	139217	5.55	537609	6.97	262844	9.01	449266	10.75	336859	13.93	268088	16.07
ZZZZZZ	133255	5.55	517907	6.97	258774	9.01	441618	10.75	332276	13.93	262097	16.07

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Initial Cal is: SX2953-ICC2953 X072423.D 08/17/20 12:03
(b) Check Std Limit = -50 to + 100% of initial cal area.
(c) Upper Limit = + 100% of check standard area; Retention time + 0.167 minutes.
(d) Lower Limit = -50% of check standard area; Retention time -0.167 minutes.

Surrogate Recovery Summary

Job Number: FA78194
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Method: SW846 8270E **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
FA78194-1	X072618.D	58	61	62
FA78194-1	X072604.D	49	47	51
FA78194-2	X072605.D	51	48	53
OP81781-BS	X072585.D	72	77	75
OP81781-MB	X072586.D	60	54	59
OP81781-MS	X072599.D	67	69	63
OP81781-MSD	X072600.D	69	73	69

Surrogate Compounds	Recovery Limits
S1 = Nitrobenzene-d5	40-105%
S2 = 2-Fluorobiphenyl	43-107%
S3 = Terphenyl-d14	45-119%

Surrogate Recovery Summary

Job Number: FA78194
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Method: SW846 8270E BY SIM **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2
FA78194-1	7G11426.D	66	82
FA78194-2	7G11427.D	79	95
OP81782-BS	7G11409.D	92	105
OP81782-MB	7G11410.D	85	118
OP81782-MS	7G11421.D	89	91
OP81782-MSD	7G11422.D	101	106

Surrogate Compounds	Recovery Limits
S1 = 2-Methylnaphthalene-d10	50-150%
S2 = Fluoranthene-d10	50-150%

Initial Calibration Summary

Job Number: FA78194
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: S7G472-ICC472
Lab FileID: 7G10836.D

Response Factor Report MSBNA8

Method : C:\msdchem\1\met...pahf7gD0072120.m (RTE Integrator)
Title : PAH's by 8270 SIM
Last Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

Calibration Files
L1 =7G10833.D L2 =7G10834.D L3 =7G10835.D L4 =7G10836.D
L5 =7G10837.D L6 =7G10838.D L7 =7G10839.D

Compound	L1	L2	L3	L4	L5	L6	L7	Avg	%RSD
1) I Naphthalene-d8	ISTD								
2)P Naphthalene	1.788	1.149	1.123	1.177	1.176	1.182	1.252	1.264	18.55
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9999									
Response Ratio = 0.00000 + 1.12694 *A + 0.01247 *A^2									
3)P 2-Methylnaphthale	1.042	0.771	0.794	0.867	0.873	0.908	0.973	0.890	10.71
4)s 2-Methylnaphthale	0.874	0.545	0.557	0.602	0.614	0.624	0.669	0.641	17.36
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9999									
Response Ratio = 0.00000 + 0.57628 *A + 0.00934 *A^2									
5)P 1-Methylnaphthale	1.294	0.799	0.779	0.829	0.824	0.846	0.913	0.898	20.03
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9999									
Response Ratio = 0.00000 + 0.78065 *A + 0.01318 *A^2									
6) I Acenaphthene-d10	ISTD								
7)P Acenaphthylene	3.327	2.218	2.216	2.419	2.341	2.384	2.491	2.485	15.48
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9998									
Response Ratio = 0.00000 + 2.28588 *A + 0.02049 *A^2									
8)P Acenaphthene	2.268	1.471	1.460	1.575	1.548	1.557	1.652	1.647	17.08
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9999									
Response Ratio = 0.00000 + 1.48716 *A + 0.01640 *A^2									
9)P Dibenzofuran	1.560	1.051	1.032	1.113	1.089	1.076	1.140	1.152	15.96
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9998									
Response Ratio = 0.00000 + 1.04854 *A + 0.00901 *A^2									
10)P Fluorene	2.436	1.605	1.570	1.689	1.676	1.701	1.778	1.779	16.71
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9999									
Response Ratio = 0.00000 + 1.62233 *A + 0.01563 *A^2									
11) I Phenanthrene-d10	ISTD								
12)P Pentachlorophenol	0.084	0.080	0.117	0.151	0.178	0.197	0.233	0.149	39.03
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9987									
Response Ratio = 0.00000 + 0.14189 *A + 0.00368 *A^2									
13)P Phenanthrene	2.007	1.282	1.303	1.371	1.336	1.382	1.439	1.446	17.50
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9999									
Response Ratio = 0.00000 + 1.30979 *A + 0.01292 *A^2									
14)P Anthracene	2.174	1.335	1.305	1.353	1.340	1.365	1.396	1.467	21.35
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9999									
Response Ratio = 0.00000 + 1.32278 *A + 0.01470 *A^2									

Initial Calibration Summary

Job Number: FA78194 **Sample:** S7G472-ICC472
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** 7G10836.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

```
15)P Carbazole          3.180 2.159 2.195 2.326 2.267 2.295 2.316 2.391  14.77
16)P Fluoranthene       3.786 2.408 2.453 2.600 2.542 2.608 2.743 2.734  17.43
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9999
              Response Ratio = 0.00000 + 2.46832 *A + 0.02745 *A^2

17)s Fluoranthene-d10  3.033 1.977 2.025 2.147 2.071 2.136 2.194 2.226  16.33
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9998
              Response Ratio = 0.00000 + 2.05640 *A + 0.01374 *A^2


18) I   Chrysene-d12           ----------------ISTD---------------------
19)P Pyrene             2.490 1.553 1.540 1.619 1.610 1.629 1.672 1.730  19.54
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9999
              Response Ratio = 0.00000 + 1.57982 *A + 0.00925 *A^2

20)P Benzo[a]anthracen 1.818 1.195 1.210 1.275 1.268 1.268 1.312 1.335  16.22
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9999
              Response Ratio = 0.00000 + 1.23579 *A + 0.01515 *A^2

21)P Chrysene           2.438 1.458 1.376 1.447 1.376 1.368 1.385 1.550  25.39
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9997
              Response Ratio = 0.00000 + 1.38698 *A + -0.00072 *A^2


22) I   Perylene-d12           ----------------ISTD---------------------
23)P Benzo[b]fluoranth 1.677 1.174 1.240 1.363 1.337 1.329 1.383 1.358  11.71
24)P Benzo[k]fluoranth 2.395 1.507 1.422 1.504 1.430 1.470 1.515 1.606  21.78
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9998
              Response Ratio = 0.00000 + 1.42711 *A + 0.01741 *A^2

25)P Benzo[a]pyrene     1.657 1.212 1.202 1.293 1.268 1.287 1.342 1.323  11.71
26)P Indeno[1,2,3-cd]p 0.889 0.670 0.773 0.892 0.895 0.905 1.021 0.863  12.93
27)P Dibenz[a,h]anthra 1.091 0.768 0.828 0.940 0.961 1.000 1.118 0.958  13.38
28)P Benzo[g,h,i]peryl 1.292 0.877 0.912 1.008 1.013 1.042 1.143 1.041  13.53
-------------------------------------------------------------------------------
(#) = Out of Range

          simpahf7gD0072120.m       Wed Jul 22 13:15:14 2020
```

Initial Calibration Verification

Job Number: FA78194
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: S7G472-ICV472
Lab FileID: 7G10840.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\072120_7G472\7G10840.D Vial: 10
Acq On : 21 Jul 2020 4:19 pm Operator: fouads
Sample : icv472-4 Inst : MSBNA8
Misc : op80679,S7G472,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\met...pahf7gD0072120.m (RTE Integrator)
Title : PAH's by 8270 SIM
Last Update : Tue Jul 21 16:46:17 2020
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	R.T.
1	I	Naphthalene-d8	4.000	4.000	0.0	98	0.00	4.73
			Amount	Calc.	%Drift			
2	P	Naphthalene	10.000	9.543	4.6	92	0.00	4.75
			Amount	Calc.	%Drift			
3	P	2-Methylnaphthalene	10.000	8.171	18.3	82	0.00	5.34
			Amount	Calc.	%Drift			
4	s	2-Methylnaphthalene-d10			NA			
5	P	1-Methylnaphthalene	10.000	9.875	1.3	95	0.00	5.42
			Amount	Calc.	%Drift			
6	I	Acenaphthene-d10	4.000	4.000	0.0	99	0.00	6.22
			Amount	Calc.	%Drift			
7	P	Acenaphthylene	10.000	9.065	9.4	87	0.00	6.10
8	P	Acenaphthene	10.000	9.628	3.7	93	0.00	6.25
9	P	Dibenzofuran	10.000	18.813	-88.1#	183	0.00	6.41
10	P	Fluorene	10.000	9.705	2.9	95	0.00	6.70
			Amount	Calc.	%Drift			
11	I	Phenanthrene-d10	4.000	4.000	0.0	100	0.00	7.51
			Amount	Calc.	%Drift			
12	P	Pentachlorophenol	20.000	14.755	26.2#	61	0.00	7.38
13	P	Phenanthrene	10.000	9.479	5.2	93	0.00	7.53
14	P	Anthracene	5.000	4.255	14.9	84	0.00	7.58
			Amount	Calc.	%Drift			
15	P	Carbazole	5.000	2.375	52.5#	49	0.00	7.75
			Amount	Calc.	%Drift			
16	P	Fluoranthene	10.000	8.721	12.8	85	-0.01	8.56
17	s	Fluoranthene-d10			NA			
			Amount	Calc.	%Drift			
18	I	Chrysene-d12	4.000	4.000	0.0	97	0.00	9.85

Initial Calibration Verification

Job Number: FA78194
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: S7G472-ICV472
Lab FileID: 7G10840.D

			Amount	Calc.	%Drift			
19	P	Pyrene	10.000	9.176	8.2	88	0.00	8.75
20	P	Benzo[a]anthracene	5.000	4.494	10.1	86	0.00	9.84
21	P	Chrysene	5.000	5.042	-0.8	94	0.00	9.88

			Amount	Calc.	%Drift			
22	I	Perylene-d12	4.000	4.000	0.0	97	0.00	11.62
23	P	Benzo[b]fluoranthene	5.000	4.666	6.7	90	0.00	11.10

			Amount	Calc.	%Drift			
24	P	Benzo[k]fluoranthene	5.000	4.742	5.2	88	0.00	11.13

			Amount	Calc.	%Drift			
25	P	Benzo[a]pyrene	5.000	4.510	9.8	89	0.00	11.54
26	P	Indeno[1,2,3-cd]pyrene	5.000	4.449	11.0	83	-0.01	13.38
27	P	Dibenz[a,h]anthracene	5.000	4.399	12.0	87	0.00	13.44
28	P	Benzo[g,h,i]perylene	5.000	4.244	15.1	85	0.00	13.85

(#) = Out of Range SPCC's out = 0 CCC's out = 0
7G10836.D simpahf7gD0072120.m Wed Jul 22 13:16:09 2020

Continuing Calibration Summary

Job Number: FA78194 **Sample:** S7G494-CC472
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** 7G11408.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\ed...2020\s7g494\7G11408.d Vial: 2
Acq On : 29 Aug 2020 8:39 am Operator: FOUADS
Sample : cc472-4 Inst : MSBNA8
Misc : op81342,S7G494,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\met...pahf7gD0072120.m (RTE Integrator)
Title : PAH's by 8270 SIM
Last Update : Tue Jul 21 16:46:17 2020
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Naphthalene-d8	1.000	1.000	0.0	69	0.00	4.56
			True	Calc.	% Drift			
2	P	Naphthalene	10.000	10.121	-1.2	68	0.00	4.58
			AvgRF	CCRF	% Dev			
3	P	2-Methylnaphthalene	0.890	0.884	0.7	70	0.00	5.16
			True	Calc.	% Drift			
4	s	2-Methylnaphthalene-d10	10.000	11.027	-10.3	76	0.00	5.14
5	P	1-Methylnaphthalene	10.000	10.436	-4.4	70	0.00	5.25
			AvgRF	CCRF	% Dev			
6	I	Acenaphthene-d10	1.000	1.000	0.0	73	0.00	6.05
			True	Calc.	% Drift			
7	P	Acenaphthylene	10.000	10.579	-5.8	74	0.00	5.93
8	P	Acenaphthene	10.000	10.359	-3.6	73	0.00	6.07
9	P	Dibenzofuran	10.000	11.549	-15.5	81	0.00	6.23
10	P	Fluorene	10.000	10.452	-4.5	75	0.00	6.52
			AvgRF	CCRF	% Dev			
11	I	Phenanthrene-d10	1.000	1.000	0.0	81	0.00	7.33
			True	Calc.	% Drift			
12	P	Pentachlorophenol	25.000	24.481	2.1	86	0.00	7.20
13	P	Phenanthrene	10.000	9.996	0.0	79	0.00	7.35
14	P	Anthracene	5.000	4.991	0.2	80	0.00	7.40
			AvgRF	CCRF	% Dev			
15	P	Carbazole	2.391	2.526	-5.6	88	0.00	7.58
			True	Calc.	% Drift			
16	P	Fluoranthene	10.000	10.738	-7.4	85	0.00	8.38
17	s	Fluoranthene-d10	10.000	11.343	-13.4	89	0.00	8.37
			AvgRF	CCRF	% Dev			
18	I	Chrysene-d12	1.000	1.000	0.0	86	0.00	9.65

Continuing Calibration Summary

Job Number: FA78194 **Sample:** S7G494-CC472
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** 7G11408.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

			True	Calc.	% Drift			
19	P	Pyrene	10.000	9.886	1.1	84	0.00	8.57
20	P	Benzo[a]anthracene	5.000	4.882	2.4	82	0.00	9.64
21	P	Chrysene	5.000	5.436	-8.7	89	0.00	9.68
			AvgRF	CCRF	% Dev			
22	I	Perylene-d12	1.000	1.000	0.0	89	0.00	11.37
23	P	Benzo[b]fluoranthene	1.358	1.260	7.2	82	0.00	10.86
			True	Calc.	% Drift			
24	P	Benzo[k]fluoranthene	5.000	5.619	-12.4	96	0.00	10.90
			AvgRF	CCRF	% Dev			
25	P	Benzo[a]pyrene	1.323	1.305	1.4	90	0.00	11.29
26	P	Indeno[1,2,3-cd]pyrene	0.863	0.932	-8.0	93	0.00	13.08
27	P	Dibenz[a,h]anthracene	0.958	1.089	-13.7	103	0.00	13.13
28	P	Benzo[g,h,i]perylene	1.041	1.123	-7.9	99	0.00	13.54

(#) = Out of Range SPCC's out = 0 CCC's out = 0
7G10836.D simpahf7gD0072120.m Mon Aug 31 00:11:42 2020

Initial Calibration Summary

Job Number: FA78194
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2953-ICC2953
Lab FileID: X072423.D

Response Factor Report MSBNA05

Method : C:\msdchem\1\MET...DApp9SX-081720.m (RTE Integrator)
Title : SW846 8270D OR EPA 625
Last Update : Tue Aug 18 13:05:00 2020
Response via : Initial Calibration

Calibration Files
5 =x072428.D 10 =x072429.D 25 =x072430.D 50 =x072431.D
60 =x072432.D 75 =x072433.D 100 =x072434.D 1 =x072427.D

Compound	5	10	25	50	60	75	100	1	Avg	%RSD
1) I 1,4-Dichlorobenzene-d	ISTD									
2) 1,4-Dioxane	0.750	0.722	0.664	0.680	0.679	0.676	0.685	0.737	0.699	4.63
3) N-nitrosodim	1.252	1.228	1.179	1.220	1.251	1.228	1.240	1.381	1.247	4.71
4) Pyridine	1.959	1.835	1.820	1.927	1.986	1.978	2.056	1.984	1.943	4.11
5) Benzaldehyde	1.287	1.273	1.189	1.228	1.215	1.192	1.164	1.201	1.219	3.48
6) Aniline	2.258	2.230	2.131	2.240	2.328	2.305	2.385	2.088	2.246	4.39
7) 2-Fluorophen	1.578	1.568	1.483	1.534	1.532	1.522	1.523	1.456	1.524	2.64
8) bis(2-Chloro	1.496	1.479	1.462	1.604	1.620	1.591	1.581	1.442	1.534	4.66
9) Phenol-d5	1.759	1.751	1.716	1.818	1.896	1.862	1.886	1.608	1.787	5.50
10) Phenol	1.989	1.985	1.943	2.137	2.182	2.128	2.106	1.732	2.025	7.23
11) 2-Chlorophen	1.508	1.521	1.530	1.664	1.685	1.659	1.664	1.381	1.577	6.87
12) 1,3-Dichloro	1.667	1.677	1.618	1.746	1.740	1.712	1.702	1.569	1.679	3.60
13) 1,4-Dichloro	1.760	1.751	1.731	1.828	1.803	1.771	1.752	1.709	1.763	2.16
14) 1,2-Dichloro	1.627	1.576	1.577	1.640	1.635	1.585	1.573	1.586	1.600	1.81
15) Benzyl alcoh	0.926	0.955	0.973	1.041	1.062	1.036	1.052	0.801	0.981	8.98
16) 2,2'-Oxybis(	3.245	3.166	3.086	3.149	3.145	3.038	2.948	3.111	3.111	2.88
17) 2-Methylphen	1.402	1.404	1.419	1.501	1.537	1.526	1.557	1.274	1.452	6.57
18) Acetophenone	2.066	2.063	2.046	2.152	2.160	2.113	2.124	1.918	2.080	3.75
19) Hexachloroet	0.650	0.665	0.658	0.697	0.692	0.676	0.674	0.621	0.667	3.64
20) N-Nitroso-di	1.145	1.123	1.148	1.191	1.221	1.191	1.190	1.016	1.153	5.54
21) 3&4-Methylph	1.457	1.468	1.485	1.590	1.626	1.589	1.610	1.302	1.516	7.23
22) I Naphthalene-d8	ISTD									
23) Nitrobenzene	0.446	0.439	0.445	0.463	0.464	0.457	0.450	0.407	0.447	4.05
24) Nitrobenzene	0.449	0.437	0.431	0.449	0.450	0.441	0.431	0.449	0.442	1.87
25) Isophorone	0.725	0.728	0.723	0.744	0.752	0.740	0.737	0.671	0.728	3.42
26) 2-Nitropheno	0.203	0.208	0.209	0.222	0.227	0.222	0.225	0.171	0.211	8.63
27) 2,4-Dimethyl	0.347	0.344	0.334	0.357	0.358	0.356	0.354	0.316	0.346	4.19
28) O,O,O-Trieth	0.154	0.155	0.152	0.160	0.162	0.160	0.158	0.152	0.157	2.49
29) bis(2-Chloro	0.435	0.439	0.438	0.456	0.461	0.448	0.442	0.395	0.439	4.60
30) Benzoic Acid	0.144	0.190	0.207	0.214	0.246	0.261	0.273	0.038	0.197	38.75
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9985										
Response Ratio = 0.00000 + 0.17276 *A + 0.04244 *A^2										
31) 2,4-Dichloro	0.291	0.294	0.300	0.316	0.317	0.317	0.312	0.248	0.299	7.82
32) 1,2,4-Trichl	0.320	0.321	0.320	0.333	0.332	0.325	0.319	0.317	0.323	1.85
33) alpha-Terpin									0.000	-1.00
34) Naphthalene	1.148	1.146	1.136	1.166	1.157	1.125	1.092	1.103	1.134	2.29
35) 4-Chloroanil	0.473	0.469	0.467	0.475	0.476	0.462	0.452	0.426	0.462	3.62
36) 2,6-Dichloro	0.291	0.296	0.295	0.305	0.307	0.300	0.295	0.268	0.295	4.08
37) Hexachlorobu	0.161	0.162	0.158	0.165	0.163	0.162	0.158	0.157	0.161	1.76
38) Caprolactam	0.111	0.114	0.115	0.122	0.122	0.122	0.122	0.086	0.114	10.59
39) 4-Chloro-3-m	0.302	0.305	0.302	0.314	0.323	0.320	0.325	0.253	0.305	7.64
40) 2-Methylnaph	0.740	0.735	0.725	0.739	0.751	0.737	0.724	0.680	0.729	2.93
41) 1-Methylnaph	0.708	0.695	0.682	0.713	0.716	0.700	0.685	0.662	0.695	2.63
42) 1,2,4,5-Tetr	0.294	0.293	0.292	0.313	0.316	0.308	0.303	0.284	0.300	3.76

Initial Calibration Summary

Job Number: FA78194 **Sample:** SX2953-ICC2953
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072423.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

```
43) I   Acenaphthene-d10      ----------------ISTD--------------------
44) Hexachlorocy       0.088 0.156 0.215 0.236 0.248 0.268       0.202  33.44
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9953
              Response Ratio = 0.00000 + 0.13185 *A + 0.05871 *A^2

45) 2,4,6-Trichl 0.383 0.399 0.394 0.414 0.427 0.423 0.428 0.318 0.398   9.13
46) 2,4,5-Trichl 0.401 0.421 0.420 0.442 0.461 0.464 0.463 0.308 0.422  12.29
47) 2-Fluorobiph 1.575 1.592 1.572 1.663 1.667 1.674 1.640 1.486 1.609   4.03
48) 1,1'-Bipheny 1.769 1.824 1.723 1.799 1.761 1.731 1.666 1.710 1.748   2.90
49) 2-Chloronaph 1.331 1.333 1.336 1.371 1.371 1.352 1.308 1.218 1.327   3.69
50) 2-Nitroanili 0.465 0.491 0.492 0.509 0.523 0.519 0.527 0.398 0.491   8.70
51) p-Dinitroben 0.247 0.262 0.275 0.293 0.303 0.302 0.306 0.181 0.271  15.52
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9996
              Response Ratio = 0.00000 + 0.26756 *A + 0.01737 *A^2

52) Acenaphthyle 2.039 2.089 2.085 2.206 2.234 2.222 2.170 1.861 2.113   5.89
53) Dimethylphth 1.411 1.421 1.401 1.480 1.507 1.538 1.550 1.284 1.449   6.06
54) m-Dinitroben 0.225 0.241 0.245 0.272 0.279 0.283 0.286 0.157 0.248  17.35
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9995
              Response Ratio = 0.00000 + 0.24151 *A + 0.01992 *A^2

55) 2,6-Dinitrot 0.334 0.338 0.339 0.363 0.377 0.382 0.382 0.277 0.349  10.18
56) o-Dinitroben 0.343 0.358 0.358 0.372 0.379 0.310 0.301 0.286 0.338  10.33
57) Acenaphthene 1.383 1.432 1.404 1.438 1.453 1.432 1.409 1.335 1.411   2.68
58) 3-Nitroanili 0.380 0.389 0.401 0.421 0.426 0.433 0.436 0.310 0.399  10.41
59) 2,4-Dinitrop 0.036 0.068 0.130 0.181 0.196 0.209             0.137  52.40
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9958
              Response Ratio = 0.00000 + 0.07225 *A + 0.07819 *A^2

60) Dibenzofuran 1.845 1.851 1.811 1.885 1.892 1.880 1.876 1.724 1.846   3.02
61) 2,4-Dinitrot 0.409 0.438 0.450 0.483 0.494 0.493 0.493 0.335 0.449  12.39
62) 4-Nitropheno 0.110 0.132 0.150 0.171 0.180 0.184 0.183 0.040 0.144  34.68
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9982
              Response Ratio = 0.00000 + 0.14126 *A + 0.01970 *A^2

63) 2,3,5,6-Tetr 0.228 0.259 0.283 0.307 0.316 0.319 0.326 0.160 0.275  20.87
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9994
              Response Ratio = 0.00000 + 0.26771 *A + 0.02585 *A^2

64) 2,3,4,6-Tetr 0.282 0.286 0.310 0.339 0.351 0.349 0.359 0.212 0.311  15.99
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9995
              Response Ratio = 0.00000 + 0.29956 *A + 0.02605 *A^2

65) Fluorene     1.443 1.487 1.459 1.520 1.533 1.531 1.507 1.314 1.474   4.94
66) 4-Chlorophen 0.670 0.695 0.686 0.722 0.724 0.718 0.702 0.634 0.694   4.42
67) Diethylphtha 1.356 1.406 1.374 1.457 1.476 1.495 1.493 1.257 1.414   5.86
68) Thionazin    0.323 0.320 0.326 0.340 0.328 0.321 0.301 0.287 0.318   5.24
69) 4-Nitroanili 0.356 0.396 0.414 0.445 0.449 0.458 0.459 0.270 0.406  16.14
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9996
              Response Ratio = 0.00000 + 0.40170 *A + 0.02636 *A^2


70) I   Phenanthrene-d10      ----------------ISTD--------------------
71) 4,6-Dinitro- 0.087 0.114 0.147 0.168 0.172 0.177 0.176 0.033 0.134  38.91
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9970
              Response Ratio = 0.00000 + 0.13395 *A + 0.01991 *A^2

72) n-Nitrosodip 0.628 0.654 0.652 0.666 0.663 0.663 0.651 0.696 0.659   2.93
73) Diphenylamin 0.753 0.785 0.783 0.799 0.796 0.796 0.781 0.696 0.774   4.44
```

Initial Calibration Summary

Job Number: FA78194 **Sample:** SX2953-ICC2953
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072423.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

74)	1,2-Diphenyl	0.927	0.969	0.985	0.997	0.997	0.978	1.047	0.804	0.963	7.52
75)	2,4,6-Tribro	0.076	0.082	0.088	0.092	0.094	0.096	0.099	0.060	0.086	14.79
76)	Sulfotep	0.134	0.141	0.142	0.144	0.143	0.139	0.137	0.128	0.139	3.89
77)	Phorate	0.515	0.523	0.525	0.540	0.537	0.528	0.513	0.464	0.518	4.58
78)	4-Bromopheny	0.189	0.197	0.199	0.210	0.212	0.215	0.214	0.172	0.201	7.41
79)	Hexachlorobe	0.187	0.194	0.196	0.209	0.212	0.214	0.215	0.175	0.200	7.27
80)	Dimethoate	0.326	0.341	0.357	0.373	0.370	0.373	0.368	0.246	0.344	12.60
81)	Simazine	0.127	0.133	0.135	0.139	0.142	0.142	0.144		0.137	4.39
82)	Atrazine	0.230	0.229	0.233	0.248	0.247	0.272	0.266	0.213	0.242	8.20
83)	Pentachlorop			0.075	0.093	0.097	0.101	0.104		0.094	12.39
84)	Phenanthrene	1.269	1.274	1.266	1.279	1.288	1.272	1.238	1.216	1.263	1.89
85)	Anthracene	1.260	1.313	1.334	1.371	1.364	1.354	1.304	1.147	1.306	5.64
86)	Disulfoton	0.427	0.440	0.454	0.454	0.459	0.402	0.414	0.369	0.427	7.27
87)	Carbazole	1.127	1.170	1.173	1.215	1.223	1.211	1.187	0.987	1.162	6.62
88)	Methyl Parat	0.252	0.276	0.289	0.305	0.304	0.304	0.303	0.174	0.276	16.37

---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9996
Response Ratio = 0.00000 + 0.28453 *A + 0.00934 *A^2

89)	Di-n-butylph	1.242	1.330	1.333	1.366	1.399	1.382	1.370	1.070	1.311	8.30
90)	Ethyl Parath	0.144	0.156	0.166	0.176	0.177	0.180	0.178	0.102	0.160	16.66

---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9995
Response Ratio = 0.00000 + 0.16190 *A + 0.00790 *A^2

91)	Fluoranthene	1.151	1.193	1.196	1.238	1.254	1.254	1.250	1.063	1.200	5.55
92)	I Chrysene-d12	----------ISTD----------									
93)	Benzidine	0.841	0.922	0.908	0.902	0.907	0.897	0.870	0.681	0.866	9.11
94)	Pyrene	1.684	1.704	1.660	1.693	1.719	1.744	1.770	1.534	1.688	4.22
95)	Terphenyl-d1	1.163	1.158	1.138	1.162	1.182	1.190	1.214	1.018	1.153	5.12
96)	Famphur	0.504	0.511	0.484	0.451	0.425	0.409	0.406	0.415	0.451	9.68
97)	Butylbenzylp	0.687	0.718	0.725	0.731	0.741	0.752	0.768	0.549	0.709	9.69
98)	3,3'-Dichlor	0.417	0.446	0.456	0.480	0.483	0.487	0.473	0.336	0.447	11.34
99)	Benzo[a]anth	1.322	1.341	1.306	1.327	1.337	1.351	1.364	1.294	1.330	1.72
100)	Chrysene	1.404	1.390	1.416	1.444	1.444	1.443	1.419	1.276	1.405	3.96
101)	bis(2-Ethylh	0.889	0.948	0.998	1.029	1.037	1.044	1.046	0.671	0.958	13.42
102)	I Perylene-d12	----------ISTD----------									
103)	Di-n-octylph	1.579	1.711	1.849	1.988	2.060	2.084	2.076	1.275	1.828	15.86

---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9993
Response Ratio = 0.00000 + 1.79075 *A + 0.13456 *A^2

104)	Benzo[b]fluo	1.302	1.321	1.385	1.464	1.462	1.463	1.476	1.165	1.380	8.00
105)	Benzo[k]fluo	1.340	1.454	1.456	1.509	1.613	1.611	1.593	1.154	1.466	10.76
106)	Benzo[a]pyre	1.102	1.178	1.216	1.291	1.328	1.304	1.317	0.989	1.216	9.93
107)	Indeno[1,2,3	0.963	1.047	1.052	1.059	1.087	1.083	1.113	0.893	1.037	7.04
108)	Dibenz[a,h]a	1.022	1.072	1.135	1.207	1.242	1.253	1.299	0.966	1.149	10.44
109)	Benzo[g,h,i]	1.175	1.227	1.224	1.230	1.242	1.248	1.288	1.052	1.211	5.87
110)	1,4-Dichlorobenzene-d	----------ISTD----------									
111)	2-Picoline	1.780	1.854	1.829	1.992	1.961	1.937	1.945	2.005	1.913	4.28
112)	N-Nitrosomet	1.349	1.278	1.289	1.425	1.411	1.383	1.410	1.535	1.385	5.93
113)	Methyl metha	0.731	0.746	0.744	0.816	0.805	0.785	0.775	0.788	0.774	3.96
114)	N-Nitrosodie	0.762	0.760	0.749	0.843	0.840	0.818	0.818	0.812	0.800	4.68
115)	Ethyl methan	1.210	1.247	1.237	1.375	1.345	1.317	1.303	1.288	1.290	4.35
116)	Pentachloroe	0.525	0.544	0.543	0.596	0.571	0.559	0.547	0.617	0.563	5.41
117)	N-Nitrosopyr	0.680	0.673	0.688	0.750	0.740	0.725	0.708	0.681	0.705	4.20
118)	N-Nitrosomor	1.222	1.185	1.183	1.298	1.251	1.225	1.147	1.259	1.221	3.97
119)	O-Toluidine	2.397	2.413	2.472	2.808	2.775	2.677	2.570	2.489	2.575	6.24
120)	Naphthalene-d8A	----------ISTD----------									

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121) N-Nitrosopip 0.385 0.389 0.383 0.416 0.407 0.389 0.379 0.407 0.394 3.48
122) A,A-Dimethyl 1.233 1.256 1.385 1.576 1.539 1.498 1.456 1.021 1.371 13.74
123) Hexachloropr 0.157 0.165 0.164 0.180 0.175 0.171 0.167 0.159 0.167 4.68
124) N-Nitrosodi- 0.248 0.249 0.319 0.344 0.337 0.328 0.319 0.321 0.308 12.24
125) p-Phenylened 0.269 0.291 0.322 0.372 0.335 0.315 0.256 0.102 0.283 28.99
---- Quadratic regression ---- Coefficient = 0.9923
Response Ratio = -0.01039 + 0.40960 *A + -0.05319 *A^2

126) Isosafrole 0.255 0.269 0.269 0.298 0.291 0.284 0.277 0.267 0.276 5.09

127) Acenaphthene-d10A ----------ISTD----------
128) Safrole 0.510 0.537 0.548 0.622 0.612 0.607 0.586 0.542 0.571 7.28
129) 1-Chloronaph 1.269 1.329 1.340 1.499 1.446 1.415 1.365 1.418 1.385 5.28
130) Diphenyl Eth 0.883 0.907 0.927 1.032 0.995 0.974 0.947 0.984 0.956 5.17
131) 1,4-Naphthoq 0.371 0.447 0.537 0.500 0.468 0.388 0.452 14.15
---- Quadratic regression ---- Coefficient = 0.9945
Response Ratio = -0.09352 + 0.73880 *A + -0.12167 *A^2

132) Pentachlorob 0.443 0.441 0.440 0.489 0.477 0.471 0.465 0.495 0.465 4.70
133) 1-Naphthylam 1.302 1.343 1.369 1.544 1.493 1.456 1.401 1.329 1.405 6.09
134) 2-Naphthylam 1.385 1.449 1.478 1.622 1.592 1.584 1.501 1.421 1.504 5.79
135) 5-Nitro-o-to 0.398 0.427 0.439 0.507 0.497 0.491 0.476 0.365 0.450 11.43

136) Phenanthrene-d10A ----------ISTD----------
137) 1,3,5-Trinit 0.138 0.164 0.195 0.234 0.231 0.236 0.236 0.097 0.191 27.91
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9972
Response Ratio = 0.00000 + 0.18764 *A + 0.02327 *A^2

138) Diallate 0.703 0.736 0.715 0.754 0.722 0.718 0.694 0.764 0.726 3.33
139) Phenacetin 0.381 0.412 0.421 0.475 0.456 0.458 0.423 0.324 0.419 11.61
140) 4-Aminobiphe 0.861 0.909 0.910 0.973 0.886 0.852 0.782 0.799 0.872 7.13
141) Pronamide 0.319 0.334 0.346 0.381 0.364 0.357 0.353 0.300 0.344 7.51
142) Pentachloron 0.073 0.079 0.079 0.087 0.084 0.082 0.081 0.071 0.080 6.61
143) 4-Nitroquino 0.010 0.026 0.045 0.046 0.046 0.042 0.036 41.02
---- Quadratic regression ---- Coefficient = 0.9908
Response Ratio = -0.01348 + 0.05986 *A + -0.00451 *A^2

144) Methapyrilen 0.088 0.093 0.104 0.112 0.107 0.104 0.097 0.073 0.097 12.82
145) Isodrin 0.120 0.121 0.117 0.127 0.122 0.120 0.118 0.130 0.122 3.69

146) I Chrysene-d12A ----------ISTD----------
147) Aramite 0.146 0.162 0.175 0.202 0.199 0.199 0.200 0.131 0.177 15.67
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9986
Response Ratio = 0.00000 + 0.17446 *A + 0.01239 *A^2

148) p-(Dimethyla 0.360 0.411 0.447 0.503 0.498 0.490 0.490 0.296 0.437 17.35
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9991
Response Ratio = 0.00000 + 0.48468 *A + 0.00319 *A^2

149) Chlorobenzil 0.468 0.498 0.512 0.572 0.564 0.557 0.548 0.467 0.523 8.14
150) Kepone 0.070 0.084 0.094 0.116 0.117 0.113 0.117 0.102 18.72
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9968
Response Ratio = 0.00000 + 0.09421 *A + 0.01057 *A^2

151) 3,3'-Dimethy 0.441 0.523 0.529 0.589 0.564 0.546 0.511 0.526 0.529 8.25
152) 2-Acetylamin 0.513 0.586 0.648 0.733 0.711 0.724 0.711 0.383 0.626 19.98
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9983
Response Ratio = 0.00000 + 0.64087 *A + 0.03693 *A^2

Initial Calibration Summary

Job Number: FA78194
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2953-ICC2953
Lab FileID: X072423.D

```
153) I   Perylene-d12A         ----------------ISTD--------------------
154) 7,12-Dimethy 0.571 0.595 0.599 0.687 0.692 0.682 0.675 0.604 0.638   7.88
155) Hexachloroph                                                 0.000  -1.00
156) 3-Methylchol 0.498 0.540 0.551 0.651 0.640 0.640 0.631 0.475 0.578  12.22
157) Dibenz(a,j)a 0.771 0.851 0.864 0.998 0.966 1.032 1.048 0.718 0.906  13.62
 ---------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

           8270DApp9SX-081720.m        Tue Aug 18 14:10:04 2020
```

Initial Calibration Verification

Job Number: FA78194
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2953-ICV2953
Lab FileID: X072435.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\0817_sx2953\x072435.D Vial: 18
Acq On : 17 Aug 2020 5:12 pm Operator: marthav
Sample : icv2953-50 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\MET...DApp9SX-081720.m (RTE Integrator)
Title : SW846 8270D OR EPA 625
Last Update : Tue Aug 18 13:05:00 2020
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	139	0.00	5.62
2		1,4-Dioxane	50.000	47.034	5.9	135	0.04	2.47
3		N-nitrosodimethylamine	50.000	47.439	5.1	135	0.03	2.80
4		Pyridine		----------NA----------				
5	P	Benzaldehyde	50.000	44.234	11.5	122	0.00	5.15
6		Aniline		----------NA----------				
7	S	2-Fluorophenol		----------NA----------				
8	P	bis(2-Chloroethyl)ether	50.000	43.610	12.8	116	0.00	5.35
9	S	Phenol-d5		----------NA----------				
10	P	Phenol	50.000	41.044	17.9	108	0.00	5.31
11	P	2-Chlorophenol	50.000	45.436	9.1	120	0.00	5.40
12		1,3-Dichlorobenzene	50.000	47.579	4.8	127	0.00	5.55
13		1,4-Dichlorobenzene	50.000	48.019	4.0	129	0.00	5.63
14		1,2-Dichlorobenzene	50.000	48.046	3.9	131	0.00	5.79
15		Benzyl alcohol		----------NA----------				
16	P	2,2'-Oxybis(1-chloropropa	50.000	46.819	6.4	129	0.00	5.94
17	P	2-Methylphenol	50.000	43.836	12.3	118	0.00	5.95
18	P	Acetophenone	50.000	46.360	7.3	125	0.00	6.07
19	P	Hexachloroethane	50.000	49.182	1.6	131	0.00	6.16
20	P	N-Nitroso-di-n-propylamin	50.000	47.262	5.5	127	0.00	6.09
21	P	3&4-Methylphenol	100.000	90.796	9.2	108	0.00	6.14
22	I	Naphthalene-d8	40.000	40.000	0.0	137	0.00	7.04
23	S	Nitrobenzene-d5		----------NA----------				
24	P	Nitrobenzene	50.000	45.313	9.4	123	0.00	6.26
25	P	Isophorone	50.000	47.326	5.3	127	0.00	6.54
26	P	2-Nitrophenol	50.000	48.842	2.3	128	0.00	6.62
27	P	2,4-Dimethylphenol	50.000	43.253	13.5	115	0.00	6.71
28		O,O,O-Triethylphosphoroth		----------NA----------				
29	P	bis(2-Chloroethoxy)methan	50.000	44.261	11.5	117	0.00	6.80
		---------- Amount	Calc.	%Drift	----------			
30		Benzoic Acid	100.000	94.610	5.4	114	0.06	6.95
		---------- Amount	Calc.	%Drift	----------			
31	P	2,4-Dichlorophenol	50.000	47.477	5.0	124	0.00	6.92
32		1,2,4-Trichlorobenzene	50.000	48.105	3.8	128	0.00	6.98
33		alpha-Terpineol		----------NA----------				
34	P	Naphthalene	50.000	46.867	6.3	125	0.00	7.06
35	P	4-Chloroaniline		----------NA----------				
36		2,6-Dichlorophenol	50.000	46.691	6.6	124	0.00	7.16
37	P	Hexachlorobutadiene	50.000	48.560	2.9	130	0.00	7.21

Initial Calibration Verification

Job Number: FA78194
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2953-ICV2953
Lab FileID: X072435.D

38	P	Caprolactam	50.000	40.272	19.5	104	0.00	7.60
39	P	4-Chloro-3-methylphenol	50.000	44.938	10.1	120	0.00	7.77
40	P	2-Methylnaphthalene		----------NA----------				
41		1-Methylnaphthalene	50.000	42.769	14.5	115	0.00	7.98
42	P	1,2,4,5-Tetrachlorobenzen	50.000	46.048	7.9	122	0.00	8.06
43	I	Acenaphthene-d10	40.000	40.000	0.0	126	0.00	9.07
		---------- Amount	Calc.	%Drift	----------			
44	P	Hexachlorocyclopentadiene	50.000	58.800	-17.6	150	0.00	8.05
		---------- Amount	Calc.	%Drift	----------			
45	P	2,4,6-Trichlorophenol	50.000	50.560	-1.1	123	0.00	8.22
46	P	2,4,5-Trichlorophenol	50.000	52.134	-4.3	126	0.00	8.28
47	S	2-Fluorobiphenyl		----------NA----------				
48	P	1,1'-Biphenyl	50.000	47.425	5.2	116	0.00	8.42
49	P	2-Chloronaphthalene	50.000	48.922	2.2	120	0.00	8.43
50	P	2-Nitroaniline		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
51		p-Dinitrobenzene		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
52	P	Acenaphthylene	50.000	52.235	-4.5	126	0.00	8.91
53	P	Dimethylphthalate	50.000	45.871	8.3	113	0.00	8.81
		---------- Amount	Calc.	%Drift	----------			
54		m-Dinitrobenzene		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
55	P	2,6-Dinitrotoluene	50.000	46.011	8.0	112	0.00	8.87
56		o-Dinitrobenzene		----------NA----------				
57	P	Acenaphthene	50.000	48.085	3.8	119	0.00	9.12
58	P	3-Nitroaniline		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
59	P	2,4-Dinitrophenol	100.000	79.975	20.0#	0	0.00	9.20
		---------- Amount	Calc.	%Drift	----------			
60	P	Dibenzofuran		----------NA----------				
61	P	2,4-Dinitrotoluene	50.000	48.368	3.3	114	0.00	9.35
		---------- Amount	Calc.	%Drift	----------			
62	P	4-Nitrophenol	100.000	83.464	16.5	94	0.00	9.36
63		2,3,5,6-Tetrachlorophenol		----------NA----------				
64	P	2,3,4,6-Tetrachlorophenol	50.000	43.045	13.9	105	0.00	9.49
		---------- Amount	Calc.	%Drift	----------			
65	P	Fluorene	50.000	49.228	1.5	121	0.00	9.72
66	P	4-Chlorophenyl-phenylethe	50.000	47.987	4.0	117	0.00	9.74
67	P	Diethylphthalate	50.000	47.042	5.9	115	0.00	9.65
68		Thionazin		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
69	P	4-Nitroaniline		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
70	I	Phenanthrene-d10	40.000	40.000	0.0	122	0.00	10.82

Initial Calibration Verification

Job Number: FA78194
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2953-ICV2953
Lab FileID: X072435.D

			Amount	Calc.	%Drift			
71	P	4,6-Dinitro-2-methylpheno	100.000	92.825	7.2	101	0.00	9.83
			Amount	Calc.	%Drift			
72	P	n-Nitrosodiphenylamine		----------NA----------				
73		Diphenylamine		----------NA----------				
74		1,2-Diphenylhydrazine	50.000	48.305	3.4	114	0.00	9.93
75	S	2,4,6-Tribromophenol		----------NA----------				
76		Sulfotep		----------NA----------				
77		Phorate		----------NA----------				
78	P	4-Bromophenyl-phenylether	50.000	47.573	4.9	111	0.00	10.31
79	P	Hexachlorobenzene	50.000	46.985	6.0	110	0.00	10.36
80		Dimethoate		----------NA----------				
81		Simazine		----------NA----------				
82	P	Atrazine	50.000	43.042	13.9	103	0.00	10.56
83	P	Pentachlorophenol	100.000	104.545	-4.5	100	0.00	10.62
84	P	Phenanthrene	50.000	47.678	4.6	115	0.00	10.85
85	P	Anthracene	50.000	46.638	6.7	108	0.00	10.91
86		Disulfoton		----------NA----------				
87	P	Carbazole		----------NA----------				
			Amount	Calc.	%Drift			
88		Methyl Parathion		----------NA----------				
			Amount	Calc.	%Drift			
89	P	Di-n-butylphthalate	50.000	47.079	5.8	110	0.00	11.59
			Amount	Calc.	%Drift			
90		Ethyl Parathion		----------NA----------				
			Amount	Calc.	%Drift			
91	P	Fluoranthene	50.000	45.952	8.1	108	0.00	12.25
92	I	Chrysene-d12	40.000	40.000	0.0	105	0.00	14.02
93		Benzidine		----------NA----------				
94	P	Pyrene	50.000	50.869	-1.7	106	0.00	12.51
95	S	Terphenyl-d14		----------NA----------				
96		Famphur		----------NA----------				
97	P	Butylbenzylphthalate	50.000	51.951	-3.9	105	0.00	13.36
98	P	3,3'-Dichlorobenzidine		----------NA----------				
99	P	Benzo[a]anthracene	50.000	48.505	3.0	102	0.00	14.00
100	P	Chrysene	50.000	50.139	-0.3	102	0.00	14.05
101	P	bis(2-Ethylhexyl)phthalat	50.000	54.777	-9.6	107	0.00	14.16
102	I	Perylene-d12	40.000	40.000	0.0	100	0.00	16.19
			Amount	Calc.	%Drift			
103	P	Di-n-octylphthalate	50.000	54.386	-8.8	108	0.00	15.12
			Amount	Calc.	%Drift			
104	P	Benzo[b]fluoranthene	50.000	50.266	-0.5	95	0.00	15.55
105	P	Benzo[k]fluoranthene	50.000	52.065	-4.1	101	0.00	15.60
106	P	Benzo[a]pyrene	50.000	49.891	0.2	94	0.00	16.09
107	P	Indeno[1,2,3-cd]pyrene	50.000	45.699	8.6	90	0.00	17.86
108	P	Dibenz[a,h]anthracene	50.000	47.647	4.7	91	0.00	17.91
109	P	Benzo[g,h,i]perylene	50.000	45.772	8.5	90	0.00	18.22
110		1,4-Dichlorobenzene-d4A	40.000	40.000	0.0	150	0.00	5.62
111		2-Picoline		----------NA----------				
112		N-Nitrosomethylethylamine		----------NA----------				

Initial Calibration Verification

Job Number: FA78194
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2953-ICV2953
Lab FileID: X072435.D

113		Methyl methanesulfonate		----------NA----------				
114		N-Nitrosodiethylamine		----------NA----------				
115		Ethyl methanesulfonate		----------NA----------				
116		Pentachloroethane		----------NA----------				
117		N-Nitrosopyrrolidine		----------NA----------				
118		N-Nitrosomorpholine		----------NA----------				
119		O-Toluidine		----------NA----------				
120		Naphthalene-d8A	40.000	40.000	0.0	148	0.00	7.04
121		N-Nitrosopiperidine		----------NA----------				
122		A,A-Dimethylphenethylamin		----------NA----------				
123		Hexachloropropene		----------NA----------				
124		N-Nitrosodi-n-butylamine		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
125		p-Phenylenediamine		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
126		Isosafrole		----------NA----------				
127		Acenaphthene-d10A	40.000	40.000	0.0	135	0.00	9.07
128		Safrole		----------NA----------				
129		1-Chloronaphthalene		----------NA----------				
130		Diphenyl Ether		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
131		1,4-Naphthoquinone		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
132		Pentachlorobenzene		----------NA----------				
133		1-Naphthylamine		----------NA----------				
134		2-Naphthylamine		----------NA----------				
135		5-Nitro-o-toluidine		----------NA----------				
136		Phenanthrene-d10A	40.000	40.000	0.0	121	0.00	10.82
		---------- Amount	Calc.	%Drift	----------			
137		1,3,5-Trinitrobenzene		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
138		Diallate		----------NA----------				
139		Phenacetin		----------NA----------				
140		4-Aminobiphenyl		----------NA----------				
141		Pronamide		----------NA----------				
142		Pentachloronitrobenzene		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
143		4-Nitroquinoline 1-Oxide		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
144		Methapyrilene		----------NA----------				
145		Isodrin		----------NA----------				
146	I	Chrysene-d12A	40.000	40.000	0.0	114	0.01	14.02
		---------- Amount	Calc.	%Drift	----------			
147		Aramite		----------NA----------				
148		p-(Dimethylamine)azobenze		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			

Initial Calibration Verification

Job Number: FA78194
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2953-ICV2953
Lab FileID: X072435.D

149		Chlorobenzilate		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
150		Kepone		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
151		3,3'-Dimethylbenzidine		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
152		2-Acetylaminofluorene		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
153	I	Perylene-d12A	40.000	40.000	0.0	99	-0.01	16.19
154		7,12-Dimethylbenz(a)anthr		----------NA----------				
155		Hexachlorophene		----------NA----------				
156		3-Methylcholanthrene		----------NA----------				
157		Dibenz(a,j)acridine		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
x072431.D 8270DApp9SX-081720.m Tue Aug 18 13:15:59 2020

Initial Calibration Verification

Job Number: FA78194
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2953-ICV2953
Lab FileID: X072436.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\0817_sx2953\x072436.D Vial: 19
Acq On : 17 Aug 2020 5:38 pm Operator: marthav
Sample : icv2953-50 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\MET...DApp9SX-081720.m (RTE Integrator)
Title : SW846 8270D OR EPA 625
Last Update : Tue Aug 18 13:05:00 2020
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	107	0.00	5.61
2		1,4-Dioxane		----------NA----------				
3		N-nitrosodimethylamine		----------NA----------				
4		Pyridine	50.000	52.954	-5.9	115	0.00	2.79
5	P	Benzaldehyde		----------NA----------				
6		Aniline	50.000	48.952	2.1	105	0.00	5.27
7	S	2-Fluorophenol		----------NA----------				
8	P	bis(2-Chloroethyl)ether		----------NA----------				
9	S	Phenol-d5		----------NA----------				
10	P	Phenol		----------NA----------				
11	P	2-Chlorophenol		----------NA----------				
12		1,3-Dichlorobenzene		----------NA----------				
13		1,4-Dichlorobenzene		----------NA----------				
14		1,2-Dichlorobenzene		----------NA----------				
15		Benzyl alcohol	50.000	51.661	-3.3	104	0.00	5.80
16	P	2,2'-Oxybis(1-chloropropa		----------NA----------				
17	P	2-Methylphenol		----------NA----------				
18	P	Acetophenone		----------NA----------				
19	P	Hexachloroethane		----------NA----------				
20	P	N-Nitroso-di-n-propylamin		----------NA----------				
21	P	3&4-Methylphenol		----------NA----------				
22	I	Naphthalene-d8	40.000	40.000	0.0	103	0.00	7.03
23	S	Nitrobenzene-d5		----------NA----------				
24	P	Nitrobenzene		----------NA----------				
25	P	Isophorone		----------NA----------				
26	P	2-Nitrophenol		----------NA----------				
27	P	2,4-Dimethylphenol		----------NA----------				
28		O,O,O-Triethylphosphoroth		----------NA----------				
29	P	bis(2-Chloroethoxy)methan		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
30		Benzoic Acid		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
31	P	2,4-Dichlorophenol		----------NA----------				
32		1,2,4-Trichlorobenzene		----------NA----------				
33		alpha-Terpineol		----------NA----------				
34	P	Naphthalene		----------NA----------				
35	P	4-Chloroaniline	50.000	53.428	-6.9	107	0.00	7.15
36		2,6-Dichlorophenol		----------NA----------				
37	P	Hexachlorobutadiene		----------NA----------				

Initial Calibration Verification

Job Number: FA78194
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2953-ICV2953
Lab FileID: X072436.D

38	P	Caprolactam		----------NA----------				
39	P	4-Chloro-3-methylphenol		----------NA----------				
40	P	2-Methylnaphthalene	50.000	50.451	-0.9	102	0.00	7.86
41		1-Methylnaphthalene		----------NA----------				
42	P	1,2,4,5-Tetrachlorobenzen		----------NA----------				
43	I	Acenaphthene-d10	40.000	40.000	0.0	110	0.00	9.07
		---------- Amount	Calc.	%Drift	----------			
44	P	Hexachlorocyclopentadiene		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
45	P	2,4,6-Trichlorophenol		----------NA----------				
46	P	2,4,5-Trichlorophenol		----------NA----------				
47	S	2-Fluorobiphenyl		----------NA----------				
48	P	1,1'-Biphenyl		----------NA----------				
49	P	2-Chloronaphthalene		----------NA----------				
50	P	2-Nitroaniline	50.000	50.647	-1.3	107	0.00	8.57
		---------- Amount	Calc.	%Drift	----------			
51		p-Dinitrobenzene		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
52	P	Acenaphthylene		----------NA----------				
53	P	Dimethylphthalate		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
54		m-Dinitrobenzene	50.000	44.811	10.4	95	-0.01	8.84
		---------- Amount	Calc.	%Drift	----------			
55	P	2,6-Dinitrotoluene		----------NA----------				
56		o-Dinitrobenzene		----------NA----------				
57	P	Acenaphthene		----------NA----------				
58	P	3-Nitroaniline	50.000	50.015	-0.0	104	0.00	9.07
		---------- Amount	Calc.	%Drift	----------			
59	P	2,4-Dinitrophenol		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
60	P	Dibenzofuran	50.000	48.454	3.1	104	0.00	9.32
61	P	2,4-Dinitrotoluene		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
62	P	4-Nitrophenol		----------NA----------				
63		2,3,5,6-Tetrachlorophenol		----------NA----------				
64	P	2,3,4,6-Tetrachlorophenol		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
65	P	Fluorene		----------NA----------				
66	P	4-Chlorophenyl-phenylethe		----------NA----------				
67	P	Diethylphthalate		----------NA----------				
68		Thionazin		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
69	P	4-Nitroaniline	50.000	44.569	10.9	95	-0.02	9.78
		---------- Amount	Calc.	%Drift	----------			
70	I	Phenanthrene-d10	40.000	40.000	0.0	103	0.00	10.82

Initial Calibration Verification

Job Number: FA78194
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2953-ICV2953
Lab FileID: X072436.D

			Amount	Calc.	%Drift			
71	P	4,6-Dinitro-2-methylpheno		NA				
			Amount	Calc.	%Drift			
72	P	n-Nitrosodiphenylamine	60.000	58.817	2.0	100	0.00	9.89
73		Diphenylamine	50.000	50.117	-0.2	100	0.00	9.89
74		1,2-Diphenylhydrazine		NA				
75	S	2,4,6-Tribromophenol		NA				
76		Sulfotep		NA				
77		Phorate		NA				
78	P	4-Bromophenyl-phenylether		NA				
79	P	Hexachlorobenzene		NA				
80		Dimethoate		NA				
81		Simazine		NA				
82	P	Atrazine		NA				
83	P	Pentachlorophenol		NA				
84	P	Phenanthrene		NA				
85	P	Anthracene		NA				
86		Disulfoton		NA				
87	P	Carbazole	50.000	49.718	0.6	98	0.00	11.13
			Amount	Calc.	%Drift			
88		Methyl Parathion		NA				
			Amount	Calc.	%Drift			
89	P	Di-n-butylphthalate		NA				
			Amount	Calc.	%Drift			
90		Ethyl Parathion		NA				
			Amount	Calc.	%Drift			
91	P	Fluoranthene		NA				
92	I	Chrysene-d12	40.000	40.000	0.0	94	-0.01	14.01
93		Benzidine	50.000	50.289	-0.6	91	0.00	12.44
94	P	Pyrene		NA				
95	S	Terphenyl-d14		NA				
96		Famphur		NA				
97	P	Butylbenzylphthalate		NA				
98	P	3,3'-Dichlorobenzidine	50.000	46.586	6.8	81	0.00	14.01
99	P	Benzo[a]anthracene		NA				
100	P	Chrysene		NA				
101	P	bis(2-Ethylhexyl)phthalat		NA				
102	I	Perylene-d12	40.000	40.000	0.0	95	0.00	16.19
			Amount	Calc.	%Drift			
103	P	Di-n-octylphthalate		NA				
			Amount	Calc.	%Drift			
104	P	Benzo[b]fluoranthene		NA				
105	P	Benzo[k]fluoranthene		NA				
106	P	Benzo[a]pyrene		NA				
107	P	Indeno[1,2,3-cd]pyrene		NA				
108	P	Dibenz[a,h]anthracene		NA				
109	P	Benzo[g,h,i]perylene		NA				
110		1,4-Dichlorobenzene-d4A	40.000	40.000	0.0	116	0.00	5.61
111		2-Picoline		NA				
112		N-Nitrosomethylethylamine		NA				

Initial Calibration Verification

Job Number: FA78194
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2953-ICV2953
Lab FileID: X072436.D

113		Methyl methanesulfonate		----------NA----------				
114		N-Nitrosodiethylamine		----------NA----------				
115		Ethyl methanesulfonate		----------NA----------				
116		Pentachloroethane		----------NA----------				
117		N-Nitrosopyrrolidine		----------NA----------				
118		N-Nitrosomorpholine		----------NA----------				
119		O-Toluidine		----------NA----------				
120		Naphthalene-d8A	40.000	40.000	0.0	111	0.00	7.03
121		N-Nitrosopiperidine		----------NA----------				
122		A,A-Dimethylphenethylamin		----------NA----------				
123		Hexachloropropene		----------NA----------				
124		N-Nitrosodi-n-butylamine		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
125		p-Phenylenediamine		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
126		Isosafrole		----------NA----------				
127		Acenaphthene-d10A	40.000	40.000	0.0	117	0.00	9.07
128		Safrole		----------NA----------				
129		1-Chloronaphthalene		----------NA----------				
130		Diphenyl Ether		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
131		1,4-Naphthoquinone		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
132		Pentachlorobenzene		----------NA----------				
133		1-Naphthylamine		----------NA----------				
134		2-Naphthylamine		----------NA----------				
135		5-Nitro-o-toluidine		----------NA----------				
136		Phenanthrene-d10A	40.000	40.000	0.0	102	0.00	10.82
		---------- Amount	Calc.	%Drift	----------			
137		1,3,5-Trinitrobenzene		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
138		Diallate		----------NA----------				
139		Phenacetin		----------NA----------				
140		4-Aminobiphenyl		----------NA----------				
141		Pronamide		----------NA----------				
142		Pentachloronitrobenzene		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
143		4-Nitroquinoline 1-Oxide		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
144		Methapyrilene		----------NA----------				
145		Isodrin		----------NA----------				
146	I	Chrysene-d12A	40.000	40.000	0.0	102	0.00	14.01
		---------- Amount	Calc.	%Drift	----------			
147		Aramite		----------NA----------				
148		p-(Dimethylamine)azobenze		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			

Initial Calibration Verification

Job Number: FA78194
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2953-ICV2953
Lab FileID: X072436.D

149		Chlorobenzilate		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
150		Kepone		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
151		3,3'-Dimethylbenzidine		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
152		2-Acetylaminofluorene		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
153	I	Perylene-d12A	40.000	40.000	0.0	95	-0.01	16.19
154		7,12-Dimethylbenz(a)anthr		----------NA----------				
155		Hexachlorophene		----------NA----------				
156		3-Methylcholanthrene		----------NA----------				
157		Dibenz(a,j)acridine		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
x072431.D 8270DApp9SX-081720.m Tue Aug 18 13:16:39 2020

Initial Calibration Verification

Job Number: FA78194
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2953-ICV2953
Lab FileID: X072437.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\0817_sx2953\x072437.D Vial: 20
Acq On : 17 Aug 2020 6:03 pm Operator: marthav
Sample : icv2953-50 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\MET...DApp9SX-081720.m (RTE Integrator)
Title : SW846 8270D OR EPA 625
Last Update : Tue Aug 18 13:05:00 2020
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	102	0.00	5.61
2		1,4-Dioxane		----------NA----------				
3		N-nitrosodimethylamine		----------NA----------				
4		Pyridine		----------NA----------				
5	P	Benzaldehyde		----------NA----------				
6		Aniline		----------NA----------				
7	S	2-Fluorophenol		----------NA----------				
8	P	bis(2-Chloroethyl)ether		----------NA----------				
9	S	Phenol-d5		----------NA----------				
10	P	Phenol		----------NA----------				
11	P	2-Chlorophenol		----------NA----------				
12		1,3-Dichlorobenzene		----------NA----------				
13		1,4-Dichlorobenzene		----------NA----------				
14		1,2-Dichlorobenzene		----------NA----------				
15		Benzyl alcohol		----------NA----------				
16	P	2,2'-Oxybis(1-chloropropa		----------NA----------				
17	P	2-Methylphenol		----------NA----------				
18	P	Acetophenone		----------NA----------				
19	P	Hexachloroethane		----------NA----------				
20	P	N-Nitroso-di-n-propylamin		----------NA----------				
21	P	3&4-Methylphenol		----------NA----------				
22	I	Naphthalene-d8	40.000	40.000	0.0	101	0.00	7.03
23	S	Nitrobenzene-d5		----------NA----------				
24	P	Nitrobenzene		----------NA----------				
25	P	Isophorone		----------NA----------				
26	P	2-Nitrophenol		----------NA----------				
27	P	2,4-Dimethylphenol		----------NA----------				
28		O,O,O-Triethylphosphoroth	50.000	48.084	3.8	95	0.00	6.77
29	P	bis(2-Chloroethoxy)methan		----------NA----------				
		---------- Amount		Calc.	%Drift	----------		
30		Benzoic Acid		----------NA----------				
		---------- Amount		Calc.	%Drift	----------		
31	P	2,4-Dichlorophenol		----------NA----------				
32		1,2,4-Trichlorobenzene		----------NA----------				
33		alpha-Terpineol		----------NA----------				
34	P	Naphthalene		----------NA----------				
35	P	4-Chloroaniline		----------NA----------				
36		2,6-Dichlorophenol		----------NA----------				
37	P	Hexachlorobutadiene		----------NA----------				

38	P	Caprolactam			NA			
39	P	4-Chloro-3-methylphenol			NA			
40	P	2-Methylnaphthalene			NA			
41		1-Methylnaphthalene			NA			
42	P	1,2,4,5-Tetrachlorobenzen			NA			
43	I	Acenaphthene-d10	40.000	40.000	0.0	96	0.00	9.07
			Amount	Calc.	%Drift			
44	P	Hexachlorocyclopentadiene			NA			
			Amount	Calc.	%Drift			
45	P	2,4,6-Trichlorophenol			NA			
46	P	2,4,5-Trichlorophenol			NA			
47	S	2-Fluorobiphenyl			NA			
48	P	1,1'-Biphenyl			NA			
49	P	2-Chloronaphthalene			NA			
50	P	2-Nitroaniline			NA			
			Amount	Calc.	%Drift			
51		p-Dinitrobenzene			NA			
			Amount	Calc.	%Drift			
52	P	Acenaphthylene			NA			
53	P	Dimethylphthalate			NA			
			Amount	Calc.	%Drift			
54		m-Dinitrobenzene			NA			
			Amount	Calc.	%Drift			
55	P	2,6-Dinitrotoluene			NA			
56		o-Dinitrobenzene			NA			
57	P	Acenaphthene			NA			
58	P	3-Nitroaniline			NA			
			Amount	Calc.	%Drift			
59	P	2,4-Dinitrophenol			NA			
			Amount	Calc.	%Drift			
60	P	Dibenzofuran			NA			
61	P	2,4-Dinitrotoluene			NA			
			Amount	Calc.	%Drift			
62	P	4-Nitrophenol			NA			
63		2,3,5,6-Tetrachlorophenol			NA			
64	P	2,3,4,6-Tetrachlorophenol			NA			
			Amount	Calc.	%Drift			
65	P	Fluorene			NA			
66	P	4-Chlorophenyl-phenylethe			NA			
67	P	Diethylphthalate			NA			
68		Thionazin	50.000	50.691	-1.4	91	-0.01	9.72
			Amount	Calc.	%Drift			
69	P	4-Nitroaniline			NA			
			Amount	Calc.	%Drift			
70	I	Phenanthrene-d10	40.000	40.000	0.0	99	0.00	10.82

Initial Calibration Verification

Job Number: FA78194
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2953-ICV2953
Lab FileID: X072437.D

			Amount	Calc.	%Drift			
71	P	4,6-Dinitro-2-methylpheno		----------NA----------				
			Amount	Calc.	%Drift			
72	P	n-Nitrosodiphenylamine		----------NA----------				
73		Diphenylamine		----------NA----------				
74		1,2-Diphenylhydrazine		----------NA----------				
75	S	2,4,6-Tribromophenol		----------NA----------				
76		Sulfotep	50.000	47.689	4.6	91	0.00	10.11
77		Phorate	50.000	50.339	-0.7	95	0.00	10.24
78	P	4-Bromophenyl-phenylether		----------NA----------				
79	P	Hexachlorobenzene		----------NA----------				
80		Dimethoate	50.000	49.728	0.5	91	0.00	10.45
81		Simazine		----------NA----------				
82	P	Atrazine		----------NA----------				
83	P	Pentachlorophenol		----------NA----------				
84	P	Phenanthrene		----------NA----------				
85	P	Anthracene		----------NA----------				
86		Disulfoton	50.000	50.547	-1.1	94	0.00	10.86
87	P	Carbazole		----------NA----------				
			Amount	Calc.	%Drift			
88		Methyl Parathion	50.000	48.298	3.4	93	0.00	11.30
			Amount	Calc.	%Drift			
89	P	Di-n-butylphthalate		----------NA----------				
			Amount	Calc.	%Drift			
90		Ethyl Parathion	50.000	49.154	1.7	95	0.00	11.77
			Amount	Calc.	%Drift			
91	P	Fluoranthene		----------NA----------				
92	I	Chrysene-d12	40.000	40.000	0.0	89	-0.01	14.01
93		Benzidine		----------NA----------				
94	P	Pyrene		----------NA----------				
95	S	Terphenyl-d14		----------NA----------				
96		Famphur	50.000	58.937	-17.9	105	0.00	13.28
97	P	Butylbenzylphthalate		----------NA----------				
98	P	3,3'-Dichlorobenzidine		----------NA----------				
99	P	Benzo[a]anthracene		----------NA----------				
100	P	Chrysene		----------NA----------				
101	P	bis(2-Ethylhexyl)phthalat		----------NA----------				
102	I	Perylene-d12	40.000	40.000	0.0	92	0.00	16.18
			Amount	Calc.	%Drift			
103	P	Di-n-octylphthalate		----------NA----------				
			Amount	Calc.	%Drift			
104	P	Benzo[b]fluoranthene		----------NA----------				
105	P	Benzo[k]fluoranthene		----------NA----------				
106	P	Benzo[a]pyrene		----------NA----------				
107	P	Indeno[1,2,3-cd]pyrene		----------NA----------				
108	P	Dibenz[a,h]anthracene		----------NA----------				
109	P	Benzo[g,h,i]perylene		----------NA----------				
110		1,4-Dichlorobenzene-d4A	40.000	40.000	0.0	110	0.00	5.61
111		2-Picoline		----------NA----------				
112		N-Nitrosomethylethylamine		----------NA----------				

Initial Calibration Verification

Job Number: FA78194 **Sample:** SX2953-ICV2953
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072437.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

113		Methyl methanesulfonate		----------NA----------				
114		N-Nitrosodiethylamine		----------NA----------				
115		Ethyl methanesulfonate		----------NA----------				
116		Pentachloroethane		----------NA----------				
117		N-Nitrosopyrrolidine		----------NA----------				
118		N-Nitrosomorpholine		----------NA----------				
119		O-Toluidine		----------NA----------				
120		Naphthalene-d8A	40.000	40.000	0.0	109	0.00	7.03
121		N-Nitrosopiperidine		----------NA----------				
122		A,A-Dimethylphenethylamin		----------NA----------				
123		Hexachloropropene		----------NA----------				
124		N-Nitrosodi-n-butylamine		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
125		p-Phenylenediamine		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
126		Isosafrole		----------NA----------				
127		Acenaphthene-d10A	40.000	40.000	0.0	103	0.00	9.07
128		Safrole		----------NA----------				
129		1-Chloronaphthalene		----------NA----------				
130		Diphenyl Ether		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
131		1,4-Naphthoquinone		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
132		Pentachlorobenzene		----------NA----------				
133		1-Naphthylamine		----------NA----------				
134		2-Naphthylamine		----------NA----------				
135		5-Nitro-o-toluidine		----------NA----------				
136		Phenanthrene-d10A	40.000	40.000	0.0	98	0.00	10.82
		---------- Amount	Calc.	%Drift	----------			
137		1,3,5-Trinitrobenzene		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
138		Diallate		----------NA----------				
139		Phenacetin		----------NA----------				
140		4-Aminobiphenyl		----------NA----------				
141		Pronamide		----------NA----------				
142		Pentachloronitrobenzene		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
143		4-Nitroquinoline 1-Oxide		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
144		Methapyrilene		----------NA----------				
145		Isodrin		----------NA----------				
146	I	Chrysene-d12A	40.000	40.000	0.0	97	0.00	14.01
		---------- Amount	Calc.	%Drift	----------			
147		Aramite		----------NA----------				
148		p-(Dimethylamine)azobenze		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			

149	Chlorobenzilate		----------NA----------					
	---------- Amount	Calc.	%Drift	----------				
150	Kepone		----------NA----------					
	---------- Amount	Calc.	%Drift	----------				
151	3,3'-Dimethylbenzidine		----------NA----------					
	---------- Amount	Calc.	%Drift	----------				
152	2-Acetylaminofluorene		----------NA----------					
	---------- Amount	Calc.	%Drift	----------				
153 I	Perylene-d12A	40.000	40.000	0.0	91	-0.02	16.18	
154	7,12-Dimethylbenz(a)anthr		----------NA----------					
155	Hexachlorophene		----------NA----------					
156	3-Methylcholanthrene		----------NA----------					
157	Dibenz(a,j)acridine		----------NA----------					

(#) = Out of Range SPCC's out = 0 CCC's out = 0
x072431.D 8270DApp9SX-081720.m Tue Aug 18 13:18:08 2020

Initial Calibration Verification

Job Number: FA78194
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2953-ICV2953
Lab FileID: X072438.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\0817_sx2953\x072438.D Vial: 21
Acq On : 17 Aug 2020 6:29 pm Operator: marthav
Sample : icv2953-50 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\MET...DApp9SX-081720.m (RTE Integrator)
Title : SW846 8270D OR EPA 625
Last Update : Tue Aug 18 13:05:00 2020
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	109	0.00	5.61
2		1,4-Dioxane		----------NA----------				
3		N-nitrosodimethylamine		----------NA----------				
4		Pyridine		----------NA----------				
5	P	Benzaldehyde		----------NA----------				
6		Aniline		----------NA----------				
7	S	2-Fluorophenol		----------NA----------				
8	P	bis(2-Chloroethyl)ether		----------NA----------				
9	S	Phenol-d5		----------NA----------				
10	P	Phenol		----------NA----------				
11	P	2-Chlorophenol		----------NA----------				
12		1,3-Dichlorobenzene		----------NA----------				
13		1,4-Dichlorobenzene		----------NA----------				
14		1,2-Dichlorobenzene		----------NA----------				
15		Benzyl alcohol		----------NA----------				
16	P	2,2'-Oxybis(1-chloropropa		----------NA----------				
17	P	2-Methylphenol		----------NA----------				
18	P	Acetophenone		----------NA----------				
19	P	Hexachloroethane		----------NA----------				
20	P	N-Nitroso-di-n-propylamin		----------NA----------				
21	P	3&4-Methylphenol		----------NA----------				
22	I	Naphthalene-d8	40.000	40.000	0.0	110	0.00	7.03
23	S	Nitrobenzene-d5		----------NA----------				
24	P	Nitrobenzene		----------NA----------				
25	P	Isophorone		----------NA----------				
26	P	2-Nitrophenol		----------NA----------				
27	P	2,4-Dimethylphenol		----------NA----------				
28		O,O,O-Triethylphosphoroth		----------NA----------				
29	P	bis(2-Chloroethoxy)methan		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
30		Benzoic Acid		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
31	P	2,4-Dichlorophenol		----------NA----------				
32		1,2,4-Trichlorobenzene		----------NA----------				
33		alpha-Terpineol		----------NA----------				
34	P	Naphthalene		----------NA----------				
35	P	4-Chloroaniline		----------NA----------				
36		2,6-Dichlorophenol		----------NA----------				
37	P	Hexachlorobutadiene		----------NA----------				

Initial Calibration Verification

Job Number: FA78194
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2953-ICV2953
Lab FileID: X072438.D

38	P	Caprolactam			NA				
39	P	4-Chloro-3-methylphenol			NA				
40	P	2-Methylnaphthalene			NA				
41		1-Methylnaphthalene			NA				
42	P	1,2,4,5-Tetrachlorobenzen			NA				
43	I	Acenaphthene-d10	40.000	40.000	0.0	101	0.00	9.07	
			Amount	Calc.	%Drift				
44	P	Hexachlorocyclopentadiene			NA				
			Amount	Calc.	%Drift				
45	P	2,4,6-Trichlorophenol			NA				
46	P	2,4,5-Trichlorophenol			NA				
47	S	2-Fluorobiphenyl			NA				
48	P	1,1'-Biphenyl			NA				
49	P	2-Chloronaphthalene			NA				
50	P	2-Nitroaniline			NA				
			Amount	Calc.	%Drift				
51		p-Dinitrobenzene			NA				
			Amount	Calc.	%Drift				
52	P	Acenaphthylene			NA				
53	P	Dimethylphthalate			NA				
			Amount	Calc.	%Drift				
54		m-Dinitrobenzene			NA				
			Amount	Calc.	%Drift				
55	P	2,6-Dinitrotoluene			NA				
56		o-Dinitrobenzene			NA				
57	P	Acenaphthene			NA				
58	P	3-Nitroaniline			NA				
			Amount	Calc.	%Drift				
59	P	2,4-Dinitrophenol			NA				
			Amount	Calc.	%Drift				
60	P	Dibenzofuran			NA				
61	P	2,4-Dinitrotoluene			NA				
			Amount	Calc.	%Drift				
62	P	4-Nitrophenol			NA				
63		2,3,5,6-Tetrachlorophenol			NA				
64	P	2,3,4,6-Tetrachlorophenol			NA				
			Amount	Calc.	%Drift				
65	P	Fluorene			NA				
66	P	4-Chlorophenyl-phenylethe			NA				
67	P	Diethylphthalate			NA				
68		Thionazin			NA				
			Amount	Calc.	%Drift				
69	P	4-Nitroaniline			NA				
			Amount	Calc.	%Drift				
70	I	Phenanthrene-d10	40.000	40.000	0.0	105	0.00	10.82	

Initial Calibration Verification

Job Number: FA78194
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2953-ICV2953
Lab FileID: X072438.D

			Amount	Calc.	%Drift			
71	P	4,6-Dinitro-2-methylpheno		----------NA----------				
			Amount	Calc.	%Drift			
72	P	n-Nitrosodiphenylamine		----------NA----------				
73		Diphenylamine		----------NA----------				
74		1,2-Diphenylhydrazine		----------NA----------				
75	S	2,4,6-Tribromophenol		----------NA----------				
76		Sulfotep		----------NA----------				
77		Phorate		----------NA----------				
78	P	4-Bromophenyl-phenylether		----------NA----------				
79	P	Hexachlorobenzene		----------NA----------				
80		Dimethoate		----------NA----------				
81		Simazine		----------NA----------				
82	P	Atrazine		----------NA----------				
83	P	Pentachlorophenol		----------NA----------				
84	P	Phenanthrene		----------NA----------				
85	P	Anthracene		----------NA----------				
86		Disulfoton		----------NA----------				
87	P	Carbazole		----------NA----------				
			Amount	Calc.	%Drift			
88		Methyl Parathion		----------NA----------				
			Amount	Calc.	%Drift			
89	P	Di-n-butylphthalate		----------NA----------				
			Amount	Calc.	%Drift			
90		Ethyl Parathion		----------NA----------				
			Amount	Calc.	%Drift			
91	P	Fluoranthene		----------NA----------				
92	I	Chrysene-d12	40.000	40.000	0.0	91	-0.01	14.01
93		Benzidine		----------NA----------				
94	P	Pyrene		----------NA----------				
95	S	Terphenyl-d14		----------NA----------				
96		Famphur		----------NA----------				
97	P	Butylbenzylphthalate		----------NA----------				
98	P	3,3'-Dichlorobenzidine		----------NA----------				
99	P	Benzo[a]anthracene		----------NA----------				
100	P	Chrysene		----------NA----------				
101	P	bis(2-Ethylhexyl)phthalat		----------NA----------				
102	I	Perylene-d12	40.000	40.000	0.0	103	0.00	16.19
			Amount	Calc.	%Drift			
103	P	Di-n-octylphthalate		----------NA----------				
			Amount	Calc.	%Drift			
104	P	Benzo[b]fluoranthene		----------NA----------				
105	P	Benzo[k]fluoranthene		----------NA----------				
106	P	Benzo[a]pyrene		----------NA----------				
107	P	Indeno[1,2,3-cd]pyrene		----------NA----------				
108	P	Dibenz[a,h]anthracene		----------NA----------				
109	P	Benzo[g,h,i]perylene		----------NA----------				
110		1,4-Dichlorobenzene-d4A	40.000	40.000	0.0	118	0.00	5.61
111		2-Picoline	50.000	45.971	8.1	104	0.00	3.58
112		N-Nitrosomethylethylamine	50.000	43.732	12.5	100	0.00	3.72

Initial Calibration Verification

Job Number: FA78194 **Sample:** SX2953-ICV2953
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072438.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

113	Methyl methanesulfonate	50.000	57.124	-14.2	127	0.00	4.06
114	N-Nitrosodiethylamine	50.000	44.225	11.5	99	0.00	4.47
115	Ethyl methanesulfonate	50.000	45.339	9.3	100	0.00	4.81
116	Pentachloroethane	50.000	47.222	5.6	105	0.00	5.30
117	N-Nitrosopyrrolidine	50.000	44.098	11.8	98	0.00	6.06
118	N-Nitrosomorpholine	50.000	44.344	11.3	98	0.00	6.10
119	O-Toluidine	50.000	47.057	5.9	102	0.00	6.11
120	Naphthalene-d8A	40.000	40.000	0.0	119	0.00	7.03
121	N-Nitrosopiperidine	50.000	42.584	14.8	96	0.00	6.42
122	A,A-Dimethylphenethylamin	50.000	41.379	17.2	86	-0.03	6.87
123	Hexachloropropene	50.000	63.125	-26.3#	140	0.00	7.16
124	N-Nitrosodi-n-butylamine	50.000	35.818	28.4#	76	0.00	7.56
	---------- Amount	Calc.	%Drift	----------			
125	p-Phenylenediamine	50.000	46.662	6.7	101	0.00	7.56
	---------- Amount	Calc.	%Drift	----------			
126	Isosafrole	50.000	45.742	8.5	101	0.00	7.78
127	Acenaphthene-d10A	40.000	40.000	0.0	108	0.00	9.07
128	Safrole	50.000	57.390	-14.8	114	0.00	8.39
129	1-Chloronaphthalene	50.000	55.507	-11.0	111	0.00	8.45
130	Diphenyl Ether	----------NA----------					
	---------- Amount	Calc.	%Drift	----------			
131	1,4-Naphthoquinone	50.000	33.845	32.3#	72	0.00	8.65
	---------- Amount	Calc.	%Drift	----------			
132	Pentachlorobenzene	50.000	50.732	-1.5	104	0.00	9.27
133	1-Naphthylamine	50.000	48.773	2.5	96	0.00	9.42
134	2-Naphthylamine	50.000	48.007	4.0	96	0.00	9.52
135	5-Nitro-o-toluidine	50.000	46.078	7.8	88	0.00	9.76
136	Phenanthrene-d10A	40.000	40.000	0.0	104	0.00	10.82
	---------- Amount	Calc.	%Drift	----------			
137	1,3,5-Trinitrobenzene	50.000	50.571	-1.1	97	0.00	10.29
	---------- Amount	Calc.	%Drift	----------			
138	Diallate	50.000	47.542	4.9	95	0.00	10.23
139	Phenacetin	50.000	51.834	-3.7	95	0.00	10.31
140	4-Aminobiphenyl	50.000	45.530	8.9	85	0.00	10.63
141	Pronamide	50.000	51.971	-3.9	98	0.00	10.74
142	Pentachloronitrobenzene	50.000	48.503	3.0	92	0.00	10.62
	---------- Amount	Calc.	%Drift	----------			
143	4-Nitroquinoline 1-Oxide	50.000	47.309	5.4	93	0.00	11.78
	---------- Amount	Calc.	%Drift	----------			
144	Methapyrilene	----------NA----------					
145	Isodrin	50.000	48.963	2.1	98	0.00	12.05
146 I	Chrysene-d12A	40.000	40.000	0.0	99	0.00	14.01
	---------- Amount	Calc.	%Drift	----------			
147	Aramite	50.000	47.842	4.3	89	0.00	12.84
148	p-(Dimethylamine)azobenze	50.000	45.466	9.1	87	0.00	12.91
	---------- Amount	Calc.	%Drift	----------			

Initial Calibration Verification

Job Number: FA78194
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2953-ICV2953
Lab FileID: X072438.D

			Amount	Calc.	%Drift			
149		Chlorobenzilate	50.000	49.349	1.3	89	0.00	12.98
			Amount	Calc.	%Drift			
150		Kepone	50.000	48.933	2.1	89	0.00	13.31
			Amount	Calc.	%Drift			
151		3,3'-Dimethylbenzidine	50.000	90.551	-81.1#	160	0.00	13.32
			Amount	Calc.	%Drift			
152		2-Acetylaminofluorene	50.000	46.418	7.2	85	0.00	13.65
			Amount	Calc.	%Drift			
153	I	Perylene-d12A	40.000	40.000	0.0	102	0.00	16.19
154		7,12-Dimethylbenz(a)anthr	50.000	54.694	-9.4	104	0.00	15.54
155		Hexachlorophene		----------NA----------				
156		3-Methylcholanthrene	50.000	55.802	-11.6	101	0.00	16.72
157		Dibenz(a,j)acridine	50.000	50.485	-1.0	93	0.00	17.63

(#) = Out of Range SPCC's out = 0 CCC's out = 0
x072431.D 8270DApp9SX-081720.m Tue Aug 18 13:20:46 2020

Initial Calibration Verification

Job Number: FA78194
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2953-ICV2953
Lab FileID: X072439.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\0817_sx2953\x072439.D Vial: 22
Acq On : 17 Aug 2020 6:54 pm Operator: marthav
Sample : icv2953-50 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\MET...DApp9SX-081720.m (RTE Integrator)
Title : SW846 8270D OR EPA 625
Last Update : Tue Aug 18 13:05:00 2020
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	104	0.00	5.61
2		1,4-Dioxane		----------	NA	----------		
3		N-nitrosodimethylamine		----------	NA	----------		
4		Pyridine		----------	NA	----------		
5	P	Benzaldehyde		----------	NA	----------		
6		Aniline		----------	NA	----------		
7	S	2-Fluorophenol		----------	NA	----------		
8	P	bis(2-Chloroethyl)ether		----------	NA	----------		
9	S	Phenol-d5		----------	NA	----------		
10	P	Phenol		----------	NA	----------		
11	P	2-Chlorophenol		----------	NA	----------		
12		1,3-Dichlorobenzene		----------	NA	----------		
13		1,4-Dichlorobenzene		----------	NA	----------		
14		1,2-Dichlorobenzene		----------	NA	----------		
15		Benzyl alcohol		----------	NA	----------		
16	P	2,2'-Oxybis(1-chloropropa		----------	NA	----------		
17	P	2-Methylphenol		----------	NA	----------		
18	P	Acetophenone		----------	NA	----------		
19	P	Hexachloroethane		----------	NA	----------		
20	P	N-Nitroso-di-n-propylamin		----------	NA	----------		
21	P	3&4-Methylphenol		----------	NA	----------		
22	I	Naphthalene-d8	40.000	40.000	0.0	104	0.00	7.03
23	S	Nitrobenzene-d5		----------	NA	----------		
24	P	Nitrobenzene		----------	NA	----------		
25	P	Isophorone		----------	NA	----------		
26	P	2-Nitrophenol		----------	NA	----------		
27	P	2,4-Dimethylphenol		----------	NA	----------		
28		O,O,O-Triethylphosphoroth		----------	NA	----------		
29	P	bis(2-Chloroethoxy)methan		----------	NA	----------		
		----------	Amount	Calc.	%Drift	----------		
30		Benzoic Acid		----------	NA	----------		
		----------	Amount	Calc.	%Drift	----------		
31	P	2,4-Dichlorophenol		----------	NA	----------		
32		1,2,4-Trichlorobenzene		----------	NA	----------		
33		alpha-Terpineol		----------	NA	----------		
34	P	Naphthalene		----------	NA	----------		
35	P	4-Chloroaniline		----------	NA	----------		
36		2,6-Dichlorophenol		----------	NA	----------		
37	P	Hexachlorobutadiene		----------	NA	----------		

38	P	Caprolactam		----------NA----------				
39	P	4-Chloro-3-methylphenol		----------NA----------				
40	P	2-Methylnaphthalene		----------NA----------				
41		1-Methylnaphthalene		----------NA----------				
42	P	1,2,4,5-Tetrachlorobenzen		----------NA----------				
43	I	Acenaphthene-d10	40.000	40.000	0.0	112	0.00	9.07
		---------- Amount	Calc.	%Drift ----------				
44	P	Hexachlorocyclopentadiene		----------NA----------				
		---------- Amount	Calc.	%Drift ----------				
45	P	2,4,6-Trichlorophenol		----------NA----------				
46	P	2,4,5-Trichlorophenol		----------NA----------				
47	S	2-Fluorobiphenyl		----------NA----------				
48	P	1,1'-Biphenyl		----------NA----------				
49	P	2-Chloronaphthalene		----------NA----------				
50	P	2-Nitroaniline		----------NA----------				
		---------- Amount	Calc.	%Drift ----------				
51		p-Dinitrobenzene		----------NA----------				
		---------- Amount	Calc.	%Drift ----------				
52	P	Acenaphthylene		----------NA----------				
53	P	Dimethylphthalate		----------NA----------				
		---------- Amount	Calc.	%Drift ----------				
54		m-Dinitrobenzene		----------NA----------				
		---------- Amount	Calc.	%Drift ----------				
55	P	2,6-Dinitrotoluene		----------NA----------				
56		o-Dinitrobenzene		----------NA----------				
57	P	Acenaphthene		----------NA----------				
58	P	3-Nitroaniline		----------NA----------				
		---------- Amount	Calc.	%Drift ----------				
59	P	2,4-Dinitrophenol		----------NA----------				
		---------- Amount	Calc.	%Drift ----------				
60	P	Dibenzofuran		----------NA----------				
61	P	2,4-Dinitrotoluene		----------NA----------				
		---------- Amount	Calc.	%Drift ----------				
62	P	4-Nitrophenol		----------NA----------				
63		2,3,5,6-Tetrachlorophenol		----------NA----------				
64	P	2,3,4,6-Tetrachlorophenol		----------NA----------				
		---------- Amount	Calc.	%Drift ----------				
65	P	Fluorene		----------NA----------				
66	P	4-Chlorophenyl-phenylethe		----------NA----------				
67	P	Diethylphthalate		----------NA----------				
68		Thionazin		----------NA----------				
		---------- Amount	Calc.	%Drift ----------				
69	P	4-Nitroaniline		----------NA----------				
		---------- Amount	Calc.	%Drift ----------				
70	I	Phenanthrene-d10	40.000	40.000	0.0	107	0.00	10.82

Initial Calibration Verification

Job Number: FA78194
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2953-ICV2953
Lab FileID: X072439.D

			Amount	Calc.	%Drift			
71	P	4,6-Dinitro-2-methylpheno		----------NA----------				
			Amount	Calc.	%Drift			
72	P	n-Nitrosodiphenylamine		----------NA----------				
73		Diphenylamine		----------NA----------				
74		1,2-Diphenylhydrazine		----------NA----------				
75	S	2,4,6-Tribromophenol		----------NA----------				
76		Sulfotep		----------NA----------				
77		Phorate		----------NA----------				
78	P	4-Bromophenyl-phenylether		----------NA----------				
79	P	Hexachlorobenzene		----------NA----------				
80		Dimethoate		----------NA----------				
81		Simazine		----------NA----------				
82	P	Atrazine		----------NA----------				
83	P	Pentachlorophenol		----------NA----------				
84	P	Phenanthrene		----------NA----------				
85	P	Anthracene		----------NA----------				
86		Disulfoton		----------NA----------				
87	P	Carbazole		----------NA----------				
			Amount	Calc.	%Drift			
88		Methyl Parathion		----------NA----------				
			Amount	Calc.	%Drift			
89	P	Di-n-butylphthalate		----------NA----------				
			Amount	Calc.	%Drift			
90		Ethyl Parathion		----------NA----------				
			Amount	Calc.	%Drift			
91	P	Fluoranthene		----------NA----------				
92	I	Chrysene-d12	40.000	40.000	0.0	100	-0.01	14.01
93		Benzidine		----------NA----------				
94	P	Pyrene		----------NA----------				
95	S	Terphenyl-d14		----------NA----------				
96		Famphur		----------NA----------				
97	P	Butylbenzylphthalate		----------NA----------				
98	P	3,3'-Dichlorobenzidine		----------NA----------				
99	P	Benzo[a]anthracene		----------NA----------				
100	P	Chrysene		----------NA----------				
101	P	bis(2-Ethylhexyl)phthalat		----------NA----------				
102	I	Perylene-d12	40.000	40.000	0.0	105	0.00	16.18
			Amount	Calc.	%Drift			
103	P	Di-n-octylphthalate		----------NA----------				
			Amount	Calc.	%Drift			
104	P	Benzo[b]fluoranthene		----------NA----------				
105	P	Benzo[k]fluoranthene		----------NA----------				
106	P	Benzo[a]pyrene		----------NA----------				
107	P	Indeno[1,2,3-cd]pyrene		----------NA----------				
108	P	Dibenz[a,h]anthracene		----------NA----------				
109	P	Benzo[g,h,i]perylene		----------NA----------				
110		1,4-Dichlorobenzene-d4A	40.000	40.000	0.0	112	0.00	5.61
111		2-Picoline		----------NA----------				
112		N-Nitrosomethylethylamine		----------NA----------				

Initial Calibration Verification

Job Number: FA78194
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2953-ICV2953
Lab FileID: X072439.D

113		Methyl methanesulfonate		----------NA----------				
114		N-Nitrosodiethylamine		----------NA----------				
115		Ethyl methanesulfonate		----------NA----------				
116		Pentachloroethane		----------NA----------				
117		N-Nitrosopyrrolidine		----------NA----------				
118		N-Nitrosomorpholine		----------NA----------				
119		O-Toluidine		----------NA----------				
120		Naphthalene-d8A	40.000	40.000	0.0	112	0.00	7.03
121		N-Nitrosopiperidine		----------NA----------				
122		A,A-Dimethylphenethylamin		----------NA----------				
123		Hexachloropropene		----------NA----------				
124		N-Nitrosodi-n-butylamine		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
125		p-Phenylenediamine		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
126		Isosafrole		----------NA----------				
127		Acenaphthene-d10A	40.000	40.000	0.0	120	0.00	9.07
128		Safrole		----------NA----------				
129		1-Chloronaphthalene		----------NA----------				
130		Diphenyl Ether	50.000	40.615	18.8	90	0.00	8.55
		----------	Amount	Calc.	%Drift	----------		
131		1,4-Naphthoquinone		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
132		Pentachlorobenzene		----------NA----------				
133		1-Naphthylamine		----------NA----------				
134		2-Naphthylamine		----------NA----------				
135		5-Nitro-o-toluidine		----------NA----------				
136		Phenanthrene-d10A	40.000	40.000	0.0	106	0.00	10.82
		----------	Amount	Calc.	%Drift	----------		
137		1,3,5-Trinitrobenzene	50.000	43.691	12.6	84	0.00	10.28
		----------	Amount	Calc.	%Drift	----------		
138		Diallate		----------NA----------				
139		Phenacetin		----------NA----------				
140		4-Aminobiphenyl		----------NA----------				
141		Pronamide		----------NA----------				
142		Pentachloronitrobenzene		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
143		4-Nitroquinoline 1-Oxide		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
144		Methapyrilene	50.000	355.567	-611.1#	654	0.00	11.89
145		Isodrin		----------NA----------				
146	I	Chrysene-d12A	40.000	40.000	0.0	109	0.00	14.01
		----------	Amount	Calc.	%Drift	----------		
147		Aramite		----------NA----------				
148		p-(Dimethylamine)azobenze		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		

149	Chlorobenzilate		----------NA----------					
	---------- Amount		Calc.	%Drift	----------			
150	Kepone		----------NA----------					
	---------- Amount		Calc.	%Drift	----------			
151	3,3'-Dimethylbenzidine		----------NA----------					
	---------- Amount		Calc.	%Drift	----------			
152	2-Acetylaminofluorene		----------NA----------					
	---------- Amount		Calc.	%Drift	----------			
153 I	Perylene-d12A	40.000	40.000	0.0	105	-0.02	16.18	
154	7,12-Dimethylbenz(a)anthr		----------NA----------					
155	Hexachlorophene		----------NA----------					
156	3-Methylcholanthrene		----------NA----------					
157	Dibenz(a,j)acridine		----------NA----------					

(#) = Out of Range SPCC's out = 0 CCC's out = 0
x072431.D 8270DApp9SX-081720.m Tue Aug 18 13:23:35 2020

Continuing Calibration Summary

Job Number: FA78194 **Sample:** SX2960-CC2953
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072584.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\0828_sx2960\x072584.D Vial: 2
Acq On : 28 Aug 2020 2:10 pm Operator: marthav
Sample : cc2953-50 8270 Inst : MSBNA05
Misc : op81605,sx2960,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\MET...DApp9SX-081720.m (RTE Integrator)
Title : SW846 8270D OR EPA 625
Last Update : Tue Aug 18 13:05:00 2020
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	102	0.00	5.56
2		1,4-Dioxane	0.699	0.680	2.7	102	-0.01	2.38
3		N-nitrosodimethylamine	1.247	1.258	-0.9	105	-0.01	2.72
4		Pyridine	1.943	1.981	-2.0	105	-0.01	2.74
5	P	Benzaldehyde	1.219	1.137	6.7	95	0.00	5.09
6		Aniline	2.246	2.354	-4.8	107	0.00	5.22
7	S	2-Fluorophenol	1.524	1.552	-1.8	103	-0.01	4.24
8	P	bis(2-Chloroethyl)ether	1.534	1.665	-8.5	106	0.00	5.30
9	S	Phenol-d5	1.787	1.909	-6.8	107	-0.02	5.27
10	P	Phenol	2.025	2.206	-8.9	105	-0.01	5.29
11	P	2-Chlorophenol	1.577	1.690	-7.2	104	0.00	5.37
12		1,3-Dichlorobenzene	1.679	1.718	-2.3	100	0.00	5.49
13		1,4-Dichlorobenzene	1.763	1.791	-1.6	100	0.00	5.58
14		1,2-Dichlorobenzene	1.600	1.623	-1.4	101	0.00	5.74
15		Benzyl alcohol	0.981	1.105	-12.6	108	0.00	5.76
16	P	2,2'-Oxybis(1-chloropropa	3.111	3.290	-5.8	107	0.00	5.89
17	P	2-Methylphenol	1.452	1.569	-8.1	107	0.00	5.93
18	P	Acetophenone	2.080	2.292	-10.2	109	0.00	6.02
19	P	Hexachloroethane	0.667	0.655	1.8	96	0.00	6.11
20	P	N-Nitroso-di-n-propylamin	1.153	1.268	-10.0	109	0.00	6.04
21	P	3&4-Methylphenol	1.516	1.666	-9.9	107	0.00	6.10
22	I	Naphthalene-d8	1.000	1.000	0.0	107	0.00	6.99
23	S	Nitrobenzene-d5	0.447	0.460	-2.9	106	0.00	6.18
24	P	Nitrobenzene	0.442	0.451	-2.0	107	0.00	6.21
25	P	Isophorone	0.728	0.770	-5.8	111	0.00	6.48
26	P	2-Nitrophenol	0.211	0.223	-5.7	108	0.00	6.56
27	P	2,4-Dimethylphenol	0.346	0.361	-4.3	108	0.00	6.68
28		O,O,O-Triethylphosphoroth	0.157	0.166	-5.7	111	0.00	6.72
29	P	bis(2-Chloroethoxy)methan	0.439	0.470	-7.1	110	0.00	6.75
			Amount	Calc.	%Drift			
30		Benzoic Acid	50.000	62.234	-24.5#	149	-0.01	6.86
			AvgRF	CCRF	%Dev			
31	P	2,4-Dichlorophenol	0.299	0.322	-7.7	109	0.00	6.88
32		1,2,4-Trichlorobenzene	0.323	0.326	-0.9	105	0.00	6.93
33		alpha-Terpineol			NA			
34	P	Naphthalene	1.134	1.159	-2.2	106	0.00	7.01
35	P	4-Chloroaniline	0.462	0.488	-5.6	110	0.00	7.11
36		2,6-Dichlorophenol	0.295	0.310	-5.1	109	0.00	7.11
37	P	Hexachlorobutadiene	0.161	0.160	0.6	104	0.00	7.16

Continuing Calibration Summary

Job Number: FA78194 **Sample:** SX2960-CC2953
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072584.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

38	P	Caprolactam	0.114	0.129	-13.2	114	0.00	7.55
39	P	4-Chloro-3-methylphenol	0.305	0.330	-8.2	112	0.00	7.74
40	P	2-Methylnaphthalene	0.729	0.765	-4.9	111	0.00	7.81
41		1-Methylnaphthalene	0.695	0.730	-5.0	110	0.00	7.92
42	P	1,2,4,5-Tetrachlorobenzen	0.300	0.314	-4.7	107	0.00	8.01
43	I	Acenaphthene-d10	1.000	1.000	0.0	108	0.00	9.02
			Amount	Calc.	%Drift			
44	P	Hexachlorocyclopentadiene	50.000	51.224	-2.4	106	0.00	8.00
			AvgRF	CCRF	%Dev			
45	P	2,4,6-Trichlorophenol	0.398	0.423	-6.3	110	0.00	8.18
46	P	2,4,5-Trichlorophenol	0.422	0.457	-8.3	111	0.00	8.24
47	S	2-Fluorobiphenyl	1.609	1.687	-4.8	109	0.00	8.26
48	P	1,1'-Biphenyl	1.748	1.831	-4.7	110	0.00	8.37
49	P	2-Chloronaphthalene	1.327	1.390	-4.7	109	0.00	8.38
50	P	2-Nitroaniline	0.491	0.530	-7.9	112	0.00	8.53
			Amount	Calc.	%Drift			
51		p-Dinitrobenzene	50.000	53.547	-7.1	114	0.00	8.71
			AvgRF	CCRF	%Dev			
52	P	Acenaphthylene	2.113	2.287	-8.2	112	0.00	8.85
53	P	Dimethylphthalate	1.449	1.548	-6.8	113	0.00	8.77
			Amount	Calc.	%Drift			
54		m-Dinitrobenzene	50.000	53.120	-6.2	113	0.00	8.79
			AvgRF	CCRF	%Dev			
55	P	2,6-Dinitrotoluene	0.349	0.388	-11.2	115	0.00	8.83
56		o-Dinitrobenzene	0.338	0.317	6.2	92	0.00	8.88
57	P	Acenaphthene	1.411	1.485	-5.2	111	0.00	9.06
58	P	3-Nitroaniline	0.399	0.448	-12.3	115	0.00	9.02
			Amount	Calc.	%Drift			
59	P	2,4-Dinitrophenol	50.000	54.848	-9.7	117	0.00	9.15
			AvgRF	CCRF	%Dev			
60	P	Dibenzofuran	1.846	1.937	-4.9	111	0.00	9.26
61	P	2,4-Dinitrotoluene	0.449	0.511	-13.8	114	0.00	9.30
			Amount	Calc.	%Drift			
62	P	4-Nitrophenol	50.000	51.868	-3.7	109	-0.01	9.33
63		2,3,5,6-Tetrachlorophenol	50.000	49.188	1.6	103	0.00	9.39
64	P	2,3,4,6-Tetrachlorophenol	50.000	52.388	-4.8	111	0.00	9.44
			AvgRF	CCRF	%Dev			
65	P	Fluorene	1.474	1.603	-8.8	114	0.00	9.67
66	P	4-Chlorophenyl-phenylethe	0.694	0.738	-6.3	110	0.00	9.69
67	P	Diethylphthalate	1.414	1.532	-8.3	113	0.00	9.60
68		Thionazin	0.318	0.355	-11.6	113	0.00	9.68
			Amount	Calc.	%Drift			
69	P	4-Nitroaniline	50.000	52.909	-5.8	112	0.00	9.75
			AvgRF	CCRF	%Dev			
70	I	Phenanthrene-d10	1.000	1.000	0.0	109	0.00	10.76

Continuing Calibration Summary

Job Number: FA78194 **Sample:** SX2960-CC2953
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072584.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

			Amount	Calc.	%Drift			
71	P	4,6-Dinitro-2-methylpheno	50.000	54.628	-9.3	113	0.00	9.78
			AvgRF	CCRF	%Dev			
72	P	n-Nitrosodiphenylamine	0.659	0.687	-4.2	112	0.00	9.84
73		Diphenylamine	0.774	0.824	-6.5	112	0.00	9.84
74		1,2-Diphenylhydrazine	0.963	1.033	-7.3	112	0.00	9.87
75	S	2,4,6-Tribromophenol	0.086	0.093	-8.1	110	0.00	9.96
76		Sulfotep	0.139	0.152	-9.4	114	0.00	10.06
77		Phorate	0.518	0.565	-9.1	113	0.00	10.20
78	P	4-Bromophenyl-phenylether	0.201	0.217	-8.0	112	0.00	10.26
79	P	Hexachlorobenzene	0.200	0.217	-8.5	113	0.00	10.31
80		Dimethoate	0.344	0.380	-10.5	111	0.00	10.40
81		Simazine	0.137	0.140	-2.2	109	0.00	10.48
82	P	Atrazine	0.242	0.254	-5.0	111	0.00	10.52
83	P	Pentachlorophenol	0.094	0.082	12.8	95	0.00	10.58
84	P	Phenanthrene	1.263	1.328	-5.1	113	0.00	10.79
85	P	Anthracene	1.306	1.384	-6.0	110	0.00	10.85
86		Disulfoton	0.427	0.603	-41.2#	144	0.00	10.82
87	P	Carbazole	1.162	1.231	-5.9	110	0.00	11.07
			Amount	Calc.	%Drift			
88		Methyl Parathion	50.000	51.830	-3.7	109	0.00	11.25
			AvgRF	CCRF	%Dev			
89	P	Di-n-butylphthalate	1.311	1.412	-7.7	112	0.00	11.53
			Amount	Calc.	%Drift			
90		Ethyl Parathion	50.000	53.455	-6.9	114	0.00	11.73
			AvgRF	CCRF	%Dev			
91	P	Fluoranthene	1.200	1.266	-5.5	111	0.00	12.19
92	I	Chrysene-d12	1.000	1.000	0.0	105	0.00	13.95
93		Benzidine	0.866	0.840	3.0	98	0.00	12.39
94	P	Pyrene	1.688	1.778	-5.3	110	0.00	12.45
95	S	Terphenyl-d14	1.153	1.223	-6.1	111	0.00	12.68
96		Famphur	0.451	0.382	15.3	89	0.00	13.22
97	P	Butylbenzylphthalate	0.709	0.768	-8.3	111	0.00	13.31
98	P	3,3'-Dichlorobenzidine	0.447	0.485	-8.5	106	0.00	13.95
99	P	Benzo[a]anthracene	1.330	1.356	-2.0	107	0.00	13.94
100	P	Chrysene	1.405	1.485	-5.7	108	0.00	13.99
101	P	bis(2-Ethylhexyl)phthalat	0.958	1.063	-11.0	109	0.00	14.10
102	I	Perylene-d12	1.000	1.000	0.0	100	0.00	16.09
			Amount	Calc.	%Drift			
103	P	Di-n-octylphthalate	50.000	55.004	-10.0	109	0.00	15.05
			AvgRF	CCRF	%Dev			
104	P	Benzo[b]fluoranthene	1.380	1.463	-6.0	100	0.00	15.46
105	P	Benzo[k]fluoranthene	1.466	1.640	-11.9	109	0.00	15.51
106	P	Benzo[a]pyrene	1.216	1.319	-8.5	102	0.00	15.99
107	P	Indeno[1,2,3-cd]pyrene	1.037	1.023	1.4	97	0.00	17.77
108	P	Dibenz[a,h]anthracene	1.149	1.189	-3.5	99	0.00	17.83
109	P	Benzo[g,h,i]perylene	1.211	1.209	0.2	98	0.00	18.14
110		1,4-Dichlorobenzene-d4A	1.000	1.000	0.0	110	0.00	5.56
111		2-Picoline		----------NA----------				
112		N-Nitrosomethylethylamine		----------NA----------				

Continuing Calibration Summary

Job Number: FA78194 **Sample:** SX2960-CC2953
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072584.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

113		Methyl methanesulfonate		----------NA----------				
114		N-Nitrosodiethylamine		----------NA----------				
115		Ethyl methanesulfonate		----------NA----------				
116		Pentachloroethane		----------NA----------				
117		N-Nitrosopyrrolidine		----------NA----------				
118		N-Nitrosomorpholine		----------NA----------				
119		O-Toluidine		----------NA----------				
120		Naphthalene-d8A	1.000	1.000	0.0	115	0.00	6.99
121		N-Nitrosopiperidine		----------NA----------				
122		A,A-Dimethylphenethylamin		----------NA----------				
123		Hexachloropropene		----------NA----------				
124		N-Nitrosodi-n-butylamine		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
125		p-Phenylenediamine		----------NA----------				
		---------- AvgRF	CCRF	%Dev	----------			
126		Isosafrole		----------NA----------				
127		Acenaphthene-d10A	1.000	1.000	0.0	115	0.00	9.02
128		Safrole		----------NA----------				
129		1-Chloronaphthalene		----------NA----------				
130		Diphenyl Ether		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
131		1,4-Naphthoquinone		----------NA----------				
		---------- AvgRF	CCRF	%Dev	----------			
132		Pentachlorobenzene		----------NA----------				
133		1-Naphthylamine		----------NA----------				
134		2-Naphthylamine		----------NA----------				
135		5-Nitro-o-toluidine		----------NA----------				
136		Phenanthrene-d10A	1.000	1.000	0.0	108	0.00	10.76
		---------- Amount	Calc.	%Drift	----------			
137		1,3,5-Trinitrobenzene		----------NA----------				
		---------- AvgRF	CCRF	%Dev	----------			
138		Diallate		----------NA----------				
139		Phenacetin		----------NA----------				
140		4-Aminobiphenyl		----------NA----------				
141		Pronamide		----------NA----------				
142		Pentachloronitrobenzene		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
143		4-Nitroquinoline 1-Oxide		----------NA----------				
		---------- AvgRF	CCRF	%Dev	----------			
144		Methapyrilene		----------NA----------				
145		Isodrin		----------NA----------				
146	I	Chrysene-d12A	1.000	1.000	0.0	115	0.00	13.95
		---------- Amount	Calc.	%Drift	----------			
147		Aramite		----------NA----------				
148		p-(Dimethylamine)azobenze		----------NA----------				
		---------- AvgRF	CCRF	%Dev	----------			

Continuing Calibration Summary

Job Number: FA78194 **Sample:** SX2960-CC2953
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072584.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

149		Chlorobenzilate		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
150		Kepone		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
151		3,3'-Dimethylbenzidine		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
152		2-Acetylaminofluorene		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
153	I	Perylene-d12A	1.000	1.000	0.0	99	0.00	16.09
154		7,12-Dimethylbenz(a)anthr		----------NA----------				
155		Hexachlorophene		----------NA----------				
156		3-Methylcholanthrene		----------NA----------				
157		Dibenz(a,j)acridine		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
x072431.D 8270DApp9SX-081720.m Sat Aug 29 10:31:29 2020

Continuing Calibration Summary

Job Number: FA78194
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: SX2961-CC2953
Lab FileID: X072614.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\ed...2020\sx2961\x072614.d Vial: 2
Acq On : 29 Aug 2020 11:41 am Operator: marthav
Sample : cc2953-50 8270 Inst : MSBNA05
Misc : op81605,sx2961,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\msdchem\1\met...DApp9SX-081720.m (RTE Integrator)
Title : SW846 8270D OR EPA 625
Last Update : Tue Aug 18 13:05:00 2020
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	96	0.00	5.55
2		1,4-Dioxane	0.699	0.704	-0.7	99	0.00	2.36
3		N-nitrosodimethylamine	1.247	1.403	-12.5	110	0.00	2.71
4		Pyridine	1.943	2.040	-5.0	101	0.00	2.73
5	P	Benzaldehyde	1.219	1.273	-4.4	99	0.00	5.09
6		Aniline	2.246	2.427	-8.1	104	0.00	5.21
7	S	2-Fluorophenol	1.524	1.629	-6.9	102	0.00	4.23
8	P	bis(2-Chloroethyl)ether	1.534	1.707	-11.3	102	0.00	5.29
9	S	Phenol-d5	1.787	1.987	-11.2	105	0.00	5.26
10	P	Phenol	2.025	2.304	-13.8	103	0.00	5.27
11	P	2-Chlorophenol	1.577	1.764	-11.9	102	0.00	5.35
12		1,3-Dichlorobenzene	1.679	1.799	-7.1	99	0.00	5.49
13		1,4-Dichlorobenzene	1.763	1.856	-5.3	97	0.00	5.57
14		1,2-Dichlorobenzene	1.600	1.687	-5.4	99	0.00	5.73
15		Benzyl alcohol	0.981	1.151	-17.3	106	0.00	5.75
16	P	2,2'-Oxybis(1-chloropropa	3.111	3.584	-15.2	109	0.00	5.88
17	P	2-Methylphenol	1.452	1.614	-11.2	103	0.00	5.91
18	P	Acetophenone	2.080	2.274	-9.3	101	0.00	6.01
19	P	Hexachloroethane	0.667	0.705	-5.7	97	0.00	6.10
20	P	N-Nitroso-di-n-propylamin	1.153	1.318	-14.3	106	0.00	6.03
21	P	3&4-Methylphenol	1.516	1.699	-12.1	102	0.00	6.09
22	I	Naphthalene-d8	1.000	1.000	0.0	99	0.00	6.98
23	S	Nitrobenzene-d5	0.447	0.481	-7.6	103	0.00	6.18
24	P	Nitrobenzene	0.442	0.473	-7.0	105	0.00	6.20
25	P	Isophorone	0.728	0.800	-9.9	107	0.00	6.48
26	P	2-Nitrophenol	0.211	0.231	-9.5	103	0.00	6.56
27	P	2,4-Dimethylphenol	0.346	0.374	-8.1	104	0.00	6.67
28		O,O,O-Triethylphosphoroth	0.157	0.159	-1.3	99	0.00	6.71
29	P	bis(2-Chloroethoxy)methan	0.439	0.481	-9.6	105	0.00	6.75
		----------	True	Calc.	% Drift	----------		
30		Benzoic Acid	50.000	60.785	-21.6#	134	0.00	6.84
		----------	AvgRF	CCRF	% Dev	----------		
31	P	2,4-Dichlorophenol	0.299	0.328	-9.7	103	0.00	6.86
32		1,2,4-Trichlorobenzene	0.323	0.337	-4.3	100	0.00	6.92
33		alpha-Terpineol		----------NA----------				
34	P	Naphthalene	1.134	1.193	-5.2	102	0.00	7.00
35	P	4-Chloroaniline	0.462	0.499	-8.0	104	0.00	7.10
36		2,6-Dichlorophenol	0.295	0.319	-8.1	104	0.00	7.10
37	P	Hexachlorobutadiene	0.161	0.166	-3.1	100	0.00	7.15

Continuing Calibration Summary

Job Number: FA78194 **Sample:** SX2961-CC2953
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072614.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

38	P	Caprolactam	0.114	0.127	-11.4	104	0.00	7.54
39	P	4-Chloro-3-methylphenol	0.305	0.339	-11.1	107	0.00	7.72
40	P	2-Methylnaphthalene	0.729	0.777	-6.6	104	0.00	7.80
41		1-Methylnaphthalene	0.695	0.744	-7.1	104	0.00	7.92
42	P	1,2,4,5-Tetrachlorobenzen	0.300	0.318	-6.0	101	0.00	8.00
43	I	Acenaphthene-d10	1.000	1.000	0.0	99	0.00	9.01
		----------	True	Calc.	% Drift	----------		
44	P	Hexachlorocyclopentadiene	50.000	51.974	-3.9	99	0.00	7.99
		----------	AvgRF	CCRF	% Dev	----------		
45	P	2,4,6-Trichlorophenol	0.398	0.436	-9.5	104	0.00	8.17
46	P	2,4,5-Trichlorophenol	0.422	0.464	-10.0	104	0.00	8.23
47	S	2-Fluorobiphenyl	1.609	1.740	-8.1	104	0.00	8.25
48	P	1,1'-Biphenyl	1.748	1.837	-5.1	101	0.00	8.36
49	P	2-Chloronaphthalene	1.327	1.437	-8.3	104	0.00	8.37
50	P	2-Nitroaniline	0.491	0.573	-16.7	111	0.00	8.52
		----------	True	Calc.	% Drift	----------		
51		p-Dinitrobenzene	50.000	55.523	-11.0	109	0.00	8.70
		----------	AvgRF	CCRF	% Dev	----------		
52	P	Acenaphthylene	2.113	2.331	-10.3	105	0.00	8.85
53	P	Dimethylphthalate	1.449	1.591	-9.8	106	0.00	8.76
		----------	True	Calc.	% Drift	----------		
54		m-Dinitrobenzene	50.000	54.328	-8.7	106	0.00	8.79
		----------	AvgRF	CCRF	% Dev	----------		
55	P	2,6-Dinitrotoluene	0.349	0.398	-14.0	108	0.00	8.82
56		o-Dinitrobenzene	0.338	0.350	-3.6	93	0.00	8.87
57	P	Acenaphthene	1.411	1.526	-8.2	105	0.00	9.05
58	P	3-Nitroaniline	0.399	0.460	-15.3	108	0.00	9.01
		----------	True	Calc.	% Drift	----------		
59	P	2,4-Dinitrophenol	50.000	52.703	-5.4	101	0.00	9.14
		----------	AvgRF	CCRF	% Dev	----------		
60	P	Dibenzofuran	1.846	1.976	-7.0	104	0.00	9.26
61	P	2,4-Dinitrotoluene	0.449	0.530	-18.0	109	0.00	9.29
		----------	True	Calc.	% Drift	----------		
62	P	4-Nitrophenol	50.000	52.323	-4.6	101	0.00	9.32
63		2,3,5,6-Tetrachlorophenol	50.000	48.845	2.3	94	0.00	9.38
64	P	2,3,4,6-Tetrachlorophenol	50.000	52.761	-5.5	103	0.00	9.43
		----------	AvgRF	CCRF	% Dev	----------		
65	P	Fluorene	1.474	1.632	-10.7	106	0.00	9.66
66	P	4-Chlorophenyl-phenylethe	0.694	0.764	-10.1	105	0.00	9.68
67	P	Diethylphthalate	1.414	1.588	-12.3	108	0.00	9.59
68		Thionazin	0.318	0.370	-16.4	108	0.00	9.68
		----------	True	Calc.	% Drift	----------		
69	P	4-Nitroaniline	50.000	55.260	-10.5	108	0.00	9.74
		----------	AvgRF	CCRF	% Dev	----------		
70	I	Phenanthrene-d10	1.000	1.000	0.0	101	0.00	10.75

Continuing Calibration Summary

Job Number: FA78194 **Sample:** SX2961-CC2953
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072614.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

			True	Calc.	% Drift			
71	P	4,6-Dinitro-2-methylpheno	50.000	54.002	-8.0	104	0.00	9.77
			AvgRF	CCRF	% Dev			
72	P	n-Nitrosodiphenylamine	0.659	0.704	-6.8	107	0.00	9.84
73		Diphenylamine	0.774	0.845	-9.2	107	0.00	9.84
74		1,2-Diphenylhydrazine	0.963	1.083	-12.5	109	0.00	9.87
75	S	2,4,6-Tribromophenol	0.086	0.096	-11.6	105	0.00	9.95
76		Sulfotep	0.139	0.153	-10.1	107	0.00	10.05
77		Phorate	0.518	0.572	-10.4	107	0.00	10.18
78	P	4-Bromophenyl-phenylether	0.201	0.217	-8.0	104	0.00	10.25
79	P	Hexachlorobenzene	0.200	0.220	-10.0	106	0.00	10.30
80		Dimethoate	0.344	0.400	-16.3	108	0.00	10.39
81		Simazine	0.137	0.144	-5.1	104	0.00	10.47
82	P	Atrazine	0.242	0.260	-7.4	106	0.00	10.51
83	P	Pentachlorophenol	0.094	0.078	17.0	84	0.00	10.56
84	P	Phenanthrene	1.263	1.363	-7.9	107	0.00	10.78
85	P	Anthracene	1.306	1.436	-10.0	106	0.00	10.84
86		Disulfoton	0.427	0.489	-14.5	108	0.00	10.81
87	P	Carbazole	1.162	1.282	-10.3	106	0.00	11.07
			True	Calc.	% Drift			
88		Methyl Parathion	50.000	54.177	-8.4	106	0.00	11.24
			AvgRF	CCRF	% Dev			
89	P	Di-n-butylphthalate	1.311	1.484	-13.2	109	0.00	11.52
			True	Calc.	% Drift			
90		Ethyl Parathion	50.000	55.664	-11.3	110	0.00	11.71
			AvgRF	CCRF	% Dev			
91	P	Fluoranthene	1.200	1.334	-11.2	109	0.00	12.18
92	I	Chrysene-d12	1.000	1.000	0.0	103	0.00	13.94
93		Benzidine	0.866	0.931	-7.5	107	0.00	12.38
94	P	Pyrene	1.688	1.785	-5.7	109	0.00	12.44
95	S	Terphenyl-d14	1.153	1.219	-5.7	108	0.00	12.67
96		Famphur	0.451	0.431	4.4	99	0.00	13.21
97	P	Butylbenzylphthalate	0.709	0.792	-11.7	112	0.00	13.30
98	P	3,3'-Dichlorobenzidine	0.447	0.527	-17.9	113	0.00	13.94
99	P	Benzo[a]anthracene	1.330	1.409	-5.9	110	0.00	13.93
100	P	Chrysene	1.405	1.536	-9.3	110	0.00	13.98
101	P	bis(2-Ethylhexyl)phthalat	0.958	1.118	-16.7	112	0.00	14.09
102	I	Perylene-d12	1.000	1.000	0.0	104	0.00	16.08
			True	Calc.	% Drift			
103	P	Di-n-octylphthalate	50.000	55.640	-11.3	116	0.00	15.04
			AvgRF	CCRF	% Dev			
104	P	Benzo[b]fluoranthene	1.380	1.524	-10.4	109	0.00	15.45
105	P	Benzo[k]fluoranthene	1.466	1.651	-12.6	114	0.00	15.50
106	P	Benzo[a]pyrene	1.216	1.360	-11.8	110	0.00	15.98
107	P	Indeno[1,2,3-cd]pyrene	1.037	1.106	-6.7	109	0.00	17.76
108	P	Dibenz[a,h]anthracene	1.149	1.260	-9.7	109	0.00	17.81
109	P	Benzo[g,h,i]perylene	1.211	1.251	-3.3	106	0.00	18.12
110		1,4-Dichlorobenzene-d4A	1.000	1.000	0.0	103	0.00	5.55
111		2-Picoline		----------NA----------				
112		N-Nitrosomethylethylamine		----------NA----------				

Continuing Calibration Summary

Job Number: FA78194 **Sample:** SX2961-CC2953
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072614.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

113	Methyl methanesulfonate		----------NA----------					
114	N-Nitrosodiethylamine		----------NA----------					
115	Ethyl methanesulfonate		----------NA----------					
116	Pentachloroethane		----------NA----------					
117	N-Nitrosopyrrolidine		----------NA----------					
118	N-Nitrosomorpholine		----------NA----------					
119	O-Toluidine		----------NA----------					
120	Naphthalene-d8A	1.000	1.000	0.0	107	0.00	6.98	
121	N-Nitrosopiperidine		----------NA----------					
122	A,A-Dimethylphenethylamin		----------NA----------					
123	Hexachloropropene		----------NA----------					
124	N-Nitrosodi-n-butylamine		----------NA----------					
	----------	True	Calc.	% Drift	----------			
125	p-Phenylenediamine		----------NA----------					
	----------	AvgRF	CCRF	% Dev	----------			
126	Isosafrole		----------NA----------					
127	Acenaphthene-d10A	1.000	1.000	0.0	106	0.00	9.01	
128	Safrole		----------NA----------					
129	1-Chloronaphthalene		----------NA----------					
130	Diphenyl Ether		----------NA----------					
	----------	True	Calc.	% Drift	----------			
131	1,4-Naphthoquinone		----------NA----------					
	----------	AvgRF	CCRF	% Dev	----------			
132	Pentachlorobenzene		----------NA----------					
133	1-Naphthylamine		----------NA----------					
134	2-Naphthylamine		----------NA----------					
135	5-Nitro-o-toluidine		----------NA----------					
136	Phenanthrene-d10A	1.000	1.000	0.0	100	0.00	10.75	
	----------	True	Calc.	% Drift	----------			
137	1,3,5-Trinitrobenzene		----------NA----------					
	----------	AvgRF	CCRF	% Dev	----------			
138	Diallate		----------NA----------					
139	Phenacetin		----------NA----------					
140	4-Aminobiphenyl		----------NA----------					
141	Pronamide		----------NA----------					
142	Pentachloronitrobenzene		----------NA----------					
	----------	True	Calc.	% Drift	----------			
143	4-Nitroquinoline 1-Oxide		----------NA----------					
	----------	AvgRF	CCRF	% Dev	----------			
144	Methapyrilene		----------NA----------					
145	Isodrin		----------NA----------					
146 I	Chrysene-d12A	1.000	1.000	0.0	113	0.00	13.94	
	----------	True	Calc.	% Drift	----------			
147	Aramite		----------NA----------					
148	p-(Dimethylamine)azobenze		----------NA----------					
	----------	AvgRF	CCRF	% Dev	----------			

Continuing Calibration Summary

Job Number: FA78194 **Sample:** SX2961-CC2953
Account: ECONTNM EarthCon Consultants, Inc **Lab FileID:** X072614.D
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

149		Chlorobenzilate		----------NA----------					
		----------	True	Calc.	% Drift	----------			
150		Kepone		----------NA----------					
		----------	AvgRF	CCRF	% Dev	----------			
151		3,3'-Dimethylbenzidine		----------NA----------					
		----------	True	Calc.	% Drift	----------			
152		2-Acetylaminofluorene		----------NA----------					
		----------	AvgRF	CCRF	% Dev	----------			
153	I	Perylene-d12A	1.000	1.000	0.0	103	0.00	16.08	
154		7,12-Dimethylbenz(a)anthr		----------NA----------					
155		Hexachlorophene		----------NA----------					
156		3-Methylcholanthrene		----------NA----------					
157		Dibenz(a,j)acridine		----------NA----------					

(#) = Out of Range SPCC's out = 0 CCC's out = 0
x072431.D 8270DApp9SX-081720.m Sun Aug 30 22:54:27 2020

Run Sequence Report

Job Number: FA78194
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Run ID: S7G472 **Method:** SW846 8270D BY SIM **Instrument ID:** GCMS7G

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
S7G472-DFTPP	7G10822.D	07/21/20 08:44	n/a	DFTPP Tune
S7G472-IC472	7G10833.D	07/21/20 13:31	n/a	Initial cal 1
S7G472-IC472	7G10834.D	07/21/20 13:55	n/a	Initial cal 2
S7G472-IC472	7G10835.D	07/21/20 14:19	n/a	Initial cal 3
S7G472-ICC472	7G10836.D	07/21/20 14:43	n/a	Initial cal 4
S7G472-IC472	7G10837.D	07/21/20 15:07	n/a	Initial cal 5
S7G472-IC472	7G10838.D	07/21/20 15:31	n/a	Initial cal 6
S7G472-IC472	7G10839.D	07/21/20 15:55	n/a	Initial cal 7
S7G472-ICV472	7G10840.D	07/21/20 16:19	n/a	Initial cal verification 4
S7G472-DFTPP	7G10841.D	07/21/20 16:43	n/a	DFTPP Tune
S7G472-CC472	7G10842.D	07/21/20 17:01	n/a	Continuing cal 4
OP81120-MB	7G10843.D	07/21/20 17:25	OP81120	Method Blank
OP81126-MB	7G10845.D	07/21/20 18:13	OP81126	Method Blank
OP81126-BS	7G10846.D	07/21/20 18:38	OP81126	Blank Spike
ZZZZZZ	7G10847.D	07/21/20 19:02	OP81120	(unrelated sample)
ZZZZZZ	7G10848.D	07/21/20 19:26	OP81120	(unrelated sample)
ZZZZZZ	7G10849.D	07/21/20 19:50	OP81120	(unrelated sample)
ZZZZZZ	7G10850.D	07/21/20 20:14	OP81120	(unrelated sample)
ZZZZZZ	7G10851.D	07/21/20 20:37	OP81120	(unrelated sample)
FA76888-6	7G10852.D	07/21/20 21:01	OP81120	(used for QC only; not part of job FA78194)
OP81120-MS	7G10853.D	07/21/20 21:25	OP81120	Matrix Spike
OP81120-MSD	7G10854.D	07/21/20 21:48	OP81120	Matrix Spike Duplicate
ZZZZZZ	7G10855.D	07/21/20 22:12	OP81126	(unrelated sample)
ZZZZZZ	7G10856.D	07/21/20 22:35	OP81126	(unrelated sample)
ZZZZZZ	7G10857.D	07/21/20 22:59	OP81126	(unrelated sample)
FA76878-1	7G10858.D	07/21/20 23:23	OP81126	(used for QC only; not part of job FA78194)
OP81126-MS	7G10859.D	07/21/20 23:47	OP81126	Matrix Spike
OP81126-MSD	7G10860.D	07/22/20 00:10	OP81126	Matrix Spike Duplicate
ZZZZZZ	7G10861.D	07/22/20 00:34	OP81126	(unrelated sample)
ZZZZZZ	7G10862.D	07/22/20 00:58	OP81126	(unrelated sample)
ZZZZZZ	7G10863.D	07/22/20 01:22	OP81126	(unrelated sample)
ZZZZZZ	7G10864.D	07/22/20 01:45	OP81126	(unrelated sample)
ZZZZZZ	7G10865.D	07/22/20 02:09	OP81126	(unrelated sample)
ZZZZZZ	7G10867.D	07/22/20 02:56	OP81126	(unrelated sample)
ZZZZZZ	7G10868.D	07/22/20 03:20	OP81126	(unrelated sample)

Run Sequence Report

Job Number: FA78194
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Run ID: S7G494 **Method:** SW846 8270E BY SIM **Instrument ID:** GCMS7G

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
S7G494-DFTPP	7G11407.D	08/29/20 08:21	n/a	DFTPP Tune
S7G494-CC472	7G11408.D	08/29/20 08:39	n/a	Continuing cal 4
OP81782-BS	7G11409.D	08/29/20 09:04	OP81782	Blank Spike
OP81782-MB	7G11410.D	08/29/20 09:27	OP81782	Method Blank
ZZZZZZ	7G11411.D	08/29/20 10:05	OP81782	(unrelated sample)
ZZZZZZ	7G11412.D	08/29/20 10:28	OP81782	(unrelated sample)
ZZZZZZ	7G11413.D	08/29/20 10:52	OP81782	(unrelated sample)
OP81787-LBS	7G11414.D	08/29/20 11:15	OP81787	Blank Spike
OP81787-LB	7G11415.D	08/29/20 11:39	OP81787	Leachate Blank
ZZZZZZ	7G11416.D	08/29/20 12:02	OP81782	(unrelated sample)
ZZZZZZ	7G11417.D	08/29/20 12:26	OP81782	(unrelated sample)
ZZZZZZ	7G11418.D	08/29/20 12:49	OP81782	(unrelated sample)
ZZZZZZ	7G11419.D	08/29/20 13:13	OP81782	(unrelated sample)
FA78193-8	7G11420.D	08/29/20 13:37	OP81782	(used for QC only; not part of job FA78194)
OP81782-MS	7G11421.D	08/29/20 14:00	OP81782	Matrix Spike
OP81782-MSD	7G11422.D	08/29/20 14:24	OP81782	Matrix Spike Duplicate
ZZZZZZ	7G11423.D	08/29/20 14:48	OP81782	(unrelated sample)
ZZZZZZ	7G11424.D	08/29/20 15:11	OP81782	(unrelated sample)
ZZZZZZ	7G11425.D	08/29/20 15:35	OP81782	(unrelated sample)
FA78194-1	7G11426.D	08/29/20 15:59	OP81782	CS-TB-16A
FA78194-2	7G11427.D	08/29/20 16:22	OP81782	CS-53
FA78157-1	7G11428.D	08/29/20 16:46	OP81787	(used for QC only; not part of job FA78194)
OP81787-MS	7G11429.D	08/29/20 17:10	OP81787	Matrix Spike
OP81787-MSD	7G11430.D	08/29/20 17:33	OP81787	Matrix Spike Duplicate
ZZZZZZ	7G11431.D	08/29/20 17:57	OP81787	(unrelated sample)
ZZZZZZ	7G11432.D	08/29/20 18:20	OP81787	(unrelated sample)
ZZZZZZ	7G11433.D	08/29/20 18:44	OP81787	(unrelated sample)

Run Sequence Report

Job Number: FA78194
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Run ID: SX2953 **Method:** SW846 8270D **Instrument ID:** GCMSX

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
SX2953-DFTPP	X072418.D	08/17/20 10:03	n/a	DFTPP Tune
SX2953-IC2953	X072419.D	08/17/20 10:20	n/a	Initial cal 1
SX2953-IC2953	X072420.D	08/17/20 10:46	n/a	Initial cal 5
SX2953-IC2953	X072421.D	08/17/20 11:11	n/a	Initial cal 10
SX2953-IC2953	X072422.D	08/17/20 11:37	n/a	Initial cal 25
SX2953-ICC2953	X072423.D	08/17/20 12:03	n/a	Initial cal 50
SX2953-IC2953	X072424.D	08/17/20 12:28	n/a	Initial cal 60
SX2953-IC2953	X072425.D	08/17/20 12:54	n/a	Initial cal 75
SX2953-IC2953	X072426.D	08/17/20 13:20	n/a	Initial cal 100
SX2953-IC2953	X072427.D	08/17/20 13:46	n/a	Initial cal 1
SX2953-IC2953	X072428.D	08/17/20 14:12	n/a	Initial cal 5
SX2953-IC2953	X072429.D	08/17/20 14:38	n/a	Initial cal 10
SX2953-IC2953	X072430.D	08/17/20 15:04	n/a	Initial cal 25
SX2953-IC2953	X072431.D	08/17/20 15:30	n/a	Initial cal 50
SX2953-IC2953	X072432.D	08/17/20 15:55	n/a	Initial cal 60
SX2953-IC2953	X072433.D	08/17/20 16:21	n/a	Initial cal 75
SX2953-IC2953	X072434.D	08/17/20 16:46	n/a	Initial cal 100
SX2953-ICV2953	X072435.D	08/17/20 17:12	n/a	Initial cal verification 50
SX2953-ICV2953	X072436.D	08/17/20 17:38	n/a	Initial cal verification 50
SX2953-ICV2953	X072437.D	08/17/20 18:03	n/a	Initial cal verification 50
SX2953-ICV2953	X072438.D	08/17/20 18:29	n/a	Initial cal verification 50
SX2953-ICV2953	X072439.D	08/17/20 18:54	n/a	Initial cal verification 50

Run Sequence Report

Job Number: FA78194
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Run ID: SX2960	**Method:** SW846 8270E	**Instrument ID:** GCMSX

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
SX2960-DFTPP	X072583.D	08/28/20 13:53	n/a	DFTPP Tune
SX2960-CC2953	X072584.D	08/28/20 14:10	n/a	Continuing cal 50
OP81781-BS	X072585.D	08/28/20 14:38	OP81781	Blank Spike
OP81781-MB	X072586.D	08/28/20 15:04	OP81781	Method Blank
ZZZZZZ	X072587.D	08/28/20 15:30	OP81781	(unrelated sample)
OP81775-BS	X072588.D	08/28/20 15:56	OP81775	Blank Spike
OP81775-MB	X072589.D	08/28/20 16:22	OP81775	Method Blank
ZZZZZZ	X072590.D	08/28/20 16:47	OP81775	(unrelated sample)
ZZZZZZ	X072591.D	08/28/20 17:14	OP81775	(unrelated sample)
ZZZZZZ	X072592.D	08/28/20 17:39	OP81781	(unrelated sample)
ZZZZZZ	X072593.D	08/28/20 18:05	OP81781	(unrelated sample)
ZZZZZZ	X072594.D	08/28/20 18:31	OP81781	(unrelated sample)
ZZZZZZ	X072595.D	08/28/20 18:57	OP81781	(unrelated sample)
ZZZZZZ	X072596.D	08/28/20 19:23	OP81781	(unrelated sample)
ZZZZZZ	X072597.D	08/28/20 19:49	OP81781	(unrelated sample)
FA78193-8	X072598.D	08/28/20 20:14	OP81781	(used for QC only; not part of job FA78194)
OP81781-MS	X072599.D	08/28/20 20:40	OP81781	Matrix Spike
OP81781-MSD	X072600.D	08/28/20 21:06	OP81781	Matrix Spike Duplicate
ZZZZZZ	X072601.D	08/28/20 21:31	OP81781	(unrelated sample)
ZZZZZZ	X072602.D	08/28/20 21:57	OP81781	(unrelated sample)
ZZZZZZ	X072603.D	08/28/20 22:23	OP81781	(unrelated sample)
FA78194-1	X072604.D	08/28/20 22:48	OP81781	CS-TB-16A
FA78194-2	X072605.D	08/28/20 23:14	OP81781	CS-53
FA78191-1	X072606.D	08/28/20 23:39	OP81775	(used for QC only; not part of job FA78194)
OP81775-MS	X072607.D	08/29/20 00:05	OP81775	Matrix Spike
OP81775-MSD	X072608.D	08/29/20 00:30	OP81775	Matrix Spike Duplicate
ZZZZZZ	X072609.D	08/29/20 00:55	OP81775	(unrelated sample)
ZZZZZZ	X072610.D	08/29/20 01:21	OP81775	(unrelated sample)

Run Sequence Report

Job Number: FA78194
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Run ID: SX2961	**Method:** SW846 8270D	**Instrument ID:** GCMSX

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
SX2961-DFTPP	X072613.D	08/29/20 11:24	n/a	DFTPP Tune
SX2961-CC2953	X072614.D	08/29/20 11:41	n/a	Continuing cal 50
ZZZZZZ	X072615.D	08/29/20 12:07	OP81775	(unrelated sample)
OP81786-LBS	X072616.D	08/29/20 12:32	OP81786	Blank Spike
OP81786-LB	X072617.D	08/29/20 12:57	OP81786	Leachate Blank
FA78194-1	X072618.D	08/29/20 13:23	OP81781	CS-TB-16A
ZZZZZZ	X072619.D	08/29/20 13:49	OP81786	(unrelated sample)
ZZZZZZ	X072620.D	08/29/20 14:14	OP81786	(unrelated sample)
ZZZZZZ	X072621.D	08/29/20 14:40	OP81786	(unrelated sample)
ZZZZZZ	X072622.D	08/29/20 15:05	OP81786	(unrelated sample)
ZZZZZZ	X072623.D	08/29/20 15:31	OP81786	(unrelated sample)
ZZZZZZ	X072624.D	08/29/20 15:56	OP81786	(unrelated sample)
FA78133-7L	X072625.D	08/29/20 16:22	OP81786	(used for QC only; not part of job FA78194)
OP81786-MS	X072626.D	08/29/20 16:48	OP81786	Matrix Spike
OP81786-MSD	X072627.D	08/29/20 17:13	OP81786	Matrix Spike Duplicate
ZZZZZZ	X072628.D	08/29/20 17:39	OP81786	(unrelated sample)
ZZZZZZ	X072629.D	08/29/20 18:04	OP81786	(unrelated sample)
ZZZZZZ	X072630.D	08/29/20 18:30	OP81786	(unrelated sample)
ZZZZZZ	X072631.D	08/29/20 18:55	OP81786	(unrelated sample)
FA78196-2L	X072632.D	08/29/20 19:21	OP81786	(used for QC only; not part of job FA78194)
OP81786-DUP	X072633.D	08/29/20 19:46	OP81786	Duplicate
ZZZZZZ	X072634.D	08/29/20 20:11	OP81786	(unrelated sample)

MS Semi-volatiles

Raw Data

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan
08/31/20 11:36

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0828_sx2960\
Data File : x072604.D
Acq On : 28 Aug 2020 10:48 pm
Operator : marthav
Sample : fa78194-1 E Inst : MSBNA05
Misc : op81781,sx2960,29.8,,,1,1,soil
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Aug 29 10:19:58 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Aug 18 13:05:00 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.564	152	218083	40.00	ppm	0.00
22) Naphthalene-d8	6.986	136	875969	40.00	ppm	0.00
43) Acenaphthene-d10	9.024	164	454039	40.00	ppm	0.00
70) Phenanthrene-d10	10.762	188	778094	40.00	ppm	0.00
92) Chrysene-d12	13.982	240	599117	40.00	ppm	0.03
102) Perylene-d12	16.143	264	504410	40.00	ppm	0.05
110) 1,4-Dichlorobenzene-d4A	5.564	152	218083	40.00	ppm	0.00
120) Naphthalene-d8A	6.986	136	875969	40.00	ppm	0.00
127) Acenaphthene-d10A	9.024	164	454039	40.00	ppm	0.00
136) Phenanthrene-d10A	10.762	188	778094	40.00	ppm	0.00
146) Chrysene-d12A	13.982	240	599117	40.00	ppm	0.03
153) Perylene-d12A	16.143	264	504410	40.00	ppm	0.05
System Monitoring Compounds						
7) 2-Fluorophenol	4.253	112	407690	49.05	ppm	0.00
Spiked Amount 100.000	Range 40 - 102		Recovery = 49.05%			
9) Phenol-d5	5.280	99	566562	58.15	ppm	-0.01
Spiked Amount 100.000	Range 41 - 100		Recovery = 58.15%			
23) Nitrobenzene-d5	6.184	82	241034	24.65	ppm	0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 49.30%			
47) 2-Fluorobiphenyl	8.254	172	426562	23.36	ppm	0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 46.72%			
75) 2,4,6-Tribromophenol	9.960	330	82543	49.48	ppm	0.00
Spiked Amount 100.000	Range 42 - 108		Recovery = 49.48%			
95) Terphenyl-d14	12.688	244	438070	25.36	ppm	0.01
Spiked Amount 50.000	Range 45 - 119		Recovery = 50.72%			
Target Compounds						Qvalue
5) Benzaldehyde	5.098	106	1953	0.29	ppm	95
18) Acetophenone	6.024	105	1761	0.16	ppm	92
30) Benzoic Acid	6.810	105	3256	0.86	ppm	81
34) Naphthalene	7.008	128	21621	0.87	ppm	99
40) 2-Methylnaphthalene	7.810	142	8513	0.53	ppm	98
41) 1-Methylnaphthalene	7.922	142	3171	0.21	ppm	95
48) 1,1'-Biphenyl	8.366	154	2424	0.12	ppm	98
52) Acenaphthylene	8.853	152	298441	12.44	ppm	99
57) Acenaphthene	9.056	153	11954	0.75	ppm	94
60) Dibenzofuran	9.265	168	14978	0.71	ppm	96
65) Fluorene	9.666	166	19158	1.14	ppm	88
84) Phenanthrene	10.789	178	73575	3.00	ppm	98
85) Anthracene	10.853	178	695638	27.39	ppm	98
87) Carbazole	11.073	167	136023	6.02	ppm	99
91) Fluoranthene	12.212	202	3425990	146.79	ppm	98
94) Pyrene	12.485	202	5325091	210.57	ppm	97
99) Benzo[a]anthracene	13.972	228	1893932	95.05	ppm	98
100) Chrysene	14.020	228	2000156	95.08	ppm	98
104) Benzo[b]fluoranthene	15.523	252	2975906	171.06	ppm	96
105) Benzo[k]fluoranthene	15.565	252	712881m	38.56	ppm	
106) Benzo[a]pyrene	16.052	252	1043338	68.06	ppm	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0828_sx2960\
Data File : x072604.D
Acq On : 28 Aug 2020 10:48 pm
Operator : marthav
Sample : fa78194-1 E Inst : MSBNA05
Misc : op81781,sx2960,29.8,,,1,1,soil
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Aug 29 10:19:58 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Aug 18 13:05:00 2020
Response via : Initial Calibration

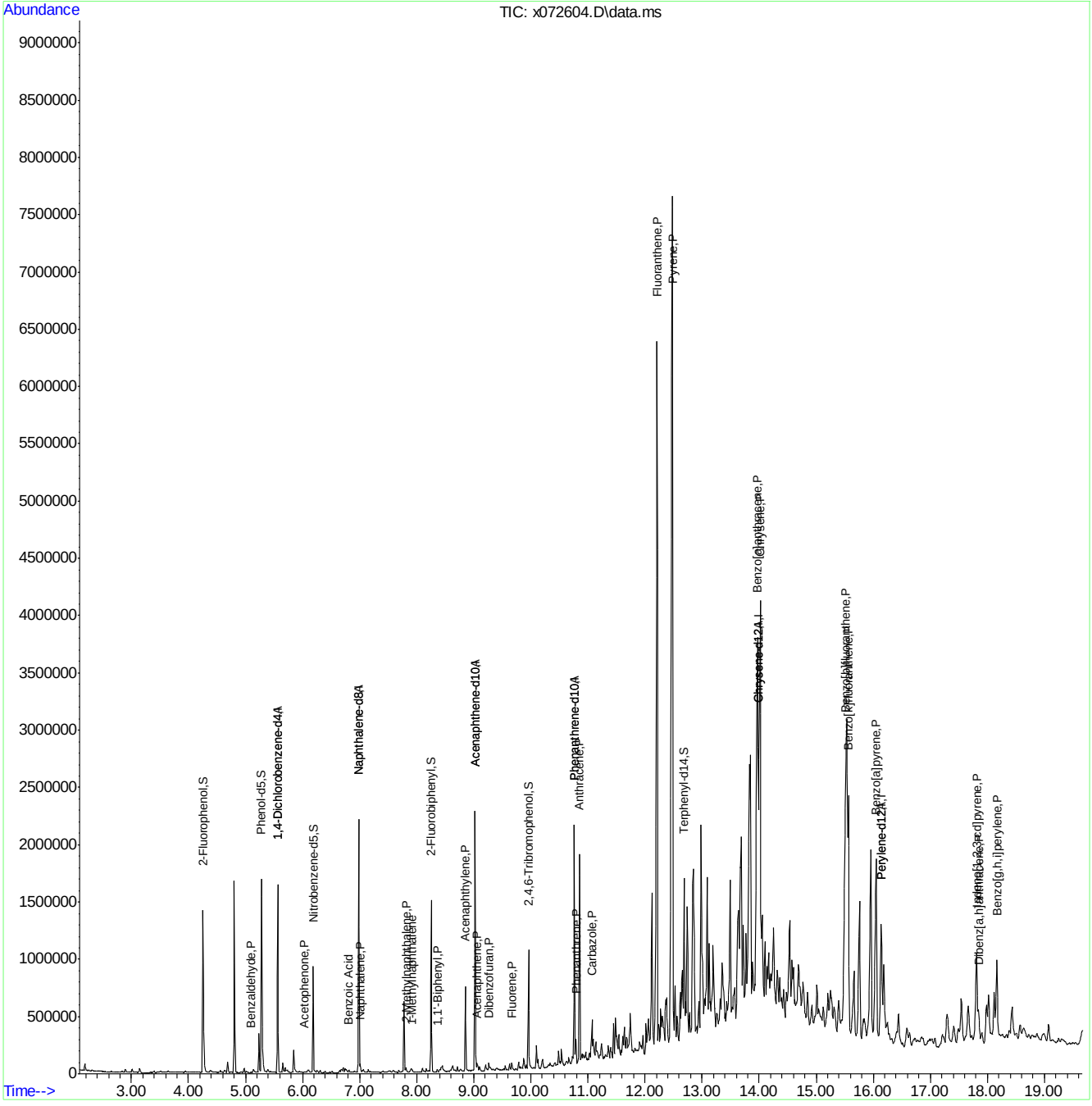
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
107) Indeno[1,2,3-cd]pyrene	17.812	276	530398	40.55	ppm	85
108) Dibenz[a,h]anthracene	17.844	278	118398	8.17	ppm	88
109) Benzo[g,h,i]perylene	18.165	276	396940	26.00	ppm	86

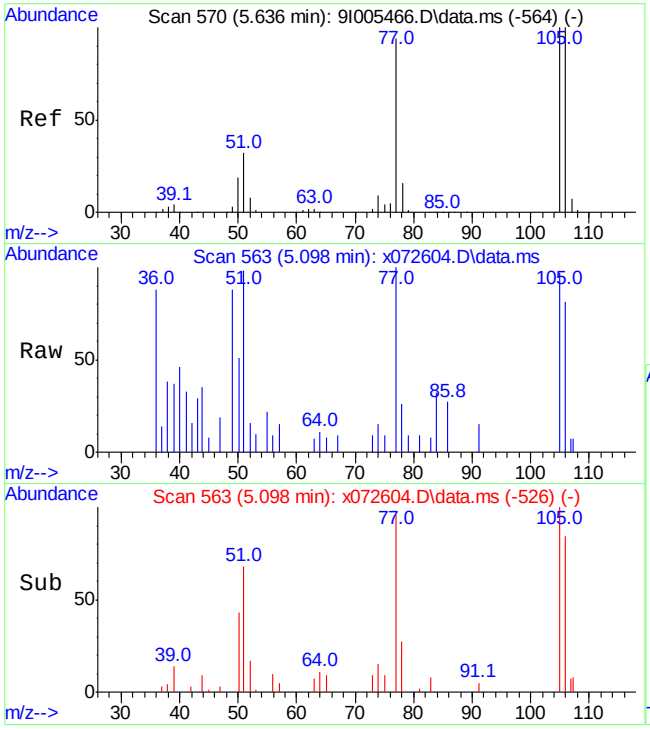
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0828_sx2960\
Data File : x072604.D
Acq On : 28 Aug 2020 10:48 pm
Operator : marthav
Sample : fa78194-1 E Inst : MSBNA05
Misc : op81781,sx2960,29.8,,,1,1,soil
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Aug 29 10:19:58 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Aug 18 13:05:00 2020
Response via : Initial Calibration

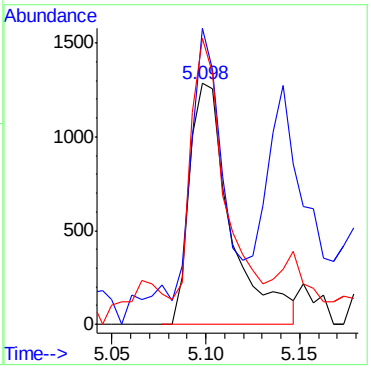


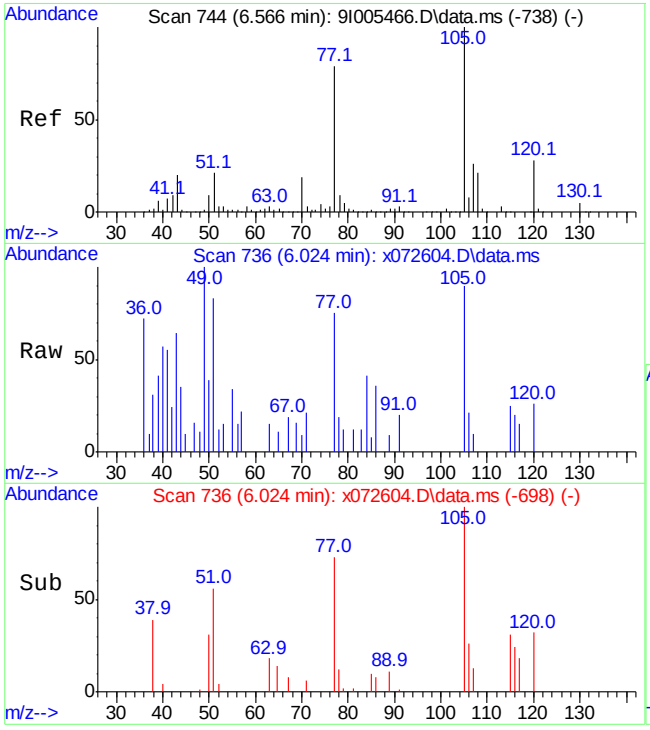


#5
Benzaldehyde
Concen: 0.29 ppm
RT: 5.098 min Scan# 563
Delta R.T. -0.001 min
Lab File: x072604.D
Acq: 28 Aug 2020 10:48 pm

Tgt Ion:106 Resp: 1953

Ion	Ratio	Lower	Upper
106	100		
77	85.7	63.9	123.9
105	102.5	70.0	130.0

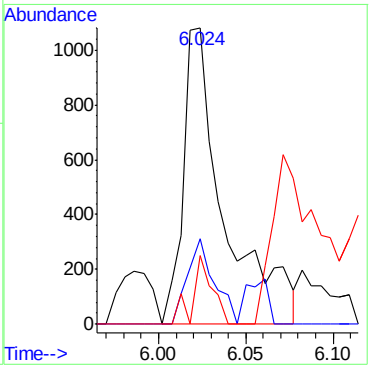


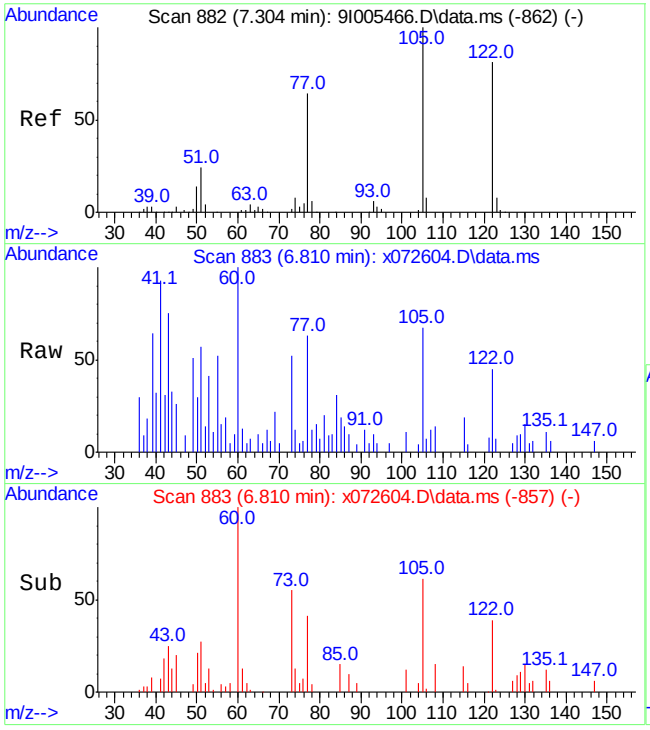


#18
Acetophenone
Concen: 0.16 ppm
RT: 6.024 min Scan# 736
Delta R.T. 0.001 min
Lab File: x072604.D
Acq: 28 Aug 2020 10:48 pm

Tgt Ion:105 Resp: 1761

Ion	Ratio	Lower	Upper
105	100		
120	30.4	0.0	58.3
106	0.0	0.0	38.0

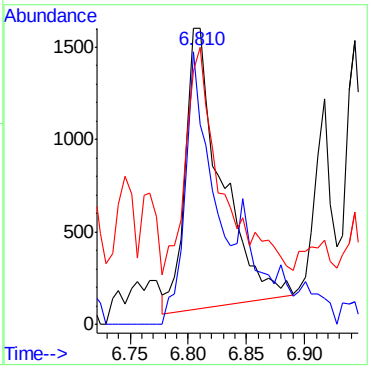


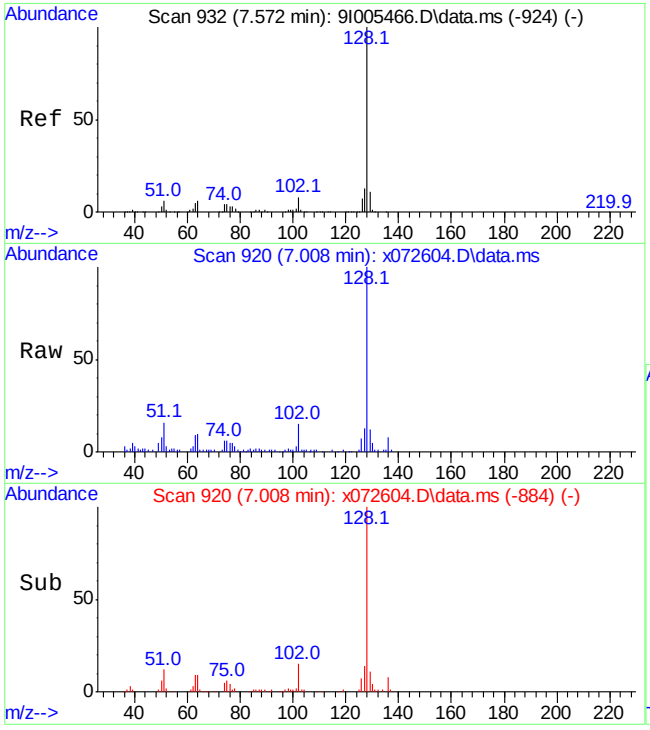


#30
Benzoic Acid
Concen: 0.86 ppm
RT: 6.810 min Scan# 883
Delta R.T. -0.059 min
Lab File: x072604.D
Acq: 28 Aug 2020 10:48 pm

Tgt Ion:105 Resp: 3256

Ion	Ratio	Lower	Upper
105	100		
122	69.7	51.2	111.2
77	85.0	34.1	94.1

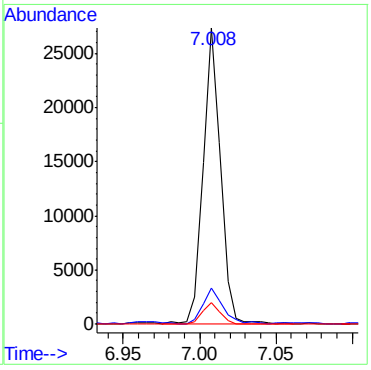


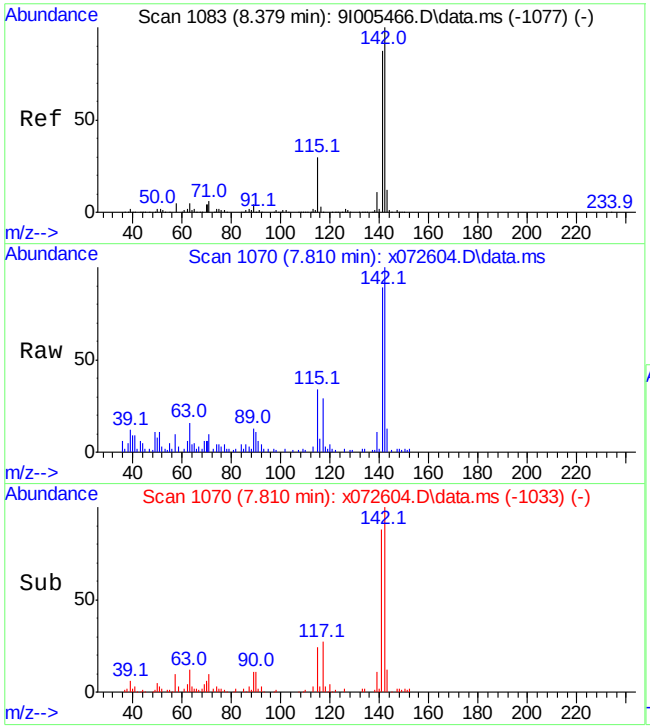


#34
Naphthalene
Concen: 0.87 ppm
RT: 7.008 min Scan# 920
Delta R.T. -0.005 min
Lab File: x072604.D
Acq: 28 Aug 2020 10:48 pm

Tgt Ion:128 Resp: 21621

Ion	Ratio	Lower	Upper
128	100		
129	11.5	0.0	41.4
126	7.1	0.0	37.4

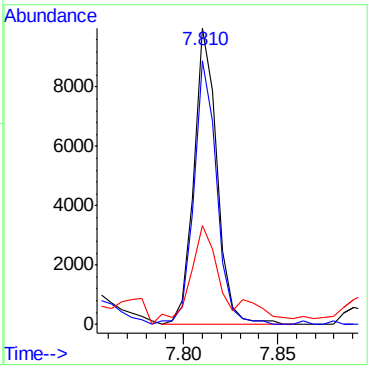


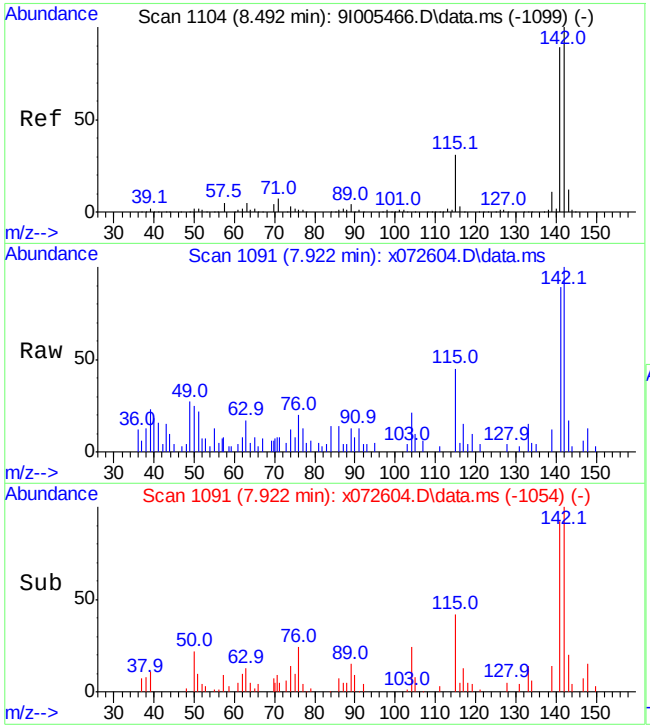


#40
2-Methylnaphthalene
Concen: 0.53 ppm
RT: 7.810 min Scan# 1070
Delta R.T. -0.004 min
Lab File: x072604.D
Acq: 28 Aug 2020 10:48 pm

Tgt Ion:142 Resp: 8513

Ion	Ratio	Lower	Upper
142	100		
141	88.4	56.8	116.8
115	30.8	0.0	60.0

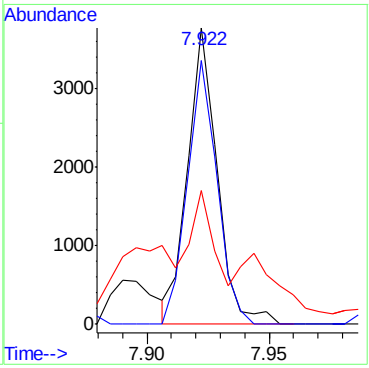


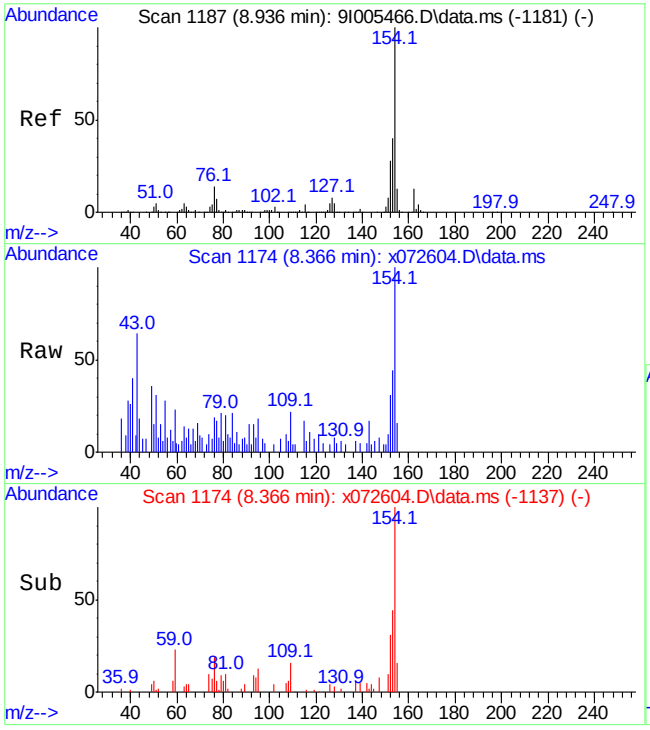


#41
1-Methylnaphthalene
Concen: 0.21 ppm
RT: 7.922 min Scan# 1091
Delta R.T. -0.004 min
Lab File: x072604.D
Acq: 28 Aug 2020 10:48 pm

Tgt Ion:142 Resp: 3171

Ion	Ratio	Lower	Upper
142	100		
141	92.7	59.0	119.0
115	25.9	1.1	61.1

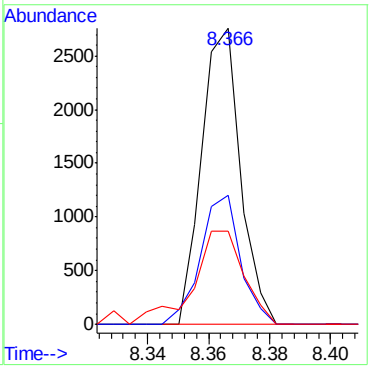


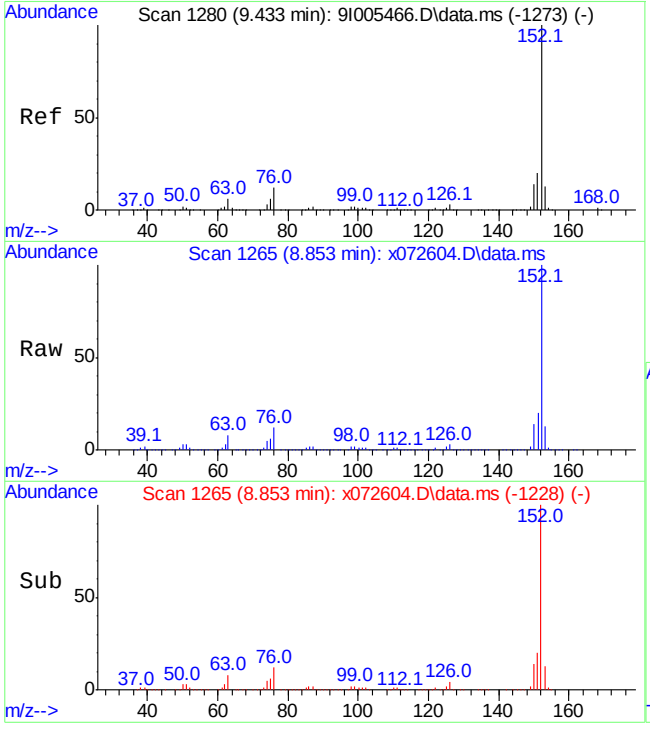


#48
1,1'-Biphenyl
Concen: 0.12 ppm
RT: 8.366 min Scan# 1174
Delta R.T. -0.002 min
Lab File: x072604.D
Acq: 28 Aug 2020 10:48 pm

Tgt Ion:154 Resp: 2424

Ion	Ratio	Lower	Upper
154	100		
153	43.5	11.2	71.2
152	28.4	0.0	58.1

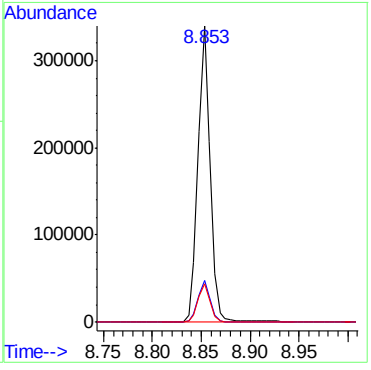


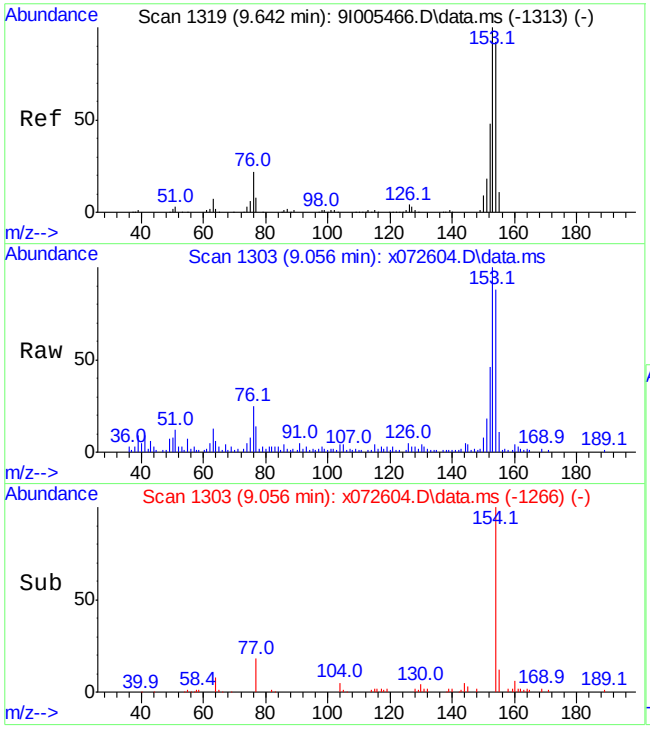


#52
Acenaphthylene
Concen: 12.44 ppm
RT: 8.853 min Scan# 1265
Delta R.T. -0.000 min
Lab File: x072604.D
Acq: 28 Aug 2020 10:48 pm

Tgt Ion:152 Resp: 298441

Ion	Ratio	Lower	Upper
152	100		
150	13.9	0.0	44.3
153	12.9	0.0	43.3

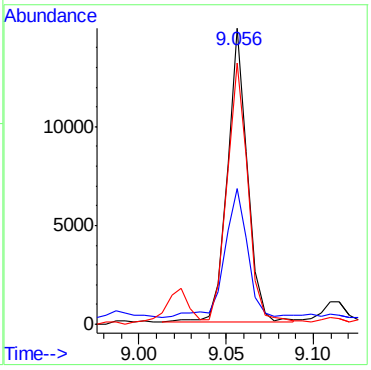


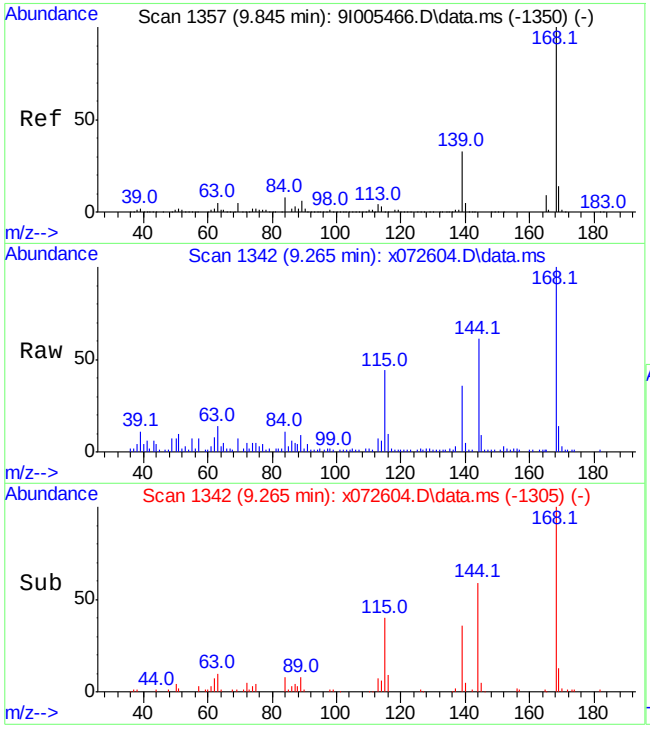


#57
Acenaphthene
Concen: 0.75 ppm
RT: 9.056 min Scan# 1303
Delta R.T. 0.000 min
Lab File: x072604.D
Acq: 28 Aug 2020 10:48 pm

Tgt Ion:153 Resp: 11954

Ion	Ratio	Lower	Upper
153	100		
152	43.9	18.4	78.4
154	86.9	62.4	122.4

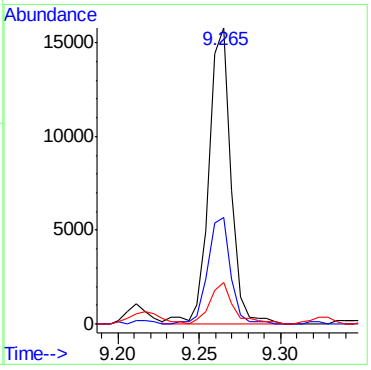


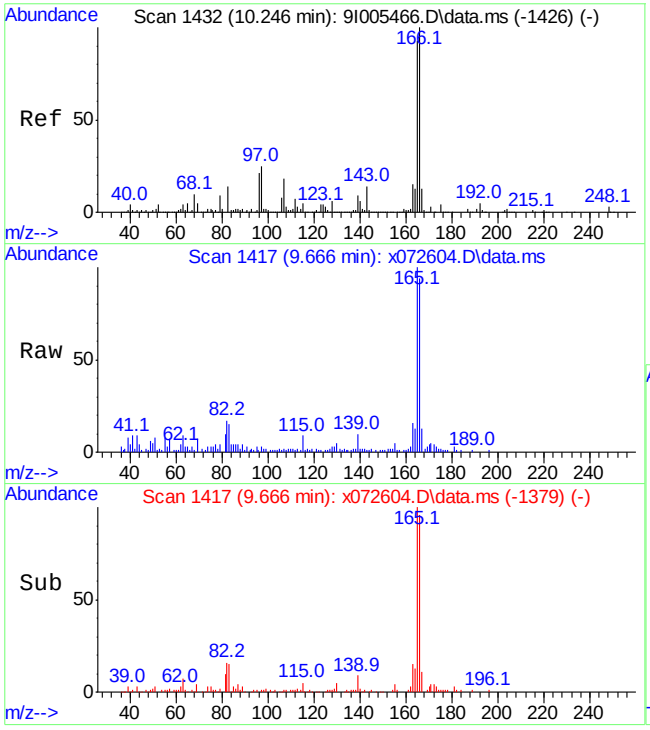


#60
Dibenzofuran
Concen: 0.71 ppm
RT: 9.265 min Scan# 1342
Delta R.T. 0.001 min
Lab File: x072604.D
Acq: 28 Aug 2020 10:48 pm

Tgt Ion:168 Resp: 14978

Ion	Ratio	Lower	Upper
168	100		
139	36.2	3.0	63.0
169	13.2	0.0	43.5

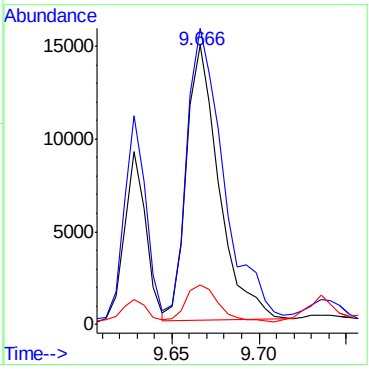


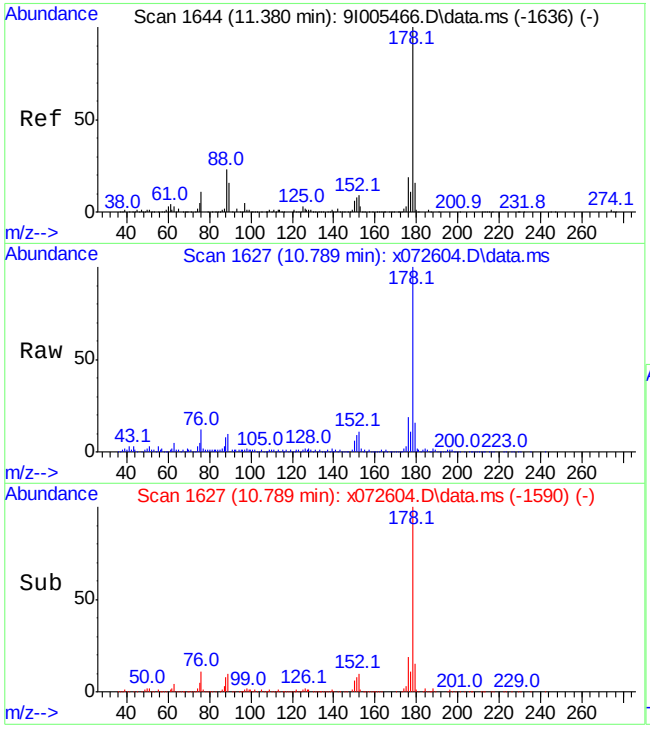


#65
Fluorene
Concen: 1.14 ppm
RT: 9.666 min Scan# 1417
Delta R.T. 0.001 min
Lab File: x072604.D
Acq: 28 Aug 2020 10:48 pm

Tgt Ion:166 Resp: 19158

Ion	Ratio	Lower	Upper
166	100		
165	105.1	62.7	122.7
167	12.5	0.0	43.5

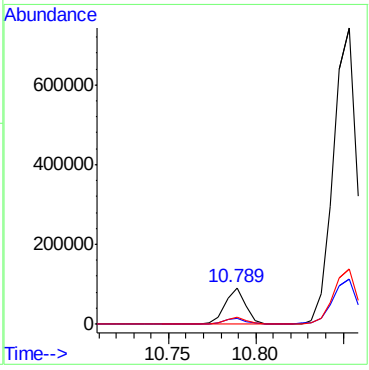


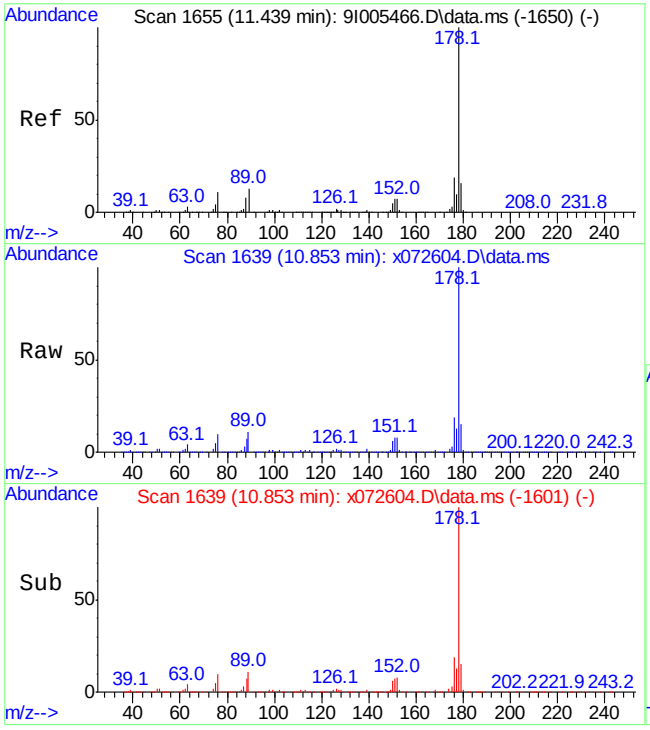


#84
Phenanthrene
Concen: 3.00 ppm
RT: 10.789 min Scan# 1627
Delta R.T. 0.000 min
Lab File: x072604.D
Acq: 28 Aug 2020 10:48 pm

Tgt Ion:178 Resp: 73575

Ion	Ratio	Lower	Upper
178	100		
179	15.1	0.0	45.8
176	18.5	0.0	49.3

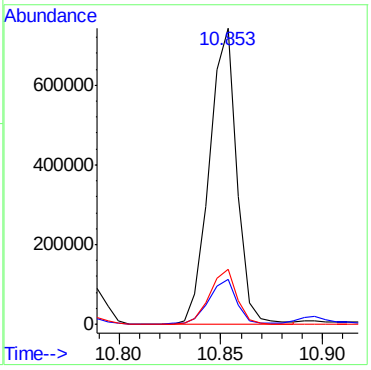


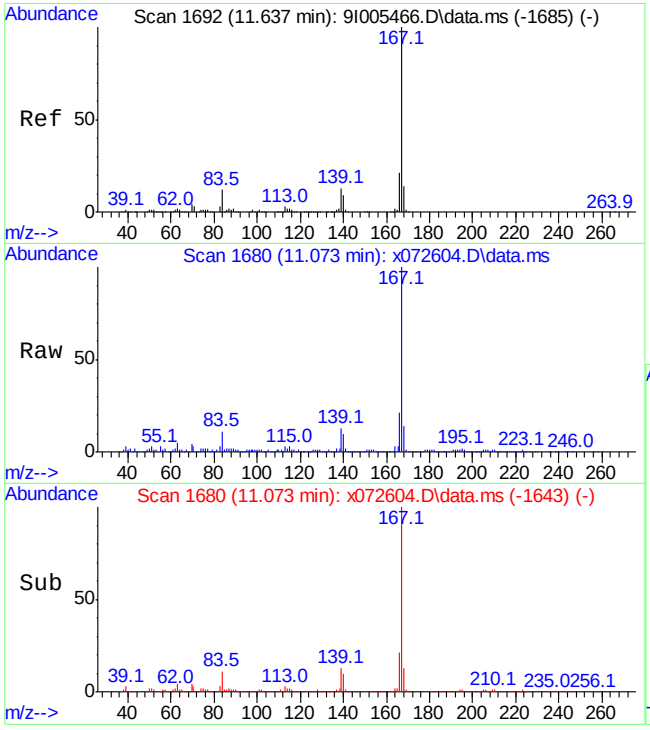


#85
Anthracene
Concen: 27.39 ppm
RT: 10.853 min Scan# 1639
Delta R.T. 0.006 min
Lab File: x072604.D
Acq: 28 Aug 2020 10:48 pm

Tgt Ion:178 Resp: 695638

Ion	Ratio	Lower	Upper
178	100		
179	14.6	0.0	46.0
176	18.6	0.0	49.3

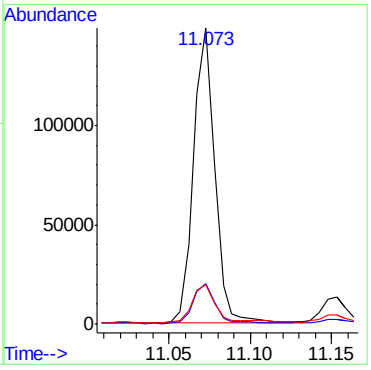


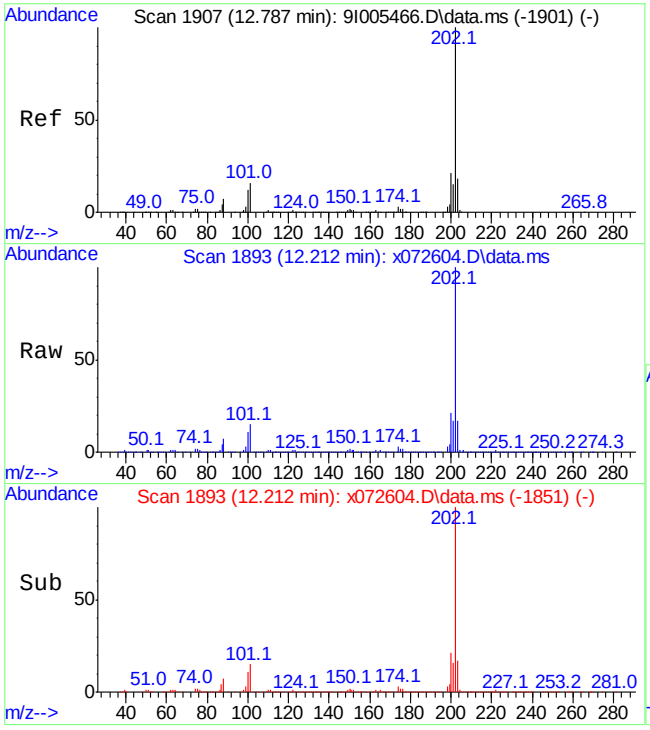


#87
Carbazole
Concen: 6.02 ppm
RT: 11.073 min Scan# 1680
Delta R.T. 0.001 min
Lab File: x072604.D
Acq: 28 Aug 2020 10:48 pm

Tgt Ion:167 Resp: 136023

Ion	Ratio	Lower	Upper
167	100		
168	13.6	0.0	43.9
139	12.8	0.0	42.7

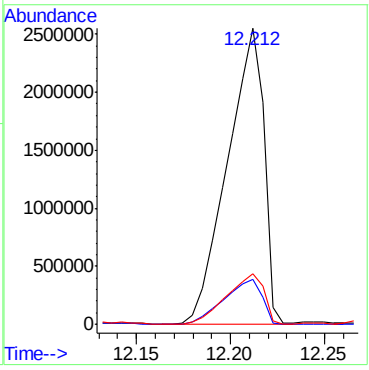


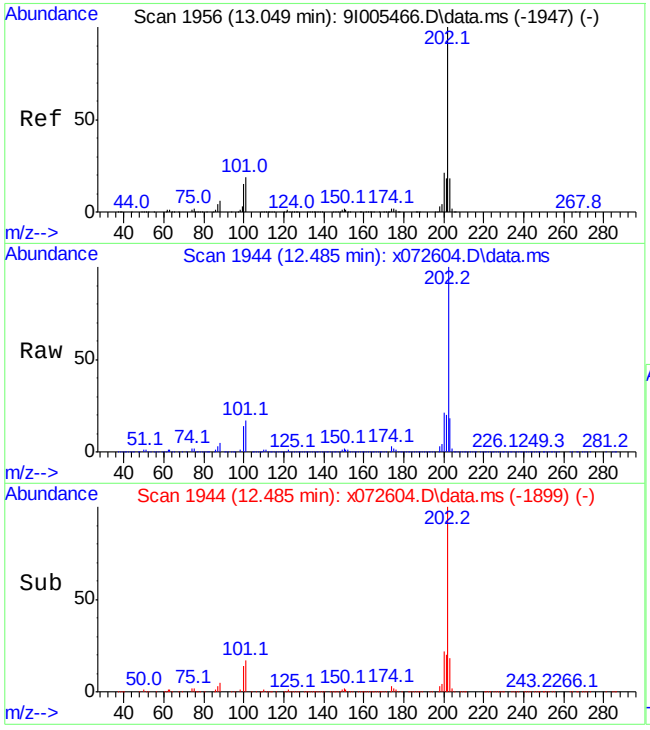


#91
Fluoranthene
Concen: 146.79 ppm
RT: 12.212 min Scan# 1893
Delta R.T. 0.024 min
Lab File: x072604.D
Acq: 28 Aug 2020 10:48 pm

Tgt Ion:202 Resp: 3425990

Ion	Ratio	Lower	Upper
202	100		
101	15.0	0.0	45.8
203	17.2	0.0	48.1

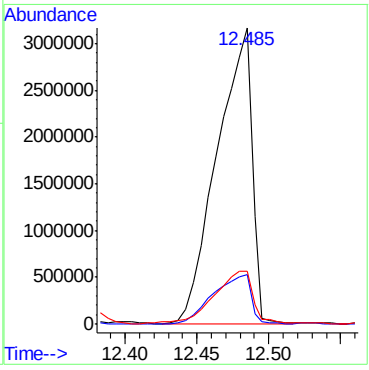


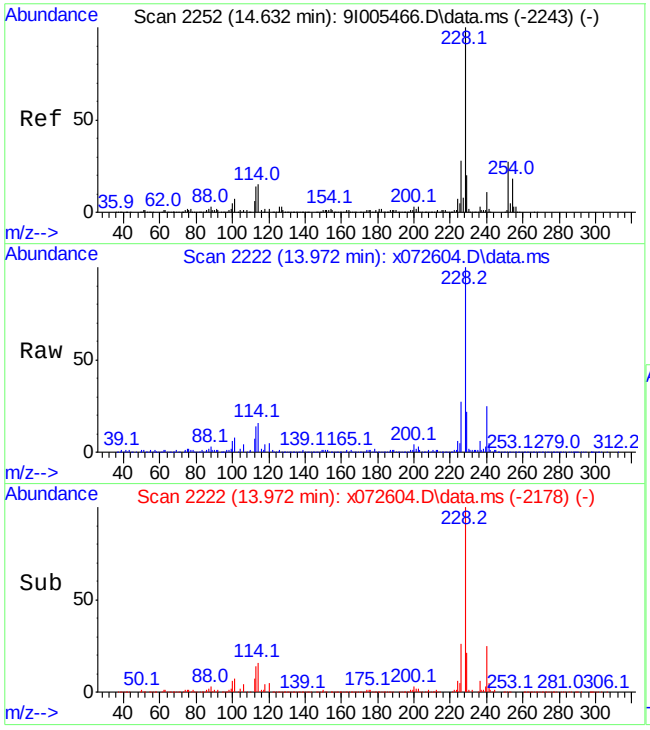


#94
Pyrene
Concen: 210.57 ppm
RT: 12.485 min Scan# 1944
Delta R.T. 0.041 min
Lab File: x072604.D
Acq: 28 Aug 2020 10:48 pm

Tgt Ion:202 Resp: 5325091

Ion	Ratio	Lower	Upper
202	100		
101	16.7	0.0	48.7
203	17.3	0.0	48.4

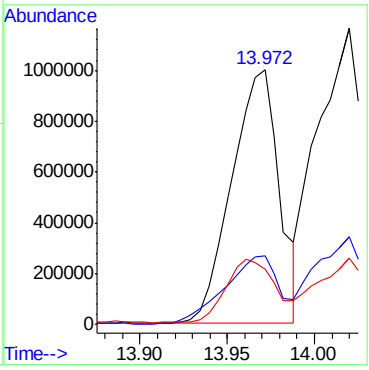


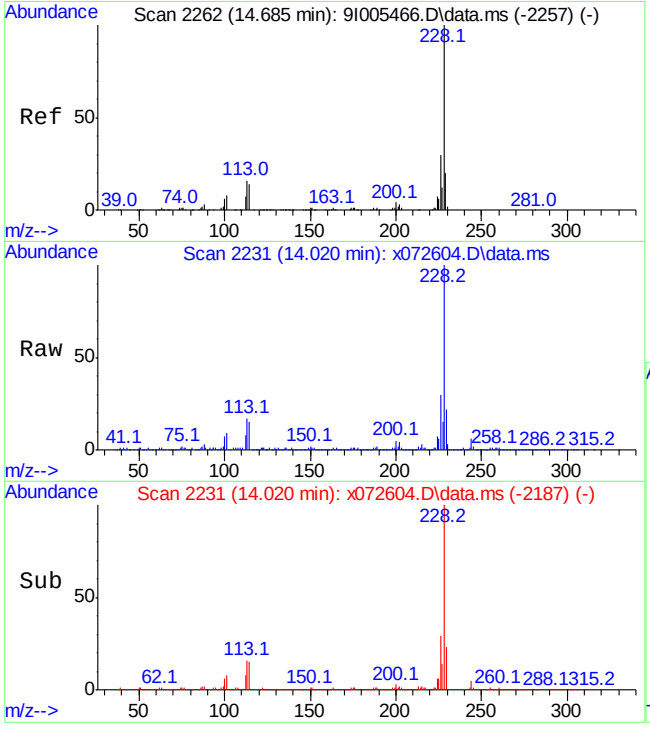


#99
Benzo[a]anthracene
Concen: 95.05 ppm
RT: 13.972 min Scan# 2222
Delta R.T. 0.037 min
Lab File: x072604.D
Acq: 28 Aug 2020 10:48 pm

Tgt Ion:228 Resp: 1893932

Ion	Ratio	Lower	Upper
228	100		
226	25.9	0.0	57.5
229	20.0	0.0	49.9

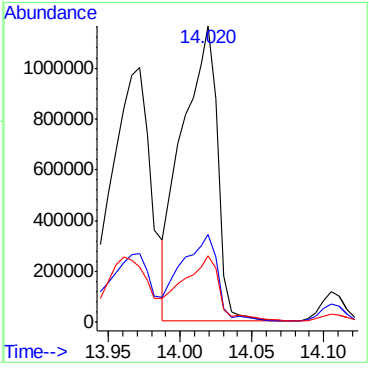


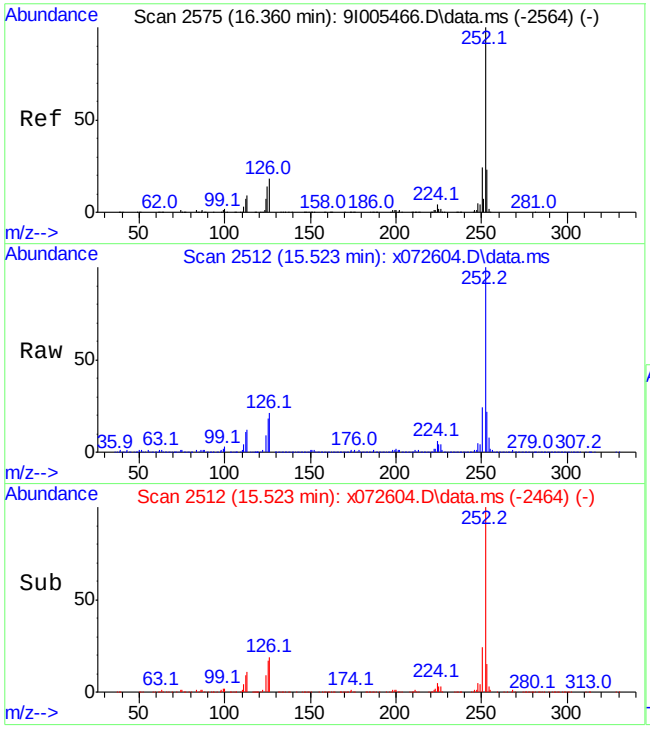


#100
Chrysene
Concen: 95.08 ppm
RT: 14.020 min Scan# 2231
Delta R.T. 0.038 min
Lab File: x072604.D
Acq: 28 Aug 2020 10:48 pm

Tgt Ion:228 Resp: 2000156

Ion	Ratio	Lower	Upper
228	100		
226	29.3	0.4	60.4
229	21.3	0.0	50.1

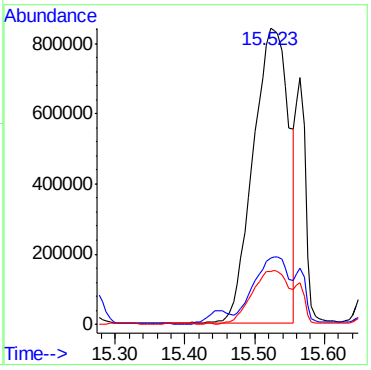


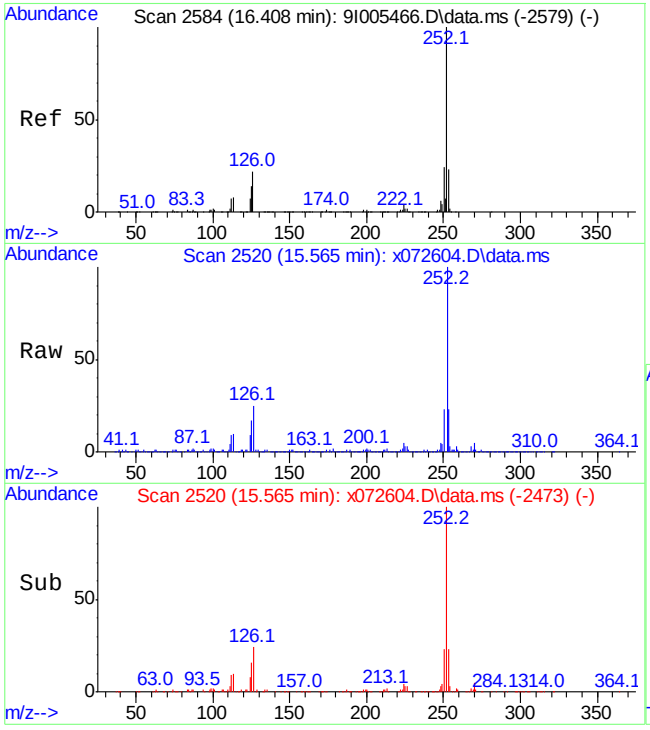


#104
Benzo[b]fluoranthene
Concen: 171.06 ppm
RT: 15.523 min Scan# 2512
Delta R.T. 0.058 min
Lab File: x072604.D
Acq: 28 Aug 2020 10:48 pm

Tgt Ion:252 Resp: 2975906

Ion	Ratio	Lower	Upper
252	100		
253	21.9	0.0	52.5
125	17.5	0.0	44.0

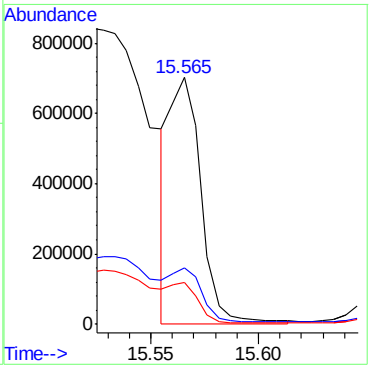


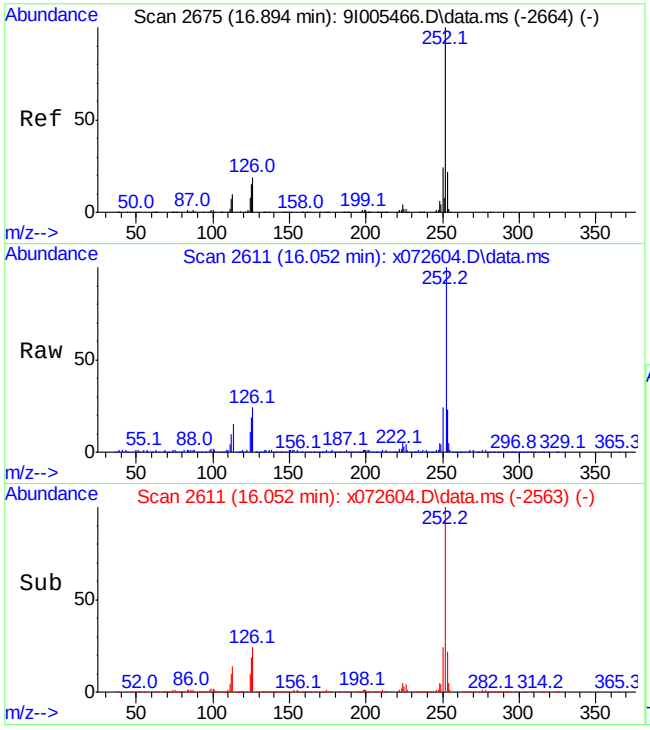


#105
Benzo[k]fluoranthene
Concen: 38.56 ppm m
RT: 15.565 min Scan# 2520
Delta R.T. 0.053 min
Lab File: x072604.D
Acq: 28 Aug 2020 10:48 pm

Tgt Ion:252 Resp: 712881

Ion	Ratio	Lower	Upper
252	100		
253	23.0	0.0	52.5
125	16.8	0.0	44.4

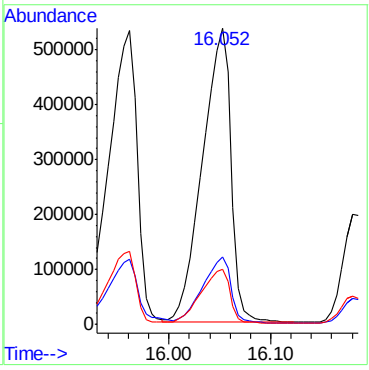


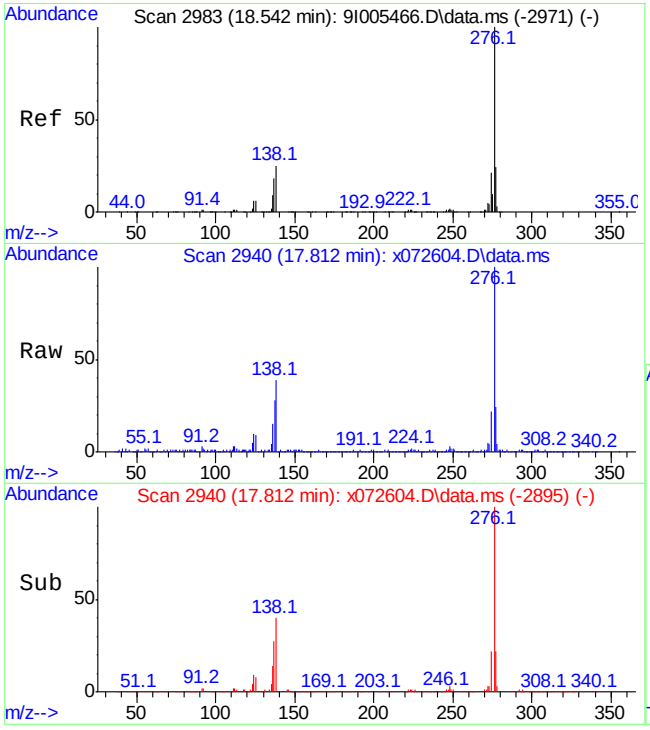


#106
Benzo[a]pyrene
Concen: 68.06 ppm
RT: 16.052 min Scan# 2611
Delta R.T. 0.059 min
Lab File: x072604.D
Acq: 28 Aug 2020 10:48 pm

Tgt Ion:252 Resp: 1043338

Ion	Ratio	Lower	Upper
252	100		
253	21.9	0.0	52.3
125	18.4	0.0	44.7

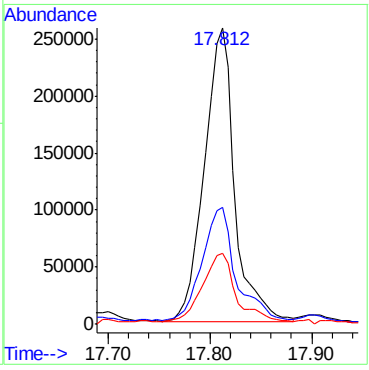


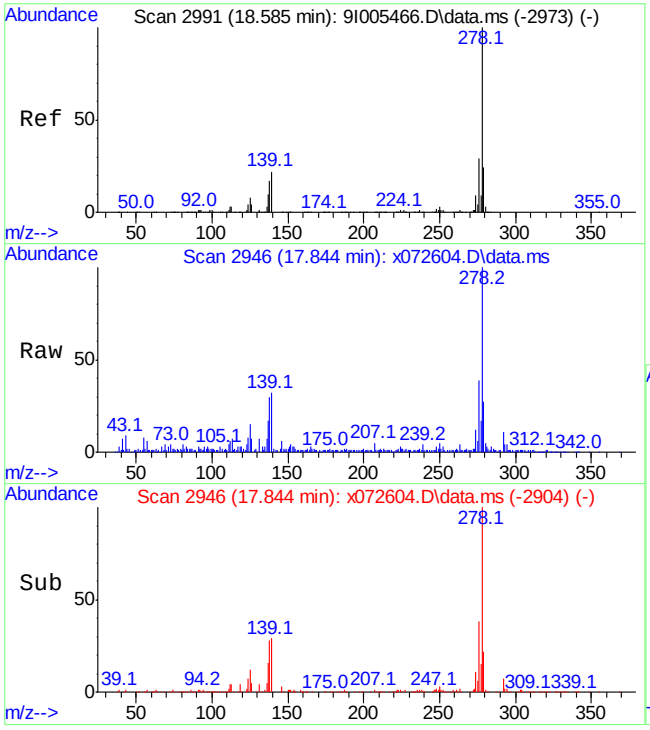


#107
Indeno[1,2,3-cd]pyrene
Concen: 40.55 ppm
RT: 17.812 min Scan# 2940
Delta R.T. 0.040 min
Lab File: x072604.D
Acq: 28 Aug 2020 10:48 pm

Tgt Ion:276 Resp: 530398

Ion	Ratio	Lower	Upper
276	100		
138	38.5	0.0	54.7
277	23.3	0.0	53.8

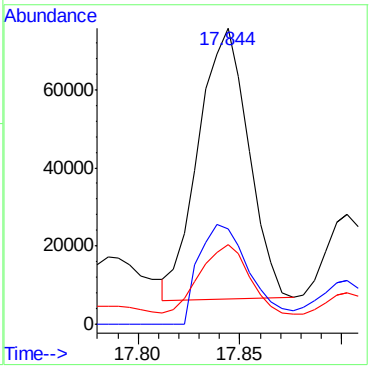


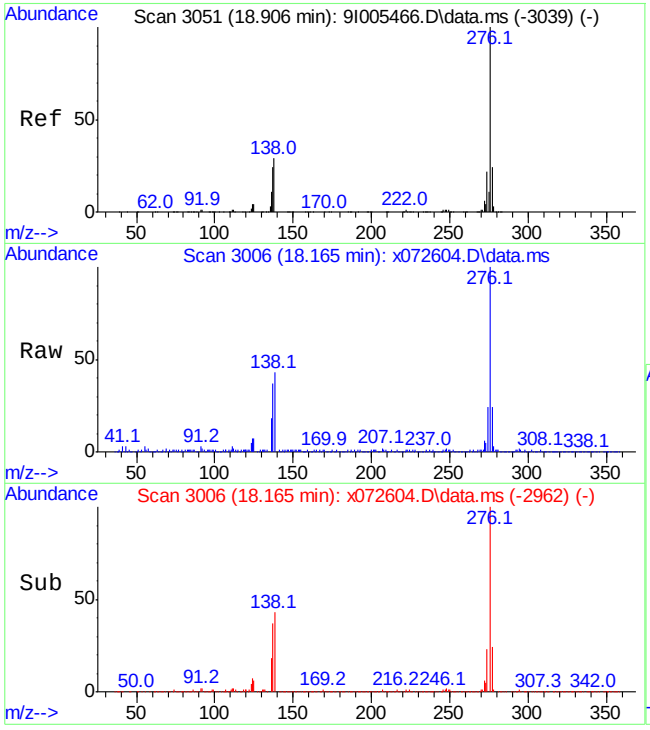


#108
Dibenz[a,h]anthracene
Concen: 8.17 ppm
RT: 17.844 min Scan# 2946
Delta R.T. 0.024 min
Lab File: x072604.D
Acq: 28 Aug 2020 10:48 pm

Tgt Ion:278 Resp: 118398

Ion	Ratio	Lower	Upper
278	100		
139	32.1	0.0	52.4
279	26.2	0.0	54.4

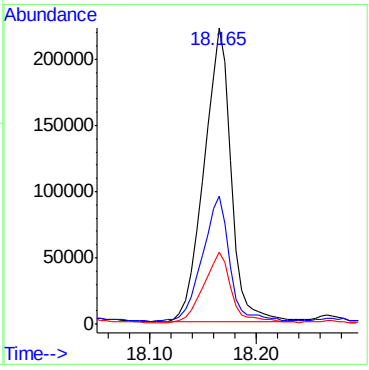




#109
Benzo[g,h,i]perylene
Concen: 26.00 ppm
RT: 18.165 min Scan# 3006
Delta R.T. 0.035 min
Lab File: x072604.D
Acq: 28 Aug 2020 10:48 pm

Tgt Ion:276 Resp: 396940

Ion	Ratio	Lower	Upper
276	100		
138	42.6	0.0	59.4
277	23.9	0.0	54.1



Manual Integration Approval Summary

Sample Number: FA78194-1
Lab FileID: X072604.D
Injection Time: 08/28/20 22:48

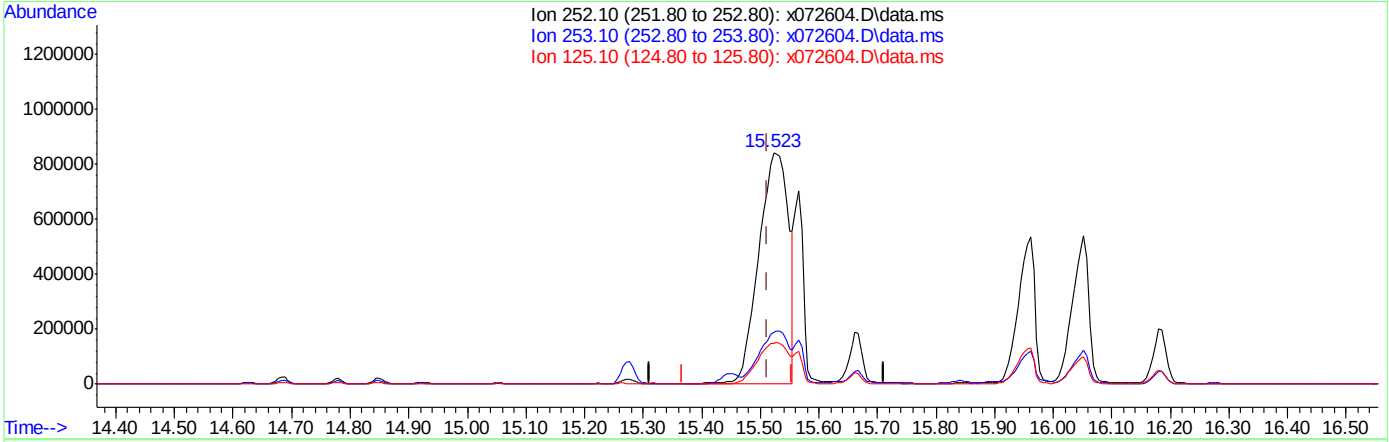
Method: SW846 8270E
Analyst approved: 08/31/20 09:12 Martha Valls
Supervisor approved: 08/31/20 11:36 Naresh Jiawan

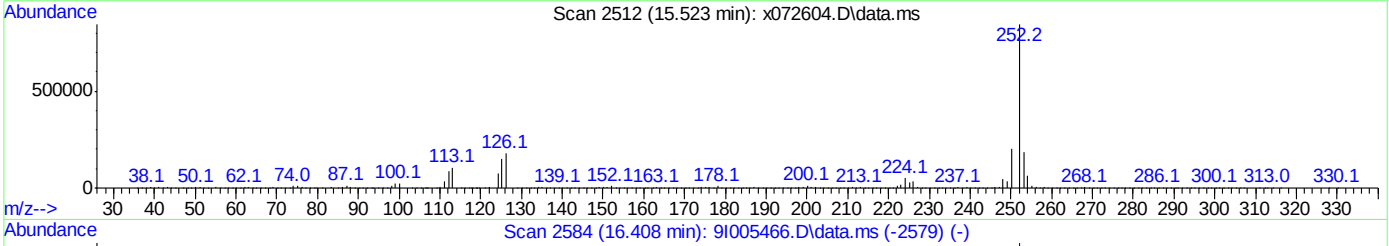
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(k)fluoranthene	207-08-9		15.57	Missed peak

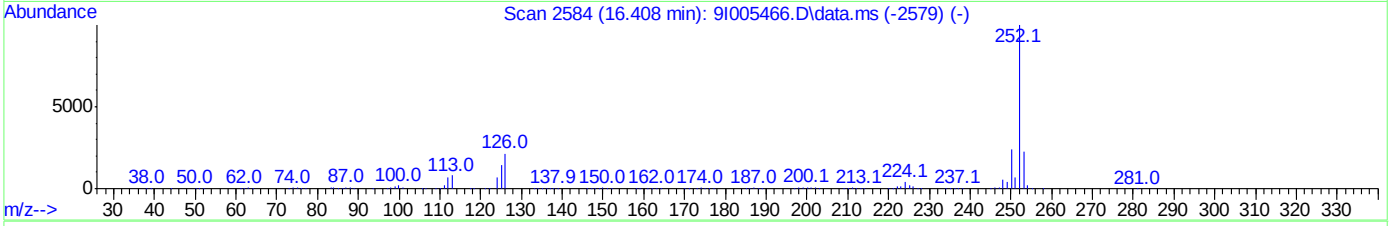
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0828_sx2960\
Data File : x072604.D
Acq On : 28 Aug 2020 10:48 pm
Operator : marthav
Sample : fa78194-1 E Inst : MSBNA05
Misc : op81781,sx2960,29.8,,,1,1,soil
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Aug 29 09:07:30 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Aug 18 13:05:00 2020
Response via : Initial Calibration







TIC: x072604.D\data.ms

(105) Benzo[k]fluoranthene (P)

15.523min (+0.010) 160.96ppm

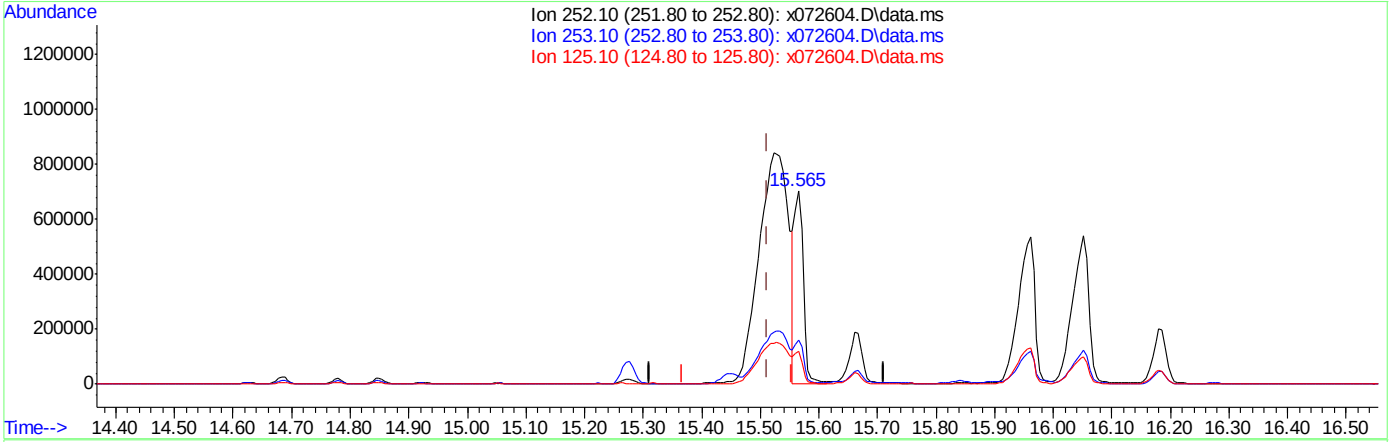
response 2975906

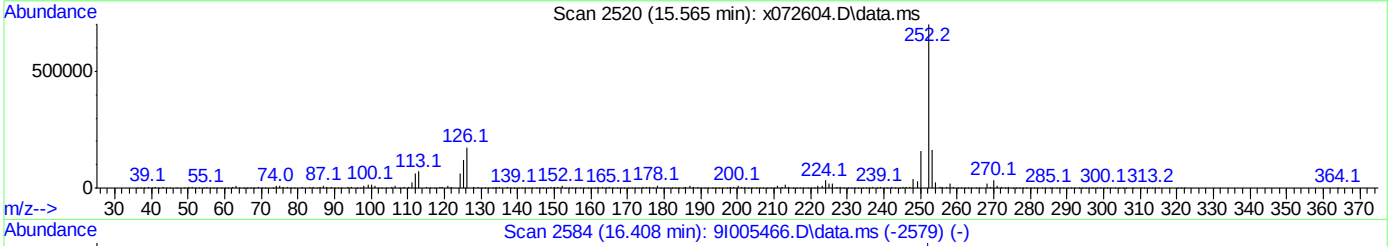
Ion	Exp%	Act%
252.10	100	100
253.10	22.50	21.88
125.10	14.40	17.49
0.00	0.00	0.00

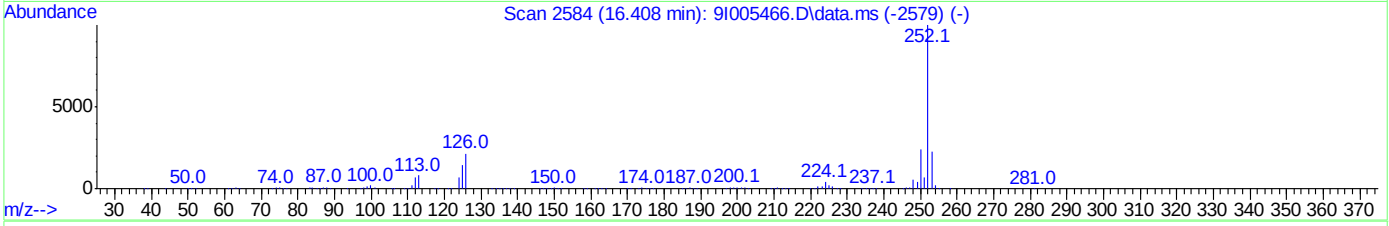
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0828_sx2960\
Data File : x072604.D
Acq On : 28 Aug 2020 10:48 pm
Operator : marthav
Sample : fa78194-1 E Inst : MSBNA05
Misc : op81781,sx2960,29.8,,,1,1,soil
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Aug 29 09:07:30 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Aug 18 13:05:00 2020
Response via : Initial Calibration







TIC: x072604.D\data.ms

(105) Benzo[k]fluoranthene (P)

15.565min (+0.053) 38.56ppm m

response 712881

Ion	Exp%	Act%
252.10	100	100
253.10	22.50	22.98
125.10	14.40	16.81
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan
08/31/20 11:36

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-31-2020\sx2961\
Data File : x072618.d
Acq On : 29 Aug 2020 1:23 pm
Operator : marthav
Sample : fa78194-1 E, 5
Misc : op81781,sx2961,29.8,,,1,5,soil
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 30 23:21:30 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Aug 18 13:05:00 2020
Response via : Initial Calibration

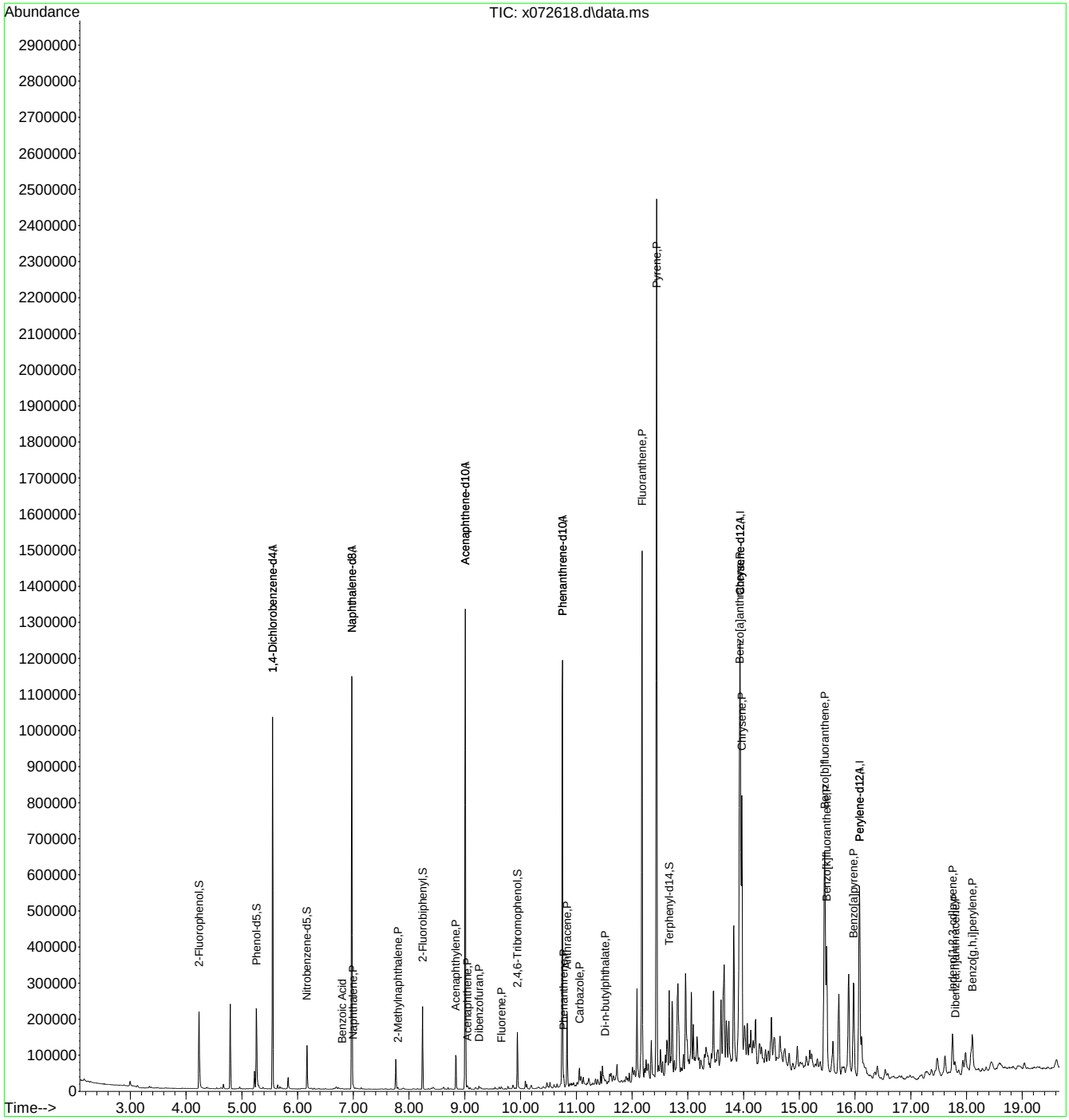
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.553	152	132607	40.00	ppm	0.00
22) Naphthalene-d8	6.975	136	513704	40.00	ppm	0.00
43) Acenaphthene-d10	9.008	164	252416	40.00	ppm	0.00
70) Phenanthrene-d10	10.752	188	437417	40.00	ppm	0.00
92) Chrysene-d12	13.939	240	376578	40.00	ppm	0.00
102) Perylene-d12	16.079	264	278895	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	5.553	152	132607	40.00	ppm	0.00
120) Naphthalene-d8A	6.975	136	513704	40.00	ppm	0.00
127) Acenaphthene-d10A	9.008	164	252416	40.00	ppm	0.00
136) Phenanthrene-d10A	10.752	188	437417	40.00	ppm	0.00
146) Chrysene-d12A	13.939	240	376578	40.00	ppm	0.00
153) Perylene-d12A	16.079	264	278895	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	4.232	112	55792	11.04	ppm	0.00
Spiked Amount 100.000	Range 40 - 102		Recovery = 11.04%#			
9) Phenol-d5	5.264	99	75693	12.78	ppm	0.00
Spiked Amount 100.000	Range 41 - 100		Recovery = 12.78%#			
23) Nitrobenzene-d5	6.168	82	33369	5.82	ppm	-0.01
Spiked Amount 50.000	Range 40 - 105		Recovery = 11.64%#			
47) 2-Fluorobiphenyl	8.243	172	61536	6.06	ppm	0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 12.12%#			
75) 2,4,6-Tribromophenol	9.944	330	10512	11.21	ppm	-0.01
Spiked Amount 100.000	Range 42 - 108		Recovery = 11.21%#			
95) Terphenyl-d14	12.666	244	67830	6.25	ppm	0.00
Spiked Amount 50.000	Range 45 - 119		Recovery = 12.50%#			
Target Compounds						Qvalue
30) Benzoic Acid	6.799	105	801	0.36	ppm	71
34) Naphthalene	6.997	128	3341	0.23	ppm	98
40) 2-Methylnaphthalene	7.799	142	1203	0.13	ppm	99
52) Acenaphthylene	8.837	152	39478	2.96	ppm	98
57) Acenaphthene	9.045	153	1651	0.19	ppm	93
60) Dibenzofuran	9.254	168	2166	0.19	ppm	91
65) Fluorene	9.655	166	2270	0.24	ppm	97
84) Phenanthrene	10.773	178	10600	0.77	ppm	98
85) Anthracene	10.832	178	75617	5.30	ppm	99
87) Carbazole	11.057	167	17714	1.39	ppm	98
89) Di-n-butylphthalate	11.516	149	764	0.05	ppm	78
91) Fluoranthene	12.180	202	564304	43.01	ppm	98
94) Pyrene	12.442	202	978852	61.58	ppm	98
99) Benzo[a]anthracene	13.929	228	301058	24.04	ppm	99
100) Chrysene	13.972	228	347919	26.31	ppm	98
104) Benzo[b]fluoranthene	15.458	252	408131	42.43	ppm	98
105) Benzo[k]fluoranthene	15.491	252	150102	14.68	ppm	99
106) Benzo[a]pyrene	15.972	252	152605	18.00	ppm	99
107) Indeno[1,2,3-cd]pyrene	17.753	276	65376m	9.04	ppm	
108) Dibenz[a,h]anthracene	17.796	278	12439	1.55	ppm	89
109) Benzo[g,h,i]perylene	18.106	276	56283	6.67	ppm	99

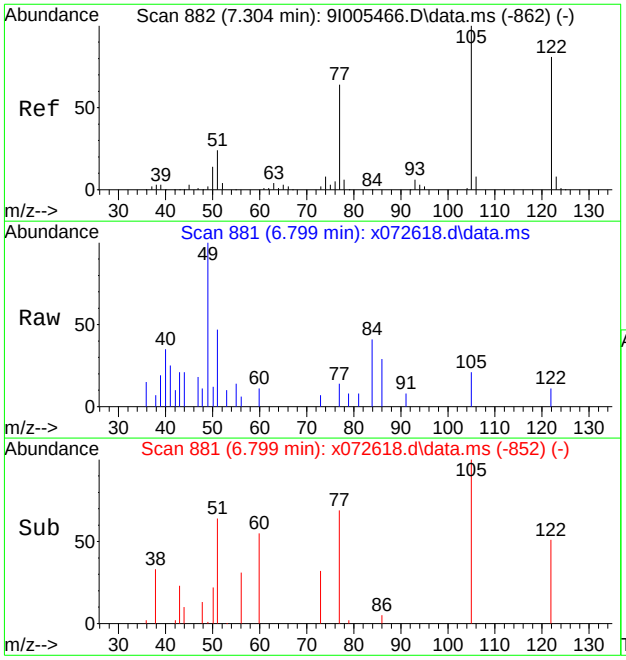
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-31-2020\sx2961\
Data File : x072618.d
Acq On : 29 Aug 2020 1:23 pm
Operator : marthav
Sample : fa78194-1 E, 5
Misc : op81781,sx2961,29.8,,,1,5,soil
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 30 23:21:30 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Aug 18 13:05:00 2020
Response via : Initial Calibration

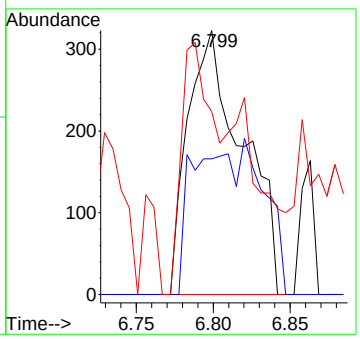


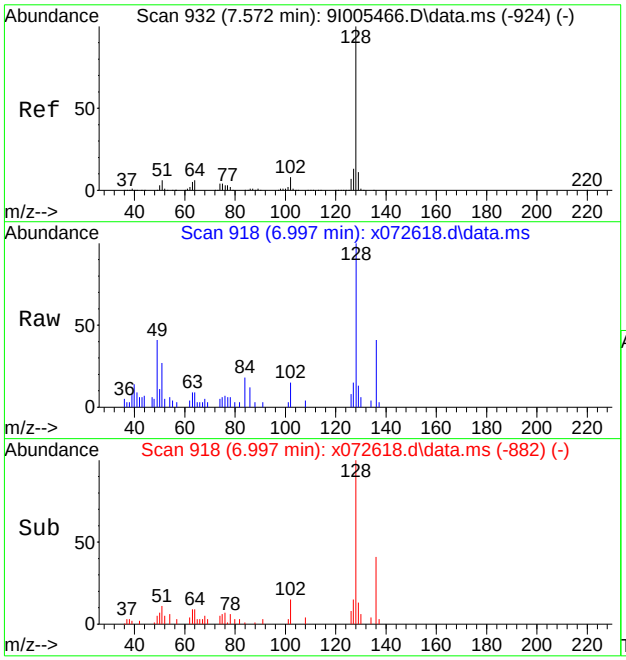


#30
Benzoic Acid
Concen: 0.36 ppm
RT: 6.799 min Scan# 881
Delta R.T. -0.043 min
Lab File: x072618.d
Acq: 29 Aug 2020 1:23 pm

Tgt Ion:105 Resp: 801

Ion	Ratio	Lower	Upper
105	100		
122	51.4	47.8	107.8
77	53.9	48.2	108.2

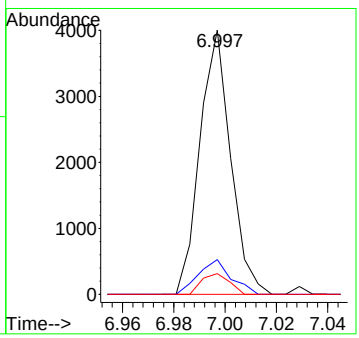


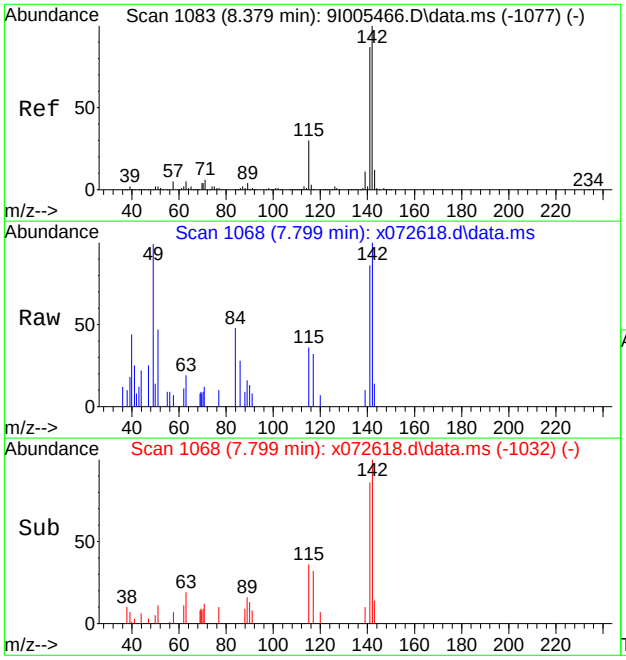


#34
Naphthalene
Concen: 0.23 ppm
RT: 6.997 min Scan# 918
Delta R.T. -0.005 min
Lab File: x072618.d
Acq: 29 Aug 2020 1:23 pm

Tgt Ion:128 Resp: 3341

Ion	Ratio	Lower	Upper
128	100		
129	11.4	0.0	40.6
126	7.9	0.0	37.3

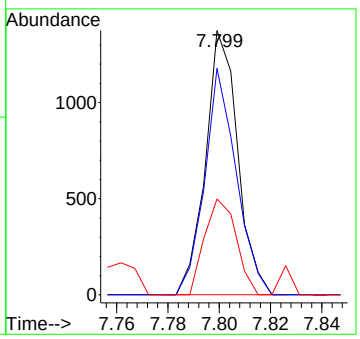


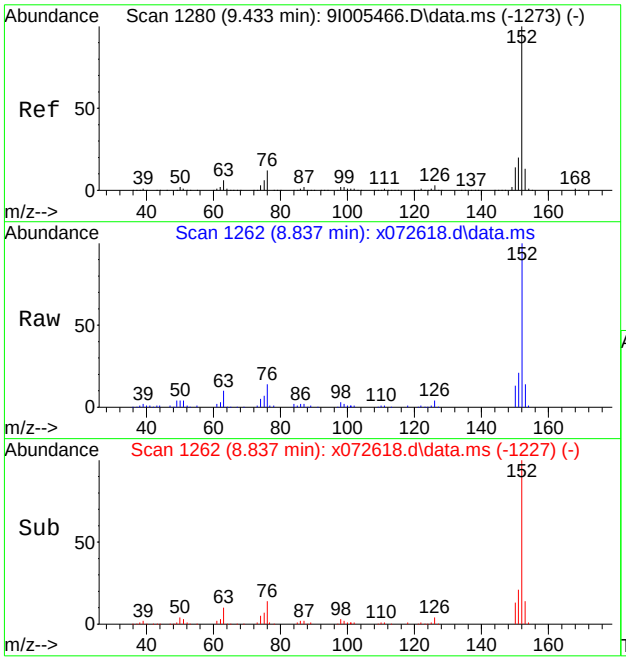


#40
2-Methylnaphthalene
Concen: 0.13 ppm
RT: 7.799 min Scan# 1068
Delta R.T. -0.005 min
Lab File: x072618.d
Acq: 29 Aug 2020 1:23 pm

Tgt Ion:142 Resp: 1203

Ion	Ratio	Lower	Upper
142	100		
141	85.6	56.4	116.4
115	30.7	2.5	62.5

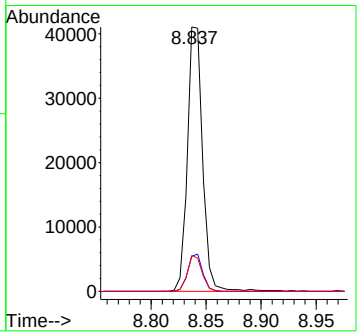


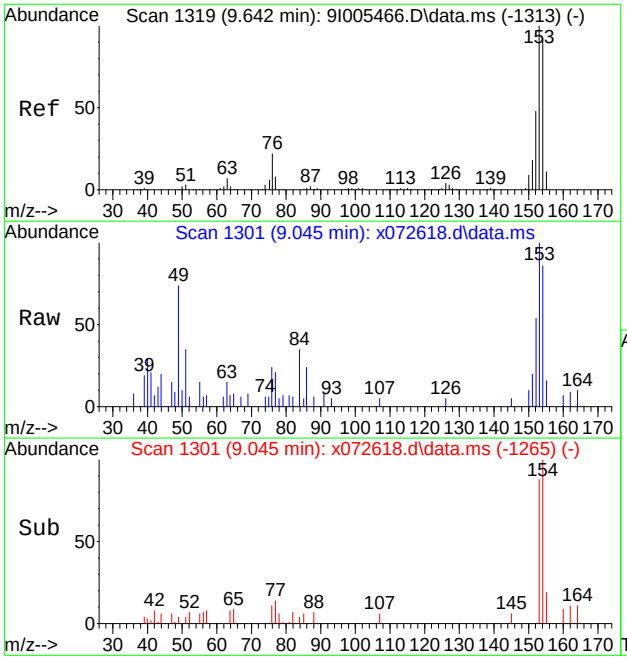


#52
Acenaphthylene
Concen: 2.96 ppm
RT: 8.837 min Scan# 1262
Delta R.T. -0.011 min
Lab File: x072618.d
Acq: 29 Aug 2020 1:23 pm

Tgt Ion:152 Resp: 39478

Ion	Ratio	Lower	Upper
152	100		
150	13.3	0.0	44.0
153	13.6	0.0	42.9

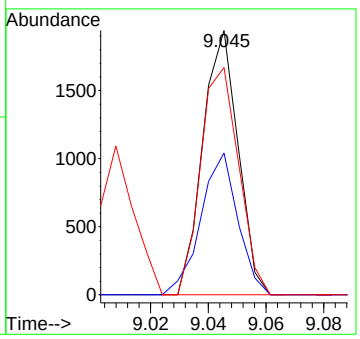


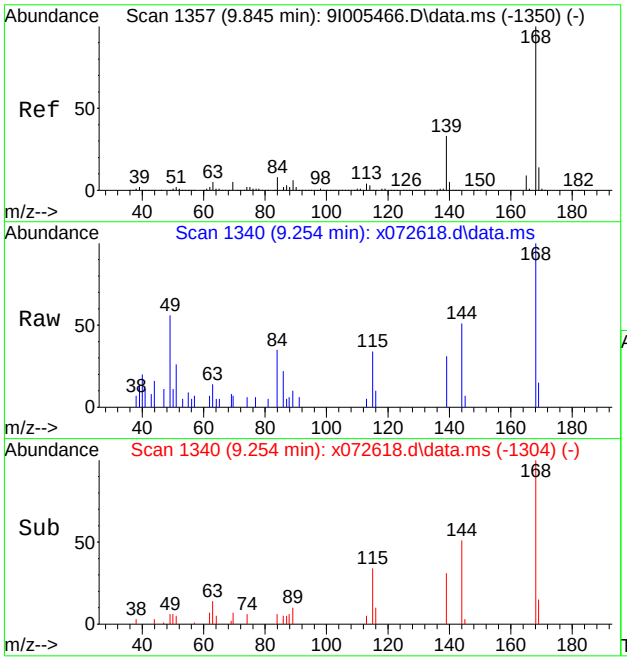


#57
Acenaphthene
Concen: 0.19 ppm
RT: 9.045 min Scan# 1301
Delta R.T. -0.005 min
Lab File: x072618.d
Acq: 29 Aug 2020 1:23 pm

Tgt Ion:153 Resp: 1651

Ion	Ratio	Lower	Upper
153	100		
152	53.7	17.5	77.5
154	86.0	61.6	121.6

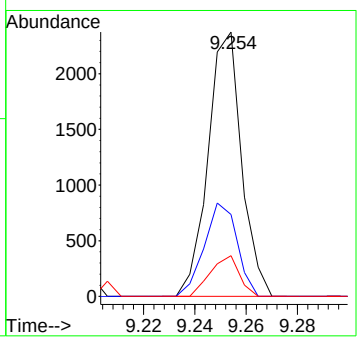


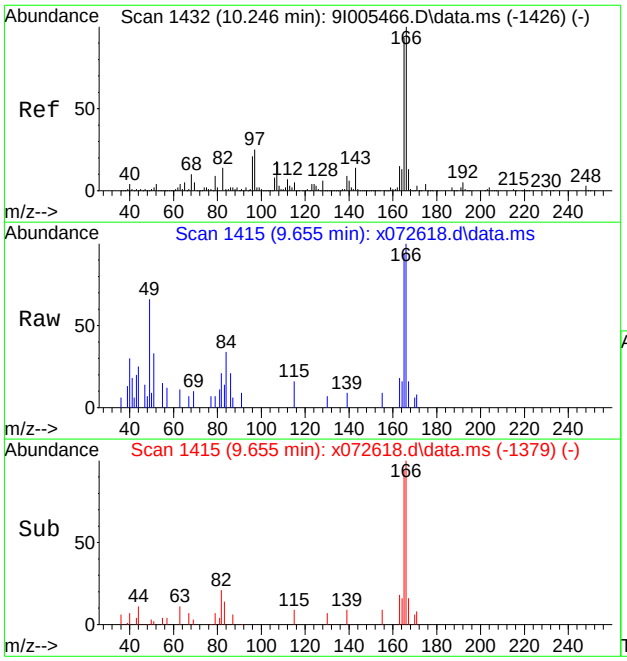


#60
Dibenzofuran
Concen: 0.19 ppm
RT: 9.254 min Scan# 1340
Delta R.T. -0.005 min
Lab File: x072618.d
Acq: 29 Aug 2020 1:23 pm

Tgt Ion:168 Resp: 2166

Ion	Ratio	Lower	Upper
168	100		
139	31.0	6.6	66.6
169	15.4	0.0	43.0

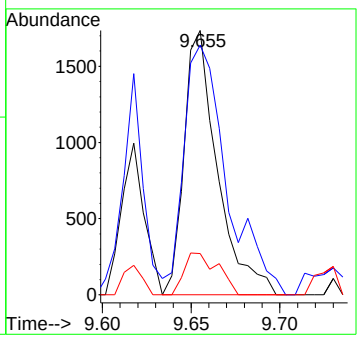


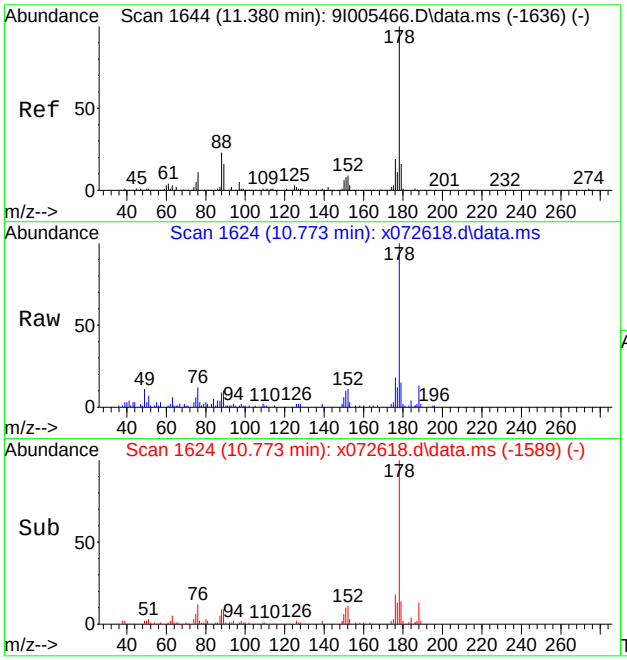


#65
Fluorene
Concen: 0.24 ppm
RT: 9.655 min Scan# 1415
Delta R.T. -0.005 min
Lab File: x072618.d
Acq: 29 Aug 2020 1:23 pm

Tgt Ion:166 Resp: 2270

Ion	Ratio	Lower	Upper
166	100		
165	91.4	64.3	124.3
167	15.6	0.0	43.1

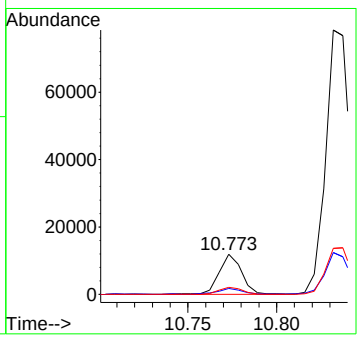


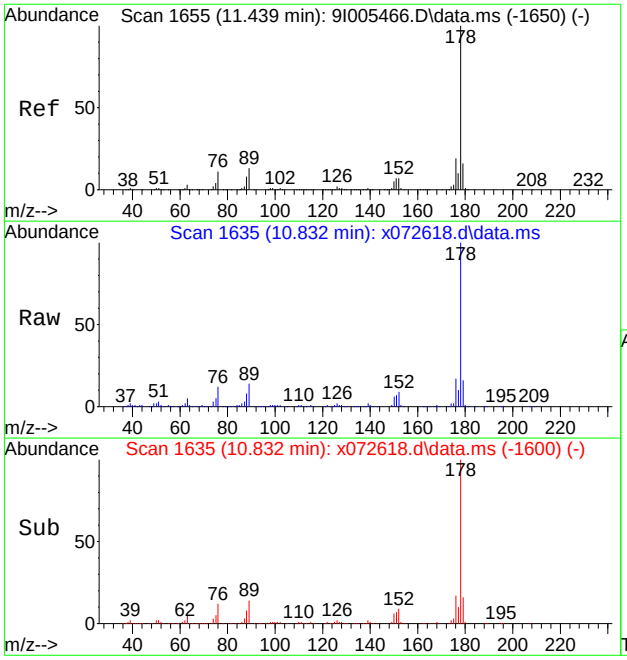


#84
Phenanthrene
Concen: 0.77 ppm
RT: 10.773 min Scan# 1624
Delta R.T. -0.011 min
Lab File: x072618.d
Acq: 29 Aug 2020 1:23 pm

Tgt Ion:178 Resp: 10600

Ion	Ratio	Lower	Upper
178	100		
179	14.5	0.0	44.9
176	17.9	0.0	49.1

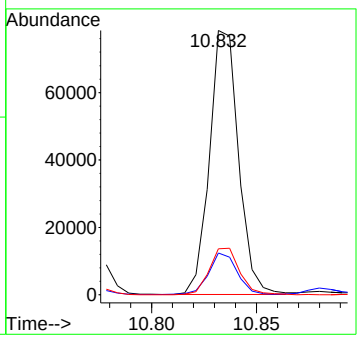


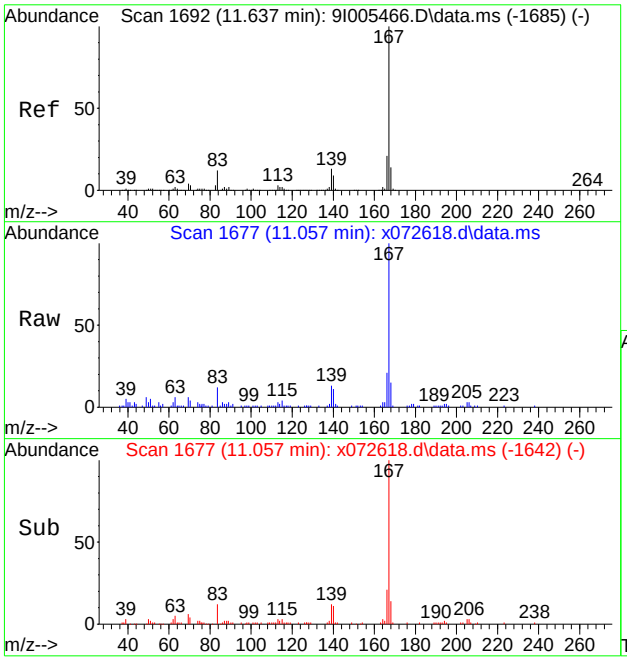


#85
Anthracene
Concen: 5.30 ppm
RT: 10.832 min Scan# 1635
Delta R.T. -0.011 min
Lab File: x072618.d
Acq: 29 Aug 2020 1:23 pm

Tgt Ion:178 Resp: 75617

Ion	Ratio	Lower	Upper
178	100		
179	15.7	0.0	45.1
176	17.3	0.0	48.0

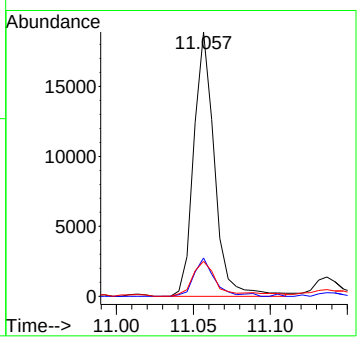


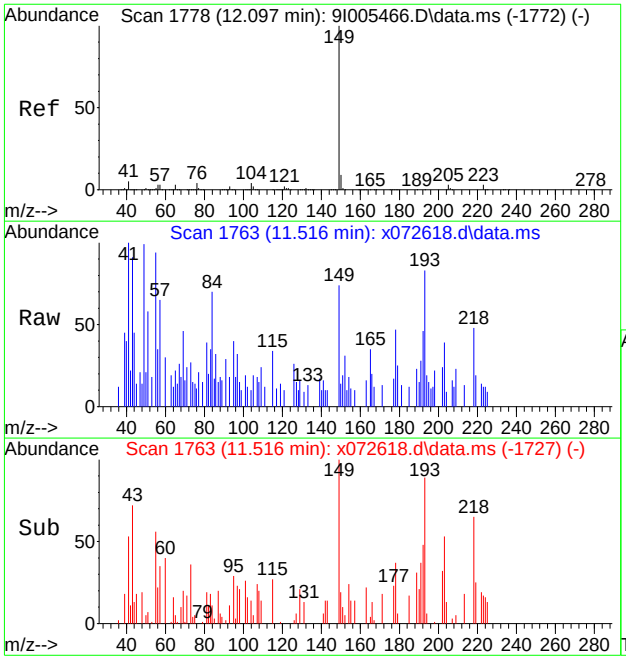


#87
Carbazole
Concen: 1.39 ppm
RT: 11.057 min Scan# 1677
Delta R.T. -0.011 min
Lab File: x072618.d
Acq: 29 Aug 2020 1:23 pm

Tgt Ion:167 Resp: 17714

Ion	Ratio	Lower	Upper
167	100		
168	14.7	0.0	43.0
139	13.0	0.0	42.9

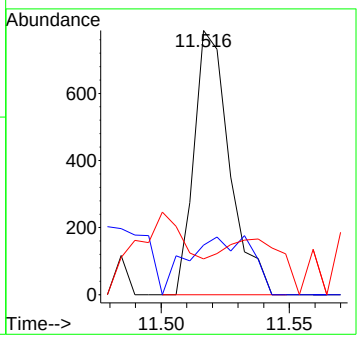


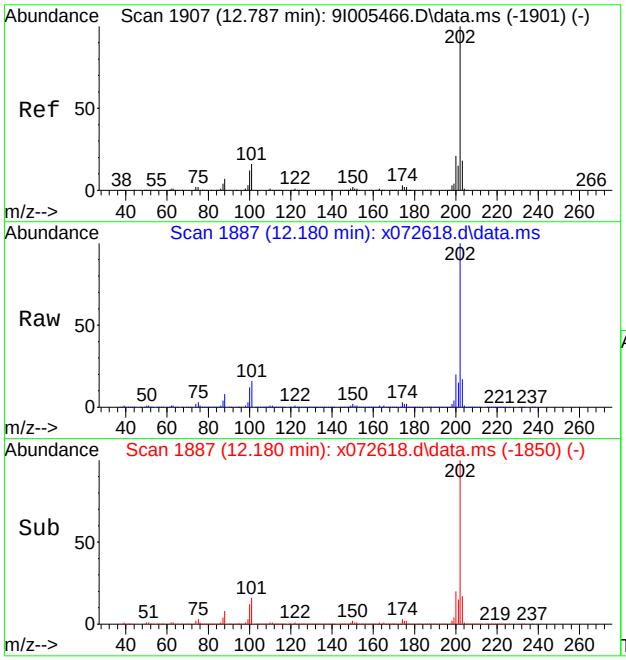


#89
Di-n-butylphthalate
Concen: 0.05 ppm
RT: 11.516 min Scan# 1763
Delta R.T. -0.005 min
Lab File: x072618.d
Acq: 29 Aug 2020 1:23 pm

Tgt Ion:149 Resp: 764

Ion	Ratio	Lower	Upper
149	100		
150	18.8	0.0	39.2
104	0.0	0.0	34.8

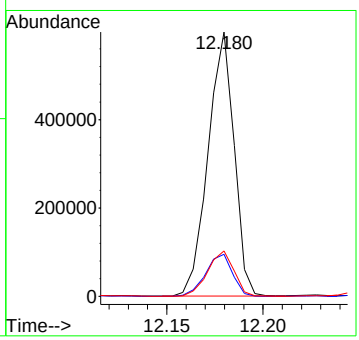


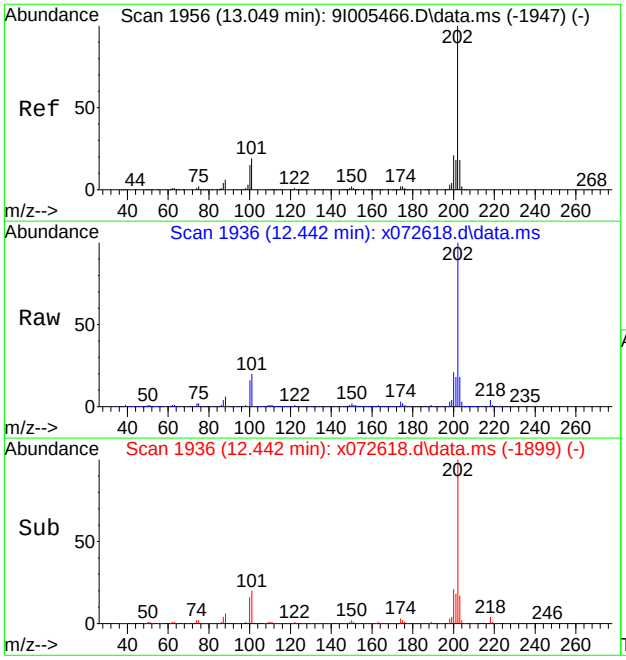


#91
Fluoranthene
Concen: 43.01 ppm
RT: 12.180 min Scan# 1887
Delta R.T. 0.000 min
Lab File: x072618.d
Acq: 29 Aug 2020 1:23 pm

Tgt Ion:202 Resp: 564304

Ion	Ratio	Lower	Upper
202	100		
101	15.9	0.0	47.5
203	17.2	0.0	47.3

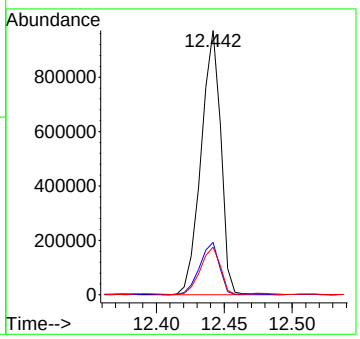


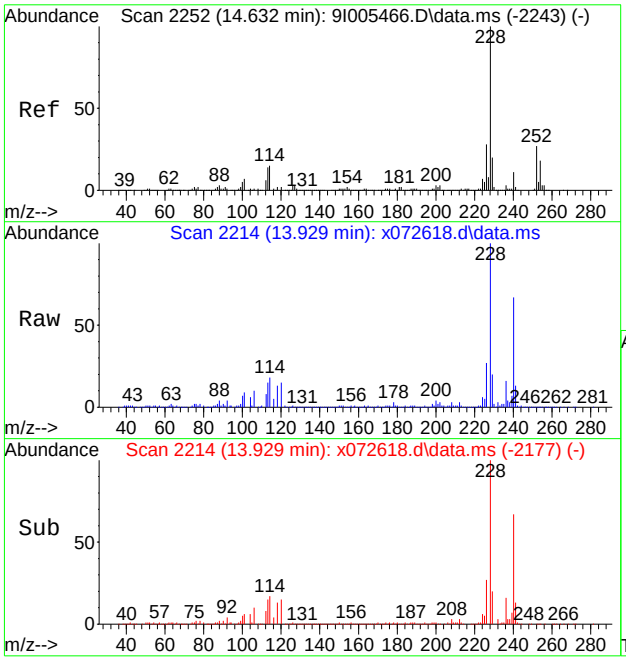


#94
Pyrene
Concen: 61.58 ppm
RT: 12.442 min Scan# 1936
Delta R.T. 0.000 min
Lab File: x072618.d
Acq: 29 Aug 2020 1:23 pm

Tgt Ion:202 Resp: 978852

Ion	Ratio	Lower	Upper
202	100		
101	19.8	0.0	48.6
203	17.9	0.0	47.7

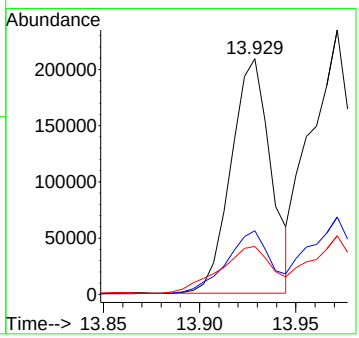


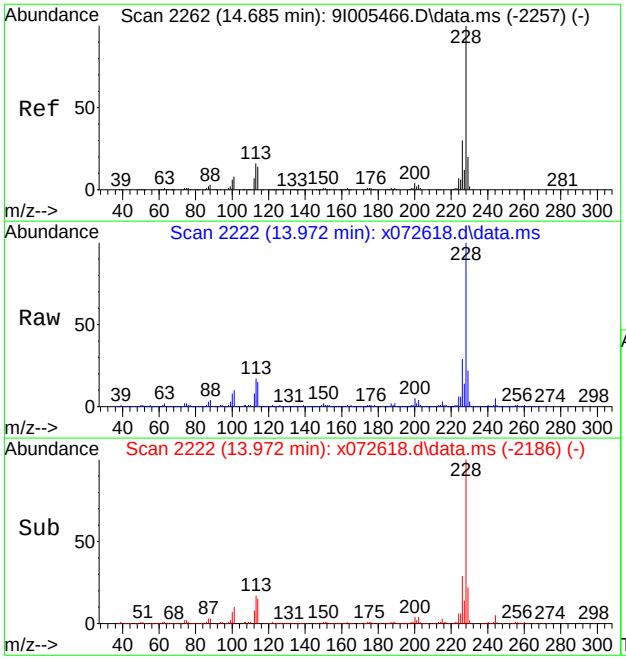


#99
Benzo[a]anthracene
Concen: 24.04 ppm
RT: 13.929 min Scan# 2214
Delta R.T. 0.000 min
Lab File: x072618.d
Acq: 29 Aug 2020 1:23 pm

Tgt Ion:228 Resp: 301058

Ion	Ratio	Lower	Upper
228	100		
226	26.3	0.0	57.0
229	19.2	0.0	49.2

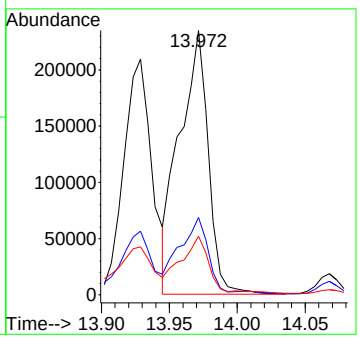


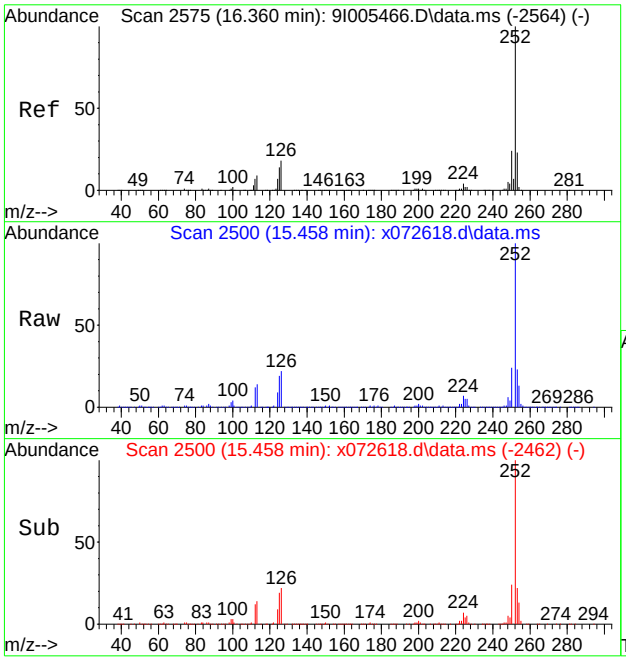


#100
Chrysene
Concen: 26.31 ppm
RT: 13.972 min Scan# 2222
Delta R.T. -0.005 min
Lab File: x072618.d
Acq: 29 Aug 2020 1:23 pm

Tgt Ion:228 Resp: 347919

Ion	Ratio	Lower	Upper
228	100		
226	29.0	0.0	59.4
229	21.4	0.0	49.5

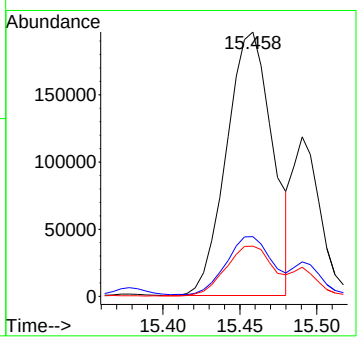


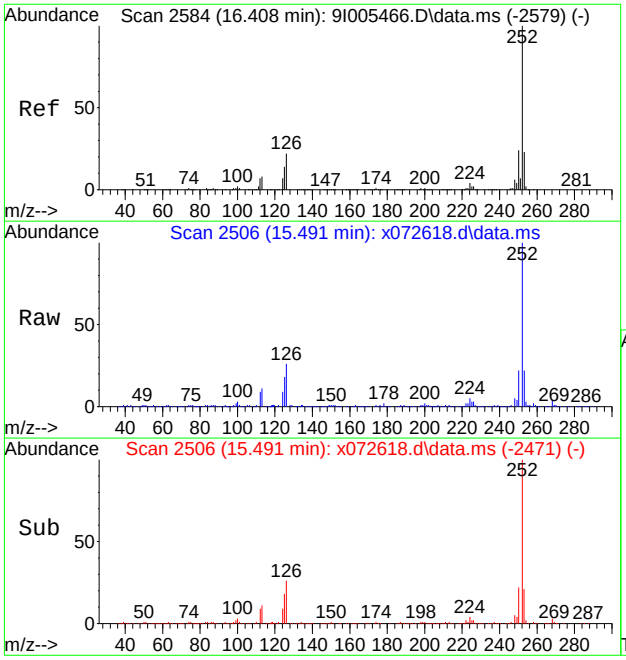


#104
Benzo[b]fluoranthene
Concen: 42.43 ppm
RT: 15.458 min Scan# 2500
Delta R.T. 0.005 min
Lab File: x072618.d
Acq: 29 Aug 2020 1:23 pm

Tgt Ion:252 Resp: 408131

Ion	Ratio	Lower	Upper
252	100		
253	22.2	0.0	52.0
125	18.6	0.0	47.0

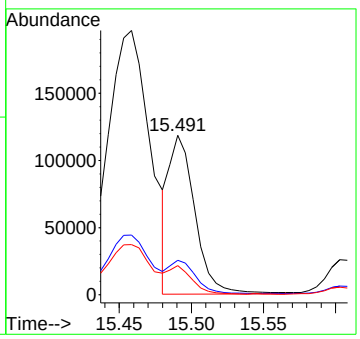


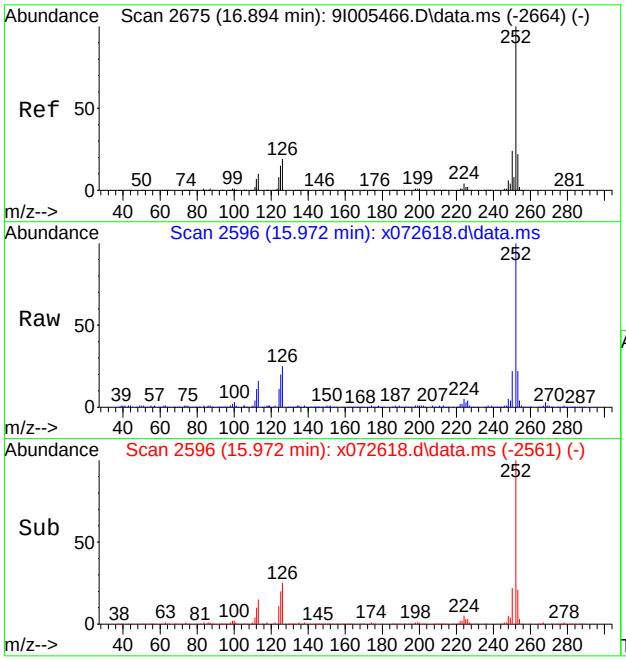


#105
Benzo[k]fluoranthene
Concen: 14.68 ppm
RT: 15.491 min Scan# 2506
Delta R.T. -0.011 min
Lab File: x072618.d
Acq: 29 Aug 2020 1:23 pm

Tgt Ion:252 Resp: 150102

Ion	Ratio	Lower	Upper
252	100		
253	21.1	0.0	51.3
125	16.9	0.0	47.6

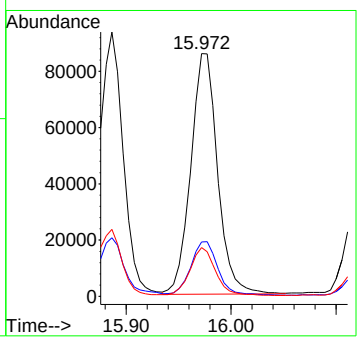


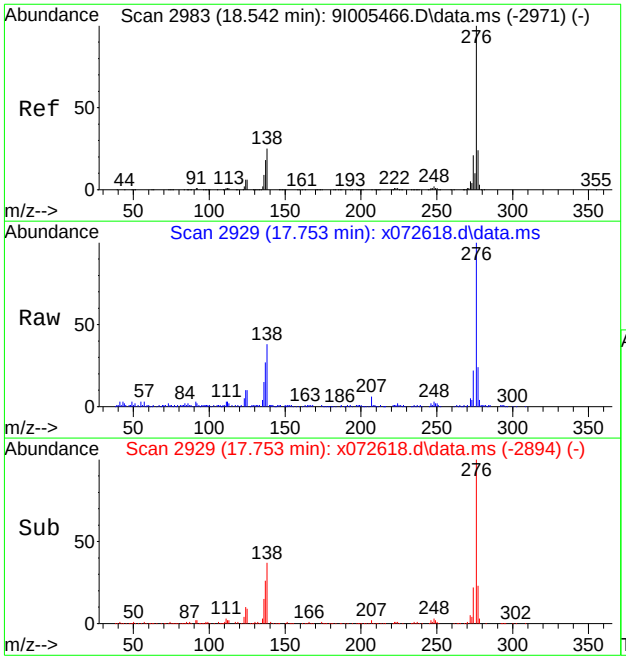


#106
Benzo[a]pyrene
Concen: 18.00 ppm
RT: 15.972 min Scan# 2596
Delta R.T. -0.011 min
Lab File: x072618.d
Acq: 29 Aug 2020 1:23 pm

Tgt Ion:252 Resp: 152605

Ion	Ratio	Lower	Upper
252	100		
253	22.0	0.0	51.2
125	19.8	0.0	49.5

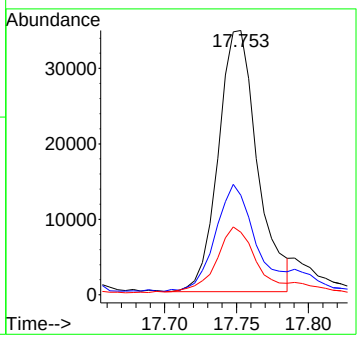


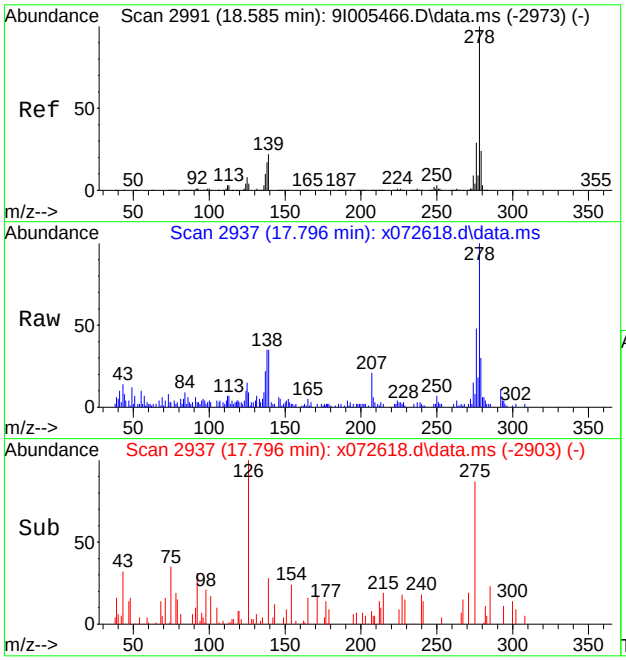


#107
Indeno[1,2,3-cd]pyrene
Concen: 9.04 ppm m
RT: 17.753 min Scan# 2929
Delta R.T. -0.011 min
Lab File: x072618.d
Acq: 29 Aug 2020 1:23 pm

Tgt Ion:276 Resp: 65376

Ion	Ratio	Lower	Upper
276	100		
138	37.6	8.4	68.4
277	23.7	0.0	54.1

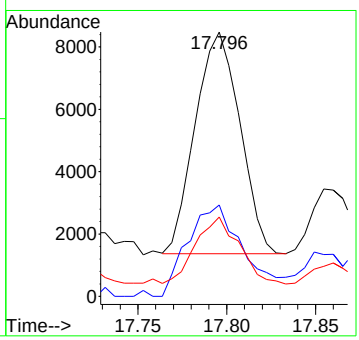


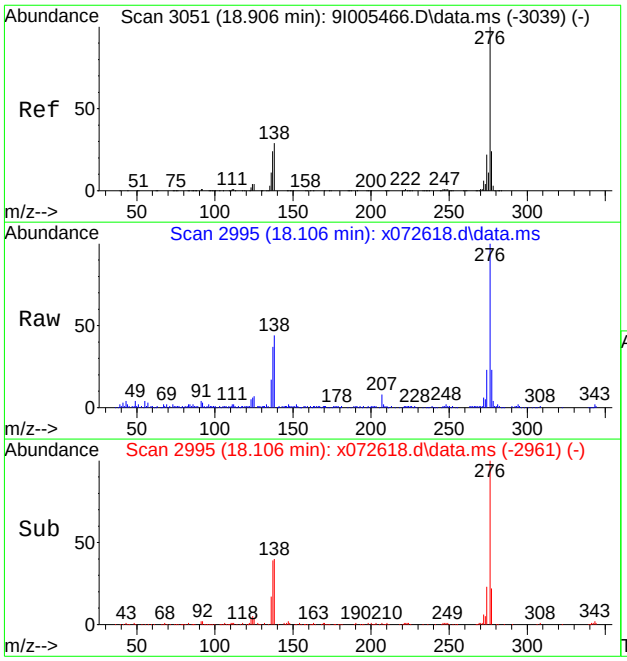


#108
Dibenz[a,h]anthracene
Concen: 1.55 ppm
RT: 17.796 min Scan# 2937
Delta R.T. -0.016 min
Lab File: x072618.d
Acq: 29 Aug 2020 1:23 pm

Tgt Ion:278 Resp: 12439

Ion	Ratio	Lower	Upper
278	100		
139	37.0	2.0	62.0
279	30.1	0.0	53.8

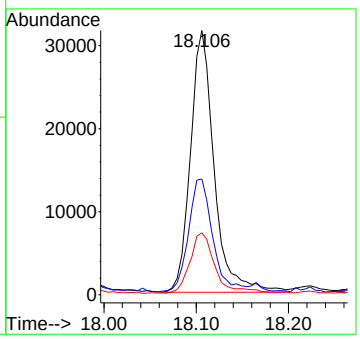




#109
Benzo[g,h,i]perylene
Concen: 6.67 ppm
RT: 18.106 min Scan# 2995
Delta R.T. -0.016 min
Lab File: x072618.d
Acq: 29 Aug 2020 1:23 pm

Tgt Ion:276 Resp: 56283

Ion	Ratio	Lower	Upper
276	100		
138	43.1	13.2	73.2
277	22.9	0.0	53.6



Manual Integration Approval Summary

Sample Number: FA78194-1
Lab FileID: X072618.D
Injection Time: 08/29/20 13:23

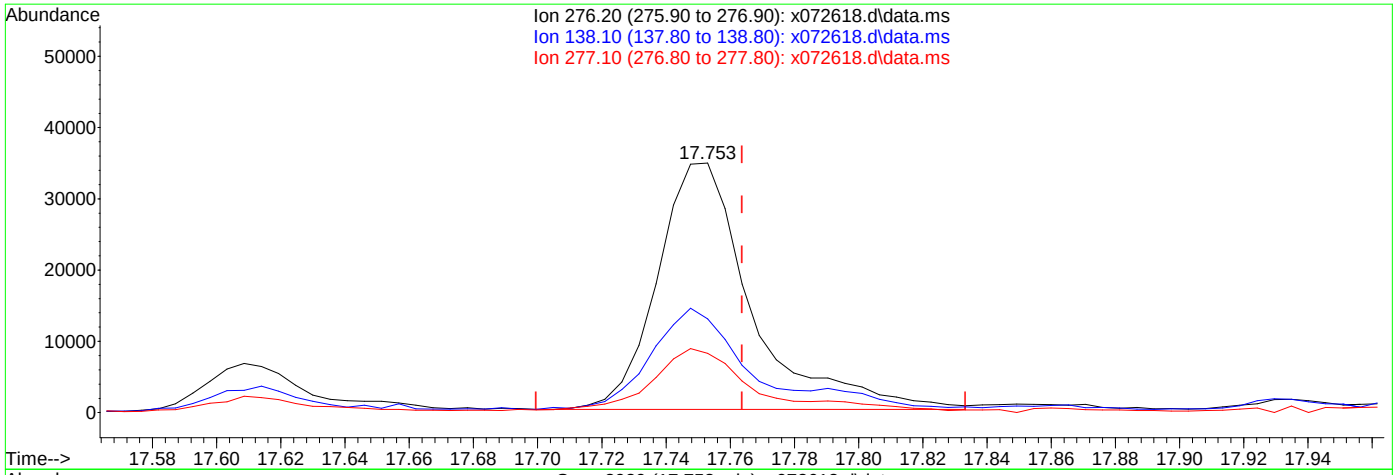
Method: SW846 8270E
Analyst approved: 08/31/20 09:12 Martha Valls
Supervisor approved: 08/31/20 11:36 Naresh Jiawan

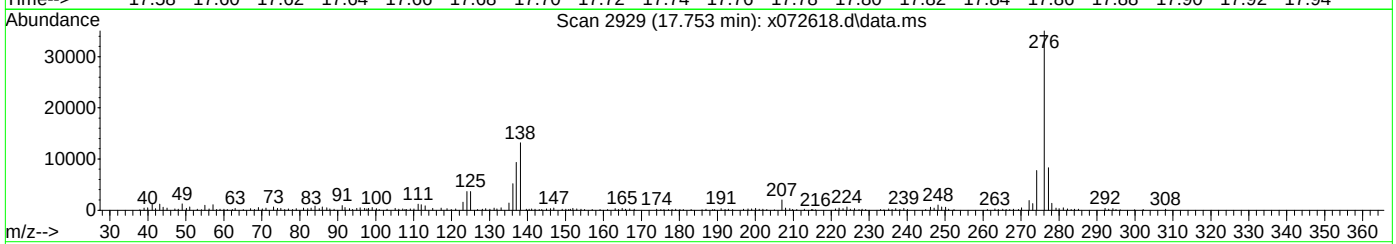
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		17.75	Overlapping peak

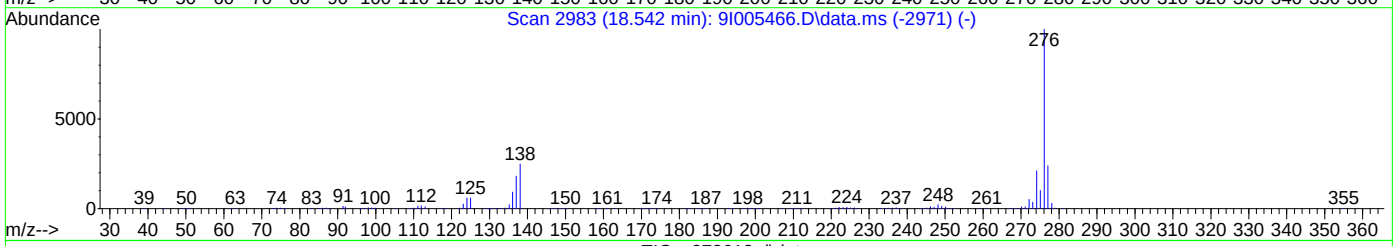
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-31-2020\sx2961\
Data File : x072618.d
Acq On : 29 Aug 2020 1:23 pm
Operator : marthav
Sample : fa78194-1 E, 5
Misc : op81781,sx2961,29.8,,,1,5,soil
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 30 22:55:33 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Aug 18 13:05:00 2020
Response via : Initial Calibration







TIC: x072618.d\data.ms

(107) Indeno[1,2,3-cd]pyrene (P)

17.753min (-0.011) 9.83ppm

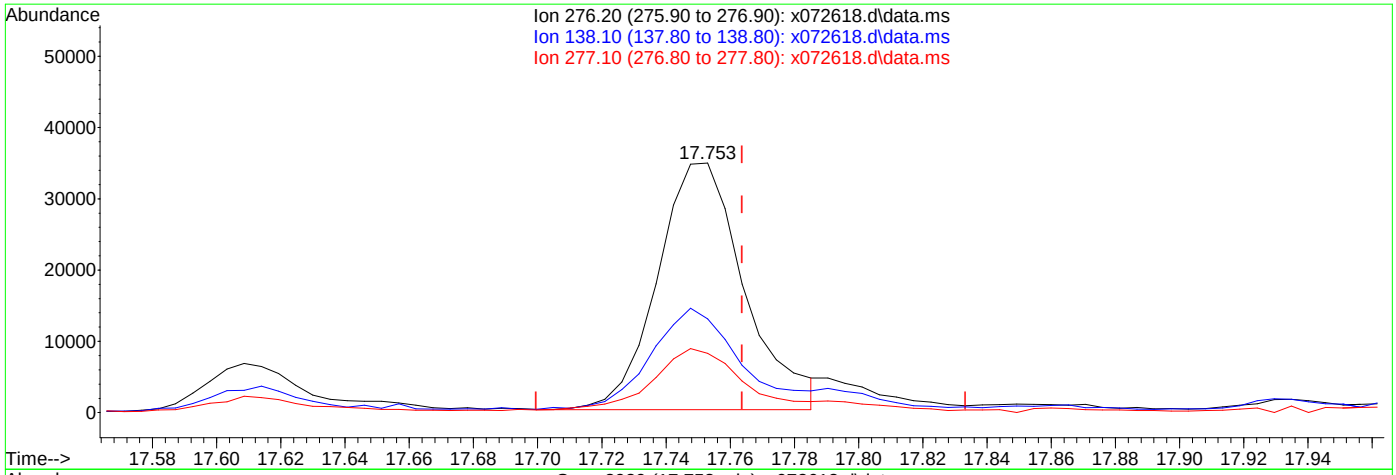
response 71063

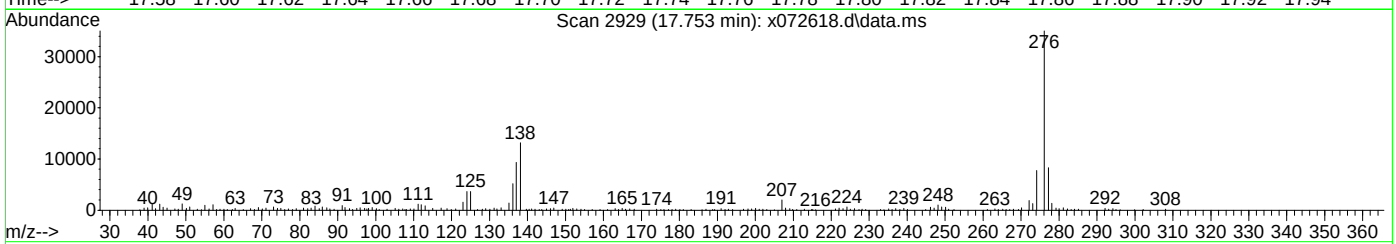
Ion	Exp%	Act%
276.20	100	100
138.10	38.40	36.53
277.10	24.10	23.06
0.00	0.00	0.00

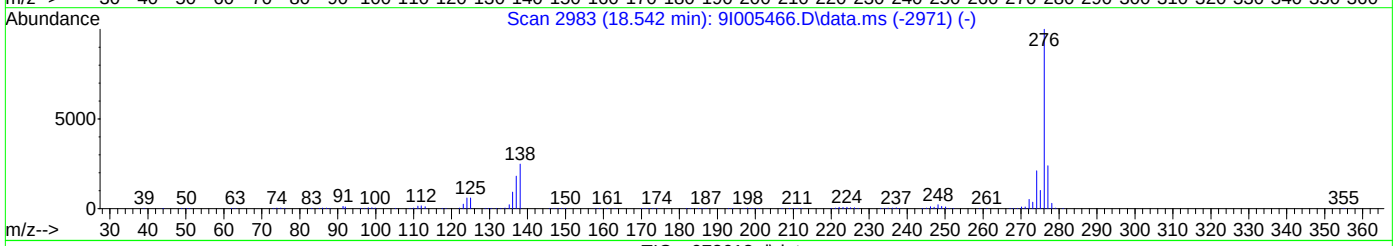
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-31-2020\sx2961\
Data File : x072618.d
Acq On : 29 Aug 2020 1:23 pm
Operator : marthav
Sample : fa78194-1 E, 5
Misc : op81781,sx2961,29.8,,,1,5,soil
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 30 22:55:33 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Aug 18 13:05:00 2020
Response via : Initial Calibration







TIC: x072618.d\data.ms

(107) Indeno[1,2,3-cd]pyrene (P)

17.753min (-0.011) 9.04ppm m

response 65376

Ion	Exp%	Act%
276.20	100	100
138.10	38.40	37.59
277.10	24.10	23.68
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0828_sx2960\
Data File : x072605.D
Acq On : 28 Aug 2020 11:14 pm
Operator : marthav
Sample : fa78194-2 E Inst : MSBNA05
Misc : op81781,sx2960,29.9,,,1,1,soil
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Aug 29 10:21:59 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Aug 18 13:05:00 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.563	152	179412	40.00	ppm	0.00
22) Naphthalene-d8	6.986	136	762146	40.00	ppm	0.00
43) Acenaphthene-d10	9.024	164	404431	40.00	ppm	0.00
70) Phenanthrene-d10	10.762	188	692477	40.00	ppm	0.00
92) Chrysene-d12	13.950	240	509467	40.00	ppm	0.00
102) Perylene-d12	16.106	264	412450	40.00	ppm	0.01
110) 1,4-Dichlorobenzene-d4A	5.563	152	179412	40.00	ppm	0.00
120) Naphthalene-d8A	6.986	136	762146	40.00	ppm	0.00
127) Acenaphthene-d10A	9.024	164	404431	40.00	ppm	0.00
136) Phenanthrene-d10A	10.762	188	692477	40.00	ppm	0.00
146) Chrysene-d12A	13.950	240	509467	40.00	ppm	0.00
153) Perylene-d12A	16.106	264	412450	40.00	ppm	0.01
System Monitoring Compounds						
7) 2-Fluorophenol	4.258	112	375917	54.98	ppm	0.00
Spiked Amount 100.000	Range 40 - 102		Recovery = 54.98%			
9) Phenol-d5	5.285	99	504762	62.98	ppm	0.00
Spiked Amount 100.000	Range 41 - 100		Recovery = 62.98%			
23) Nitrobenzene-d5	6.184	82	217673	25.58	ppm	0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 51.16%			
47) 2-Fluorobiphenyl	8.254	172	392363	24.12	ppm	0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 48.24%			
75) 2,4,6-Tribromophenol	9.960	330	82868	55.82	ppm	0.00
Spiked Amount 100.000	Range 42 - 108		Recovery = 55.82%			
95) Terphenyl-d14	12.683	244	387294	26.37	ppm	0.00
Spiked Amount 50.000	Range 45 - 119		Recovery = 52.74%			
Target Compounds						Qvalue
30) Benzoic Acid	6.804	105	2777	0.84	ppm	87
34) Naphthalene	7.008	128	6070	0.28	ppm	94
40) 2-Methylnaphthalene	7.810	142	5015	0.36	ppm	98
41) 1-Methylnaphthalene	7.922	142	3689	0.28	ppm	94
48) 1,1'-Biphenyl	8.366	154	1292	0.07	ppm	88
52) Acenaphthylene	8.853	152	37042	1.73	ppm	100
57) Acenaphthene	9.056	153	2611	0.18	ppm	94
60) Dibenzofuran	9.265	168	4067	0.22	ppm	93
65) Fluorene	9.666	166	6324	0.42	ppm	97
84) Phenanthrene	10.789	178	28695	1.31	ppm	98
85) Anthracene	10.848	178	92033	4.07	ppm	99
87) Carbazole	11.073	167	18589	0.92	ppm	99
89) Di-n-butylphthalate	11.527	149	1879	0.08	ppm	85
91) Fluoranthene	12.190	202	134920	6.50	ppm	98
94) Pyrene	12.447	202	142120	6.61	ppm	98
99) Benzo[a]anthracene	13.939	228	68019	4.01	ppm	97
100) Chrysene	13.982	228	87410	4.89	ppm	99
101) bis(2-Ethylhexyl)phtha...	14.105	149	4682	0.38	ppm	98
104) Benzo[b]fluoranthene	15.464	252	106386	7.48	ppm	93
105) Benzo[k]fluoranthene	15.507	252	30569	2.02	ppm	97
106) Benzo[a]pyrene	15.993	252	39018	3.11	ppm	94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0828_sx2960\
Data File : x072605.D
Acq On : 28 Aug 2020 11:14 pm
Operator : marthav
Sample : fa78194-2 E Inst : MSBNA05
Misc : op81781,sx2960,29.9,,,1,1,soil
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Aug 29 10:21:59 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Aug 18 13:05:00 2020
Response via : Initial Calibration

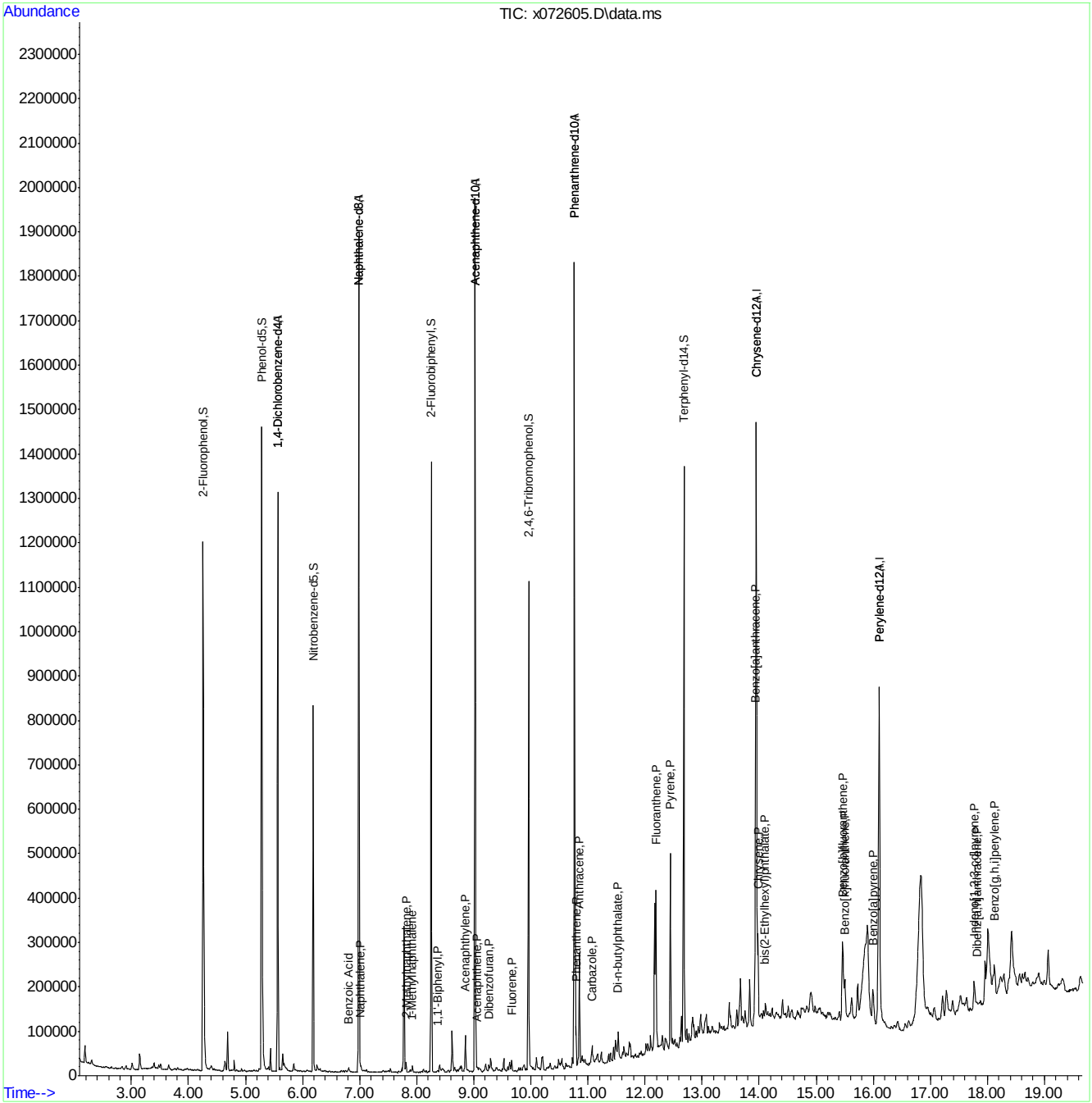
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
107) Indeno[1,2,3-cd]pyrene	17.769	276	33488	3.13	ppm	82
108) Dibenz[a,h]anthracene	17.817	278	6304	0.53	ppm	90
109) Benzo[g,h,i]perylene	18.127	276	29219	2.34	ppm	88

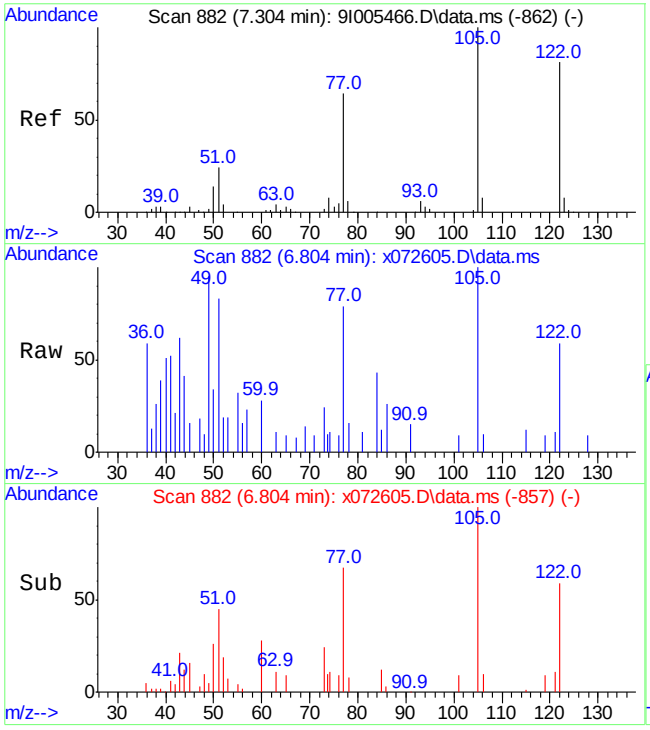
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0828_sx2960\
Data File : x072605.D
Acq On : 28 Aug 2020 11:14 pm
Operator : marthav
Sample : fa78194-2 E Inst : MSBNA05
Misc : op81781,sx2960,29.9,,,1,1,soil
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Aug 29 10:21:59 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Aug 18 13:05:00 2020
Response via : Initial Calibration

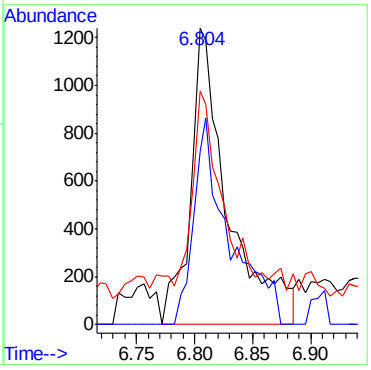


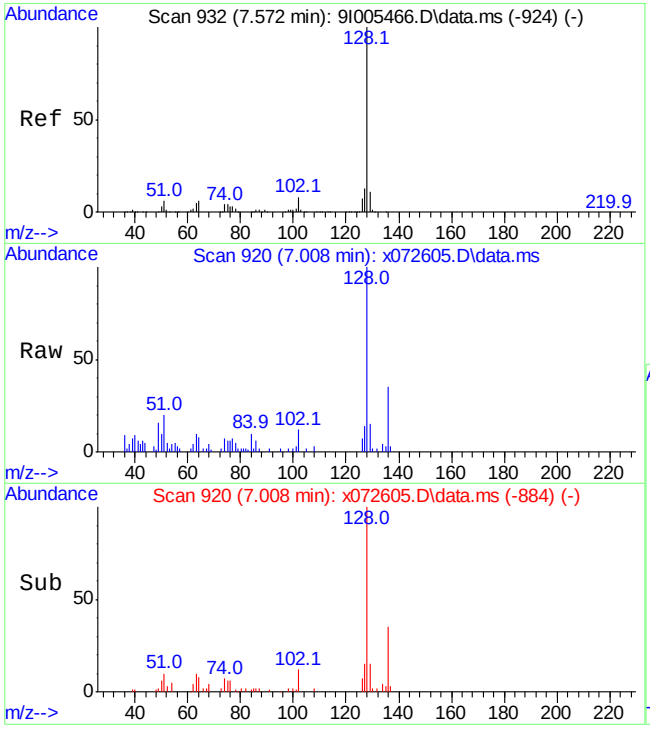


#30
Benzoic Acid
Concen: 0.84 ppm
RT: 6.804 min Scan# 882
Delta R.T. -0.064 min
Lab File: x072605.D
Acq: 28 Aug 2020 11:14 pm

Tgt Ion:105 Resp: 2777

Ion	Ratio	Lower	Upper
105	100		
122	62.3	51.2	111.2
77	66.1	34.1	94.1

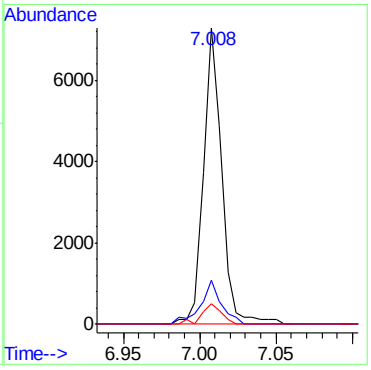


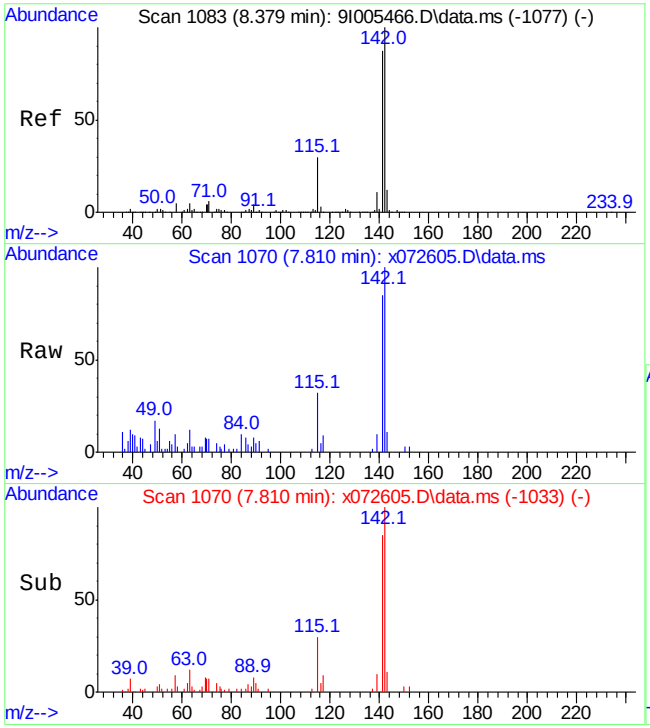


#34
Naphthalene
Concen: 0.28 ppm
RT: 7.008 min Scan# 920
Delta R.T. -0.005 min
Lab File: x072605.D
Acq: 28 Aug 2020 11:14 pm

Tgt Ion:128 Resp: 6070

Ion	Ratio	Lower	Upper
128	100		
129	15.0	0.0	41.4
126	6.8	0.0	37.4

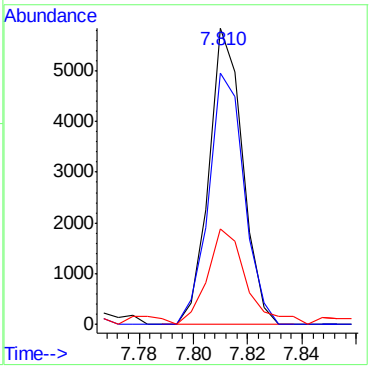


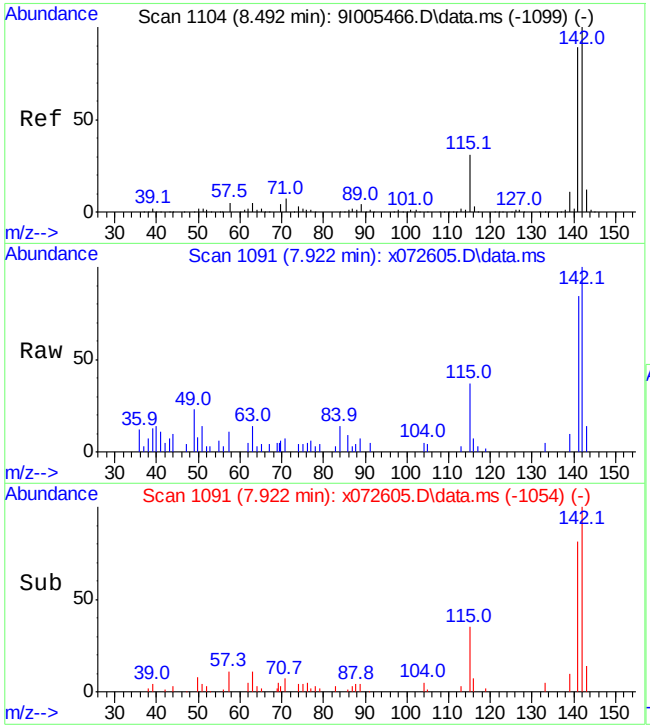


#40
2-Methylnaphthalene
Concen: 0.36 ppm
RT: 7.810 min Scan# 1070
Delta R.T. -0.004 min
Lab File: x072605.D
Acq: 28 Aug 2020 11:14 pm

Tgt Ion:142 Resp: 5015

Ion	Ratio	Lower	Upper
142	100		
141	84.8	56.8	116.8
115	30.1	0.0	60.0

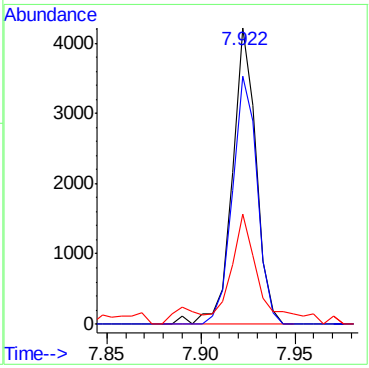


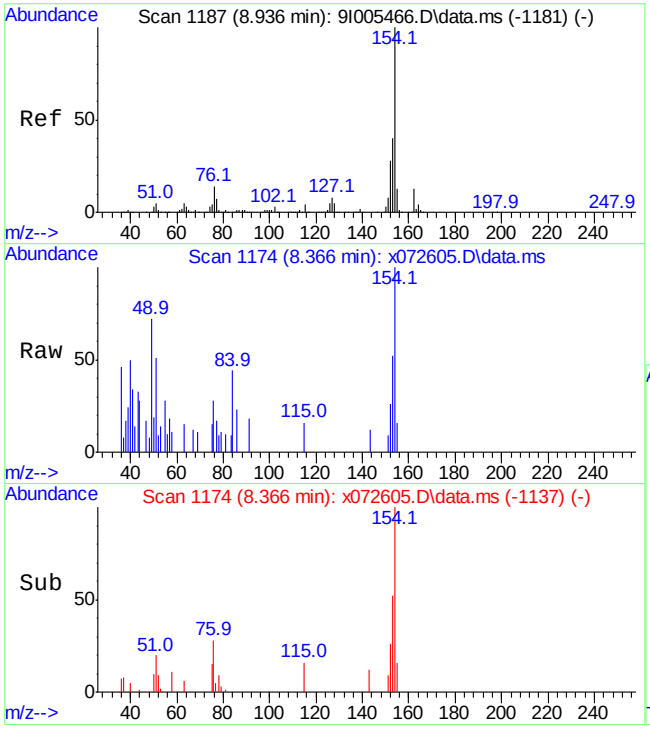


#41
1-Methylnaphthalene
Concen: 0.28 ppm
RT: 7.922 min Scan# 1091
Delta R.T. -0.004 min
Lab File: x072605.D
Acq: 28 Aug 2020 11:14 pm

Tgt Ion:142 Resp: 3689

Ion	Ratio	Lower	Upper
142	100		
141	83.8	59.0	119.0
115	35.6	1.1	61.1

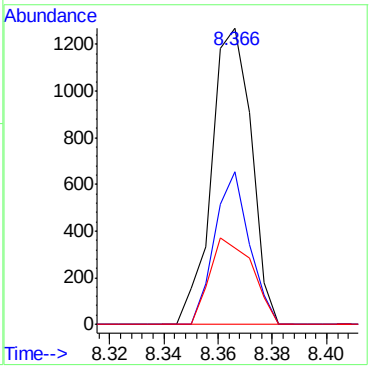


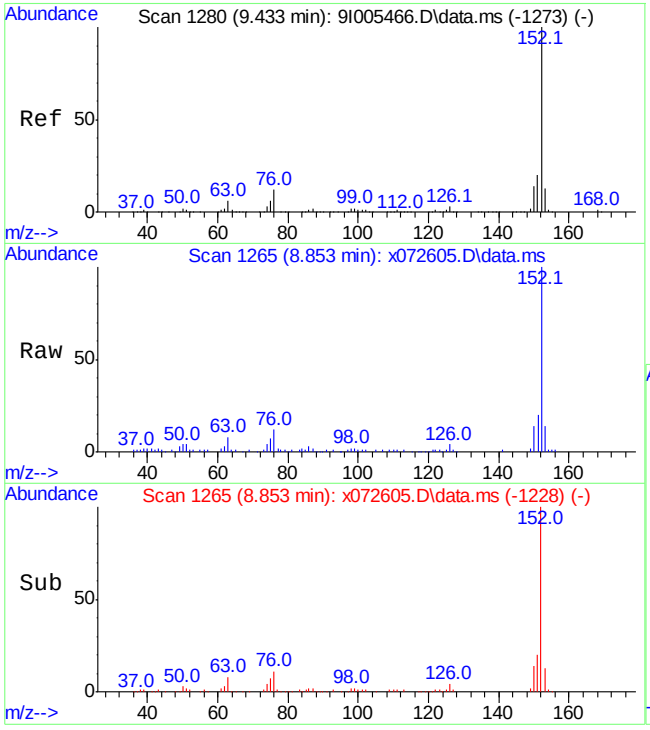


#48
1,1'-Biphenyl
Concen: 0.07 ppm
RT: 8.366 min Scan# 1174
Delta R.T. -0.002 min
Lab File: x072605.D
Acq: 28 Aug 2020 11:14 pm

Tgt Ion:154 Resp: 1292

Ion	Ratio	Lower	Upper
154	100		
153	51.7	11.2	71.2
152	25.7	0.0	58.1

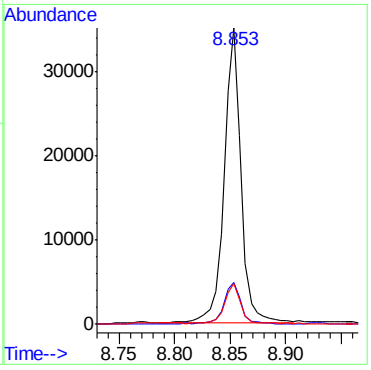


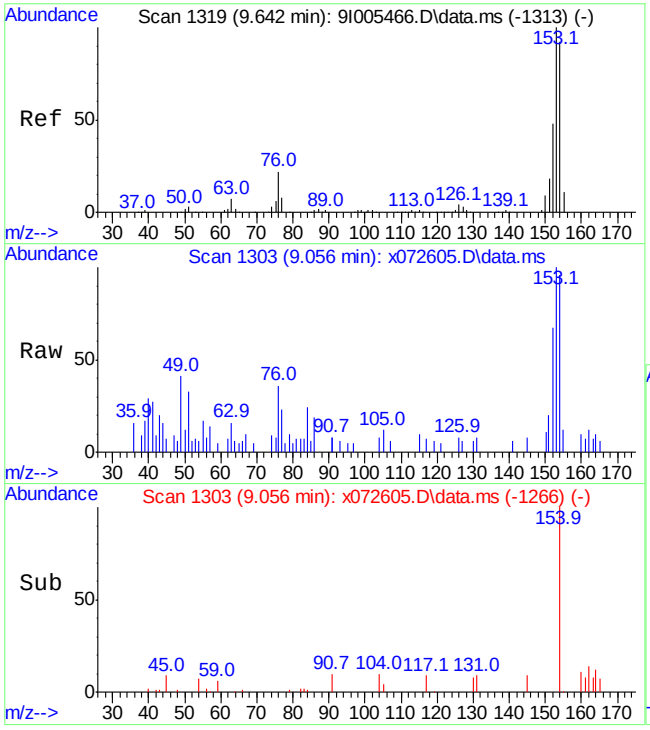


#52
Acenaphthylene
Concen: 1.73 ppm
RT: 8.853 min Scan# 1265
Delta R.T. -0.000 min
Lab File: x072605.D
Acq: 28 Aug 2020 11:14 pm

Tgt Ion:152 Resp: 37042

Ion	Ratio	Lower	Upper
152	100		
150	14.2	0.0	44.3
153	13.4	0.0	43.3

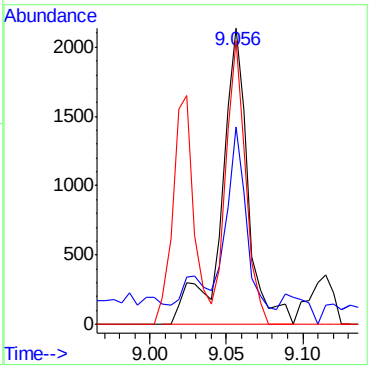


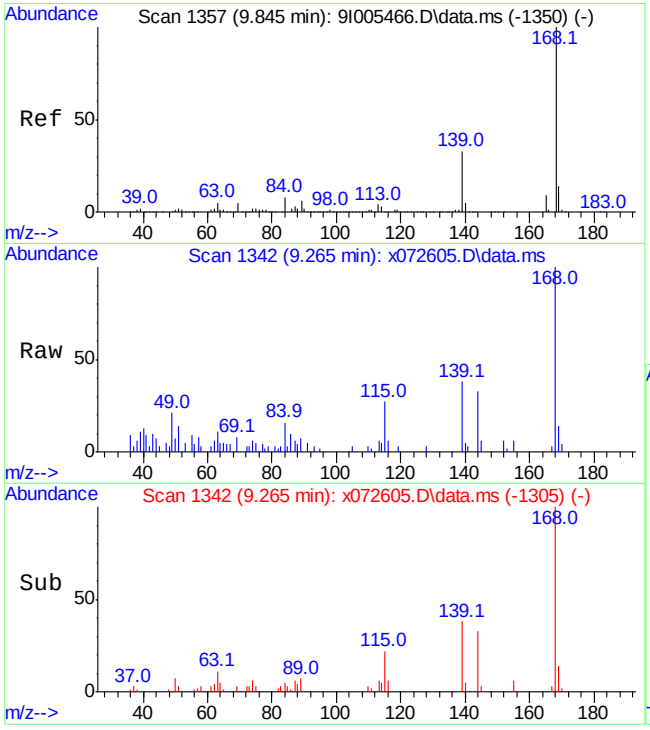


#57
Acenaphthene
Concen: 0.18 ppm
RT: 9.056 min Scan# 1303
Delta R.T. 0.000 min
Lab File: x072605.D
Acq: 28 Aug 2020 11:14 pm

Tgt Ion:153 Resp: 2611

Ion	Ratio	Lower	Upper
153	100		
152	58.7	18.4	78.4
154	91.2	62.4	122.4

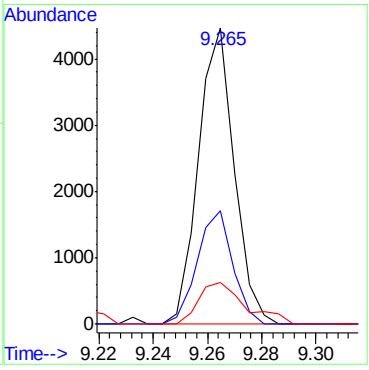


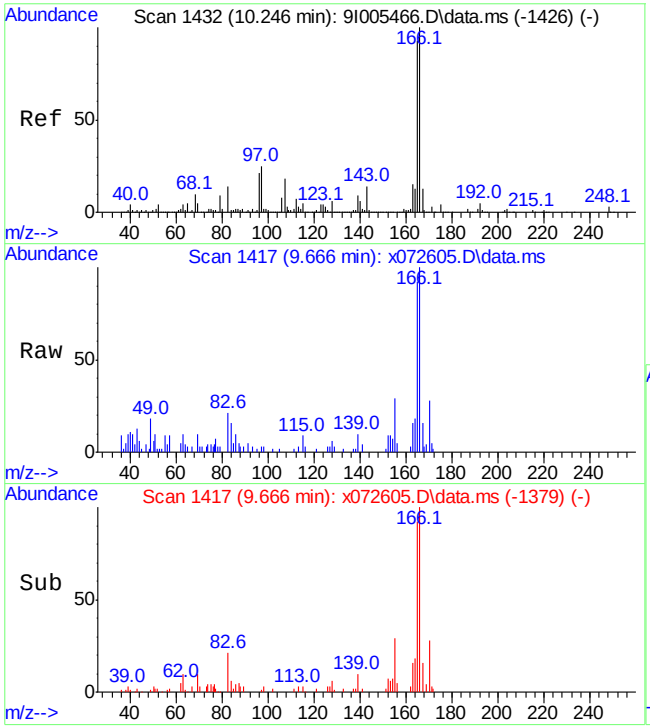


#60
Dibenzofuran
Concen: 0.22 ppm
RT: 9.265 min Scan# 1342
Delta R.T. 0.000 min
Lab File: x072605.D
Acq: 28 Aug 2020 11:14 pm

Tgt Ion:168 Resp: 4067

Ion	Ratio	Lower	Upper
168	100		
139	38.2	3.0	63.0
169	14.0	0.0	43.5

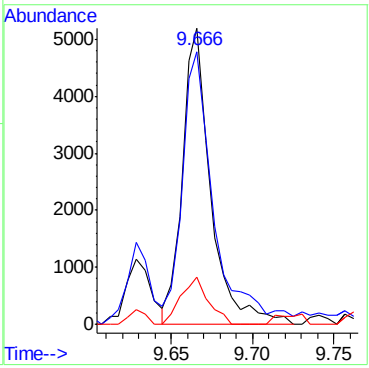


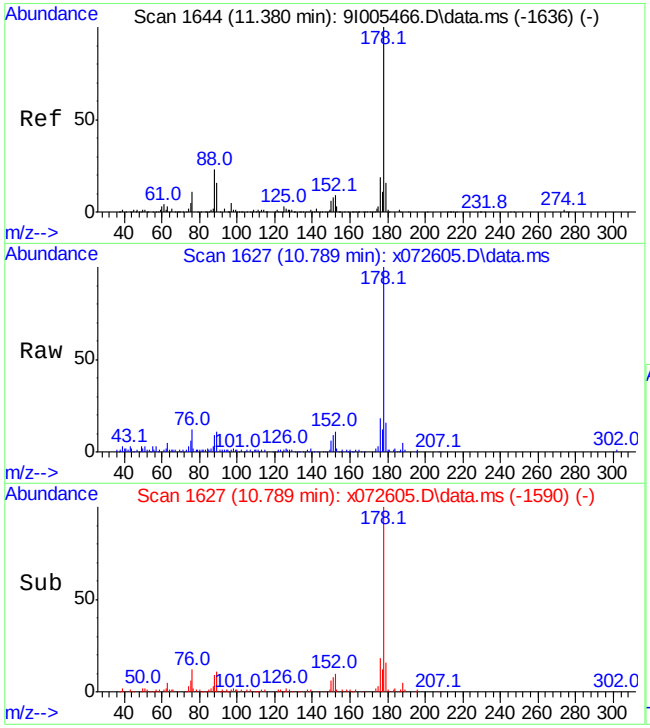


#65
Fluorene
Concen: 0.42 ppm
RT: 9.666 min Scan# 1417
Delta R.T. 0.001 min
Lab File: x072605.D
Acq: 28 Aug 2020 11:14 pm

Tgt Ion:166 Resp: 6324

Ion	Ratio	Lower	Upper
166	100		
165	89.8	62.7	122.7
167	15.0	0.0	43.5

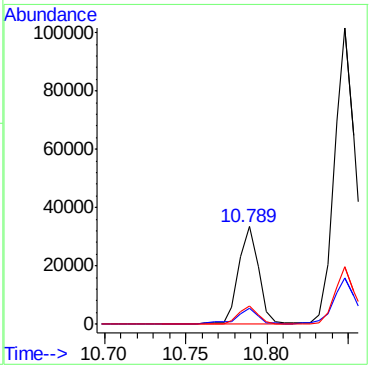


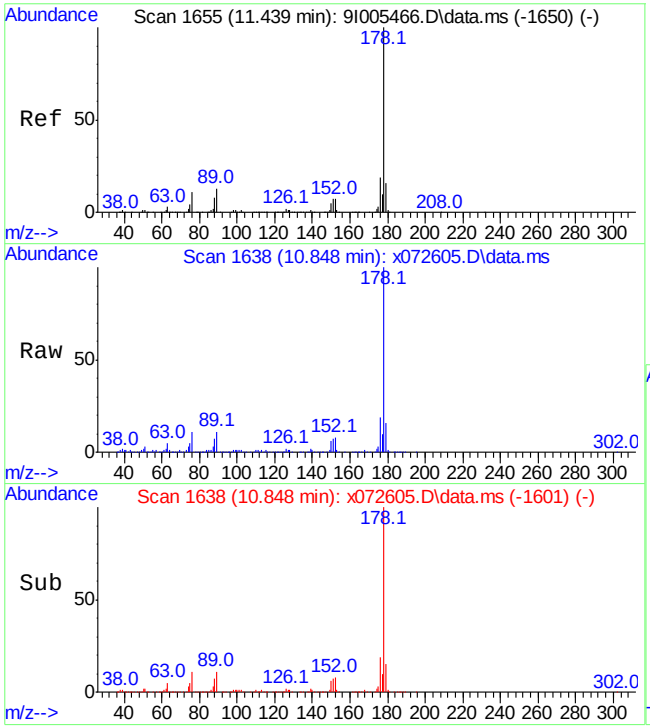


#84
Phenanthrene
Concen: 1.31 ppm
RT: 10.789 min Scan# 1627
Delta R.T. 0.000 min
Lab File: x072605.D
Acq: 28 Aug 2020 11:14 pm

Tgt Ion:178 Resp: 28695

Ion	Ratio	Lower	Upper
178	100		
179	15.6	0.0	45.8
176	18.2	0.0	49.3

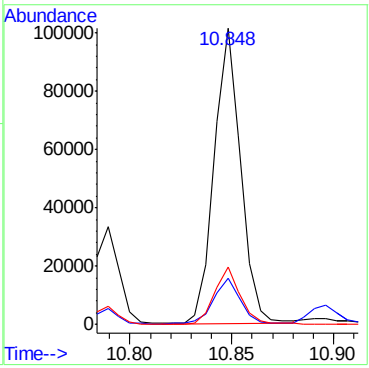


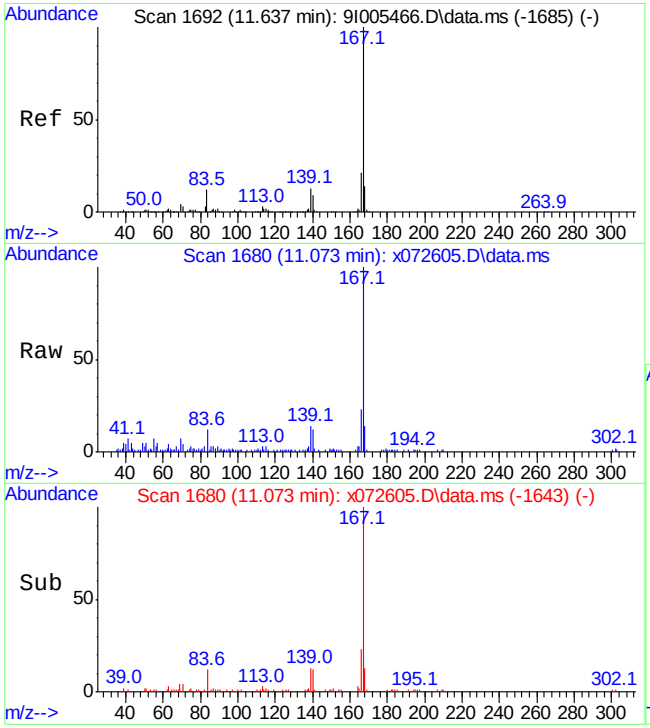


#85
Anthracene
Concen: 4.07 ppm
RT: 10.848 min Scan# 1638
Delta R.T. 0.000 min
Lab File: x072605.D
Acq: 28 Aug 2020 11:14 pm

Tgt Ion:178 Resp: 92033

Ion	Ratio	Lower	Upper
178	100		
179	15.3	0.0	46.0
176	19.2	0.0	49.3

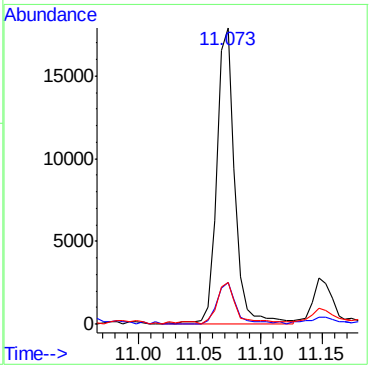


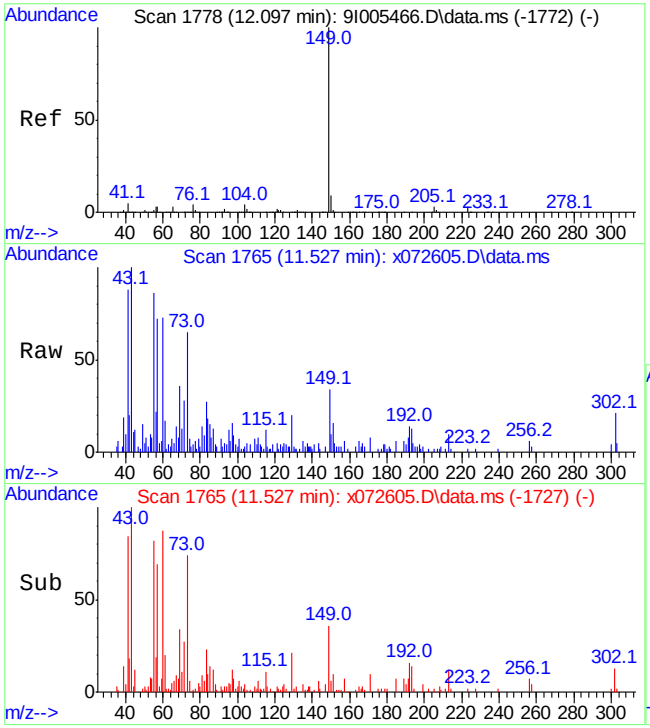


#87
Carbazole
Concen: 0.92 ppm
RT: 11.073 min Scan# 1680
Delta R.T. 0.000 min
Lab File: x072605.D
Acq: 28 Aug 2020 11:14 pm

Tgt Ion:167 Resp: 18589

Ion	Ratio	Lower	Upper
167	100		
168	14.0	0.0	43.9
139	13.6	0.0	42.7

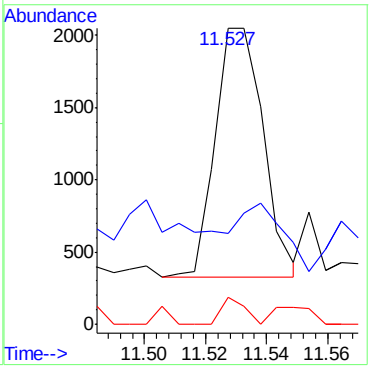


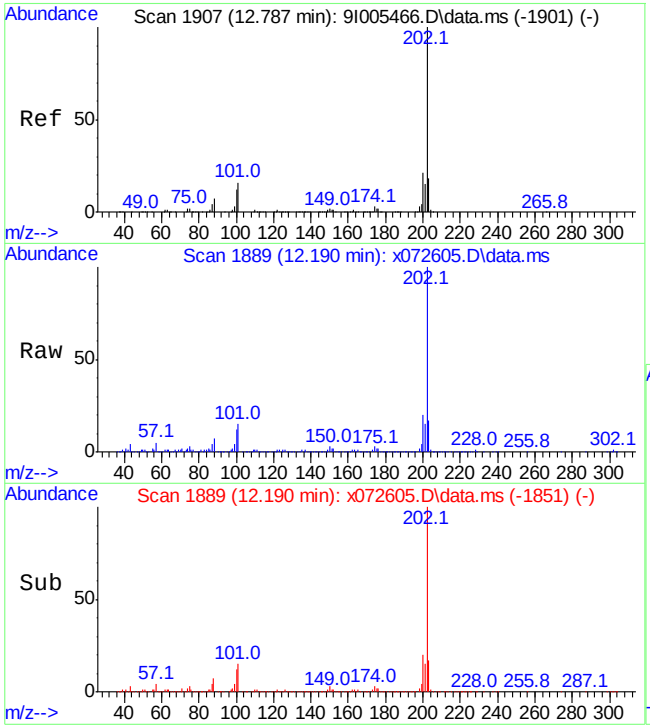


#89
Di-n-butylphthalate
Concen: 0.08 ppm
RT: 11.527 min Scan# 1765
Delta R.T. 0.001 min
Lab File: x072605.D
Acq: 28 Aug 2020 11:14 pm

Tgt Ion:149 Resp: 1879

Ion	Ratio	Lower	Upper
149	100		
150	1.6	0.0	39.5
104	4.1	0.0	34.2

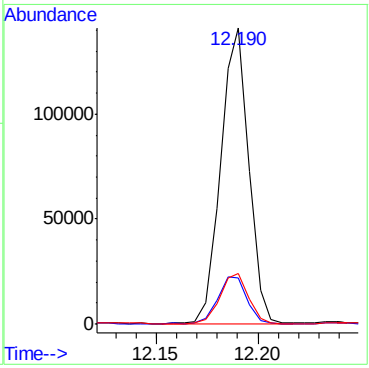


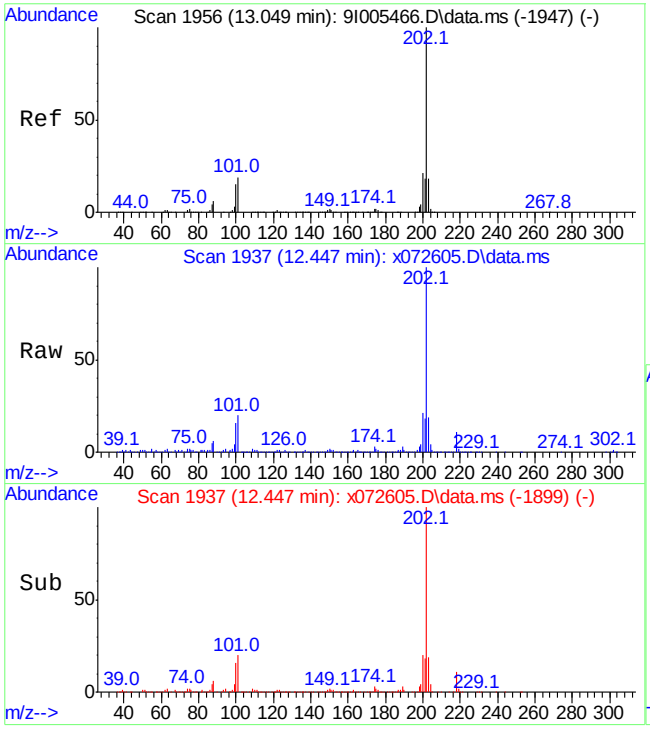


#91
Fluoranthene
Concen: 6.50 ppm
RT: 12.190 min Scan# 1889
Delta R.T. 0.002 min
Lab File: x072605.D
Acq: 28 Aug 2020 11:14 pm

Tgt Ion:202 Resp: 134920

Ion	Ratio	Lower	Upper
202	100		
101	15.4	0.0	45.8
203	17.1	0.0	48.1

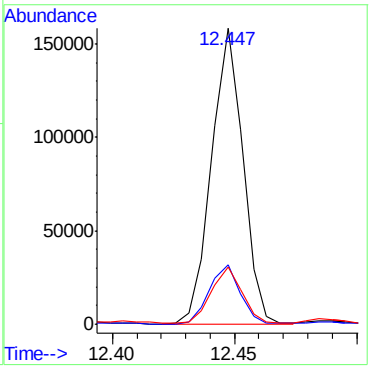


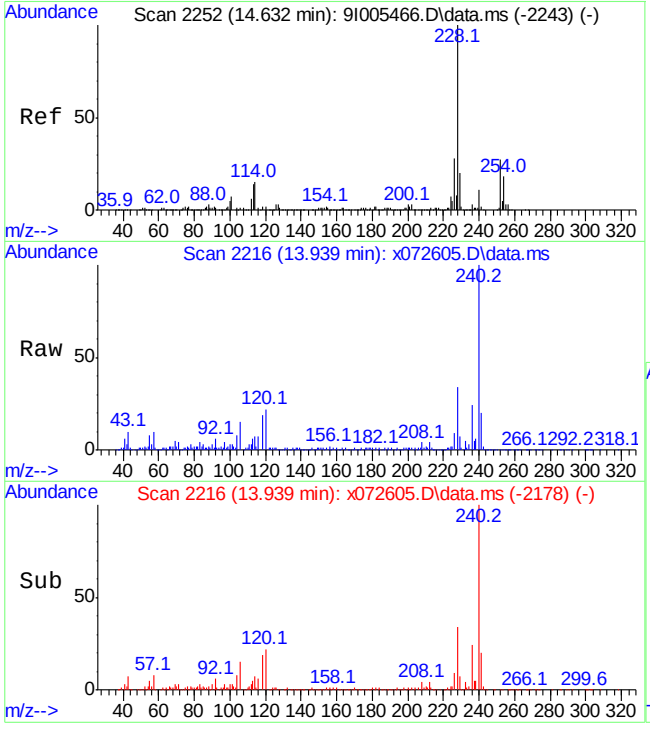


#94
Pyrene
Concen: 6.61 ppm
RT: 12.447 min Scan# 1937
Delta R.T. 0.003 min
Lab File: x072605.D
Acq: 28 Aug 2020 11:14 pm

Tgt Ion:202 Resp: 142120

Ion	Ratio	Lower	Upper
202	100		
101	19.9	0.0	48.7
203	19.0	0.0	48.4

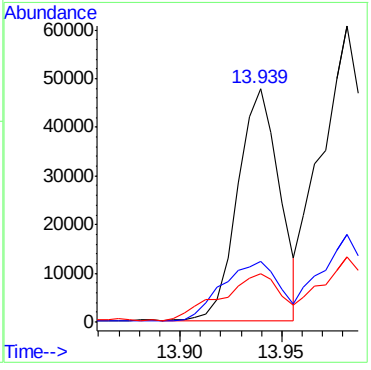


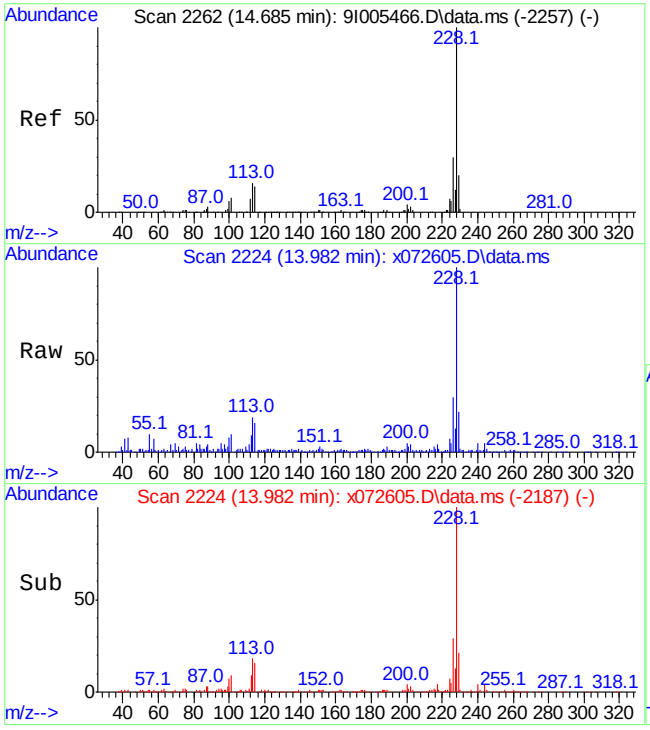


#99
Benzo[a]anthracene
Concen: 4.01 ppm
RT: 13.939 min Scan# 2216
Delta R.T. 0.005 min
Lab File: x072605.D
Acq: 28 Aug 2020 11:14 pm

Tgt Ion:228 Resp: 68019

Ion	Ratio	Lower	Upper
228	100		
226	25.6	0.0	57.5
229	19.4	0.0	49.9

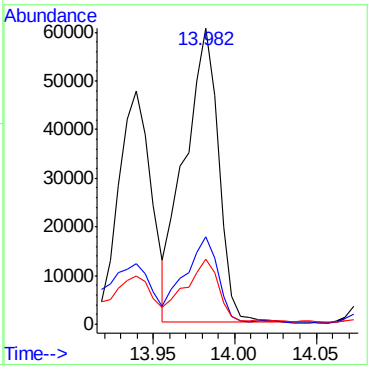


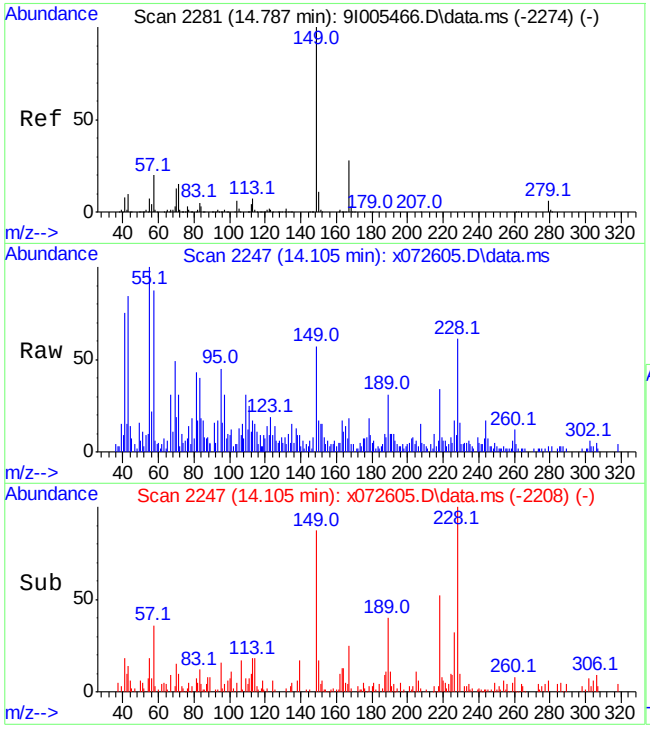


#100
Chrysene
Concen: 4.89 ppm
RT: 13.982 min Scan# 2224
Delta R.T. 0.000 min
Lab File: x072605.D
Acq: 28 Aug 2020 11:14 pm

Tgt Ion:228 Resp: 87410

Ion	Ratio	Lower	Upper
228	100		
226	29.7	0.4	60.4
229	20.9	0.0	50.1

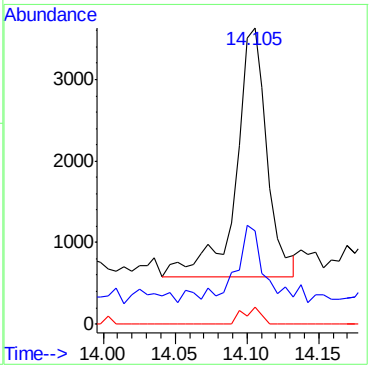


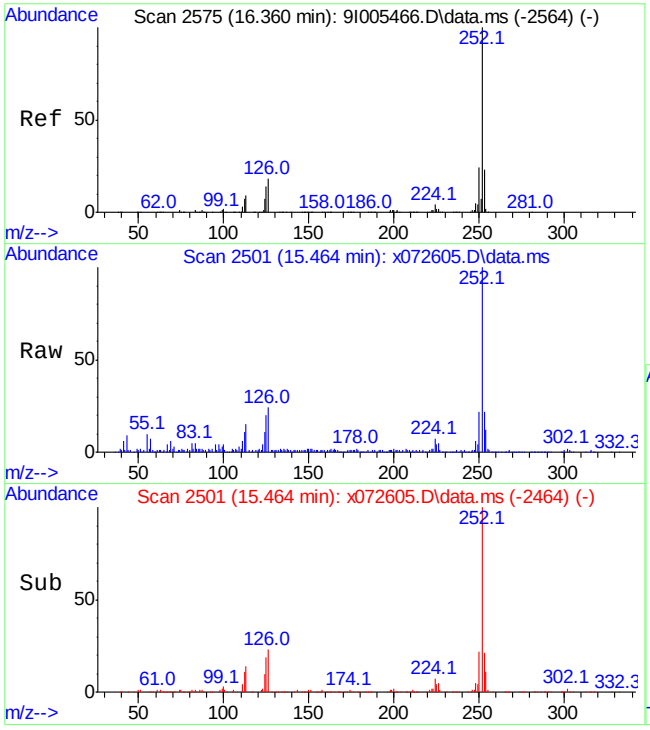


#101
bis(2-Ethylhexyl)phthalate
Concen: 0.38 ppm
RT: 14.105 min Scan# 2247
Delta R.T. 0.011 min
Lab File: x072605.D
Acq: 28 Aug 2020 11:14 pm

Tgt Ion:149 Resp: 4682

Ion	Ratio	Lower	Upper
149	100		
167	27.7	0.0	58.5
279	7.0	0.0	35.7

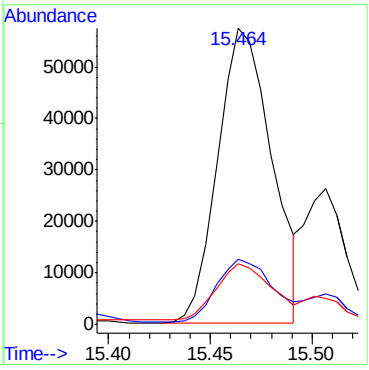


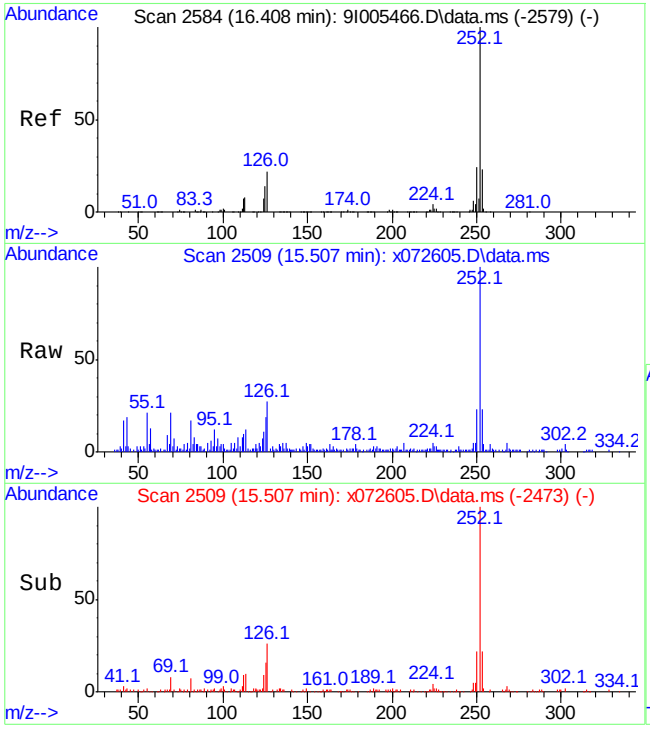


#104
Benzo[b]fluoranthene
Concen: 7.48 ppm
RT: 15.464 min Scan# 2501
Delta R.T. -0.001 min
Lab File: x072605.D
Acq: 28 Aug 2020 11:14 pm

Tgt Ion:252 Resp: 106386

Ion	Ratio	Lower	Upper
252	100		
253	21.2	0.0	52.5
125	19.5	0.0	44.0

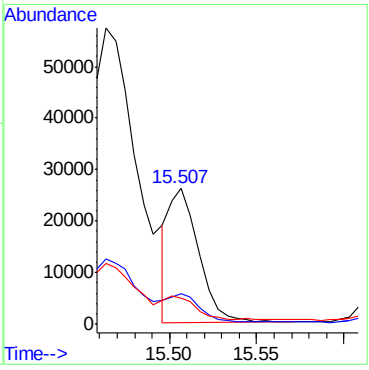


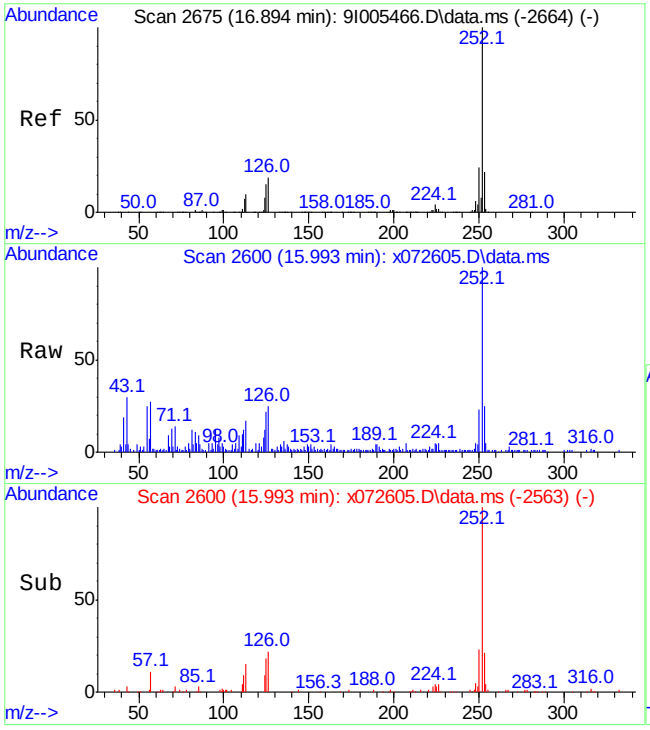


#105
Benzo[k]fluoranthene
Concen: 2.02 ppm
RT: 15.507 min Scan# 2509
Delta R.T. -0.006 min
Lab File: x072605.D
Acq: 28 Aug 2020 11:14 pm

Tgt Ion:252 Resp: 30569

Ion	Ratio	Lower	Upper
252	100		
253	21.1	0.0	52.5
125	13.5	0.0	44.4

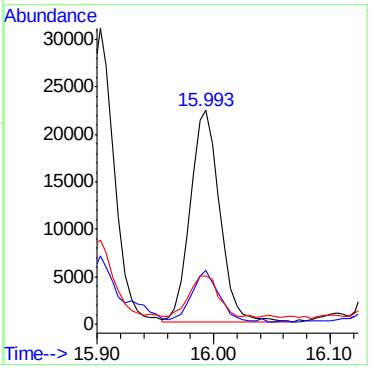


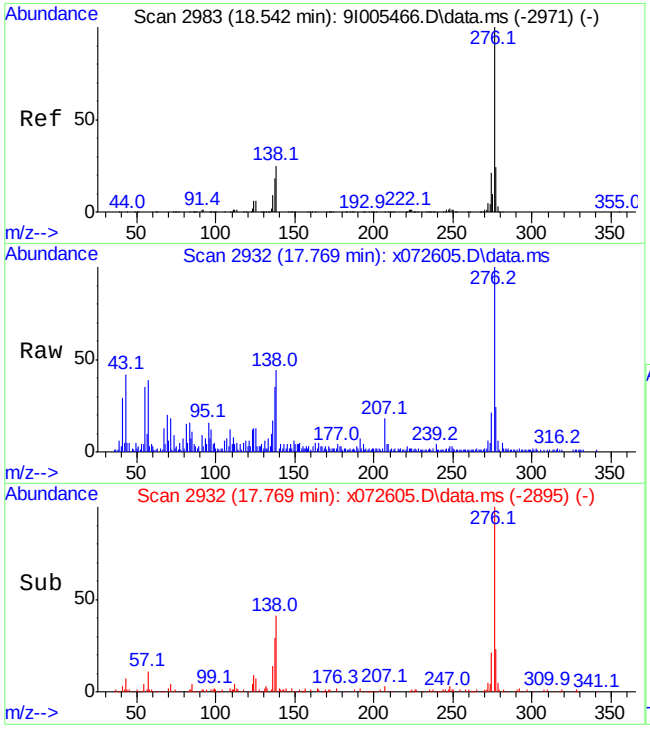


#106
Benzo[a]pyrene
Concen: 3.11 ppm
RT: 15.993 min Scan# 2600
Delta R.T. -0.000 min
Lab File: x072605.D
Acq: 28 Aug 2020 11:14 pm

Tgt Ion:252 Resp: 39018

Ion	Ratio	Lower	Upper
252	100		
253	23.7	0.0	52.3
125	19.1	0.0	44.7

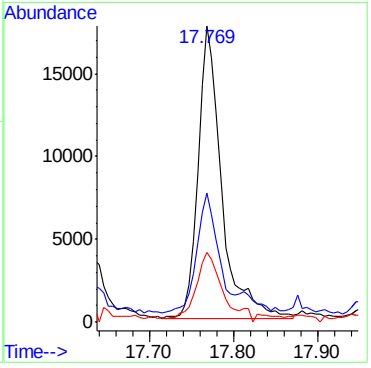


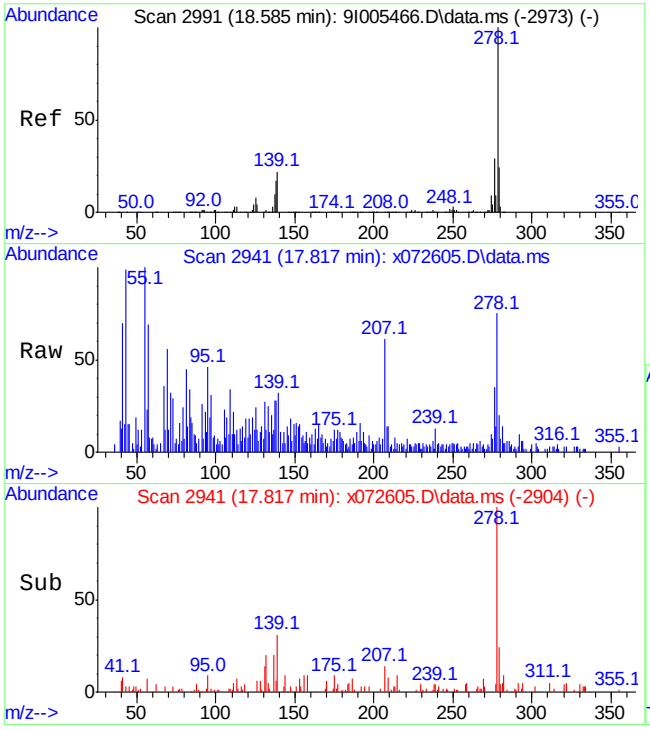


#107
Indeno[1,2,3-cd]pyrene
Concen: 3.13 ppm
RT: 17.769 min Scan# 2932
Delta R.T. -0.003 min
Lab File: x072605.D
Acq: 28 Aug 2020 11:14 pm

Tgt Ion:276 Resp: 33488

Ion	Ratio	Lower	Upper
276	100		
138	40.3	0.0	54.7
277	22.1	0.0	53.8

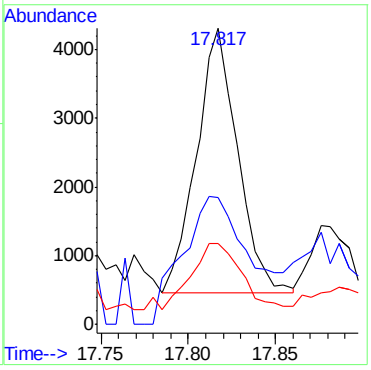


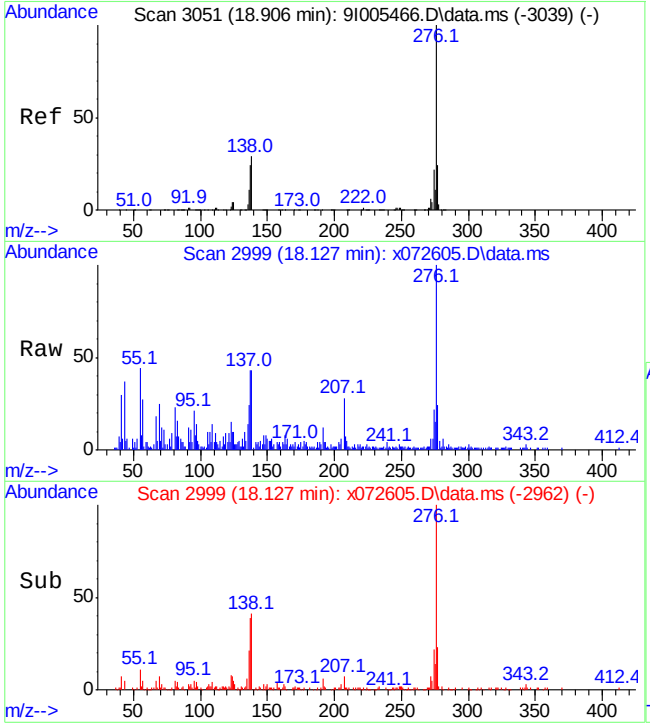


#108
Dibenz[a,h]anthracene
Concen: 0.53 ppm
RT: 17.817 min Scan# 2941
Delta R.T. -0.003 min
Lab File: x072605.D
Acq: 28 Aug 2020 11:14 pm

Tgt Ion:278 Resp: 6304

Ion	Ratio	Lower	Upper
278	100		
139	30.1	0.0	52.4
279	26.3	0.0	54.4

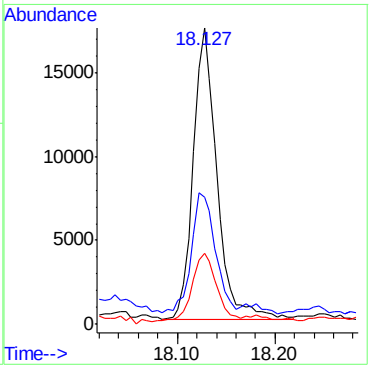




#109
Benzo[g,h,i]perylene
Concen: 2.34 ppm
RT: 18.127 min Scan# 2999
Delta R.T. -0.002 min
Lab File: x072605.D
Acq: 28 Aug 2020 11:14 pm

Tgt Ion:276 Resp: 29219

Ion	Ratio	Lower	Upper
276	100		
138	39.6	0.0	59.4
277	22.7	0.0	54.1



Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan
08/31/20 11:56

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-31-2020\s7g494\
Data File : 7G11426.d
Acq On : 29 Aug 2020 3:59 pm
Operator : FOUADS
Sample : fa78194-1 e,2
Misc : op81782,S7G494,29.8,,,1,2,soil
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Aug 31 00:38:10 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

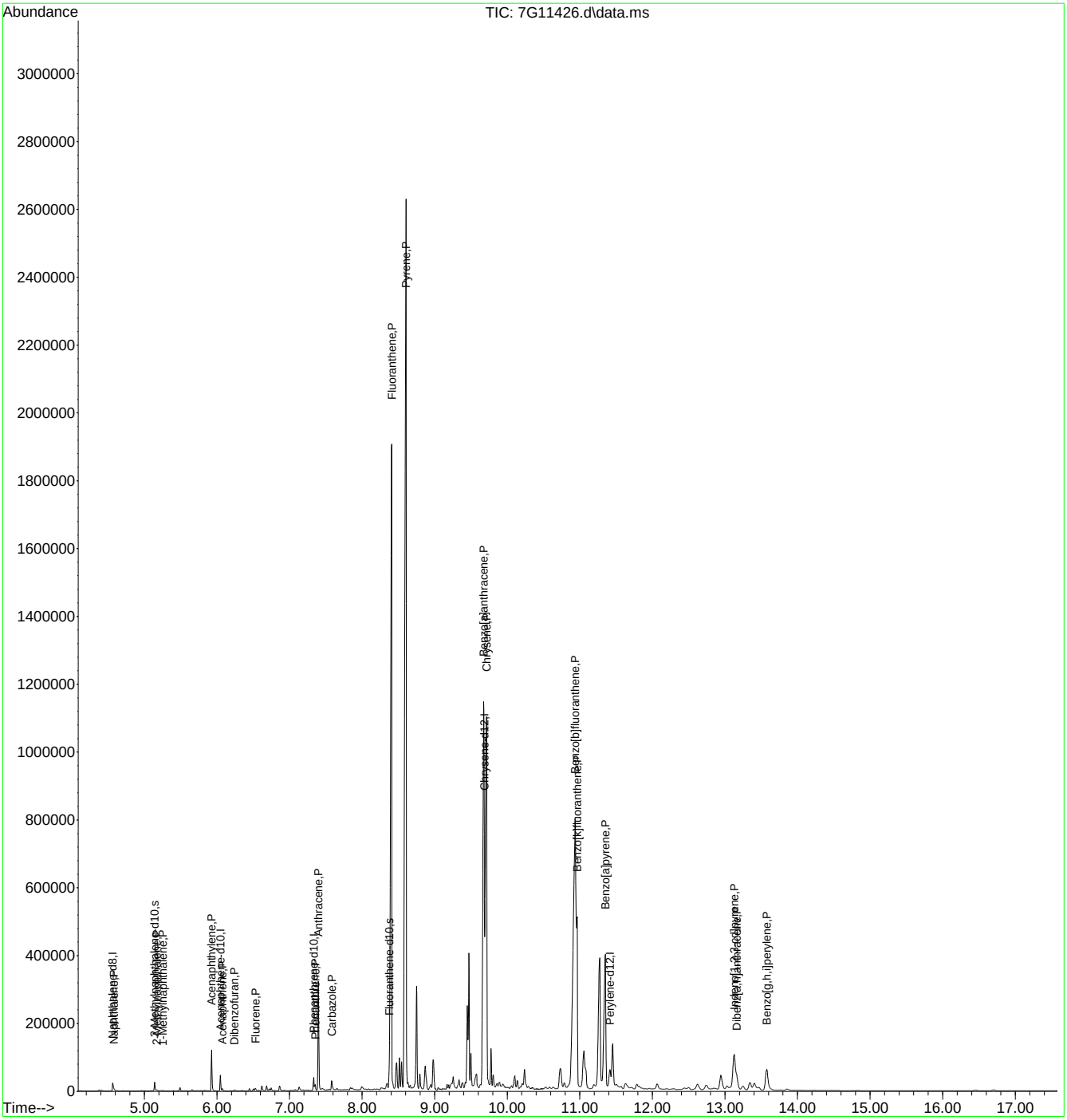
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.564	136	21431	4.00	ppm	0.00
6) Acenaphthene-d10	6.046	164	14044	4.00	ppm	0.00
11) Phenanthrene-d10	7.334	188	28282	4.00	ppm	0.00
18) Chrysene-d12	9.683	240	67371	4.00	ppm	0.03
22) Perylene-d12	11.416	264	52475	4.00	ppm	0.04
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.141	152	10311	3.30	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 33.00%#			
17) Fluoranthene-d10	8.376	212	60288	4.12	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 41.20%#			
Target Compounds						Qvalue
2) Naphthalene	4.582	128	2207	0.37	ppm	99
3) 2-Methylnaphthalene	5.170	142	1039	0.22	ppm	98
5) 1-Methylnaphthalene	5.253	142	478	0.11	ppm	98
7) Acenaphthylene	5.925	152	70200	8.58	ppm	99
8) Acenaphthene	6.075	153	2107	0.40	ppm	99
9) Dibenzofuran	6.240	168	2269	0.62	ppm	92
10) Fluorene	6.530	166	3732	0.65	ppm	96
13) Phenanthrene	7.355	178	12136	1.31	ppm	98
14) Anthracene	7.397	178	199075	20.16	ppm	99
15) Carbazole	7.584	167	22292	1.32	ppm	98
16) Fluoranthene	8.408	202	1557755	74.02	ppm	98
19) Pyrene	8.607	202	2706900	89.90	ppm	97
20) Benzo[a]anthracene	9.676	228	929124	39.79	ppm	91
21) Chrysene	9.714	228	1011079	43.53	ppm	99
23) Benzo[b]fluoranthene	10.935	252	1724783m	96.84	ppm	
24) Benzo[k]fluoranthene	10.964	252	287588m	14.70	ppm	
25) Benzo[a]pyrene	11.353	252	536648	30.92	ppm	99
26) Indeno[1,2,3-cd]pyrene	13.129	276	178408	15.75	ppm	98
27) Dibenz[a,h]anthracene	13.163	278	47276	3.76	ppm	97
28) Benzo[g,h,i]perylene	13.575	276	108999	7.98	ppm	99

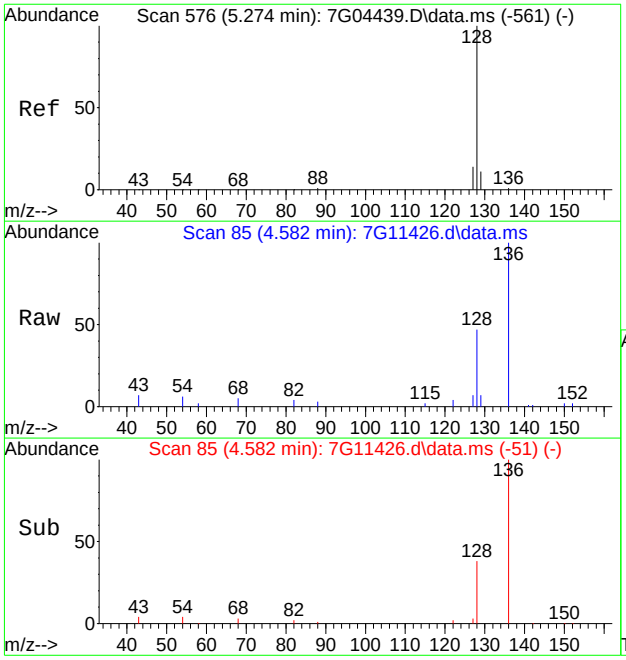
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-31-2020\s7g494\
Data File : 7G11426.d
Acq On : 29 Aug 2020 3:59 pm
Operator : FOUADS
Sample : fa78194-1 e,2
Misc : op81782,S7G494,29.8,,,1,2,soil
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Aug 31 00:38:10 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

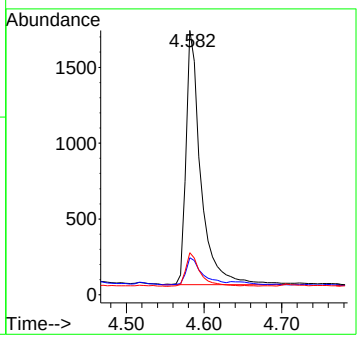


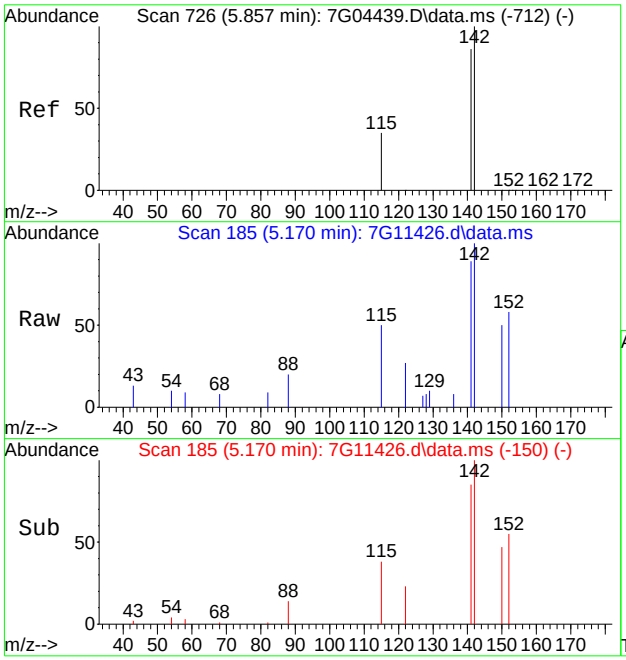


#2
Naphthalene
Concen: 0.37 ppm
RT: 4.582 min Scan# 85
Delta R.T. -0.000 min
Lab File: 7G11426.d
Acq: 29 Aug 2020 3:59 pm

Tgt Ion:128 Resp: 2207

Ion	Ratio	Lower	Upper
128	100		
129	10.6	0.0	41.2
127	12.8	0.0	43.0

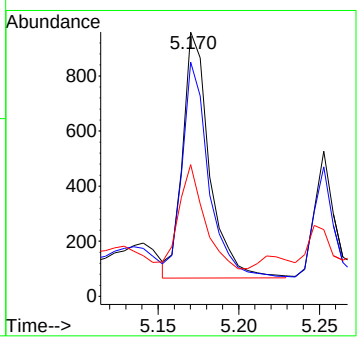


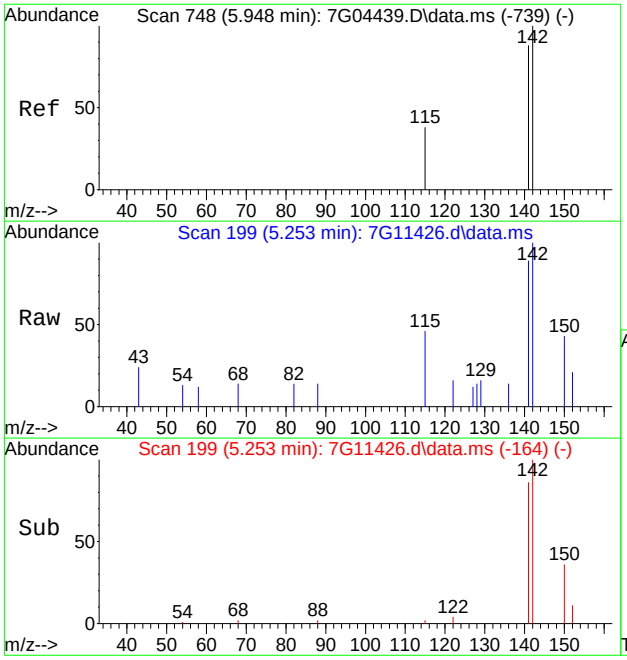


#3
2-Methylnaphthalene
Concen: 0.22 ppm
RT: 5.170 min Scan# 185
Delta R.T. 0.006 min
Lab File: 7G11426.d
Acq: 29 Aug 2020 3:59 pm

Tgt Ion:142 Resp: 1039

Ion	Ratio	Lower	Upper
142	100		
141	87.9	57.6	117.6
115	40.6	7.8	67.8

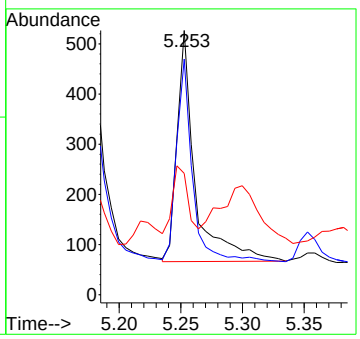


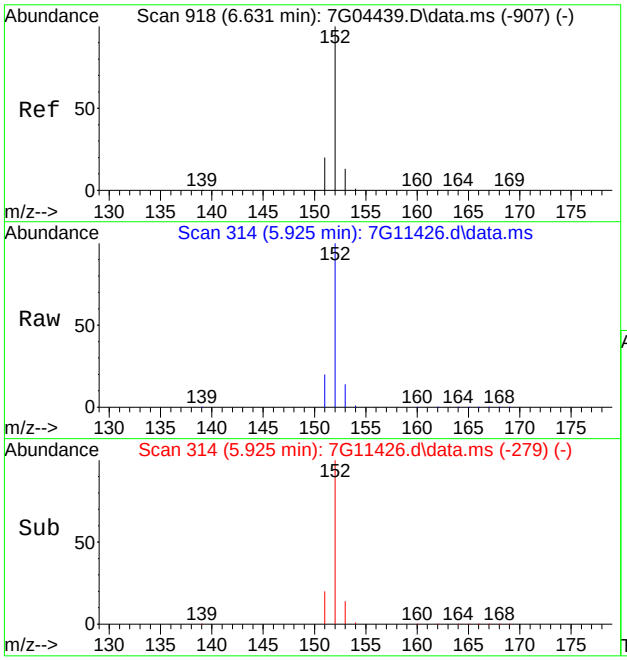


#5
1-Methylnaphthalene
Concen: 0.11 ppm
RT: 5.253 min Scan# 199
Delta R.T. 0.006 min
Lab File: 7G11426.d
Acq: 29 Aug 2020 3:59 pm

Tgt Ion:142 Resp: 478

Ion	Ratio	Lower	Upper
142	100		
141	87.9	57.8	117.8
115	27.2	0.3	60.3

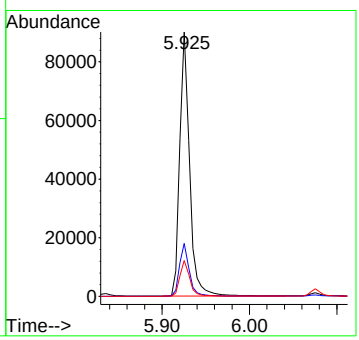


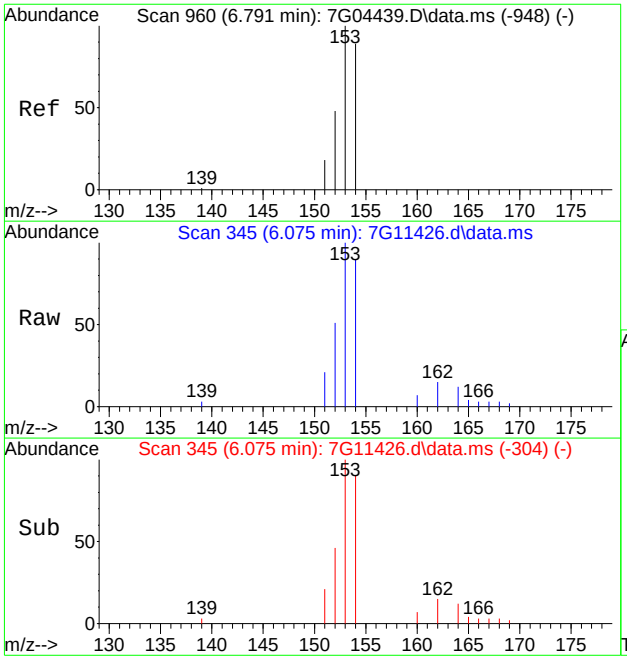


#7
Acenaphthylene
Concen: 8.58 ppm
RT: 5.925 min Scan# 314
Delta R.T. -0.000 min
Lab File: 7G11426.d
Acq: 29 Aug 2020 3:59 pm

Tgt Ion:152 Resp: 70200

Ion	Ratio	Lower	Upper
152	100		
151	20.0	0.0	49.5
153	13.6	0.0	43.7

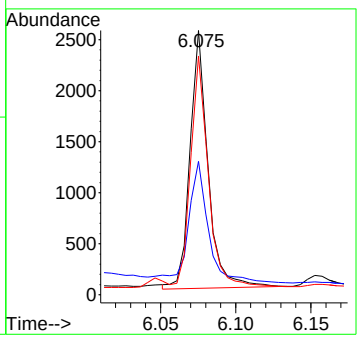


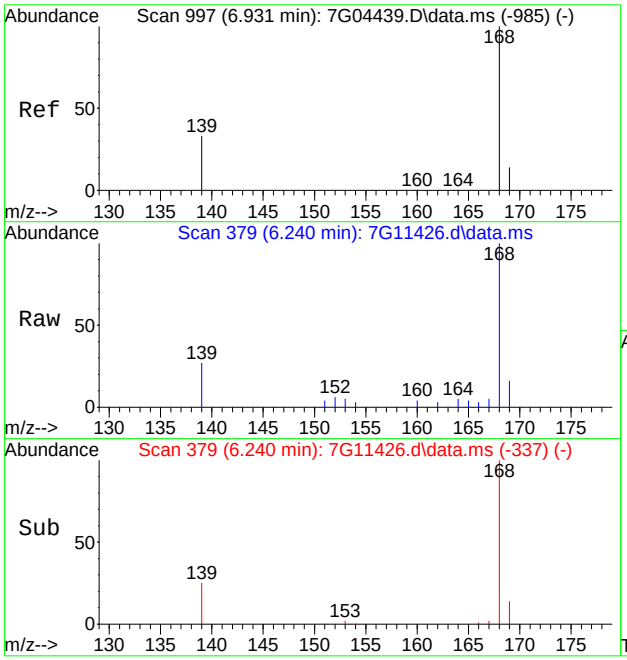


#8
Acenaphthene
Concen: 0.40 ppm
RT: 6.075 min Scan# 345
Delta R.T. 0.005 min
Lab File: 7G11426.d
Acq: 29 Aug 2020 3:59 pm

Tgt Ion:153 Resp: 2107

Ion	Ratio	Lower	Upper
153	100		
152	46.1	16.7	76.7
154	89.3	59.8	119.8

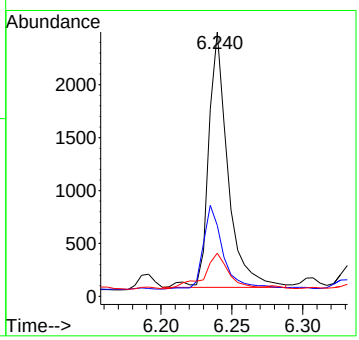


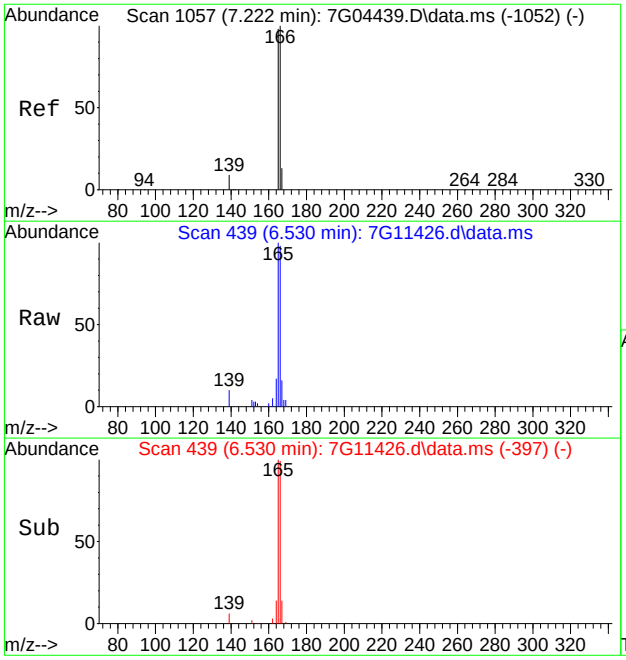


#9
Dibenzofuran
Concen: 0.62 ppm
RT: 6.240 min Scan# 379
Delta R.T. 0.005 min
Lab File: 7G11426.d
Acq: 29 Aug 2020 3:59 pm

Tgt Ion:168 Resp: 2269

Ion	Ratio	Lower	Upper
168	100		
139	24.8	10.3	50.3
169	13.8	0.0	33.2

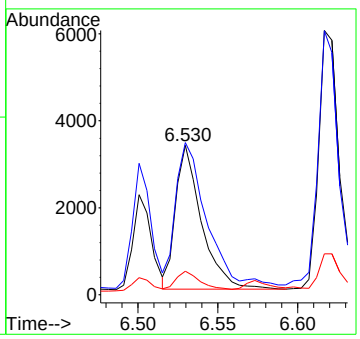


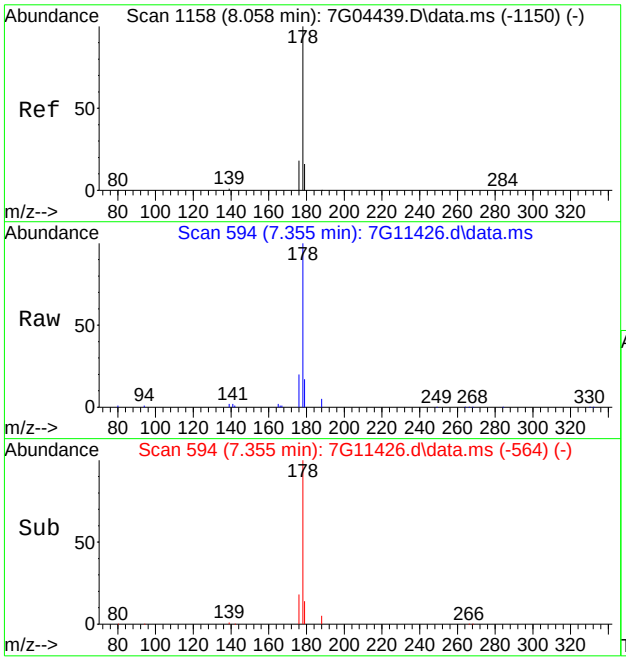


#10
Fluorene
Concen: 0.65 ppm
RT: 6.530 min Scan# 439
Delta R.T. 0.005 min
Lab File: 7G11426.d
Acq: 29 Aug 2020 3:59 pm

Tgt Ion:166 Resp: 3732

Ion	Ratio	Lower	Upper
166	100		
165	99.1	65.5	125.5
167	12.4	0.0	44.0

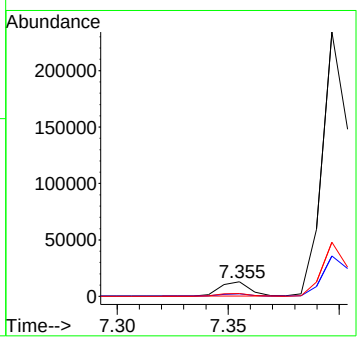


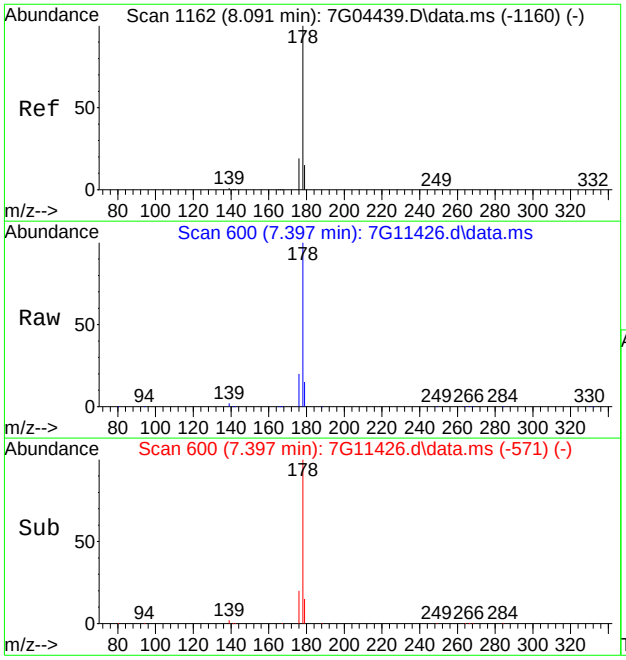


#13
Phenanthrene
Concen: 1.31 ppm
RT: 7.355 min Scan# 594
Delta R.T. 0.007 min
Lab File: 7G11426.d
Acq: 29 Aug 2020 3:59 pm

Tgt Ion:178 Resp: 12136

Ion	Ratio	Lower	Upper
178	100		
179	15.7	0.0	45.3
176	19.0	0.0	50.1

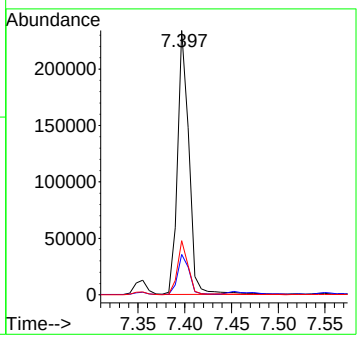


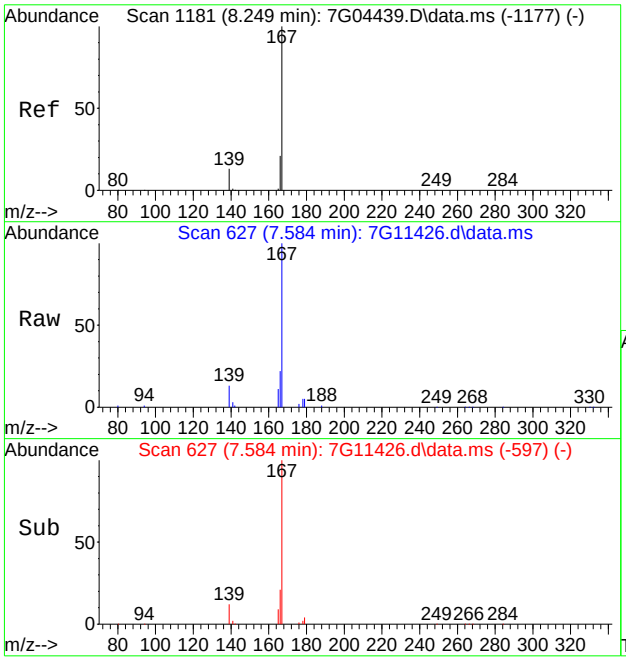


#14
Anthracene
Concen: 20.16 ppm
RT: 7.397 min Scan# 600
Delta R.T. -0.000 min
Lab File: 7G11426.d
Acq: 29 Aug 2020 3:59 pm

Tgt Ion:178 Resp: 199075

Ion	Ratio	Lower	Upper
178	100		
179	15.1	0.0	45.3
176	20.5	0.0	49.4

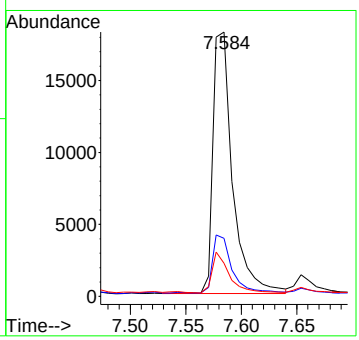


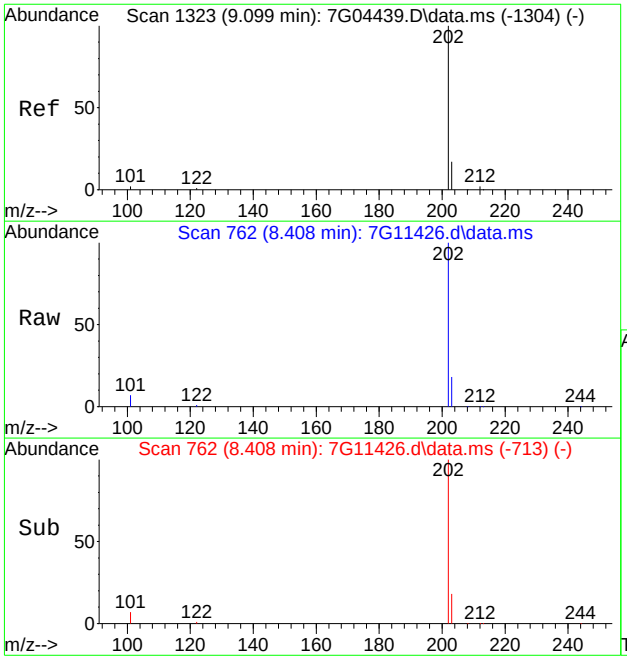


#15
Carbazole
Concen: 1.32 ppm
RT: 7.584 min Scan# 627
Delta R.T. 0.007 min
Lab File: 7G11426.d
Acq: 29 Aug 2020 3:59 pm

Tgt Ion:167 Resp: 22292

Ion	Ratio	Lower	Upper
167	100		
166	21.0	0.0	39.8
139	11.2	0.0	31.2

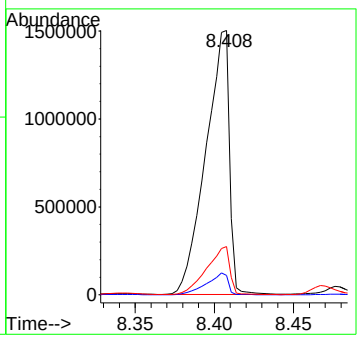


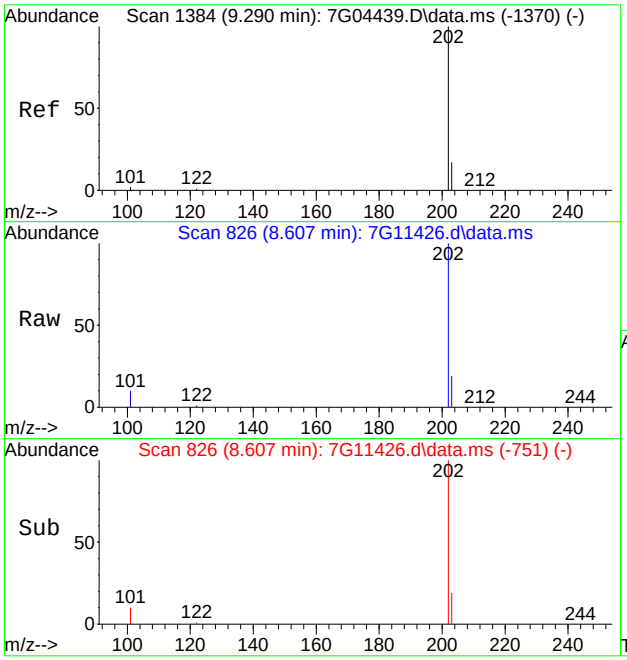


#16
Fluoranthene
Concen: 74.02 ppm
RT: 8.408 min Scan# 762
Delta R.T. 0.025 min
Lab File: 7G11426.d
Acq: 29 Aug 2020 3:59 pm

Tgt Ion:202 Resp: 1557755

Ion	Ratio	Lower	Upper
202	100		
101	7.3	0.0	36.6
203	18.2	0.0	47.6

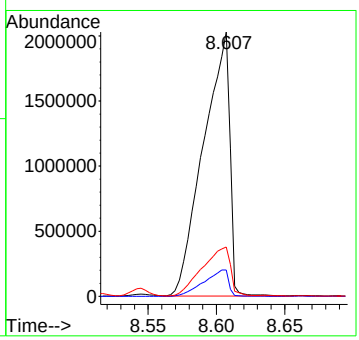


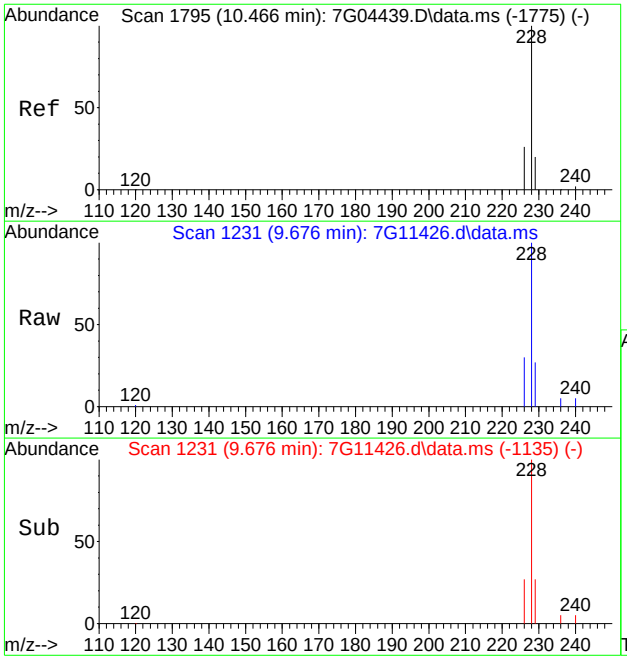


#19
Pyrene
Concen: 89.90 ppm
RT: 8.607 min Scan# 826
Delta R.T. 0.034 min
Lab File: 7G11426.d
Acq: 29 Aug 2020 3:59 pm

Tgt Ion:202 Resp: 2706900

Ion	Ratio	Lower	Upper
202	100		
101	10.0	0.0	38.0
203	18.5	0.0	47.6

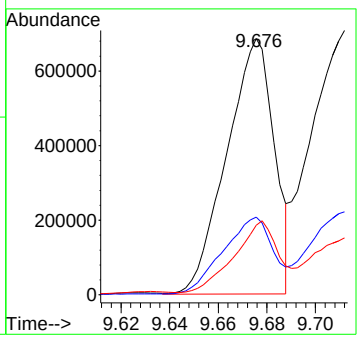


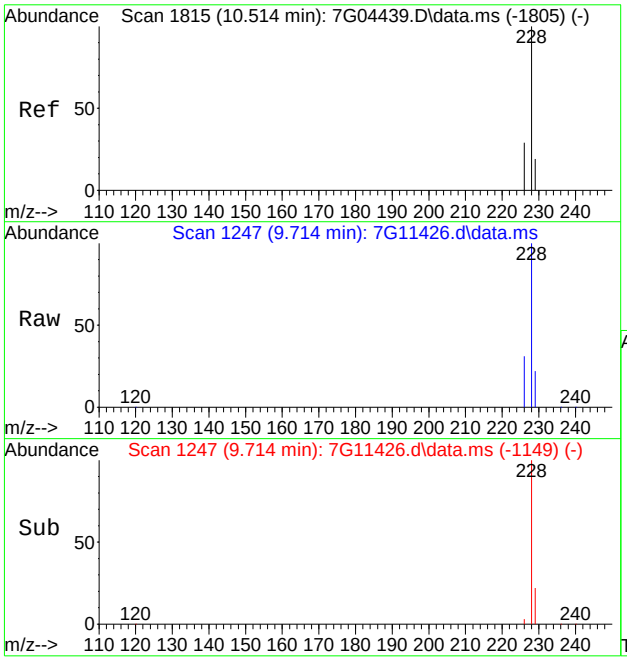


#20
Benzo[a]anthracene
Concen: 39.79 ppm
RT: 9.676 min Scan# 1231
Delta R.T. 0.031 min
Lab File: 7G11426.d
Acq: 29 Aug 2020 3:59 pm

Tgt Ion:228 Resp: 929124

Ion	Ratio	Lower	Upper
228	100		
226	30.2	0.0	56.9
229	25.6	0.0	49.7

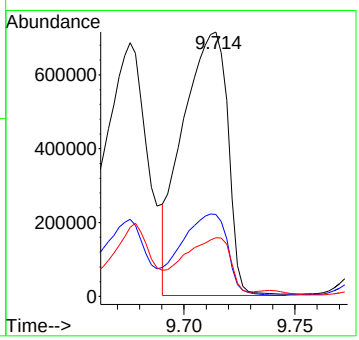


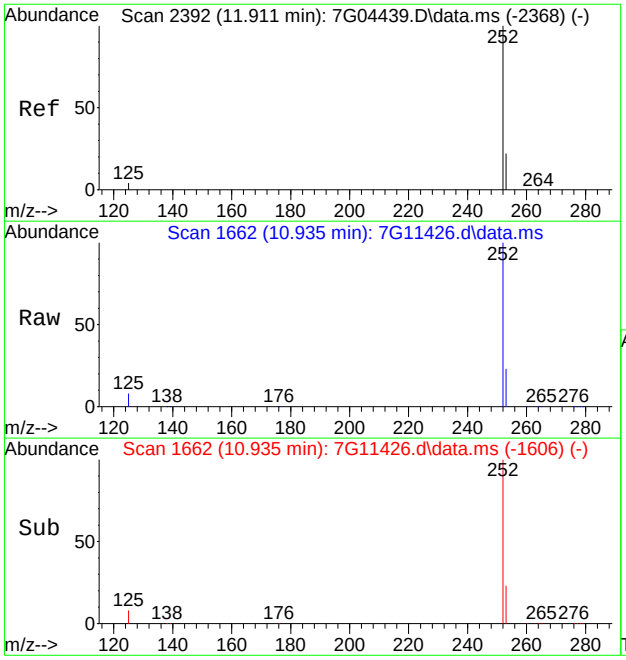


#21
Chrysene
Concen: 43.53 ppm
RT: 9.714 min Scan# 1247
Delta R.T. 0.036 min
Lab File: 7G11426.d
Acq: 29 Aug 2020 3:59 pm

Tgt Ion:228 Resp: 1011079

Ion	Ratio	Lower	Upper
228	100		
226	30.8	0.2	60.2
229	20.1	0.0	49.5

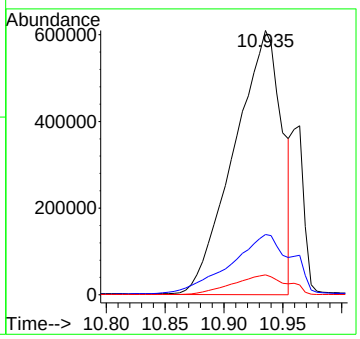


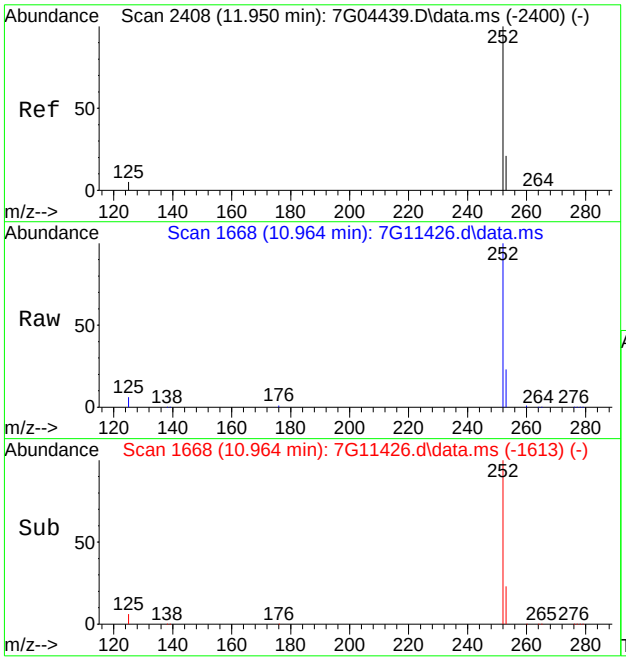


#23
Benzo[b]fluoranthene
Concen: 96.84 ppm m
RT: 10.935 min Scan# 1662
Delta R.T. 0.073 min
Lab File: 7G11426.d
Acq: 29 Aug 2020 3:59 pm

Tgt Ion:252 Resp: 1724783

Ion	Ratio	Lower	Upper
252	100		
253	22.8	0.0	51.8
125	7.6	0.0	36.8

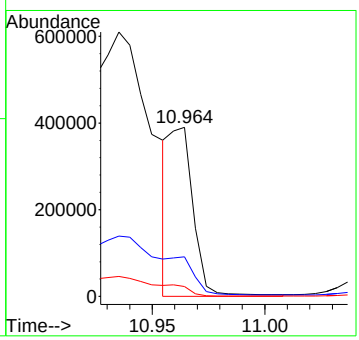


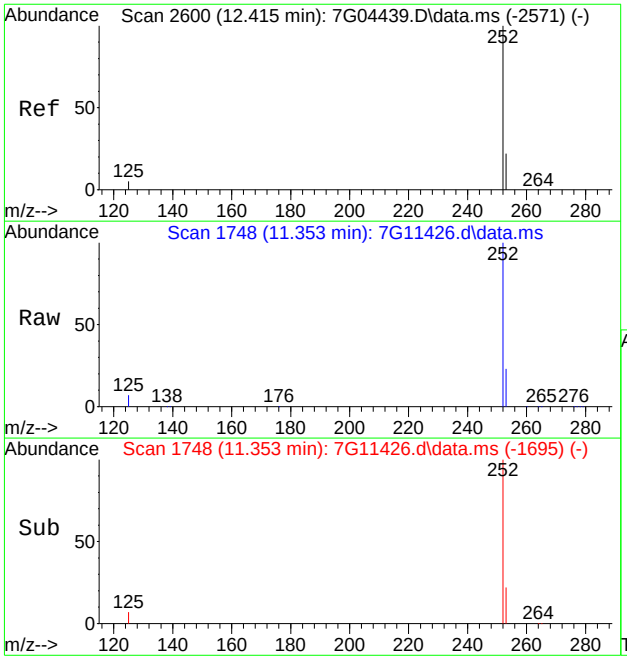


#24
Benzo[k]fluoranthene
Concen: 14.70 ppm m
RT: 10.964 min Scan# 1668
Delta R.T. 0.068 min
Lab File: 7G11426.d
Acq: 29 Aug 2020 3:59 pm

Tgt Ion:252 Resp: 287588

Ion	Ratio	Lower	Upper
252	100		
253	23.4	0.0	51.9
125	5.9	0.0	37.1

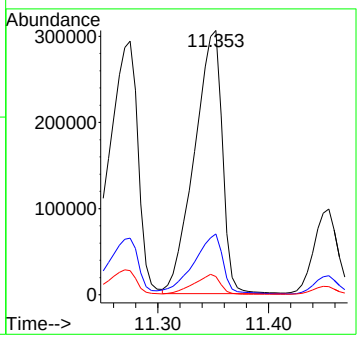


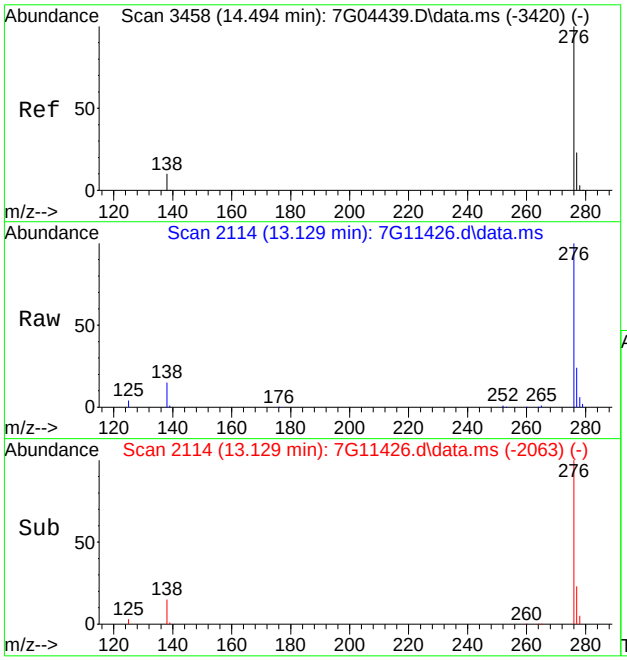


#25
Benzo[a]pyrene
Concen: 30.92 ppm
RT: 11.353 min Scan# 1748
Delta R.T. 0.058 min
Lab File: 7G11426.d
Acq: 29 Aug 2020 3:59 pm

Tgt Ion:252 Resp: 536648

Ion	Ratio	Lower	Upper
252	100		
253	22.2	0.0	52.2
125	6.7	0.0	37.6

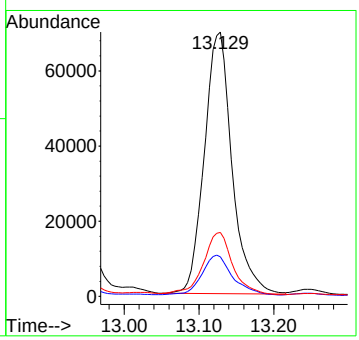


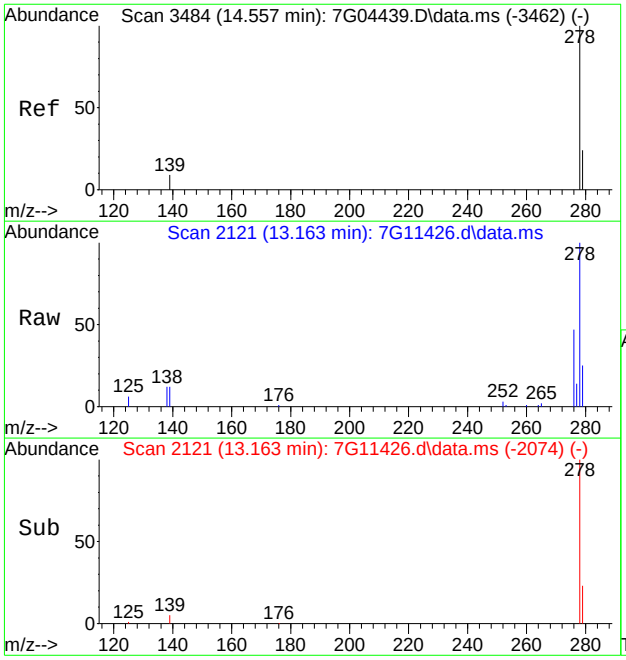


#26
Indeno[1,2,3-cd]pyrene
Concen: 15.75 ppm
RT: 13.129 min Scan# 2114
Delta R.T. 0.048 min
Lab File: 7G11426.d
Acq: 29 Aug 2020 3:59 pm

Tgt Ion:276 Resp: 178408

Ion	Ratio	Lower	Upper
276	100		
138	14.6	0.0	45.6
277	23.5	0.0	54.0

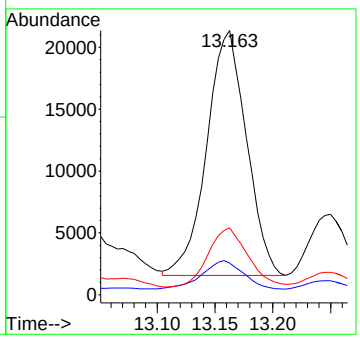


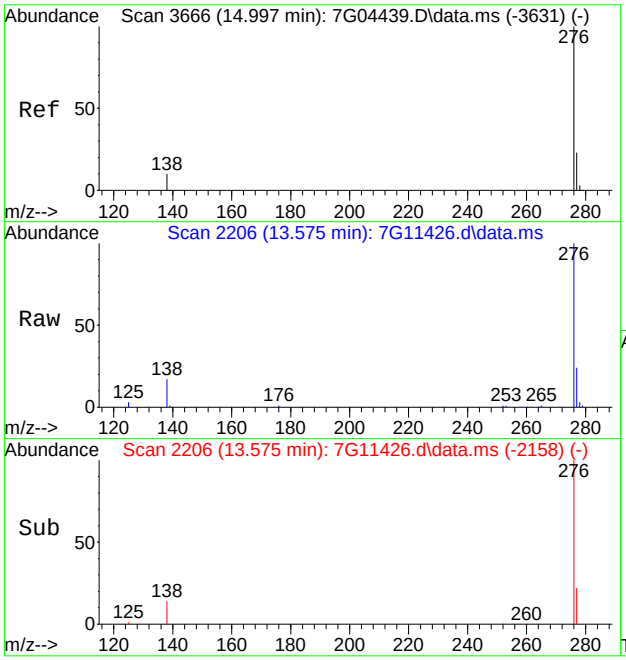


#27
Dibenz[a,h]anthracene
Concen: 3.76 ppm
RT: 13.163 min Scan# 2121
Delta R.T. 0.029 min
Lab File: 7G11426.d
Acq: 29 Aug 2020 3:59 pm

Tgt Ion:278 Resp: 47276

Ion	Ratio	Lower	Upper
278	100		
139	10.6	0.0	43.3
279	23.8	0.0	53.9

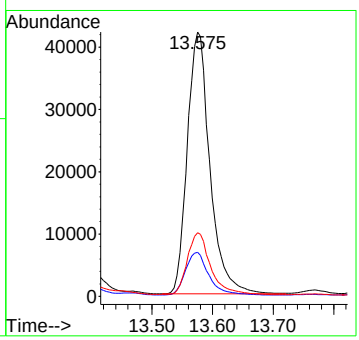




#28
Benzo[g,h,i]perylene
Concen: 7.98 ppm
RT: 13.575 min Scan# 2206
Delta R.T. 0.034 min
Lab File: 7G11426.d
Acq: 29 Aug 2020 3:59 pm

Tgt Ion:276 Resp: 108999

Ion	Ratio	Lower	Upper
276	100		
138	16.3	0.0	47.0
277	23.6	0.0	53.7



Manual Integration Approval Summary

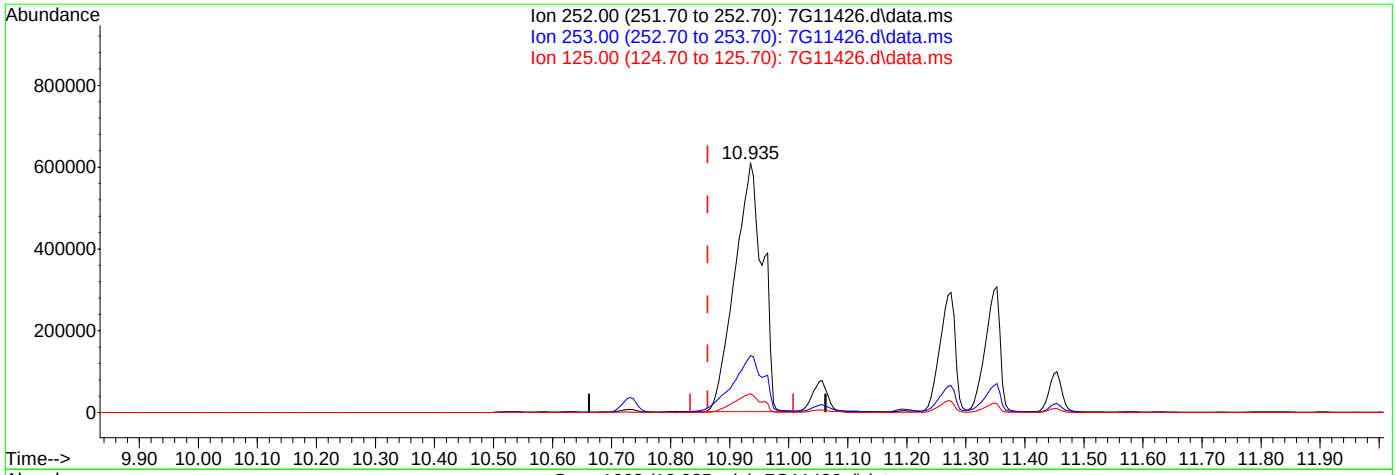
Sample Number: FA78194-1
Lab FileID: 7G11426.D
Injection Time: 08/29/20 15:59
Method: SW846 8270E BY SIM
Analyst approved: 08/31/20 07:58 Fouad Sekkar
Supervisor approved: 08/31/20 11:56 Naresh Jiawan

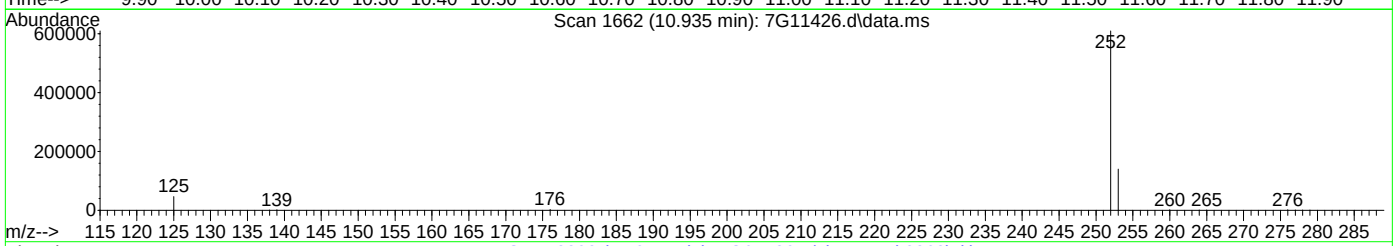
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(b)fluoranthene	205-99-2		10.94	Overlapping peak
Benzo(k)fluoranthene	207-08-9		10.96	Overlapping peak

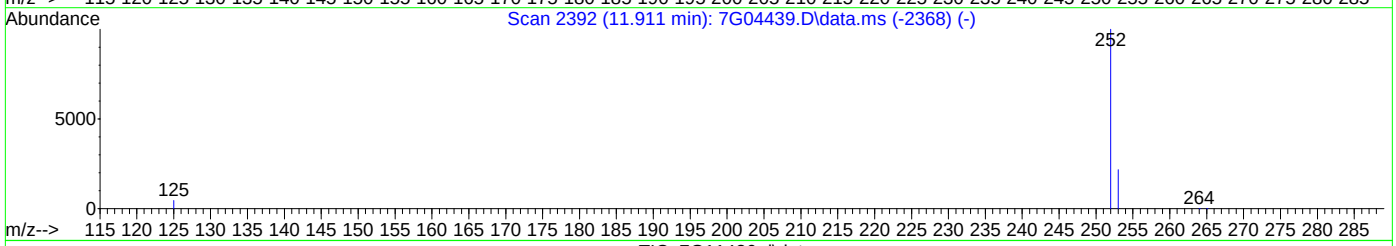
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-31-2020\s7g494\
Data File : 7G11426.d
Acq On : 29 Aug 2020 3:59 pm
Operator : FOUADS
Sample : fa78194-1 e,2
Misc : op81782,S7G494,29.8,,,1,2,soil
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Aug 31 00:13:31 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11426.d\data.ms

(23) Benzo[b]fluoranthene (P)

10.935min (+0.073) 111.92ppm

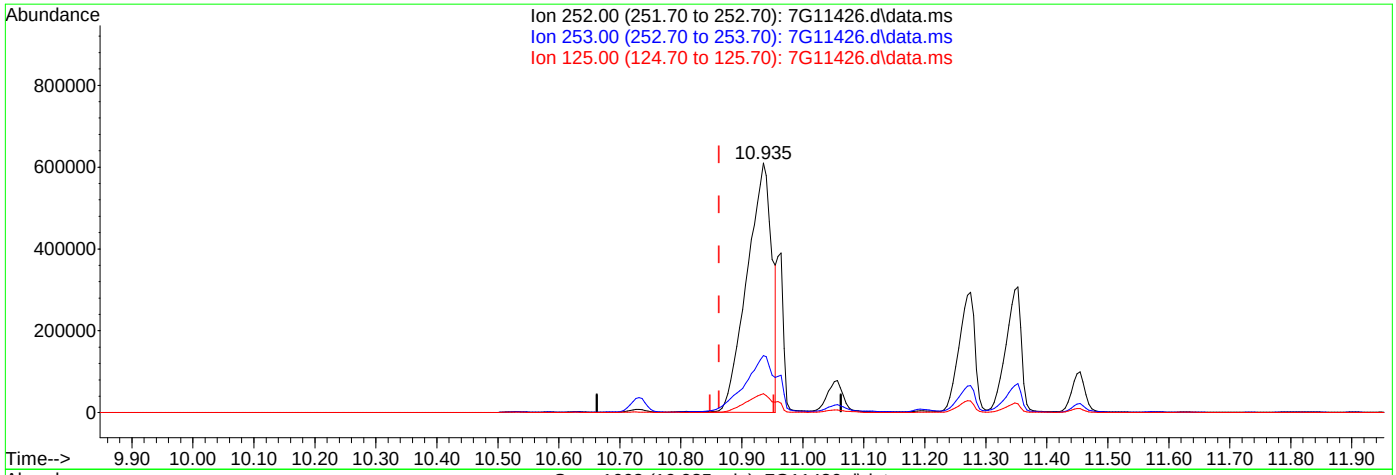
response 1993474

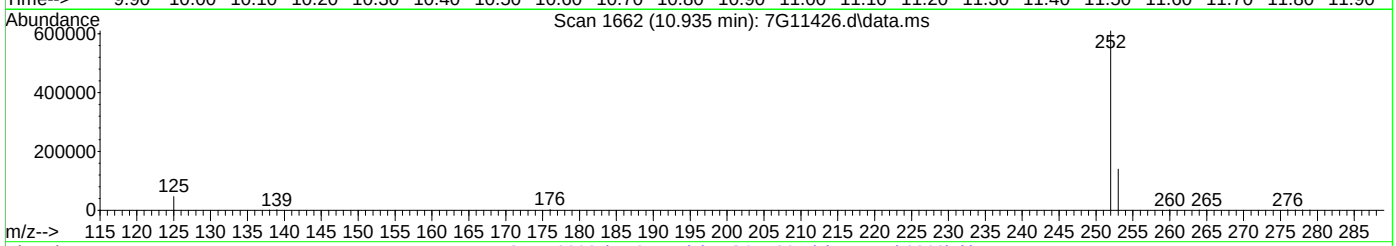
Ion	Exp%	Act%
252.00	100	100
253.00	21.80	22.46
125.00	6.80	7.53
0.00	0.00	0.00

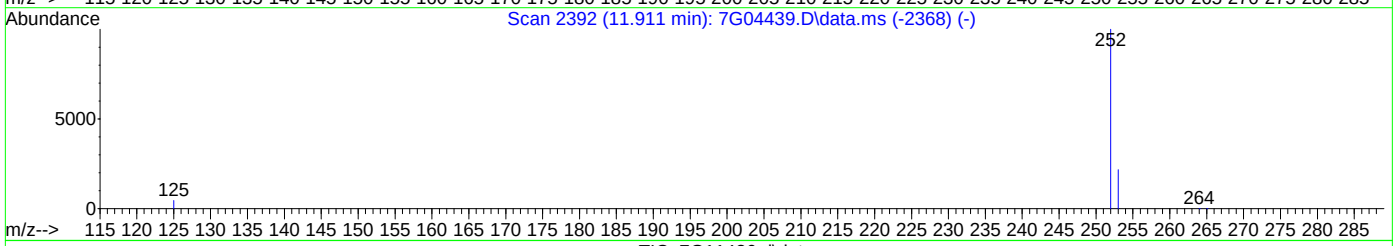
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-31-2020\s7g494\
Data File : 7G11426.d
Acq On : 29 Aug 2020 3:59 pm
Operator : FOUADS
Sample : fa78194-1 e,2
Misc : op81782,S7G494,29.8,,,1,2,soil
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Aug 31 00:13:31 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11426.d\data.ms

(23) Benzo[b]fluoranthene (P)

10.935min (+0.073) 96.84ppm m

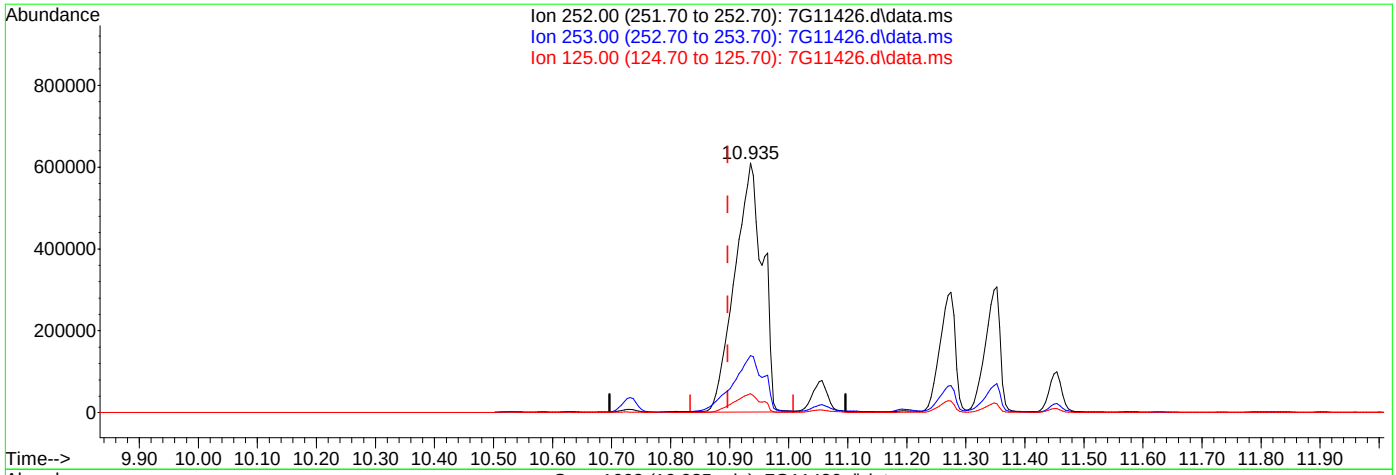
response 1724783

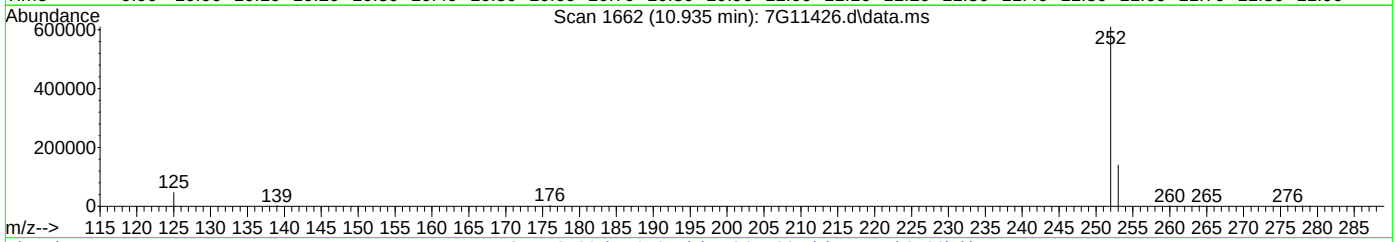
Ion	Exp%	Act%
252.00	100	100
253.00	21.80	22.84
125.00	6.80	7.59
0.00	0.00	0.00

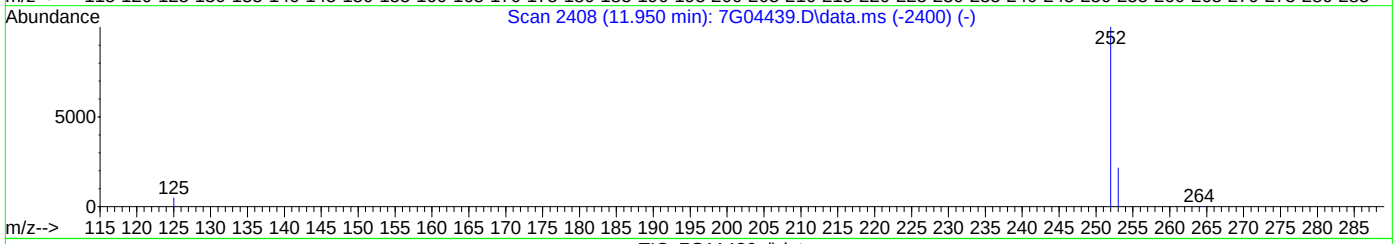
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-31-2020\s7g494\
Data File : 7G11426.d
Acq On : 29 Aug 2020 3:59 pm
Operator : FOUADS
Sample : fa78194-1 e,2
Misc : op81782,S7G494,29.8,,,1,2,soil
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Aug 31 00:13:31 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11426.d\data.ms

(24) Benzo[k]fluoranthene (P)

10.935min (+0.039) 84.99ppm

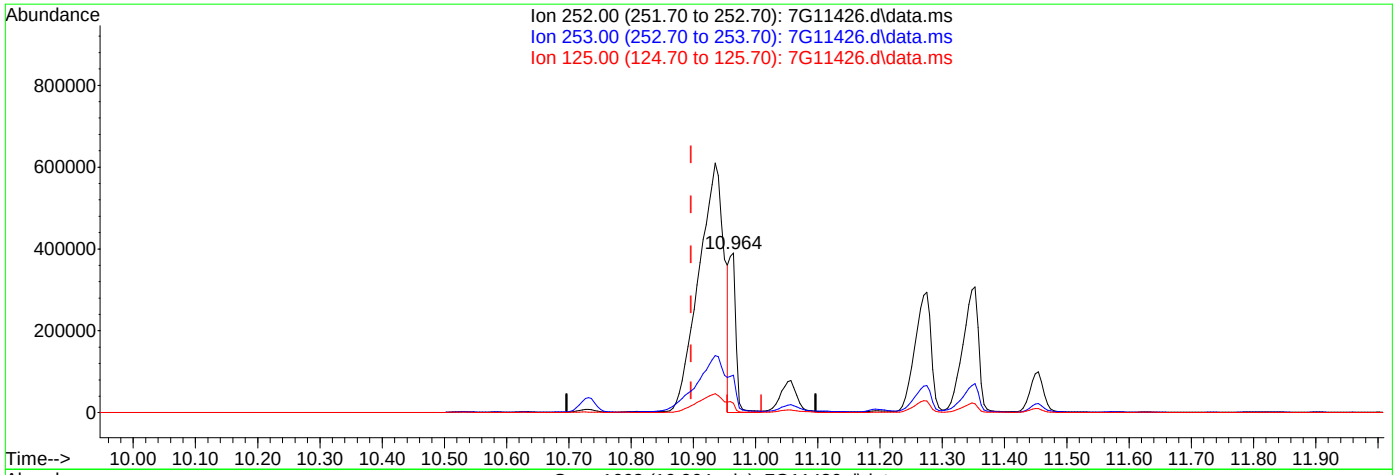
response 2003622

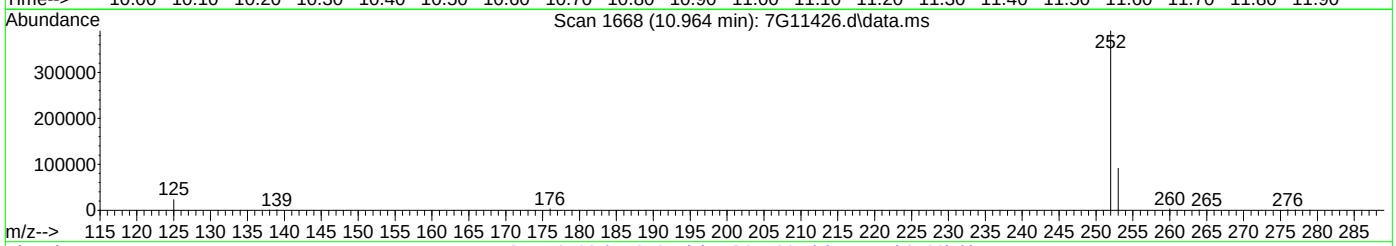
Ion	Exp%	Act%
252.00	100	100
253.00	21.90	22.46
125.00	7.10	7.53
0.00	0.00	0.00

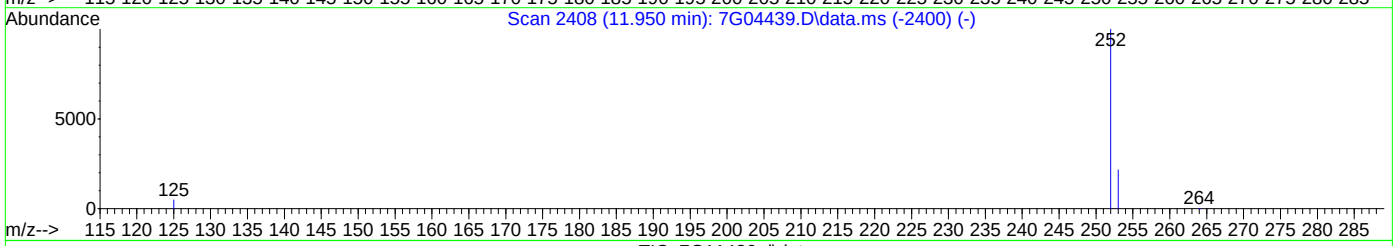
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-31-2020\s7g494\
Data File : 7G11426.d
Acq On : 29 Aug 2020 3:59 pm
Operator : FOUADS
Sample : fa78194-1 e,2
Misc : op81782,S7G494,29.8,,,1,2,soil
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Aug 31 00:13:31 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11426.d\data.ms

(24) Benzo[k]fluoranthene (P)

10.964min (+0.068) 14.70ppm m

response 287588

Ion	Exp%	Act%
252.00	100	100
253.00	21.90	23.41
125.00	7.10	5.92
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan
08/31/20 11:56

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-31-2020\s7g494\
Data File : 7G11427.d
Acq On : 29 Aug 2020 4:22 pm
Operator : FOUADS
Sample : fa78194-2 e
Misc : op81782,S7G494,29.9,,,1,1,soil
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Aug 31 00:39:22 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

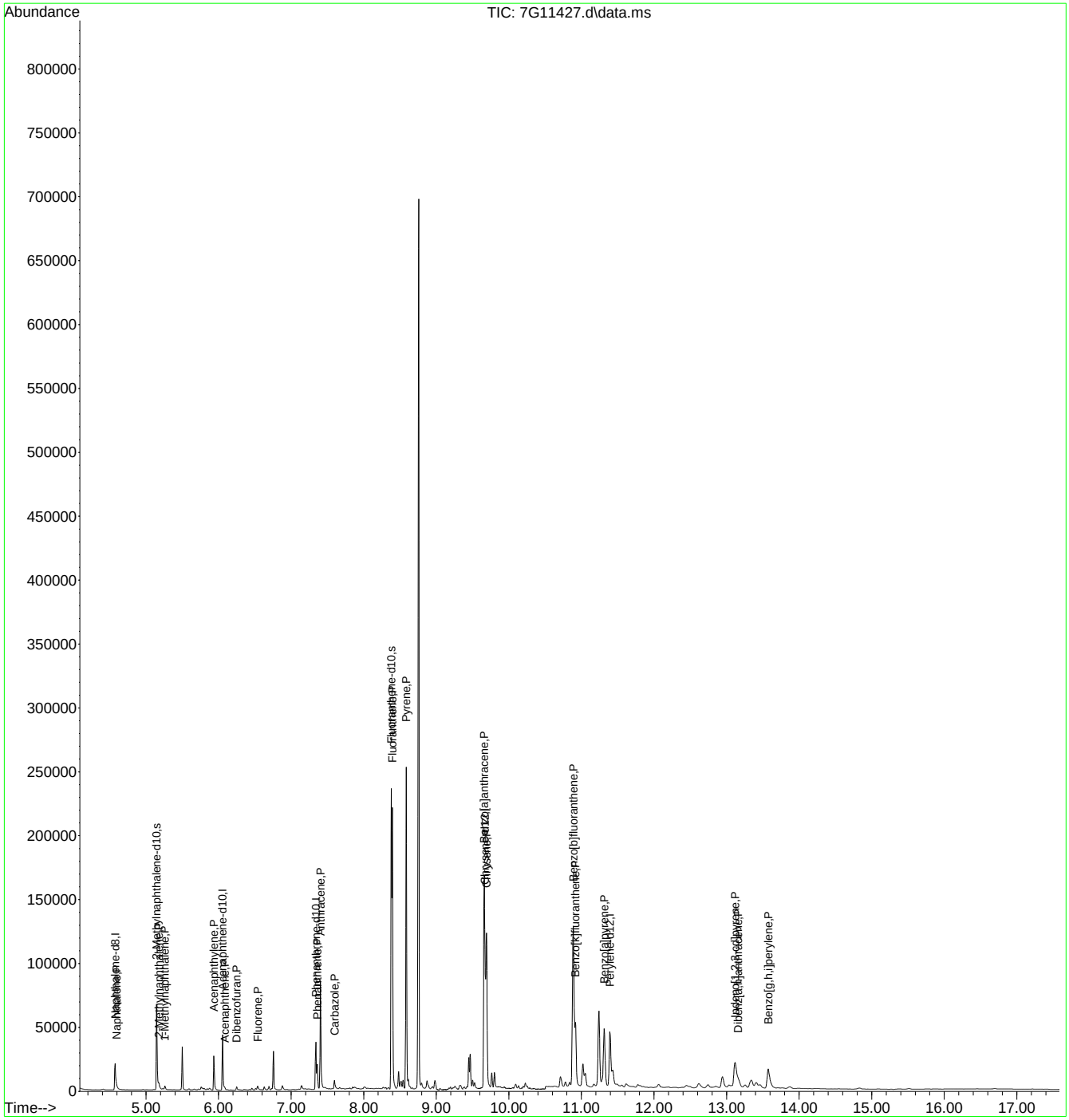
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.576	136	21226	4.00	ppm	0.01
6) Acenaphthene-d10	6.056	164	13666	4.00	ppm	0.00
11) Phenanthrene-d10	7.341	188	27443	4.00	ppm	0.01
18) Chrysene-d12	9.668	240	51591	4.00	ppm	0.02
22) Perylene-d12	11.391	264	46795	4.00	ppm	0.02
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.147	152	24828	7.87	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 78.70%			
17) Fluoranthene-d10	8.380	212	135538	9.46	ppm	0.01
Spiked Amount 10.000	Range 50 - 150		Recovery = 94.60%			
Target Compounds						Qvalue
2) Naphthalene	4.593	128	1691	0.28	ppm	99
3) 2-Methylnaphthalene	5.176	142	1644	0.35	ppm	99
5) 1-Methylnaphthalene	5.259	142	1294	0.31	ppm	92
7) Acenaphthylene	5.935	152	17604	2.24	ppm	99
8) Acenaphthene	6.085	153	783	0.15	ppm	97
9) Dibenzofuran	6.249	168	1798	0.50	ppm	98
10) Fluorene	6.539	166	1329	0.24	ppm	98
13) Phenanthrene	7.362	178	13026	1.44	ppm	99
14) Anthracene	7.404	178	57697	6.25	ppm	100
15) Carbazole	7.598	167	6275	0.38	ppm	99
16) Fluoranthene	8.395	202	140601	8.12	ppm	100
19) Pyrene	8.585	202	154996	7.52	ppm	97
20) Benzo[a]anthracene	9.659	228	85232	5.26	ppm	88
21) Chrysene	9.693	228	107355	6.01	ppm	99
23) Benzo[b]fluoranthene	10.887	252	171869m	10.82	ppm	
24) Benzo[k]fluoranthene	10.916	252	41404m	2.46	ppm	
25) Benzo[a]pyrene	11.314	252	57822	3.74	ppm	99
26) Indeno[1,2,3-cd]pyrene	13.119	276	37831	3.75	ppm	98
27) Dibenz[a,h]anthracene	13.158	278	9653	0.86	ppm	97
28) Benzo[g,h,i]perylene	13.575	276	28956	2.38	ppm	98

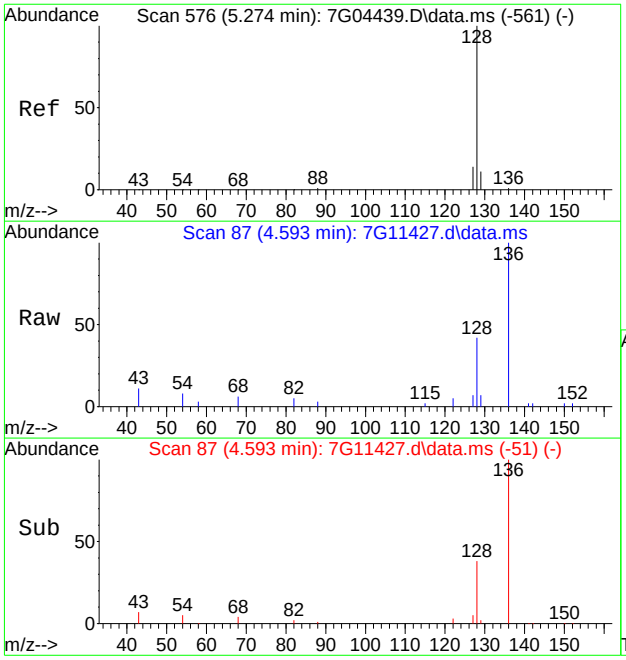
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-31-2020\s7g494\
Data File : 7G11427.d
Acq On : 29 Aug 2020 4:22 pm
Operator : FOUADS
Sample : fa78194-2 e
Misc : op81782,S7G494,29.9,,,1,1,soil
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Aug 31 00:39:22 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

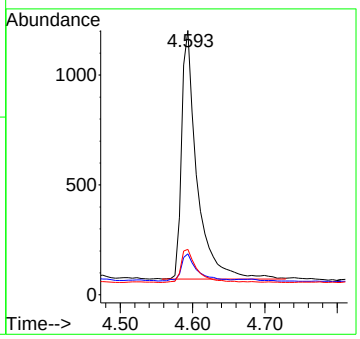


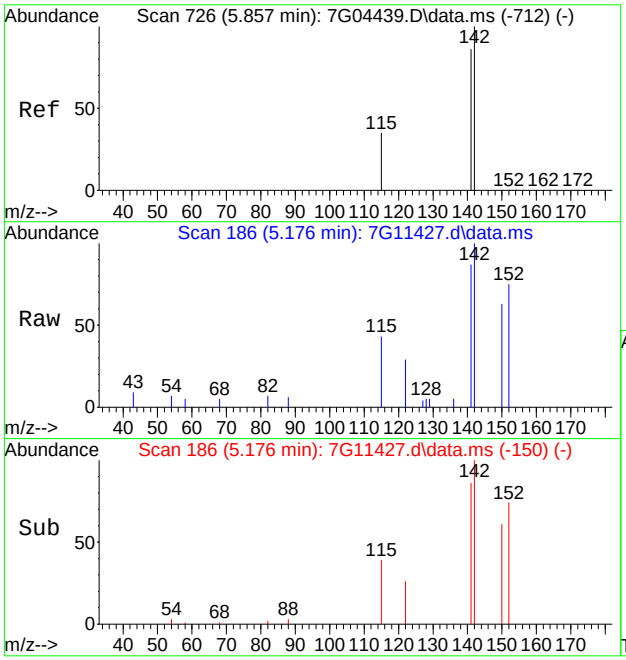


#2
Naphthalene
Concen: 0.28 ppm
RT: 4.593 min Scan# 87
Delta R.T. 0.012 min
Lab File: 7G11427.d
Acq: 29 Aug 2020 4:22 pm

Tgt Ion:128 Resp: 1691

Ion	Ratio	Lower	Upper
128	100		
129	10.9	0.0	41.2
127	13.3	0.0	43.0

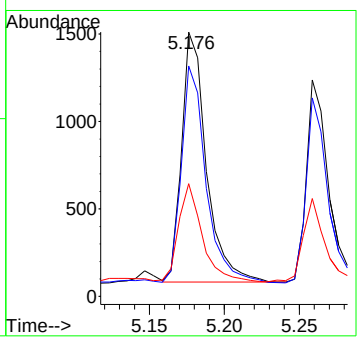


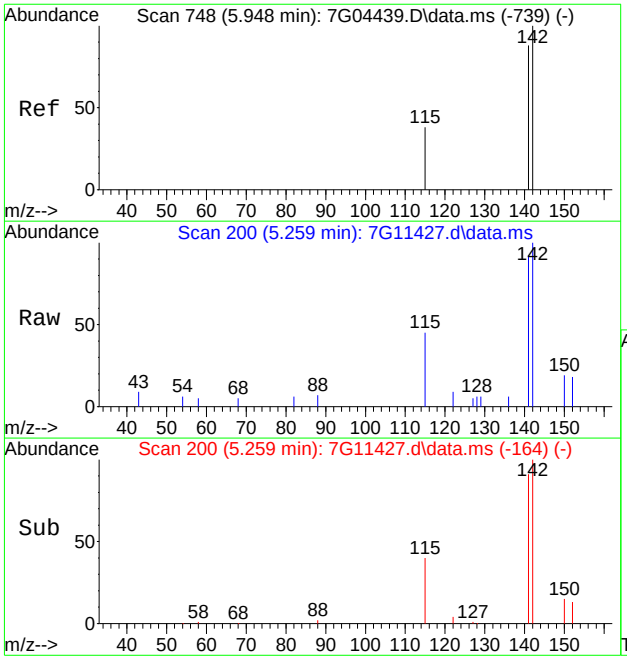


#3
2-Methylnaphthalene
Concen: 0.35 ppm
RT: 5.176 min Scan# 186
Delta R.T. 0.012 min
Lab File: 7G11427.d
Acq: 29 Aug 2020 4:22 pm

Tgt Ion:142 Resp: 1644

Ion	Ratio	Lower	Upper
142	100		
141	86.9	57.6	117.6
115	38.7	7.8	67.8

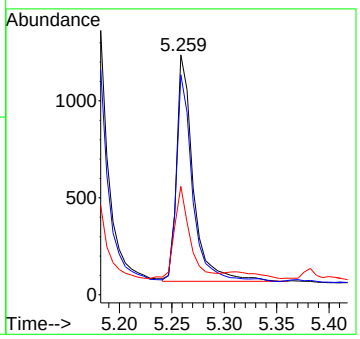


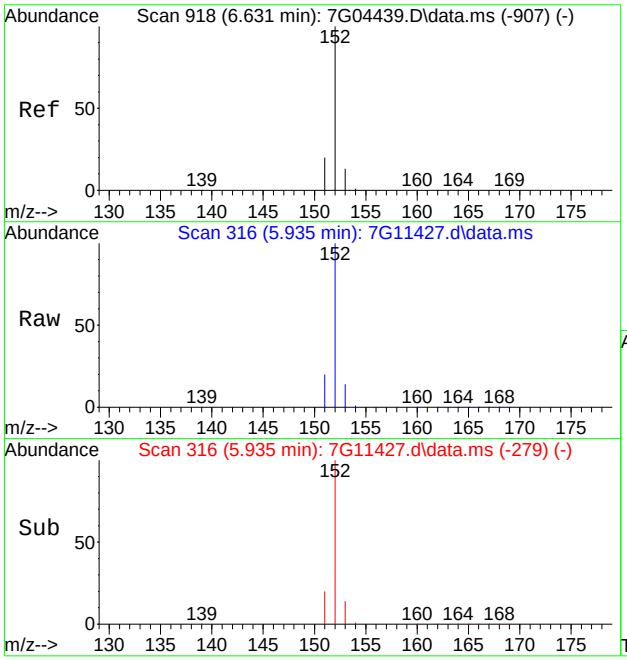


#5
1-Methylnaphthalene
Concen: 0.31 ppm
RT: 5.259 min Scan# 200
Delta R.T. 0.012 min
Lab File: 7G11427.d
Acq: 29 Aug 2020 4:22 pm

Tgt Ion:142 Resp: 1294

Ion	Ratio	Lower	Upper
142	100		
141	91.3	57.8	117.8
115	40.5	0.3	60.3

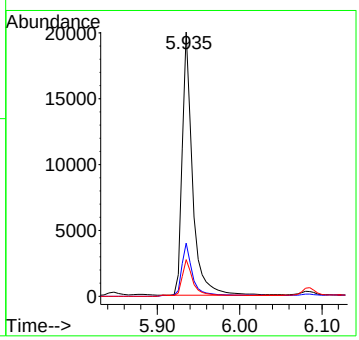


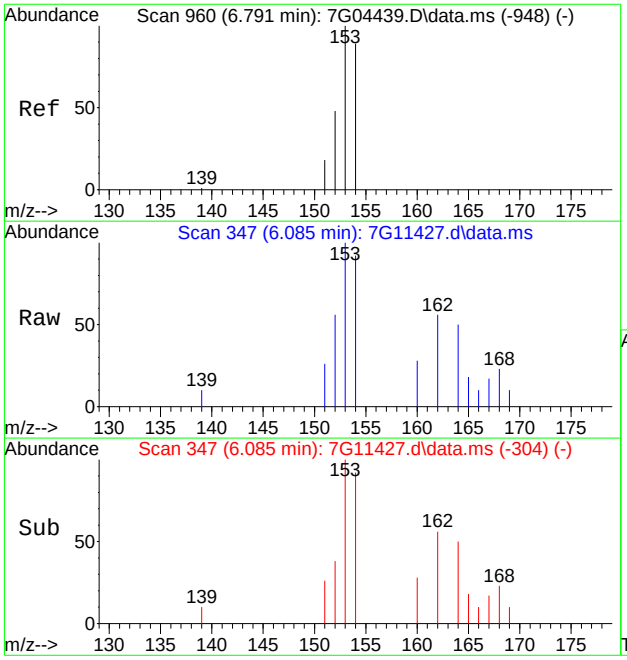


#7
Acenaphthylene
Concen: 2.24 ppm
RT: 5.935 min Scan# 316
Delta R.T. 0.010 min
Lab File: 7G11427.d
Acq: 29 Aug 2020 4:22 pm

Tgt Ion:152 Resp: 17604

Ion	Ratio	Lower	Upper
152	100		
151	19.8	0.0	49.5
153	13.6	0.0	43.7

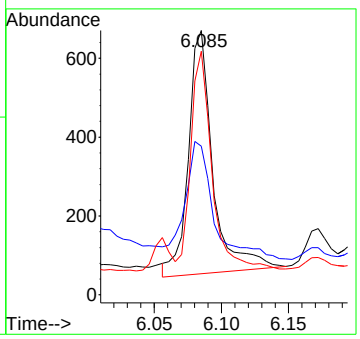


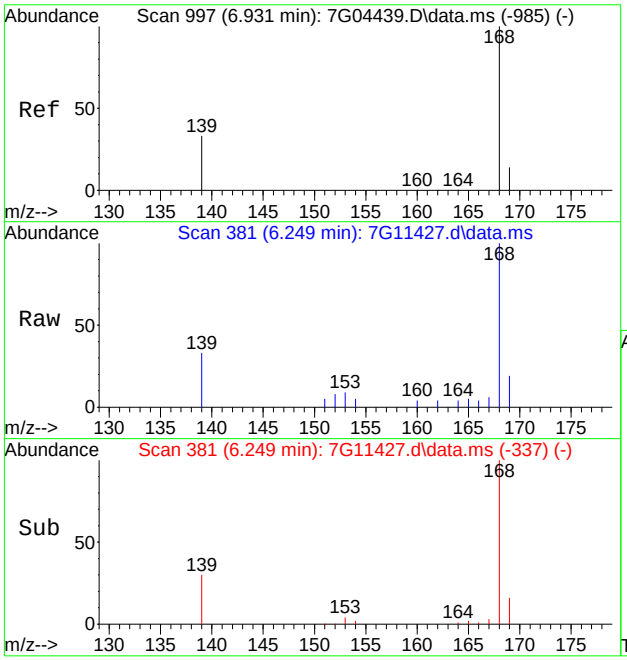


#8
Acenaphthene
Concen: 0.15 ppm
RT: 6.085 min Scan# 347
Delta R.T. 0.014 min
Lab File: 7G11427.d
Acq: 29 Aug 2020 4:22 pm

Tgt Ion:153 Resp: 783

Ion	Ratio	Lower	Upper
153	100		
152	45.5	16.7	76.7
154	86.1	59.8	119.8

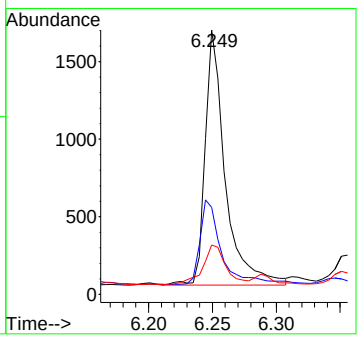


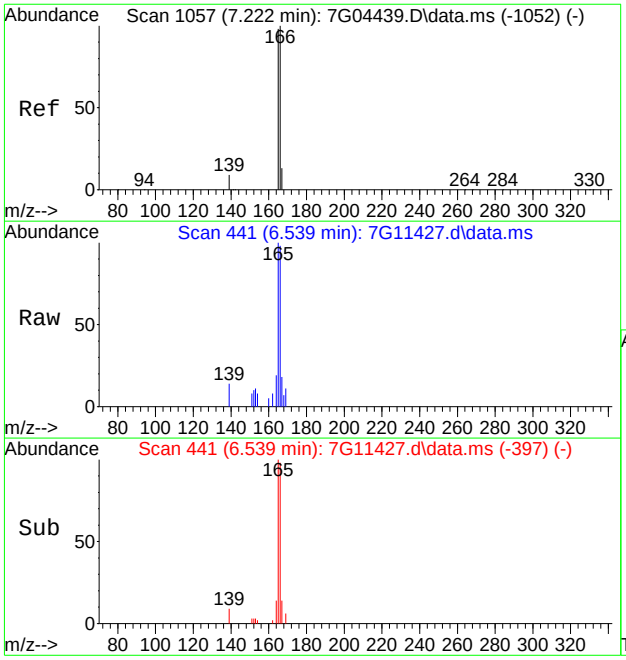


#9
Dibenzofuran
Concen: 0.50 ppm
RT: 6.249 min Scan# 381
Delta R.T. 0.014 min
Lab File: 7G11427.d
Acq: 29 Aug 2020 4:22 pm

Tgt Ion:168 Resp: 1798

Ion	Ratio	Lower	Upper
168	100		
139	29.9	10.3	50.3
169	15.4	0.0	33.2

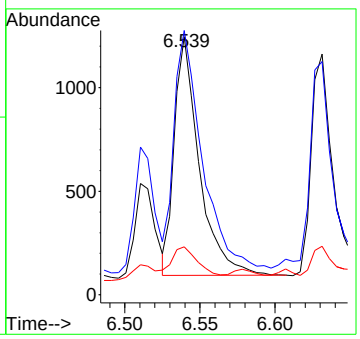


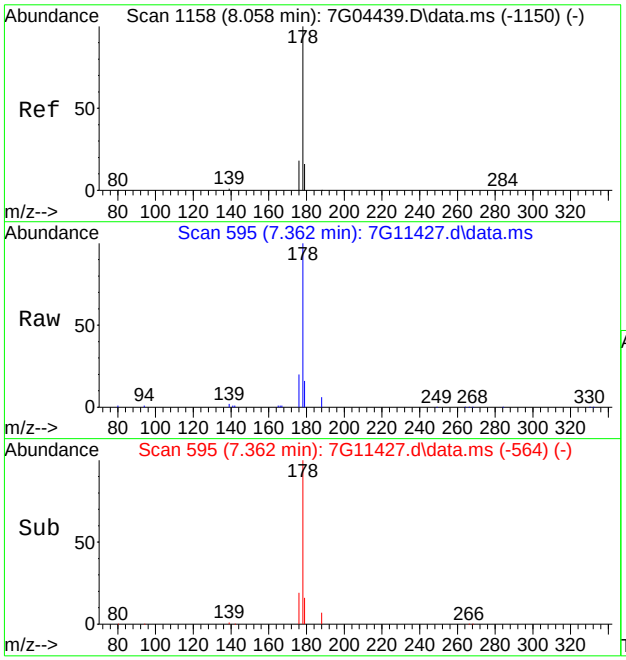


#10
Fluorene
Concen: 0.24 ppm
RT: 6.539 min Scan# 441
Delta R.T. 0.014 min
Lab File: 7G11427.d
Acq: 29 Aug 2020 4:22 pm

Tgt Ion:166 Resp: 1329

Ion	Ratio	Lower	Upper
166	100		
165	96.6	65.5	125.5
167	10.0	0.0	44.0

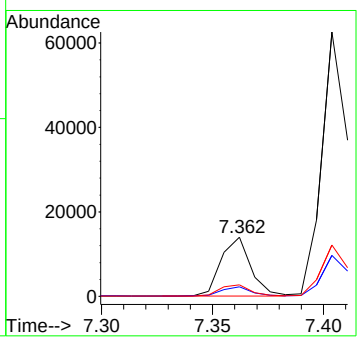


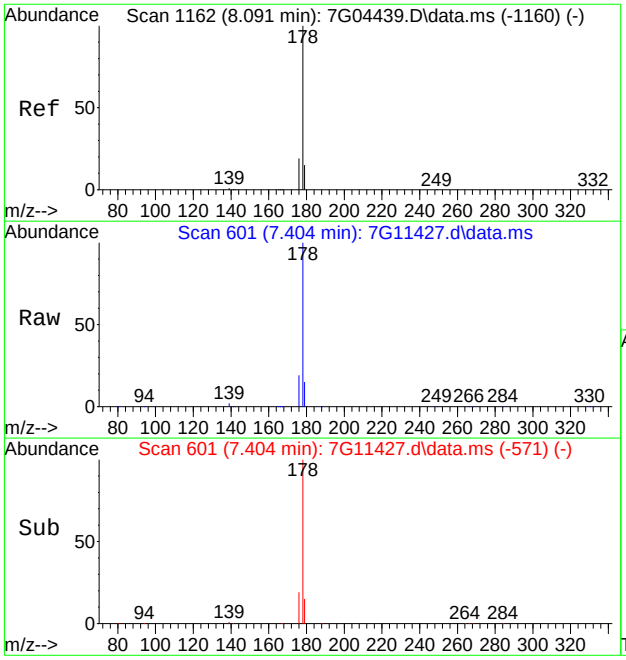


#13
Phenanthrene
Concen: 1.44 ppm
RT: 7.362 min Scan# 595
Delta R.T. 0.014 min
Lab File: 7G11427.d
Acq: 29 Aug 2020 4:22 pm

Tgt Ion:178 Resp: 13026

Ion	Ratio	Lower	Upper
178	100		
179	15.7	0.0	45.3
176	19.3	0.0	50.1

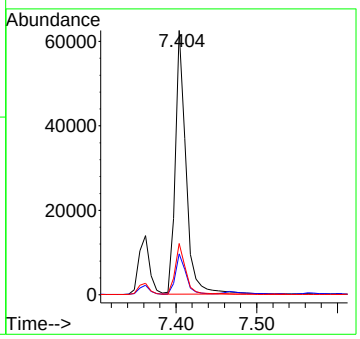


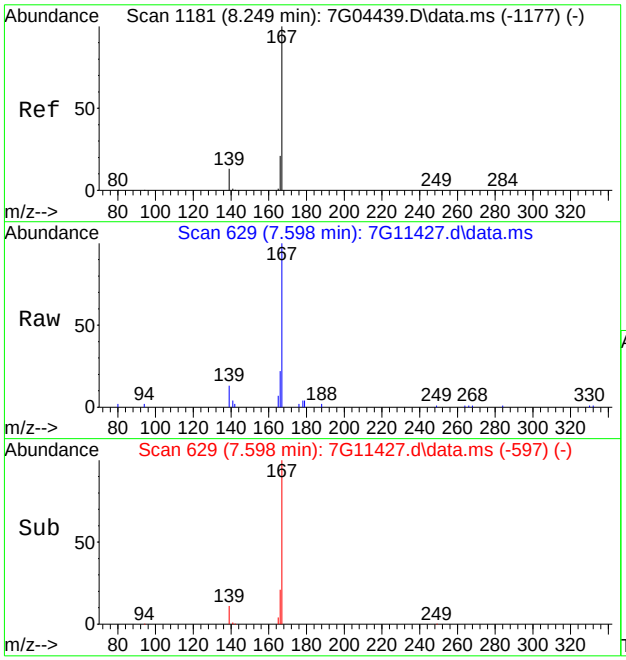


#14
Anthracene
Concen: 6.25 ppm
RT: 7.404 min Scan# 601
Delta R.T. 0.007 min
Lab File: 7G11427.d
Acq: 29 Aug 2020 4:22 pm

Tgt Ion:178 Resp: 57697

Ion	Ratio	Lower	Upper
178	100		
179	15.3	0.0	45.3
176	19.3	0.0	49.4

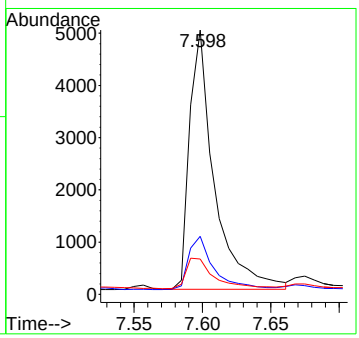


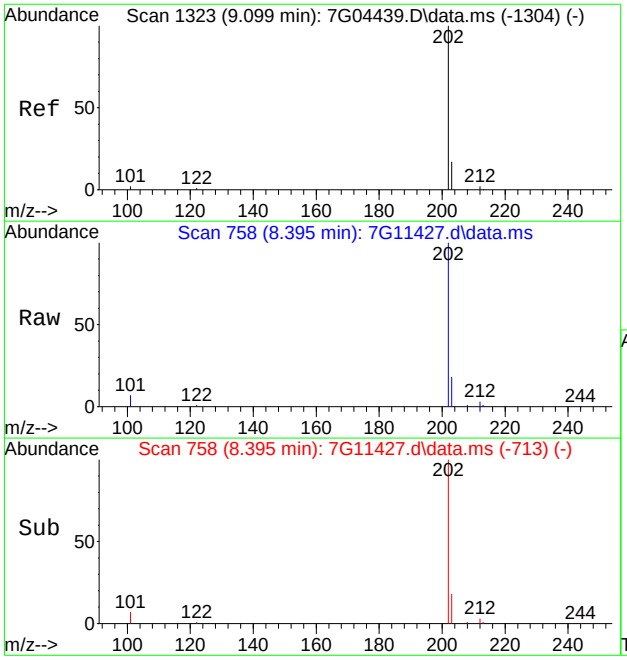


#15
Carbazole
Concen: 0.38 ppm
RT: 7.598 min Scan# 629
Delta R.T. 0.021 min
Lab File: 7G11427.d
Acq: 29 Aug 2020 4:22 pm

Tgt Ion:167 Resp: 6275

Ion	Ratio	Lower	Upper
167	100		
166	20.2	0.0	39.8
139	11.1	0.0	31.2

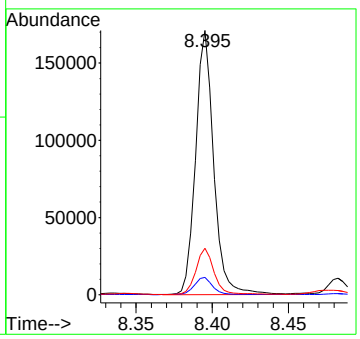


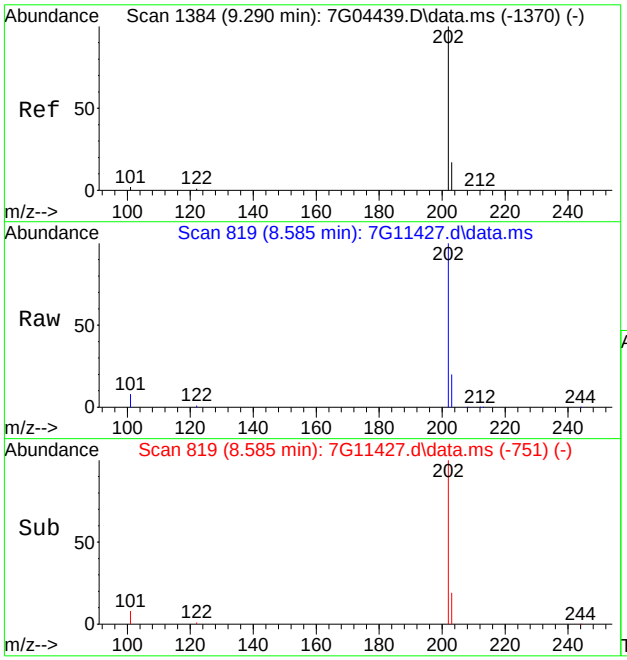


#16
Fluoranthene
Concen: 8.12 ppm
RT: 8.395 min Scan# 758
Delta R.T. 0.012 min
Lab File: 7G11427.d
Acq: 29 Aug 2020 4:22 pm

Tgt Ion:202 Resp: 140601

Ion	Ratio	Lower	Upper
202	100		
101	6.5	0.0	36.6
203	17.5	0.0	47.6

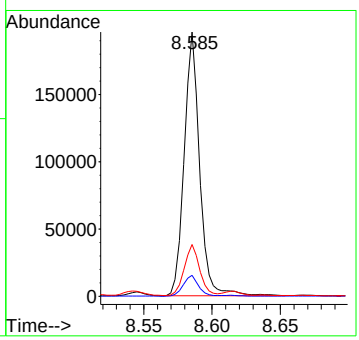


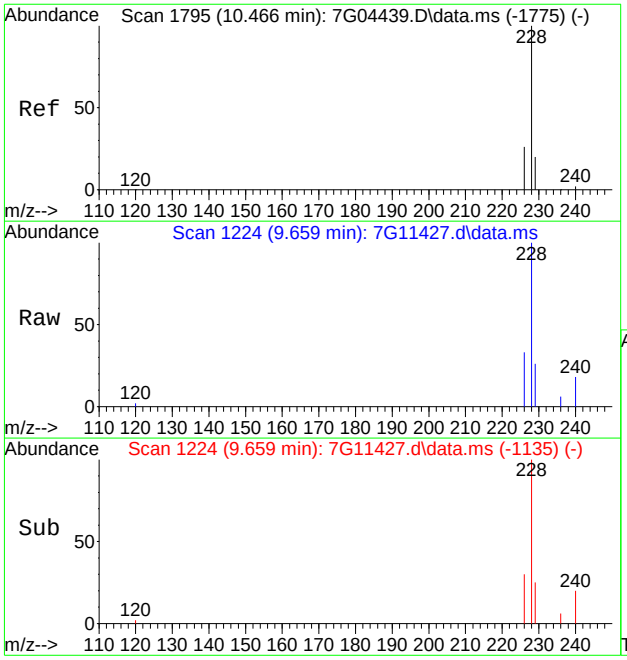


#19
Pyrene
Concen: 7.52 ppm
RT: 8.585 min Scan# 819
Delta R.T. 0.012 min
Lab File: 7G11427.d
Acq: 29 Aug 2020 4:22 pm

Tgt Ion:202 Resp: 154996

Ion	Ratio	Lower	Upper
202	100		
101	8.0	0.0	38.0
203	19.3	0.0	47.6

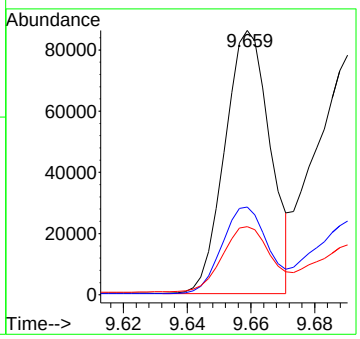


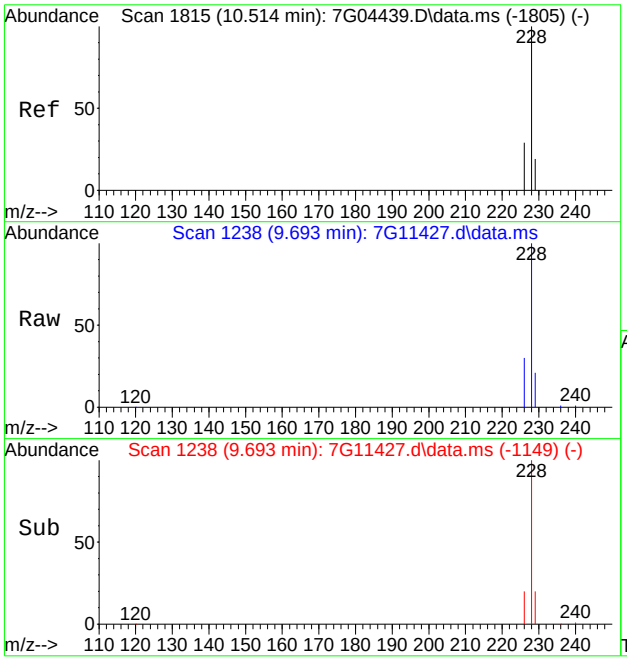


#20
Benzo[a]anthracene
Concen: 5.26 ppm
RT: 9.659 min Scan# 1224
Delta R.T. 0.014 min
Lab File: 7G11427.d
Acq: 29 Aug 2020 4:22 pm

Tgt Ion:228 Resp: 85232

Ion	Ratio	Lower	Upper
228	100		
226	33.4	0.0	56.9
229	24.7	0.0	49.7

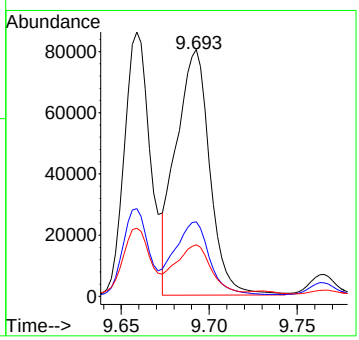


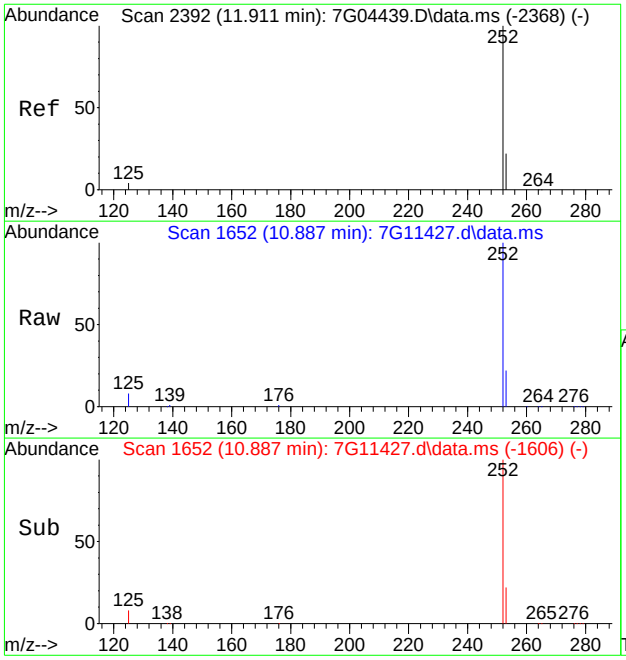


#21
Chrysene
Concen: 6.01 ppm
RT: 9.693 min Scan# 1238
Delta R.T. 0.014 min
Lab File: 7G11427.d
Acq: 29 Aug 2020 4:22 pm

Tgt Ion:228 Resp: 107355

Ion	Ratio	Lower	Upper
228	100		
226	29.4	0.2	60.2
229	19.3	0.0	49.5

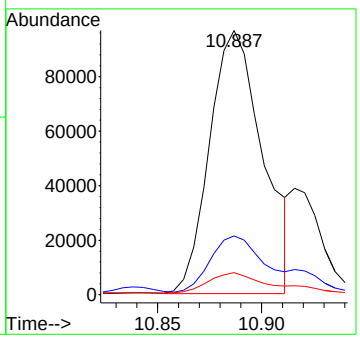


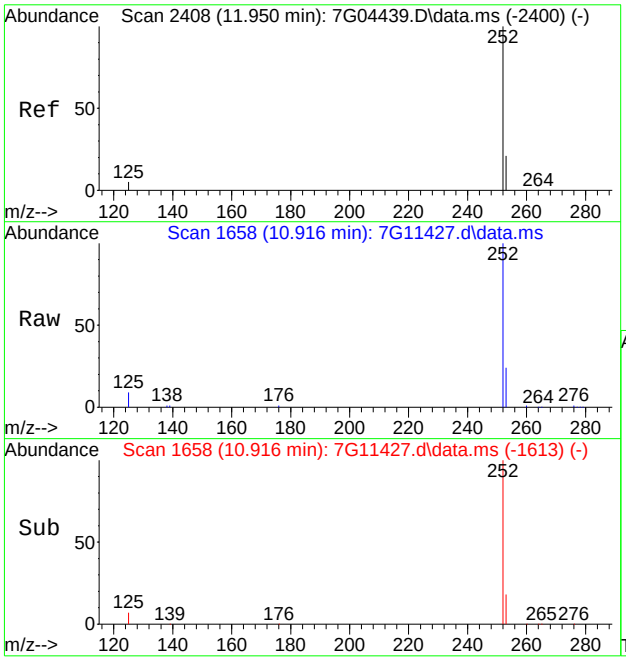


#23
Benzo[b]fluoranthene
Concen: 10.82 ppm m
RT: 10.887 min Scan# 1652
Delta R.T. 0.024 min
Lab File: 7G11427.d
Acq: 29 Aug 2020 4:22 pm

Tgt Ion:252 Resp: 171869

Ion	Ratio	Lower	Upper
252	100		
253	22.2	0.0	51.8
125	8.4	0.0	36.8

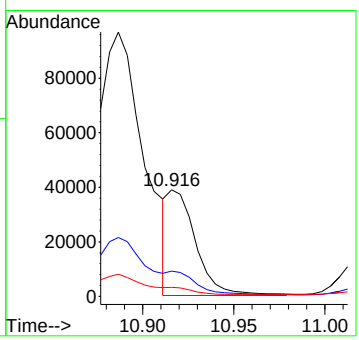


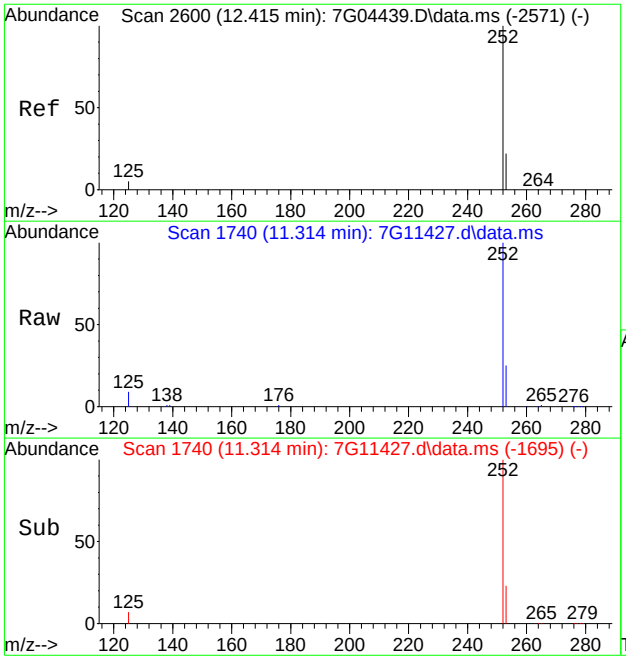


#24
Benzo[k]fluoranthene
Concen: 2.46 ppm m
RT: 10.916 min Scan# 1658
Delta R.T. 0.019 min
Lab File: 7G11427.d
Acq: 29 Aug 2020 4:22 pm

Tgt Ion:252 Resp: 41404

Ion	Ratio	Lower	Upper
252	100		
253	23.6	0.0	51.9
125	8.6	0.0	37.1

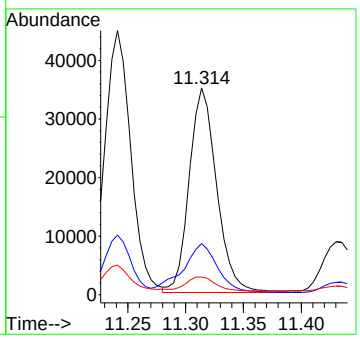


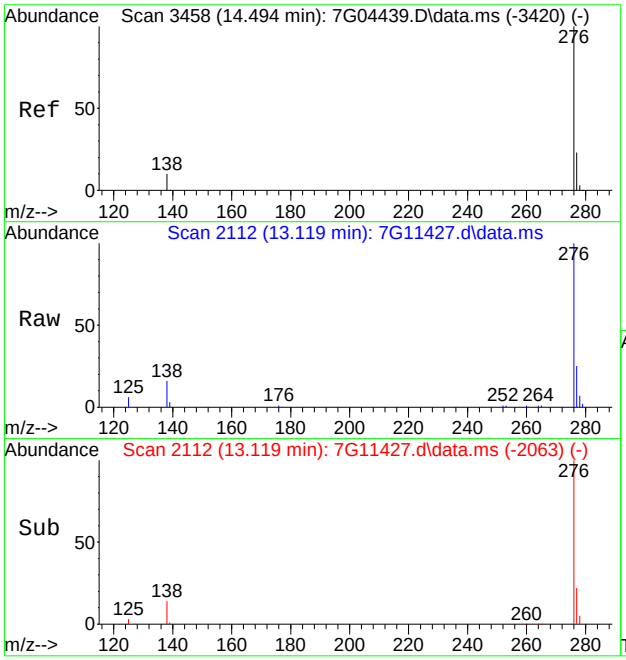


#25
Benzo[a]pyrene
Concen: 3.74 ppm
RT: 11.314 min Scan# 1740
Delta R.T. 0.019 min
Lab File: 7G11427.d
Acq: 29 Aug 2020 4:22 pm

Tgt Ion:252 Resp: 57822

Ion	Ratio	Lower	Upper
252	100		
253	22.0	0.0	52.2
125	6.4	0.0	37.6

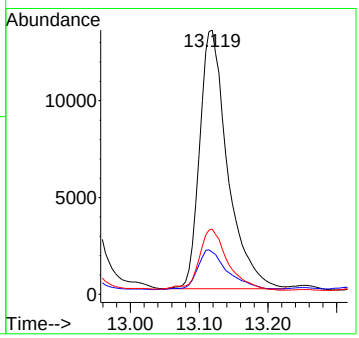


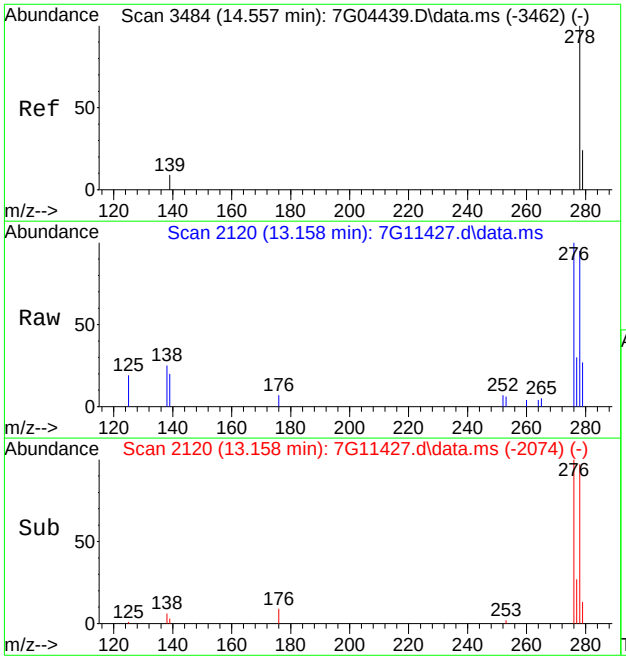


#26
Indeno[1,2,3-cd]pyrene
Concen: 3.75 ppm
RT: 13.119 min Scan# 2112
Delta R.T. 0.039 min
Lab File: 7G11427.d
Acq: 29 Aug 2020 4:22 pm

Tgt Ion:276 Resp: 37831

Ion	Ratio	Lower	Upper
276	100		
138	14.2	0.0	45.6
277	23.5	0.0	54.0

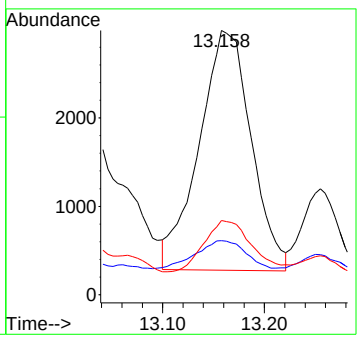


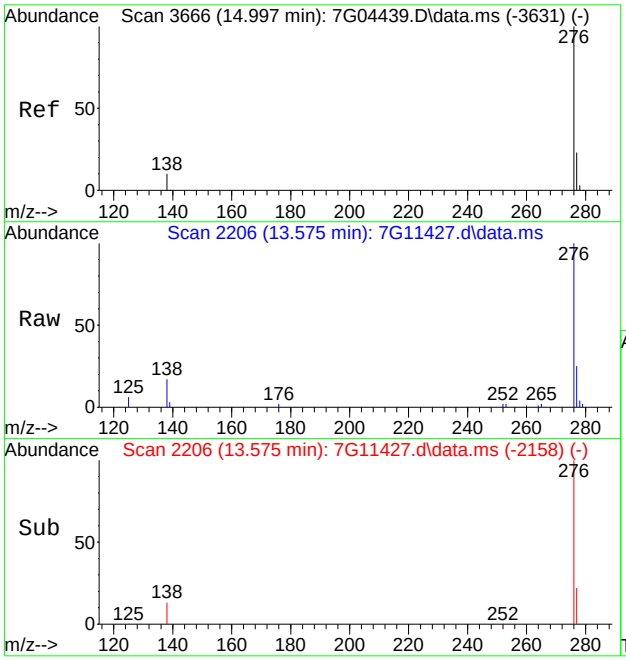


#27
Dibenz[a,h]anthracene
Concen: 0.86 ppm
RT: 13.158 min Scan# 2120
Delta R.T. 0.024 min
Lab File: 7G11427.d
Acq: 29 Aug 2020 4:22 pm

Tgt Ion:278 Resp: 9653

Ion	Ratio	Lower	Upper
278	100		
139	12.5	0.0	43.3
279	22.1	0.0	53.9

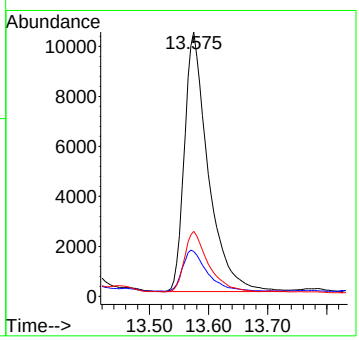




#28
Benzo[g,h,i]perylene
Concen: 2.38 ppm
RT: 13.575 min Scan# 2206
Delta R.T. 0.034 min
Lab File: 7G11427.d
Acq: 29 Aug 2020 4:22 pm

Tgt Ion:276 Resp: 28956

Ion	Ratio	Lower	Upper
276	100		
138	15.3	0.0	47.0
277	23.3	0.0	53.7



Manual Integration Approval Summary

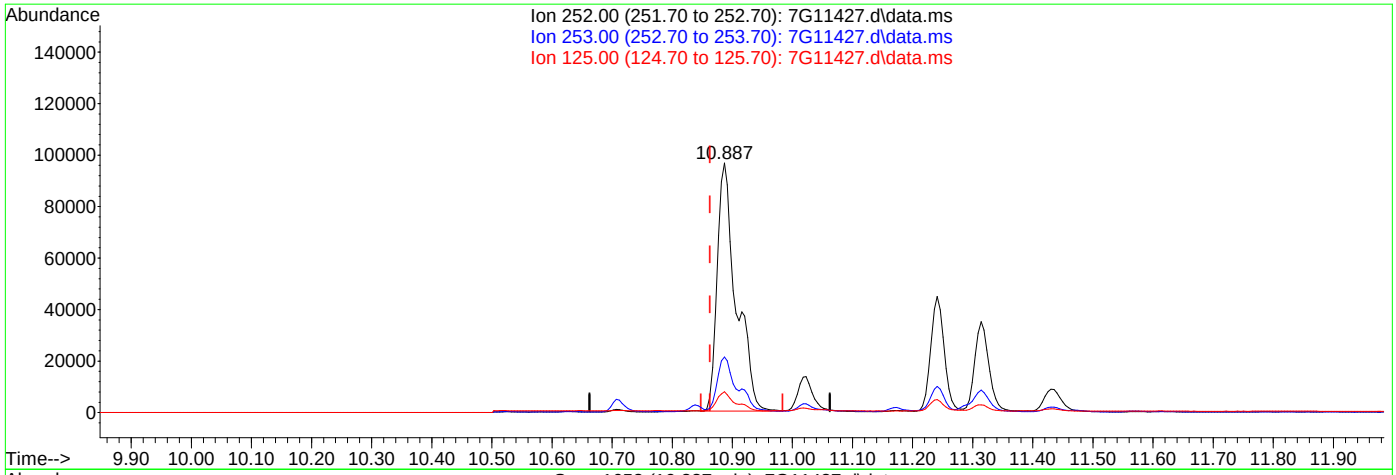
Sample Number: FA78194-2
Lab FileID: 7G11427.D
Injection Time: 08/29/20 16:22
Method: SW846 8270E BY SIM
Analyst approved: 08/31/20 07:58 Fouad Sekkar
Supervisor approved: 08/31/20 11:56 Naresh Jiawan

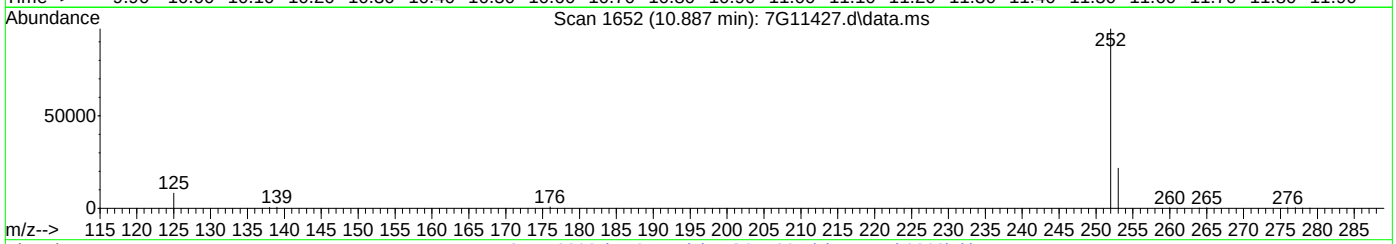
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(b)fluoranthene	205-99-2		10.89	Overlapping peak
Benzo(k)fluoranthene	207-08-9		10.92	Overlapping peak

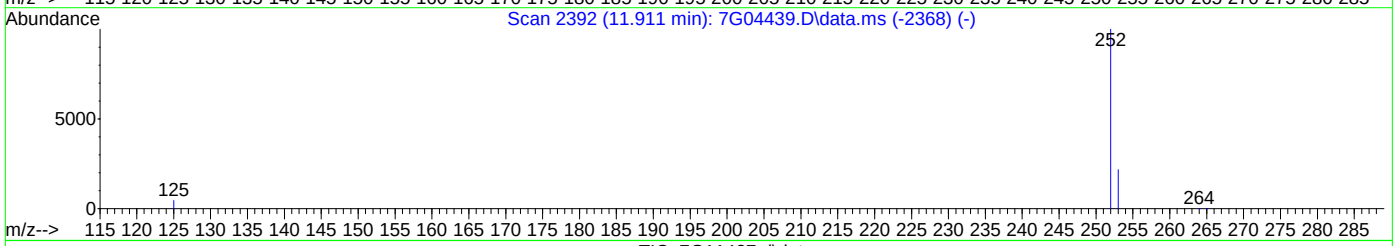
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-31-2020\s7g494\
Data File : 7G11427.d
Acq On : 29 Aug 2020 4:22 pm
Operator : FOUADS
Sample : fa78194-2 e
Misc : op81782,S7G494,29.9,,,1,1,soil
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Aug 31 00:13:33 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11427.d\data.ms

(23) Benzo[b]fluoranthene (P)

10.887min (+0.024) 13.32ppm

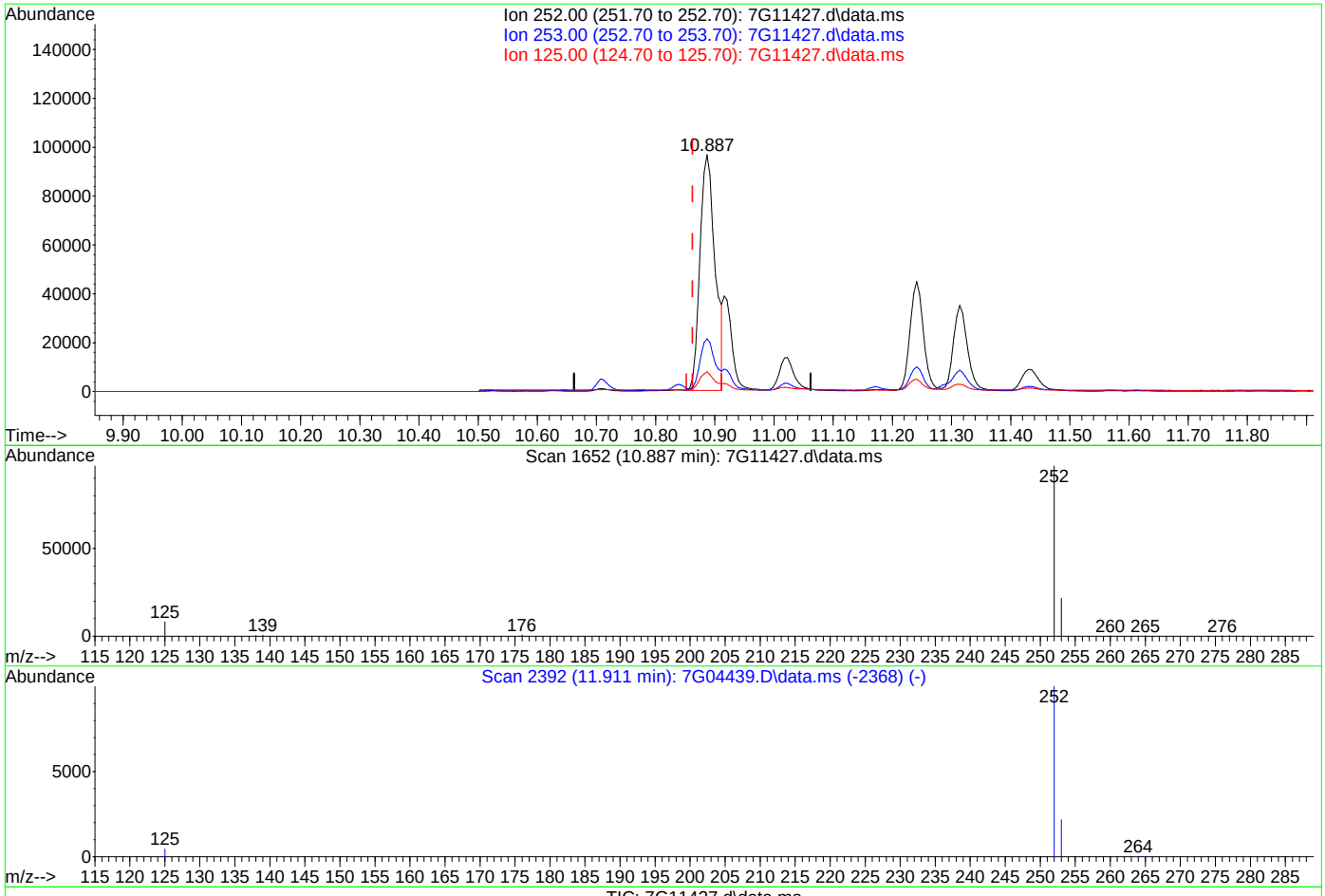
response 211621

Ion	Exp%	Act%
252.00	100	100
253.00	21.80	21.05
125.00	6.80	7.70
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-31-2020\s7g494\
Data File : 7G11427.d
Acq On : 29 Aug 2020 4:22 pm
Operator : FOUADS
Sample : fa78194-2 e
Misc : op81782,S7G494,29.9,,,1,1,soil
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Aug 31 00:13:33 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration



TIC: 7G11427.d\data.ms

(23) Benzo[b]fluoranthene (P)

10.887min (+0.024) 10.82ppm m

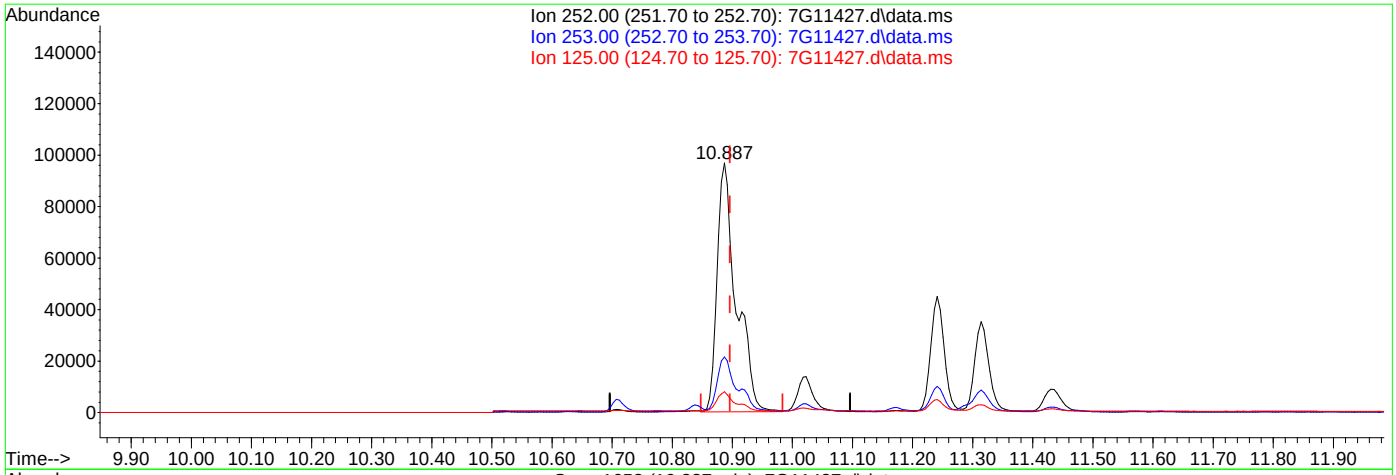
response 171869

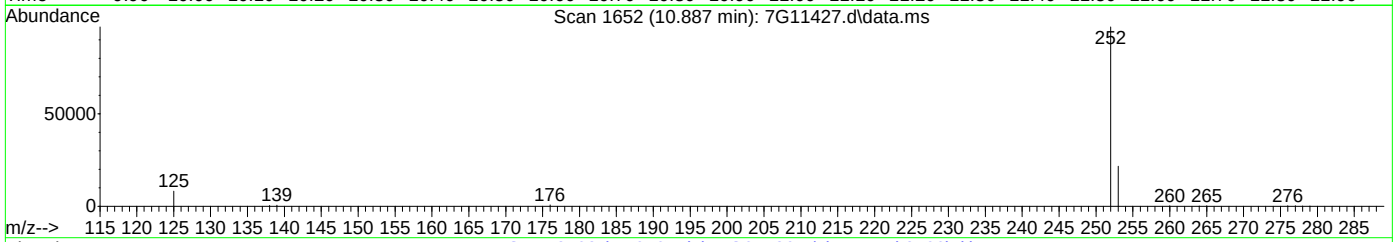
Ion	Exp%	Act%
252.00	100	100
253.00	21.80	22.23
125.00	6.80	8.37
0.00	0.00	0.00

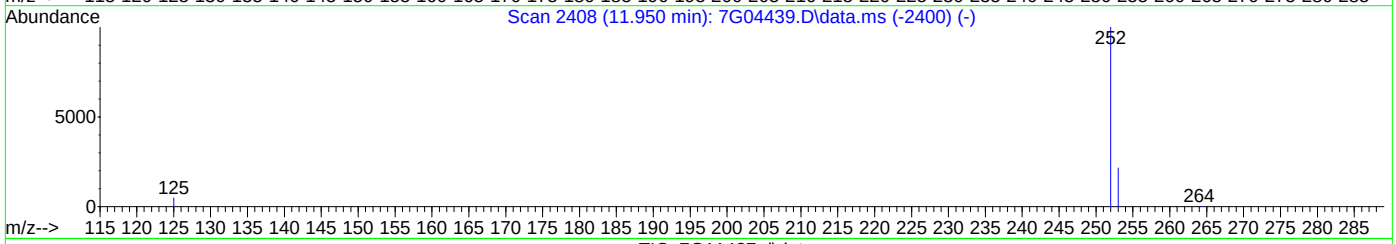
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-31-2020\s7g494\
Data File : 7G11427.d
Acq On : 29 Aug 2020 4:22 pm
Operator : FOUADS
Sample : fa78194-2 e
Misc : op81782,S7G494,29.9,,,1,1,soil
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Aug 31 00:13:33 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11427.d\data.ms

(24) Benzo[k]fluoranthene (P)

10.887min (-0.010) 12.32ppm

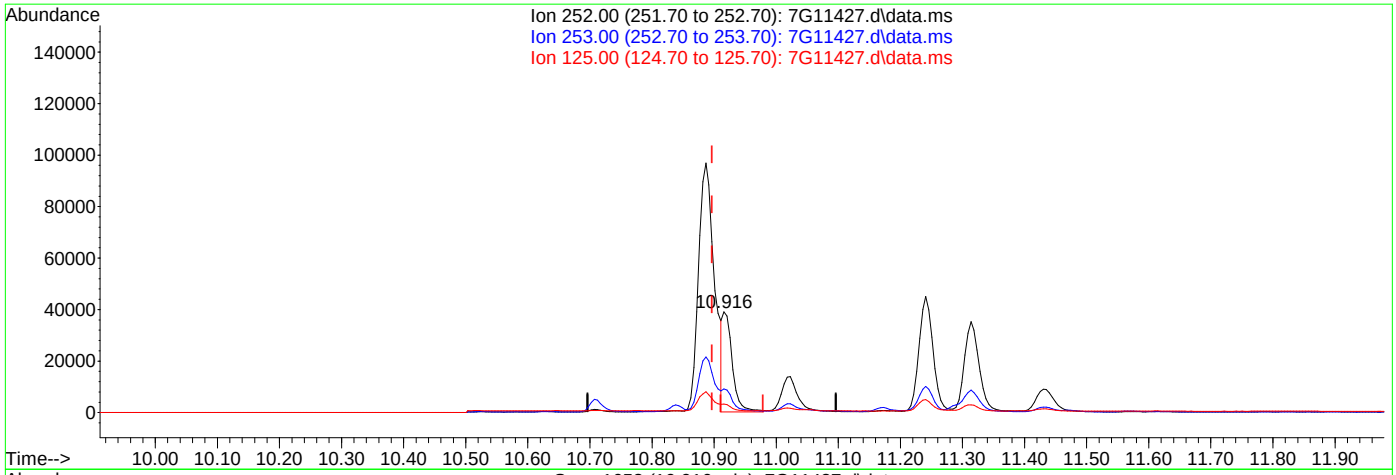
response 213496

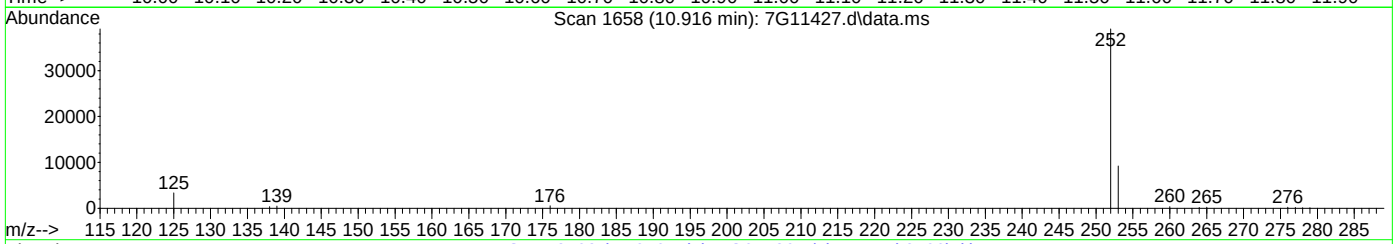
Ion	Exp%	Act%
252.00	100	100
253.00	21.90	21.05
125.00	7.10	7.70
0.00	0.00	0.00

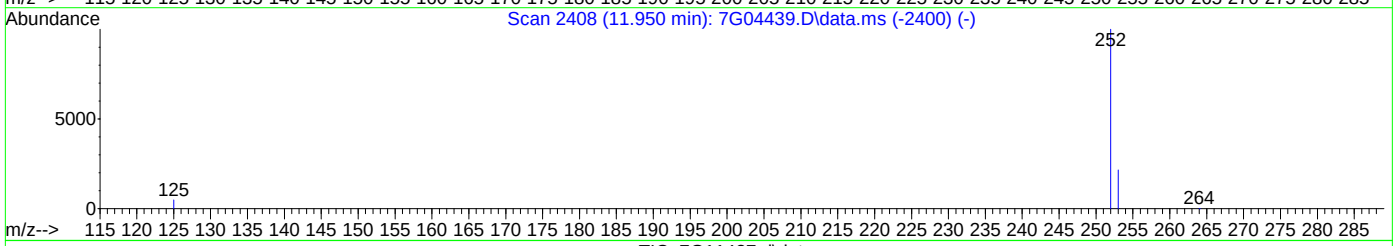
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-31-2020\s7g494\
Data File : 7G11427.d
Acq On : 29 Aug 2020 4:22 pm
Operator : FOUADS
Sample : fa78194-2 e
Misc : op81782,S7G494,29.9,,,1,1,soil
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Aug 31 00:13:33 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11427.d\data.ms

(24) Benzo[k]fluoranthene (P)

10.916min (+0.019) 2.46ppm m

response 41404

Ion	Exp%	Act%
252.00	100	100
253.00	21.90	23.59
125.00	7.10	8.57
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0828_sx2960\
Data File : x072586.D
Acq On : 28 Aug 2020 3:04 pm
Operator : marthav
Sample : op81781-mb E Inst : MSBNA05
Misc : op81781,sx2960,30.0,,,1,1,soil
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 29 09:35:39 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Aug 18 13:05:00 2020
Response via : Initial Calibration

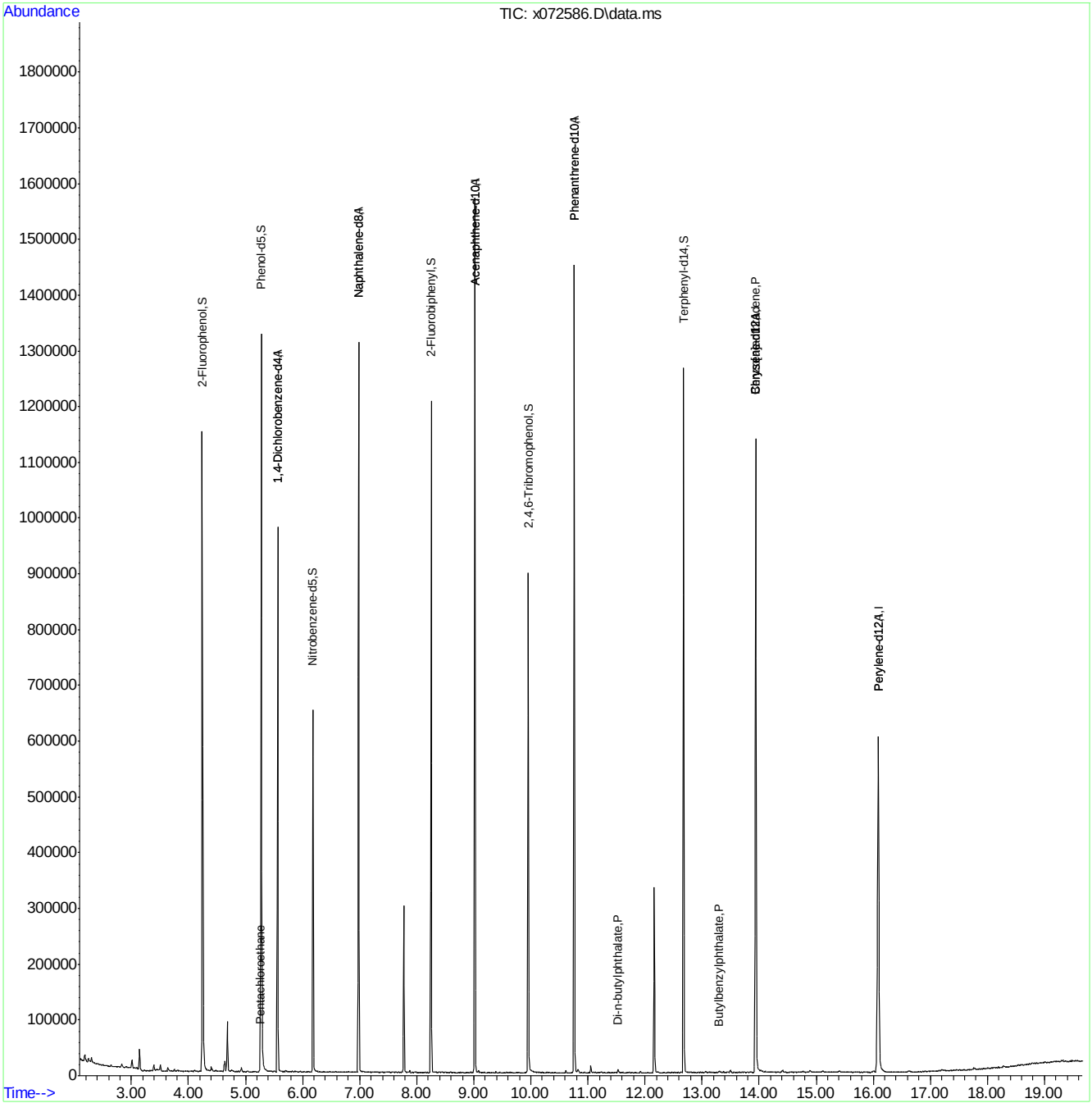
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.563	152	136585	40.00	ppm	0.00
22) Naphthalene-d8	6.981	136	542267	40.00	ppm	0.00
43) Acenaphthene-d10	9.019	164	309469	40.00	ppm	0.00
70) Phenanthrene-d10	10.757	188	544305	40.00	ppm	0.00
92) Chrysene-d12	13.945	240	437145	40.00	ppm	0.00
102) Perylene-d12	16.090	264	337693	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	5.563	152	136585	40.00	ppm	0.00
120) Naphthalene-d8A	6.981	136	542267	40.00	ppm	0.00
127) Acenaphthene-d10A	9.019	164	309469	40.00	ppm	0.00
136) Phenanthrene-d10A	10.757	188	544305	40.00	ppm	0.00
146) Chrysene-d12A	13.945	240	437145	40.00	ppm	0.00
153) Perylene-d12A	16.090	264	337693	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	4.242	112	313156	60.16	ppm	-0.01
Spiked Amount 100.000	Range 40 - 102		Recovery = 60.16%			
9) Phenol-d5	5.275	99	418357	68.56	ppm	-0.02
Spiked Amount 100.000	Range 41 - 100		Recovery = 68.56%			
23) Nitrobenzene-d5	6.179	82	180353	29.79	ppm	-0.01
Spiked Amount 50.000	Range 40 - 105		Recovery = 59.58%			
47) 2-Fluorobiphenyl	8.254	172	334985	26.92	ppm	0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 53.84%			
75) 2,4,6-Tribromophenol	9.955	330	72654	62.26	ppm	0.00
Spiked Amount 100.000	Range 42 - 108		Recovery = 62.26%			
95) Terphenyl-d14	12.677	244	374756	29.74	ppm	0.00
Spiked Amount 50.000	Range 45 - 119		Recovery = 59.48%			
Target Compounds						Qvalue
89) Di-n-butylphthalate	11.527	149	1663	0.09	ppm	94
97) Butylbenzylphthalate	13.298	149	657	0.08	ppm	62
99) Benzo[a]anthracene	13.945	228	1106	0.08	ppm	57
116) Pentachloroethane	5.253	167	543	0.28	ppm	86

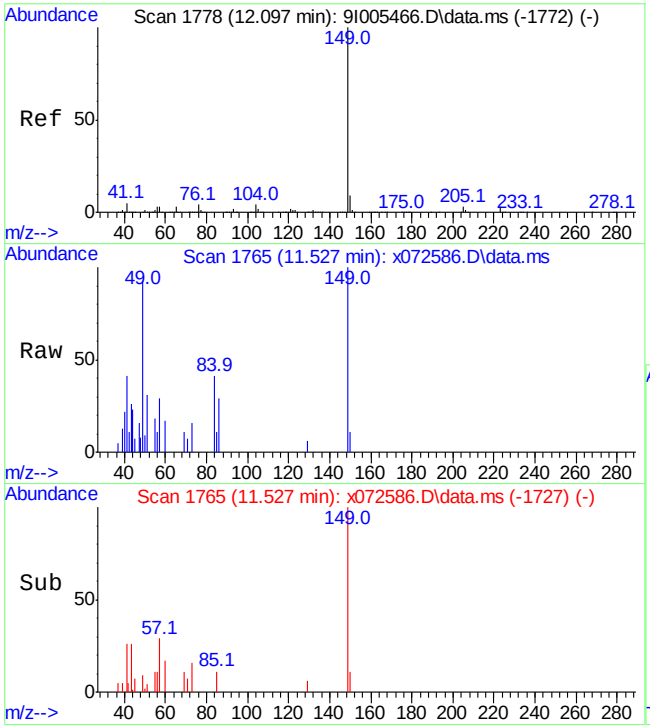
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0828_sx2960\
Data File : x072586.D
Acq On : 28 Aug 2020 3:04 pm
Operator : marthav
Sample : op81781-mb E Inst : MSBNA05
Misc : op81781,sx2960,30.0,,,1,1,soil
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 29 09:35:39 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Aug 18 13:05:00 2020
Response via : Initial Calibration

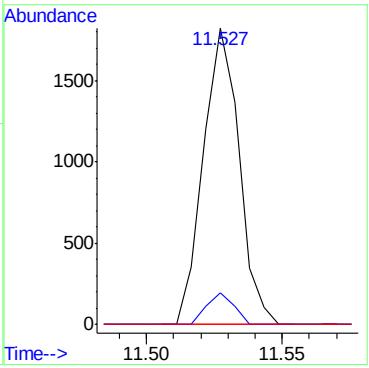


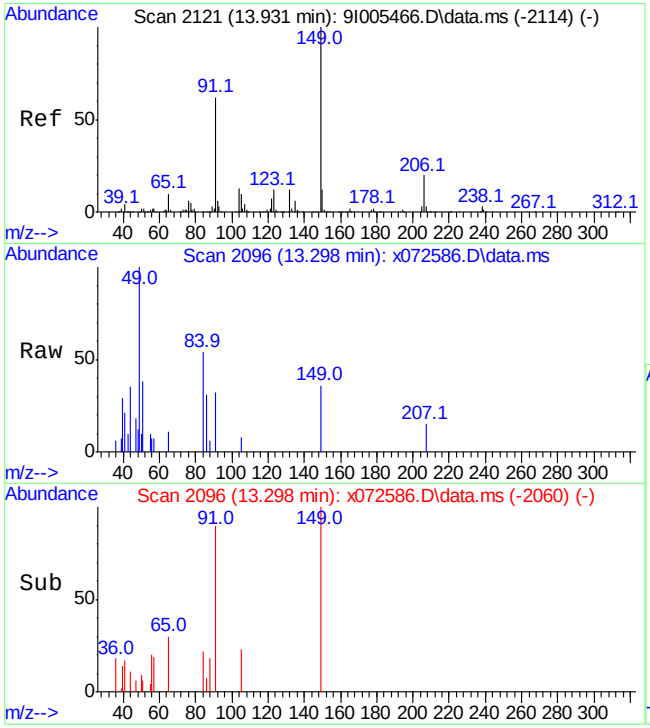


#89
Di-n-butylphthalate
Concen: 0.09 ppm
RT: 11.527 min Scan# 1765
Delta R.T. 0.001 min
Lab File: x072586.D
Acq: 28 Aug 2020 3:04 pm

Tgt Ion:149 Resp: 1663

Ion	Ratio	Lower	Upper
149	100		
150	10.8	0.0	39.5
104	0.0	0.0	34.2

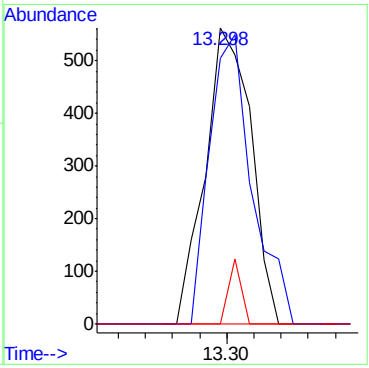


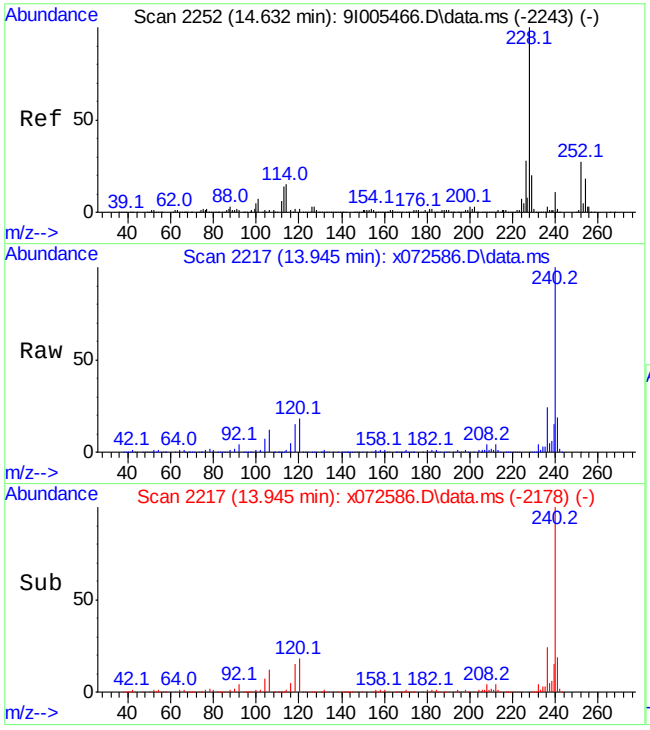


#97
Butylbenzylphthalate
Concen: 0.08 ppm
RT: 13.298 min Scan# 2096
Delta R.T. -0.006 min
Lab File: x072586.D
Acq: 28 Aug 2020 3:04 pm

Tgt Ion:149 Resp: 657

Ion	Ratio	Lower	Upper
149	100		
91	89.9	32.1	92.1
206	0.0	0.0	49.7

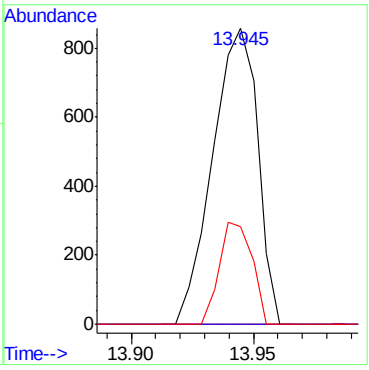


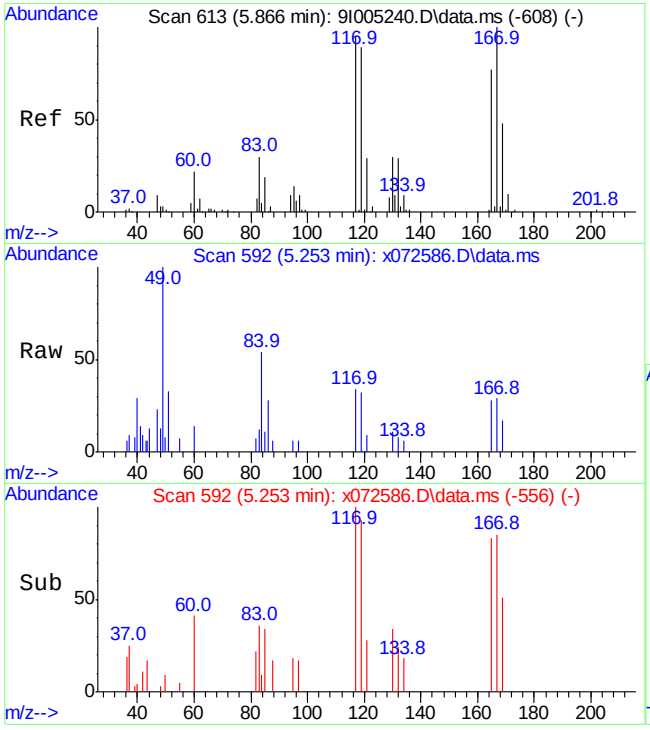


#99
Benzo[a]anthracene
Concen: 0.08 ppm
RT: 13.945 min Scan# 2217
Delta R.T. 0.011 min
Lab File: x072586.D
Acq: 28 Aug 2020 3:04 pm

Tgt Ion:228 Resp: 1106

Ion	Ratio	Lower	Upper
228	100		
226	0.0	0.0	57.5
229	33.0	0.0	49.9

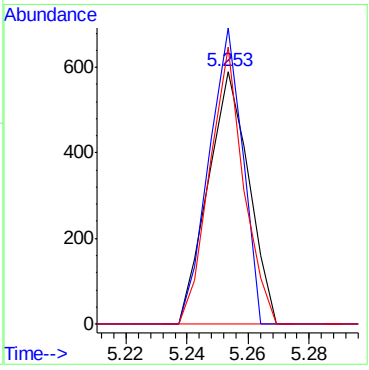




#116
Pentachloroethane
Concen: 0.28 ppm
RT: 5.253 min Scan# 592
Delta R.T. -0.006 min
Lab File: x072586.D
Acq: 28 Aug 2020 3:04 pm

Tgt Ion:167 Resp: 543

Ion	Ratio	Lower	Upper
167	100		
117	117.3	82.2	122.2
119	109.7	76.9	116.9



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-31-2020\s7g494\
Data File : 7G11410.d
Acq On : 29 Aug 2020 9:27 am
Operator : FOUADS
Sample : op81782-mb e
Misc : op81782,S7G494,30.0,,,1,1,soil
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 31 00:12:52 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

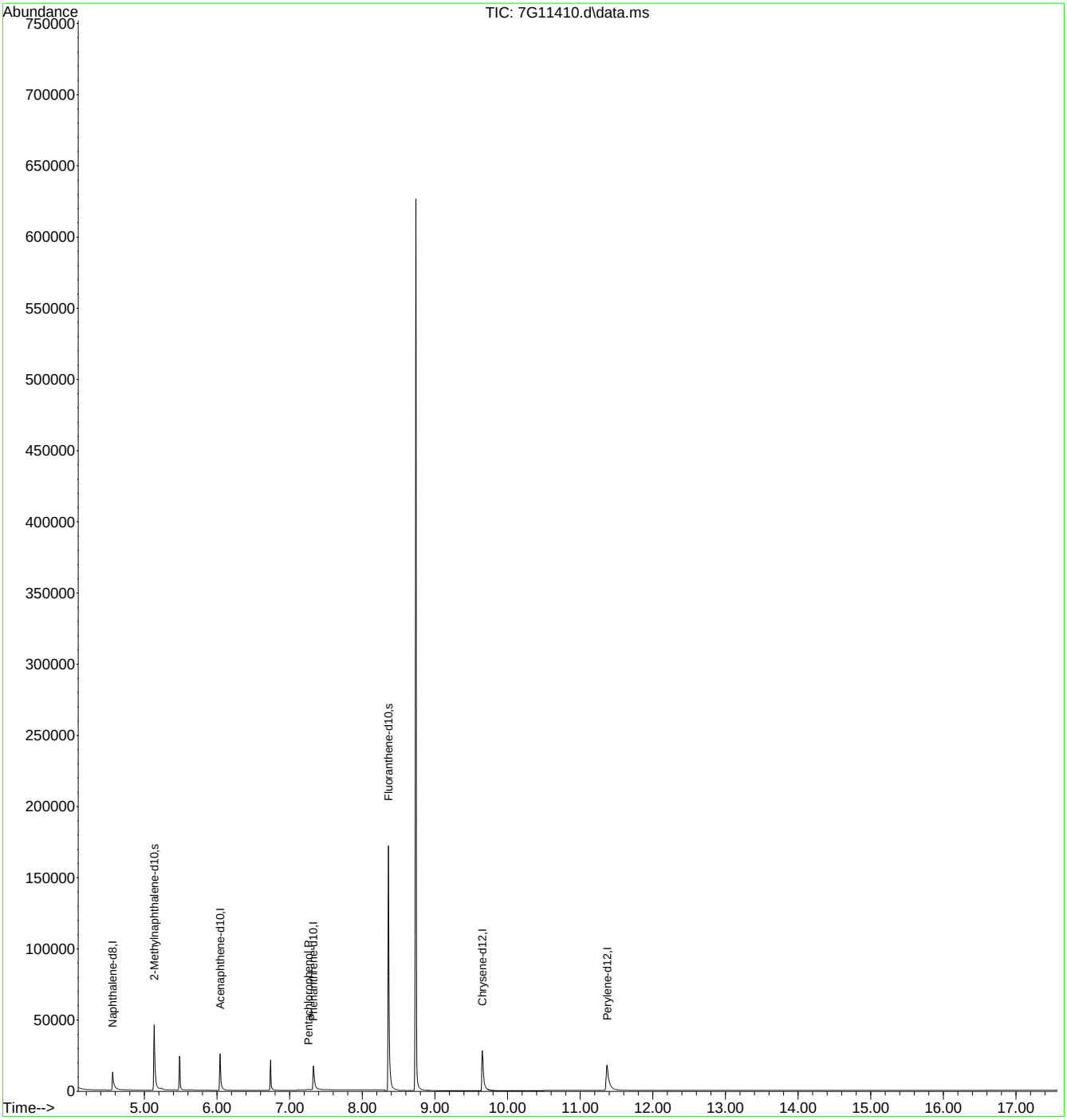
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.564	136	18585	4.00	ppm	0.00
6) Acenaphthene-d10	6.042	164	11306	4.00	ppm	0.00
11) Phenanthrene-d10	7.327	188	21885	4.00	ppm	0.00
18) Chrysene-d12	9.652	240	37111	4.00	ppm	0.00
22) Perylene-d12	11.372	264	32802	4.00	ppm	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.135	152	23428	8.46	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 84.60%			
17) Fluoranthene-d10	8.361	212	135023	11.77	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 117.70%			
Target Compounds						Qvalue
12) Pentachlorophenol	7.258	266	349	0.45	ppm	97

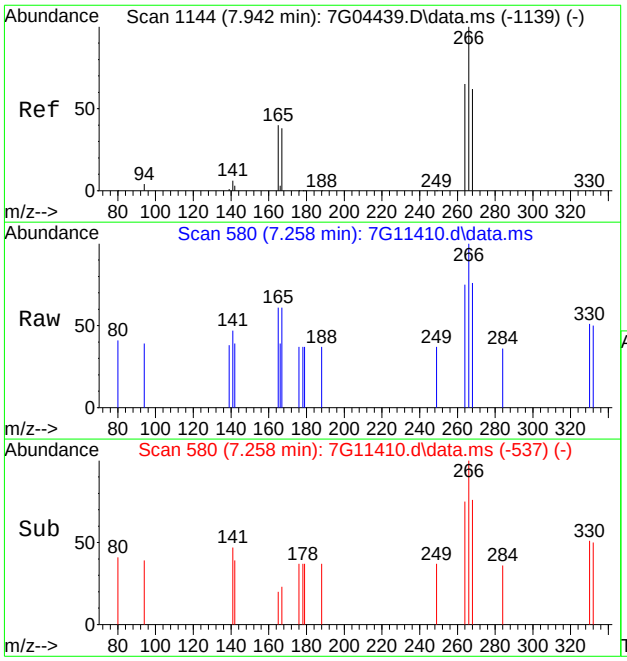
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-31-2020\s7g494\
Data File : 7G11410.d
Acq On : 29 Aug 2020 9:27 am
Operator : FOUADS
Sample : op81782-mb e
Misc : op81782,S7G494,30.0,,,1,1,soil
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 31 00:12:52 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

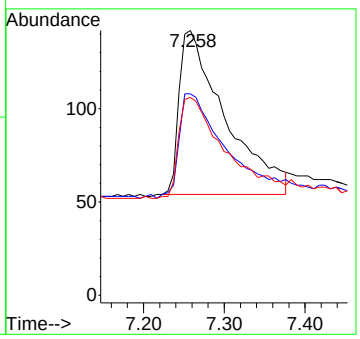




#12
Pentachlorophenol
Concen: 0.45 ppm
RT: 7.258 min Scan# 580
Delta R.T. 0.056 min
Lab File: 7G11410.d
Acq: 29 Aug 2020 9:27 am

Tgt Ion:266 Resp: 349

Ion	Ratio	Lower	Upper
266	100		
268	61.0	42.2	82.2
264	61.0	45.1	85.1



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0828_sx2960\
Data File : x072585.D
Acq On : 28 Aug 2020 2:38 pm
Operator : marthav
Sample : op81781-bs E Inst : MSBNA05
Misc : op81781,sx2960,30.0,,,1,1,soil
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 29 10:39:16 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Aug 18 13:05:00 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.564	152	163444	40.00	ppm	0.00
22) Naphthalene-d8	6.986	136	643596	40.00	ppm	0.00
43) Acenaphthene-d10	9.019	164	300966	40.00	ppm	0.00
70) Phenanthrene-d10	10.762	188	478938	40.00	ppm	0.00
92) Chrysene-d12	13.945	240	333319	40.00	ppm	0.00
102) Perylene-d12	16.084	264	256037	40.00	ppm	-0.01
110) 1,4-Dichlorobenzene-d4A	5.564	152	163444	40.00	ppm	0.00
120) Naphthalene-d8A	6.986	136	643596	40.00	ppm	0.00
127) Acenaphthene-d10A	9.019	164	300966	40.00	ppm	0.00
136) Phenanthrene-d10A	10.762	188	478938	40.00	ppm	0.00
146) Chrysene-d12A	13.945	240	333319	40.00	ppm	0.00
153) Perylene-d12A	16.084	264	256037	40.00	ppm	-0.01
System Monitoring Compounds						
7) 2-Fluorophenol	4.242	112	428112	68.73	ppm	-0.01
Spiked Amount 100.000	Range 40 - 102		Recovery = 68.73%			
9) Phenol-d5	5.275	99	570577	78.14	ppm	-0.02
Spiked Amount 100.000	Range 41 - 100		Recovery = 78.14%			
23) Nitrobenzene-d5	6.184	82	258121	35.92	ppm	0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 71.84%			
47) 2-Fluorobiphenyl	8.254	172	463966	38.33	ppm	0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 76.66%			
75) 2,4,6-Tribromophenol	9.960	330	86137	83.89	ppm	0.00
Spiked Amount 100.000	Range 42 - 108		Recovery = 83.89%			
95) Terphenyl-d14	12.677	244	362417	37.72	ppm	0.00
Spiked Amount 50.000	Range 45 - 119		Recovery = 75.44%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.386	88	87056	30.48	ppm	# 35
3) N-nitrosodimethylamine	2.723	42	173067	33.96	ppm	# 38
4) Pyridine	2.750	79	256479	32.30	ppm	# 29
5) Benzaldehyde	5.093	106	169124	33.96	ppm	92
6) Aniline	5.221	93	292691	31.90	ppm	91
8) bis(2-Chloroethyl)ether	5.296	93	232999	37.16	ppm	# 68
10) Phenol	5.291	94	316066	38.19	ppm	84
11) 2-Chlorophenol	5.366	128	239078	37.11	ppm	81
12) 1,3-Dichlorobenzene	5.494	146	241324	35.18	ppm	97
13) 1,4-Dichlorobenzene	5.580	146	254945	35.39	ppm	97
14) 1,2-Dichlorobenzene	5.740	146	234014	35.80	ppm	96
15) Benzyl alcohol	5.751	108	171672	42.83	ppm	89
16) 2,2'-Oxybis(1-chloropr...	5.895	45	476555	37.49	ppm	76
17) 2-Methylphenol	5.922	108	218433	36.81	ppm	99
18) Acetophenone	6.018	105	321620	37.84	ppm	95
19) Hexachloroethane	6.109	117	92919	34.11	ppm	95
20) N-Nitroso-di-n-propyla...	6.040	70	183530	38.95	ppm	# 61
21) 3&4-Methylphenol	6.104	108	480901	77.63	ppm	96
24) Nitrobenzene	6.205	77	257550	36.21	ppm	84
25) Isophorone	6.484	82	460897	39.37	ppm	95
26) 2-Nitrophenol	6.564	139	129332	38.13	ppm	75

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0828_sx2960\
Data File : x072585.D
Acq On : 28 Aug 2020 2:38 pm
Operator : marthav
Sample : op81781-bs E Inst : MSBNA05
Misc : op81781,sx2960,30.0,,,1,1,soil
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 29 10:39:16 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Aug 18 13:05:00 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
27) 2,4-Dimethylphenol	6.676	107	211334	37.98	ppm		96
29) bis(2-Chloroethoxy)met...	6.751	93	251537	35.61	ppm		95
30) Benzoic Acid	6.895	105	365249	85.99	ppm		91
31) 2,4-Dichlorophenol	6.879	162	187709	38.99	ppm		97
32) 1,2,4-Trichlorobenzene	6.927	180	191648	36.82	ppm		98
34) Naphthalene	7.008	128	669814	36.70	ppm		99
35) 4-Chloroaniline	7.104	127	275398	37.02	ppm		89
36) 2,6-Dichlorophenol	7.115	162	187579	39.57	ppm		97
37) Hexachlorobutadiene	7.157	225	95276	36.81	ppm		99
38) Caprolactam	7.532	113	71721	39.05	ppm	#	44
39) 4-Chloro-3-methylphenol	7.735	107	194679	39.62	ppm		92
40) 2-Methylnaphthalene	7.810	142	455548	38.84	ppm		98
41) 1-Methylnaphthalene	7.922	142	406527	36.35	ppm		98
42) 1,2,4,5-Tetrachloroben...	8.008	216	180262	37.30	ppm		99
44) Hexachlorocyclopentadiene	7.992	237	61540	42.20	ppm		98
45) 2,4,6-Trichlorophenol	8.174	196	123123	41.10	ppm		98
46) 2,4,5-Trichlorophenol	8.243	196	131569	41.41	ppm		99
48) 1,1'-Biphenyl	8.366	154	505921	38.47	ppm		100
49) 2-Chloronaphthalene	8.377	162	394685	39.52	ppm		98
50) 2-Nitroaniline	8.527	65	169117	45.82	ppm	#	64
52) Acenaphthylene	8.853	152	690981	43.46	ppm		99
53) Dimethylphthalate	8.762	163	428063	39.27	ppm		99
54) m-Dinitrobenzene	8.794	168	80980	41.08	ppm	#	36
55) 2,6-Dinitrotoluene	8.821	165	105358	40.12	ppm		70
57) Acenaphthene	9.056	153	426335	40.17	ppm		99
58) 3-Nitroaniline	9.019	138	121989	40.60	ppm		94
59) 2,4-Dinitrophenol	9.147	184	112131	70.77	ppm	#	70
60) Dibenzofuran	9.265	168	586689	42.25	ppm		96
61) 2,4-Dinitrotoluene	9.292	165	146125	43.23	ppm		87
62) 4-Nitrophenol	9.329	109	97115	72.86	ppm	#	62
64) 2,3,4,6-Tetrachlorophenol	9.441	232	82310	34.01	ppm		92
65) Fluorene	9.666	166	464545	41.88	ppm		98
66) 4-Chlorophenyl-phenyle...	9.687	204	208620	39.95	ppm		91
67) Diethylphthalate	9.596	149	428949	40.31	ppm		97
69) 4-Nitroaniline	9.746	138	125527	39.03	ppm		88
71) 4,6-Dinitro-2-methylph...	9.773	198	173131	82.60	ppm	#	61
72) n-Nitrosodiphenylamine	9.842	169	329891	41.80	ppm		95
73) Diphenylamine	9.842	169	329891	35.61	ppm		95
74) 1,2-Diphenylhydrazine	9.875	77	478981	41.55	ppm		92
78) 4-Bromophenyl-phenylether	10.260	248	97965	40.71	ppm		86
79) Hexachlorobenzene	10.302	284	97238	40.56	ppm		71
82) Atrazine	10.506	200	106771	36.80	ppm		78
83) Pentachlorophenol	10.570	266	82068	72.86	ppm		96
84) Phenanthrene	10.789	178	624073	41.28	ppm		99
85) Anthracene	10.848	178	629515	40.26	ppm		98
87) Carbazole	11.073	167	608537	43.76	ppm		99
89) Di-n-butylphthalate	11.527	149	640357	40.78	ppm		99
91) Fluoranthene	12.185	202	572894	39.88	ppm		98
93) Benzidine	12.388	184	6890	0.95	ppm		93
94) Pyrene	12.447	202	584978	41.58	ppm		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0828_sx2960\
Data File : x072585.D
Acq On : 28 Aug 2020 2:38 pm
Operator : marthav
Sample : op81781-bs E Inst : MSBNA05
Misc : op81781,sx2960,30.0,,,1,1,soil
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 29 10:39:16 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Aug 18 13:05:00 2020
Response via : Initial Calibration

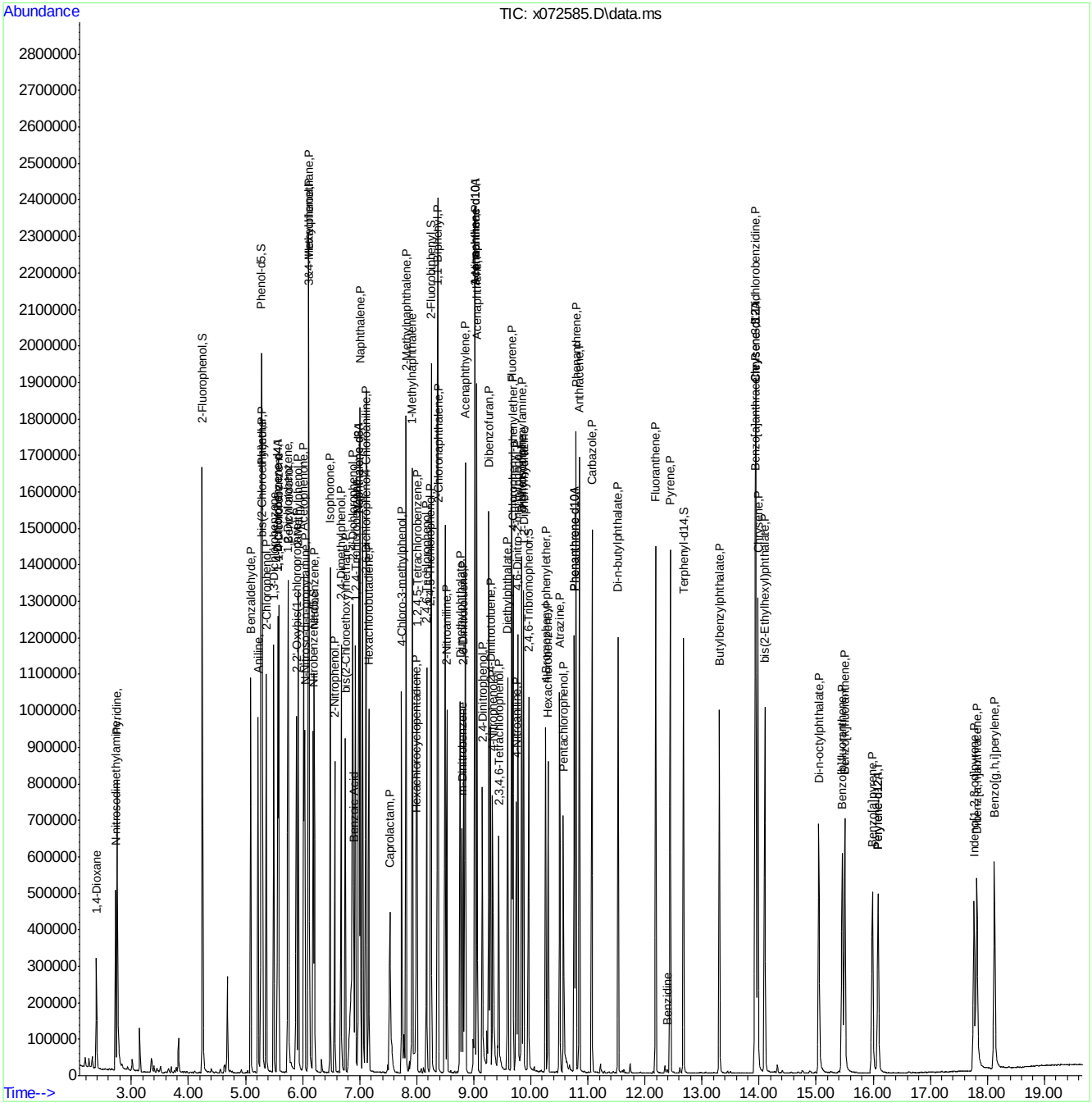
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	Butylbenzylphthalate	13.303	149	252952	42.82	ppm	91
98)	3,3'-Dichlorobenzidine	13.940	252	154347	41.41	ppm	97
99)	Benzo[a]anthracene	13.934	228	454800	41.03	ppm	99
100)	Chrysene	13.982	228	507087	43.33	ppm	98
101)	bis(2-Ethylhexyl)phtha...	14.100	149	356077	44.62	ppm	97
103)	Di-n-octylphthalate	15.047	149	510779	41.35	ppm	92
104)	Benzo[b]fluoranthene	15.459	252	367166	41.58	ppm	96
105)	Benzo[k]fluoranthene	15.507	252	405853	43.25	ppm	97
106)	Benzo[a]pyrene	15.988	252	330109	42.42	ppm	95
107)	Indeno[1,2,3-cd]pyrene	17.764	276	275938	41.57	ppm	87
108)	Dibenz[a,h]anthracene	17.817	278	297569	40.45	ppm	91
109)	Benzo[g,h,i]perylene	18.122	276	331622	42.79	ppm	84

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0828_sx2960\
Data File : x072585.D
Acq On : 28 Aug 2020 2:38 pm
Operator : marthav
Sample : op81781-bs E Inst : MSBNA05
Misc : op81781,sx2960,30.0,,,1,1,soil
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 29 10:39:16 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Aug 18 13:05:00 2020
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan
08/31/20 11:56

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-31-2020\s7g494\
Data File : 7G11409.d
Acq On : 29 Aug 2020 9:04 am
Operator : FOUADS
Sample : op81782-bs e
Misc : op81782,S7G494,30.0,,,1,1,soil
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 31 00:15:57 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

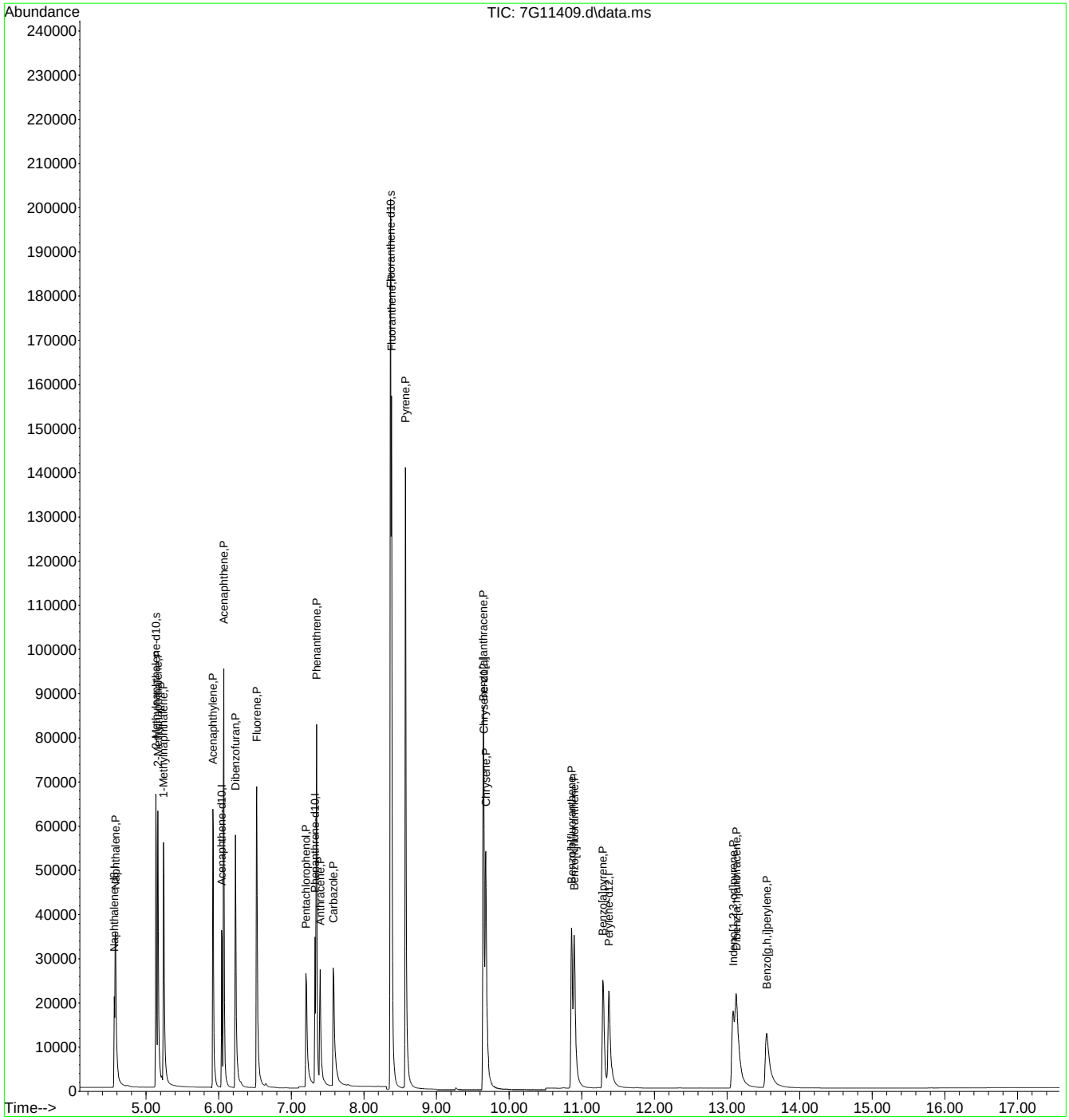
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.564	136	18652	4.00	ppm	0.00
6) Acenaphthene-d10	6.042	164	11435	4.00	ppm	0.00
11) Phenanthrene-d10	7.327	188	23070	4.00	ppm	0.00
18) Chrysene-d12	9.652	240	39206	4.00	ppm	0.00
22) Perylene-d12	11.372	264	36045	4.00	ppm	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.135	152	25755m	9.24	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 92.40%			
17) Fluoranthene-d10	8.367	212	127130	10.53	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 105.30%			
Target Compounds						Qvalue
2) Naphthalene	4.582	128	36224	6.77	ppm	99
3) 2-Methylnaphthalene	5.164	142	26491	6.39	ppm	96
5) 1-Methylnaphthalene	5.241	142	27888	7.43	ppm	88
7) Acenaphthylene	5.921	152	46727	7.04	ppm	98
8) Acenaphthene	6.071	153	31830	7.34	ppm	99
9) Dibenzofuran	6.230	168	45589	14.74	ppm	97
10) Fluorene	6.525	166	36211	7.67	ppm	98
12) Pentachlorophenol	7.202	266	13828	15.37	ppm	98
13) Phenanthrene	7.348	178	55438	7.21	ppm	99
14) Anthracene	7.397	178	25909	3.36	ppm	99
15) Carbazole	7.578	167	37826	2.74	ppm	98
16) Fluoranthene	8.380	202	115331	7.93	ppm	100
19) Pyrene	8.570	202	119186	7.61	ppm	100
20) Benzo[a]anthracene	9.642	228	46459	3.79	ppm	100
21) Chrysene	9.678	228	59226	4.36	ppm	99
23) Benzo[b]fluoranthene	10.858	252	42957	3.51	ppm	99
24) Benzo[k]fluoranthene	10.896	252	57004	4.37	ppm	100
25) Benzo[a]pyrene	11.290	252	41955	3.52	ppm	99
26) Indeno[1,2,3-cd]pyrene	13.085	276	32136m	4.13	ppm	
27) Dibenz[a,h]anthracene	13.129	278	37535	4.35	ppm	99
28) Benzo[g,h,i]perylene	13.546	276	36933	3.94	ppm	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-31-2020\s7g494\
Data File : 7G11409.d
Acq On : 29 Aug 2020 9:04 am
Operator : FOUADS
Sample : op81782-bs e
Misc : op81782,S7G494,30.0,,,1,1,soil
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 31 00:15:57 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration



Manual Integration Approval Summary

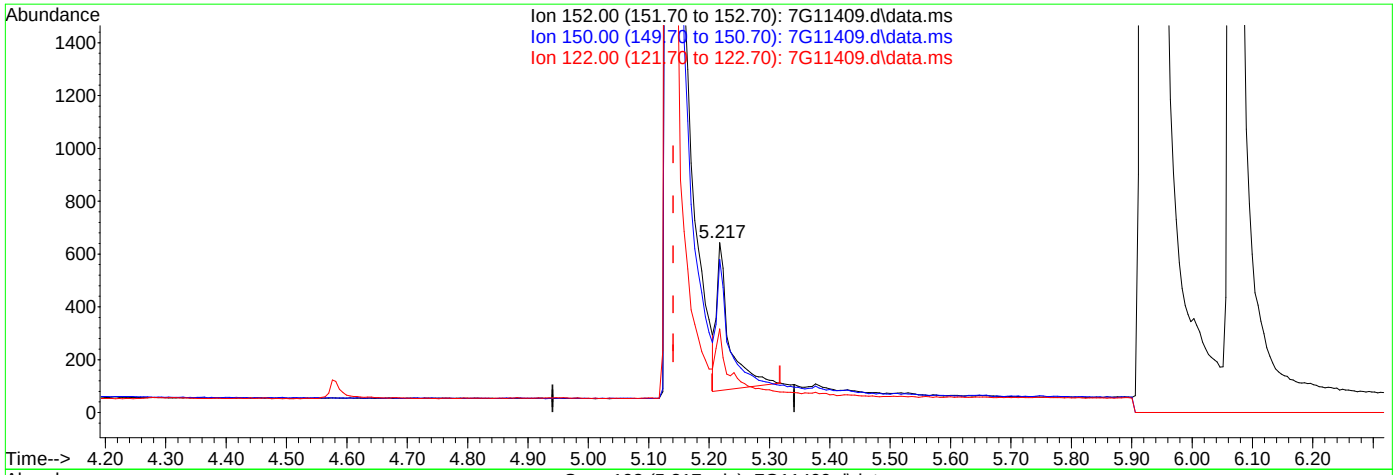
Sample Number: OP81782-BS
Lab FileID: 7G11409.D
Injection Time: 08/29/20 09:04
Method: SW846 8270E BY SIM
Analyst approved: 08/31/20 01:14 Edessa Sumagaysay
Supervisor approved: 08/31/20 11:56 Naresh Jiawan

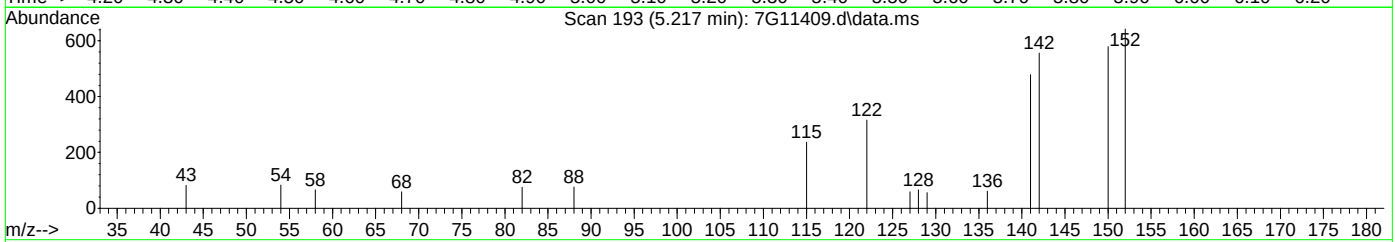
Parameter	CAS	Sig#	R.T. (min.)	Reason
2-Methylnaphthalene-d10	7297-45-2		5.14	Missed peak
Indeno(1,2,3-cd)pyrene	193-39-5		13.09	Overlapping peak

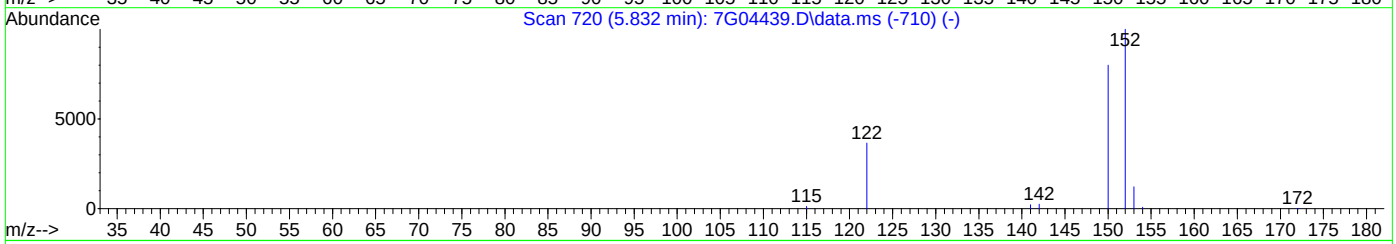
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-31-2020\s7g494\
Data File : 7G11409.d
Acq On : 29 Aug 2020 9:04 am
Operator : FOUADS
Sample : op81782-bs e
Misc : op81782,S7G494,30.0,,,1,1,soil
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 31 00:12:49 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11409.d\data.ms

(4) 2-Methylnaphthalene-d10 (s)

5.217min (+0.077) 0.30ppm

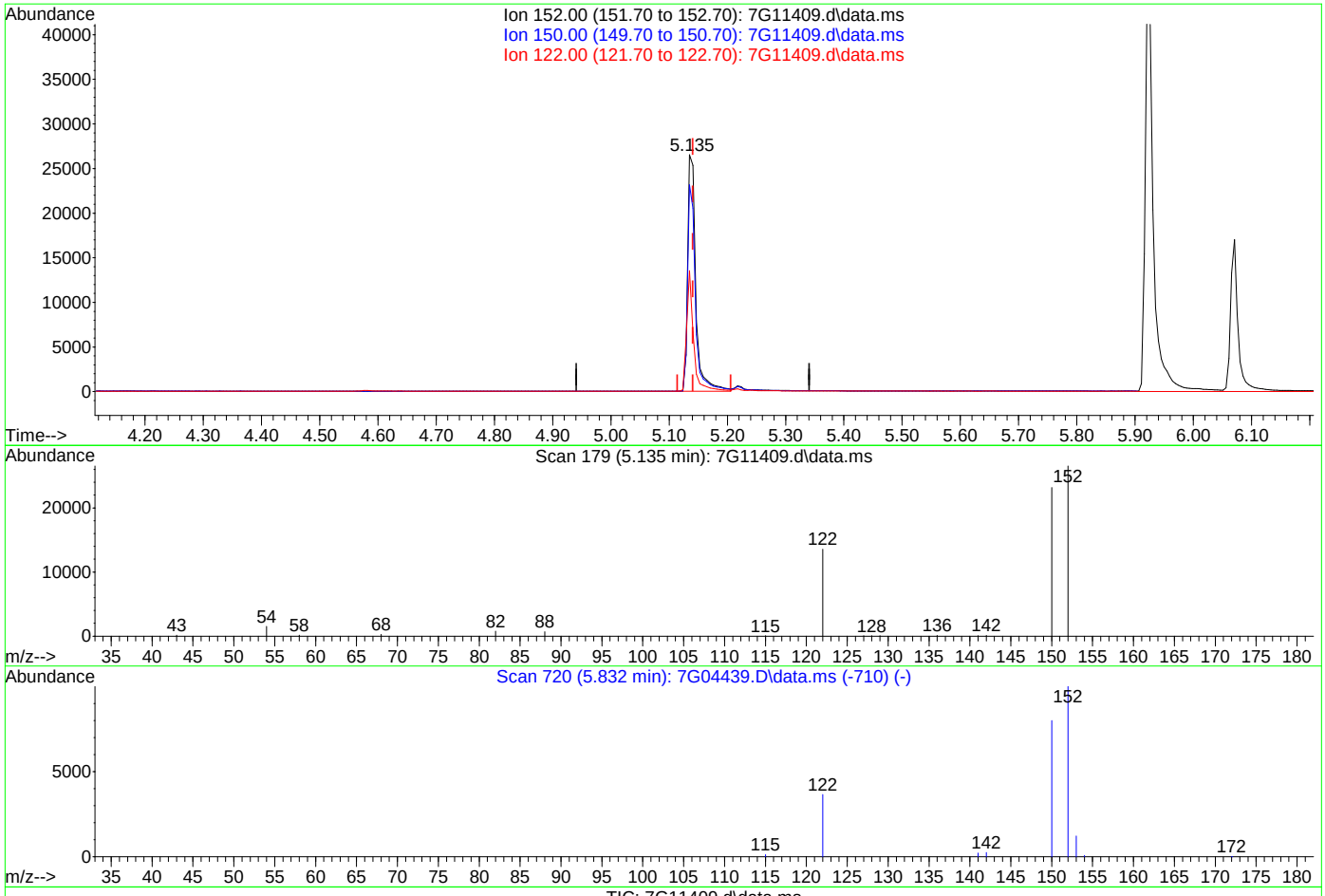
response 818

Ion	Exp%	Act%
152.00	100	100
150.00	80.90	89.58
122.00	29.40	44.05
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-31-2020\s7g494\
Data File : 7G11409.d
Acq On : 29 Aug 2020 9:04 am
Operator : FOUADS
Sample : op81782-bs e
Misc : op81782,S7G494,30.0,,,1,1,soil
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 31 00:12:49 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration



TIC: 7G11409.d\data.ms

(4) 2-Methylnaphthalene-d10 (s)

5.135min (-0.006) 9.24ppm m

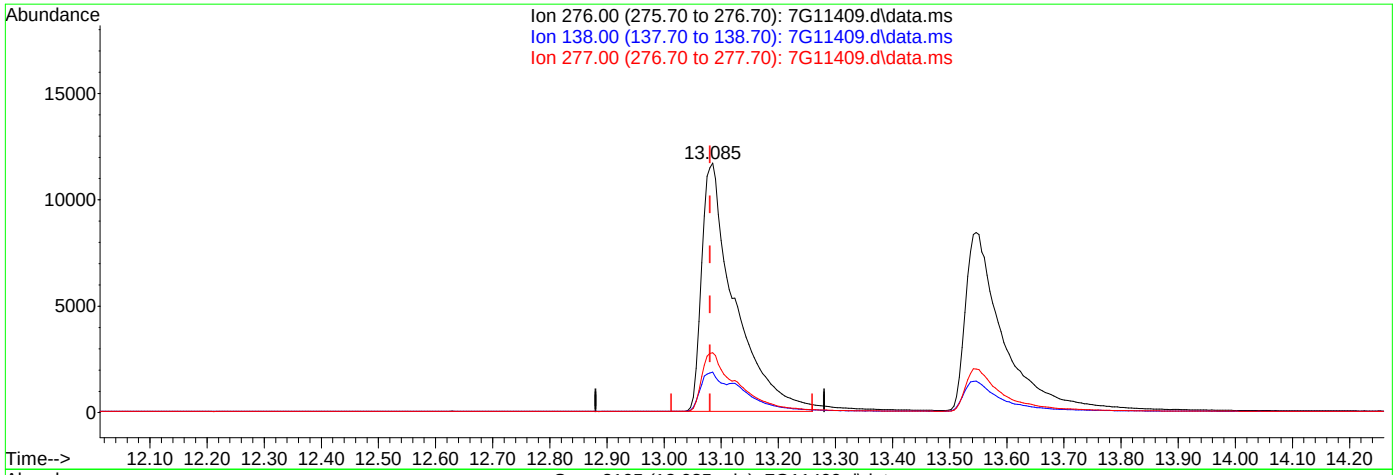
response 25755

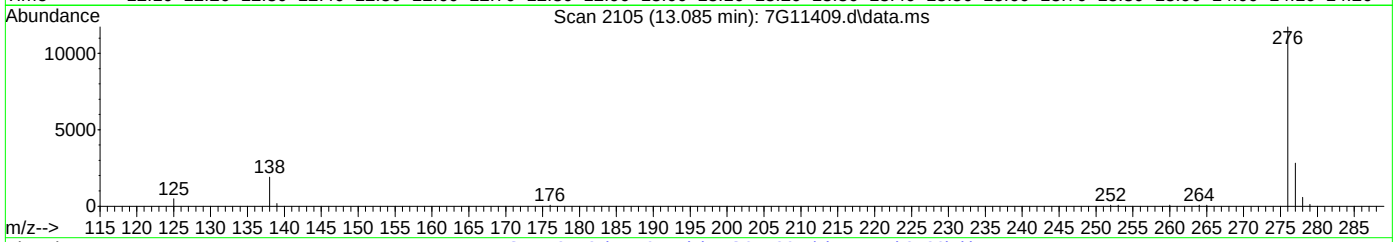
Ion	Exp%	Act%
152.00	100	100
150.00	80.90	87.26
122.00	29.40	51.00#
0.00	0.00	0.00

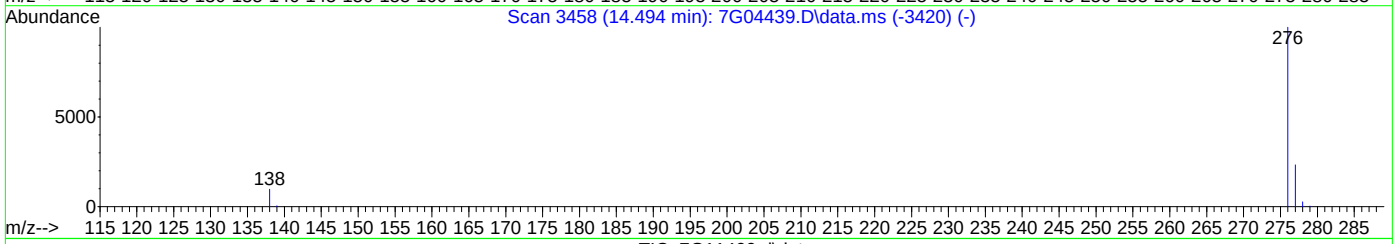
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-31-2020\s7g494\
Data File : 7G11409.d
Acq On : 29 Aug 2020 9:04 am
Operator : FOUADS
Sample : op81782-bs e
Misc : op81782,S7G494,30.0,,,1,1,soil
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 31 00:12:49 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11409.d\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.085min (+0.005) 6.01ppm

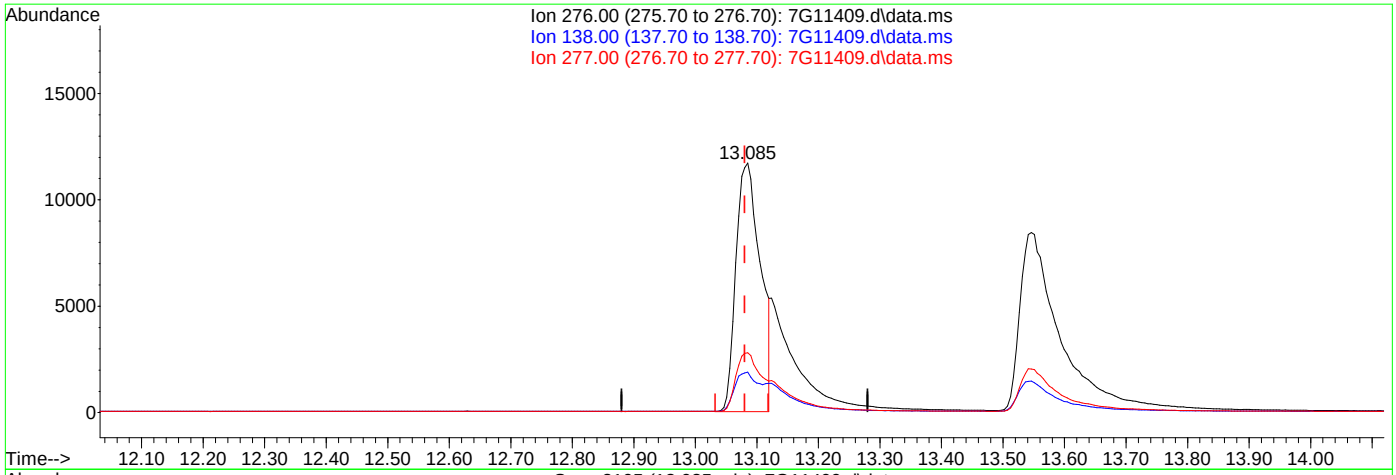
response 46740

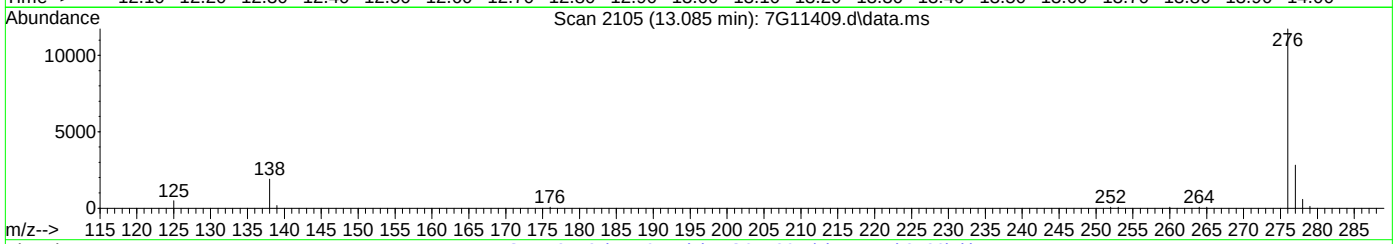
Ion	Exp%	Act%
276.00	100	100
138.00	15.60	15.73
277.00	24.00	23.60
0.00	0.00	0.00

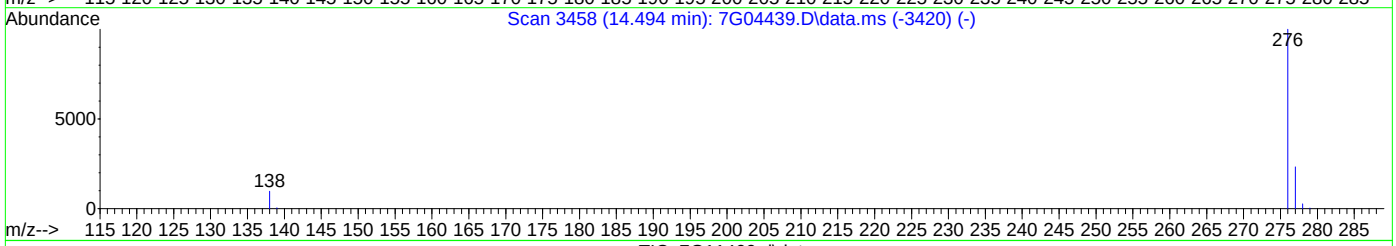
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-31-2020\s7g494\
Data File : 7G11409.d
Acq On : 29 Aug 2020 9:04 am
Operator : FOUADS
Sample : op81782-bs e
Misc : op81782,S7G494,30.0,,,1,1,soil
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 31 00:12:49 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11409.d\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.085min (+0.005) 4.13ppm m

response 32136

Ion	Exp%	Act%
276.00	100	100
138.00	15.60	16.21
277.00	24.00	23.98
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0828_sx2960\
Data File : x072599.D
Acq On : 28 Aug 2020 8:40 pm
Operator : marthav
Sample : op81781-ms E Inst : MSBNA05
Misc : op81781,sx2960,30.1,,,1,1,soil
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Aug 29 10:07:37 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Aug 18 13:05:00 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.564	152	169673	40.00	ppm	0.00
22) Naphthalene-d8	6.986	136	649978	40.00	ppm	0.00
43) Acenaphthene-d10	9.024	164	292162	40.00	ppm	0.00
70) Phenanthrene-d10	10.762	188	454021	40.00	ppm	0.00
92) Chrysene-d12	13.950	240	332538	40.00	ppm	0.00
102) Perylene-d12	16.095	264	275195	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	5.564	152	169673	40.00	ppm	0.00
120) Naphthalene-d8A	6.986	136	649978	40.00	ppm	0.00
127) Acenaphthene-d10A	9.024	164	292162	40.00	ppm	0.00
136) Phenanthrene-d10A	10.762	188	454021	40.00	ppm	0.00
146) Chrysene-d12A	13.950	240	332538	40.00	ppm	0.00
153) Perylene-d12A	16.095	264	275195	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	4.248	112	403633	62.42	ppm	0.00
Spiked Amount 100.000	Range 40 - 102		Recovery = 62.42%			
9) Phenol-d5	5.285	99	513777	67.78	ppm	0.00
Spiked Amount 100.000	Range 41 - 100		Recovery = 67.78%			
23) Nitrobenzene-d5	6.184	82	243360	33.54	ppm	0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 67.08%			
47) 2-Fluorobiphenyl	8.259	172	404106	34.39	ppm	0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 68.78%			
75) 2,4,6-Tribromophenol	9.960	330	71616	73.57	ppm	0.00
Spiked Amount 100.000	Range 42 - 108		Recovery = 73.57%			
95) Terphenyl-d14	12.677	244	301576	31.46	ppm	0.00
Spiked Amount 50.000	Range 45 - 119		Recovery = 62.92%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.392	88	78529	26.49	ppm	# 30
3) N-nitrosodimethylamine	2.729	42	173908	32.87	ppm	# 35
4) Pyridine	2.761	79	115754	14.04	ppm	# 19
5) Benzaldehyde	5.098	106	162036	31.35	ppm	94
6) Aniline	5.232	93	231387	24.29	ppm	87
8) bis(2-Chloroethyl)ether	5.301	93	223362	34.32	ppm	# 66
10) Phenol	5.296	94	282349	32.87	ppm	73
11) 2-Chlorophenol	5.371	128	222863	33.33	ppm	79
12) 1,3-Dichlorobenzene	5.499	146	230092	32.31	ppm	97
13) 1,4-Dichlorobenzene	5.585	146	240465	32.15	ppm	97
14) 1,2-Dichlorobenzene	5.745	146	219412	32.33	ppm	97
15) Benzyl alcohol	5.756	108	155129	37.28	ppm	88
16) 2,2'-Oxybis(1-chloropr...	5.895	45	469730	35.60	ppm	73
17) 2-Methylphenol	5.927	108	197252	32.02	ppm	98
18) Acetophenone	6.024	105	293539	33.27	ppm	95
19) Hexachloroethane	6.109	117	85676	30.30	ppm	84
20) N-Nitroso-di-n-propyla...	6.040	70	165228	33.78	ppm	# 53
21) 3&4-Methylphenol	6.109	108	428305	66.60	ppm	97
24) Nitrobenzene	6.211	77	239727	33.37	ppm	85
25) Isophorone	6.489	82	409605	34.65	ppm	95
26) 2-Nitrophenol	6.569	139	114643	33.47	ppm	77

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0828_sx2960\
Data File : x072599.D
Acq On : 28 Aug 2020 8:40 pm
Operator : marthav
Sample : op81781-ms E Inst : MSBNA05
Misc : op81781,sx2960,30.1,,,1,1,soil
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Aug 29 10:07:37 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Aug 18 13:05:00 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
27) 2,4-Dimethylphenol	6.676	107	191410	34.06	ppm		95
29) bis(2-Chloroethoxy)met...	6.751	93	224958	31.53	ppm		95
30) Benzoic Acid	6.895	105	311550	75.74	ppm		90
31) 2,4-Dichlorophenol	6.879	162	166650	34.27	ppm		95
32) 1,2,4-Trichlorobenzene	6.927	180	175142	33.32	ppm		97
34) Naphthalene	7.013	128	611703	33.19	ppm		98
35) 4-Chloroaniline	7.109	127	225551	30.02	ppm		87
36) 2,6-Dichlorophenol	7.115	162	164533	34.37	ppm		97
37) Hexachlorobutadiene	7.163	225	88871	34.00	ppm		99
38) Caprolactam	7.537	113	60731	32.75	ppm	#	37
39) 4-Chloro-3-methylphenol	7.740	107	167729	33.80	ppm		88
40) 2-Methylnaphthalene	7.815	142	404090	34.12	ppm		99
41) 1-Methylnaphthalene	7.928	142	357090	31.62	ppm		99
42) 1,2,4,5-Tetrachloroben...	8.008	216	155924	31.95	ppm		98
44) Hexachlorocyclopentadiene	7.997	237	21241	18.32	ppm		97
45) 2,4,6-Trichlorophenol	8.179	196	107622	37.01	ppm		99
46) 2,4,5-Trichlorophenol	8.249	196	113554	36.82	ppm		99
48) 1,1'-Biphenyl	8.366	154	442582	34.67	ppm		99
49) 2-Chloronaphthalene	8.377	162	342733	35.35	ppm		95
50) 2-Nitroaniline	8.532	65	145561	40.63	ppm	#	68
52) Acenaphthylene	8.853	152	586623	38.01	ppm		99
53) Dimethylphthalate	8.762	163	369872	34.95	ppm		99
54) m-Dinitrobenzene	8.794	168	63968	33.89	ppm	#	69
55) 2,6-Dinitrotoluene	8.826	165	87683	34.40	ppm		85
57) Acenaphthene	9.062	153	362020	35.14	ppm		99
58) 3-Nitroaniline	9.019	138	108338	37.14	ppm		91
59) 2,4-Dinitrophenol	9.147	184	30461	31.27	ppm	#	34
60) Dibenzofuran	9.265	168	492187	36.51	ppm		95
61) 2,4-Dinitrotoluene	9.297	165	117859	35.92	ppm		97
62) 4-Nitrophenol	9.334	109	80960	64.13	ppm	#	64
64) 2,3,4,6-Tetrachlorophenol	9.441	232	73533	31.46	ppm		90
65) Fluorene	9.666	166	386692	35.91	ppm		99
66) 4-Chlorophenyl-phenyle...	9.693	204	174524	34.43	ppm		94
67) Diethylphthalate	9.596	149	365003	35.33	ppm		97
69) 4-Nitroaniline	9.746	138	103504	33.44	ppm		88
71) 4,6-Dinitro-2-methylph...	9.773	198	67113	38.60	ppm	#	59
72) n-Nitrosodiphenylamine	9.842	169	276866	37.00	ppm		96
73) Diphenylamine	9.842	169	276866	31.53	ppm		96
74) 1,2-Diphenylhydrazine	9.875	77	405492	37.10	ppm		89
78) 4-Bromophenyl-phenylether	10.260	248	80965	35.49	ppm	#	81
79) Hexachlorobenzene	10.308	284	79080	34.79	ppm		78
82) Atrazine	10.511	200	84214	30.62	ppm		80
83) Pentachlorophenol	10.575	266	70486	66.02	ppm		96
84) Phenanthrene	10.789	178	514132	35.87	ppm		98
85) Anthracene	10.853	178	517595	34.92	ppm		98
87) Carbazole	11.073	167	508109	38.54	ppm		98
89) Di-n-butylphthalate	11.533	149	543278	36.50	ppm		99
91) Fluoranthene	12.190	202	480654	35.29	ppm		99
93) Benzidine	12.394	184	14942	2.08	ppm		93
94) Pyrene	12.447	202	495405	35.29	ppm		97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0828_sx2960\
Data File : x072599.D
Acq On : 28 Aug 2020 8:40 pm
Operator : marthav
Sample : op81781-ms E Inst : MSBNA05
Misc : op81781,sx2960,30.1,,,1,1,soil
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Aug 29 10:07:37 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Aug 18 13:05:00 2020
Response via : Initial Calibration

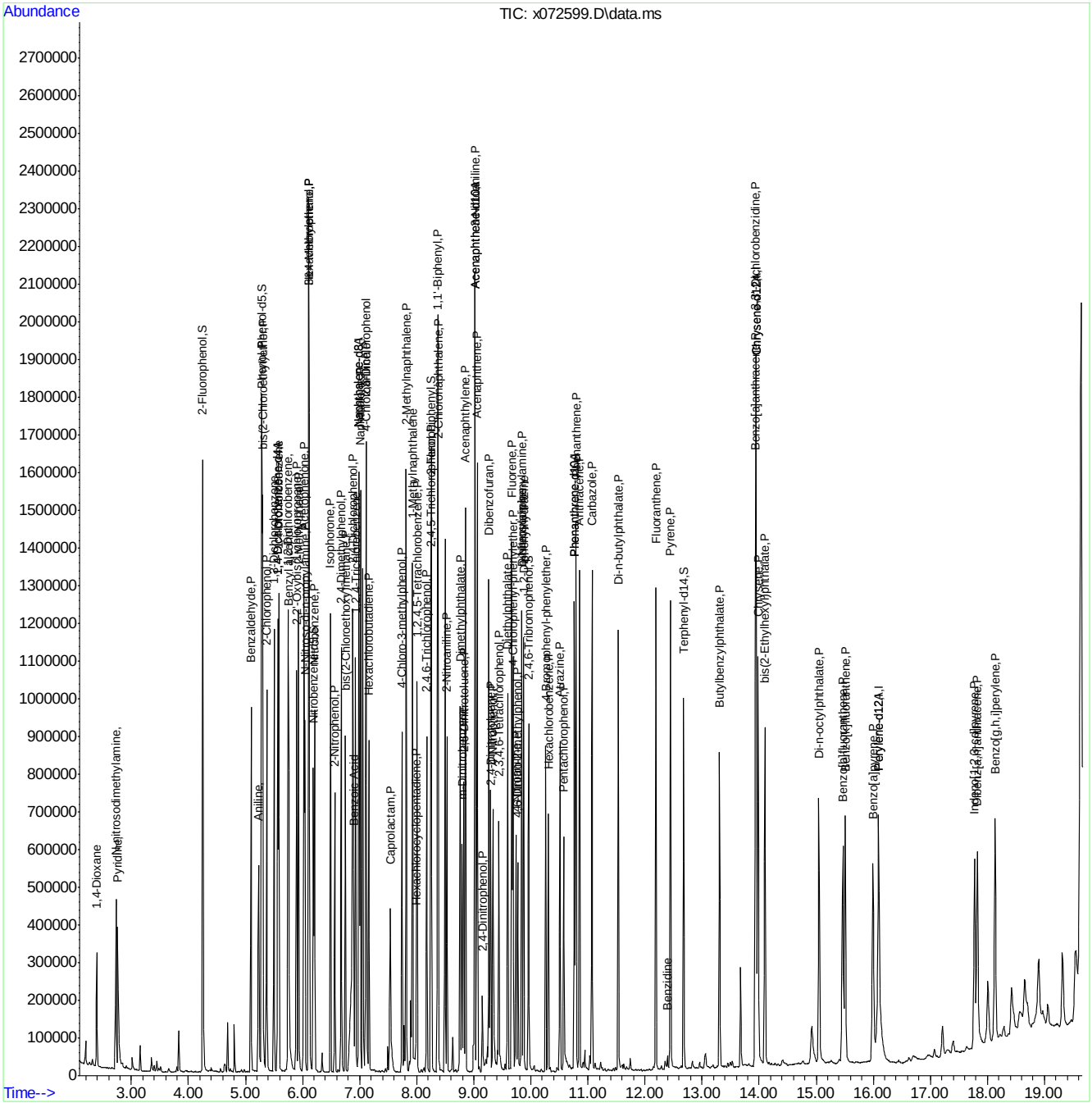
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
97)	Butylbenzylphthalate	13.308	149	222484	37.75	ppm	92
98)	3,3'-Dichlorobenzidine	13.945	252	126511	34.02	ppm	95
99)	Benzo[a]anthracene	13.939	228	404489	36.57	ppm	99
100)	Chrysene	13.988	228	434954	37.25	ppm	98
101)	bis(2-Ethylhexyl)phtha...	14.105	149	315948	39.68	ppm	97
103)	Di-n-octylphthalate	15.052	149	489822	37.16	ppm	92
104)	Benzo[b]fluoranthene	15.469	252	331489	34.92	ppm	96
105)	Benzo[k]fluoranthene	15.512	252	358297	35.52	ppm	97
106)	Benzo[a]pyrene	15.993	252	304987	36.46	ppm	94
107)	Indeno[1,2,3-cd]pyrene	17.774	276	280172	39.26	ppm	83
108)	Dibenz[a,h]anthracene	17.823	278	301509	38.13	ppm	88
109)	Benzo[g,h,i]perylene	18.133	276	318609	38.25	ppm	85

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0828_sx2960\
Data File : x072599.D
Acq On : 28 Aug 2020 8:40 pm
Operator : marthav
Sample : op81781-ms E Inst : MSBNA05
Misc : op81781,sx2960,30.1,,,1,1,soil
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Aug 29 10:07:37 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Aug 18 13:05:00 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0828_sx2960\
Data File : x072600.D
Acq On : 28 Aug 2020 9:06 pm
Operator : marthav
Sample : op81781-msd E Inst : MSBNA05
Misc : op81781,sx2960,30.4,,,1,1,soil
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Aug 29 10:08:34 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Aug 18 13:05:00 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.563	152	168360	40.00	ppm	0.00
22) Naphthalene-d8	6.986	136	657440	40.00	ppm	0.00
43) Acenaphthene-d10	9.024	164	295952	40.00	ppm	0.00
70) Phenanthrene-d10	10.762	188	470551	40.00	ppm	0.00
92) Chrysene-d12	13.955	240	338915	40.00	ppm	0.00
102) Perylene-d12	16.095	264	269589	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	5.563	152	168360	40.00	ppm	0.00
120) Naphthalene-d8A	6.986	136	657440	40.00	ppm	0.00
127) Acenaphthene-d10A	9.024	164	295952	40.00	ppm	0.00
136) Phenanthrene-d10A	10.762	188	470551	40.00	ppm	0.00
146) Chrysene-d12A	13.955	240	338915	40.00	ppm	0.00
153) Perylene-d12A	16.095	264	269589	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	4.248	112	420276	65.50	ppm	0.00
Spiked Amount 100.000	Range 40 - 102		Recovery = 65.50%			
9) Phenol-d5	5.280	99	553059	73.53	ppm	-0.01
Spiked Amount 100.000	Range 41 - 100		Recovery = 73.53%			
23) Nitrobenzene-d5	6.189	82	254848	34.72	ppm	0.00
Spiked Amount 50.000	Range 40 - 105		Recovery = 69.44%			
47) 2-Fluorobiphenyl	8.259	172	434954	36.55	ppm	0.00
Spiked Amount 50.000	Range 43 - 107		Recovery = 73.10%			
75) 2,4,6-Tribromophenol	9.965	330	79375	78.68	ppm	0.00
Spiked Amount 100.000	Range 42 - 108		Recovery = 78.68%			
95) Terphenyl-d14	12.677	244	337381	34.53	ppm	0.00
Spiked Amount 50.000	Range 45 - 119		Recovery = 69.06%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.392	88	79591	27.05	ppm	# 33
3) N-nitrosodimethylamine	2.723	42	179925	34.27	ppm	# 33
4) Pyridine	2.761	79	94886	11.60	ppm	# 13
5) Benzaldehyde	5.098	106	170373	33.22	ppm	93
6) Aniline	5.232	93	245383	25.96	ppm	83
8) bis(2-Chloroethyl)ether	5.301	93	239292	37.05	ppm	# 68
10) Phenol	5.296	94	307025	36.02	ppm	73
11) 2-Chlorophenol	5.371	128	237073	35.73	ppm	79
12) 1,3-Dichlorobenzene	5.499	146	238804	33.79	ppm	96
13) 1,4-Dichlorobenzene	5.585	146	252980	34.09	ppm	97
14) 1,2-Dichlorobenzene	5.745	146	229563	34.09	ppm	97
15) Benzyl alcohol	5.756	108	167049	40.46	ppm	81
16) 2,2'-Oxybis(1-chloropr...	5.895	45	498511	38.07	ppm	72
17) 2-Methylphenol	5.927	108	211681	34.63	ppm	98
18) Acetophenone	6.023	105	314580	35.93	ppm	96
19) Hexachloroethane	6.109	117	90071	32.10	ppm	84
20) N-Nitroso-di-n-propyla...	6.039	70	179053	36.89	ppm	# 53
21) 3&4-Methylphenol	6.109	108	471329	73.87	ppm	97
24) Nitrobenzene	6.211	77	257249	35.41	ppm	85
25) Isophorone	6.489	82	448417	37.50	ppm	95
26) 2-Nitrophenol	6.569	139	123712	35.71	ppm	79

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0828_sx2960\
Data File : x072600.D
Acq On : 28 Aug 2020 9:06 pm
Operator : marthav
Sample : op81781-msd E Inst : MSBNA05
Misc : op81781,sx2960,30.4,,,1,1,soil
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Aug 29 10:08:34 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Aug 18 13:05:00 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
27) 2,4-Dimethylphenol	6.676	107	210084	36.96	ppm		93
29) bis(2-Chloroethoxy)met...	6.751	93	243937	33.81	ppm		94
30) Benzoic Acid	6.901	105	347213	81.49	ppm		92
31) 2,4-Dichlorophenol	6.879	162	182257	37.06	ppm		96
32) 1,2,4-Trichlorobenzene	6.927	180	187249	35.22	ppm		98
34) Naphthalene	7.013	128	651822	34.97	ppm		99
35) 4-Chloroaniline	7.109	127	251896	33.15	ppm		89
36) 2,6-Dichlorophenol	7.114	162	179569	37.08	ppm		95
37) Hexachlorobutadiene	7.163	225	94331	35.68	ppm		99
39) 4-Chloro-3-methylphenol	7.740	107	186893	37.23	ppm		95
40) 2-Methylnaphthalene	7.815	142	436068	36.40	ppm		98
41) 1-Methylnaphthalene	7.927	142	388797	34.03	ppm		99
42) 1,2,4,5-Tetrachloroben...	8.008	216	169973	34.43	ppm		98
44) Hexachlorocyclopentadiene	7.997	237	25147	20.91	ppm		98
45) 2,4,6-Trichlorophenol	8.179	196	120037	40.75	ppm		99
46) 2,4,5-Trichlorophenol	8.248	196	127451	40.79	ppm		98
48) 1,1'-Biphenyl	8.366	154	489685	37.86	ppm		99
49) 2-Chloronaphthalene	8.377	162	378826	38.57	ppm		95
50) 2-Nitroaniline	8.532	65	161708	44.55	ppm	#	66
52) Acenaphthylene	8.853	152	646950	41.38	ppm		99
53) Dimethylphthalate	8.762	163	411795	38.41	ppm		99
54) m-Dinitrobenzene	8.794	168	72611	37.70	ppm	#	44
55) 2,6-Dinitrotoluene	8.826	165	98068	37.98	ppm		71
57) Acenaphthene	9.061	153	401410	38.46	ppm		100
58) 3-Nitroaniline	9.024	138	119442	40.42	ppm		95
59) 2,4-Dinitrophenol	9.147	184	44400	39.93	ppm	#	96
60) Dibenzofuran	9.270	168	537967	39.40	ppm		96
61) 2,4-Dinitrotoluene	9.297	165	133914	40.29	ppm		99
62) 4-Nitrophenol	9.334	109	91598	70.37	ppm	#	62
64) 2,3,4,6-Tetrachlorophenol	9.441	232	82865	34.76	ppm		88
65) Fluorene	9.671	166	433296	39.72	ppm		97
66) 4-Chlorophenyl-phenyle...	9.692	204	194923	37.96	ppm		93
67) Diethylphthalate	9.596	149	410141	39.19	ppm		98
69) 4-Nitroaniline	9.746	138	117944	37.39	ppm		86
71) 4,6-Dinitro-2-methylph...	9.773	198	86755	46.89	ppm	#	50
72) n-Nitrosodiphenylamine	9.842	169	310322	40.02	ppm		96
73) Diphenylamine	9.842	169	310322	34.10	ppm		96
74) 1,2-Diphenylhydrazine	9.874	77	457218	40.37	ppm		89
78) 4-Bromophenyl-phenylether	10.259	248	91911	38.87	ppm	#	80
79) Hexachlorobenzene	10.308	284	88120	37.41	ppm		75
82) Atrazine	10.511	200	96146	33.73	ppm		77
83) Pentachlorophenol	10.575	266	79180	71.55	ppm		98
84) Phenanthrene	10.789	178	583800	39.30	ppm		99
85) Anthracene	10.853	178	581543	37.86	ppm		98
87) Carbazole	11.072	167	572608	41.91	ppm		98
89) Di-n-butylphthalate	11.532	149	613849	39.79	ppm		98
91) Fluoranthene	12.190	202	543367	38.50	ppm		98
93) Benzidine	12.394	184	22155	3.02	ppm		94
94) Pyrene	12.447	202	559837	39.13	ppm		97
97) Butylbenzylphthalate	13.308	149	253874	42.26	ppm		92

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0828_sx2960\
Data File : x072600.D
Acq On : 28 Aug 2020 9:06 pm
Operator : marthav
Sample : op81781-msd E Inst : MSBNA05
Misc : op81781,sx2960,30.4,,,1,1,soil
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Aug 29 10:08:34 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Aug 18 13:05:00 2020
Response via : Initial Calibration

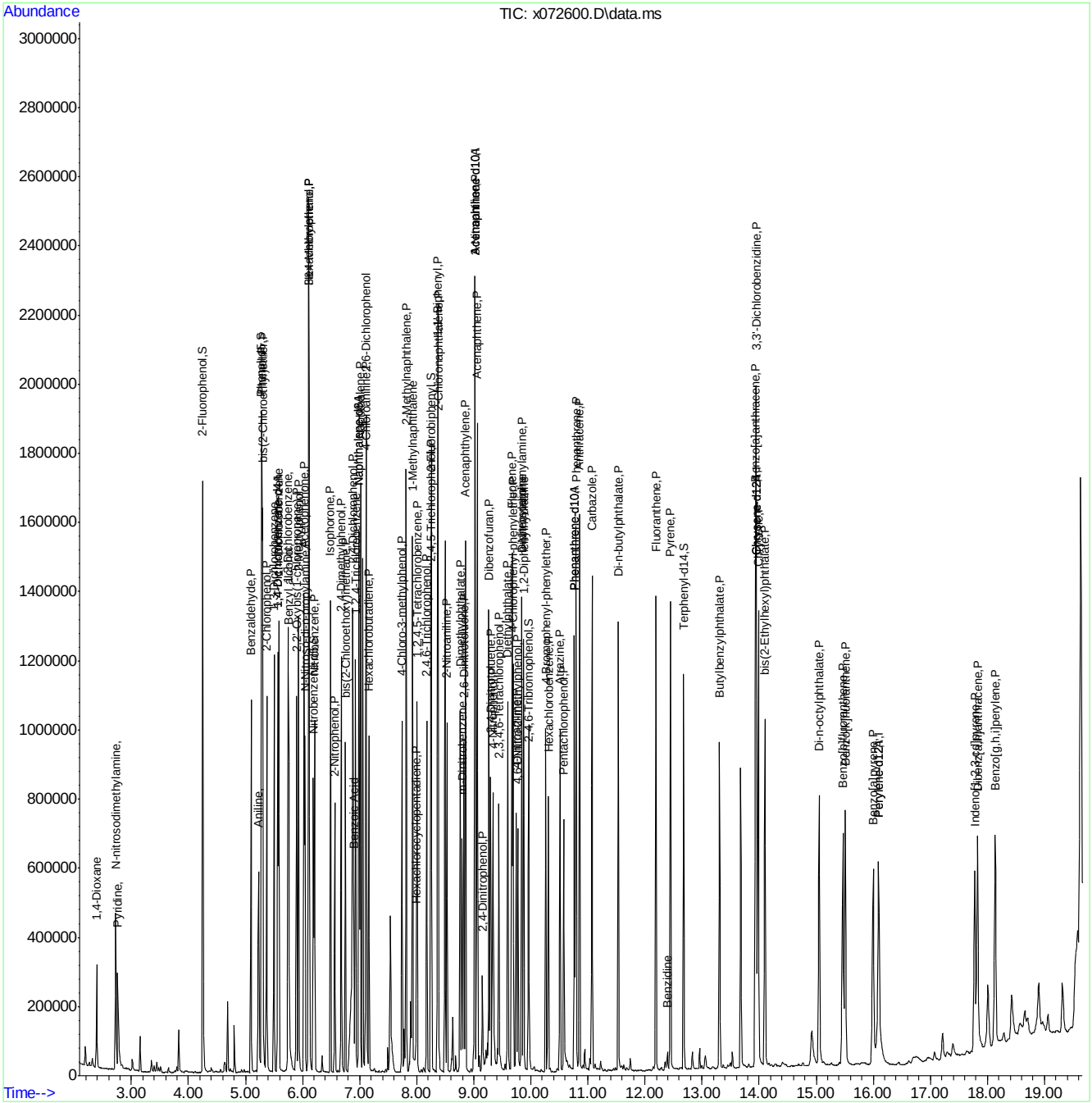
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
98)	3,3'-Dichlorobenzidine	13.950	252	153712	40.56	ppm	97
99)	Benzo[a]anthracene	13.939	228	454667	40.34	ppm	99
100)	Chrysene	13.987	228	495571	41.64	ppm	97
101)	bis(2-Ethylhexyl)phtha...	14.105	149	357931	44.11	ppm	97
103)	Di-n-octylphthalate	15.052	149	547745	42.06	ppm	91
104)	Benzo[b]fluoranthene	15.469	252	378618	40.72	ppm	97
105)	Benzo[k]fluoranthene	15.512	252	384714	38.93	ppm	96
106)	Benzo[a]pyrene	15.999	252	334456	40.82	ppm	96
107)	Indeno[1,2,3-cd]pyrene	17.780	276	310761	44.46	ppm	87
108)	Dibenz[a,h]anthracene	17.828	278	328331	42.39	ppm	90
109)	Benzo[g,h,i]perylene	18.138	276	349314	42.80	ppm	87

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0828_sx2960\
Data File : x072600.D
Acq On : 28 Aug 2020 9:06 pm
Operator : marthav
Sample : op81781-msd E Inst : MSBNA05
Misc : op81781,sx2960,30.4,,,1,1,soil
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Aug 29 10:08:34 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Aug 18 13:05:00 2020
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan
08/31/20 11:56

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-31-2020\s7g494\
Data File : 7G11421.d
Acq On : 29 Aug 2020 2:00 pm
Operator : FOUADS
Sample : op81782-ms e
Misc : op81782,S7G494,29.8,,,1,1,soil
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 31 00:33:11 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

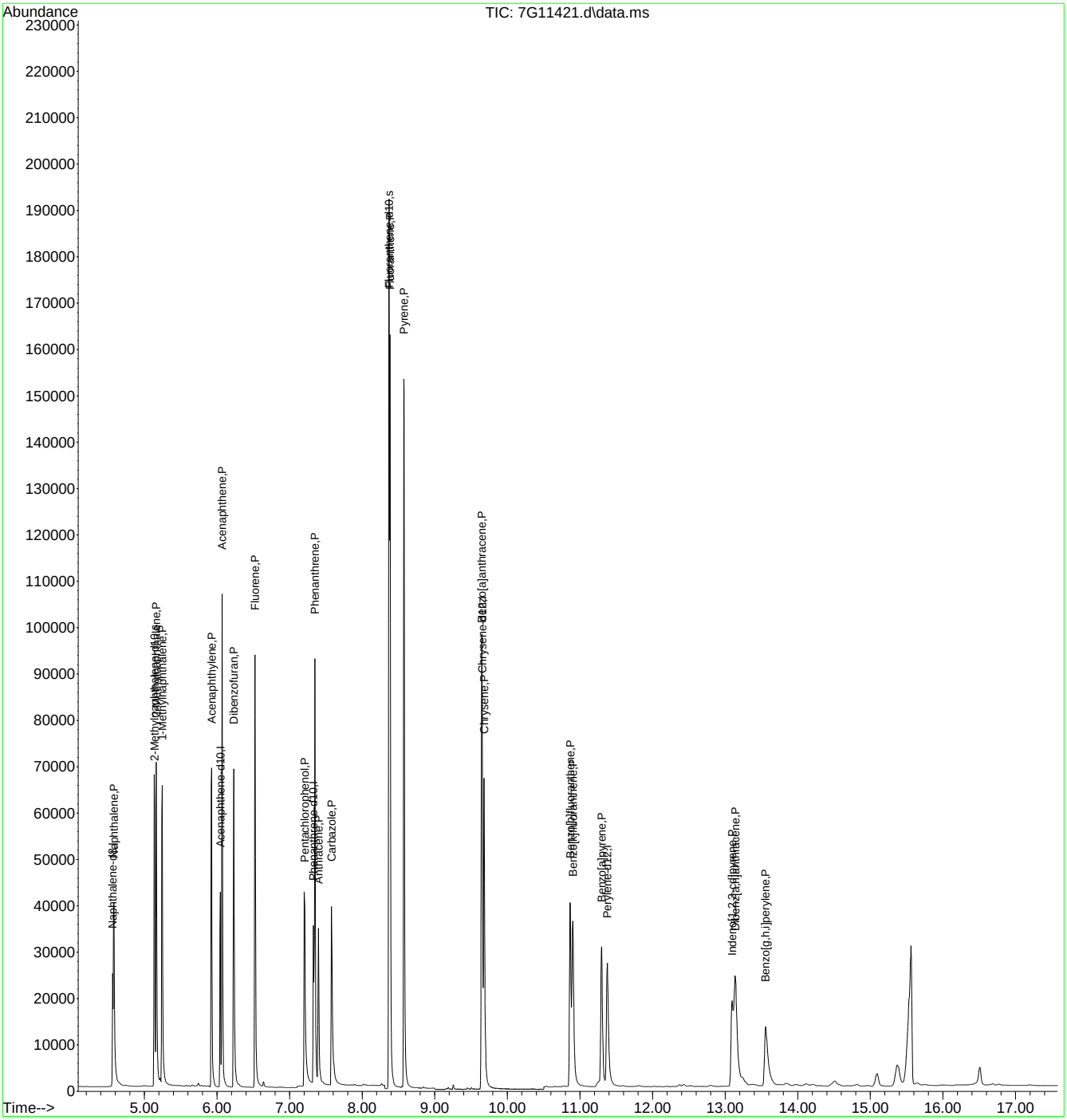
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.564	136	19074	4.00	ppm	0.00
6) Acenaphthene-d10	6.046	164	12303	4.00	ppm	0.00
11) Phenanthrene-d10	7.327	188	24370	4.00	ppm	0.00
18) Chrysene-d12	9.654	240	41347	4.00	ppm	0.00
22) Perylene-d12	11.377	264	37924	4.00	ppm	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.141	152	25379	8.91	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 89.10%			
17) Fluoranthene-d10	8.370	212	115751	9.10	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 91.00%			
Target Compounds						Qvalue
2) Naphthalene	4.581	128	35788	6.54	ppm	99
3) 2-Methylnaphthalene	5.164	142	26727	6.30	ppm	99
5) 1-Methylnaphthalene	5.247	142	28108	7.32	ppm	98
7) Acenaphthylene	5.925	152	47681	6.68	ppm	100
8) Acenaphthene	6.070	153	32033	6.87	ppm	99
9) Dibenzofuran	6.230	168	45857	13.81	ppm	99
10) Fluorene	6.525	166	36624	7.21	ppm	98
12) Pentachlorophenol	7.209	266	18806	19.33	ppm	95
13) Phenanthrene	7.348	178	55040	6.78	ppm	100
14) Anthracene	7.397	178	25501	3.14	ppm	100
15) Carbazole	7.577	167	37090	2.55	ppm	98
16) Fluoranthene	8.383	202	108212	7.06	ppm	99
19) Pyrene	8.573	202	113415	6.88	ppm	99
20) Benzo[a]anthracene	9.644	228	48225	3.73	ppm	99
21) Chrysene	9.678	228	53217	3.71	ppm	99
23) Benzo[b]fluoranthene	10.867	252	45032	3.50	ppm	100
24) Benzo[k]fluoranthene	10.901	252	51902	3.79	ppm	100
25) Benzo[a]pyrene	11.299	252	42053	3.35	ppm	98
26) Indeno[1,2,3-cd]pyrene	13.095	276	31141m	3.80	ppm	
27) Dibenz[a,h]anthracene	13.138	278	36650	4.04	ppm	99
28) Benzo[g,h,i]perylene	13.556	276	31705	3.21	ppm	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-31-2020\s7g494\
Data File : 7G11421.d
Acq On : 29 Aug 2020 2:00 pm
Operator : FOUADS
Sample : op81782-ms e
Misc : op81782,S7G494,29.8,,,1,1,soil
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 31 00:33:11 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration



Manual Integration Approval Summary

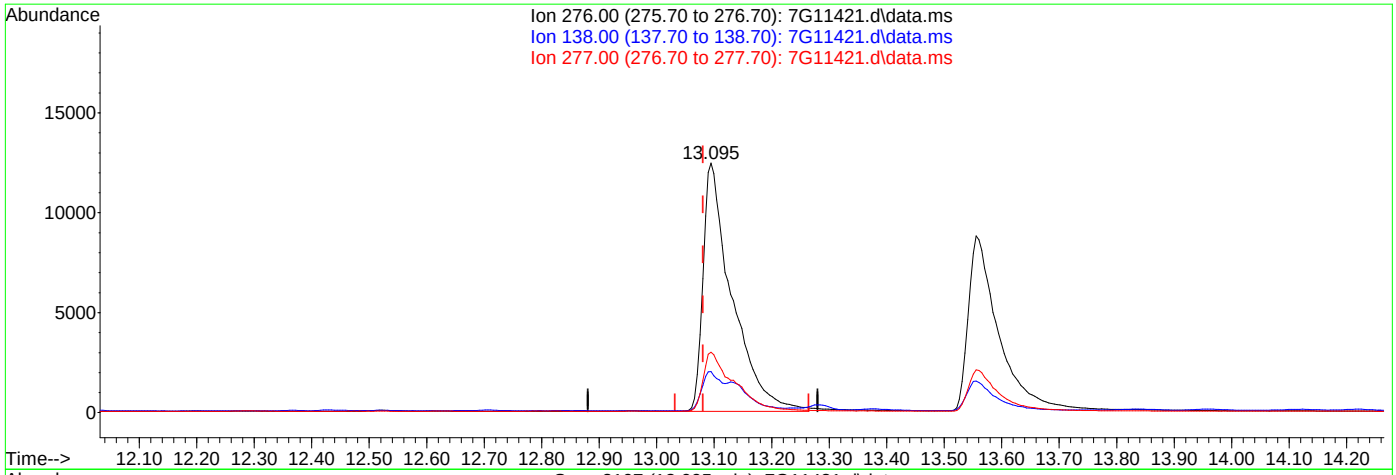
Sample Number: OP81782-MS
Lab FileID: 7G11421.D
Injection Time: 08/29/20 14:00
Method: SW846 8270E BY SIM
Analyst approved: 08/31/20 07:58 Fouad Sekkar
Supervisor approved: 08/31/20 11:56 Naresh Jiawan

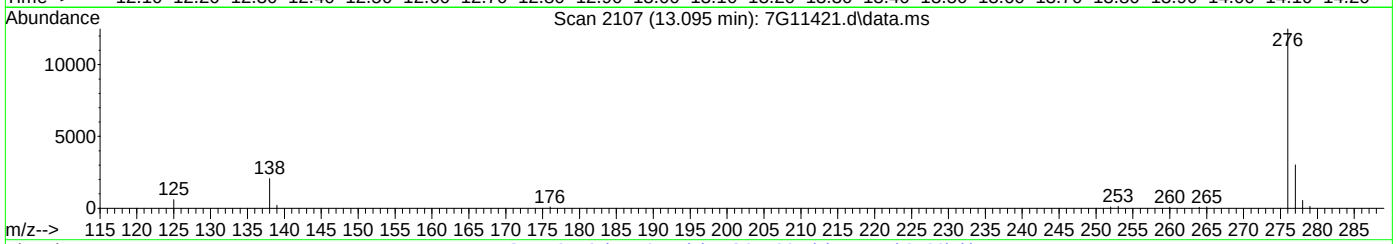
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		13.09	Overlapping peak

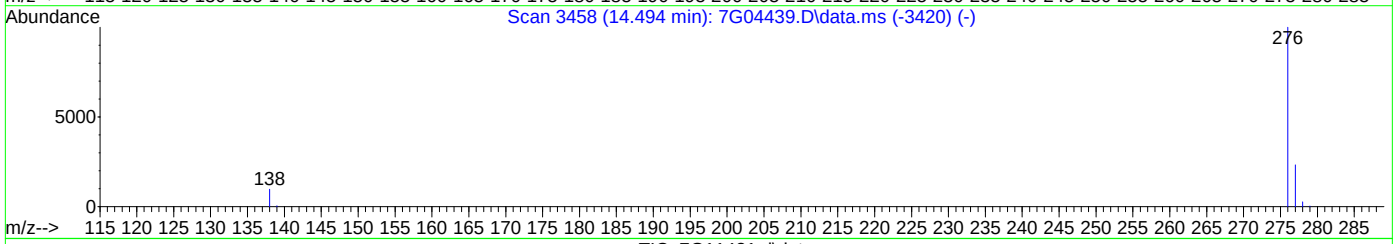
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-31-2020\s7g494\
Data File : 7G11421.d
Acq On : 29 Aug 2020 2:00 pm
Operator : FOUADS
Sample : op81782-ms e
Misc : op81782,S7G494,29.8,,,1,1,soil
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 31 00:13:14 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11421.d\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.095min (+0.014) 5.31ppm

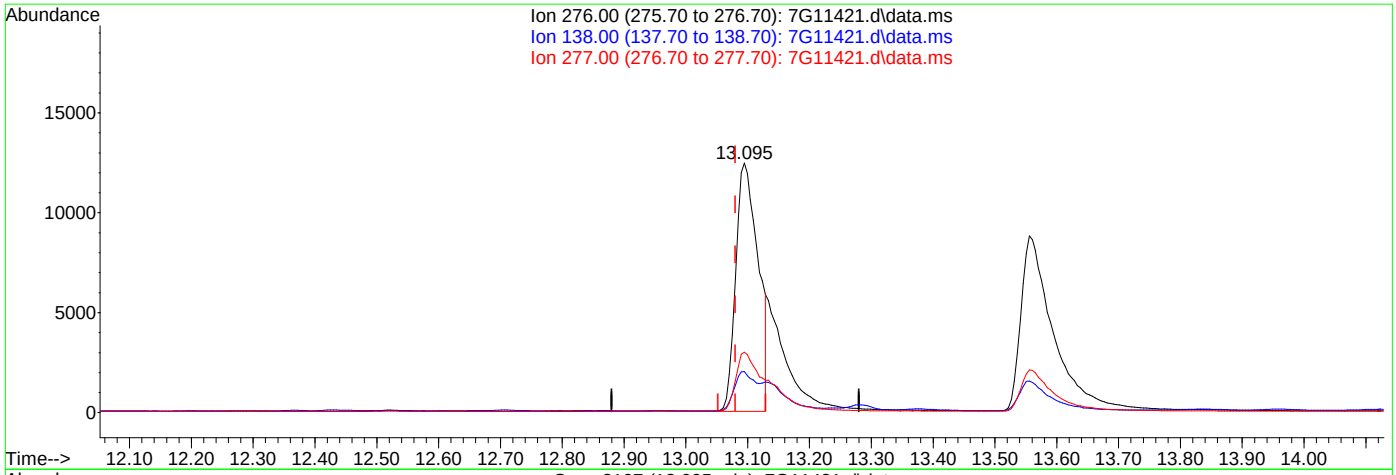
response 43477

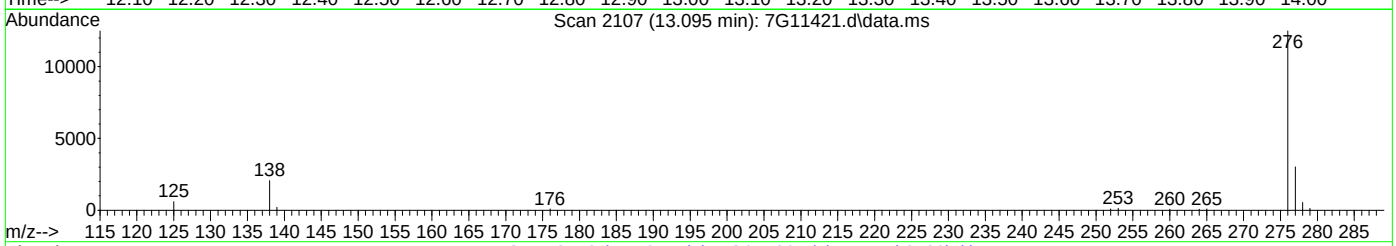
Ion	Exp%	Act%
276.00	100	100
138.00	15.60	15.10
277.00	24.00	23.79
0.00	0.00	0.00

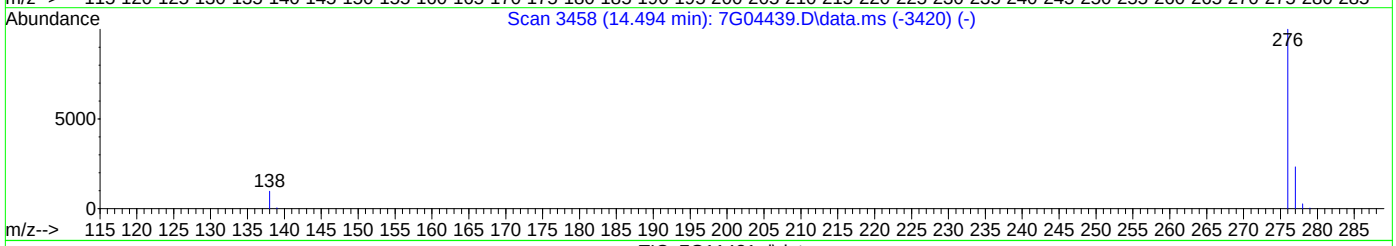
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-31-2020\s7g494\
Data File : 7G11421.d
Acq On : 29 Aug 2020 2:00 pm
Operator : FOUADS
Sample : op81782-ms e
Misc : op81782,S7G494,29.8,,,1,1,soil
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 31 00:31:58 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11421.d\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.095min (+0.014) 3.80ppm m

response 31141

Ion	Exp%	Act%
276.00	100	100
138.00	15.60	16.45
277.00	24.00	24.21
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan
08/31/20 11:56

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-31-2020\s7g494\
Data File : 7G11422.d
Acq On : 29 Aug 2020 2:24 pm
Operator : FOUADS
Sample : op81782-msd e
Misc : op81782,S7G494,29.9,,,1,1,soil
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 31 00:32:33 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

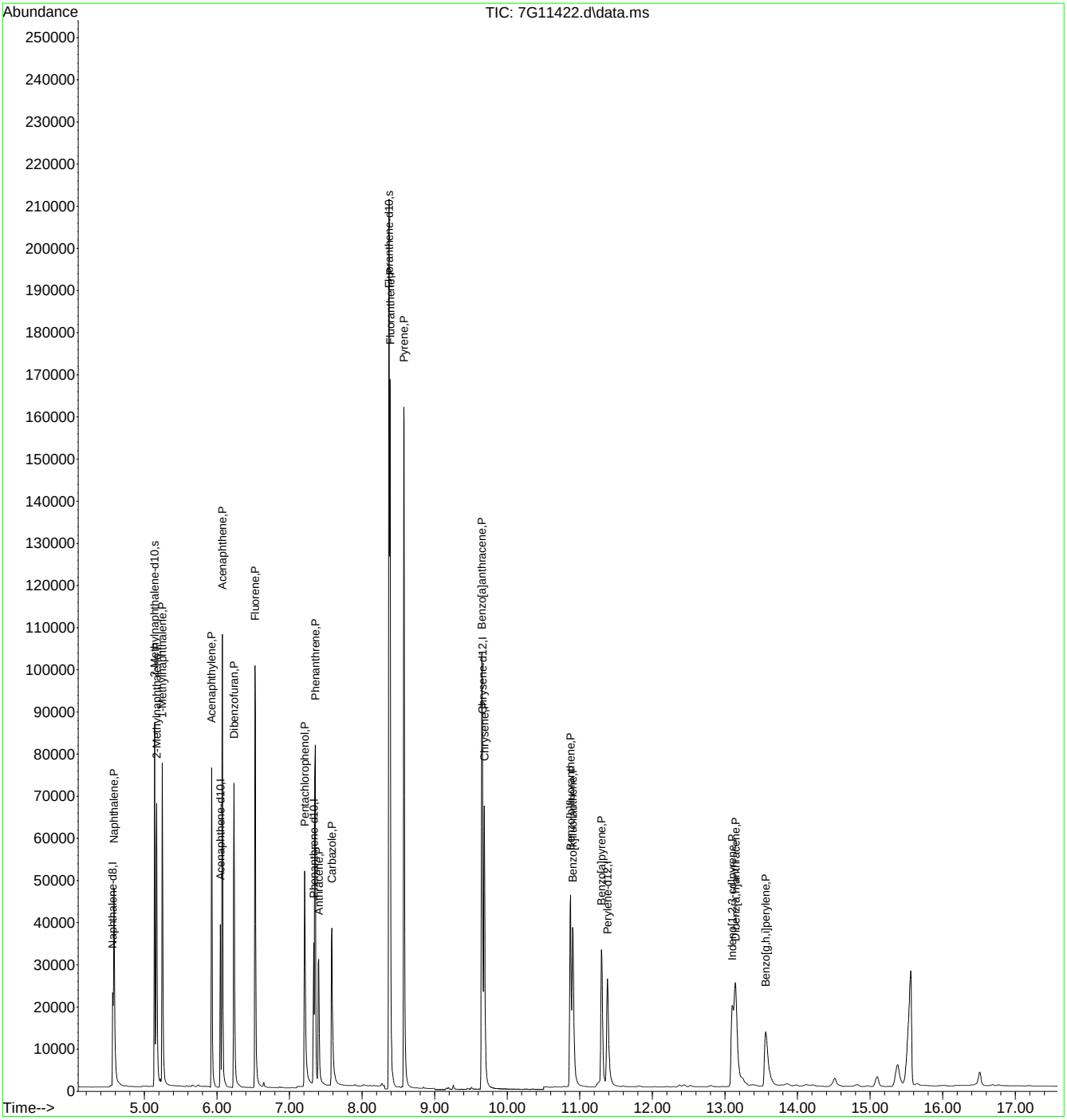
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.564	136	18468	4.00	ppm	0.00
6) Acenaphthene-d10	6.046	164	11862	4.00	ppm	0.00
11) Phenanthrene-d10	7.334	188	23793	4.00	ppm	0.00
18) Chrysene-d12	9.659	240	40442	4.00	ppm	0.00
22) Perylene-d12	11.382	264	36679	4.00	ppm	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.141	152	27873	10.07	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 100.70%			
17) Fluoranthene-d10	8.373	212	132571	10.65	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 106.50%			
Target Compounds						Qvalue
2) Naphthalene	4.582	128	37288	7.03	ppm	99
3) 2-Methylnaphthalene	5.170	142	28383	6.91	ppm	94
5) 1-Methylnaphthalene	5.247	142	29350	7.88	ppm	92
7) Acenaphthylene	5.925	152	49850	7.24	ppm	98
8) Acenaphthene	6.075	153	33791	7.51	ppm	98
9) Dibenzofuran	6.235	168	48157	15.00	ppm	94
10) Fluorene	6.525	166	38956	7.95	ppm	97
12) Pentachlorophenol	7.209	266	20383	21.23	ppm	97
13) Phenanthrene	7.355	178	58217	7.34	ppm	99
14) Anthracene	7.404	178	27202	3.42	ppm	98
15) Carbazole	7.584	167	40364	2.84	ppm	99
16) Fluoranthene	8.389	202	115376	7.69	ppm	100
19) Pyrene	8.576	202	119627	7.41	ppm	100
20) Benzo[a]anthracene	9.649	228	50686	4.01	ppm	100
21) Chrysene	9.683	228	56707	4.05	ppm	100
23) Benzo[b]fluoranthene	10.872	252	48443	3.89	ppm	99
24) Benzo[k]fluoranthene	10.901	252	54235	4.09	ppm	99
25) Benzo[a]pyrene	11.299	252	44363	3.66	ppm	99
26) Indeno[1,2,3-cd]pyrene	13.100	276	35165m	4.44	ppm	
27) Dibenz[a,h]anthracene	13.148	278	38988	4.44	ppm	99
28) Benzo[g,h,i]perylene	13.561	276	33803	3.54	ppm	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-31-2020\s7g494\
Data File : 7G11422.d
Acq On : 29 Aug 2020 2:24 pm
Operator : FOUADS
Sample : op81782-msd e
Misc : op81782,S7G494,29.9,,,1,1,soil
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 31 00:32:33 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration



Manual Integration Approval Summary

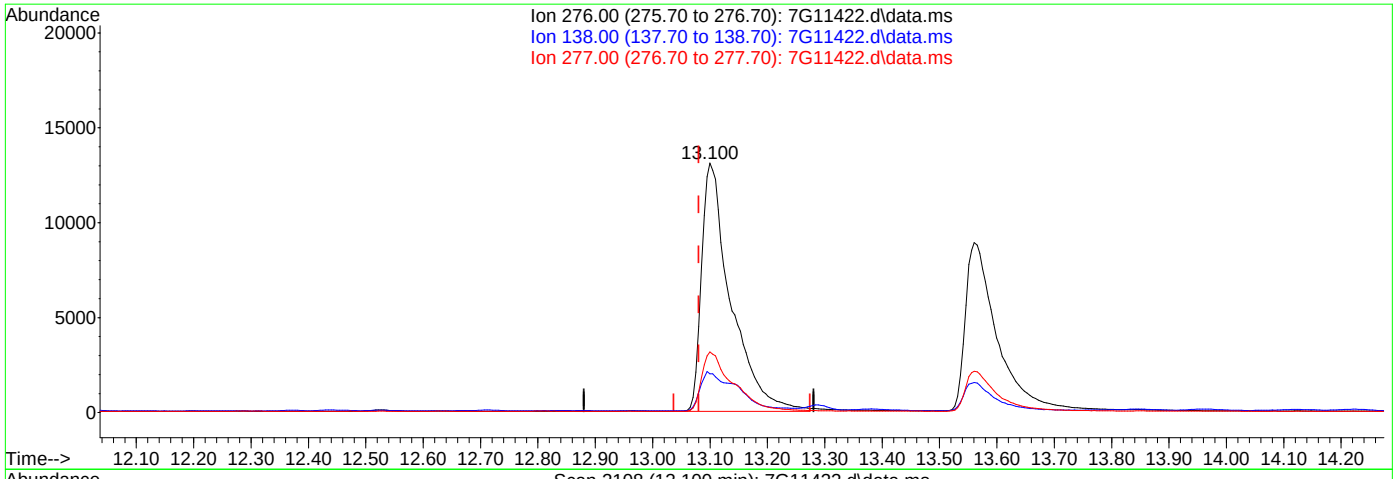
Sample Number: OP81782-MSD
Lab FileID: 7G11422.D
Injection Time: 08/29/20 14:24
Method: SW846 8270E BY SIM
Analyst approved: 08/31/20 07:58 Fouad Sekkar
Supervisor approved: 08/31/20 11:56 Naresh Jiawan

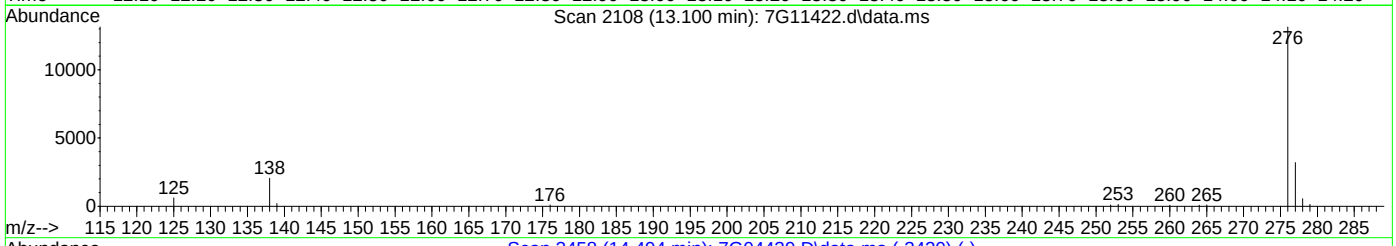
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		13.10	Overlapping peak

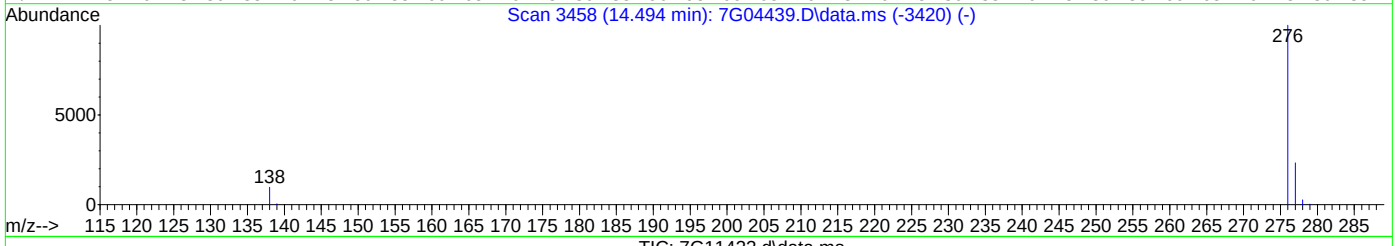
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-31-2020\s7g494\
Data File : 7G11422.d
Acq On : 29 Aug 2020 2:24 pm
Operator : FOUADS
Sample : op81782-msd e
Misc : op81782,S7G494,29.9,,,1,1,soil
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 31 00:13:16 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11422.d\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.100min (+0.019) 5.85ppm

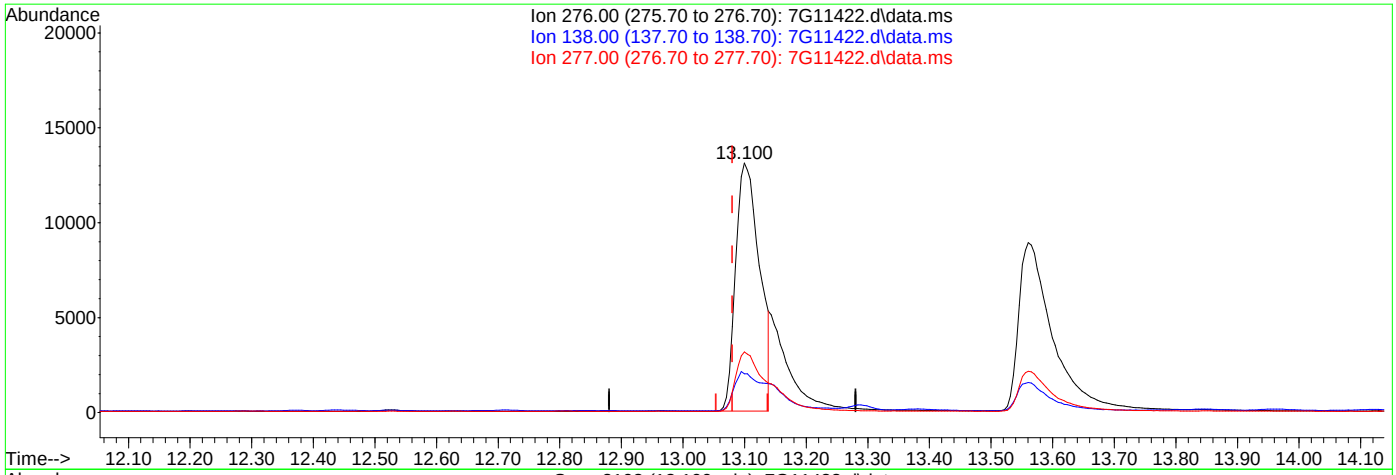
response 46319

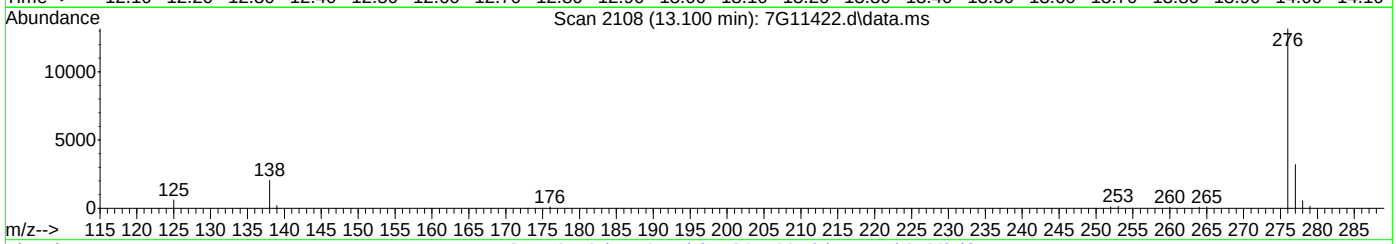
Ion	Exp%	Act%
276.00	100	100
138.00	15.60	14.12
277.00	24.00	23.84
0.00	0.00	0.00

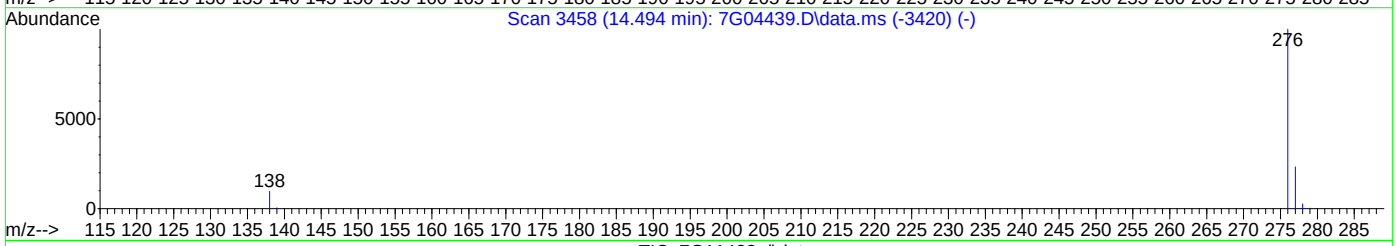
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-31-2020\s7g494\
Data File : 7G11422.d
Acq On : 29 Aug 2020 2:24 pm
Operator : FOUADS
Sample : op81782-msd e
Misc : op81782,S7G494,29.9,,,1,1,soil
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 31 00:13:16 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration







TIC: 7G11422.d\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.100min (+0.019) 4.44ppm m

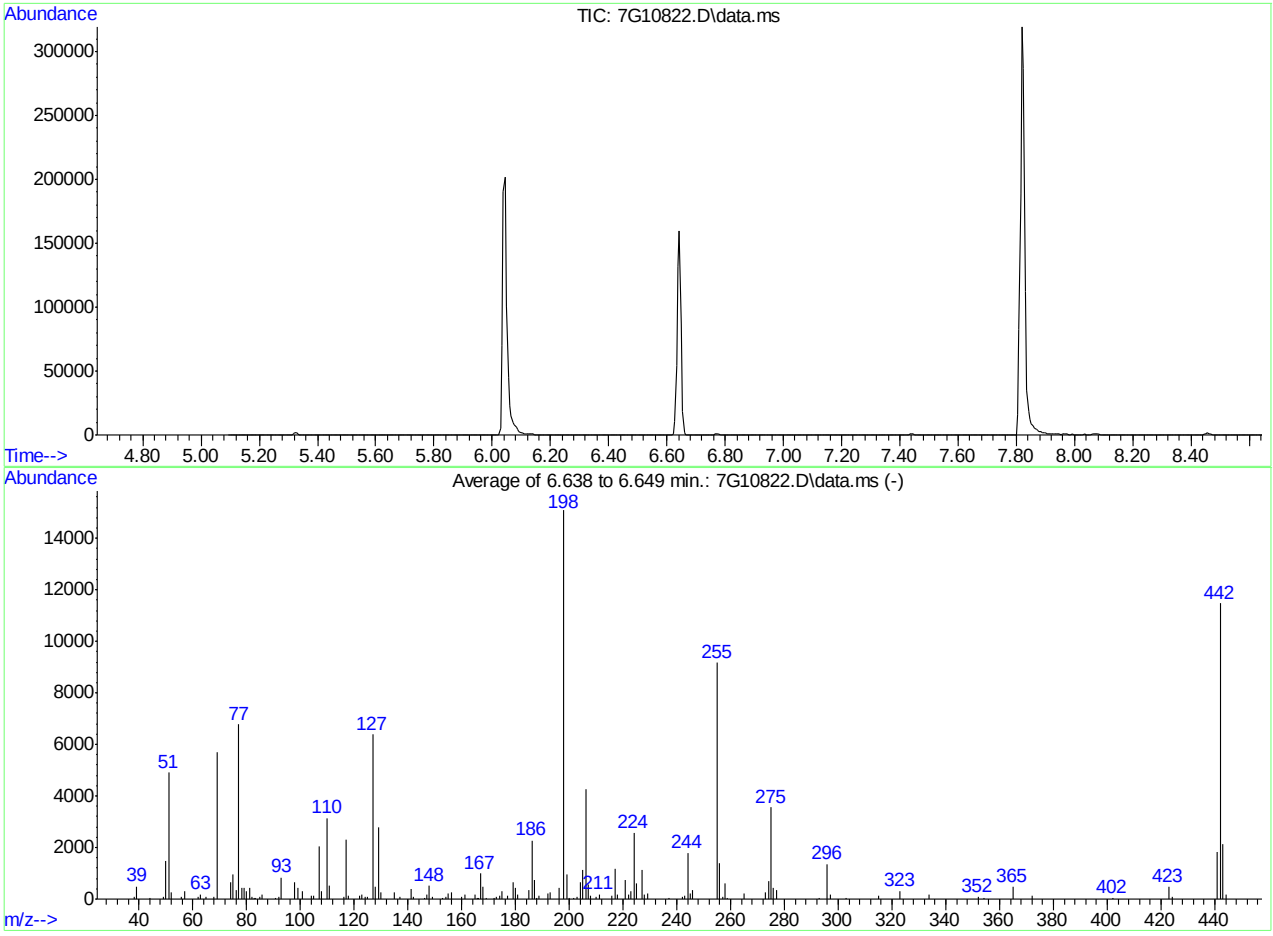
response 35165

Ion	Exp%	Act%
276.00	100	100
138.00	15.60	15.60
277.00	24.00	24.26
0.00	0.00	0.00

SW-846 Method 8270

Data File : C:\msdchem\1\data\072120_7G472\7G10822.D Vial: 1
Acq On : 21 Jul 2020 8:44 am Operator: fouads
Sample : dftpp Inst : MSBNA8
Misc : op80679,S7G472,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\methods\dftpp.m (RTE Integrator)
Title : Tune Evaluation



AutoFind: Scans 290, 291, 292; Background Corrected with Scan 285

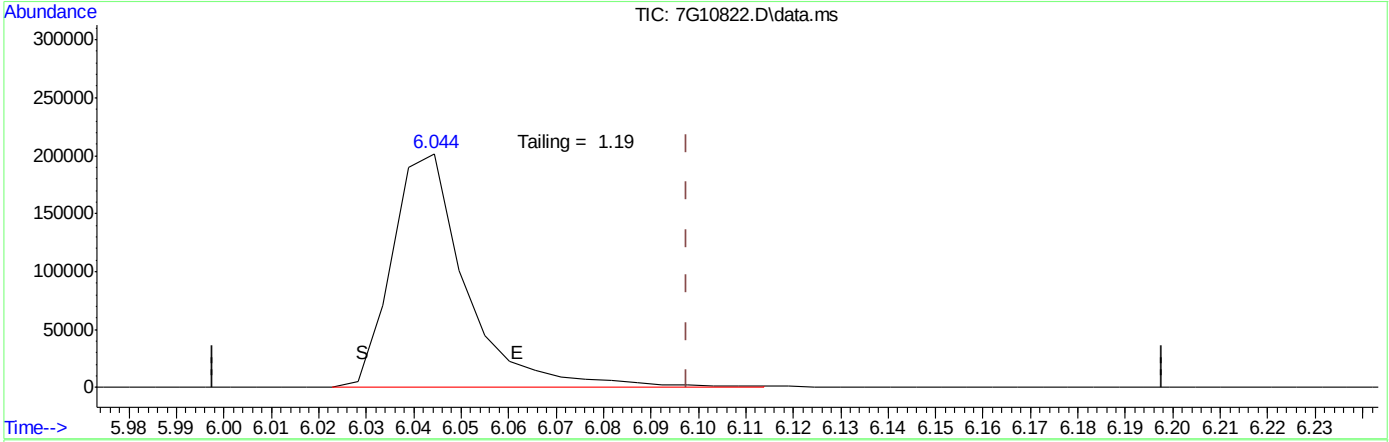
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	32.6	4908	PASS
68	69	0.00	2	1.6	91	PASS
69	198	0.00	100	37.7	5683	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	42.3	6380	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	15078	PASS
199	198	5	9	6.3	953	PASS
275	198	10	30	23.5	3550	PASS
365	198	1	100	3.1	473	PASS
441	443	0.01	100	84.1	1808	PASS
442	198	40	100	76.1	11474	PASS
443	442	17	23	18.7	2149	PASS

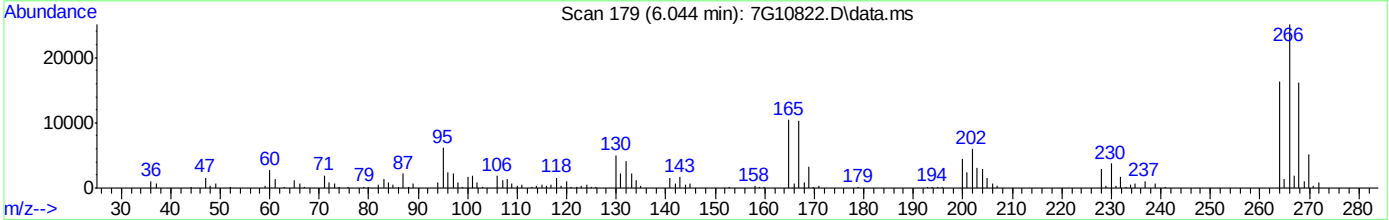
7G10822.D dftpp.m Wed Jul 22 13:20:11 2020

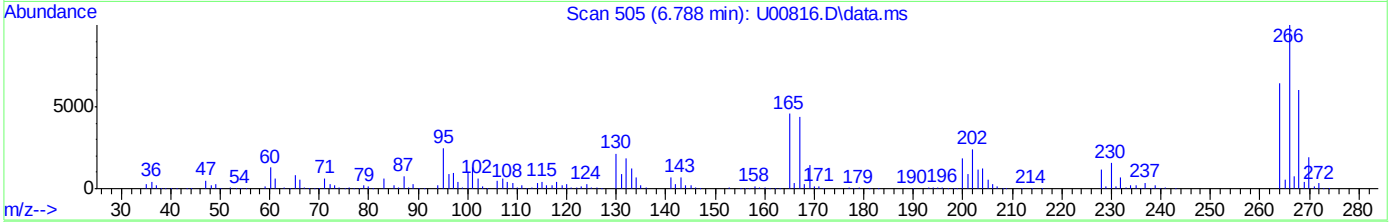
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10822.D
Acq On : 21 Jul 2020 8:44 am
Operator : fouads
Sample : dftpp
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 21 08:58:05 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Tue Jun 23 13:15:39 2020
Response via : Initial Calibration







TIC: 7G10822.D\data.ms

(1) Pentachlorophenol

6.044min (-0.053) 9.28

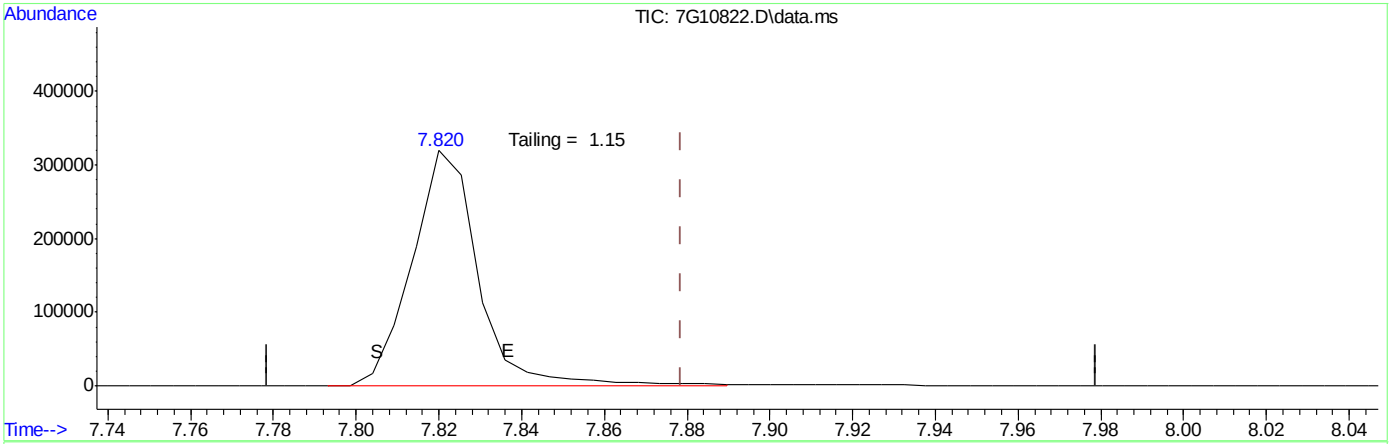
response 221934

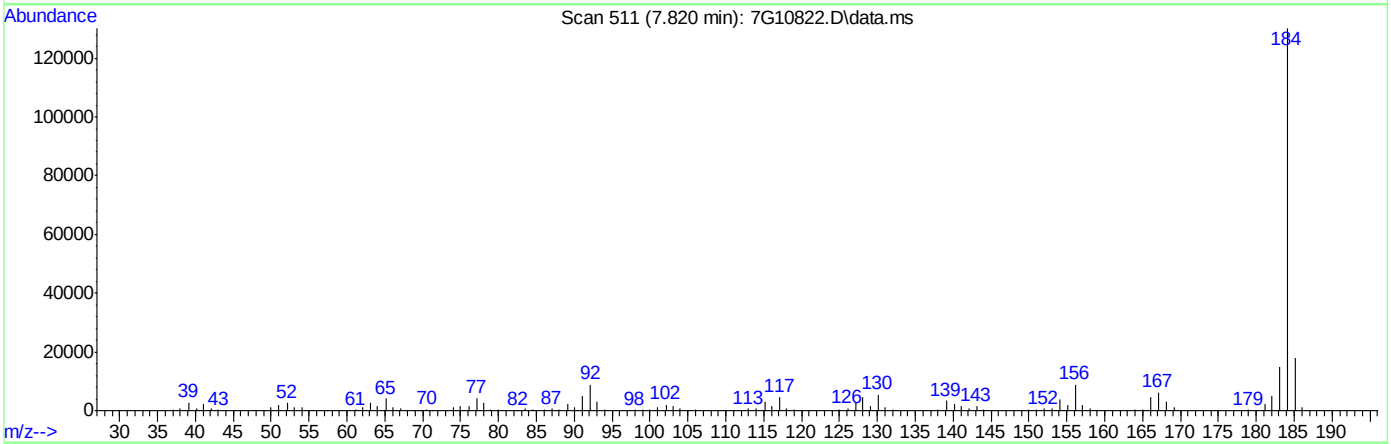
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10822.D
Acq On : 21 Jul 2020 8:44 am
Operator : fouads
Sample : dftpp
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 21 08:58:05 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Tue Jun 23 13:15:39 2020
Response via : Initial Calibration





TIC: 7G10822.D\data.ms

(3) Benzidine

7.820min (-0.059) 8.36

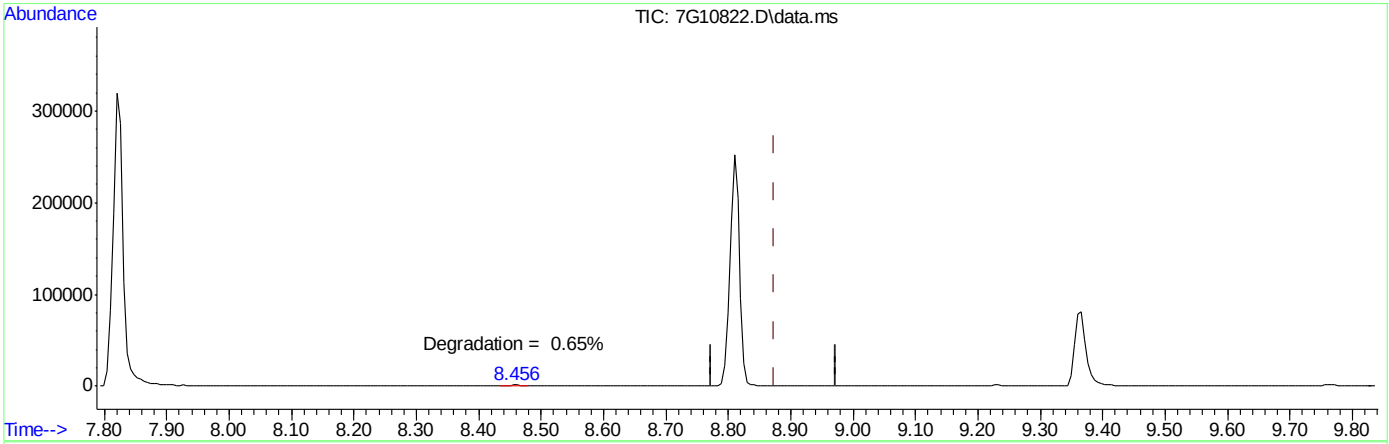
response 354536

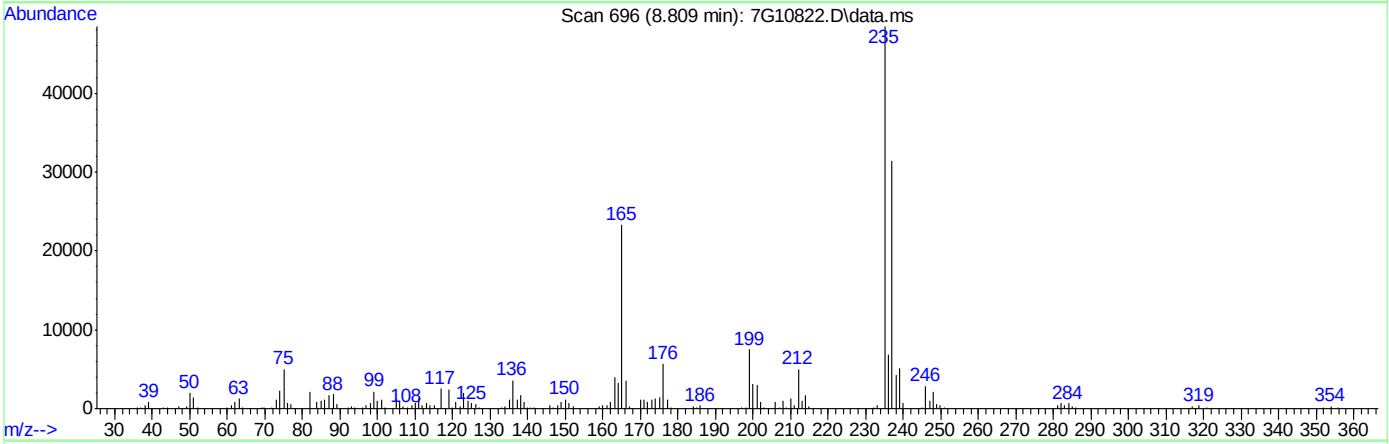
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10822.D
Acq On : 21 Jul 2020 8:44 am
Operator : fouads
Sample : dftpp
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 21 08:58:05 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Tue Jun 23 13:15:39 2020
Response via : Initial Calibration





TIC: 7G10822.D\data.ms

(4) DDT

8.809min (-0.064) 7.86

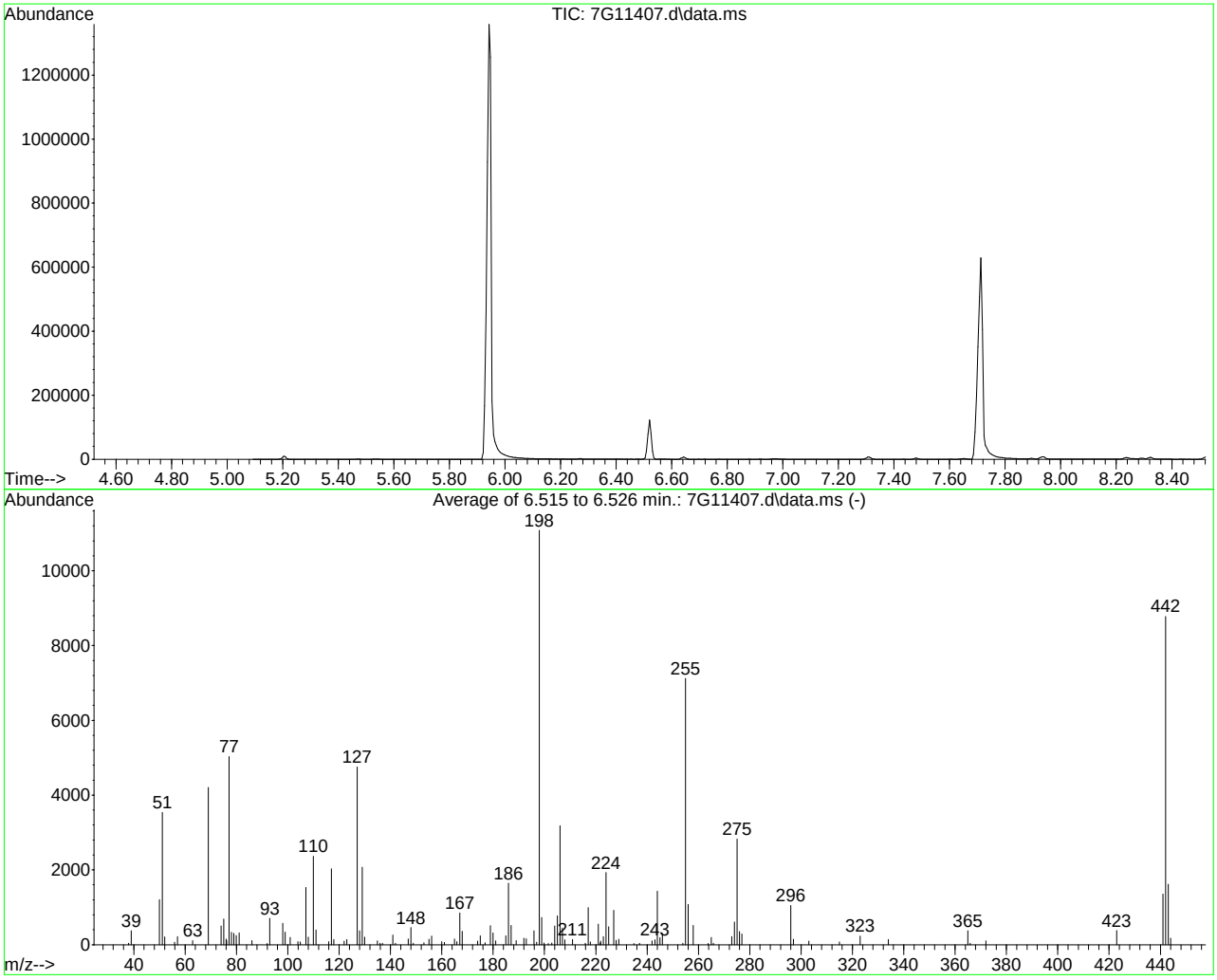
response 274297

Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

SW-846 Method 8270

Data File : C:\msdchem\1\data\ed...2020\s7g494\7G11407.d Vial: 1
Acq On : 29 Aug 2020 8:21 am Operator: FOUADS
Sample : dftpp Inst : MSBNA8
Misc : op81342,S7G494,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\methods\dftpp.m (RTE Integrator)
Title : Tune Evaluation



AutoFind: Scans 267, 268, 269; Background Corrected with Scan 263

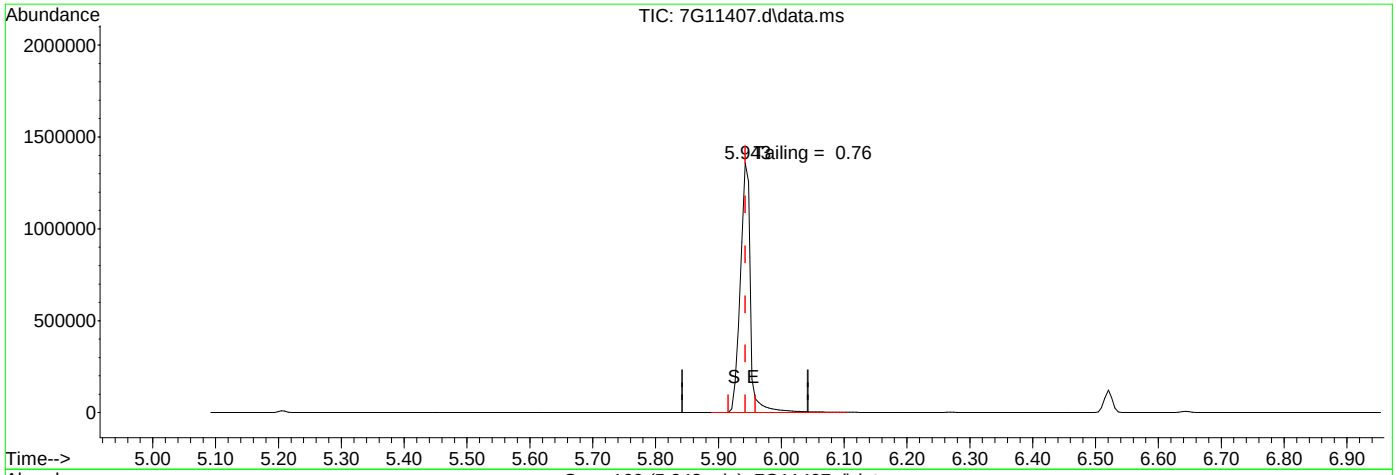
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	31.9	3538	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	38.0	4205	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	42.9	4753	PASS
197	198	0.00	1	0.6	71	PASS
198	198	100	100	100.0	11078	PASS
199	198	5	9	6.6	732	PASS
275	198	10	30	25.5	2826	PASS
365	198	1	100	3.4	376	PASS
441	443	0.01	100	83.7	1352	PASS
442	198	40	100	79.3	8781	PASS
443	442	17	23	18.4	1615	PASS

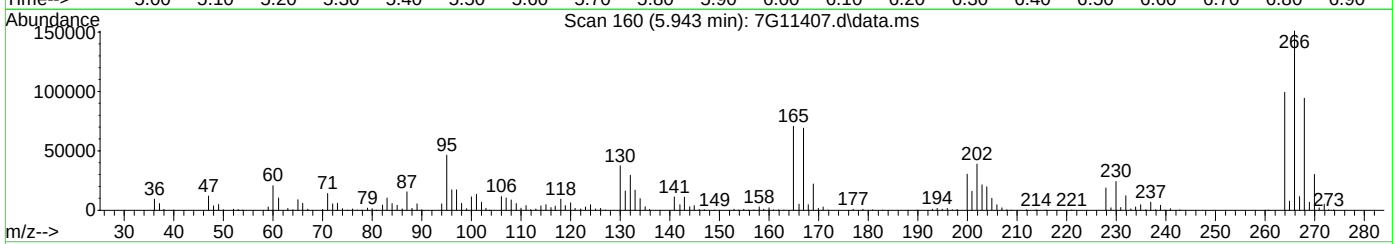
7G11407.d dftpp.m Sun Aug 30 23:43:25 2020

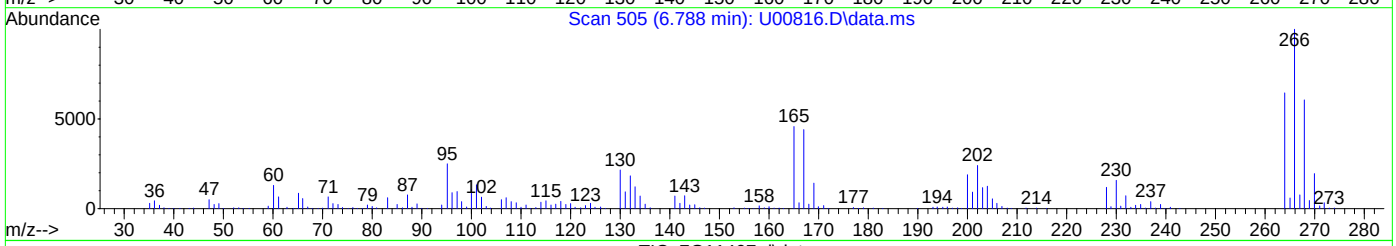
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-31-2020\s7g494\
Data File : 7G11407.d
Acq On : 29 Aug 2020 8:21 am
Operator : FOUADS
Sample : dftpp
Misc : op81342,S7G494,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 30 23:43:16 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Sun Aug 30 23:43:13 2020
Response via : Initial Calibration







TIC: 7G11407.d\data.ms

(1) Pentachlorophenol

5.943min (0.000) 59.85

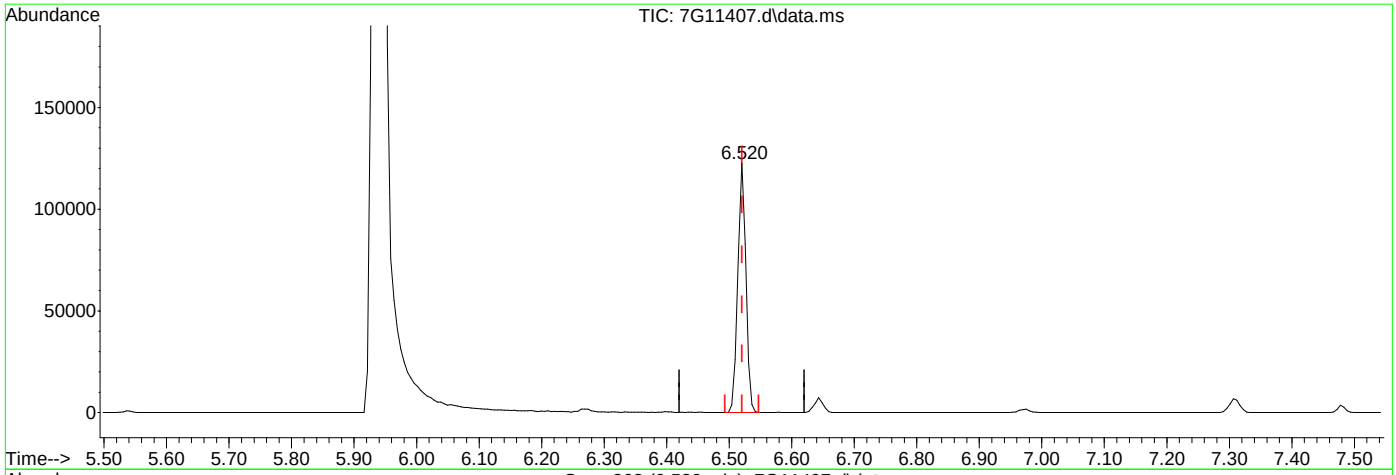
response 1431508

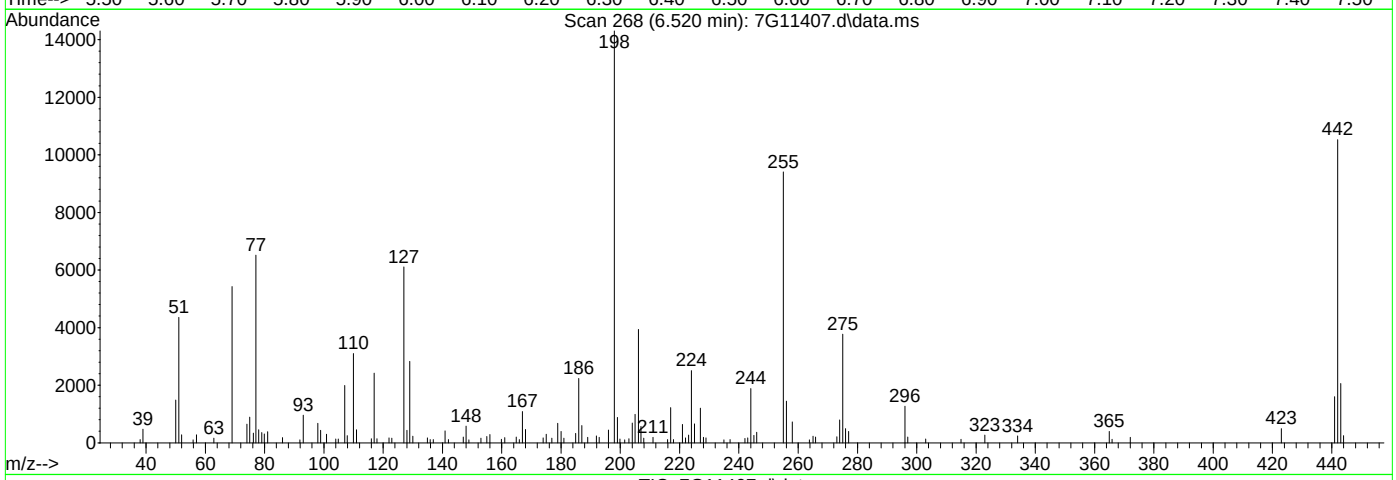
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-31-2020\s7g494\
Data File : 7G11407.d
Acq On : 29 Aug 2020 8:21 am
Operator : FOUADS
Sample : dftpp
Misc : op81342,S7G494,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 30 23:43:16 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Sun Aug 30 23:43:13 2020
Response via : Initial Calibration





TIC: 7G11407.d\data.ms

(2) DFTPP

6.520min (0.000) 3.91

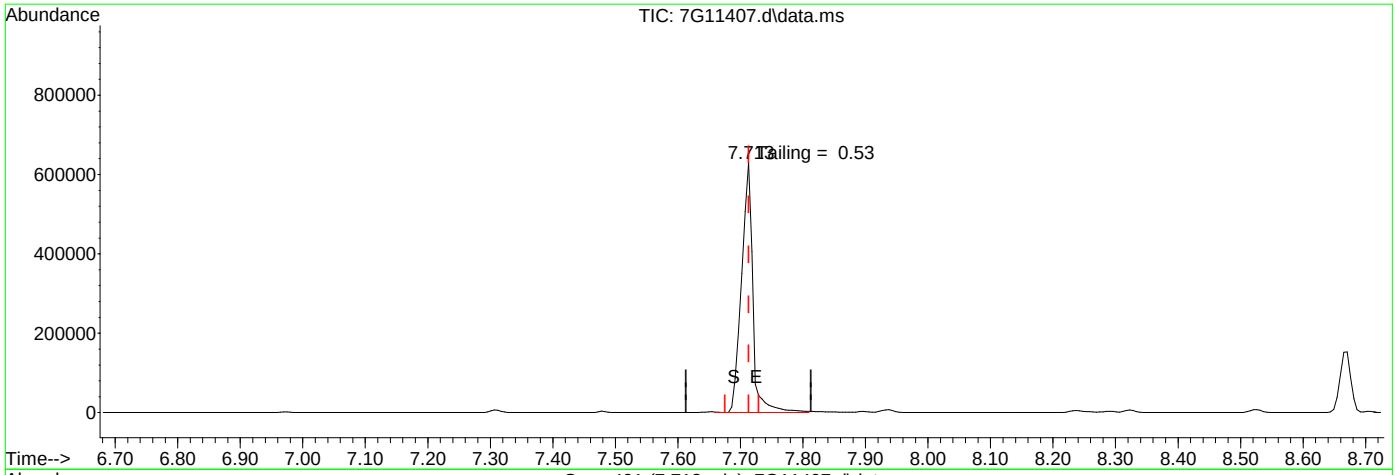
response 110209

Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-31-2020\s7g494\
Data File : 7G11407.d
Acq On : 29 Aug 2020 8:21 am
Operator : FOUADS
Sample : dftpp
Misc : op81342,S7G494,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 30 23:43:16 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Sun Aug 30 23:43:13 2020
Response via : Initial Calibration



TIC: 7G11407.d\data.ms

(3) Benzidine

7.713min (0.000) 17.50

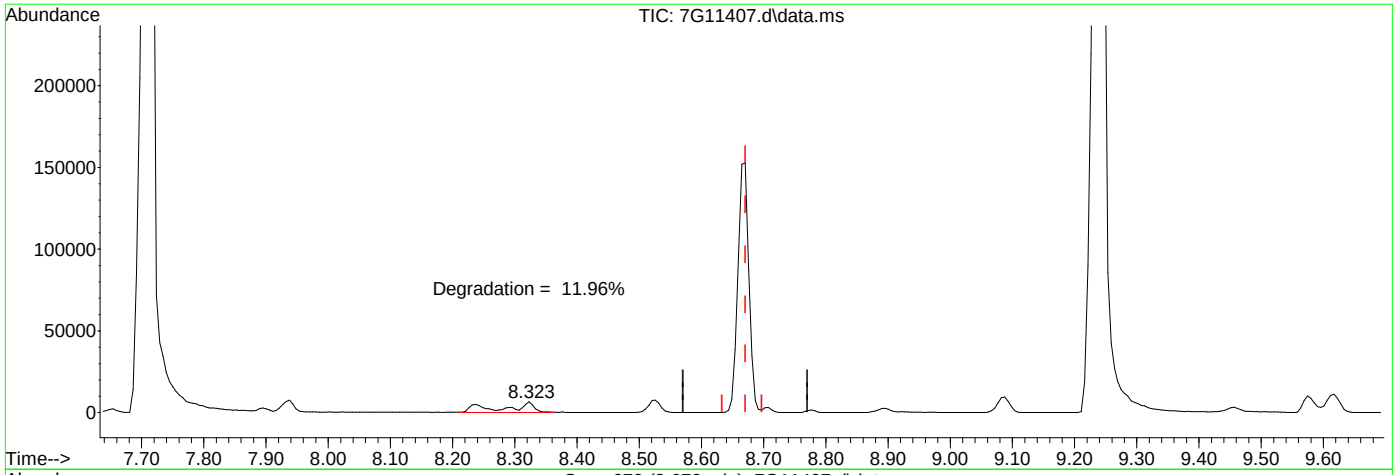
response 742254

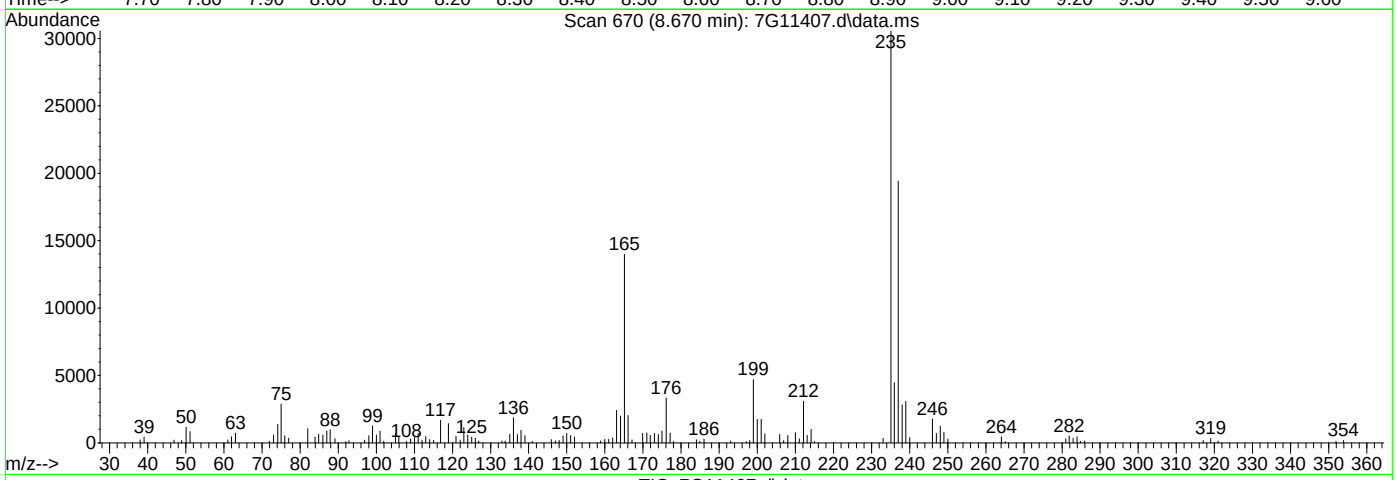
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-31-2020\s7g494\
Data File : 7G11407.d
Acq On : 29 Aug 2020 8:21 am
Operator : FOUADS
Sample : dftpp
Misc : op81342,S7G494,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 30 23:43:16 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Sun Aug 30 23:43:13 2020
Response via : Initial Calibration





TIC: 7G11407.d\data.ms

(4) DDT

8.670min (0.000) 5.36

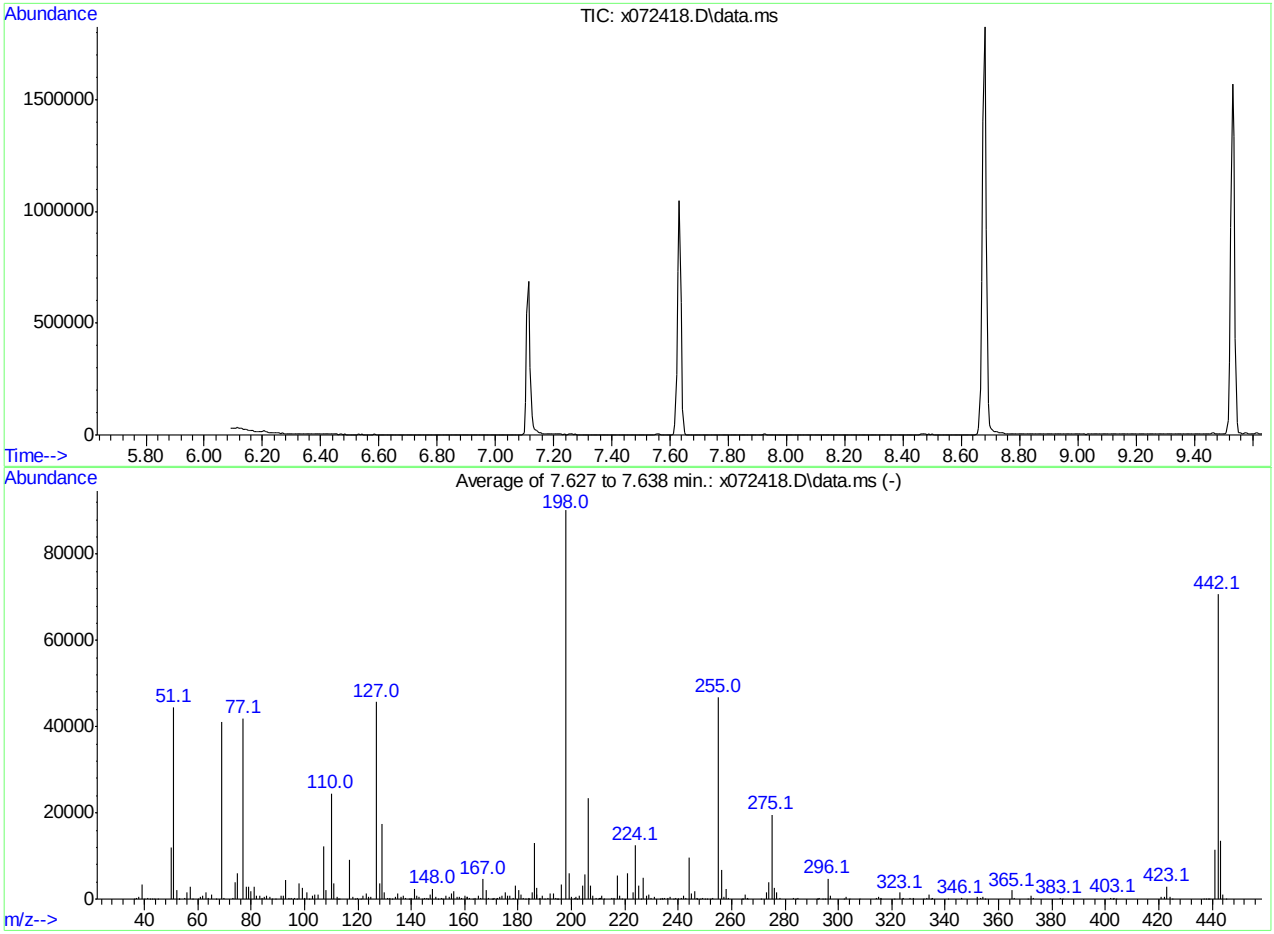
response 187189

Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

SW-846 Method 8270

Data File : C:\msdchem\1\DATA\0817_sx2953\x072418.D Vial: 1
Acq On : 17 Aug 2020 10:03 am Operator: marthav
Sample : dftpp Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\METHODS\dftpp.m (RTE Integrator)
Title : Tune Evaluation



AutoFind: Scans 288, 289, 290; Background Corrected with Scan 282

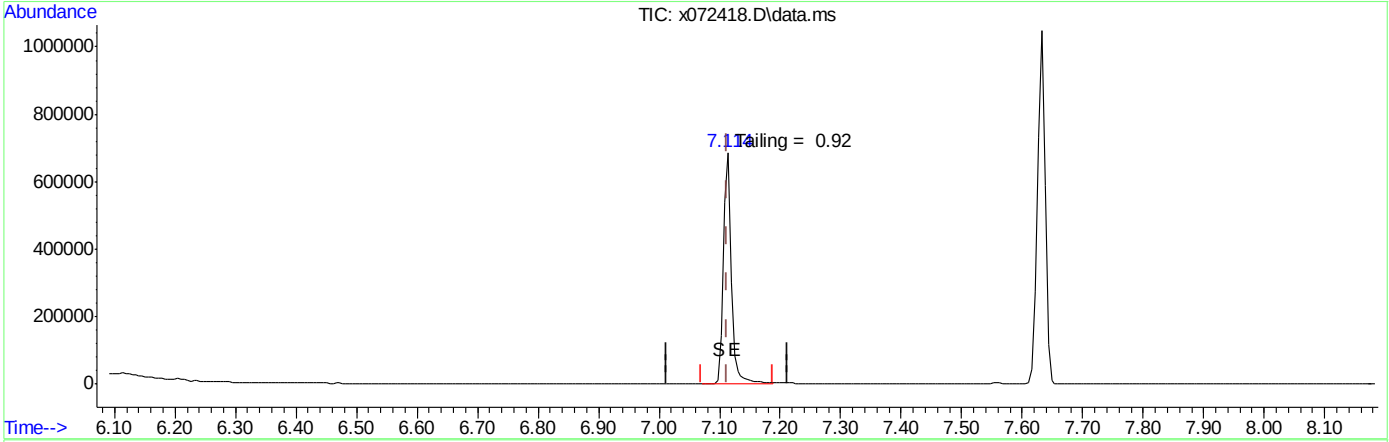
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	49.4	44499	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	45.6	41125	PASS
70	69	0.00	2	0.6	260	PASS
127	198	40	60	50.8	45755	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	90149	PASS
199	198	5	9	6.7	5996	PASS
275	198	10	30	21.8	19625	PASS
365	198	1	100	2.2	1969	PASS
441	443	0.01	100	84.4	11426	PASS
442	198	40	100	78.5	70792	PASS
443	442	17	23	19.1	13534	PASS

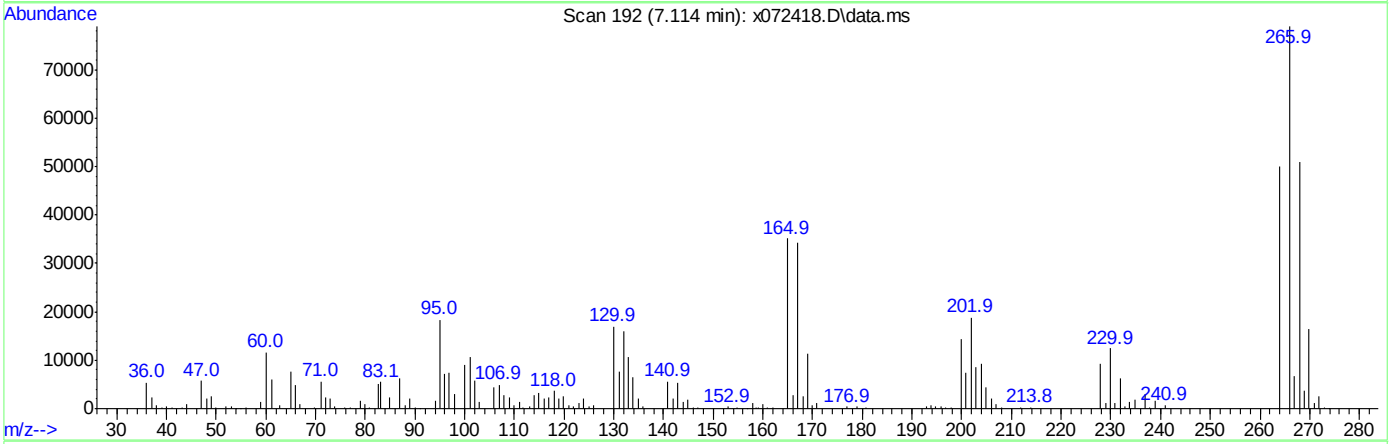
x072418.D dftpp.m Tue Aug 18 10:26:09 2020

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072418.D
Acq On : 17 Aug 2020 10:03 am
Operator : marthav
Sample : dftpp Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 18 10:26:11 2020
Quant Method : C:\msdchem\1\METHODS\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Tue Aug 18 10:26:06 2020
Response via : Initial Calibration





TIC: x072418.D\data.ms

(1) Pentachlorophenol

7.114min (0.000) 25.47

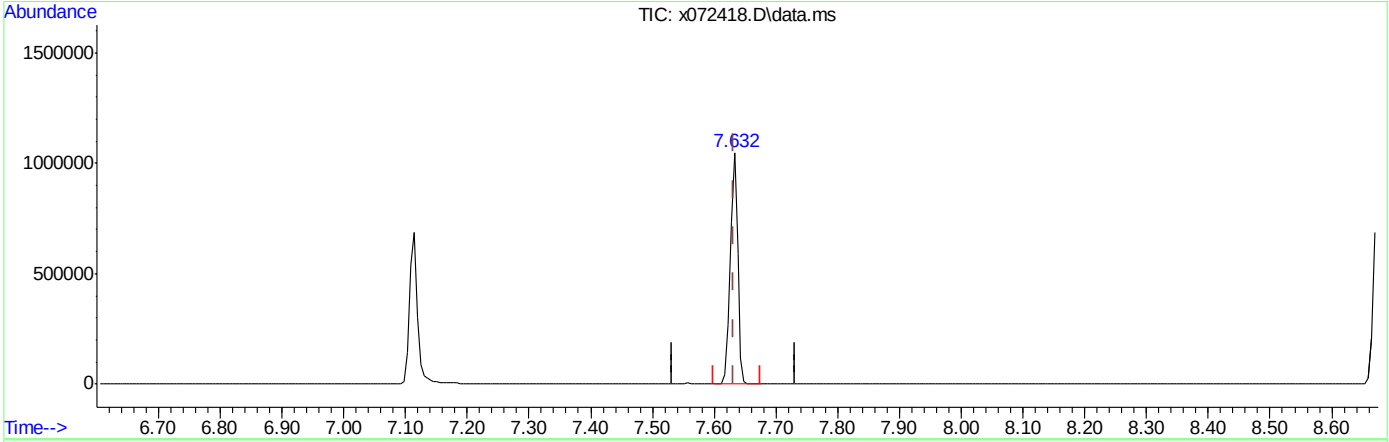
response 609233

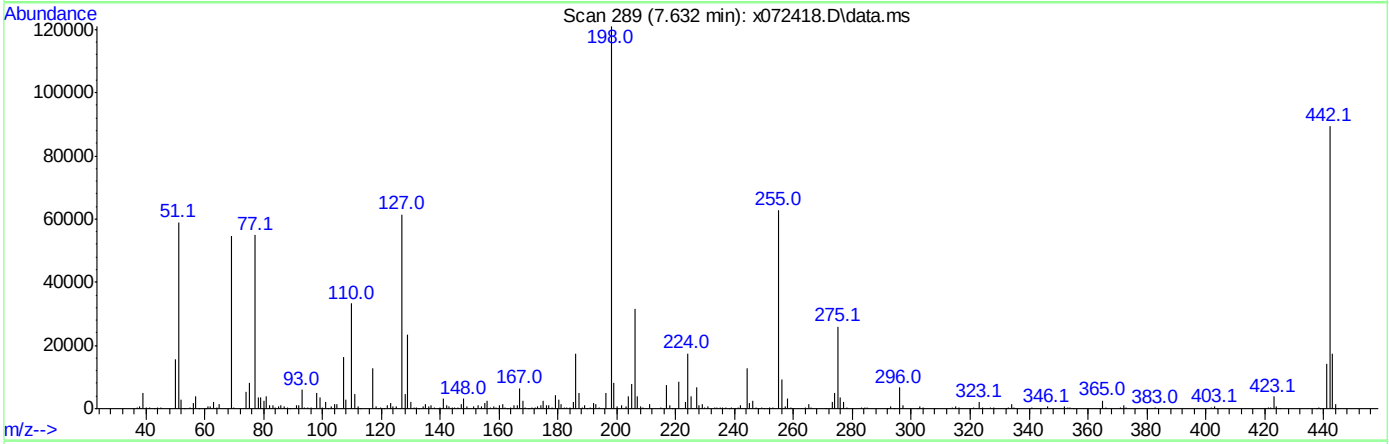
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072418.D
Acq On : 17 Aug 2020 10:03 am
Operator : marthav
Sample : dftpp Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 18 10:26:11 2020
Quant Method : C:\msdchem\1\METHODS\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Tue Aug 18 10:26:06 2020
Response via : Initial Calibration





TIC: x072418.D\data.ms

(2) DFTPP

7.632min (0.000) 32.00

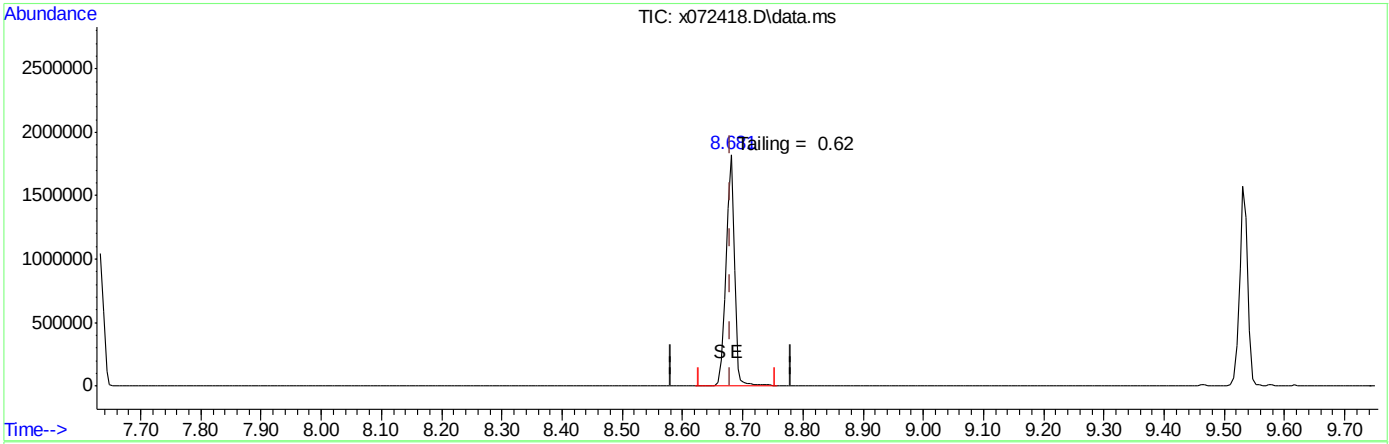
response 903028

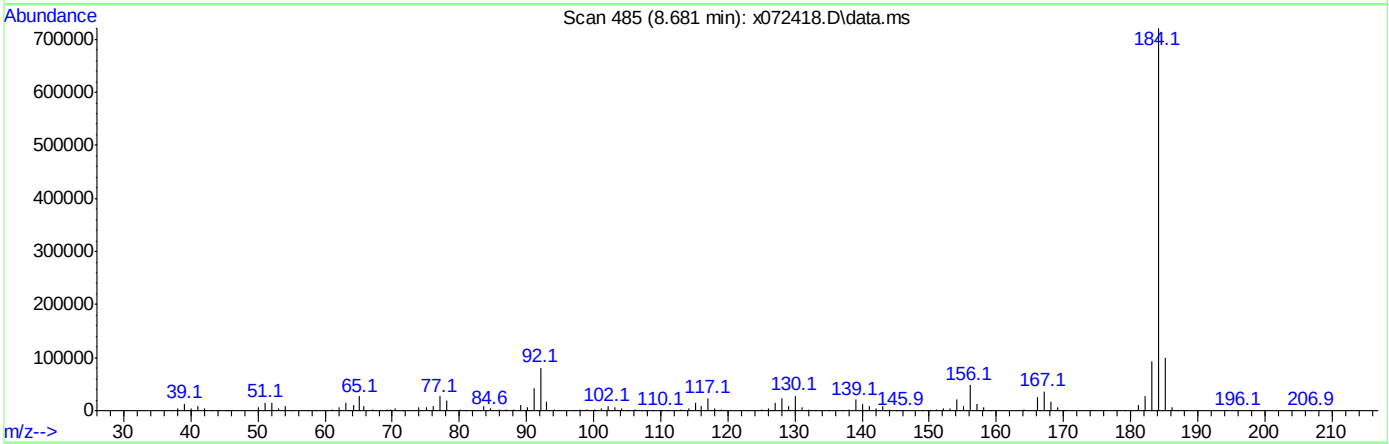
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072418.D
Acq On : 17 Aug 2020 10:03 am
Operator : marthav
Sample : dftpp Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 18 10:26:11 2020
Quant Method : C:\msdchem\1\METHODS\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Tue Aug 18 10:26:06 2020
Response via : Initial Calibration





TIC: x072418.D\data.ms

(3) Benzidine

8.681min (0.000) 40.60

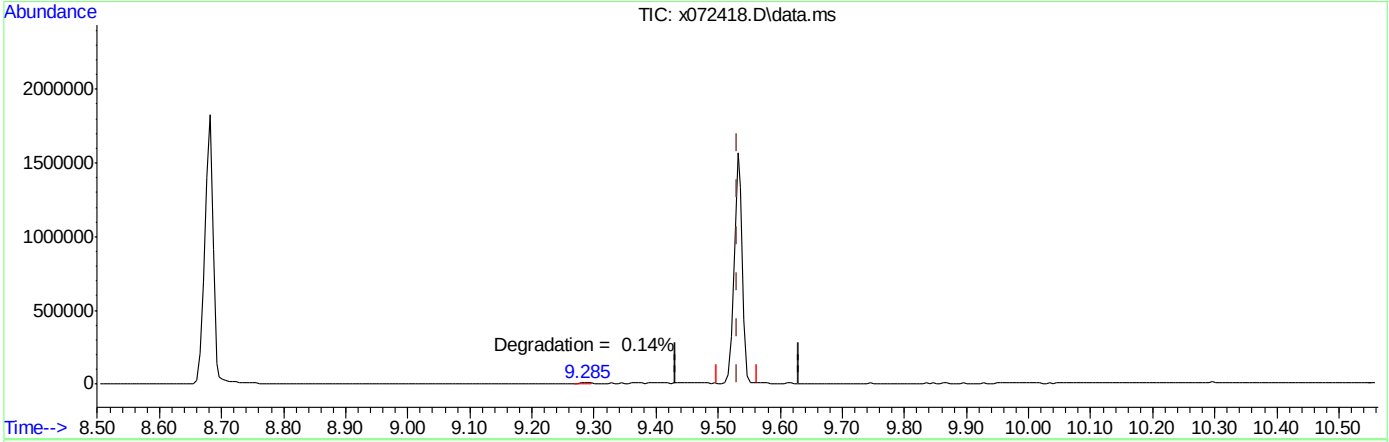
response 1722065

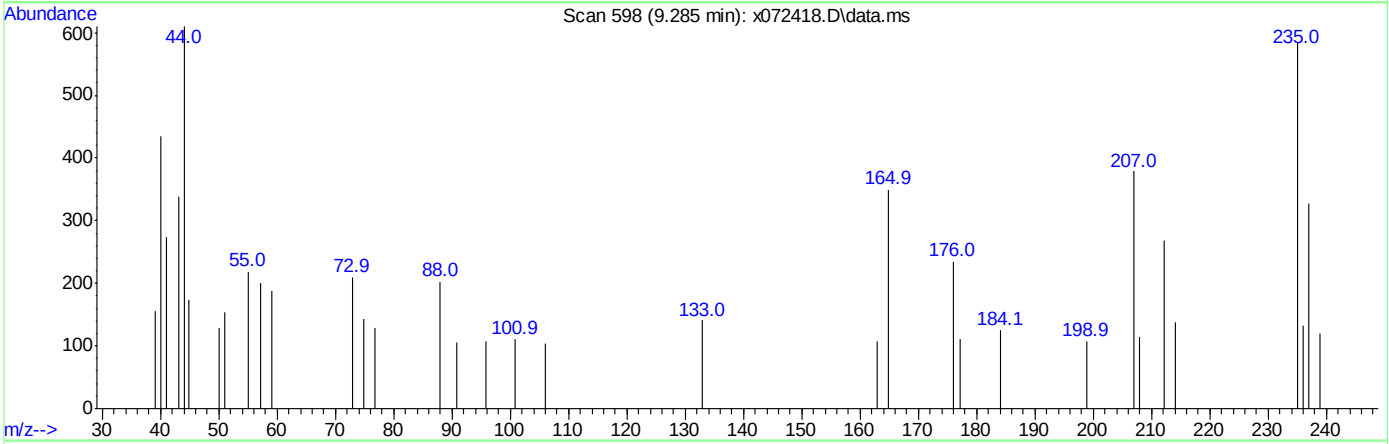
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072418.D
Acq On : 17 Aug 2020 10:03 am
Operator : marthav
Sample : dftpp Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 18 10:26:11 2020
Quant Method : C:\msdchem\1\METHODS\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Tue Aug 18 10:26:06 2020
Response via : Initial Calibration





TIC: x072418.D\data.ms

(4) DDT

9.531min (0.000) 42.98

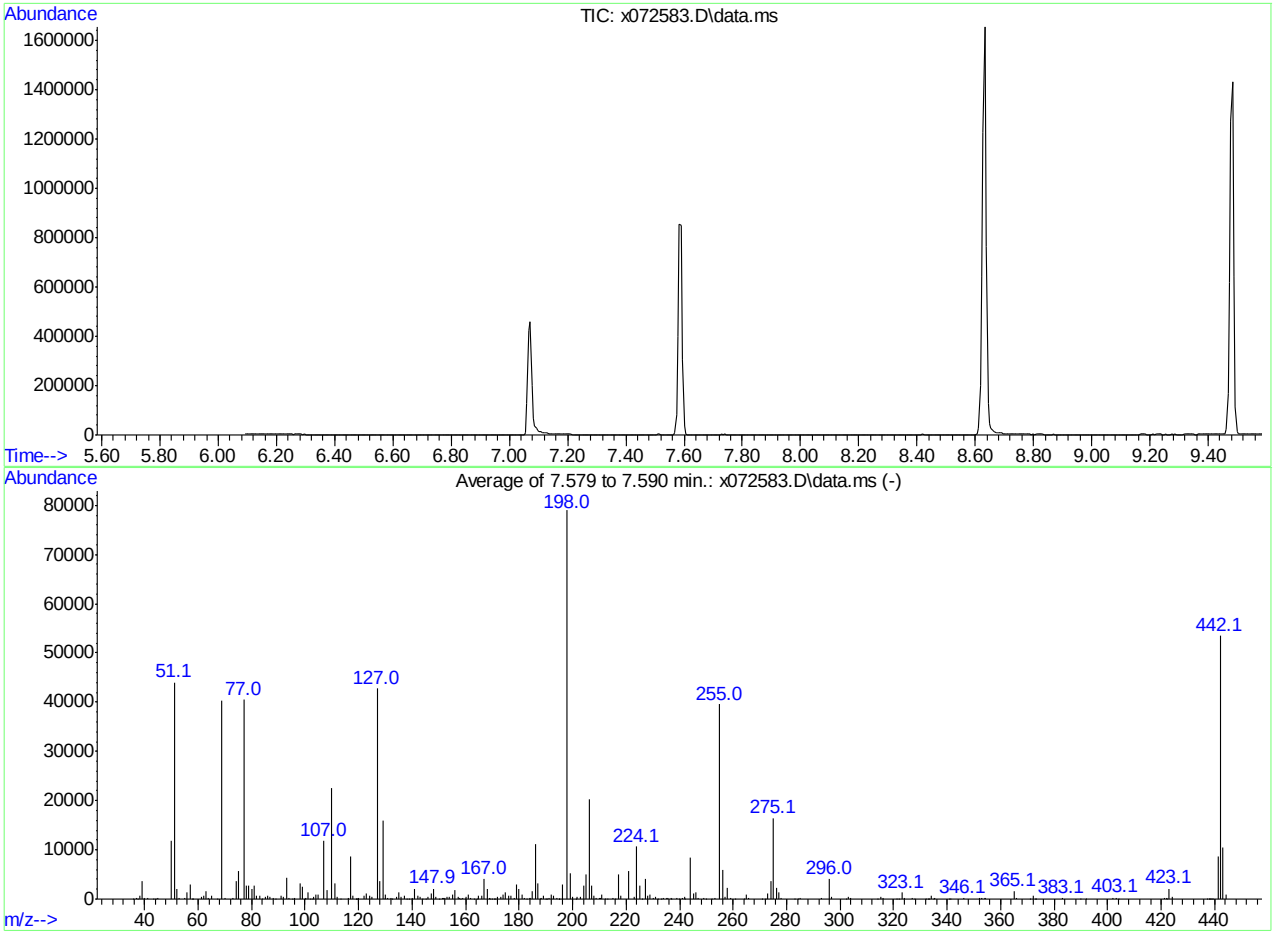
response 1500392

Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

SW-846 Method 8270

Data File : C:\msdchem\1\DATA\0828_sx2960\x072583.D Vial: 1
Acq On : 28 Aug 2020 1:53 pm Operator: marthav
Sample : dftpp Inst : MSBNA05
Misc : op81605,sx2960,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\METHODS\dftpp.m (RTE Integrator)
Title : Tune Evaluation



AutoFind: Scans 279, 280, 281; Background Corrected with Scan 274

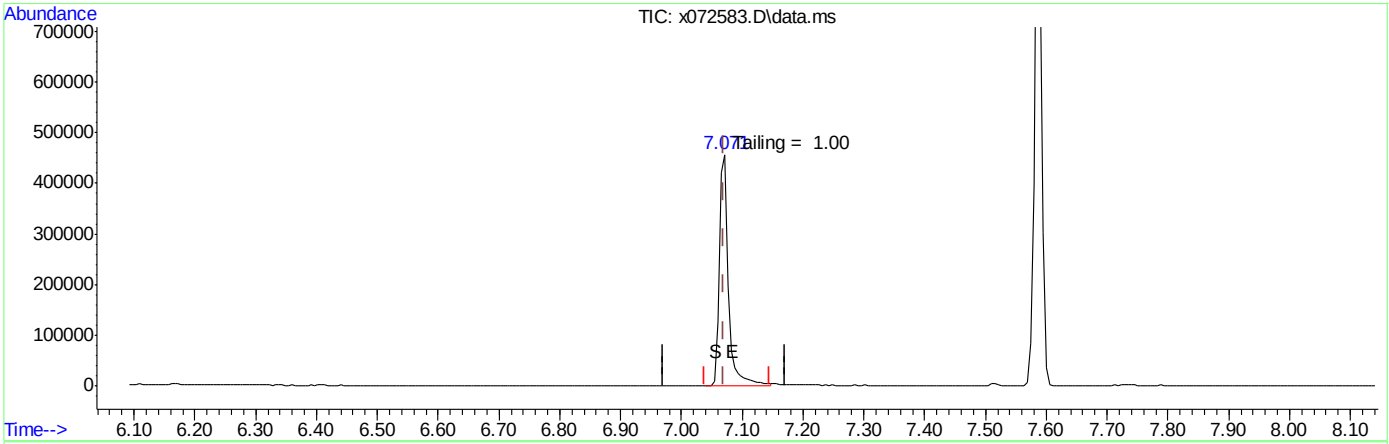
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	55.8	44035	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	51.0	40253	PASS
70	69	0.00	2	0.5	212	PASS
127	198	40	60	54.2	42792	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	78949	PASS
199	198	5	9	6.6	5218	PASS
275	198	10	30	20.8	16406	PASS
365	198	1	100	2.0	1608	PASS
441	443	0.01	100	83.5	8766	PASS
442	198	40	100	67.7	53467	PASS
443	442	17	23	19.6	10499	PASS

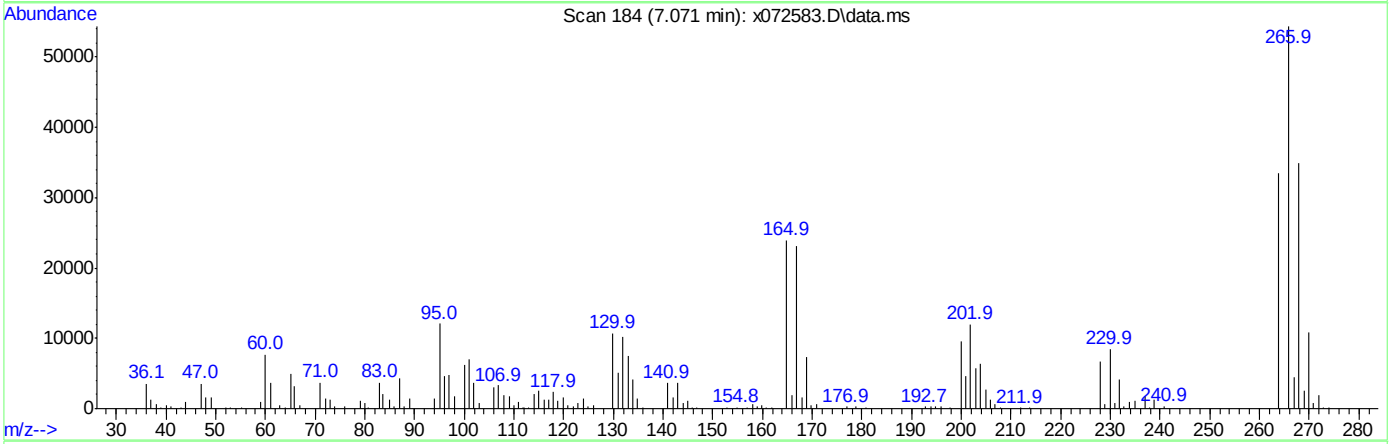
x072583.D dftpp.m Sat Aug 29 09:24:41 2020

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0828_sx2960\
Data File : x072583.D
Acq On : 28 Aug 2020 1:53 pm
Operator : marthav
Sample : dftpp Inst : MSBNA05
Misc : op81605,sx2960,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 29 09:24:35 2020
Quant Method : C:\msdchem\1\METHODS\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Sat Aug 29 09:24:32 2020
Response via : Initial Calibration





TIC: x072583.D\data.ms

(1) Pentachlorophenol

7.071min (0.000) 19.14

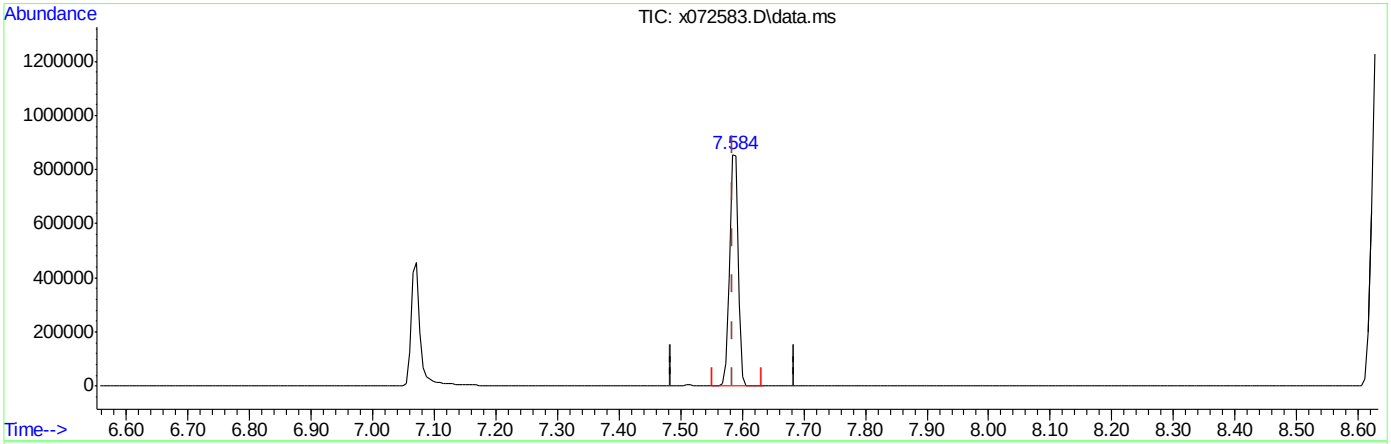
response 457718

Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0828_sx2960\
Data File : x072583.D
Acq On : 28 Aug 2020 1:53 pm
Operator : marthav
Sample : dftpp Inst : MSBNA05
Misc : op81605,sx2960,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 29 09:24:35 2020
Quant Method : C:\msdchem\1\METHODS\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Sat Aug 29 09:24:32 2020
Response via : Initial Calibration



TIC: x072583.D\data.ms

(2) DFTPP

7.584min (0.000) 28.82

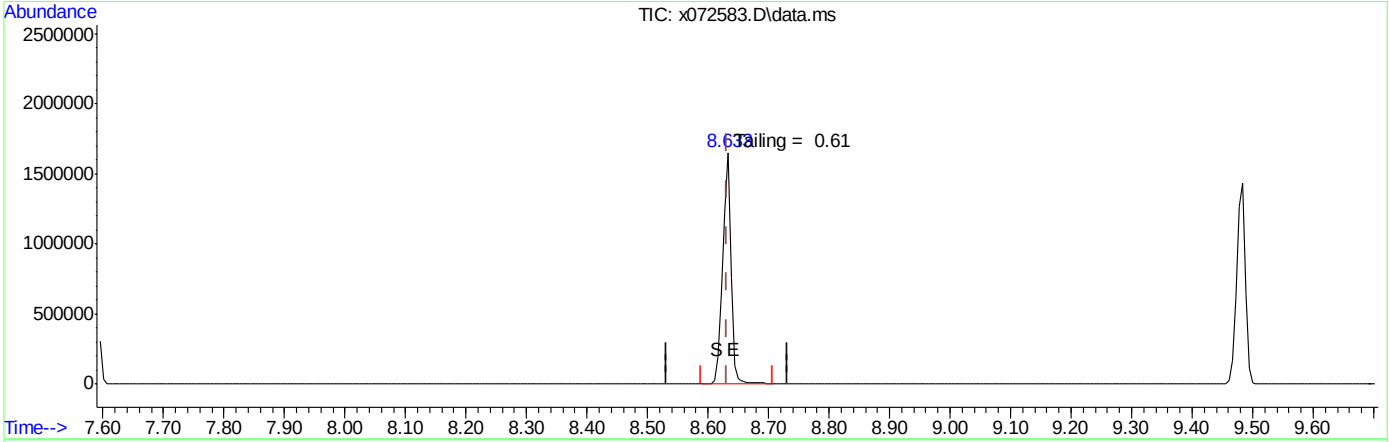
response 813368

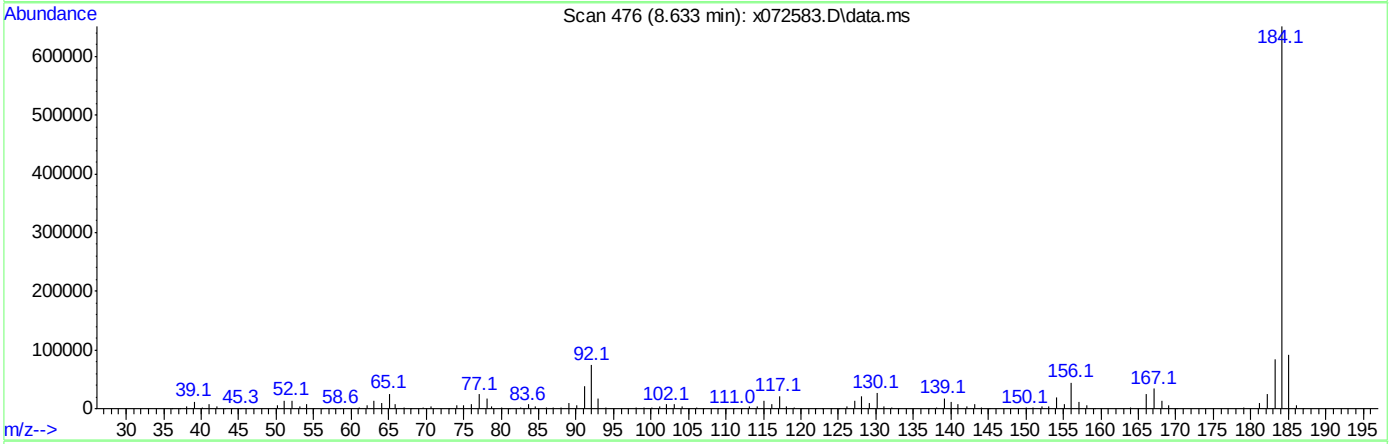
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0828_sx2960\
Data File : x072583.D
Acq On : 28 Aug 2020 1:53 pm
Operator : marthav
Sample : dftpp Inst : MSBNA05
Misc : op81605,sx2960,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 29 09:24:35 2020
Quant Method : C:\msdchem\1\METHODS\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Sat Aug 29 09:24:32 2020
Response via : Initial Calibration





TIC: x072583.D\data.ms

(3) Benzidine

8.633min (0.000) 36.21

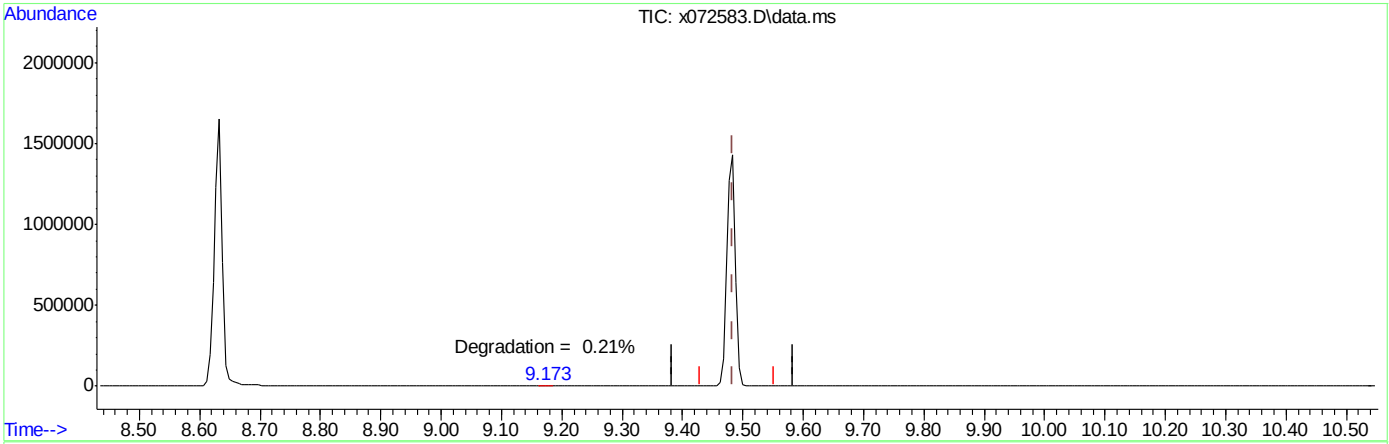
response 1536081

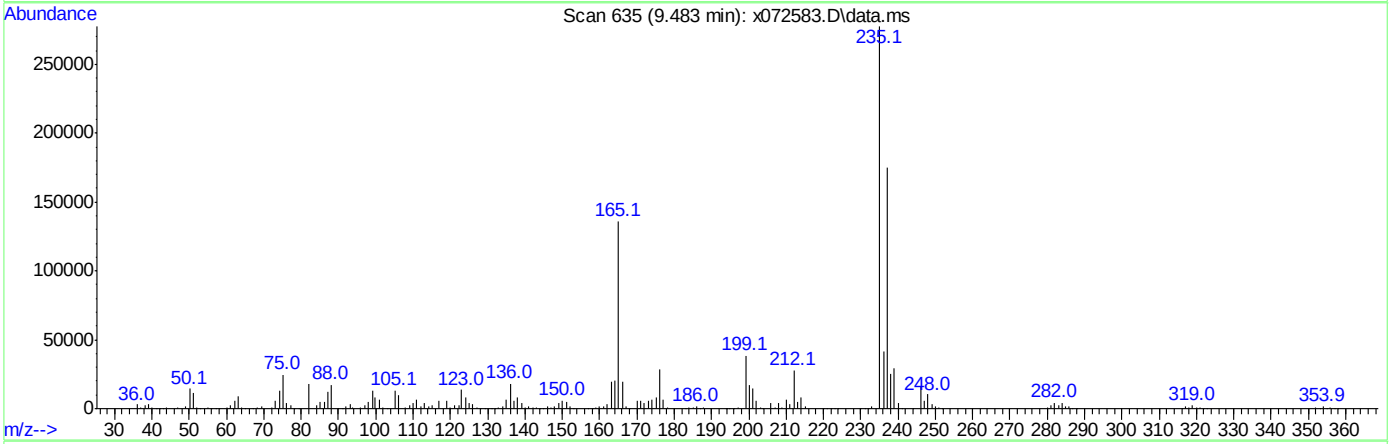
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0828_sx2960\
Data File : x072583.D
Acq On : 28 Aug 2020 1:53 pm
Operator : marthav
Sample : dftpp Inst : MSBNA05
Misc : op81605,sx2960,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 29 09:24:35 2020
Quant Method : C:\msdchem\1\METHODS\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Sat Aug 29 09:24:32 2020
Response via : Initial Calibration





TIC: x072583.D\data.ms

(4) DDT

9.483min (0.000) 39.34

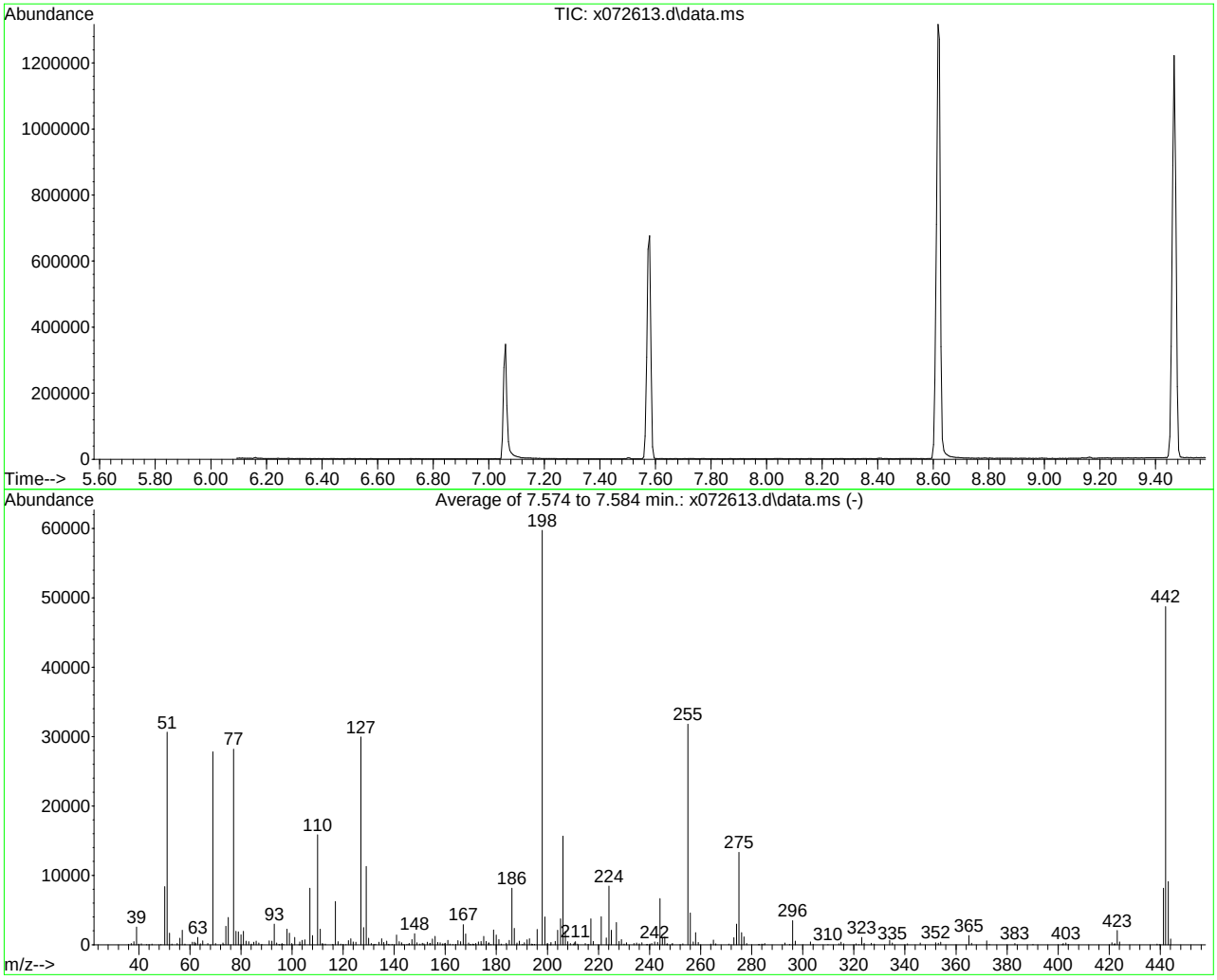
response 1373314

Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

SW-846 Method 8270

Data File : C:\msdchem\1\data\ed...2020\sx2961\x072613.d Vial: 1
Acq On : 29 Aug 2020 11:24 am Operator: marthav
Sample : dftpp Inst : MSBNA05
Misc : op81605,sx2961,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\methods\dftpp.m (RTE Integrator)
Title : Tune Evaluation



AutoFind: Scans 278, 279, 280; Background Corrected with Scan 273

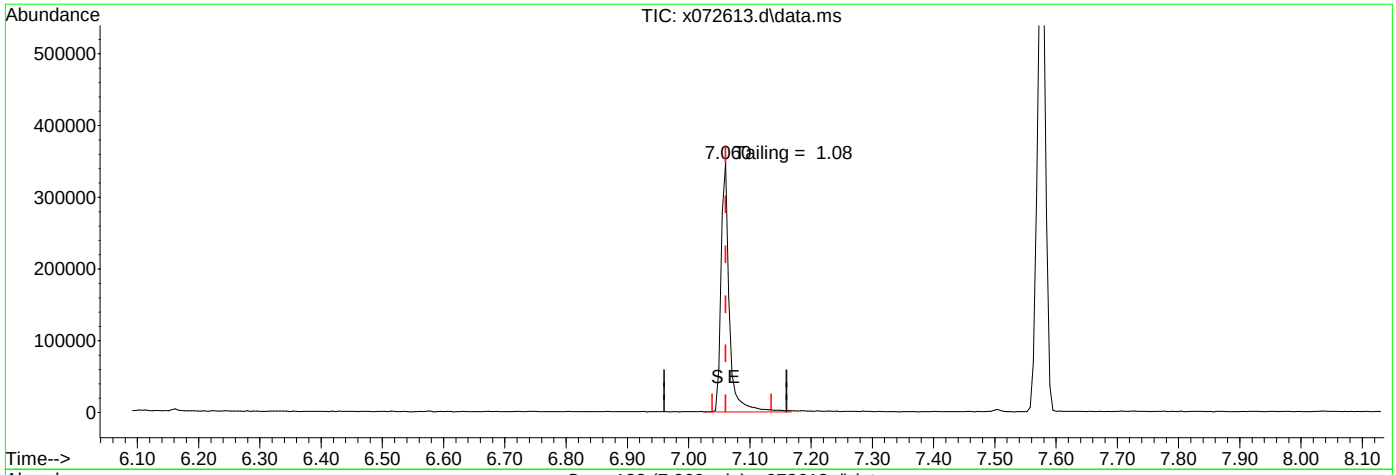
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	51.3	30640	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	46.5	27794	PASS
70	69	0.00	2	0.6	168	PASS
127	198	40	60	50.2	29955	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	59717	PASS
199	198	5	9	6.7	4006	PASS
275	198	10	30	22.3	13316	PASS
365	198	1	100	2.2	1327	PASS
441	443	0.01	100	89.5	8160	PASS
442	198	40	100	81.6	48741	PASS
443	442	17	23	18.7	9115	PASS

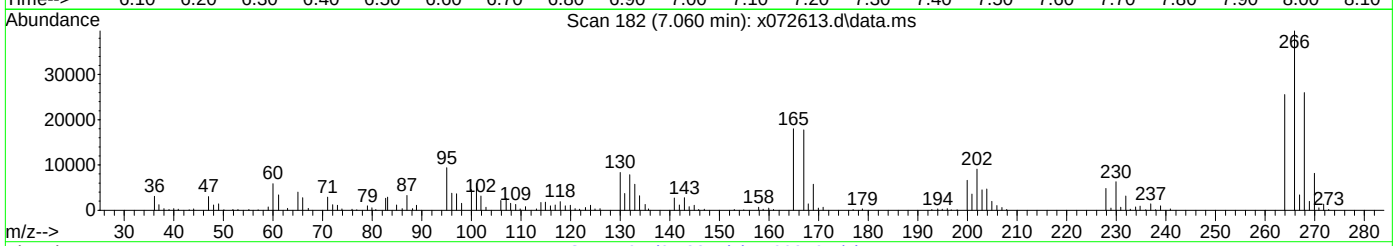
x072613.d dftpp.m Sun Aug 30 22:30:56 2020

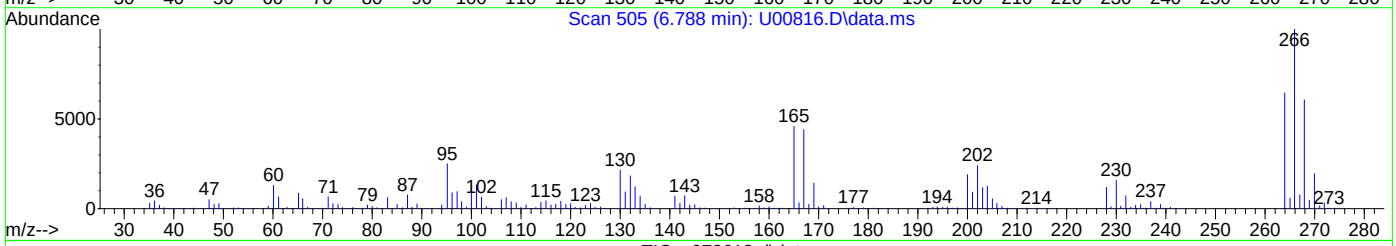
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-31-2020\sx2961\
Data File : x072613.d
Acq On : 29 Aug 2020 11:24 am
Operator : marthav
Sample : dftpp
Misc : op81605,sx2961,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 30 22:30:45 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Sun Aug 30 22:30:42 2020
Response via : Initial Calibration







TIC: x072613.d\data.ms

(1) Pentachlorophenol

7.060min (0.000) 13.43

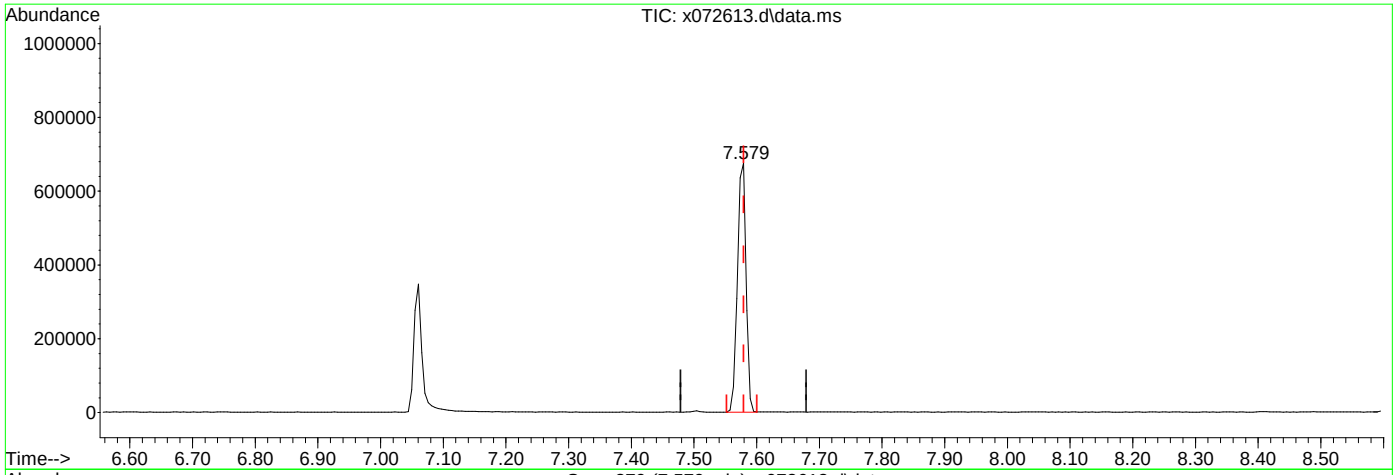
response 321188

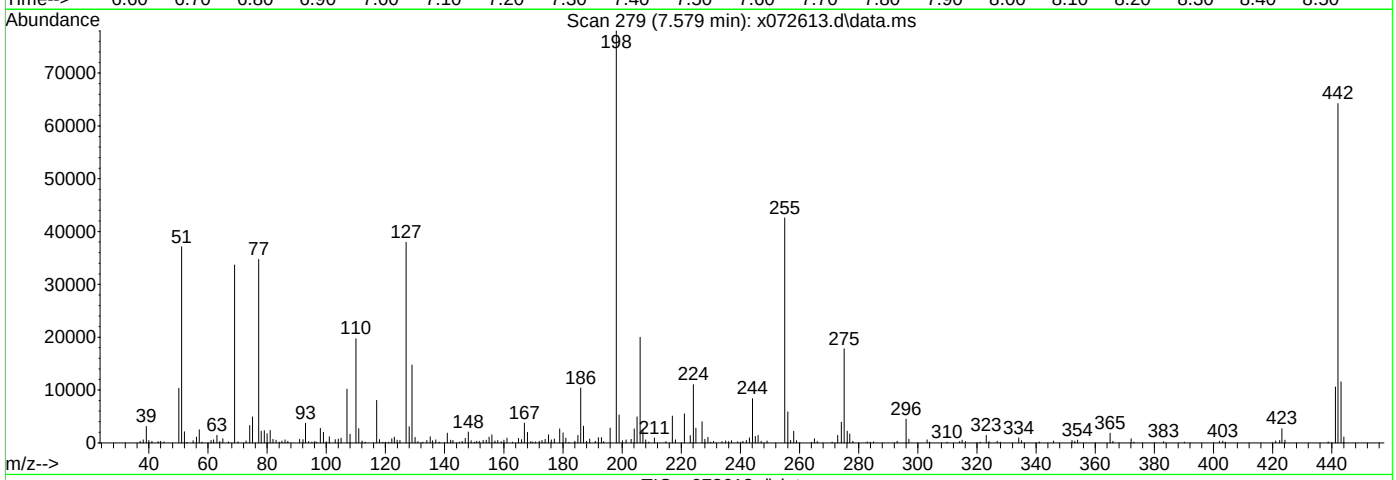
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-31-2020\sx2961\
Data File : x072613.d
Acq On : 29 Aug 2020 11:24 am
Operator : marthav
Sample : dftpp
Misc : op81605,sx2961,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 30 22:30:45 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Sun Aug 30 22:30:42 2020
Response via : Initial Calibration





TIC: x072613.d\data.ms

(2) DFTPP

7.579min (0.000) 22.80

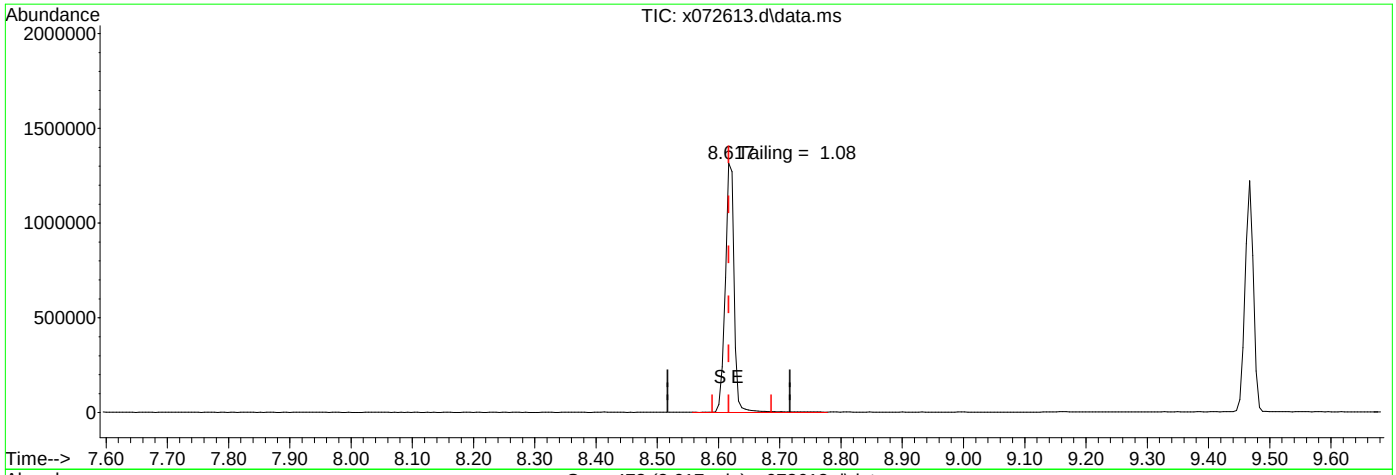
response 643410

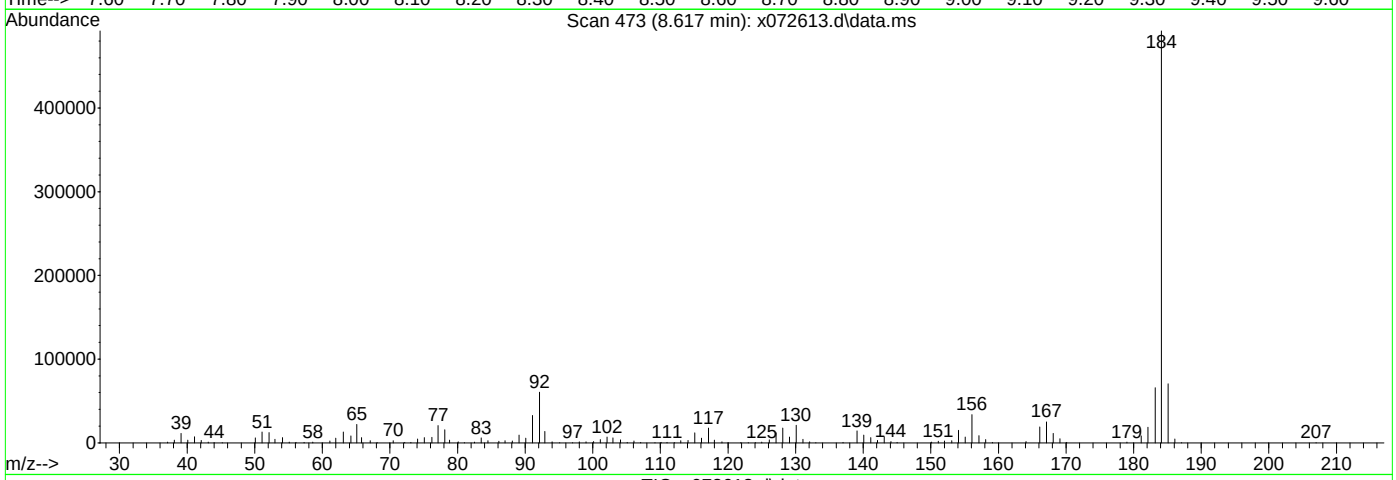
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-31-2020\sx2961\
Data File : x072613.d
Acq On : 29 Aug 2020 11:24 am
Operator : marthav
Sample : dftpp
Misc : op81605,sx2961,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 30 22:30:45 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Sun Aug 30 22:30:42 2020
Response via : Initial Calibration





TIC: x072613.d\data.ms

(3) Benzidine

8.617min (0.000) 30.76

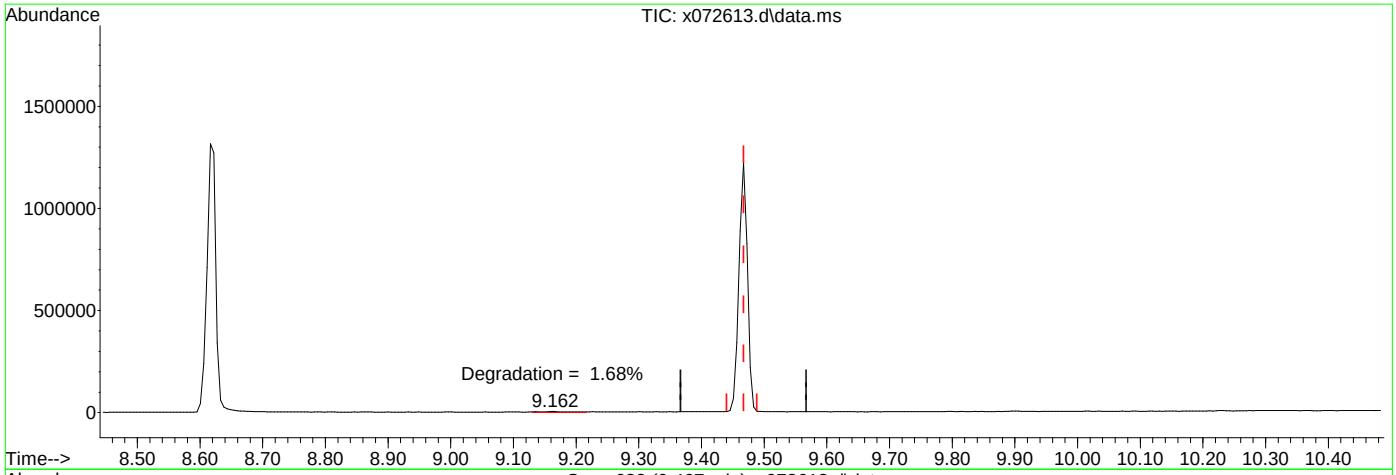
response 1304520

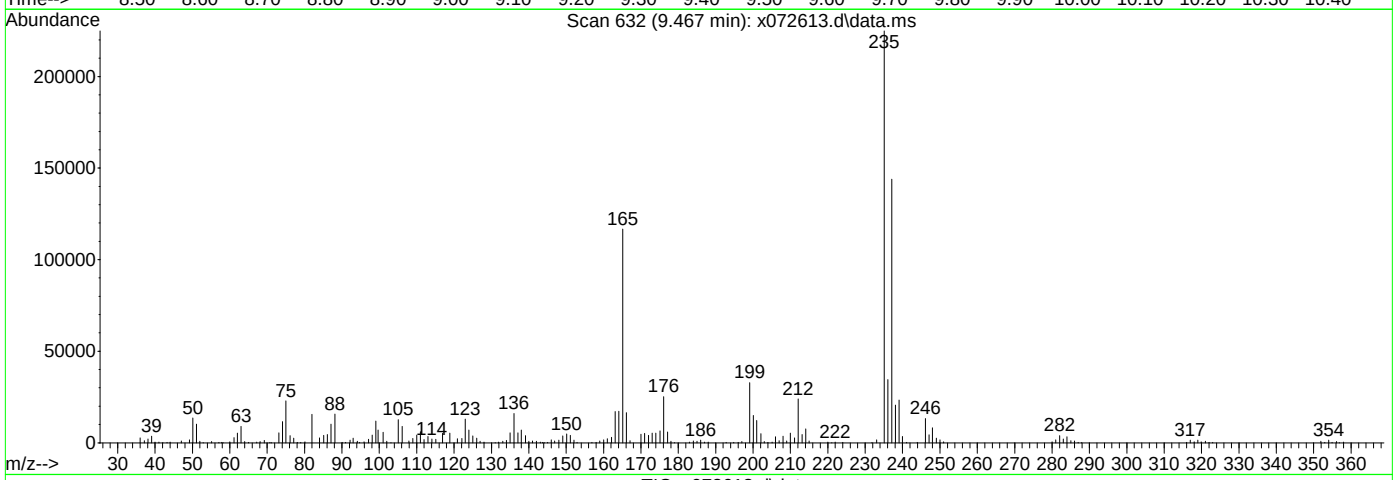
Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-31-2020\sx2961\
Data File : x072613.d
Acq On : 29 Aug 2020 11:24 am
Operator : marthav
Sample : dftpp
Misc : op81605,sx2961,1000,,,1,1,water
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 30 22:30:45 2020
Quant Method : C:\msdchem\1\methods\dftpp.m
Quant Title : Tune Evaluation
QLast Update : Sun Aug 30 22:30:42 2020
Response via : Initial Calibration





TIC: x072613.d\data.ms

(4) DDT

9.467min (0.000) 32.87

response 1147501

Signal	Exp%	Act%
TIC	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integrations APPROVED
(compounds with "m" flag)
Nicole McCampbell
07/22/20 17:04

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10833.D
Acq On : 21 Jul 2020 1:31 pm
Operator : fouads
Sample : ic472-1
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 21 16:22:34 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.758	136	23994	4.00	ppm	-0.01
6) Acenaphthene-d10	6.244	164	13702	4.00	ppm	-0.01
11) Phenanthrene-d10	7.528	188	24543	4.00	ppm	-0.01
18) Chrysene-d12	9.872	240	38114	4.00	ppm	-0.01
22) Perylene-d12	11.639	264	32339	4.00	ppm	-0.02
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.346	152	2098	0.52	ppm	-0.02
Spiked Amount 10.000	Range 50 - 150		Recovery =	5.20%#		
17) Fluoranthene-d10	8.573	212	7444	0.53	ppm	-0.03
Spiked Amount 10.000	Range 50 - 150		Recovery =	5.30%#		
Target Compounds						Qvalue
2) Naphthalene	4.775	128	4289	0.56	ppm	98
3) 2-Methylnaphthalene	5.370	142	2500	0.43	ppm	97
5) 1-Methylnaphthalene	5.447	142	3106	0.56	ppm	91
7) Acenaphthylene	6.128	152	4559	0.52	ppm	99
8) Acenaphthene	6.273	153	3108	0.54	ppm	97
9) Dibenzofuran	6.447	168	2138	0.53	ppm	100
10) Fluorene	6.732	166	3338	0.54	ppm	100
12) Pentachlorophenol	7.424	266	516m	0.70	ppm	
13) Phenanthrene	7.549	178	4926	0.55	ppm	99
14) Anthracene	7.605	178	2668	0.30	ppm	99
15) Carbazole	7.785	167	3902	0.26	ppm	95
16) Fluoranthene	8.588	202	9291	0.54	ppm	99
19) Pyrene	8.782	202	9492	0.53	ppm	100
20) Benzo[a]anthracene	9.862	228	3464	0.26	ppm	98
21) Chrysene	9.898	228	4647	0.32	ppm	100
23) Benzo[b]fluoranthene	11.129	252	2712	0.21	ppm	99
24) Benzo[k]fluoranthene	11.168	252	3873	0.26	ppm	99
25) Benzo[a]pyrene	11.566	252	2679	0.24	ppm	100
26) Indeno[1,2,3-cd]pyrene	13.449	276	1438m	0.29	ppm	
27) Dibenz[a,h]anthracene	13.507	278	1764	0.34	ppm	99
28) Benzo[g,h,i]perylene	13.910	276	2089	0.39	ppm	92

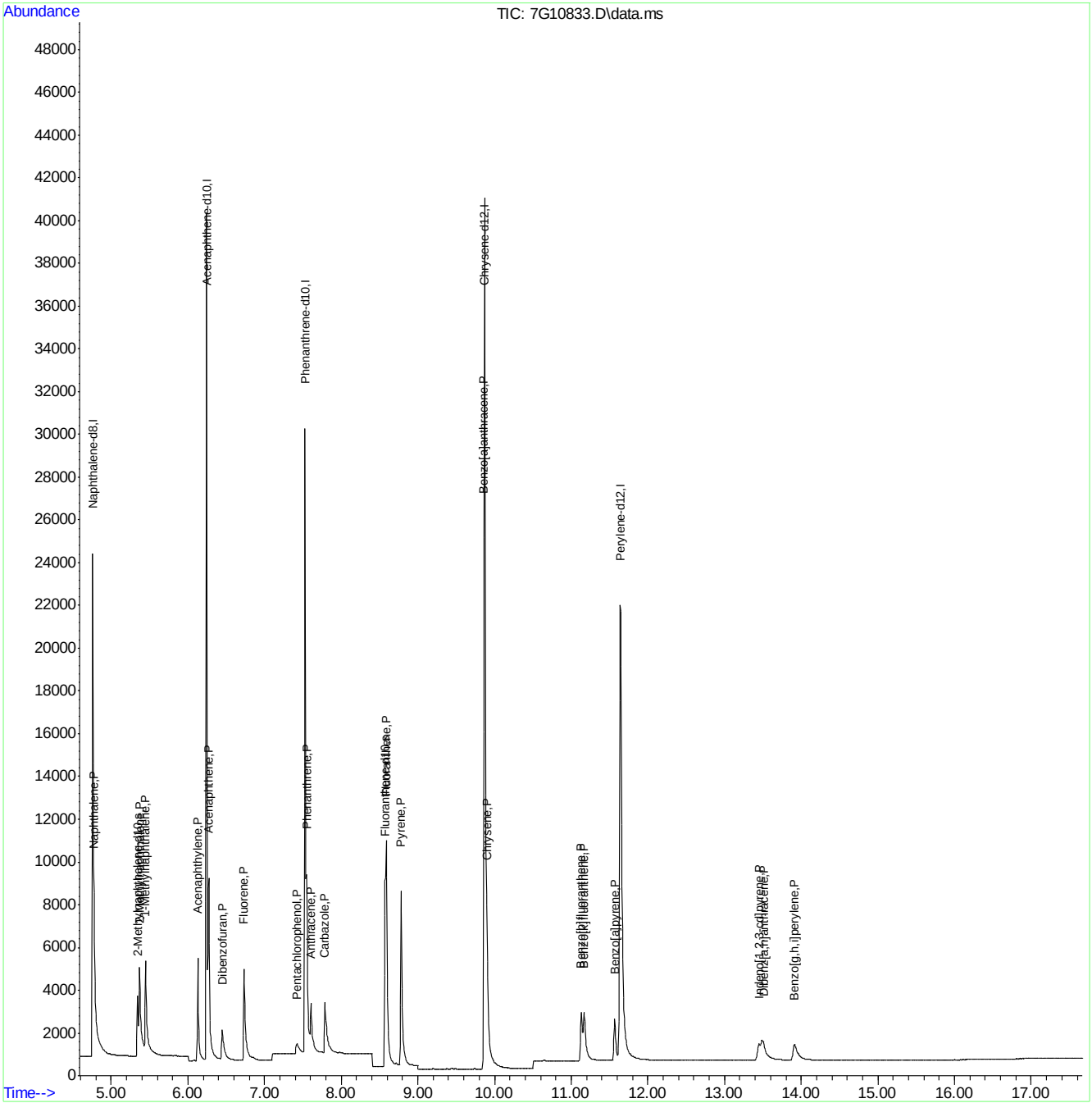
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.6.1
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10833.D
Acq On : 21 Jul 2020 1:31 pm
Operator : fouads
Sample : ic472-1
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 21 16:22:34 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration



Manual Integration Approval Summary

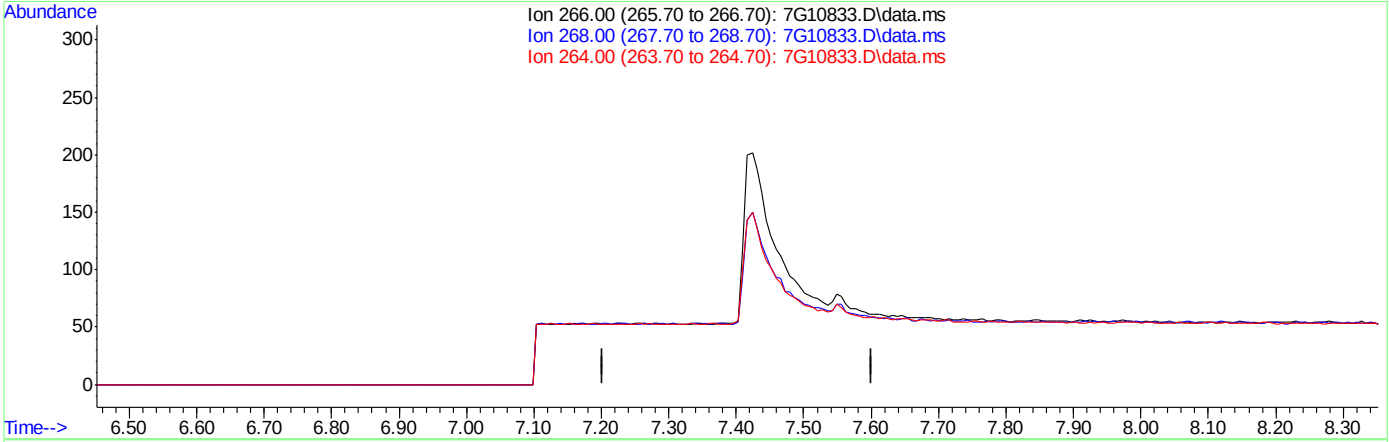
Sample Number: S7G472-IC472
Lab FileID: 7G10833.D
Injection Time: 07/21/20 13:31
Method: SW846 8270D BY SIM
Analyst approved: 07/22/20 13:31 Fouad Sekkar
Supervisor approved: 07/22/20 17:04 Nicole McCampbell

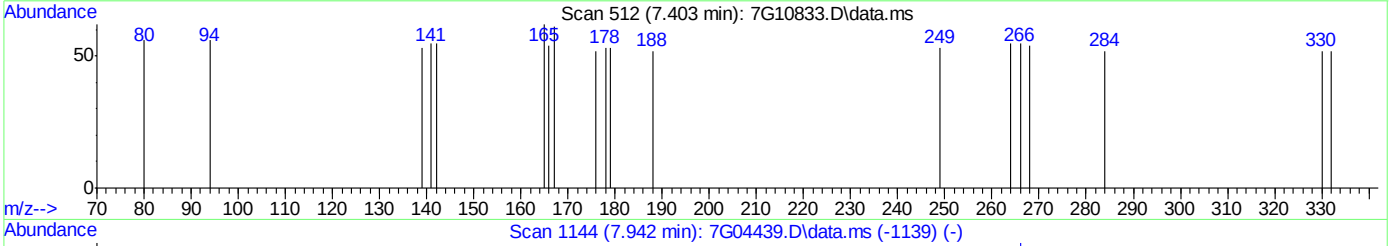
Parameter	CAS	Sig#	R.T. (min.)	Reason
Pentachlorophenol	87-86-5		7.42	Missed peak
Indeno(1,2,3-cd)pyrene	193-39-5		13.45	Missed peak

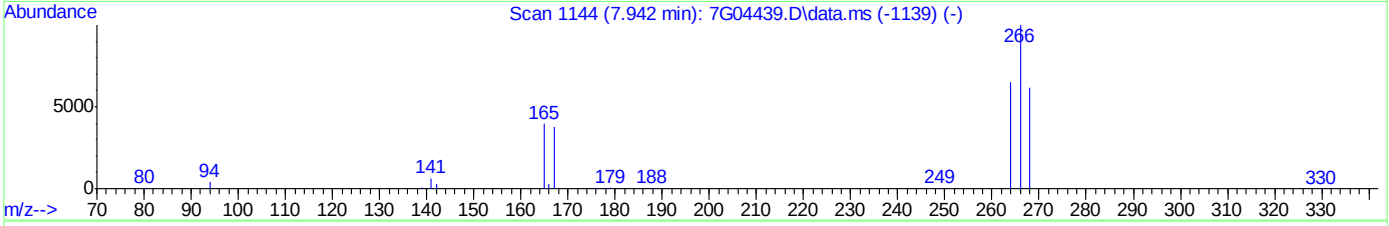
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10833.D
Acq On : 21 Jul 2020 1:31 pm
Operator : fouads
Sample : ic472-1
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 21 16:18:33 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration







TIC: 7G10833.D\data.ms

(12) Pentachlorophenol (P)

7.402min (-7.402) 0.00ppm

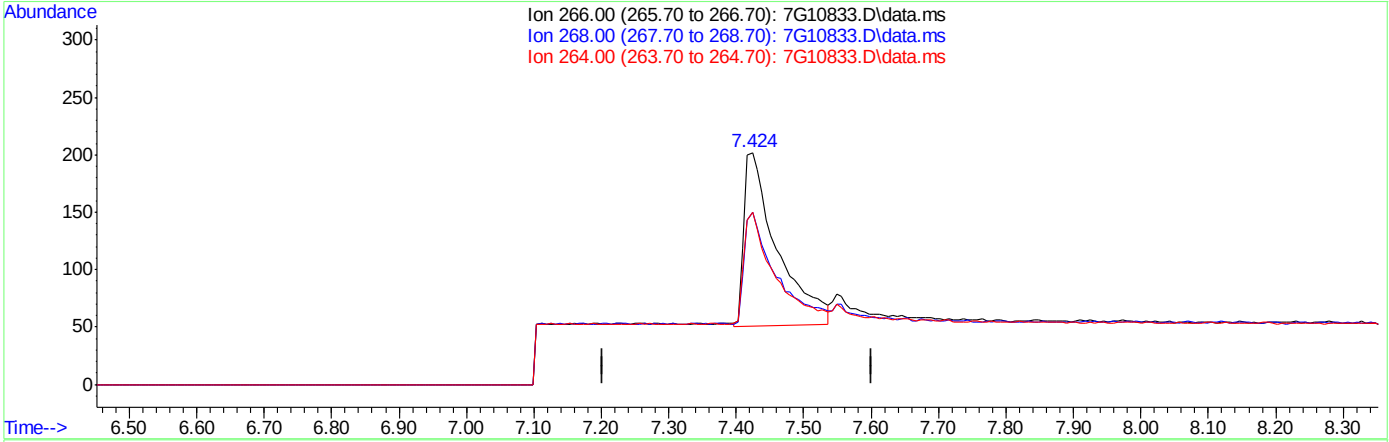
response 0

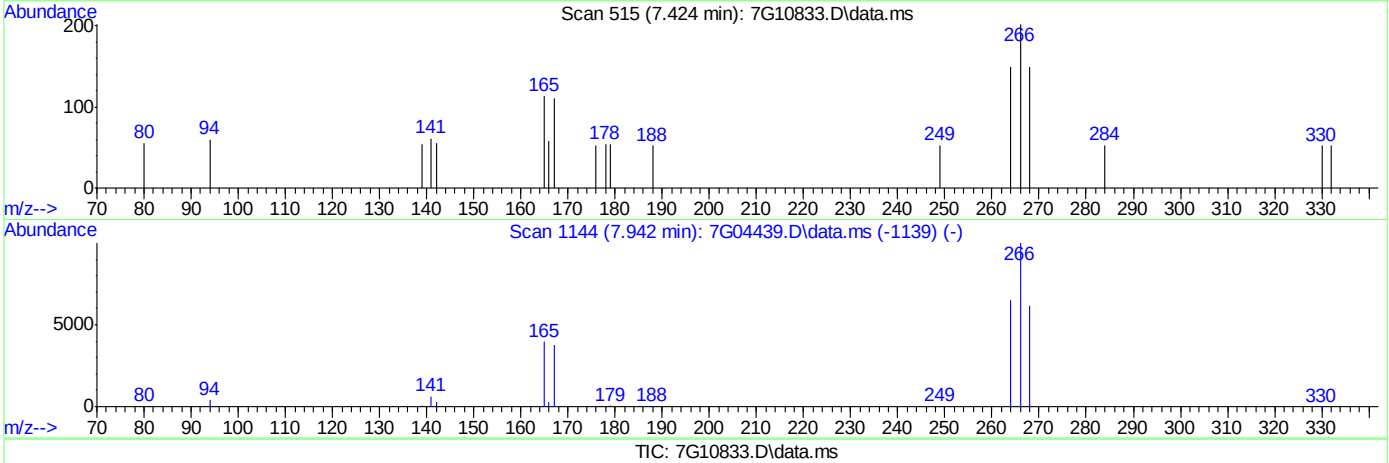
Ion	Exp%	Act%
266.00	100	0.00
268.00	61.80	0.00#
264.00	65.30	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10833.D
Acq On : 21 Jul 2020 1:31 pm
Operator : fouads
Sample : ic472-1
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 21 16:18:33 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration





TIC: 7G10833.D\data.ms

(12) Pentachlorophenol (P)

7.424min (+0.022) 0.70ppm m

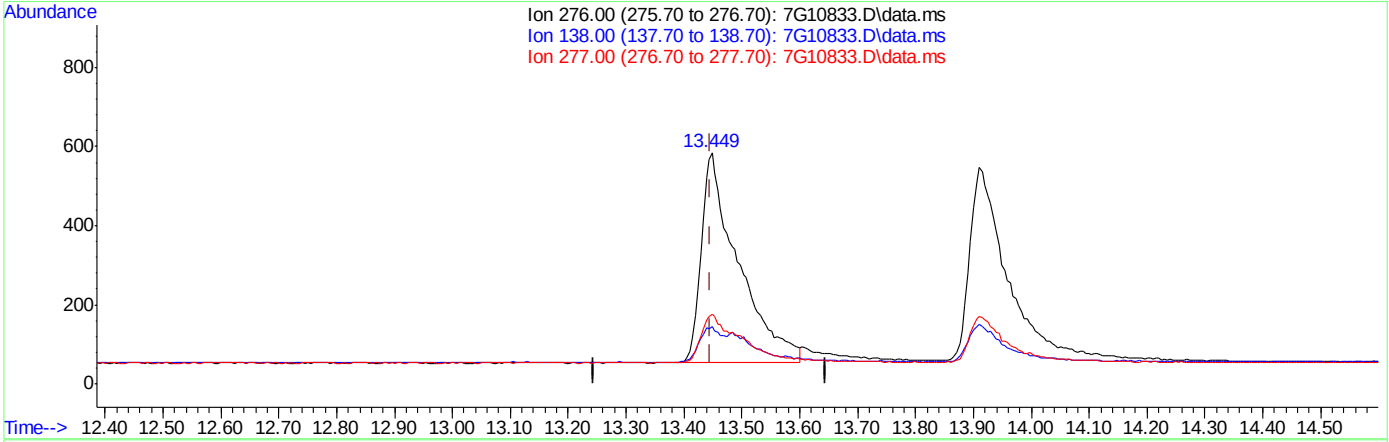
response 516

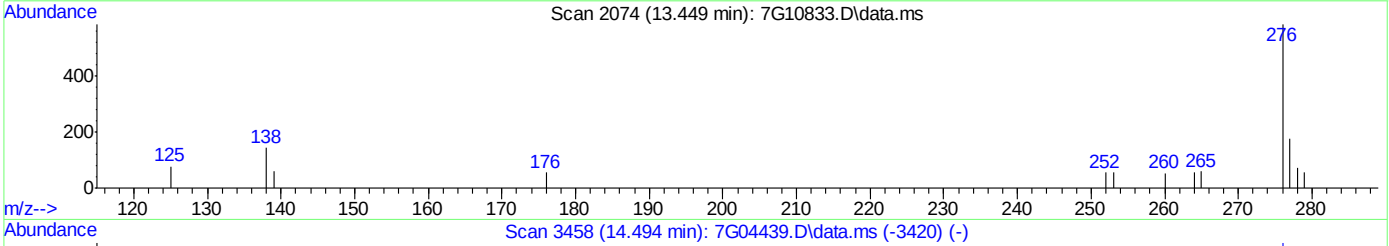
Ion	Exp%	Act%
266.00	100	100
268.00	61.80	74.26
264.00	65.30	74.26
0.00	0.00	0.00

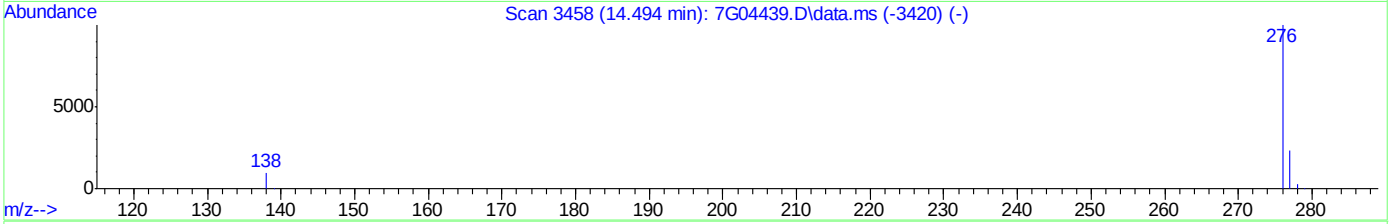
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10833.D
Acq On : 21 Jul 2020 1:31 pm
Operator : fouads
Sample : ic472-1
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 21 16:18:33 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration







TIC: 7G10833.D\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.449min (+0.004) 0.47ppm

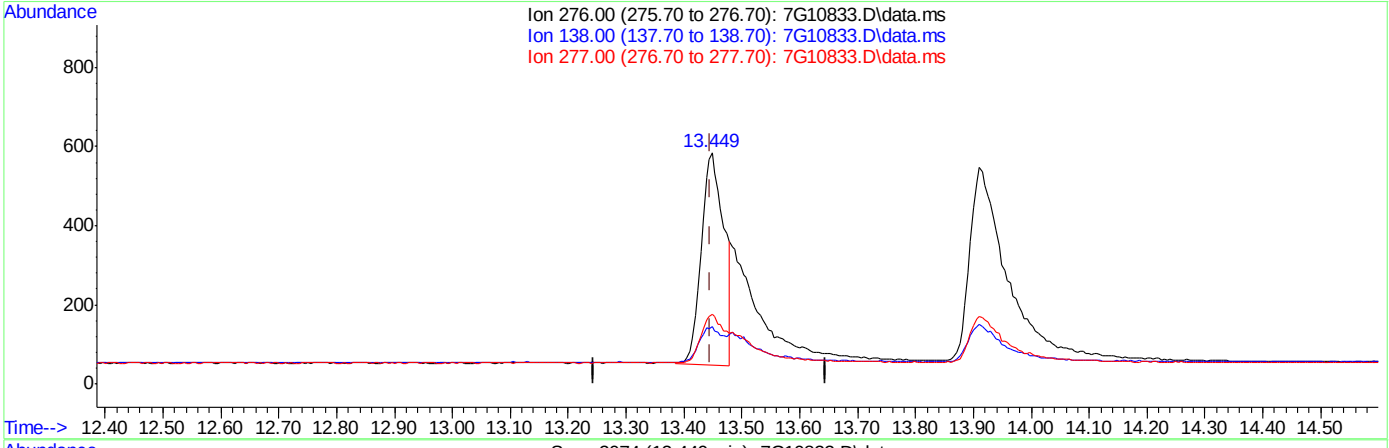
response 2338

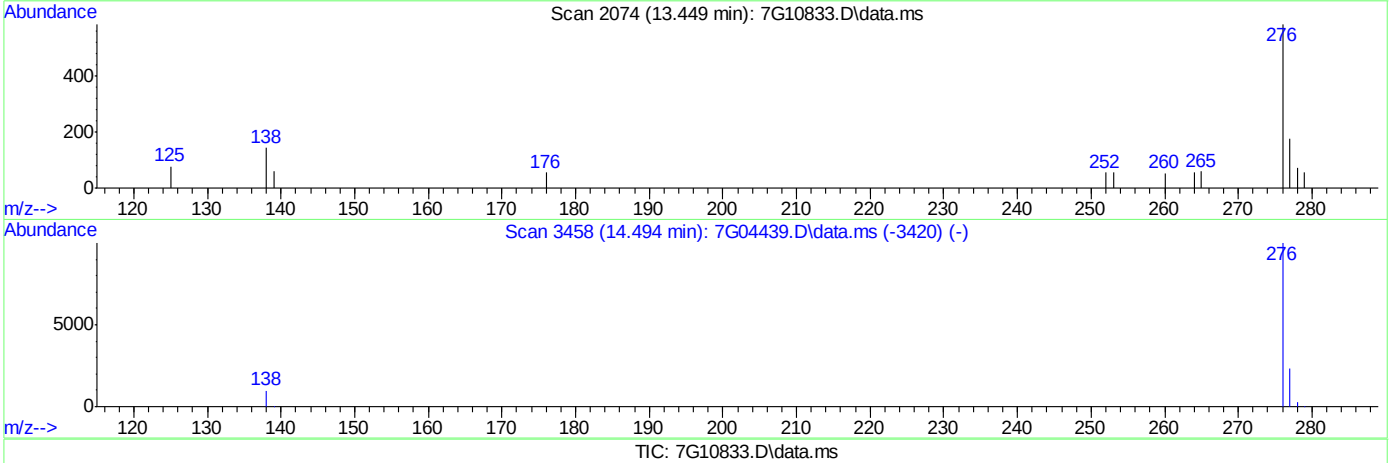
Ion	Exp%	Act%
276.00	100	100
138.00	14.60	16.37
277.00	22.90	23.10
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10833.D
Acq On : 21 Jul 2020 1:31 pm
Operator : fouads
Sample : ic472-1
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 21 16:18:33 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration





TIC: 7G10833.D\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.449min (+0.004) 0.29ppm m

response 1438

Ion	Exp%	Act%
276.00	100	100
138.00	14.60	24.62
277.00	22.90	30.26
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 07/22/20 17:04

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10834.D
Acq On : 21 Jul 2020 1:55 pm
Operator : fouads
Sample : ic472-2
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 21 16:23:38 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration

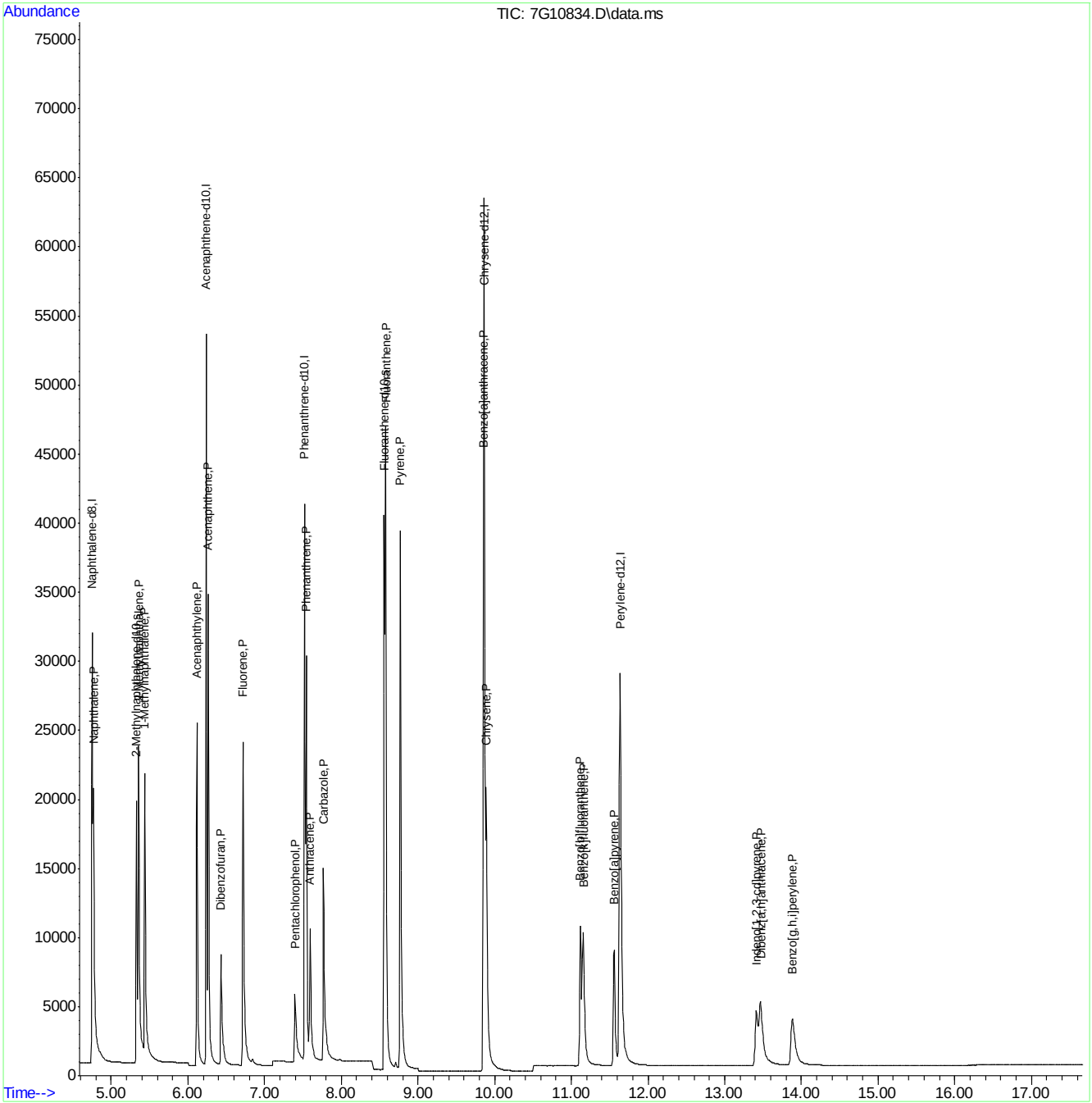
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.752	136	29081	4.00	ppm	-0.02
6) Acenaphthene-d10	6.239	164	16862	4.00	ppm	-0.02
11) Phenanthrene-d10	7.521	188	30203	4.00	ppm	-0.02
18) Chrysene-d12	9.862	240	48257	4.00	ppm	-0.02
22) Perylene-d12	11.636	264	41825	4.00	ppm	-0.03
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.329	152	7918	1.62	ppm	-0.04
Spiked Amount 10.000	Range 50 - 150		Recovery = 16.20%#			
17) Fluoranthene-d10	8.560	212	29862	1.74	ppm	-0.04
Spiked Amount 10.000	Range 50 - 150		Recovery = 17.40%#			
Target Compounds						Qvalue
2) Naphthalene	4.769	128	16703	1.81	ppm	100
3) 2-Methylnaphthalene	5.358	142	11209	1.60	ppm	98
5) 1-Methylnaphthalene	5.435	142	11625	1.74	ppm	84
7) Acenaphthylene	6.118	152	18703	1.74	ppm	99
8) Acenaphthene	6.263	153	12399	1.77	ppm	94
9) Dibenzofuran	6.432	168	8863	1.80	ppm	95
10) Fluorene	6.717	166	13533	1.79	ppm	100
12) Pentachlorophenol	7.396	266	3019	3.31	ppm	98
13) Phenanthrene	7.542	178	19355	1.76	ppm	99
14) Anthracene	7.591	178	10083	0.91	ppm	100
15) Carbazole	7.764	167	16301	0.88	ppm	97
16) Fluoranthene	8.579	202	36358	1.73	ppm	99
19) Pyrene	8.769	202	37461	1.66	ppm	98
20) Benzo[a]anthracene	9.855	228	14421	0.85	ppm	99
21) Chrysene	9.891	228	17593	0.97	ppm	99
23) Benzo[b]fluoranthene	11.117	252	12271	0.74	ppm	99
24) Benzo[k]fluoranthene	11.156	252	15759	0.82	ppm	99
25) Benzo[a]pyrene	11.559	252	12673	0.88	ppm	99
26) Indeno[1,2,3-cd]pyrene	13.412	276	7001m	1.08	ppm	
27) Dibenz[a,h]anthracene	13.471	278	8032	1.18	ppm	100
28) Benzo[g,h,i]perylene	13.883	276	9167	1.33	ppm	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10834.D
Acq On : 21 Jul 2020 1:55 pm
Operator : fouads
Sample : ic472-2
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 21 16:23:38 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration



Manual Integration Approval Summary

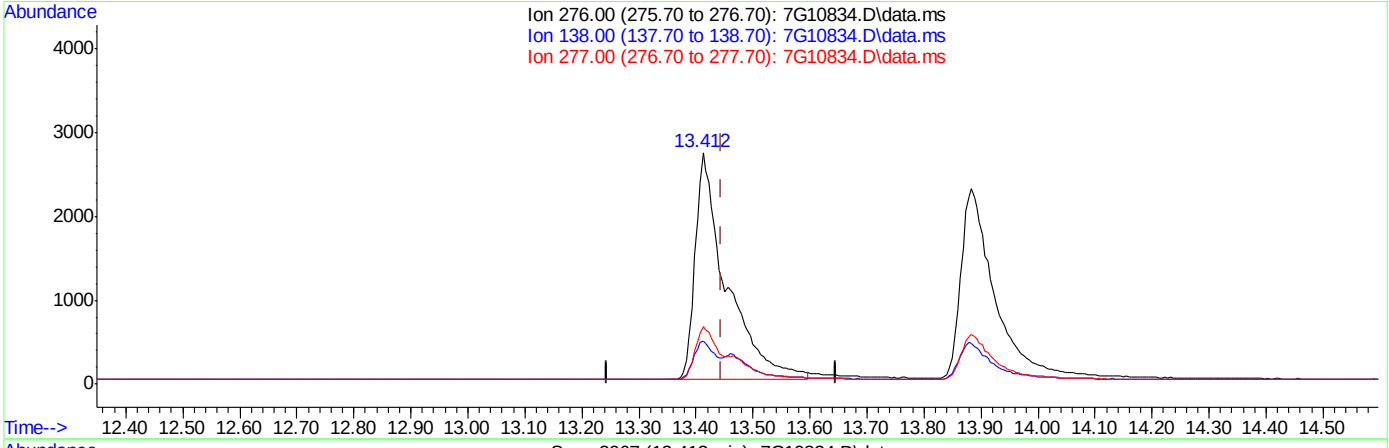
Sample Number:	S7G472-IC472	**Method:**	SW846 8270D BY SIM
Lab FileID:	7G10834.D	**Analyst approved:**	07/22/20 13:31 Fouad Sekkar
Injection Time:	07/21/20 13:55	**Supervisor approved:**	07/22/20 17:04 Nicole McCampbell

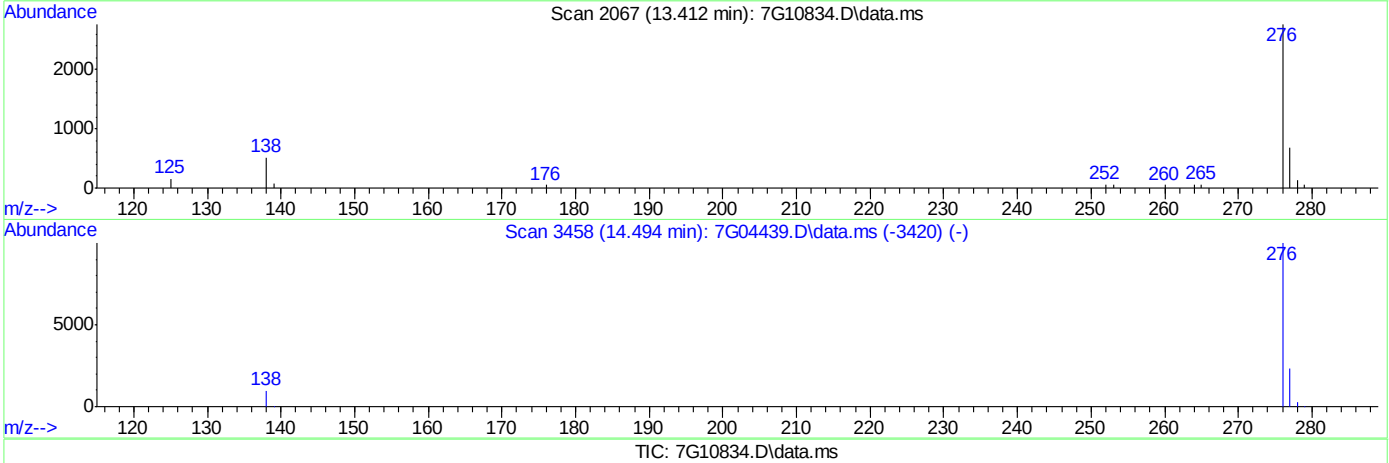
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		13.41	Missed peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10834.D
Acq On : 21 Jul 2020 1:55 pm
Operator : fouads
Sample : ic472-2
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 21 16:18:37 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration





TIC: 7G10834.D\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.412min (-0.033) 1.59ppm

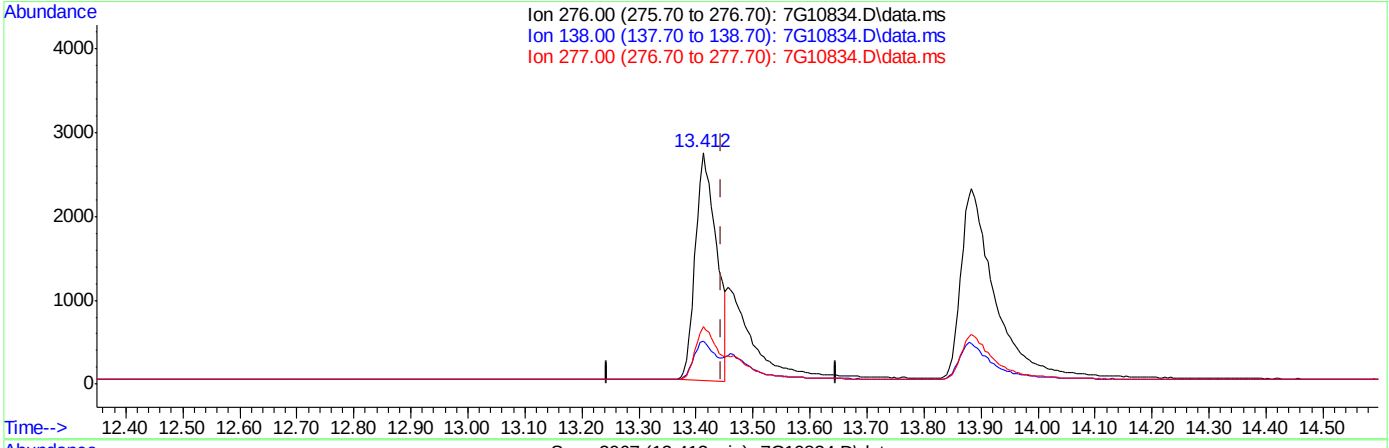
response 10318

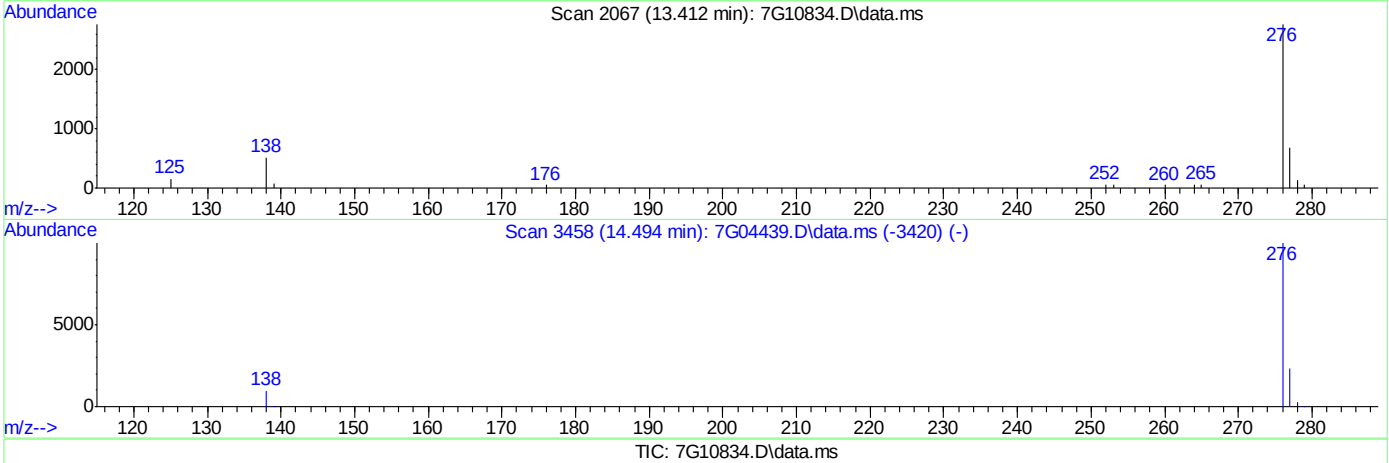
Ion	Exp%	Act%
276.00	100	100
138.00	14.60	16.99
277.00	22.90	23.44
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10834.D
Acq On : 21 Jul 2020 1:55 pm
Operator : fouads
Sample : ic472-2
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 21 16:18:37 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration





TIC: 7G10834.D\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.412min (-0.033) 1.08ppm m

response 7001

Ion	Exp%	Act%
276.00	100	100
138.00	14.60	18.75
277.00	22.90	24.95
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 07/22/20 17:04

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10835.D
Acq On : 21 Jul 2020 2:19 pm
Operator : fouads
Sample : ic472-3
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 21 16:24:24 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration

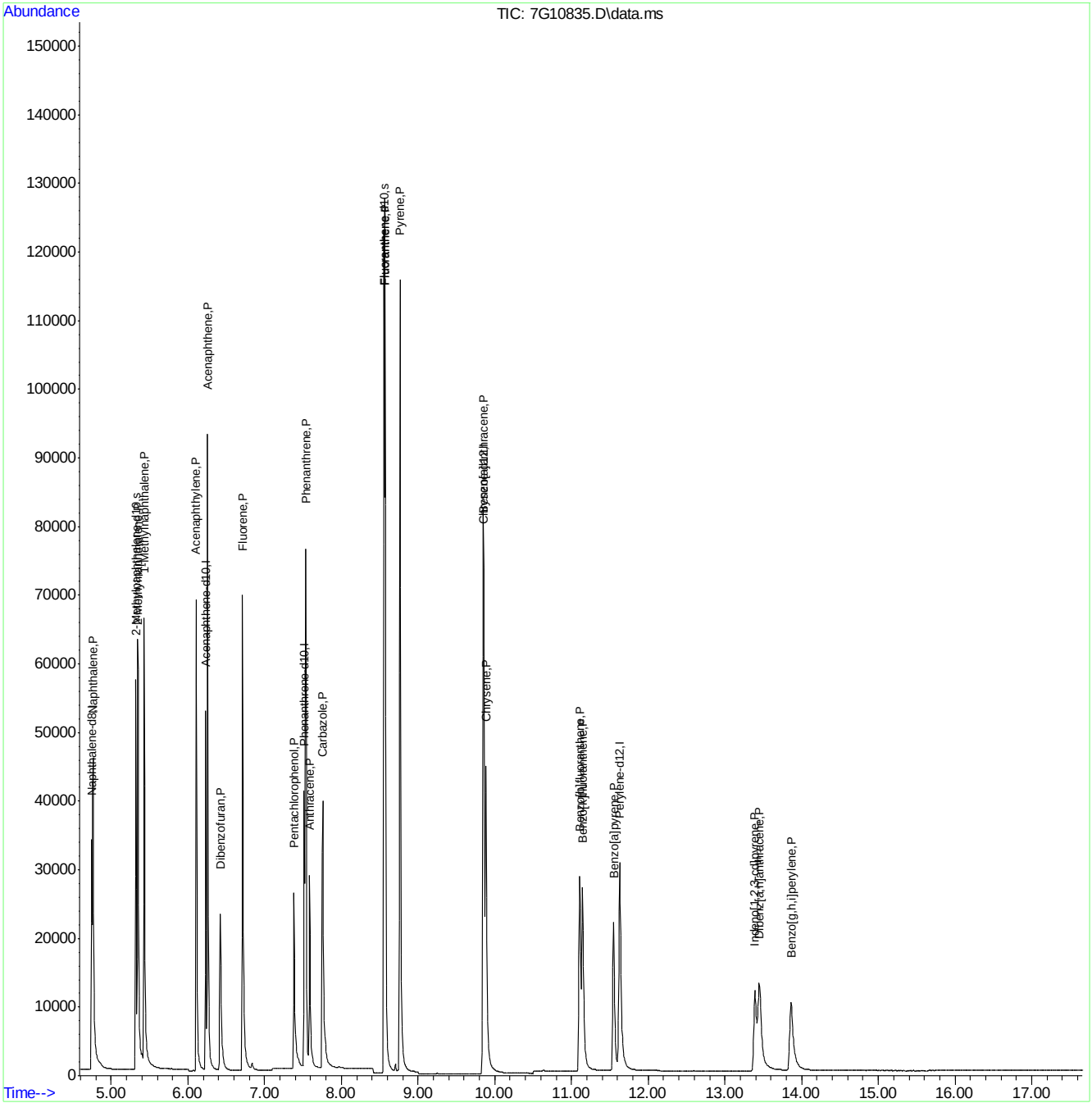
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.746	136	28715	4.00	ppm	-0.02
6) Acenaphthene-d10	6.234	164	16760	4.00	ppm	-0.02
11) Phenanthrene-d10	7.514	188	29264	4.00	ppm	-0.03
18) Chrysene-d12	9.857	240	48140	4.00	ppm	-0.03
22) Perylene-d12	11.627	264	42133	4.00	ppm	-0.04
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.323	152	19987	4.15	ppm	-0.04
Spiked Amount 10.000	Range 50 - 150		Recovery = 41.50%#			
17) Fluoranthene-d10	8.557	212	74078	4.46	ppm	-0.04
Spiked Amount 10.000	Range 50 - 150		Recovery = 44.60%#			
Target Compounds						Qvalue
2) Naphthalene	4.764	128	40296	4.43	ppm	100
3) 2-Methylnaphthalene	5.352	142	28506	4.13	ppm	98
5) 1-Methylnaphthalene	5.429	142	27972	4.23	ppm	89
7) Acenaphthylene	6.108	152	46420	4.35	ppm	98
8) Acenaphthene	6.258	153	30591	4.38	ppm	96
9) Dibenzofuran	6.423	168	21620	4.42	ppm	92
10) Fluorene	6.713	166	32883	4.37	ppm	98
12) Pentachlorophenol	7.382	266	10713	12.12	ppm	97
13) Phenanthrene	7.535	178	47680	4.47	ppm	99
14) Anthracene	7.584	178	23874	2.22	ppm	100
15) Carbazole	7.757	167	40148	2.22	ppm	100
16) Fluoranthene	8.570	202	89721	4.40	ppm	99
19) Pyrene	8.763	202	92682	4.12	ppm	99
20) Benzo[a]anthracene	9.847	228	36400	2.15	ppm	99
21) Chrysene	9.886	228	41406	2.29	ppm	100
23) Benzo[b]fluoranthene	11.107	252	32655	1.96	ppm	99
24) Benzo[k]fluoranthene	11.141	252	37458	1.94	ppm	100
25) Benzo[a]pyrene	11.549	252	31646	2.17	ppm	100
26) Indeno[1,2,3-cd]pyrene	13.393	276	20359m	3.11	ppm	
27) Dibenz[a,h]anthracene	13.446	278	21793	3.19	ppm	99
28) Benzo[g,h,i]perylene	13.864	276	24010	3.45	ppm	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10835.D
Acq On : 21 Jul 2020 2:19 pm
Operator : fouads
Sample : ic472-3
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 21 16:24:24 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration



Manual Integration Approval Summary

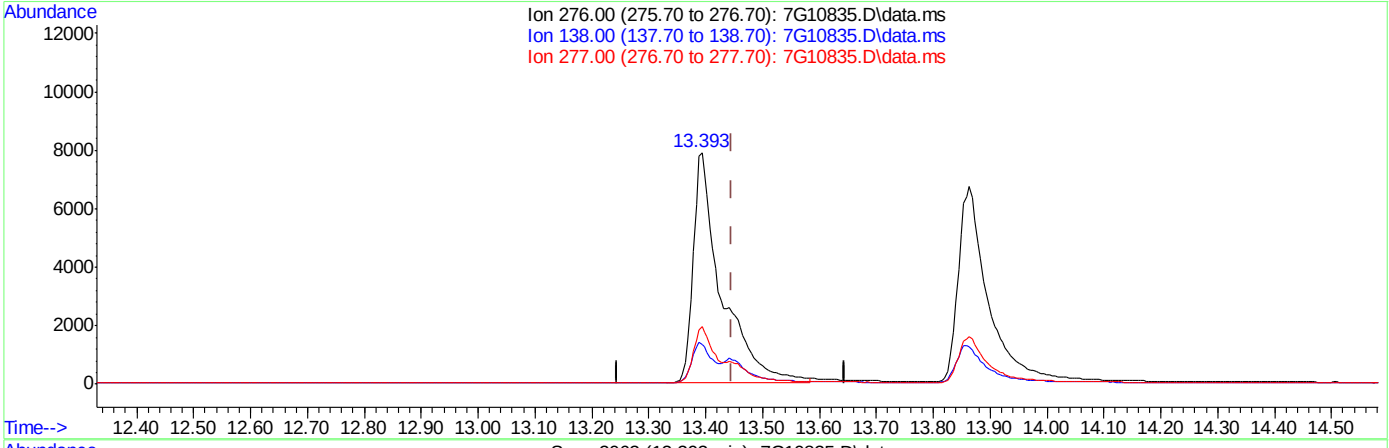
Sample Number: S7G472-IC472
Lab FileID: 7G10835.D
Injection Time: 07/21/20 14:19
Method: SW846 8270D BY SIM
Analyst approved: 07/22/20 13:31 Fouad Sekkar
Supervisor approved: 07/22/20 17:04 Nicole McCampbell

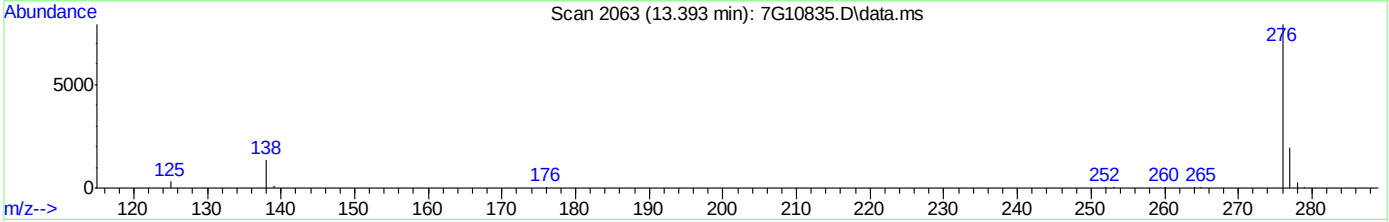
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		13.39	Missed peak

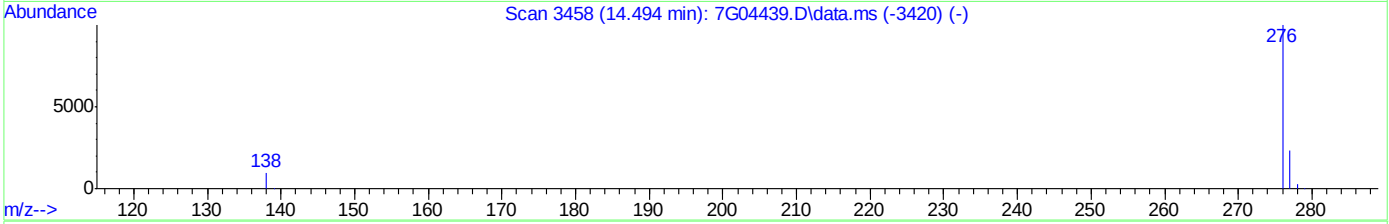
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10835.D
Acq On : 21 Jul 2020 2:19 pm
Operator : fouads
Sample : ic472-3
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 21 16:18:41 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration







TIC: 7G10835.D\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.393min (-0.052) 4.18ppm

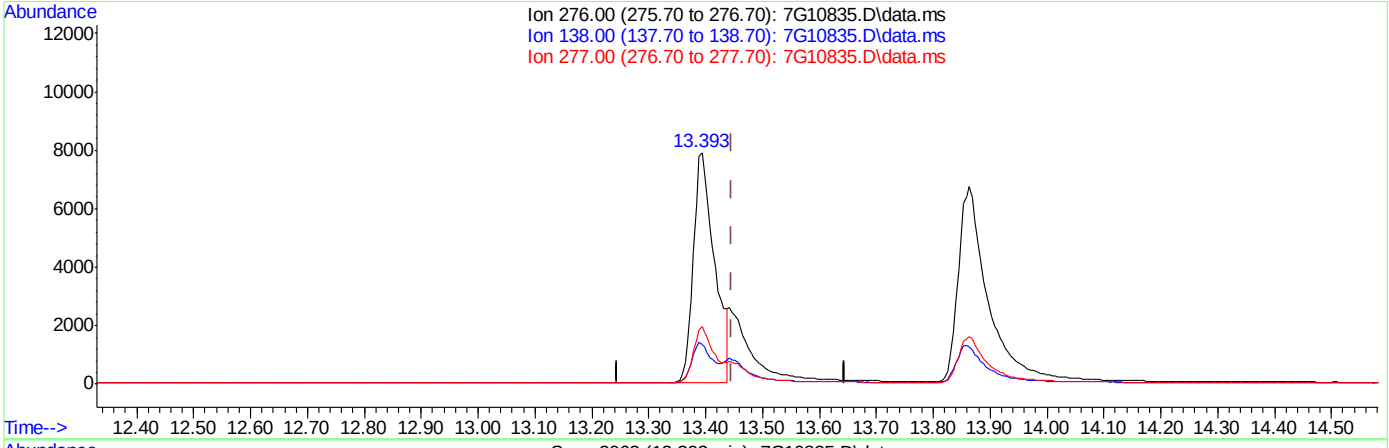
response 27333

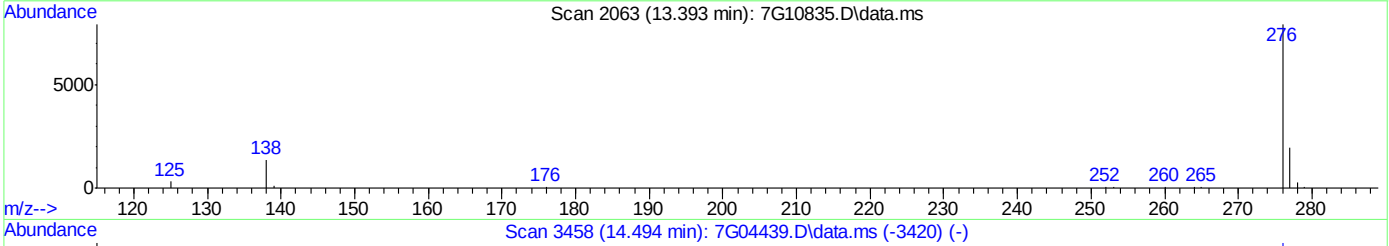
Ion	Exp%	Act%
276.00	100	100
138.00	14.60	16.53
277.00	22.90	24.07
0.00	0.00	0.00

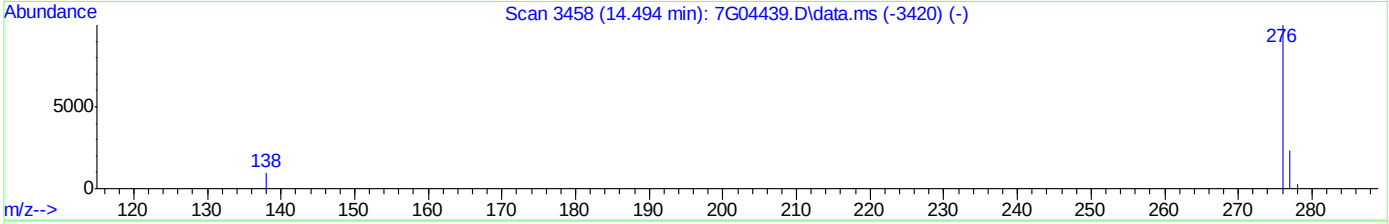
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10835.D
Acq On : 21 Jul 2020 2:19 pm
Operator : fouads
Sample : ic472-3
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 21 16:18:41 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration







TIC: 7G10835.D\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.393min (-0.052) 3.11ppm m

response 20359

Ion	Exp%	Act%
276.00	100	100
138.00	14.60	17.21
277.00	22.90	24.62
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10836.D
Acq On : 21 Jul 2020 2:43 pm
Operator : fouads
Sample : icc472-4
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 21 16:18:45 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration

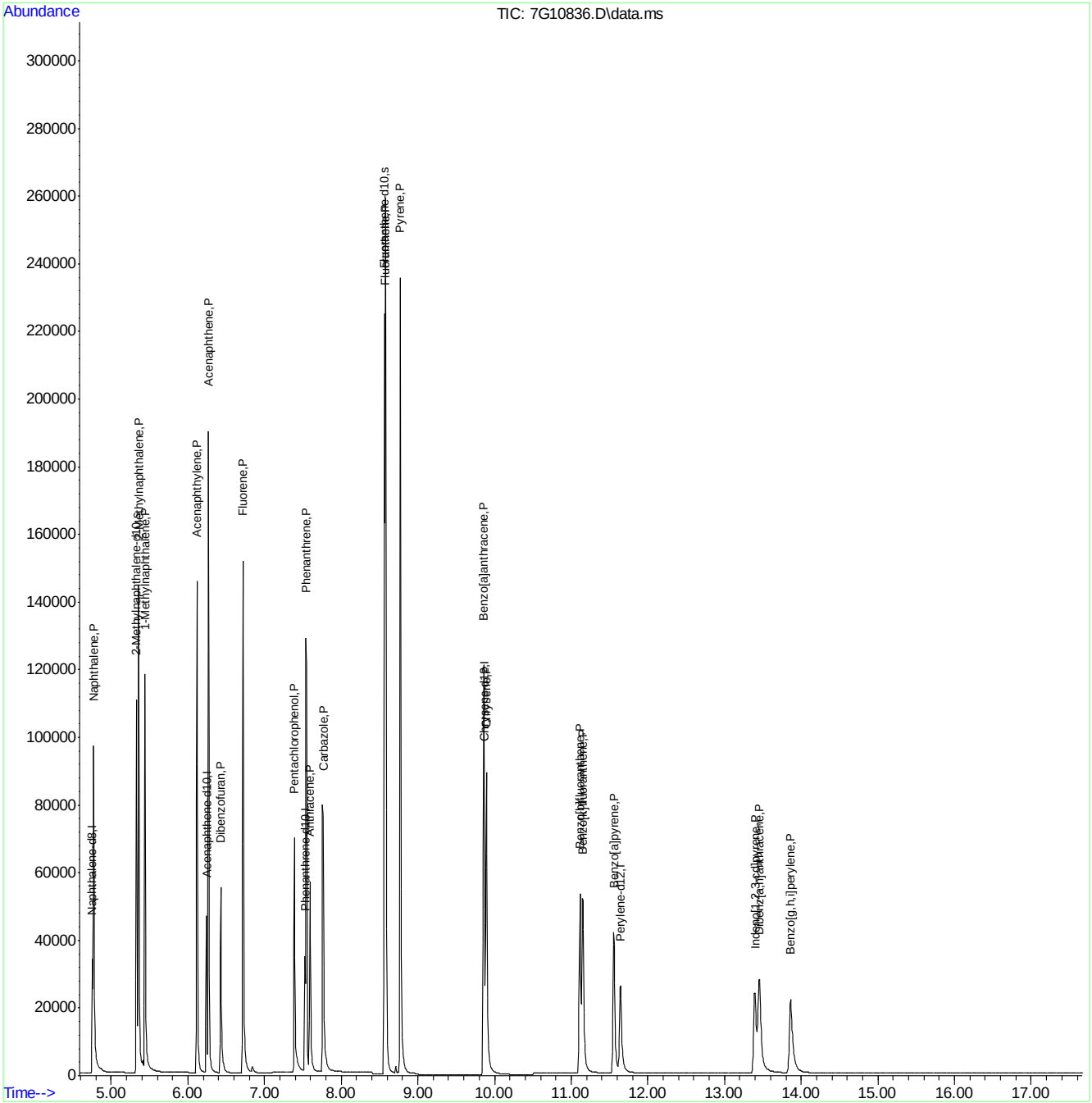
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.752	136	25300	4.00	ppm	-0.02
6) Acenaphthene-d10	6.244	164	14609	4.00	ppm	-0.01
11) Phenanthrene-d10	7.528	188	26093	4.00	ppm	-0.01
18) Chrysene-d12	9.867	240	42851	4.00	ppm	-0.02
22) Perylene-d12	11.644	264	37551	4.00	ppm	-0.02
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.329	152	38049	8.97	ppm	-0.04
Spiked Amount 10.000	Range 50 - 150		Recovery = 89.70%			
17) Fluoranthene-d10	8.567	212	140061	9.46	ppm	-0.03
Spiked Amount 10.000	Range 50 - 150		Recovery = 94.60%			
Target Compounds						Qvalue
2) Naphthalene	4.770	128	74430	9.28	ppm	100
3) 2-Methylnaphthalene	5.358	142	54816	9.01	ppm	99
5) 1-Methylnaphthalene	5.441	142	52432	9.01	ppm	97
7) Acenaphthylene	6.118	152	88343	9.50	ppm	99
8) Acenaphthene	6.268	153	57505	9.45	ppm	98
9) Dibenzofuran	6.428	168	40635	9.53	ppm	95
10) Fluorene	6.718	166	61698	9.42	ppm	98
12) Pentachlorophenol	7.389	266	24644	31.26	ppm	96
13) Phenanthrene	7.542	178	89406	9.41	ppm	98
14) Anthracene	7.591	178	44114	4.59	ppm	100
15) Carbazole	7.764	167	75881	4.72	ppm	100
16) Fluoranthene	8.579	202	169605	9.33	ppm	99
19) Pyrene	8.769	202	173437	8.66	ppm	99
20) Benzo[a]anthracene	9.857	228	68306	4.53	ppm	99
21) Chrysene	9.893	228	77498	4.81	ppm	100
23) Benzo[b]fluoranthene	11.115	252	63976	4.30	ppm	100
24) Benzo[k]fluoranthene	11.149	252	70592	4.10	ppm	99
25) Benzo[a]pyrene	11.556	252	60678	4.68	ppm	100
26) Indeno[1,2,3-cd]pyrene	13.400	276	41853	7.17	ppm	99
27) Dibenz[a,h]anthracene	13.454	278	44122	7.25	ppm	99
28) Benzo[g,h,i]perylene	13.861	276	47313	7.62	ppm	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10836.D
Acq On : 21 Jul 2020 2:43 pm
Operator : fouads
Sample : icc472-4
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

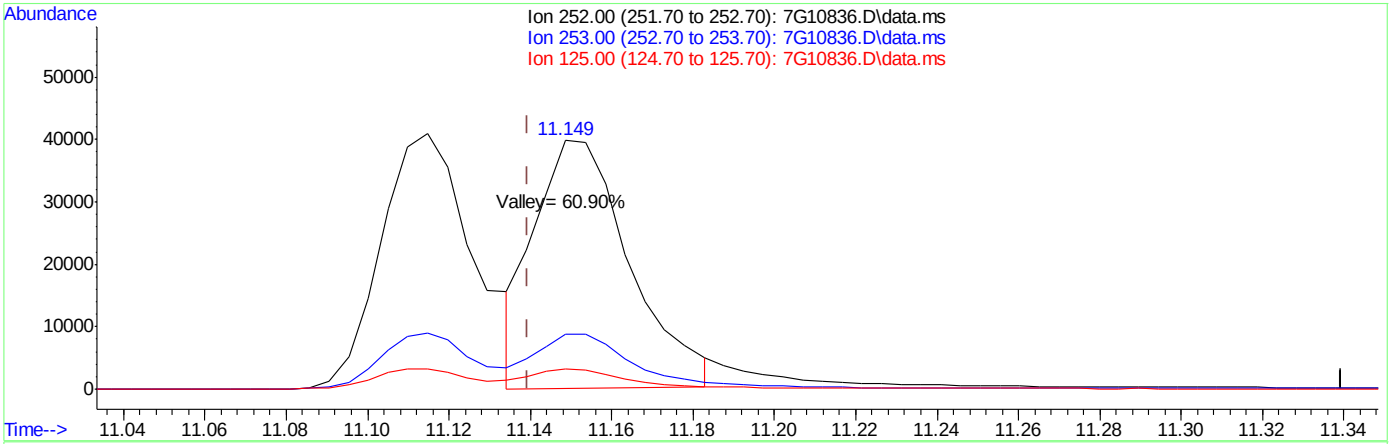
Quant Time: Jul 21 16:18:45 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration

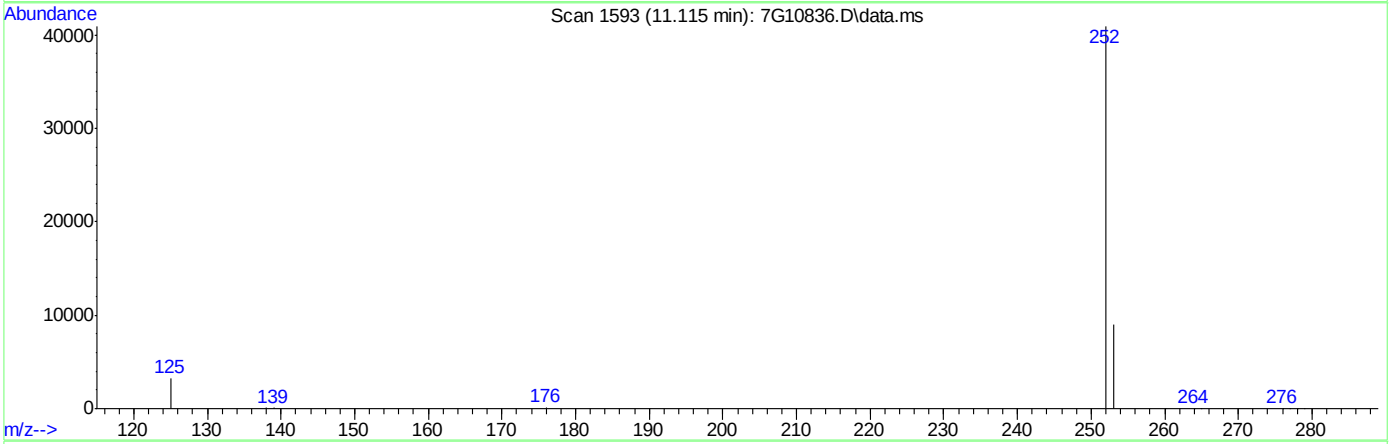


Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10836.D
Acq On : 21 Jul 2020 2:43 pm
Operator : fouads
Sample : icc472-4
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 21 16:18:45 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration





TIC: 7G10836.D\data.ms

(23) Benzo[b]fluoranthene (P)

11.115min (-0.025) 4.30ppm

response 63976

Ion	Exp%	Act%
252.00	100	100
253.00	22.10	22.03
125.00	7.40	7.61
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10837.D
Acq On : 21 Jul 2020 3:07 pm
Operator : fouads
Sample : ic472-5
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 21 16:18:49 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration

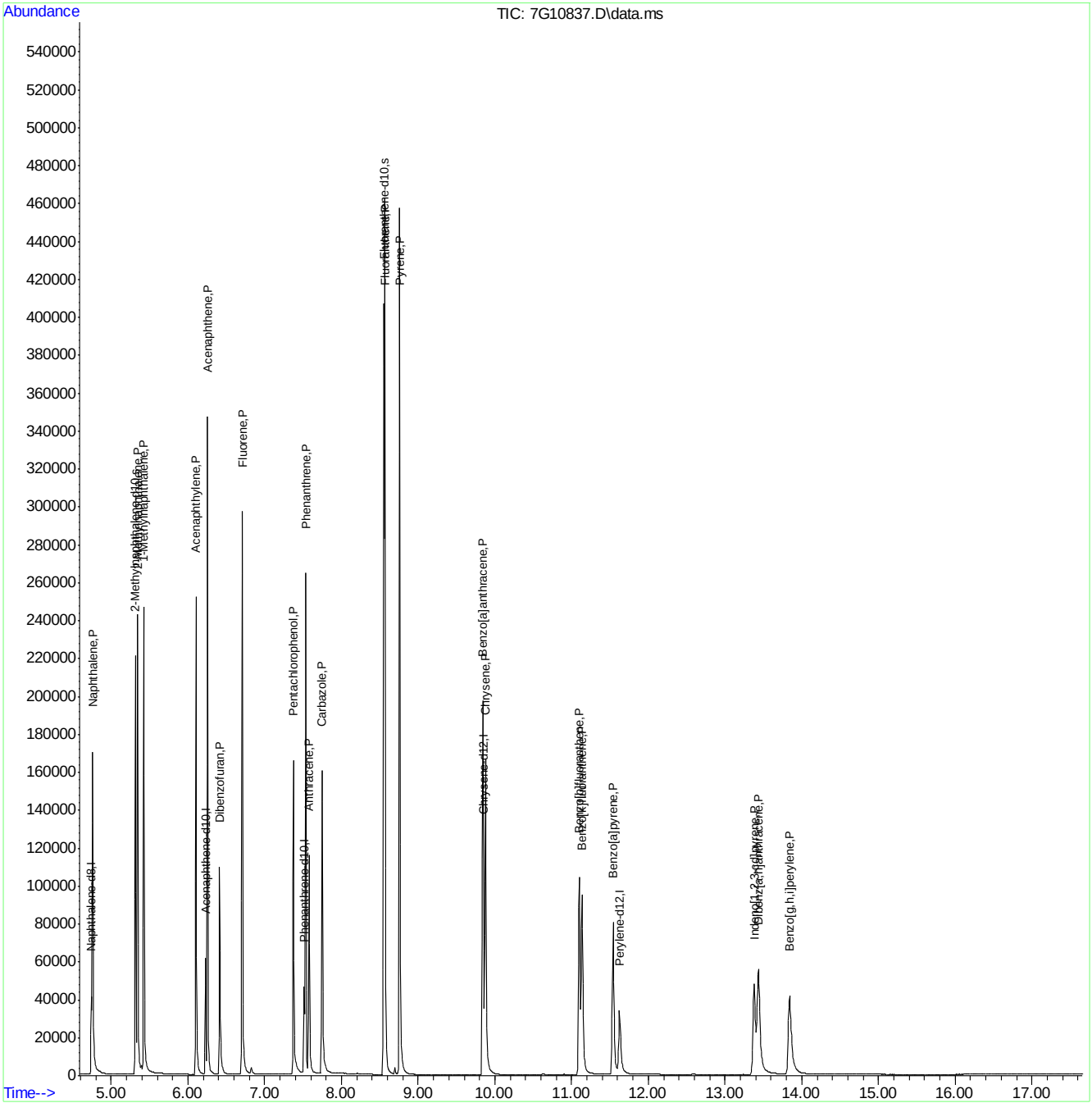
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.740	136	29180	4.00	ppm	-0.03
6) Acenaphthene-d10	6.229	164	17414	4.00	ppm	-0.03
11) Phenanthrene-d10	7.514	188	31347	4.00	ppm	-0.03
18) Chrysene-d12	9.852	240	50970	4.00	ppm	-0.03
22) Perylene-d12	11.624	264	45434	4.00	ppm	-0.04
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.317	152	67210	13.75	ppm	-0.05
Spiked Amount 10.000	Range 50 - 150		Recovery = 137.50%			
17) Fluoranthene-d10	8.554	212	243460	13.69	ppm	-0.04
Spiked Amount 10.000	Range 50 - 150		Recovery = 136.90%			
Target Compounds						Qvalue
2) Naphthalene	4.758	128	128711	13.92	ppm	100
3) 2-Methylnaphthalene	5.347	142	95557	13.62	ppm	97
5) 1-Methylnaphthalene	5.423	142	90151	13.42	ppm	85
7) Acenaphthylene	6.104	152	152885	13.80	ppm	98
8) Acenaphthene	6.253	153	101085	13.94	ppm	95
9) Dibenzofuran	6.413	168	71111	13.99	ppm	91
10) Fluorene	6.708	166	109450	14.01	ppm	97
12) Pentachlorophenol	7.375	266	52326	55.25	ppm	97
13) Phenanthrene	7.535	178	157070	13.76	ppm	99
14) Anthracene	7.577	178	78741	6.82	ppm	100
15) Carbazole	7.744	167	133273	6.89	ppm	93
16) Fluoranthene	8.570	202	298825	13.68	ppm	99
19) Pyrene	8.757	202	307670	12.91	ppm	99
20) Benzo[a]anthracene	9.843	228	121166	6.75	ppm	99
21) Chrysene	9.879	228	131534	6.86	ppm	100
23) Benzo[b]fluoranthene	11.100	252	113926	6.33	ppm	100
24) Benzo[k]fluoranthene	11.134	252	121858	5.85	ppm	98
25) Benzo[a]pyrene	11.542	252	108027	6.88	ppm	100
26) Indeno[1,2,3-cd]pyrene	13.381	276	76251	10.80	ppm	99
27) Dibenz[a,h]anthracene	13.434	278	81827	11.11	ppm	99
28) Benzo[g,h,i]perylene	13.842	276	86286	11.49	ppm	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10837.D
Acq On : 21 Jul 2020 3:07 pm
Operator : fouads
Sample : ic472-5
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 21 16:18:49 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10838.D
Acq On : 21 Jul 2020 3:31 pm
Operator : fouads
Sample : ic472-6
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 21 16:18:53 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration

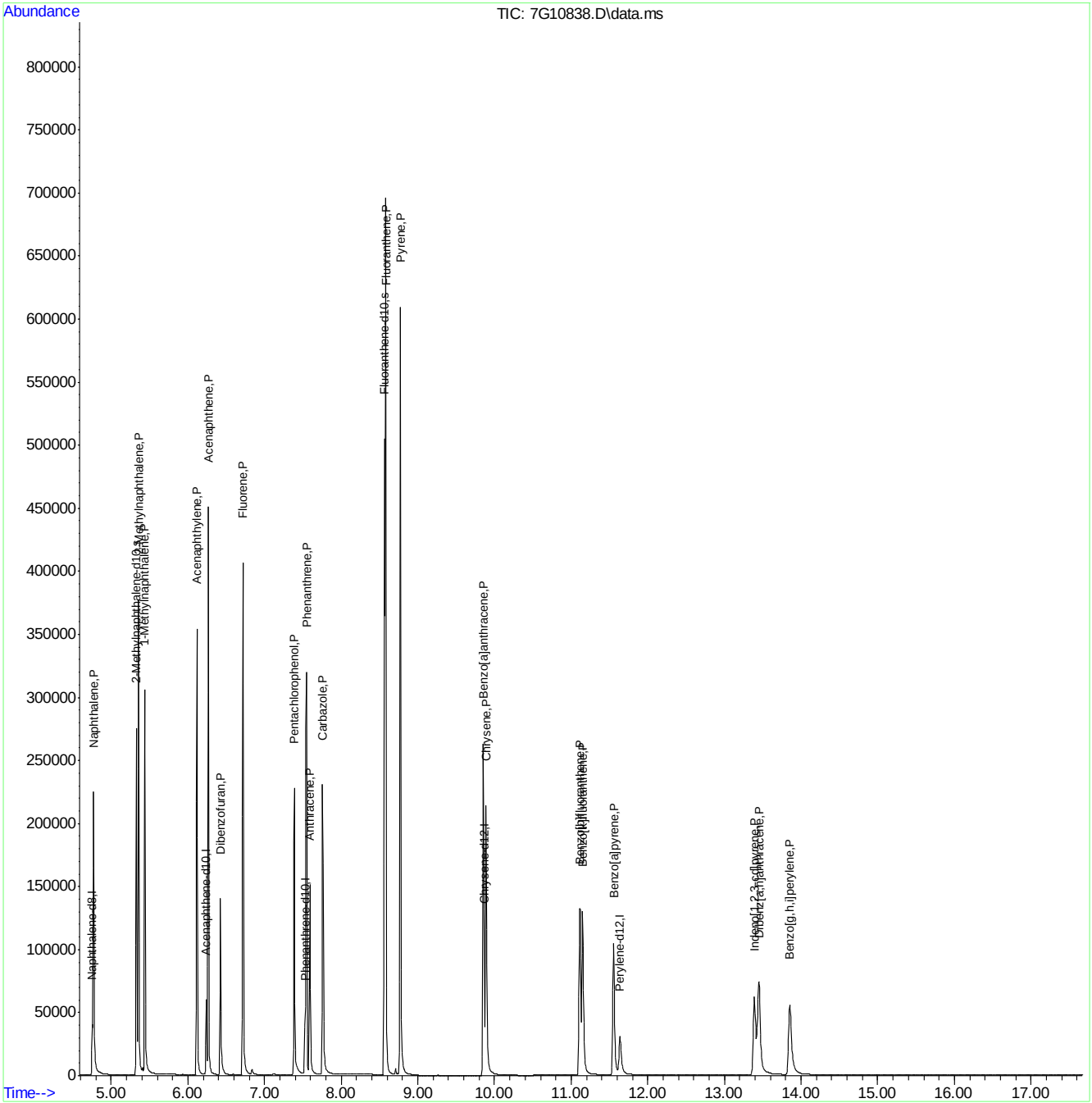
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.752	136	27924	4.00	ppm	-0.02
6) Acenaphthene-d10	6.239	164	16693	4.00	ppm	-0.02
11) Phenanthrene-d10	7.528	188	29642	4.00	ppm	-0.01
18) Chrysene-d12	9.867	240	49529	4.00	ppm	-0.02
22) Perylene-d12	11.636	264	43958	4.00	ppm	-0.03
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.329	152	87127	18.62	ppm	-0.04
Spiked Amount 10.000	Range 50 - 150		Recovery = 186.20%#			
17) Fluoranthene-d10	8.566	212	316580	18.82	ppm	-0.03
Spiked Amount 10.000	Range 50 - 150		Recovery = 188.20%#			
Target Compounds						Qvalue
2) Naphthalene	4.770	128	165015	18.64	ppm	99
3) 2-Methylnaphthalene	5.358	142	126792	18.88	ppm	100
5) 1-Methylnaphthalene	5.435	142	118187	18.39	ppm	82
7) Acenaphthylene	6.118	152	198973	18.73	ppm	99
8) Acenaphthene	6.268	153	129983	18.69	ppm	96
9) Dibenzofuran	6.423	168	89811	18.43	ppm	98
10) Fluorene	6.717	166	141988	18.97	ppm	98
12) Pentachlorophenol	7.389	266	73035	81.55	ppm	95
13) Phenanthrene	7.549	178	204799	18.97	ppm	98
14) Anthracene	7.591	178	101141	9.27	ppm	99
15) Carbazole	7.757	167	170049	9.30	ppm	93
16) Fluoranthene	8.582	202	386576	18.71	ppm	99
19) Pyrene	8.772	202	403389	17.42	ppm	99
20) Benzo[a]anthracene	9.855	228	156963	9.00	ppm	100
21) Chrysene	9.891	228	169372	9.09	ppm	98
23) Benzo[b]fluoranthene	11.112	252	146078	8.39	ppm	99
24) Benzo[k]fluoranthene	11.151	252	161554	8.02	ppm	99
25) Benzo[a]pyrene	11.554	252	141460	9.32	ppm	100
26) Indeno[1,2,3-cd]pyrene	13.393	276	99407	14.56	ppm	98
27) Dibenz[a,h]anthracene	13.451	278	109943	15.42	ppm	99
28) Benzo[g,h,i]perylene	13.854	276	114554	15.76	ppm	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10838.D
Acq On : 21 Jul 2020 3:31 pm
Operator : fouads
Sample : ic472-6
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 21 16:18:53 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10839.D
Acq On : 21 Jul 2020 3:55 pm
Operator : fouads
Sample : ic472-7
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 21 16:18:56 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration

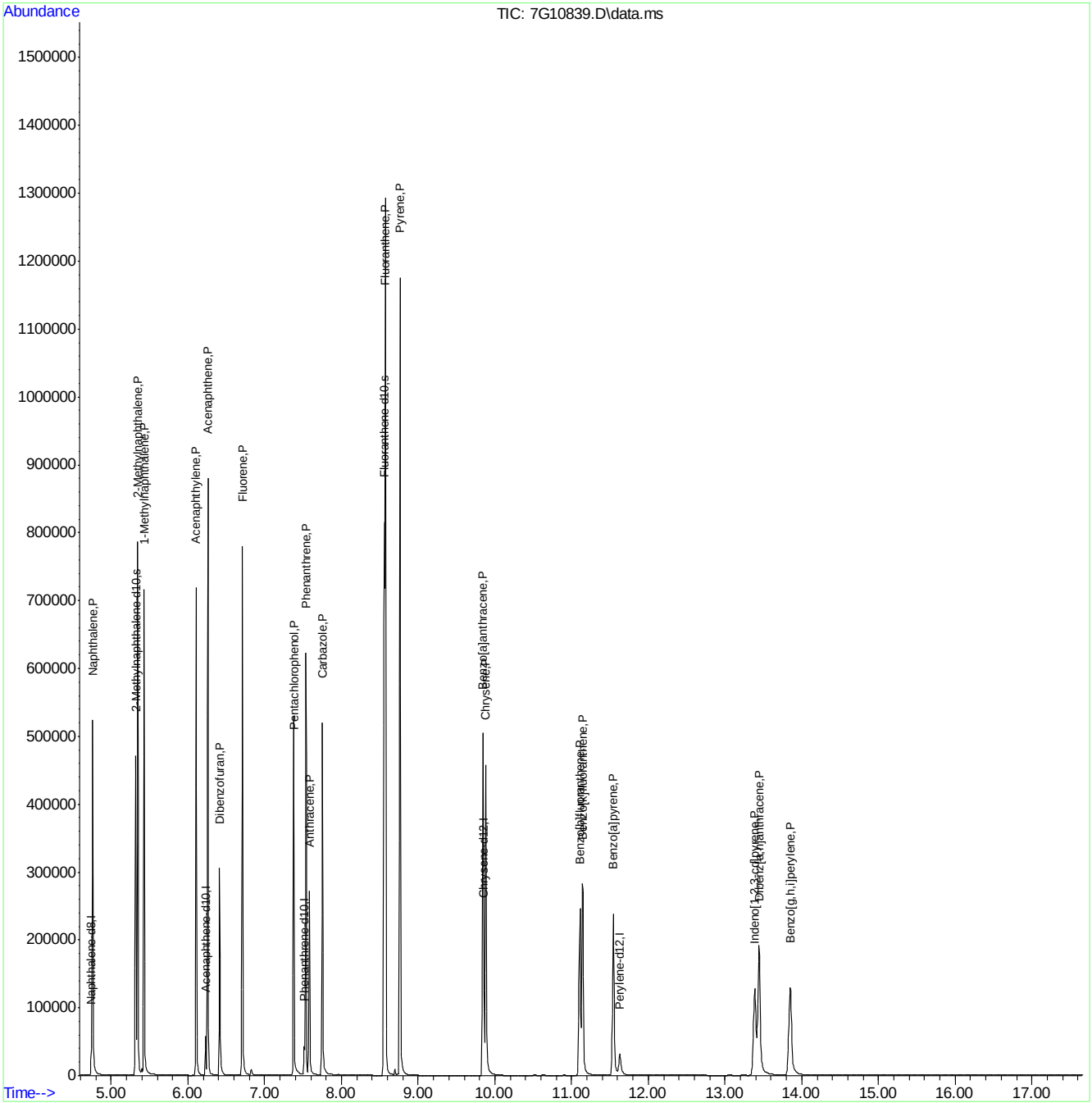
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.740	136	26293	4.00	ppm	-0.03
6) Acenaphthene-d10	6.229	164	15786	4.00	ppm	-0.03
11) Phenanthrene-d10	7.514	188	28087	4.00	ppm	-0.03
18) Chrysene-d12	9.855	240	46860	4.00	ppm	-0.03
22) Perylene-d12	11.629	264	41097	4.00	ppm	-0.03
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.323	152	176001	39.95	ppm	-0.04
Spiked Amount 10.000	Range 50 - 150		Recovery =	399.50%#		
17) Fluoranthene-d10	8.560	212	616116	38.66	ppm	-0.04
Spiked Amount 10.000	Range 50 - 150		Recovery =	386.60%#		
Target Compounds						Qvalue
2) Naphthalene	4.758	128	329242	39.51	ppm	99
3) 2-Methylnaphthalene	5.347	142	255780	40.45	ppm	90
5) 1-Methylnaphthalene	5.429	142	239953	39.66	ppm	92
7) Acenaphthylene	6.108	152	393285	39.15	ppm	98
8) Acenaphthene	6.258	153	260794	39.66	ppm	95
9) Dibenzofuran	6.413	168	179943	39.06	ppm	90
10) Fluorene	6.708	166	280750	39.66	ppm	98
12) Pentachlorophenol	7.382	266	163526	192.69	ppm	92
13) Phenanthrene	7.535	178	404134	39.50	ppm	98
14) Anthracene	7.584	178	196055	18.96	ppm	97
15) Carbazole	7.751	167	325209	18.77	ppm	95
16) Fluoranthene	8.576	202	770477	39.36	ppm	98
19) Pyrene	8.763	202	783512	35.75	ppm	99
20) Benzo[a]anthracene	9.845	228	307361	18.64	ppm	99
21) Chrysene	9.881	228	324523	18.40	ppm	99
23) Benzo[b]fluoranthene	11.110	252	284281	17.47	ppm	99
24) Benzo[k]fluoranthene	11.144	252	311293	16.53	ppm	100
25) Benzo[a]pyrene	11.547	252	275786	19.43	ppm	99
26) Indeno[1,2,3-cd]pyrene	13.391	276	209818	32.86	ppm	99
27) Dibenz[a,h]anthracene	13.444	278	229817	34.49	ppm	99
28) Benzo[g,h,i]perylene	13.852	276	234890	34.57	ppm	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10839.D
Acq On : 21 Jul 2020 3:55 pm
Operator : fouads
Sample : ic472-7
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 21 16:18:56 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Jul 20 13:21:21 2020
Response via : Initial Calibration



Manual Integrations APPROVED
(compounds with "m" flag)
Nicole McCampbell
07/22/20 17:04

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10840.D
Acq On : 21 Jul 2020 4:19 pm
Operator : fouads
Sample : icv472-4
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 21 16:47:23 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration

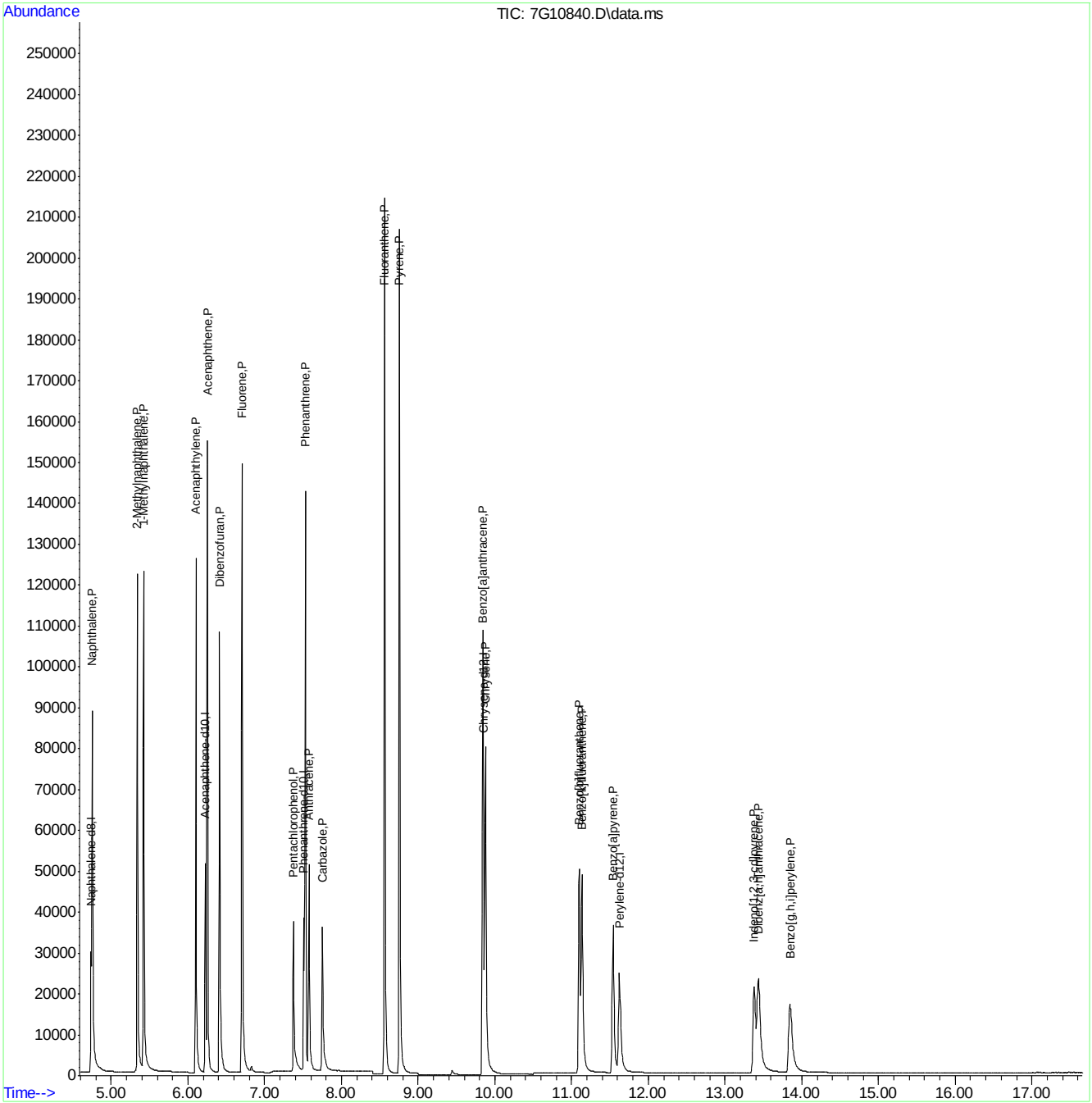
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.734	136	24813	4.00	ppm	0.00
6) Acenaphthene-d10	6.224	164	14478	4.00	ppm	0.00
11) Phenanthrene-d10	7.507	188	26182	4.00	ppm	0.00
18) Chrysene-d12	9.852	240	41612	4.00	ppm	0.00
22) Perylene-d12	11.624	264	36348	4.00	ppm	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	0.000	152	0	0.00	ppm	
Spiked Amount 10.000	Range 50 - 150		Recovery =	0.00%#		
17) Fluoranthene-d10	0.000	212	0d	0.00	ppm	
Spiked Amount 10.000	Range 50 - 150		Recovery =	0.00%#		
Target Compounds						Qvalue
2) Naphthalene	4.752	128	68472	9.54	ppm	99
3) 2-Methylnaphthalene	5.341	142	45097	8.17	ppm	95
5) 1-Methylnaphthalene	5.423	142	49815	9.88	ppm	97
7) Acenaphthylene	6.104	152	76527	9.07	ppm	100
8) Acenaphthene	6.253	153	53203	9.63	ppm	98
9) Dibenzofuran	6.408	168	74284	18.81	ppm	90
10) Fluorene	6.703	166	58318	9.70	ppm	98
12) Pentachlorophenol	7.375	266	15014	14.76	ppm	99
13) Phenanthrene	7.528	178	83170	9.48	ppm	99
14) Anthracene	7.577	178	37274	4.25	ppm	99
15) Carbazole	7.750	167	37176	2.38	ppm	99
16) Fluoranthene	8.563	202	144320	8.72	ppm	100
19) Pyrene	8.753	202	152837	9.18	ppm	99
20) Benzo[a]anthracene	9.840	228	58564	4.49	ppm	99
21) Chrysene	9.879	228	72701	5.04	ppm	100
23) Benzo[b]fluoranthene	11.100	252	57562	4.67	ppm	100
24) Benzo[k]fluoranthene	11.134	252	62383	4.74	ppm	100
25) Benzo[a]pyrene	11.542	252	54221	4.51	ppm	100
26) Indeno[1,2,3-cd]pyrene	13.376	276	34907m	4.45	ppm	
27) Dibenz[a,h]anthracene	13.439	278	38293	4.40	ppm	99
28) Benzo[g,h,i]perylene	13.847	276	40149	4.24	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10840.D
Acq On : 21 Jul 2020 4:19 pm
Operator : fouads
Sample : icv472-4
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 21 16:47:23 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration



Manual Integration Approval Summary

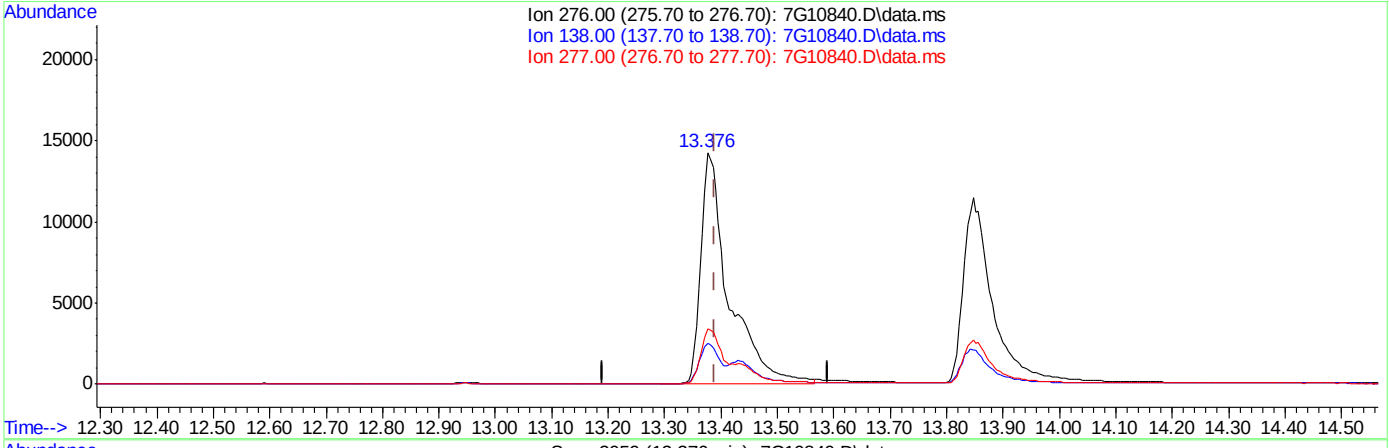
Sample Number: S7G472-ICV472
Lab FileID: 7G10840.D
Injection Time: 07/21/20 16:19
Method: SW846 8270D BY SIM
Analyst approved: 07/22/20 13:31 Fouad Sekkar
Supervisor approved: 07/22/20 17:04 Nicole McCampbell

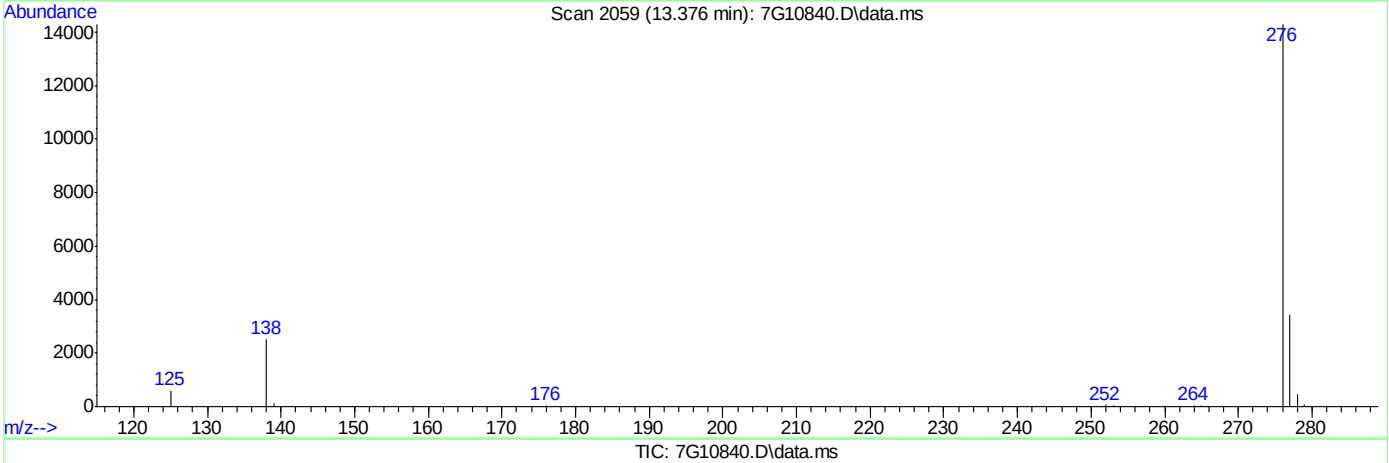
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		13.38	Missed peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10840.D
Acq On : 21 Jul 2020 4:19 pm
Operator : fouads
Sample : icv472-4
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 21 16:46:41 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration





TIC: 7G10840.D\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.376min (-0.015) 6.21ppm

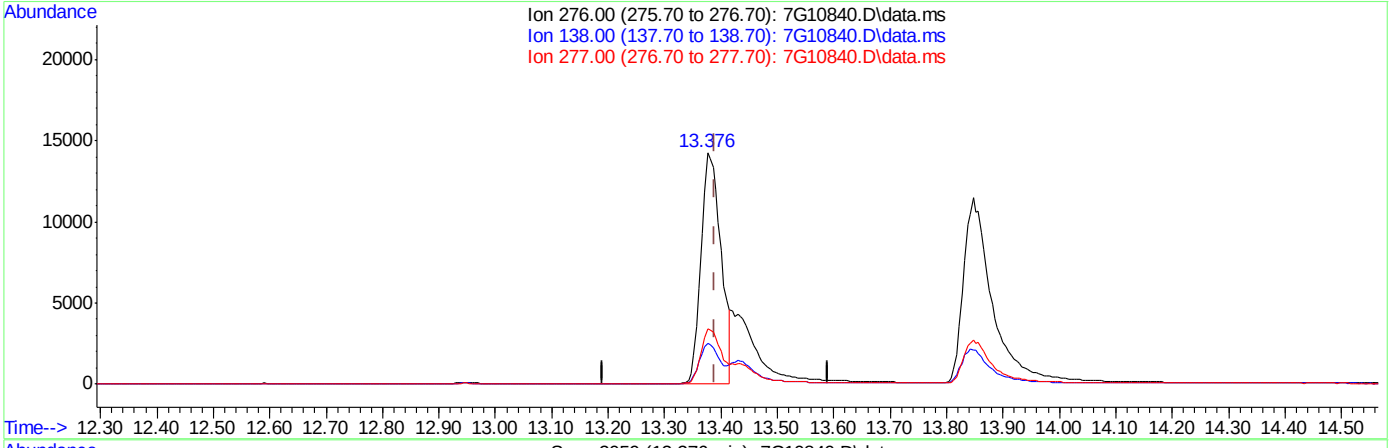
response 48737

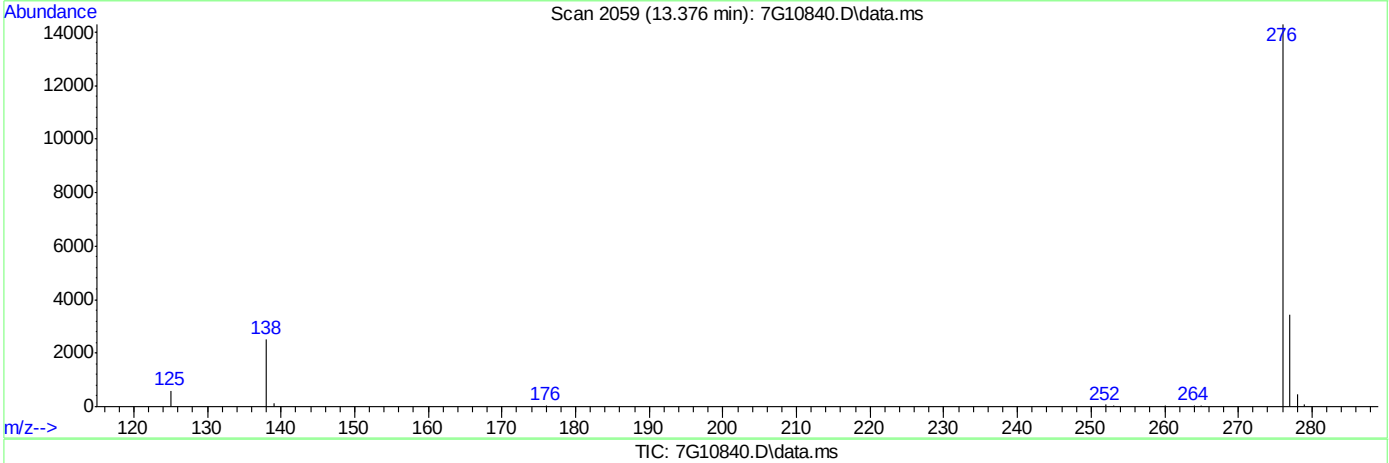
Ion	Exp%	Act%
276.00	100	100
138.00	14.00	17.25
277.00	23.10	23.60
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\072120_7G472\
Data File : 7G10840.D
Acq On : 21 Jul 2020 4:19 pm
Operator : fouads
Sample : icv472-4
Misc : op80679,S7G472,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 21 16:46:41 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Tue Jul 21 16:46:17 2020
Response via : Initial Calibration





TIC: 7G10840.D\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.376min (-0.015) 4.45ppm m

response 34907

Ion	Exp%	Act%
276.00	100	100
138.00	14.00	17.64
277.00	23.10	23.92
0.00	0.00	0.00

Manual Integrations APPROVED
(compounds with "m" flag)
Naresh Jiawan
08/31/20 11:56

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-31-2020\s7g494\
Data File : 7G11408.d
Acq On : 29 Aug 2020 8:39 am
Operator : FOUADS
Sample : cc472-4
Misc : op81342,S7G494,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 31 00:11:23 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Aug 31 00:10:20 2020
Response via : Initial Calibration

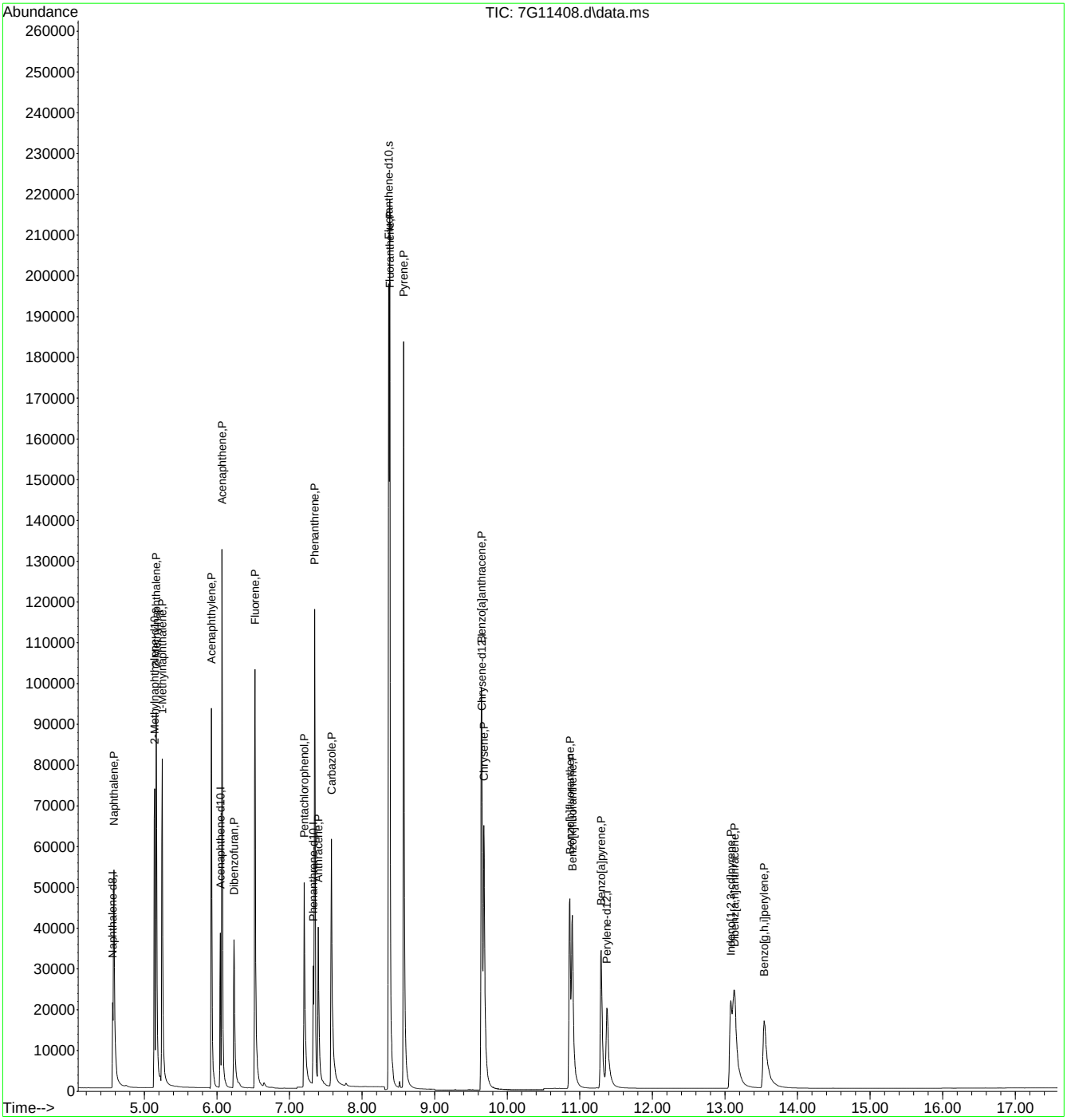
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Naphthalene-d8	4.564	136	17369	4.00	ppm	0.00
6) Acenaphthene-d10	6.046	164	10600	4.00	ppm	0.00
11) Phenanthrene-d10	7.327	188	21043	4.00	ppm	0.00
18) Chrysene-d12	9.652	240	36799	4.00	ppm	0.00
22) Perylene-d12	11.372	264	33303	4.00	ppm	0.00
System Monitoring Compounds						
4) 2-Methylnaphthalene-d10	5.141	152	28825	11.03	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 110.30%			
17) Fluoranthene-d10	8.367	212	125032	11.34	ppm	0.00
Spiked Amount 10.000	Range 50 - 150		Recovery = 113.40%			
Target Compounds						Qvalue
2) Naphthalene	4.582	128	50916	10.12	ppm	100
3) 2-Methylnaphthalene	5.164	142	38384	9.94	ppm	100
5) 1-Methylnaphthalene	5.247	142	36934	10.44	ppm	100
7) Acenaphthylene	5.926	152	65599	10.58	ppm	100
8) Acenaphthene	6.071	153	41989	10.36	ppm	100
9) Dibenzofuran	6.235	168	32887	11.55	ppm	100
10) Fluorene	6.525	166	46067	10.45	ppm	100
12) Pentachlorophenol	7.202	266	21173	24.48	ppm	100
13) Phenanthrene	7.348	178	70575	10.00	ppm	100
14) Anthracene	7.397	178	35211	4.99	ppm	100
15) Carbazole	7.578	167	66442	5.28	ppm	100
16) Fluoranthene	8.383	202	143604	10.74	ppm	100
19) Pyrene	8.573	202	145758	9.89	ppm	100
20) Benzo[a]anthracene	9.644	228	56337	4.88	ppm	100
21) Chrysene	9.678	228	69308	5.44	ppm	100
23) Benzo[b]fluoranthene	10.863	252	52453	4.64	ppm	100
24) Benzo[k]fluoranthene	10.896	252	67910	5.62	ppm	100
25) Benzo[a]pyrene	11.294	252	54342	4.93	ppm	100
26) Indeno[1,2,3-cd]pyrene	13.080	276	38791m	5.40	ppm	
27) Dibenz[a,h]anthracene	13.134	278	45346	5.69	ppm	99
28) Benzo[g,h,i]perylene	13.541	276	46734	5.39	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-31-2020\s7g494\
Data File : 7G11408.d
Acq On : 29 Aug 2020 8:39 am
Operator : FOUADS
Sample : cc472-4
Misc : op81342,S7G494,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 31 00:11:23 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Aug 31 00:10:20 2020
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: S7G494-CC472
Lab FileID: 7G11408.D
Injection Time: 08/29/20 08:39

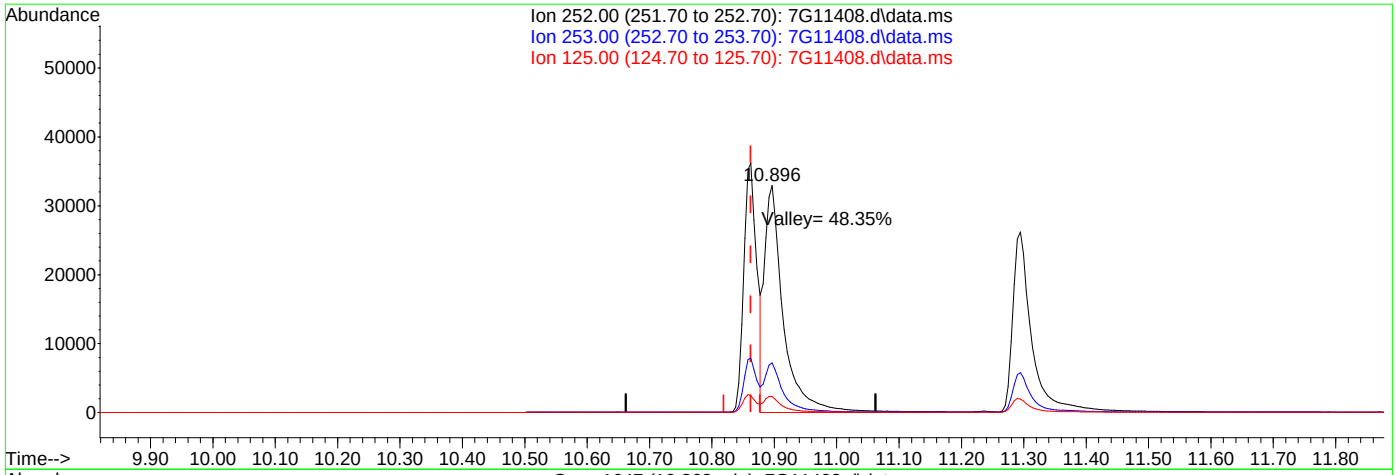
Method: SW846 8270D BY SIM
Analyst approved: 08/31/20 01:14 Edessa Sumagaysay
Supervisor approved: 08/31/20 11:56 Naresh Jiawan

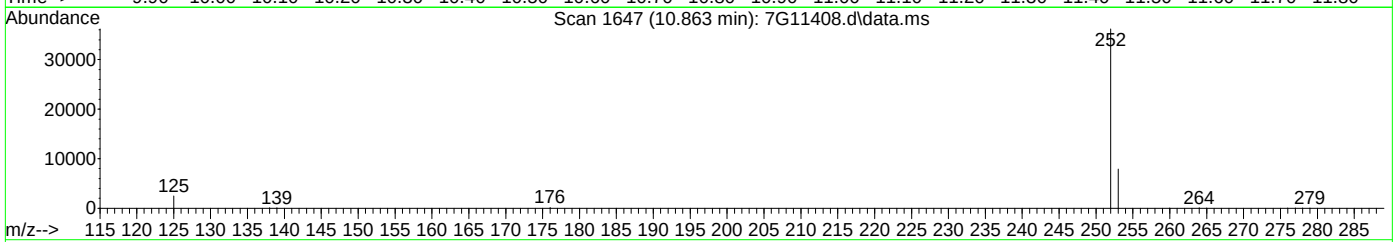
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		13.08	Overlapping peak

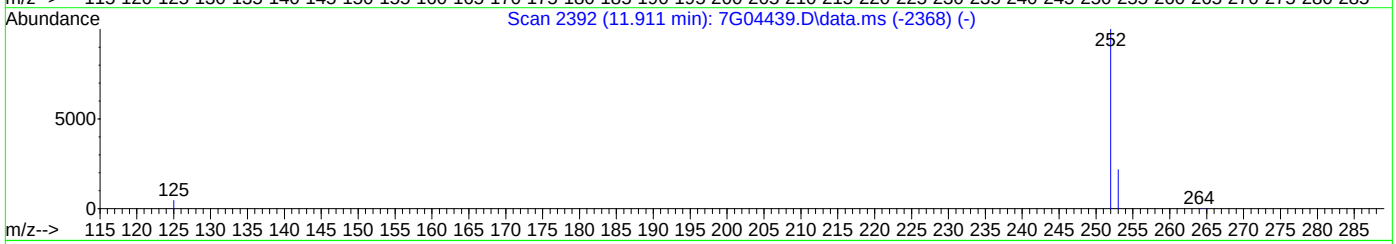
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-31-2020\s7g494\
Data File : 7G11408.d
Acq On : 29 Aug 2020 8:39 am
Operator : FOUADS
Sample : cc472-4
Misc : op81342,S7G494,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 31 00:10:23 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Aug 31 00:10:20 2020
Response via : Initial Calibration







TIC: 7G11408.d\data.ms

(23) Benzo[b]fluoranthene (P)

10.863min (0.000) 4.64ppm

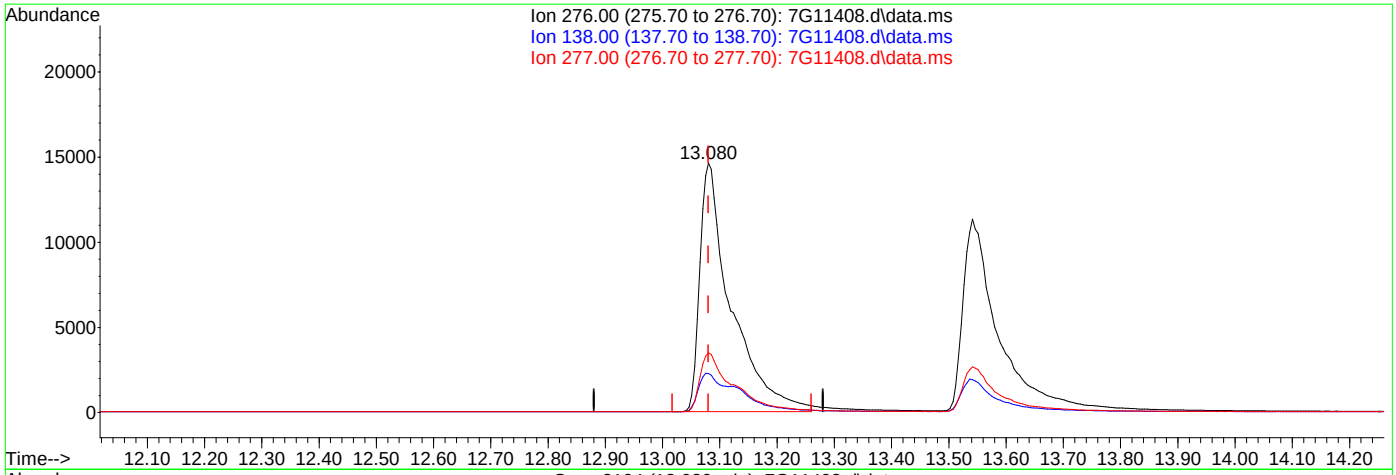
response 52453

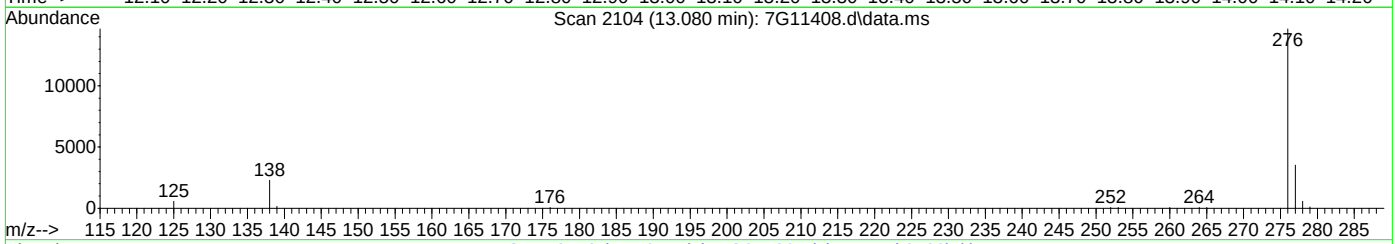
Ion	Exp%	Act%
252.00	100	100
253.00	21.80	21.74
125.00	6.80	6.61
0.00	0.00	0.00

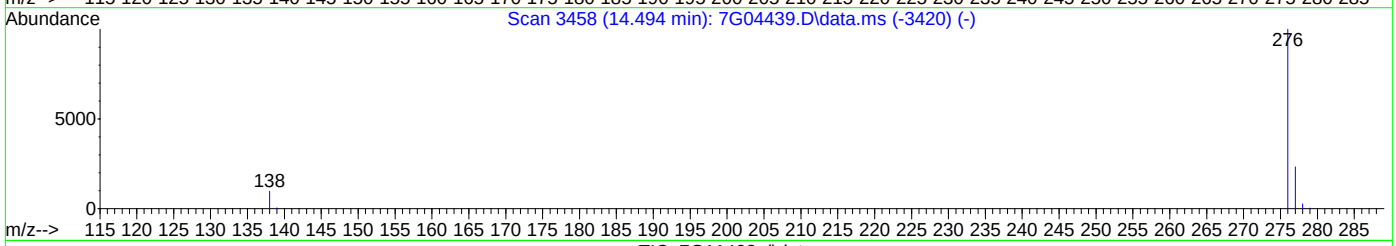
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-31-2020\s7g494\
Data File : 7G11408.d
Acq On : 29 Aug 2020 8:39 am
Operator : FOUADS
Sample : cc472-4
Misc : op81342,S7G494,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 31 00:10:23 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Aug 31 00:10:20 2020
Response via : Initial Calibration







TIC: 7G11408.d\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.080min (0.000) 7.67ppm

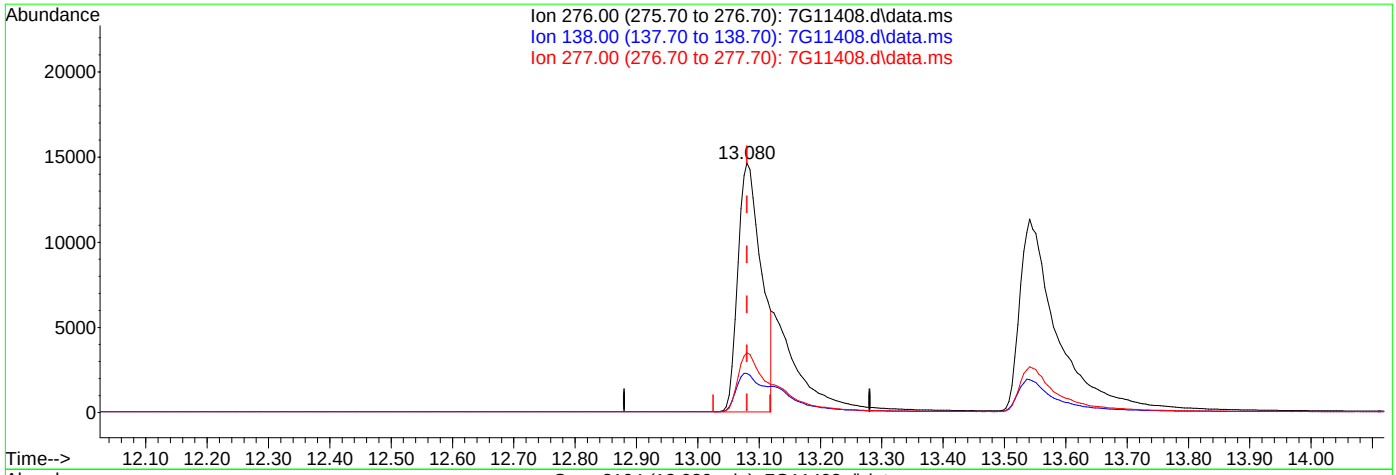
response 55123

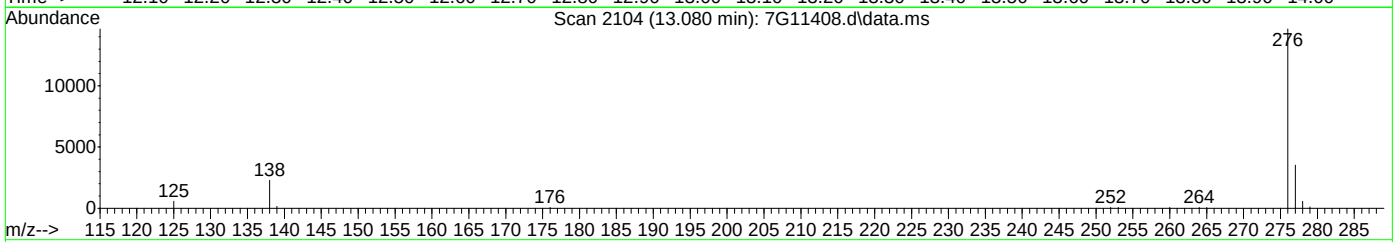
Ion	Exp%	Act%
276.00	100	100
138.00	15.60	15.22
277.00	24.00	23.65
0.00	0.00	0.00

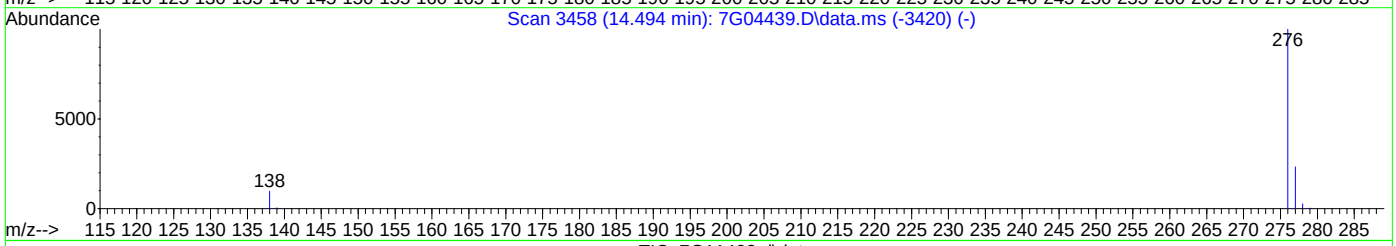
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-31-2020\s7g494\
Data File : 7G11408.d
Acq On : 29 Aug 2020 8:39 am
Operator : FOUADS
Sample : cc472-4
Misc : op81342,S7G494,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 31 00:10:23 2020
Quant Method : C:\msdchem\1\methods\simpahf7gD0072120.m
Quant Title : PAH's by 8270 SIM
QLast Update : Mon Aug 31 00:10:20 2020
Response via : Initial Calibration







TIC: 7G11408.d\data.ms

(26) Indeno[1,2,3-cd]pyrene (P)

13.080min (0.000) 5.40ppm m

response 38791

Ion	Exp%	Act%
276.00	100	100
138.00	15.60	15.61
277.00	24.00	23.97
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 08/18/20 14:38

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072419.D
Acq On : 17 Aug 2020 10:20 am
Operator : marthav
Sample : ic2953-1 8270 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 18 10:31:27 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.612	152	161224	40.00	ppm	0.00
22) Naphthalene-d8	7.034	136	598128	40.00	ppm	0.00
43) Acenaphthene-d10	9.072	164	281230	40.00	ppm	0.00
70) Phenanthrene-d10	10.816	188	454971	40.00	ppm	0.00
92) Chrysene-d12	14.009	240	332886	40.00	ppm	-0.01
102) Perylene-d12	16.186	264	260830	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	0.000	152	0m	40.00	ppm	-5.62
120) Naphthalene-d8A	0.000	136	0m	40.00	ppm	-7.04
127) Acenaphthene-d10A	0.000	164	0m	40.00	ppm	-9.08
136) Phenanthrene-d10A	0.000	188	0m	40.00	ppm	-10.82
146) Chrysene-d12A	0.000	240	0m	40.00	ppm	-14.02
153) Perylene-d12A	0.000	264	0m	40.00	ppm	-16.19
System Monitoring Compounds						
7) 2-Fluorophenol	4.274	112	11736	2.03	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 2.03%#			
9) Phenol-d5	5.301	99	12960	1.88	ppm	0.00
Spiked Amount 100.000	Range 10 - 50		Recovery = 1.88%#			
23) Nitrobenzene-d5	6.227	82	6093	0.99	ppm	-0.01
Spiked Amount 50.000	Range 42 - 108		Recovery = 1.98%#			
47) 2-Fluorobiphenyl	8.302	172	10447	1.03	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 2.06%#			
75) 2,4,6-Tribromophenol	10.008	330	1376	1.66	ppm	0.00
Spiked Amount 100.000	Range 33 - 118		Recovery = 1.66%#			
95) Terphenyl-d14	12.731	244	8474	0.96	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 1.92%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.434	88	2969	1.07	ppm	# 26
3) N-nitrosodimethylamine	2.782	42	5566	1.13	ppm	# 32
4) Pyridine	2.836	79	7997m	1.19	ppm	
5) Benzaldehyde	5.141	106	4841	1.01	ppm	86
6) Aniline	5.264	93	8417	0.88	ppm	89
8) bis(2-Chloroethyl)ether	5.344	93	5811	0.98	ppm	74
10) Phenol	5.317	94	6982	0.86	ppm	90
11) 2-Chlorophenol	5.403	128	5565	0.90	ppm	75
12) 1,3-Dichlorobenzene	5.547	146	6325	0.99	ppm	97
13) 1,4-Dichlorobenzene	5.633	146	6889	1.02	ppm	93
14) 1,2-Dichlorobenzene	5.793	146	6392	0.99	ppm	99
15) Benzyl alcohol	5.793	108	3230	0.76	ppm	77
16) 2,2'-Oxybis(1-chloropr...	5.932	45	12538	1.01	ppm	71
17) 2-Methylphenol	5.954	108	5134	0.87	ppm	98
18) Acetophenone	6.066	105	7729	0.89	ppm	98
19) Hexachloroethane	6.157	117	2504	0.98	ppm	81
20) N-Nitroso-di-n-propyla...	6.077	70	4096	0.89	ppm	# 59
21) 3&4-Methylphenol	6.136	108	5249	0.87	ppm	96
24) Nitrobenzene	6.248	77	6721	1.10	ppm	77
25) Isophorone	6.526	82	10034	0.92	ppm	99
26) 2-Nitrophenol	6.612	139	2562	0.88	ppm	73

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072419.D
Acq On : 17 Aug 2020 10:20 am
Operator : marthav
Sample : ic2953-1 8270 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 18 10:31:27 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
27)	2,4-Dimethylphenol	6.713	107	4727	0.88	ppm		91
28)	O,O,O-Triethylphosphor...	6.762	198	2275	0.99	ppm		80
29)	bis(2-Chloroethoxy)met...	6.794	93	5900	0.92	ppm		98
30)	Benzoic Acid	6.858	105	573m	0.16	ppm		
31)	2,4-Dichlorophenol	6.922	162	3702	0.85	ppm		91
32)	1,2,4-Trichlorobenzene	6.975	180	4747	1.07	ppm		96
34)	Naphthalene	7.056	128	16493	1.02	ppm		99
35)	4-Chloroaniline	7.147	127	6366	0.93	ppm		85
36)	2,6-Dichlorophenol	7.152	162	4007	0.90	ppm		90
37)	Hexachlorobutadiene	7.211	225	2352	1.07	ppm		98
38)	Caprolactam	7.521	113	1292	0.72	ppm	#	24
39)	4-Chloro-3-methylphenol	7.767	107	3776	0.81	ppm		87
40)	2-Methylnaphthalene	7.863	142	10175	0.95	ppm		98
41)	1-Methylnaphthalene	7.976	142	9894	0.96	ppm		100
42)	1,2,4,5-Tetrachloroben...	8.056	216	4243	0.95	ppm		95
45)	2,4,6-Trichlorophenol	8.222	196	2235	0.87	ppm		95
46)	2,4,5-Trichlorophenol	8.281	196	2163	0.76	ppm		88
48)	1,1'-Biphenyl	8.414	154	12021	1.05	ppm		97
49)	2-Chloronaphthalene	8.425	162	8566	0.99	ppm		96
50)	2-Nitroaniline	8.569	65	2800	0.88	ppm	#	57
51)	p-Dinitrobenzene	8.751	75	1276	0.72	ppm	#	55
52)	Acenaphthylene	8.901	152	13087	0.93	ppm		98
53)	Dimethylphthalate	8.799	163	9028	0.91	ppm		94
54)	m-Dinitrobenzene	8.837	168	1106	0.67	ppm	#	20
55)	2,6-Dinitrotoluene	8.869	165	1945	0.83	ppm		85
56)	o-Dinitrobenzene	8.917	50	2009	0.90	ppm	#	45
57)	Acenaphthene	9.110	153	9383	1.00	ppm		99
58)	3-Nitroaniline	9.061	138	2178	0.85	ppm	#	76
60)	Dibenzofuran	9.313	168	12124	0.97	ppm		93
61)	2,4-Dinitrotoluene	9.340	165	2358	0.79	ppm		95
62)	4-Nitrophenol	9.372	109	278m	0.19	ppm		
63)	2,3,5,6-Tetrachlorophenol	9.441	232	1124	0.54	ppm		93
64)	2,3,4,6-Tetrachlorophenol	9.489	232	1493	0.68	ppm		87
65)	Fluorene	9.714	166	9236	0.95	ppm		98
66)	4-Chlorophenyl-phenyle...	9.741	204	4458	0.95	ppm		89
67)	Diethylphthalate	9.634	149	8841	0.89	ppm		98
68)	Thionazin	9.725	97	2017	0.96	ppm		98
69)	4-Nitroaniline	9.773	138	1898	0.66	ppm		92
71)	4,6-Dinitro-2-methylph...	9.821	198	378m	0.29	ppm		
72)	n-Nitrosodiphenylamine	9.885	169	7922	1.12	ppm		93
73)	Diphenylamine	9.885	169	7922	0.95	ppm		93
74)	1,2-Diphenylhydrazine	9.923	77	9144	0.90	ppm		91
76)	Sulfotep	10.110	97	1454	0.97	ppm	#	62
77)	Phorate	10.243	75	5283	1.01	ppm		95
78)	4-Bromophenyl-phenylether	10.313	248	1957	0.90	ppm		84
79)	Hexachlorobenzene	10.356	284	1987	0.91	ppm		65
80)	Dimethoate	10.436	87	2794	0.79	ppm		92
81)	Simazine	10.506	201	1126	0.70	ppm		77
82)	Atrazine	10.548	200	2428	0.91	ppm		77
84)	Phenanthrene	10.837	178	13829	1.01	ppm		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072419.D
Acq On : 17 Aug 2020 10:20 am
Operator : marthav
Sample : ic2953-1 8270 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 18 10:31:27 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
85) Anthracene	10.901	178	13050	0.91	ppm		95
86) Disulfoton	10.864	88	4200	0.76	ppm		93
87) Carbazole	11.121	167	11226	0.89	ppm		99
88) Methyl Parathion	11.303	109	1979	0.65	ppm	#	83
89) Di-n-butylphthalate	11.581	149	12172	0.86	ppm		99
90) Ethyl Parathion	11.773	97	1157	0.70	ppm		82
91) Fluoranthene	12.244	202	12086	0.95	ppm		95
93) Benzidine	12.442	184	5671	0.96	ppm		99
94) Pyrene	12.501	202	12766	0.92	ppm		98
96) Famphur	13.271	218	3450	1.05	ppm		92
97) Butylbenzylphthalate	13.362	149	4573	0.86	ppm		85
98) 3,3'-Dichlorobenzidine	14.004	252	2795	0.90	ppm		83
99) Benzo[a]anthracene	13.998	228	10768	1.03	ppm		98
100) Chrysene	14.041	228	10619	0.95	ppm		99
101) bis(2-Ethylhexyl)phtha...	14.164	149	5582	0.80	ppm		98
103) Di-n-octylphthalate	15.116	149	8317	1.03	ppm		91
104) Benzo[b]fluoranthene	15.539	252	7598	1.09	ppm		93
105) Benzo[k]fluoranthene	15.581	252	7522m	0.81	ppm		
106) Benzo[a]pyrene	16.073	252	6450	0.97	ppm		92
107) Indeno[1,2,3-cd]pyrene	17.849	276	5824	1.58	ppm		90
108) Dibenz[a,h]anthracene	17.897	278	6301	1.55	ppm		89
109) Benzo[g,h,i]perylene	18.202	276	6863	1.16	ppm		86

(#) = qualifier out of range (m) = manual integration (+) = signals summed

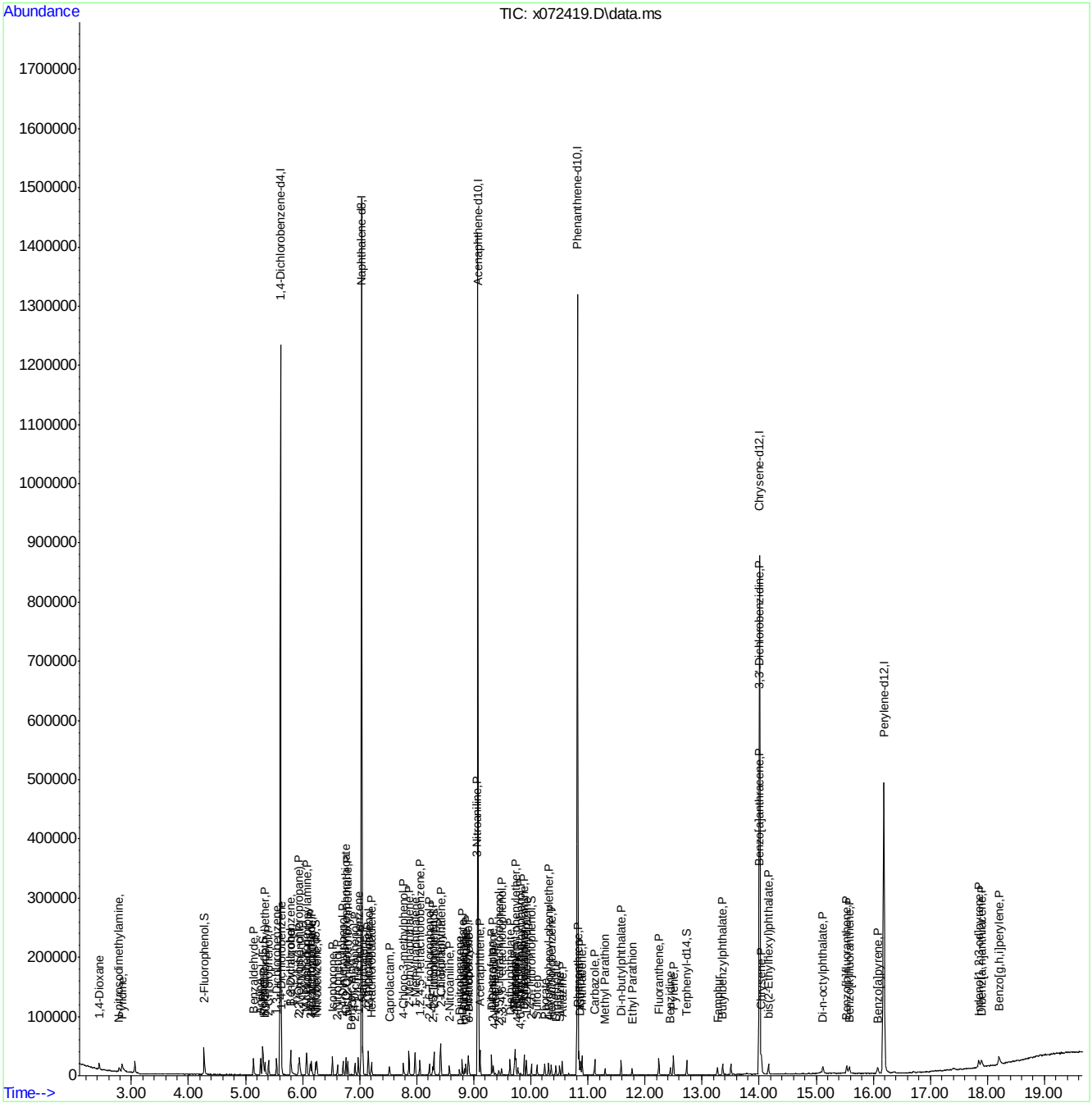
7.6.10

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072419.D
Acq On : 17 Aug 2020 10:20 am
Operator : marthav
Sample : ic2953-1 8270 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 18 10:31:27 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration



Manual Integration Approval Summary

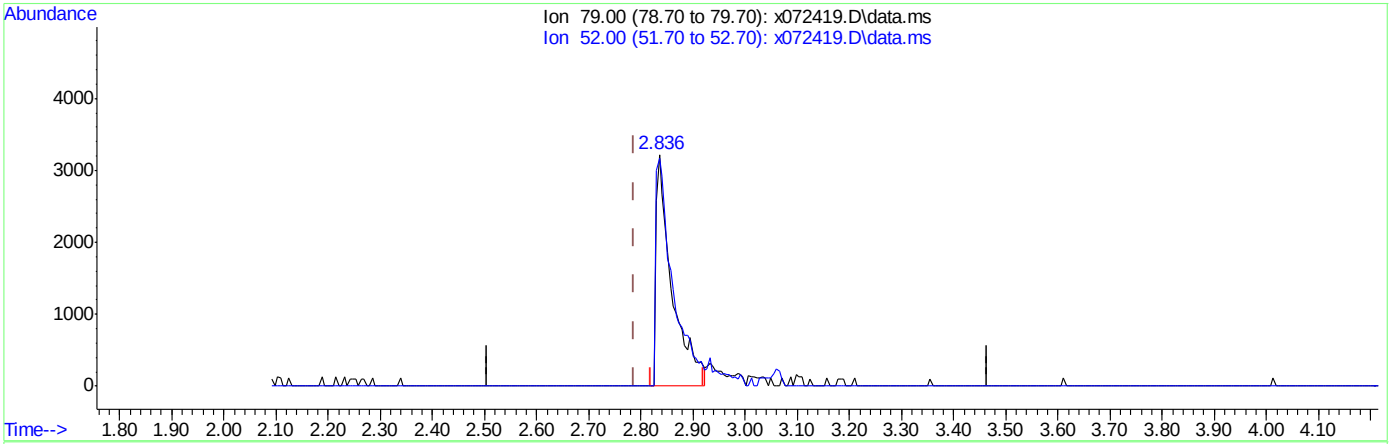
Sample Number: SX2953-IC2953
Lab FileID: X072419.D
Injection Time: 08/17/20 10:20
Method: SW846 8270D
Analyst approved: 08/18/20 14:01 Martha Valls
Supervisor approved: 08/18/20 14:38 Nicole McCampbell

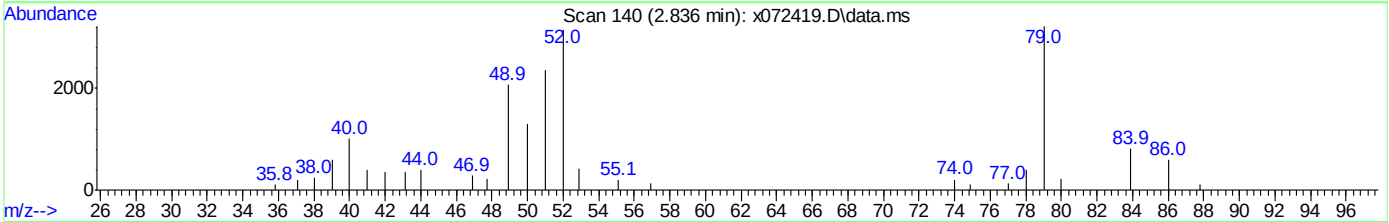
Parameter	CAS	Sig#	R.T. (min.)	Reason
Pyridine	110-86-1		2.84	Missed peak
Benzoic Acid	65-85-0		6.86	Missed peak
4-Nitrophenol	100-02-7		9.37	Missed peak
4,6-Dinitro-o-cresol	534-52-1		9.82	Missed peak
Benzo(k)fluoranthene	207-08-9		15.58	Missed peak

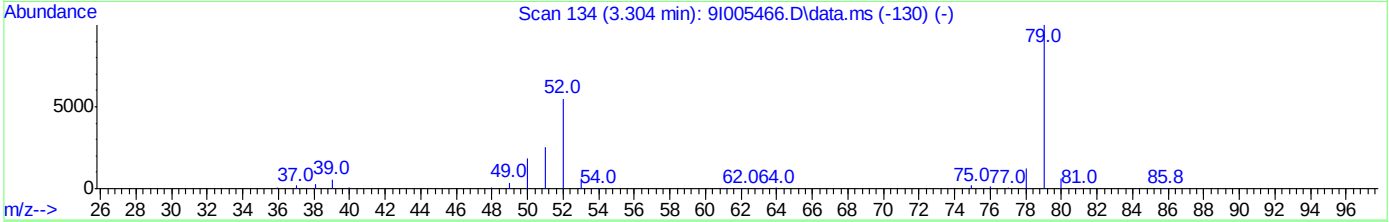
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072419.D
Acq On : 17 Aug 2020 10:20 am
Operator : marthav
Sample : ic2953-1 8270 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 17 14:46:34 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration







TIC: x072419.D\data.ms

(4) Pyridine ( )

2.836min (+0.048) 1.01ppm

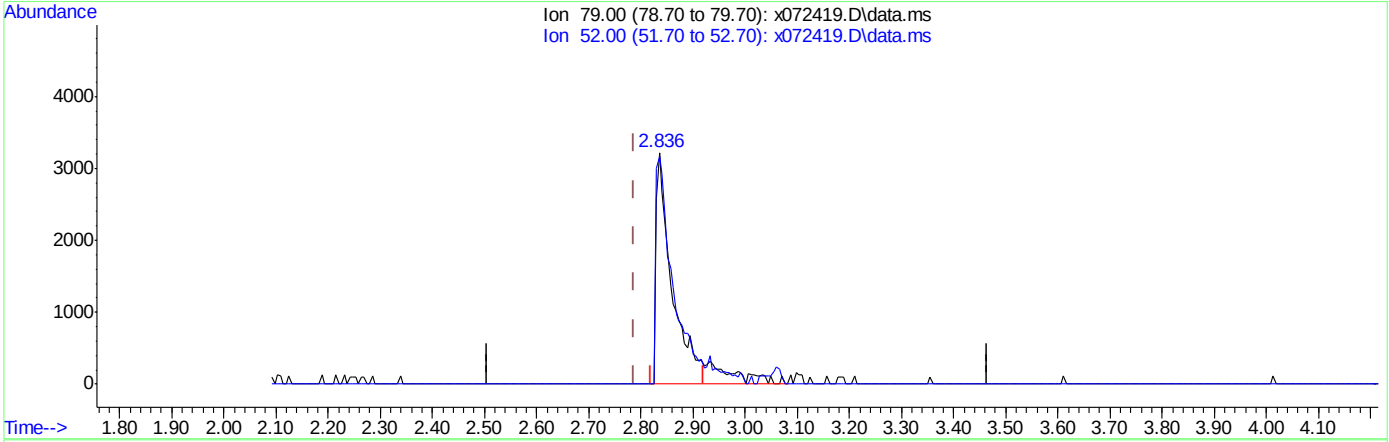
response 6773

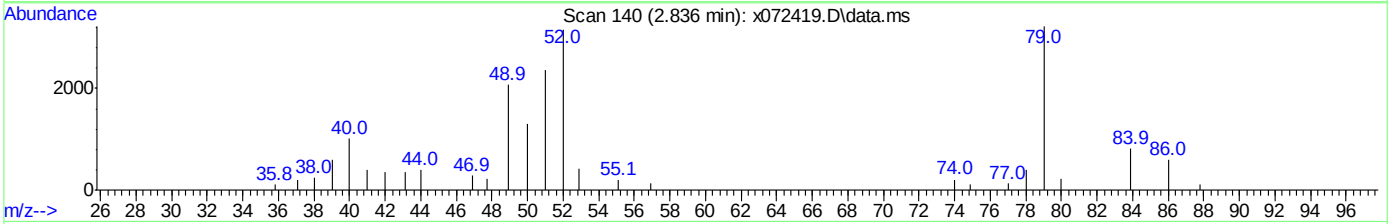
Ion	Exp%	Act%
79.00	100	100
52.00	54.80	98.92#
0.00	0.00	0.00
0.00	0.00	0.00

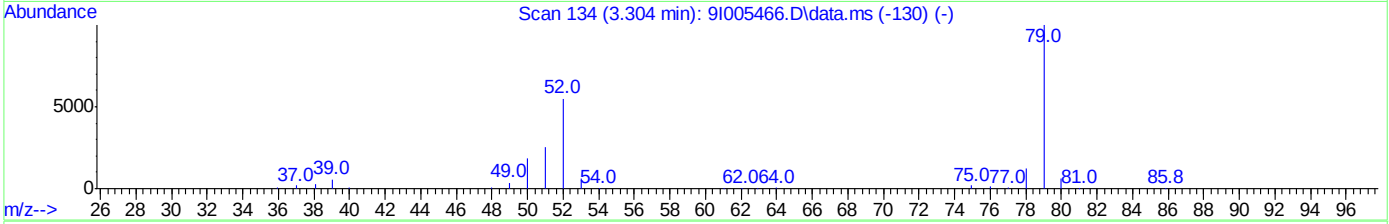
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072419.D
Acq On : 17 Aug 2020 10:20 am
Operator : marthav
Sample : ic2953-1 8270 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 17 14:46:34 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration







TIC: x072419.D\data.ms

(4) Pyridine ( )

2.836min (+0.048) 1.19ppm m

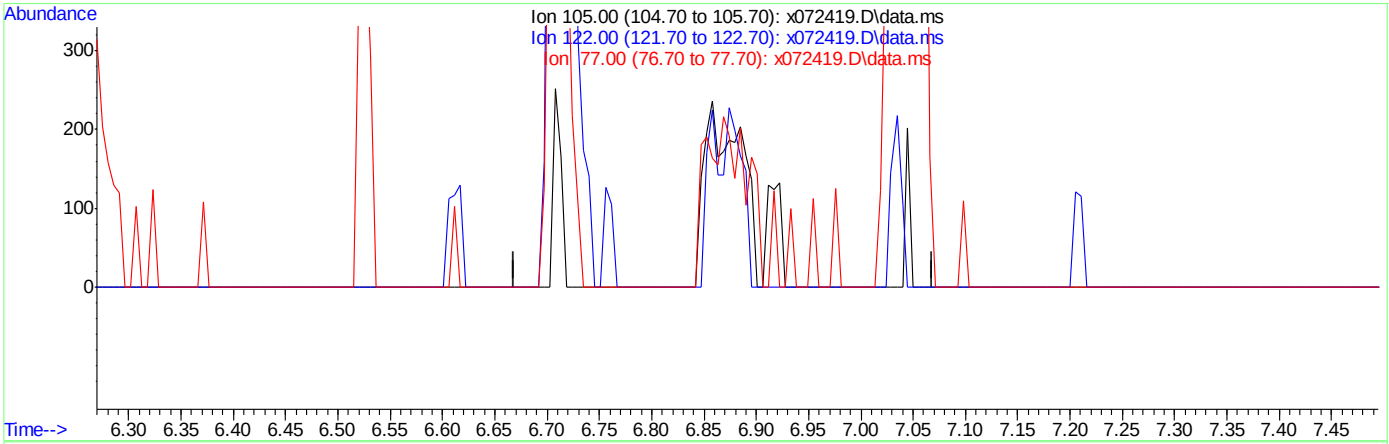
response 7997

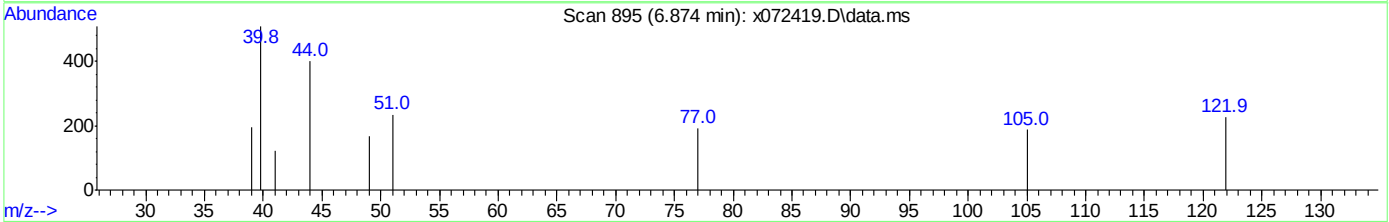
Ion	Exp%	Act%
79.00	100	100
52.00	54.80	98.29#
0.00	0.00	0.00
0.00	0.00	0.00

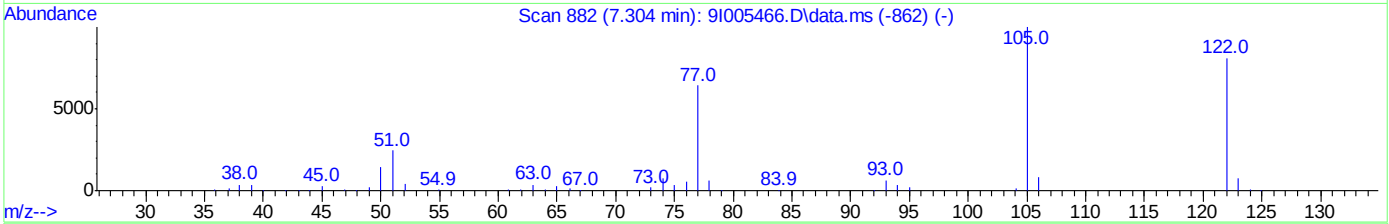
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072419.D
Acq On : 17 Aug 2020 10:20 am
Operator : marthav
Sample : ic2953-1 8270 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 17 14:46:34 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration







TIC: x072419.D\data.ms

(30) Benzoic Acid

6.868min (-6.868) 0.00ppm

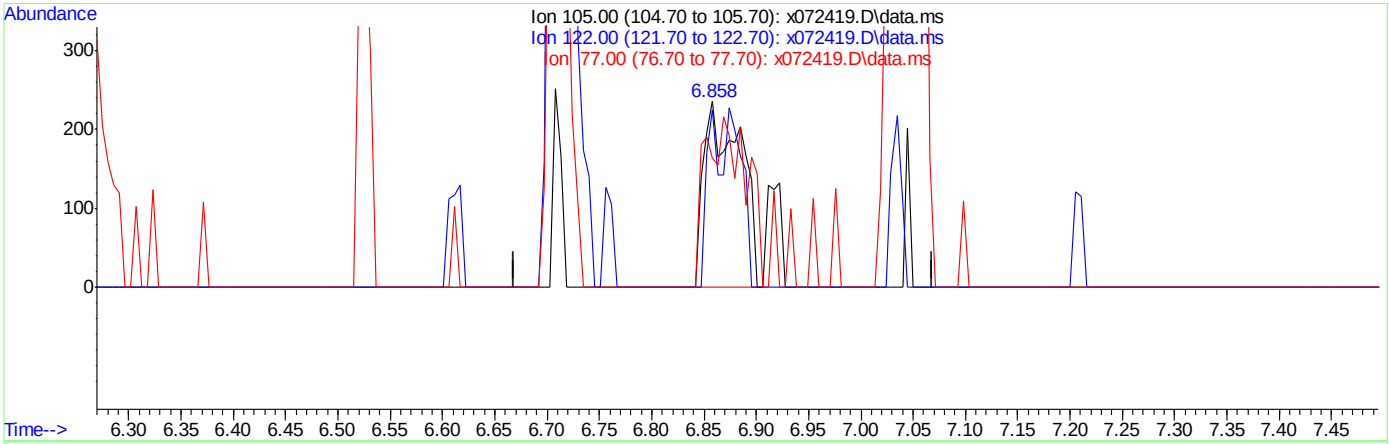
response 0

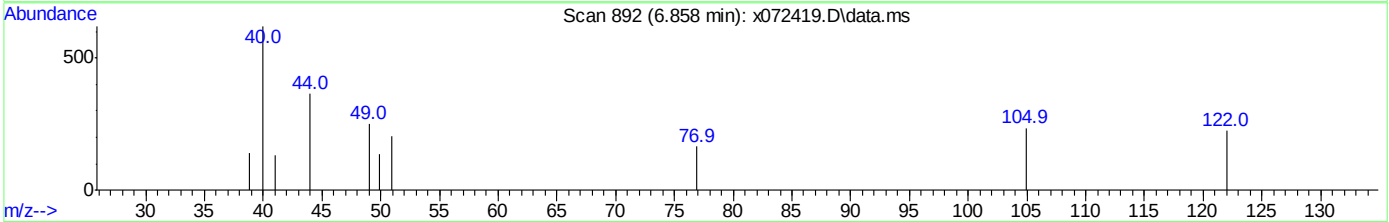
Ion	Exp%	Act%
105.00	100	0.00
122.00	81.20	0.00#
77.00	64.10	0.00#
0.00	0.00	0.00

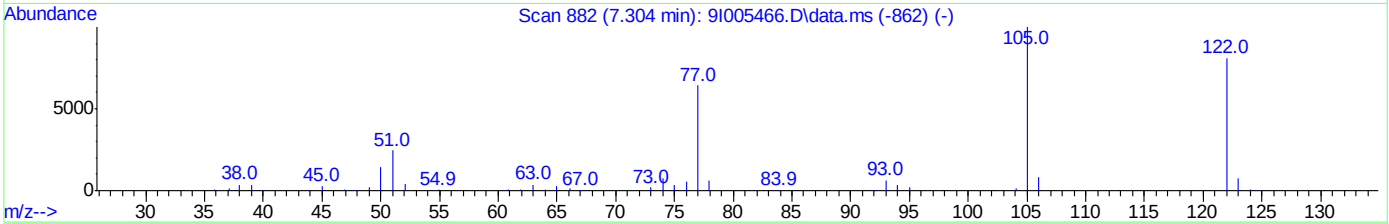
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072419.D
Acq On : 17 Aug 2020 10:20 am
Operator : marthav
Sample : ic2953-1 8270 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 17 14:46:34 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration







TIC: x072419.D\data.ms

(30) Benzoic Acid

6.858min (-0.011) 0.16ppm m

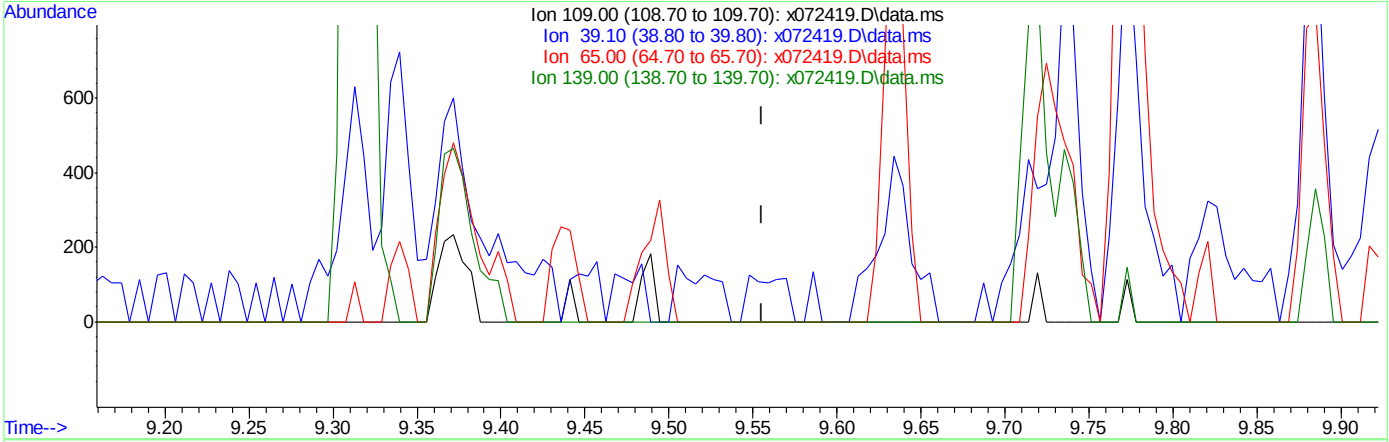
response 573

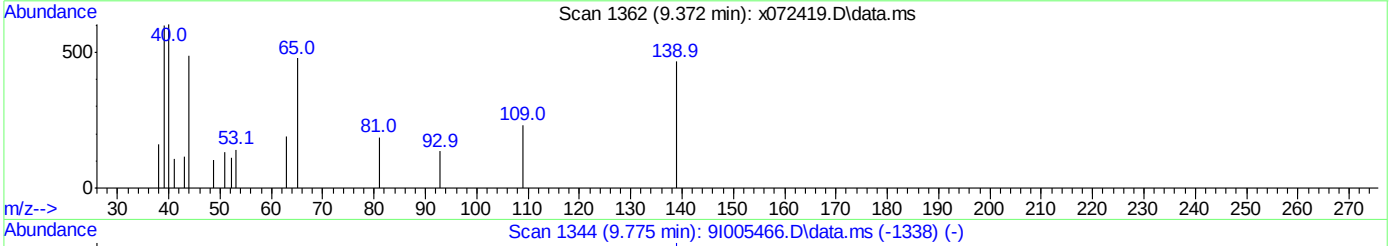
Ion	Exp%	Act%
105.00	100	100
122.00	81.20	95.34
77.00	64.10	69.49
0.00	0.00	0.00

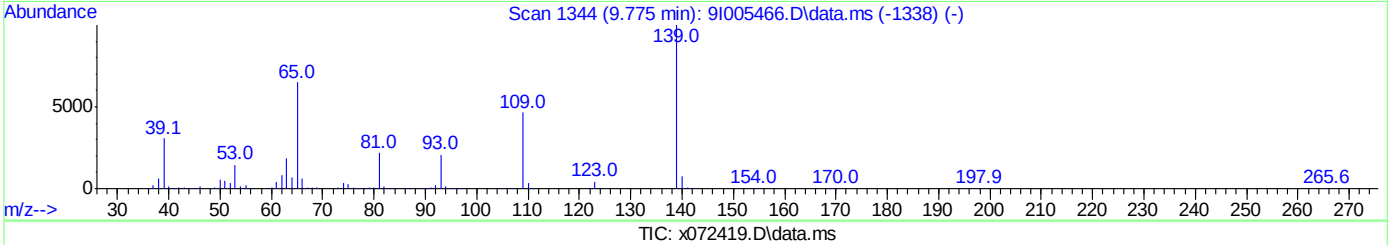
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072419.D
Acq On : 17 Aug 2020 10:20 am
Operator : marthav
Sample : ic2953-1 8270 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 17 14:46:34 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration







TIC: x072419.D\data.ms

(62) 4-Nitrophenol (P)

9.356min (-9.356) 0.00ppm

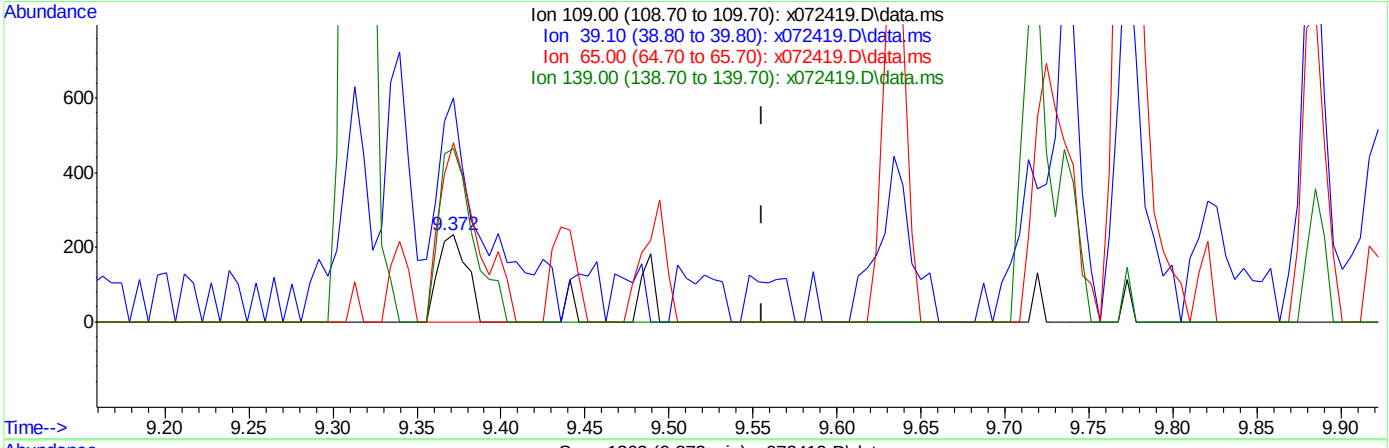
response 0

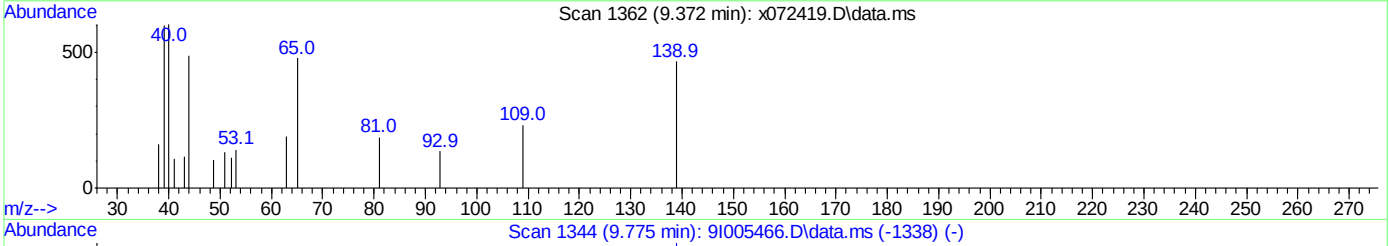
Ion	Exp%	Act%
109.00	100	0.00
39.10	66.10	0.00#
65.00	139.60	0.00#
139.00	215.10	0.00#

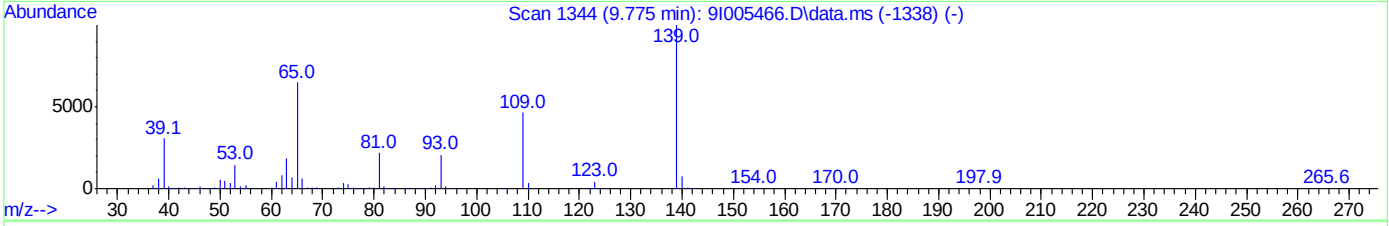
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072419.D
Acq On : 17 Aug 2020 10:20 am
Operator : marthav
Sample : ic2953-1 8270 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 17 14:46:34 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration







TIC: x072419.D\data.ms

(62) 4-Nitrophenol (P)

9.372min (+0.016) 0.19ppm m

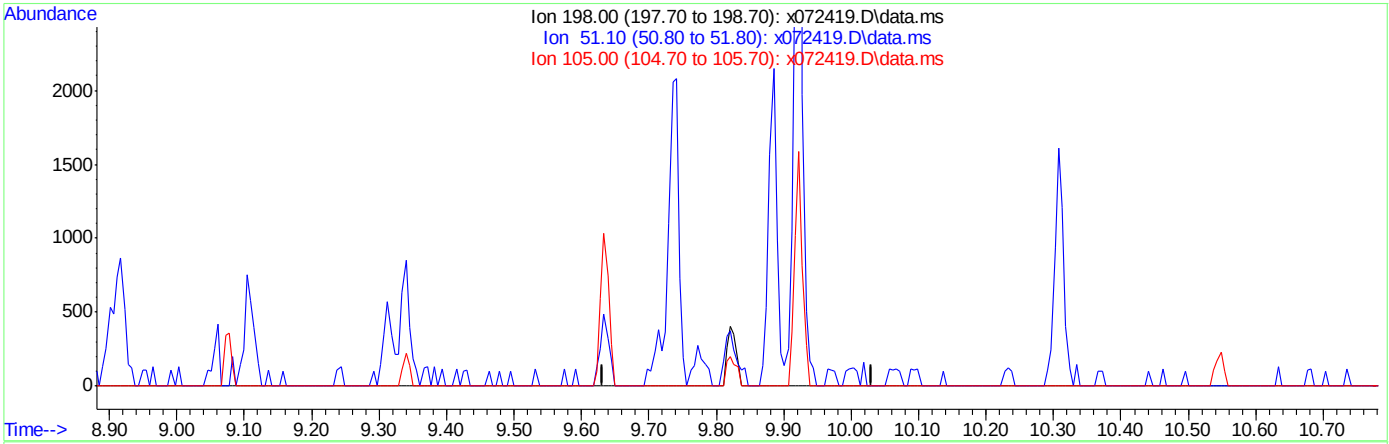
response 278

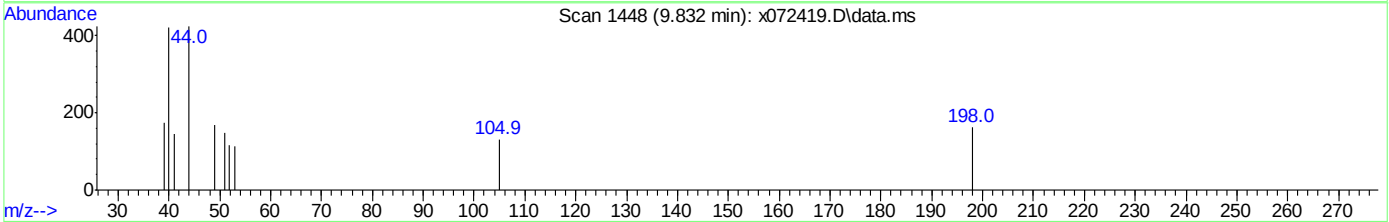
Ion	Exp%	Act%
109.00	100	100
39.10	66.10	257.94#
65.00	139.60	205.58#
139.00	215.10	200.00

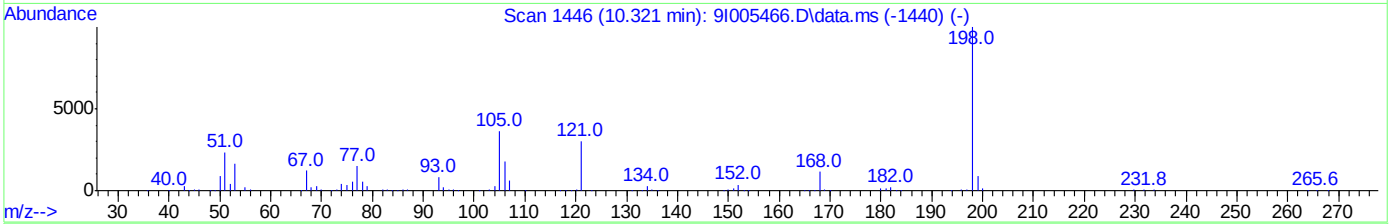
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072419.D
Acq On : 17 Aug 2020 10:20 am
Operator : marthav
Sample : ic2953-1 8270 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 17 14:46:34 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration







TIC: x072419.D\data.ms

(71) 4,6-Dinitro-2-methylphenol (P)

9.832min (-9.832) 0.00ppm

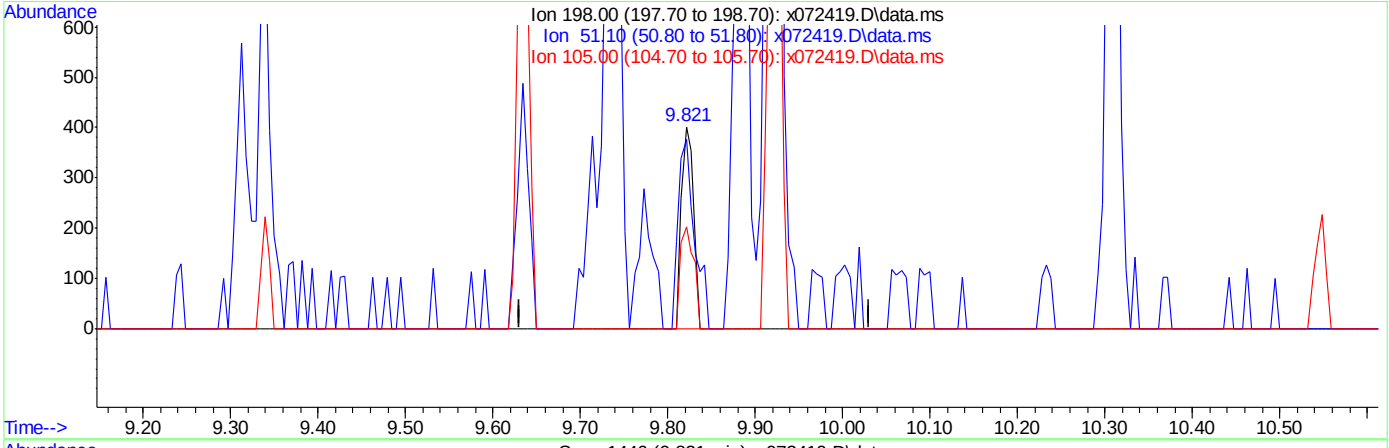
response 0

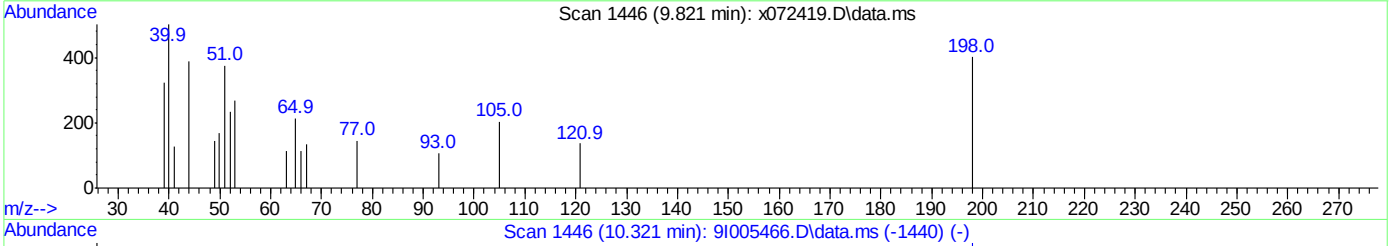
Ion	Exp%	Act%
198.00	100	0.00
51.10	23.40	0.00
105.00	36.30	0.00#
0.00	0.00	0.00

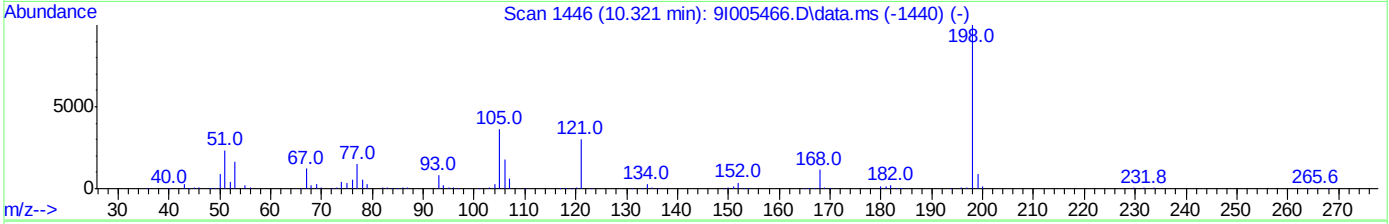
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072419.D
Acq On : 17 Aug 2020 10:20 am
Operator : marthav
Sample : ic2953-1 8270 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 17 14:46:34 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration







TIC: x072419.D\data.ms

(71) 4,6-Dinitro-2-methylphenol (P)

9.821min (-0.011) 0.29ppm m

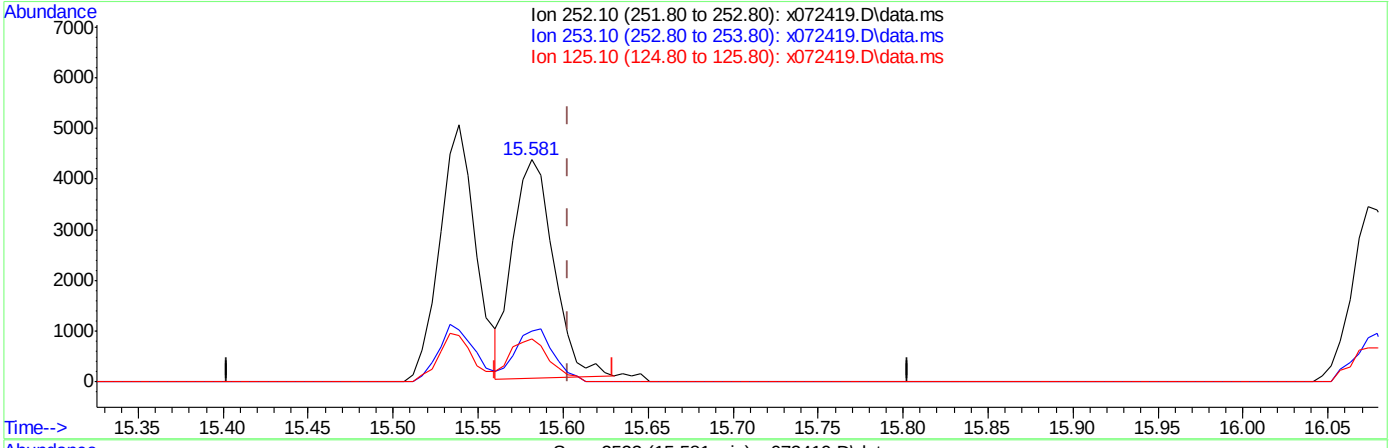
response 378

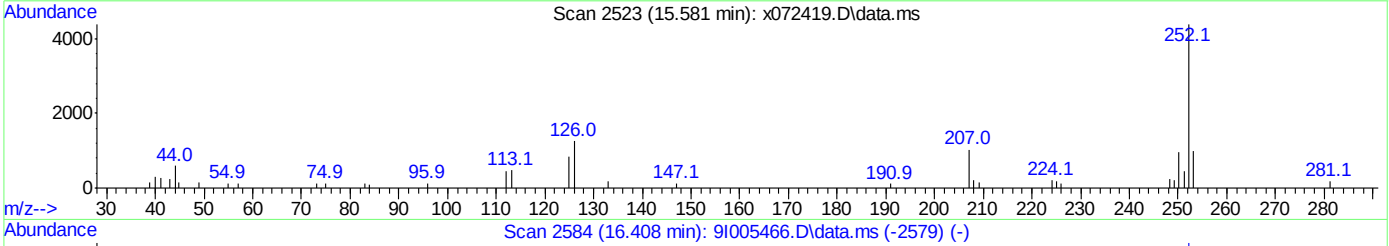
Ion	Exp%	Act%
198.00	100	100
51.10	23.40	93.77#
105.00	36.30	50.62
0.00	0.00	0.00

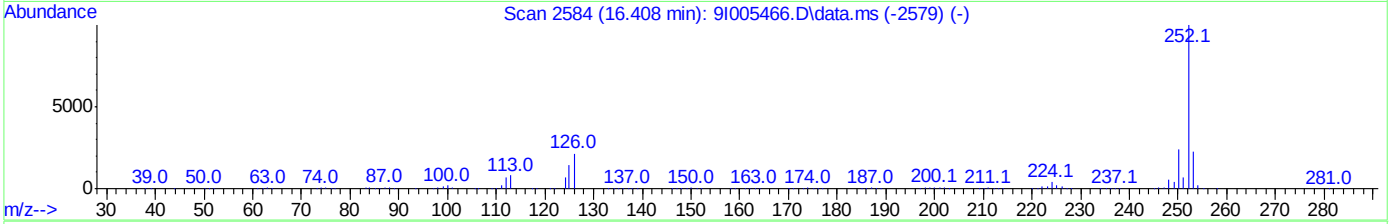
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072419.D
Acq On : 17 Aug 2020 10:20 am
Operator : marthav
Sample : ic2953-1 8270 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 17 14:46:34 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration







TIC: x072419.D\data.ms

(105) Benzo[k]fluoranthene (P)

15.581min (-0.021) 0.78ppm

response 7192

Ion	Exp%	Act%
252.10	100	100
253.10	22.50	23.43
125.10	14.40	19.45
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072419.D
Acq On : 17 Aug 2020 10:20 am
Operator : marthav
Sample : ic2953-1 8270 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
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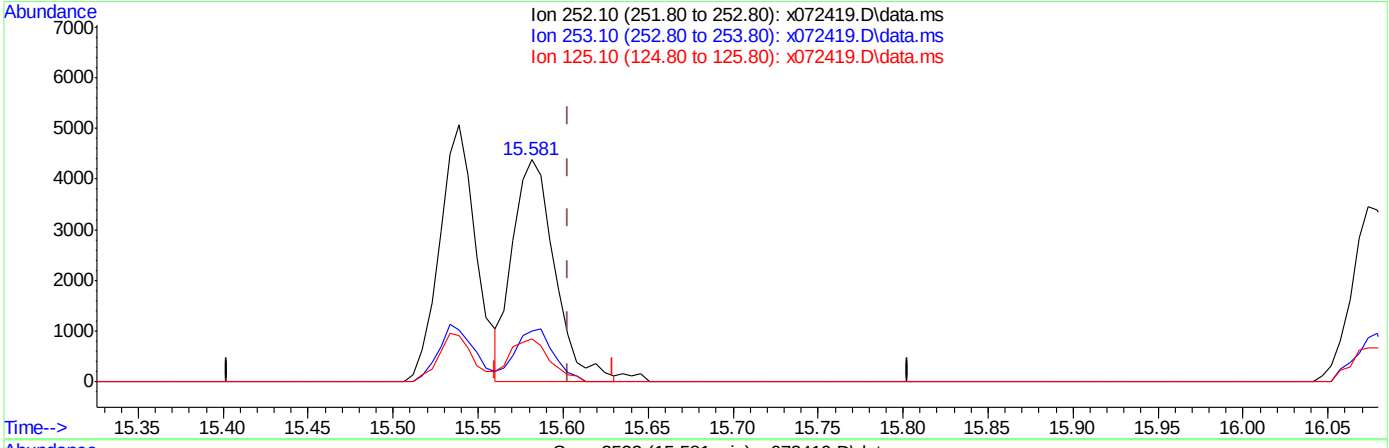
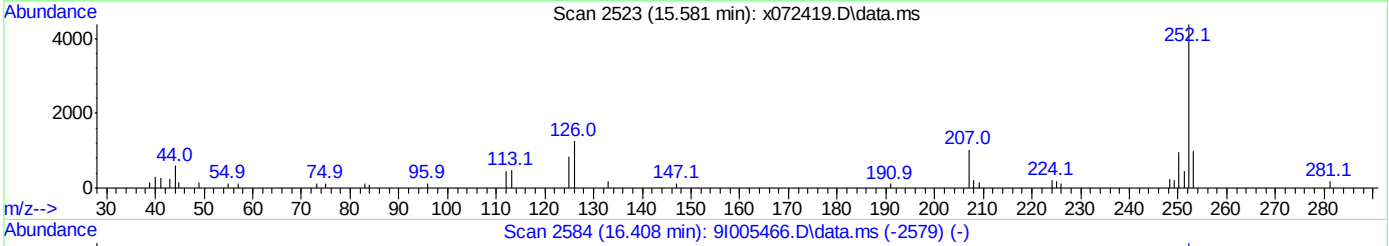
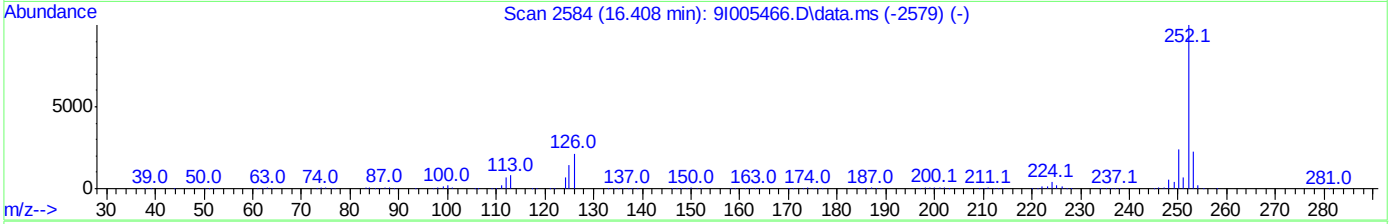






TIC: x072419.D\data.ms

(105) Benzo[k]fluoranthene (P)

15.581min (-0.021) 0.81ppm m

response 7522

Ion	Exp%	Act%
252.10	100	100
253.10	22.50	22.66
125.10	14.40	19.24
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072420.D
Acq On : 17 Aug 2020 10:46 am
Operator : marthav
Sample : ic2953-5 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 18 10:31:40 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.612	152	163294	40.00	ppm	0.00
22) Naphthalene-d8	7.034	136	625360	40.00	ppm	0.00
43) Acenaphthene-d10	9.072	164	302543	40.00	ppm	0.00
70) Phenanthrene-d10	10.816	188	495250	40.00	ppm	0.00
92) Chrysene-d12	14.009	240	343327	40.00	ppm	-0.01
102) Perylene-d12	16.186	264	267933	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	0.000	152	0m	40.00	ppm	-5.62
120) Naphthalene-d8A	0.000	136	0m	40.00	ppm	-7.04
127) Acenaphthene-d10A	0.000	164	0m	40.00	ppm	-9.08
136) Phenanthrene-d10A	0.000	188	0m	40.00	ppm	-10.82
146) Chrysene-d12A	0.000	240	0m	40.00	ppm	-14.02
153) Perylene-d12A	0.000	264	0m	40.00	ppm	-16.19
System Monitoring Compounds						
7) 2-Fluorophenol	4.274	112	64420	11.00	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 11.00%#			
9) Phenol-d5	5.296	99	71827	10.31	ppm	0.00
Spiked Amount 100.000	Range 10 - 50		Recovery = 10.31%			
23) Nitrobenzene-d5	6.227	82	34861	5.40	ppm	-0.01
Spiked Amount 50.000	Range 42 - 108		Recovery = 10.80%#			
47) 2-Fluorobiphenyl	8.302	172	59572	5.44	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 10.88%#			
75) 2,4,6-Tribromophenol	10.008	330	9423	10.24	ppm	0.00
Spiked Amount 100.000	Range 33 - 118		Recovery = 10.24%#			
95) Terphenyl-d14	12.731	244	49913	5.47	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 10.94%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.434	88	15313	5.47	ppm	# 38
3) N-nitrosodimethylamine	2.766	42	25556	5.14	ppm	# 36
4) Pyridine	2.809	79	39979	5.87	ppm	# 16
5) Benzaldehyde	5.141	106	26266	5.40	ppm	94
6) Aniline	5.264	93	46089	4.75	ppm	98
8) bis(2-Chloroethyl)ether	5.344	93	30545	5.10	ppm	75
10) Phenol	5.312	94	40592	4.91	ppm	91
11) 2-Chlorophenol	5.403	128	30787	4.93	ppm	77
12) 1,3-Dichlorobenzene	5.547	146	34028	5.24	ppm	95
13) 1,4-Dichlorobenzene	5.633	146	35925	5.23	ppm	98
14) 1,2-Dichlorobenzene	5.793	146	33214	5.09	ppm	98
15) Benzyl alcohol	5.793	108	18911	4.37	ppm	84
16) 2,2'-Oxybis(1-chloropr...	5.932	45	66226	5.26	ppm	75
17) 2-Methylphenol	5.948	108	28609	4.81	ppm	97
18) Acetophenone	6.066	105	42171	4.79	ppm	96
19) Hexachloroethane	6.157	117	13268	5.15	ppm	89
20) N-Nitroso-di-n-propyla...	6.077	70	23370	5.03	ppm	# 58
21) 3&4-Methylphenol	6.130	108	29745	4.84	ppm	96
24) Nitrobenzene	6.248	77	35110	5.49	ppm	80
25) Isophorone	6.526	82	56673	4.97	ppm	94
26) 2-Nitrophenol	6.612	139	15881	5.23	ppm	74

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072420.D
Acq On : 17 Aug 2020 10:46 am
Operator : marthav
Sample : ic2953-5 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 18 10:31:40 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
27) 2,4-Dimethylphenol	6.708	107	27152	4.81	ppm		93
28) O,O,O-Triethylphosphor...	6.767	198	12049	5.03	ppm		90
29) bis(2-Chloroethoxy)met...	6.794	93	33995	5.09	ppm		96
30) Benzoic Acid	6.847	105	11292	2.94	ppm		93
31) 2,4-Dichlorophenol	6.917	162	22725	5.00	ppm		96
32) 1,2,4-Trichlorobenzene	6.975	180	25005	5.38	ppm		96
34) Naphthalene	7.056	128	89757	5.29	ppm		99
35) 4-Chloroaniline	7.147	127	36979	5.16	ppm		88
36) 2,6-Dichlorophenol	7.152	162	22771	4.91	ppm		96
37) Hexachlorobutadiene	7.211	225	12557	5.48	ppm		97
38) Caprolactam	7.526	113	8651	4.59	ppm	#	35
39) 4-Chloro-3-methylphenol	7.767	107	23609	4.87	ppm		96
40) 2-Methylnaphthalene	7.863	142	57826	5.16	ppm		98
41) 1-Methylnaphthalene	7.976	142	55310	5.15	ppm		99
42) 1,2,4,5-Tetrachloroben...	8.056	216	22986	4.93	ppm		95
44) Hexachlorocyclopentadiene	8.045	237	1870	0.93	ppm		91
45) 2,4,6-Trichlorophenol	8.222	196	14476	5.21	ppm		98
46) 2,4,5-Trichlorophenol	8.280	196	15153	4.97	ppm		94
48) 1,1'-Biphenyl	8.414	154	66902	5.42	ppm		99
49) 2-Chloronaphthalene	8.425	162	50325	5.43	ppm		97
50) 2-Nitroaniline	8.569	65	17587	5.15	ppm	#	62
51) p-Dinitrobenzene	8.751	75	9331	4.88	ppm	#	61
52) Acenaphthylene	8.901	152	77106	5.10	ppm		98
53) Dimethylphthalate	8.799	163	53362	5.00	ppm		99
54) m-Dinitrobenzene	8.837	168	8500	4.78	ppm	#	52
55) 2,6-Dinitrotoluene	8.869	165	12635	5.02	ppm		87
56) o-Dinitrobenzene	8.917	50	12967	5.37	ppm	#	48
57) Acenaphthene	9.110	153	52299	5.20	ppm		99
58) 3-Nitroaniline	9.056	138	14384	5.19	ppm		92
59) 2,4-Dinitrophenol	9.200	184	1358	1.40	ppm	#	59
60) Dibenzofuran	9.313	168	69767	5.20	ppm		95
61) 2,4-Dinitrotoluene	9.339	165	15451	4.81	ppm		96
62) 4-Nitrophenol	9.361	109	4165	2.69	ppm	#	73
63) 2,3,5,6-Tetrachlorophenol	9.436	232	8621	3.83	ppm		86
64) 2,3,4,6-Tetrachlorophenol	9.489	232	10648	4.53	ppm		92
65) Fluorene	9.714	166	54555	5.21	ppm		100
66) 4-Chlorophenyl-phenyle...	9.741	204	25334	5.02	ppm		93
67) Diethylphthalate	9.639	149	51270	4.81	ppm		98
68) Thionazin	9.725	97	12226	5.40	ppm		96
69) 4-Nitroaniline	9.773	138	13447	4.36	ppm		87
71) 4,6-Dinitro-2-methylph...	9.816	198	5398	3.71	ppm	#	39
72) n-Nitrosodiphenylamine	9.885	169	46619	6.06	ppm		95
73) Diphenylamine	9.885	169	46619	5.16	ppm		95
74) 1,2-Diphenylhydrazine	9.922	77	57369	5.17	ppm		89
76) Sulfotep	10.110	97	8296	5.08	ppm	#	70
77) Phorate	10.243	75	31900	5.58	ppm		97
78) 4-Bromophenyl-phenylether	10.308	248	11712	4.93	ppm	#	78
79) Hexachlorobenzene	10.356	284	11595	4.89	ppm		72
80) Dimethoate	10.436	87	20159	5.22	ppm		96
81) Simazine	10.506	201	7875	4.51	ppm		96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072420.D
Acq On : 17 Aug 2020 10:46 am
Operator : marthav
Sample : ic2953-5 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 18 10:31:40 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration

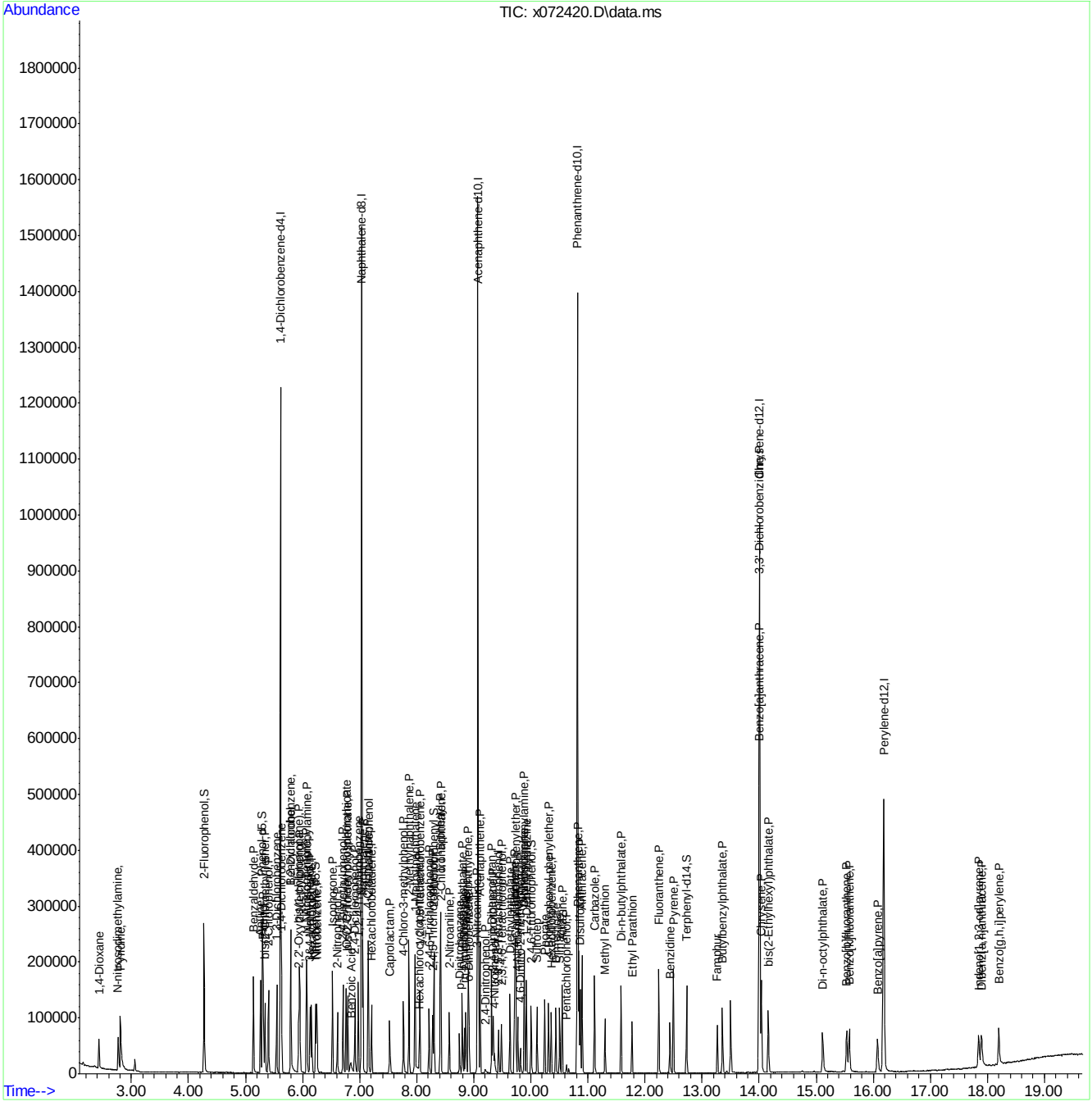
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
82) Atrazine	10.548	200	14212	4.91	ppm	79
83) Pentachlorophenol	10.623	266	2048	1.60	ppm	96
84) Phenanthrene	10.837	178	78554	5.25	ppm	98
85) Anthracene	10.901	178	78028	5.00	ppm	99
86) Disulfoton	10.864	88	26441	4.42	ppm	91
87) Carbazole	11.115	167	69798	5.07	ppm	99
88) Methyl Parathion	11.302	109	15624	4.72	ppm	88
89) Di-n-butylphthalate	11.581	149	76897	5.01	ppm	99
90) Ethyl Parathion	11.773	97	8908	4.92	ppm	85
91) Fluoranthene	12.238	202	71279	5.13	ppm	96
93) Benzidine	12.442	184	36087	5.89	ppm	97
94) Pyrene	12.501	202	72260	5.07	ppm	99
96) Famphur	13.265	218	21631	6.53	ppm	83
97) Butylbenzylphthalate	13.356	149	29499	5.33	ppm	85
98) 3,3'-Dichlorobenzidine	14.004	252	17884	5.52	ppm	95
99) Benzo[a]anthracene	13.998	228	56756	5.26	ppm	98
100) Chrysene	14.041	228	60244	5.24	ppm	98
101) bis(2-Ethylhexyl)phtha...	14.164	149	38141	5.25	ppm	97
103) Di-n-octylphthalate	15.116	149	52878	6.16	ppm	91
104) Benzo[b]fluoranthene	15.539	252	43608	6.04	ppm	95
105) Benzo[k]fluoranthene	15.581	252	44885	4.72	ppm	97
106) Benzo[a]pyrene	16.073	252	36907	5.36	ppm	95
107) Indeno[1,2,3-cd]pyrene	17.844	276	32267	8.11	ppm	89
108) Dibenz[a,h]anthracene	17.897	278	34225	7.75	ppm	89
109) Benzo[g,h,i]perylene	18.202	276	39369	6.34	ppm	89

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072420.D
Acq On : 17 Aug 2020 10:46 am
Operator : marthav
Sample : ic2953-5 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 18 10:31:40 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 08/18/20 14:38

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072421.D
Acq On : 17 Aug 2020 11:11 am
Operator : marthav
Sample : ic2953-10 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 18 12:47:28 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.612	152	157672	40.00	ppm	0.00
22) Naphthalene-d8	7.034	136	602477	40.00	ppm	0.00
43) Acenaphthene-d10	9.072	164	284043	40.00	ppm	0.00
70) Phenanthrene-d10	10.816	188	465019	40.00	ppm	0.00
92) Chrysene-d12	14.014	240	332928	40.00	ppm	0.00
102) Perylene-d12	16.186	264	262327	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	0.000	152	0m	40.00	ppm	-5.62
120) Naphthalene-d8A	0.000	136	0m	40.00	ppm	-7.04
127) Acenaphthene-d10A	0.000	164	0m	40.00	ppm	-9.08
136) Phenanthrene-d10A	0.000	188	0m	40.00	ppm	-10.82
146) Chrysene-d12A	0.000	240	0m	40.00	ppm	-14.02
153) Perylene-d12A	0.000	264	0m	40.00	ppm	-16.19
System Monitoring Compounds						
7) 2-Fluorophenol	4.269	112	123616	21.87	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 21.87%			
9) Phenol-d5	5.296	99	138032	20.52	ppm	0.00
Spiked Amount 100.000	Range 10 - 50		Recovery = 20.52%			
23) Nitrobenzene-d5	6.232	82	66177	10.64	ppm	0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 21.28%#			
47) 2-Fluorobiphenyl	8.302	172	113043	10.99	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 21.98%#			
75) 2,4,6-Tribromophenol	10.008	330	18962	21.40	ppm	0.00
Spiked Amount 100.000	Range 33 - 118		Recovery = 21.40%#			
95) Terphenyl-d14	12.731	244	96422	10.90	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 21.80%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.429	88	28473	10.54	ppm	# 35
3) N-nitrosodimethylamine	2.766	42	48415	10.09	ppm	# 39
4) Pyridine	2.798	79	72333	11.00	ppm	# 18
5) Benzaldehyde	5.141	106	50196	10.68	ppm	91
6) Aniline	5.264	93	87898	9.38	ppm	91
8) bis(2-Chloroethyl)ether	5.344	93	58301	10.08	ppm	75
10) Phenol	5.312	94	78243	9.81	ppm	95
11) 2-Chlorophenol	5.403	128	59963	9.94	ppm	79
12) 1,3-Dichlorobenzene	5.547	146	66115	10.55	ppm	98
13) 1,4-Dichlorobenzene	5.633	146	69029	10.41	ppm	99
14) 1,2-Dichlorobenzene	5.793	146	62114	9.86	ppm	97
15) Benzyl alcohol	5.793	108	37652	9.02	ppm	88
16) 2,2'-Oxybis(1-chloropr...	5.938	45	124816	10.27	ppm	73
17) 2-Methylphenol	5.954	108	55331	9.64	ppm	99
18) Acetophenone	6.066	105	81322	9.58	ppm	96
19) Hexachloroethane	6.157	117	26208	10.53	ppm	83
20) N-Nitroso-di-n-propyla...	6.077	70	44257	9.87	ppm	# 57
21) 3&4-Methylphenol	6.130	108	57858	9.75	ppm	96
24) Nitrobenzene	6.253	77	65776	10.69	ppm	87
25) Isophorone	6.526	82	109699	9.98	ppm	94
26) 2-Nitrophenol	6.612	139	31288	10.69	ppm	74

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072421.D
Acq On : 17 Aug 2020 11:11 am
Operator : marthav
Sample : ic2953-10 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 18 12:47:28 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
27) 2,4-Dimethylphenol	6.708	107	51785	9.53	ppm		95
28) O,O,O-Triethylphosphor...	6.767	198	23353	10.12	ppm		87
29) bis(2-Chloroethoxy)met...	6.794	93	66055	10.27	ppm		95
30) Benzoic Acid	6.836	105	28595m	7.56	ppm		
31) 2,4-Dichlorophenol	6.917	162	44233	10.10	ppm		96
32) 1,2,4-Trichlorobenzene	6.975	180	48378	10.81	ppm		97
34) Naphthalene	7.061	128	172670	10.57	ppm		99
35) 4-Chloroaniline	7.147	127	70623	10.24	ppm		88
36) 2,6-Dichlorophenol	7.157	162	44586	9.98	ppm		98
37) Hexachlorobutadiene	7.211	225	24425	11.06	ppm		99
38) Caprolactam	7.537	113	17148	9.43	ppm	#	50
39) 4-Chloro-3-methylphenol	7.767	107	45912	9.83	ppm	#	26
40) 2-Methylnaphthalene	7.863	142	110724	10.25	ppm		99
41) 1-Methylnaphthalene	7.976	142	104735	10.13	ppm		99
42) 1,2,4,5-Tetrachloroben...	8.056	216	44159	9.83	ppm		99
44) Hexachlorocyclopentadiene	8.045	237	6282	3.29	ppm		96
45) 2,4,6-Trichlorophenol	8.222	196	28364	10.88	ppm		98
46) 2,4,5-Trichlorophenol	8.280	196	29872	10.44	ppm		98
48) 1,1'-Biphenyl	8.414	154	129546	11.17	ppm		100
49) 2-Chloronaphthalene	8.425	162	94665	10.87	ppm		97
50) 2-Nitroaniline	8.569	65	34840	10.87	ppm	#	59
51) p-Dinitrobenzene	8.751	75	18595	10.35	ppm	#	60
52) Acenaphthylene	8.906	152	148315	10.45	ppm		99
53) Dimethylphthalate	8.805	163	100915	10.07	ppm		99
54) m-Dinitrobenzene	8.837	168	17093	10.24	ppm	#	47
55) 2,6-Dinitrotoluene	8.869	165	24014	10.15	ppm		81
56) o-Dinitrobenzene	8.917	50	25408	11.22	ppm	#	44
57) Acenaphthene	9.110	153	101688	10.78	ppm		99
58) 3-Nitroaniline	9.061	138	27599	10.61	ppm		98
59) 2,4-Dinitrophenol	9.195	184	4834	5.18	ppm	#	28
60) Dibenzofuran	9.313	168	131436	10.44	ppm		95
61) 2,4-Dinitrotoluene	9.340	165	31072	10.30	ppm		94
62) 4-Nitrophenol	9.356	109	9359	6.44	ppm	#	74
63) 2,3,5,6-Tetrachlorophenol	9.436	232	18402	8.72	ppm		93
64) 2,3,4,6-Tetrachlorophenol	9.489	232	20338	9.21	ppm		91
65) Fluorene	9.719	166	105569	10.75	ppm		98
66) 4-Chlorophenyl-phenyle...	9.741	204	49376	10.41	ppm		93
67) Diethylphthalate	9.639	149	99849	9.98	ppm		96
68) Thionazin	9.730	97	22741	10.70	ppm		99
69) 4-Nitroaniline	9.778	138	28152	9.72	ppm		89
71) 4,6-Dinitro-2-methylph...	9.821	198	13246	9.40	ppm	#	65
72) n-Nitrosodiphenylamine	9.885	169	91232	12.63	ppm		95
73) Diphenylamine	9.885	169	91232	10.76	ppm		95
74) 1,2-Diphenylhydrazine	9.923	77	112636	10.81	ppm		90
76) Sulfotep	10.110	97	16439	10.73	ppm	#	65
77) Phorate	10.243	75	60759	11.32	ppm		95
78) 4-Bromophenyl-phenylether	10.313	248	22939	10.27	ppm		88
79) Hexachlorobenzene	10.356	284	22559	10.13	ppm		63
80) Dimethoate	10.436	87	39642	10.89	ppm		98
81) Simazine	10.511	201	15449	9.42	ppm		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072421.D
Acq On : 17 Aug 2020 11:11 am
Operator : marthav
Sample : ic2953-10 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 18 12:47:28 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration

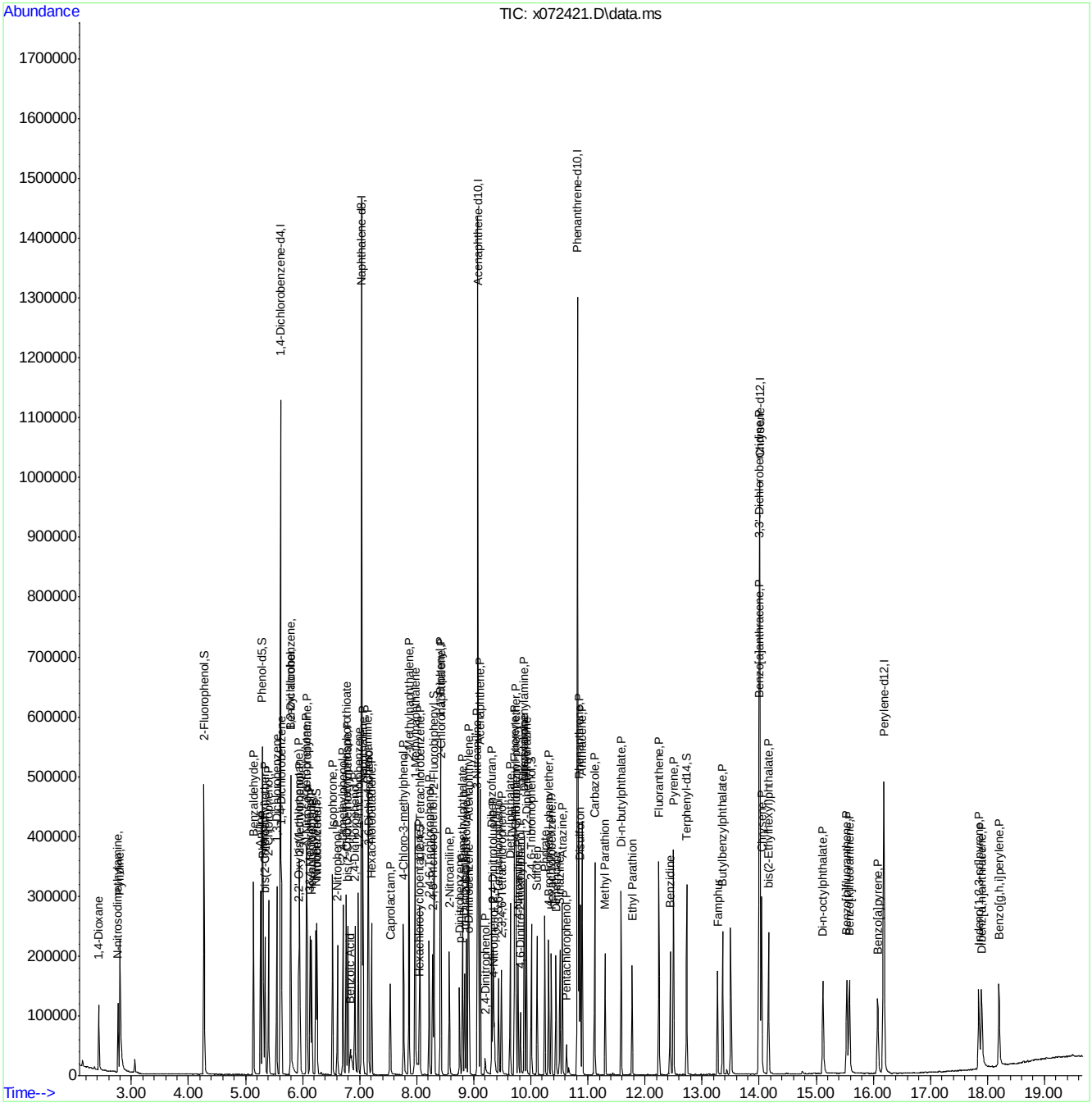
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
82) Atrazine	10.548	200	26651	9.82	ppm	#	69
83) Pentachlorophenol	10.623	266	5263	4.32	ppm		96
84) Phenanthrene	10.842	178	148053	10.54	ppm		99
85) Anthracene	10.901	178	152618	10.42	ppm		98
86) Disulfoton	10.864	88	51203m	9.11	ppm		
87) Carbazole	11.121	167	136028	10.53	ppm		98
88) Methyl Parathion	11.302	109	32057	10.27	ppm	#	85
89) Di-n-butylphthalate	11.581	149	154589	10.72	ppm		99
90) Ethyl Parathion	11.773	97	18142	10.55	ppm		86
91) Fluoranthene	12.244	202	138715	10.64	ppm		99
93) Benzidine	12.442	184	76758	12.73	ppm		97
94) Pyrene	12.501	202	141857	10.26	ppm		98
96) Famphur	13.271	218	42555	13.74	ppm		88
97) Butylbenzylphthalate	13.362	149	59767	11.04	ppm		90
98) 3,3'-Dichlorobenzidine	14.004	252	37153	11.64	ppm		95
99) Benzo[a]anthracene	13.998	228	111627	10.67	ppm		99
100) Chrysene	14.046	228	115673	10.38	ppm		97
101) bis(2-Ethylhexyl)phtha...	14.164	149	78882	11.03	ppm		94
103) Di-n-octylphthalate	15.116	149	112233	12.85	ppm		91
104) Benzo[b]fluoranthene	15.539	252	86629	12.08	ppm		97
105) Benzo[k]fluoranthene	15.587	252	95377	10.24	ppm		96
106) Benzo[a]pyrene	16.079	252	77286	11.31	ppm		95
107) Indeno[1,2,3-cd]pyrene	17.849	276	68635	16.56	ppm		84
108) Dibenz[a,h]anthracene	17.903	278	70273	15.27	ppm		92
109) Benzo[g,h,i]perylene	18.208	276	80486	12.86	ppm		87

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072421.D
Acq On : 17 Aug 2020 11:11 am
Operator : marthav
Sample : ic2953-10 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 18 12:47:28 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration



Manual Integration Approval Summary

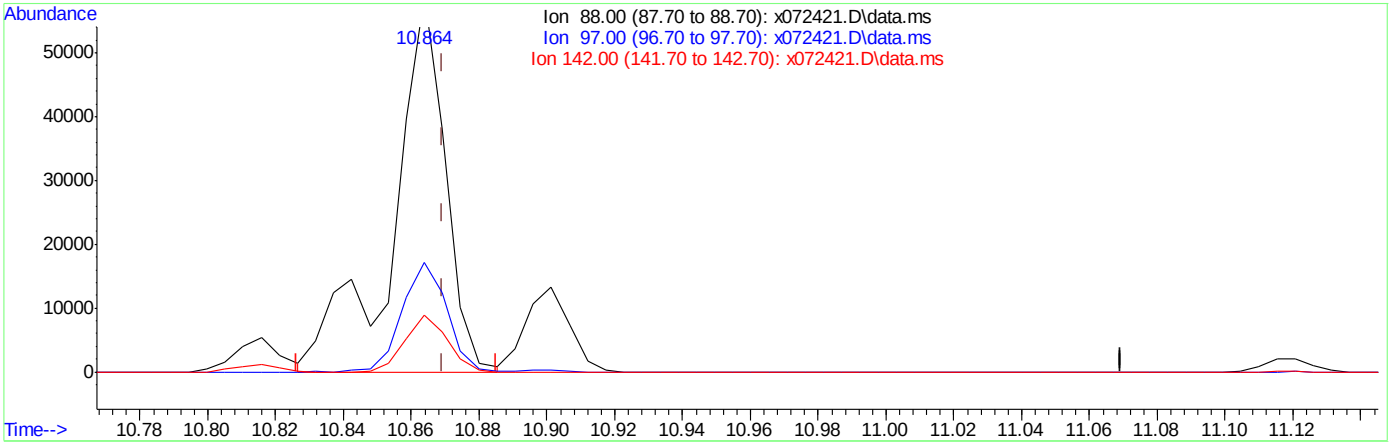
Sample Number: SX2953-IC2953
Lab FileID: X072421.D
Injection Time: 08/17/20 11:11
Method: SW846 8270D
Analyst approved: 08/18/20 14:01 Martha Valls
Supervisor approved: 08/18/20 14:38 Nicole McCampbell

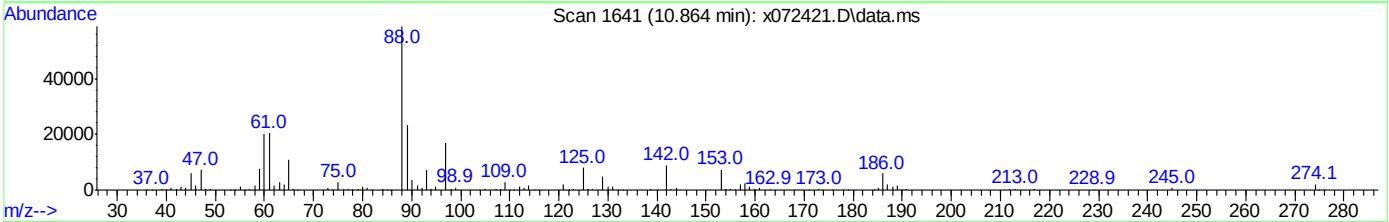
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic Acid	65-85-0		6.84	Split peak
Disulfoton	298-04-4		10.86	Split peak

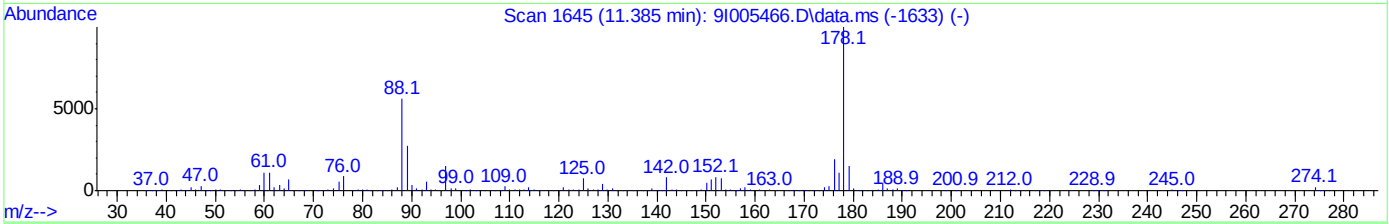
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072421.D
Acq On : 17 Aug 2020 11:11 am
Operator : marthav
Sample : ic2953-10 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 17 14:46:39 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration







TIC: x072421.D\data.ms

(86) Disulfoton

10.864min (-0.005) 11.33ppm

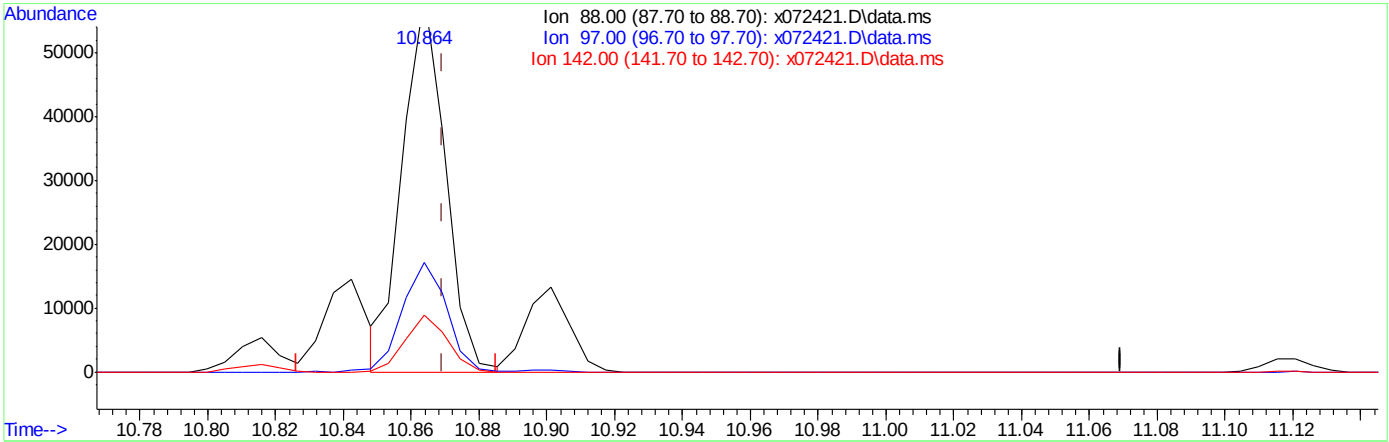
response 63662

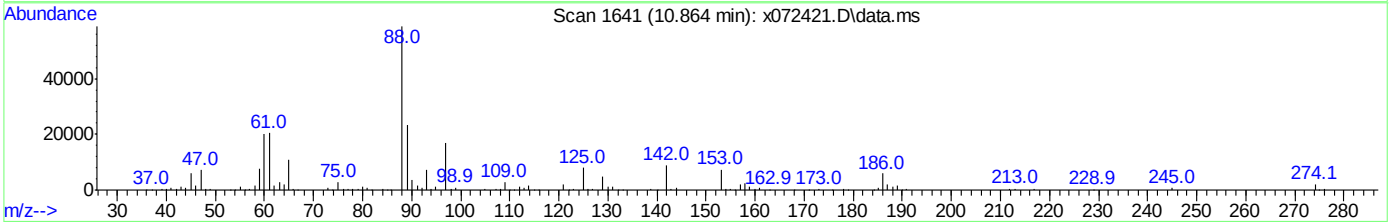
Ion	Exp%	Act%
88.00	100	100
97.00	26.50	29.51
142.00	14.20	15.29
0.00	0.00	0.00

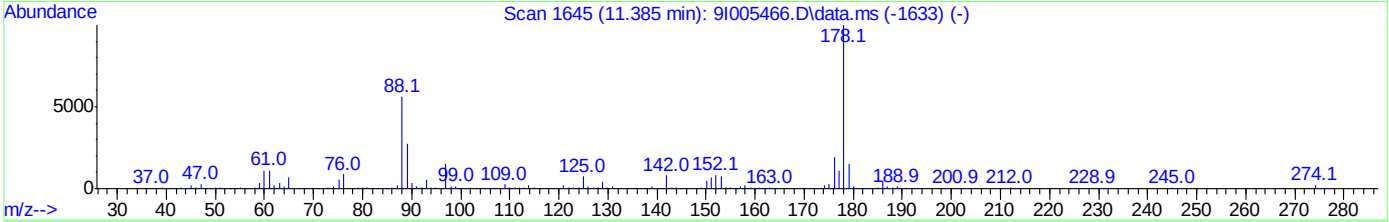
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072421.D
Acq On : 17 Aug 2020 11:11 am
Operator : marthav
Sample : ic2953-10 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 17 14:46:39 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration







TIC: x072421.D\data.ms

(86) Disulfoton

10.864min (-0.005) 9.11ppm m

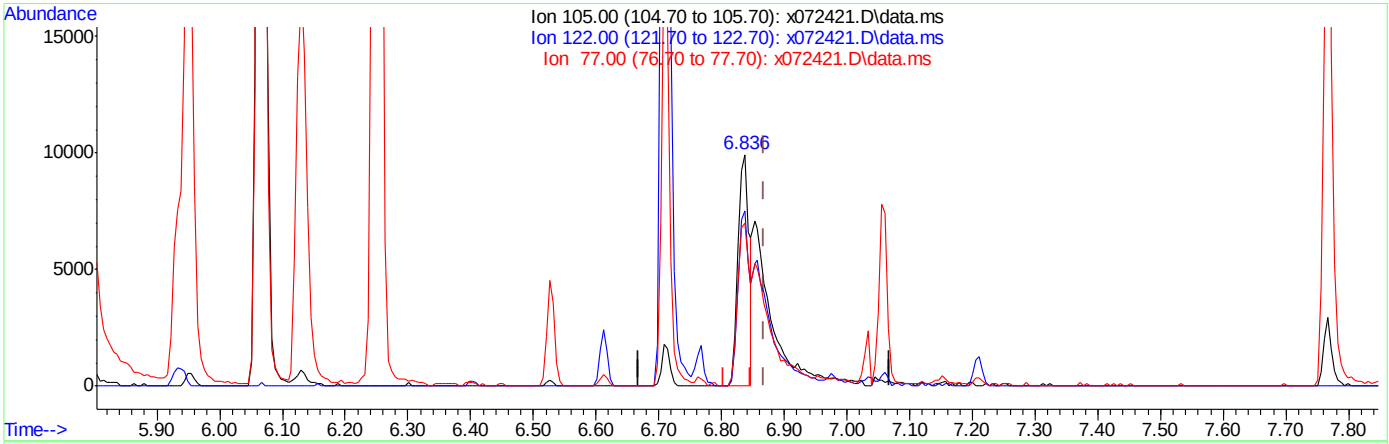
response 51203

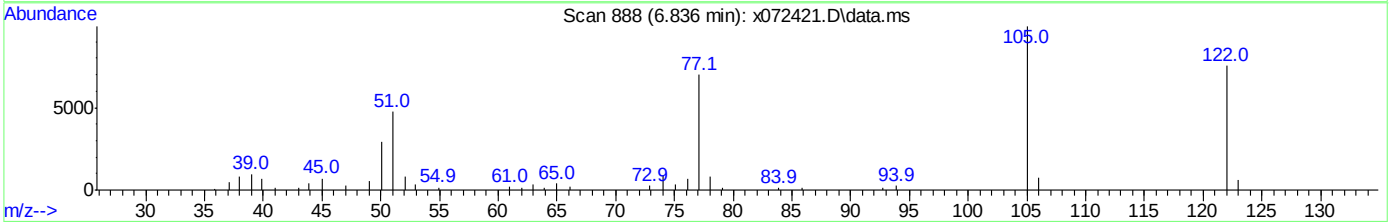
Ion	Exp%	Act%
88.00	100	100
97.00	26.50	29.05
142.00	14.20	15.17
0.00	0.00	0.00

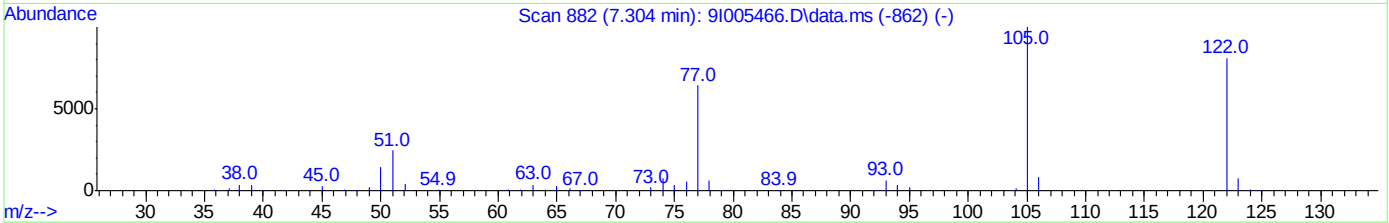
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072421.D
Acq On : 17 Aug 2020 11:11 am
Operator : marthav
Sample : ic2953-10 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 18 09:26:28 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration







TIC: x072421.D\data.ms

(30) Benzoic Acid

6.836min (-0.032) 3.52ppm

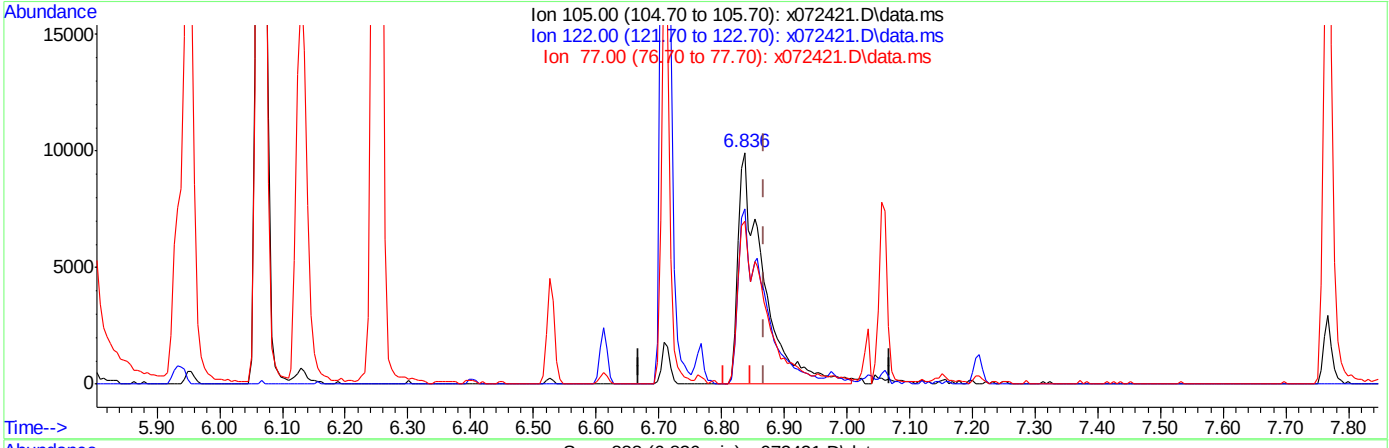
response 13078

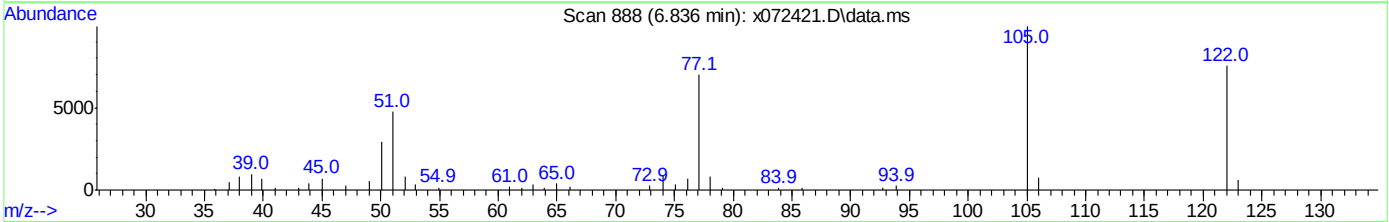
Ion	Exp%	Act%
105.00	100	100
122.00	81.20	79.23
77.00	64.10	70.75
0.00	0.00	0.00

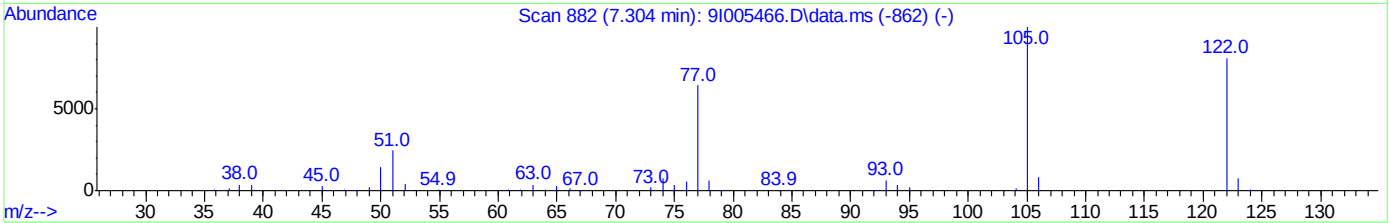
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072421.D
Acq On : 17 Aug 2020 11:11 am
Operator : marthav
Sample : ic2953-10 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 18 09:26:28 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration







TIC: x072421.D\data.ms

(30) Benzoic Acid

6.836min (-0.032) 7.56ppm m

response 28595

Ion	Exp%	Act%
105.00	100	100
122.00	81.20	75.82
77.00	64.10	70.28
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 08/18/20 14:38

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072422.D
Acq On : 17 Aug 2020 11:37 am
Operator : marthav
Sample : ic2953-25 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 18 12:47:49 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.612	152	164883	40.00	ppm	0.00
22) Naphthalene-d8	7.034	136	632554	40.00	ppm	0.00
43) Acenaphthene-d10	9.072	164	304899	40.00	ppm	0.00
70) Phenanthrene-d10	10.816	188	495684	40.00	ppm	0.00
92) Chrysene-d12	14.014	240	364637	40.00	ppm	0.00
102) Perylene-d12	16.186	264	282107	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	0.000	152	0m	40.00	ppm	-5.62
120) Naphthalene-d8A	0.000	136	0m	40.00	ppm	-7.04
127) Acenaphthene-d10A	0.000	164	0m	40.00	ppm	-9.08
136) Phenanthrene-d10A	0.000	188	0m	40.00	ppm	-10.82
146) Chrysene-d12A	0.000	240	0m	40.00	ppm	-14.02
153) Perylene-d12A	0.000	264	0m	40.00	ppm	-16.19
System Monitoring Compounds						
7) 2-Fluorophenol	4.269	112	305677	51.70	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 51.70%			
9) Phenol-d5	5.296	99	353575	50.27	ppm	0.00
Spiked Amount 100.000	Range 10 - 50		Recovery = 50.27%#			
23) Nitrobenzene-d5	6.232	82	176071	26.95	ppm	0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 53.90%			
47) 2-Fluorobiphenyl	8.307	172	299586	27.14	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 54.28%			
75) 2,4,6-Tribromophenol	10.008	330	54245	53.64	ppm	0.00
Spiked Amount 100.000	Range 33 - 118		Recovery = 53.64%			
95) Terphenyl-d14	12.731	244	259456	26.78	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 53.56%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.429	88	68396	24.20	ppm	# 43
3) N-nitrosodimethylamine	2.761	42	121469	24.21	ppm	# 37
4) Pyridine	2.793	79	187573	27.28	ppm	# 27
5) Benzaldehyde	5.141	106	122489	24.92	ppm	91
6) Aniline	5.264	93	219625	22.41	ppm	84
8) bis(2-Chloroethyl)ether	5.344	93	150693	24.91	ppm	# 73
10) Phenol	5.312	94	200200	24.00	ppm	91
11) 2-Chlorophenol	5.403	128	157660	24.99	ppm	77
12) 1,3-Dichlorobenzene	5.547	146	166789	25.45	ppm	97
13) 1,4-Dichlorobenzene	5.633	146	178339	25.72	ppm	98
14) 1,2-Dichlorobenzene	5.793	146	162495	24.67	ppm	98
15) Benzyl alcohol	5.793	108	100271	22.97	ppm	90
16) 2,2'-Oxybis(1-chloropr...	5.938	45	317979	25.01	ppm	73
17) 2-Methylphenol	5.954	108	146232	24.37	ppm	98
18) Acetophenone	6.066	105	210838	23.74	ppm	96
19) Hexachloroethane	6.162	117	67818	26.05	ppm	94
20) N-Nitroso-di-n-propyla...	6.082	70	118258	25.21	ppm	# 55
21) 3&4-Methylphenol	6.130	108	153066	24.67	ppm	92
24) Nitrobenzene	6.253	77	170467	26.38	ppm	83
25) Isophorone	6.532	82	285915	24.78	ppm	95
26) 2-Nitrophenol	6.612	139	82683	26.91	ppm	69

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072422.D
Acq On : 17 Aug 2020 11:37 am
Operator : marthav
Sample : ic2953-25 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 18 12:47:49 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
27) 2,4-Dimethylphenol	6.713	107	132156	23.16	ppm		98
28) O,O,O-Triethylphosphor...	6.767	198	59918	24.74	ppm		73
29) bis(2-Chloroethoxy)met...	6.799	93	173039	25.63	ppm		95
30) Benzoic Acid	6.852	105	81713m	19.45	ppm		
31) 2,4-Dichlorophenol	6.917	162	118674	25.80	ppm		96
32) 1,2,4-Trichlorobenzene	6.981	180	126360	26.88	ppm		99
34) Naphthalene	7.061	128	449180	26.19	ppm		99
35) 4-Chloroaniline	7.152	127	184550	25.48	ppm		90
36) 2,6-Dichlorophenol	7.157	162	116454	24.83	ppm		97
37) Hexachlorobutadiene	7.211	225	62576	26.99	ppm		99
38) Caprolactam	7.564	113	45304	23.74	ppm	#	50
39) 4-Chloro-3-methylphenol	7.767	107	119238	24.31	ppm	#	26
40) 2-Methylnaphthalene	7.863	142	286666	25.27	ppm		97
41) 1-Methylnaphthalene	7.976	142	269438	24.81	ppm		99
42) 1,2,4,5-Tetrachloroben...	8.061	216	115557	24.49	ppm		99
44) Hexachlorocyclopentadiene	8.045	237	29772	13.90	ppm		97
45) 2,4,6-Trichlorophenol	8.222	196	75065	26.82	ppm		98
46) 2,4,5-Trichlorophenol	8.281	196	79989	26.04	ppm		99
48) 1,1'-Biphenyl	8.420	154	328432	26.38	ppm		99
49) 2-Chloronaphthalene	8.430	162	254557	27.24	ppm		98
50) 2-Nitroaniline	8.575	65	93746	27.25	ppm	#	67
51) p-Dinitrobenzene	8.757	75	52378	27.15	ppm	#	68
52) Acenaphthylene	8.906	152	397369	26.09	ppm		99
53) Dimethylphthalate	8.810	163	266980	24.82	ppm		99
54) m-Dinitrobenzene	8.842	168	46647	26.02	ppm	#	76
55) 2,6-Dinitrotoluene	8.874	165	64582	25.44	ppm		93
56) o-Dinitrobenzene	8.922	50	68257	28.07	ppm	#	45
57) Acenaphthene	9.110	153	267639	26.43	ppm		98
58) 3-Nitroaniline	9.061	138	76466	27.38	ppm		93
59) 2,4-Dinitrophenol	9.195	184	24806	22.17	ppm	#	42
60) Dibenzofuran	9.318	168	345199	25.54	ppm		96
61) 2,4-Dinitrotoluene	9.345	165	85718	26.48	ppm		94
62) 4-Nitrophenol	9.356	109	28639	18.35	ppm	#	68
63) 2,3,5,6-Tetrachlorophenol	9.436	232	54017	23.84	ppm		94
64) 2,3,4,6-Tetrachlorophenol	9.489	232	59056	24.92	ppm		92
65) Fluorene	9.719	166	278120	26.37	ppm		99
66) 4-Chlorophenyl-phenyle...	9.741	204	130688	25.67	ppm		89
67) Diethylphthalate	9.644	149	261907	24.38	ppm		98
68) Thionazin	9.730	97	62139	27.23	ppm		98
69) 4-Nitroaniline	9.784	138	78839	25.37	ppm		88
71) 4,6-Dinitro-2-methylph...	9.821	198	45622	27.76	ppm	#	54
72) n-Nitrosodiphenylamine	9.890	169	242547	31.49	ppm		94
73) Diphenylamine	9.890	169	242547	26.83	ppm		94
74) 1,2-Diphenylhydrazine	9.928	77	305078	27.46	ppm		93
76) Sulfotep	10.110	97	43855	26.85	ppm	#	62
77) Phorate	10.243	75	162545	28.41	ppm		94
78) 4-Bromophenyl-phenylether	10.313	248	61537	25.86	ppm	#	84
79) Hexachlorobenzene	10.361	284	60846	25.63	ppm		76
80) Dimethoate	10.441	87	110627	28.18	ppm		97
81) Simazine	10.516	201	41724	23.88	ppm		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072422.D
Acq On : 17 Aug 2020 11:37 am
Operator : marthav
Sample : ic2953-25 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 18 12:47:49 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration

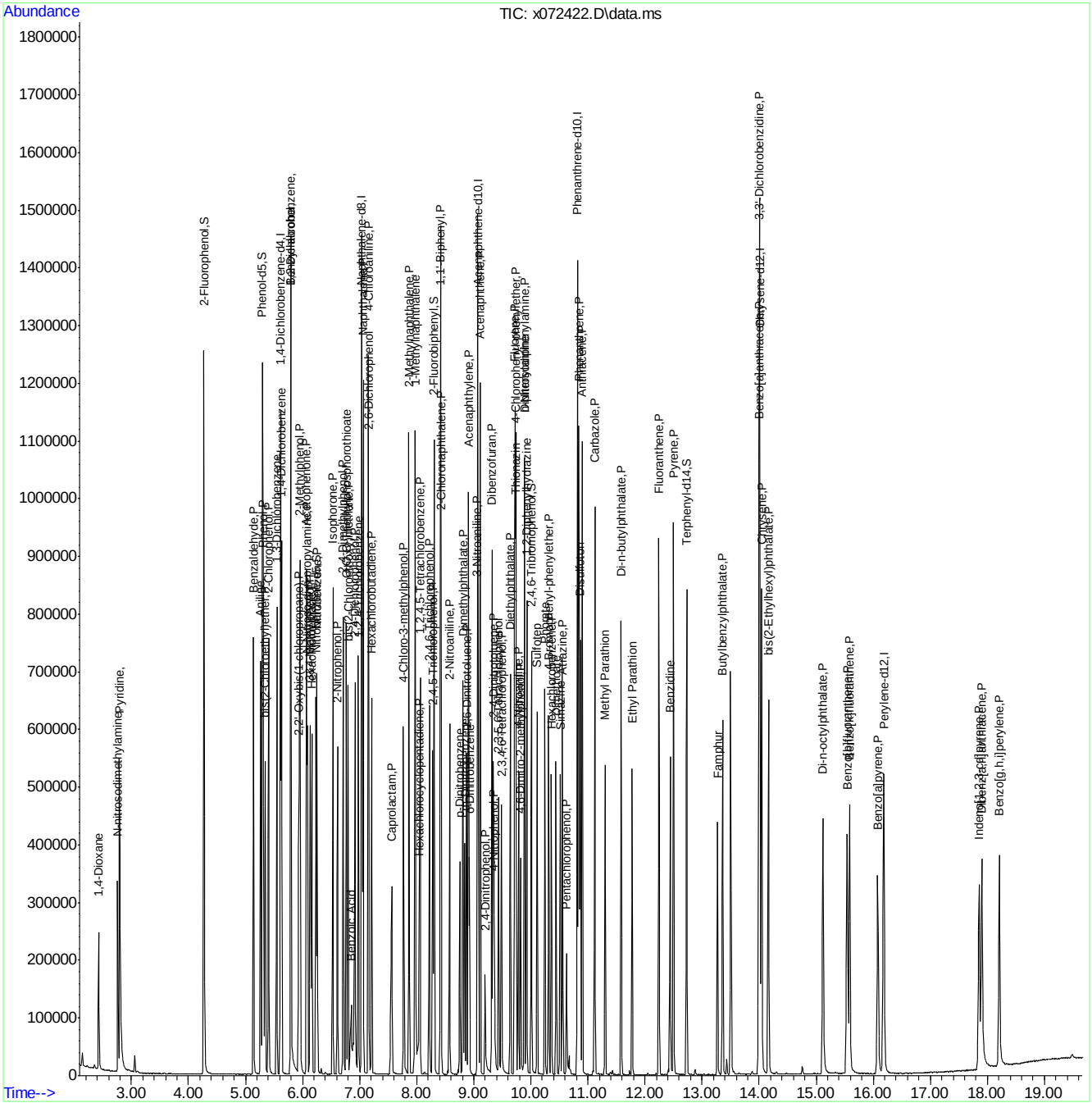
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
82) Atrazine	10.559	200	72211	24.95	ppm		87
83) Pentachlorophenol	10.623	266	23126	16.84	ppm		96
84) Phenanthrene	10.843	178	392212	26.18	ppm		99
85) Anthracene	10.901	178	413221	26.47	ppm		98
86) Disulfoton	10.864	88	140499m	23.46	ppm		
87) Carbazole	11.121	167	363367	26.38	ppm		99
88) Methyl Parathion	11.303	109	89663	26.66	ppm	#	87
89) Di-n-butylphthalate	11.581	149	412970	26.86	ppm		98
90) Ethyl Parathion	11.773	97	51403	27.07	ppm		86
91) Fluoranthene	12.244	202	370420	26.65	ppm		99
93) Benzidine	12.442	184	206944	30.21	ppm		97
94) Pyrene	12.501	202	378323	24.99	ppm		97
96) Famphur	13.271	218	110302	36.99	ppm		89
97) Butylbenzylphthalate	13.362	149	165172	27.13	ppm		93
98) 3,3'-Dichlorobenzidine	14.004	252	103910	28.47	ppm		94
99) Benzo[a]anthracene	13.998	228	297633	25.97	ppm		99
100) Chrysene	14.046	228	322811	26.45	ppm		98
101) bis(2-Ethylhexyl)phtha...	14.164	149	227383	27.86	ppm		96
103) Di-n-octylphthalate	15.116	149	325923	31.43	ppm		92
104) Benzo[b]fluoranthene	15.544	252	244252	30.40	ppm		97
105) Benzo[k]fluoranthene	15.587	252	256717	25.63	ppm		97
106) Benzo[a]pyrene	16.079	252	214379	28.03	ppm		96
107) Indeno[1,2,3-cd]pyrene	17.855	276	185477	36.44	ppm		88
108) Dibenz[a,h]anthracene	17.903	278	200041	34.94	ppm		89
109) Benzo[g,h,i]perylene	18.213	276	215743	29.86	ppm		87

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072422.D
Acq On : 17 Aug 2020 11:37 am
Operator : marthav
Sample : ic2953-25 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 18 12:47:49 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration



Manual Integration Approval Summary

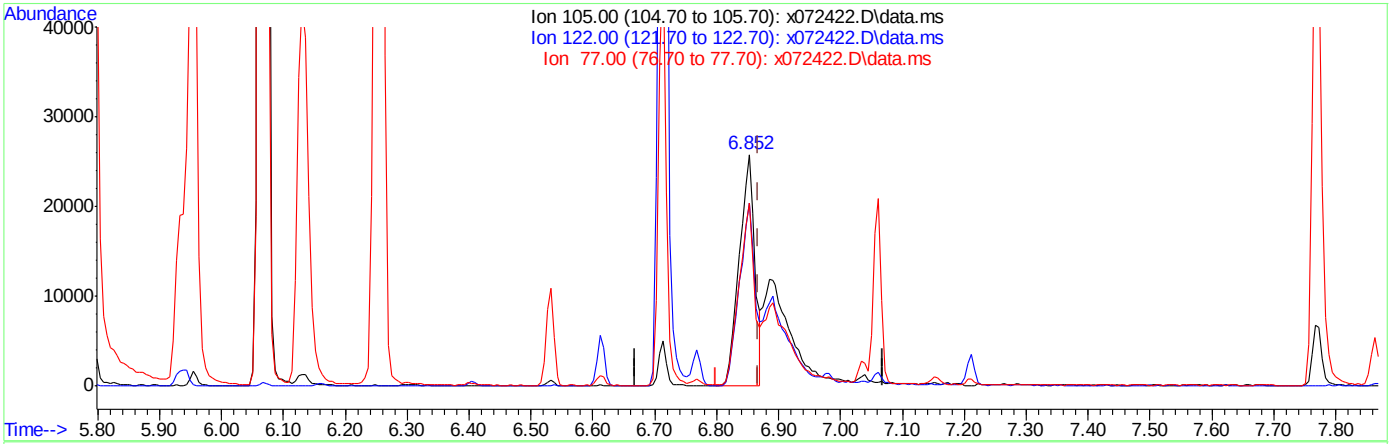
Sample Number:	SX2953-IC2953	**Method:**	SW846 8270D
Lab FileID:	X072422.D	**Analyst approved:**	08/18/20 14:01 Martha Valls
Injection Time:	08/17/20 11:37	**Supervisor approved:**	08/18/20 14:38 Nicole McCampbell

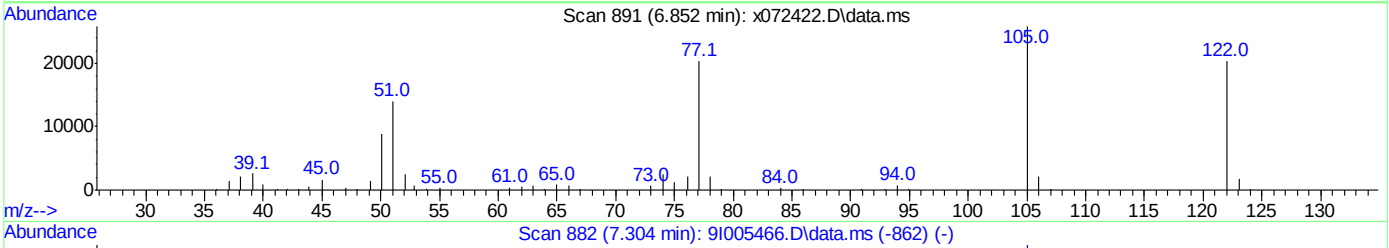
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic Acid	65-85-0		6.85	Split peak
Disulfoton	298-04-4		10.86	Split peak

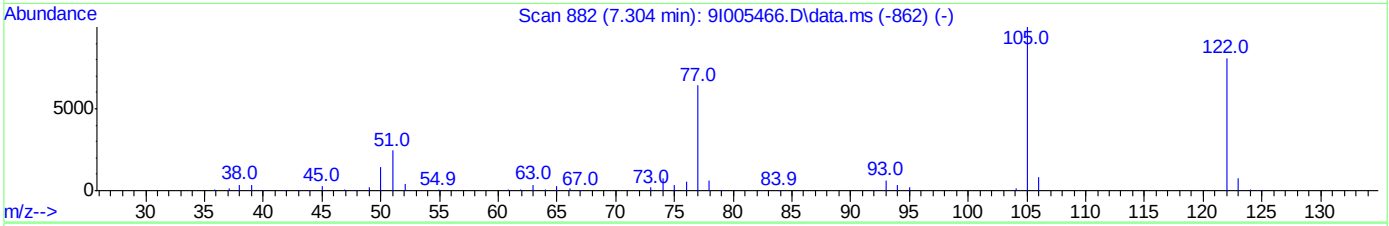
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072422.D
Acq On : 17 Aug 2020 11:37 am
Operator : marthav
Sample : ic2953-25 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 17 14:46:41 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration







TIC: x072422.D\data.ms

(30) Benzoic Acid

6.852min (-0.016) 10.97ppm

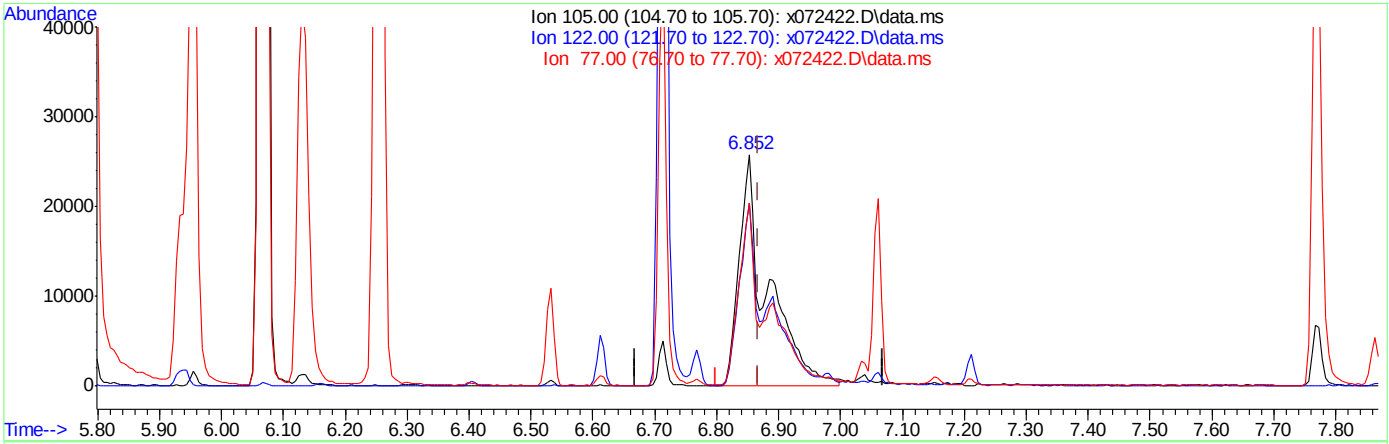
response 44292

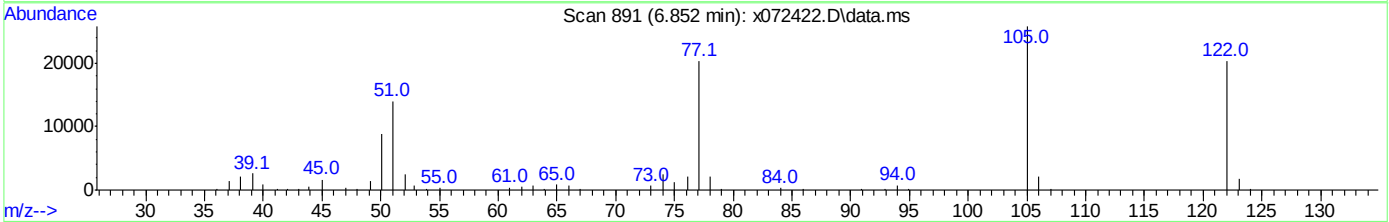
Ion	Exp%	Act%
105.00	100	100
122.00	81.20	77.48
77.00	64.10	78.82
0.00	0.00	0.00

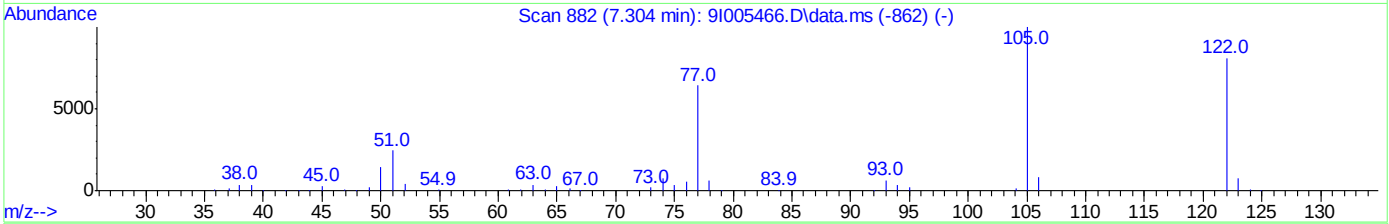
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072422.D
Acq On : 17 Aug 2020 11:37 am
Operator : marthav
Sample : ic2953-25 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 17 14:46:41 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration







TIC: x072422.D\data.ms

(30) Benzoic Acid

6.852min (-0.016) 19.45ppm m

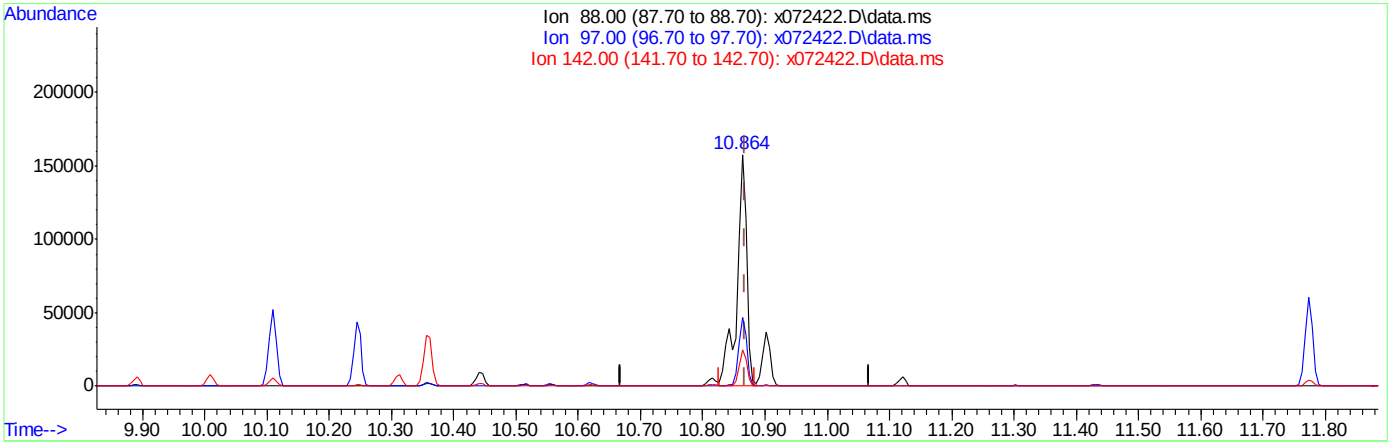
response 81713

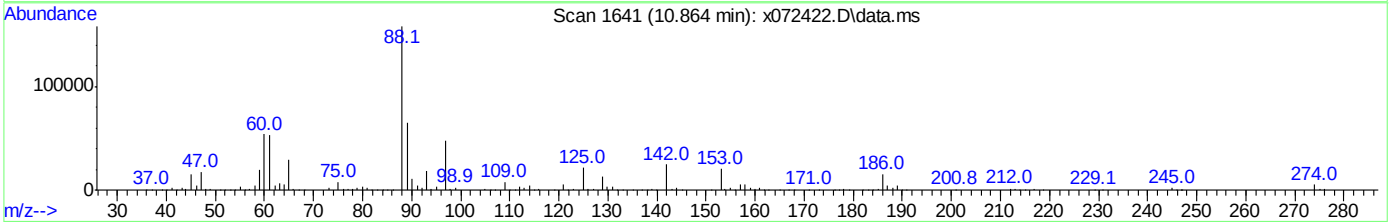
Ion	Exp%	Act%
105.00	100	100
122.00	81.20	78.83
77.00	64.10	79.08
0.00	0.00	0.00

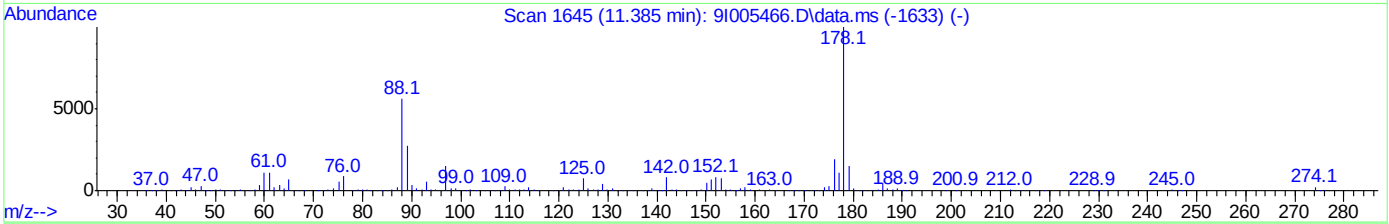
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072422.D
Acq On : 17 Aug 2020 11:37 am
Operator : marthav
Sample : ic2953-25 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 17 14:46:41 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration







TIC: x072422.D\data.ms

(86) Disulfoton

10.864min (-0.005) 28.99ppm

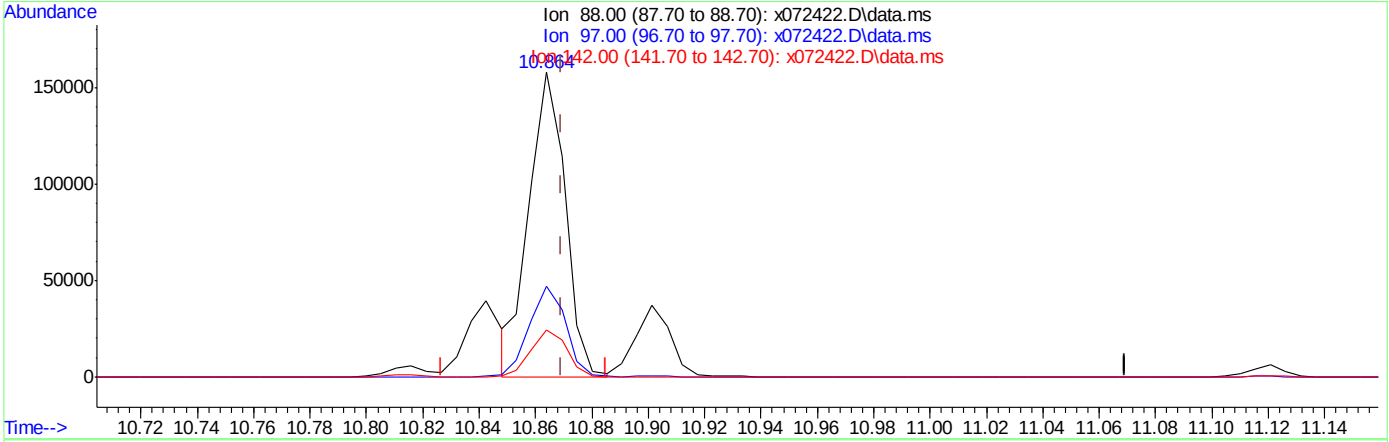
response 173565

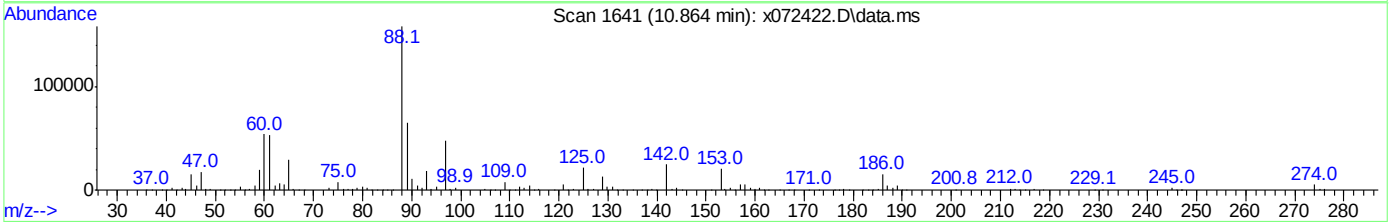
Ion	Exp%	Act%
88.00	100	100
97.00	26.50	30.14
142.00	14.20	15.68
0.00	0.00	0.00

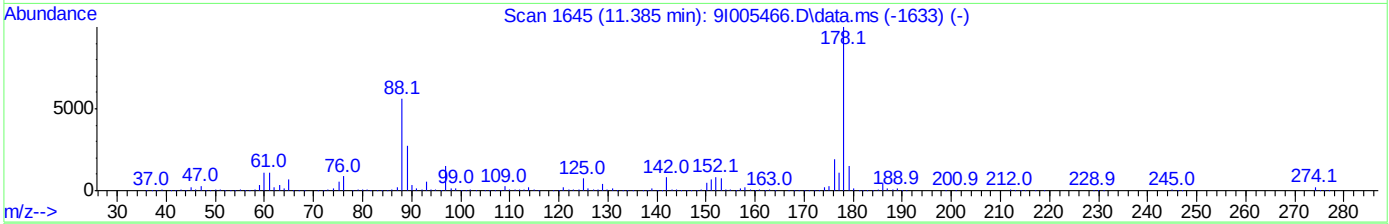
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072422.D
Acq On : 17 Aug 2020 11:37 am
Operator : marthav
Sample : ic2953-25 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 17 14:46:41 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration







TIC: x072422.D\data.ms

(86) Disulfoton

10.864min (-0.005) 23.46ppm m

response 140499

Ion	Exp%	Act%
88.00	100	100
97.00	26.50	29.85
142.00	14.20	15.57
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 08/18/20 14:38

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072423.D
Acq On : 17 Aug 2020 12:03 pm
Operator : marthav
Sample : icc2953-50 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 18 12:48:12 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.617	152	155540	40.00	ppm	0.00
22) Naphthalene-d8	7.040	136	601149	40.00	ppm	0.00
43) Acenaphthene-d10	9.077	164	289917	40.00	ppm	0.00
70) Phenanthrene-d10	10.816	188	486107	40.00	ppm	0.00
92) Chrysene-d12	14.020	240	374416	40.00	ppm	0.00
102) Perylene-d12	16.191	264	278810	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	0.000	152	0m	40.00	ppm	-5.62
120) Naphthalene-d8A	0.000	136	0m	40.00	ppm	-7.04
127) Acenaphthene-d10A	0.000	164	0m	40.00	ppm	-9.08
136) Phenanthrene-d10A	0.000	188	0m	40.00	ppm	-10.82
146) Chrysene-d12A	0.000	240	0m	40.00	ppm	-14.02
153) Perylene-d12A	0.000	264	0m	40.00	ppm	-16.19
System Monitoring Compounds						
7) 2-Fluorophenol	4.269	112	596384	106.94	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 106.94%#			
9) Phenol-d5	5.301	99	706972	106.55	ppm	0.00
Spiked Amount 100.000	Range 10 - 50		Recovery = 106.55%#			
23) Nitrobenzene-d5	6.237	82	347918	56.04	ppm	0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 112.08%#			
47) 2-Fluorobiphenyl	8.307	172	602561	57.41	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 114.82%#			
75) 2,4,6-Tribromophenol	10.013	330	111659	102.34	ppm	0.00
Spiked Amount 100.000	Range 33 - 118		Recovery = 102.34%			
95) Terphenyl-d14	12.736	244	543794	54.66	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 109.32%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.424	88	132154	49.58	ppm	# 36
3) N-nitrosodimethylamine	2.766	42	237118	50.10	ppm	# 39
4) Pyridine	2.787	79	374626	57.77	ppm	# 28
5) Benzaldehyde	5.146	106	238697	51.48	ppm	93
6) Aniline	5.269	93	435492	47.10	ppm	85
8) bis(2-Chloroethyl)ether	5.349	93	311821	54.64	ppm	75
10) Phenol	5.317	94	415583	52.80	ppm	92
11) 2-Chlorophenol	5.408	128	323609	54.38	ppm	83
12) 1,3-Dichlorobenzene	5.547	146	339506	54.92	ppm	96
13) 1,4-Dichlorobenzene	5.633	146	355473	54.34	ppm	97
14) 1,2-Dichlorobenzene	5.793	146	318781	51.30	ppm	97
15) Benzyl alcohol	5.799	108	202487	49.17	ppm	94
16) 2,2'-Oxybis(1-chloropr...	5.943	45	612298	51.06	ppm	76
17) 2-Methylphenol	5.959	108	291838	51.55	ppm	98
18) Acetophenone	6.071	105	418376	49.94	ppm	96
19) Hexachloroethane	6.162	117	135504	55.17	ppm	91
20) N-Nitroso-di-n-propyla...	6.093	70	231596	52.35	ppm	# 59
21) 3&4-Methylphenol	6.136	108	309187	52.84	ppm	96
24) Nitrobenzene	6.259	77	337059	54.88	ppm	84
25) Isophorone	6.537	82	559130	50.98	ppm	95
26) 2-Nitrophenol	6.617	139	166502	57.02	ppm	80

7.6.14

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072423.D
Acq On : 17 Aug 2020 12:03 pm
Operator : marthav
Sample : icc2953-50 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 18 12:48:12 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
27) 2,4-Dimethylphenol	6.719	107	268035	49.43	ppm		95
28) O,O,O-Triethylphosphor...	6.772	198	119999	52.14	ppm		81
29) bis(2-Chloroethoxy)met...	6.804	93	342697	53.41	ppm		96
30) Benzoic Acid	6.868	105	160813m	37.25	ppm		
31) 2,4-Dichlorophenol	6.917	162	237385	54.30	ppm		96
32) 1,2,4-Trichlorobenzene	6.981	180	250281	56.02	ppm		97
34) Naphthalene	7.061	128	875825	53.73	ppm		99
35) 4-Chloroaniline	7.157	127	356908	51.85	ppm		92
36) 2,6-Dichlorophenol	7.163	162	229387	51.46	ppm		97
37) Hexachlorobutadiene	7.211	225	124270	56.41	ppm		99
38) Caprolactam	7.590	113	91452	50.42	ppm	#	50
39) 4-Chloro-3-methylphenol	7.772	107	236223	50.68	ppm	#	57
40) 2-Methylnaphthalene	7.869	142	555600	51.54	ppm		99
41) 1-Methylnaphthalene	7.976	142	535496	51.88	ppm		99
42) 1,2,4,5-Tetrachloroben...	8.061	216	234838	52.38	ppm		97
44) Hexachlorocyclopentadiene	8.050	237	78093	35.35	ppm		99
45) 2,4,6-Trichlorophenol	8.222	196	149870	56.32	ppm		97
46) 2,4,5-Trichlorophenol	8.286	196	160200	54.85	ppm		98
48) 1,1'-Biphenyl	8.420	154	651883	55.06	ppm		99
49) 2-Chloronaphthalene	8.430	162	496701	55.90	ppm		95
50) 2-Nitroaniline	8.580	65	184465	56.39	ppm	#	69
51) p-Dinitrobenzene	8.757	75	106234	57.92	ppm	#	61
52) Acenaphthylene	8.912	152	799418	55.21	ppm		99
53) Dimethylphthalate	8.815	163	536469	52.45	ppm		100
54) m-Dinitrobenzene	8.847	168	98509	57.80	ppm	#	47
55) 2,6-Dinitrotoluene	8.874	165	131720	54.57	ppm		89
56) o-Dinitrobenzene	8.933	50	134886	58.35	ppm	#	48
57) Acenaphthene	9.115	153	520970	54.10	ppm		99
58) 3-Nitroaniline	9.072	138	152389	57.39	ppm		99
59) 2,4-Dinitrophenol	9.200	184	65700	52.14	ppm	#	87
60) Dibenzofuran	9.318	168	683292	53.16	ppm		95
61) 2,4-Dinitrotoluene	9.350	165	175054	56.88	ppm		88
62) 4-Nitrophenol	9.356	109	61864	41.70	ppm	#	58
63) 2,3,5,6-Tetrachlorophenol	9.441	232	111212	51.62	ppm		95
64) 2,3,4,6-Tetrachlorophenol	9.489	232	122938	54.55	ppm		89
65) Fluorene	9.725	166	551007	54.95	ppm		98
66) 4-Chlorophenyl-phenyle...	9.741	204	261626	54.05	ppm		89
67) Diethylphthalate	9.650	149	528019	51.69	ppm		99
68) Thionazin	9.735	97	123090	56.73	ppm		99
69) 4-Nitroaniline	9.794	138	161114	54.53	ppm		86
71) 4,6-Dinitro-2-methylph...	9.832	198	102374	56.04	ppm	#	69
72) n-Nitrosodiphenylamine	9.896	169	485350	64.25	ppm		97
73) Diphenylamine	9.896	169	485350	54.75	ppm		97
74) 1,2-Diphenylhydrazine	9.928	77	605569	55.59	ppm		90
76) Sulfotep	10.115	97	87653	54.72	ppm	#	71
77) Phorate	10.249	75	328343	58.52	ppm		95
78) 4-Bromophenyl-phenylether	10.313	248	127895	54.80	ppm	#	81
79) Hexachlorobenzene	10.361	284	126889	54.49	ppm		71
80) Dimethoate	10.452	87	226787	57.72	ppm		97
81) Simazine	10.527	201	84339	49.21	ppm		95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072423.D
Acq On : 17 Aug 2020 12:03 pm
Operator : marthav
Sample : icc2953-50 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 18 12:48:12 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration

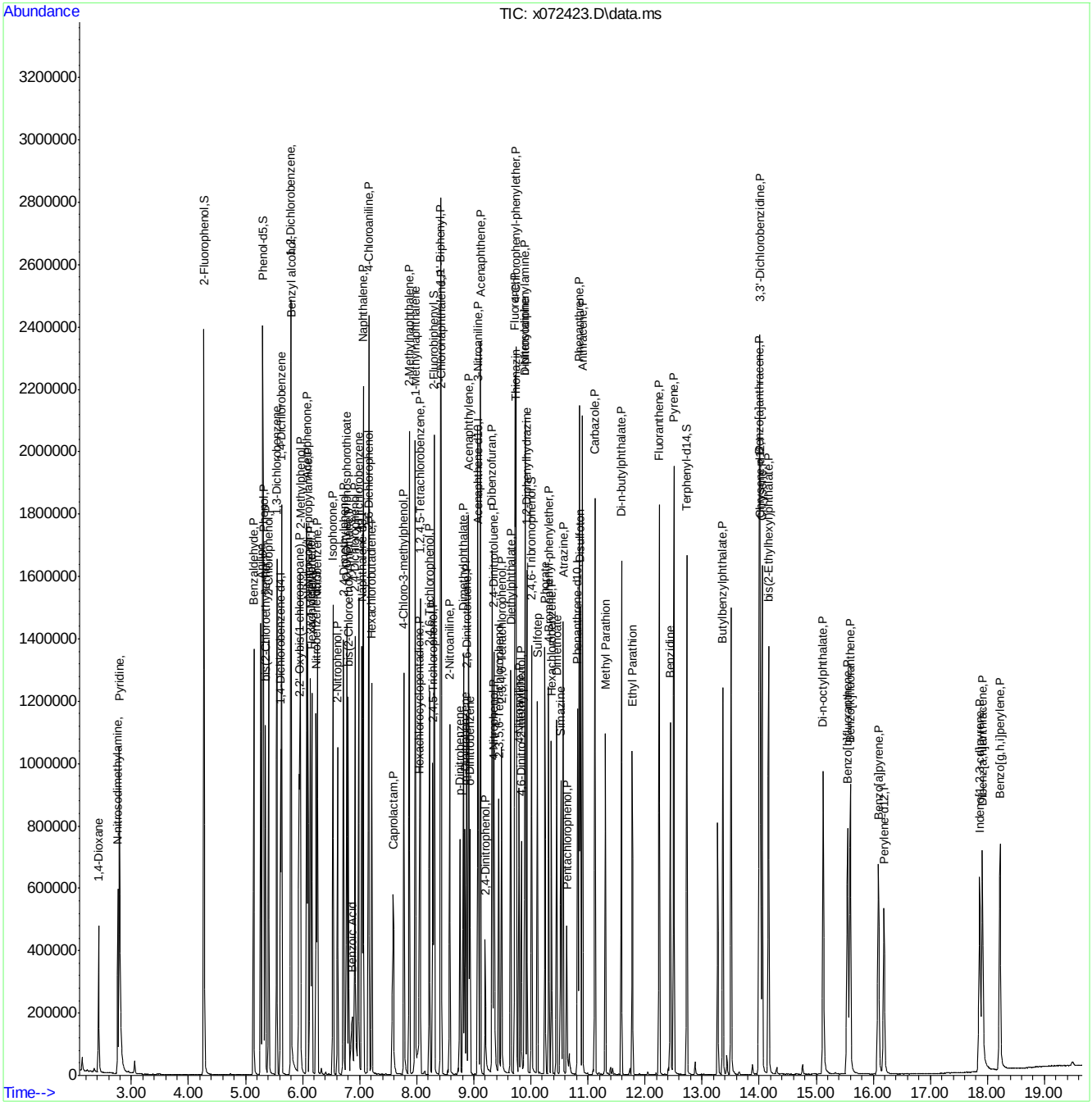
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
82) Atrazine	10.564	200	150559	53.05	ppm		82
83) Pentachlorophenol	10.629	266	56759	38.58	ppm		97
84) Phenanthrene	10.848	178	777336	52.92	ppm		99
85) Anthracene	10.907	178	832925	54.41	ppm		98
86) Disulfoton	10.869	88	275860m	46.98	ppm		
87) Carbazole	11.126	167	738072	54.63	ppm		99
88) Methyl Parathion	11.308	109	185337	55.15	ppm	#	87
89) Di-n-butylphthalate	11.586	149	829741	55.03	ppm		99
90) Ethyl Parathion	11.778	97	106858	54.32	ppm		88
91) Fluoranthene	12.249	202	752039	55.18	ppm		99
93) Benzidine	12.447	184	422319	56.94	ppm		96
94) Pyrene	12.506	202	792295	50.96	ppm		99
96) Famphur	13.276	218	210865	Below Cal			90
97) Butylbenzylphthalate	13.362	149	342263	52.59	ppm		87
98) 3,3'-Dichlorobenzidine	14.014	252	224747	56.12	ppm		97
99) Benzo[a]anthracene	14.004	228	621270	52.79	ppm		99
100) Chrysene	14.057	228	675866	53.93	ppm		98
101) bis(2-Ethylhexyl)phtha...	14.164	149	481715	54.07	ppm		96
103) Di-n-octylphthalate	15.121	149	692792	59.26	ppm		93
104) Benzo[b]fluoranthene	15.555	252	510079	60.29	ppm		97
105) Benzo[k]fluoranthene	15.603	252	525774	53.12	ppm		97
106) Benzo[a]pyrene	16.089	252	449916	55.89	ppm		95
107) Indeno[1,2,3-cd]pyrene	17.865	276	369038	62.95	ppm		87
108) Dibenz[a,h]anthracene	17.913	278	420547	62.45	ppm		90
109) Benzo[g,h,i]perylene	18.224	276	428717	54.59	ppm		88

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072423.D
Acq On : 17 Aug 2020 12:03 pm
Operator : marthav
Sample : icc2953-50 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 18 12:48:12 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration



Manual Integration Approval Summary

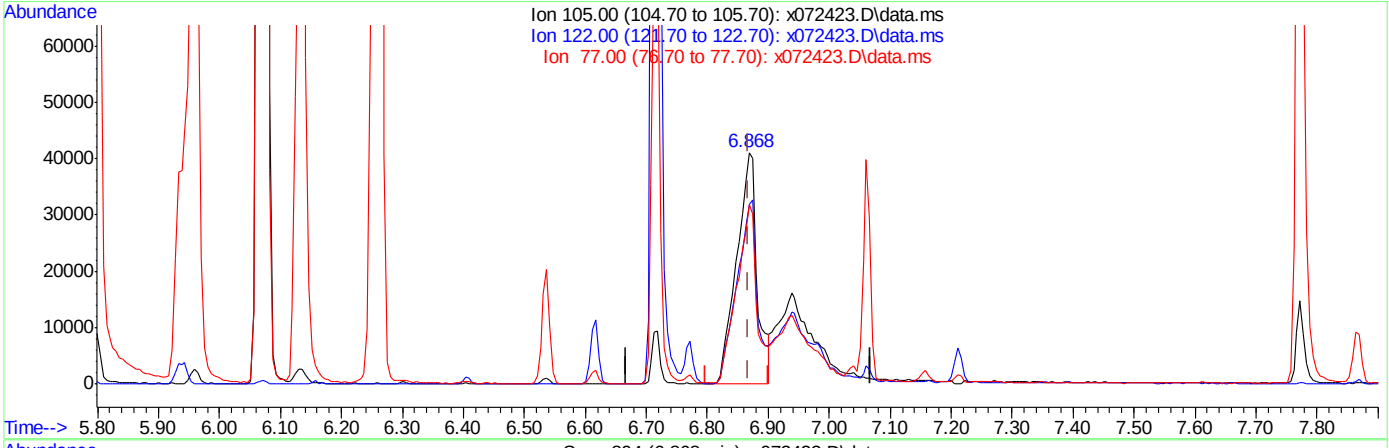
Sample Number: SX2953-ICC2953 **Method:** SW846 8270D
Lab FileID: X072423.D **Analyst approved:** 08/18/20 14:01 Martha Valls
Injection Time: 08/17/20 12:03 **Supervisor approved:** 08/18/20 14:38 Nicole McCampbell

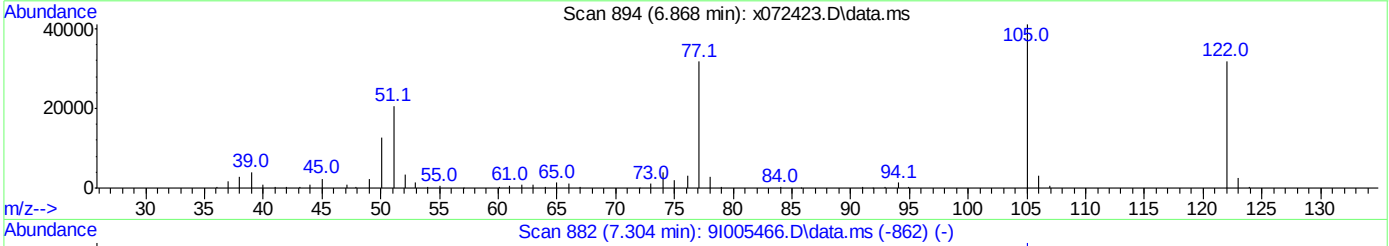
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic Acid	65-85-0		6.87	Split peak
Disulfoton	298-04-4		10.87	Split peak

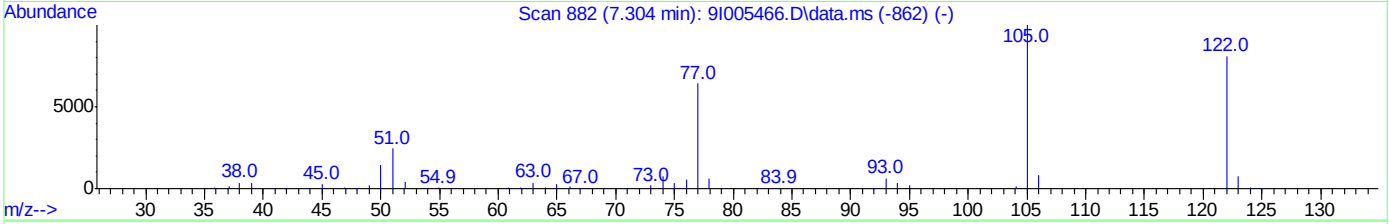
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072423.D
Acq On : 17 Aug 2020 12:03 pm
Operator : marthav
Sample : icc2953-50 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 17 14:46:43 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration







TIC: x072423.D\data.ms

(30) Benzoic Acid

6.868min (0.000) 23.45ppm

response 95336

Ion	Exp%	Act%
105.00	100	100
122.00	81.20	77.51
77.00	64.10	77.21
0.00	0.00	0.00

Quantitation Report (Qedit)

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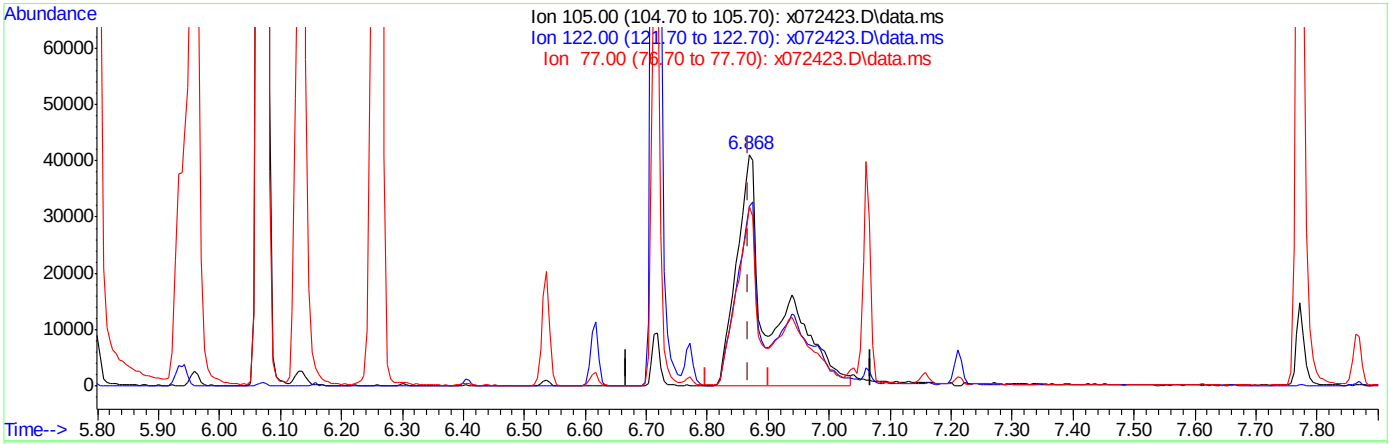

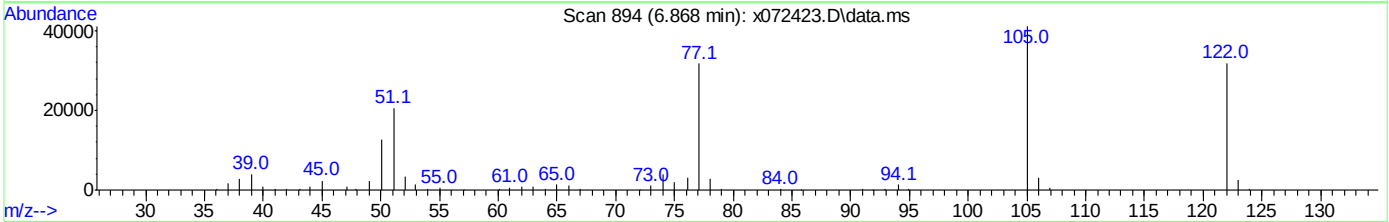

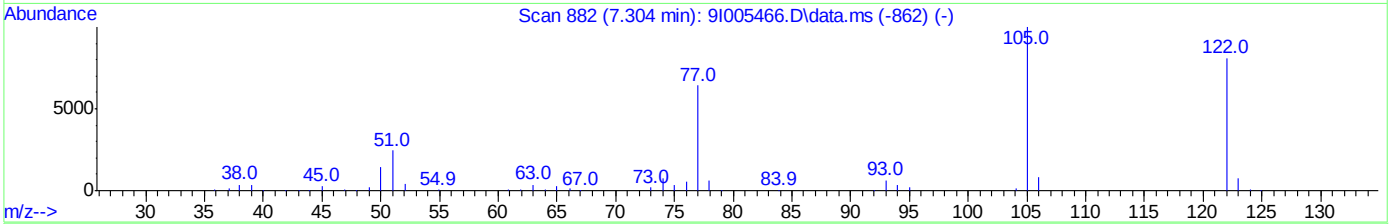

TIC: x072423.D\data.ms

(30) Benzoic Acid

6.868min (0.000) 37.25ppm m

response 160813

Ion	Exp%	Act%
105.00	100	100
122.00	81.20	77.47
77.00	64.10	77.39
0.00	0.00	0.00

Quantitation Report (Qedit)

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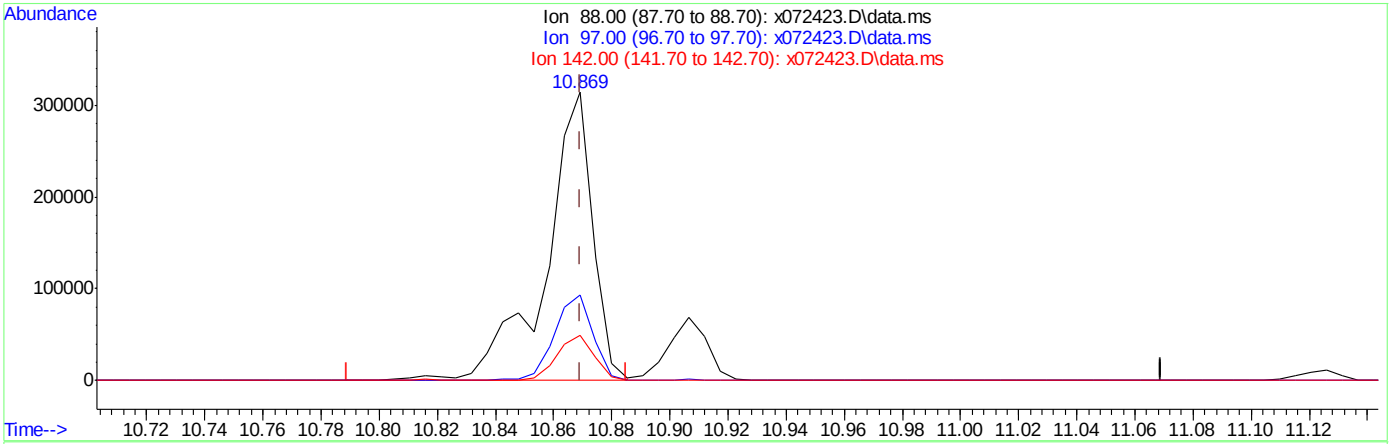

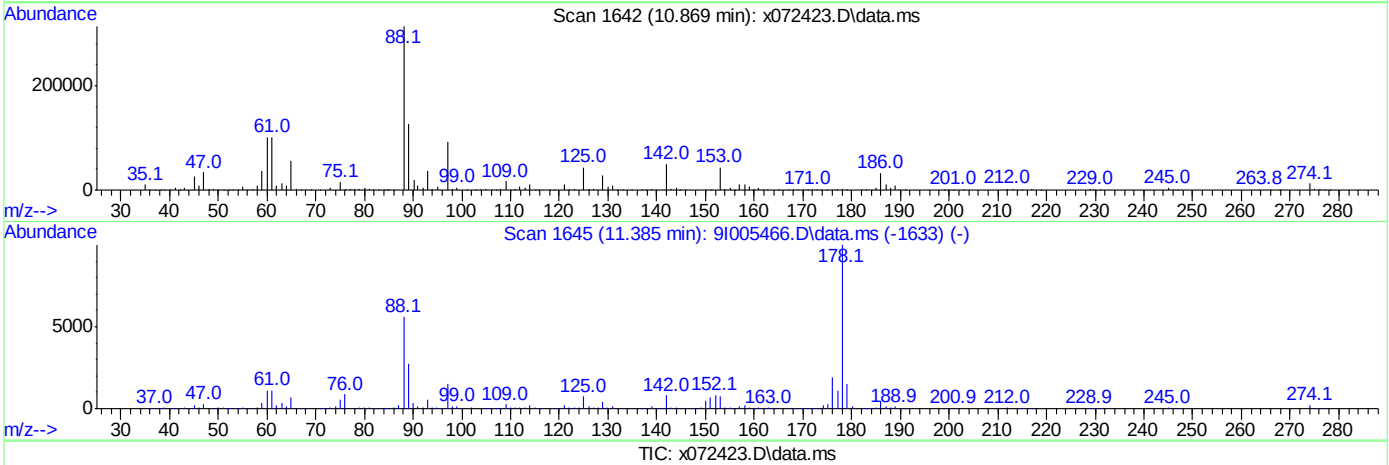

TIC: x072423.D\data.ms

(86) Disulfoton

10.869min (0.000) 60.31ppm

response 354157

Ion	Exp%	Act%
88.00	100	100
97.00	26.50	29.76
142.00	14.20	15.77
0.00	0.00	0.00

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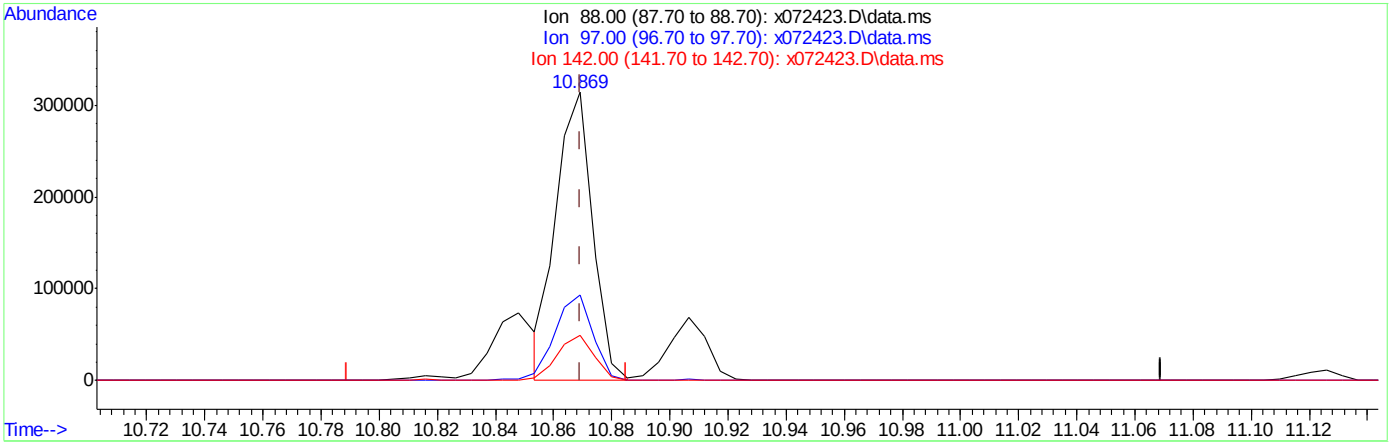

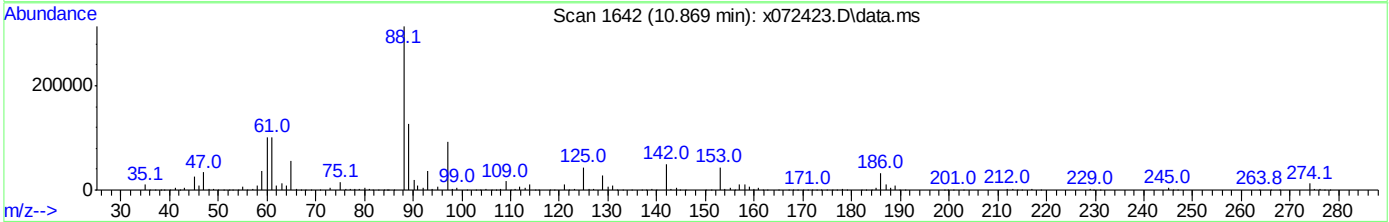

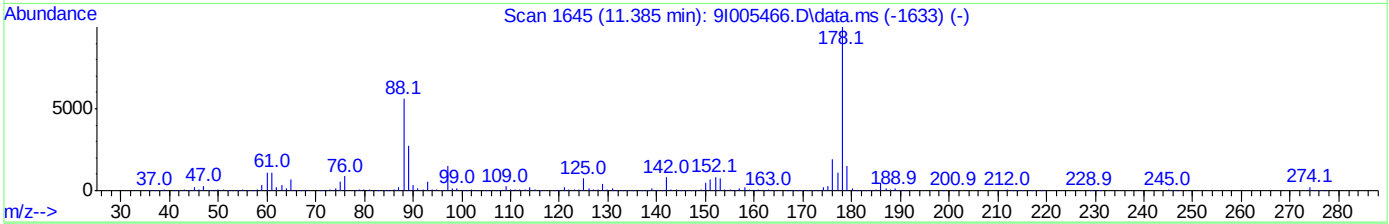

TIC: x072423.D\data.ms

(86) Disulfoton

10.869min (0.000) 46.98ppm m

response 275860

Ion	Exp%	Act%
88.00	100	100
97.00	26.50	29.74
142.00	14.20	15.77
0.00	0.00	0.00

Quantitation Report (Qedit)

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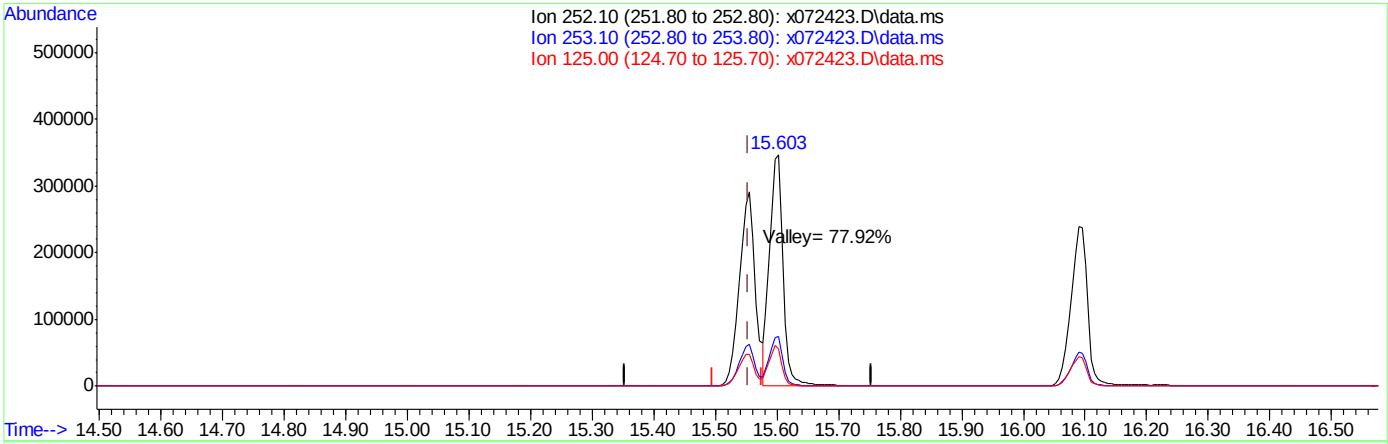

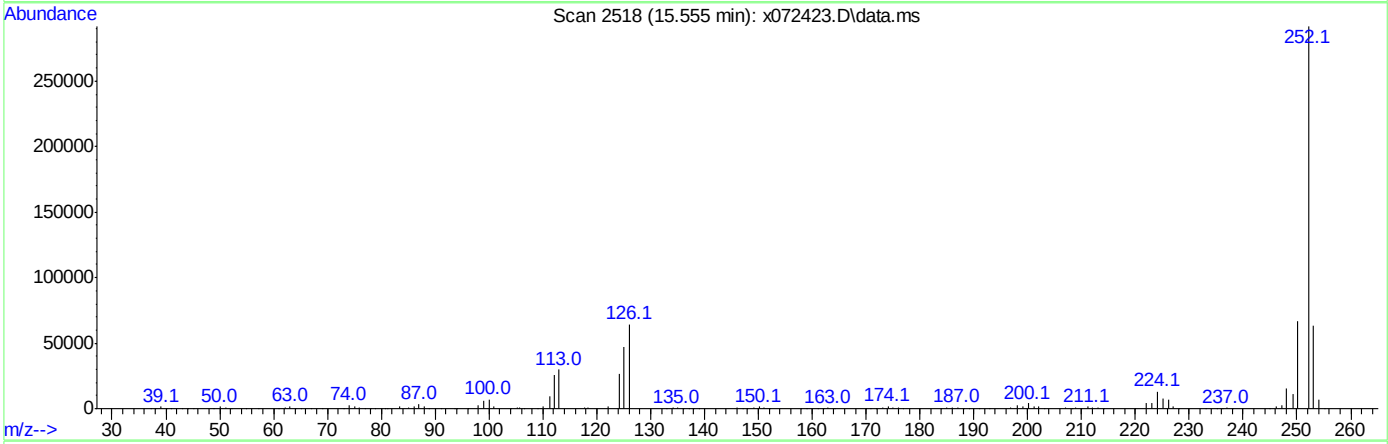

TIC: x072423.D\data.ms

(104) Benzo[b]fluoranthene (P)

15.555min (0.000) 60.29ppm

response 510079

Ion	Exp%	Act%
252.10	100	100
253.10	22.50	21.71
125.00	14.00	15.81
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 08/18/20 14:38

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072424.D
Acq On : 17 Aug 2020 12:28 pm
Operator : marthav
Sample : ic2953-60 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 18 12:48:34 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.617	152	163464	40.00	ppm	0.00
22) Naphthalene-d8	7.040	136	642755	40.00	ppm	0.00
43) Acenaphthene-d10	9.077	164	311380	40.00	ppm	0.00
70) Phenanthrene-d10	10.821	188	525877	40.00	ppm	0.00
92) Chrysene-d12	14.020	240	406073	40.00	ppm	0.00
102) Perylene-d12	16.191	264	297447	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	0.000	152	0m	40.00	ppm	-5.62
120) Naphthalene-d8A	0.000	136	0m	40.00	ppm	-7.04
127) Acenaphthene-d10A	0.000	164	0m	40.00	ppm	-9.08
136) Phenanthrene-d10A	0.000	188	0m	40.00	ppm	-10.82
146) Chrysene-d12A	0.000	240	0m	40.00	ppm	-14.02
153) Perylene-d12A	0.000	264	0m	40.00	ppm	-16.19
System Monitoring Compounds						
7) 2-Fluorophenol	4.269	112	751041	128.14	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 128.14%#			
9) Phenol-d5	5.307	99	929592	133.31	ppm	0.00
Spiked Amount 100.000	Range 10 - 50		Recovery = 133.31%#			
23) Nitrobenzene-d5	6.237	82	447645	67.44	ppm	0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 134.88%#			
47) 2-Fluorobiphenyl	8.313	172	778790	69.09	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 138.18%#			
75) 2,4,6-Tribromophenol	10.019	330	148146	121.24	ppm	0.00
Spiked Amount 100.000	Range 33 - 118		Recovery = 121.24%#			
95) Terphenyl-d14	12.736	244	719808	66.71	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 133.42%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.424	88	166367	59.39	ppm	# 38
3) N-nitrosodimethylamine	2.766	42	306626	61.64	ppm	# 38
4) Pyridine	2.787	79	486960	71.45	ppm	# 30
5) Benzaldehyde	5.146	106	297806	61.12	ppm	92
6) Aniline	5.269	93	570741	58.73	ppm	93
8) bis(2-Chloroethyl)ether	5.349	93	397177	66.23	ppm	74
10) Phenol	5.317	94	535117	64.69	ppm	89
11) 2-Chlorophenol	5.408	128	413051	66.04	ppm	82
12) 1,3-Dichlorobenzene	5.547	146	426547	65.65	ppm	97
13) 1,4-Dichlorobenzene	5.633	146	442014	64.30	ppm	97
14) 1,2-Dichlorobenzene	5.793	146	401000	61.40	ppm	96
15) Benzyl alcohol	5.799	108	260506	60.19	ppm	91
16) 2,2'-Oxybis(1-chloropr...	5.943	45	771219	61.19	ppm	76
17) 2-Methylphenol	5.959	108	376771	63.33	ppm	99
18) Acetophenone	6.077	105	529662	60.16	ppm	97
19) Hexachloroethane	6.162	117	169665	65.73	ppm	92
20) N-Nitroso-di-n-propyla...	6.098	70	299273	64.36	ppm	# 65
21) 3&4-Methylphenol	6.136	108	398755	64.84	ppm	97
24) Nitrobenzene	6.264	77	433437	66.00	ppm	87
25) Isophorone	6.537	82	725105	61.84	ppm	95
26) 2-Nitrophenol	6.617	139	218437	69.96	ppm	84

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072424.D
Acq On : 17 Aug 2020 12:28 pm
Operator : marthav
Sample : ic2953-60 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 18 12:48:34 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
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Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
27) 2,4-Dimethylphenol	6.719	107	345233	59.54	ppm		95
28) O,O,O-Triethylphosphor...	6.772	198	156292	63.51	ppm		77
29) bis(2-Chloroethoxy)met...	6.804	93	444547	64.80	ppm		95
30) Benzoic Acid	6.890	105	237392m	49.00	ppm		
31) 2,4-Dichlorophenol	6.917	162	305524	65.37	ppm		95
32) 1,2,4-Trichlorobenzene	6.981	180	319968	66.99	ppm		98
34) Naphthalene	7.066	128	1115585	64.01	ppm		99
35) 4-Chloroaniline	7.157	127	458460	62.29	ppm		91
36) 2,6-Dichlorophenol	7.163	162	295671	62.04	ppm		97
37) Hexachlorobutadiene	7.211	225	157149	66.72	ppm		99
38) Caprolactam	7.607	113	117393	60.53	ppm	#	50
39) 4-Chloro-3-methylphenol	7.772	107	311047	62.41	ppm	#	26
40) 2-Methylnaphthalene	7.869	142	723757	62.80	ppm		99
41) 1-Methylnaphthalene	7.981	142	690397	62.56	ppm		99
42) 1,2,4,5-Tetrachloroben...	8.061	216	304894	63.60	ppm		98
44) Hexachlorocyclopentadiene	8.050	237	110011	44.82	ppm		97
45) 2,4,6-Trichlorophenol	8.227	196	199331	69.74	ppm		99
46) 2,4,5-Trichlorophenol	8.286	196	215163	68.59	ppm		99
48) 1,1'-Biphenyl	8.420	154	822337	64.67	ppm		99
49) 2-Chloronaphthalene	8.430	162	640293	67.09	ppm		95
50) 2-Nitroaniline	8.580	65	244488	69.58	ppm	#	66
51) p-Dinitrobenzene	8.762	75	141518	71.84	ppm	#	66
52) Acenaphthylene	8.912	152	1043381	67.09	ppm		99
53) Dimethylphthalate	8.821	163	703682	64.06	ppm		99
54) m-Dinitrobenzene	8.847	168	130510	71.30	ppm	#	62
55) 2,6-Dinitrotoluene	8.880	165	176026	67.90	ppm		89
56) o-Dinitrobenzene	8.938	50	177020	71.29	ppm	#	48
57) Acenaphthene	9.115	153	678486	65.60	ppm		99
58) 3-Nitroaniline	9.072	138	198839	69.72	ppm		93
59) 2,4-Dinitrophenol	9.200	184	91709	63.87	ppm	#	62
60) Dibenzofuran	9.323	168	883528	64.00	ppm		97
61) 2,4-Dinitrotoluene	9.350	165	230766	69.81	ppm		81
62) 4-Nitrophenol	9.356	109	84290	52.90	ppm	#	44
63) 2,3,5,6-Tetrachlorophenol	9.441	232	147642	63.81	ppm		95
64) 2,3,4,6-Tetrachlorophenol	9.489	232	163729	67.65	ppm		89
65) Fluorene	9.725	166	716032	66.48	ppm		98
66) 4-Chlorophenyl-phenyle...	9.746	204	338277	65.07	ppm		94
67) Diethylphthalate	9.650	149	689365	62.83	ppm		98
68) Thionazin	9.735	97	153344	65.80	ppm		98
69) 4-Nitroaniline	9.800	138	209503	66.02	ppm		85
71) 4,6-Dinitro-2-methylph...	9.837	198	135783	65.97	ppm		85
72) n-Nitrosodiphenylamine	9.901	169	627877	76.83	ppm		96
73) Diphenylamine	9.901	169	627877	65.47	ppm		96
74) 1,2-Diphenylhydrazine	9.933	77	786299	66.72	ppm		94
76) Sulfotep	10.115	97	112477	64.91	ppm	#	67
77) Phorate	10.249	75	423764	69.81	ppm		94
78) 4-Bromophenyl-phenylether	10.318	248	167075	66.17	ppm		86
79) Hexachlorobenzene	10.366	284	167177	66.36	ppm		80
80) Dimethoate	10.457	87	292041	68.22	ppm		98
81) Simazine	10.532	201	111651	60.22	ppm		96

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Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
82) Atrazine	10.570	200	194725	63.42	ppm		88
83) Pentachlorophenol	10.629	266	76162	46.44	ppm		98
84) Phenanthrene	10.848	178	1016119	63.94	ppm		99
85) Anthracene	10.912	178	1075744	64.95	ppm		98
86) Disulfoton	10.869	88	361962m	56.98	ppm		
87) Carbazole	11.126	167	964346	65.99	ppm		99
88) Methyl Parathion	11.308	109	239811	65.53	ppm	#	85
89) Di-n-butylphthalate	11.586	149	1103836	67.67	ppm		98
90) Ethyl Parathion	11.778	97	139700	64.38	ppm		88
91) Fluoranthene	12.249	202	989109	67.09	ppm		98
93) Benzidine	12.447	184	552398	67.32	ppm		97
94) Pyrene	12.511	202	1046762	62.08	ppm		98
96) Famphur	13.276	218	258712	Below Cal			87
97) Butylbenzylphthalate	13.367	149	451545	62.96	ppm		92
98) 3,3'-Dichlorobenzidine	14.014	252	294166	66.17	ppm		96
99) Benzo[a]anthracene	14.009	228	814554	63.82	ppm		99
100) Chrysene	14.057	228	879424	64.70	ppm		98
101) bis(2-Ethylhexyl)phtha...	14.169	149	631866	63.96	ppm		97
103) Di-n-octylphthalate	15.121	149	919211	70.27	ppm		92
104) Benzo[b]fluoranthene	15.555	252	652164	70.74	ppm		97
105) Benzo[k]fluoranthene	15.603	252	719634	68.15	ppm		96
106) Benzo[a]pyrene	16.095	252	592713	67.33	ppm		95
107) Indeno[1,2,3-cd]pyrene	17.871	276	485009	73.43	ppm		89
108) Dibenz[a,h]anthracene	17.919	278	553926	72.75	ppm		91
109) Benzo[g,h,i]perylene	18.229	276	554198	63.95	ppm		87

(#) = qualifier out of range (m) = manual integration (+) = signals summed

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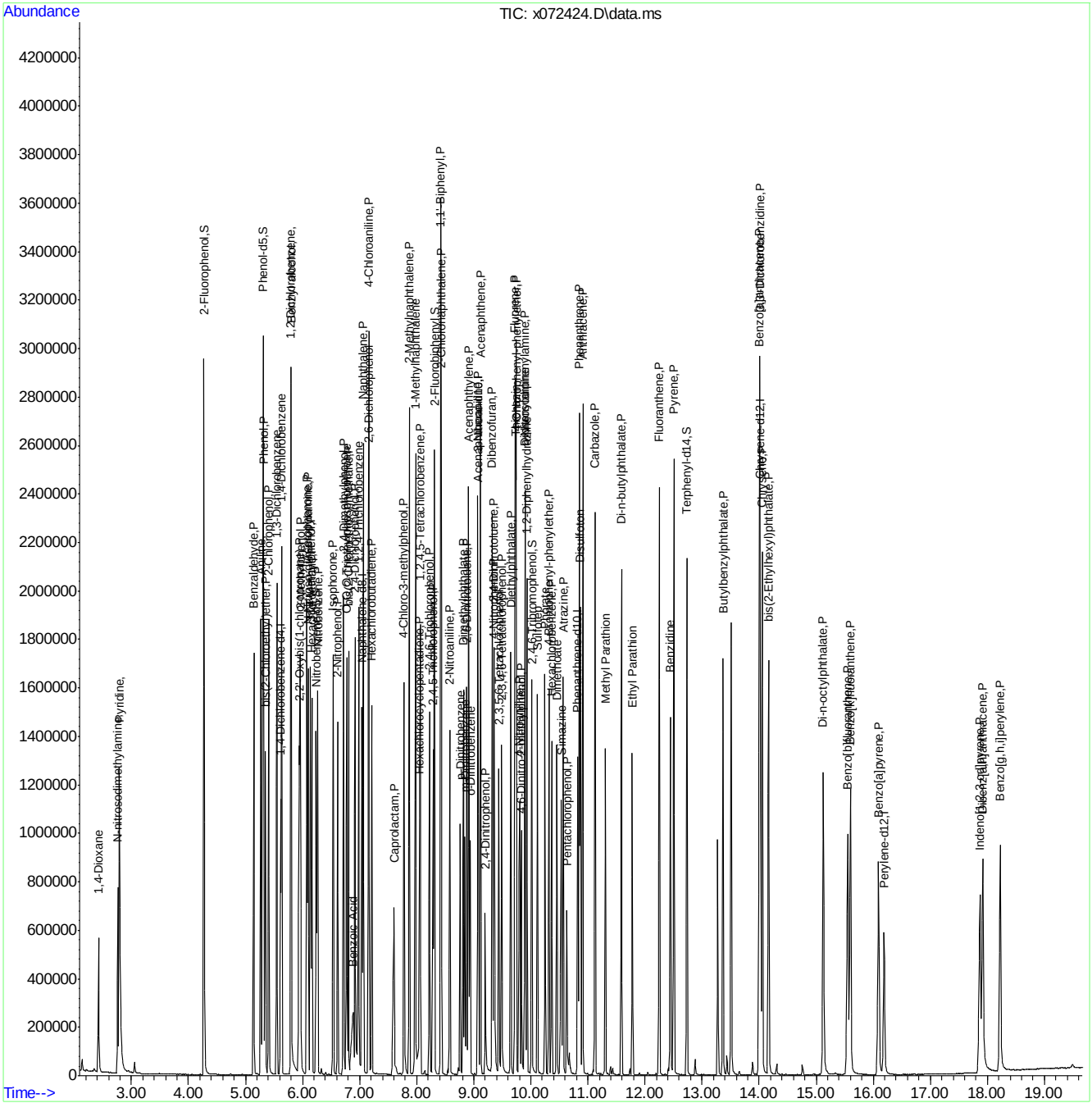
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration



Manual Integration Approval Summary

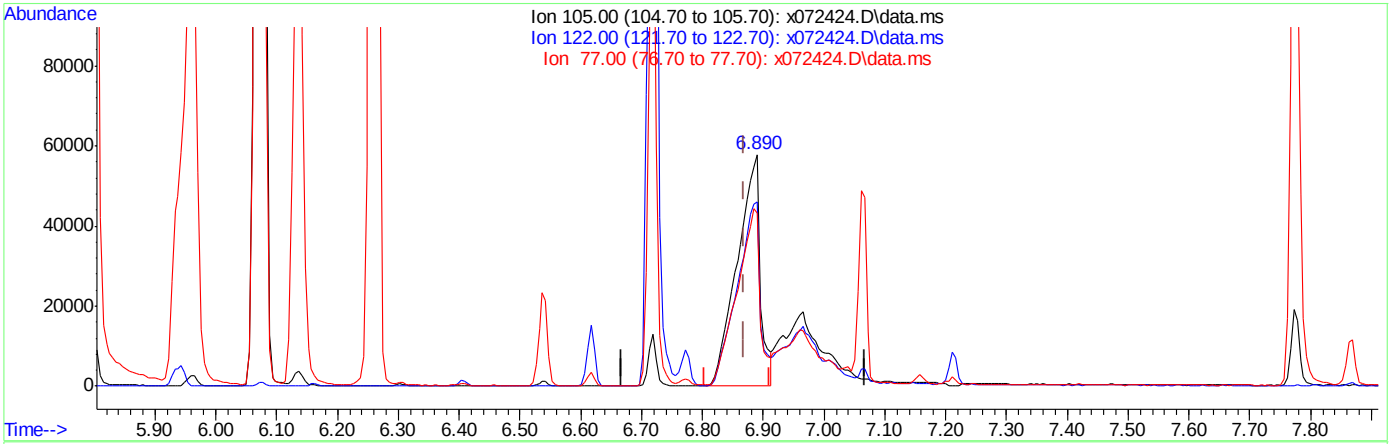
Sample Number:	SX2953-IC2953	**Method:**	SW846 8270D
Lab FileID:	X072424.D	**Analyst approved:**	08/18/20 14:01 Martha Valls
Injection Time:	08/17/20 12:28	**Supervisor approved:**	08/18/20 14:38 Nicole McCampbell

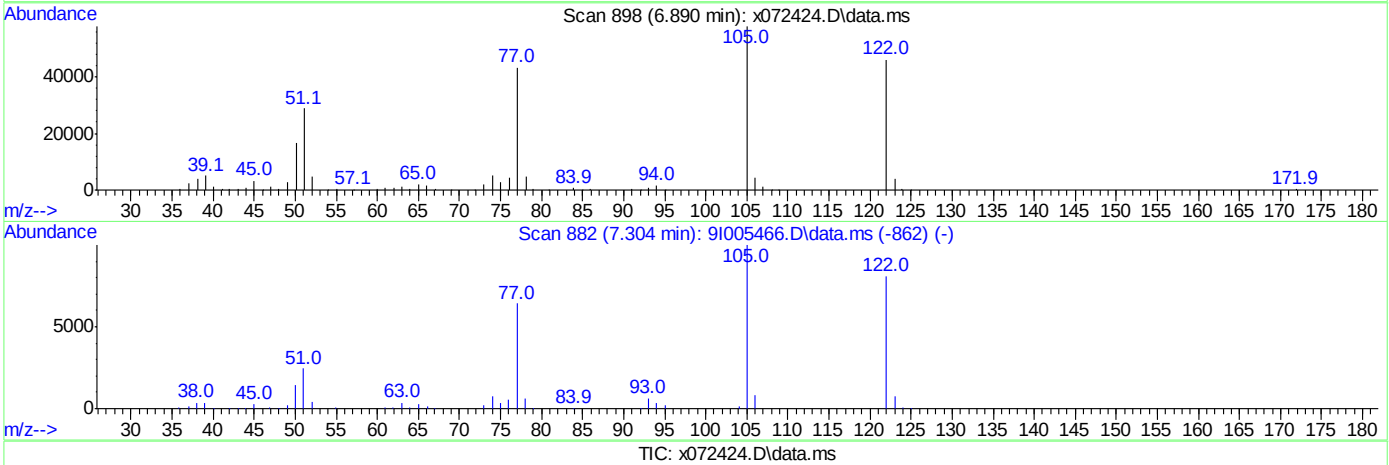
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic Acid	65-85-0		6.89	Split peak
Disulfoton	298-04-4		10.87	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072424.D
Acq On : 17 Aug 2020 12:28 pm
Operator : marthav
Sample : ic2953-60 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 17 14:46:45 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration





TIC: x072424.D\data.ms

(30) Benzoic Acid

6.890min (+0.021) 33.23ppm

response 150777

Ion	Exp%	Act%
105.00	100	100
122.00	81.20	79.66
77.00	64.10	74.03
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
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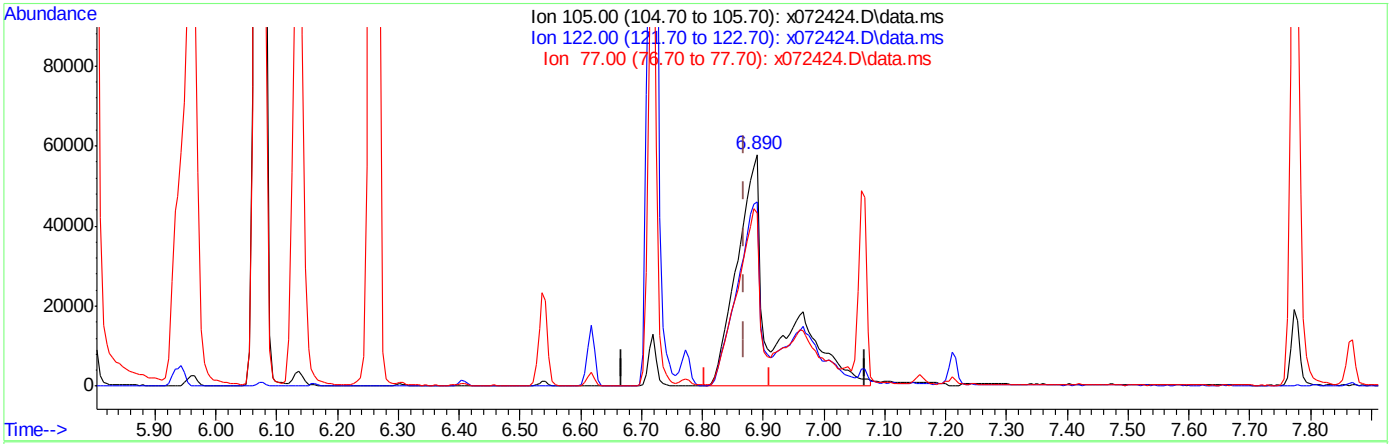
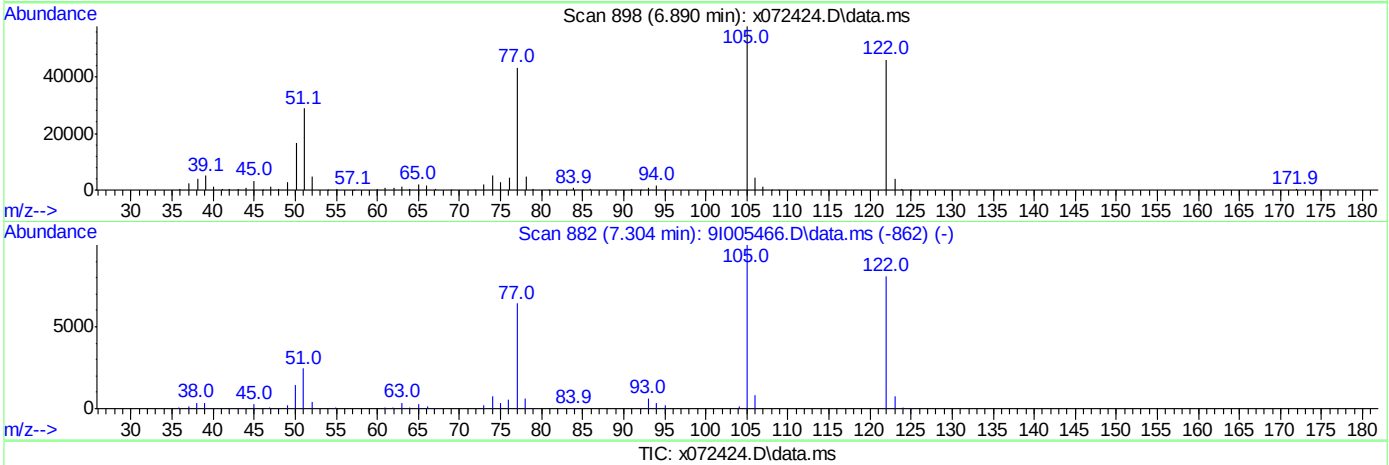




TIC: x072424.D\data.ms

(30) Benzoic Acid

6.890min (+0.021) 49.00ppm m

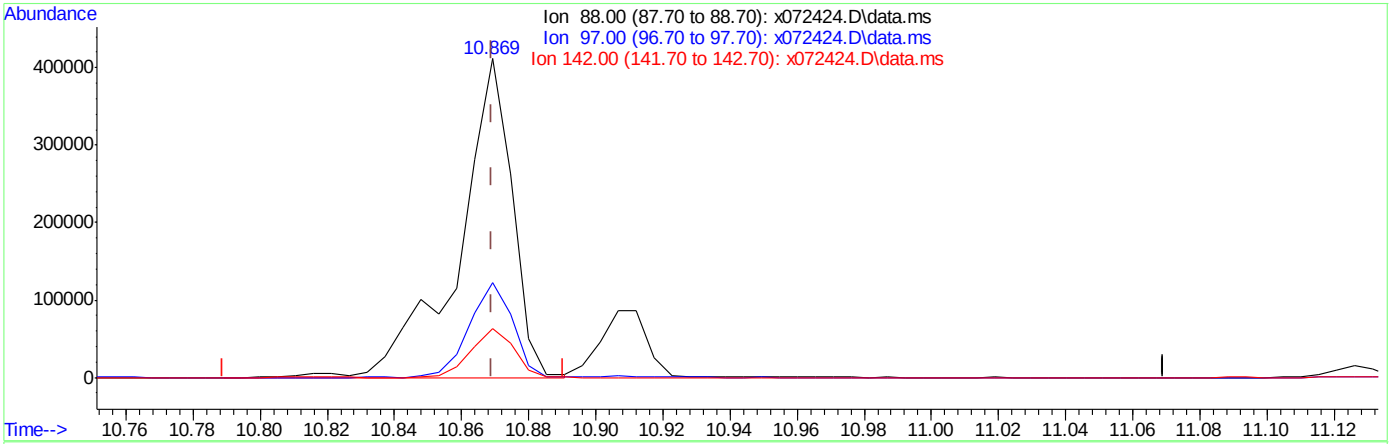
response 237392

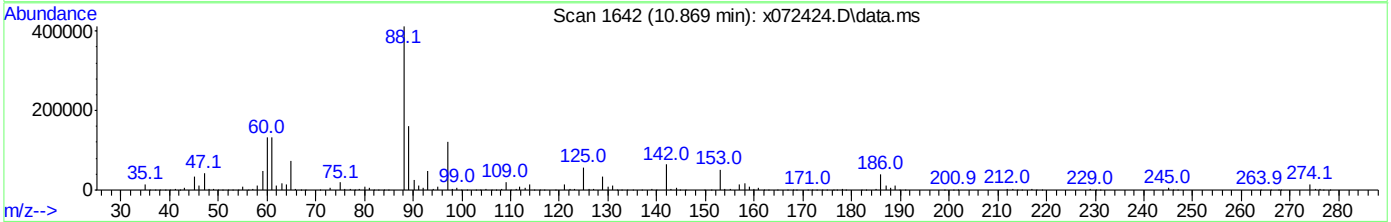
Ion	Exp%	Act%
105.00	100	100
122.00	81.20	79.77
77.00	64.10	74.92
0.00	0.00	0.00

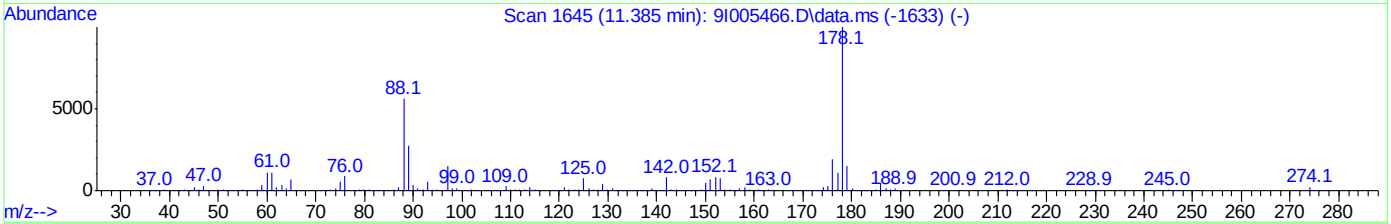
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072424.D
Acq On : 17 Aug 2020 12:28 pm
Operator : marthav
Sample : ic2953-60 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 18 09:30:00 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration







TIC: x072424.D\data.ms

(86) Disulfoton

10.869min (+0.000) 71.94ppm

response 456998

Ion	Exp%	Act%
88.00	100	100
97.00	26.50	29.83
142.00	14.20	15.50
0.00	0.00	0.00

Quantitation Report (Qedit)

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Data File : x072424.D
Acq On : 17 Aug 2020 12:28 pm
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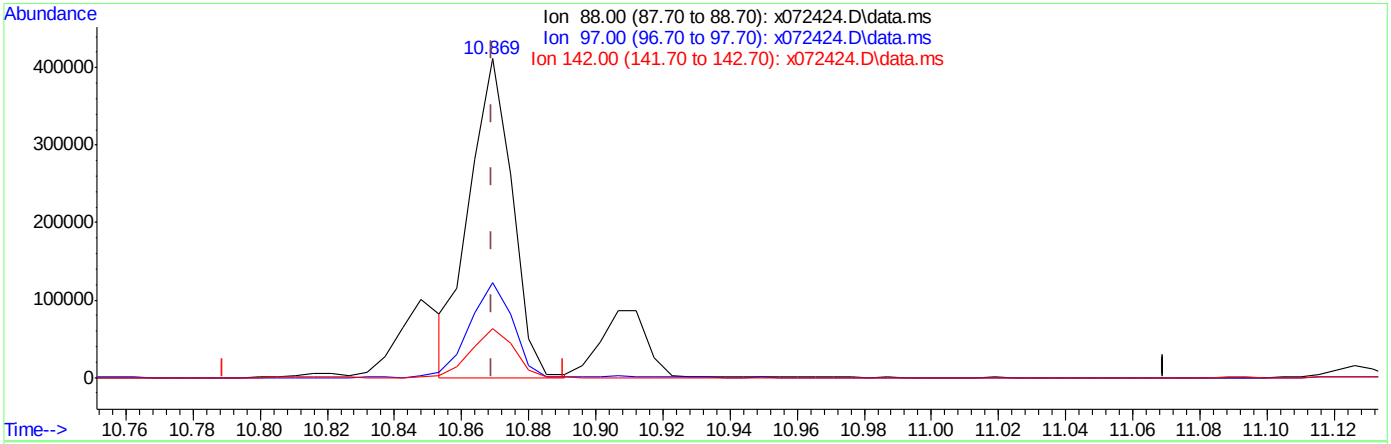

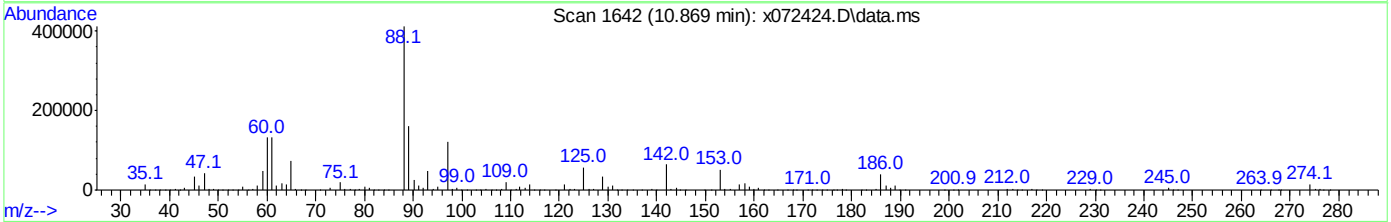

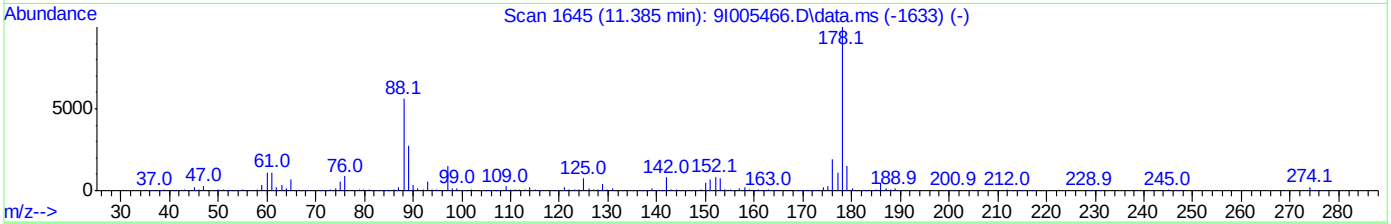

TIC: x072424.D\data.ms

(86) Disulfoton

10.869min (+0.000) 56.98ppm m

response 361962

Ion	Exp%	Act%
88.00	100	100
97.00	26.50	29.75
142.00	14.20	15.45
0.00	0.00	0.00

X072425.D

Manual Integrations APPROVED (compounds with "m" flag)

Nicole McCampbell 08/18/20 14:38

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072425.D
Acq On : 17 Aug 2020 12:54 pm
Operator : marthav
Sample : ic2953-75 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 18 12:48:50 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.617	152	163305	40.00	ppm	0.00
22) Naphthalene-d8	7.040	136	641123	40.00	ppm	0.00
43) Acenaphthene-d10	9.077	164	305861	40.00	ppm	0.00
70) Phenanthrene-d10	10.821	188	520619	40.00	ppm	0.00
92) Chrysene-d12	14.020	240	402094	40.00	ppm	0.00
102) Perylene-d12	16.191	264	294654	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	0.000	152	0m	40.00	ppm	-5.62
120) Naphthalene-d8A	0.000	136	0m	40.00	ppm	-7.04
127) Acenaphthene-d10A	0.000	164	0m	40.00	ppm	-9.08
136) Phenanthrene-d10A	0.000	188	0m	40.00	ppm	-10.82
146) Chrysene-d12A	0.000	240	0m	40.00	ppm	-14.02
153) Perylene-d12A	0.000	264	0m	40.00	ppm	-16.19
System Monitoring Compounds						
7) 2-Fluorophenol	4.269	112	931864	159.14	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 159.14%#			
9) Phenol-d5	5.307	99	1140446	163.71	ppm	0.00
Spiked Amount 100.000	Range 10 - 50		Recovery = 163.71%#			
23) Nitrobenzene-d5	6.243	82	549677	83.02	ppm	0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 166.04%#			
47) 2-Fluorobiphenyl	8.313	172	959940	86.70	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 173.40%#			
75) 2,4,6-Tribromophenol	10.019	330	187545	147.91	ppm	0.00
Spiked Amount 100.000	Range 33 - 118		Recovery = 147.91%#			
95) Terphenyl-d14	12.736	244	896909	83.95	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 167.90%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.424	88	207057	73.98	ppm	# 39
3) N-nitrosodimethylamine	2.766	42	376127	75.69	ppm	# 37
4) Pyridine	2.787	79	605667	88.95	ppm	# 28
5) Benzaldehyde	5.146	106	365071	74.99	ppm	93
6) Aniline	5.269	93	705687	72.69	ppm	99
8) bis(2-Chloroethyl)ether	5.355	93	487210	81.32	ppm	79
10) Phenol	5.317	94	651480	78.84	ppm	86
11) 2-Chlorophenol	5.408	128	507908	81.29	ppm	81
12) 1,3-Dichlorobenzene	5.547	146	524095	80.74	ppm	95
13) 1,4-Dichlorobenzene	5.633	146	542289	78.96	ppm	96
14) 1,2-Dichlorobenzene	5.793	146	485246	74.37	ppm	97
15) Benzyl alcohol	5.804	108	317271	73.38	ppm	87
16) 2,2'-Oxybis(1-chloropr...	5.943	45	930187	73.88	ppm	76
17) 2-Methylphenol	5.965	108	467189	78.60	ppm	97
18) Acetophenone	6.077	105	646927	73.55	ppm	96
19) Hexachloroethane	6.162	117	207047	80.29	ppm	91
20) N-Nitroso-di-n-propyla...	6.098	70	364694	78.51	ppm	# 62
21) 3&4-Methylphenol	6.136	108	486403	79.17	ppm	93
24) Nitrobenzene	6.264	77	530379	80.97	ppm	86
25) Isophorone	6.542	82	889736	76.07	ppm	95
26) 2-Nitrophenol	6.617	139	266602	85.61	ppm	75

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072425.D
Acq On : 17 Aug 2020 12:54 pm
Operator : marthav
Sample : ic2953-75 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 18 12:48:50 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
27) 2,4-Dimethylphenol	6.719	107	428322	74.06	ppm		95
28) O,O,O-Triethylphosphor...	6.777	198	192126	78.27	ppm		88
29) bis(2-Chloroethoxy)met...	6.804	93	538198	78.65	ppm		95
30) Benzoic Acid	6.901	105	313415m	61.71	ppm		
31) 2,4-Dichlorophenol	6.917	162	380735	81.67	ppm		94
32) 1,2,4-Trichlorobenzene	6.981	180	390931	82.05	ppm		97
34) Naphthalene	7.066	128	1352710	77.81	ppm		99
35) 4-Chloroaniline	7.157	127	555140	75.62	ppm		90
36) 2,6-Dichlorophenol	7.163	162	360706	75.88	ppm		97
37) Hexachlorobutadiene	7.216	225	194858	82.93	ppm		98
38) Caprolactam	7.617	113	146370	75.67	ppm	#	51
39) 4-Chloro-3-methylphenol	7.778	107	384809	77.41	ppm	#	65
40) 2-Methylnaphthalene	7.869	142	886330	77.10	ppm		99
41) 1-Methylnaphthalene	7.981	142	842031	76.50	ppm		99
42) 1,2,4,5-Tetrachloroben...	8.067	216	370066	77.39	ppm		98
44) Hexachlorocyclopentadiene	8.050	237	142499	56.72	ppm		98
45) 2,4,6-Trichlorophenol	8.227	196	242827	86.49	ppm		99
46) 2,4,5-Trichlorophenol	8.286	196	266080	86.35	ppm		99
48) 1,1'-Biphenyl	8.425	154	992661	79.48	ppm		99
49) 2-Chloronaphthalene	8.436	162	775458	82.72	ppm		98
50) 2-Nitroaniline	8.580	65	297670	86.25	ppm	#	66
51) p-Dinitrobenzene	8.762	75	173058	89.44	ppm	#	66
52) Acenaphthylene	8.912	152	1274491	83.43	ppm		100
53) Dimethylphthalate	8.821	163	881756	81.72	ppm		99
54) m-Dinitrobenzene	8.853	168	162095	90.15	ppm	#	52
55) 2,6-Dinitrotoluene	8.885	165	219169	86.07	ppm		85
56) o-Dinitrobenzene	8.938	50	177790	72.90	ppm	#	46
57) Acenaphthene	9.120	153	821029	80.82	ppm		100
58) 3-Nitroaniline	9.077	138	248157	88.58	ppm		99
59) 2,4-Dinitrophenol	9.206	184	119922	79.12	ppm	#	90
60) Dibenzofuran	9.323	168	1078328	79.52	ppm		96
61) 2,4-Dinitrotoluene	9.356	165	282716	87.07	ppm		88
62) 4-Nitrophenol	9.361	109	105240	67.24	ppm	#	66
63) 2,3,5,6-Tetrachlorophenol	9.441	232	182941	80.49	ppm		94
64) 2,3,4,6-Tetrachlorophenol	9.495	232	200174	84.20	ppm		93
65) Fluorene	9.725	166	878113	83.00	ppm		98
66) 4-Chlorophenyl-phenyle...	9.746	204	411809	80.64	ppm		95
67) Diethylphthalate	9.655	149	857651	79.58	ppm		98
68) Thionazin	9.741	97	184287	80.50	ppm		97
69) 4-Nitroaniline	9.805	138	262767	84.29	ppm		87
71) 4,6-Dinitro-2-methylph...	9.837	198	172523	80.14	ppm		79
72) n-Nitrosodiphenylamine	9.901	169	776929	96.03	ppm		96
73) Diphenylamine	9.901	169	776929	81.83	ppm		96
74) 1,2-Diphenylhydrazine	9.933	77	954389	81.80	ppm		93
76) Sulfotep	10.115	97	136107	79.34	ppm	#	65
77) Phorate	10.249	75	515777	85.83	ppm		94
78) 4-Bromophenyl-phenylether	10.318	248	209510	83.81	ppm		85
79) Hexachlorobenzene	10.366	284	208644	83.66	ppm		80
80) Dimethoate	10.457	87	364208	84.98	ppm		97
81) Simazine	10.538	201	138793	75.62	ppm		97

Quantitation Report (QT Reviewed)

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Data File : x072425.D
Acq On : 17 Aug 2020 12:54 pm
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Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
82) Atrazine	10.570	200	265597	87.37	ppm		82
83) Pentachlorophenol	10.629	266	98893	58.29	ppm		97
84) Phenanthrene	10.853	178	1242040	78.95	ppm		99
85) Anthracene	10.912	178	1321652	80.61	ppm		97
86) Disulfoton	10.869	88	392483m	62.41	ppm		
87) Carbazole	11.131	167	1181808	81.68	ppm		99
88) Methyl Parathion	11.308	109	296605	81.05	ppm	#	86
89) Di-n-butylphthalate	11.586	149	1349441	83.56	ppm		98
90) Ethyl Parathion	11.778	97	175361	79.35	ppm		89
91) Fluoranthene	12.249	202	1224389	83.88	ppm		98
93) Benzidine	12.447	184	676648	81.15	ppm		96
94) Pyrene	12.511	202	1314860	78.76	ppm		98
96) Famphur	13.276	218	308714	Below Cal			92
97) Butylbenzylphthalate	13.367	149	566674	78.01	ppm		93
98) 3,3'-Dichlorobenzidine	14.014	252	366963	80.70	ppm		98
99) Benzo[a]anthracene	14.004	228	1018471	80.59	ppm		98
100) Chrysene	14.057	228	1088189	80.86	ppm		98
101) bis(2-Ethylhexyl)phtha...	14.164	149	787454	78.07	ppm		97
103) Di-n-octylphthalate	15.121	149	1151293	83.99	ppm		93
104) Benzo[b]fluoranthene	15.560	252	808044	85.88	ppm		97
105) Benzo[k]fluoranthene	15.608	252	890069	85.09	ppm		97
106) Benzo[a]pyrene	16.100	252	720373	80.37	ppm		96
107) Indeno[1,2,3-cd]pyrene	17.871	276	598339	85.98	ppm		87
108) Dibenz[a,h]anthracene	17.919	278	692288	85.70	ppm		91
109) Benzo[g,h,i]perylene	18.234	276	689727	76.83	ppm		90

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

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Operator : marthav
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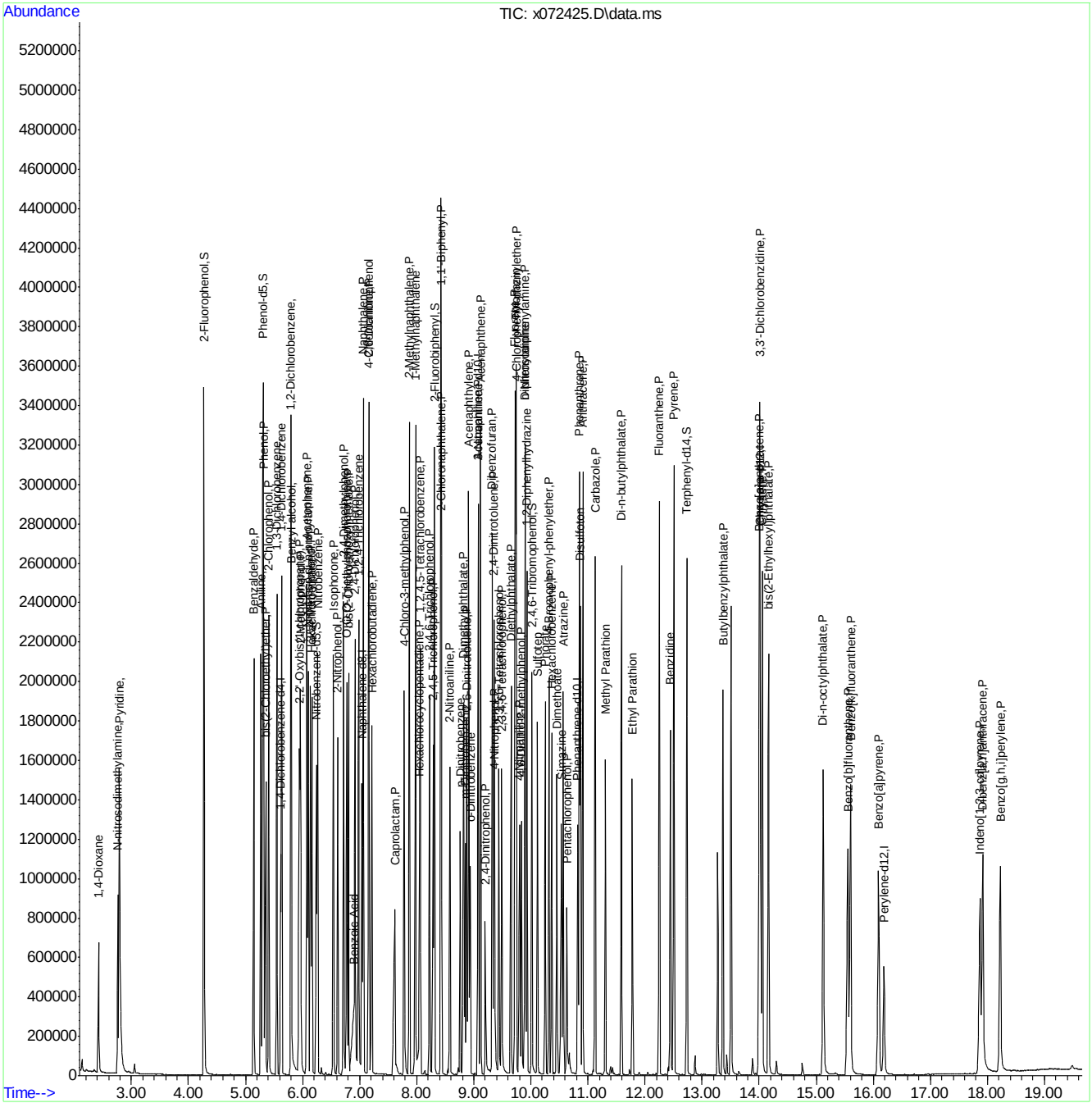

Manual Integration Approval Summary

Sample Number: SX2953-IC2953
Lab FileID: X072425.D
Injection Time: 08/17/20 12:54

Method: SW846 8270D
Analyst approved: 08/18/20 14:01 Martha Valls
Supervisor approved: 08/18/20 14:38 Nicole McCampbell

Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic Acid	65-85-0		6.90	Split peak
Disulfoton	298-04-4		10.87	Split peak

Quantitation Report (Qedit)

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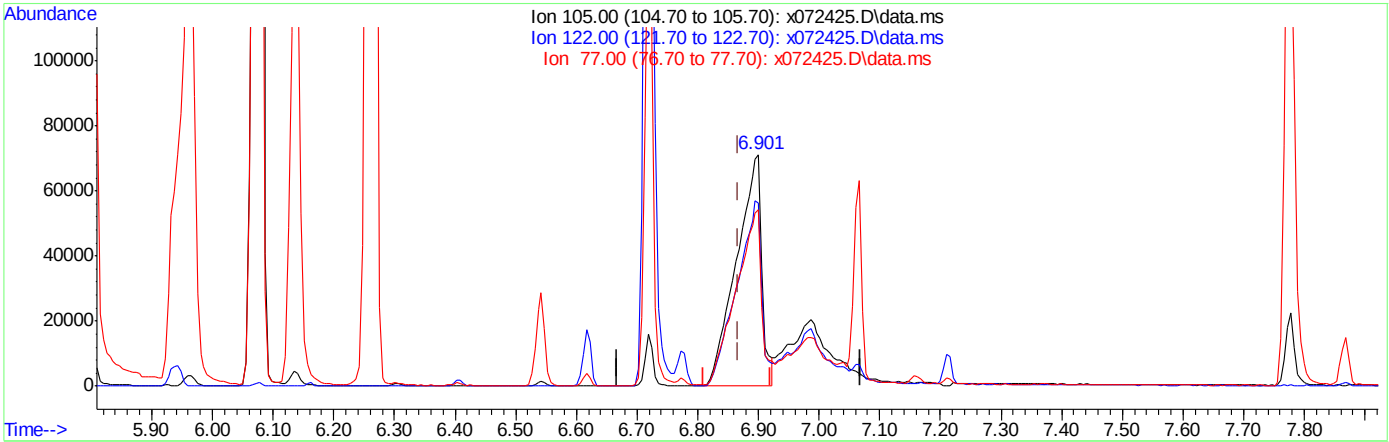
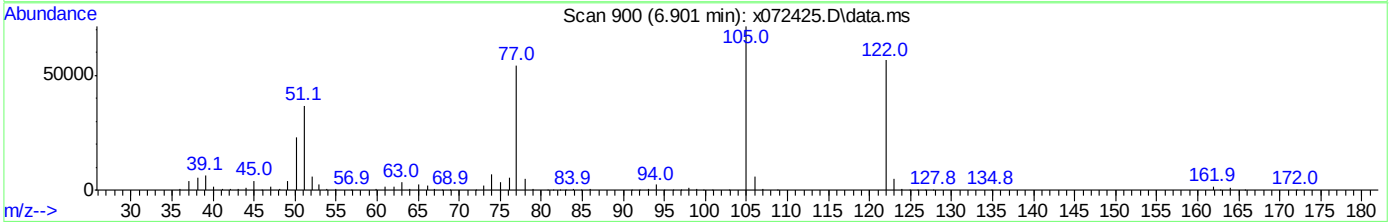
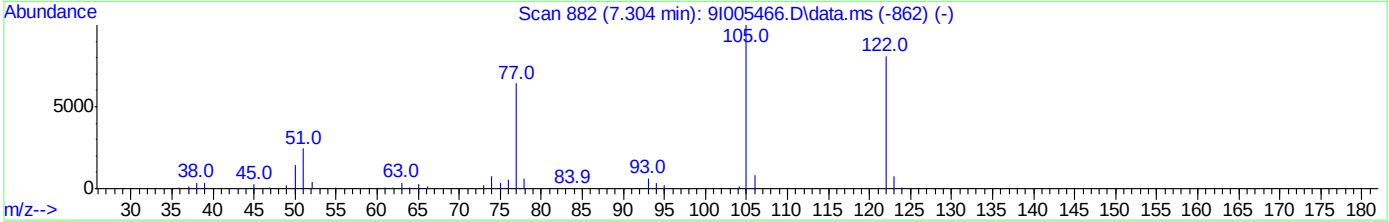






TIC: x072425.D\data.ms

(30) Benzoic Acid

6.901min (+0.032) 43.97ppm

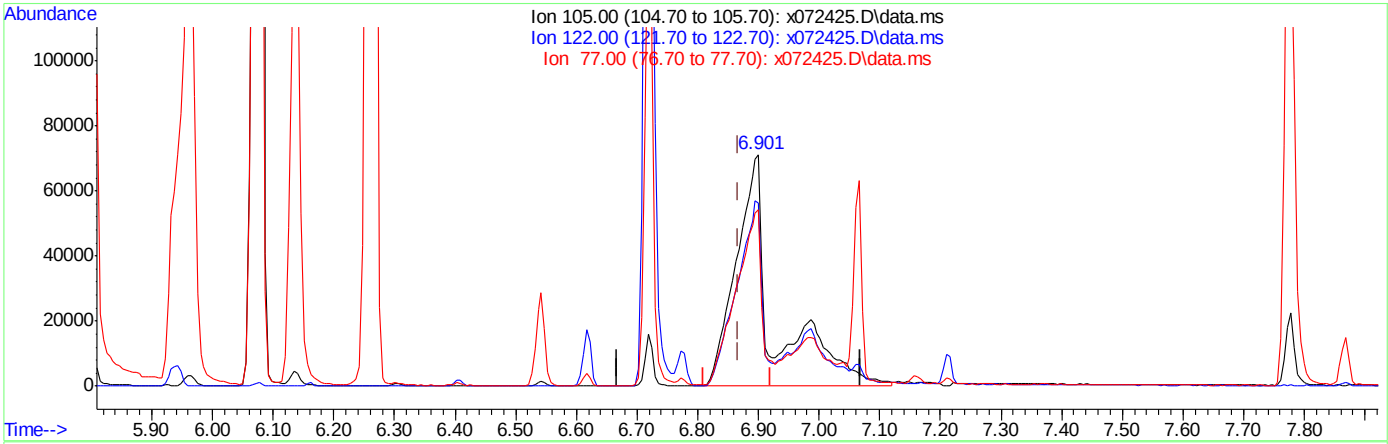
response 208141

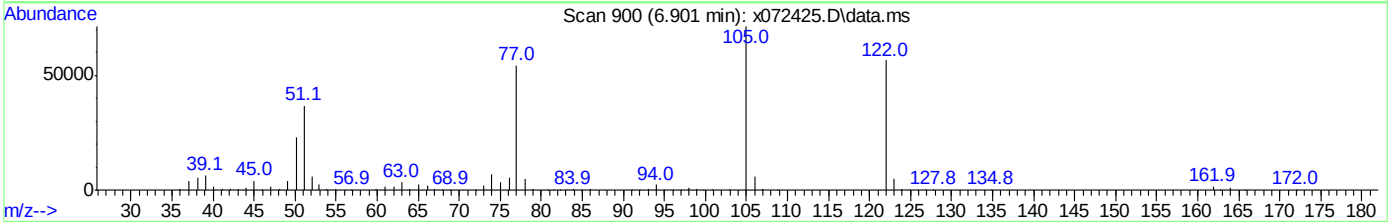
Ion	Exp%	Act%
105.00	100	100
122.00	81.20	79.16
77.00	64.10	75.08
0.00	0.00	0.00

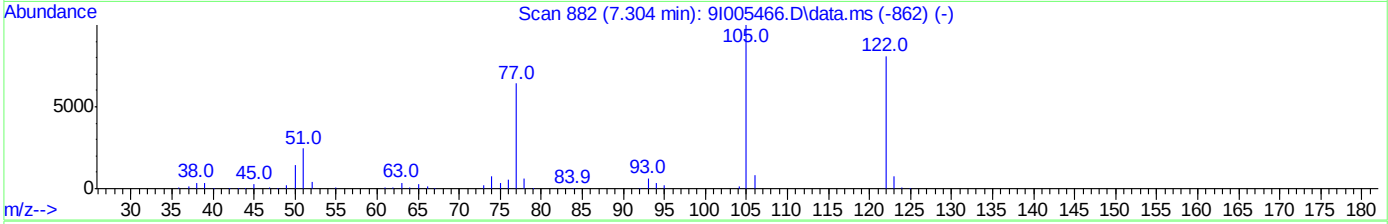
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072425.D
Acq On : 17 Aug 2020 12:54 pm
Operator : marthav
Sample : ic2953-75 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 17 14:46:47 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration







TIC: x072425.D\data.ms

(30) Benzoic Acid

6.901min (+0.032) 61.71ppm m

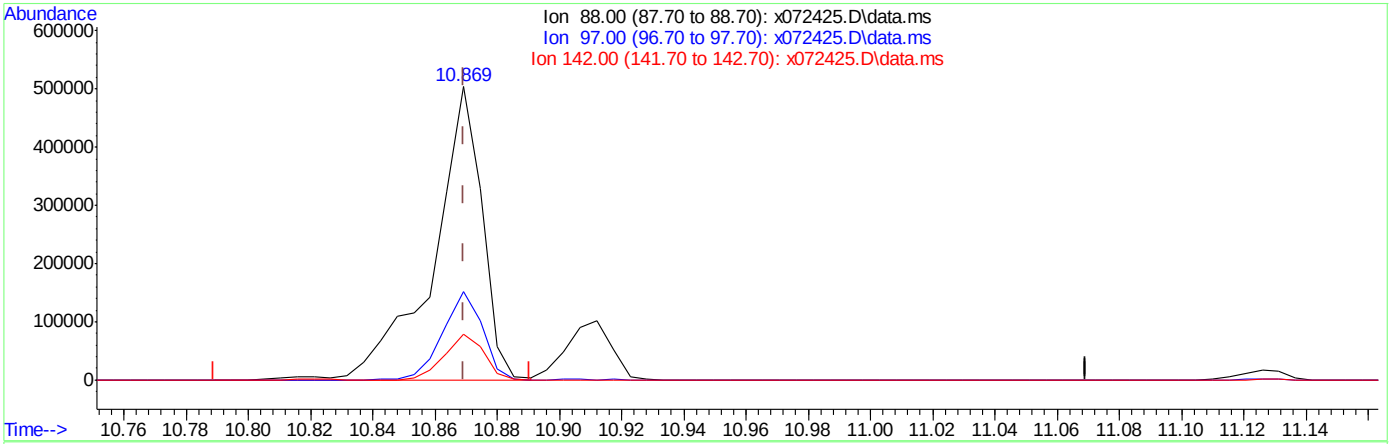
response 313415

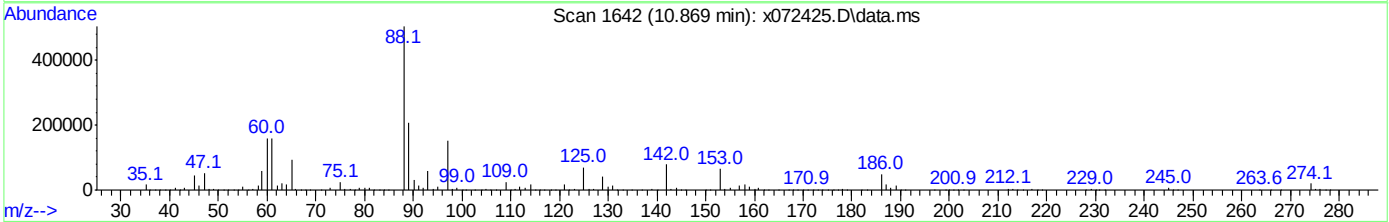
Ion	Exp%	Act%
105.00	100	100
122.00	81.20	79.25
77.00	64.10	76.16
0.00	0.00	0.00

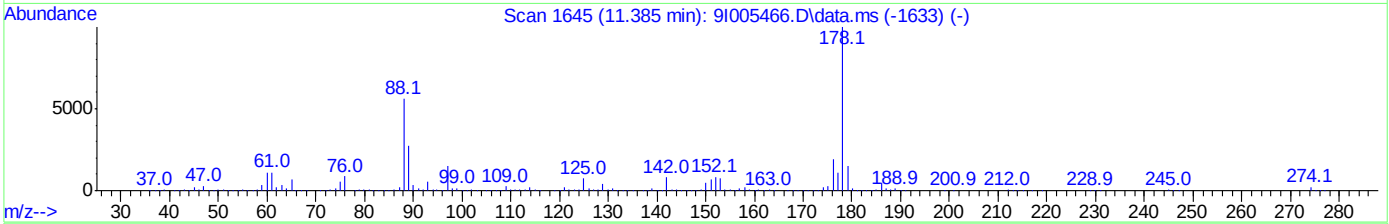
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072425.D
Acq On : 17 Aug 2020 12:54 pm
Operator : marthav
Sample : ic2953-75 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 17 14:46:47 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration







TIC: x072425.D\data.ms

(86) Disulfoton

10.869min (0.000) 87.41ppm

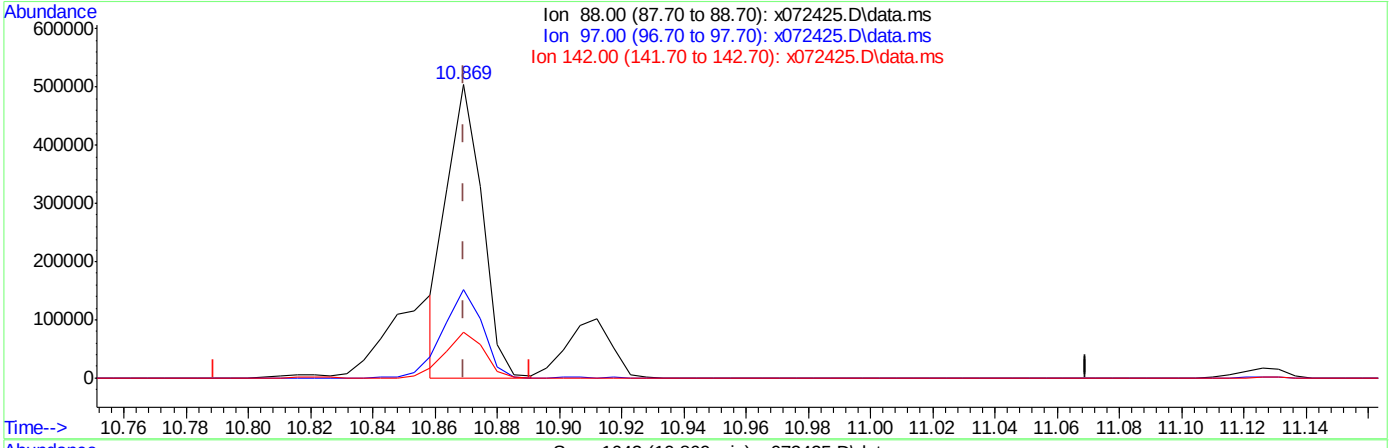
response 549749

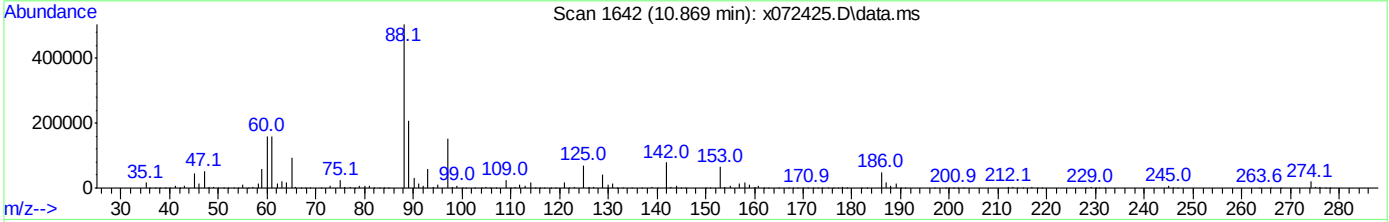
Ion	Exp%	Act%
88.00	100	100
97.00	26.50	30.23
142.00	14.20	15.49
0.00	0.00	0.00

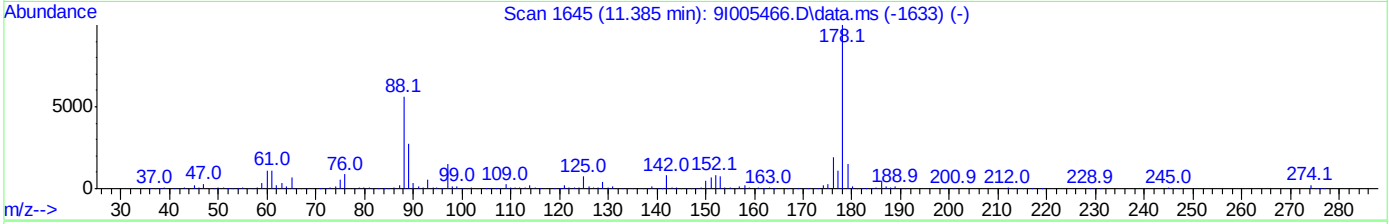
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072425.D
Acq On : 17 Aug 2020 12:54 pm
Operator : marthav
Sample : ic2953-75 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 17 14:46:47 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration







TIC: x072425.D\data.ms

(86) Disulfoton

10.869min (0.000) 62.41ppm m

response 392483

Ion	Exp%	Act%
88.00	100	100
97.00	26.50	30.16
142.00	14.20	15.45
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 08/18/20 14:38

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072426.D
Acq On : 17 Aug 2020 1:20 pm
Operator : marthav
Sample : ic2953-100 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 18 12:49:10 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.617	152	171279	40.00	ppm	0.00
22) Naphthalene-d8	7.040	136	686194	40.00	ppm	0.00
43) Acenaphthene-d10	9.078	164	324108	40.00	ppm	0.00
70) Phenanthrene-d10	10.821	188	555967	40.00	ppm	0.00
92) Chrysene-d12	14.025	240	412170	40.00	ppm	0.00
102) Perylene-d12	16.191	264	305438	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	0.000	152	0m	40.00	ppm	-5.62
120) Naphthalene-d8A	0.000	136	0m	40.00	ppm	-7.04
127) Acenaphthene-d10A	0.000	164	0m	40.00	ppm	-9.08
136) Phenanthrene-d10A	0.000	188	0m	40.00	ppm	-10.82
146) Chrysene-d12A	0.000	240	0m	40.00	ppm	-14.02
153) Perylene-d12A	0.000	264	0m	40.00	ppm	-16.19
System Monitoring Compounds						
7) 2-Fluorophenol	4.275	112	1304372	212.39	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 212.39%#			
9) Phenol-d5	5.312	99	1615238	221.07	ppm	0.01
Spiked Amount 100.000	Range 10 - 50		Recovery = 221.07%#			
23) Nitrobenzene-d5	6.243	82	771539	108.87	ppm	0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 217.74%#			
47) 2-Fluorobiphenyl	8.313	172	1328665	113.24	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 226.48%#			
75) 2,4,6-Tribromophenol	10.024	330	273903	188.95	ppm	0.01
Spiked Amount 100.000	Range 33 - 118		Recovery = 188.95%#			
95) Terphenyl-d14	12.741	244	1250524	114.19	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 228.38%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.424	88	293132	99.86	ppm	# 41
3) N-nitrosodimethylamine	2.777	42	530779	101.84	ppm	# 40
4) Pyridine	2.793	79	880310	123.27	ppm	# 34
5) Benzaldehyde	5.146	106	498615	97.66	ppm	91
6) Aniline	5.275	93	1021345	100.30	ppm	97
8) bis(2-Chloroethyl)ether	5.355	93	676797	107.70	ppm	78
10) Phenol	5.323	94	901695	104.04	ppm	89
11) 2-Chlorophenol	5.408	128	712646	108.75	ppm	80
12) 1,3-Dichlorobenzene	5.553	146	728645	107.03	ppm	98
13) 1,4-Dichlorobenzene	5.638	146	750223	104.15	ppm	98
14) 1,2-Dichlorobenzene	5.799	146	673629	98.44	ppm	98
15) Benzyl alcohol	5.810	108	450405	99.32	ppm	87
16) 2,2'-Oxybis(1-chloropr...	5.943	45	1262133	95.57	ppm	76
17) 2-Methylphenol	5.965	108	666570	106.93	ppm	98
18) Acetophenone	6.082	105	909420	98.58	ppm	97
19) Hexachloroethane	6.163	117	288404	106.63	ppm	88
20) N-Nitroso-di-n-propyla...	6.104	70	509508	104.58	ppm	# 63
21) 3&4-Methylphenol	6.141	108	689499	107.00	ppm	96
24) Nitrobenzene	6.270	77	738932	105.39	ppm	87
25) Isophorone	6.548	82	1263462	100.93	ppm	96
26) 2-Nitrophenol	6.623	139	385983	115.80	ppm	78

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072426.D
Acq On : 17 Aug 2020 1:20 pm
Operator : marthav
Sample : ic2953-100 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 18 12:49:10 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
27) 2,4-Dimethylphenol	6.724	107	607504	98.14	ppm		95
28) O,O,O-Triethylphosphor...	6.778	198	271216	103.23	ppm		81
29) bis(2-Chloroethoxy)met...	6.810	93	757486	103.43	ppm		97
30) Benzoic Acid	6.927	105	468598m	80.45	ppm		
31) 2,4-Dichlorophenol	6.922	162	535447	107.31	ppm		96
32) 1,2,4-Trichlorobenzene	6.986	180	547919	107.45	ppm		99
34) Naphthalene	7.067	128	1872703	100.65	ppm		99
35) 4-Chloroaniline	7.163	127	775203	98.66	ppm		91
36) 2,6-Dichlorophenol	7.168	162	506545	99.56	ppm		97
37) Hexachlorobutadiene	7.216	225	270929	107.74	ppm		99
38) Caprolactam	7.639	113	209875m	101.37	ppm		
39) 4-Chloro-3-methylphenol	7.783	107	558004	104.88	ppm	#	35
40) 2-Methylnaphthalene	7.869	142	1241269	100.88	ppm		98
41) 1-Methylnaphthalene	7.981	142	1175504	99.78	ppm		98
42) 1,2,4,5-Tetrachloroben...	8.067	216	519505	101.50	ppm		99
44) Hexachlorocyclopentadiene	8.051	237	217254	76.51	ppm		97
45) 2,4,6-Trichlorophenol	8.227	196	346470	116.46	ppm		97
46) 2,4,5-Trichlorophenol	8.286	196	374885	114.81	ppm		99
48) 1,1'-Biphenyl	8.425	154	1350286	102.03	ppm		99
49) 2-Chloronaphthalene	8.436	162	1059649	106.67	ppm		96
50) 2-Nitroaniline	8.586	65	427012	116.76	ppm	#	67
51) p-Dinitrobenzene	8.767	75	248046	120.97	ppm	#	66
52) Acenaphthylene	8.917	152	1758134	108.61	ppm		99
53) Dimethylphthalate	8.826	163	1255543	109.81	ppm		99
54) m-Dinitrobenzene	8.858	168	231426	121.46	ppm	#	59
55) 2,6-Dinitrotoluene	8.890	165	309322	114.63	ppm		84
56) o-Dinitrobenzene	8.949	50	243902	94.37	ppm	#	51
57) Acenaphthene	9.120	153	1141743	106.06	ppm		99
58) 3-Nitroaniline	9.083	138	353226	118.99	ppm		96
59) 2,4-Dinitrophenol	9.206	184	166347	96.13	ppm	#	79
60) Dibenzofuran	9.329	168	1519816	105.77	ppm		97
61) 2,4-Dinitrotoluene	9.361	165	399189	116.02	ppm		83
62) 4-Nitrophenol	9.366	109	148506	89.54	ppm	#	64
63) 2,3,5,6-Tetrachlorophenol	9.447	232	264059	109.64	ppm		95
64) 2,3,4,6-Tetrachlorophenol	9.495	232	290786	115.42	ppm		91
65) Fluorene	9.730	166	1221093	108.92	ppm		99
66) 4-Chlorophenyl-phenyle...	9.746	204	569198	105.18	ppm		94
67) Diethylphthalate	9.661	149	1209695	105.93	ppm		99
68) Thionazin	9.746	97	243782	100.50	ppm		95
69) 4-Nitroaniline	9.821	138	371958	112.60	ppm		91
71) 4,6-Dinitro-2-methylph...	9.848	198	244046	99.06	ppm	#	45
72) n-Nitrosodiphenylamine	9.907	169	1085665	125.66	ppm		96
73) Diphenylamine	9.907	169	1085665	107.08	ppm		96
74) 1,2-Diphenylhydrazine	9.939	77	1455365	116.81	ppm		95
76) Sulfotep	10.121	97	191100	104.31	ppm	#	73
77) Phorate	10.254	75	712595	111.04	ppm		95
78) 4-Bromophenyl-phenylether	10.324	248	297225	111.34	ppm		88
79) Hexachlorobenzene	10.372	284	298849	112.21	ppm		86
80) Dimethoate	10.468	87	511777	109.99	ppm		96
81) Simazine	10.549	201	200295	102.19	ppm		94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072426.D
Acq On : 17 Aug 2020 1:20 pm
Operator : marthav
Sample : ic2953-100 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 18 12:49:10 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration

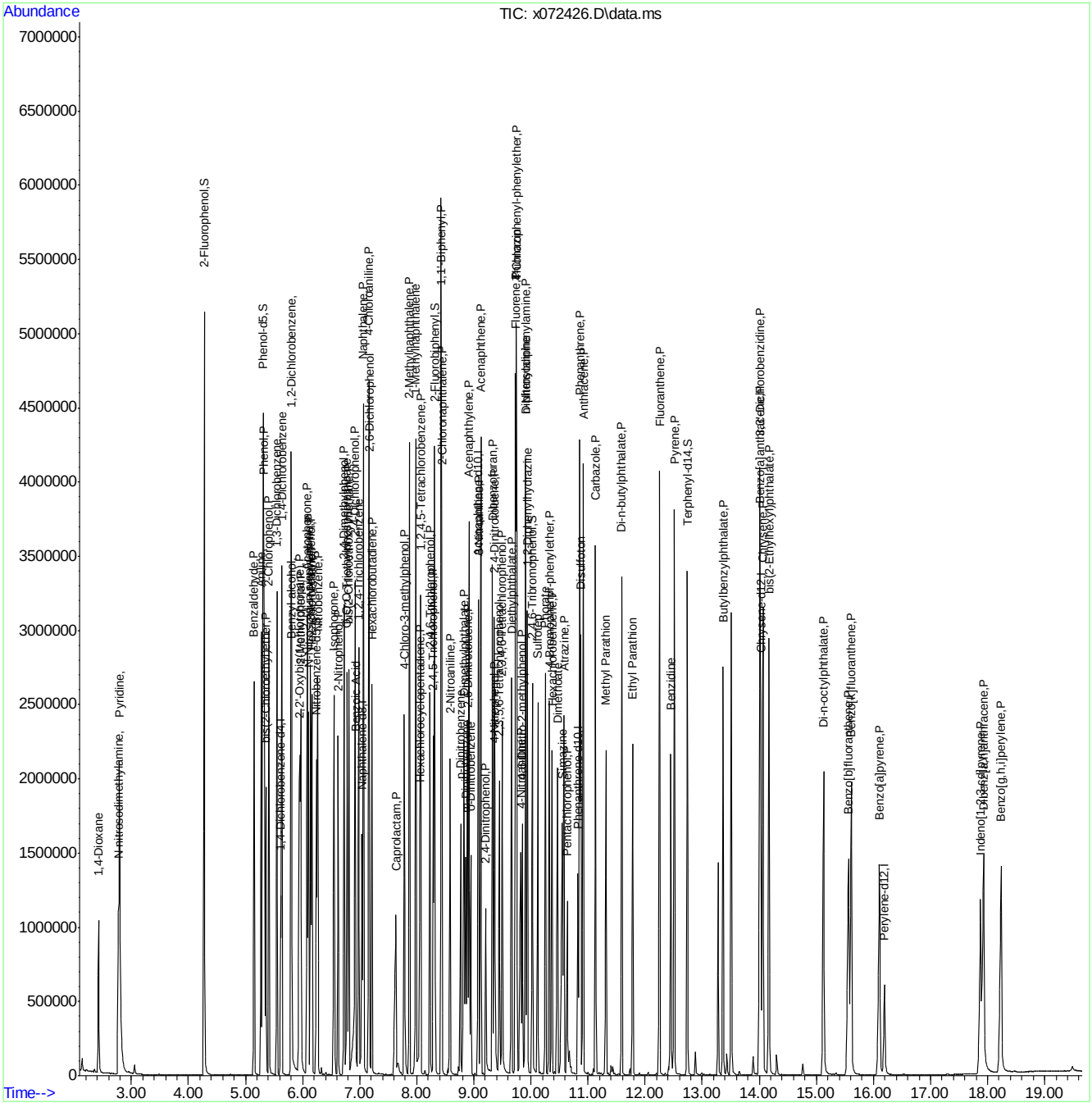
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
82) Atrazine	10.581	200	370237	114.05	ppm		91
83) Pentachlorophenol	10.634	266	145133	75.44	ppm		98
84) Phenanthrene	10.853	178	1720732	102.42	ppm		99
85) Anthracene	10.918	178	1812311	103.50	ppm		98
86) Disulfoton	10.875	88	575161m	85.64	ppm		
87) Carbazole	11.132	167	1649728	106.77	ppm		98
88) Methyl Parathion	11.313	109	421074	106.05	ppm	#	87
89) Di-n-butylphthalate	11.592	149	1903692	110.38	ppm		99
90) Ethyl Parathion	11.784	97	247340	100.77	ppm		90
91) Fluoranthene	12.255	202	1736924	111.43	ppm		97
93) Benzidine	12.453	184	896466	101.14	ppm		96
94) Pyrene	12.517	202	1823919	106.58	ppm		96
96) Famphur	13.282	218	418252	Below Cal			92
97) Butylbenzylphthalate	13.367	149	791215	102.51	ppm		90
98) 3,3'-Dichlorobenzidine	14.020	252	487662	100.29	ppm		98
99) Benzo[a]anthracene	14.009	228	1405004	108.46	ppm		99
100) Chrysene	14.063	228	1462024	105.98	ppm		98
101) bis(2-Ethylhexyl)phtha...	14.170	149	1077919	99.64	ppm		98
103) Di-n-octylphthalate	15.127	149	1585231	103.49	ppm		93
104) Benzo[b]fluoranthene	15.566	252	1126753	110.28	ppm		97
105) Benzo[k]fluoranthene	15.614	252	1216097	112.15	ppm		97
106) Benzo[a]pyrene	16.106	252	1005677	103.32	ppm		96
107) Indeno[1,2,3-cd]pyrene	17.876	276	849969	107.06	ppm		88
108) Dibenz[a,h]anthracene	17.930	278	991630	106.86	ppm		92
109) Benzo[g,h,i]perylene	18.240	276	983144	98.44	ppm		87

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072426.D
Acq On : 17 Aug 2020 1:20 pm
Operator : marthav
Sample : ic2953-100 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 18 12:49:10 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration



Manual Integration Approval Summary

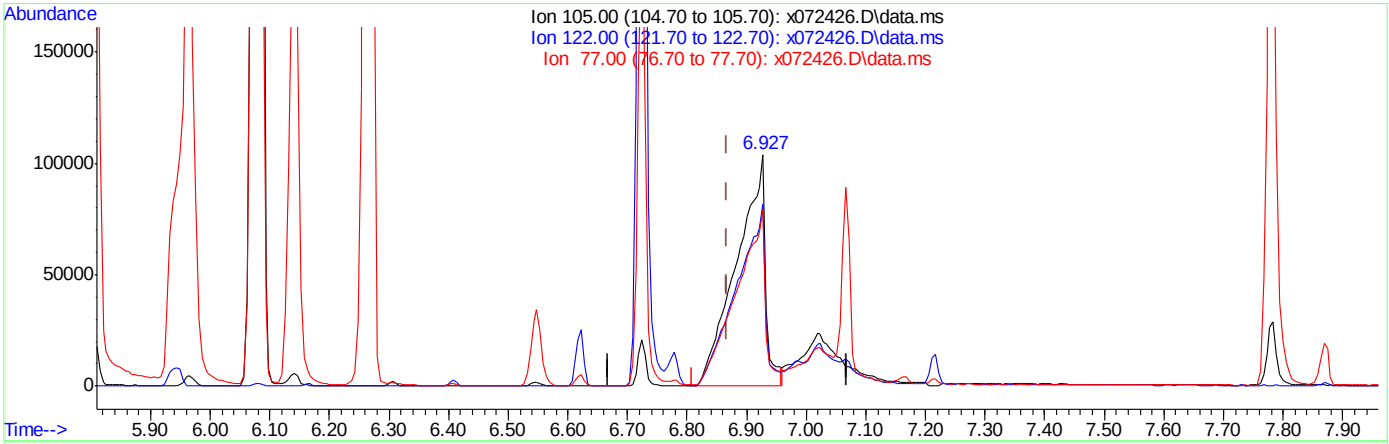
Sample Number: SX2953-IC2953
Lab FileID: X072426.D
Injection Time: 08/17/20 13:20
Method: SW846 8270D
Analyst approved: 08/18/20 14:01 Martha Valls
Supervisor approved: 08/18/20 14:38 Nicole McCampbell

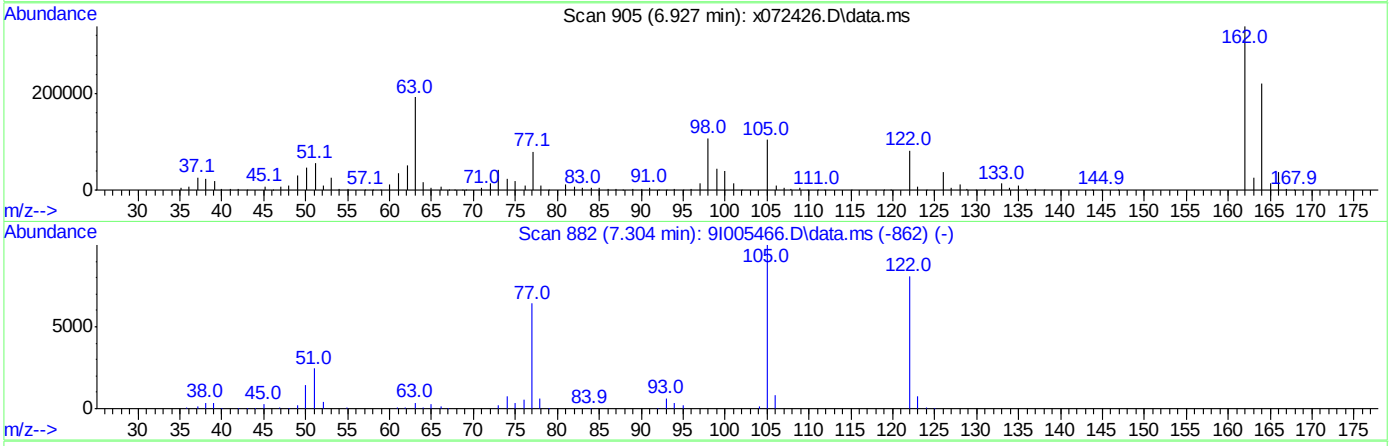
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic Acid	65-85-0		6.93	Split peak
Caprolactam	105-60-2		7.64	Split peak
Disulfoton	298-04-4		10.87	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072426.D
Acq On : 17 Aug 2020 1:20 pm
Operator : marthav
Sample : ic2953-100 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 17 14:46:49 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration





TIC: x072426.D\data.ms

(30) Benzoic Acid

6.927min (+0.059) 63.91ppm

response 350325

Ion	Exp%	Act%
105.00	100	100
122.00	81.20	78.34
77.00	64.10	75.56
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072426.D
Acq On : 17 Aug 2020 1:20 pm
Operator : marthav
Sample : ic2953-100 Inst : MSBNA05
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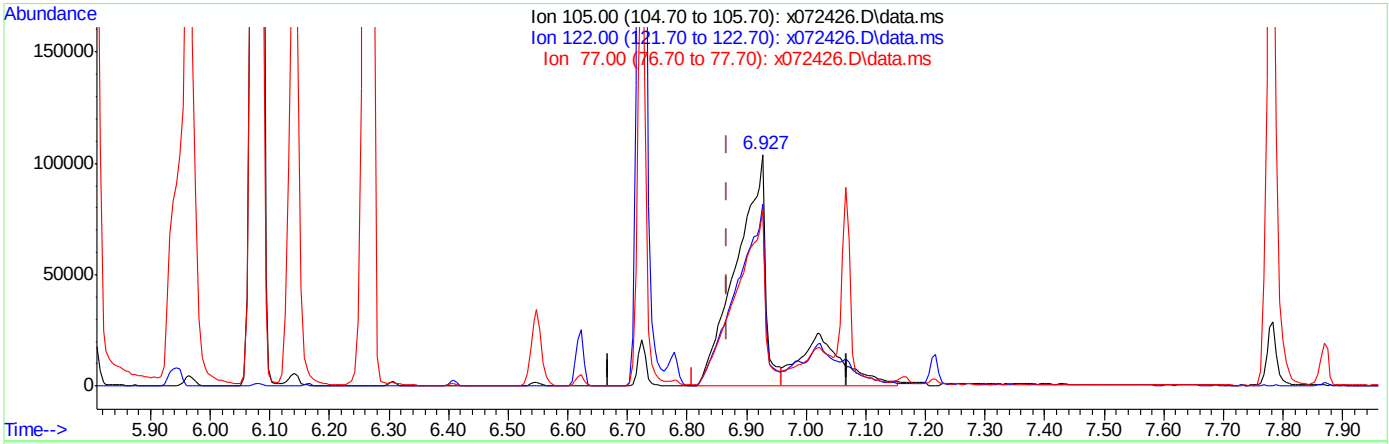
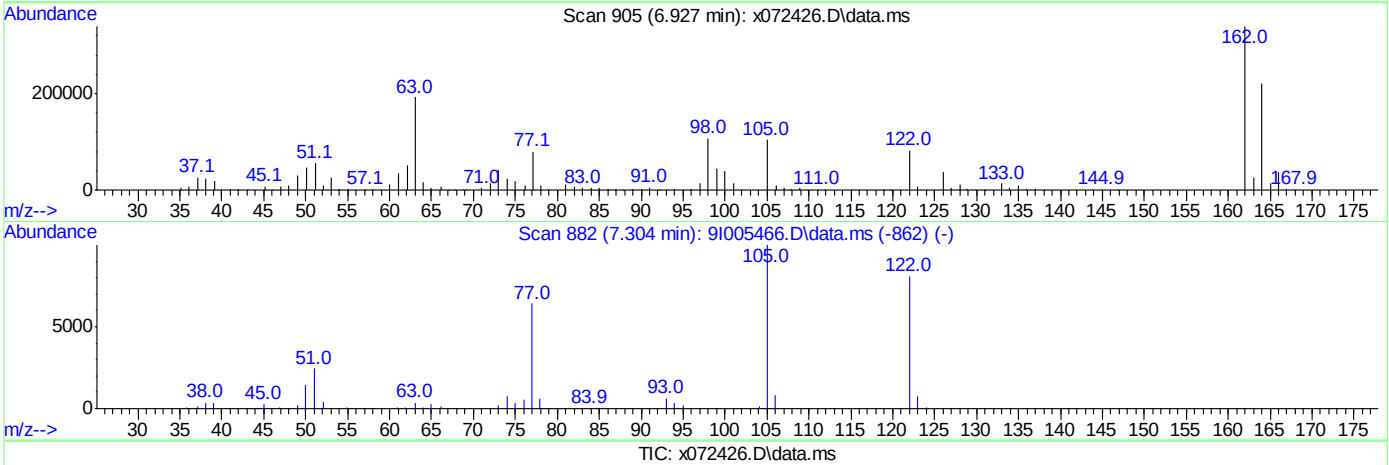
Quant Time: Aug 17 14:46:49 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration





TIC: x072426.D\data.ms

(30) Benzoic Acid

6.927min (+0.059) 80.45ppm m

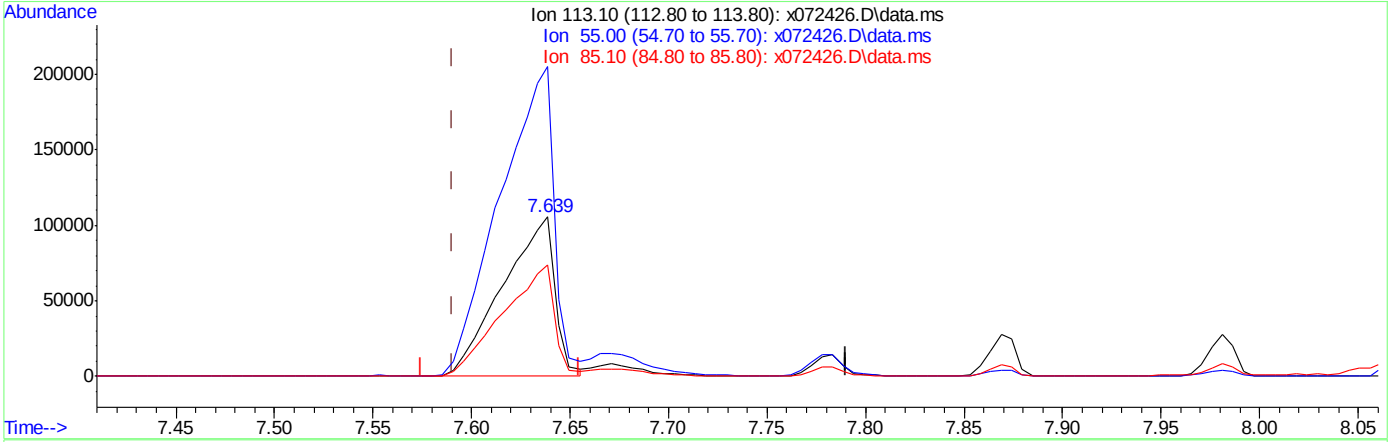
response 468598

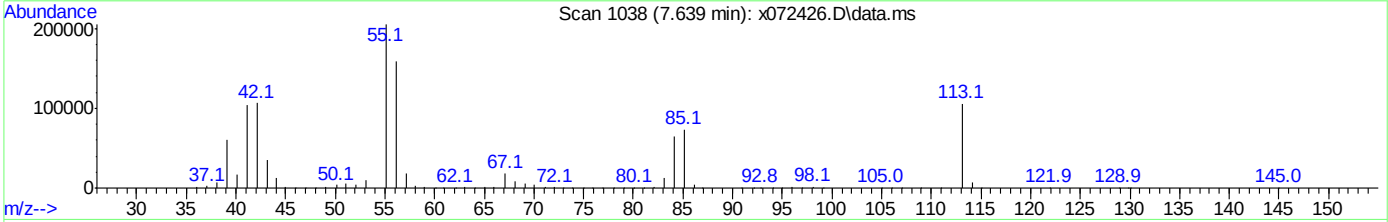
Ion	Exp%	Act%
105.00	100	100
122.00	81.20	78.48
77.00	64.10	76.04
0.00	0.00	0.00

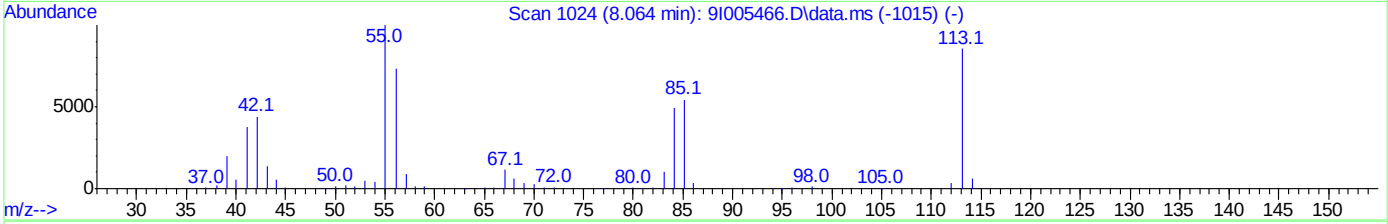
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072426.D
Acq On : 17 Aug 2020 1:20 pm
Operator : marthav
Sample : ic2953-100 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 17 14:46:49 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration







TIC: x072426.D\data.ms

(38) Caprolactam (P)

7.639min (+0.048) 94.06ppm

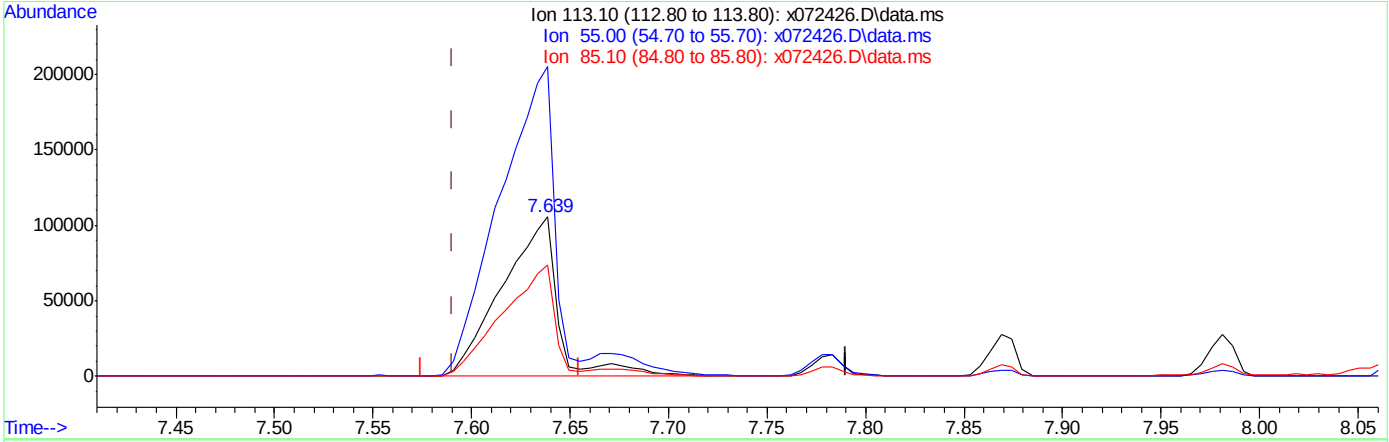
response 194733

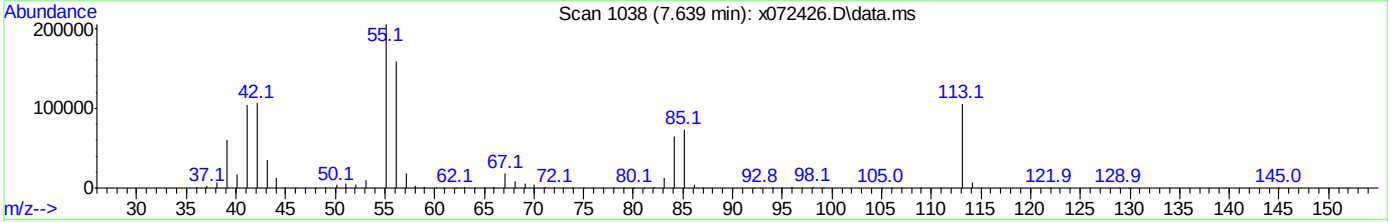
Ion	Exp%	Act%
113.10	100	100
55.00	117.00	193.47#
85.10	63.40	69.51
0.00	0.00	0.00

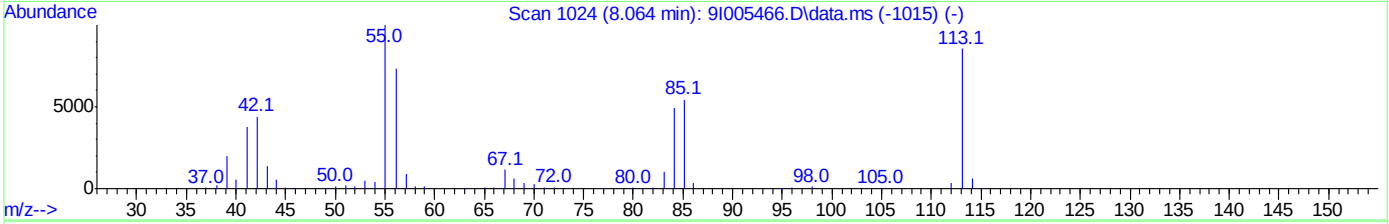
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072426.D
Acq On : 17 Aug 2020 1:20 pm
Operator : marthav
Sample : ic2953-100 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 17 14:46:49 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration







TIC: x072426.D\data.ms

(38) Caprolactam (P)

7.639min (+0.048) 101.37ppm m

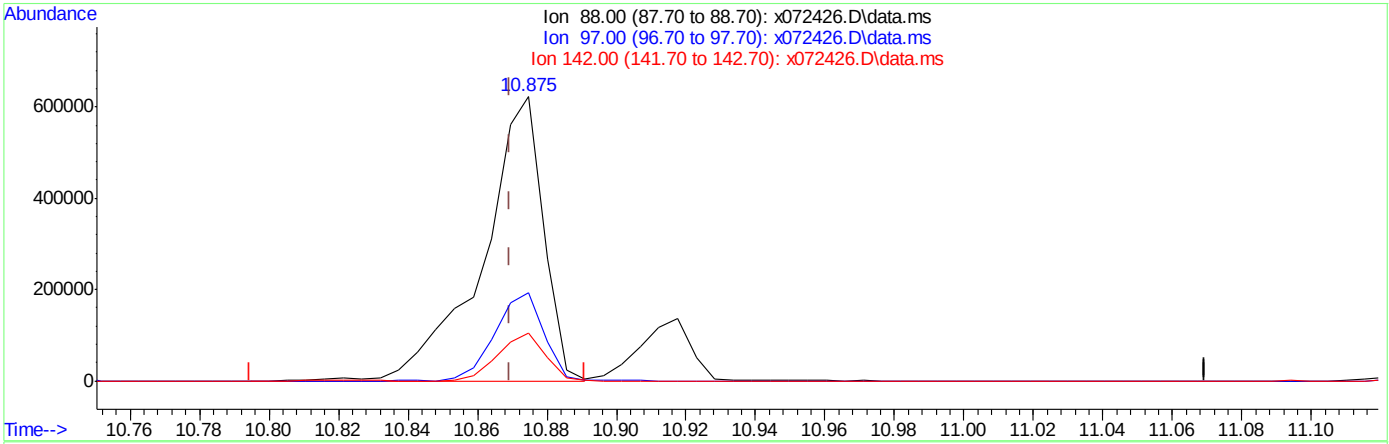
response 209875

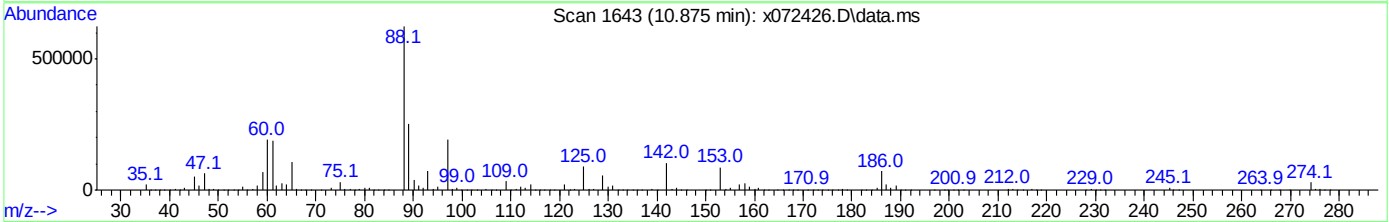
Ion	Exp%	Act%
113.10	100	100
55.00	117.00	193.97#
85.10	63.40	69.56
0.00	0.00	0.00

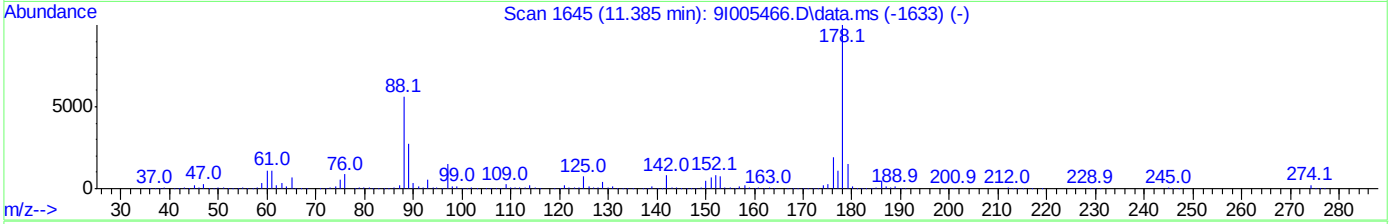
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072426.D
Acq On : 17 Aug 2020 1:20 pm
Operator : marthav
Sample : ic2953-100 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 17 14:46:49 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration







TIC: x072426.D\data.ms

(86) Disulfoton

10.875min (+0.006) 112.69ppm

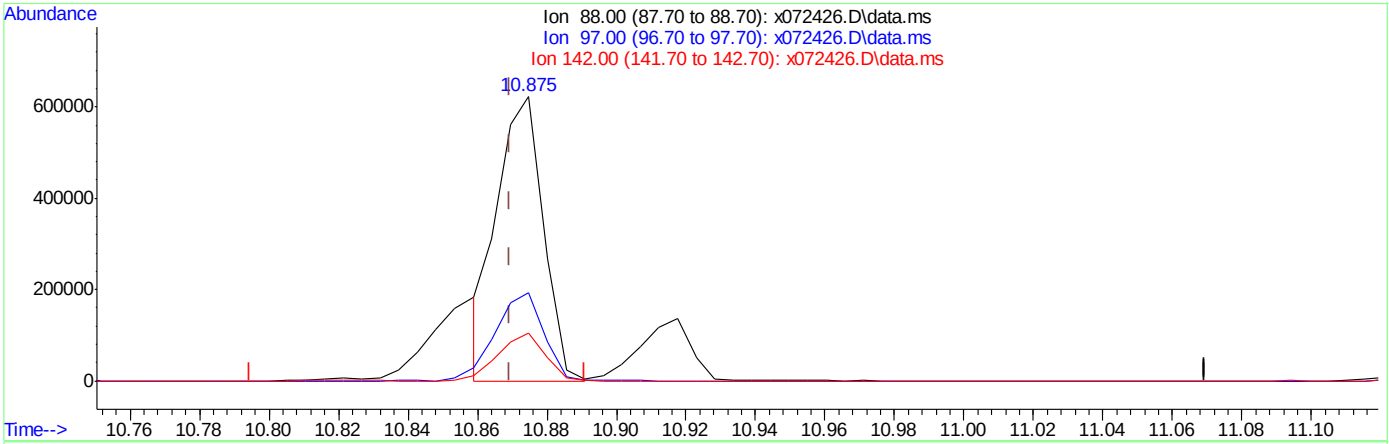
response 756858

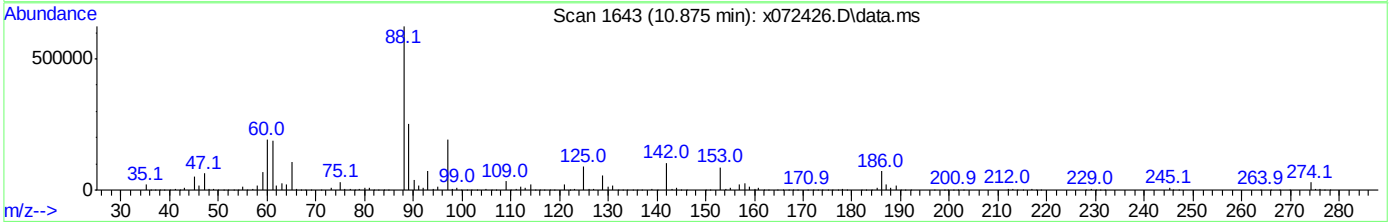
Ion	Exp%	Act%
88.00	100	100
97.00	26.50	30.90
142.00	14.20	16.63
0.00	0.00	0.00

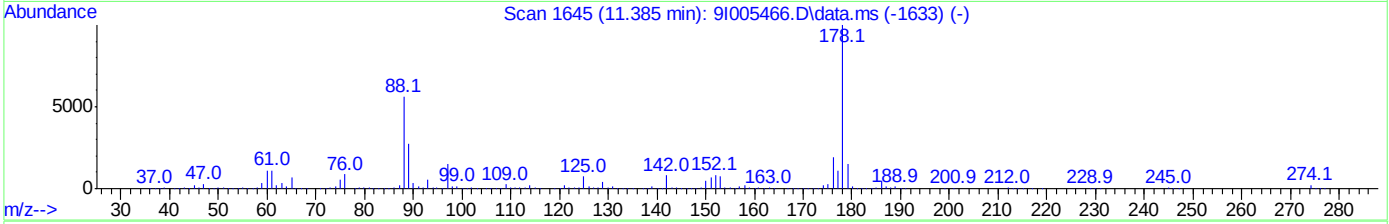
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072426.D
Acq On : 17 Aug 2020 1:20 pm
Operator : marthav
Sample : ic2953-100 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 17 14:46:49 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Wed Jun 24 12:54:05 2020
Response via : Initial Calibration







TIC: x072426.D\data.ms

(86) Disulfoton

10.875min (+0.006) 85.64ppm m

response 575161

Ion	Exp%	Act%
88.00	100	100
97.00	26.50	30.87
142.00	14.20	16.61
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 08/18/20 14:38

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072427.D
Acq On : 17 Aug 2020 1:46 pm
Operator : marthav
Sample : ic2953-1 app9 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 18 12:49:30 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Aug 18 09:38:11 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	0.000	152	0m	40.00	ppm		-5.62
22) Naphthalene-d8	0.000	136	0m	40.00	ppm		-7.04
43) Acenaphthene-d10	0.000	164	0m	40.00	ppm		-9.08
70) Phenanthrene-d10	0.000	188	0m	40.00	ppm		-10.82
92) Chrysene-d12	0.000	240	0m	40.00	ppm		-14.02
102) Perylene-d12	0.000	264	0m	40.00	ppm		-16.19
110) 1,4-Dichlorobenzene-d4A	5.612	152	153617	40.00	ppm		0.00
120) Naphthalene-d8A	7.034	136	582401	40.00	ppm		0.00
127) Acenaphthene-d10A	9.072	164	276635	40.00	ppm		0.00
136) Phenanthrene-d10A	10.816	188	463435	40.00	ppm		0.00
146) Chrysene-d12A	14.009	240	326613	40.00	ppm		0.00
153) Perylene-d12A	16.181	264	252662	40.00	ppm		0.00
System Monitoring Compounds							
7) 2-Fluorophenol	0.000	112	0d	0.00	ppm		
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#			
9) Phenol-d5	0.000	99	0d	0.00	ppm		
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#			
23) Nitrobenzene-d5	0.000	82	0d	0.00	ppm		
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#			
47) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm		
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#			
75) 2,4,6-Tribromophenol	0.000	330	0d	0.00	ppm		
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#			
95) Terphenyl-d14	0.000	244	0d	0.00	ppm		
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#			
Target Compounds							Qvalue
111) 2-Picoline	3.595	93	7699	1.05	ppm		84
112) N-Nitrosomethylethylamine	3.729	42	5894m	1.16	ppm		
113) Methyl methanesulfonate	4.055	80	3026	0.85	ppm		94
114) N-Nitrosodiethylamine	4.462	102	3119	1.05	ppm	#	38
115) Ethyl methanesulfonate	4.804	79	4946	1.01	ppm		94
116) Pentachloroethane	5.301	167	2368	1.13	ppm		97
117) N-Nitrosopyrrolidine	6.040	100	2614	0.97	ppm	#	1
118) N-Nitrosomorpholine	6.093	56	4834	0.98	ppm	#	70
119) O-Toluidine	6.104	106	9560	0.95	ppm		91
121) N-Nitrosopiperidine	6.419	42	5930	1.11	ppm	#	57
122) A,A-Dimethylphenethyla...	6.911	58	14868m	0.70	ppm		
123) Hexachloropropene	7.157	213	2308	0.94	ppm		97
124) N-Nitrosodi-n-butylamine	7.548	84	4673m	1.12	ppm		
125) p-Phenylenediamine	7.559	108	1480m	0.27	ppm		
126) Isosafrole	7.778	162	3889	0.98	ppm		76
128) Safrole	8.388	162	3747	1.03	ppm		87
129) 1-Chloronaphthalene	8.446	162	9806	1.13	ppm		98
130) Diphenyl Ether	8.543	170	6804	1.12	ppm		96
131) 1,4-Naphthoquinone	8.650	158	1203	0.36	ppm		86
132) Pentachlorobenzene	9.265	250	3422	1.12	ppm		97
133) 1-Naphthylamine	9.415	143	9194	0.96	ppm		95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072427.D
Acq On : 17 Aug 2020 1:46 pm
Operator : marthav
Sample : ic2953-1 app9 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 18 12:49:30 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Aug 18 09:38:11 2020
Response via : Initial Calibration

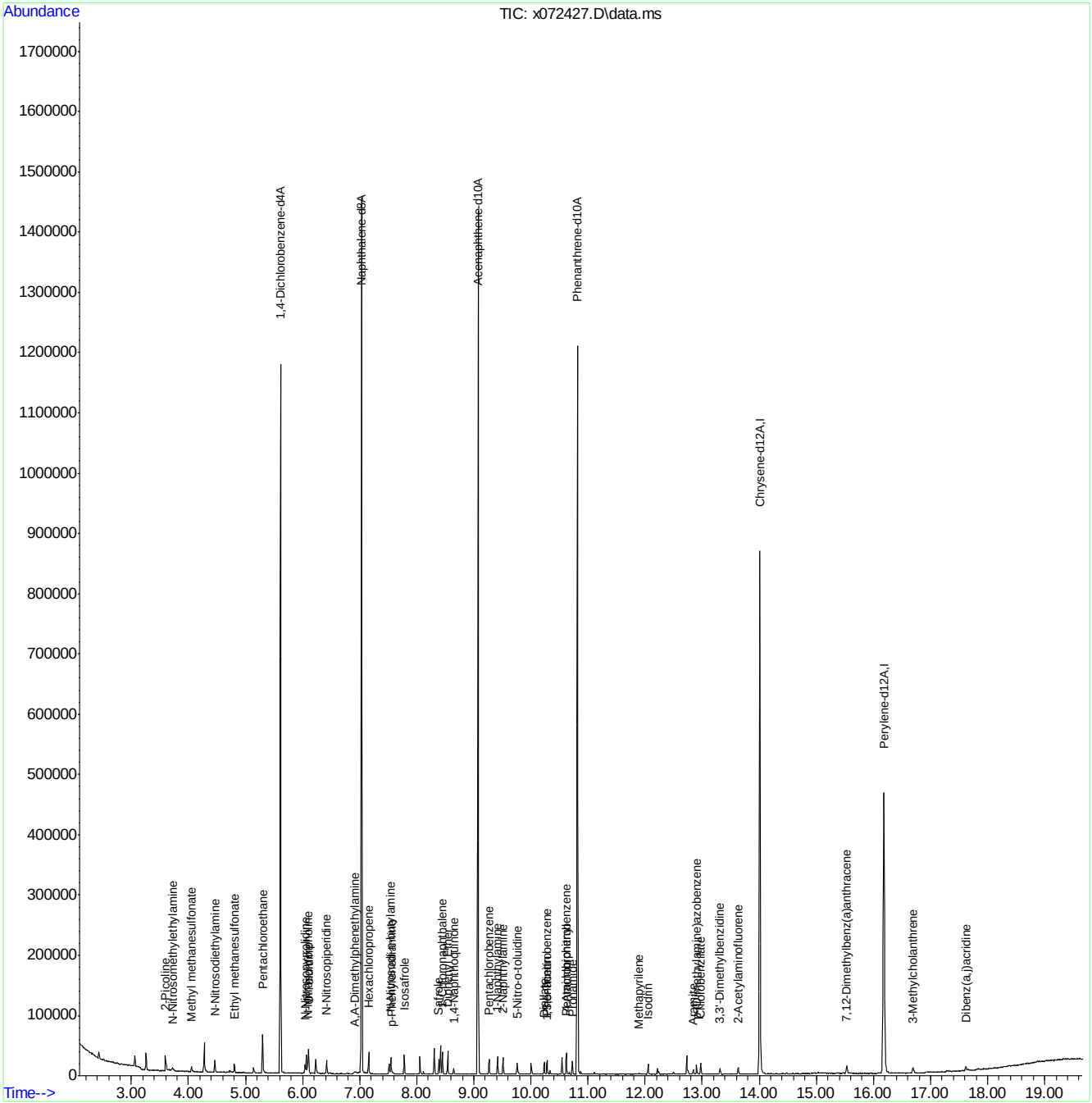
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
134) 2-Naphthylamine	9.511	143	9826	0.96	ppm		93
135) 5-Nitro-o-toluidine	9.757	152	2521	0.89	ppm		74
137) 1,3,5-Trinitrobenzene	10.286	75	1125	0.59	ppm		80
138) Diallate	10.233	43	8852m	1.22	ppm		
139) Phenacetin	10.281	108	3752	0.84	ppm		84
140) 4-Aminobiphenyl	10.623	169	9260	0.99	ppm		94
141) Pronamide	10.725	173	3477	0.96	ppm		97
142) Pentachloronitrobenzene	10.613	237	827	0.92	ppm		91
144) Methapyrilene	11.896	58	848	0.36	ppm	#	66
145) Isodrin	12.051	193	1509	1.15	ppm	#	82
147) Aramite	12.843	185	1072m	0.90	ppm		
148) p-(Dimethylamine)azobe...	12.902	120	2418	0.66	ppm		77
149) Chlorobenzilate	12.971	139	3816	0.90	ppm	#	64
151) 3,3'-Dimethylbenzidine	13.314	212	4292	0.81	ppm		76
152) 2-Acetylaminofluorene	13.629	181	3126	0.76	ppm		92
154) 7,12-Dimethylbenz(a)an...	15.533	256	3814	1.09	ppm		95
156) 3-Methylcholanthrene	16.694	268	2998	0.95	ppm		90
157) Dibenz(a,j)acridine	17.614	279	4533	1.09	ppm		90

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072427.D
Acq On : 17 Aug 2020 1:46 pm
Operator : marthav
Sample : ic2953-1 app9 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 18 12:49:30 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Aug 18 09:38:11 2020
Response via : Initial Calibration



Manual Integration Approval Summary

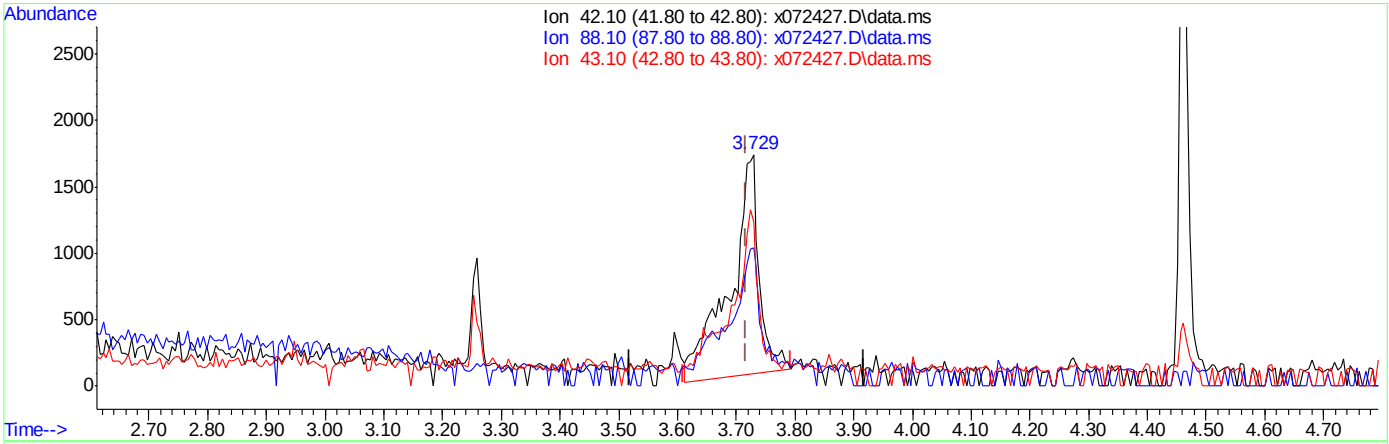
Sample Number: SX2953-IC2953
Lab FileID: X072427.D
Injection Time: 08/17/20 13:46
Method: SW846 8270D
Analyst approved: 08/18/20 14:01 Martha Valls
Supervisor approved: 08/18/20 14:38 Nicole McCampbell

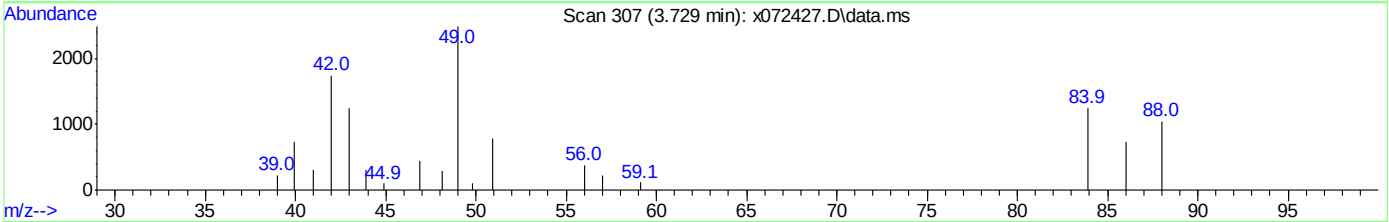
Parameter	CAS	Sig#	R.T. (min.)	Reason
N-Nitrosomethylethylamine	10595-95-6		3.73	Split peak
A,A-Dimethylphenethylamine	122-09-8		6.91	Split peak
N-Nitrosodi-n-butylamine	924-16-3		7.55	Split peak
p-Phenylenediamine	106-50-3		7.56	Split peak
Diallate	2303-16-4		10.23	Split peak
Aramite	140-57-8		12.84	Split peak

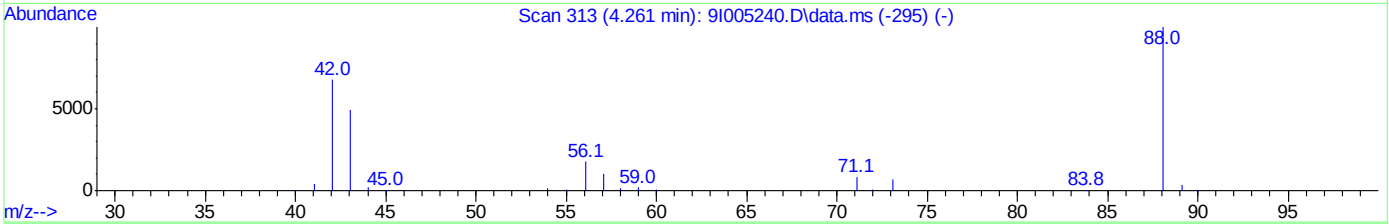
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072427.D
Acq On : 17 Aug 2020 1:46 pm
Operator : marthav
Sample : ic2953-1 app9 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 18 09:38:27 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Aug 18 09:38:11 2020
Response via : Initial Calibration







TIC: x072427.D\data.ms

(112) N-Nitrosomethylethylamine

3.729min (+0.011) 1.13ppm

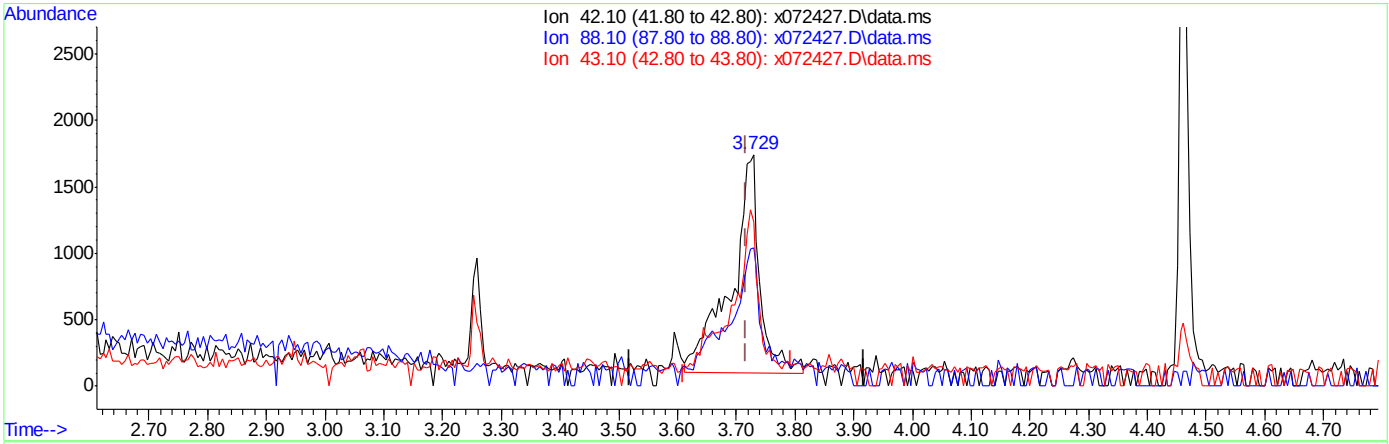
response 5745

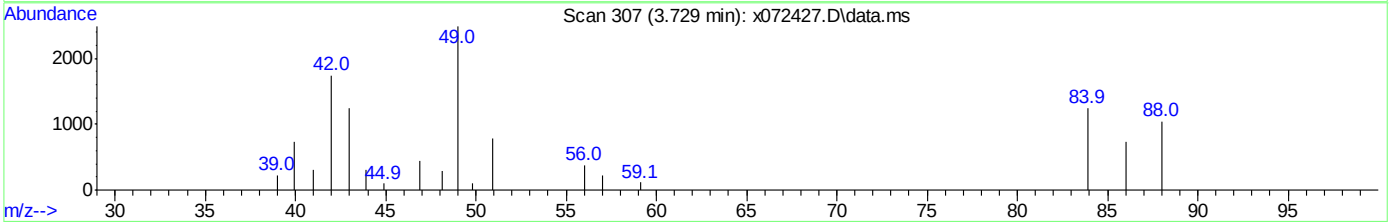
Ion	Exp%	Act%
42.10	100	100
88.10	147.70	55.95#
43.10	72.60	68.35
0.00	0.00	0.00

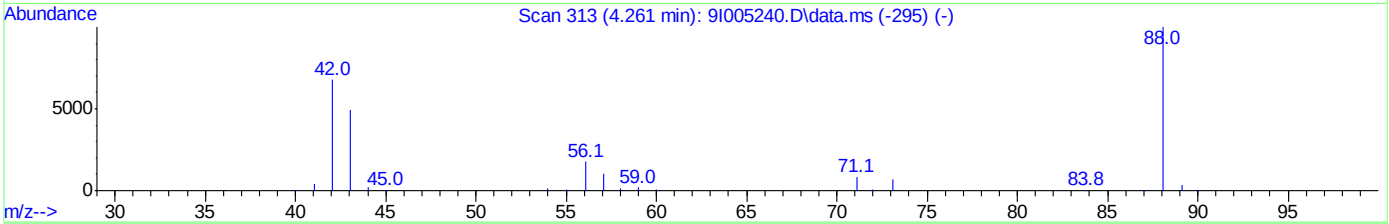
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072427.D
Acq On : 17 Aug 2020 1:46 pm
Operator : marthav
Sample : ic2953-1 app9 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 18 09:38:27 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Aug 18 09:38:11 2020
Response via : Initial Calibration







TIC: x072427.D\data.ms

(112) N-Nitrosomethylethylamine

3.729min (+0.011) 1.10ppm m

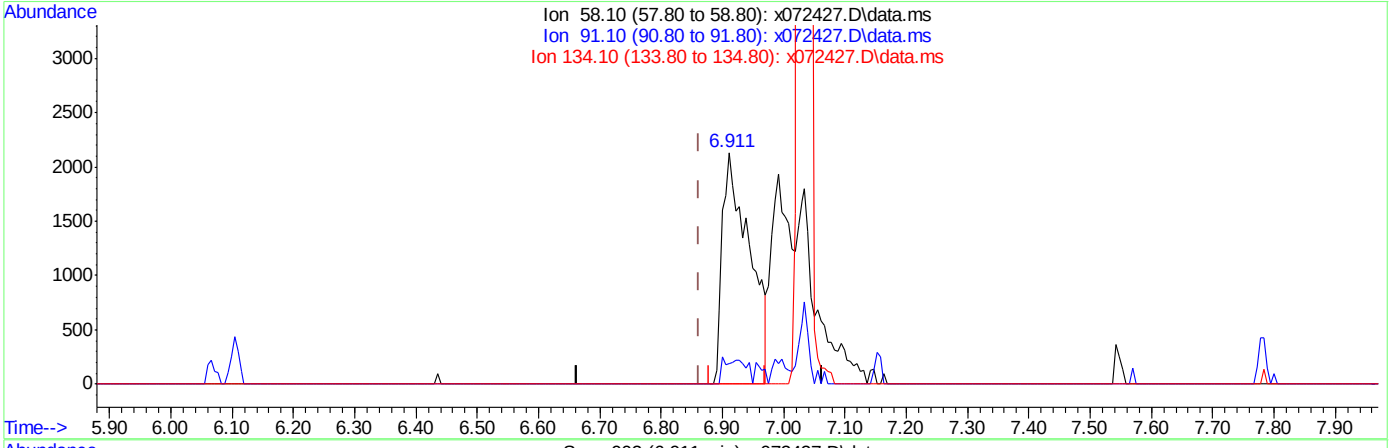
response 5626

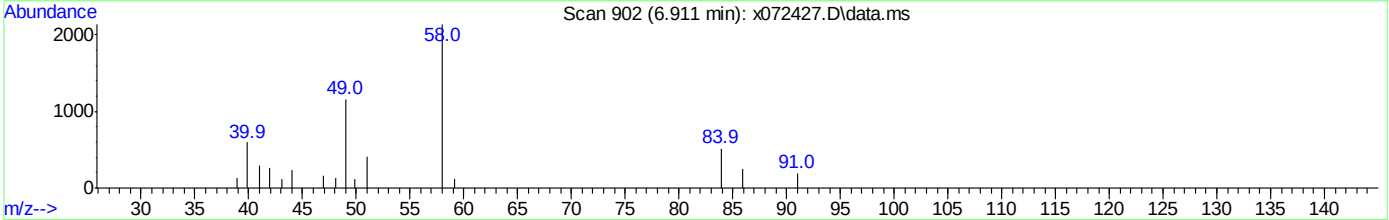
Ion	Exp%	Act%
42.10	100	100
88.10	147.70	59.72#
43.10	72.60	70.97
0.00	0.00	0.00

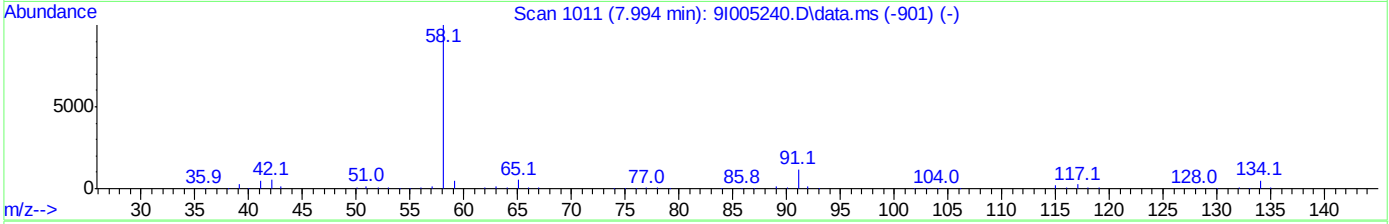
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072427.D
Acq On : 17 Aug 2020 1:46 pm
Operator : marthav
Sample : ic2953-1 app9 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 18 09:38:27 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Aug 18 09:38:11 2020
Response via : Initial Calibration







TIC: x072427.D\data.ms

(122) A,A-Dimethylphenethylamine

6.911min (+0.048) 0.30ppm

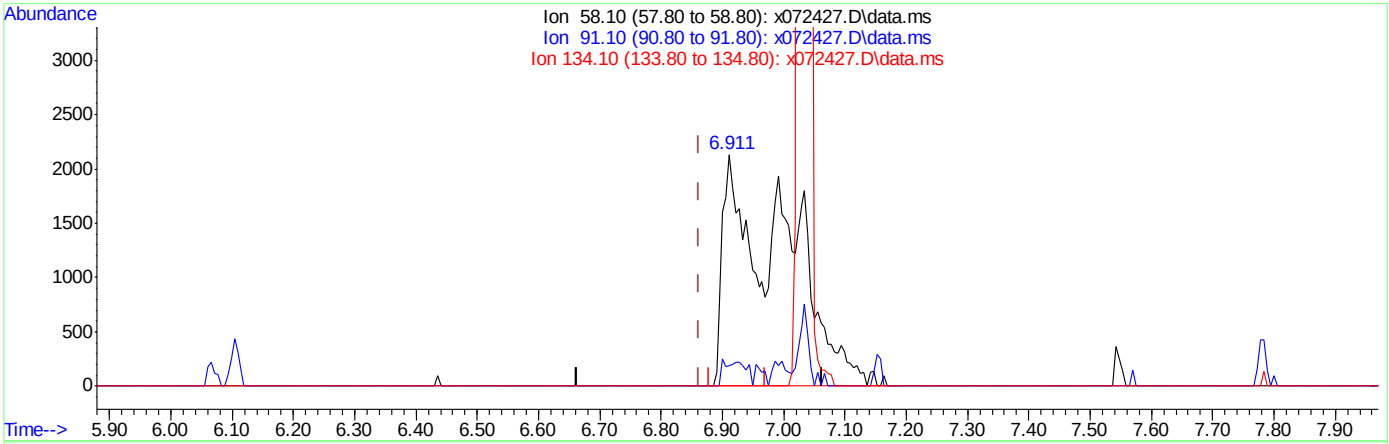
response 6512

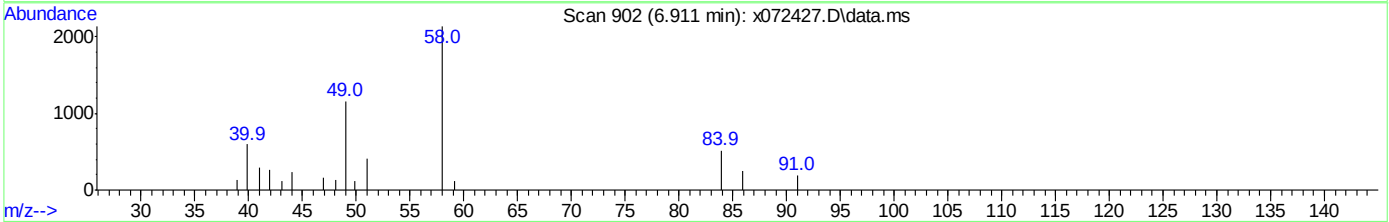
Ion	Exp%	Act%
58.10	100	100
91.10	11.70	7.02
134.10	5.10	0.00
0.00	0.00	0.00

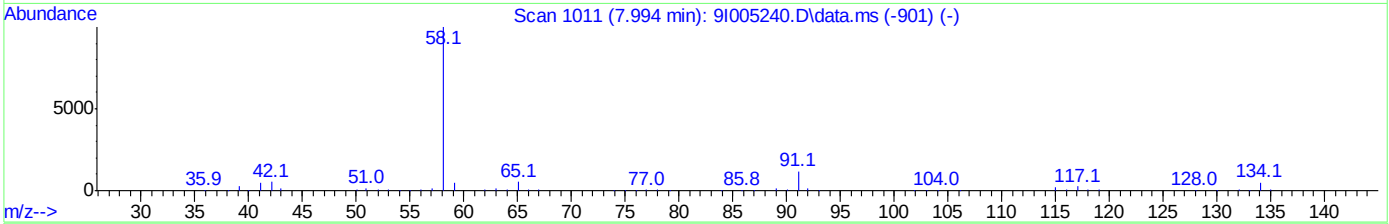
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072427.D
Acq On : 17 Aug 2020 1:46 pm
Operator : marthav
Sample : ic2953-1 app9 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 18 09:38:27 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Aug 18 09:38:11 2020
Response via : Initial Calibration







TIC: x072427.D\data.ms

(122) A,A-Dimethylphenethylamine

6.911min (+0.048) 0.70ppm m

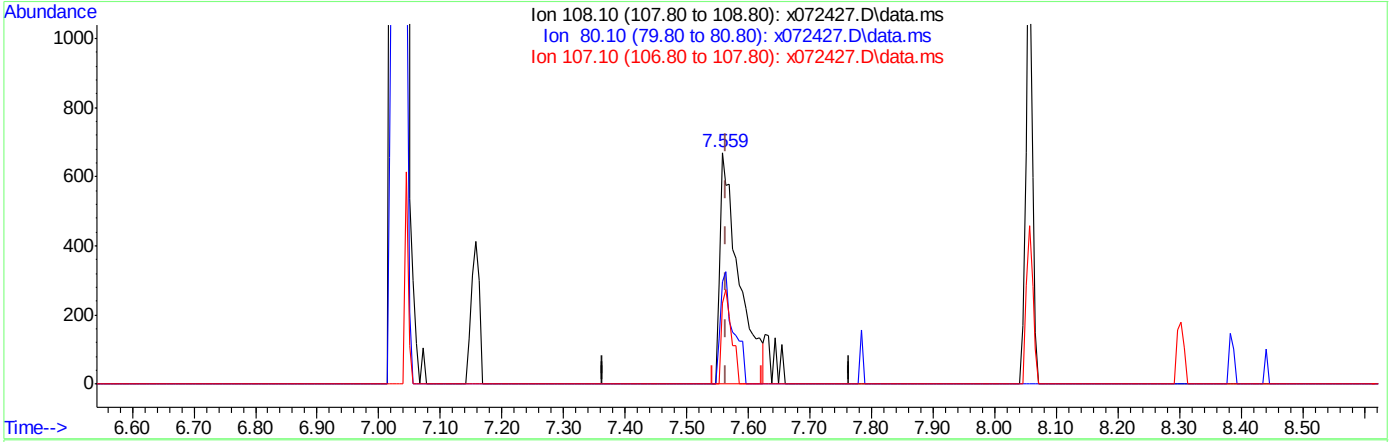
response 14868

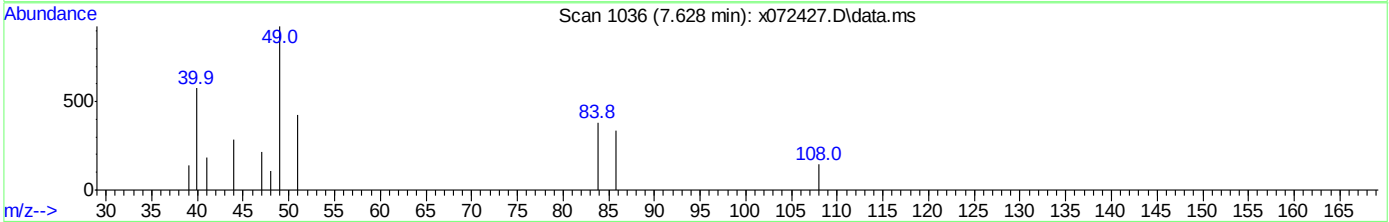
Ion	Exp%	Act%
58.10	100	100
91.10	11.70	8.91
134.10	5.10	0.00
0.00	0.00	0.00

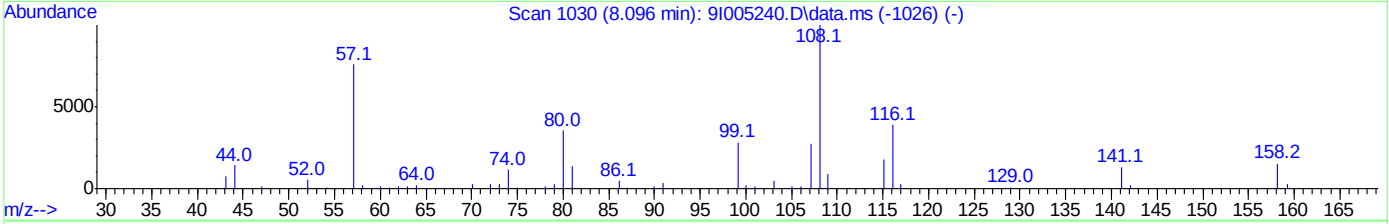
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072427.D
Acq On : 17 Aug 2020 1:46 pm
Operator : marthav
Sample : ic2953-1 app9 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 18 09:38:27 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Aug 18 09:38:11 2020
Response via : Initial Calibration







TIC: x072427.D\data.ms

(125) p-Phenylenediamine

7.559min (-0.005) 0.25ppm

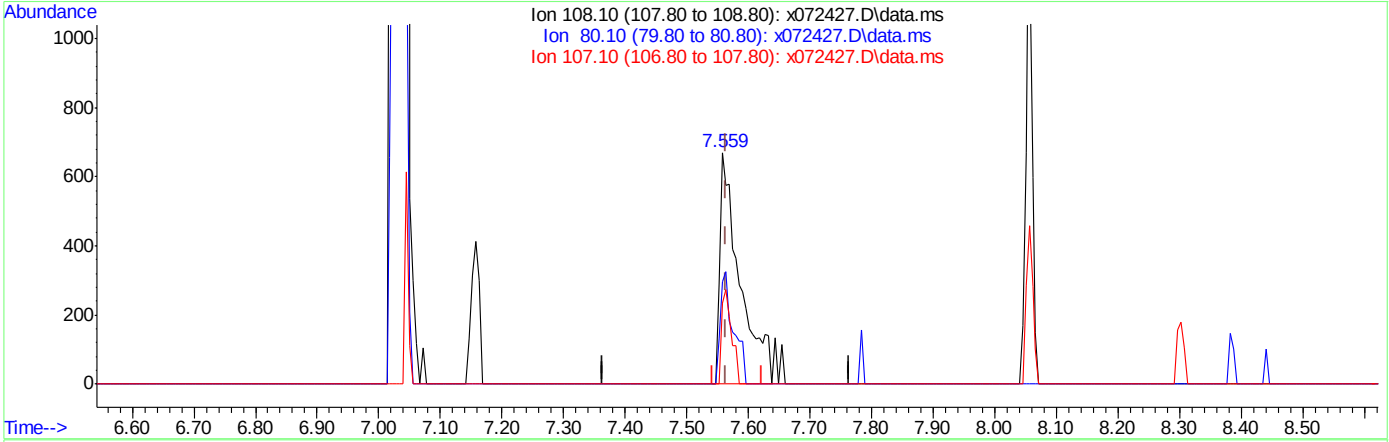
response 1388

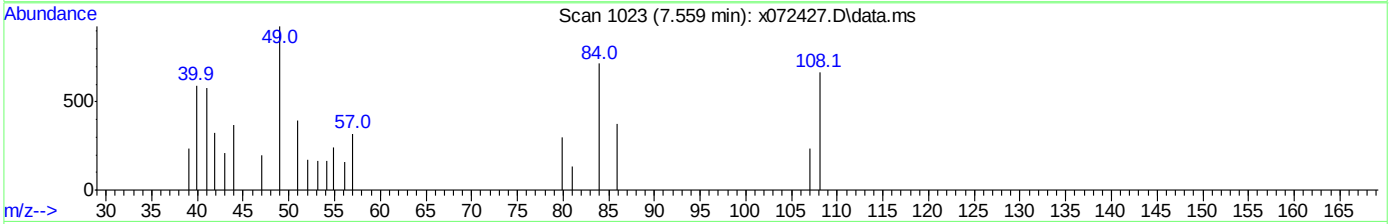
Ion	Exp%	Act%
108.10	100	100
80.10	35.50	48.48
107.10	27.70	38.66
0.00	0.00	0.00

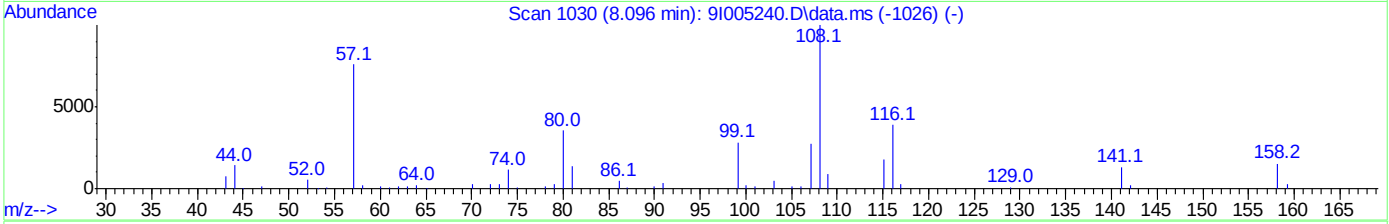
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072427.D
Acq On : 17 Aug 2020 1:46 pm
Operator : marthav
Sample : ic2953-1 app9 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 18 09:38:27 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Aug 18 09:38:11 2020
Response via : Initial Calibration







TIC: x072427.D\data.ms

(125) p-Phenylenediamine

7.559min (-0.005) 0.27ppm m

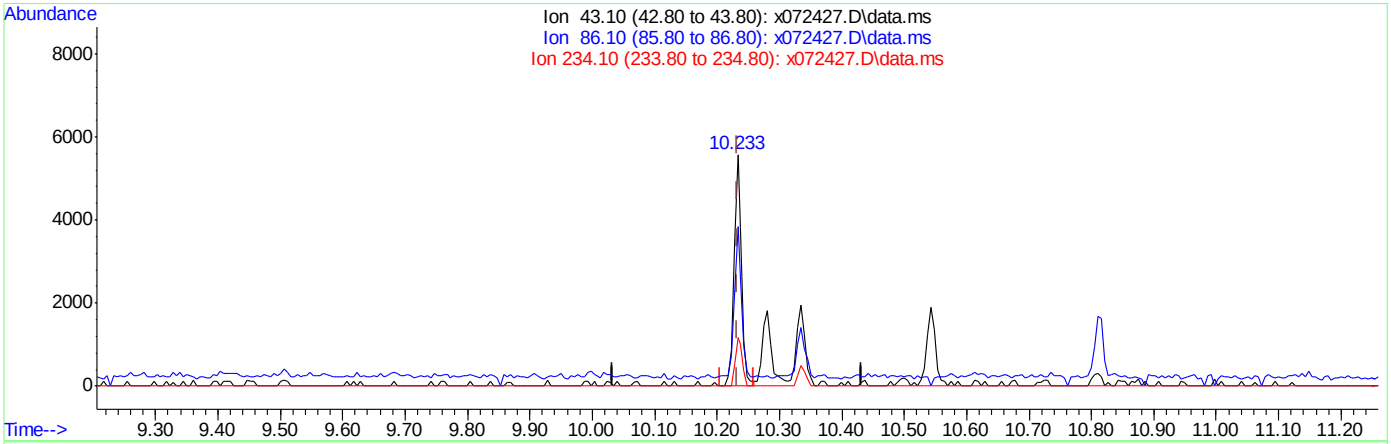
response 1480

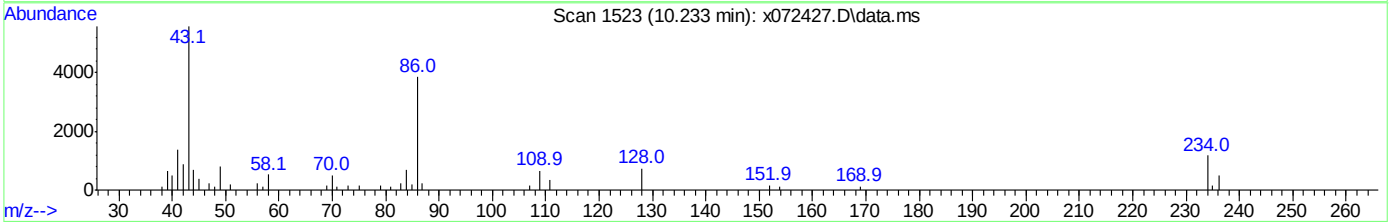
Ion	Exp%	Act%
108.10	100	100
80.10	35.50	44.18
107.10	27.70	35.22
0.00	0.00	0.00

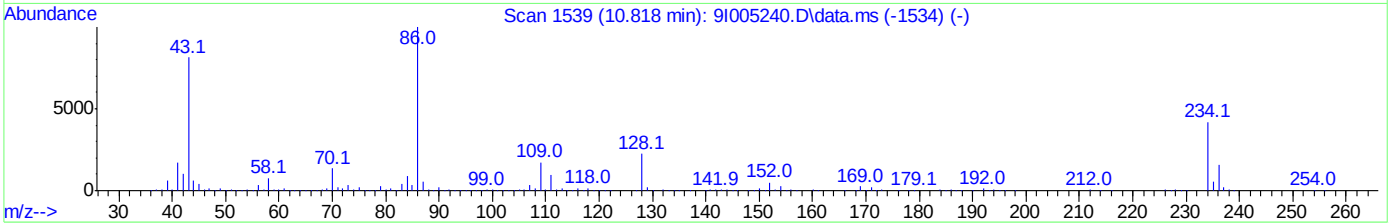
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072427.D
Acq On : 17 Aug 2020 1:46 pm
Operator : marthav
Sample : ic2953-1 app9 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 18 09:38:27 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Aug 18 09:38:11 2020
Response via : Initial Calibration







TIC: x072427.D\data.ms

(138) Diallate

10.233min (0.000) 0.69ppm

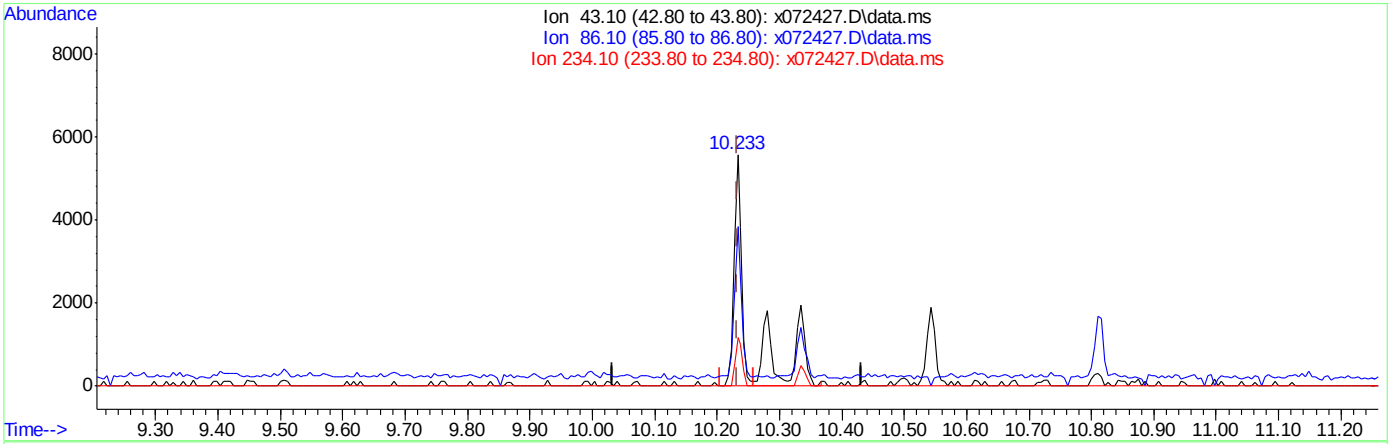
response 5010

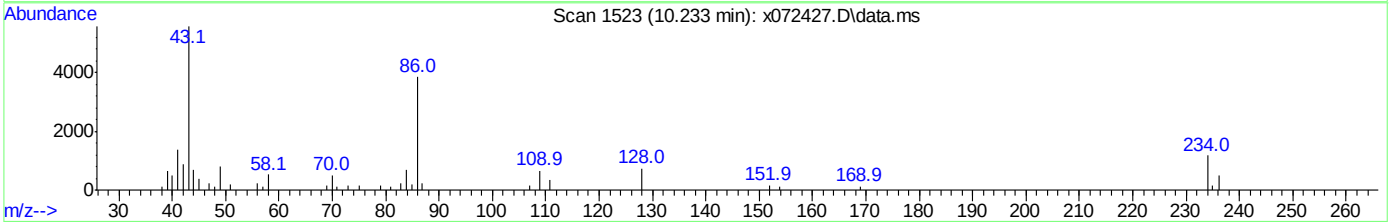
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	65.48#
234.10	51.50	21.17#
0.00	0.00	0.00

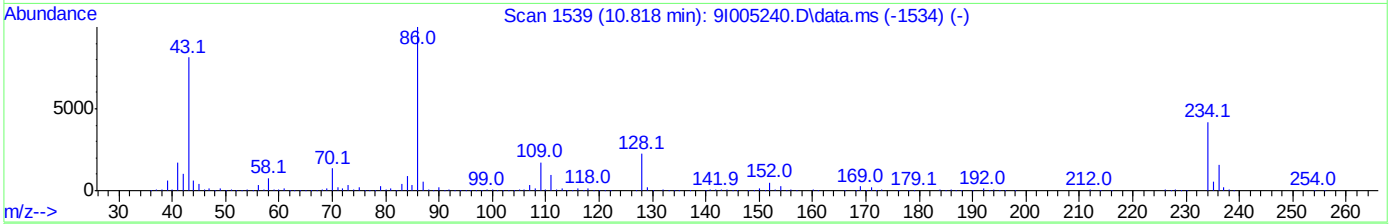
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072427.D
Acq On : 17 Aug 2020 1:46 pm
Operator : marthav
Sample : ic2953-1 app9 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 18 09:38:27 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Aug 18 09:38:11 2020
Response via : Initial Calibration







TIC: x072427.D\data.ms

(138) Diallate

10.233min (0.000) 1.22ppm m

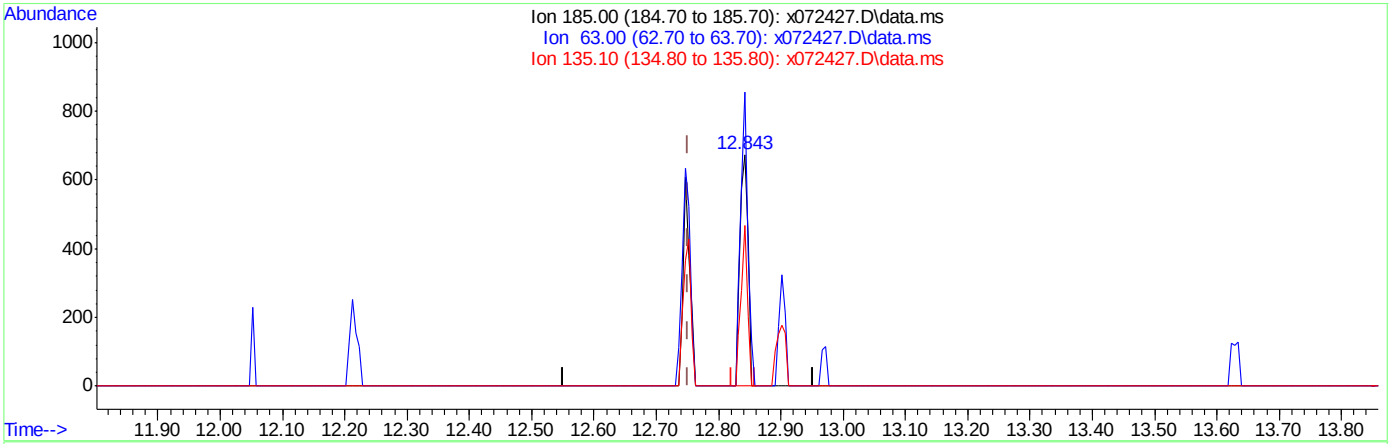
response 8852

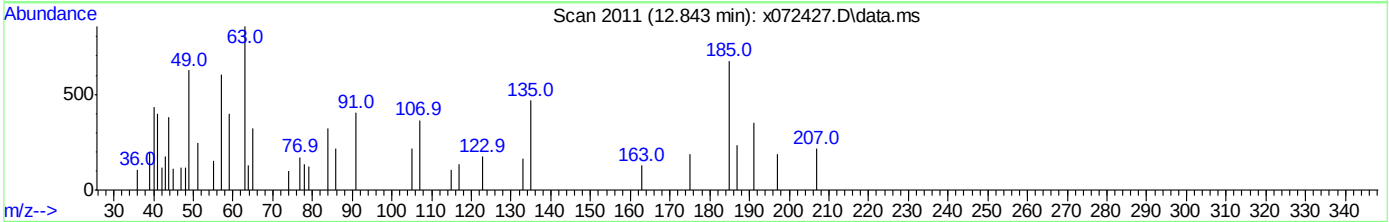
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	69.10#
234.10	51.50	20.96#
0.00	0.00	0.00

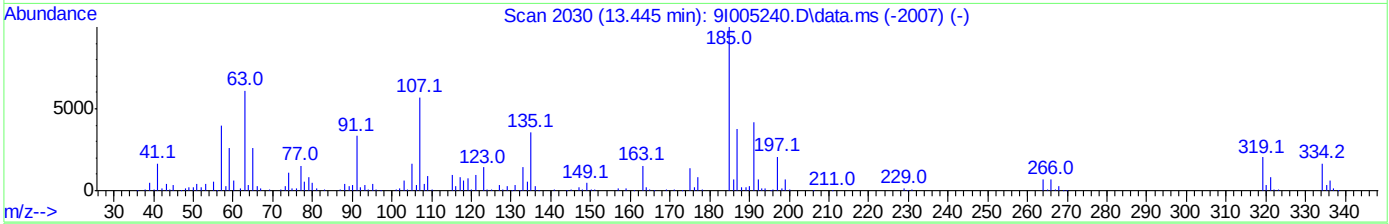
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072427.D
Acq On : 17 Aug 2020 1:46 pm
Operator : marthav
Sample : ic2953-1 app9 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 18 09:38:27 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Aug 18 09:38:11 2020
Response via : Initial Calibration







TIC: x072427.D\data.ms

(147) Aramite

12.843min (+0.091) 0.52ppm

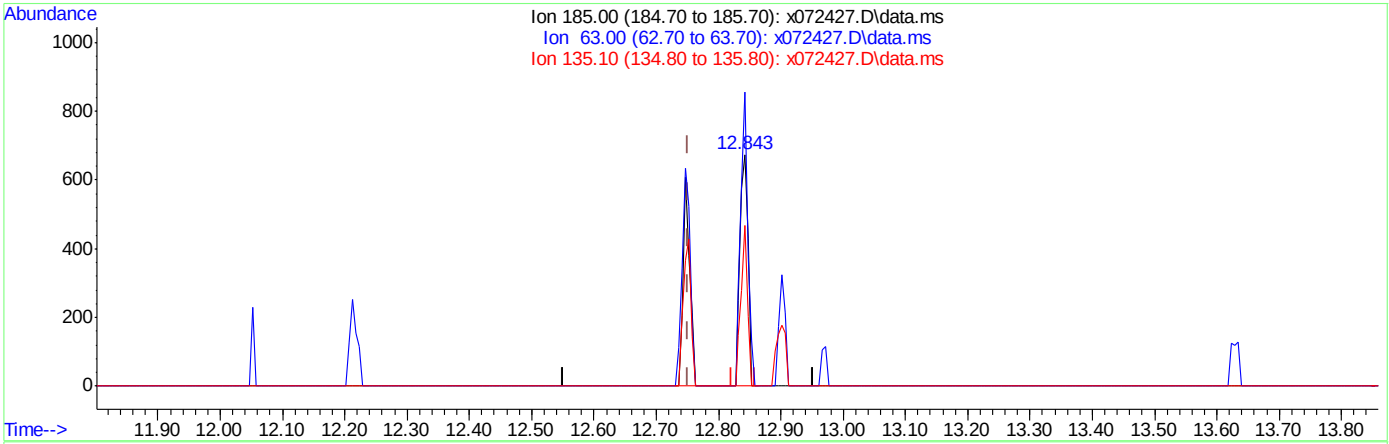
response 619

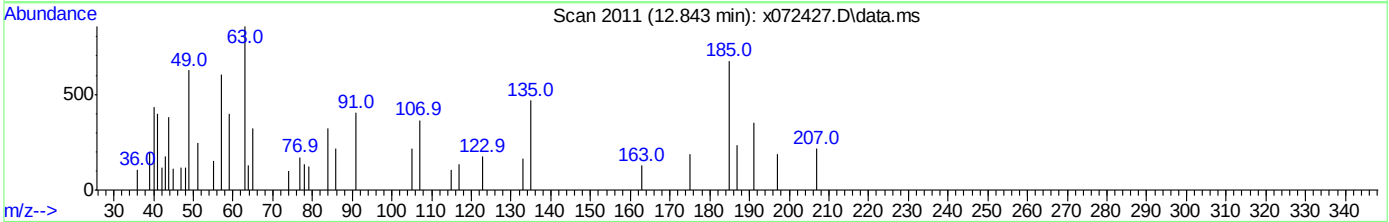
Ion	Exp%	Act%
185.00	100	100
63.00	61.10	126.85#
135.10	35.60	69.44#
0.00	0.00	0.00

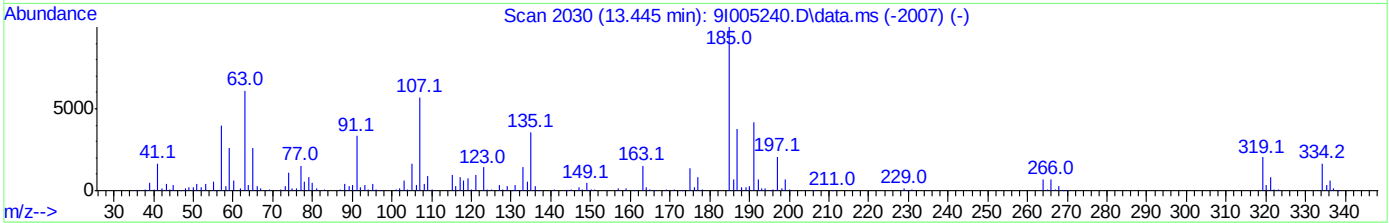
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072427.D
Acq On : 17 Aug 2020 1:46 pm
Operator : marthav
Sample : ic2953-1 app9 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 18 09:38:27 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Aug 18 09:38:11 2020
Response via : Initial Calibration







TIC: x072427.D\data.ms

(147) Aramite

12.843min (+0.091) 0.90ppm m

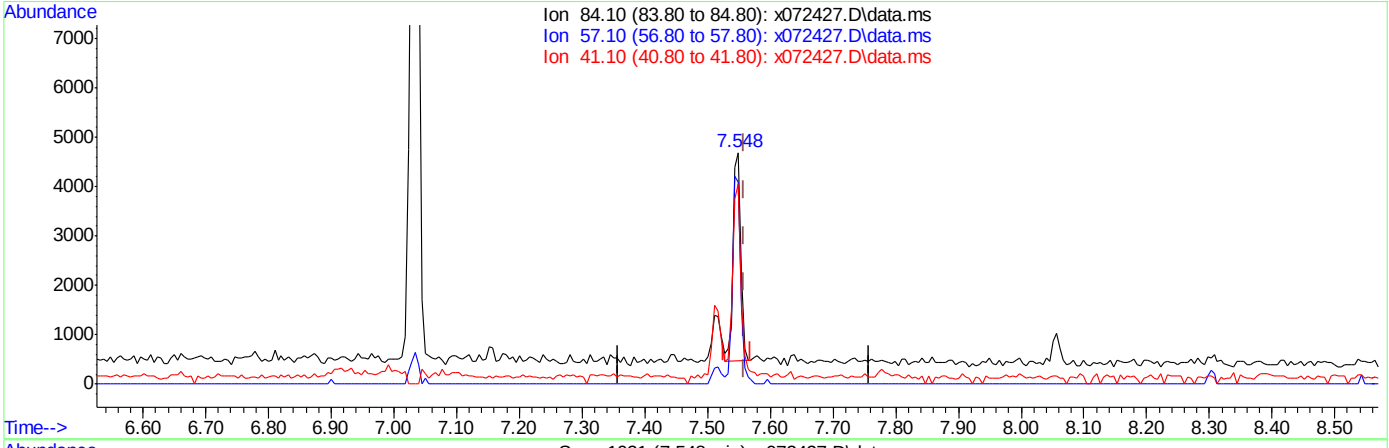
response 1072

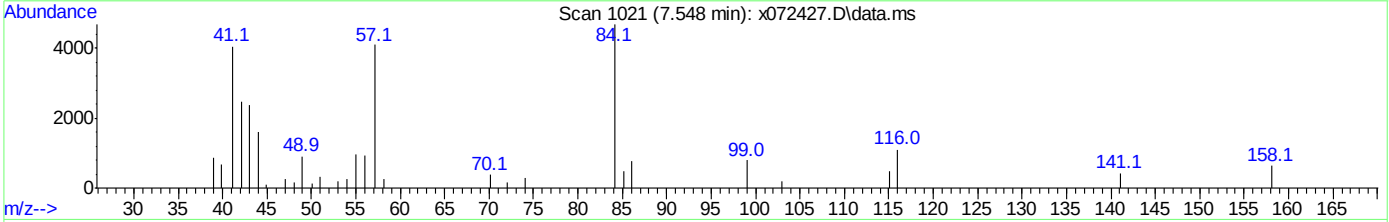
Ion	Exp%	Act%
185.00	100	100
63.00	61.10	126.85#
135.10	35.60	69.44#
0.00	0.00	0.00

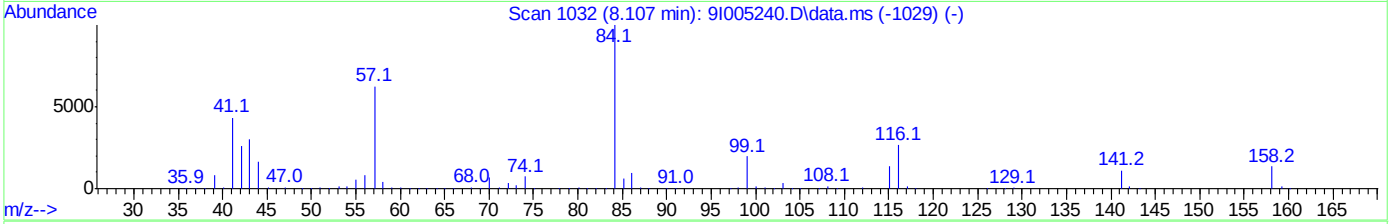
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072427.D
Acq On : 17 Aug 2020 1:46 pm
Operator : marthav
Sample : ic2953-1 app9 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 18 09:38:27 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Aug 18 09:38:11 2020
Response via : Initial Calibration







TIC: x072427.D\data.ms

(124) N-Nitrosodi-n-butylamine

7.548min (-0.011) 0.84ppm

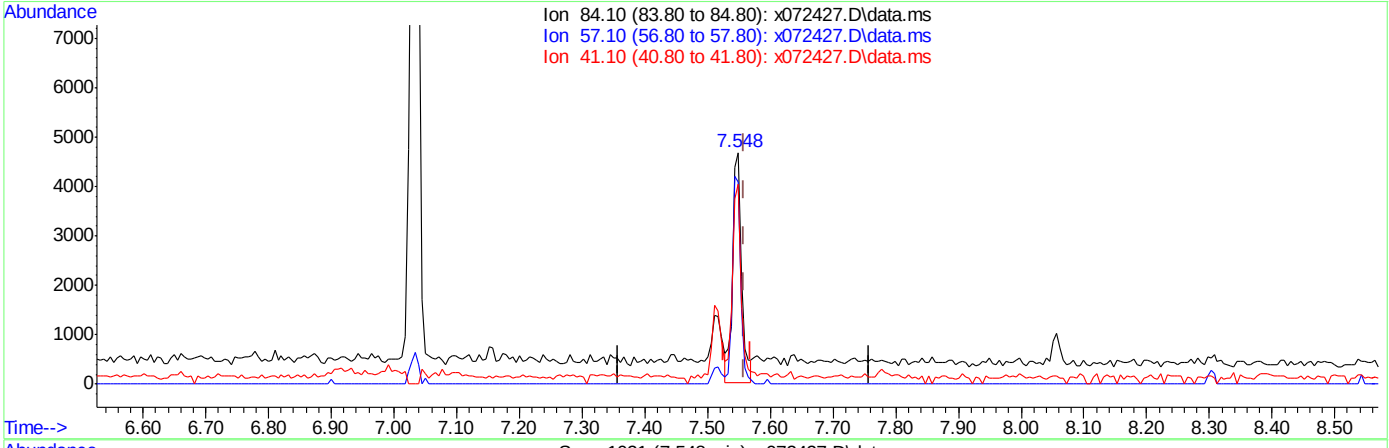
response 3528

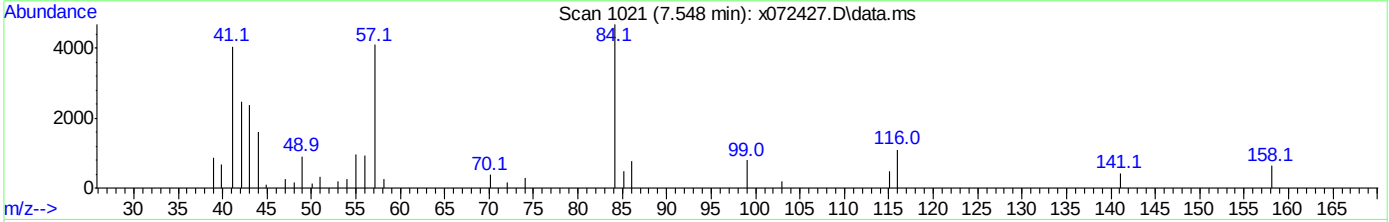
Ion	Exp%	Act%
84.10	100	100
57.10	62.70	96.28#
41.10	43.50	89.38#
0.00	0.00	0.00

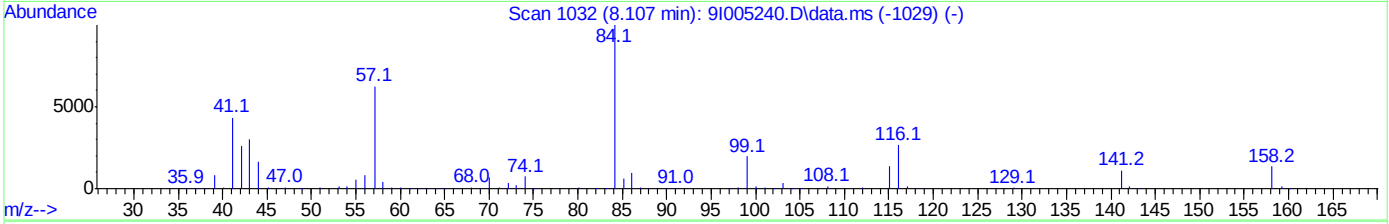
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072427.D
Acq On : 17 Aug 2020 1:46 pm
Operator : marthav
Sample : ic2953-1 app9 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 18 09:38:27 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Aug 18 09:38:11 2020
Response via : Initial Calibration







TIC: x072427.D\data.ms

(124) N-Nitrosodi-n-butylamine

7.548min (-0.011) 1.12ppm m

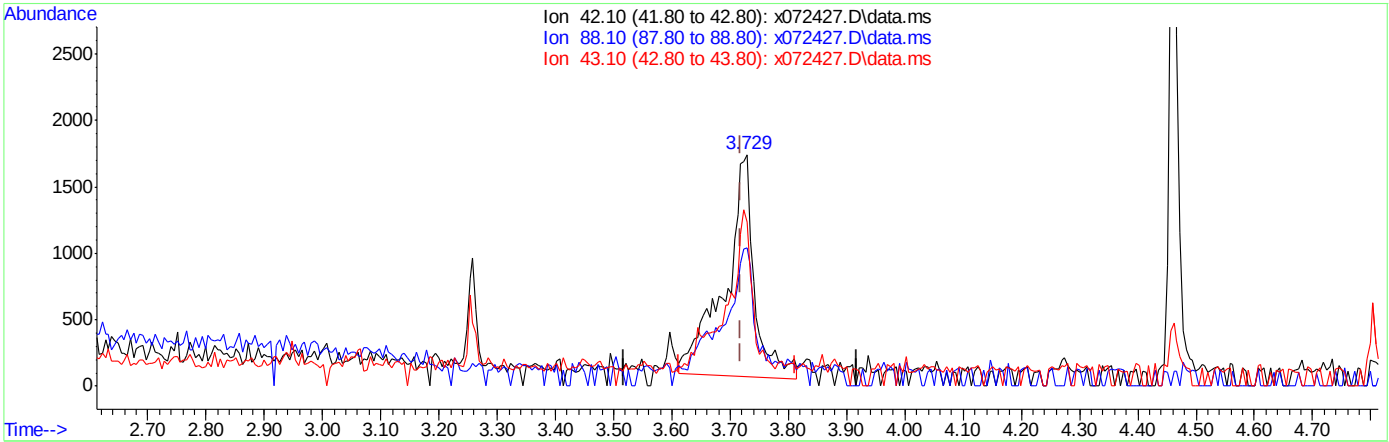
response 4673

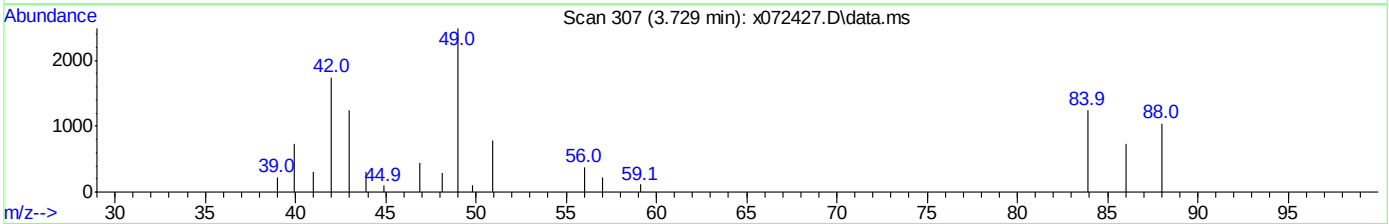
Ion	Exp%	Act%
84.10	100	100
57.10	62.70	87.48
41.10	43.50	86.37#
0.00	0.00	0.00

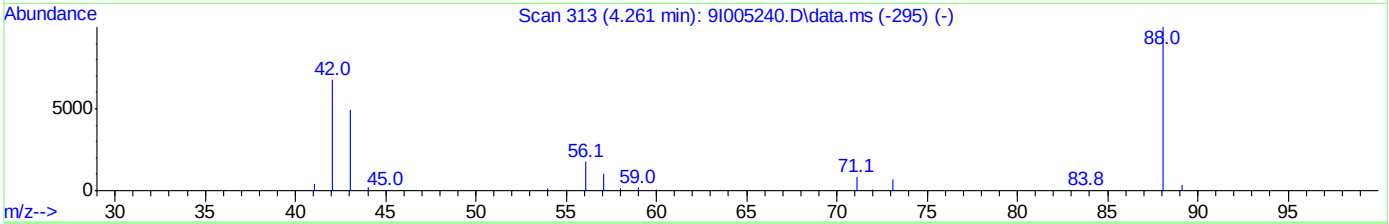
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072427.D
Acq On : 17 Aug 2020 1:46 pm
Operator : marthav
Sample : ic2953-1 app9 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 18 09:38:27 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Aug 18 09:38:11 2020
Response via : Initial Calibration







TIC: x072427.D\data.ms

(112) N-Nitrosomethylethylamine

3.729min (+0.011) 1.16ppm m

response 5894

Ion	Exp%	Act%
42.10	100	100
88.10	147.70	59.72#
43.10	72.60	70.97
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 08/18/20 14:38

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072428.D
Acq On : 17 Aug 2020 2:12 pm
Operator : marthav
Sample : ic2953-5 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 18 12:49:47 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Mon Aug 17 14:57:23 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	0.000	152	0m	40.00	ppm		-5.62
22) Naphthalene-d8	0.000	136	0m	40.00	ppm		-7.04
43) Acenaphthene-d10	0.000	164	0m	40.00	ppm		-9.08
70) Phenanthrene-d10	0.000	188	0m	40.00	ppm		-10.82
92) Chrysene-d12	0.000	240	0m	40.00	ppm		-14.02
102) Perylene-d12	0.000	264	0m	40.00	ppm		-16.19
110) 1,4-Dichlorobenzene-d4A	5.612	152	145446	40.00	ppm		0.00
120) Naphthalene-d8A	7.034	136	554572	40.00	ppm		0.00
127) Acenaphthene-d10A	9.072	164	271846	40.00	ppm		0.00
136) Phenanthrene-d10A	10.816	188	466694	40.00	ppm		0.00
146) Chrysene-d12A	14.009	240	342458	40.00	ppm		0.00
153) Perylene-d12A	16.186	264	285287	40.00	ppm		0.00
System Monitoring Compounds							
7) 2-Fluorophenol	0.000	112	0d	0.00	ppm		
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#			
9) Phenol-d5	0.000	99	0d	0.00	ppm		
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#			
23) Nitrobenzene-d5	0.000	82	0d	0.00	ppm		
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#			
47) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm		
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#			
75) 2,4,6-Tribromophenol	0.000	330	0d	0.00	ppm		
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#			
95) Terphenyl-d14	0.000	244	0d	0.00	ppm		
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#			
Target Compounds							Qvalue
111) 2-Picoline	3.585	93	32356	4.66	ppm		85
112) N-Nitrosomethylethylamine	3.718	42	24529m	5.09	ppm		
113) Methyl methanesulfonate	4.050	80	13292	3.93	ppm		93
114) N-Nitrosodiethylamine	4.462	102	13855	4.92	ppm	#	33
115) Ethyl methanesulfonate	4.804	79	22003	4.72	ppm		96
116) Pentachloroethane	5.301	167	9553	4.81	ppm		92
117) N-Nitrosopyrrolidine	6.040	100	12354	4.85	ppm	#	21
118) N-Nitrosomorpholine	6.093	56	22218	4.78	ppm	#	65
119) O-Toluidine	6.104	106	43573	4.58	ppm		98
121) N-Nitrosopiperidine	6.419	42	26661	5.23	ppm	#	54
122) A,A-Dimethylphenethyla...	6.895	58	85468m	4.20	ppm		
123) Hexachloropropene	7.157	213	10856	4.66	ppm		99
124) N-Nitrosodi-n-butylamine	7.548	84	17221	4.32	ppm	#	40
125) p-Phenylenediamine	7.553	108	18653	3.54	ppm		89
126) Isosafrole	7.778	162	17650	4.67	ppm		80
128) Safrole	8.388	162	17333	4.85	ppm		94
129) 1-Chloronaphthalene	8.446	162	43137	5.07	ppm		99
130) Diphenyl Ether	8.543	170	30014	5.05	ppm		96
131) 1,4-Naphthoquinone	8.650	158	10074	3.03	ppm		85
132) Pentachlorobenzene	9.265	250	15055	5.02	ppm		97
133) 1-Naphthylamine	9.415	143	44229	4.68	ppm		95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072428.D
Acq On : 17 Aug 2020 2:12 pm
Operator : marthav
Sample : ic2953-5 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 18 12:49:47 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Mon Aug 17 14:57:23 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
134) 2-Naphthylamine	9.511	143	47054	4.66	ppm		99
135) 5-Nitro-o-toluidine	9.757	152	13522	4.87	ppm		75
137) 1,3,5-Trinitrobenzene	10.281	75	8054	4.19	ppm		80
138) Diallate	10.233	43	40982m	5.60	ppm		
139) Phenacetin	10.281	108	22246	4.95	ppm		94
140) 4-Aminobiphenyl	10.623	169	50231	5.31	ppm		98
141) Pronamide	10.725	173	18635	5.08	ppm		97
142) Pentachloronitrobenzene	10.613	237	4286	4.74	ppm		87
144) Methapyrilene	11.902	58	5130	2.14	ppm		74
145) Isodrin	12.051	193	6991	5.28	ppm	#	74
147) Aramite	12.843	185	6255m	5.02	ppm		
148) p-(Dimethylamine)azobe...	12.902	120	15405	4.03	ppm		79
149) Chlorobenzilate	12.971	139	20021	4.48	ppm	#	66
150) Kepone	13.303	272	3002	19.47	ppm		96
151) 3,3'-Dimethylbenzidine	13.314	212	18869	3.41	ppm		97
152) 2-Acetylaminofluorene	13.629	181	21941	5.07	ppm		88
154) 7,12-Dimethylbenz(a)an...	15.533	256	20348	5.14	ppm		91
156) 3-Methylcholanthrene	16.694	268	17772	4.98	ppm		90
157) Dibenz(a,j)acridine	17.619	279	27480	5.85	ppm		89

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

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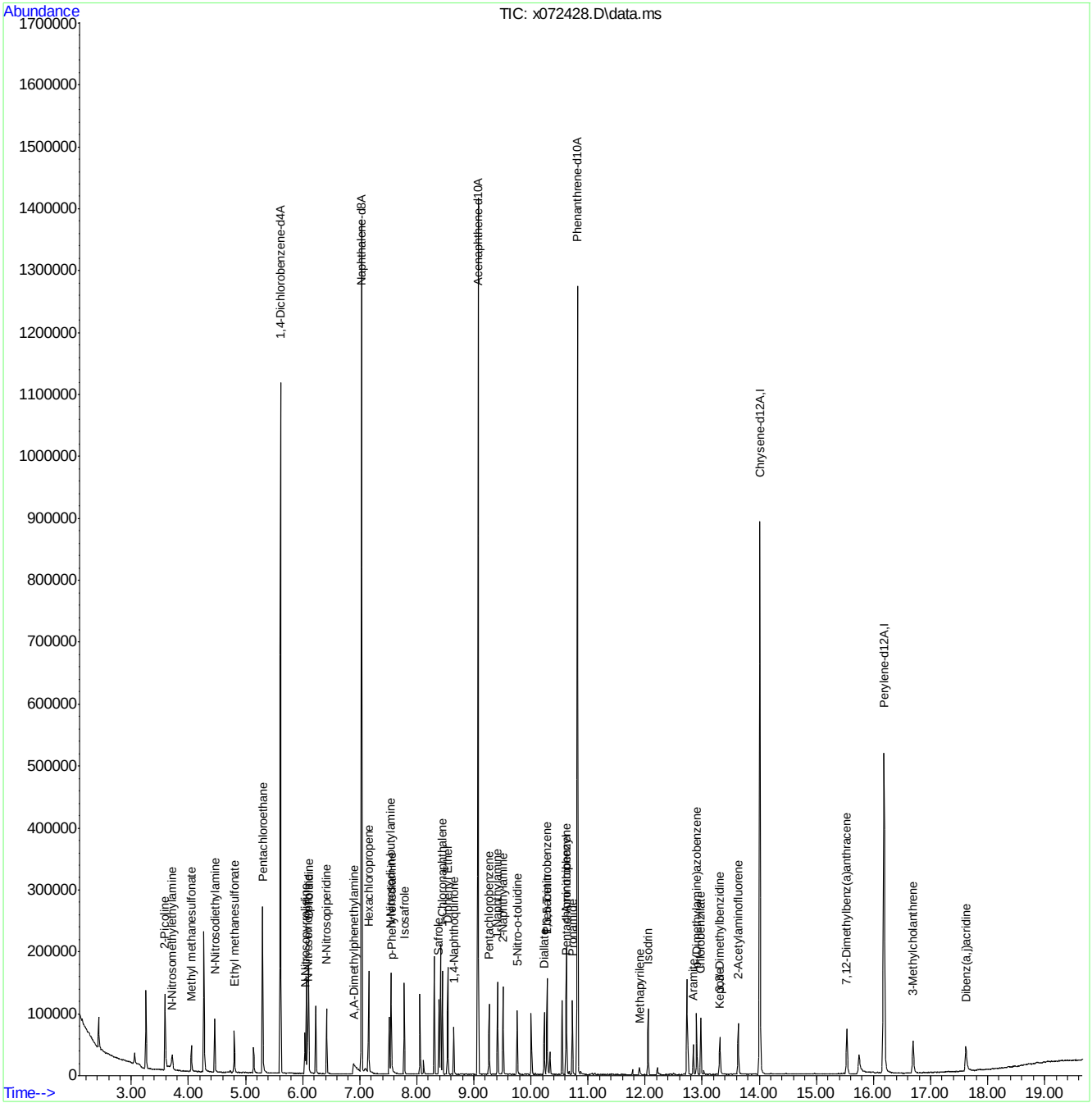

Manual Integration Approval Summary

Sample Number: SX2953-IC2953
Lab FileID: X072428.D
Injection Time: 08/17/20 14:12

Method: SW846 8270D
Analyst approved: 08/18/20 14:01 Martha Valls
Supervisor approved: 08/18/20 14:38 Nicole McCampbell

Parameter	CAS	Sig#	R.T. (min.)	Reason
N-Nitrosomethylethylamine	10595-95-6		3.72	Split peak
A,A-Dimethylphenethylamine	122-09-8		6.90	Split peak
Diallate	2303-16-4		10.23	Split peak
Aramite	140-57-8		12.84	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
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Sample : ic2953-5 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
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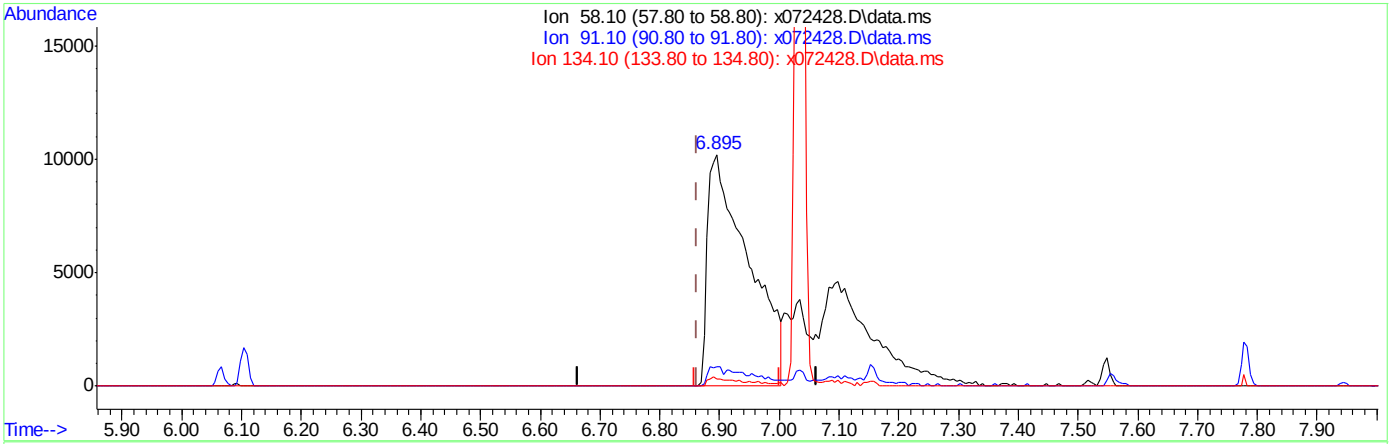

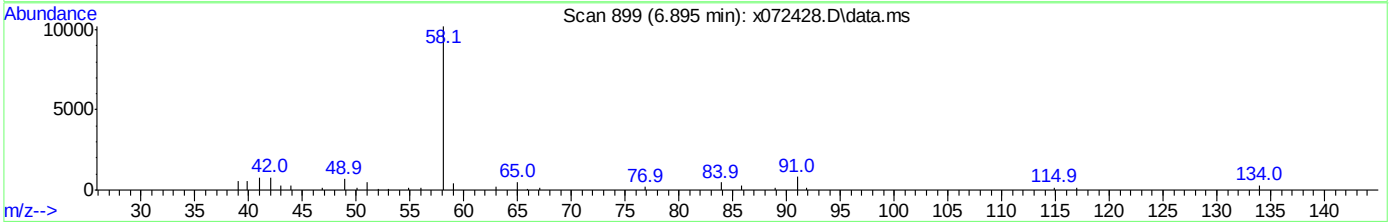

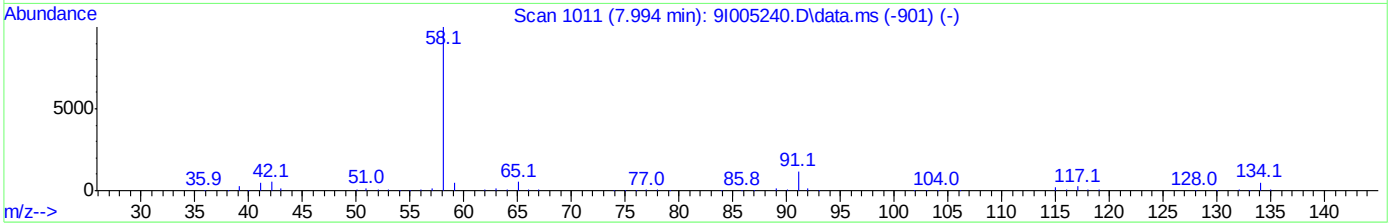

TIC: x072428.D\data.ms

(122) A,A-Dimethylphenethylamine

6.895min (+0.032) 2.38ppm

response 48318

Ion	Exp%	Act%
58.10	100	100
91.10	11.70	7.89
134.10	5.10	2.46
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
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Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Mon Aug 17 14:57:23 2020
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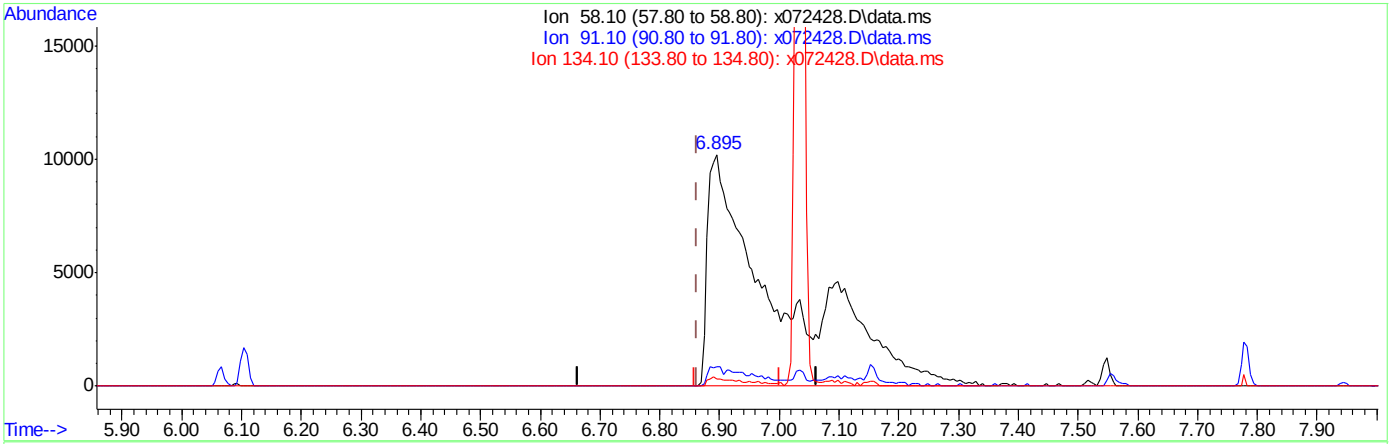

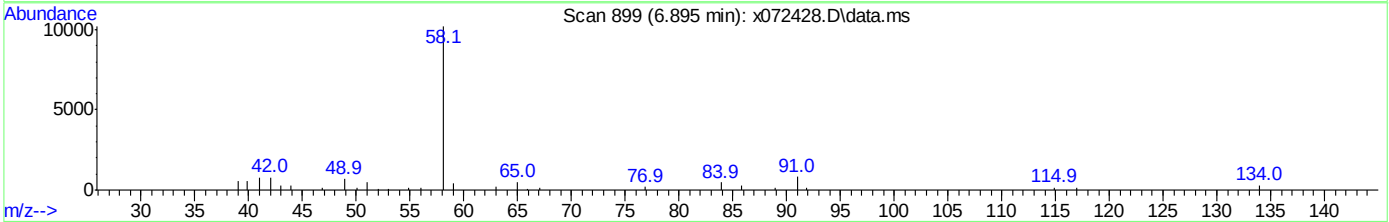

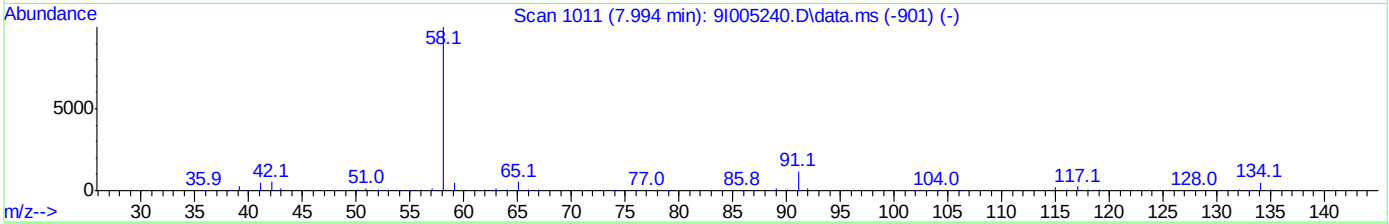

TIC: x072428.D\data.ms

(122) A,A-Dimethylphenethylamine

6.895min (+0.032) 4.20ppm m

response 85468

Ion	Exp%	Act%
58.10	100	100
91.10	11.70	8.17
134.10	5.10	2.86
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072428.D
Acq On : 17 Aug 2020 2:12 pm
Operator : marthav
Sample : ic2953-5 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 18 09:38:29 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Mon Aug 17 14:57:23 2020
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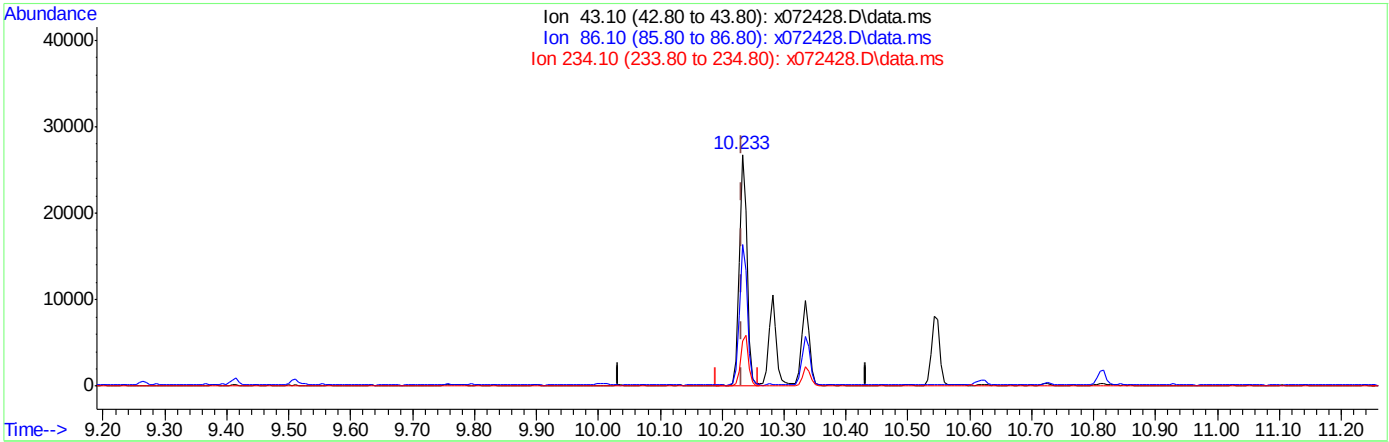
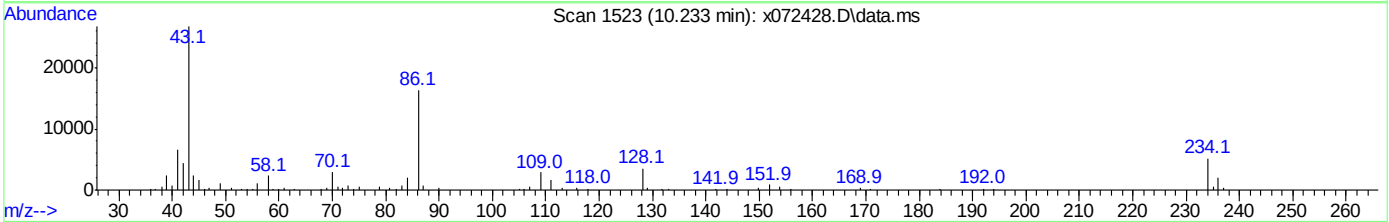
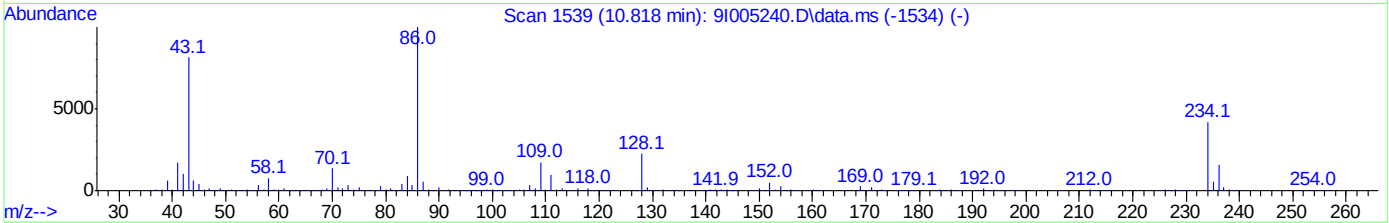






TIC: x072428.D\data.ms

(138) Diallate

10.233min (+0.000) 3.13ppm

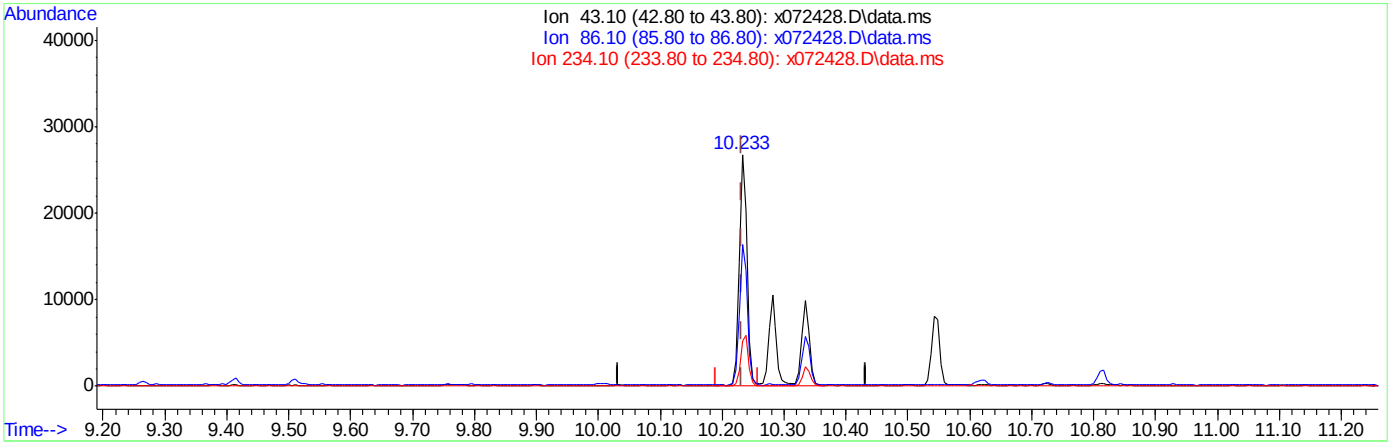
response 22861

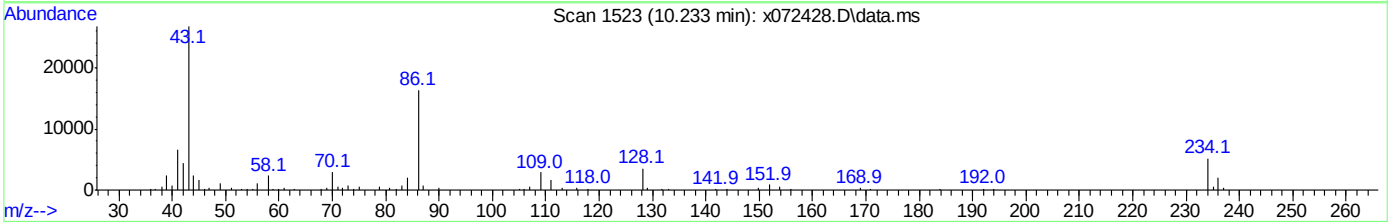
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	60.67#
234.10	51.50	19.57#
0.00	0.00	0.00

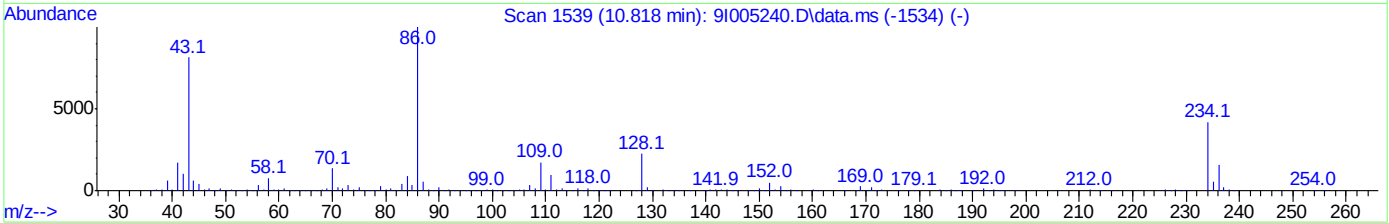
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072428.D
Acq On : 17 Aug 2020 2:12 pm
Operator : marthav
Sample : ic2953-5 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 18 09:38:29 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Mon Aug 17 14:57:23 2020
Response via : Initial Calibration







TIC: x072428.D\data.ms

(138) Diallate

10.233min (+0.000) 5.60ppm m

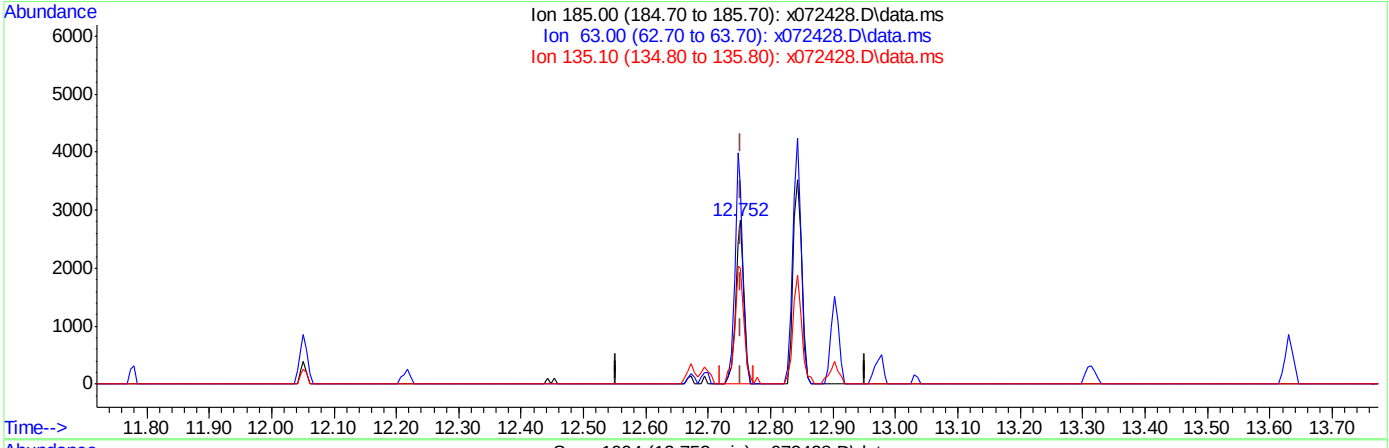
response 40982

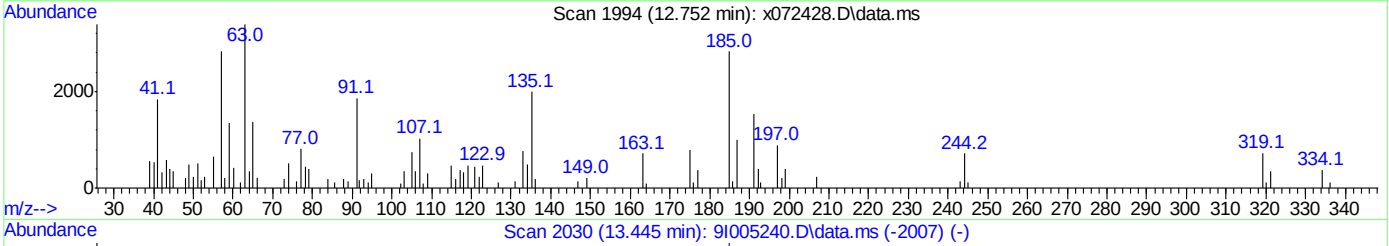
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	61.23#
234.10	51.50	19.48#
0.00	0.00	0.00

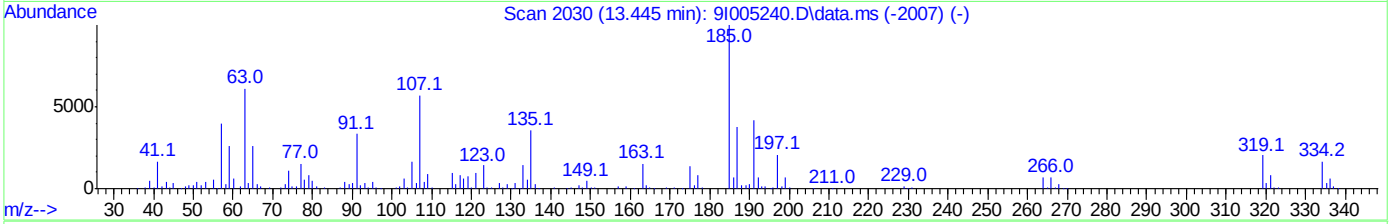
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072428.D
Acq On : 17 Aug 2020 2:12 pm
Operator : marthav
Sample : ic2953-5 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 18 09:38:29 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Mon Aug 17 14:57:23 2020
Response via : Initial Calibration







TIC: x072428.D\data.ms

(147) Aramite

12.752min (+0.000) 2.27ppm

response 2832

Ion	Exp%	Act%
185.00	100	100
63.00	61.10	120.08#
135.10	35.60	70.61#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072428.D
Acq On : 17 Aug 2020 2:12 pm
Operator : marthav
Sample : ic2953-5 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 18 09:38:29 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
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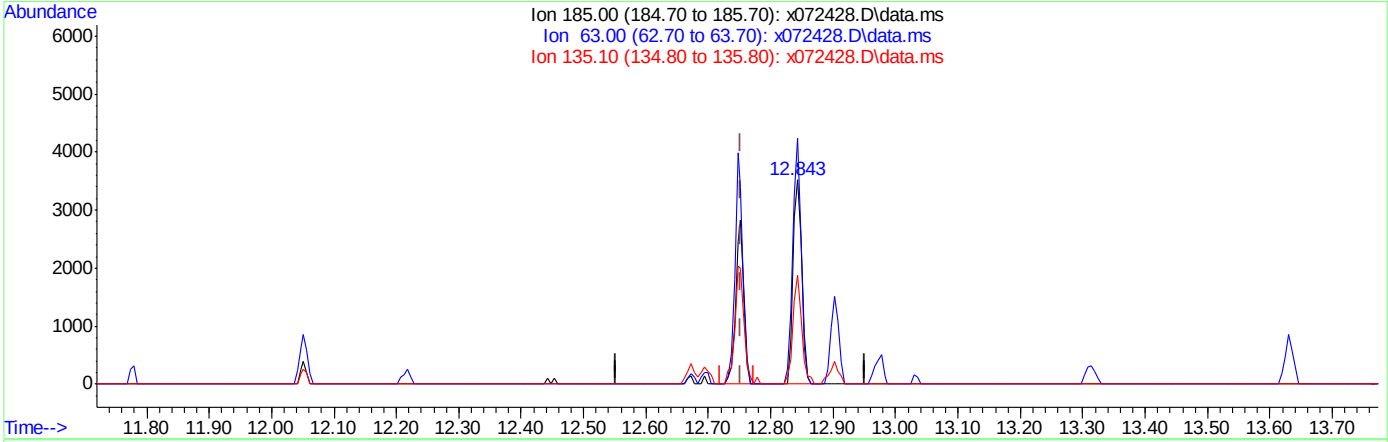

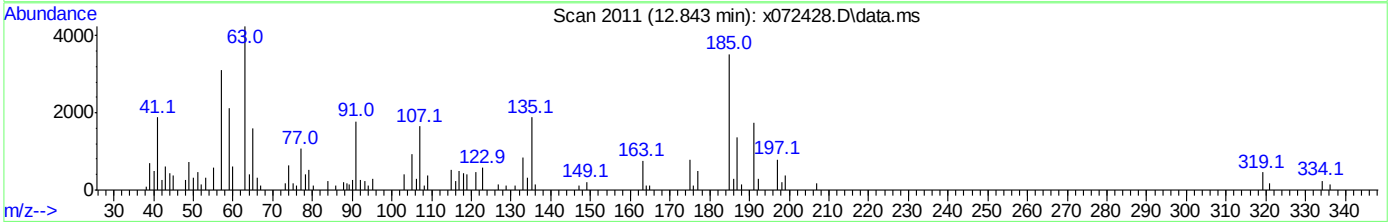

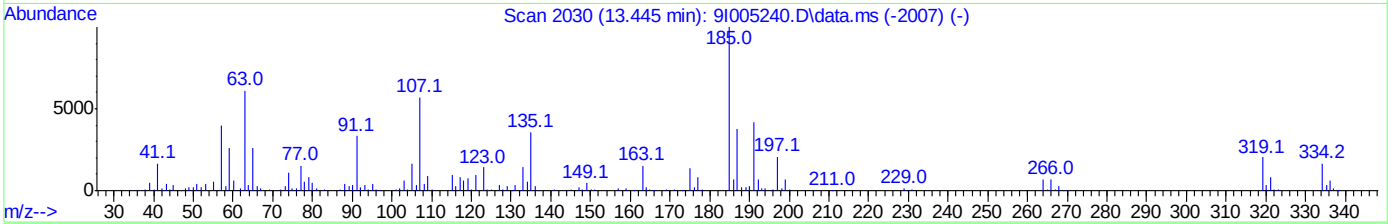

TIC: x072428.D\data.ms

(147) Aramite

12.843min (+0.091) 5.02ppm m

response 6255

Ion	Exp%	Act%
185.00	100	100
63.00	61.10	120.56#
135.10	35.60	53.38
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072428.D
Acq On : 17 Aug 2020 2:12 pm
Operator : marthav
Sample : ic2953-5 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 11 Sample Multiplier: 1

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Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
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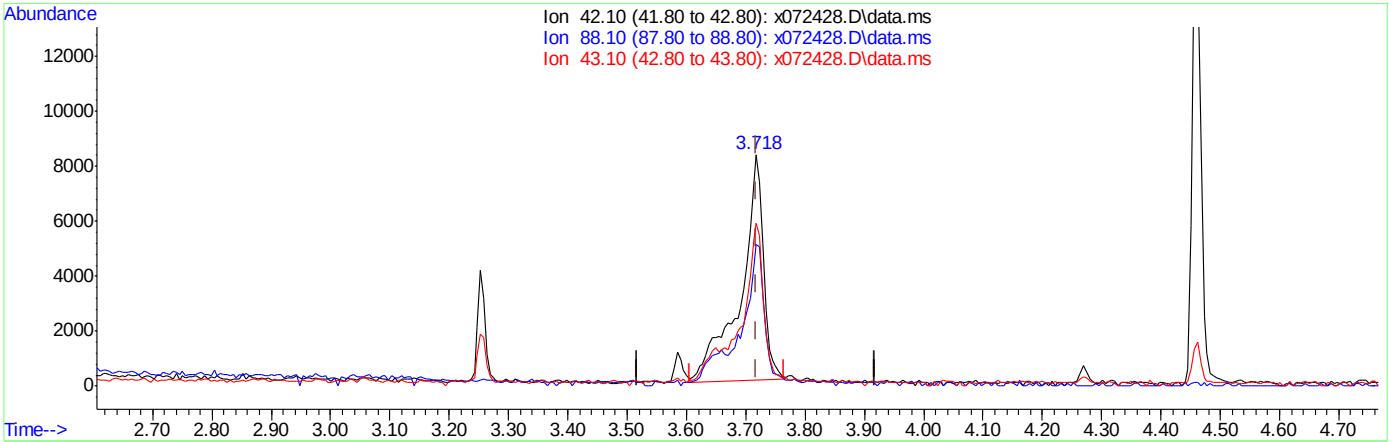

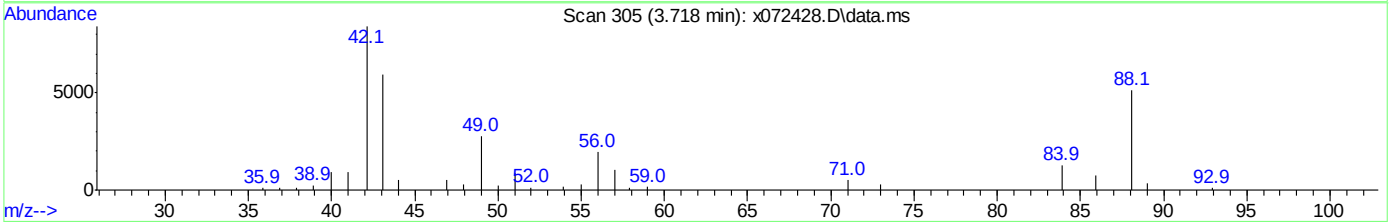

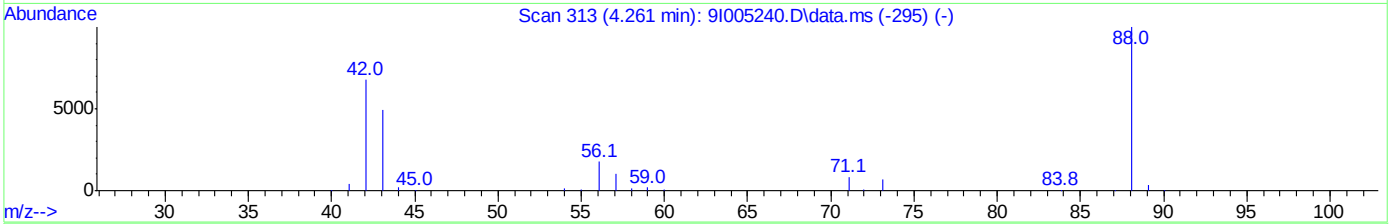

TIC: x072428.D\data.ms

(112) N-Nitrosomethylethylamine

3.718min (+0.000) 4.62ppm

response 22270

Ion	Exp%	Act%
42.10	100	100
88.10	147.70	60.77#
43.10	72.60	69.21
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072428.D
Acq On : 17 Aug 2020 2:12 pm
Operator : marthav
Sample : ic2953-5 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 18 09:38:29 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
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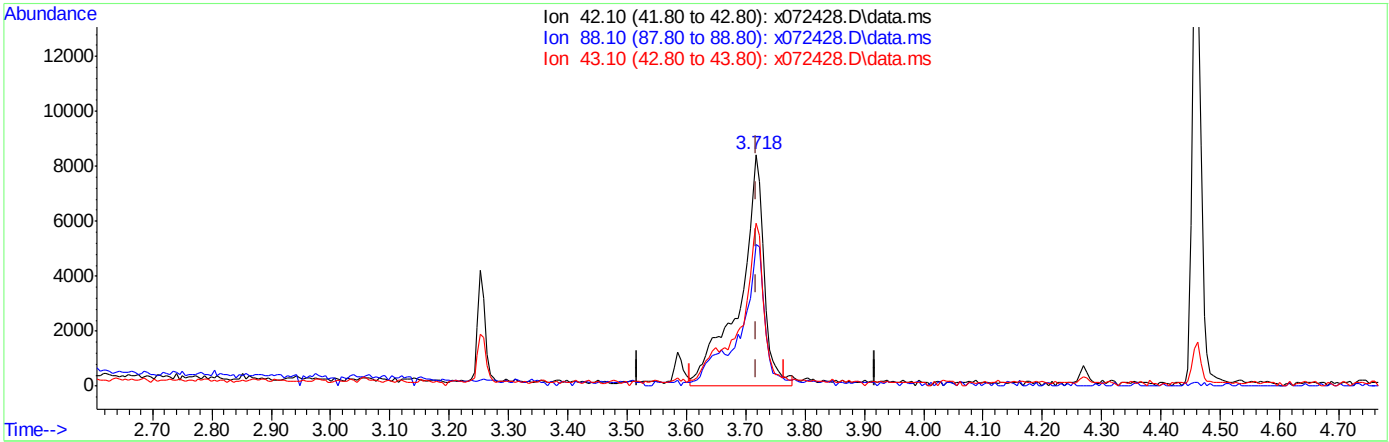
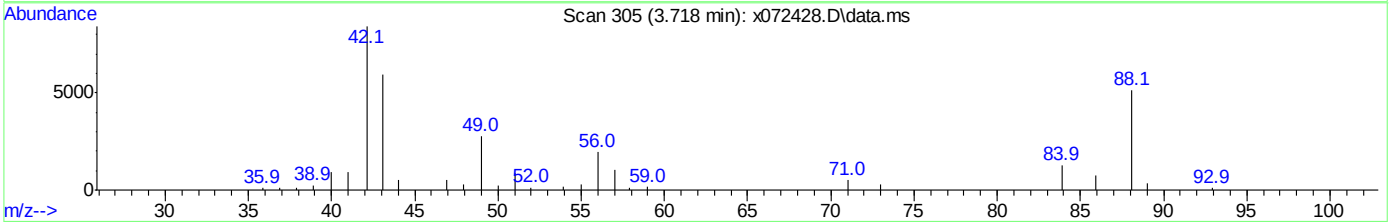
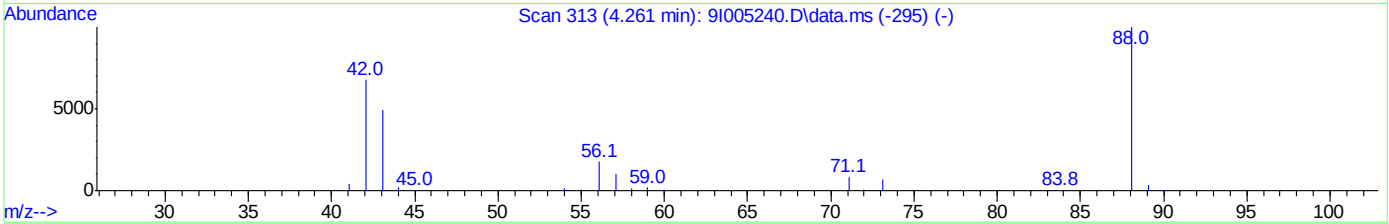






TIC: x072428.D\data.ms

(112) N-Nitrosomethylethylamine

3.718min (+0.000) 5.09ppm m

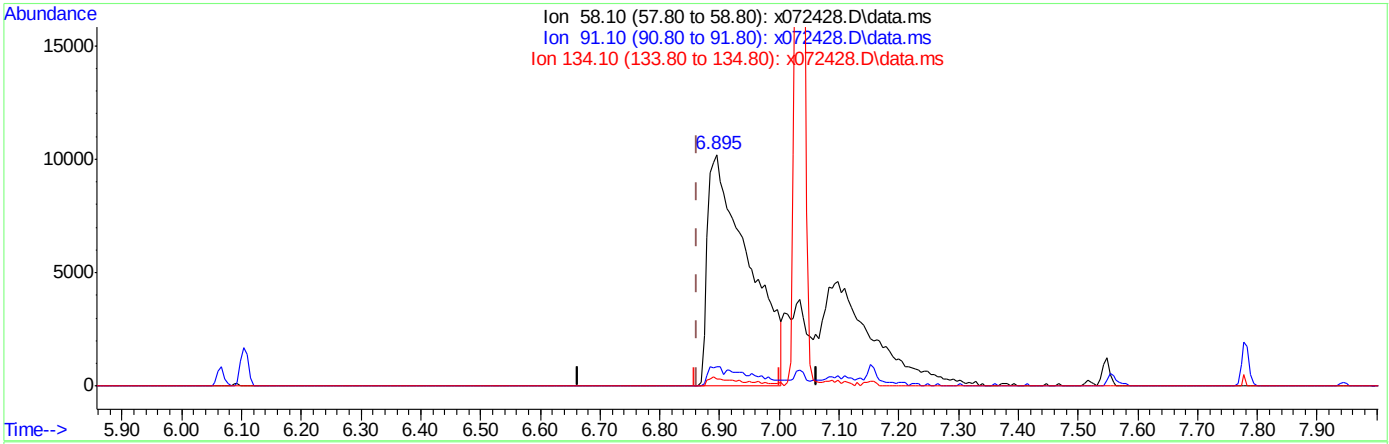
response 24529

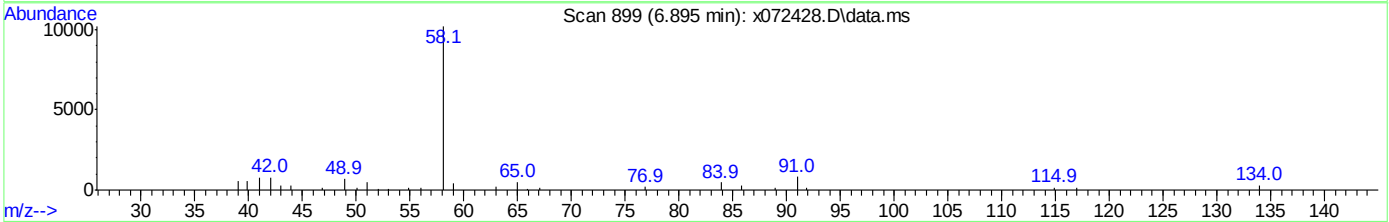
Ion	Exp%	Act%
42.10	100	100
88.10	147.70	61.04#
43.10	72.60	70.23
0.00	0.00	0.00

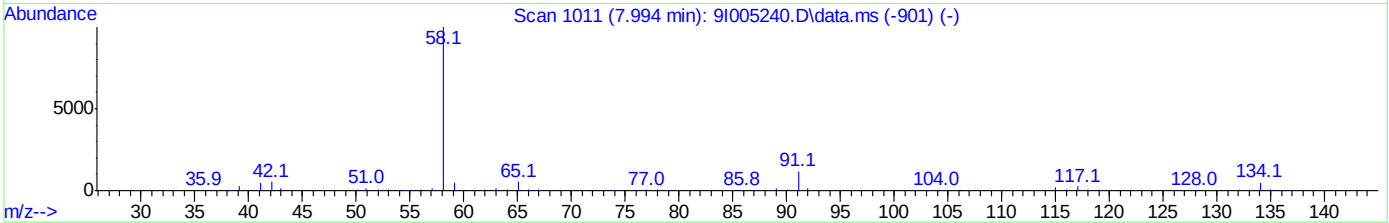
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072428.D
Acq On : 17 Aug 2020 2:12 pm
Operator : marthav
Sample : ic2953-5 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 18 09:38:29 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Mon Aug 17 14:57:23 2020
Response via : Initial Calibration







TIC: x072428.D\data.ms

(122) A,A-Dimethylphenethylamine

6.895min (+0.032) 2.38ppm

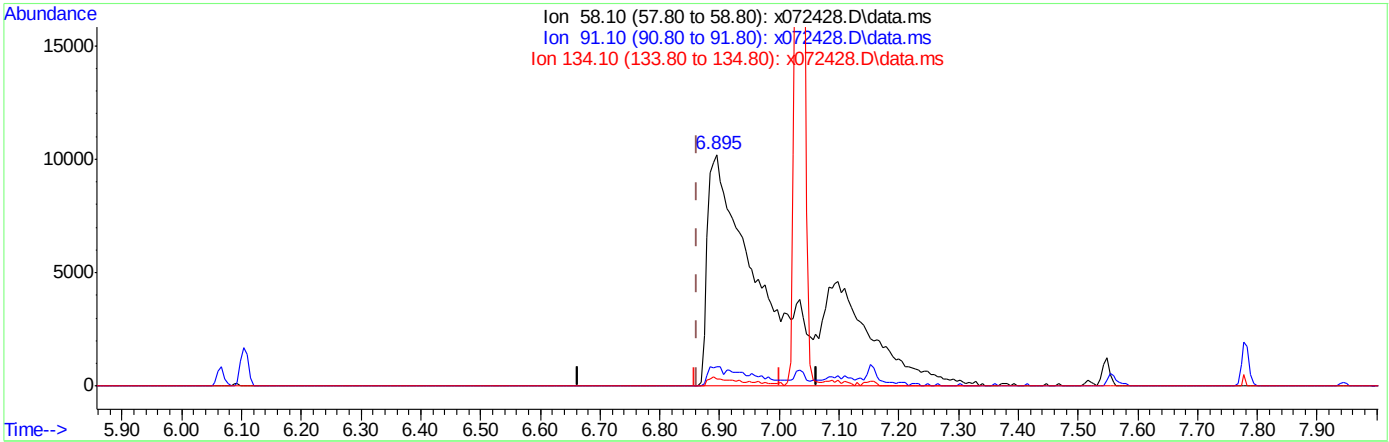
response 48318

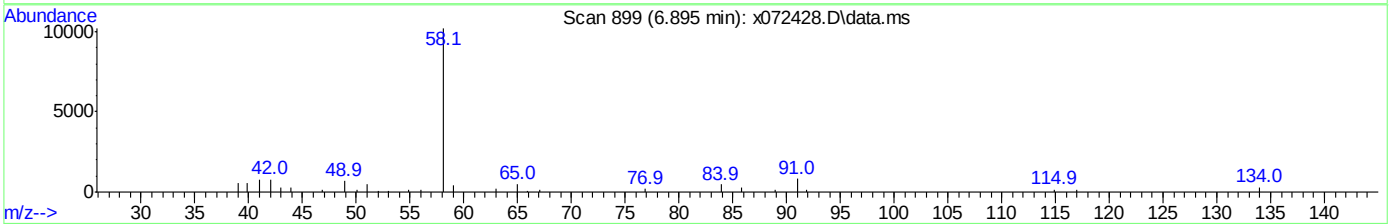
Ion	Exp%	Act%
58.10	100	100
91.10	11.70	7.89
134.10	5.10	2.46
0.00	0.00	0.00

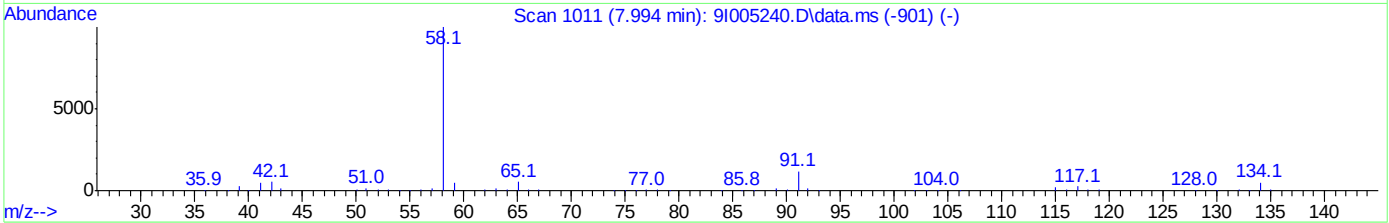
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072428.D
Acq On : 17 Aug 2020 2:12 pm
Operator : marthav
Sample : ic2953-5 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 18 09:38:29 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Mon Aug 17 14:57:23 2020
Response via : Initial Calibration







TIC: x072428.D\data.ms

(122) A,A-Dimethylphenethylamine

6.895min (+0.032) 4.20ppm m

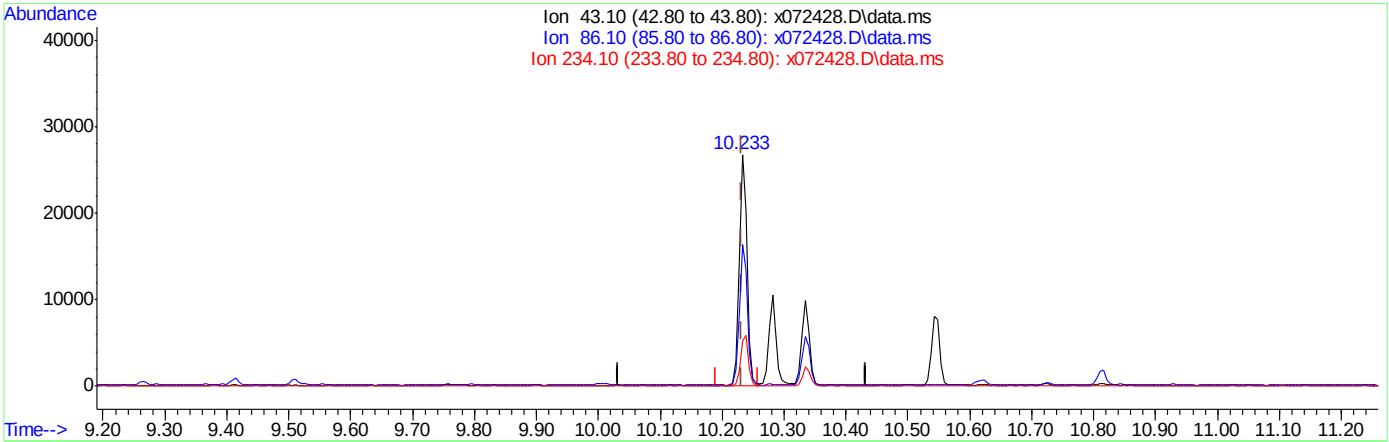
response 85468

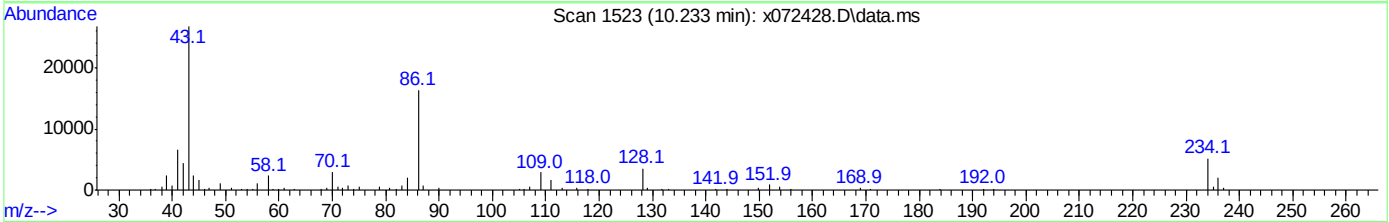
Ion	Exp%	Act%
58.10	100	100
91.10	11.70	8.17
134.10	5.10	2.86
0.00	0.00	0.00

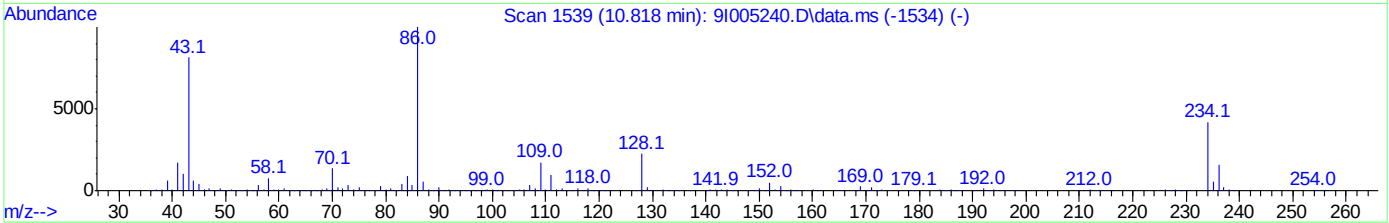
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072428.D
Acq On : 17 Aug 2020 2:12 pm
Operator : marthav
Sample : ic2953-5 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 18 09:38:29 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Mon Aug 17 14:57:23 2020
Response via : Initial Calibration







TIC: x072428.D\data.ms

(138) Diallate

10.233min (+0.000) 3.13ppm

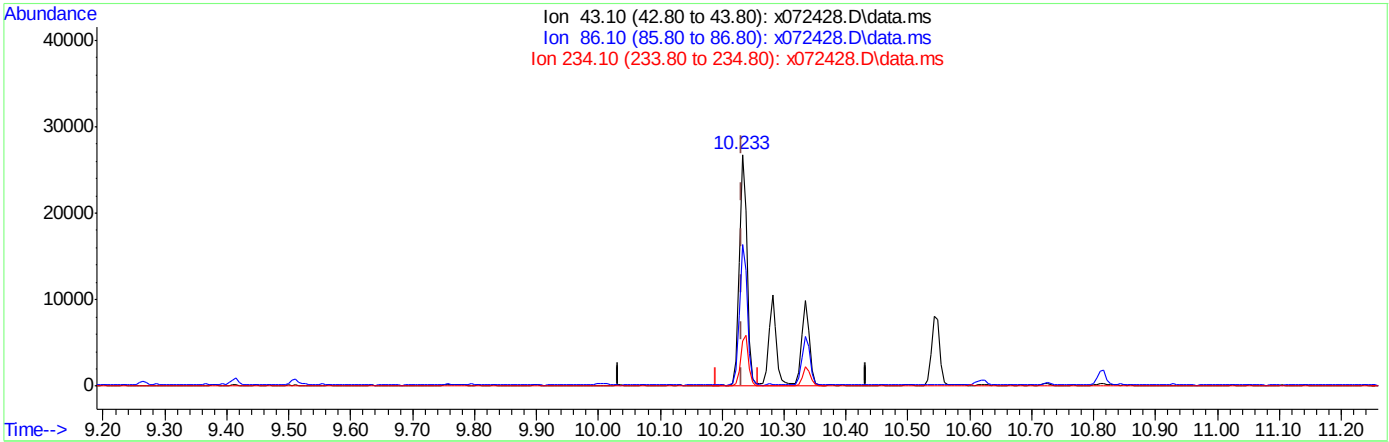
response 22861

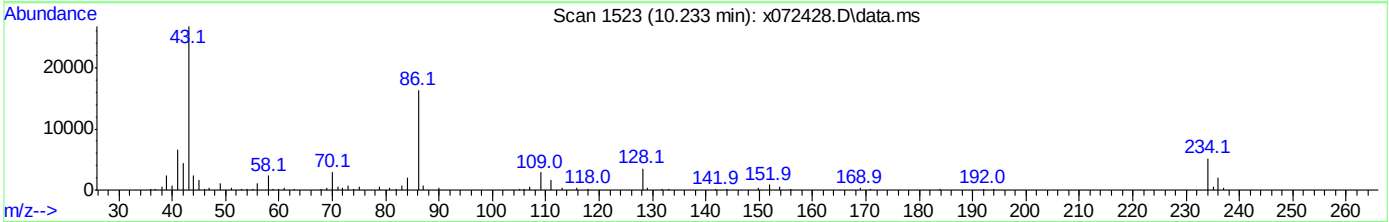
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	60.67#
234.10	51.50	19.57#
0.00	0.00	0.00

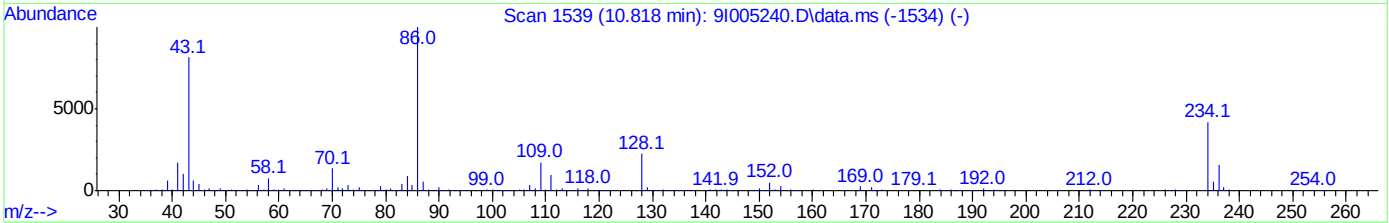
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072428.D
Acq On : 17 Aug 2020 2:12 pm
Operator : marthav
Sample : ic2953-5 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 18 09:38:29 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Mon Aug 17 14:57:23 2020
Response via : Initial Calibration







TIC: x072428.D\data.ms

(138) Diallate

10.233min (+0.000) 5.60ppm m

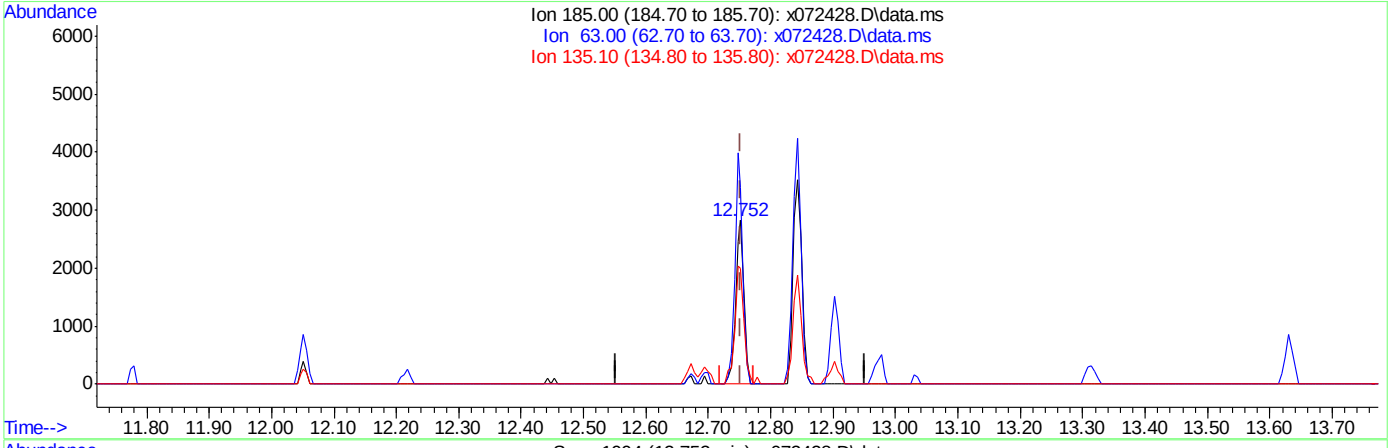
response 40982

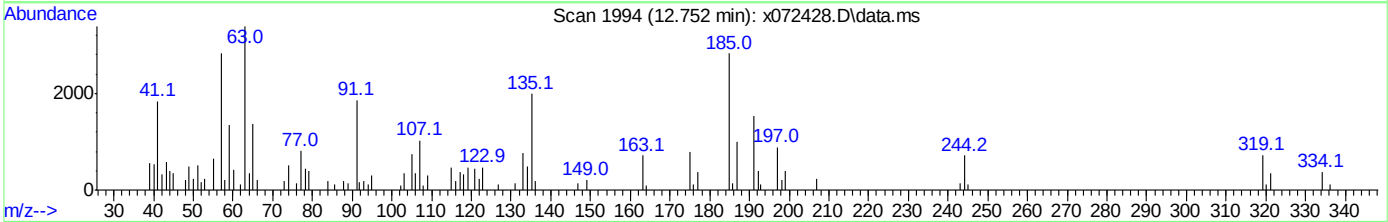
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	61.23#
234.10	51.50	19.48#
0.00	0.00	0.00

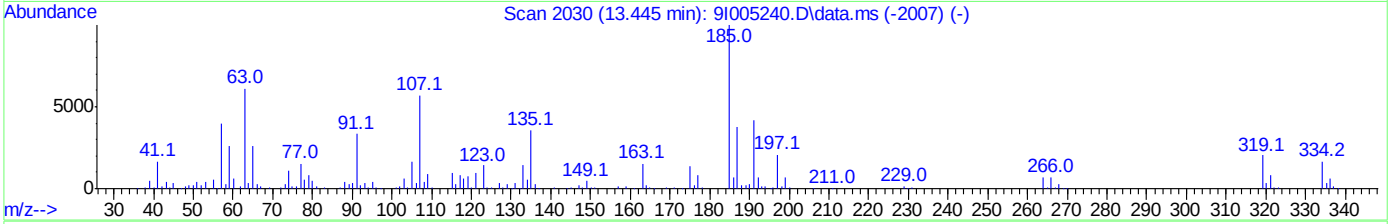
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072428.D
Acq On : 17 Aug 2020 2:12 pm
Operator : marthav
Sample : ic2953-5 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 18 09:38:29 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Mon Aug 17 14:57:23 2020
Response via : Initial Calibration







TIC: x072428.D\data.ms

(147) Aramite

12.752min (+0.000) 2.27ppm

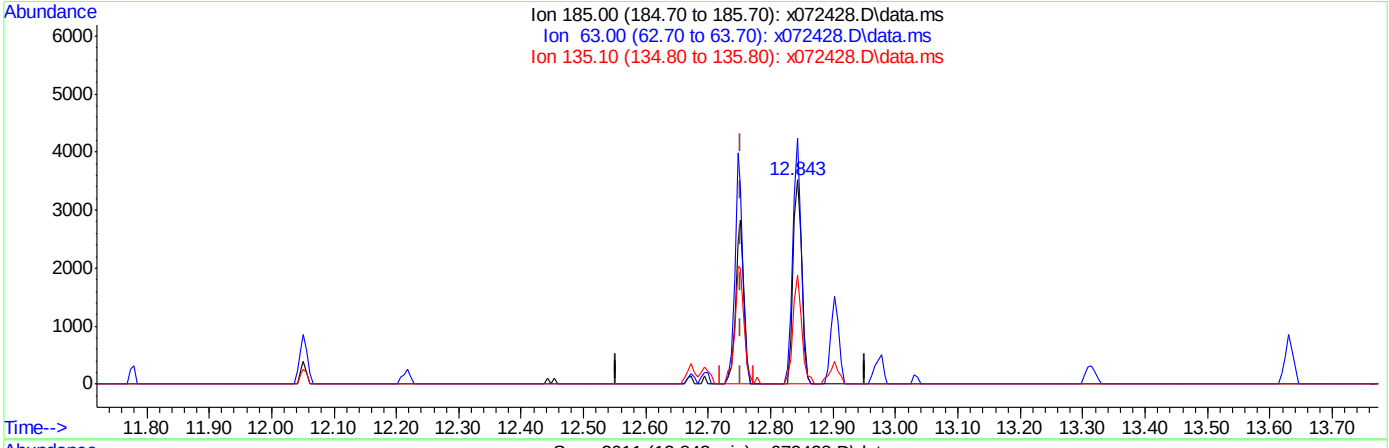
response 2832

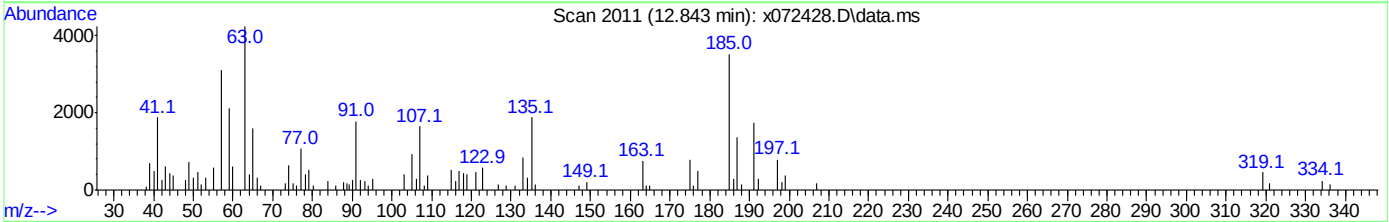
Ion	Exp%	Act%
185.00	100	100
63.00	61.10	120.08#
135.10	35.60	70.61#
0.00	0.00	0.00

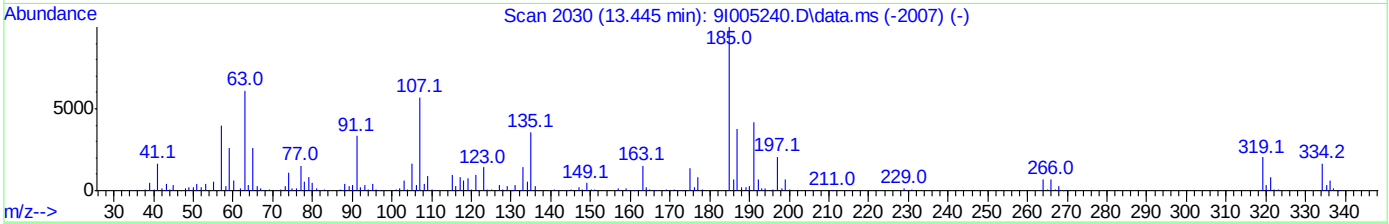
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072428.D
Acq On : 17 Aug 2020 2:12 pm
Operator : marthav
Sample : ic2953-5 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 18 09:38:29 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Mon Aug 17 14:57:23 2020
Response via : Initial Calibration







TIC: x072428.D\data.ms

(147) Aramite

12.843min (+0.091) 5.02ppm m

response 6255

Ion	Exp%	Act%
185.00	100	100
63.00	61.10	120.56#
135.10	35.60	53.38
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 08/18/20 14:38

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072429.D
Acq On : 17 Aug 2020 2:38 pm
Operator : marthav
Sample : ic2953-10 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 18 12:50:04 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Mon Aug 17 14:57:23 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	0.000	152	0m	40.00	ppm		-5.62
22) Naphthalene-d8	0.000	136	0m	40.00	ppm		-7.04
43) Acenaphthene-d10	0.000	164	0m	40.00	ppm		-9.08
70) Phenanthrene-d10	0.000	188	0m	40.00	ppm		-10.82
92) Chrysene-d12	0.000	240	0m	40.00	ppm		-14.02
102) Perylene-d12	0.000	264	0m	40.00	ppm		-16.19
110) 1,4-Dichlorobenzene-d4A	5.612	152	158314	40.00	ppm		0.00
120) Naphthalene-d8A	7.034	136	593048	40.00	ppm		0.00
127) Acenaphthene-d10A	9.072	164	285208	40.00	ppm		0.00
136) Phenanthrene-d10A	10.816	188	472547	40.00	ppm		0.00
146) Chrysene-d12A	14.014	240	330789	40.00	ppm		0.00
153) Perylene-d12A	16.186	264	279541	40.00	ppm		0.00
System Monitoring Compounds							
7) 2-Fluorophenol	0.000	112	0d	0.00	ppm		
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#			
9) Phenol-d5	0.000	99	0d	0.00	ppm		
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#			
23) Nitrobenzene-d5	0.000	82	0d	0.00	ppm		
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#			
47) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm		
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#			
75) 2,4,6-Tribromophenol	0.000	330	0d	0.00	ppm		
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#			
95) Terphenyl-d14	0.000	244	0d	0.00	ppm		
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#			
Target Compounds							Qvalue
111) 2-Picoline	3.584	93	73397	9.72	ppm		86
112) N-Nitrosomethylethylamine	3.718	42	50577	9.63	ppm	#	50
113) Methyl methanesulfonate	4.050	80	29511	8.02	ppm		91
114) N-Nitrosodiethylamine	4.462	102	30083	9.81	ppm	#	22
115) Ethyl methanesulfonate	4.804	79	49368	9.73	ppm		94
116) Pentachloroethane	5.301	167	21533	9.97	ppm		88
117) N-Nitrosopyrrolidine	6.045	100	26646	9.61	ppm	#	18
118) N-Nitrosomorpholine	6.093	56	46882	9.26	ppm	#	66
119) O-Toluidine	6.104	106	95495	9.21	ppm		99
121) N-Nitrosopiperidine	6.419	42	57663	10.57	ppm	#	54
122) A,A-Dimethylphenethyla...	6.879	58	186258m	8.56	ppm		
123) Hexachloropropene	7.157	213	24506	9.84	ppm		99
124) N-Nitrosodi-n-butylamine	7.548	84	36980	8.68	ppm	#	40
125) p-Phenylenediamine	7.553	108	43143	7.67	ppm		92
126) Isosafrole	7.783	162	39949	9.89	ppm		86
128) Safrole	8.388	162	38313	10.22	ppm		91
129) 1-Chloronaphthalene	8.446	162	94742	10.61	ppm		98
130) Diphenyl Ether	8.543	170	64637	10.36	ppm		92
131) 1,4-Naphthoquinone	8.650	158	26442	7.57	ppm		82
132) Pentachlorobenzene	9.265	250	31417	9.99	ppm		100
133) 1-Naphthylamine	9.415	143	95727	9.66	ppm		97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072429.D
Acq On : 17 Aug 2020 2:38 pm
Operator : marthav
Sample : ic2953-10 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 18 12:50:04 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Mon Aug 17 14:57:23 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
134) 2-Naphthylamine	9.511	143	103312	9.76	ppm		98
135) 5-Nitro-o-toluidine	9.757	152	30451	10.45	ppm		79
137) 1,3,5-Trinitrobenzene	10.281	75	19329	9.94	ppm		82
138) Diallate	10.233	43	86942m	11.74	ppm		
139) Phenacetin	10.286	108	48731	10.71	ppm		95
140) 4-Aminobiphenyl	10.623	169	107342	11.20	ppm		99
141) Pronamide	10.730	173	39436	10.63	ppm		99
142) Pentachloronitrobenzene	10.618	237	9294	10.14	ppm		88
143) 4-Nitroquinoline 1-Oxide	11.779	190	1187	1.98	ppm	#	56
144) Methapyrilene	11.902	58	10993	4.53	ppm		71
145) Isodrin	12.051	193	14327	10.69	ppm	#	73
147) Aramite	12.843	185	13428m	11.15	ppm		
148) p-(Dimethylamine)azobe...	12.907	120	34029	9.20	ppm		86
149) Chlorobenzilate	12.977	139	41171	9.54	ppm		75
150) Kepone	13.303	272	6931	46.54	ppm		86
151) 3,3'-Dimethylbenzidine	13.314	212	43241	8.09	ppm		94
152) 2-Acetylaminofluorene	13.635	181	48472	11.59	ppm		91
154) 7,12-Dimethylbenz(a)an...	15.539	256	41562	10.72	ppm		93
156) 3-Methylcholanthrene	16.699	268	37711	10.79	ppm		93
157) Dibenz(a,j)acridine	17.625	279	59457	12.92	ppm		95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

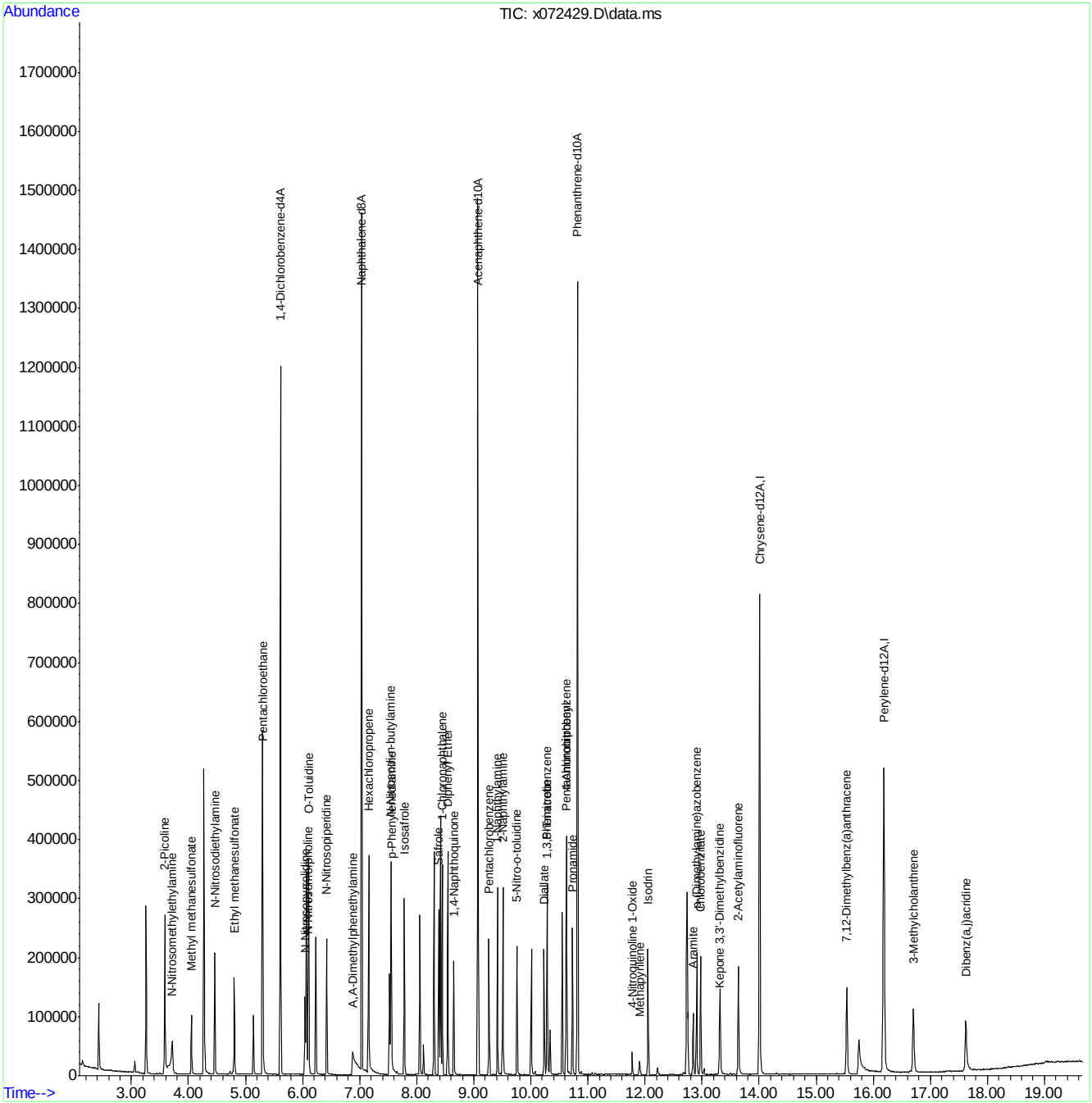
7.6.20

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072429.D
Acq On : 17 Aug 2020 2:38 pm
Operator : marthav
Sample : ic2953-10 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 18 12:50:04 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Mon Aug 17 14:57:23 2020
Response via : Initial Calibration



8270DApp9SX-081720.m Tue Aug 18 13:45:02 2020 Page: 3

Manual Integration Approval Summary

Sample Number: SX2953-IC2953
Lab FileID: X072429.D
Injection Time: 08/17/20 14:38

Method: SW846 8270D
Analyst approved: 08/18/20 14:01 Martha Valls
Supervisor approved: 08/18/20 14:38 Nicole McCampbell

Parameter	CAS	Sig#	R.T. (min.)	Reason
A,A-Dimethylphenethylamine	122-09-8		6.88	Split peak
Diallate	2303-16-4		10.23	Split peak
Aramite	140-57-8		12.84	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072429.D
Acq On : 17 Aug 2020 2:38 pm
Operator : marthav
Sample : ic2953-10 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 18 09:38:31 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
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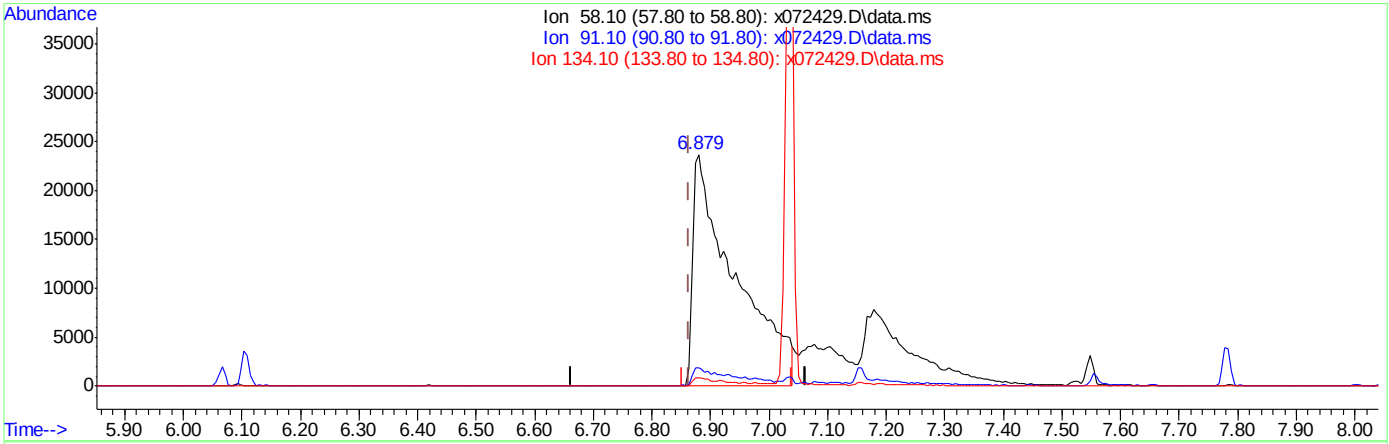
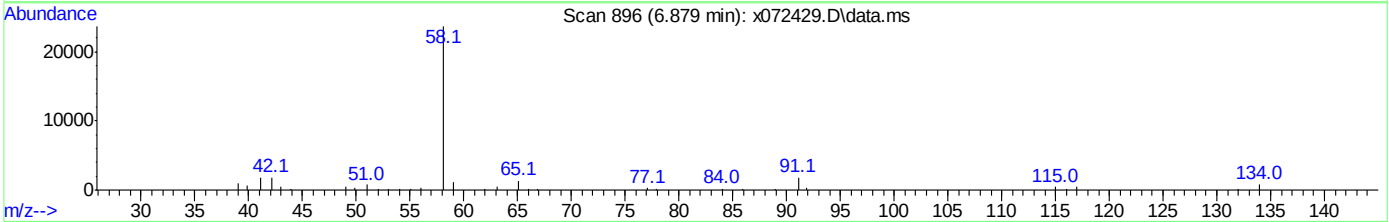
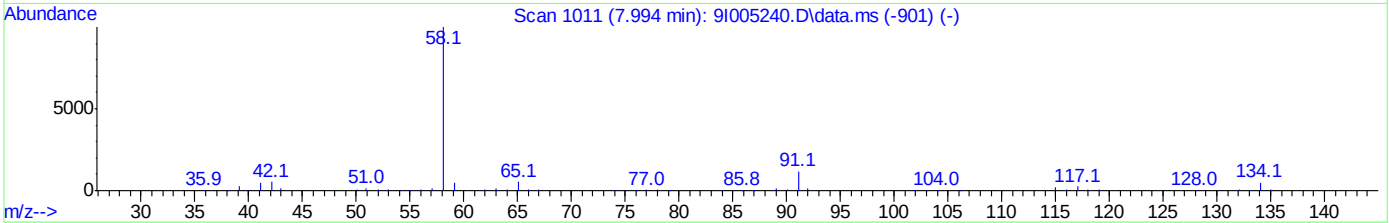
Response via : Initial Calibration







TIC: x072429.D\data.ms

(122) A,A-Dimethylphenethylamine

6.879min (+0.016) 5.46ppm

response 118755

Ion	Exp%	Act%
58.10	100	100
91.10	11.70	6.35
134.10	5.10	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072429.D
Acq On : 17 Aug 2020 2:38 pm
Operator : marthav
Sample : ic2953-10 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 18 09:38:31 2020
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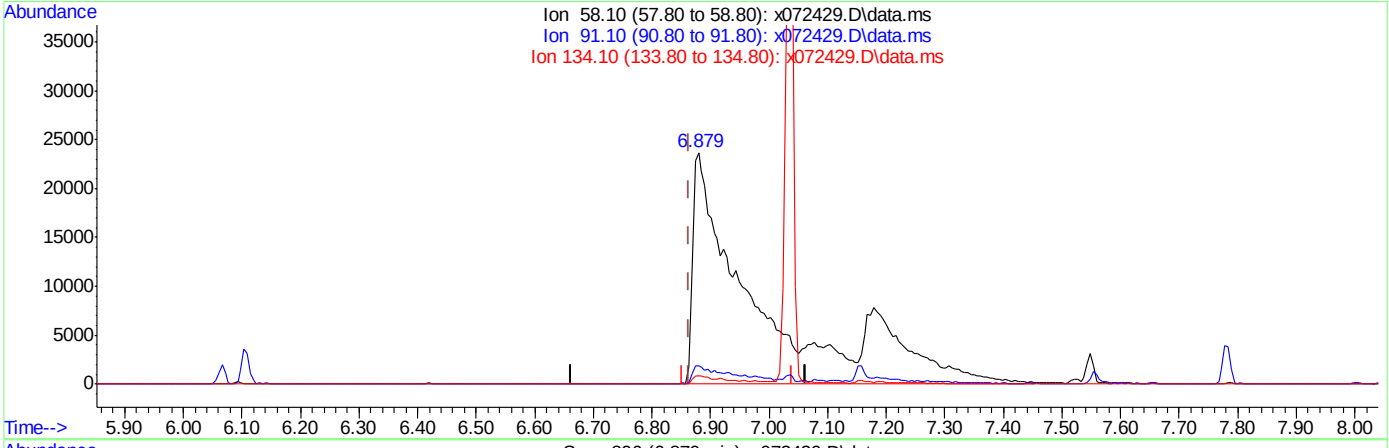
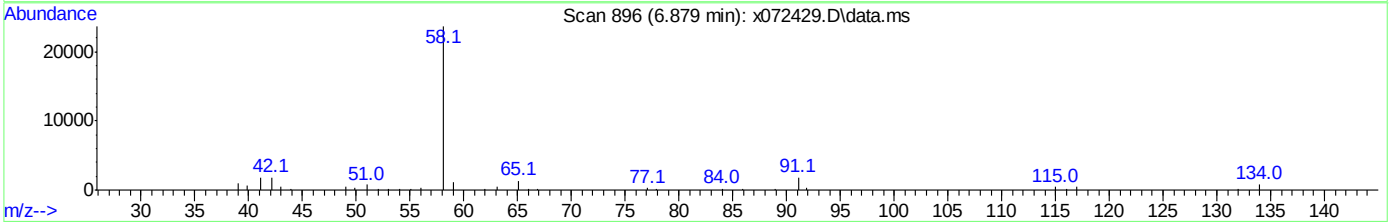
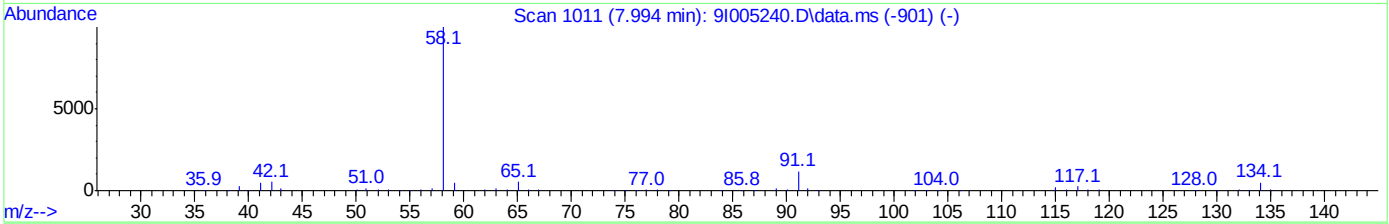
Response via : Initial Calibration







TIC: x072429.D\data.ms

(122) A,A-Dimethylphenethylamine

6.879min (+0.016) 8.56ppm m

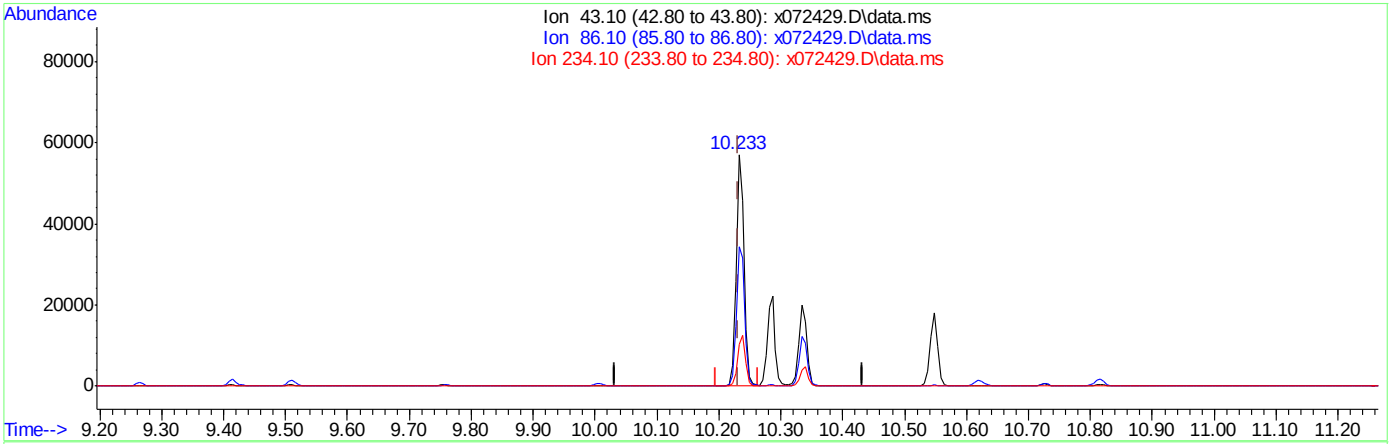
response 186258

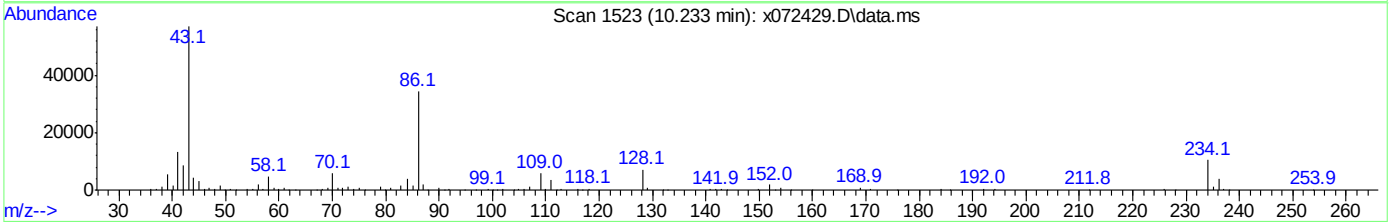
Ion	Exp%	Act%
58.10	100	100
91.10	11.70	7.78
134.10	5.10	3.43
0.00	0.00	0.00

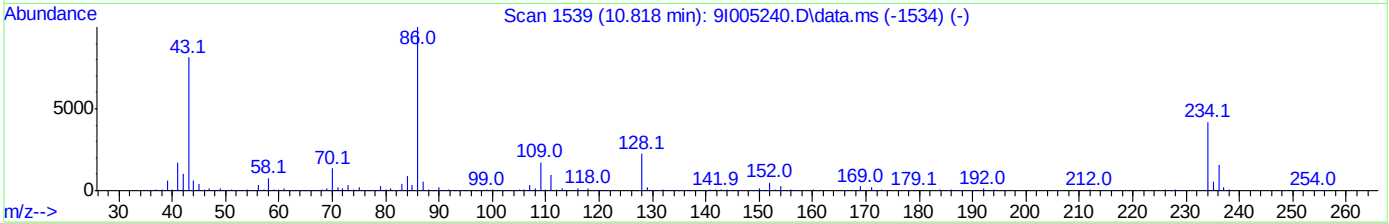
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072429.D
Acq On : 17 Aug 2020 2:38 pm
Operator : marthav
Sample : ic2953-10 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 18 09:38:31 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Mon Aug 17 14:57:23 2020
Response via : Initial Calibration







TIC: x072429.D\data.ms

(138) Diallate

10.233min (-0.000) 6.58ppm

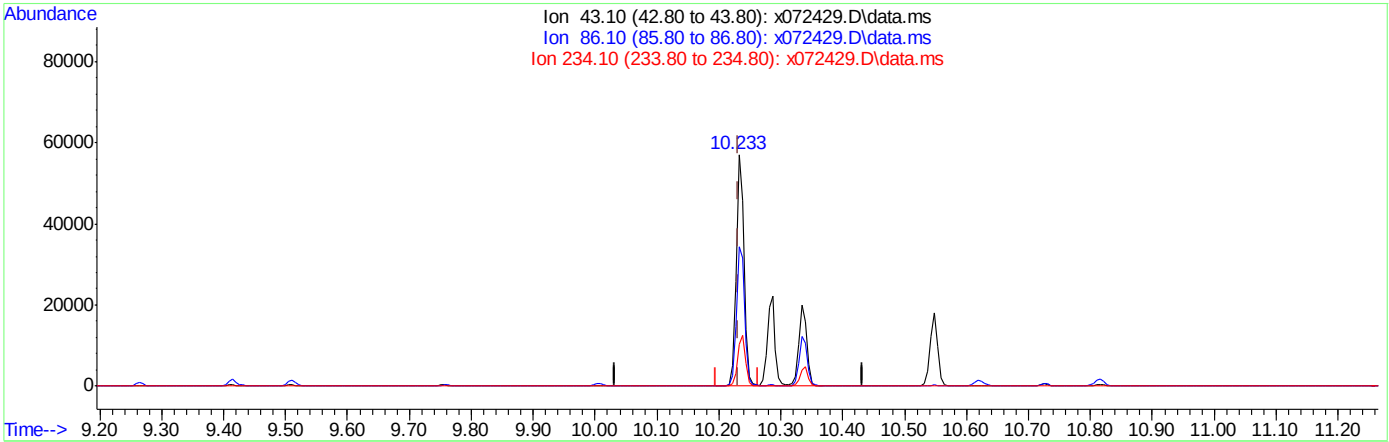
response 48745

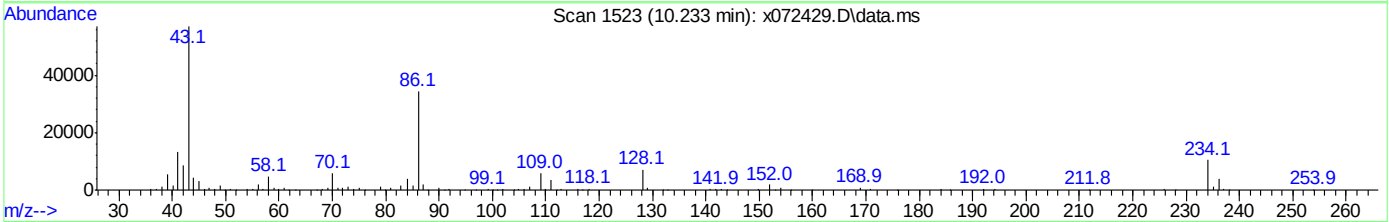
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	60.16#
234.10	51.50	18.21#
0.00	0.00	0.00

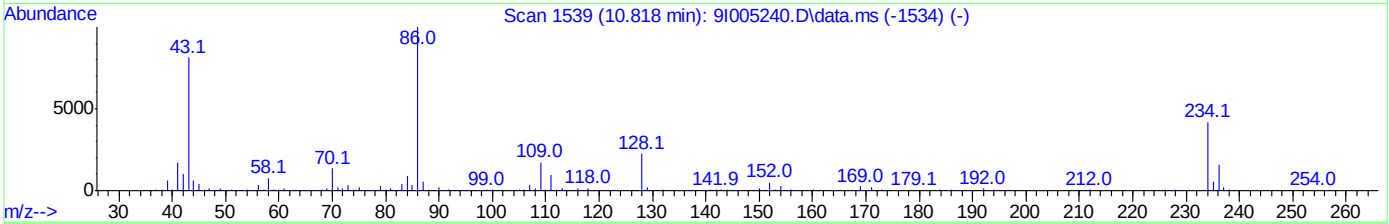
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072429.D
Acq On : 17 Aug 2020 2:38 pm
Operator : marthav
Sample : ic2953-10 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 18 09:38:31 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Mon Aug 17 14:57:23 2020
Response via : Initial Calibration







TIC: x072429.D\data.ms

(138) Diallate

10.233min (-0.000) 11.74ppm m

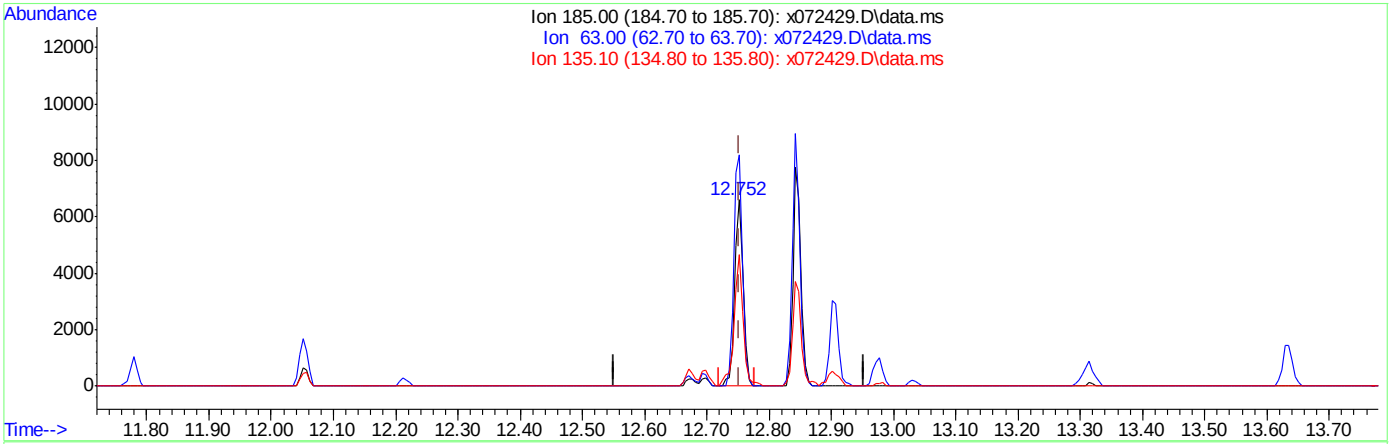
response 86942

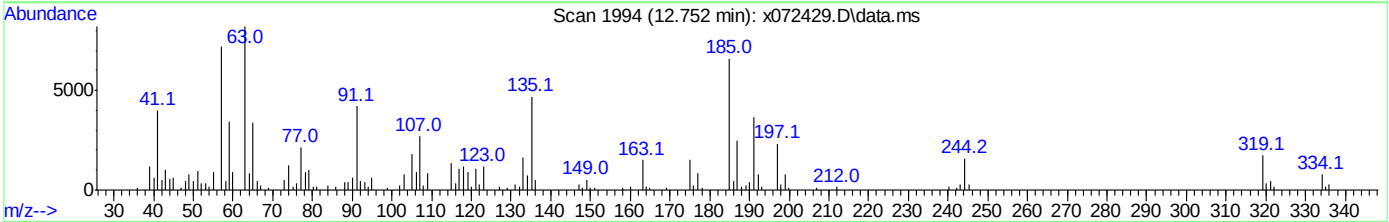
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	60.36#
234.10	51.50	18.18#
0.00	0.00	0.00

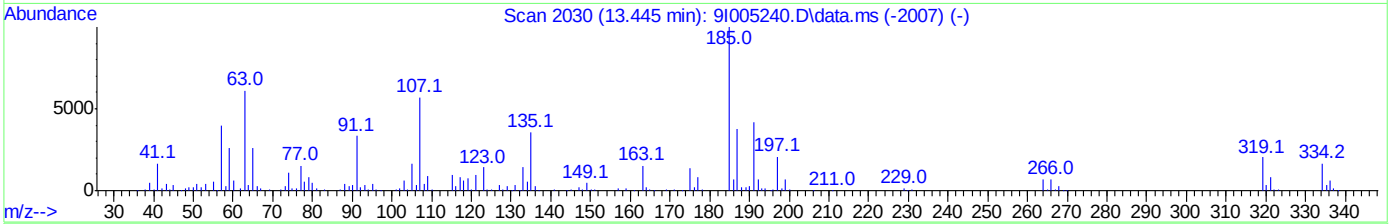
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072429.D
Acq On : 17 Aug 2020 2:38 pm
Operator : marthav
Sample : ic2953-10 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 18 09:38:31 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Mon Aug 17 14:57:23 2020
Response via : Initial Calibration







TIC: x072429.D\data.ms

(147) Aramite

12.752min (-0.000) 5.16ppm

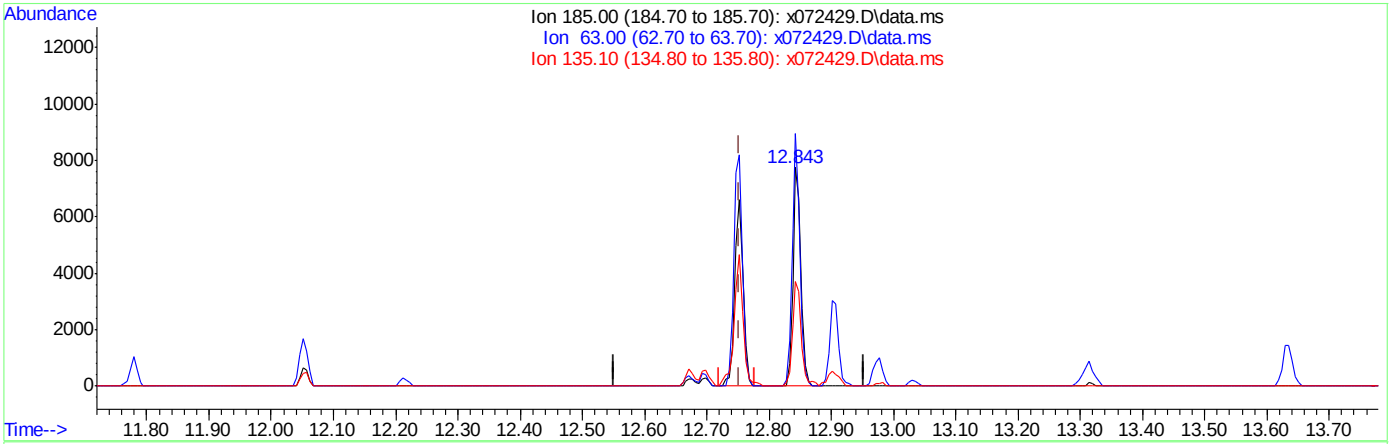
response 6216

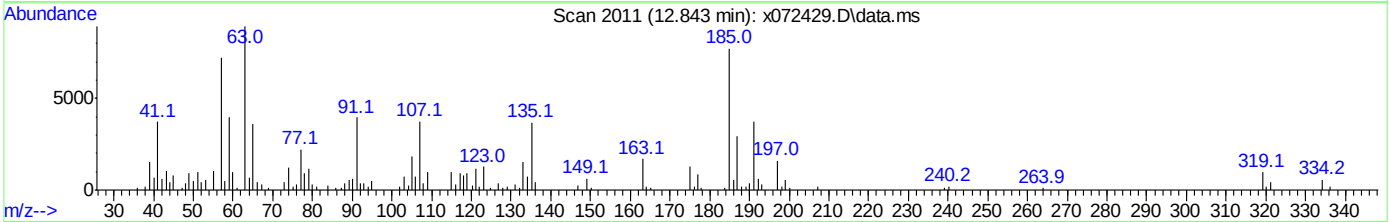
Ion	Exp%	Act%
185.00	100	100
63.00	61.10	124.53#
135.10	35.60	69.99#
0.00	0.00	0.00

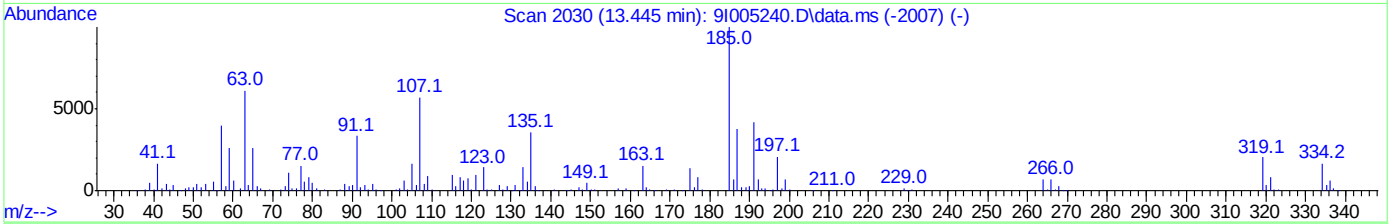
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072429.D
Acq On : 17 Aug 2020 2:38 pm
Operator : marthav
Sample : ic2953-10 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 18 09:38:31 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Mon Aug 17 14:57:23 2020
Response via : Initial Calibration







TIC: x072429.D\data.ms

(147) Aramite

12.843min (+0.091) 11.15ppm m

response 13428

Ion	Exp%	Act%
185.00	100	100
63.00	61.10	115.47#
135.10	35.60	47.70
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 08/18/20 14:38

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072430.D
Acq On : 17 Aug 2020 3:04 pm
Operator : marthav
Sample : ic2953-25 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 18 12:50:24 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Mon Aug 17 14:57:23 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	0.000	152	0m	40.00	ppm		-5.62
22) Naphthalene-d8	0.000	136	0m	40.00	ppm		-7.04
43) Acenaphthene-d10	0.000	164	0m	40.00	ppm		-9.08
70) Phenanthrene-d10	0.000	188	0m	40.00	ppm		-10.82
92) Chrysene-d12	0.000	240	0m	40.00	ppm		-14.02
102) Perylene-d12	0.000	264	0m	40.00	ppm		-16.19
110) 1,4-Dichlorobenzene-d4A	5.612	152	155748	40.00	ppm		0.00
120) Naphthalene-d8A	7.034	136	591623	40.00	ppm		0.00
127) Acenaphthene-d10A	9.072	164	285749	40.00	ppm		0.00
136) Phenanthrene-d10A	10.816	188	493067	40.00	ppm		0.00
146) Chrysene-d12A	14.009	240	344798	40.00	ppm		0.00
153) Perylene-d12A	16.186	264	301662	40.00	ppm		0.00
System Monitoring Compounds							
7) 2-Fluorophenol	0.000	112	0d	0.00	ppm		
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#			
9) Phenol-d5	0.000	99	0d	0.00	ppm		
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#			
23) Nitrobenzene-d5	0.000	82	0d	0.00	ppm		
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#			
47) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm		
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#			
75) 2,4,6-Tribromophenol	0.000	330	0d	0.00	ppm		
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#			
95) Terphenyl-d14	0.000	244	0d	0.00	ppm		
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#			
Target Compounds							Qvalue
111) 2-Picoline	3.579	93	178003	23.96	ppm		85
112) N-Nitrosomethylethylamine	3.718	42	125470	24.29	ppm	#	52
113) Methyl methanesulfonate	4.055	80	72411	19.99	ppm		92
114) N-Nitrosodiethylamine	4.462	102	72907	24.17	ppm	#	12
115) Ethyl methanesulfonate	4.809	79	120419	24.13	ppm		95
116) Pentachloroethane	5.301	167	52821	24.86	ppm		92
117) N-Nitrosopyrrolidine	6.050	100	66988	24.56	ppm	#	31
118) N-Nitrosomorpholine	6.098	56	115141	23.13	ppm	#	66
119) O-Toluidine	6.109	106	240663	23.60	ppm		99
121) N-Nitrosopiperidine	6.425	42	141610	26.02	ppm	#	57
122) A,A-Dimethylphenethyla...	6.869	58	512173m	23.60	ppm		
123) Hexachloropropene	7.157	213	60639	24.42	ppm		98
124) N-Nitrosodi-n-butylamine	7.548	84	118013	27.77	ppm	#	38
125) p-Phenylenediamine	7.559	108	119071m	21.21	ppm		
126) Isosafrole	7.783	162	99412	24.66	ppm		88
128) Safrole	8.388	162	97907	26.06	ppm		91
129) 1-Chloronaphthalene	8.446	162	239401	26.75	ppm		97
130) Diphenyl Ether	8.543	170	165569	26.48	ppm		93
131) 1,4-Naphthoquinone	8.650	158	79803	22.80	ppm		86
132) Pentachlorobenzene	9.265	250	78613	24.96	ppm		99
133) 1-Naphthylamine	9.415	143	244557	24.64	ppm		96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072430.D
Acq On : 17 Aug 2020 3:04 pm
Operator : marthav
Sample : ic2953-25 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 18 12:50:24 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Mon Aug 17 14:57:23 2020
Response via : Initial Calibration

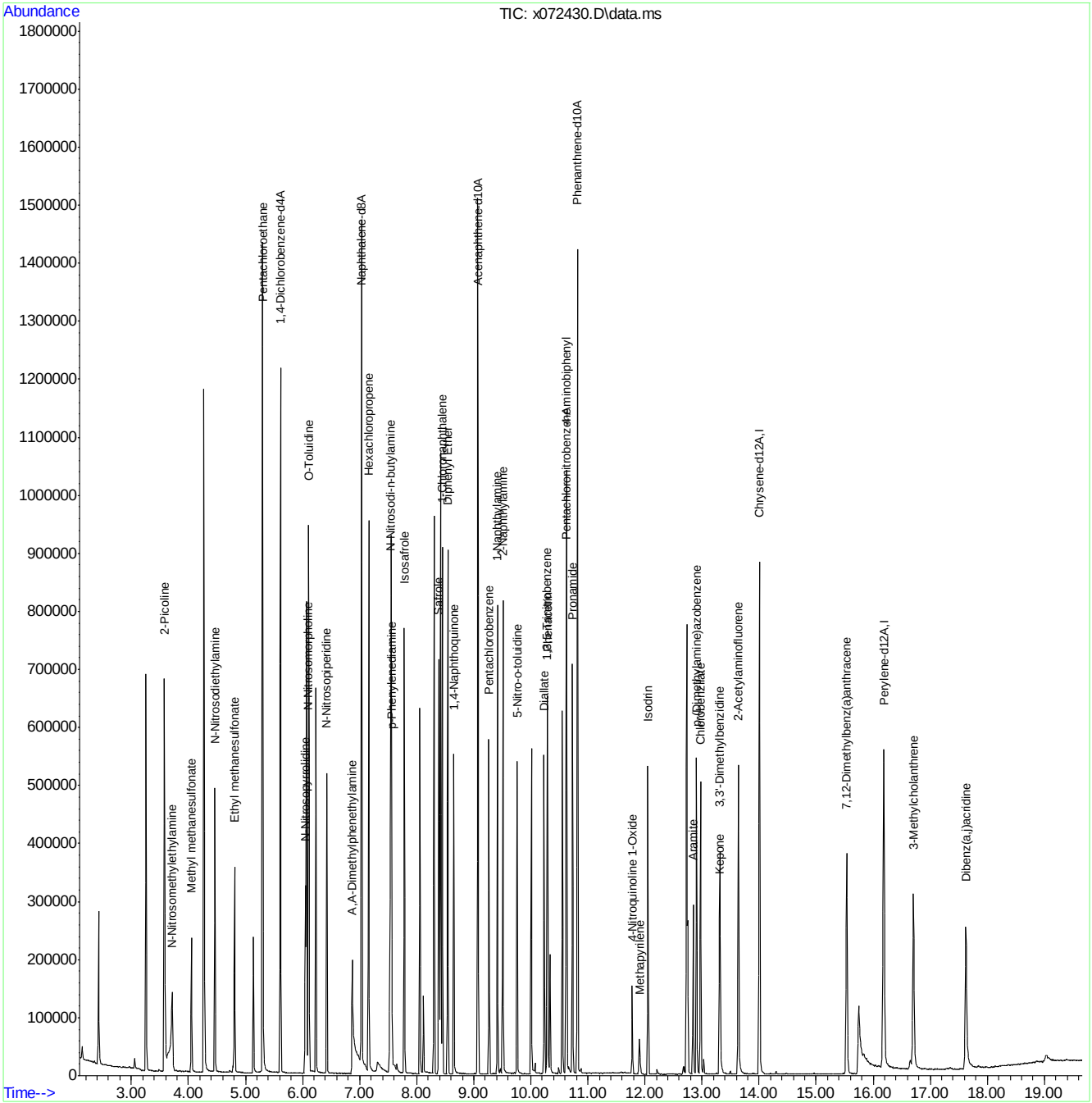
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
134) 2-Naphthylamine	9.511	143	263981	24.88	ppm		97
135) 5-Nitro-o-toluidine	9.762	152	78413	26.87	ppm		85
137) 1,3,5-Trinitrobenzene	10.286	75	60047	29.60	ppm		91
138) Diallate	10.233	43	220223m	28.50	ppm		
139) Phenacetin	10.292	108	129866	27.36	ppm		93
140) 4-Aminobiphenyl	10.623	169	280356	28.04	ppm		99
141) Pronamide	10.730	173	106472	27.50	ppm		98
142) Pentachloronitrobenzene	10.618	237	24290	25.41	ppm		92
143) 4-Nitroquinoline 1-Oxide	11.779	190	8121	12.98	ppm	#	66
144) Methapyrilene	11.902	58	32030	12.66	ppm	#	70
145) Isodrin	12.051	193	35958	25.70	ppm	#	78
147) Aramite	12.843	185	37719m	30.05	ppm		
148) p-(Dimethylamine)azobe...	12.907	120	96227	24.97	ppm		88
149) Chlorobenzilate	12.971	139	110399	24.55	ppm	#	64
150) Kepone	13.303	272	20346	131.07	ppm		92
151) 3,3'-Dimethylbenzidine	13.314	212	114056	20.48	ppm		98
152) 2-Acetylaminofluorene	13.635	181	139616	32.03	ppm		91
154) 7,12-Dimethylbenz(a)an...	15.539	256	113002	27.00	ppm		92
156) 3-Methylcholanthrene	16.705	268	103874	27.53	ppm		94
157) Dibenz(a,j)acridine	17.625	279	162825	32.80	ppm		96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072430.D
Acq On : 17 Aug 2020 3:04 pm
Operator : marthav
Sample : ic2953-25 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 18 12:50:24 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Mon Aug 17 14:57:23 2020
Response via : Initial Calibration



Manual Integration Approval Summary

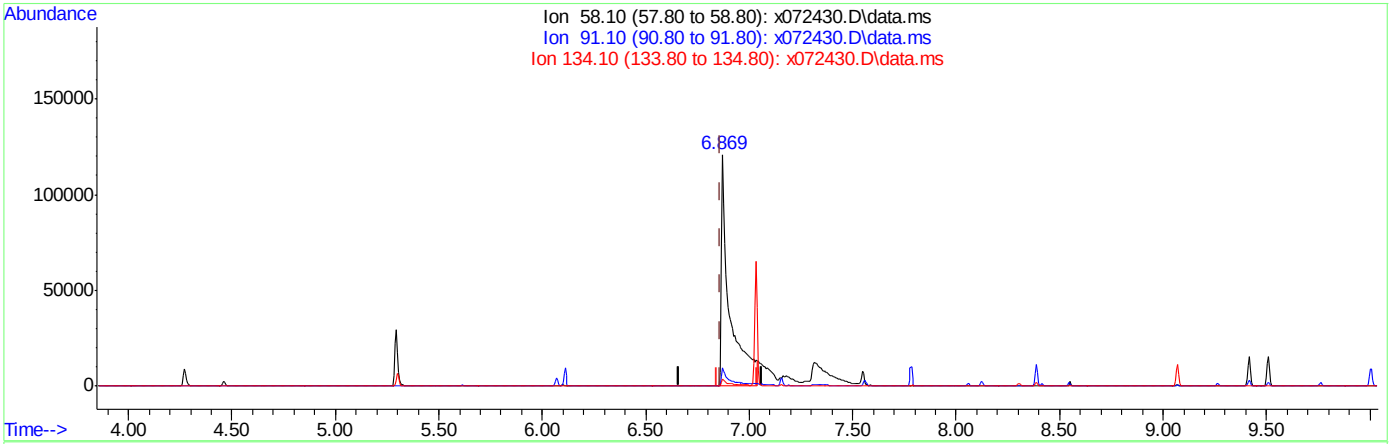
Sample Number: SX2953-IC2953
Lab FileID: X072430.D
Injection Time: 08/17/20 15:04
Method: SW846 8270D
Analyst approved: 08/18/20 14:01 Martha Valls
Supervisor approved: 08/18/20 14:38 Nicole McCampbell

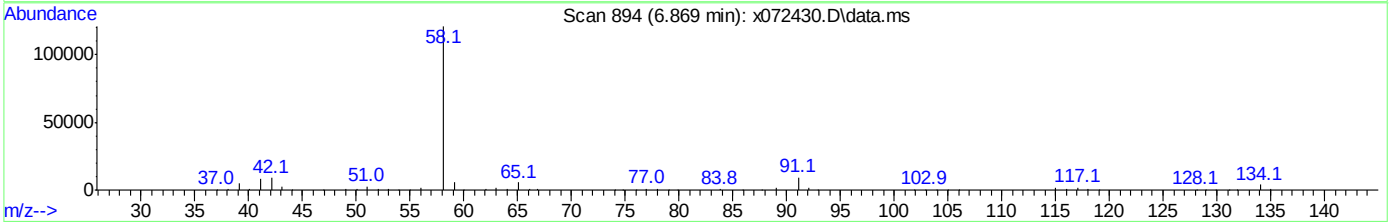
Parameter	CAS	Sig#	R.T. (min.)	Reason
A,A-Dimethylphenethylamine	122-09-8		6.87	Split peak
p-Phenylenediamine	106-50-3		7.56	Split peak
Diallate	2303-16-4		10.23	Split peak
Aramite	140-57-8		12.84	Split peak

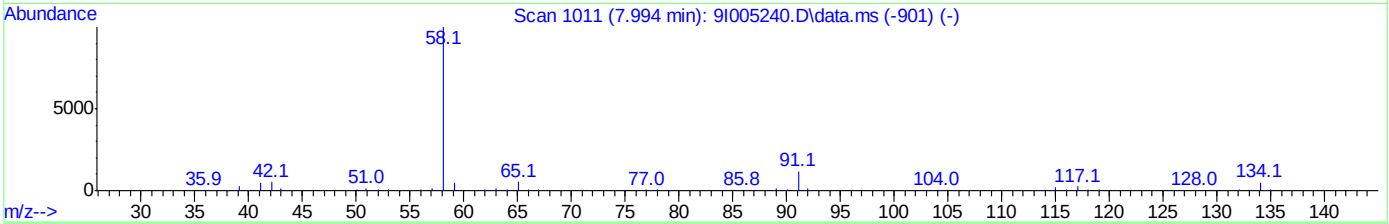
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072430.D
Acq On : 17 Aug 2020 3:04 pm
Operator : marthav
Sample : ic2953-25 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 18 09:38:33 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Mon Aug 17 14:57:23 2020
Response via : Initial Calibration







TIC: x072430.D\data.ms

(122) A,A-Dimethylphenethylamine

6.869min (+0.005) 15.89ppm

response 344726

Ion	Exp%	Act%
58.10	100	100
91.10	11.70	7.69
134.10	5.10	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072430.D
Acq On : 17 Aug 2020 3:04 pm
Operator : marthav
Sample : ic2953-25 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
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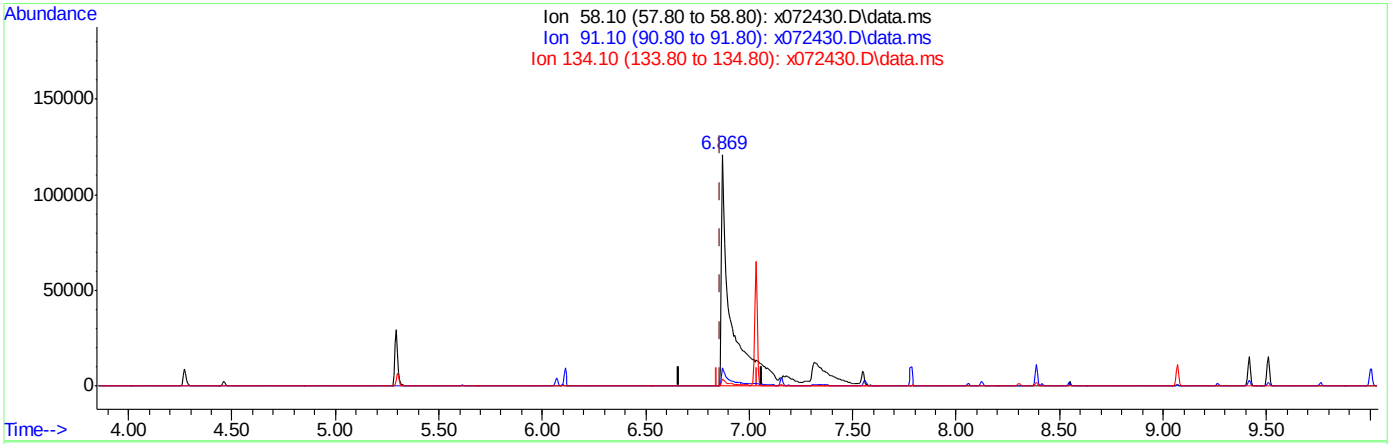
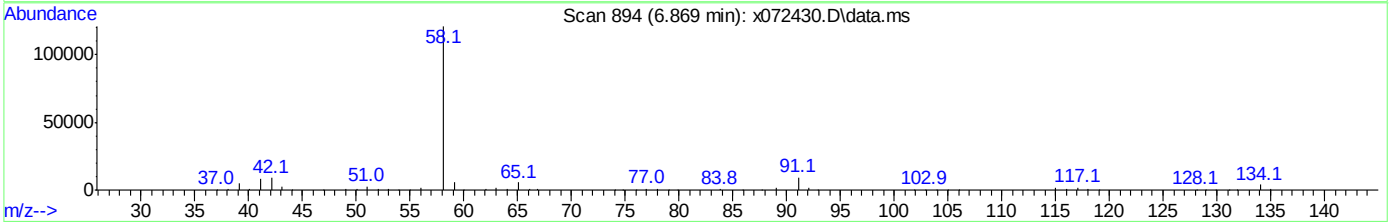
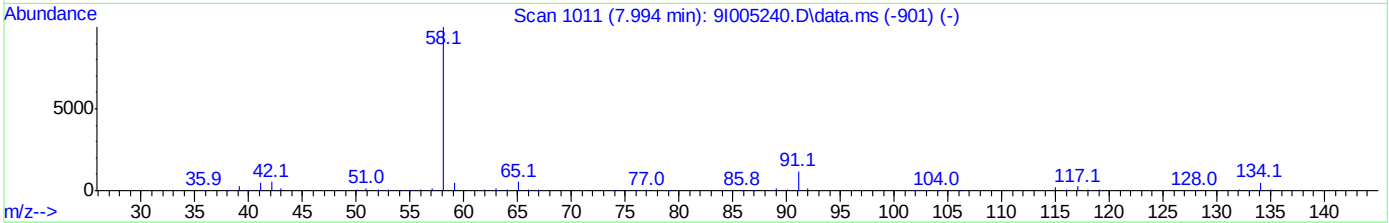






TIC: x072430.D\data.ms

(122) A,A-Dimethylphenethylamine

6.869min (+0.005) 23.60ppm m

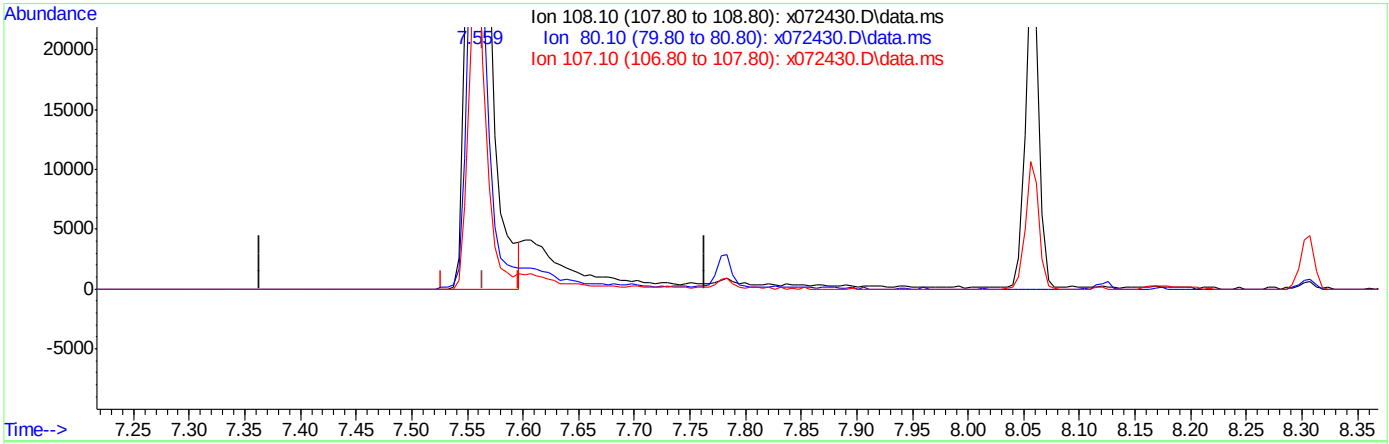
response 512173

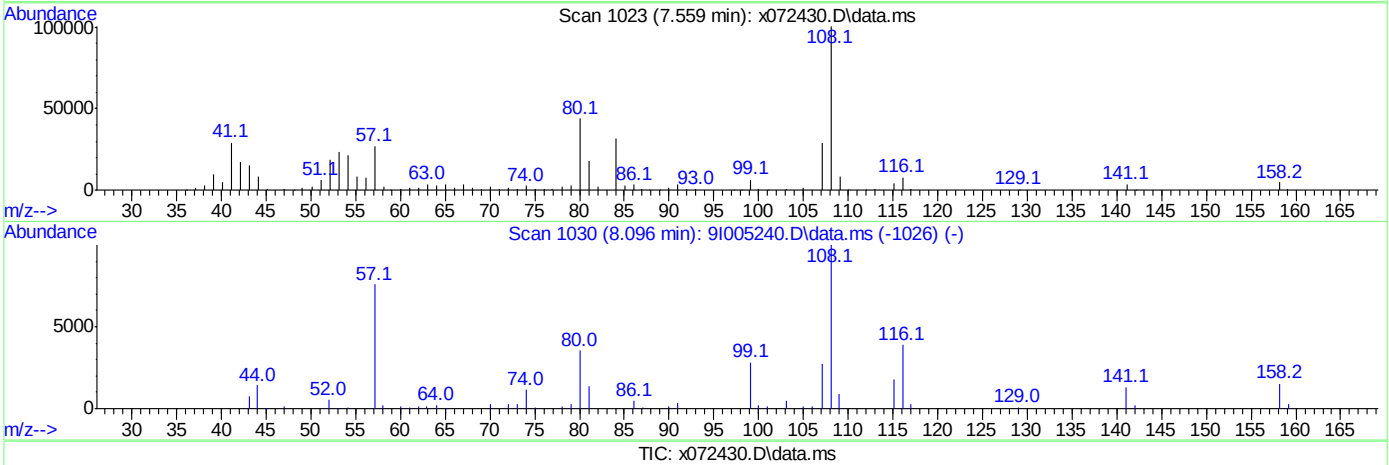
Ion	Exp%	Act%
58.10	100	100
91.10	11.70	7.86
134.10	5.10	3.29
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072430.D
Acq On : 17 Aug 2020 3:04 pm
Operator : marthav
Sample : ic2953-25 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 18 09:38:33 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Mon Aug 17 14:57:23 2020
Response via : Initial Calibration





TIC: x072430.D\data.ms

(125) p-Phenylenediamine

7.559min (-0.005) 18.89ppm

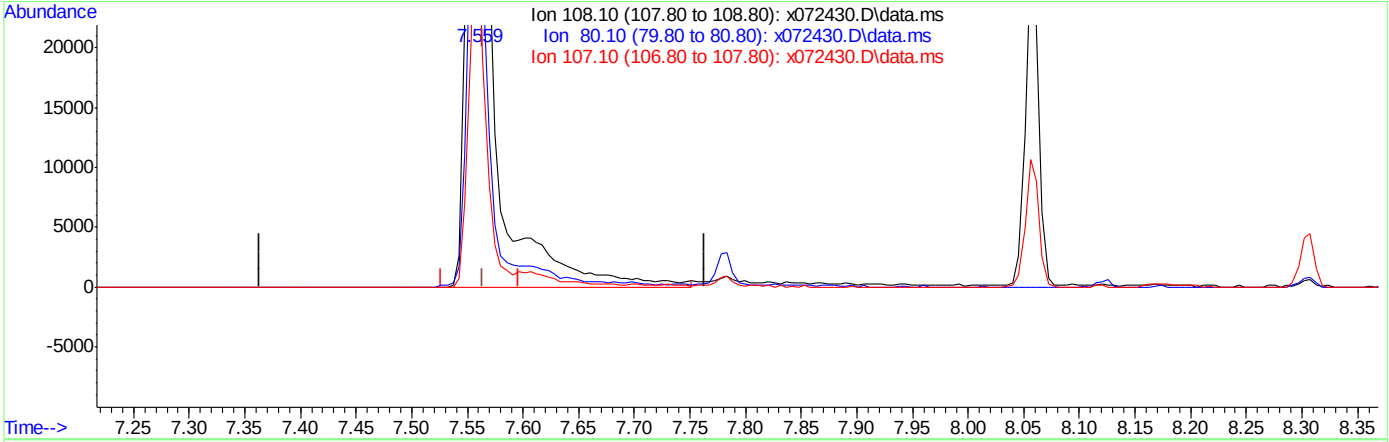
response 106038

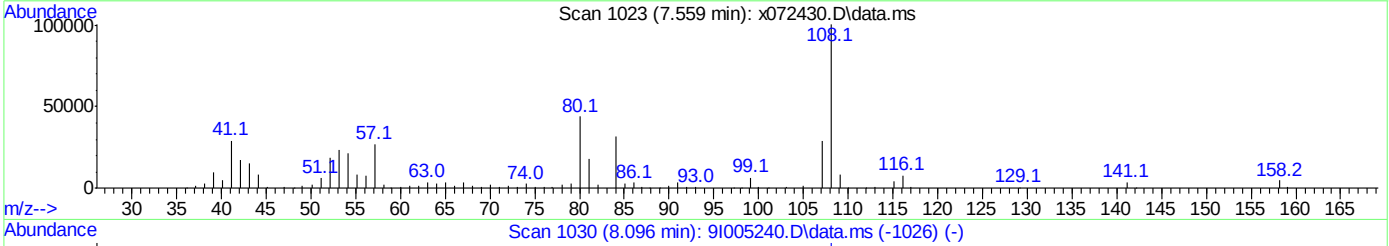
Ion	Exp%	Act%
108.10	100	100
80.10	35.50	43.43
107.10	27.70	28.57
0.00	0.00	0.00

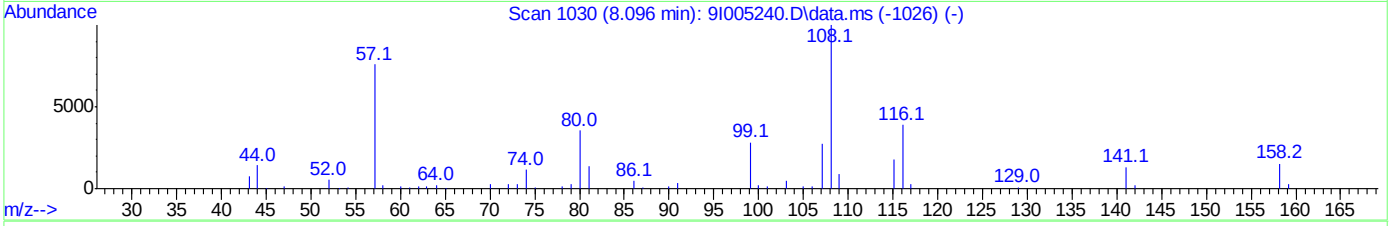
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072430.D
Acq On : 17 Aug 2020 3:04 pm
Operator : marthav
Sample : ic2953-25 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 18 09:38:33 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Mon Aug 17 14:57:23 2020
Response via : Initial Calibration







TIC: x072430.D\data.ms

(125) p-Phenylenediamine

7.559min (-0.005) 21.21ppm m

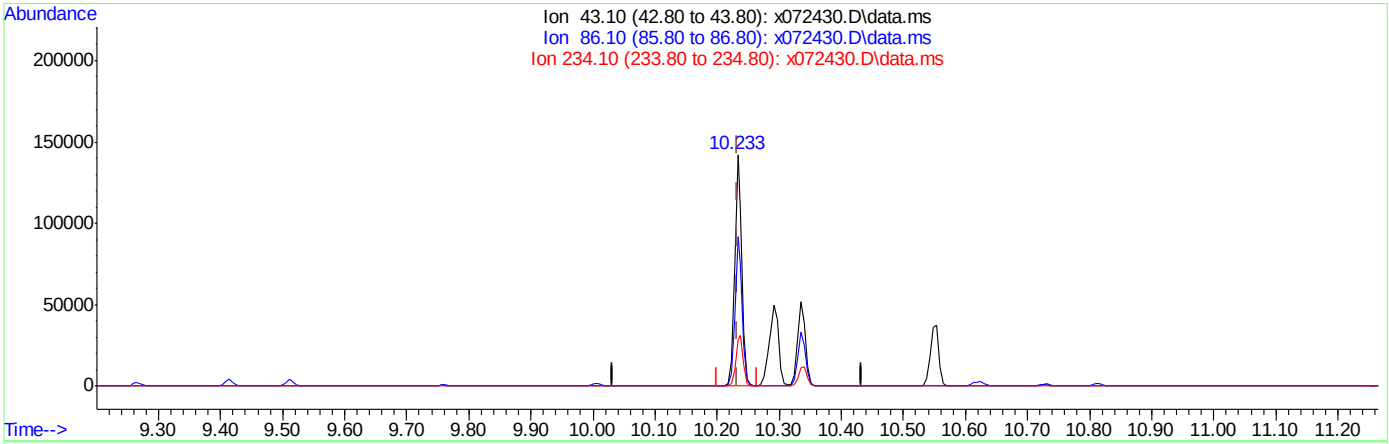
response 119071

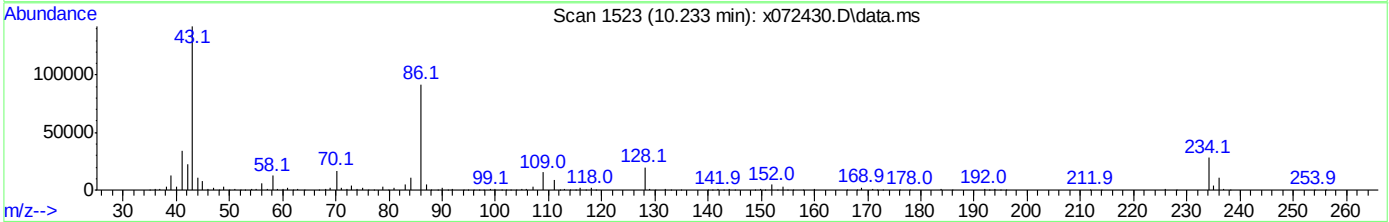
Ion	Exp%	Act%
108.10	100	100
80.10	35.50	43.55
107.10	27.70	28.64
0.00	0.00	0.00

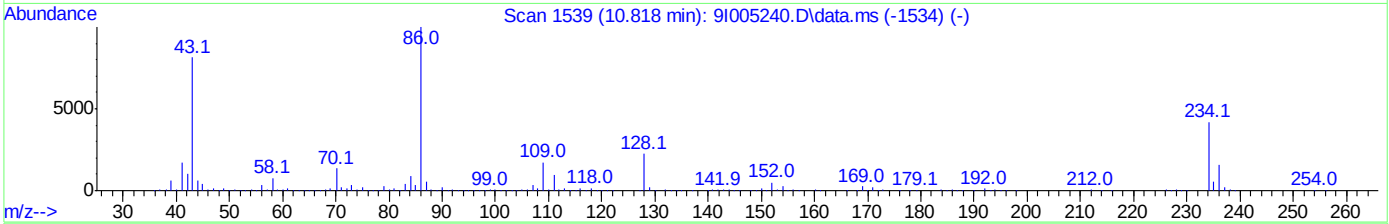
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072430.D
Acq On : 17 Aug 2020 3:04 pm
Operator : marthav
Sample : ic2953-25 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 18 09:38:33 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Mon Aug 17 14:57:23 2020
Response via : Initial Calibration







TIC: x072430.D\data.ms

(138) Diallate

10.233min (+0.000) 15.82ppm

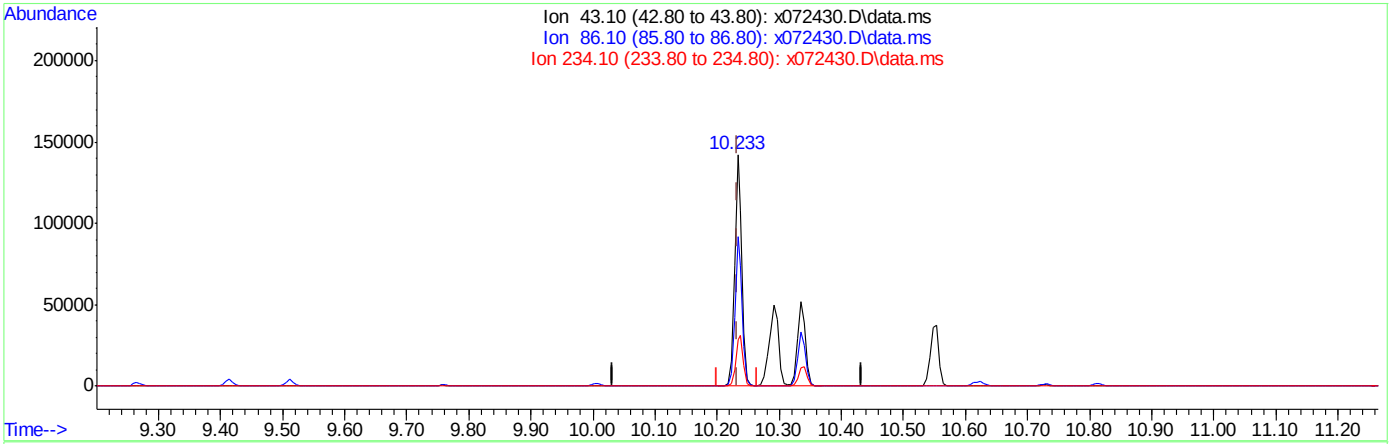
response 122223

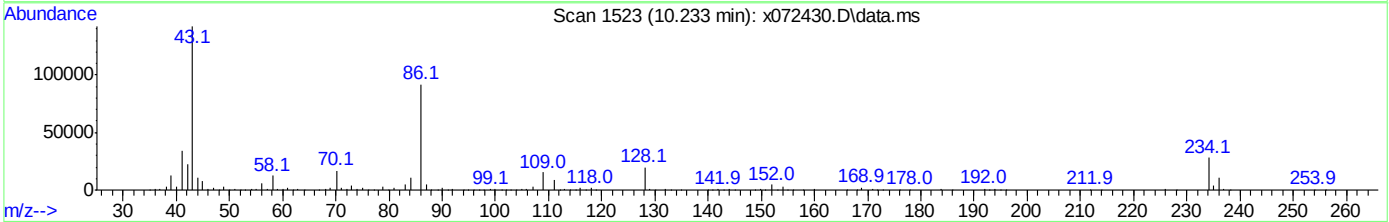
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	64.36#
234.10	51.50	19.80#
0.00	0.00	0.00

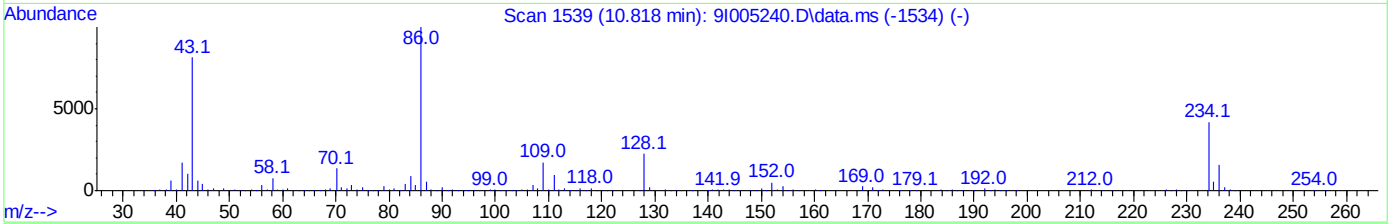
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072430.D
Acq On : 17 Aug 2020 3:04 pm
Operator : marthav
Sample : ic2953-25 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 18 09:38:33 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Mon Aug 17 14:57:23 2020
Response via : Initial Calibration







TIC: x072430.D\data.ms

(138) Diallate

10.233min (+0.000) 28.50ppm m

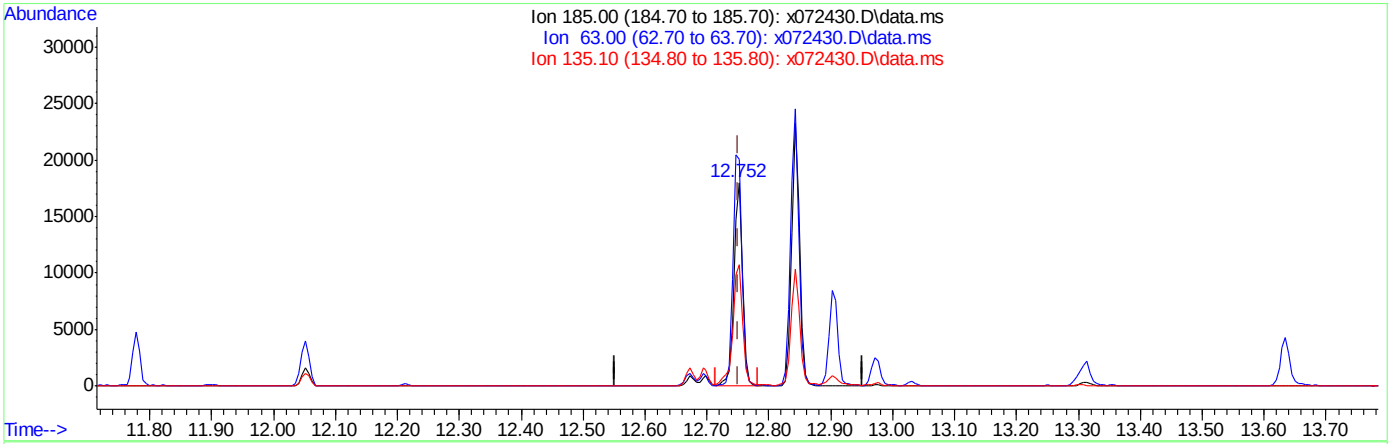
response 220223

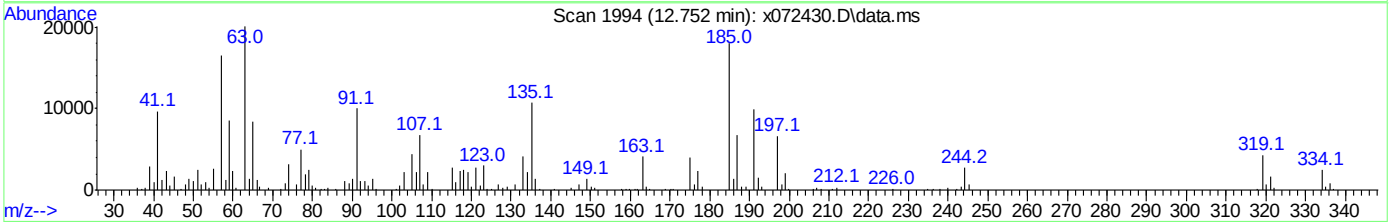
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	64.48#
234.10	51.50	19.78#
0.00	0.00	0.00

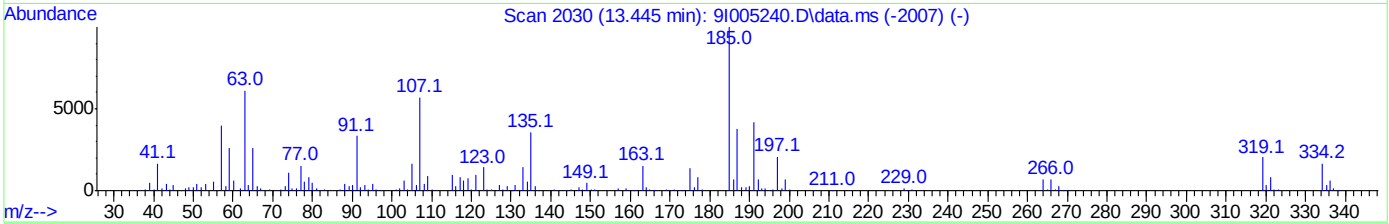
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072430.D
Acq On : 17 Aug 2020 3:04 pm
Operator : marthav
Sample : ic2953-25 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 18 09:38:33 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Mon Aug 17 14:57:23 2020
Response via : Initial Calibration







TIC: x072430.D\data.ms

(147) Aramite

12.752min (+0.000) 13.63ppm

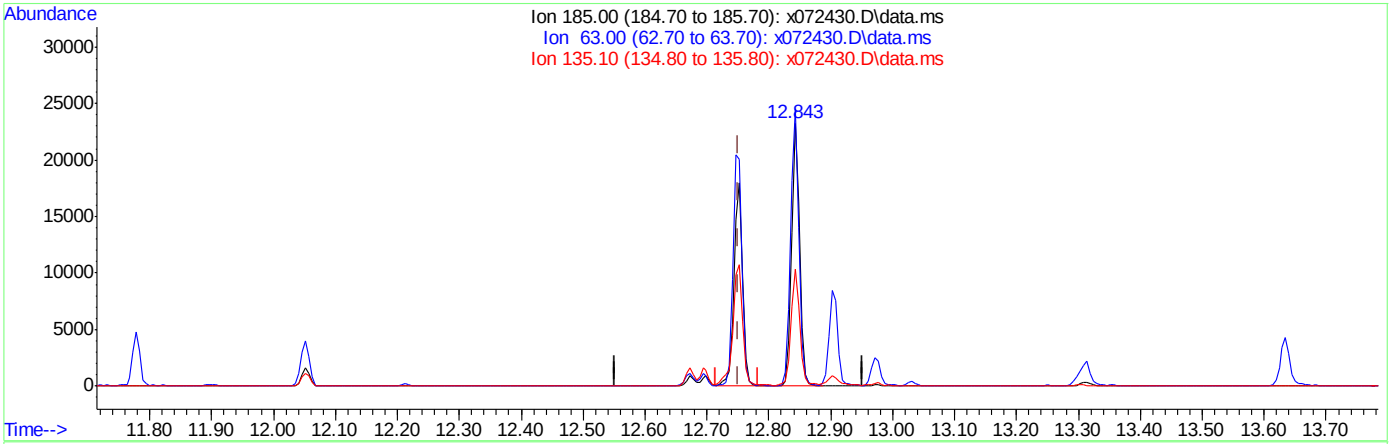
response 17115

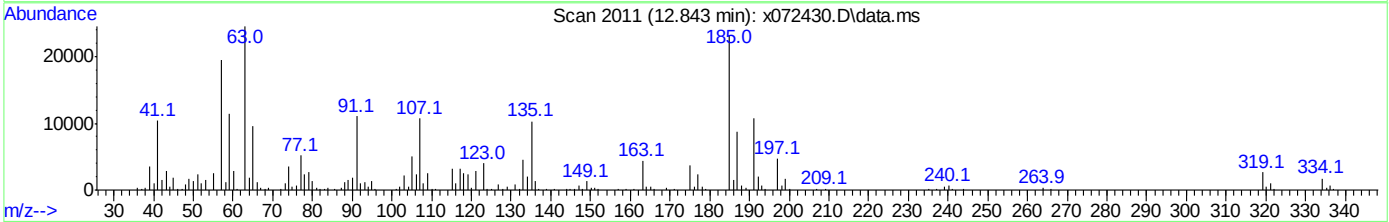
Ion	Exp%	Act%
185.00	100	100
63.00	61.10	111.20#
135.10	35.60	58.63
0.00	0.00	0.00

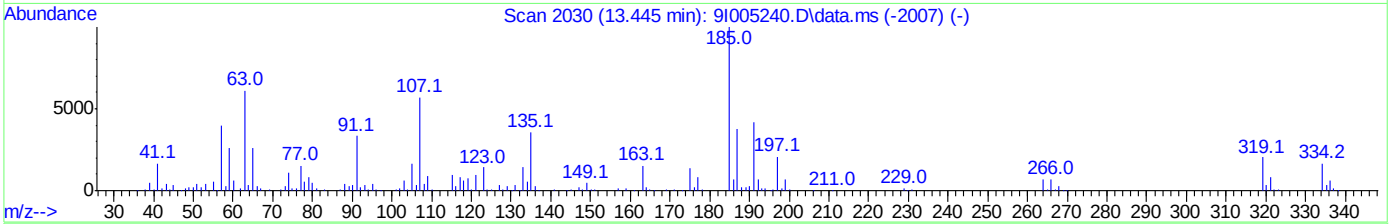
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072430.D
Acq On : 17 Aug 2020 3:04 pm
Operator : marthav
Sample : ic2953-25 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 18 09:38:33 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Mon Aug 17 14:57:23 2020
Response via : Initial Calibration







TIC: x072430.D\data.ms

(147) Aramite

12.843min (+0.091) 30.05ppm m

response 37719

Ion	Exp%	Act%
185.00	100	100
63.00	61.10	105.68#
135.10	35.60	44.48
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 08/18/20 14:38

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072431.D
Acq On : 17 Aug 2020 3:30 pm
Operator : marthav
Sample : ic2953-50 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 18 12:50:41 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Mon Aug 17 14:57:23 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	0.000	152	0m	40.00	ppm		-5.62
22) Naphthalene-d8	0.000	136	0m	40.00	ppm		-7.04
43) Acenaphthene-d10	0.000	164	0m	40.00	ppm		-9.08
70) Phenanthrene-d10	0.000	188	0m	40.00	ppm		-10.82
92) Chrysene-d12	0.000	240	0m	40.00	ppm		-14.02
102) Perylene-d12	0.000	264	0m	40.00	ppm		-16.19
110) 1,4-Dichlorobenzene-d4A	5.612	152	144267	40.00	ppm		0.00
120) Naphthalene-d8A	7.034	136	557164	40.00	ppm		0.00
127) Acenaphthene-d10A	9.072	164	271143	40.00	ppm		0.00
136) Phenanthrene-d10A	10.816	188	490342	40.00	ppm		0.00
146) Chrysene-d12A	14.009	240	343409	40.00	ppm		0.00
153) Perylene-d12A	16.186	264	281181	40.00	ppm		0.00
System Monitoring Compounds							
7) 2-Fluorophenol	0.000	112	0d	0.00	ppm		
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#			
9) Phenol-d5	0.000	99	0d	0.00	ppm		
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#			
23) Nitrobenzene-d5	0.000	82	0d	0.00	ppm		
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#			
47) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm		
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#			
75) 2,4,6-Tribromophenol	0.000	330	0d	0.00	ppm		
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#			
95) Terphenyl-d14	0.000	244	0d	0.00	ppm		
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#			
Target Compounds							Qvalue
111) 2-Picoline	3.579	93	359267	52.22	ppm		86
112) N-Nitrosomethylethylamine	3.718	42	256901	53.70	ppm	#	51
113) Methyl methanesulfonate	4.061	80	147176	43.87	ppm		92
114) N-Nitrosodiethylamine	4.472	102	151959	54.38	ppm	#	30
115) Ethyl methanesulfonate	4.815	79	247882	53.63	ppm		93
116) Pentachloroethane	5.301	167	107506	54.62	ppm		92
117) N-Nitrosopyrrolidine	6.056	100	135228	53.52	ppm	#	8
118) N-Nitrosomorpholine	6.104	56	234024	50.75	ppm	#	67
119) O-Toluidine	6.114	106	506332	53.61	ppm		98
121) N-Nitrosopiperidine	6.430	42	289566	56.50	ppm	#	58
122) A,A-Dimethylphenethyla...	6.863	58	1097724m	53.71	ppm		
123) Hexachloropropene	7.157	213	125041	53.47	ppm		99
124) N-Nitrosodi-n-butylamine	7.559	84	239610	59.87	ppm	#	51
125) p-Phenylenediamine	7.564	108	258968m	48.99	ppm		
126) Isosafrole	7.783	162	207476	54.65	ppm		83
128) Safrole	8.393	162	210796	59.12	ppm		93
129) 1-Chloronaphthalene	8.452	162	507945	59.81	ppm		99
130) Diphenyl Ether	8.548	170	349832	58.97	ppm		96
131) 1,4-Naphthoquinone	8.650	158	181865	54.76	ppm		83
132) Pentachlorobenzene	9.270	250	165789	55.48	ppm		99
133) 1-Naphthylamine	9.420	143	523253	55.56	ppm		97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072431.D
Acq On : 17 Aug 2020 3:30 pm
Operator : marthav
Sample : ic2953-50 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 18 12:50:41 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Mon Aug 17 14:57:23 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
134) 2-Naphthylamine	9.516	143	549828	54.62	ppm		97
135) 5-Nitro-o-toluidine	9.768	152	171994	62.10	ppm		83
137) 1,3,5-Trinitrobenzene	10.292	75	143678	71.22	ppm		87
138) Diallate	10.233	43	461953m	60.12	ppm		
139) Phenacetin	10.308	108	291366	61.73	ppm		93
140) 4-Aminobiphenyl	10.629	169	596499	59.98	ppm		99
141) Pronamide	10.736	173	233638	60.67	ppm		98
142) Pentachloronitrobenzene	10.618	237	53472	56.24	ppm		90
143) 4-Nitroquinoline 1-Oxide	11.784	190	27864	44.78	ppm		88
144) Methapyrilene	11.896	58	68923	27.39	ppm		71
145) Isodrin	12.051	193	77657	55.82	ppm	#	80
147) Aramite	12.848	185	86504m	69.19	ppm		
148) p-(Dimethylamine)azobe...	12.907	120	216009	56.28	ppm		84
149) Chlorobenzilate	12.977	139	245525	54.81	ppm		75
150) Kepone	13.303	272	49666	321.25	ppm		93
151) 3,3'-Dimethylbenzidine	13.319	212	253033	45.62	ppm		98
152) 2-Acetylaminofluorene	13.645	181	314776	72.51	ppm		93
154) 7,12-Dimethylbenz(a)an...	15.544	256	241492	61.91	ppm		93
155) Hexachlorophene	15.956	196	19984m	32.12	ppm		
156) 3-Methylcholanthrene	16.710	268	228640	65.02	ppm		96
157) Dibenz(a,j)acridine	17.635	279	350722	75.80	ppm		97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072431.D
Acq On : 17 Aug 2020 3:30 pm
Operator : marthav
Sample : ic2953-50 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 14 Sample Multiplier: 1

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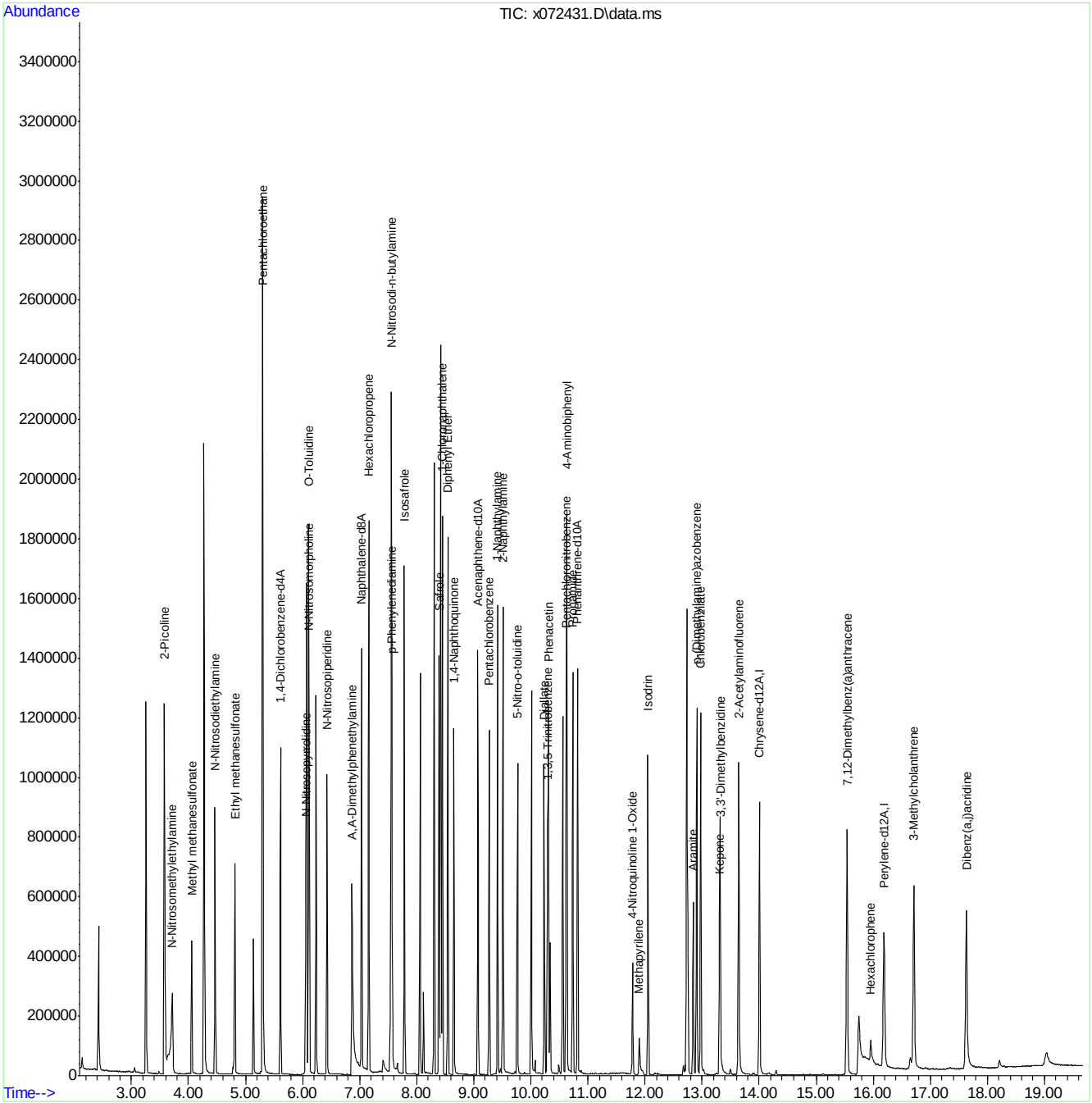
Quant Title : SW846 8270D OR EPA 625
QLast Update : Mon Aug 17 14:57:23 2020
Response via : Initial Calibration



Manual Integration Approval Summary

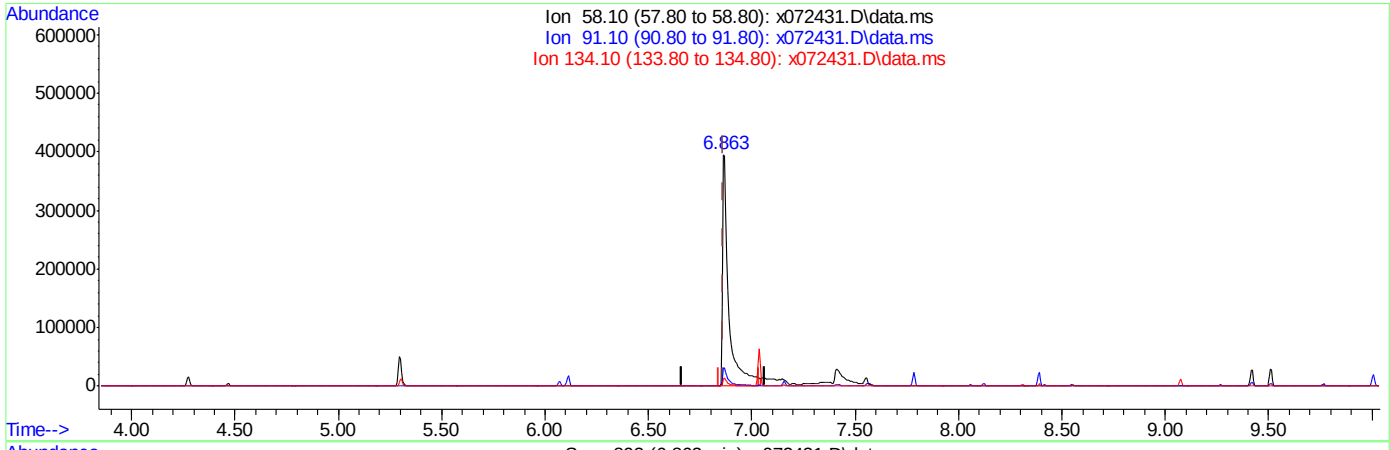
Sample Number: SX2953-IC2953 **Method:** SW846 8270D
Lab FileID: X072431.D **Analyst approved:** 08/18/20 14:01 Martha Valls
Injection Time: 08/17/20 15:30 **Supervisor approved:** 08/18/20 14:38 Nicole McCampbell

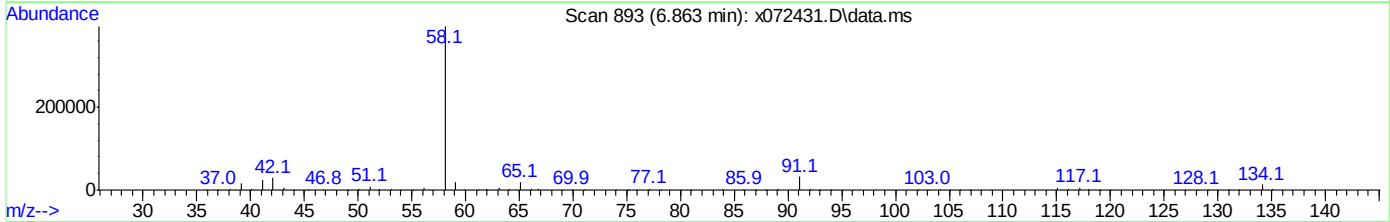
Parameter	CAS	Sig#	R.T. (min.)	Reason
A,A-Dimethylphenethylamine	122-09-8		6.86	Split peak
p-Phenylenediamine	106-50-3		7.56	Split peak
Diallate	2303-16-4		10.23	Split peak
Aramite	140-57-8		12.85	Split peak
Hexachlorophene	70-30-4		15.96	Split peak

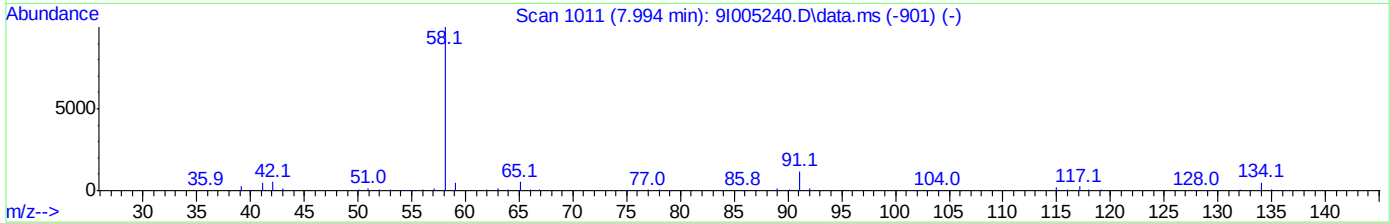
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072431.D
Acq On : 17 Aug 2020 3:30 pm
Operator : marthav
Sample : ic2953-50 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 18 09:38:35 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Mon Aug 17 14:57:23 2020
Response via : Initial Calibration







TIC: x072431.D\data.ms

(122) A,A-Dimethylphenethylamine

6.863min (0.000) 40.07ppm

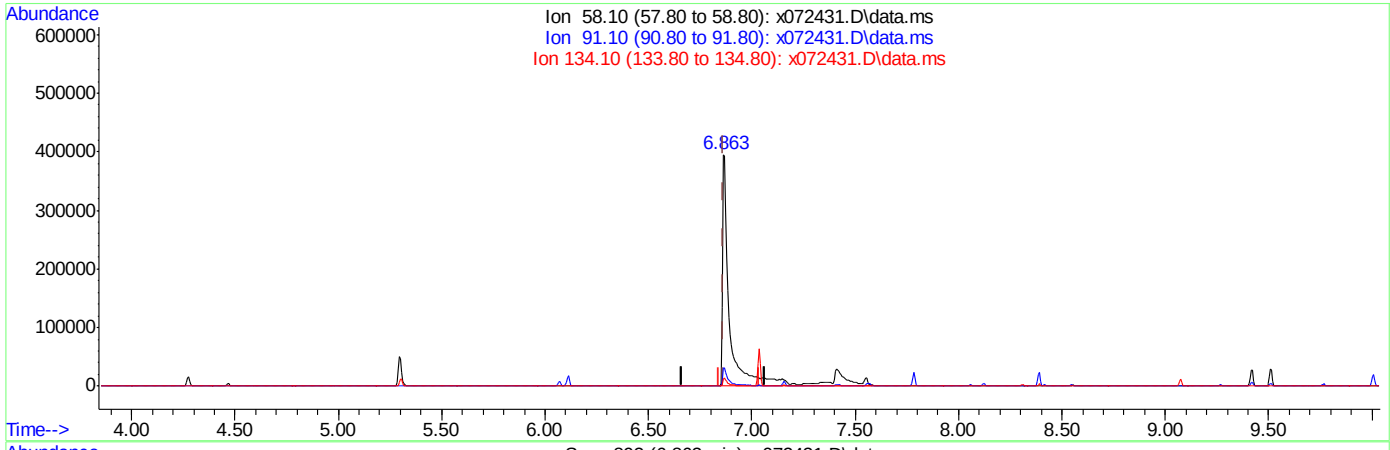
response 818819

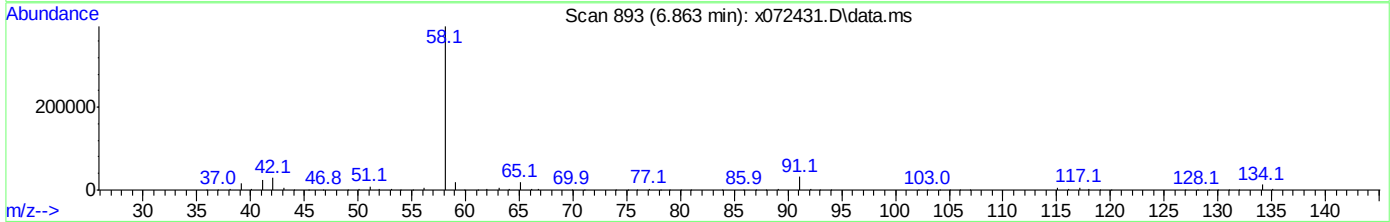
Ion	Exp%	Act%
58.10	100	100
91.10	11.70	7.97
134.10	5.10	0.00
0.00	0.00	0.00

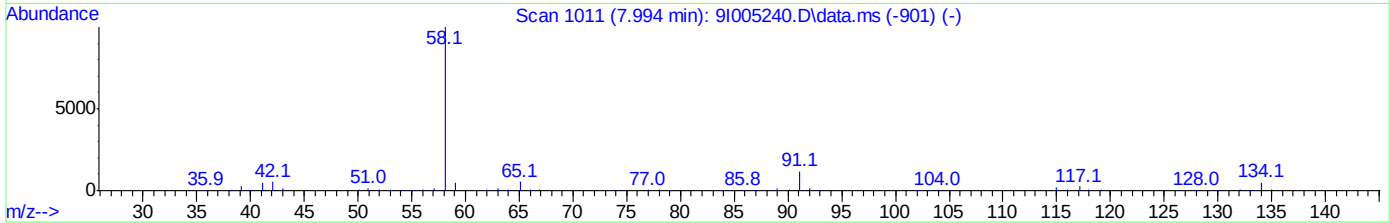
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072431.D
Acq On : 17 Aug 2020 3:30 pm
Operator : marthav
Sample : ic2953-50 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 18 09:38:35 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Mon Aug 17 14:57:23 2020
Response via : Initial Calibration







TIC: x072431.D\data.ms

(122) A,A-Dimethylphenethylamine

6.863min (0.000) 53.71ppm m

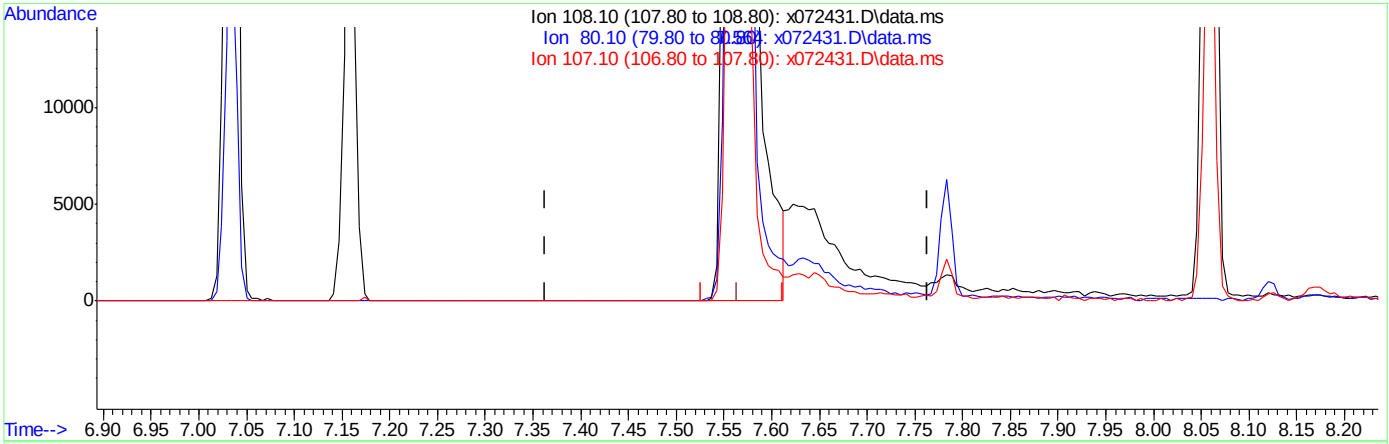
response 1097724

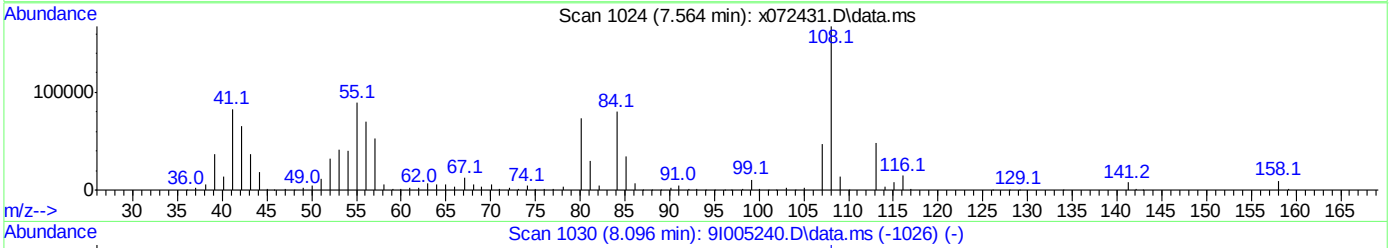
Ion	Exp%	Act%
58.10	100	100
91.10	11.70	8.04
134.10	5.10	3.27
0.00	0.00	0.00

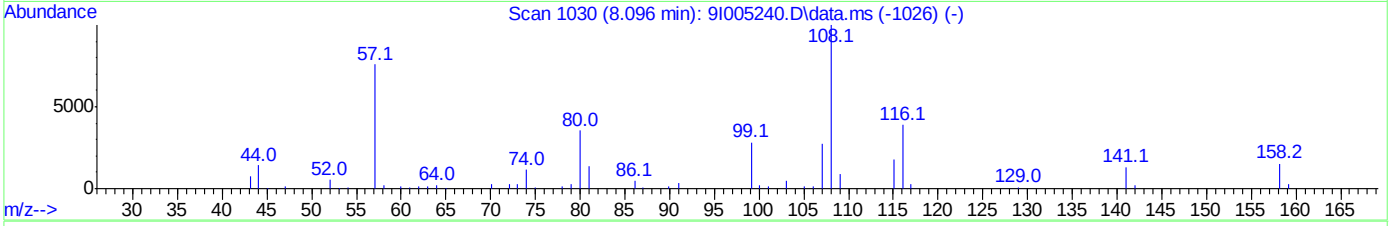
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072431.D
Acq On : 17 Aug 2020 3:30 pm
Operator : marthav
Sample : ic2953-50 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 18 09:38:35 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Mon Aug 17 14:57:23 2020
Response via : Initial Calibration







TIC: x072431.D\data.ms

(125) p-Phenylenediamine

7.564min (0.000) 45.01ppm

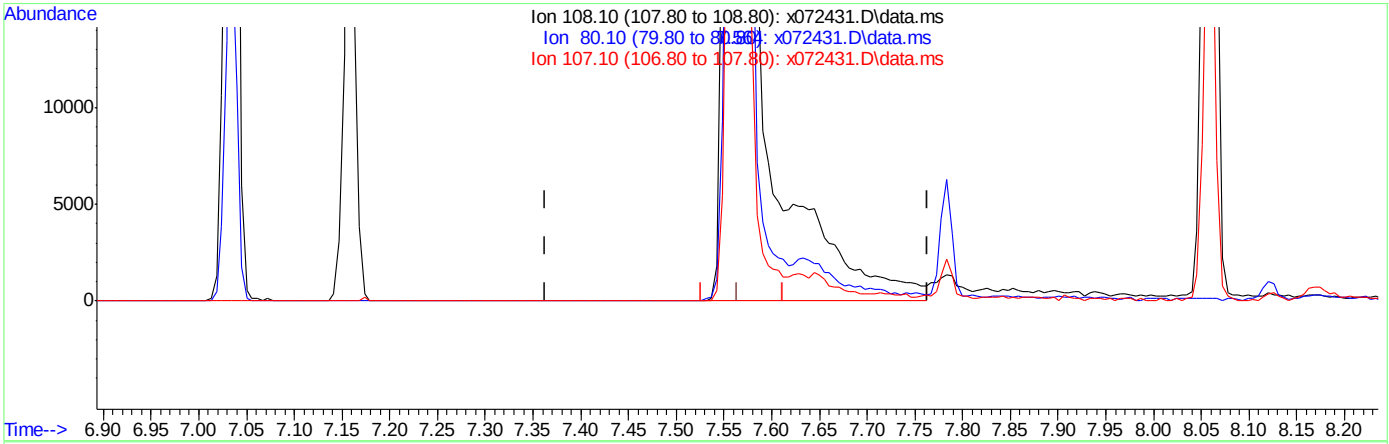
response 237933

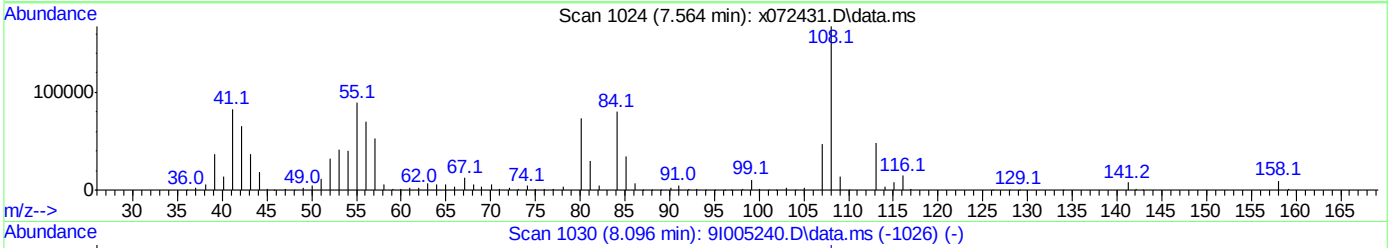
Ion	Exp%	Act%
108.10	100	100
80.10	35.50	43.83
107.10	27.70	28.35
0.00	0.00	0.00

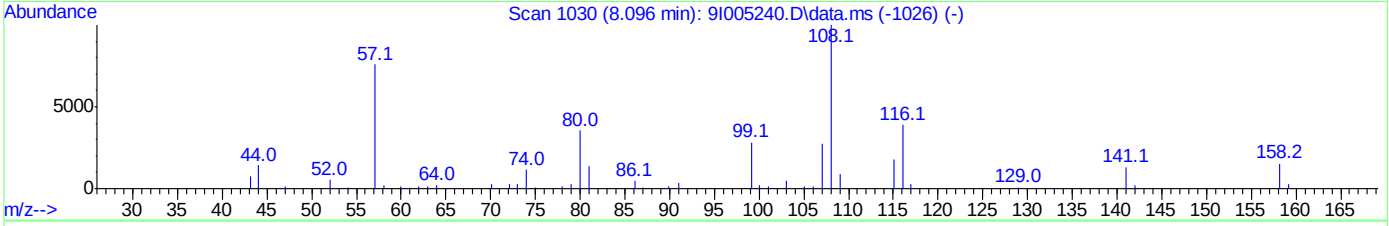
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072431.D
Acq On : 17 Aug 2020 3:30 pm
Operator : marthav
Sample : ic2953-50 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 18 09:38:35 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Mon Aug 17 14:57:23 2020
Response via : Initial Calibration







TIC: x072431.D\data.ms

(125) p-Phenylenediamine

7.564min (0.000) 48.99ppm m

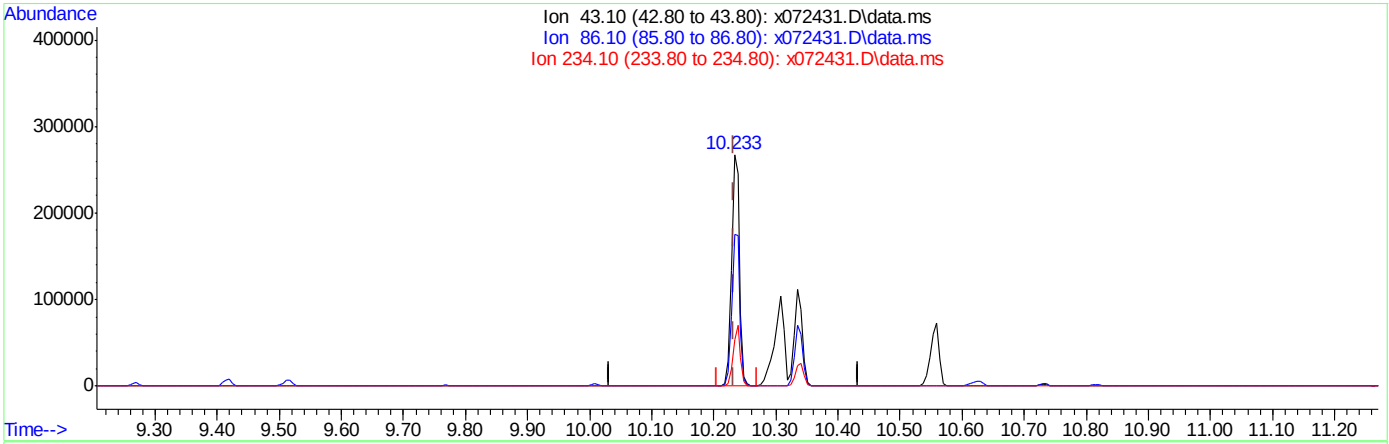
response 258968

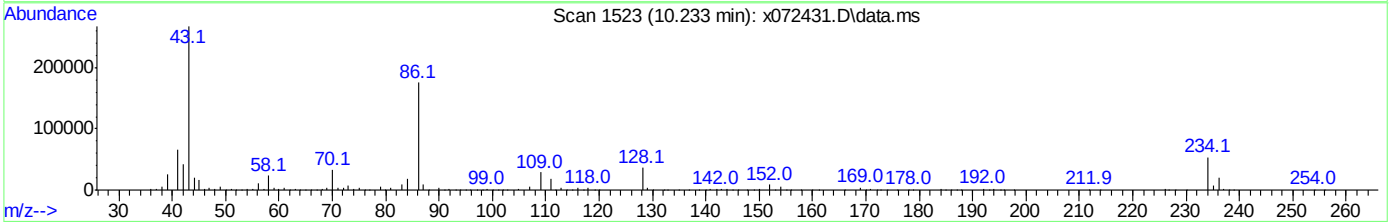
Ion	Exp%	Act%
108.10	100	100
80.10	35.50	43.85
107.10	27.70	28.31
0.00	0.00	0.00

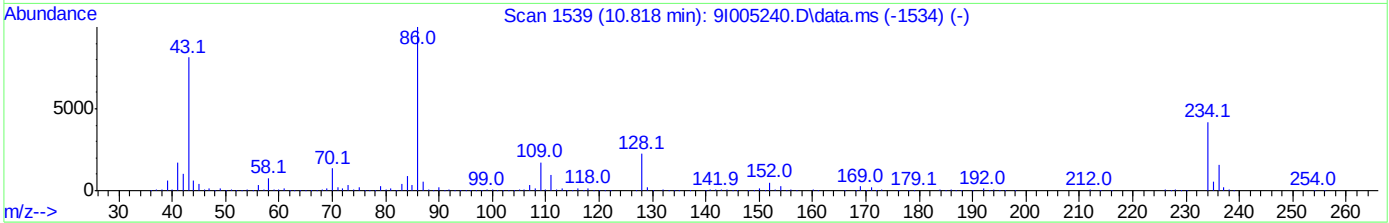
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072431.D
Acq On : 17 Aug 2020 3:30 pm
Operator : marthav
Sample : ic2953-50 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 18 09:38:35 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Mon Aug 17 14:57:23 2020
Response via : Initial Calibration







TIC: x072431.D\data.ms

(138) Diallate

10.233min (0.000) 32.43ppm

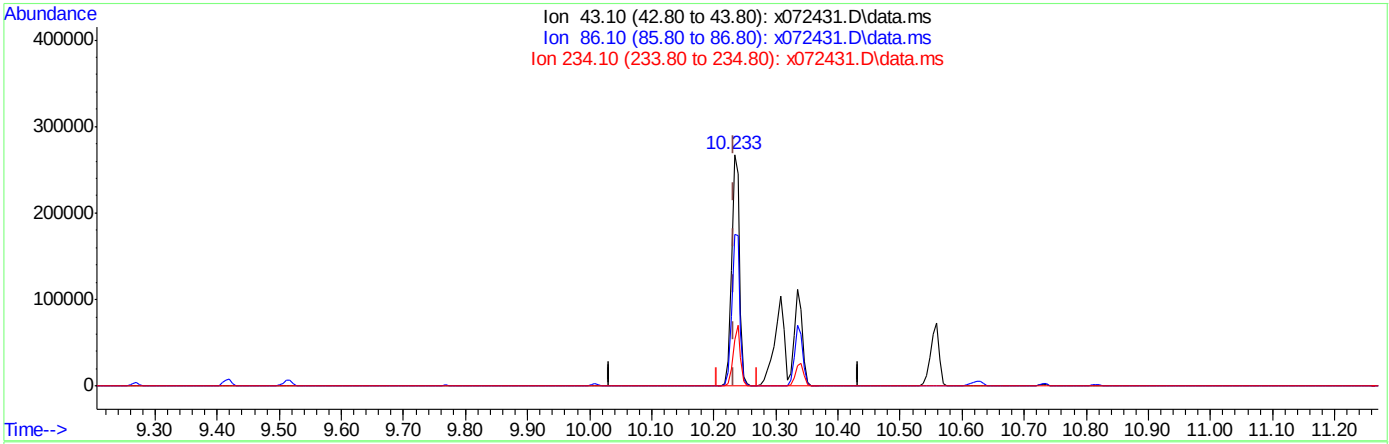
response 249221

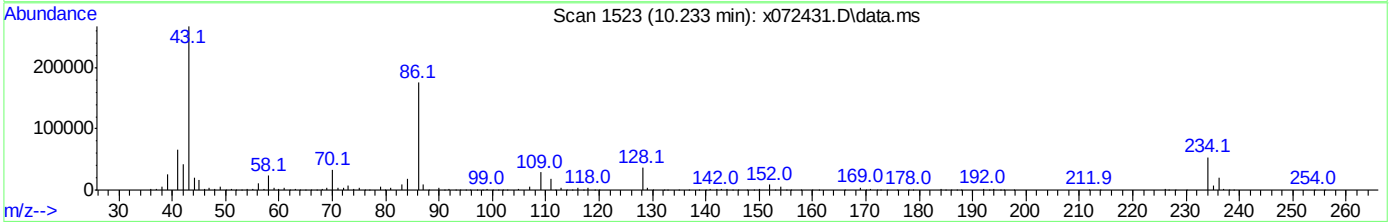
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	65.47#
234.10	51.50	19.91#
0.00	0.00	0.00

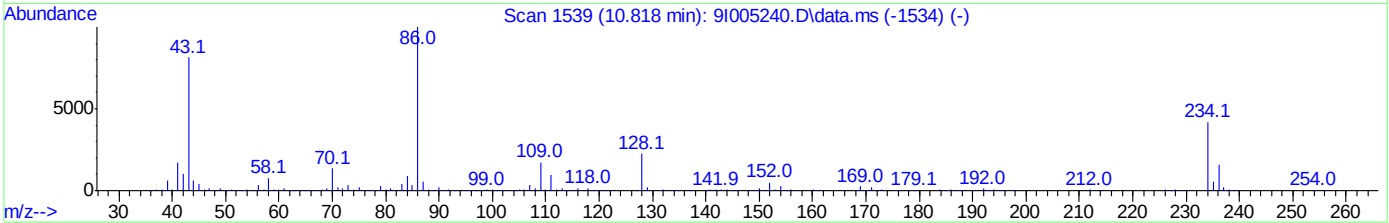
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072431.D
Acq On : 17 Aug 2020 3:30 pm
Operator : marthav
Sample : ic2953-50 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 18 09:38:35 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Mon Aug 17 14:57:23 2020
Response via : Initial Calibration







TIC: x072431.D\data.ms

(138) Diallate

10.233min (0.000) 60.12ppm m

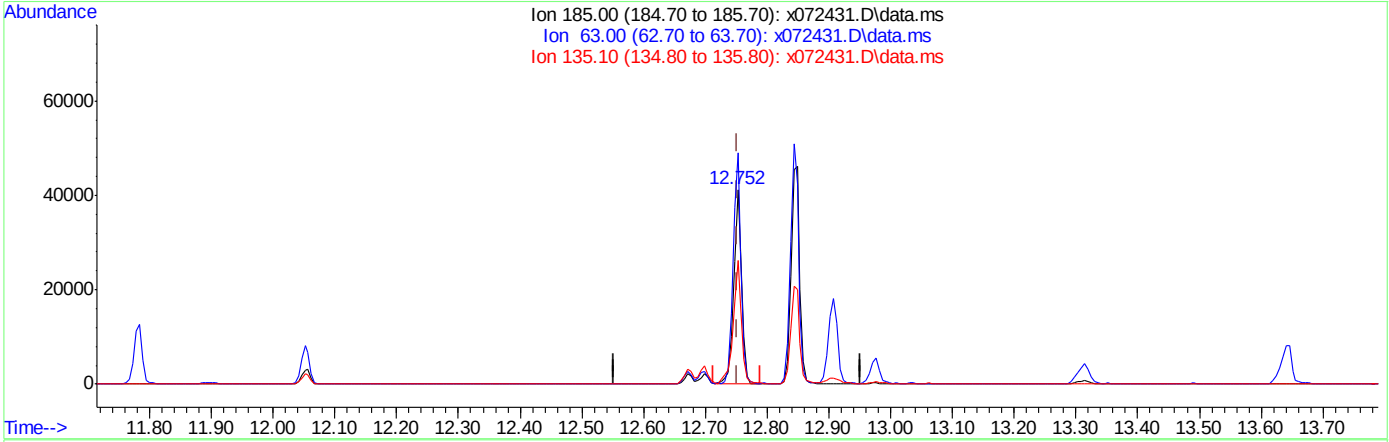
response 461953

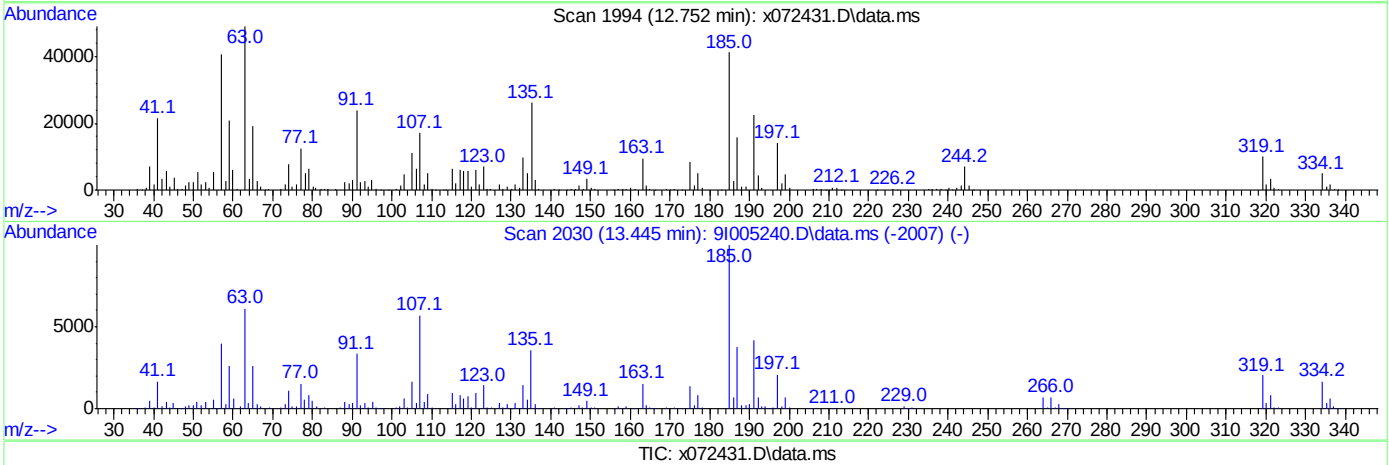
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	65.49#
234.10	51.50	19.89#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072431.D
Acq On : 17 Aug 2020 3:30 pm
Operator : marthav
Sample : ic2953-50 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 18 09:38:35 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Mon Aug 17 14:57:23 2020
Response via : Initial Calibration





TIC: x072431.D\data.ms

(147) Aramite

12.752min (0.000) 31.62ppm

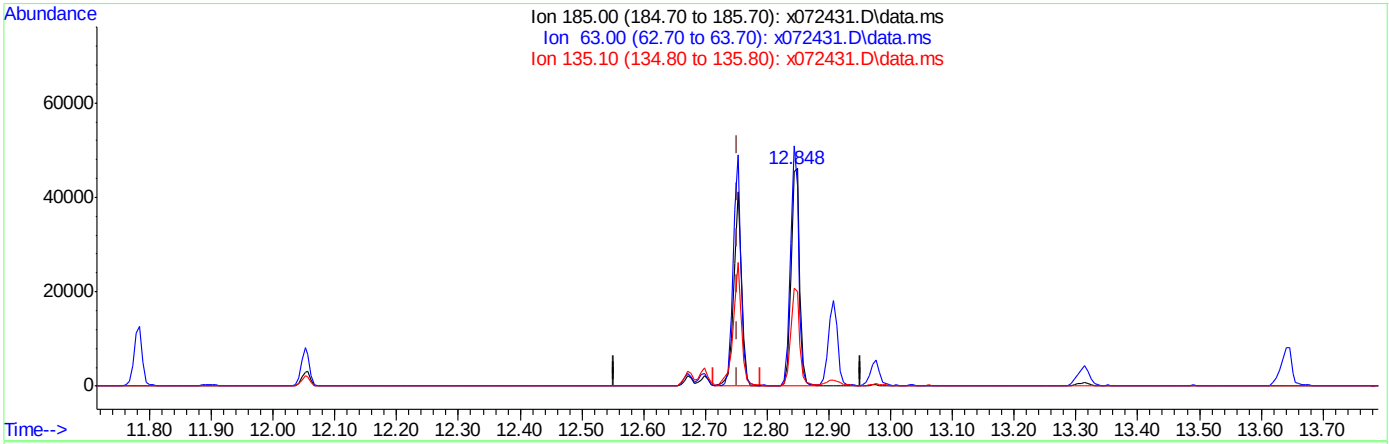
response 39535

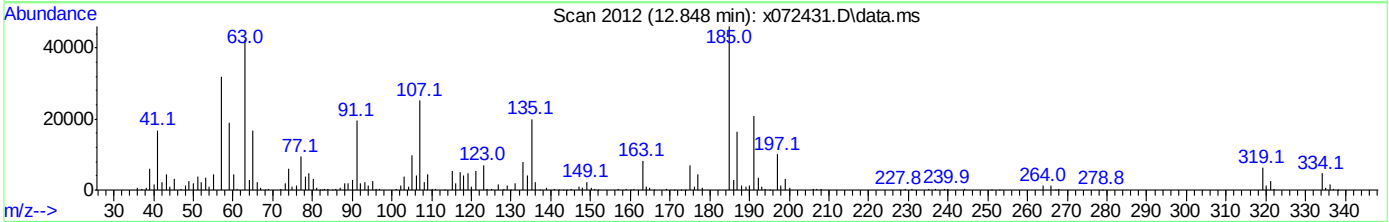
Ion	Exp%	Act%
185.00	100	100
63.00	61.10	118.93#
135.10	35.60	62.84
0.00	0.00	0.00

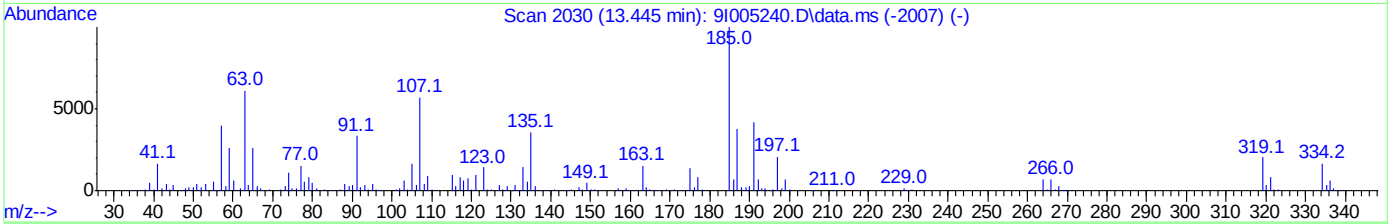
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072431.D
Acq On : 17 Aug 2020 3:30 pm
Operator : marthav
Sample : ic2953-50 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 18 09:38:35 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Mon Aug 17 14:57:23 2020
Response via : Initial Calibration







TIC: x072431.D\data.ms

(147) Aramite

12.848min (+0.096) 69.19ppm m

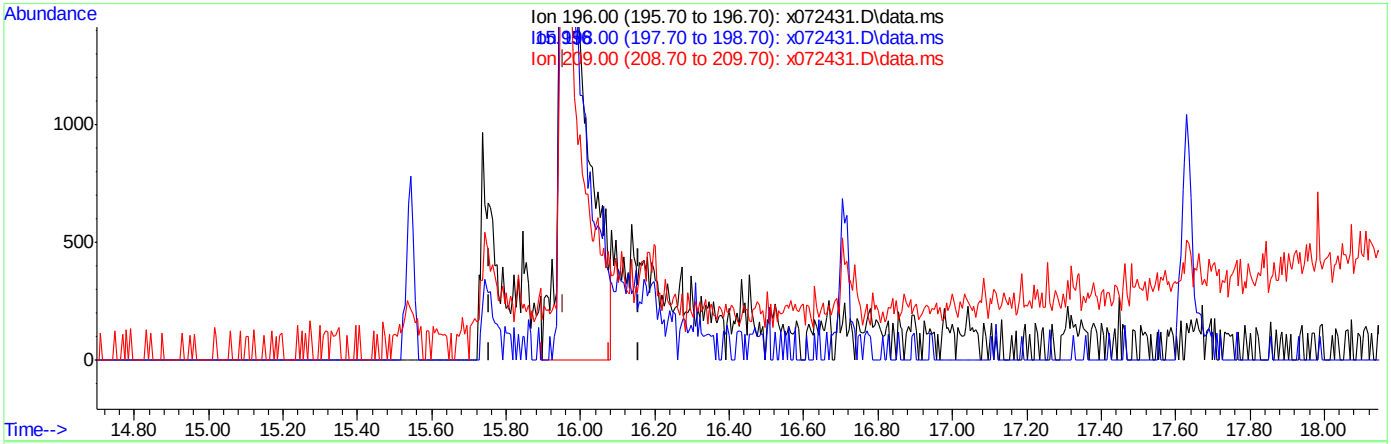
response 86504

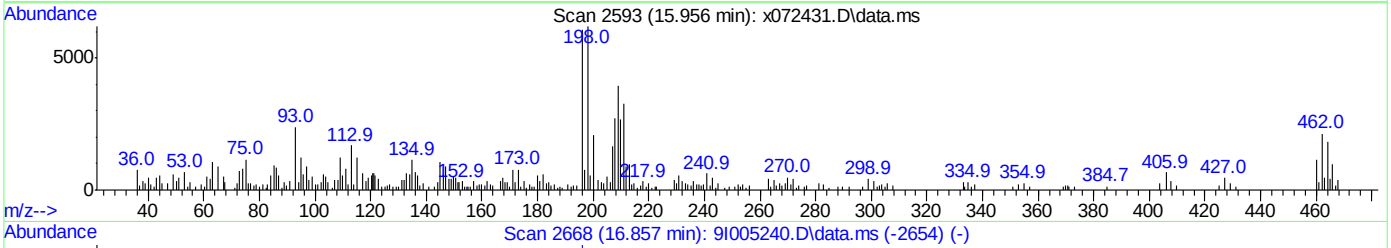
Ion	Exp%	Act%
185.00	100	100
63.00	61.10	92.04#
135.10	35.60	43.24
0.00	0.00	0.00

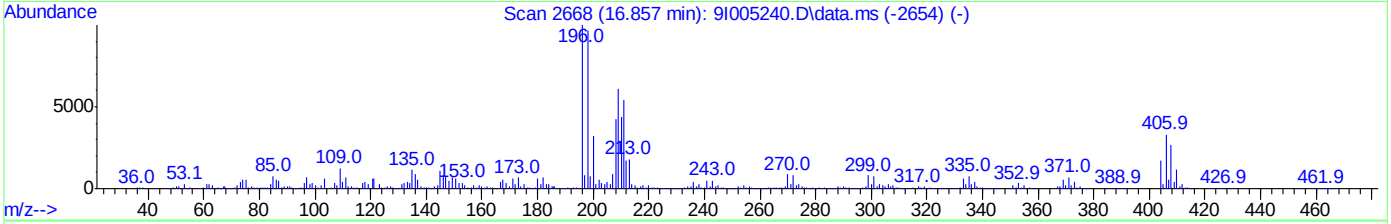
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072431.D
Acq On : 17 Aug 2020 3:30 pm
Operator : marthav
Sample : ic2953-50 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 18 09:38:35 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Mon Aug 17 14:57:23 2020
Response via : Initial Calibration







TIC: x072431.D\data.ms

(155) Hexachlorophene

15.956min (0.000) 24.36ppm

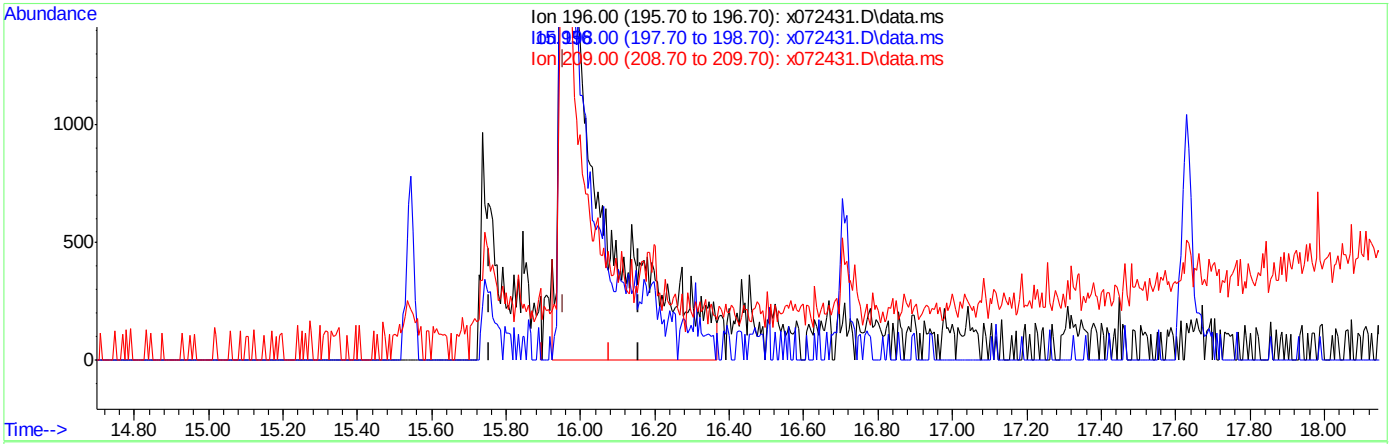
response 15154

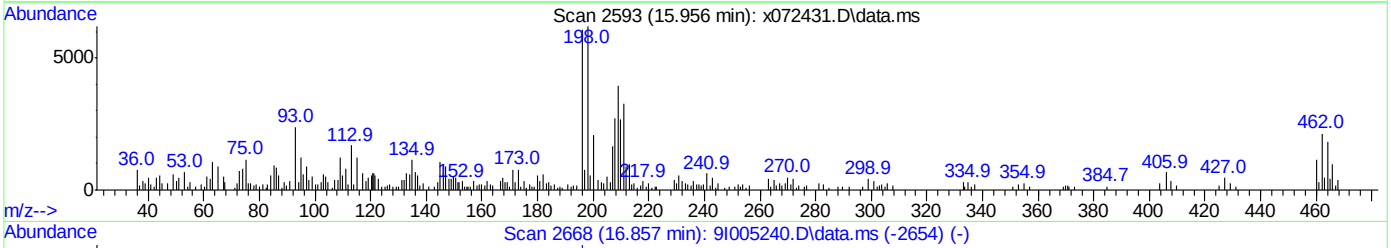
Ion	Exp%	Act%
196.00	100	100
198.00	96.50	103.18
209.00	60.90	62.73
0.00	0.00	0.00

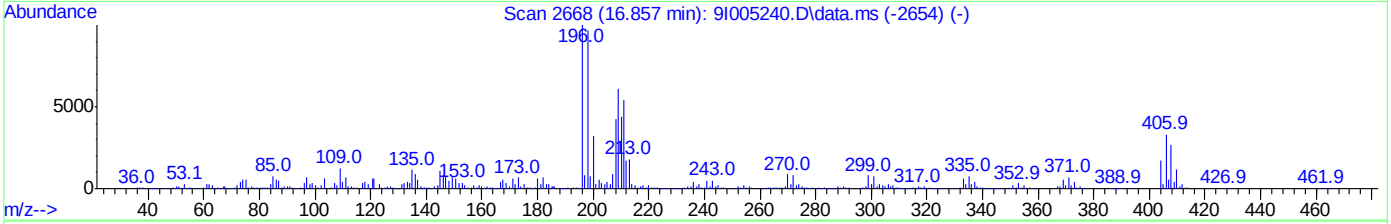
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072431.D
Acq On : 17 Aug 2020 3:30 pm
Operator : marthav
Sample : ic2953-50 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 18 09:38:35 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Mon Aug 17 14:57:23 2020
Response via : Initial Calibration







TIC: x072431.D\data.ms

(155) Hexachlorophene

15.956min (0.000) 32.12ppm m

response 19984

Ion	Exp%	Act%
196.00	100	100
198.00	96.50	102.31
209.00	60.90	65.13
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 08/18/20 14:38

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072432.D
Acq On : 17 Aug 2020 3:55 pm
Operator : marthav
Sample : ic2953-60 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 18 12:51:02 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Mon Aug 17 14:57:23 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	0.000	152	0m	40.00	ppm		-5.62
22) Naphthalene-d8	0.000	136	0m	40.00	ppm		-7.04
43) Acenaphthene-d10	0.000	164	0m	40.00	ppm		-9.08
70) Phenanthrene-d10	0.000	188	0m	40.00	ppm		-10.82
92) Chrysene-d12	0.000	240	0m	40.00	ppm		-14.02
102) Perylene-d12	0.000	264	0m	40.00	ppm		-16.19
110) 1,4-Dichlorobenzene-d4A	5.612	152	162283	40.00	ppm		0.00
120) Naphthalene-d8A	7.034	136	628782	40.00	ppm		0.00
127) Acenaphthene-d10A	9.072	164	305695	40.00	ppm		0.00
136) Phenanthrene-d10A	10.821	188	554999	40.00	ppm		0.00
146) Chrysene-d12A	14.009	240	381895	40.00	ppm		0.00
153) Perylene-d12A	16.196	264	300020	40.00	ppm		0.01
System Monitoring Compounds							
7) 2-Fluorophenol	0.000	112	0d	0.00	ppm		
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#			
9) Phenol-d5	0.000	99	0d	0.00	ppm		
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#			
23) Nitrobenzene-d5	0.000	82	0d	0.00	ppm		
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#			
47) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm		
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#			
75) 2,4,6-Tribromophenol	0.000	330	0d	0.00	ppm		
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#			
95) Terphenyl-d14	0.000	244	0d	0.00	ppm		
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#			
Target Compounds							Qvalue
111) 2-Picoline	3.579	93	477313	61.67	ppm		86
112) N-Nitrosomethylethylamine	3.718	42	343451	63.82	ppm	#	53
113) Methyl methanesulfonate	4.060	80	195856	51.90	ppm		92
114) N-Nitrosodiethylamine	4.472	102	204368	65.01	ppm	#	24
115) Ethyl methanesulfonate	4.815	79	327331	62.96	ppm		92
116) Pentachloroethane	5.307	167	139089	62.82	ppm		98
117) N-Nitrosopyrrolidine	6.066	100	180030	63.34	ppm	#	46
118) N-Nitrosomorpholine	6.109	56	304521	58.71	ppm	#	69
119) O-Toluidine	6.114	106	675485	63.58	ppm		98
121) N-Nitrosopiperidine	6.430	42	384074	66.40	ppm	#	56
122) A,A-Dimethylphenethyla...	6.895	58	1451288m	62.93	ppm		
123) Hexachloropropene	7.157	213	164894	62.48	ppm		99
124) N-Nitrosodi-n-butylamine	7.558	84	318171	70.44	ppm	#	52
125) p-Phenylenediamine	7.564	108	316120	52.99	ppm		92
126) Isosafrole	7.783	162	274022	63.96	ppm		82
128) Safrole	8.393	162	280841	69.86	ppm		90
129) 1-Chloronaphthalene	8.452	162	662971	69.24	ppm		97
130) Diphenyl Ether	8.548	170	456362	68.24	ppm		94
131) 1,4-Naphthoquinone	8.655	158	229446	61.28	ppm		87
132) Pentachlorobenzene	9.270	250	218883	64.97	ppm		98
133) 1-Naphthylamine	9.420	143	684677	64.48	ppm		96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072432.D
Acq On : 17 Aug 2020 3:55 pm
Operator : marthav
Sample : ic2953-60 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 18 12:51:02 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Mon Aug 17 14:57:23 2020
Response via : Initial Calibration

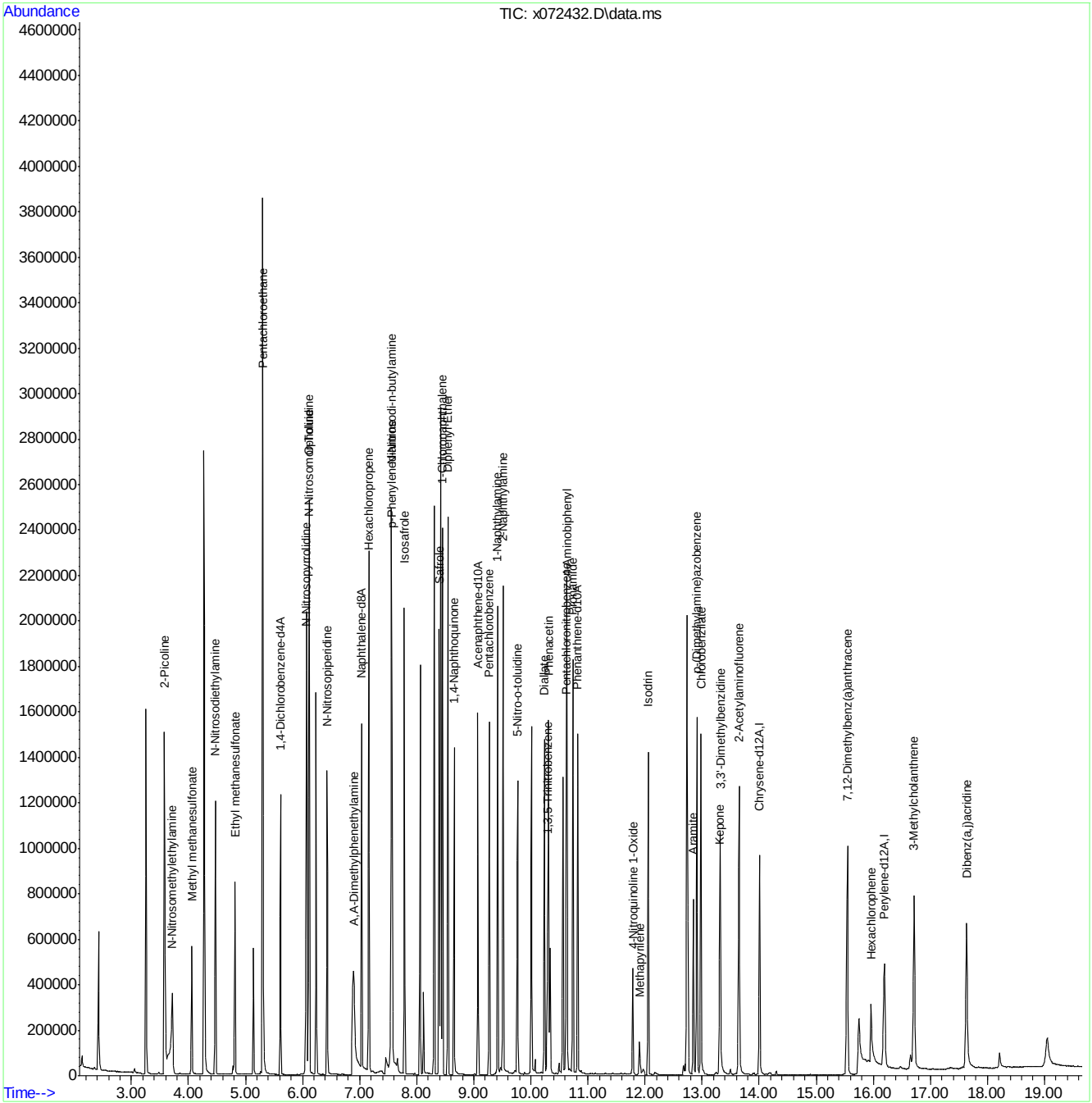
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
134) 2-Naphthylamine	9.516	143	730214	64.34	ppm	97
135) 5-Nitro-o-toluidine	9.767	152	227712	72.93	ppm	79
137) 1,3,5-Trinitrobenzene	10.297	75	192607	84.35	ppm	87
138) Diallate	10.238	43	601114m	69.11	ppm	
139) Phenacetin	10.313	108	379284	70.99	ppm	94
140) 4-Aminobiphenyl	10.634	169	737561	65.53	ppm	98
141) Pronamide	10.736	173	303035	69.52	ppm	98
142) Pentachloronitrobenzene	10.618	237	69829	64.88	ppm	92
143) 4-Nitroquinoline 1-Oxide	11.789	190	38258	54.33	ppm	93
144) Methapyrilene	11.902	58	88781m	31.18	ppm	
145) Isodrin	12.057	193	101774	64.63	ppm	85
147) Aramite	12.848	185	114059m	82.04	ppm	
148) p-(Dimethylamine)azobe...	12.912	120	285130	66.81	ppm	88
149) Chlorobenzilate	12.982	139	322886	64.82	ppm	82
150) Kepone	13.308	272	67066	390.08	ppm	91
151) 3,3'-Dimethylbenzidine	13.319	212	323042	52.37	ppm	99
152) 2-Acetylaminofluorene	13.650	181	407170	84.34	ppm	93
154) 7,12-Dimethylbenz(a)an...	15.549	256	311358	74.81	ppm	94
155) Hexachlorophene	15.961	196	48776	73.47	ppm	98
156) 3-Methylcholanthrene	16.715	268	288051	76.77	ppm	96
157) Dibenz(a,j)acridine	17.635	279	434677	88.04	ppm	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072432.D
Acq On : 17 Aug 2020 3:55 pm
Operator : marthav
Sample : ic2953-60 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 18 12:51:02 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Mon Aug 17 14:57:23 2020
Response via : Initial Calibration



Manual Integration Approval Summary

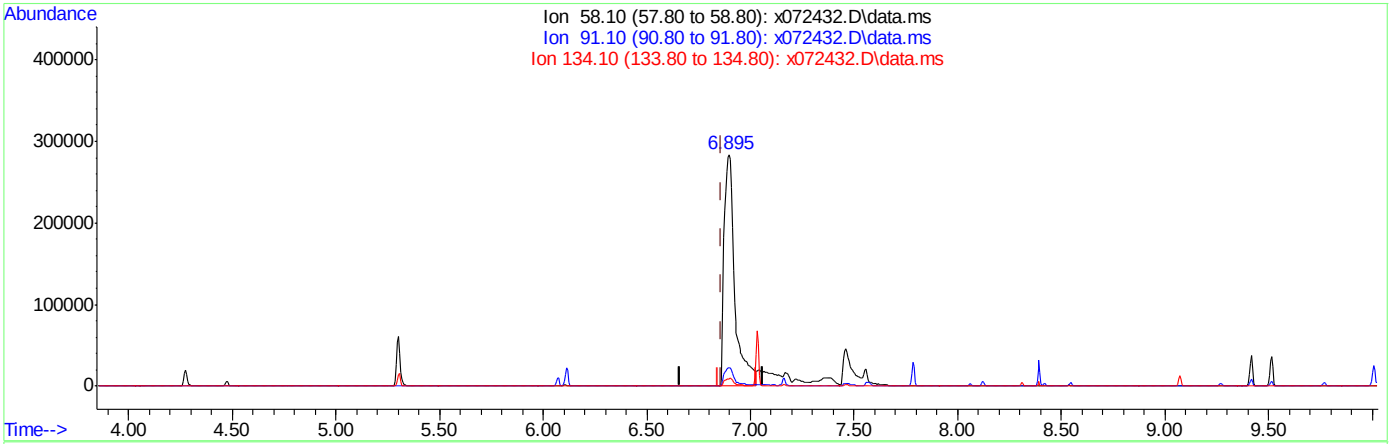
Sample Number: SX2953-IC2953
Lab FileID: X072432.D
Injection Time: 08/17/20 15:55
Method: SW846 8270D
Analyst approved: 08/18/20 14:01 Martha Valls
Supervisor approved: 08/18/20 14:38 Nicole McCampbell

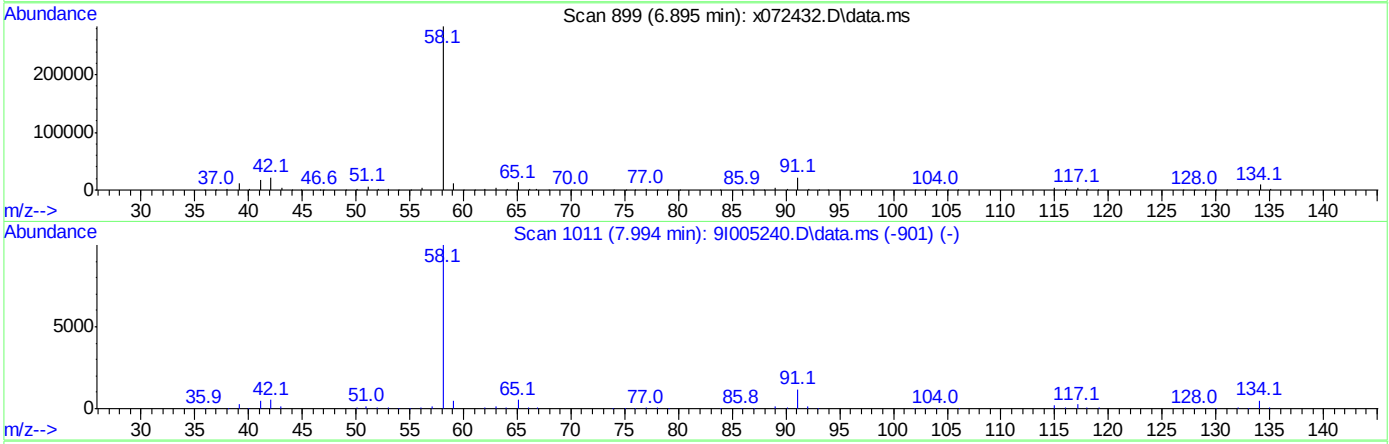
Parameter	CAS	Sig#	R.T. (min.)	Reason
A,A-Dimethylphenethylamine	122-09-8		6.90	Split peak
Diallate	2303-16-4		10.24	Split peak
Methapyrilene	91-80-5		11.90	Split peak
Aramite	140-57-8		12.85	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072432.D
Acq On : 17 Aug 2020 3:55 pm
Operator : marthav
Sample : ic2953-60 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 18 09:38:37 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Mon Aug 17 14:57:23 2020
Response via : Initial Calibration





TIC: x072432.D\data.ms

(122) A,A-Dimethylphenethylamine

6.895min (+0.032) 44.93ppm

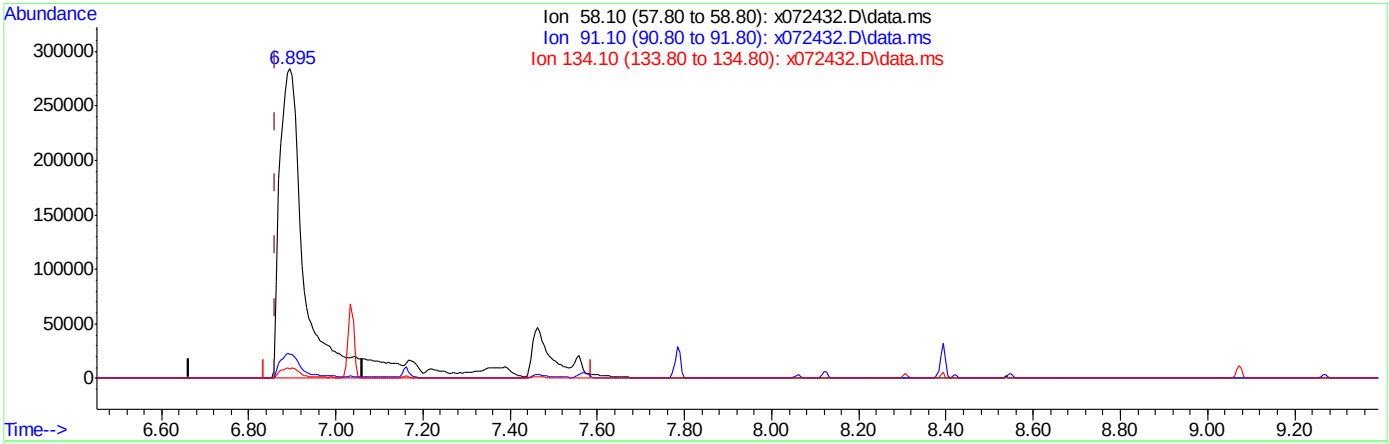
response 1036247

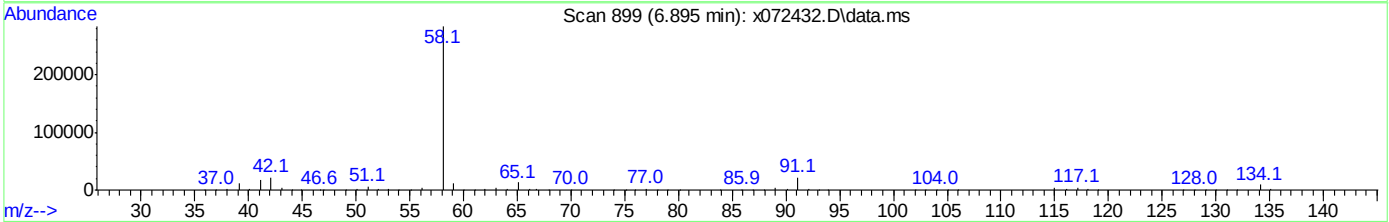
Ion	Exp%	Act%
58.10	100	100
91.10	11.70	7.73
134.10	5.10	0.00
0.00	0.00	0.00

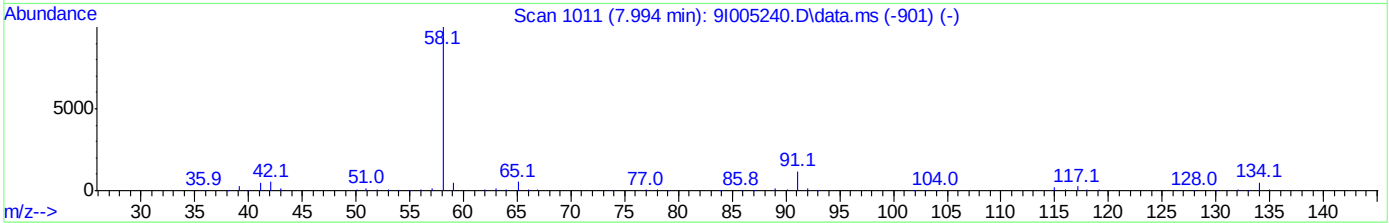
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072432.D
Acq On : 17 Aug 2020 3:55 pm
Operator : marthav
Sample : ic2953-60 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 18 09:38:37 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Mon Aug 17 14:57:23 2020
Response via : Initial Calibration







TIC: x072432.D\data.ms

(122) A,A-Dimethylphenethylamine

6.895min (+0.032) 55.59ppm m

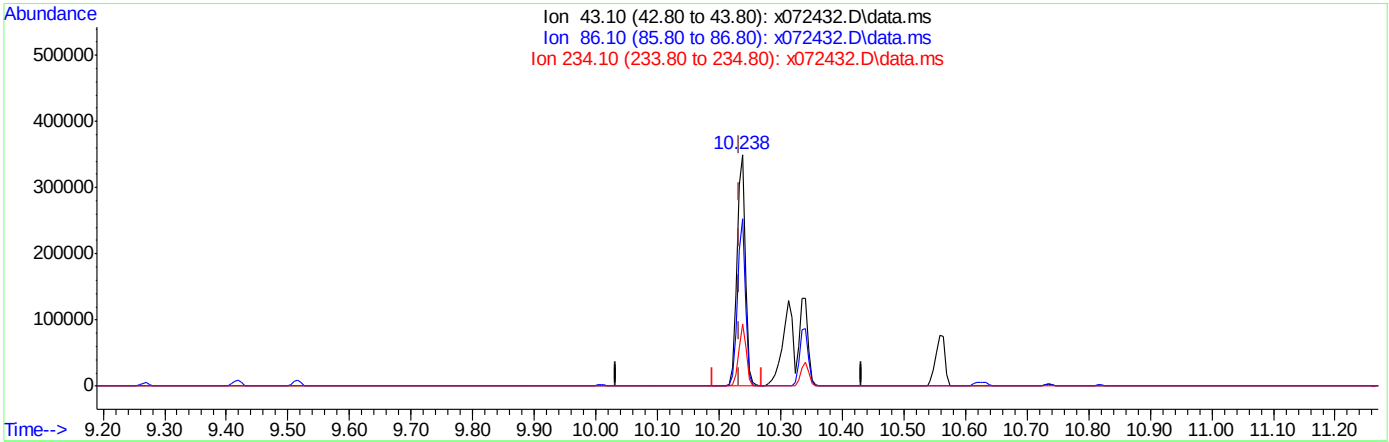
response 1282187

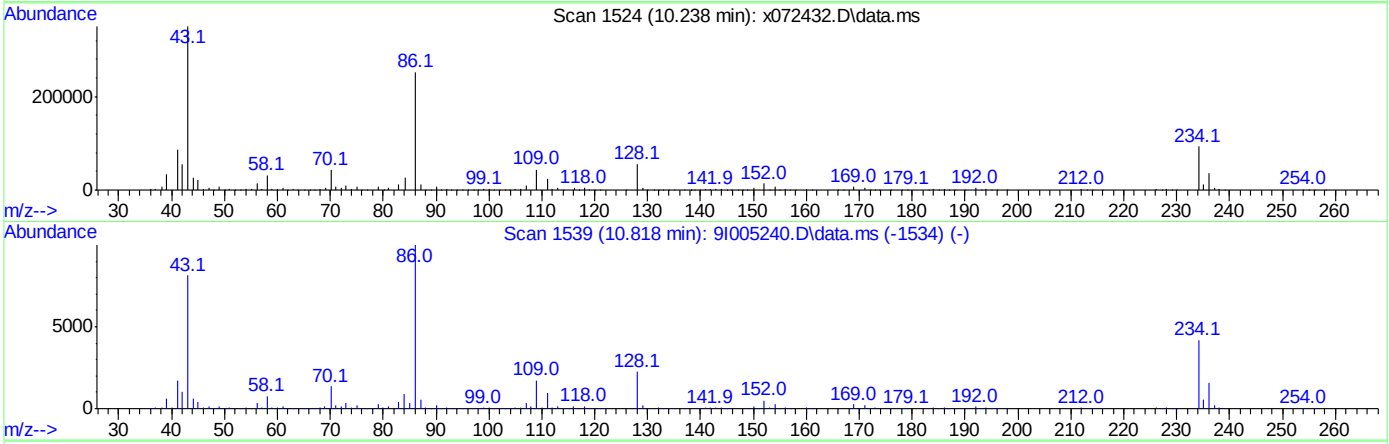
Ion	Exp%	Act%
58.10	100	100
91.10	11.70	7.81
134.10	5.10	3.20
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072432.D
Acq On : 17 Aug 2020 3:55 pm
Operator : marthav
Sample : ic2953-60 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 18 09:38:37 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Mon Aug 17 14:57:23 2020
Response via : Initial Calibration





TIC: x072432.D\data.ms

(138) Diallate

10.238min (+0.005) 37.27ppm

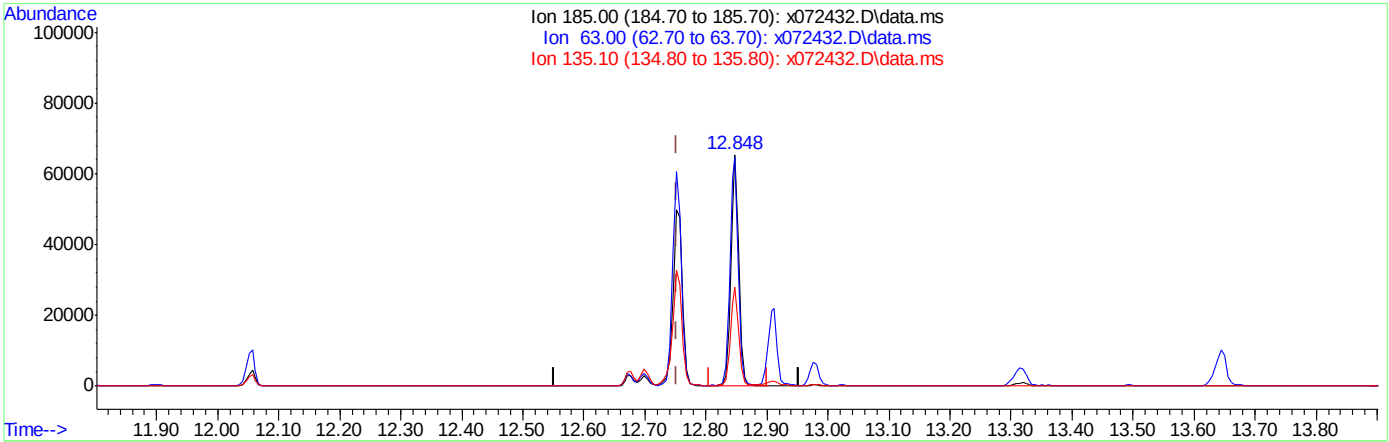
response 324189

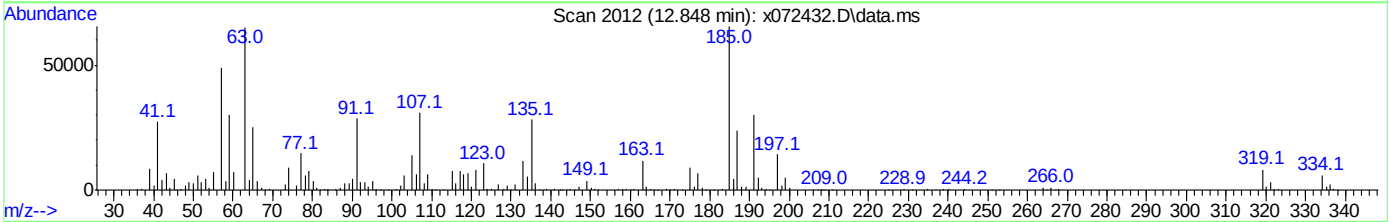
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	72.20#
234.10	51.50	26.75
0.00	0.00	0.00

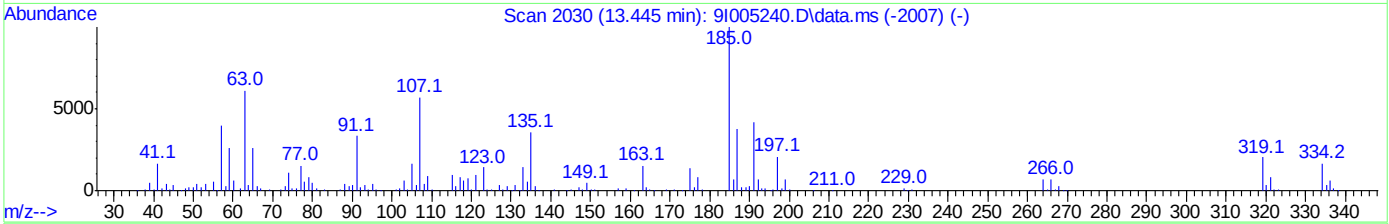
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072432.D
Acq On : 17 Aug 2020 3:55 pm
Operator : marthav
Sample : ic2953-60 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 18 09:38:37 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Mon Aug 17 14:57:23 2020
Response via : Initial Calibration







TIC: x072432.D\data.ms

(147) Aramite

12.848min (+0.096) 44.63ppm

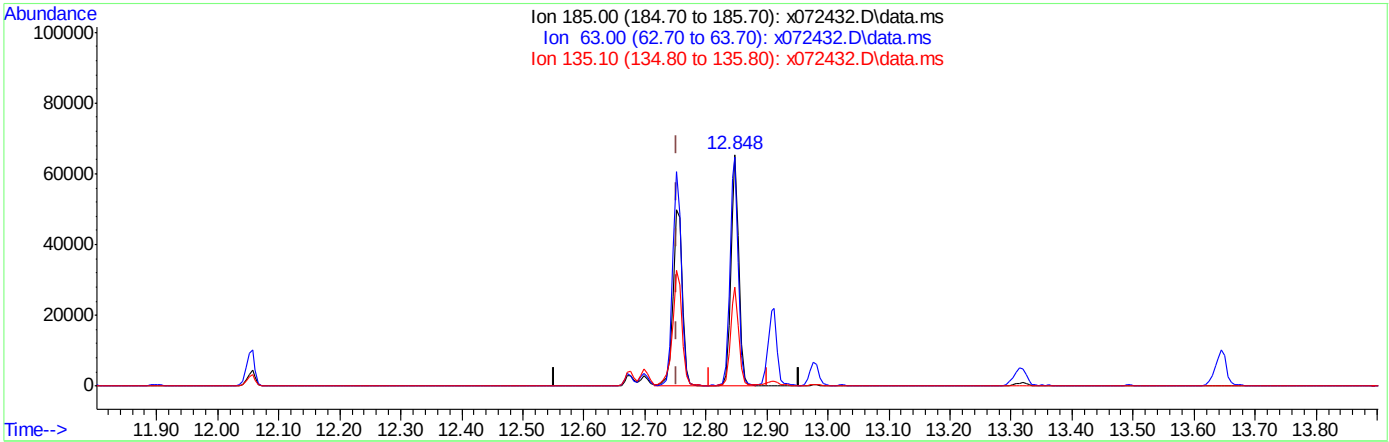
response 62044

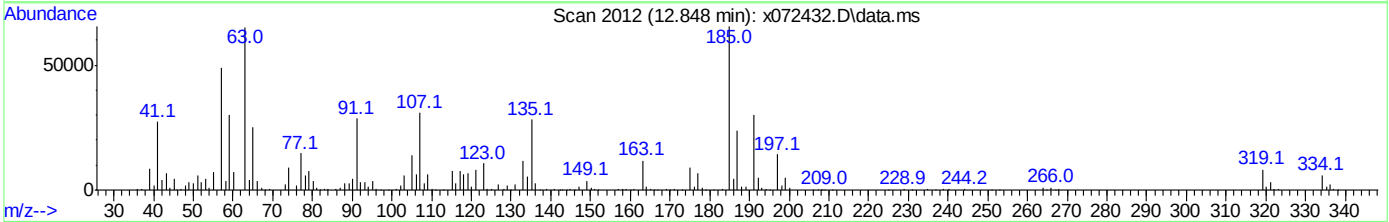
Ion	Exp%	Act%
185.00	100	100
63.00	61.10	89.03
135.10	35.60	41.93
0.00	0.00	0.00

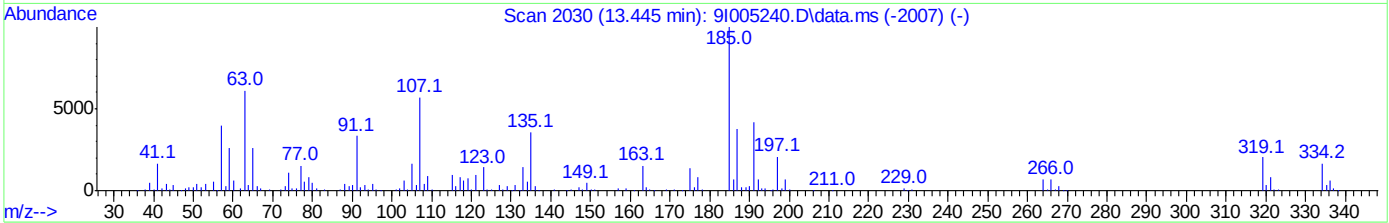
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072432.D
Acq On : 17 Aug 2020 3:55 pm
Operator : marthav
Sample : ic2953-60 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 18 09:38:37 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Mon Aug 17 14:57:23 2020
Response via : Initial Calibration







TIC: x072432.D\data.ms

(147) Aramite

12.848min (+0.096) 82.04ppm m

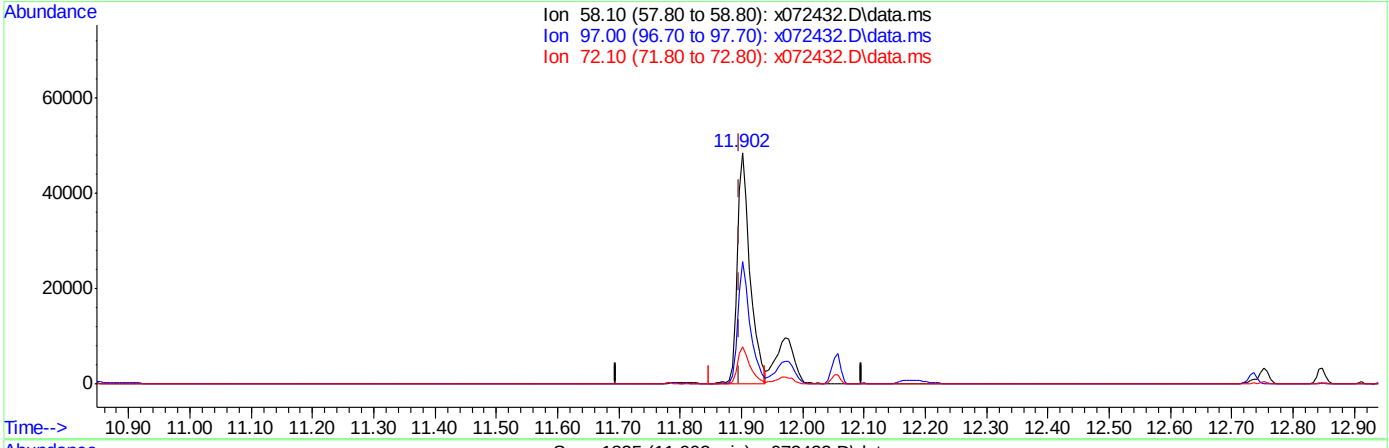
response 114059

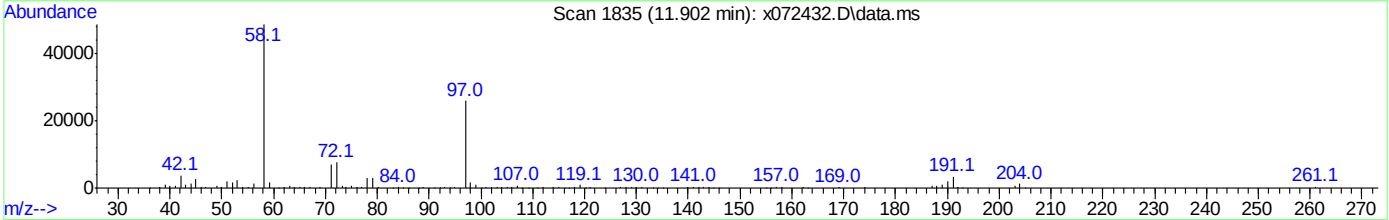
Ion	Exp%	Act%
185.00	100	100
63.00	61.10	99.03#
135.10	35.60	42.94
0.00	0.00	0.00

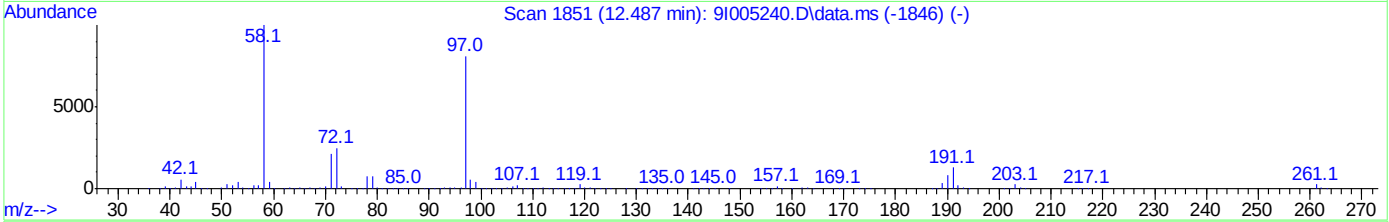
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072432.D
Acq On : 17 Aug 2020 3:55 pm
Operator : marthav
Sample : ic2953-60 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 18 09:38:37 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Mon Aug 17 14:57:23 2020
Response via : Initial Calibration







TIC: x072432.D\data.ms

(144) Methapyrilene

11.902min (+0.005) 24.13ppm

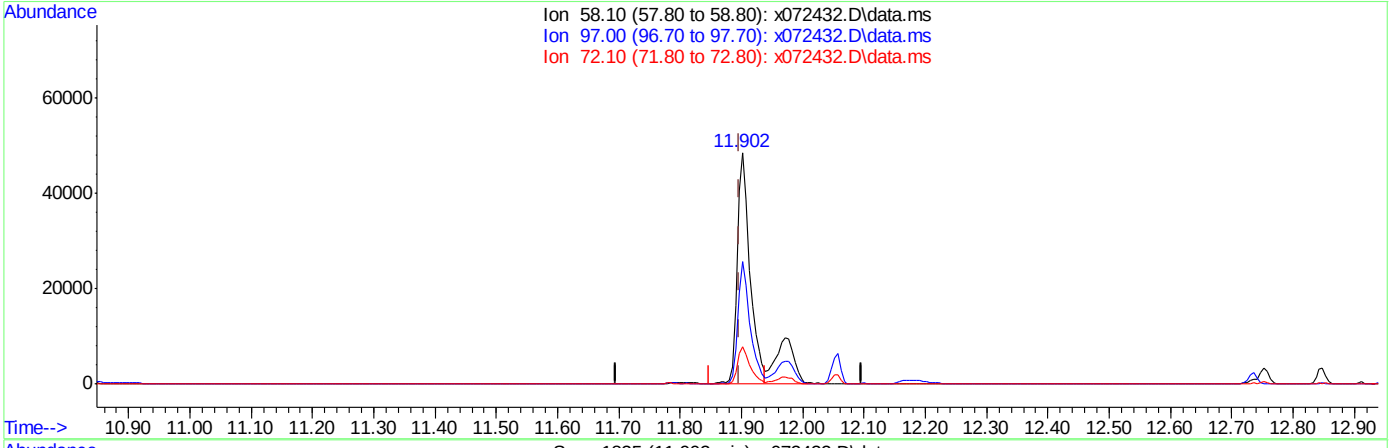
response 68717

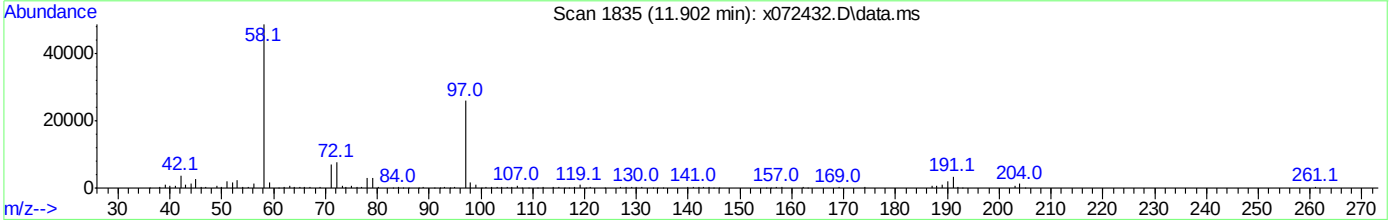
Ion	Exp%	Act%
58.10	100	100
97.00	80.90	53.19
72.10	24.80	15.98
0.00	0.00	0.00

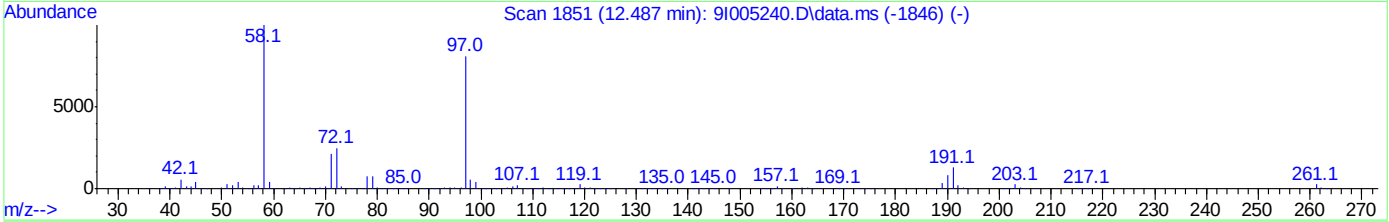
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072432.D
Acq On : 17 Aug 2020 3:55 pm
Operator : marthav
Sample : ic2953-60 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 18 09:38:37 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Mon Aug 17 14:57:23 2020
Response via : Initial Calibration







TIC: x072432.D\data.ms

(144) Methapyrilene

11.902min (+0.005) 31.18ppm m

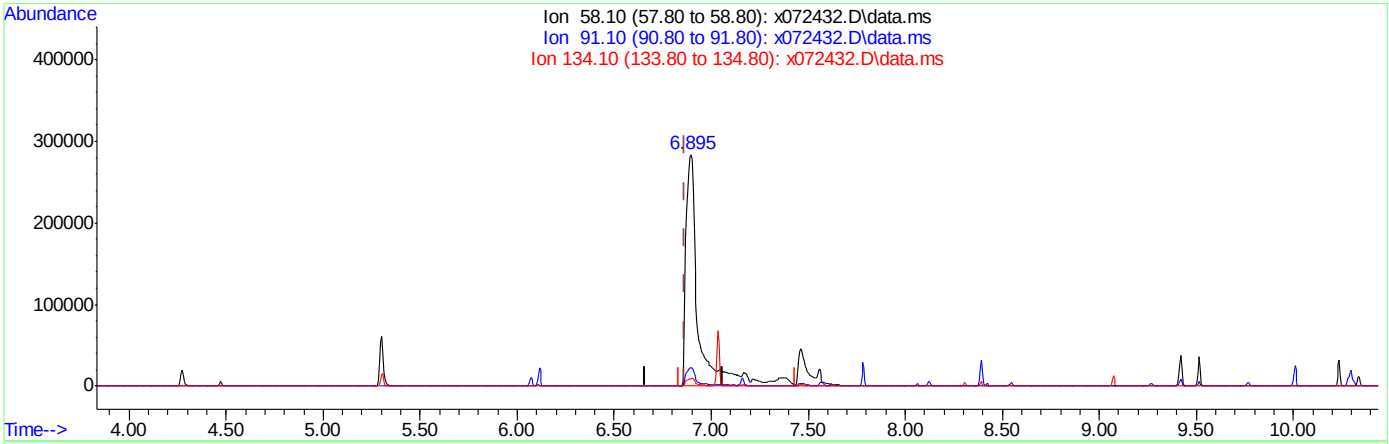
response 88781

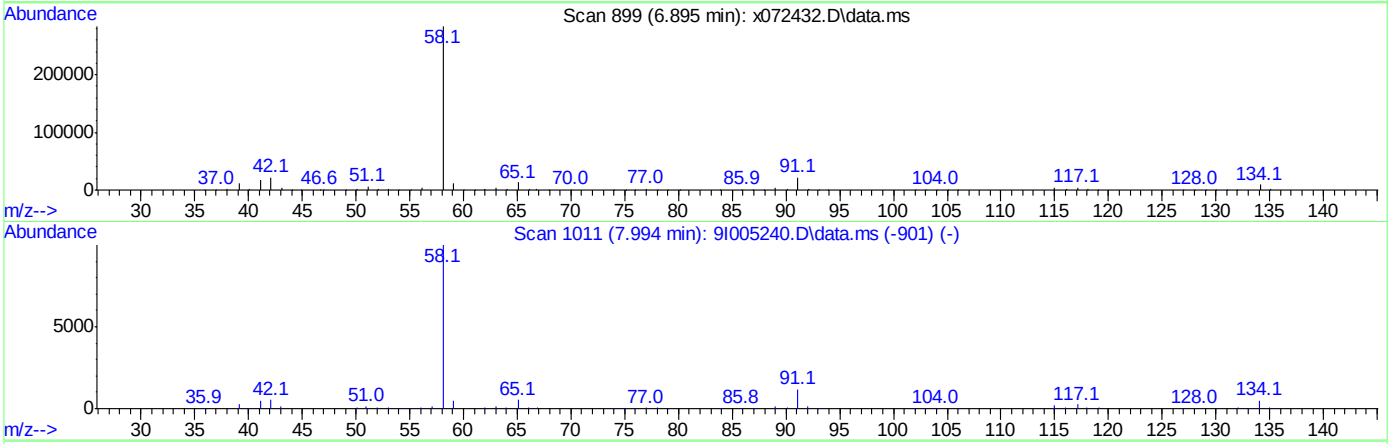
Ion	Exp%	Act%
58.10	100	100
97.00	80.90	53.11
72.10	24.80	15.97
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072432.D
Acq On : 17 Aug 2020 3:55 pm
Operator : marthav
Sample : ic2953-60 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 18 10:18:53 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Mon Aug 17 14:57:23 2020
Response via : Initial Calibration





TIC: x072432.D\data.ms

(122) A,A-Dimethylphenethylamine

6.895min (+0.032) 62.93ppm m

response 1451288

Ion	Exp%	Act%
58.10	100	100
91.10	11.70	7.81
134.10	5.10	3.20
0.00	0.00	0.00

X072433.D

Manual Integrations APPROVED (compounds with "m" flag)

Nicole McCampbell 08/18/20 14:38

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072433.D
Acq On : 17 Aug 2020 4:21 pm
Operator : marthav
Sample : ic2953-75 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 18 12:51:19 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Mon Aug 17 14:57:23 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	0.000	152	0m	40.00	ppm		-5.62
22) Naphthalene-d8	0.000	136	0m	40.00	ppm		-7.04
43) Acenaphthene-d10	0.000	164	0m	40.00	ppm		-9.08
70) Phenanthrene-d10	0.000	188	0m	40.00	ppm		-10.82
92) Chrysene-d12	0.000	240	0m	40.00	ppm		-14.02
102) Perylene-d12	0.000	264	0m	40.00	ppm		-16.19
110) 1,4-Dichlorobenzene-d4A	5.612	152	160559	40.00	ppm		0.00
120) Naphthalene-d8A	7.034	136	624414	40.00	ppm		0.00
127) Acenaphthene-d10A	9.072	164	297295	40.00	ppm		0.00
136) Phenanthrene-d10A	10.821	188	536180	40.00	ppm		0.00
146) Chrysene-d12A	14.009	240	369357	40.00	ppm		0.00
153) Perylene-d12A	16.202	264	296235	40.00	ppm		0.02
System Monitoring Compounds							
7) 2-Fluorophenol	0.000	112	0d	0.00	ppm		
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#			
9) Phenol-d5	0.000	99	0d	0.00	ppm		
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#			
23) Nitrobenzene-d5	0.000	82	0d	0.00	ppm		
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#			
47) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm		
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#			
75) 2,4,6-Tribromophenol	0.000	330	0d	0.00	ppm		
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#			
95) Terphenyl-d14	0.000	244	0d	0.00	ppm		
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#			
Target Compounds							Qvalue
111) 2-Picoline	3.579	93	583222	76.17	ppm		85
112) N-Nitrosomethylethylamine	3.724	42	416395	78.20	ppm	#	52
113) Methyl methanesulfonate	4.061	80	236208	63.27	ppm		92
114) N-Nitrosodiethylamine	4.478	102	246254	79.18	ppm	#	31
115) Ethyl methanesulfonate	4.820	79	396499	77.08	ppm		94
116) Pentachloroethane	5.307	167	168315	76.84	ppm		99
117) N-Nitrosopyrrolidine	6.066	100	218238	77.61	ppm	#	31
118) N-Nitrosomorpholine	6.109	56	368814	71.87	ppm	#	69
119) O-Toluidine	6.120	106	805835	76.66	ppm		99
121) N-Nitrosopiperidine	6.430	42	455634	79.32	ppm	#	56
122) A,A-Dimethylphenethyla...	6.927	58	1753399m	76.56	ppm		
123) Hexachloropropene	7.157	213	200501	76.50	ppm		99
124) N-Nitrosodi-n-butylamine	7.559	84	384453	85.71	ppm	#	51
125) p-Phenylenediamine	7.569	108	368375m	62.18	ppm		
126) Isosafrole	7.789	162	332389	78.13	ppm		89
128) Safrole	8.393	162	338378	86.55	ppm		91
129) 1-Chloronaphthalene	8.452	162	788538	84.68	ppm		97
130) Diphenyl Ether	8.548	170	542977	83.48	ppm		94
131) 1,4-Naphthoquinone	8.655	158	261067	71.70	ppm		86
132) Pentachlorobenzene	9.270	250	262431	80.09	ppm		99
133) 1-Naphthylamine	9.420	143	811772	78.61	ppm		94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072433.D
Acq On : 17 Aug 2020 4:21 pm
Operator : marthav
Sample : ic2953-75 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 18 12:51:19 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Mon Aug 17 14:57:23 2020
Response via : Initial Calibration

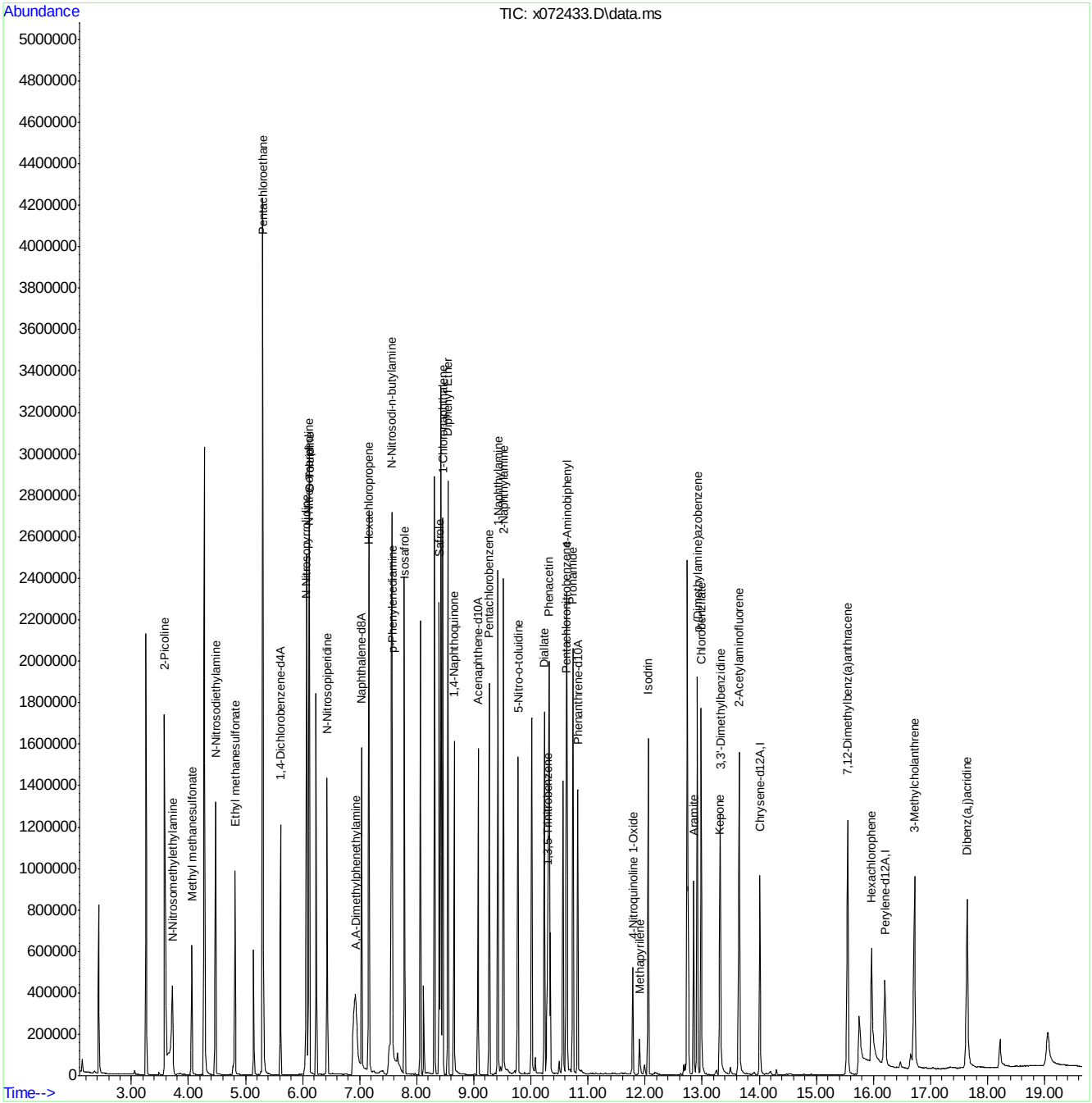
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
134) 2-Naphthylamine	9.516	143	882844	79.99	ppm	97
135) 5-Nitro-o-toluidine	9.773	152	273828	90.17	ppm	84
137) 1,3,5-Trinitrobenzene	10.297	75	237485	107.66	ppm	88
138) Diallate	10.238	43	722010m	85.92	ppm	
139) Phenacetin	10.319	108	460298	89.18	ppm	93
140) 4-Aminobiphenyl	10.634	169	857043	78.81	ppm	98
141) Pronamide	10.736	173	359174	85.29	ppm	98
142) Pentachloronitrobenzene	10.618	237	82783	79.62	ppm	89
143) 4-Nitroquinoline 1-Oxide	11.789	190	46037	67.67	ppm	94
144) Methapyrilene	11.902	58	104261m	37.90	ppm	
145) Isodrin	12.057	193	120786	79.40	ppm	86
147) Aramite	12.848	185	137680m	102.39	ppm	
148) p-(Dimethylamine)azobe...	12.913	120	339084	82.14	ppm	87
149) Chlorobenzilate	12.982	139	385619	80.04	ppm	81
150) Kepone	13.308	272	78338	471.11	ppm	92
151) 3,3'-Dimethylbenzidine	13.319	212	378350	63.42	ppm	99
152) 2-Acetylaminofluorene	13.651	181	501399	107.39	ppm	92
154) 7,12-Dimethylbenz(a)an...	15.549	256	378888	92.20	ppm	93
155) Hexachlorophene	15.967	196	116848	178.27	ppm	99
156) 3-Methylcholanthrene	16.721	268	355226	95.88	ppm	96
157) Dibenz(a,j)acridine	17.641	279	573199	117.58	ppm	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072433.D
Acq On : 17 Aug 2020 4:21 pm
Operator : marthav
Sample : ic2953-75 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 18 12:51:19 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Mon Aug 17 14:57:23 2020
Response via : Initial Calibration



8270DApp9SX-081720.m Tue Aug 18 13:45:10 2020 Page: 3

Manual Integration Approval Summary

Sample Number: SX2953-IC2953
Lab FileID: X072433.D
Injection Time: 08/17/20 16:21

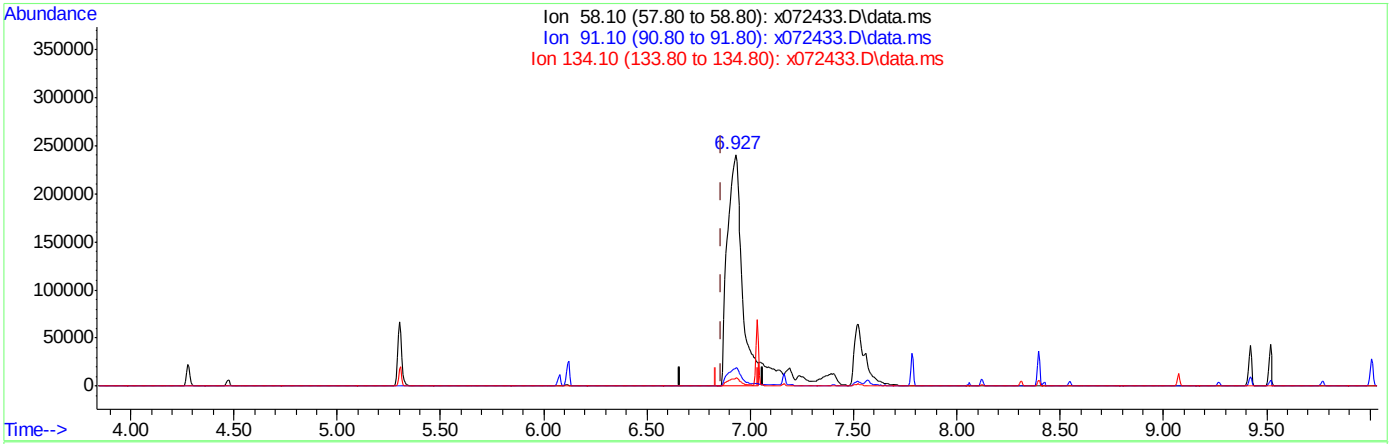
Method: SW846 8270D
Analyst approved: 08/18/20 14:01 Martha Valls
Supervisor approved: 08/18/20 14:38 Nicole McCampbell

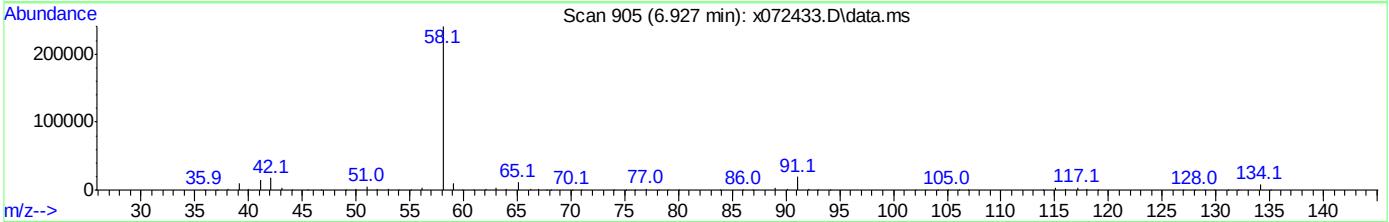
Parameter	CAS	Sig#	R.T. (min.)	Reason
A,A-Dimethylphenethylamine	122-09-8		6.93	Split peak
p-Phenylenediamine	106-50-3		7.57	Split peak
Diallate	2303-16-4		10.24	Split peak
Methapyrilene	91-80-5		11.90	Split peak
Aramite	140-57-8		12.85	Split peak

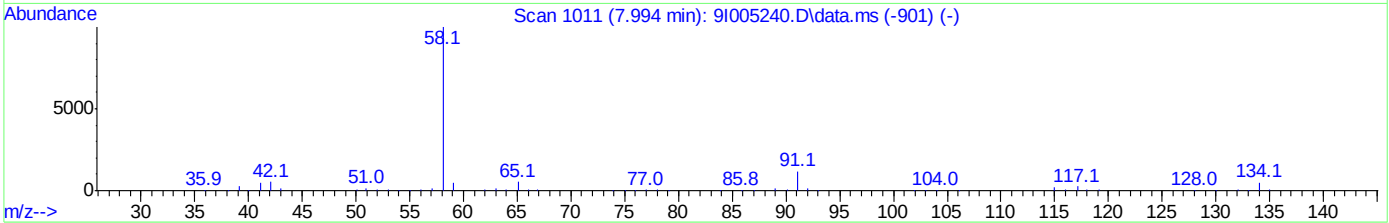
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072433.D
Acq On : 17 Aug 2020 4:21 pm
Operator : marthav
Sample : ic2953-75 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 18 09:38:39 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Mon Aug 17 14:57:23 2020
Response via : Initial Calibration







TIC: x072433.D\data.ms

(122) A,A-Dimethylphenethylamine

6.927min (+0.064) 53.57ppm

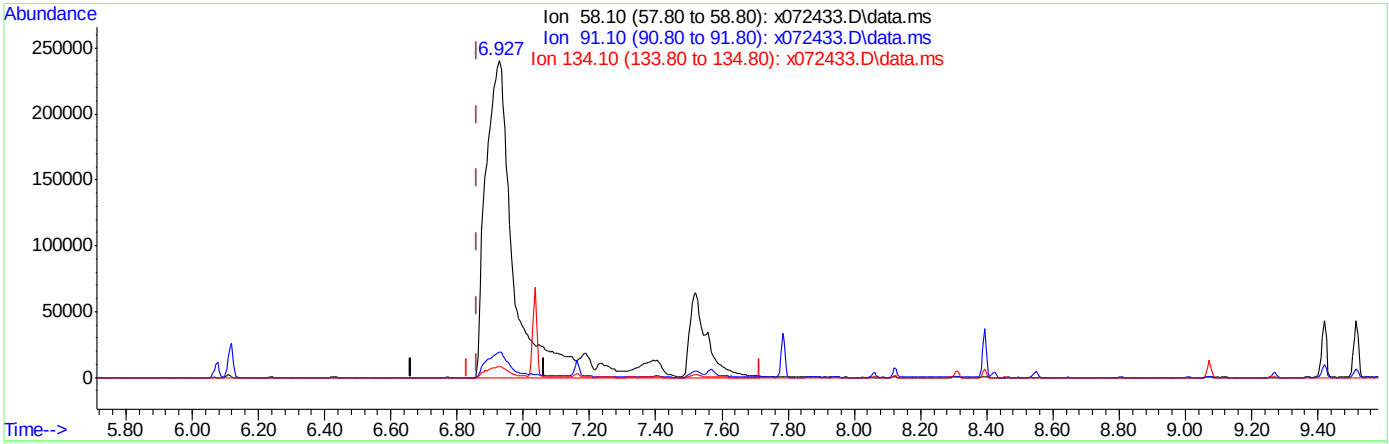
response 1226867

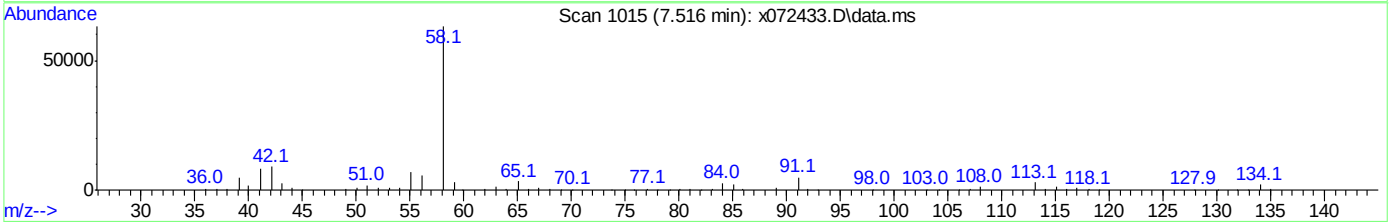
Ion	Exp%	Act%
58.10	100	100
91.10	11.70	7.87
134.10	5.10	0.00
0.00	0.00	0.00

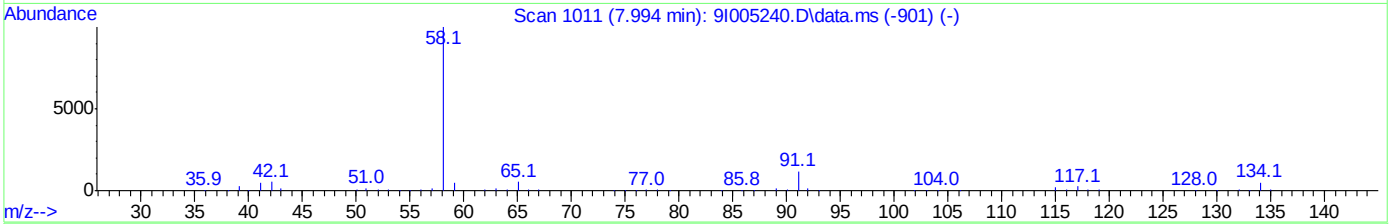
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072433.D
Acq On : 17 Aug 2020 4:21 pm
Operator : marthav
Sample : ic2953-75 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 18 09:38:39 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Mon Aug 17 14:57:23 2020
Response via : Initial Calibration







TIC: x072433.D\data.ms

(122) A,A-Dimethylphenethylamine

6.927min (+0.064) 76.56ppm m

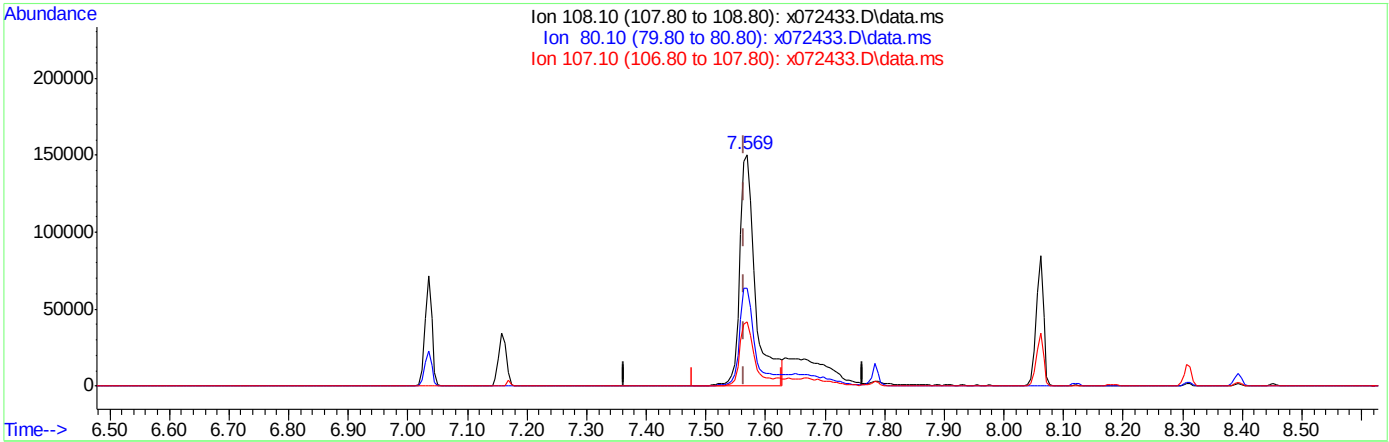
response 1753399

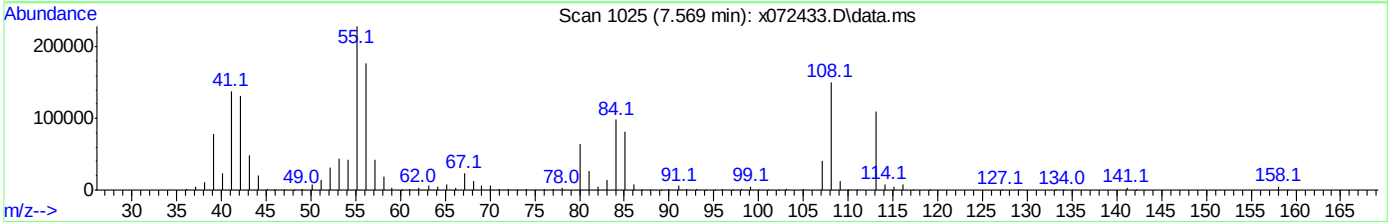
Ion	Exp%	Act%
58.10	100	100
91.10	11.70	8.02
134.10	5.10	3.60
0.00	0.00	0.00

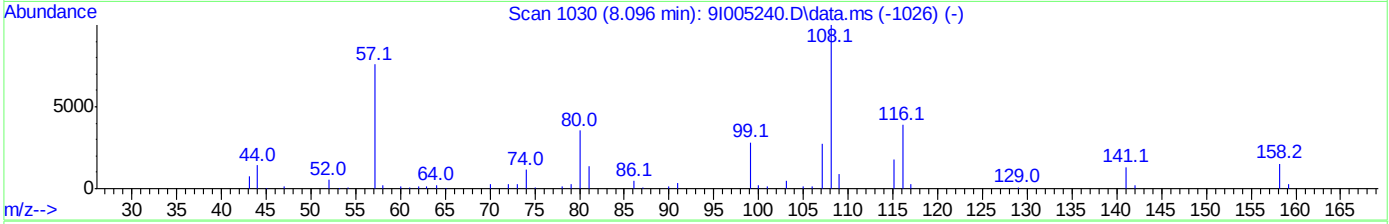
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072433.D
Acq On : 17 Aug 2020 4:21 pm
Operator : marthav
Sample : ic2953-75 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 18 09:38:39 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Mon Aug 17 14:57:23 2020
Response via : Initial Calibration







TIC: x072433.D\data.ms

(125) p-Phenylenediamine

7.569min (+0.005) 46.64ppm

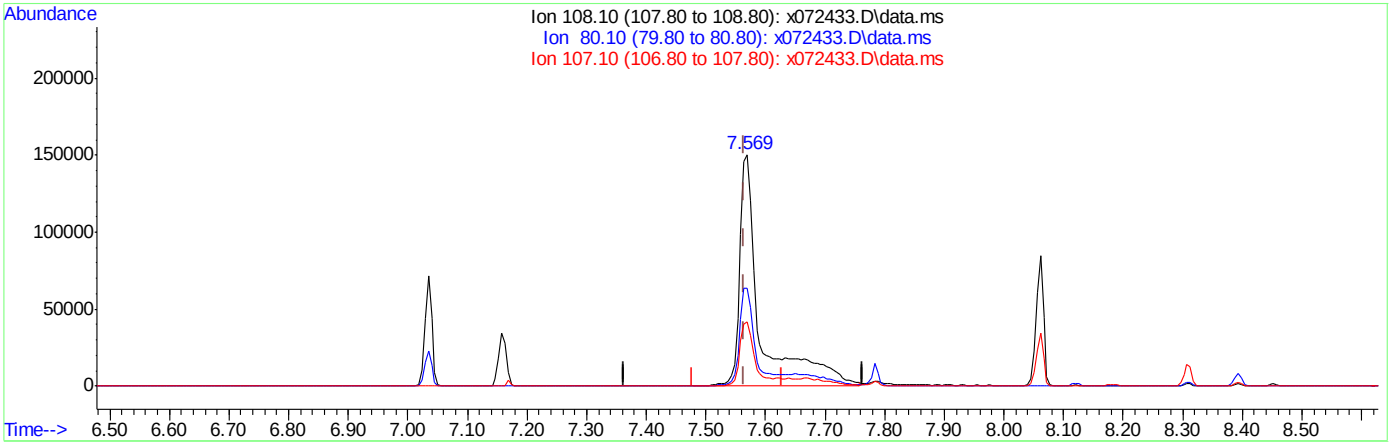
response 276314

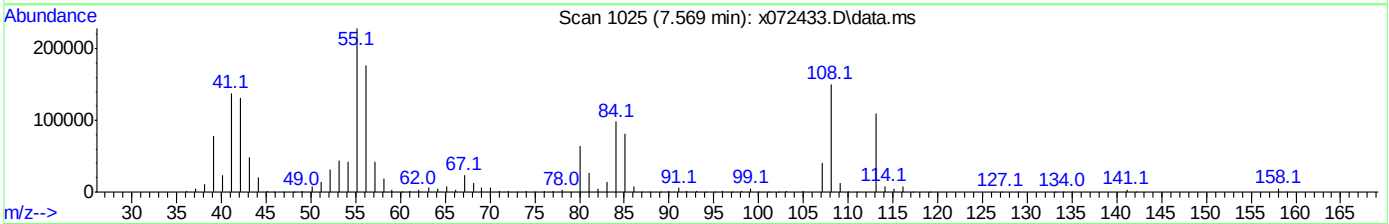
Ion	Exp%	Act%
108.10	100	100
80.10	35.50	42.39
107.10	27.70	27.61
0.00	0.00	0.00

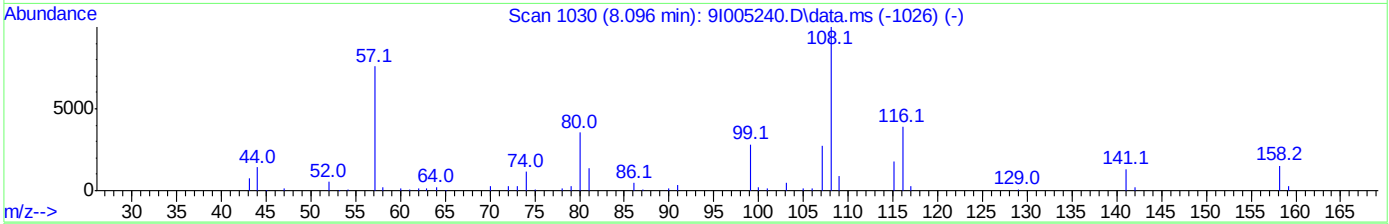
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072433.D
Acq On : 17 Aug 2020 4:21 pm
Operator : marthav
Sample : ic2953-75 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 18 09:38:39 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Mon Aug 17 14:57:23 2020
Response via : Initial Calibration







TIC: x072433.D\data.ms

(125) p-Phenylenediamine

7.569min (+0.005) 62.18ppm m

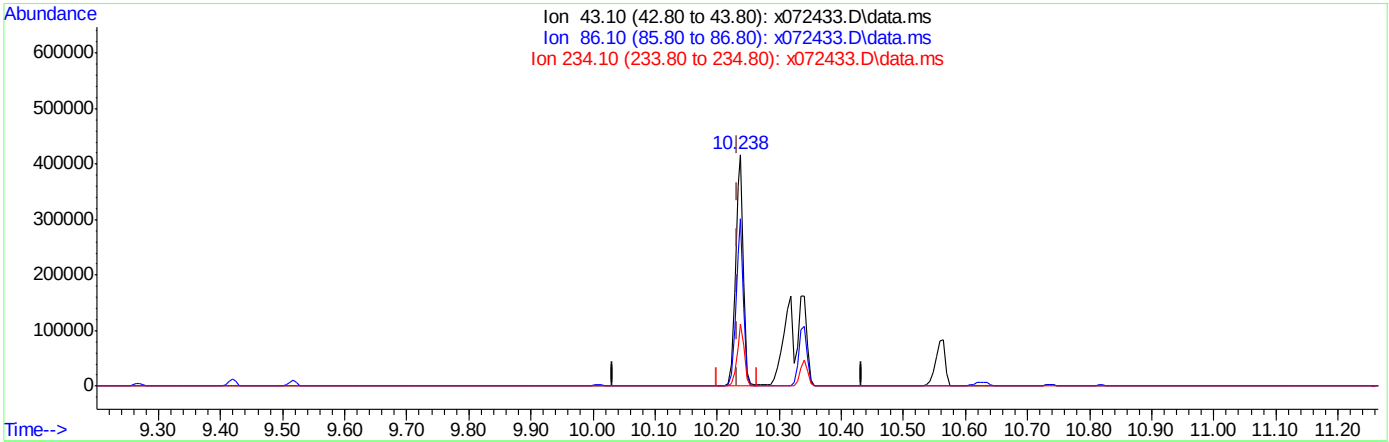
response 368375

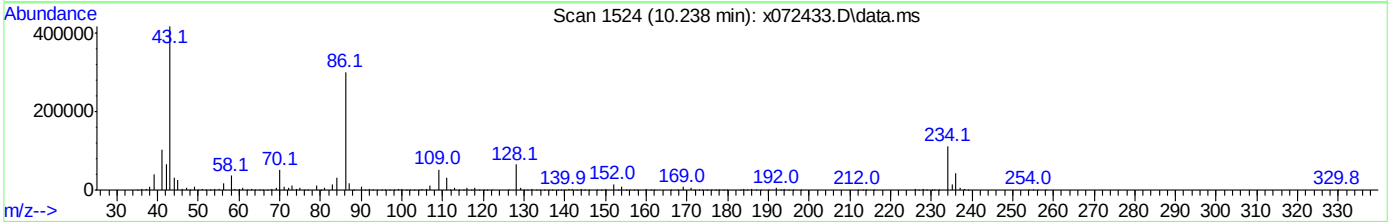
Ion	Exp%	Act%
108.10	100	100
80.10	35.50	42.47
107.10	27.70	27.57
0.00	0.00	0.00

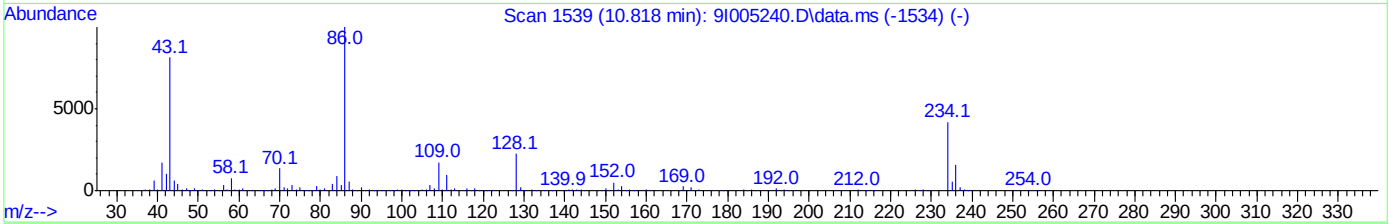
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072433.D
Acq On : 17 Aug 2020 4:21 pm
Operator : marthav
Sample : ic2953-75 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 18 09:38:39 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Mon Aug 17 14:57:23 2020
Response via : Initial Calibration







TIC: x072433.D\data.ms

(138) Diallate

10.238min (+0.005) 46.29ppm

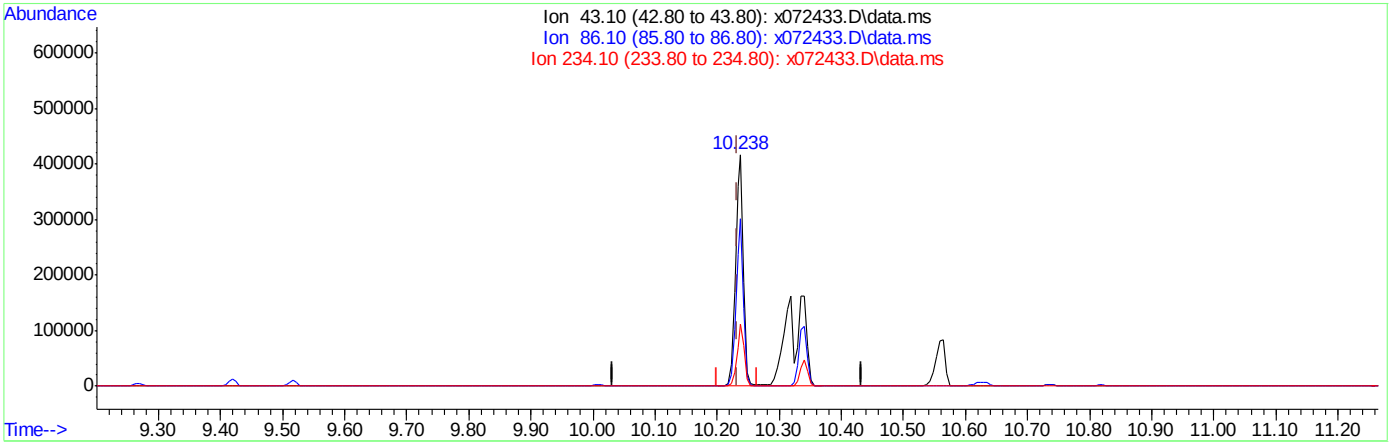
response 388998

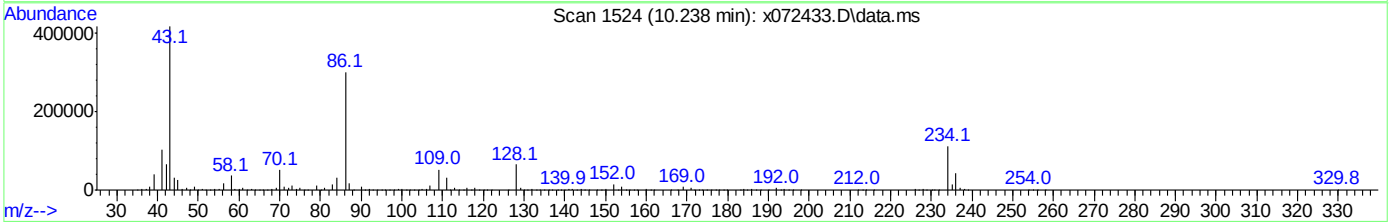
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	72.34#
234.10	51.50	26.97
0.00	0.00	0.00

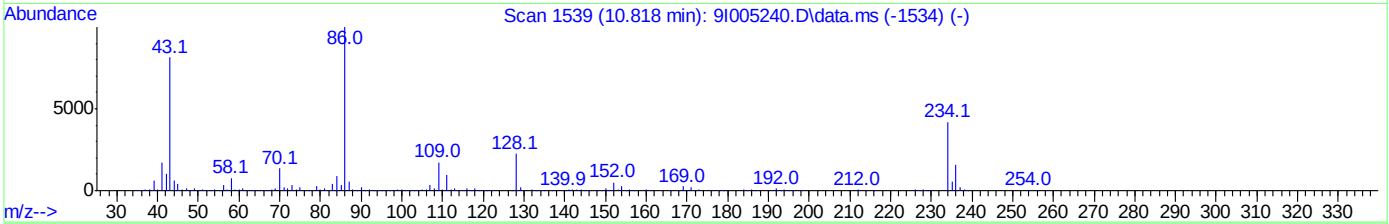
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072433.D
Acq On : 17 Aug 2020 4:21 pm
Operator : marthav
Sample : ic2953-75 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 18 09:38:39 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Mon Aug 17 14:57:23 2020
Response via : Initial Calibration







TIC: x072433.D\data.ms

(138) Diallate

10.238min (+0.005) 85.92ppm m

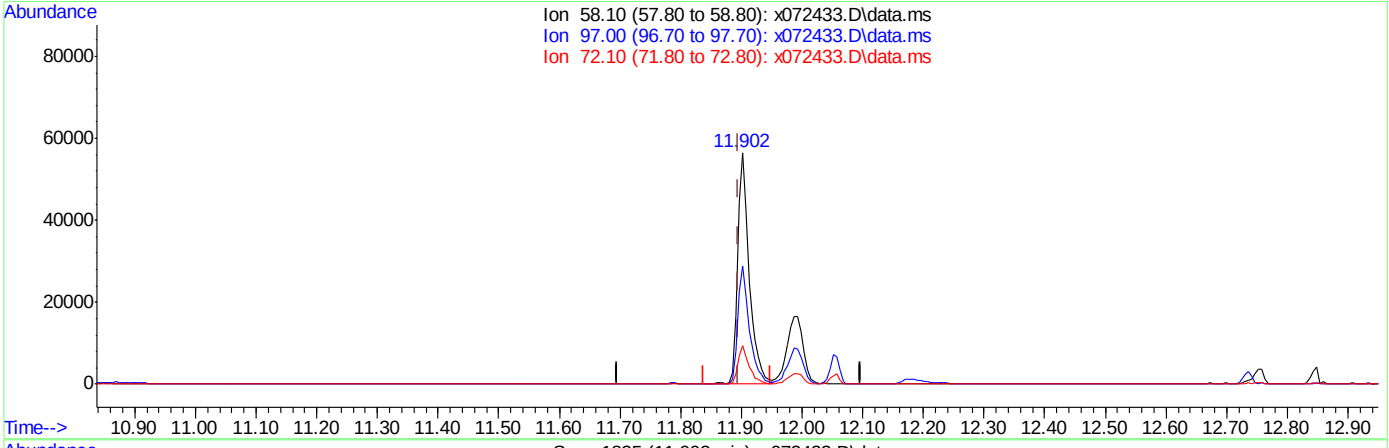
response 722010

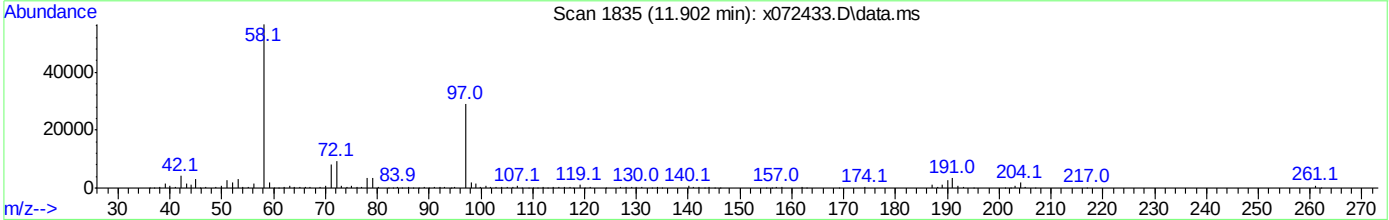
Ion	Exp%	Act%
43.10	100	100
86.10	123.10	72.22#
234.10	51.50	26.89
0.00	0.00	0.00

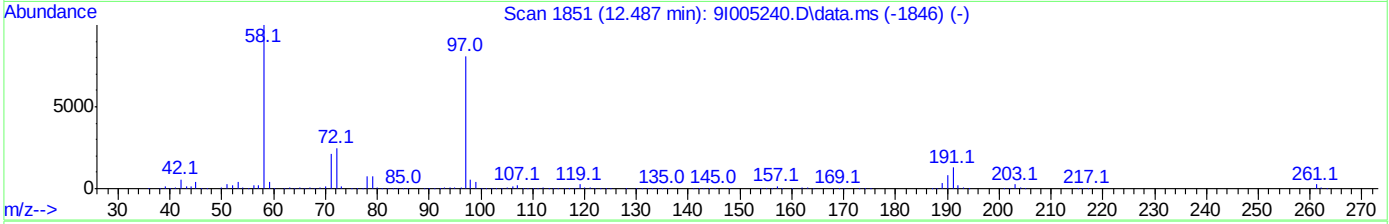
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072433.D
Acq On : 17 Aug 2020 4:21 pm
Operator : marthav
Sample : ic2953-75 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 18 09:38:39 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Mon Aug 17 14:57:23 2020
Response via : Initial Calibration







TIC: x072433.D\data.ms

(144) Methapyrilene

11.902min (+0.005) 26.83ppm

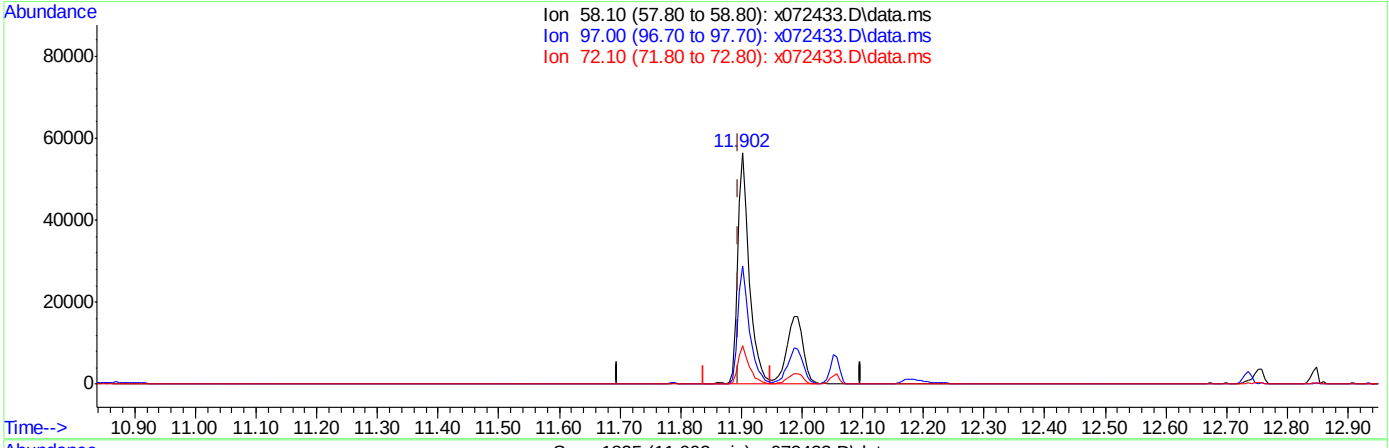
response 73799

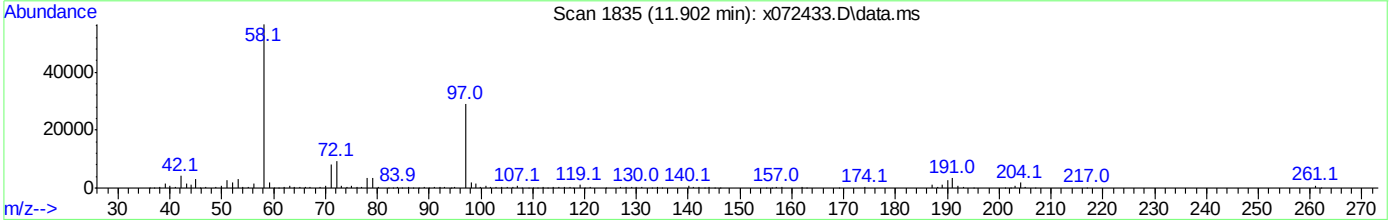
Ion	Exp%	Act%
58.10	100	100
97.00	80.90	51.16
72.10	24.80	16.48
0.00	0.00	0.00

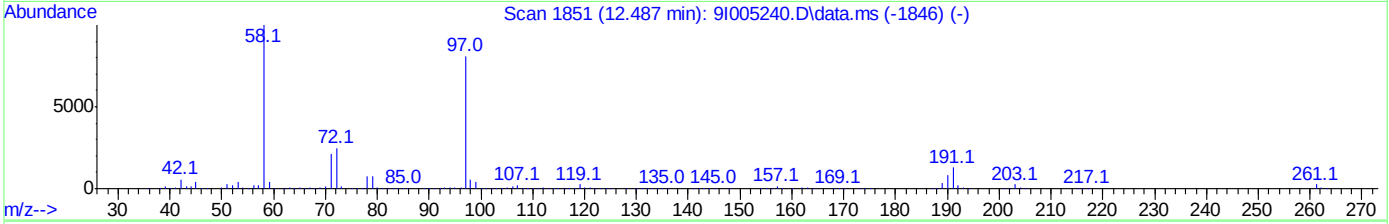
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072433.D
Acq On : 17 Aug 2020 4:21 pm
Operator : marthav
Sample : ic2953-75 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 18 09:38:39 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Mon Aug 17 14:57:23 2020
Response via : Initial Calibration







TIC: x072433.D\data.ms

(144) Methapyrilene

11.902min (+0.005) 37.90ppm m

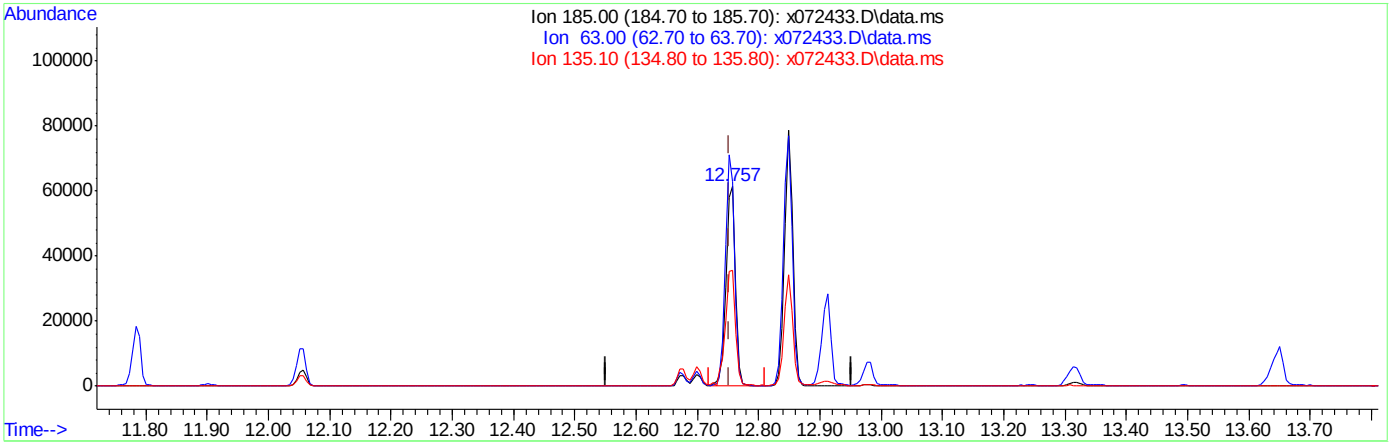
response 104261

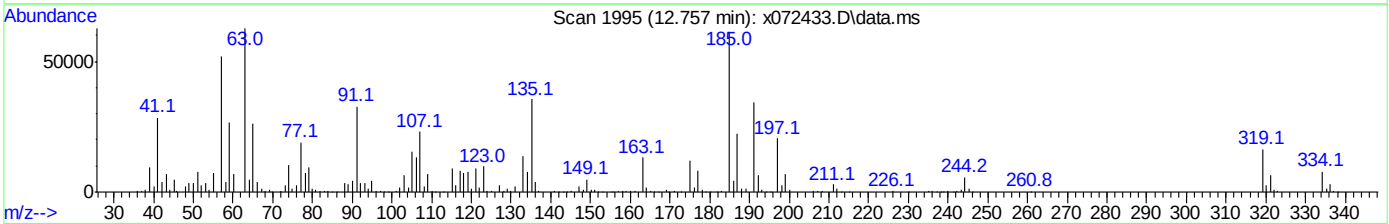
Ion	Exp%	Act%
58.10	100	100
97.00	80.90	51.17
72.10	24.80	16.53
0.00	0.00	0.00

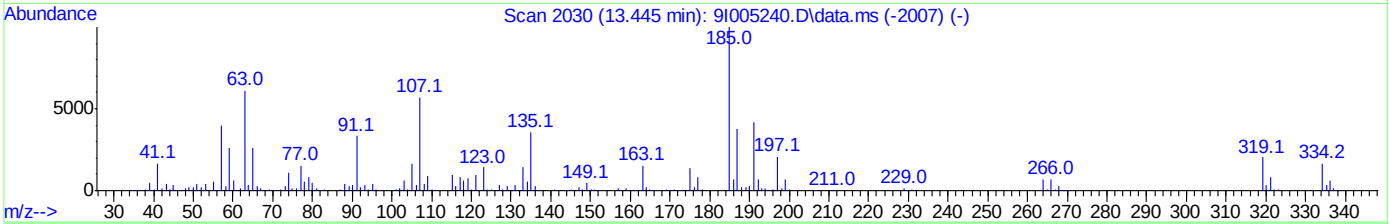
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072433.D
Acq On : 17 Aug 2020 4:21 pm
Operator : marthav
Sample : ic2953-75 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 18 09:38:39 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Mon Aug 17 14:57:23 2020
Response via : Initial Calibration







TIC: x072433.D\data.ms

(147) Aramite

12.757min (+0.005) 47.87ppm

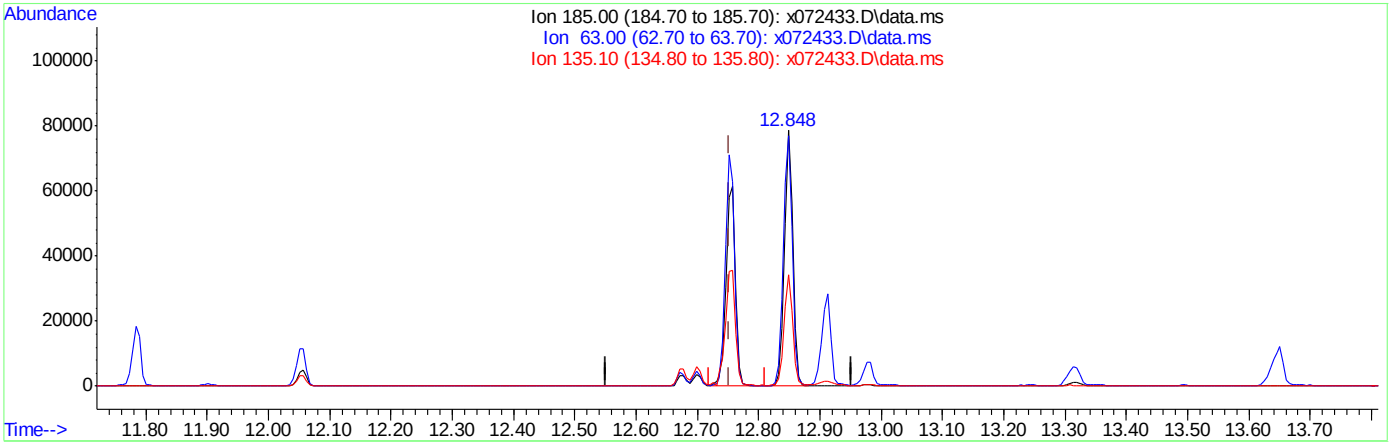
response 64372

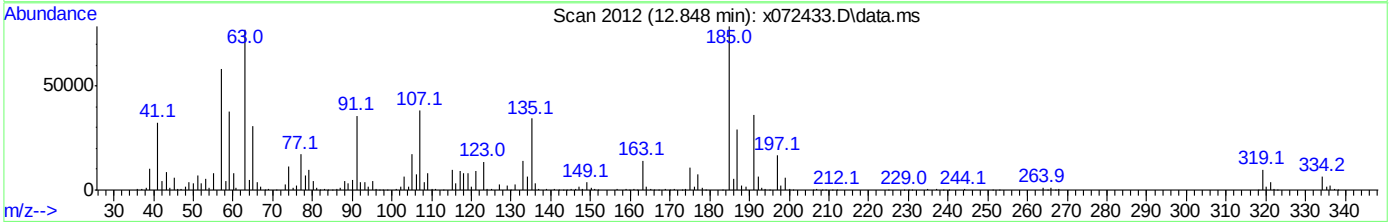
Ion	Exp%	Act%
185.00	100	100
63.00	61.10	101.77#
135.10	35.60	57.44
0.00	0.00	0.00

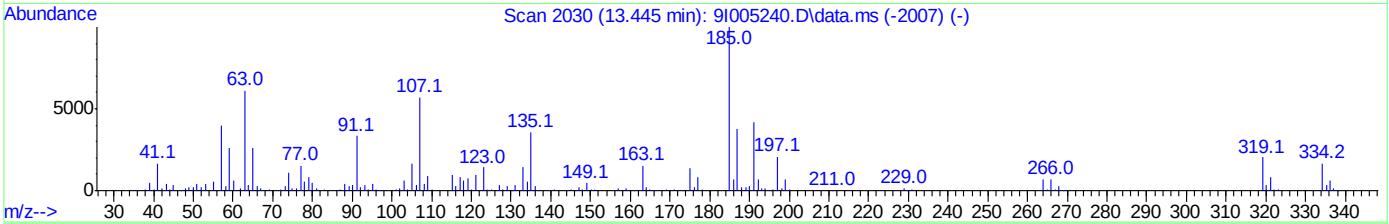
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072433.D
Acq On : 17 Aug 2020 4:21 pm
Operator : marthav
Sample : ic2953-75 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 18 09:38:39 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Mon Aug 17 14:57:23 2020
Response via : Initial Calibration







TIC: x072433.D\data.ms

(147) Aramite

12.848min (+0.096) 102.39ppm m

response 137680

Ion	Exp%	Act%
185.00	100	100
63.00	61.10	97.80#
135.10	35.60	43.73
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 08/18/20 14:38

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072434.D
Acq On : 17 Aug 2020 4:46 pm
Operator : marthav
Sample : ic2953-100 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Aug 18 12:51:36 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Mon Aug 17 14:57:23 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	0.000	152	0m	40.00	ppm		-5.62
22) Naphthalene-d8	0.000	136	0m	40.00	ppm		-7.04
43) Acenaphthene-d10	0.000	164	0m	40.00	ppm		-9.08
70) Phenanthrene-d10	0.000	188	0m	40.00	ppm		-10.82
92) Chrysene-d12	0.000	240	0m	40.00	ppm		-14.02
102) Perylene-d12	0.000	264	0m	40.00	ppm		-16.19
110) 1,4-Dichlorobenzene-d4A	5.612	152	166331	40.00	ppm		0.00
120) Naphthalene-d8A	7.034	136	652378	40.00	ppm		0.00
127) Acenaphthene-d10A	9.072	164	308383	40.00	ppm		0.00
136) Phenanthrene-d10A	10.821	188	545329	40.00	ppm		0.00
146) Chrysene-d12A	14.009	240	364764	40.00	ppm		0.00
153) Perylene-d12A	16.213	264	291828	40.00	ppm		0.03
System Monitoring Compounds							
7) 2-Fluorophenol	0.000	112	0d	0.00	ppm		
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#			
9) Phenol-d5	0.000	99	0d	0.00	ppm		
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#			
23) Nitrobenzene-d5	0.000	82	0d	0.00	ppm		
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#			
47) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm		
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#			
75) 2,4,6-Tribromophenol	0.000	330	0d	0.00	ppm		
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#			
95) Terphenyl-d14	0.000	244	0d	0.00	ppm		
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#			
Target Compounds							Qvalue
111) 2-Picoline	3.585	93	808656	101.94	ppm		85
112) N-Nitrosomethylethylamine	3.729	42	586232	106.28	ppm	#	53
113) Methyl methanesulfonate	4.071	80	322166	83.29	ppm		93
114) N-Nitrosodiethylamine	4.483	102	339991	105.52	ppm	#	26
115) Ethyl methanesulfonate	4.825	79	541929	101.70	ppm		95
116) Pentachloroethane	5.307	167	227585	100.29	ppm		99
117) N-Nitrosopyrrolidine	6.077	100	294357	101.04	ppm	#	40
118) N-Nitrosomorpholine	6.114	56	477157	89.75	ppm	#	71
119) O-Toluidine	6.120	106	1068585	98.13	ppm		98
121) N-Nitrosopiperidine	6.435	42	617580	102.91	ppm	#	57
122) A,A-Dimethylphenethyla...	6.960	58	2374923m	99.25	ppm		
123) Hexachloropropene	7.163	213	271868	99.29	ppm		100
124) N-Nitrosodi-n-butylamine	7.559	84	520628	111.09	ppm	#	52
125) p-Phenylenediamine	7.569	108	417680m	67.48	ppm		
126) Isosafrole	7.789	162	452063	101.70	ppm		87
128) Safrole	8.398	162	452054	111.48	ppm		93
129) 1-Chloronaphthalene	8.457	162	1052185	108.93	ppm		97
130) Diphenyl Ether	8.548	170	730449	108.27	ppm		94
131) 1,4-Naphthoquinone	8.655	158	299315	79.25	ppm		84
132) Pentachlorobenzene	9.270	250	358378	105.44	ppm		99
133) 1-Naphthylamine	9.425	143	1080328	100.86	ppm		97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072434.D
Acq On : 17 Aug 2020 4:46 pm
Operator : marthav
Sample : ic2953-100 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Aug 18 12:51:36 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Mon Aug 17 14:57:23 2020
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Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
134) 2-Naphthylamine	9.522	143	1157162	101.08	ppm	98
135) 5-Nitro-o-toluidine	9.773	152	367216	116.58	ppm	79
137) 1,3,5-Trinitrobenzene	10.281	75	322238	143.63	ppm	86
138) Diallate	10.238	43	946267m	110.72	ppm	
139) Phenacetin	10.324	108	577060	109.92	ppm	96
140) 4-Aminobiphenyl	10.634	169	1066662	96.45	ppm	99
141) Pronamide	10.741	173	481499	112.43	ppm	99
142) Pentachloronitrobenzene	10.623	237	110835	104.81	ppm	91
143) 4-Nitroquinoline 1-Oxide	11.789	190	56808	82.10	ppm	89
144) Methapyrilene	11.902	58	132428m	47.33	ppm	
145) Isodrin	12.057	193	161112	104.13	ppm	86
147) Aramite	12.848	185	182742m	137.61	ppm	
148) p-(Dimethylamine)azobe...	12.913	120	447023	109.66	ppm	87
149) Chlorobenzilate	12.982	139	499513	104.98	ppm	81
150) Kepone	13.314	272	106827	650.52	ppm	94
151) 3,3'-Dimethylbenzidine	13.319	212	466151	79.12	ppm	98
152) 2-Acetylaminofluorene	13.656	181	648015	140.53	ppm	94
154) 7,12-Dimethylbenz(a)an...	15.555	256	492319	121.61	ppm	93
155) Hexachlorophene	15.972	196	236039	365.54	ppm	97
156) 3-Methylcholanthrene	16.726	268	460325	126.13	ppm	97
157) Dibenz(a,j)acridine	17.646	279	764298	159.15	ppm	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

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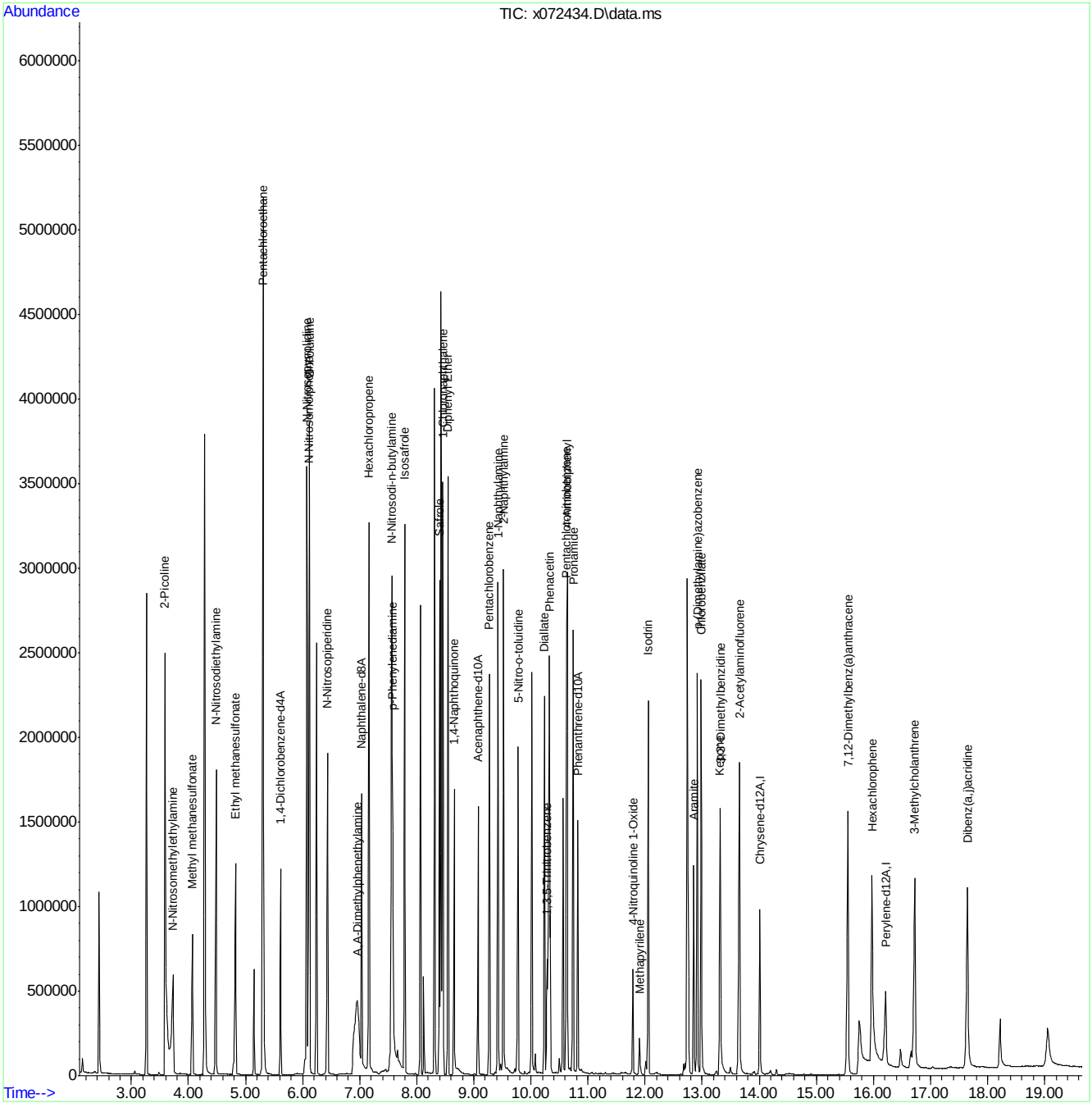

Manual Integration Approval Summary

Sample Number: SX2953-IC2953
Lab FileID: X072434.D
Injection Time: 08/17/20 16:46

Method: SW846 8270D
Analyst approved: 08/18/20 14:01 Martha Valls
Supervisor approved: 08/18/20 14:38 Nicole McCampbell

Parameter	CAS	Sig#	R.T. (min.)	Reason
A,A-Dimethylphenethylamine	122-09-8		6.96	Split peak
p-Phenylenediamine	106-50-3		7.57	Split peak
Diallate	2303-16-4		10.24	Split peak
Methapyrilene	91-80-5		11.90	Split peak
Aramite	140-57-8		12.85	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
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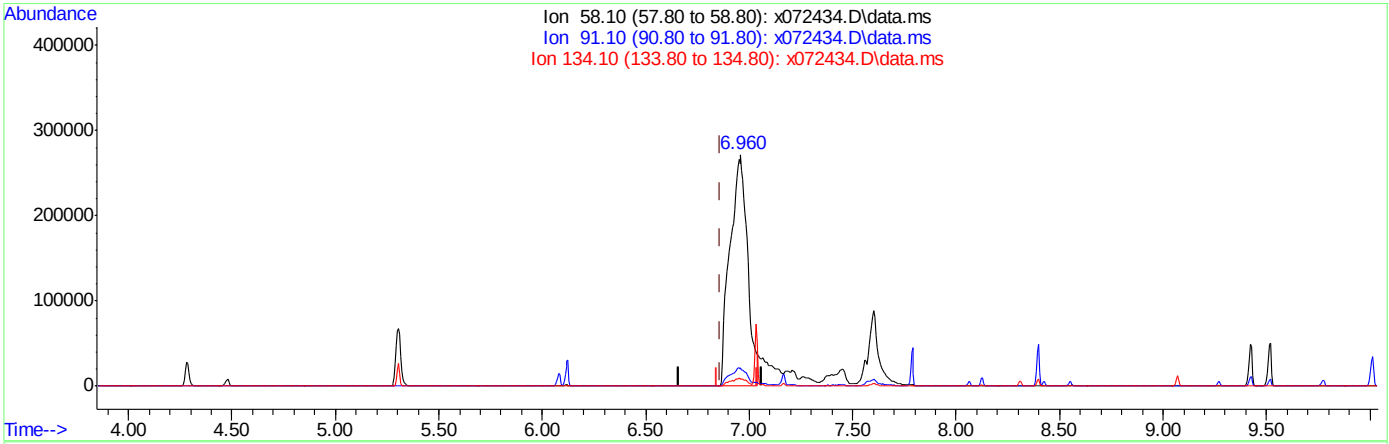

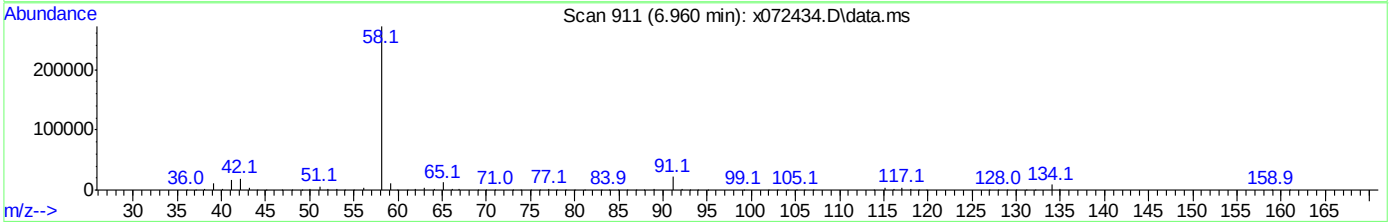

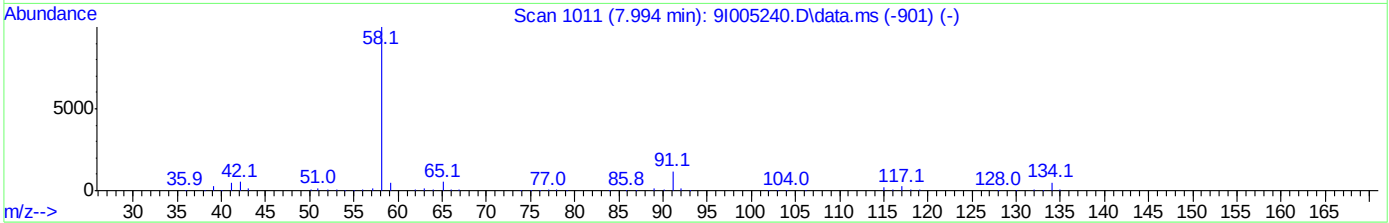

TIC: x072434.D\data.ms

(122) A,A-Dimethylphenethylamine

6.960min (+0.096) 68.66ppm

response 1643028

Ion	Exp%	Act%
58.10	100	100
91.10	11.70	7.79
134.10	5.10	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

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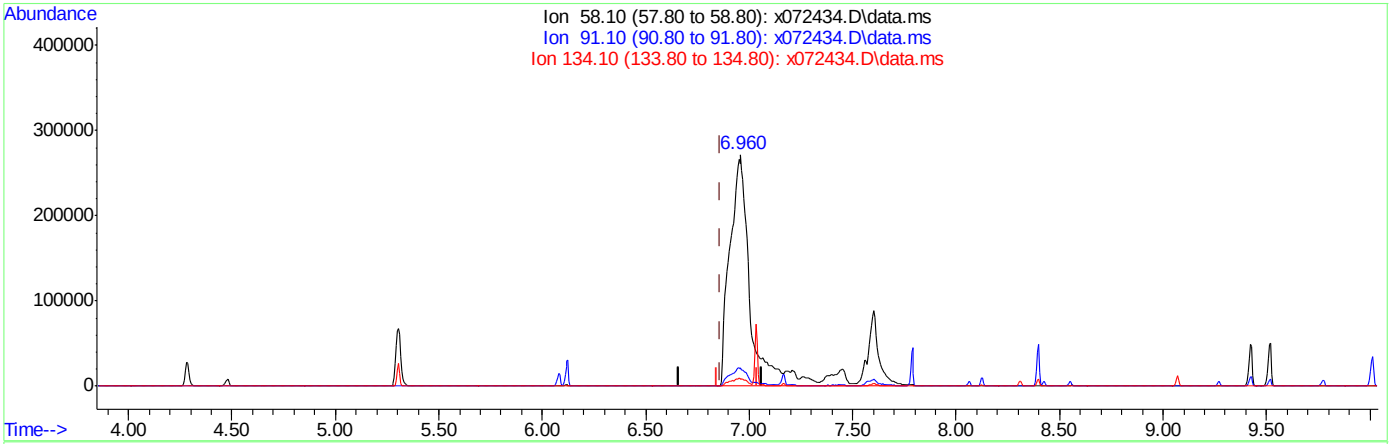

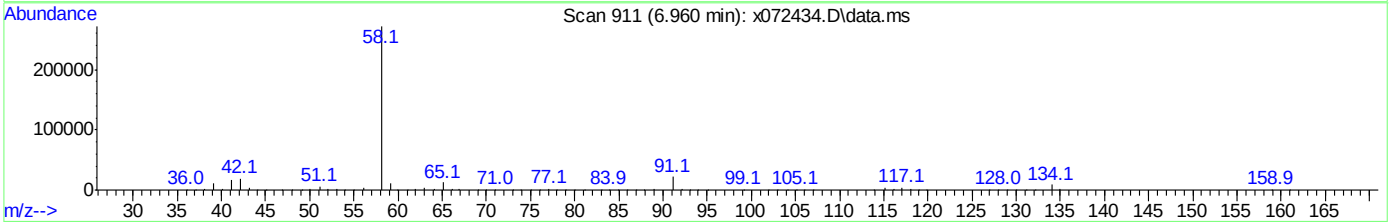

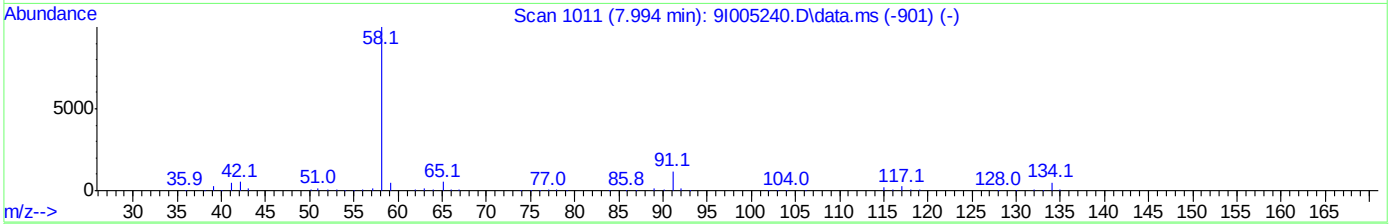

TIC: x072434.D\data.ms

(122) A,A-Dimethylphenethylamine

6.960min (+0.096) 99.25ppm m

response 2374923

Ion	Exp%	Act%
58.10	100	100
91.10	11.70	7.95
134.10	5.10	3.27
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072434.D
Acq On : 17 Aug 2020 4:46 pm
Operator : marthav
Sample : ic2953-100 Inst : MSBNA05
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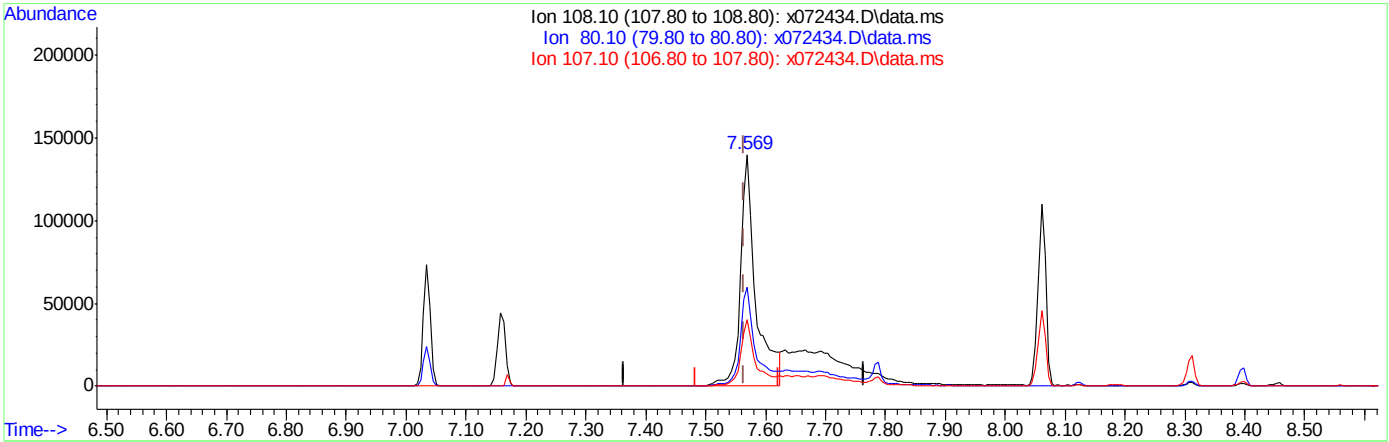

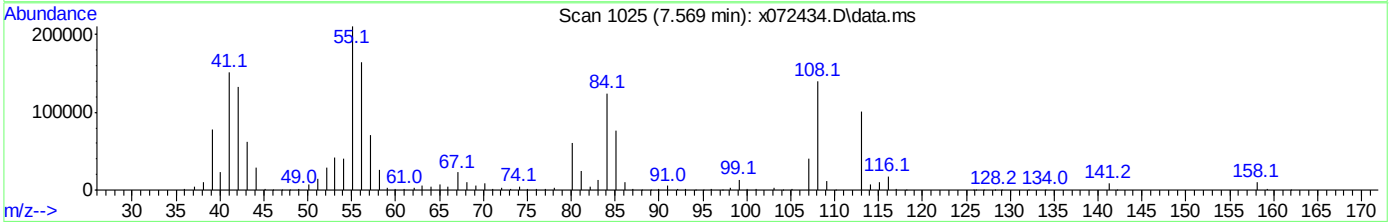

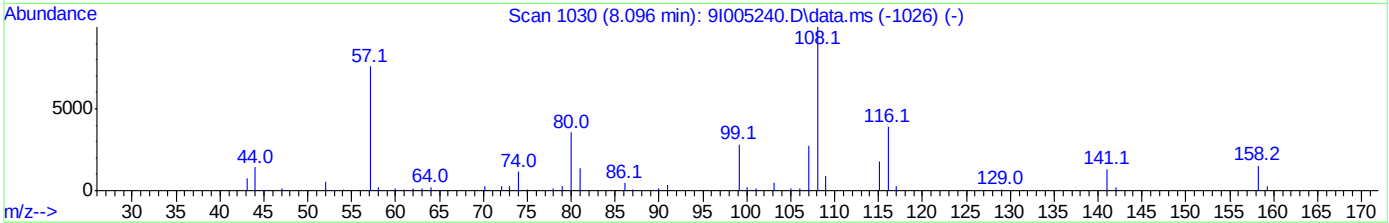

TIC: x072434.D\data.ms

(125) p-Phenylenediamine

7.569min (+0.005) 39.92ppm

response 247138

Ion	Exp%	Act%
108.10	100	100
80.10	35.50	42.74
107.10	27.70	28.86
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072434.D
Acq On : 17 Aug 2020 4:46 pm
Operator : marthav
Sample : ic2953-100 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Aug 18 09:38:41 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Mon Aug 17 14:57:23 2020
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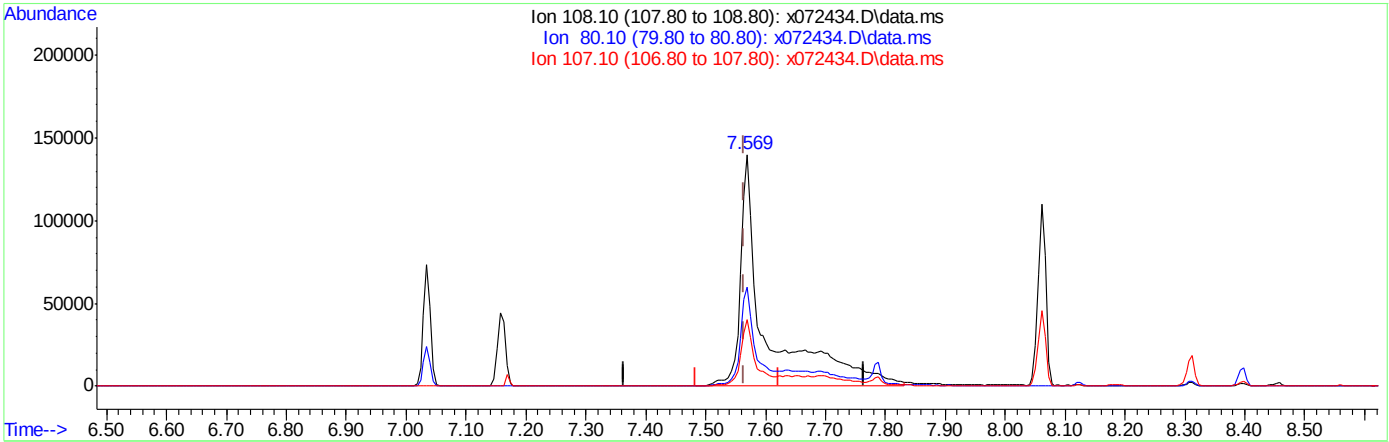

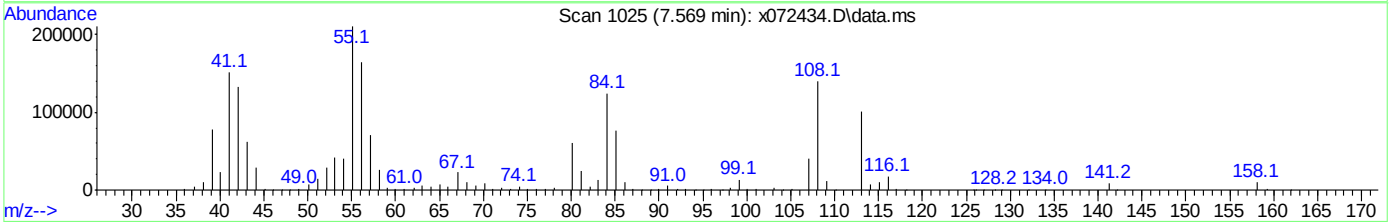

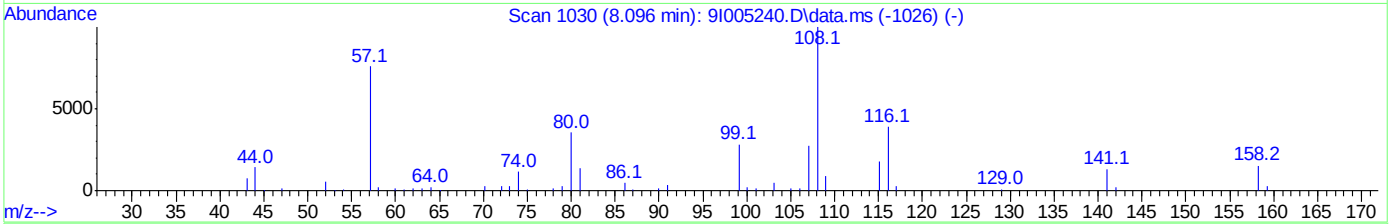

TIC: x072434.D\data.ms

(125) p-Phenylenediamine

7.569min (+0.005) 67.48ppm m

response 417680

Ion	Exp%	Act%
108.10	100	100
80.10	35.50	42.84
107.10	27.70	28.88
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072434.D
Acq On : 17 Aug 2020 4:46 pm
Operator : marthav
Sample : ic2953-100 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 17 Sample Multiplier: 1

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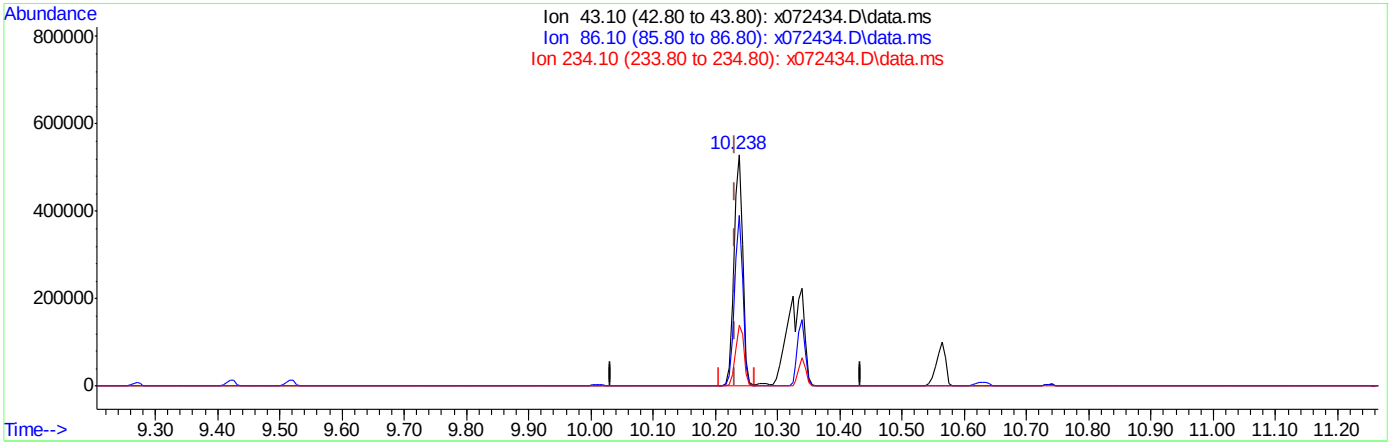

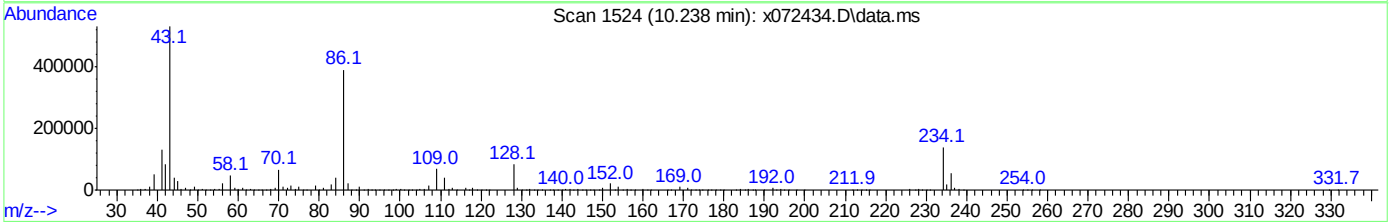

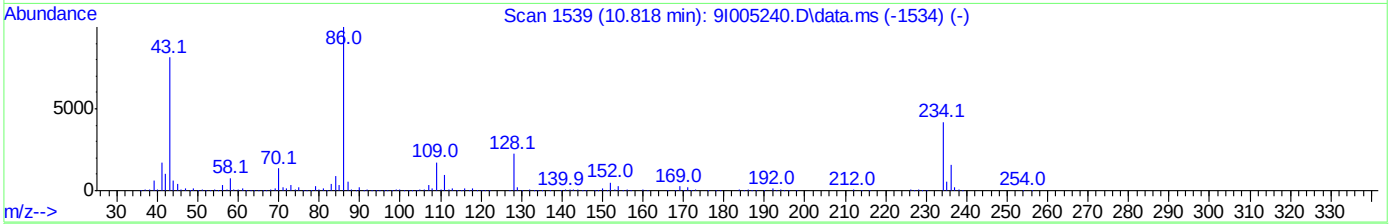

TIC: x072434.D\data.ms

(138) Diallate

10.238min (+0.005) 59.86ppm

response 511536

Ion	Exp%	Act%
43.10	100	100
86.10	123.10	73.77#
234.10	51.50	26.17
0.00	0.00	0.00

Quantitation Report (Qedit)

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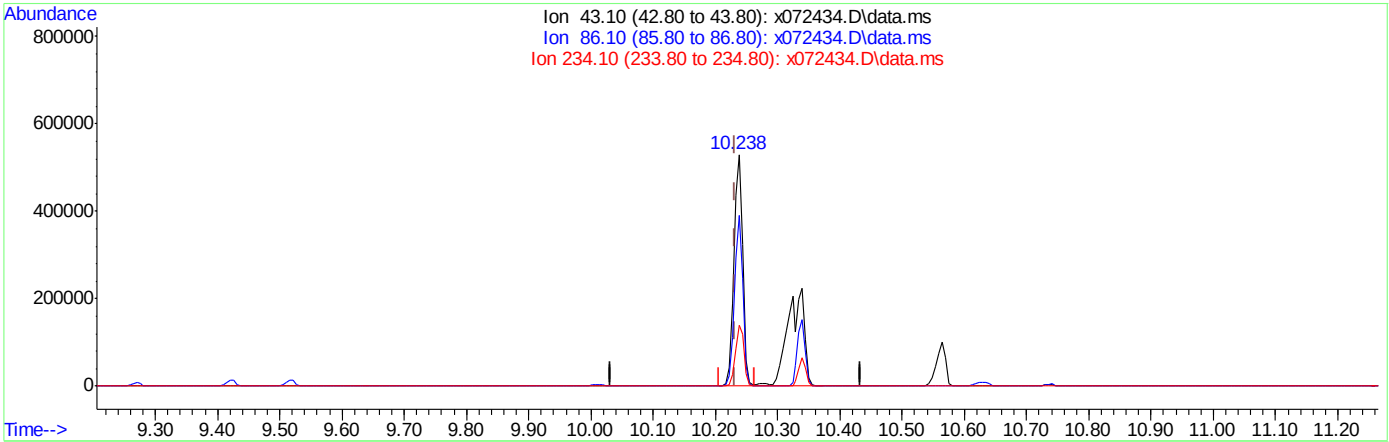

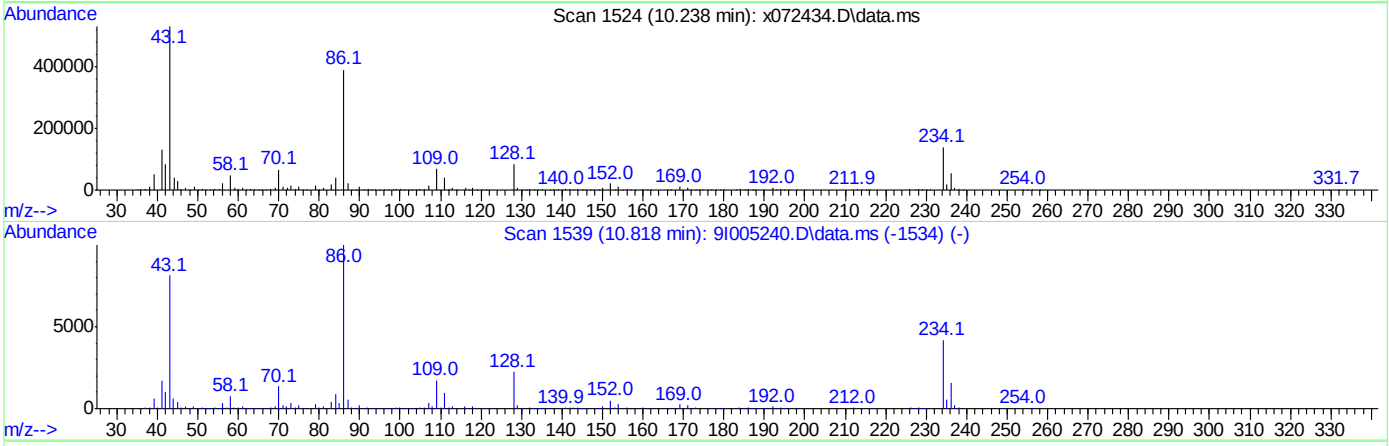

TIC: x072434.D\data.ms

(138) Diallate

10.238min (+0.005) 110.72ppm m

response 946267

Ion	Exp%	Act%
43.10	100	100
86.10	123.10	73.61#
234.10	51.50	26.09
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072434.D
Acq On : 17 Aug 2020 4:46 pm
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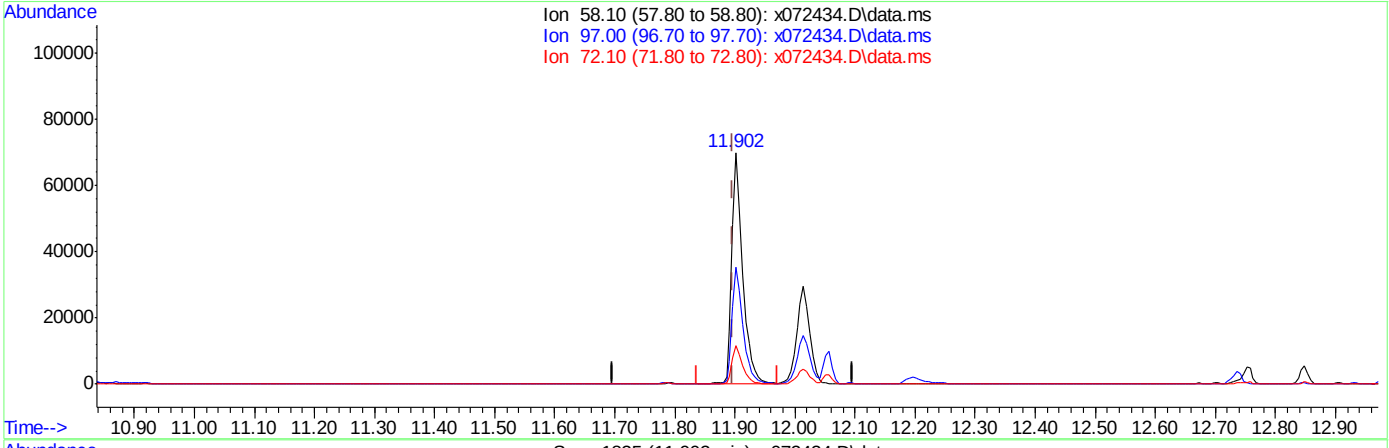

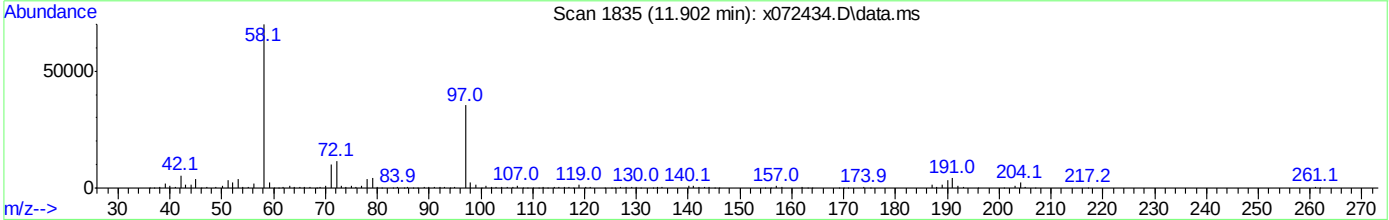

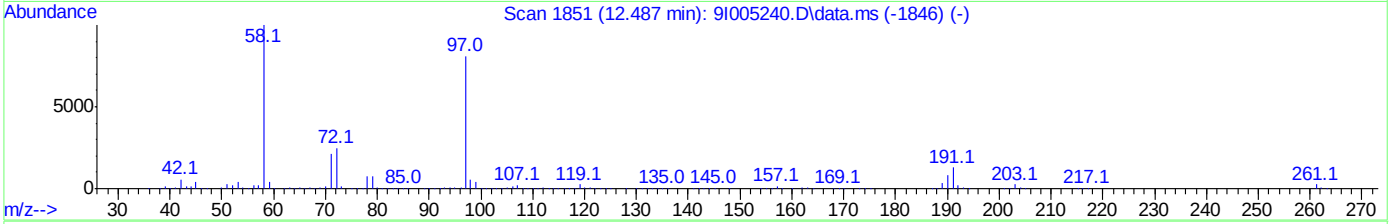

TIC: x072434.D\data.ms

(144) Methapyrilene

11.902min (+0.005) 31.31ppm

response 87619

Ion	Exp%	Act%
58.10	100	100
97.00	80.90	50.50#
72.10	24.80	16.51
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
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Sample : ic2953-100 Inst : MSBNA05
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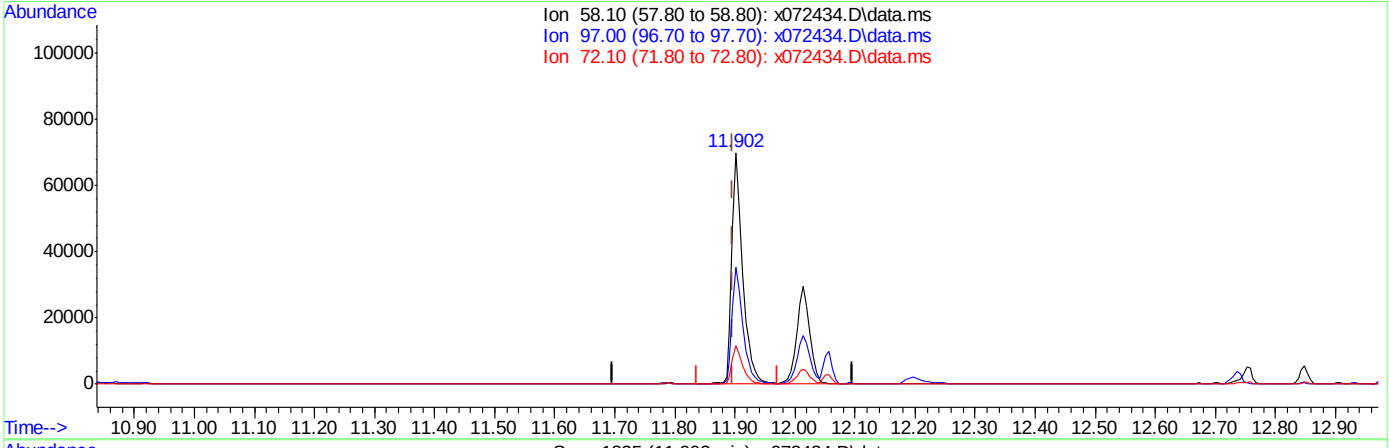
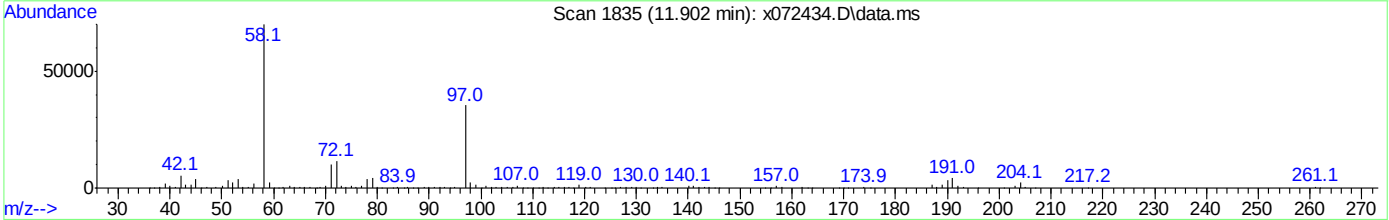
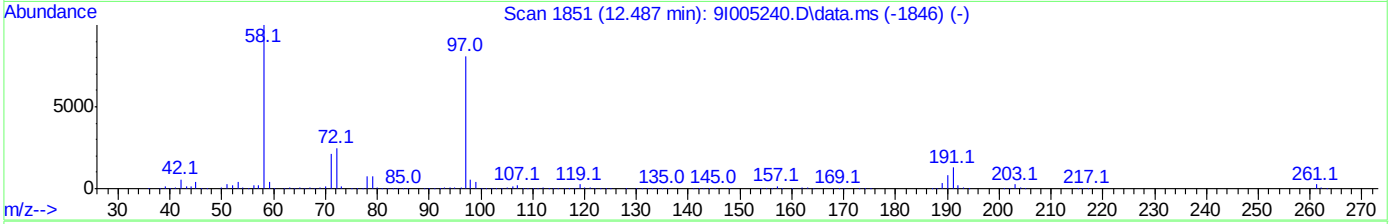






TIC: x072434.D\data.ms

(144) Methapyrilene

11.902min (+0.005) 47.33ppm m

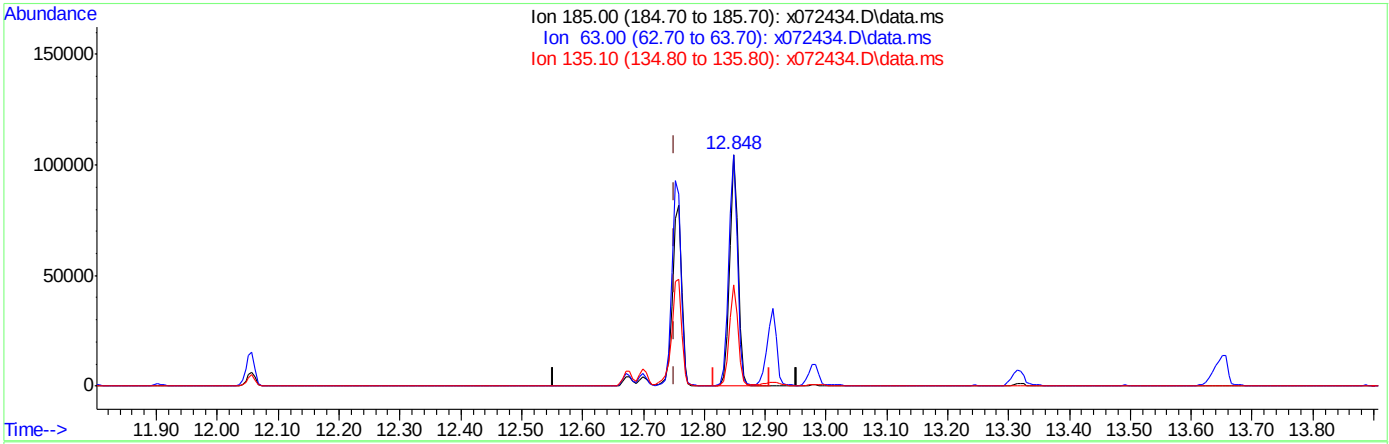
response 132428

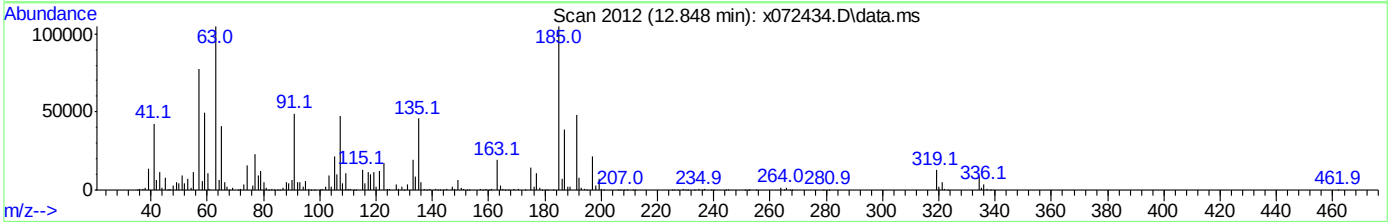
Ion	Exp%	Act%
58.10	100	100
97.00	80.90	50.54#
72.10	24.80	16.47
0.00	0.00	0.00

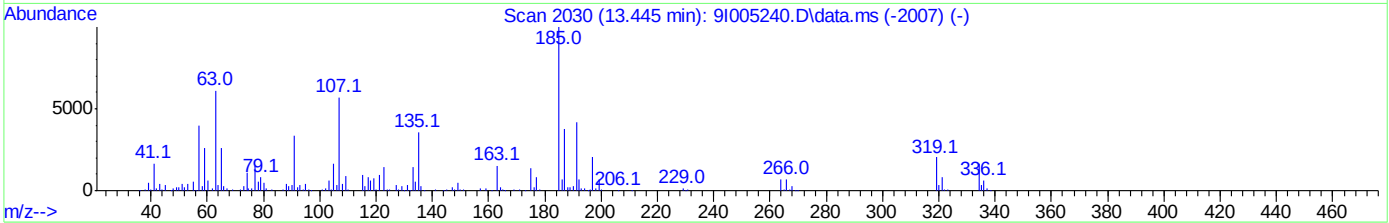
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072434.D
Acq On : 17 Aug 2020 4:46 pm
Operator : marthav
Sample : ic2953-100 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Aug 18 09:38:41 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Mon Aug 17 14:57:23 2020
Response via : Initial Calibration







TIC: x072434.D\data.ms

(147) Aramite

12.848min (+0.096) 73.61ppm

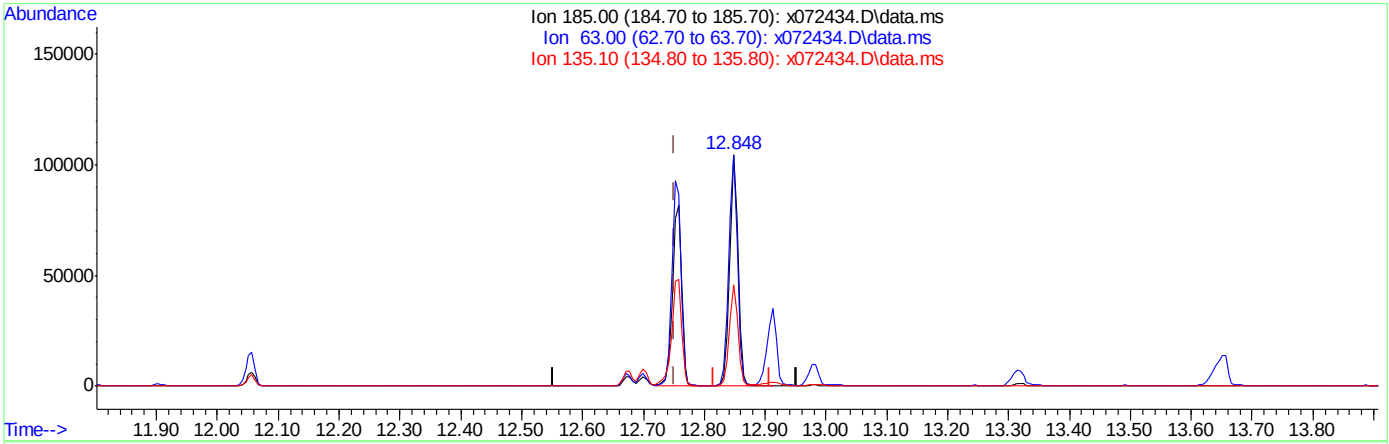
response 97753

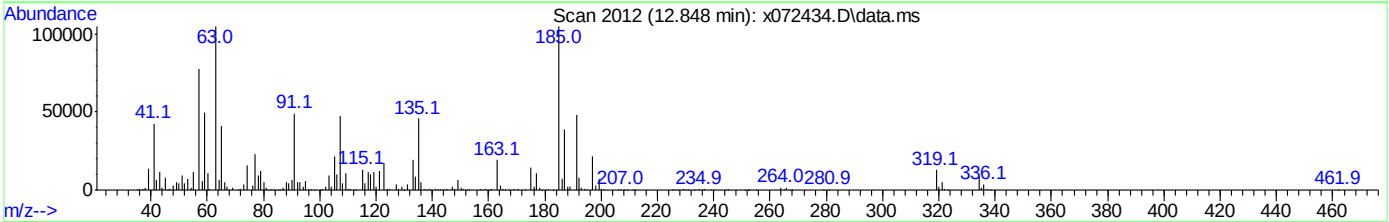
Ion	Exp%	Act%
185.00	100	100
63.00	61.10	86.83
135.10	35.60	42.77
0.00	0.00	0.00

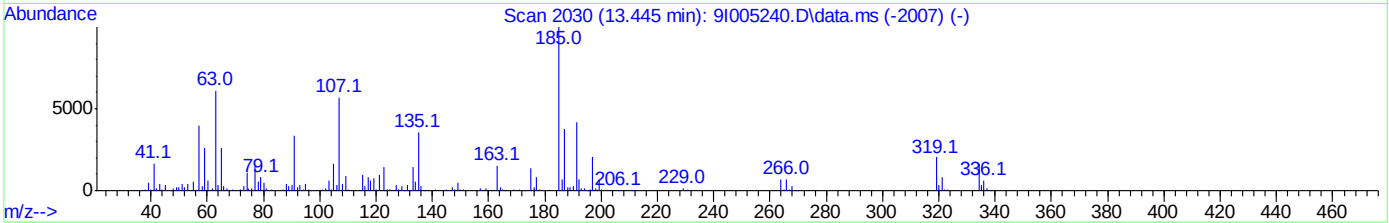
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072434.D
Acq On : 17 Aug 2020 4:46 pm
Operator : marthav
Sample : ic2953-100 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Aug 18 09:38:41 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Mon Aug 17 14:57:23 2020
Response via : Initial Calibration







TIC: x072434.D\data.ms

(147) Aramite

12.848min (+0.096) 137.61ppm m

response 182742

Ion	Exp%	Act%
185.00	100	100
63.00	61.10	99.80#
135.10	35.60	43.67
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072435.D
Acq On : 17 Aug 2020 5:12 pm
Operator : marthav
Sample : icv2953-50 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Aug 18 13:11:51 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Aug 18 13:05:00 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.617	152	216572	40.00	ppm	0.00
22) Naphthalene-d8	7.040	136	825885	40.00	ppm	0.00
43) Acenaphthene-d10	9.072	164	366214	40.00	ppm	0.00
70) Phenanthrene-d10	10.816	188	591981	40.00	ppm	0.00
92) Chrysene-d12	14.020	240	391651	40.00	ppm	0.00
102) Perylene-d12	16.186	264	278867	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	5.617	152	216572	40.00	ppm	0.00
120) Naphthalene-d8A	7.040	136	825885	40.00	ppm	0.00
127) Acenaphthene-d10A	9.072	164	366214	40.00	ppm	0.00
136) Phenanthrene-d10A	10.816	188	591981	40.00	ppm	0.00
146) Chrysene-d12A	14.020	240	391651	40.00	ppm	0.01
153) Perylene-d12A	16.186	264	278867	40.00	ppm	-0.01
System Monitoring Compounds						
7) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#		
9) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#		
23) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#		
47) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#		
75) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#		
95) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#		
Target Compounds						Qvalue
2) 1,4-Dioxane	2.467	88	178002	47.03	ppm	99
3) N-nitrosodimethylamine	2.798	42	320355	47.44	ppm	97
5) Benzaldehyde	5.146	106	291854	44.23	ppm	99
8) bis(2-Chloroethyl)ether	5.350	93	362294	43.61	ppm	99
10) Phenol	5.312	94	450062	41.04	ppm	97
11) 2-Chlorophenol	5.403	128	387827	45.44	ppm	93
12) 1,3-Dichlorobenzene	5.548	146	432498	47.58	ppm	100
13) 1,4-Dichlorobenzene	5.633	146	458395	48.02	ppm	100
14) 1,2-Dichlorobenzene	5.794	146	416176	48.05	ppm	99
16) 2,2'-Oxybis(1-chloropr...	5.943	45	788589	46.82	ppm	95
17) 2-Methylphenol	5.954	108	344684	43.84	ppm	95
18) Acetophenone	6.072	105	522134	46.36	ppm	99
19) Hexachloroethane	6.163	117	177509	49.18	ppm	99
20) N-Nitroso-di-n-propyla...	6.093	70	295046	47.26	ppm	99
21) 3&4-Methylphenol	6.136	108	745255	90.80	ppm	99
24) Nitrobenzene	6.259	77	413597	45.31	ppm	98
25) Isophorone	6.537	82	710919	47.33	ppm	99
26) 2-Nitrophenol	6.617	139	212567	48.84	ppm	98
27) 2,4-Dimethylphenol	6.714	107	308856	43.25	ppm	99
29) bis(2-Chloroethoxy)met...	6.799	93	401202	44.26	ppm	99
30) Benzoic Acid	6.949	105	533582	94.61	ppm	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072435.D
Acq On : 17 Aug 2020 5:12 pm
Operator : marthav
Sample : icv2953-50 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Aug 18 13:11:51 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Aug 18 13:05:00 2020
Response via : Initial Calibration

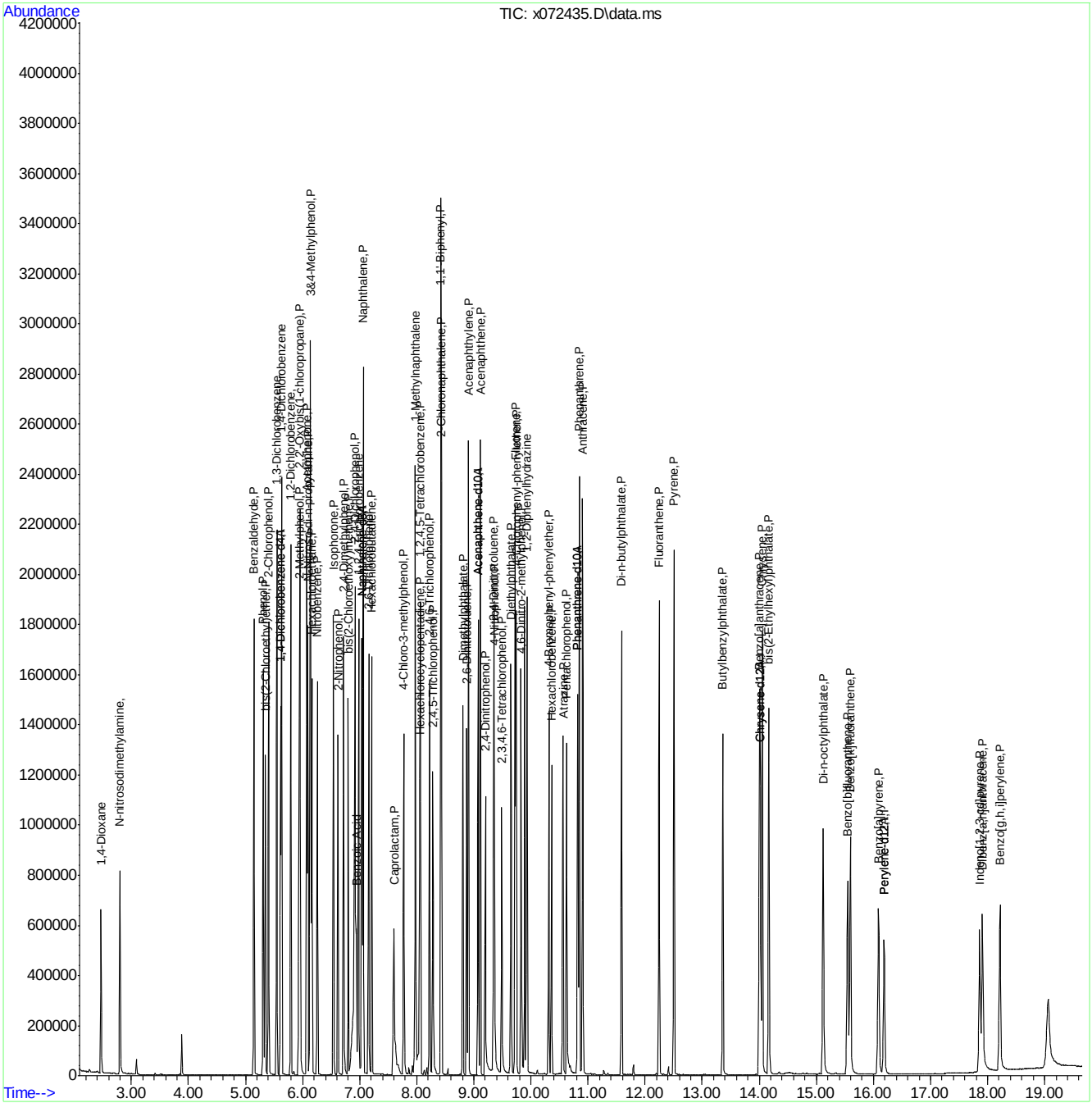
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
31)	2,4-Dichlorophenol	6.917	162	293320	47.48	ppm		98
32)	1,2,4-Trichlorobenzene	6.981	180	321272	48.11	ppm		98
34)	Naphthalene	7.061	128	1097494	46.87	ppm		100
36)	2,6-Dichlorophenol	7.157	162	284042	46.69	ppm		97
37)	Hexachlorobutadiene	7.211	225	161270	48.56	ppm		99
38)	Caprolactam	7.601	113	94904	40.27	ppm		98
39)	4-Chloro-3-methylphenol	7.767	107	283377	44.94	ppm	#	57
41)	1-Methylnaphthalene	7.976	142	613780	42.77	ppm		100
42)	1,2,4,5-Tetrachloroben...	8.061	216	285550	46.05	ppm		99
44)	Hexachlorocyclopentadiene	8.051	237	117442	58.80	ppm		100
45)	2,4,6-Trichlorophenol	8.222	196	184311	50.56	ppm		98
46)	2,4,5-Trichlorophenol	8.281	196	201549	52.13	ppm		98
48)	1,1'-Biphenyl	8.420	154	758933	47.42	ppm		100
49)	2-Chloronaphthalene	8.430	162	594550	48.92	ppm		99
52)	Acenaphthylene	8.906	152	1010619	52.23	ppm		99
53)	Dimethylphthalate	8.810	163	608492	45.87	ppm		99
55)	2,6-Dinitrotoluene	8.874	165	147021	46.01	ppm	#	78
57)	Acenaphthene	9.115	153	620996	48.08	ppm		99
59)	2,4-Dinitrophenol	9.201	184	167375	79.98	ppm	#	74
61)	2,4-Dinitrotoluene	9.345	165	198946	48.37	ppm		88
62)	4-Nitrophenol	9.356	109	139352	83.46	ppm		95
64)	2,3,4,6-Tetrachlorophenol	9.489	232	129099	43.04	ppm		97
65)	Fluorene	9.725	166	664442	49.23	ppm		99
66)	4-Chlorophenyl-phenyle...	9.741	204	304890	47.99	ppm		99
67)	Diethylphthalate	9.650	149	609163	47.04	ppm		99
71)	4,6-Dinitro-2-methylph...	9.832	198	247491	92.83	ppm		99
74)	1,2-Diphenylhydrazine	9.928	77	688305	48.31	ppm		99
78)	4-Bromophenyl-phenylether	10.313	248	141512	47.57	ppm		99
79)	Hexachlorobenzene	10.361	284	139241	46.99	ppm		99
82)	Atrazine	10.565	200	154352	43.04	ppm		93
83)	Pentachlorophenol	10.623	266	145542	104.54	ppm		98
84)	Phenanthrene	10.848	178	891017	47.68	ppm		100
85)	Anthracene	10.907	178	901307	46.64	ppm		100
89)	Di-n-butylphthalate	11.586	149	913781	47.08	ppm		100
91)	Fluoranthene	12.249	202	815949	45.95	ppm		98
94)	Pyrene	12.506	202	840978	50.87	ppm		99
97)	Butylbenzylphthalate	13.362	149	360632	51.95	ppm		99
99)	Benzo[a]anthracene	14.004	228	631807	48.50	ppm		99
100)	Chrysene	14.052	228	689506	50.14	ppm		100
101)	bis(2-Ethylhexyl)phtha...	14.164	149	513688	54.78	ppm		100
103)	Di-n-octylphthalate	15.122	149	748348	54.39	ppm		100
104)	Benzo[b]fluoranthene	15.549	252	483474	50.27	ppm		99
105)	Benzo[k]fluoranthene	15.598	252	532186	52.07	ppm		98
106)	Benzo[a]pyrene	16.090	252	422861	49.89	ppm		99
107)	Indeno[1,2,3-cd]pyrene	17.860	276	330434	45.70	ppm		98
108)	Dibenz[a,h]anthracene	17.908	278	381764	47.65	ppm		98
109)	Benzo[g,h,i]perylene	18.224	276	386403	45.77	ppm		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072435.D
Acq On : 17 Aug 2020 5:12 pm
Operator : marthav
Sample : icv2953-50 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Aug 18 13:11:51 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Aug 18 13:05:00 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072436.D
Acq On : 17 Aug 2020 5:38 pm
Operator : marthav
Sample : icv2953-50 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Aug 18 13:09:42 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Aug 18 13:05:00 2020
Response via : Initial Calibration

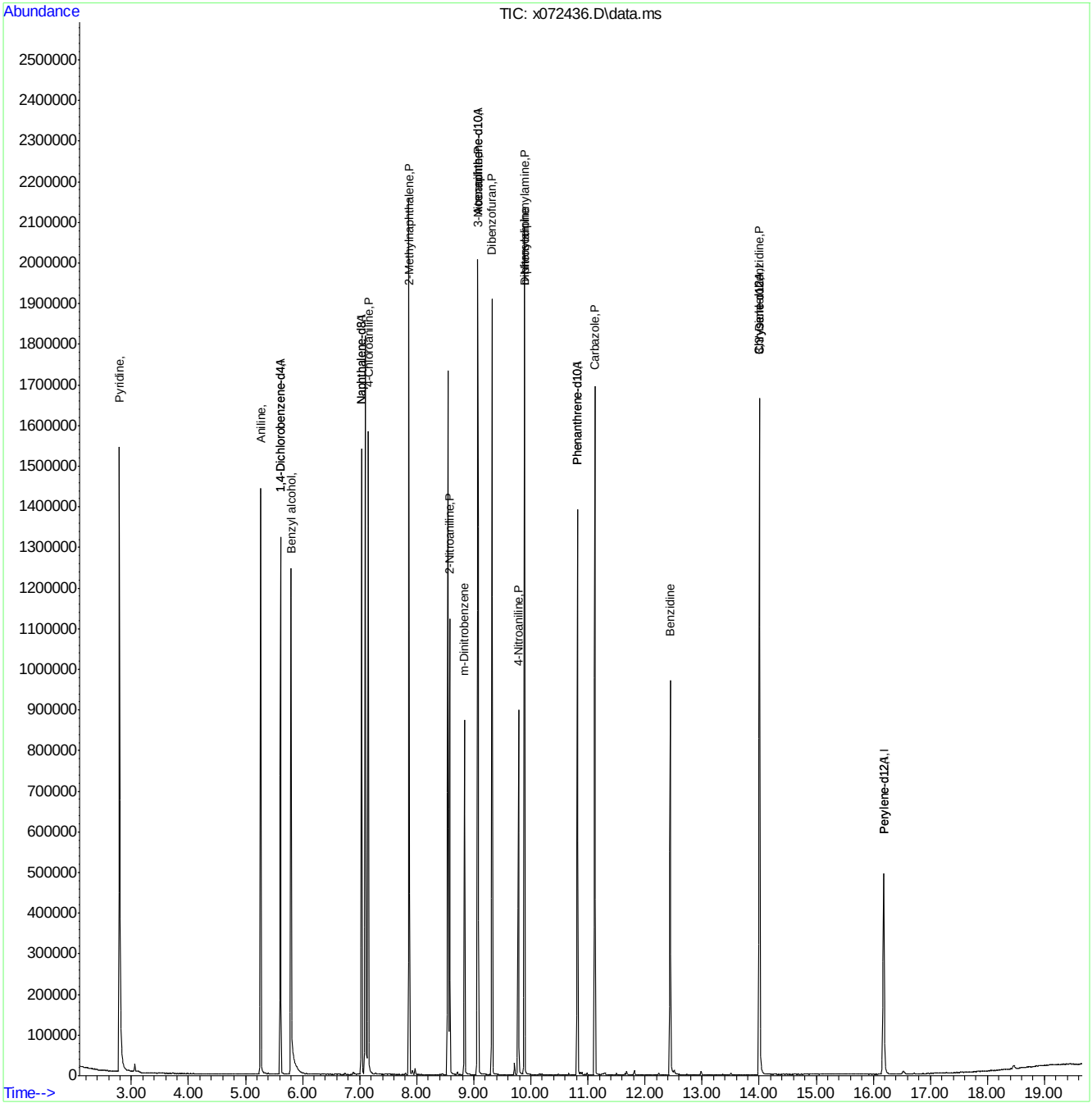
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	5.612	152	166897	40.00	ppm		0.00
22) Naphthalene-d8	7.034	136	619176	40.00	ppm		0.00
43) Acenaphthene-d10	9.072	164	317861	40.00	ppm		0.00
70) Phenanthrene-d10	10.816	188	500997	40.00	ppm		0.00
92) Chrysene-d12	14.009	240	351364	40.00	ppm		-0.01
102) Perylene-d12	16.186	264	266050	40.00	ppm		0.00
110) 1,4-Dichlorobenzene-d4A	5.612	152	166897	40.00	ppm		0.00
120) Naphthalene-d8A	7.034	136	619176	40.00	ppm		0.00
127) Acenaphthene-d10A	9.072	164	317861	40.00	ppm		0.00
136) Phenanthrene-d10A	10.816	188	500997	40.00	ppm		0.00
146) Chrysene-d12A	14.009	240	351364	40.00	ppm		0.00
153) Perylene-d12A	16.186	264	266050	40.00	ppm		-0.01
System Monitoring Compounds							
7) 2-Fluorophenol	0.000	112	0	0.00	ppm		
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#			
9) Phenol-d5	0.000	99	0	0.00	ppm		
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#			
23) Nitrobenzene-d5	0.000	82	0	0.00	ppm		
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#			
47) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm		
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#			
75) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm		
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#			
95) Terphenyl-d14	0.000	244	0	0.00	ppm		
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#			
Target Compounds							Qvalue
4) Pyridine	2.787	79	429314	52.95	ppm		97
6) Aniline	5.269	93	458662	48.95	ppm		68
15) Benzyl alcohol	5.799	108	211458	51.66	ppm		93
35) 4-Chloroaniline	7.152	127	382367	53.43	ppm		98
40) 2-Methylnaphthalene	7.863	142	569255	50.45	ppm		99
50) 2-Nitroaniline	8.575	65	197428	50.65	ppm		94
54) m-Dinitrobenzene	8.837	168	93945	44.81	ppm	#	1
58) 3-Nitroaniline	9.067	138	158726	50.01	ppm		97
60) Dibenzofuran	9.318	168	710634	48.45	ppm		99
69) 4-Nitroaniline	9.783	138	152671	44.57	ppm		99
72) n-Nitrosodiphenylamine	9.890	169	485609	58.82	ppm		99
73) Diphenylamine	9.890	169	485609	50.12	ppm		99
87) Carbazole	11.126	167	723302	49.72	ppm		99
93) Benzidine	12.442	184	382621	50.29	ppm		98
98) 3,3'-Dichlorobenzidine	14.009	252	183026	46.59	ppm		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072436.D
Acq On : 17 Aug 2020 5:38 pm
Operator : marthav
Sample : icv2953-50 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Aug 18 13:09:42 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Aug 18 13:05:00 2020
Response via : Initial Calibration



8270DApp9SX-081720.m Tue Aug 18 13:59:38 2020 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072437.D
Acq On : 17 Aug 2020 6:03 pm
Operator : marthav
Sample : icv2953-50 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Aug 18 13:12:43 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Aug 18 13:05:00 2020
Response via : Initial Calibration

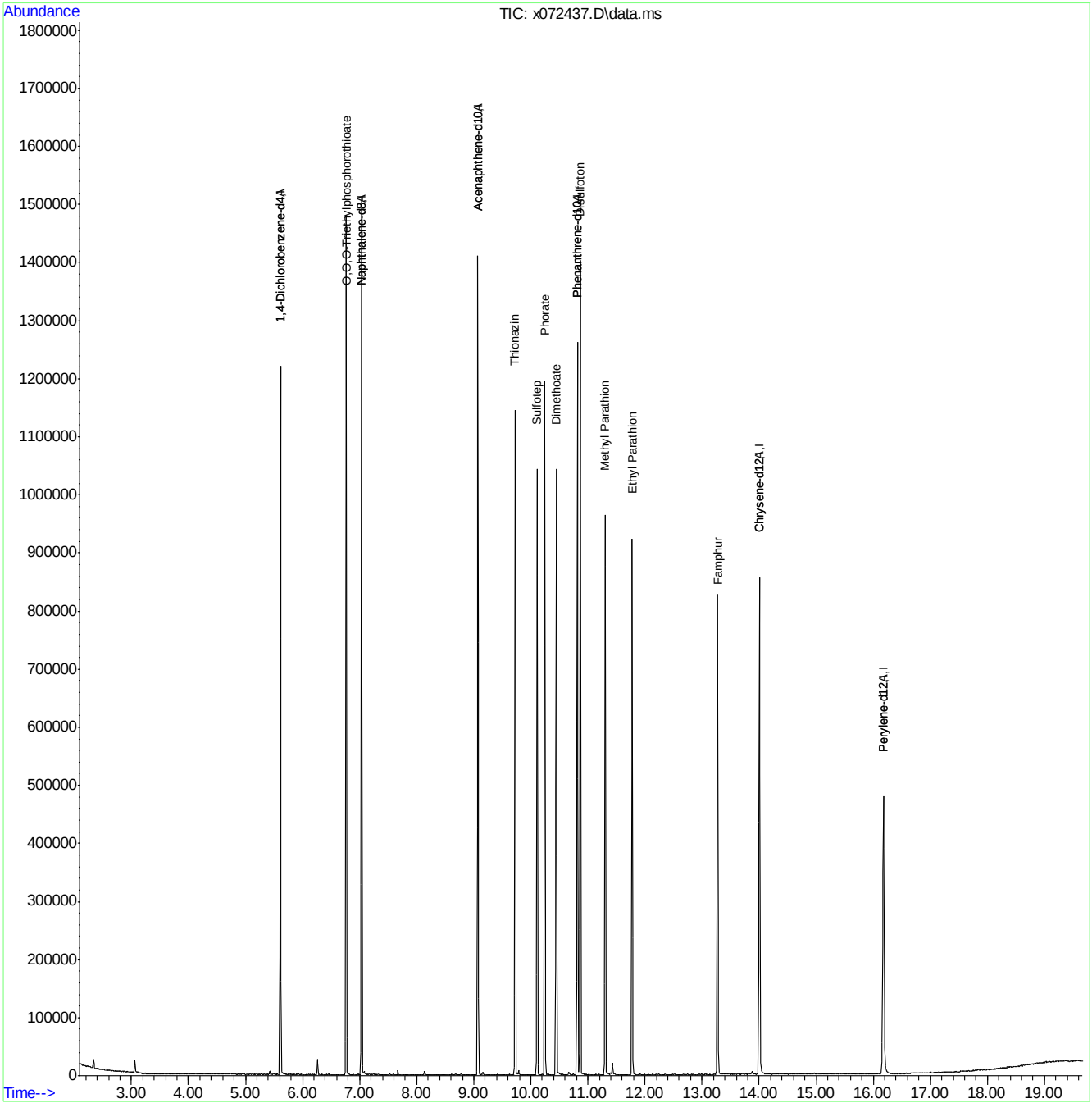
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.611	152	159309	40.00	ppm	0.00
22) Naphthalene-d8	7.034	136	605378	40.00	ppm	0.00
43) Acenaphthene-d10	9.072	164	277970	40.00	ppm	0.00
70) Phenanthrene-d10	10.816	188	480164	40.00	ppm	0.00
92) Chrysene-d12	14.009	240	332883	40.00	ppm	-0.01
102) Perylene-d12	16.180	264	256330	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	5.611	152	159309	40.00	ppm	0.00
120) Naphthalene-d8A	7.034	136	605378	40.00	ppm	0.00
127) Acenaphthene-d10A	9.072	164	277970	40.00	ppm	0.00
136) Phenanthrene-d10A	10.816	188	480164	40.00	ppm	0.00
146) Chrysene-d12A	14.009	240	332883	40.00	ppm	0.00
153) Perylene-d12A	16.180	264	256330	40.00	ppm	-0.02
System Monitoring Compounds						
7) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#		
9) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#		
23) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#		
47) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#		
75) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#		
95) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#		
Target Compounds						Qvalue
28) O,O,O-Triethylphosphor...	6.767	198	113945	48.08	ppm	100
68) Thionazin	9.725	97	112138	50.69	ppm	97
76) Sulfotep	10.110	97	79327	47.69	ppm	85
77) Phorate	10.243	75	313143	50.34	ppm	100
80) Dimethoate	10.447	87	205504	49.73	ppm	99
86) Disulfoton	10.864	88	259323	50.55	ppm	98
88) Methyl Parathion	11.302	109	171500	48.30	ppm	95
90) Ethyl Parathion	11.773	97	101256	49.15	ppm	96
96) Famphur	13.276	218	220993	58.94	ppm	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072437.D
Acq On : 17 Aug 2020 6:03 pm
Operator : marthav
Sample : icv2953-50 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Aug 18 13:12:43 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Aug 18 13:05:00 2020
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Nicole McCampbell 08/18/20 14:38

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072438.D
Acq On : 17 Aug 2020 6:29 pm
Operator : marthav
Sample : icv2953-50 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Aug 18 13:19:45 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Aug 18 13:05:00 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.612	152	169803	40.00	ppm	0.00
22) Naphthalene-d8	7.034	136	662138	40.00	ppm	0.00
43) Acenaphthene-d10	9.072	164	293615	40.00	ppm	0.00
70) Phenanthrene-d10	10.816	188	510174	40.00	ppm	0.00
92) Chrysene-d12	14.009	240	339083	40.00	ppm	-0.01
102) Perylene-d12	16.191	264	286571	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	5.612	152	169803	40.00	ppm	0.00
120) Naphthalene-d8A	7.034	136	662138	40.00	ppm	0.00
127) Acenaphthene-d10A	9.072	164	293615	40.00	ppm	0.00
136) Phenanthrene-d10A	10.816	188	510174	40.00	ppm	0.00
146) Chrysene-d12A	14.009	240	339083	40.00	ppm	0.00
153) Perylene-d12A	16.191	264	286571	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#		
9) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#		
23) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#		
47) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#		
75) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#		
95) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#		
Target Compounds						Qvalue
111) 2-Picoline	3.579	93	373284	45.97	ppm	99
112) N-Nitrosomethylethylamine	3.724	42	257099	43.73	ppm	98
113) Methyl methanesulfonate	4.061	80	187589	57.12	ppm	99
114) N-Nitrosodiethylamine	4.467	102	150216	44.22	ppm	90
115) Ethyl methanesulfonate	4.815	79	248334	45.34	ppm	99
116) Pentachloroethane	5.301	167	112827	47.22	ppm	97
117) N-Nitrosopyrrolidine	6.056	100	132064	44.10	ppm	95
118) N-Nitrosomorpholine	6.104	56	229879	44.34	ppm	99
119) O-Toluidine	6.114	106	514392	47.06	ppm	99
121) N-Nitrosopiperidine	6.425	42	277966	42.58	ppm	97
122) A,A-Dimethylphenethyla...	6.874	58	938753m	41.38	ppm	
123) Hexachloropropene	7.157	213	174599	63.13	ppm	99
124) N-Nitrosodi-n-butylamine	7.559	84	182832	35.82	ppm	89
125) p-Phenylenediamine	7.564	108	261574	46.66	ppm	99
126) Isosafrole	7.783	162	209130	45.74	ppm	99
128) Safrole	8.388	162	240394	57.39	ppm	97
129) 1-Chloronaphthalene	8.452	162	564326	55.51	ppm	99
131) 1,4-Naphthoquinone	8.650	158	130508m	33.85	ppm	
132) Pentachlorobenzene	9.270	250	173198	50.73	ppm	100
133) 1-Naphthylamine	9.420	143	502896	48.77	ppm	100
134) 2-Naphthylamine	9.516	143	529990	48.01	ppm	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072438.D
Acq On : 17 Aug 2020 6:29 pm
Operator : marthav
Sample : icv2953-50 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Aug 18 13:19:45 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Aug 18 13:05:00 2020
Response via : Initial Calibration

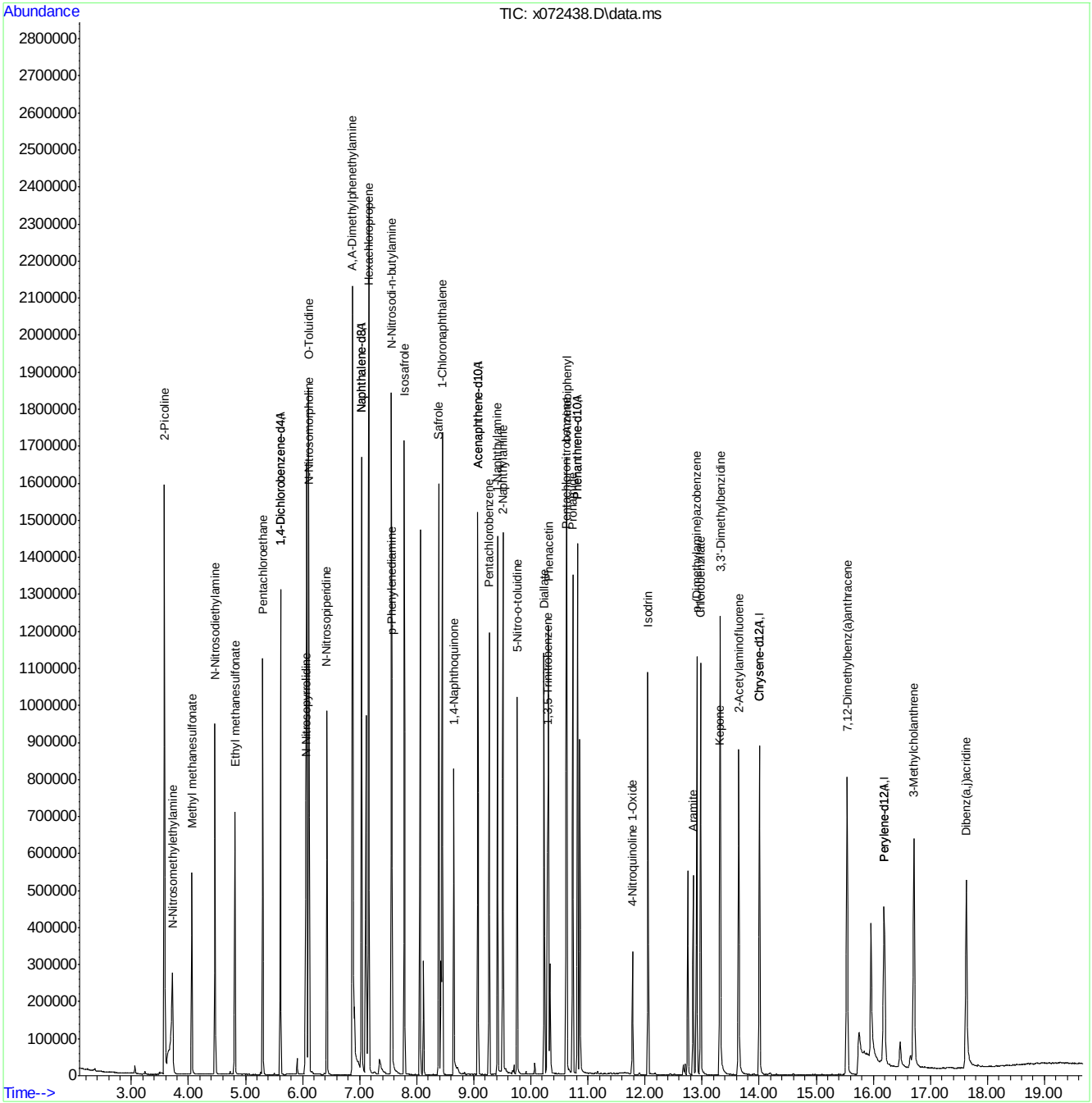
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
135) 5-Nitro-o-toluidine	9.762	152	152212	46.08	ppm	95
137) 1,3,5-Trinitrobenzene	10.292	75	140009	50.57	ppm	98
138) Diallate	10.233	43	440007m	47.54	ppm	
139) Phenacetin	10.308	108	276939	51.83	ppm	95
140) 4-Aminobiphenyl	10.629	169	506142	45.53	ppm	99
141) Pronamide	10.736	173	228230	51.97	ppm	99
142) Pentachloronitrobenzene	10.618	237	49266	48.50	ppm	99
143) 4-Nitroquinoline 1-Oxide	11.784	190	26027	47.31	ppm	97
145) Isodrin	12.051	193	76134	48.96	ppm	96
147) Aramite	12.843	185	76763m	47.84	ppm	
148) p-(Dimethylamine)azobe...	12.907	120	188202	45.47	ppm	100
149) Chlorobenzilate	12.977	139	218863	49.35	ppm	100
150) Kepone	13.308	272	44443	48.93	ppm	96
151) 3,3'-Dimethylbenzidine	13.319	212	405820	90.55	ppm	97
152) 2-Acetylaminofluorene	13.645	181	269042	46.42	ppm	100
154) 7,12-Dimethylbenz(a)an...	15.544	256	250014	54.69	ppm	99
156) 3-Methylcholanthrene	16.715	268	231104	55.80	ppm	99
157) Dibenz(a,j)acridine	17.630	279	327599	50.49	ppm	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072438.D
Acq On : 17 Aug 2020 6:29 pm
Operator : marthav
Sample : icv2953-50 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Aug 18 13:19:45 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Aug 18 13:05:00 2020
Response via : Initial Calibration



Manual Integration Approval Summary

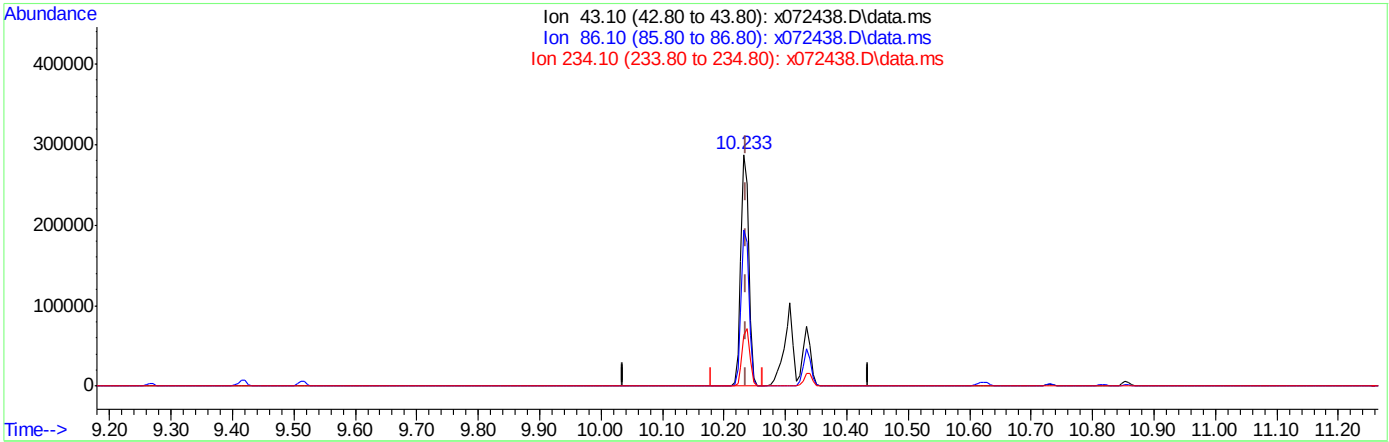
Sample Number: SX2953-ICV2953 **Method:** SW846 8270D
Lab FileID: X072438.D **Analyst approved:** 08/18/20 14:01 Martha Valls
Injection Time: 08/17/20 18:29 **Supervisor approved:** 08/18/20 14:38 Nicole McCampbell

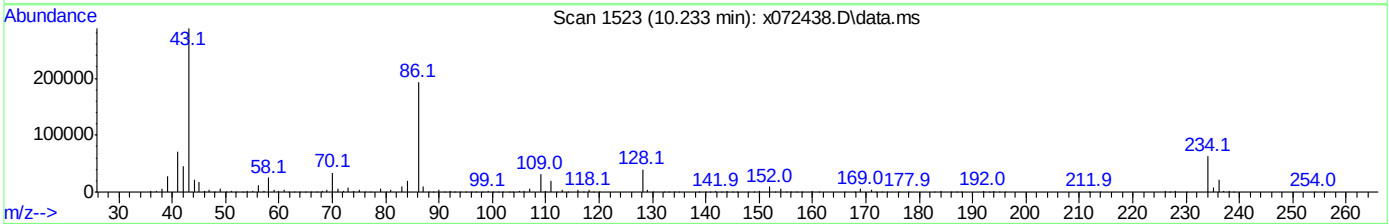
Parameter	CAS	Sig#	R.T. (min.)	Reason
A,A-Dimethylphenethylamine	122-09-8		6.87	Split peak
1,4-Naphthoquinone	130-15-4		8.65	Split peak
Diallate	2303-16-4		10.23	Split peak
Aramite	140-57-8		12.84	Split peak

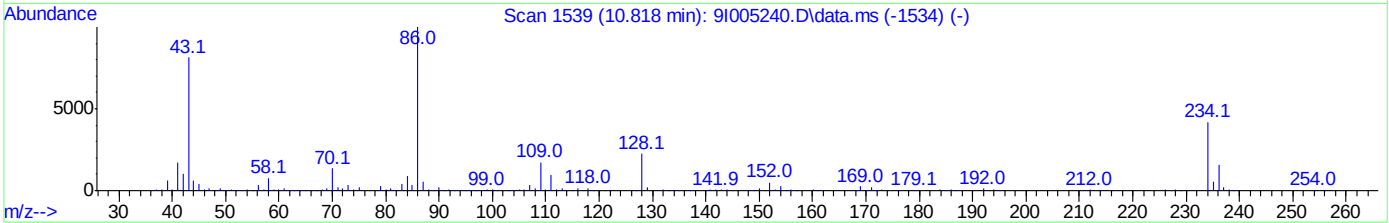
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072438.D
Acq On : 17 Aug 2020 6:29 pm
Operator : marthav
Sample : icv2953-50 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Aug 18 13:06:04 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Aug 18 13:05:00 2020
Response via : Initial Calibration







TIC: x072438.D\data.ms

(138) Diallate

10.233min (-0.003) 28.81ppm

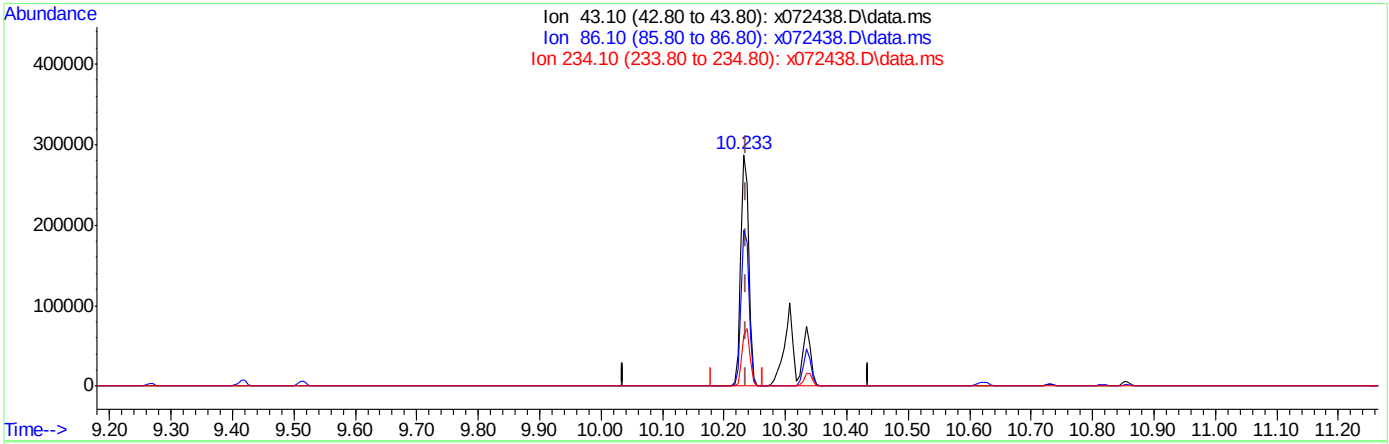
response 266681

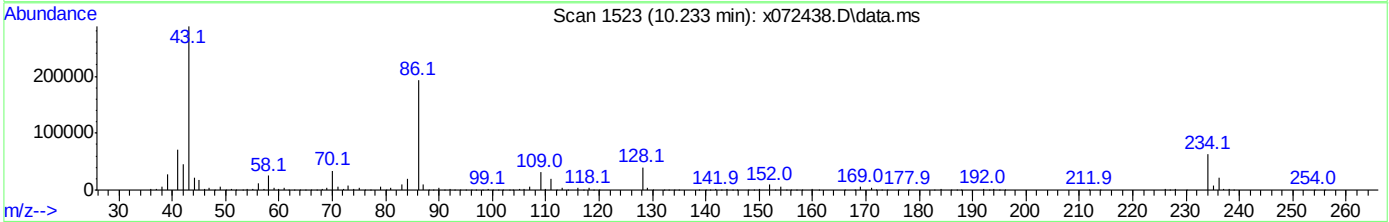
Ion	Exp%	Act%
43.10	100	100
86.10	65.50	67.22
234.10	19.90	21.99
0.00	0.00	0.00

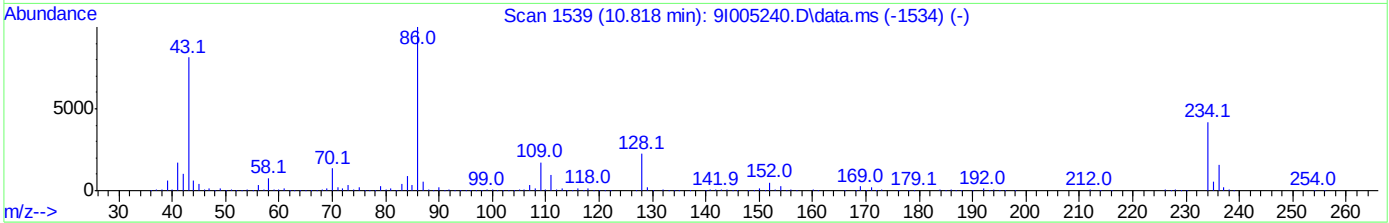
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072438.D
Acq On : 17 Aug 2020 6:29 pm
Operator : marthav
Sample : icv2953-50 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Aug 18 13:06:04 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Aug 18 13:05:00 2020
Response via : Initial Calibration







TIC: x072438.D\data.ms

(138) Diallate

10.233min (-0.003) 47.54ppm m

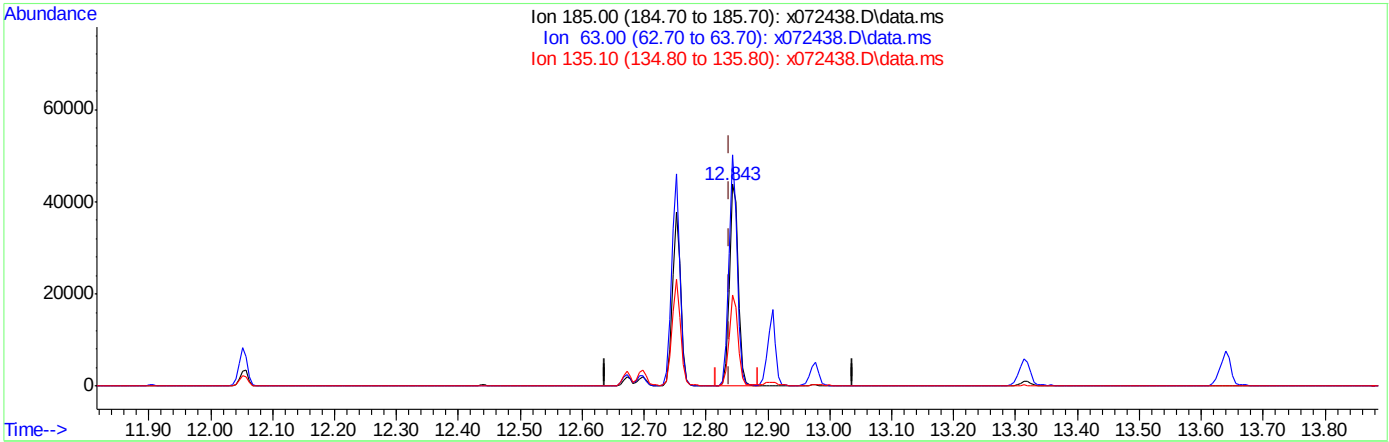
response 440007

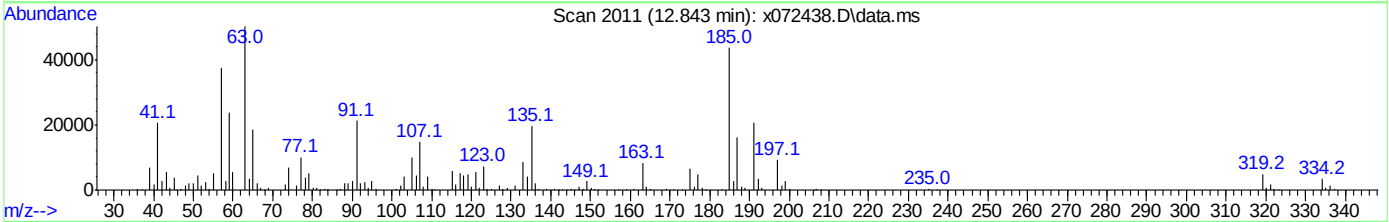
Ion	Exp%	Act%
43.10	100	100
86.10	65.50	67.24
234.10	19.90	21.97
0.00	0.00	0.00

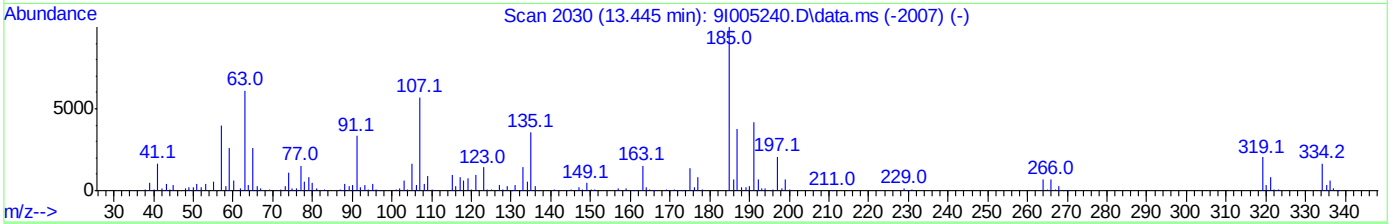
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072438.D
Acq On : 17 Aug 2020 6:29 pm
Operator : marthav
Sample : icv2953-50 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Aug 18 13:06:04 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Aug 18 13:05:00 2020
Response via : Initial Calibration







TIC: x072438.D\data.ms

(147) Aramite

12.843min (+0.005) 27.32ppm

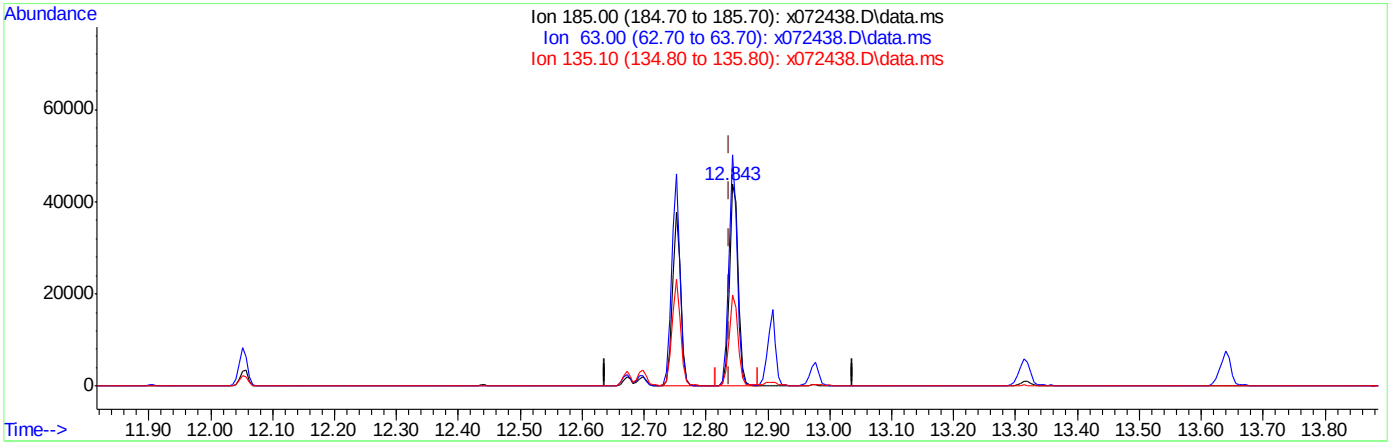
response 42369

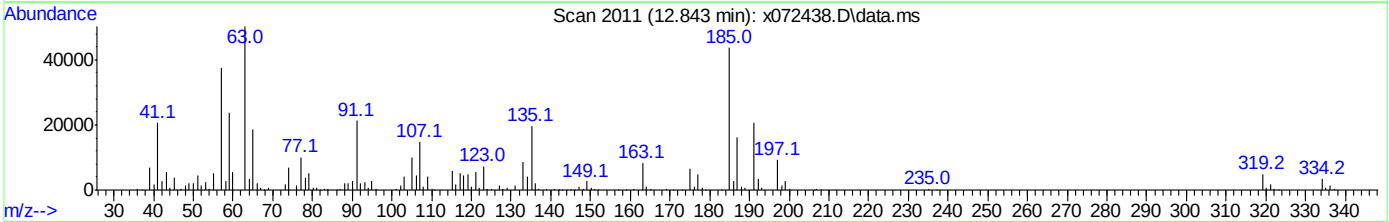
Ion	Exp%	Act%
185.00	100	100
63.00	92.00	114.48
135.10	43.20	44.44
0.00	0.00	0.00

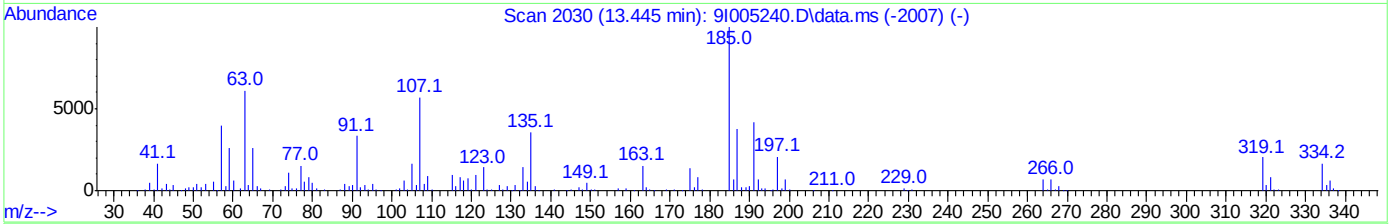
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072438.D
Acq On : 17 Aug 2020 6:29 pm
Operator : marthav
Sample : icv2953-50 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Aug 18 13:06:04 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Aug 18 13:05:00 2020
Response via : Initial Calibration







TIC: x072438.D\data.ms

(147) Aramite

12.843min (+0.005) 47.84ppm m

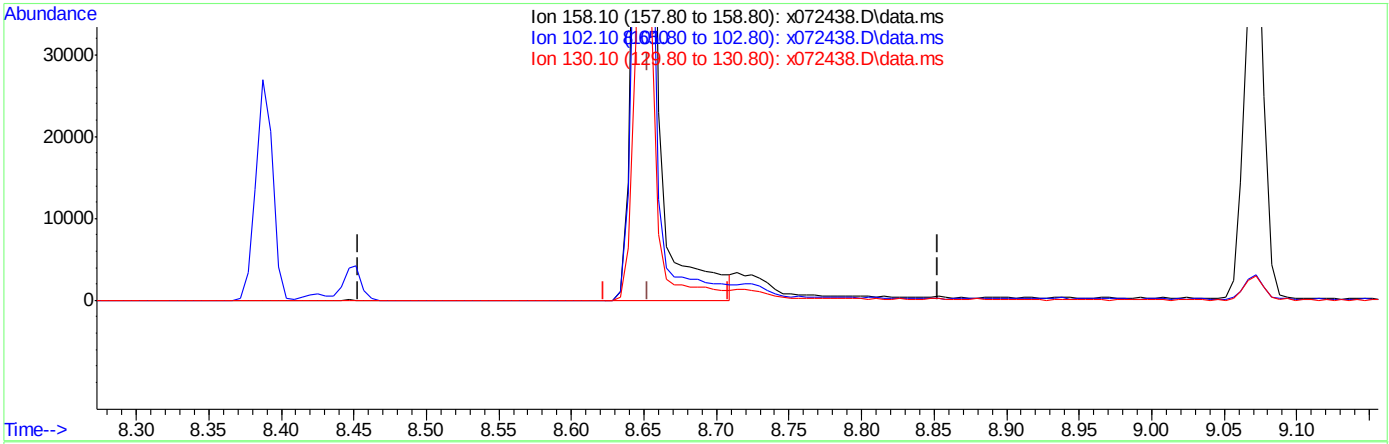
response 76763

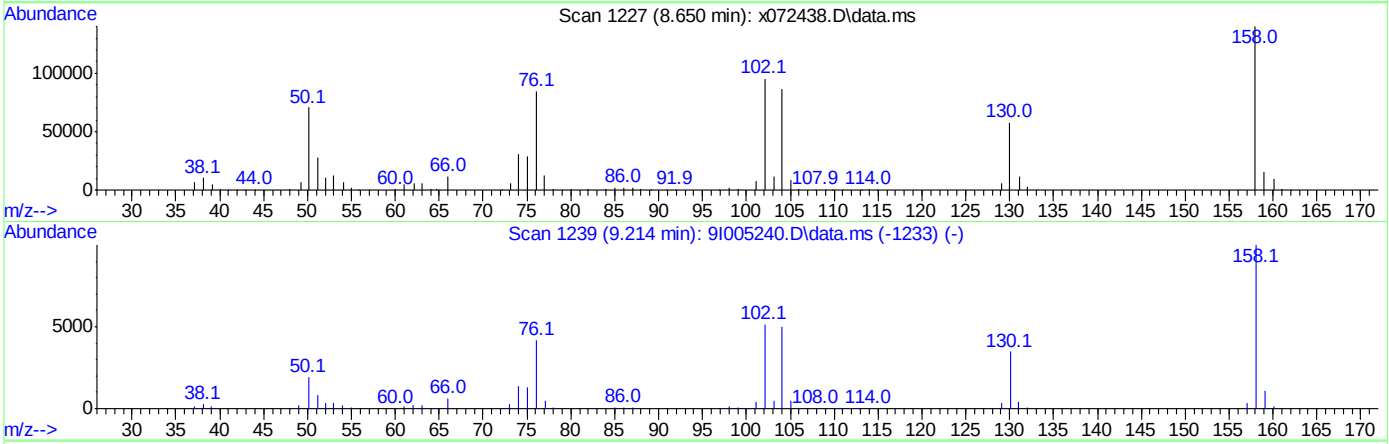
Ion	Exp%	Act%
185.00	100	100
63.00	92.00	114.87
135.10	43.20	44.97
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072438.D
Acq On : 17 Aug 2020 6:29 pm
Operator : marthav
Sample : icv2953-50 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Aug 18 13:14:12 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Aug 18 13:05:00 2020
Response via : Initial Calibration





TIC: x072438.D\data.ms

(131) 1,4-Naphthoquinone

8.650min (-0.003) 32.16ppm

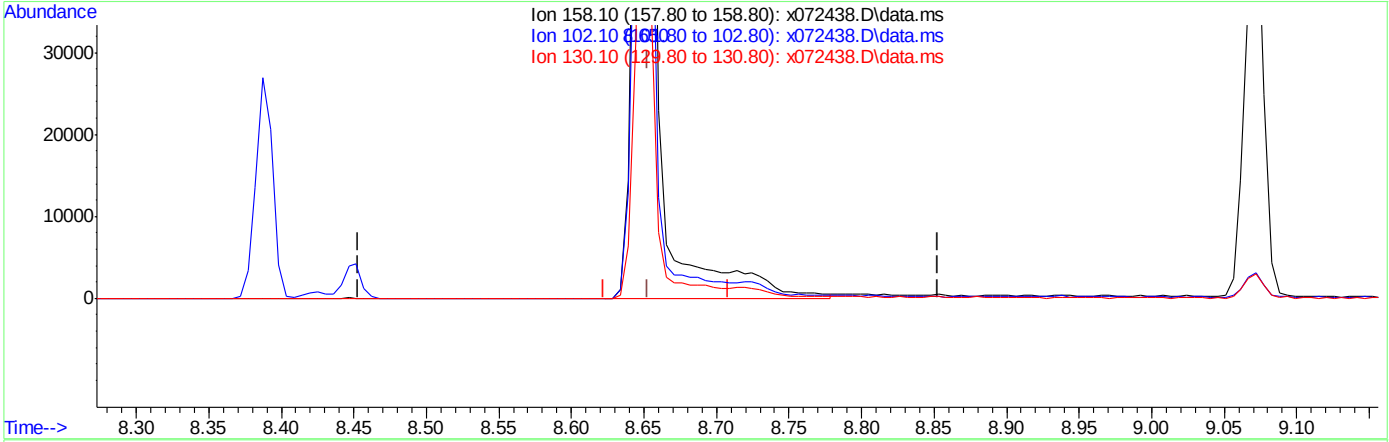
response 123836

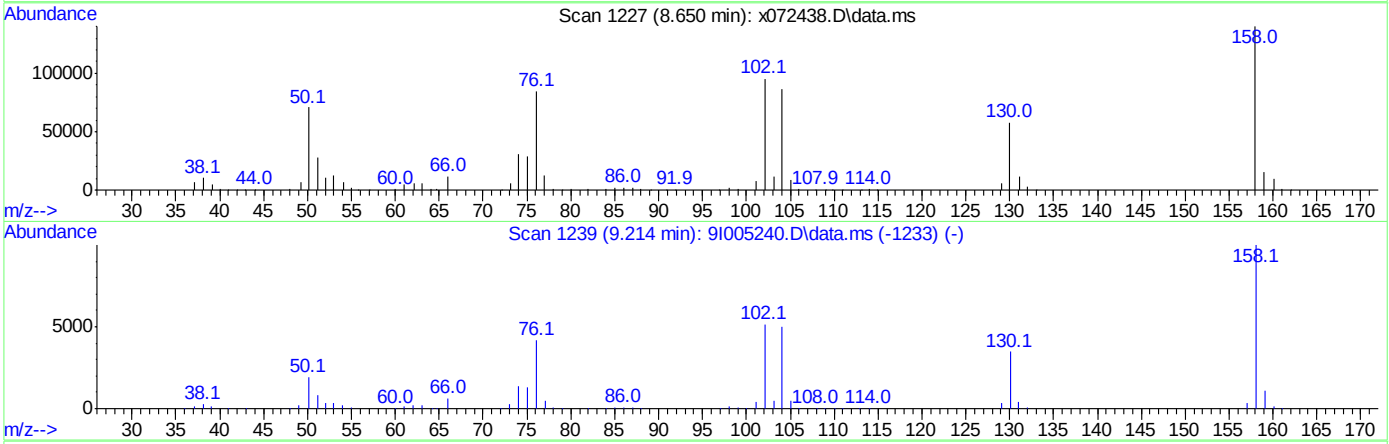
Ion	Exp%	Act%
158.10	100	100
102.10	67.20	68.06
130.10	40.20	41.38
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072438.D
Acq On : 17 Aug 2020 6:29 pm
Operator : marthav
Sample : icv2953-50 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Aug 18 13:14:12 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Aug 18 13:05:00 2020
Response via : Initial Calibration





TIC: x072438.D\data.ms

(131) 1,4-Naphthoquinone

8.650min (-0.003) 33.85ppm m

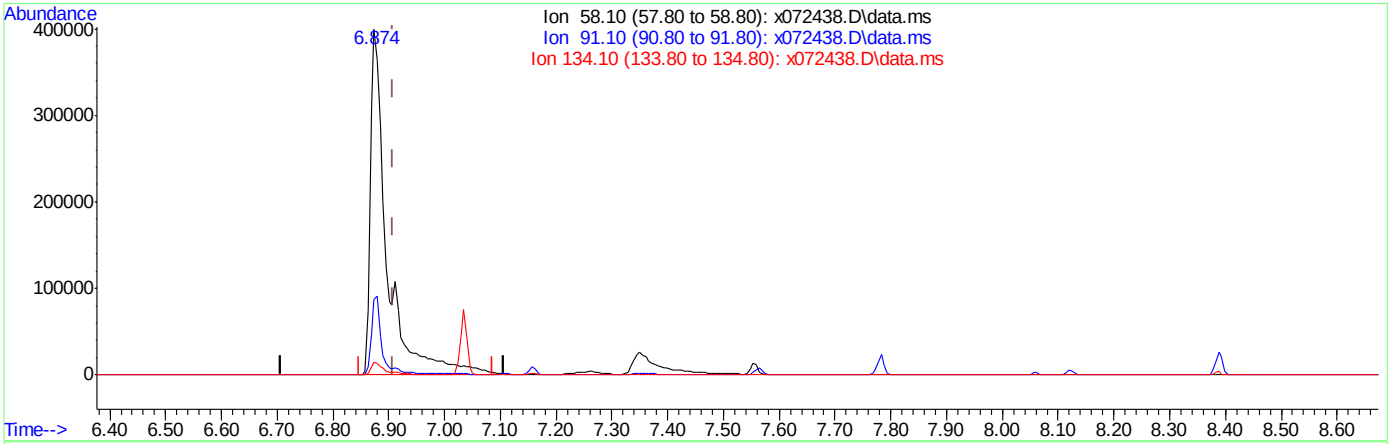
response 130508

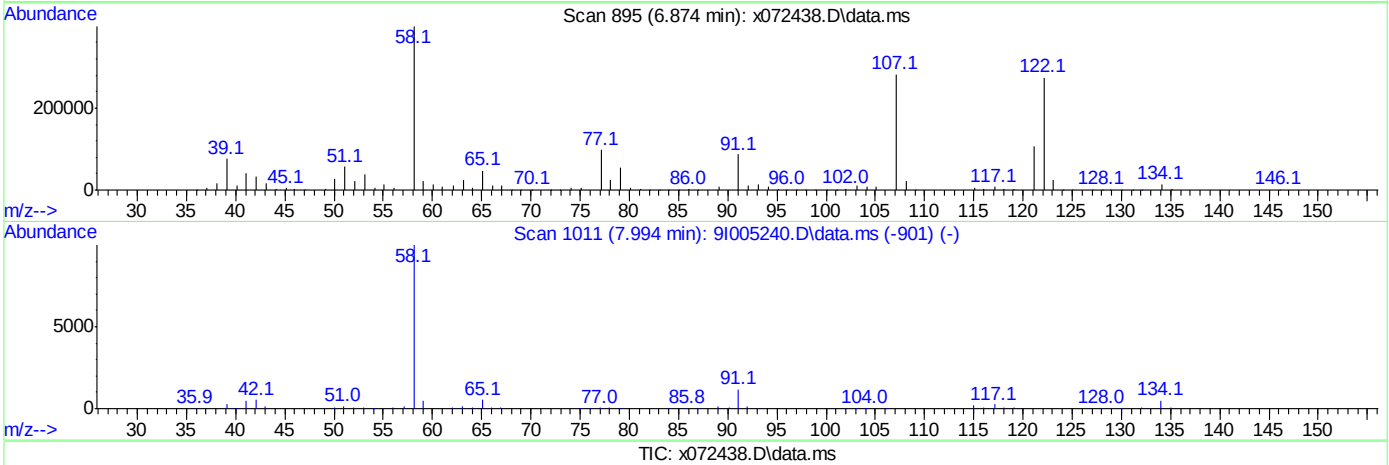
Ion	Exp%	Act%
158.10	100	100
102.10	67.20	67.96
130.10	40.20	41.33
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072438.D
Acq On : 17 Aug 2020 6:29 pm
Operator : marthav
Sample : icv2953-50 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Aug 18 13:14:12 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Aug 18 13:05:00 2020
Response via : Initial Calibration





TIC: x072438.D\data.ms

(122) A,A-Dimethylphenethylamine

6.874min (-0.034) 36.84ppm

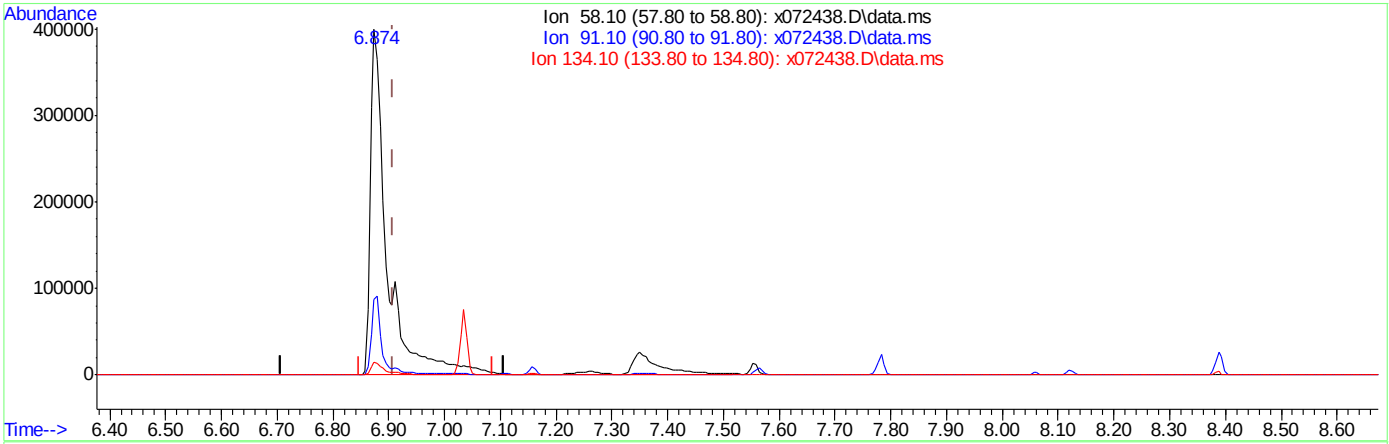
response 835869

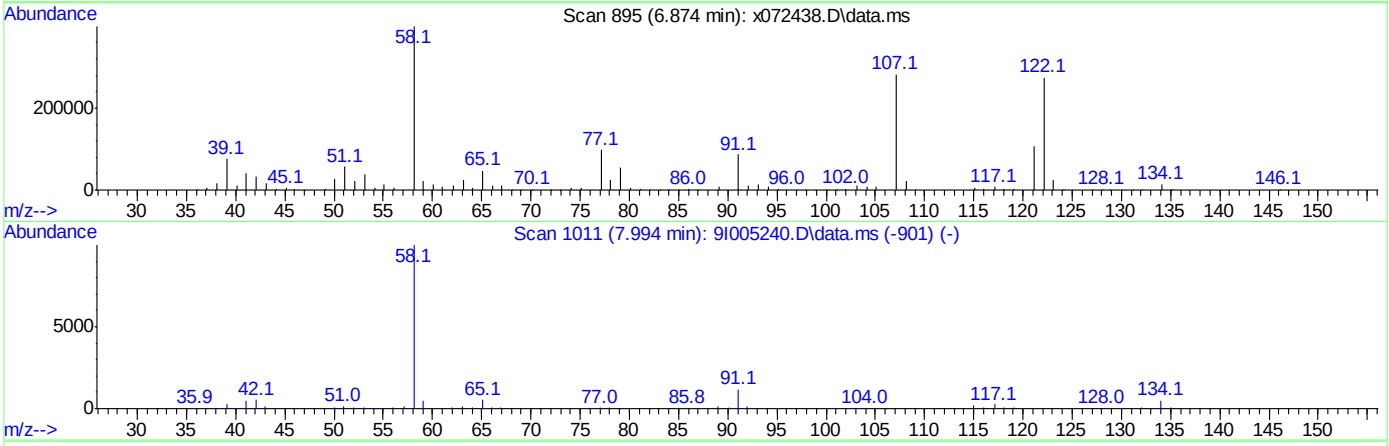
Ion	Exp%	Act%
58.10	100	100
91.10	8.00	21.75
134.10	3.30	3.50
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072438.D
Acq On : 17 Aug 2020 6:29 pm
Operator : marthav
Sample : icv2953-50 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Aug 18 13:14:12 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Aug 18 13:05:00 2020
Response via : Initial Calibration





TIC: x072438.D\data.ms

(122) A,A-Dimethylphenethylamine

6.874min (-0.034) 41.38ppm m

response 938753

Ion	Exp%	Act%
58.10	100	100
91.10	8.00	21.72
134.10	3.30	3.51
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072439.D
Acq On : 17 Aug 2020 6:54 pm
Operator : marthav
Sample : icv2953-50 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Aug 18 13:15:13 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Aug 18 13:05:00 2020
Response via : Initial Calibration

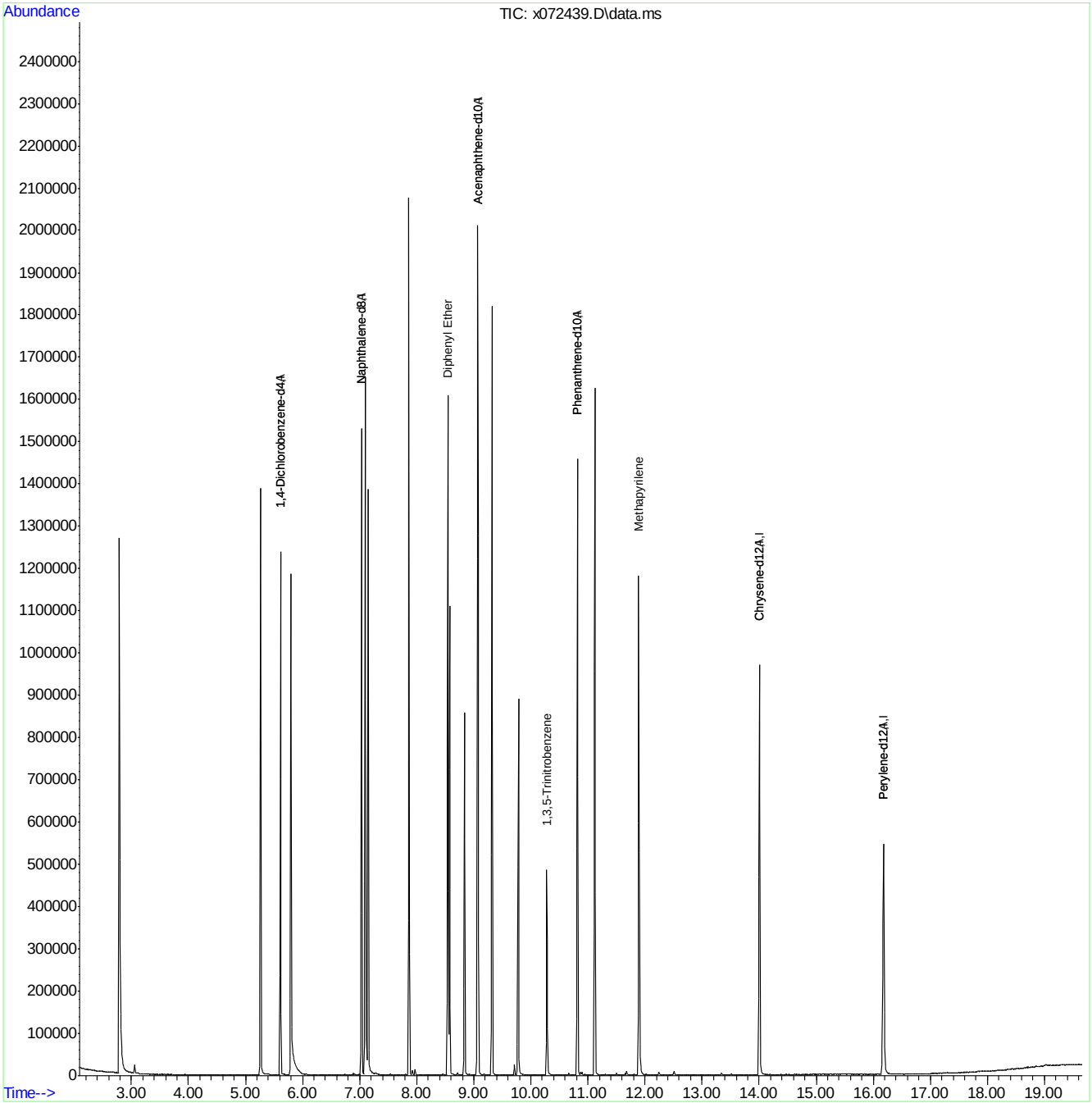
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.611	152	162040	40.00	ppm	0.00
22) Naphthalene-d8	7.034	136	622437	40.00	ppm	0.00
43) Acenaphthene-d10	9.072	164	325235	40.00	ppm	0.00
70) Phenanthrene-d10	10.816	188	521648	40.00	ppm	0.00
92) Chrysene-d12	14.009	240	373401	40.00	ppm	-0.01
102) Perylene-d12	16.180	264	293840	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	5.611	152	162040	40.00	ppm	0.00
120) Naphthalene-d8A	7.034	136	622437	40.00	ppm	0.00
127) Acenaphthene-d10A	9.072	164	325235	40.00	ppm	0.00
136) Phenanthrene-d10A	10.816	188	521648	40.00	ppm	0.00
146) Chrysene-d12A	14.009	240	373401	40.00	ppm	0.00
153) Perylene-d12A	16.180	264	293840	40.00	ppm	-0.02
System Monitoring Compounds						
7) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 100.000	Range 14 - 67		Recovery =	0.00%#		
9) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 100.000	Range 10 - 50		Recovery =	0.00%#		
23) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000	Range 42 - 108		Recovery =	0.00%#		
47) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000	Range 40 - 106		Recovery =	0.00%#		
75) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 100.000	Range 33 - 118		Recovery =	0.00%#		
95) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000	Range 39 - 121		Recovery =	0.00%#		
Target Compounds						Qvalue
130) Diphenyl Ether	8.548	170	315771	40.61	ppm	99
137) 1,3,5-Trinitrobenzene	10.281	75	121402	43.69	ppm	98
144) Methapyrilene	11.891	58	450984	355.57	ppm	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0817_sx2953\
Data File : x072439.D
Acq On : 17 Aug 2020 6:54 pm
Operator : marthav
Sample : icv2953-50 Inst : MSBNA05
Misc : op81484,sx2953,1000,,,1,1,water
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Aug 18 13:15:13 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Aug 18 13:05:00 2020
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan 08/29/20 12:04

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0828_sx2960\
Data File : x072584.D
Acq On : 28 Aug 2020 2:10 pm
Operator : marthav
Sample : cc2953-50 8270 Inst : MSBNA05
Misc : op81605,sx2960,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 29 09:33:46 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Aug 18 13:05:00 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.563	152	158778	40.00	ppm	0.00
22) Naphthalene-d8	6.986	136	642911	40.00	ppm	0.00
43) Acenaphthene-d10	9.019	164	312269	40.00	ppm	0.00
70) Phenanthrene-d10	10.762	188	527531	40.00	ppm	0.00
92) Chrysene-d12	13.950	240	393869	40.00	ppm	0.00
102) Perylene-d12	16.095	264	279073	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	5.563	152	158778	40.00	ppm	0.00
120) Naphthalene-d8A	6.986	136	642911	40.00	ppm	0.00
127) Acenaphthene-d10A	9.019	164	312269	40.00	ppm	0.00
136) Phenanthrene-d10A	10.762	188	527531	40.00	ppm	0.00
146) Chrysene-d12A	13.950	240	393869	40.00	ppm	0.00
153) Perylene-d12A	16.095	264	279073	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	4.242	112	615916	101.79	ppm	-0.01
Spiked Amount 100.000	Range 14 - 67		Recovery = 101.79%#			
9) Phenol-d5	5.275	99	757788	106.83	ppm	-0.02
Spiked Amount 100.000	Range 10 - 50		Recovery = 106.83%#			
23) Nitrobenzene-d5	6.184	82	369810	51.52	ppm	0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 103.04%			
47) 2-Fluorobiphenyl	8.259	172	658393	52.43	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 104.86%			
75) 2,4,6-Tribromophenol	9.960	330	122734	108.52	ppm	0.00
Spiked Amount 100.000	Range 33 - 118		Recovery = 108.52%			
95) Terphenyl-d14	12.677	244	602127	53.03	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 106.06%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.376	88	134924	48.63	ppm	# 37
3) N-nitrosodimethylamine	2.718	42	249599	50.41	ppm	# 38
4) Pyridine	2.739	79	393088	50.96	ppm	# 27
5) Benzaldehyde	5.093	106	225601	46.64	ppm	89
6) Aniline	5.221	93	467253	52.42	ppm	87
8) bis(2-Chloroethyl)ether	5.296	93	330392	54.25	ppm	# 69
10) Phenol	5.291	94	437861	54.47	ppm	84
11) 2-Chlorophenol	5.366	128	335491	53.61	ppm	81
12) 1,3-Dichlorobenzene	5.494	146	340953	51.16	ppm	96
13) 1,4-Dichlorobenzene	5.580	146	355483	50.79	ppm	96
14) 1,2-Dichlorobenzene	5.740	146	322066	50.72	ppm	97
15) Benzyl alcohol	5.756	108	219403	56.34	ppm	86
16) 2,2'-Oxybis(1-chloropr...	5.890	45	653006	52.88	ppm	74
17) 2-Methylphenol	5.927	108	311416	54.02	ppm	98
18) Acetophenone	6.023	105	454959	55.10	ppm	96
19) Hexachloroethane	6.109	117	129911	49.10	ppm	94
20) N-Nitroso-di-n-propyla...	6.040	70	251757	55.01	ppm	# 60
21) 3&4-Methylphenol	6.104	108	330676	54.95	ppm	97
24) Nitrobenzene	6.205	77	362086	50.96	ppm	83
25) Isophorone	6.483	82	618537	52.90	ppm	95
26) 2-Nitrophenol	6.564	139	179171	52.89	ppm	73

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0828_sx2960\
Data File : x072584.D
Acq On : 28 Aug 2020 2:10 pm
Operator : marthav
Sample : cc2953-50 8270 Inst : MSBNA05
Misc : op81605,sx2960,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 29 09:33:46 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Aug 18 13:05:00 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
27) 2,4-Dimethylphenol	6.676	107	290391	52.24	ppm		95
28) O,O,O-Triethylphosphor...	6.724	198	133103	52.89	ppm		87
29) bis(2-Chloroethoxy)met...	6.751	93	377412	53.49	ppm		95
30) Benzoic Acid	6.858	105	238866m	62.23	ppm		
31) 2,4-Dichlorophenol	6.879	162	258936	53.84	ppm		97
32) 1,2,4-Trichlorobenzene	6.927	180	262208	50.44	ppm		97
34) Naphthalene	7.008	128	931020	51.07	ppm		100
35) 4-Chloroaniline	7.109	127	391804	52.73	ppm		92
36) 2,6-Dichlorophenol	7.115	162	249112	52.60	ppm		98
37) Hexachlorobutadiene	7.157	225	128630	49.76	ppm		98
38) Caprolactam	7.548	113	103856	56.61	ppm	#	50
39) 4-Chloro-3-methylphenol	7.740	107	265401	54.07	ppm		95
40) 2-Methylnaphthalene	7.810	142	614679	52.47	ppm		98
41) 1-Methylnaphthalene	7.922	142	586856	52.53	ppm		99
42) 1,2,4,5-Tetrachloroben...	8.008	216	252055	52.21	ppm		98
44) Hexachlorocyclopentadiene	7.997	237	82793	51.22	ppm		99
45) 2,4,6-Trichlorophenol	8.179	196	165082	53.11	ppm		99
46) 2,4,5-Trichlorophenol	8.243	196	178322	54.09	ppm		98
48) 1,1'-Biphenyl	8.366	154	714733	52.38	ppm		100
49) 2-Chloronaphthalene	8.377	162	542616	52.36	ppm		96
50) 2-Nitroaniline	8.532	65	206730	53.98	ppm	#	69
51) p-Dinitrobenzene	8.708	75	121571	53.55	ppm		96
52) Acenaphthylene	8.853	152	892704	54.11	ppm		100
53) Dimethylphthalate	8.767	163	604378	53.43	ppm		99
54) m-Dinitrobenzene	8.794	168	111123	53.12	ppm	#	56
55) 2,6-Dinitrotoluene	8.826	165	151339	55.54	ppm		79
56) o-Dinitrobenzene	8.885	50	123753	46.85	ppm		92
57) Acenaphthene	9.061	153	579602	52.63	ppm		99
58) 3-Nitroaniline	9.024	138	174892	56.10	ppm		97
59) 2,4-Dinitrophenol	9.147	184	76846	54.85	ppm	#	81
60) Dibenzofuran	9.265	168	755887	52.46	ppm		95
61) 2,4-Dinitrotoluene	9.297	165	199612	56.91	ppm		88
62) 4-Nitrophenol	9.334	109	67543	51.87	ppm	#	60
63) 2,3,5,6-Tetrachlorophenol	9.388	232	115009	49.19	ppm		91
64) 2,3,4,6-Tetrachlorophenol	9.441	232	136466	52.39	ppm		91
65) Fluorene	9.666	166	625777	54.37	ppm		98
66) 4-Chlorophenyl-phenyle...	9.687	204	287966	53.15	ppm		89
67) Diethylphthalate	9.596	149	598097	54.17	ppm		97
68) Thionazin	9.682	97	138615	55.78	ppm		98
69) 4-Nitroaniline	9.751	138	180324	52.91	ppm		87
71) 4,6-Dinitro-2-methylph...	9.778	198	116097	54.63	ppm		59
72) n-Nitrosodiphenylamine	9.842	169	543374	62.50	ppm		96
73) Diphenylamine	9.842	169	543374	53.26	ppm		96
74) 1,2-Diphenylhydrazine	9.874	77	681174	53.65	ppm		91
76) Sulfotep	10.062	97	100022	54.73	ppm	#	64
77) Phorate	10.195	75	372248	54.47	ppm		94
78) 4-Bromophenyl-phenylether	10.260	248	142771	53.86	ppm	#	80
79) Hexachlorobenzene	10.308	284	142801	54.07	ppm		81
80) Dimethoate	10.404	87	250631	55.20	ppm		98
81) Simazine	10.479	201	92198	50.90	ppm		97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0828_sx2960\
Data File : x072584.D
Acq On : 28 Aug 2020 2:10 pm
Operator : marthav
Sample : cc2953-50 8270 Inst : MSBNA05
Misc : op81605,sx2960,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 29 09:33:46 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Aug 18 13:05:00 2020
Response via : Initial Calibration

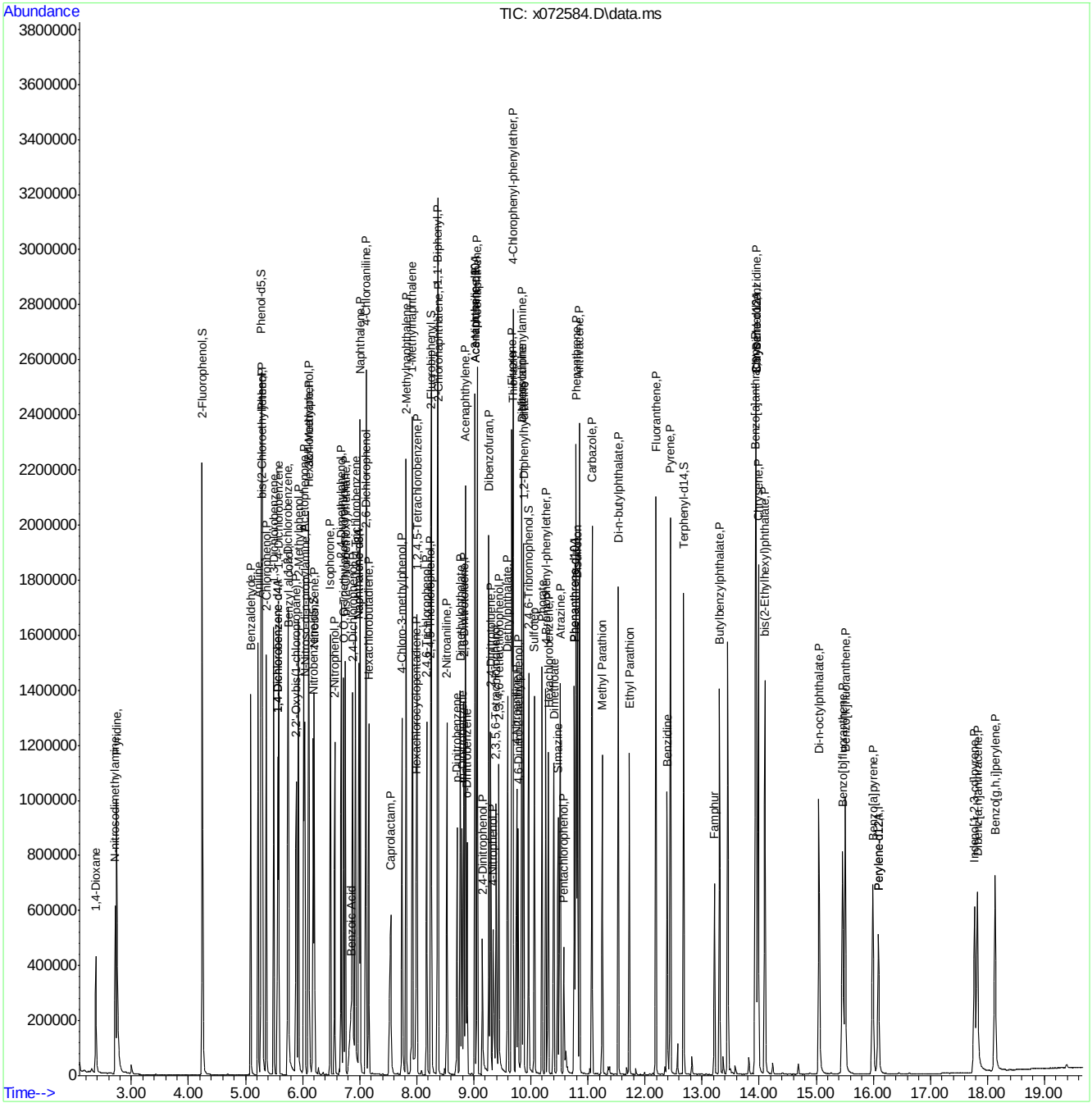
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
82) Atrazine	10.516	200	167679	52.47	ppm		88
83) Pentachlorophenol	10.575	266	53851	43.41	ppm		98
84) Phenanthrene	10.789	178	875629	52.58	ppm		99
85) Anthracene	10.853	178	912675	53.00	ppm		98
86) Disulfoton	10.816	88	397376	70.50	ppm		92
87) Carbazole	11.073	167	811915	53.00	ppm		99
88) Methyl Parathion	11.254	109	202762	51.83	ppm	#	86
89) Di-n-butylphthalate	11.533	149	931091	53.83	ppm		99
90) Ethyl Parathion	11.725	97	121578	53.46	ppm		88
91) Fluoranthene	12.190	202	834988	52.77	ppm		99
93) Benzidine	12.394	184	413506	48.48	ppm		95
94) Pyrene	12.447	202	875279	52.65	ppm		98
96) Famphur	13.217	218	188167	42.41	ppm		88
97) Butylbenzylphthalate	13.308	149	378318	54.19	ppm		91
98) 3,3'-Dichlorobenzidine	13.950	252	238798	54.22	ppm		97
99) Benzo[a]anthracene	13.939	228	667649	50.97	ppm		98
100) Chrysene	13.988	228	730903	52.85	ppm		98
101) bis(2-Ethylhexyl)phtha...	14.100	149	523295	55.49	ppm		97
103) Di-n-octylphthalate	15.047	149	758218	55.00	ppm		92
104) Benzo[b]fluoranthene	15.464	252	510427	53.03	ppm		96
105) Benzo[k]fluoranthene	15.512	252	572164	55.93	ppm		96
106) Benzo[a]pyrene	15.993	252	460225	54.26	ppm		94
107) Indeno[1,2,3-cd]pyrene	17.774	276	356766	49.30	ppm		86
108) Dibenz[a,h]anthracene	17.828	278	414749	51.73	ppm		92
109) Benzo[g,h,i]perylene	18.138	276	421694	49.92	ppm		87

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\0828_sx2960\
Data File : x072584.D
Acq On : 28 Aug 2020 2:10 pm
Operator : marthav
Sample : cc2953-50 8270 Inst : MSBNA05
Misc : op81605,sx2960,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 29 09:33:46 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Aug 18 13:05:00 2020
Response via : Initial Calibration



Manual Integration Approval Summary

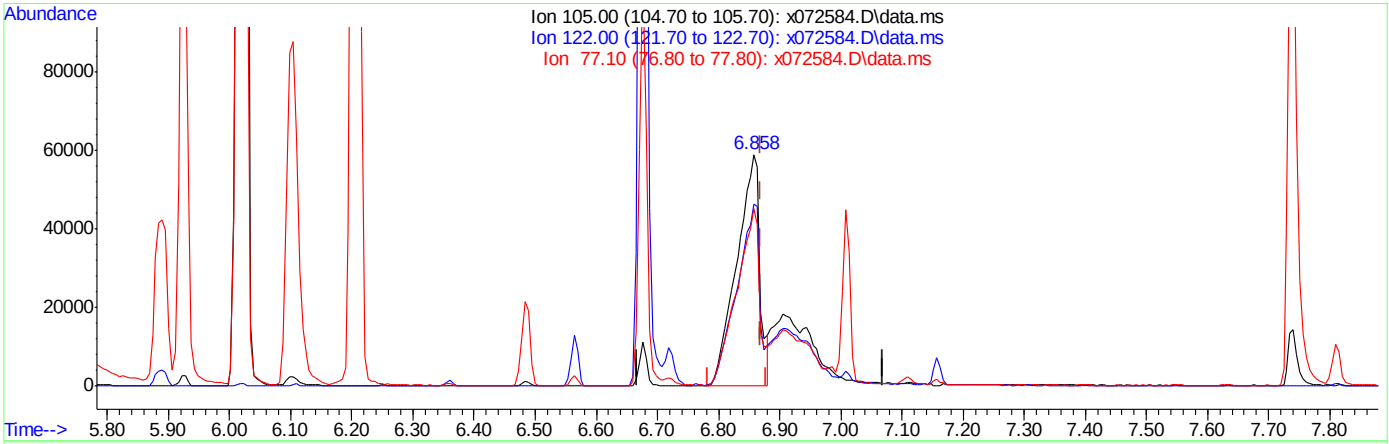
Sample Number:	SX2960-CC2953	**Method:**	SW846 8270D
Lab FileID:	X072584.D	**Analyst approved:**	08/29/20 10:36 Martha Valls
Injection Time:	08/28/20 14:10	**Supervisor approved:**	08/29/20 12:04 Naresh Jiawan

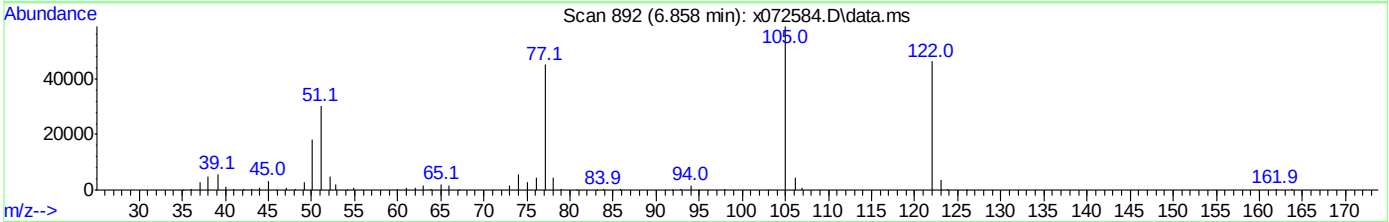
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic Acid	65-85-0		6.86	Split peak

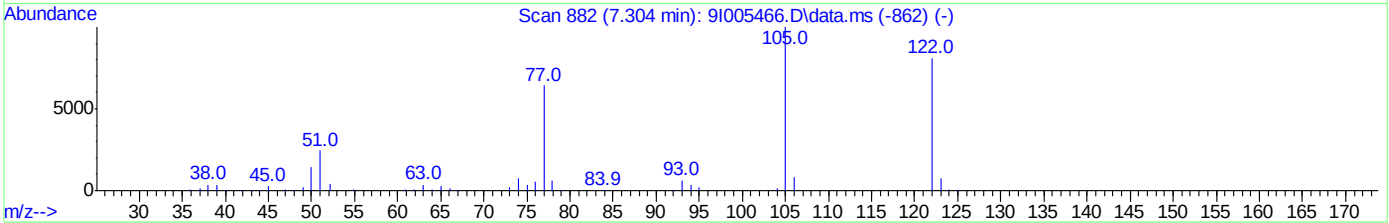
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0828_sx2960\
Data File : x072584.D
Acq On : 28 Aug 2020 2:10 pm
Operator : marthav
Sample : cc2953-50 8270 Inst : MSBNA05
Misc : op81605,sx2960,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 29 09:32:54 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Aug 18 13:05:00 2020
Response via : Initial Calibration







TIC: x072584.D\data.ms

(30) Benzoic Acid

6.858min (-0.011) 43.76ppm

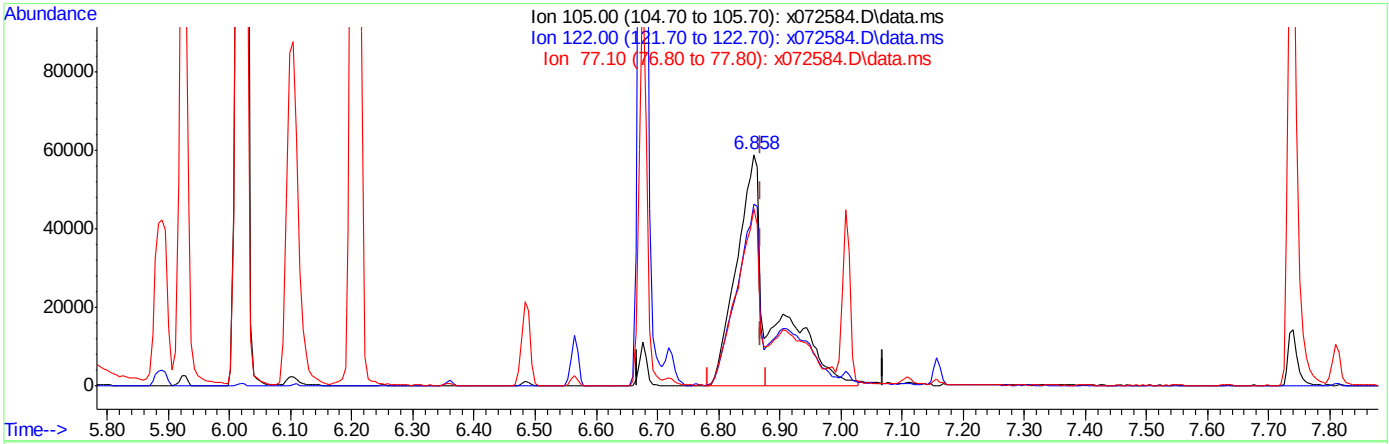
response 154174

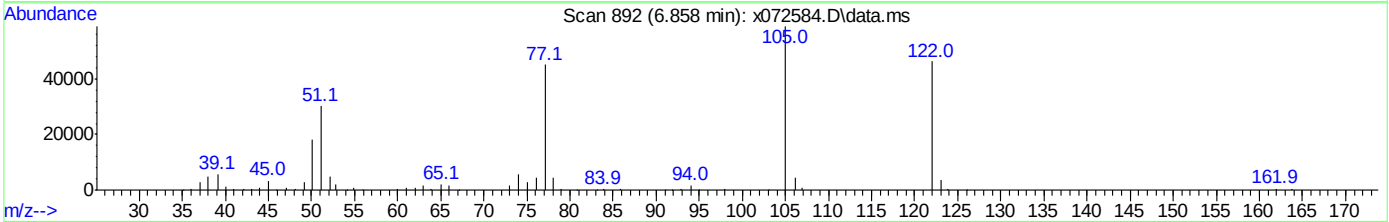
Ion	Exp%	Act%
105.00	100	100
122.00	81.20	78.06
77.10	64.10	75.87
0.00	0.00	0.00

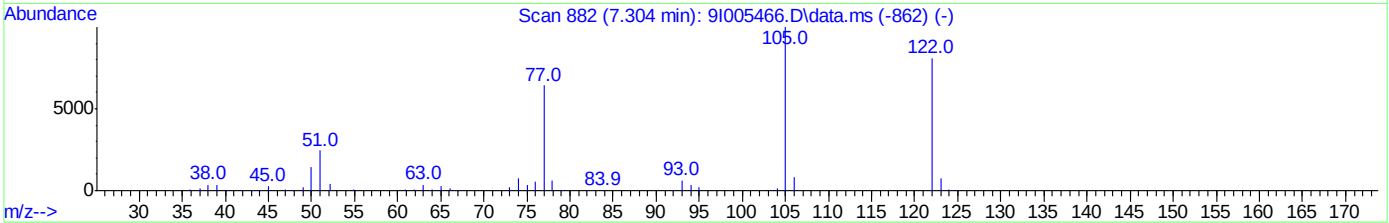
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0828_sx2960\
Data File : x072584.D
Acq On : 28 Aug 2020 2:10 pm
Operator : marthav
Sample : cc2953-50 8270 Inst : MSBNA05
Misc : op81605,sx2960,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 29 09:32:54 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Aug 18 13:05:00 2020
Response via : Initial Calibration







TIC: x072584.D\data.ms

(30) Benzoic Acid

6.858min (-0.011) 62.23ppm m

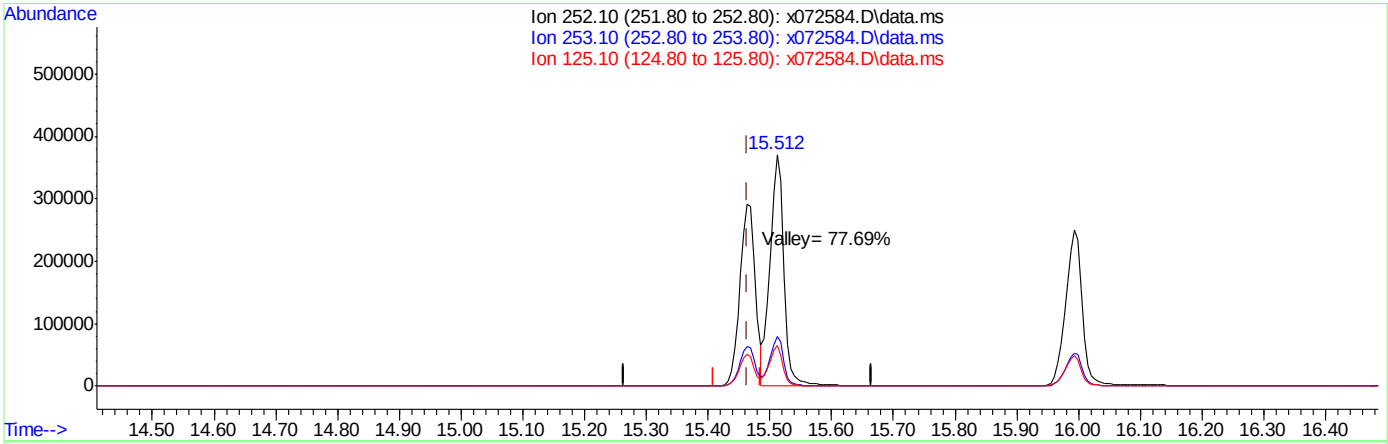
response 238866

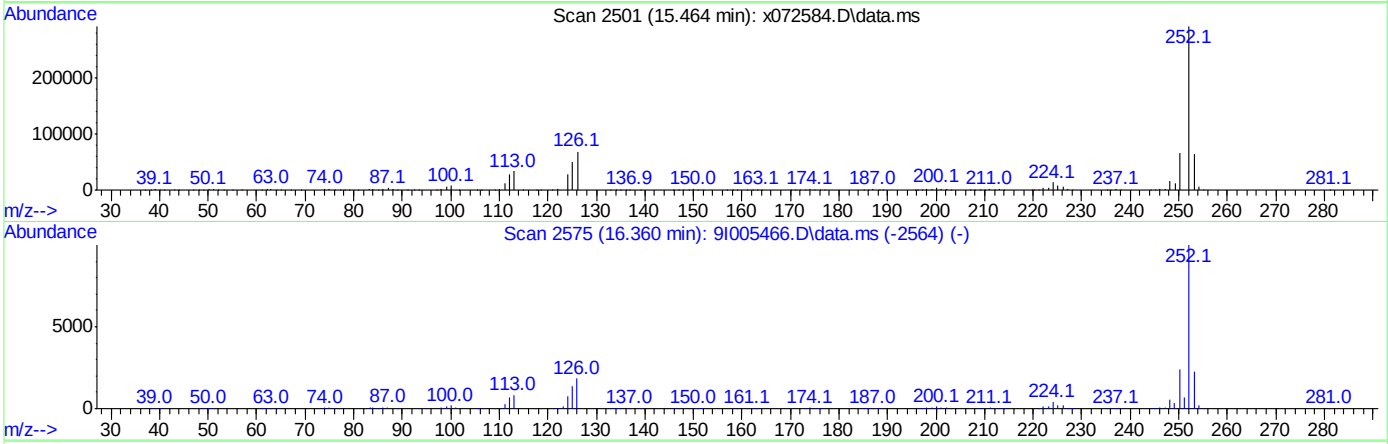
Ion	Exp%	Act%
105.00	100	100
122.00	81.20	78.64
77.10	64.10	76.44
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\0828_sx2960\
Data File : x072584.D
Acq On : 28 Aug 2020 2:10 pm
Operator : marthav
Sample : cc2953-50 8270 Inst : MSBNA05
Misc : op81605,sx2960,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 29 09:32:54 2020
Quant Method : C:\msdchem\1\METHODS\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Tue Aug 18 13:05:00 2020
Response via : Initial Calibration





TIC: x072584.D\data.ms

(104) Benzo[b]fluoranthene (P)

15.464min (-0.001) 53.03ppm

response 510427

Ion	Exp%	Act%
252.10	100	100
253.10	22.50	21.94
125.10	14.00	17.53
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Naresh Jiawan
08/31/20 11:34

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-31-2020\sx2961\
Data File : x072614.d
Acq On : 29 Aug 2020 11:41 am
Operator : marthav
Sample : cc2953-50 8270
Misc : op81605,sx2961,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 30 22:54:03 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Sun Aug 30 22:48:56 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.553	152	149018	40.00	ppm	0.00
22) Naphthalene-d8	6.975	136	596345	40.00	ppm	0.00
43) Acenaphthene-d10	9.013	164	286750	40.00	ppm	0.00
70) Phenanthrene-d10	10.752	188	489662	40.00	ppm	0.00
92) Chrysene-d12	13.939	240	387000	40.00	ppm	0.00
102) Perylene-d12	16.079	264	290893	40.00	ppm	0.00
110) 1,4-Dichlorobenzene-d4A	5.553	152	149018	40.00	ppm	0.00
120) Naphthalene-d8A	6.975	136	596345	40.00	ppm	0.00
127) Acenaphthene-d10A	9.013	164	286750	40.00	ppm	0.00
136) Phenanthrene-d10A	10.752	188	489662	40.00	ppm	0.00
146) Chrysene-d12A	13.939	240	387000	40.00	ppm	0.00
153) Perylene-d12A	16.079	264	290893	40.00	ppm	0.00
System Monitoring Compounds						
7) 2-Fluorophenol	4.232	112	606777	106.85	ppm	0.00
Spiked Amount 100.000	Range 14 - 67		Recovery = 106.85%#			
9) Phenol-d5	5.264	99	740416	111.22	ppm	0.00
Spiked Amount 100.000	Range 10 - 50		Recovery = 111.22%#			
23) Nitrobenzene-d5	6.178	82	358533	53.85	ppm	0.00
Spiked Amount 50.000	Range 42 - 108		Recovery = 107.70%			
47) 2-Fluorobiphenyl	8.248	172	623807	54.09	ppm	0.00
Spiked Amount 50.000	Range 40 - 106		Recovery = 108.18%#			
75) 2,4,6-Tribromophenol	9.955	330	117386	111.81	ppm	0.00
Spiked Amount 100.000	Range 33 - 118		Recovery = 111.81%			
95) Terphenyl-d14	12.672	244	589912	52.88	ppm	0.00
Spiked Amount 50.000	Range 39 - 121		Recovery = 105.76%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.365	88	131178	50.37	ppm	100
3) N-nitrosodimethylamine	2.707	42	261319	56.24	ppm	100
4) Pyridine	2.729	79	380037	52.50	ppm	100
5) Benzaldehyde	5.087	106	237190	52.25	ppm	100
6) Aniline	5.210	93	452064	54.04	ppm	93
8) bis(2-Chloroethyl)ether	5.291	93	318018	55.63	ppm	97
10) Phenol	5.275	94	429155	56.88	ppm	99
11) 2-Chlorophenol	5.355	128	328659	55.96	ppm	100
12) 1,3-Dichlorobenzene	5.489	146	335152	53.58	ppm	100
13) 1,4-Dichlorobenzene	5.574	146	345651	52.62	ppm	100
14) 1,2-Dichlorobenzene	5.735	146	314224	52.72	ppm	100
15) Benzyl alcohol	5.745	108	214472	58.68	ppm	92
16) 2,2'-Oxybis(1-chloropr...	5.884	45	667662	57.61	ppm	100
17) 2-Methylphenol	5.911	108	300648	55.57	ppm #	79
18) Acetophenone	6.013	105	423528	54.65	ppm	100
19) Hexachloroethane	6.098	117	131403	52.91	ppm	100
20) N-Nitroso-di-n-propyla...	6.034	70	245522	57.16	ppm	100
21) 3&4-Methylphenol	6.088	108	316558	56.05	ppm	100
24) Nitrobenzene	6.200	77	352587	53.50	ppm	100
25) Isophorone	6.478	82	596227	54.97	ppm	100
26) 2-Nitrophenol	6.558	139	172263	54.82	ppm	99
27) 2,4-Dimethylphenol	6.665	107	279059	54.12	ppm	100
28) O,O,O-Triethylphosphor...	6.713	198	118578	50.80	ppm	98
29) bis(2-Chloroethoxy)met...	6.745	93	358616	54.79	ppm	99
30) Benzoic Acid	6.842	105	215013m	60.79	ppm	
31) 2,4-Dichlorophenol	6.863	162	244691	54.85	ppm	100
32) 1,2,4-Trichlorobenzene	6.917	180	250979	52.04	ppm	100
34) Naphthalene	7.002	128	889611	52.61	ppm	100
35) 4-Chloroaniline	7.098	127	371838	53.95	ppm	100

Quantitation Report (QT Reviewed)

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Operator : marthav
Sample : cc2953-50 8270
Misc : op81605,sx2961,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 30 22:54:03 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Sun Aug 30 22:48:56 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
36) 2,6-Dichlorophenol	7.104	162	237722	54.12	ppm		100
37) Hexachlorobutadiene	7.152	225	123871	51.66	ppm		100
38) Caprolactam	7.537	113	95027	55.85	ppm		100
39) 4-Chloro-3-methylphenol	7.724	107	252475	55.45	ppm	#	29
40) 2-Methylnaphthalene	7.804	142	579322	53.31	ppm		100
41) 1-Methylnaphthalene	7.917	142	554288	53.49	ppm		100
42) 1,2,4,5-Tetrachloroben...	8.002	216	237377	53.01	ppm		100
44) Hexachlorocyclopentadiene	7.986	237	77551	51.97	ppm		100
45) 2,4,6-Trichlorophenol	8.168	196	156382	54.79	ppm		100
46) 2,4,5-Trichlorophenol	8.232	196	166369	54.96	ppm		100
48) 1,1'-Biphenyl	8.361	154	658440	52.55	ppm		100
49) 2-Chloronaphthalene	8.366	162	514952	54.11	ppm		100
50) 2-Nitroaniline	8.521	65	205489	58.43	ppm		100
51) p-Dinitrobenzene	8.698	75	116097	55.52	ppm		100
52) Acenaphthylene	8.847	152	835395	55.14	ppm		100
53) Dimethylphthalate	8.757	163	570386	54.91	ppm		100
54) m-Dinitrobenzene	8.789	168	104597	54.33	ppm	#	41
55) 2,6-Dinitrotoluene	8.821	165	142548	56.97	ppm		90
56) o-Dinitrobenzene	8.874	50	125535	51.75	ppm		94
57) Acenaphthene	9.051	153	547126	54.10	ppm		100
58) 3-Nitroaniline	9.013	138	164956	57.62	ppm		100
59) 2,4-Dinitrophenol	9.142	184	66222	52.70	ppm	#	69
60) Dibenzofuran	9.259	168	708343	53.54	ppm		95
61) 2,4-Dinitrotoluene	9.286	165	190137	59.04	ppm		95
62) 4-Nitrophenol	9.318	109	62651	52.32	ppm		98
63) 2,3,5,6-Tetrachlorophenol	9.382	232	104797	48.85	ppm		100
64) 2,3,4,6-Tetrachlorophenol	9.430	232	126298	52.76	ppm		100
65) Fluorene	9.660	166	584942	55.35	ppm		100
66) 4-Chlorophenyl-phenyle...	9.682	204	273861	55.05	ppm		100
67) Diethylphthalate	9.591	149	569068	56.12	ppm		100
68) Thionazin	9.676	97	132557	58.09	ppm		100
69) 4-Nitroaniline	9.741	138	173560	55.26	ppm		100
71) 4,6-Dinitro-2-methylph...	9.773	198	106320	54.00	ppm	#	47
72) n-Nitrosodiphenylamine	9.837	169	517398	64.12	ppm		100
73) Diphenylamine	9.837	169	517398	54.63	ppm		100
74) 1,2-Diphenylhydrazine	9.869	77	662604	56.22	ppm		100
76) Sulfotep	10.051	97	93764	55.27	ppm		100
77) Phorate	10.185	75	350214	55.21	ppm		100
78) 4-Bromophenyl-phenylether	10.254	248	133112	54.10	ppm		98
79) Hexachlorobenzene	10.297	284	134398	54.83	ppm		99
80) Dimethoate	10.393	87	245036	58.14	ppm		100
81) Simazine	10.468	201	88115	52.41	ppm		98
82) Atrazine	10.506	200	158981	53.60	ppm		99
83) Pentachlorophenol	10.564	266	47819	41.53	ppm		100
84) Phenanthrene	10.784	178	834340	53.97	ppm		100
85) Anthracene	10.842	178	879082	54.99	ppm		100
86) Disulfoton	10.805	88	299051m	57.16	ppm		
87) Carbazole	11.067	167	784391	55.17	ppm		100
88) Methyl Parathion	11.244	109	197091	54.18	ppm		100
89) Di-n-butylphthalate	11.522	149	908359	56.58	ppm		100
90) Ethyl Parathion	11.714	97	117811	55.66	ppm		100
91) Fluoranthene	12.180	202	816297	55.58	ppm		100
93) Benzidine	12.383	184	450453	53.75	ppm		100
94) Pyrene	12.442	202	863571	52.86	ppm		100
96) Famphur	13.207	218	208458	47.82	ppm		100
97) Butylbenzylphthalate	13.298	149	382931	55.83	ppm		100
98) 3,3'-Dichlorobenzidine	13.939	252	254811	58.89	ppm		100
99) Benzo[a]anthracene	13.929	228	681594	52.96	ppm		100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-31-2020\sx2961\
Data File : x072614.d
Acq On : 29 Aug 2020 11:41 am
Operator : marthav
Sample : cc2953-50 8270
Misc : op81605,sx2961,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 30 22:54:03 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Sun Aug 30 22:48:56 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
100) Chrysene	13.977	228	743070	54.68	ppm	100
101) bis(2-Ethylhexyl)phtha...	14.089	149	540979	58.38	ppm	100
103) Di-n-octylphthalate	15.036	149	800337	55.64	ppm	100
104) Benzo[b]fluoranthene	15.453	252	554041	55.22	ppm	100
105) Benzo[k]fluoranthene	15.501	252	600451	56.32	ppm	100
106) Benzo[a]pyrene	15.983	252	494448	55.93	ppm	100
107) Indeno[1,2,3-cd]pyrene	17.764	276	402288	53.34	ppm	97
108) Dibenz[a,h]anthracene	17.812	278	458047	54.80	ppm	100
109) Benzo[g,h,i]perylene	18.122	276	454943	51.66	ppm	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\edessas\08-31-2020\sx2961\
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Operator : marthav
Sample : cc2953-50 8270
Misc : op81605,sx2961,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 30 22:54:03 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Sun Aug 30 22:48:56 2020
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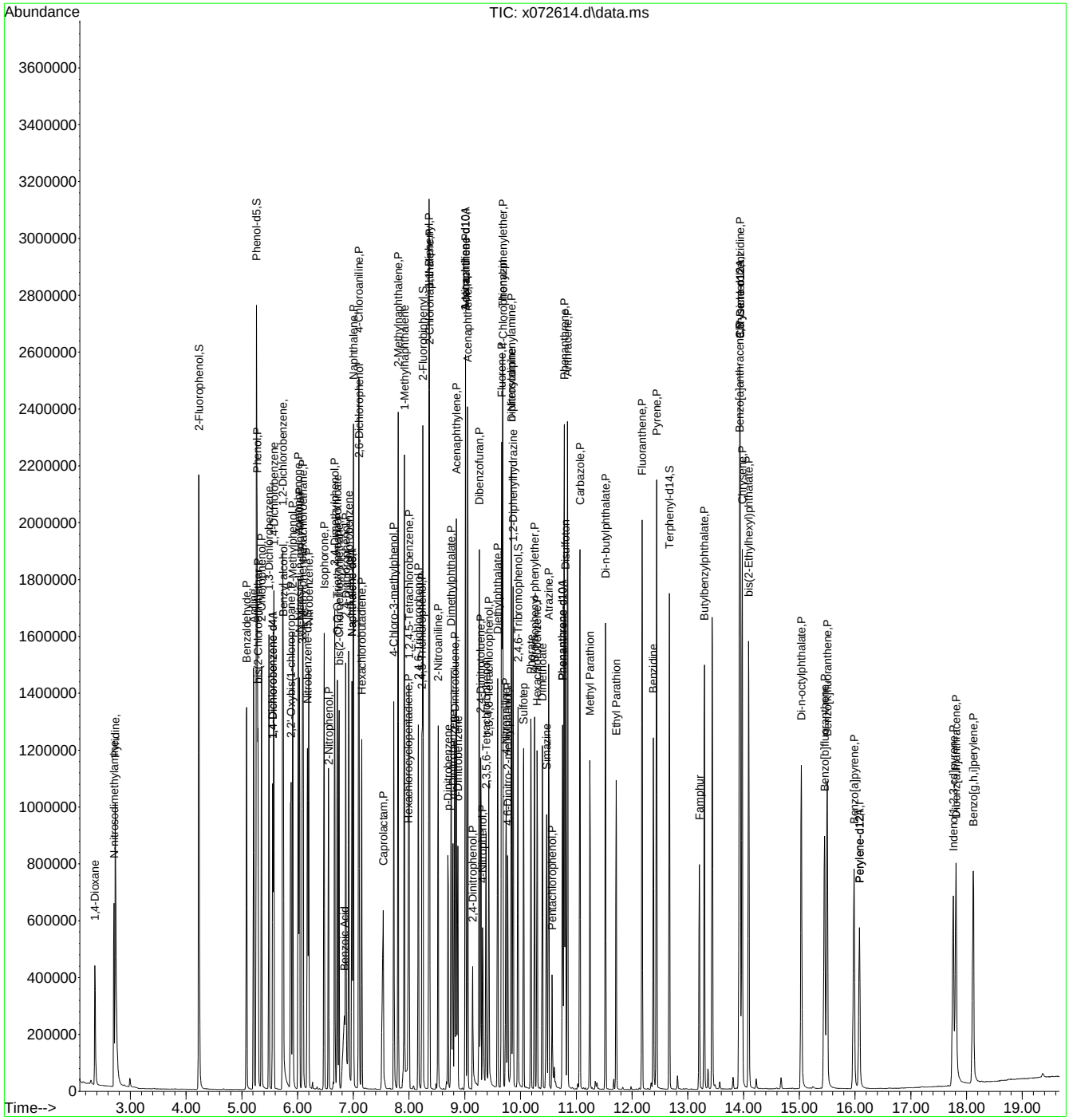


Manual Integration Approval Summary

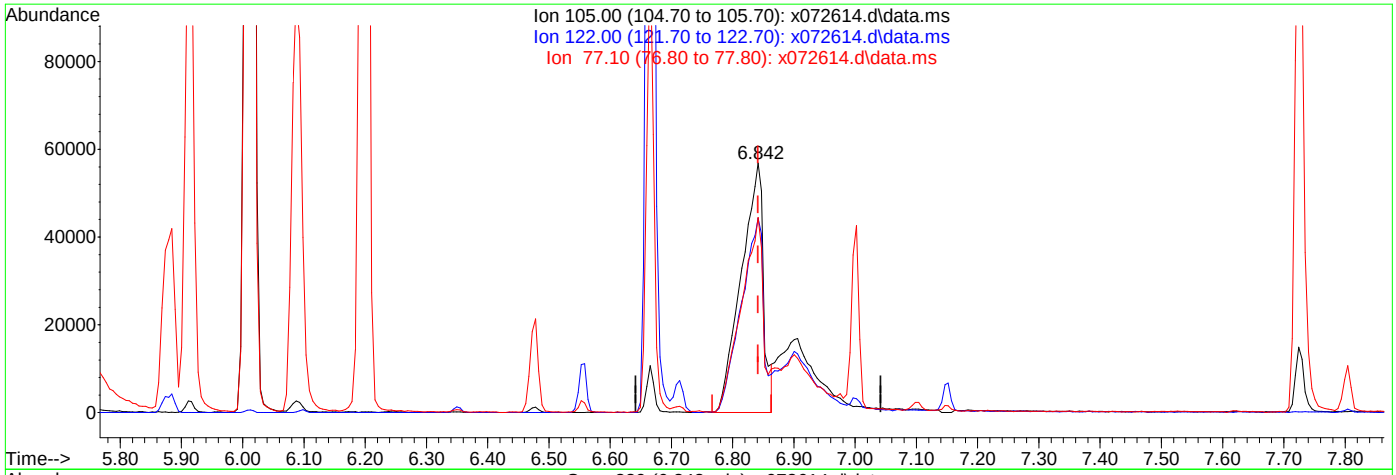
Sample Number: SX2961-CC2953
Lab FileID: X072614.D
Injection Time: 08/29/20 11:41
Method: SW846 8270D
Analyst approved: 08/30/20 23:53 Edessa Sumagaysay
Supervisor approved: 08/31/20 11:34 Naresh Jiawan

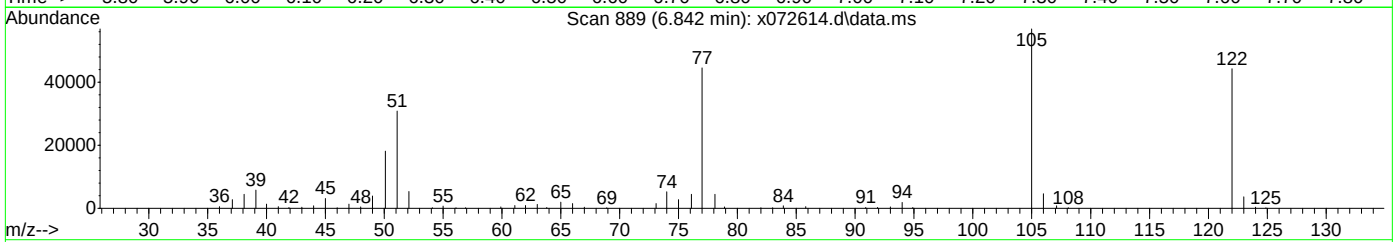
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic Acid	65-85-0		6.84	Split peak
Disulfoton	298-04-4		10.81	Overlapping peak

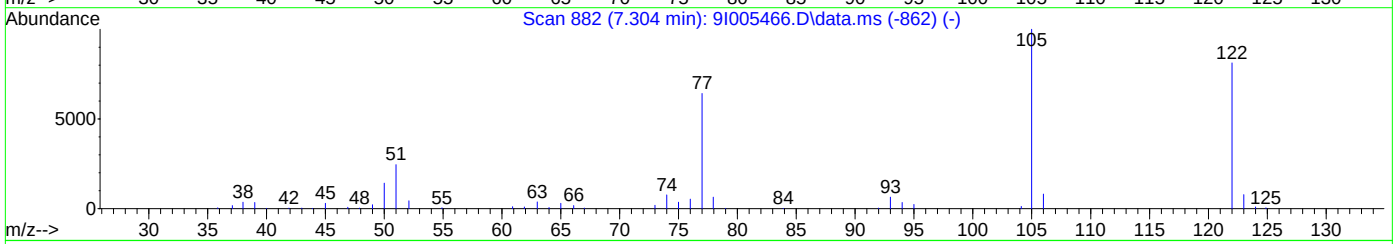
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-31-2020\sx2961\
Data File : x072614.d
Acq On : 29 Aug 2020 11:41 am
Operator : marthav
Sample : cc2953-50 8270
Misc : op81605,sx2961,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 30 22:49:02 2020
Quant Method : C:\msdchem\1\methods\8270DApp9SX-081720.m
Quant Title : SW846 8270D OR EPA 625
QLast Update : Sun Aug 30 22:48:56 2020
Response via : Initial Calibration







TIC: x072614.d\data.ms

(30) Benzoic Acid

6.842min (0.000) 43.90ppm

response 143545

Ion	Exp%	Act%
105.00	100	100
122.00	77.80	77.54
77.10	78.20	76.70
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-31-2020\sx2961\
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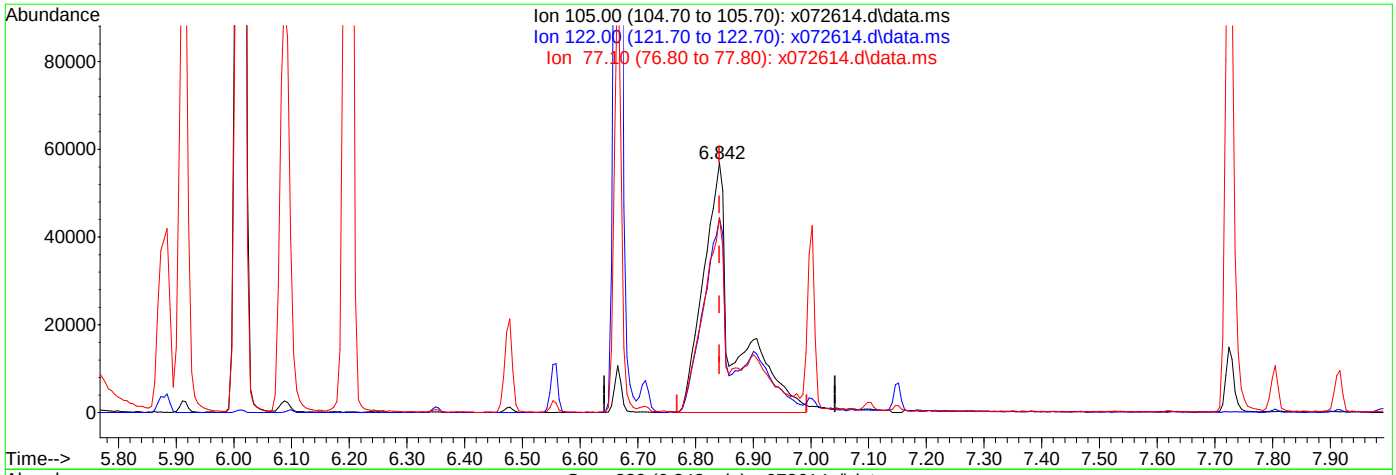

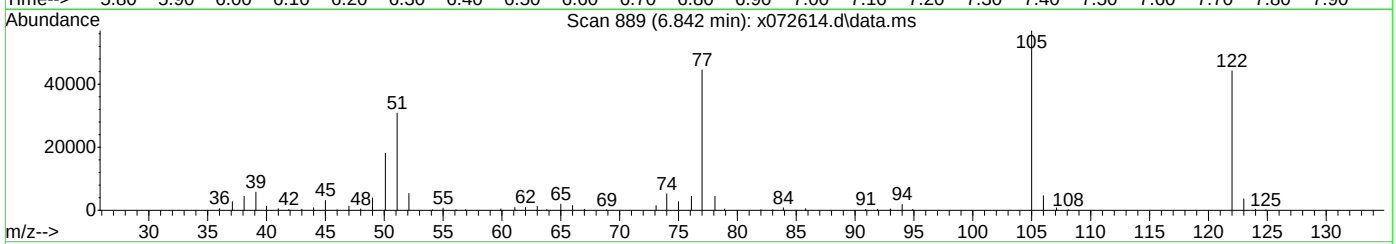

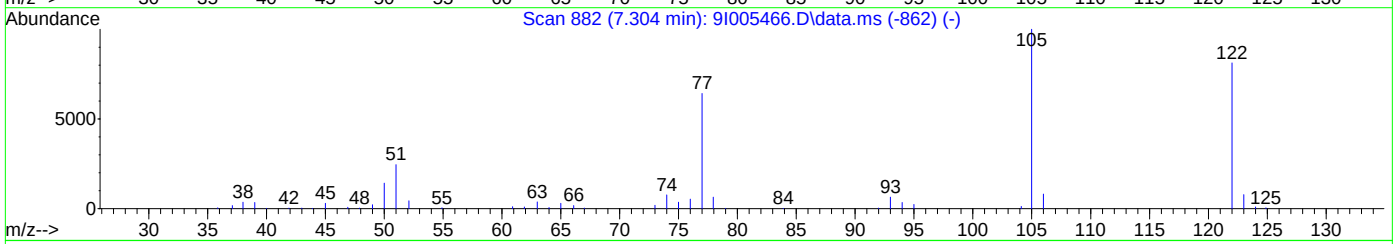

TIC: x072614.d\data.ms

(30) Benzoic Acid

6.842min (0.000) 60.79ppm m

response 215013

Ion	Exp%	Act%
105.00	100	100
122.00	77.80	77.81
77.10	78.20	78.16
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-31-2020\sx2961\
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Acq On : 29 Aug 2020 11:41 am
Operator : marthav
Sample : cc2953-50 8270
Misc : op81605,sx2961,1000,,,1,1,water
ALS Vial : 2 Sample Multiplier: 1

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Quant Method : C:\msdchem\1\methods\8270DApp9SX-081720.m
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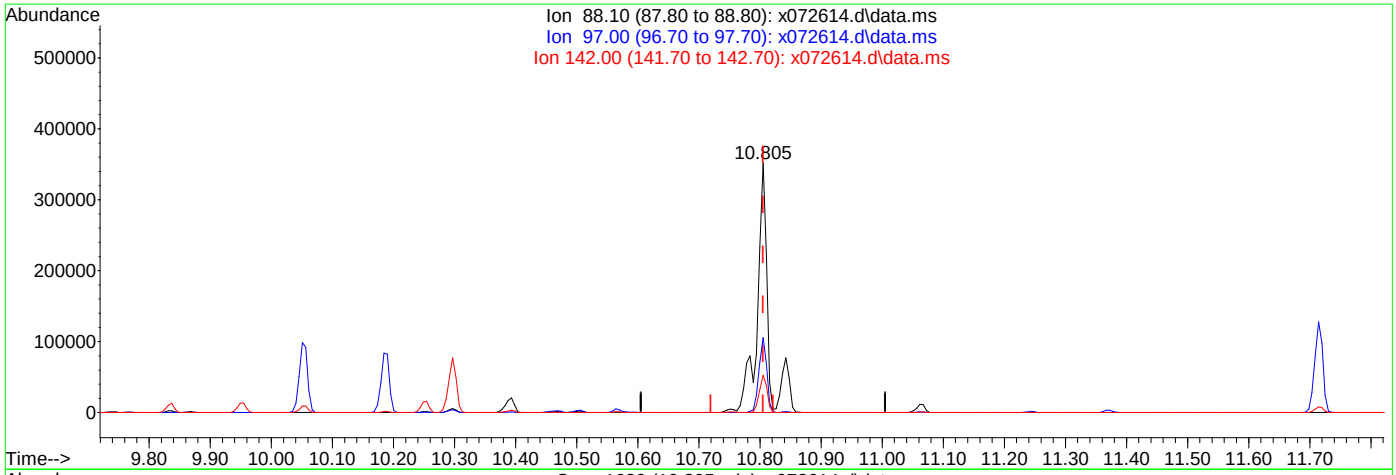

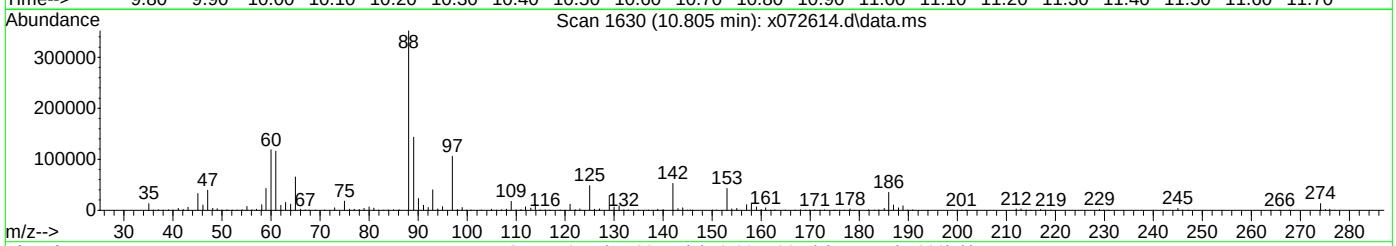

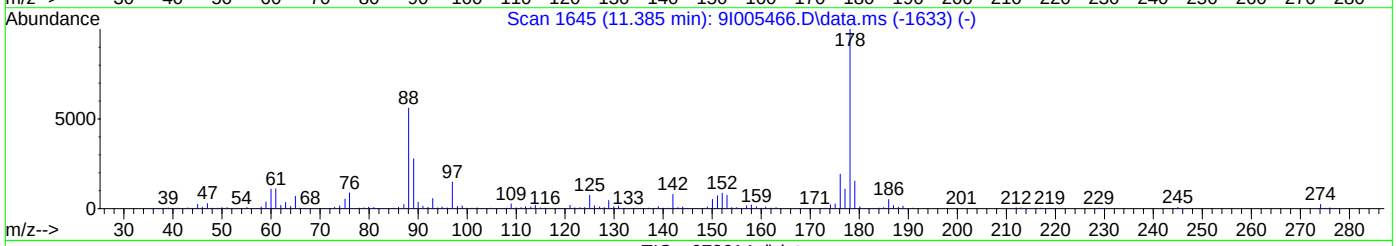

TIC: x072614.d\data.ms

(86) Disulfoton

10.805min (0.000) 72.65ppm

response 380082

Ion	Exp%	Act%
88.10	100	100
97.00	30.00	30.02
142.00	15.00	14.98
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\edessas\08-31-2020\sx2961\
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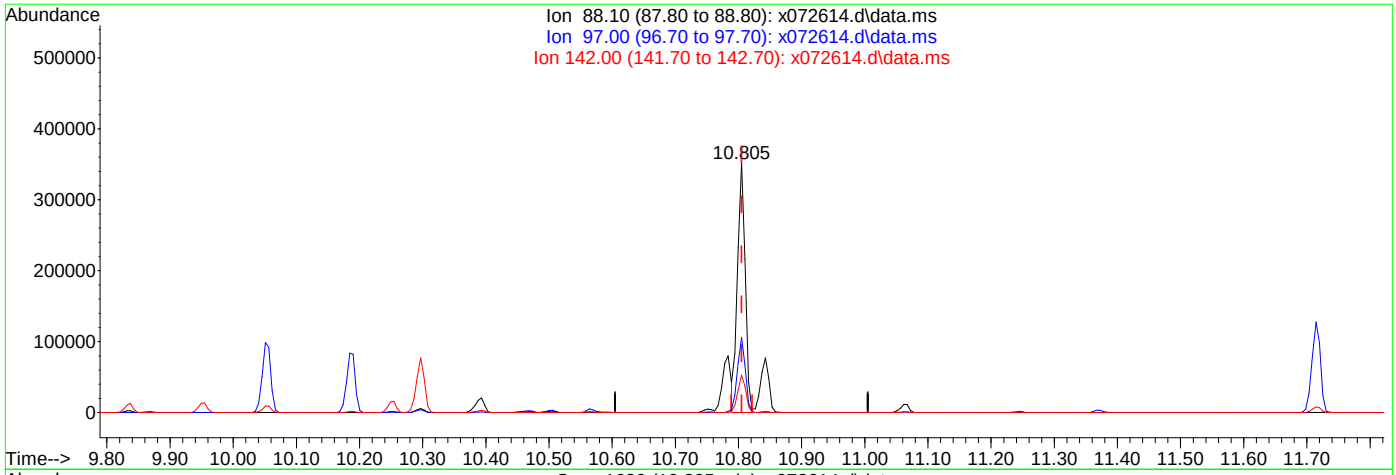

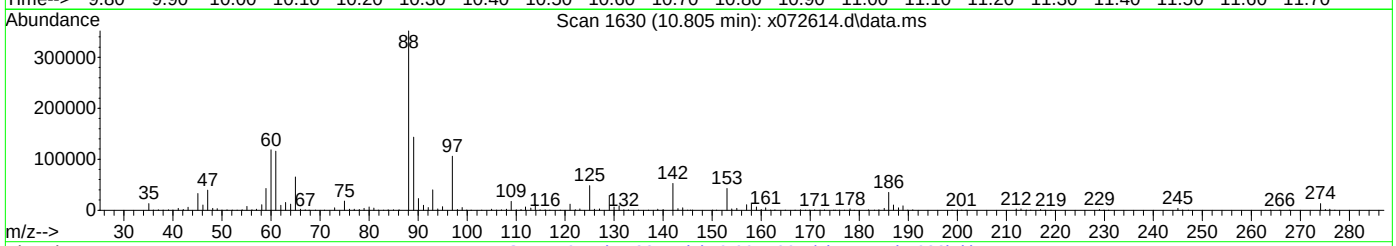

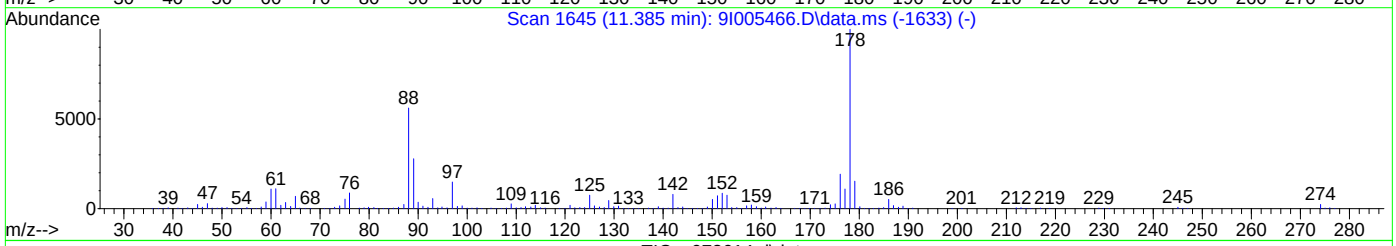

TIC: x072614.d\data.ms

(86) Disulfoton

10.805min (0.000) 57.16ppm m

response 299051

Ion	Exp%	Act%
88.10	100	100
97.00	30.00	30.01
142.00	15.00	14.99
0.00	0.00	0.00

Quantitation Report (Qedit)

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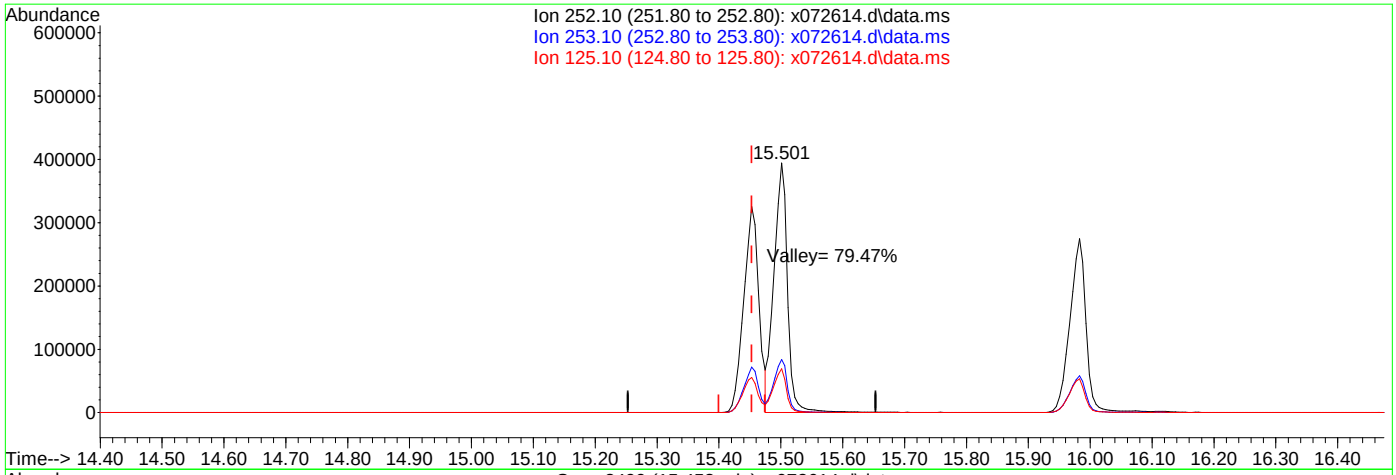
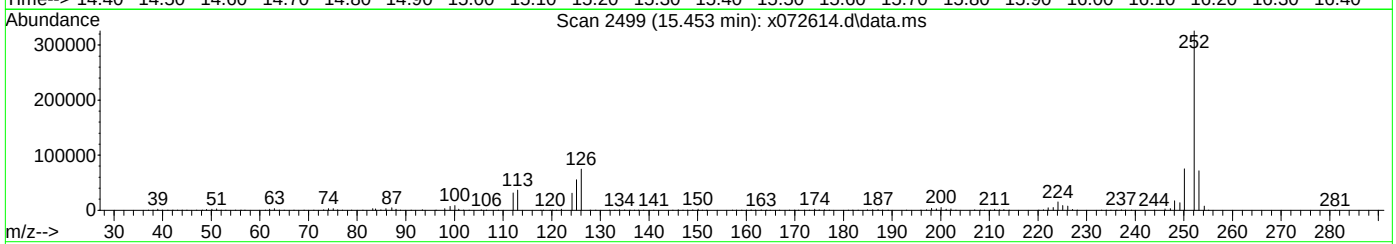
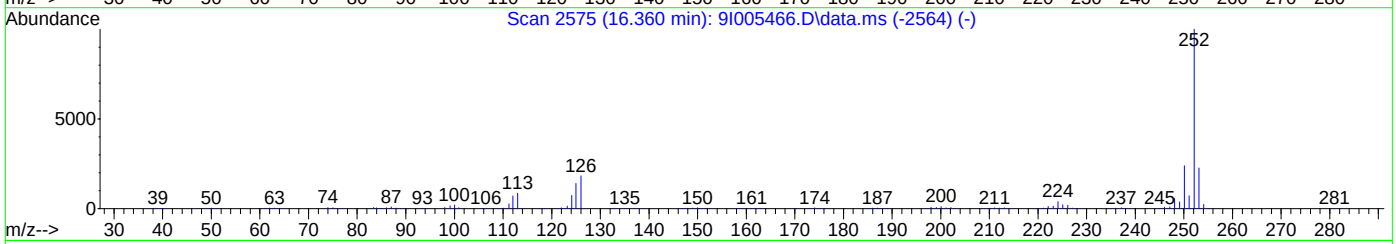
QLast Update : Sun Aug 30 22:48:56 2020
Response via : Initial Calibration







TIC: x072614.d\data.ms

(104) Benzo[b]fluoranthene (P)

15.453min (0.000) 55.22ppm

response 554041

Ion	Exp%	Act%
252.10	100	100
253.10	22.00	22.23
125.10	17.00	16.83
0.00	0.00	0.00

DATE	7/21/2020	METHODS	8270D Simpah	IC/ICC STD LOT	s6349
COLUMN TYPE	ZB5-MS	ACQ. METHOD	FASTPAH	ICV STD LOT	E6624
AMOUNT INJ	1ul	PROC. METHOD	SIMPAHF7GD072120.M	DFTPP	s6313
INSTRUMENT	MSBNA-S7G	CALIB. DATE	7/21/2020	EM VOLTAGE	ev1376
ANALYST	fouads	RUN BATCH	S7G472	ISTD LOT	s6358

DATA FILE	ALS	SAMPLE NAME	METHOD	DF	MISC. INFO	COMMENTS
7G10821	1	dftpp	DFTPP	1	op80679,S7G472,1000,,,1,1,water	
7G10822	1	dftpp	DFTPP	1	op80679,S7G472,1000,,,1,1,water	tune passed, response(148973)
7G10823	2	cc470-4	FASTPAH	100/400	op80679,S7G472,1000,,,1,1,water	failed
7G10824	3	ic472-1	FASTPAH	na	op80679,S7G472,1000,,,1,1,water	
7G10825	4	ic472-2	FASTPAH	na	op80679,S7G472,1000,,,1,1,water	
7G10826	5	ic472-3	FASTPAH	na	op80679,S7G472,1000,,,1,1,water	
7G10827	6	icc472-4	FASTPAH	na	op80679,S7G472,1000,,,1,1,water	na
7G10828	7	ic472-5	FASTPAH	na	op80679,S7G472,1000,,,1,1,water	
7G10829	8	ic472-6	FASTPAH	na	op80679,S7G472,1000,,,1,1,water	
7G10830	9	ic472-7	FASTPAH	na	op80679,S7G472,1000,,,1,1,water	
7G10831	10	ic472-4	FASTPAH	na	op80679,S7G472,1000,,,1,1,water	
7G10832	2	cc472-1	FASTPAH	na	op80679,S7G472,1000,,,1,1,water	na
7G10833	3	ic472-1	FASTPAH	5+495	op80679,S7G472,1000,,,1,1,water	
7G10834	4	ic472-2	FASTPAH	20+380	op80679,S7G472,1000,,,1,1,water	
7G10835	5	ic472-3	FASTPAH	50+350	op80679,S7G472,1000,,,1,1,water	
7G10836	6	icc472-4	FASTPAH	100+300	op80679,S7G472,1000,,,1,1,water	curve passed
7G10837	7	ic472-5	FASTPAH	150+250	op80679,S7G472,1000,,,1,1,water	
7G10838	8	ic472-6	FASTPAH	200+200	op80679,S7G472,1000,,,1,1,water	
7G10839	9	ic472-7	FASTPAH	1X	op80679,S7G472,1000,,,1,1,water	
7G10840	10	icV472-4	FASTPAH	2X SPK	op80679,S7G472,1000,,,1,1,water	passed dibenzo high,carbz low ,pcp less30%
7G10841	1	dftpp	DFTPP	1	op80679,S7G472,1000,,,1,1,water	tune passed
7G10842	2	cc472-4	FASTPAH	100+300	op81126-,s7G472,1000,,,1,1,water	ccv passed
7G10843	3	op71120-mb	FASTPAH	1	op81120,s7G472,1000,,,1,1,water	nd
7G10844	4	op71120-bs	FASTPAH	1	op81120,s7G472,1000,,,1,1,water	8270 spk used rr@1x
7G10845	5	op71126-mb	FASTPAH	1	op81126,s7G472,15.0,,,1,1,soil	nd
7G10846	6	op71126-bs	FASTPAH	1	op81126,s7G472,15.0,,,1,1,soil	ok
7G10847	7	fa76888-1	FASTPAH	1	op81120,s7G472,1050,,,1,1,water	nd
7G10848	8	fa76888-2	FASTPAH	1	op81120,s7G472,1050,,,1,1,water	nd
7G10849	9	fa76888-3	FASTPAH	1	op81120,s7G472,1050,,,1,1,water	nd
7G10850	10	fa76888-4	FASTPAH	1	op81120,s7G472,1050,,,1,1,water	nd
7G10851	11	fa76888-5	FASTPAH	1	op81120,s7G472,1050,,,1,1,water	nd
7G10852	12	fa76888-6	FASTPAH	1	op81120,s7G472,1050,,,1,1,water	nd
7G10853	13	op81120-ms	FASTPAH	1	op81120,s7G472,520,,,1,1,water	ok
7G10854	14	op81120-msd	FASTPAH	1	op81120,s7G472,520,,,1,1,water	ok
7G10855	15	fa76853-2	FASTPAH	1	op81126,s7G472,15.0,,,1,1,soil	ok
7G10856	16	fa76854-2	FASTPAH	1	op81126,s7G472,15.0,,,1,1,soil	ok
7G10857	17	fa76825-1a,5	FASTPAH	5	op81126,s7G472,15.3,,,1,5,soil	ok,dl req matrix viscous
7G10858	18	fa76878-1	FASTPAH	1	op81126,s7G472,15.1,,,1,1,soil	ok
7G10859	19	op81126-ms	FASTPAH	1	op81126,s7G472,15.2,,,1,1,soil	ok
7G10860	20	op81126-msd	FASTPAH	1	op81126,s7G472,14.9,,,1,1,soil	ok
7G10861	21	fa76878-2	FASTPAH	1	op81126,s7G472,14.9,,,1,1,soil	ok
7G10862	22	fa76878-3	FASTPAH	1	op81126,s7G472,15.2,,,1,1,soil	ok
7G10863	23	fa76886-1,5	FASTPAH	5	op81126,s7G472,15.2,,,1,1,soil	ok,dl req matrix viscous
7G10864	24	fa76886-2,5	FASTPAH	5	op81126,s7G472,15.0,,,2,5,soil	ok,dl req matrix viscous
7G10865	25	fa76886-3,5	FASTPAH	5	op81126,s7G472,15.4,,,1,5,soil	ok,dl req matrix viscous
7G10866	26	fa76886-4,5	FASTPAH	5	op81126,s7G472,15.1,,,1,5,soil	surrg low rr@5x
7G10867	27	fa76886-5,5	FASTPAH	5	op81126,s7G472,15.2,,,1,5,soil	ok.dl req matrix viscous
7G10868	28	fa76886-6	FASTPAH	1	op81126,s7G472,15.3,,,1,1,soil	ok
7G10869	3	blk	FASTPAH	1	op81126,s7G472,15.3,,,1,1,soil	na

DATE	8/29/2020	**METHODS**	8270D Simpah	**IC/ICC STD LOT**	**s6420**
COLUMN TYPE	ZB5-MS	**ACQ. METHOD**	FASTPAH	**ICV STD LOT**	**E6750**
AMOUNT INJ	1ul	**PROC. METHOD**	SIMPAHF7GD0072120.M	**DFTPP**	**s6313**
INSTRUMENT	MSBNA-S7G	**CALIB. DATE**	7/21/2020	**EM VOLTAGE**	**ev1376**
ANALYST	fouads	**RUN BATCH**	S7G494	**ISTD LOT**	**s6424**

DATA FILE	ALS	SAMPLE NAME	METHOD	DF	MISC. INFO	COMMENTS
7G11406	1	dftpp	DFTPP	1	op81342,S7G494,1000,,,1,1,water	
7G11407	1	dftpp	DFTPP	1	op81342,S7G494,1000,,,1,1,water	PASS(response:110209)
7G11408	2	cc472-4	8270	1	op81342,S7G494,1000,,,1,1,water	PASS (Failed reso check=NA, #26(OP)
7G11409	3	op81782-bs e	8270	1	op81782,S7G494,30.0,,,1,1,soil	#4(MP) #26(OP)
7G11410	4	op81782-mb e	8270	1	op81782,S7G494,30.0,,,1,1,soil	PCP hit
7G11411	5	fa78193-1 e	8270	1	op81782,S7G494,30.4,,,1,1,soil	#5(MP)#23,24(OP)
7G11412	6	fa78193-2 e	8270	1	op81782,S7G494,30.4,,,1,1,soil	ND, #23,24(OP)
7G11413	7	fa78193-3 e	8270	1	op81782,S7G494,29.8,,,1,1,soil	ND, #23,24(OP)
7G11414	8	op81787-lbs	8270	1	op81787,S7G494,1000,,,1,1,water	PASSED #26(OP)
7G11415	9	op81787-lb	8270	1	op81787,S7G494,1000,,,1,1,water	Nap hit=NA
7G11416	10	fa78193-4 e	8270	1	op81782,S7G494,30.2,,,1,1,soil	ND, #23,24(OP)
7G11417	11	fa78193-5 e,2	8270	2	op81782,S7G494,29.7,,,1,2,soil	ND, dil req, #23,24(OP)EXTRACT VISCOUS
7G11418	12	fa78193-6 e	8270	1	op81782,S7G494,30.3,,,1,1,soil	ND, #23,24(OP)
7G11419	13	fa78193-7 e	8270	1	op81782,S7G494,30.1,,,1,1,soil	ND, #23,24(OP)
7G11420	14	fa78193-8 e	8270	1	op81782,S7G494,29.8,,,1,1,soil	ND, #23,24(OP)
7G11421	15	op81782-ms e	8270	1	op81782,S7G494,29.8,,,1,1,soil	OK, #26(OP)
7G11422	16	op81782-msd e	8270	1	op81782,S7G494,29.9,,,1,1,soil	OK, #26(OP)
7G11423	17	fa78193-9 e	8270	1	op81782,S7G494,30.2,,,1,1,soil	ND, #23,24(OP)
7G11424	18	fa78193-10 e	8270	1	op81782,S7G494,30.4,,,1,1,soil	ND, #4(MP)#23,24(OP)
7G11425	19	fa78193-12 e	8270	1	op81782,S7G494,30.0,,,1,1,soil	ND, #23,24(OP)
7G11426	20	fa78194-1 e,2	8270	2	op81782,S7G494,29.8,,,1,2,soil	ND, dil req, #23,24(OP)EXTRACT VISCOUS
7G11427	21	fa78194-2 e	8270	1	op81782,S7G494,29.9,,,1,1,soil	ND #23,24(OP)
7G11428	22	fa78157-1	8270	1	op81787,S7G494,1000,,,1,1,water	X FOR ANTRACENE 1,12,13,14,15,16,17,18,2
7G11429	23	op81787-ms	8270	1	op81787,S7G494,500,,,1,1,water	RR10x IS high #5,9,15(MP)#26(OP)
7G11430	24	op81787-msd	8270	1	op81787,S7G494,500,,,1,1,water	RR10x IS high #12,14(MP)#26(OP)
7G11431	25	fa78157-2	8270	1	op81787,S7G494,1000,,,1,1,water	OK#12,20(MP)
7G11432	26	fa78157-3,5	8270	5	op81787,S7G494,1000,,,1,5,water	RR20x PCP #14(MP)
7G11433	27	fa78157-4,5	8270	5	op81787,S7G494,1000,,,1,5,water	OK
7G11434	28	fa78157-3	8270	1	op81787,S7G494,1000,,,1,1,water	bad injection=NA
7G11435	29	fa78157-4	8270	1	op81787,S7G494,1000,,,1,1,water	Not used #9,12(MP)
7G11436	9	blk	8270	1	op81782,S7G494,29.9,,,1,1,soil	OK

SGS-ORLANDO **MS BNA05-X** **ANALYSIS LOG**

DATE	8/17/2020	**METHODS**	8270D	**IC/ICC STD LOT**	**S6417/S6418**
COLUMN TYPE	DB-5MS	**ACQ. METHOD**	ACQ-BNA	**ICV STD LOT**	**10204A**
AMOUNT INJ	2	**PROC. METHOD**	8270DAPP9SX-081720	**DFTPP**	**S6384**
INSTRUMENT	MS-SX	**CALIB. DATE**	8/17/2020	**EM VOLTAGE**	**1000V**
ANALYST	MV	**RUN BATCH**	SX2953	**ISTD LOT**	**10194D**

App9 cc: S6396 ICV(1) 10204A ICV(2) 9809D + 9782 + 10072D ICV(3) (OP) 9934A App9 ICV (1) 9988A + 10108A + 10156A App 9 ICV(2) 9809D + 8558B + 9690B

DATA FILE	ALS	SAMPLE NAME	METHOD	DF	MISC. INFO	COMMENTS
x072418	1	dftpp	DFTPP	1x	op81484,sx2953,1000,,,1,1,water	Pass, response: 903028
x072419	2	ic2953-1 8270	8270	2+2/396	op81484,sx2953,1000,,,1,1,water	Response fail for, 2,4DNP, Hxcc, PCP
x072420	3	ic2953-5	8270	10+10/380	op81484,sx2953,1000,,,1,1,water	Response fail for, Hxcc, PCP
x072421	4	ic2953-10	8270	20+20/360	op81484,sx2953,1000,,,1,1,water	Response fail for, PCP
x072422	5	ic2953-25	8270	50+50/300	op81484,sx2953,1000,,,1,1,water	Curve Pass, Pass DOD
x072423	6	icc2953-50	8270	100+100/200	op81484,sx2953,1000,,,1,1,water	Curve Pass, Pass DOD
x072424	7	ic2953-60	8270	120+120/160	op81484,sx2953,1000,,,1,1,water	Curve Pass, Pass DOD
x072425	8	ic2953-75	8270	150+150/100	op81484,sx2953,1000,,,1,1,water	Curve Pass, Pass DOD
x072426	9	ic2953-100	8270	200+200/0	op81484,sx2953,1000,,,1,1,water	Level not use for 2,4DNP
x072427	10	ic2953-1 app9	App9	2/398	op81484,sx2953,1000,,,1,1,water	no response for 1,4Nq, Kepone,Hcp
x072428	11	ic2953-5	App9	10+4/386	op81484,sx2953,1000,,,1,1,water	no response for 1,4Nq, Hcp
x072429	12	ic2953-10	App9	20+8/372	op81484,sx2953,1000,,,1,1,water	no response for Hcp
x072430	13	ic2953-25	App9	50+20/330	op81484,sx2953,1000,,,1,1,water	no response for Hcp
x072431	14	ic2953-50	App9	100+40/260	op81484,sx2953,1000,,,1,1,water	Curve Pass, Pass DOD, no HCP
x072432	15	ic2953-60	App9	120+48/232	op81484,sx2953,1000,,,1,1,water	Curve Pass, Pass DOD, no HCP
x072433	16	ic2953-75	App9	150+60/190	op81484,sx2953,1000,,,1,1,water	Curve Pass, Pass DOD, no HCP
x072434	17	ic2953-100	App9	200+80/120	op81484,sx2953,1000,,,1,1,water	Curve Pass, Pass DOD, no HCP
x072435	18	icv2953-50	8270	200/400	op81484,sx2953,1000,,,1,1,water	2,4-Dinitrophenol low dod
x072436	19	icv2953-50	8270	20+20+10/400	op81484,sx2953,1000,,,1,1,water	Pass
x072437	20	icv2953-50	op	10/400	op81484,sx2953,1000,,,1,1,water	Pass
x072438	21	icv2953-50	App9	10+20+100/400	op81484,sx2953,1000,,,1,1,water	Hcp high dod, N-N-n-b low dod, 1,4-Nq fail low, 3,3'-Dtb fail high
x072439	22	icv2953-50	App9	20+20+20/400	op81484,sx2953,1000,,,1,1,water	Methapyrilene fail high

SGS-ORLANDO **MS BNA05-X** **ANALYSIS LOG**

DATE	8/28/2020	**METHODS**	8270D	**IC/ICC STD LOT**	**S6417/S6418**
COLUMN TYPE	DB-5MS	**ACQ. METHOD**	ACQ-BNA	**ICV STD LOT**	**10204A**
AMOUNT INJ	2	**PROC. METHOD**	8270DAPP9SX-081720	**DFTPP**	**S6384**
INSTRUMENT	MS-SX	**CALIB. DATE**	8/18/2020	**EM VOLTAGE**	**1000V**
ANALYST	MV	**RUN BATCH**	SX2960	**ISTD LOT**	**10194D**

App9 cc: S6396 ICV(1) 10204A ICV(2) 9809D + 9782 + 10072D ICV(3) (OP) 9934A App9 ICV (1) 9988A + 10108A + 10156A App 9 ICV(2) 9809D + 8558B + 9690B

DATA FILE	ALS	SAMPLE NAME	METHOD	DF	MISC. INFO	COMMENTS
x072582	100	Cond Std	8270	""	op81605,sx2960,1000,,,1,1,water	Conditioning
x072583	1	dftpp	DFTPP	1x	op81605,sx2960,1000,,,1,1,water	Pass, Response: 813368
x072584	2	cc2953-50 8270	8270	100+100/400	op81605,sx2960,1000,,,1,1,water	Benzoic Acid and Disulfoton fail high
x072585	3	op81781-bs E	8270	1x	op81781,sx2960,30.0,,,1,1,soil	Pass
x072586	4	op81781-mb E	8270	1x	op81781,sx2960,30.0,,,1,1,soil	ND
x072587	5	fa78193-1 E	8270	1x	op81781,sx2960,30.1,,,1,1,soil	ok
x072588	6	op81775-bs	8270	1x	op81775,sx2960,1000,,,1,1,water	4,6-Dinitro
x072589	7	op81775-mb	8270	1x	op81775,sx2960,1000,,,1,1,water	ND
x072590	8	fa78118-2B	8270	1x	op81775,sx2960,900,,,1,1,water	**ok + rr 5x**
x072591	9	fa78123-2	8270	1x	op81775,sx2960,1000,,,1,1,water	ND
x072592	10	fa78193-2 E	8270	1x	op81781,sx2960,30.4,,,1,1,soil	ok
x072593	11	fa78193-3 E	8270	1x	op81781,sx2960,29.8,,,1,1,soil	ok
x072594	12	fa78193-4 E	8270	1x	op81781,sx2960,30.2,,,1,1,soil	ND
x072595	13	fa78193-5 E	8270	1x	op81781,sx2960,29.7,,,1,1,soil	ok
x072596	14	fa78193-6 E	8270	1x	op81781,sx2960,30.3,,,1,1,soil	ok
x072597	15	fa78193-7 E	8270	1x	op81781,sx2960,30.1,,,1,1,soil	ND
x072598	16	fa78193-8 E	8270	1x	op81781,sx2960,29.8,,,1,1,soil	ok
x072599	17	op81781-ms E	8270	1x	op81781,sx2960,30.1,,,1,1,soil	ok
x072600	18	op81781-msd E	8270	1x	op81781,sx2960,30.4,,,1,1,soil	ok
x072601	19	fa78193-9 E	8270	1x	op81781,sx2960,30.2,,,1,1,soil	ok
x072602	20	fa78193-10 E	8270	1x	op81781,sx2960,30.4,,,1,1,soil	ok
x072603	21	fa78193-12 E	8270	1x	op81781,sx2960,30.0,,,1,1,soil	ok

SGS-ORLANDO **MS BNA05-X** **ANALYSIS LOG**

x072604	22	fa78194-1 E	8270	1x	op81781,sx2960,29.8,,,1,1,soil	**ok + rr 5x**
x072605	23	fa78194-2 E	8270	1x	op81781,sx2960,29.9,,,1,1,soil	ok
x072606	24	fa78191-1	8270	1x	op81775,sx2960,1050,,,1,1,water	ND
x072607	25	op81775-ms	8270	1x	op81775,sx2960,520,,,1,1,water	ok
x072608	26	op81775-msd	8270	1x	op81775,sx2960,520,,,1,1,water	ok
x072609	27	fa78191-2	8270	1x	op81775,sx2960,1050,,,1,1,water	ok
x072610	28	fa78191-3	8270	1x	op81775,sx2960,1050,,,1,1,water	ok

SGS-ORLANDO **MS BNA05-X** **ANALYSIS LOG**

DATE	8/29/2020	**METHODS**	8270D	**IC/ICC STD LOT**	**S6417/S6418**
COLUMN TYPE	DB-5MS	**ACQ. METHOD**	ACQ-BNA	**ICV STD LOT**	**10204A**
AMOUNT INJ	2	**PROC. METHOD**	8270DAPP9SX-081720	**DFTPP**	**S6384**
INSTRUMENT	MS-SX	**CALIB. DATE**	8/18/2020	**EM VOLTAGE**	**1000V**
ANALYST	MV	**RUN BATCH**	SX2961	**ISTD LOT**	**10194D**

App9 cc: S6396 ICV(1) 10204A ICV(2) 9809D + 9782 + 10072D ICV(3) (OP) 9934A App9 ICV (1) 9988A + 10108A + 10156A App 9 ICV(2) 9809D + 8558B + 9690B

DATA FILE	ALS	SAMPLE NAME	METHOD	DF	MISC. INFO	COMMENTS
x072611	100	Cond Std	8270	""""""""	op81605,sx2961,1000,,,1,1,water	Conditioning
x072612	100	Cond Std	DFTPP	""""""""	op81605,sx2961,1000,,,1,1,water	Conditioning
x072613	1	dftpp	8270	1x	op81605,sx2961,1000,,,1,1,water	PASS(response:643410)
x072614	2	cc2953-50 8270	8270	100+100/400	op81605,sx2961,1000,,,1,1,water	Bacid↑, #30(SP)#89(OP)
x072615	3	op78118-2B,5	8270	50/500	op81775,sx2961,900,,,1,5,water	E-combine sx2960
x072616	4	op81786-lbs	8270	1x	op81786,sx2961,100,,,1,1,water	PCP ↓
x072617	5	op81786-lb	8270	1x	op81786,sx2961,100,,,1,1,water	ND
x072618	6	fa78194-1 E, 5	8270	50/500	op81781,sx2961,29.8,,,1,5,soil	E-combine sx2960, #107(OP)
x072619	7	fa78133-1L	8270	1x	op81786,sx2961,100,,,1,1,water	ND
x072620	8	fa78133-2L	8270	1x	op81786,sx2961,100,,,1,1,water	ND
x072621	9	fa78133-3L	8270	1x	op81786,sx2961,100,,,1,1,water	ND
x072622	10	fa78133-4L	8270	1x	op81786,sx2961,100,,,1,1,water	ND
x072623	11	fa78133-5L	8270	1x	op81786,sx2961,100,,,1,1,water	ND
x072624	12	fa78133-6L	8270	1x	op81786,sx2961,100,,,1,1,water	ND
x072625	13	fa78133-7L	8270	1x	op81786,sx2961,100,,,1,1,water	ND
x072626	14	op81786-ms	8270	1x	op81786,sx2961,100,,,1,1,water	OK
x072627	15	op81786-msd	8270	1x	op81786,sx2961,100,,,1,1,water	OK
x072628	16	fa78133-8L	8270	1x	op81786,sx2961,100,,,1,1,water	ND
x072629	17	fa78133-9L	8270	1x	op81786,sx2961,100,,,1,1,water	ND
x072630	18	fa78133-10L	8270	1x	op81786,sx2961,100,,,1,1,water	ND
x072631	19	fa78196-1L	8270	1x	op81786,sx2961,100,,,1,1,water	ND
x072632	20	fa78196-2L	8270	1x	op81786,sx2961,100,,,1,1,water	ND

x072633	21	op81786-dup	8270	1x	op81786,sx2961,100,,,1,1,water	ND
x072634	22	fa78196-3L	8270	1x	op81786,sx2961,100,,,1,1,water	ND

SGS - ORLANDO

SOLID SAMPLE PREP REPORT

Date/Time Started: 8/20/20 9:00 {mm/dd/yy 24:00}

Date/Time Finished: 8/28/20 13:15 {mm/dd/yy 24:00}

Prep Method: ✓ 3550C _____ 3580A

Analytical Method: 8270

Batch No: OP81781

Ext. By: GT:JM Conc. By: AN Vialed By: AN Balance ID: NAUS

Sample ID	Bottle Number	Amount Extracted (g)	Surrogate Amount	Spike Amount	Final Volume (ml)	Comments
OP81781-MB	-	30.0	0.5		1ml	
OP81781-BS	-	30.0	0.5	0.5 + 0.5		
FA78193-1	1	30.1				
FA78193-2	1	30.4				
FA78193-3	1	29.8				
FA78193-4	1	30.2				
FA78193-5	1	29.7				
FA78193-6	1	30.3				
FA78193-7	1	30.1				
FA78193-8	1	29.8				
FA78193-9	1	30.2				
FA78193-10	1	30.4				
FA78193-12	1	30.0				
FA78194-1	1	29.8				
FA78194-2	1	29.9				
FA78193-8-MS	1	30.1	0.5	0.5 + 0.5	1ml	
FA78193-8-MSD	1	30.4	0.5	0.5 + 0.5		
DUP						

Comments:

Surr ID: #67435 Conc: 100/200 PPM Exp. Date: 12/30/20 Inj. By: GT Ver. By: JM

Spk ID: 102604C Conc: Varied Exp. Date: 02/28/21 Inj. By: GT Ver. By: JM

Spk ID2: 66946 Conc: 100 PPM Exp. Date: 01/01/21 Inj. By: GT Ver. By: JM

Initial Bath Temp (Therm ID): TV6 Exchange Bath/N-Evap Temp (Therm ID): _____

Observed Temp °C: 45 Observed Temp °C: _____ Corr. Temp °C: _____

CH_2Cl_2 Lot#	201444	Hexane Lot #	X	Na_2SO_4 Lot#	SS2551
CH_3CN Lot #	X	Methanol Lot #	X	Acetone Lot#	197447
Filter Paper Lot#	231019	pH Paper #	X	Reagent #	X

Copper Lot # X If Sulfur Cleaning

Relinquished By: _____ Date: 8/28/20

Accepted By: _____ Date: 8/28/20

NF 02/16

NF 02/16

SGS - ORLANDO **SOLID SAMPLE PREP REPORT**

Date/Time Started: 6/28/20 9:00 (mm/dd/yy 24:00)

Date/Time Finished: 8/28/20 13:15 (mm/dd/yy 24:00)

Prep Method: ✓ 3550C ____ 3580A

Analytical Method: ~~8270~~ SIM PCP JM 6/29/20

Batch No: OP81782

Ext. By: JM. GT Conc. By: AN Vialed By: AN Balance ID: WA05

Sample ID	Bottle Number	Amount Extracted (g)	Surrogate Amount	Spike Amount	Final Volume (ml)	Comments
OP81782-MB	-	30.0	0.1		1ml	
OP81782-BS	-	30.0	0.1	0.5		
FA78193-1	1	30.1				
FA78193-2	1	30.4				
FA78193-3	1	29.8				
FA78193-4	1	30.2				
FA78193-5	1	29.7				
FA78193-6	1	30.3				
FA78193-7	1	30.1				
FA78193-8	1	29.8				
FA78193-9	1	30.2				
FA78193-10	1	30.4				
FA78193-12	1	30.0				
FA78194-1	1	29.8				
FA78194-2	1	29.9				
FA78193-8-MS	1	29.8	0.1	0.5	1ml	
FA78193-8-MSD	1	29.9	0.1	0.5		
DUP						

Comments:

Surr ID: E6699 N Conc: 100ppm Exp. Date: 10/02/20 Inj. By: GT Ver. By: JM

Spk ID: E6750 Conc: 20/40ppm Exp. Date: 01/09/20 Inj. By: GT Ver. By: JM

Spk ID2: — Conc: — Exp. Date: — Inj. By: ____ Ver. By: ____

Initial Bath Temp (Therm ID): TV6 Exchange Bath/N-Evap Temp (Therm ID): ____

Observed Temp °C: 45 Observed Temp °C: ____ Corr. Temp °C: ____

CH_2Cl_2 Lot#	201444	Hexane Lot #	X	Na_2SO_4 Lot#	SS2551
CH_3CN Lot #	X	Methanol Lot #	X	Acetone Lot#	197447
Filter Paper Lot#	231019	pH Paper #	X	Reagent #	X

Copper Lot # X If Sulfur Cleaning

Relinquished By: [signature] Date: 8/28/20

Accepted By: [signature] Date: 8/28/20

NF 02/16

NF 02/16

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Percent Solids Raw Data Summary

Percent Solids Raw Data Summary

Job Number: FA78194
Account: ECONTNM EarthCon Consultants, Inc
Project: KMCC Navassa Site; 120 Quality Dr, Navassa, NC

Sample: FA78194-1 **Analyzed:** 28-AUG-20 by JC **Method:** SM19 2540G
ClientID: CS-TB-16A

Wet Weight (Total)	13.54	g
Tare Weight	2.57	g
Dry Weight (Total)	11.59	g
Solids, Percent	82.2	%

Sample: FA78194-2 **Analyzed:** 28-AUG-20 by JC **Method:** SM19 2540G
ClientID: CS-53

Wet Weight (Total)	13.64	g
Tare Weight	2.55	g
Dry Weight (Total)	11.99	g
Solids, Percent	85.1	%



FINAL LAB REPORT

KMCC Navassa

B4511

11-Aug-2020

Prepared by

SGS NORTH AMERICA

Prepared for

EarthCon

Mary Brookshire

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Phone: 404-317-7748
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This report is approved by

Tamara Burkamper
C=US, OU=EHS, O=SGS North America Inc.,
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I have reviewed this document
2020-08-11 09:27:15

Tamara Burkamper

Senior Project Manager

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Results reported relate only to the items tested.

PROJECT INFORMATION SUMMARY *(When applicable, see QC Annotations for details)*

Client Project	KMCC Navassa
SGS Project #	B4511
Analytical Protocol(s)	8290A
No. Samples Submitted	10
Additional QC Sample(s)	MS/MSD
No. Laboratory Method Blanks	1
No. OPRs / Batch CS3	1
Date Received	06-Aug-20
Condition Received	Good
Temperature upon Receipt (ºC)	0.6
Extraction within Holding Time	Yes
Analysis within Holding Time	Yes

QC ANNOTATIONS:

1. Please see Appendices attached for data qualifier/attribute and lab identifier descriptions which may be contained in the project.

CS-24: the reported percent recovery and RPD of OCDD for the MS/MSD do not meet accuracy and precision criteria. The reported concentration of OCDD in the parent sample is high.

APPENDIX A: GENERAL DATA QUALIFIERS / DATA ATTRIBUTES

B	The analyte was found in the method blank, at a concentration that was at least 10% of the concentration in the sample.
C	Two or more congeners co-elute. In EDDs, C denotes the lowest IUPAC congener in a co-elution group and additional co-eluters for the group are shown with the number of the lowest IUPAC co-eluter.
E	The reported concentration exceeds the calibration range (upper point of the calibration curve) and is an estimated value.
EMPC	Represents an Estimated Maximum Possible Concentration. EMPCs arise in cases where the signal/noise ratio is not sufficient for peak identification (the determined ion-abundance ratio is outside the allowed theoretical range), or where there is a co-eluting interference.
H/h	If the standard recovery is below the method or SOP specified value “H” is assigned. If the obtained value is less than half the specified value “h” is assigned.
J	Indicates that an analyte has a concentration below the reporting limit (lowest point of the calibration curve) and is an estimated value.
ND	Indicates a non-detect.
NR or R	Indicates a value that is not reportable.
PR	Due to interference, the associated congener is poorly resolved.
QI	Indicates the presence of a quantitative interference.
SI	Denotes “Single Ion Mode” and is utilized for PCBs where the secondary ion trace has a significantly elevated noise level due to background PFK. Responses for such peaks are calculated using an EMPC approach based solely on the primary ion area(s) and may be considered estimates.
U	The analyte was not detected. The estimated detection limit (EDL) may be reported for this analyte.
V	The labeled standard recovery was found to be outside of the method control limits.

APPENDIX B: DRBC/TMDL SPECIFIC DATA QUALIFIERS / DATA ATTRIBUTES

J	The reported result is an estimate. The value is less than the minimum calibration level but greater than the estimated detection limit (EDL).
U	The analyte was not detected in the sample at the estimated detection limit (EDL).
E	The reported concentration is an estimate. The value exceeds the upper calibration range (upper point of the calibration curve).
D	Dilution Data. Result was obtained from the analysis of a dilution.
B	Analyte found in the sample and associated method blank.
C	Co-eluting congener
Cxx	Co-elutes with the indicated congener, data is reported under the lowest IUPAC congener. 'Xx' denotes the IUPAC number with the lowest numerical designated congener.
NR	Analyte is not reportable because of problems in sample preparation or analysis.
V	Labeled standard recovery is not within method control limits.
X	Results from re-injection/repeat/second-column analysis.
EMPC	Estimated maximum possible concentration. Indicates that a peak is identified but did not meet the method specified ion-abundance ratio.

APPENDIX C: LAB IDENTIFIERS

AR	Indicates use of the archived portion of the sample extract.
CU	Indicates a sample that required additional clean-up prior to MS injection/processing.
D	Indicates a dilution of the sample extract. The number that follows the "D" indicates the dilution factor.
DE	Indicates a dilution performed with the addition of ES (extraction standard) solution.
DUP	Designation for a duplicate sample.
MS	Designation for a matrix spike.
MSD	Designation for a matrix spike duplicate.
RJ	Indicates a reinjection of the sample extract.
S	Indicates a sample split. The number that follows the "S" indicates the split factor.

SGS CERTIFICATIONS

Alaska	17-012
Arkansas	88-0682
California (ELAP)	ELAP Cert #2914
CLIA	34D1013708
Connecticut	PH-0258
USDA Soil Permit	P330-20-00103
American Association for Laboratory Accreditation (A2LA)	2726.01 (ISO 17025:2005, 2009 TNI, DoD ELAP QSM 5.1)
Florida DOH	E87634
Louisiana DEQ	4115
Louisiana DOH	LA031
Maine	2018018
Massachusetts	M-NC919
Minnesota (Primary NELAP For Method 23)	037-999-459
Montana	0106
New Hampshire (Primary NELAP)	2085
New Hampshire (Secondary NELAP)	2083
New Jersey	NC100
New York	11685
North Carolina DEQ	481
North Dakota	R-197
Oregon	NC200002
Pennsylvania	68-03675
South Carolina	99029002
Texas	T104704260
US Coast Guard	16714/159.317/SGS
Vermont	VT-87634
Virginia	460214
Washington	C913

Rev. 13-Apr-2020

Sample ID: CS-SS-101

Method 8290A

Client Data		Sample Data		Laboratory Data			
Name:	EarthCon	Matrix:	Solid	Lab Project ID:	B4511	Date Received:	06-Aug-2020
Project ID:	KMCC Navassa	Weight/Volume:	9.19 g	Lab Sample ID	B4511_17654_DF_001	Date Extracted:	06-Aug-2020
Date Collected:	05-Aug-2020	% Solid:	91.2 %	QC Batch No:	17654	Date Analyzed:	07-Aug-2020
		Split:	-	Dilution:	-	Time Analyzed:	17:00:53

Analyte	Conc. (pg/g)	DL (pg/g)	EMPC (pg/g)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	0.165			ES 2378-TCDD	71.7	
12378-PeCDD	0.379			J	ES 12378-PeCDD	76.3	
123478-HxCDD	1.61			J	ES 123478-HxCDD	63.2	
123678-HxCDD	3.95				ES 123678-HxCDD	61	
123789-HxCDD	2.33			J	ES 123789-HxCDD	65.6	
1234678-HpCDD	161				ES 1234678-HpCDD	58.5	
OCDD	1,610				ES OCDD	47.1	
2378-TCDF	0.313			J	ES 2378-TCDF	72.9	
12378-PeCDF	EMPC		0.32	J	ES 12378-PeCDF	75.9	
23478-PeCDF	EMPC		0.686	J	ES 23478-PeCDF	74.4	
123478-HxCDF	2.77				ES 123478-HxCDF	61.1	
123678-HxCDF	1.17			J	ES 123678-HxCDF	62.4	
234678-HxCDF	EMPC		1.56	J	ES 234678-HxCDF	58.6	
123789-HxCDF	ND	0.219			ES 123789-HxCDF	60.6	
1234678-HpCDF	30.8				ES 1234678-HpCDF	58.9	
1234789-HpCDF	3.64				ES 1234789-HpCDF	57.3	
OCDF	100				ES OCDF	45.3	
Totals					**Standard**	**CS Recoveries**	
					CS 37Cl-2378-TCDD	89.2	
Total TCDD	0.965		1.62		CS 12347-PeCDD	99.8	
Total PeCDD	3.1		5.06		CS 12346-PeCDF	85.8	
Total HxCDD	43		43		CS 123469-HxCDF	69.7	
Total HpCDD	468		468		CS 1234689-HpCDF	67.6	
Total TCDF	3.04		6.36				
Total PeCDF	7.74		8.99				
Total HxCDF	37.9		40.1				
Total HpCDF	115		115				
Total PCDD/Fs	**2,390**		**2,400**				
ITEF TEQs							
TEQ: ND=0	5.07		5.59				
TEQ: ND=DL/2	5.17	0.231	5.68				
TEQ: ND=DL	5.26	0.462	5.78				

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Sample ID: CS-SS-101 — TEQ Summary — Method 8290A

Client Project Name:	EarthCon	Matrix:	Solid	Lab Sample ID:	B4511_17654_DF_001
Cliend Project ID:	KMCC Navassa	Weight/Volume:	9.19 g	QC Batch No.:	17654
Date Collected:	05-Aug-2020	Split:	-	Date Extracted:	06-Aug-2020
Date Received:	06-Aug-2020	Dilution:	-	Date Analyzed:	07-Aug-2020 17:00
Lab Project No:	B4511	Units	pg/g		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	(0.165)		0.165	(0.165)	(0.165)	(0.165)
12378-PeCDD	0.379	J	0.169	0.19	0.379	0.379
123478-HxCDD	1.61	J	0.134	0.161	0.161	0.161
123678-HxCDD	3.95		0.147	0.395	0.395	0.395
123789-HxCDD	2.33	J	0.126	0.233	0.233	0.233
1234678-HpCDD	161		0.112	1.61	1.61	1.61
OCDD	1610		0.365	1.61	0.161	0.484
2378-TCDF	0.313	J	0.0897	0.0313	0.0313	0.0313
12378-PeCDF	[0.32]	J	0.165	[0.016]	[0.016]	[0.0096]
23478-PeCDF	[0.686]	J	0.155	[0.343]	[0.343]	[0.206]
123478-HxCDF	2.77		0.171	0.277	0.277	0.277
123678-HxCDF	1.17	J	0.164	0.117	0.117	0.117
234678-HxCDF	[1.56]	J	0.182	[0.156]	[0.156]	[0.156]
123789-HxCDF	(0.219)		0.219	(0.0219)	(0.0219)	(0.0219)
1234678-HpCDF	30.8		0.0741	0.308	0.308	0.308
1234789-HpCDF	3.64		0.0865	0.0364	0.0364	0.0364
OCDF	100		0.236	0.1	0.01	0.0301

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TEQ Summaries			
EMPC = 0, ND = 0	5.07	3.72	4.07
EMPC = 0, ND = DL / 2	5.17	3.82	4.16
EMPC = 0, ND = DL	5.26	3.91	4.25
EMPC = 0, < J-level = 0	4.34	2.8	3.14
EMPC = EMPC, ND = 0	5.59	4.24	4.44
EMPC = EMPC, ND = DL / 2	5.68	4.33	4.53
EMPC = EMPC, ND = DL	5.78	4.43	4.62
EMPC = EMPC, < J-level = 0	4.34	2.8	3.14

Checkcode: 458-533-TQV

SGS North America - DF v0.7

Sample ID: CS-SB-125

Method 8290A

Client Data		Sample Data		Laboratory Data			
Name:	EarthCon	Matrix:	Solid	Lab Project ID:	B4511	Date Received:	06-Aug-2020
Project ID:	KMCC Navassa	Weight/Volume:	9.25 g	Lab Sample ID	B4511_17654_DF_002	Date Extracted:	06-Aug-2020
Date Collected:	05-Aug-2020	% Solid:	91.7 %	QC Batch No:	17654	Date Analyzed:	07-Aug-2020
		Split:	-	Dilution:	-	Time Analyzed:	17:48:26

Analyte	Conc. (pg/g)	DL (pg/g)	EMPC (pg/g)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	0.129			ES 2378-TCDD	78.4	
12378-PeCDD	EMPC		0.187	J	ES 12378-PeCDD	80.5	
123478-HxCDD	EMPC		0.562	J	ES 123478-HxCDD	67.6	
123678-HxCDD	1.67			J	ES 123678-HxCDD	70.1	
123789-HxCDD	1.07			J	ES 123789-HxCDD	73.3	
1234678-HpCDD	66.1				ES 1234678-HpCDD	68.3	
OCDD	515				ES OCDD	59.9	
2378-TCDF	ND	0.0761			ES 2378-TCDF	79.9	
12378-PeCDF	ND	0.109			ES 12378-PeCDF	81	
23478-PeCDF	EMPC		0.189	J	ES 23478-PeCDF	76.4	
123478-HxCDF	0.862			J	ES 123478-HxCDF	66.3	
123678-HxCDF	0.498			J	ES 123678-HxCDF	67.7	
234678-HxCDF	0.763			J	ES 234678-HxCDF	64.9	
123789-HxCDF	ND	0.166			ES 123789-HxCDF	67.2	
1234678-HpCDF	17.3				ES 1234678-HpCDF	69.6	
1234789-HpCDF	1.49			J	ES 1234789-HpCDF	68.3	
OCDF	65.1				ES OCDF	58.5	
Totals					**Standard**	**CS Recoveries**	
					CS 37Cl-2378-TCDD	89.9	
Total TCDD	ND		0.264		CS 12347-PeCDD	97	
Total PeCDD	0.26		1.46		CS 12346-PeCDF	85.4	
Total HxCDD	16.5		17.1		CS 123469-HxCDF	71.8	
Total HpCDD	181		181		CS 1234689-HpCDF	76.2	
Total TCDF	ND		0.68				
Total PeCDF	0.695		2.46				
Total HxCDF	18		18.2				
Total HpCDF	58		58				
Total PCDD/Fs	**855**		**860**				
ITEF TEQs							
TEQ: ND=0	1.92		2.16				
TEQ: ND=DL/2	1.99	0.182	2.24				
TEQ: ND=DL	2.07	0.364	2.32				

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Sample ID: CS-SB-125 — TEQ Summary — Method 8290A

Client Project Name:	EarthCon	Matrix:	Solid	Lab Sample ID:	B4511_17654_DF_002
Cliend Project ID:	KMCC Navassa	Weight/Volume:	9.25 g	QC Batch No.:	17654
Date Collected:	05-Aug-2020	Split:	-	Date Extracted:	06-Aug-2020
Date Received:	06-Aug-2020	Dilution:	-	Date Analyzed:	07-Aug-2020 17:48
Lab Project No:	B4511	Units	pg/g		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	(0.129)		0.129	(0.129)	(0.129)	(0.129)
12378-PeCDD	[0.187]	J	0.129	[0.0933]	[0.187]	[0.187]
123478-HxCDD	[0.562]	J	0.14	[0.0562]	[0.0562]	[0.0562]
123678-HxCDD	1.67	J	0.133	0.167	0.167	0.167
123789-HxCDD	1.07	J	0.124	0.107	0.107	0.107
1234678-HpCDD	66.1		0.0599	0.661	0.661	0.661
OCDD	515		0.326	0.515	0.0515	0.155
2378-TCDF	(0.0761)		0.0761	(0.00761)	(0.00761)	(0.00761)
12378-PeCDF	(0.109)		0.109	(0.00547)	(0.00547)	(0.00328)
23478-PeCDF	[0.189]	J	0.117	[0.0946]	[0.0946]	[0.0568]
123478-HxCDF	0.862	J	0.129	0.0862	0.0862	0.0862
123678-HxCDF	0.498	J	0.128	0.0498	0.0498	0.0498
234678-HxCDF	0.763	J	0.142	0.0763	0.0763	0.0763
123789-HxCDF	(0.166)		0.166	(0.0166)	(0.0166)	(0.0166)
1234678-HpCDF	17.3		0.0956	0.173	0.173	0.173
1234789-HpCDF	1.49	J	0.115	0.0149	0.0149	0.0149
OCDF	65.1		0.155	0.0651	0.00651	0.0195

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TEQ Summaries			
EMPC = 0, ND = 0	1.92	1.39	1.51
EMPC = 0, ND = DL / 2	1.99	1.47	1.59
EMPC = 0, ND = DL	2.07	1.55	1.67
EMPC = 0, < J-level = 0	1.41	0.892	1.01
EMPC = EMPC, ND = 0	2.16	1.73	1.81
EMPC = EMPC, ND = DL / 2	2.24	1.81	1.89
EMPC = EMPC, ND = DL	2.32	1.89	1.97
EMPC = EMPC, < J-level = 0	1.41	0.892	1.01

Sample ID: CS-24

Method 8290A

Client Data		Sample Data		Laboratory Data			
Name:	EarthCon	Matrix:	Solid	Lab Project ID:	B4511	Date Received:	06-Aug-2020
Project ID:	KMCC Navassa	Weight/Volume:	9.02 g	Lab Sample ID	B4511_17654_DF_003	Date Extracted:	06-Aug-2020
Date Collected:	05-Aug-2020	% Solid:	88.9 %	QC Batch No:	17654	Date Analyzed:	07-Aug-2020
		Split:	-	Dilution:	-	Time Analyzed:	18:35:59

Analyte	Conc. (pg/g)	DL (pg/g)	EMPC (pg/g)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	0.109			ES 2378-TCDD	70.5	
12378-PeCDD	0.433			J	ES 12378-PeCDD	74.6	
123478-HxCDD	1.04			J	ES 123478-HxCDD	63.3	
123678-HxCDD	2.6			J	ES 123678-HxCDD	61.4	
123789-HxCDD	1.61			J	ES 123789-HxCDD	66.1	
1234678-HpCDD	91.2				ES 1234678-HpCDD	56.8	
OCDD	928				ES OCDD	44.3	
2378-TCDF	EMPC		0.204	J	ES 2378-TCDF	72.1	
12378-PeCDF	EMPC		0.225	J	ES 12378-PeCDF	76	
23478-PeCDF	1.12			J	ES 23478-PeCDF	72.6	
123478-HxCDF	1.42			J	ES 123478-HxCDF	62.2	
123678-HxCDF	0.854			J	ES 123678-HxCDF	61	
234678-HxCDF	1.41			J	ES 234678-HxCDF	58.4	
123789-HxCDF	ND	0.195			ES 123789-HxCDF	58.5	
1234678-HpCDF	19.9				ES 1234678-HpCDF	59.3	
1234789-HpCDF	1.14			J	ES 1234789-HpCDF	56	
OCDF	46.5				ES OCDF	44.9	
Totals					**Standard**	**CS Recoveries**	
					CS 37Cl-2378-TCDD	89.8	
Total TCDD	0.293		0.885		CS 12347-PeCDD	97	
Total PeCDD	2.24		3.86		CS 12346-PeCDF	86.1	
Total HxCDD	29.3		31.8		CS 123469-HxCDF	70.2	
Total HpCDD	309		309		CS 1234689-HpCDF	68.4	
Total TCDF	3.19		5.45				
Total PeCDF	9.67		11.3				
Total HxCDF	25.9		26.4				
Total HpCDF	57.5		57.5				
Total PCDD/Fs	**1,410**		**1,420**				
ITEF TEQs							
TEQ: ND=0	3.77		3.8				
TEQ: ND=DL/2	3.83	0.183	3.86				
TEQ: ND=DL	3.89	0.366	3.93				

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Sample ID: CS-24 — TEQ Summary — Method 8290A

Client Project Name:	EarthCon	Matrix:	Solid	Lab Sample ID:	B4511_17654_DF_003
Cliend Project ID:	KMCC Navassa	Weight/Volume:	9.02 g	QC Batch No.:	17654
Date Collected:	05-Aug-2020	Split:	-	Date Extracted:	06-Aug-2020
Date Received:	06-Aug-2020	Dilution:	-	Date Analyzed:	07-Aug-2020 18:35
Lab Project No:	B4511	Units	pg/g		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	(0.109)		0.109	(0.109)	(0.109)	(0.109)
12378-PeCDD	0.433	J	0.113	0.216	0.433	0.433
123478-HxCDD	1.04	J	0.165	0.104	0.104	0.104
123678-HxCDD	2.6	J	0.177	0.26	0.26	0.26
123789-HxCDD	1.61	J	0.149	0.161	0.161	0.161
1234678-HpCDD	91.2		0.082	0.912	0.912	0.912
OCDD	928		0.34	0.928	0.0928	0.279
2378-TCDF	[0.204]	J	0.0683	[0.0204]	[0.0204]	[0.0204]
12378-PeCDF	[0.225]	J	0.141	[0.0113]	[0.0113]	[0.00675]
23478-PeCDF	1.12	J	0.143	0.559	0.559	0.335
123478-HxCDF	1.42	J	0.142	0.142	0.142	0.142
123678-HxCDF	0.854	J	0.149	0.0854	0.0854	0.0854
234678-HxCDF	1.41	J	0.158	0.141	0.141	0.141
123789-HxCDF	(0.195)		0.195	(0.0195)	(0.0195)	(0.0195)
1234678-HpCDF	19.9		0.0451	0.199	0.199	0.199
1234789-HpCDF	1.14	J	0.059	0.0114	0.0114	0.0114
OCDF	46.5		0.182	0.0465	0.00465	0.0139

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TEQ Summaries			
EMPC = 0, ND = 0	3.77	3.11	3.08
EMPC = 0, ND = DL / 2	3.83	3.17	3.14
EMPC = 0, ND = DL	3.89	3.23	3.21
EMPC = 0, < J-level = 0	2.09	1.21	1.4
EMPC = EMPC, ND = 0	3.8	3.14	3.1
EMPC = EMPC, ND = DL / 2	3.86	3.2	3.17
EMPC = EMPC, ND = DL	3.93	3.27	3.23
EMPC = EMPC, < J-level = 0	2.09	1.21	1.4

Sample ID: CS-24-MS

Method 8290A

Client Data		Sample Data		Laboratory Data			
Name:	EarthCon	Matrix:	Solid	Lab Project ID:	B4511	Date Received:	06-Aug-2020
Project ID:	KMCC Navassa	Weight/Volume:	9.02 g	Lab Sample ID	B4511_17654_DF_003MS	Date Extracted:	06-Aug-2020
Date Collected:	05-Aug-2020	% Solid:	88.9 %	QC Batch No:	17654	Date Analyzed:	07-Aug-2020
		Split:	-	Dilution:	-	Time Analyzed:	19:23:31

Analyte	Conc. (pg/g)	DL (pg/g)	EMPC (pg/g)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	22.6				ES 2378-TCDD	79.2	
12378-PeCDD	104				ES 12378-PeCDD	85.2	
123478-HxCDD	118				ES 123478-HxCDD	64.6	
123678-HxCDD	122				ES 123678-HxCDD	66.3	
123789-HxCDD	113				ES 123789-HxCDD	69.9	
1234678-HpCDD	206				ES 1234678-HpCDD	66.9	
OCDD	1,080				ES OCDD	57.6	
2378-TCDF	24				ES 2378-TCDF	71.9	
12378-PeCDF	114				ES 12378-PeCDF	75.2	
23478-PeCDF	125				ES 23478-PeCDF	74.3	
123478-HxCDF	118				ES 123478-HxCDF	63.9	
123678-HxCDF	118				ES 123678-HxCDF	64.5	
234678-HxCDF	120				ES 234678-HxCDF	63.1	
123789-HxCDF	112				ES 123789-HxCDF	65.4	
1234678-HpCDF	140				ES 1234678-HpCDF	65.1	
1234789-HpCDF	115				ES 1234789-HpCDF	66.1	
OCDF	277				ES OCDF	55.6	
Totals					**Standard**	**CS Recoveries**	
					CS 37Cl-2378-TCDD	94.7	
Total TCDD	102		103		CS 12347-PeCDD	104	
Total PeCDD	156		157		CS 12346-PeCDF	80.4	
Total HxCDD	408		408		CS 123469-HxCDF	69.1	
Total HpCDD	433		433		CS 1234689-HpCDF	73.3	
Total TCDF	122		123				
Total PeCDF	297		298				
Total HxCDF	515		515				
Total HpCDF	293		293				
Total PCDD/Fs	**3,680**		**3,680**				
ITEF TEQs							
TEQ: ND=0	233		233				
TEQ: ND=DL/2	233	0.274	233				
TEQ: ND=DL	233	0.548	233				

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Sample ID: CS-24-MS — TEQ Summary — Method 8290A

Client Project Name:	EarthCon	Matrix:	Solid	Lab Sample ID:	B4511_17654_DF_003MS
Cliend Project ID:	KMCC Navassa	Weight/Volume:	9.02 g	QC Batch No.:	17654
Date Collected:	05-Aug-2020	Split:	-	Date Extracted:	06-Aug-2020
Date Received:	06-Aug-2020	Dilution:	-	Date Analyzed:	07-Aug-2020 19:23
Lab Project No:	B4511	Units	pg/g		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	22.6		0.089	22.6	22.6	22.6
12378-PeCDD	104		0.14	52	104	104
123478-HxCDD	118		0.129	11.8	11.8	11.8
123678-HxCDD	122		0.126	12.2	12.2	12.2
123789-HxCDD	113		0.122	11.3	11.3	11.3
1234678-HpCDD	206		0.109	2.06	2.06	2.06
OCDD	1080		0.272	1.08	0.108	0.323
2378-TCDF	24		0.157	2.4	2.4	2.4
12378-PeCDF	114		0.183	5.68	5.68	3.41
23478-PeCDF	125		0.185	62.4	62.4	37.4
123478-HxCDF	118		0.522	11.8	11.8	11.8
123678-HxCDF	118		0.524	11.8	11.8	11.8
234678-HxCDF	120		0.605	12	12	12
123789-HxCDF	112		0.667	11.2	11.2	11.2
1234678-HpCDF	140		0.0391	1.4	1.4	1.4
1234789-HpCDF	115		0.0482	1.15	1.15	1.15
OCDF	277		0.15	0.277	0.0277	0.0831

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TEQ Summaries			
EMPC = 0, ND = 0	233	284	257
EMPC = 0, ND = DL / 2	233	284	257
EMPC = 0, ND = DL	233	284	257
EMPC = 0, < J-level = 0	233	284	257
EMPC = EMPC, ND = 0	233	284	257
EMPC = EMPC, ND = DL / 2	233	284	257
EMPC = EMPC, ND = DL	233	284	257
EMPC = EMPC, < J-level = 0	233	284	257

Sample ID: CS-24-MSD

Method 8290A

Client Data		Sample Data		Laboratory Data			
Name:	EarthCon	Matrix:	Solid	Lab Project ID:	B4511	Date Received:	06-Aug-2020
Project ID:	KMCC Navassa	Weight/Volume:	8.96 g	Lab Sample ID	B4511_17654_DF_003MSD	Date Extracted:	06-Aug-2020
Date Collected:	05-Aug-2020	% Solid:	88.9 %	QC Batch No:	17654	Date Analyzed:	07-Aug-2020
		Split:	-	Dilution:	-	Time Analyzed:	20:10:58

Analyte	Conc. (pg/g)	DL (pg/g)	EMPC (pg/g)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	22.7				ES 2378-TCDD	87.8	
12378-PeCDD	104				ES 12378-PeCDD	99.8	
123478-HxCDD	113				ES 123478-HxCDD	71.1	
123678-HxCDD	124				ES 123678-HxCDD	67.7	
123789-HxCDD	113				ES 123789-HxCDD	70.9	
1234678-HpCDD	224				ES 1234678-HpCDD	65.1	
OCDD	1,240				ES OCDD	53.2	
2378-TCDF	22.9				ES 2378-TCDF	90.8	
12378-PeCDF	112				ES 12378-PeCDF	92.6	
23478-PeCDF	124				ES 23478-PeCDF	95.6	
123478-HxCDF	116				ES 123478-HxCDF	66.6	
123678-HxCDF	120				ES 123678-HxCDF	64.2	
234678-HxCDF	121				ES 234678-HxCDF	64.6	
123789-HxCDF	114				ES 123789-HxCDF	66.7	
1234678-HpCDF	142				ES 1234678-HpCDF	64.5	
1234789-HpCDF	117				ES 1234789-HpCDF	63.5	
OCDF	278				ES OCDF	52.3	
Totals					**Standard**	**CS Recoveries**	
					CS 37Cl-2378-TCDD	91.1	
Total TCDD	104		105		CS 12347-PeCDD	81.4	
Total PeCDD	152		152		CS 12346-PeCDF	93.3	
Total HxCDD	405		405		CS 123469-HxCDF	64.3	
Total HpCDD	476		476		CS 1234689-HpCDF	68.2	
Total TCDF	124		125				
Total PeCDF	295		295				
Total HxCDF	521		521				
Total HpCDF	302		302				
Total PCDD/Fs	**3,900**		**3,900**				
ITEF TEQs							
TEQ: ND=0	233		233				
TEQ: ND=DL/2	233	0.359	233				
TEQ: ND=DL	233	0.718	233				

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Sample ID: CS-24-MSD — TEQ Summary — Method 8290A

Client Project Name:	EarthCon	Matrix:	Solid	Lab Sample ID:	B4511_17654_DF_003MSD
Cliend Project ID:	KMCC Navassa	Weight/Volume:	8.96 g	QC Batch No.:	17654
Date Collected:	05-Aug-2020	Split:	-	Date Extracted:	06-Aug-2020
Date Received:	06-Aug-2020	Dilution:	-	Date Analyzed:	07-Aug-2020 20:10
Lab Project No:	B4511	Units	pg/g		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	22.7		0.194	22.7	22.7	22.7
12378-PeCDD	104		0.234	51.8	104	104
123478-HxCDD	113		0.182	11.3	11.3	11.3
123678-HxCDD	124		0.204	12.4	12.4	12.4
123789-HxCDD	113		0.18	11.3	11.3	11.3
1234678-HpCDD	224		0.0974	2.24	2.24	2.24
OCDD	1240		0.317	1.24	0.124	0.373
2378-TCDF	22.9		0.122	2.29	2.29	2.29
12378-PeCDF	112		0.198	5.58	5.58	3.35
23478-PeCDF	124		0.19	62	62	37.2
123478-HxCDF	116		0.533	11.6	11.6	11.6
123678-HxCDF	120		0.511	12	12	12
234678-HxCDF	121		0.559	12.1	12.1	12.1
123789-HxCDF	114		0.697	11.4	11.4	11.4
1234678-HpCDF	142		0.0741	1.42	1.42	1.42
1234789-HpCDF	117		0.0851	1.17	1.17	1.17
OCDF	278		0.208	0.278	0.0278	0.0833

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TEQ Summaries			
EMPC = 0, ND = 0	233	283	256
EMPC = 0, ND = DL / 2	233	283	256
EMPC = 0, ND = DL	233	283	256
EMPC = 0, < J-level = 0	233	283	256
EMPC = EMPC, ND = 0	233	283	256
EMPC = EMPC, ND = DL / 2	233	283	256
EMPC = EMPC, ND = DL	233	283	256
EMPC = EMPC, < J-level = 0	233	283	256

Checkcode: 343-506-QBV

MS/MSD Comparison

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Method 8290A

Sample ID: CS-24

Analyte	Native Conc.	MS Spike	MS Conc.	MS Rec.	MSD Spike	MSD Conc.	MSD Rec.	RPD
	(pg/g)	(pg/g)	(pg/g)	%	(pg/g)	(pg/g)	%	
2,3,7,8-TCDD	ND	22.2	22.6	102	22.3	22.7	102	0%
1,2,3,7,8-PeCDD	0.433	111	104	93.5	112	104	92.4	1%
1,2,3,4,7,8-HxCDD	1.04	111	118	105	112	113	100	5%
1,2,3,6,7,8-HxCDD	2.6	111	122	108	112	124	108	0%
1,2,3,7,8,9-HxCDD	1.61	111	113	100	112	113	100	0%
1,2,3,4,6,7,8-HpCDD	91.2	111	206	104	112	224	119	13%
OCDD	928	222	1080	67	223	1240	142	72%
2,3,7,8-TCDF	0.204	22.2	24	107	22.3	22.9	102	5%
1,2,3,7,8-PeCDF	0.225	111	114	102	112	112	99.8	2%
2,3,4,7,8-PeCDF	1.12	111	125	112	112	124	110	2%
1,2,3,4,7,8-HxCDF	1.42	111	118	105	112	116	103	2%
1,2,3,6,7,8-HxCDF	0.854	111	118	105	112	120	107	2%
2,3,4,6,7,8-HxCDF	1.41	111	120	107	112	121	107	0%
1,2,3,7,8,9-HxCDF	ND	111	112	101	112	114	102	1%
1,2,3,4,6,7,8-HpCDF	19.9	111	140	108	112	142	110	2%
1,2,3,4,7,8,9-HpCDF	1.14	111	115	103	112	117	104	1%
OCDF	46.5	222	277	104	223	278	104	0%

* % Recovery limits for MS and MSD: 70-130% of expected value, if native < RL
* RPD limit for MS vs. MSD recoveries: +/- 20%, if native < RL

Sample ID: CS-23

Method 8290A

Client Data		Sample Data		Laboratory Data			
Name:	EarthCon	Matrix:	Solid	Lab Project ID:	B4511	Date Received:	06-Aug-2020
Project ID:	KMCC Navassa	Weight/Volume:	9.43 g	Lab Sample ID	B4511_17654_DF_004	Date Extracted:	06-Aug-2020
Date Collected:	05-Aug-2020	% Solid:	93.0 %	QC Batch No:	17654	Date Analyzed:	07-Aug-2020
		Split:	-	Dilution:	-	Time Analyzed:	20:58:30

Analyte	Conc. (pg/g)	DL (pg/g)	EMPC (pg/g)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	EMPC		0.116	J	ES 2378-TCDD	83.3	
12378-PeCDD	0.779			J	ES 12378-PeCDD	88.1	
123478-HxCDD	2.63			J	ES 123478-HxCDD	71.4	
123678-HxCDD	5.67				ES 123678-HxCDD	70.9	
123789-HxCDD	4.36				ES 123789-HxCDD	72.8	
1234678-HpCDD	197				ES 1234678-HpCDD	65.9	
OCDD	1,580				ES OCDD	51.8	
2378-TCDF	0.382			J	ES 2378-TCDF	84.5	
12378-PeCDF	EMPC		0.416	J	ES 12378-PeCDF	86.7	
23478-PeCDF	2.13			J	ES 23478-PeCDF	83	
123478-HxCDF	3.32				ES 123478-HxCDF	69.3	
123678-HxCDF	2.25			J	ES 123678-HxCDF	69.8	
234678-HxCDF	3.62				ES 234678-HxCDF	67.1	
123789-HxCDF	ND	0.343			ES 123789-HxCDF	65.1	
1234678-HpCDF	48.3				ES 1234678-HpCDF	66.4	
1234789-HpCDF	4.62				ES 1234789-HpCDF	63.7	
OCDF	115				ES OCDF	47.8	
Totals					**Standard**	**CS Recoveries**	
					CS 37Cl-2378-TCDD	92.5	
Total TCDD	2.1		3.05		CS 12347-PeCDD	101	
Total PeCDD	5.88		7.19		CS 12346-PeCDF	88.1	
Total HxCDD	47.2		47.2		CS 123469-HxCDF	71.3	
Total HpCDD	414		414		CS 1234689-HpCDF	70.7	
Total TCDF	8.47		11.2				
Total PeCDF	26.1		27.7				
Total HxCDF	69.2		69.2				
Total HpCDF	145		145				
Total PCDD/Fs	**2,410**		**2,420**				
ITEF TEQs							
TEQ: ND=0	7.87		8.01				
TEQ: ND=DL/2	7.89	0.21	8.03				
TEQ: ND=DL	7.91	0.42	8.04				

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Sample ID: CS-23 — TEQ Summary — Method 8290A

Client Project Name:	EarthCon	Matrix:	Solid	Lab Sample ID:	B4511_17654_DF_004
Cliend Project ID:	KMCC Navassa	Weight/Volume:	9.43 g	QC Batch No.:	17654
Date Collected:	05-Aug-2020	Split:	-	Date Extracted:	06-Aug-2020
Date Received:	06-Aug-2020	Dilution:	-	Date Analyzed:	07-Aug-2020 20:58
Lab Project No:	B4511	Units	pg/g		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	[0.116]	J	0.133	[0.116]	[0.116]	[0.116]
12378-PeCDD	0.779	J	0.0935	0.389	0.779	0.779
123478-HxCDD	2.63	J	0.0896	0.263	0.263	0.263
123678-HxCDD	5.67		0.0988	0.567	0.567	0.567
123789-HxCDD	4.36		0.0938	0.436	0.436	0.436
1234678-HpCDD	197		0.118	1.97	1.97	1.97
OCDD	1580		0.288	1.58	0.158	0.474
2378-TCDF	0.382	J	0.0935	0.0382	0.0382	0.0382
12378-PeCDF	[0.416]	J	0.163	[0.0208]	[0.0208]	[0.0125]
23478-PeCDF	2.13	J	0.162	1.06	1.06	0.638
123478-HxCDF	3.32		0.253	0.332	0.332	0.332
123678-HxCDF	2.25	J	0.232	0.225	0.225	0.225
234678-HxCDF	3.62		0.273	0.362	0.362	0.362
123789-HxCDF	(0.343)		0.343	(0.0343)	(0.0343)	(0.0343)
1234678-HpCDF	48.3		0.0647	0.483	0.483	0.483
1234789-HpCDF	4.62		0.077	0.0462	0.0462	0.0462
OCDF	115		0.227	0.115	0.0115	0.0346

TEQ Summaries			
EMPC = 0, ND = 0	7.87	6.74	6.65
EMPC = 0, ND = DL / 2	7.89	6.75	6.67
EMPC = 0, ND = DL	7.91	6.77	6.68
EMPC = 0, < J-level = 0	5.9	4.37	4.71
EMPC = EMPC, ND = 0	8.01	6.87	6.78
EMPC = EMPC, ND = DL / 2	8.03	6.89	6.8
EMPC = EMPC, ND = DL	8.04	6.91	6.81
EMPC = EMPC, < J-level = 0	5.9	4.37	4.71

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Checkcode: 764-441-HCS

Sample ID: CS-22

Method 8290A

Client Data		Sample Data		Laboratory Data			
Name:	EarthCon	Matrix:	Solid	Lab Project ID:	B4511	Date Received:	06-Aug-2020
Project ID:	KMCC Navassa	Weight/Volume:	9.59 g	Lab Sample ID	B4511_17654_DF_005	Date Extracted:	06-Aug-2020
Date Collected:	05-Aug-2020	% Solid:	90.8 %	QC Batch No:	17654	Date Analyzed:	07-Aug-2020
		Split:	-	Dilution:	-	Time Analyzed:	21:45:56

Analyte	Conc. (pg/g)	DL (pg/g)	EMPC (pg/g)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	EMPC		0.105	J	ES 2378-TCDD	80.4	
12378-PeCDD	1.18			J	ES 12378-PeCDD	83.1	
123478-HxCDD	3.5				ES 123478-HxCDD	67.3	
123678-HxCDD	8.52				ES 123678-HxCDD	67.3	
123789-HxCDD	5.45				ES 123789-HxCDD	74.2	
1234678-HpCDD	282				ES 1234678-HpCDD	67.2	
OCDD	2,320				ES OCDD	58.2	
2378-TCDF	EMPC		0.523		ES 2378-TCDF	80.4	
12378-PeCDF	EMPC		0.621	J	ES 12378-PeCDF	82.2	
23478-PeCDF	2.5			J	ES 23478-PeCDF	78.3	
123478-HxCDF	3.84				ES 123478-HxCDF	65.5	
123678-HxCDF	2.32			J	ES 123678-HxCDF	65.3	
234678-HxCDF	3.56				ES 234678-HxCDF	63.8	
123789-HxCDF	ND	0.303			ES 123789-HxCDF	65.9	
1234678-HpCDF	58.8				ES 1234678-HpCDF	66	
1234789-HpCDF	4.7				ES 1234789-HpCDF	65.1	
OCDF	160				ES OCDF	54.8	
Totals					**Standard**	**CS Recoveries**	
					CS 37Cl-2378-TCDD	89.7	
Total TCDD	1.97		4.11		CS 12347-PeCDD	94.7	
Total PeCDD	10.3		10.8		CS 12346-PeCDF	82	
Total HxCDD	79.9		79.9		CS 123469-HxCDF	67.6	
Total HpCDD	726		726		CS 1234689-HpCDF	68	
Total TCDF	8.55		13.4				
Total PeCDF	28.1		29.2				
Total HxCDF	78.9		79.5				
Total HpCDF	185		185				
Total PCDD/Fs	**3,600**		**3,610**				
ITEF TEQs							
TEQ: ND=0	10.5		10.7				
TEQ: ND=DL/2	10.5	0.213	10.7				
TEQ: ND=DL	10.5	0.425	10.7				

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Sample ID: CS-22 — TEQ Summary — Method 8290A

Client Project Name:	EarthCon	Matrix:	Solid	Lab Sample ID:	B4511_17654_DF_005
Cliend Project ID:	KMCC Navassa	Weight/Volume:	9.59 g	QC Batch No.:	17654
Date Collected:	05-Aug-2020	Split:	-	Date Extracted:	06-Aug-2020
Date Received:	06-Aug-2020	Dilution:	-	Date Analyzed:	07-Aug-2020 21:45
Lab Project No:	B4511	Units	pg/g		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	[0.105]	J	0.106	[0.105]	[0.105]	[0.105]
12378-PeCDD	1.18	J	0.14	0.589	1.18	1.18
123478-HxCDD	3.5		0.141	0.35	0.35	0.35
123678-HxCDD	8.52		0.143	0.852	0.852	0.852
123789-HxCDD	5.45		0.134	0.545	0.545	0.545
1234678-HpCDD	282		0.0729	2.82	2.82	2.82
OCDD	2320		0.302	2.32	0.232	0.696
2378-TCDF	[0.523]		0.116	[0.0523]	[0.0523]	[0.0523]
12378-PeCDF	[0.621]	J	0.166	[0.031]	[0.031]	[0.0186]
23478-PeCDF	2.5	J	0.17	1.25	1.25	0.749
123478-HxCDF	3.84		0.226	0.384	0.384	0.384
123678-HxCDF	2.32	J	0.227	0.232	0.232	0.232
234678-HxCDF	3.56		0.245	0.356	0.356	0.356
123789-HxCDF	(0.303)		0.303	(0.0303)	(0.0303)	(0.0303)
1234678-HpCDF	58.8		0.0634	0.588	0.588	0.588
1234789-HpCDF	4.7		0.0708	0.047	0.047	0.047
OCDF	160		0.181	0.16	0.016	0.0481

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TEQ Summaries			
EMPC = 0, ND = 0	10.5	8.85	8.85
EMPC = 0, ND = DL / 2	10.5	8.87	8.86
EMPC = 0, ND = DL	10.5	8.88	8.88
EMPC = 0, < J-level = 0	8.42	6.19	6.69
EMPC = EMPC, ND = 0	10.7	9.04	9.02
EMPC = EMPC, ND = DL / 2	10.7	9.05	9.04
EMPC = EMPC, ND = DL	10.7	9.07	9.05
EMPC = EMPC, < J-level = 0	8.48	6.24	6.74

Checkcode: 460-756-YTX

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Sample ID: CS-26

Method 8290A

Client Data		Sample Data		Laboratory Data			
Name:	EarthCon	Matrix:	Solid	Lab Project ID:	B4511	Date Received:	06-Aug-2020
Project ID:	KMCC Navassa	Weight/Volume:	9.54 g	Lab Sample ID	B4511_17654_DF_006	Date Extracted:	06-Aug-2020
Date Collected:	05-Aug-2020	% Solid:	91.8 %	QC Batch No:	17654	Date Analyzed:	08-Aug-2020
		Split:	-	Dilution:	-	Time Analyzed:	1:03:17

Analyte	Conc. (pg/g)	DL (pg/g)	EMPC (pg/g)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	0.1			ES 2378-TCDD	78.4	
12378-PeCDD	EMPC		0.175	J	ES 12378-PeCDD	79.2	
123478-HxCDD	EMPC		0.65	J	ES 123478-HxCDD	69.1	
123678-HxCDD	1.18			J	ES 123678-HxCDD	67.3	
123789-HxCDD	0.864			J	ES 123789-HxCDD	73.5	
1234678-HpCDD	66				ES 1234678-HpCDD	63.4	
OCDD	346				ES OCDD	52.6	
2378-TCDF	EMPC		0.0762	J	ES 2378-TCDF	80.1	
12378-PeCDF	EMPC		0.128	J	ES 12378-PeCDF	80.4	
23478-PeCDF	EMPC		0.399	J	ES 23478-PeCDF	77.2	
123478-HxCDF	EMPC		0.371	J	ES 123478-HxCDF	67.2	
123678-HxCDF	0.413			J	ES 123678-HxCDF	66.8	
234678-HxCDF	0.596			J	ES 234678-HxCDF	64.3	
123789-HxCDF	ND	0.148			ES 123789-HxCDF	64.1	
1234678-HpCDF	6.04				ES 1234678-HpCDF	67	
1234789-HpCDF	0.602			J	ES 1234789-HpCDF	60.5	
OCDF	16.1				ES OCDF	47	
Totals					**Standard**	**CS Recoveries**	
					CS 37Cl-2378-TCDD	86.2	
Total TCDD	ND		0.577		CS 12347-PeCDD	91.3	
Total PeCDD	0.784		3.15		CS 12346-PeCDF	79	
Total HxCDD	49.2		49.9		CS 123469-HxCDF	68	
Total HpCDD	450		450		CS 1234689-HpCDF	68.1	
Total TCDF	1.13		2.47				
Total PeCDF	5.31		5.83				
Total HxCDF	8.54		8.91				
Total HpCDF	19.2		19.2				
Total PCDD/Fs	**896**		**902**				
ITEF TEQs							
TEQ: ND=0	1.39		1.8				
TEQ: ND=DL/2	1.45	0.142	1.85				
TEQ: ND=DL	1.51	0.284	1.91				

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Sample ID: CS-26 — TEQ Summary — Method 8290A

Client Project Name:	EarthCon	Matrix:	Solid	Lab Sample ID:	B4511_17654_DF_006
Cliend Project ID:	KMCC Navassa	Weight/Volume:	9.54 g	QC Batch No.:	17654
Date Collected:	05-Aug-2020	Split:	-	Date Extracted:	06-Aug-2020
Date Received:	06-Aug-2020	Dilution:	-	Date Analyzed:	08-Aug-2020 01:03
Lab Project No:	B4511	Units	pg/g		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	(0.1)		0.1	(0.1)	(0.1)	(0.1)
12378-PeCDD	[0.175]	J	0.106	[0.0873]	[0.175]	[0.175]
123478-HxCDD	[0.65]	J	0.0547	[0.065]	[0.065]	[0.065]
123678-HxCDD	1.18	J	0.0536	0.118	0.118	0.118
123789-HxCDD	0.864	J	0.0488	0.0864	0.0864	0.0864
1234678-HpCDD	66		0.0539	0.66	0.66	0.66
OCDD	346		0.167	0.346	0.0346	0.104
2378-TCDF	[0.0762]	J	0.0472	[0.00762]	[0.00762]	[0.00762]
12378-PeCDF	[0.128]	J	0.1	[0.00642]	[0.00642]	[0.00385]
23478-PeCDF	[0.399]	J	0.107	[0.199]	[0.199]	[0.12]
123478-HxCDF	[0.371]	J	0.115	[0.0371]	[0.0371]	[0.0371]
123678-HxCDF	0.413	J	0.106	0.0413	0.0413	0.0413
234678-HxCDF	0.596	J	0.123	0.0596	0.0596	0.0596
123789-HxCDF	(0.148)		0.148	(0.0148)	(0.0148)	(0.0148)
1234678-HpCDF	6.04		0.0746	0.0604	0.0604	0.0604
1234789-HpCDF	0.602	J	0.0996	0.00602	0.00602	0.00602
OCDF	16.1		0.154	0.0161	0.00161	0.00484

TEQ Summaries			
EMPC = 0, ND = 0	1.39	1.07	1.14
EMPC = 0, ND = DL / 2	1.45	1.12	1.2
EMPC = 0, ND = DL	1.51	1.18	1.25
EMPC = 0, < J-level = 0	1.08	0.756	0.829
EMPC = EMPC, ND = 0	1.8	1.56	1.55
EMPC = EMPC, ND = DL / 2	1.85	1.61	1.6
EMPC = EMPC, ND = DL	1.91	1.67	1.66
EMPC = EMPC, < J-level = 0	1.08	0.756	0.829

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Checkcode: 702-048-XWM

Sample ID: CS-25

Method 8290A

Client Data		Sample Data		Laboratory Data			
Name:	EarthCon	Matrix:	Solid	Lab Project ID:	B4511	Date Received:	06-Aug-2020
Project ID:	KMCC Navassa	Weight/Volume:	9.02 g	Lab Sample ID	B4511_17654_DF_007	Date Extracted:	06-Aug-2020
Date Collected:	05-Aug-2020	% Solid:	88.0 %	QC Batch No:	17654	Date Analyzed:	08-Aug-2020
		Split:	-	Dilution:	-	Time Analyzed:	1:50:51

Analyte	Conc. (pg/g)	DL (pg/g)	EMPC (pg/g)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	0.13			ES 2378-TCDD	84.6	
12378-PeCDD	EMPC		0.345	J	ES 12378-PeCDD	83.6	
123478-HxCDD	EMPC		0.802	J	ES 123478-HxCDD	72.9	
123678-HxCDD	1.57			J	ES 123678-HxCDD	70.2	
123789-HxCDD	EMPC		1.25	J	ES 123789-HxCDD	75.8	
1234678-HpCDD	55.6				ES 1234678-HpCDD	65.2	
OCDD	525				ES OCDD	58.3	
2378-TCDF	EMPC		0.19	J	ES 2378-TCDF	84.6	
12378-PeCDF	0.398			J	ES 12378-PeCDF	82.2	
23478-PeCDF	EMPC		0.528	J	ES 23478-PeCDF	78.4	
123478-HxCDF	0.793			J	ES 123478-HxCDF	70	
123678-HxCDF	0.565			J	ES 123678-HxCDF	70.6	
234678-HxCDF	EMPC		0.76	J	ES 234678-HxCDF	66.6	
123789-HxCDF	ND	0.188			ES 123789-HxCDF	66.7	
1234678-HpCDF	8.45				ES 1234678-HpCDF	68.8	
1234789-HpCDF	EMPC		0.729	J	ES 1234789-HpCDF	63.9	
OCDF	19.1				ES OCDF	53.3	
Totals					**Standard**	**CS Recoveries**	
					CS 37Cl-2378-TCDD	90.4	
Total TCDD	1.52		2.16		CS 12347-PeCDD	92.2	
Total PeCDD	3.65		5.61		CS 12346-PeCDF	80.1	
Total HxCDD	23.5		26.1		CS 123469-HxCDF	69.8	
Total HpCDD	195		195		CS 1234689-HpCDF	71.2	
Total TCDF	1.11		6.18				
Total PeCDF	6.25		7.08				
Total HxCDF	11.5		12.5				
Total HpCDF	22.8		23.5				
Total PCDD/Fs	**809**		**822**				
ITEF TEQs							
TEQ: ND=0	1.5		2.24				
TEQ: ND=DL/2	1.57	0.192	2.31				
TEQ: ND=DL	1.65	0.384	2.39				

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Sample ID: CS-25 — TEQ Summary — Method 8290A

Client Project Name:	EarthCon	Matrix:	Solid	Lab Sample ID:	B4511_17654_DF_007
Cliend Project ID:	KMCC Navassa	Weight/Volume:	9.02 g	QC Batch No.:	17654
Date Collected:	05-Aug-2020	Split:	-	Date Extracted:	06-Aug-2020
Date Received:	06-Aug-2020	Dilution:	-	Date Analyzed:	08-Aug-2020 01:50
Lab Project No:	B4511	Units	pg/g		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	(0.13)		0.13	(0.13)	(0.13)	(0.13)
12378-PeCDD	[0.345]	J	0.164	[0.172]	[0.345]	[0.345]
123478-HxCDD	[0.802]	J	0.11	[0.0802]	[0.0802]	[0.0802]
123678-HxCDD	1.57	J	0.122	0.157	0.157	0.157
123789-HxCDD	[1.25]	J	0.104	[0.125]	[0.125]	[0.125]
1234678-HpCDD	55.6		0.0754	0.556	0.556	0.556
OCDD	525		0.456	0.525	0.0525	0.157
2378-TCDF	[0.19]	J	0.0738	[0.019]	[0.019]	[0.019]
12378-PeCDF	0.398	J	0.132	0.0199	0.0199	0.0119
23478-PeCDF	[0.528]	J	0.125	[0.264]	[0.264]	[0.158]
123478-HxCDF	0.793	J	0.131	0.0793	0.0793	0.0793
123678-HxCDF	0.565	J	0.128	0.0565	0.0565	0.0565
234678-HxCDF	[0.76]	J	0.147	[0.076]	[0.076]	[0.076]
123789-HxCDF	(0.188)		0.188	(0.0188)	(0.0188)	(0.0188)
1234678-HpCDF	8.45		0.0827	0.0845	0.0845	0.0845
1234789-HpCDF	[0.729]	J	0.0938	[0.00729]	[0.00729]	[0.00729]
OCDF	19.1		0.193	0.0191	0.00191	0.00574

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TEQ Summaries			
EMPC = 0, ND = 0	1.5	1.01	1.11
EMPC = 0, ND = DL / 2	1.57	1.08	1.18
EMPC = 0, ND = DL	1.65	1.16	1.26
EMPC = 0, < J-level = 0	1.18	0.695	0.804
EMPC = EMPC, ND = 0	2.24	1.92	1.92
EMPC = EMPC, ND = DL / 2	2.31	2	1.99
EMPC = EMPC, ND = DL	2.39	2.07	2.07
EMPC = EMPC, < J-level = 0	1.18	0.695	0.804

Checkcode: 290-011-XGQ

Sample ID: CS-SS-104

Method 8290A

Client Data		Sample Data		Laboratory Data			
Name:	EarthCon	Matrix:	Solid	Lab Project ID:	B4511	Date Received:	06-Aug-2020
Project ID:	KMCC Navassa	Weight/Volume:	8.82 g	Lab Sample ID	B4511_17654_DF_008	Date Extracted:	06-Aug-2020
Date Collected:	05-Aug-2020	% Solid:	87.1 %	QC Batch No:	17654	Date Analyzed:	08-Aug-2020
		Split:	-	Dilution:	-	Time Analyzed:	2:38:23

Analyte	Conc. (pg/g)	DL (pg/g)	EMPC (pg/g)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	0.124			ES 2378-TCDD	80.8	
12378-PeCDD	0.764			J	ES 12378-PeCDD	85.2	
123478-HxCDD	3.37				ES 123478-HxCDD	64	
123678-HxCDD	10				ES 123678-HxCDD	64.6	
123789-HxCDD	6.84				ES 123789-HxCDD	64.3	
1234678-HpCDD	416				ES 1234678-HpCDD	61.3	
OCDD	3,190				ES OCDD	49.8	
2378-TCDF	EMPC		0.144	J	ES 2378-TCDF	83.3	
12378-PeCDF	0.307			J	ES 12378-PeCDF	83.2	
23478-PeCDF	0.766			J	ES 23478-PeCDF	82.3	
123478-HxCDF	4.62				ES 123478-HxCDF	62.1	
123678-HxCDF	2.59			J	ES 123678-HxCDF	60.5	
234678-HxCDF	4.69				ES 234678-HxCDF	60.8	
123789-HxCDF	ND	0.386			ES 123789-HxCDF	63.7	
1234678-HpCDF	132				ES 1234678-HpCDF	59.2	
1234789-HpCDF	12.9				ES 1234789-HpCDF	56.5	
OCDF	636				ES OCDF	48.5	
Totals					**Standard**	**CS Recoveries**	
					CS 37Cl-2378-TCDD	91.2	
Total TCDD	0.584		2.52		CS 12347-PeCDD	96.3	
Total PeCDD	2.26		4.46		CS 12346-PeCDF	83.7	
Total HxCDD	54.5		54.5		CS 123469-HxCDF	64.9	
Total HpCDD	737		737		CS 1234689-HpCDF	63.9	
Total TCDF	4.32		7.29				
Total PeCDF	12.7		13				
Total HxCDF	117		118				
Total HpCDF	499		499				
Total PCDD/Fs	**5,250**		**5,260**				
ITEF TEQs							
TEQ: ND=0	13.4		13.4				
TEQ: ND=DL/2	13.5	0.243	13.5				
TEQ: ND=DL	13.6	0.486	13.6				

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Sample ID: CS-SS-104 — TEQ Summary — Method 8290A

Client Project Name:	EarthCon	Matrix:	Solid	Lab Sample ID:	B4511_17654_DF_008
Cliend Project ID:	KMCC Navassa	Weight/Volume:	8.82 g	QC Batch No.:	17654
Date Collected:	05-Aug-2020	Split:	-	Date Extracted:	06-Aug-2020
Date Received:	06-Aug-2020	Dilution:	-	Date Analyzed:	08-Aug-2020 02:38
Lab Project No:	B4511	Units	pg/g		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	(0.124)		0.124	(0.124)	(0.124)	(0.124)
12378-PeCDD	0.764	J	0.14	0.382	0.764	0.764
123478-HxCDD	3.37		0.159	0.337	0.337	0.337
123678-HxCDD	10		0.175	1	1	1
123789-HxCDD	6.84		0.167	0.684	0.684	0.684
1234678-HpCDD	416		0.0903	4.16	4.16	4.16
OCDD	3190		0.395	3.19	0.319	0.956
2378-TCDF	[0.144]	J	0.0941	[0.0144]	[0.0144]	[0.0144]
12378-PeCDF	0.307	J	0.162	0.0154	0.0154	0.00922
23478-PeCDF	0.766	J	0.169	0.383	0.383	0.23
123478-HxCDF	4.62		0.312	0.462	0.462	0.462
123678-HxCDF	2.59	J	0.323	0.259	0.259	0.259
234678-HxCDF	4.69		0.342	0.469	0.469	0.469
123789-HxCDF	(0.386)		0.386	(0.0386)	(0.0386)	(0.0386)
1234678-HpCDF	132		0.0881	1.32	1.32	1.32
1234789-HpCDF	12.9		0.114	0.129	0.129	0.129
OCDF	636		0.322	0.636	0.0636	0.191

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TEQ Summaries			
EMPC = 0, ND = 0	13.4	10.4	11
EMPC = 0, ND = DL / 2	13.5	10.4	11.1
EMPC = 0, ND = DL	13.6	10.5	11.1
EMPC = 0, < J-level = 0	12.4	8.94	9.71
EMPC = EMPC, ND = 0	13.4	10.4	11
EMPC = EMPC, ND = DL / 2	13.5	10.5	11.1
EMPC = EMPC, ND = DL	13.6	10.5	11.1
EMPC = EMPC, < J-level = 0	12.4	8.94	9.71

Checkcode: 578-088-WRL

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Sample ID: SS-108-D

Method 8290A

Client Data		Sample Data		Laboratory Data			
Name:	EarthCon	Matrix:	Solid	Lab Project ID:	B4511	Date Received:	06-Aug-2020
Project ID:	KMCC Navassa	Weight/Volume:	7.99 g	Lab Sample ID	B4511_17654_DF_009	Date Extracted:	06-Aug-2020
Date Collected:	05-Aug-2020	% Solid:	79.9 %	QC Batch No:	17654	Date Analyzed:	08-Aug-2020
		Split:	-	Dilution:	-	Time Analyzed:	3:25:50

Analyte	Conc. (pg/g)	DL (pg/g)	EMPC (pg/g)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	0.114			ES 2378-TCDD	80.6	
12378-PeCDD	EMPC		0.225	J	ES 12378-PeCDD	90.4	
123478-HxCDD	EMPC		0.243	J	ES 123478-HxCDD	69	
123678-HxCDD	EMPC		0.488	J	ES 123678-HxCDD	67.4	
123789-HxCDD	0.502			J	ES 123789-HxCDD	68.6	
1234678-HpCDD	15.4				ES 1234678-HpCDD	63.7	
OCDD	134				ES OCDD	46.2	
2378-TCDF	0.285			J	ES 2378-TCDF	84.2	
12378-PeCDF	0.376			J	ES 12378-PeCDF	87.3	
23478-PeCDF	0.486			J	ES 23478-PeCDF	86.2	
123478-HxCDF	0.505			J	ES 123478-HxCDF	65.5	
123678-HxCDF	0.337			J	ES 123678-HxCDF	66.2	
234678-HxCDF	0.31			J	ES 234678-HxCDF	64.7	
123789-HxCDF	ND	0.0979			ES 123789-HxCDF	62.5	
1234678-HpCDF	2.64			J	ES 1234678-HpCDF	65.4	
1234789-HpCDF	0.229			J	ES 1234789-HpCDF	56.4	
OCDF	4.92			J	ES OCDF	42.9	
Totals					**Standard**	**CS Recoveries**	
					CS 37Cl-2378-TCDD	93.7	
Total TCDD	4.87		6.93		CS 12347-PeCDD	104	
Total PeCDD	4.55		5.54		CS 12346-PeCDF	90.6	
Total HxCDD	8.45		9.43		CS 123469-HxCDF	72.6	
Total HpCDD	44.2		44.2		CS 1234689-HpCDF	71.3	
Total TCDF	10.7		12.5				
Total PeCDF	2.31		4.48				
Total HxCDF	4		4.44				
Total HpCDF	5.84		6.11				
Total PCDD/Fs	**224**		**233**				
ITEF TEQs							
TEQ: ND=0	0.777		0.962				
TEQ: ND=DL/2	0.839	0.184	1.02				
TEQ: ND=DL	0.901	0.367	1.09				

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Sample ID: SS-108-D — TEQ Summary — Method 8290A

Client Project Name:	EarthCon	Matrix:	Solid	Lab Sample ID:	B4511_17654_DF_009
Cliend Project ID:	KMCC Navassa	Weight/Volume:	7.99 g	QC Batch No.:	17654
Date Collected:	05-Aug-2020	Split:	-	Date Extracted:	06-Aug-2020
Date Received:	06-Aug-2020	Dilution:	-	Date Analyzed:	08-Aug-2020 03:25
Lab Project No:	B4511	Units	pg/g		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	(0.114)		0.114	(0.114)	(0.114)	(0.114)
12378-PeCDD	[0.225]	J	0.141	[0.112]	[0.225]	[0.225]
123478-HxCDD	[0.243]	J	0.17	[0.0243]	[0.0243]	[0.0243]
123678-HxCDD	[0.488]	J	0.173	[0.0488]	[0.0488]	[0.0488]
123789-HxCDD	0.502	J	0.164	0.0502	0.0502	0.0502
1234678-HpCDD	15.4		0.107	0.154	0.154	0.154
OCDD	134		0.254	0.134	0.0134	0.0402
2378-TCDF	0.285	J	0.0721	0.0285	0.0285	0.0285
12378-PeCDF	0.376	J	0.159	0.0188	0.0188	0.0113
23478-PeCDF	0.486	J	0.164	0.243	0.243	0.146
123478-HxCDF	0.505	J	0.0712	0.0505	0.0505	0.0505
123678-HxCDF	0.337	J	0.0701	0.0337	0.0337	0.0337
234678-HxCDF	0.31	J	0.0734	0.031	0.031	0.031
123789-HxCDF	(0.0979)		0.0979	(0.00979)	(0.00979)	(0.00979)
1234678-HpCDF	2.64	J	0.0774	0.0264	0.0264	0.0264
1234789-HpCDF	0.229	J	0.105	0.00229	0.00229	0.00229
OCDF	4.92	J	0.201	0.00492	0.000492	0.00148

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TEQ Summaries			
EMPC = 0, ND = 0	0.777	0.652	0.575
EMPC = 0, ND = DL / 2	0.839	0.714	0.637
EMPC = 0, ND = DL	0.901	0.776	0.699
EMPC = 0, < J-level = 0	0.288	0.167	0.194
EMPC = EMPC, ND = 0	0.962	0.95	0.873
EMPC = EMPC, ND = DL / 2	1.02	1.01	0.935
EMPC = EMPC, ND = DL	1.09	1.07	0.997
EMPC = EMPC, < J-level = 0	0.288	0.167	0.194

Checkcode: 704-809-DZT

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Sample ID: CS-RISB02

Method 8290A

Client Data		Sample Data		Laboratory Data			
Name:	EarthCon	Matrix:	Solid	Lab Project ID:	B4511	Date Received:	06-Aug-2020
Project ID:	KMCC Navassa	Weight/Volume:	9.42 g	Lab Sample ID	B4511_17654_DF_010	Date Extracted:	06-Aug-2020
Date Collected:	05-Aug-2020	% Solid:	92.1 %	QC Batch No:	17654	Date Analyzed:	08-Aug-2020
		Split:	-	Dilution:	-	Time Analyzed:	4:13:22

Analyte	Conc. (pg/g)	DL (pg/g)	EMPC (pg/g)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	0.112			ES 2378-TCDD	78.4	
12378-PeCDD	ND	0.135			ES 12378-PeCDD	83.1	
123478-HxCDD	0.35			J	ES 123478-HxCDD	69.8	
123678-HxCDD	1.2			J	ES 123678-HxCDD	68.4	
123789-HxCDD	0.72			J	ES 123789-HxCDD	72.3	
1234678-HpCDD	36.3				ES 1234678-HpCDD	67.3	
OCDD	304				ES OCDD	58.3	
2378-TCDF	ND	0.0788			ES 2378-TCDF	79.7	
12378-PeCDF	ND	0.104			ES 12378-PeCDF	82	
23478-PeCDF	0.301			J	ES 23478-PeCDF	79.7	
123478-HxCDF	0.863			J	ES 123478-HxCDF	67.5	
123678-HxCDF	EMPC		0.347	J	ES 123678-HxCDF	67	
234678-HxCDF	EMPC		0.517	J	ES 234678-HxCDF	66	
123789-HxCDF	ND	0.117			ES 123789-HxCDF	64.9	
1234678-HpCDF	9.95				ES 1234678-HpCDF	66.9	
1234789-HpCDF	0.96			J	ES 1234789-HpCDF	63.7	
OCDF	27				ES OCDF	54.6	
Totals					**Standard**	**CS Recoveries**	
					CS 37Cl-2378-TCDD	92.1	
Total TCDD	ND		0.276		CS 12347-PeCDD	97	
Total PeCDD	ND	0.135	ND		CS 12346-PeCDF	86.8	
Total HxCDD	10.6		10.6		CS 123469-HxCDF	71.5	
Total HpCDD	92.3		92.3		CS 1234689-HpCDF	71.8	
Total TCDF	0.223		1.25				
Total PeCDF	1.97		3.42				
Total HxCDF	9.7		11.9				
Total HpCDF	31.8		31.8				
Total PCDD/Fs	**478**		**483**				
ITEF TEQs							
TEQ: ND=0	1.27		1.35				
TEQ: ND=DL/2	1.37	0.163	1.46				
TEQ: ND=DL	1.47	0.326	1.56				

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Sample ID: CS-RISB02 — TEQ Summary — Method 8290A

Client Project Name:	EarthCon	Matrix:	Solid	Lab Sample ID:	B4511_17654_DF_010
Cliend Project ID:	KMCC Navassa	Weight/Volume:	9.42 g	QC Batch No.:	17654
Date Collected:	05-Aug-2020	Split:	-	Date Extracted:	06-Aug-2020
Date Received:	06-Aug-2020	Dilution:	-	Date Analyzed:	08-Aug-2020 04:13
Lab Project No:	B4511	Units	pg/g		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	(0.112)		0.112	(0.112)	(0.112)	(0.112)
12378-PeCDD	(0.135)		0.135	(0.0673)	(0.135)	(0.135)
123478-HxCDD	0.35	J	0.123	0.035	0.035	0.035
123678-HxCDD	1.2	J	0.142	0.12	0.12	0.12
123789-HxCDD	0.72	J	0.126	0.072	0.072	0.072
1234678-HpCDD	36.3		0.101	0.363	0.363	0.363
OCDD	304		0.328	0.304	0.0304	0.0913
2378-TCDF	(0.0788)		0.0788	(0.00788)	(0.00788)	(0.00788)
12378-PeCDF	(0.104)		0.104	(0.00519)	(0.00519)	(0.00311)
23478-PeCDF	0.301	J	0.107	0.151	0.151	0.0903
123478-HxCDF	0.863	J	0.0833	0.0863	0.0863	0.0863
123678-HxCDF	[0.347]	J	0.0893	[0.0347]	[0.0347]	[0.0347]
234678-HxCDF	[0.517]	J	0.0883	[0.0517]	[0.0517]	[0.0517]
123789-HxCDF	(0.117)		0.117	(0.0117)	(0.0117)	(0.0117)
1234678-HpCDF	9.95		0.0705	0.0995	0.0995	0.0995
1234789-HpCDF	0.96	J	0.0881	0.0096	0.0096	0.0096
OCDF	27		0.16	0.027	0.0027	0.00811

TEQ Summaries			
EMPC = 0, ND = 0	1.27	0.969	0.975
EMPC = 0, ND = DL / 2	1.37	1.1	1.11
EMPC = 0, ND = DL	1.47	1.24	1.24
EMPC = 0, < J-level = 0	0.794	0.496	0.562
EMPC = EMPC, ND = 0	1.35	1.06	1.06
EMPC = EMPC, ND = DL / 2	1.46	1.19	1.2
EMPC = EMPC, ND = DL	1.56	1.33	1.33
EMPC = EMPC, < J-level = 0	0.794	0.496	0.562

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Checkcode: 921-381-FZP

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Sample ID: Method Blank B4511_17654 — Method 8290A

Client Data		Sample Data		Laboratory Data			
Name:	EarthCon	Matrix:	Solid	Lab Project ID:	B4511	Date Received:	n/a
Project ID:	KMCC Navassa	Weight/Volume:	10.00 g	Lab Sample ID	MB1_17654_DF_SDS	Date Extracted:	06-Aug-2020
Date Collected:	n/a	% Solid:	n/a	QC Batch No:	17654	Date Analyzed:	07-Aug-2020
		Split:	-	Dilution:	-	Time Analyzed:	16:13:20

Analyte	Conc. (pg/g)	DL (pg/g)	EMPC (pg/g)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	0.0826			ES 2378-TCDD	93.6	
12378-PeCDD	ND	0.101			ES 12378-PeCDD	94	
123478-HxCDD	ND	0.0607			ES 123478-HxCDD	79.7	
123678-HxCDD	ND	0.0578			ES 123678-HxCDD	79.8	
123789-HxCDD	ND	0.0517			ES 123789-HxCDD	87.6	
1234678-HpCDD	ND	0.0564			ES 1234678-HpCDD	81.8	
OCDD	ND	0.0963			ES OCDD	80.5	
2378-TCDF	ND	0.0583			ES 2378-TCDF	88.5	
12378-PeCDF	ND	0.059			ES 12378-PeCDF	91.1	
23478-PeCDF	ND	0.0578			ES 23478-PeCDF	87.7	
123478-HxCDF	ND	0.0523			ES 123478-HxCDF	73.5	
123678-HxCDF	ND	0.049			ES 123678-HxCDF	79.9	
234678-HxCDF	ND	0.054			ES 234678-HxCDF	73.6	
123789-HxCDF	ND	0.0663			ES 123789-HxCDF	72.2	
1234678-HpCDF	ND	0.0344			ES 1234678-HpCDF	89.8	
1234789-HpCDF	ND	0.0515			ES 1234789-HpCDF	72.3	
OCDF	ND	0.134			ES OCDF	64.9	
Totals					**Standard**	**CS Recoveries**	
					CS 37Cl-2378-TCDD	110	
Total TCDD	ND	0.0826	ND		CS 12347-PeCDD	115	
Total PeCDD	ND	0.101	ND		CS 12346-PeCDF	99.5	
Total HxCDD	ND	0.0563	ND		CS 123469-HxCDF	86	
Total HpCDD	ND	0.0564	ND		CS 1234689-HpCDF	89.5	
Total TCDF	ND	0.0583	ND				
Total PeCDF	ND	0.0585	ND				
Total HxCDF	ND	0.0546	ND				
Total HpCDF	ND	0.041	ND				
Total PCDD/Fs	**ND**		**ND**				
ITEF TEQs							
TEQ: ND=0	0		0				
TEQ: ND=DL/2	0.106	0.106	0.106				
TEQ: ND=DL	0.211	0.211	0.211				

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Sample ID: Method Blank B4511_17654 — TEQ Summary — Method 8290A

Client Project Name:	EarthCon	Matrix:	Solid	Lab Sample ID:	MB1_17654_DF_SDS
Cliend Project ID:	KMCC Navassa	Weight/Volume:	10.00 g	QC Batch No.:	17654
Date Collected:	n/a	Split:	-	Date Extracted:	06-Aug-2020
Date Received:	n/a	Dilution:	-	Date Analyzed:	07-Aug-2020 16:13
Lab Project No:	B4511	Units	pg/g		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	(0.0826)		0.0826	(0.0826)	(0.0826)	(0.0826)
12378-PeCDD	(0.101)		0.101	(0.0503)	(0.101)	(0.101)
123478-HxCDD	(0.0607)		0.0607	(0.00607)	(0.00607)	(0.00607)
123678-HxCDD	(0.0578)		0.0578	(0.00578)	(0.00578)	(0.00578)
123789-HxCDD	(0.0517)		0.0517	(0.00517)	(0.00517)	(0.00517)
1234678-HpCDD	(0.0564)		0.0564	(0.000564)	(0.000564)	(0.000564)
OCDD	(0.0963)		0.0963	(0.0000963)	(0.00000963)	(0.0000289)
2378-TCDF	(0.0583)		0.0583	(0.00583)	(0.00583)	(0.00583)
12378-PeCDF	(0.059)		0.059	(0.00295)	(0.00295)	(0.00177)
23478-PeCDF	(0.0578)		0.0578	(0.0289)	(0.0289)	(0.0174)
123478-HxCDF	(0.0523)		0.0523	(0.00523)	(0.00523)	(0.00523)
123678-HxCDF	(0.049)		0.049	(0.0049)	(0.0049)	(0.0049)
234678-HxCDF	(0.054)		0.054	(0.0054)	(0.0054)	(0.0054)
123789-HxCDF	(0.0663)		0.0663	(0.00663)	(0.00663)	(0.00663)
1234678-HpCDF	(0.0344)		0.0344	(0.000344)	(0.000344)	(0.000344)
1234789-HpCDF	(0.0515)		0.0515	(0.000515)	(0.000515)	(0.000515)
OCDF	(0.134)		0.134	(0.000134)	(0.0000134)	(0.0000403)

TEQ Summaries			
EMPC = 0, ND = 0	0	0	0
EMPC = 0, ND = DL / 2	0.106	0.131	0.124
EMPC = 0, ND = DL	0.211	0.261	0.249
EMPC = 0, < J-level = 0	0	0	0
EMPC = EMPC, ND = 0	0	0	0
EMPC = EMPC, ND = DL / 2	0.106	0.131	0.124
EMPC = EMPC, ND = DL	0.211	0.261	0.249
EMPC = EMPC, < J-level = 0	0	0	0

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METHOD 8290A **PCDD/F ONGOING PRECISION AND RECOVERY (OPR)** **FORM 8A**

Lab Name:	SGS North America		
Initial Calibration:	ICAL: MM3_DF_10012020_12JUN2020		
Instrument ID:	MM3	GC Column ID:	ZB-5ms
VER Data Filename:	200807R02	Analysis Date:	07-AUG-2020 14:39:00
Lab ID:	OPR1_17654_DF		

NATIVE ANALYTES	SPIKE CONC.	CONC. FOUND	RANGE (ng/mL)			OK
2,3,7,8-TCDD	10	10.7	6.7	-	15.8	Y
1,2,3,7,8-PeCDD	50	47.3	35	-	71	Y
1,2,3,4,7,8-HxCDD	50	50.7	35	-	82	Y
1,2,3,6,7,8-HxCDD	50	53.9	38	-	67	Y
1,2,3,7,8,9-HxCDD	50	48.6	32	-	81	Y
1,2,3,4,6,7,8-HpCDD	50	52.6	35	-	70	Y
OCDD	100	107	78	-	144	Y
2,3,7,8-TCDF	10	11.4	7.5	-	15.8	Y
1,2,3,7,8-PeCDF	50	50.2	40	-	67	Y
2,3,4,7,8-PeCDF	50	56.8	34	-	80	Y
1,2,3,4,7,8-HxCDF	50	51.4	36	-	67	Y
1,2,3,6,7,8-HxCDF	50	54	42	-	65	Y
2,3,4,6,7,8-HxCDF	50	55.6	35	-	78	Y
1,2,3,7,8,9-HxCDF	50	50.7	39	-	65	Y
1,2,3,4,6,7,8-HpCDF	50	53.7	41	-	61	Y
1,2,3,4,7,8,9-HpCDF	50	52	39	-	69	Y
OCDF	100	105	63	-	170	Y

Contract-required concentration limits for OPR as specified in Table 6,
Method 1613. 10/94

Processed: 10 Aug 2020 09:06 Analyst: pw

METHOD 8290A **PCDD/F ONGOING PRECISION AND RECOVERY (OPR)** **FORM 8B**

Lab Name: SGS North America
Initial Calibration: ICAL: MM3_DF_10012020_12JUN2020
Instrument ID: MM3 GC Column ID: ZB-5ms
VER Data Filename: 200807R02 Analysis Date: 07-AUG-2020 14:39:00
Lab ID: OPR1_17654_DF

LABELED ANALYTES	SPIKE CONC.	CONC. FOUND	RANGE (ng/mL)			OK
13C-2,3,7,8-TCDD	100	88.4	20	-	175	Y
13C-1,2,3,7,8-PeCDD	100	91.2	21	-	227	Y
13C-1,2,3,4,7,8-HxCDD	100	77.4	21	-	193	Y
13C-1,2,3,6,7,8-HxCDD	100	77.4	25	-	163	Y
13C-1,2,3,7,8,9-HxCDD	100	84.3	26	-	166	Y
13C-1,2,3,4,6,7,8-HpCDD	100	75.3	26	-	166	Y
13C-OCDD	200	123	26	-	397	Y
13C-2,3,7,8-TCDF	100	85.4	22	-	152	Y
13C-1,2,3,7,8-PeCDF	100	90.6	21	-	192	Y
13C-2,3,4,7,8-PeCDF	100	82.6	13	-	328	Y
13C-1,2,3,4,7,8-HxCDF	100	71.1	19	-	202	Y
13C-1,2,3,6,7,8-HxCDF	100	75.2	21	-	159	Y
13C-2,3,4,6,7,8-HxCDF	100	68.7	22	-	176	Y
13C-1,2,3,7,8,9-HxCDF	100	64.8	17	-	205	Y
13C-1,2,3,4,6,7,8-HpCDF	100	84	21	-	158	Y
13C-1,2,3,4,7,8,9-HpCDF	100	63.5	20	-	186	Y
13C-OCDF	200	99.5	26	-	397	Y
CLEANUP STANDARD						
37Cl-2,3,7,8-TCDD	40	39.7	12.4	-	76.4	Y

Contract-required concentration limits for OPR as specified in Table 6,
Method 1613. 10/94

Processed: 10 Aug 2020 09:06 Analyst: pw

Sample Receipt Notification

5500 Business Drive
Wilmington, NC 28405 USA
Tel: 910 794-1613
Toll Free: 866 846-8290
Fax: 910 794-3919

Project Manager:	*Tamara Burkamper*
Receipt Date & Time:	*06-Aug-20 at 11:00*
AP Project name:	*B4511*
Requested TAT:	*3 business days*
Projected due date:	*11-Aug-20*
Matrix:	*Solid*
Phone#:	*910-794-1613*
Email Address:	*Tamara.Morgan@sgs.com*

Company Contact:	*Mary Ann Brookshire*
Company:	*EarthCon*
Project Name & Site:	*KMCC Navassa*
Project PO#:	*02.20200007.00*
QAAP/Contract #:	*file*
Requested Analysis:	*SW-846 Method 8290A*
Phone#:	*404-317-7748*
Email Address:	*mbrookshire@earthcon.com*

Client Smp ID	AP Smp ID	Sample Condition & Notes	Quantity	Size	Sampling Date	Sampling Time	Received Temp (°C)	Container #	Shipping #
CS-SS-101	B4511_001	SO	1	4oz Amber	05-Aug-20	17:27	0.6	1	N/A
CS-SB-125	B4511_002	SO	1	4oz Amber	05-Aug-20	16:48	0.6	1	N/A
CS-24	B4511_003	SO MS/MSD	3	4oz Amber	05-Aug-20	17:40	0.6	1	N/A
CS-23	B4511_004	SO	1	4oz Amber	05-Aug-20	17:00	0.6	1	N/A
CS-22	B4511_005	SO	1	4oz Amber	05-Aug-20	16:55	0.6	1	N/A
CS-26	B4511_006	SO	1	4oz Amber	05-Aug-20	17:55	0.6	1	N/A
CS-25	B4511_007	SO	1	4oz Amber	05-Aug-20	18:10	0.6	1	N/A
CS-SS-104	B4511_008	SO	1	4oz Amber	05-Aug-20	18:16	0.6	1	N/A
SS-108-D	B4511_009	SO	1	4oz Amber	05-Aug-20	14:00	0.6	1	N/A
CS-RISB02	B4511_010	SO	1	4oz Amber	05-Aug-20	13:30	0.6	1	N/A

Preservation Type: **Sample Seals:** No

Notes/Comments:

Samples received intact

Any un-extracted sample will be stored for 90 days from reporting date. Additional storage fees may apply for any samples stored longer than 90 days.

Received by: Ashley Owens *Logged in by: Ashley Owens* *QC'ed by:* TB 08/06/2020

All services are rendered in accordance with the applicable SGS General Conditions of Service accessible via: http://www.sgs.com/terms_and_conditions.htm

SGS North America Inc - Orlando
Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 FAX: 407-425-0707
www.sgs.com

Rush - 3 day TAT

SGS - ORLANDO JOB # : B4511 PAGE 1 OF 1

SGS - ORLANDO Quote # | SKIFF #

Client / Reporting Information

Company Name: EarthCon
Address: 1880 West Oak Pkwy
City: Marietta State: GA Zip: 30062
Project Contact: M. Brookshire Email: mbrookshire@earthcon.com
Phone #: 404-317-7748
Sampler(s) Name(s) (Printed) Sampler 1: T. Messier Sampler 2: S. Tyler

Project Information

Project Name: KMCC Navassa
Street: 120 Quality Drive
City: Navassa State: NC
Project #: 02.20200007.00
Fax #:
Client Purchase Order #:

Analytical Information

Dioxins & Furans/8290A

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid

SGS Orlando Sample #	Field ID / Point of Collection	COLLECTION DATE	TIME	SAMPLED BY:	MATRIX	TOTAL # OF BOTTLES	OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NAOH+ZNAC	DI WATER	MEOH	Dioxins & Furans/8290A	LAB USE ONLY
	CS-SS-101	8.5.20	1727	TM	SO	1		1								1	
	CS-SB-125	8.5.20	1648	CA	SO	1		1								1	
	CS-24	8.5.20	1740	ST	SO	1		1								1	
	CS-24-MS	8.5.20	1740	ST	SO	1		1								1	
	CS-24-MSD	8.5.20	1740	ST	SO	1		1								1	
	CS-23	8.5.20	1700	DF	SO	1		1								1	
	CS-22	8.5.20	1655	ST	SO	1		1								1	
	CS-26	8.5.20	1755	DF	SO	1		1								1	
	CS-25	8.5.20	1810	ST	SO	1		1								1	
	CS-SS-104	8.5.20	1816	TM	SO	1		1								1	
	SS-108-D	8.5.20	1400	DF	SO	1		1								1	
	CS-RISB02	8.5.20	1330	TM	SO	1		1								1	

Turnaround Time (Business days)

10 Day (Business) Approved By: / Date:
7 Day
5 Day
3 Day *RUSH* (circled)
2 Day *RUSH*
1 Day *RUSH*
Other
Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- [ ] COMMERCIAL "A" (RESULTS ONLY)
- [ ] COMMERCIAL "B" (RESULTS PLUS QC)
- [ ] REDT1 (EPA LEVEL 3)
- [x] FULLT1 (EPA LEVEL 4)
- [ ] EDD'S

Comments / Remarks

3-day RUSH

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
1	[signature]	8/6/20 1100	2 [signature]	3		4
5	Relinquished by/Affiliation	Date Time:	6 Received By/Affiliation	7 Relinquished By/Affiliation	Date Time:	8 Received By/Affiliation

Lab Use Only : Cooler Temperature (s) Celsius (corrected): 0.6°C

http://www.sgs.com/en/terms-and-conditions

ORLD-SMT-0001-03-FORM-COC (4).xls Rev 031318

Project Initiation Form

Project Number: B4511

Initiation Date: 06-Aug-20

Client Name: EarthCon

Sample Matrix: Solid

Analysis Method: 8290 PCDD/F

TAT: 3 days

Project Manager: Tamara

Special Instructions

M8290A w/OPR

10 g DWE extraction

Create MS/MSD from B4511_003

May contain high levels

Reporting Instructions

M8290A w/OPR

Create MS/MSD summary for B4511_003

May contain high levels
EQUIS4 file with headers and w/o VVL validation

EPA Region 4 Equis

PM Initials: tburkamper Date: 6-Aug-20

SGS

Methods: PCB PAH | PCDD/F WHO-2 | QUANTICS USV | PEST

Extraction Type: SDS CLL | TALEX Carbon SPE

Solid

Final Volume: 20 uL

Batch# 17654

Split: 1/2 1/4

Extract Initial/Date: ZT 8/6/2020

Clean-up Initial/Date: ~~RB~~ 8/7/2020

Transfer Init/Date: ~~RB~~ 8/7/2020

Lab Sample ID	Extraction Position / Solvent:	Extraction Weight/Volume g	mL	(Td)	ASECS #	Observations
B4511_17654_001	6	10.08				Dark, moist, sandy
B4511_17654_002	7	10.08				See 001
B4511_17654_003	8	10.14				See 001
B4511_17654_003MS	9	10.14				See 001
B4511_17654_003MSD	10	10.08				See 001
B4511_17654_004	11	10.14				See 001
B4511_17654_005	12	10.56				See 001
B4511_17654_006	13	10.39				Brown, moist, sandy
B4511_17654_007	14	10.25				See 001
B4511_17654_008	15	10.12				See 001
B4511_17654_009	16	10.00				Black, moist, sandy
B4511_17654_010	17	10.23				See 006
MB1_17654	4	10.00				Sodium Sulfate
OPR1_17654	5	10.00				Sodium Sulfate

ZT 8/6/2020

Supply IDs

- Toluene: STL 13-5
- MeCHL: STL13-8
- Florisil: SPL4-264B
- Hexane: STL13-7
- Silica: SPL4-277B
- S Nitrate: SPL4-288
- Base Silica: SPL4-279
- HydroMatrix: N/A
- Tetradecane: SPL4-277A
- H_2SO_4: N/A
- A Silica: SPL4-287
- Sodium Sulfate: SPL4-264A

Additional Cleanup

Acid Partition Date/Initial:	
Mini-Acid Date/Initial:	CL 10Aug20
Carbon Column Date/Initial:	n/a
GPC Date/Initial:	
Bond-Elute Date/Initial:	

Cycle Time

TOL	Start: 1530
	Stop: 0830
HEX	Start:
	Stop:
DCM	Start:
	Stop:

SGS

Methods: PCB PCDD/F QUANTICS PAH WHO-2 USV PEST

Solid

Batch# 17654

Inter-Department Communication Sheet

CL 10Aug20

n/a

SGS

Wt. Volume Results

Batch #: 17654

Comments:

Lab Sample ID	Boat WT.	Sample Wt. + Boat Wt.	Dried Sample + Boat Wt.	% Solid	Average % Solid	RSD	Qtest Ratio (if Applicable)	Dry Wt. Equiv.	Extracted Wt.	Final Wt.
B4511_001	0.81	3.41	3.18	91.15%	91.15%			10.97	10.08	9.19
B4511_002	0.81	3.95	3.69	91.72%	91.72%			10.9	10.08	9.25
B4511_003	0.82	3.89	3.55	88.93%	88.93%			11.25	10.14	9.02
B4511_003MS	0.82	3.89	3.55	88.93%	88.93%			11.25	10.14	9.02
B4511_003MSD	0.82	3.89	3.55	88.93%	88.93%			11.25	10.08	8.96
B4511_004	0.79	4.95	4.66	93.03%	93.03%			10.75	10.14	9.43
B4511_005	0.79	4.27	3.95	90.80%	90.80%			11.01	10.56	9.59
B4511_006	0.8	4.45	4.15	91.78%	91.78%			10.9	10.39	9.54
B4511_007	0.79	3.62	3.28	87.99%	87.99%			11.37	10.25	9.02
B4511_008	0.79	3.66	3.29	87.11%	87.11%			11.48	10.12	8.82
B4511_009	0.8	4.18	3.5	79.88%	79.88%			12.52	10	7.99
B4511_010	0.79	3.81	3.57	92.05%	92.05%			10.86	10.23	9.42

REVIEWED
Carla_Lyon , 14:21:56, 08/10/2020

% Solid Determination WorkSheet

SGS

Batch: 17654

Lab Sample ID	Boat Wt.	Sample Wt. + Boat Wt.	Dried Sample + Boat Wt.	Comments
B4511_17654_001	0.81	3.41	3.18	
B4511_17654_002	0.81	3.95	3.69	
B4511_17654_003	0.82	3.89	3.55	
~~B4511_17654_003MS~~	~~0.79~~	~~4.95~~		
~~B4511_17654_003MSD~~	0			
B4511_17654_004	0.79	4.95	4.66	
B4511_17654_005	0.79	4.27	3.95	
B4511_17654_006	0.80	4.45	4.15	
B4511_17654_007	0.79	3.62	3.28	
B4511_17654_008	0.79	3.66	3.29	
B4511_17654_009	0.80	4.18	3.50	
B4511_17654_010	0.79	3.81	3.57	
Date/Initials:		8/6/2020		

EE 8/6/2020

REVIEWED
Carla_Lyon , 14:25:06, 08/10/2020

SGS

Methods: PCB PAH | PCDD/F WHO-2 | QUANTICS USV | PEST

Solid

Batch # 17654

Lab Sample ID	D/F Ax-A	D/F Ax-B	D/F ES	D/F CS	D/F JS		
Spiker Initials/Date:	8/6/2020	8/6/2020	8/6/2020	8/7/2020	8/7/2020		
	Amount: 20µL	Amount: 20µL	Amount: 20µL	Amount: 20µL	Amount: 20µL	Amount:	Amount:
	Observer Initials	Observer Initials	Observer Initials	Observer Initials	Observer Initials	Observer Initials	Observer Initials
B4511_17654_001	—	—					
B4511_17654_002	—	—					
B4511_17654_003	—	—					
B4511_17654_003MS							
B4511_17654_003MSD							
B4511_17654_004	—	—					
B4511_17654_005	—	—					
B4511_17654_006	—	—					
B4511_17654_007	—	—					
B4511_17654_008	—	—					
B4511_17654_009	—	—					
B4511_17654_010	—	—					
MB1_17654	—	—					
OPR1_17654							
	8/6/20	8/6/20	8/6/20	8/7/20	8/7/20		

8/7/2020

Standard Information

Spike ID	DF Ax-A	DF Ax-B	DF ES	D/F CS	D/F JS		
SIL #	23-12-15	20638-2	24-1-1	23.441.1	23.441.2		
Concentration	10 ng/mL	10 pg/µL	100 pg/µL	100 pg/µL	100 pg/µL		
Expiration Date	4-7-25	6-17-21	8/2028	5/21/21	5/21/21		

Instrument: MM3 (AutoSpec-Ultima) MS Experiment: df_cl4-8_db5MS GC Program: df_db5MS

#	Datafile	Vial#	Lab ID	Wt/Vol	Client/Sample ID	Analyst(s)	Checkcode	Acq Date	Acq Time
1	200807R01	3	CS3_200807_DF_RA	1.00	SIL 20-449-3	PSW	523-331	07-Aug-2020	13:43:23
2	200807R02	6	OPR1_17654_DF	1.00	0_17654_OPR001	PSW	184-198	07-Aug-2020	14:39:00
3	200807R03	2	SBS_200807_DF_RA	1.00	SIL 20-61-1	PSW	398-019	07-Aug-2020	15:26:32
4	200807R04	5	MB1_17654_DF_SDS	10.00	Method Blank	PSW	154-009	07-Aug-2020	16:13:20
5	200807R05	7	B4511_17654_DF_001	9.19	CS-SS-101	PSW	458-533	07-Aug-2020	17:00:53
6	200807R06	8	B4511_17654_DF_002	9.25	CS-SB-125	PSW	882-901	07-Aug-2020	17:48:26
7	200807R07	9	B4511_17654_DF_003	9.02	CS-24	PSW	425-303	07-Aug-2020	18:35:59
8	200807R08	10	B4511_17654_DF_003MS	9.02	CS-24-MS	PSW	607-175	07-Aug-2020	19:23:31
9	200807R09	11	B4511_17654_DF_003MSD	8.96	CS-24-MSD	PSW	343-506	07-Aug-2020	20:10:58
10	200807R10	12	B4511_17654_DF_004	9.43	CS-23	PSW	764-441	07-Aug-2020	20:58:30
11	200807R11	13	B4511_17654_DF_005	9.59	CS-22	PSW	460-756	07-Aug-2020	21:45:56
12	200807R12	3	CS3_200807_DF_RB	1.00	SIL 20-449-3	PSW	446-519	07-Aug-2020	22:33:28
13	200807R13	6	OPR1_17654_DF-RJ	1.00	0_17654_OPR001 CPSM only	PSW	275-672	07-Aug-2020	23:29:08
14	200807R14	2	SBS_200807_DF_RB	1.00	SIL 20-61-1 CL 10Aug20	PSW	140-454	08-Aug-2020	00:15:51
15	200807R15	14	B4511_17654_DF_006	9.54	CS-26	PSW	702-048	08-Aug-2020	01:03:17
16	200807R16	15	B4511_17654_DF_007	9.02	CS-25	PSW	290-011	08-Aug-2020	01:50:51
17	200807R17	16	B4511_17654_DF_008	8.82	CS-SS-104	PSW	578-088	08-Aug-2020	02:38:23
18	200807R18	17	B4511_17654_DF_009	7.99	SS-108-D	PSW	704-809	08-Aug-2020	03:25:50
19	200807R19	18	B4511_17654_DF_010	9.42	CS-RISB02	PSW	921-381	08-Aug-2020	04:13:22
20	200807R20	3	CS3_200807_DF_RC	1.00	SIL 20-449-3	PSW	658-828	08-Aug-2020	05:00:55

REVIEWED
By Paul Walton at 9:30 am, Aug 10, 2020

APPROVED
Carla_Lyon , 16:43:07, 08/10/2020

Project file: not saved
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027

Printed: 10-Aug-2020 09:30

Lab ID: MB1_17654_DF_SDS | **Acq'd:** 07 Aug 2020 16:13 PSW | **Wt/Vol:** 10.00 g | **ICAL:** MM3_DF_10012020_12JUN2020

Client ID: Method Blank B4511_17654 | **UTP:** 10-Aug-2020 09:02:18 PSW | **J-level:** 0.5 pg/g | **Split:** 1 | **Checkcode:** 154-009-ZSS

Datafile: 200807R04 | **Report:** 10 Aug 2020 09:06 pw | **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	NotFnd		1.0009	-		-	-	-	1.18	-	3535	0.0826
12378-PeCDD	NotFnd		1.0006	-		-	-	-	1.14	-	4413	0.101
123478-HxCDD	NotFnd		1.0004	-		-	-	-	1.09	-	2751	0.0607
123678-HxCDD	NotFnd		1.0035	-		-	-	-	1.13	-	2751	0.0578
123789-HxCDD	NotFnd		1.0116	-		-	-	-	1.05	-	2751	0.0517
1234678-HpCDD	NotFnd		1.0003	-		-	-	-	0.98	-	3022	0.0564
OCDD	NotFnd		1.0003	-		-	-	-	1.08	-	3285	0.0963
2378-TCDF	NotFnd		1.0006	-		-	-	-	0.98	-	3117	0.0583
12378-PeCDF	NotFnd		1.0006	-		-	-	-	0.95	-	3374	0.059
23478-PeCDF	NotFnd		1.0005	-		-	-	-	0.95	-	3374	0.0578
123478-HxCDF	NotFnd		1.0005	-		-	-	-	1.20	-	3073	0.0523
123678-HxCDF	NotFnd		1.0004	-		-	-	-	1.07	-	3073	0.049
234678-HxCDF	NotFnd		1.0005	-		-	-	-	1.10	-	3073	0.054
123789-HxCDF	NotFnd		1.0004	-		-	-	-	1.09	-	3073	0.0663
1234678-HpCDF	NotFnd		1.0003	-		-	-	-	1.28	-	2773	0.0344
1234789-HpCDF	NotFnd		1.0002	-		-	-	-	1.27	-	2773	0.0515
OCDF	NotFnd		1.0003	-		-	-	-	1.01	-	4292	0.134

Name	Act RT	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	27.26	1.0255	1.0256	+0.2	8.16E+07	0.77	Y	1.01	93.6
ES 12378-PeCDD	32.80	1.2330	1.2340	+2.0	7.08E+07	1.66	Y	0.87	94
ES 123478-HxCDD	36.72	0.9917	0.9916	-0.2	6.65E+07	1.32	Y	1.10	79.7
ES 123678-HxCDD	36.83	0.9947	0.9947	0	6.44E+07	1.30	Y	1.06	79.8
ES 123789-HxCDD	37.13	1.0028	1.0027	-0.2	8.12E+07	1.25	Y	1.22	87.6
ES 1234678-HpCDD	39.95	1.0785	1.0788	+0.7	6.18E+07	1.08	Y	0.99	81.8
ES OCDD	42.37	1.1439	1.1442	+0.8	8.21E+07	0.92	Y	0.67	80.5
ES 2378-TCDF	26.34	1.0572	1.0576	+0.6	1.29E+08	0.79	Y	1.01	88.5
ES 12378-PeCDF	31.31	1.2558	1.2571	+2.4	1.18E+08	1.55	Y	0.90	91.1
ES 23478-PeCDF	32.45	1.3012	1.3027	+2.9	1.12E+08	1.56	Y	0.89	87.7
ES 123478-HxCDF	35.75	0.9655	0.9654	-0.2	8.01E+07	0.52	Y	1.43	73.5
ES 123678-HxCDF	35.89	0.9693	0.9692	-0.2	9.93E+07	0.52	Y	1.63	79.9
ES 234678-HxCDF	36.54	0.9867	0.9867	0	8.28E+07	0.52	Y	1.48	73.6
ES 123789-HxCDF	37.51	1.0130	1.0129	-0.2	7.11E+07	0.52	Y	1.29	72.2
ES 1234678-HpCDF	39.04	1.0540	1.0542	+0.5	7.84E+07	0.44	Y	1.15	89.8
ES 1234789-HpCDF	40.36	1.0898	1.0900	+0.5	4.99E+07	0.44	Y	0.91	72.3
ES OCDF	42.53	1.1484	1.1486	+0.5	8.19E+07	0.89	Y	0.83	64.9

Lab ID: MB1_17654_DF_SDS | Acq'd: 07 Aug 2020 16:13 PSW | Wt/Vol: 10.00 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: Method Blank B4511_17654 | UTP: 10-Aug-2020 09:02:18 PSW | J-level: 0.5 pg/g | Split: 1 | Checkcode: 154-009-ZSS

Datafile: 200807R04 | Report: 10 Aug 2020 09:06 pw | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %	
JS 1234-TCDD	26.58		-	-	-	8.65E+07	0.77	Y	-	-	
JS 1234-TCDF	24.91		-	-	-	1.43E+08	0.79	Y	-	-	
JS 123467-HxCDD	37.03		-	-	-	3.81E+07	1.28	Y	-	-	
CS 37Cl-2378-TCDD	27.29		1.0265	1.0265	0	3.94E+07	n/a	-	1.04	110	
CS 12347-PeCDD	32.30		1.2141	1.2149	+1.6	7.34E+07	1.67	Y	0.74	115	
CS 12346-PeCDF	30.78		1.2343	1.2356	+2.4	1.23E+08	1.56	Y	0.86	99.5	
CS 123469-HxCDF	36.20		0.9776	0.9775	-0.2	8.89E+07	0.51	Y	1.36	86	
CS 1234689-HpCDF	39.45		1.0650	1.0652	+0.5	7.19E+07	0.44	Y	1.05	89.5	
~~SS 37Cl-2378-TCDD~~	~~27.29~~		~~1.0265~~	~~1.0265~~	~~0~~	~~3.94E+07~~	~~n/a~~		~~1.04~~	~~116~~	Not used in this project.
~~SS 12347-PeCDD~~	~~32.30~~		~~1.2141~~	~~1.2149~~	~~+1.6~~	~~7.34E+07~~	~~1.67~~	~~Y~~	~~0.86~~	~~121~~	CL 10Aug20
~~SS 12346-PeCDF~~	~~30.78~~		~~1.2343~~	~~1.2356~~	~~+2.4~~	~~1.23E+08~~	~~1.56~~	~~Y~~	~~0.96~~	~~109~~	
~~SS 123469-HxCDF~~	~~36.20~~		~~0.9776~~	~~0.9775~~	~~-0.2~~	~~8.89E+07~~	~~0.51~~	~~Y~~	~~0.83~~	~~107~~	
~~SS 1234689-HpCDF~~	~~39.45~~		~~1.0650~~	~~1.0652~~	~~+0.5~~	~~7.19E+07~~	~~0.44~~	~~Y~~	~~0.92~~	~~99.3~~	

Totals	Conc	EMPC
Total TCDD	0	0
Total PeCDD	0	0
Total HxCDD	0	0
Total HpCDD	0	0
Total Tetra-Octa Dioxins	0	0
Total TCDF	0	0
Total PeCDF	0	0
Total HxCDF	0	0
Total HpCDF	0	0
Total Tetra-Octa Furans	0	0
Total Tetra-Octa Dioxins & Furans	0	0

Lab ID: MB1_17654_DF_SDS **Acq'd:** 07 Aug 2020 16:13 PSW **Wt/Vol:** 10.00 g **ICAL:** MM3_DF_10012020_12JUN2020

Client ID: Method Blank B4511_17654 **UTP:** 10-Aug-2020 09:02:18 PSW **J-level:** 0.5 pg/g **Split:** 1 **Checkcode:** 154-009-ZSS

Datafile: 200807R04 **Report:** 10 Aug 2020 09:06 pw **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1368-TCDD	NotFnd		0.8591						1.18		3535	0.0826
1379-TCDD	NotFnd		0.8732						1.18		3535	0.0826
1369-TCDD	NotFnd		0.8901						1.18		3535	0.0826
1469-TCDD	NotFnd		0.9205						1.18		3535	0.0826
1247/1246/1248/1249-TCDD	NotFnd		0.9301						1.18		3535	0.0826
1378-TCDD	NotFnd		0.9374						1.18		3535	0.0826
1268-TCDD	NotFnd		0.9449						1.18		3535	0.0826
1478-TCDD	NotFnd		0.9544						1.18		3535	0.0826
1279-TCDD	NotFnd		0.9610						1.18		3535	0.0826
1234/1269-TCDD	NotFnd		0.9746						1.18		3535	0.0826
1236-TCDD	NotFnd		0.9802						1.18		3535	0.0826
1237/1238-TCDD	NotFnd		0.9898						1.18		3535	0.0826
1239-TCDD	NotFnd		0.9950						1.18		3535	0.0826
2378-TCDD	**NotFnd**		**1.0009**						**1.18**		**3535**	**0.0826**
1278-TCDD	NotFnd		1.0133						1.18		3535	0.0826
1267-TCDD	NotFnd		1.0185						1.18		3535	0.0826
1289-TCDD	NotFnd		1.0379						1.18		3535	0.0826
12479/12468-PeCDD	NotFnd		0.9229						1.14		4413	0.101
12469-PeCDD	NotFnd		0.9396						1.14		4413	0.101
12368-PeCDD	NotFnd		0.9568						1.14		4413	0.101
12478-PeCDD	NotFnd		0.9626						1.14		4413	0.101
12379-PeCDD	NotFnd		0.9657						1.14		4413	0.101
12369/12467/12489-PeCDD	NotFnd		0.9738						1.14		4413	0.101
12346/12347-PeCDD	NotFnd		0.9853						1.14		4413	0.101
12378-PeCDD	NotFnd		**1.0006**						**1.14**		**4413**	**0.101**
12367-PeCDD	NotFnd		1.0034						1.14		4413	0.101
12389-PeCDD	NotFnd		1.0141						1.14		4413	0.101
124679/124689-HxCDD	NotFnd		0.9542						1.09		2751	0.0563
123468-HxCDD	NotFnd		0.9721						1.09		2751	0.0563
123679/123689-HxCDD	NotFnd		0.9799						1.09		2751	0.0563
123469-HxCDD	NotFnd		0.9835						1.09		2751	0.0563
123478-HxCDD	NotFnd		**1.0004**						1.09		**2751**	**0.0607**
123678-HxCDD	NotFnd		**1.0035**						1.13		**2751**	**0.0578**
123467-HxCDD	NotFnd		1.0088						1.09		2751	0.0563
123789-HxCDD	NotFnd		**1.0116**						1.05		**2751**	**0.0517**

Lab ID: MB1_17654_DF_SDS **Acq'd:** 07 Aug 2020 16:13 PSW **Wt/Vol:** 10.00 g **ICAL:** MM3_DF_10012020_12JUN2020

Client ID: Method Blank B4511_17654 **UTP:** 10-Aug-2020 09:02:18 PSW **J-level:** 0.5 pg/g **Split:** 1 **Checkcode:** 154-009-ZSS

Datafile: 200807R04 **Report:** 10 Aug 2020 09:06 pw **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1234679-HpCDD	NotFnd		0.9843						0.98		3022	0.0564
1234678-HpCDD	**NotFnd**		**1.0003**						**0.98**		**3022**	**0.0564**
OCDD	**NotFnd**		**1.0003**						**1.08**		**3285**	**0.0963**
OCDD-a	NotFnd		1.0002						0.07		6528	3.11
1368-TCDF	NotFnd		0.8044						0.98		3117	0.0583
1468-TCDF	NotFnd		0.8261						0.98		3117	0.0583
2468-TCDF	NotFnd		0.8511						0.98		3117	0.0583
1346/1246-TCDF	NotFnd		0.8665						0.98		3117	0.0583
1347/1378/1247-TCDF	NotFnd		0.8723						0.98		3117	0.0583
1348-TCDF	NotFnd		0.8835						0.98		3117	0.0583
1248/1367/1379-TCDF	NotFnd		0.8888						0.98		3117	0.0583
1268-TCDF	NotFnd		0.9044						0.98		3117	0.0583
1467-TCDF	NotFnd		0.9098						0.98		3117	0.0583
1478-TCDF	NotFnd		0.9167						0.98		3117	0.0583
1369/1237-TCDF	NotFnd		0.9316						0.98		3117	0.0583
2467-TCDF	NotFnd		0.9369						0.98		3117	0.0583
2368-TCDF	NotFnd		0.9430						0.98		3117	0.0583
1238/1234/1678/1469/1236-TCDF	NotFnd		0.9468						0.98		3117	0.0583
1278-TCDF	NotFnd		0.9651						0.98		3117	0.0583
1349-TCDF	NotFnd		0.9704						0.98		3117	0.0583
1267-TCDF	NotFnd		0.9761						0.98		3117	0.0583
2346/1249-TCDF	NotFnd		0.9834						0.98		3117	0.0583
2347/1279-TCDF	NotFnd		0.9921						0.98		3117	0.0583
2348-TCDF	NotFnd		0.9964						0.98		3117	0.0583
2378-TCDF	**NotFnd**		**1.0006**						**0.98**		**3117**	**0.0583**
2367/3467-TCDF	NotFnd		1.0156						0.98		3117	0.0583
1269-TCDF	NotFnd		1.0249						0.98		3117	0.0583
1239-TCDF	NotFnd		1.0357						0.98		3117	0.0583
1289-TCDF	NotFnd		1.0799						0.98		3117	0.0583
13468/12468-PeCDF	NotFnd		0.9084						0.95		4227	0.0732
13678/13467/12467-PeCDF	NotFnd		0.9591						0.95		3374	0.0585
12368/13478/12478-PeCDF	NotFnd		0.9642						0.95		3374	0.0585
14678-PeCDF	NotFnd		0.9675						0.95		3374	0.0585
13479-PeCDF	NotFnd		0.9706						0.95		3374	0.0585
13469/12479-PeCDF	NotFnd		0.9787						0.95		3374	0.0585
12346-PeCDF	NotFnd		0.9833						0.95		3374	0.0585

Lab ID: MB1_17654_DF_SDS | **Acq'd:** 07 Aug 2020 16:13 PSW | **Wt/Vol:** 10.00 g | **ICAL:** MM3_DF_10012020_12JUN2020

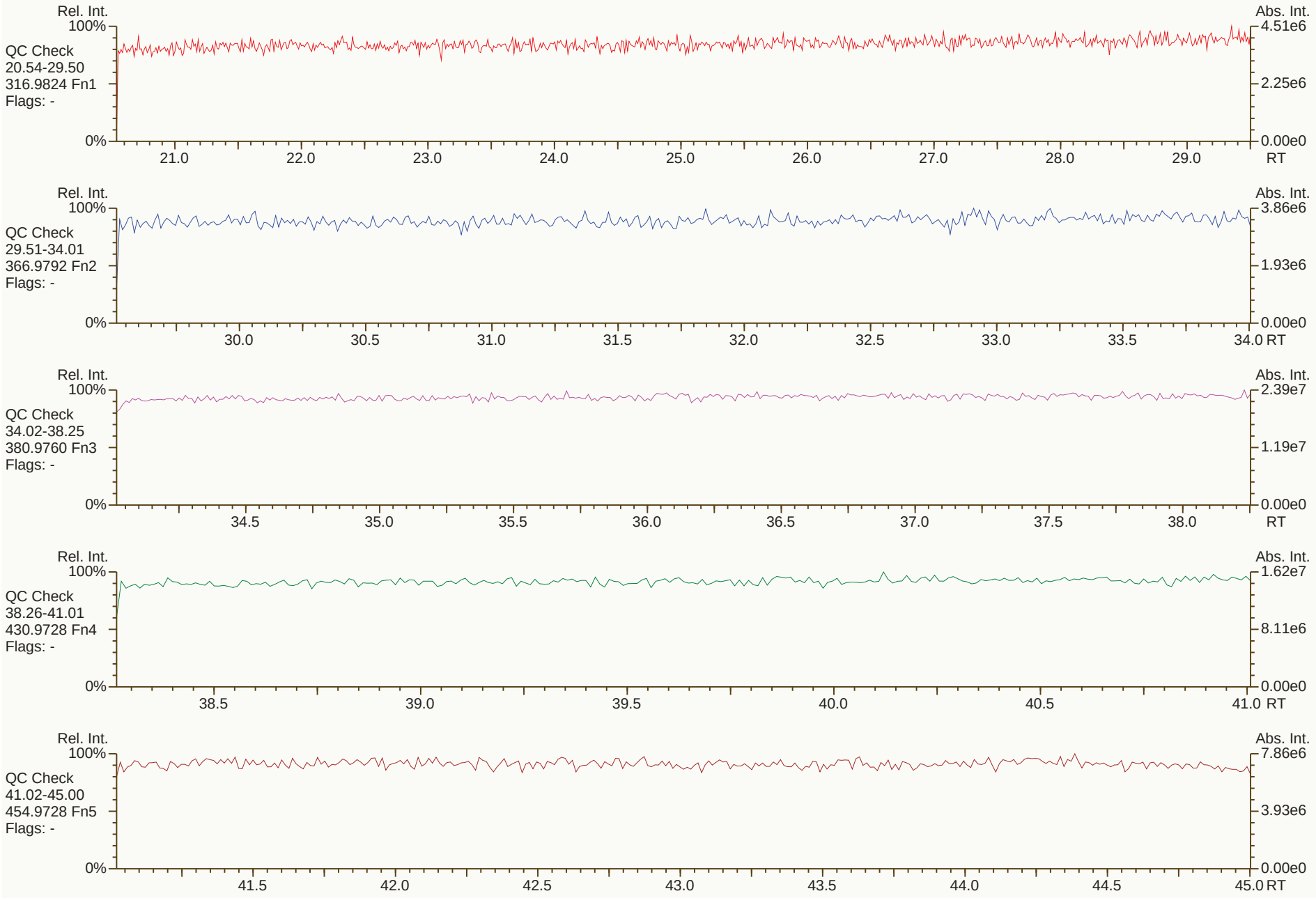
Client ID: Method Blank B4511_17654 | **UTP:** 10-Aug-2020 09:02:18 PSW | **J-level:** 0.5 pg/g | **Split:** 1 | **Checkcode:** 154-009-ZSS

Datafile: 200807R04 | **Report:** 10 Aug 2020 09:06 pw | **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
23468/12469-PeCDF	NotFnd		0.9861						0.95		3374	0.0585
12347-PeCDF	NotFnd		0.9887						0.95		3374	0.0585
12348-PeCDF	NotFnd		0.9938						0.95		3374	0.0585
12378-PeCDF	**NotFnd**		**1.0006**						**0.95**		**3374**	**0.059**
12678/12367-PeCDF	NotFnd		1.0095						0.95		3374	0.0585
12379-PeCDF	NotFnd		1.0150						0.95		3374	0.0585
12679-PeCDF	NotFnd		0.9926						0.95		3374	0.0585
23467/12369-PeCDF	NotFnd		0.9966						0.95		3374	0.0585
23478-PeCDF	**NotFnd**		**1.0005**						**0.95**		**3374**	**0.0578**
23478/12489-PeCDF	NotFnd		0.0000						0.95			
12489-PeCDF	NotFnd		1.0047						0.95		3374	0.0585
12349-PeCDF	NotFnd		1.0107						0.95		3374	0.0585
12389-PeCDF	NotFnd		1.0339						0.95		3374	0.0585
123468-HxCDF	NotFnd		0.9617						1.11		3073	0.0546
124678/134678-HxCDF	NotFnd		0.9673						1.11		3073	0.0546
134679-HxCDF	NotFnd		0.9737						1.11		3073	0.0546
124679-HxCDF	NotFnd		0.9792						1.11		3073	0.0546
124689-HxCDF	NotFnd		0.9854						1.11		3073	0.0546
123467-HxCDF	NotFnd		0.9972						1.11		3073	0.0546
123478-HxCDF	**NotFnd**		**1.0005**						**1.20**		**3073**	**0.0523**
123678-HxCDF	**NotFnd**		**1.0004**						**1.07**		**3073**	**0.049**
123479-HxCDF	NotFnd		1.0049						1.11		3073	0.0546
123469-HxCDF	NotFnd		1.0089						1.11		3073	0.0546
123679-HxCDF	NotFnd		0.9945						1.11		3073	0.0546
234678-HxCDF	**NotFnd**		**1.0005**						**1.10**		**3073**	**0.054**
234678/123689-HxCDF	NotFnd		0.0000						1.10			
123689-HxCDF	NotFnd		1.0054						1.11		3073	0.0546
123789-HxCDF	**NotFnd**		**1.0004**						**1.09**		**3073**	**0.0663**
123789/123489-HxCDF	NotFnd		0.0000						1.09			
123489-HxCDF	NotFnd		1.0008						1.11		3073	0.0546
1234678-HpCDF	**NotFnd**		**1.0003**						**1.28**		**2773**	**0.0344**
1234679-HpCDF	NotFnd		1.0072						1.27		2773	0.041
1234689-HpCDF	NotFnd		1.0107						1.27		2773	0.041
1234789-HpCDF	**NotFnd**		**1.0002**						**1.27**		**2773**	**0.0515**
OCDF	**NotFnd**		**1.0003**						**1.01**		**4292**	**0.134**
OCDF-a	NotFnd		1.0002						0.06		4445	2.22

SGS ID: MB1_17654_DF_SDS | **Sample ID: Method Blank** | **Acq: 07-Aug-2020 16:13:20**

Instr: [ILM] AutoSpec-Ultima MM3 | **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 5** | **User: PSW Datafile: 200807R04**



Results: P:\B4500_B4599\B4511\B4511_17654 DF\Resources\MB1_17654_DF_SDS.utp_res, saved 10-Aug-2020 09:02 (PSW)

Peak annotation: Areas, Centroids

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 scc: 154-009

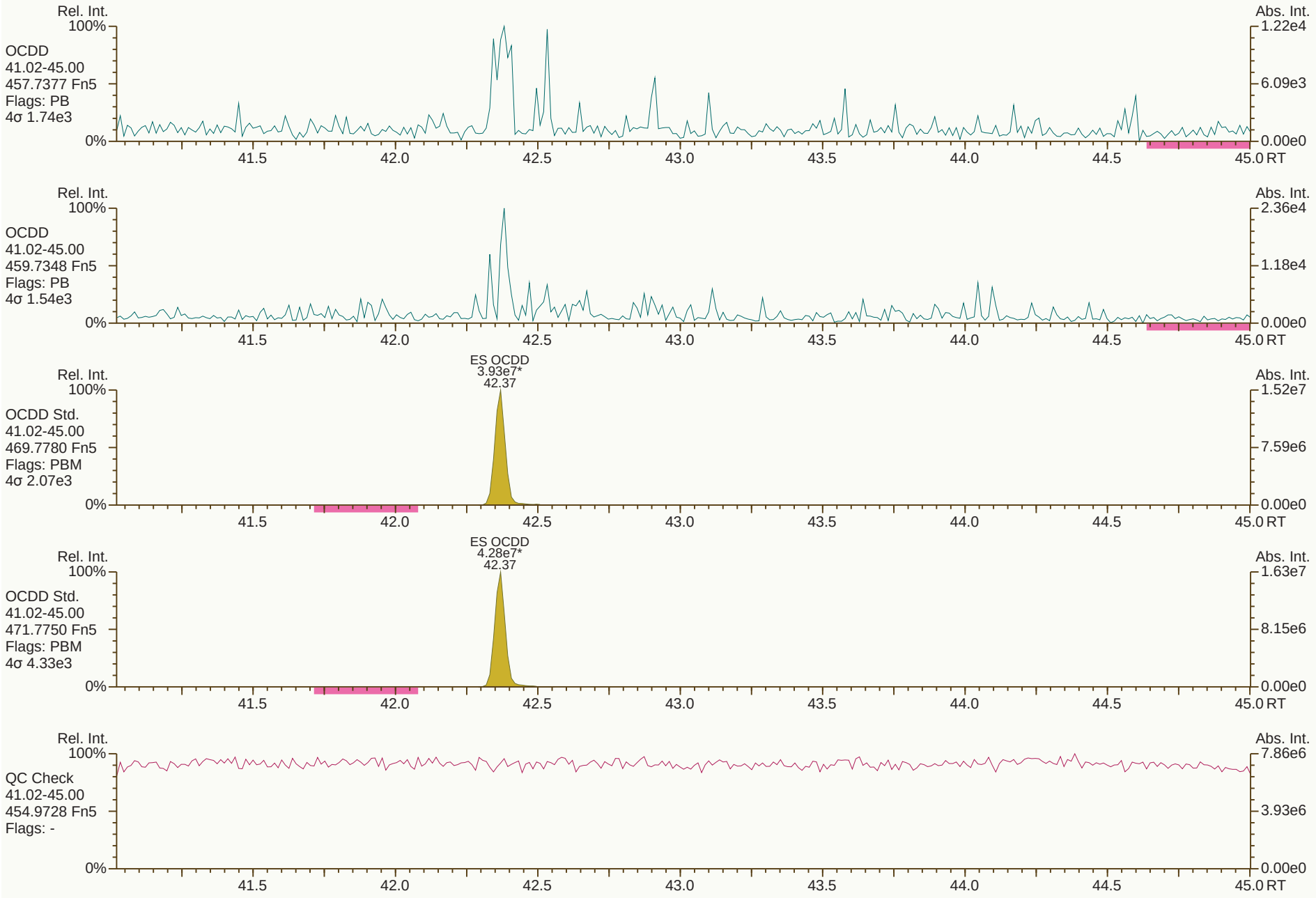
PKD: n/a Printed: 10-Aug-2020 09:16 Page 1 of 12

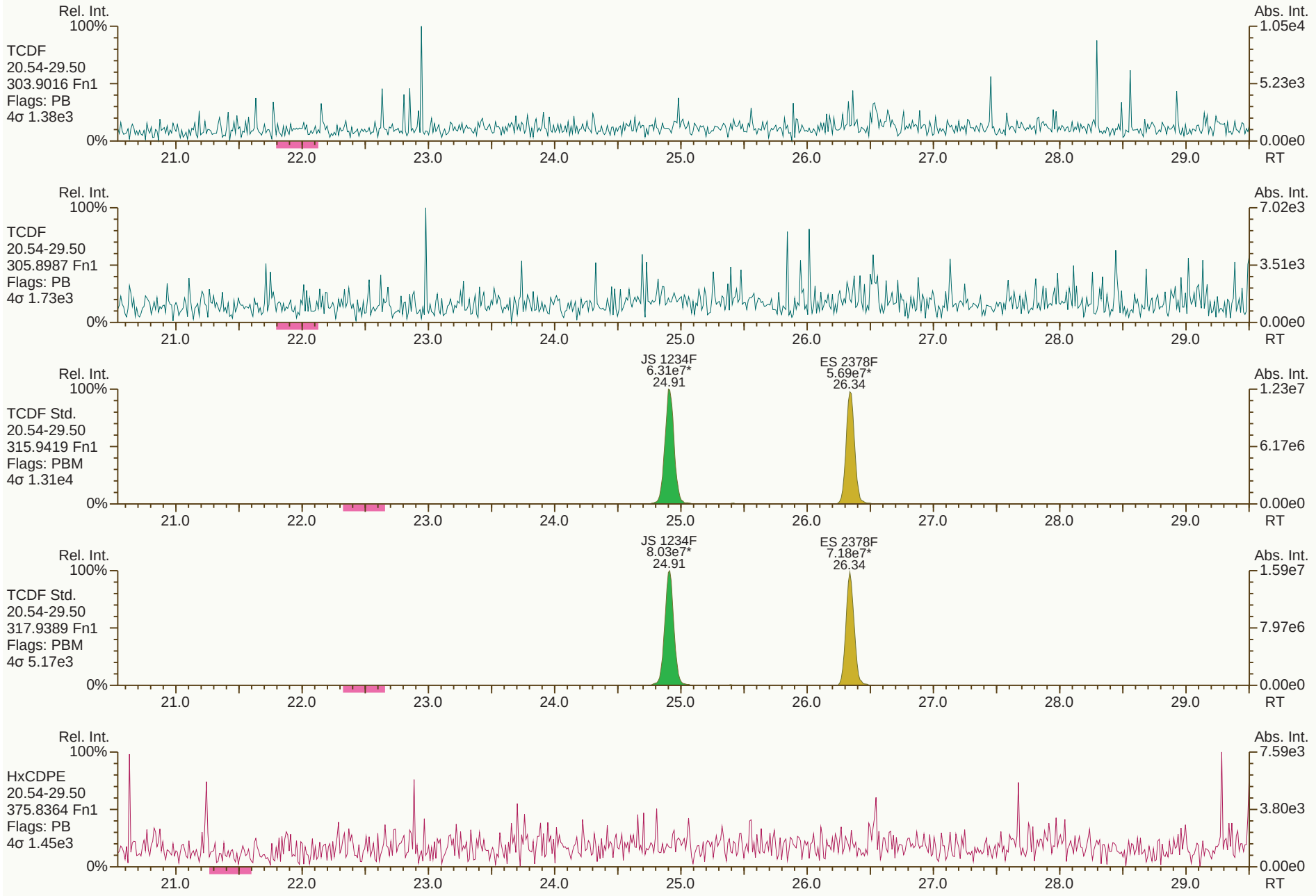

Rel. Int.
100%
TCDD
20.54-29.50
319.8965 Fn1
Flags: PB
4σ 2.16e3
0%
Abs. Int.
1.46e4
7.29e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD
20.54-29.50
321.8936 Fn1
Flags: PB
4σ 1.37e3
0%
Abs. Int.
7.93e3
3.97e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
37Cl-TCDD
20.54-29.50
327.8850 Fn1
Flags: PBM
4σ 1.96e3
0%
CS 37Cl-2378D
3.94e7*
27.29
Abs. Int.
9.06e6
4.53e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
331.9368 Fn1
Flags: PBM
4σ 8.35e3
0%
JS 1234D
3.76e7*
26.58
ES 2378D
3.55e7*
27.26
Abs. Int.
8.52e6
4.26e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
333.9339 Fn1
Flags: PBM
4σ 2.79e3
0%
JS 1234D
4.89e7*
26.58
ES 2378D
4.60e7*
27.26
Abs. Int.
1.08e7
5.41e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
PeCDD
29.51-34.01
355.8546 Fn2
Flags: PB
4σ 2.56e3
0%
Abs. Int.
1.33e4
6.67e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD
29.51-34.01
357.8517 Fn2
Flags: PB
4σ 1.85e3
0%
Abs. Int.
6.33e3
3.16e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
CS 12347D
4.59e7*
32.30
ES 12378D
4.42e7*
32.80
Rel. Int.
100%
PeCDD Std.
29.51-34.01
367.8949 Fn2
Flags: PBM
4σ 1.33e3
0%
Abs. Int.
1.28e7
6.38e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
CS 12347D
2.75e7*
32.30
ES 12378D
2.66e7*
32.80
Rel. Int.
100%
PeCDD Std.
29.51-34.01
369.8919 Fn2
Flags: PBM
4σ 2.94e3
0%
Abs. Int.
7.51e6
3.76e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
QC Check
29.51-34.01
366.9792 Fn2
Flags: -
0%
Abs. Int.
3.86e6
1.93e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT

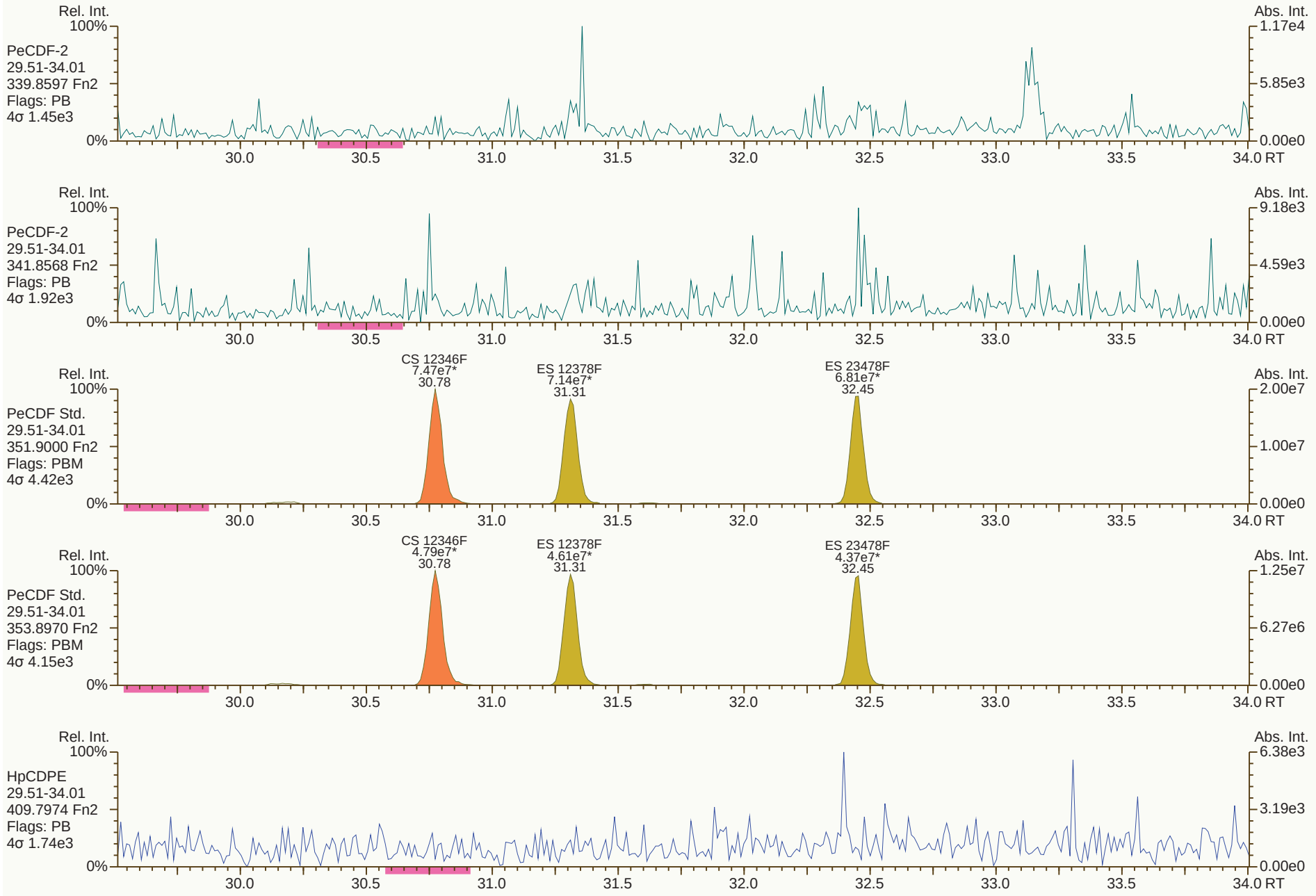

Rel. Int.
100%
HxCDD
34.02-38.25
389.8156 Fn3
Flags: PB
4σ 1.41e3
0%
Abs. Int.
9.24e3
4.62e3
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD
34.02-38.25
391.8127 Fn3
Flags: PB
4σ 1.34e3
0%
Abs. Int.
8.99e3
4.50e3
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
401.8559 Fn3
Flags: PBM
4σ 4.25e3
0%
ES 123678D
3.64e7*
36.83
ES 123478D
3.78e7*
36.72
ES 123789D
4.51e7*
37.13
JS 123467D
2.14e7*
37.03
Abs. Int.
1.41e7
7.05e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
403.8530 Fn3
Flags: PBM
4σ 1.92e3
0%
ES 123678D
3.81e7*
36.83
ES 123478D
2.87e7*
36.72
ES 123789D
3.61e7*
37.13
JS 123467D
1.67e7*
37.03
Abs. Int.
1.06e7
5.32e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
0%
Abs. Int.
2.39e7
1.19e7
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT

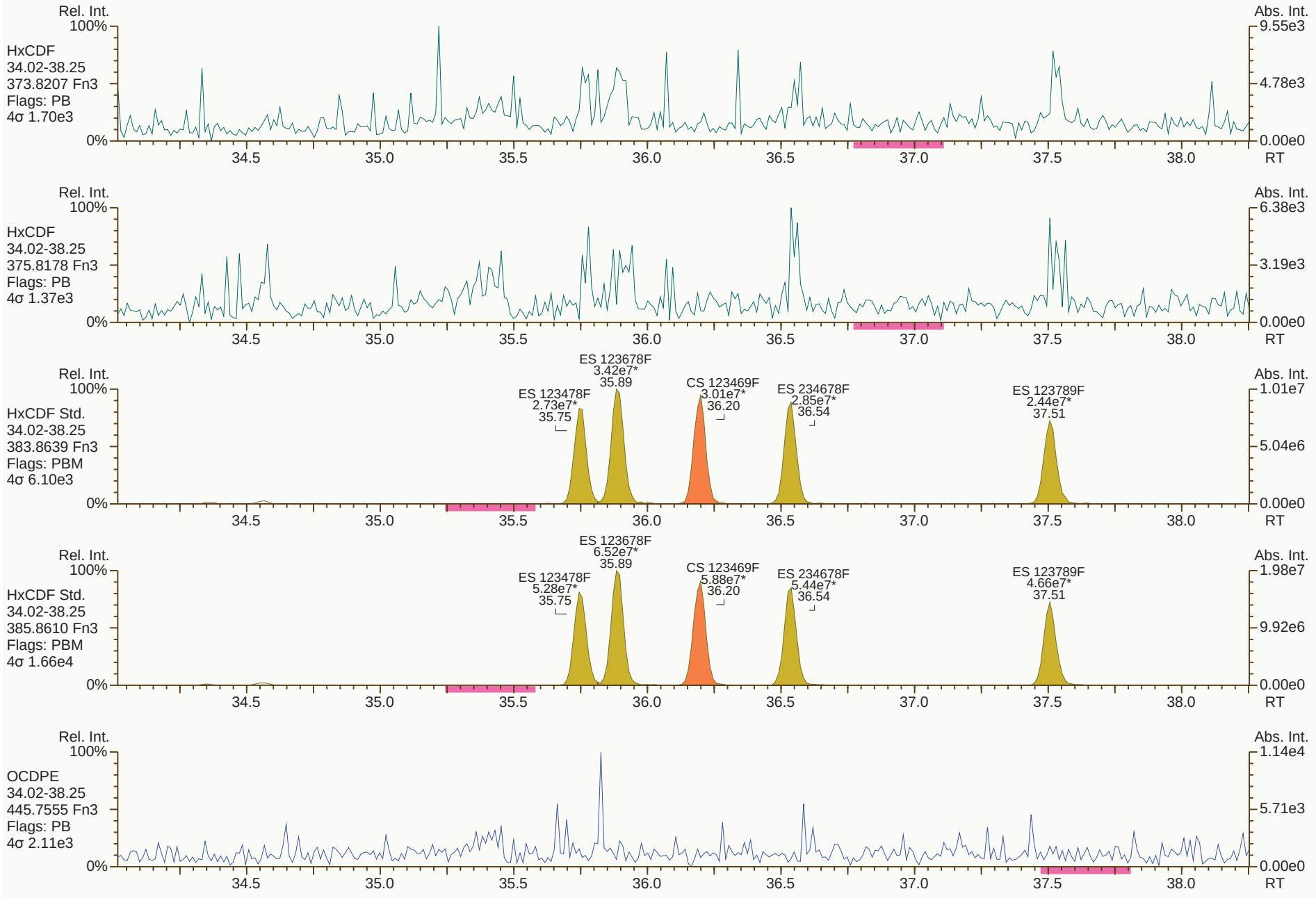

Rel. Int.
100%
HpCDD
38.26-41.01
423.7767 Fn4
Flags: PB
4σ 1.70e3
0%
Abs. Int.
1.40e4
7.01e3
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.26-41.01
425.7737 Fn4
Flags: PB
4σ 1.32e3
0%
Abs. Int.
1.52e4
7.59e3
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
ES 1234678D
3.21e7*
39.95
Rel. Int.
100%
HpCDD Std.
38.26-41.01
435.8169 Fn4
Flags: PBM
4σ 2.54e3
0%
Abs. Int.
1.41e7
7.07e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
ES 1234678D
2.97e7*
39.95
Rel. Int.
100%
HpCDD Std.
38.26-41.01
437.8140 Fn4
Flags: PBM
4σ 2.51e3
0%
Abs. Int.
1.31e7
6.56e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.26-41.01
430.9728 Fn4
Flags: -
0%
Abs. Int.
1.62e7
8.11e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT

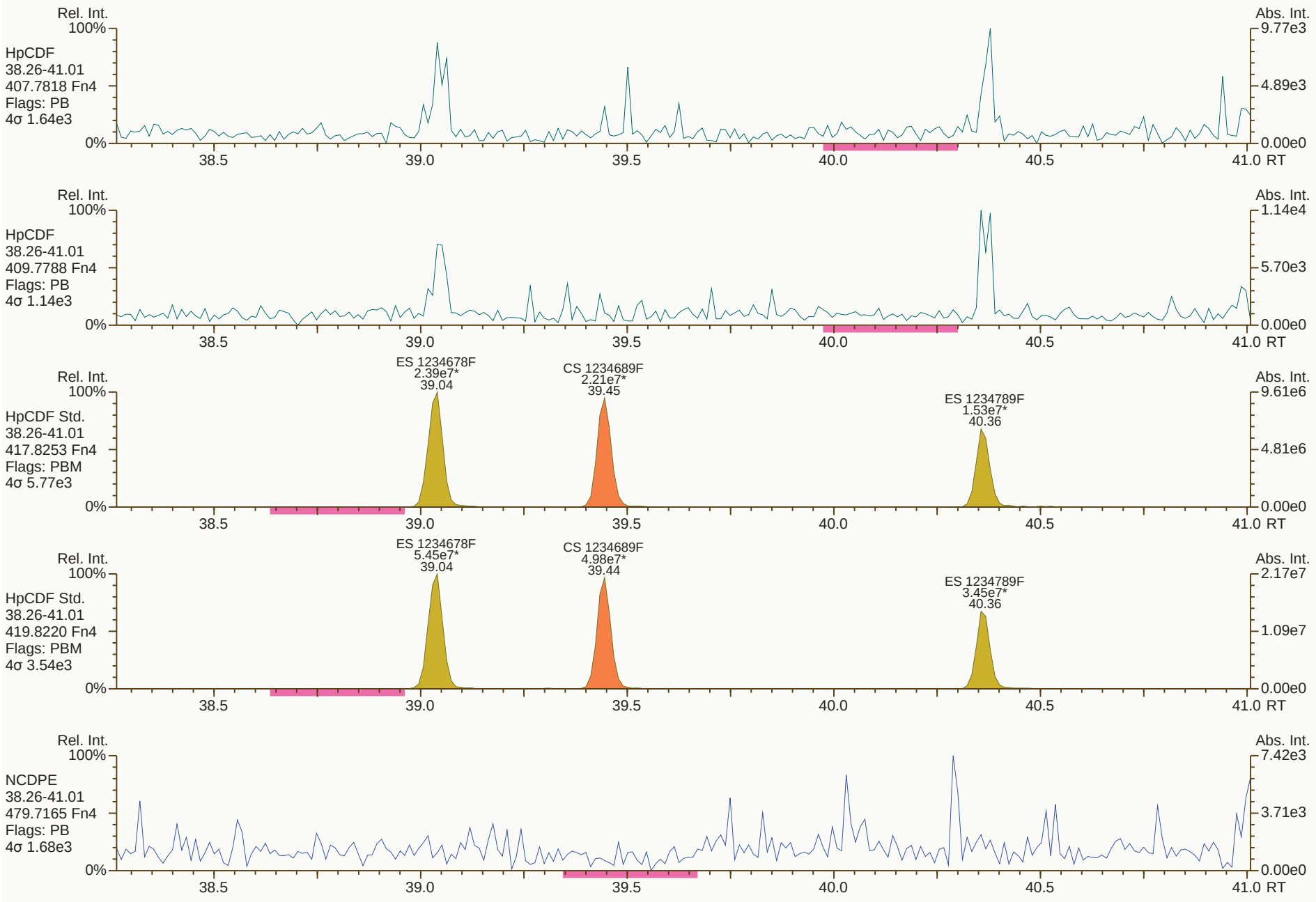

Rel. Int.
100%
OCDD
41.02-45.00
457.7377 Fn5
Flags: PB
4σ 1.74e3
0%
Abs. Int.
1.22e4
6.09e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDD
41.02-45.00
459.7348 Fn5
Flags: PB
4σ 1.54e3
0%
Abs. Int.
2.36e4
1.18e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
3.93e7*
42.37
Rel. Int.
100%
OCDD Std.
41.02-45.00
469.7780 Fn5
Flags: PBM
4σ 2.07e3
0%
Abs. Int.
1.52e7
7.59e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
4.28e7*
42.37
Rel. Int.
100%
OCDD Std.
41.02-45.00
471.7750 Fn5
Flags: PBM
4σ 4.33e3
0%
Abs. Int.
1.63e7
8.15e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
7.86e6
3.93e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT


Rel. Int.
100%
TCDF
20.54-29.50
303.9016 Fn1
Flags: PB
4σ 1.38e3
0%
Abs. Int.
1.05e4
5.23e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF
20.54-29.50
305.8987 Fn1
Flags: PB
4σ 1.73e3
0%
Abs. Int.
7.02e3
3.51e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
315.9419 Fn1
Flags: PBM
4σ 1.31e4
JS 1234F
6.31e7*
24.91
ES 2378F
5.69e7*
26.34
0%
Abs. Int.
1.23e7
6.17e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
317.9389 Fn1
Flags: PBM
4σ 5.17e3
JS 1234F
8.03e7*
24.91
ES 2378F
7.18e7*
26.34
0%
Abs. Int.
1.59e7
7.97e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
HxCDPE
20.54-29.50
375.8364 Fn1
Flags: PB
4σ 1.45e3
0%
Abs. Int.
7.59e3
3.80e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
0%
Abs. Int.
1.04e4
5.20e3
0.00e0
RT
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
PeCDF-1
20.54-29.50
339.8597 Fn1
Flags: PB
4σ 1.84e3
PeCDF-1
20.54-29.50
341.8568 Fn1
Flags: PB
4σ 2.39e3
7.76e3
3.88e3
QC Check
20.54-29.50
316.9824 Fn1
Flags: -
4.51e6
2.25e6


Rel. Int.
100%
PeCDF-2
29.51-34.01
339.8597 Fn2
Flags: PB
4σ 1.45e3
0%
Abs. Int.
1.17e4
5.85e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF-2
29.51-34.01
341.8568 Fn2
Flags: PB
4σ 1.92e3
0%
Abs. Int.
9.18e3
4.59e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
351.9000 Fn2
Flags: PBM
4σ 4.42e3
0%
CS 12346F
7.47e7*
30.78
ES 12378F
7.14e7*
31.31
ES 23478F
6.81e7*
32.45
Abs. Int.
2.00e7
1.00e7
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
353.8970 Fn2
Flags: PBM
4σ 4.15e3
0%
CS 12346F
4.79e7*
30.78
ES 12378F
4.61e7*
31.31
ES 23478F
4.37e7*
32.45
Abs. Int.
1.25e7
6.27e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
HpCDPE
29.51-34.01
409.7974 Fn2
Flags: PB
4σ 1.74e3
0%
Abs. Int.
6.38e3
3.19e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT


Rel. Int.
100%
HxCDF
34.02-38.25
373.8207 Fn3
Flags: PB
4σ 1.70e3
0%
Abs. Int.
9.55e3
4.78e3
0.00e0
RT
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
Rel. Int.
100%
HxCDF
34.02-38.25
375.8178 Fn3
Flags: PB
4σ 1.37e3
0%
Abs. Int.
6.38e3
3.19e3
0.00e0
RT
Rel. Int.
100%
HxCDF Std.
34.02-38.25
383.8639 Fn3
Flags: PBM
4σ 6.10e3
0%
ES 123678F
3.42e7*
35.89
ES 123478F
2.73e7*
35.75
CS 123469F
3.01e7*
36.20
ES 234678F
2.85e7*
36.54
ES 123789F
2.44e7*
37.51
Abs. Int.
1.01e7
5.04e6
0.00e0
RT
Rel. Int.
100%
HxCDF Std.
34.02-38.25
385.8610 Fn3
Flags: PBM
4σ 1.66e4
0%
ES 123678F
6.52e7*
35.89
ES 123478F
5.28e7*
35.75
CS 123469F
5.88e7*
36.20
ES 234678F
5.44e7*
36.54
ES 123789F
4.66e7*
37.51
Abs. Int.
1.98e7
9.92e6
0.00e0
RT
Rel. Int.
100%
OCDPE
34.02-38.25
445.7555 Fn3
Flags: PB
4σ 2.11e3
0%
Abs. Int.
1.14e4
5.71e3
0.00e0
RT



Results: P:\B4500_B4599\B4511\B4511_17654 DF\Resources\MB1_17654_DF_SDS.utp_res, saved 10-Aug-2020 09:02 (PSW) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 0695, 6159, 0443 scc: 154-009 *PKD: 10-Aug-2020 08:01 Printed: 10-Aug-2020 09:16 Page 11 of 12*


Rel. Int.
100%
OCDF
41.02-45.00
441.7428 Fn5
Flags: PB
4σ 1.63e3
0%
Abs. Int.
5.01e3
2.50e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF
41.02-45.00
443.7398 Fn5
Flags: PB
4σ 2.66e3
0%
Abs. Int.
1.57e4
7.86e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDF
3.86e7*
42.53
Rel. Int.
100%
OCDF Std.
41.02-45.00
453.7830 Fn5
Flags: PBM
4σ 2.12e3
0%
Abs. Int.
1.49e7
7.47e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDF
4.33e7*
42.53
Rel. Int.
100%
OCDF Std.
41.02-45.00
455.7801 Fn5
Flags: PBM
4σ 2.04e3
0%
Abs. Int.
1.59e7
7.93e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
DCDPE
41.02-45.00
513.6775 Fn5
Flags: PB
4σ 1.71e3
0%
Abs. Int.
7.71e3
3.86e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

Lab ID: B4511_17654_DF_001 **Acq'd:** 07 Aug 2020 17:00 PSW **Wt/Vol:** 9.19 g **ICAL:** MM3_DF_10012020_12JUN2020

Client ID: CS-SS-101 **UTP:** 10-Aug-2020 09:02:19 PSW **J-level:** 0.544 pg/g **Split:** 1 **Checkcode:** 458-533-TQV

Datafile: 200807R05 **Report:** 10 Aug 2020 09:06 pw **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	NotFnd		1.0009	-		-	-	-	1.18	-	4853	0.165
12378-PeCDD	32.84	J	1.0006	1.0008	+0.4	1.11E+05	1.35	Y	1.14	0.379	5520	0.169
123478-HxCDD	36.74	J	1.0004	1.0003	-0.2	4.05E+05	1.36	Y	1.09	1.61	4369	0.134
123678-HxCDD	36.86		1.0035	1.0036	+0.2	9.58E+05	1.22	Y	1.13	3.95	4369	0.147
123789-HxCDD	37.15	J	1.0116	1.0116	0	6.50E+05	1.41	Y	1.05	2.33	4369	0.126
1234678-HpCDD	39.96		1.0003	1.0003	0	3.06E+07	1.06	Y	0.98	161	3798	0.112
OCDD	42.39		1.0003	1.0002	-0.3	1.82E+08	0.90	Y	1.08	1,610	5952	0.365
2378-TCDF	26.36	J	1.0006	1.0007	+0.2	1.43E+05	0.66	Y	0.98	0.313	3535	0.0897
12378-PeCDF	31.34	J EMPC	1.0006	1.0006	0	1.31E+05	2.13	N	0.95	0.32	7033	0.165
23478-PeCDF	32.49	J EMPC	1.0005	1.0011	+1.2	2.71E+05	1.83	N	0.95	0.686	7033	0.155
123478-HxCDF	35.77		1.0005	1.0005	0	9.61E+05	1.14	Y	1.20	2.77	7245	0.171
123678-HxCDF	35.91	J	1.0004	1.0004	0	4.25E+05	1.21	Y	1.07	1.17	7245	0.164
234678-HxCDF	36.56	J EMPC	1.0005	1.0004	-0.2	4.93E+05	1.46	N	1.10	1.56	7245	0.182
123789-HxCDF	NotFnd		1.0004	-		-	-	-	1.09	-	7245	0.219
1234678-HpCDF	39.05		1.0003	1.0003	0	8.85E+06	0.98	Y	1.28	30.8	3297	0.0741
1234789-HpCDF	40.37		1.0002	1.0001	-0.2	7.98E+05	0.96	Y	1.27	3.64	3297	0.0865
OCDF	42.55		1.0003	1.0002	-0.3	1.26E+07	0.87	Y	1.01	100	4400	0.236

Name	Act RT		Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	27.27		1.0255	1.0257	+0.3	6.10E+07	0.76	Y	1.01	71.7
ES 12378-PeCDD	32.81		1.2330	1.2342	+2.4	5.61E+07	1.66	Y	0.87	76.3
ES 123478-HxCDD	36.73		0.9917	0.9916	-0.2	5.01E+07	1.29	Y	1.10	63.2
ES 123678-HxCDD	36.84		0.9947	0.9947	0	4.69E+07	1.29	Y	1.06	61
ES 123789-HxCDD	37.14		1.0028	1.0027	-0.2	5.78E+07	1.27	Y	1.22	65.6
ES 1234678-HpCDD	39.95		1.0785	1.0787	+0.5	4.20E+07	1.09	Y	0.99	58.5
ES OCDD	42.38		1.1439	1.1441	+0.5	4.56E+07	0.93	Y	0.67	47.1
ES 2378-TCDF	26.34		1.0572	1.0577	+0.8	1.02E+08	0.79	Y	1.01	72.9
ES 12378-PeCDF	31.32		1.2558	1.2575	+3.2	9.38E+07	1.54	Y	0.90	75.9
ES 23478-PeCDF	32.46		1.3012	1.3031	+3.7	9.09E+07	1.54	Y	0.89	74.4
ES 123478-HxCDF	35.76		0.9655	0.9654	-0.2	6.33E+07	0.51	Y	1.43	61.1
ES 123678-HxCDF	35.90		0.9693	0.9692	-0.2	7.38E+07	0.54	Y	1.63	62.4
ES 234678-HxCDF	36.54		0.9867	0.9866	-0.2	6.27E+07	0.51	Y	1.48	58.6
ES 123789-HxCDF	37.52		1.0130	1.0129	-0.2	5.66E+07	0.53	Y	1.29	60.6
ES 1234678-HpCDF	39.04		1.0540	1.0541	+0.2	4.89E+07	0.44	Y	1.15	58.9
ES 1234789-HpCDF	40.37		1.0898	1.0899	+0.2	3.76E+07	0.45	Y	0.91	57.3
ES OCDF	42.54		1.1484	1.1486	+0.5	5.43E+07	0.91	Y	0.83	45.3

Lab ID: B4511_17654_DF_001 | Acq'd: 07 Aug 2020 17:00 PSW | Wt/Vol: 9.19 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-SS-101 | UTP: 10-Aug-2020 09:02:19 PSW | J-level: 0.544 pg/g | Split: 1 | Checkcode: 458-533-TQV

Datafile: 200807R05 | Report: 10 Aug 2020 09:06 pw | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %	
JS 1234-TCDD	26.59		-	-	-	8.45E+07	0.76	Y	-	-	
JS 1234-TCDF	24.91		-	-	-	1.37E+08	0.79	Y	-	-	
JS 123467-HxCDD	37.04		-	-	-	3.62E+07	1.26	Y	-	-	
CS 37Cl-2378-TCDD	27.29		1.0265	1.0265	0	3.13E+07	n/a	-	1.04	89.2	
CS 12347-PeCDD	32.30		1.2141	1.2151	+1.9	6.23E+07	1.63	Y	0.74	99.8	
CS 12346-PeCDF	30.79		1.2343	1.2360	+3.1	1.01E+08	1.57	Y	0.86	85.8	
CS 123469-HxCDF	36.20		0.9776	0.9775	-0.2	6.85E+07	0.53	Y	1.36	69.7	
CS 1234689-HpCDF	39.45		1.0650	1.0652	+0.5	5.16E+07	0.47	Y	1.05	67.6	
~~SS 37Cl-2378-TCDD~~	~~27.29~~		~~1.0265~~	~~1.0265~~	~~0~~	~~3.13E+07~~	~~n/a~~		~~1.04~~	~~124~~	Not used in this project.
~~SS 12347-PeCDD~~	~~32.30~~		~~1.2141~~	~~1.2151~~	~~+1.9~~	~~6.23E+07~~	~~1.63~~	~~Y~~	~~0.86~~	~~130~~	CL 10Aug20
~~SS 12346-PeCDF~~	~~30.79~~		~~1.2343~~	~~1.2360~~	~~+3.1~~	~~1.01E+08~~	~~1.57~~	~~Y~~	~~0.96~~	~~113~~	
~~SS 123469-HxCDF~~	~~36.20~~		~~0.9776~~	~~0.9775~~	~~-0.2~~	~~6.85E+07~~	~~0.53~~	~~Y~~	~~0.83~~	~~111~~	
~~SS 1234689-HpCDF~~	~~39.45~~		~~1.0650~~	~~1.0652~~	~~+0.5~~	~~5.16E+07~~	~~0.47~~	~~Y~~	~~0.92~~	~~114~~	

Totals	Conc	EMPC
Total TCDD	0.965	1.62
Total PeCDD	3.1	5.06
Total HxCDD	43	43
Total HpCDD	468	468
Total Tetra-Octa Dioxins	2130	2130
Total TCDF	3.04	6.36
Total PeCDF	7.74	8.99
Total HxCDF	37.9	40.1
Total HpCDF	115	115
Total Tetra-Octa Furans	264	271
Total Tetra-Octa Dioxins & Furans	2390	2400

Lab ID: B4511_17654_DF_001 **Acq'd:** 07 Aug 2020 17:00 PSW **Wt/Vol:** 9.19 g **ICAL:** MM3_DF_10012020_12JUN2020

Client ID: CS-SS-101 **UTP:** 10-Aug-2020 09:02:19 PSW **J-level:** 0.544 pg/g **Split:** 1 **Checkcode:** 458-533-TQV

Datafile: 200807R05 **Report:** 10 Aug 2020 09:06 pw **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1368-TCDD	23.40		0.8591	0.8580	-1.5	2.21E+05	0.84	Y	1.18	0.669	4853	0.165
1379-TCDD	23.79	J EMPC	0.8732	0.8725	-1.0	1.32E+05	1.06	N	1.18	0.4	4853	0.165
1369-TCDD	NotFnd		0.8901						1.18		4853	0.165
1469-TCDD	NotFnd		0.9205						1.18		4853	0.165
1247/1246/1248/1249-TCDD	25.34	J	0.9301	0.9293	-1.2	9.76E+04	0.86	Y	1.18	0.296	4853	0.165
1378-TCDD	NotFnd		0.9374						1.18		4853	0.165
1268-TCDD	NotFnd		0.9449						1.18		4853	0.165
1478-TCDD	NotFnd		0.9544						1.18		4853	0.165
1279-TCDD	NotFnd		0.9610						1.18		4853	0.165
1234/1269-TCDD	26.60	J EMPC	0.9746	0.9756	+1.6	8.52E+04	0.92	N	1.18	0.258	4853	0.165
1236-TCDD	NotFnd		0.9802						1.18		4853	0.165
1237/1238-TCDD	NotFnd		0.9898						1.18		4853	0.165
1239-TCDD	NotFnd		0.9950						1.18		4853	0.165
2378-TCDD	**NotFnd**		**1.0009**						**1.18**		**4853**	**0.165**
1278-TCDD	NotFnd		1.0133						1.18		4853	0.165
1267-TCDD	NotFnd		1.0185						1.18		4853	0.165
1289-TCDD	NotFnd		1.0379						1.18		4853	0.165
12479/12468-PeCDD	30.27	J	0.9229	0.9226	-0.5	4.47E+05	1.44	Y	1.14	1.53	5520	0.169
12469-PeCDD	30.82	J EMPC	0.9396	0.9392	-0.7	1.43E+05	1.82	N	1.14	0.487	5520	0.169
12368-PeCDD	31.39	J	0.9568	0.9568	0	1.74E+05	1.36	Y	1.14	0.593	5520	0.169
12478-PeCDD	31.58	J EMPC	0.9626	0.9625	-0.2	1.06E+05	1.22	N	1.14	0.361	5520	0.169
12379-PeCDD	31.68	J EMPC	0.9657	0.9657	0	1.24E+05	2.15	N	1.14	0.423	5520	0.169
12369/12467/12489-PeCDD	31.95	J EMPC	0.9738	0.9738	0	1.58E+05	1.25	N	1.14	0.541	5520	0.169
12346/12347-PeCDD	32.33	J	0.9853	0.9852	-0.2	1.77E+05	1.70	Y	1.14	0.604	5520	0.169
12378-PeCDD	32.84	J	**1.0006**	**1.0008**	**+0.4**	**1.11E+05**	**1.35**	**Y**	**1.14**	**0.379**	**5520**	**0.169**
12367-PeCDD	32.92	J EMPC	1.0034	1.0033	-0.2	4.15E+04	1.87	N	1.14	0.142	5520	0.169
12389-PeCDD	NotFnd		1.0141						1.14		5520	0.169
124679/124689-HxCDD	35.05		0.9542	0.9543	+0.2	3.41E+06	1.19	Y	1.09	13.2	4369	0.135
123468-HxCDD	35.70		0.9721	0.9721	0	1.16E+06	1.21	Y	1.09	4.51	4369	0.135
123679/123689-HxCDD	35.99		0.9799	0.9799	0	3.16E+06	1.40	Y	1.09	12.2	4369	0.135
123469-HxCDD	36.12		0.9835	0.9835	0	9.60E+05	1.18	Y	1.09	3.72	4369	0.135
123478-HxCDD	36.74	J	**1.0004**	**1.0003**	**-0.2**	**4.05E+05**	**1.36**	**Y**	1.09	**1.61**	**4369**	**0.134**
123678-HxCDD	36.86		**1.0035**	**1.0036**	**+0.2**	**9.58E+05**	**1.22**	**Y**	1.13	**3.95**	**4369**	**0.147**
123467-HxCDD	37.06	J	1.0088	1.0090	+0.4	3.82E+05	1.06	Y	1.09	1.48	4369	0.135
123789-HxCDD	37.15	J	**1.0116**	**1.0116**	**0**	**6.50E+05**	**1.41**	**Y**	1.05	**2.33**	**4369**	**0.126**

Lab ID: B4511_17654_DF_001 | Acq'd: 07 Aug 2020 17:00 PSW | Wt/Vol: 9.19 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-SS-101 | UTP: 10-Aug-2020 09:02:19 PSW | J-level: 0.544 pg/g | Split: 1 | Checkcode: 458-533-TQV

Datafile: 200807R05 | Report: 10 Aug 2020 09:06 pw | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1234679-HpCDD	39.32		0.9843	0.9842	-0.2	5.82E+07	1.04	Y	0.98	307	3798	0.112
1234678-HpCDD	**39.96**		**1.0003**	**1.0003**	**0**	**3.06E+07**	**1.06**	**Y**	**0.98**	**161**	**3798**	**0.112**
OCDD	**42.39**		**1.0003**	**1.0002**	**-0.3**	**1.82E+08**	**0.90**	**Y**	**1.08**	**1,610**	**5952**	**0.365**
OCDD-a	42.38		1.0002	1.0002	0	1.12E+07	2.55	Y	0.07	1,610	7809	7.78
1368-TCDF	21.16	J	0.8044	0.8031	-1.7	2.22E+05	0.87	Y	0.98	0.486	3535	0.0897
1468-TCDF	NotFnd		0.8261						0.98		3535	0.0897
2468-TCDF	22.38	EMPC	0.8511	0.8496	-2.0	5.90E+05	0.61	N	0.98	1.29	3535	0.0897
1346/1246-TCDF	NotFnd		0.8665						0.98		3535	0.0897
1347/1378/1247-TCDF	22.94		0.8723	0.8709	-1.9	2.69E+05	0.82	Y	0.98	0.588	3535	0.0897
1348-TCDF	NotFnd		0.8835						0.98		3535	0.0897
1248/1367/1379-TCDF	23.37	J EMPC	0.8888	0.8871	-2.4	1.91E+05	0.62	N	0.98	0.417	3535	0.0897
1268-TCDF	23.81	J EMPC	0.9044	0.9037	-1.0	1.36E+05	0.50	N	0.98	0.298	3535	0.0897
1467-TCDF	23.94	J	0.9098	0.9088	-1.4	6.21E+04	0.75	Y	0.98	0.136	3535	0.0897
1478-TCDF	24.13	J	0.9167	0.9158	-1.3	8.88E+04	0.69	Y	0.98	0.194	3535	0.0897
1369/1237-TCDF	24.55	J	0.9316	0.9319	+0.4	7.31E+04	0.67	Y	0.98	0.16	3535	0.0897
2467-TCDF	24.67	J	0.9369	0.9364	-0.7	8.31E+04	0.78	Y	0.98	0.182	3535	0.0897
2368-TCDF	24.86		0.9430	0.9436	+0.9	2.85E+05	0.78	Y	0.98	0.623	3535	0.0897
1238/1234/1678/1469/1236-TCDF	24.97	J	0.9468	0.9478	+1.5	1.20E+05	0.79	Y	0.98	0.261	3535	0.0897
1278-TCDF	25.41	J EMPC	0.9651	0.9644	-1.1	9.19E+04	0.64	N	0.98	0.201	3535	0.0897
1349-TCDF	NotFnd		0.9704						0.98		3535	0.0897
1267-TCDF	25.71	J EMPC	0.9761	0.9759	-0.3	5.20E+04	0.90	N	0.98	0.114	3535	0.0897
2346/1249-TCDF	25.92	J	0.9834	0.9840	+0.9	4.62E+04	0.79	Y	0.98	0.101	3535	0.0897
2347/1279-TCDF	26.13	J EMPC	0.9921	0.9918	-0.5	6.46E+04	1.50	N	0.98	0.141	3535	0.0897
2348-TCDF	26.23	J EMPC	0.9964	0.9957	-1.1	4.28E+04	0.49	N	0.98	0.0935	3535	0.0897
2378-TCDF	**26.36**	J	**1.0006**	**1.0007**	**+0.2**	**1.43E+05**	**0.66**	**Y**	**0.98**	**0.313**	**3535**	**0.0897**
2367/3467-TCDF	26.75	J EMPC	1.0156	1.0156	0	1.40E+05	1.09	N	0.98	0.306	3535	0.0897
1269-TCDF	NotFnd		1.0249						0.98		3535	0.0897
1239-TCDF	NotFnd		1.0357						0.98		3535	0.0897
1289-TCDF	28.46	J EMPC	1.0799	1.0803	+0.7	2.09E+05	1.87	N	0.98	0.457	3535	0.0897
13468/12468-PeCDF	28.46		0.9084	0.9085	+0.2	1.57E+06	1.57	Y	0.95	3.91	3721	0.0846
13678/13467/12467-PeCDF	30.05	J	0.9591	0.9595	+0.7	2.58E+05	1.57	Y	0.95	0.641	7033	0.16
12368/13478/12478-PeCDF	30.21	J	0.9642	0.9644	+0.4	8.37E+05	1.77	Y	0.95	2.08	7033	0.16
14678-PeCDF	30.30	J EMPC	0.9675	0.9673	-0.4	9.77E+04	1.19	N	0.95	0.243	7033	0.16
13479-PeCDF	NotFnd		0.9706						0.95		7033	0.16
13469/12479-PeCDF	NotFnd		0.9787						0.95		7033	0.16
12346-PeCDF	NotFnd		0.9833						0.95		7033	0.16

Lab ID: B4511_17654_DF_001 **Acq'd:** 07 Aug 2020 17:00 PSW **Wt/Vol:** 9.19 g **ICAL:** MM3_DF_10012020_12JUN2020

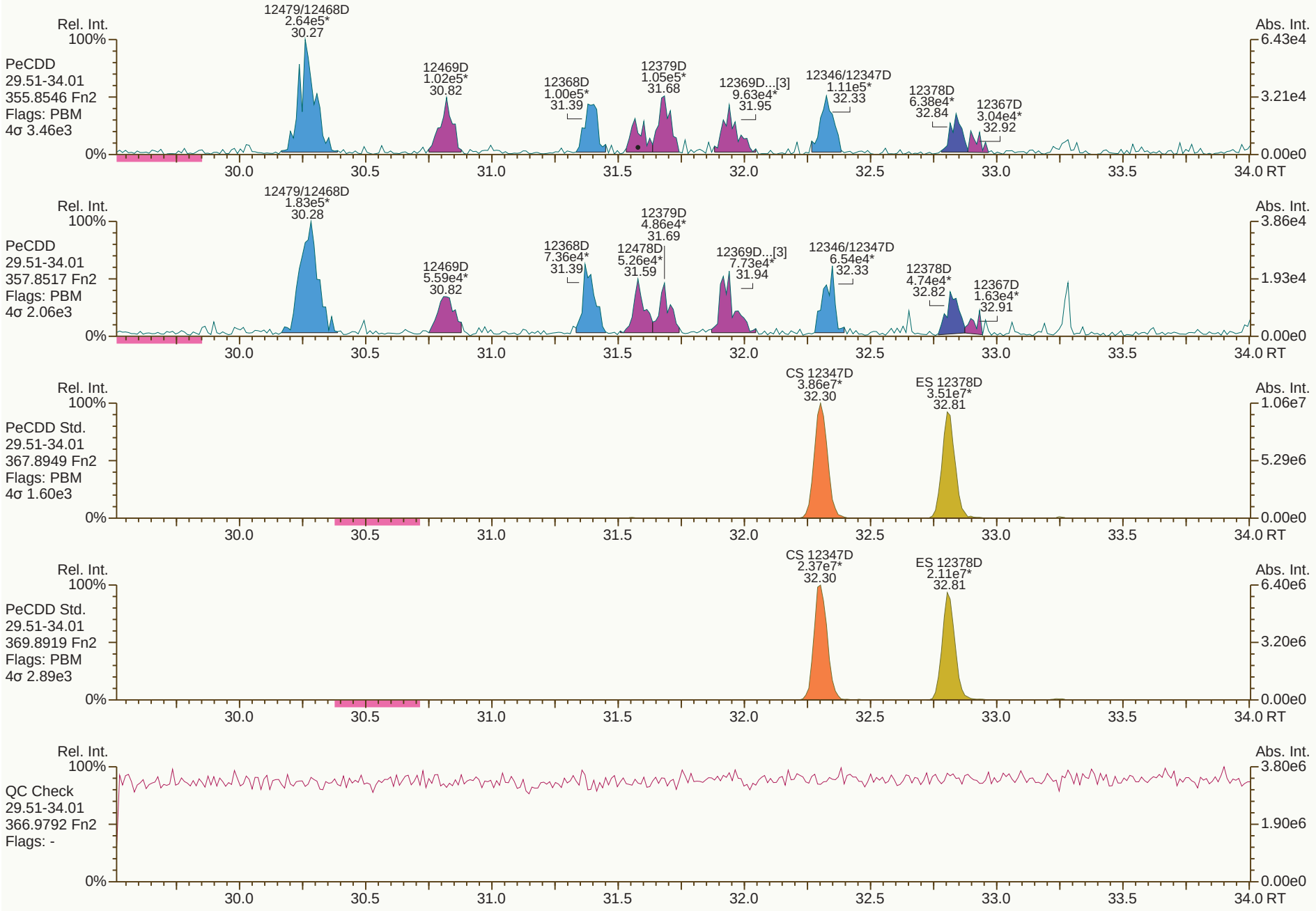
Client ID: CS-SS-101 **UTP:** 10-Aug-2020 09:02:19 PSW **J-level:** 0.544 pg/g **Split:** 1 **Checkcode:** 458-533-TQV

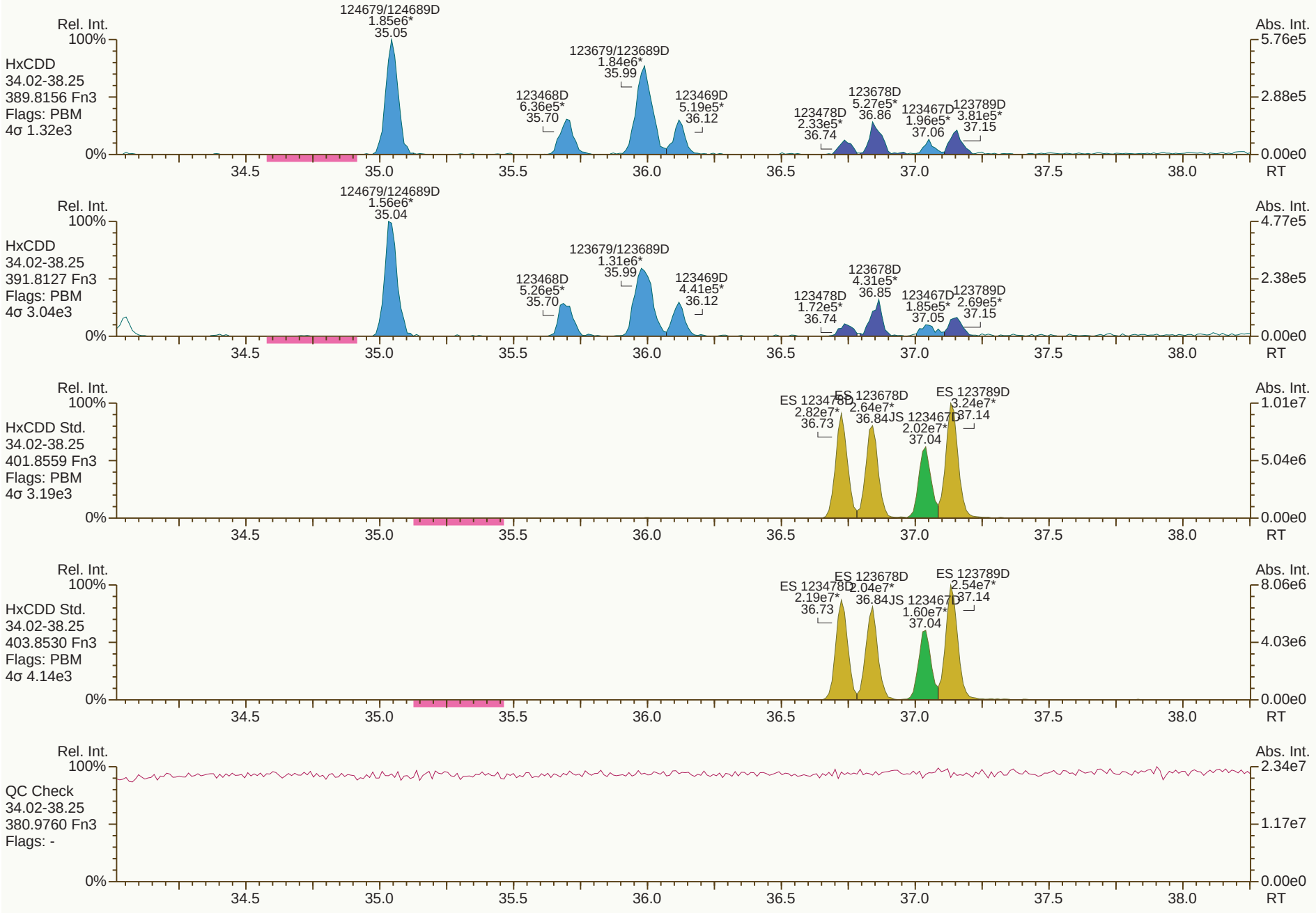
Datafile: 200807R05 **Report:** 10 Aug 2020 09:06 pw **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

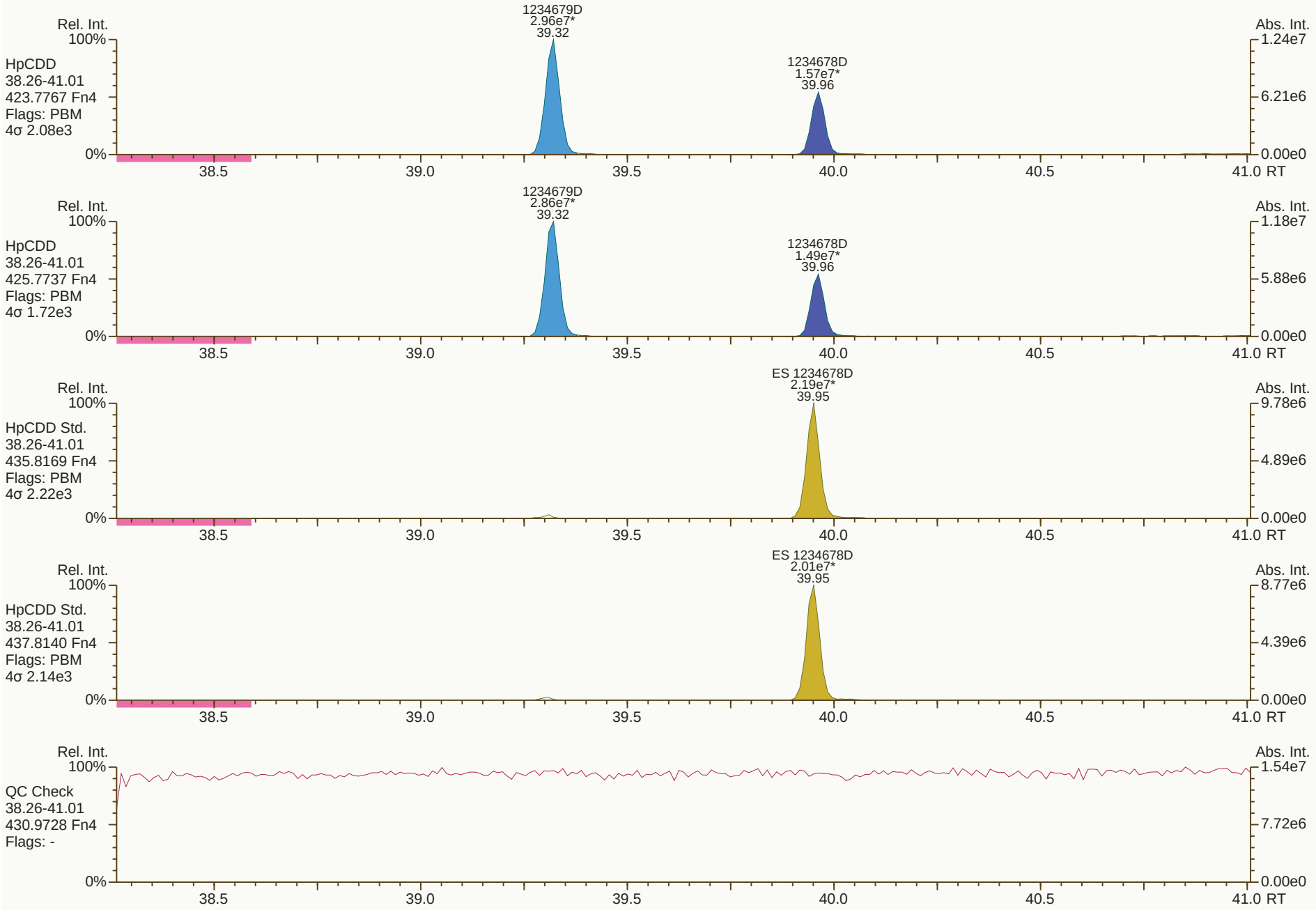
Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
23468/12469-PeCDF	30.89	J	0.9861	0.9862	+0.2	2.69E+05	1.70	Y	0.95	0.671	7033	0.16
12347-PeCDF	NotFnd		0.9887						0.95		7033	0.16
12348-PeCDF	NotFnd		0.9938						0.95		7033	0.16
12378-PeCDF	**31.34**	J EMPC	**1.0006**	**1.0006**	**0**	**1.31E+05**	**2.13**	**N**	**0.95**	**0.32**	**7033**	**0.165**
12678/12367-PeCDF	31.63	J	1.0095	1.0099	+0.8	1.73E+05	1.45	Y	0.95	0.432	7033	0.16
12379-PeCDF	NotFnd		1.0150						0.95		7033	0.16
12679-PeCDF	NotFnd		0.9926						0.95		7033	0.16
23467/12369-PeCDF	NotFnd		0.9966						0.95		7033	0.16
23478-PeCDF	**32.49**	J EMPC	**1.0005**	**1.0011**	**+1.2**	**2.71E+05**	**1.83**	**N**	**0.95**	**0.686**	**7033**	**0.155**
23478/12489-PeCDF	NotFnd		0.0000						0.95			
12489-PeCDF	NotFnd		1.0047						0.95		7033	0.16
12349-PeCDF	NotFnd		1.0107						0.95		7033	0.16
12389-PeCDF	NotFnd		1.0339						0.95		7033	0.16
123468-HxCDF	34.38		0.9617	0.9616	-0.2	9.96E+05	1.15	Y	1.11	3.04	7245	0.182
124678/134678-HxCDF	34.58		0.9673	0.9672	-0.2	3.94E+06	1.25	Y	1.11	12	7245	0.182
134679-HxCDF	NotFnd		0.9737						1.11		7245	0.182
124679-HxCDF	35.01	J EMPC	0.9792	0.9791	-0.2	1.07E+05	0.61	N	1.11	0.325	7245	0.182
124689-HxCDF	35.23		0.9854	0.9854	0	6.06E+06	1.29	Y	1.11	18.5	7245	0.182
123467-HxCDF	35.65	J EMPC	0.9972	0.9970	-0.4	1.03E+05	0.92	N	1.11	0.313	7245	0.182
123478-HxCDF	**35.77**		**1.0005**	**1.0005**	**0**	**9.61E+05**	**1.14**	**Y**	**1.20**	**2.77**	**7245**	**0.171**
123678-HxCDF	**35.91**	J	**1.0004**	**1.0004**	**0**	**4.25E+05**	**1.21**	**Y**	**1.07**	**1.17**	**7245**	**0.164**
123479-HxCDF	NotFnd		1.0049						1.11		7245	0.182
123469-HxCDF	NotFnd		1.0089						1.11		7245	0.182
123679-HxCDF	NotFnd		0.9945						1.11		7245	0.182
234678-HxCDF	**36.56**	J EMPC	**1.0005**	**1.0004**	**-0.2**	**4.93E+05**	**1.46**	**N**	**1.10**	**1.56**	**7245**	**0.182**
234678/123689-HxCDF	NotFnd		0.0000						1.10			
123689-HxCDF	NotFnd		1.0054						1.11		7245	0.182
123789-HxCDF	**NotFnd**		**1.0004**						**1.09**		**7245**	**0.219**
123789/123489-HxCDF	NotFnd		0.0000						1.09			
123489-HxCDF	37.56	J	1.0008	1.0012	+0.9	1.33E+05	1.30	Y	1.11	0.407	7245	0.182
1234678-HpCDF	**39.05**		**1.0003**	**1.0003**	**0**	**8.85E+06**	**0.98**	**Y**	**1.28**	**30.8**	**3297**	**0.0741**
1234679-HpCDF	39.32	**J**	1.0072	1.0072	0	3.29E+05	0.92	Y	1.27	1.3	3297	0.0795
1234689-HpCDF	39.46		1.0107	1.0107	0	2.01E+07	1.03	Y	1.27	79.6	3297	0.0795
1234789-HpCDF	**40.37**		**1.0002**	**1.0001**	**-0.2**	**7.98E+05**	**0.96**	**Y**	**1.27**	**3.64**	**3297**	**0.0865**
OCDF	**42.55**		**1.0003**	**1.0002**	**-0.3**	**1.26E+07**	**0.87**	**Y**	**1.01**	**100**	**4400**	**0.236**
OCDF-a	42.54		1.0002	1.0001	-0.3	6.12E+05	2.44	Y	0.06	77.5	3780	3.24


Rel. Int.
100%
QC Check
20.54-29.50
316.9824 Fn1
Flags: -
0%
Abs. Int.
4.41e6
2.20e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
QC Check
29.51-34.01
366.9792 Fn2
Flags: -
0%
Abs. Int.
3.80e6
1.90e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
0%
Abs. Int.
2.34e7
1.17e7
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
QC Check
38.26-41.01
430.9728 Fn4
Flags: -
0%
Abs. Int.
1.54e7
7.72e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
7.78e6
3.89e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT


Rel. Int.
100%
TCDD
20.54-29.50
319.8965 Fn1
Flags: PBM
4σ 2.28e3
1368D
1.01e5*
23.40
1379D
7.92e4*
23.79
1247D...[4]
4.52e4*
25.34
1234/1269D
4.42e4*
26.60
Abs. Int.
2.70e4
1.35e4
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD
20.54-29.50
321.8936 Fn1
Flags: PBM
4σ 2.57e3
1368D
1.20e5*
23.39
1379D
7.46e4*
23.79
1247D...[4]
5.24e4*
25.34
1234/1269D
4.81e4*
26.61
Abs. Int.
2.78e4
1.39e4
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
37Cl-TCDD
20.54-29.50
327.8850 Fn1
Flags: PBM
4σ 1.49e3
CS 37Cl-2378D
3.13e7*
27.29
Abs. Int.
6.71e6
3.35e6
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
331.9368 Fn1
Flags: PBM
4σ 8.07e3
JS 1234D
3.65e7*
26.59
ES 2378D
2.63e7*
27.27
Abs. Int.
7.75e6
3.88e6
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
333.9339 Fn1
Flags: PBM
4σ 4.07e3
JS 1234D
4.80e7*
26.59
ES 2378D
3.47e7*
27.27
Abs. Int.
1.01e7
5.07e6
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
Abs. Int.
PeCDD
29.51-34.01
355.8546 Fn2
Flags: PBM
4σ 3.46e3
12479/12468D 2.64e5* 30.27
12469D 1.02e5* 30.82
12368D 1.00e5* 31.39
12379D 1.05e5* 31.68
12369D...[3] 9.63e4* 31.95
12346/12347D 1.11e5* 32.33
12378D 6.38e4* 32.84
12367D 3.04e4* 32.92
PeCDD
29.51-34.01
357.8517 Fn2
Flags: PBM
4σ 2.06e3
12479/12468D 1.83e5* 30.28
12469D 5.59e4* 30.82
12368D 7.36e4* 31.39
12478D 5.26e4* 31.59
12379D 4.86e4* 31.69
12369D...[3] 7.73e4* 31.94
12346/12347D 6.54e4* 32.33
12378D 4.74e4* 32.82
12367D 1.63e4* 32.91
PeCDD Std.
29.51-34.01
367.8949 Fn2
Flags: PBM
4σ 1.60e3
CS 12347D 3.86e7* 32.30
ES 12378D 3.51e7* 32.81
PeCDD Std.
29.51-34.01
369.8919 Fn2
Flags: PBM
4σ 2.89e3
CS 12347D 2.37e7* 32.30
ES 12378D 2.11e7* 32.81
QC Check
29.51-34.01
366.9792 Fn2
Flags: -
100%
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT


Rel. Int.
100%
HxCDD
34.02-38.25
389.8156 Fn3
Flags: PBM
4σ 1.32e3
124679/124689D
1.85e6*
35.05
123679/123689D
1.84e6*
35.99
123468D
6.36e5*
35.70
123469D
5.19e5*
36.12
123478D
2.33e5*
36.74
123678D
5.27e5*
36.86
123467D
1.96e5*
37.06
123789D
3.81e5*
37.15
Abs. Int.
5.76e5
2.88e5
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD
34.02-38.25
391.8127 Fn3
Flags: PBM
4σ 3.04e3
124679/124689D
1.56e6*
35.04
123679/123689D
1.31e6*
35.99
123468D
5.26e5*
35.70
123469D
4.41e5*
36.12
123478D
1.72e5*
36.74
123678D
4.31e5*
36.85
123467D
1.85e5*
37.05
123789D
2.69e5*
37.15
Abs. Int.
4.77e5
2.38e5
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
401.8559 Fn3
Flags: PBM
4σ 3.19e3
ES 123478D
2.82e7*
36.73
ES 123678D
2.64e7*
36.84
JS 123467D
2.02e7*
37.04
ES 123789D
3.24e7*
37.14
Abs. Int.
1.01e7
5.04e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
403.8530 Fn3
Flags: PBM
4σ 4.14e3
ES 123478D
2.19e7*
36.73
ES 123678D
2.04e7*
36.84
JS 123467D
1.60e7*
37.04
ES 123789D
2.54e7*
37.14
Abs. Int.
8.06e6
4.03e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
Abs. Int.
2.34e7
1.17e7
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT

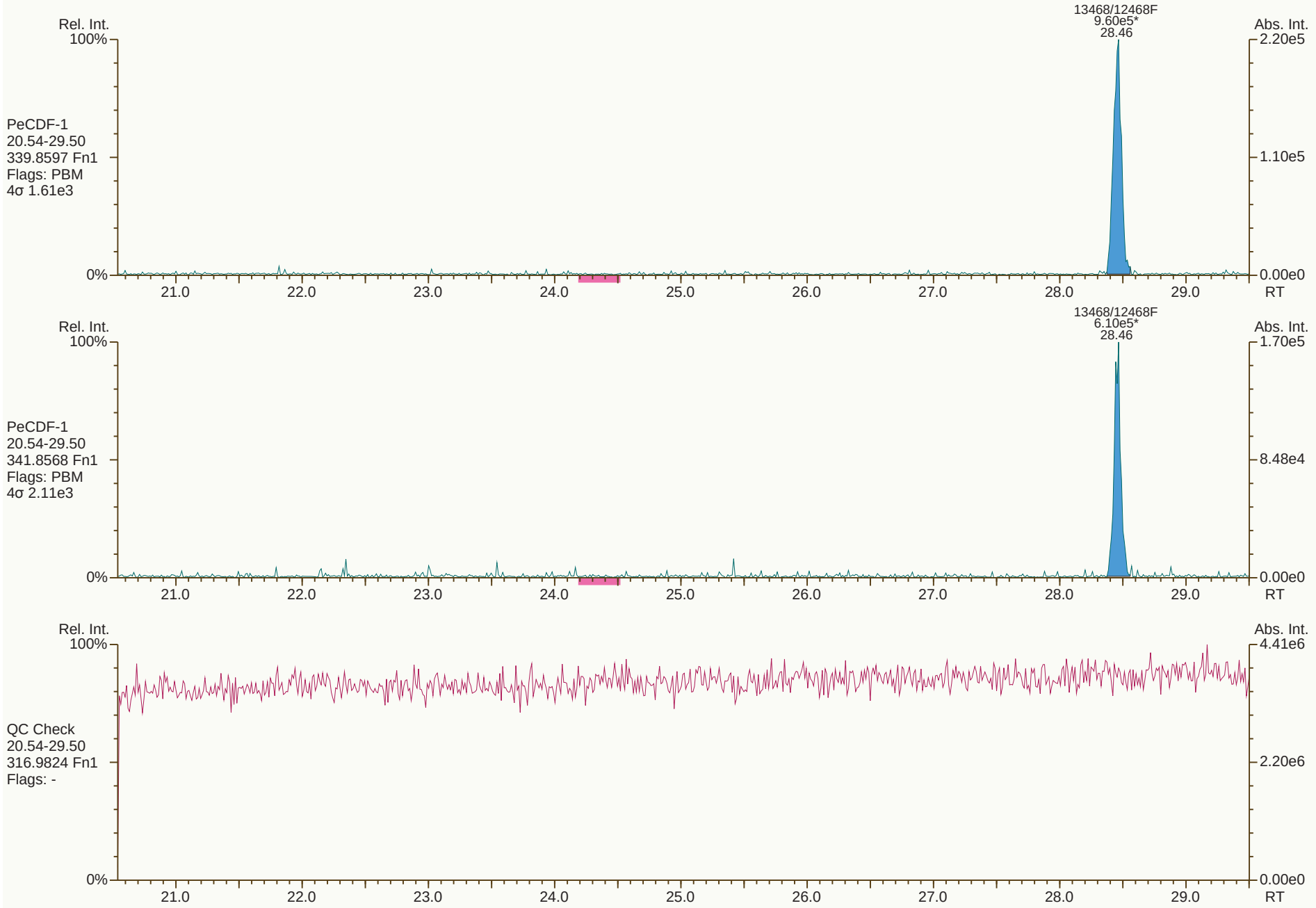

Rel. Int.
100%
HpCDD
38.26-41.01
423.7767 Fn4
Flags: PBM
4σ 2.08e3
0%
1234679D
2.96e7*
39.32
1234678D
1.57e7*
39.96
Abs. Int.
1.24e7
6.21e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.26-41.01
425.7737 Fn4
Flags: PBM
4σ 1.72e3
0%
1234679D
2.86e7*
39.32
1234678D
1.49e7*
39.96
Abs. Int.
1.18e7
5.88e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
435.8169 Fn4
Flags: PBM
4σ 2.22e3
0%
ES 1234678D
2.19e7*
39.95
Abs. Int.
9.78e6
4.89e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
437.8140 Fn4
Flags: PBM
4σ 2.14e3
0%
ES 1234678D
2.01e7*
39.95
Abs. Int.
8.77e6
4.39e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.26-41.01
430.9728 Fn4
Flags: -
0%
Abs. Int.
1.54e7
7.72e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT


OCDD
8.59e7*
42.39
Rel. Int.
Abs. Int.
OCDD
41.02-45.00
457.7377 Fn5
Flags: PBM
4σ 2.71e3
OCDD
9.58e7*
42.38
OCDD
41.02-45.00
459.7348 Fn5
Flags: PBM
4σ 3.24e3
ES OCDD
2.20e7*
42.38
OCDD Std.
41.02-45.00
469.7780 Fn5
Flags: PBM
4σ 2.36e3
ES OCDD
2.36e7*
42.37
OCDD Std.
41.02-45.00
471.7750 Fn5
Flags: PBM
4σ 1.64e3
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
100%
0%
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT


Rel. Int.
100%
TCDF
20.54-29.50
303.9016 Fn1
Flags: PBM
4σ 1.27e3
1368F 1.03e5* 21.16
2468F 2.57e5* 22.38
1347F...[3] 1.21e5* 22.94
1248F...[3] 8.30e4* 23.37
1268F 5.94e4* 23.81
1478F 3.62e4* 24.13
2467F 3.63e4* 24.67
2368F 1.25e5* 24.86
1267F 2.66e4* 25.71
2347/1279F 5.48e4* 26.13
2378F 5.71e4* 26.36
2367/3467F 8.63e4* 26.75
1289F 2.20e5* 28.46
Abs. Int.
6.76e4
3.38e4
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
TCDF
20.54-29.50
305.8987 Fn1
Flags: PBM
4σ 2.26e3
1368F 1.19e5* 21.15
2468F 4.21e5* 22.39
1347F...[3] 1.48e5* 22.95
1248F...[3] 1.34e5* 23.37
1268F 1.18e5* 23.81
1467F 3.56e4* 23.94
2368F 1.60e5* 24.85
1278F 6.20e4* 25.42
2346/1249F 2.58e4* 25.92
2378F 8.60e4* 26.36
2367/3467F 7.92e4* 26.75
1289F 1.18e5* 28.46
Abs. Int.
7.02e4
3.51e4
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
315.9419 Fn1
Flags: PBM
4σ 1.54e4
JS 1234F 6.06e7* 24.91
ES 2378F 4.49e7* 26.34
Abs. Int.
1.19e7
5.96e6
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
317.9389 Fn1
Flags: PBM
4σ 9.64e3
JS 1234F 7.67e7* 24.91
ES 2378F 5.66e7* 26.34
Abs. Int.
1.51e7
7.56e6
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
HxCDPE
20.54-29.50
375.8364 Fn1
Flags: PB
4σ 1.36e3
Abs. Int.
8.72e3
4.36e3
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT

SGS ID: B4511_17654_DF_001 | **Sample ID: CS-SS-101** | **Acq: 07-Aug-2020 17:00:53**

Instr: [ILM] AutoSpec-Ultima MM3 | **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 7** | **User: PSW Datafile: 200807R05**

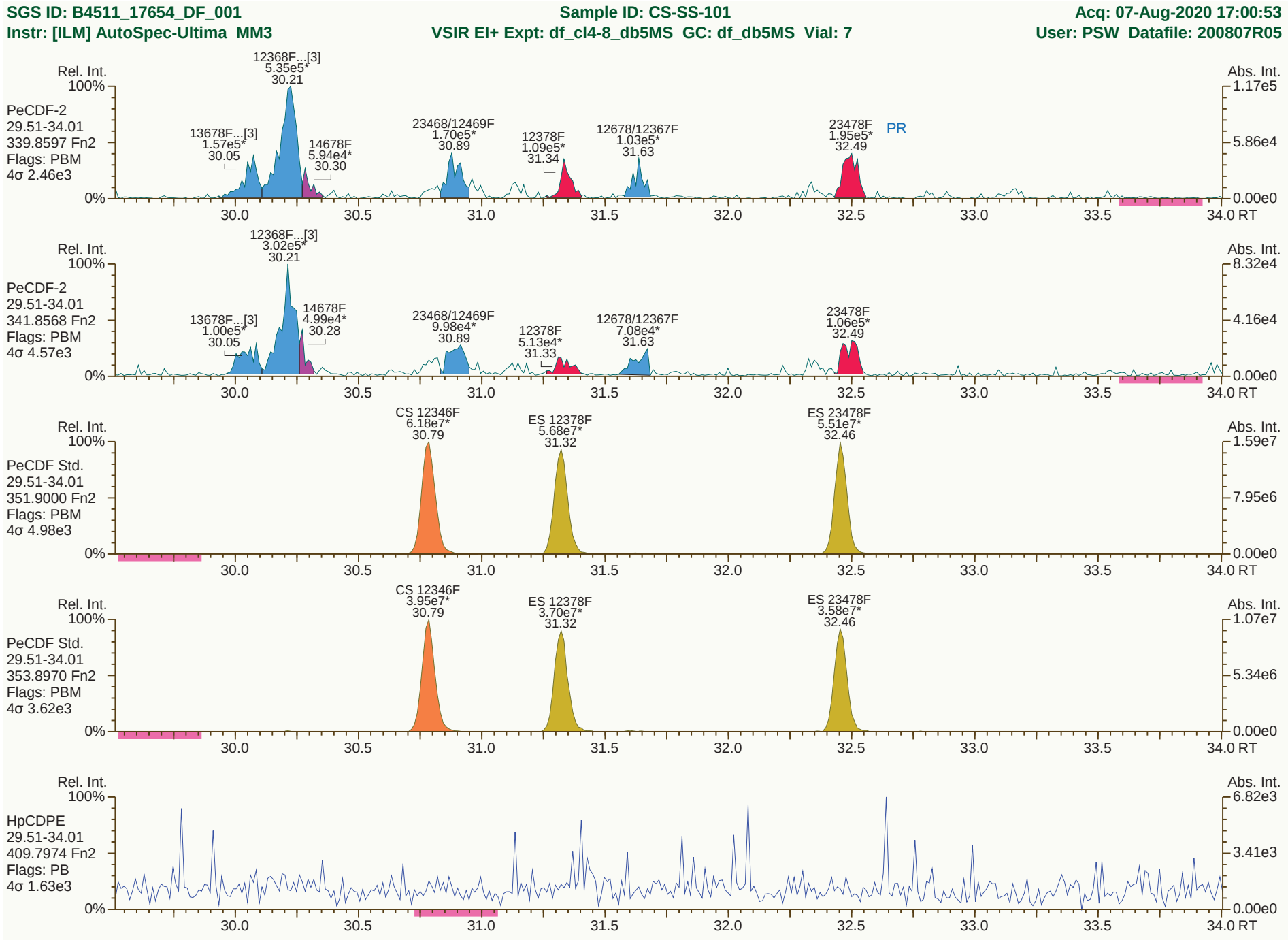


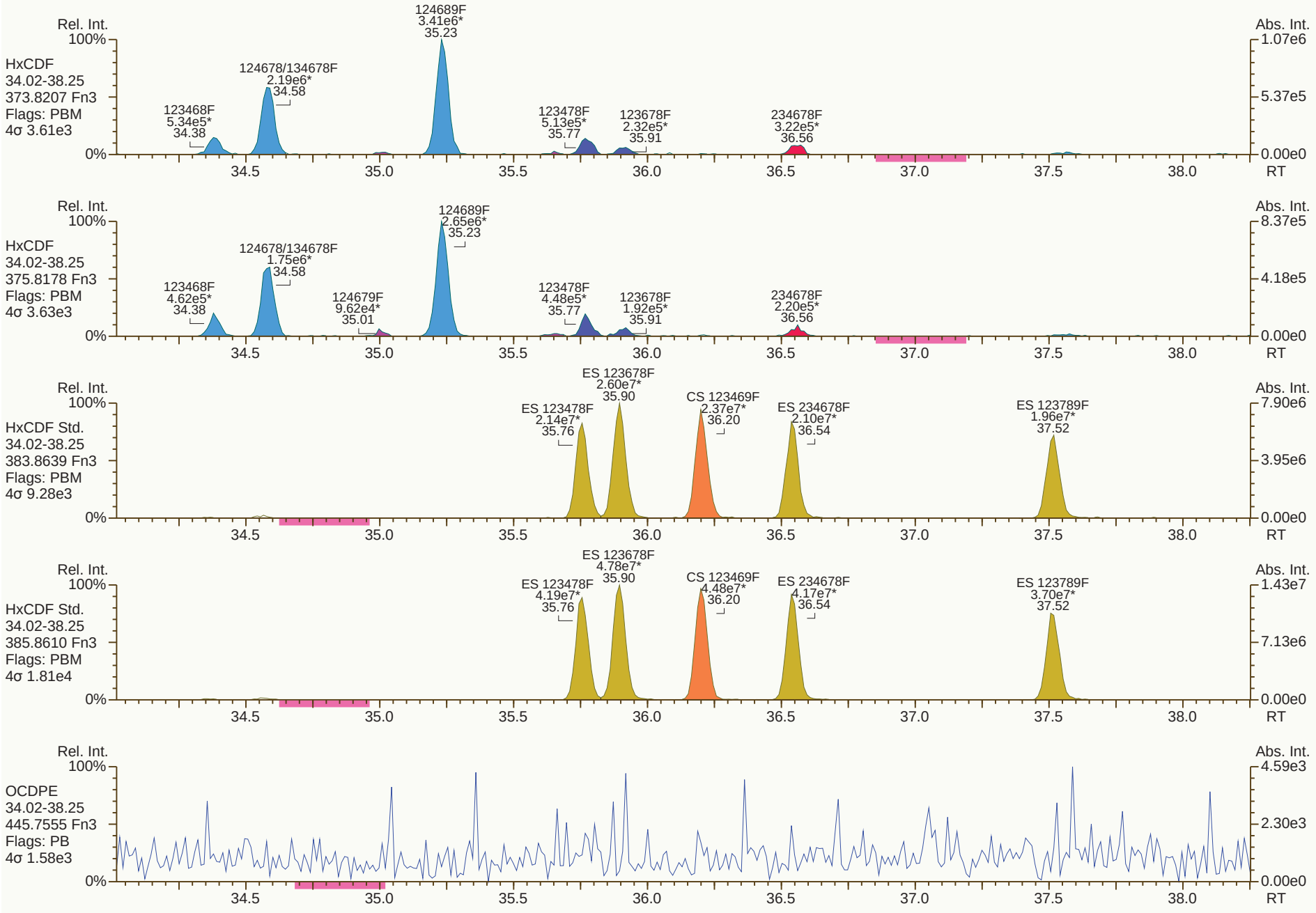
Results: P:\B4500_B4599\B4511\B4511_17654 DF\Resources\B4511_17654_DF_001.utp_res, saved 10-Aug-2020 09:02 (PSW)

Peak annotation: Areas, Centroids

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 3344 scc: 458-533

PKD: 10-Aug-2020 08:12 Printed: 10-Aug-2020 09:17 Page 8 of 12

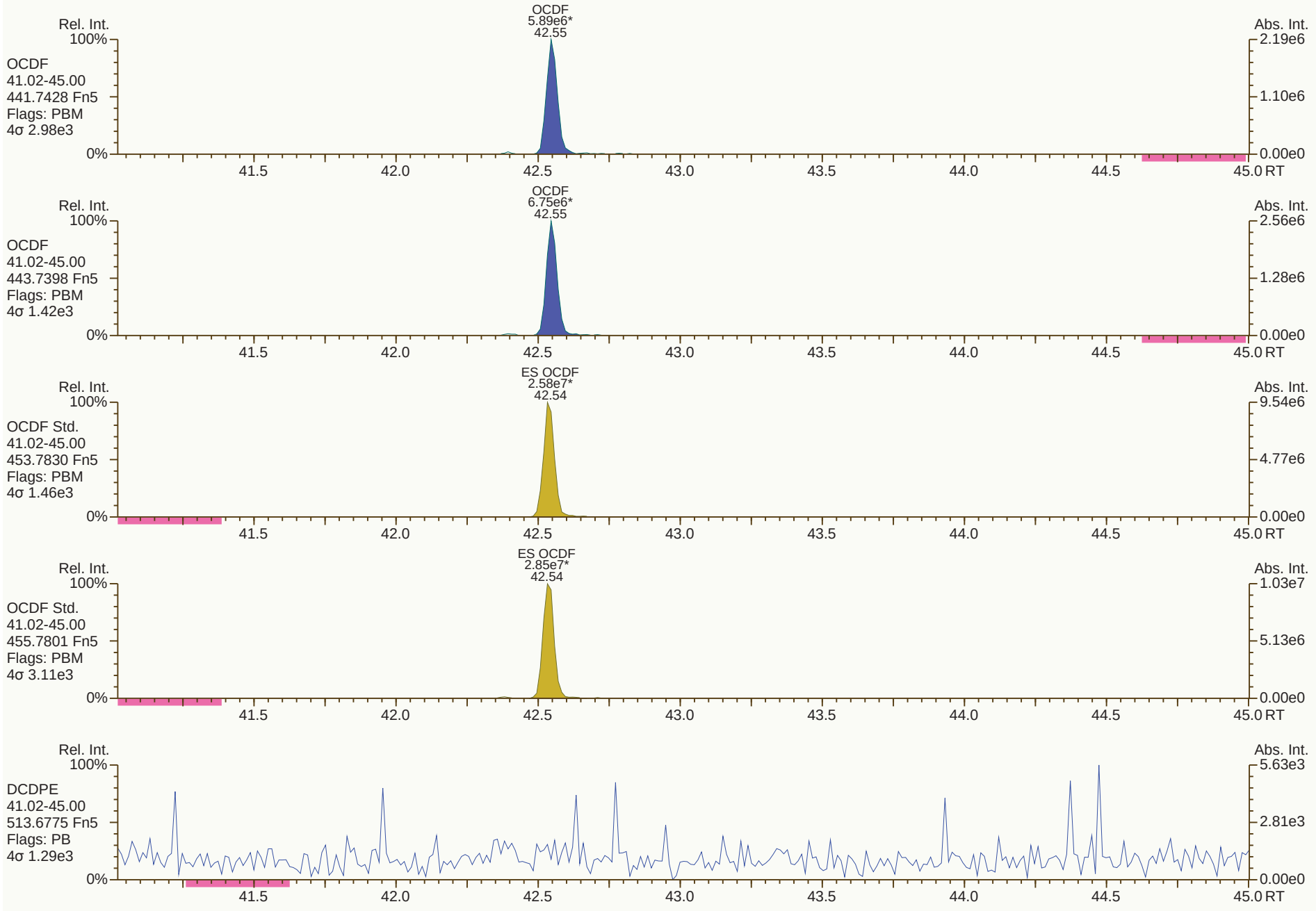

SGS ID: B4511_17654_DF_001
Sample ID: CS-SS-101
Acq: 07-Aug-2020 17:00:53
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 7
User: PSW Datafile: 200807R05
Rel. Int.
Abs. Int.
PeCDF-2
29.51-34.01
339.8597 Fn2
Flags: PBM
4σ 2.46e3
12368F...[3] 5.35e5* 30.21
13678F...[3] 1.57e5* 30.05
14678F 5.94e4* 30.30
23468/12469F 1.70e5* 30.89
12378F 1.09e5* 31.34
12678/12367F 1.03e5* 31.63
23478F 1.95e5* 32.49
PR
PeCDF-2
29.51-34.01
341.8568 Fn2
Flags: PBM
4σ 4.57e3
12368F...[3] 3.02e5* 30.21
13678F...[3] 1.00e5* 30.05
14678F 4.99e4* 30.28
23468/12469F 9.98e4* 30.89
12378F 5.13e4* 31.33
12678/12367F 7.08e4* 31.63
23478F 1.06e5* 32.49
PeCDF Std.
29.51-34.01
351.9000 Fn2
Flags: PBM
4σ 4.98e3
CS 12346F 6.18e7* 30.79
ES 12378F 5.68e7* 31.32
ES 23478F 5.51e7* 32.46
PeCDF Std.
29.51-34.01
353.8970 Fn2
Flags: PBM
4σ 3.62e3
CS 12346F 3.95e7* 30.79
ES 12378F 3.70e7* 31.32
ES 23478F 3.58e7* 32.46
HpCDPE
29.51-34.01
409.7974 Fn2
Flags: PB
4σ 1.63e3
100%
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
1.17e5
5.86e4
0.00e0
8.32e4
4.16e4
1.59e7
7.95e6
1.07e7
5.34e6
6.82e3
3.41e3
Results: P:\B4500_B4599\B4511\B4511_17654 DF\Resources\B4511_17654_DF_001.utp_res, saved 10-Aug-2020 09:02 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 2352, 8768, 0409 scc: 458-533
PKD: 10-Aug-2020 08:12 Printed: 10-Aug-2020 09:17 Page 9 of 12


Rel. Int.
100%
HxCDF
34.02-38.25
373.8207 Fn3
Flags: PBM
4σ 3.61e3
123468F
5.34e5*
34.38
124678/134678F
2.19e6*
34.58
124689F
3.41e6*
35.23
123478F
5.13e5*
35.77
123678F
2.32e5*
35.91
234678F
3.22e5*
36.56
0%
Abs. Int.
1.07e6
5.37e5
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDF
34.02-38.25
375.8178 Fn3
Flags: PBM
4σ 3.63e3
123468F
4.62e5*
34.38
124678/134678F
1.75e6*
34.58
124679F
9.62e4*
35.01
124689F
2.65e6*
35.23
123478F
4.48e5*
35.77
123678F
1.92e5*
35.91
234678F
2.20e5*
36.56
0%
Abs. Int.
8.37e5
4.18e5
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDF Std.
34.02-38.25
383.8639 Fn3
Flags: PBM
4σ 9.28e3
ES 123478F
2.14e7*
35.76
ES 123678F
2.60e7*
35.90
CS 123469F
2.37e7*
36.20
ES 234678F
2.10e7*
36.54
ES 123789F
1.96e7*
37.52
0%
Abs. Int.
7.90e6
3.95e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDF Std.
34.02-38.25
385.8610 Fn3
Flags: PBM
4σ 1.81e4
ES 123478F
4.19e7*
35.76
ES 123678F
4.78e7*
35.90
CS 123469F
4.48e7*
36.20
ES 234678F
4.17e7*
36.54
ES 123789F
3.70e7*
37.52
0%
Abs. Int.
1.43e7
7.13e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
OCDPE
34.02-38.25
445.7555 Fn3
Flags: PB
4σ 1.58e3
0%
Abs. Int.
4.59e3
2.30e3
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT



Results: P:\B4500_B4599\B4511\B4511_17654 DF\Resources\B4511_17654_DF_001.utp_res, saved 10-Aug-2020 09:02 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 4648, 7969, 2284 scc: 458-533 *PKD: 10-Aug-2020 08:12 Printed: 10-Aug-2020 09:17 Page 11 of 12*


OCDF
5.89e6*
42.55
Rel. Int.
100%
OCDF
41.02-45.00
441.7428 Fn5
Flags: PBM
4σ 2.98e3
0%
Abs. Int.
2.19e6
1.10e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDF
6.75e6*
42.55
Rel. Int.
100%
OCDF
41.02-45.00
443.7398 Fn5
Flags: PBM
4σ 1.42e3
0%
Abs. Int.
2.56e6
1.28e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDF
2.58e7*
42.54
Rel. Int.
100%
OCDF Std.
41.02-45.00
453.7830 Fn5
Flags: PBM
4σ 1.46e3
0%
Abs. Int.
9.54e6
4.77e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDF
2.85e7*
42.54
Rel. Int.
100%
OCDF Std.
41.02-45.00
455.7801 Fn5
Flags: PBM
4σ 3.11e3
0%
Abs. Int.
1.03e7
5.13e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
DCDPE
41.02-45.00
513.6775 Fn5
Flags: PB
4σ 1.29e3
0%
Abs. Int.
5.63e3
2.81e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

Lab ID: B4511_17654_DF_002 **Acq'd:** 07 Aug 2020 17:48 PSW **Wt/Vol:** 9.25 g **ICAL:** MM3_DF_10012020_12JUN2020

Client ID: CS-SB-125 **UTP:** 10-Aug-2020 09:02:20 PSW **J-level:** 0.541 pg/g **Split:** 1 **Checkcode:** 882-901-WPX

Datafile: 200807R06 **Report:** 10 Aug 2020 09:06 pw **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	NotFnd		1.0009	-		-	-	-	1.18	-	4119	0.129
12378-PeCDD	32.84	J EMPC	1.0006	1.0007	+0.2	5.53E+04	1.92	N	1.14	0.187	4166	0.129
123478-HxCDD	36.75	J EMPC	1.0004	1.0004	0	1.45E+05	0.97	N	1.09	0.562	4481	0.14
123678-HxCDD	36.86	J	1.0035	1.0034	-0.2	4.47E+05	1.19	Y	1.13	1.67	4481	0.133
123789-HxCDD	37.16	J	1.0116	1.0116	0	3.20E+05	1.05	Y	1.05	1.07	4481	0.124
1234678-HpCDD	39.97		1.0003	1.0003	0	1.41E+07	1.03	Y	0.98	66.1	2150	0.0599
OCDD	42.39		1.0003	1.0003	0	7.11E+07	0.89	Y	1.08	515	6360	0.326
2378-TCDF	NotFnd		1.0006	-		-	-	-	0.98	-	3244	0.0761
12378-PeCDF	NotFnd		1.0006	-		-	-	-	0.95	-	4927	0.109
23478-PeCDF	32.48	J EMPC	1.0005	1.0006	+0.2	7.38E+04	2.45	N	0.95	0.189	4927	0.117
123478-HxCDF	35.78	J	1.0005	1.0005	0	3.12E+05	1.36	Y	1.20	0.862	5836	0.129
123678-HxCDF	35.92	J	1.0004	1.0005	+0.2	1.89E+05	1.21	Y	1.07	0.498	5836	0.128
234678-HxCDF	36.56	J	1.0005	1.0004	-0.2	2.57E+05	1.23	Y	1.10	0.763	5836	0.142
123789-HxCDF	NotFnd		1.0004	-		-	-	-	1.09	-	5836	0.166
1234678-HpCDF	39.06		1.0003	1.0003	0	5.66E+06	0.99	Y	1.28	17.3	4600	0.0956
1234789-HpCDF	40.38	J	1.0002	1.0002	0	3.74E+05	0.98	Y	1.27	1.49	4600	0.115
OCDF	42.56		1.0003	1.0002	-0.3	1.02E+07	0.87	Y	1.01	65.1	3439	0.155

Name	Act RT	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	27.27	1.0255	1.0256	+0.2	6.35E+07	0.76	Y	1.01	78.4
ES 12378-PeCDD	32.81	1.2330	1.2340	+2.0	5.64E+07	1.63	Y	0.87	80.5
ES 123478-HxCDD	36.73	0.9917	0.9916	-0.2	5.13E+07	1.28	Y	1.10	67.6
ES 123678-HxCDD	36.84	0.9947	0.9947	0	5.15E+07	1.28	Y	1.06	70.1
ES 123789-HxCDD	37.14	1.0028	1.0027	-0.2	6.17E+07	1.28	Y	1.22	73.3
ES 1234678-HpCDD	39.96	1.0785	1.0787	+0.5	4.69E+07	1.08	Y	0.99	68.3
ES OCDD	42.38	1.1439	1.1441	+0.5	5.55E+07	0.90	Y	0.67	59.9
ES 2378-TCDF	26.35	1.0572	1.0576	+0.6	1.06E+08	0.78	Y	1.01	79.9
ES 12378-PeCDF	31.33	1.2558	1.2574	+3.0	9.57E+07	1.56	Y	0.90	81
ES 23478-PeCDF	32.46	1.3012	1.3029	+3.3	8.93E+07	1.57	Y	0.89	76.4
ES 123478-HxCDF	35.76	0.9655	0.9654	-0.2	6.56E+07	0.51	Y	1.43	66.3
ES 123678-HxCDF	35.90	0.9693	0.9692	-0.2	7.65E+07	0.52	Y	1.63	67.7
ES 234678-HxCDF	36.55	0.9867	0.9867	0	6.64E+07	0.53	Y	1.48	64.9
ES 123789-HxCDF	37.52	1.0130	1.0130	0	6.01E+07	0.53	Y	1.29	67.2
ES 1234678-HpCDF	39.05	1.0540	1.0542	+0.5	5.52E+07	0.44	Y	1.15	69.6
ES 1234789-HpCDF	40.37	1.0898	1.0900	+0.5	4.28E+07	0.46	Y	0.91	68.3
ES OCDF	42.55	1.1484	1.1486	+0.5	6.71E+07	0.92	Y	0.83	58.5

Lab ID: B4511_17654_DF_002 | Acq'd: 07 Aug 2020 17:48 PSW | Wt/Vol: 9.25 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-SB-125 | UTP: 10-Aug-2020 09:02:20 PSW | J-level: 0.541 pg/g | Split: 1 | Checkcode: 882-901-WPX

Datafile: 200807R06 | Report: 10 Aug 2020 09:06 pw | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %	
JS 1234-TCDD	26.59		-	-	-	8.05E+07	0.79	Y	-	-	
JS 1234-TCDF	24.91		-	-	-	1.31E+08	0.78	Y	-	-	
JS 123467-HxCDD	37.04		-	-	-	3.46E+07	1.30	Y	-	-	
CS 37Cl-2378-TCDD	27.30		1.0265	1.0265	0	3.00E+07	n/a	-	1.04	89.9	
CS 12347-PeCDD	32.31		1.2141	1.2150	+1.7	5.78E+07	1.68	Y	0.74	97	
CS 12346-PeCDF	30.79		1.2343	1.2358	+2.8	9.64E+07	1.54	Y	0.86	85.4	
CS 123469-HxCDF	36.21		0.9776	0.9775	-0.2	6.75E+07	0.51	Y	1.36	71.8	
CS 1234689-HpCDF	39.46		1.0650	1.0652	+0.5	5.56E+07	0.44	Y	1.05	76.2	
~~SS 37Cl-2378-TCDD~~	~~27.30~~		~~1.0265~~	~~1.0265~~	~~0~~	~~3.00E+07~~	~~n/a~~		~~1.04~~	~~114~~	Not used in this project.
~~SS 12347-PeCDD~~	~~32.31~~		~~1.2141~~	~~1.2150~~	~~+1.7~~	~~5.78E+07~~	~~1.68~~	~~Y~~	~~0.86~~	~~120~~	CL 10Aug20
~~SS 12346-PeCDF~~	~~30.79~~		~~1.2343~~	~~1.2358~~	~~+2.8~~	~~9.64E+07~~	~~1.54~~	~~Y~~	~~0.96~~	~~105~~	
~~SS 123469-HxCDF~~	~~36.21~~		~~0.9776~~	~~0.9775~~	~~-0.2~~	~~6.75E+07~~	~~0.51~~	~~Y~~	~~0.83~~	~~106~~	
~~SS 1234689-HpCDF~~	~~39.46~~		~~1.0650~~	~~1.0652~~	~~+0.5~~	~~5.56E+07~~	~~0.44~~	~~Y~~	~~0.92~~	~~109~~	

Totals	Conc	EMPC
Total TCDD	0	0.264
Total PeCDD	0.26	1.46
Total HxCDD	16.5	17.1
Total HpCDD	181	181
Total Tetra-Octa Dioxins	713	715
Total TCDF	0	0.68
Total PeCDF	0.695	2.46
Total HxCDF	18	18.2
Total HpCDF	58	58
Total Tetra-Octa Furans	142	144
Total Tetra-Octa Dioxins & Furans	855	860

Lab ID: B4511_17654_DF_002 | Acq'd: 07 Aug 2020 17:48 PSW | Wt/Vol: 9.25 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-SB-125 | UTP: 10-Aug-2020 09:02:20 PSW | J-level: 0.541 pg/g | Split: 1 | Checkcode: 882-901-WPX

Datafile: 200807R06 | Report: 10 Aug 2020 09:06 pw | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1368-TCDD	23.40	J EMPC	0.8591	0.8580	-1.5	9.13E+04	1.26	N	1.18	0.264	4119	0.129
1379-TCDD	NotFnd		0.8732						1.18		4119	0.129
1369-TCDD	NotFnd		0.8901						1.18		4119	0.129
1469-TCDD	NotFnd		0.9205						1.18		4119	0.129
1247/1246/1248/1249-TCDD	NotFnd		0.9301						1.18		4119	0.129
1378-TCDD	NotFnd		0.9374						1.18		4119	0.129
1268-TCDD	NotFnd		0.9449						1.18		4119	0.129
1478-TCDD	NotFnd		0.9544						1.18		4119	0.129
1279-TCDD	NotFnd		0.9610						1.18		4119	0.129
1234/1269-TCDD	NotFnd		0.9746						1.18		4119	0.129
1236-TCDD	NotFnd		0.9802						1.18		4119	0.129
1237/1238-TCDD	NotFnd		0.9898						1.18		4119	0.129
1239-TCDD	NotFnd		0.9950						1.18		4119	0.129
2378-TCDD	**NotFnd**		**1.0009**						**1.18**		**4119**	**0.129**
1278-TCDD	NotFnd		1.0133						1.18		4119	0.129
1267-TCDD	NotFnd		1.0185						1.18		4119	0.129
1289-TCDD	NotFnd		1.0379						1.18		4119	0.129
12479/12468-PeCDD	30.28	J EMPC	0.9229	0.9227	-0.4	1.03E+05	2.01	N	1.14	0.347	4166	0.129
12469-PeCDD	30.80	J EMPC	0.9396	0.9387	-1.7	6.39E+04	2.39	N	1.14	0.216	4166	0.129
12368-PeCDD	31.38	J	0.9568	0.9564	-0.8	7.72E+04	1.69	Y	1.14	0.26	4166	0.129
12478-PeCDD	NotFnd		0.9626						1.14		4166	0.129
12379-PeCDD	NotFnd		0.9657						1.14		4166	0.129
12369/12467/12489-PeCDD	31.94	J EMPC	0.9738	0.9733	-1.0	7.54E+04	2.04	N	1.14	0.254	4166	0.129
12346/12347-PeCDD	32.35	J EMPC	0.9853	0.9858	+1.0	5.82E+04	1.94	N	1.14	0.196	4166	0.129
12378-PeCDD	32.84	J EMPC	**1.0006**	**1.0007**	**+0.2**	**5.53E+04**	**1.92**	**N**	**1.14**	**0.187**	**4166**	**0.129**
12367-PeCDD	NotFnd		1.0034						1.14		4166	0.129
12389-PeCDD	NotFnd		1.0141						1.14		4166	0.129
124679/124689-HxCDD	35.05		0.9542	0.9542	0	1.41E+06	1.16	Y	1.09	5.1	4481	0.131
123468-HxCDD	35.70	J	0.9721	0.9721	0	4.09E+05	1.29	Y	1.09	1.48	4481	0.131
123679/123689-HxCDD	35.99		0.9799	0.9799	0	1.32E+06	1.29	Y	1.09	4.79	4481	0.131
123469-HxCDD	36.12	J	0.9835	0.9834	-0.2	5.19E+05	1.35	Y	1.09	1.88	4481	0.131
123478-HxCDD	36.75	J EMPC	**1.0004**	**1.0004**	**0**	**1.45E+05**	**0.97**	**N**	1.09	**0.562**	**4481**	**0.14**
123678-HxCDD	36.86	J	**1.0035**	**1.0034**	**-0.2**	**4.47E+05**	**1.19**	**Y**	1.13	**1.67**	**4481**	**0.133**
123467-HxCDD	37.06	J	1.0088	1.0089	+0.2	1.52E+05	1.26	Y	1.09	0.552	4481	0.131
123789-HxCDD	37.16	J	**1.0116**	**1.0116**	**0**	**3.20E+05**	**1.05**	**Y**	1.05	**1.07**	**4481**	**0.124**

Lab ID: B4511_17654_DF_002 | Acq'd: 07 Aug 2020 17:48 PSW | Wt/Vol: 9.25 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-SB-125 | UTP: 10-Aug-2020 09:02:20 PSW | J-level: 0.541 pg/g | Split: 1 | Checkcode: 882-901-WPX

Datafile: 200807R06 | Report: 10 Aug 2020 09:06 pw | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

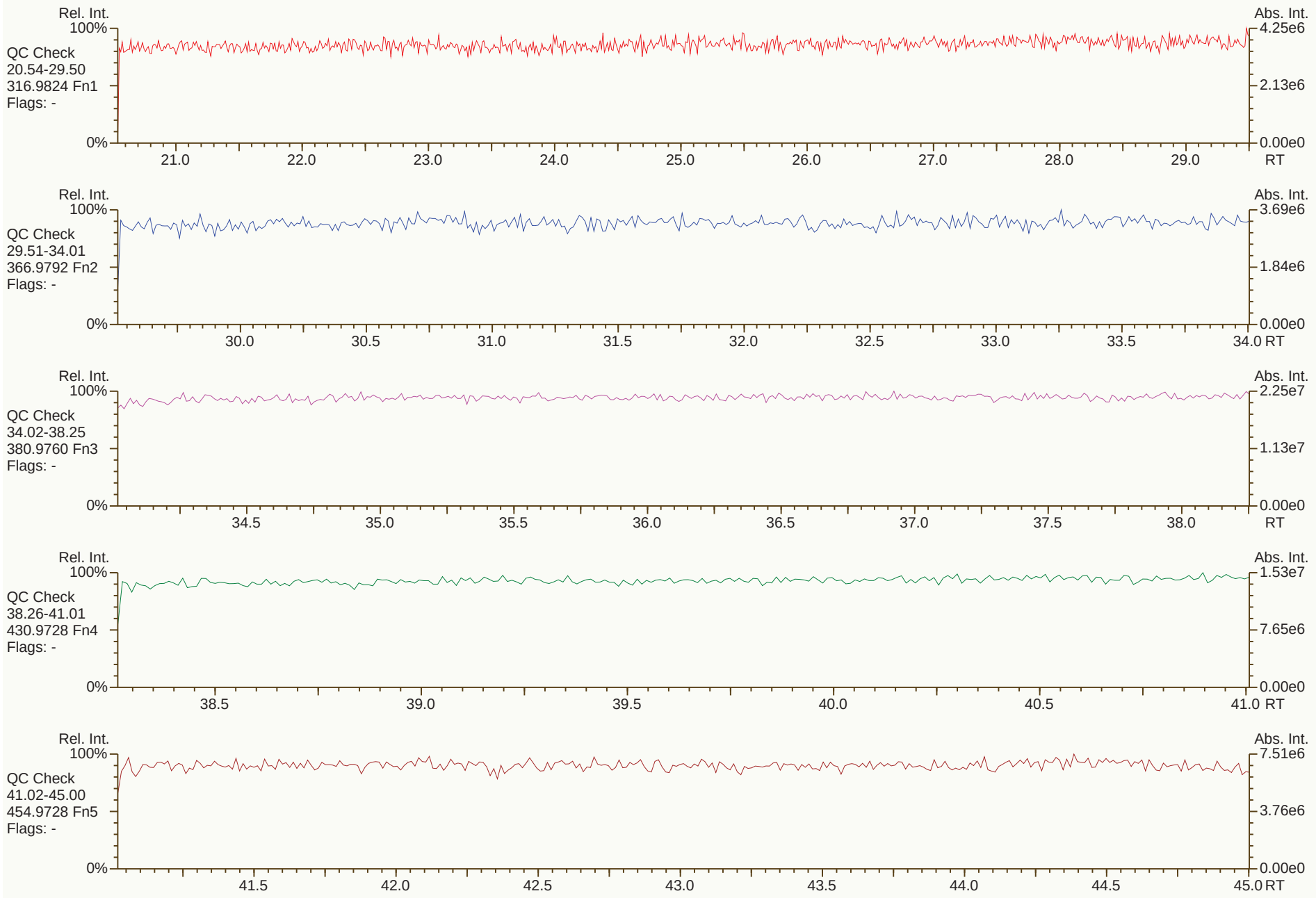
Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1234679-HpCDD	39.33		0.9843	0.9842	-0.2	2.45E+07	1.00	Y	0.98	115	2150	0.0599
1234678-HpCDD	**39.97**		**1.0003**	**1.0003**	**0**	**1.41E+07**	**1.03**	**Y**	**0.98**	**66.1**	**2150**	**0.0599**
OCDD	**42.39**		**1.0003**	**1.0003**	**0**	**7.11E+07**	**0.89**	**Y**	**1.08**	**515**	**6360**	**0.326**
OCDD-a	42.39		1.0002	1.0002	0	4.69E+06	2.48	Y	0.07	552	4409	3.68
1368-TCDF	NotFnd		0.8044						0.98		3244	0.0761
1468-TCDF	NotFnd		0.8261						0.98		3244	0.0761
2468-TCDF	22.39	J EMPC	0.8511	0.8499	-1.6	1.55E+05	0.95	N	0.98	0.321	3244	0.0761
1346/1246-TCDF	NotFnd		0.8665						0.98		3244	0.0761
1347/1378/1247-TCDF	NotFnd		0.8723						0.98		3244	0.0761
1348-TCDF	NotFnd		0.8835						0.98		3244	0.0761
1248/1367/1379-TCDF	NotFnd		0.8888						0.98		3244	0.0761
1268-TCDF	NotFnd		0.9044						0.98		3244	0.0761
1467-TCDF	NotFnd		0.9098						0.98		3244	0.0761
1478-TCDF	NotFnd		0.9167						0.98		3244	0.0761
1369/1237-TCDF	NotFnd		0.9316						0.98		3244	0.0761
2467-TCDF	NotFnd		0.9369						0.98		3244	0.0761
2368-TCDF	NotFnd		0.9430						0.98		3244	0.0761
1238/1234/1678/1469/1236-TCDF	NotFnd		0.9468						0.98		3244	0.0761
1278-TCDF	NotFnd		0.9651						0.98		3244	0.0761
1349-TCDF	NotFnd		0.9704						0.98		3244	0.0761
1267-TCDF	NotFnd		0.9761						0.98		3244	0.0761
2346/1249-TCDF	NotFnd		0.9834						0.98		3244	0.0761
2347/1279-TCDF	NotFnd		0.9921						0.98		3244	0.0761
2348-TCDF	NotFnd		0.9964						0.98		3244	0.0761
2378-TCDF	**NotFnd**		**1.0006**						**0.98**		**3244**	**0.0761**
2367/3467-TCDF	NotFnd		1.0156						0.98		3244	0.0761
1269-TCDF	NotFnd		1.0249						0.98		3244	0.0761
1239-TCDF	NotFnd		1.0357						0.98		3244	0.0761
1289-TCDF	28.46	J EMPC	1.0799	1.0802	+0.5	1.73E+05	1.85	N	0.98	0.359	3244	0.0761
13468/12468-PeCDF	28.46	J EMPC	0.9084	0.9086	+0.3	5.43E+05	1.93	N	0.95	1.34	2488	0.057
13678/13467/12467-PeCDF	30.06	J EMPC	0.9591	0.9595	+0.7	9.35E+04	1.92	N	0.95	0.231	4927	0.113
12368/13478/12478-PeCDF	30.23	J	0.9642	0.9649	+1.3	2.82E+05	1.77	Y	0.95	0.695	4927	0.113
14678-PeCDF	NotFnd		0.9675						0.95		4927	0.113
13479-PeCDF	NotFnd		0.9706						0.95		4927	0.113
13469/12479-PeCDF	NotFnd		0.9787						0.95		4927	0.113
12346-PeCDF	NotFnd		0.9833						0.95		4927	0.113

Lab ID: B4511_17654_DF_002 **Acq'd:** 07 Aug 2020 17:48 PSW **Wt/Vol:** 9.25 g **ICAL:** MM3_DF_10012020_12JUN2020

Client ID: CS-SB-125 **UTP:** 10-Aug-2020 09:02:20 PSW **J-level:** 0.541 pg/g **Split:** 1 **Checkcode:** 882-901-WPX

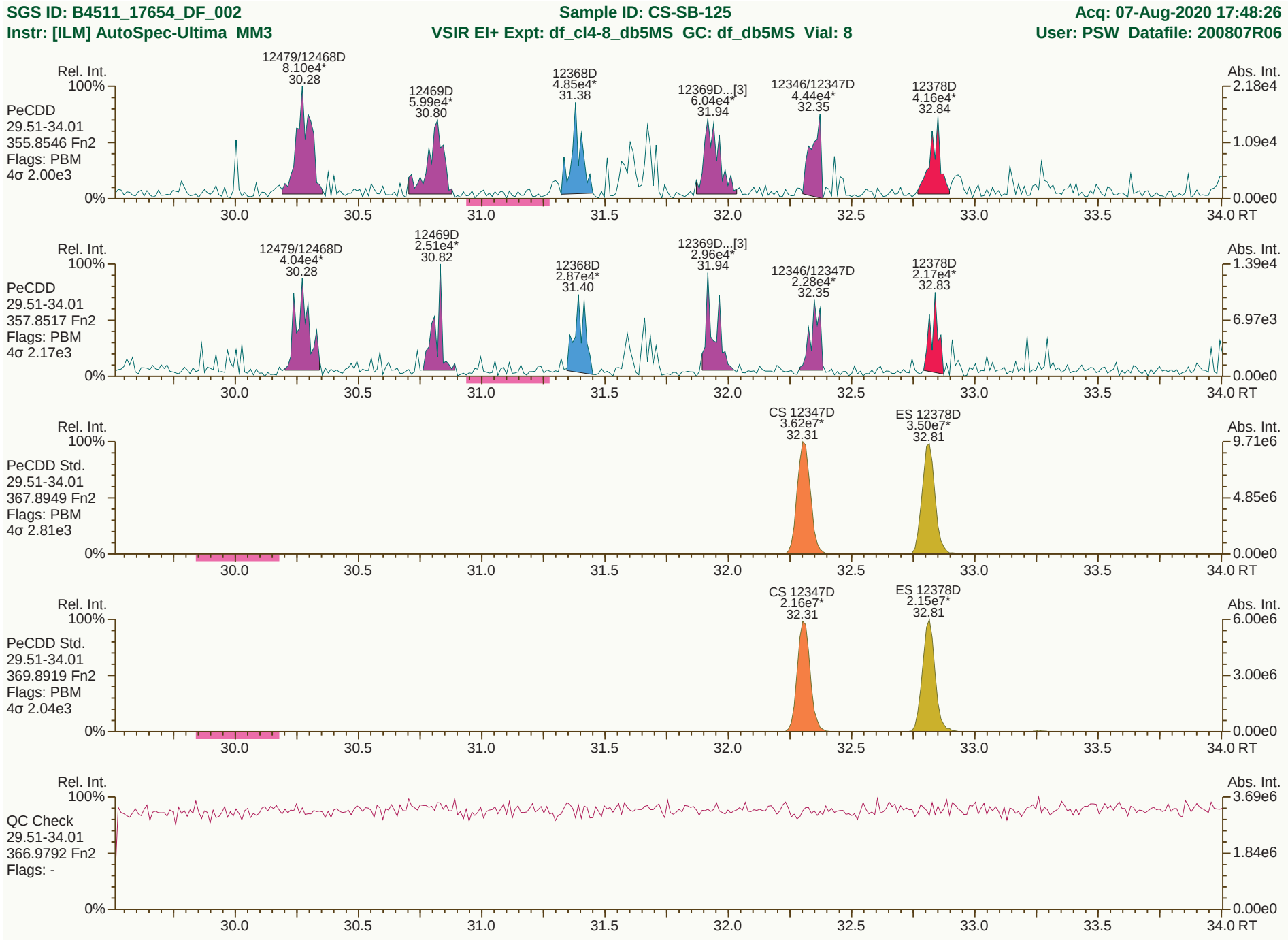
Datafile: 200807R06 **Report:** 10 Aug 2020 09:06 pw **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
23468/12469-PeCDF	NotFnd		0.9861						0.95		4927	0.113
12347-PeCDF	NotFnd		0.9887						0.95		4927	0.113
12348-PeCDF	NotFnd		0.9938						0.95		4927	0.113
12378-PeCDF	**NotFnd**		**1.0006**						**0.95**		**4927**	**0.109**
12678/12367-PeCDF	NotFnd		1.0095						0.95		4927	0.113
12379-PeCDF	NotFnd		1.0150						0.95		4927	0.113
12679-PeCDF	NotFnd		0.9926						0.95		4927	0.113
23467/12369-PeCDF	NotFnd		0.9966						0.95		4927	0.113
23478-PeCDF	**32.48**	J EMPC	**1.0005**	**1.0006**	**+0.2**	**7.38E+04**	**2.45**	**N**	**0.95**	**0.189**	**4927**	**0.117**
23478/12489-PeCDF	NotFnd		0.0000						0.95			
12489-PeCDF	NotFnd		1.0047						0.95		4927	0.113
12349-PeCDF	NotFnd		1.0107						0.95		4927	0.113
12389-PeCDF	NotFnd		1.0339						0.95		4927	0.113
123468-HxCDF	34.39	J	0.9617	0.9616	-0.2	5.73E+05	1.07	Y	1.11	1.66	5836	0.14
124678/134678-HxCDF	34.59		0.9673	0.9672	-0.2	2.17E+06	1.25	Y	1.11	6.27	5836	0.14
134679-HxCDF	NotFnd		0.9737						1.11		5836	0.14
124679-HxCDF	NotFnd		0.9792						1.11		5836	0.14
124689-HxCDF	35.24		0.9854	0.9854	0	2.76E+06	1.17	Y	1.11	7.99	5836	0.14
123467-HxCDF	35.66	J EMPC	0.9972	0.9972	0	5.97E+04	0.87	N	1.11	0.173	5836	0.14
123478-HxCDF	**35.78**	J	**1.0005**	**1.0005**	**0**	**3.12E+05**	**1.36**	**Y**	**1.20**	**0.862**	**5836**	**0.129**
123678-HxCDF	**35.92**	J	**1.0004**	**1.0005**	**+0.2**	**1.89E+05**	**1.21**	**Y**	**1.07**	**0.498**	**5836**	**0.128**
123479-HxCDF	NotFnd		1.0049						1.11		5836	0.14
123469-HxCDF	NotFnd		1.0089						1.11		5836	0.14
123679-HxCDF	NotFnd		0.9945						1.11		5836	0.14
234678-HxCDF	**36.56**	J	**1.0005**	**1.0004**	**-0.2**	**2.57E+05**	**1.23**	**Y**	**1.10**	**0.763**	**5836**	**0.142**
234678/123689-HxCDF	NotFnd		0.0000						1.10			
123689-HxCDF	NotFnd		1.0054						1.11		5836	0.14
123789-HxCDF	**NotFnd**		**1.0004**						**1.09**		**5836**	**0.166**
123789/123489-HxCDF	NotFnd		0.0000						1.09			
123489-HxCDF	NotFnd		1.0008						1.11		5836	0.14
1234678-HpCDF	**39.06**		**1.0003**	**1.0003**	**0**	**5.66E+06**	**0.99**	**Y**	**1.28**	**17.3**	**4600**	**0.0956**
1234679-HpCDF	39.33	**J**	1.0072	1.0072	0	1.61E+05	1.18	Y	1.27	0.557	4600	0.104
1234689-HpCDF	39.47		1.0107	1.0107	0	1.11E+07	1.04	Y	1.27	38.6	4600	0.104
1234789-HpCDF	**40.38**	**J**	**1.0002**	**1.0002**	**0**	**3.74E+05**	**0.98**	**Y**	**1.27**	**1.49**	**4600**	**0.115**
OCDF	**42.56**		**1.0003**	**1.0002**	**-0.3**	**1.02E+07**	**0.87**	**Y**	**1.01**	**65.1**	**3439**	**0.155**
OCDF-a	42.56	**EMPC**	1.0002	1.0003	+0.3	4.51E+05	4.68	N	0.06	46	4599	3.32

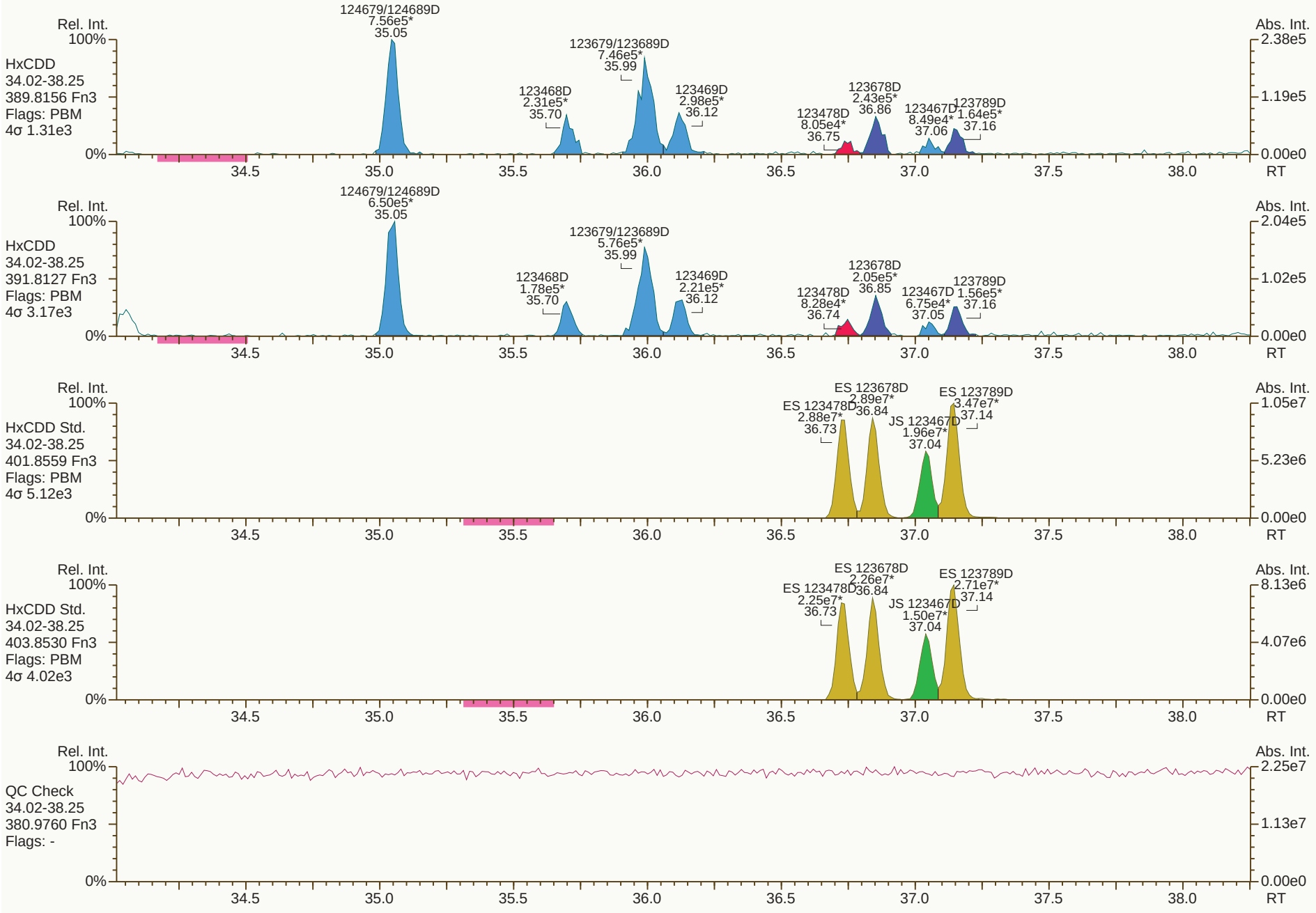

Rel. Int.
100%
0%
Abs. Int.
4.25e6
2.13e6
0.00e0
QC Check
20.54-29.50
316.9824 Fn1
Flags: -
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0 RT
Rel. Int.
100%
0%
Abs. Int.
3.69e6
1.84e6
0.00e0
QC Check
29.51-34.01
366.9792 Fn2
Flags: -
30.0 30.5 31.0 31.5 32.0 32.5 33.0 33.5 34.0 RT
Rel. Int.
100%
0%
Abs. Int.
2.25e7
1.13e7
0.00e0
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 RT
Rel. Int.
100%
0%
Abs. Int.
1.53e7
7.65e6
0.00e0
QC Check
38.26-41.01
430.9728 Fn4
Flags: -
38.5 39.0 39.5 40.0 40.5 41.0 RT
Rel. Int.
100%
0%
Abs. Int.
7.51e6
3.76e6
0.00e0
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
41.5 42.0 42.5 43.0 43.5 44.0 44.5 45.0 RT

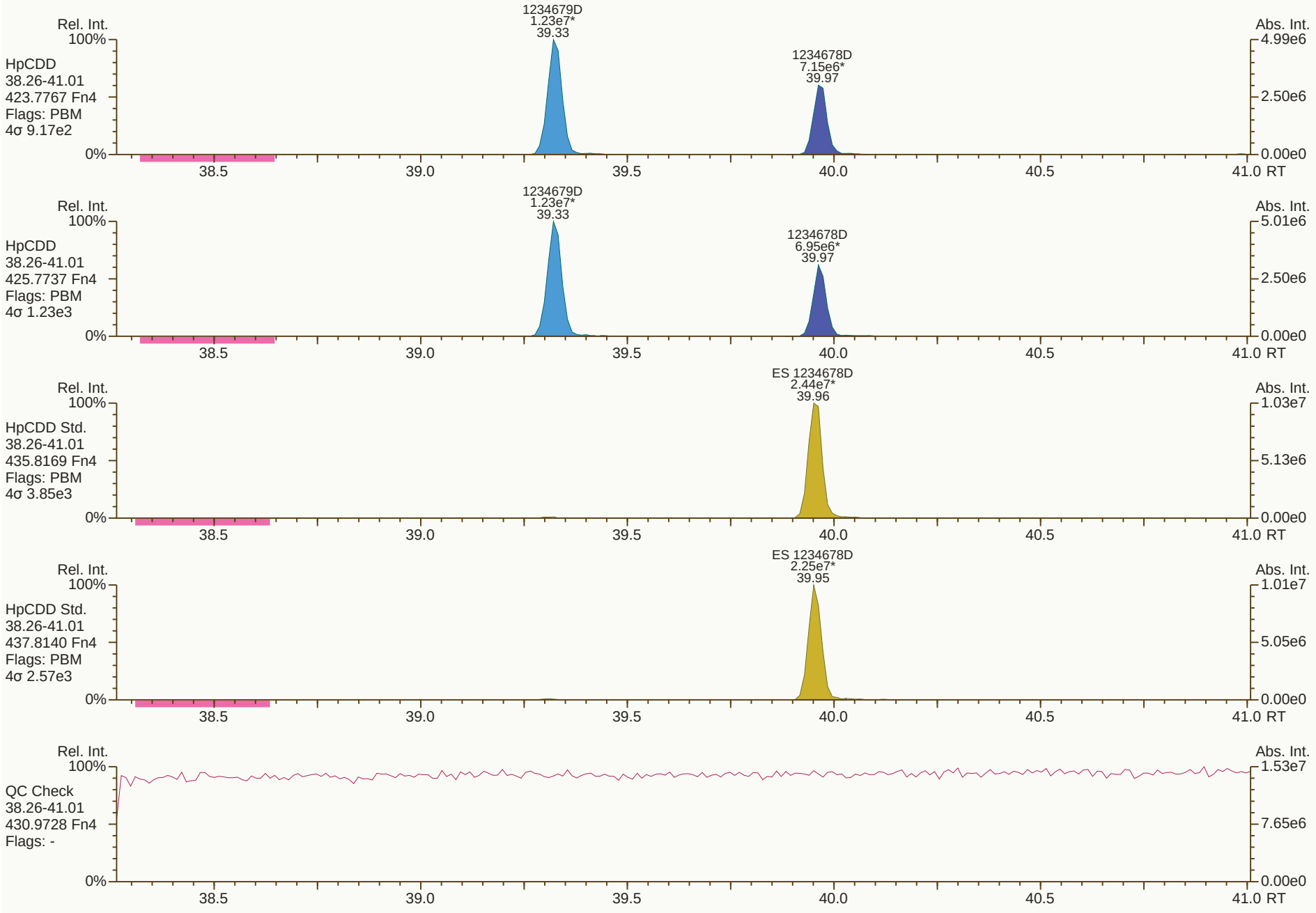

Rel. Int.
100%
TCDD
20.54-29.50
319.8965 Fn1
Flags: PBM
4σ 2.17e3
0%
1368D
6.52e4*
23.40
Abs. Int.
1.71e4
8.54e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD
20.54-29.50
321.8936 Fn1
Flags: PBM
4σ 1.95e3
0%
1368D
5.16e4*
23.41
Abs. Int.
1.52e4
7.58e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
37Cl-TCDD
20.54-29.50
327.8850 Fn1
Flags: PBM
4σ 2.04e3
0%
CS 37Cl-2378D
3.00e7*
27.30
Abs. Int.
6.93e6
3.46e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
331.9368 Fn1
Flags: PBM
4σ 5.10e3
0%
JS 1234D
3.54e7*
26.59
ES 2378D
2.75e7*
27.27
Abs. Int.
7.84e6
3.92e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
333.9339 Fn1
Flags: PBM
4σ 2.08e3
0%
JS 1234D
4.51e7*
26.59
ES 2378D
3.60e7*
27.27
Abs. Int.
9.77e6
4.88e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT

SGS ID: B4511_17654_DF_002 | Sample ID: CS-SB-125 | Acq: 07-Aug-2020 17:48:26
Instr: [ILM] AutoSpec-Ultima MM3 | VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 8 | User: PSW Datafile: 200807R06



Results: P:\B4500_B4599\B4511\B4511_17654 DF\Resources\B4511_17654_DF_002.utp_res, saved 10-Aug-2020 09:02 (PSW) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 4042, 0149 scc: 882-901 *PKD: 10-Aug-2020 08:15 Printed: 10-Aug-2020 09:17 Page 3 of 12*


Rel. Int.
100%
HxCDD
34.02-38.25
389.8156 Fn3
Flags: PBM
4σ 1.31e3
124679/124689D
7.56e5*
35.05
123679/123689D
7.46e5*
35.99
123468D
2.31e5*
35.70
123469D
2.98e5*
36.12
123678D
2.43e5*
36.86
123478D
8.05e4*
36.75
123467D
8.49e4*
37.06
123789D
1.64e5*
37.16
Abs. Int.
2.38e5
1.19e5
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD
34.02-38.25
391.8127 Fn3
Flags: PBM
4σ 3.17e3
124679/124689D
6.50e5*
35.05
123679/123689D
5.76e5*
35.99
123468D
1.78e5*
35.70
123469D
2.21e5*
36.12
123678D
2.05e5*
36.85
123478D
8.28e4*
36.74
123467D
6.75e4*
37.05
123789D
1.56e5*
37.16
Abs. Int.
2.04e5
1.02e5
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
401.8559 Fn3
Flags: PBM
4σ 5.12e3
ES 123678D
2.89e7*
36.84
ES 123478D
2.88e7*
36.73
JS 123467D
1.96e7*
37.04
ES 123789D
3.47e7*
37.14
Abs. Int.
1.05e7
5.23e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
403.8530 Fn3
Flags: PBM
4σ 4.02e3
ES 123678D
2.26e7*
36.84
ES 123478D
2.25e7*
36.73
JS 123467D
1.50e7*
37.04
ES 123789D
2.71e7*
37.14
Abs. Int.
8.13e6
4.07e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
Abs. Int.
2.25e7
1.13e7
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT


Rel. Int.
100%
HpCDD
38.26-41.01
423.7767 Fn4
Flags: PBM
4σ 9.17e2
0%
1234679D
1.23e7*
39.33
1234678D
7.15e6*
39.97
Abs. Int.
4.99e6
2.50e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.26-41.01
425.7737 Fn4
Flags: PBM
4σ 1.23e3
0%
1234679D
1.23e7*
39.33
1234678D
6.95e6*
39.97
Abs. Int.
5.01e6
2.50e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
435.8169 Fn4
Flags: PBM
4σ 3.85e3
0%
ES 1234678D
2.44e7*
39.96
Abs. Int.
1.03e7
5.13e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
437.8140 Fn4
Flags: PBM
4σ 2.57e3
0%
ES 1234678D
2.25e7*
39.95
Abs. Int.
1.01e7
5.05e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.26-41.01
430.9728 Fn4
Flags: -
0%
Abs. Int.
1.53e7
7.65e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT


OCDD
3.35e7*
42.39
Rel. Int.
100%
OCDD
41.02-45.00
457.7377 Fn5
Flags: PBM
4σ 2.96e3
0%
Abs. Int.
1.18e7
5.89e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDD
3.77e7*
42.39
Rel. Int.
100%
OCDD
41.02-45.00
459.7348 Fn5
Flags: PBM
4σ 3.40e3
0%
Abs. Int.
1.35e7
6.74e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
2.64e7*
42.38
Rel. Int.
100%
OCDD Std.
41.02-45.00
469.7780 Fn5
Flags: PBM
4σ 2.33e3
0%
Abs. Int.
9.30e6
4.65e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
2.92e7*
42.38
Rel. Int.
100%
OCDD Std.
41.02-45.00
471.7750 Fn5
Flags: PBM
4σ 2.41e3
0%
Abs. Int.
1.05e7
5.27e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
7.51e6
3.76e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

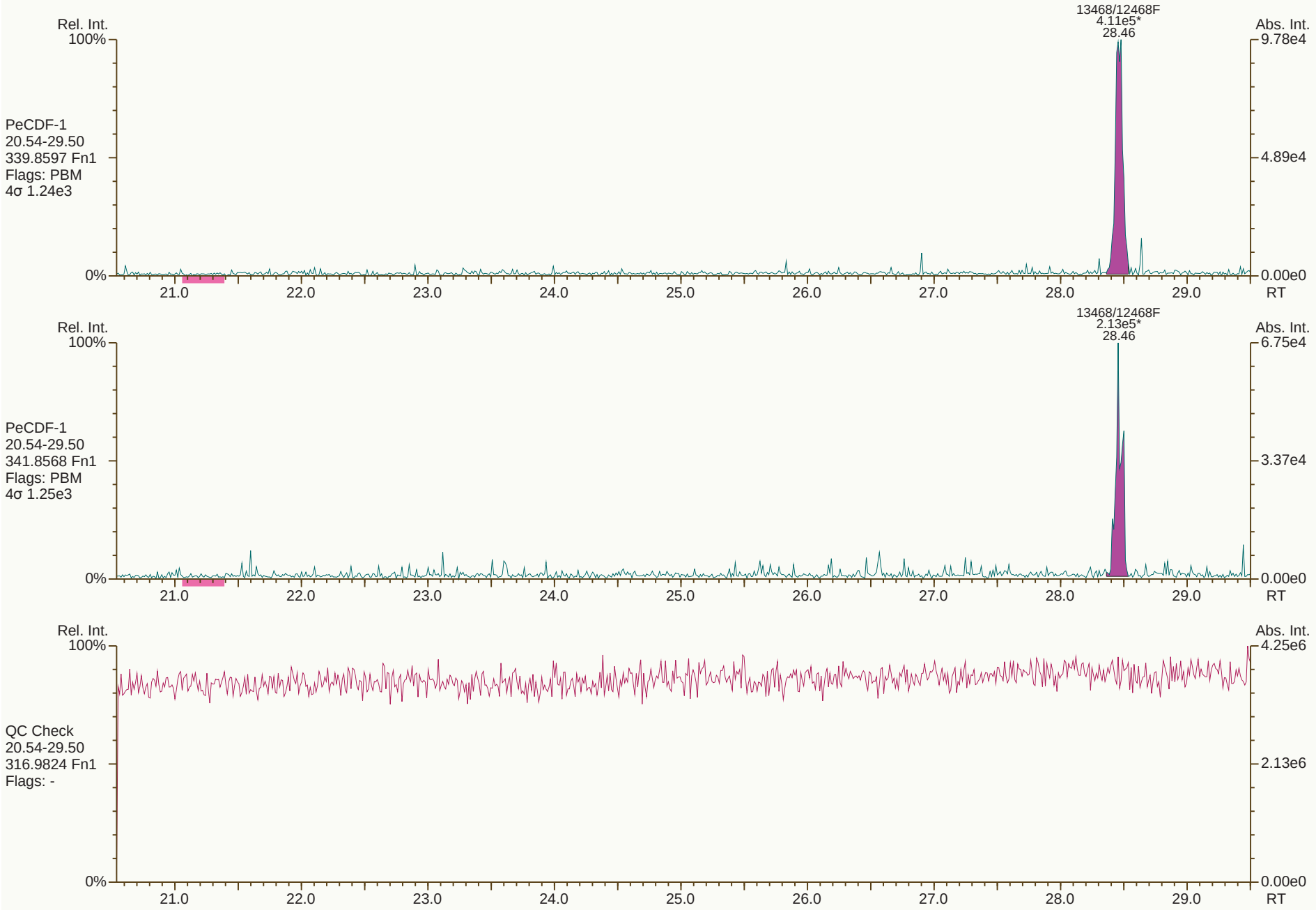
SGS ID: B4511_17654_DF_002 | Sample ID: CS-SB-125 | Acq: 07-Aug-2020 17:48:26
Instr: [ILM] AutoSpec-Ultima MM3 | VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 8 | User: PSW Datafile: 200807R06



Results: P:\B4500_B4599\B4511\B4511_17654 DF\Resources\B4511_17654_DF_002.utp_res, saved 10-Aug-2020 09:02 (PSW) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 6032, 3263, 7603 scc: 882-901 *PKD: 10-Aug-2020 08:15 Printed: 10-Aug-2020 09:17 Page 7 of 12*

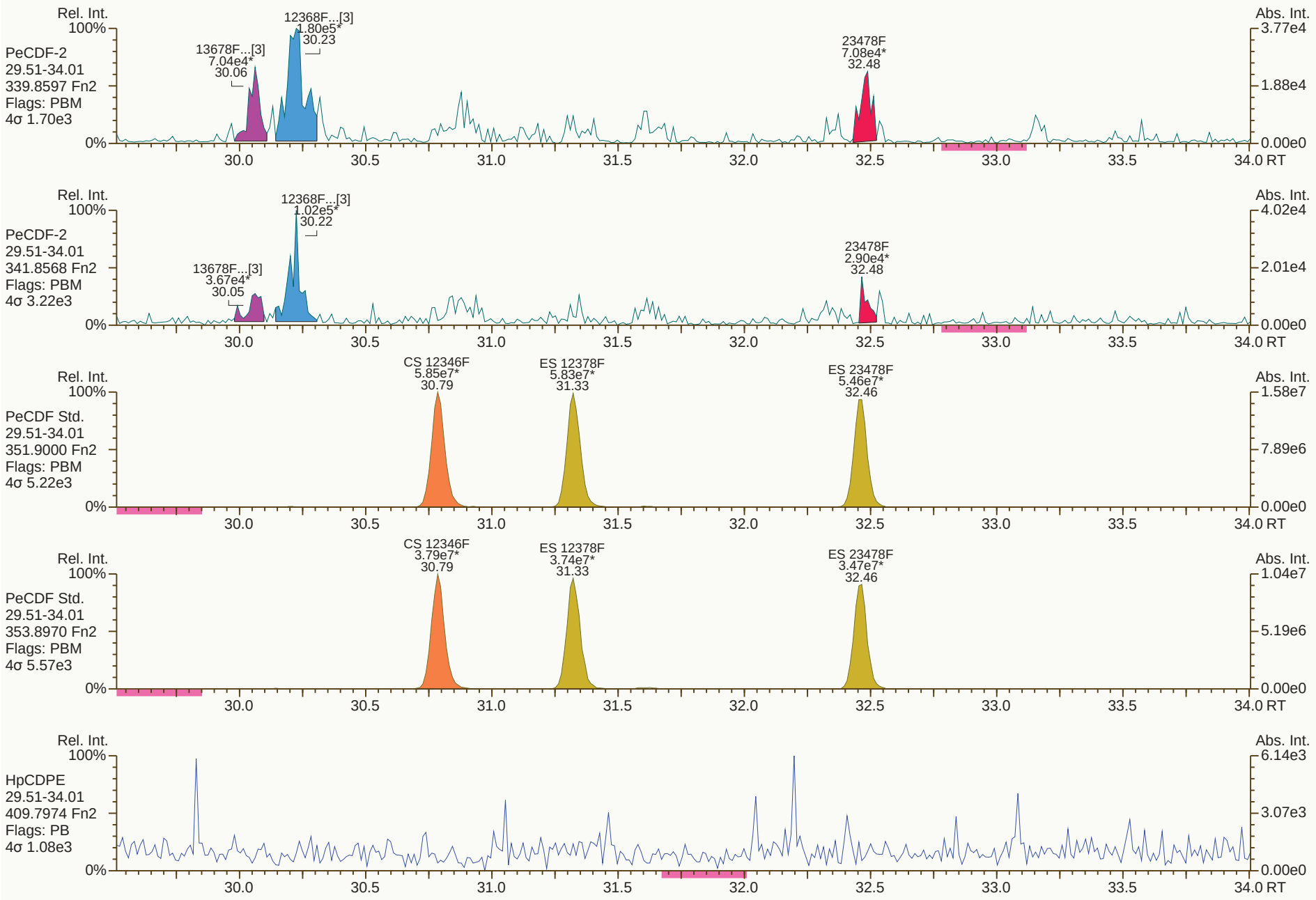
SGS ID: B4511_17654_DF_002 **Sample ID: CS-SB-125** **Acq: 07-Aug-2020 17:48:26**

Instr: [ILM] AutoSpec-Ultima MM3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 8** **User: PSW Datafile: 200807R06**

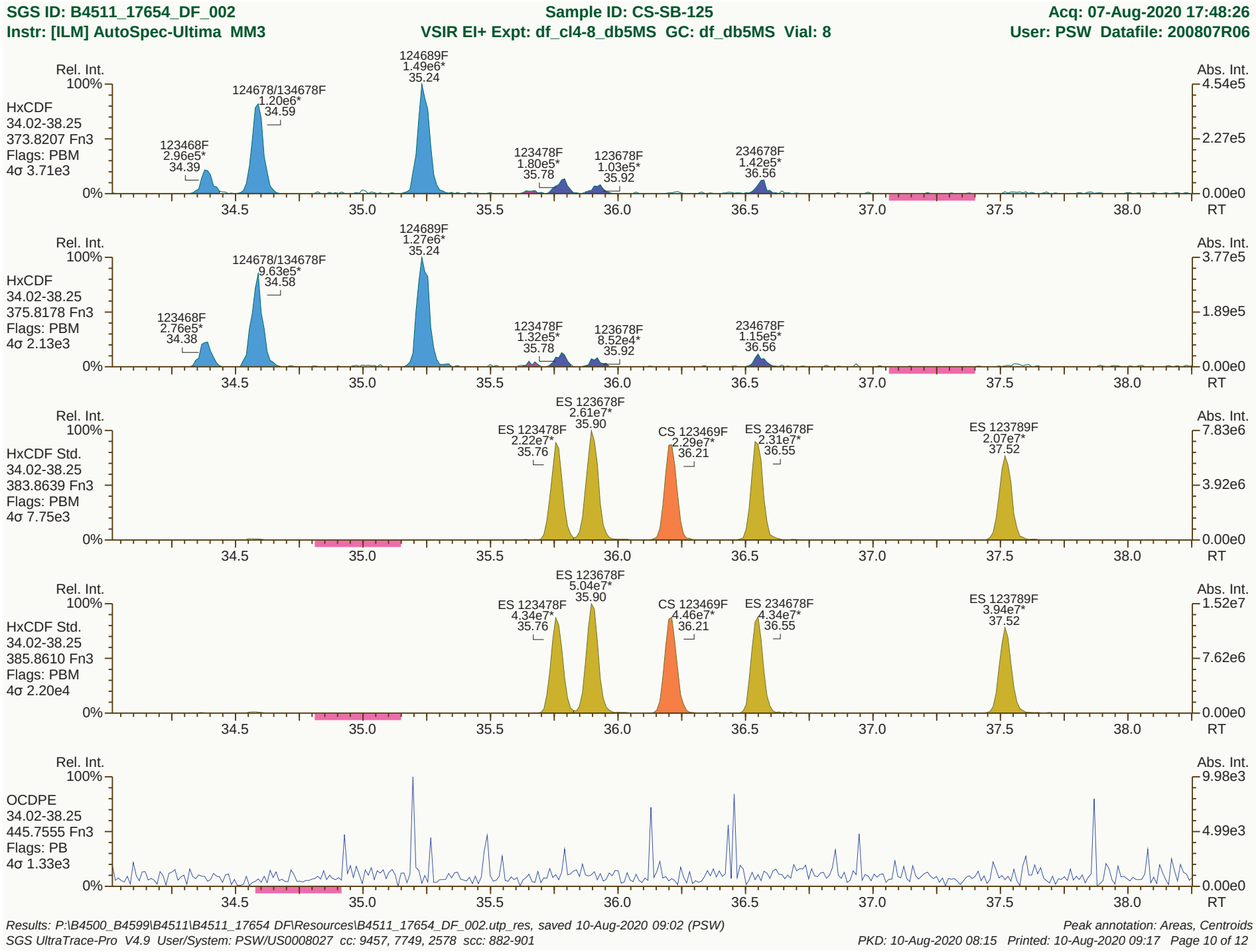


Results: P:\B4500_B4599\B4511\B4511_17654 DF\Resources\B4511_17654_DF_002.utp_res, saved 10-Aug-2020 09:02 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 9763 scc: 882-901 *Revised: 10-Aug-2020 08:12 (PSW) Printed: 10-Aug-2020 09:17 Page 8 of 12*

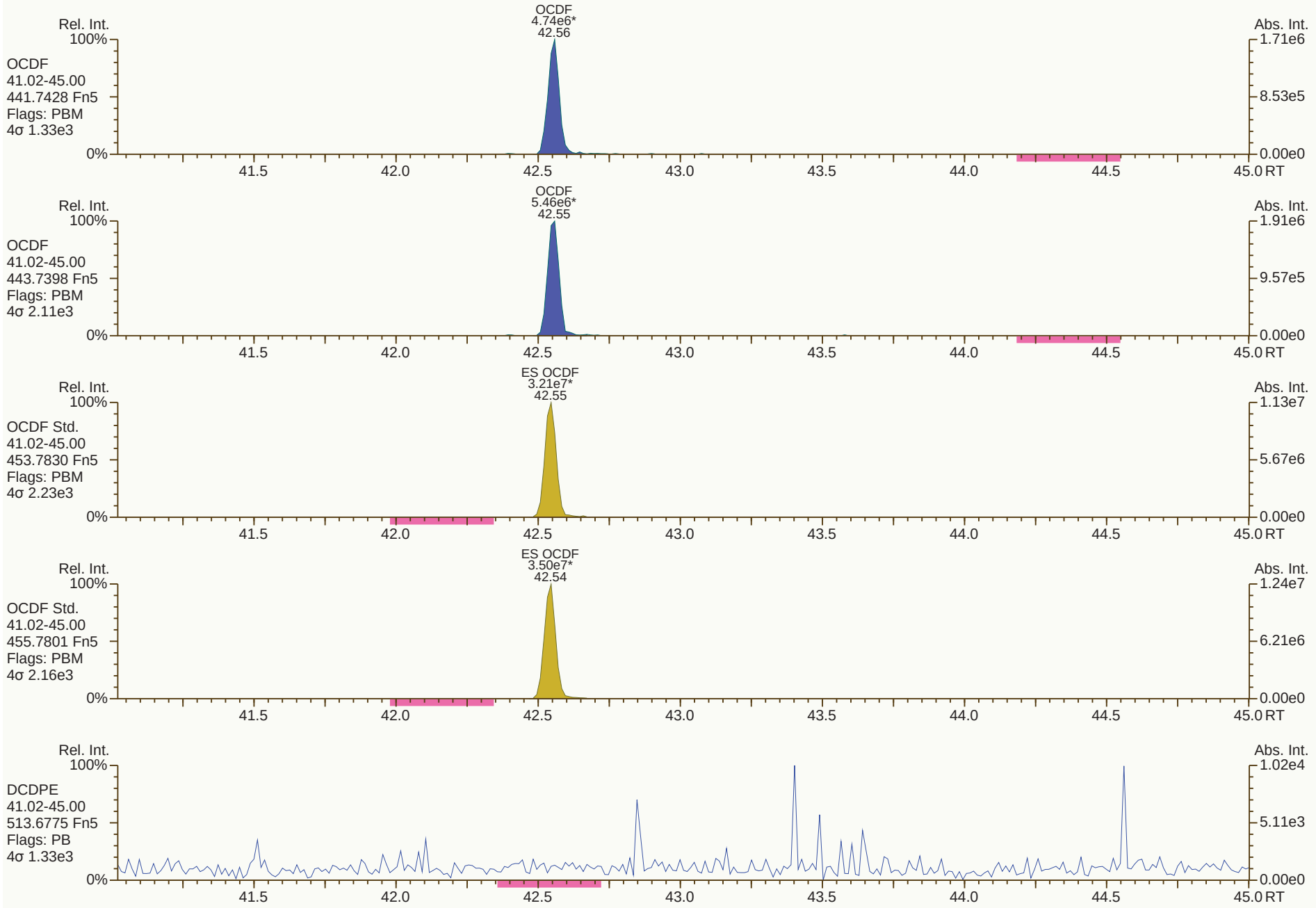

Rel. Int.
100%
PeCDF-2
29.51-34.01
339.8597 Fn2
Flags: PBM
4σ 1.70e3
13678F...[3]
7.04e4*
30.06
12368F...[3]
1.80e5*
30.23
23478F
7.08e4*
32.48
Abs. Int.
3.77e4
1.88e4
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF-2
29.51-34.01
341.8568 Fn2
Flags: PBM
4σ 3.22e3
13678F...[3]
3.67e4*
30.05
12368F...[3]
1.02e5*
30.22
23478F
2.90e4*
32.48
Abs. Int.
4.02e4
2.01e4
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
351.9000 Fn2
Flags: PBM
4σ 5.22e3
CS 12346F
5.85e7*
30.79
ES 12378F
5.83e7*
31.33
ES 23478F
5.46e7*
32.46
Abs. Int.
1.58e7
7.89e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
353.8970 Fn2
Flags: PBM
4σ 5.57e3
CS 12346F
3.79e7*
30.79
ES 12378F
3.74e7*
31.33
ES 23478F
3.47e7*
32.46
Abs. Int.
1.04e7
5.19e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
HpCDPE
29.51-34.01
409.7974 Fn2
Flags: PB
4σ 1.08e3
Abs. Int.
6.14e3
3.07e3
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT

SGS ID: B4511_17654_DF_002 | Sample ID: CS-SB-125 | Acq: 07-Aug-2020 17:48:26
Instr: [ILM] AutoSpec-Ultima MM3 | VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 8 | User: PSW Datafile: 200807R06



Results: P:\B4500_B4599\B4511\B4511_17654 DF\Resources\B4511_17654_DF_002.utp_res, saved 10-Aug-2020 09:02 (PSW) | Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 9457, 7749, 2578 scc: 882-901 | PKD: 10-Aug-2020 08:15 Printed: 10-Aug-2020 09:17 Page 10 of 12


Rel. Int.
100%
HpCDF
38.26-41.01
407.7818 Fn4
Flags: PBM
4σ 1.60e3
0%
1234678F
2.82e6*
39.06
1234689F
5.68e6*
39.47
Abs. Int.
2.22e6
1.11e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF
38.26-41.01
409.7788 Fn4
Flags: PBM
4σ 3.00e3
0%
1234678F
2.84e6*
39.06
1234689F
5.47e6*
39.47
Abs. Int.
2.27e6
1.14e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.26-41.01
417.8253 Fn4
Flags: PBM
4σ 2.27e3
0%
ES 1234678F
1.67e7*
39.05
CS 1234689F
1.71e7*
39.46
ES 1234789F
1.34e7*
40.37
Abs. Int.
7.14e6
3.57e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.26-41.01
419.8220 Fn4
Flags: PBM
4σ 2.42e3
0%
ES 1234678F
3.85e7*
39.05
CS 1234689F
3.85e7*
39.46
ES 1234789F
2.94e7*
40.37
Abs. Int.
1.54e7
7.70e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
NCDPE
38.26-41.01
479.7165 Fn4
Flags: PB
4σ 1.09e3
0%
RT
Abs. Int.
7.26e4
3.63e4
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT


OCDF
4.74e6*
42.56
Rel. Int.
100%
OCDF
41.02-45.00
441.7428 Fn5
Flags: PBM
4σ 1.33e3
0%
Abs. Int.
1.71e6
8.53e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDF
5.46e6*
42.55
Rel. Int.
100%
OCDF
41.02-45.00
443.7398 Fn5
Flags: PBM
4σ 2.11e3
0%
Abs. Int.
1.91e6
9.57e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDF
3.21e7*
42.55
Rel. Int.
100%
OCDF Std.
41.02-45.00
453.7830 Fn5
Flags: PBM
4σ 2.23e3
0%
Abs. Int.
1.13e7
5.67e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDF
3.50e7*
42.54
Rel. Int.
100%
OCDF Std.
41.02-45.00
455.7801 Fn5
Flags: PBM
4σ 2.16e3
0%
Abs. Int.
1.24e7
6.21e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
DCDPE
41.02-45.00
513.6775 Fn5
Flags: PB
4σ 1.33e3
0%
Abs. Int.
1.02e4
5.11e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

Lab ID: B4511_17654_DF_003 **Acq'd:** 07 Aug 2020 18:35 PSW **Wt/Vol:** 9.02 g **ICAL:** MM3_DF_10012020_12JUN2020

Client ID: CS-24 **UTP:** 10-Aug-2020 09:02:21 PSW **J-level:** 0.554 pg/g **Split:** 1 **Checkcode:** 425-303-DYK

Datafile: 200807R07 **Report:** 10 Aug 2020 09:06 pw **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	NotFnd		1.0009	-		-	-	-	1.18	-	3569	0.109
12378-PeCDD	32.81	J	1.0006	1.0002	-0.8	1.28E+05	1.63	Y	1.14	0.433	3775	0.113
123478-HxCDD	36.74	J	1.0004	1.0005	+0.2	2.73E+05	1.35	Y	1.09	1.04	5331	0.165
123678-HxCDD	36.85	J	1.0035	1.0034	-0.2	6.61E+05	1.23	Y	1.13	2.6	5331	0.177
123789-HxCDD	37.15	J	1.0116	1.0117	+0.2	4.71E+05	1.36	Y	1.05	1.61	5331	0.149
1234678-HpCDD	39.96		1.0003	1.0003	0	1.75E+07	1.05	Y	0.98	91.2	2673	0.082
OCDD	42.38		1.0003	1.0003	0	1.03E+08	0.89	Y	1.08	928	6226	0.34
2378-TCDF	26.36	J EMPC	1.0006	1.0005	-0.2	9.51E+04	0.55	N	0.98	0.204	2829	0.0683
12378-PeCDF	31.34	J EMPC	1.0006	1.0007	+0.2	9.52E+04	1.29	N	0.95	0.225	6309	0.141
23478-PeCDF	32.49	J	1.0005	1.0011	+1.2	4.45E+05	1.77	Y	0.95	1.12	6309	0.143
123478-HxCDF	35.77	J	1.0005	1.0005	0	5.25E+05	1.14	Y	1.20	1.42	6523	0.142
123678-HxCDF	35.90	J	1.0004	1.0003	-0.2	3.16E+05	1.22	Y	1.07	0.854	6523	0.149
234678-HxCDF	36.55	J	1.0005	1.0003	-0.4	4.64E+05	1.23	Y	1.10	1.41	6523	0.158
123789-HxCDF	NotFnd		1.0004	-		-	-	-	1.09	-	6523	0.195
1234678-HpCDF	39.05		1.0003	1.0003	0	6.01E+06	1.01	Y	1.28	19.9	2176	0.0451
1234789-HpCDF	40.37	J	1.0002	1.0002	0	2.54E+05	1.08	Y	1.27	1.14	2176	0.059
OCDF	42.55		1.0003	1.0002	-0.3	6.06E+06	0.89	Y	1.01	46.5	3603	0.182

Name	Act RT		Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	27.27		1.0255	1.0256	+0.2	6.32E+07	0.78	Y	1.01	70.5
ES 12378-PeCDD	32.80		1.2330	1.2340	+2.0	5.79E+07	1.64	Y	0.87	74.6
ES 123478-HxCDD	36.72		0.9917	0.9916	-0.2	5.34E+07	1.28	Y	1.10	63.3
ES 123678-HxCDD	36.83		0.9947	0.9947	0	5.01E+07	1.25	Y	1.06	61.4
ES 123789-HxCDD	37.13		1.0028	1.0028	0	6.19E+07	1.30	Y	1.22	66.1
ES 1234678-HpCDD	39.95		1.0785	1.0787	+0.5	4.33E+07	1.08	Y	0.99	56.8
ES OCDD	42.37		1.1439	1.1441	+0.5	4.56E+07	0.92	Y	0.67	44.3
ES 2378-TCDF	26.34		1.0572	1.0575	+0.5	1.06E+08	0.77	Y	1.01	72.1
ES 12378-PeCDF	31.32		1.2558	1.2570	+2.3	9.88E+07	1.62	Y	0.90	76
ES 23478-PeCDF	32.45		1.3012	1.3026	+2.7	9.33E+07	1.56	Y	0.89	72.6
ES 123478-HxCDF	35.75		0.9655	0.9654	-0.2	6.84E+07	0.52	Y	1.43	62.2
ES 123678-HxCDF	35.89		0.9693	0.9692	-0.2	7.66E+07	0.53	Y	1.63	61
ES 234678-HxCDF	36.54		0.9867	0.9867	0	6.64E+07	0.54	Y	1.48	58.4
ES 123789-HxCDF	37.51		1.0130	1.0130	0	5.81E+07	0.52	Y	1.29	58.5
ES 1234678-HpCDF	39.04		1.0540	1.0542	+0.5	5.22E+07	0.45	Y	1.15	59.3
ES 1234789-HpCDF	40.36		1.0898	1.0900	+0.5	3.91E+07	0.44	Y	0.91	56
ES OCDF	42.54		1.1484	1.1486	+0.5	5.72E+07	0.88	Y	0.83	44.9

Lab ID: B4511_17654_DF_003 | Acq'd: 07 Aug 2020 18:35 PSW | Wt/Vol: 9.02 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-24 | UTP: 10-Aug-2020 09:02:21 PSW | J-level: 0.554 pg/g | Split: 1 | Checkcode: 425-303-DYK

Datafile: 200807R07 | Report: 10 Aug 2020 09:06 pw | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %	
JS 1234-TCDD	26.58		-	-	-	8.91E+07	0.79	Y	-	-	
JS 1234-TCDF	24.91		-	-	-	1.44E+08	0.80	Y	-	-	
JS 123467-HxCDD	37.03		-	-	-	3.85E+07	1.33	Y	-	-	
CS 37Cl-2378-TCDD	27.29		1.0265	1.0265	0	3.32E+07	n/a	-	1.04	89.8	
CS 12347-PeCDD	32.30		1.2141	1.2149	+1.6	6.40E+07	1.73	Y	0.74	97	
CS 12346-PeCDF	30.78		1.2343	1.2355	+2.2	1.07E+08	1.53	Y	0.86	86.1	
CS 123469-HxCDF	36.20		0.9776	0.9775	-0.2	7.32E+07	0.51	Y	1.36	70.2	
CS 1234689-HpCDF	39.45		1.0650	1.0652	+0.5	5.55E+07	0.46	Y	1.05	68.4	
~~SS 37Cl-2378-TCDD~~	~~27.29~~		~~1.0265~~	~~1.0265~~	~~0~~	~~3.32E+07~~	~~n/a~~		~~1.04~~	~~127~~	Not used in this project.
~~SS 12347-PeCDD~~	~~32.30~~		~~1.2141~~	~~1.2149~~	~~+1.6~~	~~6.40E+07~~	~~1.73~~	~~Y~~	~~0.86~~	~~129~~	CL 10Aug20
~~SS 12346-PeCDF~~	~~30.78~~		~~1.2343~~	~~1.2355~~	~~+2.2~~	~~1.07E+08~~	~~1.53~~	~~Y~~	~~0.96~~	~~113~~	
~~SS 123469-HxCDF~~	~~36.20~~		~~0.9776~~	~~0.9775~~	~~-0.2~~	~~7.32E+07~~	~~0.51~~	~~Y~~	~~0.83~~	~~115~~	
~~SS 1234689-HpCDF~~	~~39.45~~		~~1.0650~~	~~1.0652~~	~~+0.5~~	~~5.55E+07~~	~~0.46~~	~~Y~~	~~0.92~~	~~115~~	

Totals	Conc	EMPC
Total TCDD	0.293	0.885
Total PeCDD	2.24	3.86
Total HxCDD	29.3	31.8
Total HpCDD	309	309
Total Tetra-Octa Dioxins	1270	1270
Total TCDF	3.19	5.45
Total PeCDF	9.67	11.3
Total HxCDF	25.9	26.4
Total HpCDF	57.5	57.5
Total Tetra-Octa Furans	143	147
Total Tetra-Octa Dioxins & Furans	1410	1420

Lab ID: B4511_17654_DF_003 **Acq'd:** 07 Aug 2020 18:35 PSW **Wt/Vol:** 9.02 g **ICAL:** MM3_DF_10012020_12JUN2020

Client ID: CS-24 **UTP:** 10-Aug-2020 09:02:21 PSW **J-level:** 0.554 pg/g **Split:** 1 **Checkcode:** 425-303-DYK

Datafile: 200807R07 **Report:** 10 Aug 2020 09:06 pw **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1368-TCDD	23.40	EMPC	0.8591	0.8581	-1.4	1.99E+05	0.95	N	1.18	0.592	3569	0.109
1379-TCDD	23.79	J	0.8732	0.8724	-1.1	9.85E+04	0.74	Y	1.18	0.293	3569	0.109
1369-TCDD	NotFnd		0.8901						1.18		3569	0.109
1469-TCDD	NotFnd		0.9205						1.18		3569	0.109
1247/1246/1248/1249-TCDD	NotFnd		0.9301						1.18		3569	0.109
1378-TCDD	NotFnd		0.9374						1.18		3569	0.109
1268-TCDD	NotFnd		0.9449						1.18		3569	0.109
1478-TCDD	NotFnd		0.9544						1.18		3569	0.109
1279-TCDD	NotFnd		0.9610						1.18		3569	0.109
1234/1269-TCDD	NotFnd		0.9746						1.18		3569	0.109
1236-TCDD	NotFnd		0.9802						1.18		3569	0.109
1237/1238-TCDD	NotFnd		0.9898						1.18		3569	0.109
1239-TCDD	NotFnd		0.9950						1.18		3569	0.109
2378-TCDD	**NotFnd**		**1.0009**						**1.18**		**3569**	**0.109**
1278-TCDD	NotFnd		1.0133						1.18		3569	0.109
1267-TCDD	NotFnd		1.0185						1.18		3569	0.109
1289-TCDD	NotFnd		1.0379						1.18		3569	0.109
12479/12468-PeCDD	30.27	J	0.9229	0.9228	-0.2	3.31E+05	1.49	Y	1.14	1.12	3775	0.113
12469-PeCDD	30.80	J EMPC	0.9396	0.9389	-1.3	1.34E+05	2.18	N	1.14	0.45	3775	0.113
12368-PeCDD	31.38	J EMPC	0.9568	0.9567	-0.2	1.22E+05	1.29	N	1.14	0.411	3775	0.113
12478-PeCDD	31.58	J EMPC	0.9626	0.9626	0	1.32E+05	1.31	N	1.14	0.445	3775	0.113
12379-PeCDD	31.68	J	0.9657	0.9656	-0.2	1.03E+05	1.69	Y	1.14	0.346	3775	0.113
12369/12467/12489-PeCDD	31.94	J EMPC	0.9738	0.9736	-0.4	9.30E+04	1.81	N	1.14	0.314	3775	0.113
12346/12347-PeCDD	32.33	J	0.9853	0.9855	+0.4	1.01E+05	1.33	Y	1.14	0.341	3775	0.113
12378-PeCDD	32.81	J	**1.0006**	**1.0002**	**-0.8**	**1.28E+05**	**1.63**	**Y**	**1.14**	**0.433**	**3775**	**0.113**
12367-PeCDD	NotFnd		1.0034						1.14		3775	0.113
12389-PeCDD	NotFnd		1.0141						1.14		3775	0.113
124679/124689-HxCDD	35.04		0.9542	0.9542	0	3.02E+06	1.22	Y	1.09	11.2	5331	0.162
123468-HxCDD	35.69	J EMPC	0.9721	0.9720	-0.2	6.78E+05	1.43	N	1.09	2.51	5331	0.162
123679/123689-HxCDD	35.99		0.9799	0.9799	0	2.59E+06	1.22	Y	1.09	9.57	5331	0.162
123469-HxCDD	36.11	J	0.9835	0.9834	-0.2	6.78E+05	1.38	Y	1.09	2.51	5331	0.162
123478-HxCDD	36.74	J	**1.0004**	**1.0005**	**+0.2**	**2.73E+05**	**1.35**	**Y**	1.09	**1.04**	**5331**	**0.165**
123678-HxCDD	36.85	J	**1.0035**	**1.0034**	**-0.2**	**6.61E+05**	**1.23**	**Y**	1.13	**2.6**	**5331**	**0.177**
123467-HxCDD	37.05	J	1.0088	1.0089	+0.2	2.29E+05	1.34	Y	1.09	0.846	5331	0.162
123789-HxCDD	37.15	J	**1.0116**	**1.0117**	**+0.2**	**4.71E+05**	**1.36**	**Y**	1.05	**1.61**	**5331**	**0.149**

Lab ID: B4511_17654_DF_003 | Acq'd: 07 Aug 2020 18:35 PSW | Wt/Vol: 9.02 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-24 | UTP: 10-Aug-2020 09:02:21 PSW | J-level: 0.554 pg/g | Split: 1 | Checkcode: 425-303-DYK

Datafile: 200807R07 | Report: 10 Aug 2020 09:06 pw | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1234679-HpCDD	39.32		0.9843	0.9842	-0.2	4.18E+07	1.04	Y	0.98	218	2673	0.082
1234678-HpCDD	**39.96**		**1.0003**	**1.0003**	**0**	**1.75E+07**	**1.05**	**Y**	**0.98**	**91.2**	**2673**	**0.082**
OCDD	**42.38**		**1.0003**	**1.0003**	**0**	**1.03E+08**	**0.89**	**Y**	**1.08**	**928**	**6226**	**0.34**
OCDD-a	42.38		1.0002	1.0002	0	6.15E+06	2.45	Y	0.07	904	3889	3.44
1368-TCDF	21.15	J	0.8044	0.8027	-2.2	6.29E+04	0.83	Y	0.98	0.135	2829	0.0683
1468-TCDF	21.73	J	0.8261	0.8249	-1.6	1.04E+05	0.86	Y	0.98	0.222	2829	0.0683
2468-TCDF	22.40		0.8511	0.8504	-0.9	5.78E+05	0.76	Y	0.98	1.24	2829	0.0683
1346/1246-TCDF	22.85	J EMPC	0.8665	0.8673	+1.1	6.96E+04	0.53	N	0.98	0.149	2829	0.0683
1347/1378/1247-TCDF	22.97	J EMPC	0.8723	0.8718	-0.7	1.84E+05	0.92	N	0.98	0.395	2829	0.0683
1348-TCDF	NotFnd		0.8835						0.98		2829	0.0683
1248/1367/1379-TCDF	23.37	J	0.8888	0.8872	-2.2	1.68E+05	0.82	Y	0.98	0.359	2829	0.0683
1268-TCDF	23.81	J	0.9044	0.9040	-0.6	2.14E+05	0.77	Y	0.98	0.459	2829	0.0683
1467-TCDF	NotFnd		0.9098						0.98		2829	0.0683
1478-TCDF	24.13	J	0.9167	0.9162	-0.7	8.05E+04	0.77	Y	0.98	0.172	2829	0.0683
1369/1237-TCDF	24.55	J EMPC	0.9316	0.9318	+0.3	3.18E+04	0.62	N	0.98	0.0681	2829	0.0683
2467-TCDF	24.67	J	0.9369	0.9365	-0.6	6.31E+04	0.77	Y	0.98	0.135	2829	0.0683
2368-TCDF	24.84	J EMPC	0.9430	0.9431	+0.1	2.48E+05	0.64	N	0.98	0.531	2829	0.0683
1238/1234/1678/1469/1236-TCDF	24.95	J EMPC	0.9468	0.9470	+0.3	7.73E+04	1.25	N	0.98	0.166	2829	0.0683
1278-TCDF	25.42	J	0.9651	0.9650	-0.2	1.09E+05	0.85	Y	0.98	0.232	2829	0.0683
1349-TCDF	NotFnd		0.9704						0.98		2829	0.0683
1267-TCDF	25.72	J	0.9761	0.9762	+0.2	6.67E+04	0.66	Y	0.98	0.143	2829	0.0683
2346/1249-TCDF	NotFnd		0.9834						0.98		2829	0.0683
2347/1279-TCDF	26.15	J EMPC	0.9921	0.9925	+0.6	4.63E+04	1.60	N	0.98	0.0991	2829	0.0683
2348-TCDF	26.25	J	0.9964	0.9965	+0.2	4.51E+04	0.77	Y	0.98	0.0966	2829	0.0683
2378-TCDF	**26.36**	J EMPC	**1.0006**	**1.0005**	**-0.2**	**9.51E+04**	**0.55**	**N**	**0.98**	**0.204**	**2829**	**0.0683**
2367/3467-TCDF	26.74	J EMPC	1.0156	1.0151	-0.8	1.22E+05	0.55	N	0.98	0.262	2829	0.0683
1269-TCDF	NotFnd		1.0249						0.98		2829	0.0683
1239-TCDF	NotFnd		1.0357						0.98		2829	0.0683
1289-TCDF	28.46	J EMPC	1.0799	1.0802	+0.5	1.79E+05	1.53	N	0.98	0.384	2829	0.0683
13468/12468-PeCDF	28.45		0.9084	0.9086	+0.3	2.04E+06	1.62	Y	0.95	4.97	3321	0.0747
13678/13467/12467-PeCDF	30.04	J EMPC	0.9591	0.9594	+0.5	1.98E+05	1.19	N	0.95	0.482	6309	0.142
12368/13478/12478-PeCDF	30.20		0.9642	0.9645	+0.5	1.16E+06	1.56	Y	0.95	2.82	6309	0.142
14678-PeCDF	NotFnd		0.9675						0.95		6309	0.142
13479-PeCDF	NotFnd		0.9706						0.95		6309	0.142
13469/12479-PeCDF	NotFnd		0.9787						0.95		6309	0.142
12346-PeCDF	NotFnd		0.9833						0.95		6309	0.142

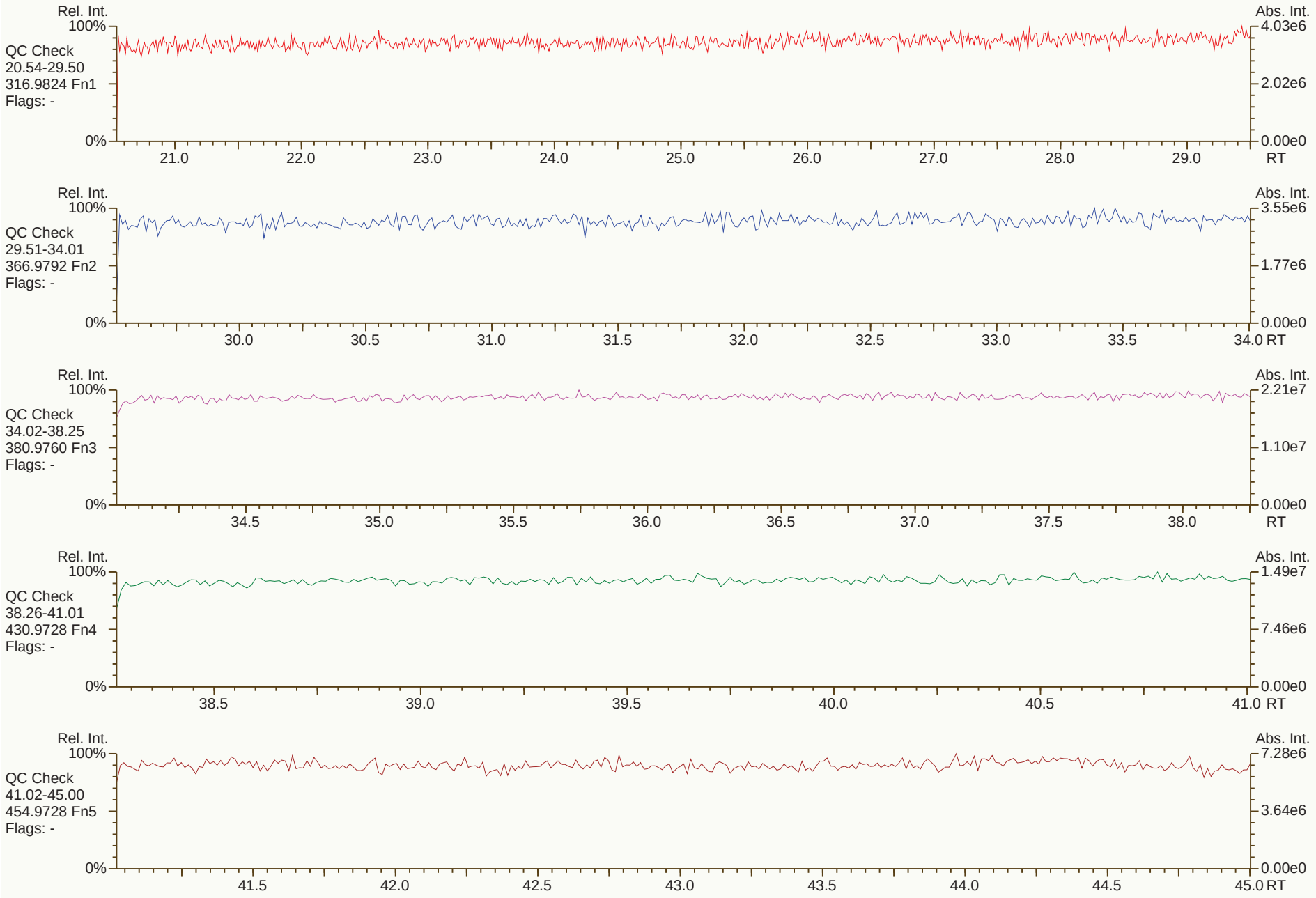
Lab ID: B4511_17654_DF_003 | Acq'd: 07 Aug 2020 18:35 PSW | Wt/Vol: 9.02 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-24 | UTP: 10-Aug-2020 09:02:21 PSW | J-level: 0.554 pg/g | Split: 1 | Checkcode: 425-303-DYK

Datafile: 200807R07 | Report: 10 Aug 2020 09:06 pw | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

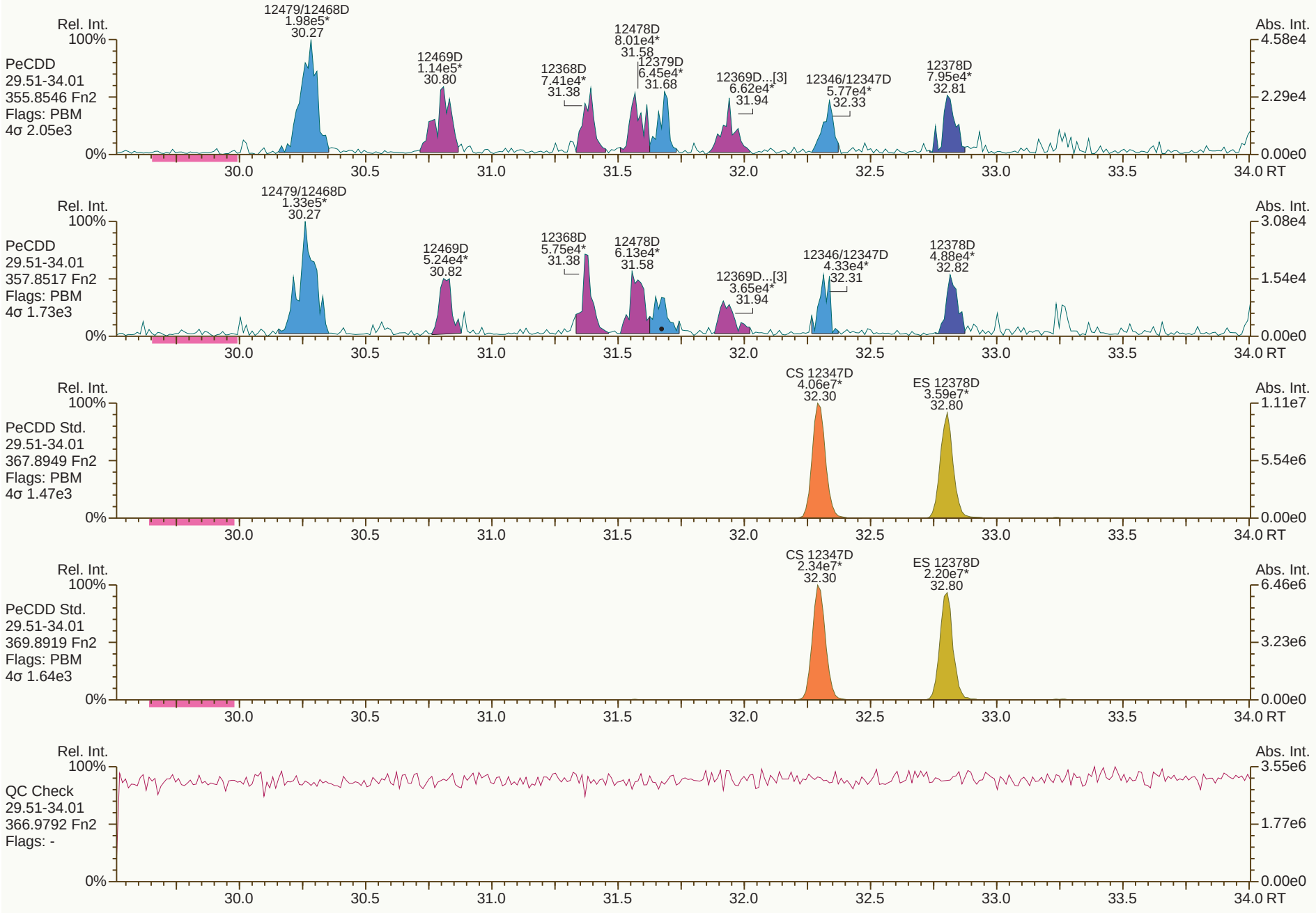
Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
23468/12469-PeCDF	30.89	J EMPC	0.9861	0.9864	+0.6	3.77E+05	1.86	N	0.95	0.919	6309	0.142
12347-PeCDF	NotFnd		0.9887						0.95		6309	0.142
12348-PeCDF	NotFnd		0.9938						0.95		6309	0.142
12378-PeCDF	**31.34**	J EMPC	**1.0006**	**1.0007**	**+0.2**	**9.52E+04**	**1.29**	**N**	**0.95**	**0.225**	**6309**	**0.141**
12678/12367-PeCDF	31.64	J	1.0095	1.0104	+1.7	2.04E+05	1.72	Y	0.95	0.498	6309	0.142
12379-PeCDF	NotFnd		1.0150						0.95		6309	0.142
12679-PeCDF	NotFnd		0.9926						0.95		6309	0.142
23467/12369-PeCDF	32.34	J	0.9966	0.9966	0	1.11E+05	1.75	Y	0.95	0.27	6309	0.142
23478-PeCDF	**32.49**	J	**1.0005**	**1.0011**	**+1.2**	**4.45E+05**	**1.77**	**Y**	**0.95**	**1.12**	**6309**	**0.143**
23478/12489-PeCDF	NotFnd		0.0000						0.95			
12489-PeCDF	NotFnd		1.0047						0.95		6309	0.142
12349-PeCDF	NotFnd		1.0107						0.95		6309	0.142
12389-PeCDF	NotFnd		1.0339						0.95		6309	0.142
123468-HxCDF	34.38	J	0.9617	0.9616	-0.2	9.23E+05	1.08	Y	1.11	2.73	6523	0.159
124678/134678-HxCDF	34.58		0.9673	0.9671	-0.4	3.19E+06	1.35	Y	1.11	9.43	6523	0.159
134679-HxCDF	NotFnd		0.9737						1.11		6523	0.159
124679-HxCDF	35.01	J	0.9792	0.9792	0	7.55E+04	1.41	Y	1.11	0.223	6523	0.159
124689-HxCDF	35.23		0.9854	0.9854	0	3.32E+06	1.25	Y	1.11	9.8	6523	0.159
123467-HxCDF	35.65	J EMPC	0.9972	0.9971	-0.2	1.06E+05	0.94	N	1.11	0.314	6523	0.159
123478-HxCDF	**35.77**	J	**1.0005**	**1.0005**	**0**	**5.25E+05**	**1.14**	**Y**	**1.20**	**1.42**	**6523**	**0.142**
123678-HxCDF	**35.90**	J	**1.0004**	**1.0003**	**-0.2**	**3.16E+05**	**1.22**	**Y**	**1.07**	**0.854**	**6523**	**0.149**
123479-HxCDF	NotFnd		1.0049						1.11		6523	0.159
123469-HxCDF	NotFnd		1.0089						1.11		6523	0.159
123679-HxCDF	NotFnd		0.9945						1.11		6523	0.159
234678-HxCDF	**36.55**	J	**1.0005**	**1.0003**	**-0.4**	**4.64E+05**	**1.23**	**Y**	**1.10**	**1.41**	**6523**	**0.158**
234678/123689-HxCDF	NotFnd		0.0000						1.10			
123689-HxCDF	NotFnd		1.0054						1.11		6523	0.159
123789-HxCDF	**NotFnd**		**1.0004**						**1.09**		**6523**	**0.195**
123789/123489-HxCDF	NotFnd		0.0000						1.09			
123489-HxCDF	37.55	J EMPC	1.0008	1.0010	+0.5	6.59E+04	1.43	N	1.11	0.195	6523	0.159
1234678-HpCDF	**39.05**		**1.0003**	**1.0003**	**0**	**6.01E+06**	**1.01**	**Y**	**1.28**	**19.9**	**2176**	**0.0451**
1234679-HpCDF	39.32	**J**	1.0072	1.0072	0	2.14E+05	1.15	Y	1.27	0.814	2176	0.0511
1234689-HpCDF	39.46		1.0107	1.0107	0	9.35E+06	1.03	Y	1.27	35.6	2176	0.0511
1234789-HpCDF	**40.37**	**J**	**1.0002**	**1.0002**	**0**	**2.54E+05**	**1.08**	**Y**	**1.27**	**1.14**	**2176**	**0.059**
OCDF	**42.55**		**1.0003**	**1.0002**	**-0.3**	**6.06E+06**	**0.89**	**Y**	**1.01**	**46.5**	**3603**	**0.182**
OCDF-a	42.54		1.0002	1.0000	-0.5	3.88E+05	2.30	Y	0.06	47.6	3395	2.74

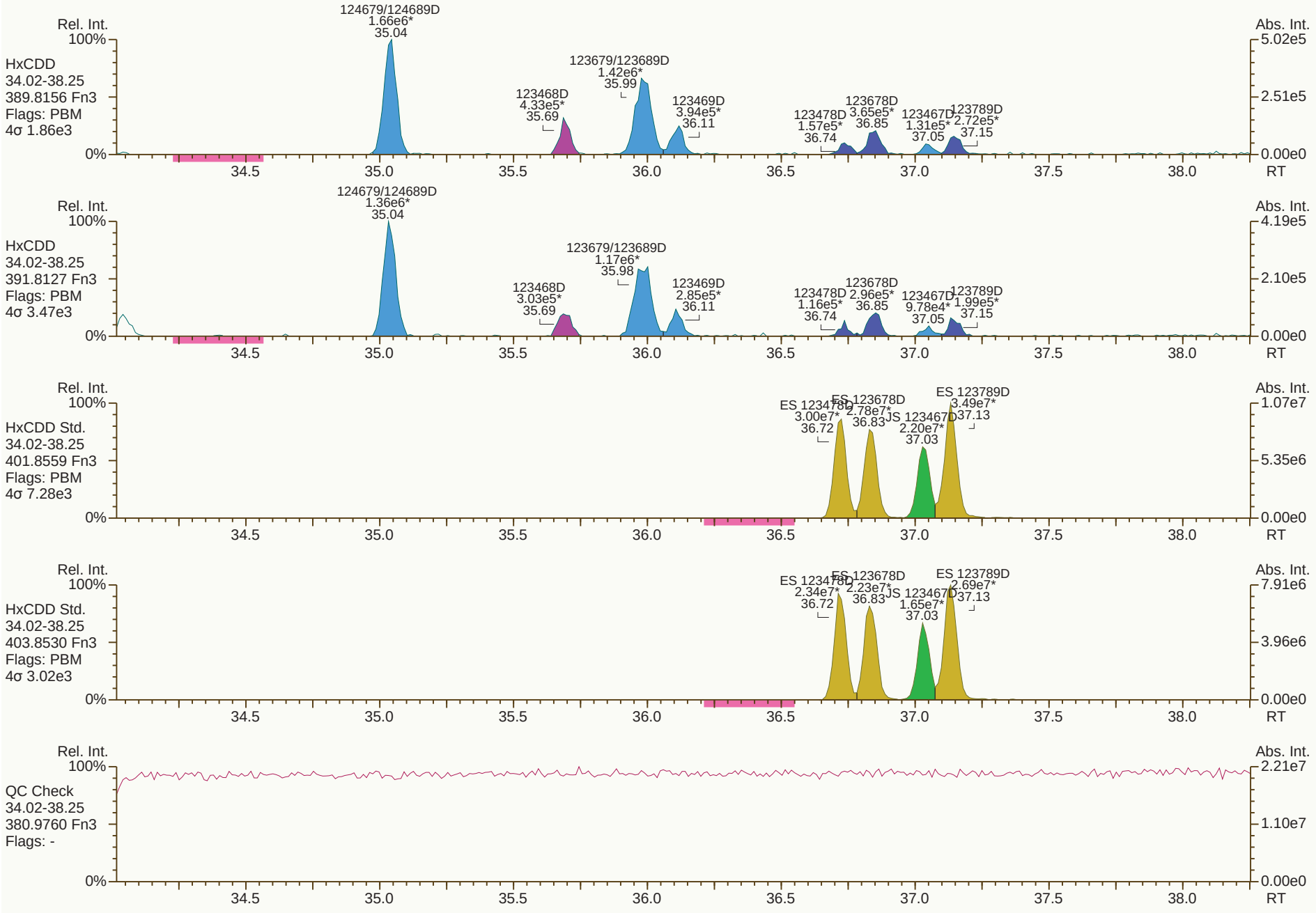
SGS ID: B4511_17654_DF_003 **Sample ID: CS-24** **Acq: 07-Aug-2020 18:35:59**
Instr: [ILM] AutoSpec-Ultima MM3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 9** **User: PSW Datafile: 200807R07**

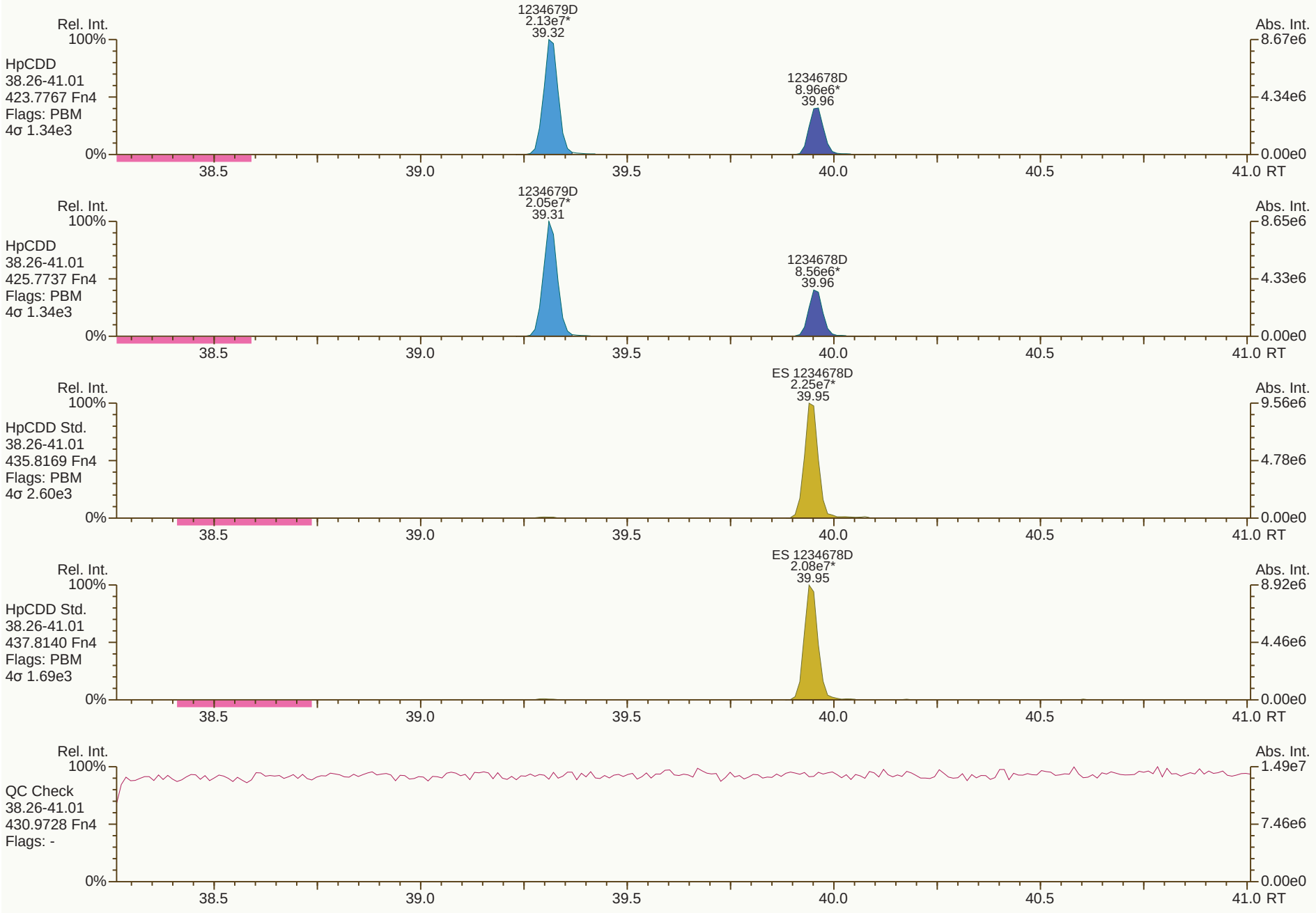


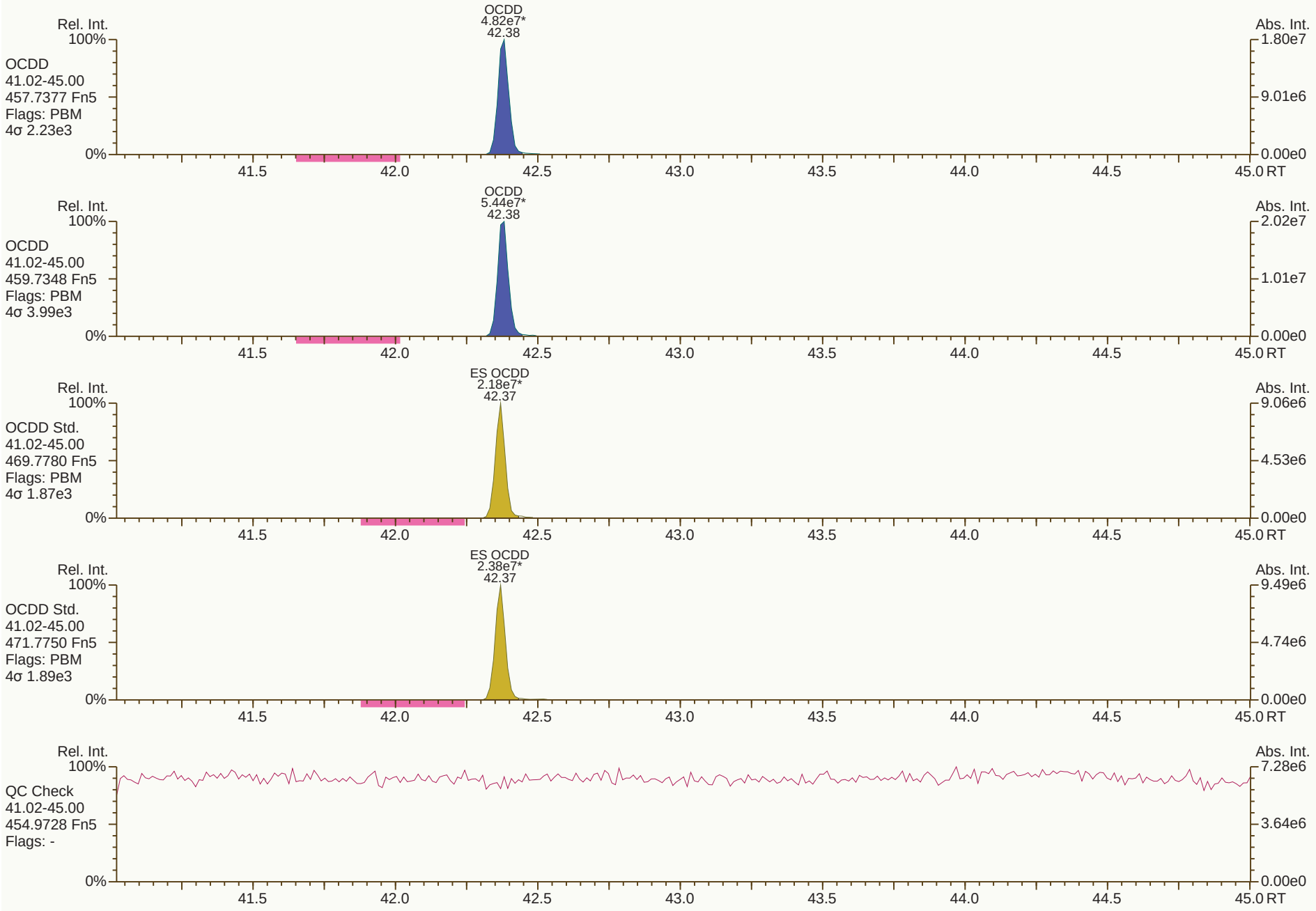
Results: P:\B4500_B4599\B4511\B4511_17654 DF\Resources\B4511_17654_DF_003.utp_res, saved 10-Aug-2020 09:02 (PSW) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 scc: 425-303 *PKD: n/a Printed: 10-Aug-2020 09:17 Page 1 of 12*


Rel. Int.
100%
TCDD
20.54-29.50
319.8965 Fn1
Flags: PBM
4σ 1.25e3
1368D
1.07e5*
23.40
1379D
4.18e4*
23.79
Abs. Int.
1.96e4
9.80e3
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD
20.54-29.50
321.8936 Fn1
Flags: PBM
4σ 2.32e3
1368D
1.12e5*
23.40
1379D
5.67e4*
23.78
Abs. Int.
2.53e4
1.27e4
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
37Cl-TCDD
20.54-29.50
327.8850 Fn1
Flags: PBM
4σ 2.21e3
CS 37Cl-2378D
3.32e7*
27.29
Abs. Int.
7.85e6
3.93e6
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
331.9368 Fn1
Flags: PBM
4σ 5.30e3
JS 1234D
3.93e7*
26.58
ES 2378D
2.77e7*
27.27
Abs. Int.
9.11e6
4.55e6
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
333.9339 Fn1
Flags: PBM
4σ 2.28e3
JS 1234D
4.98e7*
26.58
ES 2378D
3.56e7*
27.26
Abs. Int.
1.12e7
5.58e6
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT

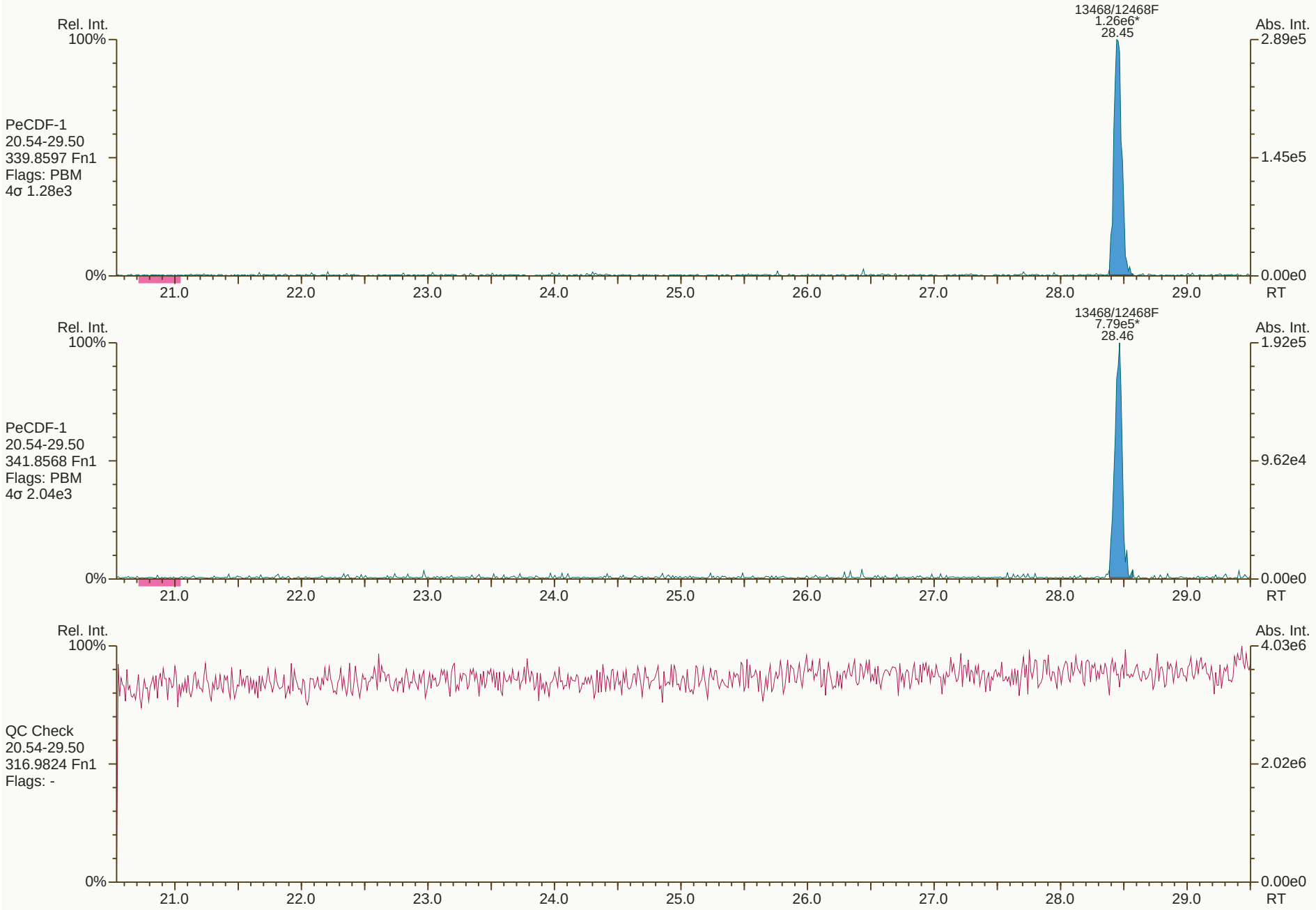

Rel. Int.
100%
PeCDD
29.51-34.01
355.8546 Fn2
Flags: PBM
4σ 2.05e3
12479/12468D
1.98e5*
30.27
12469D
1.14e5*
30.80
12368D
7.41e4*
31.38
12478D
8.01e4*
31.58
12379D
6.45e4*
31.68
12369D...[3]
6.62e4*
31.94
12346/12347D
5.77e4*
32.33
12378D
7.95e4*
32.81
Abs. Int.
4.58e4
2.29e4
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD
29.51-34.01
357.8517 Fn2
Flags: PBM
4σ 1.73e3
12479/12468D
1.33e5*
30.27
12469D
5.24e4*
30.82
12368D
5.75e4*
31.38
12478D
6.13e4*
31.58
12369D...[3]
3.65e4*
31.94
12346/12347D
4.33e4*
32.31
12378D
4.88e4*
32.82
Abs. Int.
3.08e4
1.54e4
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
367.8949 Fn2
Flags: PBM
4σ 1.47e3
CS 12347D
4.06e7*
32.30
ES 12378D
3.59e7*
32.80
Abs. Int.
1.11e7
5.54e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
369.8919 Fn2
Flags: PBM
4σ 1.64e3
CS 12347D
2.34e7*
32.30
ES 12378D
2.20e7*
32.80
Abs. Int.
6.46e6
3.23e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
QC Check
29.51-34.01
366.9792 Fn2
Flags: -
Abs. Int.
3.55e6
1.77e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT


Rel. Int.
100%
HxCDD
34.02-38.25
389.8156 Fn3
Flags: PBM
4σ 1.86e3
124679/124689D
1.66e6*
35.04
123679/123689D
1.42e6*
35.99
123468D
4.33e5*
35.69
123469D
3.94e5*
36.11
123678D
3.65e5*
36.85
123478D
1.57e5*
36.74
123467D
1.31e5*
37.05
123789D
2.72e5*
37.15
Abs. Int.
5.02e5
2.51e5
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD
34.02-38.25
391.8127 Fn3
Flags: PBM
4σ 3.47e3
124679/124689D
1.36e6*
35.04
123679/123689D
1.17e6*
35.98
123468D
3.03e5*
35.69
123469D
2.85e5*
36.11
123678D
2.96e5*
36.85
123478D
1.16e5*
36.74
123467D
9.78e4*
37.05
123789D
1.99e5*
37.15
Abs. Int.
4.19e5
2.10e5
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
401.8559 Fn3
Flags: PBM
4σ 7.28e3
ES 123478D
3.00e7*
36.72
ES 123678D
2.78e7*
36.83
JS 123467D
2.20e7*
37.03
ES 123789D
3.49e7*
37.13
Abs. Int.
1.07e7
5.35e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
403.8530 Fn3
Flags: PBM
4σ 3.02e3
ES 123478D
2.34e7*
36.72
ES 123678D
2.23e7*
36.83
JS 123467D
1.65e7*
37.03
ES 123789D
2.69e7*
37.13
Abs. Int.
7.91e6
3.96e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
Abs. Int.
2.21e7
1.10e7
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT

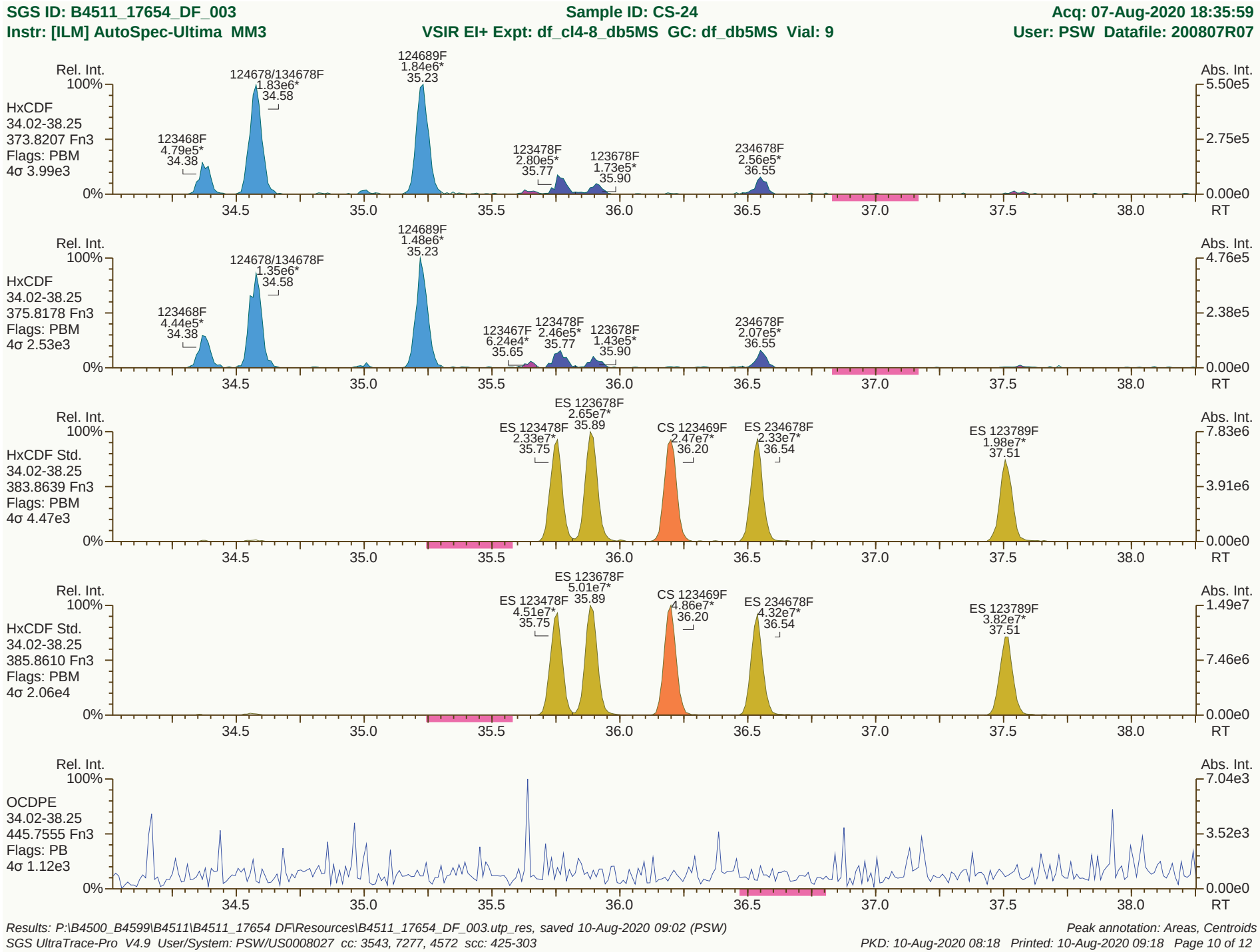

Rel. Int.
100%
HpCDD
38.26-41.01
423.7767 Fn4
Flags: PBM
4σ 1.34e3
0%
1234679D
2.13e7*
39.32
1234678D
8.96e6*
39.96
Abs. Int.
8.67e6
4.34e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.26-41.01
425.7737 Fn4
Flags: PBM
4σ 1.34e3
0%
1234679D
2.05e7*
39.31
1234678D
8.56e6*
39.96
Abs. Int.
8.65e6
4.33e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
435.8169 Fn4
Flags: PBM
4σ 2.60e3
0%
ES 1234678D
2.25e7*
39.95
Abs. Int.
9.56e6
4.78e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
437.8140 Fn4
Flags: PBM
4σ 1.69e3
0%
ES 1234678D
2.08e7*
39.95
Abs. Int.
8.92e6
4.46e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.26-41.01
430.9728 Fn4
Flags: -
0%
Abs. Int.
1.49e7
7.46e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT

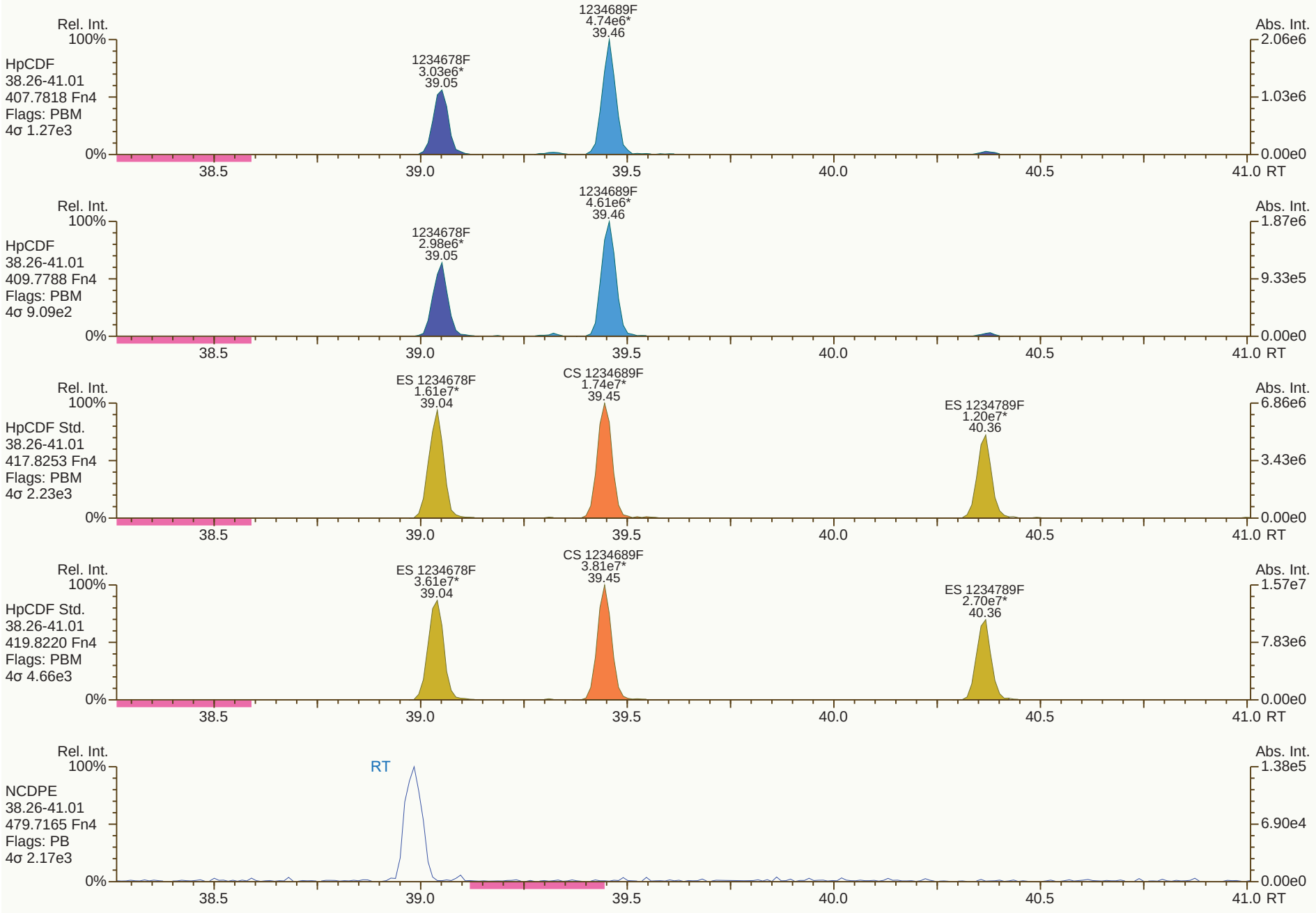

OCDD
4.82e7*
42.38
Rel. Int.
100%
OCDD
41.02-45.00
457.7377 Fn5
Flags: PBM
4σ 2.23e3
0%
Abs. Int.
1.80e7
9.01e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDD
5.44e7*
42.38
Rel. Int.
100%
OCDD
41.02-45.00
459.7348 Fn5
Flags: PBM
4σ 3.99e3
0%
Abs. Int.
2.02e7
1.01e7
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
2.18e7*
42.37
Rel. Int.
100%
OCDD Std.
41.02-45.00
469.7780 Fn5
Flags: PBM
4σ 1.87e3
0%
Abs. Int.
9.06e6
4.53e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
2.38e7*
42.37
Rel. Int.
100%
OCDD Std.
41.02-45.00
471.7750 Fn5
Flags: PBM
4σ 1.89e3
0%
Abs. Int.
9.49e6
4.74e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
7.28e6
3.64e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

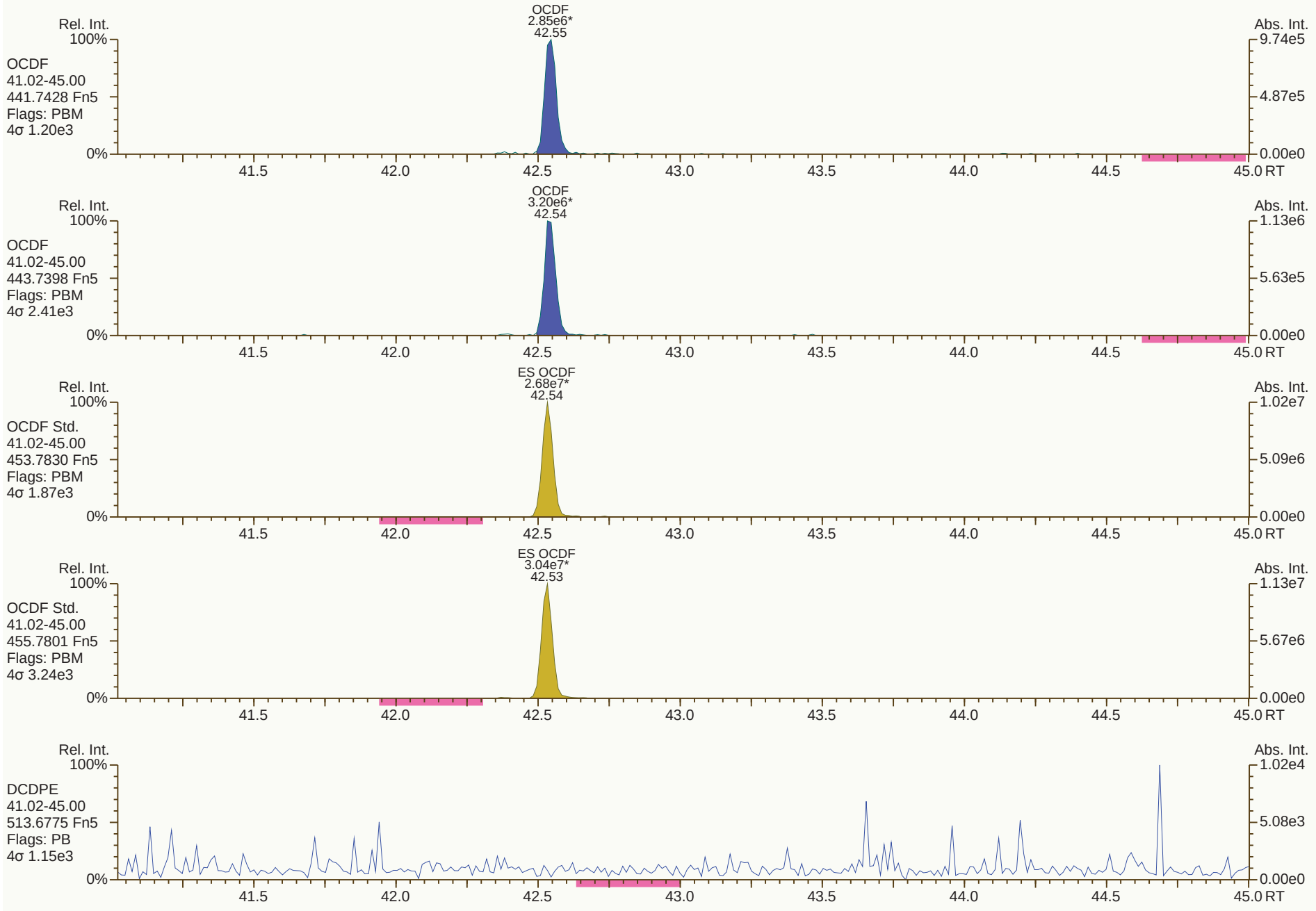

SGS ID: B4511_17654_DF_003
Sample ID: CS-24
Acq: 07-Aug-2020 18:35:59
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 9
User: PSW Datafile: 200807R07
Rel. Int.
Abs. Int.
TCDF
20.54-29.50
303.9016 Fn1
Flags: PBM
4σ 1.35e3
1368F 2.85e4* 21.15
1468F 4.80e4* 21.73
2468F 2.50e5* 22.40
1347F...[3] 9.60e4* 22.97
1346/1246F 3.03e4* 22.85
1248F...[3] 7.54e4* 23.37
1268F 9.34e4* 23.81
1478F 3.51e4* 24.13
1369/1237F 1.38e4* 24.55
2368F 1.08e5* 24.84
1238F...[5] 5.46e4* 24.95
1278F 5.00e4* 25.42
2348F 1.97e4* 26.25
2378F 4.14e4* 26.36
2367/3467F 5.32e4* 26.74
1289F 1.55e5* 28.46
TCDF
20.54-29.50
305.8987 Fn1
Flags: PBM
4σ 1.48e3
1368F 3.44e4* 21.15
1468F 5.58e4* 21.73
2468F 3.28e5* 22.39
1346/1246F 5.69e4* 22.83
1248F...[3] 9.23e4* 23.37
1268F 1.21e5* 23.81
1478F 4.54e4* 24.13
1369/1237F 2.24e4* 24.52
2368F 1.69e5* 24.84
1238F...[5] 3.87e4* 24.94
1278F 5.86e4* 25.42
2348F 2.54e4* 26.25
2378F 7.51e4* 26.36
2367/3467F 9.62e4* 26.74
1289F 1.01e5* 28.46
TCDF Std.
20.54-29.50
315.9419 Fn1
Flags: PBM
4σ 1.14e4
JS 1234F 6.42e7* 24.91
ES 2378F 4.59e7* 26.34
TCDF Std.
20.54-29.50
317.9389 Fn1
Flags: PBM
4σ 8.15e3
JS 1234F 8.03e7* 24.91
ES 2378F 5.98e7* 26.34
HxCDPE
20.54-29.50
375.8364 Fn1
Flags: PB
4σ 1.46e3
100%
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Results: P:\B4500_B4599\B4511\B4511_17654 DF\Resources\B4511_17654_DF_003.utp_res, saved 10-Aug-2020 09:02 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 1999, 9537, 3841 scc: 425-303
PKD: 10-Aug-2020 08:18 Printed: 10-Aug-2020 09:18 Page 7 of 12


Rel. Int.
100%
0%
Abs. Int.
2.89e5
1.45e5
0.00e0
RT
13468/12468F
1.26e6*
28.45
PeCDF-1
20.54-29.50
339.8597 Fn1
Flags: PBM
4σ 1.28e3
13468/12468F
7.79e5*
28.46
PeCDF-1
20.54-29.50
341.8568 Fn1
Flags: PBM
4σ 2.04e3
QC Check
20.54-29.50
316.9824 Fn1
Flags: -
4.03e6
2.02e6
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0


Rel. Int.
100%
PeCDF-2
29.51-34.01
339.8597 Fn2
Flags: PBM
4σ 2.38e3
12368F...[3]
7.05e5*
30.20
13678F...[3]
1.20e5*
30.04
23468/12469F
2.74e5*
30.89
12378F
5.78e4*
31.34
12678/12367F
1.29e5*
31.64
23467/12369F
7.05e4*
32.34
23478F
2.84e5*
32.49
PR
Abs. Int.
1.42e5
7.11e4
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF-2
29.51-34.01
341.8568 Fn2
Flags: PBM
4σ 3.93e3
12368F...[3]
4.51e5*
30.20
13678F...[3]
1.01e5*
30.03
23468/12469F
1.48e5*
30.88
12378F
4.49e4*
31.33
12678/12367F
7.50e4*
31.63
23467/12369F
4.02e4*
32.33
23478F
1.61e5*
32.49
Abs. Int.
1.09e5
5.44e4
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
351.9000 Fn2
Flags: PBM
4σ 3.88e3
CS 12346F
6.47e7*
30.78
ES 12378F
6.12e7*
31.32
ES 23478F
5.69e7*
32.45
Abs. Int.
1.72e7
8.61e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
353.8970 Fn2
Flags: PBM
4σ 4.48e3
CS 12346F
4.22e7*
30.78
ES 12378F
3.76e7*
31.31
ES 23478F
3.64e7*
32.45
Abs. Int.
1.08e7
5.39e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
HpCDPE
29.51-34.01
409.7974 Fn2
Flags: PB
4σ 1.49e3
Abs. Int.
2.66e4
1.33e4
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT


SGS ID: B4511_17654_DF_003
Sample ID: CS-24
Acq: 07-Aug-2020 18:35:59
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 9
User: PSW Datafile: 200807R07
Rel. Int.
Abs. Int.
HxCDF
34.02-38.25
373.8207 Fn3
Flags: PBM
4σ 3.99e3
123468F 4.79e5* 34.38
124678/134678F 1.83e6* 34.58
124689F 1.84e6* 35.23
123478F 2.80e5* 35.77
123678F 1.73e5* 35.90
234678F 2.56e5* 36.55
5.50e5
2.75e5
0.00e0
HxCDF
34.02-38.25
375.8178 Fn3
Flags: PBM
4σ 2.53e3
123468F 4.44e5* 34.38
124678/134678F 1.35e6* 34.58
124689F 1.48e6* 35.23
123467F 6.24e4* 35.65
123478F 2.46e5* 35.77
123678F 1.43e5* 35.90
234678F 2.07e5* 36.55
4.76e5
2.38e5
0.00e0
HxCDF Std.
34.02-38.25
383.8639 Fn3
Flags: PBM
4σ 4.47e3
ES 123478F 2.33e7* 35.75
ES 123678F 2.65e7* 35.89
CS 123469F 2.47e7* 36.20
ES 234678F 2.33e7* 36.54
ES 123789F 1.98e7* 37.51
7.83e6
3.91e6
0.00e0
HxCDF Std.
34.02-38.25
385.8610 Fn3
Flags: PBM
4σ 2.06e4
ES 123478F 4.51e7* 35.75
ES 123678F 5.01e7* 35.89
CS 123469F 4.86e7* 36.20
ES 234678F 4.32e7* 36.54
ES 123789F 3.82e7* 37.51
1.49e7
7.46e6
0.00e0
OCDPE
34.02-38.25
445.7555 Fn3
Flags: PB
4σ 1.12e3
7.04e3
3.52e3
0.00e0
100%
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Results: P:\B4500_B4599\B4511\B4511_17654 DF\Resources\B4511_17654_DF_003.utp_res, saved 10-Aug-2020 09:02 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 3543, 7277, 4572 scc: 425-303
PKD: 10-Aug-2020 08:18 Printed: 10-Aug-2020 09:18 Page 10 of 12


Rel. Int.
100%
HpCDF
38.26-41.01
407.7818 Fn4
Flags: PBM
4σ 1.27e3
0%
1234678F
3.03e6*
39.05
1234689F
4.74e6*
39.46
Abs. Int.
2.06e6
1.03e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF
38.26-41.01
409.7788 Fn4
Flags: PBM
4σ 9.09e2
0%
1234678F
2.98e6*
39.05
1234689F
4.61e6*
39.46
Abs. Int.
1.87e6
9.33e5
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.26-41.01
417.8253 Fn4
Flags: PBM
4σ 2.23e3
0%
ES 1234678F
1.61e7*
39.04
CS 1234689F
1.74e7*
39.45
ES 1234789F
1.20e7*
40.36
Abs. Int.
6.86e6
3.43e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.26-41.01
419.8220 Fn4
Flags: PBM
4σ 4.66e3
0%
ES 1234678F
3.61e7*
39.04
CS 1234689F
3.81e7*
39.45
ES 1234789F
2.70e7*
40.36
Abs. Int.
1.57e7
7.83e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
NCDPE
38.26-41.01
479.7165 Fn4
Flags: PB
4σ 2.17e3
0%
RT
Abs. Int.
1.38e5
6.90e4
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT



Results: P:\B4500_B4599\B4511\B4511_17654 DF\Resources\B4511_17654_DF_003.utp_res, saved 10-Aug-2020 09:02 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 7366, 9204, 2235 scc: 425-303 *PKD: 10-Aug-2020 08:18 Printed: 10-Aug-2020 09:18 Page 12 of 12*

Lab ID: B4511_17654_DF_003MS | **Acq'd:** 07 Aug 2020 19:23 PSW | **Wt/Vol:** 9.02 g | **ICAL:** MM3_DF_10012020_12JUN2020

Client ID: CS-24-MS | **UTP:** 10-Aug-2020 09:02:22 PSW | **J-level:** 0.554 pg/g | **Split:** 1 | **Checkcode:** 607-175-CCB

Datafile: 200807R08 | **Report:** 10 Aug 2020 09:06 pw | **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	27.29		1.0009	1.0008	-0.2	8.46E+06	0.81	Y	1.18	22.6	3009	0.089
12378-PeCDD	32.83		1.0006	1.0006	0	3.50E+07	1.58	Y	1.14	104	5132	0.14
123478-HxCDD	36.74		1.0004	1.0004	0	3.48E+07	1.28	Y	1.09	118	4654	0.129
123678-HxCDD	36.86		1.0035	1.0035	0	3.69E+07	1.21	Y	1.13	122	4654	0.126
123789-HxCDD	37.15		1.0116	1.0116	0	3.84E+07	1.24	Y	1.05	113	4654	0.122
1234678-HpCDD	39.97		1.0003	1.0003	0	5.14E+07	1.03	Y	0.98	206	4695	0.109
OCDD	42.39		1.0003	1.0003	0	1.70E+08	0.91	Y	1.08	1,080	5984	0.272
2378-TCDF	26.37		1.0006	1.0008	+0.3	1.24E+07	0.74	Y	0.98	24	6864	0.157
12378-PeCDF	31.34		1.0006	1.0006	0	5.27E+07	1.52	Y	0.95	114	9017	0.183
23478-PeCDF	32.47		1.0005	1.0006	+0.2	5.63E+07	1.53	Y	0.95	125	9017	0.185
123478-HxCDF	35.77		1.0005	1.0005	0	4.91E+07	1.26	Y	1.20	118	28032	0.522
123678-HxCDF	35.91		1.0004	1.0005	+0.2	5.06E+07	1.25	Y	1.07	118	28032	0.524
234678-HxCDF	36.56		1.0005	1.0005	0	4.70E+07	1.25	Y	1.10	120	28032	0.605
123789-HxCDF	37.53		1.0004	1.0005	+0.2	3.95E+07	1.25	Y	1.09	112	28032	0.667
1234678-HpCDF	39.06		1.0003	1.0003	0	5.09E+07	1.05	Y	1.28	140	2353	0.0391
1234789-HpCDF	40.38		1.0002	1.0002	0	3.33E+07	1.02	Y	1.27	115	2353	0.0482
OCDF	42.55		1.0003	1.0002	-0.3	4.92E+07	0.90	Y	1.01	277	3814	0.15

Name	Act RT	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	27.27	1.0255	1.0256	+0.2	7.05E+07	0.75	Y	1.01	79.2
ES 12378-PeCDD	32.81	1.2330	1.2339	+1.8	6.56E+07	1.68	Y	0.87	85.2
ES 123478-HxCDD	36.73	0.9917	0.9916	-0.2	5.99E+07	1.27	Y	1.10	64.6
ES 123678-HxCDD	36.84	0.9947	0.9947	0	5.95E+07	1.33	Y	1.06	66.3
ES 123789-HxCDD	37.14	1.0028	1.0028	0	7.20E+07	1.32	Y	1.22	69.9
ES 1234678-HpCDD	39.95	1.0785	1.0787	+0.5	5.62E+07	1.04	Y	0.99	66.9
ES OCDD	42.38	1.1439	1.1442	+0.8	6.53E+07	0.91	Y	0.67	57.6
ES 2378-TCDF	26.35	1.0572	1.0575	+0.5	1.17E+08	0.79	Y	1.01	71.9
ES 12378-PeCDF	31.32	1.2558	1.2571	+2.4	1.08E+08	1.58	Y	0.90	75.2
ES 23478-PeCDF	32.46	1.3012	1.3026	+2.7	1.06E+08	1.60	Y	0.89	74.3
ES 123478-HxCDF	35.76	0.9655	0.9655	0	7.73E+07	0.54	Y	1.43	63.9
ES 123678-HxCDF	35.90	0.9693	0.9692	-0.2	8.91E+07	0.51	Y	1.63	64.5
ES 234678-HxCDF	36.54	0.9867	0.9867	0	7.90E+07	0.53	Y	1.48	63.1
ES 123789-HxCDF	37.52	1.0130	1.0130	0	7.15E+07	0.53	Y	1.29	65.4
ES 1234678-HpCDF	39.04	1.0540	1.0542	+0.5	6.32E+07	0.45	Y	1.15	65.1
ES 1234789-HpCDF	40.37	1.0898	1.0900	+0.5	5.07E+07	0.47	Y	0.91	66.1
ES OCDF	42.54	1.1484	1.1487	+0.8	7.80E+07	0.91	Y	0.83	55.6

Lab ID: B4511_17654_DF_003MS | Acq'd: 07 Aug 2020 19:23 PSW | Wt/Vol: 9.02 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-24-MS | UTP: 10-Aug-2020 09:02:22 PSW | J-level: 0.554 pg/g | Split: 1 | Checkcode: 607-175-CCB

Datafile: 200807R08 | Report: 10 Aug 2020 09:06 pw | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %	
JS 1234-TCDD	26.59		-	-	-	8.84E+07	0.78	Y	-	-	
JS 1234-TCDF	24.92		-	-	-	1.60E+08	0.80	Y	-	-	
JS 123467-HxCDD	37.04		-	-	-	4.23E+07	1.34	Y	-	-	
CS 37Cl-2378-TCDD	27.29		1.0265	1.0265	0	3.48E+07	n/a	-	1.04	94.7	
CS 12347-PeCDD	32.30		1.2141	1.2149	+1.6	6.77E+07	1.63	Y	0.74	104	
CS 12346-PeCDF	30.78		1.2343	1.2355	+2.2	1.11E+08	1.60	Y	0.86	80.4	
CS 123469-HxCDF	36.20		0.9776	0.9775	-0.2	7.94E+07	0.53	Y	1.36	69.1	
CS 1234689-HpCDF	39.45		1.0650	1.0652	+0.5	6.54E+07	0.46	Y	1.05	73.3	
~~SS 37Cl-2378-TCDD~~	~~27.29~~		~~1.0265~~	~~1.0265~~	~~0~~	~~3.48E+07~~	~~n/a~~		~~1.04~~	~~119~~	Not used in this project.
~~SS 12347-PeCDD~~	~~32.30~~		~~1.2141~~	~~1.2149~~	~~+1.6~~	~~6.77E+07~~	~~1.63~~	~~Y~~	~~0.86~~	~~121~~	CL 10Aug20
~~SS 12346-PeCDF~~	~~30.78~~		~~1.2343~~	~~1.2355~~	~~+2.2~~	~~1.11E+08~~	~~1.60~~	~~Y~~	~~0.96~~	~~106~~	
~~SS 123469-HxCDF~~	~~36.20~~		~~0.9776~~	~~0.9775~~	~~-0.2~~	~~7.94E+07~~	~~0.53~~	~~Y~~	~~0.83~~	~~107~~	
~~SS 1234689-HpCDF~~	~~39.45~~		~~1.0650~~	~~1.0652~~	~~+0.5~~	~~6.54E+07~~	~~0.46~~	~~Y~~	~~0.92~~	~~112~~	

Totals	Conc	EMPC
Total TCDD	102	103
Total PeCDD	156	157
Total HxCDD	408	408
Total HpCDD	433	433
Total Tetra-Octa Dioxins	2180	2180
Total TCDF	122	123
Total PeCDF	297	298
Total HxCDF	515	515
Total HpCDF	293	293
Total Tetra-Octa Furans	1,510	1510
Total Tetra-Octa Dioxins & Furans	3680	3680

* 37Cl correction has been applied to 2378-TCDD

	Original Values	Corrected Values
Ratio	0.81	0.81
Response	8.48E+06	8.46E+06

Lab ID: B4511_17654_DF_003MS | **Acq'd:** 07 Aug 2020 19:23 PSW | **Wt/Vol:** 9.02 g | **ICAL:** MM3_DF_10012020_12JUN2020

Client ID: CS-24-MS | **UTP:** 10-Aug-2020 09:02:22 PSW | **J-level:** 0.554 pg/g | **Split:** 1 | **Checkcode:** 607-175-CCB

Datafile: 200807R08 | **Report:** 10 Aug 2020 09:06 pw | **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1368-TCDD	23.40		0.8591	0.8582	-1.3	1.07E+07	0.79	Y	1.18	28.6	3009	0.089
1379-TCDD	23.79	J	0.8732	0.8723	-1.3	1.35E+05	0.67	Y	1.18	0.36	3009	0.089
1369-TCDD	NotFnd		0.8901						1.18		3009	0.089
1469-TCDD	NotFnd		0.9205						1.18		3009	0.089
1247/1246/1248/1249-TCDD	NotFnd		0.9301						1.18		3009	0.089
1378-TCDD	NotFnd		0.9374						1.18		3009	0.089
1268-TCDD	NotFnd		0.9449						1.18		3009	0.089
1478-TCDD	NotFnd		0.9544						1.18		3009	0.089
1279-TCDD	NotFnd		0.9610						1.18		3009	0.089
1234/1269-TCDD	NotFnd		0.9746						1.18		3009	0.089
1236-TCDD	NotFnd		0.9802						1.18		3009	0.089
1237/1238-TCDD	26.98	J EMPC	0.9898	0.9892	-1.0	2.00E+05	0.89	N	1.18	0.535	3009	0.089
1239-TCDD	27.13		0.9950	0.9950	0	7.79E+06	0.80	Y	1.18	20.8	3009	0.089
2378-TCDD	**27.29**		**1.0009**	1.0008	**-0.2**	8.46E+06	0.81	Y	**1.18**	**22.6**	**3009**	**0.089**
1278-TCDD	NotFnd		1.0133						1.18		3009	0.089
1267-TCDD	NotFnd		1.0185						1.18		3009	0.089
1289-TCDD	28.31		1.0379	1.0381	+0.3	1.11E+07	0.78	Y	1.18	29.7	3009	0.089
12479/12468-PeCDD	30.28		0.9229	0.9228	-0.2	8.24E+06	1.56	Y	1.14	24.5	5132	0.14
12469-PeCDD	30.81	J	0.9396	0.9392	-0.7	1.88E+05	1.55	Y	1.14	0.56	5132	0.14
12368-PeCDD	31.39	J	0.9568	0.9567	-0.2	2.31E+05	1.39	Y	1.14	0.689	5132	0.14
12478-PeCDD	31.58	J EMPC	0.9626	0.9626	0	1.80E+05	1.16	N	1.14	0.537	5132	0.14
12379-PeCDD	31.67	J EMPC	0.9657	0.9654	-0.6	1.28E+05	1.81	N	1.14	0.38	5132	0.14
12369/12467/12489-PeCDD	31.95	J	0.9738	0.9738	0	1.45E+05	1.39	Y	1.14	0.433	5132	0.14
12346/12347-PeCDD	32.33	J	0.9853	0.9853	0	1.86E+05	1.58	Y	1.14	0.555	5132	0.14
12378-PeCDD	32.83		**1.0006**	**1.0006**	**0**	**3.50E+07**	**1.58**	**Y**	**1.14**	**104**	**5132**	**0.14**
12367-PeCDD	NotFnd		1.0034						1.14		5132	0.14
12389-PeCDD	33.27		1.0141	1.0142	+0.2	8.38E+06	1.50	Y	1.14	25	5132	0.14
124679/124689-HxCDD	35.04		0.9542	0.9542	0	1.18E+07	1.27	Y	1.09	37.7	4654	0.125
123468-HxCDD	35.70		0.9721	0.9720	-0.2	9.47E+05	1.24	Y	1.09	3.02	4654	0.125
123679/123689-HxCDD	35.99		0.9799	0.9799	0	3.15E+06	1.23	Y	1.09	10.1	4654	0.125
123469-HxCDD	36.12	J	0.9835	0.9835	0	7.57E+05	1.33	Y	1.09	2.42	4654	0.125
123478-HxCDD	36.74		**1.0004**	**1.0004**	**0**	**3.48E+07**	**1.28**	**Y**	1.09	**118**	**4654**	**0.129**
123678-HxCDD	36.86		**1.0035**	**1.0035**	**0**	**3.69E+07**	**1.21**	**Y**	1.13	**122**	**4654**	**0.126**
123467-HxCDD	37.04	J	1.0088	1.0085	-0.7	4.97E+05	1.22	Y	1.09	1.59	4654	0.125
123789-HxCDD	37.15		**1.0116**	**1.0116**	**0**	**3.84E+07**	**1.24**	**Y**	1.05	**113**	**4654**	**0.122**

Lab ID: B4511_17654_DF_003MS | Acq'd: 07 Aug 2020 19:23 PSW | Wt/Vol: 9.02 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-24-MS | UTP: 10-Aug-2020 09:02:22 PSW | J-level: 0.554 pg/g | Split: 1 | Checkcode: 607-175-CCB

Datafile: 200807R08 | Report: 10 Aug 2020 09:06 pw | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1234679-HpCDD	39.32		0.9843	0.9842	-0.2	5.65E+07	1.03	Y	0.98	227	4695	0.109
1234678-HpCDD	**39.97**		**1.0003**	**1.0003**	**0**	**5.14E+07**	**1.03**	**Y**	**0.98**	**206**	**4695**	**0.109**
OCDD	**42.39**		**1.0003**	**1.0003**	**0**	**1.70E+08**	**0.91**	**Y**	**1.08**	**1,080**	**5984**	**0.272**
OCDD-a	42.38		1.0002	1.0002	0	1.01E+07	2.39	Y	0.07	1,040	6563	4.84
1368-TCDF	21.17		0.8044	0.8034	-1.3	1.55E+07	0.77	Y	0.98	30	6864	0.157
1468-TCDF	21.74	J	0.8261	0.8250	-1.4	1.33E+05	0.69	Y	0.98	0.257	6864	0.157
2468-TCDF	22.40		0.8511	0.8501	-1.3	4.32E+06	0.72	Y	0.98	8.36	6864	0.157
1346/1246-TCDF	NotFnd		0.8665						0.98		6864	0.157
1347/1378/1247-TCDF	22.97	J	0.8723	0.8718	-0.7	2.59E+05	0.70	Y	0.98	0.501	6864	0.157
1348-TCDF	NotFnd		0.8835						0.98		6864	0.157
1248/1367/1379-TCDF	23.37	J	0.8888	0.8869	-2.7	4.60E+04	0.78	Y	0.98	0.0891	6864	0.157
1268-TCDF	23.80	J	0.9044	0.9034	-1.4	2.52E+05	0.73	Y	0.98	0.489	6864	0.157
1467-TCDF	NotFnd		0.9098						0.98		6864	0.157
1478-TCDF	NotFnd		0.9167						0.98		6864	0.157
1369/1237-TCDF	24.54	J	0.9316	0.9313	-0.4	8.81E+04	0.86	Y	0.98	0.171	6864	0.157
2467-TCDF	NotFnd		0.9369						0.98		6864	0.157
2368-TCDF	24.84		0.9430	0.9428	-0.3	3.79E+05	0.81	Y	0.98	0.735	6864	0.157
1238/1234/1678/1469/1236-TCDF	24.93	EMPC	0.9468	0.9463	-0.7	3.03E+05	0.91	N	0.98	0.587	6864	0.157
1278-TCDF	25.43	J EMPC	0.9651	0.9650	-0.2	2.85E+05	0.61	N	0.98	0.552	6864	0.157
1349-TCDF	NotFnd		0.9704						0.98		6864	0.157
1267-TCDF	NotFnd		0.9761						0.98		6864	0.157
2346/1249-TCDF	NotFnd		0.9834						0.98		6864	0.157
2347/1279-TCDF	NotFnd		0.9921						0.98		6864	0.157
2348-TCDF	26.26		0.9964	0.9965	+0.2	1.44E+07	0.79	Y	0.98	27.8	6864	0.157
2378-TCDF	**26.37**		**1.0006**	**1.0008**	**+0.3**	**1.24E+07**	**0.74**	**Y**	**0.98**	**24**	**6864**	**0.157**
2367/3467-TCDF	NotFnd		1.0156						0.98		6864	0.157
1269-TCDF	NotFnd		1.0249						0.98		6864	0.157
1239-TCDF	NotFnd		1.0357						0.98		6864	0.157
1289-TCDF	28.47		1.0799	1.0806	+1.2	1.54E+07	0.78	Y	0.98	29.8	6864	0.157
13468/12468-PeCDF	28.43		0.9084	0.9078	-1.0	1.20E+07	1.58	Y	0.95	26.2	3638	0.0741
13678/13467/12467-PeCDF	30.04	J	0.9591	0.9591	0	2.34E+05	1.67	Y	0.95	0.512	9017	0.184
12368/13478/12478-PeCDF	30.21		0.9642	0.9644	+0.4	1.77E+06	1.48	Y	0.95	3.87	9017	0.184
14678-PeCDF	NotFnd		0.9675						0.95		9017	0.184
13479-PeCDF	NotFnd		0.9706						0.95		9017	0.184
13469/12479-PeCDF	NotFnd		0.9787						0.95		9017	0.184
12346-PeCDF	NotFnd		0.9833						0.95		9017	0.184

Lab ID: B4511_17654_DF_003MS **Acq'd: 07 Aug 2020 19:23 PSW** **Wt/Vol: 9.02 g** **ICAL: MM3_DF_10012020_12JUN2020**

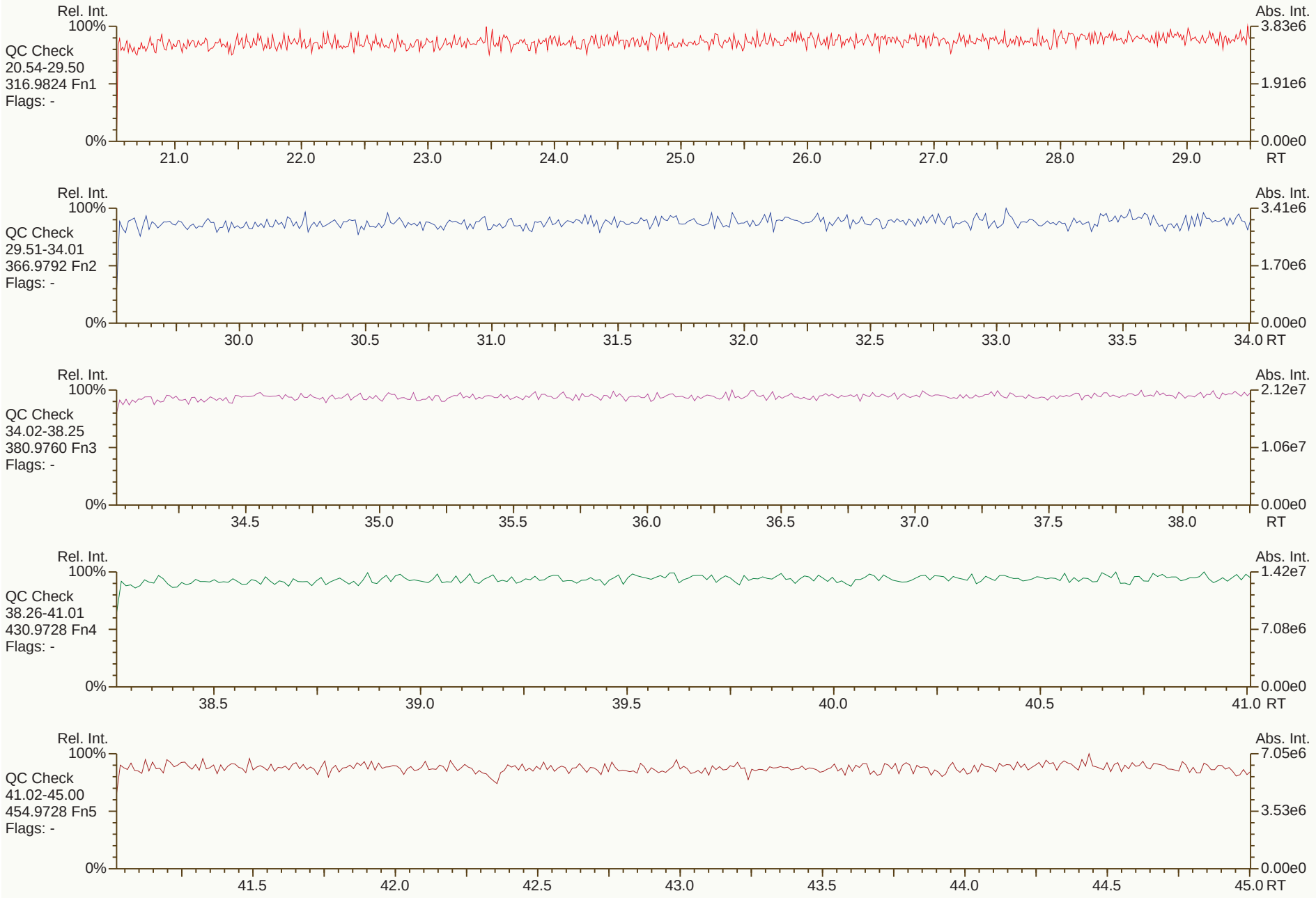
Client ID: CS-24-MS **UTP: 10-Aug-2020 09:02:22 PSW** **J-level: 0.554 pg/g** **Split: 1** **Checkcode: 607-175-CCB**

Datafile: 200807R08 **Report: 10 Aug 2020 09:06 pw** **Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)**

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
23468/12469-PeCDF	30.89	J	0.9861	0.9862	+0.2	6.08E+05	1.55	Y	0.95	1.33	9017	0.184
12347-PeCDF	NotFnd		0.9887						0.95		9017	0.184
12348-PeCDF	31.14	J EMPC	0.9938	0.9942	+0.7	1.10E+05	0.98	N	0.95	0.241	9017	0.184
12378-PeCDF	**31.34**		**1.0006**	**1.0006**	**0**	**5.27E+07**	**1.52**	**Y**	**0.95**	**114**	**9017**	**0.183**
12678/12367-PeCDF	31.64		1.0095	1.0101	+1.1	1.67E+06	1.61	Y	0.95	3.65	9017	0.184
12379-PeCDF	NotFnd		1.0150						0.95		9017	0.184
12679-PeCDF	NotFnd		0.9926						0.95		9017	0.184
23467/12369-PeCDF	32.35	J	0.9966	0.9967	+0.2	1.95E+05	1.49	Y	0.95	0.427	9017	0.184
23478-PeCDF	**32.47**		**1.0005**	**1.0006**	**+0.2**	**5.63E+07**	**1.53**	**Y**	**0.95**	**125**	**9017**	**0.185**
23478/12489-PeCDF	NotFnd		0.0000						0.95			
12489-PeCDF	NotFnd		1.0047						0.95		9017	0.184
12349-PeCDF	NotFnd		1.0107						0.95		9017	0.184
12389-PeCDF	33.56		1.0339	1.0340	+0.2	1.05E+07	1.56	Y	0.95	23	9017	0.184
123468-HxCDF	34.38		0.9617	0.9616	-0.2	1.14E+07	1.25	Y	1.11	28.5	28032	0.574
124678/134678-HxCDF	34.58		0.9673	0.9672	-0.2	3.80E+06	1.17	Y	1.11	9.56	28032	0.574
134679-HxCDF	NotFnd		0.9737						1.11		28032	0.574
124679-HxCDF	NotFnd		0.9792						1.11		28032	0.574
124689-HxCDF	35.23		0.9854	0.9854	0	3.62E+06	1.28	Y	1.11	9.1	28032	0.574
123467-HxCDF	NotFnd		0.9972						1.11		28032	0.574
123478-HxCDF	**35.77**		**1.0005**	**1.0005**	**0**	**4.91E+07**	**1.26**	**Y**	**1.20**	**118**	**28032**	**0.522**
123678-HxCDF	**35.91**		**1.0004**	**1.0005**	**+0.2**	**5.06E+07**	**1.25**	**Y**	**1.07**	**118**	**28032**	**0.524**
123479-HxCDF	NotFnd		1.0049						1.11		28032	0.574
123469-HxCDF	NotFnd		1.0089						1.11		28032	0.574
123679-HxCDF	NotFnd		0.9945						1.11		28032	0.574
234678-HxCDF	**36.56**		**1.0005**	**1.0005**	**0**	**4.70E+07**	**1.25**	**Y**	**1.10**	**120**	**28032**	**0.605**
234678/123689-HxCDF	NotFnd		0.0000						1.10			
123689-HxCDF	NotFnd		1.0054						1.11		28032	0.574
123789-HxCDF	**37.53**		**1.0004**	**1.0005**	**+0.2**	**3.95E+07**	**1.25**	**Y**	**1.09**	**112**	**28032**	**0.667**
123789/123489-HxCDF	NotFnd		0.0000						1.09			
123489-HxCDF	NotFnd		1.0008						1.11		28032	0.574
1234678-HpCDF	**39.06**		**1.0003**	**1.0003**	**0**	**5.09E+07**	**1.05**	**Y**	**1.28**	**140**	**2353**	**0.0391**
1234679-HpCDF	39.32	**J**	1.0072	1.0071	-0.2	5.64E+05	0.99	Y	1.27	1.72	2353	0.0431
1234689-HpCDF	39.46		1.0107	1.0107	0	1.22E+07	1.01	Y	1.27	37.3	2353	0.0431
1234789-HpCDF	**40.38**		**1.0002**	**1.0002**	**0**	**3.33E+07**	**1.02**	**Y**	**1.27**	**115**	**2353**	**0.0482**
OCDF	**42.55**		**1.0003**	**1.0002**	**-0.3**	**4.92E+07**	**0.90**	**Y**	**1.01**	**277**	**3814**	**0.15**
OCDF-a	42.55	**EMPC**	1.0002	1.0002	0	2.52E+06	1.96	N	0.06	227	3811	2.4

SGS ID: B4511_17654_DF_003MS | **Sample ID: CS-24-MS** | **Acq: 07-Aug-2020 19:23:31**

Instr: [ILM] AutoSpec-Ultima MM3 | **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 10** | **User: PSW Datafile: 200807R08**

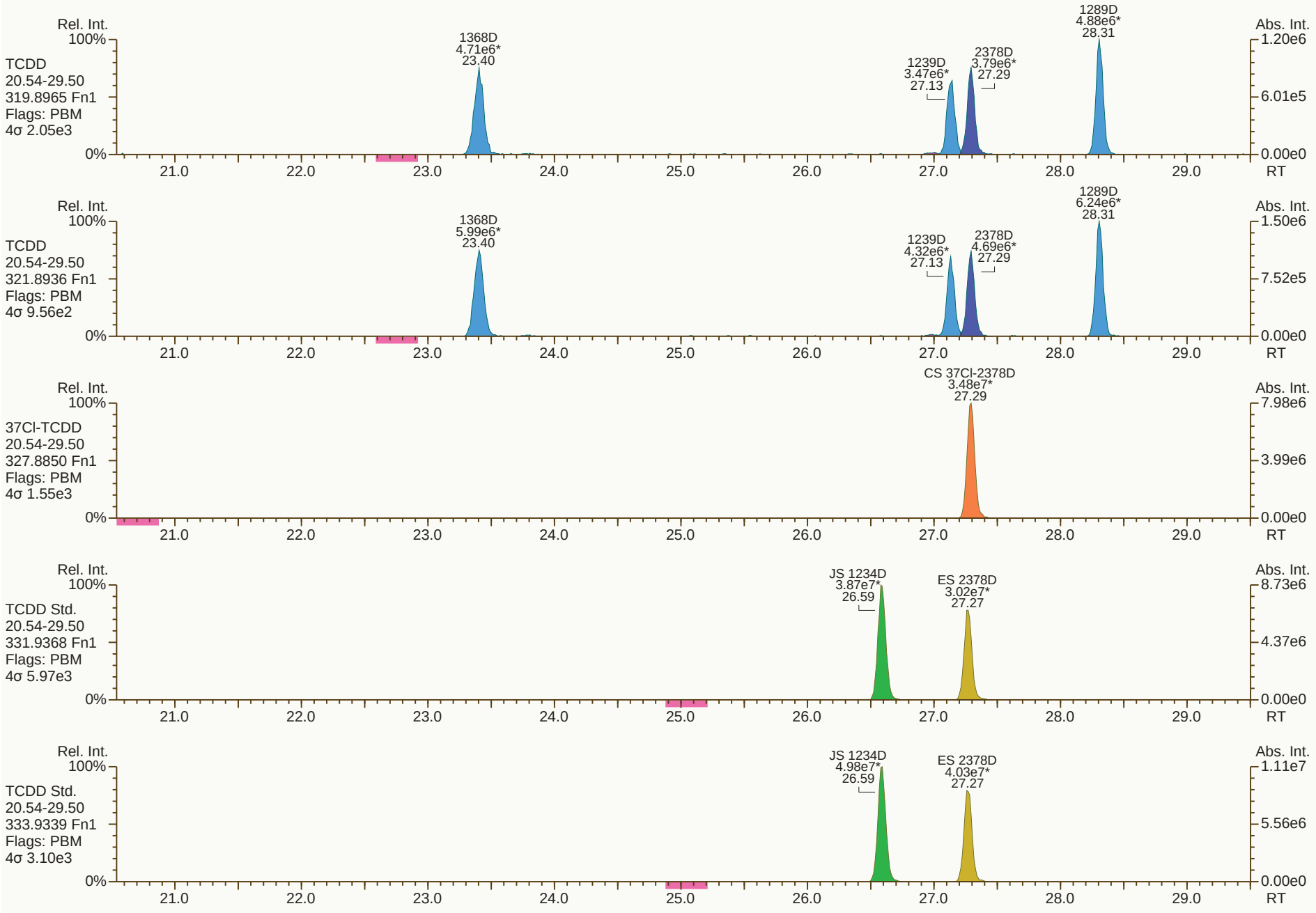


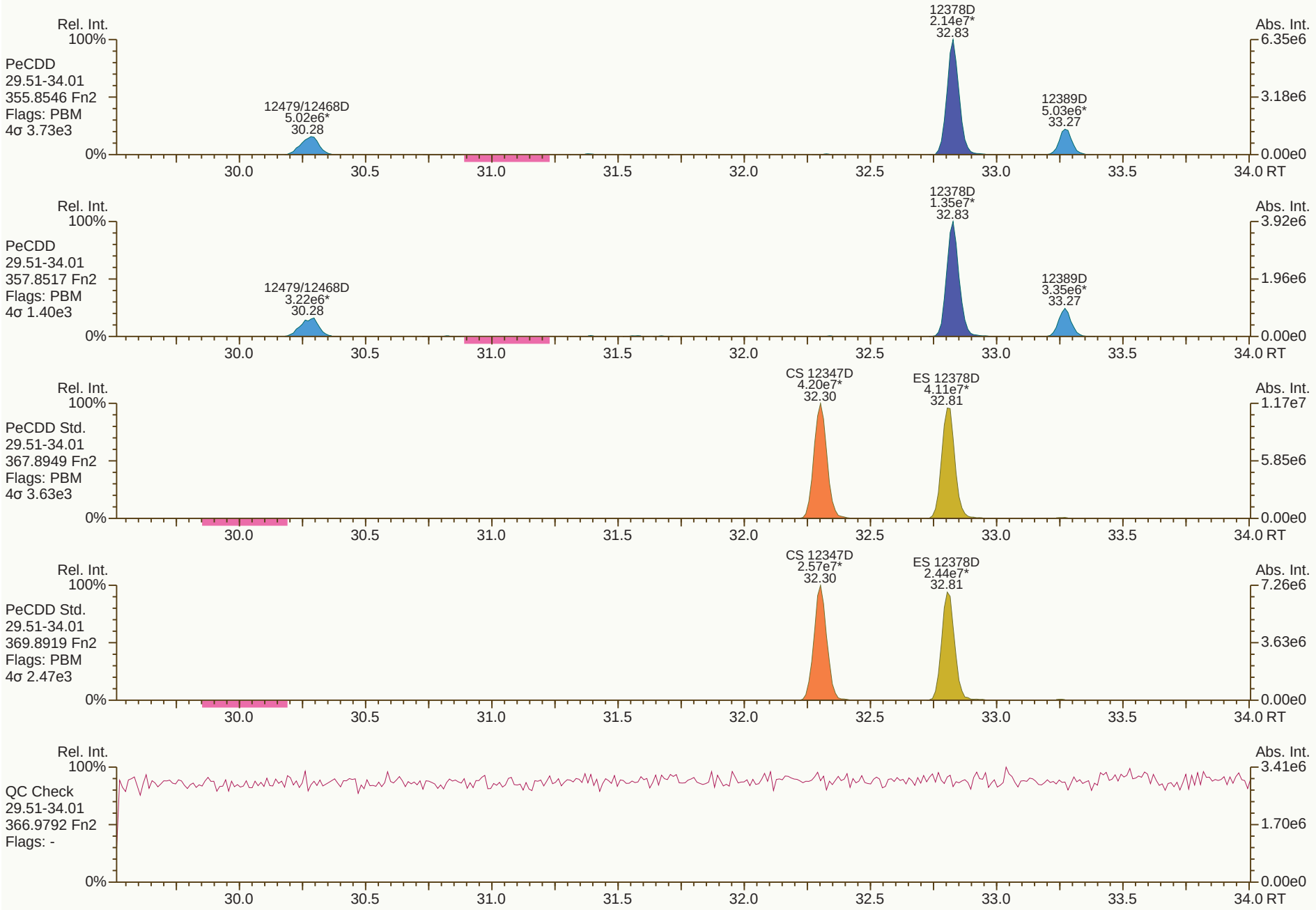
Results: P:\B4500_B4599\B4511\B4511_17654 DF\Resources\B4511_17654_DF_003MS.utp_res, saved 10-Aug-2020 09:13 (PSW)

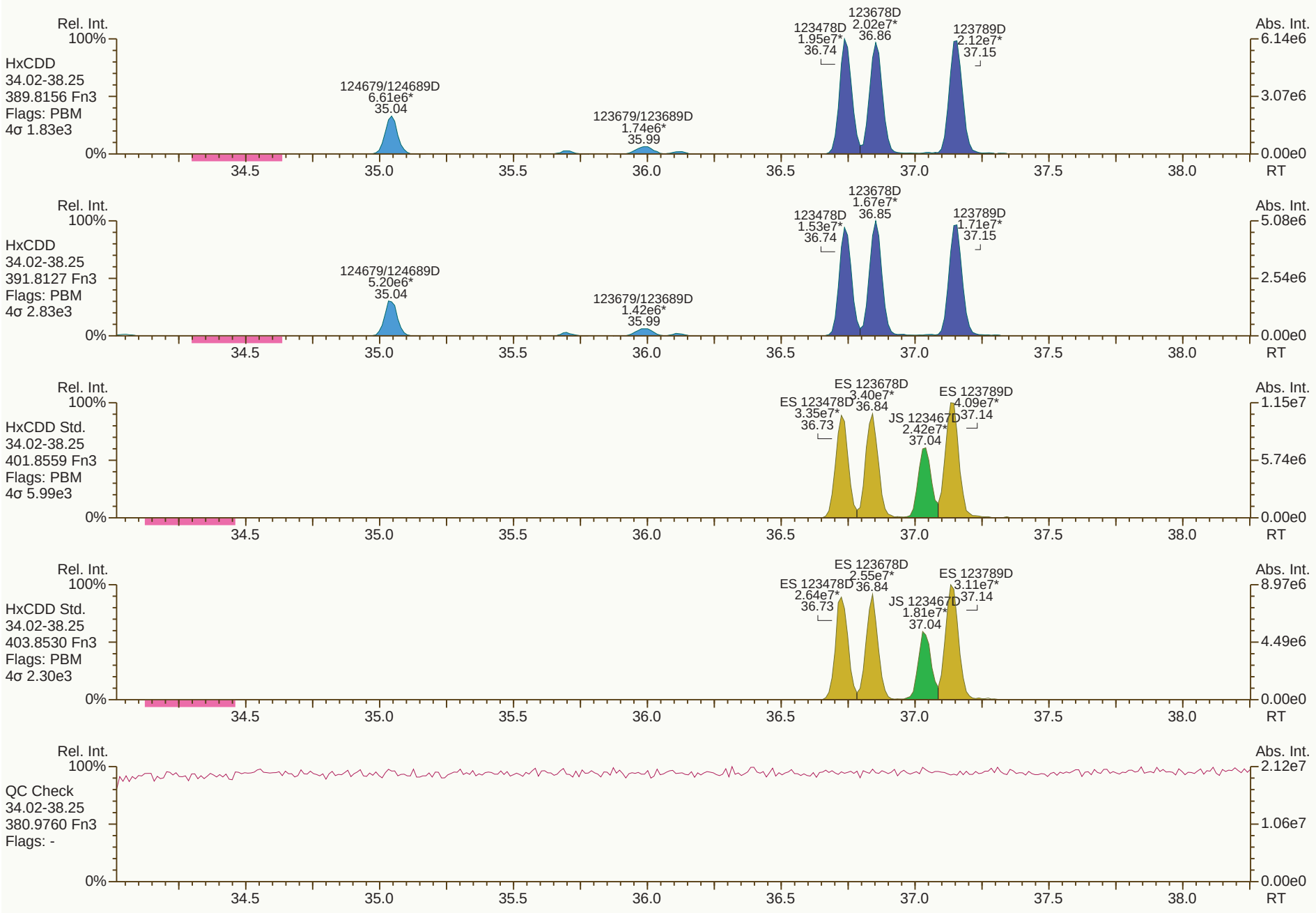
Peak annotation: Areas, Centroids

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 scc: 607-175

PKD: n/a Printed: 10-Aug-2020 09:18 Page 1 of 12


Rel. Int.
100%
TCDD
20.54-29.50
319.8965 Fn1
Flags: PBM
4σ 2.05e3
0%
1368D
4.71e6*
23.40
1239D
3.47e6*
27.13
2378D
3.79e6*
27.29
1289D
4.88e6*
28.31
Abs. Int.
1.20e6
6.01e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD
20.54-29.50
321.8936 Fn1
Flags: PBM
4σ 9.56e2
0%
1368D
5.99e6*
23.40
1239D
4.32e6*
27.13
2378D
4.69e6*
27.29
1289D
6.24e6*
28.31
Abs. Int.
1.50e6
7.52e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
37Cl-TCDD
20.54-29.50
327.8850 Fn1
Flags: PBM
4σ 1.55e3
0%
CS 37Cl-2378D
3.48e7*
27.29
Abs. Int.
7.98e6
3.99e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
331.9368 Fn1
Flags: PBM
4σ 5.97e3
0%
JS 1234D
3.87e7*
26.59
ES 2378D
3.02e7*
27.27
Abs. Int.
8.73e6
4.37e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
333.9339 Fn1
Flags: PBM
4σ 3.10e3
0%
JS 1234D
4.98e7*
26.59
ES 2378D
4.03e7*
27.27
Abs. Int.
1.11e7
5.56e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
PeCDD
29.51-34.01
355.8546 Fn2
Flags: PBM
4σ 3.73e3
12479/12468D
5.02e6*
30.28
12378D
2.14e7*
32.83
12389D
5.03e6*
33.27
Abs. Int.
6.35e6
3.18e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD
29.51-34.01
357.8517 Fn2
Flags: PBM
4σ 1.40e3
12479/12468D
3.22e6*
30.28
12378D
1.35e7*
32.83
12389D
3.35e6*
33.27
Abs. Int.
3.92e6
1.96e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
367.8949 Fn2
Flags: PBM
4σ 3.63e3
CS 12347D
4.20e7*
32.30
ES 12378D
4.11e7*
32.81
Abs. Int.
1.17e7
5.85e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
369.8919 Fn2
Flags: PBM
4σ 2.47e3
CS 12347D
2.57e7*
32.30
ES 12378D
2.44e7*
32.81
Abs. Int.
7.26e6
3.63e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
QC Check
29.51-34.01
366.9792 Fn2
Flags: -
Abs. Int.
3.41e6
1.70e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT


Rel. Int.
100%
HxCDD
34.02-38.25
389.8156 Fn3
Flags: PBM
4σ 1.83e3
124679/124689D
6.61e6*
35.04
123679/123689D
1.74e6*
35.99
123478D
1.95e7*
36.74
123678D
2.02e7*
36.86
123789D
2.12e7*
37.15
Abs. Int.
6.14e6
3.07e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD
34.02-38.25
391.8127 Fn3
Flags: PBM
4σ 2.83e3
124679/124689D
5.20e6*
35.04
123679/123689D
1.42e6*
35.99
123478D
1.53e7*
36.74
123678D
1.67e7*
36.85
123789D
1.71e7*
37.15
Abs. Int.
5.08e6
2.54e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
401.8559 Fn3
Flags: PBM
4σ 5.99e3
ES 123478D
3.35e7*
36.73
ES 123678D
3.40e7*
36.84
JS 123467D
2.42e7*
37.04
ES 123789D
4.09e7*
37.14
Abs. Int.
1.15e7
5.74e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
403.8530 Fn3
Flags: PBM
4σ 2.30e3
ES 123478D
2.64e7*
36.73
ES 123678D
2.55e7*
36.84
JS 123467D
1.81e7*
37.04
ES 123789D
3.11e7*
37.14
Abs. Int.
8.97e6
4.49e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
Abs. Int.
2.12e7
1.06e7
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT

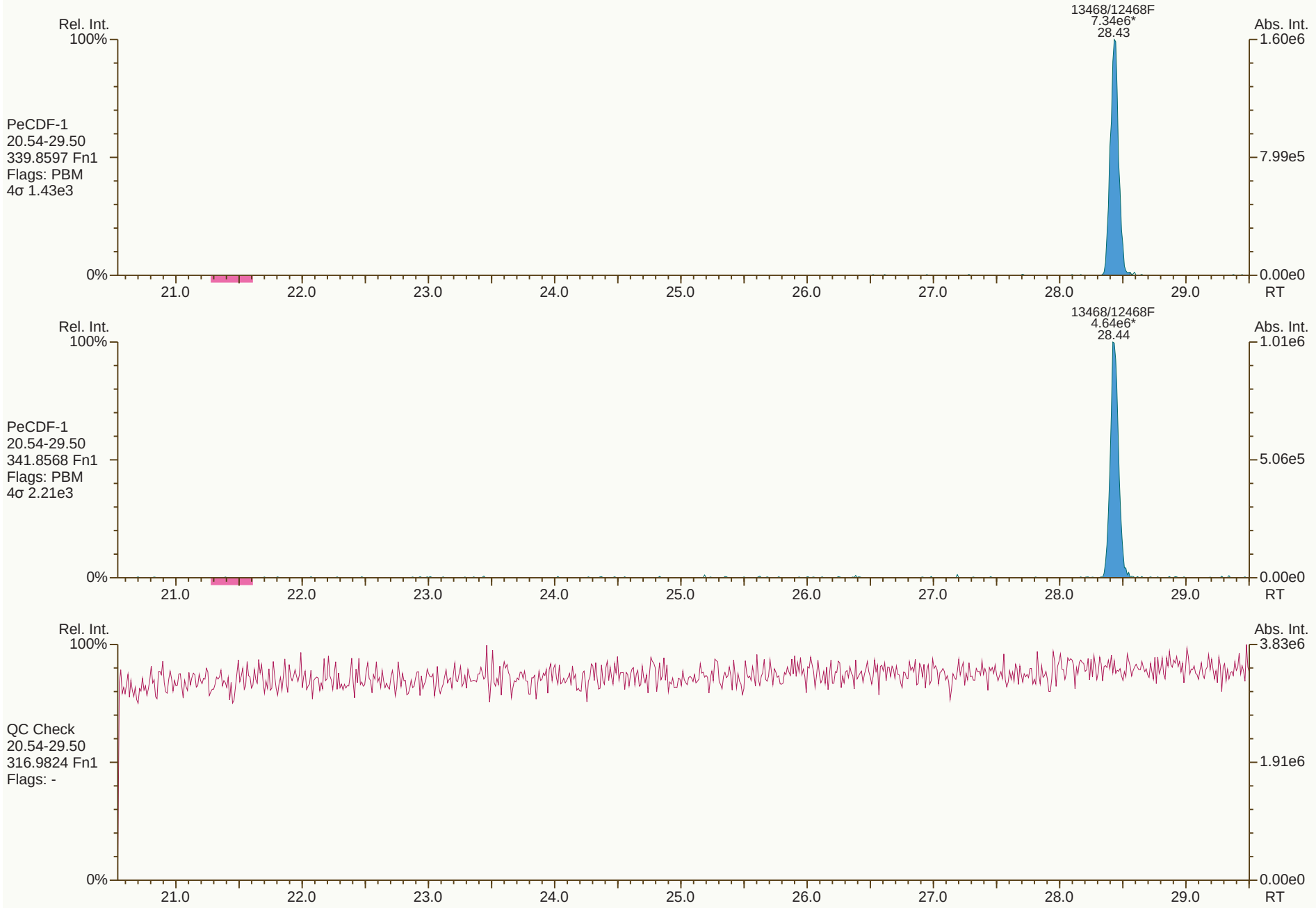

Rel. Int.
100%
HpCDD
38.26-41.01
423.7767 Fn4
Flags: PBM
4σ 2.03e3
0%
1234679D
2.87e7*
39.32
1234678D
2.61e7*
39.97
Abs. Int.
1.17e7
5.84e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.26-41.01
425.7737 Fn4
Flags: PBM
4σ 2.67e3
0%
1234679D
2.78e7*
39.32
1234678D
2.53e7*
39.96
Abs. Int.
1.13e7
5.65e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
435.8169 Fn4
Flags: PBM
4σ 3.10e3
0%
ES 1234678D
2.86e7*
39.95
Abs. Int.
1.24e7
6.18e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
437.8140 Fn4
Flags: PBM
4σ 3.92e3
0%
ES 1234678D
2.76e7*
39.95
Abs. Int.
1.21e7
6.05e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.26-41.01
430.9728 Fn4
Flags: -
0%
Abs. Int.
1.42e7
7.08e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT


OCDD
8.12e7*
42.39
Rel. Int.
100%
OCDD
41.02-45.00
457.7377 Fn5
Flags: PBM
4σ 1.54e3
0%
Abs. Int.
2.91e7
1.45e7
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDD
8.91e7*
42.39
Rel. Int.
100%
OCDD
41.02-45.00
459.7348 Fn5
Flags: PBM
4σ 4.44e3
0%
Abs. Int.
3.18e7
1.59e7
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
3.11e7*
42.38
Rel. Int.
100%
OCDD Std.
41.02-45.00
469.7780 Fn5
Flags: PBM
4σ 2.35e3
0%
Abs. Int.
1.08e7
5.42e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
3.41e7*
42.38
Rel. Int.
100%
OCDD Std.
41.02-45.00
471.7750 Fn5
Flags: PBM
4σ 2.77e3
0%
Abs. Int.
1.17e7
5.84e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
7.05e6
3.53e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT


Rel. Int.
100%
TCDF
20.54-29.50
303.9016 Fn1
Flags: PBM
4σ 4.36e3
1368F
6.74e6*
21.17
2468F
1.81e6*
22.40
2348F
6.33e6*
26.26
2378F
5.28e6*
26.37
1289F
6.73e6*
28.47
Abs. Int.
1.68e6
8.40e5
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF
20.54-29.50
305.8987 Fn1
Flags: PBM
4σ 2.51e3
1368F
8.73e6*
21.17
2468F
2.51e6*
22.40
2348F
8.02e6*
26.26
2378F
7.09e6*
26.37
1289F
8.65e6*
28.47
Abs. Int.
2.23e6
1.12e6
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
315.9419 Fn1
Flags: PBM
4σ 1.15e4
Conc(2378F) = (5.28e6 + 7.09e6) * 2000pg / (5.14e7 + 6.53e7) * 0.98 * 9.017502g = 24pg/g
PSW 10-Aug-2020 09:13
VERIFIED
JS 1234F
7.10e7*
24.92
ES 2378F
5.14e7*
26.35
Abs. Int.
1.38e7
6.91e6
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
317.9389 Fn1
Flags: PBM
4σ 8.98e3
JS 1234F
8.90e7*
24.91
ES 2378F
6.53e7*
26.35
Abs. Int.
1.84e7
9.22e6
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
HxCDPE
20.54-29.50
375.8364 Fn1
Flags: PB
4σ 1.21e3
Abs. Int.
8.41e3
4.20e3
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT

SGS ID: B4511_17654_DF_003MS | Sample ID: CS-24-MS | Acq: 07-Aug-2020 19:23:31

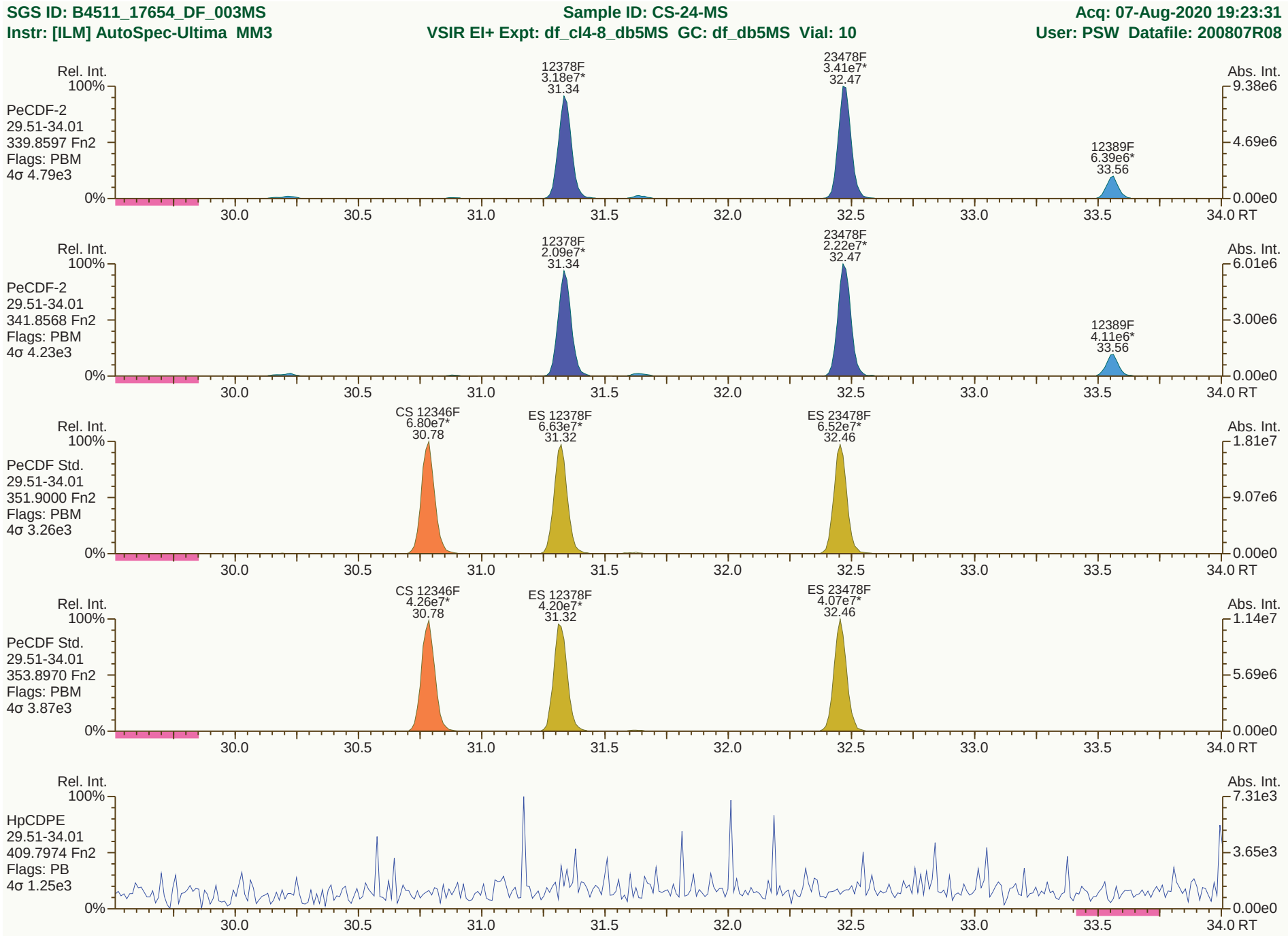
Instr: [ILM] AutoSpec-Ultima MM3 | VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 10 | User: PSW Datafile: 200807R08

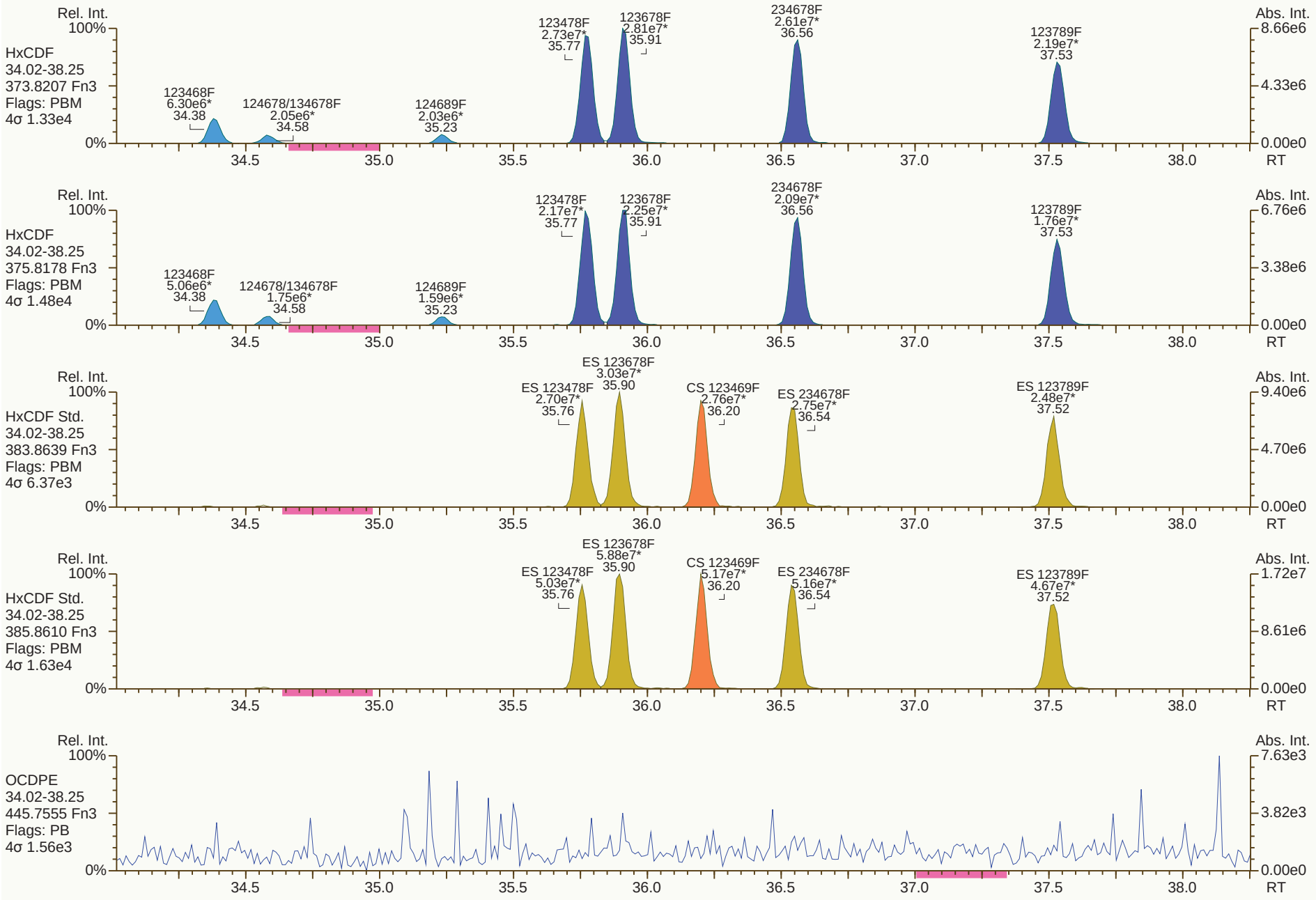


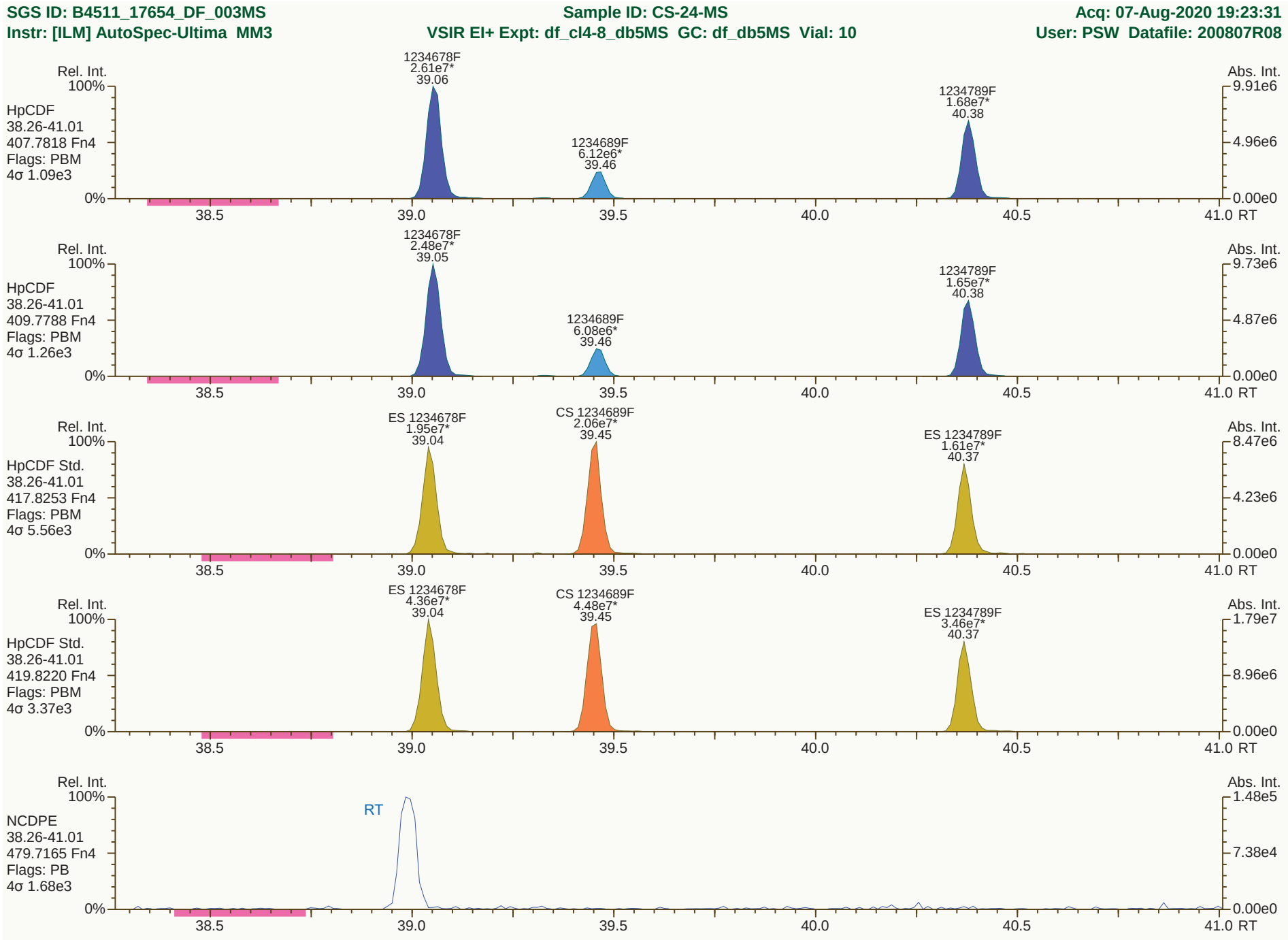
Results: P:\B4500_B4599\B4511\B4511_17654 DF\Resources\B4511_17654_DF_003MS.utp_res, saved 10-Aug-2020 09:13 (PSW) | *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 8494 scc: 607-175 | *PKD: 10-Aug-2020 08:21 Printed: 10-Aug-2020 09:18 Page 8 of 12*

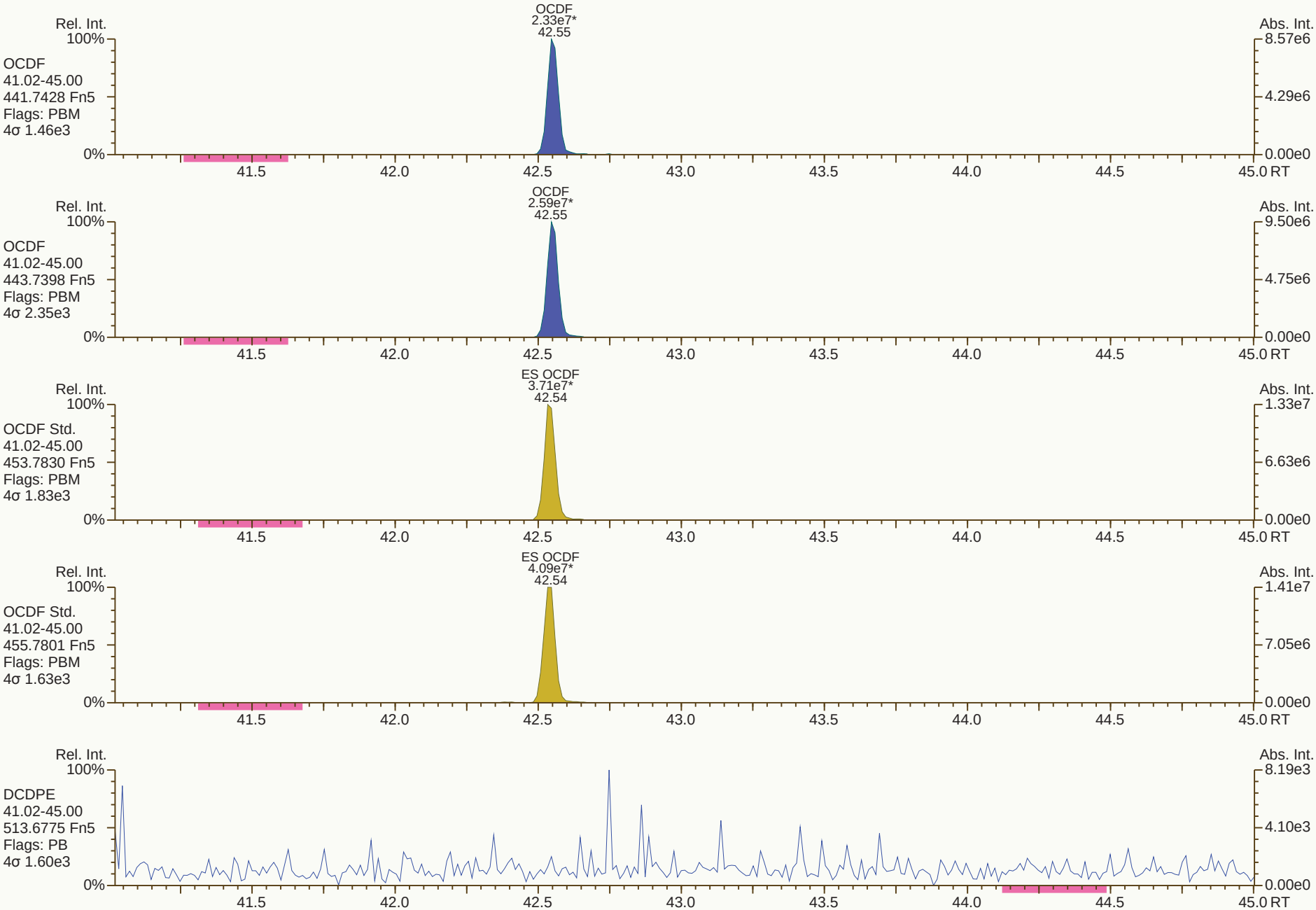
SGS ID: B4511_17654_DF_003MS
Instr: [ILM] AutoSpec-Ultima MM3
Sample ID: CS-24-MS
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 10
Acq: 07-Aug-2020 19:23:31
User: PSW Datafile: 200807R08




Rel. Int.
100%
HxCDF
34.02-38.25
373.8207 Fn3
Flags: PBM
4σ 1.33e4
123468F
6.30e6*
34.38
124678/134678F
2.05e6*
34.58
124689F
2.03e6*
35.23
123478F
2.73e7*
35.77
123678F
2.81e7*
35.91
234678F
2.61e7*
36.56
123789F
2.19e7*
37.53
Abs. Int.
8.66e6
4.33e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDF
34.02-38.25
375.8178 Fn3
Flags: PBM
4σ 1.48e4
123468F
5.06e6*
34.38
124678/134678F
1.75e6*
34.58
124689F
1.59e6*
35.23
123478F
2.17e7*
35.77
123678F
2.25e7*
35.91
234678F
2.09e7*
36.56
123789F
1.76e7*
37.53
Abs. Int.
6.76e6
3.38e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDF Std.
34.02-38.25
383.8639 Fn3
Flags: PBM
4σ 6.37e3
ES 123678F
3.03e7*
35.90
ES 123478F
2.70e7*
35.76
CS 123469F
2.76e7*
36.20
ES 234678F
2.75e7*
36.54
ES 123789F
2.48e7*
37.52
Abs. Int.
9.40e6
4.70e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDF Std.
34.02-38.25
385.8610 Fn3
Flags: PBM
4σ 1.63e4
ES 123678F
5.88e7*
35.90
ES 123478F
5.03e7*
35.76
CS 123469F
5.17e7*
36.20
ES 234678F
5.16e7*
36.54
ES 123789F
4.67e7*
37.52
Abs. Int.
1.72e7
8.61e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
OCDPE
34.02-38.25
445.7555 Fn3
Flags: PB
4σ 1.56e3
Abs. Int.
7.63e3
3.82e3
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT


SGS ID: B4511_17654_DF_003MS
Sample ID: CS-24-MS
Acq: 07-Aug-2020 19:23:31
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 10
User: PSW Datafile: 200807R08
Rel. Int.
Abs. Int.
HpCDF
38.26-41.01
407.7818 Fn4
Flags: PBM
4σ 1.09e3
1234678F
2.61e7*
39.06
1234689F
6.12e6*
39.46
1234789F
1.68e7*
40.38
9.91e6
4.96e6
0.00e0
HpCDF
38.26-41.01
409.7788 Fn4
Flags: PBM
4σ 1.26e3
1234678F
2.48e7*
39.05
1234689F
6.08e6*
39.46
1234789F
1.65e7*
40.38
9.73e6
4.87e6
0.00e0
HpCDF Std.
38.26-41.01
417.8253 Fn4
Flags: PBM
4σ 5.56e3
ES 1234678F
1.95e7*
39.04
CS 1234689F
2.06e7*
39.45
ES 1234789F
1.61e7*
40.37
8.47e6
4.23e6
0.00e0
HpCDF Std.
38.26-41.01
419.8220 Fn4
Flags: PBM
4σ 3.37e3
ES 1234678F
4.36e7*
39.04
CS 1234689F
4.48e7*
39.45
ES 1234789F
3.46e7*
40.37
1.79e7
8.96e6
0.00e0
NCDPE
38.26-41.01
479.7165 Fn4
Flags: PB
4σ 1.68e3
RT
1.48e5
7.38e4
0.00e0
100%
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Results: P:\B4500_B4599\B4511\B4511_17654 DF\Resources\B4511_17654_DF_003MS.utp_res, saved 10-Aug-2020 09:13 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 6398, 7740, 3816 scc: 607-175
PKD: 10-Aug-2020 08:21 Printed: 10-Aug-2020 09:18 Page 11 of 12

SGS ID: B4511_17654_DF_003MS
Instr: [ILM] AutoSpec-Ultima MM3
Sample ID: CS-24-MS
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 10
Acq: 07-Aug-2020 19:23:31
User: PSW Datafile: 200807R08



Lab ID: B4511_17654_DF_003MSD | **Acq'd:** 07 Aug 2020 20:10 PSW | **Wt/Vol:** 8.96 g | **ICAL:** MM3_DF_10012020_12JUN2020

Client ID: CS-24-MSD | **UTP:** 10-Aug-2020 09:02:23 PSW | **J-level:** 0.558 pg/g | **Split:** 1 | **Checkcode:** 343-506-QBV

Datafile: 200807R09 | **Report:** 10 Aug 2020 09:06 pw | **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	27.30		1.0009	1.0009	0	9.10E+06	0.79	Y	1.18	22.7	6954	0.194
12378-PeCDD	32.85		1.0006	1.0006	0	3.94E+07	1.57	Y	1.14	104	9270	0.234
123478-HxCDD	36.75		1.0004	1.0004	0	3.68E+07	1.26	Y	1.09	113	7483	0.182
123678-HxCDD	36.86		1.0035	1.0035	0	3.83E+07	1.24	Y	1.13	124	7483	0.204
123789-HxCDD	37.16		1.0116	1.0116	0	3.93E+07	1.24	Y	1.05	113	7483	0.18
1234678-HpCDD	39.97		1.0003	1.0003	0	5.45E+07	1.02	Y	0.98	224	3839	0.0974
OCDD	42.39		1.0003	1.0002	-0.3	1.83E+08	0.90	Y	1.08	1,240	7284	0.317
2378-TCDF	26.38		1.0006	1.0009	+0.5	1.27E+07	0.76	Y	0.98	22.9	6014	0.122
12378-PeCDF	31.35		1.0006	1.0006	0	5.43E+07	1.55	Y	0.95	112	10178	0.198
23478-PeCDF	32.49		1.0005	1.0006	+0.2	6.13E+07	1.51	Y	0.95	124	10178	0.19
123478-HxCDF	35.78		1.0005	1.0005	0	5.08E+07	1.22	Y	1.20	116	27190	0.533
123678-HxCDF	35.92		1.0004	1.0004	0	5.17E+07	1.25	Y	1.07	120	27190	0.511
234678-HxCDF	36.57		1.0005	1.0005	0	4.86E+07	1.27	Y	1.10	121	27190	0.559
123789-HxCDF	37.54		1.0004	1.0004	0	4.09E+07	1.24	Y	1.09	114	27190	0.697
1234678-HpCDF	39.06		1.0003	1.0003	0	5.17E+07	1.05	Y	1.28	142	4024	0.0741
1234789-HpCDF	40.39		1.0002	1.0003	+0.2	3.27E+07	1.05	Y	1.27	117	4024	0.0851
OCDF	42.56		1.0003	1.0002	-0.3	4.65E+07	0.92	Y	1.01	278	5273	0.208

Name	Act RT	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	27.28	1.0255	1.0256	+0.2	7.61E+07	0.77	Y	1.01	87.8
ES 12378-PeCDD	32.83	1.2330	1.2342	+2.4	7.48E+07	1.66	Y	0.87	99.8
ES 123478-HxCDD	36.74	0.9917	0.9916	-0.2	6.67E+07	1.29	Y	1.10	71.1
ES 123678-HxCDD	36.85	0.9947	0.9947	0	6.14E+07	1.27	Y	1.06	67.7
ES 123789-HxCDD	37.15	1.0028	1.0027	-0.2	7.38E+07	1.26	Y	1.22	70.9
ES 1234678-HpCDD	39.96	1.0785	1.0786	+0.2	5.53E+07	1.07	Y	0.99	65.1
ES OCDD	42.38	1.1439	1.1441	+0.5	6.09E+07	0.92	Y	0.67	53.2
ES 2378-TCDF	26.36	1.0572	1.0576	+0.6	1.26E+08	0.79	Y	1.01	90.8
ES 12378-PeCDF	31.33	1.2558	1.2572	+2.6	1.14E+08	1.61	Y	0.90	92.6
ES 23478-PeCDF	32.47	1.3012	1.3028	+3.1	1.17E+08	1.60	Y	0.89	95.6
ES 123478-HxCDF	35.77	0.9655	0.9654	-0.2	8.14E+07	0.52	Y	1.43	66.6
ES 123678-HxCDF	35.91	0.9693	0.9692	-0.2	8.96E+07	0.52	Y	1.63	64.2
ES 234678-HxCDF	36.55	0.9867	0.9866	-0.2	8.17E+07	0.54	Y	1.48	64.6
ES 123789-HxCDF	37.53	1.0130	1.0130	0	7.36E+07	0.52	Y	1.29	66.7
ES 1234678-HpCDF	39.05	1.0540	1.0541	+0.2	6.32E+07	0.46	Y	1.15	64.5
ES 1234789-HpCDF	40.38	1.0898	1.0899	+0.2	4.92E+07	0.45	Y	0.91	63.5
ES OCDF	42.55	1.1484	1.1485	+0.3	7.41E+07	0.89	Y	0.83	52.3

Lab ID: B4511_17654_DF_003MSD | Acq'd: 07 Aug 2020 20:10 PSW | Wt/Vol: 8.96 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-24-MSD | UTP: 10-Aug-2020 09:02:23 PSW | J-level: 0.558 pg/g | Split: 1 | Checkcode: 343-506-QBV

Datafile: 200807R09 | Report: 10 Aug 2020 09:06 pw | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %	
JS 1234-TCDD	26.60		-	-	-	8.60E+07	0.80	Y	-	-	
JS 1234-TCDF	24.92		-	-	-	1.37E+08	0.79	Y	-	-	
JS 123467-HxCDD	37.05		-	-	-	4.28E+07	1.28	Y	-	-	
CS 37Cl-2378-TCDD	27.30		1.0265	1.0265	0	3.25E+07	n/a	-	1.04	91.1	
CS 12347-PeCDD	32.32		1.2141	1.2150	+1.7	5.18E+07	1.62	Y	0.74	81.4	
CS 12346-PeCDF	30.79		1.2343	1.2357	+2.6	1.10E+08	1.54	Y	0.86	93.3	
CS 123469-HxCDF	36.21		0.9776	0.9775	-0.2	7.47E+07	0.53	Y	1.36	64.3	
CS 1234689-HpCDF	39.46		1.0650	1.0652	+0.5	6.16E+07	0.44	Y	1.05	68.2	
~~SS 37Cl-2378-TCDD~~	~~27.30~~		~~1.0265~~	~~1.0265~~	~~0~~	~~3.25E+07~~	~~n/a~~		~~1.04~~	~~103~~	Not used in this project.
~~SS 12347-PeCDD~~	~~32.32~~		~~1.2141~~	~~1.2150~~	~~+1.7~~	~~5.18E+07~~	~~1.62~~	~~Y~~	~~0.86~~	~~81.1~~	CL 10Aug20
~~SS 12346-PeCDF~~	~~30.79~~		~~1.2343~~	~~1.2357~~	~~+2.6~~	~~1.10E+08~~	~~1.54~~	~~Y~~	~~0.96~~	~~100~~	
~~SS 123469-HxCDF~~	~~36.21~~		~~0.9776~~	~~0.9775~~	~~-0.2~~	~~7.47E+07~~	~~0.53~~	~~Y~~	~~0.83~~	~~99.8~~	
~~SS 1234689-HpCDF~~	~~39.46~~		~~1.0650~~	~~1.0652~~	~~+0.5~~	~~6.16E+07~~	~~0.44~~	~~Y~~	~~0.92~~	~~105~~	

Totals	Conc	EMPC
Total TCDD	104	105
Total PeCDD	152	152
Total HxCDD	405	405
Total HpCDD	476	476
Total Tetra-Octa Dioxins	2380	2380
Total TCDF	124	125
Total PeCDF	295	295
Total HxCDF	521	521
Total HpCDF	302	302
Total Tetra-Octa Furans	1,520	1520
Total Tetra-Octa Dioxins & Furans	3900	3900

* 37Cl correction has been applied to 2378-TCDD

	Original Values	Corrected Values
Ratio	0.79	0.79
Response	9.12E+06	9.10E+06

Lab ID: B4511_17654_DF_003MSD **Acq'd: 07 Aug 2020 20:10 PSW** **Wt/Vol: 8.96 g** **ICAL: MM3_DF_10012020_12JUN2020**

Client ID: CS-24-MSD **UTP: 10-Aug-2020 09:02:23 PSW** **J-level: 0.558 pg/g** **Split: 1** **Checkcode: 343-506-QBV**

Datafile: 200807R09 **Report: 10 Aug 2020 09:06 pw** **Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)**

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1368-TCDD	23.41		0.8591	0.8583	-1.1	1.19E+07	0.78	Y	1.18	29.6	6954	0.194
1379-TCDD	NotFnd		0.8732						1.18		6954	0.194
1369-TCDD	NotFnd		0.8901						1.18		6954	0.194
1469-TCDD	NotFnd		0.9205						1.18		6954	0.194
1247/1246/1248/1249-TCDD	NotFnd		0.9301						1.18		6954	0.194
1378-TCDD	25.57	J EMPC	0.9374	0.9374	0	8.69E+04	1.13	N	1.18	0.216	6954	0.194
1268-TCDD	NotFnd		0.9449						1.18		6954	0.194
1478-TCDD	NotFnd		0.9544						1.18		6954	0.194
1279-TCDD	NotFnd		0.9610						1.18		6954	0.194
1234/1269-TCDD	NotFnd		0.9746						1.18		6954	0.194
1236-TCDD	NotFnd		0.9802						1.18		6954	0.194
1237/1238-TCDD	26.98	J EMPC	0.9898	0.9891	-1.1	2.17E+05	1.19	N	1.18	0.54	6954	0.194
1239-TCDD	27.14		0.9950	0.9950	0	8.62E+06	0.89	Y	1.18	21.5	6954	0.194
2378-TCDD	**27.30**		**1.0009**	1.0009	**0**	9.10E+06	0.79	Y	**1.18**	**22.7**	**6954**	**0.194**
1278-TCDD	NotFnd		1.0133						1.18		6954	0.194
1267-TCDD	NotFnd		1.0185						1.18		6954	0.194
1289-TCDD	28.32		1.0379	1.0381	+0.3	1.22E+07	0.77	Y	1.18	30.3	6954	0.194
12479/12468-PeCDD	30.29		0.9229	0.9226	-0.5	8.88E+06	1.53	Y	1.14	23.3	9270	0.234
12469-PeCDD	30.83	J	0.9396	0.9390	-1.1	2.61E+05	1.53	Y	1.14	0.687	9270	0.234
12368-PeCDD	31.39	J	0.9568	0.9563	-0.9	1.92E+05	1.76	Y	1.14	0.503	9270	0.234
12478-PeCDD	31.59	J	0.9626	0.9623	-0.6	2.51E+05	1.43	Y	1.14	0.659	9270	0.234
12379-PeCDD	31.70	J	0.9657	0.9655	-0.4	1.66E+05	1.45	Y	1.14	0.437	9270	0.234
12369/12467/12489-PeCDD	31.96	J	0.9738	0.9735	-0.6	1.92E+05	1.55	Y	1.14	0.506	9270	0.234
12346/12347-PeCDD	32.35	J	0.9853	0.9854	+0.2	1.63E+05	1.55	Y	1.14	0.429	9270	0.234
12378-PeCDD	32.85		**1.0006**	**1.0006**	**0**	**3.94E+07**	**1.57**	**Y**	**1.14**	**104**	**9270**	**0.234**
12367-PeCDD	NotFnd		1.0034						1.14		9270	0.234
12389-PeCDD	33.29		1.0141	1.0142	+0.2	8.33E+06	1.50	Y	1.14	21.9	9270	0.234
124679/124689-HxCDD	35.05		0.9542	0.9542	0	1.30E+07	1.26	Y	1.09	39.5	7483	0.188
123468-HxCDD	35.71		0.9721	0.9720	-0.2	1.04E+06	1.40	Y	1.09	3.16	7483	0.188
123679/123689-HxCDD	36.00		0.9799	0.9799	0	3.47E+06	1.32	Y	1.09	10.6	7483	0.188
123469-HxCDD	36.12	J	0.9835	0.9833	-0.4	7.81E+05	1.26	Y	1.09	2.38	7483	0.188
123478-HxCDD	36.75		**1.0004**	**1.0004**	**0**	**3.68E+07**	**1.26**	**Y**	1.09	**113**	**7483**	**0.182**
123678-HxCDD	36.86		**1.0035**	**1.0035**	**0**	**3.83E+07**	**1.24**	**Y**	1.13	**124**	**7483**	**0.204**
123467-HxCDD	NotFnd		1.0088						1.09		7483	0.188
123789-HxCDD	37.16		**1.0116**	**1.0116**	**0**	**3.93E+07**	**1.24**	**Y**	1.05	**113**	**7483**	**0.18**

Lab ID: B4511_17654_DF_003MSD | Acq'd: 07 Aug 2020 20:10 PSW | Wt/Vol: 8.96 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-24-MSD | UTP: 10-Aug-2020 09:02:23 PSW | J-level: 0.558 pg/g | Split: 1 | Checkcode: 343-506-QBV

Datafile: 200807R09 | Report: 10 Aug 2020 09:06 pw | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1234679-HpCDD	39.33		0.9843	0.9843	0	6.14E+07	1.04	Y	0.98	252	3839	0.0974
1234678-HpCDD	**39.97**		**1.0003**	**1.0003**	**0**	**5.45E+07**	**1.02**	**Y**	**0.98**	**224**	**3839**	**0.0974**
OCDD	**42.39**		**1.0003**	**1.0002**	**-0.3**	**1.83E+08**	**0.90**	**Y**	**1.08**	**1,240**	**7284**	**0.317**
OCDD-a	42.39		1.0002	1.0002	0	1.10E+07	2.67	Y	0.07	1,220	6989	4.93
1368-TCDF	21.17		0.8044	0.8033	-1.4	1.72E+07	0.74	Y	0.98	31	6014	0.122
1468-TCDF	21.73	J	0.8261	0.8245	-2.1	1.02E+05	0.88	Y	0.98	0.184	6014	0.122
2468-TCDF	22.40		0.8511	0.8500	-1.5	4.72E+06	0.78	Y	0.98	8.5	6014	0.122
1346/1246-TCDF	NotFnd		0.8665						0.98		6014	0.122
1347/1378/1247-TCDF	22.96		0.8723	0.8711	-1.7	3.13E+05	0.69	Y	0.98	0.564	6014	0.122
1348-TCDF	NotFnd		0.8835						0.98		6014	0.122
1248/1367/1379-TCDF	NotFnd		0.8888						0.98		6014	0.122
1268-TCDF	23.81	J	0.9044	0.9035	-1.3	2.72E+05	0.79	Y	0.98	0.49	6014	0.122
1467-TCDF	NotFnd		0.9098						0.98		6014	0.122
1478-TCDF	NotFnd		0.9167						0.98		6014	0.122
1369/1237-TCDF	NotFnd		0.9316						0.98		6014	0.122
2467-TCDF	NotFnd		0.9369						0.98		6014	0.122
2368-TCDF	24.85	EMPC	0.9430	0.9429	-0.1	3.58E+05	0.93	N	0.98	0.645	6014	0.122
1238/1234/1678/1469/1236-TCDF	24.95	J	0.9468	0.9466	-0.3	2.92E+05	0.69	Y	0.98	0.527	6014	0.122
1278-TCDF	25.43		0.9651	0.9650	-0.2	3.73E+05	0.71	Y	0.98	0.672	6014	0.122
1349-TCDF	NotFnd		0.9704						0.98		6014	0.122
1267-TCDF	NotFnd		0.9761						0.98		6014	0.122
2346/1249-TCDF	NotFnd		0.9834						0.98		6014	0.122
2347/1279-TCDF	NotFnd		0.9921						0.98		6014	0.122
2348-TCDF	26.27		0.9964	0.9966	+0.3	1.58E+07	0.78	Y	0.98	28.5	6014	0.122
2378-TCDF	**26.38**		**1.0006**	**1.0009**	**+0.5**	**1.27E+07**	**0.76**	**Y**	**0.98**	**22.9**	**6014**	**0.122**
2367/3467-TCDF	26.76	J EMPC	1.0156	1.0151	-0.8	2.29E+05	0.58	N	0.98	0.413	6014	0.122
1269-TCDF	NotFnd		1.0249						0.98		6014	0.122
1239-TCDF	NotFnd		1.0357						0.98		6014	0.122
1289-TCDF	28.48		1.0799	1.0806	+1.2	1.67E+07	0.76	Y	0.98	30.1	6014	0.122
13468/12468-PeCDF	28.45		0.9084	0.9079	-0.9	1.31E+07	1.59	Y	0.95	26.6	4235	0.0807
13678/13467/12467-PeCDF	30.05	J EMPC	0.9591	0.9590	-0.2	2.10E+05	2.05	N	0.95	0.428	10178	0.194
12368/13478/12478-PeCDF	30.22		0.9642	0.9644	+0.4	1.91E+06	1.59	Y	0.95	3.9	10178	0.194
14678-PeCDF	NotFnd		0.9675						0.95		10178	0.194
13479-PeCDF	NotFnd		0.9706						0.95		10178	0.194
13469/12479-PeCDF	NotFnd		0.9787						0.95		10178	0.194
12346-PeCDF	NotFnd		0.9833						0.95		10178	0.194

Lab ID: B4511_17654_DF_003MSD | **Acq'd:** 07 Aug 2020 20:10 PSW | **Wt/Vol:** 8.96 g | **ICAL:** MM3_DF_10012020_12JUN2020

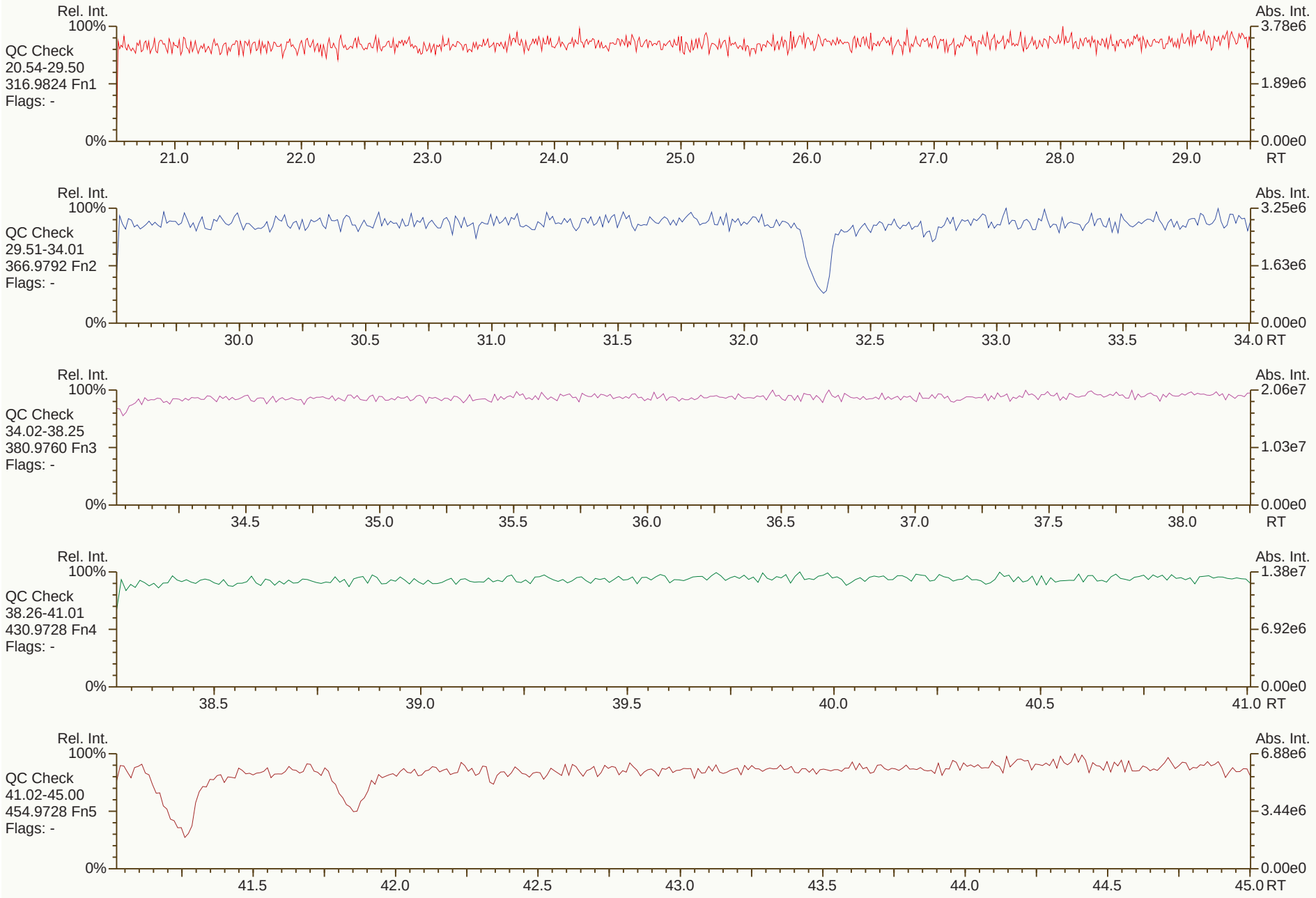
Client ID: CS-24-MSD | **UTP:** 10-Aug-2020 09:02:23 PSW | **J-level:** 0.558 pg/g | **Split:** 1 | **Checkcode:** 343-506-QBV

Datafile: 200807R09 | **Report:** 10 Aug 2020 09:06 pw | **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
23468/12469-PeCDF	30.90	J	0.9861	0.9861	0	6.30E+05	1.51	Y	0.95	1.29	10178	0.194
12347-PeCDF	NotFnd		0.9887						0.95		10178	0.194
12348-PeCDF	31.14	J	0.9938	0.9940	+0.4	1.37E+05	1.58	Y	0.95	0.278	10178	0.194
12378-PeCDF	**31.35**		**1.0006**	**1.0006**	**0**	**5.43E+07**	**1.55**	**Y**	**0.95**	**112**	**10178**	**0.198**
12678/12367-PeCDF	31.65		1.0095	1.0101	+1.1	1.81E+06	1.63	Y	0.95	3.68	10178	0.194
12379-PeCDF	NotFnd		1.0150						0.95		10178	0.194
12679-PeCDF	NotFnd		0.9926						0.95		10178	0.194
23467/12369-PeCDF	32.36	J	0.9966	0.9966	0	1.76E+05	1.57	Y	0.95	0.358	10178	0.194
23478-PeCDF	**32.49**		**1.0005**	**1.0006**	**+0.2**	**6.13E+07**	**1.51**	**Y**	**0.95**	**124**	**10178**	**0.19**
23478/12489-PeCDF	NotFnd		0.0000						0.95			
12489-PeCDF	NotFnd		1.0047						0.95		10178	0.194
12349-PeCDF	NotFnd		1.0107						0.95		10178	0.194
12389-PeCDF	33.58		1.0339	1.0342	+0.6	1.14E+07	1.53	Y	0.95	23.3	10178	0.194
123468-HxCDF	34.40		0.9617	0.9618	+0.2	1.23E+07	1.27	Y	1.11	30.3	27190	0.57
124678/134678-HxCDF	34.59		0.9673	0.9672	-0.2	4.24E+06	1.25	Y	1.11	10.4	27190	0.57
134679-HxCDF	NotFnd		0.9737						1.11		27190	0.57
124679-HxCDF	NotFnd		0.9792						1.11		27190	0.57
124689-HxCDF	35.24		0.9854	0.9854	0	3.99E+06	1.20	Y	1.11	9.79	27190	0.57
123467-HxCDF	NotFnd		0.9972						1.11		27190	0.57
123478-HxCDF	**35.78**		**1.0005**	**1.0005**	**0**	**5.08E+07**	**1.22**	**Y**	**1.20**	**116**	**27190**	**0.533**
123678-HxCDF	**35.92**		**1.0004**	**1.0004**	**0**	**5.17E+07**	**1.25**	**Y**	**1.07**	**120**	**27190**	**0.511**
123479-HxCDF	NotFnd		1.0049						1.11		27190	0.57
123469-HxCDF	NotFnd		1.0089						1.11		27190	0.57
123679-HxCDF	NotFnd		0.9945						1.11		27190	0.57
234678-HxCDF	**36.57**		**1.0005**	**1.0005**	**0**	**4.86E+07**	**1.27**	**Y**	**1.10**	**121**	**27190**	**0.559**
234678/123689-HxCDF	NotFnd		0.0000						1.10			
123689-HxCDF	NotFnd		1.0054						1.11		27190	0.57
123789-HxCDF	**37.54**		**1.0004**	**1.0004**	**0**	**4.09E+07**	**1.24**	**Y**	**1.09**	**114**	**27190**	**0.697**
123789/123489-HxCDF	NotFnd		0.0000						1.09			
123489-HxCDF	NotFnd		1.0008						1.11		27190	0.57
1234678-HpCDF	**39.06**		**1.0003**	**1.0003**	**0**	**5.17E+07**	**1.05**	**Y**	**1.28**	**142**	**4024**	**0.0741**
1234679-HpCDF	39.33	**J**	1.0072	1.0071	-0.2	5.09E+05	1.09	Y	1.27	1.58	4024	0.079
1234689-HpCDF	39.47		1.0107	1.0107	0	1.33E+07	1.04	Y	1.27	41.3	4024	0.079
1234789-HpCDF	**40.39**		**1.0002**	**1.0003**	**+0.2**	**3.27E+07**	**1.05**	**Y**	**1.27**	**117**	**4024**	**0.0851**
OCDF	**42.56**		**1.0003**	**1.0002**	**-0.3**	**4.65E+07**	**0.92**	**Y**	**1.01**	**278**	**5273**	**0.208**
OCDF-a	42.56		1.0002	1.0002	0	2.96E+06	2.71	Y	0.06	282	3967	2.49

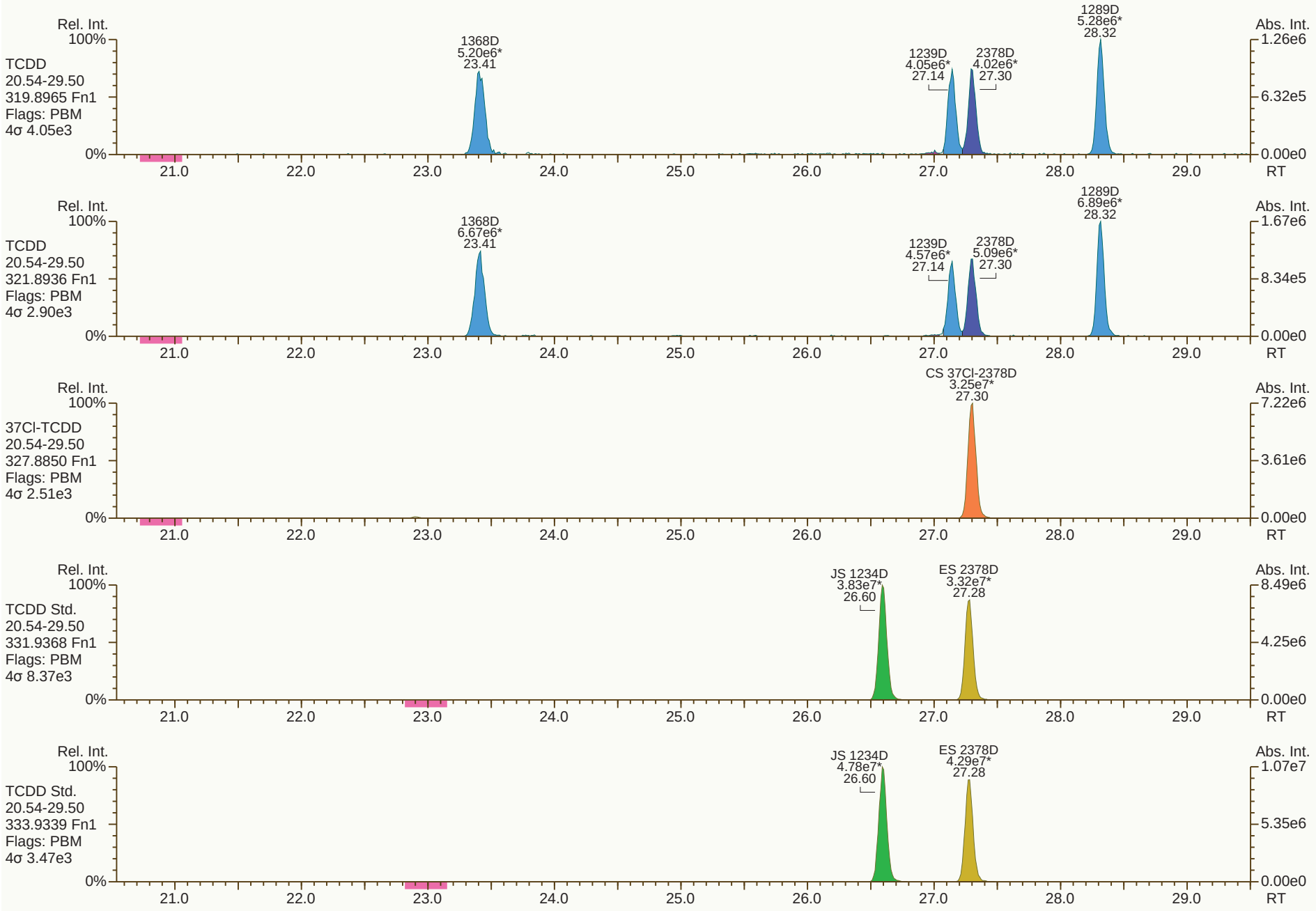
SGS ID: B4511_17654_DF_003MSD **Sample ID: CS-24-MSD** **Acq: 07-Aug-2020 20:10:58**

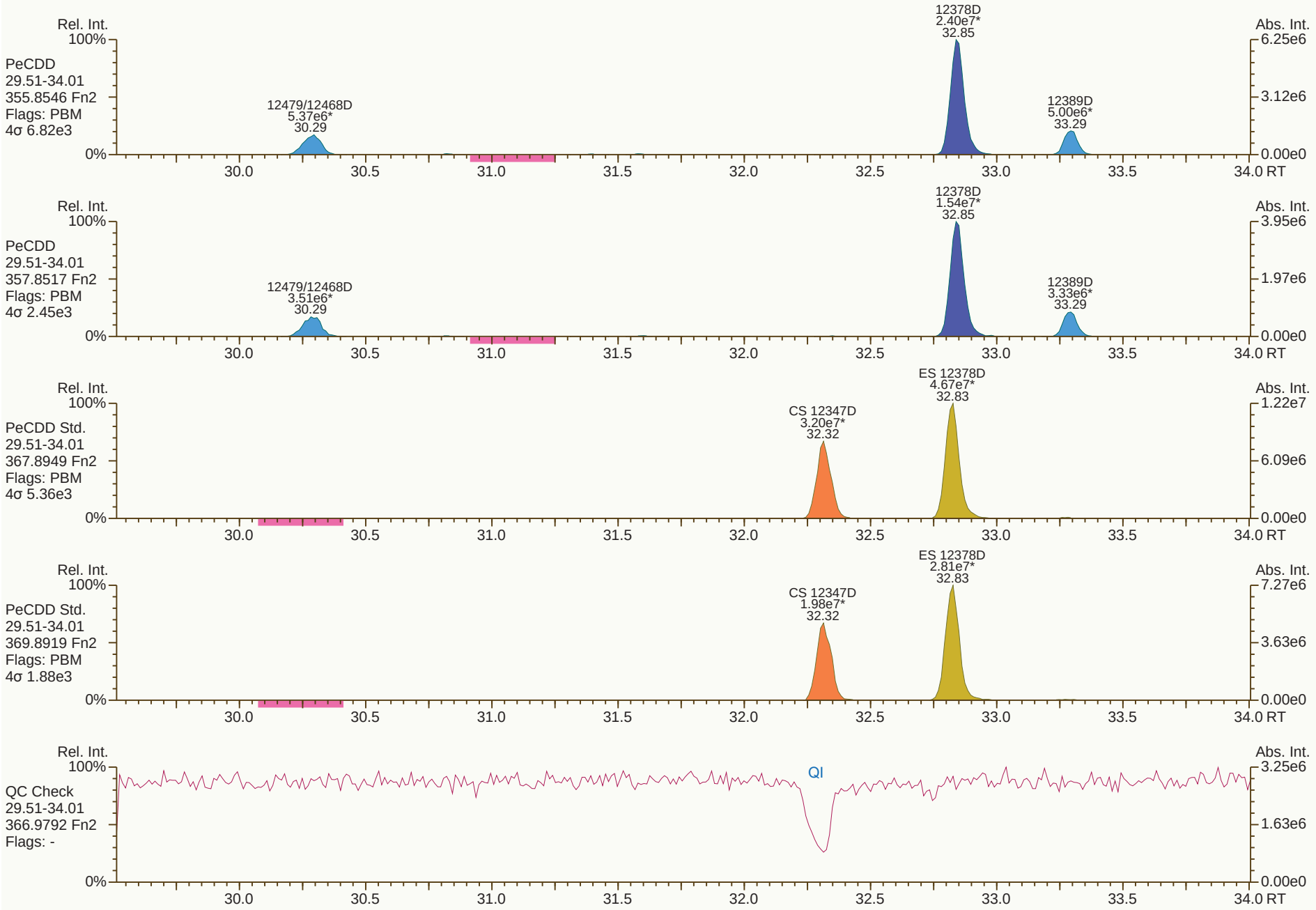
Instr: [ILM] AutoSpec-Ultima MM3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 11** **User: PSW Datafile: 200807R09**

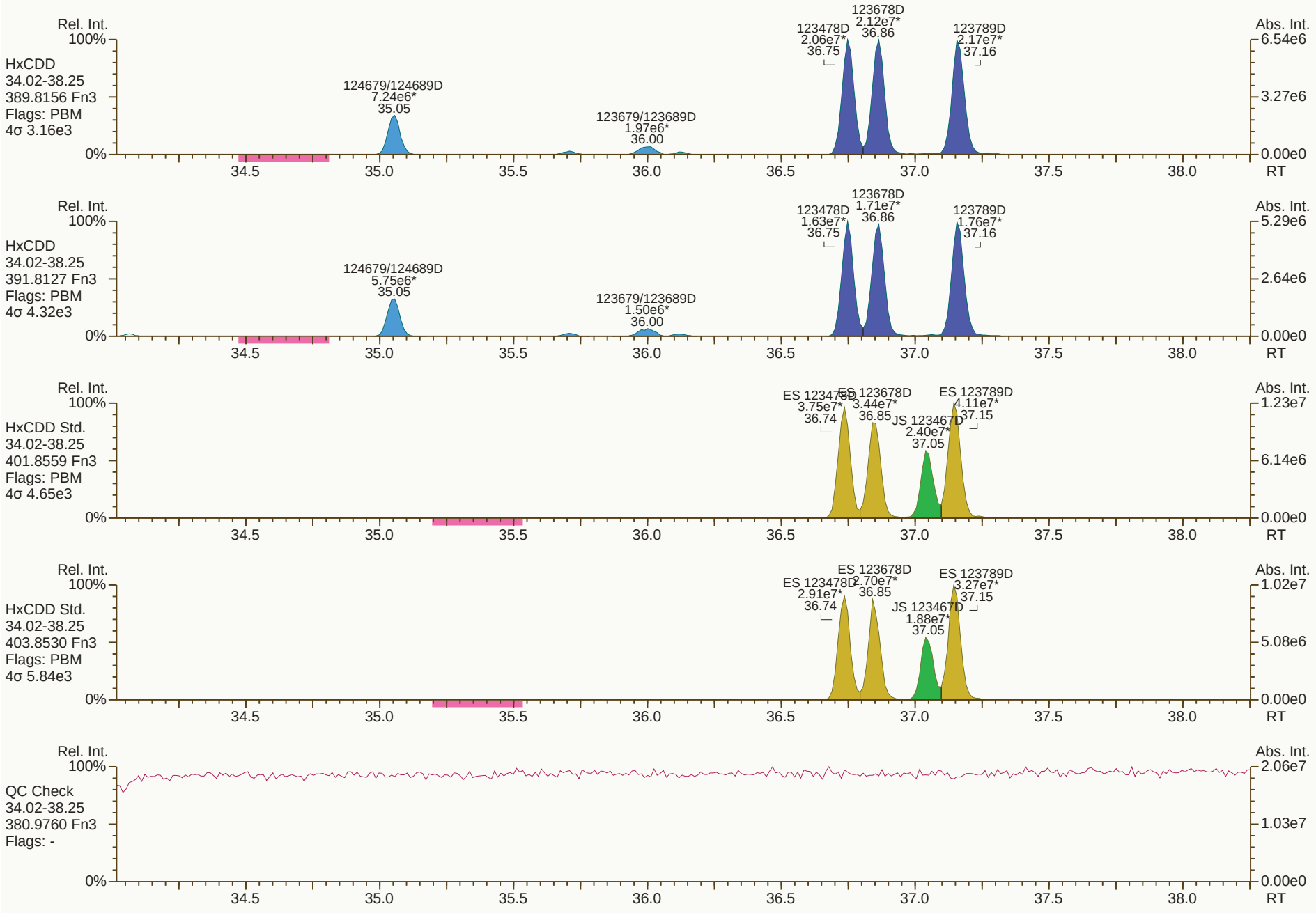


Results: P:\B4500_B4599\B4511\B4511_17654 DF\Resources\B4511_17654_DF_003MSD.utp_res, saved 10-Aug-2020 09:02 (PSW) *Peak annotation: Areas, Centroids*

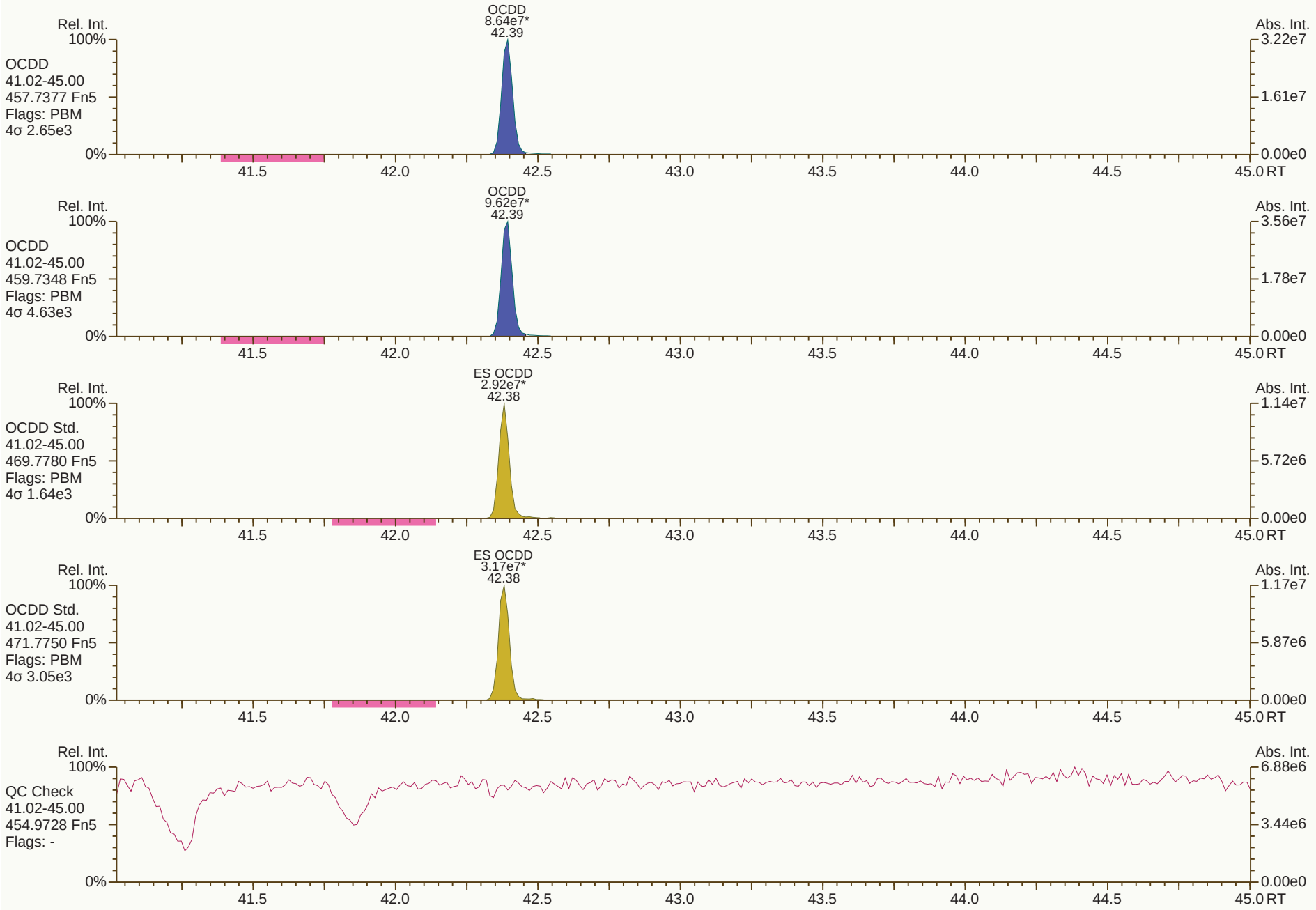
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 scc: 343-506 *PKD: n/a Printed: 10-Aug-2020 09:18 Page 1 of 12*


Rel. Int.
100%
TCDD
20.54-29.50
319.8965 Fn1
Flags: PBM
4σ 4.05e3
0%
1368D
5.20e6*
23.41
1239D
4.05e6*
27.14
2378D
4.02e6*
27.30
1289D
5.28e6*
28.32
Abs. Int.
1.26e6
6.32e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD
20.54-29.50
321.8936 Fn1
Flags: PBM
4σ 2.90e3
0%
1368D
6.67e6*
23.41
1239D
4.57e6*
27.14
2378D
5.09e6*
27.30
1289D
6.89e6*
28.32
Abs. Int.
1.67e6
8.34e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
37Cl-TCDD
20.54-29.50
327.8850 Fn1
Flags: PBM
4σ 2.51e3
0%
CS 37Cl-2378D
3.25e7*
27.30
Abs. Int.
7.22e6
3.61e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
331.9368 Fn1
Flags: PBM
4σ 8.37e3
0%
JS 1234D
3.83e7*
26.60
ES 2378D
3.32e7*
27.28
Abs. Int.
8.49e6
4.25e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
333.9339 Fn1
Flags: PBM
4σ 3.47e3
0%
JS 1234D
4.78e7*
26.60
ES 2378D
4.29e7*
27.28
Abs. Int.
1.07e7
5.35e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
PeCDD
29.51-34.01
355.8546 Fn2
Flags: PBM
4σ 6.82e3
0%
12479/12468D
5.37e6*
30.29
12378D
2.40e7*
32.85
12389D
5.00e6*
33.29
Abs. Int.
6.25e6
3.12e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD
29.51-34.01
357.8517 Fn2
Flags: PBM
4σ 2.45e3
0%
12479/12468D
3.51e6*
30.29
12378D
1.54e7*
32.85
12389D
3.33e6*
33.29
Abs. Int.
3.95e6
1.97e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
367.8949 Fn2
Flags: PBM
4σ 5.36e3
0%
CS 12347D
3.20e7*
32.32
ES 12378D
4.67e7*
32.83
Abs. Int.
1.22e7
6.09e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
369.8919 Fn2
Flags: PBM
4σ 1.88e3
0%
CS 12347D
1.98e7*
32.32
ES 12378D
2.81e7*
32.83
Abs. Int.
7.27e6
3.63e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
QC Check
29.51-34.01
366.9792 Fn2
Flags: -
0%
QI
Abs. Int.
3.25e6
1.63e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT


Rel. Int.
100%
HxCDD
34.02-38.25
389.8156 Fn3
Flags: PBM
4σ 3.16e3
124679/124689D
7.24e6*
35.05
123679/123689D
1.97e6*
36.00
123478D
2.06e7*
36.75
123678D
2.12e7*
36.86
123789D
2.17e7*
37.16
Abs. Int.
6.54e6
3.27e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD
34.02-38.25
391.8127 Fn3
Flags: PBM
4σ 4.32e3
124679/124689D
5.75e6*
35.05
123679/123689D
1.50e6*
36.00
123478D
1.63e7*
36.75
123678D
1.71e7*
36.86
123789D
1.76e7*
37.16
Abs. Int.
5.29e6
2.64e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
401.8559 Fn3
Flags: PBM
4σ 4.65e3
ES 123478D
3.75e7*
36.74
ES 123678D
3.44e7*
36.85
JS 123467D
2.40e7*
37.05
ES 123789D
4.11e7*
37.15
Abs. Int.
1.23e7
6.14e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
403.8530 Fn3
Flags: PBM
4σ 5.84e3
ES 123478D
2.91e7*
36.74
ES 123678D
2.70e7*
36.85
JS 123467D
1.88e7*
37.05
ES 123789D
3.27e7*
37.15
Abs. Int.
1.02e7
5.08e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
Abs. Int.
2.06e7
1.03e7
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT


Rel. Int.
100%
HpCDD
38.26-41.01
423.7767 Fn4
Flags: PBM
4σ 2.53e3
0%
1234679D
3.13e7*
39.33
1234678D
2.76e7*
39.97
Abs. Int.
1.21e7
6.06e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.26-41.01
425.7737 Fn4
Flags: PBM
4σ 1.31e3
0%
1234679D
3.01e7*
39.33
1234678D
2.70e7*
39.97
Abs. Int.
1.16e7
5.78e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
435.8169 Fn4
Flags: PBM
4σ 6.83e3
0%
ES 1234678D
2.85e7*
39.96
Abs. Int.
1.15e7
5.77e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
437.8140 Fn4
Flags: PBM
4σ 2.82e3
0%
ES 1234678D
2.68e7*
39.96
Abs. Int.
1.10e7
5.48e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.26-41.01
430.9728 Fn4
Flags: -
0%
Abs. Int.
1.38e7
6.92e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT


OCDD
8.64e7*
42.39
Rel. Int.
Abs. Int.
OCDD
41.02-45.00
457.7377 Fn5
Flags: PBM
4σ 2.65e3
OCDD
9.62e7*
42.39
OCDD
41.02-45.00
459.7348 Fn5
Flags: PBM
4σ 4.63e3
ES OCDD
2.92e7*
42.38
OCDD Std.
41.02-45.00
469.7780 Fn5
Flags: PBM
4σ 1.64e3
ES OCDD
3.17e7*
42.38
OCDD Std.
41.02-45.00
471.7750 Fn5
Flags: PBM
4σ 3.05e3
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
100%
0%
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

SGS ID: B4511_17654_DF_003MSD
Instr: [ILM] AutoSpec-Ultima MM3

Sample ID: CS-24-MSD
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 11

Acq: 07-Aug-2020 20:10:58
User: PSW Datafile: 200807R09



Results: P:\B4500_B4599\B4511\B4511_17654 DF\Resources\B4511_17654_DF_003MSD.utp_res, saved 10-Aug-2020 09:02 (PSW)
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 6315, 3038, 6418 scc: 343-506

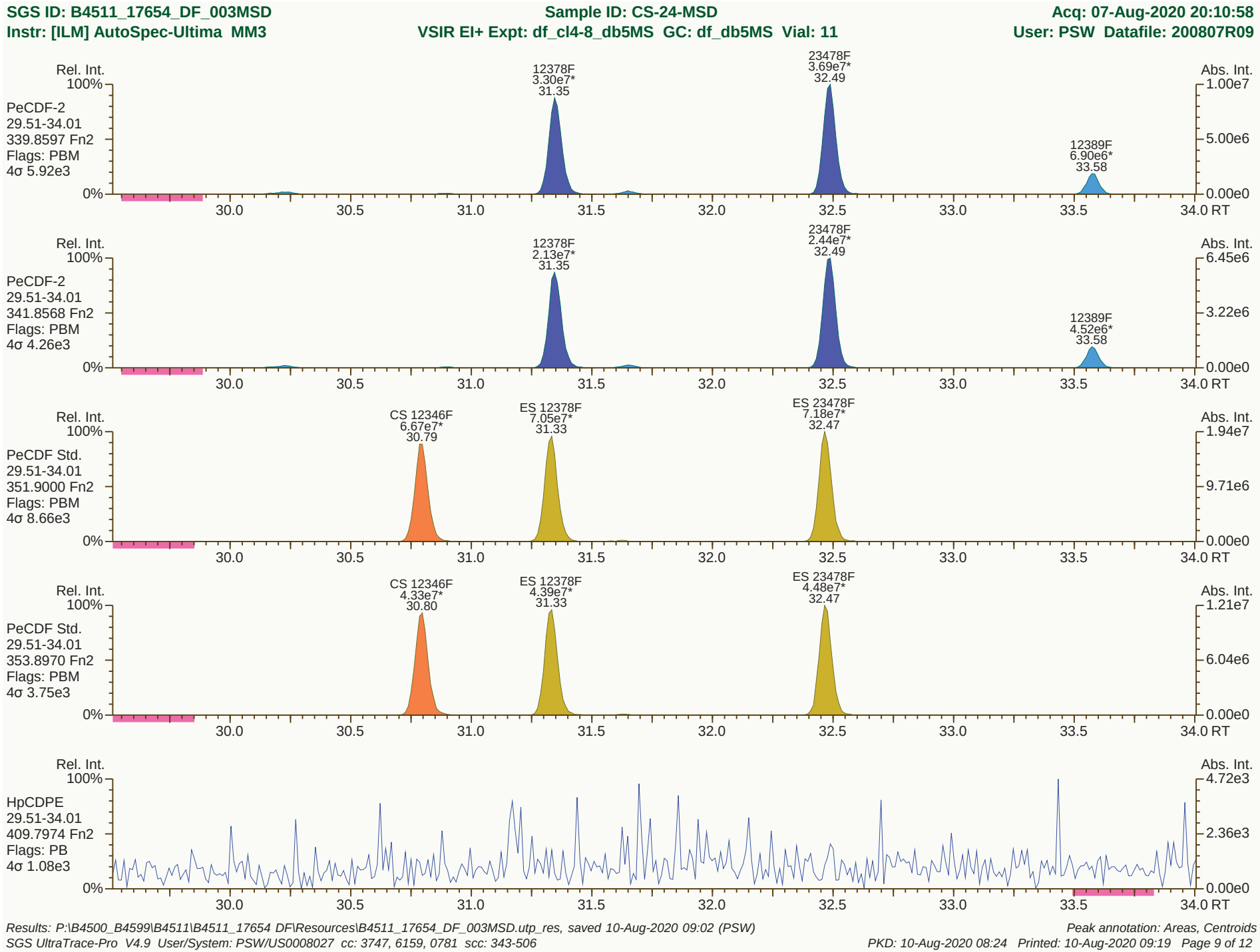
Peak annotation: Areas, Centroids
PKD: 10-Aug-2020 08:24 Printed: 10-Aug-2020 09:19 Page 7 of 12

SGS ID: B4511_17654_DF_003MSD **Sample ID: CS-24-MSD** **Acq: 07-Aug-2020 20:10:58**
Instr: [ILM] AutoSpec-Ultima MM3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 11** **User: PSW Datafile: 200807R09**



Results: P:\B4500_B4599\B4511\B4511_17654 DF\Resources\B4511_17654_DF_003MSD.utp_res, saved 10-Aug-2020 09:02 (PSW) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 0083 scc: 343-506 *PKD: 10-Aug-2020 08:24 Printed: 10-Aug-2020 09:19 Page 8 of 12*

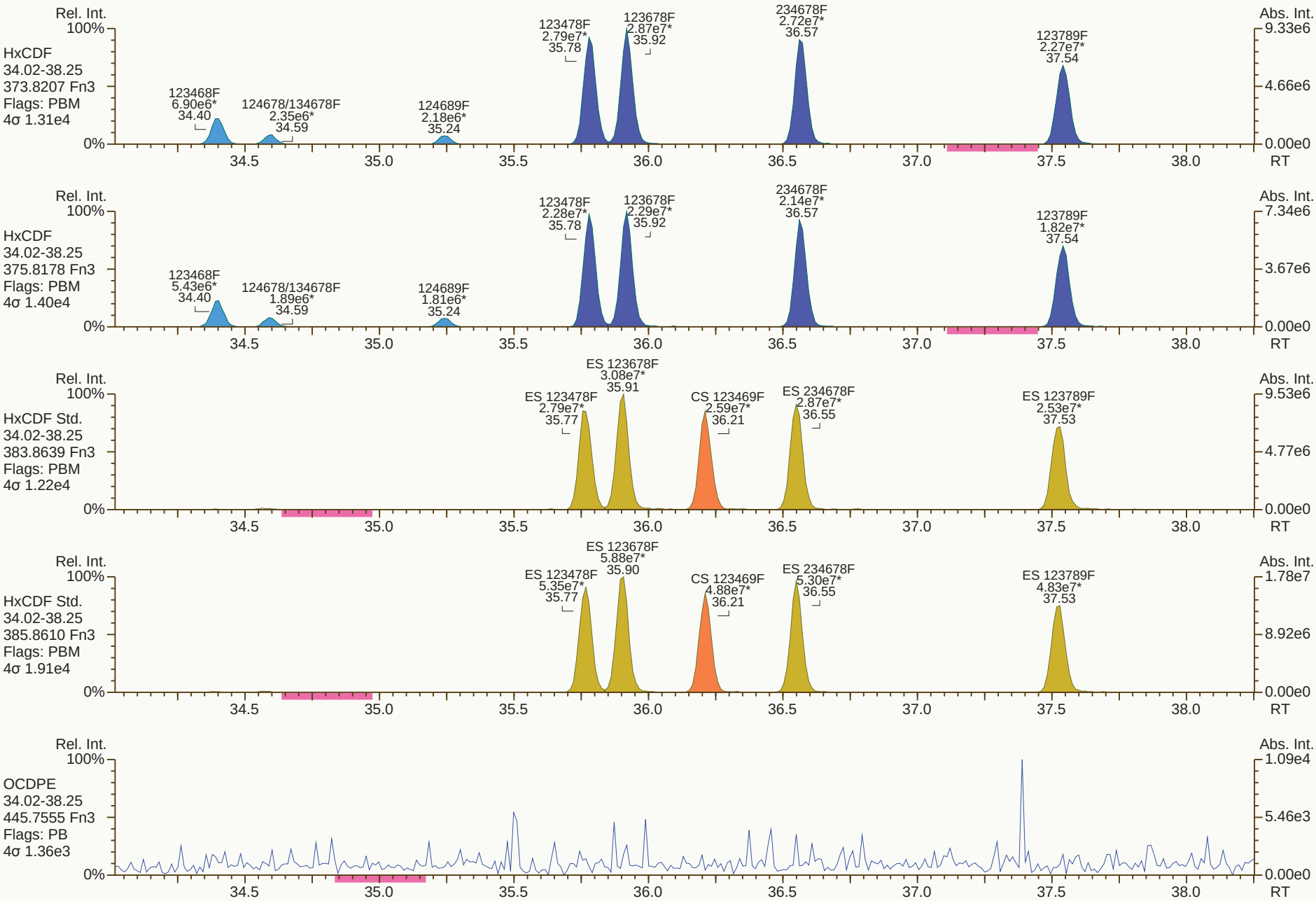
SGS ID: B4511_17654_DF_003MSD
Instr: [ILM] AutoSpec-Ultima MM3
Sample ID: CS-24-MSD
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 11
Acq: 07-Aug-2020 20:10:58
User: PSW Datafile: 200807R09



SGS ID: B4511_17654_DF_003MSD
Instr: [ILM] AutoSpec-Ultima MM3

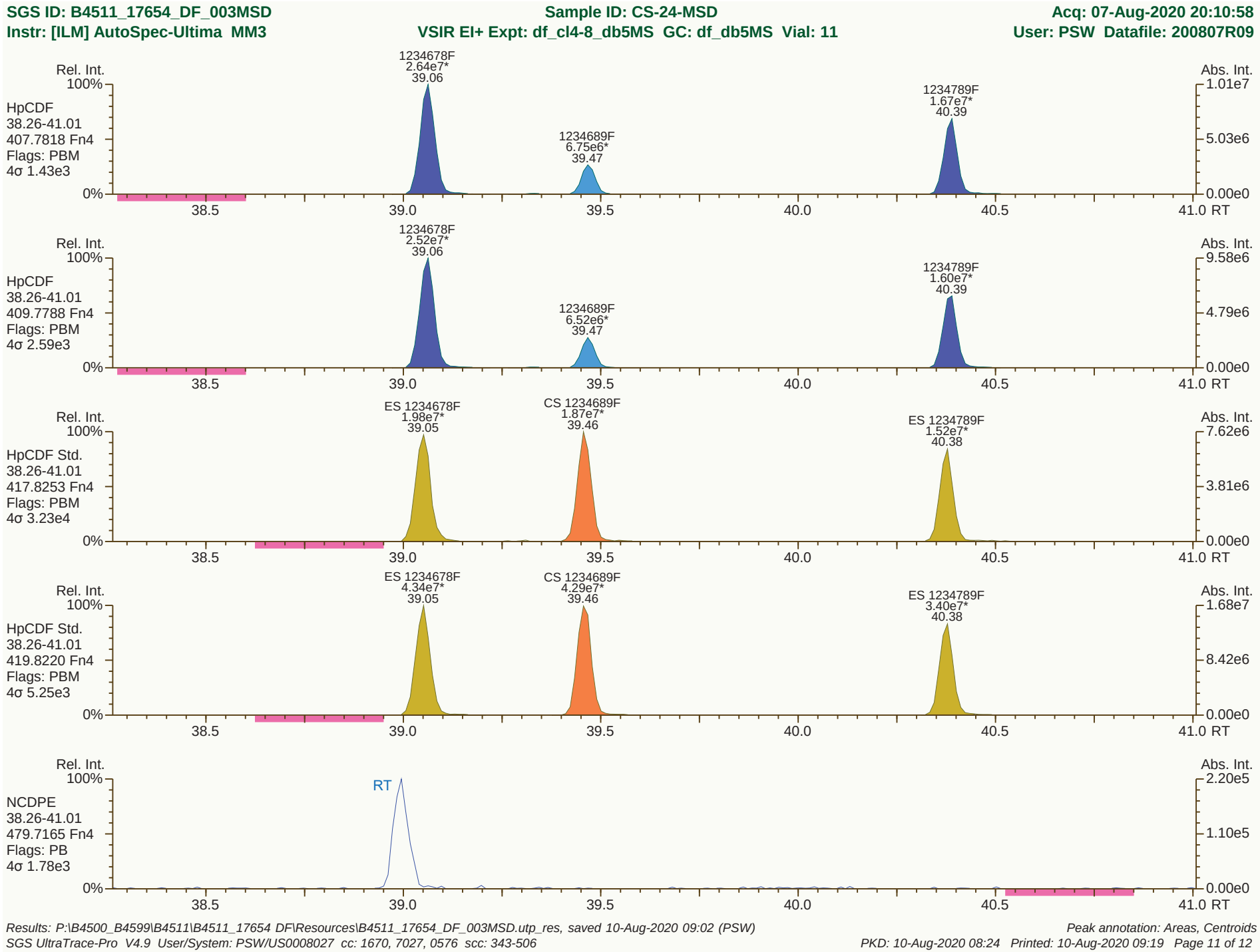
Sample ID: CS-24-MSD
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 11

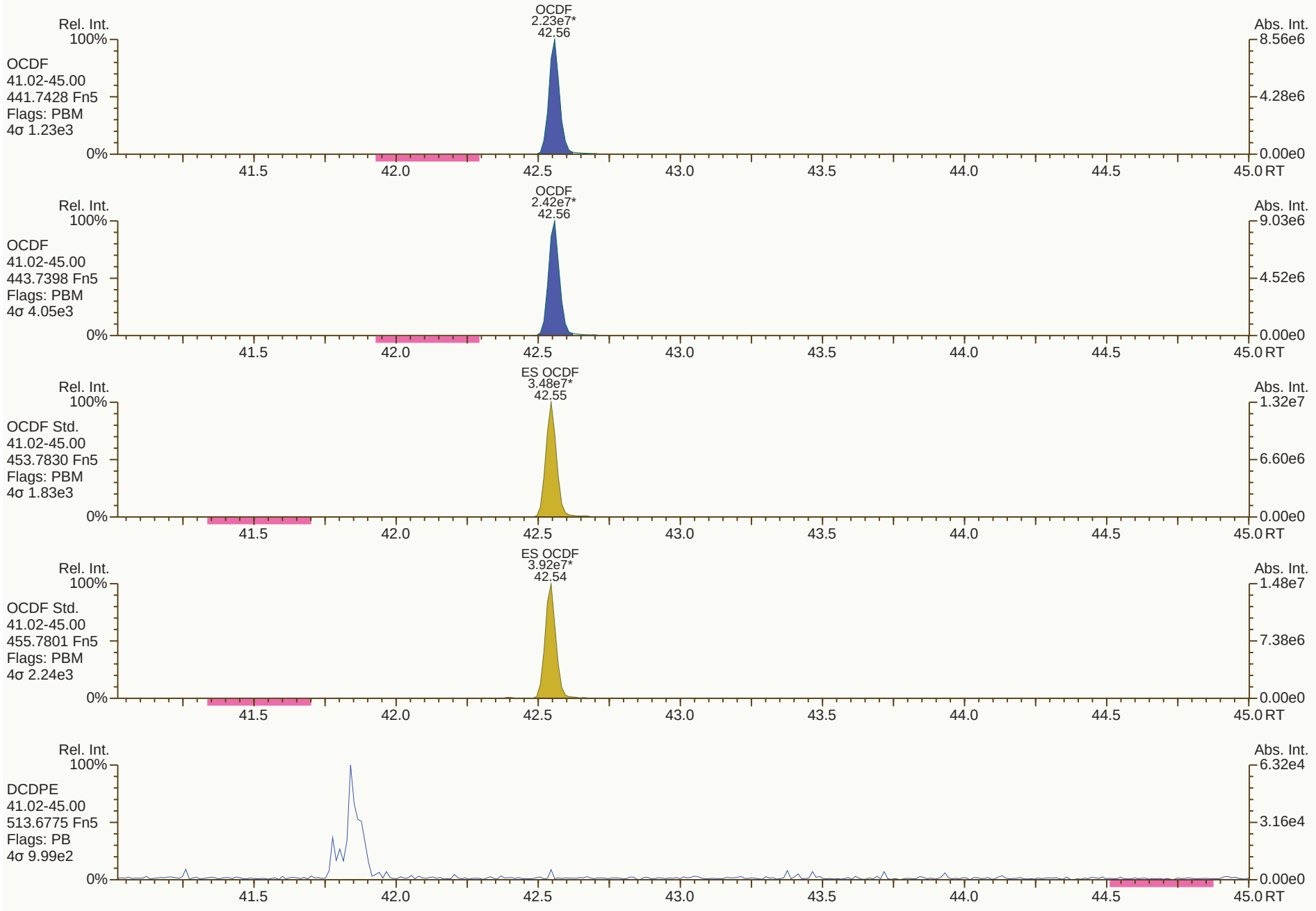
Acq: 07-Aug-2020 20:10:58
User: PSW Datafile: 200807R09



Results: P:\B4500_B4599\B4511\B4511_17654 DF\Resources\B4511_17654_DF_003MSD.utp_res, saved 10-Aug-2020 09:02 (PSW)
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 9764, 1184, 8180 scc: 343-506

Peak annotation: Areas, Centroids
PKD: 10-Aug-2020 08:24 Printed: 10-Aug-2020 09:19 Page 10 of 12


SGS ID: B4511_17654_DF_003MSD
Sample ID: CS-24-MSD
Acq: 07-Aug-2020 20:10:58
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 11
User: PSW Datafile: 200807R09
Rel. Int.
Abs. Int.
HpCDF
38.26-41.01
407.7818 Fn4
Flags: PBM
4σ 1.43e3
1234678F
2.64e7*
39.06
1234689F
6.75e6*
39.47
1234789F
1.67e7*
40.39
1.01e7
5.03e6
0.00e0
HpCDF
38.26-41.01
409.7788 Fn4
Flags: PBM
4σ 2.59e3
1234678F
2.52e7*
39.06
1234689F
6.52e6*
39.47
1234789F
1.60e7*
40.39
9.58e6
4.79e6
0.00e0
HpCDF Std.
38.26-41.01
417.8253 Fn4
Flags: PBM
4σ 3.23e4
ES 1234678F
1.98e7*
39.05
CS 1234689F
1.87e7*
39.46
ES 1234789F
1.52e7*
40.38
7.62e6
3.81e6
0.00e0
HpCDF Std.
38.26-41.01
419.8220 Fn4
Flags: PBM
4σ 5.25e3
ES 1234678F
4.34e7*
39.05
CS 1234689F
4.29e7*
39.46
ES 1234789F
3.40e7*
40.38
1.68e7
8.42e6
0.00e0
NCDPE
38.26-41.01
479.7165 Fn4
Flags: PB
4σ 1.78e3
RT
2.20e5
1.10e5
0.00e0
100%
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Results: P:\B4500_B4599\B4511\B4511_17654 DF\Resources\B4511_17654_DF_003MSD.utp_res, saved 10-Aug-2020 09:02 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 1670, 7027, 0576 scc: 343-506
PKD: 10-Aug-2020 08:24 Printed: 10-Aug-2020 09:19 Page 11 of 12


Rel. Int.
100%
OCDF
41.02-45.00
441.7428 Fn5
Flags: PBM
4σ 1.23e3
0%
OCDF
2.23e7*
42.56
Abs. Int.
8.56e6
4.28e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF
41.02-45.00
443.7398 Fn5
Flags: PBM
4σ 4.05e3
0%
OCDF
2.42e7*
42.56
Abs. Int.
9.03e6
4.52e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF Std.
41.02-45.00
453.7830 Fn5
Flags: PBM
4σ 1.83e3
0%
ES OCDF
3.48e7*
42.55
Abs. Int.
1.32e7
6.60e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF Std.
41.02-45.00
455.7801 Fn5
Flags: PBM
4σ 2.24e3
0%
ES OCDF
3.92e7*
42.54
Abs. Int.
1.48e7
7.38e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
DCDPE
41.02-45.00
513.6775 Fn5
Flags: PB
4σ 9.99e2
0%
Abs. Int.
6.32e4
3.16e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

Lab ID: B4511_17654_DF_004 **Acq'd:** 07 Aug 2020 20:58 PSW **Wt/Vol:** 9.43 g **ICAL:** MM3_DF_10012020_12JUN2020

Client ID: CS-23 **UTP:** 10-Aug-2020 09:02:24 PSW **J-level:** 0.53 pg/g **Split:** 1 **Checkcode:** 764-441-HCS

Datafile: 200807R10 **Report:** 10 Aug 2020 09:06 pw **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	27.30	J EMPC	1.0009	1.0010	+0.2	4.37E+04	1.13	N	1.18	0.116	4496	0.133
12378-PeCDD	32.83	J	1.0006	1.0008	+0.4	2.59E+05	1.38	Y	1.14	0.779	3321	0.0935
123478-HxCDD	36.74	J	1.0004	1.0004	0	7.57E+05	1.25	Y	1.09	2.63	3505	0.0896
123678-HxCDD	36.85		1.0035	1.0035	0	1.62E+06	1.37	Y	1.13	5.67	3505	0.0988
123789-HxCDD	37.15		1.0116	1.0116	0	1.36E+06	1.29	Y	1.05	4.36	3505	0.0938
1234678-HpCDD	39.96		1.0003	1.0003	0	4.28E+07	1.07	Y	0.98	197	4440	0.118
OCDD	42.38		1.0003	1.0003	0	1.98E+08	0.89	Y	1.08	1,580	5405	0.288
2378-TCDF	26.35	J	1.0006	1.0003	-0.5	1.99E+05	0.71	Y	0.98	0.382	4382	0.0935
12378-PeCDF	31.33	J EMPC	1.0006	1.0003	-0.6	1.91E+05	1.99	N	0.95	0.416	7771	0.163
23478-PeCDF	32.49	J	1.0005	1.0012	+1.4	9.21E+05	1.65	Y	0.95	2.13	7771	0.162
123478-HxCDF	35.77		1.0005	1.0005	0	1.32E+06	1.33	Y	1.20	3.32	12222	0.253
123678-HxCDF	35.91	J	1.0004	1.0004	0	9.25E+05	1.24	Y	1.07	2.25	12222	0.232
234678-HxCDF	36.55		1.0005	1.0004	-0.2	1.33E+06	1.33	Y	1.10	3.62	12222	0.273
123789-HxCDF	NotFnd		1.0004	-		-	-	-	1.09	-	12222	0.343
1234678-HpCDF	39.05		1.0003	1.0003	0	1.59E+07	1.04	Y	1.28	48.3	3075	0.0647
1234789-HpCDF	40.38		1.0002	1.0003	+0.2	1.14E+06	1.11	Y	1.27	4.62	3075	0.077
OCDF	42.55		1.0003	1.0002	-0.3	1.56E+07	0.89	Y	1.01	115	4339	0.227

Name	Act RT	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	27.27	1.0255	1.0256	+0.2	6.78E+07	0.79	Y	1.01	83.3
ES 12378-PeCDD	32.81	1.2330	1.2340	+2.0	6.21E+07	1.69	Y	0.87	88.1
ES 123478-HxCDD	36.73	0.9917	0.9916	-0.2	5.59E+07	1.29	Y	1.10	71.4
ES 123678-HxCDD	36.84	0.9947	0.9947	0	5.38E+07	1.28	Y	1.06	70.9
ES 123789-HxCDD	37.14	1.0028	1.0027	-0.2	6.33E+07	1.28	Y	1.22	72.8
ES 1234678-HpCDD	39.95	1.0785	1.0787	+0.5	4.68E+07	1.08	Y	0.99	65.9
ES OCDD	42.37	1.1439	1.1441	+0.5	4.95E+07	0.90	Y	0.67	51.8
ES 2378-TCDF	26.35	1.0572	1.0575	+0.5	1.13E+08	0.79	Y	1.01	84.5
ES 12378-PeCDF	31.32	1.2558	1.2572	+2.6	1.03E+08	1.55	Y	0.90	86.7
ES 23478-PeCDF	32.45	1.3012	1.3028	+3.1	9.71E+07	1.55	Y	0.89	83
ES 123478-HxCDF	35.76	0.9655	0.9654	-0.2	7.08E+07	0.51	Y	1.43	69.3
ES 123678-HxCDF	35.90	0.9693	0.9692	-0.2	8.14E+07	0.52	Y	1.63	69.8
ES 234678-HxCDF	36.54	0.9867	0.9866	-0.2	7.09E+07	0.53	Y	1.48	67.1
ES 123789-HxCDF	37.51	1.0130	1.0129	-0.2	6.01E+07	0.52	Y	1.29	65.1
ES 1234678-HpCDF	39.04	1.0540	1.0541	+0.2	5.44E+07	0.46	Y	1.15	66.4
ES 1234789-HpCDF	40.37	1.0898	1.0900	+0.5	4.13E+07	0.45	Y	0.91	63.7
ES OCDF	42.54	1.1484	1.1486	+0.5	5.66E+07	0.91	Y	0.83	47.8

Lab ID: B4511_17654_DF_004 | Acq'd: 07 Aug 2020 20:58 PSW | Wt/Vol: 9.43 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-23 | UTP: 10-Aug-2020 09:02:24 PSW | J-level: 0.53 pg/g | Split: 1 | Checkcode: 764-441-HCS

Datafile: 200807R10 | Report: 10 Aug 2020 09:06 pw | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %	
JS 1234-TCDD	26.59		-	-	-	8.09E+07	0.78	Y	-	-	
JS 1234-TCDF	24.91		-	-	-	1.31E+08	0.77	Y	-	-	
JS 123467-HxCDD	37.04		-	-	-	3.58E+07	1.26	Y	-	-	
CS 37Cl-2378-TCDD	27.29		1.0265	1.0265	0	3.11E+07	n/a	-	1.04	92.5	
CS 12347-PeCDD	32.30		1.2141	1.2150	+1.7	6.04E+07	1.67	Y	0.74	101	
CS 12346-PeCDF	30.78		1.2343	1.2357	+2.6	9.95E+07	1.58	Y	0.86	88.1	
CS 123469-HxCDF	36.20		0.9776	0.9775	-0.2	6.92E+07	0.52	Y	1.36	71.3	
CS 1234689-HpCDF	39.45		1.0650	1.0651	+0.2	5.33E+07	0.45	Y	1.05	70.7	
~~SS 37Cl-2378-TCDD~~	~~27.29~~		~~1.0265~~	~~1.0265~~	~~0~~	~~3.11E+07~~	~~n/a~~		~~1.04~~	~~110~~	Not used in this project.
~~SS 12347-PeCDD~~	~~32.30~~		~~1.2141~~	~~1.2150~~	~~+1.7~~	~~6.04E+07~~	~~1.67~~	~~Y~~	~~0.86~~	~~114~~	CL 10Aug20
~~SS 12346-PeCDF~~	~~30.78~~		~~1.2343~~	~~1.2357~~	~~+2.6~~	~~9.95E+07~~	~~1.58~~	~~Y~~	~~0.96~~	~~101~~	
~~SS 123469-HxCDF~~	~~36.20~~		~~0.9776~~	~~0.9775~~	~~-0.2~~	~~6.92E+07~~	~~0.52~~	~~Y~~	~~0.83~~	~~102~~	
~~SS 1234689-HpCDF~~	~~39.45~~		~~1.0650~~	~~1.0651~~	~~+0.2~~	~~5.33E+07~~	~~0.45~~	~~Y~~	~~0.92~~	~~106~~	

Totals	Conc	EMPC
Total TCDD	2.1	3.05
Total PeCDD	5.88	7.19
Total HxCDD	47.2	47.2
Total HpCDD	414	414
Total Tetra-Octa Dioxins	2050	2050
Total TCDF	8.47	11.2
Total PeCDF	26.1	27.7
Total HxCDF	69.2	69.2
Total HpCDF	145	145
Total Tetra-Octa Furans	364	369
Total Tetra-Octa Dioxins & Furans	2410	2420

* 37Cl correction has been applied to 2378-TCDD

	Original Values	Corrected Values
Ratio	0.64	1.13
Response	7.11E+04	5.25E+04

Lab ID: B4511_17654_DF_004 **Acq'd: 07 Aug 2020 20:58 PSW** **Wt/Vol: 9.43 g** **ICAL: MM3_DF_10012020_12JUN2020**

Client ID: CS-23 **UTP: 10-Aug-2020 09:02:24 PSW** **J-level: 0.53 pg/g** **Split: 1** **Checkcode: 764-441-HCS**

Datafile: 200807R10 **Report: 10 Aug 2020 09:06 pw** **Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)**

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1368-TCDD	23.39		0.8591	0.8579	-1.7	4.37E+05	0.79	Y	1.18	1.16	4496	0.133
1379-TCDD	23.79		0.8732	0.8726	-0.9	2.56E+05	0.78	Y	1.18	0.68	4496	0.133
1369-TCDD	NotFnd		0.8901						1.18		4496	0.133
1469-TCDD	NotFnd		0.9205						1.18		4496	0.133
1247/1246/1248/1249-TCDD	25.33	J EMPC	0.9301	0.9291	-1.5	1.04E+05	1.04	N	1.18	0.276	4496	0.133
1378-TCDD	25.55	J EMPC	0.9374	0.9369	-0.8	8.29E+04	0.94	N	1.18	0.22	4496	0.133
1268-TCDD	NotFnd		0.9449						1.18		4496	0.133
1478-TCDD	NotFnd		0.9544						1.18		4496	0.133
1279-TCDD	26.18	J EMPC	0.9610	0.9600	-1.6	5.49E+04	1.03	N	1.18	0.146	4496	0.133
1234/1269-TCDD	26.61	J	0.9746	0.9760	+2.2	9.95E+04	0.85	Y	1.18	0.264	4496	0.133
1236-TCDD	NotFnd		0.9802						1.18		4496	0.133
1237/1238-TCDD	27.00	J EMPC	0.9898	0.9903	+0.8	7.17E+04	0.95	N	1.18	0.19	4496	0.133
1239-TCDD	NotFnd		0.9950						1.18		4496	0.133
2378-TCDD	**27.30**	J EMPC	**1.0009**	1.0010	**+0.2**	4.37E+04	1.13	N	**1.18**	**0.116**	**4496**	**0.133**
1278-TCDD	NotFnd		1.0133						1.18		4496	0.133
1267-TCDD	NotFnd		1.0185						1.18		4496	0.133
1289-TCDD	NotFnd		1.0379						1.18		4496	0.133
12479/12468-PeCDD	30.27	J	0.9229	0.9228	-0.2	5.78E+05	1.58	Y	1.14	1.74	3321	0.0935
12469-PeCDD	30.82	J	0.9396	0.9393	-0.6	2.11E+05	1.35	Y	1.14	0.636	3321	0.0935
12368-PeCDD	31.39	J	0.9568	0.9567	-0.2	3.51E+05	1.71	Y	1.14	1.06	3321	0.0935
12478-PeCDD	31.58	J	0.9626	0.9625	-0.2	2.14E+05	1.64	Y	1.14	0.643	3321	0.0935
12379-PeCDD	31.68	J EMPC	0.9657	0.9655	-0.4	2.01E+05	1.91	N	1.14	0.604	3321	0.0935
12369/12467/12489-PeCDD	31.94	J	0.9738	0.9736	-0.4	2.58E+05	1.40	Y	1.14	0.775	3321	0.0935
12346/12347-PeCDD	32.33	J EMPC	0.9853	0.9853	0	1.87E+05	1.13	N	1.14	0.564	3321	0.0935
12378-PeCDD	32.83	J	**1.0006**	**1.0008**	**+0.4**	**2.59E+05**	**1.38**	**Y**	**1.14**	**0.779**	**3321**	**0.0935**
12367-PeCDD	32.93	J EMPC	1.0034	1.0036	+0.4	4.78E+04	2.13	N	1.14	0.144	3321	0.0935
12389-PeCDD	33.27	J	1.0141	1.0141	0	8.48E+04	1.34	Y	1.14	0.255	3321	0.0935
124679/124689-HxCDD	35.04		0.9542	0.9542	0	3.22E+06	1.26	Y	1.09	10.9	3505	0.0939
123468-HxCDD	35.70		0.9721	0.9720	-0.2	1.35E+06	1.24	Y	1.09	4.55	3505	0.0939
123679/123689-HxCDD	35.99		0.9799	0.9799	0	4.53E+06	1.23	Y	1.09	15.3	3505	0.0939
123469-HxCDD	36.11	J	0.9835	0.9834	-0.2	7.73E+05	1.31	Y	1.09	2.61	3505	0.0939
123478-HxCDD	36.74	J	**1.0004**	**1.0004**	**0**	**7.57E+05**	**1.25**	**Y**	1.09	**2.63**	**3505**	**0.0896**
123678-HxCDD	36.85		**1.0035**	**1.0035**	**0**	**1.62E+06**	**1.37**	**Y**	1.13	**5.67**	**3505**	**0.0988**
123467-HxCDD	37.05	J	1.0088	1.0088	0	3.64E+05	1.39	Y	1.09	1.23	3505	0.0939
123789-HxCDD	37.15		**1.0116**	**1.0116**	**0**	**1.36E+06**	**1.29**	**Y**	1.05	**4.36**	**3505**	**0.0938**

Lab ID: B4511_17654_DF_004 | Acq'd: 07 Aug 2020 20:58 PSW | Wt/Vol: 9.43 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-23 | UTP: 10-Aug-2020 09:02:24 PSW | J-level: 0.53 pg/g | Split: 1 | Checkcode: 764-441-HCS

Datafile: 200807R10 | Report: 10 Aug 2020 09:06 pw | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

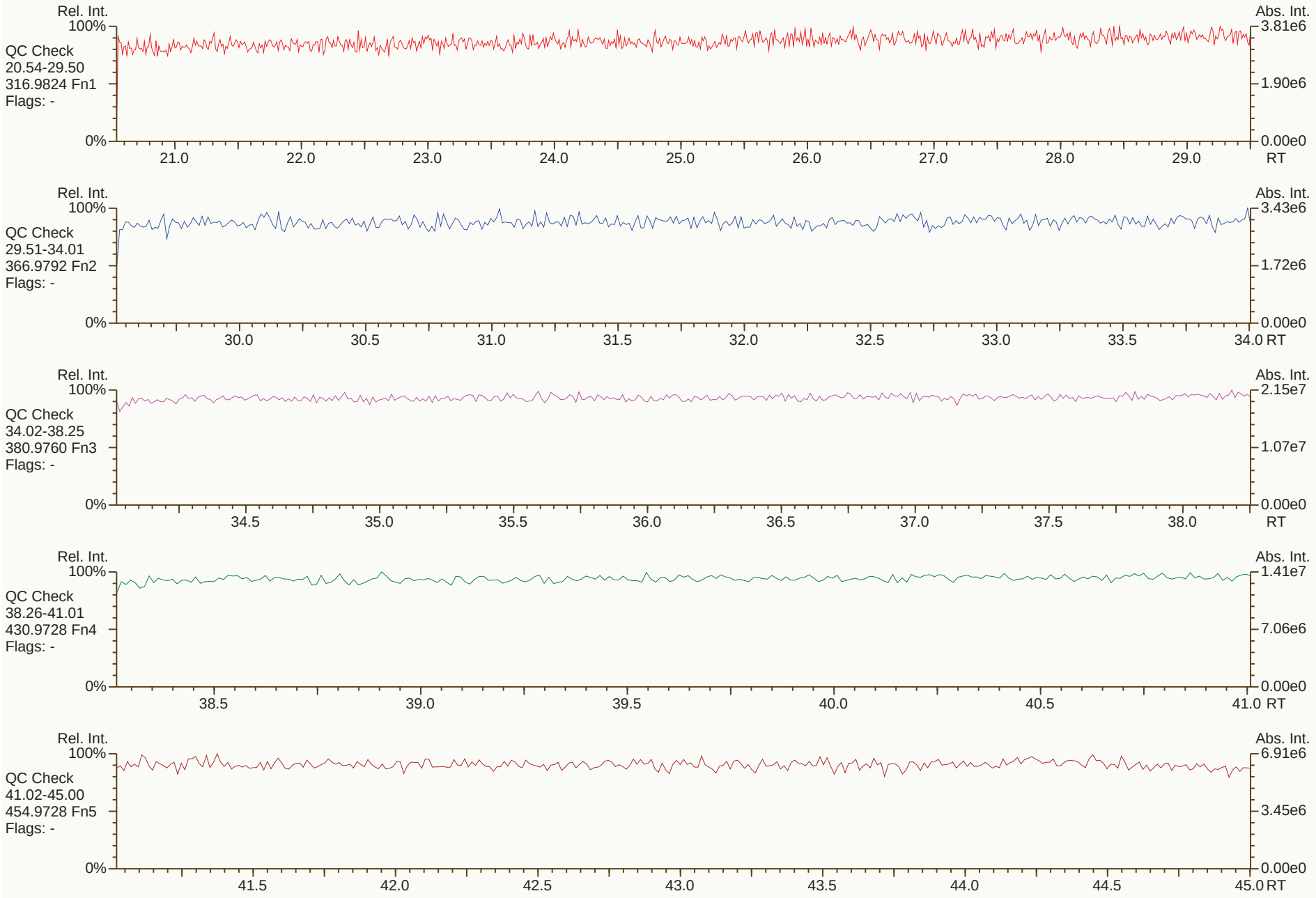
Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1234679-HpCDD	39.32		0.9843	0.9842	-0.2	4.69E+07	1.04	Y	0.98	216	4440	0.118
1234678-HpCDD	**39.96**		**1.0003**	**1.0003**	**0**	**4.28E+07**	**1.07**	**Y**	**0.98**	**197**	**4440**	**0.118**
OCDD	**42.38**		**1.0003**	**1.0003**	**0**	**1.98E+08**	**0.89**	**Y**	**1.08**	**1,580**	**5405**	**0.288**
OCDD-a	42.38		1.0002	1.0002	0	1.19E+07	2.40	Y	0.07	1,540	4530	3.92
1368-TCDF	21.17	J	0.8044	0.8036	-1.0	2.13E+05	0.73	Y	0.98	0.41	4382	0.0935
1468-TCDF	21.73	J	0.8261	0.8248	-1.7	1.80E+05	0.76	Y	0.98	0.346	4382	0.0935
2468-TCDF	22.40		0.8511	0.8501	-1.3	1.16E+06	0.73	Y	0.98	2.22	4382	0.0935
1346/1246-TCDF	22.87	J	0.8665	0.8680	+2.1	2.36E+05	0.74	Y	0.98	0.453	4382	0.0935
1347/1378/1247-TCDF	22.99	J	0.8723	0.8724	+0.1	2.75E+05	0.75	Y	0.98	0.529	4382	0.0935
1348-TCDF	23.27	J EMPC	0.8835	0.8831	-0.6	6.52E+04	1.14	N	0.98	0.125	4382	0.0935
1248/1367/1379-TCDF	23.37		0.8888	0.8871	-2.4	3.99E+05	0.76	Y	0.98	0.767	4382	0.0935
1268-TCDF	23.80		0.9044	0.9033	-1.6	6.05E+05	0.79	Y	0.98	1.16	4382	0.0935
1467-TCDF	23.98	J	0.9098	0.9101	+0.4	1.18E+05	0.83	Y	0.98	0.226	4382	0.0935
1478-TCDF	24.14	J	0.9167	0.9163	-0.6	1.11E+05	0.73	Y	0.98	0.214	4382	0.0935
1369/1237-TCDF	24.53	J EMPC	0.9316	0.9312	-0.6	8.77E+04	0.64	N	0.98	0.168	4382	0.0935
2467-TCDF	24.68	J	0.9369	0.9367	-0.3	2.00E+05	0.76	Y	0.98	0.385	4382	0.0935
2368-TCDF	24.84	EMPC	0.9430	0.9427	-0.4	5.54E+05	0.89	N	0.98	1.06	4382	0.0935
1238/1234/1678/1469/1236-TCDF	24.94		0.9468	0.9467	-0.1	3.50E+05	0.75	Y	0.98	0.671	4382	0.0935
1278-TCDF	25.43	J EMPC	0.9651	0.9652	+0.2	1.92E+05	0.65	N	0.98	0.369	4382	0.0935
1349-TCDF	NotFnd		0.9704						0.98		4382	0.0935
1267-TCDF	25.71	J EMPC	0.9761	0.9758	-0.5	7.93E+04	0.37	N	0.98	0.152	4382	0.0935
2346/1249-TCDF	25.90	J	0.9834	0.9831	-0.5	1.24E+05	0.71	Y	0.98	0.237	4382	0.0935
2347/1279-TCDF	26.13	J	0.9921	0.9917	-0.6	1.55E+05	0.79	Y	0.98	0.298	4382	0.0935
2348-TCDF	26.24	J	0.9964	0.9959	-0.8	9.09E+04	0.82	Y	0.98	0.174	4382	0.0935
2378-TCDF	**26.35**	J	**1.0006**	**1.0003**	**-0.5**	**1.99E+05**	**0.71**	**Y**	**0.98**	**0.382**	**4382**	**0.0935**
2367/3467-TCDF	26.75	EMPC	1.0156	1.0154	-0.3	3.36E+05	0.90	N	0.98	0.646	4382	0.0935
1269-TCDF	NotFnd		1.0249						0.98		4382	0.0935
1239-TCDF	NotFnd		1.0357						0.98		4382	0.0935
1289-TCDF	28.47	J EMPC	1.0799	1.0806	+1.2	1.29E+05	1.38	N	0.98	0.248	4382	0.0935
13468/12468-PeCDF	28.46		0.9084	0.9087	+0.5	5.73E+06	1.47	Y	0.95	12.8	3218	0.0674
13678/13467/12467-PeCDF	30.05	J	0.9591	0.9594	+0.5	5.48E+05	1.42	Y	0.95	1.23	7771	0.163
12368/13478/12478-PeCDF	30.20		0.9642	0.9643	+0.2	2.74E+06	1.52	Y	0.95	6.14	7771	0.163
14678-PeCDF	30.31	J	0.9675	0.9677	+0.4	1.61E+05	1.61	Y	0.95	0.36	7771	0.163
13479-PeCDF	NotFnd		0.9706						0.95		7771	0.163
13469/12479-PeCDF	NotFnd		0.9787						0.95		7771	0.163
12346-PeCDF	30.81	J EMPC	0.9833	0.9836	+0.6	2.32E+05	1.92	N	0.95	0.52	7771	0.163

Lab ID: B4511_17654_DF_004 **Acq'd:** 07 Aug 2020 20:58 PSW **Wt/Vol:** 9.43 g **ICAL:** MM3_DF_10012020_12JUN2020

Client ID: CS-23 **UTP:** 10-Aug-2020 09:02:24 PSW **J-level:** 0.53 pg/g **Split:** 1 **Checkcode:** 764-441-HCS

Datafile: 200807R10 **Report:** 10 Aug 2020 09:06 pw **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
23468/12469-PeCDF	30.89	J	0.9861	0.9862	+0.2	8.98E+05	1.53	Y	0.95	2.01	7771	0.163
12347-PeCDF	NotFnd		0.9887						0.95		7771	0.163
12348-PeCDF	31.12	J	0.9938	0.9938	0	1.32E+05	1.41	Y	0.95	0.296	7771	0.163
12378-PeCDF	**31.33**	J EMPC	**1.0006**	**1.0003**	**-0.6**	**1.91E+05**	**1.99**	**N**	**0.95**	**0.416**	**7771**	**0.163**
12678/12367-PeCDF	31.64	J	1.0095	1.0101	+1.1	5.06E+05	1.45	Y	0.95	1.14	7771	0.163
12379-PeCDF	NotFnd		1.0150						0.95		7771	0.163
12679-PeCDF	NotFnd		0.9926						0.95		7771	0.163
23467/12369-PeCDF	32.34	J EMPC	0.9966	0.9965	-0.2	2.65E+05	1.31	N	0.95	0.595	7771	0.163
23478-PeCDF	**32.49**	J	**1.0005**	**1.0012**	**+1.4**	**9.21E+05**	**1.65**	**Y**	**0.95**	**2.13**	**7771**	**0.162**
23478/12489-PeCDF	NotFnd		0.0000						0.95			
12489-PeCDF	NotFnd		1.0047						0.95		7771	0.163
12349-PeCDF	NotFnd		1.0107						0.95		7771	0.163
12389-PeCDF	NotFnd		1.0339						0.95		7771	0.163
123468-HxCDF	34.38		0.9617	0.9616	-0.2	2.46E+06	1.33	Y	1.11	6.6	12222	0.271
124678/134678-HxCDF	34.58		0.9673	0.9671	-0.4	9.66E+06	1.31	Y	1.11	26	12222	0.271
134679-HxCDF	NotFnd		0.9737						1.11		12222	0.271
124679-HxCDF	35.01	J	0.9792	0.9790	-0.4	1.82E+05	1.30	Y	1.11	0.488	12222	0.271
124689-HxCDF	35.23		0.9854	0.9854	0	9.50E+06	1.19	Y	1.11	25.5	12222	0.271
123467-HxCDF	35.65	J	0.9972	0.9972	0	5.12E+05	1.22	Y	1.11	1.38	12222	0.271
123478-HxCDF	**35.77**		**1.0005**	**1.0005**	**0**	**1.32E+06**	**1.33**	**Y**	**1.20**	**3.32**	**12222**	**0.253**
123678-HxCDF	**35.91**	J	**1.0004**	**1.0004**	**0**	**9.25E+05**	**1.24**	**Y**	**1.07**	**2.25**	**12222**	**0.232**
123479-HxCDF	NotFnd		1.0049						1.11		12222	0.271
123469-HxCDF	NotFnd		1.0089						1.11		12222	0.271
123679-HxCDF	NotFnd		0.9945						1.11		12222	0.271
234678-HxCDF	**36.55**		**1.0005**	**1.0004**	**-0.2**	**1.33E+06**	**1.33**	**Y**	**1.10**	**3.62**	**12222**	**0.273**
234678/123689-HxCDF	NotFnd		0.0000						1.10			
123689-HxCDF	NotFnd		1.0054						1.11		12222	0.271
123789-HxCDF	**NotFnd**		**1.0004**						**1.09**		**12222**	**0.343**
123789/123489-HxCDF	NotFnd		0.0000						1.09			
123489-HxCDF	NotFnd		1.0008						1.11		12222	0.271
1234678-HpCDF	**39.05**		**1.0003**	**1.0003**	**0**	**1.59E+07**	**1.04**	**Y**	**1.28**	**48.3**	**3075**	**0.0647**
1234679-HpCDF	39.32	**J**	1.0072	1.0072	0	4.75E+05	1.11	Y	1.27	1.65	3075	0.07
1234689-HpCDF	39.46		1.0107	1.0107	0	2.61E+07	1.00	Y	1.27	90.7	3075	0.07
1234789-HpCDF	**40.38**		**1.0002**	**1.0003**	**+0.2**	**1.14E+06**	**1.11**	**Y**	**1.27**	**4.62**	**3075**	**0.077**
OCDF	**42.55**		**1.0003**	**1.0002**	**-0.3**	**1.56E+07**	**0.89**	**Y**	**1.01**	**115**	**4339**	**0.227**
OCDF-a	42.55	**EMPC**	1.0002	1.0002	0	6.81E+05	2.99	N	0.06	80.5	4749	3.97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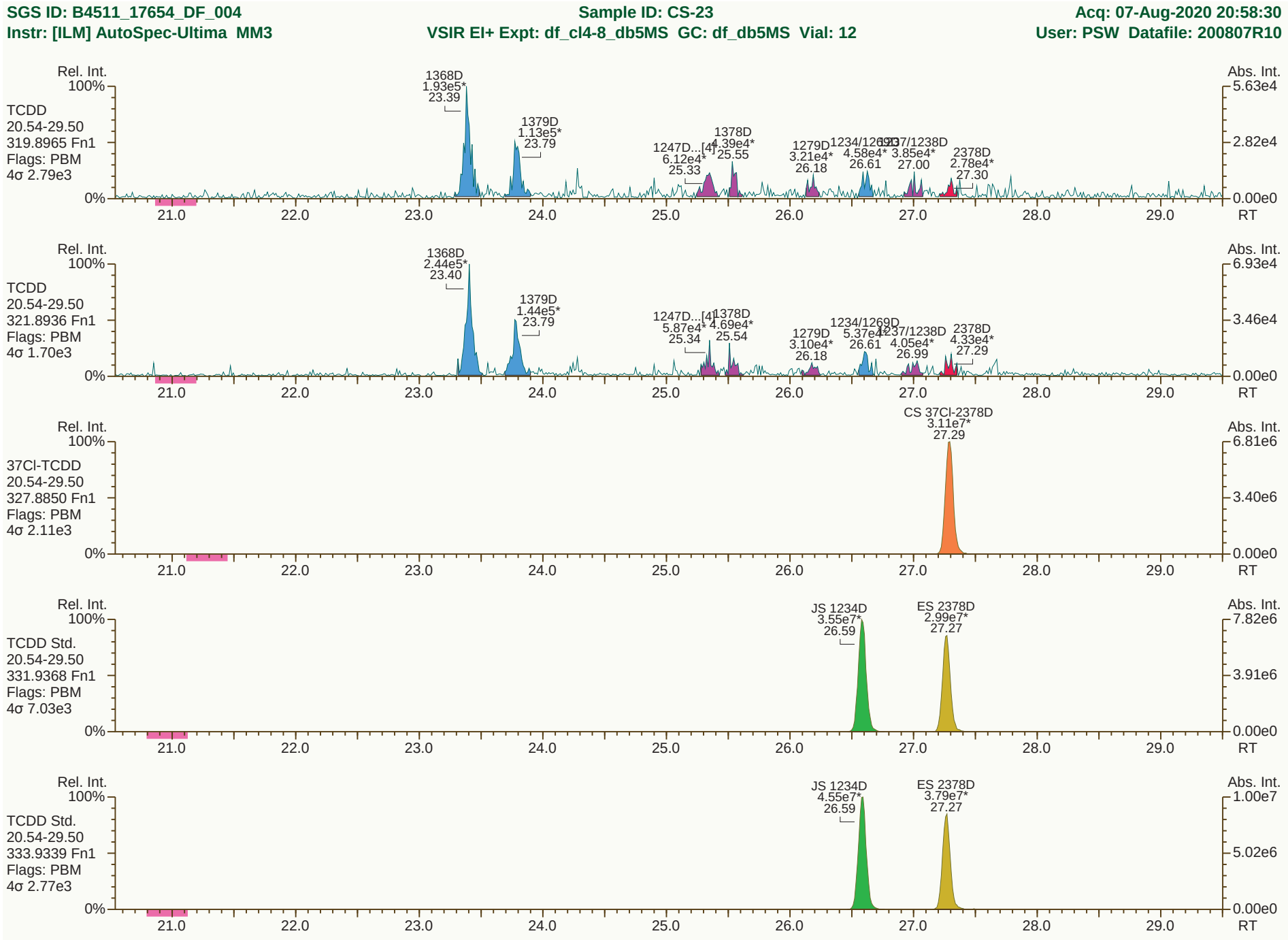
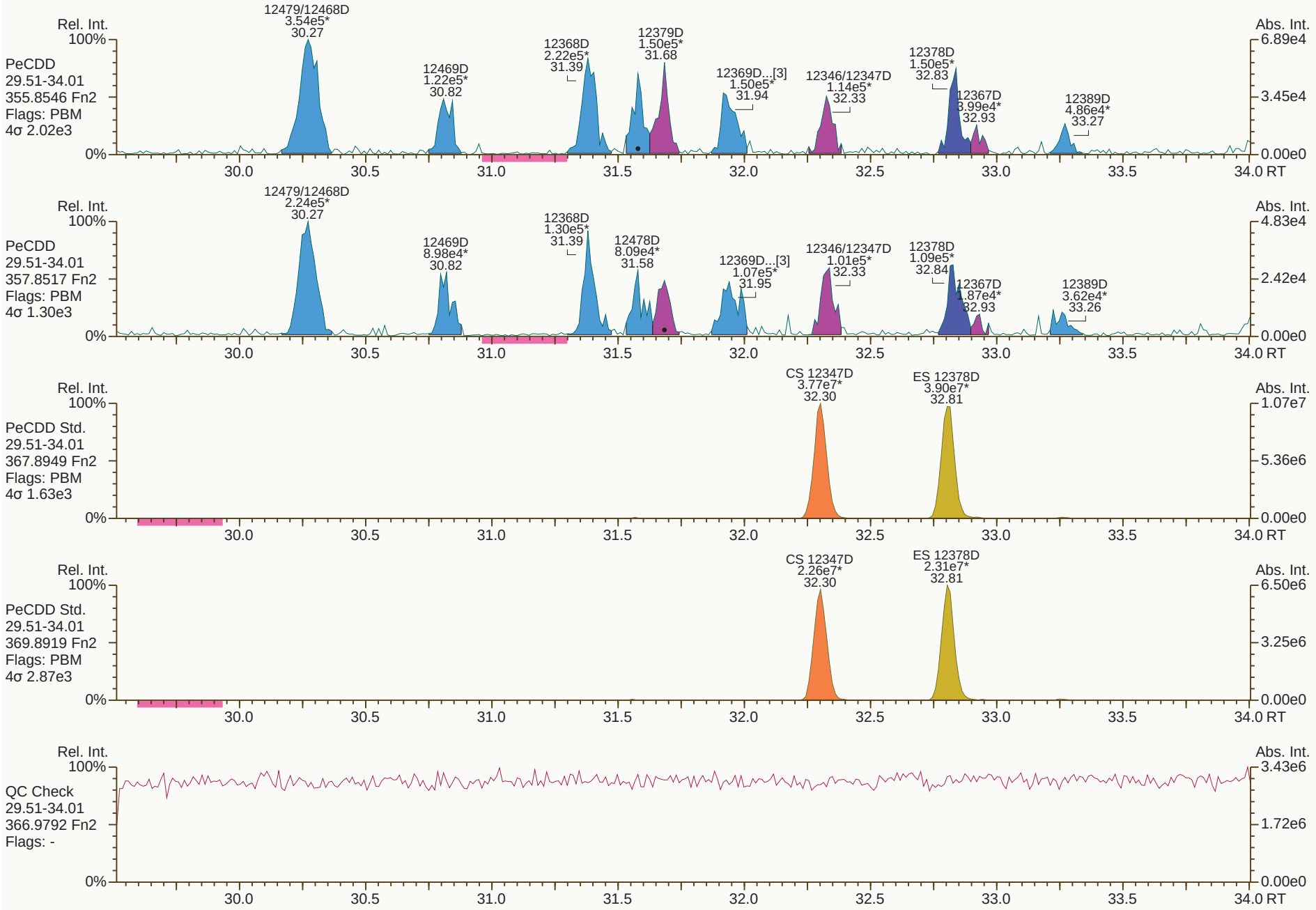
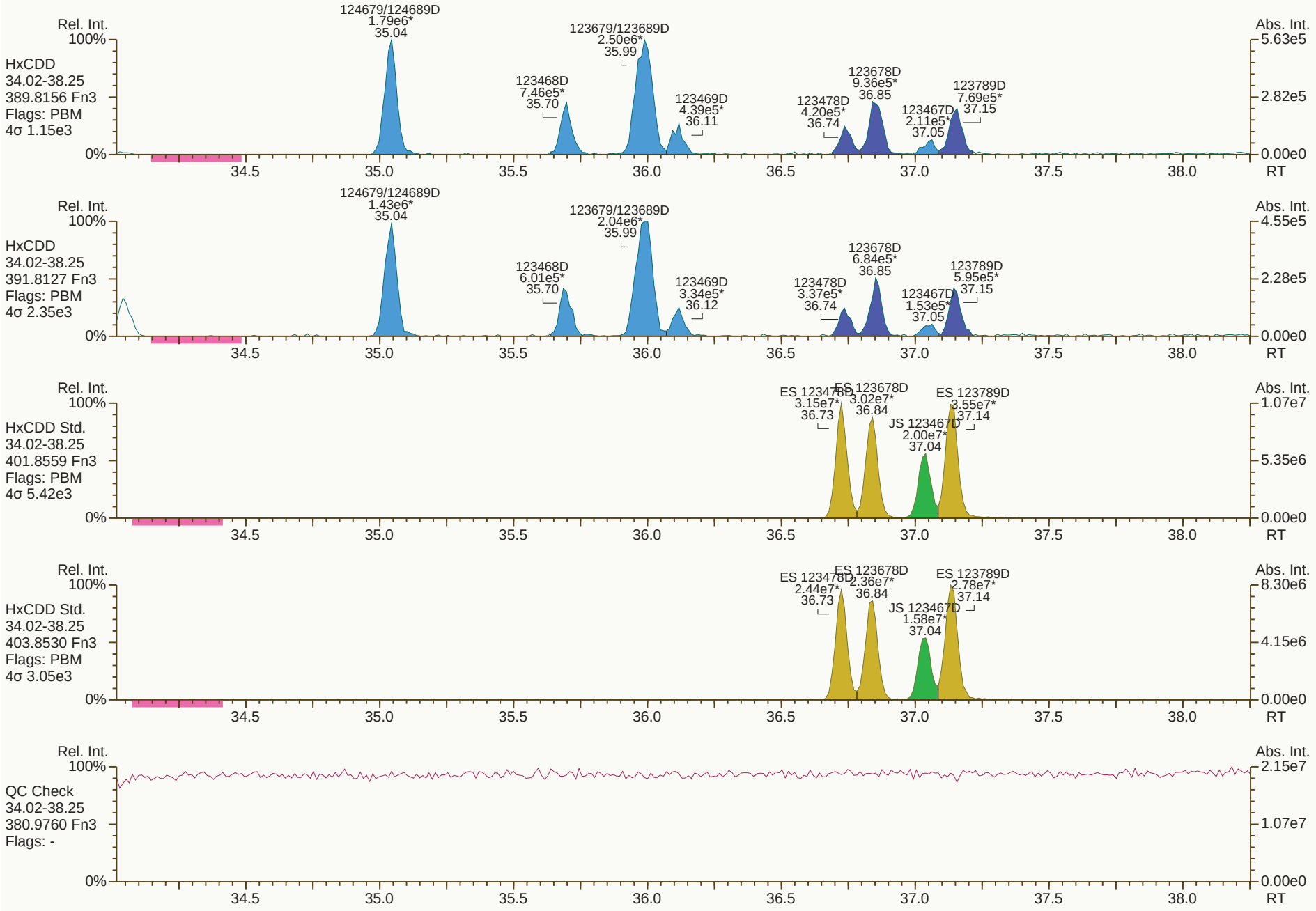
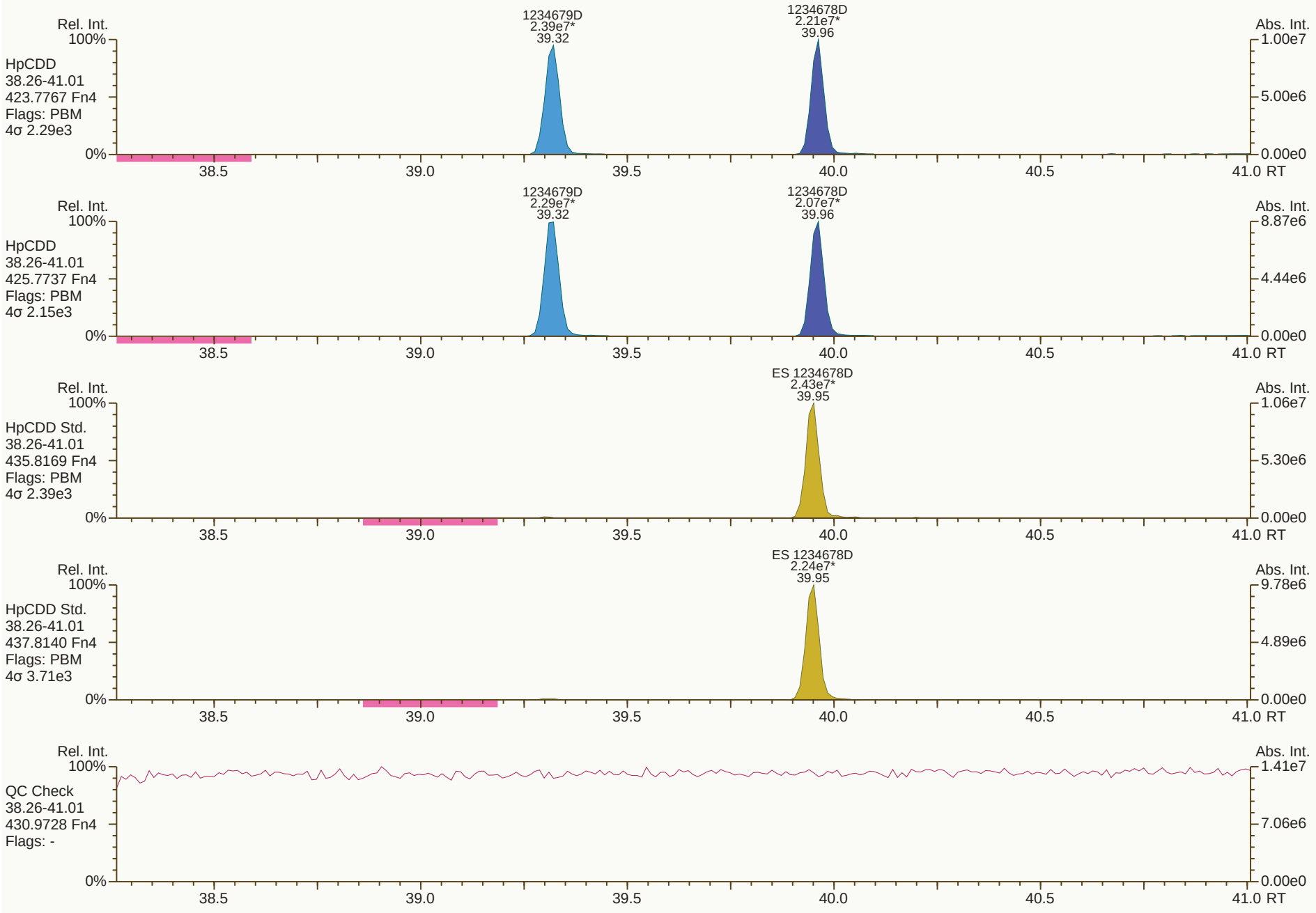
QC Check
20.54-29.50
316.9824 Fn1
Flags: -
0%
Abs. Int.
3.81e6
1.90e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
QC Check
29.51-34.01
366.9792 Fn2
Flags: -
0%
Abs. Int.
3.43e6
1.72e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
0%
Abs. Int.
2.15e7
1.07e7
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
QC Check
38.26-41.01
430.9728 Fn4
Flags: -
0%
Abs. Int.
1.41e7
7.06e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
6.91e6
3.45e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

SGS ID: B4511_17654_DF_004 Sample ID: CS-23 Acq: 07-Aug-2020 20:58:30
Instr: [ILM] AutoSpec-Ultima MM3 VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 12 User: PSW Datafile: 200807R10



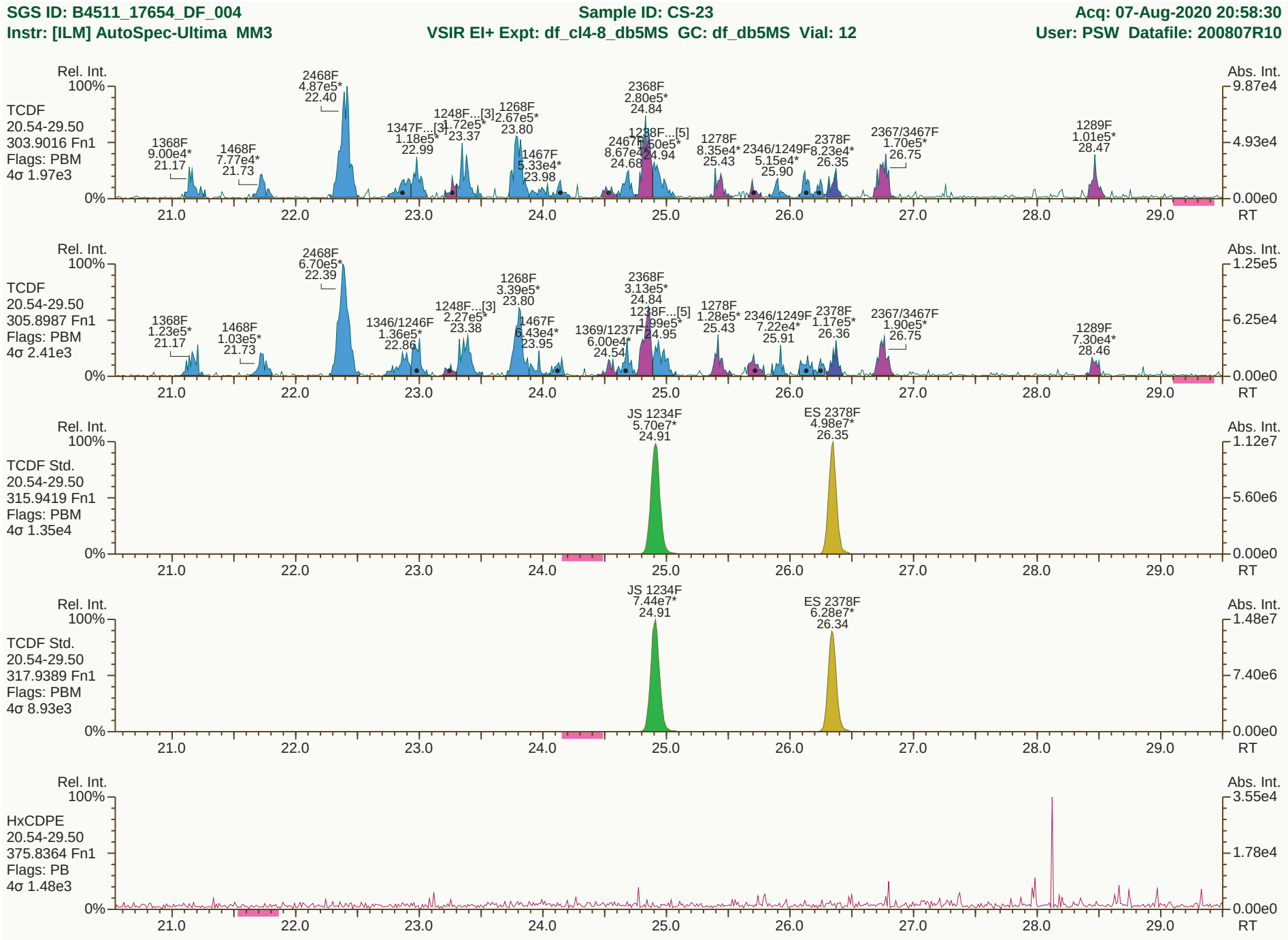

Rel. Int.
100%
PeCDD
29.51-34.01
355.8546 Fn2
Flags: PBM
4σ 2.02e3
12479/12468D
3.54e5*
30.27
12469D
1.22e5*
30.82
12368D
2.22e5*
31.39
12379D
1.50e5*
31.68
12369D...[3]
1.50e5*
31.94
12346/12347D
1.14e5*
32.33
12378D
1.50e5*
32.83
12367D
3.99e4*
32.93
12389D
4.86e4*
33.27
Abs. Int.
6.89e4
3.45e4
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD
29.51-34.01
357.8517 Fn2
Flags: PBM
4σ 1.30e3
12479/12468D
2.24e5*
30.27
12469D
8.98e4*
30.82
12368D
1.30e5*
31.39
12478D
8.09e4*
31.58
12369D...[3]
1.07e5*
31.95
12346/12347D
1.01e5*
32.33
12378D
1.09e5*
32.84
12367D
1.87e4*
32.93
12389D
3.62e4*
33.26
Abs. Int.
4.83e4
2.42e4
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
367.8949 Fn2
Flags: PBM
4σ 1.63e3
CS 12347D
3.77e7*
32.30
ES 12378D
3.90e7*
32.81
Abs. Int.
1.07e7
5.36e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
369.8919 Fn2
Flags: PBM
4σ 2.87e3
CS 12347D
2.26e7*
32.30
ES 12378D
2.31e7*
32.81
Abs. Int.
6.50e6
3.25e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
QC Check
29.51-34.01
366.9792 Fn2
Flags: -
Abs. Int.
3.43e6
1.72e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT


Rel. Int.
100%
HxCDD
34.02-38.25
389.8156 Fn3
Flags: PBM
4σ 1.15e3
124679/124689D
1.79e6*
35.04
123679/123689D
2.50e6*
35.99
123468D
7.46e5*
35.70
123469D
4.39e5*
36.11
123678D
9.36e5*
36.85
123478D
4.20e5*
36.74
123467D
2.11e5*
37.05
123789D
7.69e5*
37.15
Abs. Int.
5.63e5
2.82e5
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD
34.02-38.25
391.8127 Fn3
Flags: PBM
4σ 2.35e3
124679/124689D
1.43e6*
35.04
123679/123689D
2.04e6*
35.99
123468D
6.01e5*
35.70
123469D
3.34e5*
36.12
123678D
6.84e5*
36.85
123478D
3.37e5*
36.74
123467D
1.53e5*
37.05
123789D
5.95e5*
37.15
Abs. Int.
4.55e5
2.28e5
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
401.8559 Fn3
Flags: PBM
4σ 5.42e3
ES 123478D
3.15e7*
36.73
ES 123678D
3.02e7*
36.84
JS 123467D
2.00e7*
37.04
ES 123789D
3.55e7*
37.14
Abs. Int.
1.07e7
5.35e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
403.8530 Fn3
Flags: PBM
4σ 3.05e3
ES 123478D
2.44e7*
36.73
ES 123678D
2.36e7*
36.84
JS 123467D
1.58e7*
37.04
ES 123789D
2.78e7*
37.14
Abs. Int.
8.30e6
4.15e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
Abs. Int.
2.15e7
1.07e7
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT


Rel. Int.
100%
HpCDD
38.26-41.01
423.7767 Fn4
Flags: PBM
4σ 2.29e3
0%
1234679D
2.39e7*
39.32
1234678D
2.21e7*
39.96
Abs. Int.
1.00e7
5.00e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.26-41.01
425.7737 Fn4
Flags: PBM
4σ 2.15e3
0%
1234679D
2.29e7*
39.32
1234678D
2.07e7*
39.96
Abs. Int.
8.87e6
4.44e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
435.8169 Fn4
Flags: PBM
4σ 2.39e3
0%
ES 1234678D
2.43e7*
39.95
Abs. Int.
1.06e7
5.30e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
437.8140 Fn4
Flags: PBM
4σ 3.71e3
0%
ES 1234678D
2.24e7*
39.95
Abs. Int.
9.78e6
4.89e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.26-41.01
430.9728 Fn4
Flags: -
0%
Abs. Int.
1.41e7
7.06e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT

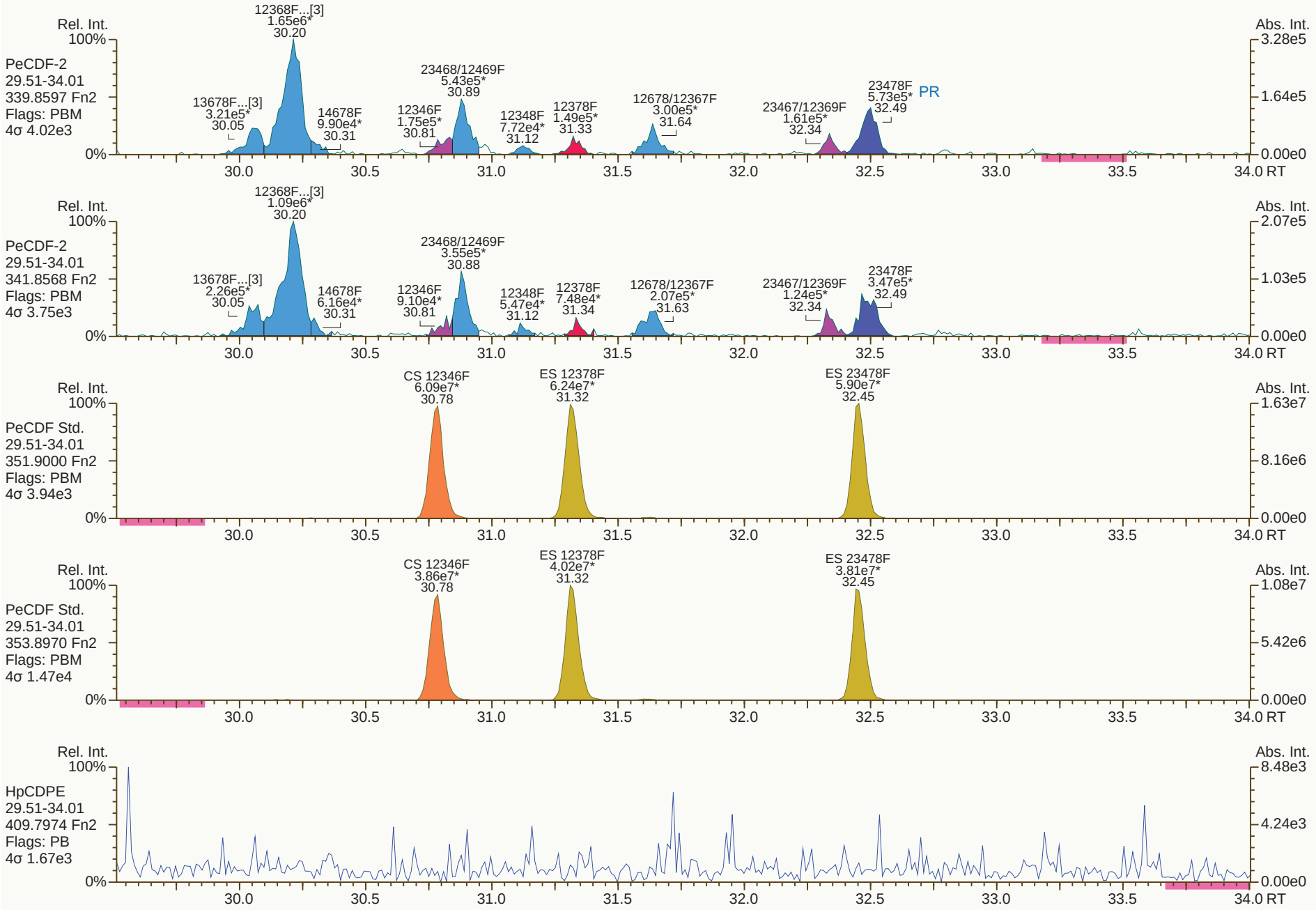

OCDD
9.37e7*
42.38
Rel. Int.
100%
OCDD
41.02-45.00
457.7377 Fn5
Flags: PBM
4σ 2.58e3
0%
Abs. Int.
3.52e7
1.76e7
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDD
1.05e8*
42.38
Rel. Int.
100%
OCDD
41.02-45.00
459.7348 Fn5
Flags: PBM
4σ 2.83e3
0%
Abs. Int.
3.93e7
1.97e7
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
2.35e7*
42.37
Rel. Int.
100%
OCDD Std.
41.02-45.00
469.7780 Fn5
Flags: PBM
4σ 1.35e3
0%
Abs. Int.
8.78e6
4.39e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
2.61e7*
42.37
Rel. Int.
100%
OCDD Std.
41.02-45.00
471.7750 Fn5
Flags: PBM
4σ 4.20e3
0%
Abs. Int.
9.81e6
4.91e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
6.91e6
3.45e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

SGS ID: B4511_17654_DF_004 | Sample ID: CS-23 | Acq: 07-Aug-2020 20:58:30
Instr: [ILM] AutoSpec-Ultima MM3 | VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 12 | User: PSW Datafile: 200807R10

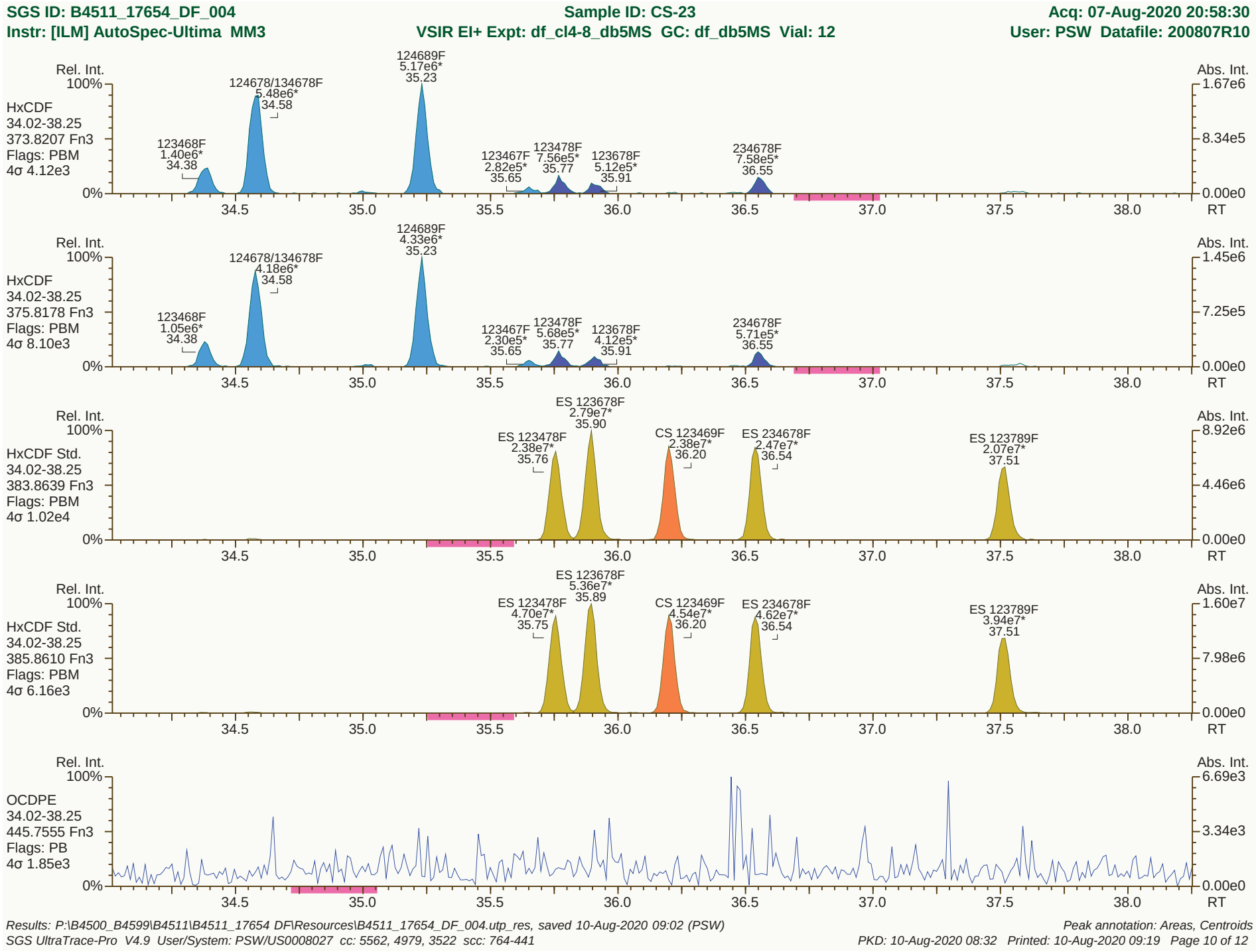


Results: P:\B4500_B4599\B4511\B4511_17654 DF\Resources\B4511_17654_DF_004.utp_res, saved 10-Aug-2020 09:02 (PSW) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 2319, 4772, 9921 scc: 764-441 *PKD: 10-Aug-2020 08:32 Printed: 10-Aug-2020 09:19 Page 7 of 12*

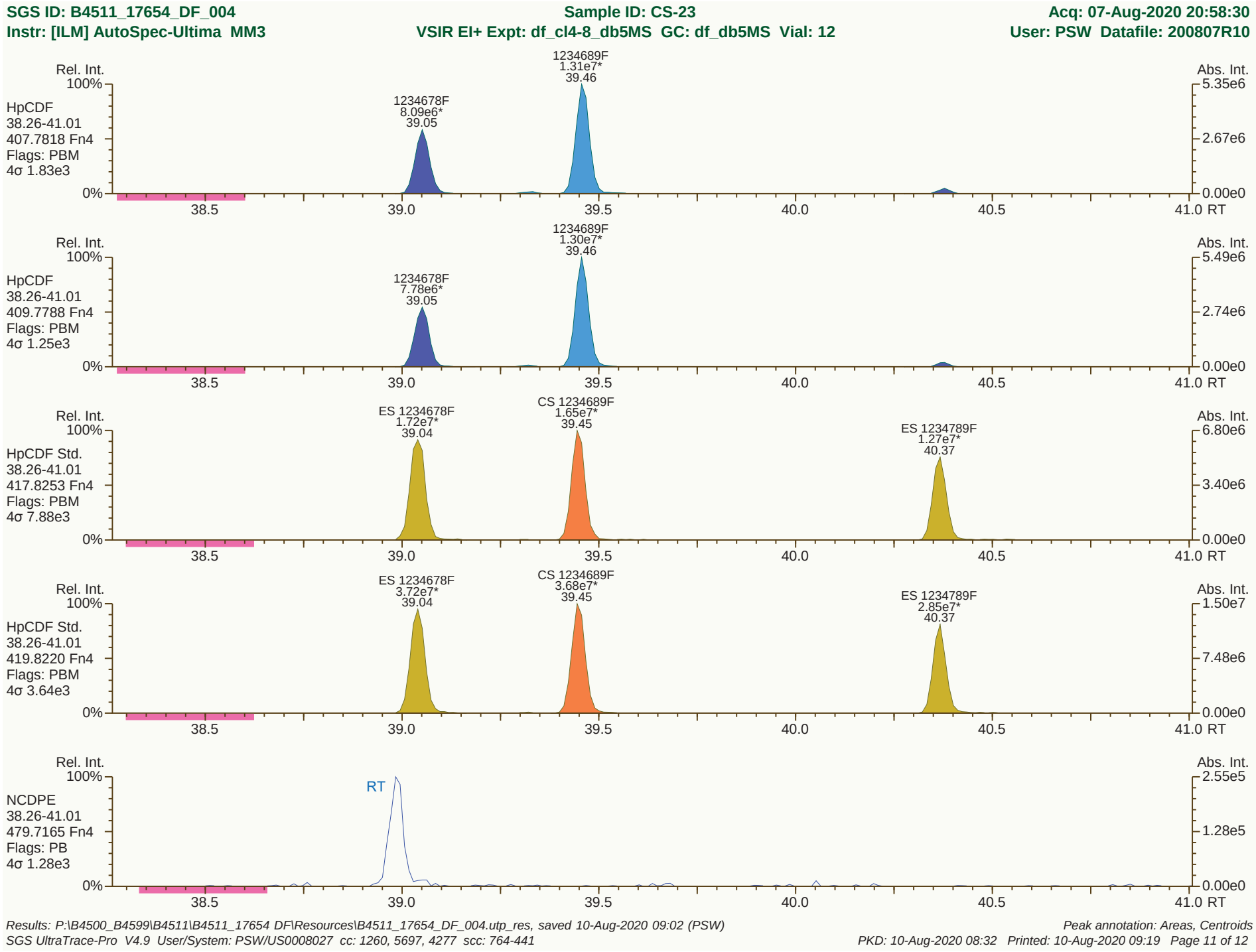

Rel. Int.
100%
0%
Abs. Int.
8.80e5
4.40e5
0.00e0
RT
13468/12468F
3.41e6*
28.46
PeCDF-1
20.54-29.50
339.8597 Fn1
Flags: PBM
4σ 1.70e3
13468/12468F
2.32e6*
28.46
5.63e5
2.81e5
PeCDF-1
20.54-29.50
341.8568 Fn1
Flags: PBM
4σ 1.52e3
3.81e6
1.90e6
QC Check
20.54-29.50
316.9824 Fn1
Flags: -
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0

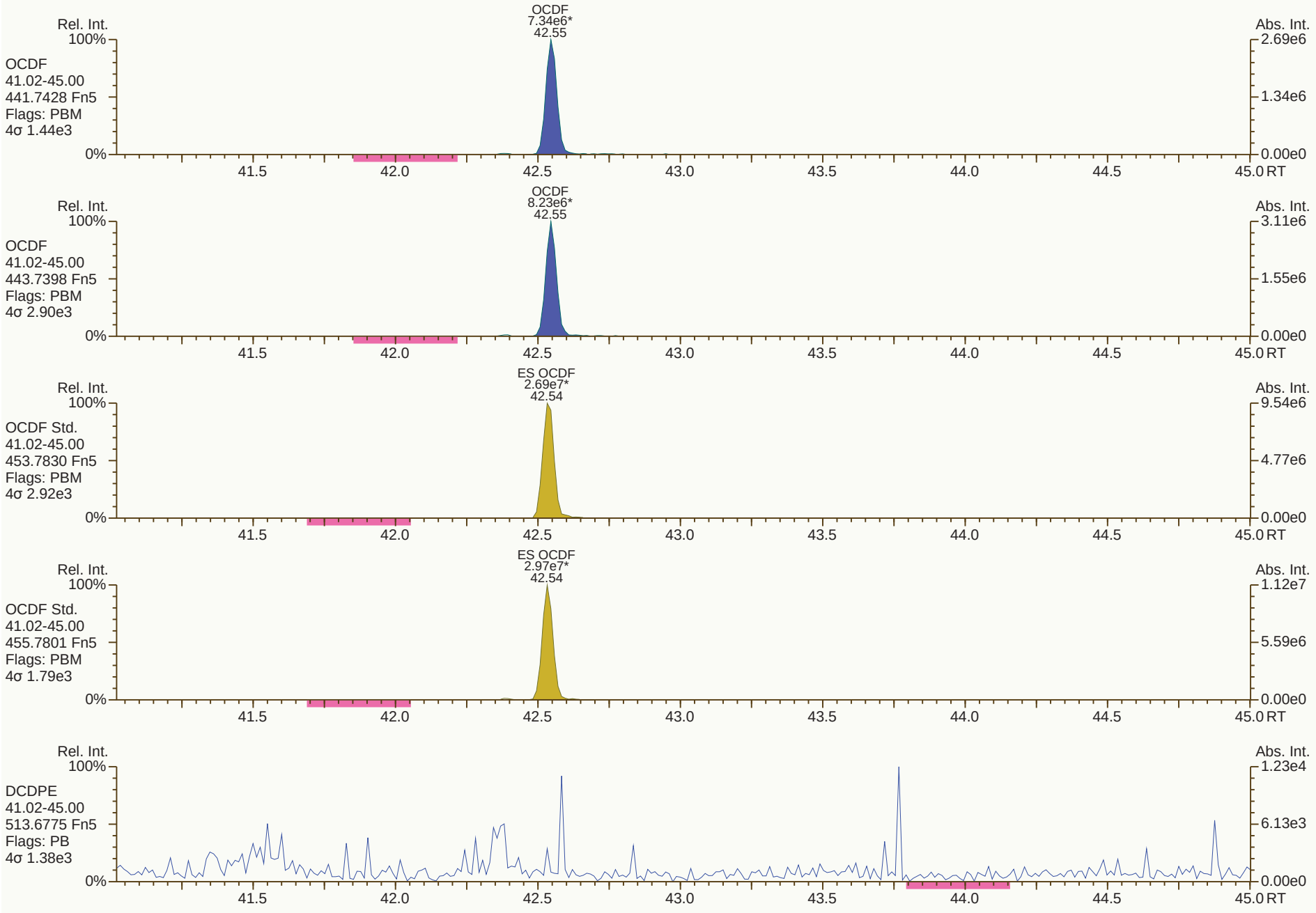

Rel. Int.
100%
PeCDF-2
29.51-34.01
339.8597 Fn2
Flags: PBM
4σ 4.02e3
12368F...[3]
1.65e6*
30.20
13678F...[3]
3.21e5*
30.05
14678F
9.90e4*
30.31
12346F
1.75e5*
30.81
23468/12469F
5.43e5*
30.89
12348F
7.72e4*
31.12
12378F
1.49e5*
31.33
12678/12367F
3.00e5*
31.64
23467/12369F
1.61e5*
32.34
23478F
5.73e5*
32.49
PR
Abs. Int.
3.28e5
1.64e5
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF-2
29.51-34.01
341.8568 Fn2
Flags: PBM
4σ 3.75e3
12368F...[3]
1.09e6*
30.20
13678F...[3]
2.26e5*
30.05
14678F
6.16e4*
30.31
12346F
9.10e4*
30.81
23468/12469F
3.55e5*
30.88
12348F
5.47e4*
31.12
12378F
7.48e4*
31.34
12678/12367F
2.07e5*
31.63
23467/12369F
1.24e5*
32.34
23478F
3.47e5*
32.49
Abs. Int.
2.07e5
1.03e5
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
351.9000 Fn2
Flags: PBM
4σ 3.94e3
CS 12346F
6.09e7*
30.78
ES 12378F
6.24e7*
31.32
ES 23478F
5.90e7*
32.45
Abs. Int.
1.63e7
8.16e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
353.8970 Fn2
Flags: PBM
4σ 1.47e4
CS 12346F
3.86e7*
30.78
ES 12378F
4.02e7*
31.32
ES 23478F
3.81e7*
32.45
Abs. Int.
1.08e7
5.42e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
HpCDPE
29.51-34.01
409.7974 Fn2
Flags: PB
4σ 1.67e3
Abs. Int.
8.48e3
4.24e3
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT

SGS ID: B4511_17654_DF_004 Sample ID: CS-23 Acq: 07-Aug-2020 20:58:30
Instr: [ILM] AutoSpec-Ultima MM3 VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 12 User: PSW Datafile: 200807R10



SGS ID: B4511_17654_DF_004 Sample ID: CS-23 Acq: 07-Aug-2020 20:58:30
Instr: [ILM] AutoSpec-Ultima MM3 VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 12 User: PSW Datafile: 200807R10




Rel. Int.
100%
OCDF
41.02-45.00
441.7428 Fn5
Flags: PBM
4σ 1.44e3
0%
OCDF
7.34e6*
42.55
Abs. Int.
2.69e6
1.34e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF
41.02-45.00
443.7398 Fn5
Flags: PBM
4σ 2.90e3
0%
OCDF
8.23e6*
42.55
Abs. Int.
3.11e6
1.55e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF Std.
41.02-45.00
453.7830 Fn5
Flags: PBM
4σ 2.92e3
0%
ES OCDF
2.69e7*
42.54
Abs. Int.
9.54e6
4.77e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF Std.
41.02-45.00
455.7801 Fn5
Flags: PBM
4σ 1.79e3
0%
ES OCDF
2.97e7*
42.54
Abs. Int.
1.12e7
5.59e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
DCDPE
41.02-45.00
513.6775 Fn5
Flags: PB
4σ 1.38e3
0%
Abs. Int.
1.23e4
6.13e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

Lab ID: B4511_17654_DF_005 | Acq'd: 07 Aug 2020 21:45 PSW | Wt/Vol: 9.59 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-22 | UTP: 10-Aug-2020 09:02:25 PSW | J-level: 0.521 pg/g | Split: 1 | Checkcode: 460-756-YTX

Datafile: 200807R11 | Report: 10 Aug 2020 09:06 pw | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	27.28	J EMPC	1.0009	1.0003	-1.0	4.01E+04	1.18	N	1.18	0.105	3543	0.106
12378-PeCDD	32.83	J	1.0006	1.0006	0	3.87E+05	1.67	Y	1.14	1.18	4992	0.14
123478-HxCDD	36.74		1.0004	1.0004	0	9.94E+05	1.15	Y	1.09	3.5	5152	0.141
123678-HxCDD	36.86		1.0035	1.0035	0	2.42E+06	1.27	Y	1.13	8.52	5152	0.143
123789-HxCDD	37.15		1.0116	1.0116	0	1.82E+06	1.25	Y	1.05	5.45	5152	0.134
1234678-HpCDD	39.97		1.0003	1.0003	0	6.53E+07	1.04	Y	0.98	282	2922	0.0729
OCDD	42.39		1.0003	1.0003	0	3.43E+08	0.90	Y	1.08	2,320	6242	0.302
2378-TCDF	26.37	EMPC	1.0006	1.0008	+0.3	2.78E+05	0.65	N	0.98	0.523	5028	0.116
12378-PeCDF	31.33	J EMPC	1.0006	1.0002	-0.8	2.89E+05	1.87	N	0.95	0.621	8257	0.166
23478-PeCDF	32.49	J	1.0005	1.0011	+1.2	1.09E+06	1.45	Y	0.95	2.5	8257	0.17
123478-HxCDF	35.78		1.0005	1.0005	0	1.52E+06	1.18	Y	1.20	3.84	11142	0.226
123678-HxCDF	35.91	J	1.0004	1.0004	0	9.34E+05	1.32	Y	1.07	2.32	11142	0.227
234678-HxCDF	36.56		1.0005	1.0005	0	1.30E+06	1.20	Y	1.10	3.56	11142	0.245
123789-HxCDF	NotFnd		1.0004	-		-	-	-	1.09	-	11142	0.303
1234678-HpCDF	39.06		1.0003	1.0003	0	2.01E+07	1.04	Y	1.28	58.8	3071	0.0634
1234789-HpCDF	40.38		1.0002	1.0002	0	1.24E+06	1.06	Y	1.27	4.7	3071	0.0708
OCDF	42.55		1.0003	1.0003	0	2.60E+07	0.86	Y	1.01	160	4195	0.181

Name	Act RT	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	27.27	1.0255	1.0257	+0.3	6.75E+07	0.79	Y	1.01	80.4
ES 12378-PeCDD	32.81	1.2330	1.2340	+2.0	6.03E+07	1.63	Y	0.87	83.1
ES 123478-HxCDD	36.73	0.9917	0.9916	-0.2	5.43E+07	1.32	Y	1.10	67.3
ES 123678-HxCDD	36.84	0.9947	0.9947	0	5.26E+07	1.29	Y	1.06	67.3
ES 123789-HxCDD	37.14	1.0028	1.0027	-0.2	6.65E+07	1.26	Y	1.22	74.2
ES 1234678-HpCDD	39.95	1.0785	1.0787	+0.5	4.91E+07	1.03	Y	0.99	67.2
ES OCDD	42.38	1.1439	1.1441	+0.5	5.73E+07	0.91	Y	0.67	58.2
ES 2378-TCDF	26.35	1.0572	1.0575	+0.5	1.13E+08	0.77	Y	1.01	80.4
ES 12378-PeCDF	31.32	1.2558	1.2573	+2.8	1.02E+08	1.58	Y	0.90	82.2
ES 23478-PeCDF	32.46	1.3012	1.3028	+3.1	9.64E+07	1.56	Y	0.89	78.3
ES 123478-HxCDF	35.76	0.9655	0.9654	-0.2	6.89E+07	0.53	Y	1.43	65.5
ES 123678-HxCDF	35.90	0.9693	0.9692	-0.2	7.84E+07	0.54	Y	1.63	65.3
ES 234678-HxCDF	36.54	0.9867	0.9866	-0.2	6.95E+07	0.50	Y	1.48	63.8
ES 123789-HxCDF	37.52	1.0130	1.0129	-0.2	6.27E+07	0.53	Y	1.29	65.9
ES 1234678-HpCDF	39.04	1.0540	1.0542	+0.5	5.57E+07	0.45	Y	1.15	66
ES 1234789-HpCDF	40.37	1.0898	1.0900	+0.5	4.35E+07	0.45	Y	0.91	65.1
ES OCDF	42.54	1.1484	1.1486	+0.5	6.68E+07	0.91	Y	0.83	54.8

Lab ID: B4511_17654_DF_005 | Acq'd: 07 Aug 2020 21:45 PSW | Wt/Vol: 9.59 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-22 | UTP: 10-Aug-2020 09:02:25 PSW | J-level: 0.521 pg/g | Split: 1 | Checkcode: 460-756-YTX

Datafile: 200807R11 | Report: 10 Aug 2020 09:06 pw | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %	
JS 1234-TCDD	26.59		-	-	-	8.33E+07	0.78	Y	-	-	
JS 1234-TCDF	24.91		-	-	-	1.38E+08	0.77	Y	-	-	
JS 123467-HxCDD	37.04		-	-	-	3.68E+07	1.32	Y	-	-	
CS 37Cl-2378-TCDD	27.29		1.0265	1.0265	0	3.10E+07	n/a	-	1.04	89.7	
CS 12347-PeCDD	32.31		1.2141	1.2150	+1.7	5.84E+07	1.63	Y	0.74	94.7	
CS 12346-PeCDF	30.79		1.2343	1.2358	+2.8	9.76E+07	1.59	Y	0.86	82	
CS 123469-HxCDF	36.20		0.9776	0.9775	-0.2	6.75E+07	0.55	Y	1.36	67.6	
CS 1234689-HpCDF	39.45		1.0650	1.0652	+0.5	5.28E+07	0.47	Y	1.05	68	
~~SS 37Cl-2378-TCDD~~	~~27.29~~		~~1.0265~~	~~1.0265~~	~~0~~	~~3.10E+07~~	~~n/a~~		~~1.04~~	~~111~~	Not used in this project.
~~SS 12347-PeCDD~~	~~32.31~~		~~1.2141~~	~~1.2150~~	~~+1.7~~	~~5.84E+07~~	~~1.63~~	~~Y~~	~~0.86~~	~~113~~	CL 10Aug20
~~SS 12346-PeCDF~~	~~30.79~~		~~1.2343~~	~~1.2358~~	~~+2.8~~	~~9.76E+07~~	~~1.59~~	~~Y~~	~~0.96~~	~~99.3~~	
~~SS 123469-HxCDF~~	~~36.20~~		~~0.9776~~	~~0.9775~~	~~-0.2~~	~~6.75E+07~~	~~0.55~~	~~Y~~	~~0.83~~	~~103~~	
~~SS 1234689-HpCDF~~	~~39.45~~		~~1.0650~~	~~1.0652~~	~~+0.5~~	~~5.28E+07~~	~~0.47~~	~~Y~~	~~0.92~~	~~103~~	

Totals	Conc	EMPC
Total TCDD	1.97	4.11
Total PeCDD	10.3	10.8
Total HxCDD	79.9	79.9
Total HpCDD	726	726
Total Tetra-Octa Dioxins	3140	3140
Total TCDF	8.55	13.4
Total PeCDF	28.1	29.2
Total HxCDF	78.9	79.5
Total HpCDF	185	185
Total Tetra-Octa Furans	461	468
Total Tetra-Octa Dioxins & Furans	3600	3610

* 37Cl correction has been applied to 2378-TCDD

	Original Values	Corrected Values
Ratio	0.65	1.18
Response	6.81E+04	4.94E+04

Lab ID: B4511_17654_DF_005 | Acq'd: 07 Aug 2020 21:45 PSW | Wt/Vol: 9.59 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-22 | UTP: 10-Aug-2020 09:02:25 PSW | J-level: 0.521 pg/g | Split: 1 | Checkcode: 460-756-YTX

Datafile: 200807R11 | Report: 10 Aug 2020 09:06 pw | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1368-TCDD	23.40		0.8591	0.8581	-1.4	5.69E+05	0.81	Y	1.18	1.49	3543	0.106
1379-TCDD	23.79	EMPC	0.8732	0.8724	-1.1	2.95E+05	0.96	N	1.18	0.775	3543	0.106
1369-TCDD	NotFnd		0.8901						1.18		3543	0.106
1469-TCDD	25.09	J EMPC	0.9205	0.9198	-1.1	6.35E+04	1.33	N	1.18	0.167	3543	0.106
1247/1246/1248/1249-TCDD	25.33	J EMPC	0.9301	0.9289	-1.8	1.55E+05	0.58	N	1.18	0.406	3543	0.106
1378-TCDD	25.55	J	0.9374	0.9369	-0.8	1.19E+05	0.80	Y	1.18	0.311	3543	0.106
1268-TCDD	25.76	J	0.9449	0.9444	-0.8	6.40E+04	0.67	Y	1.18	0.168	3543	0.106
1478-TCDD	NotFnd		0.9544						1.18		3543	0.106
1279-TCDD	NotFnd		0.9610						1.18		3543	0.106
1234/1269-TCDD	26.60	J EMPC	0.9746	0.9752	+1.0	1.22E+05	0.96	N	1.18	0.32	3543	0.106
1236-TCDD	NotFnd		0.9802						1.18		3543	0.106
1237/1238-TCDD	26.98	J EMPC	0.9898	0.9891	-1.1	9.31E+04	0.63	N	1.18	0.244	3543	0.106
1239-TCDD	NotFnd		0.9950						1.18		3543	0.106
2378-TCDD	**27.28**	J EMPC	**1.0009**	1.0003	**-1.0**	4.01E+04	1.18	N	**1.18**	**0.105**	**3543**	**0.106**
1278-TCDD	27.64	J EMPC	1.0133	1.0136	+0.5	4.45E+04	1.28	N	1.18	0.117	3543	0.106
1267-TCDD	NotFnd		1.0185						1.18		3543	0.106
1289-TCDD	NotFnd		1.0379						1.18		3543	0.106
12479/12468-PeCDD	30.28		0.9229	0.9228	-0.2	8.89E+05	1.62	Y	1.14	2.71	4992	0.14
12469-PeCDD	30.82	J	0.9396	0.9394	-0.4	3.64E+05	1.52	Y	1.14	1.11	4992	0.14
12368-PeCDD	31.39	J	0.9568	0.9568	0	4.27E+05	1.44	Y	1.14	1.3	4992	0.14
12478-PeCDD	31.58	J	0.9626	0.9625	-0.2	3.70E+05	1.54	Y	1.14	1.13	4992	0.14
12379-PeCDD	31.69	J	0.9657	0.9657	0	3.20E+05	1.74	Y	1.14	0.973	4992	0.14
12369/12467/12489-PeCDD	31.95	J	0.9738	0.9736	-0.4	3.70E+05	1.44	Y	1.14	1.13	4992	0.14
12346/12347-PeCDD	32.33	J	0.9853	0.9853	0	2.63E+05	1.53	Y	1.14	0.801	4992	0.14
12378-PeCDD	32.83	J	**1.0006**	**1.0006**	**0**	**3.87E+05**	**1.67**	**Y**	**1.14**	**1.18**	**4992**	**0.14**
12367-PeCDD	32.93	J EMPC	1.0034	1.0036	+0.4	5.78E+04	2.02	N	1.14	0.176	4992	0.14
12389-PeCDD	33.28	J EMPC	1.0141	1.0144	+0.6	8.83E+04	2.05	N	1.14	0.269	4992	0.14
124679/124689-HxCDD	35.05		0.9542	0.9542	0	7.30E+06	1.27	Y	1.09	24.2	5152	0.138
123468-HxCDD	35.70		0.9721	0.9720	-0.2	2.05E+06	1.38	Y	1.09	6.81	5152	0.138
123679/123689-HxCDD	35.99		0.9799	0.9799	0	7.29E+06	1.24	Y	1.09	24.2	5152	0.138
123469-HxCDD	36.12		0.9835	0.9834	-0.2	1.55E+06	1.35	Y	1.09	5.13	5152	0.138
123478-HxCDD	36.74		**1.0004**	**1.0004**	**0**	**9.94E+05**	**1.15**	**Y**	1.09	**3.5**	**5152**	**0.141**
123678-HxCDD	36.86		**1.0035**	**1.0035**	**0**	**2.42E+06**	**1.27**	**Y**	1.13	**8.52**	**5152**	**0.143**
123467-HxCDD	37.06	J	1.0088	1.0090	+0.4	6.32E+05	1.40	Y	1.09	2.1	5152	0.138
123789-HxCDD	37.15		**1.0116**	**1.0116**	**0**	**1.82E+06**	**1.25**	**Y**	1.05	**5.45**	**5152**	**0.134**

Lab ID: B4511_17654_DF_005 | Acq'd: 07 Aug 2020 21:45 PSW | Wt/Vol: 9.59 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-22 | UTP: 10-Aug-2020 09:02:25 PSW | J-level: 0.521 pg/g | Split: 1 | Checkcode: 460-756-YTX

Datafile: 200807R11 | Report: 10 Aug 2020 09:06 pw | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1234679-HpCDD	39.32		0.9843	0.9842	-0.2	1.03E+08	1.04	Y	0.98	444	2922	0.0729
1234678-HpCDD	**39.97**		**1.0003**	**1.0003**	**0**	**6.53E+07**	**1.04**	**Y**	**0.98**	**282**	**2922**	**0.0729**
OCDD	**42.39**		**1.0003**	**1.0003**	**0**	**3.43E+08**	**0.90**	**Y**	**1.08**	**2,320**	**6242**	**0.302**
OCDD-a	42.39		1.0002	1.0002	0	2.05E+07	2.34	Y	0.07	2,250	5383	4.23
1368-TCDF	21.15		0.8044	0.8029	-1.9	3.35E+05	0.67	Y	0.98	0.631	5028	0.116
1468-TCDF	21.74	J EMPC	0.8261	0.8250	-1.4	2.15E+05	0.62	N	0.98	0.404	5028	0.116
2468-TCDF	22.39		0.8511	0.8498	-1.7	1.65E+06	0.80	Y	0.98	3.12	5028	0.116
1346/1246-TCDF	22.82	J EMPC	0.8665	0.8661	-0.5	1.56E+05	0.48	N	0.98	0.295	5028	0.116
1347/1378/1247-TCDF	22.96	EMPC	0.8723	0.8714	-1.2	4.78E+05	0.56	N	0.98	0.901	5028	0.116
1348-TCDF	23.27	J	0.8835	0.8831	-0.6	1.43E+05	0.82	Y	0.98	0.269	5028	0.116
1248/1367/1379-TCDF	23.38		0.8888	0.8873	-2.1	4.92E+05	0.70	Y	0.98	0.927	5028	0.116
1268-TCDF	23.81	EMPC	0.9044	0.9038	-0.9	5.92E+05	1.02	N	0.98	1.12	5028	0.116
1467-TCDF	23.95	J	0.9098	0.9090	-1.1	1.33E+05	0.83	Y	0.98	0.251	5028	0.116
1478-TCDF	24.14	J	0.9167	0.9161	-0.9	2.04E+05	0.72	Y	0.98	0.385	5028	0.116
1369/1237-TCDF	NotFnd		0.9316						0.98		5028	0.116
2467-TCDF	24.68	J	0.9369	0.9366	-0.4	1.64E+05	0.71	Y	0.98	0.308	5028	0.116
2368-TCDF	24.85		0.9430	0.9431	+0.1	7.12E+05	0.67	Y	0.98	1.34	5028	0.116
1238/1234/1678/1469/1236-TCDF	24.96	J	0.9468	0.9472	+0.6	2.60E+05	0.82	Y	0.98	0.49	5028	0.116
1278-TCDF	25.42	J	0.9651	0.9649	-0.3	2.32E+05	0.88	Y	0.98	0.438	5028	0.116
1349-TCDF	25.54	J EMPC	0.9704	0.9695	-1.4	3.27E+04	1.33	N	0.98	0.0616	5028	0.116
1267-TCDF	25.71	J EMPC	0.9761	0.9758	-0.5	1.25E+05	0.61	N	0.98	0.236	5028	0.116
2346/1249-TCDF	NotFnd		0.9834						0.98		5028	0.116
2347/1279-TCDF	26.13	J	0.9921	0.9917	-0.6	1.03E+05	0.80	Y	0.98	0.194	5028	0.116
2348-TCDF	26.24	J	0.9964	0.9961	-0.5	1.03E+05	0.78	Y	0.98	0.195	5028	0.116
2378-TCDF	**26.37**	EMPC	**1.0006**	**1.0008**	**+0.3**	**2.78E+05**	**0.65**	**N**	**0.98**	**0.523**	**5028**	**0.116**
2367/3467-TCDF	26.75	EMPC	1.0156	1.0154	-0.3	3.74E+05	0.91	N	0.98	0.704	5028	0.116
1269-TCDF	NotFnd		1.0249						0.98		5028	0.116
1239-TCDF	NotFnd		1.0357						0.98		5028	0.116
1289-TCDF	28.47	EMPC	1.0799	1.0804	+0.9	3.47E+05	1.40	N	0.98	0.654	5028	0.116
13468/12468-PeCDF	28.46		0.9084	0.9086	+0.3	6.33E+06	1.64	Y	0.95	14	4223	0.086
13678/13467/12467-PeCDF	30.05	J	0.9591	0.9594	+0.5	5.01E+05	1.36	Y	0.95	1.11	8257	0.168
12368/13478/12478-PeCDF	30.21		0.9642	0.9645	+0.5	3.22E+06	1.47	Y	0.95	7.12	8257	0.168
14678-PeCDF	NotFnd		0.9675						0.95		8257	0.168
13479-PeCDF	NotFnd		0.9706						0.95		8257	0.168
13469/12479-PeCDF	NotFnd		0.9787						0.95		8257	0.168
12346-PeCDF	NotFnd		0.9833						0.95		8257	0.168

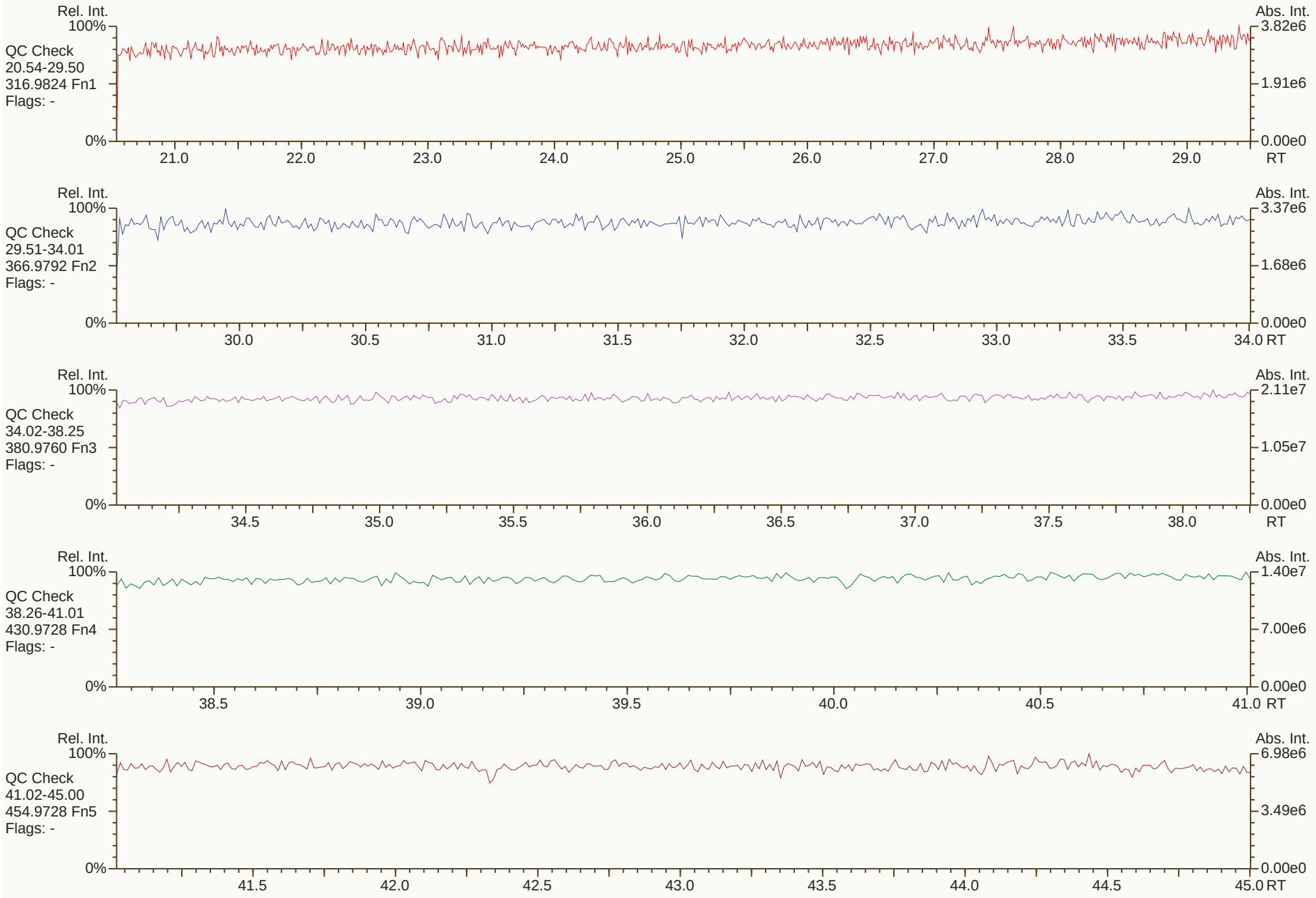
Lab ID: B4511_17654_DF_005 **Acq'd:** 07 Aug 2020 21:45 PSW **Wt/Vol:** 9.59 g **ICAL:** MM3_DF_10012020_12JUN2020

Client ID: CS-22 **UTP:** 10-Aug-2020 09:02:25 PSW **J-level:** 0.521 pg/g **Split:** 1 **Checkcode:** 460-756-YTX

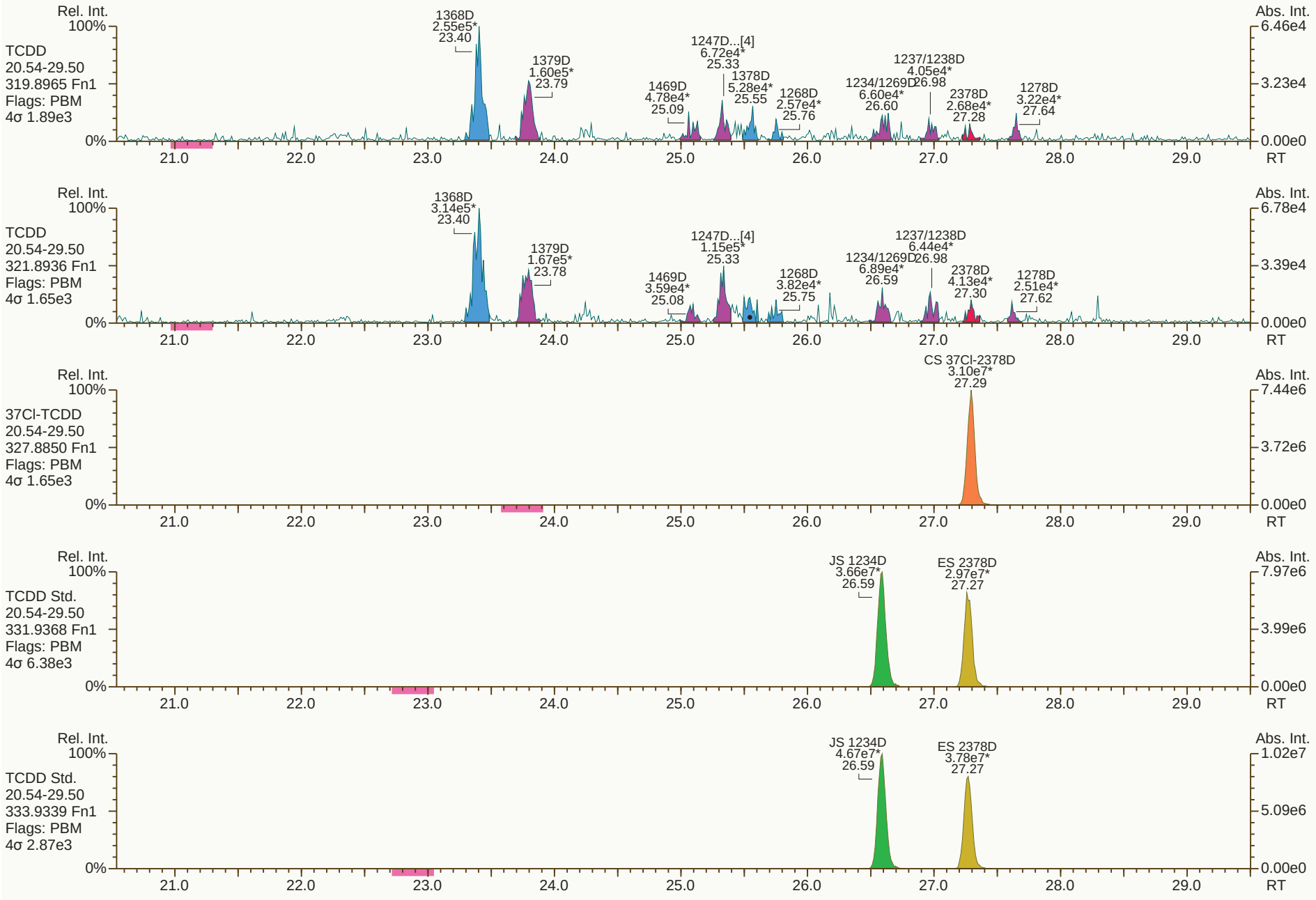
Datafile: 200807R11 **Report:** 10 Aug 2020 09:06 pw **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
23468/12469-PeCDF	30.89	J	0.9861	0.9862	+0.2	1.03E+06	1.55	Y	0.95	2.29	8257	0.168
12347-PeCDF	NotFnd		0.9887						0.95		8257	0.168
12348-PeCDF	NotFnd		0.9938						0.95		8257	0.168
12378-PeCDF	**31.33**	J EMPC	**1.0006**	**1.0002**	**-0.8**	**2.89E+05**	**1.87**	**N**	**0.95**	**0.621**	**8257**	**0.166**
12678/12367-PeCDF	31.63	J	1.0095	1.0099	+0.8	4.95E+05	1.61	Y	0.95	1.1	8257	0.168
12379-PeCDF	NotFnd		1.0150						0.95		8257	0.168
12679-PeCDF	NotFnd		0.9926						0.95		8257	0.168
23467/12369-PeCDF	32.34	J EMPC	0.9966	0.9965	-0.2	1.87E+05	1.11	N	0.95	0.415	8257	0.168
23478-PeCDF	**32.49**	J	**1.0005**	**1.0011**	**+1.2**	**1.09E+06**	**1.45**	**Y**	**0.95**	**2.5**	**8257**	**0.17**
23478/12489-PeCDF	NotFnd		0.0000						0.95			
12489-PeCDF	NotFnd		1.0047						0.95		8257	0.168
12349-PeCDF	NotFnd		1.0107						0.95		8257	0.168
12389-PeCDF	NotFnd		1.0339						0.95		8257	0.168
123468-HxCDF	34.38		0.9617	0.9616	-0.2	2.87E+06	1.18	Y	1.11	7.69	11142	0.248
124678/134678-HxCDF	34.58		0.9673	0.9671	-0.4	1.04E+07	1.20	Y	1.11	27.8	11142	0.248
134679-HxCDF	NotFnd		0.9737						1.11		11142	0.248
124679-HxCDF	35.01	J EMPC	0.9792	0.9792	0	2.14E+05	1.61	N	1.11	0.573	11142	0.248
124689-HxCDF	35.24		0.9854	0.9854	0	1.20E+07	1.27	Y	1.11	32.1	11142	0.248
123467-HxCDF	35.65	J	0.9972	0.9971	-0.2	2.94E+05	1.15	Y	1.11	0.789	11142	0.248
123478-HxCDF	**35.78**		**1.0005**	**1.0005**	**0**	**1.52E+06**	**1.18**	**Y**	**1.20**	**3.84**	**11142**	**0.226**
123678-HxCDF	**35.91**	J	**1.0004**	**1.0004**	**0**	**9.34E+05**	**1.32**	**Y**	**1.07**	**2.32**	**11142**	**0.227**
123479-HxCDF	NotFnd		1.0049						1.11		11142	0.248
123469-HxCDF	NotFnd		1.0089						1.11		11142	0.248
123679-HxCDF	NotFnd		0.9945						1.11		11142	0.248
234678-HxCDF	**36.56**		**1.0005**	**1.0005**	**0**	**1.30E+06**	**1.20**	**Y**	**1.10**	**3.56**	**11142**	**0.245**
234678/123689-HxCDF	NotFnd		0.0000						1.10			
123689-HxCDF	NotFnd		1.0054						1.11		11142	0.248
123789-HxCDF	**NotFnd**		**1.0004**						**1.09**		**11142**	**0.303**
123789/123489-HxCDF	NotFnd		0.0000						1.09			
123489-HxCDF	37.57	J	1.0008	1.0013	+1.1	3.20E+05	1.27	Y	1.11	0.858	11142	0.248
1234678-HpCDF	**39.06**		**1.0003**	**1.0003**	**0**	**2.01E+07**	**1.04**	**Y**	**1.28**	**58.8**	**3071**	**0.0634**
1234679-HpCDF	39.32	**J**	1.0072	1.0071	-0.2	6.13E+05	1.04	Y	1.27	2.02	3071	0.0667
1234689-HpCDF	39.46		1.0107	1.0107	0	3.63E+07	1.05	Y	1.27	120	3071	0.0667
1234789-HpCDF	**40.38**		**1.0002**	**1.0002**	**0**	**1.24E+06**	**1.06**	**Y**	**1.27**	**4.7**	**3071**	**0.0708**
OCDF	**42.55**		**1.0003**	**1.0003**	**0**	**2.60E+07**	**0.86**	**Y**	**1.01**	**160**	**4195**	**0.181**
OCDF-a	42.55		1.0002	1.0002	0	1.71E+06	2.64	Y	0.06	169	5690	3.92

SGS ID: B4511_17654_DF_005 **Sample ID: CS-22** **Acq: 07-Aug-2020 21:45:56**
Instr: [ILM] AutoSpec-Ultima MM3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 13** **User: PSW Datafile: 200807R11**



Results: P:\B4500_B4599\B4511\B4511_17654 DF\Resources\B4511_17654_DF_005.utp_res, saved 10-Aug-2020 09:02 (PSW) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 scc: 460-756 *PKD: n/a Printed: 10-Aug-2020 09:19 Page 1 of 12*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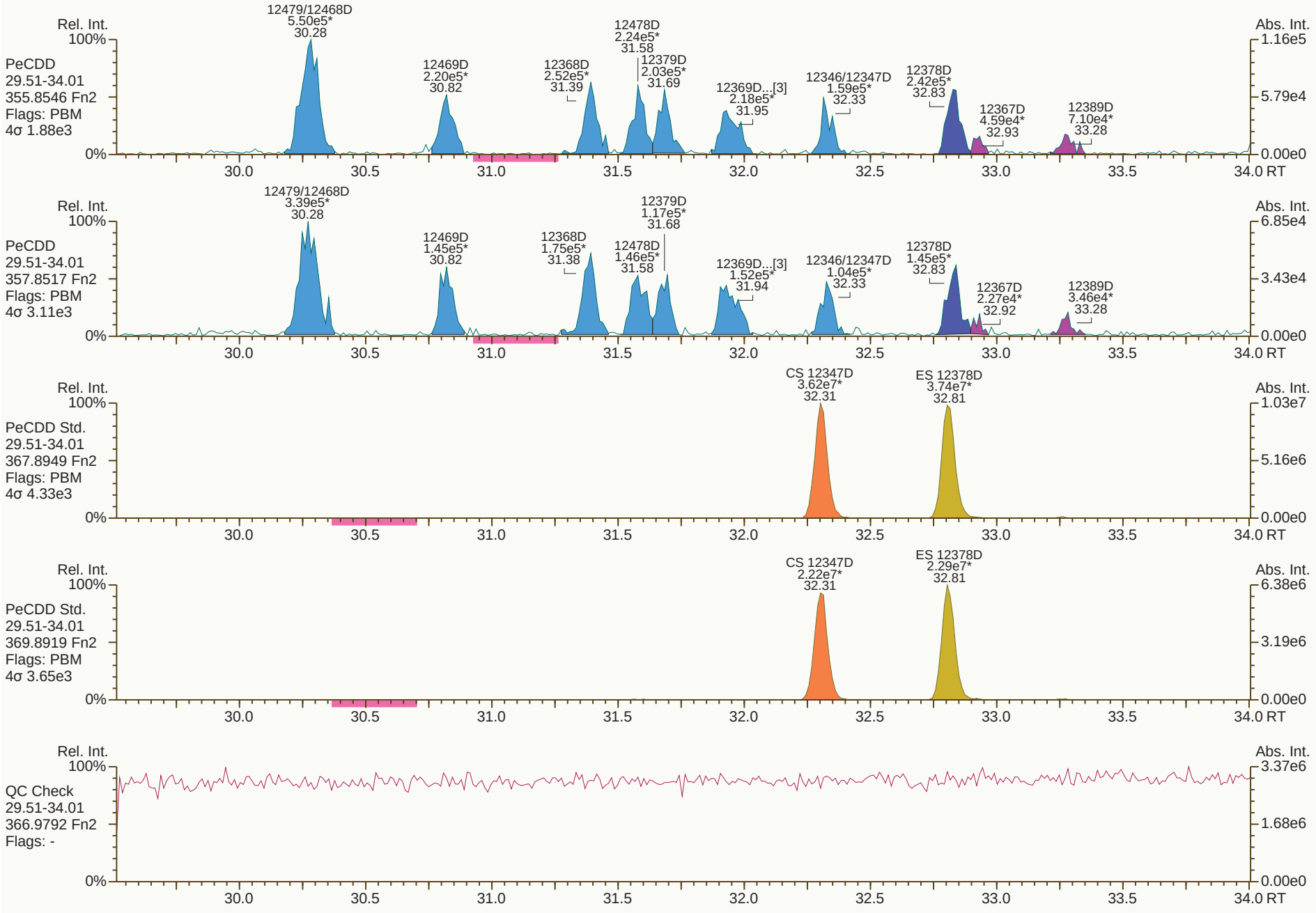
100%
TCDD
20.54-29.50
319.8965 Fn1
Flags: PBM
4σ 1.89e3
1368D 2.55e5* 23.40
1379D 1.60e5* 23.79
1469D 4.78e4* 25.09
1247D...[4] 6.72e4* 25.33
1378D 5.28e4* 25.55
1268D 2.57e4* 25.76
1234/1269D 6.60e4* 26.60
1237/1238D 4.05e4* 26.98
2378D 2.68e4* 27.28
1278D 3.22e4* 27.64
Abs. Int.
6.46e4
3.23e4
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
TCDD
20.54-29.50
321.8936 Fn1
Flags: PBM
4σ 1.65e3
1368D 3.14e5* 23.40
1379D 1.67e5* 23.78
1469D 3.59e4* 25.08
1247D...[4] 1.15e5* 25.33
1268D 3.82e4* 25.75
1234/1269D 6.89e4* 26.59
1237/1238D 6.44e4* 26.98
2378D 4.13e4* 27.30
1278D 2.51e4* 27.62
Abs. Int.
6.78e4
3.39e4
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
37Cl-TCDD
20.54-29.50
327.8850 Fn1
Flags: PBM
4σ 1.65e3
CS 37Cl-2378D 3.10e7* 27.29
Abs. Int.
7.44e6
3.72e6
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
331.9368 Fn1
Flags: PBM
4σ 6.38e3
JS 1234D 3.66e7* 26.59
ES 2378D 2.97e7* 27.27
Abs. Int.
7.97e6
3.99e6
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
333.9339 Fn1
Flags: PBM
4σ 2.87e3
JS 1234D 4.67e7* 26.59
ES 2378D 3.78e7* 27.27
Abs. Int.
1.02e7
5.09e6
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT


Rel. Int.
100%
PeCDD
29.51-34.01
355.8546 Fn2
Flags: PBM
4σ 1.88e3
12479/12468D 5.50e5* 30.28
12469D 2.20e5* 30.82
12368D 2.52e5* 31.39
12478D 2.24e5* 31.58
12379D 2.03e5* 31.69
12369D...[3] 2.18e5* 31.95
12346/12347D 1.59e5* 32.33
12378D 2.42e5* 32.83
12367D 4.59e4* 32.93
12389D 7.10e4* 33.28
Abs. Int.
1.16e5
5.79e4
0.00e0
0%
30.0 30.5 31.0 31.5 32.0 32.5 33.0 33.5 34.0 RT
Rel. Int.
100%
PeCDD
29.51-34.01
357.8517 Fn2
Flags: PBM
4σ 3.11e3
12479/12468D 3.39e5* 30.28
12469D 1.45e5* 30.82
12368D 1.75e5* 31.38
12379D 1.17e5* 31.68
12478D 1.46e5* 31.58
12369D...[3] 1.52e5* 31.94
12346/12347D 1.04e5* 32.33
12378D 1.45e5* 32.83
12367D 2.27e4* 32.92
12389D 3.46e4* 33.28
Abs. Int.
6.85e4
3.43e4
0.00e0
0%
30.0 30.5 31.0 31.5 32.0 32.5 33.0 33.5 34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
367.8949 Fn2
Flags: PBM
4σ 4.33e3
CS 12347D 3.62e7* 32.31
ES 12378D 3.74e7* 32.81
Abs. Int.
1.03e7
5.16e6
0.00e0
0%
30.0 30.5 31.0 31.5 32.0 32.5 33.0 33.5 34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
369.8919 Fn2
Flags: PBM
4σ 3.65e3
CS 12347D 2.22e7* 32.31
ES 12378D 2.29e7* 32.81
Abs. Int.
6.38e6
3.19e6
0.00e0
0%
30.0 30.5 31.0 31.5 32.0 32.5 33.0 33.5 34.0 RT
Rel. Int.
100%
QC Check
29.51-34.01
366.9792 Fn2
Flags: -
Abs. Int.
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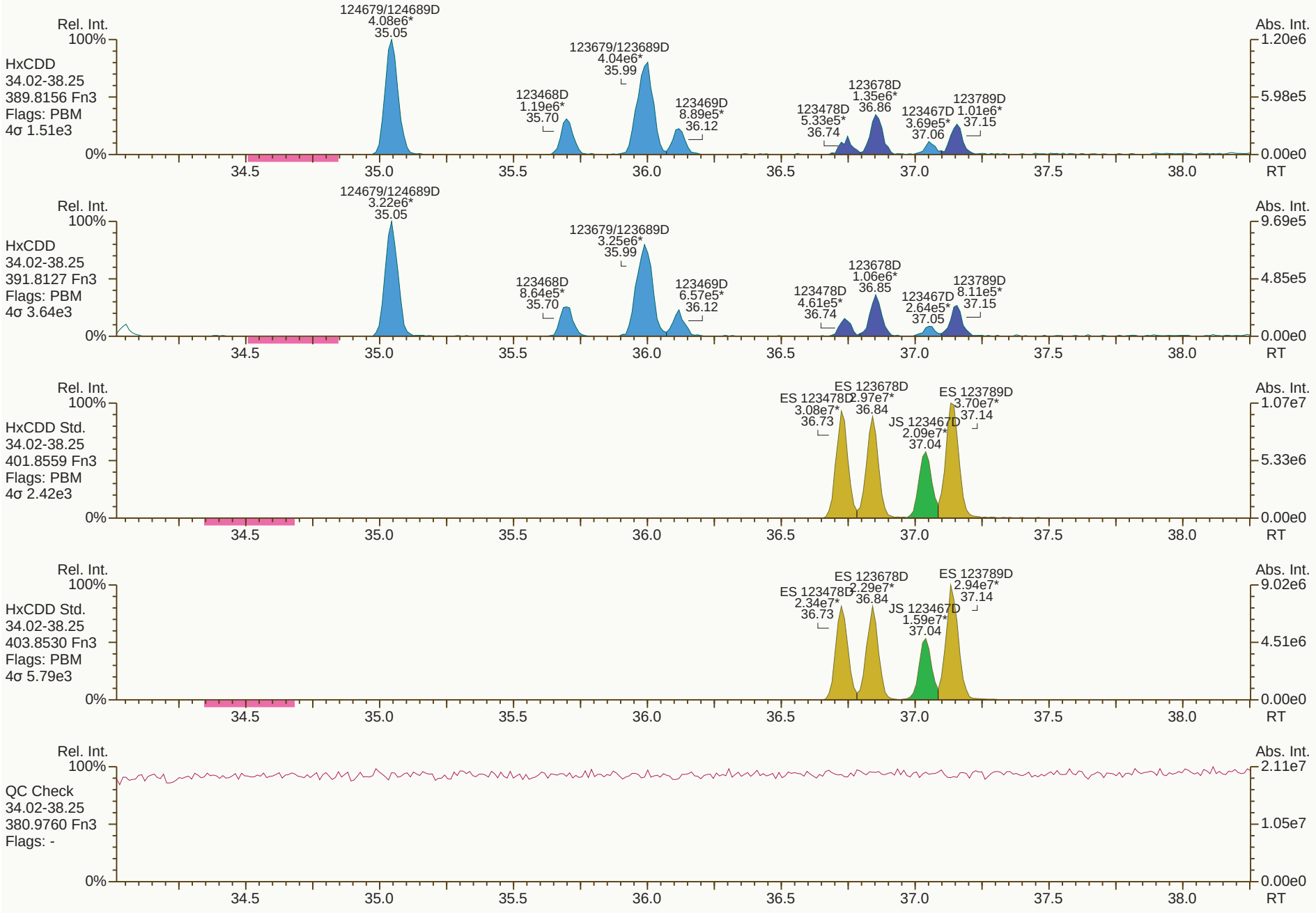
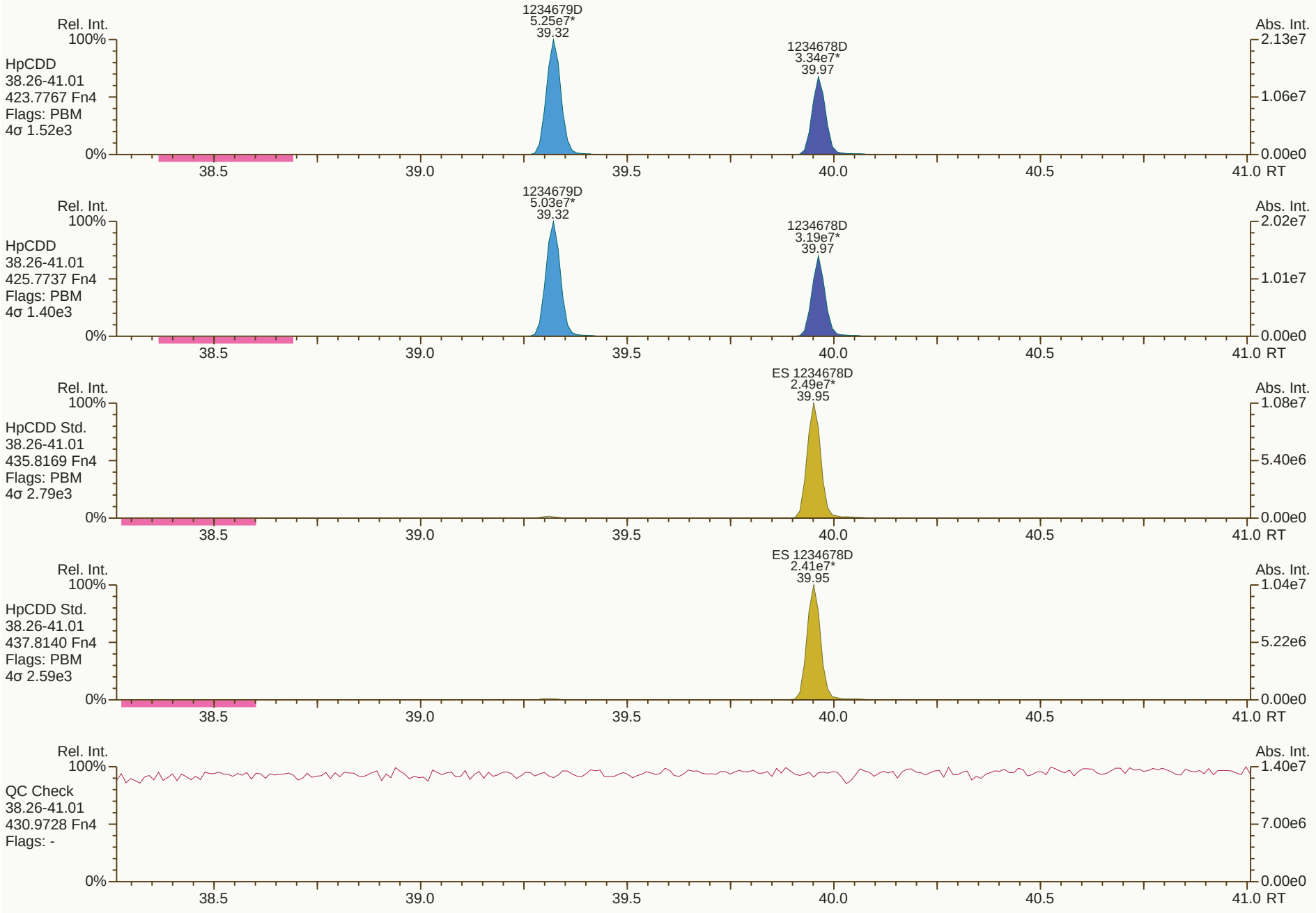
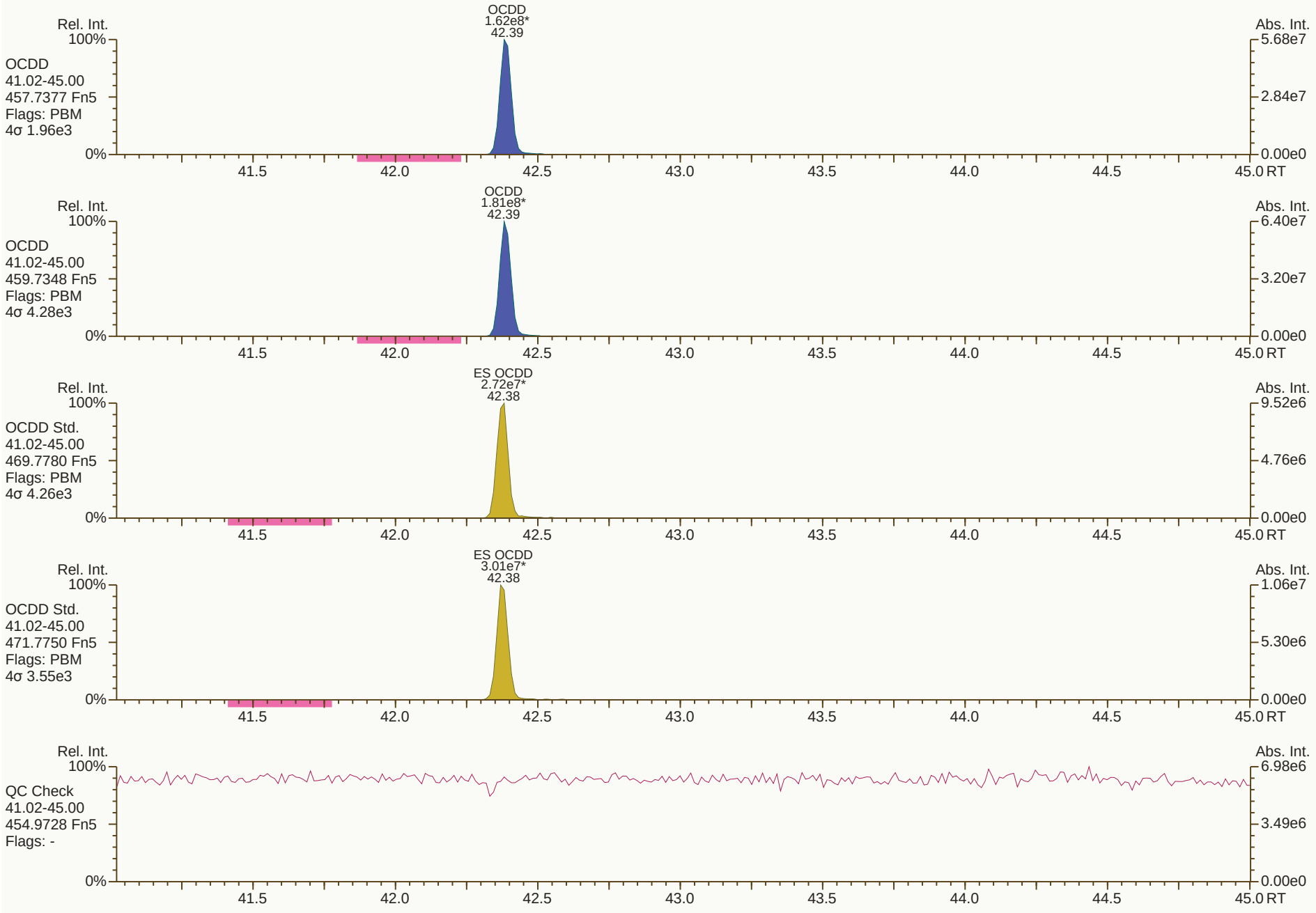
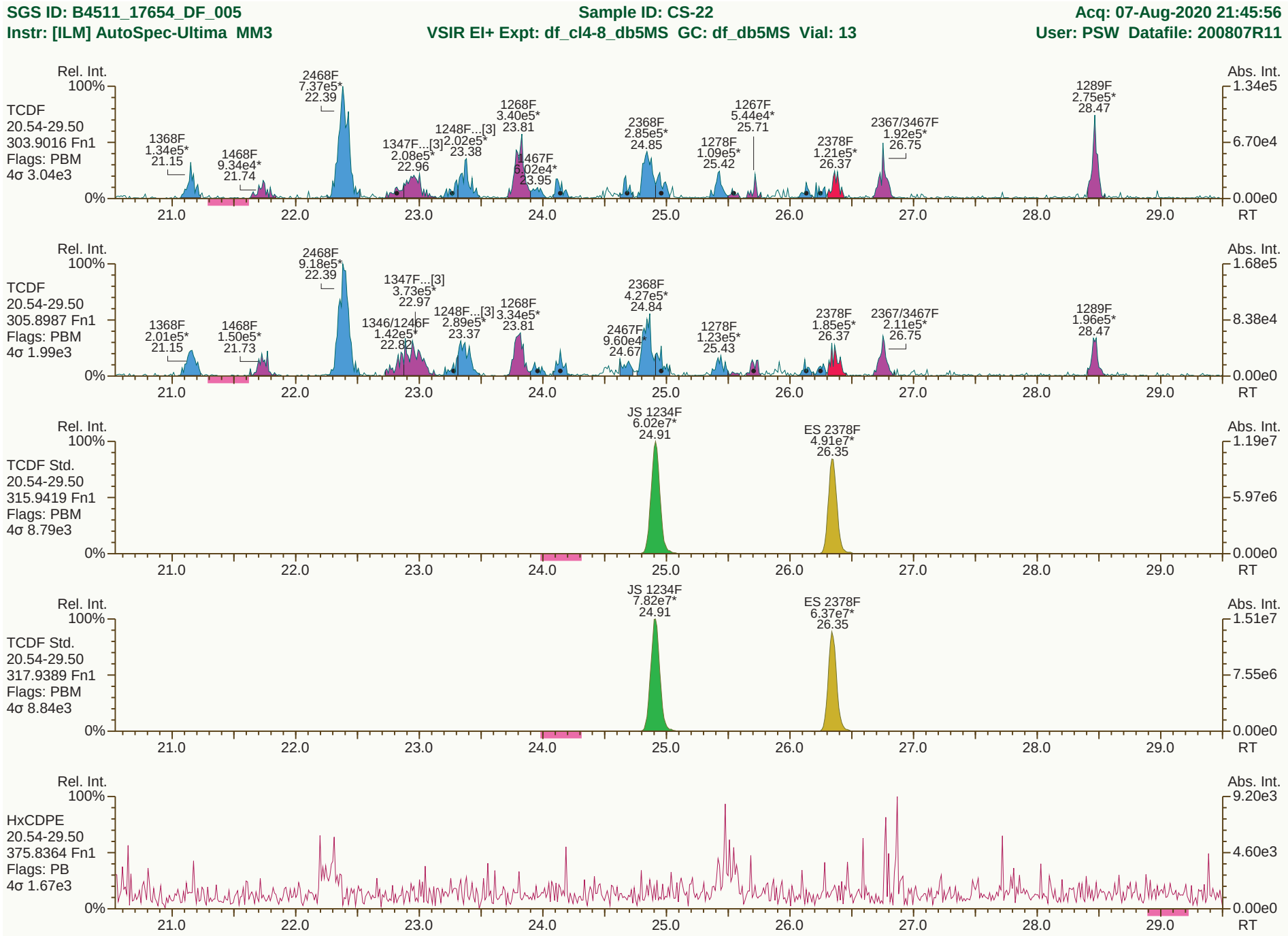
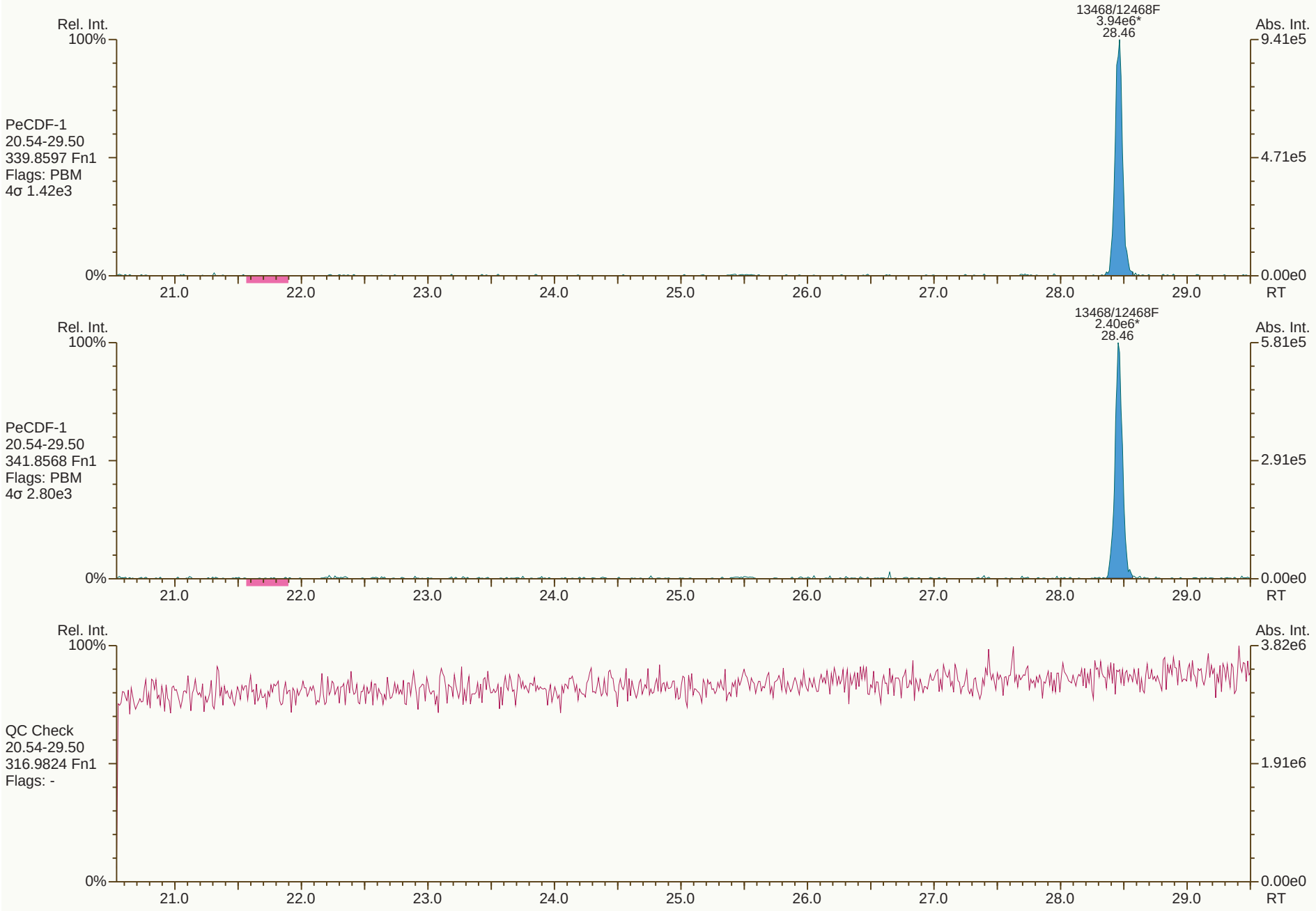
1.68e6
0.00e0
0%
30.0 30.5 31.0 31.5 32.0 32.5 33.0 33.5 34.0 RT

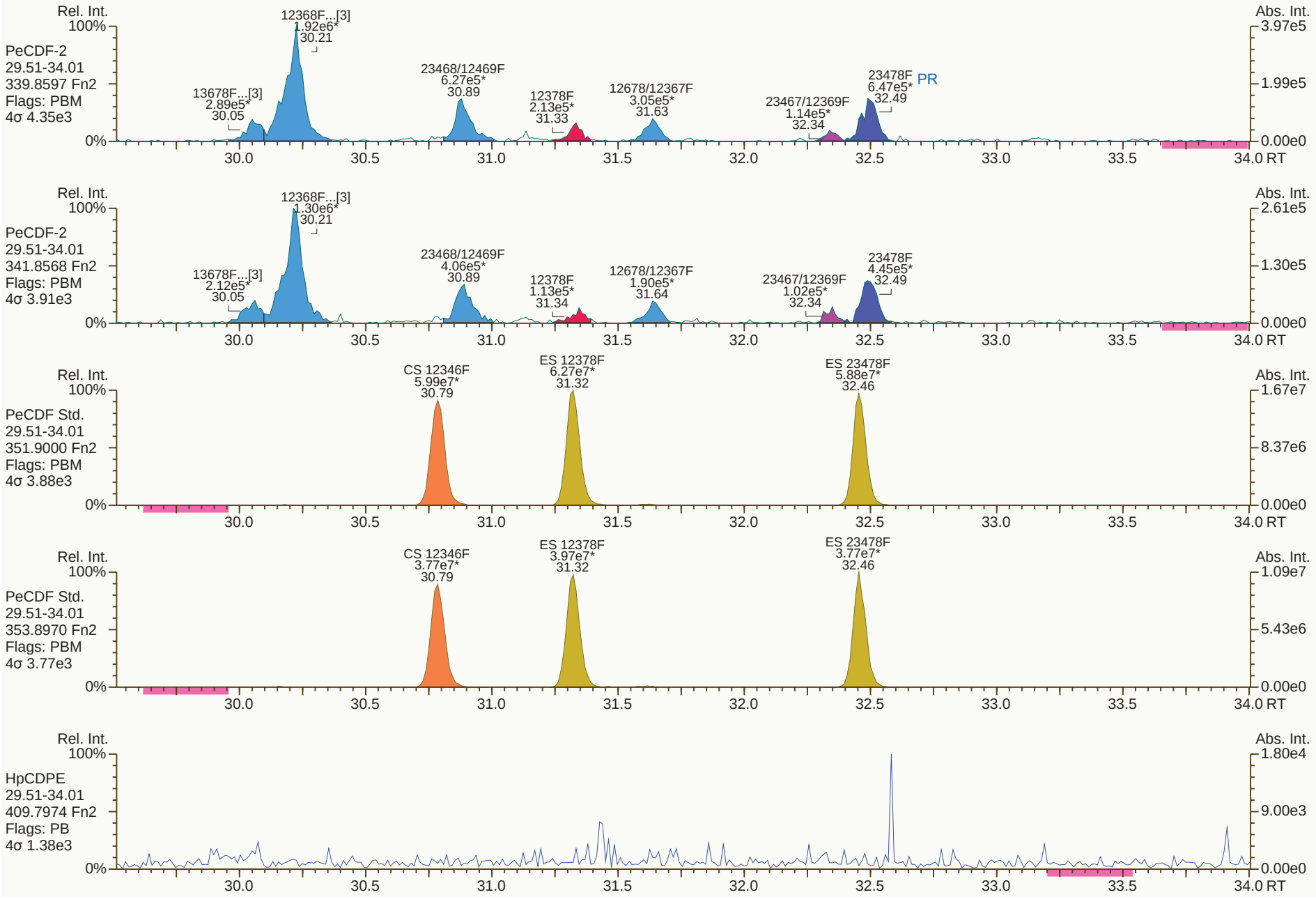

Rel. Int.
100%
HxCDD
34.02-38.25
389.8156 Fn3
Flags: PBM
4σ 1.51e3
124679/124689D
4.08e6*
35.05
123679/123689D
4.04e6*
35.99
123468D
1.19e6*
35.70
123469D
8.89e5*
36.12
123678D
1.35e6*
36.86
123478D
5.33e5*
36.74
123467D
3.69e5*
37.06
123789D
1.01e6*
37.15
Abs. Int.
1.20e6
5.98e5
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD
34.02-38.25
391.8127 Fn3
Flags: PBM
4σ 3.64e3
124679/124689D
3.22e6*
35.05
123679/123689D
3.25e6*
35.99
123468D
8.64e5*
35.70
123469D
6.57e5*
36.12
123678D
1.06e6*
36.85
123478D
4.61e5*
36.74
123467D
2.64e5*
37.05
123789D
8.11e5*
37.15
Abs. Int.
9.69e5
4.85e5
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
401.8559 Fn3
Flags: PBM
4σ 2.42e3
ES 123678D
2.97e7*
36.84
ES 123478D
3.08e7*
36.73
JS 123467D
2.09e7*
37.04
ES 123789D
3.70e7*
37.14
Abs. Int.
1.07e7
5.33e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
403.8530 Fn3
Flags: PBM
4σ 5.79e3
ES 123678D
2.29e7*
36.84
ES 123478D
2.34e7*
36.73
JS 123467D
1.59e7*
37.04
ES 123789D
2.94e7*
37.14
Abs. Int.
9.02e6
4.51e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
Abs. Int.
2.11e7
1.05e7
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT

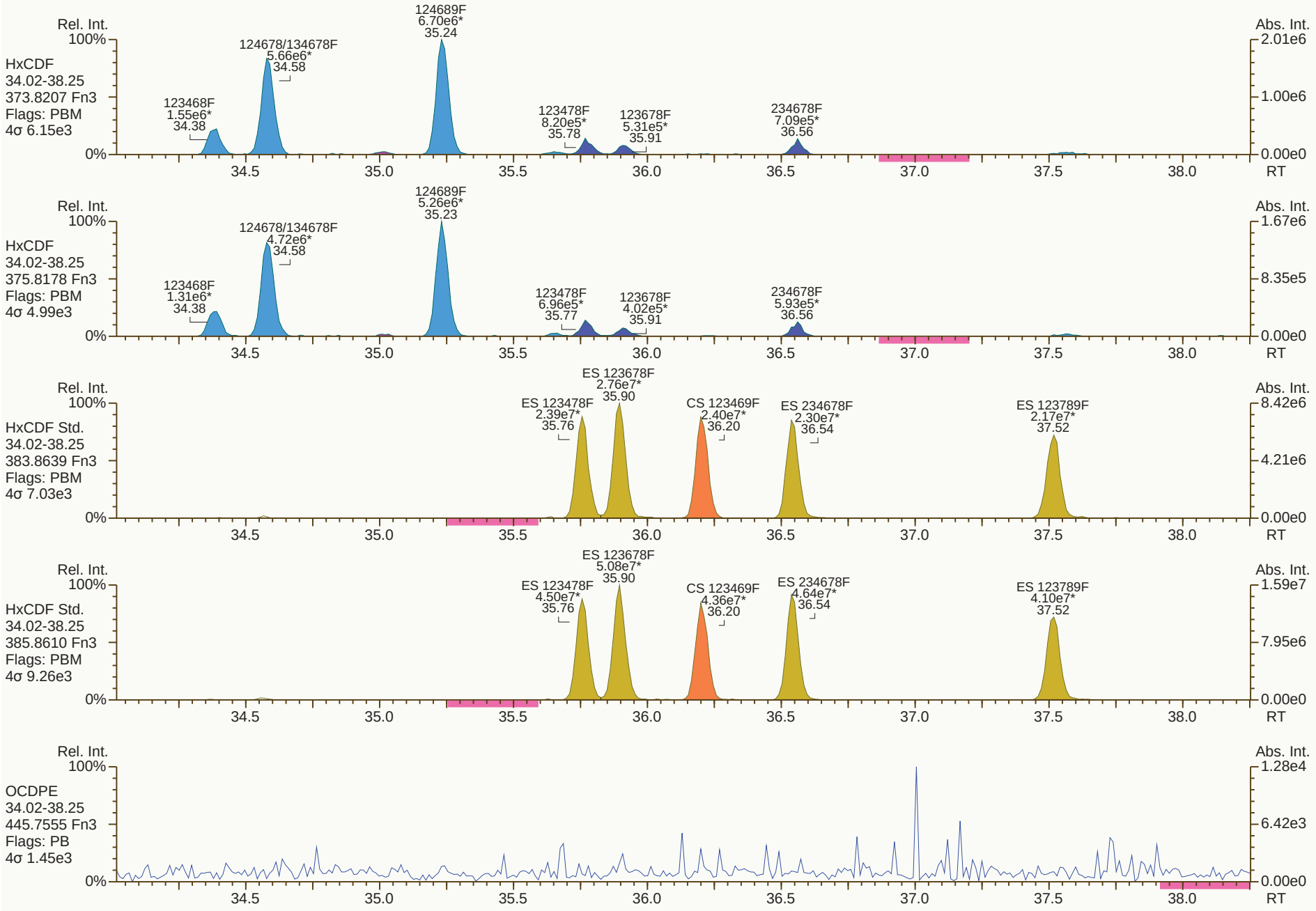

Rel. Int.
100%
HpCDD
38.26-41.01
423.7767 Fn4
Flags: PBM
4σ 1.52e3
0%
1234679D
5.25e7*
39.32
1234678D
3.34e7*
39.97
Abs. Int.
2.13e7
1.06e7
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.26-41.01
425.7737 Fn4
Flags: PBM
4σ 1.40e3
0%
1234679D
5.03e7*
39.32
1234678D
3.19e7*
39.97
Abs. Int.
2.02e7
1.01e7
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
435.8169 Fn4
Flags: PBM
4σ 2.79e3
0%
ES 1234678D
2.49e7*
39.95
Abs. Int.
1.08e7
5.40e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
437.8140 Fn4
Flags: PBM
4σ 2.59e3
0%
ES 1234678D
2.41e7*
39.95
Abs. Int.
1.04e7
5.22e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.26-41.01
430.9728 Fn4
Flags: -
0%
Abs. Int.
1.40e7
7.00e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT


OCDD
1.62e8*
42.39
Rel. Int.
100%
OCDD
41.02-45.00
457.7377 Fn5
Flags: PBM
4σ 1.96e3
0%
Abs. Int.
5.68e7
2.84e7
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDD
1.81e8*
42.39
Rel. Int.
100%
OCDD
41.02-45.00
459.7348 Fn5
Flags: PBM
4σ 4.28e3
0%
Abs. Int.
6.40e7
3.20e7
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
2.72e7*
42.38
Rel. Int.
100%
OCDD Std.
41.02-45.00
469.7780 Fn5
Flags: PBM
4σ 4.26e3
0%
Abs. Int.
9.52e6
4.76e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
3.01e7*
42.38
Rel. Int.
100%
OCDD Std.
41.02-45.00
471.7750 Fn5
Flags: PBM
4σ 3.55e3
0%
Abs. Int.
1.06e7
5.30e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
6.98e6
3.49e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT


SGS ID: B4511_17654_DF_005
Sample ID: CS-22
Acq: 07-Aug-2020 21:45:56
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 13
User: PSW Datafile: 200807R11
Rel. Int.
Abs. Int.
TCDF
20.54-29.50
303.9016 Fn1
Flags: PBM
4σ 3.04e3
1368F 1.34e5* 21.15
1468F 9.34e4* 21.74
2468F 7.37e5* 22.39
1347F...[3] 2.08e5* 22.96
1248F...[3] 2.02e5* 23.38
1268F 3.40e5* 23.81
1467F 6.02e4* 23.95
2368F 2.85e5* 24.85
1278F 1.09e5* 25.42
1267F 5.44e4* 25.71
2378F 1.21e5* 26.37
2367/3467F 1.92e5* 26.75
1289F 2.75e5* 28.47
TCDF
20.54-29.50
305.8987 Fn1
Flags: PBM
4σ 1.99e3
1368F 2.01e5* 21.15
1468F 1.50e5* 21.73
2468F 9.18e5* 22.39
1347F...[3] 3.73e5* 22.97
1346/1246F 1.42e5* 22.82
1248F...[3] 2.89e5* 23.37
1268F 3.34e5* 23.81
2467F 9.60e4* 24.67
2368F 4.27e5* 24.84
1278F 1.23e5* 25.43
2378F 1.85e5* 26.37
2367/3467F 2.11e5* 26.75
1289F 1.96e5* 28.47
TCDF Std.
20.54-29.50
315.9419 Fn1
Flags: PBM
4σ 8.79e3
JS 1234F 6.02e7* 24.91
ES 2378F 4.91e7* 26.35
TCDF Std.
20.54-29.50
317.9389 Fn1
Flags: PBM
4σ 8.84e3
JS 1234F 7.82e7* 24.91
ES 2378F 6.37e7* 26.35
HxCDPE
20.54-29.50
375.8364 Fn1
Flags: PB
4σ 1.67e3
100%
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
1.34e5
6.70e4
0.00e0
1.68e5
8.38e4
1.19e7
5.97e6
1.51e7
7.55e6
9.20e3
4.60e3
Results: P:\B4500_B4599\B4511\B4511_17654 DF\Resources\B4511_17654_DF_005.utp_res, saved 10-Aug-2020 09:02 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 3989, 7526, 0977 scc: 460-756
PKD: 10-Aug-2020 08:36 Printed: 10-Aug-2020 09:20 Page 7 of 12


Rel. Int.
100%
0%
Abs. Int.
9.41e5
4.71e5
0.00e0
RT
13468/12468F
3.94e6*
28.46
PeCDF-1
20.54-29.50
339.8597 Fn1
Flags: PBM
4σ 1.42e3
13468/12468F
2.40e6*
28.46
5.81e5
2.91e5
PeCDF-1
20.54-29.50
341.8568 Fn1
Flags: PBM
4σ 2.80e3
3.82e6
1.91e6
QC Check
20.54-29.50
316.9824 Fn1
Flags: -
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0


Rel. Int.
100%
PeCDF-2
29.51-34.01
339.8597 Fn2
Flags: PBM
4σ 4.35e3
12368F...[3]
1.92e6*
30.21
13678F...[3]
2.89e5*
30.05
23468/12469F
6.27e5*
30.89
12378F
2.13e5*
31.33
12678/12367F
3.05e5*
31.63
23467/12369F
1.14e5*
32.34
23478F
6.47e5*
32.49
PR
Abs. Int.
3.97e5
1.99e5
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF-2
29.51-34.01
341.8568 Fn2
Flags: PBM
4σ 3.91e3
12368F...[3]
1.30e6*
30.21
13678F...[3]
2.12e5*
30.05
23468/12469F
4.06e5*
30.89
12378F
1.13e5*
31.34
12678/12367F
1.90e5*
31.64
23467/12369F
1.02e5*
32.34
23478F
4.45e5*
32.49
Abs. Int.
2.61e5
1.30e5
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
351.9000 Fn2
Flags: PBM
4σ 3.88e3
CS 12346F
5.99e7*
30.79
ES 12378F
6.27e7*
31.32
ES 23478F
5.88e7*
32.46
Abs. Int.
1.67e7
8.37e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
353.8970 Fn2
Flags: PBM
4σ 3.77e3
CS 12346F
3.77e7*
30.79
ES 12378F
3.97e7*
31.32
ES 23478F
3.77e7*
32.46
Abs. Int.
1.09e7
5.43e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
HpCDPE
29.51-34.01
409.7974 Fn2
Flags: PB
4σ 1.38e3
Abs. Int.
1.80e4
9.00e3
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT


Rel. Int.
100%
HxCDF
34.02-38.25
373.8207 Fn3
Flags: PBM
4σ 6.15e3
123468F 1.55e6* 34.38
124678/134678F 5.66e6* 34.58
124689F 6.70e6* 35.24
123478F 8.20e5* 35.78
123678F 5.31e5* 35.91
234678F 7.09e5* 36.56
Abs. Int.
2.01e6
1.00e6
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0
RT
Rel. Int.
100%
HxCDF
34.02-38.25
375.8178 Fn3
Flags: PBM
4σ 4.99e3
123468F 1.31e6* 34.38
124678/134678F 4.72e6* 34.58
124689F 5.26e6* 35.23
123478F 6.96e5* 35.77
123678F 4.02e5* 35.91
234678F 5.93e5* 36.56
Abs. Int.
1.67e6
8.35e5
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0
RT
Rel. Int.
100%
HxCDF Std.
34.02-38.25
383.8639 Fn3
Flags: PBM
4σ 7.03e3
ES 123478F 2.39e7* 35.76
ES 123678F 2.76e7* 35.90
CS 123469F 2.40e7* 36.20
ES 234678F 2.30e7* 36.54
ES 123789F 2.17e7* 37.52
Abs. Int.
8.42e6
4.21e6
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0
RT
Rel. Int.
100%
HxCDF Std.
34.02-38.25
385.8610 Fn3
Flags: PBM
4σ 9.26e3
ES 123478F 4.50e7* 35.76
ES 123678F 5.08e7* 35.90
CS 123469F 4.36e7* 36.20
ES 234678F 4.64e7* 36.54
ES 123789F 4.10e7* 37.52
Abs. Int.
1.59e7
7.95e6
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0
RT
Rel. Int.
100%
OCDPE
34.02-38.25
445.7555 Fn3
Flags: PB
4σ 1.45e3
Abs. Int.
1.28e4
6.42e3
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0
RT


Rel. Int.
100%
HpCDF
38.26-41.01
407.7818 Fn4
Flags: PBM
4σ 1.58e3
1234678F
1.02e7*
39.06
1234689F
1.85e7*
39.46
Abs. Int.
7.15e6
3.58e6
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF
38.26-41.01
409.7788 Fn4
Flags: PBM
4σ 1.49e3
1234678F
9.89e6*
39.06
1234689F
1.77e7*
39.46
Abs. Int.
7.16e6
3.58e6
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.26-41.01
417.8253 Fn4
Flags: PBM
4σ 1.36e4
ES 1234678F
1.74e7*
39.04
CS 1234689F
1.68e7*
39.45
ES 1234789F
1.36e7*
40.37
Abs. Int.
7.01e6
3.50e6
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.26-41.01
419.8220 Fn4
Flags: PBM
4σ 2.14e3
ES 1234678F
3.83e7*
39.04
CS 1234689F
3.60e7*
39.45
ES 1234789F
2.99e7*
40.37
Abs. Int.
1.41e7
7.03e6
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
NCDPE
38.26-41.01
479.7165 Fn4
Flags: PB
4σ 1.62e3
RT
Abs. Int.
4.07e5
2.04e5
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT


Rel. Int.
100%
OCDF
41.02-45.00
441.7428 Fn5
Flags: PBM
4σ 1.72e3
0%
OCDF
1.20e7*
42.55
Abs. Int.
4.36e6
2.18e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF
41.02-45.00
443.7398 Fn5
Flags: PBM
4σ 2.47e3
0%
OCDF
1.39e7*
42.55
Abs. Int.
4.85e6
2.42e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF Std.
41.02-45.00
453.7830 Fn5
Flags: PBM
4σ 2.25e3
0%
ES OCDF
3.19e7*
42.54
Abs. Int.
1.14e7
5.70e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF Std.
41.02-45.00
455.7801 Fn5
Flags: PBM
4σ 2.19e3
0%
ES OCDF
3.50e7*
42.54
Abs. Int.
1.25e7
6.24e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
DCDPE
41.02-45.00
513.6775 Fn5
Flags: PB
4σ 1.49e3
0%
Abs. Int.
6.36e3
3.18e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

Lab ID: B4511_17654_DF_006 | Acq'd: 08 Aug 2020 01:03 PSW | Wt/Vol: 9.54 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-26 | UTP: 10-Aug-2020 09:02:27 PSW | J-level: 0.524 pg/g | Split: 1 | Checkcode: 702-048-XWM

Datafile: 200807R15 | Report: 10 Aug 2020 09:07 pw | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	NotFnd		1.0009	-		-	-	-	1.18	-	3966	0.1
12378-PeCDD	32.82	J EMPC	1.0006	1.0006	0	6.25E+04	1.31	N	1.14	0.175	4293	0.106
123478-HxCDD	36.74	J EMPC	1.0004	1.0004	0	2.04E+05	0.95	N	1.09	0.65	2121	0.0547
123678-HxCDD	36.85	J	1.0035	1.0035	0	3.59E+05	1.38	Y	1.13	1.18	2121	0.0536
123789-HxCDD	37.15	J	1.0116	1.0116	0	3.08E+05	1.25	Y	1.05	0.864	2121	0.0488
1234678-HpCDD	39.96		1.0003	1.0003	0	1.55E+07	1.00	Y	0.98	66	2096	0.0539
OCDD	42.38		1.0003	1.0003	0	4.98E+07	0.91	Y	1.08	346	3570	0.167
2378-TCDF	26.36	J EMPC	1.0006	1.0006	0	4.52E+04	1.76	N	0.98	0.0762	2589	0.0472
12378-PeCDF	31.33	J EMPC	1.0006	1.0006	0	6.57E+04	2.57	N	0.95	0.128	5690	0.1
23478-PeCDF	32.49	J EMPC	1.0005	1.0012	+1.4	1.93E+05	2.23	N	0.95	0.399	5690	0.107
123478-HxCDF	35.77	J EMPC	1.0005	1.0004	-0.2	1.62E+05	0.88	N	1.20	0.371	5987	0.115
123678-HxCDF	35.90	J	1.0004	1.0004	0	1.83E+05	1.11	Y	1.07	0.413	5987	0.106
234678-HxCDF	36.55	J	1.0005	1.0004	-0.2	2.36E+05	1.26	Y	1.10	0.596	5987	0.123
123789-HxCDF	NotFnd		1.0004	-		-	-	-	1.09	-	5987	0.148
1234678-HpCDF	39.05		1.0003	1.0003	0	2.25E+06	1.00	Y	1.28	6.04	4133	0.0746
1234789-HpCDF	40.37	J	1.0002	1.0002	0	1.59E+05	0.93	Y	1.27	0.602	4133	0.0996
OCDF	42.54		1.0003	1.0002	-0.3	2.41E+06	0.89	Y	1.01	16.1	3268	0.154

Name	Act RT	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	27.26	1.0255	1.0256	+0.2	7.56E+07	0.77	Y	1.01	78.4
ES 12378-PeCDD	32.80	1.2330	1.2341	+2.2	6.61E+07	1.65	Y	0.87	79.2
ES 123478-HxCDD	36.72	0.9917	0.9917	0	6.04E+07	1.30	Y	1.10	69.1
ES 123678-HxCDD	36.83	0.9947	0.9947	0	5.69E+07	1.26	Y	1.06	67.3
ES 123789-HxCDD	37.13	1.0028	1.0028	0	7.13E+07	1.29	Y	1.22	73.5
ES 1234678-HpCDD	39.95	1.0785	1.0788	+0.7	5.02E+07	1.04	Y	0.99	63.4
ES OCDD	42.37	1.1439	1.1442	+0.8	5.61E+07	0.92	Y	0.67	52.6
ES 2378-TCDF	26.34	1.0572	1.0576	+0.6	1.27E+08	0.79	Y	1.01	80.1
ES 12378-PeCDF	31.31	1.2558	1.2573	+2.8	1.13E+08	1.57	Y	0.90	80.4
ES 23478-PeCDF	32.45	1.3012	1.3029	+3.3	1.07E+08	1.56	Y	0.89	77.2
ES 123478-HxCDF	35.75	0.9655	0.9655	0	7.66E+07	0.52	Y	1.43	67.2
ES 123678-HxCDF	35.89	0.9693	0.9692	-0.2	8.69E+07	0.54	Y	1.63	66.8
ES 234678-HxCDF	36.54	0.9867	0.9867	0	7.58E+07	0.52	Y	1.48	64.3
ES 123789-HxCDF	37.51	1.0130	1.0130	0	6.60E+07	0.52	Y	1.29	64.1
ES 1234678-HpCDF	39.04	1.0540	1.0542	+0.5	6.11E+07	0.44	Y	1.15	67
ES 1234789-HpCDF	40.36	1.0898	1.0900	+0.5	4.37E+07	0.46	Y	0.91	60.5
ES OCDF	42.54	1.1484	1.1487	+0.8	6.21E+07	0.90	Y	0.83	47

Lab ID: B4511_17654_DF_006 | Acq'd: 08 Aug 2020 01:03 PSW | Wt/Vol: 9.54 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-26 | UTP: 10-Aug-2020 09:02:27 PSW | J-level: 0.524 pg/g | Split: 1 | Checkcode: 702-048-XWM

Datafile: 200807R15 | Report: 10 Aug 2020 09:07 pw | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %	
JS 1234-TCDD	26.58		-	-	-	9.58E+07	0.78	Y	-	-	
JS 1234-TCDF	24.91		-	-	-	1.56E+08	0.79	Y	-	-	
JS 123467-HxCDD	37.03		-	-	-	3.99E+07	1.27	Y	-	-	
CS 37Cl-2378-TCDD	27.29		1.0265	1.0265	0	3.43E+07	n/a	-	1.04	86.2	
CS 12347-PeCDD	32.30		1.2141	1.2150	+1.7	6.48E+07	1.65	Y	0.74	91.3	
CS 12346-PeCDF	30.78		1.2343	1.2358	+2.8	1.06E+08	1.59	Y	0.86	79	
CS 123469-HxCDF	36.20		0.9776	0.9775	-0.2	7.35E+07	0.52	Y	1.36	68	
CS 1234689-HpCDF	39.45		1.0650	1.0653	+0.7	5.72E+07	0.42	Y	1.05	68.1	
~~SS 37Cl-2378-TCDD~~	~~27.29~~		~~1.0265~~	~~1.0265~~	~~0~~	~~3.43E+07~~	~~n/a~~		~~1.04~~	~~109~~	Not used in this project.
~~SS 12347-PeCDD~~	~~32.30~~		~~1.2141~~	~~1.2150~~	~~+1.7~~	~~6.48E+07~~	~~1.65~~	~~Y~~	~~0.86~~	~~115~~	CL 10Aug20
~~SS 12346-PeCDF~~	~~30.78~~		~~1.2343~~	~~1.2358~~	~~+2.8~~	~~1.06E+08~~	~~1.59~~	~~Y~~	~~0.96~~	~~97.7~~	
~~SS 123469-HxCDF~~	~~36.20~~		~~0.9776~~	~~0.9775~~	~~-0.2~~	~~7.35E+07~~	~~0.52~~	~~Y~~	~~0.83~~	~~101~~	
~~SS 1234689-HpCDF~~	~~39.45~~		~~1.0650~~	~~1.0653~~	~~+0.7~~	~~5.72E+07~~	~~0.42~~	~~Y~~	~~0.92~~	~~101~~	

Totals	Conc	EMPC
Total TCDD	0	0.577
Total PeCDD	0.784	3.15
Total HxCDD	49.2	49.9
Total HpCDD	450	450
Total Tetra-Octa Dioxins	846	850
Total TCDF	1.13	2.47
Total PeCDF	5.31	5.83
Total HxCDF	8.54	8.91
Total HpCDF	19.2	19.2
Total Tetra-Octa Furans	50.3	52.5
Total Tetra-Octa Dioxins & Furans	896	902

Lab ID: B4511_17654_DF_006 | Acq'd: 08 Aug 2020 01:03 PSW | Wt/Vol: 9.54 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-26 | UTP: 10-Aug-2020 09:02:27 PSW | J-level: 0.524 pg/g | Split: 1 | Checkcode: 702-048-XWM

Datafile: 200807R15 | Report: 10 Aug 2020 09:07 pw | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1368-TCDD	23.40	J EMPC	0.8591	0.8582	-1.3	1.76E+05	0.90	N	1.18	0.415	3966	0.1
1379-TCDD	23.76	J EMPC	0.8732	0.8717	-2.1	6.89E+04	0.91	N	1.18	0.162	3966	0.1
1369-TCDD	NotFnd		0.8901						1.18		3966	0.1
1469-TCDD	NotFnd		0.9205						1.18		3966	0.1
1247/1246/1248/1249-TCDD	NotFnd		0.9301						1.18		3966	0.1
1378-TCDD	NotFnd		0.9374						1.18		3966	0.1
1268-TCDD	NotFnd		0.9449						1.18		3966	0.1
1478-TCDD	NotFnd		0.9544						1.18		3966	0.1
1279-TCDD	NotFnd		0.9610						1.18		3966	0.1
1234/1269-TCDD	NotFnd		0.9746						1.18		3966	0.1
1236-TCDD	NotFnd		0.9802						1.18		3966	0.1
1237/1238-TCDD	NotFnd		0.9898						1.18		3966	0.1
1239-TCDD	NotFnd		0.9950						1.18		3966	0.1
2378-TCDD	**NotFnd**		**1.0009**						**1.18**		**3966**	**0.1**
1278-TCDD	NotFnd		1.0133						1.18		3966	0.1
1267-TCDD	NotFnd		1.0185						1.18		3966	0.1
1289-TCDD	NotFnd		1.0379						1.18		3966	0.1
12479/12468-PeCDD	30.27	J	0.9229	0.9227	-0.4	2.81E+05	1.70	Y	1.14	0.784	4293	0.106
12469-PeCDD	30.80	J EMPC	0.9396	0.9391	-0.9	2.31E+05	1.88	N	1.14	0.644	4293	0.106
12368-PeCDD	31.38	J EMPC	0.9568	0.9567	-0.2	1.59E+05	1.11	N	1.14	0.445	4293	0.106
12478-PeCDD	31.58	J EMPC	0.9626	0.9626	0	4.30E+04	2.39	N	1.14	0.12	4293	0.106
12379-PeCDD	31.67	J EMPC	0.9657	0.9656	-0.2	1.14E+05	2.03	N	1.14	0.319	4293	0.106
12369/12467/12489-PeCDD	31.94	J EMPC	0.9738	0.9736	-0.4	1.35E+05	1.11	N	1.14	0.376	4293	0.106
12346/12347-PeCDD	32.32	J EMPC	0.9853	0.9852	-0.2	1.04E+05	1.09	N	1.14	0.291	4293	0.106
12378-PeCDD	32.82	J EMPC	**1.0006**	**1.0006**	**0**	**6.25E+04**	**1.31**	**N**	**1.14**	**0.175**	**4293**	**0.106**
12367-PeCDD	NotFnd		1.0034						1.14		4293	0.106
12389-PeCDD	NotFnd		1.0141						1.14		4293	0.106
124679/124689-HxCDD	35.04		0.9542	0.9542	0	6.22E+06	1.31	Y	1.09	19.1	2121	0.0521
123468-HxCDD	35.69		0.9721	0.9720	-0.2	2.04E+06	1.28	Y	1.09	6.24	2121	0.0521
123679/123689-HxCDD	35.98		0.9799	0.9798	-0.2	3.59E+06	1.21	Y	1.09	11	2121	0.0521
123469-HxCDD	36.11		0.9835	0.9833	-0.4	2.90E+06	1.20	Y	1.09	8.87	2121	0.0521
123478-HxCDD	36.74	J EMPC	**1.0004**	**1.0004**	**0**	**2.04E+05**	**0.95**	**N**	1.09	**0.65**	**2121**	**0.0547**
123678-HxCDD	36.85	J	**1.0035**	**1.0035**	**0**	**3.59E+05**	**1.38**	**Y**	1.13	**1.18**	**2121**	**0.0536**
123467-HxCDD	37.05	J	1.0088	1.0089	+0.2	6.60E+05	1.36	Y	1.09	2.02	2121	0.0521
123789-HxCDD	37.15	J	**1.0116**	**1.0116**	**0**	**3.08E+05**	**1.25**	**Y**	1.05	**0.864**	**2121**	**0.0488**

Lab ID: B4511_17654_DF_006 | Acq'd: 08 Aug 2020 01:03 PSW | Wt/Vol: 9.54 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-26 | UTP: 10-Aug-2020 09:02:27 PSW | J-level: 0.524 pg/g | Split: 1 | Checkcode: 702-048-XWM

Datafile: 200807R15 | Report: 10 Aug 2020 09:07 pw | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1234679-HpCDD	39.32		0.9843	0.9842	-0.2	9.04E+07	1.03	Y	0.98	384	2096	0.0539
1234678-HpCDD	**39.96**		**1.0003**	**1.0003**	**0**	**1.55E+07**	**1.00**	**Y**	**0.98**	**66**	**2096**	**0.0539**
OCDD	**42.38**		**1.0003**	**1.0003**	**0**	**4.98E+07**	**0.91**	**Y**	**1.08**	**346**	**3570**	**0.167**
OCDD-a	42.38		1.0002	1.0001	-0.3	3.06E+06	2.30	Y	0.07	346	6988	5.3
1368-TCDF	21.16	J	0.8044	0.8035	-1.1	7.18E+04	0.78	Y	0.98	0.121	2589	0.0472
1468-TCDF	NotFnd		0.8261						0.98		2589	0.0472
2468-TCDF	22.38		0.8511	0.8496	-2.0	3.27E+05	0.67	Y	0.98	0.551	2589	0.0472
1346/1246-TCDF	NotFnd		0.8665						0.98		2589	0.0472
1347/1378/1247-TCDF	22.95	J	0.8723	0.8714	-1.2	1.53E+05	0.77	Y	0.98	0.258	2589	0.0472
1348-TCDF	NotFnd		0.8835						0.98		2589	0.0472
1248/1367/1379-TCDF	23.37	J EMPC	0.8888	0.8872	-2.2	1.35E+05	0.64	N	0.98	0.227	2589	0.0472
1268-TCDF	23.81	J EMPC	0.9044	0.9037	-1.0	1.70E+05	0.56	N	0.98	0.287	2589	0.0472
1467-TCDF	NotFnd		0.9098						0.98		2589	0.0472
1478-TCDF	24.12	J EMPC	0.9167	0.9156	-1.6	3.38E+04	0.91	N	0.98	0.0569	2589	0.0472
1369/1237-TCDF	NotFnd		0.9316						0.98		2589	0.0472
2467-TCDF	NotFnd		0.9369						0.98		2589	0.0472
2368-TCDF	24.83	J EMPC	0.9430	0.9425	-0.7	1.48E+05	0.64	N	0.98	0.249	2589	0.0472
1238/1234/1678/1469/1236-TCDF	24.95	J EMPC	0.9468	0.9473	+0.7	5.51E+04	1.30	N	0.98	0.0927	2589	0.0472
1278-TCDF	25.42	J	0.9651	0.9649	-0.3	6.86E+04	0.73	Y	0.98	0.116	2589	0.0472
1349-TCDF	NotFnd		0.9704						0.98		2589	0.0472
1267-TCDF	NotFnd		0.9761						0.98		2589	0.0472
2346/1249-TCDF	NotFnd		0.9834						0.98		2589	0.0472
2347/1279-TCDF	26.14	J	0.9921	0.9925	+0.6	5.20E+04	0.69	Y	0.98	0.0876	2589	0.0472
2348-TCDF	26.26	J EMPC	0.9964	0.9969	+0.8	3.96E+04	0.53	N	0.98	0.0667	2589	0.0472
2378-TCDF	**26.36**	J EMPC	**1.0006**	**1.0006**	**0**	**4.52E+04**	**1.76**	**N**	**0.98**	**0.0762**	**2589**	**0.0472**
2367/3467-TCDF	26.74	J EMPC	1.0156	1.0152	-0.6	7.70E+04	0.47	N	0.98	0.13	2589	0.0472
1269-TCDF	NotFnd		1.0249						0.98		2589	0.0472
1239-TCDF	NotFnd		1.0357						0.98		2589	0.0472
1289-TCDF	28.44	J EMPC	1.0799	1.0799	0	8.97E+04	1.61	N	0.98	0.151	2589	0.0472
13468/12468-PeCDF	28.46		0.9084	0.9087	+0.5	1.39E+06	1.66	Y	0.95	2.79	3298	0.06
13678/13467/12467-PeCDF	30.04	J	0.9591	0.9592	+0.2	1.61E+05	1.60	Y	0.95	0.323	5690	0.104
12368/13478/12478-PeCDF	30.20	J	0.9642	0.9645	+0.5	6.97E+05	1.70	Y	0.95	1.4	5690	0.104
14678-PeCDF	NotFnd		0.9675						0.95		5690	0.104
13479-PeCDF	NotFnd		0.9706						0.95		5690	0.104
13469/12479-PeCDF	NotFnd		0.9787						0.95		5690	0.104
12346-PeCDF	NotFnd		0.9833						0.95		5690	0.104

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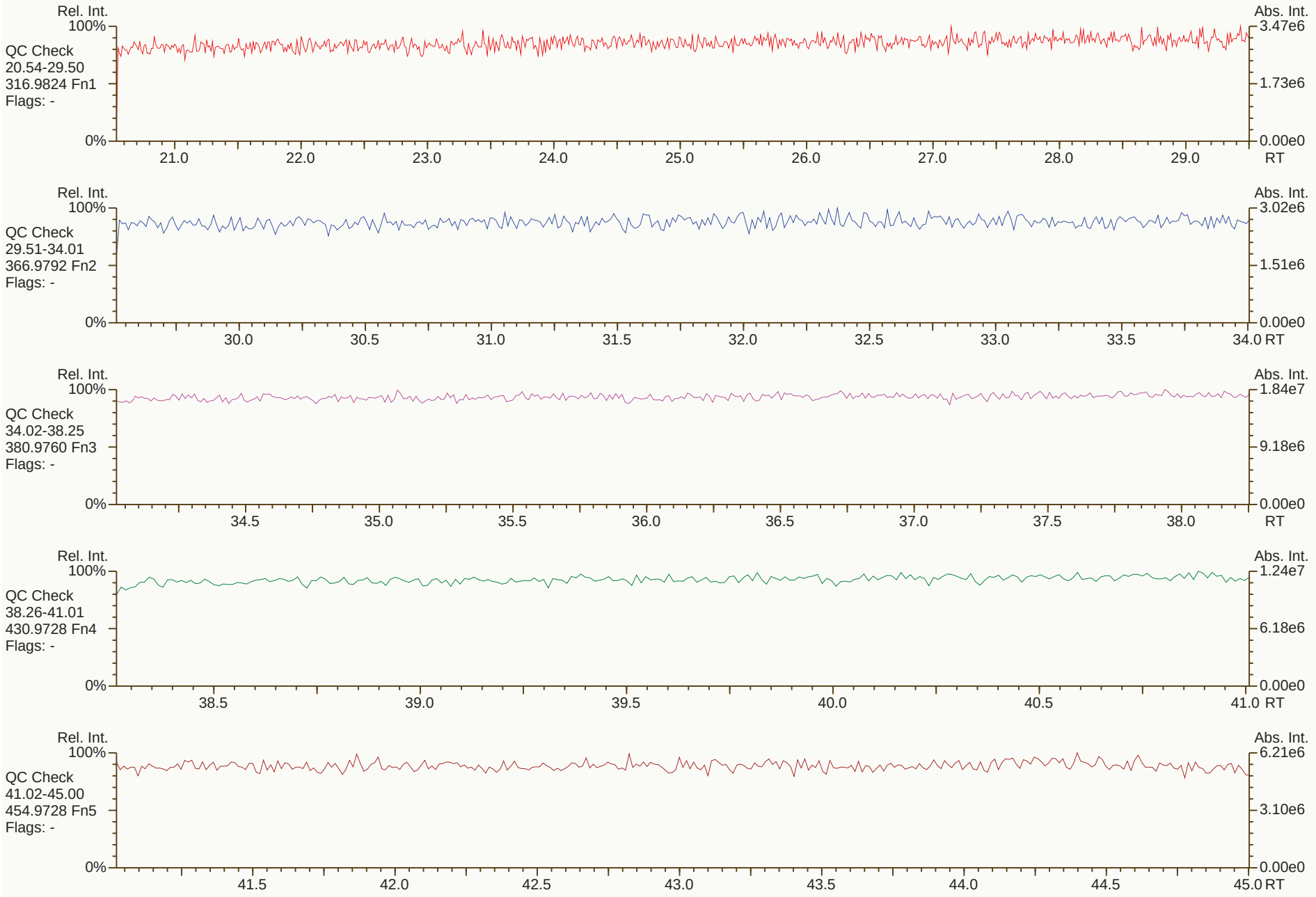
Client ID: CS-26 | UTP: 10-Aug-2020 09:02:27 PSW | J-level: 0.524 pg/g | Split: 1 | Checkcode: 702-048-XWM

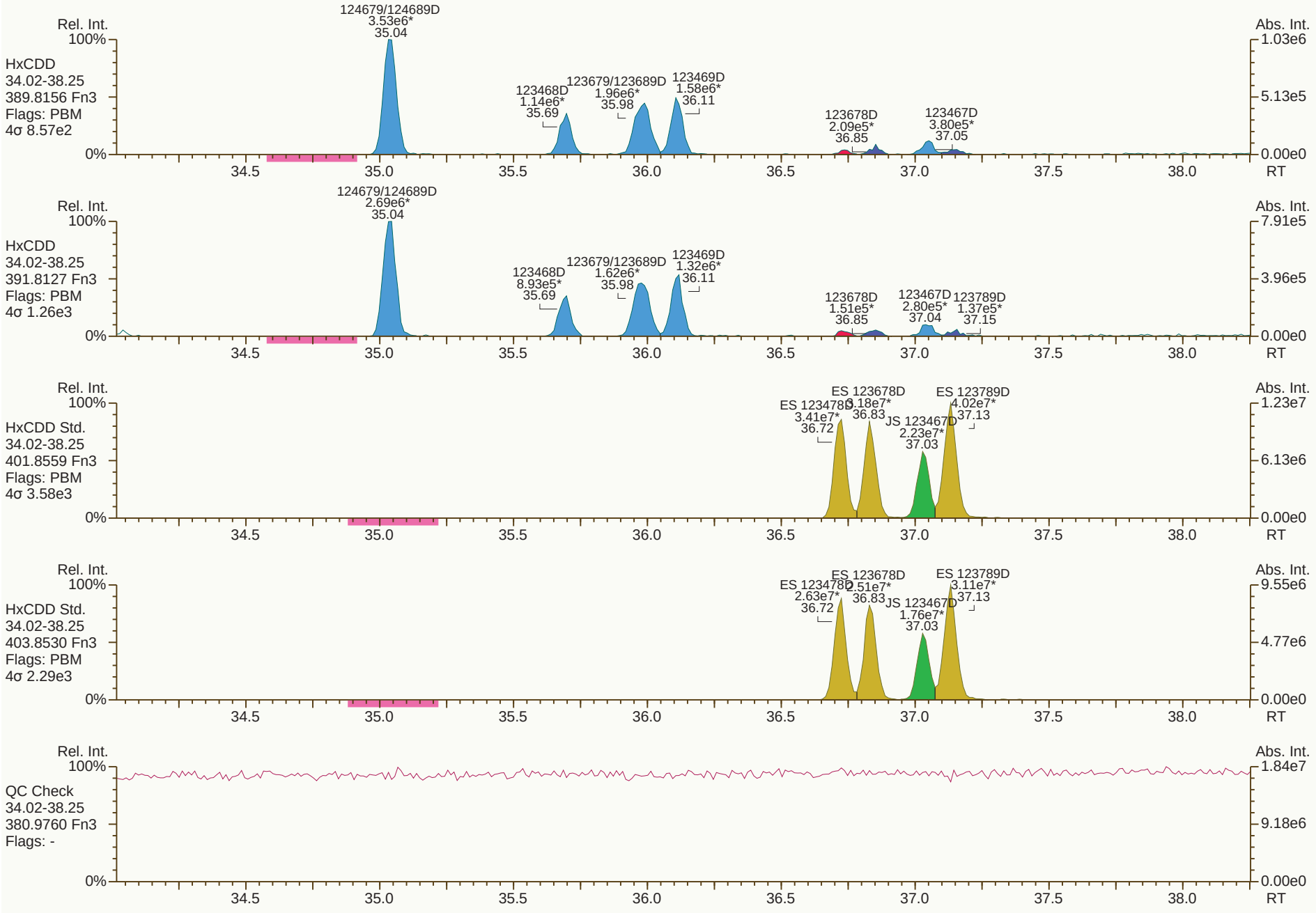
Datafile: 200807R15 | Report: 10 Aug 2020 09:07 pw | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
23468/12469-PeCDF	30.87	J	0.9861	0.9859	-0.4	1.99E+05	1.51	Y	0.95	0.4	5690	0.104
12347-PeCDF	NotFnd		0.9887						0.95		5690	0.104
12348-PeCDF	NotFnd		0.9938						0.95		5690	0.104
12378-PeCDF	**31.33**	J EMPC	**1.0006**	**1.0006**	**0**	**6.57E+04**	**2.57**	**N**	**0.95**	**0.128**	**5690**	**0.1**
12678/12367-PeCDF	31.62	J	1.0095	1.0099	+0.8	1.41E+05	1.55	Y	0.95	0.283	5690	0.104
12379-PeCDF	NotFnd		1.0150						0.95		5690	0.104
12679-PeCDF	NotFnd		0.9926						0.95		5690	0.104
23467/12369-PeCDF	32.34	J	0.9966	0.9965	-0.2	5.38E+04	1.62	Y	0.95	0.108	5690	0.104
23478-PeCDF	**32.49**	J EMPC	**1.0005**	**1.0012**	**+1.4**	**1.93E+05**	**2.23**	**N**	**0.95**	**0.399**	**5690**	**0.107**
23478/12489-PeCDF	NotFnd		0.0000						0.95			
12489-PeCDF	NotFnd		1.0047						0.95		5690	0.104
12349-PeCDF	NotFnd		1.0107						0.95		5690	0.104
12389-PeCDF	NotFnd		1.0339						0.95		5690	0.104
123468-HxCDF	34.38	J	0.9617	0.9616	-0.2	3.40E+05	1.30	Y	1.11	0.84	5987	0.121
124678/134678-HxCDF	34.58		0.9673	0.9671	-0.4	1.31E+06	1.21	Y	1.11	3.24	5987	0.121
134679-HxCDF	NotFnd		0.9737						1.11		5987	0.121
124679-HxCDF	NotFnd		0.9792						1.11		5987	0.121
124689-HxCDF	35.23		0.9854	0.9853	-0.2	1.32E+06	1.31	Y	1.11	3.26	5987	0.121
123467-HxCDF	35.64	J	0.9972	0.9969	-0.6	7.73E+04	1.23	Y	1.11	0.191	5987	0.121
123478-HxCDF	**35.77**	J EMPC	**1.0005**	**1.0004**	**-0.2**	**1.62E+05**	**0.88**	**N**	**1.20**	**0.371**	**5987**	**0.115**
123678-HxCDF	**35.90**	J	**1.0004**	**1.0004**	**0**	**1.83E+05**	**1.11**	**Y**	**1.07**	**0.413**	**5987**	**0.106**
123479-HxCDF	NotFnd		1.0049						1.11		5987	0.121
123469-HxCDF	NotFnd		1.0089						1.11		5987	0.121
123679-HxCDF	NotFnd		0.9945						1.11		5987	0.121
234678-HxCDF	**36.55**	J	**1.0005**	**1.0004**	**-0.2**	**2.36E+05**	**1.26**	**Y**	**1.10**	**0.596**	**5987**	**0.123**
234678/123689-HxCDF	NotFnd		0.0000						1.10			
123689-HxCDF	NotFnd		1.0054						1.11		5987	0.121
123789-HxCDF	**NotFnd**		**1.0004**						**1.09**		**5987**	**0.148**
123789/123489-HxCDF	NotFnd		0.0000						1.09			
123489-HxCDF	NotFnd		1.0008						1.11		5987	0.121
1234678-HpCDF	**39.05**		**1.0003**	**1.0003**	**0**	**2.25E+06**	**1.00**	**Y**	**1.28**	**6.04**	**4133**	**0.0746**
1234679-HpCDF	39.32	**J**	1.0072	1.0072	0	1.96E+05	0.93	Y	1.27	0.615	4133	0.085
1234689-HpCDF	39.46		1.0107	1.0107	0	3.80E+06	0.97	Y	1.27	11.9	4133	0.085
1234789-HpCDF	**40.37**	**J**	**1.0002**	**1.0002**	**0**	**1.59E+05**	**0.93**	**Y**	**1.27**	**0.602**	**4133**	**0.0996**
OCDF	**42.54**		**1.0003**	**1.0002**	**-0.3**	**2.41E+06**	**0.89**	**Y**	**1.01**	**16.1**	**3268**	**0.154**
OCDF-a	NotFnd		1.0002						0.06		4461	3.35

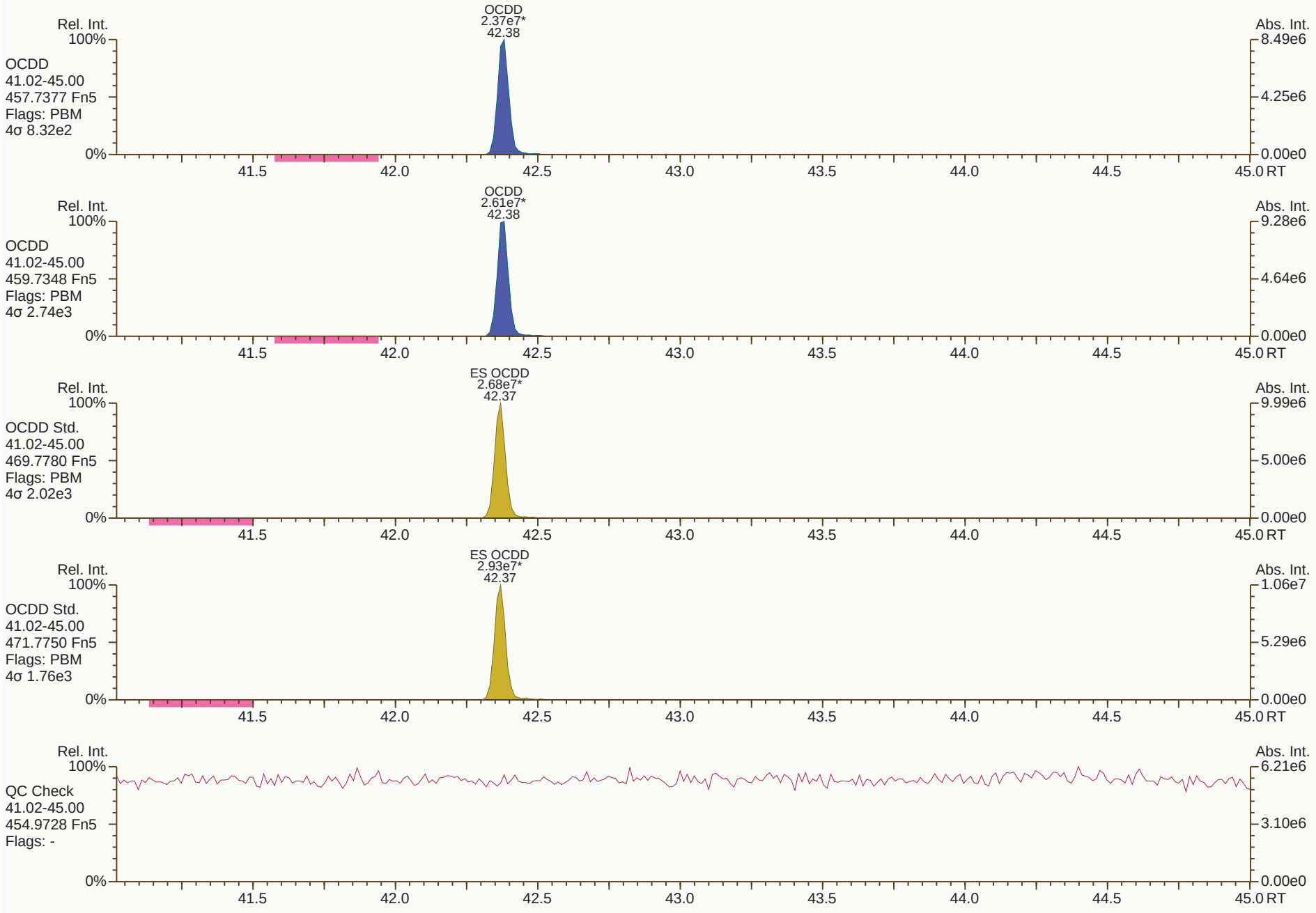

Rel. Int.
100%
0%
Abs. Int.
3.47e6
1.73e6
0.00e0
QC Check
20.54-29.50
316.9824 Fn1
Flags: -
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
0%
Abs. Int.
3.02e6
1.51e6
0.00e0
QC Check
29.51-34.01
366.9792 Fn2
Flags: -
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
0%
Abs. Int.
1.84e7
9.18e6
0.00e0
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
0%
Abs. Int.
1.24e7
6.18e6
0.00e0
QC Check
38.26-41.01
430.9728 Fn4
Flags: -
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
0%
Abs. Int.
6.21e6
3.10e6
0.00e0
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT


Rel. Int.
100%
TCDD
20.54-29.50
319.8965 Fn1
Flags: PBM
4σ 2.42e3
1368D
8.94e4*
23.40
1379D
3.54e4*
23.76
Abs. Int.
3.03e4
1.51e4
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD
20.54-29.50
321.8936 Fn1
Flags: PBM
4σ 1.55e3
1368D
9.95e4*
23.40
1379D
3.89e4*
23.77
Abs. Int.
2.94e4
1.47e4
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
37Cl-TCDD
20.54-29.50
327.8850 Fn1
Flags: PBM
4σ 1.80e3
CS 37Cl-2378D
3.43e7*
27.29
Abs. Int.
7.66e6
3.83e6
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
331.9368 Fn1
Flags: PBM
4σ 7.60e3
JS 1234D
4.19e7*
26.58
ES 2378D
3.28e7*
27.26
Abs. Int.
9.40e6
4.70e6
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
333.9339 Fn1
Flags: PBM
4σ 2.52e3
JS 1234D
5.39e7*
26.58
ES 2378D
4.28e7*
27.26
Abs. Int.
1.25e7
6.23e6
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT

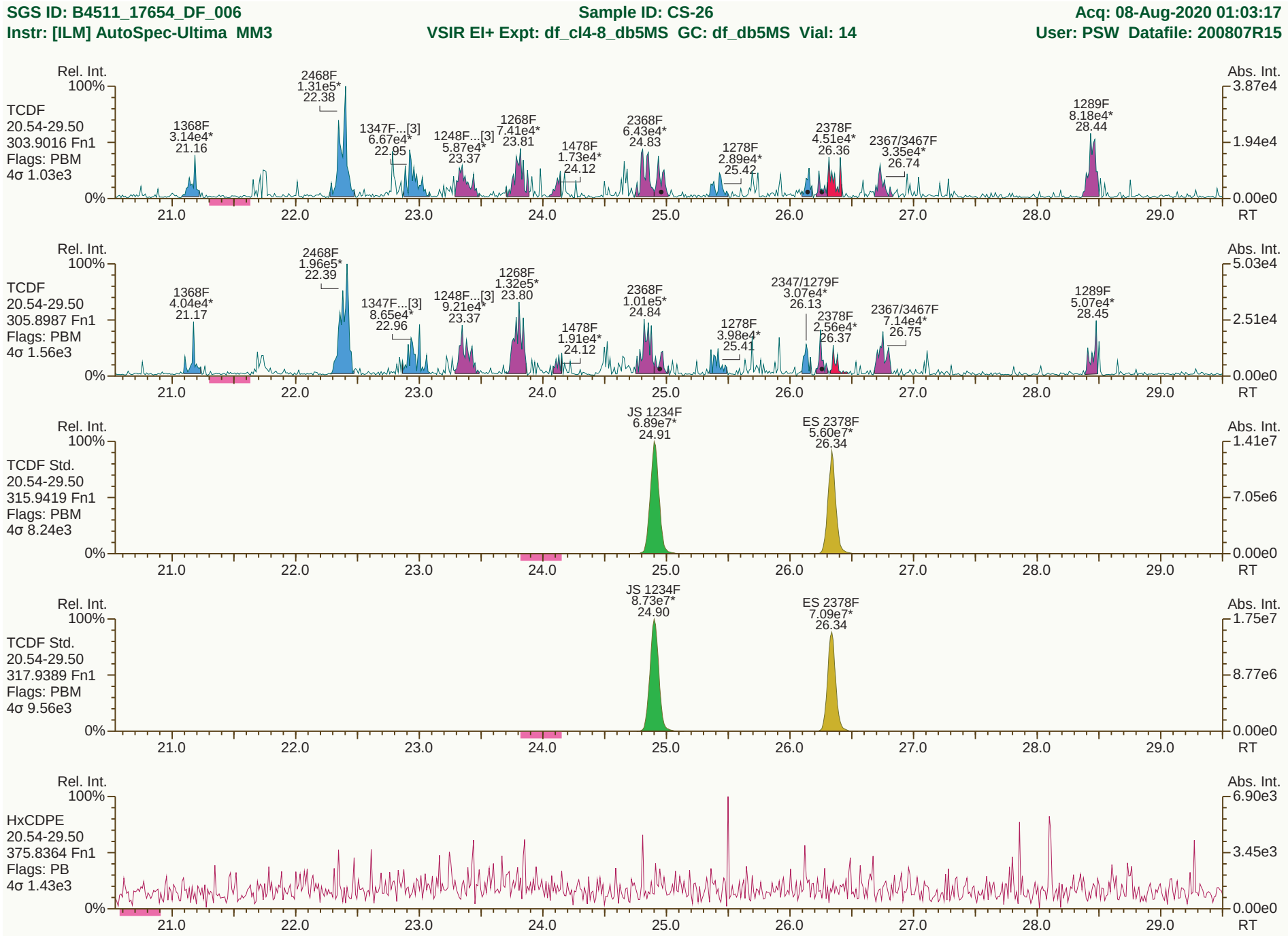

SGS ID: B4511_17654_DF_006
Sample ID: CS-26
Acq: 08-Aug-2020 01:03:17
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 14
User: PSW Datafile: 200807R15
Rel. Int.
Abs. Int.
PeCDD
29.51-34.01
355.8546 Fn2
Flags: PBM
4σ 2.71e3
12479/12468D
1.77e5*
30.27
12469D
1.70e5*
30.80
12368D
9.68e4*
31.38
12478D
4.03e4*
31.58
12379D
9.07e4*
31.67
12369D...[3]
8.19e4*
31.94
12346/12347D
6.32e4*
32.32
12378D
3.80e4*
32.82
PeCDD
29.51-34.01
357.8517 Fn2
Flags: PBM
4σ 1.59e3
12479/12468D
1.04e5*
30.27
12469D
9.04e4*
30.81
12368D
8.72e4*
31.38
12379D
4.47e4*
31.68
12369D...[3]
7.35e4*
31.94
12346/12347D
5.80e4*
32.31
12378D
2.90e4*
32.83
PeCDD Std.
29.51-34.01
367.8949 Fn2
Flags: PBM
4σ 3.78e3
CS 12347D
4.03e7*
32.30
ES 12378D
4.12e7*
32.80
PeCDD Std.
29.51-34.01
369.8919 Fn2
Flags: PBM
4σ 2.05e3
CS 12347D
2.44e7*
32.30
ES 12378D
2.49e7*
32.80
QC Check
29.51-34.01
366.9792 Fn2
Flags: -
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Results: P:\B4500_B4599\B4511\B4511_17654 DF\Resources\B4511_17654_DF_006.utp_res, saved 10-Aug-2020 09:02 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 6126, 2156 scc: 702-048
PKD: 10-Aug-2020 08:40 Printed: 10-Aug-2020 09:21 Page 3 of 12


Rel. Int.
100%
HxCDD
34.02-38.25
389.8156 Fn3
Flags: PBM
4σ 8.57e2
124679/124689D
3.53e6*
35.04
123468D
1.14e6*
35.69
123679/123689D
1.96e6*
35.98
123469D
1.58e6*
36.11
123678D
2.09e5*
36.85
123467D
3.80e5*
37.05
Abs. Int.
1.03e6
5.13e5
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD
34.02-38.25
391.8127 Fn3
Flags: PBM
4σ 1.26e3
124679/124689D
2.69e6*
35.04
123468D
8.93e5*
35.69
123679/123689D
1.62e6*
35.98
123469D
1.32e6*
36.11
123678D
1.51e5*
36.85
123467D
2.80e5*
37.04
123789D
1.37e5*
37.15
Abs. Int.
7.91e5
3.96e5
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
401.8559 Fn3
Flags: PBM
4σ 3.58e3
ES 123678D
3.18e7*
36.83
ES 123478D
3.41e7*
36.72
JS 123467D
2.23e7*
37.03
ES 123789D
4.02e7*
37.13
Abs. Int.
1.23e7
6.13e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
403.8530 Fn3
Flags: PBM
4σ 2.29e3
ES 123678D
2.51e7*
36.83
ES 123478D
2.63e7*
36.72
JS 123467D
1.76e7*
37.03
ES 123789D
3.11e7*
37.13
Abs. Int.
9.55e6
4.77e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
Abs. Int.
1.84e7
9.18e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT


Rel. Int.
100%
HpCDD
38.26-41.01
423.7767 Fn4
Flags: PBM
4σ 1.19e3
0%
1234679D
4.59e7*
39.32
1234678D
7.77e6*
39.96
Abs. Int.
1.89e7
9.43e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.26-41.01
425.7737 Fn4
Flags: PBM
4σ 9.03e2
0%
1234679D
4.44e7*
39.31
1234678D
7.75e6*
39.96
Abs. Int.
1.81e7
9.04e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
435.8169 Fn4
Flags: PBM
4σ 2.18e3
0%
ES 1234678D
2.56e7*
39.95
Abs. Int.
1.06e7
5.30e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
437.8140 Fn4
Flags: PBM
4σ 1.93e3
0%
ES 1234678D
2.45e7*
39.95
Abs. Int.
1.04e7
5.18e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.26-41.01
430.9728 Fn4
Flags: -
0%
Abs. Int.
1.24e7
6.18e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT


OCDD
2.37e7*
42.38
Rel. Int.
100%
OCDD
41.02-45.00
457.7377 Fn5
Flags: PBM
4σ 8.32e2
0%
Abs. Int.
8.49e6
4.25e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDD
2.61e7*
42.38
Rel. Int.
100%
OCDD
41.02-45.00
459.7348 Fn5
Flags: PBM
4σ 2.74e3
0%
Abs. Int.
9.28e6
4.64e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
2.68e7*
42.37
Rel. Int.
100%
OCDD Std.
41.02-45.00
469.7780 Fn5
Flags: PBM
4σ 2.02e3
0%
Abs. Int.
9.99e6
5.00e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
2.93e7*
42.37
Rel. Int.
100%
OCDD Std.
41.02-45.00
471.7750 Fn5
Flags: PBM
4σ 1.76e3
0%
Abs. Int.
1.06e7
5.29e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
6.21e6
3.10e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

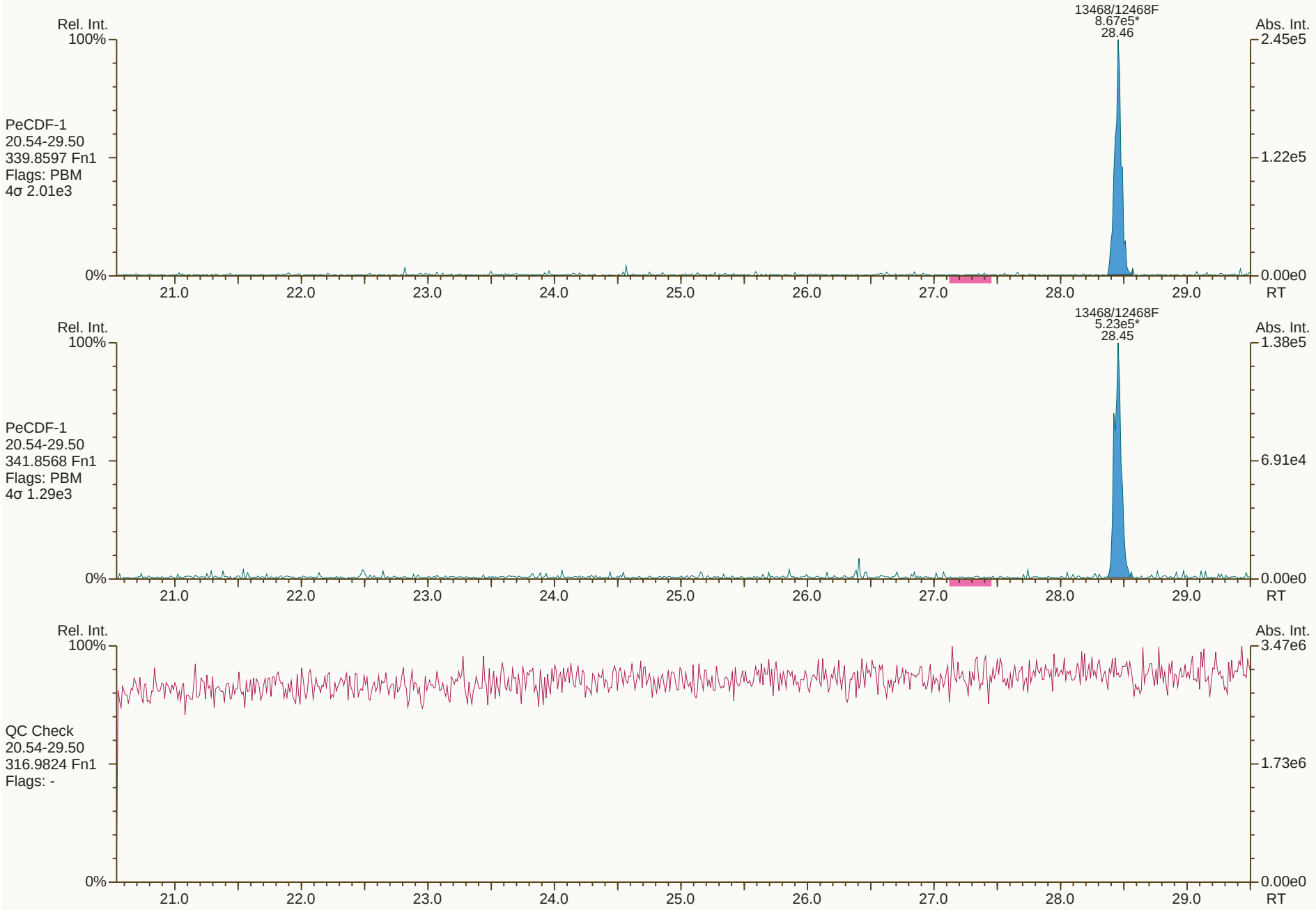
SGS ID: B4511_17654_DF_006 | Sample ID: CS-26 | Acq: 08-Aug-2020 01:03:17
Instr: [ILM] AutoSpec-Ultima MM3 | VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 14 | User: PSW Datafile: 200807R15



Results: P:\B4500_B4599\B4511\B4511_17654 DF\Resources\B4511_17654_DF_006.utp_res, saved 10-Aug-2020 09:02 (PSW) | Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 2276, 9589, 4286 scc: 702-048 | PKD: 10-Aug-2020 08:40 Printed: 10-Aug-2020 09:22 Page 7 of 12

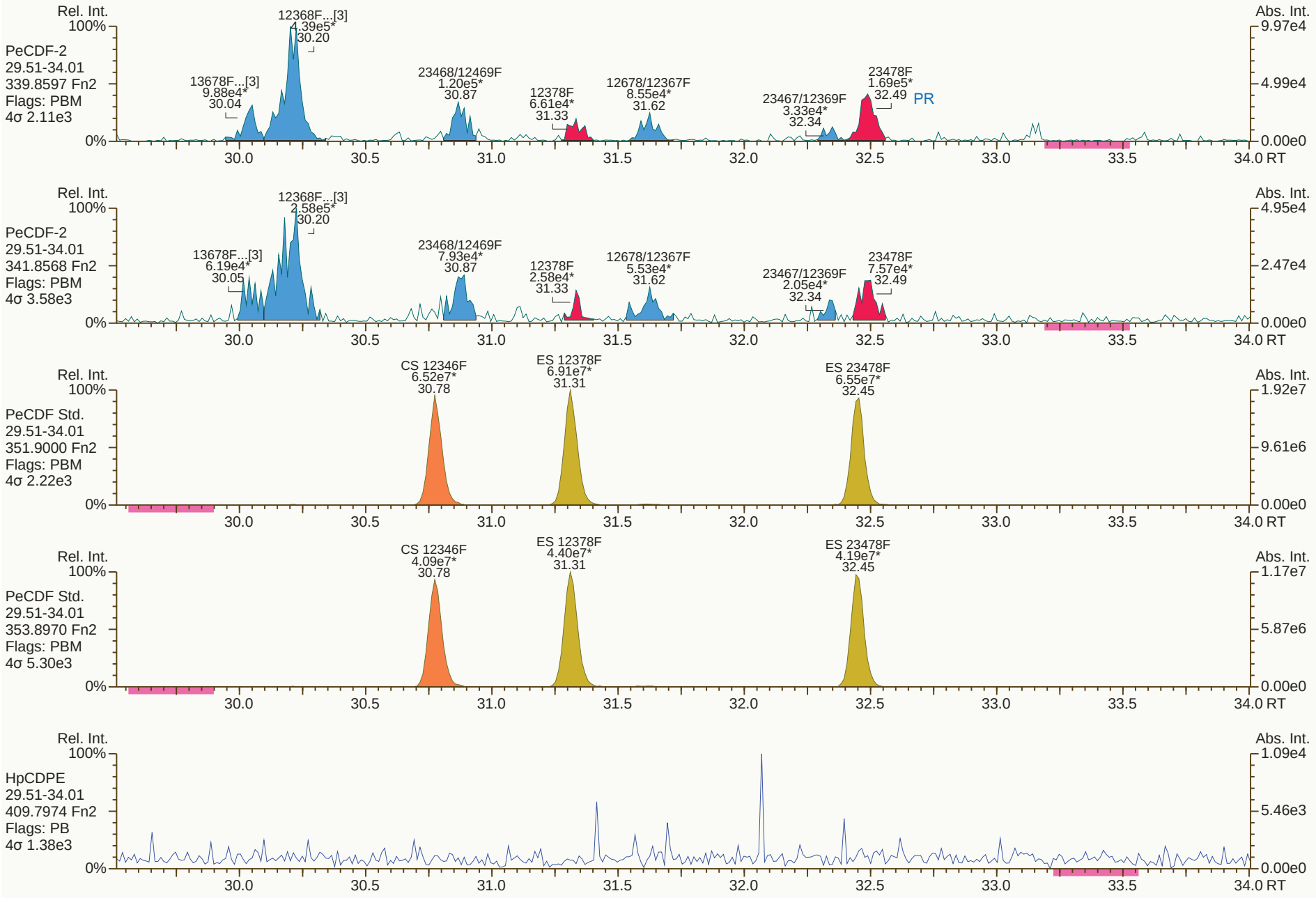
SGS ID: B4511_17654_DF_006 | Sample ID: CS-26 | Acq: 08-Aug-2020 01:03:17

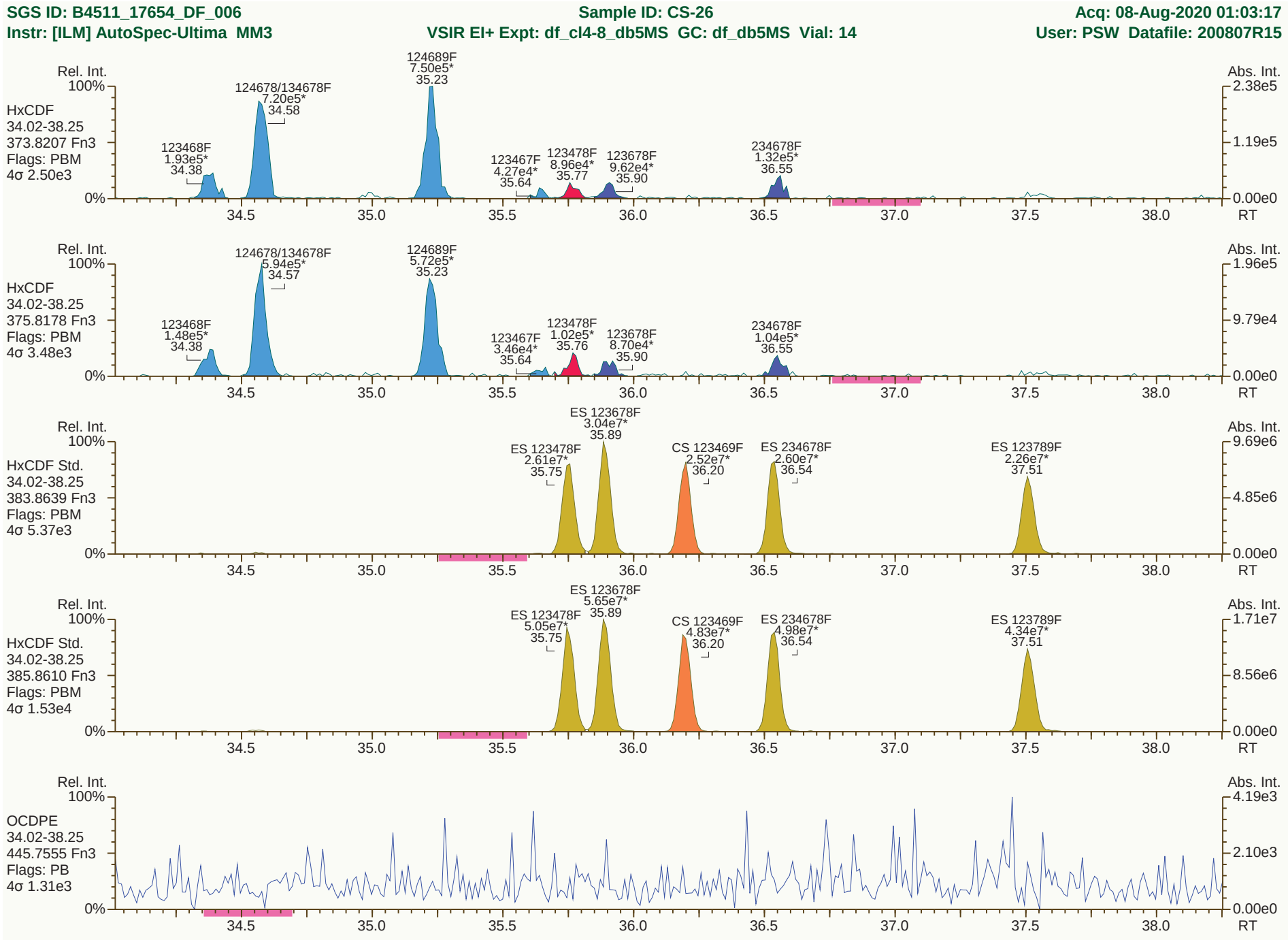
Instr: [ILM] AutoSpec-Ultima MM3 | VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 14 | User: PSW Datafile: 200807R15

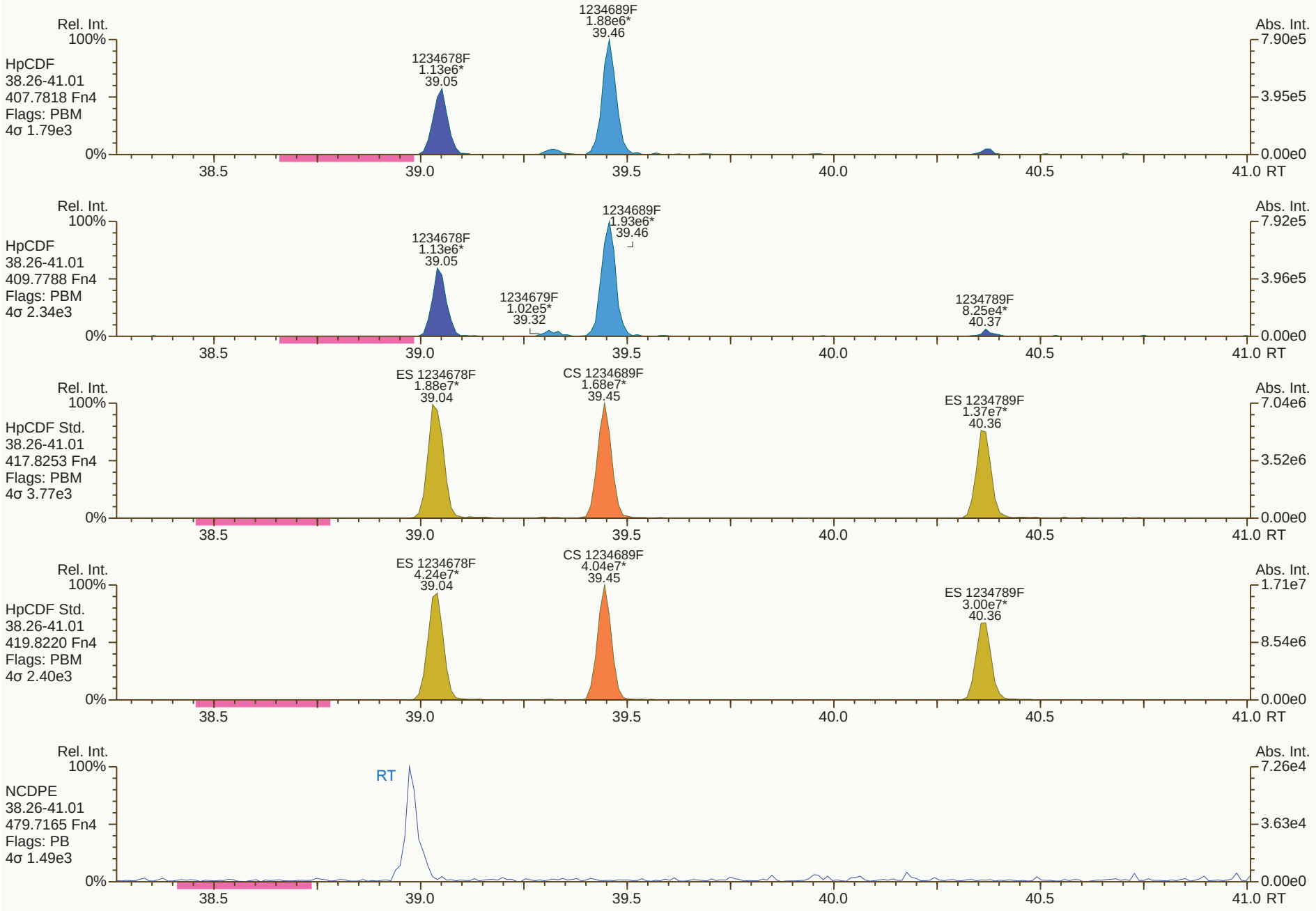


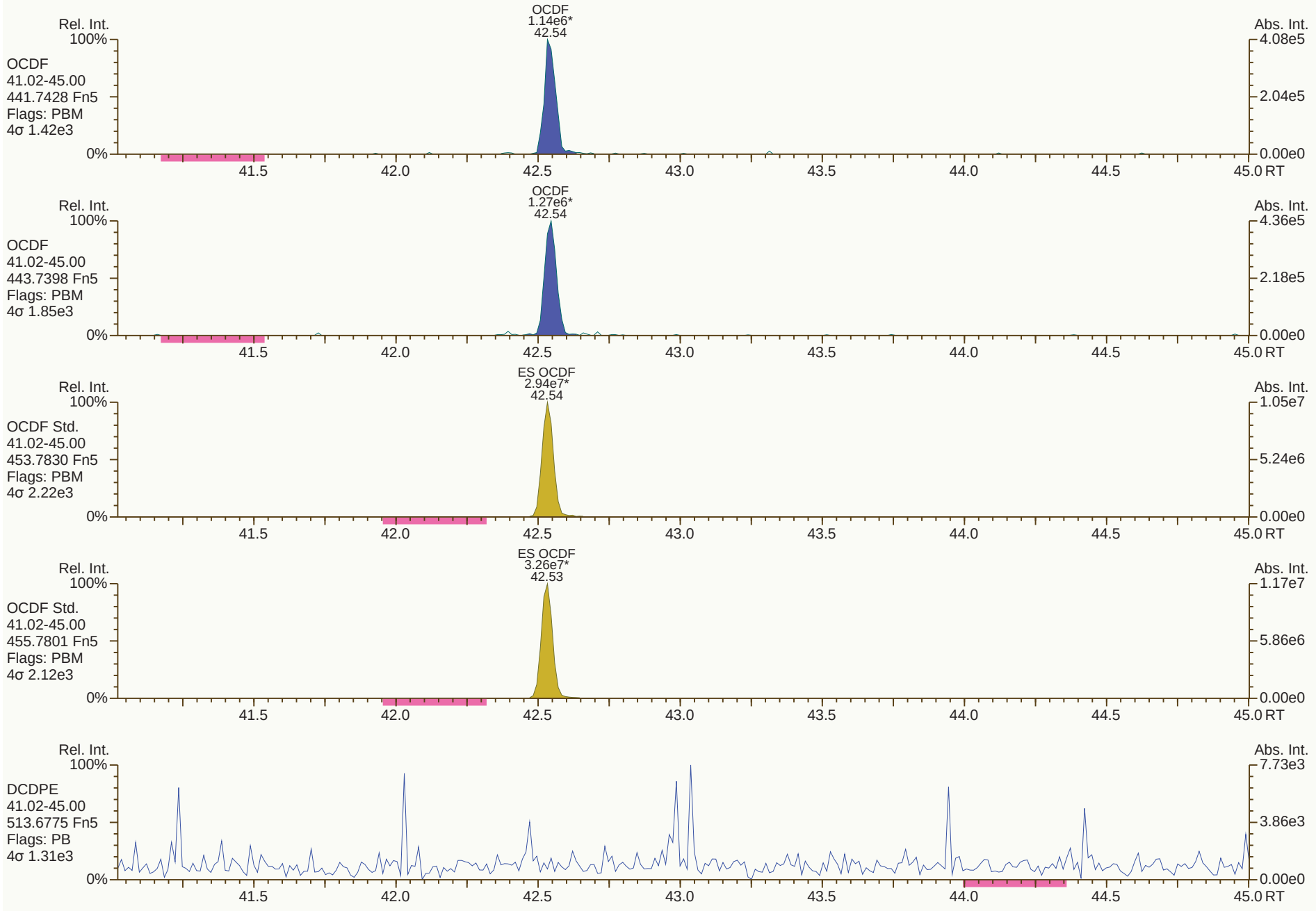
Results: P:\B4500_B4599\B4511\B4511_17654 DF\Resources\B4511_17654_DF_006.utp_res, saved 10-Aug-2020 09:02 (PSW) | *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 9377 scc: 702-048 | *PKD: 10-Aug-2020 08:40 Printed: 10-Aug-2020 09:22 Page 8 of 12*


Rel. Int.
100%
PeCDF-2
29.51-34.01
339.8597 Fn2
Flags: PBM
4σ 2.11e3
12368F...[3]
4.39e5*
30.20
13678F...[3]
9.88e4*
30.04
23468/12469F
1.20e5*
30.87
12378F
6.61e4*
31.33
12678/12367F
8.55e4*
31.62
23467/12369F
3.33e4*
32.34
23478F
1.69e5*
32.49
PR
Abs. Int.
9.97e4
4.99e4
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF-2
29.51-34.01
341.8568 Fn2
Flags: PBM
4σ 3.58e3
12368F...[3]
2.58e5*
30.20
13678F...[3]
6.19e4*
30.05
23468/12469F
7.93e4*
30.87
12378F
2.58e4*
31.33
12678/12367F
5.53e4*
31.62
23467/12369F
2.05e4*
32.34
23478F
7.57e4*
32.49
Abs. Int.
4.95e4
2.47e4
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
351.9000 Fn2
Flags: PBM
4σ 2.22e3
CS 12346F
6.52e7*
30.78
ES 12378F
6.91e7*
31.31
ES 23478F
6.55e7*
32.45
Abs. Int.
1.92e7
9.61e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
353.8970 Fn2
Flags: PBM
4σ 5.30e3
CS 12346F
4.09e7*
30.78
ES 12378F
4.40e7*
31.31
ES 23478F
4.19e7*
32.45
Abs. Int.
1.17e7
5.87e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
HpCDPE
29.51-34.01
409.7974 Fn2
Flags: PB
4σ 1.38e3
Abs. Int.
1.09e4
5.46e3
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT


SGS ID: B4511_17654_DF_006
Sample ID: CS-26
Acq: 08-Aug-2020 01:03:17
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 14
User: PSW Datafile: 200807R15
Rel. Int.
Abs. Int.
HxCDF
34.02-38.25
373.8207 Fn3
Flags: PBM
4σ 2.50e3
123468F 1.93e5* 34.38
124678/134678F 7.20e5* 34.58
124689F 7.50e5* 35.23
123467F 4.27e4* 35.64
123478F 8.96e4* 35.77
123678F 9.62e4* 35.90
234678F 1.32e5* 36.55
HxCDF
34.02-38.25
375.8178 Fn3
Flags: PBM
4σ 3.48e3
123468F 1.48e5* 34.38
124678/134678F 5.94e5* 34.57
124689F 5.72e5* 35.23
123467F 3.46e4* 35.64
123478F 1.02e5* 35.76
123678F 8.70e4* 35.90
234678F 1.04e5* 36.55
HxCDF Std.
34.02-38.25
383.8639 Fn3
Flags: PBM
4σ 5.37e3
ES 123478F 2.61e7* 35.75
ES 123678F 3.04e7* 35.89
CS 123469F 2.52e7* 36.20
ES 234678F 2.60e7* 36.54
ES 123789F 2.26e7* 37.51
HxCDF Std.
34.02-38.25
385.8610 Fn3
Flags: PBM
4σ 1.53e4
ES 123478F 5.05e7* 35.75
ES 123678F 5.65e7* 35.89
CS 123469F 4.83e7* 36.20
ES 234678F 4.98e7* 36.54
ES 123789F 4.34e7* 37.51
OCDPE
34.02-38.25
445.7555 Fn3
Flags: PB
4σ 1.31e3
100%
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
2.38e5
1.19e5
0.00e0
1.96e5
9.79e4
9.69e6
4.85e6
1.71e7
8.56e6
4.19e3
2.10e3
Results: P:\B4500_B4599\B4511\B4511_17654 DF\Resources\B4511_17654_DF_006.utp_res, saved 10-Aug-2020 09:02 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 7107, 4483, 7150 scc: 702-048
PKD: 10-Aug-2020 08:40 Printed: 10-Aug-2020 09:22 Page 10 of 12


Rel. Int.
100%
HpCDF
38.26-41.01
407.7818 Fn4
Flags: PBM
4σ 1.79e3
1234678F
1.13e6*
39.05
1234689F
1.88e6*
39.46
Abs. Int.
7.90e5
3.95e5
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF
38.26-41.01
409.7788 Fn4
Flags: PBM
4σ 2.34e3
1234678F
1.13e6*
39.05
1234679F
1.02e5*
39.32
1234689F
1.93e6*
39.46
1234789F
8.25e4*
40.37
Abs. Int.
7.92e5
3.96e5
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.26-41.01
417.8253 Fn4
Flags: PBM
4σ 3.77e3
ES 1234678F
1.88e7*
39.04
CS 1234689F
1.68e7*
39.45
ES 1234789F
1.37e7*
40.36
Abs. Int.
7.04e6
3.52e6
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.26-41.01
419.8220 Fn4
Flags: PBM
4σ 2.40e3
ES 1234678F
4.24e7*
39.04
CS 1234689F
4.04e7*
39.45
ES 1234789F
3.00e7*
40.36
Abs. Int.
1.71e7
8.54e6
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
NCDPE
38.26-41.01
479.7165 Fn4
Flags: PB
4σ 1.49e3
RT
Abs. Int.
7.26e4
3.63e4
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT


Rel. Int.
100%
OCDF
41.02-45.00
441.7428 Fn5
Flags: PBM
4σ 1.42e3
0%
OCDF
1.14e6*
42.54
Abs. Int.
4.08e5
2.04e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF
41.02-45.00
443.7398 Fn5
Flags: PBM
4σ 1.85e3
0%
OCDF
1.27e6*
42.54
Abs. Int.
4.36e5
2.18e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF Std.
41.02-45.00
453.7830 Fn5
Flags: PBM
4σ 2.22e3
0%
ES OCDF
2.94e7*
42.54
Abs. Int.
1.05e7
5.24e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF Std.
41.02-45.00
455.7801 Fn5
Flags: PBM
4σ 2.12e3
0%
ES OCDF
3.26e7*
42.53
Abs. Int.
1.17e7
5.86e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
DCDPE
41.02-45.00
513.6775 Fn5
Flags: PB
4σ 1.31e3
0%
Abs. Int.
7.73e3
3.86e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

Lab ID: B4511_17654_DF_007 **Acq'd:** 08 Aug 2020 01:50 PSW **Wt/Vol:** 9.02 g **ICAL:** MM3_DF_10012020_12JUN2020

Client ID: CS-25 **UTP:** 10-Aug-2020 09:02:29 PSW **J-level:** 0.554 pg/g **Split:** 1 **Checkcode:** 290-011-XGQ

Datafile: 200807R16 **Report:** 10 Aug 2020 09:07 pw **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	NotFnd		1.0009	-		-	-	-	1.18	-	3628	0.13
12378-PeCDD	32.83	J EMPC	1.0006	1.0005	-0.2	8.70E+04	2.05	N	1.14	0.345	4760	0.164
123478-HxCDD	36.74	J EMPC	1.0004	1.0004	0	1.77E+05	1.53	N	1.09	0.802	3091	0.11
123678-HxCDD	36.85	J	1.0035	1.0035	0	3.33E+05	1.25	Y	1.13	1.57	3091	0.122
123789-HxCDD	37.15	J EMPC	1.0116	1.0115	-0.2	3.05E+05	1.50	N	1.05	1.25	3091	0.104
1234678-HpCDD	39.97		1.0003	1.0003	0	8.94E+06	1.01	Y	0.98	55.6	2078	0.0754
OCDD	42.39		1.0003	1.0003	0	5.56E+07	0.89	Y	1.08	525	6880	0.456
2378-TCDF	26.37	J EMPC	1.0006	1.0008	+0.3	8.11E+04	1.14	N	0.98	0.19	2664	0.0738
12378-PeCDF	31.33	J	1.0006	1.0005	-0.2	1.42E+05	1.75	Y	0.95	0.398	4761	0.132
23478-PeCDF	32.49	J EMPC	1.0005	1.0009	+0.8	1.77E+05	1.16	N	0.95	0.528	4761	0.125
123478-HxCDF	35.77	J	1.0005	1.0005	0	2.40E+05	1.39	Y	1.20	0.793	5120	0.131
123678-HxCDF	35.91	J	1.0004	1.0004	0	1.76E+05	1.27	Y	1.07	0.565	5120	0.128
234678-HxCDF	36.56	J EMPC	1.0005	1.0005	0	2.07E+05	1.45	N	1.10	0.76	5120	0.147
123789-HxCDF	NotFnd		1.0004	-		-	-	-	1.09	-	5120	0.188
1234678-HpCDF	39.05		1.0003	1.0003	0	2.15E+06	1.03	Y	1.28	8.45	3323	0.0827
1234789-HpCDF	40.38	J EMPC	1.0002	1.0003	+0.2	1.35E+05	1.25	N	1.27	0.729	3323	0.0938
OCDF	42.55		1.0003	1.0002	-0.3	2.16E+06	0.90	Y	1.01	19.1	3038	0.193

Name	Act RT		Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	27.27		1.0255	1.0257	+0.3	5.77E+07	0.76	Y	1.01	84.6
ES 12378-PeCDD	32.81		1.2330	1.2341	+2.2	4.93E+07	1.64	Y	0.87	83.6
ES 123478-HxCDD	36.73		0.9917	0.9916	-0.2	4.47E+07	1.26	Y	1.10	72.9
ES 123678-HxCDD	36.84		0.9947	0.9946	-0.2	4.18E+07	1.24	Y	1.06	70.2
ES 123789-HxCDD	37.14		1.0028	1.0027	-0.2	5.17E+07	1.28	Y	1.22	75.8
ES 1234678-HpCDD	39.95		1.0785	1.0787	+0.5	3.63E+07	1.02	Y	0.99	65.2
ES OCDD	42.38		1.1439	1.1442	+0.8	4.38E+07	0.92	Y	0.67	58.3
ES 2378-TCDF	26.35		1.0572	1.0576	+0.6	9.67E+07	0.78	Y	1.01	84.6
ES 12378-PeCDF	31.32		1.2558	1.2573	+2.8	8.34E+07	1.57	Y	0.90	82.2
ES 23478-PeCDF	32.46		1.3012	1.3029	+3.3	7.87E+07	1.58	Y	0.89	78.4
ES 123478-HxCDF	35.76		0.9655	0.9654	-0.2	5.61E+07	0.52	Y	1.43	70
ES 123678-HxCDF	35.89		0.9693	0.9692	-0.2	6.46E+07	0.52	Y	1.63	70.6
ES 234678-HxCDF	36.54		0.9867	0.9866	-0.2	5.52E+07	0.51	Y	1.48	66.6
ES 123789-HxCDF	37.52		1.0130	1.0129	-0.2	4.83E+07	0.52	Y	1.29	66.7
ES 1234678-HpCDF	39.04		1.0540	1.0542	+0.5	4.42E+07	0.44	Y	1.15	68.8
ES 1234789-HpCDF	40.37		1.0898	1.0900	+0.5	3.25E+07	0.46	Y	0.91	63.9
ES OCDF	42.54		1.1484	1.1486	+0.5	4.95E+07	0.89	Y	0.83	53.3

Lab ID: B4511_17654_DF_007 | Acq'd: 08 Aug 2020 01:50 PSW | Wt/Vol: 9.02 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-25 | UTP: 10-Aug-2020 09:02:29 PSW | J-level: 0.554 pg/g | Split: 1 | Checkcode: 290-011-XGQ

Datafile: 200807R16 | Report: 10 Aug 2020 09:07 pw | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %	
JS 1234-TCDD	26.59		-	-	-	6.77E+07	0.78	Y	-	-	
JS 1234-TCDF	24.91		-	-	-	1.13E+08	0.79	Y	-	-	
JS 123467-HxCDD	37.04		-	-	-	2.80E+07	1.29	Y	-	-	
CS 37Cl-2378-TCDD	27.29		1.0265	1.0265	0	2.54E+07	n/a	-	1.04	90.4	
CS 12347-PeCDD	32.30		1.2141	1.2150	+1.7	4.62E+07	1.62	Y	0.74	92.2	
CS 12346-PeCDF	30.78		1.2343	1.2358	+2.8	7.76E+07	1.56	Y	0.86	80.1	
CS 123469-HxCDF	36.20		0.9776	0.9775	-0.2	5.31E+07	0.51	Y	1.36	69.8	
CS 1234689-HpCDF	39.45		1.0650	1.0652	+0.5	4.21E+07	0.44	Y	1.05	71.2	
~~SS 37Cl-2378-TCDD~~	~~27.29~~		~~1.0265~~	~~1.0265~~	~~0~~	~~2.54E+07~~	~~n/a~~		~~1.04~~	~~106~~	Not used in this project.
~~SS 12347-PeCDD~~	~~32.30~~		~~1.2141~~	~~1.2150~~	~~+1.7~~	~~4.62E+07~~	~~1.62~~	~~Y~~	~~0.86~~	~~110~~	CL 10Aug20
~~SS 12346-PeCDF~~	~~30.78~~		~~1.2343~~	~~1.2358~~	~~+2.8~~	~~7.76E+07~~	~~1.56~~	~~Y~~	~~0.96~~	~~96.9~~	
~~SS 123469-HxCDF~~	~~36.20~~		~~0.9776~~	~~0.9775~~	~~-0.2~~	~~5.31E+07~~	~~0.51~~	~~Y~~	~~0.83~~	~~98.4~~	
~~SS 1234689-HpCDF~~	~~39.45~~		~~1.0650~~	~~1.0652~~	~~+0.5~~	~~4.21E+07~~	~~0.44~~	~~Y~~	~~0.92~~	~~103~~	

Totals	Conc	EMPC
Total TCDD	1.52	2.16
Total PeCDD	3.65	5.61
Total HxCDD	23.5	26.1
Total HpCDD	195	195
Total Tetra-Octa Dioxins	748	753
Total TCDF	1.11	6.18
Total PeCDF	6.25	7.08
Total HxCDF	11.5	12.5
Total HpCDF	22.8	23.5
Total Tetra-Octa Furans	60.8	68.4
Total Tetra-Octa Dioxins & Furans	809	822

Lab ID: B4511_17654_DF_007 **Acq'd:** 08 Aug 2020 01:50 PSW **Wt/Vol:** 9.02 g **ICAL:** MM3_DF_10012020_12JUN2020

Client ID: CS-25 **UTP:** 10-Aug-2020 09:02:29 PSW **J-level:** 0.554 pg/g **Split:** 1 **Checkcode:** 290-011-XGQ

Datafile: 200807R16 **Report:** 10 Aug 2020 09:07 pw **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1368-TCDD	23.39		0.8591	0.8580	-1.5	3.38E+05	0.83	Y	1.18	1.1	3628	0.13
1379-TCDD	23.78	J EMPC	0.8732	0.8722	-1.4	1.56E+05	1.05	N	1.18	0.508	3628	0.13
1369-TCDD	NotFnd		0.8901						1.18		3628	0.13
1469-TCDD	NotFnd		0.9205						1.18		3628	0.13
1247/1246/1248/1249-TCDD	25.33	J	0.9301	0.9290	-1.7	6.75E+04	0.75	Y	1.18	0.22	3628	0.13
1378-TCDD	25.56	J	0.9374	0.9375	+0.2	6.13E+04	0.85	Y	1.18	0.2	3628	0.13
1268-TCDD	NotFnd		0.9449						1.18		3628	0.13
1478-TCDD	NotFnd		0.9544						1.18		3628	0.13
1279-TCDD	NotFnd		0.9610						1.18		3628	0.13
1234/1269-TCDD	26.60	J EMPC	0.9746	0.9756	+1.6	4.05E+04	1.13	N	1.18	0.132	3628	0.13
1236-TCDD	NotFnd		0.9802						1.18		3628	0.13
1237/1238-TCDD	NotFnd		0.9898						1.18		3628	0.13
1239-TCDD	NotFnd		0.9950						1.18		3628	0.13
2378-TCDD	**NotFnd**		**1.0009**						**1.18**		**3628**	**0.13**
1278-TCDD	NotFnd		1.0133						1.18		3628	0.13
1267-TCDD	NotFnd		1.0185						1.18		3628	0.13
1289-TCDD	NotFnd		1.0379						1.18		3628	0.13
12479/12468-PeCDD	30.27	J EMPC	0.9229	0.9227	-0.4	4.08E+05	1.87	N	1.14	1.61	4760	0.164
12469-PeCDD	30.81	J	0.9396	0.9392	-0.7	1.02E+05	1.58	Y	1.14	0.403	4760	0.164
12368-PeCDD	31.38	J	0.9568	0.9566	-0.4	2.62E+05	1.36	Y	1.14	1.04	4760	0.164
12478-PeCDD	31.58	J	0.9626	0.9626	0	1.22E+05	1.54	Y	1.14	0.485	4760	0.164
12379-PeCDD	31.68	J	0.9657	0.9656	-0.2	2.17E+05	1.54	Y	1.14	0.858	4760	0.164
12369/12467/12489-PeCDD	31.94	J	0.9738	0.9734	-0.8	1.04E+05	1.72	Y	1.14	0.411	4760	0.164
12346/12347-PeCDD	32.32	J	0.9853	0.9851	-0.4	1.16E+05	1.67	Y	1.14	0.459	4760	0.164
12378-PeCDD	32.83	J EMPC	**1.0006**	**1.0005**	**-0.2**	**8.70E+04**	**2.05**	**N**	**1.14**	**0.345**	**4760**	**0.164**
12367-PeCDD	NotFnd		1.0034						1.14		4760	0.164
12389-PeCDD	NotFnd		1.0141						1.14		4760	0.164
124679/124689-HxCDD	35.04		0.9542	0.9541	-0.2	2.09E+06	1.27	Y	1.09	9.24	3091	0.111
123468-HxCDD	35.70		0.9721	0.9721	0	8.58E+05	1.31	Y	1.09	3.79	3091	0.111
123679/123689-HxCDD	35.99		0.9799	0.9799	0	1.60E+06	1.27	Y	1.09	7.06	3091	0.111
123469-HxCDD	36.12	J	0.9835	0.9834	-0.2	4.26E+05	1.27	Y	1.09	1.88	3091	0.111
123478-HxCDD	36.74	J EMPC	**1.0004**	**1.0004**	**0**	**1.77E+05**	**1.53**	**N**	1.09	**0.802**	**3091**	**0.11**
123678-HxCDD	36.85	J	**1.0035**	**1.0035**	**0**	**3.33E+05**	**1.25**	**Y**	1.13	**1.57**	**3091**	**0.122**
123467-HxCDD	37.04	J EMPC	1.0088	1.0087	-0.2	1.25E+05	1.60	N	1.09	0.553	3091	0.111
123789-HxCDD	37.15	J EMPC	**1.0116**	**1.0115**	**-0.2**	**3.05E+05**	**1.50**	**N**	1.05	**1.25**	**3091**	**0.104**

Lab ID: B4511_17654_DF_007 | Acq'd: 08 Aug 2020 01:50 PSW | Wt/Vol: 9.02 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-25 | UTP: 10-Aug-2020 09:02:29 PSW | J-level: 0.554 pg/g | Split: 1 | Checkcode: 290-011-XGQ

Datafile: 200807R16 | Report: 10 Aug 2020 09:07 pw | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

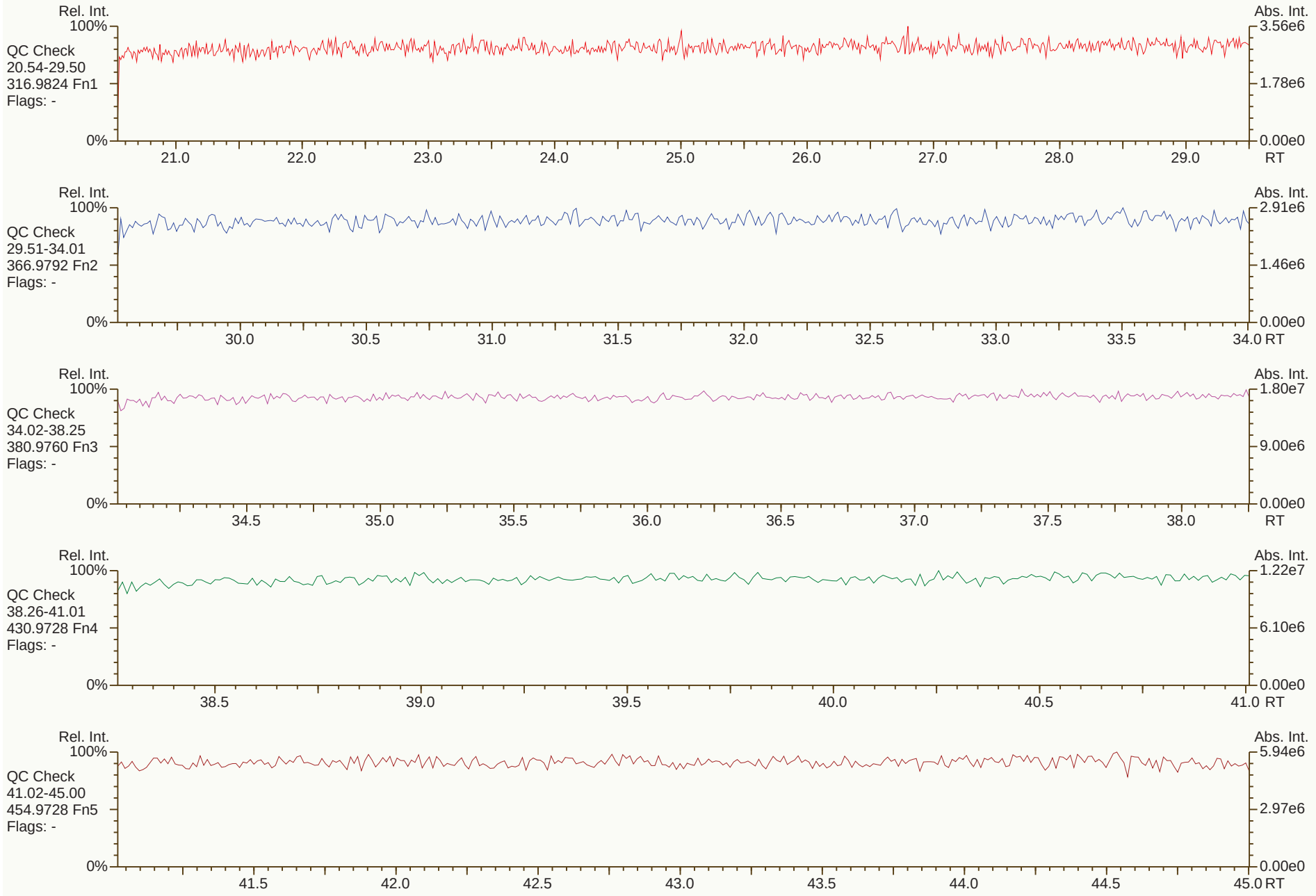
Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1234679-HpCDD	39.32		0.9843	0.9842	-0.2	2.24E+07	1.01	Y	0.98	139	2078	0.0754
1234678-HpCDD	**39.97**		**1.0003**	**1.0003**	**0**	**8.94E+06**	**1.01**	**Y**	**0.98**	**55.6**	**2078**	**0.0754**
OCDD	**42.39**		**1.0003**	**1.0003**	**0**	**5.56E+07**	**0.89**	**Y**	**1.08**	**525**	**6880**	**0.456**
OCDD-a	42.38	**EMPC**	1.0002	1.0002	0	3.07E+06	2.07	N	0.07	470	4698	5.06
1368-TCDF	21.16	J EMPC	0.8044	0.8031	-1.7	1.10E+05	0.63	N	0.98	0.257	2664	0.0738
1468-TCDF	21.74	J	0.8261	0.8250	-1.4	7.03E+04	0.71	Y	0.98	0.164	2664	0.0738
2468-TCDF	22.39	EMPC	0.8511	0.8498	-1.7	4.55E+05	0.91	N	0.98	1.06	2664	0.0738
1346/1246-TCDF	22.85	J	0.8665	0.8672	+1.0	4.71E+04	0.70	Y	0.98	0.11	2664	0.0738
1347/1378/1247-TCDF	22.95	EMPC	0.8723	0.8711	-1.7	2.45E+05	0.95	N	0.98	0.572	2664	0.0738
1348-TCDF	NotFnd		0.8835						0.98		2664	0.0738
1248/1367/1379-TCDF	23.38	J EMPC	0.8888	0.8875	-1.8	1.52E+05	0.96	N	0.98	0.354	2664	0.0738
1268-TCDF	23.81	J EMPC	0.9044	0.9038	-0.9	1.51E+05	0.90	N	0.98	0.353	2664	0.0738
1467-TCDF	NotFnd		0.9098						0.98		2664	0.0738
1478-TCDF	24.14	J EMPC	0.9167	0.9164	-0.4	7.04E+04	1.10	N	0.98	0.165	2664	0.0738
1369/1237-TCDF	24.53	J	0.9316	0.9309	-1.0	5.59E+04	0.84	Y	0.98	0.131	2664	0.0738
2467-TCDF	24.67	J EMPC	0.9369	0.9364	-0.7	5.62E+04	0.48	N	0.98	0.131	2664	0.0738
2368-TCDF	24.85	J EMPC	0.9430	0.9433	+0.4	2.11E+05	0.93	N	0.98	0.494	2664	0.0738
1238/1234/1678/1469/1236-TCDF	24.96	J	0.9468	0.9474	+0.9	1.06E+05	0.76	Y	0.98	0.248	2664	0.0738
1278-TCDF	25.42	J	0.9651	0.9649	-0.3	1.17E+05	0.85	Y	0.98	0.275	2664	0.0738
1349-TCDF	NotFnd		0.9704						0.98		2664	0.0738
1267-TCDF	25.71	J EMPC	0.9761	0.9759	-0.3	5.83E+04	0.57	N	0.98	0.136	2664	0.0738
2346/1249-TCDF	25.91	J EMPC	0.9834	0.9834	0	3.10E+04	0.55	N	0.98	0.0725	2664	0.0738
2347/1279-TCDF	26.15	J	0.9921	0.9925	+0.6	7.74E+04	0.66	Y	0.98	0.181	2664	0.0738
2348-TCDF	26.25	J EMPC	0.9964	0.9965	+0.2	2.91E+04	1.67	N	0.98	0.0681	2664	0.0738
2378-TCDF	**26.37**	J EMPC	**1.0006**	**1.0008**	**+0.3**	**8.11E+04**	**1.14**	**N**	**0.98**	**0.19**	**2664**	**0.0738**
2367/3467-TCDF	26.75	J EMPC	1.0156	1.0154	-0.3	2.04E+05	0.99	N	0.98	0.477	2664	0.0738
1269-TCDF	NotFnd		1.0249						0.98		2664	0.0738
1239-TCDF	NotFnd		1.0357						0.98		2664	0.0738
1289-TCDF	28.45	EMPC	1.0799	1.0800	+0.2	3.15E+05	1.80	N	0.98	0.737	2664	0.0738
13468/12468-PeCDF	28.45	J	0.9084	0.9085	+0.2	8.86E+05	1.68	Y	0.95	2.56	3505	0.0947
13678/13467/12467-PeCDF	30.04	J	0.9591	0.9592	+0.2	2.43E+05	1.76	Y	0.95	0.703	4761	0.129
12368/13478/12478-PeCDF	30.21	J	0.9642	0.9645	+0.5	7.19E+05	1.70	Y	0.95	2.08	4761	0.129
14678-PeCDF	NotFnd		0.9675						0.95		4761	0.129
13479-PeCDF	NotFnd		0.9706						0.95		4761	0.129
13469/12479-PeCDF	NotFnd		0.9787						0.95		4761	0.129
12346-PeCDF	NotFnd		0.9833						0.95		4761	0.129

Lab ID: B4511_17654_DF_007 | Acq'd: 08 Aug 2020 01:50 PSW | Wt/Vol: 9.02 g | ICAL: MM3_DF_10012020_12JUN2020

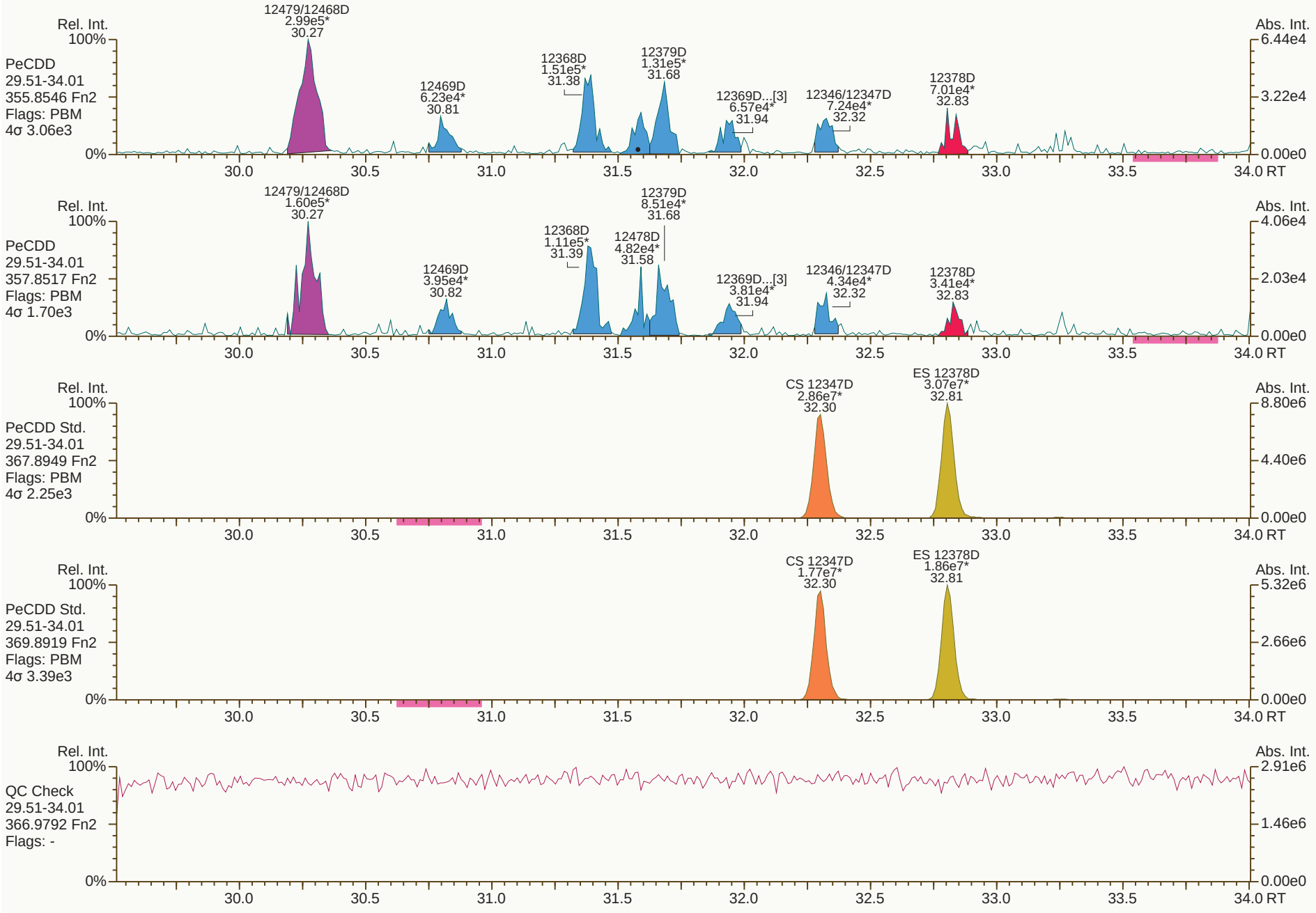
Client ID: CS-25 | UTP: 10-Aug-2020 09:02:29 PSW | J-level: 0.554 pg/g | Split: 1 | Checkcode: 290-011-XGQ

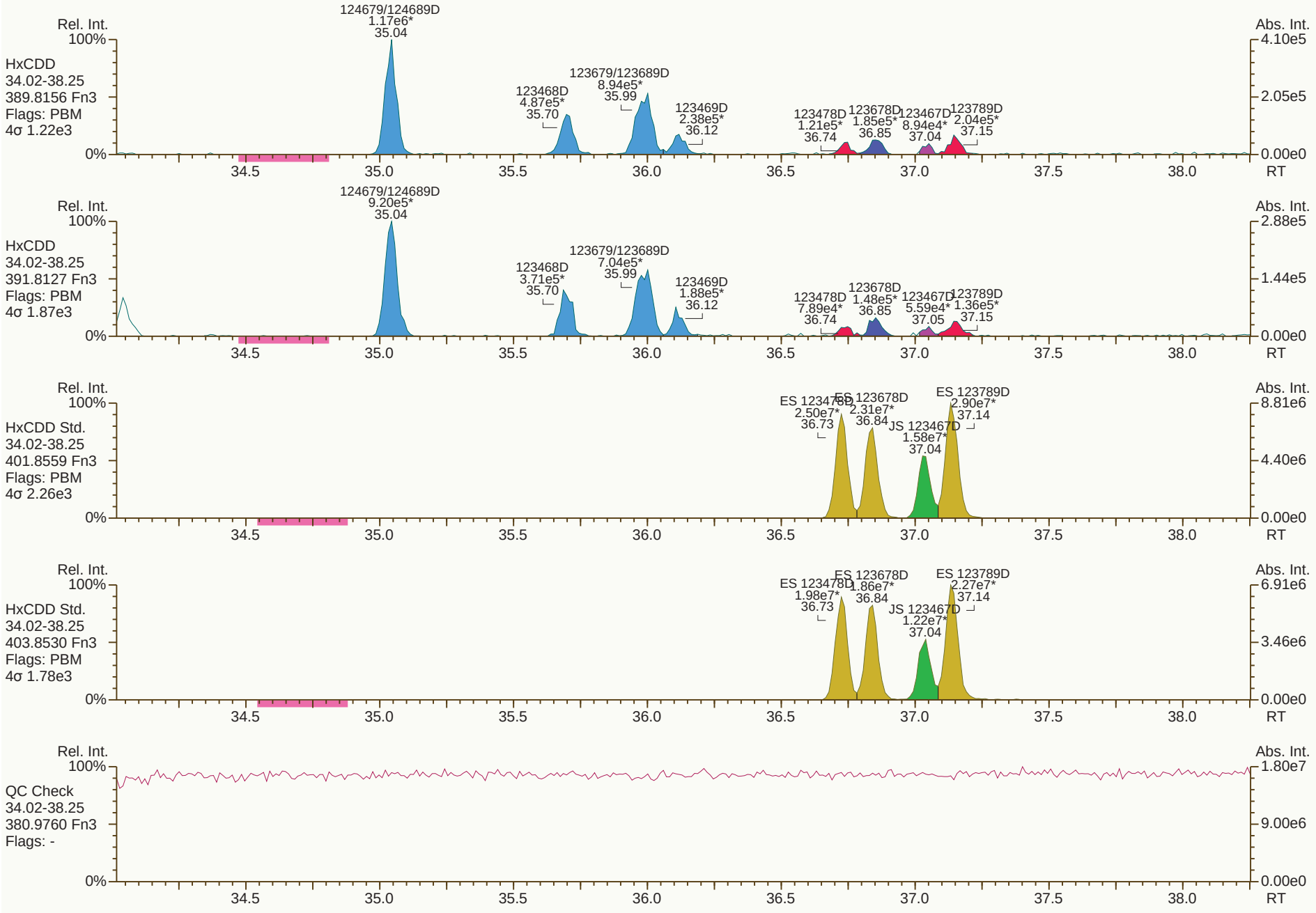
Datafile: 200807R16 | Report: 10 Aug 2020 09:07 pw | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

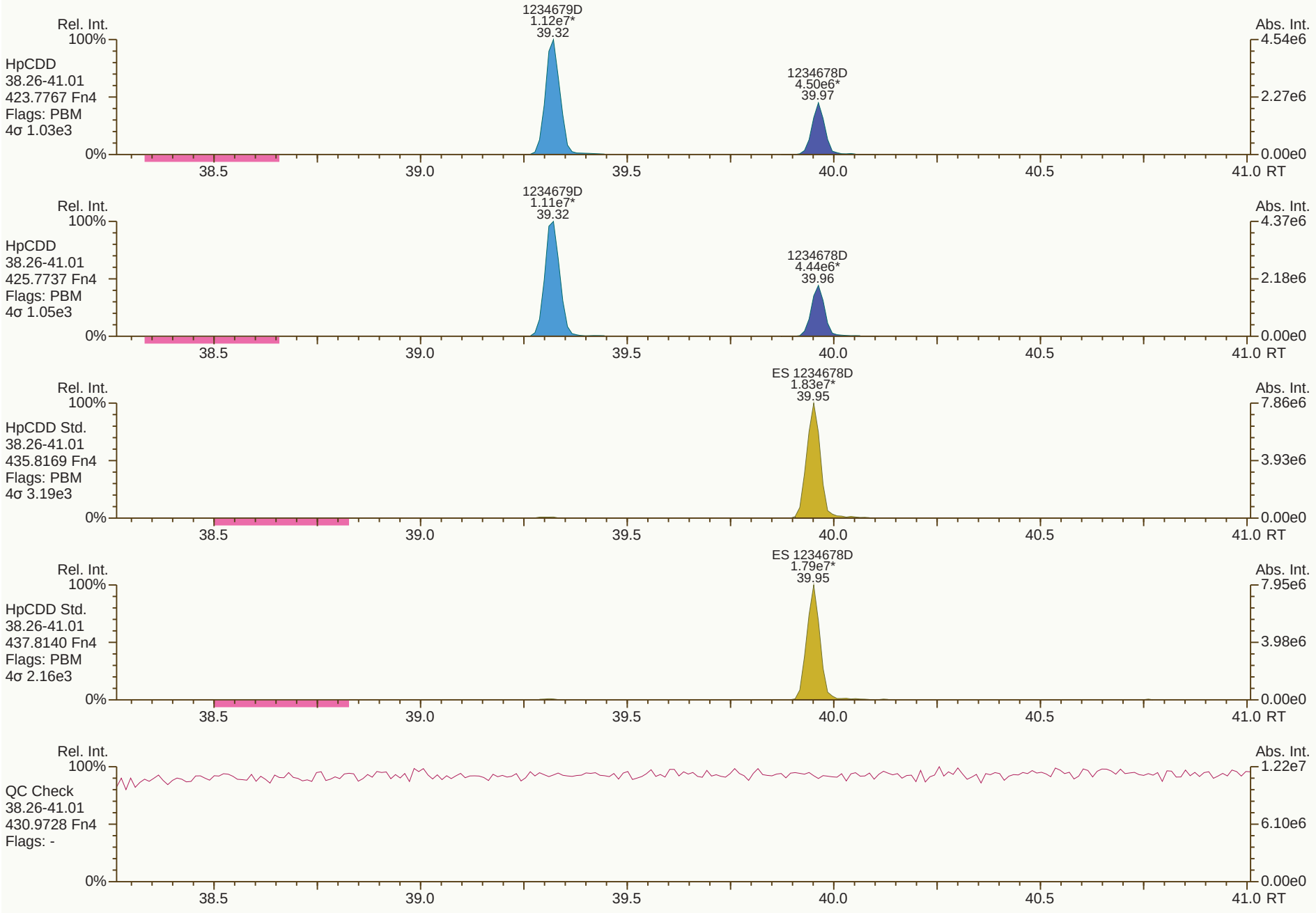
Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
23468/12469-PeCDF	NotFnd		0.9861						0.95		4761	0.129
12347-PeCDF	NotFnd		0.9887						0.95		4761	0.129
12348-PeCDF	NotFnd		0.9938						0.95		4761	0.129
12378-PeCDF	**31.33**	J	**1.0006**	**1.0005**	**-0.2**	**1.42E+05**	**1.75**	**Y**	**0.95**	**0.398**	**4761**	**0.132**
12678/12367-PeCDF	31.62	J	1.0095	1.0097	+0.4	1.77E+05	1.38	Y	0.95	0.512	4761	0.129
12379-PeCDF	NotFnd		1.0150						0.95		4761	0.129
12679-PeCDF	NotFnd		0.9926						0.95		4761	0.129
23467/12369-PeCDF	32.34	J EMPC	0.9966	0.9963	-0.6	1.07E+05	1.23	N	0.95	0.308	4761	0.129
23478-PeCDF	**32.49**	J EMPC	**1.0005**	**1.0009**	**+0.8**	**1.77E+05**	**1.16**	**N**	**0.95**	**0.528**	**4761**	**0.125**
23478/12489-PeCDF	NotFnd		0.0000						0.95			
12489-PeCDF	NotFnd		1.0047						0.95		4761	0.129
12349-PeCDF	NotFnd		1.0107						0.95		4761	0.129
12389-PeCDF	NotFnd		1.0339						0.95		4761	0.129
123468-HxCDF	34.38	J	0.9617	0.9616	-0.2	3.70E+05	1.06	Y	1.11	1.31	5120	0.146
124678/134678-HxCDF	34.58		0.9673	0.9671	-0.4	1.28E+06	1.18	Y	1.11	4.56	5120	0.146
134679-HxCDF	NotFnd		0.9737						1.11		5120	0.146
124679-HxCDF	NotFnd		0.9792						1.11		5120	0.146
124689-HxCDF	35.23		0.9854	0.9854	0	1.07E+06	1.10	Y	1.11	3.8	5120	0.146
123467-HxCDF	35.66	J	0.9972	0.9972	0	1.41E+05	1.25	Y	1.11	0.502	5120	0.146
123478-HxCDF	**35.77**	J	**1.0005**	**1.0005**	**0**	**2.40E+05**	**1.39**	**Y**	**1.20**	**0.793**	**5120**	**0.131**
123678-HxCDF	**35.91**	J	**1.0004**	**1.0004**	**0**	**1.76E+05**	**1.27**	**Y**	**1.07**	**0.565**	**5120**	**0.128**
123479-HxCDF	NotFnd		1.0049						1.11		5120	0.146
123469-HxCDF	NotFnd		1.0089						1.11		5120	0.146
123679-HxCDF	NotFnd		0.9945						1.11		5120	0.146
234678-HxCDF	**36.56**	J EMPC	**1.0005**	**1.0005**	**0**	**2.07E+05**	**1.45**	**N**	**1.10**	**0.76**	**5120**	**0.147**
234678/123689-HxCDF	NotFnd		0.0000						1.10			
123689-HxCDF	NotFnd		1.0054						1.11		5120	0.146
123789-HxCDF	**NotFnd**		**1.0004**						**1.09**		**5120**	**0.188**
123789/123489-HxCDF	NotFnd		0.0000						1.09			
123489-HxCDF	37.56	J EMPC	1.0008	1.0011	+0.7	5.27E+04	1.47	N	1.11	0.187	5120	0.146
1234678-HpCDF	**39.05**		**1.0003**	**1.0003**	**0**	**2.15E+06**	**1.03**	**Y**	**1.28**	**8.45**	**3323**	**0.0827**
1234679-HpCDF	39.32	**J**	1.0072	1.0072	0	1.25E+05	1.01	Y	1.27	0.566	3323	0.0875
1234689-HpCDF	39.46		1.0107	1.0107	0	3.03E+06	1.01	Y	1.27	13.8	3323	0.0875
1234789-HpCDF	**40.38**	**J EMPC**	**1.0002**	**1.0003**	**+0.2**	**1.35E+05**	**1.25**	**N**	**1.27**	**0.729**	**3323**	**0.0938**
OCDF	**42.55**		**1.0003**	**1.0002**	**-0.3**	**2.16E+06**	**0.90**	**Y**	**1.01**	**19.1**	**3038**	**0.193**
OCDF-a	NotFnd		1.0002						0.06		3881	3.94

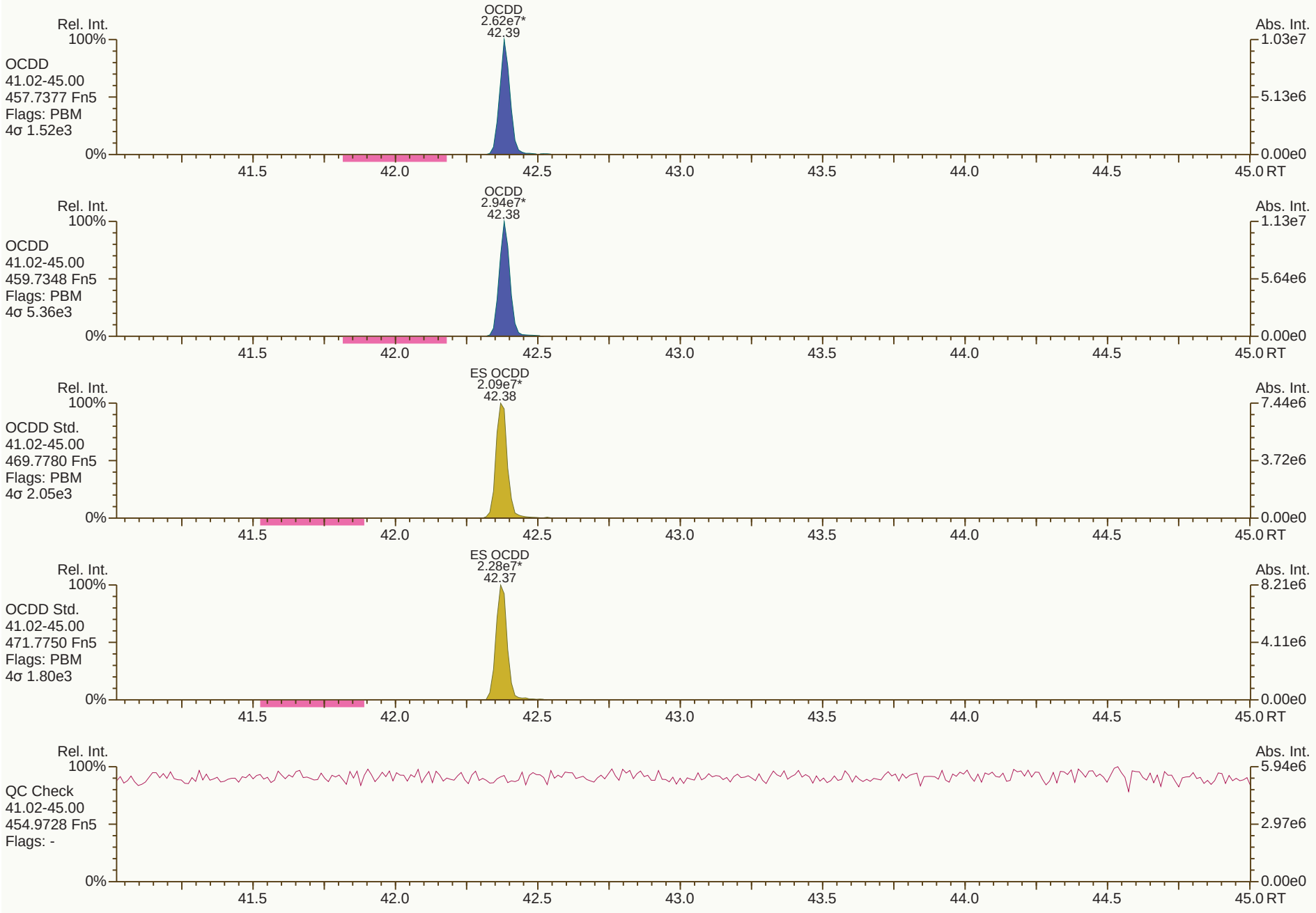

Rel. Int.
100%
QC Check
20.54-29.50
316.9824 Fn1
Flags: -
0%
Abs. Int.
3.56e6
1.78e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
QC Check
29.51-34.01
366.9792 Fn2
Flags: -
0%
Abs. Int.
2.91e6
1.46e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
0%
Abs. Int.
1.80e7
9.00e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
QC Check
38.26-41.01
430.9728 Fn4
Flags: -
0%
Abs. Int.
1.22e7
6.10e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
5.94e6
2.97e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT


Rel. Int.
100%
TCDD
20.54-29.50
319.8965 Fn1
Flags: PBM
4σ 1.63e3
1368D
1.53e5*
23.39
1379D
9.20e4*
23.78
1247D...[4]
2.90e4*
25.33
1378D
2.82e4*
25.56
1234/1269D
2.58e4*
26.60
Abs. Int.
3.97e4
1.99e4
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD
20.54-29.50
321.8936 Fn1
Flags: PBM
4σ 1.99e3
1368D
1.85e5*
23.40
1379D
8.79e4*
23.80
1247D...[4]
3.85e4*
25.33
1378D
3.31e4*
25.57
1234/1269D
2.29e4*
26.60
Abs. Int.
4.47e4
2.24e4
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
37Cl-TCDD
20.54-29.50
327.8850 Fn1
Flags: PBM
4σ 1.29e3
CS 37Cl-2378D
2.54e7*
27.29
Abs. Int.
5.75e6
2.88e6
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
331.9368 Fn1
Flags: PBM
4σ 7.53e3
JS 1234D
2.96e7*
26.59
ES 2378D
2.49e7*
27.27
Abs. Int.
6.94e6
3.47e6
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
333.9339 Fn1
Flags: PBM
4σ 2.10e3
JS 1234D
3.82e7*
26.58
ES 2378D
3.28e7*
27.27
Abs. Int.
8.55e6
4.28e6
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
Abs. Int.
PeCDD
29.51-34.01
355.8546 Fn2
Flags: PBM
4σ 3.06e3
12479/12468D
2.99e5*
30.27
12469D
6.23e4*
30.81
12368D
1.51e5*
31.38
12379D
1.31e5*
31.68
12369D...[3]
6.57e4*
31.94
12346/12347D
7.24e4*
32.32
12378D
7.01e4*
32.83
PeCDD
29.51-34.01
357.8517 Fn2
Flags: PBM
4σ 1.70e3
12479/12468D
1.60e5*
30.27
12469D
3.95e4*
30.82
12368D
1.11e5*
31.39
12478D
4.82e4*
31.58
12379D
8.51e4*
31.68
12369D...[3]
3.81e4*
31.94
12346/12347D
4.34e4*
32.32
12378D
3.41e4*
32.83
PeCDD Std.
29.51-34.01
367.8949 Fn2
Flags: PBM
4σ 2.25e3
CS 12347D
2.86e7*
32.30
ES 12378D
3.07e7*
32.81
PeCDD Std.
29.51-34.01
369.8919 Fn2
Flags: PBM
4σ 3.39e3
CS 12347D
1.77e7*
32.30
ES 12378D
1.86e7*
32.81
QC Check
29.51-34.01
366.9792 Fn2
Flags: -
100%
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
6.44e4
3.22e4
0.00e0
4.06e4
2.03e4
8.80e6
4.40e6
5.32e6
2.66e6
2.91e6
1.46e6

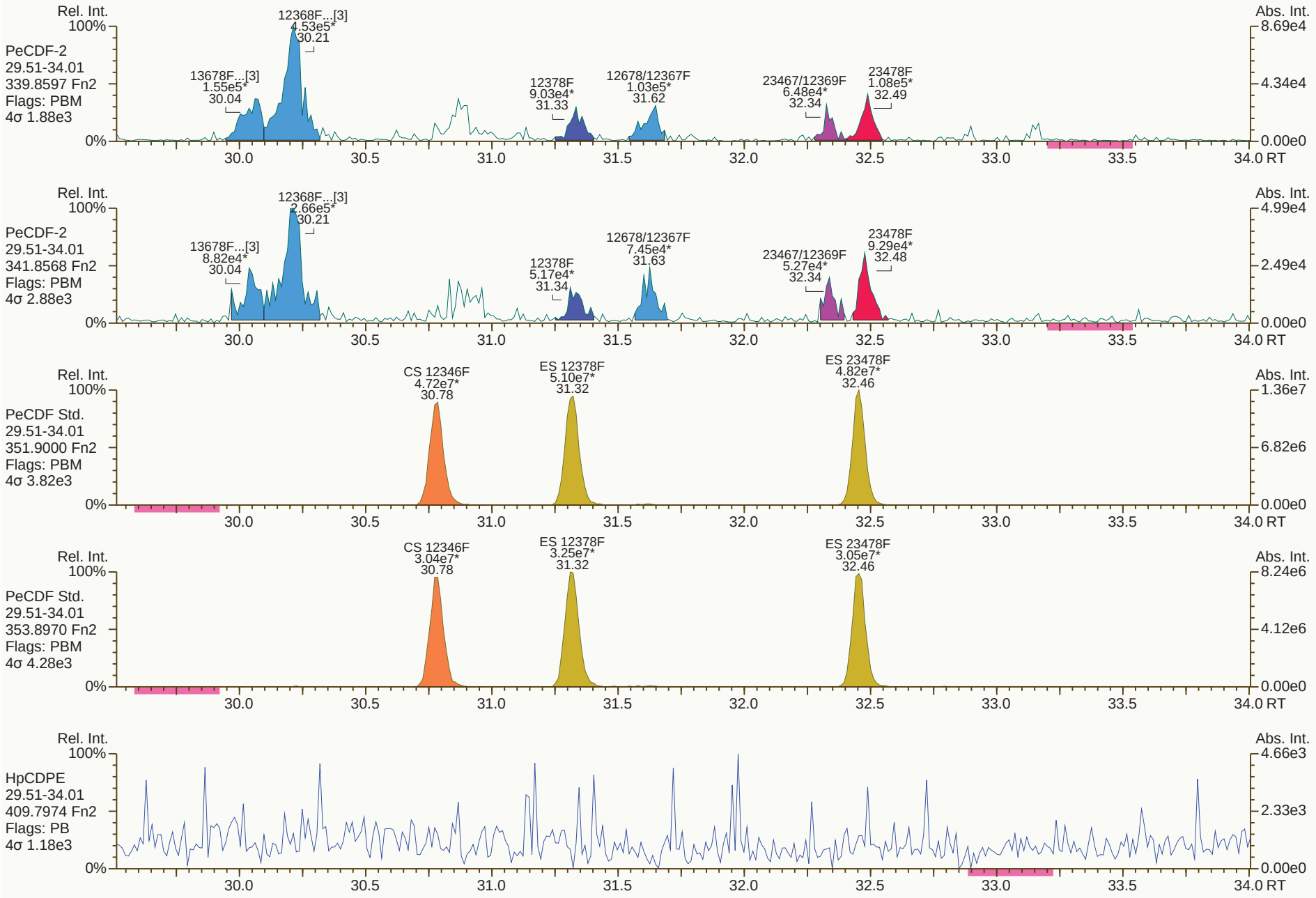

Rel. Int.
100%
HxCDD
34.02-38.25
389.8156 Fn3
Flags: PBM
4σ 1.22e3
124679/124689D
1.17e6*
35.04
123468D
4.87e5*
35.70
123679/123689D
8.94e5*
35.99
123469D
2.38e5*
36.12
123478D
1.21e5*
36.74
123678D
1.85e5*
36.85
123467D
8.94e4*
37.04
123789D
2.04e5*
37.15
Abs. Int.
4.10e5
2.05e5
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD
34.02-38.25
391.8127 Fn3
Flags: PBM
4σ 1.87e3
124679/124689D
9.20e5*
35.04
123468D
3.71e5*
35.70
123679/123689D
7.04e5*
35.99
123469D
1.88e5*
36.12
123478D
7.89e4*
36.74
123678D
1.48e5*
36.85
123467D
5.59e4*
37.05
123789D
1.36e5*
37.15
Abs. Int.
2.88e5
1.44e5
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
401.8559 Fn3
Flags: PBM
4σ 2.26e3
ES 123478D
2.50e7*
36.73
ES 123678D
2.31e7*
36.84
JS 123467D
1.58e7*
37.04
ES 123789D
2.90e7*
37.14
Abs. Int.
8.81e6
4.40e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
403.8530 Fn3
Flags: PBM
4σ 1.78e3
ES 123478D
1.98e7*
36.73
ES 123678D
1.86e7*
36.84
JS 123467D
1.22e7*
37.04
ES 123789D
2.27e7*
37.14
Abs. Int.
6.91e6
3.46e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
Abs. Int.
1.80e7
9.00e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT

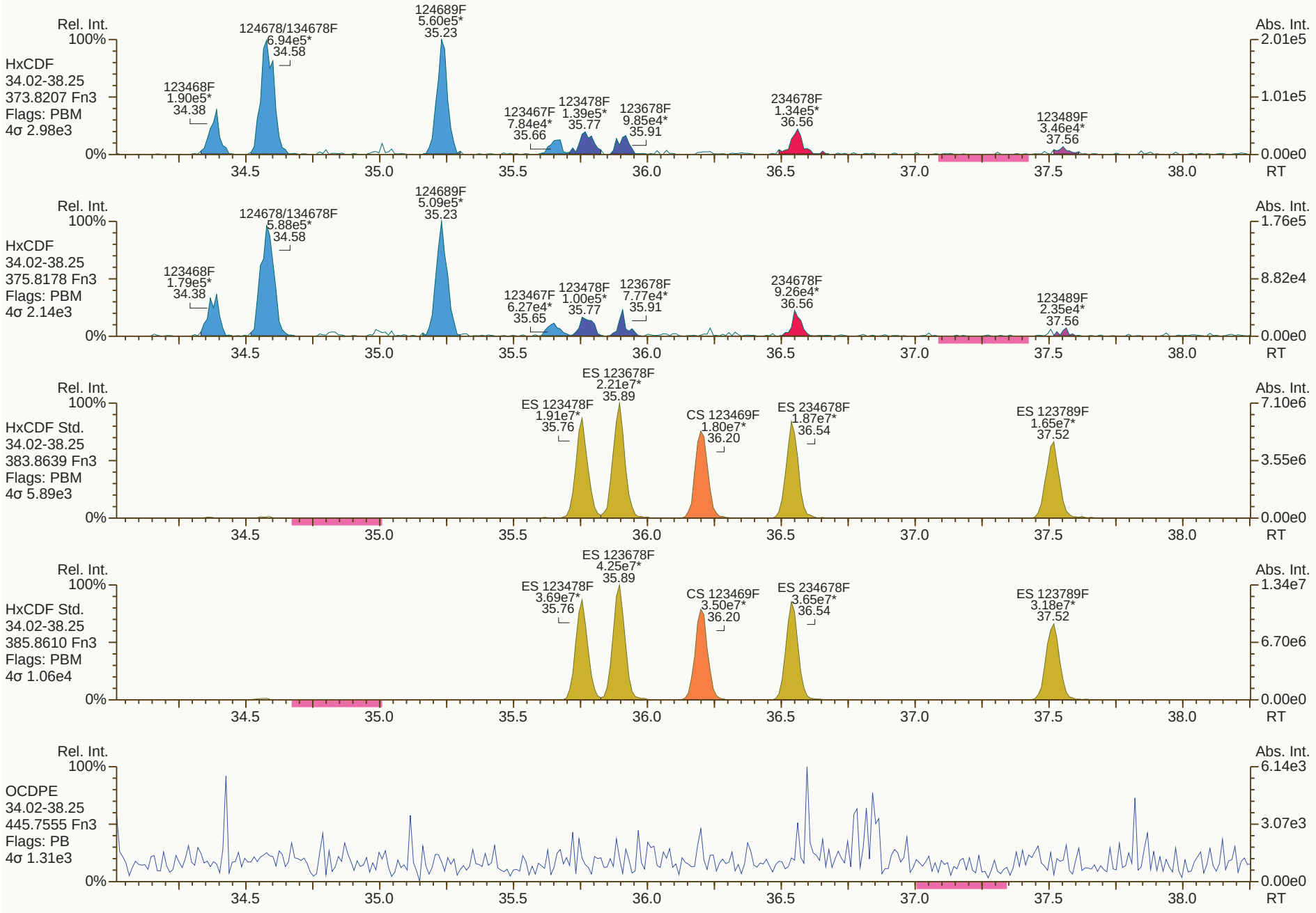

Rel. Int.
100%
HpCDD
38.26-41.01
423.7767 Fn4
Flags: PBM
4σ 1.03e3
0%
1234679D
1.12e7*
39.32
1234678D
4.50e6*
39.97
Abs. Int.
4.54e6
2.27e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.26-41.01
425.7737 Fn4
Flags: PBM
4σ 1.05e3
0%
1234679D
1.11e7*
39.32
1234678D
4.44e6*
39.96
Abs. Int.
4.37e6
2.18e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
435.8169 Fn4
Flags: PBM
4σ 3.19e3
0%
ES 1234678D
1.83e7*
39.95
Abs. Int.
7.86e6
3.93e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
437.8140 Fn4
Flags: PBM
4σ 2.16e3
0%
ES 1234678D
1.79e7*
39.95
Abs. Int.
7.95e6
3.98e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.26-41.01
430.9728 Fn4
Flags: -
0%
Abs. Int.
1.22e7
6.10e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT


OCDD
2.62e7*
42.39
Rel. Int.
100%
OCDD
41.02-45.00
457.7377 Fn5
Flags: PBM
4σ 1.52e3
0%
Abs. Int.
1.03e7
5.13e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDD
2.94e7*
42.38
Rel. Int.
100%
OCDD
41.02-45.00
459.7348 Fn5
Flags: PBM
4σ 5.36e3
0%
Abs. Int.
1.13e7
5.64e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
2.09e7*
42.38
Rel. Int.
100%
OCDD Std.
41.02-45.00
469.7780 Fn5
Flags: PBM
4σ 2.05e3
0%
Abs. Int.
7.44e6
3.72e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
2.28e7*
42.37
Rel. Int.
100%
OCDD Std.
41.02-45.00
471.7750 Fn5
Flags: PBM
4σ 1.80e3
0%
Abs. Int.
8.21e6
4.11e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
5.94e6
2.97e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT


SGS ID: B4511_17654_DF_007
Sample ID: CS-25
Acq: 08-Aug-2020 01:50:51
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 15
User: PSW Datafile: 200807R16
Rel. Int.
Abs. Int.
TCDF
20.54-29.50
303.9016 Fn1
Flags: PBM
4σ 1.32e3
1368F 4.78e4* 21.16
1468F 2.92e4* 21.74
2468F 2.35e5* 22.39
1347F...[3] 1.32e5* 22.95
1248F...[3] 8.23e4* 23.38
1268F 7.66e4* 23.81
2368F 1.11e5* 24.85
1278F 5.38e4* 25.42
2346/1249F 1.35e4* 25.91
2378F 5.23e4* 26.37
2367/3467F 1.14e5* 26.75
1289F 3.21e5* 28.45
TCDF
20.54-29.50
305.8987 Fn1
Flags: PBM
4σ 1.34e3
1368F 7.62e4* 21.14
1468F 4.11e4* 21.73
2468F 2.57e5* 22.38
1347F...[3] 1.38e5* 22.97
1346/1246F 2.76e4* 22.85
1248F...[3] 8.56e4* 23.38
1268F 8.52e4* 23.81
2467F 5.12e4* 24.67
2368F 1.19e5* 24.85
1238F...[5] 6.02e4* 24.96
1267F 4.49e4* 25.71
2378F 4.58e4* 26.37
2367/3467F 1.15e5* 26.75
1289F 1.78e5* 28.46
TCDF Std.
20.54-29.50
315.9419 Fn1
Flags: PBM
4σ 9.36e3
JS 1234F 4.97e7* 24.91
ES 2378F 4.24e7* 26.35
TCDF Std.
20.54-29.50
317.9389 Fn1
Flags: PBM
4σ 4.67e3
JS 1234F 6.30e7* 24.91
ES 2378F 5.43e7* 26.34
HxCDPE
20.54-29.50
375.8364 Fn1
Flags: PB
4σ 1.42e3
100%
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
7.57e4
3.78e4
0.00e0
5.32e4
2.66e4
9.92e6
4.96e6
1.18e7
5.92e6
1.06e4
5.29e3
Results: P:\B4500_B4599\B4511\B4511_17654 DF\Resources\B4511_17654_DF_007.utp_res, saved 10-Aug-2020 09:02 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 5281, 8786, 0884 scc: 290-011
PKD: 10-Aug-2020 08:44 Printed: 10-Aug-2020 09:22 Page 7 of 12


Rel. Int.
100%
0%
Abs. Int.
1.39e5
6.95e4
0.00e0
RT
13468/12468F
5.55e5*
28.45
PeCDF-1
20.54-29.50
339.8597 Fn1
Flags: PBM
4σ 1.64e3
13468/12468F
3.31e5*
28.45
1.01e5
5.06e4
PeCDF-1
20.54-29.50
341.8568 Fn1
Flags: PBM
4σ 1.86e3
3.56e6
1.78e6
QC Check
20.54-29.50
316.9824 Fn1
Flags: -
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0


Rel. Int.
100%
0%
Abs. Int.
PeCDF-2
29.51-34.01
339.8597 Fn2
Flags: PBM
4σ 1.88e3
13678F...[3] 1.55e5* 30.04
12368F...[3] 4.53e5* 30.21
12378F 9.03e4* 31.33
12678/12367F 1.03e5* 31.62
23467/12369F 6.48e4* 32.34
23478F 1.08e5* 32.49
8.69e4
4.34e4
0.00e0
PeCDF-2
29.51-34.01
341.8568 Fn2
Flags: PBM
4σ 2.88e3
13678F...[3] 8.82e4* 30.04
12368F...[3] 2.66e5* 30.21
12378F 5.17e4* 31.34
12678/12367F 7.45e4* 31.63
23467/12369F 5.27e4* 32.34
23478F 9.29e4* 32.48
4.99e4
2.49e4
0.00e0
PeCDF Std.
29.51-34.01
351.9000 Fn2
Flags: PBM
4σ 3.82e3
CS 12346F 4.72e7* 30.78
ES 12378F 5.10e7* 31.32
ES 23478F 4.82e7* 32.46
1.36e7
6.82e6
0.00e0
PeCDF Std.
29.51-34.01
353.8970 Fn2
Flags: PBM
4σ 4.28e3
CS 12346F 3.04e7* 30.78
ES 12378F 3.25e7* 31.32
ES 23478F 3.05e7* 32.46
8.24e6
4.12e6
0.00e0
HpCDPE
29.51-34.01
409.7974 Fn2
Flags: PB
4σ 1.18e3
4.66e3
2.33e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT


Rel. Int.
100%
HxCDF
34.02-38.25
373.8207 Fn3
Flags: PBM
4σ 2.98e3
123468F 1.90e5* 34.38
124678/134678F 6.94e5* 34.58
124689F 5.60e5* 35.23
123467F 7.84e4* 35.66
123478F 1.39e5* 35.77
123678F 9.85e4* 35.91
234678F 1.34e5* 36.56
123489F 3.46e4* 37.56
Abs. Int.
2.01e5
1.01e5
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0
RT
HxCDF
34.02-38.25
375.8178 Fn3
Flags: PBM
4σ 2.14e3
123468F 1.79e5* 34.38
124678/134678F 5.88e5* 34.58
124689F 5.09e5* 35.23
123467F 6.27e4* 35.65
123478F 1.00e5* 35.77
123678F 7.77e4* 35.91
234678F 9.26e4* 36.56
123489F 2.35e4* 37.56
1.76e5
8.82e4
HxCDF Std.
34.02-38.25
383.8639 Fn3
Flags: PBM
4σ 5.89e3
ES 123678F 2.21e7* 35.89
ES 123478F 1.91e7* 35.76
CS 123469F 1.80e7* 36.20
ES 234678F 1.87e7* 36.54
ES 123789F 1.65e7* 37.52
7.10e6
3.55e6
HxCDF Std.
34.02-38.25
385.8610 Fn3
Flags: PBM
4σ 1.06e4
ES 123678F 4.25e7* 35.89
ES 123478F 3.69e7* 35.76
CS 123469F 3.50e7* 36.20
ES 234678F 3.65e7* 36.54
ES 123789F 3.18e7* 37.52
1.34e7
6.70e6
OCDPE
34.02-38.25
445.7555 Fn3
Flags: PB
4σ 1.31e3
6.14e3
3.07e3

SGS ID: B4511_17654_DF_007 Sample ID: CS-25 Acq: 08-Aug-2020 01:50:51
Instr: [ILM] AutoSpec-Ultima MM3 VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 15 User: PSW Datafile: 200807R16




OCDF
1.02e6*
42.55
Rel. Int.
100%
OCDF
41.02-45.00
441.7428 Fn5
Flags: PBM
4σ 1.16e3
0%
Abs. Int.
3.33e5
1.67e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDF
1.13e6*
42.55
OCDF
41.02-45.00
443.7398 Fn5
Flags: PBM
4σ 1.88e3
4.78e5
2.39e5
ES OCDF
2.33e7*
42.54
OCDF Std.
41.02-45.00
453.7830 Fn5
Flags: PBM
4σ 1.66e3
8.15e6
4.07e6
ES OCDF
2.61e7*
42.54
OCDF Std.
41.02-45.00
455.7801 Fn5
Flags: PBM
4σ 2.42e3
9.49e6
4.75e6
DCDPE
41.02-45.00
513.6775 Fn5
Flags: PB
4σ 1.54e3
1.18e4
5.89e3

Lab ID: B4511_17654_DF_008 **Acq'd:** 08 Aug 2020 02:38 PSW **Wt/Vol:** 8.82 g **ICAL:** MM3_DF_10012020_12JUN2020

Client ID: CS-SS-104 **UTP:** 10-Aug-2020 09:02:30 PSW **J-level:** 0.567 pg/g **Split:** 1 **Checkcode:** 578-088-WRL

Datafile: 200807R17 **Report:** 10 Aug 2020 09:07 pw **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	NotFnd		1.0009	-		-	-	-	1.18	-	4722	0.124
12378-PeCDD	32.85	J	1.0006	1.0006	0	2.75E+05	1.51	Y	1.14	0.764	5506	0.14
123478-HxCDD	36.76		1.0004	1.0004	0	1.06E+06	1.26	Y	1.09	3.37	6572	0.159
123678-HxCDD	36.87		1.0035	1.0035	0	3.18E+06	1.27	Y	1.13	10	6572	0.175
123789-HxCDD	37.17		1.0116	1.0116	0	2.30E+06	1.35	Y	1.05	6.84	6572	0.167
1234678-HpCDD	39.98		1.0003	1.0003	0	1.02E+08	1.04	Y	0.98	416	3946	0.0903
OCDD	42.40		1.0003	1.0002	-0.3	4.69E+08	0.90	Y	1.08	3,190	8155	0.395
2378-TCDF	26.40	J EMPC	1.0006	1.0014	+1.3	8.04E+04	0.56	N	0.98	0.144	4478	0.0941
12378-PeCDF	31.35	J	1.0006	1.0005	-0.2	1.47E+05	1.58	Y	0.95	0.307	8344	0.162
23478-PeCDF	32.50	J	1.0005	1.0010	+1.0	3.58E+05	1.51	Y	0.95	0.766	8344	0.169
123478-HxCDF	35.79		1.0005	1.0005	0	2.02E+06	1.20	Y	1.20	4.62	16028	0.312
123678-HxCDF	35.93	J	1.0004	1.0004	0	1.13E+06	1.37	Y	1.07	2.59	16028	0.323
234678-HxCDF	36.57		1.0005	1.0004	-0.2	1.90E+06	1.31	Y	1.10	4.69	16028	0.342
123789-HxCDF	NotFnd		1.0004	-		-	-	-	1.09	-	16028	0.386
1234678-HpCDF	39.07		1.0003	1.0003	0	4.69E+07	1.01	Y	1.28	132	4724	0.0881
1234789-HpCDF	40.40		1.0002	1.0003	+0.2	3.45E+06	1.00	Y	1.27	12.9	4724	0.114
OCDF	42.57		1.0003	1.0002	-0.3	1.06E+08	0.90	Y	1.01	636	7596	0.322

Name	Act RT		Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	27.28		1.0255	1.0256	+0.2	7.89E+07	0.79	Y	1.01	80.8
ES 12378-PeCDD	32.83		1.2330	1.2340	+2.0	7.20E+07	1.61	Y	0.87	85.2
ES 123478-HxCDD	36.74		0.9917	0.9916	-0.2	6.54E+07	1.30	Y	1.10	64
ES 123678-HxCDD	36.86		0.9947	0.9947	0	6.38E+07	1.28	Y	1.06	64.6
ES 123789-HxCDD	37.16		1.0028	1.0028	0	7.29E+07	1.30	Y	1.22	64.3
ES 1234678-HpCDD	39.97		1.0785	1.0787	+0.5	5.68E+07	1.09	Y	0.99	61.3
ES OCDD	42.39		1.1439	1.1441	+0.5	6.21E+07	0.91	Y	0.67	49.8
ES 2378-TCDF	26.36		1.0572	1.0575	+0.5	1.29E+08	0.77	Y	1.01	83.3
ES 12378-PeCDF	31.34		1.2558	1.2571	+2.4	1.14E+08	1.52	Y	0.90	83.2
ES 23478-PeCDF	32.47		1.3012	1.3026	+2.7	1.12E+08	1.59	Y	0.89	82.3
ES 123478-HxCDF	35.77		0.9655	0.9654	-0.2	8.28E+07	0.51	Y	1.43	62.1
ES 123678-HxCDF	35.91		0.9693	0.9692	-0.2	9.20E+07	0.52	Y	1.63	60.5
ES 234678-HxCDF	36.56		0.9867	0.9867	0	8.37E+07	0.53	Y	1.48	60.8
ES 123789-HxCDF	37.53		1.0130	1.0130	0	7.67E+07	0.54	Y	1.29	63.7
ES 1234678-HpCDF	39.06		1.0540	1.0542	+0.5	6.32E+07	0.44	Y	1.15	59.2
ES 1234789-HpCDF	40.38		1.0898	1.0899	+0.2	4.77E+07	0.45	Y	0.91	56.5
ES OCDF	42.56		1.1484	1.1485	+0.3	7.49E+07	0.88	Y	0.83	48.5

Lab ID: B4511_17654_DF_008 | Acq'd: 08 Aug 2020 02:38 PSW | Wt/Vol: 8.82 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-SS-104 | UTP: 10-Aug-2020 09:02:30 PSW | J-level: 0.567 pg/g | Split: 1 | Checkcode: 578-088-WRL

Datafile: 200807R17 | Report: 10 Aug 2020 09:07 pw | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %	
JS 1234-TCDD	26.60		-	-	-	9.70E+07	0.78	Y	-	-	
JS 1234-TCDF	24.93		-	-	-	1.53E+08	0.79	Y	-	-	
JS 123467-HxCDD	37.05		-	-	-	4.66E+07	1.27	Y	-	-	
CS 37Cl-2378-TCDD	27.31		1.0265	1.0265	0	3.67E+07	n/a	-	1.04	91.2	
CS 12347-PeCDD	32.32		1.2141	1.2150	+1.7	6.91E+07	1.66	Y	0.74	96.3	
CS 12346-PeCDF	30.80		1.2343	1.2356	+2.4	1.10E+08	1.59	Y	0.86	83.7	
CS 123469-HxCDF	36.22		0.9776	0.9775	-0.2	8.21E+07	0.55	Y	1.36	64.9	
CS 1234689-HpCDF	39.47		1.0650	1.0652	+0.5	6.28E+07	0.44	Y	1.05	63.9	
~~SS 37Cl-2378-TCDD~~	~~27.31~~		~~1.0265~~	~~1.0265~~	~~0~~	~~3.67E+07~~	~~n/a~~		~~1.04~~	~~112~~	Not used in this project.
~~SS 12347-PeCDD~~	~~32.32~~		~~1.2141~~	~~1.2150~~	~~+1.7~~	~~6.91E+07~~	~~1.66~~	~~Y~~	~~0.86~~	~~112~~	CL 10Aug20
~~SS 12346-PeCDF~~	~~30.80~~		~~1.2343~~	~~1.2356~~	~~+2.4~~	~~1.10E+08~~	~~1.59~~	~~Y~~	~~0.96~~	~~100~~	
~~SS 123469-HxCDF~~	~~36.22~~		~~0.9776~~	~~0.9775~~	~~-0.2~~	~~8.21E+07~~	~~0.55~~	~~Y~~	~~0.83~~	~~107~~	
~~SS 1234689-HpCDF~~	~~39.47~~		~~1.0650~~	~~1.0652~~	~~+0.5~~	~~6.28E+07~~	~~0.44~~	~~Y~~	~~0.92~~	~~108~~	

Totals	Conc	EMPC
Total TCDD	0.584	2.52
Total PeCDD	2.26	4.46
Total HxCDD	54.5	54.5
Total HpCDD	737	737
Total Tetra-Octa Dioxins	3980	3990
Total TCDF	4.32	7.29
Total PeCDF	12.7	13
Total HxCDF	117	118
Total HpCDF	499	499
Total Tetra-Octa Furans	1,270	1270
Total Tetra-Octa Dioxins & Furans	5250	5260

Lab ID: B4511_17654_DF_008 **Acq'd:** 08 Aug 2020 02:38 PSW **Wt/Vol:** 8.82 g **ICAL:** MM3_DF_10012020_12JUN2020

Client ID: CS-SS-104 **UTP:** 10-Aug-2020 09:02:30 PSW **J-level:** 0.567 pg/g **Split:** 1 **Checkcode:** 578-088-WRL

Datafile: 200807R17 **Report:** 10 Aug 2020 09:07 pw **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1368-TCDD	23.42	EMPC	0.8591	0.8584	-1.0	3.64E+05	0.93	N	1.18	0.888	4722	0.124
1379-TCDD	23.81	J EMPC	0.8732	0.8727	-0.7	1.79E+05	1.07	N	1.18	0.438	4722	0.124
1369-TCDD	NotFnd		0.8901						1.18		4722	0.124
1469-TCDD	NotFnd		0.9205						1.18		4722	0.124
1247/1246/1248/1249-TCDD	25.35	EMPC	0.9301	0.9291	-1.5	2.48E+05	0.89	N	1.18	0.606	4722	0.124
1378-TCDD	NotFnd		0.9374						1.18		4722	0.124
1268-TCDD	NotFnd		0.9449						1.18		4722	0.124
1478-TCDD	NotFnd		0.9544						1.18		4722	0.124
1279-TCDD	NotFnd		0.9610						1.18		4722	0.124
1234/1269-TCDD	26.61		0.9746	0.9754	+1.3	2.39E+05	0.82	Y	1.18	0.584	4722	0.124
1236-TCDD	NotFnd		0.9802						1.18		4722	0.124
1237/1238-TCDD	NotFnd		0.9898						1.18		4722	0.124
1239-TCDD	NotFnd		0.9950						1.18		4722	0.124
2378-TCDD	**NotFnd**		**1.0009**						**1.18**		**4722**	**0.124**
1278-TCDD	NotFnd		1.0133						1.18		4722	0.124
1267-TCDD	NotFnd		1.0185						1.18		4722	0.124
1289-TCDD	NotFnd		1.0379						1.18		4722	0.124
12479/12468-PeCDD	30.29	J EMPC	0.9229	0.9228	-0.2	3.90E+05	1.95	N	1.14	1.08	5506	0.14
12469-PeCDD	30.84	J EMPC	0.9396	0.9394	-0.4	1.31E+05	1.99	N	1.14	0.363	5506	0.14
12368-PeCDD	31.39	J EMPC	0.9568	0.9564	-0.8	1.35E+05	1.13	N	1.14	0.373	5506	0.14
12478-PeCDD	31.59	J EMPC	0.9626	0.9624	-0.4	1.36E+05	1.31	N	1.14	0.376	5506	0.14
12379-PeCDD	31.70	J	0.9657	0.9656	-0.2	1.24E+05	1.35	Y	1.14	0.343	5506	0.14
12369/12467/12489-PeCDD	31.96	J	0.9738	0.9736	-0.4	1.90E+05	1.56	Y	1.14	0.527	5506	0.14
12346/12347-PeCDD	32.35	J	0.9853	0.9854	+0.2	2.27E+05	1.47	Y	1.14	0.629	5506	0.14
12378-PeCDD	32.85	J	**1.0006**	**1.0006**	**0**	**2.75E+05**	**1.51**	**Y**	**1.14**	**0.764**	**5506**	**0.14**
12367-PeCDD	NotFnd		1.0034						1.14		5506	0.14
12389-PeCDD	NotFnd		1.0141						1.14		5506	0.14
124679/124689-HxCDD	35.06		0.9542	0.9542	0	3.35E+06	1.21	Y	1.09	10.4	6572	0.167
123468-HxCDD	35.72	J	0.9721	0.9721	0	8.88E+05	1.24	Y	1.09	2.75	6572	0.167
123679/123689-HxCDD	36.01		0.9799	0.9800	+0.2	5.68E+06	1.31	Y	1.09	17.6	6572	0.167
123469-HxCDD	36.13	J	0.9835	0.9834	-0.2	7.82E+05	1.10	Y	1.09	2.42	6572	0.167
123478-HxCDD	36.76		**1.0004**	**1.0004**	**0**	**1.06E+06**	**1.26**	**Y**	1.09	**3.37**	**6572**	**0.159**
123678-HxCDD	36.87		**1.0035**	**1.0035**	**0**	**3.18E+06**	**1.27**	**Y**	1.13	**10**	**6572**	**0.175**
123467-HxCDD	37.07	J	1.0088	1.0088	0	3.61E+05	1.27	Y	1.09	1.12	6572	0.167
123789-HxCDD	37.17		**1.0116**	**1.0116**	**0**	**2.30E+06**	**1.35**	**Y**	1.05	**6.84**	**6572**	**0.167**

Lab ID: B4511_17654_DF_008 | Acq'd: 08 Aug 2020 02:38 PSW | Wt/Vol: 8.82 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-SS-104 | UTP: 10-Aug-2020 09:02:30 PSW | J-level: 0.567 pg/g | Split: 1 | Checkcode: 578-088-WRL

Datafile: 200807R17 | Report: 10 Aug 2020 09:07 pw | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1234679-HpCDD	39.34		0.9843	0.9843	0	7.90E+07	1.02	Y	0.98	321	3946	0.0903
1234678-HpCDD	**39.98**		**1.0003**	**1.0003**	**0**	**1.02E+08**	**1.04**	**Y**	**0.98**	**416**	**3946**	**0.0903**
OCDD	**42.40**		**1.0003**	**1.0002**	**-0.3**	**4.69E+08**	**0.90**	**Y**	**1.08**	**3,190**	**8155**	**0.395**
OCDD-a	42.40		1.0002	1.0002	0	2.83E+07	2.58	Y	0.07	3,120	7634	6
1368-TCDF	21.18	EMPC	0.8044	0.8036	-1.0	3.90E+05	0.59	N	0.98	0.699	4478	0.0941
1468-TCDF	21.75	J EMPC	0.8261	0.8252	-1.2	6.18E+04	0.41	N	0.98	0.111	4478	0.0941
2468-TCDF	22.41		0.8511	0.8502	-1.2	1.50E+06	0.83	Y	0.98	2.68	4478	0.0941
1346/1246-TCDF	22.87	J	0.8665	0.8678	+1.8	1.20E+05	0.67	Y	0.98	0.215	4478	0.0941
1347/1378/1247-TCDF	23.01	J	0.8723	0.8730	+1.0	1.48E+05	0.76	Y	0.98	0.264	4478	0.0941
1348-TCDF	NotFnd		0.8835						0.98		4478	0.0941
1248/1367/1379-TCDF	23.39	J	0.8888	0.8875	-1.8	2.04E+05	0.79	Y	0.98	0.365	4478	0.0941
1268-TCDF	23.82	J EMPC	0.9044	0.9038	-0.9	1.15E+05	1.14	N	0.98	0.207	4478	0.0941
1467-TCDF	NotFnd		0.9098						0.98		4478	0.0941
1478-TCDF	NotFnd		0.9167						0.98		4478	0.0941
1369/1237-TCDF	NotFnd		0.9316						0.98		4478	0.0941
2467-TCDF	24.69	J EMPC	0.9369	0.9368	-0.1	9.32E+04	1.15	N	0.98	0.167	4478	0.0941
2368-TCDF	24.85	J	0.9430	0.9428	-0.3	2.04E+05	0.84	Y	0.98	0.366	4478	0.0941
1238/1234/1678/1469/1236-TCDF	24.95	EMPC	0.9468	0.9466	-0.3	3.37E+05	0.55	N	0.98	0.604	4478	0.0941
1278-TCDF	25.43	J	0.9651	0.9647	-0.6	7.81E+04	0.78	Y	0.98	0.14	4478	0.0941
1349-TCDF	NotFnd		0.9704						0.98		4478	0.0941
1267-TCDF	NotFnd		0.9761						0.98		4478	0.0941
2346/1249-TCDF	NotFnd		0.9834						0.98		4478	0.0941
2347/1279-TCDF	26.15	J EMPC	0.9921	0.9920	-0.2	6.11E+04	0.94	N	0.98	0.109	4478	0.0941
2348-TCDF	NotFnd		0.9964						0.98		4478	0.0941
2378-TCDF	**26.40**	J EMPC	**1.0006**	**1.0014**	**+1.3**	**8.04E+04**	**0.56**	**N**	**0.98**	**0.144**	**4478**	**0.0941**
2367/3467-TCDF	26.76	J	1.0156	1.0152	-0.6	1.63E+05	0.66	Y	0.98	0.292	4478	0.0941
1269-TCDF	NotFnd		1.0249						0.98		4478	0.0941
1239-TCDF	NotFnd		1.0357						0.98		4478	0.0941
1289-TCDF	28.48	EMPC	1.0799	1.0802	+0.5	5.17E+05	1.56	N	0.98	0.927	4478	0.0941
13468/12468-PeCDF	28.48		0.9084	0.9087	+0.5	3.33E+06	1.47	Y	0.95	7.03	3728	0.0738
13678/13467/12467-PeCDF	30.07	J	0.9591	0.9596	+0.9	2.89E+05	1.72	Y	0.95	0.612	8344	0.165
12368/13478/12478-PeCDF	30.23		0.9642	0.9647	+0.9	1.37E+06	1.51	Y	0.95	2.9	8344	0.165
14678-PeCDF	NotFnd		0.9675						0.95		8344	0.165
13479-PeCDF	NotFnd		0.9706						0.95		8344	0.165
13469/12479-PeCDF	NotFnd		0.9787						0.95		8344	0.165
12346-PeCDF	30.81	J EMPC	0.9833	0.9833	0	1.24E+05	2.33	N	0.95	0.263	8344	0.165

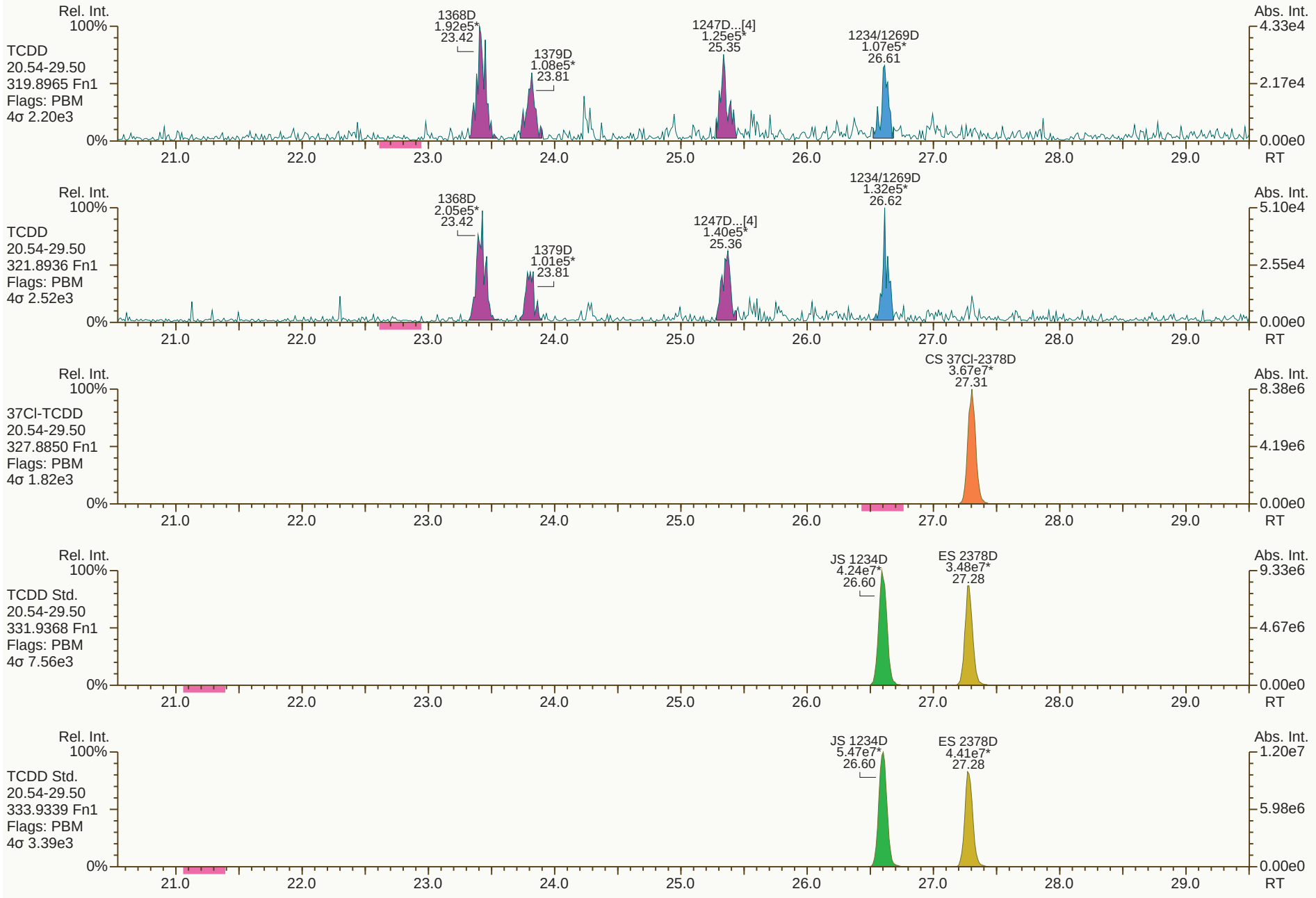
Lab ID: B4511_17654_DF_008 **Acq'd:** 08 Aug 2020 02:38 PSW **Wt/Vol:** 8.82 g **ICAL:** MM3_DF_10012020_12JUN2020

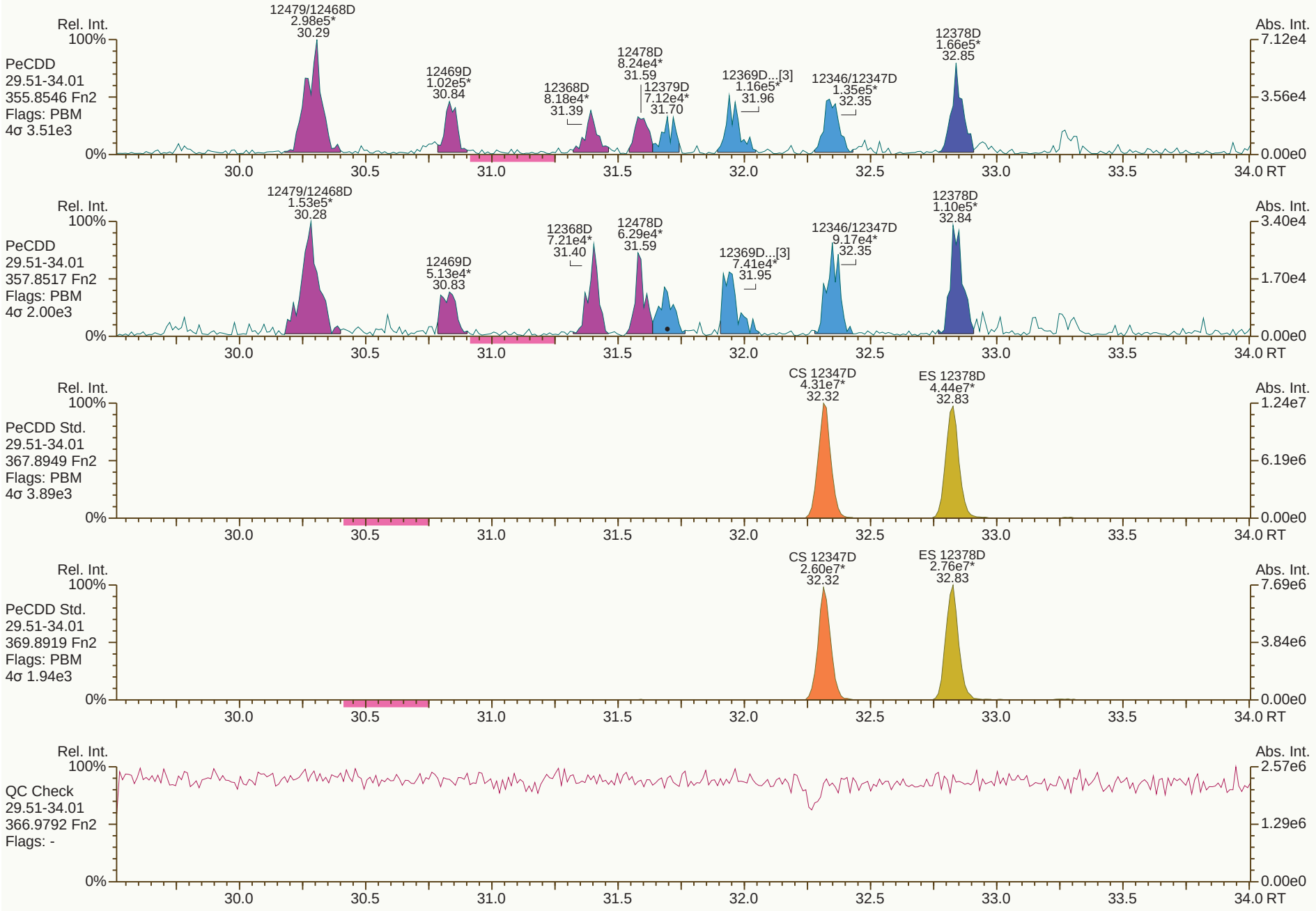
Client ID: CS-SS-104 **UTP:** 10-Aug-2020 09:02:30 PSW **J-level:** 0.567 pg/g **Split:** 1 **Checkcode:** 578-088-WRL

Datafile: 200807R17 **Report:** 10 Aug 2020 09:07 pw **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
23468/12469-PeCDF	30.90	J	0.9861	0.9860	-0.2	3.03E+05	1.71	Y	0.95	0.642	8344	0.165
12347-PeCDF	30.96	J EMPC	0.9887	0.9881	-1.1	3.53E+04	3.23	N	0.95	0.0746	8344	0.165
12348-PeCDF	NotFnd		0.9938						0.95		8344	0.165
12378-PeCDF	**31.35**	J	**1.0006**	**1.0005**	**-0.2**	**1.47E+05**	**1.58**	**Y**	**0.95**	**0.307**	**8344**	**0.162**
12678/12367-PeCDF	31.64	J	1.0095	1.0098	+0.6	1.96E+05	1.34	Y	0.95	0.415	8344	0.165
12379-PeCDF	NotFnd		1.0150						0.95		8344	0.165
12679-PeCDF	NotFnd		0.9926						0.95		8344	0.165
23467/12369-PeCDF	NotFnd		0.9966						0.95		8344	0.165
23478-PeCDF	**32.50**	J	**1.0005**	**1.0010**	**+1.0**	**3.58E+05**	**1.51**	**Y**	**0.95**	**0.766**	**8344**	**0.169**
23478/12489-PeCDF	NotFnd		0.0000						0.95			
12489-PeCDF	NotFnd		1.0047						0.95		8344	0.165
12349-PeCDF	NotFnd		1.0107						0.95		8344	0.165
12389-PeCDF	NotFnd		1.0339						0.95		8344	0.165
123468-HxCDF	34.40		0.9617	0.9617	0	4.01E+06	1.27	Y	1.11	9.76	16028	0.339
124678/134678-HxCDF	34.60		0.9673	0.9672	-0.2	1.64E+07	1.20	Y	1.11	39.8	16028	0.339
134679-HxCDF	NotFnd		0.9737						1.11		16028	0.339
124679-HxCDF	35.03	J	0.9792	0.9792	0	2.01E+05	1.27	Y	1.11	0.488	16028	0.339
124689-HxCDF	35.25		0.9854	0.9854	0	2.26E+07	1.25	Y	1.11	54.9	16028	0.339
123467-HxCDF	35.67	J	0.9972	0.9971	-0.2	2.81E+05	1.39	Y	1.11	0.684	16028	0.339
123478-HxCDF	**35.79**		**1.0005**	**1.0005**	**0**	**2.02E+06**	**1.20**	**Y**	**1.20**	**4.62**	**16028**	**0.312**
123678-HxCDF	**35.93**	J	**1.0004**	**1.0004**	**0**	**1.13E+06**	**1.37**	**Y**	**1.07**	**2.59**	**16028**	**0.323**
123479-HxCDF	NotFnd		1.0049						1.11		16028	0.339
123469-HxCDF	NotFnd		1.0089						1.11		16028	0.339
123679-HxCDF	NotFnd		0.9945						1.11		16028	0.339
234678-HxCDF	**36.57**		**1.0005**	**1.0004**	**-0.2**	**1.90E+06**	**1.31**	**Y**	**1.10**	**4.69**	**16028**	**0.342**
234678/123689-HxCDF	NotFnd		0.0000						1.10			
123689-HxCDF	NotFnd		1.0054						1.11		16028	0.339
123789-HxCDF	**NotFnd**		**1.0004**						**1.09**		**16028**	**0.386**
123789/123489-HxCDF	NotFnd		0.0000						1.09			
123489-HxCDF	37.59	J EMPC	1.0008	1.0014	+1.4	3.24E+05	1.47	N	1.11	0.788	16028	0.339
1234678-HpCDF	**39.07**		**1.0003**	**1.0003**	**0**	**4.69E+07**	**1.01**	**Y**	**1.28**	**132**	**4724**	**0.0881**
1234679-HpCDF	39.34		1.0072	1.0071	-0.2	8.84E+05	0.94	Y	1.27	2.84	4724	0.0991
1234689-HpCDF	39.48		1.0107	1.0107	0	1.10E+08	1.04	Y	1.27	352	4724	0.0991
1234789-HpCDF	**40.40**		**1.0002**	**1.0003**	**+0.2**	**3.45E+06**	**1.00**	**Y**	**1.27**	**12.9**	**4724**	**0.114**
OCDF	**42.57**		**1.0003**	**1.0002**	**-0.3**	**1.06E+08**	**0.90**	**Y**	**1.01**	**636**	**7596**	**0.322**
OCDF-a	42.56		1.0002	1.0002	0	5.92E+06	2.61	Y	0.06	566	4558	3.09


Rel. Int.
100%
0%
Abs. Int.
3.20e6
1.60e6
0.00e0
QC Check
20.54-29.50
316.9824 Fn1
Flags: -
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
0%
Abs. Int.
2.57e6
1.29e6
0.00e0
QC Check
29.51-34.01
366.9792 Fn2
Flags: -
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
0%
Abs. Int.
1.68e7
8.39e6
0.00e0
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
0%
Abs. Int.
1.12e7
5.62e6
0.00e0
QC Check
38.26-41.01
430.9728 Fn4
Flags: -
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
0%
Abs. Int.
5.63e6
2.82e6
0.00e0
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT


Rel. Int.
100%
TCDD
20.54-29.50
319.8965 Fn1
Flags: PBM
4σ 2.20e3
0%
1368D
1.92e5*
23.42
1379D
1.08e5*
23.81
1247D...[4]
1.25e5*
25.35
1234/1269D
1.07e5*
26.61
Abs. Int.
4.33e4
2.17e4
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD
20.54-29.50
321.8936 Fn1
Flags: PBM
4σ 2.52e3
0%
1368D
2.05e5*
23.42
1379D
1.01e5*
23.81
1247D...[4]
1.40e5*
25.36
1234/1269D
1.32e5*
26.62
Abs. Int.
5.10e4
2.55e4
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
37Cl-TCDD
20.54-29.50
327.8850 Fn1
Flags: PBM
4σ 1.82e3
0%
CS 37Cl-2378D
3.67e7*
27.31
Abs. Int.
8.38e6
4.19e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
331.9368 Fn1
Flags: PBM
4σ 7.56e3
0%
JS 1234D
4.24e7*
26.60
ES 2378D
3.48e7*
27.28
Abs. Int.
9.33e6
4.67e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
333.9339 Fn1
Flags: PBM
4σ 3.39e3
0%
JS 1234D
5.47e7*
26.60
ES 2378D
4.41e7*
27.28
Abs. Int.
1.20e7
5.98e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
PeCDD
29.51-34.01
355.8546 Fn2
Flags: PBM
4σ 3.51e3
12479/12468D
2.98e5*
30.29
12469D
1.02e5*
30.84
12368D
8.18e4*
31.39
12478D
8.24e4*
31.59
12379D
7.12e4*
31.70
12369D...[3]
1.16e5*
31.96
12346/12347D
1.35e5*
32.35
12378D
1.66e5*
32.85
Abs. Int.
7.12e4
3.56e4
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD
29.51-34.01
357.8517 Fn2
Flags: PBM
4σ 2.00e3
12479/12468D
1.53e5*
30.28
12469D
5.13e4*
30.83
12368D
7.21e4*
31.40
12478D
6.29e4*
31.59
12369D...[3]
7.41e4*
31.95
12346/12347D
9.17e4*
32.35
12378D
1.10e5*
32.84
Abs. Int.
3.40e4
1.70e4
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
367.8949 Fn2
Flags: PBM
4σ 3.89e3
CS 12347D
4.31e7*
32.32
ES 12378D
4.44e7*
32.83
Abs. Int.
1.24e7
6.19e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
369.8919 Fn2
Flags: PBM
4σ 1.94e3
CS 12347D
2.60e7*
32.32
ES 12378D
2.76e7*
32.83
Abs. Int.
7.69e6
3.84e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
QC Check
29.51-34.01
366.9792 Fn2
Flags: -
Abs. Int.
2.57e6
1.29e6
0.00e0
0%
30.0
30.5
31.0
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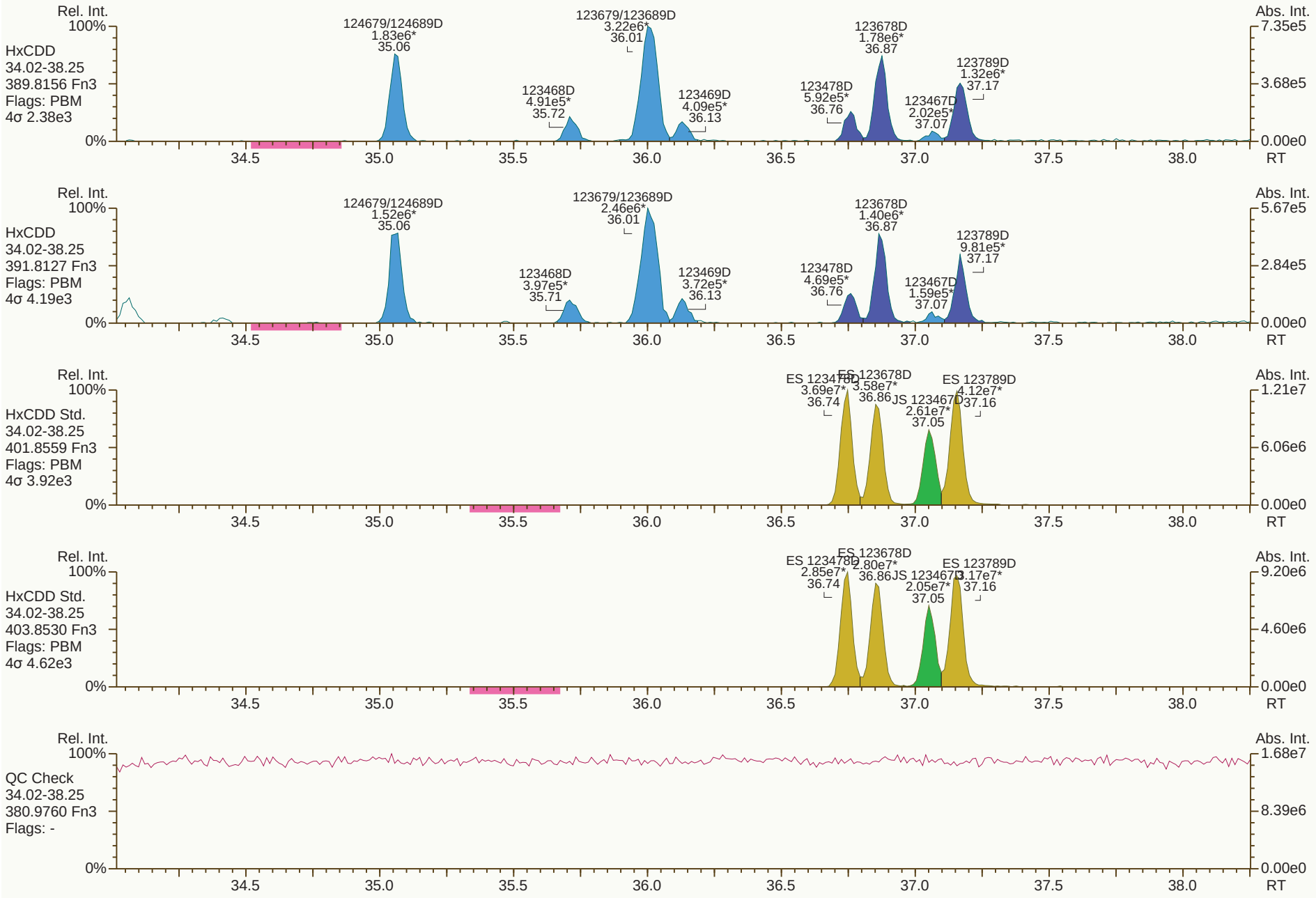
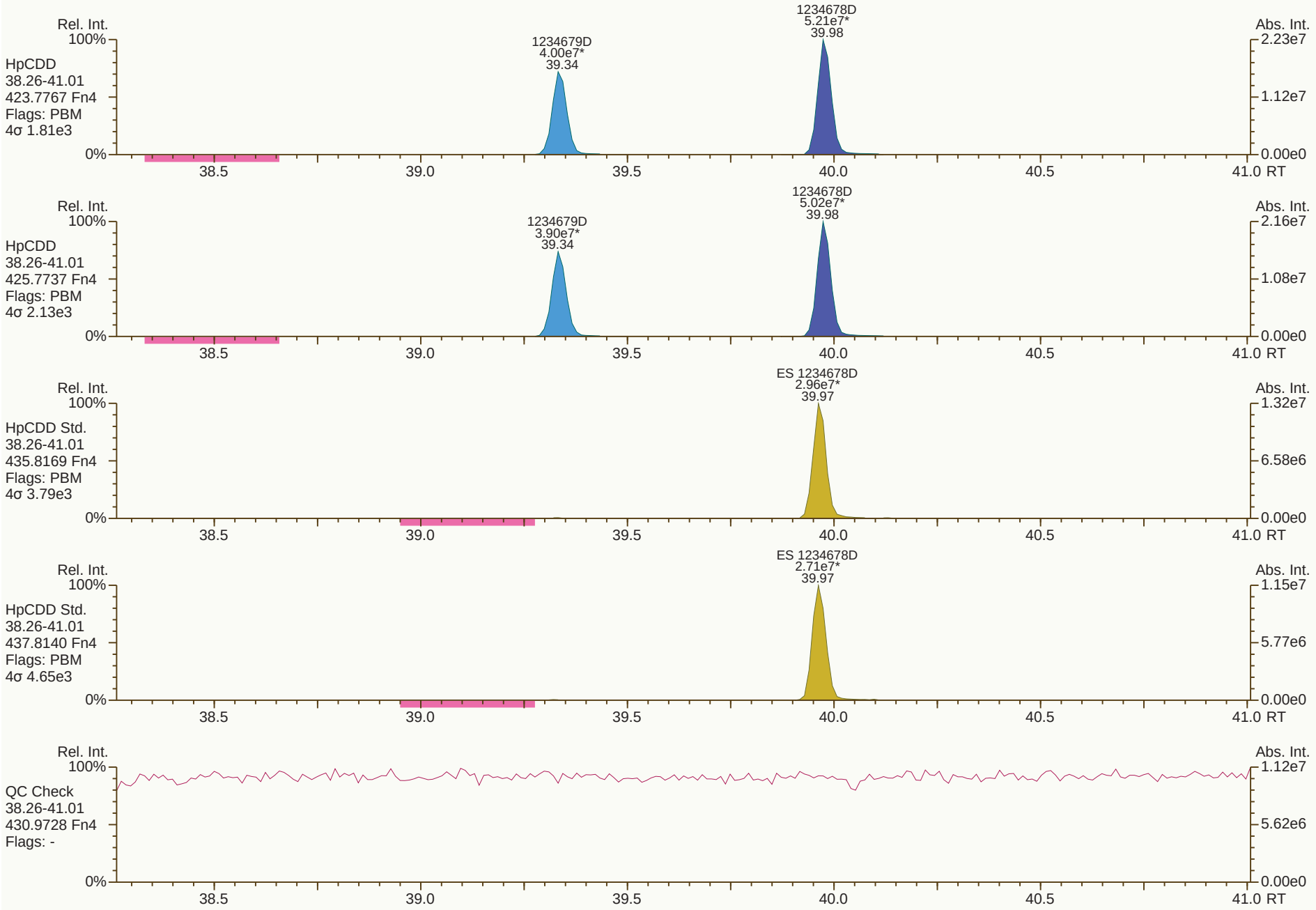
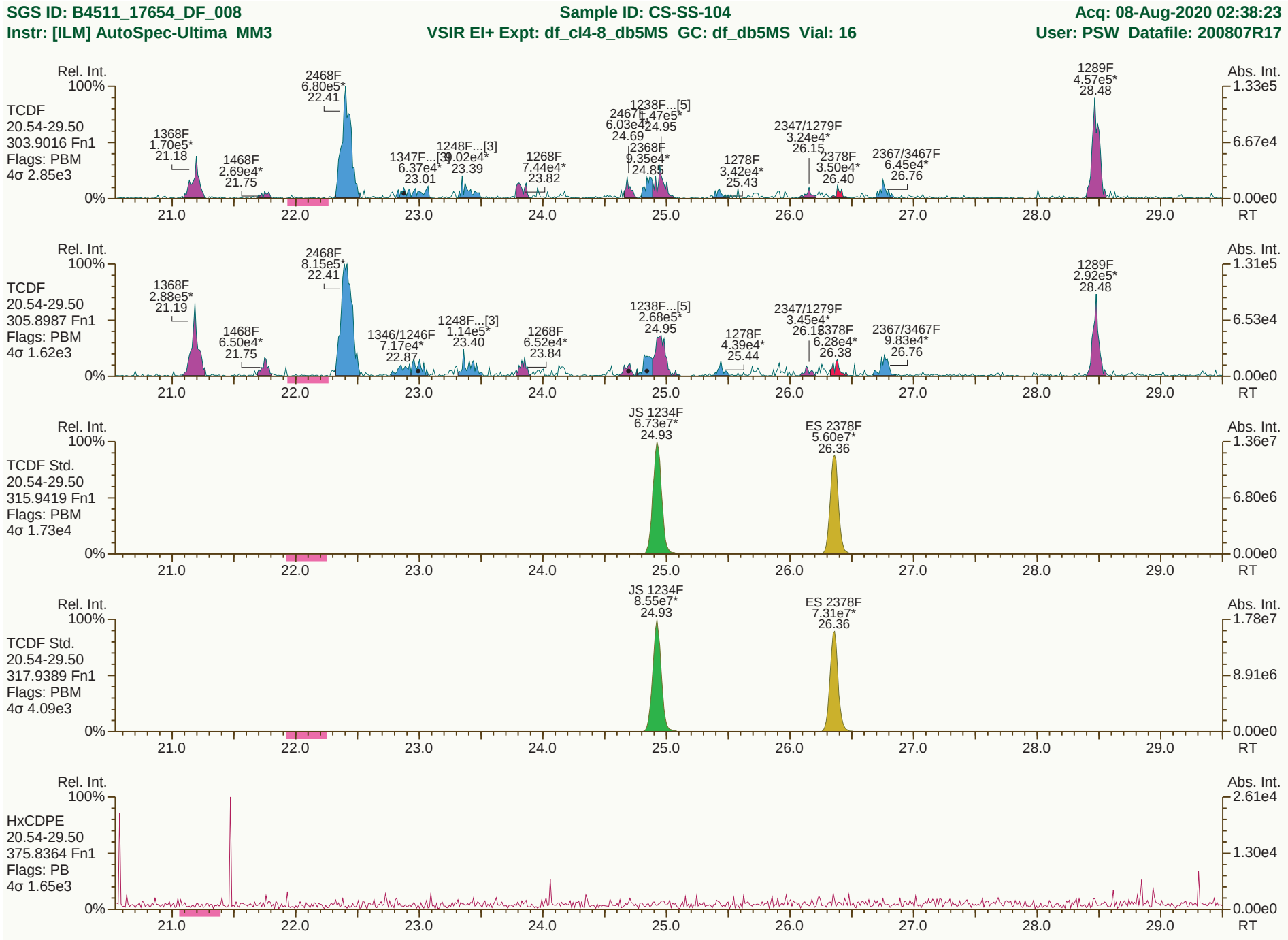
32.0
32.5
33.0
33.5
34.0 RT



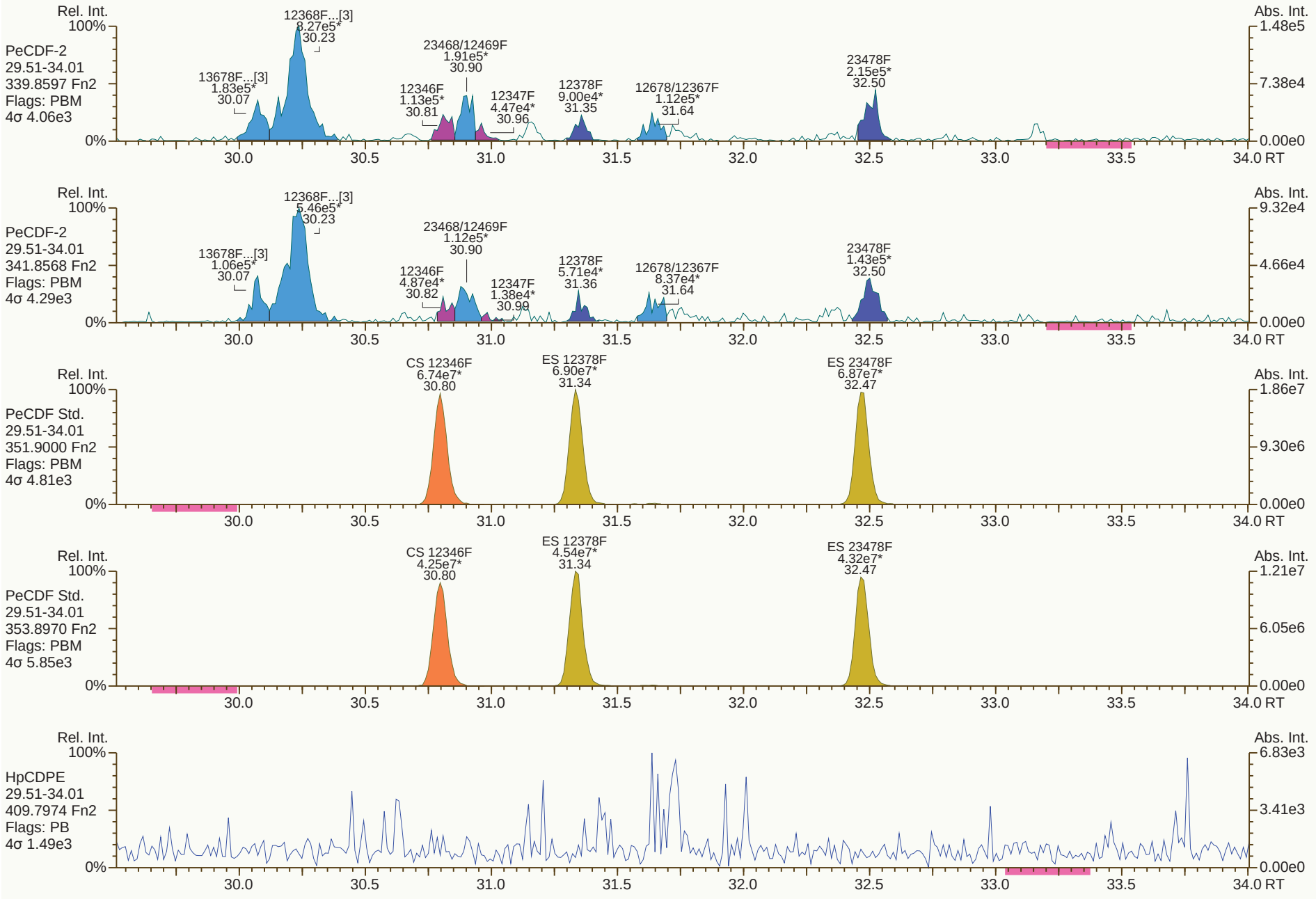
Results: P:\B4500_B4599\B4511\B4511_17654 DF\Resources\B4511_17654_DF_008.utp_res, saved 10-Aug-2020 09:02 (PSW) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 5722, 4683 scc: 578-088 *PKD: 10-Aug-2020 08:50 Printed: 10-Aug-2020 09:23 Page 4 of 12*

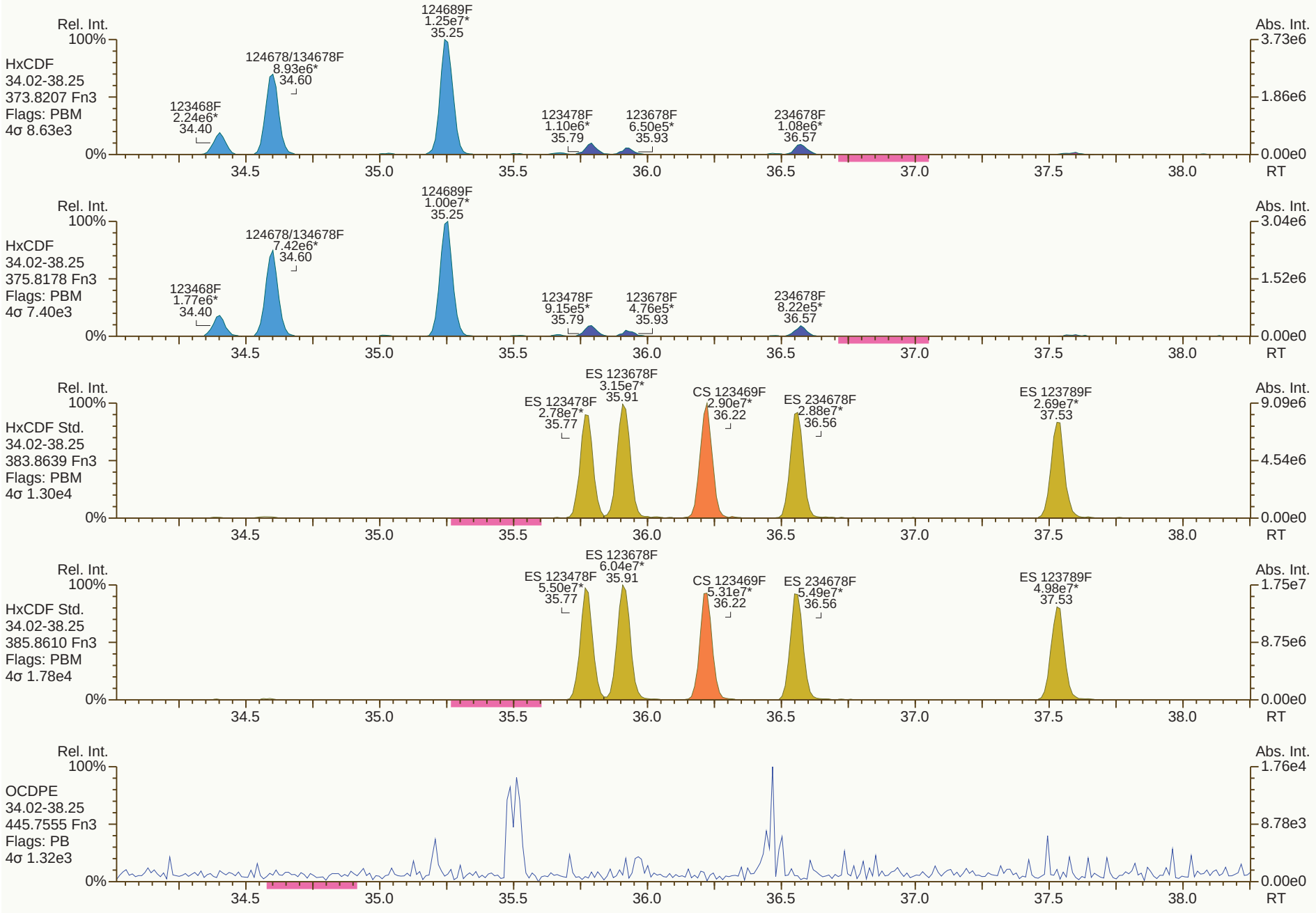

Rel. Int.
100%
HpCDD
38.26-41.01
423.7767 Fn4
Flags: PBM
4σ 1.81e3
0%
1234679D
4.00e7*
39.34
1234678D
5.21e7*
39.98
Abs. Int.
2.23e7
1.12e7
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.26-41.01
425.7737 Fn4
Flags: PBM
4σ 2.13e3
0%
1234679D
3.90e7*
39.34
1234678D
5.02e7*
39.98
Abs. Int.
2.16e7
1.08e7
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
435.8169 Fn4
Flags: PBM
4σ 3.79e3
0%
ES 1234678D
2.96e7*
39.97
Abs. Int.
1.32e7
6.58e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
437.8140 Fn4
Flags: PBM
4σ 4.65e3
0%
ES 1234678D
2.71e7*
39.97
Abs. Int.
1.15e7
5.77e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.26-41.01
430.9728 Fn4
Flags: -
0%
Abs. Int.
1.12e7
5.62e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT


OCDD
2.22e8*
42.40
Rel. Int.
100%
OCDD
41.02-45.00
457.7377 Fn5
Flags: PBM
4σ 4.50e3
0%
Abs. Int.
7.94e7
3.97e7
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDD
2.46e8*
42.40
Rel. Int.
100%
OCDD
41.02-45.00
459.7348 Fn5
Flags: PBM
4σ 3.65e3
0%
Abs. Int.
8.90e7
4.45e7
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
2.96e7*
42.39
Rel. Int.
100%
OCDD Std.
41.02-45.00
469.7780 Fn5
Flags: PBM
4σ 2.89e3
0%
Abs. Int.
1.04e7
5.19e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
3.25e7*
42.39
Rel. Int.
100%
OCDD Std.
41.02-45.00
471.7750 Fn5
Flags: PBM
4σ 3.47e3
0%
Abs. Int.
1.16e7
5.82e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
5.63e6
2.82e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT


SGS ID: B4511_17654_DF_008
Sample ID: CS-SS-104
Acq: 08-Aug-2020 02:38:23
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 16
User: PSW Datafile: 200807R17
TCDF
20.54-29.50
303.9016 Fn1
Flags: PBM
4σ 2.85e3
1368F 1.70e5* 21.18
1468F 2.69e4* 21.75
2468F 6.80e5* 22.41
1347F...[3] 6.37e4* 23.01
1248F...[3] 9.02e4* 23.39
1268F 7.44e4* 23.82
2467F 6.03e4* 24.69
1238F...[5] 1.47e5* 24.95
2368F 9.35e4* 24.85
1278F 3.42e4* 25.43
2347/1279F 3.24e4* 26.15
2378F 3.50e4* 26.40
2367/3467F 6.45e4* 26.76
1289F 4.57e5* 28.48
TCDF
20.54-29.50
305.8987 Fn1
Flags: PBM
4σ 1.62e3
1368F 2.88e5* 21.19
1468F 6.50e4* 21.75
2468F 8.15e5* 22.41
1346/1246F 7.17e4* 22.87
1248F...[3] 1.14e5* 23.40
1268F 6.52e4* 23.84
1238F...[5] 2.68e5* 24.95
1278F 4.39e4* 25.44
2347/1279F 3.45e4* 26.15
2378F 6.28e4* 26.38
2367/3467F 9.83e4* 26.76
1289F 2.92e5* 28.48
TCDF Std.
20.54-29.50
315.9419 Fn1
Flags: PBM
4σ 1.73e4
JS 1234F 6.73e7* 24.93
ES 2378F 5.60e7* 26.36
TCDF Std.
20.54-29.50
317.9389 Fn1
Flags: PBM
4σ 4.09e3
JS 1234F 8.55e7* 24.93
ES 2378F 7.31e7* 26.36
HxCDPE
20.54-29.50
375.8364 Fn1
Flags: PB
4σ 1.65e3
Rel. Int.
Abs. Int.
RT
Results: P:\B4500_B4599\B4511\B4511_17654 DF\Resources\B4511_17654_DF_008.utp_res, saved 10-Aug-2020 09:02 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 4117, 3526, 9510 scc: 578-088
PKD: 10-Aug-2020 08:50 Printed: 10-Aug-2020 09:23 Page 7 of 12


13468/12468F
1.98e6*
28.48
Rel. Int.
100%
0%
Abs. Int.
4.45e5
2.23e5
0.00e0
PeCDF-1
20.54-29.50
339.8597 Fn1
Flags: PBM
4σ 1.89e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
13468/12468F
1.35e6*
28.48
Rel. Int.
100%
0%
Abs. Int.
3.46e5
1.73e5
0.00e0
PeCDF-1
20.54-29.50
341.8568 Fn1
Flags: PBM
4σ 1.84e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
0%
Abs. Int.
3.20e6
1.60e6
0.00e0
QC Check
20.54-29.50
316.9824 Fn1
Flags: -
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT

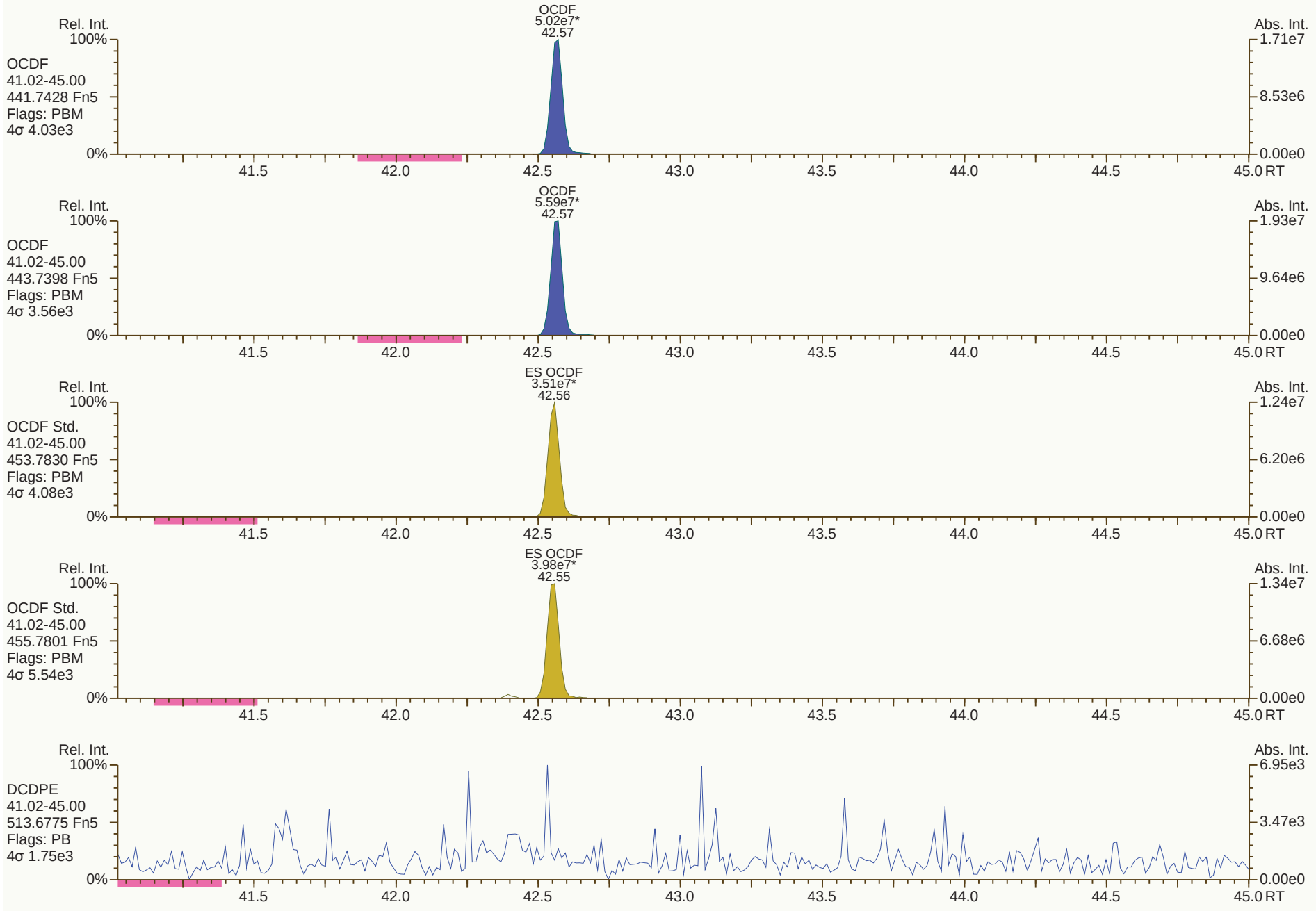

Rel. Int.
100%
PeCDF-2
29.51-34.01
339.8597 Fn2
Flags: PBM
4σ 4.06e3
0%
12368F...[3]
8.27e5*
30.23
13678F...[3]
1.83e5*
30.07
23468/12469F
1.91e5*
30.90
12346F
1.13e5*
30.81
12347F
4.47e4*
30.96
12378F
9.00e4*
31.35
12678/12367F
1.12e5*
31.64
23478F
2.15e5*
32.50
Abs. Int.
1.48e5
7.38e4
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF-2
29.51-34.01
341.8568 Fn2
Flags: PBM
4σ 4.29e3
0%
12368F...[3]
5.46e5*
30.23
13678F...[3]
1.06e5*
30.07
23468/12469F
1.12e5*
30.90
12346F
4.87e4*
30.82
12347F
1.38e4*
30.99
12378F
5.71e4*
31.36
12678/12367F
8.37e4*
31.64
23478F
1.43e5*
32.50
Abs. Int.
9.32e4
4.66e4
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
351.9000 Fn2
Flags: PBM
4σ 4.81e3
0%
CS 12346F
6.74e7*
30.80
ES 12378F
6.90e7*
31.34
ES 23478F
6.87e7*
32.47
Abs. Int.
1.86e7
9.30e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
353.8970 Fn2
Flags: PBM
4σ 5.85e3
0%
CS 12346F
4.25e7*
30.80
ES 12378F
4.54e7*
31.34
ES 23478F
4.32e7*
32.47
Abs. Int.
1.21e7
6.05e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
HpCDPE
29.51-34.01
409.7974 Fn2
Flags: PB
4σ 1.49e3
0%
Abs. Int.
6.83e3
3.41e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT



Results: P:\B4500_B4599\B4511\B4511_17654 DF\Resources\B4511_17654_DF_008.utp_res, saved 10-Aug-2020 09:02 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 3908, 6930, 7439 scc: 578-088 *PKD: 10-Aug-2020 08:50 Printed: 10-Aug-2020 09:23 Page 10 of 12*


Rel. Int.
100%
HpCDF
38.26-41.01
407.7818 Fn4
Flags: PBM
4σ 3.03e3
1234678F
2.36e7*
39.07
1234689F
5.59e7*
39.48
Abs. Int.
2.26e7
1.13e7
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF
38.26-41.01
409.7788 Fn4
Flags: PBM
4σ 1.69e3
1234678F
2.33e7*
39.07
1234689F
5.37e7*
39.48
Abs. Int.
2.16e7
1.08e7
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.26-41.01
417.8253 Fn4
Flags: PBM
4σ 6.05e3
ES 1234678F
1.93e7*
39.06
CS 1234689F
1.91e7*
39.47
ES 1234789F
1.47e7*
40.38
Abs. Int.
7.75e6
3.88e6
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.26-41.01
419.8220 Fn4
Flags: PBM
4σ 5.09e3
ES 1234678F
4.39e7*
39.06
CS 1234689F
4.37e7*
39.47
ES 1234789F
3.30e7*
40.38
Abs. Int.
1.78e7
8.88e6
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
NCDPE
38.26-41.01
479.7165 Fn4
Flags: PB
4σ 2.07e3
RT
Abs. Int.
2.65e5
1.32e5
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT


OCDF
5.02e7*
42.57
Rel. Int.
100%
OCDF
41.02-45.00
441.7428 Fn5
Flags: PBM
4σ 4.03e3
0%
Abs. Int.
1.71e7
8.53e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDF
5.59e7*
42.57
Rel. Int.
100%
OCDF
41.02-45.00
443.7398 Fn5
Flags: PBM
4σ 3.56e3
0%
Abs. Int.
1.93e7
9.64e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDF
3.51e7*
42.56
Rel. Int.
100%
OCDF Std.
41.02-45.00
453.7830 Fn5
Flags: PBM
4σ 4.08e3
0%
Abs. Int.
1.24e7
6.20e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDF
3.98e7*
42.55
Rel. Int.
100%
OCDF Std.
41.02-45.00
455.7801 Fn5
Flags: PBM
4σ 5.54e3
0%
Abs. Int.
1.34e7
6.68e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
DCDPE
41.02-45.00
513.6775 Fn5
Flags: PB
4σ 1.75e3
0%
Abs. Int.
6.95e3
3.47e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

Lab ID: B4511_17654_DF_009 **Acq'd:** 08 Aug 2020 03:25 PSW **Wt/Vol:** 7.99 g **ICAL:** MM3_DF_10012020_12JUN2020

Client ID: SS-108-D **UTP:** 10-Aug-2020 09:02:31 PSW **J-level:** 0.626 pg/g **Split:** 1 **Checkcode:** 704-809-DZT

Datafile: 200807R18 **Report:** 10 Aug 2020 09:07 pw **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	NotFnd		1.0009	-		-	-	-	1.18	-	3463	0.114
12378-PeCDD	32.82	J EMPC	1.0006	1.0005	-0.2	7.05E+04	2.59	N	1.14	0.225	5092	0.141
123478-HxCDD	36.74	J EMPC	1.0004	1.0004	0	6.73E+04	2.08	N	1.09	0.243	5771	0.17
123678-HxCDD	36.86	J EMPC	1.0035	1.0036	+0.2	1.32E+05	1.49	N	1.13	0.488	5771	0.173
123789-HxCDD	37.15	J	1.0116	1.0116	0	1.48E+05	1.39	Y	1.05	0.502	5771	0.164
1234678-HpCDD	39.96		1.0003	1.0003	0	3.21E+06	1.06	Y	0.98	15.4	3799	0.107
OCDD	42.38		1.0003	1.0002	-0.3	1.50E+07	0.88	Y	1.08	134	4347	0.254
2378-TCDF	26.37	J	1.0006	1.0011	+0.8	1.32E+05	0.68	Y	0.98	0.285	2893	0.0721
12378-PeCDF	31.33	J	1.0006	1.0005	-0.2	1.55E+05	1.46	Y	0.95	0.376	6982	0.159
23478-PeCDF	32.48	J	1.0005	1.0008	+0.6	1.95E+05	1.56	Y	0.95	0.486	6982	0.164
123478-HxCDF	35.77	J	1.0005	1.0005	0	1.90E+05	1.16	Y	1.20	0.505	3283	0.0712
123678-HxCDF	35.91	J	1.0004	1.0004	0	1.31E+05	1.11	Y	1.07	0.337	3283	0.0701
234678-HxCDF	36.55	J	1.0005	1.0004	-0.2	1.09E+05	1.26	Y	1.10	0.31	3283	0.0734
123789-HxCDF	NotFnd		1.0004	-		-	-	-	1.09	-	3283	0.0979
1234678-HpCDF	39.05	J	1.0003	1.0003	0	8.53E+05	0.97	Y	1.28	2.64	3836	0.0774
1234789-HpCDF	40.37	J	1.0002	1.0001	-0.2	4.98E+04	0.99	Y	1.27	0.229	3836	0.105
OCDF	42.54	J	1.0003	1.0002	-0.3	5.93E+05	0.81	Y	1.01	4.92	3476	0.201

Name	Act RT	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	27.26	1.0255	1.0256	+0.2	7.14E+07	0.74	Y	1.01	80.6
ES 12378-PeCDD	32.81	1.2330	1.2340	+2.0	6.92E+07	1.72	Y	0.87	90.4
ES 123478-HxCDD	36.72	0.9917	0.9916	-0.2	6.36E+07	1.32	Y	1.10	69
ES 123678-HxCDD	36.84	0.9947	0.9947	0	6.02E+07	1.29	Y	1.06	67.4
ES 123789-HxCDD	37.14	1.0028	1.0028	0	7.03E+07	1.27	Y	1.22	68.6
ES 1234678-HpCDD	39.95	1.0785	1.0787	+0.5	5.32E+07	1.07	Y	0.99	63.7
ES OCDD	42.37	1.1439	1.1441	+0.5	5.21E+07	0.96	Y	0.67	46.2
ES 2378-TCDF	26.34	1.0572	1.0575	+0.5	1.18E+08	0.79	Y	1.01	84.2
ES 12378-PeCDF	31.32	1.2558	1.2571	+2.4	1.09E+08	1.59	Y	0.90	87.3
ES 23478-PeCDF	32.45	1.3012	1.3027	+2.9	1.06E+08	1.59	Y	0.89	86.2
ES 123478-HxCDF	35.75	0.9655	0.9654	-0.2	7.88E+07	0.53	Y	1.43	65.5
ES 123678-HxCDF	35.89	0.9693	0.9692	-0.2	9.08E+07	0.54	Y	1.63	66.2
ES 234678-HxCDF	36.54	0.9867	0.9866	-0.2	8.05E+07	0.52	Y	1.48	64.7
ES 123789-HxCDF	37.51	1.0130	1.0130	0	6.80E+07	0.52	Y	1.29	62.5
ES 1234678-HpCDF	39.04	1.0540	1.0542	+0.5	6.31E+07	0.44	Y	1.15	65.4
ES 1234789-HpCDF	40.37	1.0898	1.0900	+0.5	4.30E+07	0.44	Y	0.91	56.4
ES OCDF	42.54	1.1484	1.1486	+0.5	5.97E+07	0.91	Y	0.83	42.9

Lab ID: B4511_17654_DF_009 | Acq'd: 08 Aug 2020 03:25 PSW | Wt/Vol: 7.99 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: SS-108-D | UTP: 10-Aug-2020 09:02:31 PSW | J-level: 0.626 pg/g | Split: 1 | Checkcode: 704-809-DZT

Datafile: 200807R18 | Report: 10 Aug 2020 09:07 pw | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %	
JS 1234-TCDD	26.58		-	-	-	8.79E+07	0.78	Y	-	-	
JS 1234-TCDF	24.91		-	-	-	1.39E+08	0.78	Y	-	-	
JS 123467-HxCDD	37.03		-	-	-	4.21E+07	1.26	Y	-	-	
CS 37Cl-2378-TCDD	27.29		1.0265	1.0265	0	3.41E+07	n/a	-	1.04	93.7	
CS 12347-PeCDD	32.30		1.2141	1.2150	+1.7	6.74E+07	1.67	Y	0.74	104	
CS 12346-PeCDF	30.78		1.2343	1.2355	+2.2	1.08E+08	1.54	Y	0.86	90.6	
CS 123469-HxCDF	36.20		0.9776	0.9775	-0.2	8.29E+07	0.52	Y	1.36	72.6	
CS 1234689-HpCDF	39.45		1.0650	1.0652	+0.5	6.33E+07	0.44	Y	1.05	71.3	
~~SS 37Cl-2378-TCDD~~	~~27.29~~		~~1.0265~~	~~1.0265~~	~~0~~	~~3.41E+07~~	~~n/a~~		~~1.04~~	~~115~~	Not used in this project.
~~SS 12347-PeCDD~~	~~32.30~~		~~1.2141~~	~~1.2150~~	~~+1.7~~	~~6.74E+07~~	~~1.67~~	~~Y~~	~~0.86~~	~~114~~	CL 10Aug20
~~SS 12346-PeCDF~~	~~30.78~~		~~1.2343~~	~~1.2355~~	~~+2.2~~	~~1.08E+08~~	~~1.54~~	~~Y~~	~~0.96~~	~~103~~	
~~SS 123469-HxCDF~~	~~36.20~~		~~0.9776~~	~~0.9775~~	~~-0.2~~	~~8.29E+07~~	~~0.52~~	~~Y~~	~~0.83~~	~~109~~	
~~SS 1234689-HpCDF~~	~~39.45~~		~~1.0650~~	~~1.0652~~	~~+0.5~~	~~6.33E+07~~	~~0.44~~	~~Y~~	~~0.92~~	~~109~~	

Totals	Conc	EMPC
Total TCDD	4.87	6.93
Total PeCDD	4.55	5.54
Total HxCDD	8.45	9.43
Total HpCDD	44.2	44.2
Total Tetra-Octa Dioxins	196	200
Total TCDF	10.7	12.5
Total PeCDF	2.31	4.48
Total HxCDF	4	4.44
Total HpCDF	5.84	6.11
Total Tetra-Octa Furans	27.7	32.5
Total Tetra-Octa Dioxins & Furans	224	233

Lab ID: B4511_17654_DF_009 **Acq'd:** 08 Aug 2020 03:25 PSW **Wt/Vol:** 7.99 g **ICAL:** MM3_DF_10012020_12JUN2020

Client ID: SS-108-D **UTP:** 10-Aug-2020 09:02:31 PSW **J-level:** 0.626 pg/g **Split:** 1 **Checkcode:** 704-809-DZT

Datafile: 200807R18 **Report:** 10 Aug 2020 09:07 pw **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1368-TCDD	23.40		0.8591	0.8583	-1.1	7.49E+05	0.79	Y	1.18	2.23	3463	0.114
1379-TCDD	23.79	EMPC	0.8732	0.8726	-0.9	4.15E+05	0.96	N	1.18	1.24	3463	0.114
1369-TCDD	NotFnd		0.8901						1.18		3463	0.114
1469-TCDD	NotFnd		0.9205						1.18		3463	0.114
1247/1246/1248/1249-TCDD	25.33		0.9301	0.9291	-1.5	7.45E+05	0.84	Y	1.18	2.22	3463	0.114
1378-TCDD	25.54	J EMPC	0.9374	0.9369	-0.8	1.06E+05	1.10	N	1.18	0.317	3463	0.114
1268-TCDD	25.76	J EMPC	0.9449	0.9450	+0.2	2.17E+04	1.43	N	1.18	0.0645	3463	0.114
1478-TCDD	NotFnd		0.9544						1.18		3463	0.114
1279-TCDD	26.20	J	0.9610	0.9609	-0.2	4.72E+04	0.80	Y	1.18	0.141	3463	0.114
1234/1269-TCDD	26.58	J	0.9746	0.9749	+0.5	4.35E+04	0.84	Y	1.18	0.129	3463	0.114
1236-TCDD	26.73	J	0.9802	0.9804	+0.3	4.96E+04	0.86	Y	1.18	0.148	3463	0.114
1237/1238-TCDD	26.99	J EMPC	0.9898	0.9898	0	1.48E+05	0.90	N	1.18	0.442	3463	0.114
1239-TCDD	NotFnd		0.9950						1.18		3463	0.114
2378-TCDD	**NotFnd**		**1.0009**						**1.18**		**3463**	**0.114**
1278-TCDD	NotFnd		1.0133						1.18		3463	0.114
1267-TCDD	NotFnd		1.0185						1.18		3463	0.114
1289-TCDD	NotFnd		1.0379						1.18		3463	0.114
12479/12468-PeCDD	30.26	J	0.9229	0.9225	-0.7	7.53E+05	1.55	Y	1.14	2.4	5092	0.141
12469-PeCDD	30.79	J EMPC	0.9396	0.9387	-1.7	5.62E+04	2.69	N	1.14	0.179	5092	0.141
12368-PeCDD	31.37	J	0.9568	0.9564	-0.8	2.62E+05	1.76	Y	1.14	0.835	5092	0.141
12478-PeCDD	31.58	J	0.9626	0.9626	0	6.90E+04	1.33	Y	1.14	0.22	5092	0.141
12379-PeCDD	31.68	J EMPC	0.9657	0.9656	-0.2	1.81E+05	1.86	N	1.14	0.577	5092	0.141
12369/12467/12489-PeCDD	31.95	J	0.9738	0.9739	+0.2	9.01E+04	1.74	Y	1.14	0.287	5092	0.141
12346/12347-PeCDD	32.32	J	0.9853	0.9852	-0.2	2.55E+05	1.76	Y	1.14	0.812	5092	0.141
12378-PeCDD	32.82	J EMPC	**1.0006**	**1.0005**	**-0.2**	**7.05E+04**	**2.59**	**N**	**1.14**	**0.225**	**5092**	**0.141**
12367-PeCDD	NotFnd		1.0034						1.14		5092	0.141
12389-PeCDD	NotFnd		1.0141						1.14		5092	0.141
124679/124689-HxCDD	35.04	J	0.9542	0.9541	-0.2	7.65E+05	1.14	Y	1.09	2.72	5771	0.169
123468-HxCDD	35.70	J	0.9721	0.9720	-0.2	7.31E+05	1.31	Y	1.09	2.6	5771	0.169
123679/123689-HxCDD	35.98	J	0.9799	0.9798	-0.2	6.49E+05	1.35	Y	1.09	2.31	5771	0.169
123469-HxCDD	36.12	J	0.9835	0.9835	0	8.90E+04	1.39	Y	1.09	0.316	5771	0.169
123478-HxCDD	36.74	J EMPC	**1.0004**	**1.0004**	**0**	**6.73E+04**	**2.08**	**N**	1.09	**0.243**	**5771**	**0.17**
123678-HxCDD	36.86	J EMPC	**1.0035**	**1.0036**	**+0.2**	**1.32E+05**	**1.49**	**N**	1.13	**0.488**	**5771**	**0.173**
123467-HxCDD	37.05	J EMPC	1.0088	1.0089	+0.2	7.03E+04	1.05	N	1.09	0.25	5771	0.169
123789-HxCDD	37.15	J	**1.0116**	**1.0116**	**0**	**1.48E+05**	**1.39**	**Y**	1.05	**0.502**	**5771**	**0.164**

Lab ID: B4511_17654_DF_009 | Acq'd: 08 Aug 2020 03:25 PSW | Wt/Vol: 7.99 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: SS-108-D | UTP: 10-Aug-2020 09:02:31 PSW | J-level: 0.626 pg/g | Split: 1 | Checkcode: 704-809-DZT

Datafile: 200807R18 | Report: 10 Aug 2020 09:07 pw | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

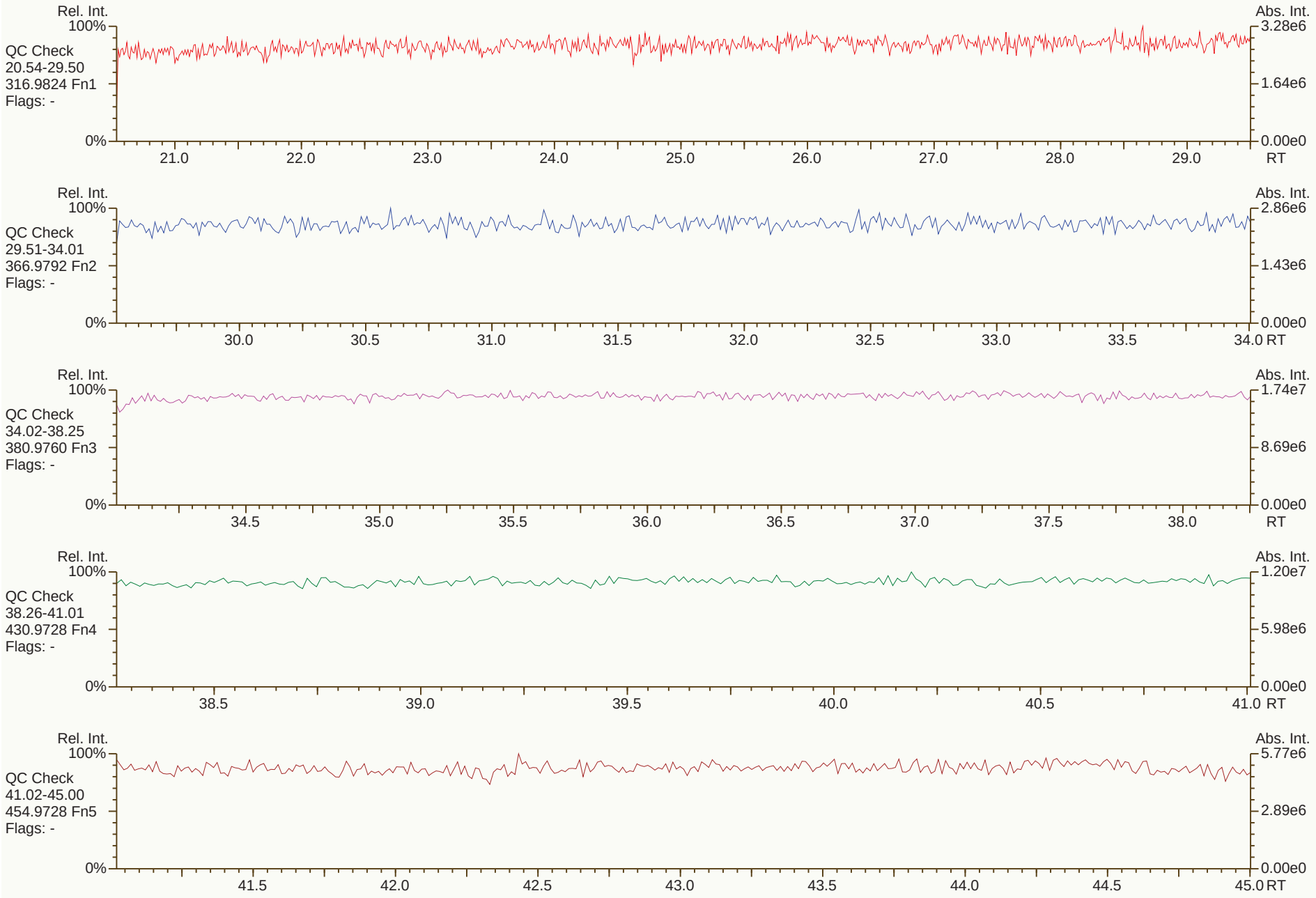
Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1234679-HpCDD	39.32		0.9843	0.9842	-0.2	6.03E+06	1.05	Y	0.98	28.8	3799	0.107
1234678-HpCDD	**39.96**		**1.0003**	**1.0003**	**0**	**3.21E+06**	**1.06**	**Y**	**0.98**	**15.4**	**3799**	**0.107**
OCDD	**42.38**		**1.0003**	**1.0002**	**-0.3**	**1.50E+07**	**0.88**	**Y**	**1.08**	**134**	**4347**	**0.254**
OCDD-a	42.38	**EMPC**	1.0002	1.0002	0	8.50E+05	2.02	N	0.07	123	8242	7.81
1368-TCDF	21.16		0.8044	0.8034	-1.3	9.36E+05	0.81	Y	0.98	2.02	2893	0.0721
1468-TCDF	21.77	J EMPC	0.8261	0.8263	+0.3	3.95E+04	0.52	N	0.98	0.085	2893	0.0721
2468-TCDF	22.40		0.8511	0.8502	-1.2	2.10E+06	0.73	Y	0.98	4.53	2893	0.0721
1346/1246-TCDF	22.83	J	0.8665	0.8668	+0.4	1.03E+05	0.78	Y	0.98	0.222	2893	0.0721
1347/1378/1247-TCDF	22.98		0.8723	0.8724	+0.1	3.46E+05	0.86	Y	0.98	0.745	2893	0.0721
1348-TCDF	23.26	J	0.8835	0.8829	-0.8	3.86E+04	0.78	Y	0.98	0.0832	2893	0.0721
1248/1367/1379-TCDF	23.39	J EMPC	0.8888	0.8878	-1.4	1.89E+05	1.10	N	0.98	0.408	2893	0.0721
1268-TCDF	23.81	J	0.9044	0.9037	-1.0	1.78E+05	0.71	Y	0.98	0.383	2893	0.0721
1467-TCDF	23.96	J EMPC	0.9098	0.9094	-0.6	3.02E+04	1.16	N	0.98	0.0651	2893	0.0721
1478-TCDF	24.14	J	0.9167	0.9162	-0.7	7.61E+04	0.86	Y	0.98	0.164	2893	0.0721
1369/1237-TCDF	24.54	J	0.9316	0.9317	+0.1	1.02E+05	0.72	Y	0.98	0.22	2893	0.0721
2467-TCDF	24.68	J EMPC	0.9369	0.9368	-0.1	1.70E+05	0.61	N	0.98	0.366	2893	0.0721
2368-TCDF	24.83		0.9430	0.9424	-0.9	3.13E+05	0.86	Y	0.98	0.675	2893	0.0721
1238/1234/1678/1469/1236-TCDF	24.94	J	0.9468	0.9466	-0.3	2.55E+05	0.72	Y	0.98	0.551	2893	0.0721
1278-TCDF	25.41	J	0.9651	0.9647	-0.6	1.50E+05	0.71	Y	0.98	0.323	2893	0.0721
1349-TCDF	NotFnd		0.9704						0.98		2893	0.0721
1267-TCDF	25.71	J EMPC	0.9761	0.9760	-0.2	7.39E+04	0.57	N	0.98	0.159	2893	0.0721
2346/1249-TCDF	NotFnd		0.9834						0.98		2893	0.0721
2347/1279-TCDF	26.13	J EMPC	0.9921	0.9918	-0.5	8.76E+04	0.97	N	0.98	0.189	2893	0.0721
2348-TCDF	26.28	J EMPC	0.9964	0.9975	+1.7	4.10E+04	0.48	N	0.98	0.0884	2893	0.0721
2378-TCDF	**26.37**	J	**1.0006**	**1.0011**	**+0.8**	**1.32E+05**	**0.68**	**Y**	**0.98**	**0.285**	**2893**	**0.0721**
2367/3467-TCDF	26.75	J	1.0156	1.0153	-0.5	2.20E+05	0.78	Y	0.98	0.474	2893	0.0721
1269-TCDF	NotFnd		1.0249						0.98		2893	0.0721
1239-TCDF	NotFnd		1.0357						0.98		2893	0.0721
1289-TCDF	28.46	J EMPC	1.0799	1.0803	+0.7	2.40E+05	1.78	N	0.98	0.517	2893	0.0721
13468/12468-PeCDF	28.45	J	0.9084	0.9084	0	4.17E+05	1.47	Y	0.95	1.02	3013	0.0697
13678/13467/12467-PeCDF	30.03	J EMPC	0.9591	0.9589	-0.4	1.99E+05	2.04	N	0.95	0.488	6982	0.161
12368/13478/12478-PeCDF	30.19	J EMPC	0.9642	0.9640	-0.4	4.15E+05	1.87	N	0.95	1.02	6982	0.161
14678-PeCDF	NotFnd		0.9675						0.95		6982	0.161
13479-PeCDF	NotFnd		0.9706						0.95		6982	0.161
13469/12479-PeCDF	NotFnd		0.9787						0.95		6982	0.161
12346-PeCDF	NotFnd		0.9833						0.95		6982	0.161

Lab ID: B4511_17654_DF_009 | Acq'd: 08 Aug 2020 03:25 PSW | Wt/Vol: 7.99 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: SS-108-D | UTP: 10-Aug-2020 09:02:31 PSW | J-level: 0.626 pg/g | Split: 1 | Checkcode: 704-809-DZT

Datafile: 200807R18 | Report: 10 Aug 2020 09:07 pw | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
23468/12469-PeCDF	30.88	J	0.9861	0.9861	0	1.75E+05	1.76	Y	0.95	0.429	6982	0.161
12347-PeCDF	NotFnd		0.9887						0.95		6982	0.161
12348-PeCDF	NotFnd		0.9938						0.95		6982	0.161
12378-PeCDF	**31.33**	J	**1.0006**	**1.0005**	**-0.2**	**1.55E+05**	**1.46**	**Y**	**0.95**	**0.376**	**6982**	**0.159**
12678/12367-PeCDF	31.62	J EMPC	1.0095	1.0096	+0.2	1.45E+05	1.99	N	0.95	0.355	6982	0.161
12379-PeCDF	NotFnd		1.0150						0.95		6982	0.161
12679-PeCDF	NotFnd		0.9926						0.95		6982	0.161
23467/12369-PeCDF	32.34	J EMPC	0.9966	0.9965	-0.2	1.24E+05	1.81	N	0.95	0.303	6982	0.161
23478-PeCDF	**32.48**	J	**1.0005**	**1.0008**	**+0.6**	**1.95E+05**	**1.56**	**Y**	**0.95**	**0.486**	**6982**	**0.164**
23478/12489-PeCDF	NotFnd		0.0000						0.95			
12489-PeCDF	NotFnd		1.0047						0.95		6982	0.161
12349-PeCDF	NotFnd		1.0107						0.95		6982	0.161
12389-PeCDF	NotFnd		1.0339						0.95		6982	0.161
123468-HxCDF	34.38	J	0.9617	0.9616	-0.2	1.74E+05	1.42	Y	1.11	0.492	3283	0.077
124678/134678-HxCDF	34.58	J	0.9673	0.9672	-0.2	4.94E+05	1.14	Y	1.11	1.4	3283	0.077
134679-HxCDF	NotFnd		0.9737						1.11		3283	0.077
124679-HxCDF	NotFnd		0.9792						1.11		3283	0.077
124689-HxCDF	35.23	J	0.9854	0.9852	-0.4	1.99E+05	1.28	Y	1.11	0.563	3283	0.077
123467-HxCDF	35.65	J	0.9972	0.9970	-0.4	1.41E+05	1.28	Y	1.11	0.399	3283	0.077
123478-HxCDF	**35.77**	J	**1.0005**	**1.0005**	**0**	**1.90E+05**	**1.16**	**Y**	**1.20**	**0.505**	**3283**	**0.0712**
123678-HxCDF	**35.91**	J	**1.0004**	**1.0004**	**0**	**1.31E+05**	**1.11**	**Y**	**1.07**	**0.337**	**3283**	**0.0701**
123479-HxCDF	NotFnd		1.0049						1.11		3283	0.077
123469-HxCDF	NotFnd		1.0089						1.11		3283	0.077
123679-HxCDF	NotFnd		0.9945						1.11		3283	0.077
234678-HxCDF	**36.55**	J	**1.0005**	**1.0004**	**-0.2**	**1.09E+05**	**1.26**	**Y**	**1.10**	**0.31**	**3283**	**0.0734**
234678/123689-HxCDF	NotFnd		0.0000						1.10			
123689-HxCDF	NotFnd		1.0054						1.11		3283	0.077
123789-HxCDF	**NotFnd**		**1.0004**						**1.09**		**3283**	**0.0979**
123789/123489-HxCDF	NotFnd		0.0000						1.09			
123489-HxCDF	37.54	J EMPC	1.0008	1.0006	-0.5	1.54E+05	1.04	N	1.11	0.435	3283	0.077
1234678-HpCDF	**39.05**	**J**	**1.0003**	**1.0003**	**0**	**8.53E+05**	**0.97**	**Y**	**1.28**	**2.64**	**3836**	**0.0774**
1234679-HpCDF	39.33	**J EMPC**	1.0072	1.0073	+0.2	7.08E+04	1.31	N	1.27	0.262	3836	0.0885
1234689-HpCDF	39.46	**J**	1.0107	1.0107	0	8.03E+05	1.18	Y	1.27	2.97	3836	0.0885
1234789-HpCDF	**40.37**	**J**	**1.0002**	**1.0001**	**-0.2**	**4.98E+04**	**0.99**	**Y**	**1.27**	**0.229**	**3836**	**0.105**
OCDF	**42.54**	**J**	**1.0003**	**1.0002**	**-0.3**	**5.93E+05**	**0.81**	**Y**	**1.01**	**4.92**	**3476**	**0.201**
OCDF-a	NotFnd		1.0002						0.06		3402	3.14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100%
QC Check
20.54-29.50
316.9824 Fn1
Flags: -
0%
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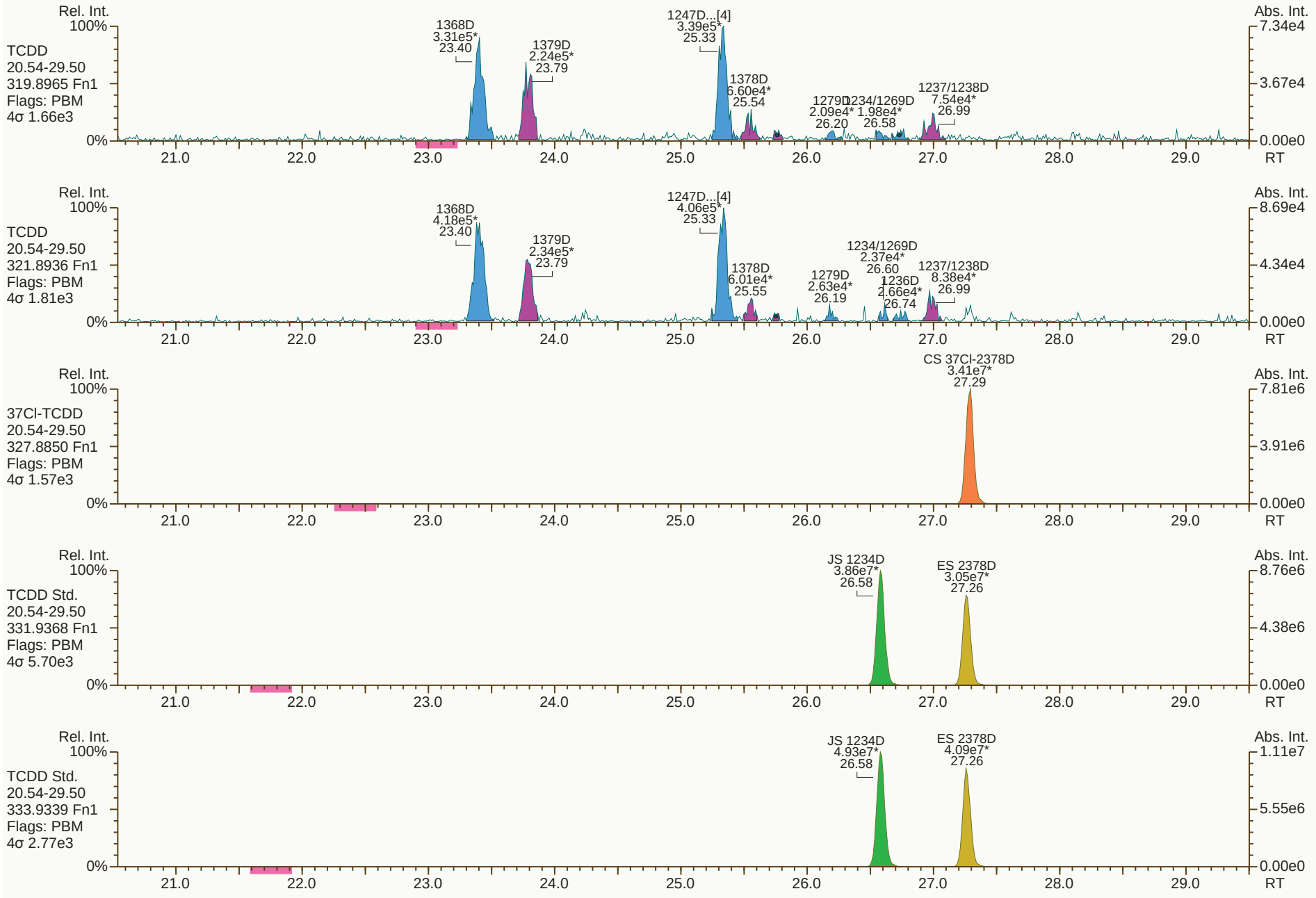
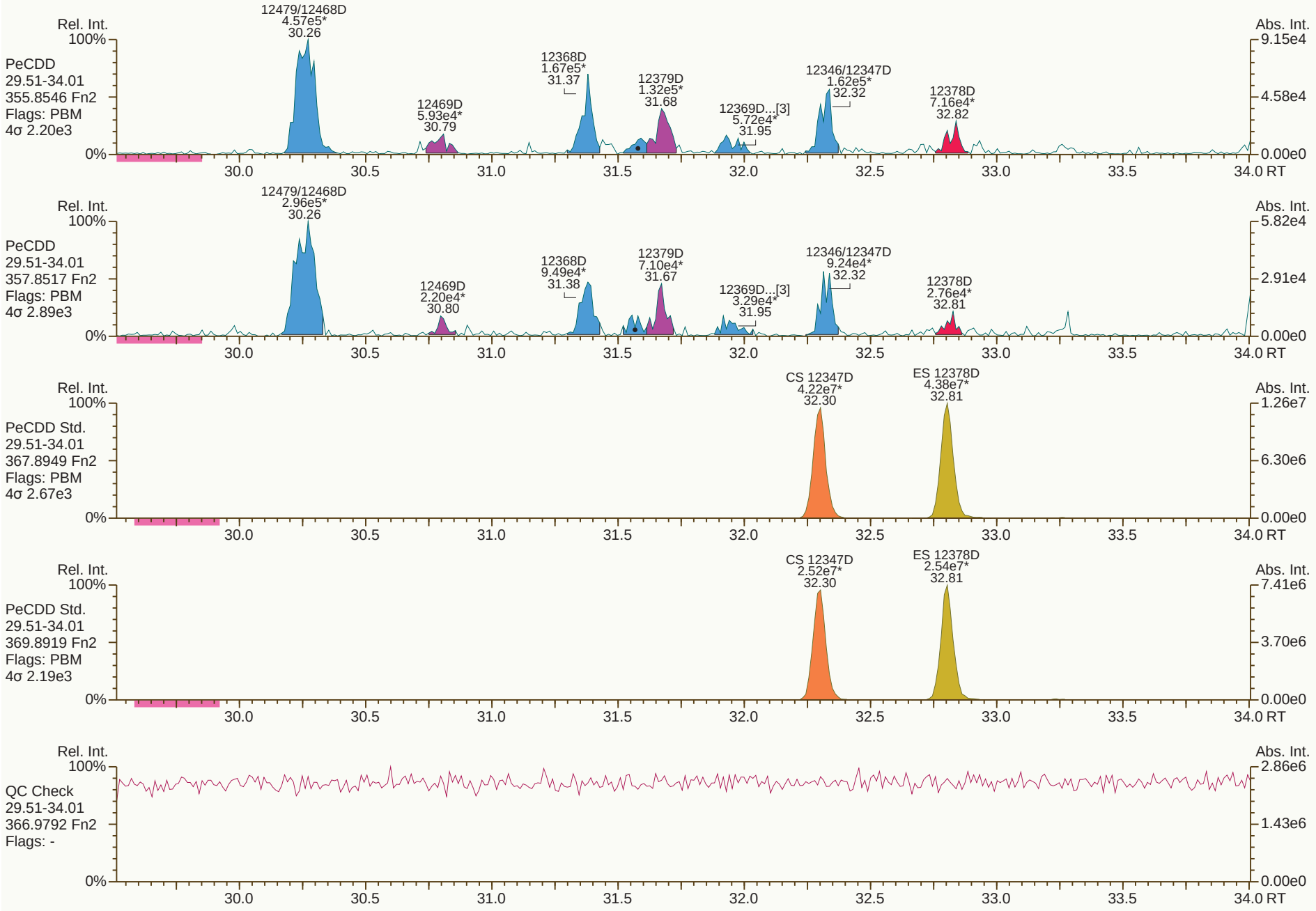
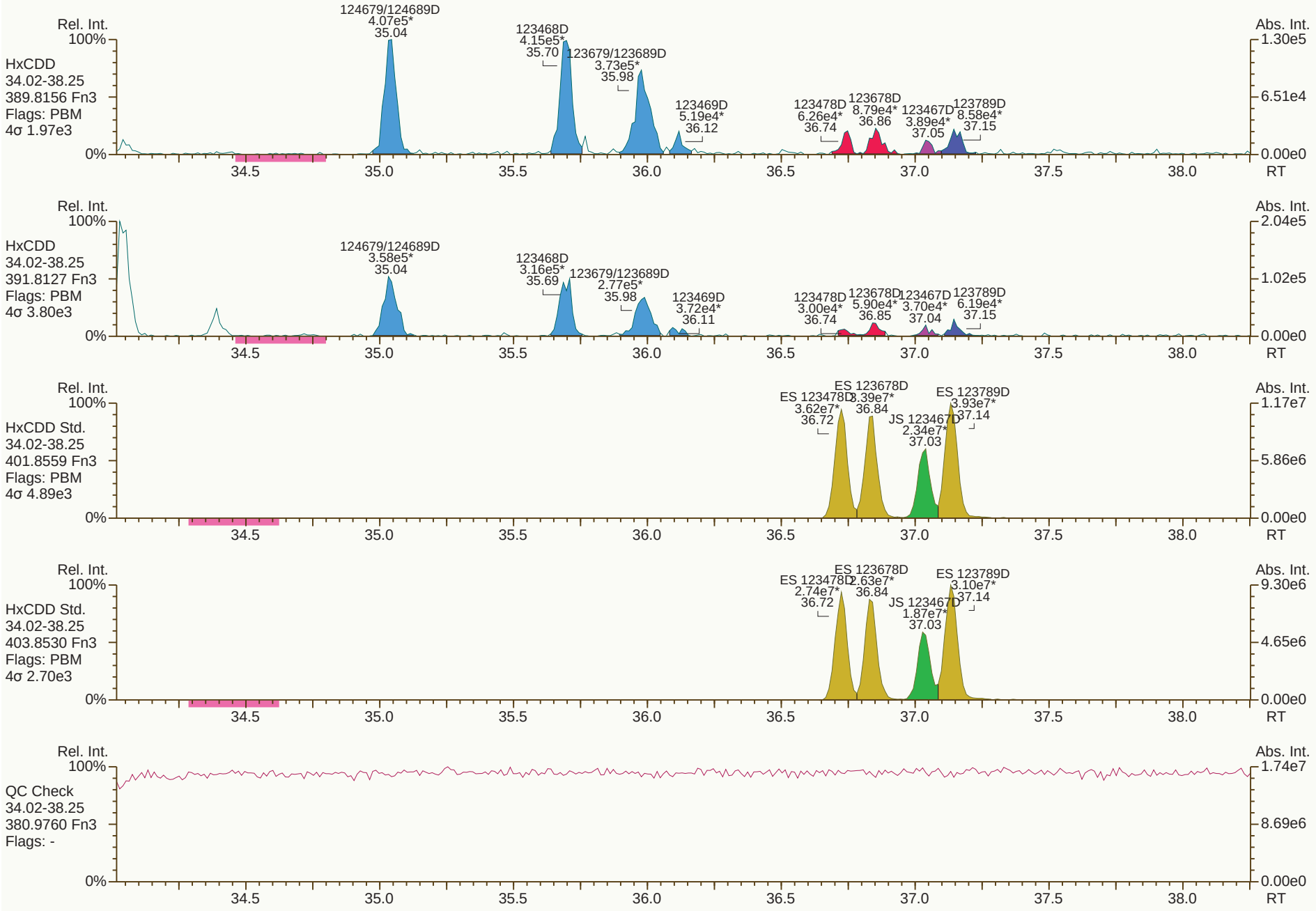
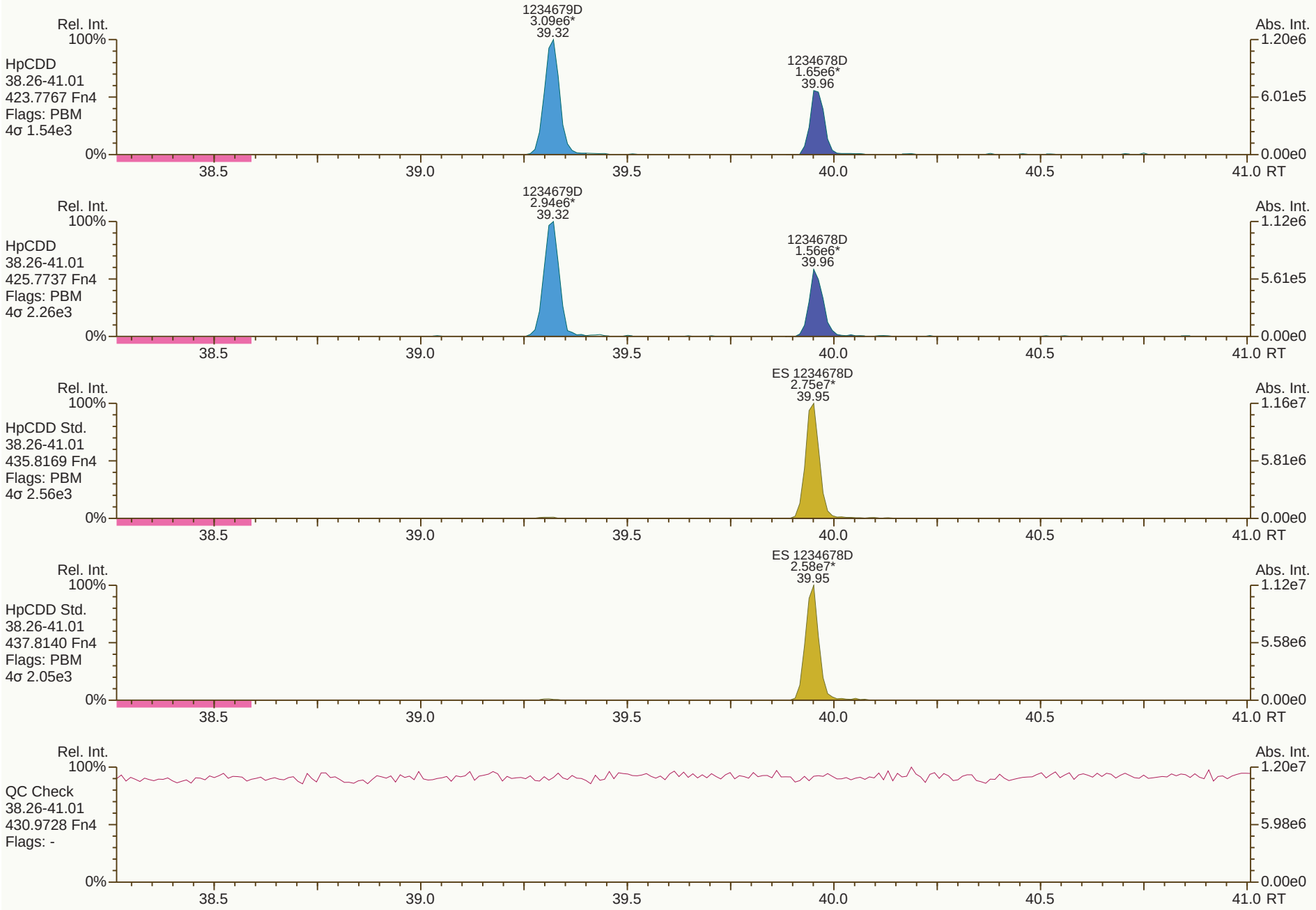
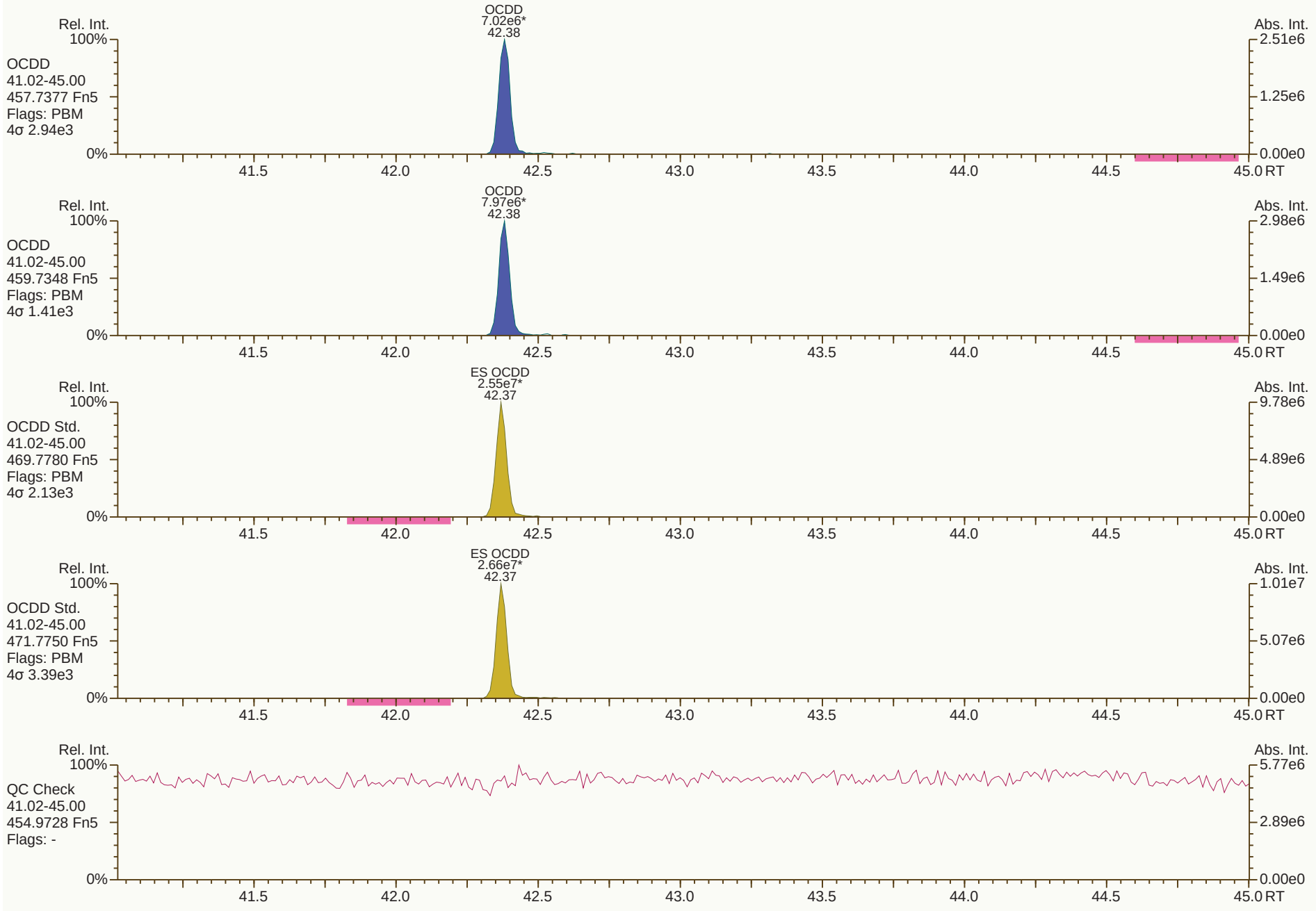
3.28e6
1.64e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
QC Check
29.51-34.01
366.9792 Fn2
Flags: -
0%
Abs. Int.
2.86e6
1.43e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
0%
Abs. Int.
1.74e7
8.69e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
QC Check
38.26-41.01
430.9728 Fn4
Flags: -
0%
Abs. Int.
1.20e7
5.98e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
5.77e6
2.89e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

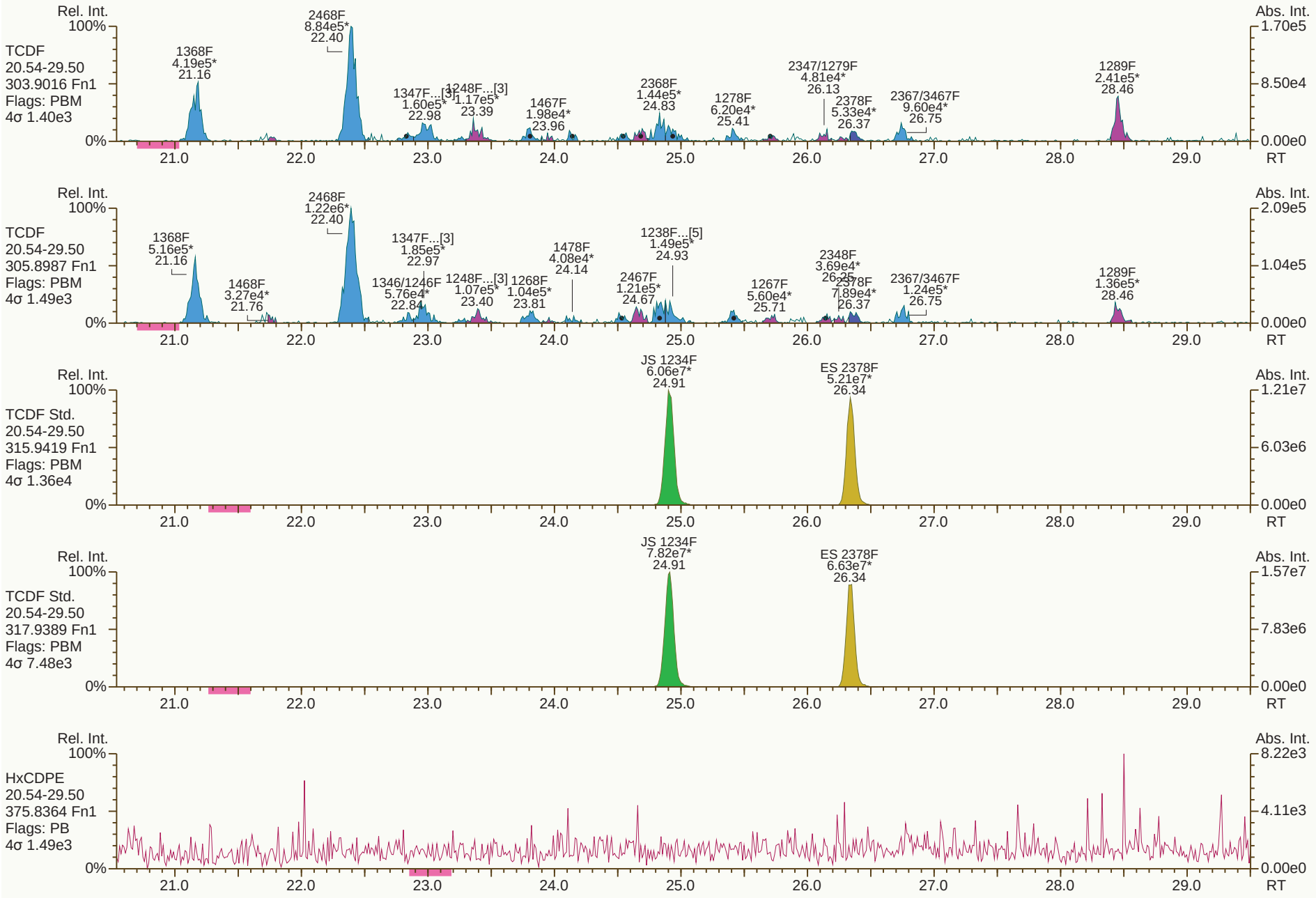

Rel. Int.
100%
TCDD
20.54-29.50
319.8965 Fn1
Flags: PBM
4σ 1.66e3
1368D
3.31e5*
23.40
1379D
2.24e5*
23.79
1247D...[4]
3.39e5*
25.33
1378D
6.60e4*
25.54
1279D
2.09e4*
26.20
1234/1269D
1.98e4*
26.58
1237/1238D
7.54e4*
26.99
Abs. Int.
7.34e4
3.67e4
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD
20.54-29.50
321.8936 Fn1
Flags: PBM
4σ 1.81e3
1368D
4.18e5*
23.40
1379D
2.34e5*
23.79
1247D...[4]
4.06e5*
25.33
1378D
6.01e4*
25.55
1279D
2.63e4*
26.19
1234/1269D
2.37e4*
26.60
1236D
2.66e4*
26.74
1237/1238D
8.38e4*
26.99
Abs. Int.
8.69e4
4.34e4
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
37Cl-TCDD
20.54-29.50
327.8850 Fn1
Flags: PBM
4σ 1.57e3
CS 37Cl-2378D
3.41e7*
27.29
Abs. Int.
7.81e6
3.91e6
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
331.9368 Fn1
Flags: PBM
4σ 5.70e3
JS 1234D
3.86e7*
26.58
ES 2378D
3.05e7*
27.26
Abs. Int.
8.76e6
4.38e6
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
333.9339 Fn1
Flags: PBM
4σ 2.77e3
JS 1234D
4.93e7*
26.58
ES 2378D
4.09e7*
27.26
Abs. Int.
1.11e7
5.55e6
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
Abs. Int.
PeCDD
29.51-34.01
355.8546 Fn2
Flags: PBM
4σ 2.20e3
12479/12468D
4.57e5*
30.26
12469D
5.93e4*
30.79
12368D
1.67e5*
31.37
12379D
1.32e5*
31.68
12369D...[3]
5.72e4*
31.95
12346/12347D
1.62e5*
32.32
12378D
7.16e4*
32.82
PeCDD
29.51-34.01
357.8517 Fn2
Flags: PBM
4σ 2.89e3
12479/12468D
2.96e5*
30.26
12469D
2.20e4*
30.80
12368D
9.49e4*
31.38
12379D
7.10e4*
31.67
12369D...[3]
3.29e4*
31.95
12346/12347D
9.24e4*
32.32
12378D
2.76e4*
32.81
PeCDD Std.
29.51-34.01
367.8949 Fn2
Flags: PBM
4σ 2.67e3
CS 12347D
4.22e7*
32.30
ES 12378D
4.38e7*
32.81
PeCDD Std.
29.51-34.01
369.8919 Fn2
Flags: PBM
4σ 2.19e3
CS 12347D
2.52e7*
32.30
ES 12378D
2.54e7*
32.81
QC Check
29.51-34.01
366.9792 Fn2
Flags: -
100%
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT

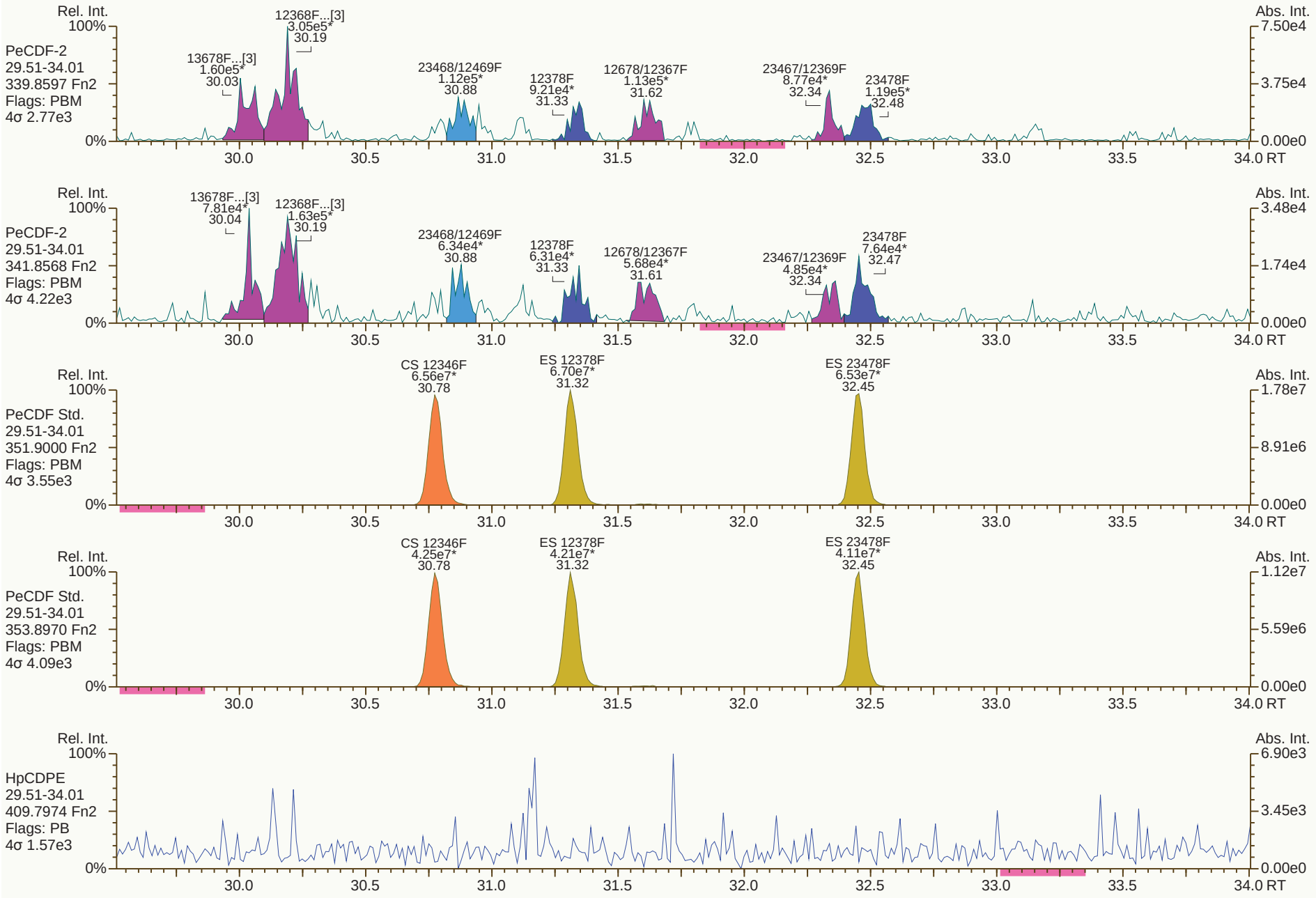

Rel. Int.
100%
HxCDD
34.02-38.25
389.8156 Fn3
Flags: PBM
4σ 1.97e3
124679/124689D
4.07e5*
35.04
123468D
4.15e5*
35.70
123679/123689D
3.73e5*
35.98
123469D
5.19e4*
36.12
123478D
6.26e4*
36.74
123678D
8.79e4*
36.86
123467D
3.89e4*
37.05
123789D
8.58e4*
37.15
Abs. Int.
1.30e5
6.51e4
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD
34.02-38.25
391.8127 Fn3
Flags: PBM
4σ 3.80e3
124679/124689D
3.58e5*
35.04
123468D
3.16e5*
35.69
123679/123689D
2.77e5*
35.98
123469D
3.72e4*
36.11
123478D
3.00e4*
36.74
123678D
5.90e4*
36.85
123467D
3.70e4*
37.04
123789D
6.19e4*
37.15
Abs. Int.
2.04e5
1.02e5
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
401.8559 Fn3
Flags: PBM
4σ 4.89e3
ES 123678D
ES 123478D
3.39e7*
3.62e7*
36.84
36.72
ES 123789D
3.93e7*
37.14
JS 123467D
2.34e7*
37.03
Abs. Int.
1.17e7
5.86e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
403.8530 Fn3
Flags: PBM
4σ 2.70e3
ES 123678D
ES 123478D
2.63e7*
2.74e7*
36.84
36.72
ES 123789D
3.10e7*
37.14
JS 123467D
1.87e7*
37.03
Abs. Int.
9.30e6
4.65e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
Abs. Int.
1.74e7
8.69e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT

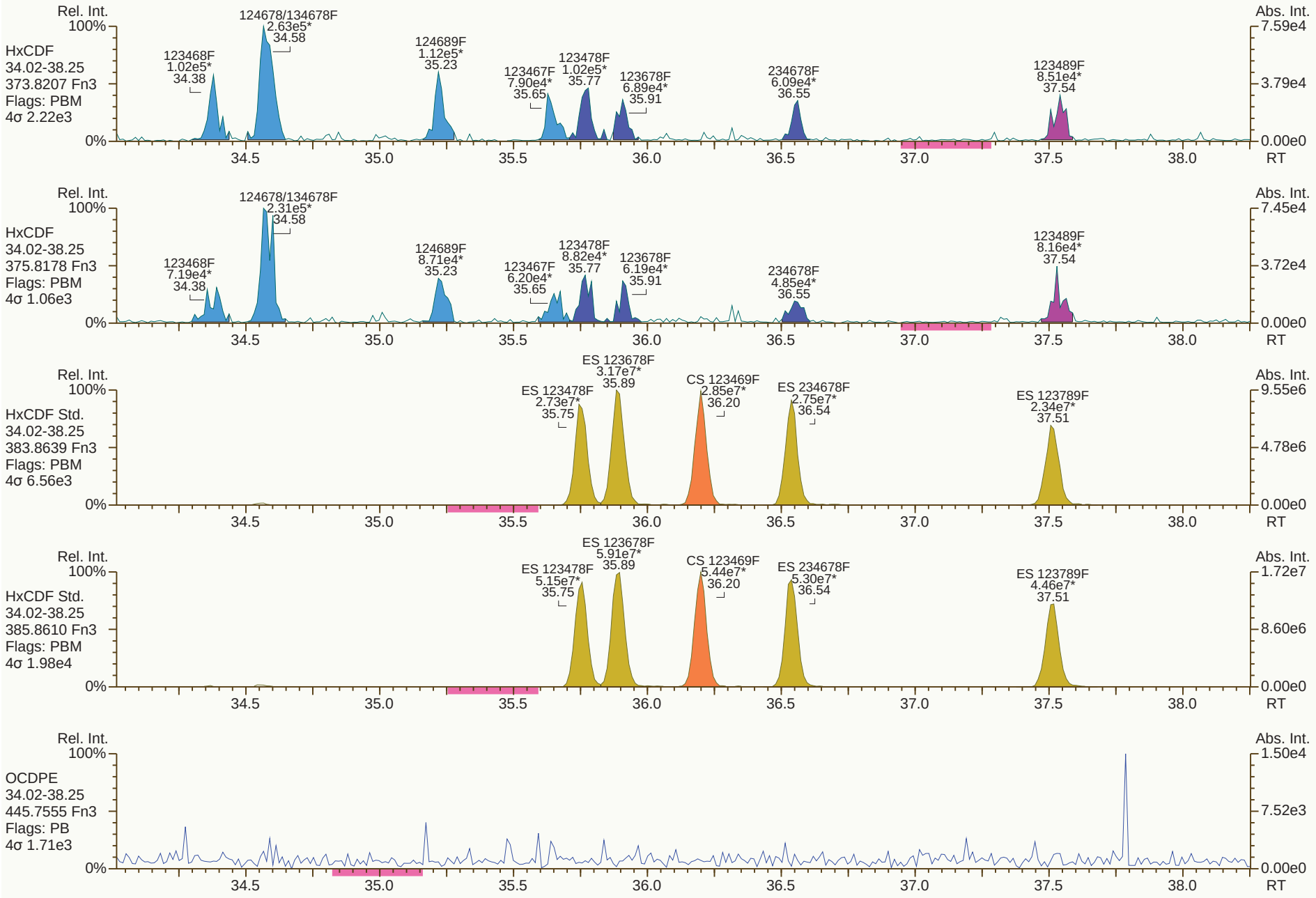

Rel. Int.
100%
HpCDD
38.26-41.01
423.7767 Fn4
Flags: PBM
4σ 1.54e3
0%
1234679D
3.09e6*
39.32
1234678D
1.65e6*
39.96
Abs. Int.
1.20e6
6.01e5
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.26-41.01
425.7737 Fn4
Flags: PBM
4σ 2.26e3
0%
1234679D
2.94e6*
39.32
1234678D
1.56e6*
39.96
Abs. Int.
1.12e6
5.61e5
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
435.8169 Fn4
Flags: PBM
4σ 2.56e3
0%
ES 1234678D
2.75e7*
39.95
Abs. Int.
1.16e7
5.81e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
437.8140 Fn4
Flags: PBM
4σ 2.05e3
0%
ES 1234678D
2.58e7*
39.95
Abs. Int.
1.12e7
5.58e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.26-41.01
430.9728 Fn4
Flags: -
0%
Abs. Int.
1.20e7
5.98e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT

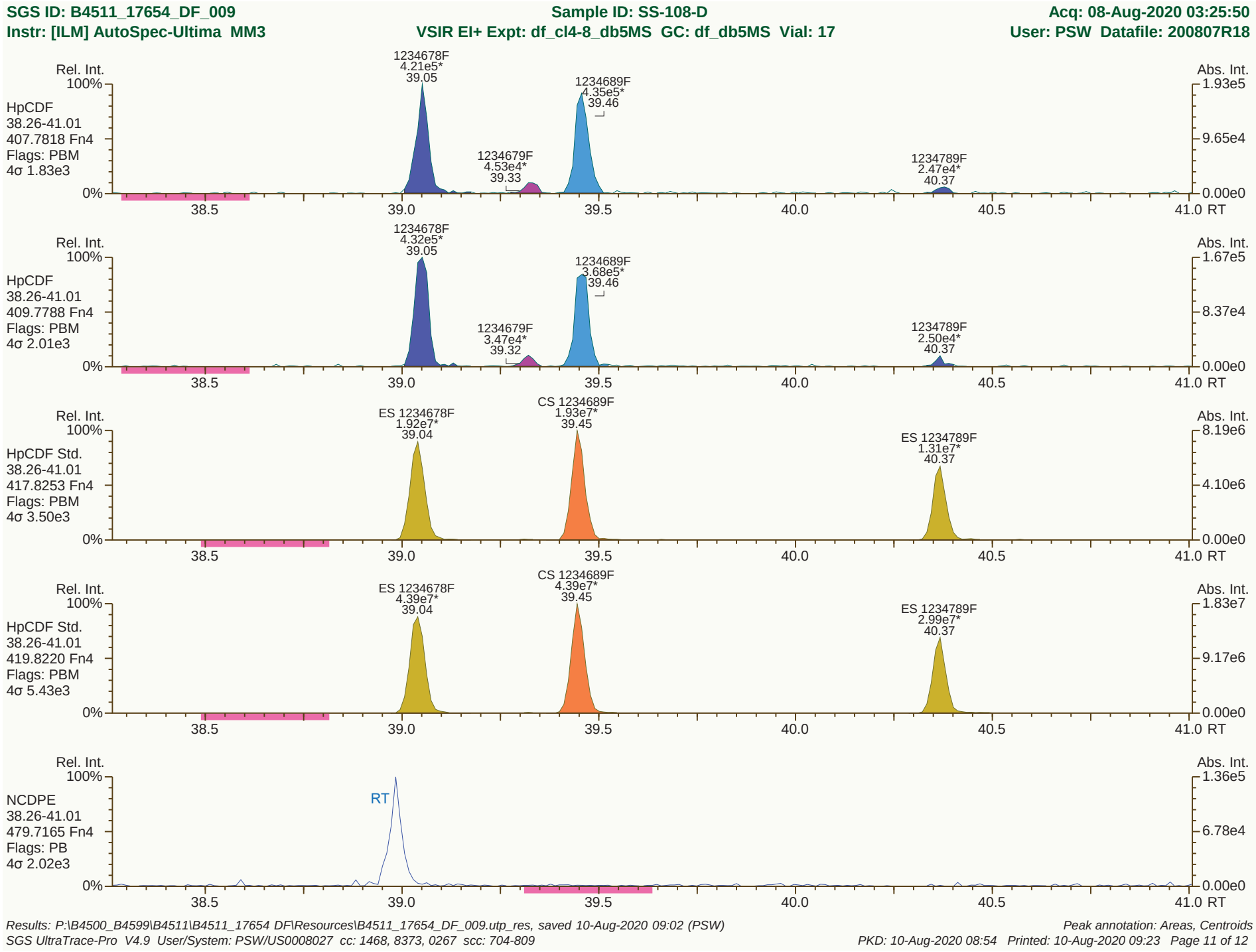

OCDD
7.02e6*
42.38
Rel. Int.
100%
OCDD
41.02-45.00
457.7377 Fn5
Flags: PBM
4σ 2.94e3
0%
Abs. Int.
2.51e6
1.25e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDD
7.97e6*
42.38
Rel. Int.
100%
OCDD
41.02-45.00
459.7348 Fn5
Flags: PBM
4σ 1.41e3
0%
Abs. Int.
2.98e6
1.49e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
2.55e7*
42.37
Rel. Int.
100%
OCDD Std.
41.02-45.00
469.7780 Fn5
Flags: PBM
4σ 2.13e3
0%
Abs. Int.
9.78e6
4.89e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
2.66e7*
42.37
Rel. Int.
100%
OCDD Std.
41.02-45.00
471.7750 Fn5
Flags: PBM
4σ 3.39e3
0%
Abs. Int.
1.01e7
5.07e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
5.77e6
2.89e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

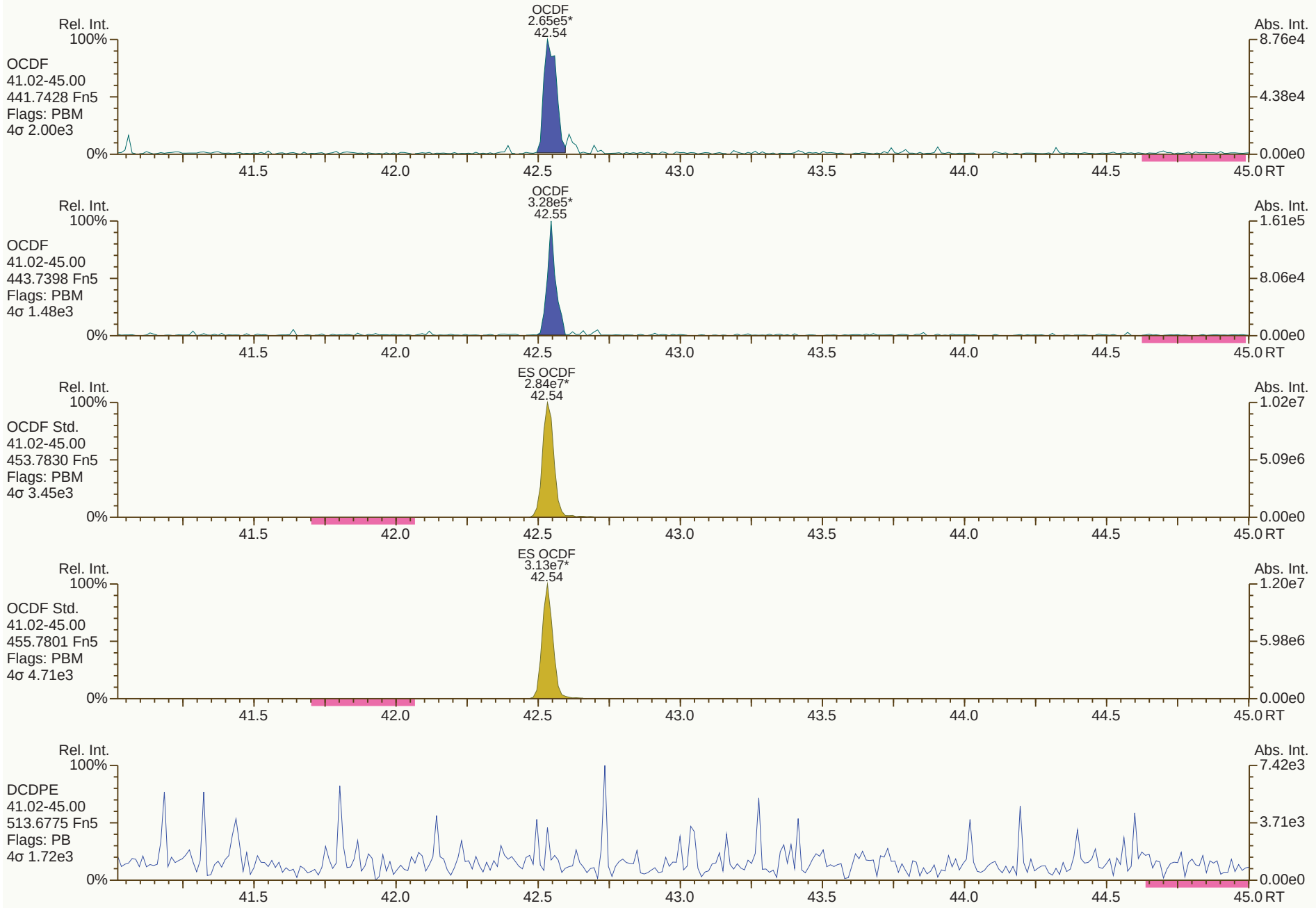

Rel. Int.
100%
TCDF
20.54-29.50
303.9016 Fn1
Flags: PBM
4σ 1.40e3
1368F 4.19e5* 21.16
2468F 8.84e5* 22.40
1347F...[3] 1.60e5* 22.98
1248F...[3] 1.17e5* 23.39
1467F 1.98e4* 23.96
2368F 1.44e5* 24.83
1278F 6.20e4* 25.41
2347/1279F 4.81e4* 26.13
2378F 5.33e4* 26.37
2367/3467F 9.60e4* 26.75
1289F 2.41e5* 28.46
Abs. Int.
1.70e5
8.50e4
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
TCDF
20.54-29.50
305.8987 Fn1
Flags: PBM
4σ 1.49e3
1368F 5.16e5* 21.16
1468F 3.27e4* 21.76
2468F 1.22e6* 22.40
1347F...[3] 1.85e5* 22.97
1346/1246F 5.76e4* 22.84
1248F...[3] 1.07e5* 23.40
1268F 1.04e5* 23.81
1478F 4.08e4* 24.14
2467F 1.21e5* 24.67
1238F...[5] 1.49e5* 24.93
1267F 5.60e4* 25.71
2348F 3.69e4* 26.25
2378F 7.89e4* 26.37
2367/3467F 1.24e5* 26.75
1289F 1.36e5* 28.46
Abs. Int.
2.09e5
1.04e5
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
315.9419 Fn1
Flags: PBM
4σ 1.36e4
JS 1234F 6.06e7* 24.91
ES 2378F 5.21e7* 26.34
Abs. Int.
1.21e7
6.03e6
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
317.9389 Fn1
Flags: PBM
4σ 7.48e3
JS 1234F 7.82e7* 24.91
ES 2378F 6.63e7* 26.34
Abs. Int.
1.57e7
7.83e6
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
HxCDPE
20.54-29.50
375.8364 Fn1
Flags: PB
4σ 1.49e3
Abs. Int.
8.22e3
4.11e3
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT


13468/12468F
2.48e5*
28.45
Rel. Int.
100%
0%
Abs. Int.
6.25e4
3.13e4
0.00e0
PeCDF-1
20.54-29.50
339.8597 Fn1
Flags: PBM
4σ 1.50e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
13468/12468F
1.69e5*
28.45
Rel. Int.
100%
0%
Abs. Int.
5.45e4
2.72e4
0.00e0
PeCDF-1
20.54-29.50
341.8568 Fn1
Flags: PBM
4σ 1.51e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
0%
Abs. Int.
3.28e6
1.64e6
0.00e0
QC Check
20.54-29.50
316.9824 Fn1
Flags: -
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
PeCDF-2
29.51-34.01
339.8597 Fn2
Flags: PBM
4σ 2.77e3
13678F...[3]
1.60e5*
30.03
12368F...[3]
3.05e5*
30.19
23468/12469F
1.12e5*
30.88
12378F
9.21e4*
31.33
12678/12367F
1.13e5*
31.62
23467/12369F
8.77e4*
32.34
23478F
1.19e5*
32.48
Abs. Int.
7.50e4
3.75e4
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF-2
29.51-34.01
341.8568 Fn2
Flags: PBM
4σ 4.22e3
13678F...[3]
7.81e4*
30.04
12368F...[3]
1.63e5*
30.19
23468/12469F
6.34e4*
30.88
12378F
6.31e4*
31.33
12678/12367F
5.68e4*
31.61
23467/12369F
4.85e4*
32.34
23478F
7.64e4*
32.47
Abs. Int.
3.48e4
1.74e4
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
351.9000 Fn2
Flags: PBM
4σ 3.55e3
CS 12346F
6.56e7*
30.78
ES 12378F
6.70e7*
31.32
ES 23478F
6.53e7*
32.45
Abs. Int.
1.78e7
8.91e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
353.8970 Fn2
Flags: PBM
4σ 4.09e3
CS 12346F
4.25e7*
30.78
ES 12378F
4.21e7*
31.32
ES 23478F
4.11e7*
32.45
Abs. Int.
1.12e7
5.59e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
HpCDPE
29.51-34.01
409.7974 Fn2
Flags: PB
4σ 1.57e3
Abs. Int.
6.90e3
3.45e3
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT


Rel. Int.
100%
HxCDF
34.02-38.25
373.8207 Fn3
Flags: PBM
4σ 2.22e3
123468F 1.02e5* 34.38
124678/134678F 2.63e5* 34.58
124689F 1.12e5* 35.23
123467F 7.90e4* 35.65
123478F 1.02e5* 35.77
123678F 6.89e4* 35.91
234678F 6.09e4* 36.55
123489F 8.51e4* 37.54
Abs. Int.
7.59e4
3.79e4
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0
RT
Rel. Int.
100%
HxCDF
34.02-38.25
375.8178 Fn3
Flags: PBM
4σ 1.06e3
123468F 7.19e4* 34.38
124678/134678F 2.31e5* 34.58
124689F 8.71e4* 35.23
123467F 6.20e4* 35.65
123478F 8.82e4* 35.77
123678F 6.19e4* 35.91
234678F 4.85e4* 36.55
123489F 8.16e4* 37.54
Abs. Int.
7.45e4
3.72e4
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0
RT
Rel. Int.
100%
HxCDF Std.
34.02-38.25
383.8639 Fn3
Flags: PBM
4σ 6.56e3
ES 123478F 2.73e7* 35.75
ES 123678F 3.17e7* 35.89
CS 123469F 2.85e7* 36.20
ES 234678F 2.75e7* 36.54
ES 123789F 2.34e7* 37.51
Abs. Int.
9.55e6
4.78e6
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0
RT
Rel. Int.
100%
HxCDF Std.
34.02-38.25
385.8610 Fn3
Flags: PBM
4σ 1.98e4
ES 123478F 5.15e7* 35.75
ES 123678F 5.91e7* 35.89
CS 123469F 5.44e7* 36.20
ES 234678F 5.30e7* 36.54
ES 123789F 4.46e7* 37.51
Abs. Int.
1.72e7
8.60e6
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0
RT
Rel. Int.
100%
OCDPE
34.02-38.25
445.7555 Fn3
Flags: PB
4σ 1.71e3
Abs. Int.
1.50e4
7.52e3
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0
RT


SGS ID: B4511_17654_DF_009
Sample ID: SS-108-D
Acq: 08-Aug-2020 03:25:50
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 17
User: PSW Datafile: 200807R18
Rel. Int.
Abs. Int.
HpCDF
38.26-41.01
407.7818 Fn4
Flags: PBM
4σ 1.83e3
1234678F 4.21e5* 39.05
1234689F 4.35e5* 39.46
1234679F 4.53e4* 39.33
1234789F 2.47e4* 40.37
HpCDF
38.26-41.01
409.7788 Fn4
Flags: PBM
4σ 2.01e3
1234678F 4.32e5* 39.05
1234689F 3.68e5* 39.46
1234679F 3.47e4* 39.32
1234789F 2.50e4* 40.37
HpCDF Std.
38.26-41.01
417.8253 Fn4
Flags: PBM
4σ 3.50e3
ES 1234678F 1.92e7* 39.04
CS 1234689F 1.93e7* 39.45
ES 1234789F 1.31e7* 40.37
HpCDF Std.
38.26-41.01
419.8220 Fn4
Flags: PBM
4σ 5.43e3
ES 1234678F 4.39e7* 39.04
CS 1234689F 4.39e7* 39.45
ES 1234789F 2.99e7* 40.37
NCDPE
38.26-41.01
479.7165 Fn4
Flags: PB
4σ 2.02e3
RT
38.5
39.0
39.5
40.0
40.5
41.0 RT
Results: P:\B4500_B4599\B4511\B4511_17654 DF\Resources\B4511_17654_DF_009.utp_res, saved 10-Aug-2020 09:02 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 1468, 8373, 0267 scc: 704-809
PKD: 10-Aug-2020 08:54 Printed: 10-Aug-2020 09:23 Page 11 of 12


OCDF
2.65e5*
42.54
Rel. Int.
100%
OCDF
41.02-45.00
441.7428 Fn5
Flags: PBM
4σ 2.00e3
0%
Abs. Int.
8.76e4
4.38e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDF
3.28e5*
42.55
Rel. Int.
100%
OCDF
41.02-45.00
443.7398 Fn5
Flags: PBM
4σ 1.48e3
0%
Abs. Int.
1.61e5
8.06e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDF
2.84e7*
42.54
Rel. Int.
100%
OCDF Std.
41.02-45.00
453.7830 Fn5
Flags: PBM
4σ 3.45e3
0%
Abs. Int.
1.02e7
5.09e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDF
3.13e7*
42.54
Rel. Int.
100%
OCDF Std.
41.02-45.00
455.7801 Fn5
Flags: PBM
4σ 4.71e3
0%
Abs. Int.
1.20e7
5.98e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
DCDPE
41.02-45.00
513.6775 Fn5
Flags: PB
4σ 1.72e3
0%
Abs. Int.
7.42e3
3.71e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

Lab ID: B4511_17654_DF_010 **Acq'd:** 08 Aug 2020 04:13 PSW **Wt/Vol:** 9.42 g **ICAL:** MM3_DF_10012020_12JUN2020

Client ID: CS-RISB02 **UTP:** 10-Aug-2020 09:02:32 PSW **J-level:** 0.531 pg/g **Split:** 1 **Checkcode:** 921-381-FZP

Datafile: 200807R19 **Report:** 10 Aug 2020 09:07 pw **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	NotFnd		1.0009	-		-	-	-	1.18	-	3199	0.112
12378-PeCDD	NotFnd		1.0006	-		-	-	-	1.14	-	4164	0.135
123478-HxCDD	36.74	J	1.0004	1.0005	+0.2	8.40E+04	1.32	Y	1.09	0.35	3869	0.123
123678-HxCDD	36.86	J	1.0035	1.0035	0	2.81E+05	1.08	Y	1.13	1.2	3869	0.142
123789-HxCDD	37.15	J	1.0116	1.0116	0	1.91E+05	1.41	Y	1.05	0.72	3869	0.126
1234678-HpCDD	39.97		1.0003	1.0003	0	6.86E+06	0.98	Y	0.98	36.3	3382	0.101
OCDD	42.39		1.0003	1.0003	0	3.67E+07	0.92	Y	1.08	304	5900	0.328
2378-TCDF	NotFnd		1.0006	-		-	-	-	0.98	-	2856	0.0788
12378-PeCDF	NotFnd		1.0006	-		-	-	-	0.95	-	4173	0.104
23478-PeCDF	32.50	J	1.0005	1.0012	+1.4	1.07E+05	1.53	Y	0.95	0.301	4173	0.107
123478-HxCDF	35.78	J	1.0005	1.0005	0	2.86E+05	1.23	Y	1.20	0.863	3413	0.0833
123678-HxCDF	35.92	J EMPC	1.0004	1.0006	+0.4	1.17E+05	2.00	N	1.07	0.347	3413	0.0893
234678-HxCDF	36.56	J EMPC	1.0005	1.0005	0	1.59E+05	1.02	N	1.10	0.517	3413	0.0883
123789-HxCDF	NotFnd		1.0004	-		-	-	-	1.09	-	3413	0.117
1234678-HpCDF	39.06		1.0003	1.0003	0	2.81E+06	1.01	Y	1.28	9.95	2848	0.0705
1234789-HpCDF	40.38	J	1.0002	1.0002	0	2.02E+05	0.96	Y	1.27	0.96	2848	0.0881
OCDF	42.55		1.0003	1.0002	-0.3	3.55E+06	0.99	Y	1.01	27	3255	0.16

Name	Act RT		Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	27.27		1.0255	1.0257	+0.3	5.50E+07	0.77	Y	1.01	78.4
ES 12378-PeCDD	32.81		1.2330	1.2341	+2.2	5.04E+07	1.68	Y	0.87	83.1
ES 123478-HxCDD	36.73		0.9917	0.9916	-0.2	4.67E+07	1.31	Y	1.10	69.8
ES 123678-HxCDD	36.84		0.9947	0.9947	0	4.43E+07	1.30	Y	1.06	68.4
ES 123789-HxCDD	37.14		1.0028	1.0027	-0.2	5.37E+07	1.30	Y	1.22	72.3
ES 1234678-HpCDD	39.95		1.0785	1.0787	+0.5	4.08E+07	1.08	Y	0.99	67.3
ES OCDD	42.38		1.1439	1.1441	+0.5	4.76E+07	0.93	Y	0.67	58.3
ES 2378-TCDF	26.35		1.0572	1.0575	+0.5	9.13E+07	0.78	Y	1.01	79.7
ES 12378-PeCDF	31.32		1.2558	1.2572	+2.6	8.35E+07	1.56	Y	0.90	82
ES 23478-PeCDF	32.46		1.3012	1.3028	+3.1	8.01E+07	1.59	Y	0.89	79.7
ES 123478-HxCDF	35.76		0.9655	0.9654	-0.2	5.89E+07	0.53	Y	1.43	67.5
ES 123678-HxCDF	35.90		0.9693	0.9692	-0.2	6.67E+07	0.54	Y	1.63	67
ES 234678-HxCDF	36.54		0.9867	0.9866	-0.2	5.96E+07	0.54	Y	1.48	66
ES 123789-HxCDF	37.52		1.0130	1.0129	-0.2	5.11E+07	0.54	Y	1.29	64.9
ES 1234678-HpCDF	39.05		1.0540	1.0542	+0.5	4.68E+07	0.45	Y	1.15	66.9
ES 1234789-HpCDF	40.37		1.0898	1.0900	+0.5	3.53E+07	0.46	Y	0.91	63.7
ES OCDF	42.54		1.1484	1.1487	+0.8	5.53E+07	0.90	Y	0.83	54.6

Lab ID: B4511_17654_DF_010 | Acq'd: 08 Aug 2020 04:13 PSW | Wt/Vol: 9.42 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-RISB02 | UTP: 10-Aug-2020 09:02:32 PSW | J-level: 0.531 pg/g | Split: 1 | Checkcode: 921-381-FZP

Datafile: 200807R19 | Report: 10 Aug 2020 09:07 pw | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %	
JS 1234-TCDD	26.59		-	-	-	6.97E+07	0.78	Y	-	-	
JS 1234-TCDF	24.91		-	-	-	1.13E+08	0.78	Y	-	-	
JS 123467-HxCDD	37.04		-	-	-	3.05E+07	1.26	Y	-	-	
CS 37Cl-2378-TCDD	27.29		1.0265	1.0265	0	2.66E+07	n/a	-	1.04	92.1	
CS 12347-PeCDD	32.30		1.2141	1.2150	+1.7	5.00E+07	1.69	Y	0.74	97	
CS 12346-PeCDF	30.79		1.2343	1.2357	+2.6	8.44E+07	1.56	Y	0.86	86.8	
CS 123469-HxCDF	36.20		0.9776	0.9775	-0.2	5.93E+07	0.52	Y	1.36	71.5	
CS 1234689-HpCDF	39.45		1.0650	1.0652	+0.5	4.62E+07	0.45	Y	1.05	71.8	
~~SS 37Cl-2378-TCDD~~	~~27.29~~		~~1.0265~~	~~1.0265~~	~~0~~	~~2.66E+07~~	~~n/a~~		~~1.04~~	~~117~~	Not used in this project.
~~SS 12347-PeCDD~~	~~32.30~~		~~1.2141~~	~~1.2150~~	~~+1.7~~	~~5.00E+07~~	~~1.69~~	~~Y~~	~~0.86~~	~~116~~	CL 10Aug20
~~SS 12346-PeCDF~~	~~30.79~~		~~1.2343~~	~~1.2357~~	~~+2.6~~	~~8.44E+07~~	~~1.56~~	~~Y~~	~~0.96~~	~~105~~	
~~SS 123469-HxCDF~~	~~36.20~~		~~0.9776~~	~~0.9775~~	~~-0.2~~	~~5.93E+07~~	~~0.52~~	~~Y~~	~~0.83~~	~~106~~	
~~SS 1234689-HpCDF~~	~~39.45~~		~~1.0650~~	~~1.0652~~	~~+0.5~~	~~4.62E+07~~	~~0.45~~	~~Y~~	~~0.92~~	~~107~~	

Totals	Conc	EMPC
Total TCDD	0	0.276
Total PeCDD	0	0
Total HxCDD	10.6	10.6
Total HpCDD	92.3	92.3
Total Tetra-Octa Dioxins	407	408
Total TCDF	0.223	1.25
Total PeCDF	1.97	3.42
Total HxCDF	9.7	11.9
Total HpCDF	31.8	31.8
Total Tetra-Octa Furans	70.7	75.4
Total Tetra-Octa Dioxins & Furans	478	483

Lab ID: B4511_17654_DF_010 **Acq'd:** 08 Aug 2020 04:13 PSW **Wt/Vol:** 9.42 g **ICAL:** MM3_DF_10012020_12JUN2020

Client ID: CS-RISB02 **UTP:** 10-Aug-2020 09:02:32 PSW **J-level:** 0.531 pg/g **Split:** 1 **Checkcode:** 921-381-FZP

Datafile: 200807R19 **Report:** 10 Aug 2020 09:07 pw **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1368-TCDD	23.38	J EMPC	0.8591	0.8574	-2.4	8.42E+04	1.12	N	1.18	0.276	3199	0.112
1379-TCDD	NotFnd		0.8732						1.18		3199	0.112
1369-TCDD	NotFnd		0.8901						1.18		3199	0.112
1469-TCDD	NotFnd		0.9205						1.18		3199	0.112
1247/1246/1248/1249-TCDD	NotFnd		0.9301						1.18		3199	0.112
1378-TCDD	NotFnd		0.9374						1.18		3199	0.112
1268-TCDD	NotFnd		0.9449						1.18		3199	0.112
1478-TCDD	NotFnd		0.9544						1.18		3199	0.112
1279-TCDD	NotFnd		0.9610						1.18		3199	0.112
1234/1269-TCDD	NotFnd		0.9746						1.18		3199	0.112
1236-TCDD	NotFnd		0.9802						1.18		3199	0.112
1237/1238-TCDD	NotFnd		0.9898						1.18		3199	0.112
1239-TCDD	NotFnd		0.9950						1.18		3199	0.112
2378-TCDD	**NotFnd**		**1.0009**						**1.18**		**3199**	**0.112**
1278-TCDD	NotFnd		1.0133						1.18		3199	0.112
1267-TCDD	NotFnd		1.0185						1.18		3199	0.112
1289-TCDD	NotFnd		1.0379						1.18		3199	0.112
12479/12468-PeCDD	NotFnd		0.9229						1.14		4164	0.135
12469-PeCDD	NotFnd		0.9396						1.14		4164	0.135
12368-PeCDD	NotFnd		0.9568						1.14		4164	0.135
12478-PeCDD	NotFnd		0.9626						1.14		4164	0.135
12379-PeCDD	NotFnd		0.9657						1.14		4164	0.135
12369/12467/12489-PeCDD	NotFnd		0.9738						1.14		4164	0.135
12346/12347-PeCDD	NotFnd		0.9853						1.14		4164	0.135
12378-PeCDD	NotFnd		**1.0006**						**1.14**		**4164**	**0.135**
12367-PeCDD	NotFnd		1.0034						1.14		4164	0.135
12389-PeCDD	NotFnd		1.0141						1.14		4164	0.135
124679/124689-HxCDD	35.04		0.9542	0.9542	0	7.78E+05	1.38	Y	1.09	3.15	3869	0.13
123468-HxCDD	35.71	J	0.9721	0.9722	+0.2	2.22E+05	1.34	Y	1.09	0.896	3869	0.13
123679/123689-HxCDD	35.99		0.9799	0.9799	0	7.54E+05	1.34	Y	1.09	3.05	3869	0.13
123469-HxCDD	36.12	J	0.9835	0.9834	-0.2	2.25E+05	1.11	Y	1.09	0.908	3869	0.13
123478-HxCDD	36.74	J	**1.0004**	**1.0005**	**+0.2**	**8.40E+04**	**1.32**	**Y**	1.09	**0.35**	**3869**	**0.123**
123678-HxCDD	36.86	J	**1.0035**	**1.0035**	**0**	**2.81E+05**	**1.08**	**Y**	1.13	**1.2**	**3869**	**0.142**
123467-HxCDD	37.06	J	1.0088	1.0091	+0.7	7.69E+04	1.09	Y	1.09	0.311	3869	0.13
123789-HxCDD	37.15	J	**1.0116**	**1.0116**	**0**	**1.91E+05**	**1.41**	**Y**	1.05	**0.72**	**3869**	**0.126**

Lab ID: B4511_17654_DF_010 | Acq'd: 08 Aug 2020 04:13 PSW | Wt/Vol: 9.42 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-RISB02 | UTP: 10-Aug-2020 09:02:32 PSW | J-level: 0.531 pg/g | Split: 1 | Checkcode: 921-381-FZP

Datafile: 200807R19 | Report: 10 Aug 2020 09:07 pw | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

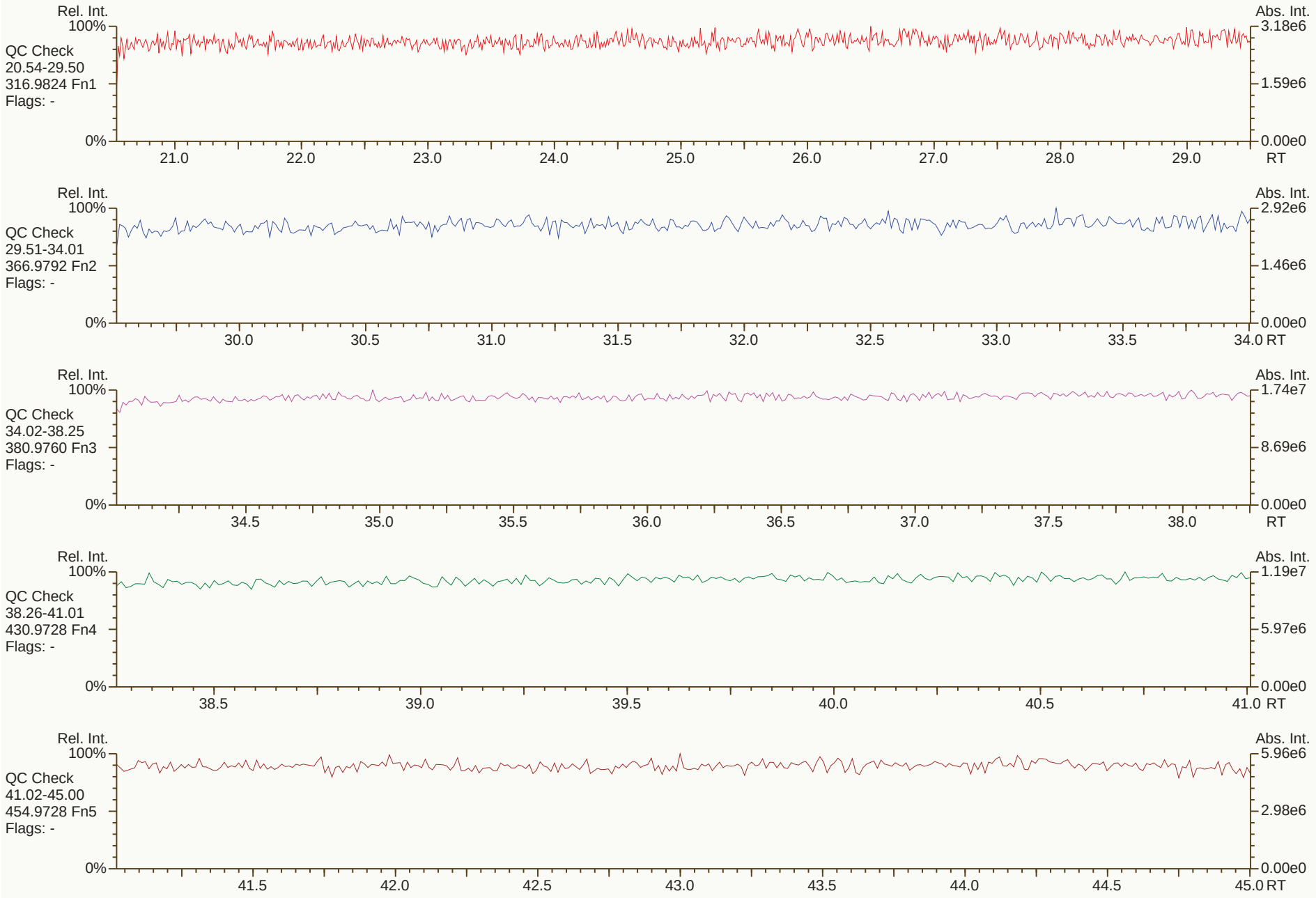
Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1234679-HpCDD	39.32		0.9843	0.9842	-0.2	1.06E+07	1.02	Y	0.98	56	3382	0.101
1234678-HpCDD	**39.97**		**1.0003**	**1.0003**	**0**	**6.86E+06**	**0.98**	**Y**	**0.98**	**36.3**	**3382**	**0.101**
OCDD	**42.39**		**1.0003**	**1.0003**	**0**	**3.67E+07**	**0.92**	**Y**	**1.08**	**304**	**5900**	**0.328**
OCDD-a	42.38		1.0002	1.0001	-0.3	2.21E+06	2.34	Y	0.07	297	5562	5.02
1368-TCDF	21.16	J	0.8044	0.8029	-1.9	9.39E+04	0.77	Y	0.98	0.223	2856	0.0788
1468-TCDF	NotFnd		0.8261						0.98		2856	0.0788
2468-TCDF	22.39	J EMPC	0.8511	0.8498	-1.7	2.18E+05	0.65	N	0.98	0.516	2856	0.0788
1346/1246-TCDF	NotFnd		0.8665						0.98		2856	0.0788
1347/1378/1247-TCDF	NotFnd		0.8723						0.98		2856	0.0788
1348-TCDF	NotFnd		0.8835						0.98		2856	0.0788
1248/1367/1379-TCDF	23.38	J EMPC	0.8888	0.8873	-2.1	5.05E+04	1.45	N	0.98	0.12	2856	0.0788
1268-TCDF	23.80	J EMPC	0.9044	0.9032	-1.7	6.66E+04	0.56	N	0.98	0.158	2856	0.0788
1467-TCDF	NotFnd		0.9098						0.98		2856	0.0788
1478-TCDF	NotFnd		0.9167						0.98		2856	0.0788
1369/1237-TCDF	NotFnd		0.9316						0.98		2856	0.0788
2467-TCDF	NotFnd		0.9369						0.98		2856	0.0788
2368-TCDF	NotFnd		0.9430						0.98		2856	0.0788
1238/1234/1678/1469/1236-TCDF	NotFnd		0.9468						0.98		2856	0.0788
1278-TCDF	NotFnd		0.9651						0.98		2856	0.0788
1349-TCDF	NotFnd		0.9704						0.98		2856	0.0788
1267-TCDF	NotFnd		0.9761						0.98		2856	0.0788
2346/1249-TCDF	NotFnd		0.9834						0.98		2856	0.0788
2347/1279-TCDF	NotFnd		0.9921						0.98		2856	0.0788
2348-TCDF	NotFnd		0.9964						0.98		2856	0.0788
2378-TCDF	**NotFnd**		**1.0006**						**0.98**		**2856**	**0.0788**
2367/3467-TCDF	NotFnd		1.0156						0.98		2856	0.0788
1269-TCDF	NotFnd		1.0249						0.98		2856	0.0788
1239-TCDF	NotFnd		1.0357						0.98		2856	0.0788
1289-TCDF	28.46	J EMPC	1.0799	1.0801	+0.3	9.94E+04	2.32	N	0.98	0.236	2856	0.0788
13468/12468-PeCDF	28.46	J	0.9084	0.9086	+0.3	6.08E+05	1.59	Y	0.95	1.67	3000	0.0757
13678/13467/12467-PeCDF	30.05	J EMPC	0.9591	0.9593	+0.4	9.55E+04	1.22	N	0.95	0.262	4173	0.105
12368/13478/12478-PeCDF	30.21	J EMPC	0.9642	0.9645	+0.5	3.11E+05	1.84	N	0.95	0.852	4173	0.105
14678-PeCDF	NotFnd		0.9675						0.95		4173	0.105
13479-PeCDF	NotFnd		0.9706						0.95		4173	0.105
13469/12479-PeCDF	NotFnd		0.9787						0.95		4173	0.105
12346-PeCDF	NotFnd		0.9833						0.95		4173	0.105

Lab ID: B4511_17654_DF_010 | Acq'd: 08 Aug 2020 04:13 PSW | Wt/Vol: 9.42 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-RISB02 | UTP: 10-Aug-2020 09:02:32 PSW | J-level: 0.531 pg/g | Split: 1 | Checkcode: 921-381-FZP

Datafile: 200807R19 | Report: 10 Aug 2020 09:07 pw | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
23468/12469-PeCDF	30.88	J EMPC	0.9861	0.9860	-0.2	6.43E+04	2.60	N	0.95	0.176	4173	0.105
12347-PeCDF	NotFnd		0.9887						0.95		4173	0.105
12348-PeCDF	NotFnd		0.9938						0.95		4173	0.105
12378-PeCDF	**NotFnd**		**1.0006**						**0.95**		**4173**	**0.104**
12678/12367-PeCDF	31.64	J EMPC	1.0095	1.0101	+1.1	5.94E+04	2.75	N	0.95	0.163	4173	0.105
12379-PeCDF	NotFnd		1.0150						0.95		4173	0.105
12679-PeCDF	NotFnd		0.9926						0.95		4173	0.105
23467/12369-PeCDF	NotFnd		0.9966						0.95		4173	0.105
23478-PeCDF	**32.50**	J	**1.0005**	**1.0012**	**+1.4**	**1.07E+05**	**1.53**	**Y**	**0.95**	**0.301**	**4173**	**0.107**
23478/12489-PeCDF	NotFnd		0.0000						0.95			
12489-PeCDF	NotFnd		1.0047						0.95		4173	0.105
12349-PeCDF	NotFnd		1.0107						0.95		4173	0.105
12389-PeCDF	NotFnd		1.0339						0.95		4173	0.105
123468-HxCDF	34.39	J EMPC	0.9617	0.9616	-0.2	2.76E+05	0.99	N	1.11	0.892	3413	0.0933
124678/134678-HxCDF	34.58		0.9673	0.9671	-0.4	1.25E+06	1.24	Y	1.11	4.05	3413	0.0933
134679-HxCDF	NotFnd		0.9737						1.11		3413	0.0933
124679-HxCDF	NotFnd		0.9792						1.11		3413	0.0933
124689-HxCDF	35.23		0.9854	0.9854	0	1.48E+06	1.22	Y	1.11	4.79	3413	0.0933
123467-HxCDF	35.66	J EMPC	0.9972	0.9972	0	6.83E+04	1.01	N	1.11	0.22	3413	0.0933
123478-HxCDF	**35.78**	J	**1.0005**	**1.0005**	**0**	**2.86E+05**	**1.23**	**Y**	**1.20**	**0.863**	**3413**	**0.0833**
123678-HxCDF	**35.92**	J EMPC	**1.0004**	**1.0006**	**+0.4**	**1.17E+05**	**2.00**	**N**	**1.07**	**0.347**	**3413**	**0.0893**
123479-HxCDF	NotFnd		1.0049						1.11		3413	0.0933
123469-HxCDF	36.22	J EMPC	1.0089	1.0091	+0.4	1.45E+04	4.07	N	1.11	0.0468	3413	0.0933
123679-HxCDF	NotFnd		0.9945						1.11		3413	0.0933
234678-HxCDF	**36.56**	J EMPC	**1.0005**	**1.0005**	**0**	**1.59E+05**	**1.02**	**N**	**1.10**	**0.517**	**3413**	**0.0883**
234678/123689-HxCDF	NotFnd		0.0000						1.10			
123689-HxCDF	NotFnd		1.0054						1.11		3413	0.0933
123789-HxCDF	**NotFnd**		**1.0004**						**1.09**		**3413**	**0.117**
123789/123489-HxCDF	NotFnd		0.0000						1.09			
123489-HxCDF	37.55	J EMPC	1.0008	1.0008	0	4.85E+04	0.79	N	1.11	0.156	3413	0.0933
1234678-HpCDF	**39.06**		**1.0003**	**1.0003**	**0**	**2.81E+06**	**1.01**	**Y**	**1.28**	**9.95**	**2848**	**0.0705**
1234679-HpCDF	39.32	**J**	1.0072	1.0069	-0.7	7.68E+04	1.11	Y	1.27	0.312	2848	0.0781
1234689-HpCDF	39.46		1.0107	1.0107	0	5.06E+06	1.05	Y	1.27	20.6	2848	0.0781
1234789-HpCDF	**40.38**	**J**	**1.0002**	**1.0002**	**0**	**2.02E+05**	**0.96**	**Y**	**1.27**	**0.96**	**2848**	**0.0881**
OCDF	**42.55**		**1.0003**	**1.0002**	**-0.3**	**3.55E+06**	**0.99**	**Y**	**1.01**	**27**	**3255**	**0.16**
OCDF-a	42.55		1.0002	1.0002	0	2.77E+05	2.17	Y	0.06	33.6	3883	3.05


Rel. Int.
100%
QC Check
20.54-29.50
316.9824 Fn1
Flags: -
0%
Abs. Int.
3.18e6
1.59e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
QC Check
29.51-34.01
366.9792 Fn2
Flags: -
0%
Abs. Int.
2.92e6
1.46e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
0%
Abs. Int.
1.74e7
8.69e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
QC Check
38.26-41.01
430.9728 Fn4
Flags: -
0%
Abs. Int.
1.19e7
5.97e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
5.96e6
2.98e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

SGS ID: B4511_17654_DF_010 **Sample ID: CS-RISB02** **Acq: 08-Aug-2020 04:13:22**

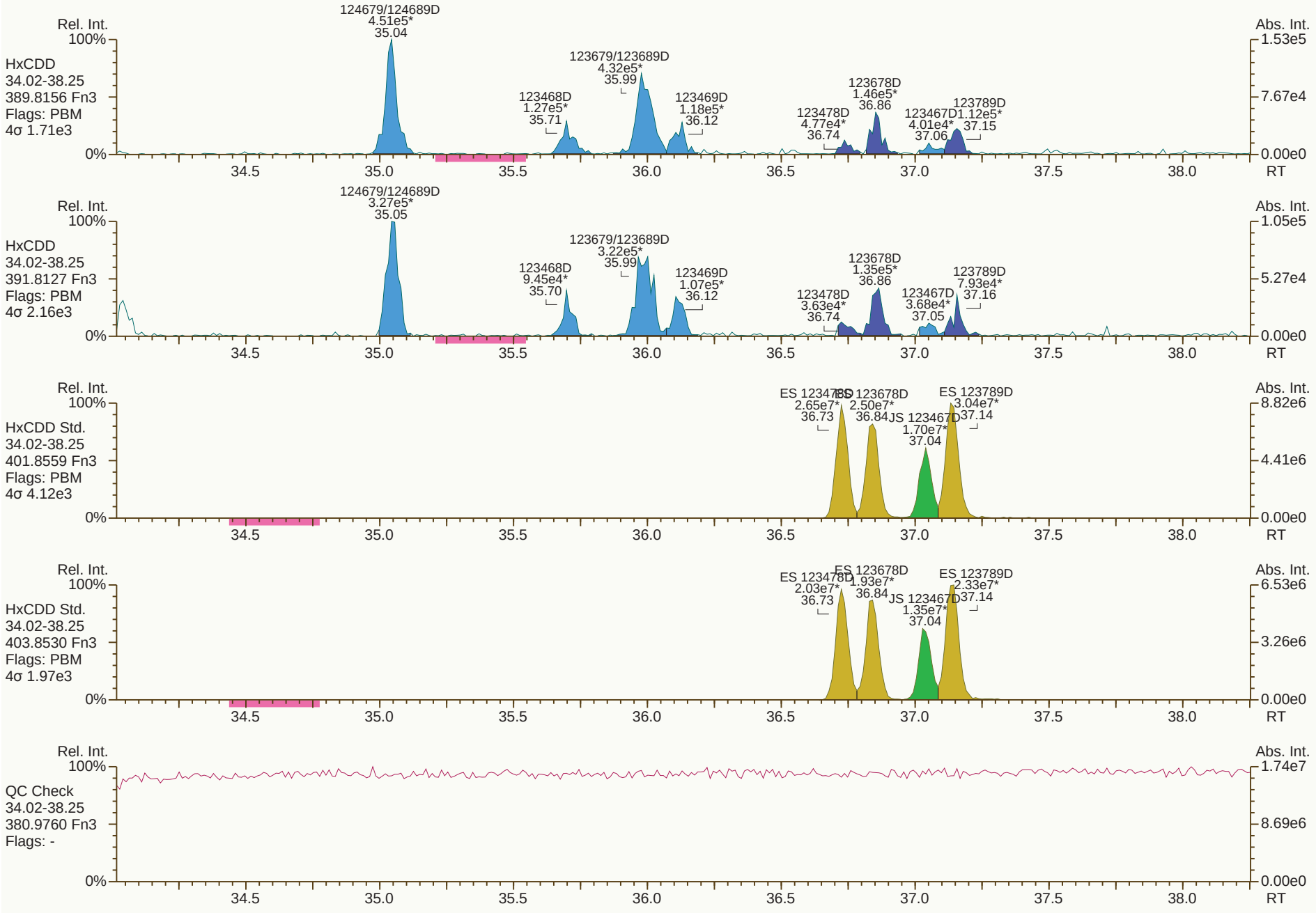
Instr: [ILM] AutoSpec-Ultima MM3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 18** **User: PSW Datafile: 200807R19**



Results: P:\B4500_B4599\B4511\B4511_17654 DF\Resources\B4511_17654_DF_010.utp_res, saved 10-Aug-2020 09:10 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 4644, 9624, 7868 scc: 921-381 *PKD: 10-Aug-2020 09:01 Printed: 10-Aug-2020 09:24 Page 2 of 12*


Rel. Int.
100%
PeCDD
29.51-34.01
355.8546 Fn2
Flags: PB
4σ 3.24e3
0%
Abs. Int.
2.05e4
1.03e4
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD
29.51-34.01
357.8517 Fn2
Flags: PB
4σ 9.21e2
0%
Abs. Int.
1.27e4
6.34e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
367.8949 Fn2
Flags: PBM
4σ 2.75e3
0%
CS 12347D
3.14e7*
32.30
ES 12378D
3.16e7*
32.81
Abs. Int.
9.07e6
4.54e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
369.8919 Fn2
Flags: PBM
4σ 1.53e3
0%
CS 12347D
1.86e7*
32.30
ES 12378D
1.88e7*
32.81
Abs. Int.
5.17e6
2.58e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
QC Check
29.51-34.01
366.9792 Fn2
Flags: -
0%
Abs. Int.
2.92e6
1.46e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT


Rel. Int.
100%
HxCDD
34.02-38.25
389.8156 Fn3
Flags: PBM
4σ 1.71e3
124679/124689D
4.51e5*
35.04
123679/123689D
4.32e5*
35.99
123468D
1.27e5*
35.71
123469D
1.18e5*
36.12
123678D
1.46e5*
36.86
123478D
4.77e4*
36.74
123467D
4.01e4*
37.06
123789D
1.12e5*
37.15
Abs. Int.
1.53e5
7.67e4
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD
34.02-38.25
391.8127 Fn3
Flags: PBM
4σ 2.16e3
124679/124689D
3.27e5*
35.05
123679/123689D
3.22e5*
35.99
123468D
9.45e4*
35.70
123469D
1.07e5*
36.12
123678D
1.35e5*
36.86
123478D
3.63e4*
36.74
123467D
3.68e4*
37.05
123789D
7.93e4*
37.16
Abs. Int.
1.05e5
5.27e4
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
401.8559 Fn3
Flags: PBM
4σ 4.12e3
ES 123478D
2.65e7*
36.73
ES 123678D
2.50e7*
36.84
JS 123467D
1.70e7*
37.04
ES 123789D
3.04e7*
37.14
Abs. Int.
8.82e6
4.41e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
403.8530 Fn3
Flags: PBM
4σ 1.97e3
ES 123478D
2.03e7*
36.73
ES 123678D
1.93e7*
36.84
JS 123467D
1.35e7*
37.04
ES 123789D
2.33e7*
37.14
Abs. Int.
6.53e6
3.26e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
Abs. Int.
1.74e7
8.69e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT

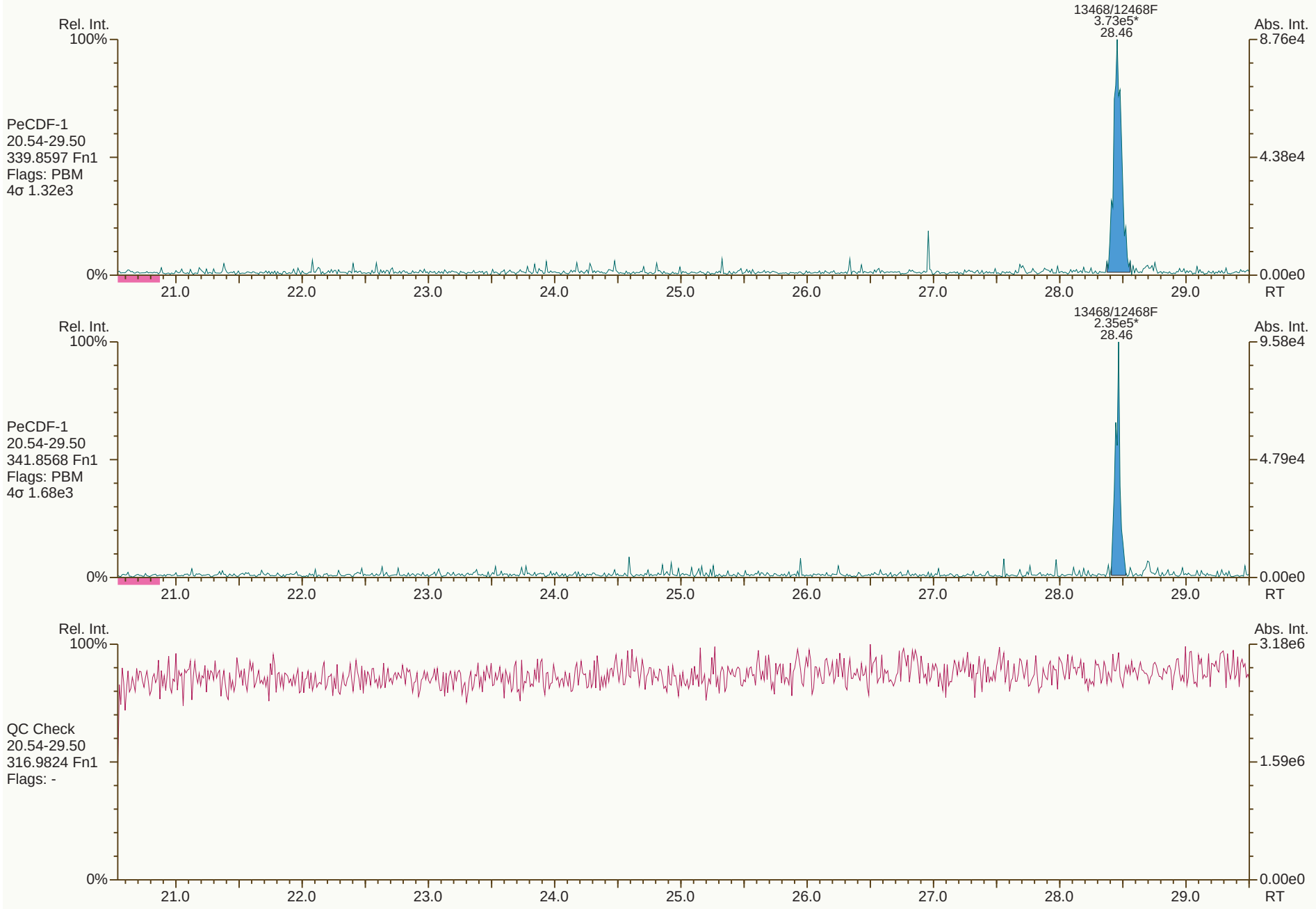

Rel. Int.
100%
HpCDD
38.26-41.01
423.7767 Fn4
Flags: PBM
4σ 1.57e3
0%
1234679D
5.35e6*
39.32
1234678D
3.40e6*
39.97
Abs. Int.
2.20e6
1.10e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.26-41.01
425.7737 Fn4
Flags: PBM
4σ 1.81e3
0%
1234679D
5.22e6*
39.32
1234678D
3.47e6*
39.97
Abs. Int.
2.31e6
1.16e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
435.8169 Fn4
Flags: PBM
4σ 1.67e3
0%
ES 1234678D
2.12e7*
39.95
Abs. Int.
9.43e6
4.71e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
437.8140 Fn4
Flags: PBM
4σ 1.81e3
0%
ES 1234678D
1.96e7*
39.95
Abs. Int.
8.71e6
4.36e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.26-41.01
430.9728 Fn4
Flags: -
0%
Abs. Int.
1.19e7
5.97e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT


OCDD
1.76e7*
42.39
Rel. Int.
100%
OCDD
41.02-45.00
457.7377 Fn5
Flags: PBM
4σ 2.51e3
0%
Abs. Int.
6.56e6
3.28e6
0.00e0
Conc(OCDD) = (1.76e7 + 1.91e7) * 4000pg / (2.30e7 + 2.47e7) * 1.08 * 9.416715g = 303pg/g
PSW 10-Aug-2020 09:10
VERIFIED
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDD
1.91e7*
42.39
OCDD
41.02-45.00
459.7348 Fn5
Flags: PBM
4σ 3.39e3
6.95e6
3.48e6
ES OCDD
2.30e7*
42.38
OCDD Std.
41.02-45.00
469.7780 Fn5
Flags: PBM
4σ 2.09e3
8.57e6
4.29e6
ES OCDD
2.47e7*
42.38
OCDD Std.
41.02-45.00
471.7750 Fn5
Flags: PBM
4σ 2.17e3
8.60e6
4.30e6
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
5.96e6
2.98e6


Rel. Int.
100%
TCDF
20.54-29.50
303.9016 Fn1
Flags: PBM
4σ 1.28e3
1368F
4.08e4*
21.16
2468F
9.46e4*
22.39
1248F...[3]
4.14e4*
23.38
1268F
2.90e4*
23.80
1289F
1.30e5*
28.46
Abs. Int.
3.25e4
1.62e4
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF
20.54-29.50
305.8987 Fn1
Flags: PBM
4σ 1.57e3
1368F
5.31e4*
21.15
2468F
1.47e5*
22.39
1248F...[3]
2.85e4*
23.37
1268F
5.14e4*
23.79
1289F
5.62e4*
28.46
Abs. Int.
3.62e4
1.81e4
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
315.9419 Fn1
Flags: PBM
4σ 1.27e4
JS 1234F
4.95e7*
24.91
ES 2378F
4.01e7*
26.35
Abs. Int.
1.03e7
5.13e6
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
317.9389 Fn1
Flags: PBM
4σ 8.48e3
JS 1234F
6.35e7*
24.91
ES 2378F
5.12e7*
26.34
Abs. Int.
1.25e7
6.27e6
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
HxCDPE
20.54-29.50
375.8364 Fn1
Flags: PB
4σ 1.34e3
Abs. Int.
8.28e3
4.14e3
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT

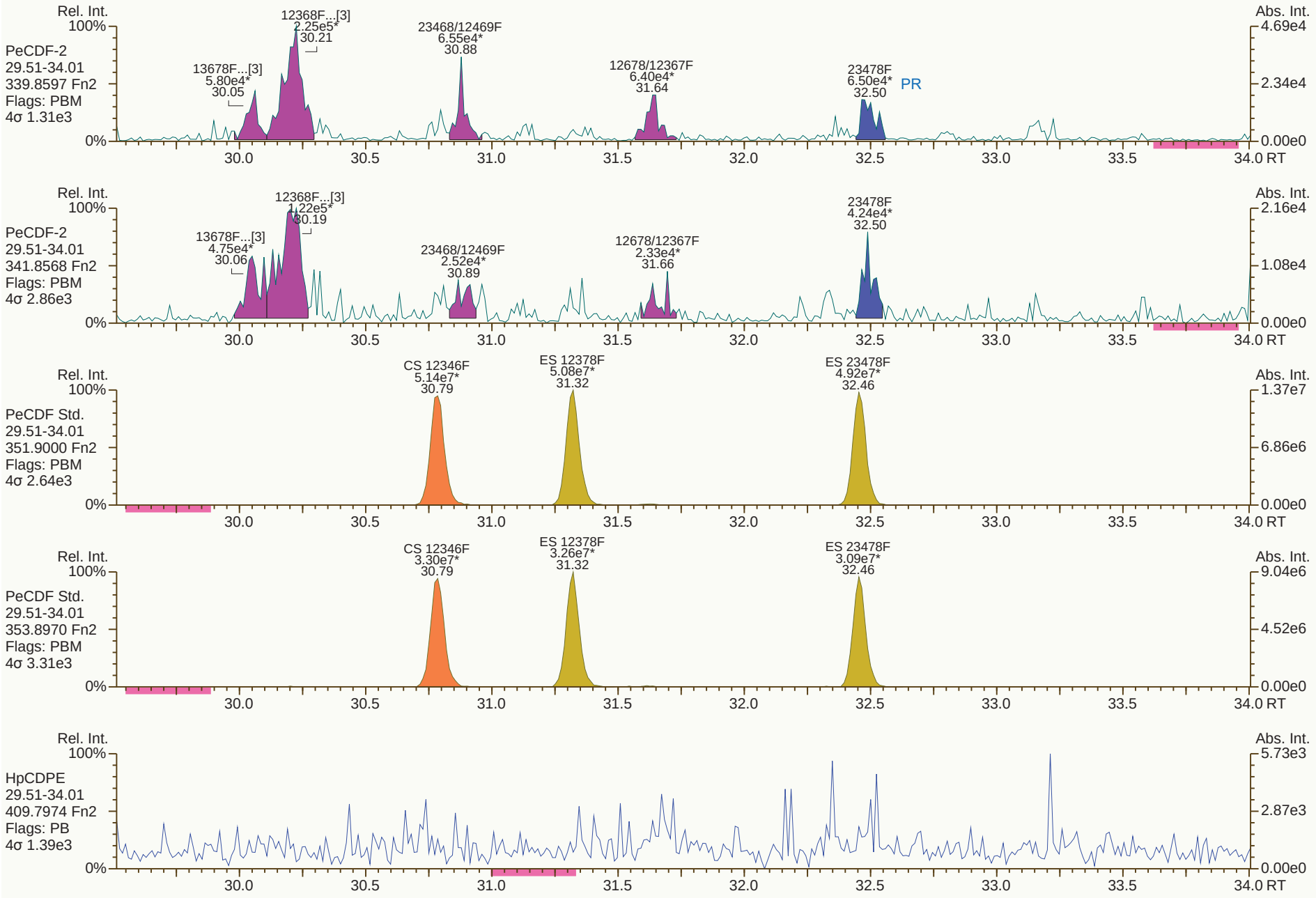
SGS ID: B4511_17654_DF_010 | Sample ID: CS-RISB02 | Acq: 08-Aug-2020 04:13:22

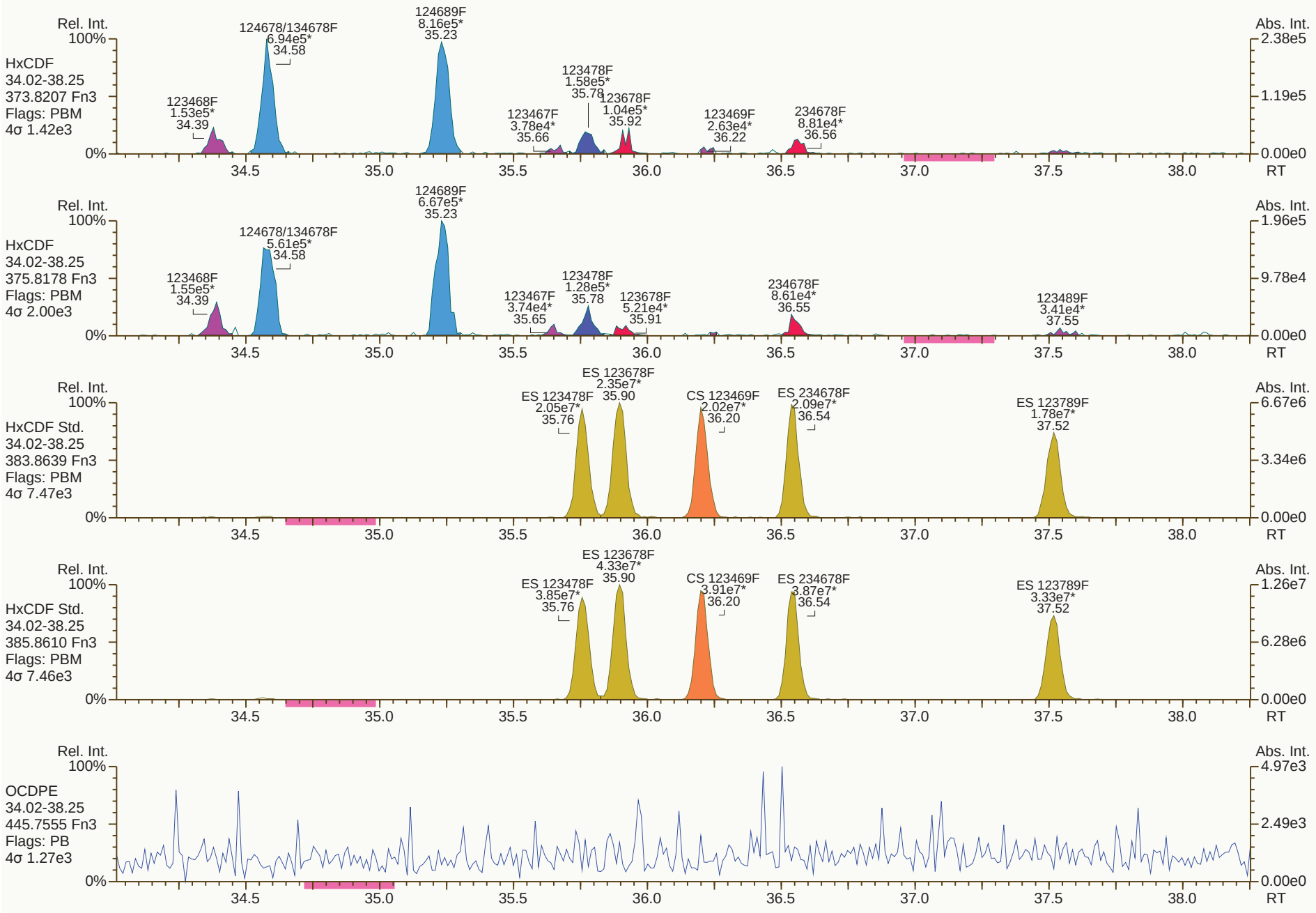
Instr: [ILM] AutoSpec-Ultima MM3 | VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 18 | User: PSW Datafile: 200807R19

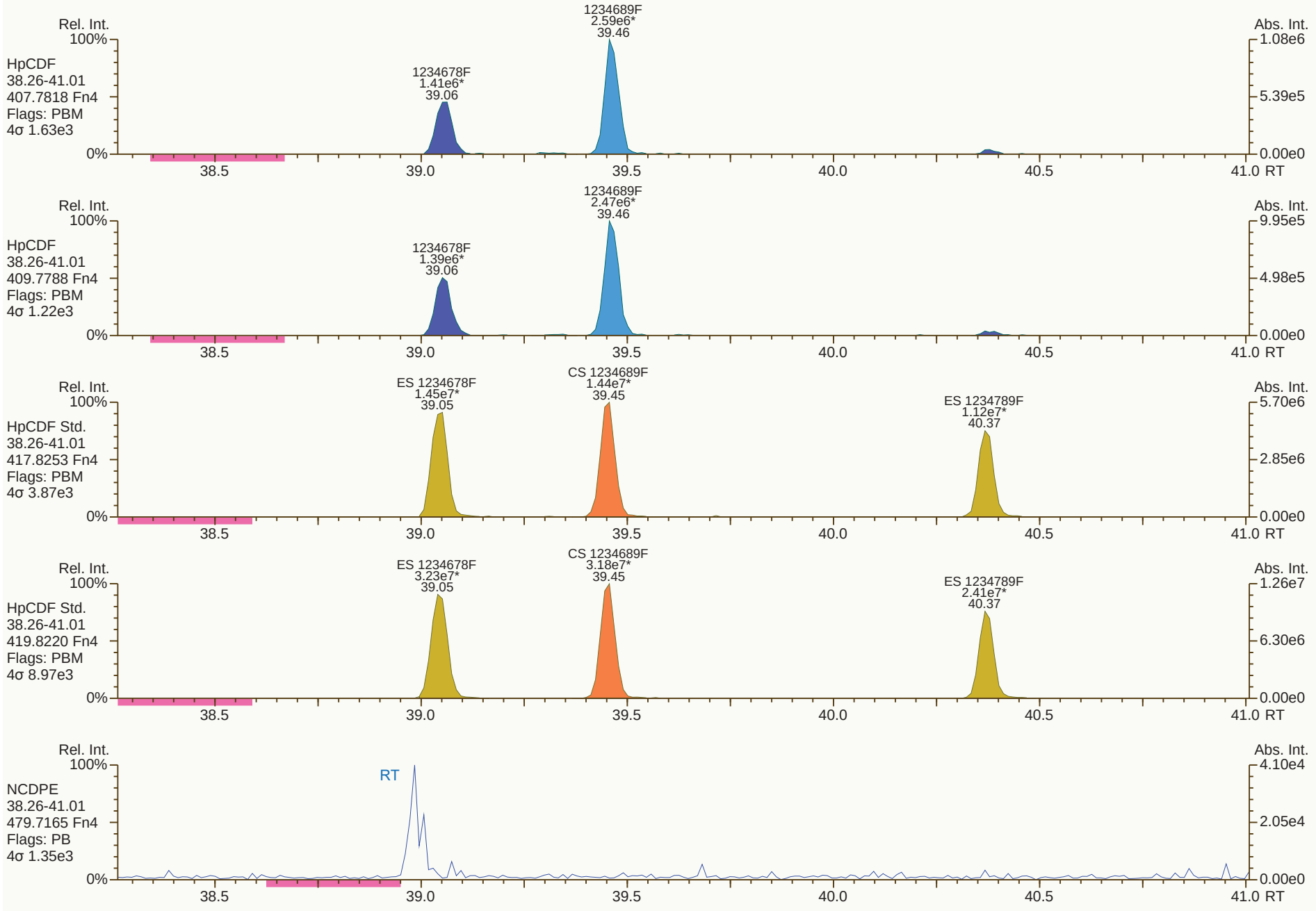


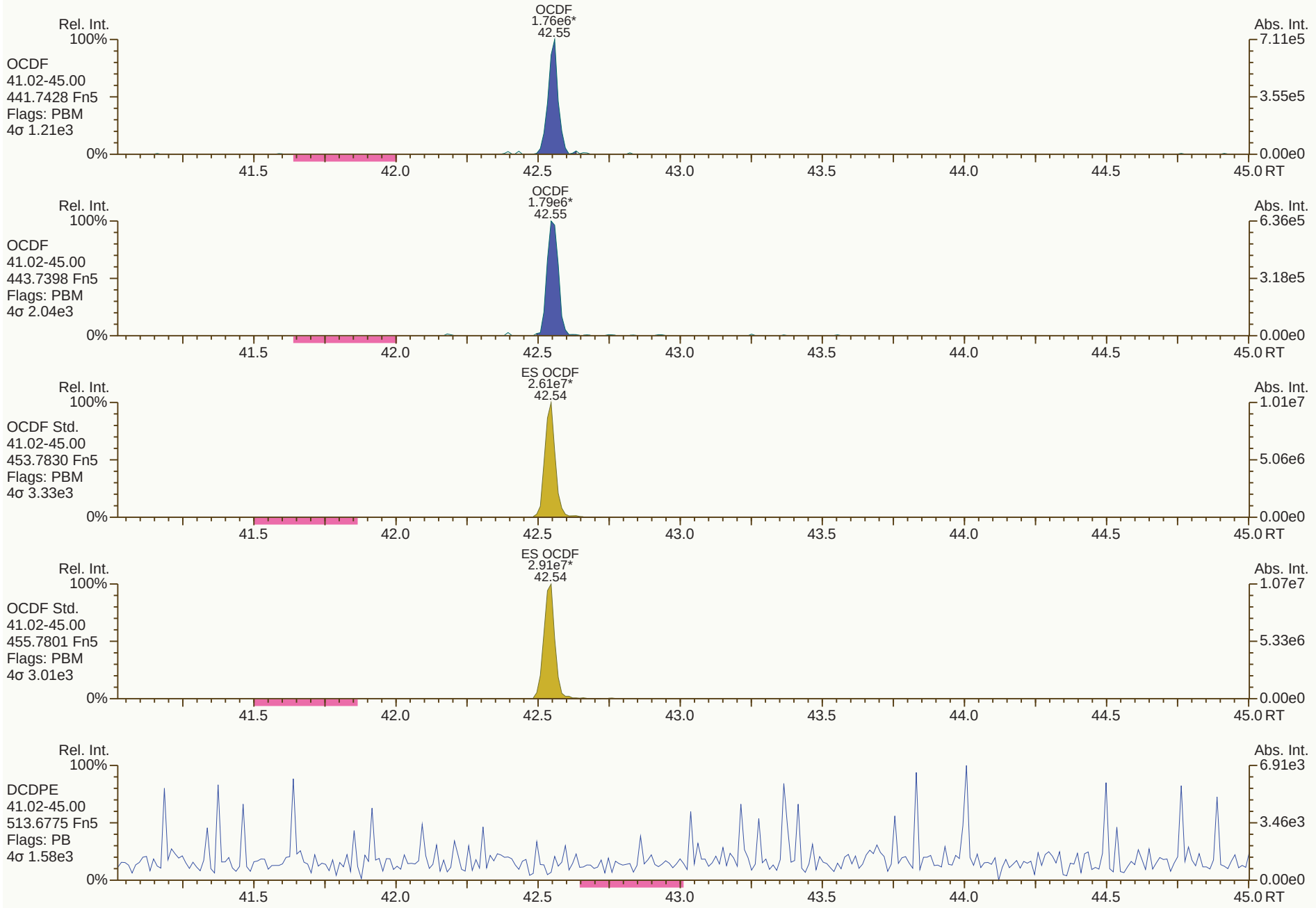
Results: P:\B4500_B4599\B4511\B4511_17654 DF\Resources\B4511_17654_DF_010.utp_res, saved 10-Aug-2020 09:10 (PSW) | *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 0031 scc: 921-381 | *PKD: 10-Aug-2020 09:01 Printed: 10-Aug-2020 09:24 Page 8 of 12*


Rel. Int.
100%
0%
Abs. Int.
PeCDF-2
29.51-34.01
339.8597 Fn2
Flags: PBM
4σ 1.31e3
13678F...[3]
5.80e4*
30.05
12368F...[3]
2.25e5*
30.21
23468/12469F
6.55e4*
30.88
12678/12367F
6.40e4*
31.64
23478F
6.50e4*
32.50
PR
4.69e4
2.34e4
0.00e0
PeCDF-2
29.51-34.01
341.8568 Fn2
Flags: PBM
4σ 2.86e3
13678F...[3]
4.75e4*
30.06
12368F...[3]
1.22e5*
30.19
23468/12469F
2.52e4*
30.89
12678/12367F
2.33e4*
31.66
23478F
4.24e4*
32.50
2.16e4
1.08e4
0.00e0
PeCDF Std.
29.51-34.01
351.9000 Fn2
Flags: PBM
4σ 2.64e3
CS 12346F
5.14e7*
30.79
ES 12378F
5.08e7*
31.32
ES 23478F
4.92e7*
32.46
1.37e7
6.86e6
0.00e0
PeCDF Std.
29.51-34.01
353.8970 Fn2
Flags: PBM
4σ 3.31e3
CS 12346F
3.30e7*
30.79
ES 12378F
3.26e7*
31.32
ES 23478F
3.09e7*
32.46
9.04e6
4.52e6
0.00e0
HpCDPE
29.51-34.01
409.7974 Fn2
Flags: PB
4σ 1.39e3
5.73e3
2.87e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT


Rel. Int.
100%
HxCDF
34.02-38.25
373.8207 Fn3
Flags: PBM
4σ 1.42e3
123468F 1.53e5* 34.39
124678/134678F 6.94e5* 34.58
124689F 8.16e5* 35.23
123467F 3.78e4* 35.66
123478F 1.58e5* 35.78
123678F 1.04e5* 35.92
123469F 2.63e4* 36.22
234678F 8.81e4* 36.56
Abs. Int.
2.38e5
1.19e5
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 RT
Rel. Int.
100%
HxCDF
34.02-38.25
375.8178 Fn3
Flags: PBM
4σ 2.00e3
123468F 1.55e5* 34.39
124678/134678F 5.61e5* 34.58
124689F 6.67e5* 35.23
123467F 3.74e4* 35.65
123478F 1.28e5* 35.78
123678F 5.21e4* 35.91
234678F 8.61e4* 36.55
123489F 3.41e4* 37.55
Abs. Int.
1.96e5
9.78e4
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 RT
Rel. Int.
100%
HxCDF Std.
34.02-38.25
383.8639 Fn3
Flags: PBM
4σ 7.47e3
ES 123478F 2.05e7* 35.76
ES 123678F 2.35e7* 35.90
CS 123469F 2.02e7* 36.20
ES 234678F 2.09e7* 36.54
ES 123789F 1.78e7* 37.52
Abs. Int.
6.67e6
3.34e6
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 RT
Rel. Int.
100%
HxCDF Std.
34.02-38.25
385.8610 Fn3
Flags: PBM
4σ 7.46e3
ES 123478F 3.85e7* 35.76
ES 123678F 4.33e7* 35.90
CS 123469F 3.91e7* 36.20
ES 234678F 3.87e7* 36.54
ES 123789F 3.33e7* 37.52
Abs. Int.
1.26e7
6.28e6
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 RT
Rel. Int.
100%
OCDPE
34.02-38.25
445.7555 Fn3
Flags: PB
4σ 1.27e3
Abs. Int.
4.97e3
2.49e3
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 RT


Rel. Int.
100%
HpCDF
38.26-41.01
407.7818 Fn4
Flags: PBM
4σ 1.63e3
1234678F
1.41e6*
39.06
1234689F
2.59e6*
39.46
Abs. Int.
1.08e6
5.39e5
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF
38.26-41.01
409.7788 Fn4
Flags: PBM
4σ 1.22e3
1234678F
1.39e6*
39.06
1234689F
2.47e6*
39.46
Abs. Int.
9.95e5
4.98e5
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.26-41.01
417.8253 Fn4
Flags: PBM
4σ 3.87e3
ES 1234678F
1.45e7*
39.05
CS 1234689F
1.44e7*
39.45
ES 1234789F
1.12e7*
40.37
Abs. Int.
5.70e6
2.85e6
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.26-41.01
419.8220 Fn4
Flags: PBM
4σ 8.97e3
ES 1234678F
3.23e7*
39.05
CS 1234689F
3.18e7*
39.45
ES 1234789F
2.41e7*
40.37
Abs. Int.
1.26e7
6.30e6
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
NCDPE
38.26-41.01
479.7165 Fn4
Flags: PB
4σ 1.35e3
RT
Abs. Int.
4.10e4
2.05e4
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT



Results: P:\B4500_B4599\B4511\B4511_17654 DF\Resources\B4511_17654_DF_010.utp_res, saved 10-Aug-2020 09:10 (PSW) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 8738, 6162, 8185 scc: 921-381 *PKD: 10-Aug-2020 09:01 Printed: 10-Aug-2020 09:24 Page 12 of 12*

Instrument: MM3 (AutoSpec-Ultima) MS Experiment: df_cl4-8_db5MS GC Program: df_db5MS

#	Datafile	Vial#	Lab ID	Wt/Vol	Client/Sample ID	Analyst(s)	Checkcode	Acq Date	Acq Time
1	200807R01	3	CS3_200807_DF_RA	1.00	SIL 20-449-3	PSW	523-331	07-Aug-2020	13:43:23
2	200807R02	6	OPR1_17654_DF	1.00	0_17654_OPR001	PSW	184-198	07-Aug-2020	14:39:00
3	200807R03	2	SBS_200807_DF_RA	1.00	SIL 20-61-1	PSW	398-019	07-Aug-2020	15:26:32
4	200807R04	5	MB1_17654_DF_SDS	10.00	Method Blank	PSW	154-009	07-Aug-2020	16:13:20
5	200807R05	7	B4511_17654_DF_001	9.19	CS-SS-101	PSW	458-533	07-Aug-2020	17:00:53
6	200807R06	8	B4511_17654_DF_002	9.25	CS-SB-125	PSW	882-901	07-Aug-2020	17:48:26
7	200807R07	9	B4511_17654_DF_003	9.02	CS-24	PSW	425-303	07-Aug-2020	18:35:59
8	200807R08	10	B4511_17654_DF_003MS	9.02	CS-24-MS	PSW	607-175	07-Aug-2020	19:23:31
9	200807R09	11	B4511_17654_DF_003MSD	8.96	CS-24-MSD	PSW	343-506	07-Aug-2020	20:10:58
10	200807R10	12	B4511_17654_DF_004	9.43	CS-23	PSW	764-441	07-Aug-2020	20:58:30
11	200807R11	13	B4511_17654_DF_005	9.59	CS-22	PSW	460-756	07-Aug-2020	21:45:56
12	200807R12	3	CS3_200807_DF_RB	1.00	SIL 20-449-3	PSW	446-519	07-Aug-2020	22:33:28
13	200807R13	6	OPR1_17654_DF-RJ	1.00	0_17654_OPR001 CPSM only	PSW	275-672	07-Aug-2020	23:29:08
14	200807R14	2	SBS_200807_DF_RB	1.00	SIL 20-61-1 CL 10Aug20	PSW	140-454	08-Aug-2020	00:15:51
15	200807R15	14	B4511_17654_DF_006	9.54	CS-26	PSW	702-048	08-Aug-2020	01:03:17
16	200807R16	15	B4511_17654_DF_007	9.02	CS-25	PSW	290-011	08-Aug-2020	01:50:51
17	200807R17	16	B4511_17654_DF_008	8.82	CS-SS-104	PSW	578-088	08-Aug-2020	02:38:23
18	200807R18	17	B4511_17654_DF_009	7.99	SS-108-D	PSW	704-809	08-Aug-2020	03:25:50
19	200807R19	18	B4511_17654_DF_010	9.42	CS-RISB02	PSW	921-381	08-Aug-2020	04:13:22
20	200807R20	3	CS3_200807_DF_RC	1.00	SIL 20-449-3	PSW	658-828	08-Aug-2020	05:00:55

REVIEWED
By Paul Walton at 9:30 am, Aug 10, 2020

APPROVED
Carla_Lyon , 15:13:40, 08/10/2020

Dioxin/Furan QC Summary	Acq'd: 07 Aug 2020 13:43 PSW	ICAL: MM3_DF_10012020_12JUN2020
Lab ID: CS3_200807_DF_RA	UTP: 10-Aug-2020 09:02:16 PSW	Checkcode: 523-331-GRN
Sample ID: SIL 20-449-3	Report: 10 Aug 2020 09:05 pw	Datafile: 200807R01

Name	RT	Response	RA	OK	Ref. RRFs	Calc. RRFs	Dev'n
2378-TCDD	27.30	1.16E+07	0.80	Y	1.18	1.25	6%
12378-PeCDD	32.84	4.90E+07	1.59	Y	1.14	1.11	-2%
123478-HxCDD	36.75	4.93E+07	1.22	Y	1.09	1.09	0%
123678-HxCDD	36.86	4.90E+07	1.25	Y	1.13	1.14	1%
123789-HxCDD	37.16	5.52E+07	1.25	Y	1.05	1.03	-2%
1234678-HpCDD	39.97	4.19E+07	1.03	Y	0.98	1.02	4%
OCDD	42.39	5.40E+07	0.89	Y	1.08	1.09	2%
2378-TCDF	26.38	1.57E+07	0.76	Y	0.98	0.98	0%
12378-PeCDF	31.35	7.00E+07	1.55	Y	0.95	0.98	3%
23478-PeCDF	32.48	7.01E+07	1.52	Y	0.95	0.96	1%
123478-HxCDF	35.78	7.14E+07	1.25	Y	1.20	1.20	0%
123678-HxCDF	35.92	7.28E+07	1.24	Y	1.07	1.09	1%
234678-HxCDF	36.57	6.78E+07	1.21	Y	1.10	1.13	3%
123789-HxCDF	37.54	5.85E+07	1.21	Y	1.09	1.11	1%
1234678-HpCDF	39.06	6.12E+07	1.04	Y	1.28	1.34	4%
1234789-HpCDF	40.38	4.73E+07	1.01	Y	1.27	1.29	2%
OCDF	42.56	6.04E+07	0.90	Y	1.01	1.00	-1%
ES 2378-TCDD	27.28	9.28E+07	0.77	Y	1.01	0.99	-1%
ES 12378-PeCDD	32.82	8.82E+07	1.64	Y	0.87	0.95	9%
ES 123478-HxCDD	36.73	9.05E+07	1.32	Y	1.10	1.00	-9%
ES 123678-HxCDD	36.85	8.63E+07	1.29	Y	1.06	0.95	-10%
ES 123789-HxCDD	37.15	1.07E+08	1.27	Y	1.22	1.18	-3%
ES 1234678-HpCDD	39.96	8.20E+07	1.08	Y	0.99	0.90	-9%
ES OCDD	42.38	9.88E+07	0.90	Y	0.67	0.54	-19%
ES 2378-TCDF	26.36	1.61E+08	0.80	Y	1.01	1.01	0%
ES 12378-PeCDF	31.33	1.43E+08	1.62	Y	0.90	0.90	0%
ES 23478-PeCDF	32.46	1.46E+08	1.55	Y	0.89	0.92	3%
ES 123478-HxCDF	35.76	1.19E+08	0.52	Y	1.43	1.31	-8%
ES 123678-HxCDF	35.9	1.34E+08	0.52	Y	1.63	1.48	-9%
ES 234678-HxCDF	36.55	1.20E+08	0.53	Y	1.48	1.32	-10%
ES 123789-HxCDF	37.52	1.06E+08	0.51	Y	1.29	1.17	-10%
ES 1234678-HpCDF	39.05	9.16E+07	0.45	Y	1.15	1.01	-12%
ES 1234789-HpCDF	40.37	7.33E+07	0.44	Y	0.91	0.81	-11%
ES OCDF	42.55	1.20E+08	0.89	Y	0.83	0.66	-20%

Dioxin/Furan QC Summary	Acq'd: 07 Aug 2020 13:43 PSW	ICAL: MM3_DF_10012020_12JUN2020
Lab ID: CS3_200807_DF_RA	UTP: 10-Aug-2020 09:02:16 PSW	Checkcode: 523-331-GRN
Sample ID: SIL 20-449-3	Report: 10 Aug 2020 09:05 pw	Datafile: 200807R01

Name	RT	Response	RA	OK	Ref. RRFs	Calc. RRFs	Dev'n
JS 1234-TCDD	26.60	9.33E+07	0.77	Y	-	-	-
JS 1234-TCDF	24.93	1.60E+08	0.78	Y	-	-	-
JS 123467-HxCDD	37.04	4.54E+07	1.30	Y	-	-	-
CS 37Cl-2378-TCDD	27.30	9.74E+06	n/a	-	1.04	1.04	1%
CS 12347-PeCDD	32.31	7.72E+07	1.66	Y	0.74	0.83	12%
CS 12346-PeCDF	30.79	1.45E+08	1.58	Y	0.86	0.91	6%
CS 123469-HxCDF	36.21	1.17E+08	0.52	Y	1.36	1.29	-5%
CS 1234689-HpCDF	39.46	8.78E+07	0.44	Y	1.05	0.97	-8%
~~SS 37Cl-2378-TCDD~~	~~27.30~~	~~9.74E+06~~	~~n/a~~	~~-~~	~~1.04~~	~~1.05~~	~~1%~~
~~SS 12347-PeCDD~~	~~32.31~~	~~7.72E+07~~	~~1.66~~	~~Y~~	~~0.86~~	~~0.88~~	~~2%~~
~~SS 12346-PeCDF~~	~~30.79~~	~~1.45E+08~~	~~1.58~~	~~Y~~	~~0.96~~	~~1.01~~	~~6%~~
~~SS 123469-HxCDF~~	~~36.21~~	~~1.17E+08~~	~~0.52~~	~~Y~~	~~0.83~~	~~0.87~~	~~4%~~
~~SS 1234689-HpCDF~~	~~39.46~~	~~8.78E+07~~	~~0.44~~	~~Y~~	~~0.92~~	~~0.96~~	~~4%~~
Not used in this project.							
CL 10Aug20							
~~OCDD-a~~	~~42.39~~	~~3.08E+06~~	~~2.49~~	~~Y~~	~~0.07~~	~~0.06~~	~~-6%~~
~~OCDF-a~~	~~42.55~~	~~3.26E+06~~	~~2.91~~	~~N~~	~~0.06~~	~~0.05~~	~~-14%~~

METHOD 8290A **PCDD/F CALIBRATION VERIFICATION** **FORM 4A**

Lab Name: SGS North America

Initial Calibration: ICAL: MM3_DF_10012020_12JUN2020

Instrument ID: MM3 GC Column ID: ZB-5ms

VER Data Filename: 200807R01 Analysis Date: 07-AUG-2020 13:43:23

NATIVE ANALYTES	M/Z's FORMING RATIO	ION ABUND. RATIO	QC LIMITS			OK	CONC. FOUND	RANGE (ng/mL)			OK
2,3,7,8-TCDD	M/M+2	0.80	0.65	-	0.89	Y	10.6	8	-	12	Y
1,2,3,7,8-PeCDD	M+2/M+4	1.59	1.32	-	1.78	Y	48.9	40	-	60	Y
1,2,3,4,7,8-HxCDD	M+2/M+4	1.22	1.05	-	1.43	Y	49.9	40	-	60	Y
1,2,3,6,7,8-HxCDD	M+2/M+4	1.25	1.05	-	1.43	Y	50.4	40	-	60	Y
1,2,3,7,8,9-HxCDD	M+2/M+4	1.25	1.05	-	1.43	Y	49	40	-	60	Y
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.03	0.88	-	1.20	Y	52	40	-	60	Y
OCDD	M+2/M+4	0.89	0.76	-	1.02	Y	102	80	-	120	Y
2,3,7,8-TCDF	M/M+2	0.76	0.65	-	0.89	Y	9.95	8	-	12	Y
1,2,3,7,8-PeCDF	M+2/M+4	1.55	1.32	-	1.78	Y	51.5	40	-	60	Y
2,3,4,7,8-PeCDF	M+2/M+4	1.52	1.32	-	1.78	Y	50.7	40	-	60	Y
1,2,3,4,7,8-HxCDF	M+2/M+4	1.25	1.05	-	1.43	Y	50.2	40	-	60	Y
1,2,3,6,7,8-HxCDF	M+2/M+4	1.24	1.05	-	1.43	Y	50.7	40	-	60	Y
2,3,4,6,7,8-HxCDF	M+2/M+4	1.21	1.05	-	1.43	Y	51.4	40	-	60	Y
1,2,3,7,8,9-HxCDF	M+2/M+4	1.21	1.05	-	1.43	Y	50.7	40	-	60	Y
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.04	0.88	-	1.20	Y	52.2	40	-	60	Y
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.01	0.88	-	1.20	Y	50.9	40	-	60	Y
OCDF	M+2/M+4	0.90	0.76	-	1.02	Y	99.5	80	-	120	Y

Processed: 10 Aug 2020 09:05 Analyst: pw

METHOD 8290A **PCDD/F CALIBRATION VERIFICATION** **FORM 4B**

Lab Name: SGS North America

Initial Calibration: ICAL: MM3_DF_10012020_12JUN2020

Instrument ID: MM3 GC Column ID: ZB-5ms

VER Data Filename: 200807R01 Analysis Date: 07-AUG-2020 13:43:23

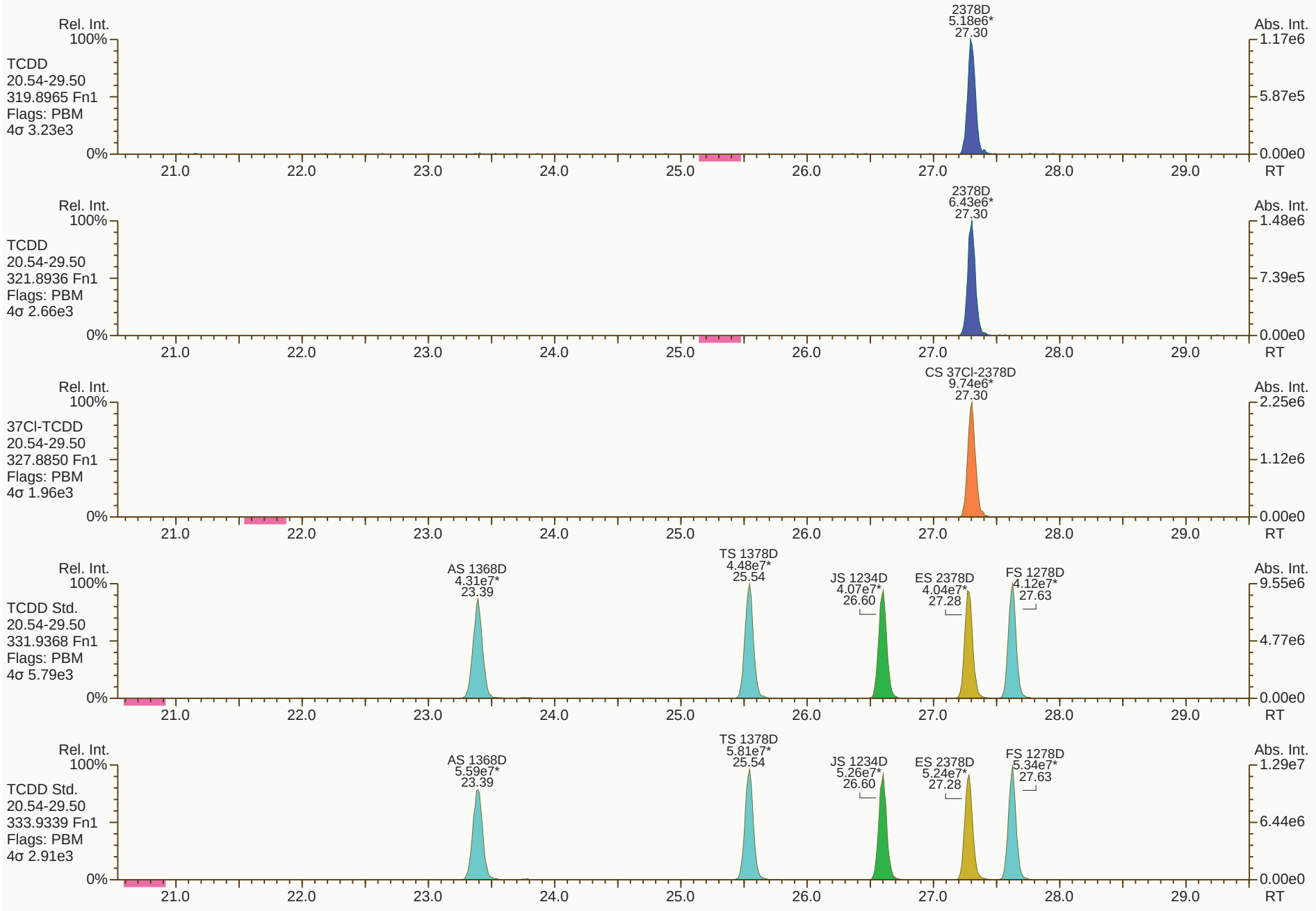
LABELED ANALYTES	M/Z's FORMING RATIO	ION ABUND. RATIO	QC LIMITS			OK	CONC. FOUND	RANGE (ng/mL)			OK
13C-2,3,7,8-TCDD	M/M+2	0.77	0.65	-	0.89	Y	98.8	70	-	130	Y
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.64	1.32	-	1.78	Y	109	70	-	130	Y
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.32	1.05	-	1.43	Y	91.1	70	-	130	Y
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.29	1.05	-	1.43	Y	89.7	70	-	130	Y
13C-1,2,3,7,8,9-HxCDD	M+2/M+4	1.27	1.05	-	1.43	Y	97.2	70	-	130	Y
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.08	0.88	-	1.20	Y	91.1	70	-	130	Y
13C-OCDD	M+2/M+4	0.90	0.76	-	1.02	Y	163	140	-	260	Y
13C-2,3,7,8-TCDF	M/M+2	0.80	0.65	-	0.89	Y	99.7	70	-	130	Y
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.62	1.32	-	1.78	Y	99.8	70	-	130	Y
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.55	1.32	-	1.78	Y	103	70	-	130	Y
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	91.8	70	-	130	Y
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	90.6	70	-	130	Y
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.53	0.43	-	0.59	Y	89.5	70	-	130	Y
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.51	0.43	-	0.59	Y	90.4	70	-	130	Y
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.45	0.37	-	0.51	Y	88.2	70	-	130	Y
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.44	0.37	-	0.51	Y	89.1	70	-	130	Y
13C-OCDF	M+2/M+4	0.89	0.76	-	1.02	Y	160	140	-	260	Y
CLEANUP STANDARDS											
37Cl-2,3,7,8-TCDD	n/a						10.1	7.9	-	12.7	Y
13C-1,2,3,4,7-PeCDD	M+2/M+4	1.66	1.32	-	1.78	Y	112	70	-	130	Y
13C-1,2,3,4,6-PeCDF	M+2/M+4	1.58	1.32	-	1.78	Y	106	70	-	130	Y
13C-1,2,3,4,6,9-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	94.8	70	-	130	Y
13C-1,2,3,4,6,8,9-HpCDF	M/M+2	0.44	0.37	-	0.51	Y	91.8	70	-	130	Y

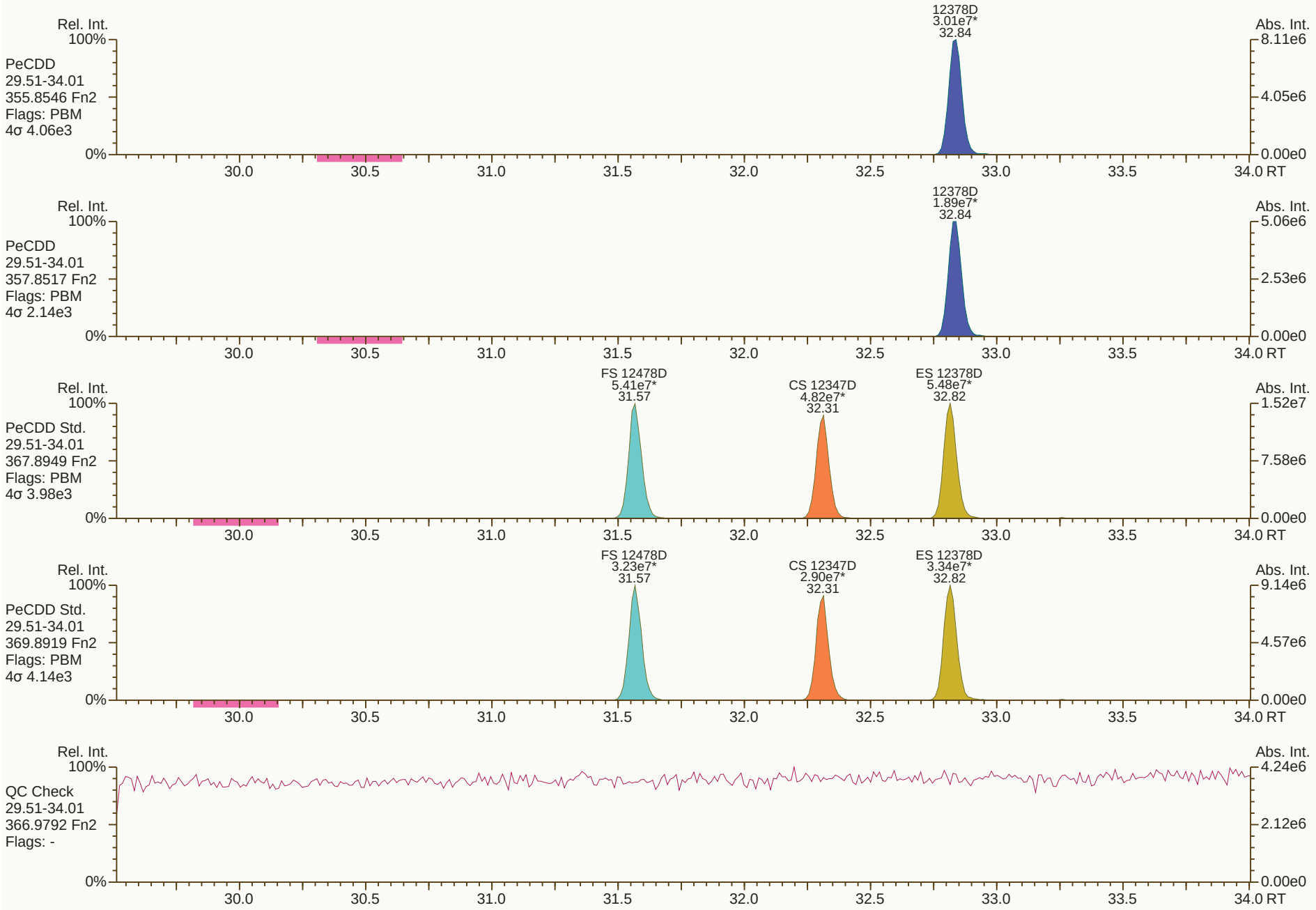
Processed: 10 Aug 2020 09:05 Analyst: pw

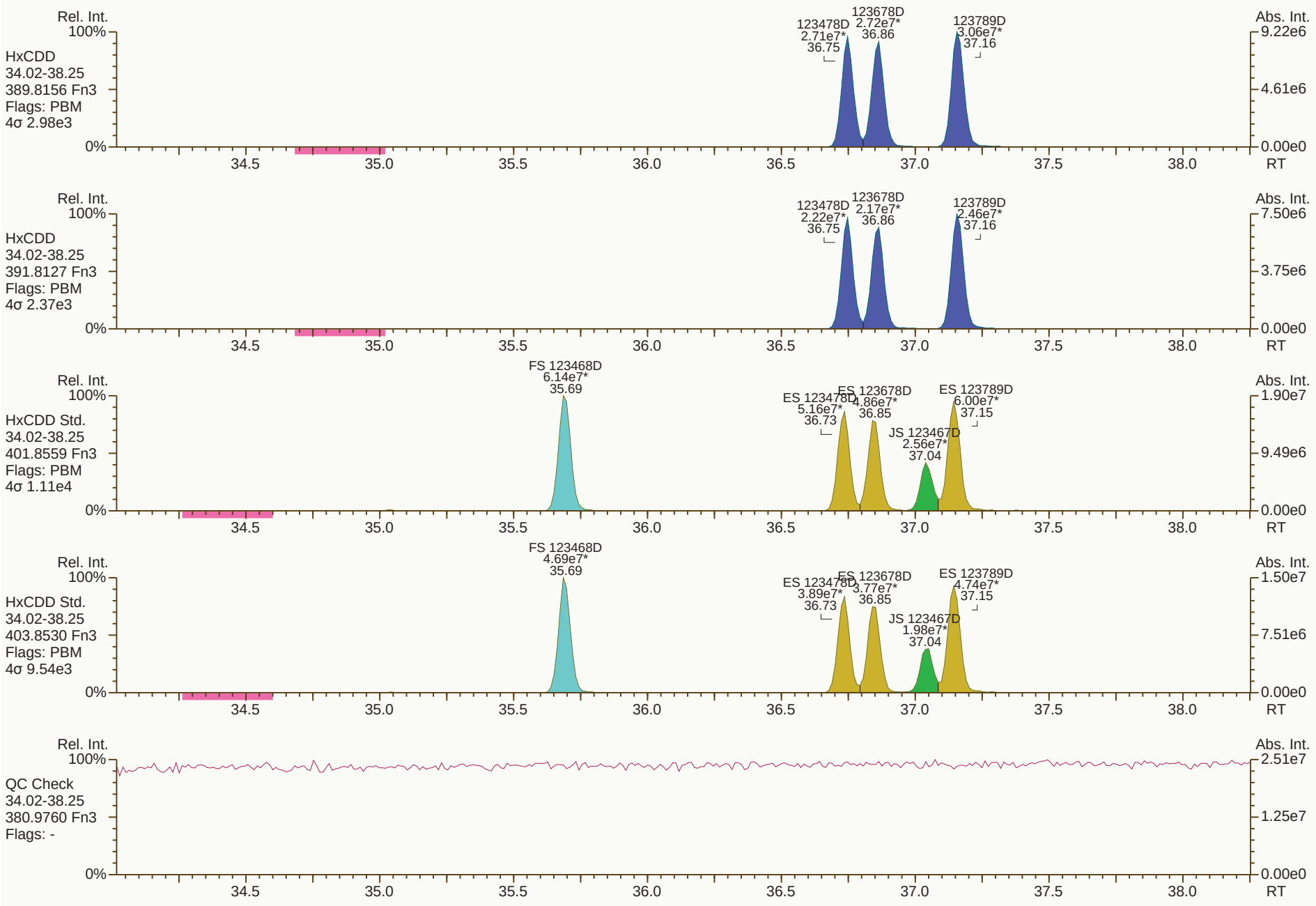
SGS ID: CS3_200807_DF_RA **Sample ID: SIL 20-449-3** **Acq: 07-Aug-2020 13:43:23**
Instr: [ILM] AutoSpec-Ultima MM3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 3** **User: PSW Datafile: 200807R01**

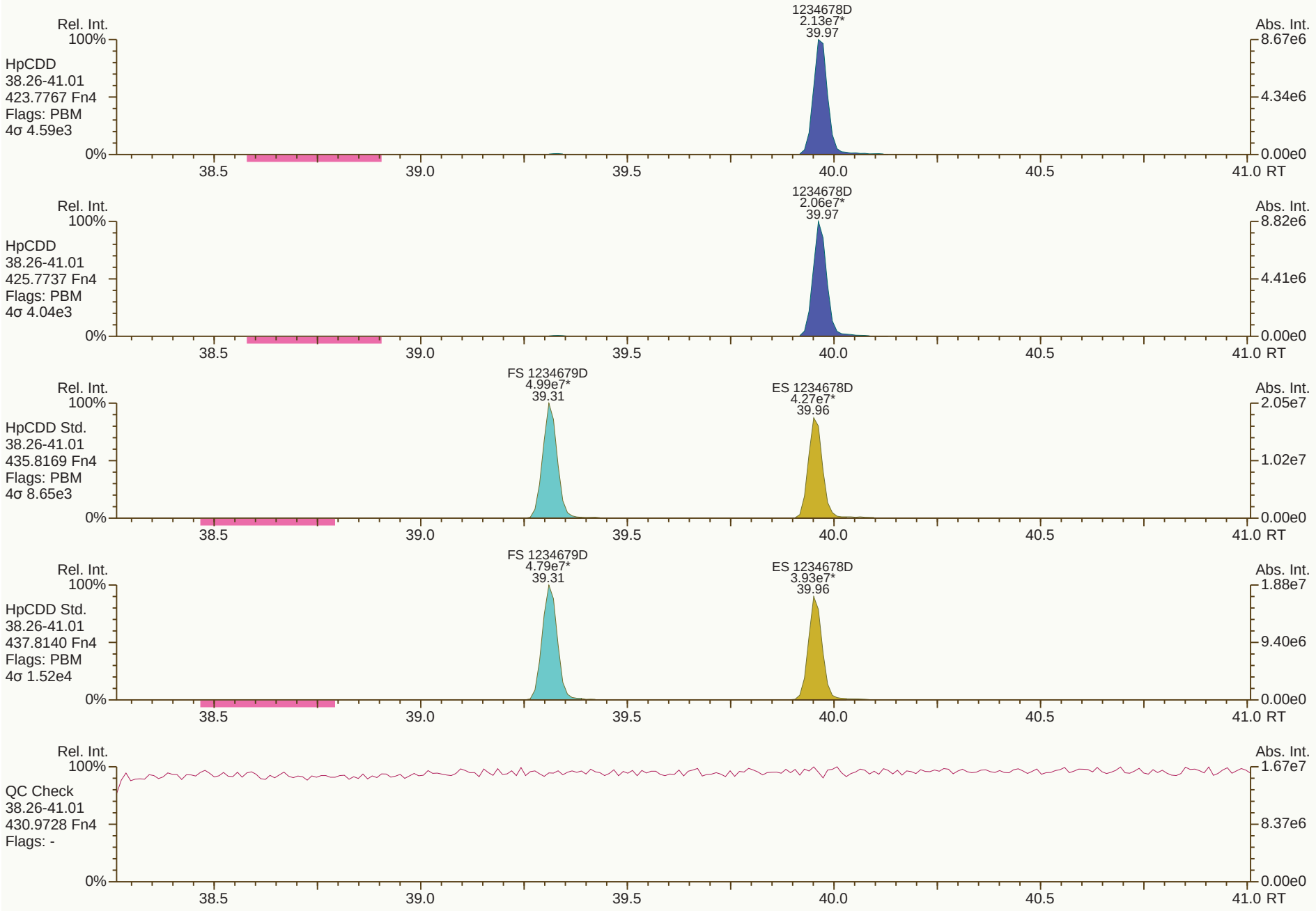


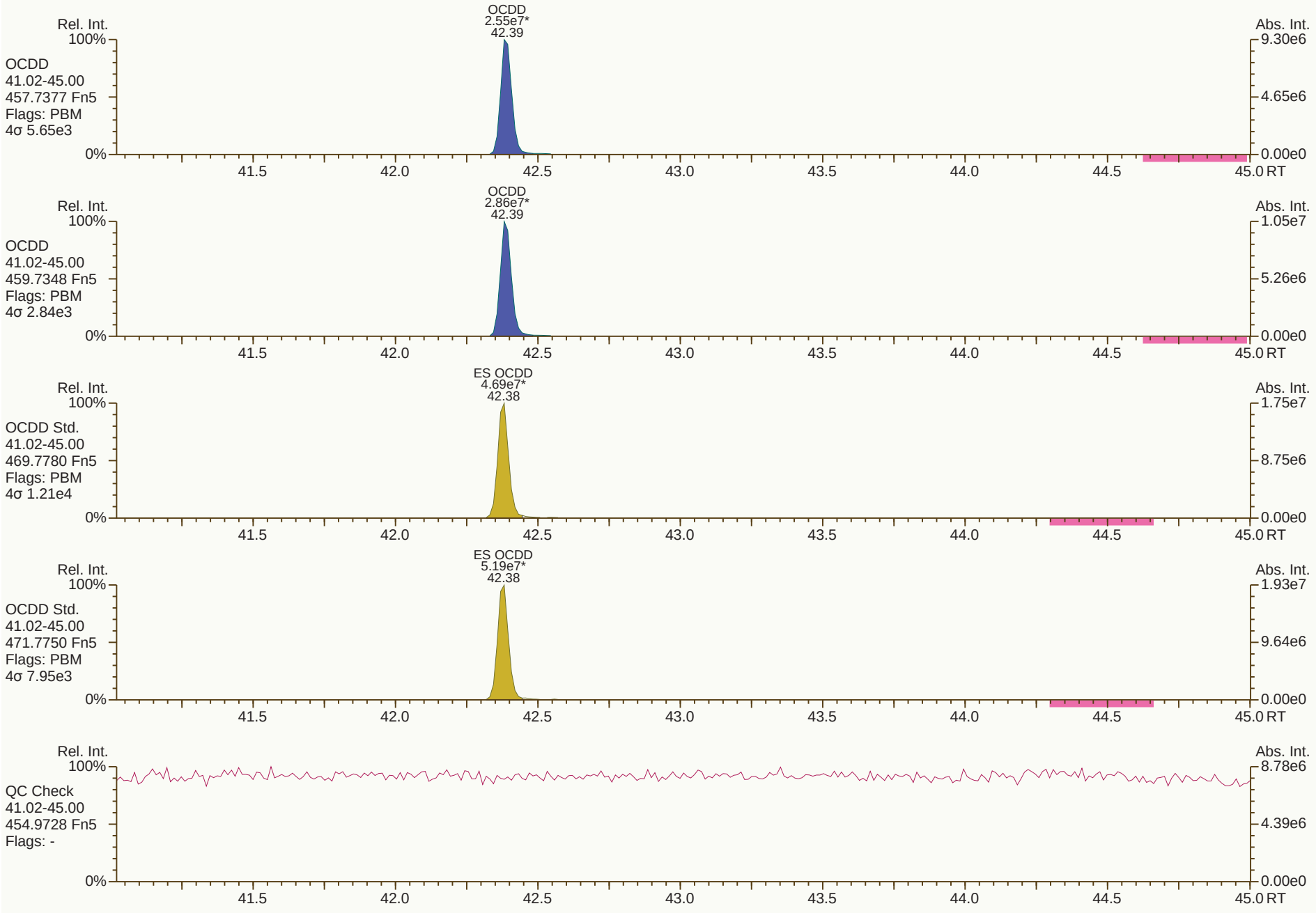
Results: P:\B4500_B4599\B4511\B4511_17654 DF\Resources\CS3_200807_DF_RA.utp_res, saved 10-Aug-2020 09:14 (PSW) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 scc: 523-331 *PKD: n/a Printed: 10-Aug-2020 09:14 Page 1 of 12*

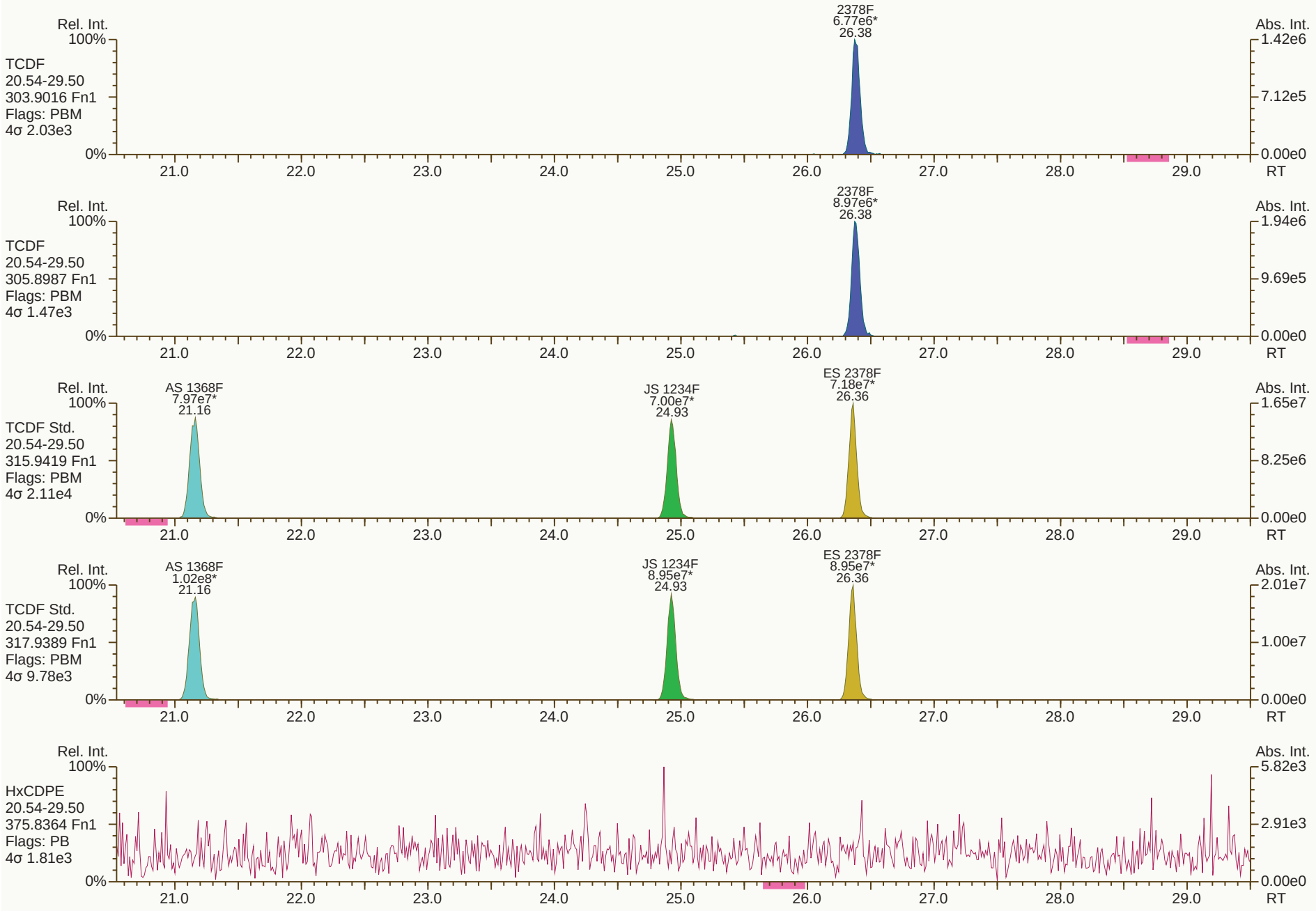

Rel. Int.
100%
TCDD
20.54-29.50
319.8965 Fn1
Flags: PBM
4σ 3.23e3
0%
2378D
5.18e6*
27.30
Abs. Int.
1.17e6
5.87e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD
20.54-29.50
321.8936 Fn1
Flags: PBM
4σ 2.66e3
0%
2378D
6.43e6*
27.30
Abs. Int.
1.48e6
7.39e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
37Cl-TCDD
20.54-29.50
327.8850 Fn1
Flags: PBM
4σ 1.96e3
0%
CS 37Cl-2378D
9.74e6*
27.30
Abs. Int.
2.25e6
1.12e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
331.9368 Fn1
Flags: PBM
4σ 5.79e3
0%
AS 1368D
4.31e7*
23.39
TS 1378D
4.48e7*
25.54
JS 1234D
4.07e7*
26.60
ES 2378D
4.04e7*
27.28
FS 1278D
4.12e7*
27.63
Abs. Int.
9.55e6
4.77e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
333.9339 Fn1
Flags: PBM
4σ 2.91e3
0%
AS 1368D
5.59e7*
23.39
TS 1378D
5.81e7*
25.54
JS 1234D
5.26e7*
26.60
ES 2378D
5.24e7*
27.28
FS 1278D
5.34e7*
27.63
Abs. Int.
1.29e7
6.44e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
PeCDD
29.51-34.01
355.8546 Fn2
Flags: PBM
4σ 4.06e3
0%
12378D
3.01e7*
32.84
Abs. Int.
8.11e6
4.05e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD
29.51-34.01
357.8517 Fn2
Flags: PBM
4σ 2.14e3
0%
12378D
1.89e7*
32.84
Abs. Int.
5.06e6
2.53e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
367.8949 Fn2
Flags: PBM
4σ 3.98e3
0%
FS 12478D
5.41e7*
31.57
CS 12347D
4.82e7*
32.31
ES 12378D
5.48e7*
32.82
Abs. Int.
1.52e7
7.58e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
369.8919 Fn2
Flags: PBM
4σ 4.14e3
0%
FS 12478D
3.23e7*
31.57
CS 12347D
2.90e7*
32.31
ES 12378D
3.34e7*
32.82
Abs. Int.
9.14e6
4.57e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
QC Check
29.51-34.01
366.9792 Fn2
Flags: -
0%
Abs. Int.
4.24e6
2.12e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT

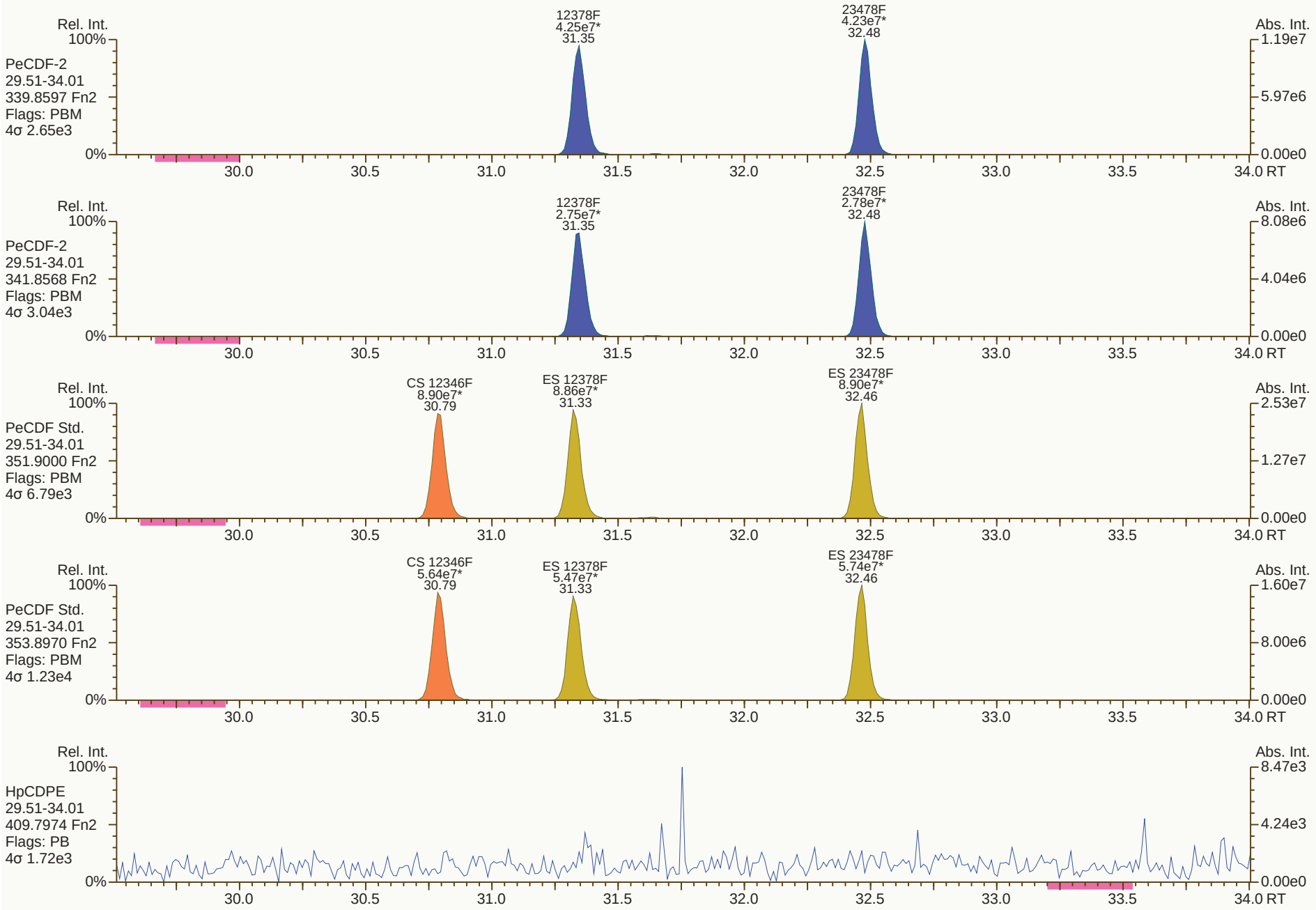

Rel. Int.
100%
HxCDD
34.02-38.25
389.8156 Fn3
Flags: PBM
4σ 2.98e3
123478D 2.71e7* 36.75
123678D 2.72e7* 36.86
123789D 3.06e7* 37.16
Abs. Int.
9.22e6
4.61e6
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0
RT
Rel. Int.
100%
HxCDD
34.02-38.25
391.8127 Fn3
Flags: PBM
4σ 2.37e3
123478D 2.22e7* 36.75
123678D 2.17e7* 36.86
123789D 2.46e7* 37.16
Abs. Int.
7.50e6
3.75e6
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
401.8559 Fn3
Flags: PBM
4σ 1.11e4
FS 123468D 6.14e7* 35.69
ES 123478D 5.16e7* 36.73
ES 123678D 4.86e7* 36.85
JS 123467D 2.56e7* 37.04
ES 123789D 6.00e7* 37.15
Abs. Int.
1.90e7
9.49e6
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
403.8530 Fn3
Flags: PBM
4σ 9.54e3
FS 123468D 4.69e7* 35.69
ES 123478D 3.89e7* 36.73
ES 123678D 3.77e7* 36.85
JS 123467D 1.98e7* 37.04
ES 123789D 4.74e7* 37.15
Abs. Int.
1.50e7
7.51e6
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0
RT
Rel. Int.
100%
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
Abs. Int.
2.51e7
1.25e7
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0
RT

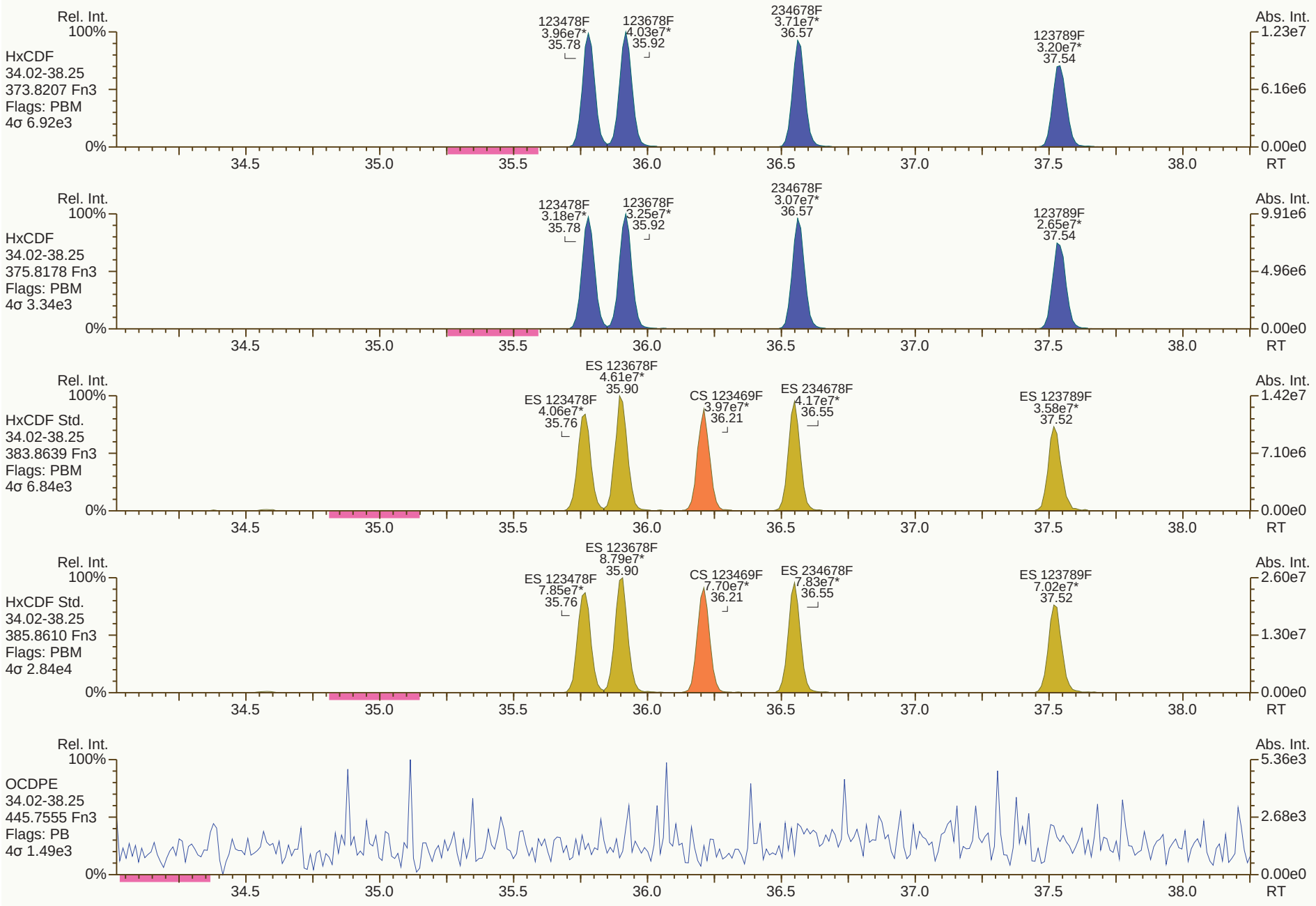

Rel. Int.
100%
HpCDD
38.26-41.01
423.7767 Fn4
Flags: PBM
4σ 4.59e3
0%
1234678D
2.13e7*
39.97
Abs. Int.
8.67e6
4.34e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.26-41.01
425.7737 Fn4
Flags: PBM
4σ 4.04e3
0%
1234678D
2.06e7*
39.97
Abs. Int.
8.82e6
4.41e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
435.8169 Fn4
Flags: PBM
4σ 8.65e3
0%
FS 1234679D
4.99e7*
39.31
ES 1234678D
4.27e7*
39.96
Abs. Int.
2.05e7
1.02e7
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
437.8140 Fn4
Flags: PBM
4σ 1.52e4
0%
FS 1234679D
4.79e7*
39.31
ES 1234678D
3.93e7*
39.96
Abs. Int.
1.88e7
9.40e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.26-41.01
430.9728 Fn4
Flags: -
0%
Abs. Int.
1.67e7
8.37e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT

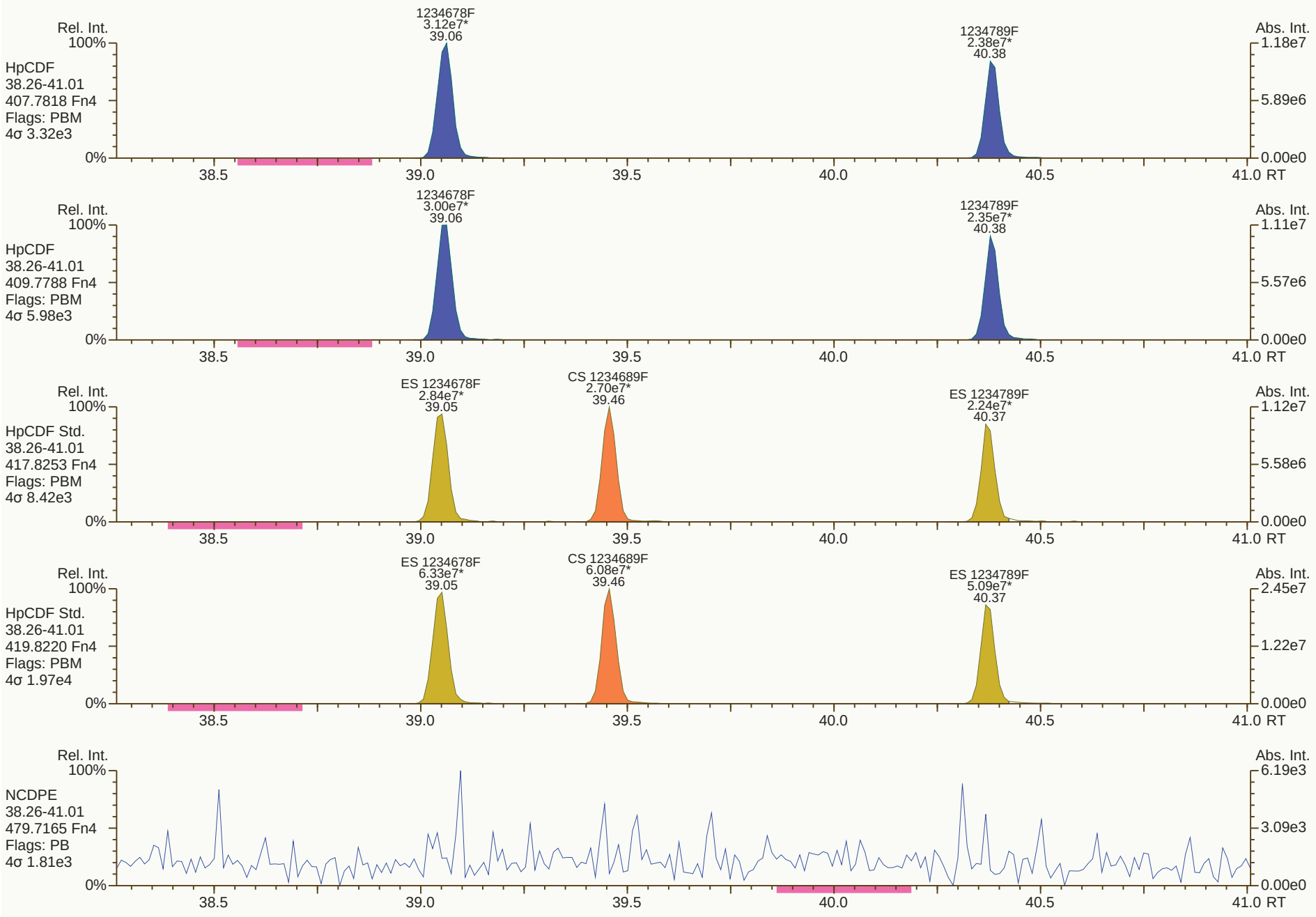

OCDD
2.55e7*
42.39
Rel. Int.
100%
OCDD
41.02-45.00
457.7377 Fn5
Flags: PBM
4σ 5.65e3
0%
Abs. Int.
9.30e6
4.65e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDD
2.86e7*
42.39
Rel. Int.
100%
OCDD
41.02-45.00
459.7348 Fn5
Flags: PBM
4σ 2.84e3
0%
Abs. Int.
1.05e7
5.26e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
4.69e7*
42.38
Rel. Int.
100%
OCDD Std.
41.02-45.00
469.7780 Fn5
Flags: PBM
4σ 1.21e4
0%
Abs. Int.
1.75e7
8.75e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
5.19e7*
42.38
Rel. Int.
100%
OCDD Std.
41.02-45.00
471.7750 Fn5
Flags: PBM
4σ 7.95e3
0%
Abs. Int.
1.93e7
9.64e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
8.78e6
4.39e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT


Rel. Int.
100%
TCDF
20.54-29.50
303.9016 Fn1
Flags: PBM
4σ 2.03e3
2378F
6.77e6*
26.38
Abs. Int.
1.42e6
7.12e5
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF
20.54-29.50
305.8987 Fn1
Flags: PBM
4σ 1.47e3
2378F
8.97e6*
26.38
Abs. Int.
1.94e6
9.69e5
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
315.9419 Fn1
Flags: PBM
4σ 2.11e4
AS 1368F
7.97e7*
21.16
JS 1234F
7.00e7*
24.93
ES 2378F
7.18e7*
26.36
Abs. Int.
1.65e7
8.25e6
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
317.9389 Fn1
Flags: PBM
4σ 9.78e3
AS 1368F
1.02e8*
21.16
JS 1234F
8.95e7*
24.93
ES 2378F
8.95e7*
26.36
Abs. Int.
2.01e7
1.00e7
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
HxCDPE
20.54-29.50
375.8364 Fn1
Flags: PB
4σ 1.81e3
Abs. Int.
5.82e3
2.91e3
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
0%
Abs. Int.
9.81e3
4.90e3
0.00e0
PeCDF-1
20.54-29.50
339.8597 Fn1
Flags: PB
4σ 1.88e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
0%
Abs. Int.
1.28e4
6.41e3
0.00e0
PeCDF-1
20.54-29.50
341.8568 Fn1
Flags: PB
4σ 2.22e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
0%
Abs. Int.
4.75e6
2.38e6
0.00e0
QC Check
20.54-29.50
316.9824 Fn1
Flags: -
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
PeCDF-2
29.51-34.01
339.8597 Fn2
Flags: PBM
4σ 2.65e3
0%
12378F
4.25e7*
31.35
23478F
4.23e7*
32.48
Abs. Int.
1.19e7
5.97e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF-2
29.51-34.01
341.8568 Fn2
Flags: PBM
4σ 3.04e3
0%
12378F
2.75e7*
31.35
23478F
2.78e7*
32.48
Abs. Int.
8.08e6
4.04e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
351.9000 Fn2
Flags: PBM
4σ 6.79e3
0%
CS 12346F
8.90e7*
30.79
ES 12378F
8.86e7*
31.33
ES 23478F
8.90e7*
32.46
Abs. Int.
2.53e7
1.27e7
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
353.8970 Fn2
Flags: PBM
4σ 1.23e4
0%
CS 12346F
5.64e7*
30.79
ES 12378F
5.47e7*
31.33
ES 23478F
5.74e7*
32.46
Abs. Int.
1.60e7
8.00e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
HpCDPE
29.51-34.01
409.7974 Fn2
Flags: PB
4σ 1.72e3
0%
Abs. Int.
8.47e3
4.24e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT

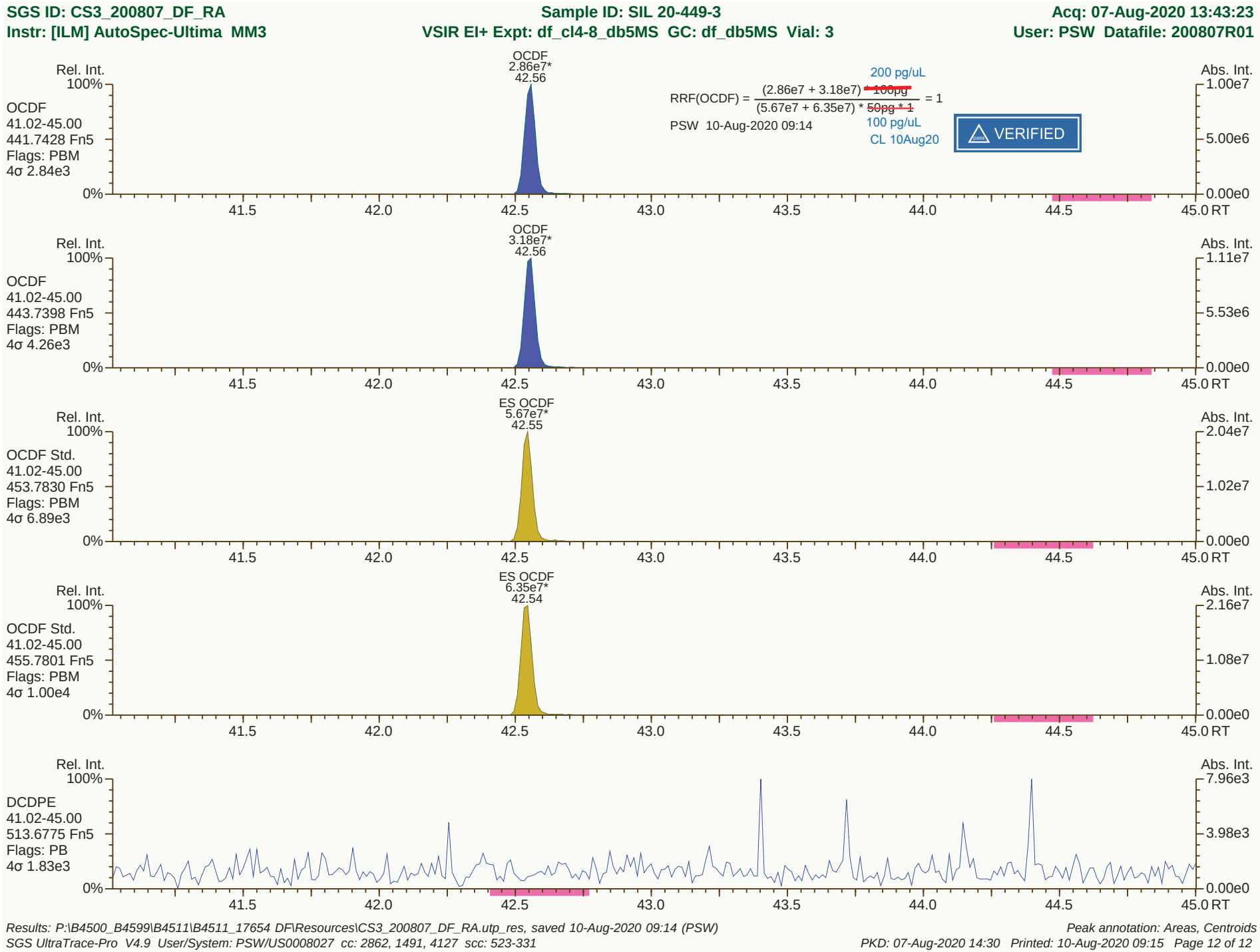

Rel. Int.
100%
HxCDF
34.02-38.25
373.8207 Fn3
Flags: PBM
4σ 6.92e3
123478F
3.96e7*
35.78
123678F
4.03e7*
35.92
234678F
3.71e7*
36.57
123789F
3.20e7*
37.54
Abs. Int.
1.23e7
6.16e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDF
34.02-38.25
375.8178 Fn3
Flags: PBM
4σ 3.34e3
123478F
3.18e7*
35.78
123678F
3.25e7*
35.92
234678F
3.07e7*
36.57
123789F
2.65e7*
37.54
Abs. Int.
9.91e6
4.96e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDF Std.
34.02-38.25
383.8639 Fn3
Flags: PBM
4σ 6.84e3
ES 123678F
4.61e7*
35.90
ES 123478F
4.06e7*
35.76
CS 123469F
3.97e7*
36.21
ES 234678F
4.17e7*
36.55
ES 123789F
3.58e7*
37.52
Abs. Int.
1.42e7
7.10e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDF Std.
34.02-38.25
385.8610 Fn3
Flags: PBM
4σ 2.84e4
ES 123678F
8.79e7*
35.90
ES 123478F
7.85e7*
35.76
CS 123469F
7.70e7*
36.21
ES 234678F
7.83e7*
36.55
ES 123789F
7.02e7*
37.52
Abs. Int.
2.60e7
1.30e7
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
OCDPE
34.02-38.25
445.7555 Fn3
Flags: PB
4σ 1.49e3
Abs. Int.
5.36e3
2.68e3
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT


Rel. Int.
100%
HpCDF
38.26-41.01
407.7818 Fn4
Flags: PBM
4σ 3.32e3
0%
1234678F
3.12e7*
39.06
1234789F
2.38e7*
40.38
Abs. Int.
1.18e7
5.89e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF
38.26-41.01
409.7788 Fn4
Flags: PBM
4σ 5.98e3
0%
1234678F
3.00e7*
39.06
1234789F
2.35e7*
40.38
Abs. Int.
1.11e7
5.57e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.26-41.01
417.8253 Fn4
Flags: PBM
4σ 8.42e3
0%
ES 1234678F
2.84e7*
39.05
CS 1234689F
2.70e7*
39.46
ES 1234789F
2.24e7*
40.37
Abs. Int.
1.12e7
5.58e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.26-41.01
419.8220 Fn4
Flags: PBM
4σ 1.97e4
0%
ES 1234678F
6.33e7*
39.05
CS 1234689F
6.08e7*
39.46
ES 1234789F
5.09e7*
40.37
Abs. Int.
2.45e7
1.22e7
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
NCDPE
38.26-41.01
479.7165 Fn4
Flags: PB
4σ 1.81e3
0%
Abs. Int.
6.19e3
3.09e3
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT

SGS ID: CS3_200807_DF_RA
Instr: [ILM] AutoSpec-Ultima MM3

Sample ID: SIL 20-449-3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 3

Acq: 07-Aug-2020 13:43:23
User: PSW Datafile: 200807R01



Results: P:\B4500_B4599\B4511\B4511_17654 DF\Resources\CS3_200807_DF_RA.utp_res, saved 10-Aug-2020 09:14 (PSW)
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 2862, 1491, 4127 scc: 523-331

Peak annotation: Areas, Centroids
PKD: 07-Aug-2020 14:30 Printed: 10-Aug-2020 09:15 Page 12 of 12

Dioxin/Furan QC Summary	Acq'd: 07 Aug 2020 22:33 PSW	ICAL: MM3_DF_10012020_12JUN2020
Lab ID: CS3_200807_DF_RB	UTP: 10-Aug-2020 09:02:26 PSW	Checkcode: 446-519-YMV
Sample ID: SIL 20-449-3	Report: 10 Aug 2020 09:05 pw	Datafile: 200807R12

Name	RT	Response	RA	OK	Ref. RRFs	Calc. RRFs	Dev'n
2378-TCDD	27.28	1.16E+07	0.82	Y	1.18	1.26	7%
12378-PeCDD	32.82	4.60E+07	1.59	Y	1.14	1.12	-2%
123478-HxCDD	36.73	4.04E+07	1.24	Y	1.09	1.05	-4%
123678-HxCDD	36.84	4.13E+07	1.26	Y	1.13	1.14	1%
123789-HxCDD	37.14	4.55E+07	1.26	Y	1.05	1.05	0%
1234678-HpCDD	39.96	3.39E+07	1.06	Y	0.98	1.01	3%
OCDD	42.38	4.76E+07	0.90	Y	1.08	1.08	0%
2378-TCDF	26.36	1.55E+07	0.76	Y	0.98	0.99	1%
12378-PeCDF	31.33	6.63E+07	1.57	Y	0.95	0.96	1%
23478-PeCDF	32.47	6.42E+07	1.53	Y	0.95	0.95	1%
123478-HxCDF	35.76	5.94E+07	1.24	Y	1.20	1.22	2%
123678-HxCDF	35.90	6.09E+07	1.21	Y	1.07	1.10	3%
234678-HxCDF	36.55	5.70E+07	1.23	Y	1.10	1.12	2%
123789-HxCDF	37.52	4.76E+07	1.23	Y	1.09	1.08	-1%
1234678-HpCDF	39.05	5.12E+07	1.02	Y	1.28	1.33	4%
1234789-HpCDF	40.37	3.95E+07	1.04	Y	1.27	1.31	4%
OCDF	42.54	5.38E+07	0.88	Y	1.01	1.05	4%
ES 2378-TCDD	27.26	9.25E+07	0.78	Y	1.01	0.99	-2%
ES 12378-PeCDD	32.8	8.26E+07	1.59	Y	0.87	0.88	1%
ES 123478-HxCDD	36.72	7.70E+07	1.27	Y	1.10	1.00	-9%
ES 123678-HxCDD	36.83	7.26E+07	1.26	Y	1.06	0.95	-11%
ES 123789-HxCDD	37.13	8.69E+07	1.27	Y	1.22	1.13	-7%
ES 1234678-HpCDD	39.94	6.73E+07	1.08	Y	0.99	0.88	-12%
ES OCDD	42.37	8.81E+07	0.93	Y	0.67	0.57	-14%
ES 2378-TCDF	26.34	1.56E+08	0.78	Y	1.01	0.98	-3%
ES 12378-PeCDF	31.31	1.38E+08	1.59	Y	0.90	0.87	-3%
ES 23478-PeCDF	32.45	1.35E+08	1.59	Y	0.89	0.85	-5%
ES 123478-HxCDF	35.75	9.75E+07	0.52	Y	1.43	1.27	-11%
ES 123678-HxCDF	35.89	1.11E+08	0.53	Y	1.63	1.44	-12%
ES 234678-HxCDF	36.53	1.01E+08	0.53	Y	1.48	1.32	-11%
ES 123789-HxCDF	37.51	8.79E+07	0.51	Y	1.29	1.14	-11%
ES 1234678-HpCDF	39.03	7.69E+07	0.46	Y	1.15	1.00	-13%
ES 1234789-HpCDF	40.36	6.01E+07	0.44	Y	0.91	0.78	-14%
ES OCDF	42.53	1.03E+08	0.91	Y	0.83	0.67	-19%

Dioxin/Furan QC Summary	Acq'd: 07 Aug 2020 22:33 PSW	ICAL: MM3_DF_10012020_12JUN2020
Lab ID: CS3_200807_DF_RB	UTP: 10-Aug-2020 09:02:26 PSW	Checkcode: 446-519-YMV
Sample ID: SIL 20-449-3	Report: 10 Aug 2020 09:05 pw	Datafile: 200807R12

Name	RT	Response	RA	OK	Ref. RRFs	Calc. RRFs	Dev'n
JS 1234-TCDD	26.58	9.38E+07	0.78	Y	-	-	-
JS 1234-TCDF	24.90	1.59E+08	0.79	Y	-	-	-
JS 123467-HxCDD	37.03	3.84E+07	1.26	Y	-	-	-
CS 37Cl-2378-TCDD	27.28	1.00E+07	n/a	-	1.04	1.07	3%
CS 12347-PeCDD	32.30	7.43E+07	1.69	Y	0.74	0.79	7%
CS 12346-PeCDF	30.78	1.43E+08	1.59	Y	0.86	0.90	5%
CS 123469-HxCDF	36.19	9.72E+07	0.52	Y	1.36	1.27	-7%
CS 1234689-HpCDF	39.44	7.00E+07	0.44	Y	1.05	0.91	-14%
~~SS 37Cl-2378-TCDD~~	~~27.28~~	~~1.00E+07~~	~~n/a~~	~~-~~	~~1.04~~	~~1.09~~	~~5%~~
~~SS 12347-PeCDD~~	~~32.30~~	~~7.43E+07~~	~~1.69~~	~~Y~~	~~0.86~~	~~0.90~~	~~5%~~
~~SS 12346-PeCDF~~	~~30.78~~	~~1.43E+08~~	~~1.59~~	~~Y~~	~~0.96~~	~~1.04~~	~~8%~~
~~SS 123469-HxCDF~~	~~36.19~~	~~9.72E+07~~	~~0.52~~	~~Y~~	~~0.83~~	~~0.88~~	~~5%~~
~~SS 1234689-HpCDF~~	~~39.44~~	~~7.00E+07~~	~~0.44~~	~~Y~~	~~0.92~~	~~0.91~~	~~-1%~~
Not used in this project.							
CL 10Aug20							
~~OCDD-a~~	~~42.37~~	~~2.65E+06~~	~~2.87~~	~~N~~	~~0.07~~	~~0.06~~	~~-9%~~
~~OCDF-a~~	~~42.54~~	~~3.03E+06~~	~~2.54~~	~~Y~~	~~0.06~~	~~0.06~~	~~-7%~~

METHOD 8290A **PCDD/F CALIBRATION VERIFICATION** **FORM 4A**

Lab Name: SGS North America

Initial Calibration: ICAL: MM3_DF_10012020_12JUN2020

Instrument ID: MM3 GC Column ID: ZB-5ms

VER Data Filename: 200807R12 Analysis Date: 07-AUG-2020 22:33:28

NATIVE ANALYTES	M/Z's FORMING RATIO	ION ABUND. RATIO	QC LIMITS			OK	CONC. FOUND	RANGE (ng/mL)			OK
2,3,7,8-TCDD	M/M+2	0.82	0.65	-	0.89	Y	10.7	8	-	12	Y
1,2,3,7,8-PeCDD	M+2/M+4	1.59	1.32	-	1.78	Y	49.1	40	-	60	Y
1,2,3,4,7,8-HxCDD	M+2/M+4	1.24	1.05	-	1.43	Y	48	40	-	60	Y
1,2,3,6,7,8-HxCDD	M+2/M+4	1.26	1.05	-	1.43	Y	50.4	40	-	60	Y
1,2,3,7,8,9-HxCDD	M+2/M+4	1.26	1.05	-	1.43	Y	50	40	-	60	Y
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.06	0.88	-	1.20	Y	51.3	40	-	60	Y
OCDD	M+2/M+4	0.90	0.76	-	1.02	Y	100	80	-	120	Y
2,3,7,8-TCDF	M/M+2	0.76	0.65	-	0.89	Y	10.1	8	-	12	Y
1,2,3,7,8-PeCDF	M+2/M+4	1.57	1.32	-	1.78	Y	50.6	40	-	60	Y
2,3,4,7,8-PeCDF	M+2/M+4	1.53	1.32	-	1.78	Y	50.4	40	-	60	Y
1,2,3,4,7,8-HxCDF	M+2/M+4	1.24	1.05	-	1.43	Y	51	40	-	60	Y
1,2,3,6,7,8-HxCDF	M+2/M+4	1.21	1.05	-	1.43	Y	51.4	40	-	60	Y
2,3,4,6,7,8-HxCDF	M+2/M+4	1.23	1.05	-	1.43	Y	51.1	40	-	60	Y
1,2,3,7,8,9-HxCDF	M+2/M+4	1.23	1.05	-	1.43	Y	49.7	40	-	60	Y
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.02	0.88	-	1.20	Y	52	40	-	60	Y
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.04	0.88	-	1.20	Y	51.8	40	-	60	Y
OCDF	M+2/M+4	0.88	0.76	-	1.02	Y	104	80	-	120	Y

Processed: 10 Aug 2020 09:05 Analyst: pw

METHOD 8290A **PCDD/F CALIBRATION VERIFICATION** **FORM 4B**

Lab Name: SGS North America

Initial Calibration: ICAL: MM3_DF_10012020_12JUN2020

Instrument ID: MM3 GC Column ID: ZB-5ms

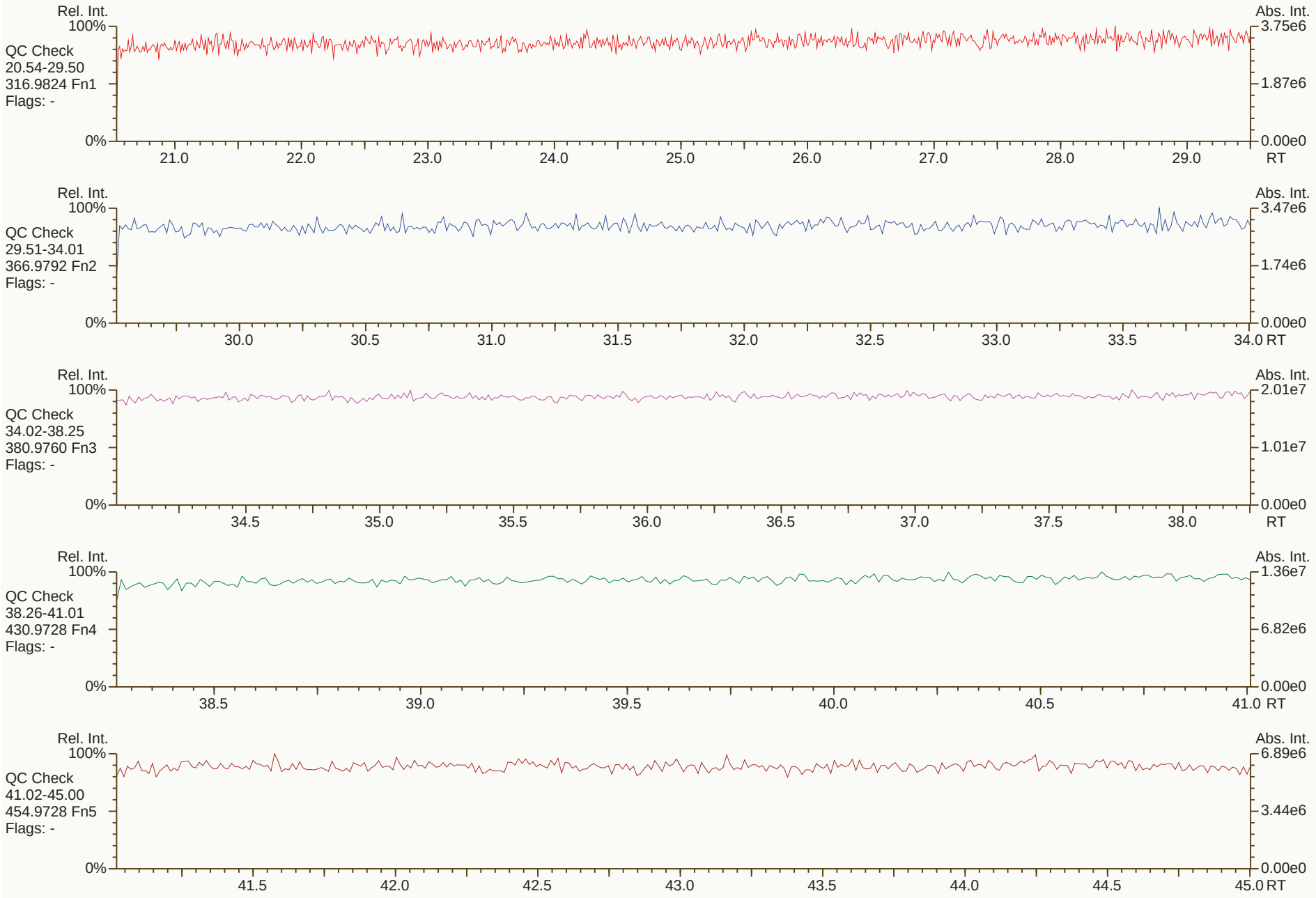
VER Data Filename: 200807R12 Analysis Date: 07-AUG-2020 22:33:28

LABELED ANALYTES	M/Z's FORMING RATIO	ION ABUND. RATIO	QC LIMITS			OK	CONC. FOUND	RANGE (ng/mL)			OK
13C-2,3,7,8-TCDD	M/M+2	0.78	0.65	-	0.89	Y	97.9	70	-	130	Y
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.59	1.32	-	1.78	Y	101	70	-	130	Y
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.27	1.05	-	1.43	Y	91.5	70	-	130	Y
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.26	1.05	-	1.43	Y	89.2	70	-	130	Y
13C-1,2,3,7,8,9-HxCDD	M+2/M+4	1.27	1.05	-	1.43	Y	93	70	-	130	Y
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.08	0.88	-	1.20	Y	88.3	70	-	130	Y
13C-OCDD	M+2/M+4	0.93	0.76	-	1.02	Y	171	140	-	260	Y
13C-2,3,7,8-TCDF	M/M+2	0.78	0.65	-	0.89	Y	97	70	-	130	Y
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.59	1.32	-	1.78	Y	96.7	70	-	130	Y
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.59	1.32	-	1.78	Y	95.5	70	-	130	Y
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	88.8	70	-	130	Y
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.53	0.43	-	0.59	Y	88.3	70	-	130	Y
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.53	0.43	-	0.59	Y	89.4	70	-	130	Y
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.51	0.43	-	0.59	Y	88.6	70	-	130	Y
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.46	0.37	-	0.51	Y	87.4	70	-	130	Y
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.44	0.37	-	0.51	Y	86.4	70	-	130	Y
13C-OCDF	M+2/M+4	0.91	0.76	-	1.02	Y	162	140	-	260	Y
CLEANUP STANDARDS											
37Cl-2,3,7,8-TCDD	n/a						10.3	7.9	-	12.7	Y
13C-1,2,3,4,7-PeCDD	M+2/M+4	1.69	1.32	-	1.78	Y	107	70	-	130	Y
13C-1,2,3,4,6-PeCDF	M+2/M+4	1.59	1.32	-	1.78	Y	105	70	-	130	Y
13C-1,2,3,4,6,9-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	93.3	70	-	130	Y
13C-1,2,3,4,6,8,9-HpCDF	M/M+2	0.44	0.37	-	0.51	Y	86.5	70	-	130	Y

Processed: 10 Aug 2020 09:05 Analyst: pw

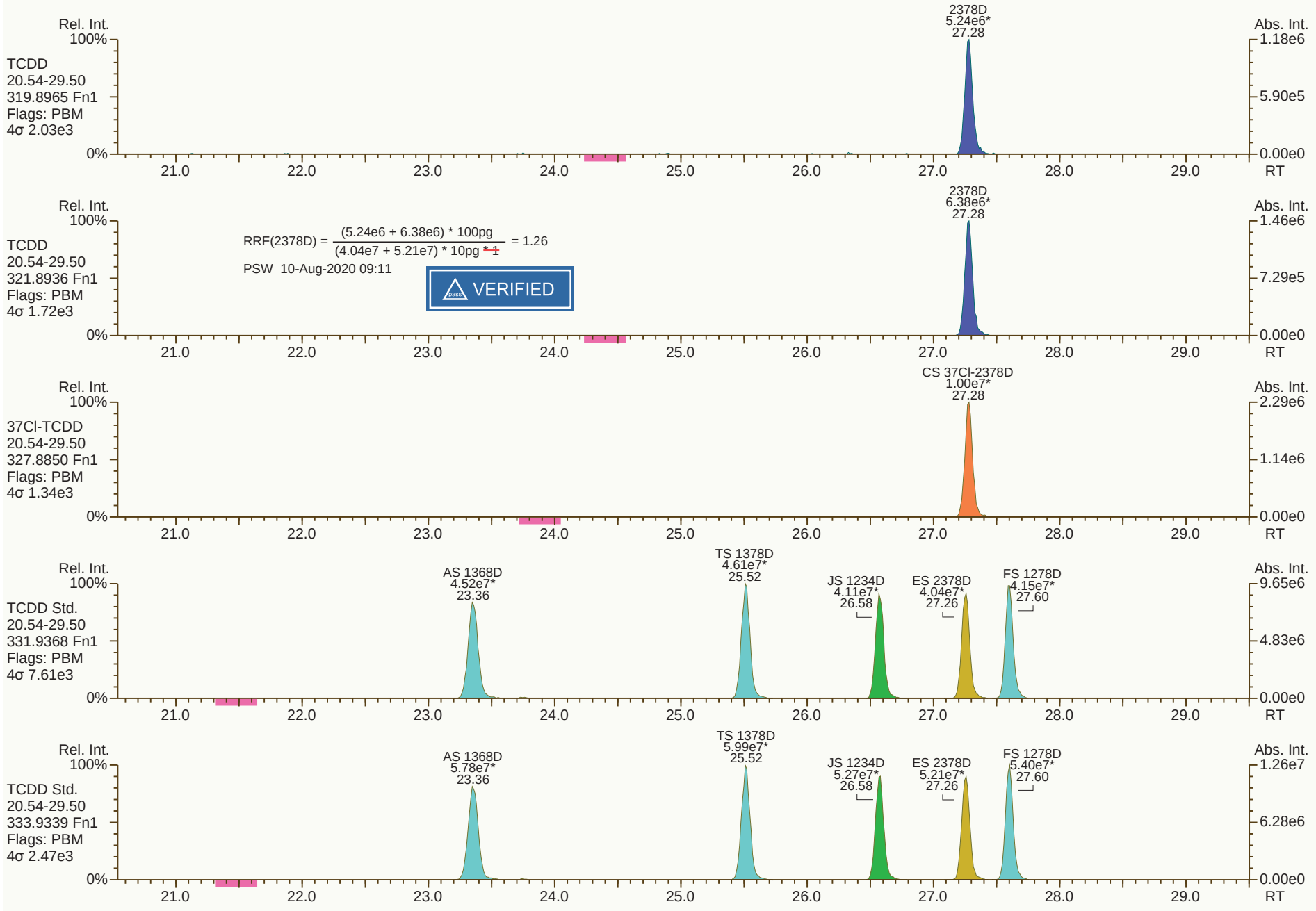
SGS ID: CS3_200807_DF_RB | **Sample ID: SIL 20-449-3** | **Acq: 07-Aug-2020 22:33:28**

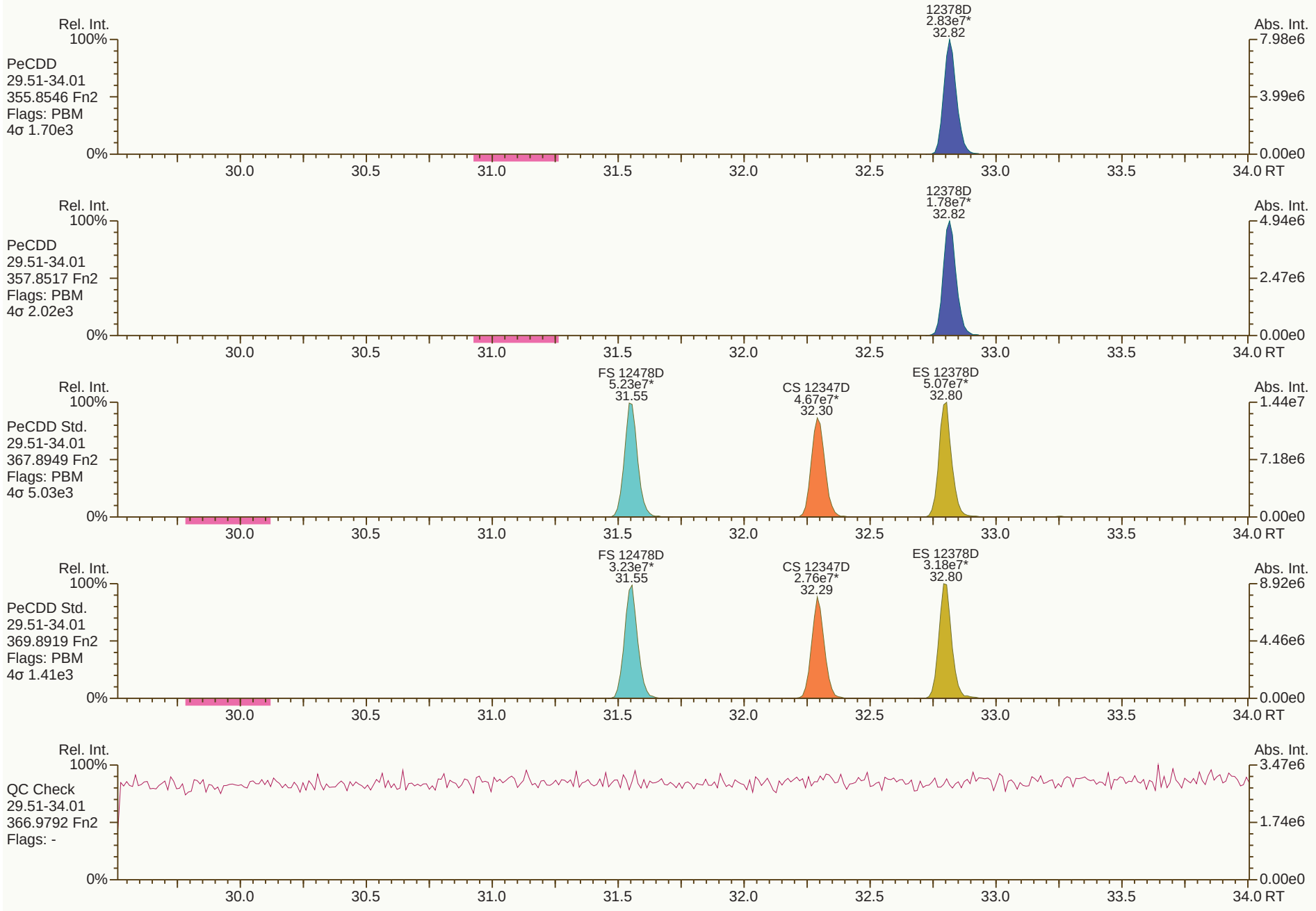
Instr: [ILM] AutoSpec-Ultima MM3 | **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 3** | **User: PSW Datafile: 200807R12**



Results: P:\B4500_B4599\B4511\B4511_17654 DF\Resources\CS3_200807_DF_RB.utp_res, saved 10-Aug-2020 09:11 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 scc: 446-519 *PKD: n/a Printed: 10-Aug-2020 09:20 Page 1 of 12*


Rel. Int.
100%
TCDD
20.54-29.50
319.8965 Fn1
Flags: PBM
4σ 2.03e3
0%
2378D
5.24e6*
27.28
Abs. Int.
1.18e6
5.90e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD
20.54-29.50
321.8936 Fn1
Flags: PBM
4σ 1.72e3
0%
RRF(2378D) = (5.24e6 + 6.38e6) * 100pg / (4.04e7 + 5.21e7) * 10pg * 1 = 1.26
PSW 10-Aug-2020 09:11
VERIFIED
2378D
6.38e6*
27.28
Abs. Int.
1.46e6
7.29e5
0.00e0
Rel. Int.
100%
37Cl-TCDD
20.54-29.50
327.8850 Fn1
Flags: PBM
4σ 1.34e3
0%
CS 37Cl-2378D
1.00e7*
27.28
Abs. Int.
2.29e6
1.14e6
0.00e0
Rel. Int.
100%
TCDD Std.
20.54-29.50
331.9368 Fn1
Flags: PBM
4σ 7.61e3
0%
AS 1368D
4.52e7*
23.36
TS 1378D
4.61e7*
25.52
JS 1234D
4.11e7*
26.58
ES 2378D
4.04e7*
27.26
FS 1278D
4.15e7*
27.60
Abs. Int.
9.65e6
4.83e6
0.00e0
Rel. Int.
100%
TCDD Std.
20.54-29.50
333.9339 Fn1
Flags: PBM
4σ 2.47e3
0%
AS 1368D
5.78e7*
23.36
TS 1378D
5.99e7*
25.52
JS 1234D
5.27e7*
26.58
ES 2378D
5.21e7*
27.26
FS 1278D
5.40e7*
27.60
Abs. Int.
1.26e7
6.28e6
0.00e0


Rel. Int.
100%
PeCDD
29.51-34.01
355.8546 Fn2
Flags: PBM
4σ 1.70e3
0%
12378D
2.83e7*
32.82
Abs. Int.
7.98e6
3.99e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD
29.51-34.01
357.8517 Fn2
Flags: PBM
4σ 2.02e3
0%
12378D
1.78e7*
32.82
Abs. Int.
4.94e6
2.47e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
367.8949 Fn2
Flags: PBM
4σ 5.03e3
0%
FS 12478D
5.23e7*
31.55
CS 12347D
4.67e7*
32.30
ES 12378D
5.07e7*
32.80
Abs. Int.
1.44e7
7.18e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
369.8919 Fn2
Flags: PBM
4σ 1.41e3
0%
FS 12478D
3.23e7*
31.55
CS 12347D
2.76e7*
32.29
ES 12378D
3.18e7*
32.80
Abs. Int.
8.92e6
4.46e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
QC Check
29.51-34.01
366.9792 Fn2
Flags: -
0%
Abs. Int.
3.47e6
1.74e6
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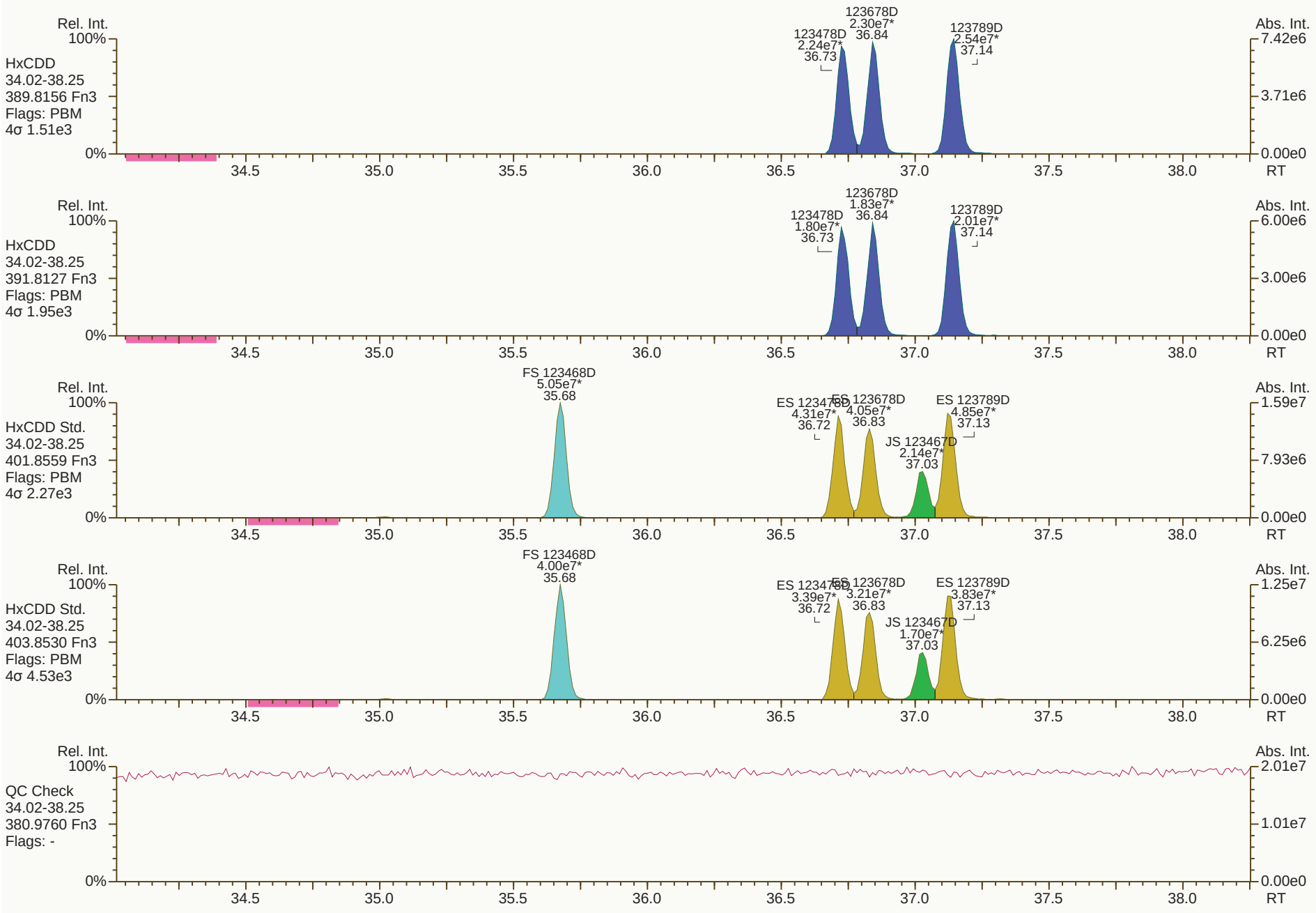
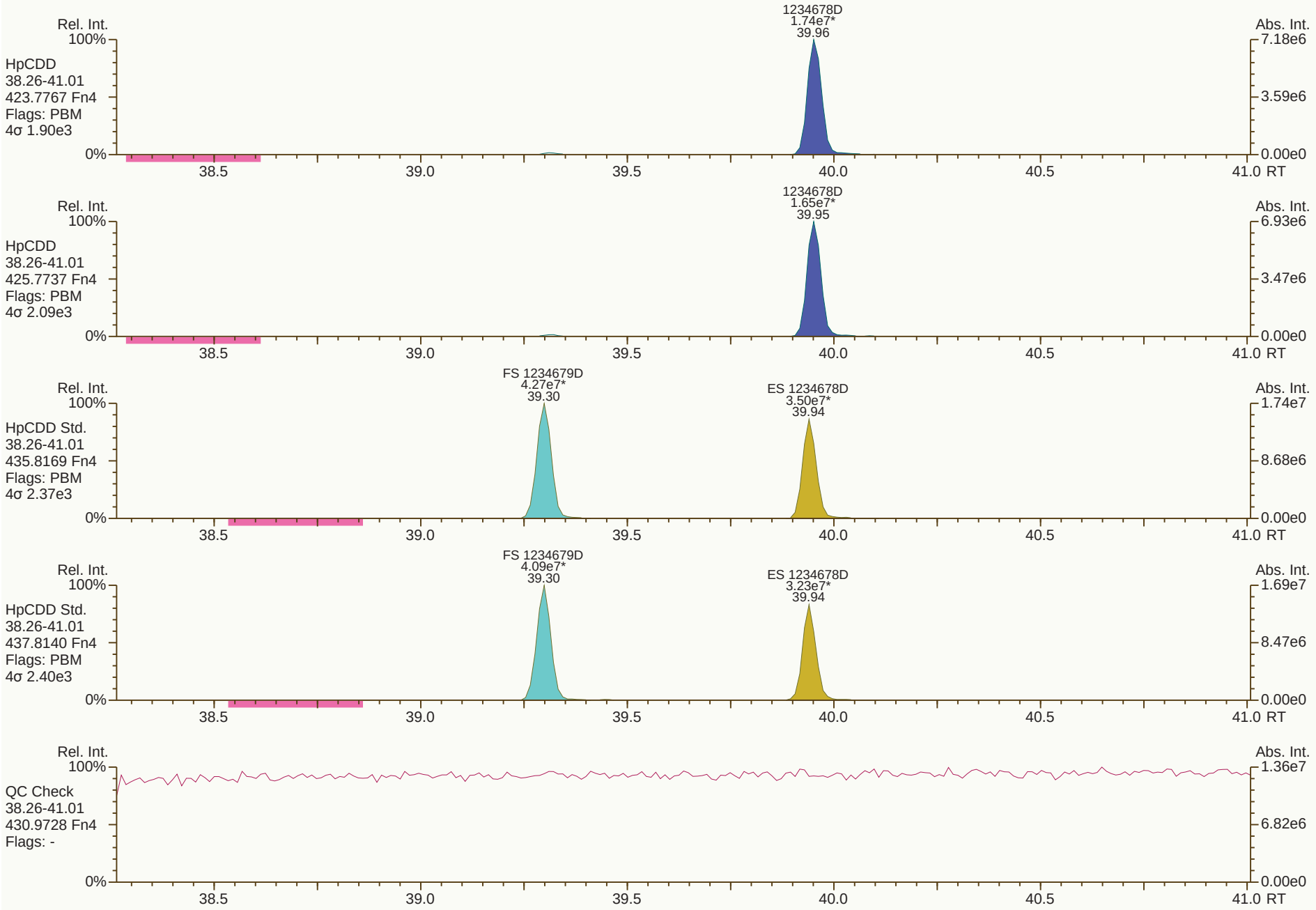
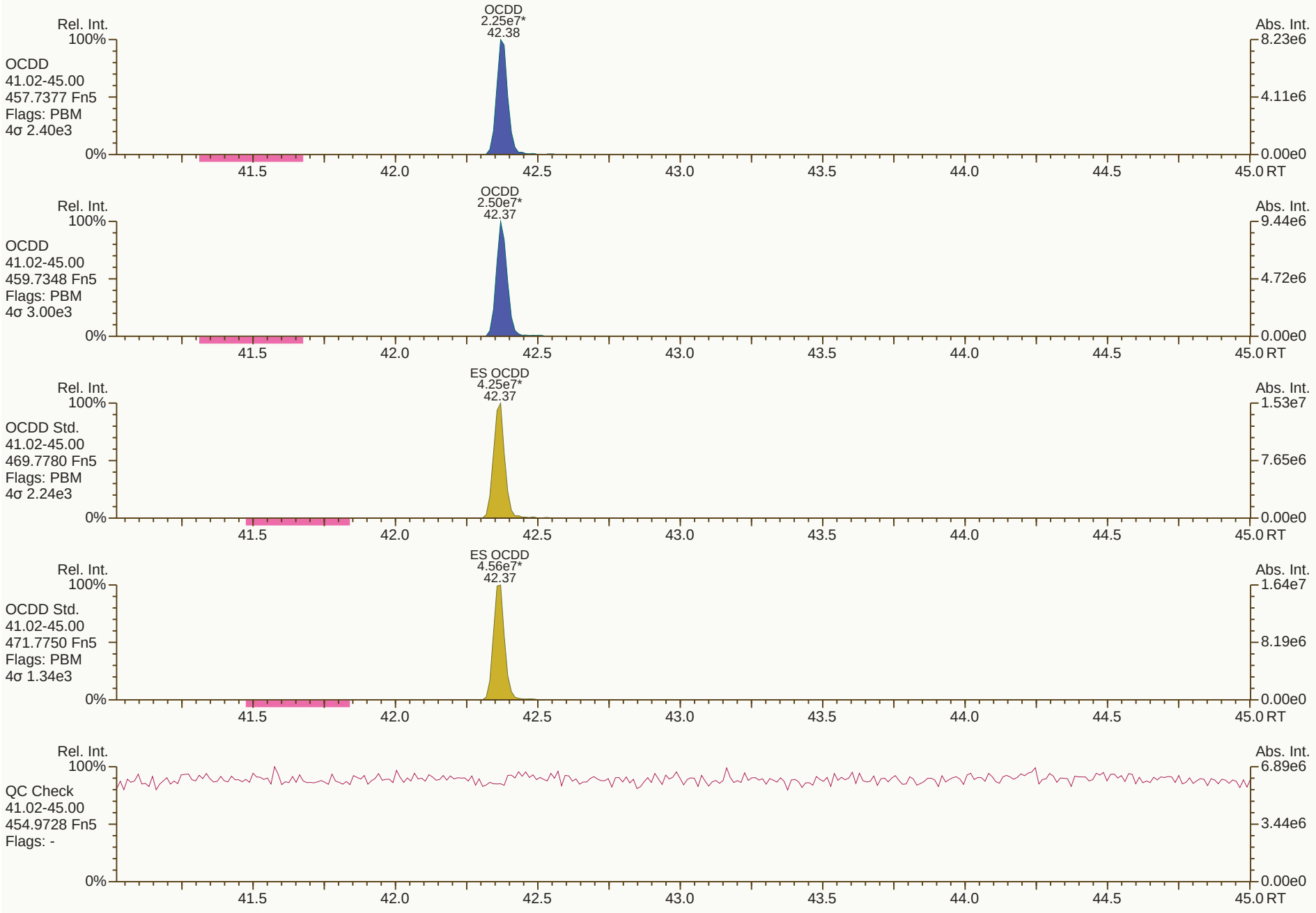
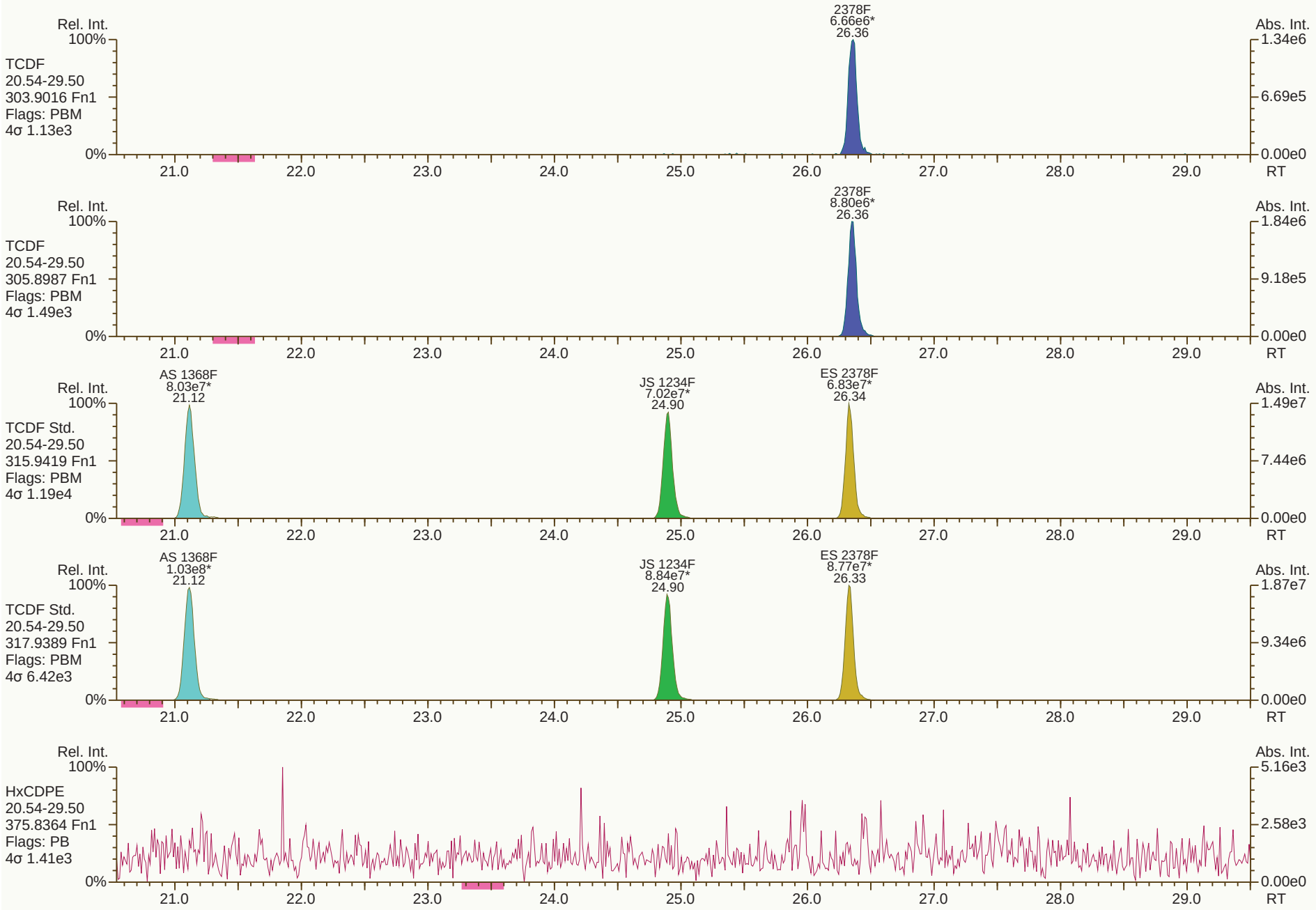
32.0
32.5
33.0
33.5
34.0 RT


Rel. Int.
100%
HxCDD
34.02-38.25
389.8156 Fn3
Flags: PBM
4σ 1.51e3
123678D
2.30e7*
36.84
123478D
2.24e7*
36.73
123789D
2.54e7*
37.14
Abs. Int.
7.42e6
3.71e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD
34.02-38.25
391.8127 Fn3
Flags: PBM
4σ 1.95e3
123678D
1.83e7*
36.84
123478D
1.80e7*
36.73
123789D
2.01e7*
37.14
Abs. Int.
6.00e6
3.00e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
401.8559 Fn3
Flags: PBM
4σ 2.27e3
FS 123468D
5.05e7*
35.68
ES 123478D
4.31e7*
36.72
ES 123678D
4.05e7*
36.83
ES 123789D
4.85e7*
37.13
JS 123467D
2.14e7*
37.03
Abs. Int.
1.59e7
7.93e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
403.8530 Fn3
Flags: PBM
4σ 4.53e3
FS 123468D
4.00e7*
35.68
ES 123478D
3.39e7*
36.72
ES 123678D
3.21e7*
36.83
ES 123789D
3.83e7*
37.13
JS 123467D
1.70e7*
37.03
Abs. Int.
1.25e7
6.25e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
Abs. Int.
2.01e7
1.01e7
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT


Rel. Int.
100%
HpCDD
38.26-41.01
423.7767 Fn4
Flags: PBM
4σ 1.90e3
0%
1234678D
1.74e7*
39.96
Abs. Int.
7.18e6
3.59e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.26-41.01
425.7737 Fn4
Flags: PBM
4σ 2.09e3
0%
1234678D
1.65e7*
39.95
Abs. Int.
6.93e6
3.47e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
435.8169 Fn4
Flags: PBM
4σ 2.37e3
0%
FS 1234679D
4.27e7*
39.30
ES 1234678D
3.50e7*
39.94
Abs. Int.
1.74e7
8.68e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
437.8140 Fn4
Flags: PBM
4σ 2.40e3
0%
FS 1234679D
4.09e7*
39.30
ES 1234678D
3.23e7*
39.94
Abs. Int.
1.69e7
8.47e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.26-41.01
430.9728 Fn4
Flags: -
0%
Abs. Int.
1.36e7
6.82e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT


OCDD
2.25e7*
42.38
Rel. Int.
100%
OCDD
41.02-45.00
457.7377 Fn5
Flags: PBM
4σ 2.40e3
0%
Abs. Int.
8.23e6
4.11e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDD
2.50e7*
42.37
Rel. Int.
100%
OCDD
41.02-45.00
459.7348 Fn5
Flags: PBM
4σ 3.00e3
0%
Abs. Int.
9.44e6
4.72e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
4.25e7*
42.37
Rel. Int.
100%
OCDD Std.
41.02-45.00
469.7780 Fn5
Flags: PBM
4σ 2.24e3
0%
Abs. Int.
1.53e7
7.65e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
4.56e7*
42.37
Rel. Int.
100%
OCDD Std.
41.02-45.00
471.7750 Fn5
Flags: PBM
4σ 1.34e3
0%
Abs. Int.
1.64e7
8.19e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
6.89e6
3.44e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT


Rel. Int.
100%
TCDF
20.54-29.50
303.9016 Fn1
Flags: PBM
4σ 1.13e3
2378F
6.66e6*
26.36
Abs. Int.
1.34e6
6.69e5
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF
20.54-29.50
305.8987 Fn1
Flags: PBM
4σ 1.49e3
2378F
8.80e6*
26.36
Abs. Int.
1.84e6
9.18e5
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
315.9419 Fn1
Flags: PBM
4σ 1.19e4
AS 1368F
8.03e7*
21.12
JS 1234F
7.02e7*
24.90
ES 2378F
6.83e7*
26.34
Abs. Int.
1.49e7
7.44e6
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
317.9389 Fn1
Flags: PBM
4σ 6.42e3
AS 1368F
1.03e8*
21.12
JS 1234F
8.84e7*
24.90
ES 2378F
8.77e7*
26.33
Abs. Int.
1.87e7
9.34e6
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
HxCDPE
20.54-29.50
375.8364 Fn1
Flags: PB
4σ 1.41e3
Abs. Int.
5.16e3
2.58e3
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT

SGS ID: CS3_200807_DF_RB | **Sample ID: SIL 20-449-3** | **Acq: 07-Aug-2020 22:33:28**

Instr: [ILM] AutoSpec-Ultima MM3 | **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 3** | **User: PSW Datafile: 200807R12**



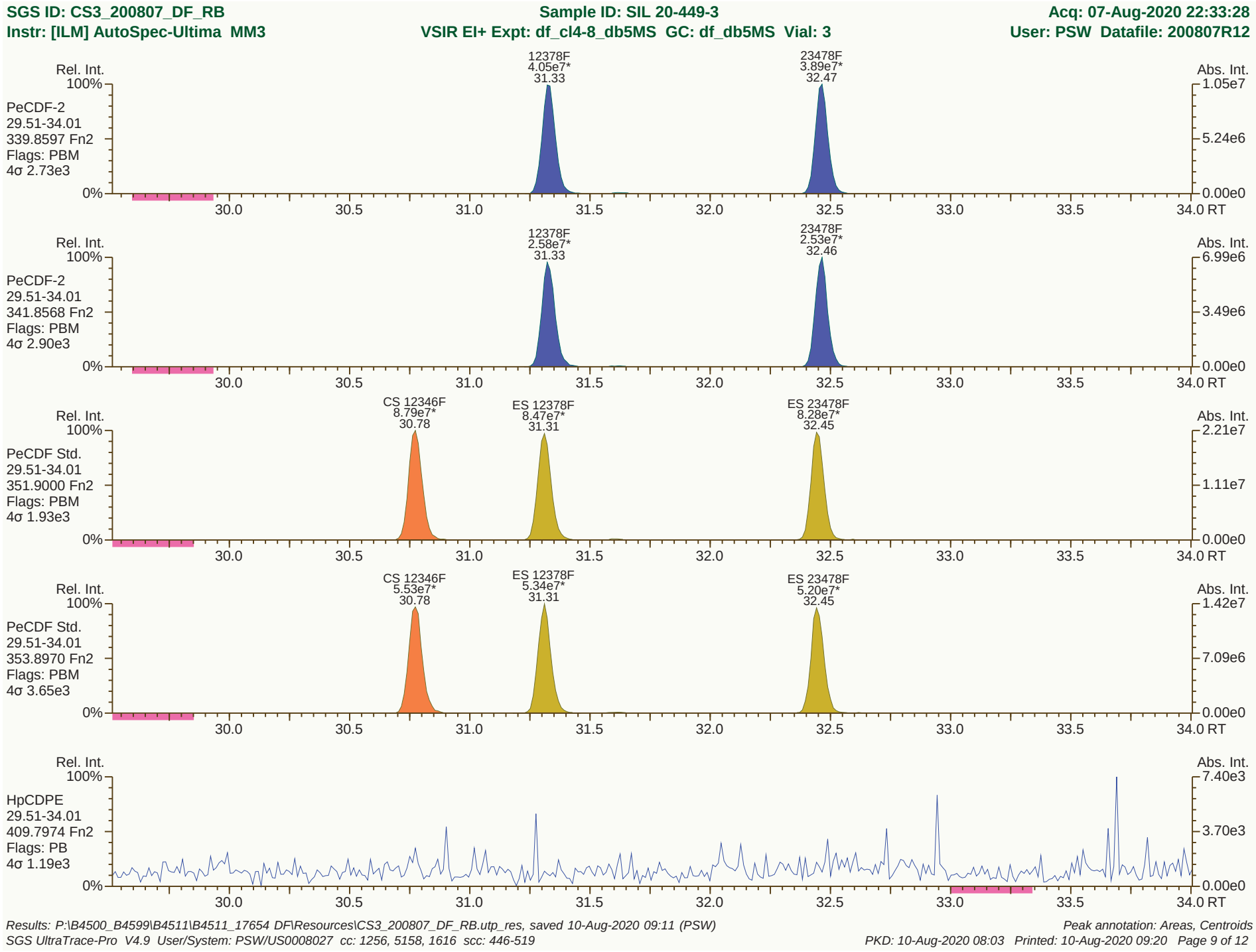
Results: P:\B4500_B4599\B4511\B4511_17654 DF\Resources\CS3_200807_DF_RB.utp_res, saved 10-Aug-2020 09:11 (PSW)

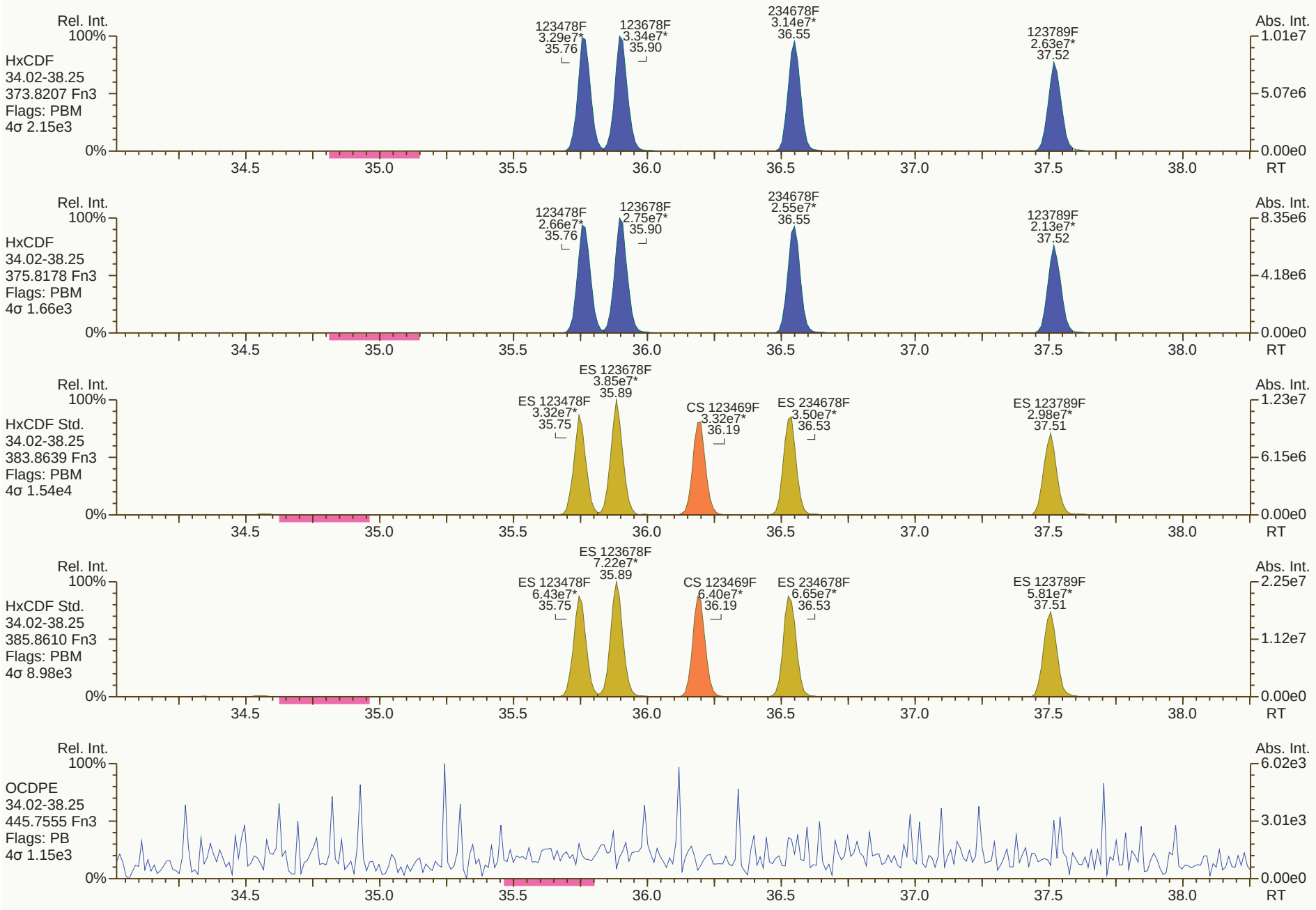
Peak annotation: Areas, Centroids

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 1045 scc: 446-519

PKD: 10-Aug-2020 08:03 Printed: 10-Aug-2020 09:20 Page 8 of 12

SGS ID: CS3_200807_DF_RB
Instr: [ILM] AutoSpec-Ultima MM3
Sample ID: SIL 20-449-3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 3
Acq: 07-Aug-2020 22:33:28
User: PSW Datafile: 200807R12




Rel. Int.
100%
HxCDF
34.02-38.25
373.8207 Fn3
Flags: PBM
4σ 2.15e3
0%
123478F
3.29e7*
35.76
123678F
3.34e7*
35.90
234678F
3.14e7*
36.55
123789F
2.63e7*
37.52
Abs. Int.
1.01e7
5.07e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDF
34.02-38.25
375.8178 Fn3
Flags: PBM
4σ 1.66e3
0%
123478F
2.66e7*
35.76
123678F
2.75e7*
35.90
234678F
2.55e7*
36.55
123789F
2.13e7*
37.52
Abs. Int.
8.35e6
4.18e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDF Std.
34.02-38.25
383.8639 Fn3
Flags: PBM
4σ 1.54e4
0%
ES 123678F
3.85e7*
35.89
ES 123478F
3.32e7*
35.75
CS 123469F
3.32e7*
36.19
ES 234678F
3.50e7*
36.53
ES 123789F
2.98e7*
37.51
Abs. Int.
1.23e7
6.15e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDF Std.
34.02-38.25
385.8610 Fn3
Flags: PBM
4σ 8.98e3
0%
ES 123678F
7.22e7*
35.89
ES 123478F
6.43e7*
35.75
CS 123469F
6.40e7*
36.19
ES 234678F
6.65e7*
36.53
ES 123789F
5.81e7*
37.51
Abs. Int.
2.25e7
1.12e7
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
OCDPE
34.02-38.25
445.7555 Fn3
Flags: PB
4σ 1.15e3
0%
Abs. Int.
6.02e3
3.01e3
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT



Results: P:\B4500_B4599\B4511\B4511_17654 DF\Resources\CS3_200807_DF_RB.utp_res, saved 10-Aug-2020 09:11 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 9600, 9519, 7375 scc: 446-519
PKD: 10-Aug-2020 08:03 Printed: 10-Aug-2020 09:20 Page 11 of 12


Rel. Int.
100%
OCDF
41.02-45.00
441.7428 Fn5
Flags: PBM
4σ 9.59e2
0%
OCDF
2.53e7*
42.54
Abs. Int.
8.62e6
4.31e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF
41.02-45.00
443.7398 Fn5
Flags: PBM
4σ 2.78e3
0%
OCDF
2.86e7*
42.54
Abs. Int.
9.81e6
4.91e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF Std.
41.02-45.00
453.7830 Fn5
Flags: PBM
4σ 1.74e3
0%
ES OCDF
4.89e7*
42.53
Abs. Int.
1.71e7
8.54e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF Std.
41.02-45.00
455.7801 Fn5
Flags: PBM
4σ 3.07e3
0%
ES OCDF
5.39e7*
42.53
Abs. Int.
1.87e7
9.35e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
DCDPE
41.02-45.00
513.6775 Fn5
Flags: PB
4σ 1.23e3
0%
Abs. Int.
6.86e3
3.43e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

Dioxin/Furan QC Summary		Acq'd: 08 Aug 2020 05:00 PSW				ICAL: MM3_DF_10012020_12JUN2020	
Lab ID: CS3_200807_DF_RC		UTP: 10-Aug-2020 09:02:33 PSW				Checkcode: 658-828-WXT	
Sample ID: SIL 20-449-3		Report: 10 Aug 2020 09:05 pw				Datafile: 200807R20	
Name	**RT**	**Response**	**RA**	**OK**	**Ref. RRFs**	**Calc. RRFs**	**Dev'n**
2378-TCDD	27.28	1.02E+07	0.80	Y	1.18	1.23	5%
12378-PeCDD	32.82	4.09E+07	1.57	Y	1.14	1.11	-2%
123478-HxCDD	36.73	3.61E+07	1.27	Y	1.09	1.08	-1%
123678-HxCDD	36.84	3.62E+07	1.26	Y	1.13	1.10	-2%
123789-HxCDD	37.14	4.02E+07	1.24	Y	1.05	1.05	0%
1234678-HpCDD	39.95	2.93E+07	1.04	Y	0.98	0.99	1%
OCDD	42.38	3.96E+07	0.88	Y	1.08	1.06	-1%
2378-TCDF	26.36	1.36E+07	0.74	Y	0.98	0.98	0%
12378-PeCDF	31.33	5.86E+07	1.54	Y	0.95	0.96	1%
23478-PeCDF	32.46	5.67E+07	1.55	Y	0.95	0.96	1%
123478-HxCDF	35.76	5.29E+07	1.24	Y	1.20	1.19	0%
123678-HxCDF	35.90	5.44E+07	1.26	Y	1.07	1.10	2%
234678-HxCDF	36.55	5.00E+07	1.24	Y	1.10	1.11	2%
123789-HxCDF	37.52	4.23E+07	1.24	Y	1.09	1.14	5%
1234678-HpCDF	39.05	4.47E+07	1.03	Y	1.28	1.35	6%
1234789-HpCDF	40.37	3.27E+07	1.08	Y	1.27	1.29	2%
OCDF	42.54	4.43E+07	0.88	Y	1.01	1.02	1%
ES 2378-TCDD	27.26	8.29E+07	0.79	Y	1.01	1.00	-1%
ES 12378-PeCDD	32.8	7.37E+07	1.66	Y	0.87	0.89	2%
ES 123478-HxCDD	36.72	6.70E+07	1.31	Y	1.10	0.99	-10%
ES 123678-HxCDD	36.83	6.56E+07	1.27	Y	1.06	0.97	-9%
ES 123789-HxCDD	37.13	7.67E+07	1.27	Y	1.22	1.13	-7%
ES 1234678-HpCDD	39.94	5.90E+07	1.05	Y	0.99	0.87	-12%
ES OCDD	42.37	7.48E+07	0.91	Y	0.67	0.55	-18%
ES 2378-TCDF	26.33	1.39E+08	0.79	Y	1.01	0.99	-2%
ES 12378-PeCDF	31.31	1.23E+08	1.59	Y	0.90	0.87	-3%
ES 23478-PeCDF	32.45	1.18E+08	1.61	Y	0.89	0.84	-5%
ES 123478-HxCDF	35.75	8.86E+07	0.53	Y	1.43	1.30	-9%
ES 123678-HxCDF	35.89	9.92E+07	0.53	Y	1.63	1.46	-10%
ES 234678-HxCDF	36.53	8.97E+07	0.53	Y	1.48	1.32	-11%
ES 123789-HxCDF	37.51	7.43E+07	0.53	Y	1.29	1.09	-15%
ES 1234678-HpCDF	39.03	6.61E+07	0.45	Y	1.15	0.97	-15%
ES 1234789-HpCDF	40.36	5.06E+07	0.47	Y	0.91	0.74	-18%
ES OCDF	42.53	8.71E+07	0.91	Y	0.83	0.64	-23%

Dioxin/Furan QC Summary	Acq'd: 08 Aug 2020 05:00 PSW	ICAL: MM3_DF_10012020_12JUN2020
Lab ID: CS3_200807_DF_RC	UTP: 10-Aug-2020 09:02:33 PSW	Checkcode: 658-828-WXT
Sample ID: SIL 20-449-3	Report: 10 Aug 2020 09:05 pw	Datafile: 200807R20

Name	RT	Response	RA	OK	Ref. RRFs	Calc. RRFs	Dev'n
JS 1234-TCDD	26.57	8.28E+07	0.79	Y	-	-	-
JS 1234-TCDF	24.90	1.40E+08	0.79	Y	-	-	-
JS 123467-HxCDD	37.03	3.40E+07	1.35	Y	-	-	-
CS 37Cl-2378-TCDD	27.28	8.87E+06	n/a	-	1.04	1.07	3%
CS 12347-PeCDD	32.29	6.65E+07	1.69	Y	0.74	0.80	9%
CS 12346-PeCDF	30.77	1.26E+08	1.55	Y	0.86	0.90	4%
CS 123469-HxCDF	36.19	8.63E+07	0.53	Y	1.36	1.27	-6%
CS 1234689-HpCDF	39.44	6.24E+07	0.44	Y	1.05	0.92	-13%
~~SS 37Cl-2378-TCDD~~	~~27.28~~	~~8.87E+06~~	~~n/a~~	~~-~~	~~1.04~~	~~1.07~~	~~3%~~
~~SS 12347-PeCDD~~	~~32.29~~	~~6.65E+07~~	~~1.69~~	~~Y~~	~~0.86~~	~~0.90~~	~~6%~~
~~SS 12346-PeCDF~~	~~30.77~~	~~1.26E+08~~	~~1.55~~	~~Y~~	~~0.96~~	~~1.03~~	~~7%~~
~~SS 123469-HxCDF~~	~~36.19~~	~~8.63E+07~~	~~0.53~~	~~Y~~	~~0.83~~	~~0.87~~	~~4%~~
~~SS 1234689-HpCDF~~	~~39.44~~	~~6.24E+07~~	~~0.44~~	~~Y~~	~~0.92~~	~~0.94~~	~~2%~~
Not used in this project.							
CL 10Aug20							
~~OCDD-a~~	~~42.38~~	~~2.52E+06~~	~~2.69~~	~~Y~~	~~0.07~~	~~0.07~~	~~2%~~
~~OCDF-a~~	~~42.54~~	~~2.74E+06~~	~~2.29~~	~~Y~~	~~0.06~~	~~0.06~~	~~0%~~

METHOD 8290A **PCDD/F CALIBRATION VERIFICATION** **FORM 4A**

Lab Name: SGS North America

Initial Calibration: ICAL: MM3_DF_10012020_12JUN2020

Instrument ID: MM3 GC Column ID: ZB-5ms

VER Data Filename: 200807R20 Analysis Date: 08-AUG-2020 05:00:55

NATIVE ANALYTES	M/Z's FORMING RATIO	ION ABUND. RATIO	QC LIMITS			OK	CONC. FOUND	RANGE (ng/mL)			OK
2,3,7,8-TCDD	M/M+2	0.80	0.65	-	0.89	Y	10.5	8	-	12	Y
1,2,3,7,8-PeCDD	M+2/M+4	1.57	1.32	-	1.78	Y	48.9	40	-	60	Y
1,2,3,4,7,8-HxCDD	M+2/M+4	1.27	1.05	-	1.43	Y	49.4	40	-	60	Y
1,2,3,6,7,8-HxCDD	M+2/M+4	1.26	1.05	-	1.43	Y	49	40	-	60	Y
1,2,3,7,8,9-HxCDD	M+2/M+4	1.24	1.05	-	1.43	Y	49.9	40	-	60	Y
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	0.88	-	1.20	Y	50.5	40	-	60	Y
OCDD	M+2/M+4	0.88	0.76	-	1.02	Y	98.6	80	-	120	Y
2,3,7,8-TCDF	M/M+2	0.74	0.65	-	0.89	Y	10	8	-	12	Y
1,2,3,7,8-PeCDF	M+2/M+4	1.54	1.32	-	1.78	Y	50.4	40	-	60	Y
2,3,4,7,8-PeCDF	M+2/M+4	1.55	1.32	-	1.78	Y	50.7	40	-	60	Y
1,2,3,4,7,8-HxCDF	M+2/M+4	1.24	1.05	-	1.43	Y	50	40	-	60	Y
1,2,3,6,7,8-HxCDF	M+2/M+4	1.26	1.05	-	1.43	Y	51.2	40	-	60	Y
2,3,4,6,7,8-HxCDF	M+2/M+4	1.24	1.05	-	1.43	Y	50.8	40	-	60	Y
1,2,3,7,8,9-HxCDF	M+2/M+4	1.24	1.05	-	1.43	Y	52.3	40	-	60	Y
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.03	0.88	-	1.20	Y	52.8	40	-	60	Y
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.08	0.88	-	1.20	Y	50.9	40	-	60	Y
OCDF	M+2/M+4	0.88	0.76	-	1.02	Y	101	80	-	120	Y

Processed: 10 Aug 2020 09:05 Analyst: pw

METHOD 8290A **PCDD/F CALIBRATION VERIFICATION** **FORM 4B**

Lab Name: SGS North America

Initial Calibration: ICAL: MM3_DF_10012020_12JUN2020

Instrument ID: MM3 GC Column ID: ZB-5ms

VER Data Filename: 200807R20 Analysis Date: 08-AUG-2020 05:00:55

LABELED ANALYTES	M/Z's FORMING RATIO	ION ABUND. RATIO	QC LIMITS			OK	CONC. FOUND	RANGE (ng/mL)			OK
13C-2,3,7,8-TCDD	M/M+2	0.79	0.65	-	0.89	Y	99.5	70	-	130	Y
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.66	1.32	-	1.78	Y	102	70	-	130	Y
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.31	1.05	-	1.43	Y	90	70	-	130	Y
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.27	1.05	-	1.43	Y	91.1	70	-	130	Y
13C-1,2,3,7,8,9-HxCDD	M+2/M+4	1.27	1.05	-	1.43	Y	92.9	70	-	130	Y
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.05	0.88	-	1.20	Y	87.6	70	-	130	Y
13C-OCDD	M+2/M+4	0.91	0.76	-	1.02	Y	165	140	-	260	Y
13C-2,3,7,8-TCDF	M/M+2	0.79	0.65	-	0.89	Y	97.8	70	-	130	Y
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.59	1.32	-	1.78	Y	97.1	70	-	130	Y
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.61	1.32	-	1.78	Y	94.8	70	-	130	Y
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.53	0.43	-	0.59	Y	91.2	70	-	130	Y
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.53	0.43	-	0.59	Y	89.5	70	-	130	Y
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.53	0.43	-	0.59	Y	89.4	70	-	130	Y
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.53	0.43	-	0.59	Y	84.7	70	-	130	Y
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.45	0.37	-	0.51	Y	85	70	-	130	Y
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.47	0.37	-	0.51	Y	82.2	70	-	130	Y
13C-OCDF	M+2/M+4	0.91	0.76	-	1.02	Y	155	140	-	260	Y
CLEANUP STANDARDS											
37Cl-2,3,7,8-TCDD	n/a						10.3	7.9	-	12.7	Y
13C-1,2,3,4,7-PeCDD	M+2/M+4	1.69	1.32	-	1.78	Y	109	70	-	130	Y
13C-1,2,3,4,6-PeCDF	M+2/M+4	1.55	1.32	-	1.78	Y	104	70	-	130	Y
13C-1,2,3,4,6,9-HxCDF	M/M+2	0.53	0.43	-	0.59	Y	93.6	70	-	130	Y
13C-1,2,3,4,6,8,9-HpCDF	M/M+2	0.44	0.37	-	0.51	Y	87.1	70	-	130	Y

Processed: 10 Aug 2020 09:05 Analyst: pw

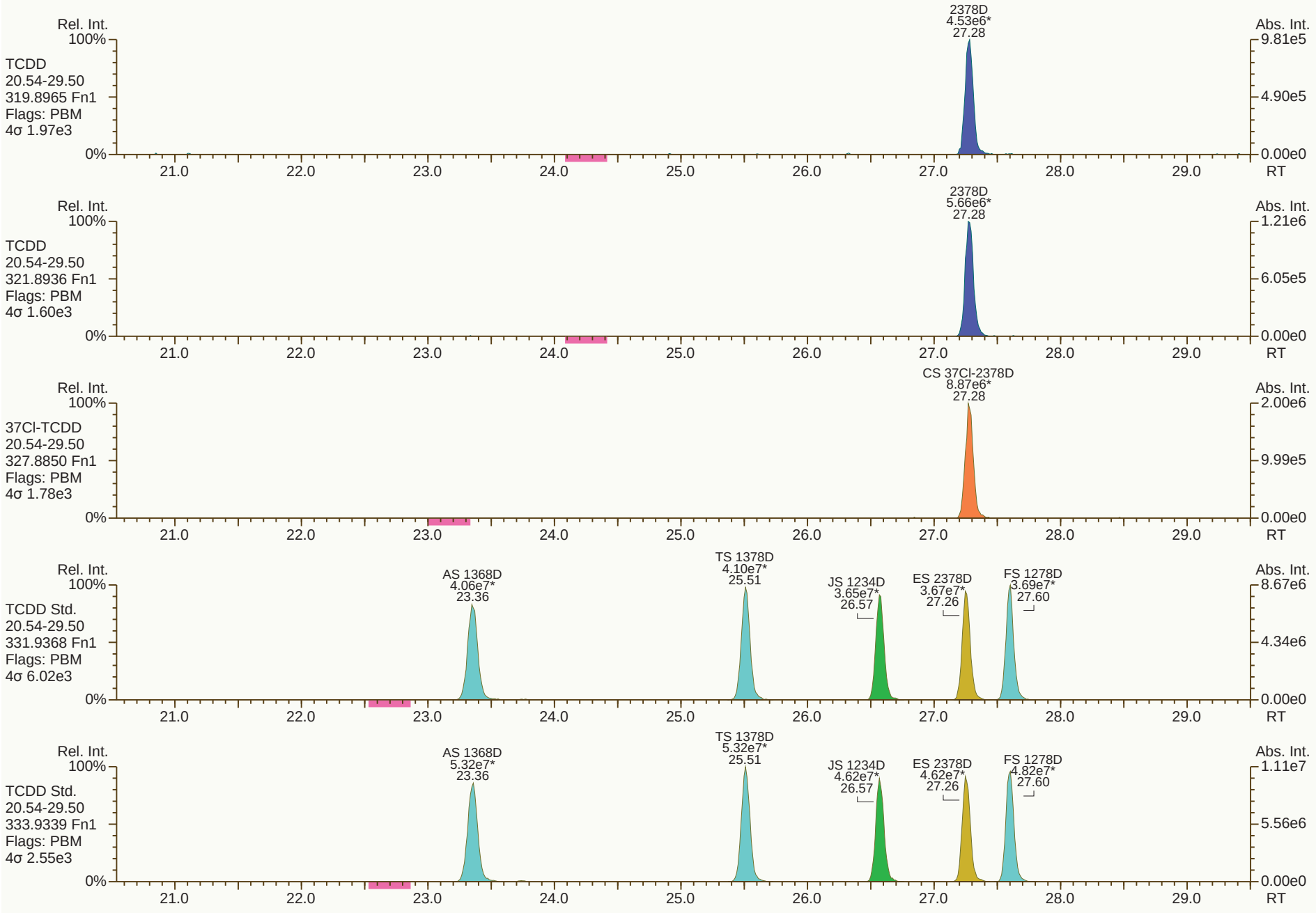
SGS ID: CS3_200807_DF_RC **Sample ID: SIL 20-449-3** **Acq: 08-Aug-2020 05:00:55**

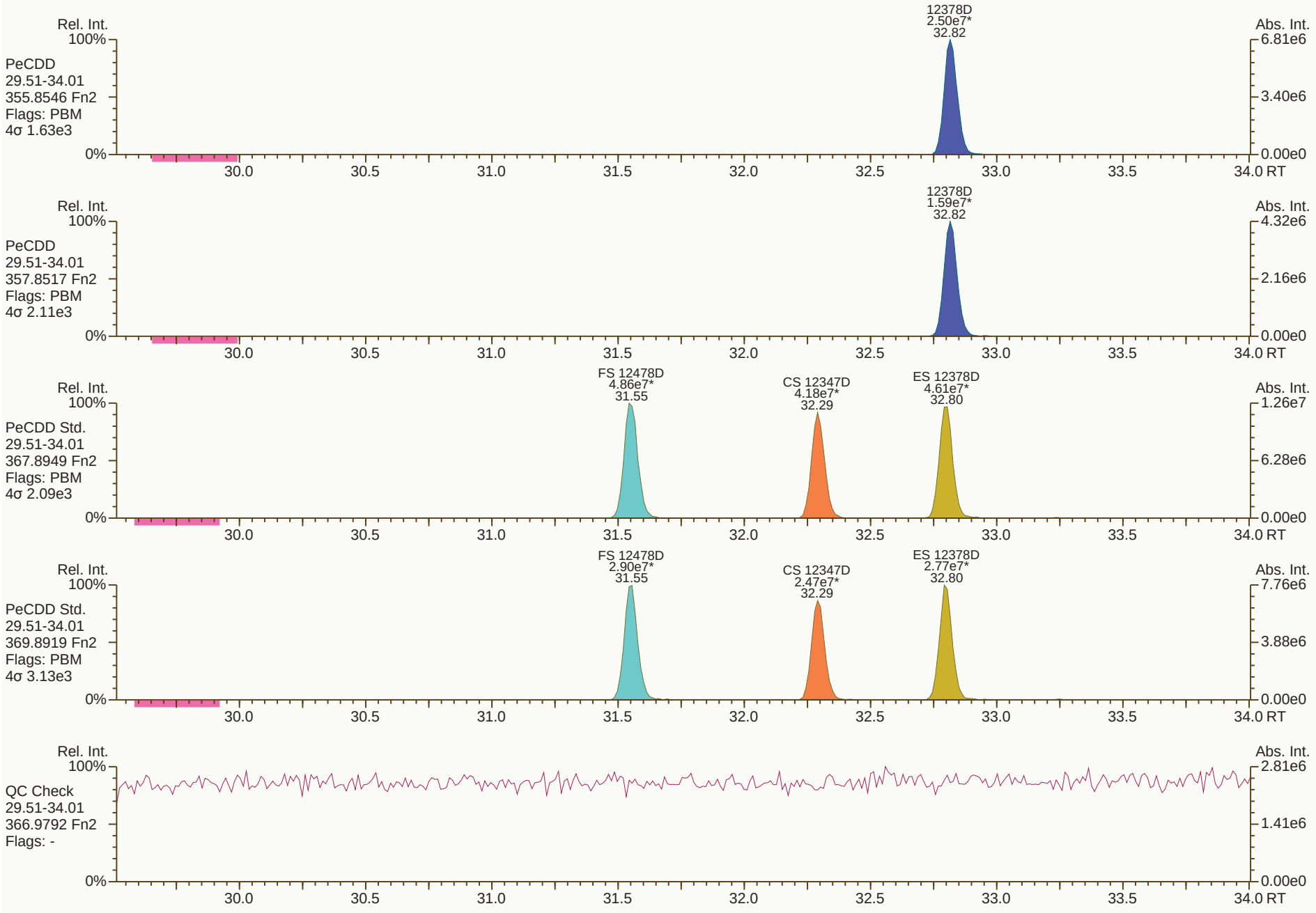
Instr: [ILM] AutoSpec-Ultima MM3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 3** **User: PSW Datafile: 200807R20**

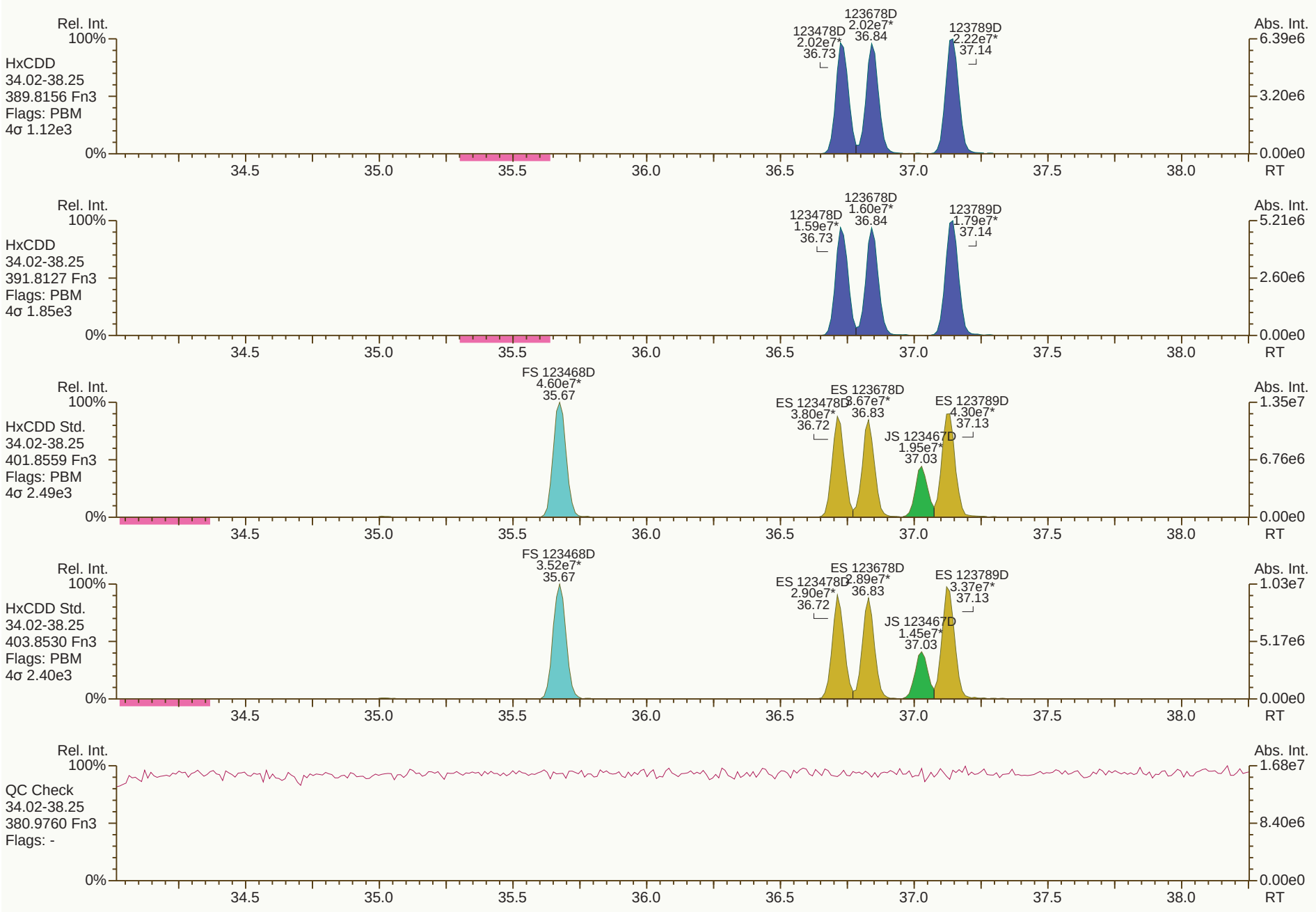


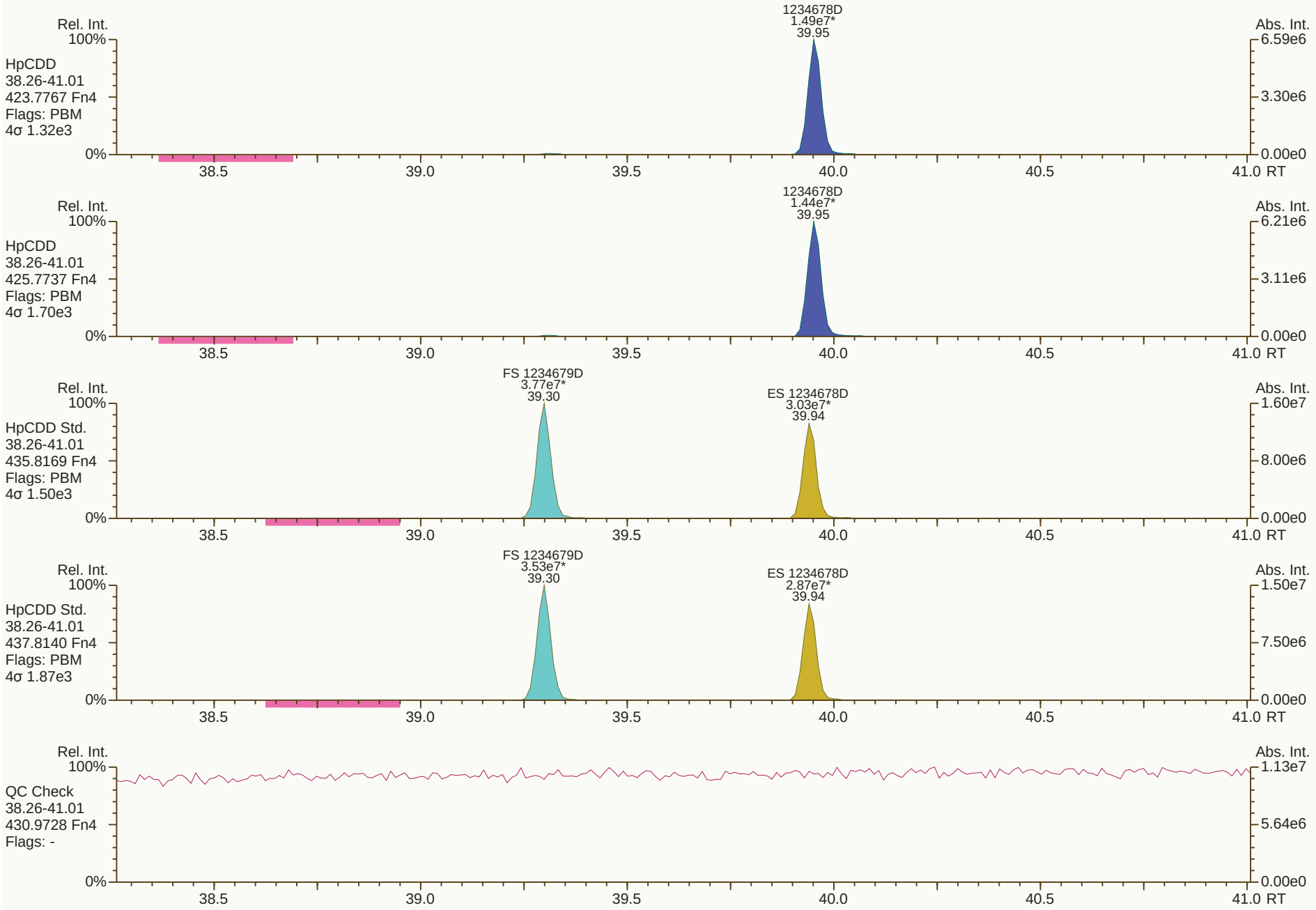
Results: P:\B4500_B4599\B4511\B4511_17654 DF\Resources\CS3_200807_DF_RC.utp_res, saved 10-Aug-2020 09:02 (PSW) *Peak annotation: Areas, Centroids*

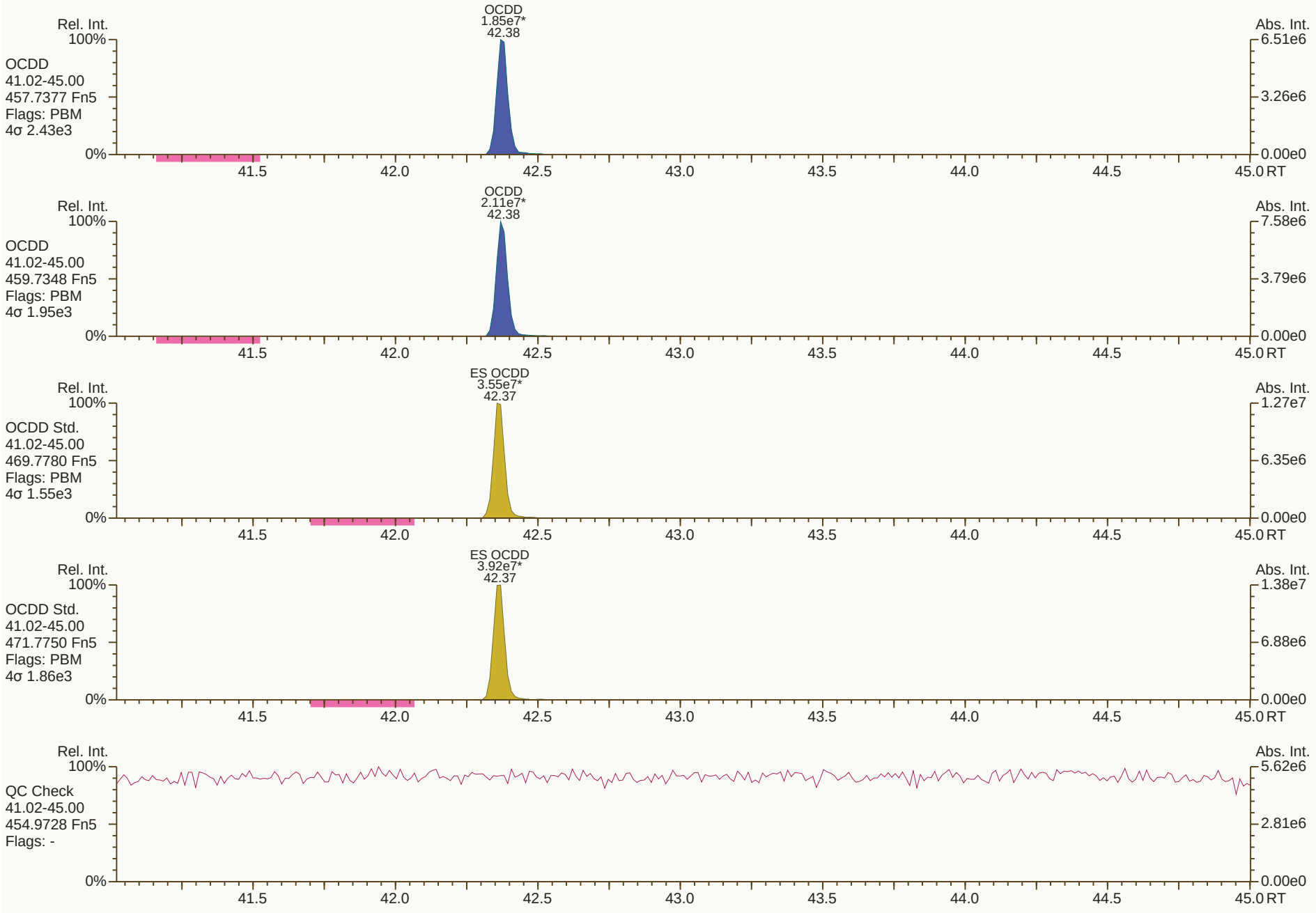
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 scc: 658-828 *PKD: n/a Printed: 10-Aug-2020 09:24 Page 1 of 12*

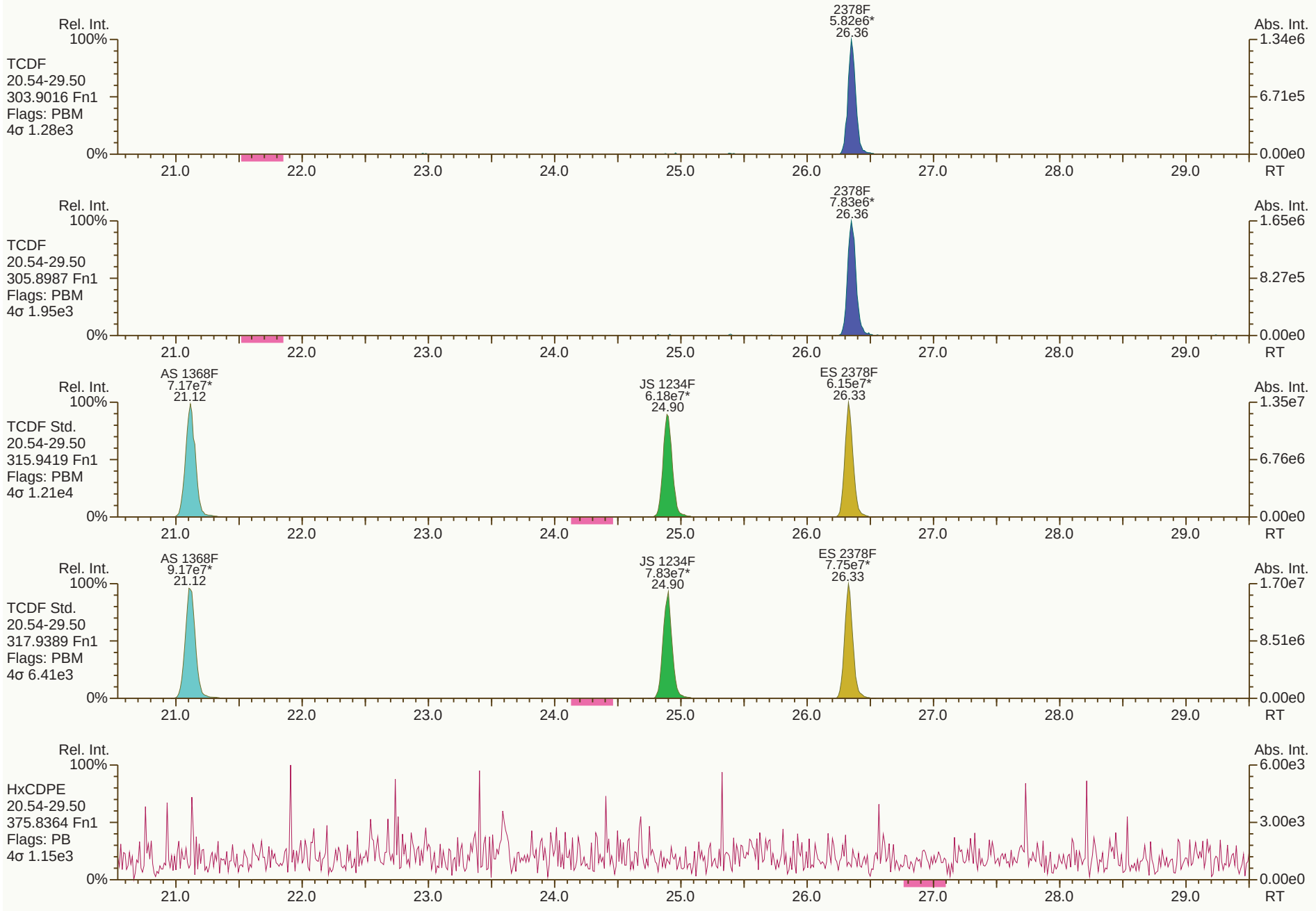

Rel. Int.
100%
TCDD
20.54-29.50
319.8965 Fn1
Flags: PBM
4σ 1.97e3
0%
2378D
4.53e6*
27.28
Abs. Int.
9.81e5
4.90e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD
20.54-29.50
321.8936 Fn1
Flags: PBM
4σ 1.60e3
0%
2378D
5.66e6*
27.28
Abs. Int.
1.21e6
6.05e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
37Cl-TCDD
20.54-29.50
327.8850 Fn1
Flags: PBM
4σ 1.78e3
0%
CS 37Cl-2378D
8.87e6*
27.28
Abs. Int.
2.00e6
9.99e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
331.9368 Fn1
Flags: PBM
4σ 6.02e3
0%
AS 1368D
4.06e7*
23.36
TS 1378D
4.10e7*
25.51
JS 1234D
3.65e7*
26.57
ES 2378D
3.67e7*
27.26
FS 1278D
3.69e7*
27.60
Abs. Int.
8.67e6
4.34e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
333.9339 Fn1
Flags: PBM
4σ 2.55e3
0%
AS 1368D
5.32e7*
23.36
TS 1378D
5.32e7*
25.51
JS 1234D
4.62e7*
26.57
ES 2378D
4.62e7*
27.26
FS 1278D
4.82e7*
27.60
Abs. Int.
1.11e7
5.56e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
PeCDD
29.51-34.01
355.8546 Fn2
Flags: PBM
4σ 1.63e3
0%
12378D
2.50e7*
32.82
Abs. Int.
6.81e6
3.40e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD
29.51-34.01
357.8517 Fn2
Flags: PBM
4σ 2.11e3
0%
12378D
1.59e7*
32.82
Abs. Int.
4.32e6
2.16e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
367.8949 Fn2
Flags: PBM
4σ 2.09e3
0%
FS 12478D
4.86e7*
31.55
CS 12347D
4.18e7*
32.29
ES 12378D
4.61e7*
32.80
Abs. Int.
1.26e7
6.28e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
369.8919 Fn2
Flags: PBM
4σ 3.13e3
0%
FS 12478D
2.90e7*
31.55
CS 12347D
2.47e7*
32.29
ES 12378D
2.77e7*
32.80
Abs. Int.
7.76e6
3.88e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
QC Check
29.51-34.01
366.9792 Fn2
Flags: -
0%
Abs. Int.
2.81e6
1.41e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT

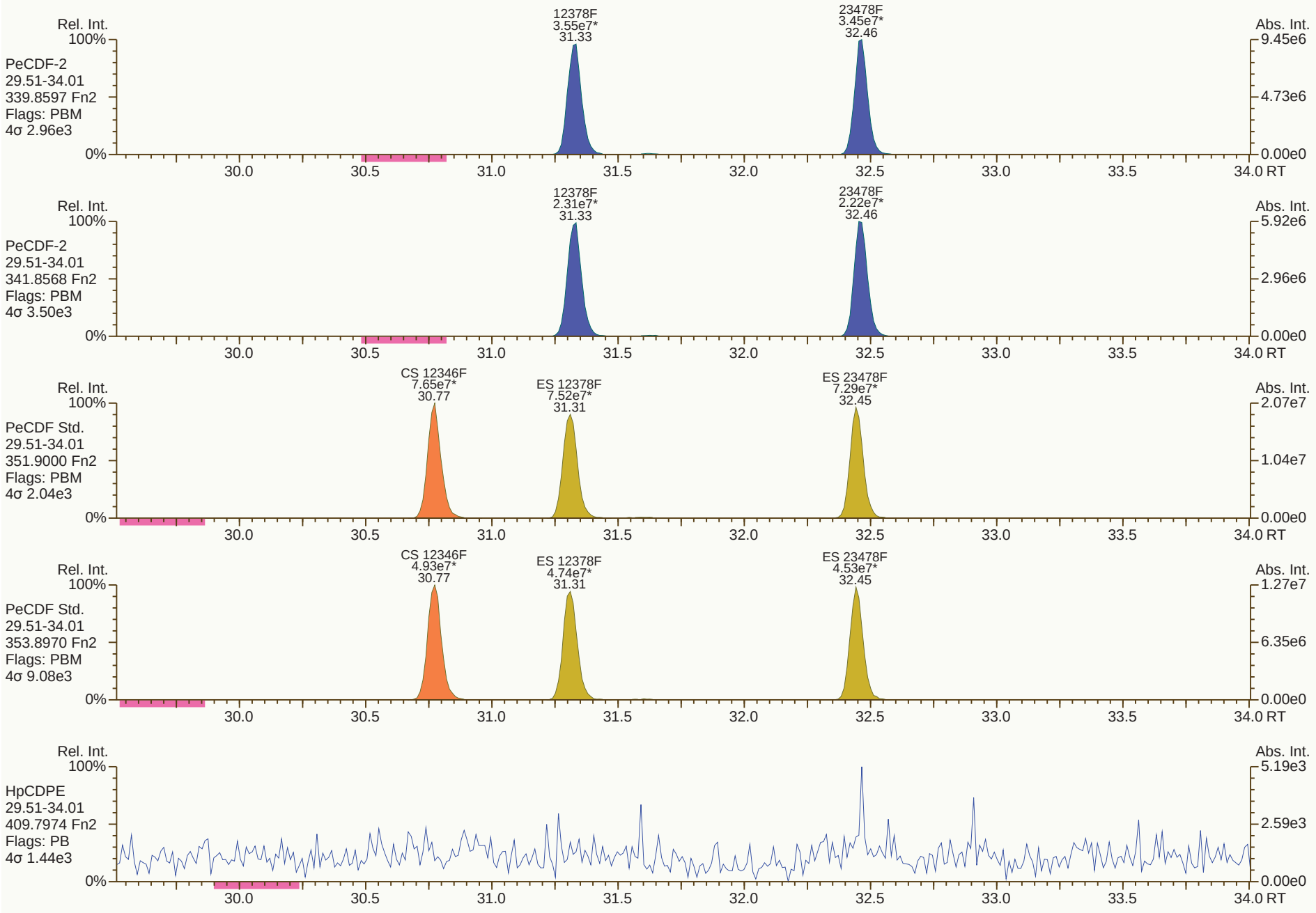

Rel. Int.
100%
HxCDD
34.02-38.25
389.8156 Fn3
Flags: PBM
4σ 1.12e3
0%
123478D
2.02e7*
36.73
123678D
2.02e7*
36.84
123789D
2.22e7*
37.14
Abs. Int.
6.39e6
3.20e6
0.00e0
RT
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
Rel. Int.
100%
HxCDD
34.02-38.25
391.8127 Fn3
Flags: PBM
4σ 1.85e3
0%
123478D
1.59e7*
36.73
123678D
1.60e7*
36.84
123789D
1.79e7*
37.14
Abs. Int.
5.21e6
2.60e6
0.00e0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
401.8559 Fn3
Flags: PBM
4σ 2.49e3
0%
FS 123468D
4.60e7*
35.67
ES 123478D
3.80e7*
36.72
ES 123678D
3.67e7*
36.83
JS 123467D
1.95e7*
37.03
ES 123789D
4.30e7*
37.13
Abs. Int.
1.35e7
6.76e6
0.00e0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
403.8530 Fn3
Flags: PBM
4σ 2.40e3
0%
FS 123468D
3.52e7*
35.67
ES 123478D
2.90e7*
36.72
ES 123678D
2.89e7*
36.83
JS 123467D
1.45e7*
37.03
ES 123789D
3.37e7*
37.13
Abs. Int.
1.03e7
5.17e6
0.00e0
RT
Rel. Int.
100%
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
0%
Abs. Int.
1.68e7
8.40e6
0.00e0
RT

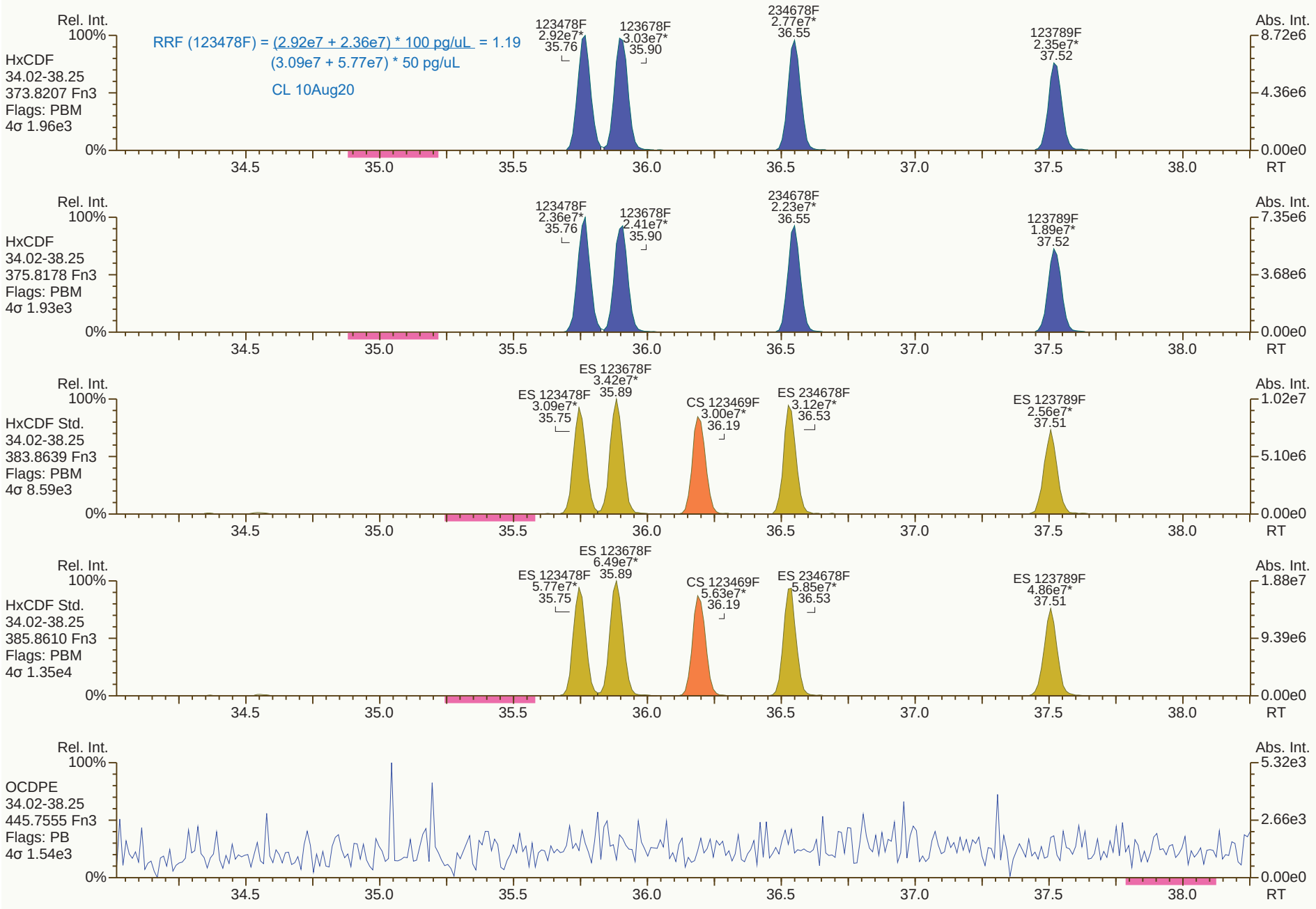

Rel. Int.
100%
HpCDD
38.26-41.01
423.7767 Fn4
Flags: PBM
4σ 1.32e3
0%
1234678D
1.49e7*
39.95
Abs. Int.
6.59e6
3.30e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.26-41.01
425.7737 Fn4
Flags: PBM
4σ 1.70e3
0%
1234678D
1.44e7*
39.95
Abs. Int.
6.21e6
3.11e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
435.8169 Fn4
Flags: PBM
4σ 1.50e3
0%
FS 1234679D
3.77e7*
39.30
ES 1234678D
3.03e7*
39.94
Abs. Int.
1.60e7
8.00e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
437.8140 Fn4
Flags: PBM
4σ 1.87e3
0%
FS 1234679D
3.53e7*
39.30
ES 1234678D
2.87e7*
39.94
Abs. Int.
1.50e7
7.50e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.26-41.01
430.9728 Fn4
Flags: -
0%
Abs. Int.
1.13e7
5.64e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT

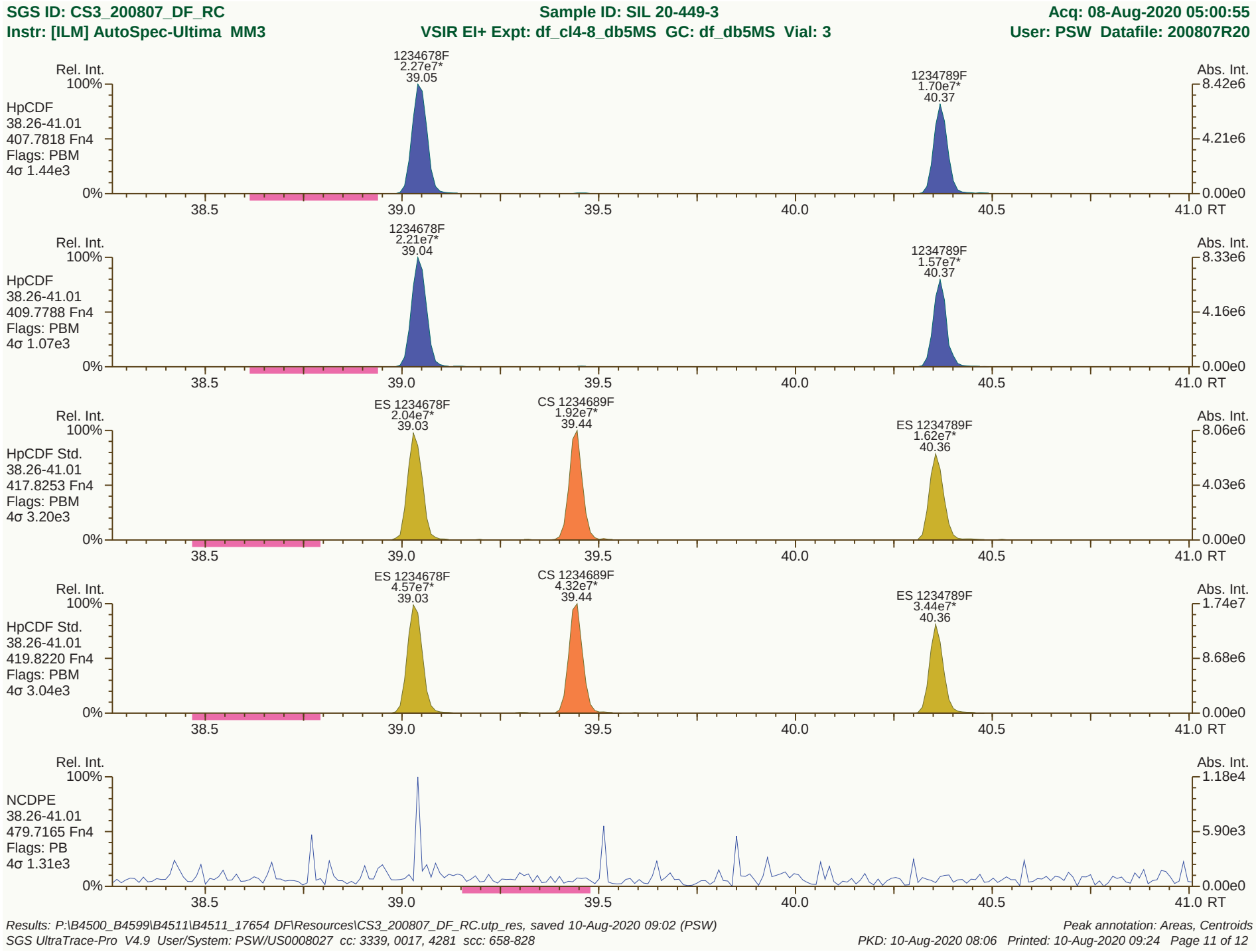

Rel. Int.
100%
OCDD
41.02-45.00
457.7377 Fn5
Flags: PBM
4σ 2.43e3
0%
OCDD
1.85e7*
42.38
Abs. Int.
6.51e6
3.26e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDD
41.02-45.00
459.7348 Fn5
Flags: PBM
4σ 1.95e3
0%
OCDD
2.11e7*
42.38
Abs. Int.
7.58e6
3.79e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDD Std.
41.02-45.00
469.7780 Fn5
Flags: PBM
4σ 1.55e3
0%
ES OCDD
3.55e7*
42.37
Abs. Int.
1.27e7
6.35e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDD Std.
41.02-45.00
471.7750 Fn5
Flags: PBM
4σ 1.86e3
0%
ES OCDD
3.92e7*
42.37
Abs. Int.
1.38e7
6.88e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
5.62e6
2.81e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT


Rel. Int.
100%
TCDF
20.54-29.50
303.9016 Fn1
Flags: PBM
4σ 1.28e3
0%
2378F
5.82e6*
26.36
Abs. Int.
1.34e6
6.71e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF
20.54-29.50
305.8987 Fn1
Flags: PBM
4σ 1.95e3
0%
2378F
7.83e6*
26.36
Abs. Int.
1.65e6
8.27e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
315.9419 Fn1
Flags: PBM
4σ 1.21e4
0%
AS 1368F
7.17e7*
21.12
JS 1234F
6.18e7*
24.90
ES 2378F
6.15e7*
26.33
Abs. Int.
1.35e7
6.76e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
317.9389 Fn1
Flags: PBM
4σ 6.41e3
0%
AS 1368F
9.17e7*
21.12
JS 1234F
7.83e7*
24.90
ES 2378F
7.75e7*
26.33
Abs. Int.
1.70e7
8.51e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
HxCDPE
20.54-29.50
375.8364 Fn1
Flags: PB
4σ 1.15e3
0%
Abs. Int.
6.00e3
3.00e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT

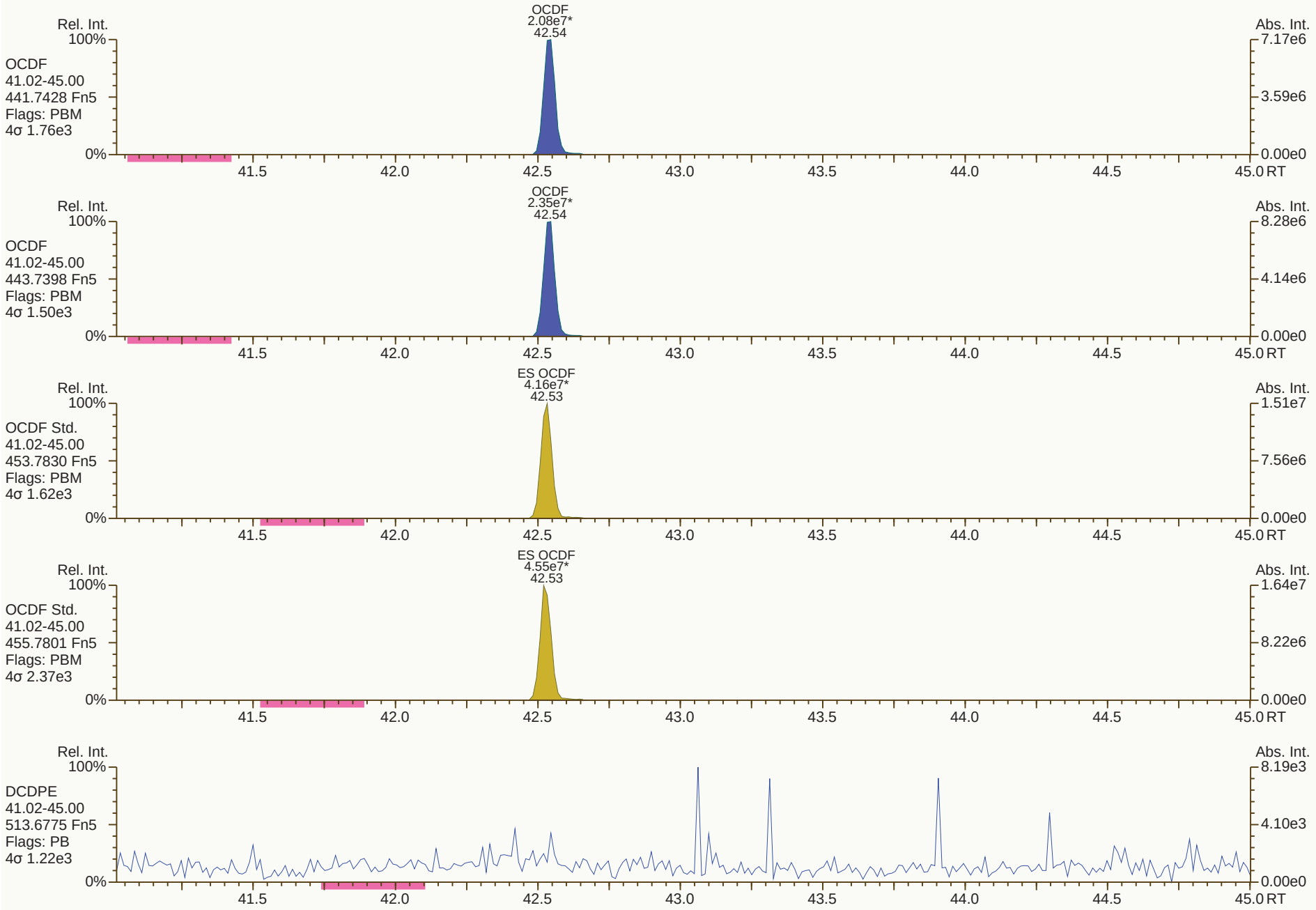

Rel. Int.
100%
0%
Abs. Int.
8.76e3
4.38e3
0.00e0
PeCDF-1
20.54-29.50
339.8597 Fn1
Flags: PB
4σ 1.83e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
0%
Abs. Int.
1.18e4
5.88e3
0.00e0
PeCDF-1
20.54-29.50
341.8568 Fn1
Flags: PB
4σ 1.84e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
0%
Abs. Int.
3.23e6
1.62e6
0.00e0
QC Check
20.54-29.50
316.9824 Fn1
Flags: -
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
PeCDF-2
29.51-34.01
339.8597 Fn2
Flags: PBM
4σ 2.96e3
0%
12378F
3.55e7*
31.33
23478F
3.45e7*
32.46
Abs. Int.
9.45e6
4.73e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF-2
29.51-34.01
341.8568 Fn2
Flags: PBM
4σ 3.50e3
0%
12378F
2.31e7*
31.33
23478F
2.22e7*
32.46
Abs. Int.
5.92e6
2.96e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
351.9000 Fn2
Flags: PBM
4σ 2.04e3
0%
CS 12346F
7.65e7*
30.77
ES 12378F
7.52e7*
31.31
ES 23478F
7.29e7*
32.45
Abs. Int.
2.07e7
1.04e7
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
353.8970 Fn2
Flags: PBM
4σ 9.08e3
0%
CS 12346F
4.93e7*
30.77
ES 12378F
4.74e7*
31.31
ES 23478F
4.53e7*
32.45
Abs. Int.
1.27e7
6.35e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
HpCDPE
29.51-34.01
409.7974 Fn2
Flags: PB
4σ 1.44e3
0%
Abs. Int.
5.19e3
2.59e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT

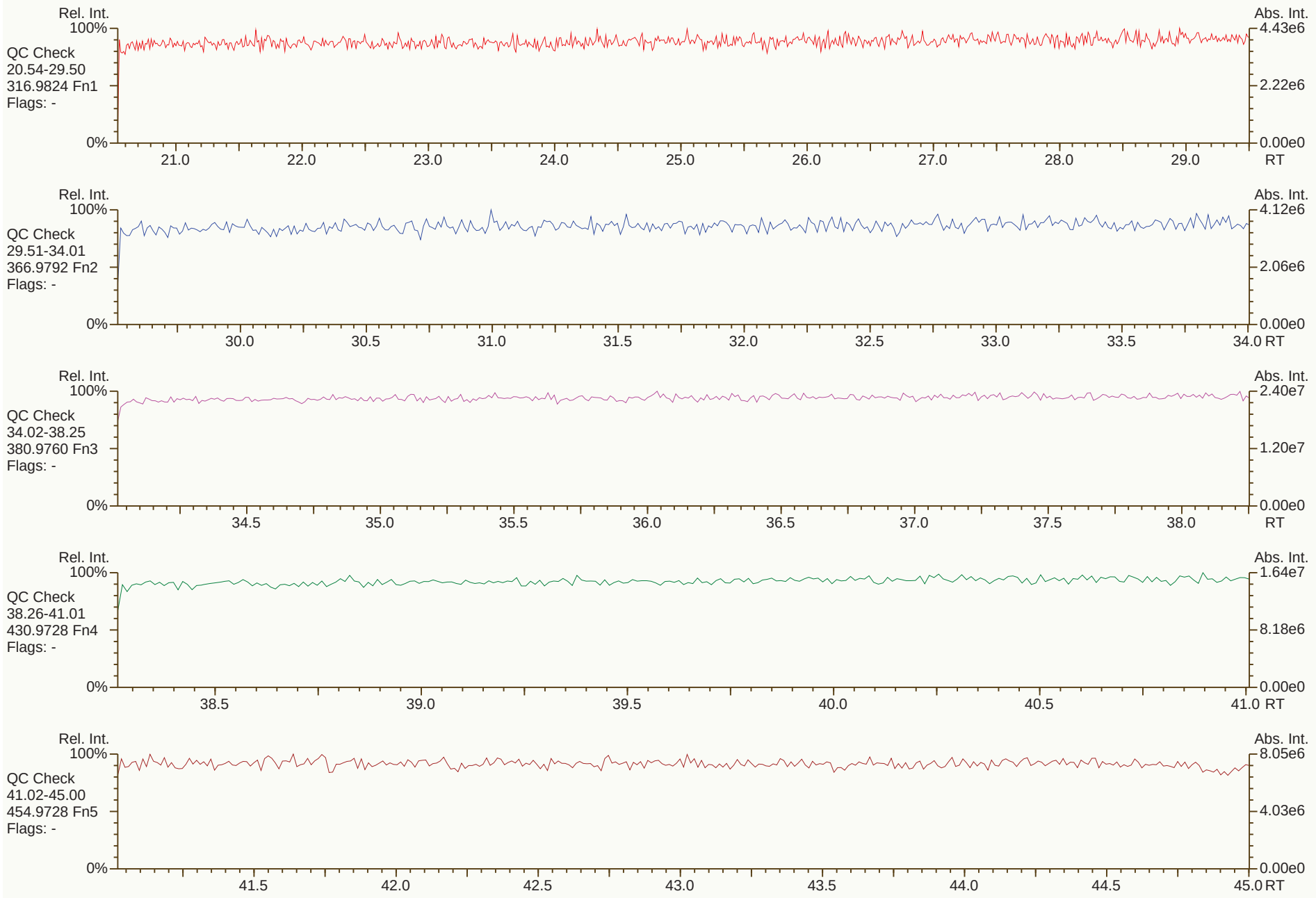

Rel. Int.
100%
0%
Abs. Int.
RT
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
HxCDF
34.02-38.25
373.8207 Fn3
Flags: PBM
4σ 1.96e3
RRF (123478F) = (2.92e7 + 2.36e7) * 100 pg/uL = 1.19
(3.09e7 + 5.77e7) * 50 pg/uL
CL 10Aug20
123478F 2.92e7* 35.76
123678F 3.03e7* 35.90
234678F 2.77e7* 36.55
123789F 2.35e7* 37.52
8.72e6
4.36e6
0.00e0
HxCDF
34.02-38.25
375.8178 Fn3
Flags: PBM
4σ 1.93e3
123478F 2.36e7* 35.76
123678F 2.41e7* 35.90
234678F 2.23e7* 36.55
123789F 1.89e7* 37.52
7.35e6
3.68e6
0.00e0
HxCDF Std.
34.02-38.25
383.8639 Fn3
Flags: PBM
4σ 8.59e3
ES 123678F 3.42e7* 35.89
ES 123478F 3.09e7* 35.75
CS 123469F 3.00e7* 36.19
ES 234678F 3.12e7* 36.53
ES 123789F 2.56e7* 37.51
1.02e7
5.10e6
0.00e0
HxCDF Std.
34.02-38.25
385.8610 Fn3
Flags: PBM
4σ 1.35e4
ES 123678F 6.49e7* 35.89
ES 123478F 5.77e7* 35.75
CS 123469F 5.63e7* 36.19
ES 234678F 5.85e7* 36.53
ES 123789F 4.86e7* 37.51
1.88e7
9.39e6
0.00e0
OCDPE
34.02-38.25
445.7555 Fn3
Flags: PB
4σ 1.54e3
5.32e3
2.66e3
0.00e0



Results: P:\B4500_B4599\B4511\B4511_17654 DF\Resources\CS3_200807_DF_RC.utp_res, saved 10-Aug-2020 09:02 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 3339, 0017, 4281 scc: 658-828
PKD: 10-Aug-2020 08:06 Printed: 10-Aug-2020 09:24 Page 11 of 12



Results: P:\B4500_B4599\B4511\B4511_17654 DF\Resources\CS3_200807_DF_RC.utp_res, saved 10-Aug-2020 09:02 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 8578, 9148, 6143 scc: 658-828
PKD: 10-Aug-2020 08:06 Printed: 10-Aug-2020 09:24 Page 12 of 12



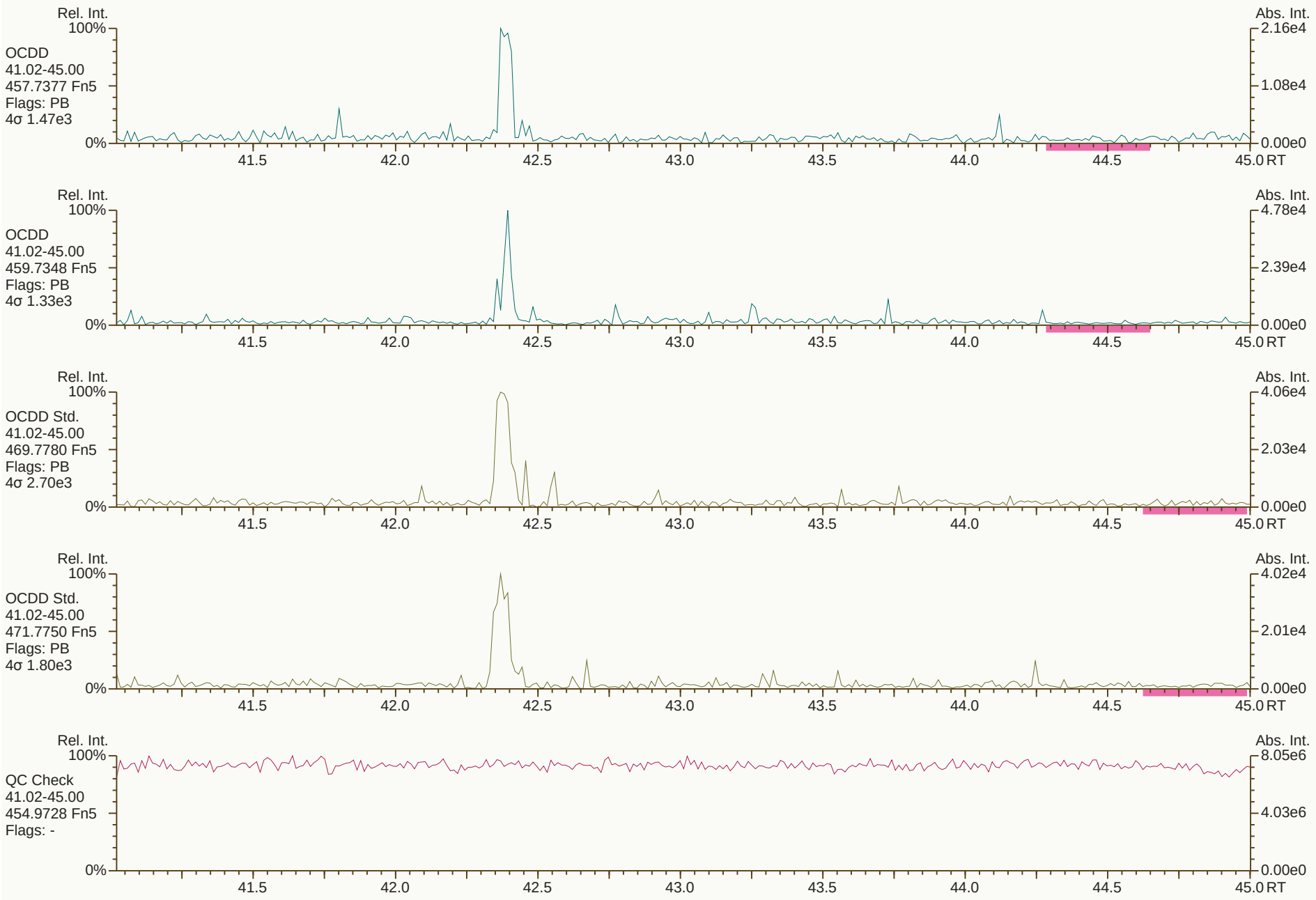
Results: P:\B4500_B4599\B4511\B4511_17654 DF\Resources\SBS_200807_DF_RA.utp_res, saved 10-Aug-2020 08:00 (PSW) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 scc: 398-019 *PKD: n/a Printed: 10-Aug-2020 09:15 Page 1 of 12*


Rel. Int.
100%
TCDD
20.54-29.50
319.8965 Fn1
Flags: PB
4σ 2.21e3
0%
Abs. Int.
9.29e3
4.65e3
0.00e0
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
TCDD
20.54-29.50
321.8936 Fn1
Flags: PB
4σ 1.86e3
0%
Abs. Int.
1.23e4
6.17e3
0.00e0
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
37Cl-TCDD
20.54-29.50
327.8850 Fn1
Flags: PB
4σ 1.64e3
0%
Abs. Int.
1.86e4
9.31e3
0.00e0
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
331.9368 Fn1
Flags: PB
4σ 5.81e3
0%
Abs. Int.
1.89e4
9.45e3
0.00e0
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
333.9339 Fn1
Flags: PB
4σ 4.29e3
0%
Abs. Int.
3.43e4
1.72e4
0.00e0
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT


Rel. Int.
100%
PeCDD
29.51-34.01
355.8546 Fn2
Flags: PB
4σ 2.13e3
0%
Abs. Int.
1.05e4
5.27e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD
29.51-34.01
357.8517 Fn2
Flags: PB
4σ 1.62e3
0%
Abs. Int.
8.85e3
4.43e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
367.8949 Fn2
Flags: PB
4σ 2.72e3
0%
Abs. Int.
2.23e4
1.11e4
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
369.8919 Fn2
Flags: PB
4σ 2.30e3
0%
Abs. Int.
1.62e4
8.12e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
QC Check
29.51-34.01
366.9792 Fn2
Flags: -
0%
Abs. Int.
4.12e6
2.06e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT


Rel. Int.
100%
HxCDD
34.02-38.25
389.8156 Fn3
Flags: PB
4σ 1.58e3
0%
Abs. Int.
1.68e4
8.39e3
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD
34.02-38.25
391.8127 Fn3
Flags: PB
4σ 1.09e3
0%
Abs. Int.
1.90e4
9.48e3
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
401.8559 Fn3
Flags: PB
4σ 5.67e3
0%
Abs. Int.
3.04e4
1.52e4
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
403.8530 Fn3
Flags: PB
4σ 2.40e3
0%
Abs. Int.
2.58e4
1.29e4
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
0%
Abs. Int.
2.40e7
1.20e7
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT


Rel. Int.
100%
HpCDD
38.26-41.01
423.7767 Fn4
Flags: PB
4σ 1.57e3
0%
Abs. Int.
2.11e4
1.06e4
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.26-41.01
425.7737 Fn4
Flags: PB
4σ 1.41e3
0%
Abs. Int.
1.77e4
8.86e3
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
435.8169 Fn4
Flags: PB
4σ 2.20e3
0%
Abs. Int.
4.92e4
2.46e4
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
437.8140 Fn4
Flags: PB
4σ 2.24e3
0%
Abs. Int.
5.45e4
2.73e4
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.26-41.01
430.9728 Fn4
Flags: -
0%
Abs. Int.
1.64e7
8.18e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT


Rel. Int.
100%
OCDD
41.02-45.00
457.7377 Fn5
Flags: PB
4σ 1.47e3
0%
Abs. Int.
2.16e4
1.08e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDD
41.02-45.00
459.7348 Fn5
Flags: PB
4σ 1.33e3
0%
Abs. Int.
4.78e4
2.39e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDD Std.
41.02-45.00
469.7780 Fn5
Flags: PB
4σ 2.70e3
0%
Abs. Int.
4.06e4
2.03e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDD Std.
41.02-45.00
471.7750 Fn5
Flags: PB
4σ 1.80e3
0%
Abs. Int.
4.02e4
2.01e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
8.05e6
4.03e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT


2468F: SPIKED
1.15e6*
22.41
Rel. Int.
100%
TCDF
20.54-29.50
303.9016 Fn1
Flags: PBM
4σ 1.75e3
0%
Abs. Int.
2.08e5
1.04e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
2468F
1.36e6*
22.41
Rel. Int.
100%
TCDF
20.54-29.50
305.8987 Fn1
Flags: PBM
4σ 1.45e3
0%
Abs. Int.
2.57e5
1.29e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
315.9419 Fn1
Flags: PB
4σ 1.10e4
0%
Abs. Int.
5.29e4
2.65e4
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
317.9389 Fn1
Flags: PB
4σ 6.38e3
0%
Abs. Int.
2.68e4
1.34e4
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
HxCDPE
20.54-29.50
375.8364 Fn1
Flags: PB
4σ 1.86e3
0%
Abs. Int.
7.30e3
3.65e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
0%
Abs. Int.
1.33e4
6.67e3
0.00e0
PeCDF-1
20.54-29.50
339.8597 Fn1
Flags: PB
4σ 1.95e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
0%
Abs. Int.
1.31e4
6.55e3
0.00e0
PeCDF-1
20.54-29.50
341.8568 Fn1
Flags: PB
4σ 2.14e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
0%
Abs. Int.
4.43e6
2.22e6
0.00e0
QC Check
20.54-29.50
316.9824 Fn1
Flags: -
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
PeCDF-2
29.51-34.01
339.8597 Fn2
Flags: PB
4σ 1.85e3
0%
Abs. Int.
1.88e4
9.40e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF-2
29.51-34.01
341.8568 Fn2
Flags: PB
4σ 2.38e3
0%
Abs. Int.
1.14e4
5.70e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
351.9000 Fn2
Flags: PB
4σ 3.27e3
0%
Abs. Int.
4.66e4
2.33e4
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
353.8970 Fn2
Flags: PB
4σ 2.83e3
0%
Abs. Int.
4.96e4
2.48e4
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
HpCDPE
29.51-34.01
409.7974 Fn2
Flags: PB
4σ 1.12e3
0%
Abs. Int.
5.44e3
2.72e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT

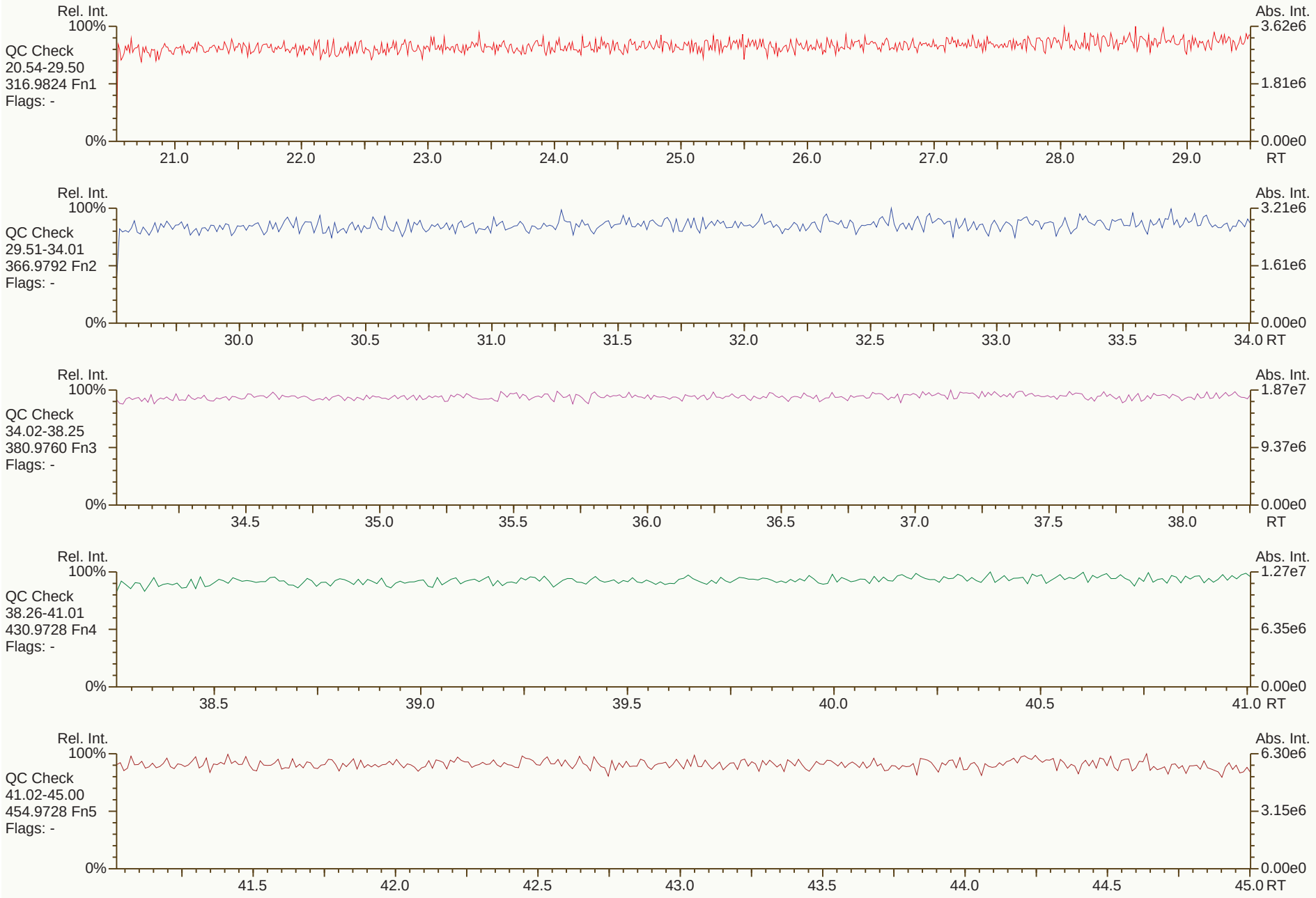

Rel. Int.
100%
HxCDF
34.02-38.25
373.8207 Fn3
Flags: PB
4σ 1.60e3
0%
Abs. Int.
2.31e4
1.16e4
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDF
34.02-38.25
375.8178 Fn3
Flags: PB
4σ 1.59e3
0%
Abs. Int.
1.27e4
6.34e3
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDF Std.
34.02-38.25
383.8639 Fn3
Flags: PB
4σ 1.52e3
0%
Abs. Int.
2.40e4
1.20e4
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDF Std.
34.02-38.25
385.8610 Fn3
Flags: PB
4σ 4.49e3
0%
Abs. Int.
5.64e4
2.82e4
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
OCDPE
34.02-38.25
445.7555 Fn3
Flags: PB
4σ 1.61e3
0%
Abs. Int.
6.63e3
3.31e3
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT


Rel. Int.
100%
HpCDF
38.26-41.01
407.7818 Fn4
Flags: PB
4σ 1.33e3
0%
Abs. Int.
3.46e4
1.73e4
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF
38.26-41.01
409.7788 Fn4
Flags: PB
4σ 1.30e3
0%
Abs. Int.
2.35e4
1.18e4
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.26-41.01
417.8253 Fn4
Flags: PB
4σ 2.55e3
0%
Abs. Int.
3.70e4
1.85e4
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.26-41.01
419.8220 Fn4
Flags: PB
4σ 2.14e3
0%
Abs. Int.
7.94e4
3.97e4
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
NCDPE
38.26-41.01
479.7165 Fn4
Flags: PB
4σ 2.08e3
0%
Abs. Int.
6.86e3
3.43e3
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT


Rel. Int.
100%
OCDF
41.02-45.00
441.7428 Fn5
Flags: PB
4σ 1.56e3
0%
Abs. Int.
3.00e4
1.50e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF
41.02-45.00
443.7398 Fn5
Flags: PB
4σ 2.53e3
0%
Abs. Int.
2.58e4
1.29e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF Std.
41.02-45.00
453.7830 Fn5
Flags: PB
4σ 2.07e3
0%
Abs. Int.
7.16e4
3.58e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF Std.
41.02-45.00
455.7801 Fn5
Flags: PB
4σ 2.61e3
0%
Abs. Int.
5.55e4
2.78e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
DCDPE
41.02-45.00
513.6775 Fn5
Flags: PB
4σ 1.90e3
0%
Abs. Int.
8.38e3
4.19e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

SGS ID: SBS_200807_DF_RB | **Sample ID: SIL 20-61-1** | **Acq: 08-Aug-2020 00:15:51**

Instr: [ILM] AutoSpec-Ultima MM3 | **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 2** | **User: PSW Datafile: 200807R14**



Results: P:\B4500_B4599\B4511\B4511_17654 DF\Resources\SBS_200807_DF_RB.utp_res, saved 10-Aug-2020 08:04 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 scc: 140-454 *PKD: n/a Printed: 10-Aug-2020 09:21 Page 1 of 12*


Rel. Int.
100%
TCDD
20.54-29.50
319.8965 Fn1
Flags: PB
4σ 2.24e3
0%
Abs. Int.
7.14e3
3.57e3
0.00e0
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
TCDD
20.54-29.50
321.8936 Fn1
Flags: PB
4σ 1.23e3
0%
Abs. Int.
1.10e4
5.48e3
0.00e0
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
37Cl-TCDD
20.54-29.50
327.8850 Fn1
Flags: PB
4σ 1.61e3
0%
Abs. Int.
1.68e4
8.40e3
0.00e0
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
331.9368 Fn1
Flags: PB
4σ 5.23e3
0%
Abs. Int.
1.84e4
9.19e3
0.00e0
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
333.9339 Fn1
Flags: PB
4σ 2.28e3
0%
Abs. Int.
2.27e4
1.14e4
0.00e0
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT


Rel. Int.
100%
PeCDD
29.51-34.01
355.8546 Fn2
Flags: PB
4σ 1.76e3
0%
Abs. Int.
1.37e4
6.87e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD
29.51-34.01
357.8517 Fn2
Flags: PB
4σ 1.45e3
0%
Abs. Int.
8.57e3
4.28e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
367.8949 Fn2
Flags: PB
4σ 2.52e3
0%
Abs. Int.
1.83e4
9.16e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
369.8919 Fn2
Flags: PB
4σ 1.35e3
0%
Abs. Int.
9.74e3
4.87e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
QC Check
29.51-34.01
366.9792 Fn2
Flags: -
0%
Abs. Int.
3.21e6
1.61e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT


Rel. Int.
100%
HxCDD
34.02-38.25
389.8156 Fn3
Flags: PB
4σ 1.10e3
0%
Abs. Int.
1.28e4
6.42e3
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD
34.02-38.25
391.8127 Fn3
Flags: PB
4σ 1.14e3
0%
Abs. Int.
1.50e4
7.52e3
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
401.8559 Fn3
Flags: PB
4σ 1.80e3
0%
Abs. Int.
4.18e4
2.09e4
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
403.8530 Fn3
Flags: PB
4σ 2.37e3
0%
Abs. Int.
3.84e4
1.92e4
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
0%
Abs. Int.
1.87e7
9.37e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT


Rel. Int.
100%
HpCDD
38.26-41.01
423.7767 Fn4
Flags: PB
4σ 1.46e3
0%
Abs. Int.
3.02e4
1.51e4
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.26-41.01
425.7737 Fn4
Flags: PB
4σ 9.72e2
0%
Abs. Int.
1.54e4
7.70e3
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
435.8169 Fn4
Flags: PB
4σ 2.08e3
0%
Abs. Int.
2.67e4
1.34e4
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
437.8140 Fn4
Flags: PB
4σ 1.78e3
0%
Abs. Int.
3.03e4
1.51e4
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.26-41.01
430.9728 Fn4
Flags: -
0%
Abs. Int.
1.27e7
6.35e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT


Rel. Int.
100%
OCDD
41.02-45.00
457.7377 Fn5
Flags: PB
4σ 1.34e3
0%
Abs. Int.
2.98e4
1.49e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDD
41.02-45.00
459.7348 Fn5
Flags: PB
4σ 1.56e3
0%
Abs. Int.
4.99e4
2.50e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDD Std.
41.02-45.00
469.7780 Fn5
Flags: PB
4σ 1.65e3
0%
Abs. Int.
3.89e4
1.94e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDD Std.
41.02-45.00
471.7750 Fn5
Flags: PB
4σ 1.72e3
0%
Abs. Int.
1.00e5
5.00e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
6.30e6
3.15e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

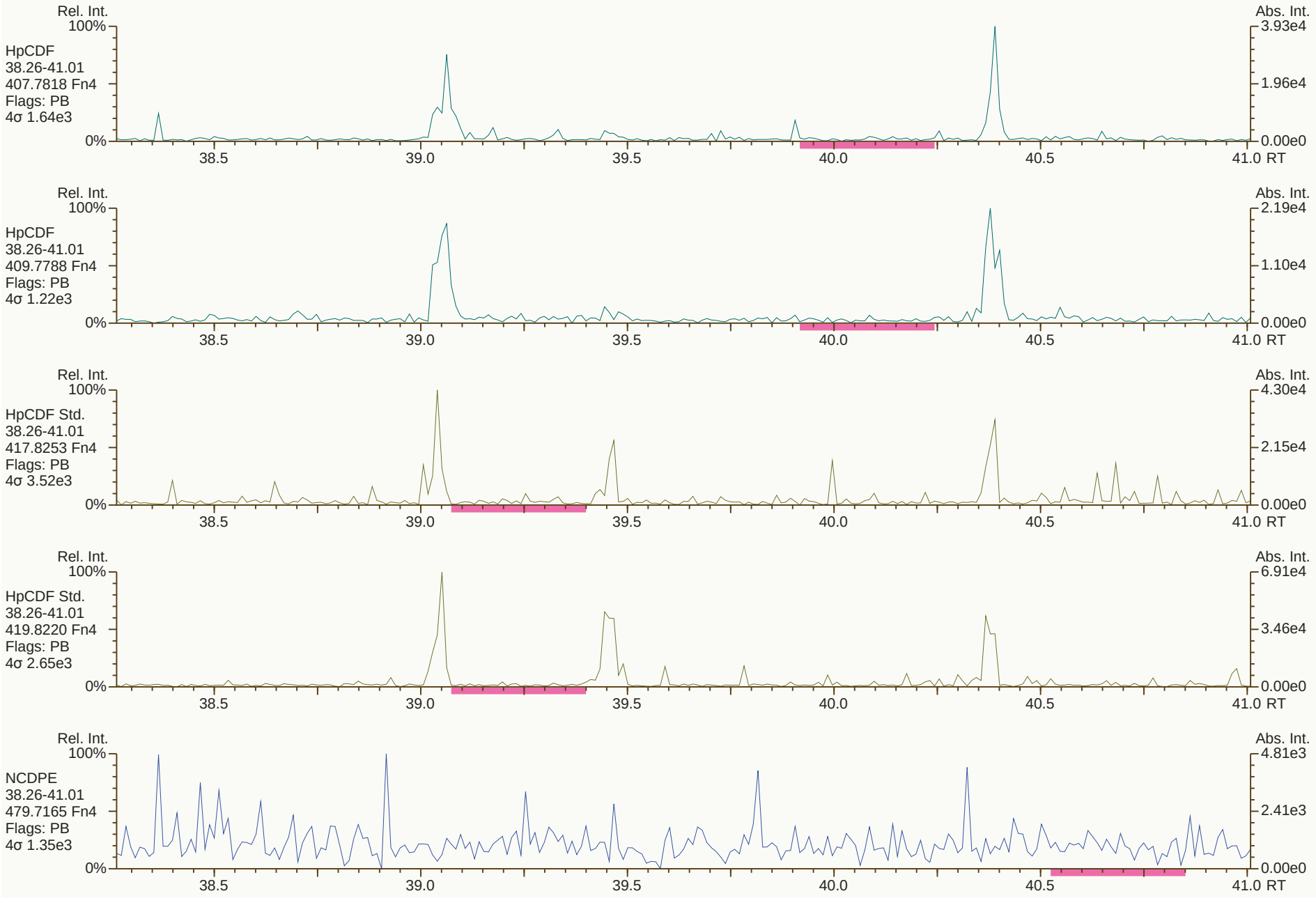
SGS ID: SBS_200807_DF_RB
Instr: [ILM] AutoSpec-Ultima MM3
Sample ID: SIL 20-61-1
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 2
Acq: 08-Aug-2020 00:15:51
User: PSW Datafile: 200807R14




Rel. Int.
100%
0%
Abs. Int.
7.08e3
3.54e3
0.00e0
PeCDF-1
20.54-29.50
339.8597 Fn1
Flags: PB
4σ 1.36e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
0%
Abs. Int.
2.02e4
1.01e4
0.00e0
PeCDF-1
20.54-29.50
341.8568 Fn1
Flags: PB
4σ 1.84e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
0%
Abs. Int.
3.62e6
1.81e6
0.00e0
QC Check
20.54-29.50
316.9824 Fn1
Flags: -
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
PeCDF-2
29.51-34.01
339.8597 Fn2
Flags: PB
4σ 1.24e3
0%
Abs. Int.
1.24e4
6.19e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF-2
29.51-34.01
341.8568 Fn2
Flags: PB
4σ 2.25e3
0%
Abs. Int.
1.30e4
6.49e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
351.9000 Fn2
Flags: PB
4σ 1.39e3
0%
Abs. Int.
4.71e4
2.35e4
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
353.8970 Fn2
Flags: PB
4σ 2.98e3
0%
Abs. Int.
2.05e4
1.03e4
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
HpCDPE
29.51-34.01
409.7974 Fn2
Flags: PB
4σ 1.16e3
0%
Abs. Int.
4.75e3
2.38e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT


Rel. Int.
100%
HxCDF
34.02-38.25
373.8207 Fn3
Flags: PB
4σ 1.57e3
0%
Abs. Int.
2.59e4
1.29e4
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDF
34.02-38.25
375.8178 Fn3
Flags: PB
4σ 1.06e3
0%
Abs. Int.
1.54e4
7.70e3
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDF Std.
34.02-38.25
383.8639 Fn3
Flags: PB
4σ 2.07e3
0%
Abs. Int.
2.67e4
1.33e4
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDF Std.
34.02-38.25
385.8610 Fn3
Flags: PB
4σ 3.05e3
0%
Abs. Int.
6.70e4
3.35e4
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
OCDPE
34.02-38.25
445.7555 Fn3
Flags: PB
4σ 1.10e3
0%
Abs. Int.
4.70e3
2.35e3
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT

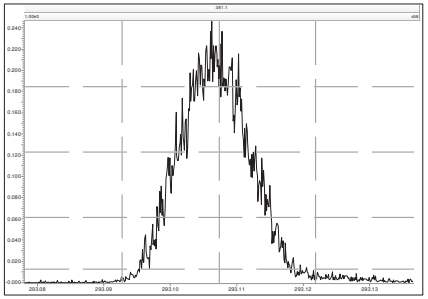

Rel. Int.
100%
HpCDF
38.26-41.01
407.7818 Fn4
Flags: PB
4σ 1.64e3
0%
Abs. Int.
3.93e4
1.96e4
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF
38.26-41.01
409.7788 Fn4
Flags: PB
4σ 1.22e3
0%
Abs. Int.
2.19e4
1.10e4
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.26-41.01
417.8253 Fn4
Flags: PB
4σ 3.52e3
0%
Abs. Int.
4.30e4
2.15e4
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.26-41.01
419.8220 Fn4
Flags: PB
4σ 2.65e3
0%
Abs. Int.
6.91e4
3.46e4
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
NCDPE
38.26-41.01
479.7165 Fn4
Flags: PB
4σ 1.35e3
0%
Abs. Int.
4.81e3
2.41e3
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT


Rel. Int.
100%
OCDF
41.02-45.00
441.7428 Fn5
Flags: PB
4σ 1.57e3
0%
Abs. Int.
2.24e4
1.12e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF
41.02-45.00
443.7398 Fn5
Flags: PB
4σ 1.17e3
0%
Abs. Int.
5.18e4
2.59e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF Std.
41.02-45.00
453.7830 Fn5
Flags: PB
4σ 2.04e3
0%
Abs. Int.
3.51e4
1.76e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF Std.
41.02-45.00
455.7801 Fn5
Flags: PB
4σ 1.68e3
0%
Abs. Int.
5.38e4
2.69e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
DCDPE
41.02-45.00
513.6775 Fn5
Flags: PB
4σ 1.52e3
0%
Abs. Int.
6.55e3
3.28e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

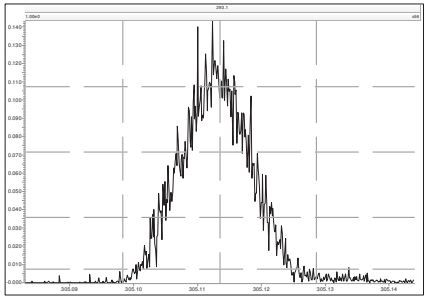
File: Experiment: df_cl4-8_db5MS.exp Reference: pfk.ref Function: 1 @ 200 (ppm)

Printed: Friday, August 07, 2020 13:41:32 Eastern Daylight Time

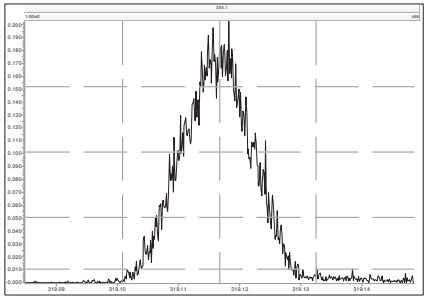
M 292.9824 R 12885



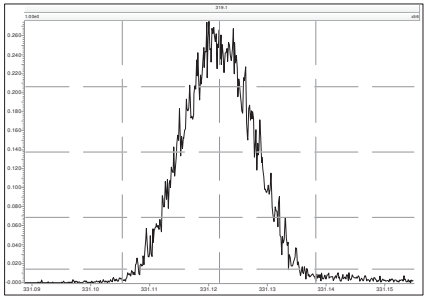
M 304.9824 R 12629



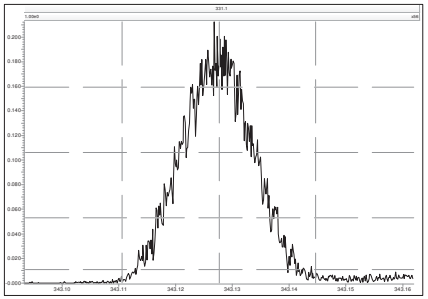
M 318.9792 R 12564



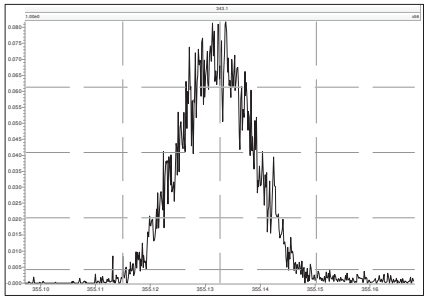
M 330.9792 R 12136



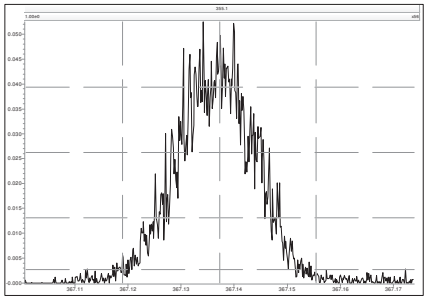
M 342.9792 R 12193



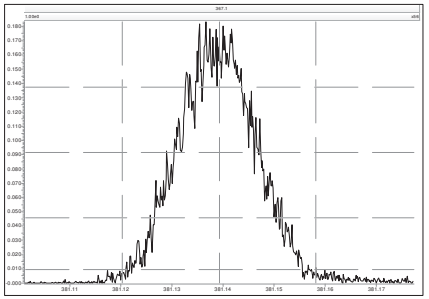
M 354.9792 R 12016



M 366.9792 R 11682



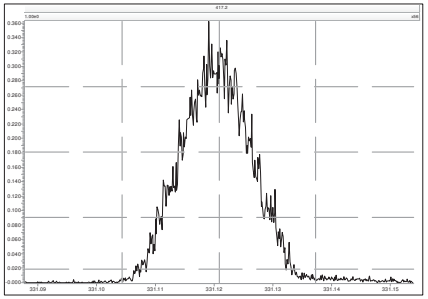
M 380.9760 R 11159



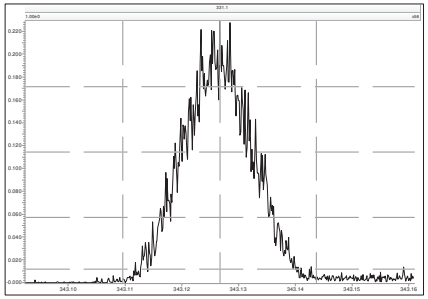
File: Experiment: df_cl4-8_db5MS.exp Reference: pfk.ref Function: 2 @ 200 (ppm)

Printed: Friday, August 07, 2020 13:41:53 Eastern Daylight Time

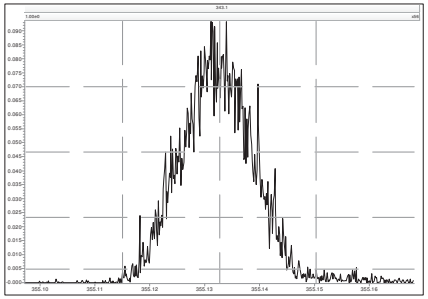
M 330.9792 R 12814



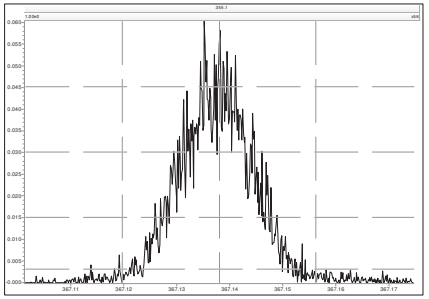
M 342.9792 R 13087



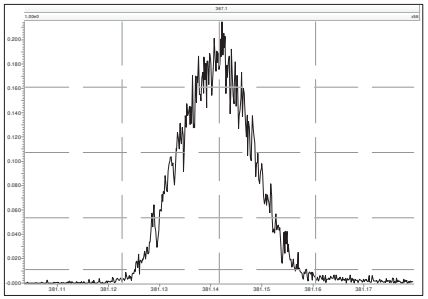
M 354.9792 R 12439



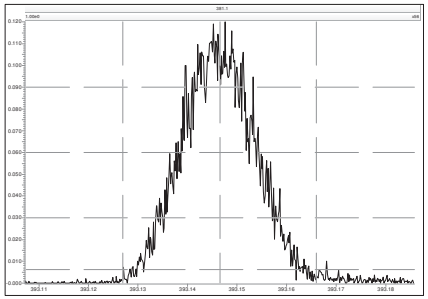
M 366.9792 R 13441



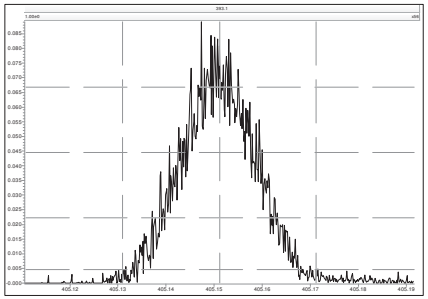
M 380.9760 R 12081



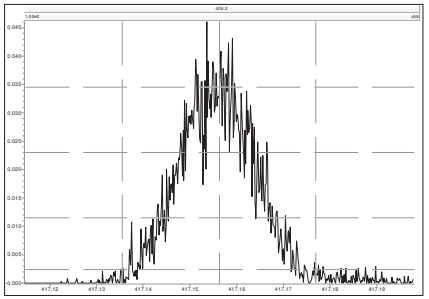
M 392.9760 R 12818



M 404.9760 R 12627



M 416.9760 R 12314



File: Experiment: df_cl4-8_db5MS.exp Reference: pfk.ref Function: 3 @ 200 (ppm)

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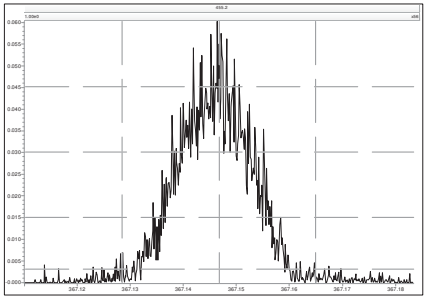
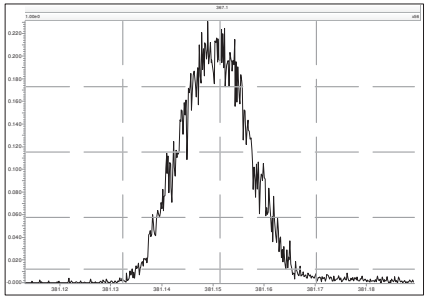
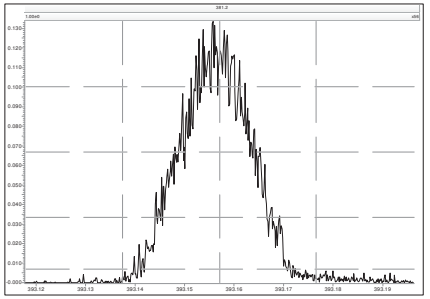
M 366.9792 R 13021



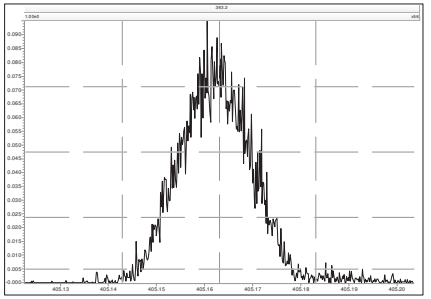
M 380.9760 R 12754



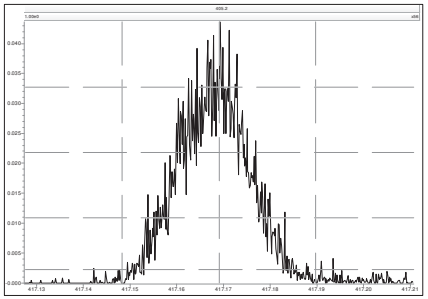
M 392.9760 R 13295



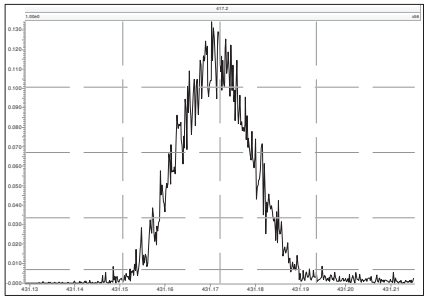
M 404.9760 R 12691



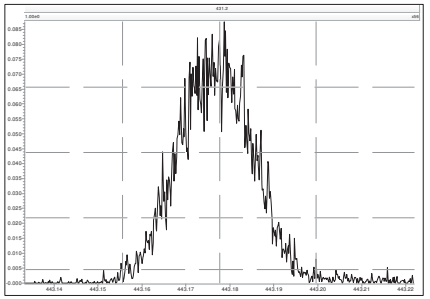
M 416.9760 R 12437



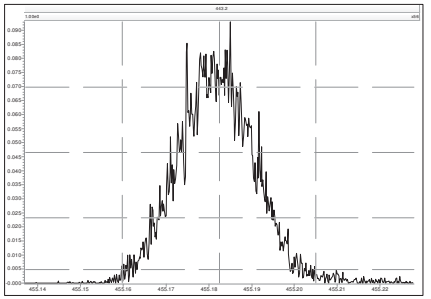
M 430.9728 R 12753



M 442.9728 R 12312



M 454.9728 R 11792



File: Experiment: df_cl4-8_db5MS.exp Reference: pfk.ref Function: 4 @ 200 (ppm)

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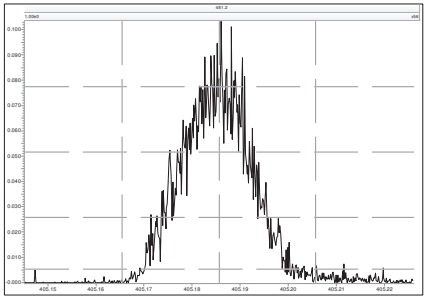
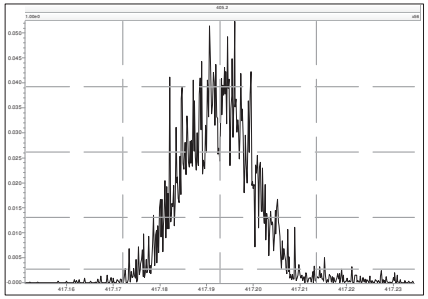
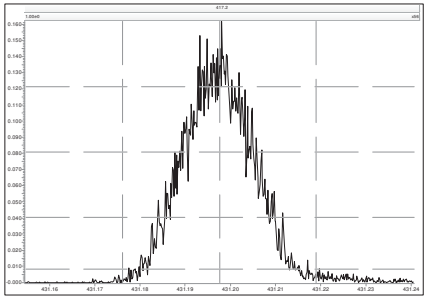
M 404.9760 R 12888



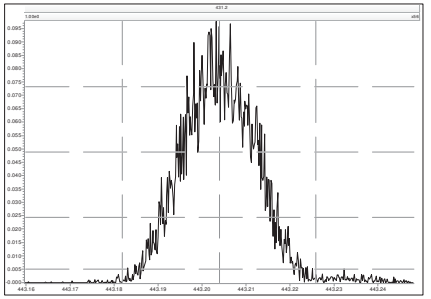
M 416.9760 R 13441



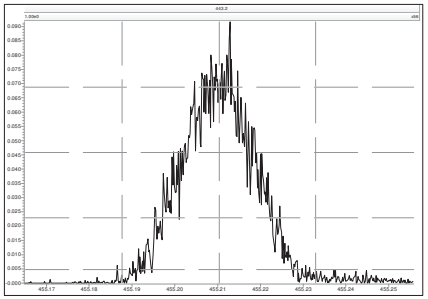
M 430.9728 R 12759



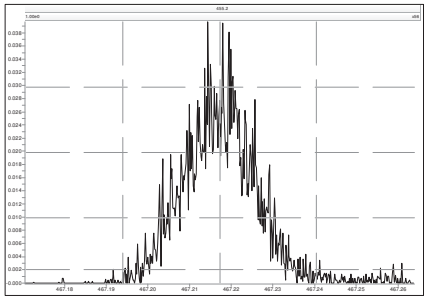
M 442.9728 R 12757



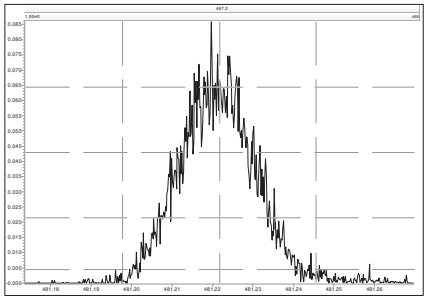
M 454.9728 R 13154



M 466.9728 R 13586



M 480.9696 R 12436



File: Experiment: df_cl4-8_db5MS.exp Reference: pfk.ref Function: 5 @ 200 (ppm)

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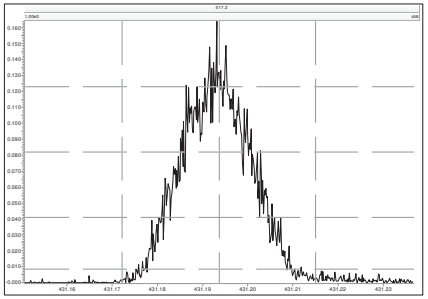
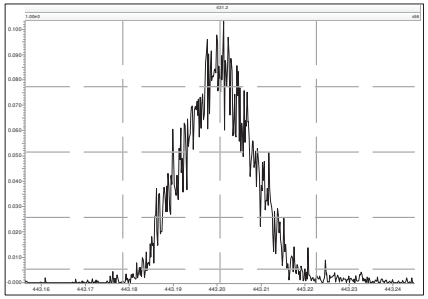
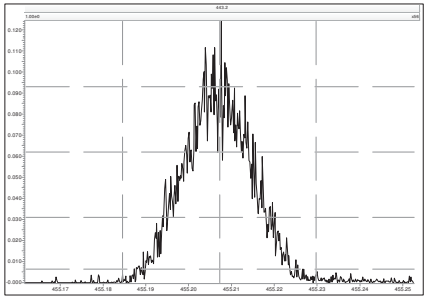
M 430.9728 R 12952



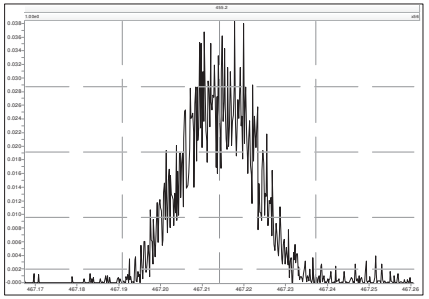
M 442.9728 R 13516



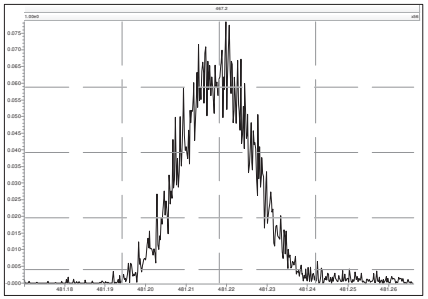
M 454.9728 R 13228



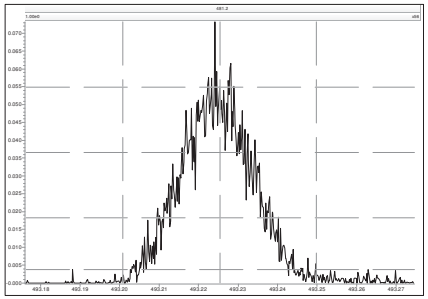
M 466.9728 R 13092



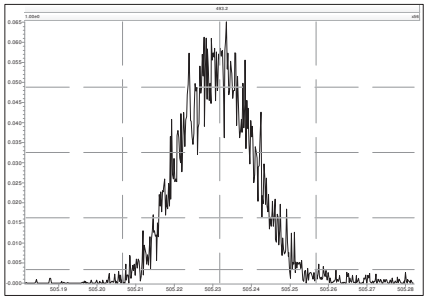
M 480.9696 R 12253



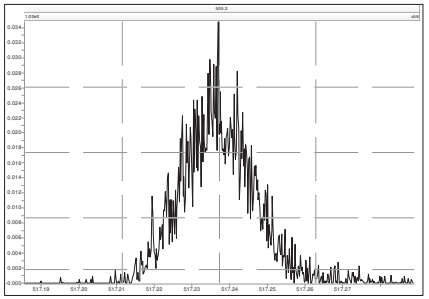
M 492.9696 R 13018



M 504.9696 R 13294



M 516.9697 R 13296



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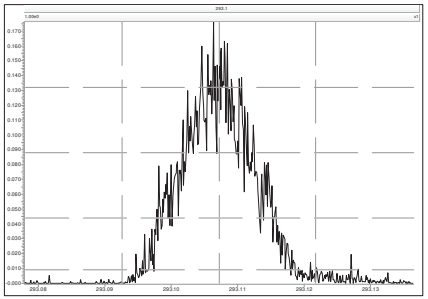
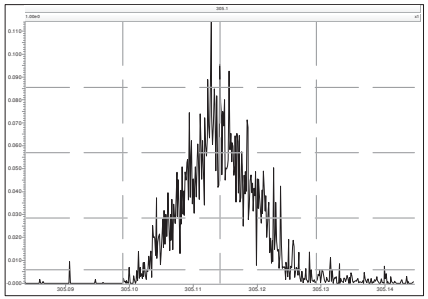
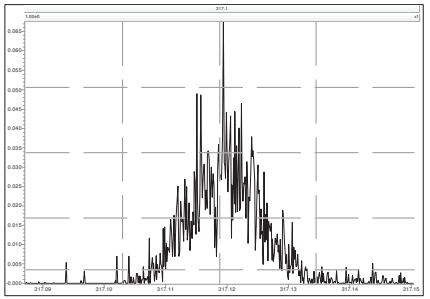
M 292.9824 R 12600



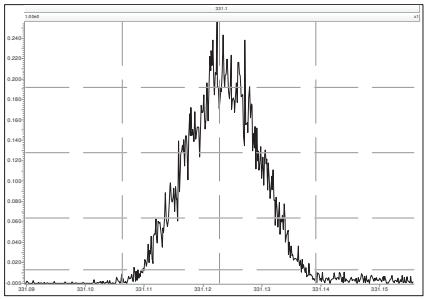
M 304.9824 R 14597



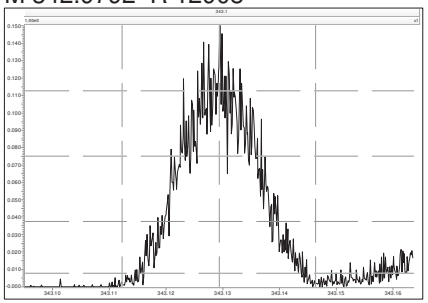
M 316.9824 R 15725



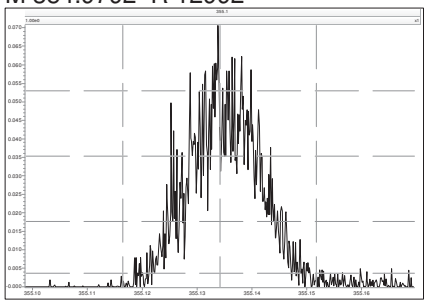
M 330.9792 R 12109



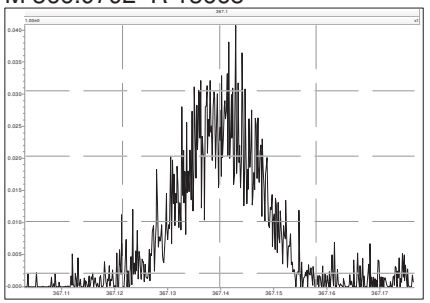
M 342.9792 R 12908



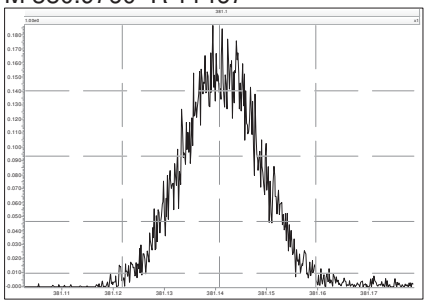
M 354.9792 R 12992



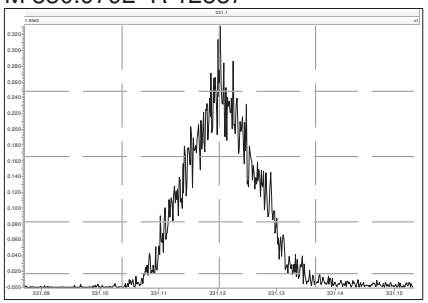
M 366.9792 R 13668



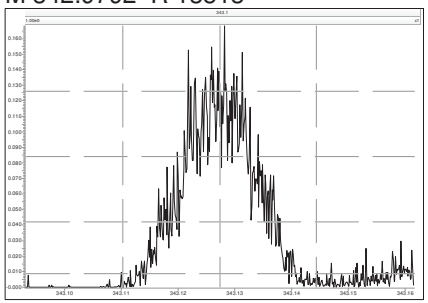
M 380.9760 R 11467



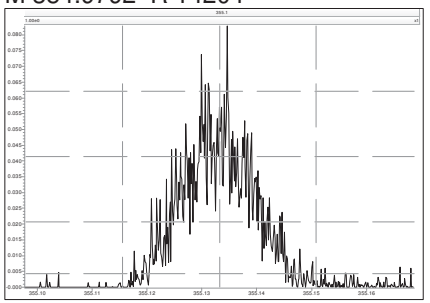
M 330.9792 R 12887



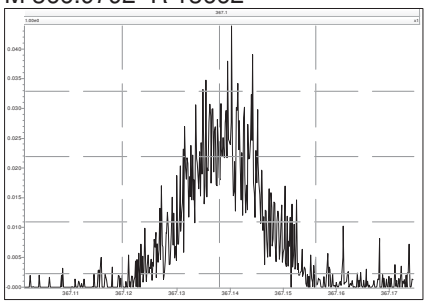
M 342.9792 R 13513



M 354.9792 R 14204



M 366.9792 R 13662



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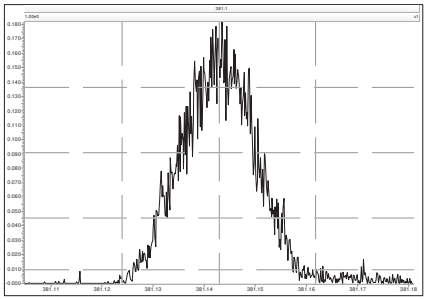
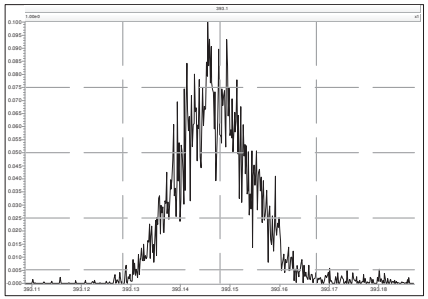
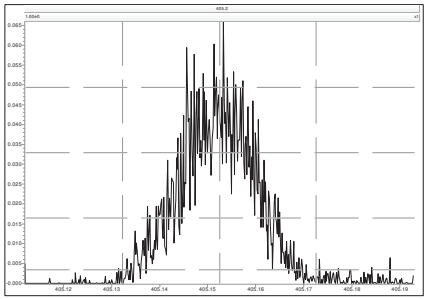
M 380.9760 R 11908



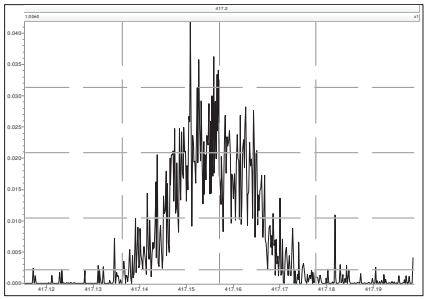
M 392.9760 R 12857



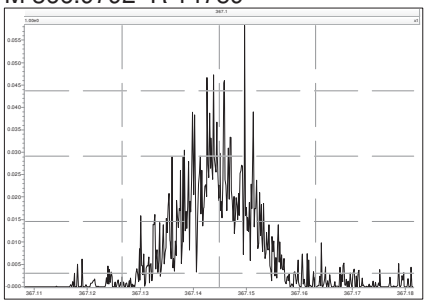
M 404.9760 R 13506



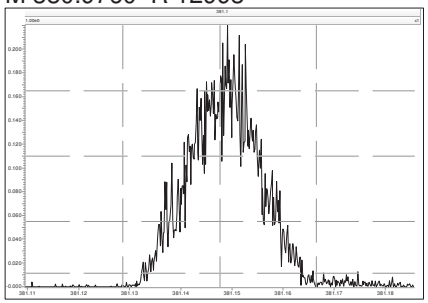
M 416.9760 R 16139



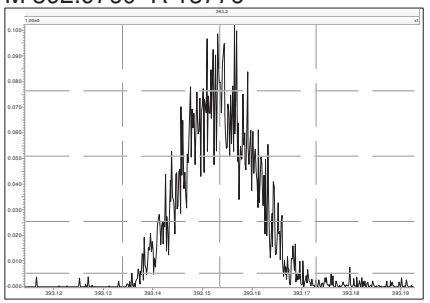
M 366.9792 R 14759



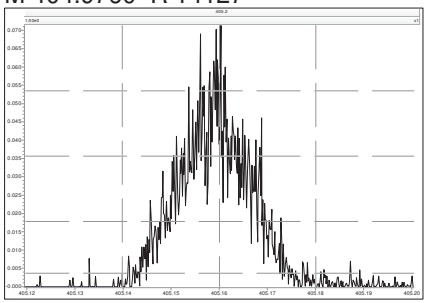
M 380.9760 R 12993



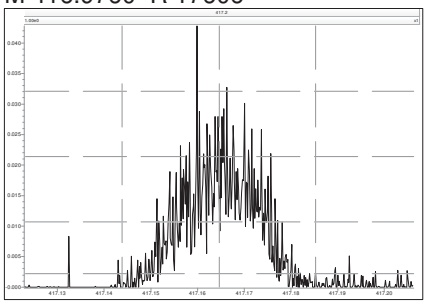
M 392.9760 R 13776



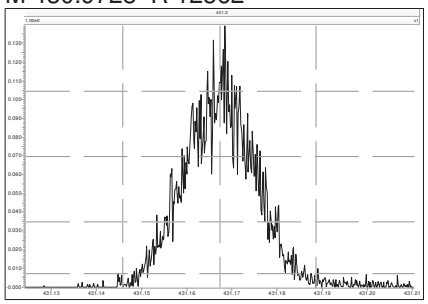
M 404.9760 R 14127



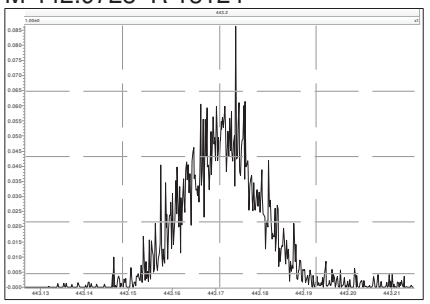
M 416.9760 R 17606



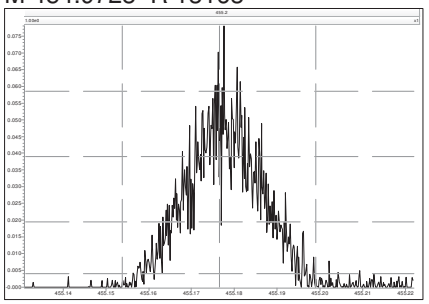
M 430.9728 R 12562



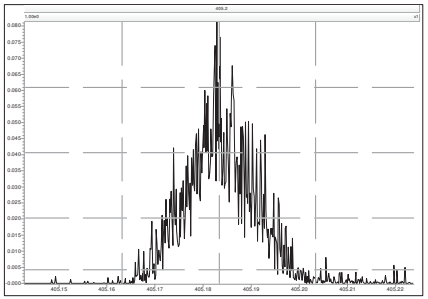
M 442.9728 R 13124



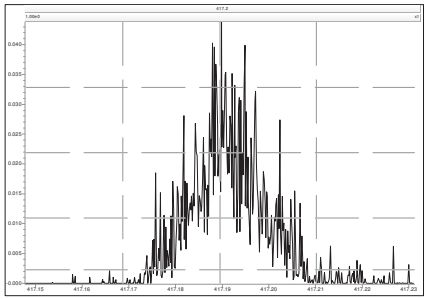
M 454.9728 R 13163



M 404.9760 R 14591



M 416.9760 R 17495



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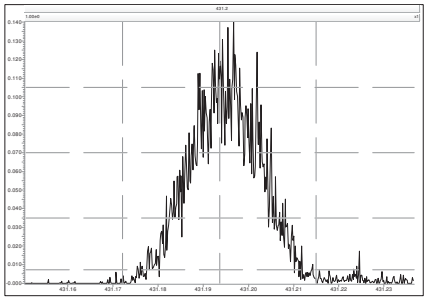

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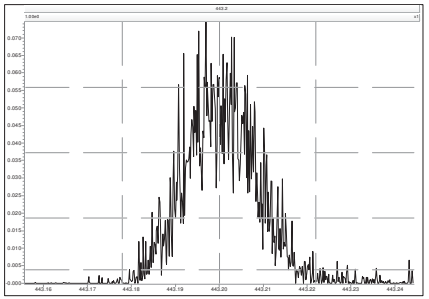

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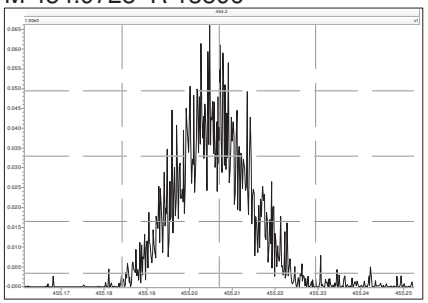

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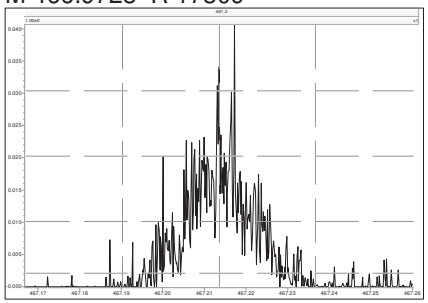

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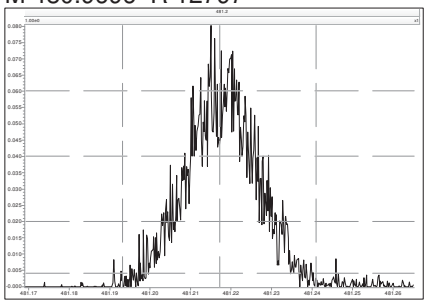

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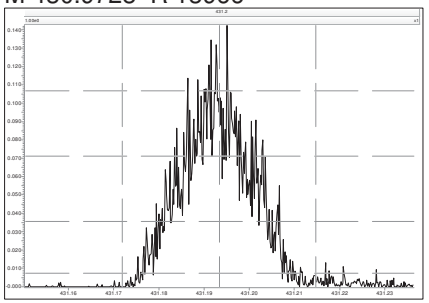

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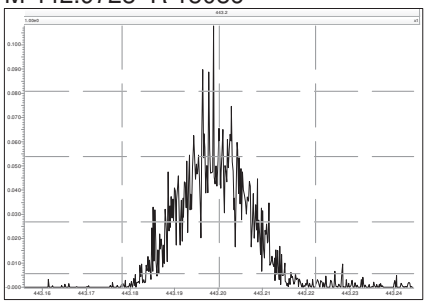

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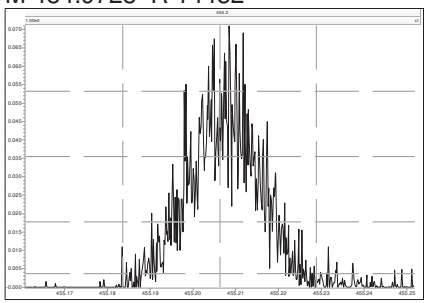

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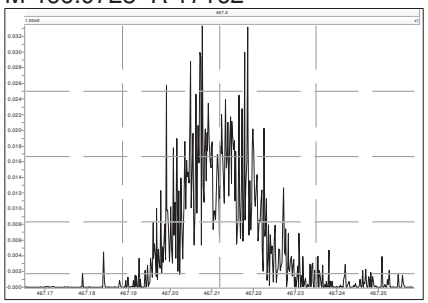

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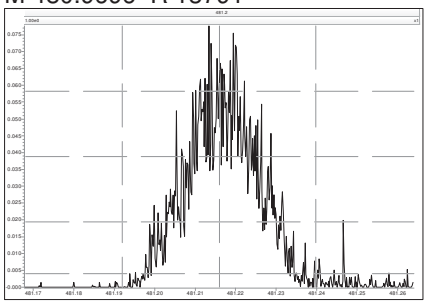

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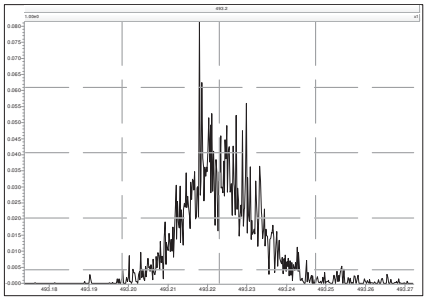

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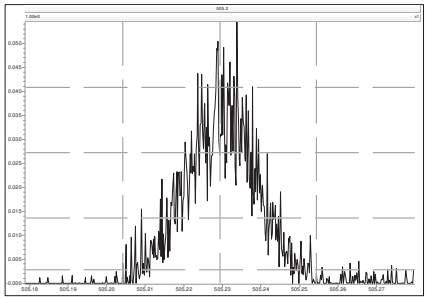

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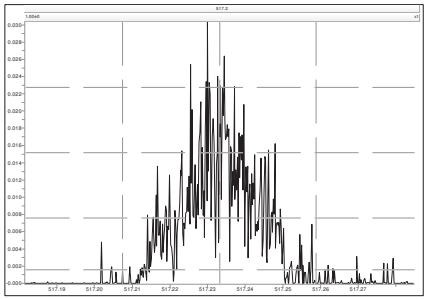

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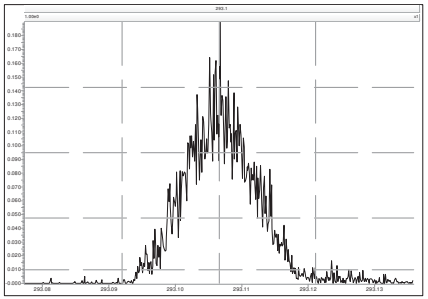

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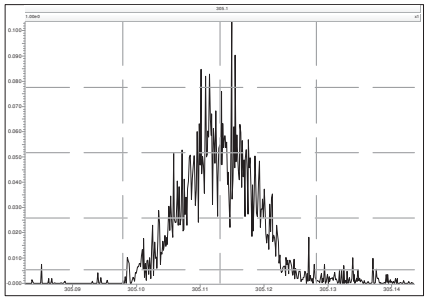

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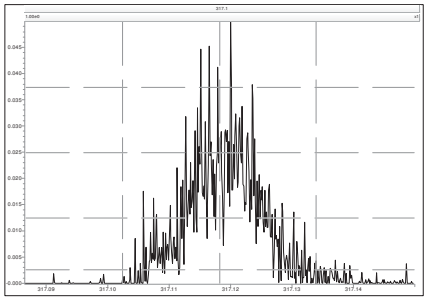

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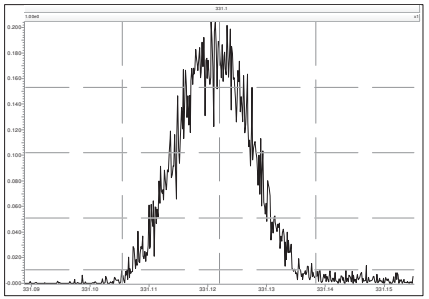

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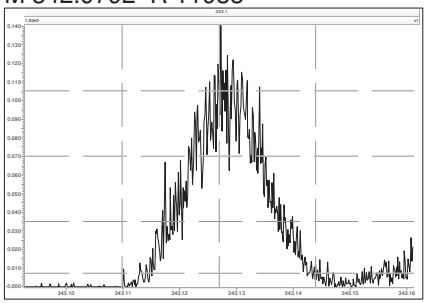

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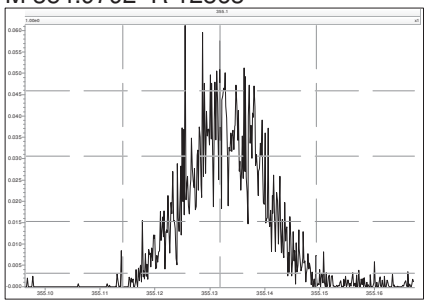

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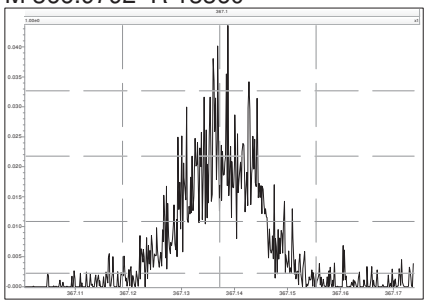

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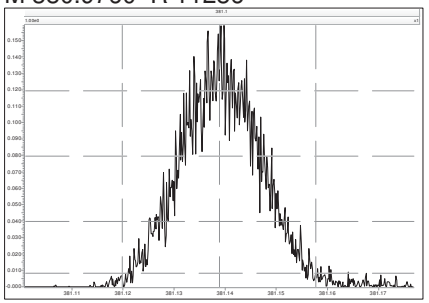

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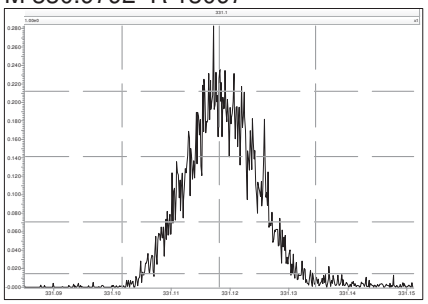

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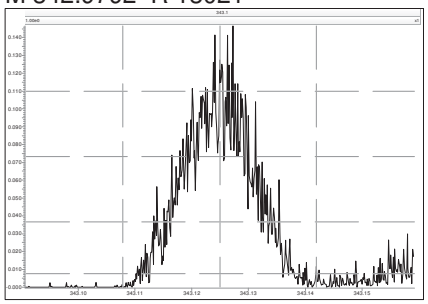

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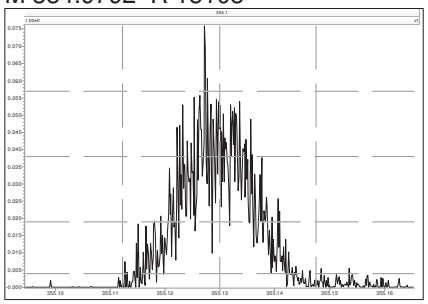

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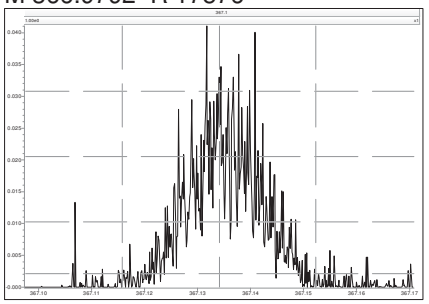

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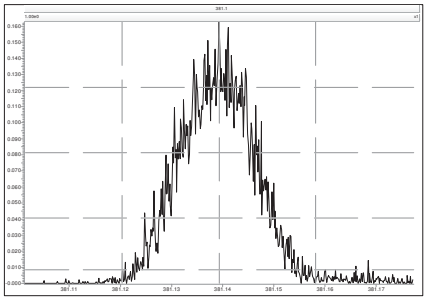

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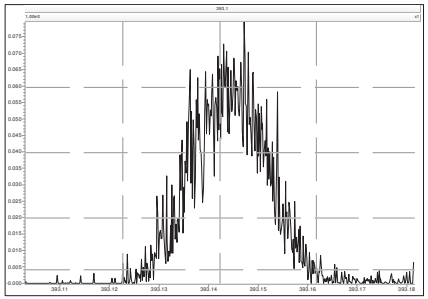

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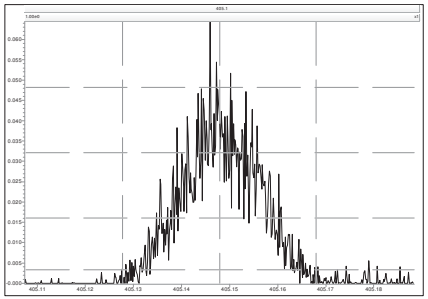

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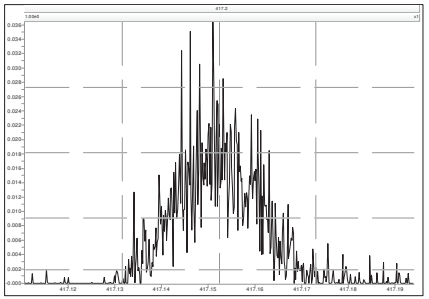

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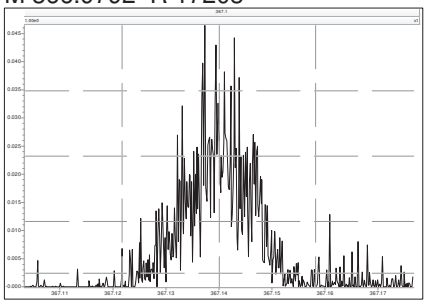

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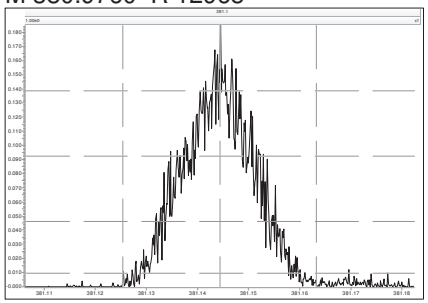

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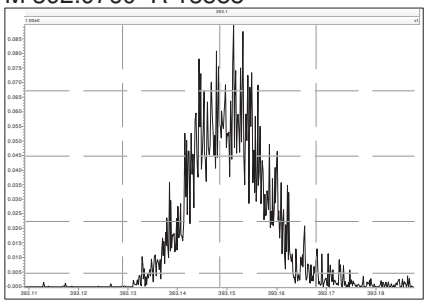

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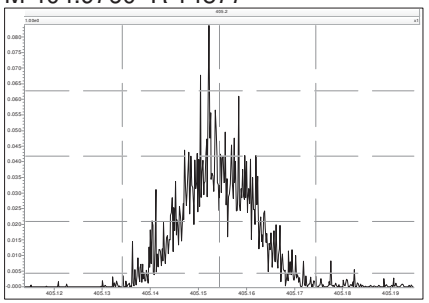

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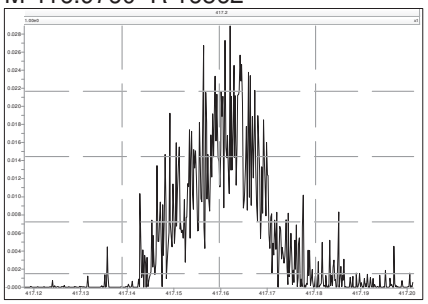

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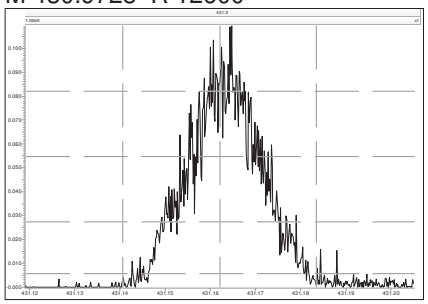

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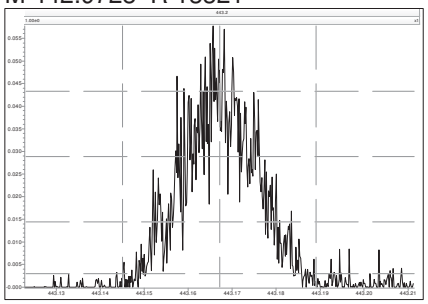

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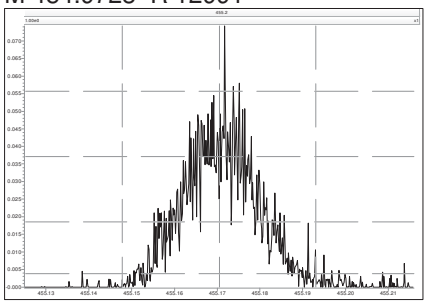

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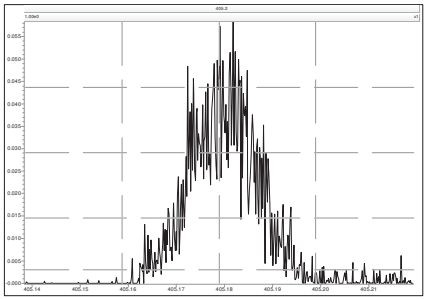

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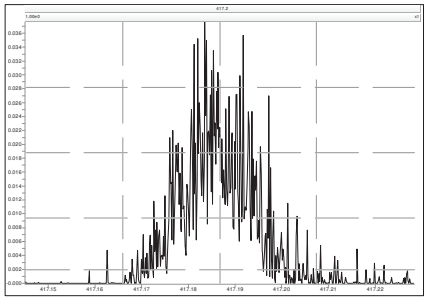

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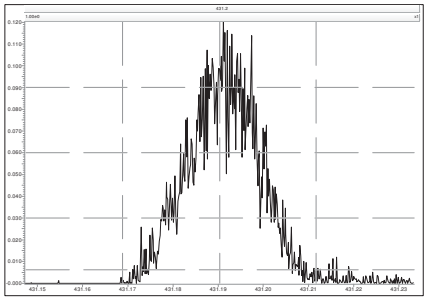

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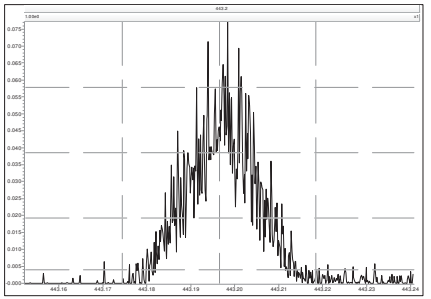

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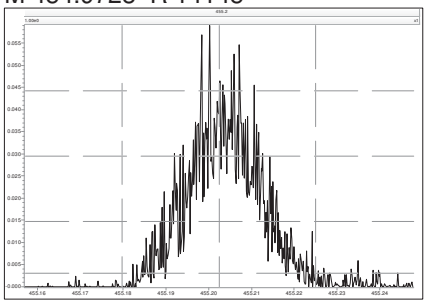

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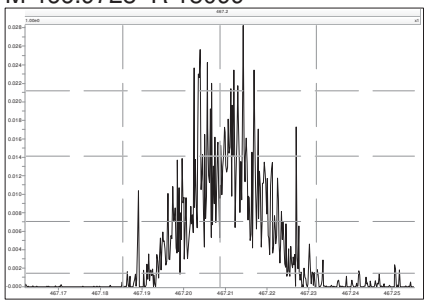

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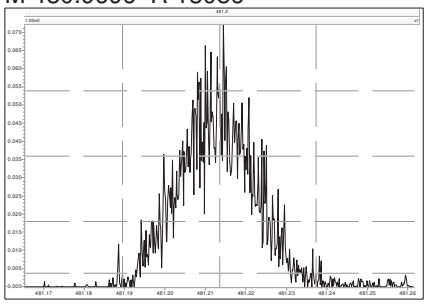

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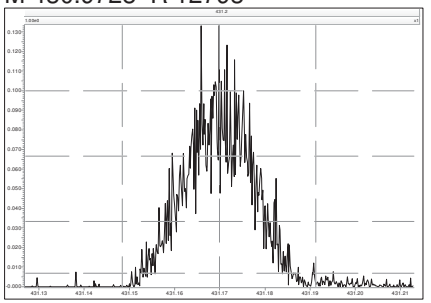

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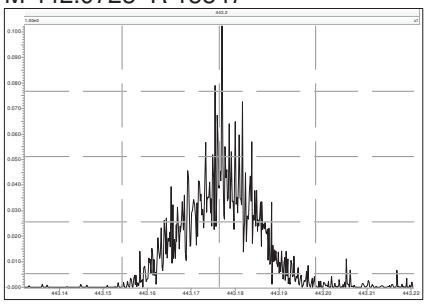

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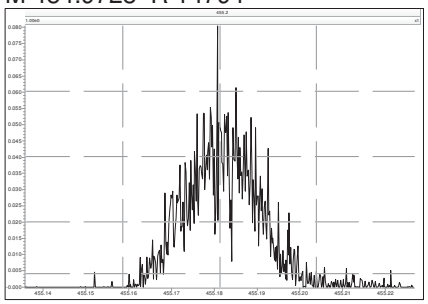

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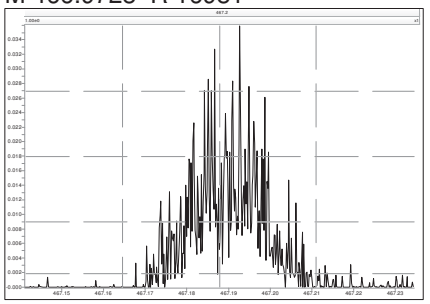

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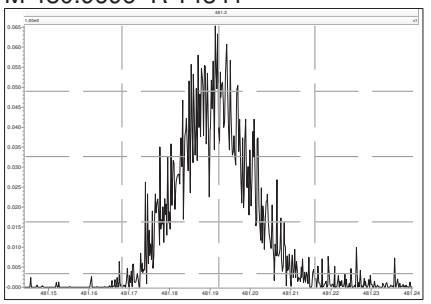

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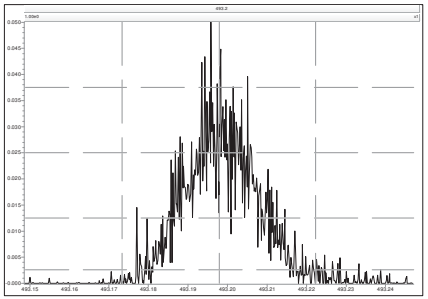

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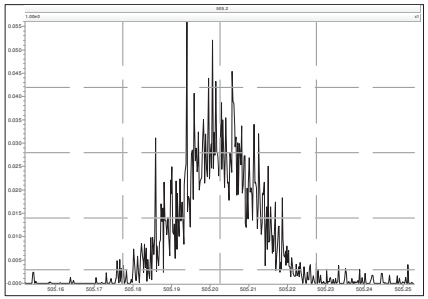

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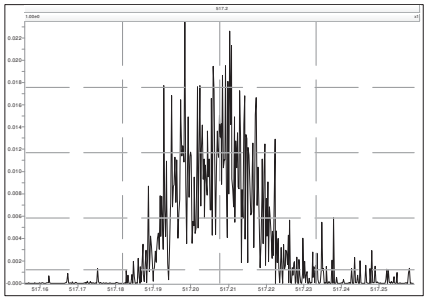

Dioxin/Furan ICAL Summary — SGS North America — Processed: 15 Jun 2020 11:54

ICAL: MM3_DF_10012020_12JUN2020
Data Acquired: 12-Jun-2020

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2378-TCDD	1.18	5.9%	1.06	1.13	1.16	1.17	1.21	1.24	1.27
12378-PeCDD	1.14	4.7%	1.07	1.09	1.09	1.15	1.17	1.19	1.20
123478-HxCDD	1.09	3.7%	1.08	1.04	1.05	1.08	1.09	1.14	1.15
123678-HxCDD	1.13	5.2%	1.06	1.08	1.07	1.16	1.13	1.20	1.19
123789-HxCDD	1.05	3.9%	1.00	1.00	1.03	1.06	1.06	1.09	1.10
1234678-HpCDD	0.98	6.4%	0.91	0.91	0.94	1.02	1.02	1.04	1.05
OCDD	1.08	5.1%	1.00	1.01	1.05	1.09	1.10	1.14	1.13
2378-TCDF	0.98	6.4%	0.98	0.88	0.92	0.99	1.01	1.05	1.04
12378-PeCDF	0.95	4.9%	0.88	0.91	0.92	0.96	0.97	1.00	1.00
23478-PeCDF	0.95	4.7%	0.91	0.88	0.92	0.96	0.96	1.00	0.99
123478-HxCDF	1.20	3.8%	1.14	1.15	1.17	1.19	1.21	1.25	1.25
123678-HxCDF	1.07	5.4%	0.98	1.03	1.04	1.10	1.10	1.13	1.13
234678-HxCDF	1.10	4.2%	1.06	1.02	1.08	1.13	1.11	1.13	1.15
123789-HxCDF	1.09	5.1%	1.01	1.06	1.04	1.11	1.13	1.16	1.14
1234678-HpCDF	1.28	4.5%	1.21	1.21	1.25	1.31	1.30	1.34	1.35
1234789-HpCDF	1.27	4.3%	1.20	1.25	1.20	1.28	1.29	1.31	1.34
OCDF	1.01	6.4%	0.93	0.96	0.95	1.00	1.05	1.08	1.09
ES 2378-TCDD	1.01	4.0%	0.98	0.98	0.99	0.97	0.99	1.06	1.07
ES 12378-PeCDD	0.87	9.5%	0.82	0.82	0.83	0.81	0.85	0.95	1.02
ES 123478-HxCDD	1.10	4.9%	1.04	1.05	1.08	1.07	1.10	1.13	1.20
ES 123678-HxCDD	1.06	6.4%	1.00	1.01	1.04	1.01	1.08	1.10	1.19
ES 123789-HxCDD	1.22	6.1%	1.11	1.18	1.20	1.20	1.21	1.26	1.35
ES 1234678-HpCDD	0.99	11.2%	0.83	0.97	0.97	0.94	0.97	1.07	1.19
ES OCDD	0.67	18.7%	0.46	0.66	0.69	0.64	0.64	0.74	0.87
ES 2378-TCDF	1.01	2.9%	0.99	0.99	1.00	0.99	1.02	1.03	1.07
ES 12378-PeCDF	0.90	8.3%	0.85	0.84	0.87	0.85	0.90	0.97	1.04
ES 23478-PeCDF	0.89	8.2%	0.83	0.84	0.85	0.84	0.89	0.95	1.02
ES 123478-HxCDF	1.43	5.0%	1.38	1.41	1.42	1.37	1.40	1.45	1.58
ES 123678-HxCDF	1.63	6.3%	1.56	1.57	1.62	1.55	1.59	1.69	1.84
ES 234678-HxCDF	1.48	6.0%	1.38	1.44	1.46	1.41	1.47	1.54	1.64
ES 123789-HxCDF	1.29	9.8%	1.15	1.22	1.29	1.23	1.25	1.35	1.54
ES 1234678-HpCDF	1.15	8.6%	1.02	1.12	1.13	1.07	1.14	1.22	1.32
ES 1234789-HpCDF	0.91	13.3%	0.72	0.86	0.91	0.86	0.89	0.98	1.11
ES OCDF	0.83	19.8%	0.56	0.82	0.85	0.77	0.77	0.93	1.10

APPROVED
Carla_Lyon , 11:39:55, 06/17/2020

Dioxin/Furan ICAL Summary — SGS North America — Processed: 17 Jun 2020 08:13

ICAL: MM3_DF_10012020_12JUN2020
Data Acquired: 12-Jun-2020

Name	Mean	% RSD	200612R03 **0.25 pg/uL CS0**	200612R04 **0.5 pg/uL CS1**	200612R05 **2 pg/uL CS2**	200612R06 **10 pg/uL CS3**	200612R07 **40 pg/uL CS4**	200612R08 **200 pg/uL CS5**	200612R11 **500 pg/uL CS6**
CS 37Cl-2378-TCDD	1.04	7.5%	-	1.02	0.96	0.99	1.06	1.16	-
CS 12347-PeCDD	0.74	1.9%	0.72	0.74	0.75	0.72	0.74	0.76	0.75
CS 12346-PeCDF	0.86	1.3%	0.86	0.85	0.88	0.85	0.87	0.85	0.87
CS 123469-HxCDF	1.36	3.4%	1.39	1.40	1.42	1.32	1.33	1.30	1.33
CS 1234689-HpCDF	1.05	4.0%	0.98	1.09	1.10	1.02	1.04	1.06	1.09
SS 37Cl-2378-TCDD	1.04	4.9%	-	1.04	0.96	1.02	1.06	1.10	-
SS 12347-PeCDD	0.86	7.7%	0.88	0.91	0.90	0.89	0.87	0.80	0.73
SS 12346-PeCDF	0.96	7.4%	1.01	1.01	1.01	1.00	0.97	0.88	0.84
SS 123469-HxCDF	0.83	7.7%	0.90	0.89	0.88	0.85	0.84	0.77	0.73
SS 1234689-HpCDF	0.92	6.1%	0.97	0.97	0.97	0.95	0.91	0.87	0.83
AS 1368-TCDD	1.08	1.1%	1.05	1.09	1.08	1.09	1.07	1.08	1.07
AS 1368-TCDF	1.18	0.9%	1.17	1.18	1.18	1.20	1.18	1.17	1.18
OCDD-a	0.07	5.4%	-	-	0.06	0.06	0.07	0.07	0.07
OCDF-a	0.06	3.1%	-	-	0.06	0.06	0.06	0.06	0.07
Totals									
Total TCDD	1.18	5.9%	1.06	1.13	1.16	1.17	1.21	1.24	1.27
Total PeCDD	1.14	4.7%	1.07	1.09	1.09	1.15	1.17	1.19	1.20
Total HxCDD	1.09	4.1%	1.05	1.04	1.05	1.10	1.09	1.14	1.15
Total HpCDD	0.98	6.4%	0.91	0.91	0.94	1.02	1.02	1.04	1.05
Total TCDF	0.98	6.4%	0.98	0.88	0.92	0.99	1.01	1.05	1.04
Total PeCDF	0.95	4.7%	0.90	0.89	0.92	0.96	0.97	1.00	1.00
Total HxCDF	1.11	4.4%	1.05	1.06	1.08	1.13	1.14	1.17	1.17
Total HpCDF	1.27	4.2%	1.21	1.23	1.22	1.30	1.30	1.32	1.35
FS 1278-TCDD	1.00	2.9%	1.03	1.01	1.00	1.01	1.00	0.97	0.95
FS 12478-PeCDD	1.00	7.8%	1.02	1.05	1.05	1.03	1.04	0.92	0.85
FS 123468-HxCDD	1.11	7.4%	1.20	1.18	1.15	1.15	1.08	1.03	0.98
FS 1234679-HpCDD	1.19	9.4%	1.32	1.24	1.25	1.25	1.20	1.06	1.01
TS 1378-TCDD	1.06	4.3%	1.07	1.08	1.06	1.12	1.06	1.01	0.98

Instrument: MM3 (AutoSpec-Ultima) MS Experiment: df_cl4-8_db5MS GC Program: df_db5MS

#	Datafile	Vial#	Lab ID	Wt/Vol	Client/Sample ID	Analyst(s)	Checkcode	Acq Date	Acq Time
2	200612R02	2	SBS_200612_DF_RA	1.00	SIL 20-61-1	PSW	041-322	12-Jun-2020	13:34:23
3	200612R03	5	CS0_200612_DF_RA	1.00	SIL 20-282-3	PSW	545-220	12-Jun-2020	14:21:06
4	200612R04	6	CS1_200612_DF_RA	1.00	SIL 20-282-2	PSW	407-197	12-Jun-2020	15:11:28
5	200612R05	7	CS2_200612_DF_RA	1.00	SIL 20-282-1	PSW	434-640	12-Jun-2020	16:02:35
6	200612R06	8	CS3_200612_DF_RB	1.00	SIL 20-449-3	PSW	726-607	12-Jun-2020	16:49:17
7	200612R07	9	CS4_200612_DF_RA	1.00	SIL 20-281-2	PSW	711-420	12-Jun-2020	17:36:49
8	200612R08	10	CS5_200612_DF_RA	1.00	SIL 20-281-1	PSW	104-974	12-Jun-2020	18:24:22
11	200612R11	11	CS6_200612_DF_RA	1.00	SIL 20-280-4	PSW	630-787	12-Jun-2020	20:46:44

REVIEWED
By Paul Walton at 8:47 am, Jun 17, 2020

Dioxin/Furan ICAL Concentrations	SGS Environmental Services							
	Concentration							
Individual Native Standards	CS0 pg/uL	CS1 pg/uL	CS2 pg/uL	CS3 pg/uL	CS4 pg/uL	CS5 pg/uL	CS6 pg/uL	Working Standards pg/uL
2378-TCDD	0.25	0.5	2	10	40	200	500	1
12378-PeCDD	1.25	2.5	10	50	200	1000	2500	1
123478-HxCDD	1.25	2.5	10	50	200	200	2500	1
123678-HxCDD	1.25	2.5	10	50	200	200	2500	1
123789-HxCDD	1.25	2.5	10	50	200	200	2500	1
1234678-HpCDD	1.25	2.5	10	50	200	200	2500	1
OCDD	2.5	5	20	100	400	2000	5000	1
2378-TCDF	0.25	0.5	2	10	40	200	500	1
12378-PeCDF	1.25	2.5	10	50	200	1000	2500	1
23478-PeCDF	1.25	2.5	10	50	200	200	2500	1
123478-HxCDF	1.25	2.5	10	50	200	200	2500	1
123678-HxCDF	1.25	2.5	10	50	200	200	2500	1
234678-HxCDF	1.25	2.5	10	50	200	200	2500	1
123789-HxCDF	1.25	2.5	10	50	200	200	2500	1
1234678-HpCDF	1.25	2.5	10	50	200	200	2500	1
1234789-HpCDF	1.25	2.5	10	50	200	200	2500	1
OCDF	2.5	5	20	100	400	2000	5000	1
Extraction Standards								
ES 2378-TCDD	100	100	100	100	100	100	100	10
ES 12378-PeCDD	100	100	100	100	100	100	100	10
ES 123478-HxCDD	100	100	100	100	100	100	100	10
ES 123678-HxCDD	100	100	100	100	100	100	100	10
ES 123789-HxCDD	100	100	100	100	100	100	100	10
ES 1234678-HpCDD	100	100	100	100	100	100	100	10
ES OCDD	200	200	200	200	200	200	200	10
ES 2378-TCDF	100	100	100	100	100	100	100	10
ES 12378-PeCDF	100	100	100	100	100	100	100	10
ES 23478-PeCDF	100	100	100	100	100	100	100	10
ES 123478-HxCDF	100	100	100	100	100	100	100	10
ES 123678-HxCDF	100	100	100	100	100	100	100	10
ES 234678-HxCDF	100	100	100	100	100	100	100	10
ES 123789-HxCDF	100	100	100	100	100	100	100	10
ES 1234678-HpCDF	100	100	100	100	100	100	100	10
ES 1234789-HpCDF	100	100	100	100	100	100	100	10
ES OCDF	200	200	200	200	200	200	200	10
Cleanup/Sampling Standards								
CS 37Cl-2378-TCDD	-	0.5	2	10	40	200	-	4
CS 12347-PeCDD	100	100	100	100	100	100	100	10
CS 12346-PeCDF	100	100	100	100	100	100	100	10
CS 123469-HxCDF	100	100	100	100	100	100	100	10
CS 1234689-HpCDF	100	100	100	100	100	100	100	10
Alternate Standards								
AS 1368-TCDD	100	100	100	100	100	100	100	10
AS 1368-TCDF	100	100	100	100	100	100	100	10
Shipping Standards								
FS 1278-TCDD	100	100	100	100	100	100	100	100
FS 12478-PeCDD	100	100	100	100	100	100	100	100
FS 123468-HxCDD	100	100	100	100	100	100	100	100
FS 1234679-HpCDD	100	100	100	100	100	100	100	100
TS 1378-TCDD	100	100	100	100	100	100	100	100
Injection Standards								
1234 TCDD 13C12	100	100	100	100	100	100	100	10
1234 TCDF 13C12	100	100	100	100	100	100	100	10
123467 HxCDD 13C12	50	50	50	50	50	50	50	5

Dioxin/Furan STD Association	SGS Environmental Services

Individual Native Standards

2378-TCDD	ES 2378-TCDD
12378-PeCDD	ES 12378-PeCDD
123478-HxCDD	ES 123478-HxCDD
123678-HxCDD	ES 123678-HxCDD
123789-HxCDD	ES 123789-HxCDD
1234678-HpCDD	ES 1234678-HpCDD
OCDD	ES OCDD
2378-TCDF	ES 2378-TCDF
12378-PeCDF	ES 12378-PeCDF
23478-PeCDF	ES 23478-PeCDF
123478-HxCDF	ES 123478-HxCDF
123678-HxCDF	ES 123678-HxCDF
234678-HxCDF	ES 234678-HxCDF
123789-HxCDF	ES 123789-HxCDF
1234678-HpCDF	ES 1234678-HpCDF
1234789-HpCDF	ES 1234789-HpCDF
OCDF	ES OCDF

Cleanup/Sampling Standards

CS 37Cl-2378-TCDD	1234 TCDD 13C12
CS 12347-PeCDD	1234 TCDD 13C12
CS 12346-PeCDF	1234 TCDF 13C12
CS 123469-HxCDF	123467 HxCDD 13C12
CS 1234689-HpCDF	123467 HxCDD 13C12

Alternate Standards

AS 1368-TCDD	1234 TCDD 13C12
AS 1368-TCDF	1234 TCDF 13C12

Shipping Standards

FS 1278-TCDD	ES 2378-TCDD
FS 12478-PeCDD	ES 12378-PeCDD
FS 123468-HxCDD	ES 123478-HxCDD
FS 1234679-HpCDD	ES 1234678-HpCDD
TS 1378-TCDD	ES 2378-TCDD

Extraction Standards

ES 2378-TCDD	1234 TCDD 13C12
ES 12378-PeCDD	1234 TCDD 13C12
ES 123478-HxCDD	123467 HxCDD 13C12
ES 123678-HxCDD	123467 HxCDD 13C12
ES 123789-HxCDD	123467 HxCDD 13C12
ES 1234678-HpCDD	123467 HxCDD 13C12
ES OCDD	123467 HxCDD 13C12
ES 2378-TCDF	1234 TCDF 13C12
ES 12378-PeCDF	1234 TCDF 13C12
ES 23478-PeCDF	1234 TCDF 13C12
ES 123478-HxCDF	123467 HxCDD 13C12
ES 123678-HxCDF	123467 HxCDD 13C12
ES 234678-HxCDF	123467 HxCDD 13C12
ES 123789-HxCDF	123467 HxCDD 13C12
ES 1234678-HpCDF	123467 HxCDD 13C12
ES 1234789-HpCDF	123467 HxCDD 13C12
ES OCDF	123467 HxCDD 13C12

Injection Standards

1234 TCDD 13C12
1234 TCDF 13C12
123467 HxCDD 13C12

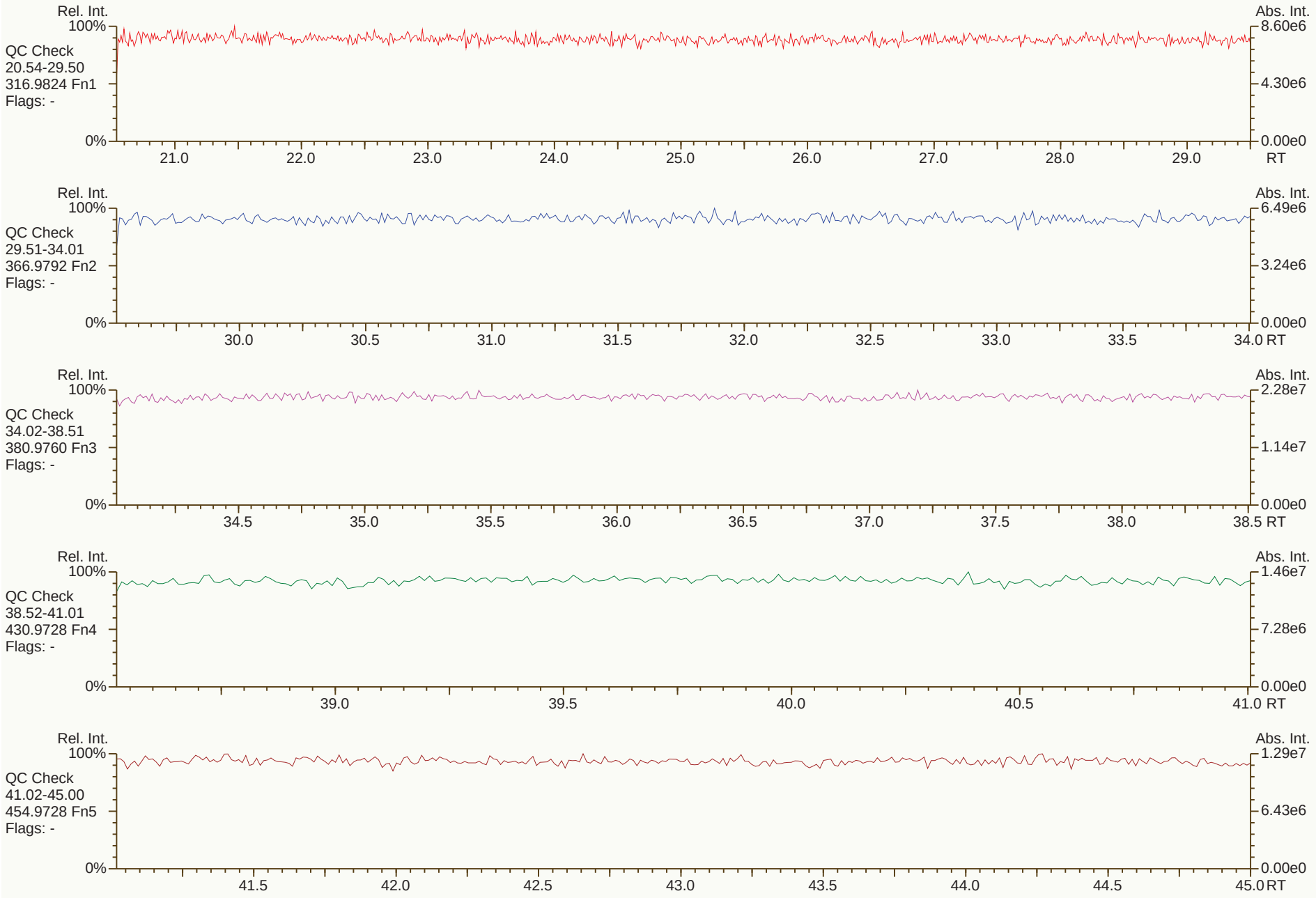
Dioxin/Furan QC Summary	Acq'd: 12 Jun 2020 14:21 PSW	ICAL: MM3_DF_10012020_12JUN2020
Lab ID: CS0_200612_DF_RA	UTP: 17-Jun-2020 08:02:40 PSW	Checkcode: 545-220-ZXZ
Sample ID: SIL 20-282-3	Report: 17 Jun 2020 08:13 pw	Datafile: 200612R03

Name	RT	Response	RA	OK	Ref. RRFs	Calc. RRFs	Dev'n
2378-TCDD	27.57	3.69E+05	0.84	Y	1.18	1.06	-10%
12378-PeCDD	33.04	1.55E+06	1.62	Y	1.14	1.07	-6%
123478-HxCDD	36.94	1.53E+06	1.25	Y	1.09	1.08	-1%
123678-HxCDD	37.06	1.43E+06	1.24	Y	1.13	1.06	-6%
123789-HxCDD	37.36	1.52E+06	1.22	Y	1.05	1.00	-4%
1234678-HpCDD	40.12	1.03E+06	1.08	Y	0.98	0.91	-8%
OCDD	42.57	1.25E+06	0.82	Y	1.08	1.00	-7%
2378-TCDF	26.67	5.62E+05	0.67	Y	0.98	0.98	-1%
12378-PeCDF	31.57	2.18E+06	1.62	Y	0.95	0.88	-7%
23478-PeCDF	32.69	2.19E+06	1.48	Y	0.95	0.91	-4%
123478-HxCDF	35.97	2.12E+06	1.30	Y	1.20	1.14	-5%
123678-HxCDF	36.11	2.06E+06	1.30	Y	1.07	0.98	-9%
234678-HxCDF	36.76	2.00E+06	1.26	Y	1.10	1.06	-3%
123789-HxCDF	37.74	1.58E+06	1.29	Y	1.09	1.01	-7%
1234678-HpCDF	39.22	1.67E+06	1.03	Y	1.28	1.21	-6%
1234789-HpCDF	40.54	1.18E+06	1.03	Y	1.27	1.20	-5%
OCDF	42.74	1.41E+06	0.83	Y	1.01	0.93	-8%
ES 2378-TCDD	27.55	1.39E+08	0.75	Y	1.01	0.98	-3%
ES 12378-PeCDD	33.03	1.16E+08	1.65	Y	0.87	0.82	-6%
ES 123478-HxCDD	36.93	1.13E+08	1.30	Y	1.10	1.04	-5%
ES 123678-HxCDD	37.04	1.08E+08	1.27	Y	1.06	1.00	-6%
ES 123789-HxCDD	37.35	1.21E+08	1.28	Y	1.22	1.11	-8%
ES 1234678-HpCDD	40.11	9.07E+07	1.07	Y	0.99	0.83	-16%
ES OCDD	42.56	9.93E+07	0.87	Y	0.67	0.46	-32%
ES 2378-TCDF	26.64	2.30E+08	0.79	Y	1.01	0.99	-2%
ES 12378-PeCDF	31.55	1.98E+08	1.57	Y	0.90	0.85	-5%
ES 23478-PeCDF	32.67	1.93E+08	1.60	Y	0.89	0.83	-7%
ES 123478-HxCDF	35.96	1.50E+08	0.52	Y	1.43	1.38	-4%
ES 123678-HxCDF	36.1	1.69E+08	0.52	Y	1.63	1.56	-5%
ES 234678-HxCDF	36.74	1.50E+08	0.54	Y	1.48	1.38	-7%
ES 123789-HxCDF	37.73	1.25E+08	0.51	Y	1.29	1.15	-11%
ES 1234678-HpCDF	39.21	1.10E+08	0.45	Y	1.15	1.02	-11%
ES 1234789-HpCDF	40.53	7.87E+07	0.46	Y	0.91	0.72	-20%
ES OCDF	42.73	1.21E+08	0.90	Y	0.83	0.56	-33%

Dioxin/Furan QC Summary	Acq'd: 12 Jun 2020 14:21 PSW	ICAL: MM3_DF_10012020_12JUN2020
Lab ID: CS0_200612_DF_RA	UTP: 17-Jun-2020 08:02:40 PSW	Checkcode: 545-220-ZXZ
Sample ID: SIL 20-282-3	Report: 17 Jun 2020 08:13 pw	Datafile: 200612R03

Name	RT	Response	RA	OK	Ref. RRFs	Calc. RRFs	Dev'n
JS 1234-TCDD	26.87	1.42E+08	0.79	Y	-	-	-
JS 1234-TCDF	25.24	2.32E+08	0.77	Y	-	-	-
JS 123467-HxCDD	37.24	5.44E+07	1.29	Y	-	-	-
CS 37Cl-2378-TCDD	NotFnd		n/a	-	1.04		
CS 12347-PeCDD	32.52	1.02E+08	1.67	Y	0.74	0.72	-3%
CS 12346-PeCDF	31.01	1.99E+08	1.55	Y	0.86	0.86	0%
CS 123469-HxCDF	36.40	1.52E+08	0.53	Y	1.36	1.39	3%
CS 1234689-HpCDF	39.61	1.07E+08	0.45	Y	1.05	0.98	-7%
SS 37Cl-2378-TCDD	NotFnd		n/a	-	1.04		
SS 12347-PeCDD	32.52	1.02E+08	1.67	Y	0.86	0.88	3%
SS 12346-PeCDF	31.01	1.99E+08	1.55	Y	0.96	1.01	5%
SS 123469-HxCDF	36.40	1.52E+08	0.53	Y	0.83	0.90	7%
SS 1234689-HpCDF	39.61	1.07E+08	0.45	Y	0.92	0.97	5%
AS 1368-TCDD	23.73	1.50E+08	0.76	Y	1.08	1.05	-2%
AS 1368-TCDF	21.52	2.72E+08	0.79	Y	1.18	1.17	-1%
FS 1278-TCDD	27.89	1.44E+08	0.77	Y	1.00	1.03	4%
FS 12478-PeCDD	31.78	1.19E+08	1.60	Y	1.00	1.02	3%
FS 123468-HxCDD	35.88	1.36E+08	1.27	Y	1.11	1.20	8%
FS 1234679-HpCDD	39.47	1.20E+08	1.08	Y	1.19	1.32	11%
TS 1378-TCDD	25.83	1.49E+08	0.76	Y	1.06	1.07	1%
~~OCDD-a~~	~~NotFnd~~				~~0.07~~		
~~OCDF-a~~	~~NotFnd~~				~~0.06~~		

SGS ID: CS0_200612_DF_RA **Sample ID: SIL 20-282-3** **Acq: 12-Jun-2020 14:21:06**
Instr: [ILM] AutoSpec-Ultima MM3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 5** **User: PSW Datafile: 200612R03**

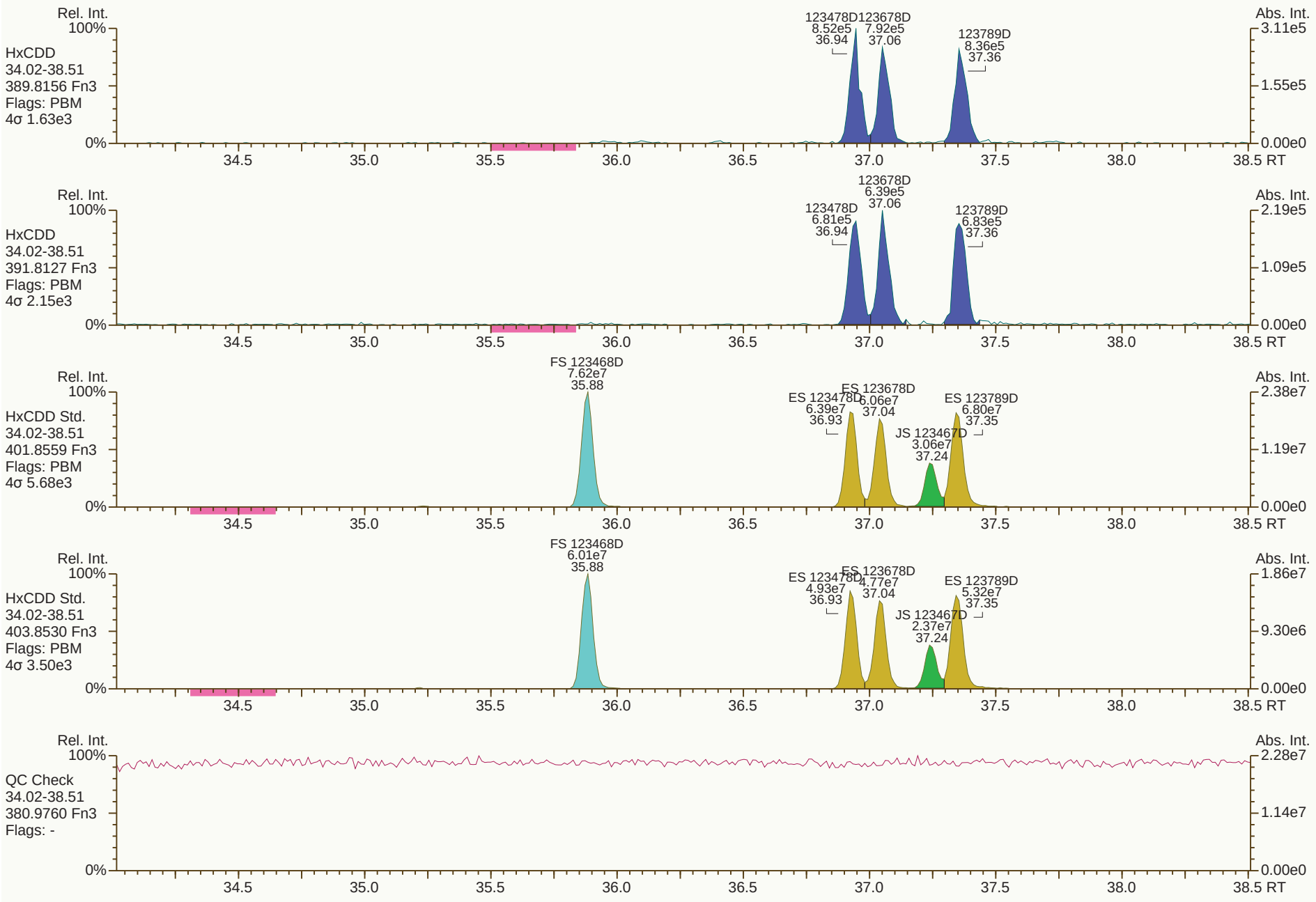


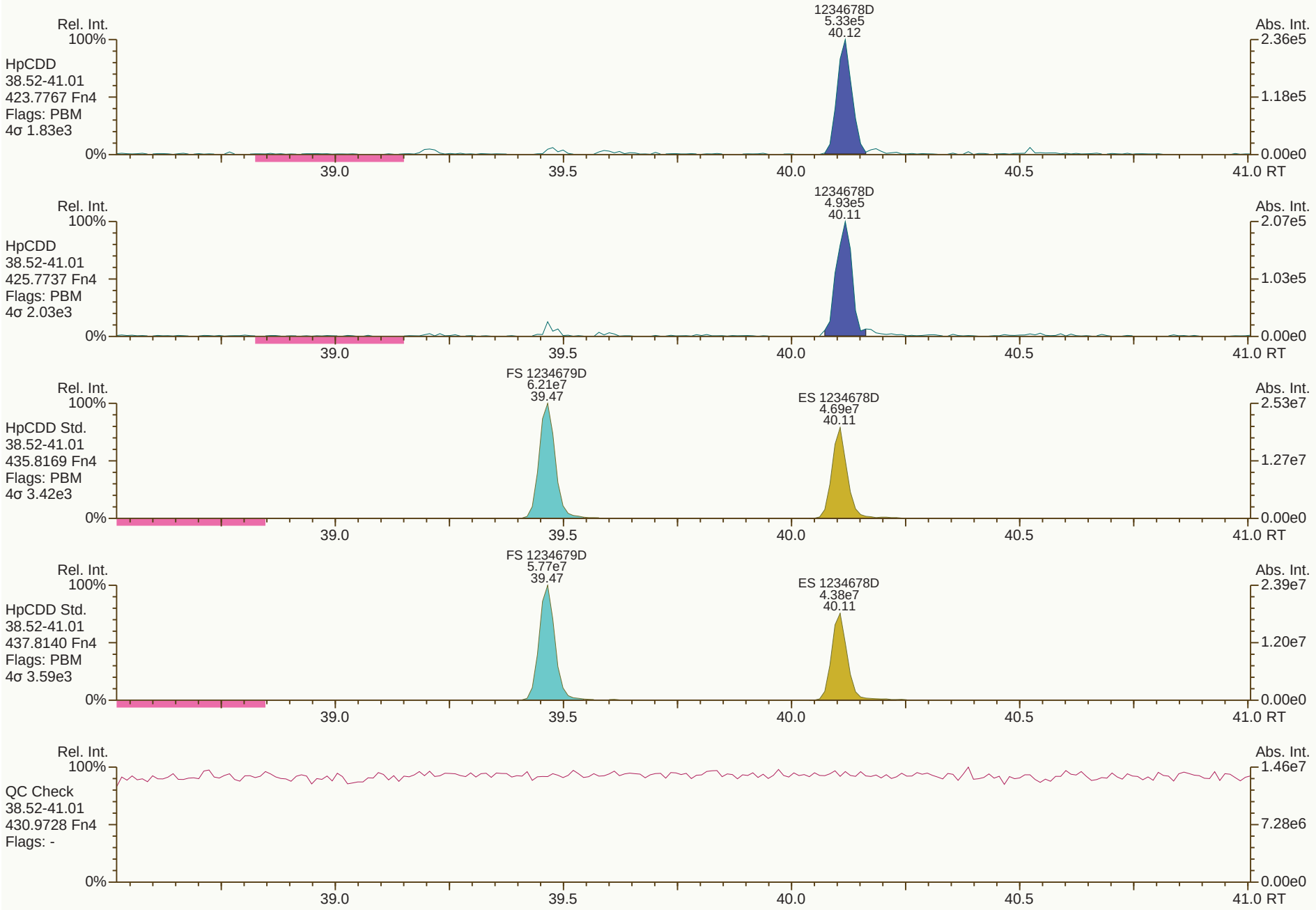
Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS0_200612_DF_RA.utp_res, saved 17-Jun-2020 08:02 (PSW) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 scc: 545-220 *PKD: n/a Printed: 17-Jun-2020 08:17 Page 1 of 12*

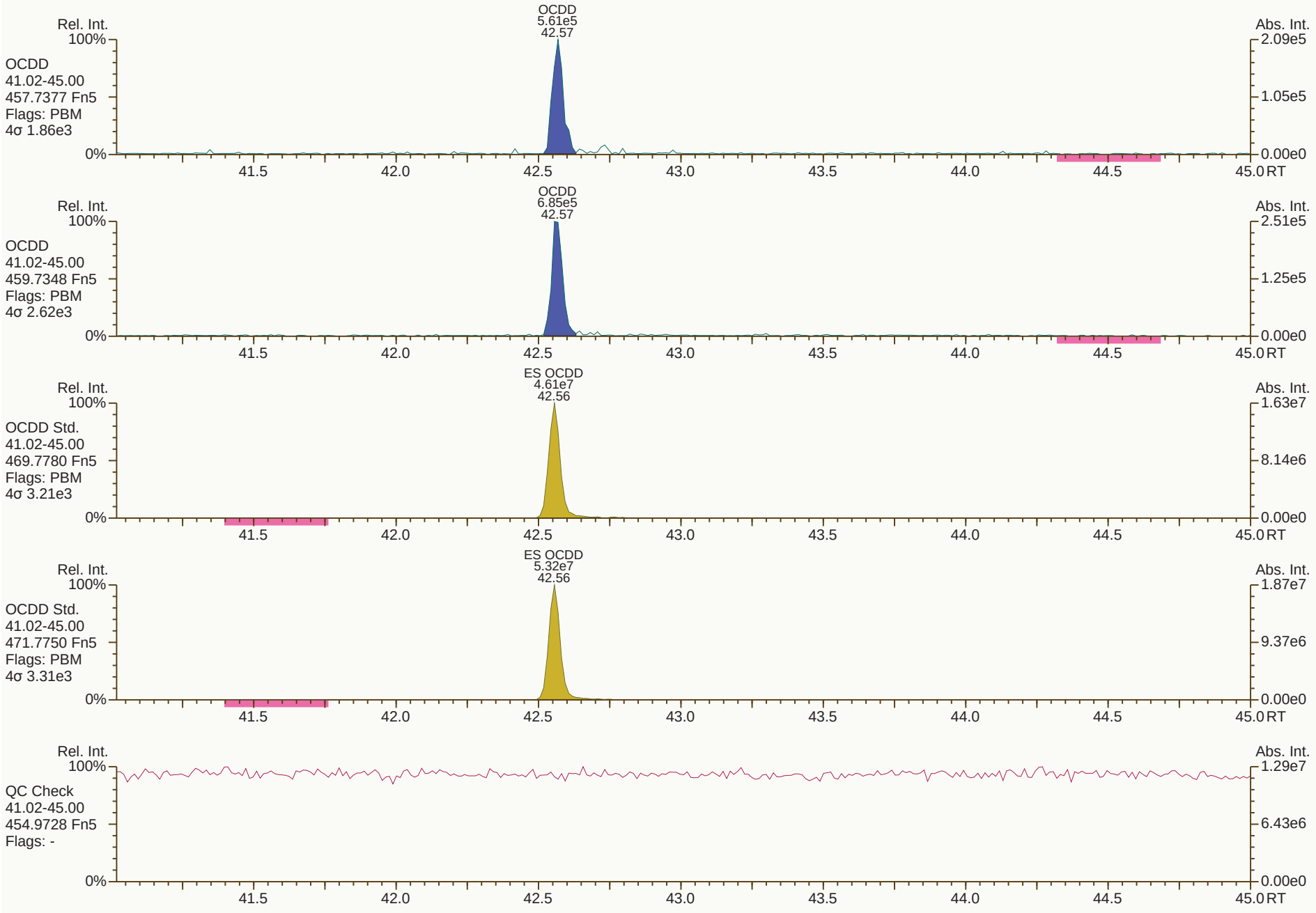


Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS0_200612_DF_RA.utp_res, saved 17-Jun-2020 08:02 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 9342, 6376, 0204 scc: 545-220
PKD: 12-Jun-2020 15:10 Printed: 17-Jun-2020 08:17 Page 2 of 12


Rel. Int.
100%
PeCDD
29.51-34.01
355.8546 Fn2
Flags: PBM
4σ 2.11e3
12378D
9.57e5
33.04
Abs. Int.
2.88e5
1.44e5
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD
29.51-34.01
357.8517 Fn2
Flags: PBM
4σ 1.87e3
12378D
5.90e5
33.04
Abs. Int.
1.85e5
9.27e4
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
367.8949 Fn2
Flags: PBM
4σ 4.56e3
FS 12478D
7.31e7
31.78
CS 12347D
6.41e7
32.52
ES 12378D
7.22e7
33.03
Abs. Int.
2.08e7
1.04e7
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
369.8919 Fn2
Flags: PBM
4σ 3.80e3
FS 12478D
4.56e7
31.78
CS 12347D
3.84e7
32.52
ES 12378D
4.38e7
33.03
Abs. Int.
1.28e7
6.39e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
QC Check
29.51-34.01
366.9792 Fn2
Flags: -
Abs. Int.
6.49e6
3.24e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT


Rel. Int.
100%
HxCDD
34.02-38.51
389.8156 Fn3
Flags: PBM
4σ 1.63e3
123478D 8.52e5 36.94
123678D 7.92e5 37.06
123789D 8.36e5 37.36
Abs. Int.
3.11e5
1.55e5
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 RT
Rel. Int.
100%
HxCDD
34.02-38.51
391.8127 Fn3
Flags: PBM
4σ 2.15e3
123678D 6.39e5 37.06
123478D 6.81e5 36.94
123789D 6.83e5 37.36
Abs. Int.
2.19e5
1.09e5
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 RT
Rel. Int.
100%
HxCDD Std.
34.02-38.51
401.8559 Fn3
Flags: PBM
4σ 5.68e3
FS 123468D 7.62e7 35.88
ES 123478D 6.39e7 36.93
ES 123678D 6.06e7 37.04
JS 123467D 3.06e7 37.24
ES 123789D 6.80e7 37.35
Abs. Int.
2.38e7
1.19e7
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 RT
Rel. Int.
100%
HxCDD Std.
34.02-38.51
403.8530 Fn3
Flags: PBM
4σ 3.50e3
FS 123468D 6.01e7 35.88
ES 123478D 4.93e7 36.93
ES 123678D 4.77e7 37.04
JS 123467D 2.37e7 37.24
ES 123789D 5.32e7 37.35
Abs. Int.
1.86e7
9.30e6
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 RT
Rel. Int.
100%
QC Check
34.02-38.51
380.9760 Fn3
Flags: -
Abs. Int.
2.28e7
1.14e7
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 RT


Rel. Int.
100%
HpCDD
38.52-41.01
423.7767 Fn4
Flags: PBM
4σ 1.83e3
1234678D
5.33e5
40.12
Abs. Int.
2.36e5
1.18e5
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.52-41.01
425.7737 Fn4
Flags: PBM
4σ 2.03e3
1234678D
4.93e5
40.11
Abs. Int.
2.07e5
1.03e5
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.52-41.01
435.8169 Fn4
Flags: PBM
4σ 3.42e3
FS 1234679D
6.21e7
39.47
ES 1234678D
4.69e7
40.11
Abs. Int.
2.53e7
1.27e7
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.52-41.01
437.8140 Fn4
Flags: PBM
4σ 3.59e3
FS 1234679D
5.77e7
39.47
ES 1234678D
4.38e7
40.11
Abs. Int.
2.39e7
1.20e7
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.52-41.01
430.9728 Fn4
Flags: -
Abs. Int.
1.46e7
7.28e6
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT

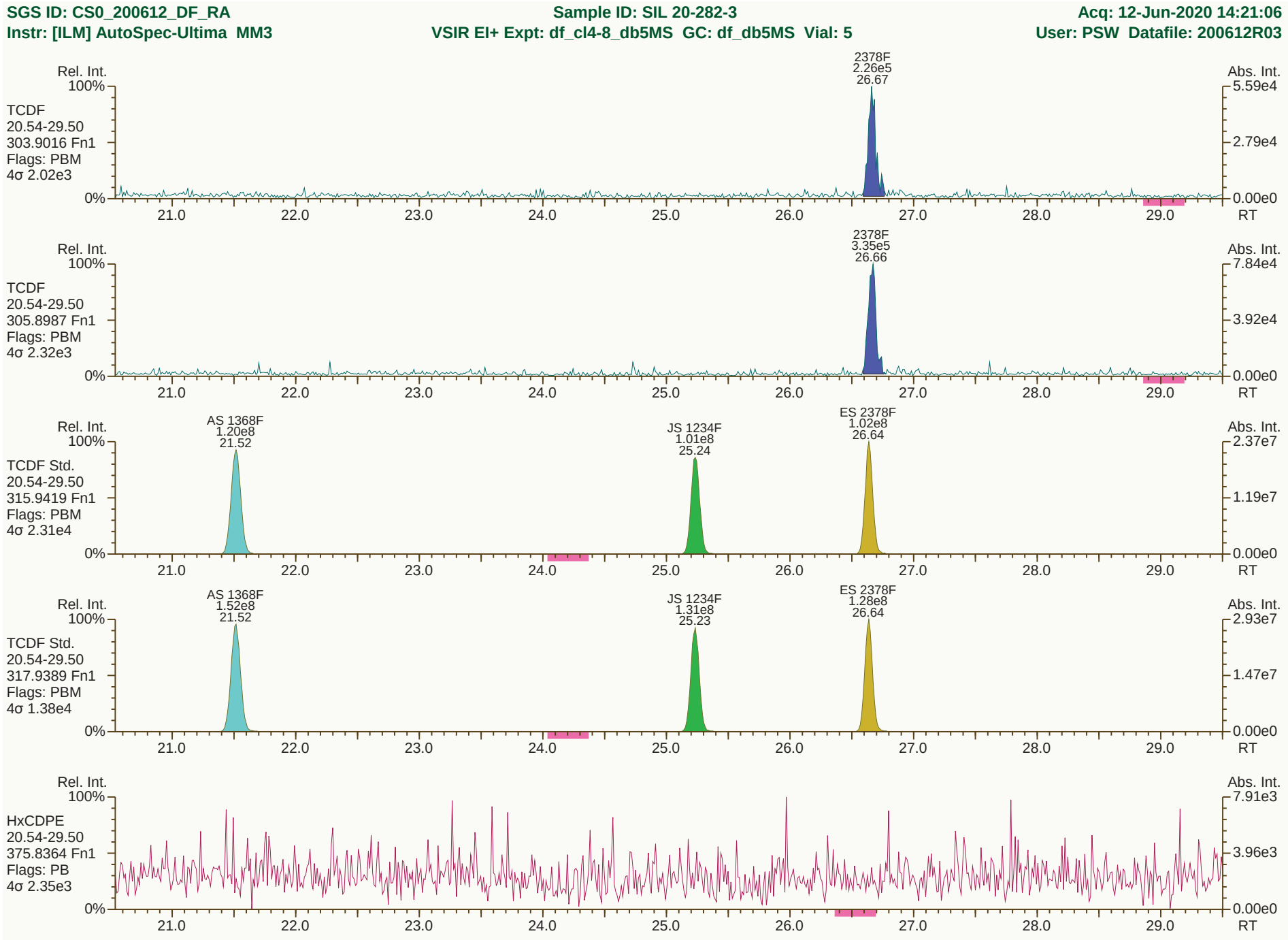

OCDD
5.61e5
42.57
Rel. Int.
Abs. Int.
OCDD
41.02-45.00
457.7377 Fn5
Flags: PBM
4σ 1.86e3
OCDD
6.85e5
42.57
OCDD
41.02-45.00
459.7348 Fn5
Flags: PBM
4σ 2.62e3
ES OCDD
4.61e7
42.56
OCDD Std.
41.02-45.00
469.7780 Fn5
Flags: PBM
4σ 3.21e3
ES OCDD
5.32e7
42.56
OCDD Std.
41.02-45.00
471.7750 Fn5
Flags: PBM
4σ 3.31e3
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
RT


SGS ID: CS0_200612_DF_RA
Sample ID: SIL 20-282-3
Acq: 12-Jun-2020 14:21:06
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 5
User: PSW Datafile: 200612R03
Rel. Int.
Abs. Int.
OCDD
41.02-45.00
462.7352 Fn5
Flags: B
4σ 2.99e3
4.25e4
2.13e4
0.00e0
OCDD
41.02-45.00
464.7322 Fn5
Flags: B
4σ 2.57e3
1.46e4
7.32e3
ES OCDD
4.61e7
42.56
OCDD std
41.02-45.00
469.7780 Fn5
Flags: PBM
4σ 3.21e3
1.63e7
8.14e6
ES OCDD
5.32e7
42.56
OCDD std
41.02-45.00
471.7750 Fn5
Flags: PBM
4σ 3.31e3
1.87e7
9.37e6
100%
0%
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0
RT
Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS0_200612_DF_RA.utp_res, saved 17-Jun-2020 08:02 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 4634, 9599
Revised: 17-Jun-2020 08:02 (PSW) Printed: 17-Jun-2020 08:27

SGS ID: CS0_200612_DF_RA
Instr: [ILM] AutoSpec-Ultima MM3

Sample ID: SIL 20-282-3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 5

Acq: 12-Jun-2020 14:21:06
User: PSW Datafile: 200612R03



Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS0_200612_DF_RA.utp_res, saved 17-Jun-2020 08:02 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 7947, 7308, 0238 scc: 545-220
PKD: 12-Jun-2020 15:10 Printed: 17-Jun-2020 08:17 Page 7 of 12

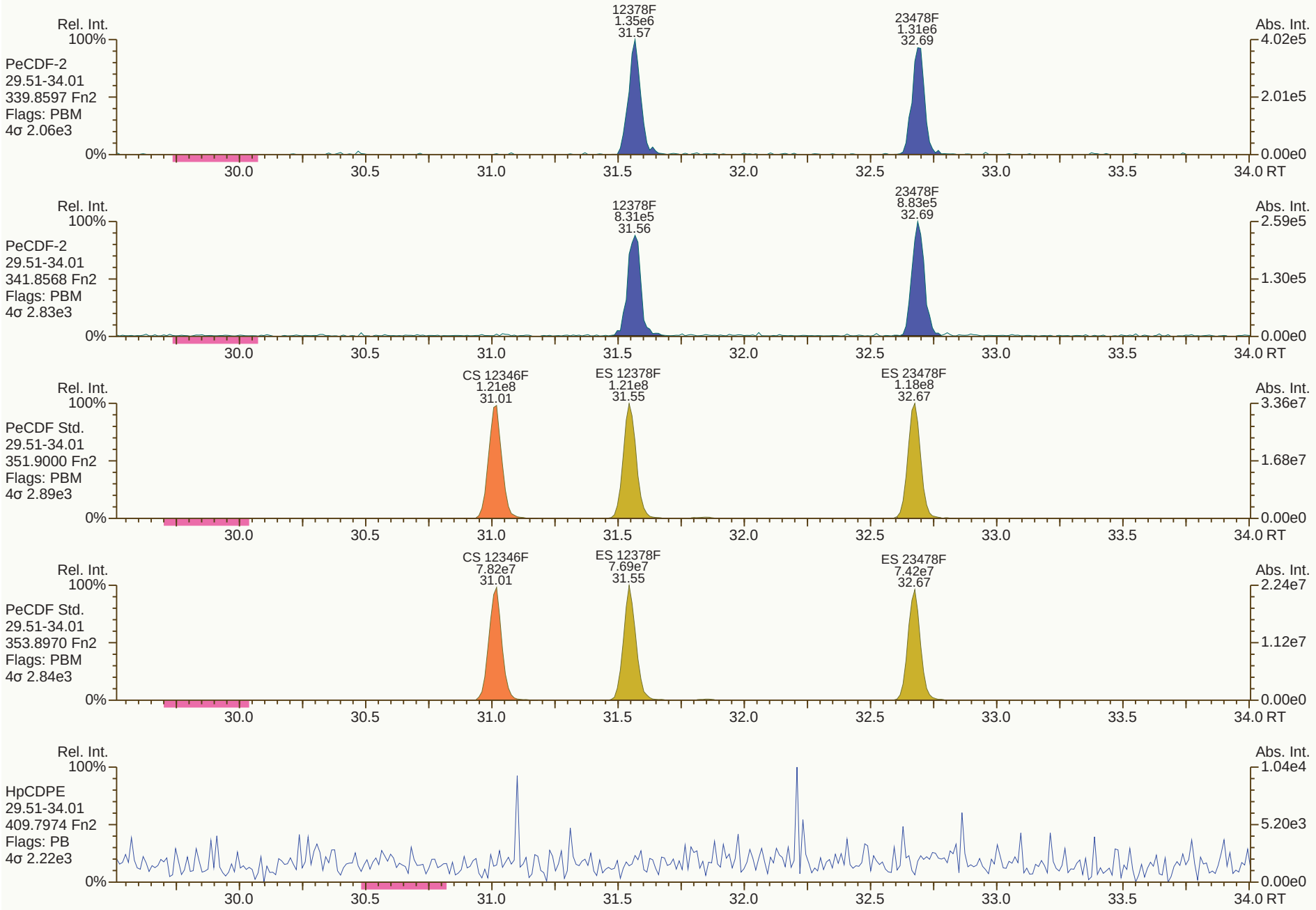
SGS ID: CS0_200612_DF_RA | **Sample ID: SIL 20-282-3** | **Acq: 12-Jun-2020 14:21:06**

Instr: [ILM] AutoSpec-Ultima MM3 | **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 5** | **User: PSW Datafile: 200612R03**

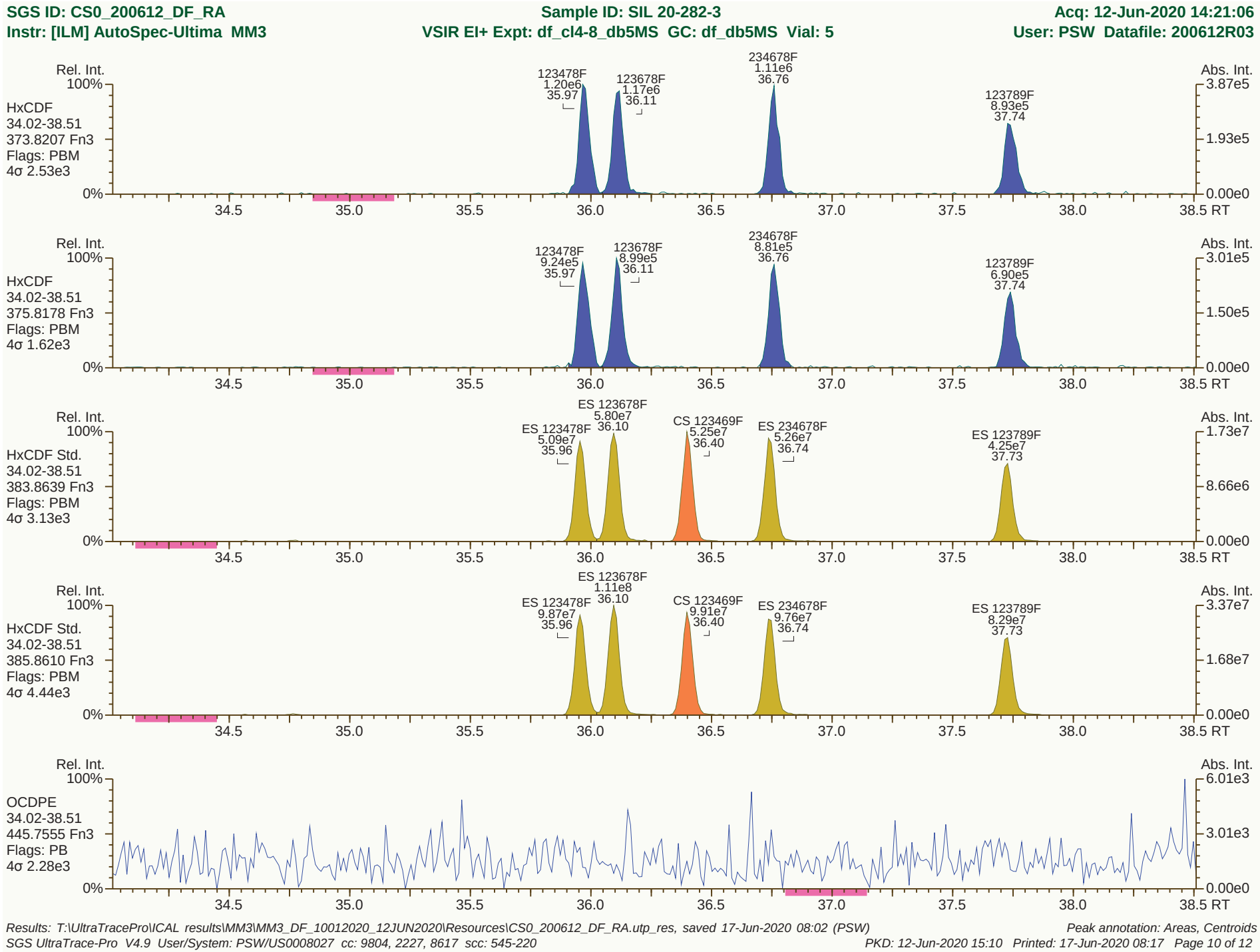


Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS0_200612_DF_RA.utp_res, saved 17-Jun-2020 08:02 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 5638 scc: 545-220 *PKD: 12-Jun-2020 15:10 Printed: 17-Jun-2020 08:17 Page 8 of 12*

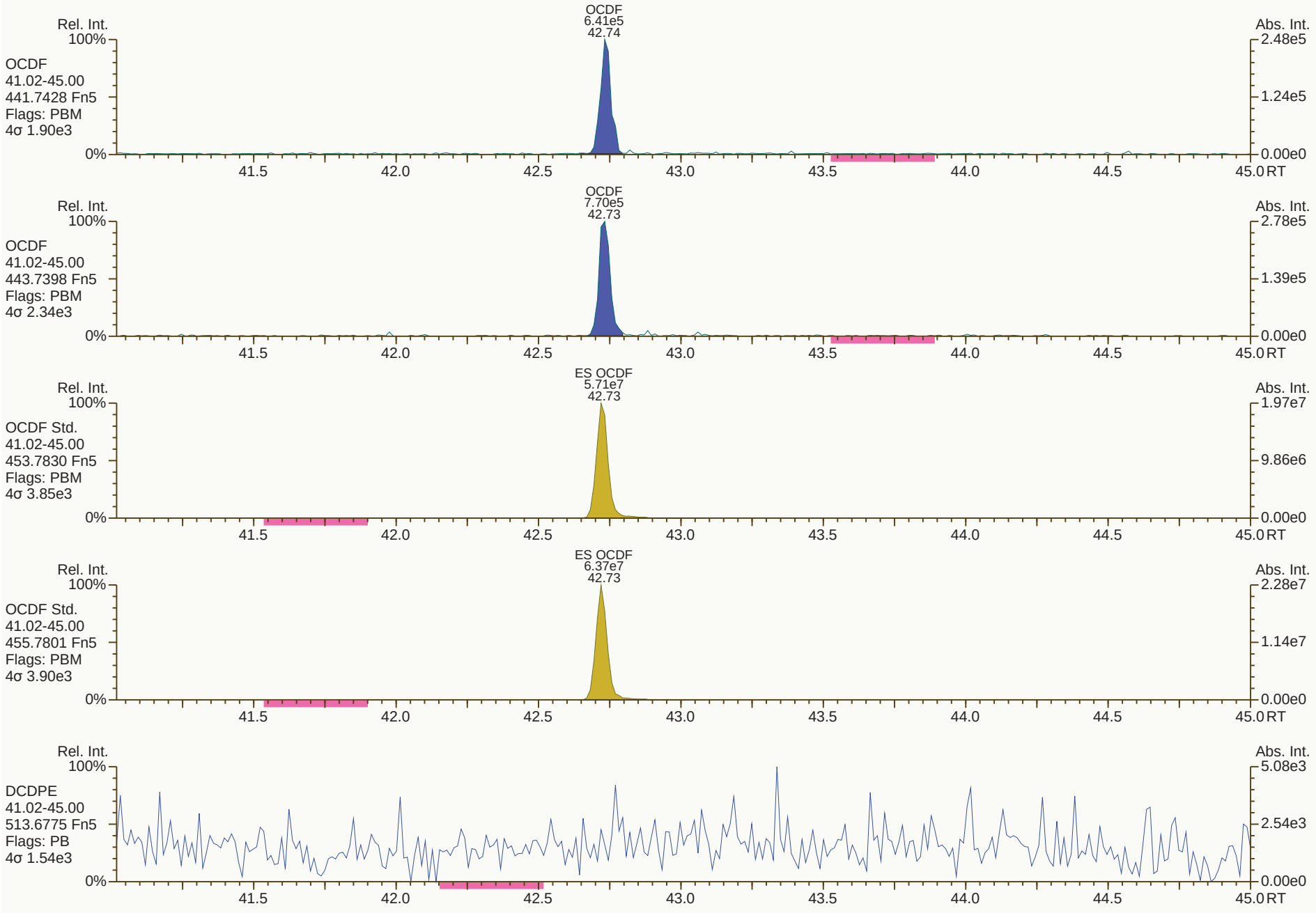

Rel. Int.
100%
PeCDF-2
29.51-34.01
339.8597 Fn2
Flags: PBM
4σ 2.06e3
0%
12378F
1.35e6
31.57
23478F
1.31e6
32.69
Abs. Int.
4.02e5
2.01e5
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF-2
29.51-34.01
341.8568 Fn2
Flags: PBM
4σ 2.83e3
0%
12378F
8.31e5
31.56
23478F
8.83e5
32.69
Abs. Int.
2.59e5
1.30e5
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
351.9000 Fn2
Flags: PBM
4σ 2.89e3
0%
CS 12346F
1.21e8
31.01
ES 12378F
1.21e8
31.55
ES 23478F
1.18e8
32.67
Abs. Int.
3.36e7
1.68e7
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
353.8970 Fn2
Flags: PBM
4σ 2.84e3
0%
CS 12346F
7.82e7
31.01
ES 12378F
7.69e7
31.55
ES 23478F
7.42e7
32.67
Abs. Int.
2.24e7
1.12e7
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
HpCDPE
29.51-34.01
409.7974 Fn2
Flags: PB
4σ 2.22e3
0%
Abs. Int.
1.04e4
5.20e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT

SGS ID: CS0_200612_DF_RA
Instr: [ILM] AutoSpec-Ultima MM3
Sample ID: SIL 20-282-3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 5
Acq: 12-Jun-2020 14:21:06
User: PSW Datafile: 200612R03





Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS0_200612_DF_RA.utp_res, saved 17-Jun-2020 08:02 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 1327, 7531, 3187 scc: 545-220
Revised: 12-Jun-2020 15:10 (PSW) Printed: 17-Jun-2020 08:17 Page 11 of 12


Rel. Int.
100%
0%
OCDF
41.02-45.00
441.7428 Fn5
Flags: PBM
4σ 1.90e3
OCDF
6.41e5
42.74
Abs. Int.
2.48e5
1.24e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
0%
OCDF
41.02-45.00
443.7398 Fn5
Flags: PBM
4σ 2.34e3
OCDF
7.70e5
42.73
Abs. Int.
2.78e5
1.39e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
0%
OCDF Std.
41.02-45.00
453.7830 Fn5
Flags: PBM
4σ 3.85e3
ES OCDF
5.71e7
42.73
Abs. Int.
1.97e7
9.86e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
0%
OCDF Std.
41.02-45.00
455.7801 Fn5
Flags: PBM
4σ 3.90e3
ES OCDF
6.37e7
42.73
Abs. Int.
2.28e7
1.14e7
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
0%
DCDPE
41.02-45.00
513.6775 Fn5
Flags: PB
4σ 1.54e3
Abs. Int.
5.08e3
2.54e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

SGS ID: CS0_200612_DF_RA | Sample ID: SIL 20-282-3 | Acq: 12-Jun-2020 14:21:06

Instr: [ILM] AutoSpec-Ultima MM3 | VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 5 | User: PSW Datafile: 200612R03



Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS0_200612_DF_RA.utp_res, saved 17-Jun-2020 08:02 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 5618, 4260 *Revised: 17-Jun-2020 08:02 (PSW) Printed: 17-Jun-2020 08:27*

Dioxin/Furan QC Summary		Acq'd: 12 Jun 2020 15:11 PSW				ICAL: MM3_DF_10012020_12JUN2020	
Lab ID: CS1_200612_DF_RA		UTP: 17-Jun-2020 08:05:59 PSW				Checkcode: 407-197-HVF	
Sample ID: SIL 20-282-2		Report: 17 Jun 2020 08:13 pw				Datafile: 200612R04	
Name	**RT**	**Response**	**RA**	**OK**	**Ref. RRFs**	**Calc. RRFs**	**Dev'n**
2378-TCDD	27.55	6.73E+05	0.88	Y	1.18	1.13	-4%
12378-PeCDD	33.03	2.70E+06	1.68	Y	1.14	1.09	-4%
123478-HxCDD	36.93	2.50E+06	1.31	Y	1.09	1.04	-4%
123678-HxCDD	37.04	2.49E+06	1.29	Y	1.13	1.08	-4%
123789-HxCDD	37.35	2.68E+06	1.24	Y	1.05	1.00	-5%
1234678-HpCDD	40.10	2.02E+06	1.07	Y	0.98	0.91	-7%
OCDD	42.56	3.01E+06	0.88	Y	1.08	1.01	-6%
2378-TCDF	26.64	8.94E+05	0.82	Y	0.98	0.88	-10%
12378-PeCDF	31.55	3.87E+06	1.53	Y	0.95	0.91	-5%
23478-PeCDF	32.68	3.78E+06	1.61	Y	0.95	0.88	-7%
123478-HxCDF	35.96	3.69E+06	1.19	Y	1.20	1.15	-4%
123678-HxCDF	36.10	3.70E+06	1.27	Y	1.07	1.03	-4%
234678-HxCDF	36.74	3.33E+06	1.35	Y	1.10	1.02	-7%
123789-HxCDF	37.73	2.92E+06	1.17	Y	1.09	1.06	-3%
1234678-HpCDF	39.20	3.10E+06	1.06	Y	1.28	1.21	-5%
1234789-HpCDF	40.53	2.46E+06	1.05	Y	1.27	1.25	-1%
OCDF	42.72	3.58E+06	0.95	Y	1.01	0.96	-5%
ES 2378-TCDD	27.53	1.19E+08	0.79	Y	1.01	0.98	-3%
ES 12378-PeCDD	33.01	9.89E+07	1.61	Y	0.87	0.82	-6%
ES 123478-HxCDD	36.91	9.57E+07	1.29	Y	1.10	1.05	-4%
ES 123678-HxCDD	37.03	9.19E+07	1.28	Y	1.06	1.01	-5%
ES 123789-HxCDD	37.33	1.07E+08	1.29	Y	1.22	1.18	-3%
ES 1234678-HpCDD	40.09	8.86E+07	1.09	Y	0.99	0.97	-2%
ES OCDD	42.55	1.20E+08	0.92	Y	0.67	0.66	-2%
ES 2378-TCDF	26.62	2.04E+08	0.80	Y	1.01	0.99	-2%
ES 12378-PeCDF	31.53	1.71E+08	1.60	Y	0.90	0.84	-7%
ES 23478-PeCDF	32.66	1.72E+08	1.59	Y	0.89	0.84	-6%
ES 123478-HxCDF	35.94	1.28E+08	0.52	Y	1.43	1.41	-2%
ES 123678-HxCDF	36.08	1.43E+08	0.51	Y	1.63	1.57	-3%
ES 234678-HxCDF	36.73	1.31E+08	0.52	Y	1.48	1.44	-3%
ES 123789-HxCDF	37.71	1.11E+08	0.52	Y	1.29	1.22	-6%
ES 1234678-HpCDF	39.19	1.02E+08	0.45	Y	1.15	1.12	-2%
ES 1234789-HpCDF	40.52	7.85E+07	0.44	Y	0.91	0.86	-5%
ES OCDF	42.72	1.50E+08	0.91	Y	0.83	0.82	-1%

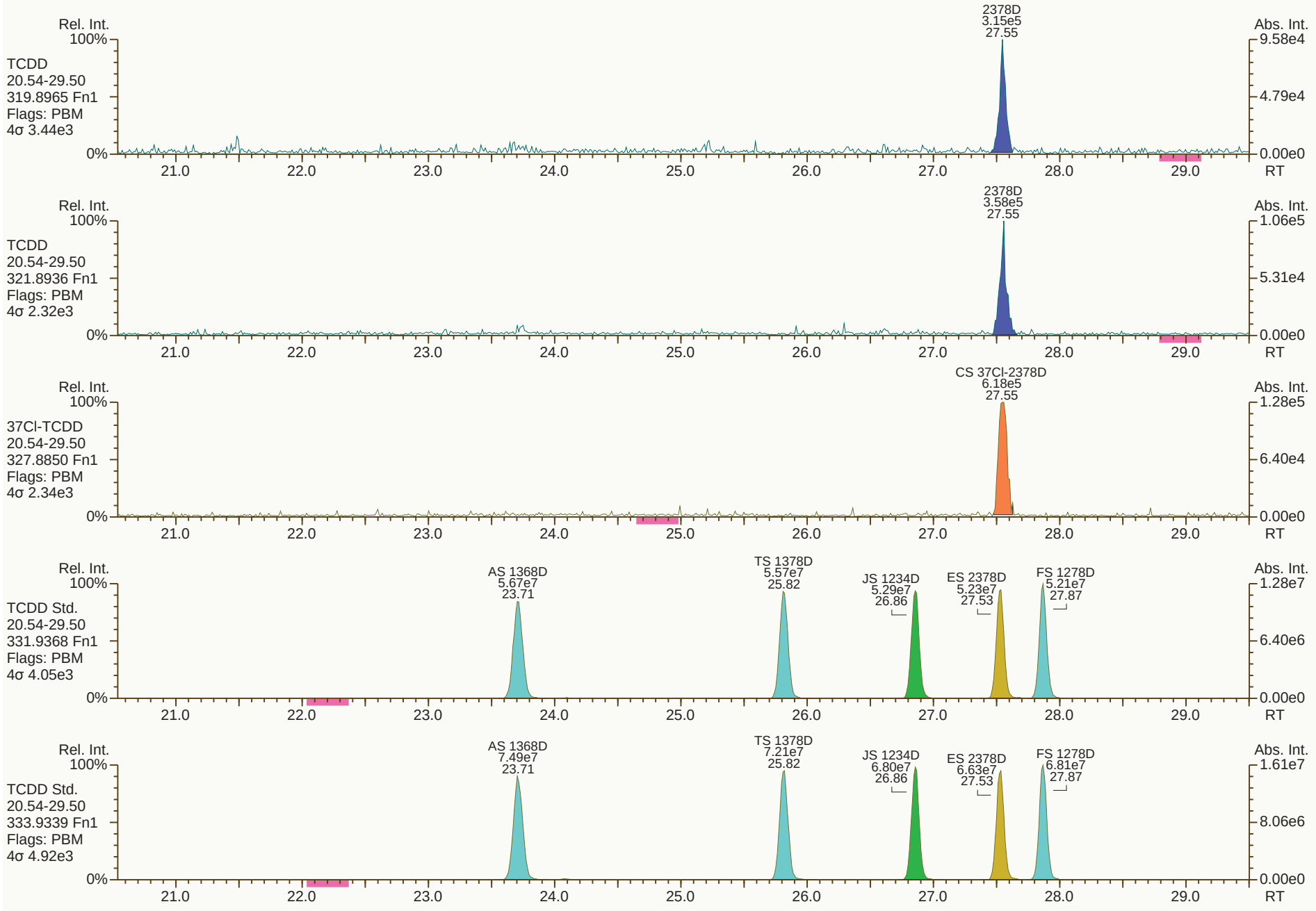
Dioxin/Furan QC Summary	Acq'd: 12 Jun 2020 15:11 PSW	ICAL: MM3_DF_10012020_12JUN2020
Lab ID: CS1_200612_DF_RA	UTP: 17-Jun-2020 08:05:59 PSW	Checkcode: 407-197-HVF
Sample ID: SIL 20-282-2	Report: 17 Jun 2020 08:13 pw	Datafile: 200612R04

Name	RT	Response	RA	OK	Ref. RRFs	Calc. RRFs	Dev'n
JS 1234-TCDD	26.86	1.21E+08	0.78	Y	-	-	-
JS 1234-TCDF	25.22	2.05E+08	0.78	Y	-	-	-
JS 123467-HxCDD	37.23	4.56E+07	1.30	Y	-	-	-
CS 37Cl-2378-TCDD	27.55	6.18E+05	n/a	-	1.04	1.02	-1%
CS 12347-PeCDD	32.51	8.99E+07	1.62	Y	0.74	0.74	1%
CS 12346-PeCDF	31.00	1.73E+08	1.57	Y	0.86	0.85	-2%
CS 123469-HxCDF	36.39	1.28E+08	0.52	Y	1.36	1.40	3%
CS 1234689-HpCDF	39.59	9.91E+07	0.45	Y	1.05	1.09	3%
SS 37Cl-2378-TCDD	27.55	6.18E+05	n/a	-	1.04	1.04	0%
SS 12347-PeCDD	32.51	8.99E+07	1.62	Y	0.86	0.91	6%
SS 12346-PeCDF	31.00	1.73E+08	1.57	Y	0.96	1.01	5%
SS 123469-HxCDF	36.39	1.28E+08	0.52	Y	0.83	0.89	7%
SS 1234689-HpCDF	39.59	9.91E+07	0.45	Y	0.92	0.97	5%
AS 1368-TCDD	23.71	1.32E+08	0.76	Y	1.08	1.09	1%
AS 1368-TCDF	21.49	2.41E+08	0.80	Y	1.18	1.18	0%
FS 1278-TCDD	27.87	1.20E+08	0.76	Y	1.00	1.01	2%
FS 12478-PeCDD	31.77	1.04E+08	1.63	Y	1.00	1.05	6%
FS 123468-HxCDD	35.87	1.13E+08	1.29	Y	1.11	1.18	6%
FS 1234679-HpCDD	39.45	1.10E+08	1.09	Y	1.19	1.24	4%
TS 1378-TCDD	25.82	1.28E+08	0.77	Y	1.06	1.08	2%
~~OCDD-a~~	~~NotFnd~~				~~0.07~~		
~~OCDF-a~~	~~NotFnd~~				~~0.06~~		

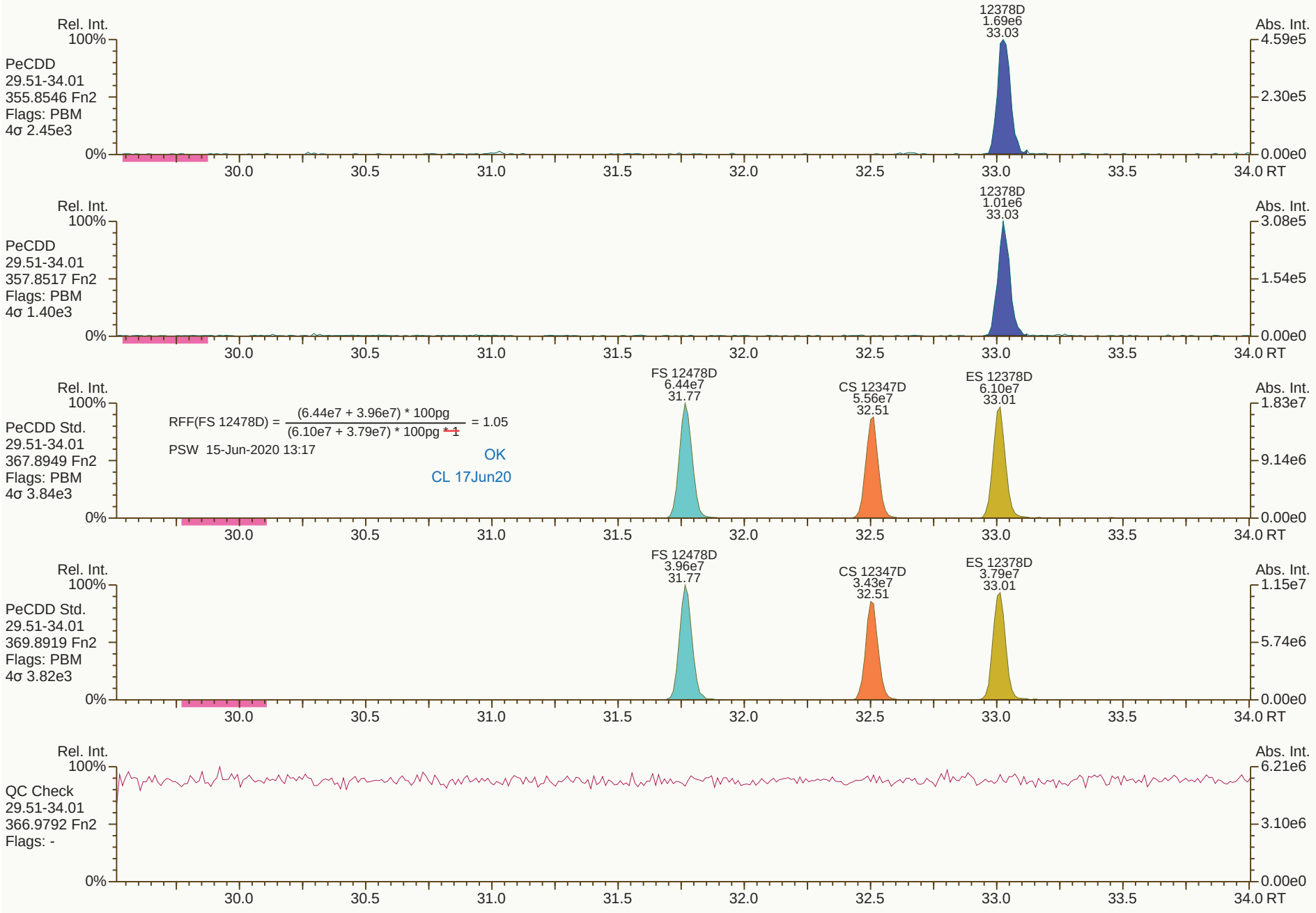
SGS ID: CS1_200612_DF_RA **Sample ID: SIL 20-282-2** **Acq: 12-Jun-2020 15:11:28**
Instr: [ILM] AutoSpec-Ultima MM3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 6** **User: PSW Datafile: 200612R04**

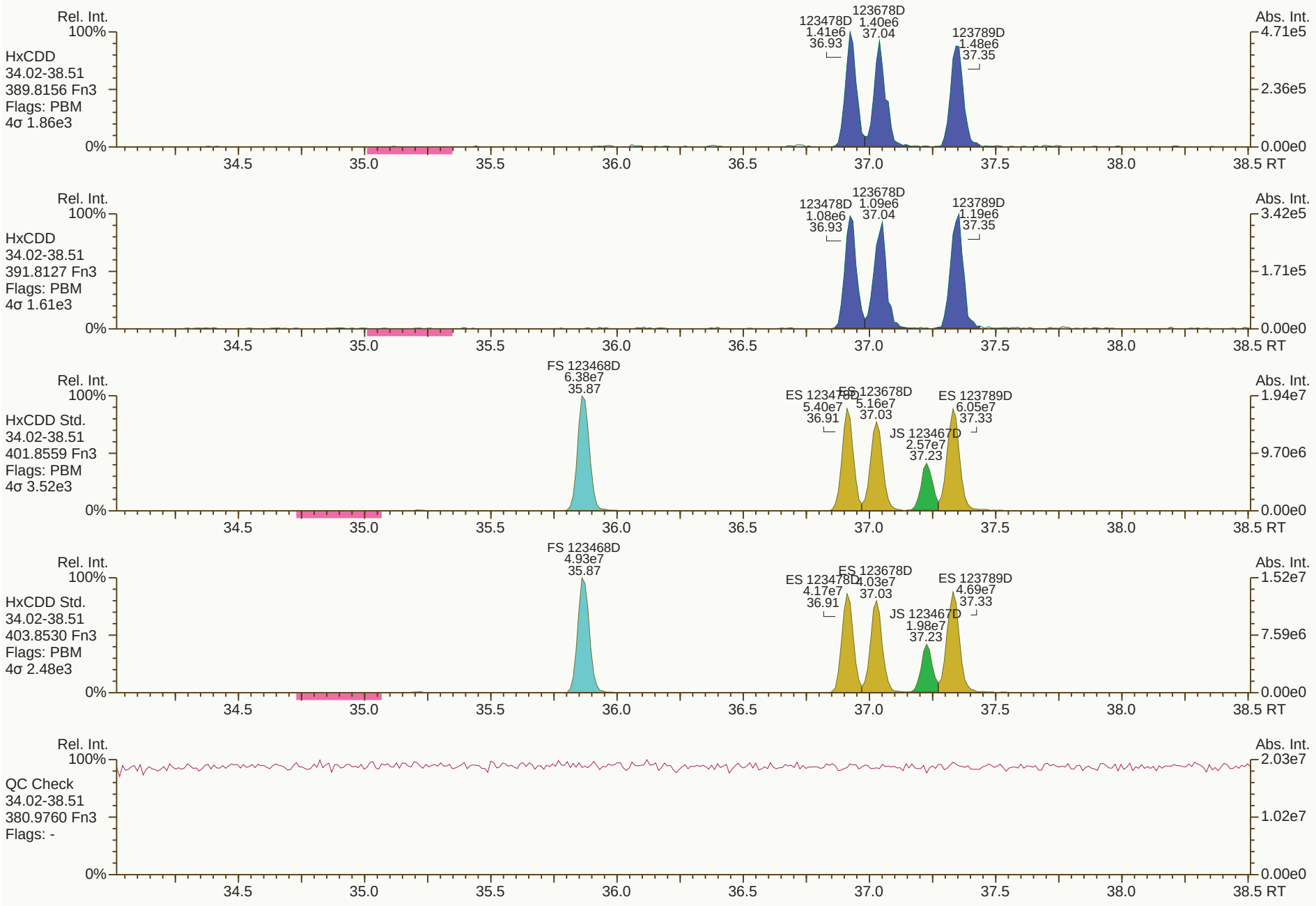


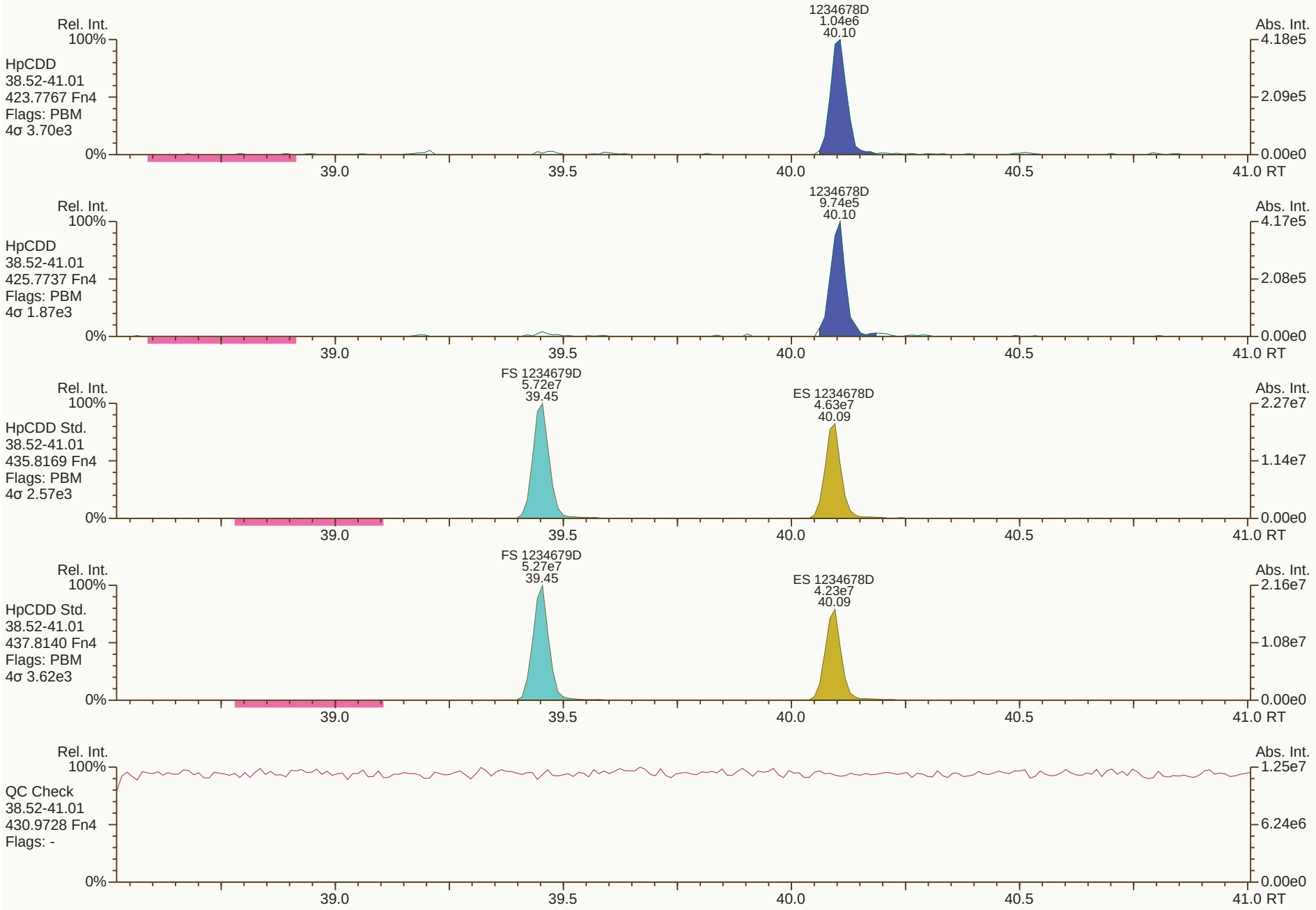
Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS1_200612_DF_RA.utp_res, saved 17-Jun-2020 08:06 (PSW) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 scc: 407-197 *PKD: n/a Printed: 17-Jun-2020 08:18 Page 1 of 12*

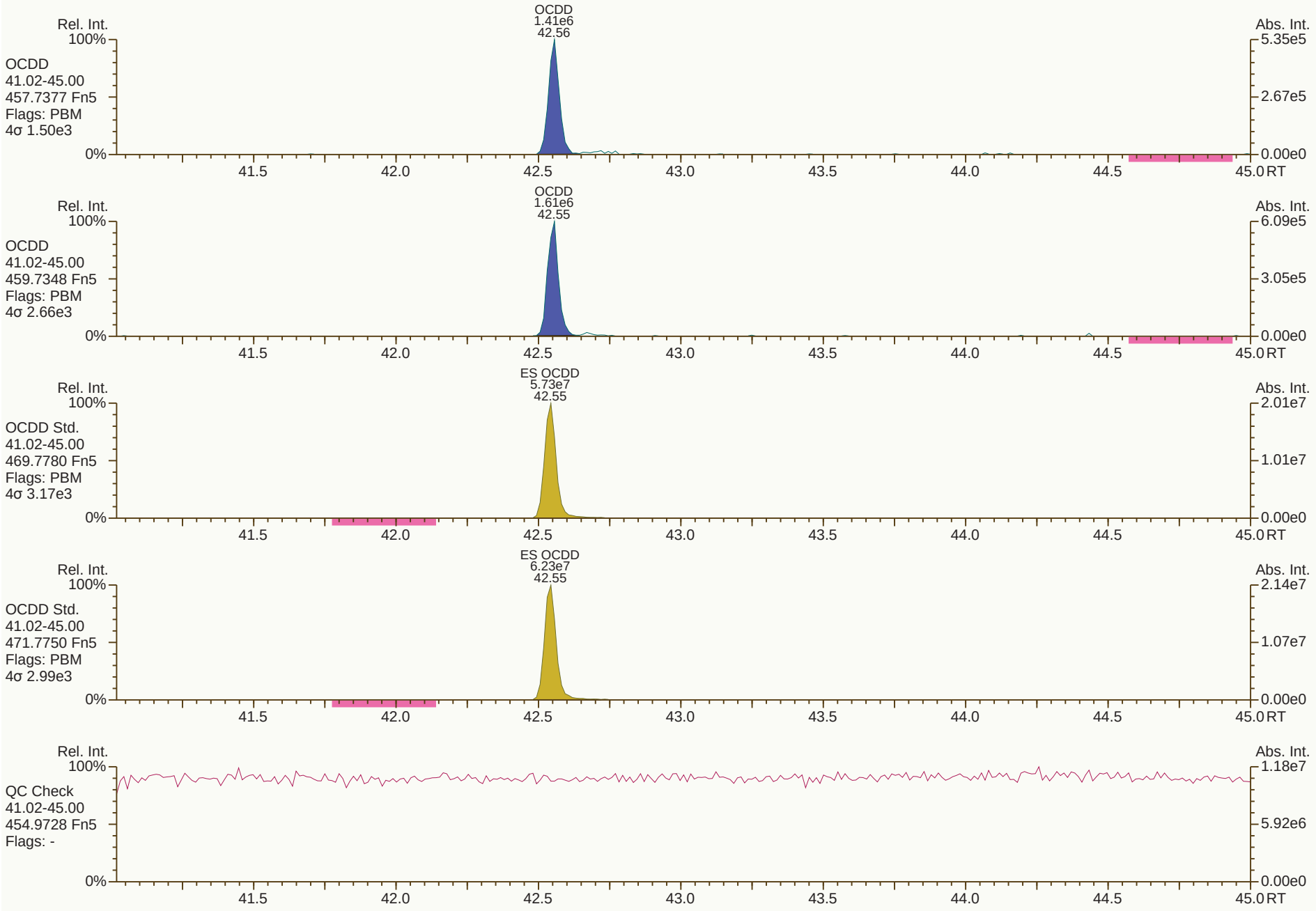


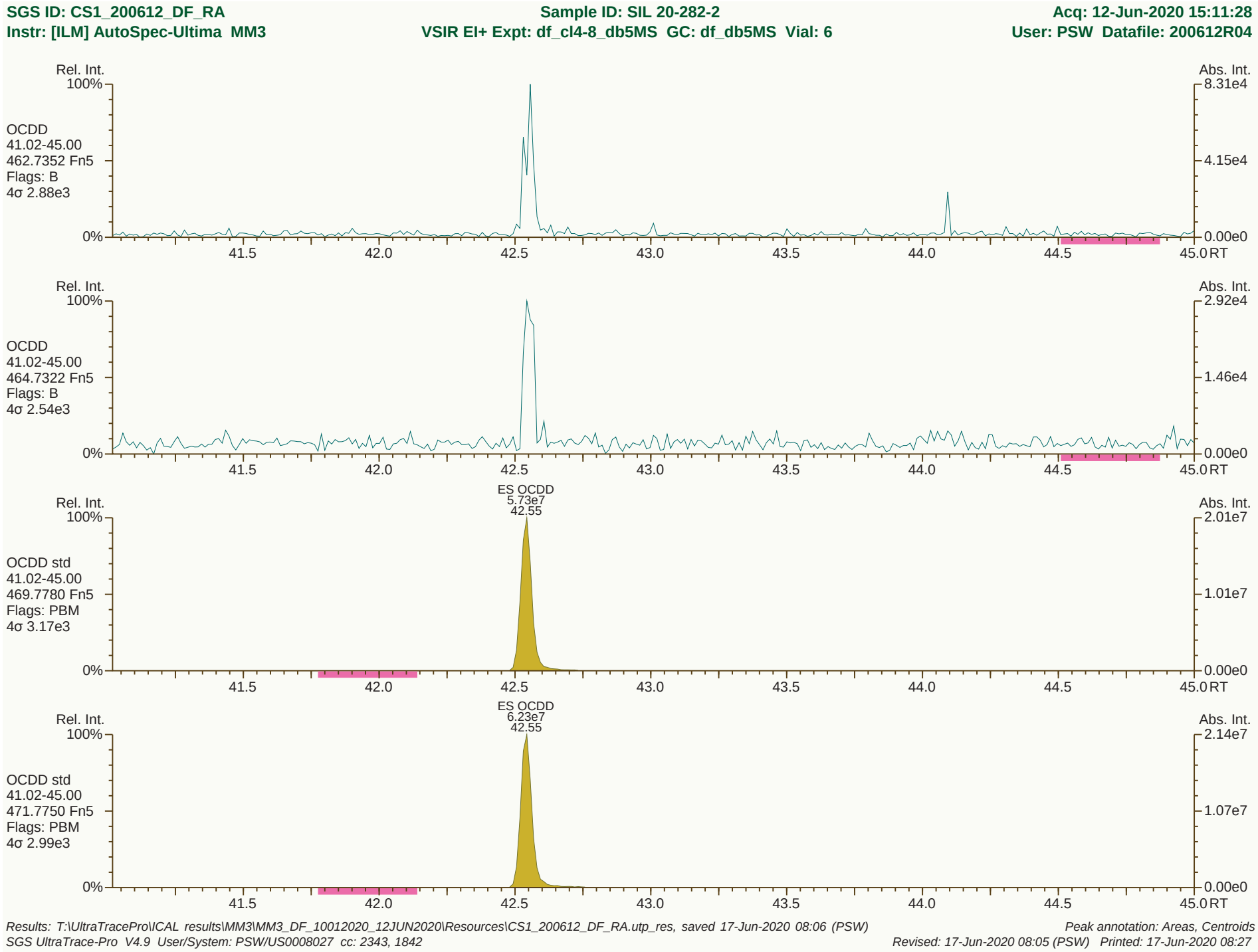
Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS1_200612_DF_RA.utp_res, saved 17-Jun-2020 08:06 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 5952, 0700, 6994 scc: 407-197
PKD: 12-Jun-2020 15:59 Printed: 17-Jun-2020 08:18 Page 2 of 12


Rel. Int.
100%
PeCDD
29.51-34.01
355.8546 Fn2
Flags: PBM
4σ 2.45e3
0%
12378D
1.69e6
33.03
Abs. Int.
4.59e5
2.30e5
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD
29.51-34.01
357.8517 Fn2
Flags: PBM
4σ 1.40e3
0%
12378D
1.01e6
33.03
Abs. Int.
3.08e5
1.54e5
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
367.8949 Fn2
Flags: PBM
4σ 3.84e3
0%
RFF(FS 12478D) = (6.44e7 + 3.96e7) * 100pg / (6.10e7 + 3.79e7) * 100pg * 1 = 1.05
PSW 15-Jun-2020 13:17
OK
CL 17Jun20
FS 12478D
6.44e7
31.77
CS 12347D
5.56e7
32.51
ES 12378D
6.10e7
33.01
Abs. Int.
1.83e7
9.14e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
369.8919 Fn2
Flags: PBM
4σ 3.82e3
0%
FS 12478D
3.96e7
31.77
CS 12347D
3.43e7
32.51
ES 12378D
3.79e7
33.01
Abs. Int.
1.15e7
5.74e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
QC Check
29.51-34.01
366.9792 Fn2
Flags: -
0%
Abs. Int.
6.21e6
3.10e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT


Rel. Int.
100%
HxCDD
34.02-38.51
389.8156 Fn3
Flags: PBM
4σ 1.86e3
123478D 1.41e6 36.93
123678D 1.40e6 37.04
123789D 1.48e6 37.35
Abs. Int.
4.71e5
2.36e5
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 RT
Rel. Int.
100%
HxCDD
34.02-38.51
391.8127 Fn3
Flags: PBM
4σ 1.61e3
123478D 1.08e6 36.93
123678D 1.09e6 37.04
123789D 1.19e6 37.35
Abs. Int.
3.42e5
1.71e5
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 RT
Rel. Int.
100%
HxCDD Std.
34.02-38.51
401.8559 Fn3
Flags: PBM
4σ 3.52e3
FS 123468D 6.38e7 35.87
ES 123478D 5.40e7 36.91
ES 123678D 5.16e7 37.03
JS 123467D 2.57e7 37.23
ES 123789D 6.05e7 37.33
Abs. Int.
1.94e7
9.70e6
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 RT
Rel. Int.
100%
HxCDD Std.
34.02-38.51
403.8530 Fn3
Flags: PBM
4σ 2.48e3
FS 123468D 4.93e7 35.87
ES 123478D 4.17e7 36.91
ES 123678D 4.03e7 37.03
JS 123467D 1.98e7 37.23
ES 123789D 4.69e7 37.33
Abs. Int.
1.52e7
7.59e6
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 RT
Rel. Int.
100%
QC Check
34.02-38.51
380.9760 Fn3
Flags: -
Abs. Int.
2.03e7
1.02e7
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 RT

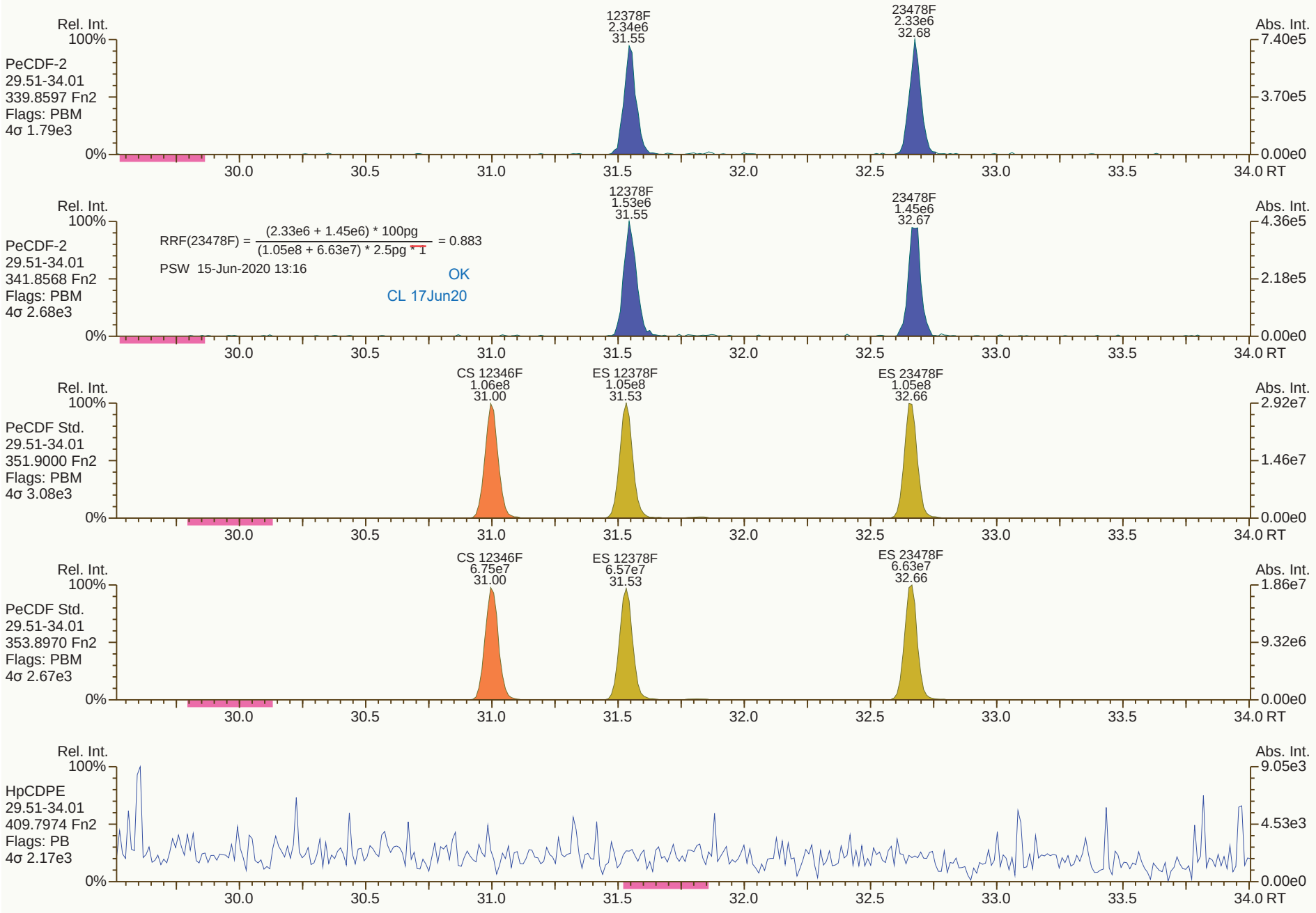

Rel. Int.
100%
HpCDD
38.52-41.01
423.7767 Fn4
Flags: PBM
4σ 3.70e3
1234678D
1.04e6
40.10
Abs. Int.
4.18e5
2.09e5
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.52-41.01
425.7737 Fn4
Flags: PBM
4σ 1.87e3
1234678D
9.74e5
40.10
Abs. Int.
4.17e5
2.08e5
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.52-41.01
435.8169 Fn4
Flags: PBM
4σ 2.57e3
FS 1234679D
5.72e7
39.45
ES 1234678D
4.63e7
40.09
Abs. Int.
2.27e7
1.14e7
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.52-41.01
437.8140 Fn4
Flags: PBM
4σ 3.62e3
FS 1234679D
5.27e7
39.45
ES 1234678D
4.23e7
40.09
Abs. Int.
2.16e7
1.08e7
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.52-41.01
430.9728 Fn4
Flags: -
Abs. Int.
1.25e7
6.24e6
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT


OCDD
1.41e6
42.56
Rel. Int.
100%
OCDD
41.02-45.00
457.7377 Fn5
Flags: PBM
4σ 1.50e3
0%
Abs. Int.
5.35e5
2.67e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDD
1.61e6
42.55
Rel. Int.
100%
OCDD
41.02-45.00
459.7348 Fn5
Flags: PBM
4σ 2.66e3
0%
Abs. Int.
6.09e5
3.05e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
5.73e7
42.55
Rel. Int.
100%
OCDD Std.
41.02-45.00
469.7780 Fn5
Flags: PBM
4σ 3.17e3
0%
Abs. Int.
2.01e7
1.01e7
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
6.23e7
42.55
Rel. Int.
100%
OCDD Std.
41.02-45.00
471.7750 Fn5
Flags: PBM
4σ 2.99e3
0%
Abs. Int.
2.14e7
1.07e7
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
1.18e7
5.92e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT


SGS ID: CS1_200612_DF_RA
Sample ID: SIL 20-282-2
Acq: 12-Jun-2020 15:11:28
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 6
User: PSW Datafile: 200612R04
Rel. Int.
Abs. Int.
OCDD
41.02-45.00
462.7352 Fn5
Flags: B
4σ 2.88e3
8.31e4
4.15e4
0.00e0
OCDD
41.02-45.00
464.7322 Fn5
Flags: B
4σ 2.54e3
2.92e4
1.46e4
ES OCDD
5.73e7
42.55
OCDD std
41.02-45.00
469.7780 Fn5
Flags: PBM
4σ 3.17e3
2.01e7
1.01e7
ES OCDD
6.23e7
42.55
OCDD std
41.02-45.00
471.7750 Fn5
Flags: PBM
4σ 2.99e3
2.14e7
1.07e7
100%
0%
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0
RT
Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS1_200612_DF_RA.utp_res, saved 17-Jun-2020 08:06 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 2343, 1842
Revised: 17-Jun-2020 08:05 (PSW) Printed: 17-Jun-2020 08:27


Rel. Int.
100%
TCDF
20.54-29.50
303.9016 Fn1
Flags: PBM
4σ 1.87e3
0%
2378F
4.02e5
26.64
Abs. Int.
1.08e5
5.41e4
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF
20.54-29.50
305.8987 Fn1
Flags: PBM
4σ 1.77e3
0%
2378F
4.92e5
26.64
Abs. Int.
1.11e5
5.55e4
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
315.9419 Fn1
Flags: PBM
4σ 2.42e4
0%
AS 1368F
1.07e8
21.49
JS 1234F
9.00e7
25.22
ES 2378F
9.04e7
26.62
Abs. Int.
2.09e7
1.05e7
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
317.9389 Fn1
Flags: PBM
4σ 1.21e4
0%
AS 1368F
1.34e8
21.49
JS 1234F
1.15e8
25.21
ES 2378F
1.13e8
26.62
Abs. Int.
2.54e7
1.27e7
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
HxCDPE
20.54-29.50
375.8364 Fn1
Flags: PB
4σ 2.31e3
0%
Abs. Int.
7.58e3
3.79e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT

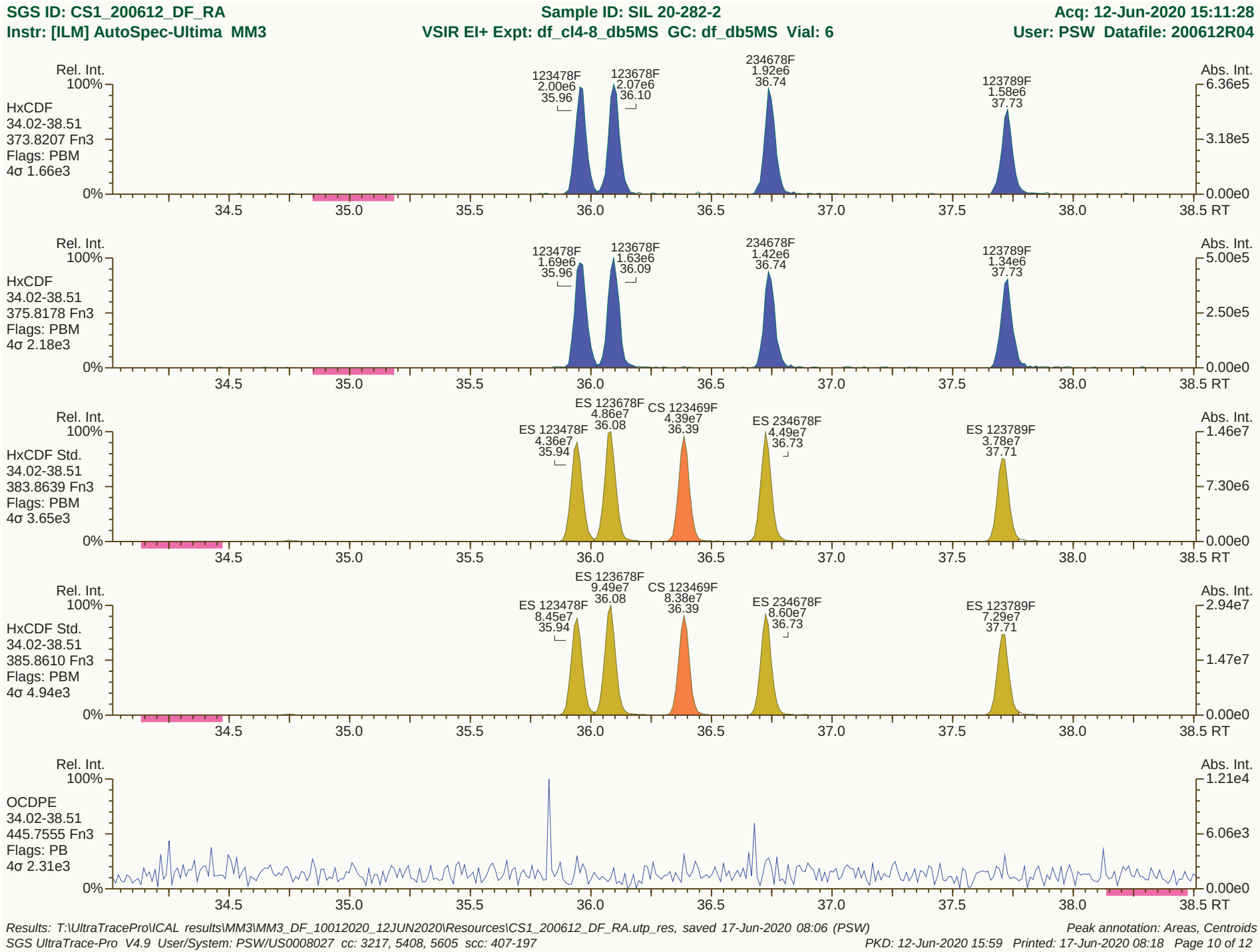

Rel. Int.
100%
0%
Abs. Int.
8.73e3
4.36e3
0.00e0
PeCDF-1
20.54-29.50
339.8597 Fn1
Flags: PB
4σ 2.55e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
0%
Abs. Int.
7.98e3
3.99e3
0.00e0
PeCDF-1
20.54-29.50
341.8568 Fn1
Flags: PB
4σ 1.86e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
0%
Abs. Int.
8.02e6
4.01e6
0.00e0
QC Check
20.54-29.50
316.9824 Fn1
Flags: -
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
PeCDF-2
29.51-34.01
339.8597 Fn2
Flags: PBM
4σ 1.79e3
0%
12378F
2.34e6
31.55
23478F
2.33e6
32.68
Abs. Int.
7.40e5
3.70e5
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF-2
29.51-34.01
341.8568 Fn2
Flags: PBM
4σ 2.68e3
0%
RRF(23478F) = (2.33e6 + 1.45e6) * 100pg / (1.05e8 + 6.63e7) * 2.5pg * 1 = 0.883
PSW 15-Jun-2020 13:16
OK
CL 17Jun20
12378F
1.53e6
31.55
23478F
1.45e6
32.67
Abs. Int.
4.36e5
2.18e5
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
351.9000 Fn2
Flags: PBM
4σ 3.08e3
0%
CS 12346F
1.06e8
31.00
ES 12378F
1.05e8
31.53
ES 23478F
1.05e8
32.66
Abs. Int.
2.92e7
1.46e7
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
353.8970 Fn2
Flags: PBM
4σ 2.67e3
0%
CS 12346F
6.75e7
31.00
ES 12378F
6.57e7
31.53
ES 23478F
6.63e7
32.66
Abs. Int.
1.86e7
9.32e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
HpCDPE
29.51-34.01
409.7974 Fn2
Flags: PB
4σ 2.17e3
0%
Abs. Int.
9.05e3
4.53e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT

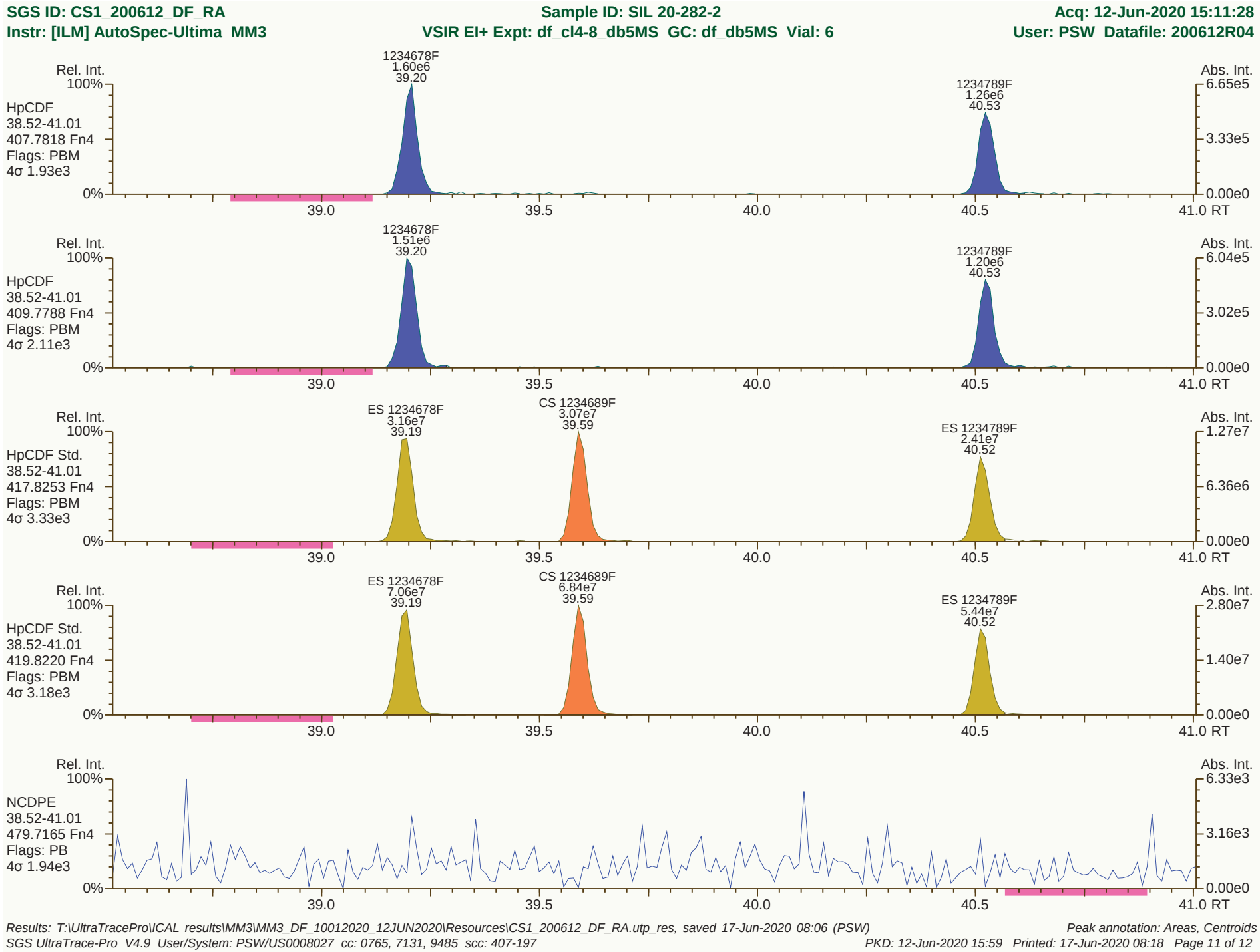
SGS ID: CS1_200612_DF_RA
Instr: [ILM] AutoSpec-Ultima MM3

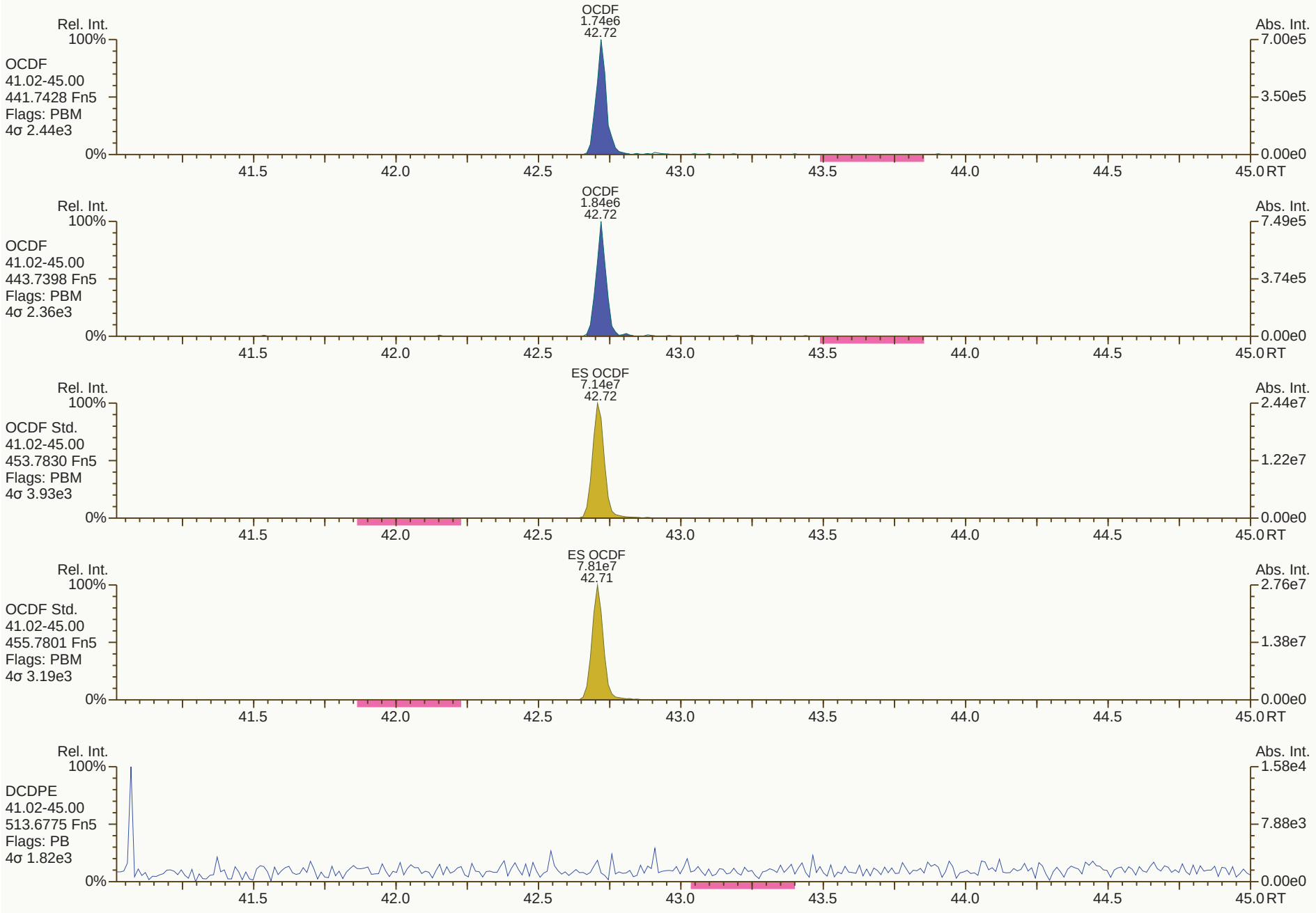
Sample ID: SIL 20-282-2
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 6

Acq: 12-Jun-2020 15:11:28
User: PSW Datafile: 200612R04



Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS1_200612_DF_RA.utp_res, saved 17-Jun-2020 08:06 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 3217, 5408, 5605 scc: 407-197
PKD: 12-Jun-2020 15:59 Printed: 17-Jun-2020 08:18 Page 10 of 12

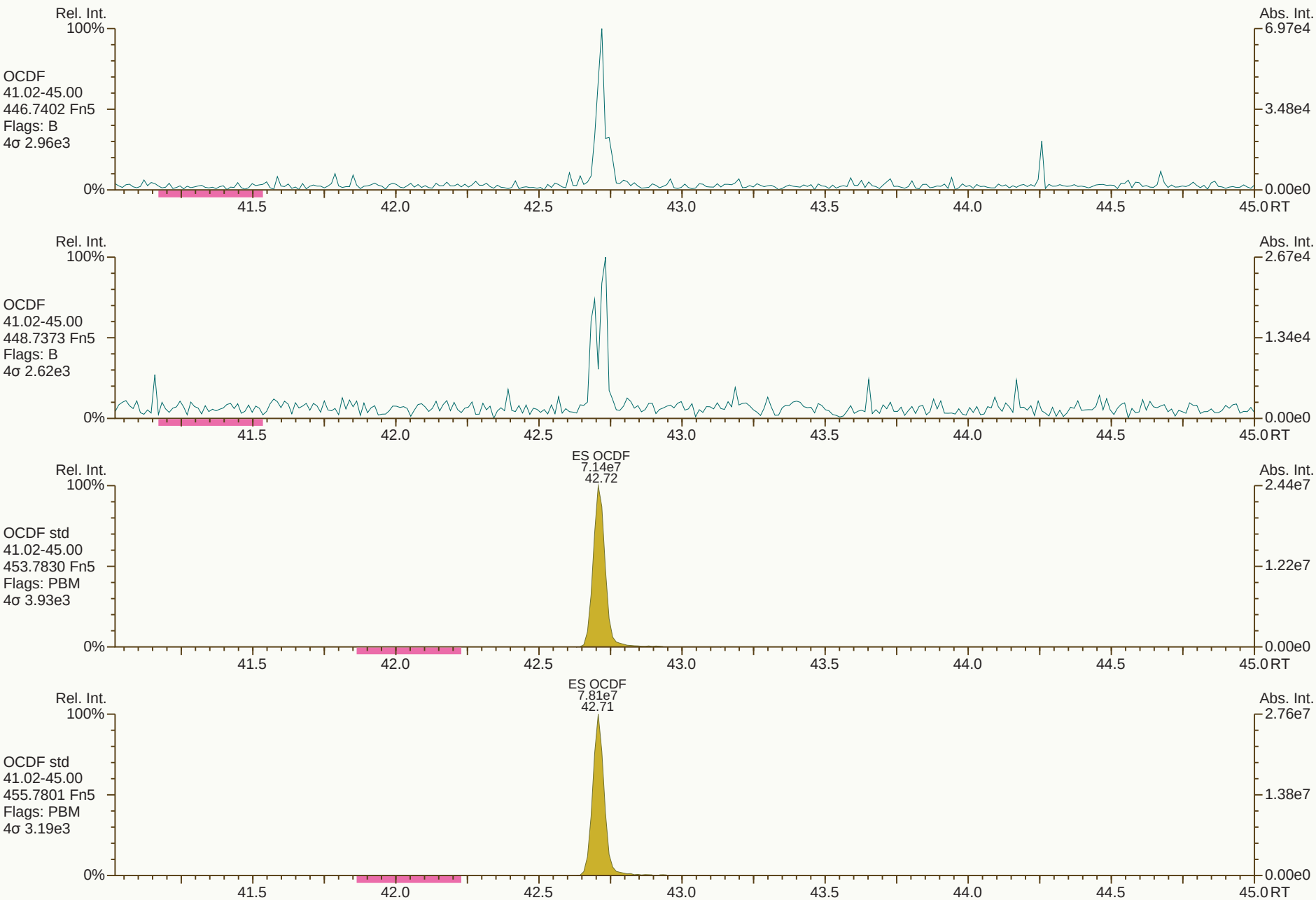

SGS ID: CS1_200612_DF_RA
Sample ID: SIL 20-282-2
Acq: 12-Jun-2020 15:11:28
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 6
User: PSW Datafile: 200612R04
Rel. Int.
Abs. Int.
HpCDF
38.52-41.01
407.7818 Fn4
Flags: PBM
4σ 1.93e3
1234678F
1.60e6
39.20
1234789F
1.26e6
40.53
6.65e5
3.33e5
0.00e0
HpCDF
38.52-41.01
409.7788 Fn4
Flags: PBM
4σ 2.11e3
1234678F
1.51e6
39.20
1234789F
1.20e6
40.53
6.04e5
3.02e5
0.00e0
HpCDF Std.
38.52-41.01
417.8253 Fn4
Flags: PBM
4σ 3.33e3
ES 1234678F
3.16e7
39.19
CS 1234689F
3.07e7
39.59
ES 1234789F
2.41e7
40.52
1.27e7
6.36e6
0.00e0
HpCDF Std.
38.52-41.01
419.8220 Fn4
Flags: PBM
4σ 3.18e3
ES 1234678F
7.06e7
39.19
CS 1234689F
6.84e7
39.59
ES 1234789F
5.44e7
40.52
2.80e7
1.40e7
0.00e0
NCDPE
38.52-41.01
479.7165 Fn4
Flags: PB
4σ 1.94e3
6.33e3
3.16e3
0.00e0
100%
0%
39.0
39.5
40.0
40.5
41.0 RT
Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS1_200612_DF_RA.utp_res, saved 17-Jun-2020 08:06 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 0765, 7131, 9485 scc: 407-197
PKD: 12-Jun-2020 15:59 Printed: 17-Jun-2020 08:18 Page 11 of 12


OCDF
1.74e6
42.72
Rel. Int.
100%
OCDF
41.02-45.00
441.7428 Fn5
Flags: PBM
4σ 2.44e3
0%
Abs. Int.
7.00e5
3.50e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDF
1.84e6
42.72
Rel. Int.
100%
OCDF
41.02-45.00
443.7398 Fn5
Flags: PBM
4σ 2.36e3
0%
Abs. Int.
7.49e5
3.74e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDF
7.14e7
42.72
Rel. Int.
100%
OCDF Std.
41.02-45.00
453.7830 Fn5
Flags: PBM
4σ 3.93e3
0%
Abs. Int.
2.44e7
1.22e7
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDF
7.81e7
42.71
Rel. Int.
100%
OCDF Std.
41.02-45.00
455.7801 Fn5
Flags: PBM
4σ 3.19e3
0%
Abs. Int.
2.76e7
1.38e7
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
DCDPE
41.02-45.00
513.6775 Fn5
Flags: PB
4σ 1.82e3
0%
Abs. Int.
1.58e4
7.88e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

SGS ID: CS1_200612_DF_RA
Instr: [ILM] AutoSpec-Ultima MM3

Sample ID: SIL 20-282-2
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 6

Acq: 12-Jun-2020 15:11:28
User: PSW Datafile: 200612R04



Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS1_200612_DF_RA.utp_res, saved 17-Jun-2020 08:06 (PSW)
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 8083, 8647

Peak annotation: Areas, Centroids
Revised: 17-Jun-2020 08:03 (PSW) Printed: 17-Jun-2020 08:27

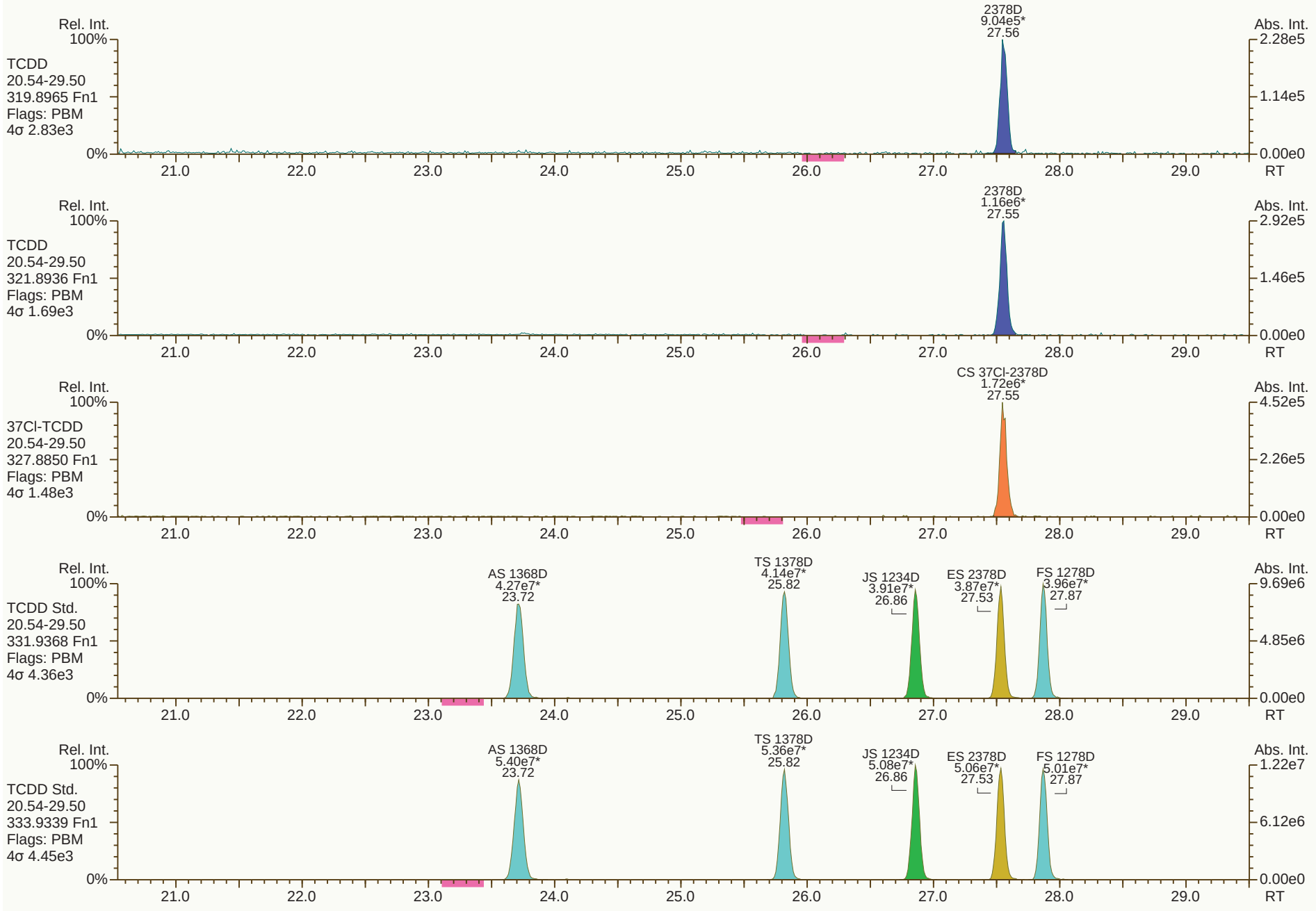
Dioxin/Furan QC Summary		Acq'd: 12 Jun 2020 16:02 PSW				ICAL: MM3_DF_10012020_12JUN2020	
Lab ID: CS2_200612_DF_RA		UTP: 15-Jun-2020 11:50:00 PSW				Checkcode: 434-640-RQY	
Sample ID: SIL 20-282-1		Report: 15 Jun 2020 11:54 pw				Datafile: 200612R05	
Name	**RT**	**Response**	**RA**	**OK**	**Ref. RRFs**	**Calc. RRFs**	**Dev'n**
2378-TCDD	27.56	2.06E+06	0.78	Y	1.18	1.16	-2%
12378-PeCDD	33.03	8.11E+06	1.59	Y	1.14	1.09	-4%
123478-HxCDD	36.93	7.68E+06	1.27	Y	1.09	1.05	-4%
123678-HxCDD	37.05	7.51E+06	1.25	Y	1.13	1.07	-5%
123789-HxCDD	37.35	8.32E+06	1.29	Y	1.05	1.03	-2%
1234678-HpCDD	40.11	6.15E+06	1.08	Y	0.98	0.94	-5%
OCDD	42.56	9.73E+06	0.90	Y	1.08	1.05	-2%
2378-TCDF	26.65	2.78E+06	0.75	Y	0.98	0.92	-6%
12378-PeCDF	31.55	1.20E+07	1.48	Y	0.95	0.92	-3%
23478-PeCDF	32.68	1.18E+07	1.60	Y	0.95	0.92	-3%
123478-HxCDF	35.96	1.12E+07	1.27	Y	1.20	1.17	-2%
123678-HxCDF	36.10	1.13E+07	1.28	Y	1.07	1.04	-3%
234678-HxCDF	36.75	1.06E+07	1.19	Y	1.10	1.08	-2%
123789-HxCDF	37.73	9.06E+06	1.26	Y	1.09	1.04	-4%
1234678-HpCDF	39.21	9.50E+06	1.05	Y	1.28	1.25	-3%
1234789-HpCDF	40.53	7.36E+06	1.02	Y	1.27	1.20	-6%
OCDF	42.73	1.09E+07	0.88	Y	1.01	0.95	-6%
ES 2378-TCDD	27.53	8.93E+07	0.77	Y	1.01	0.99	-1%
ES 12378-PeCDD	33.01	7.47E+07	1.58	Y	0.87	0.83	-5%
ES 123478-HxCDD	36.92	7.29E+07	1.31	Y	1.10	1.08	-1%
ES 123678-HxCDD	37.03	7.03E+07	1.27	Y	1.06	1.04	-1%
ES 123789-HxCDD	37.34	8.09E+07	1.30	Y	1.22	1.20	-1%
ES 1234678-HpCDD	40.1	6.55E+07	1.07	Y	0.99	0.97	-2%
ES OCDD	42.55	9.24E+07	0.92	Y	0.67	0.69	3%
ES 2378-TCDF	26.63	1.51E+08	0.78	Y	1.01	1.00	-1%
ES 12378-PeCDF	31.54	1.30E+08	1.60	Y	0.90	0.87	-4%
ES 23478-PeCDF	32.66	1.28E+08	1.59	Y	0.89	0.85	-5%
ES 123478-HxCDF	35.95	9.56E+07	0.52	Y	1.43	1.42	-1%
ES 123678-HxCDF	36.08	1.09E+08	0.53	Y	1.63	1.62	-1%
ES 234678-HxCDF	36.73	9.85E+07	0.53	Y	1.48	1.46	-1%
ES 123789-HxCDF	37.71	8.68E+07	0.52	Y	1.29	1.29	0%
ES 1234678-HpCDF	39.2	7.63E+07	0.44	Y	1.15	1.13	-1%
ES 1234789-HpCDF	40.52	6.14E+07	0.45	Y	0.91	0.91	1%
ES OCDF	42.72	1.14E+08	0.88	Y	0.83	0.85	3%

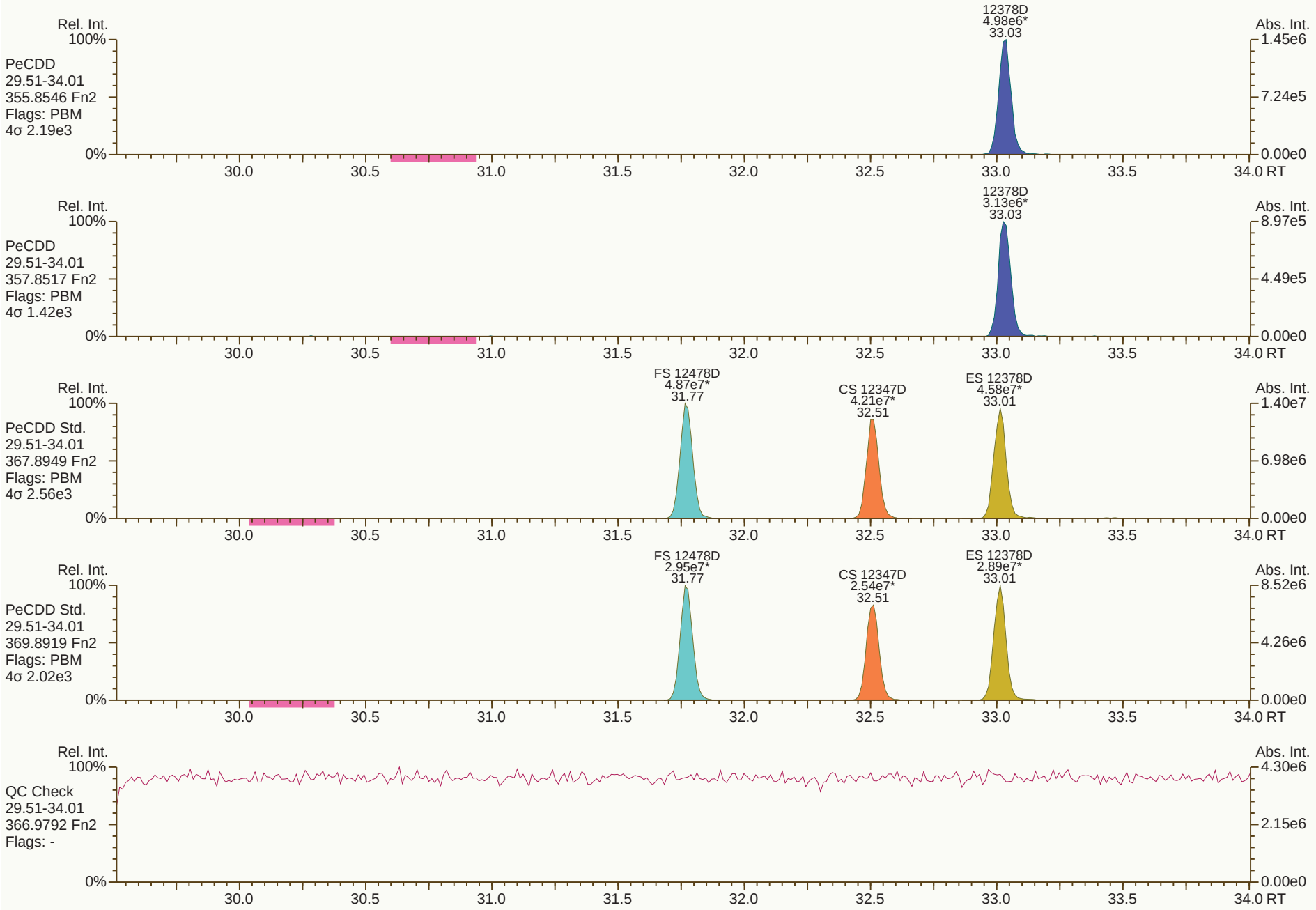
Dioxin/Furan QC Summary	Acq'd: 12 Jun 2020 16:02 PSW	ICAL: MM3_DF_10012020_12JUN2020
Lab ID: CS2_200612_DF_RA	UTP: 15-Jun-2020 11:50:00 PSW	Checkcode: 434-640-RQY
Sample ID: SIL 20-282-1	Report: 15 Jun 2020 11:54 pw	Datafile: 200612R05

Name	RT	Response	RA	OK	Ref. RRFs	Calc. RRFs	Dev'n
JS 1234-TCDD	26.86	8.99E+07	0.77	Y	-	-	-
JS 1234-TCDF	25.22	1.50E+08	0.80	Y	-	-	-
JS 123467-HxCDD	37.23	3.37E+07	1.27	Y	-	-	-
CS 37Cl-2378-TCDD	27.55	1.72E+06	n/a	-	1.04	0.96	-8%
CS 12347-PeCDD	32.51	6.75E+07	1.66	Y	0.74	0.75	1%
CS 12346-PeCDF	31.00	1.32E+08	1.54	Y	0.86	0.88	2%
CS 123469-HxCDF	36.39	9.55E+07	0.52	Y	1.36	1.42	5%
CS 1234689-HpCDF	39.60	7.38E+07	0.45	Y	1.05	1.10	4%
SS 37Cl-2378-TCDD	27.55	1.72E+06	n/a	-	1.04	0.96	-7%
SS 12347-PeCDD	32.51	6.75E+07	1.66	Y	0.86	0.90	6%
SS 12346-PeCDF	31.00	1.32E+08	1.54	Y	0.96	1.01	6%
SS 123469-HxCDF	36.39	9.55E+07	0.52	Y	0.83	0.88	5%
SS 1234689-HpCDF	39.60	7.38E+07	0.45	Y	0.92	0.97	5%
AS 1368-TCDD	23.72	9.67E+07	0.79	Y	1.08	1.08	0%
AS 1368-TCDF	21.50	1.78E+08	0.79	Y	1.18	1.18	0%
FS 1278-TCDD	27.87	8.97E+07	0.79	Y	1.00	1.00	1%
FS 12478-PeCDD	31.77	7.82E+07	1.65	Y	1.00	1.05	5%
FS 123468-HxCDD	35.87	8.35E+07	1.28	Y	1.11	1.15	3%
FS 1234679-HpCDD	39.46	8.16E+07	1.03	Y	1.19	1.25	5%
TS 1378-TCDD	25.82	9.50E+07	0.77	Y	1.06	1.06	1%
OCDD-a	42.55	5.74E+05	2.47	Y	0.07	0.06	-12%
OCDF-a	42.72	7.29E+05	2.64	Y	0.06	0.06	8%



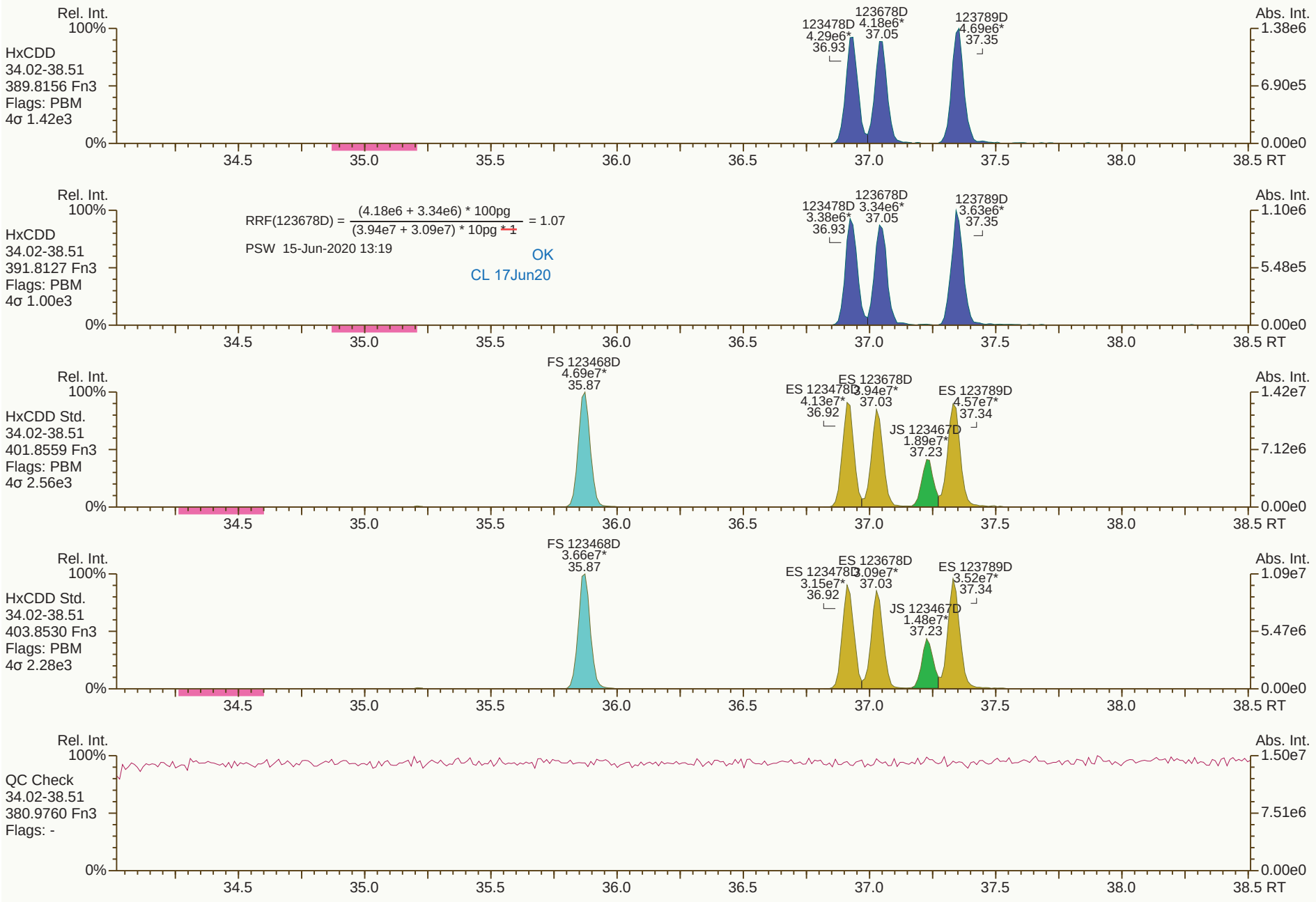
Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS2_200612_DF_RA.utp_res, saved 15-Jun-2020 13:21 (PSW) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 scc: 434-640 *PKD: n/a Printed: 15-Jun-2020 13:39 Page 1 of 12*

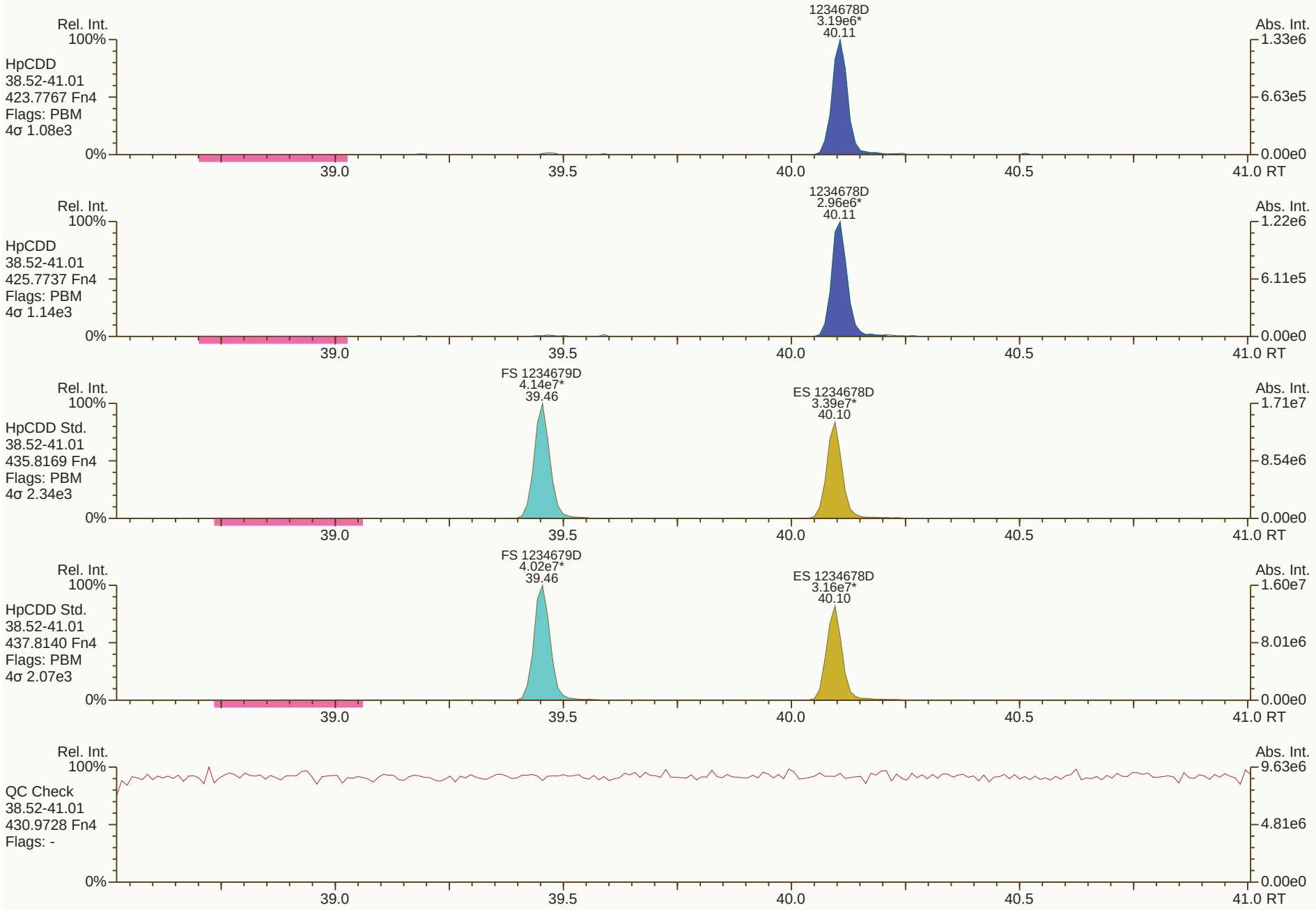

Rel. Int.
100%
TCDD
20.54-29.50
319.8965 Fn1
Flags: PBM
4σ 2.83e3
0%
2378D
9.04e5*
27.56
Abs. Int.
2.28e5
1.14e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD
20.54-29.50
321.8936 Fn1
Flags: PBM
4σ 1.69e3
0%
2378D
1.16e6*
27.55
Abs. Int.
2.92e5
1.46e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
37Cl-TCDD
20.54-29.50
327.8850 Fn1
Flags: PBM
4σ 1.48e3
0%
CS 37Cl-2378D
1.72e6*
27.55
Abs. Int.
4.52e5
2.26e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
331.9368 Fn1
Flags: PBM
4σ 4.36e3
0%
AS 1368D
4.27e7*
23.72
TS 1378D
4.14e7*
25.82
JS 1234D
3.91e7*
26.86
ES 2378D
3.87e7*
27.53
FS 1278D
3.96e7*
27.87
Abs. Int.
9.69e6
4.85e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
333.9339 Fn1
Flags: PBM
4σ 4.45e3
0%
AS 1368D
5.40e7*
23.72
TS 1378D
5.36e7*
25.82
JS 1234D
5.08e7*
26.86
ES 2378D
5.06e7*
27.53
FS 1278D
5.01e7*
27.87
Abs. Int.
1.22e7
6.12e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT

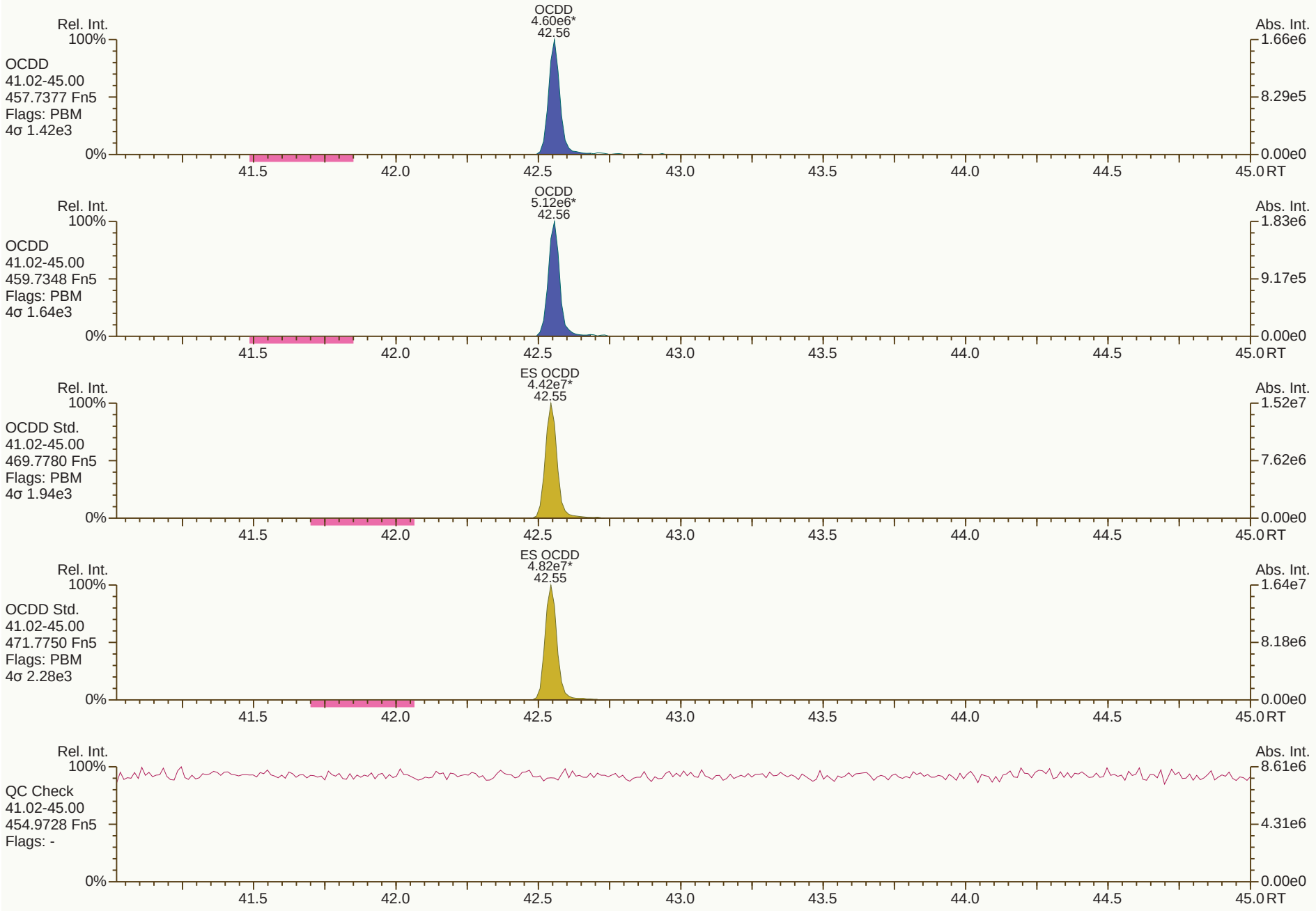


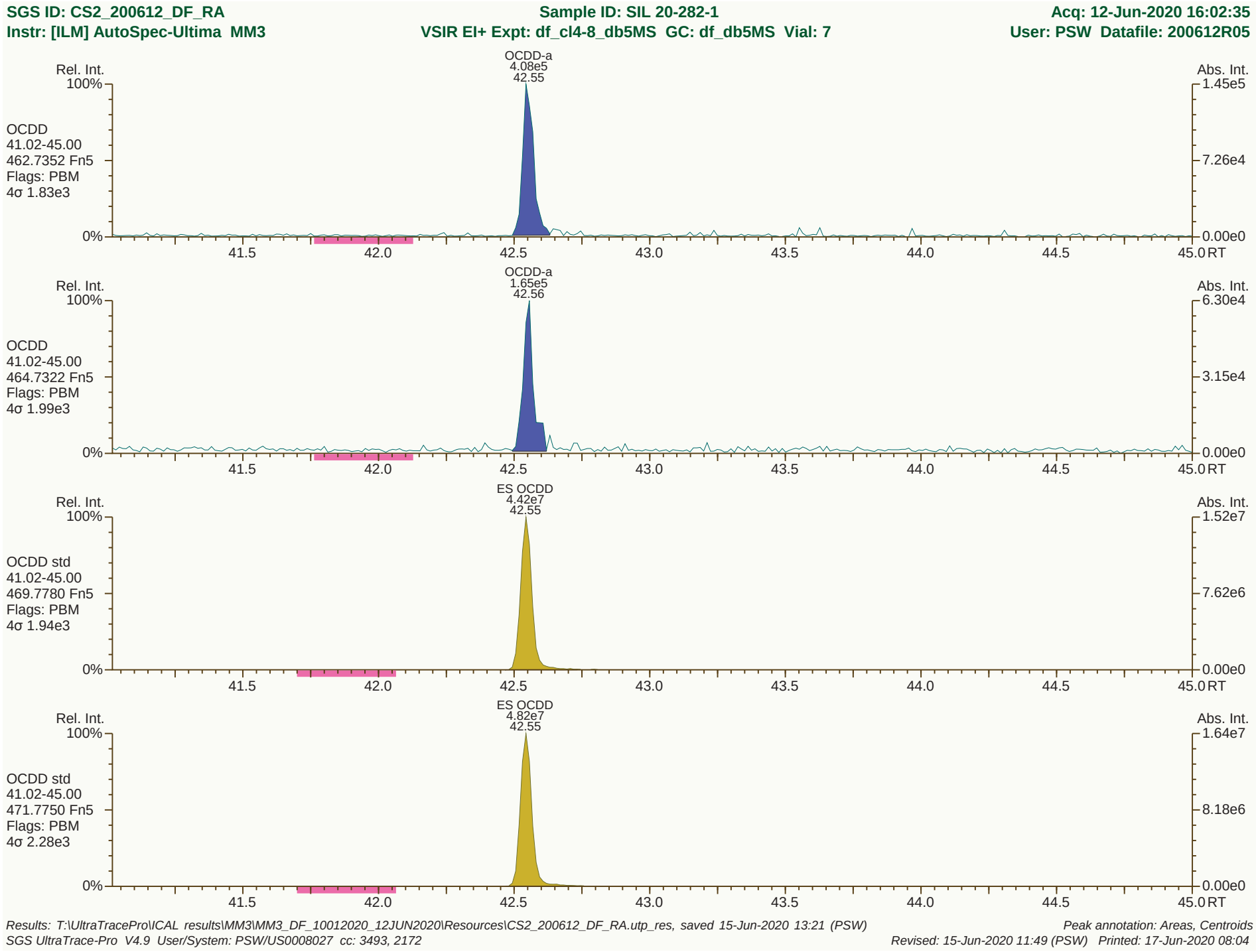
Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS2_200612_DF_RA.utp_res, saved 15-Jun-2020 13:21 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 6518, 3044 scc: 434-640 *PKD: 15-Jun-2020 08:09 Printed: 15-Jun-2020 13:39 Page 3 of 12*


Rel. Int.
100%
HxCDD
34.02-38.51
389.8156 Fn3
Flags: PBM
4σ 1.42e3
123478D 4.29e6* 36.93
123678D 4.18e6* 37.05
123789D 4.69e6* 37.35
Abs. Int.
1.38e6
6.90e5
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 RT
HxCDD
34.02-38.51
391.8127 Fn3
Flags: PBM
4σ 1.00e3
RRF(123678D) = (4.18e6 + 3.34e6) * 100pg / (3.94e7 + 3.09e7) * 10pg * 1 = 1.07
PSW 15-Jun-2020 13:19
OK
CL 17Jun20
123478D 3.38e6* 36.93
123678D 3.34e6* 37.05
123789D 3.63e6* 37.35
1.10e6
5.48e5
HxCDD Std.
34.02-38.51
401.8559 Fn3
Flags: PBM
4σ 2.56e3
FS 123468D 4.69e7* 35.87
ES 123478D 4.13e7* 36.92
ES 123678D 3.94e7* 37.03
JS 123467D 1.89e7* 37.23
ES 123789D 4.57e7* 37.34
1.42e7
7.12e6
HxCDD Std.
34.02-38.51
403.8530 Fn3
Flags: PBM
4σ 2.28e3
FS 123468D 3.66e7* 35.87
ES 123478D 3.15e7* 36.92
ES 123678D 3.09e7* 37.03
JS 123467D 1.48e7* 37.23
ES 123789D 3.52e7* 37.34
1.09e7
5.47e6
QC Check
34.02-38.51
380.9760 Fn3
Flags: -
1.50e7
7.51e6


Rel. Int.
100%
HpCDD
38.52-41.01
423.7767 Fn4
Flags: PBM
4σ 1.08e3
1234678D
3.19e6*
40.11
Abs. Int.
1.33e6
6.63e5
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.52-41.01
425.7737 Fn4
Flags: PBM
4σ 1.14e3
1234678D
2.96e6*
40.11
Abs. Int.
1.22e6
6.11e5
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.52-41.01
435.8169 Fn4
Flags: PBM
4σ 2.34e3
FS 1234679D
4.14e7*
39.46
ES 1234678D
3.39e7*
40.10
Abs. Int.
1.71e7
8.54e6
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.52-41.01
437.8140 Fn4
Flags: PBM
4σ 2.07e3
FS 1234679D
4.02e7*
39.46
ES 1234678D
3.16e7*
40.10
Abs. Int.
1.60e7
8.01e6
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.52-41.01
430.9728 Fn4
Flags: -
Abs. Int.
9.63e6
4.81e6
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT


Rel. Int.
100%
OCDD
41.02-45.00
457.7377 Fn5
Flags: PBM
4σ 1.42e3
0%
OCDD
4.60e6*
42.56
Abs. Int.
1.66e6
8.29e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDD
41.02-45.00
459.7348 Fn5
Flags: PBM
4σ 1.64e3
0%
OCDD
5.12e6*
42.56
Abs. Int.
1.83e6
9.17e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDD Std.
41.02-45.00
469.7780 Fn5
Flags: PBM
4σ 1.94e3
0%
ES OCDD
4.42e7*
42.55
Abs. Int.
1.52e7
7.62e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDD Std.
41.02-45.00
471.7750 Fn5
Flags: PBM
4σ 2.28e3
0%
ES OCDD
4.82e7*
42.55
Abs. Int.
1.64e7
8.18e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
8.61e6
4.31e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT


SGS ID: CS2_200612_DF_RA
Sample ID: SIL 20-282-1
Acq: 12-Jun-2020 16:02:35
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 7
User: PSW Datafile: 200612R05
Rel. Int.
Abs. Int.
OCDD-a
4.08e5
42.55
OCDD
41.02-45.00
462.7352 Fn5
Flags: PBM
4σ 1.83e3
1.45e5
7.26e4
0.00e0
OCDD-a
1.65e5
42.56
OCDD
41.02-45.00
464.7322 Fn5
Flags: PBM
4σ 1.99e3
6.30e4
3.15e4
ES OCDD
4.42e7
42.55
OCDD std
41.02-45.00
469.7780 Fn5
Flags: PBM
4σ 1.94e3
1.52e7
7.62e6
ES OCDD
4.82e7
42.55
OCDD std
41.02-45.00
471.7750 Fn5
Flags: PBM
4σ 2.28e3
1.64e7
8.18e6
100%
0%
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0
RT
Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS2_200612_DF_RA.utp_res, saved 15-Jun-2020 13:21 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 3493, 2172
Revised: 15-Jun-2020 11:49 (PSW) Printed: 17-Jun-2020 08:04


Rel. Int.
100%
TCDF
20.54-29.50
303.9016 Fn1
Flags: PBM
4σ 1.48e3
0%
2378F
1.19e6*
26.65
Abs. Int.
3.09e5
1.54e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF
20.54-29.50
305.8987 Fn1
Flags: PBM
4σ 1.51e3
0%
2378F
1.59e6*
26.65
Abs. Int.
3.70e5
1.85e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
315.9419 Fn1
Flags: PBM
4σ 1.45e4
0%
AS 1368F
7.83e7*
21.50
JS 1234F
6.67e7*
25.22
ES 2378F
6.62e7*
26.63
RRF(ES 2378F) = (6.62e7 + 8.46e7) * 100pg / (6.67e7 + 8.36e7) * 100pg = 1.00
PSW 15-Jun-2020 13:20
OK
CL 17Jun20
Abs. Int.
1.50e7
7.48e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
317.9389 Fn1
Flags: PBM
4σ 6.51e3
0%
AS 1368F
9.95e7*
21.50
JS 1234F
8.36e7*
25.22
ES 2378F
8.46e7*
26.62
Abs. Int.
1.85e7
9.26e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
HxCDPE
20.54-29.50
375.8364 Fn1
Flags: PB
4σ 1.63e3
0%
Abs. Int.
6.44e3
3.22e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT

SGS ID: CS2_200612_DF_RA | **Sample ID: SIL 20-282-1** | **Acq: 12-Jun-2020 16:02:35**

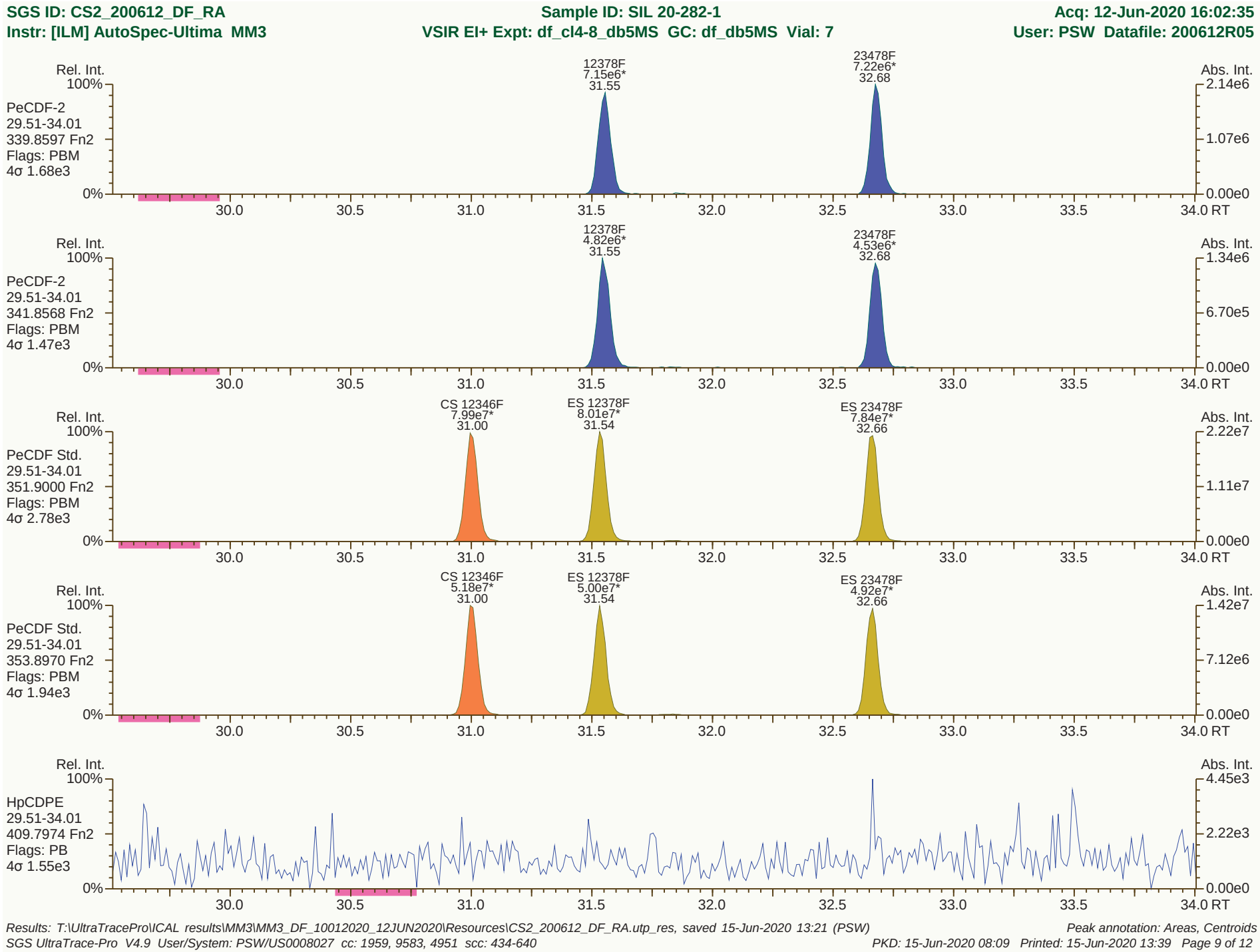
Instr: [ILM] AutoSpec-Ultima MM3 | **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 7** | **User: PSW Datafile: 200612R05**

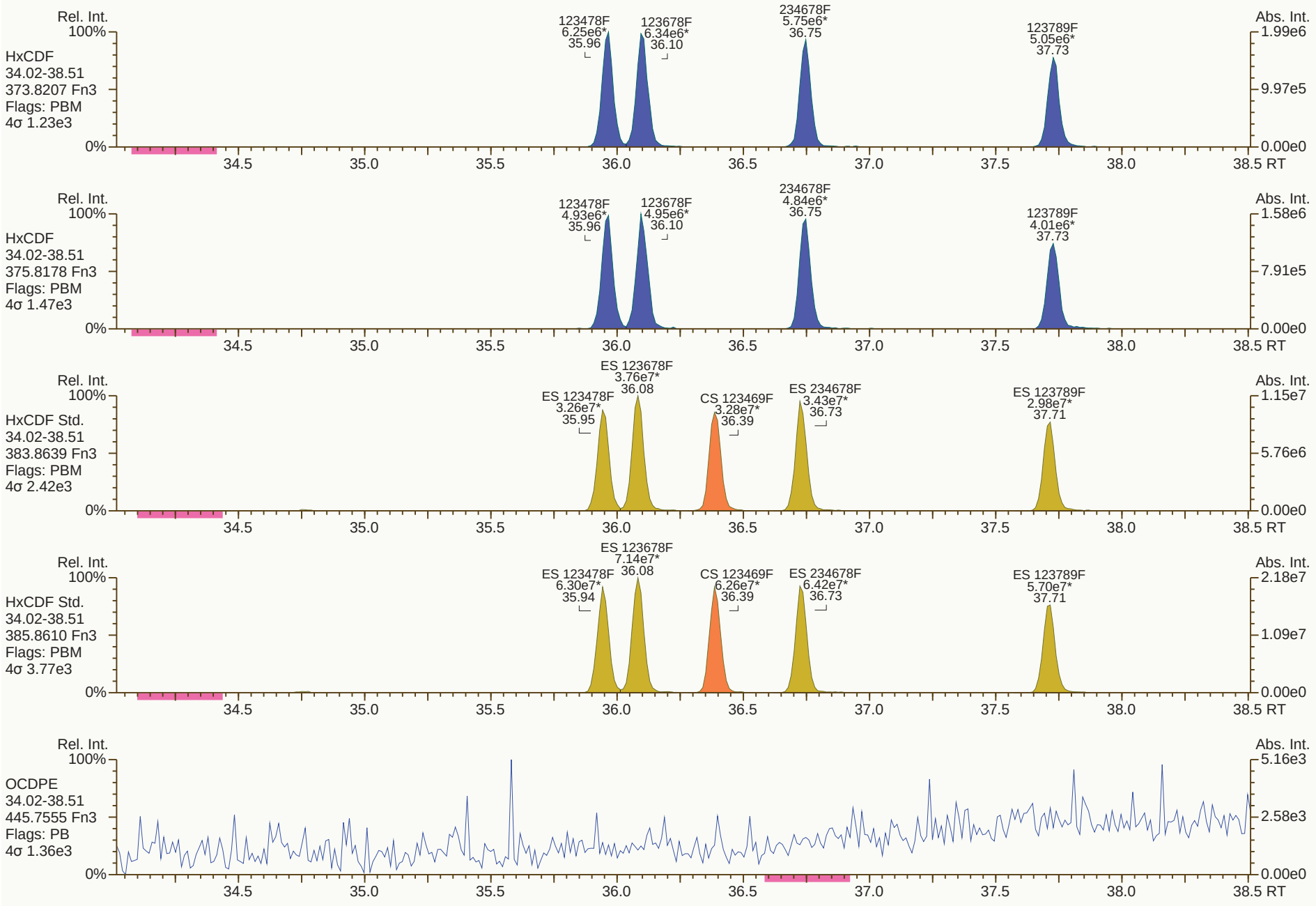


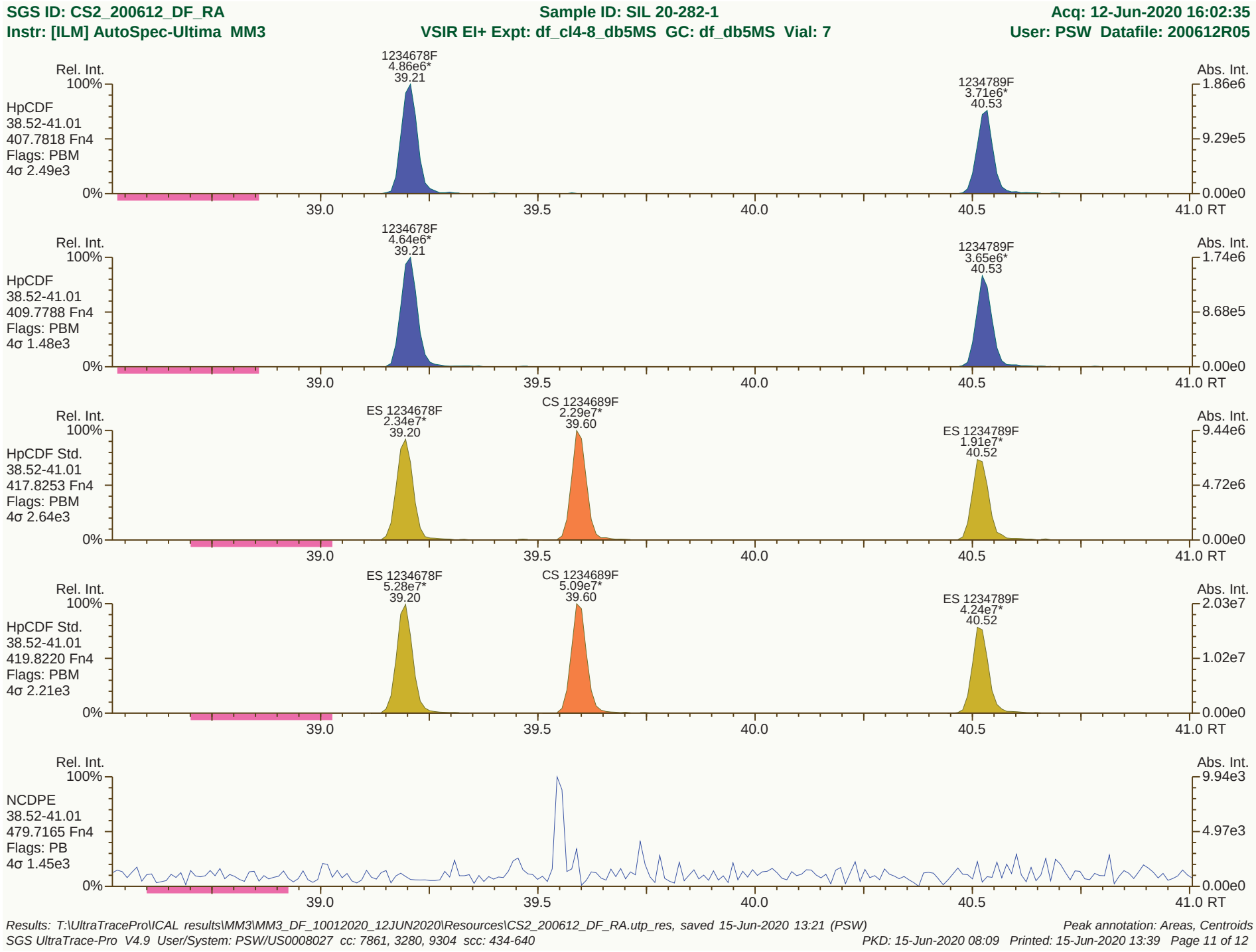
Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS2_200612_DF_RA.utp_res, saved 15-Jun-2020 13:21 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 0511 scc: 434-640 *PKD: 15-Jun-2020 08:09 Printed: 15-Jun-2020 13:39 Page 8 of 12*

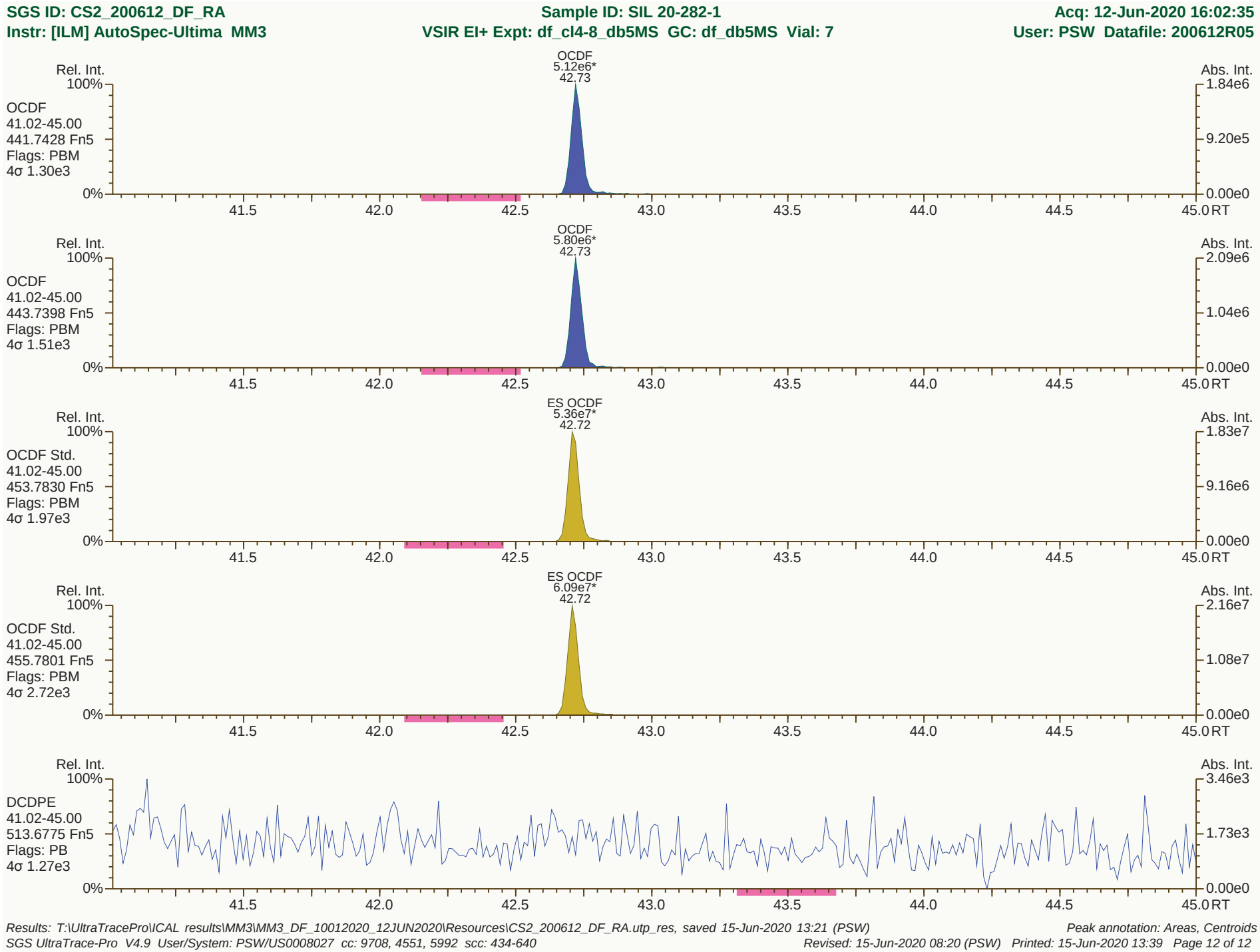
SGS ID: CS2_200612_DF_RA
Instr: [ILM] AutoSpec-Ultima MM3
Sample ID: SIL 20-282-1
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 7
Acq: 12-Jun-2020 16:02:35
User: PSW Datafile: 200612R05




Rel. Int.
100%
HxCDF
34.02-38.51
373.8207 Fn3
Flags: PBM
4σ 1.23e3
0%
123478F
6.25e6*
35.96
123678F
6.34e6*
36.10
234678F
5.75e6*
36.75
123789F
5.05e6*
37.73
Abs. Int.
1.99e6
9.97e5
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDF
34.02-38.51
375.8178 Fn3
Flags: PBM
4σ 1.47e3
0%
123478F
4.93e6*
35.96
123678F
4.95e6*
36.10
234678F
4.84e6*
36.75
123789F
4.01e6*
37.73
Abs. Int.
1.58e6
7.91e5
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDF Std.
34.02-38.51
383.8639 Fn3
Flags: PBM
4σ 2.42e3
0%
ES 123678F
3.76e7*
36.08
ES 123478F
3.26e7*
35.95
CS 123469F
3.28e7*
36.39
ES 234678F
3.43e7*
36.73
ES 123789F
2.98e7*
37.71
Abs. Int.
1.15e7
5.76e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDF Std.
34.02-38.51
385.8610 Fn3
Flags: PBM
4σ 3.77e3
0%
ES 123678F
7.14e7*
36.08
ES 123478F
6.30e7*
35.94
CS 123469F
6.26e7*
36.39
ES 234678F
6.42e7*
36.73
ES 123789F
5.70e7*
37.71
Abs. Int.
2.18e7
1.09e7
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
OCDPE
34.02-38.51
445.7555 Fn3
Flags: PB
4σ 1.36e3
0%
Abs. Int.
5.16e3
2.58e3
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT

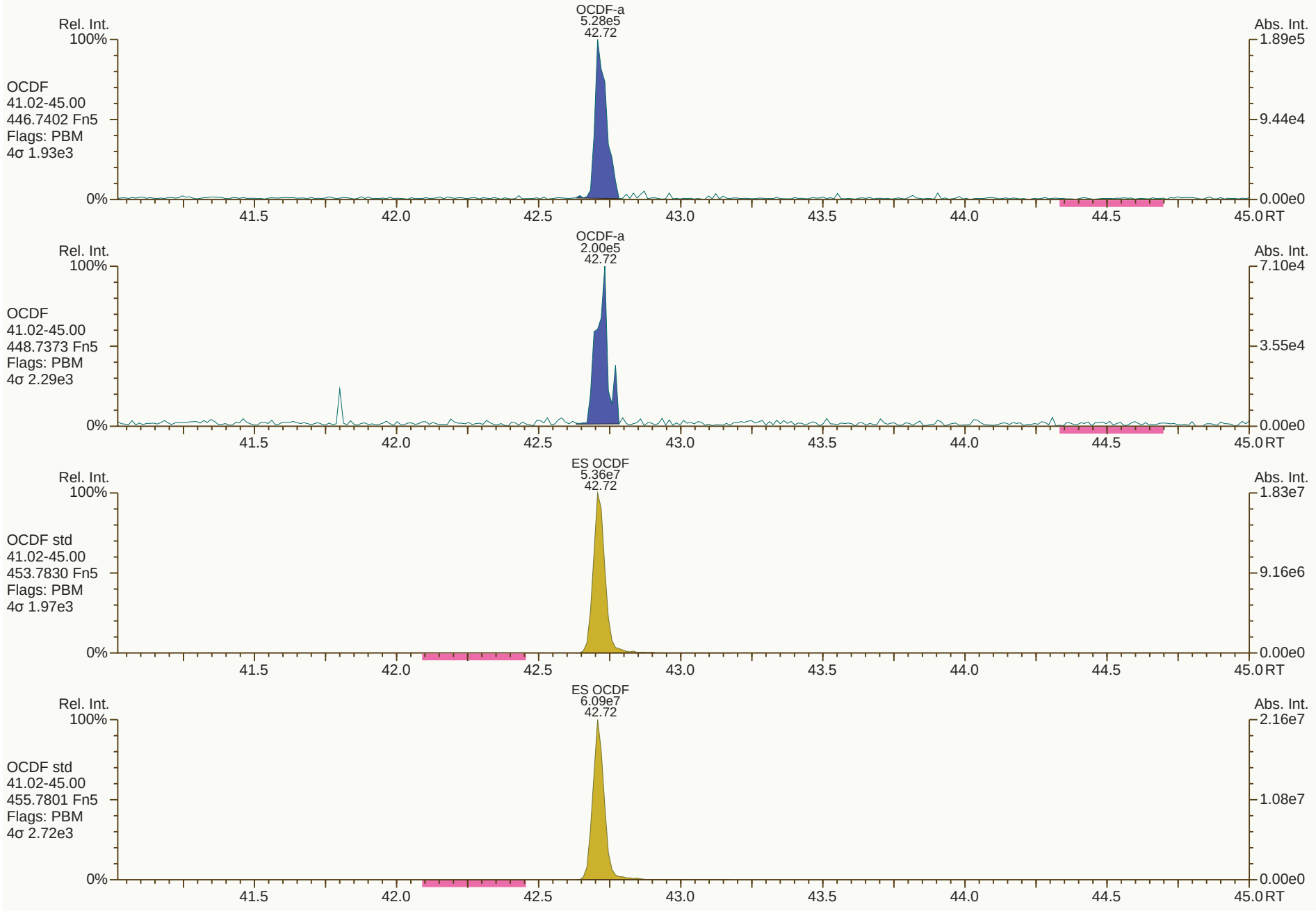

SGS ID: CS2_200612_DF_RA
Sample ID: SIL 20-282-1
Acq: 12-Jun-2020 16:02:35
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 7
User: PSW Datafile: 200612R05
Rel. Int.
Abs. Int.
HpCDF
38.52-41.01
407.7818 Fn4
Flags: PBM
4σ 2.49e3
1234678F
4.86e6*
39.21
1234789F
3.71e6*
40.53
1.86e6
9.29e5
0.00e0
HpCDF
38.52-41.01
409.7788 Fn4
Flags: PBM
4σ 1.48e3
1234678F
4.64e6*
39.21
1234789F
3.65e6*
40.53
1.74e6
8.68e5
0.00e0
HpCDF Std.
38.52-41.01
417.8253 Fn4
Flags: PBM
4σ 2.64e3
ES 1234678F
2.34e7*
39.20
CS 1234689F
2.29e7*
39.60
ES 1234789F
1.91e7*
40.52
9.44e6
4.72e6
0.00e0
HpCDF Std.
38.52-41.01
419.8220 Fn4
Flags: PBM
4σ 2.21e3
ES 1234678F
5.28e7*
39.20
CS 1234689F
5.09e7*
39.60
ES 1234789F
4.24e7*
40.52
2.03e7
1.02e7
0.00e0
NCDPE
38.52-41.01
479.7165 Fn4
Flags: PB
4σ 1.45e3
9.94e3
4.97e3
0.00e0
100%
0%
39.0
39.5
40.0
40.5
41.0 RT
Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS2_200612_DF_RA.utp_res, saved 15-Jun-2020 13:21 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 7861, 3280, 9304 scc: 434-640
PKD: 15-Jun-2020 08:09 Printed: 15-Jun-2020 13:39 Page 11 of 12

SGS ID: CS2_200612_DF_RA
Instr: [ILM] AutoSpec-Ultima MM3
Sample ID: SIL 20-282-1
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 7
Acq: 12-Jun-2020 16:02:35
User: PSW Datafile: 200612R05



SGS ID: CS2_200612_DF_RA | Sample ID: SIL 20-282-1 | Acq: 12-Jun-2020 16:02:35

Instr: [ILM] AutoSpec-Ultima MM3 | VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 7 | User: PSW Datafile: 200612R05



Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS2_200612_DF_RA.utp_res, saved 15-Jun-2020 13:21 (PSW)

Peak annotation: Areas, Centroids

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 1474, 4551

Revised: 15-Jun-2020 11:49 (PSW) Printed: 17-Jun-2020 08:04

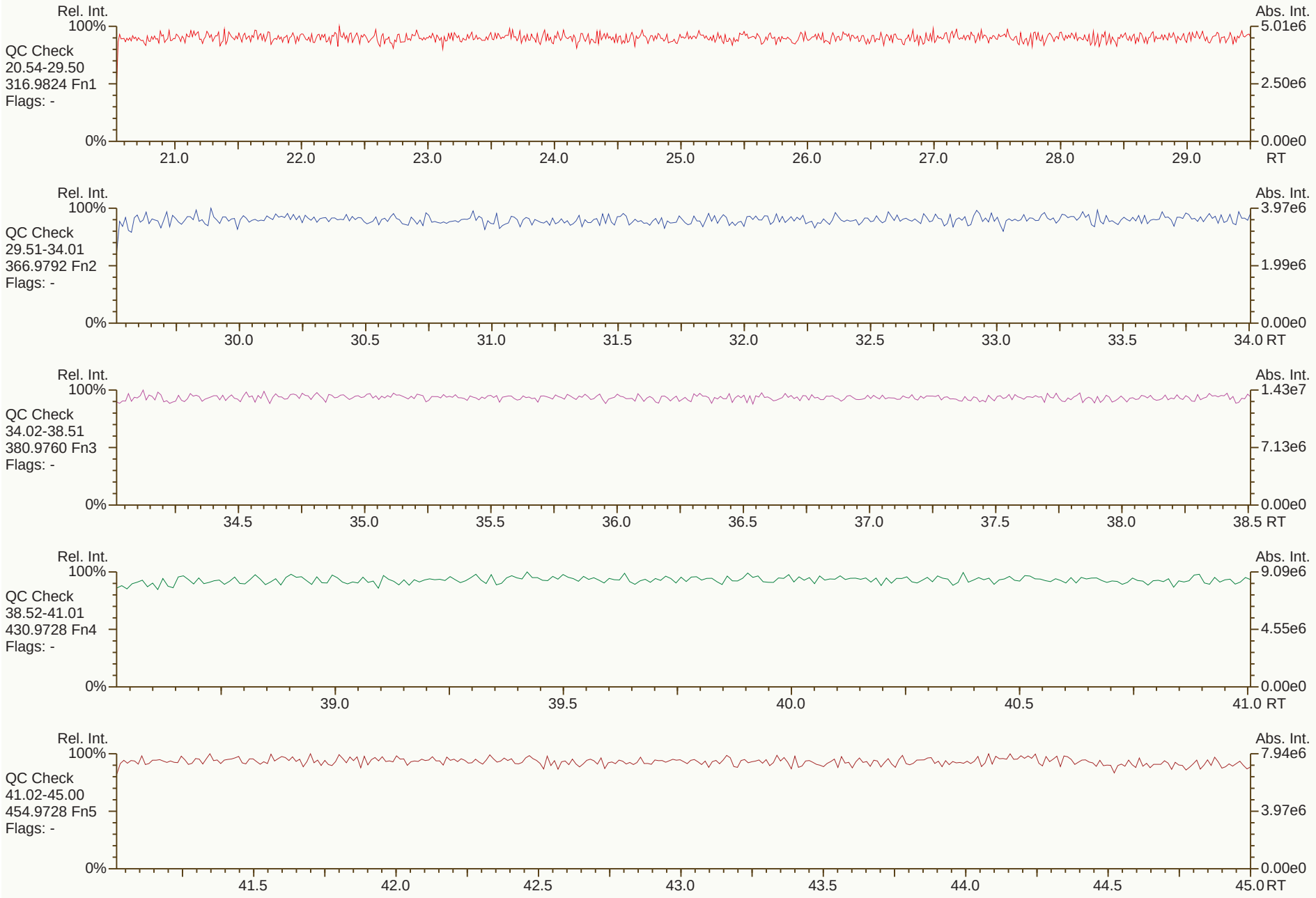
Dioxin/Furan QC Summary		Acq'd: 12 Jun 2020 16:49 PSW				ICAL: MM3_DF_10012020_12JUN2020	
Lab ID: CS3_200612_DF_RB		UTP: 15-Jun-2020 11:50:28 PSW				Checkcode: 726-607-FQH	
Sample ID: SIL 20-449-3		Report: 15 Jun 2020 11:54 pw				Datafile: 200612R06	
Name	**RT**	**Response**	**RA**	**OK**	**Ref. RRFs**	**Calc. RRFs**	**Dev'n**
2378-TCDD	27.56	1.07E+07	0.84	Y	1.18	1.17	-1%
12378-PeCDD	33.04	4.34E+07	1.59	Y	1.14	1.15	1%
123478-HxCDD	36.94	4.07E+07	1.25	Y	1.09	1.08	-1%
123678-HxCDD	37.05	4.14E+07	1.24	Y	1.13	1.16	3%
123789-HxCDD	37.36	4.45E+07	1.24	Y	1.05	1.06	1%
1234678-HpCDD	40.12	3.37E+07	1.05	Y	0.98	1.02	4%
OCDD	42.57	4.86E+07	0.89	Y	1.08	1.09	1%
2378-TCDF	26.65	1.47E+07	0.76	Y	0.98	0.99	1%
12378-PeCDF	31.56	6.16E+07	1.56	Y	0.95	0.96	1%
23478-PeCDF	32.69	6.09E+07	1.54	Y	0.95	0.96	1%
123478-HxCDF	35.97	5.76E+07	1.23	Y	1.20	1.19	0%
123678-HxCDF	36.11	5.99E+07	1.25	Y	1.07	1.10	3%
234678-HxCDF	36.76	5.60E+07	1.22	Y	1.10	1.13	3%
123789-HxCDF	37.74	4.77E+07	1.26	Y	1.09	1.11	1%
1234678-HpCDF	39.21	4.94E+07	1.04	Y	1.28	1.31	2%
1234789-HpCDF	40.54	3.88E+07	1.02	Y	1.27	1.28	1%
OCDF	42.73	5.47E+07	0.92	Y	1.01	1.00	-1%
ES 2378-TCDD	27.54	9.10E+07	0.77	Y	1.01	0.97	-3%
ES 12378-PeCDD	33.02	7.56E+07	1.64	Y	0.87	0.81	-7%
ES 123478-HxCDD	36.92	7.51E+07	1.29	Y	1.10	1.07	-2%
ES 123678-HxCDD	37.04	7.11E+07	1.29	Y	1.06	1.01	-5%
ES 123789-HxCDD	37.34	8.42E+07	1.32	Y	1.22	1.20	-1%
ES 1234678-HpCDD	40.1	6.61E+07	1.08	Y	0.99	0.94	-5%
ES OCDD	42.56	8.93E+07	0.90	Y	0.67	0.64	-5%
ES 2378-TCDF	26.63	1.49E+08	0.79	Y	1.01	0.99	-2%
ES 12378-PeCDF	31.54	1.28E+08	1.59	Y	0.90	0.85	-6%
ES 23478-PeCDF	32.67	1.27E+08	1.55	Y	0.89	0.84	-5%
ES 123478-HxCDF	35.95	9.65E+07	0.52	Y	1.43	1.37	-4%
ES 123678-HxCDF	36.09	1.09E+08	0.53	Y	1.63	1.55	-5%
ES 234678-HxCDF	36.74	9.91E+07	0.53	Y	1.48	1.41	-5%
ES 123789-HxCDF	37.72	8.63E+07	0.52	Y	1.29	1.23	-5%
ES 1234678-HpCDF	39.2	7.54E+07	0.46	Y	1.15	1.07	-6%
ES 1234789-HpCDF	40.53	6.06E+07	0.44	Y	0.91	0.86	-5%
ES OCDF	42.73	1.09E+08	0.88	Y	0.83	0.77	-6%

Dioxin/Furan QC Summary	Acq'd: 12 Jun 2020 16:49 PSW	ICAL: MM3_DF_10012020_12JUN2020
Lab ID: CS3_200612_DF_RB	UTP: 15-Jun-2020 11:50:28 PSW	Checkcode: 726-607-FQH
Sample ID: SIL 20-449-3	Report: 15 Jun 2020 11:54 pw	Datafile: 200612R06

Name	RT	Response	RA	OK	Ref. RRFs	Calc. RRFs	Dev'n
JS 1234-TCDD	26.87	9.36E+07	0.77	Y	-	-	-
JS 1234-TCDF	25.22	1.51E+08	0.79	Y	-	-	-
JS 123467-HxCDD	37.24	3.51E+07	1.26	Y	-	-	-
CS 37Cl-2378-TCDD	27.56	9.25E+06	n/a	-	1.04	0.99	-5%
CS 12347-PeCDD	32.52	6.77E+07	1.65	Y	0.74	0.72	-2%
CS 12346-PeCDF	31.01	1.28E+08	1.59	Y	0.86	0.85	-1%
CS 123469-HxCDF	36.40	9.30E+07	0.51	Y	1.36	1.32	-2%
CS 1234689-HpCDF	39.61	7.18E+07	0.45	Y	1.05	1.02	-3%
SS 37Cl-2378-TCDD	27.56	9.25E+06	n/a	-	1.04	1.02	-2%
SS 12347-PeCDD	32.52	6.77E+07	1.65	Y	0.86	0.89	5%
SS 12346-PeCDF	31.01	1.28E+08	1.59	Y	0.96	1.00	4%
SS 123469-HxCDF	36.40	9.30E+07	0.51	Y	0.83	0.85	2%
SS 1234689-HpCDF	39.61	7.18E+07	0.45	Y	0.92	0.95	3%
AS 1368-TCDD	23.72	1.02E+08	0.76	Y	1.08	1.09	1%
AS 1368-TCDF	21.50	1.81E+08	0.79	Y	1.18	1.20	2%
FS 1278-TCDD	27.88	9.15E+07	0.78	Y	1.00	1.01	1%
FS 12478-PeCDD	31.78	7.82E+07	1.64	Y	1.00	1.03	4%
FS 123468-HxCDD	35.88	8.61E+07	1.28	Y	1.11	1.15	3%
FS 1234679-HpCDD	39.46	8.24E+07	1.04	Y	1.19	1.25	5%
TS 1378-TCDD	25.82	1.02E+08	0.76	Y	1.06	1.12	6%
OCDD-a	42.56	2.79E+06	2.64	Y	0.07	0.06	-11%
OCDF-a	42.73	3.35E+06	2.46	Y	0.06	0.06	5%

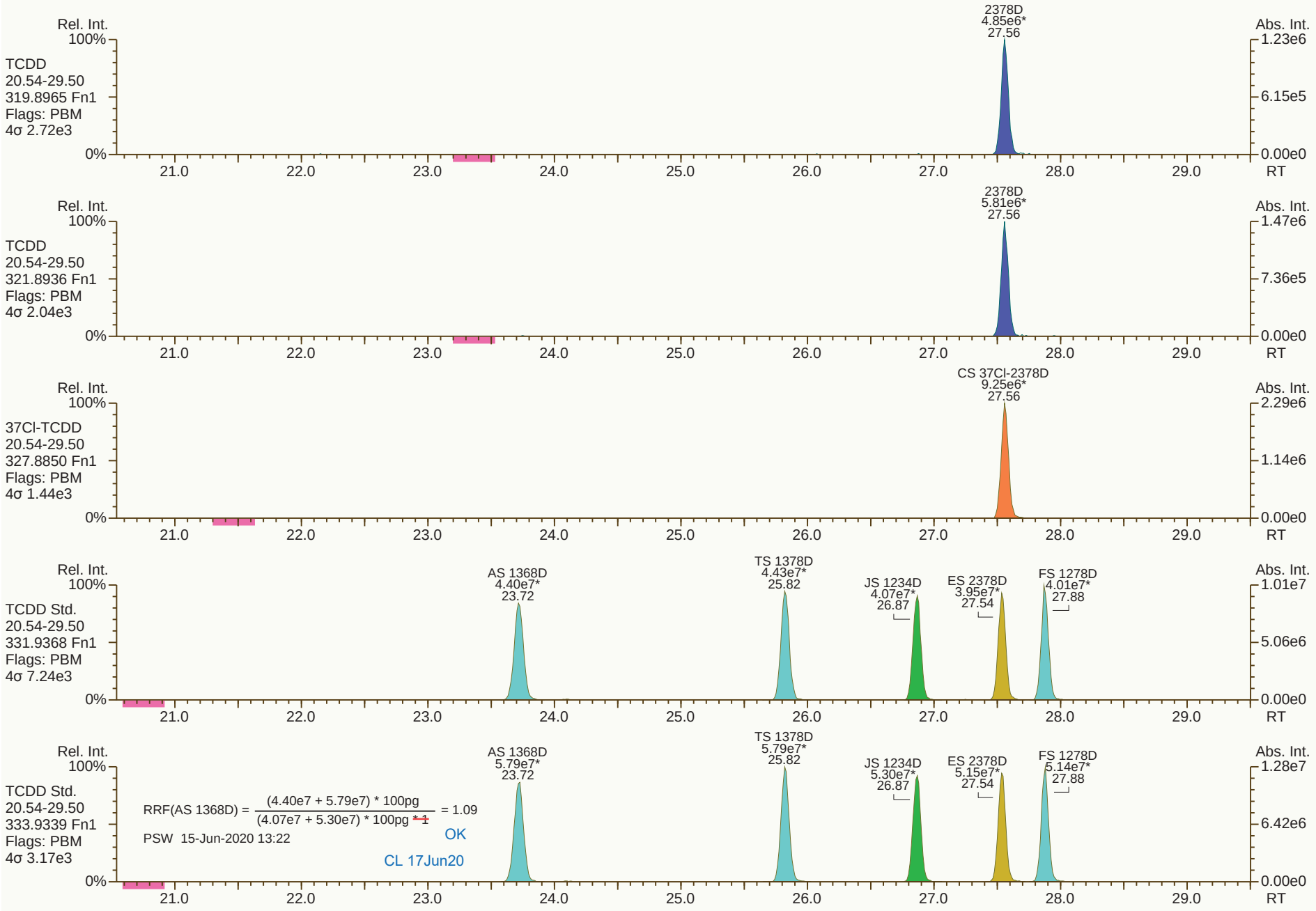
SGS ID: CS3_200612_DF_RB **Sample ID: SIL 20-449-3** **Acq: 12-Jun-2020 16:49:17**

Instr: [ILM] AutoSpec-Ultima MM3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 8** **User: PSW Datafile: 200612R06**

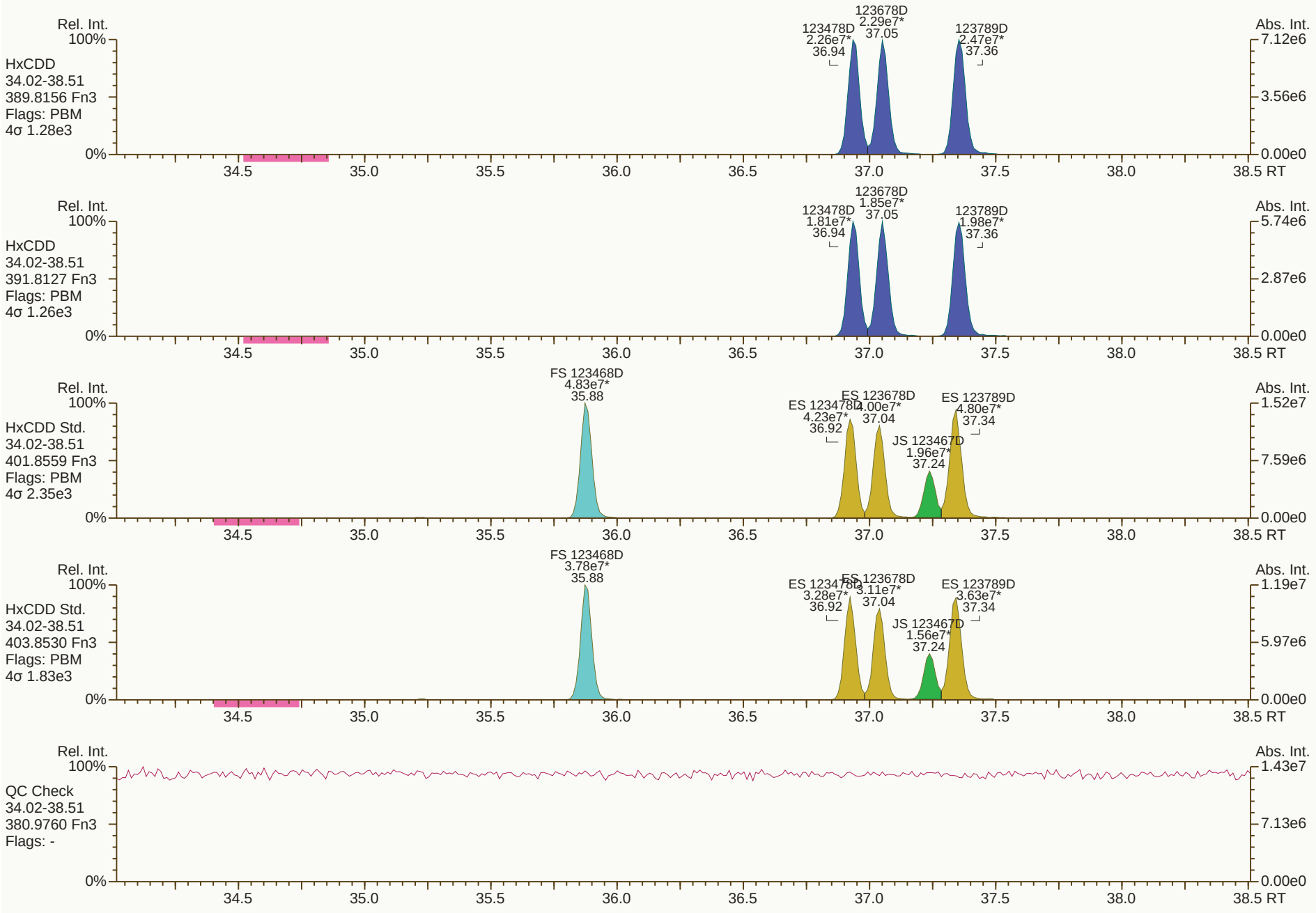


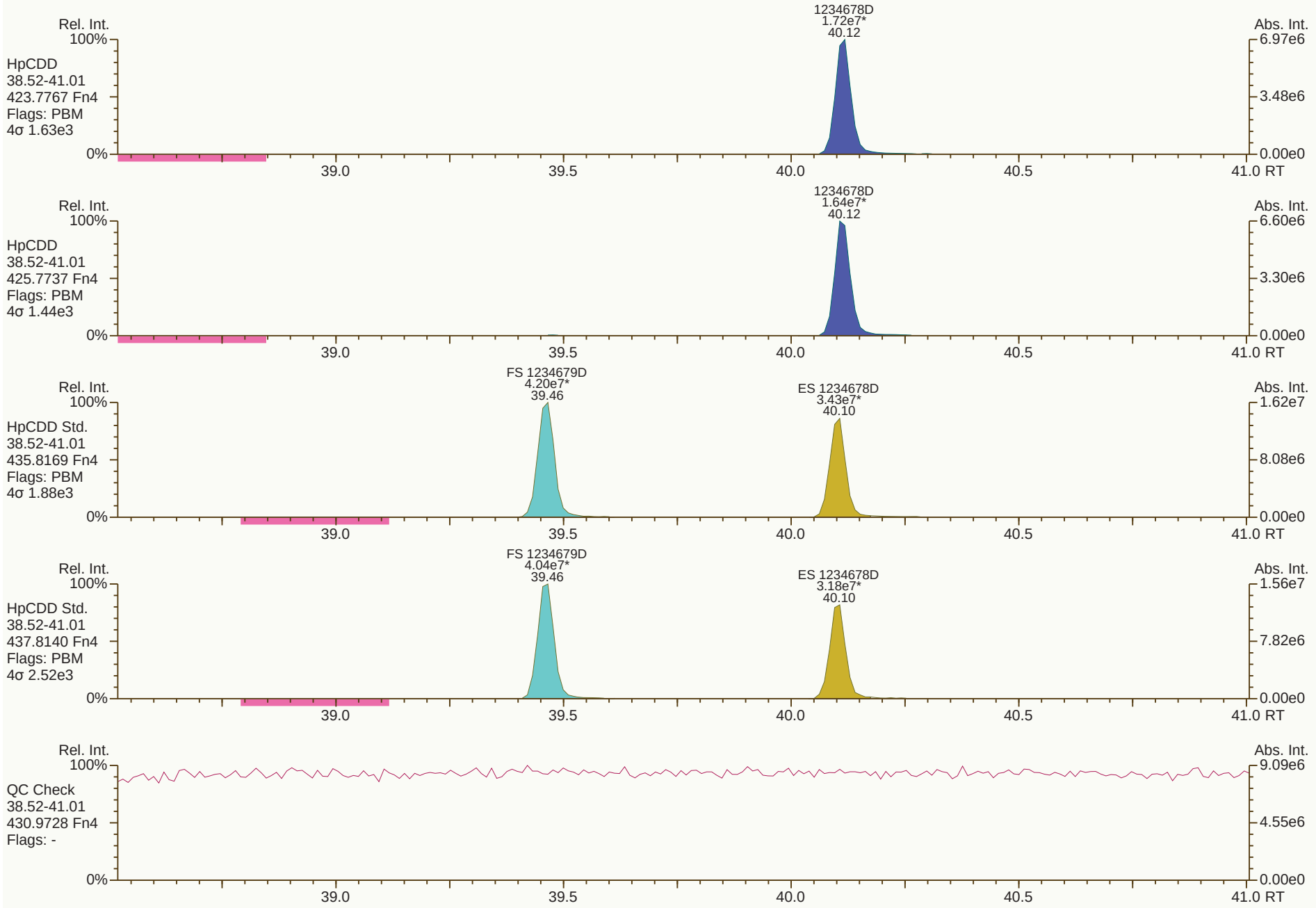
Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS3_200612_DF_RB.utp_res, saved 15-Jun-2020 13:24 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 scc: 726-607 *PKD: n/a Printed: 15-Jun-2020 13:39 Page 1 of 12*


Rel. Int.
100%
TCDD
20.54-29.50
319.8965 Fn1
Flags: PBM
4σ 2.72e3
0%
2378D
4.85e6*
27.56
Abs. Int.
1.23e6
6.15e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD
20.54-29.50
321.8936 Fn1
Flags: PBM
4σ 2.04e3
0%
2378D
5.81e6*
27.56
Abs. Int.
1.47e6
7.36e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
37Cl-TCDD
20.54-29.50
327.8850 Fn1
Flags: PBM
4σ 1.44e3
0%
CS 37Cl-2378D
9.25e6*
27.56
Abs. Int.
2.29e6
1.14e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
331.9368 Fn1
Flags: PBM
4σ 7.24e3
0%
AS 1368D
4.40e7*
23.72
TS 1378D
4.43e7*
25.82
JS 1234D
4.07e7*
26.87
ES 2378D
3.95e7*
27.54
FS 1278D
4.01e7*
27.88
Abs. Int.
1.01e7
5.06e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
333.9339 Fn1
Flags: PBM
4σ 3.17e3
0%
AS 1368D
5.79e7*
23.72
TS 1378D
5.79e7*
25.82
JS 1234D
5.30e7*
26.87
ES 2378D
5.15e7*
27.54
FS 1278D
5.14e7*
27.88
RRF(AS 1368D) = (4.40e7 + 5.79e7) * 100pg / (4.07e7 + 5.30e7) * 100pg * 1 = 1.09
PSW 15-Jun-2020 13:22
OK
CL 17Jun20
Abs. Int.
1.28e7
6.42e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
PeCDD
29.51-34.01
355.8546 Fn2
Flags: PBM
4σ 2.04e3
12378D
2.67e7*
33.04
Abs. Int.
7.86e6
3.93e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD
29.51-34.01
357.8517 Fn2
Flags: PBM
4σ 1.08e3
12378D
1.67e7*
33.04
Abs. Int.
5.04e6
2.52e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
367.8949 Fn2
Flags: PBM
4σ 3.18e3
FS 12478D
4.86e7*
31.78
CS 12347D
4.21e7*
32.52
ES 12378D
4.70e7*
33.02
Abs. Int.
1.46e7
7.29e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
369.8919 Fn2
Flags: PBM
4σ 2.19e3
FS 12478D
2.96e7*
31.78
CS 12347D
2.55e7*
32.52
ES 12378D
2.86e7*
33.02
Abs. Int.
8.69e6
4.34e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
QC Check
29.51-34.01
366.9792 Fn2
Flags: -
Abs. Int.
3.97e6
1.99e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT


Rel. Int.
100%
HxCDD
34.02-38.51
389.8156 Fn3
Flags: PBM
4σ 1.28e3
123478D
2.26e7*
36.94
123678D
2.29e7*
37.05
123789D
2.47e7*
37.36
Abs. Int.
7.12e6
3.56e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDD
34.02-38.51
391.8127 Fn3
Flags: PBM
4σ 1.26e3
123478D
1.81e7*
36.94
123678D
1.85e7*
37.05
123789D
1.98e7*
37.36
Abs. Int.
5.74e6
2.87e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDD Std.
34.02-38.51
401.8559 Fn3
Flags: PBM
4σ 2.35e3
FS 123468D
4.83e7*
35.88
ES 123478D
4.23e7*
36.92
ES 123678D
4.00e7*
37.04
JS 123467D
1.96e7*
37.24
ES 123789D
4.80e7*
37.34
Abs. Int.
1.52e7
7.59e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDD Std.
34.02-38.51
403.8530 Fn3
Flags: PBM
4σ 1.83e3
FS 123468D
3.78e7*
35.88
ES 123478D
3.28e7*
36.92
ES 123678D
3.11e7*
37.04
JS 123467D
1.56e7*
37.24
ES 123789D
3.63e7*
37.34
Abs. Int.
1.19e7
5.97e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
QC Check
34.02-38.51
380.9760 Fn3
Flags: -
Abs. Int.
1.43e7
7.13e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT

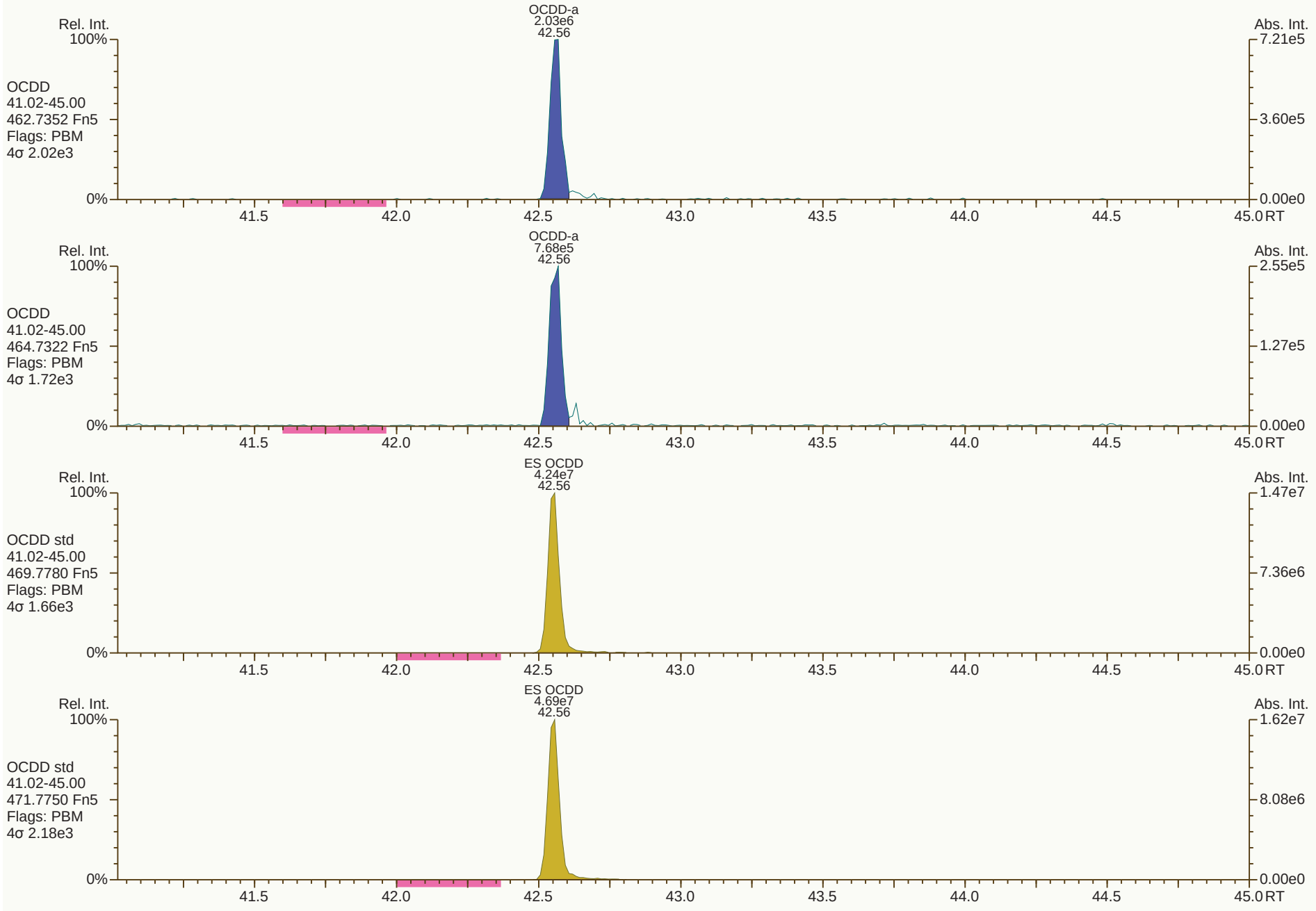

Rel. Int.
100%
HpCDD
38.52-41.01
423.7767 Fn4
Flags: PBM
4σ 1.63e3
0%
1234678D
1.72e7*
40.12
Abs. Int.
6.97e6
3.48e6
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.52-41.01
425.7737 Fn4
Flags: PBM
4σ 1.44e3
0%
1234678D
1.64e7*
40.12
Abs. Int.
6.60e6
3.30e6
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.52-41.01
435.8169 Fn4
Flags: PBM
4σ 1.88e3
0%
FS 1234679D
4.20e7*
39.46
ES 1234678D
3.43e7*
40.10
Abs. Int.
1.62e7
8.08e6
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.52-41.01
437.8140 Fn4
Flags: PBM
4σ 2.52e3
0%
FS 1234679D
4.04e7*
39.46
ES 1234678D
3.18e7*
40.10
Abs. Int.
1.56e7
7.82e6
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.52-41.01
430.9728 Fn4
Flags: -
0%
Abs. Int.
9.09e6
4.55e6
0.00e0
39.0
39.5
40.0
40.5
41.0 RT



Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS3_200612_DF_RB.utp_res, saved 15-Jun-2020 13:24 (PSW) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 8338, 8891 scc: 726-607 *PKD: 15-Jun-2020 08:10 Printed: 15-Jun-2020 13:39 Page 6 of 12*

SGS ID: CS3_200612_DF_RB | Sample ID: SIL 20-449-3 | Acq: 12-Jun-2020 16:49:17

Instr: [ILM] AutoSpec-Ultima MM3 | VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 8 | User: PSW Datafile: 200612R06



Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS3_200612_DF_RB.utp_res, saved 15-Jun-2020 13:24 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 7102, 8891 *Revised: 15-Jun-2020 11:50 (PSW) Printed: 17-Jun-2020 08:04*



Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS3_200612_DF_RB.utp_res, saved 15-Jun-2020 13:24 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 9865, 8100, 7479 scc: 726-607
PKD: 15-Jun-2020 08:10 Printed: 15-Jun-2020 13:39 Page 7 of 12

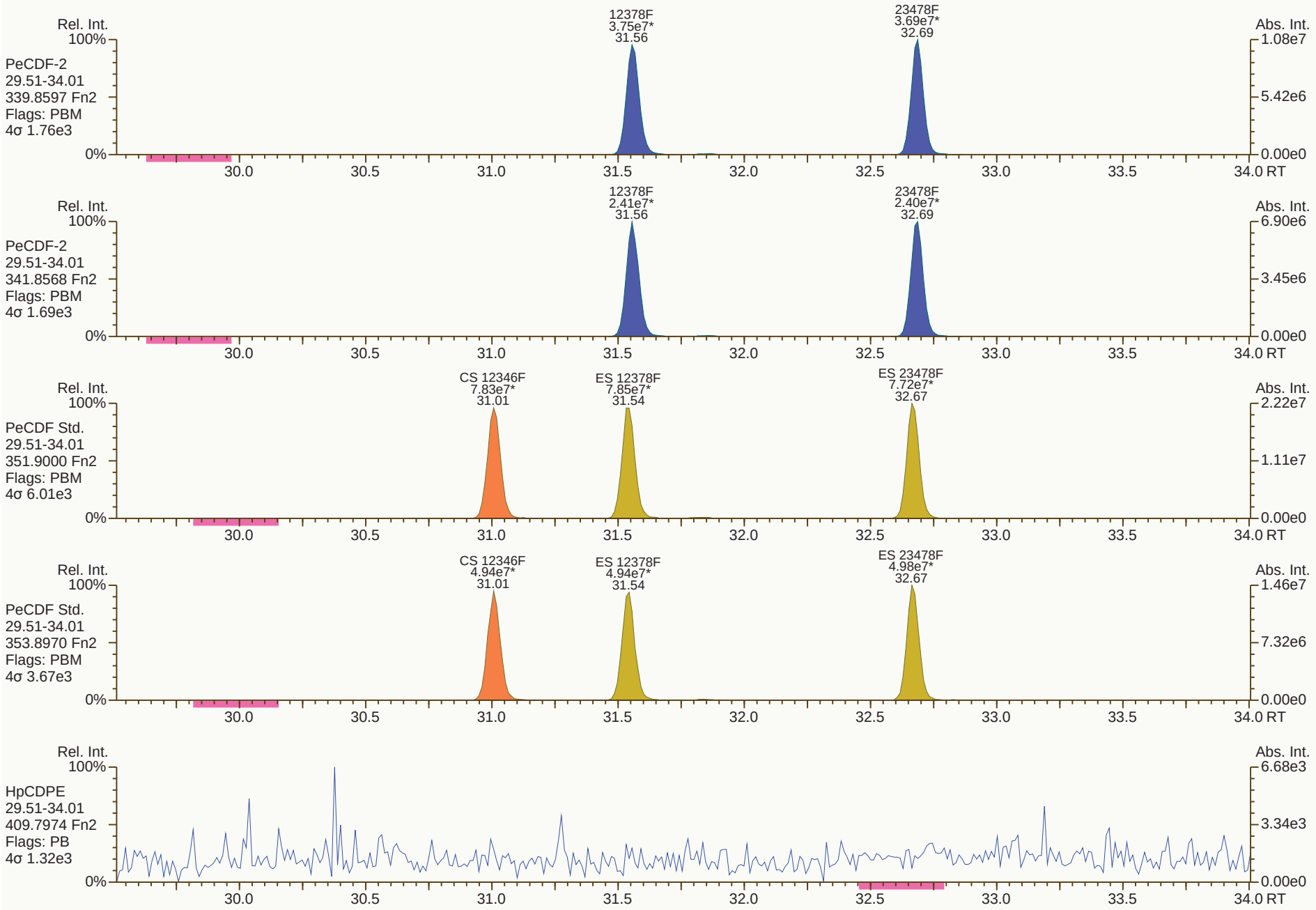
SGS ID: CS3_200612_DF_RB | **Sample ID: SIL 20-449-3** | **Acq: 12-Jun-2020 16:49:17**

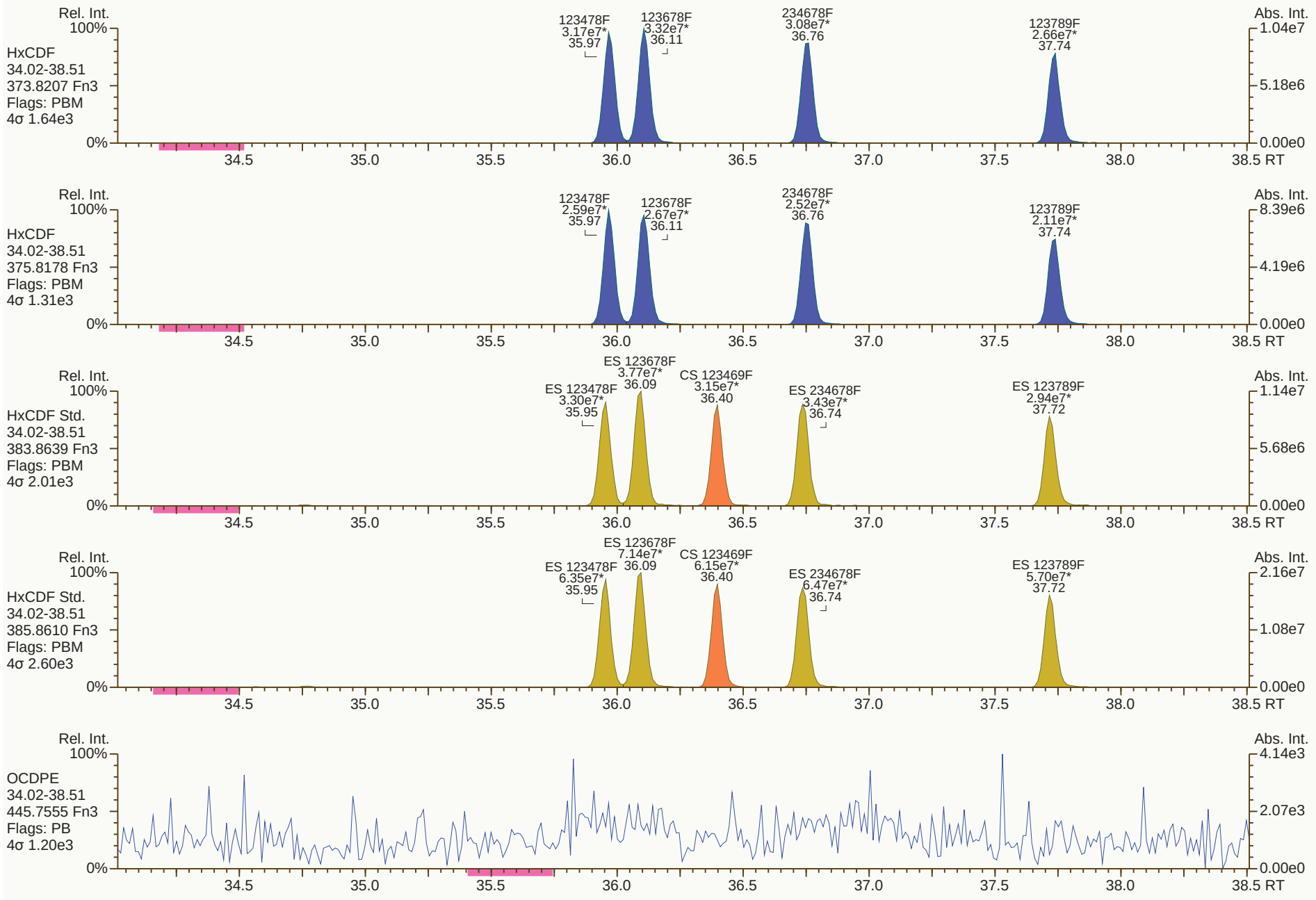
Instr: [ILM] AutoSpec-Ultima MM3 | **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 8** | **User: PSW Datafile: 200612R06**



Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS3_200612_DF_RB.utp_res, saved 15-Jun-2020 13:24 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 5332 scc: 726-607 *PKD: 15-Jun-2020 08:10 Printed: 15-Jun-2020 13:39 Page 8 of 12*

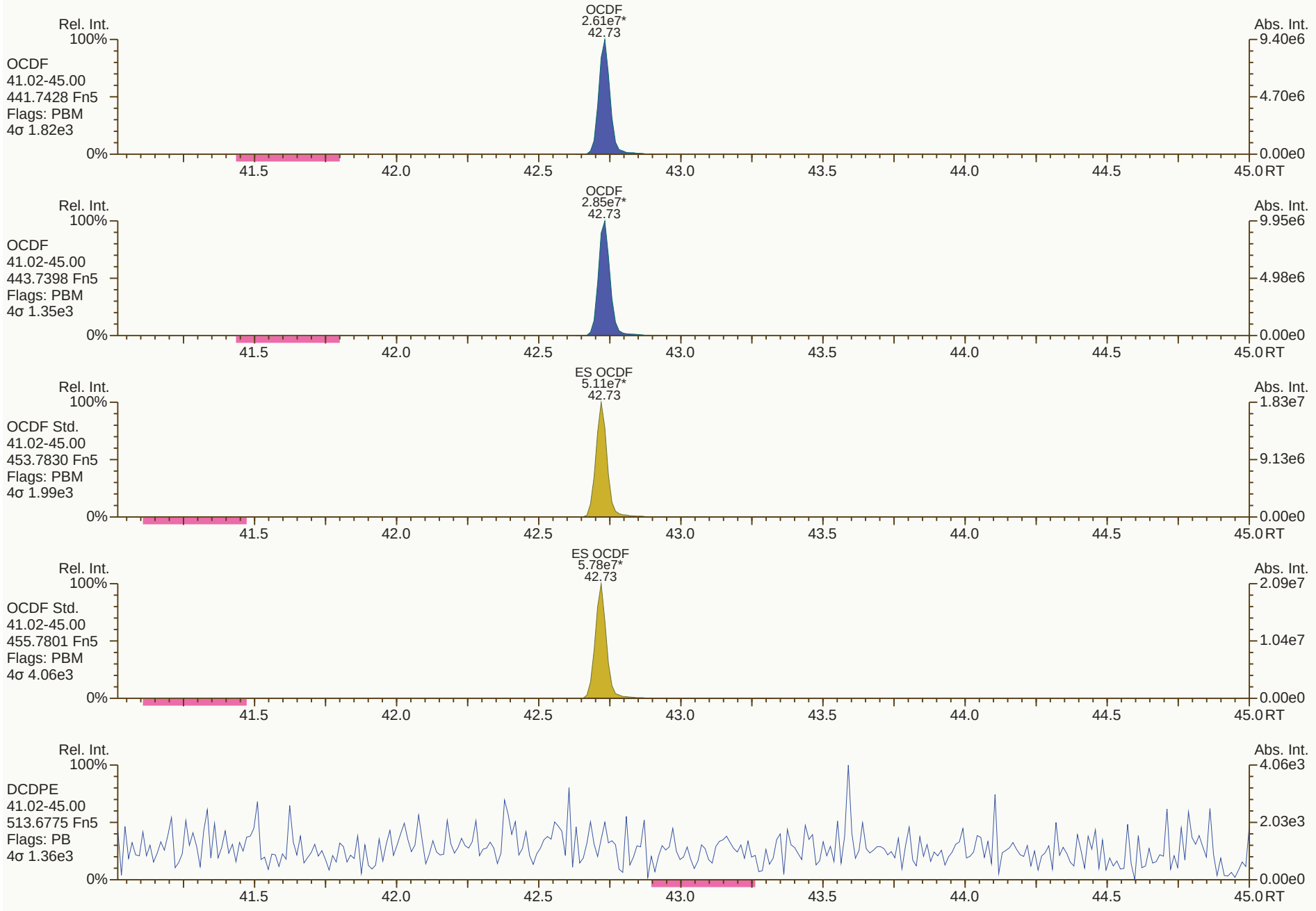

Rel. Int.
100%
PeCDF-2
29.51-34.01
339.8597 Fn2
Flags: PBM
4σ 1.76e3
0%
12378F
3.75e7*
31.56
23478F
3.69e7*
32.69
Abs. Int.
1.08e7
5.42e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF-2
29.51-34.01
341.8568 Fn2
Flags: PBM
4σ 1.69e3
0%
12378F
2.41e7*
31.56
23478F
2.40e7*
32.69
Abs. Int.
6.90e6
3.45e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
351.9000 Fn2
Flags: PBM
4σ 6.01e3
0%
CS 12346F
7.83e7*
31.01
ES 12378F
7.85e7*
31.54
ES 23478F
7.72e7*
32.67
Abs. Int.
2.22e7
1.11e7
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
353.8970 Fn2
Flags: PBM
4σ 3.67e3
0%
CS 12346F
4.94e7*
31.01
ES 12378F
4.94e7*
31.54
ES 23478F
4.98e7*
32.67
Abs. Int.
1.46e7
7.32e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
HpCDPE
29.51-34.01
409.7974 Fn2
Flags: PB
4σ 1.32e3
0%
Abs. Int.
6.68e3
3.34e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT


Rel. Int.
100%
HxCDF
34.02-38.51
373.8207 Fn3
Flags: PBM
4σ 1.64e3
0%
123478F
3.17e7*
35.97
123678F
3.32e7*
36.11
234678F
3.08e7*
36.76
123789F
2.66e7*
37.74
Abs. Int.
1.04e7
5.18e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDF
34.02-38.51
375.8178 Fn3
Flags: PBM
4σ 1.31e3
0%
123478F
2.59e7*
35.97
123678F
2.67e7*
36.11
234678F
2.52e7*
36.76
123789F
2.11e7*
37.74
Abs. Int.
8.39e6
4.19e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDF Std.
34.02-38.51
383.8639 Fn3
Flags: PBM
4σ 2.01e3
0%
ES 123478F
3.30e7*
35.95
ES 123678F
3.77e7*
36.09
CS 123469F
3.15e7*
36.40
ES 234678F
3.43e7*
36.74
ES 123789F
2.94e7*
37.72
Abs. Int.
1.14e7
5.68e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDF Std.
34.02-38.51
385.8610 Fn3
Flags: PBM
4σ 2.60e3
0%
ES 123478F
6.35e7*
35.95
ES 123678F
7.14e7*
36.09
CS 123469F
6.15e7*
36.40
ES 234678F
6.47e7*
36.74
ES 123789F
5.70e7*
37.72
Abs. Int.
2.16e7
1.08e7
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
OCDPE
34.02-38.51
445.7555 Fn3
Flags: PB
4σ 1.20e3
0%
Abs. Int.
4.14e3
2.07e3
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT

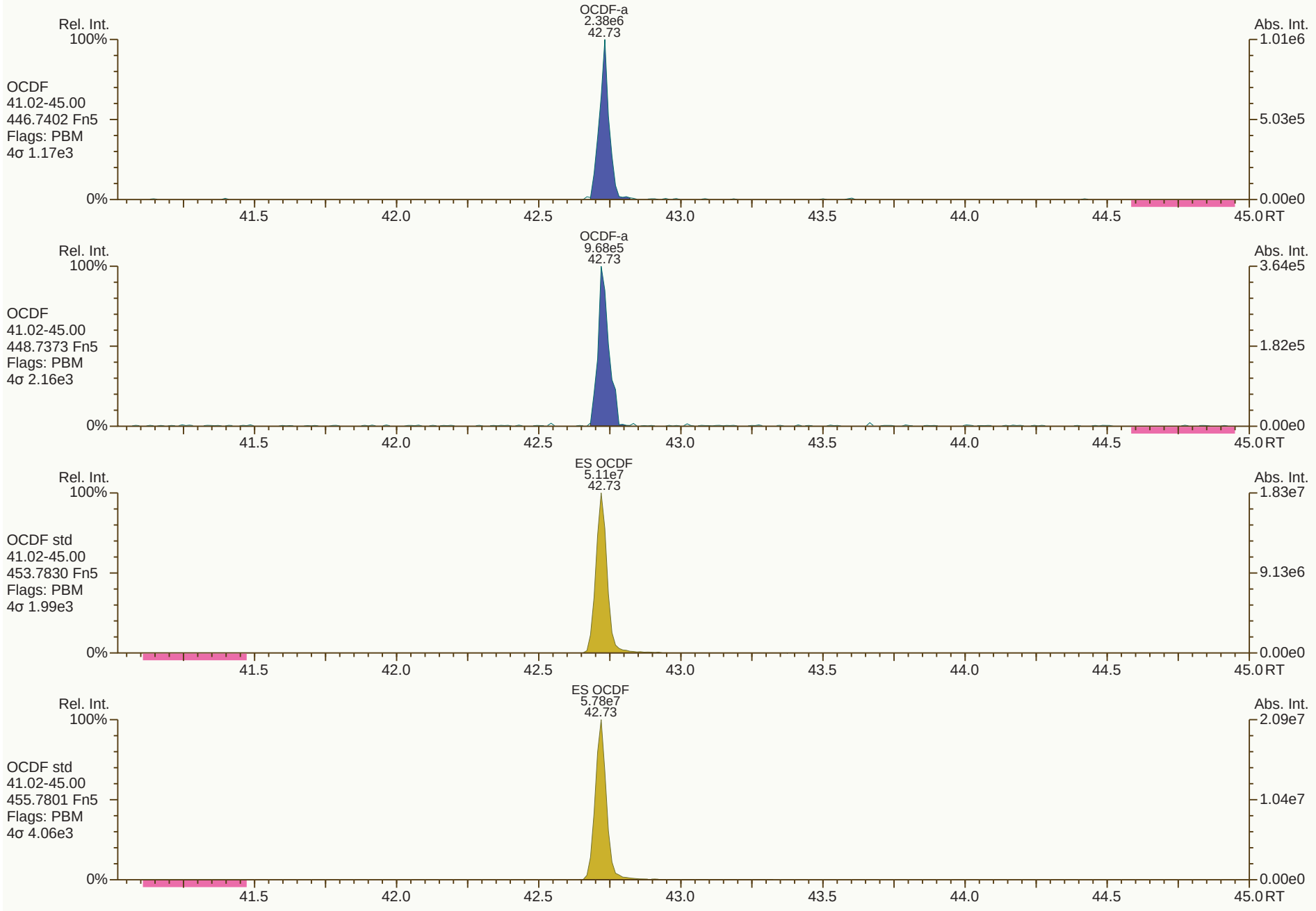


Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS3_200612_DF_RB.utp_res, saved 15-Jun-2020 13:24 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 3706, 2088, 7667 scc: 726-607 *PKD: 15-Jun-2020 08:10 Printed: 15-Jun-2020 13:39 Page 11 of 12*


OCDF
2.61e7*
42.73
Rel. Int.
Abs. Int.
OCDF
41.02-45.00
441.7428 Fn5
Flags: PBM
4σ 1.82e3
OCDF
2.85e7*
42.73
OCDF
41.02-45.00
443.7398 Fn5
Flags: PBM
4σ 1.35e3
ES OCDF
5.11e7*
42.73
OCDF Std.
41.02-45.00
453.7830 Fn5
Flags: PBM
4σ 1.99e3
ES OCDF
5.78e7*
42.73
OCDF Std.
41.02-45.00
455.7801 Fn5
Flags: PBM
4σ 4.06e3
DCDPE
41.02-45.00
513.6775 Fn5
Flags: PB
4σ 1.36e3
RT

SGS ID: CS3_200612_DF_RB
Sample ID: SIL 20-449-3
Acq: 12-Jun-2020 16:49:17
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 8
User: PSW Datafile: 200612R06



Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS3_200612_DF_RB.utp_res, saved 15-Jun-2020 13:24 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 2514, 6240
Revised: 15-Jun-2020 08:21 (PSW) Printed: 17-Jun-2020 08:04

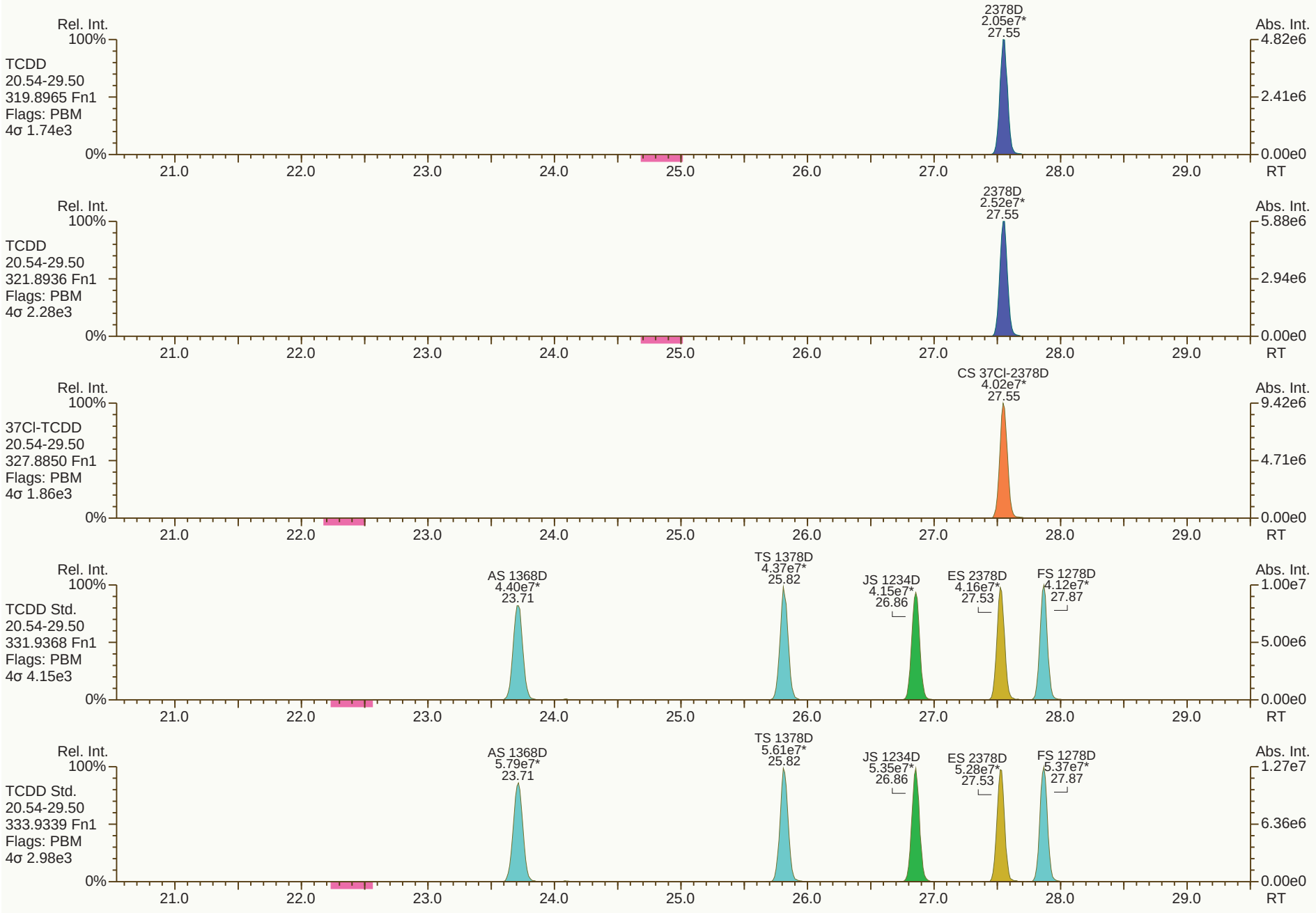
Dioxin/Furan QC Summary		Acq'd: 12 Jun 2020 17:36 PSW				ICAL: MM3_DF_10012020_12JUN2020	
Lab ID: CS4_200612_DF_RA		UTP: 15-Jun-2020 11:50:46 PSW				Checkcode: 711-420-WZT	
Sample ID: SIL 20-281-2		Report: 15 Jun 2020 11:54 pw				Datafile: 200612R07	
Name	**RT**	**Response**	**RA**	**OK**	**Ref. RRFs**	**Calc. RRFs**	**Dev'n**
2378-TCDD	27.55	4.57E+07	0.81	Y	1.18	1.21	3%
12378-PeCDD	33.03	1.89E+08	1.60	Y	1.14	1.17	3%
123478-HxCDD	36.93	1.77E+08	1.27	Y	1.09	1.09	0%
123678-HxCDD	37.04	1.79E+08	1.25	Y	1.13	1.13	0%
123789-HxCDD	37.35	1.91E+08	1.25	Y	1.05	1.06	1%
1234678-HpCDD	40.11	1.46E+08	1.05	Y	0.98	1.02	4%
OCDD	42.56	2.09E+08	0.89	Y	1.08	1.10	3%
2378-TCDF	26.64	6.34E+07	0.76	Y	0.98	1.01	3%
12378-PeCDF	31.55	2.69E+08	1.55	Y	0.95	0.97	3%
23478-PeCDF	32.68	2.64E+08	1.54	Y	0.95	0.96	1%
123478-HxCDF	35.96	2.51E+08	1.23	Y	1.20	1.21	1%
123678-HxCDF	36.10	2.58E+08	1.24	Y	1.07	1.10	3%
234678-HxCDF	36.74	2.42E+08	1.22	Y	1.10	1.11	2%
123789-HxCDF	37.73	2.09E+08	1.25	Y	1.09	1.13	3%
1234678-HpCDF	39.20	2.19E+08	1.04	Y	1.28	1.30	2%
1234789-HpCDF	40.53	1.70E+08	1.03	Y	1.27	1.29	2%
OCDF	42.72	2.40E+08	0.90	Y	1.01	1.05	4%
ES 2378-TCDD	27.53	9.44E+07	0.79	Y	1.01	0.99	-1%
ES 12378-PeCDD	33.01	8.06E+07	1.65	Y	0.87	0.85	-2%
ES 123478-HxCDD	36.91	8.16E+07	1.33	Y	1.10	1.10	1%
ES 123678-HxCDD	37.03	7.97E+07	1.30	Y	1.06	1.08	2%
ES 123789-HxCDD	37.33	8.98E+07	1.27	Y	1.22	1.21	0%
ES 1234678-HpCDD	40.09	7.16E+07	1.05	Y	0.99	0.97	-3%
ES OCDD	42.54	9.48E+07	0.92	Y	0.67	0.64	-4%
ES 2378-TCDF	26.62	1.57E+08	0.81	Y	1.01	1.02	0%
ES 12378-PeCDF	31.53	1.38E+08	1.56	Y	0.90	0.90	-1%
ES 23478-PeCDF	32.66	1.38E+08	1.56	Y	0.89	0.89	0%
ES 123478-HxCDF	35.94	1.04E+08	0.53	Y	1.43	1.40	-2%
ES 123678-HxCDF	36.08	1.17E+08	0.53	Y	1.63	1.59	-3%
ES 234678-HxCDF	36.73	1.09E+08	0.53	Y	1.48	1.47	-1%
ES 123789-HxCDF	37.71	9.28E+07	0.52	Y	1.29	1.25	-3%
ES 1234678-HpCDF	39.19	8.43E+07	0.45	Y	1.15	1.14	-1%
ES 1234789-HpCDF	40.52	6.56E+07	0.44	Y	0.91	0.89	-2%
ES OCDF	42.71	1.14E+08	0.90	Y	0.83	0.77	-7%

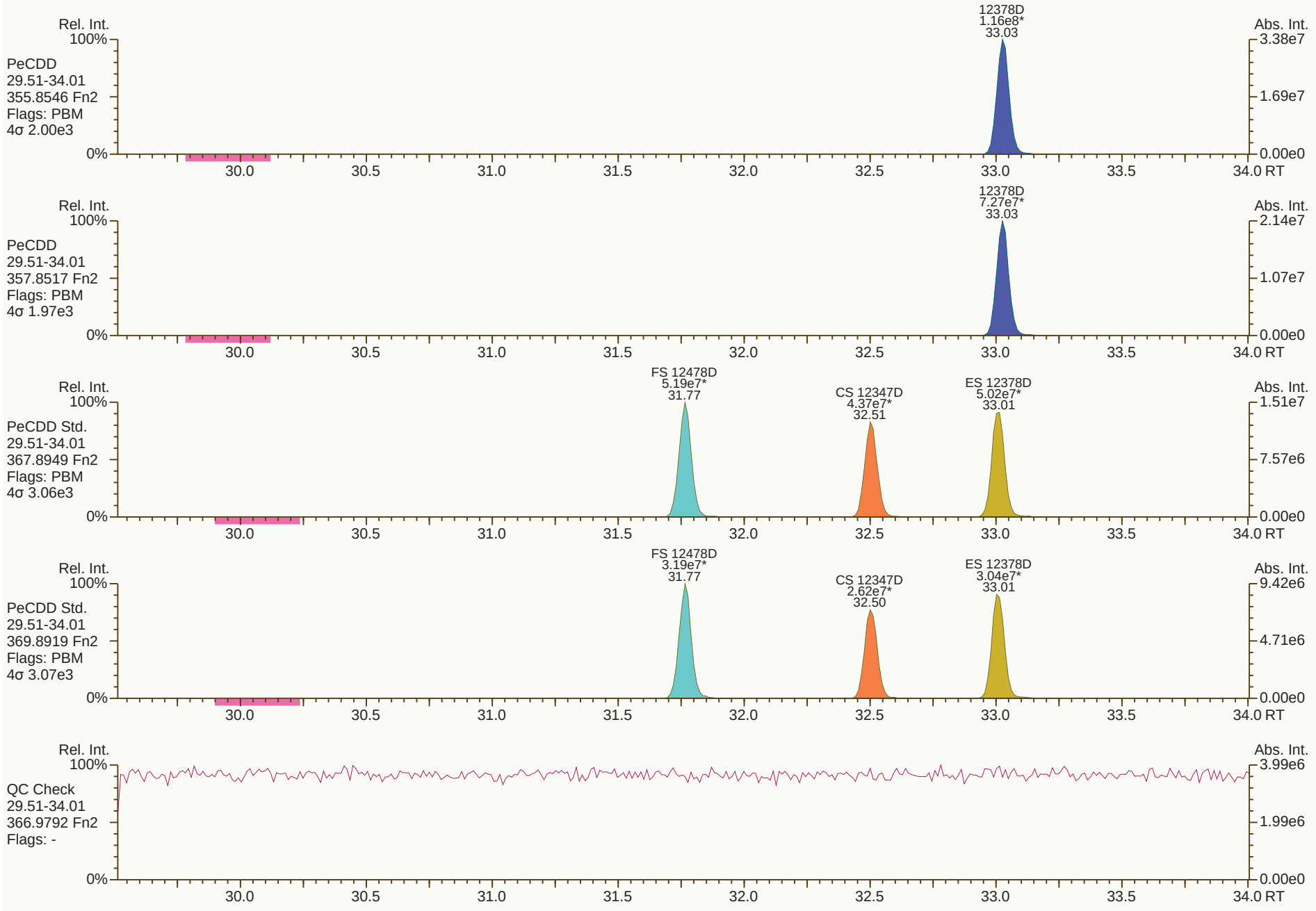
Dioxin/Furan QC Summary	Acq'd: 12 Jun 2020 17:36 PSW	ICAL: MM3_DF_10012020_12JUN2020
Lab ID: CS4_200612_DF_RA	UTP: 15-Jun-2020 11:50:46 PSW	Checkcode: 711-420-WZT
Sample ID: SIL 20-281-2	Report: 15 Jun 2020 11:54 pw	Datafile: 200612R07

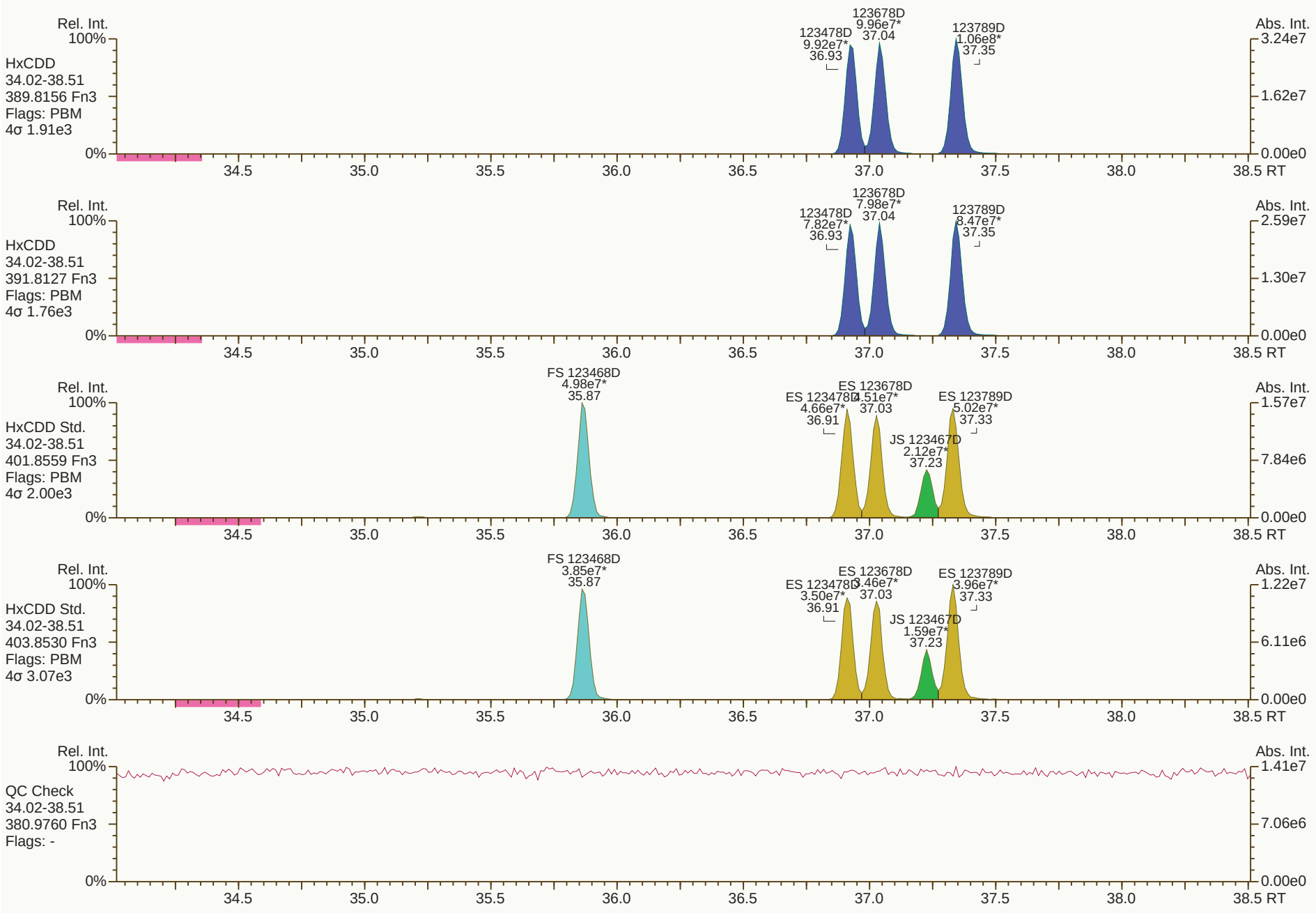
Name	RT	Response	RA	OK	Ref. RRFs	Calc. RRFs	Dev'n
JS 1234-TCDD	26.86	9.50E+07	0.78	Y	-	-	-
JS 1234-TCDF	25.22	1.54E+08	0.79	Y	-	-	-
JS 123467-HxCDD	37.23	3.70E+07	1.34	Y	-	-	-
CS 37Cl-2378-TCDD	27.55	4.02E+07	n/a	-	1.04	1.06	2%
CS 12347-PeCDD	32.51	6.98E+07	1.67	Y	0.74	0.74	-1%
CS 12346-PeCDF	31.00	1.34E+08	1.56	Y	0.86	0.87	1%
CS 123469-HxCDF	36.39	9.83E+07	0.52	Y	1.36	1.33	-2%
CS 1234689-HpCDF	39.59	7.71E+07	0.44	Y	1.05	1.04	-1%
SS 37Cl-2378-TCDD	27.55	4.02E+07	n/a	-	1.04	1.06	3%
SS 12347-PeCDD	32.51	6.98E+07	1.67	Y	0.86	0.87	1%
SS 12346-PeCDF	31.00	1.34E+08	1.56	Y	0.96	0.97	1%
SS 123469-HxCDF	36.39	9.83E+07	0.52	Y	0.83	0.84	0%
SS 1234689-HpCDF	39.59	7.71E+07	0.44	Y	0.92	0.91	-1%
AS 1368-TCDD	23.71	1.02E+08	0.76	Y	1.08	1.07	0%
AS 1368-TCDF	21.50	1.82E+08	0.80	Y	1.18	1.18	0%
FS 1278-TCDD	27.87	9.49E+07	0.77	Y	1.00	1.00	1%
FS 12478-PeCDD	31.77	8.39E+07	1.63	Y	1.00	1.04	4%
FS 123468-HxCDD	35.87	8.84E+07	1.29	Y	1.11	1.08	-2%
FS 1234679-HpCDD	39.45	8.59E+07	1.06	Y	1.19	1.20	1%
TS 1378-TCDD	25.82	9.98E+07	0.78	Y	1.06	1.06	0%
OCDD-a	42.55	1.29E+07	2.43	Y	0.07	0.07	-3%
OCDF-a	42.72	1.39E+07	2.38	Y	0.06	0.06	4%

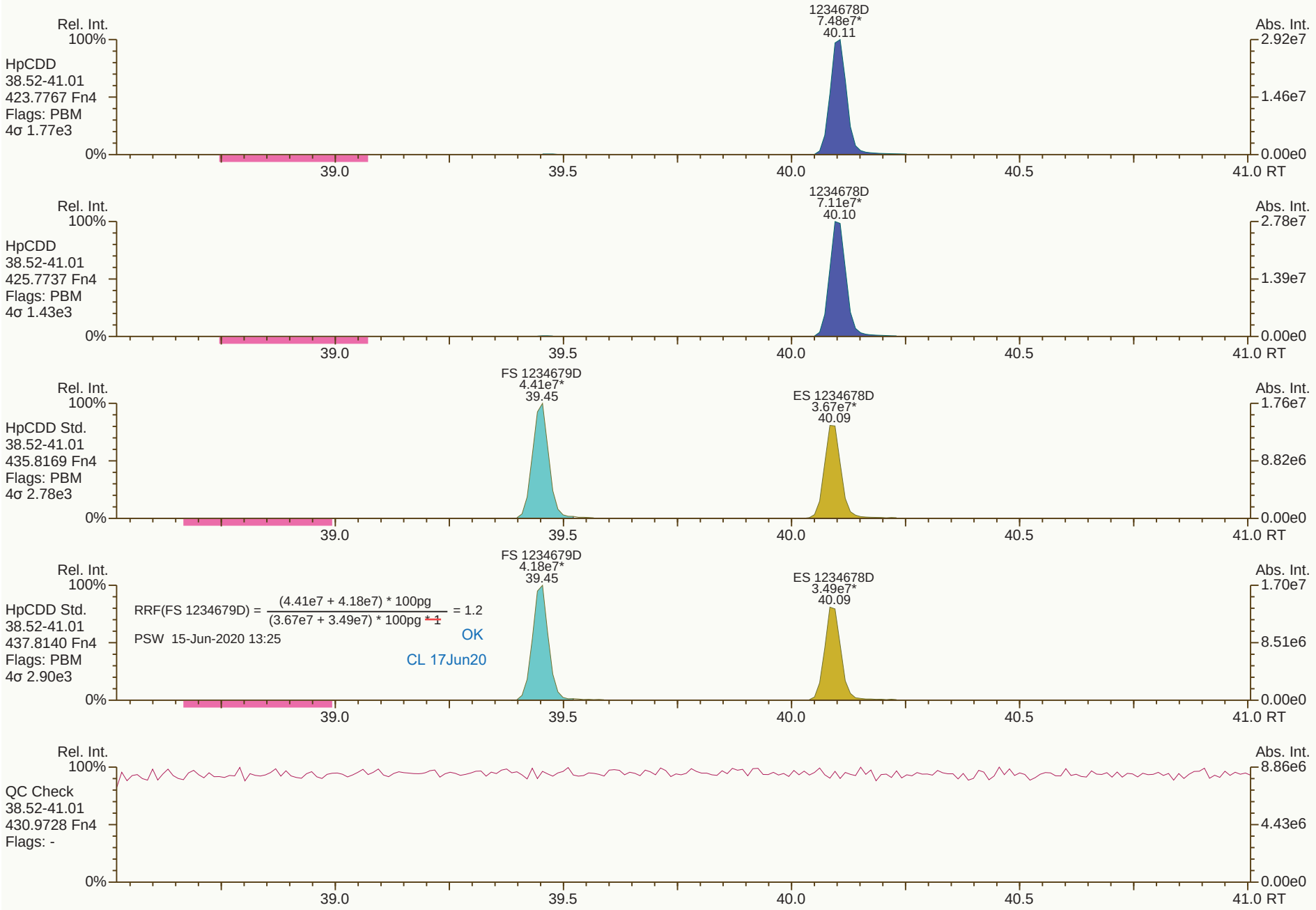


Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS4_200612_DF_RA.utp_res, saved 15-Jun-2020 13:27 (PSW) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 scc: 711-420 *PKD: n/a Printed: 15-Jun-2020 13:39 Page 1 of 12*

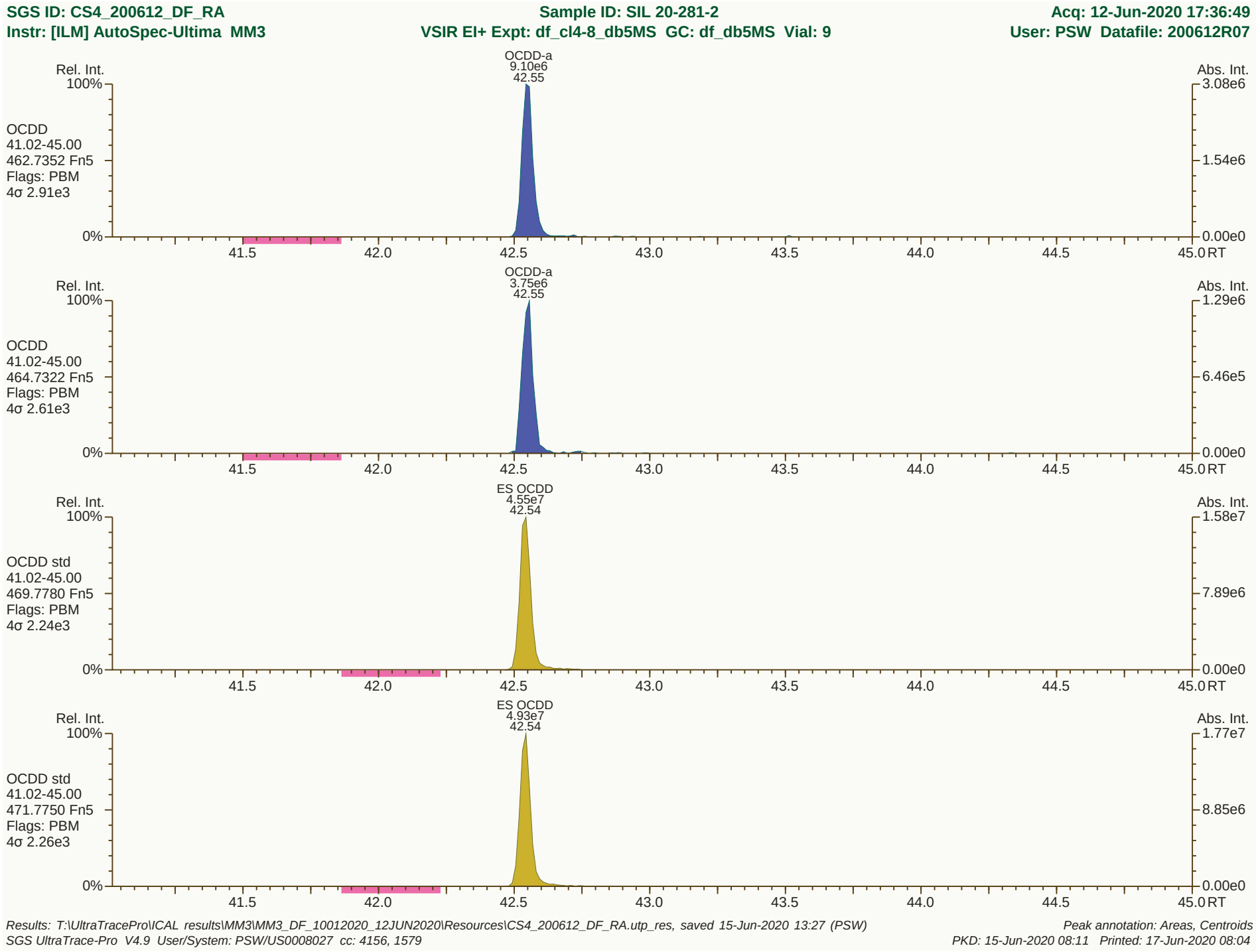

Rel. Int.
100%
TCDD
20.54-29.50
319.8965 Fn1
Flags: PBM
4σ 1.74e3
0%
2378D
2.05e7*
27.55
Abs. Int.
4.82e6
2.41e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD
20.54-29.50
321.8936 Fn1
Flags: PBM
4σ 2.28e3
0%
2378D
2.52e7*
27.55
Abs. Int.
5.88e6
2.94e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
37Cl-TCDD
20.54-29.50
327.8850 Fn1
Flags: PBM
4σ 1.86e3
0%
CS 37Cl-2378D
4.02e7*
27.55
Abs. Int.
9.42e6
4.71e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
331.9368 Fn1
Flags: PBM
4σ 4.15e3
0%
AS 1368D
4.40e7*
23.71
TS 1378D
4.37e7*
25.82
JS 1234D
4.15e7*
26.86
ES 2378D
4.16e7*
27.53
FS 1278D
4.12e7*
27.87
Abs. Int.
1.00e7
5.00e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
333.9339 Fn1
Flags: PBM
4σ 2.98e3
0%
AS 1368D
5.79e7*
23.71
TS 1378D
5.61e7*
25.82
JS 1234D
5.35e7*
26.86
ES 2378D
5.28e7*
27.53
FS 1278D
5.37e7*
27.87
Abs. Int.
1.27e7
6.36e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
PeCDD
29.51-34.01
355.8546 Fn2
Flags: PBM
4σ 2.00e3
0%
12378D
1.16e8*
33.03
Abs. Int.
3.38e7
1.69e7
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD
29.51-34.01
357.8517 Fn2
Flags: PBM
4σ 1.97e3
0%
12378D
7.27e7*
33.03
Abs. Int.
2.14e7
1.07e7
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
367.8949 Fn2
Flags: PBM
4σ 3.06e3
0%
FS 12478D
5.19e7*
31.77
CS 12347D
4.37e7*
32.51
ES 12378D
5.02e7*
33.01
Abs. Int.
1.51e7
7.57e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
369.8919 Fn2
Flags: PBM
4σ 3.07e3
0%
FS 12478D
3.19e7*
31.77
CS 12347D
2.62e7*
32.50
ES 12378D
3.04e7*
33.01
Abs. Int.
9.42e6
4.71e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
QC Check
29.51-34.01
366.9792 Fn2
Flags: -
0%
Abs. Int.
3.99e6
1.99e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT


Rel. Int.
100%
HxCDD
34.02-38.51
389.8156 Fn3
Flags: PBM
4σ 1.91e3
123678D
9.96e7*
37.04
123478D
9.92e7*
36.93
123789D
1.06e8*
37.35
Abs. Int.
3.24e7
1.62e7
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDD
34.02-38.51
391.8127 Fn3
Flags: PBM
4σ 1.76e3
123678D
7.98e7*
37.04
123478D
7.82e7*
36.93
123789D
8.47e7*
37.35
Abs. Int.
2.59e7
1.30e7
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDD Std.
34.02-38.51
401.8559 Fn3
Flags: PBM
4σ 2.00e3
FS 123468D
4.98e7*
35.87
ES 123678D
4.51e7*
37.03
ES 123478D
4.66e7*
36.91
ES 123789D
5.02e7*
37.33
JS 123467D
2.12e7*
37.23
Abs. Int.
1.57e7
7.84e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDD Std.
34.02-38.51
403.8530 Fn3
Flags: PBM
4σ 3.07e3
FS 123468D
3.85e7*
35.87
ES 123678D
3.46e7*
37.03
ES 123478D
3.50e7*
36.91
ES 123789D
3.96e7*
37.33
JS 123467D
1.59e7*
37.23
Abs. Int.
1.22e7
6.11e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
QC Check
34.02-38.51
380.9760 Fn3
Flags: -
Abs. Int.
1.41e7
7.06e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT

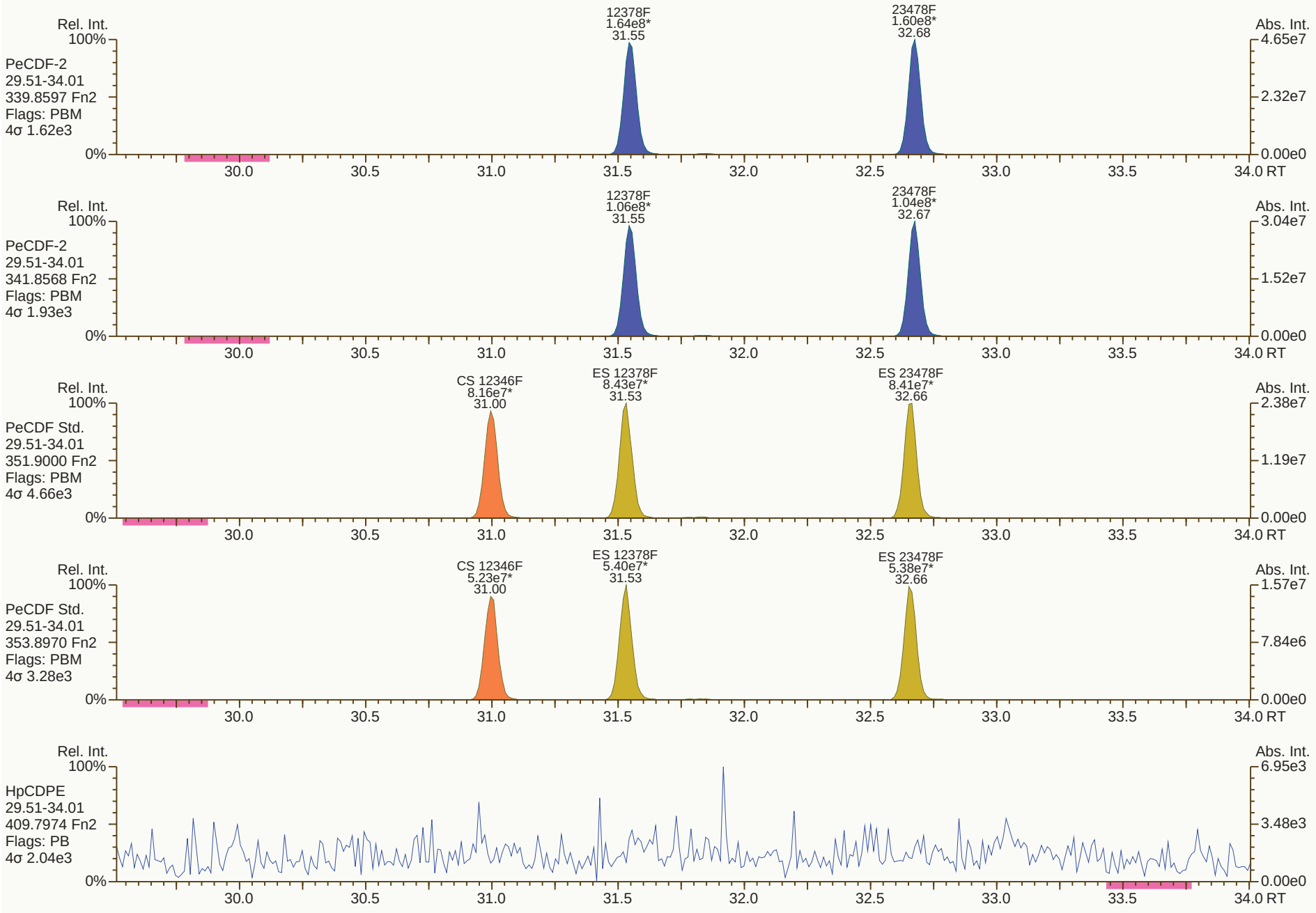

Rel. Int.
100%
HpCDD
38.52-41.01
423.7767 Fn4
Flags: PBM
4σ 1.77e3
1234678D
7.48e7*
40.11
Abs. Int.
2.92e7
1.46e7
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.52-41.01
425.7737 Fn4
Flags: PBM
4σ 1.43e3
1234678D
7.11e7*
40.10
Abs. Int.
2.78e7
1.39e7
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.52-41.01
435.8169 Fn4
Flags: PBM
4σ 2.78e3
FS 1234679D
4.41e7*
39.45
ES 1234678D
3.67e7*
40.09
Abs. Int.
1.76e7
8.82e6
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.52-41.01
437.8140 Fn4
Flags: PBM
4σ 2.90e3
RRF(FS 1234679D) = (4.41e7 + 4.18e7) * 100pg / (3.67e7 + 3.49e7) * 100pg * 1 = 1.2
PSW 15-Jun-2020 13:25
OK
CL 17Jun20
FS 1234679D
4.18e7*
39.45
ES 1234678D
3.49e7*
40.09
Abs. Int.
1.70e7
8.51e6
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.52-41.01
430.9728 Fn4
Flags: -
Abs. Int.
8.86e6
4.43e6
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT


OCDD
9.83e7*
42.56
Rel. Int.
100%
OCDD
41.02-45.00
457.7377 Fn5
Flags: PBM
4σ 1.89e3
0%
Abs. Int.
3.51e7
1.75e7
0.00e0
RRF(OCDD) = (9.83e7 + 1.11e8) * 200pg / (4.55e7 + 4.93e7) * 400pg * 1 = 1.1
PSW 15-Jun-2020 13:26
OK
CL 17Jun20
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDD
1.11e8*
42.55
Rel. Int.
100%
OCDD
41.02-45.00
459.7348 Fn5
Flags: PBM
4σ 1.52e3
0%
Abs. Int.
3.84e7
1.92e7
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
4.55e7*
42.54
Rel. Int.
100%
OCDD Std.
41.02-45.00
469.7780 Fn5
Flags: PBM
4σ 2.24e3
0%
Abs. Int.
1.58e7
7.89e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
4.93e7*
42.54
Rel. Int.
100%
OCDD Std.
41.02-45.00
471.7750 Fn5
Flags: PBM
4σ 2.26e3
0%
Abs. Int.
1.77e7
8.85e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
8.14e6
4.07e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

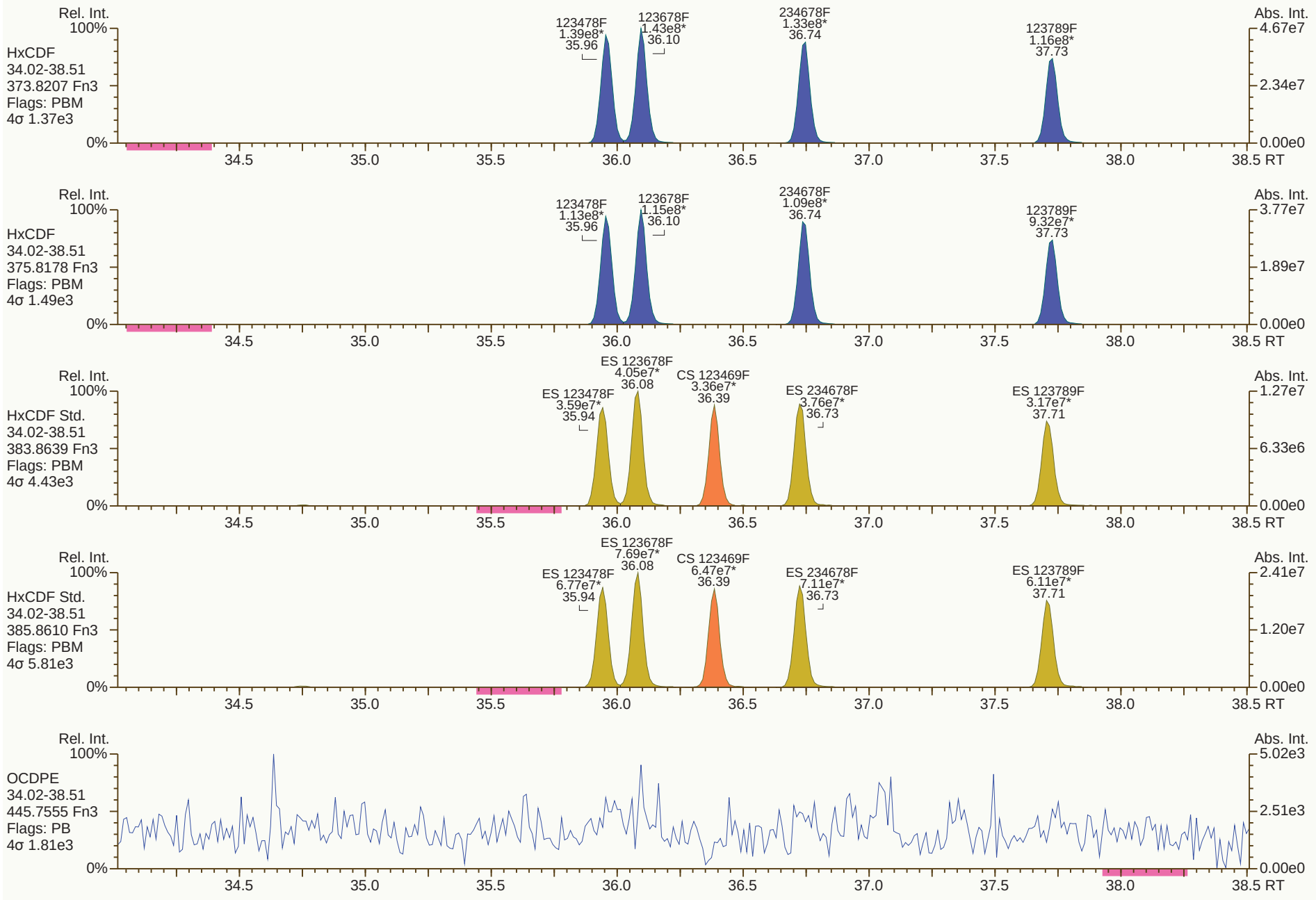

SGS ID: CS4_200612_DF_RA
Sample ID: SIL 20-281-2
Acq: 12-Jun-2020 17:36:49
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 9
User: PSW Datafile: 200612R07
OCDD-a
9.10e6
42.55
Rel. Int.
Abs. Int.
OCDD
41.02-45.00
462.7352 Fn5
Flags: PBM
4σ 2.91e3
OCDD-a
3.75e6
42.55
OCDD
41.02-45.00
464.7322 Fn5
Flags: PBM
4σ 2.61e3
ES OCDD
4.55e7
42.54
OCDD std
41.02-45.00
469.7780 Fn5
Flags: PBM
4σ 2.24e3
ES OCDD
4.93e7
42.54
OCDD std
41.02-45.00
471.7750 Fn5
Flags: PBM
4σ 2.26e3
RT
Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS4_200612_DF_RA.utp_res, saved 15-Jun-2020 13:27 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 4156, 1579
PKD: 15-Jun-2020 08:11 Printed: 17-Jun-2020 08:04

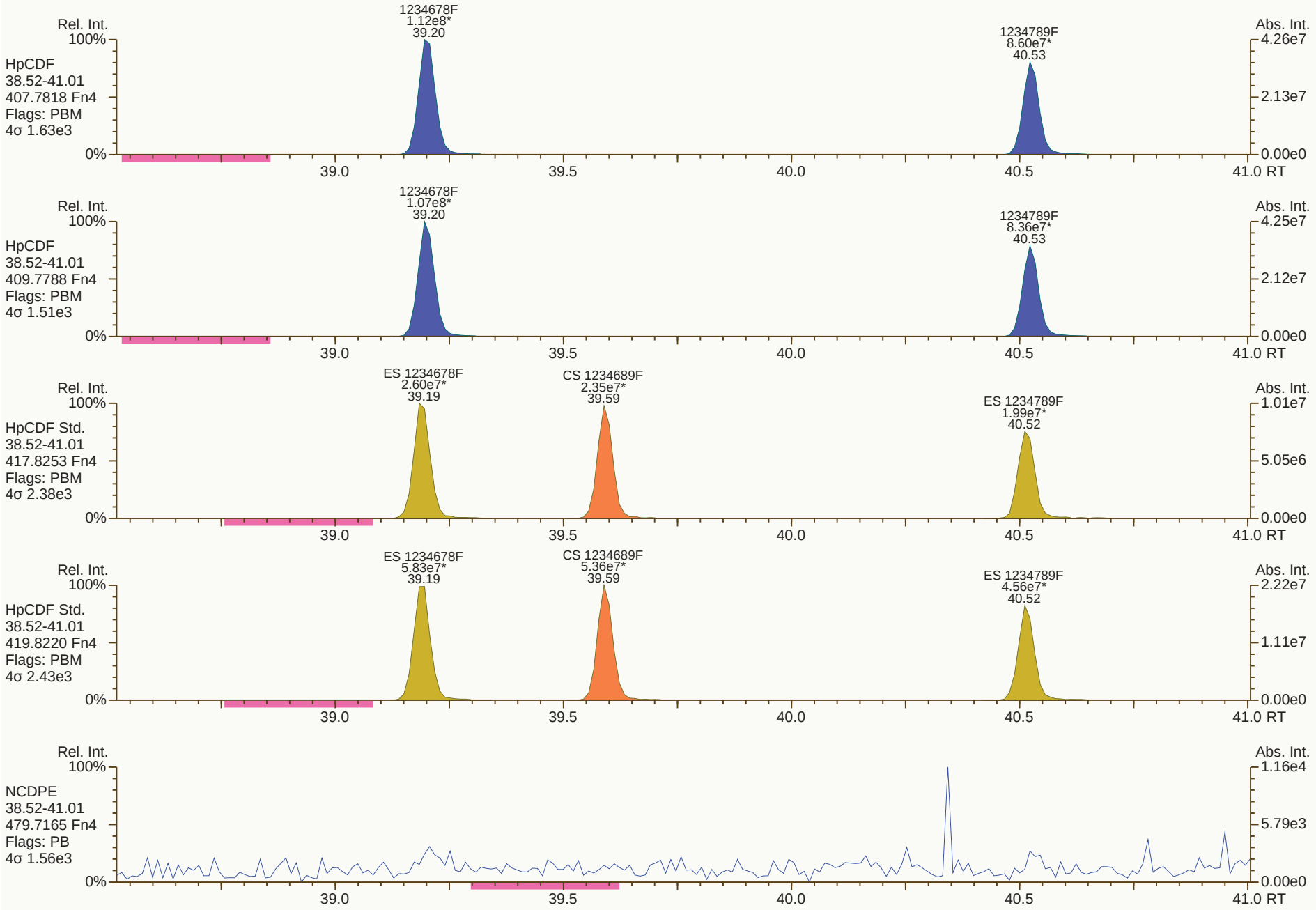

Rel. Int.
100%
TCDF
20.54-29.50
303.9016 Fn1
Flags: PBM
4σ 1.86e3
0%
2378F
2.75e7*
26.64
Abs. Int.
6.26e6
3.13e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF
20.54-29.50
305.8987 Fn1
Flags: PBM
4σ 1.09e3
0%
2378F
3.59e7*
26.64
Abs. Int.
8.11e6
4.05e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
315.9419 Fn1
Flags: PBM
4σ 1.31e4
0%
AS 1368F
8.09e7*
21.50
JS 1234F
6.82e7*
25.22
ES 2378F
7.02e7*
26.62
Abs. Int.
1.62e7
8.09e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
317.9389 Fn1
Flags: PBM
4σ 1.46e4
0%
AS 1368F
1.01e8*
21.49
JS 1234F
8.61e7*
25.21
ES 2378F
8.69e7*
26.62
Abs. Int.
2.06e7
1.03e7
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
HxCDPE
20.54-29.50
375.8364 Fn1
Flags: PB
4σ 1.71e3
0%
Abs. Int.
4.98e3
2.49e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
0%
Abs. Int.
1.08e4
5.41e3
0.00e0
PeCDF-1
20.54-29.50
339.8597 Fn1
Flags: PB
4σ 1.90e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
0%
Abs. Int.
9.38e3
4.69e3
0.00e0
PeCDF-1
20.54-29.50
341.8568 Fn1
Flags: PB
4σ 1.83e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
0%
Abs. Int.
5.18e6
2.59e6
0.00e0
QC Check
20.54-29.50
316.9824 Fn1
Flags: -
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT



Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS4_200612_DF_RA.utp_res, saved 15-Jun-2020 13:27 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 6501, 0700, 9881 scc: 711-420
PKD: 15-Jun-2020 08:11 Printed: 15-Jun-2020 13:40 Page 9 of 12

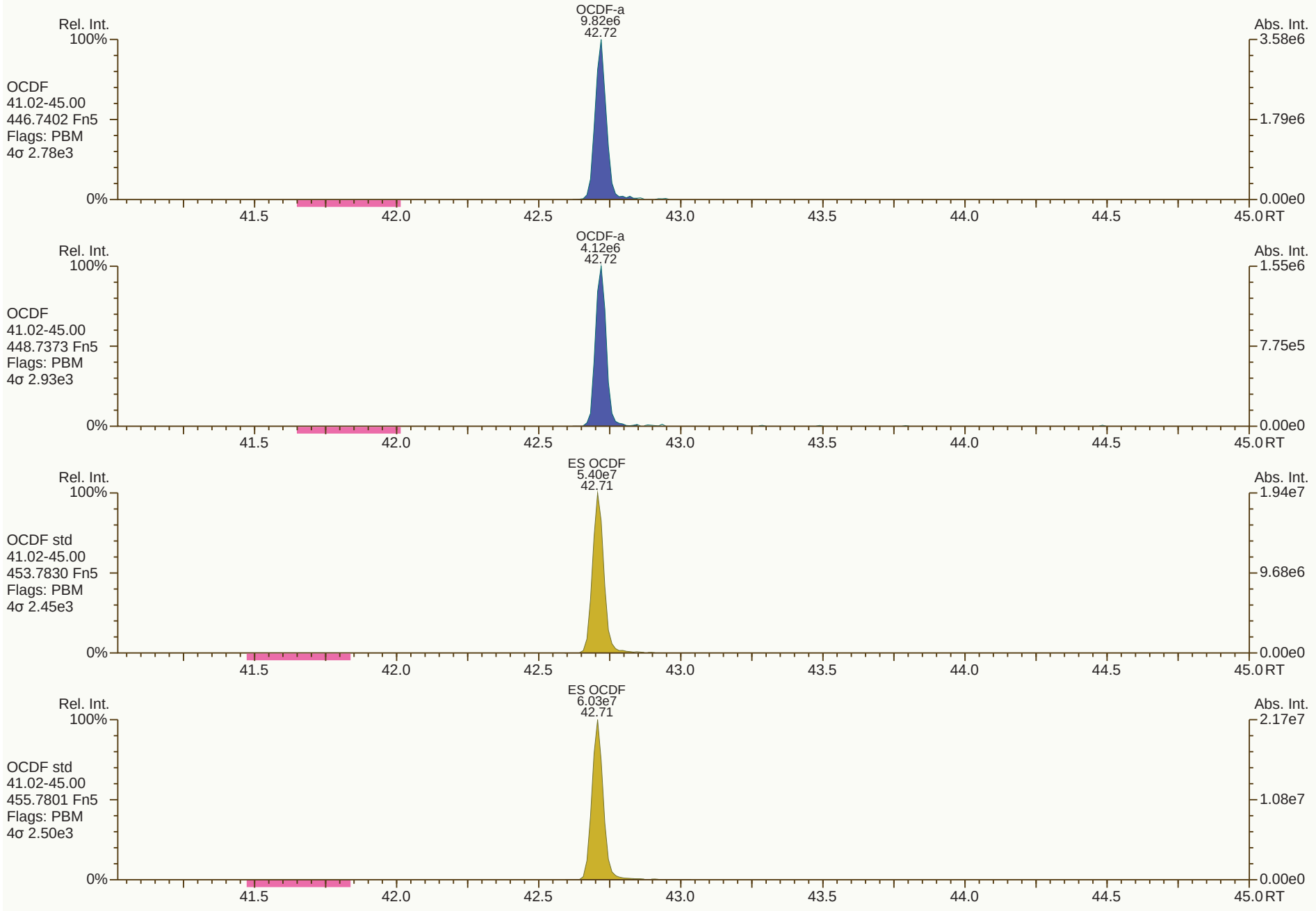

Rel. Int.
100%
HxCDF
34.02-38.51
373.8207 Fn3
Flags: PBM
4σ 1.37e3
0%
123478F
1.39e8*
35.96
123678F
1.43e8*
36.10
234678F
1.33e8*
36.74
123789F
1.16e8*
37.73
Abs. Int.
4.67e7
2.34e7
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDF
34.02-38.51
375.8178 Fn3
Flags: PBM
4σ 1.49e3
0%
123478F
1.13e8*
35.96
123678F
1.15e8*
36.10
234678F
1.09e8*
36.74
123789F
9.32e7*
37.73
Abs. Int.
3.77e7
1.89e7
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDF Std.
34.02-38.51
383.8639 Fn3
Flags: PBM
4σ 4.43e3
0%
ES 123478F
3.59e7*
35.94
ES 123678F
4.05e7*
36.08
CS 123469F
3.36e7*
36.39
ES 234678F
3.76e7*
36.73
ES 123789F
3.17e7*
37.71
Abs. Int.
1.27e7
6.33e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDF Std.
34.02-38.51
385.8610 Fn3
Flags: PBM
4σ 5.81e3
0%
ES 123478F
6.77e7*
35.94
ES 123678F
7.69e7*
36.08
CS 123469F
6.47e7*
36.39
ES 234678F
7.11e7*
36.73
ES 123789F
6.11e7*
37.71
Abs. Int.
2.41e7
1.20e7
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
OCDPE
34.02-38.51
445.7555 Fn3
Flags: PB
4σ 1.81e3
0%
Abs. Int.
5.02e3
2.51e3
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT


Rel. Int.
100%
HpCDF
38.52-41.01
407.7818 Fn4
Flags: PBM
4σ 1.63e3
0%
1234678F
1.12e8*
39.20
1234789F
8.60e7*
40.53
Abs. Int.
4.26e7
2.13e7
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF
38.52-41.01
409.7788 Fn4
Flags: PBM
4σ 1.51e3
0%
1234678F
1.07e8*
39.20
1234789F
8.36e7*
40.53
Abs. Int.
4.25e7
2.12e7
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.52-41.01
417.8253 Fn4
Flags: PBM
4σ 2.38e3
0%
ES 1234678F
2.60e7*
39.19
CS 1234689F
2.35e7*
39.59
ES 1234789F
1.99e7*
40.52
Abs. Int.
1.01e7
5.05e6
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.52-41.01
419.8220 Fn4
Flags: PBM
4σ 2.43e3
0%
ES 1234678F
5.83e7*
39.19
CS 1234689F
5.36e7*
39.59
ES 1234789F
4.56e7*
40.52
Abs. Int.
2.22e7
1.11e7
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
NCDPE
38.52-41.01
479.7165 Fn4
Flags: PB
4σ 1.56e3
0%
Abs. Int.
1.16e4
5.79e3
0.00e0
39.0
39.5
40.0
40.5
41.0 RT


Rel. Int.
100%
OCDF
41.02-45.00
441.7428 Fn5
Flags: PBM
4σ 2.42e3
0%
OCDF
1.13e8*
42.72
Abs. Int.
4.11e7
2.05e7
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF
41.02-45.00
443.7398 Fn5
Flags: PBM
4σ 1.38e3
0%
OCDF
1.27e8*
42.72
Abs. Int.
4.58e7
2.29e7
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF Std.
41.02-45.00
453.7830 Fn5
Flags: PBM
4σ 2.45e3
0%
ES OCDF
5.40e7*
42.71
Abs. Int.
1.94e7
9.68e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF Std.
41.02-45.00
455.7801 Fn5
Flags: PBM
4σ 2.50e3
0%
ES OCDF
6.03e7*
42.71
Abs. Int.
2.17e7
1.08e7
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
DCDPE
41.02-45.00
513.6775 Fn5
Flags: PB
4σ 1.56e3
0%
Abs. Int.
4.07e3
2.03e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

SGS ID: CS4_200612_DF_RA | Sample ID: SIL 20-281-2 | Acq: 12-Jun-2020 17:36:49

Instr: [ILM] AutoSpec-Ultima MM3 | VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 9 | User: PSW Datafile: 200612R07



Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS4_200612_DF_RA.utp_res, saved 15-Jun-2020 13:27 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 8790, 9665 *Revised: 15-Jun-2020 08:21 (PSW) Printed: 17-Jun-2020 08:05*

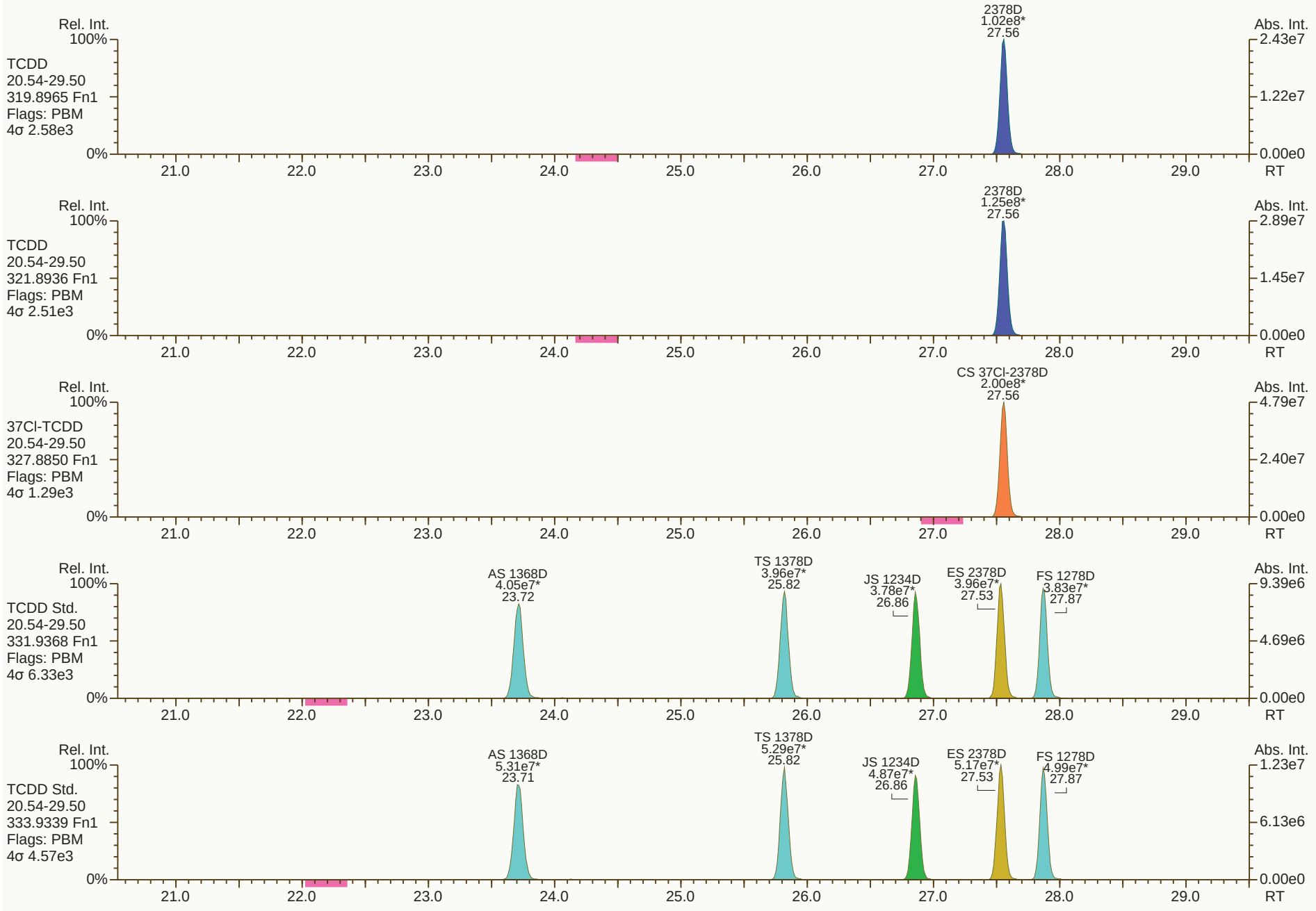
Dioxin/Furan QC Summary		Acq'd: 12 Jun 2020 18:24 PSW				ICAL: MM3_DF_10012020_12JUN2020	
Lab ID: CS5_200612_DF_RA		UTP: 15-Jun-2020 11:51:19 PSW				Checkcode: 104-974-GYN	
Sample ID: SIL 20-281-1		Report: 15 Jun 2020 11:54 pw				Datafile: 200612R08	
Name	**RT**	**Response**	**RA**	**OK**	**Ref. RRFs**	**Calc. RRFs**	**Dev'n**
2378-TCDD	27.56	2.27E+08	0.81	Y	1.18	1.24	6%
12378-PeCDD	33.04	9.77E+08	1.57	Y	1.14	1.19	5%
123478-HxCDD	36.94	9.26E+08	1.26	Y	1.09	1.14	5%
123678-HxCDD	37.05	9.44E+08	1.25	Y	1.13	1.20	6%
123789-HxCDD	37.36	9.89E+08	1.24	Y	1.05	1.09	4%
1234678-HpCDD	40.11	7.97E+08	1.04	Y	0.98	1.04	5%
OCDD	42.56	1.21E+09	0.89	Y	1.08	1.14	6%
2378-TCDF	26.65	3.13E+08	0.77	Y	0.98	1.05	7%
12378-PeCDF	31.56	1.40E+09	1.55	Y	0.95	1.00	5%
23478-PeCDF	32.69	1.38E+09	1.55	Y	0.95	1.00	6%
123478-HxCDF	35.97	1.31E+09	1.25	Y	1.20	1.25	5%
123678-HxCDF	36.11	1.37E+09	1.25	Y	1.07	1.13	5%
234678-HxCDF	36.75	1.25E+09	1.24	Y	1.10	1.13	3%
123789-HxCDF	37.74	1.13E+09	1.24	Y	1.09	1.16	6%
1234678-HpCDF	39.21	1.17E+09	1.04	Y	1.28	1.34	4%
1234789-HpCDF	40.53	9.23E+08	1.03	Y	1.27	1.31	3%
OCDF	42.73	1.44E+09	0.90	Y	1.01	1.08	7%
ES 2378-TCDD	27.53	9.13E+07	0.77	Y	1.01	1.06	5%
ES 12378-PeCDD	33.02	8.20E+07	1.61	Y	0.87	0.95	9%
ES 123478-HxCDD	36.92	8.10E+07	1.30	Y	1.10	1.13	3%
ES 123678-HxCDD	37.04	7.89E+07	1.29	Y	1.06	1.10	3%
ES 123789-HxCDD	37.34	9.05E+07	1.28	Y	1.22	1.26	3%
ES 1234678-HpCDD	40.1	7.68E+07	1.09	Y	0.99	1.07	8%
ES OCDD	42.55	1.06E+08	0.92	Y	0.67	0.74	10%
ES 2378-TCDF	26.63	1.49E+08	0.79	Y	1.01	1.03	1%
ES 12378-PeCDF	31.54	1.40E+08	1.56	Y	0.90	0.97	7%
ES 23478-PeCDF	32.67	1.38E+08	1.56	Y	0.89	0.95	7%
ES 123478-HxCDF	35.95	1.05E+08	0.53	Y	1.43	1.45	2%
ES 123678-HxCDF	36.09	1.22E+08	0.51	Y	1.63	1.69	4%
ES 234678-HxCDF	36.74	1.11E+08	0.52	Y	1.48	1.54	4%
ES 123789-HxCDF	37.72	9.75E+07	0.53	Y	1.29	1.35	5%
ES 1234678-HpCDF	39.2	8.77E+07	0.44	Y	1.15	1.22	6%
ES 1234789-HpCDF	40.53	7.06E+07	0.44	Y	0.91	0.98	8%
ES OCDF	42.72	1.33E+08	0.90	Y	0.83	0.93	12%

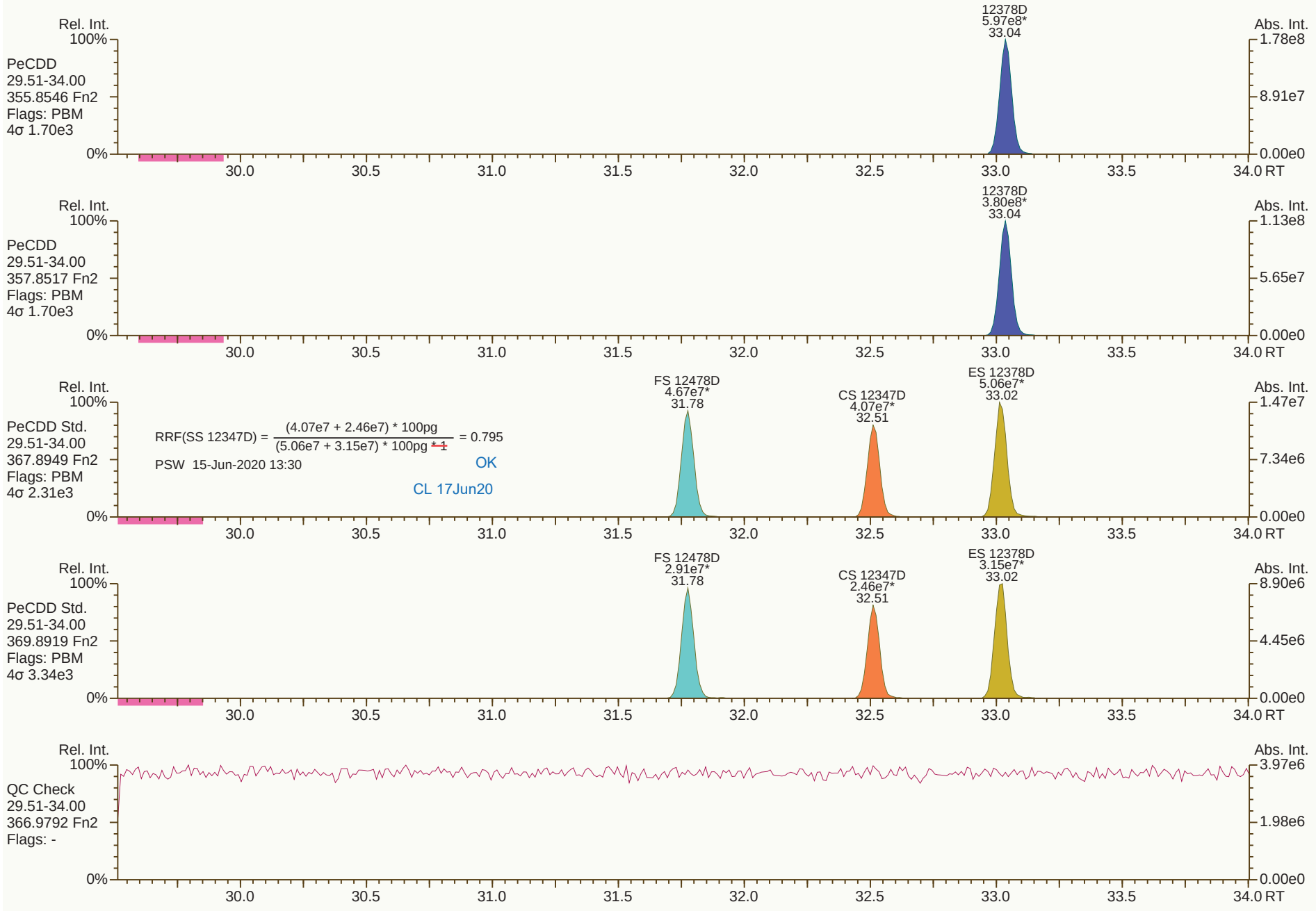
Dioxin/Furan QC Summary	Acq'd: 12 Jun 2020 18:24 PSW	ICAL: MM3_DF_10012020_12JUN2020
Lab ID: CS5_200612_DF_RA	UTP: 15-Jun-2020 11:51:19 PSW	Checkcode: 104-974-GYN
Sample ID: SIL 20-281-1	Report: 15 Jun 2020 11:54 pw	Datafile: 200612R08

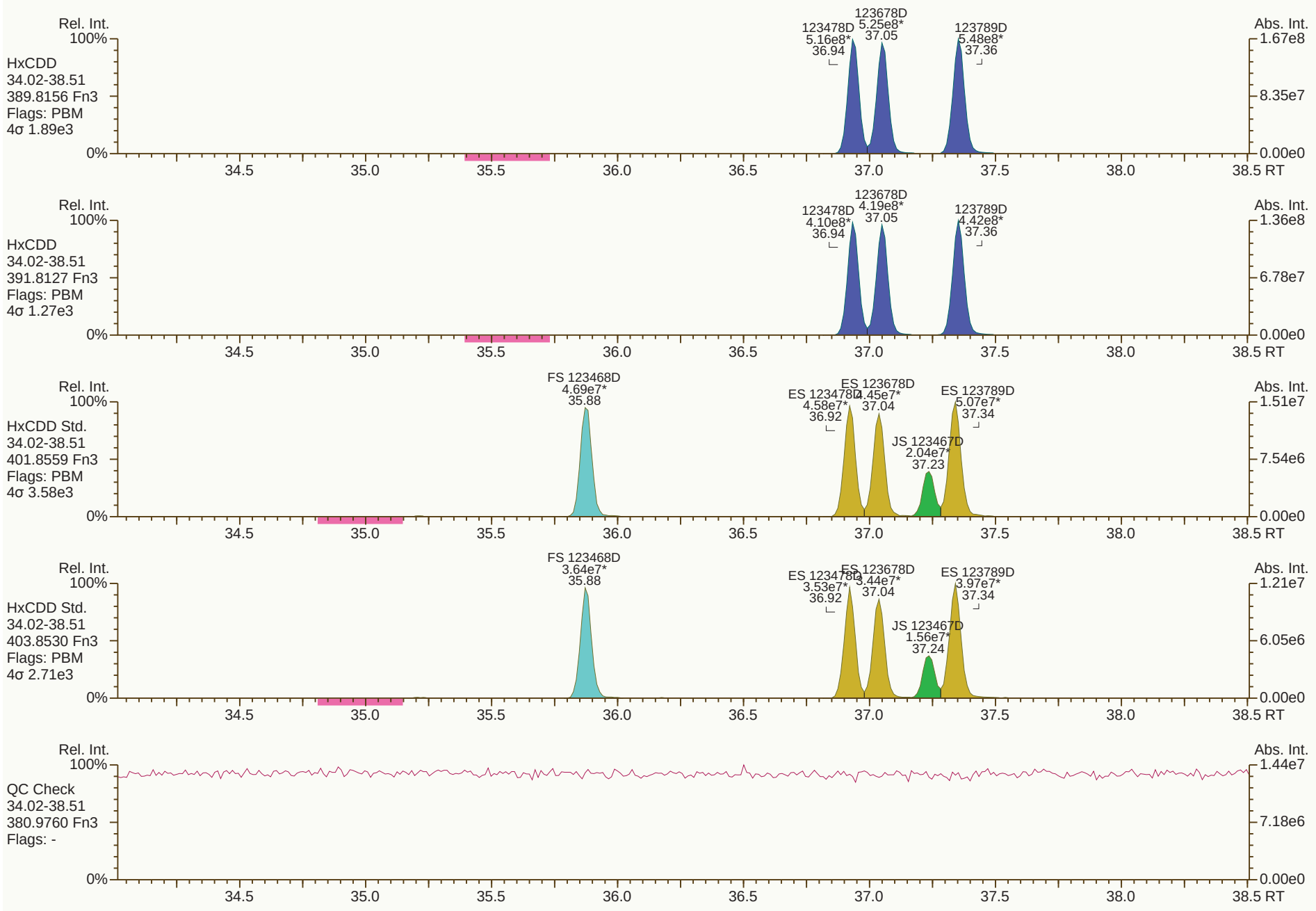
Name	RT	Response	RA	OK	Ref. RRFs	Calc. RRFs	Dev'n
JS 1234-TCDD	26.86	8.64E+07	0.78	Y	-	-	-
JS 1234-TCDF	25.22	1.45E+08	0.79	Y	-	-	-
JS 123467-HxCDD	37.23	3.60E+07	1.31	Y	-	-	-
CS 37Cl-2378-TCDD	27.56	2.00E+08	n/a	-	1.04	1.16	12%
CS 12347-PeCDD	32.51	6.53E+07	1.65	Y	0.74	0.76	2%
CS 12346-PeCDF	31.01	1.24E+08	1.58	Y	0.86	0.85	-1%
CS 123469-HxCDF	36.39	9.37E+07	0.52	Y	1.36	1.30	-4%
CS 1234689-HpCDF	39.60	7.63E+07	0.45	Y	1.05	1.06	1%
SS 37Cl-2378-TCDD	27.56	2.00E+08	n/a	-	1.04	1.10	6%
SS 12347-PeCDD	32.51	6.53E+07	1.65	Y	0.86	0.80	-7%
SS 12346-PeCDF	31.01	1.24E+08	1.58	Y	0.96	0.88	-8%
SS 123469-HxCDF	36.39	9.37E+07	0.52	Y	0.83	0.77	-8%
SS 1234689-HpCDF	39.60	7.63E+07	0.45	Y	0.92	0.87	-6%
AS 1368-TCDD	23.72	9.37E+07	0.76	Y	1.08	1.08	1%
AS 1368-TCDF	21.50	1.70E+08	0.78	Y	1.18	1.17	-1%
FS 1278-TCDD	27.87	8.82E+07	0.77	Y	1.00	0.97	-3%
FS 12478-PeCDD	31.78	7.59E+07	1.61	Y	1.00	0.92	-7%
FS 123468-HxCDD	35.88	8.33E+07	1.29	Y	1.11	1.03	-7%
FS 1234679-HpCDD	39.46	8.18E+07	1.06	Y	1.19	1.06	-11%
TS 1378-TCDD	25.82	9.25E+07	0.75	Y	1.06	1.01	-4%
OCDD-a	42.56	7.36E+07	2.50	Y	0.07	0.07	-1%
OCDF-a	42.73	8.63E+07	2.50	Y	0.06	0.06	10%

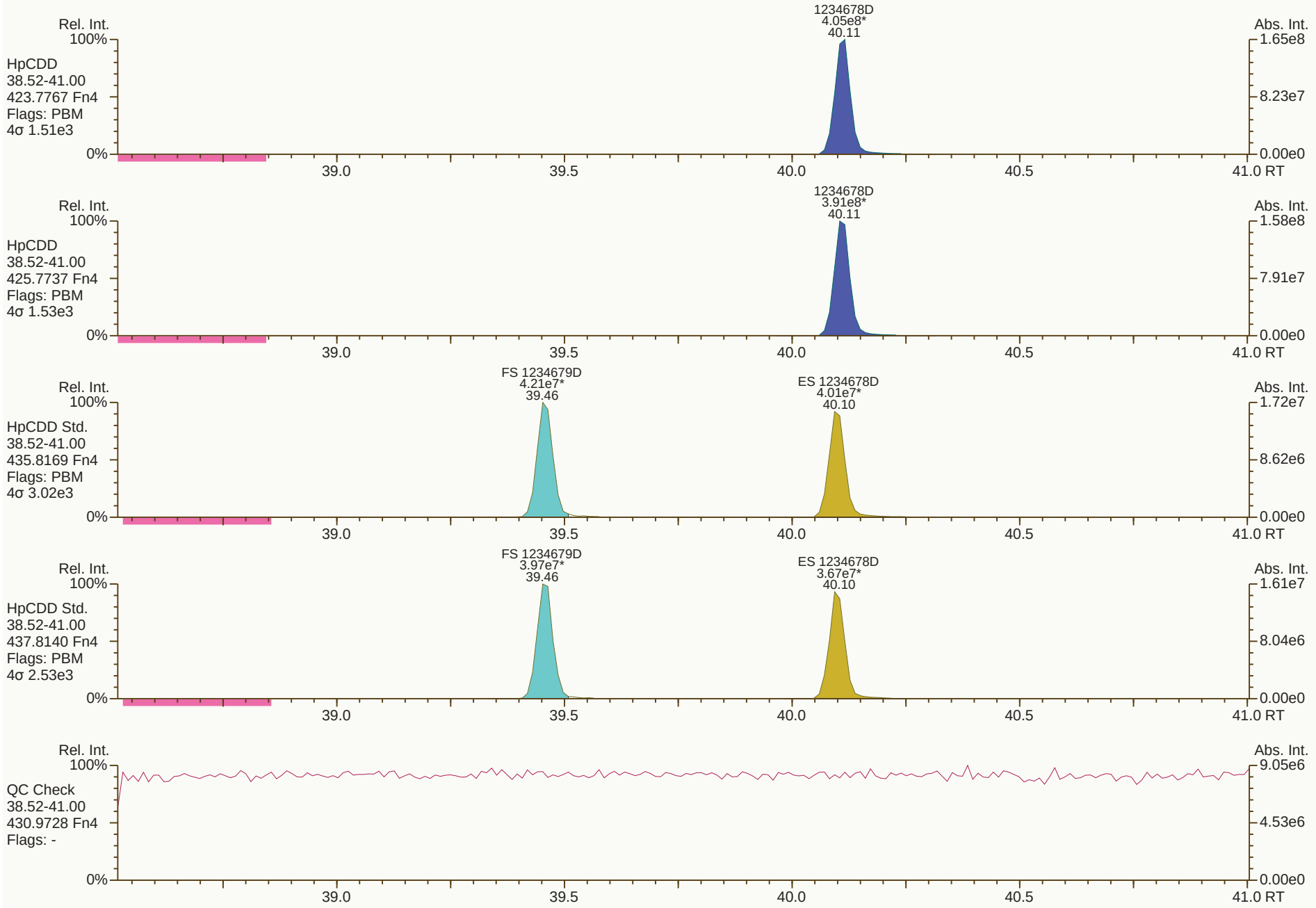


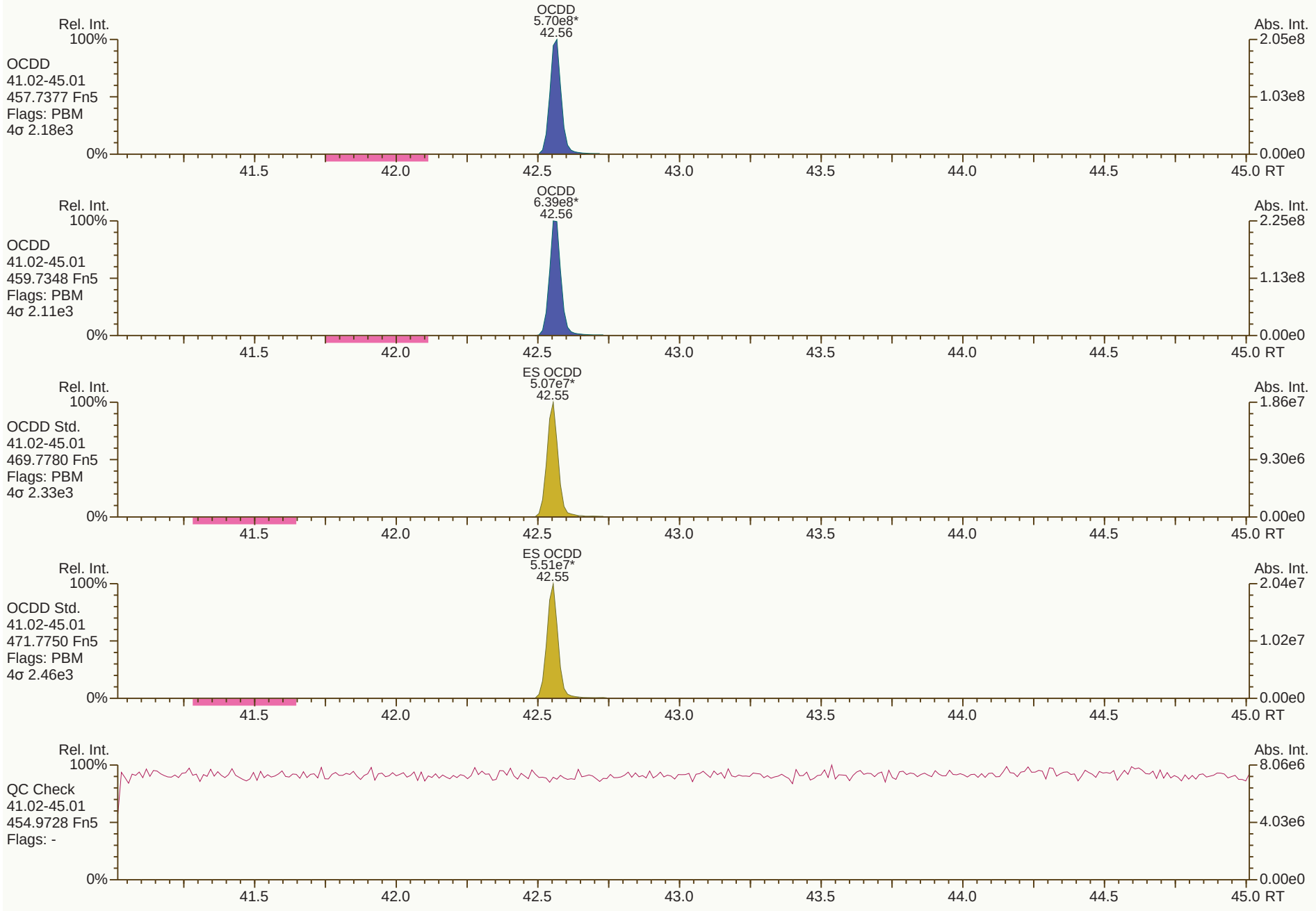
Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS5_200612_DF_RA.utp_res, saved 15-Jun-2020 13:31 (PSW) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 scc: 104-974 *PKD: n/a Printed: 15-Jun-2020 13:40 Page 1 of 12*

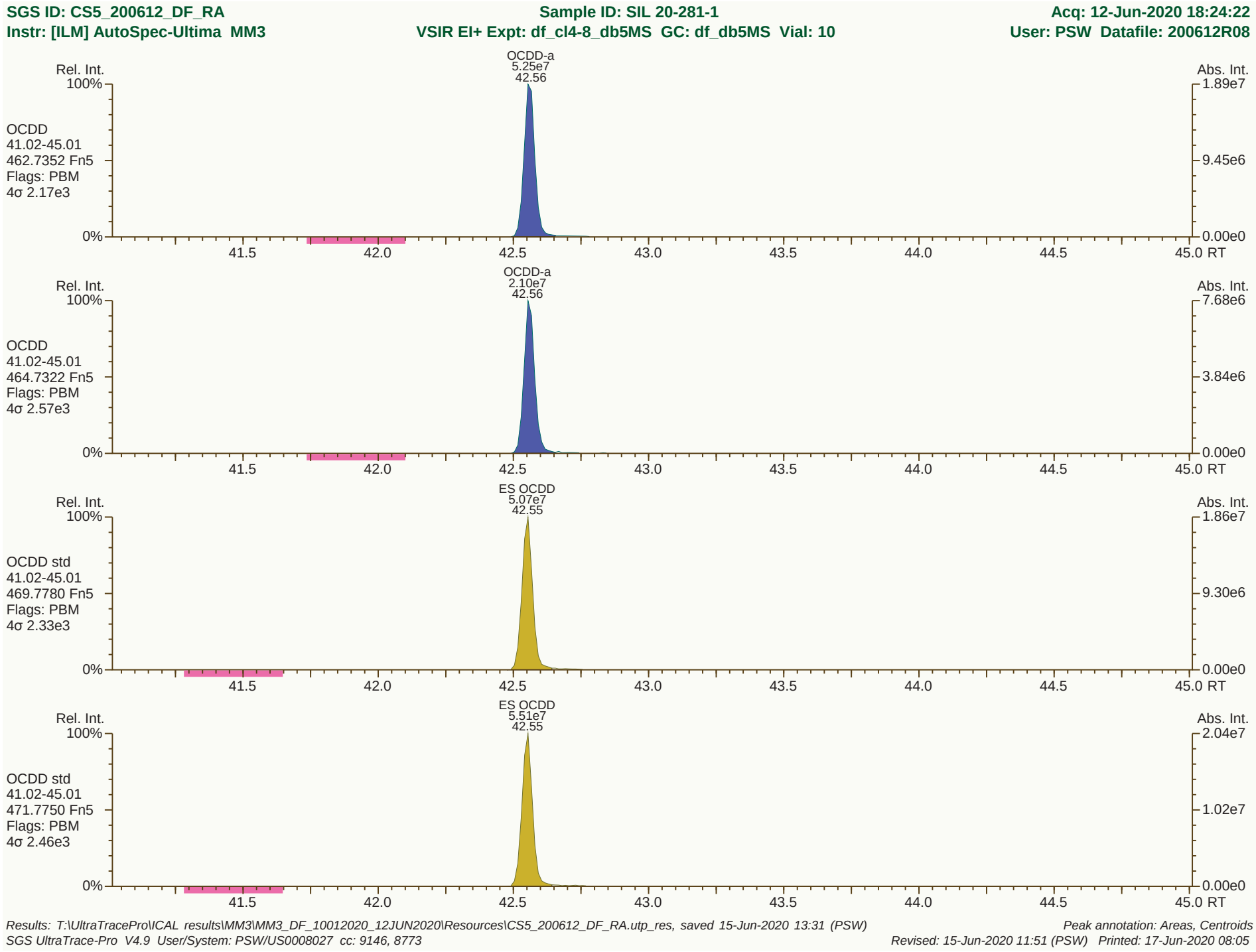

Rel. Int.
100%
TCDD
20.54-29.50
319.8965 Fn1
Flags: PBM
4σ 2.58e3
0%
2378D
1.02e8*
27.56
Abs. Int.
2.43e7
1.22e7
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD
20.54-29.50
321.8936 Fn1
Flags: PBM
4σ 2.51e3
0%
2378D
1.25e8*
27.56
Abs. Int.
2.89e7
1.45e7
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
37Cl-TCDD
20.54-29.50
327.8850 Fn1
Flags: PBM
4σ 1.29e3
0%
CS 37Cl-2378D
2.00e8*
27.56
Abs. Int.
4.79e7
2.40e7
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
331.9368 Fn1
Flags: PBM
4σ 6.33e3
0%
AS 1368D
4.05e7*
23.72
TS 1378D
3.96e7*
25.82
JS 1234D
3.78e7*
26.86
ES 2378D
3.96e7*
27.53
FS 1278D
3.83e7*
27.87
Abs. Int.
9.39e6
4.69e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
333.9339 Fn1
Flags: PBM
4σ 4.57e3
0%
AS 1368D
5.31e7*
23.71
TS 1378D
5.29e7*
25.82
JS 1234D
4.87e7*
26.86
ES 2378D
5.17e7*
27.53
FS 1278D
4.99e7*
27.87
Abs. Int.
1.23e7
6.13e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
PeCDD
29.51-34.00
355.8546 Fn2
Flags: PBM
4σ 1.70e3
0%
12378D
5.97e8*
33.04
Abs. Int.
1.78e8
8.91e7
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
PeCDD
29.51-34.00
357.8517 Fn2
Flags: PBM
4σ 1.70e3
12378D
3.80e8*
33.04
1.13e8
5.65e7
PeCDD Std.
29.51-34.00
367.8949 Fn2
Flags: PBM
4σ 2.31e3
RRF(SS 12347D) = (4.07e7 + 2.46e7) * 100pg / (5.06e7 + 3.15e7) * 100pg ~~* 1~~ = 0.795
PSW 15-Jun-2020 13:30
OK
CL 17Jun20
FS 12478D
4.67e7*
31.78
CS 12347D
4.07e7*
32.51
ES 12378D
5.06e7*
33.02
1.47e7
7.34e6
PeCDD Std.
29.51-34.00
369.8919 Fn2
Flags: PBM
4σ 3.34e3
FS 12478D
2.91e7*
31.78
CS 12347D
2.46e7*
32.51
ES 12378D
3.15e7*
33.02
8.90e6
4.45e6
QC Check
29.51-34.00
366.9792 Fn2
Flags: -
3.97e6
1.98e6


Rel. Int.
100%
HxCDD
34.02-38.51
389.8156 Fn3
Flags: PBM
4σ 1.89e3
123478D
5.16e8*
36.94
123678D
5.25e8*
37.05
123789D
5.48e8*
37.36
Abs. Int.
1.67e8
8.35e7
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDD
34.02-38.51
391.8127 Fn3
Flags: PBM
4σ 1.27e3
123478D
4.10e8*
36.94
123678D
4.19e8*
37.05
123789D
4.42e8*
37.36
Abs. Int.
1.36e8
6.78e7
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDD Std.
34.02-38.51
401.8559 Fn3
Flags: PBM
4σ 3.58e3
FS 123468D
4.69e7*
35.88
ES 123478D
4.58e7*
36.92
ES 123678D
4.45e7*
37.04
JS 123467D
2.04e7*
37.23
ES 123789D
5.07e7*
37.34
Abs. Int.
1.51e7
7.54e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDD Std.
34.02-38.51
403.8530 Fn3
Flags: PBM
4σ 2.71e3
FS 123468D
3.64e7*
35.88
ES 123478D
3.53e7*
36.92
ES 123678D
3.44e7*
37.04
JS 123467D
1.56e7*
37.24
ES 123789D
3.97e7*
37.34
Abs. Int.
1.21e7
6.05e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
QC Check
34.02-38.51
380.9760 Fn3
Flags: -
Abs. Int.
1.44e7
7.18e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT


Rel. Int.
100%
HpCDD
38.52-41.00
423.7767 Fn4
Flags: PBM
4σ 1.51e3
0%
1234678D
4.05e8*
40.11
Abs. Int.
1.65e8
8.23e7
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.52-41.00
425.7737 Fn4
Flags: PBM
4σ 1.53e3
0%
1234678D
3.91e8*
40.11
Abs. Int.
1.58e8
7.91e7
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.52-41.00
435.8169 Fn4
Flags: PBM
4σ 3.02e3
0%
FS 1234679D
4.21e7*
39.46
ES 1234678D
4.01e7*
40.10
Abs. Int.
1.72e7
8.62e6
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.52-41.00
437.8140 Fn4
Flags: PBM
4σ 2.53e3
0%
FS 1234679D
3.97e7*
39.46
ES 1234678D
3.67e7*
40.10
Abs. Int.
1.61e7
8.04e6
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.52-41.00
430.9728 Fn4
Flags: -
0%
Abs. Int.
9.05e6
4.53e6
0.00e0
39.0
39.5
40.0
40.5
41.0 RT


OCDD
5.70e8*
42.56
Rel. Int.
100%
OCDD
41.02-45.01
457.7377 Fn5
Flags: PBM
4σ 2.18e3
0%
Abs. Int.
2.05e8
1.03e8
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDD
6.39e8*
42.56
Rel. Int.
100%
OCDD
41.02-45.01
459.7348 Fn5
Flags: PBM
4σ 2.11e3
0%
Abs. Int.
2.25e8
1.13e8
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
5.07e7*
42.55
Rel. Int.
100%
OCDD Std.
41.02-45.01
469.7780 Fn5
Flags: PBM
4σ 2.33e3
0%
Abs. Int.
1.86e7
9.30e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
5.51e7*
42.55
Rel. Int.
100%
OCDD Std.
41.02-45.01
471.7750 Fn5
Flags: PBM
4σ 2.46e3
0%
Abs. Int.
2.04e7
1.02e7
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
QC Check
41.02-45.01
454.9728 Fn5
Flags: -
0%
Abs. Int.
8.06e6
4.03e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT


SGS ID: CS5_200612_DF_RA
Sample ID: SIL 20-281-1
Acq: 12-Jun-2020 18:24:22
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 10
User: PSW Datafile: 200612R08
OCDD-a
5.25e7
42.56
Rel. Int.
100%
0%
Abs. Int.
1.89e7
9.45e6
0.00e0
OCDD
41.02-45.01
462.7352 Fn5
Flags: PBM
4σ 2.17e3
OCDD-a
2.10e7
42.56
7.68e6
3.84e6
OCDD
41.02-45.01
464.7322 Fn5
Flags: PBM
4σ 2.57e3
ES OCDD
5.07e7
42.55
1.86e7
9.30e6
OCDD std
41.02-45.01
469.7780 Fn5
Flags: PBM
4σ 2.33e3
ES OCDD
5.51e7
42.55
2.04e7
1.02e7
OCDD std
41.02-45.01
471.7750 Fn5
Flags: PBM
4σ 2.46e3
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS5_200612_DF_RA.utp_res, saved 15-Jun-2020 13:31 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 9146, 8773
Revised: 15-Jun-2020 11:51 (PSW) Printed: 17-Jun-2020 08:05


Rel. Int.
100%
TCDF
20.54-29.50
303.9016 Fn1
Flags: PBM
4σ 2.41e3
0%
2378F
1.36e8*
26.65
Abs. Int.
3.06e7
1.53e7
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF
20.54-29.50
305.8987 Fn1
Flags: PBM
4σ 2.01e3
0%
2378F
1.76e8*
26.65
Abs. Int.
3.98e7
1.99e7
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
315.9419 Fn1
Flags: PBM
4σ 1.57e4
0%
AS 1368F
7.46e7*
21.50
JS 1234F
6.40e7*
25.22
ES 2378F
6.55e7*
26.63
Abs. Int.
1.50e7
7.49e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
317.9389 Fn1
Flags: PBM
4σ 8.67e3
0%
AS 1368F
9.50e7*
21.50
JS 1234F
8.10e7*
25.22
ES 2378F
8.33e7*
26.62
Abs. Int.
1.83e7
9.15e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
HxCDPE
20.54-29.50
375.8364 Fn1
Flags: PB
4σ 1.48e3
0%
Abs. Int.
8.16e3
4.08e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT

SGS ID: CS5_200612_DF_RA | **Sample ID: SIL 20-281-1** | **Acq: 12-Jun-2020 18:24:22**

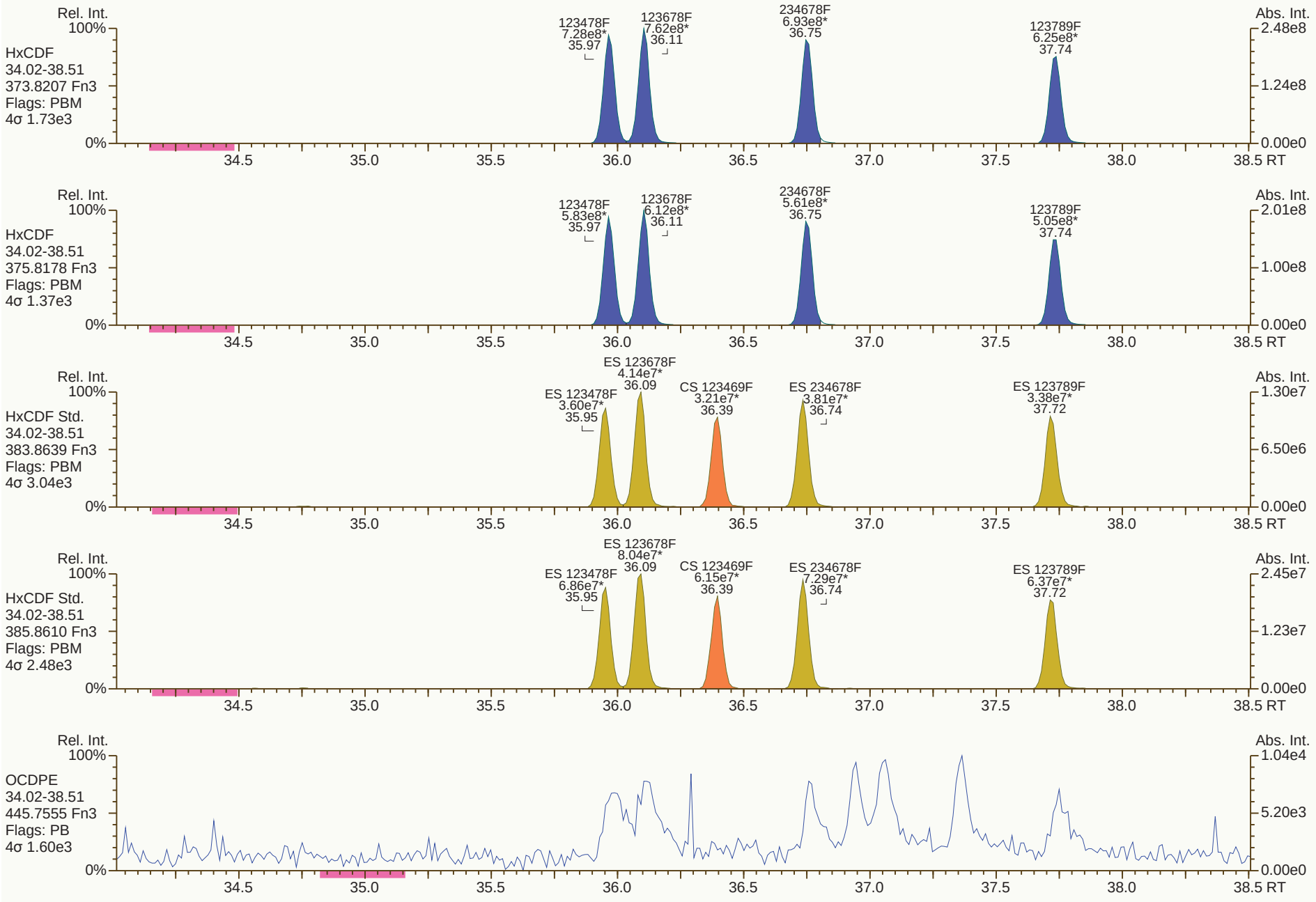
Instr: [ILM] AutoSpec-Ultima MM3 | **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 10** | **User: PSW Datafile: 200612R08**

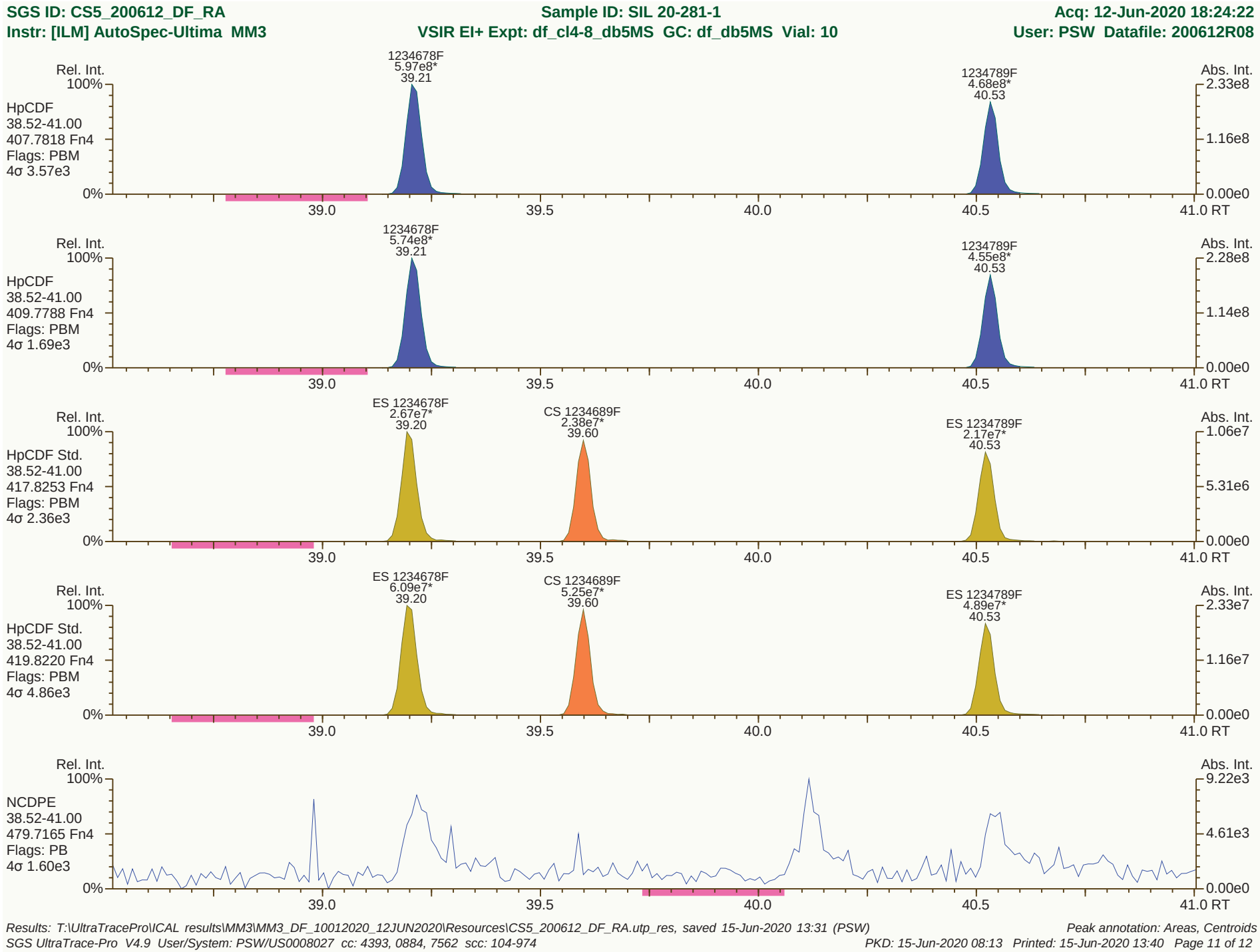


Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS5_200612_DF_RA.utp_res, saved 15-Jun-2020 13:31 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 1717 scc: 104-974 *PKD: 15-Jun-2020 08:13 Printed: 15-Jun-2020 13:40 Page 8 of 12*


Rel. Int.
100%
PeCDF-2
29.51-34.00
339.8597 Fn2
Flags: PBM
4σ 2.25e3
0%
12378F
8.50e8*
31.56
23478F
8.37e8*
32.69
Abs. Int.
2.51e8
1.25e8
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF-2
29.51-34.00
341.8568 Fn2
Flags: PBM
4σ 1.72e3
0%
12378F
5.49e8*
31.56
23478F
5.41e8*
32.68
Abs. Int.
1.62e8
8.09e7
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.00
351.9000 Fn2
Flags: PBM
4σ 2.76e3
0%
CS 12346F
7.57e7*
31.01
ES 12378F
8.53e7*
31.54
ES 23478F
8.38e7*
32.67
Abs. Int.
2.42e7
1.21e7
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.00
353.8970 Fn2
Flags: PBM
4σ 4.14e3
0%
CS 12346F
4.79e7*
31.01
ES 12378F
5.48e7*
31.54
ES 23478F
5.38e7*
32.67
Abs. Int.
1.54e7
7.70e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
HpCDPE
29.51-34.00
409.7974 Fn2
Flags: PB
4σ 1.56e3
0%
Abs. Int.
1.55e4
7.77e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT


Rel. Int.
100%
HxCDF
34.02-38.51
373.8207 Fn3
Flags: PBM
4σ 1.73e3
0%
123478F
7.28e8*
35.97
123678F
7.62e8*
36.11
234678F
6.93e8*
36.75
123789F
6.25e8*
37.74
Abs. Int.
2.48e8
1.24e8
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDF
34.02-38.51
375.8178 Fn3
Flags: PBM
4σ 1.37e3
0%
123478F
5.83e8*
35.97
123678F
6.12e8*
36.11
234678F
5.61e8*
36.75
123789F
5.05e8*
37.74
Abs. Int.
2.01e8
1.00e8
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDF Std.
34.02-38.51
383.8639 Fn3
Flags: PBM
4σ 3.04e3
0%
ES 123678F
4.14e7*
36.09
ES 123478F
3.60e7*
35.95
CS 123469F
3.21e7*
36.39
ES 234678F
3.81e7*
36.74
ES 123789F
3.38e7*
37.72
Abs. Int.
1.30e7
6.50e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDF Std.
34.02-38.51
385.8610 Fn3
Flags: PBM
4σ 2.48e3
0%
ES 123678F
8.04e7*
36.09
ES 123478F
6.86e7*
35.95
CS 123469F
6.15e7*
36.39
ES 234678F
7.29e7*
36.74
ES 123789F
6.37e7*
37.72
Abs. Int.
2.45e7
1.23e7
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
OCDPE
34.02-38.51
445.7555 Fn3
Flags: PB
4σ 1.60e3
0%
Abs. Int.
1.04e4
5.20e3
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT

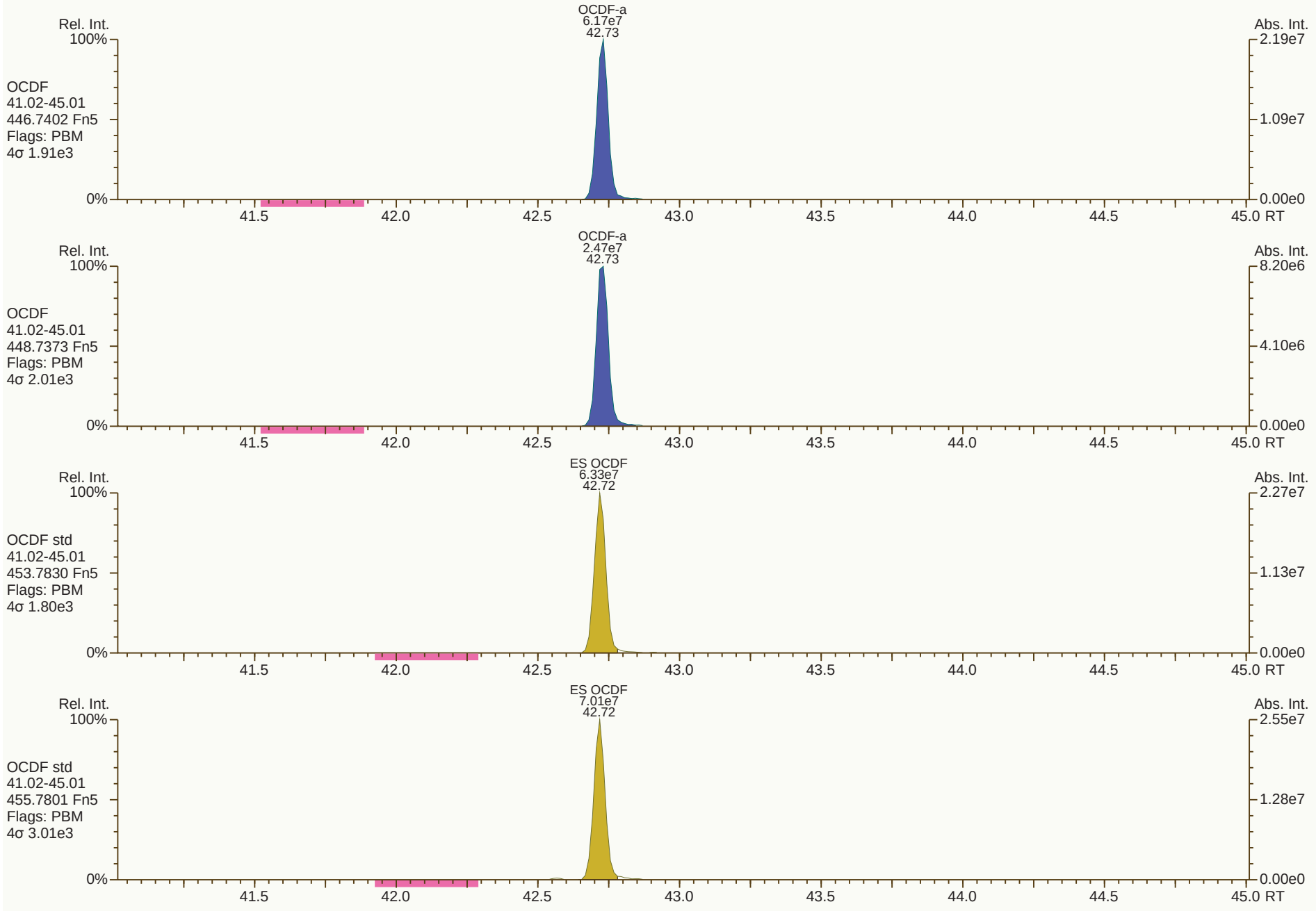


Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS5_200612_DF_RA.utp_res, saved 15-Jun-2020 13:31 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 4393, 0884, 7562 scc: 104-974
PKD: 15-Jun-2020 08:13 Printed: 15-Jun-2020 13:40 Page 11 of 12


OCDF
6.84e8*
42.73
Rel. Int.
100%
OCDF
41.02-45.01
441.7428 Fn5
Flags: PBM
4σ 1.69e3
0%
Abs. Int.
2.46e8
1.23e8
0.00e0
RRF(OCDF) = (6.84e8 + 7.57e8) * 200pg / (6.33e7 + 7.01e7) * 2000pg *1 = 1.08
PSW 15-Jun-2020 13:31
OK
CL 17Jun20
OCDF
7.57e8*
42.73
OCDF
41.02-45.01
443.7398 Fn5
Flags: PBM
4σ 1.88e3
2.73e8
1.36e8
ES OCDF
6.33e7*
42.72
OCDF Std.
41.02-45.01
453.7830 Fn5
Flags: PBM
4σ 1.80e3
2.27e7
1.13e7
ES OCDF
7.01e7*
42.72
OCDF Std.
41.02-45.01
455.7801 Fn5
Flags: PBM
4σ 3.01e3
2.55e7
1.28e7
DCDPE
41.02-45.01
513.6775 Fn5
Flags: PB
4σ 1.46e3
7.31e3
3.66e3
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

SGS ID: CS5_200612_DF_RA | Sample ID: SIL 20-281-1 | Acq: 12-Jun-2020 18:24:22

Instr: [ILM] AutoSpec-Ultima MM3 | VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 10 | User: PSW Datafile: 200612R08



Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS5_200612_DF_RA.utp_res, saved 15-Jun-2020 13:31 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 7188, 4904 *Revised: 15-Jun-2020 11:51 (PSW) Printed: 17-Jun-2020 08:05*

Dioxin/Furan QC Summary	Acq'd: 12 Jun 2020 20:46 PSW	ICAL: MM3_DF_10012020_12JUN2020
Lab ID: CS6_200612_DF_RA	UTP: 15-Jun-2020 11:51:53 PSW	Checkcode: 630-787-MDT
Sample ID: SIL 20-280-4	Report: 15 Jun 2020 11:54 pw	Datafile: 200612R11

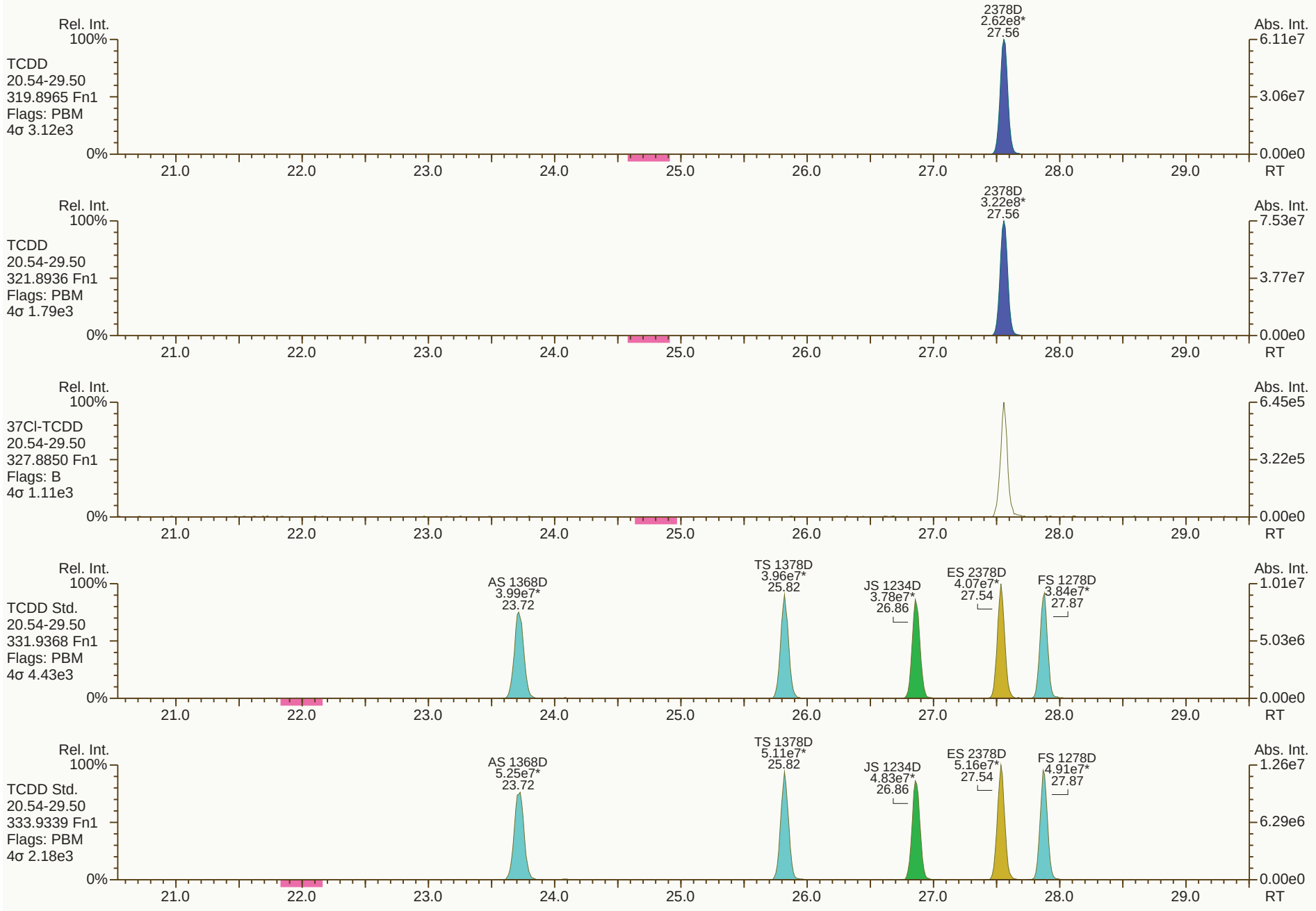
Name	RT	Response	RA	OK	Ref. RRFs	Calc. RRFs	Dev'n
2378-TCDD	27.56	5.84E+08	0.81	Y	1.18	1.27	7%
12378-PeCDD	33.04	2.64E+09	1.57	Y	1.14	1.20	5%
123478-HxCDD	36.94	2.47E+09	1.26	Y	1.09	1.15	5%
123678-HxCDD	37.05	2.55E+09	1.26	Y	1.13	1.19	6%
123789-HxCDD	37.36	2.67E+09	1.26	Y	1.05	1.10	5%
1234678-HpCDD	40.12	2.26E+09	1.04	Y	0.98	1.05	7%
OCDD	42.57	3.54E+09	0.90	Y	1.08	1.13	5%
2378-TCDF	26.65	8.06E+08	0.77	Y	0.98	1.04	6%
12378-PeCDF	31.56	3.74E+09	1.55	Y	0.95	1.00	5%
23478-PeCDF	32.69	3.66E+09	1.54	Y	0.95	0.99	5%
123478-HxCDF	35.97	3.55E+09	1.25	Y	1.20	1.25	4%
123678-HxCDF	36.11	3.73E+09	1.24	Y	1.07	1.13	5%
234678-HxCDF	36.75	3.40E+09	1.24	Y	1.10	1.15	5%
123789-HxCDF	37.74	3.15E+09	1.24	Y	1.09	1.14	4%
1234678-HpCDF	39.21	3.20E+09	1.04	Y	1.28	1.35	5%
1234789-HpCDF	40.54	2.69E+09	1.04	Y	1.27	1.34	6%
OCDF	42.74	4.30E+09	0.90	Y	1.01	1.09	8%
ES 2378-TCDD	27.54	9.23E+07	0.79	Y	1.01	1.07	6%
ES 12378-PeCDD	33.02	8.81E+07	1.68	Y	0.87	1.02	17%
ES 123478-HxCDD	36.92	8.62E+07	1.32	Y	1.10	1.20	9%
ES 123678-HxCDD	37.04	8.56E+07	1.27	Y	1.06	1.19	12%
ES 123789-HxCDD	37.34	9.73E+07	1.35	Y	1.22	1.35	11%
ES 1234678-HpCDD	40.1	8.57E+07	1.08	Y	0.99	1.19	20%
ES OCDD	42.56	1.26E+08	0.92	Y	0.67	0.87	31%
ES 2378-TCDF	26.63	1.55E+08	0.81	Y	1.01	1.07	6%
ES 12378-PeCDF	31.54	1.50E+08	1.54	Y	0.90	1.04	15%
ES 23478-PeCDF	32.67	1.48E+08	1.56	Y	0.89	1.02	15%
ES 123478-HxCDF	35.95	1.14E+08	0.52	Y	1.43	1.58	11%
ES 123678-HxCDF	36.09	1.32E+08	0.53	Y	1.63	1.84	13%
ES 234678-HxCDF	36.74	1.18E+08	0.55	Y	1.48	1.64	11%
ES 123789-HxCDF	37.72	1.11E+08	0.54	Y	1.29	1.54	19%
ES 1234678-HpCDF	39.2	9.49E+07	0.46	Y	1.15	1.32	15%
ES 1234789-HpCDF	40.53	8.02E+07	0.44	Y	0.91	1.11	23%
ES OCDF	42.73	1.58E+08	0.90	Y	0.83	1.10	32%

Dioxin/Furan QC Summary	Acq'd: 12 Jun 2020 20:46 PSW	ICAL: MM3_DF_10012020_12JUN2020
Lab ID: CS6_200612_DF_RA	UTP: 15-Jun-2020 11:51:53 PSW	Checkcode: 630-787-MDT
Sample ID: SIL 20-280-4	Report: 15 Jun 2020 11:54 pw	Datafile: 200612R11

Name	RT	Response	RA	OK	Ref. RRFs	Calc. RRFs	Dev'n
JS 1234-TCDD	26.86	8.61E+07	0.78	Y	-	-	-
JS 1234-TCDF	25.22	1.44E+08	0.79	Y	-	-	-
JS 123467-HxCDD	37.24	3.60E+07	1.33	Y	-	-	-
CS 37Cl-2378-TCDD	NotFnd		n/a	-	1.04		
CS 12347-PeCDD	32.51	6.46E+07	1.68	Y	0.74	0.75	1%
CS 12346-PeCDF	31.01	1.25E+08	1.60	Y	0.86	0.87	1%
CS 123469-HxCDF	36.39	9.59E+07	0.53	Y	1.36	1.33	-2%
CS 1234689-HpCDF	39.60	7.85E+07	0.45	Y	1.05	1.09	4%
SS 37Cl-2378-TCDD	NotFnd		n/a	-	1.04		
SS 12347-PeCDD	32.51	6.46E+07	1.68	Y	0.86	0.73	-14%
SS 12346-PeCDF	31.01	1.25E+08	1.60	Y	0.96	0.84	-13%
SS 123469-HxCDF	36.39	9.59E+07	0.53	Y	0.83	0.73	-13%
SS 1234689-HpCDF	39.60	7.85E+07	0.45	Y	0.92	0.83	-10%
AS 1368-TCDD	23.72	9.24E+07	0.76	Y	1.08	1.07	0%
AS 1368-TCDF	21.50	1.70E+08	0.78	Y	1.18	1.18	0%
FS 1278-TCDD	27.87	8.75E+07	0.78	Y	1.00	0.95	-5%
FS 12478-PeCDD	31.78	7.48E+07	1.65	Y	1.00	0.85	-15%
FS 123468-HxCDD	35.88	8.47E+07	1.31	Y	1.11	0.98	-12%
FS 1234679-HpCDD	39.46	8.66E+07	1.05	Y	1.19	1.01	-15%
TS 1378-TCDD	25.82	9.07E+07	0.78	Y	1.06	0.98	-7%
OCDD-a	42.57	2.17E+08	2.55	Y	0.07	0.07	-2%
OCDF-a	42.74	2.58E+08	2.55	Y	0.06	0.07	12%



Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS6_200612_DF_RA.utp_res, saved 15-Jun-2020 13:33 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 scc: 630-787
PKD: n/a Printed: 15-Jun-2020 13:40 Page 1 of 12



Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS6_200612_DF_RA.utp_res, saved 15-Jun-2020 13:33 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 4085, 4972, 6846 scc: 630-787 *Revised: 15-Jun-2020 08:29 (PSW) Printed: 15-Jun-2020 13:40 Page 2 of 12*

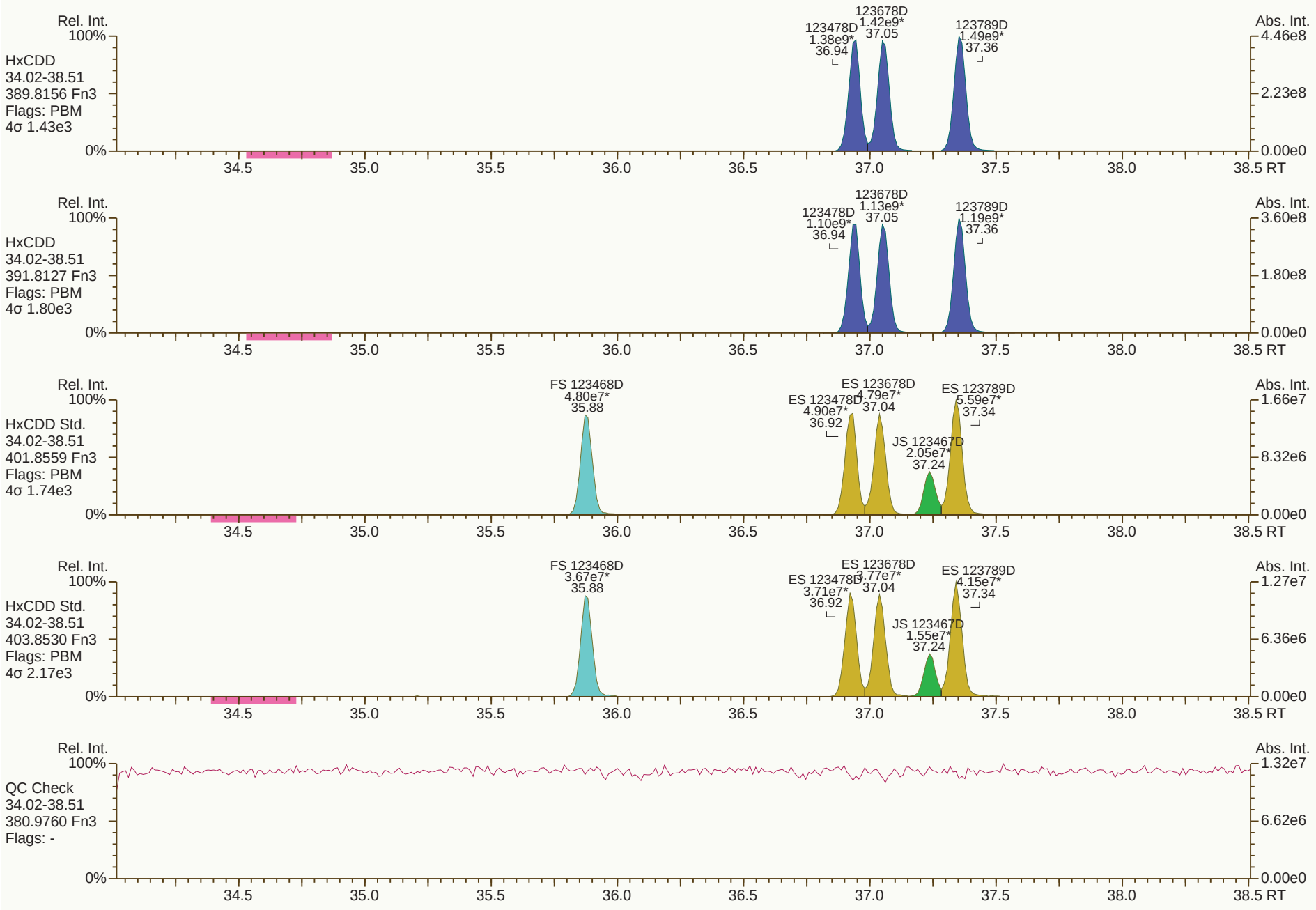
SGS ID: CS6_200612_DF_RA
Instr: [ILM] AutoSpec-Ultima MM3

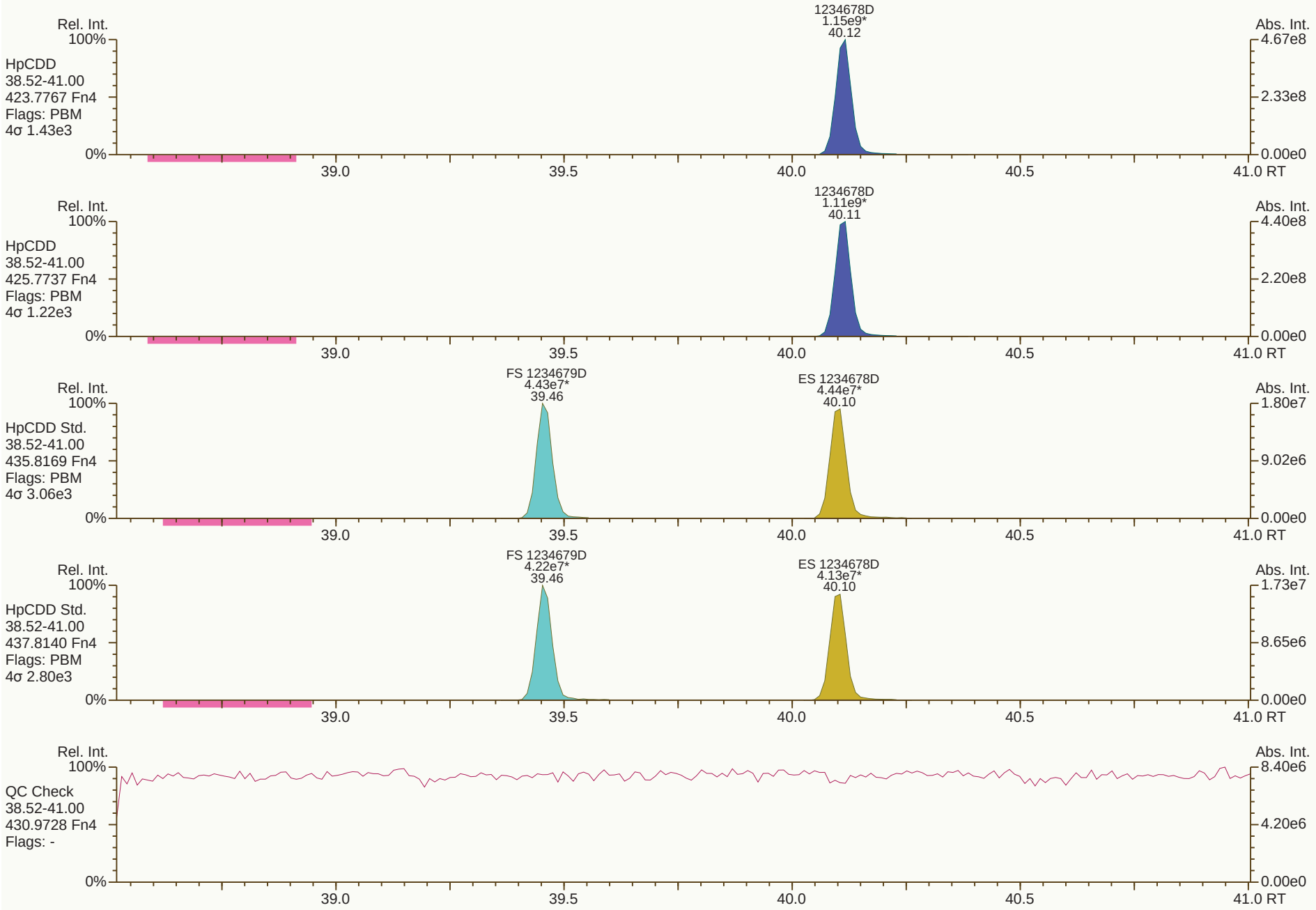
Sample ID: SIL 20-280-4
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 11

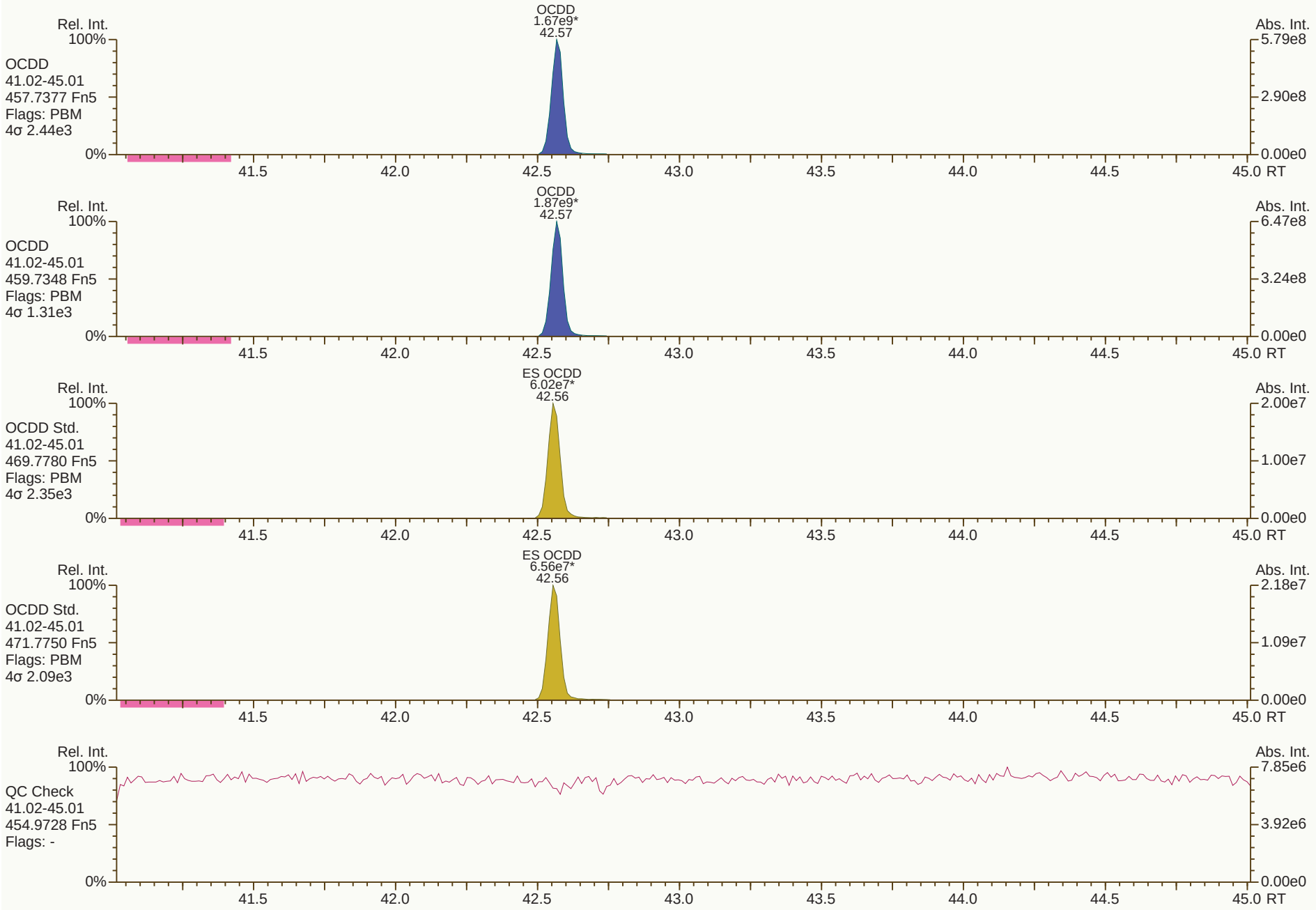
Acq: 12-Jun-2020 20:46:44
User: PSW Datafile: 200612R11

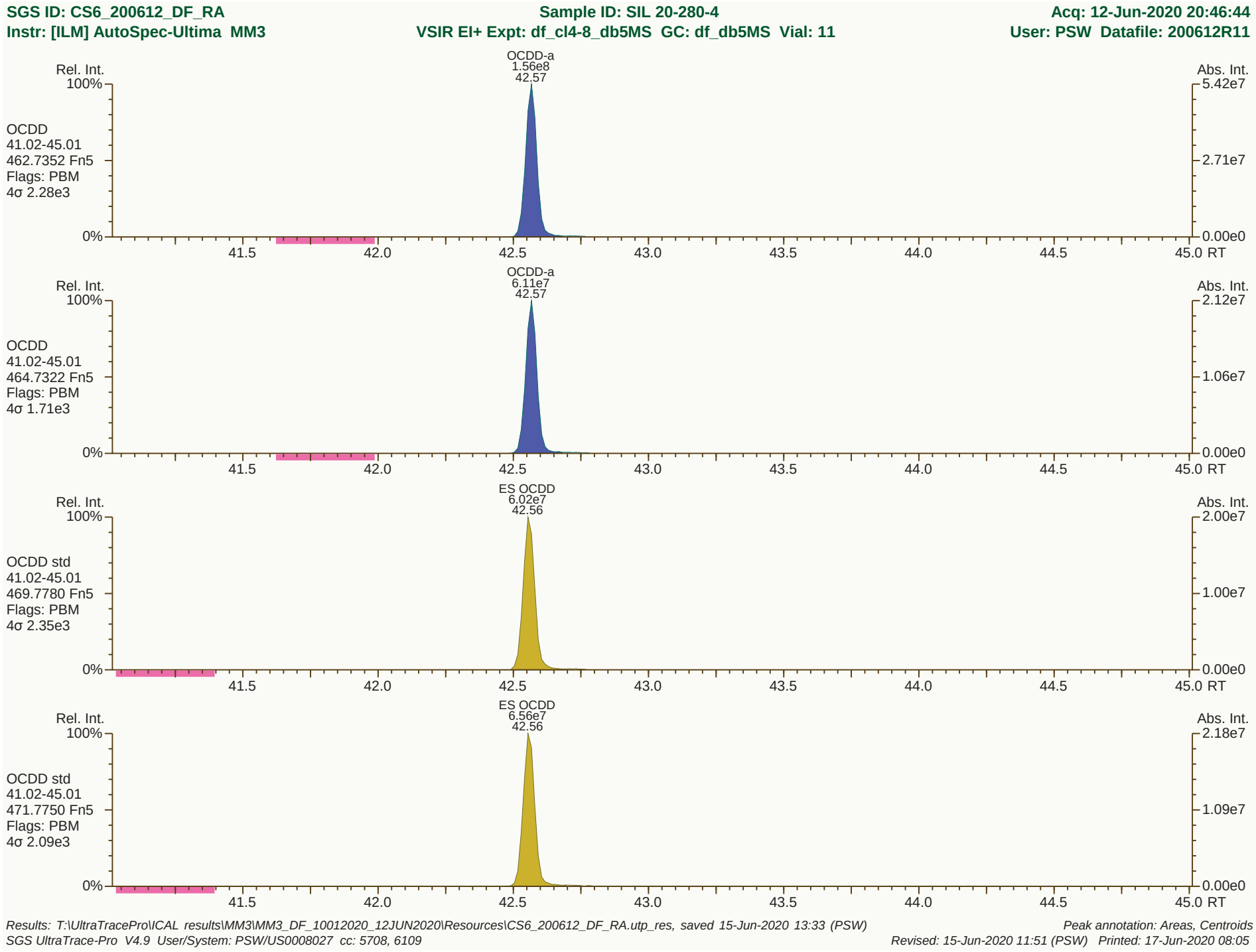


Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS6_200612_DF_RA.utp_res, saved 15-Jun-2020 13:33 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 2586, 0383 scc: 630-787
PKD: 15-Jun-2020 08:14 Printed: 15-Jun-2020 13:41 Page 3 of 12


Rel. Int.
100%
HxCDD
34.02-38.51
389.8156 Fn3
Flags: PBM
4σ 1.43e3
0%
123678D
1.42e9*
37.05
123478D
1.38e9*
36.94
123789D
1.49e9*
37.36
Abs. Int.
4.46e8
2.23e8
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDD
34.02-38.51
391.8127 Fn3
Flags: PBM
4σ 1.80e3
0%
123678D
1.13e9*
37.05
123478D
1.10e9*
36.94
123789D
1.19e9*
37.36
Abs. Int.
3.60e8
1.80e8
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDD Std.
34.02-38.51
401.8559 Fn3
Flags: PBM
4σ 1.74e3
0%
FS 123468D
4.80e7*
35.88
ES 123678D
4.79e7*
37.04
ES 123478D
4.90e7*
36.92
ES 123789D
5.59e7*
37.34
JS 123467D
2.05e7*
37.24
Abs. Int.
1.66e7
8.32e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDD Std.
34.02-38.51
403.8530 Fn3
Flags: PBM
4σ 2.17e3
0%
FS 123468D
3.67e7*
35.88
ES 123678D
3.77e7*
37.04
ES 123478D
3.71e7*
36.92
ES 123789D
4.15e7*
37.34
JS 123467D
1.55e7*
37.24
Abs. Int.
1.27e7
6.36e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
QC Check
34.02-38.51
380.9760 Fn3
Flags: -
0%
Abs. Int.
1.32e7
6.62e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT


Rel. Int.
100%
HpCDD
38.52-41.00
423.7767 Fn4
Flags: PBM
4σ 1.43e3
0%
1234678D
1.15e9*
40.12
Abs. Int.
4.67e8
2.33e8
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.52-41.00
425.7737 Fn4
Flags: PBM
4σ 1.22e3
0%
1234678D
1.11e9*
40.11
Abs. Int.
4.40e8
2.20e8
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.52-41.00
435.8169 Fn4
Flags: PBM
4σ 3.06e3
0%
FS 1234679D
4.43e7*
39.46
ES 1234678D
4.44e7*
40.10
Abs. Int.
1.80e7
9.02e6
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.52-41.00
437.8140 Fn4
Flags: PBM
4σ 2.80e3
0%
FS 1234679D
4.22e7*
39.46
ES 1234678D
4.13e7*
40.10
Abs. Int.
1.73e7
8.65e6
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.52-41.00
430.9728 Fn4
Flags: -
0%
Abs. Int.
8.40e6
4.20e6
0.00e0
39.0
39.5
40.0
40.5
41.0 RT


Rel. Int.
100%
OCDD
41.02-45.01
457.7377 Fn5
Flags: PBM
4σ 2.44e3
0%
OCDD
1.67e9*
42.57
Abs. Int.
5.79e8
2.90e8
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDD
41.02-45.01
459.7348 Fn5
Flags: PBM
4σ 1.31e3
0%
OCDD
1.87e9*
42.57
Abs. Int.
6.47e8
3.24e8
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDD Std.
41.02-45.01
469.7780 Fn5
Flags: PBM
4σ 2.35e3
0%
ES OCDD
6.02e7*
42.56
Abs. Int.
2.00e7
1.00e7
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDD Std.
41.02-45.01
471.7750 Fn5
Flags: PBM
4σ 2.09e3
0%
ES OCDD
6.56e7*
42.56
Abs. Int.
2.18e7
1.09e7
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
QC Check
41.02-45.01
454.9728 Fn5
Flags: -
0%
Abs. Int.
7.85e6
3.92e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT


SGS ID: CS6_200612_DF_RA
Sample ID: SIL 20-280-4
Acq: 12-Jun-2020 20:46:44
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 11
User: PSW Datafile: 200612R11
OCDD-a
1.56e8
42.57
Rel. Int.
100%
0%
Abs. Int.
5.42e7
2.71e7
0.00e0
OCDD
41.02-45.01
462.7352 Fn5
Flags: PBM
4σ 2.28e3
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDD-a
6.11e7
42.57
Abs. Int.
2.12e7
1.06e7
OCDD
41.02-45.01
464.7322 Fn5
Flags: PBM
4σ 1.71e3
ES OCDD
6.02e7
42.56
Abs. Int.
2.00e7
1.00e7
OCDD std
41.02-45.01
469.7780 Fn5
Flags: PBM
4σ 2.35e3
ES OCDD
6.56e7
42.56
Abs. Int.
2.18e7
1.09e7
OCDD std
41.02-45.01
471.7750 Fn5
Flags: PBM
4σ 2.09e3
Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS6_200612_DF_RA.utp_res, saved 15-Jun-2020 13:33 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 5708, 6109
Revised: 15-Jun-2020 11:51 (PSW) Printed: 17-Jun-2020 08:05


Rel. Int.
100%
TCDF
20.54-29.50
303.9016 Fn1
Flags: PBM
4σ 1.53e3
2378F
3.51e8*
26.65
Abs. Int.
8.02e7
4.01e7
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF
20.54-29.50
305.8987 Fn1
Flags: PBM
4σ 1.88e3
2378F
4.56e8*
26.65
Abs. Int.
1.03e8
5.16e7
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
315.9419 Fn1
Flags: PBM
4σ 1.28e4
AS 1368F
7.45e7*
21.50
JS 1234F
6.37e7*
25.22
ES 2378F
6.93e7*
26.63
Abs. Int.
1.53e7
7.64e6
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
317.9389 Fn1
Flags: PBM
4σ 8.21e3
AS 1368F
9.53e7*
21.50
JS 1234F
8.05e7*
25.22
ES 2378F
8.55e7*
26.63
Abs. Int.
1.88e7
9.41e6
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
HxCDPE
20.54-29.50
375.8364 Fn1
Flags: PB
4σ 1.74e3
Abs. Int.
6.90e3
3.45e3
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT

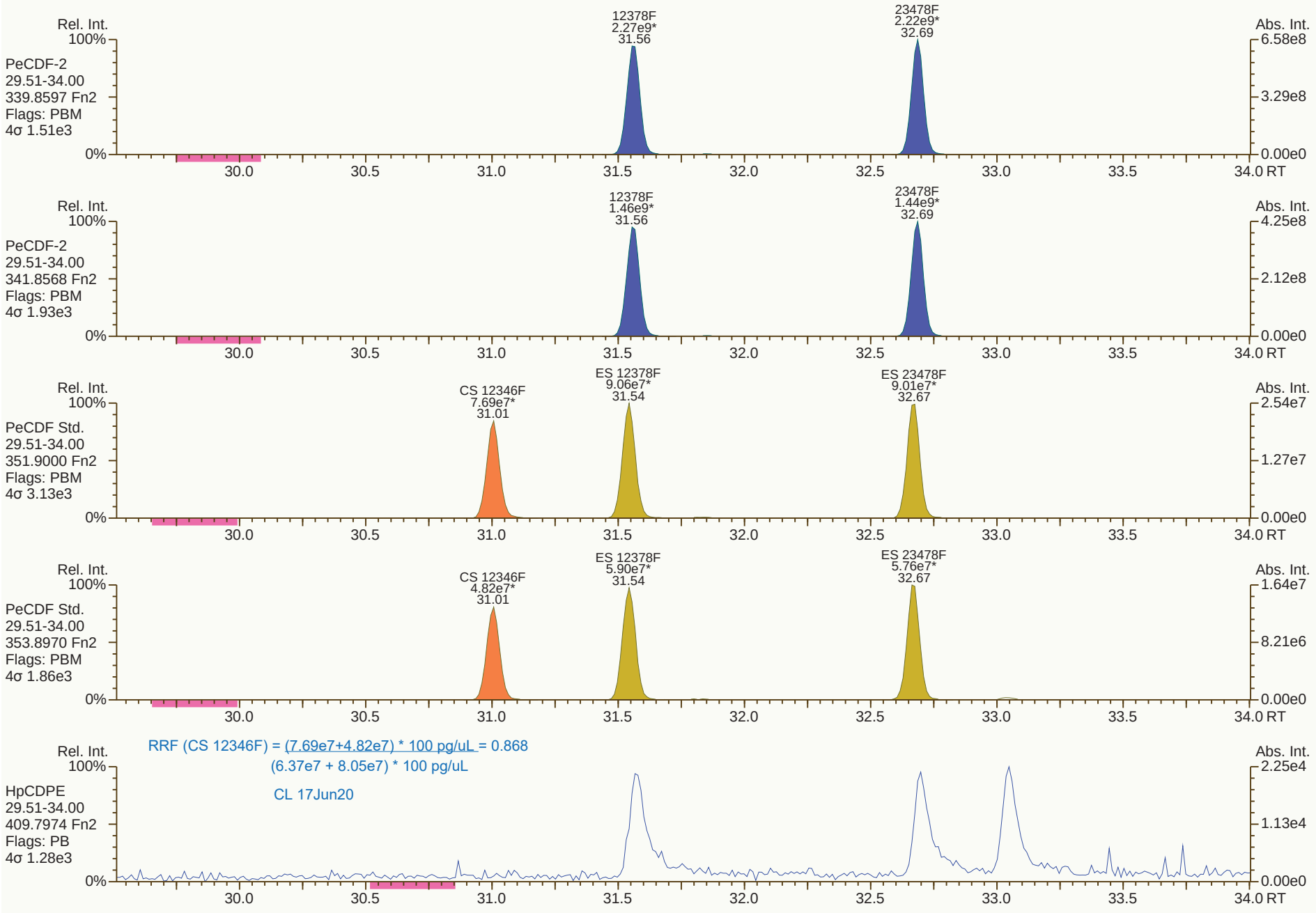
SGS ID: CS6_200612_DF_RA **Sample ID: SIL 20-280-4** **Acq: 12-Jun-2020 20:46:44**

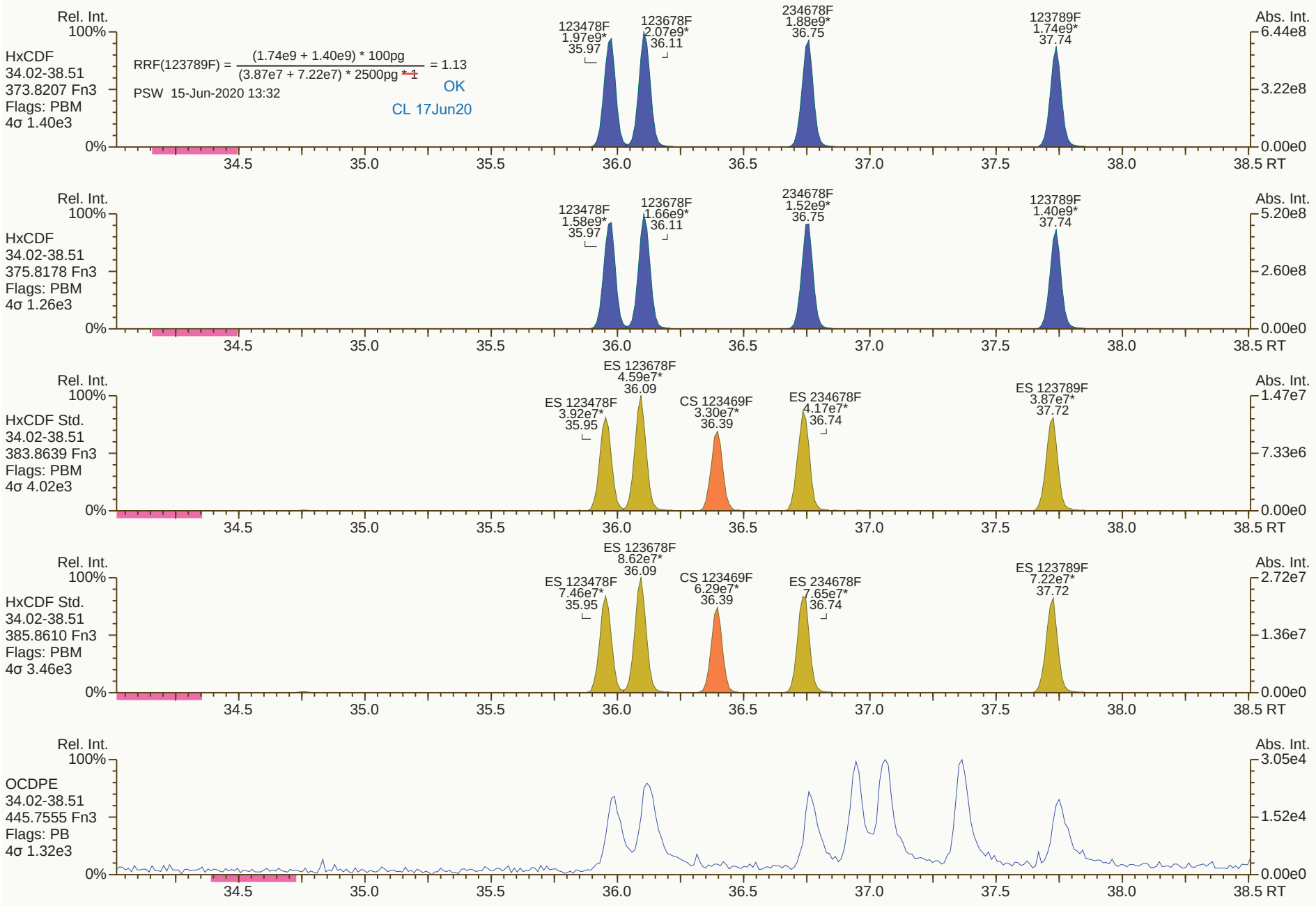
Instr: [ILM] AutoSpec-Ultima MM3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 11** **User: PSW Datafile: 200612R11**

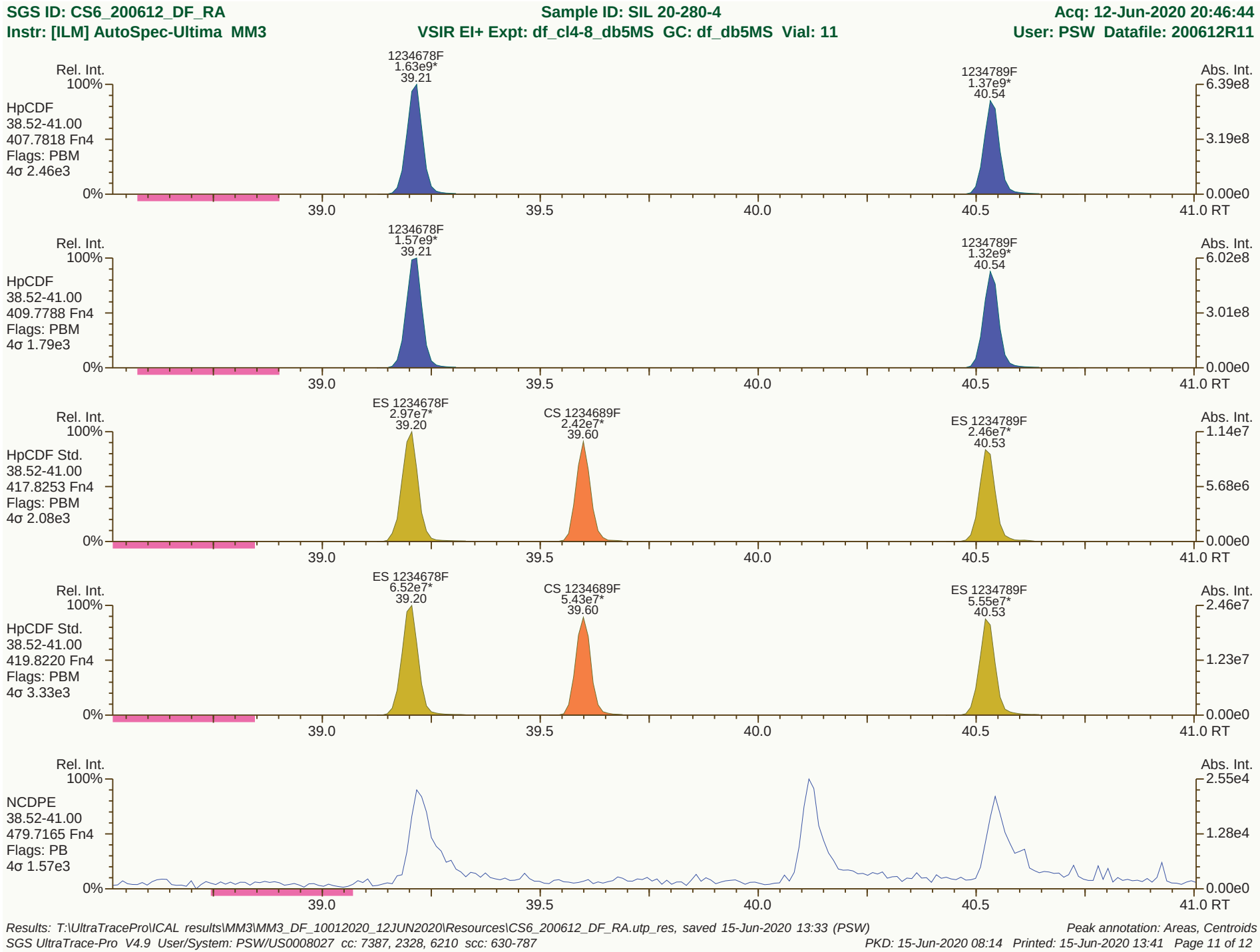


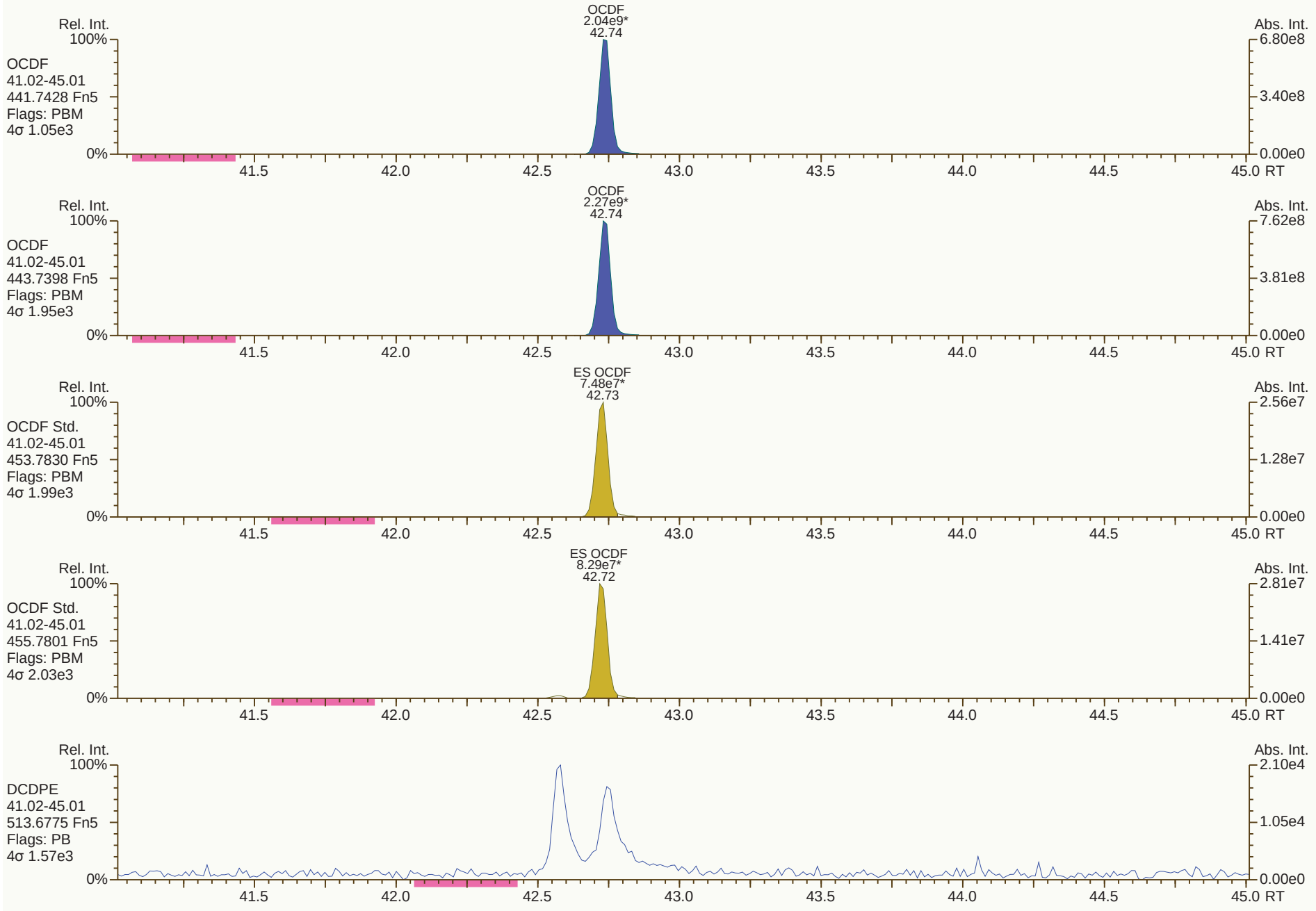
Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS6_200612_DF_RA.utp_res, saved 15-Jun-2020 13:33 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 1009 scc: 630-787 *PKD: 15-Jun-2020 08:14 Printed: 15-Jun-2020 13:41 Page 8 of 12*


Rel. Int.
100%
PeCDF-2
29.51-34.00
339.8597 Fn2
Flags: PBM
4σ 1.51e3
0%
12378F
2.27e9*
31.56
23478F
2.22e9*
32.69
Abs. Int.
6.58e8
3.29e8
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF-2
29.51-34.00
341.8568 Fn2
Flags: PBM
4σ 1.93e3
0%
12378F
1.46e9*
31.56
23478F
1.44e9*
32.69
Abs. Int.
4.25e8
2.12e8
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.00
351.9000 Fn2
Flags: PBM
4σ 3.13e3
0%
CS 12346F
7.69e7*
31.01
ES 12378F
9.06e7*
31.54
ES 23478F
9.01e7*
32.67
Abs. Int.
2.54e7
1.27e7
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.00
353.8970 Fn2
Flags: PBM
4σ 1.86e3
0%
CS 12346F
4.82e7*
31.01
ES 12378F
5.90e7*
31.54
ES 23478F
5.76e7*
32.67
Abs. Int.
1.64e7
8.21e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
RRF (CS 12346F) = (7.69e7+4.82e7) * 100 pg/uL = 0.868
(6.37e7 + 8.05e7) * 100 pg/uL
CL 17Jun20
Rel. Int.
100%
HpCDPE
29.51-34.00
409.7974 Fn2
Flags: PB
4σ 1.28e3
0%
Abs. Int.
2.25e4
1.13e4
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT

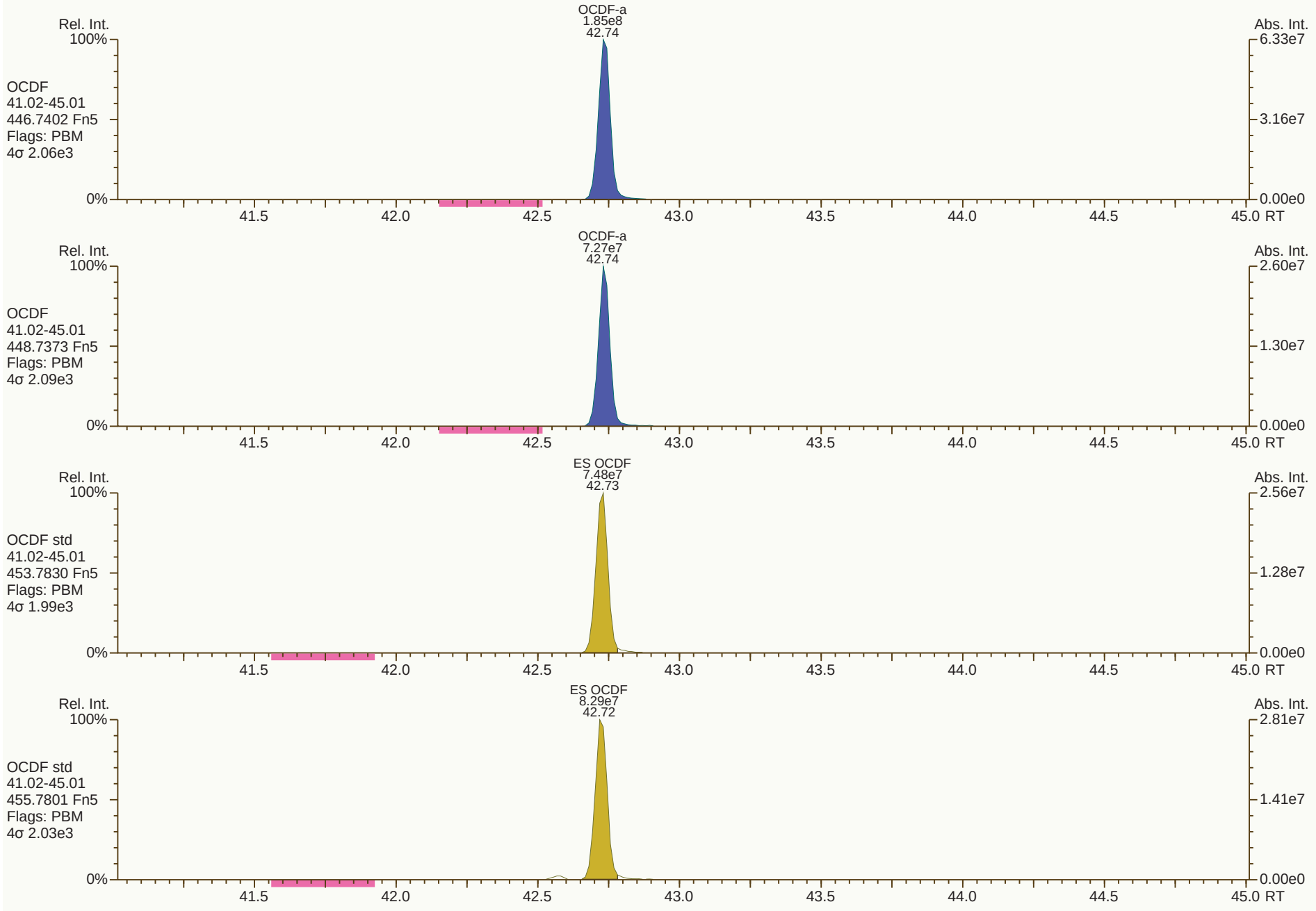

Rel. Int.
100%
HxCDF
34.02-38.51
373.8207 Fn3
Flags: PBM
4σ 1.40e3
RRF(123789F) = (1.74e9 + 1.40e9) * 100pg / (3.87e7 + 7.22e7) * 2500pg * 1 = 1.13
PSW 15-Jun-2020 13:32
OK
CL 17Jun20
123478F 1.97e9* 35.97
123678F 2.07e9* 36.11
234678F 1.88e9* 36.75
123789F 1.74e9* 37.74
Abs. Int.
6.44e8
3.22e8
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 RT
Rel. Int.
100%
HxCDF
34.02-38.51
375.8178 Fn3
Flags: PBM
4σ 1.26e3
123478F 1.58e9* 35.97
123678F 1.66e9* 36.11
234678F 1.52e9* 36.75
123789F 1.40e9* 37.74
Abs. Int.
5.20e8
2.60e8
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 RT
Rel. Int.
100%
HxCDF Std.
34.02-38.51
383.8639 Fn3
Flags: PBM
4σ 4.02e3
ES 123678F 4.59e7* 36.09
ES 123478F 3.92e7* 35.95
CS 123469F 3.30e7* 36.39
ES 234678F 4.17e7* 36.74
ES 123789F 3.87e7* 37.72
Abs. Int.
1.47e7
7.33e6
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 RT
Rel. Int.
100%
HxCDF Std.
34.02-38.51
385.8610 Fn3
Flags: PBM
4σ 3.46e3
ES 123678F 8.62e7* 36.09
ES 123478F 7.46e7* 35.95
CS 123469F 6.29e7* 36.39
ES 234678F 7.65e7* 36.74
ES 123789F 7.22e7* 37.72
Abs. Int.
2.72e7
1.36e7
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 RT
Rel. Int.
100%
OCDPE
34.02-38.51
445.7555 Fn3
Flags: PB
4σ 1.32e3
Abs. Int.
3.05e4
1.52e4
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 RT


SGS ID: CS6_200612_DF_RA
Sample ID: SIL 20-280-4
Acq: 12-Jun-2020 20:46:44
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 11
User: PSW Datafile: 200612R11
Rel. Int.
Abs. Int.
100%
0%
HpCDF
38.52-41.00
407.7818 Fn4
Flags: PBM
4σ 2.46e3
1234678F
1.63e9*
39.21
1234789F
1.37e9*
40.54
6.39e8
3.19e8
0.00e0
HpCDF
38.52-41.00
409.7788 Fn4
Flags: PBM
4σ 1.79e3
1234678F
1.57e9*
39.21
1234789F
1.32e9*
40.54
6.02e8
3.01e8
0.00e0
HpCDF Std.
38.52-41.00
417.8253 Fn4
Flags: PBM
4σ 2.08e3
ES 1234678F
2.97e7*
39.20
CS 1234689F
2.42e7*
39.60
ES 1234789F
2.46e7*
40.53
1.14e7
5.68e6
0.00e0
HpCDF Std.
38.52-41.00
419.8220 Fn4
Flags: PBM
4σ 3.33e3
ES 1234678F
6.52e7*
39.20
CS 1234689F
5.43e7*
39.60
ES 1234789F
5.55e7*
40.53
2.46e7
1.23e7
0.00e0
NCDPE
38.52-41.00
479.7165 Fn4
Flags: PB
4σ 1.57e3
2.55e4
1.28e4
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS6_200612_DF_RA.utp_res, saved 15-Jun-2020 13:33 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 7387, 2328, 6210 scc: 630-787
PKD: 15-Jun-2020 08:14 Printed: 15-Jun-2020 13:41 Page 11 of 12


Rel. Int.
100%
OCDF
41.02-45.01
441.7428 Fn5
Flags: PBM
4σ 1.05e3
0%
OCDF
2.04e9*
42.74
Abs. Int.
6.80e8
3.40e8
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF
41.02-45.01
443.7398 Fn5
Flags: PBM
4σ 1.95e3
0%
OCDF
2.27e9*
42.74
Abs. Int.
7.62e8
3.81e8
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF Std.
41.02-45.01
453.7830 Fn5
Flags: PBM
4σ 1.99e3
0%
ES OCDF
7.48e7*
42.73
Abs. Int.
2.56e7
1.28e7
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF Std.
41.02-45.01
455.7801 Fn5
Flags: PBM
4σ 2.03e3
0%
ES OCDF
8.29e7*
42.72
Abs. Int.
2.81e7
1.41e7
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
DCDPE
41.02-45.01
513.6775 Fn5
Flags: PB
4σ 1.57e3
0%
Abs. Int.
2.10e4
1.05e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

SGS ID: CS6_200612_DF_RA | Sample ID: SIL 20-280-4 | Acq: 12-Jun-2020 20:46:44

Instr: [ILM] AutoSpec-Ultima MM3 | VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 11 | User: PSW Datafile: 200612R11



Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS6_200612_DF_RA.utp_res, saved 15-Jun-2020 13:33 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 9008, 9795 *Revised: 15-Jun-2020 11:51 (PSW) Printed: 17-Jun-2020 08:05*



Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\SBS_200612_DF_RA.utp_res, saved 12-Jun-2020 14:33 (PSW) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 scc: 041-322 *PKD: n/a Printed: 15-Jun-2020 13:37 Page 1 of 12*


Rel. Int.
100%
TCDD
20.54-29.50
319.8965 Fn1
Flags: PB
4σ 3.23e3
0%
Abs. Int.
1.00e4
5.00e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD
20.54-29.50
321.8936 Fn1
Flags: PB
4σ 3.90e3
0%
Abs. Int.
1.53e4
7.65e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
37Cl-TCDD
20.54-29.50
327.8850 Fn1
Flags: PB
4σ 2.19e3
0%
Abs. Int.
1.06e4
5.29e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
331.9368 Fn1
Flags: PB
4σ 9.11e3
0%
Abs. Int.
2.23e4
1.11e4
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
333.9339 Fn1
Flags: PB
4σ 5.44e3
0%
Abs. Int.
2.39e4
1.20e4
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
PeCDD
29.51-34.01
355.8546 Fn2
Flags: PB
4σ 2.84e3
0%
Abs. Int.
9.71e3
4.85e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD
29.51-34.01
357.8517 Fn2
Flags: PB
4σ 1.59e3
0%
Abs. Int.
4.98e3
2.49e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
367.8949 Fn2
Flags: PB
4σ 8.83e3
0%
Abs. Int.
2.09e4
1.05e4
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
369.8919 Fn2
Flags: PB
4σ 3.20e3
0%
Abs. Int.
1.78e4
8.92e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
QC Check
29.51-34.01
366.9792 Fn2
Flags: -
0%
Abs. Int.
7.15e6
3.58e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT


Rel. Int.
100%
HxCDD
34.02-38.51
389.8156 Fn3
Flags: PB
4σ 2.61e3
0%
Abs. Int.
1.29e4
6.43e3
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDD
34.02-38.51
391.8127 Fn3
Flags: PB
4σ 2.61e3
0%
Abs. Int.
9.83e3
4.91e3
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDD Std.
34.02-38.51
401.8559 Fn3
Flags: PB
4σ 5.42e3
0%
Abs. Int.
3.38e4
1.69e4
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDD Std.
34.02-38.51
403.8530 Fn3
Flags: PB
4σ 5.26e3
0%
Abs. Int.
3.77e4
1.89e4
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
QC Check
34.02-38.51
380.9760 Fn3
Flags: -
0%
Abs. Int.
2.42e7
1.21e7
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT


Rel. Int.
100%
HpCDD
38.52-41.01
423.7767 Fn4
Flags: PB
4σ 2.59e3
0%
Abs. Int.
1.14e4
5.68e3
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.52-41.01
425.7737 Fn4
Flags: PB
4σ 2.19e3
0%
Abs. Int.
1.51e4
7.55e3
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.52-41.01
435.8169 Fn4
Flags: PB
4σ 3.17e3
0%
Abs. Int.
3.39e4
1.70e4
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.52-41.01
437.8140 Fn4
Flags: PB
4σ 7.18e3
0%
Abs. Int.
4.62e4
2.31e4
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.52-41.01
430.9728 Fn4
Flags: -
0%
Abs. Int.
1.48e7
7.39e6
0.00e0
39.0
39.5
40.0
40.5
41.0 RT


Rel. Int.
100%
OCDD
41.02-45.00
457.7377 Fn5
Flags: PB
4σ 2.02e3
0%
Abs. Int.
2.62e4
1.31e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDD
41.02-45.00
459.7348 Fn5
Flags: PB
4σ 2.26e3
0%
Abs. Int.
2.83e4
1.41e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDD Std.
41.02-45.00
469.7780 Fn5
Flags: PB
4σ 2.55e3
0%
Abs. Int.
5.24e4
2.62e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDD Std.
41.02-45.00
471.7750 Fn5
Flags: PB
4σ 3.88e3
0%
Abs. Int.
9.97e4
4.99e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
1.36e7
6.80e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT


2468F: SPIKED
1.60e6*
22.78
Rel. Int.
100%
TCDF
20.54-29.50
303.9016 Fn1
Flags: PBM
4σ 2.19e3
0%
Abs. Int.
2.88e5
1.44e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
2468F
1.98e6*
22.78
Rel. Int.
100%
TCDF
20.54-29.50
305.8987 Fn1
Flags: PBM
4σ 2.71e3
0%
Abs. Int.
4.00e5
2.00e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
315.9419 Fn1
Flags: PB
4σ 1.67e4
0%
Abs. Int.
4.78e4
2.39e4
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
317.9389 Fn1
Flags: PB
4σ 1.11e4
0%
Abs. Int.
5.02e4
2.51e4
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
HxCDPE
20.54-29.50
375.8364 Fn1
Flags: PB
4σ 2.44e3
0%
Abs. Int.
1.20e4
6.00e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
0%
Abs. Int.
9.00e3
4.50e3
0.00e0
PeCDF-1
20.54-29.50
339.8597 Fn1
Flags: PB
4σ 2.50e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
0%
Abs. Int.
1.76e4
8.81e3
0.00e0
PeCDF-1
20.54-29.50
341.8568 Fn1
Flags: PB
4σ 3.10e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
0%
Abs. Int.
1.01e7
5.05e6
0.00e0
QC Check
20.54-29.50
316.9824 Fn1
Flags: -
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
PeCDF-2
29.51-34.01
339.8597 Fn2
Flags: PB
4σ 1.97e3
0%
Abs. Int.
1.93e4
9.66e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF-2
29.51-34.01
341.8568 Fn2
Flags: PB
4σ 2.98e3
0%
Abs. Int.
1.18e4
5.88e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
351.9000 Fn2
Flags: PB
4σ 5.91e3
0%
Abs. Int.
4.44e4
2.22e4
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
353.8970 Fn2
Flags: PB
4σ 3.85e3
0%
Abs. Int.
2.67e4
1.34e4
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
HpCDPE
29.51-34.01
409.7974 Fn2
Flags: PB
4σ 1.84e3
0%
Abs. Int.
6.79e3
3.40e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT


Rel. Int.
100%
HxCDF
34.02-38.51
373.8207 Fn3
Flags: PB
4σ 1.94e3
0%
Abs. Int.
1.58e4
7.91e3
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDF
34.02-38.51
375.8178 Fn3
Flags: PB
4σ 3.92e3
0%
Abs. Int.
1.54e4
7.69e3
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDF Std.
34.02-38.51
383.8639 Fn3
Flags: PB
4σ 3.44e3
0%
Abs. Int.
3.56e4
1.78e4
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDF Std.
34.02-38.51
385.8610 Fn3
Flags: PB
4σ 5.38e3
0%
Abs. Int.
6.98e4
3.49e4
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
OCDPE
34.02-38.51
445.7555 Fn3
Flags: PB
4σ 2.14e3
0%
Abs. Int.
6.58e3
3.29e3
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT

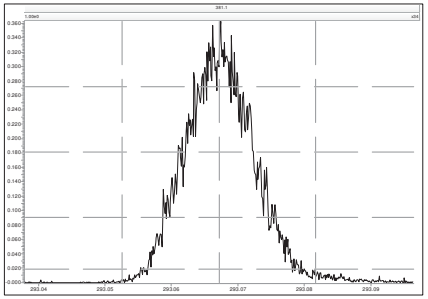

Rel. Int.
100%
HpCDF
38.52-41.01
407.7818 Fn4
Flags: PB
4σ 2.99e3
0%
Abs. Int.
3.18e4
1.59e4
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF
38.52-41.01
409.7788 Fn4
Flags: PB
4σ 2.83e3
0%
Abs. Int.
2.04e4
1.02e4
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.52-41.01
417.8253 Fn4
Flags: PB
4σ 3.04e3
0%
Abs. Int.
4.57e4
2.29e4
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.52-41.01
419.8220 Fn4
Flags: PB
4σ 7.57e3
0%
Abs. Int.
5.34e4
2.67e4
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
NCDPE
38.52-41.01
479.7165 Fn4
Flags: PB
4σ 2.61e3
0%
Abs. Int.
7.35e3
3.68e3
0.00e0
39.0
39.5
40.0
40.5
41.0 RT


Rel. Int.
100%
OCDF
41.02-45.00
441.7428 Fn5
Flags: PB
4σ 2.29e3
0%
Abs. Int.
1.99e4
9.97e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF
41.02-45.00
443.7398 Fn5
Flags: PB
4σ 1.92e3
0%
Abs. Int.
2.80e4
1.40e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF Std.
41.02-45.00
453.7830 Fn5
Flags: PB
4σ 3.07e3
0%
Abs. Int.
8.16e4
4.08e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF Std.
41.02-45.00
455.7801 Fn5
Flags: PB
4σ 2.50e3
0%
Abs. Int.
6.16e4
3.08e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
DCDPE
41.02-45.00
513.6775 Fn5
Flags: PB
4σ 1.70e3
0%
Abs. Int.
9.01e3
4.51e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

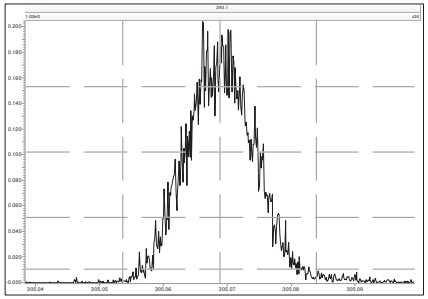
File: Experiment: df_cl4-8_db5MS.exp Reference: pfk.ref Function: 1 @ 200 (ppm)

Printed: Friday, June 12, 2020 13:32:38 Eastern Daylight Time

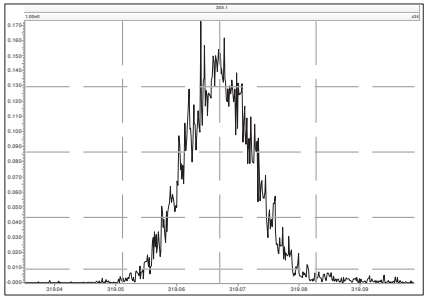
M 292.9824 R 13438



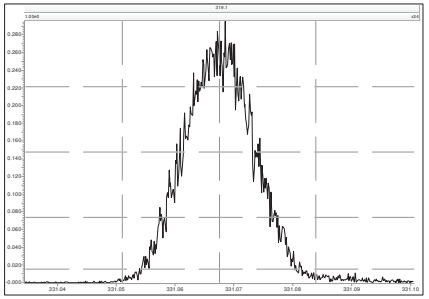
M 304.9824 R 12888



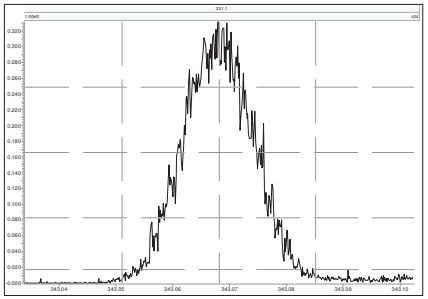
M 318.9792 R 13661



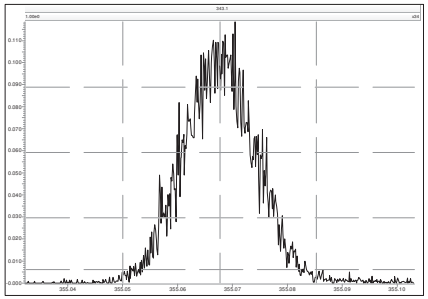
M 330.9792 R 12498



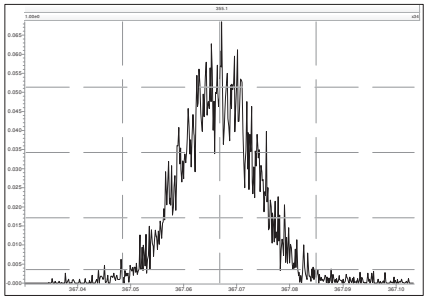
M 342.9792 R 11963



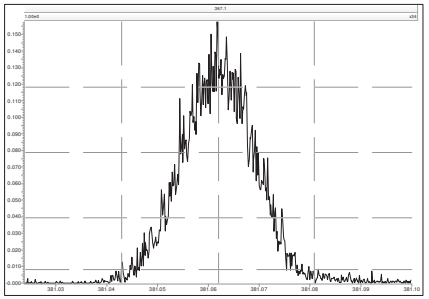
M 354.9792 R 12505



M 366.9792 R 12133



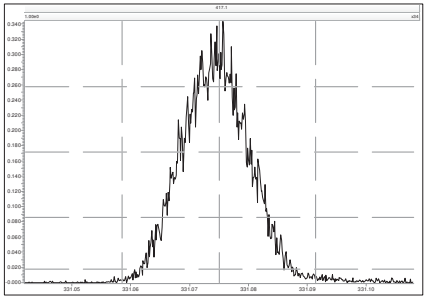
M 380.9760 R 12132



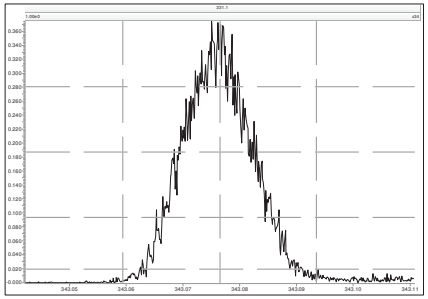
File: Experiment: df_cl4-8_db5MS.exp Reference: pfk.ref Function: 2 @ 200 (ppm)

Printed: Friday, June 12, 2020 13:32:59 Eastern Daylight Time

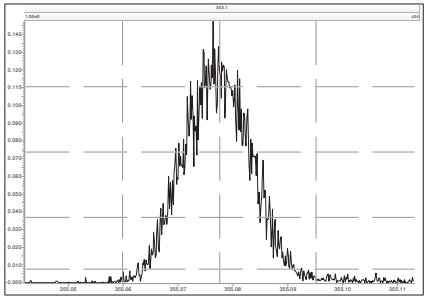
M 330.9792 R 12885



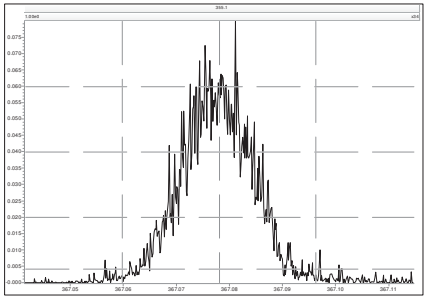
M 342.9792 R 13085



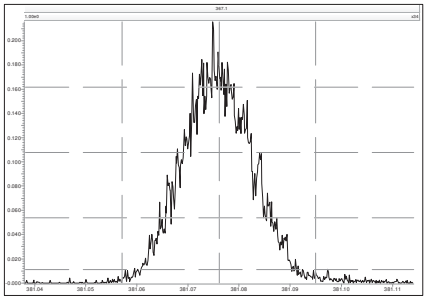
M 354.9792 R 12500



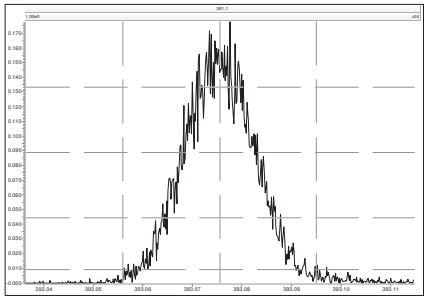
M 366.9792 R 13367



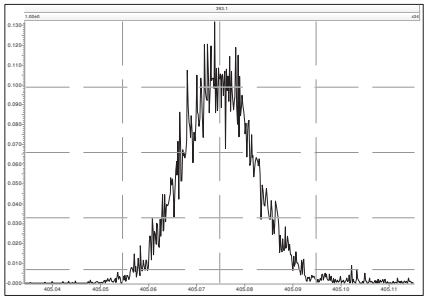
M 380.9760 R 12439



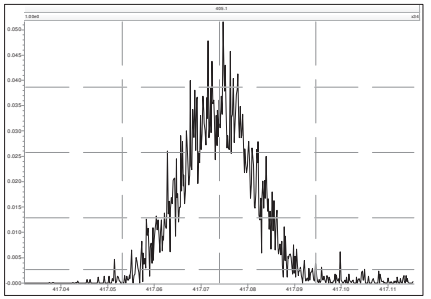
M 392.9760 R 12136



M 404.9760 R 12139



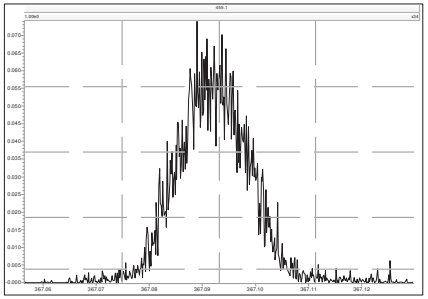
M 416.9760 R 14621



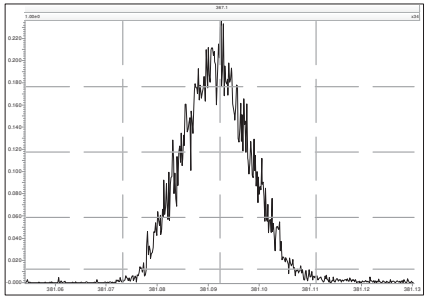
File: Experiment: df_cl4-8_db5MS.exp Reference: pfk.ref Function: 3 @ 200 (ppm)

Printed: Friday, June 12, 2020 13:33:16 Eastern Daylight Time

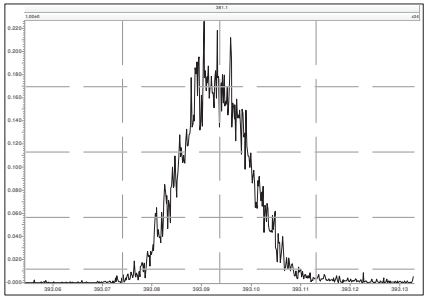
M 366.9792 R 13226



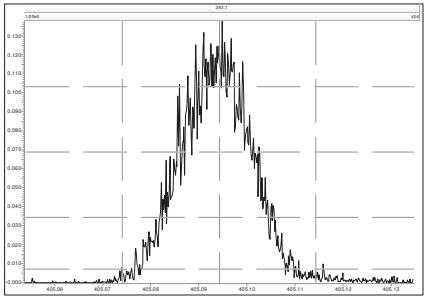
M 380.9760 R 13584



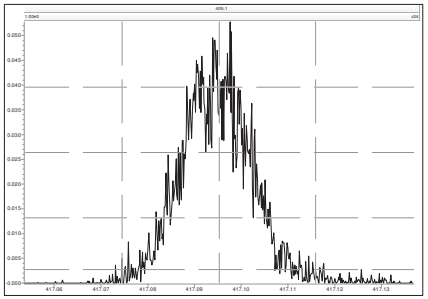
M 392.9760 R 13089



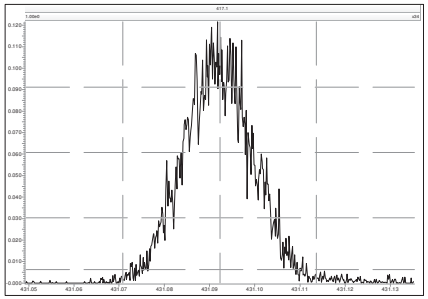
M 404.9760 R 13439



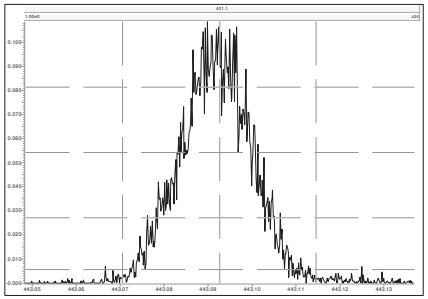
M 416.9760 R 14453



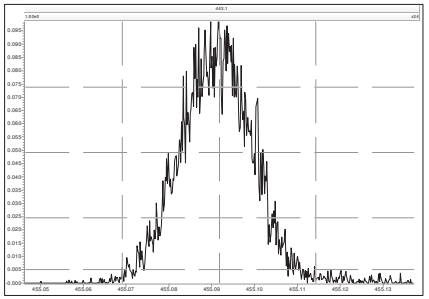
M 430.9728 R 13228



M 442.9728 R 12754



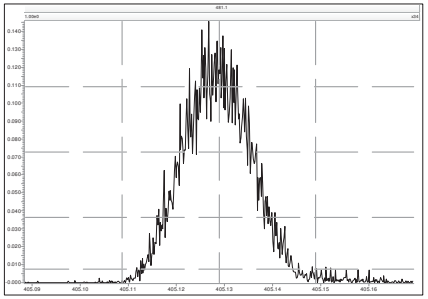
M 454.9728 R 12752



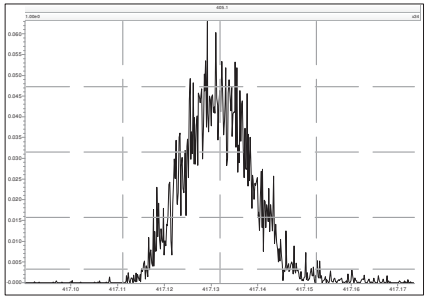
File: Experiment: df_cl4-8_db5MS.exp Reference: pfk.ref Function: 4 @ 200 (ppm)

Printed: Friday, June 12, 2020 13:33:35 Eastern Daylight Time

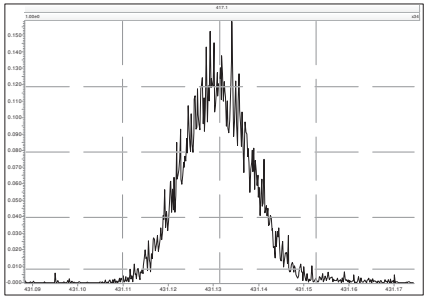
M 404.9760 R 13021



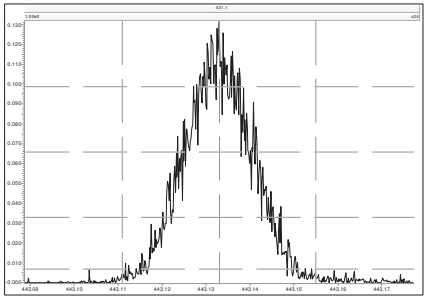
M 416.9760 R 14449



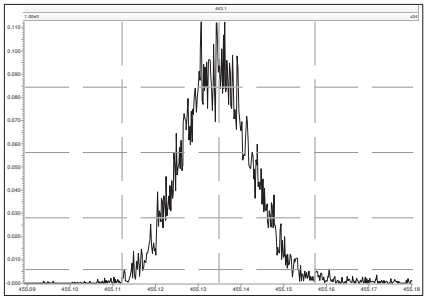
M 430.9728 R 12757



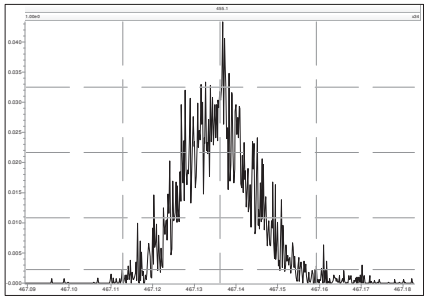
M 442.9728 R 13967



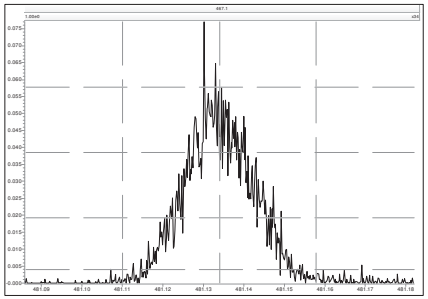
M 454.9728 R 12754



M 466.9728 R 13515



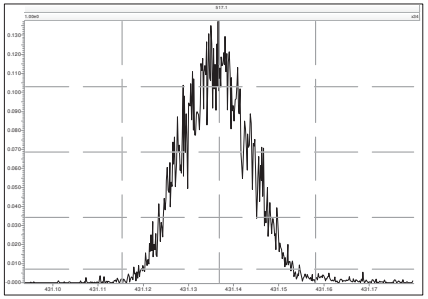
M 480.9696 R 14706



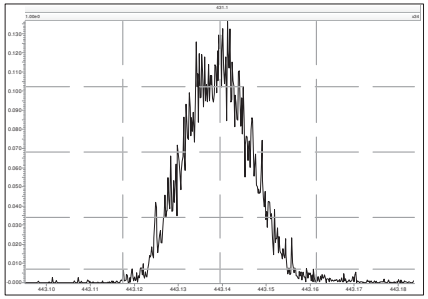
File: Experiment: df_cl4-8_db5MS.exp Reference: pfk.ref Function: 5 @ 200 (ppm)

Printed: Friday, June 12, 2020 13:33:55 Eastern Daylight Time

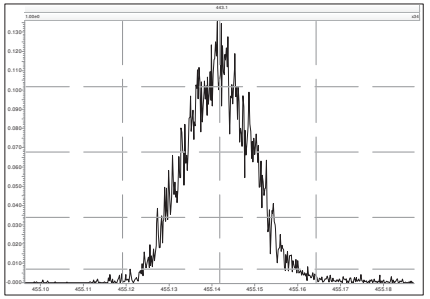
M 430.9728 R 12692



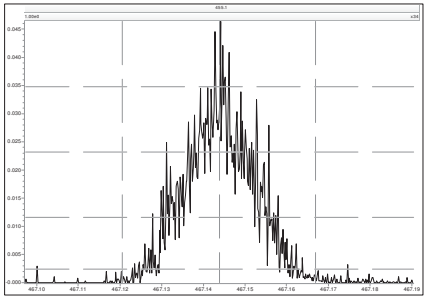
M 442.9728 R 13889



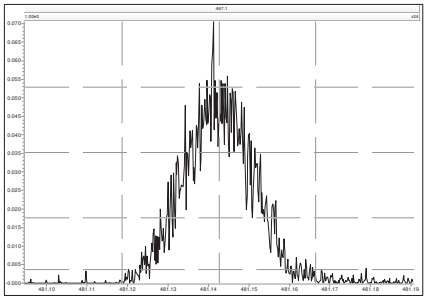
M 454.9728 R 12693



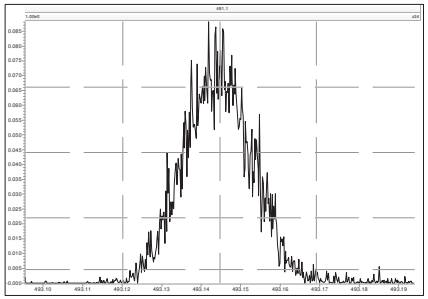
M 466.9728 R 14622



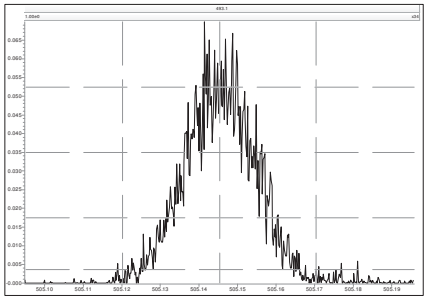
M 480.9696 R 13662



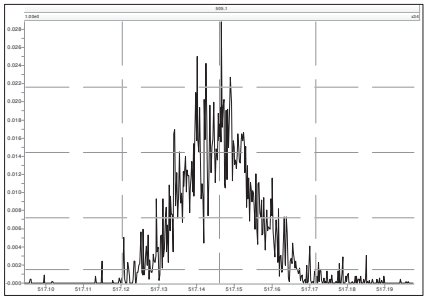
M 492.9696 R 13660



M 504.9696 R 12753

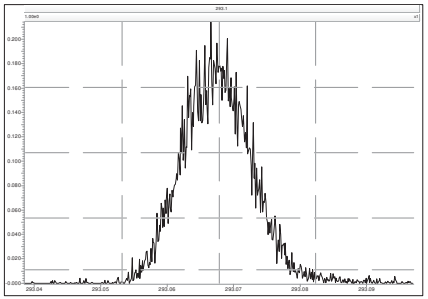


M 516.9697 R 15065

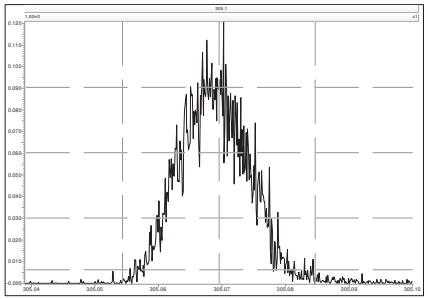


Printed: Friday, June 12, 2020 21:42:14 Eastern Daylight Time

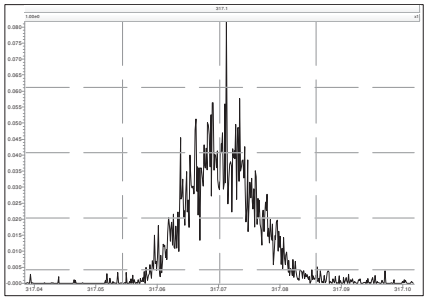
M 292.9824 R 12920



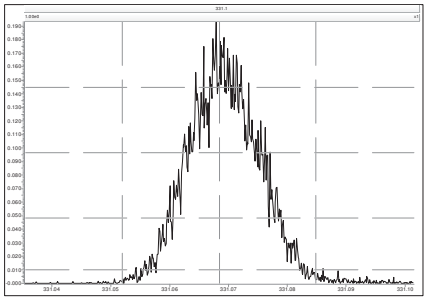
M 304.9824 R 13514



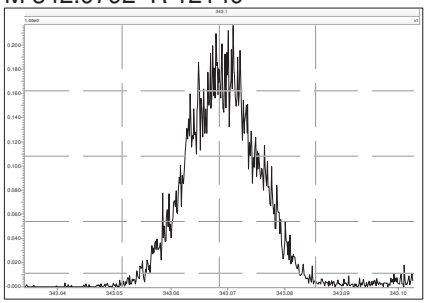
M 316.9824 R 12577



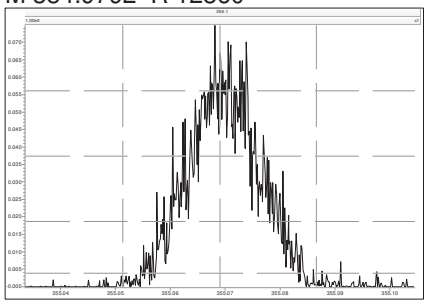
M 330.9792 R 13029



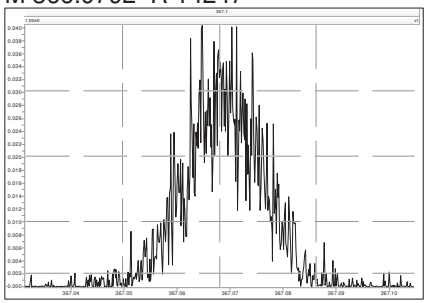
M 342.9792 R 12149



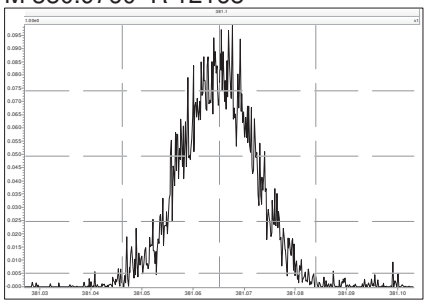
M 354.9792 R 12860



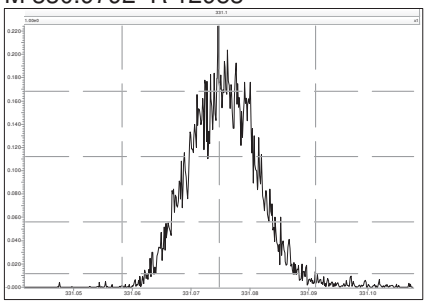
M 366.9792 R 14247



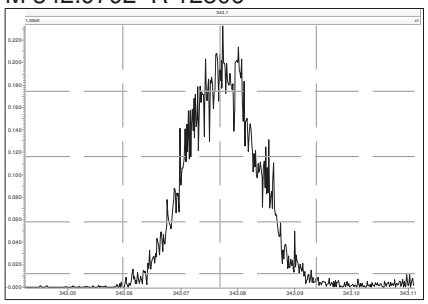
M 380.9760 R 12168



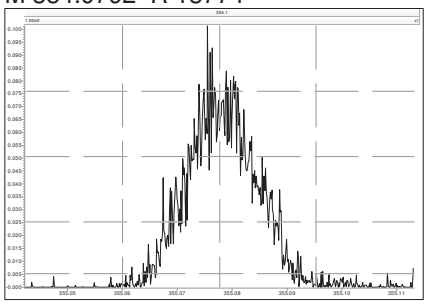
M 330.9792 R 12953



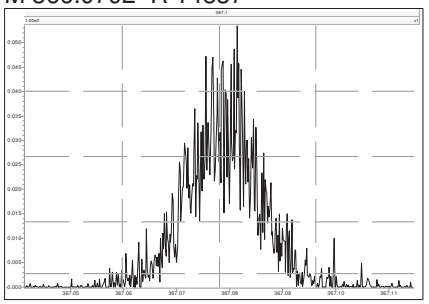
M 342.9792 R 12806



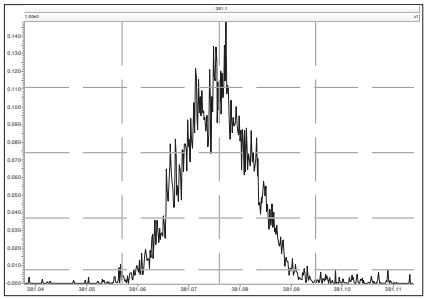
M 354.9792 R 13774



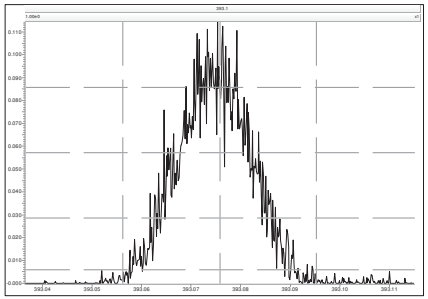
M 366.9792 R 14837



M 380.9760 R 13194



M 392.9760 R 12722



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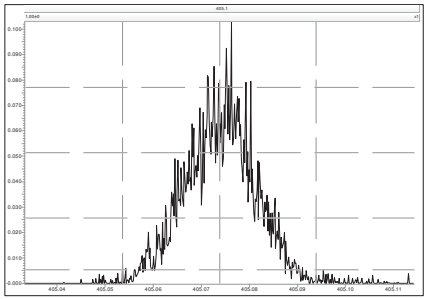

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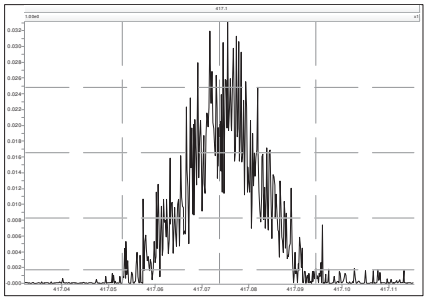

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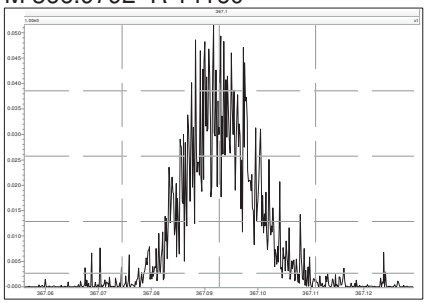

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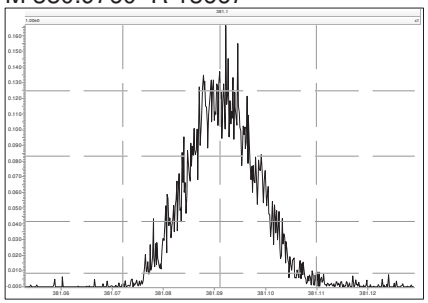

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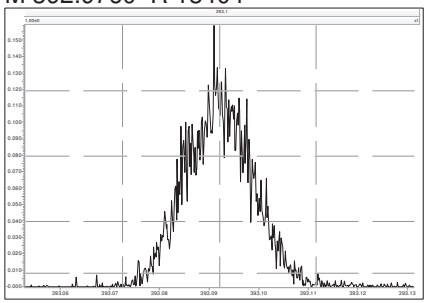

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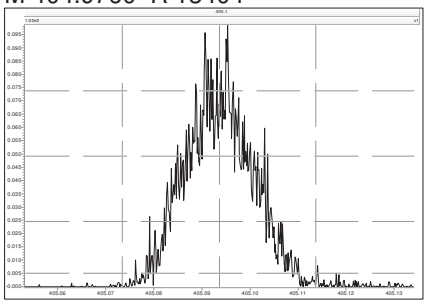

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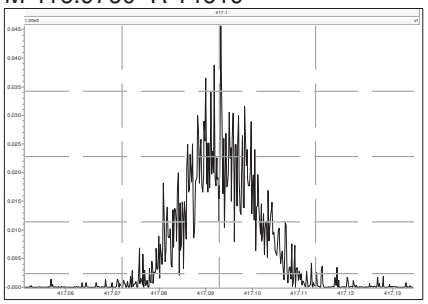

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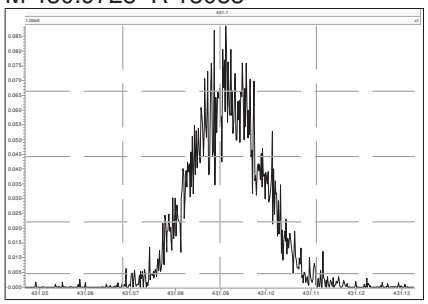

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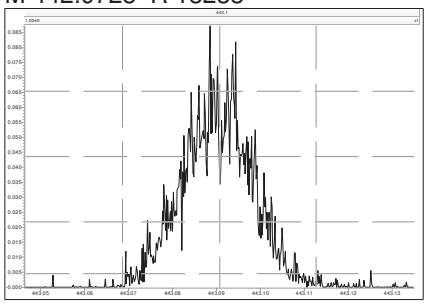

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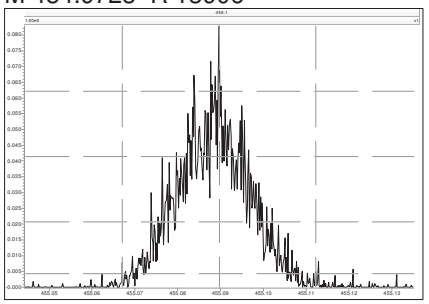

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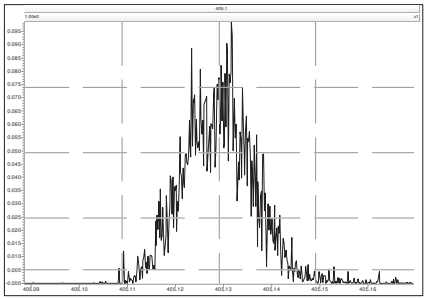

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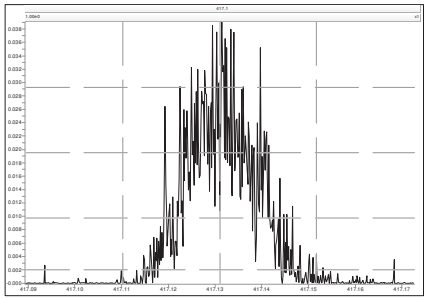

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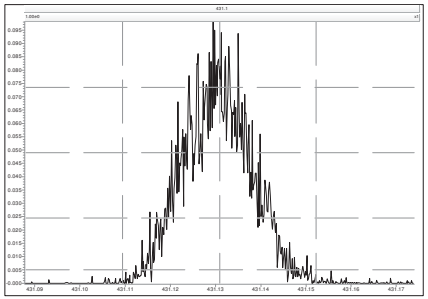

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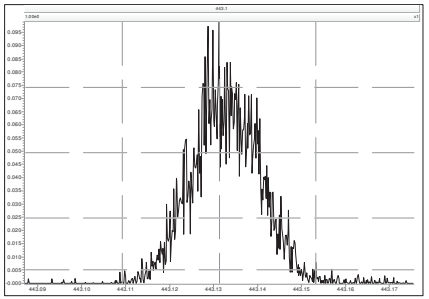

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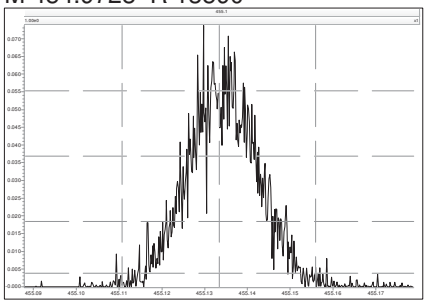

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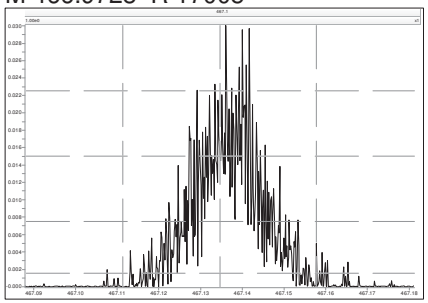

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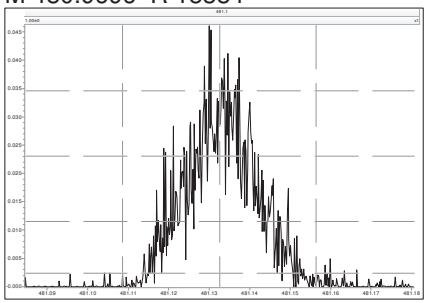

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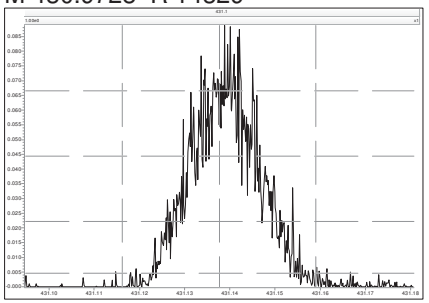
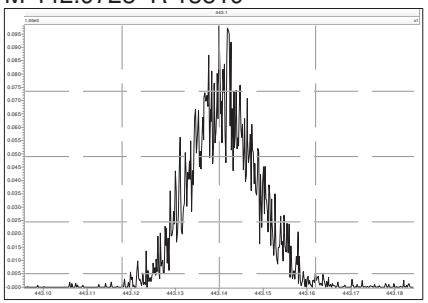


M 442.9728 R 13519



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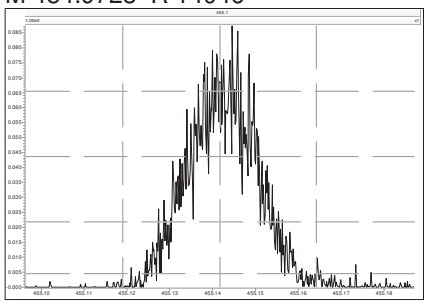
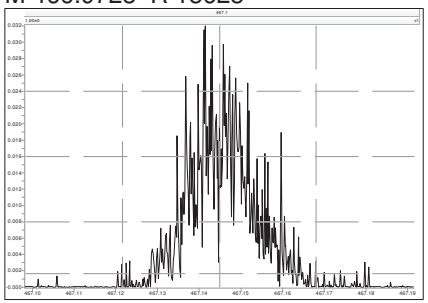
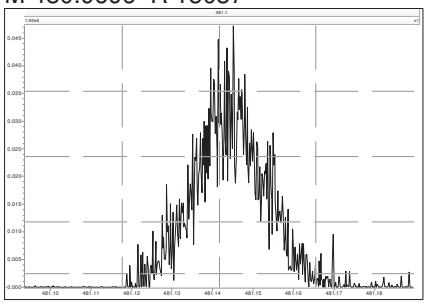


M 466.9728 R 15625



M 480.9696 R 15037



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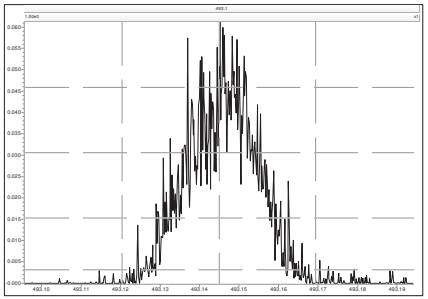

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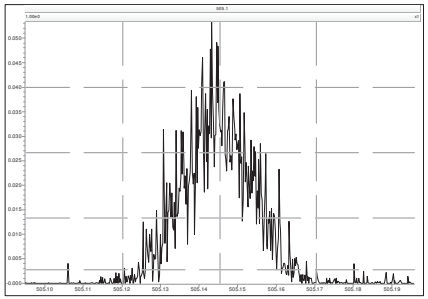

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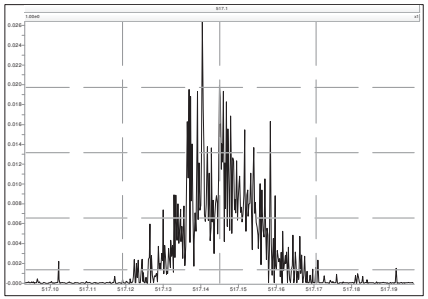


Instrument: MM3 (AutoSpec-Ultima) MS Experiment: df_cl4-8_db5MS GC Program: df_db5MS

#	Datafile	Vial#	Lab ID	Wt/Vol	Client/Sample ID	Analyst(s)	Checkcode	Acq Date	Acq Time
2	200615R02	3	CS3_200615_DF_RA	1.00	SIL 20-449-3	PSW	411-513	15-Jun-2020	09:27:48
3	200615R03	13	CS3_200615_DF_RB	1.00	ICV SIL 23-12-15	PSW	776-449	15-Jun-2020	10:28:16

REVIEWED
By Paul Walton at 8:47 am, Jun 17, 2020

APPROVED
Carla_Lyon , 11:40:07, 06/17/2020

Dioxin/Furan QC Summary	Acq'd: 15 Jun 2020 09:27 PSW	ICAL: MM3_DF_10012020_12JUN2020
Lab ID: CS3_200615_DF_RA	UTP: 15-Jun-2020 10:22:45 PSW	Checkcode: 411-513-RYV
Sample ID: SIL 20-449-3	Report: 17 Jun 2020 08:16 pw	Datafile: 200615R02

Name	RT	Response	RA	OK	Ref. RRFs	Calc. RRFs	Dev'n
2378-TCDD	27.55	1.02E+07	0.84	Y	1.18	1.24	5%
12378-PeCDD	33.02	4.07E+07	1.58	Y	1.14	1.14	1%
123478-HxCDD	36.92	3.72E+07	1.25	Y	1.09	1.11	1%
123678-HxCDD	37.04	3.77E+07	1.26	Y	1.13	1.17	4%
123789-HxCDD	37.34	3.87E+07	1.25	Y	1.05	1.07	2%
1234678-HpCDD	40.10	2.88E+07	1.04	Y	0.98	0.99	1%
OCDD	42.55	3.71E+07	0.88	Y	1.08	1.11	3%
2378-TCDF	26.64	1.50E+07	0.76	Y	0.98	1.01	3%
12378-PeCDF	31.54	6.19E+07	1.52	Y	0.95	0.97	3%
23478-PeCDF	32.67	6.02E+07	1.55	Y	0.95	0.96	1%
123478-HxCDF	35.95	5.68E+07	1.26	Y	1.20	1.21	1%
123678-HxCDF	36.09	5.97E+07	1.26	Y	1.07	1.12	5%
234678-HxCDF	36.74	5.28E+07	1.23	Y	1.10	1.12	2%
123789-HxCDF	37.72	4.40E+07	1.23	Y	1.09	1.14	4%
1234678-HpCDF	39.20	4.69E+07	1.02	Y	1.28	1.34	4%
1234789-HpCDF	40.53	3.45E+07	1.02	Y	1.27	1.29	2%
OCDF	42.72	4.46E+07	0.92	Y	1.01	1.02	1%
ES 2378-TCDD	27.52	8.29E+07	0.78	Y	1.01	0.98	-3%
ES 12378-PeCDD	33.01	7.13E+07	1.64	Y	0.87	0.84	-4%
ES 123478-HxCDD	36.91	6.72E+07	1.29	Y	1.10	0.99	-9%
ES 123678-HxCDD	37.02	6.45E+07	1.30	Y	1.06	0.95	-10%
ES 123789-HxCDD	37.33	7.20E+07	1.30	Y	1.22	1.07	-12%
ES 1234678-HpCDD	40.09	5.80E+07	1.10	Y	0.99	0.86	-14%
ES OCDD	42.55	6.69E+07	0.89	Y	0.67	0.49	-26%
ES 2378-TCDF	26.62	1.48E+08	0.79	Y	1.01	0.98	-4%
ES 12378-PeCDF	31.53	1.27E+08	1.57	Y	0.90	0.84	-7%
ES 23478-PeCDF	32.65	1.26E+08	1.62	Y	0.89	0.83	-7%
ES 123478-HxCDF	35.94	9.37E+07	0.52	Y	1.43	1.39	-3%
ES 123678-HxCDF	36.08	1.07E+08	0.52	Y	1.63	1.58	-3%
ES 234678-HxCDF	36.72	9.40E+07	0.52	Y	1.48	1.39	-6%
ES 123789-HxCDF	37.71	7.73E+07	0.53	Y	1.29	1.14	-11%
ES 1234678-HpCDF	39.19	7.01E+07	0.45	Y	1.15	1.04	-9%
ES 1234789-HpCDF	40.52	5.34E+07	0.44	Y	0.91	0.79	-13%
ES OCDF	42.71	8.73E+07	0.90	Y	0.83	0.65	-22%

Dioxin/Furan QC Summary	Acq'd: 15 Jun 2020 09:27 PSW	ICAL: MM3_DF_10012020_12JUN2020
Lab ID: CS3_200615_DF_RA	UTP: 15-Jun-2020 10:22:45 PSW	Checkcode: 411-513-RYV
Sample ID: SIL 20-449-3	Report: 17 Jun 2020 08:16 pw	Datafile: 200615R02

Name	RT	Response	RA	OK	Ref. RRFs	Calc. RRFs	Dev'n
JS 1234-TCDD	26.85	8.50E+07	0.79	Y	-	-	-
JS 1234-TCDF	25.21	1.51E+08	0.79	Y	-	-	-
JS 123467-HxCDD	37.22	3.38E+07	1.28	Y	-	-	-
CS 37Cl-2378-TCDD	27.55	8.47E+06	n/a	-	1.04	1.00	-4%
CS 12347-PeCDD	32.50	6.22E+07	1.66	Y	0.74	0.73	-1%
CS 12346-PeCDF	30.99	1.28E+08	1.57	Y	0.86	0.85	-1%
CS 123469-HxCDF	36.38	9.16E+07	0.52	Y	1.36	1.36	0%
CS 1234689-HpCDF	39.59	6.58E+07	0.45	Y	1.05	0.97	-8%
SS 37Cl-2378-TCDD	27.55	8.47E+06	n/a	-	1.04	1.02	-1%
SS 12347-PeCDD	32.50	6.22E+07	1.66	Y	0.86	0.87	2%
SS 12346-PeCDF	30.99	1.28E+08	1.57	Y	0.96	1.01	5%
SS 123469-HxCDF	36.38	9.16E+07	0.52	Y	0.83	0.86	3%
SS 1234689-HpCDF	39.59	6.58E+07	0.45	Y	0.92	0.94	2%
OCDD-a	42.55	2.36E+06	2.36	Y	0.07	0.07	7%
OCDF-a	42.71	2.56E+06	2.47	Y	0.06	0.06	-7%

METHOD 1613B **PCDD/F CALIBRATION VERIFICATION** **FORM 4A**

Lab Name: SGS North America

Initial Calibration: ICAL: MM3_DF_10012020_12JUN2020

Instrument ID: MM3 GC Column ID: ZB-5ms

VER Data Filename: 200615R02 Analysis Date: 15-JUN-2020 09:27:48

NATIVE ANALYTES	M/Z's FORMING RATIO	ION ABUND. RATIO	QC LIMITS	OK	CONC. FOUND	RANGE (ng/mL)	OK
2,3,7,8-TCDD	M/M+2	0.84	0.65 - 0.89	Y	10.5	7.8 - 12.9	Y
1,2,3,7,8-PeCDD	M+2/M+4	1.58	1.32 - 1.78	Y	50.3	39 - 65	Y
1,2,3,4,7,8-HxCDD	M+2/M+4	1.25	1.05 - 1.43	Y	50.7	39 - 64	Y
1,2,3,6,7,8-HxCDD	M+2/M+4	1.26	1.05 - 1.43	Y	51.8	39 - 64	Y
1,2,3,7,8,9-HxCDD	M+2/M+4	1.25	1.05 - 1.43	Y	51.2	41 - 61	Y
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	0.88 - 1.20	Y	50.6	43 - 58	Y
OCDD	M+2/M+4	0.88	0.76 - 1.02	Y	103	79 - 126	Y
2,3,7,8-TCDF	M/M+2	0.76	0.65 - 0.89	Y	10.3	8.4 - 12	Y
1,2,3,7,8-PeCDF	M+2/M+4	1.52	1.32 - 1.78	Y	51.3	41 - 60	Y
2,3,4,7,8-PeCDF	M+2/M+4	1.55	1.32 - 1.78	Y	50.6	41 - 61	Y
1,2,3,4,7,8-HxCDF	M+2/M+4	1.26	1.05 - 1.43	Y	50.7	45 - 56	Y
1,2,3,6,7,8-HxCDF	M+2/M+4	1.26	1.05 - 1.43	Y	52.3	44 - 57	Y
2,3,4,6,7,8-HxCDF	M+2/M+4	1.23	1.05 - 1.43	Y	51.2	44 - 57	Y
1,2,3,7,8,9-HxCDF	M+2/M+4	1.23	1.05 - 1.43	Y	52.1	45 - 56	Y
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.02	0.88 - 1.20	Y	52.2	45 - 55	Y
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.02	0.88 - 1.20	Y	50.9	43 - 58	Y
OCDF	M+2/M+4	0.92	0.76 - 1.02	Y	101	63 - 159	Y

See Table 9, Method 1613, for m/z specifications.

Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

Contract-required concentration range as specified in Table 6, Method 1613.

Processed: 17 Jun 2020 08:16 Analyst: pw

METHOD 1613B **PCDD/F CALIBRATION VERIFICATION** **FORM 4B**

Lab Name: SGS North America

Initial Calibration: ICAL: MM3_DF_10012020_12JUN2020

Instrument ID: MM3 GC Column ID: ZB-5ms

VER Data Filename: 200615R02 Analysis Date: 15-JUN-2020 09:27:48

LABELED ANALYTES	M/Z's FORMING RATIO	ION ABUND. RATIO	QC LIMITS			OK	CONC. FOUND	RANGE (ng/mL)			OK
13C-2,3,7,8-TCDD	M/M+2	0.78	0.65	-	0.89	Y	96.9	82	-	121	Y
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.64	1.32	-	1.78	Y	96.3	62	-	160	Y
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.29	1.05	-	1.43	Y	90.8	85	-	117	Y
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.30	1.05	-	1.43	Y	90.1	85	-	118	Y
13C-1,2,3,7,8,9-HxCDD	M+2/M+4	1.30	1.05	-	1.43	Y	87.6	85	-	118	Y
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.10	0.88	-	1.20	Y	86.5	72	-	138	Y
13C-OCDD	M+2/M+4	0.89	0.76	-	1.02	Y	148	96	-	415	Y
13C-2,3,7,8-TCDF	M/M+2	0.79	0.65	-	0.89	Y	96.3	71	-	140	Y
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.57	1.32	-	1.78	Y	93.3	76	-	130	Y
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.62	1.32	-	1.78	Y	93.3	77	-	130	Y
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	97	76	-	131	Y
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	96.8	70	-	143	Y
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	94.1	73	-	137	Y
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.53	0.43	-	0.59	Y	88.6	74	-	135	Y
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.45	0.37	-	0.51	Y	90.5	78	-	129	Y
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.44	0.37	-	0.51	Y	87.3	77	-	129	Y
13C-OCDF	M+2/M+4	0.90	0.76	-	1.02	Y	156	96	-	415	Y
CLEANUP STANDARDS											
37Cl-2,3,7,8-TCDD	n/a						9.62	7.9	-	12.7	Y
13C-1,2,3,4,7-PeCDD	M+2/M+4	1.66	1.32	-	1.78	Y	98.9	70	-	130	Y
13C-1,2,3,4,6-PeCDF	M+2/M+4	1.57	1.32	-	1.78	Y	98.6	70	-	130	Y
13C-1,2,3,4,6,9-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	99.9	70	-	130	Y
13C-1,2,3,4,6,8,9-HpCDF	M/M+2	0.45	0.37	-	0.51	Y	92.4	70	-	130	Y

Processed: 17 Jun 2020 08:16 Analyst: pw

METHOD 8290A **PCDD/F CALIBRATION VERIFICATION** **FORM 4A**

Lab Name: SGS North America

Initial Calibration: ICAL: MM3_DF_10012020_12JUN2020

Instrument ID: MM3 GC Column ID: ZB-5ms

VER Data Filename: 200615R02 Analysis Date: 15-JUN-2020 09:27:48

NATIVE ANALYTES	M/Z's FORMING RATIO	ION ABUND. RATIO	QC LIMITS			OK	CONC. FOUND	RANGE (ng/mL)			OK
2,3,7,8-TCDD	M/M+2	0.84	0.65	-	0.89	Y	10.5	8	-	12	Y
1,2,3,7,8-PeCDD	M+2/M+4	1.58	1.32	-	1.78	Y	50.3	40	-	60	Y
1,2,3,4,7,8-HxCDD	M+2/M+4	1.25	1.05	-	1.43	Y	50.7	40	-	60	Y
1,2,3,6,7,8-HxCDD	M+2/M+4	1.26	1.05	-	1.43	Y	51.8	40	-	60	Y
1,2,3,7,8,9-HxCDD	M+2/M+4	1.25	1.05	-	1.43	Y	51.2	40	-	60	Y
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	0.88	-	1.20	Y	50.6	40	-	60	Y
OCDD	M+2/M+4	0.88	0.76	-	1.02	Y	103	80	-	120	Y
2,3,7,8-TCDF	M/M+2	0.76	0.65	-	0.89	Y	10.3	8	-	12	Y
1,2,3,7,8-PeCDF	M+2/M+4	1.52	1.32	-	1.78	Y	51.3	40	-	60	Y
2,3,4,7,8-PeCDF	M+2/M+4	1.55	1.32	-	1.78	Y	50.6	40	-	60	Y
1,2,3,4,7,8-HxCDF	M+2/M+4	1.26	1.05	-	1.43	Y	50.7	40	-	60	Y
1,2,3,6,7,8-HxCDF	M+2/M+4	1.26	1.05	-	1.43	Y	52.3	40	-	60	Y
2,3,4,6,7,8-HxCDF	M+2/M+4	1.23	1.05	-	1.43	Y	51.2	40	-	60	Y
1,2,3,7,8,9-HxCDF	M+2/M+4	1.23	1.05	-	1.43	Y	52.1	40	-	60	Y
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.02	0.88	-	1.20	Y	52.2	40	-	60	Y
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.02	0.88	-	1.20	Y	50.9	40	-	60	Y
OCDF	M+2/M+4	0.92	0.76	-	1.02	Y	101	80	-	120	Y

Processed: 17 Jun 2020 08:15 Analyst: pw

METHOD 8290A **PCDD/F CALIBRATION VERIFICATION** **FORM 4B**

Lab Name: SGS North America

Initial Calibration: ICAL: MM3_DF_10012020_12JUN2020

Instrument ID: MM3 GC Column ID: ZB-5ms

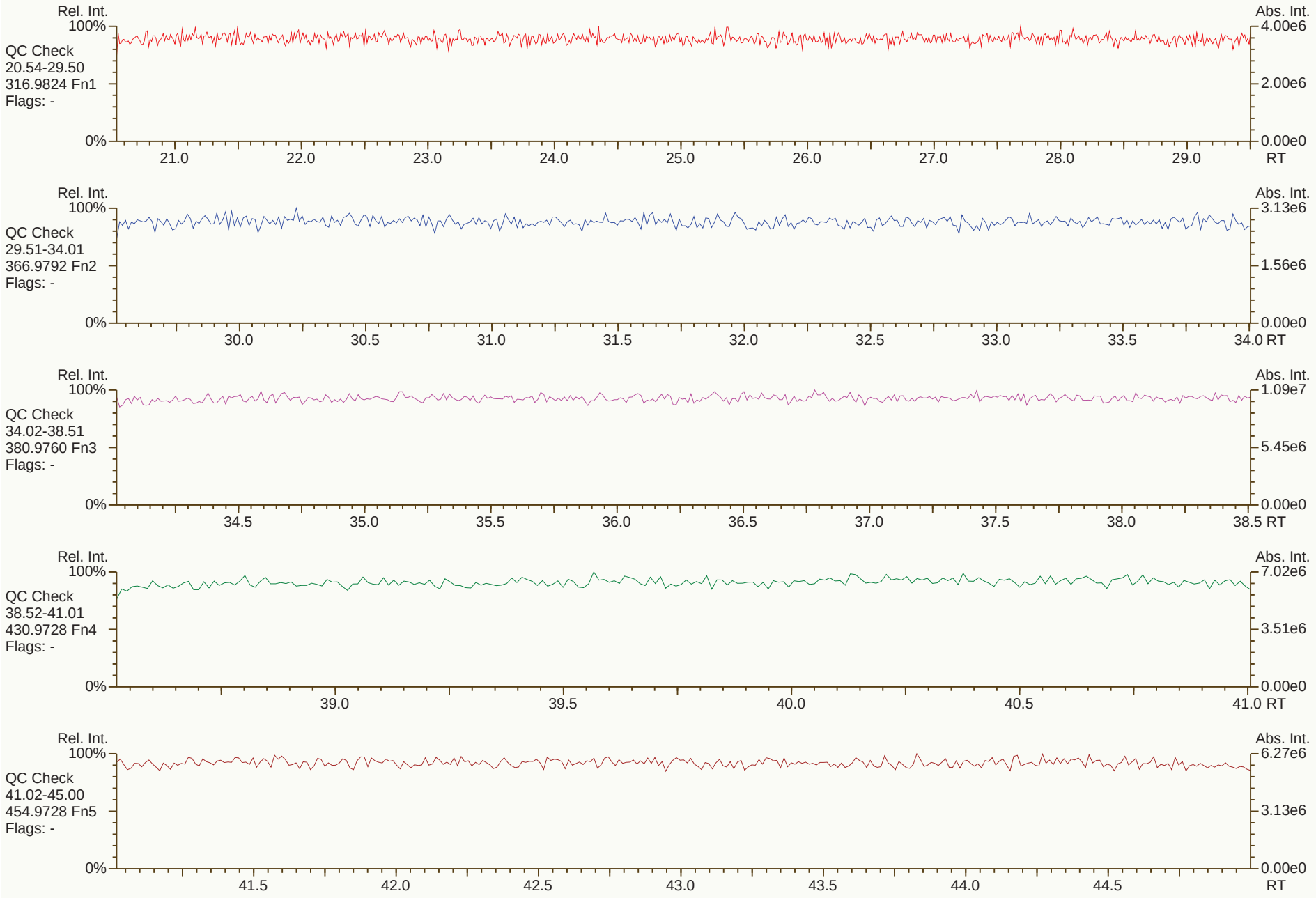
VER Data Filename: 200615R02 Analysis Date: 15-JUN-2020 09:27:48

LABELED ANALYTES	M/Z's FORMING RATIO	ION ABUND. RATIO	QC LIMITS			OK	CONC. FOUND	RANGE (ng/mL)			OK
13C-2,3,7,8-TCDD	M/M+2	0.78	0.65	-	0.89	Y	96.9	70	-	130	Y
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.64	1.32	-	1.78	Y	96.3	70	-	130	Y
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.29	1.05	-	1.43	Y	90.8	70	-	130	Y
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.30	1.05	-	1.43	Y	90.1	70	-	130	Y
13C-1,2,3,7,8,9-HxCDD	M+2/M+4	1.30	1.05	-	1.43	Y	87.6	70	-	130	Y
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.10	0.88	-	1.20	Y	86.5	70	-	130	Y
13C-OCDD	M+2/M+4	0.89	0.76	-	1.02	Y	148	140	-	260	Y
13C-2,3,7,8-TCDF	M/M+2	0.79	0.65	-	0.89	Y	96.3	70	-	130	Y
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.57	1.32	-	1.78	Y	93.3	70	-	130	Y
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.62	1.32	-	1.78	Y	93.3	70	-	130	Y
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	97	70	-	130	Y
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	96.8	70	-	130	Y
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	94.1	70	-	130	Y
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.53	0.43	-	0.59	Y	88.6	70	-	130	Y
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.45	0.37	-	0.51	Y	90.5	70	-	130	Y
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.44	0.37	-	0.51	Y	87.3	70	-	130	Y
13C-OCDF	M+2/M+4	0.90	0.76	-	1.02	Y	156	140	-	260	Y
CLEANUP STANDARDS											
37Cl-2,3,7,8-TCDD	n/a						9.62	7.9	-	12.7	Y
13C-1,2,3,4,7-PeCDD	M+2/M+4	1.66	1.32	-	1.78	Y	98.9	70	-	130	Y
13C-1,2,3,4,6-PeCDF	M+2/M+4	1.57	1.32	-	1.78	Y	98.6	70	-	130	Y
13C-1,2,3,4,6,9-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	99.9	70	-	130	Y
13C-1,2,3,4,6,8,9-HpCDF	M/M+2	0.45	0.37	-	0.51	Y	92.4	70	-	130	Y

Processed: 17 Jun 2020 08:15 Analyst: pw

SGS ID: CS3_200615_DF_RA | **Sample ID: SIL 20-449-3** | **Acq: 15-Jun-2020 09:27:48**

Instr: [ILM] AutoSpec-Ultima MM3 | **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 3** | **User: PSW Datafile: 200615R02**

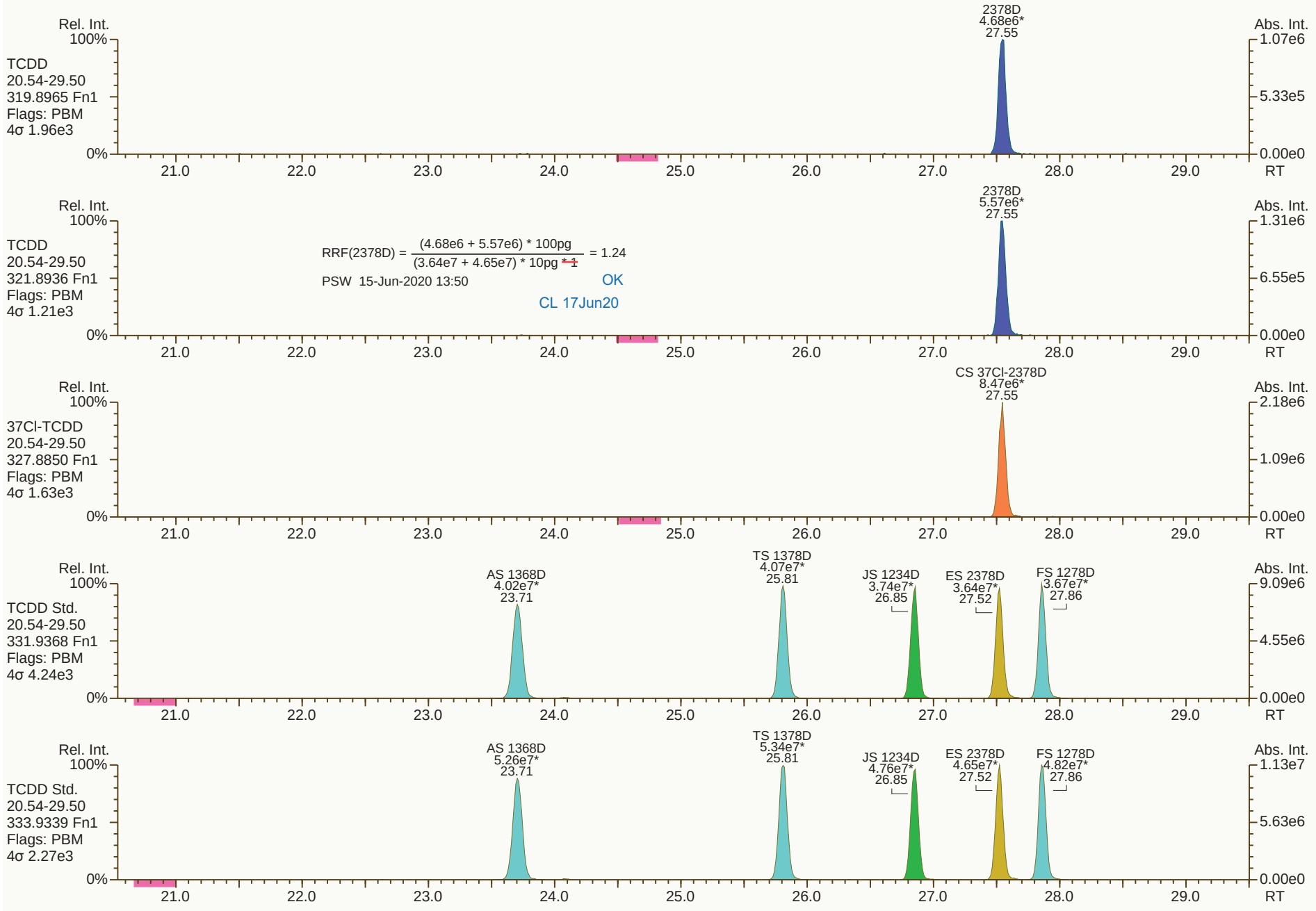


Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS3_200615_DF_RA.utp_res, saved 15-Jun-2020 13:50 (PSW)

Peak annotation: Areas, Centroids

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 scc: 411-513

PKD: n/a Printed: 15-Jun-2020 13:51 Page 1 of 12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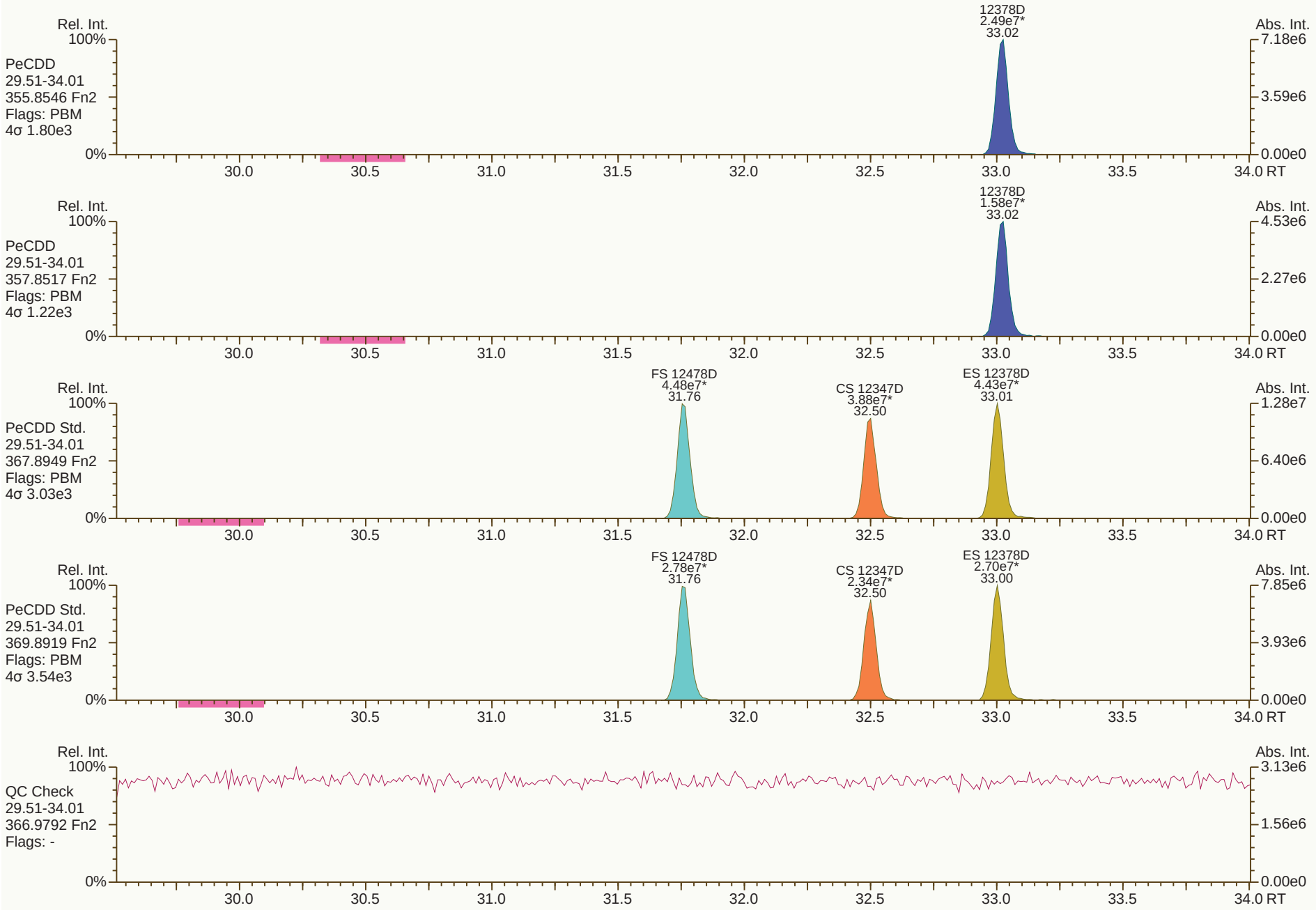
100%
TCDD
20.54-29.50
319.8965 Fn1
Flags: PBM
4σ 1.96e3
0%
2378D
4.68e6*
27.55
Abs. Int.
1.07e6
5.33e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD
20.54-29.50
321.8936 Fn1
Flags: PBM
4σ 1.21e3
0%
RRF(2378D) = (4.68e6 + 5.57e6) * 100pg / (3.64e7 + 4.65e7) * 10pg * 1 = 1.24
PSW 15-Jun-2020 13:50
OK
CL 17Jun20
2378D
5.57e6*
27.55
Abs. Int.
1.31e6
6.55e5
0.00e0
Rel. Int.
100%
37Cl-TCDD
20.54-29.50
327.8850 Fn1
Flags: PBM
4σ 1.63e3
0%
CS 37Cl-2378D
8.47e6*
27.55
Abs. Int.
2.18e6
1.09e6
0.00e0
Rel. Int.
100%
TCDD Std.
20.54-29.50
331.9368 Fn1
Flags: PBM
4σ 4.24e3
0%
AS 1368D
4.02e7*
23.71
TS 1378D
4.07e7*
25.81
JS 1234D
3.74e7*
26.85
ES 2378D
3.64e7*
27.52
FS 1278D
3.67e7*
27.86
Abs. Int.
9.09e6
4.55e6
0.00e0
Rel. Int.
100%
TCDD Std.
20.54-29.50
333.9339 Fn1
Flags: PBM
4σ 2.27e3
0%
AS 1368D
5.26e7*
23.71
TS 1378D
5.34e7*
25.81
JS 1234D
4.76e7*
26.85
ES 2378D
4.65e7*
27.52
FS 1278D
4.82e7*
27.86
Abs. Int.
1.13e7
5.63e6
0.00e0


Rel. Int.
100%
PeCDD
29.51-34.01
355.8546 Fn2
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12378D
2.49e7*
33.02
Abs. Int.
7.18e6
3.59e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD
29.51-34.01
357.8517 Fn2
Flags: PBM
4σ 1.22e3
12378D
1.58e7*
33.02
Abs. Int.
4.53e6
2.27e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
367.8949 Fn2
Flags: PBM
4σ 3.03e3
FS 12478D
4.48e7*
31.76
CS 12347D
3.88e7*
32.50
ES 12378D
4.43e7*
33.01
Abs. Int.
1.28e7
6.40e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
369.8919 Fn2
Flags: PBM
4σ 3.54e3
FS 12478D
2.78e7*
31.76
CS 12347D
2.34e7*
32.50
ES 12378D
2.70e7*
33.00
Abs. Int.
7.85e6
3.93e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
QC Check
29.51-34.01
366.9792 Fn2
Flags: -
Abs. Int.
3.13e6
1.56e6
0.00e0
0%
30.0
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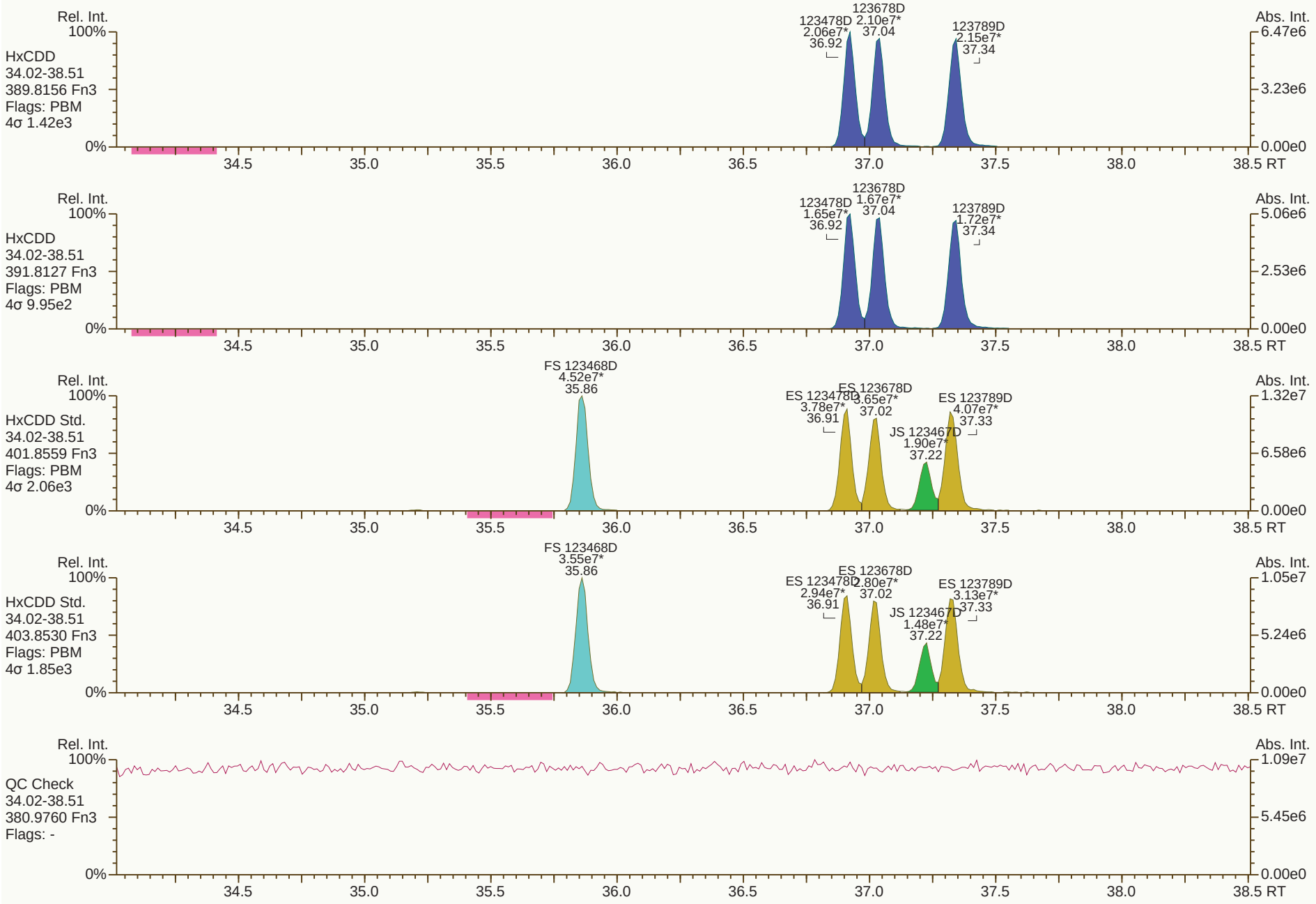
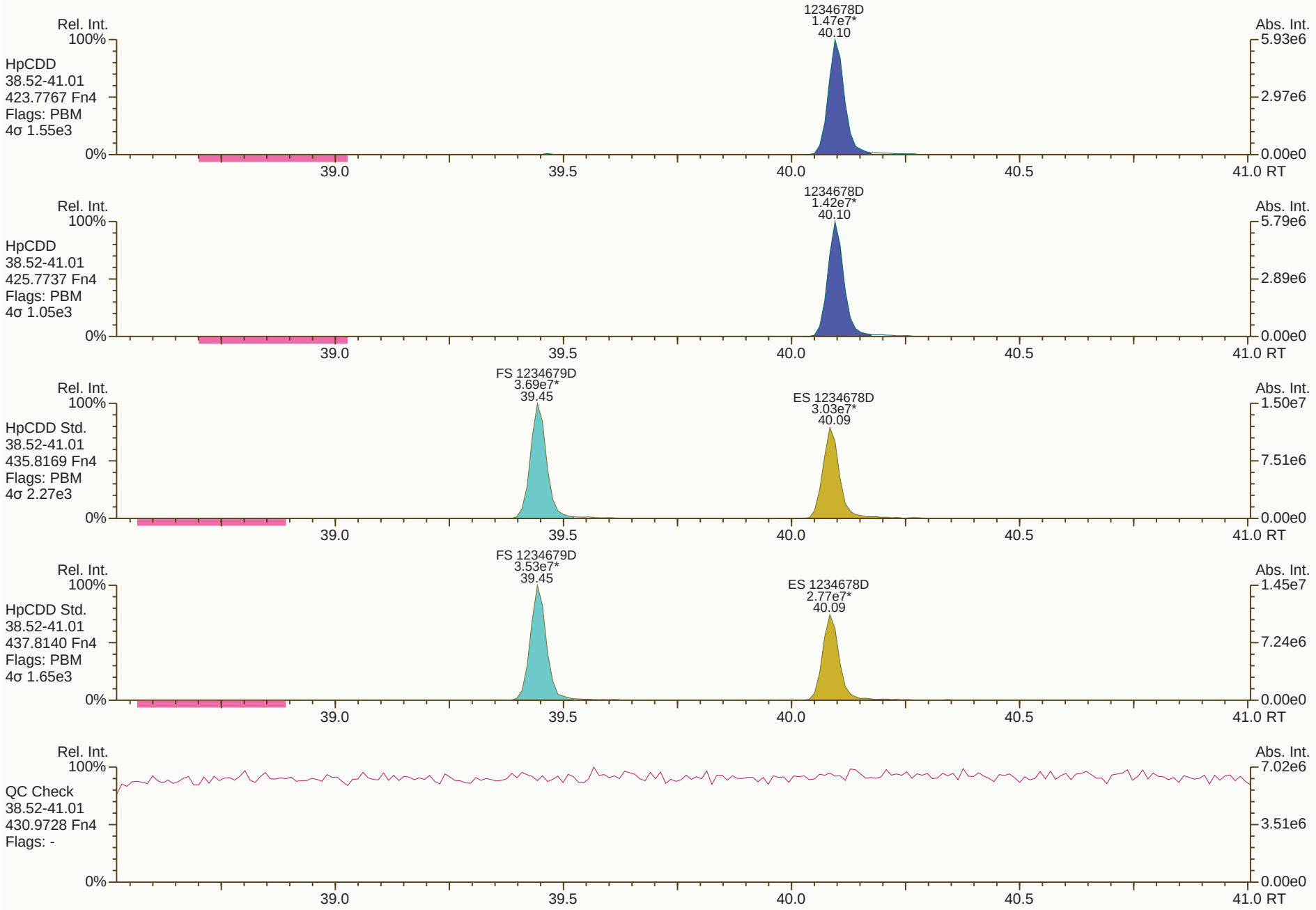
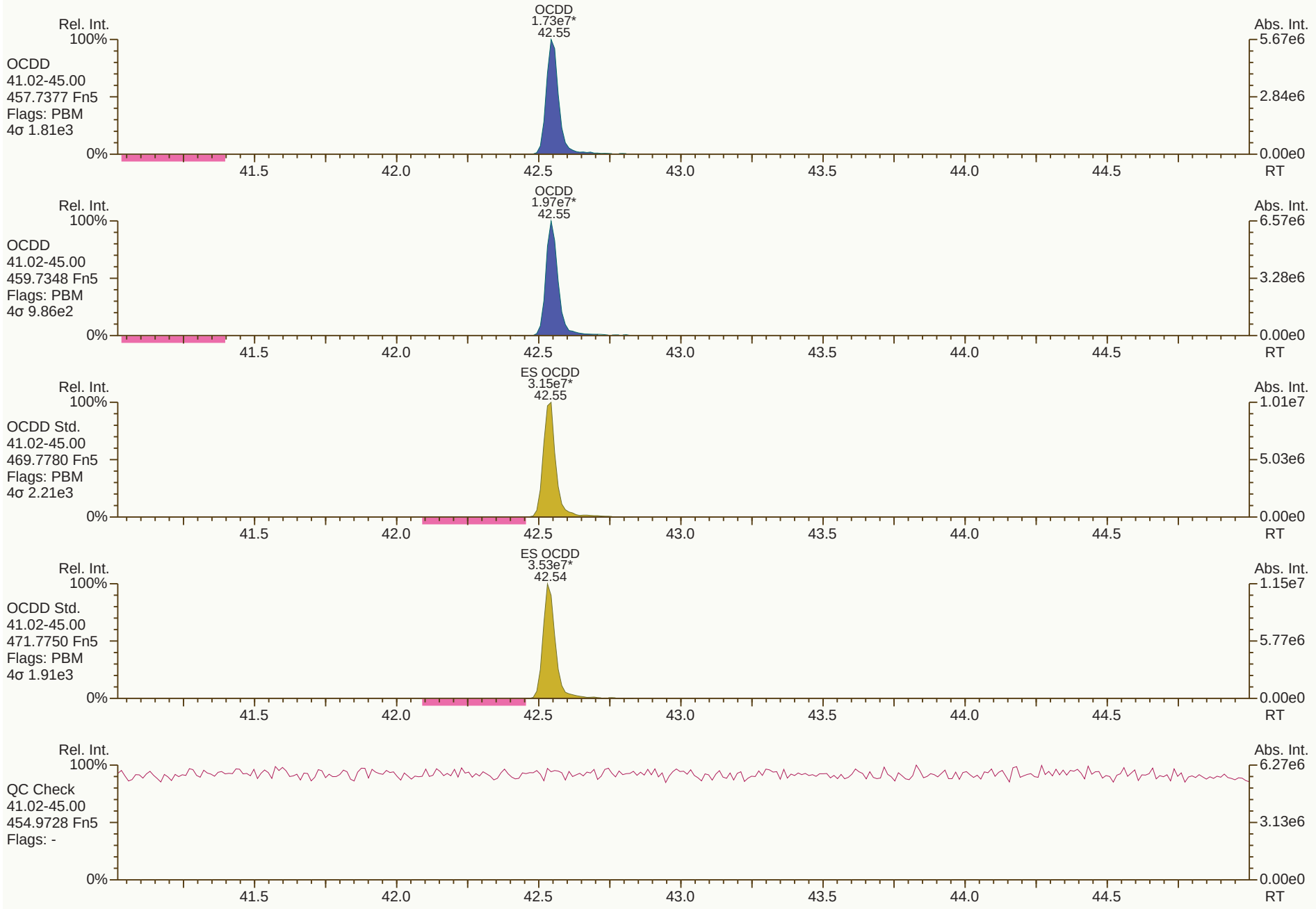
31.5
32.0
32.5
33.0
33.5
34.0 RT


Rel. Int.
100%
HxCDD
34.02-38.51
389.8156 Fn3
Flags: PBM
4σ 1.42e3
123678D
123478D 2.10e7*
2.06e7* 37.04
36.92
123789D
2.15e7*
37.34
Abs. Int.
6.47e6
3.23e6
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 RT
Rel. Int.
100%
HxCDD
34.02-38.51
391.8127 Fn3
Flags: PBM
4σ 9.95e2
123678D
123478D 1.67e7*
1.65e7* 37.04
36.92
123789D
1.72e7*
37.34
Abs. Int.
5.06e6
2.53e6
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 RT
Rel. Int.
100%
HxCDD Std.
34.02-38.51
401.8559 Fn3
Flags: PBM
4σ 2.06e3
FS 123468D
4.52e7*
35.86
ES 123678D
ES 123478D 3.65e7*
3.78e7* 37.02
36.91
ES 123789D
4.07e7*
37.33
JS 123467D
1.90e7*
37.22
Abs. Int.
1.32e7
6.58e6
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 RT
Rel. Int.
100%
HxCDD Std.
34.02-38.51
403.8530 Fn3
Flags: PBM
4σ 1.85e3
FS 123468D
3.55e7*
35.86
ES 123678D
ES 123478D 2.80e7*
2.94e7* 37.02
36.91
ES 123789D
3.13e7*
37.33
JS 123467D
1.48e7*
37.22
Abs. Int.
1.05e7
5.24e6
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 RT
Rel. Int.
100%
QC Check
34.02-38.51
380.9760 Fn3
Flags: -
Abs. Int.
1.09e7
5.45e6
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 RT


Rel. Int.
100%
HpCDD
38.52-41.01
423.7767 Fn4
Flags: PBM
4σ 1.55e3
0%
1234678D
1.47e7*
40.10
Abs. Int.
5.93e6
2.97e6
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.52-41.01
425.7737 Fn4
Flags: PBM
4σ 1.05e3
0%
1234678D
1.42e7*
40.10
Abs. Int.
5.79e6
2.89e6
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.52-41.01
435.8169 Fn4
Flags: PBM
4σ 2.27e3
0%
FS 1234679D
3.69e7*
39.45
ES 1234678D
3.03e7*
40.09
Abs. Int.
1.50e7
7.51e6
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.52-41.01
437.8140 Fn4
Flags: PBM
4σ 1.65e3
0%
FS 1234679D
3.53e7*
39.45
ES 1234678D
2.77e7*
40.09
Abs. Int.
1.45e7
7.24e6
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.52-41.01
430.9728 Fn4
Flags: -
0%
Abs. Int.
7.02e6
3.51e6
0.00e0
39.0
39.5
40.0
40.5
41.0 RT


OCDD
1.73e7*
42.55
Rel. Int.
100%
OCDD
41.02-45.00
457.7377 Fn5
Flags: PBM
4σ 1.81e3
0%
Abs. Int.
5.67e6
2.84e6
0.00e0
RT
41.5
42.0
42.5
43.0
43.5
44.0
44.5
OCDD
1.97e7*
42.55
Rel. Int.
100%
OCDD
41.02-45.00
459.7348 Fn5
Flags: PBM
4σ 9.86e2
0%
Abs. Int.
6.57e6
3.28e6
0.00e0
RT
41.5
42.0
42.5
43.0
43.5
44.0
44.5
ES OCDD
3.15e7*
42.55
Rel. Int.
100%
OCDD Std.
41.02-45.00
469.7780 Fn5
Flags: PBM
4σ 2.21e3
0%
Abs. Int.
1.01e7
5.03e6
0.00e0
RT
41.5
42.0
42.5
43.0
43.5
44.0
44.5
ES OCDD
3.53e7*
42.54
Rel. Int.
100%
OCDD Std.
41.02-45.00
471.7750 Fn5
Flags: PBM
4σ 1.91e3
0%
Abs. Int.
1.15e7
5.77e6
0.00e0
RT
41.5
42.0
42.5
43.0
43.5
44.0
44.5
Rel. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
6.27e6
3.13e6
0.00e0
RT
41.5
42.0
42.5
43.0
43.5
44.0
44.5


Rel. Int.
100%
TCDF
20.54-29.50
303.9016 Fn1
Flags: PBM
4σ 1.55e3
0%
2378F
6.46e6*
26.64
Abs. Int.
1.50e6
7.49e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF
20.54-29.50
305.8987 Fn1
Flags: PBM
4σ 1.34e3
0%
2378F
8.54e6*
26.64
Abs. Int.
1.91e6
9.54e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
315.9419 Fn1
Flags: PBM
4σ 1.05e4
0%
AS 1368F
7.92e7*
21.49
JS 1234F
6.66e7*
25.21
ES 2378F
6.54e7*
26.62
Abs. Int.
1.52e7
7.61e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
317.9389 Fn1
Flags: PBM
4σ 3.69e3
0%
AS 1368F
1.02e8*
21.49
JS 1234F
8.48e7*
25.21
ES 2378F
8.26e7*
26.61
Abs. Int.
1.92e7
9.59e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
HxCDPE
20.54-29.50
375.8364 Fn1
Flags: PB
4σ 1.61e3
0%
Abs. Int.
3.74e3
1.87e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT

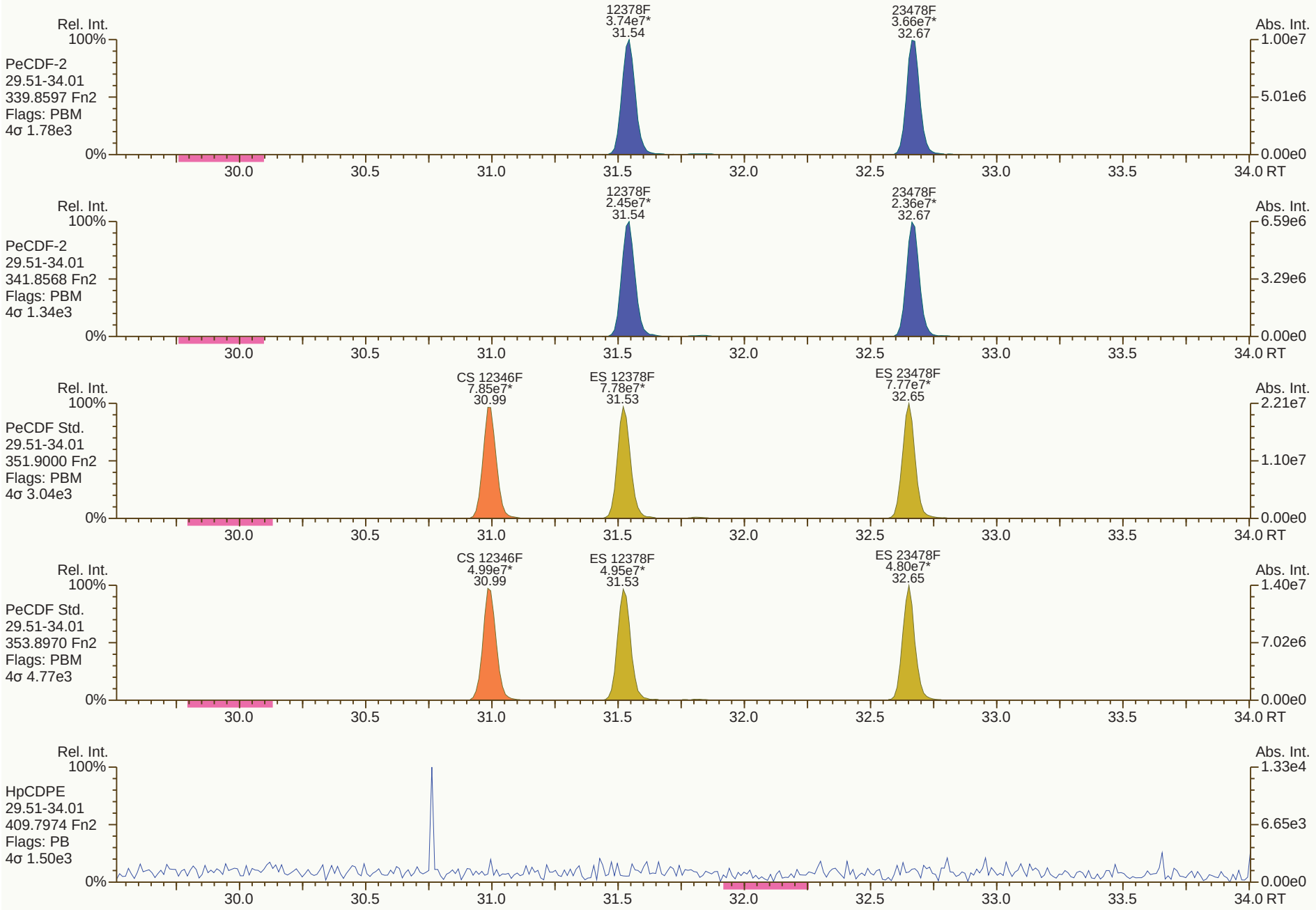
SGS ID: CS3_200615_DF_RA | Sample ID: SIL 20-449-3 | Acq: 15-Jun-2020 09:27:48

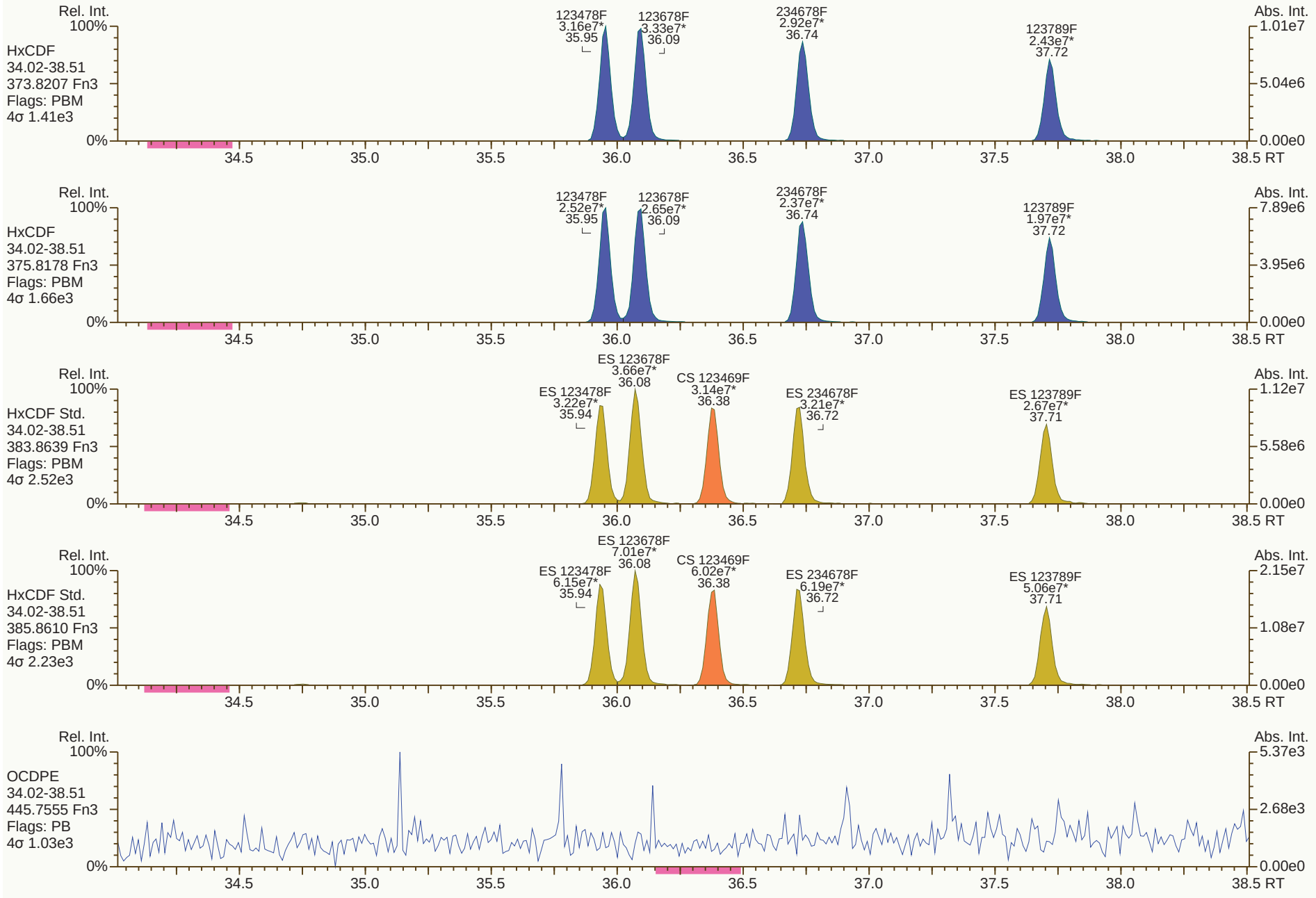
Instr: [ILM] AutoSpec-Ultima MM3 | VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 3 | User: PSW Datafile: 200615R02

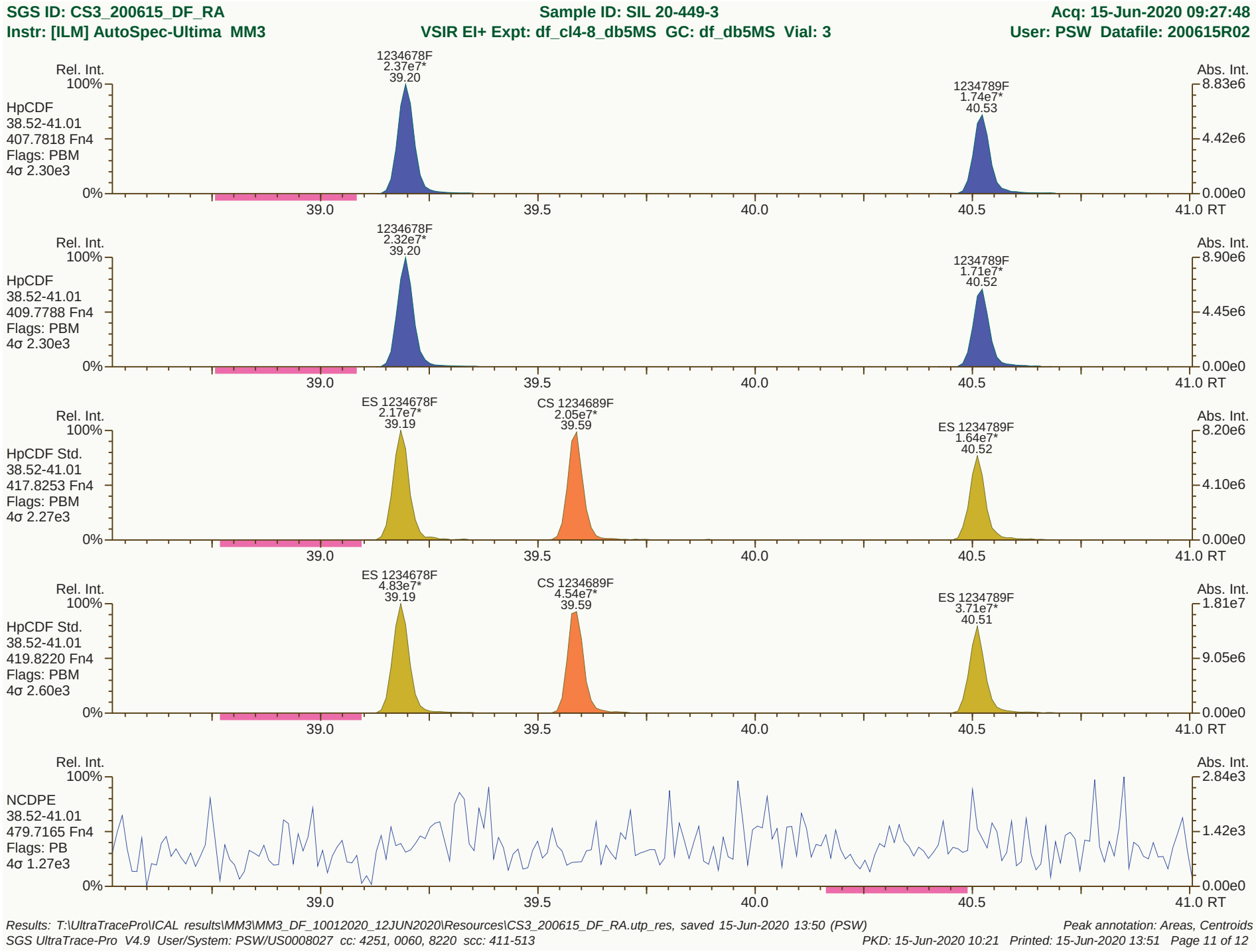


Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS3_200615_DF_RA.utp_res, saved 15-Jun-2020 13:50 (PSW) | *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 3152 scc: 411-513 | *PKD: 15-Jun-2020 10:21 Printed: 15-Jun-2020 13:51 Page 8 of 12*


Rel. Int.
100%
PeCDF-2
29.51-34.01
339.8597 Fn2
Flags: PBM
4σ 1.78e3
0%
12378F
3.74e7*
31.54
23478F
3.66e7*
32.67
Abs. Int.
1.00e7
5.01e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF-2
29.51-34.01
341.8568 Fn2
Flags: PBM
4σ 1.34e3
0%
12378F
2.45e7*
31.54
23478F
2.36e7*
32.67
Abs. Int.
6.59e6
3.29e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
351.9000 Fn2
Flags: PBM
4σ 3.04e3
0%
CS 12346F
7.85e7*
30.99
ES 12378F
7.78e7*
31.53
ES 23478F
7.77e7*
32.65
Abs. Int.
2.21e7
1.10e7
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
353.8970 Fn2
Flags: PBM
4σ 4.77e3
0%
CS 12346F
4.99e7*
30.99
ES 12378F
4.95e7*
31.53
ES 23478F
4.80e7*
32.65
Abs. Int.
1.40e7
7.02e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
HpCDPE
29.51-34.01
409.7974 Fn2
Flags: PB
4σ 1.50e3
0%
Abs. Int.
1.33e4
6.65e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT

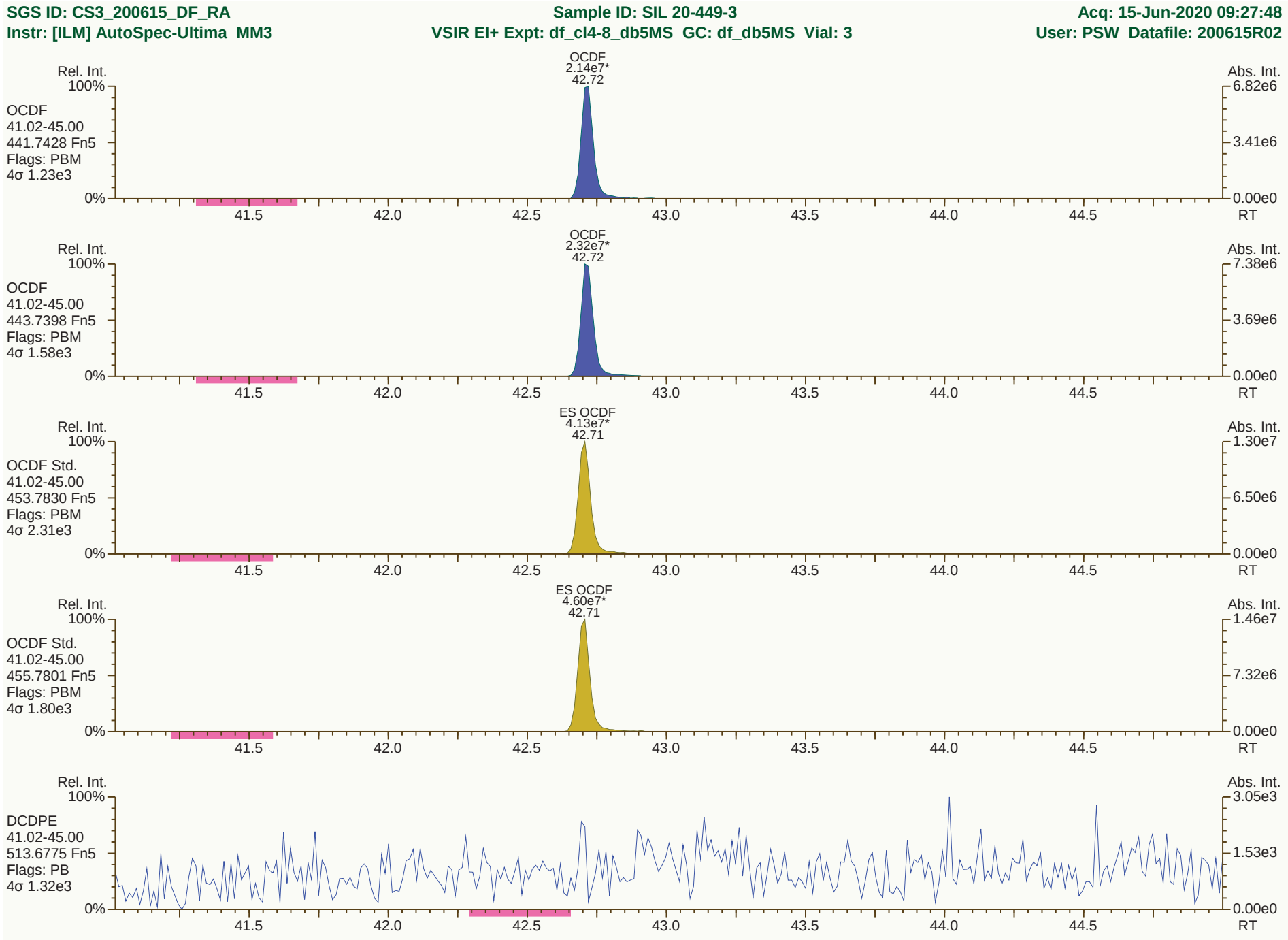

Rel. Int.
100%
HxCDF
34.02-38.51
373.8207 Fn3
Flags: PBM
4σ 1.41e3
0%
123478F
3.16e7*
35.95
123678F
3.33e7*
36.09
234678F
2.92e7*
36.74
123789F
2.43e7*
37.72
Abs. Int.
1.01e7
5.04e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDF
34.02-38.51
375.8178 Fn3
Flags: PBM
4σ 1.66e3
0%
123478F
2.52e7*
35.95
123678F
2.65e7*
36.09
234678F
2.37e7*
36.74
123789F
1.97e7*
37.72
Abs. Int.
7.89e6
3.95e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDF Std.
34.02-38.51
383.8639 Fn3
Flags: PBM
4σ 2.52e3
0%
ES 123678F
3.66e7*
36.08
ES 123478F
3.22e7*
35.94
CS 123469F
3.14e7*
36.38
ES 234678F
3.21e7*
36.72
ES 123789F
2.67e7*
37.71
Abs. Int.
1.12e7
5.58e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDF Std.
34.02-38.51
385.8610 Fn3
Flags: PBM
4σ 2.23e3
0%
ES 123678F
7.01e7*
36.08
ES 123478F
6.15e7*
35.94
CS 123469F
6.02e7*
36.38
ES 234678F
6.19e7*
36.72
ES 123789F
5.06e7*
37.71
Abs. Int.
2.15e7
1.08e7
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
OCDPE
34.02-38.51
445.7555 Fn3
Flags: PB
4σ 1.03e3
0%
Abs. Int.
5.37e3
2.68e3
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT



Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS3_200615_DF_RA.utp_res, saved 15-Jun-2020 13:50 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 4251, 0060, 8220 scc: 411-513 *PKD: 15-Jun-2020 10:21 Printed: 15-Jun-2020 13:51 Page 11 of 12*

SGS ID: CS3_200615_DF_RA
Instr: [ILM] AutoSpec-Ultima MM3
Sample ID: SIL 20-449-3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 3
Acq: 15-Jun-2020 09:27:48
User: PSW Datafile: 200615R02



Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS3_200615_DF_RA.utp_res, saved 15-Jun-2020 13:50 (PSW) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 4744, 2781, 9928 scc: 411-513 *Revised: 15-Jun-2020 10:22 (PSW) Printed: 15-Jun-2020 13:51 Page 12 of 12*

Dioxin/Furan QC Summary		Acq'd: 15 Jun 2020 10:28 PSW				ICAL: MM3_DF_10012020_12JUN2020	
Lab ID: CS3_200615_DF_RB		UTP: 15-Jun-2020 11:31:34 PSW				Checkcode: 776-449-FTJ	
Sample ID: ICV SIL 23-12-15		Report: 17 Jun 2020 08:16 pw				Datafile: 200615R03	
Name	**RT**	**Response**	**RA**	**OK**	**Ref. RRFs**	**Calc. RRFs**	**Dev'n**
2378-TCDD	27.56	9.27E+06	0.83	Y	1.18	1.20	2%
12378-PeCDD	33.03	3.83E+07	1.59	Y	1.14	1.14	0%
123478-HxCDD	36.93	3.81E+07	1.26	Y	1.09	1.20	10%
123678-HxCDD	37.05	3.92E+07	1.25	Y	1.13	1.23	9%
123789-HxCDD	37.35	4.77E+07	1.24	Y	1.05	1.10	5%
1234678-HpCDD	40.11	3.10E+07	1.04	Y	0.98	1.07	9%
OCDD	42.56	4.89E+07	0.92	Y	1.08	1.22	13%
2378-TCDF	26.65	1.43E+07	0.77	Y	0.98	1.07	9%
12378-PeCDF	31.55	6.03E+07	1.57	Y	0.95	0.97	3%
23478-PeCDF	32.68	6.65E+07	1.55	Y	0.95	1.11	17%
123478-HxCDF	35.96	5.68E+07	1.23	Y	1.20	1.28	7%
123678-HxCDF	36.10	5.89E+07	1.24	Y	1.07	1.16	9%
234678-HxCDF	36.75	5.48E+07	1.24	Y	1.10	1.22	11%
123789-HxCDF	37.73	4.60E+07	1.24	Y	1.09	1.14	4%
1234678-HpCDF	39.21	5.06E+07	1.03	Y	1.28	1.40	9%
1234789-HpCDF	40.53	3.82E+07	1.02	Y	1.27	1.32	4%
OCDF	42.73	5.27E+07	0.89	Y	1.01	1.04	3%
ES 2378-TCDD	27.54	7.71E+07	0.77	Y	1.01	1.06	5%
ES 12378-PeCDD	33.01	6.73E+07	1.67	Y	0.87	0.93	6%
ES 123478-HxCDD	36.92	6.35E+07	1.32	Y	1.10	1.02	-7%
ES 123678-HxCDD	37.03	6.38E+07	1.27	Y	1.06	1.02	-4%
ES 123789-HxCDD	37.34	8.67E+07	1.29	Y	1.22	1.39	14%
ES 1234678-HpCDD	40.1	5.78E+07	1.06	Y	0.99	0.92	-7%
ES OCDD	42.55	8.04E+07	0.91	Y	0.67	0.64	-4%
ES 2378-TCDF	26.63	1.34E+08	0.80	Y	1.01	1.09	8%
ES 12378-PeCDF	31.54	1.24E+08	1.54	Y	0.90	1.01	12%
ES 23478-PeCDF	32.66	1.20E+08	1.56	Y	0.89	0.98	10%
ES 123478-HxCDF	35.95	8.88E+07	0.51	Y	1.43	1.42	-1%
ES 123678-HxCDF	36.08	1.01E+08	0.52	Y	1.63	1.62	-1%
ES 234678-HxCDF	36.73	8.98E+07	0.52	Y	1.48	1.44	-3%
ES 123789-HxCDF	37.72	8.11E+07	0.52	Y	1.29	1.30	0%
ES 1234678-HpCDF	39.2	7.25E+07	0.45	Y	1.15	1.16	1%
ES 1234789-HpCDF	40.52	5.78E+07	0.46	Y	0.91	0.92	2%
ES OCDF	42.72	1.01E+08	0.89	Y	0.83	0.81	-3%

Dioxin/Furan QC Summary	Acq'd: 15 Jun 2020 10:28 PSW	ICAL: MM3_DF_10012020_12JUN2020
Lab ID: CS3_200615_DF_RB	UTP: 15-Jun-2020 11:31:34 PSW	Checkcode: 776-449-FTJ
Sample ID: ICV SIL 23-12-15	Report: 17 Jun 2020 08:16 pw	Datafile: 200615R03

Name	RT	Response	RA	OK	Ref. RRFs	Calc. RRFs	Dev'n	
JS 1234-TCDD	26.86	7.27E+07	0.77	Y	-	-	-	
JS 1234-TCDF	25.22	1.23E+08	0.79	Y	-	-	-	
JS 123467-HxCDD	37.23	3.13E+07	1.30	Y	-	-	-	
								OK
CS 37Cl-2378-TCDD	27.56	3.32E+07	n/a	-	1.04	4.56 /4	340%	spike level 40 pg/uL
CS 12347-PeCDD	32.51	6.36E+07	1.69	Y	0.74	0.88	18%	
CS 12346-PeCDF	31.00	1.15E+08	1.57	Y	0.86	0.94	9%	CL 17Jun20
CS 123469-HxCDF	36.39	8.60E+07	0.52	Y	1.36	1.37	1%	
CS 1234689-HpCDF	39.60	6.99E+07	0.44	Y	1.05	1.12	6%	
SS 37Cl-2378-TCDD	27.56	3.32E+07	n/a	-	1.04	4.30/4	315%	
SS 12347-PeCDD	32.51	6.36E+07	1.69	Y	0.86	0.95	11%	
SS 12346-PeCDF	31.00	1.15E+08	1.57	Y	0.96	0.93	-3%	
SS 123469-HxCDF	36.39	8.60E+07	0.52	Y	0.83	0.85	2%	
SS 1234689-HpCDF	39.60	6.99E+07	0.44	Y	0.92	0.97	4%	

n/a CL 17Jun20

~~OCDD-a~~	~~42.56~~	~~2.45E+06~~	~~3.00~~	~~N~~	~~0.07~~	~~0.06~~	~~-8%~~
~~OCDF-a~~	~~42.72~~	~~3.32E+06~~	~~2.37~~	~~Y~~	~~0.06~~	~~0.07~~	~~4%~~

METHOD 1613B **PCDD/F CALIBRATION VERIFICATION** **FORM 4A**

Lab Name: SGS North America

Initial Calibration: ICAL: MM3_DF_10012020_12JUN2020

Instrument ID: MM3 GC Column ID: ZB-5ms

VER Data Filename: 200615R03 Analysis Date: 15-JUN-2020 10:28:16

NATIVE ANALYTES	M/Z's FORMING RATIO	ION ABUND. RATIO	QC LIMITS			OK	CONC. FOUND	RANGE (ng/mL)			OK
2,3,7,8-TCDD	M/M+2	0.83	0.65	-	0.89	Y	10.2	7.8	-	12.9	Y
1,2,3,7,8-PeCDD	M+2/M+4	1.59	1.32	-	1.78	Y	50.1	39	-	65	Y
1,2,3,4,7,8-HxCDD	M+2/M+4	1.26	1.05	-	1.43	Y	54.9	39	-	64	Y
1,2,3,6,7,8-HxCDD	M+2/M+4	1.25	1.05	-	1.43	Y	54.5	39	-	64	Y
1,2,3,7,8,9-HxCDD	M+2/M+4	1.24	1.05	-	1.43	Y	52.4	41	-	61	Y
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	0.88	-	1.20	Y	54.5	43	-	58	Y
OCDD	M+2/M+4	0.92	0.76	-	1.02	Y	113	79	-	126	Y
2,3,7,8-TCDF	M/M+2	0.77	0.65	-	0.89	Y	10.9	8.4	-	12	Y
1,2,3,7,8-PeCDF	M+2/M+4	1.57	1.32	-	1.78	Y	51.3	41	-	60	Y
2,3,4,7,8-PeCDF	M+2/M+4	1.55	1.32	-	1.78	Y	58.6	41	-	61	Y
1,2,3,4,7,8-HxCDF	M+2/M+4	1.23	1.05	-	1.43	Y	53.5	45	-	56	Y
1,2,3,6,7,8-HxCDF	M+2/M+4	1.24	1.05	-	1.43	Y	54.3	44	-	57	Y
2,3,4,6,7,8-HxCDF	M+2/M+4	1.24	1.05	-	1.43	Y	55.6	44	-	57	Y
1,2,3,7,8,9-HxCDF	M+2/M+4	1.24	1.05	-	1.43	Y	52	45	-	56	Y
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.03	0.88	-	1.20	Y	54.5	45	-	55	Y
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.02	0.88	-	1.20	Y	52.1	43	-	58	Y
OCDF	M+2/M+4	0.89	0.76	-	1.02	Y	103	63	-	159	Y

See Table 9, Method 1613, for m/z specifications.

Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

Contract-required concentration range as specified in Table 6, Method 1613.

Processed: 17 Jun 2020 08:16 Analyst: pw

METHOD 1613B **PCDD/F CALIBRATION VERIFICATION** **FORM 4B**

Lab Name: SGS North America

Initial Calibration: ICAL: MM3_DF_10012020_12JUN2020

Instrument ID: MM3 GC Column ID: ZB-5ms

VER Data Filename: 200615R03 Analysis Date: 15-JUN-2020 10:28:16

LABELED ANALYTES	M/Z's FORMING RATIO	ION ABUND. RATIO	QC LIMITS			OK	CONC. FOUND	RANGE (ng/mL)			OK	
13C-2,3,7,8-TCDD	M/M+2	0.77	0.65	-	0.89	Y	105	82	-	121	Y	
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.67	1.32	-	1.78	Y	106	62	-	160	Y	
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.32	1.05	-	1.43	Y	92.7	85	-	117	Y	
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.27	1.05	-	1.43	Y	96.2	85	-	118	Y	
13C-1,2,3,7,8,9-HxCDD	M+2/M+4	1.29	1.05	-	1.43	Y	114	85	-	118	Y	
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.06	0.88	-	1.20	Y	93.1	72	-	138	Y	
13C-OCDD	M+2/M+4	0.91	0.76	-	1.02	Y	192	96	-	415	Y	
13C-2,3,7,8-TCDF	M/M+2	0.80	0.65	-	0.89	Y	108	71	-	140	Y	
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.54	1.32	-	1.78	Y	112	76	-	130	Y	
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.56	1.32	-	1.78	Y	110	77	-	130	Y	
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.51	0.43	-	0.59	Y	99.3	76	-	131	Y	
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	99.3	70	-	143	Y	
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	97.2	73	-	137	Y	
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	100	74	-	135	Y	
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.45	0.37	-	0.51	Y	101	78	-	129	Y	
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.46	0.37	-	0.51	Y	102	77	-	129	Y	
13C-OCDF	M+2/M+4	0.89	0.76	-	1.02	Y	195	96	-	415	Y	
CLEANUP STANDARDS												
								31.6	-	50.8	Y	
37Cl-2,3,7,8-TCDD	n/a						44	~~7.9~~	~~-~~	~~12.7~~	~~N~~	spike level 40 CL 17Jun20
13C-1,2,3,4,7-PeCDD	M+2/M+4	1.69	1.32	-	1.78	Y	118	70	-	130	Y	
13C-1,2,3,4,6-PeCDF	M+2/M+4	1.57	1.32	-	1.78	Y	109	70	-	130	Y	
13C-1,2,3,4,6,9-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	101	70	-	130	Y	
13C-1,2,3,4,6,8,9-HpCDF	M/M+2	0.44	0.37	-	0.51	Y	106	70	-	130	Y	

Processed: 17 Jun 2020 08:16 Analyst: pw

METHOD 8290A **PCDD/F CALIBRATION VERIFICATION** **FORM 4A**

Lab Name: SGS North America

Initial Calibration: ICAL: MM3_DF_10012020_12JUN2020

Instrument ID: MM3 GC Column ID: ZB-5ms

VER Data Filename: 200615R03 Analysis Date: 15-JUN-2020 10:28:16

NATIVE ANALYTES	M/Z's FORMING RATIO	ION ABUND. RATIO	QC LIMITS			OK	CONC. FOUND	RANGE (ng/mL)			OK
2,3,7,8-TCDD	M/M+2	0.83	0.65	-	0.89	Y	10.2	8	-	12	Y
1,2,3,7,8-PeCDD	M+2/M+4	1.59	1.32	-	1.78	Y	50.1	40	-	60	Y
1,2,3,4,7,8-HxCDD	M+2/M+4	1.26	1.05	-	1.43	Y	54.9	40	-	60	Y
1,2,3,6,7,8-HxCDD	M+2/M+4	1.25	1.05	-	1.43	Y	54.5	40	-	60	Y
1,2,3,7,8,9-HxCDD	M+2/M+4	1.24	1.05	-	1.43	Y	52.4	40	-	60	Y
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	0.88	-	1.20	Y	54.5	40	-	60	Y
OCDD	M+2/M+4	0.92	0.76	-	1.02	Y	113	80	-	120	Y
2,3,7,8-TCDF	M/M+2	0.77	0.65	-	0.89	Y	10.9	8	-	12	Y
1,2,3,7,8-PeCDF	M+2/M+4	1.57	1.32	-	1.78	Y	51.3	40	-	60	Y
2,3,4,7,8-PeCDF	M+2/M+4	1.55	1.32	-	1.78	Y	58.6	40	-	60	Y
1,2,3,4,7,8-HxCDF	M+2/M+4	1.23	1.05	-	1.43	Y	53.5	40	-	60	Y
1,2,3,6,7,8-HxCDF	M+2/M+4	1.24	1.05	-	1.43	Y	54.3	40	-	60	Y
2,3,4,6,7,8-HxCDF	M+2/M+4	1.24	1.05	-	1.43	Y	55.6	40	-	60	Y
1,2,3,7,8,9-HxCDF	M+2/M+4	1.24	1.05	-	1.43	Y	52	40	-	60	Y
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.03	0.88	-	1.20	Y	54.5	40	-	60	Y
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.02	0.88	-	1.20	Y	52.1	40	-	60	Y
OCDF	M+2/M+4	0.89	0.76	-	1.02	Y	103	80	-	120	Y

Processed: 17 Jun 2020 08:15 Analyst: pw

METHOD 8290A **PCDD/F CALIBRATION VERIFICATION** **FORM 4B**

Lab Name: SGS North America

Initial Calibration: ICAL: MM3_DF_10012020_12JUN2020

Instrument ID: MM3 GC Column ID: ZB-5ms

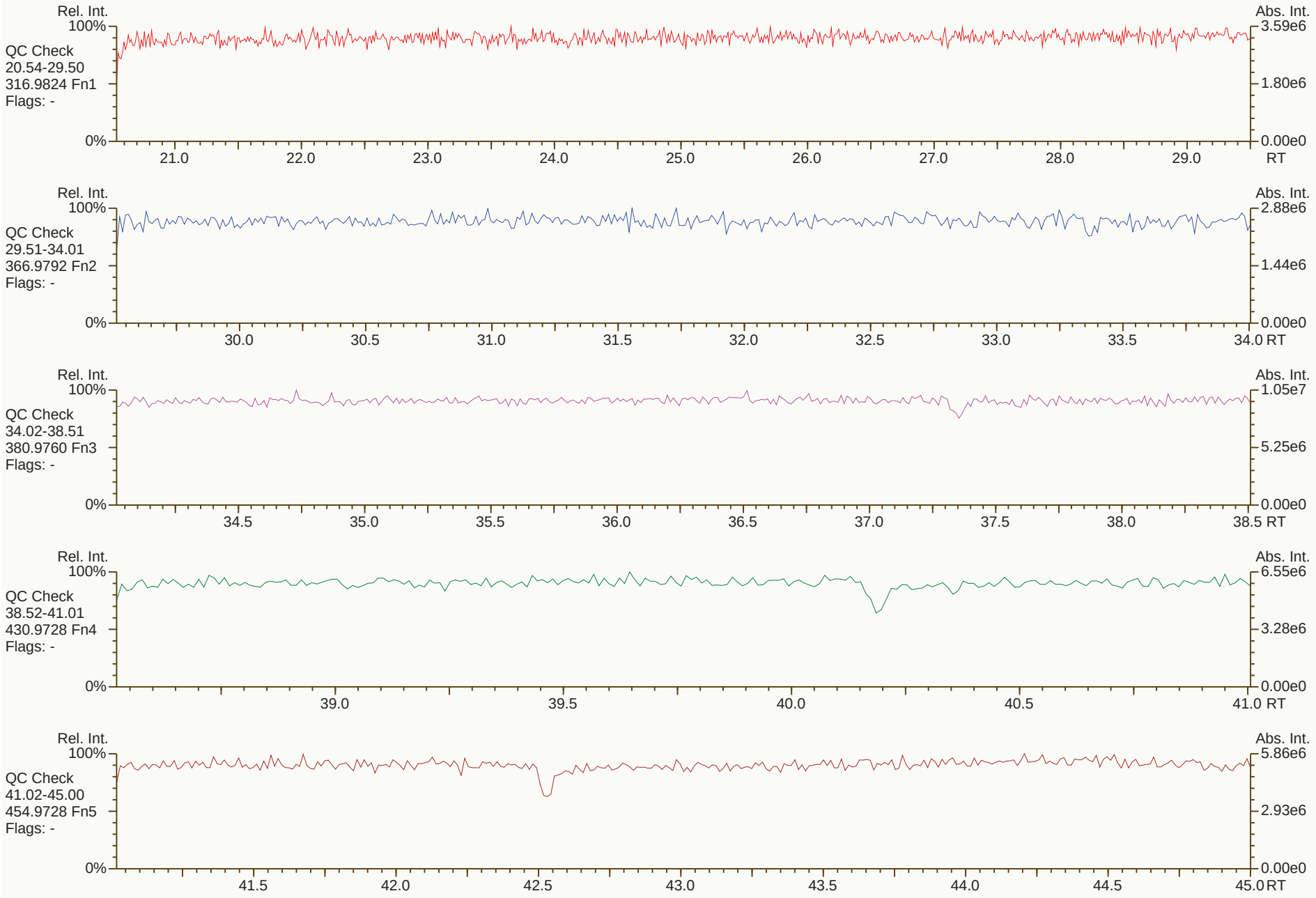
VER Data Filename: 200615R03 Analysis Date: 15-JUN-2020 10:28:16

LABELED ANALYTES	M/Z's FORMING RATIO	ION ABUND. RATIO	QC LIMITS			OK	CONC. FOUND	RANGE (ng/mL)			OK	
13C-2,3,7,8-TCDD	M/M+2	0.77	0.65	-	0.89	Y	105	70	-	130	Y	
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.67	1.32	-	1.78	Y	106	70	-	130	Y	
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.32	1.05	-	1.43	Y	92.7	70	-	130	Y	
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.27	1.05	-	1.43	Y	96.2	70	-	130	Y	
13C-1,2,3,7,8,9-HxCDD	M+2/M+4	1.29	1.05	-	1.43	Y	114	70	-	130	Y	
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.06	0.88	-	1.20	Y	93.1	70	-	130	Y	
13C-OCDD	M+2/M+4	0.91	0.76	-	1.02	Y	192	140	-	260	Y	
13C-2,3,7,8-TCDF	M/M+2	0.80	0.65	-	0.89	Y	108	70	-	130	Y	
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.54	1.32	-	1.78	Y	112	70	-	130	Y	
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.56	1.32	-	1.78	Y	110	70	-	130	Y	
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.51	0.43	-	0.59	Y	99.3	70	-	130	Y	
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	99.3	70	-	130	Y	
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	97.2	70	-	130	Y	
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	100	70	-	130	Y	
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.45	0.37	-	0.51	Y	101	70	-	130	Y	
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.46	0.37	-	0.51	Y	102	70	-	130	Y	
13C-OCDF	M+2/M+4	0.89	0.76	-	1.02	Y	195	140	-	260	Y	
CLEANUP STANDARDS												
								31.6	-	50.8	Y	
37Cl-2,3,7,8-TCDD	n/a						44	~~7.9~~	~~-~~	~~12.7~~	~~N~~	spike level 40
13C-1,2,3,4,7-PeCDD	M+2/M+4	1.69	1.32	-	1.78	Y	118	70	-	130	Y	CL 17Jun20
13C-1,2,3,4,6-PeCDF	M+2/M+4	1.57	1.32	-	1.78	Y	109	70	-	130	Y	
13C-1,2,3,4,6,9-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	101	70	-	130	Y	
13C-1,2,3,4,6,8,9-HpCDF	M/M+2	0.44	0.37	-	0.51	Y	106	70	-	130	Y	

Processed: 17 Jun 2020 08:15 Analyst: pw

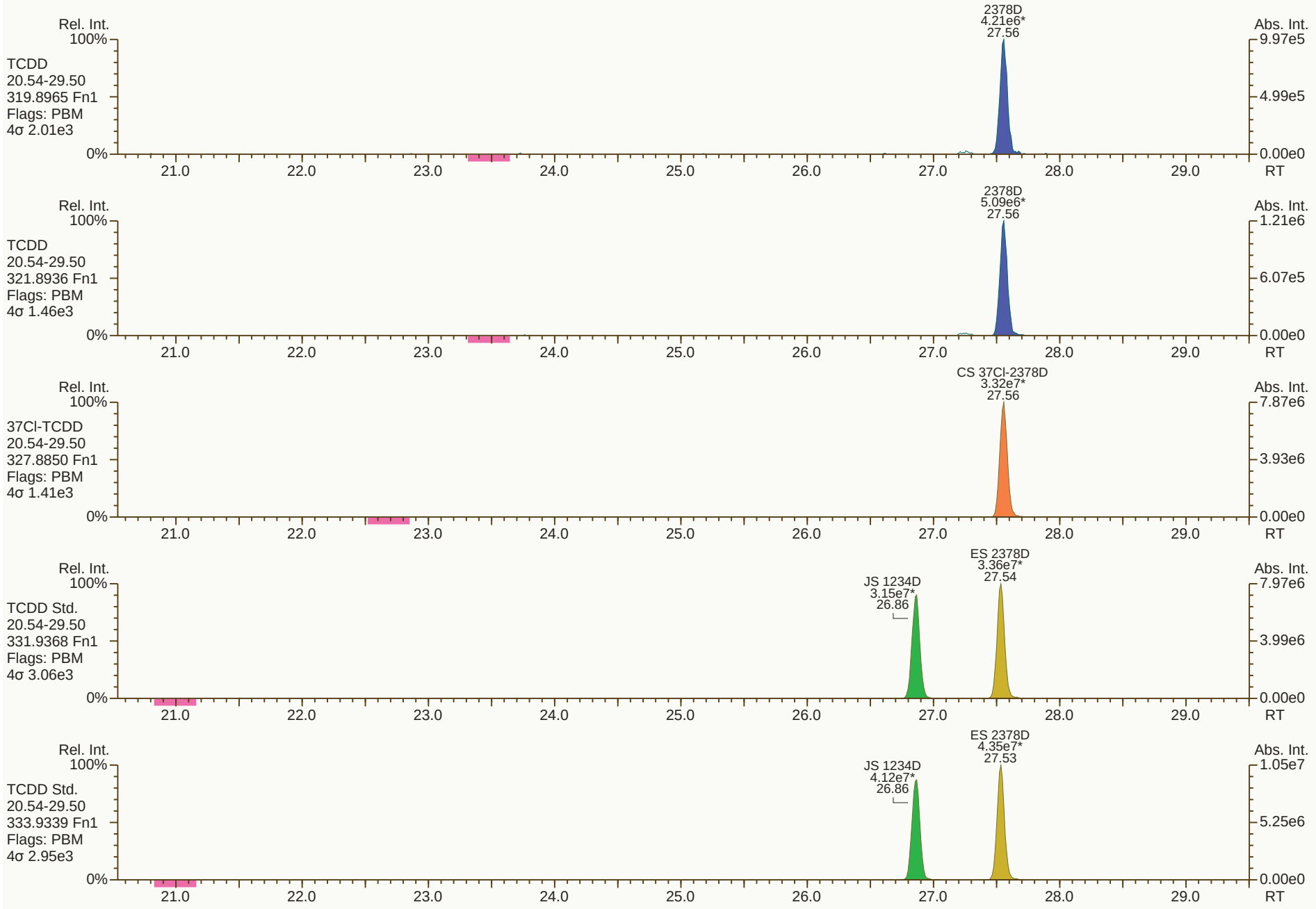
SGS ID: CS3_200615_DF_RB **Sample ID: ICV SIL 23-12-15** **Acq: 15-Jun-2020 10:28:16**

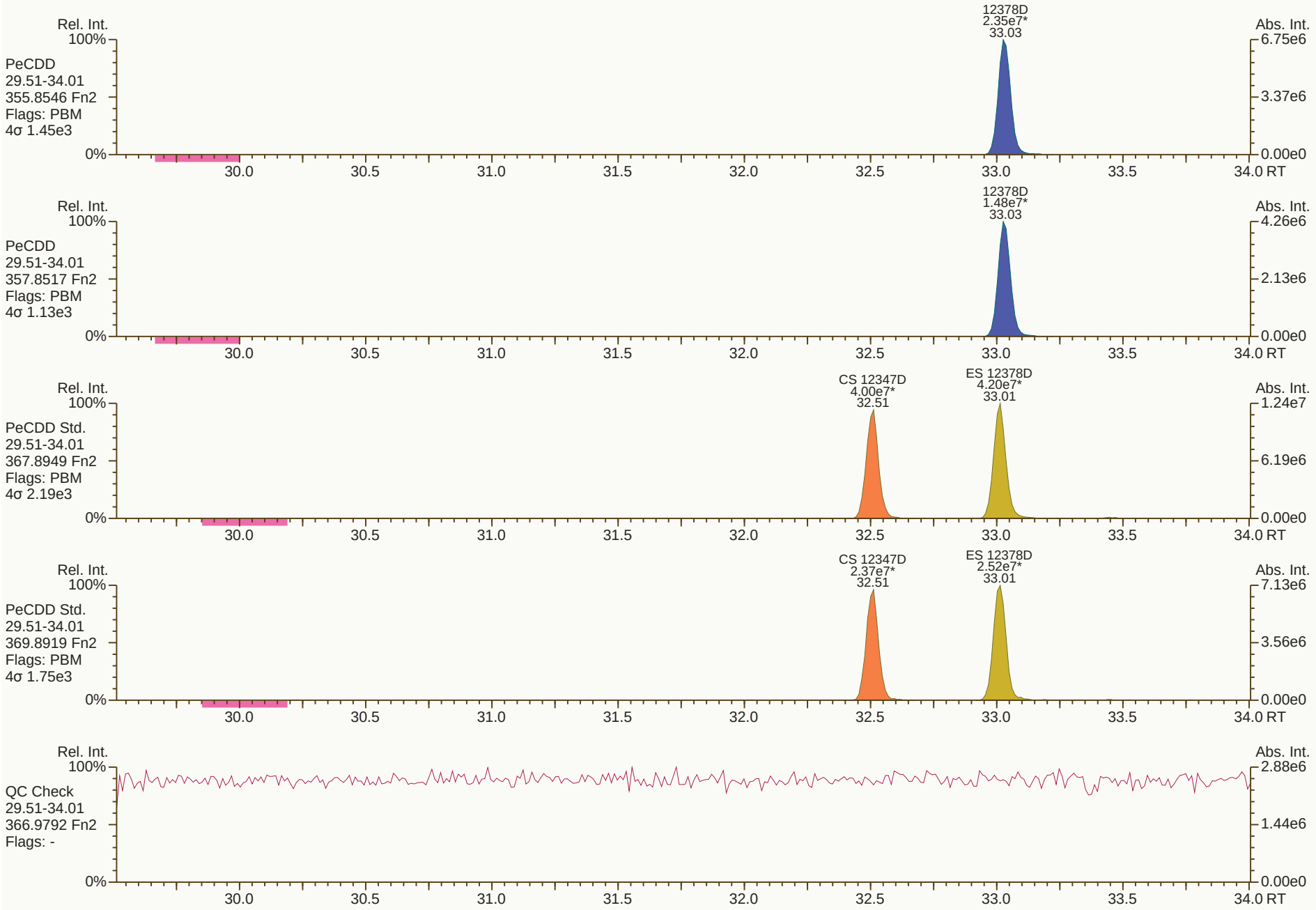
Instr: [ILM] AutoSpec-Ultima MM3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 13** **User: PSW Datafile: 200615R03**

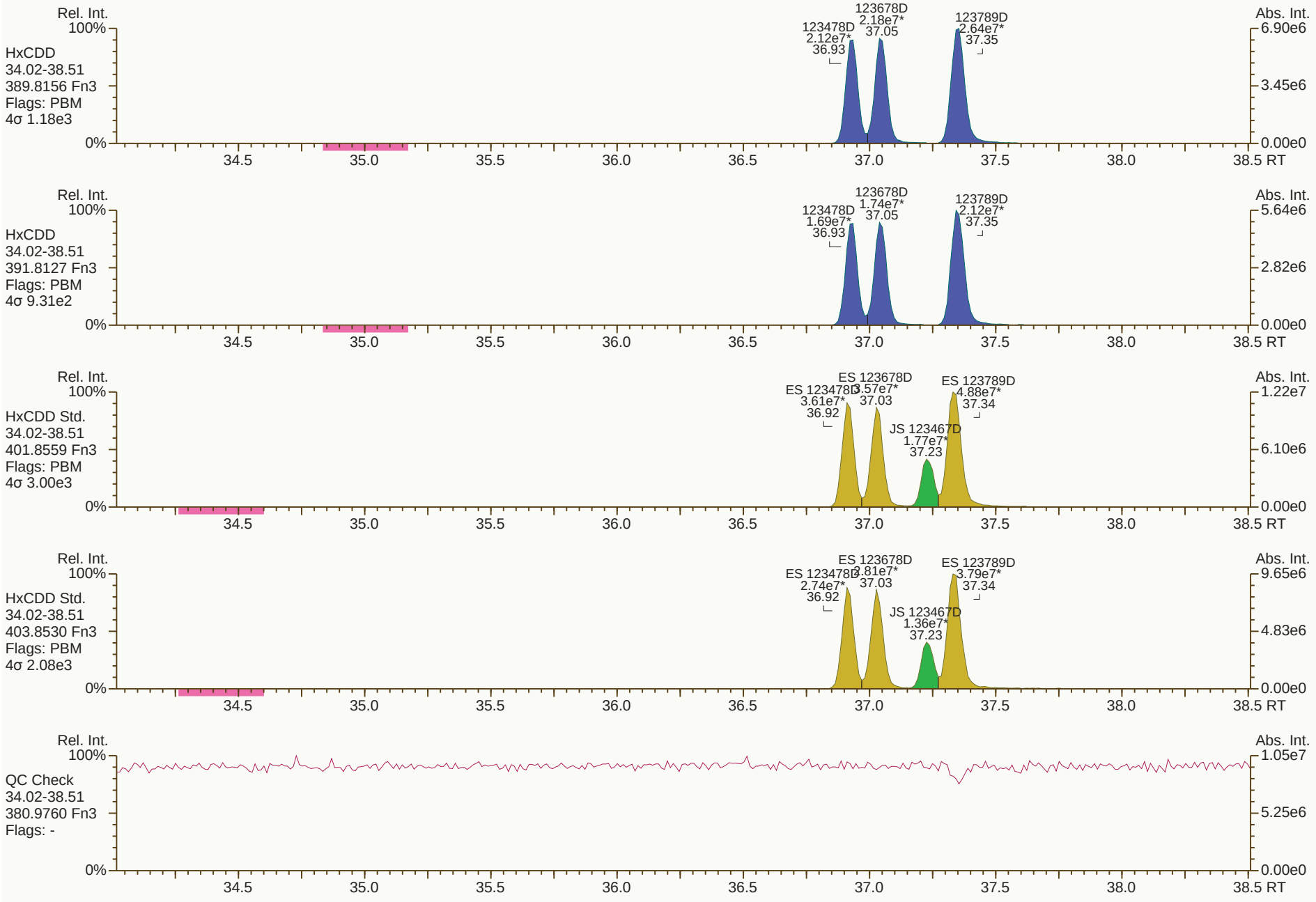


Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS3_200615_DF_RB.utp_res, saved 15-Jun-2020 13:50 (PSW) *Peak annotation: Areas, Centroids*

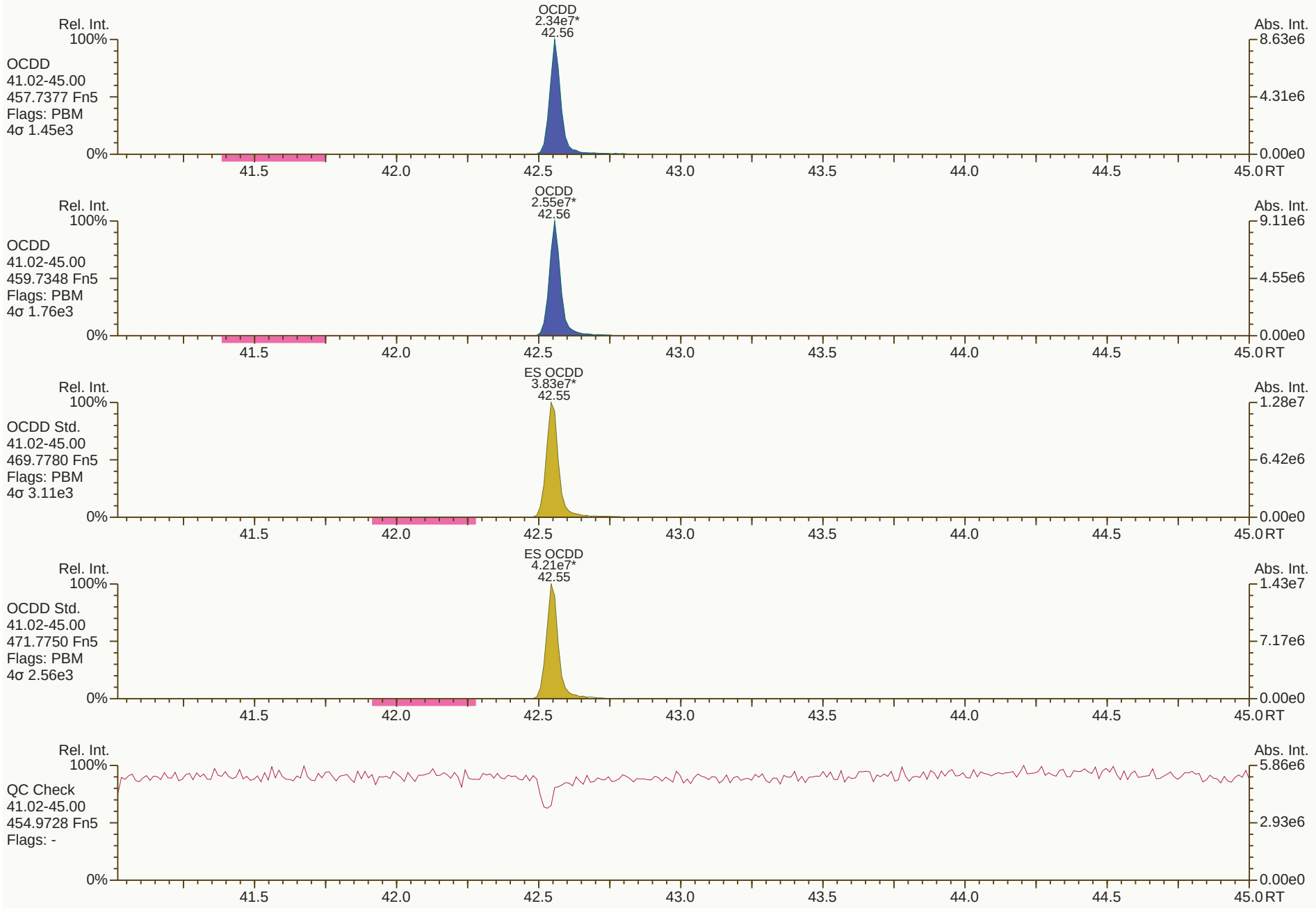
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 scc: 776-449 *PKD: n/a Printed: 15-Jun-2020 13:51 Page 1 of 12*


Rel. Int.
100%
TCDD
20.54-29.50
319.8965 Fn1
Flags: PBM
4σ 2.01e3
0%
2378D
4.21e6*
27.56
Abs. Int.
9.97e5
4.99e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD
20.54-29.50
321.8936 Fn1
Flags: PBM
4σ 1.46e3
0%
2378D
5.09e6*
27.56
Abs. Int.
1.21e6
6.07e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
37Cl-TCDD
20.54-29.50
327.8850 Fn1
Flags: PBM
4σ 1.41e3
0%
CS 37Cl-2378D
3.32e7*
27.56
Abs. Int.
7.87e6
3.93e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
331.9368 Fn1
Flags: PBM
4σ 3.06e3
0%
JS 1234D
3.15e7*
26.86
ES 2378D
3.36e7*
27.54
Abs. Int.
7.97e6
3.99e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
333.9339 Fn1
Flags: PBM
4σ 2.95e3
0%
JS 1234D
4.12e7*
26.86
ES 2378D
4.35e7*
27.53
Abs. Int.
1.05e7
5.25e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
PeCDD
29.51-34.01
355.8546 Fn2
Flags: PBM
4σ 1.45e3
0%
12378D
2.35e7*
33.03
Abs. Int.
6.75e6
3.37e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD
29.51-34.01
357.8517 Fn2
Flags: PBM
4σ 1.13e3
0%
12378D
1.48e7*
33.03
Abs. Int.
4.26e6
2.13e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
367.8949 Fn2
Flags: PBM
4σ 2.19e3
0%
CS 12347D
4.00e7*
32.51
ES 12378D
4.20e7*
33.01
Abs. Int.
1.24e7
6.19e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
369.8919 Fn2
Flags: PBM
4σ 1.75e3
0%
CS 12347D
2.37e7*
32.51
ES 12378D
2.52e7*
33.01
Abs. Int.
7.13e6
3.56e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
QC Check
29.51-34.01
366.9792 Fn2
Flags: -
0%
Abs. Int.
2.88e6
1.44e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT


Rel. Int.
100%
HxCDD
34.02-38.51
389.8156 Fn3
Flags: PBM
4σ 1.18e3
123478D
2.12e7*
36.93
123678D
2.18e7*
37.05
123789D
2.64e7*
37.35
Abs. Int.
6.90e6
3.45e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDD
34.02-38.51
391.8127 Fn3
Flags: PBM
4σ 9.31e2
123478D
1.69e7*
36.93
123678D
1.74e7*
37.05
123789D
2.12e7*
37.35
Abs. Int.
5.64e6
2.82e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDD Std.
34.02-38.51
401.8559 Fn3
Flags: PBM
4σ 3.00e3
ES 123478D
3.61e7*
36.92
ES 123678D
3.57e7*
37.03
JS 123467D
1.77e7*
37.23
ES 123789D
4.88e7*
37.34
Abs. Int.
1.22e7
6.10e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDD Std.
34.02-38.51
403.8530 Fn3
Flags: PBM
4σ 2.08e3
ES 123478D
2.74e7*
36.92
ES 123678D
2.81e7*
37.03
JS 123467D
1.36e7*
37.23
ES 123789D
3.79e7*
37.34
Abs. Int.
9.65e6
4.83e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
QC Check
34.02-38.51
380.9760 Fn3
Flags: -
Abs. Int.
1.05e7
5.25e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT


Rel. Int.
100%
HpCDD
38.52-41.01
423.7767 Fn4
Flags: PBM
4σ 1.41e3
0%
1234678D
1.58e7*
40.11
Abs. Int.
6.20e6
3.10e6
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.52-41.01
425.7737 Fn4
Flags: PBM
4σ 1.76e3
0%
1234678D
1.52e7*
40.11
Abs. Int.
6.13e6
3.07e6
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.52-41.01
435.8169 Fn4
Flags: PBM
4σ 1.54e3
0%
ES 1234678D
2.97e7*
40.10
Abs. Int.
1.23e7
6.15e6
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.52-41.01
437.8140 Fn4
Flags: PBM
4σ 2.01e3
0%
ES 1234678D
2.81e7*
40.10
Abs. Int.
1.11e7
5.56e6
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.52-41.01
430.9728 Fn4
Flags: -
0%
Abs. Int.
6.55e6
3.28e6
0.00e0
39.0
39.5
40.0
40.5
41.0 RT


OCDD
2.34e7*
42.56
Rel. Int.
100%
OCDD
41.02-45.00
457.7377 Fn5
Flags: PBM
4σ 1.45e3
0%
Abs. Int.
8.63e6
4.31e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDD
2.55e7*
42.56
Rel. Int.
100%
OCDD
41.02-45.00
459.7348 Fn5
Flags: PBM
4σ 1.76e3
0%
Abs. Int.
9.11e6
4.55e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
3.83e7*
42.55
Rel. Int.
100%
OCDD Std.
41.02-45.00
469.7780 Fn5
Flags: PBM
4σ 3.11e3
0%
Abs. Int.
1.28e7
6.42e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
4.21e7*
42.55
Rel. Int.
100%
OCDD Std.
41.02-45.00
471.7750 Fn5
Flags: PBM
4σ 2.56e3
0%
Abs. Int.
1.43e7
7.17e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
5.86e6
2.93e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT


SGS ID: CS3_200615_DF_RB
Sample ID: ICV SIL 23-12-15
Acq: 15-Jun-2020 10:28:16
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 13
User: PSW Datafile: 200615R03
Rel. Int.
Abs. Int.
TCDF
20.54-29.50
303.9016 Fn1
Flags: PBM
4σ 1.07e3
2378F
6.26e6*
26.65
1.55e6
7.74e5
0.00e0
RT
TCDF
20.54-29.50
305.8987 Fn1
Flags: PBM
4σ 1.63e3
2378F
8.09e6*
26.65
1.91e6
9.56e5
RRF(2378F) = (6.26e6 + 8.09e6) * 100pg / (5.95e7 + 7.44e7) * 10pg * 1 = 1.07
PSW 15-Jun-2020 13:50
OK
CL 17Jun20
TCDF Std.
20.54-29.50
315.9419 Fn1
Flags: PBM
4σ 9.41e3
JS 1234F
5.43e7*
25.22
ES 2378F
5.95e7*
26.63
1.32e7
6.59e6
TCDF Std.
20.54-29.50
317.9389 Fn1
Flags: PBM
4σ 5.89e3
JS 1234F
6.85e7*
25.22
ES 2378F
7.44e7*
26.63
1.67e7
8.37e6
HxCDPE
20.54-29.50
375.8364 Fn1
Flags: PB
4σ 1.44e3
4.90e3
2.45e3
100%
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS3_200615_DF_RB.utp_res, saved 15-Jun-2020 13:50 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 9229, 6226, 5470 scc: 776-449
PKD: 15-Jun-2020 11:29 Printed: 15-Jun-2020 13:51 Page 7 of 12

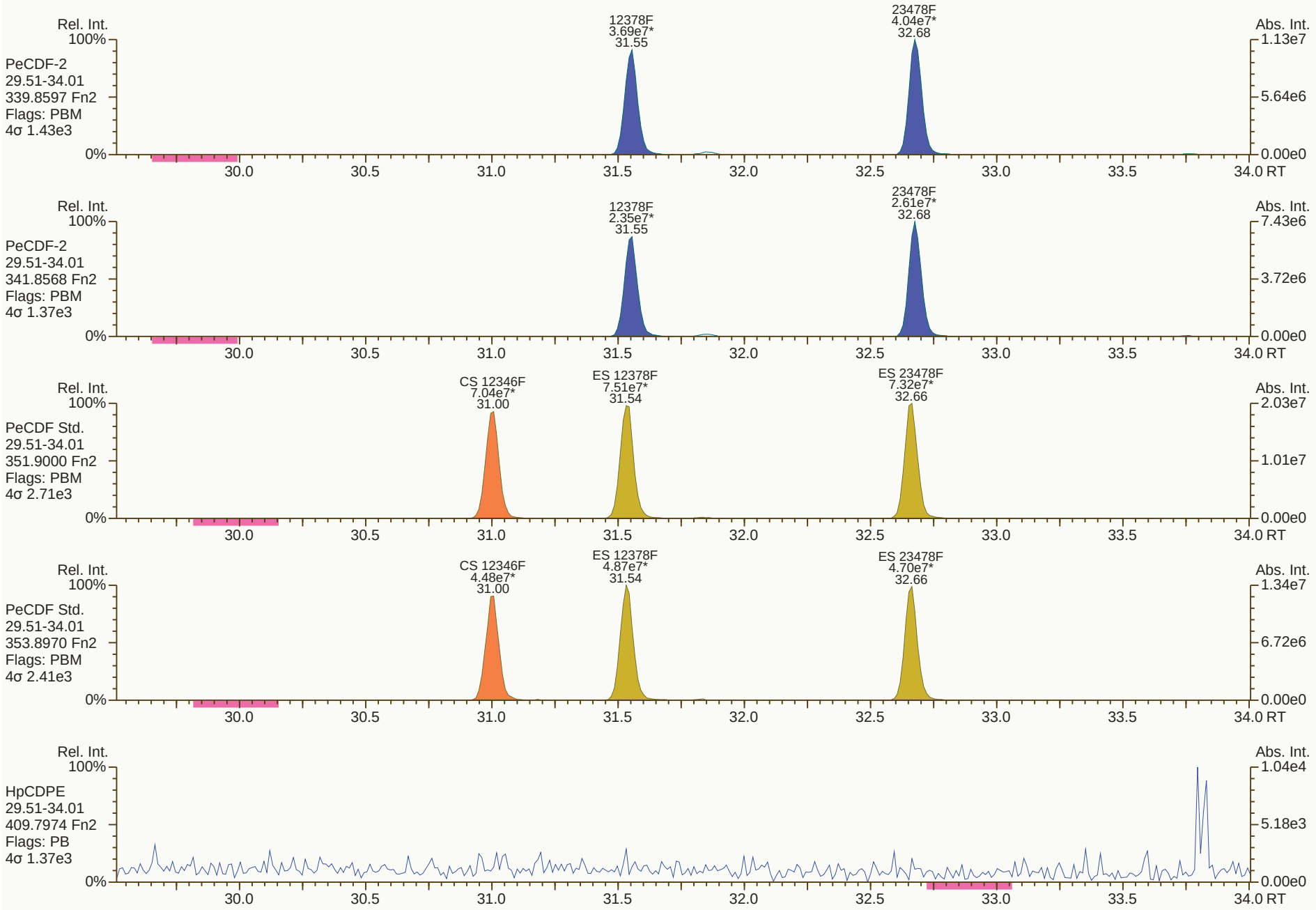
SGS ID: CS3_200615_DF_RB **Sample ID: ICV SIL 23-12-15** **Acq: 15-Jun-2020 10:28:16**

Instr: [ILM] AutoSpec-Ultima MM3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 13** **User: PSW Datafile: 200615R03**



Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS3_200615_DF_RB.utp_res, saved 15-Jun-2020 13:50 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 5095 scc: 776-449 *Revised: 15-Jun-2020 11:28 (PSW) Printed: 15-Jun-2020 13:51 Page 8 of 12*


Rel. Int.
100%
PeCDF-2
29.51-34.01
339.8597 Fn2
Flags: PBM
4σ 1.43e3
0%
12378F
3.69e7*
31.55
23478F
4.04e7*
32.68
Abs. Int.
1.13e7
5.64e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF-2
29.51-34.01
341.8568 Fn2
Flags: PBM
4σ 1.37e3
0%
12378F
2.35e7*
31.55
23478F
2.61e7*
32.68
Abs. Int.
7.43e6
3.72e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
351.9000 Fn2
Flags: PBM
4σ 2.71e3
0%
CS 12346F
7.04e7*
31.00
ES 12378F
7.51e7*
31.54
ES 23478F
7.32e7*
32.66
Abs. Int.
2.03e7
1.01e7
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
353.8970 Fn2
Flags: PBM
4σ 2.41e3
0%
CS 12346F
4.48e7*
31.00
ES 12378F
4.87e7*
31.54
ES 23478F
4.70e7*
32.66
Abs. Int.
1.34e7
6.72e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
HpCDPE
29.51-34.01
409.7974 Fn2
Flags: PB
4σ 1.37e3
0%
Abs. Int.
1.04e4
5.18e3
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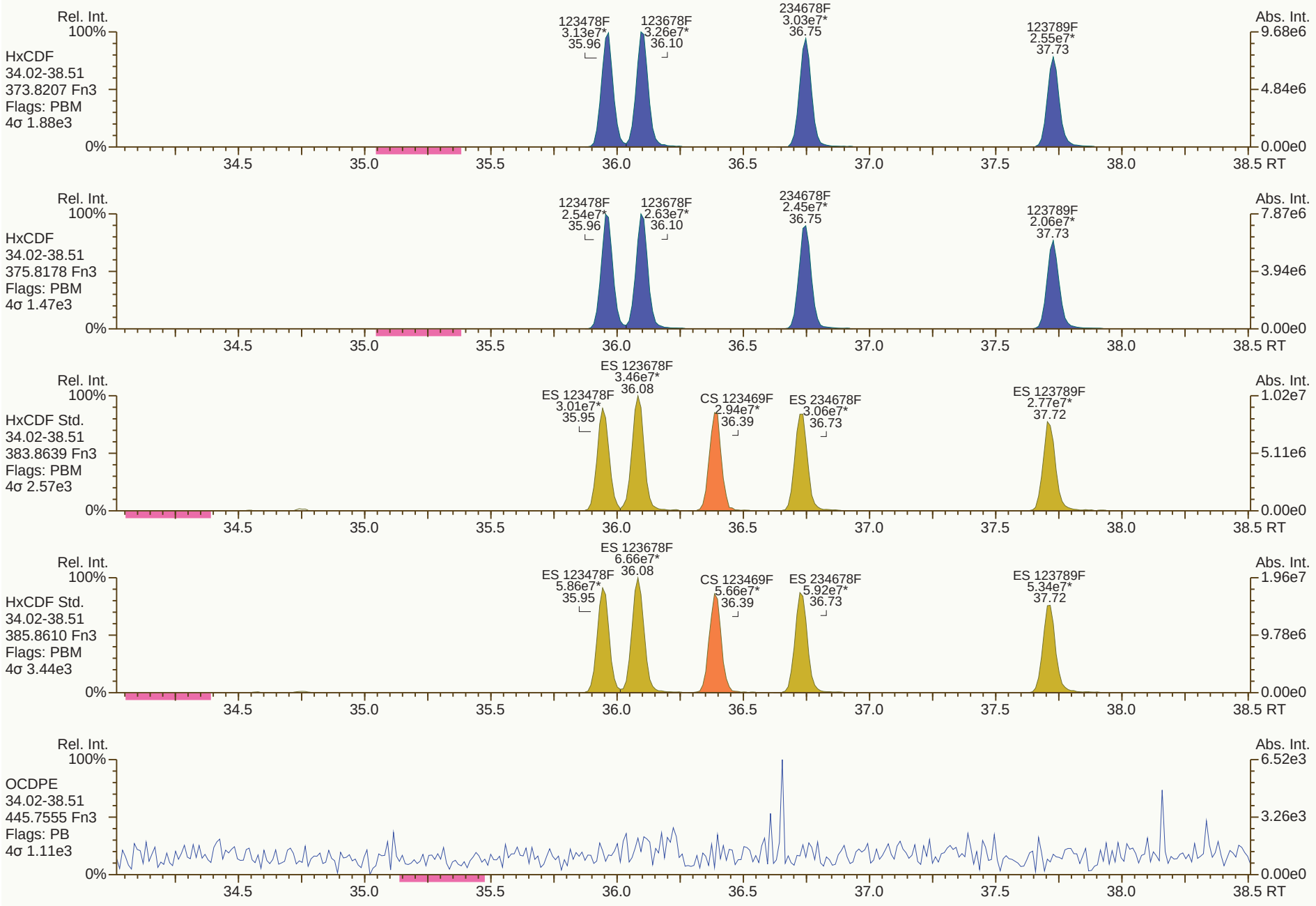
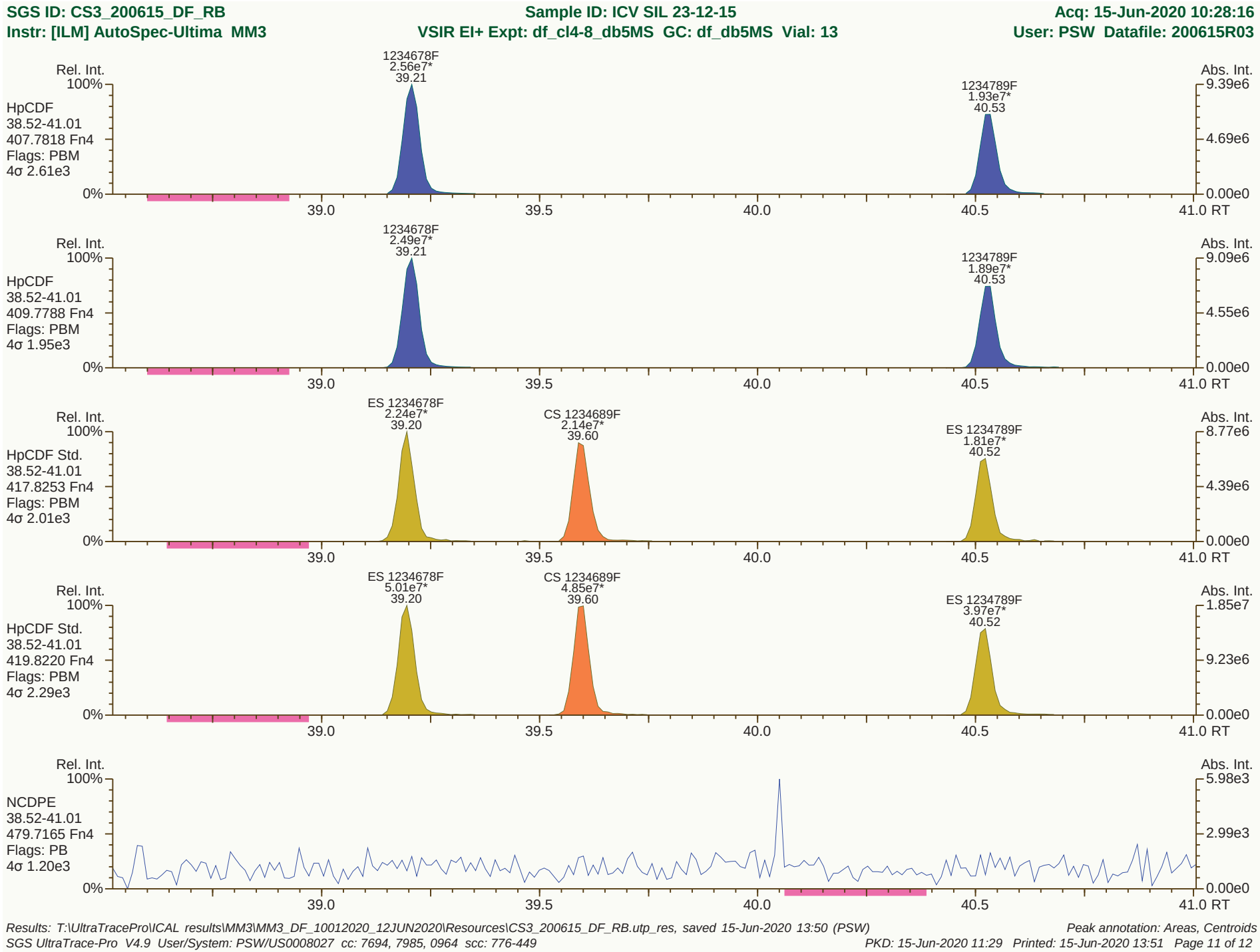
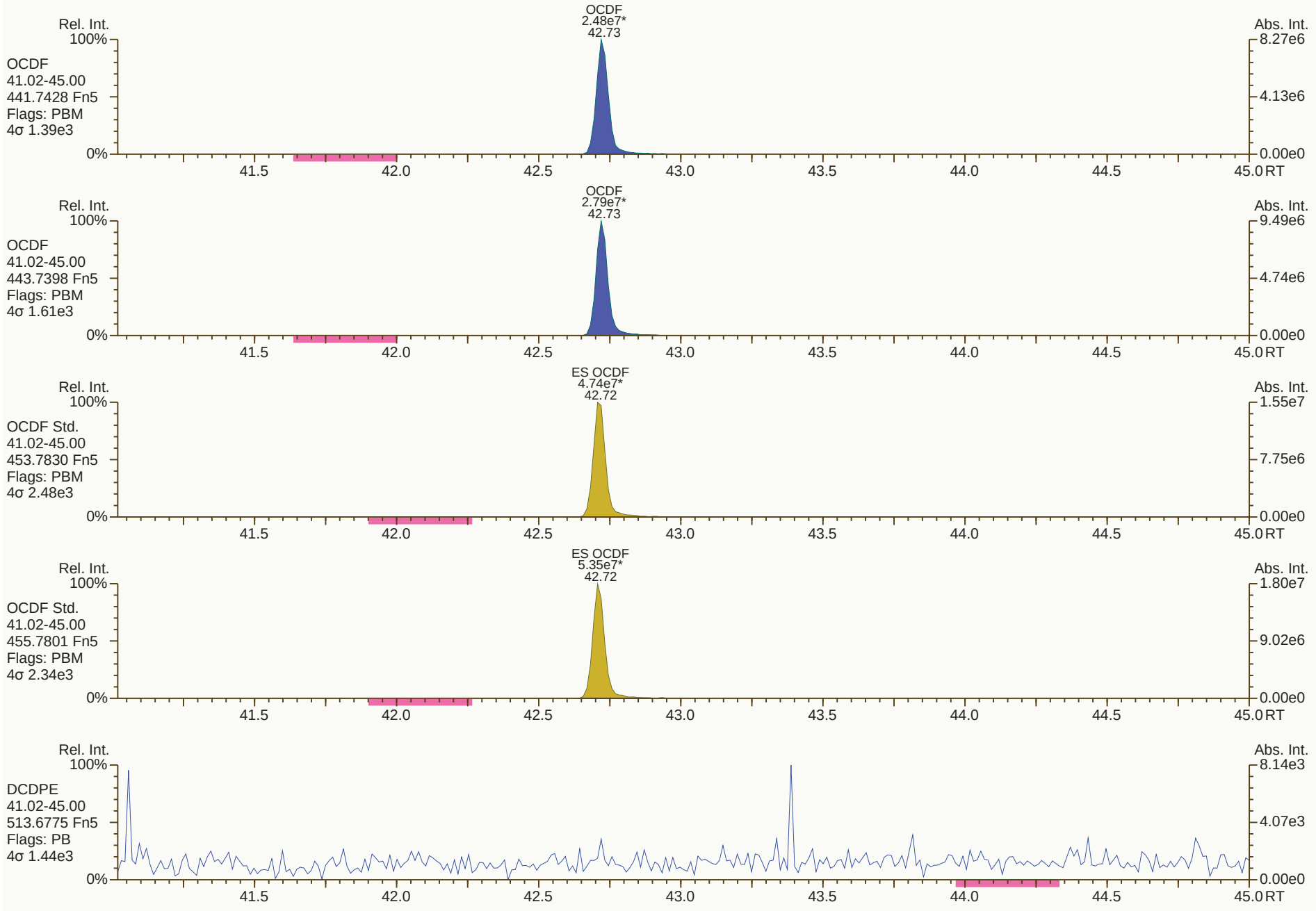
33.0
33.5
34.0 RT


Rel. Int.
100%
HxCDF
34.02-38.51
373.8207 Fn3
Flags: PBM
4σ 1.88e3
123478F
3.13e7*
35.96
123678F
3.26e7*
36.10
234678F
3.03e7*
36.75
123789F
2.55e7*
37.73
Abs. Int.
9.68e6
4.84e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDF
34.02-38.51
375.8178 Fn3
Flags: PBM
4σ 1.47e3
123478F
2.54e7*
35.96
123678F
2.63e7*
36.10
234678F
2.45e7*
36.75
123789F
2.06e7*
37.73
Abs. Int.
7.87e6
3.94e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDF Std.
34.02-38.51
383.8639 Fn3
Flags: PBM
4σ 2.57e3
ES 123678F
3.46e7*
36.08
ES 123478F
3.01e7*
35.95
CS 123469F
2.94e7*
36.39
ES 234678F
3.06e7*
36.73
ES 123789F
2.77e7*
37.72
Abs. Int.
1.02e7
5.11e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDF Std.
34.02-38.51
385.8610 Fn3
Flags: PBM
4σ 3.44e3
ES 123678F
6.66e7*
36.08
ES 123478F
5.86e7*
35.95
CS 123469F
5.66e7*
36.39
ES 234678F
5.92e7*
36.73
ES 123789F
5.34e7*
37.72
Abs. Int.
1.96e7
9.78e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
OCDPE
34.02-38.51
445.7555 Fn3
Flags: PB
4σ 1.11e3
Abs. Int.
6.52e3
3.26e3
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT


SGS ID: CS3_200615_DF_RB
Sample ID: ICV SIL 23-12-15
Acq: 15-Jun-2020 10:28:16
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 13
User: PSW Datafile: 200615R03
Rel. Int.
Abs. Int.
HpCDF
38.52-41.01
407.7818 Fn4
Flags: PBM
4σ 2.61e3
1234678F
2.56e7*
39.21
1234789F
1.93e7*
40.53
9.39e6
4.69e6
0.00e0
HpCDF
38.52-41.01
409.7788 Fn4
Flags: PBM
4σ 1.95e3
1234678F
2.49e7*
39.21
1234789F
1.89e7*
40.53
9.09e6
4.55e6
0.00e0
HpCDF Std.
38.52-41.01
417.8253 Fn4
Flags: PBM
4σ 2.01e3
ES 1234678F
2.24e7*
39.20
CS 1234689F
2.14e7*
39.60
ES 1234789F
1.81e7*
40.52
8.77e6
4.39e6
0.00e0
HpCDF Std.
38.52-41.01
419.8220 Fn4
Flags: PBM
4σ 2.29e3
ES 1234678F
5.01e7*
39.20
CS 1234689F
4.85e7*
39.60
ES 1234789F
3.97e7*
40.52
1.85e7
9.23e6
0.00e0
NCDPE
38.52-41.01
479.7165 Fn4
Flags: PB
4σ 1.20e3
5.98e3
2.99e3
0.00e0
100%
0%
39.0
39.5
40.0
40.5
41.0 RT
Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS3_200615_DF_RB.utp_res, saved 15-Jun-2020 13:50 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 7694, 7985, 0964 scc: 776-449
PKD: 15-Jun-2020 11:29 Printed: 15-Jun-2020 13:51 Page 11 of 12

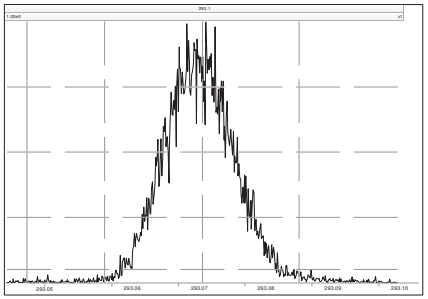


Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS3_200615_DF_RB.utp_res, saved 15-Jun-2020 13:50 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 1201, 7893, 8879 scc: 776-449
PKD: 15-Jun-2020 11:29 Printed: 15-Jun-2020 13:51 Page 12 of 12

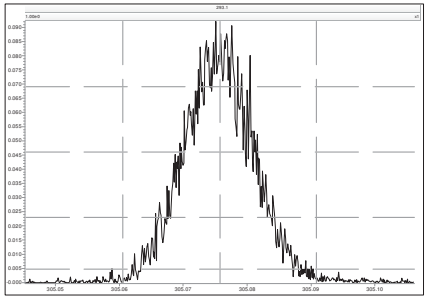
File: Experiment: df_cl4-8_db5MS.exp Reference: pfk.ref Function: 1 @ 200 (ppm)

Printed: Monday, June 15, 2020 08:39:26 Eastern Daylight Time

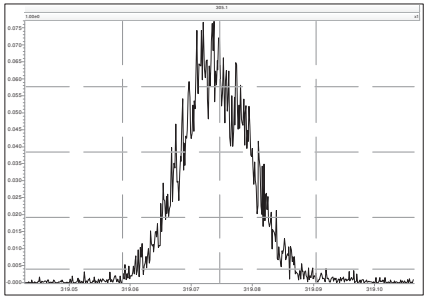
M 292.9824 R 12688



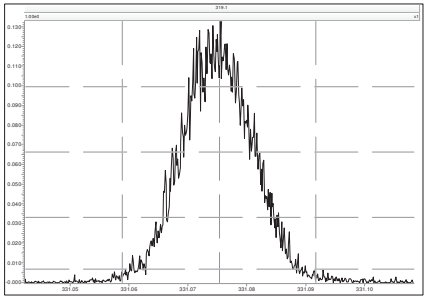
M 304.9824 R 12564



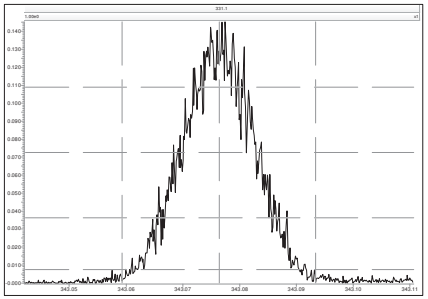
M 318.9792 R 13369



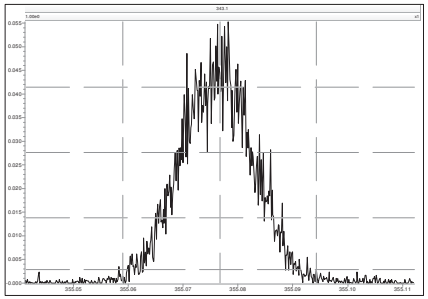
M 330.9792 R 12957



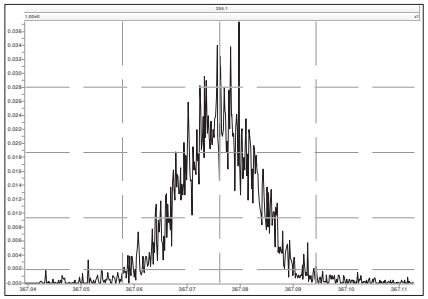
M 342.9792 R 11570



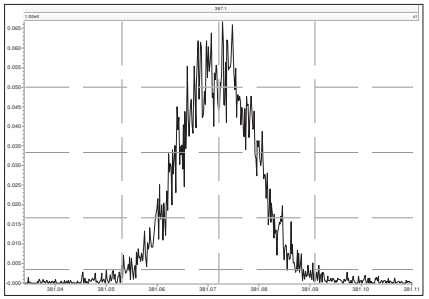
M 354.9792 R 12690



M 366.9792 R 12253



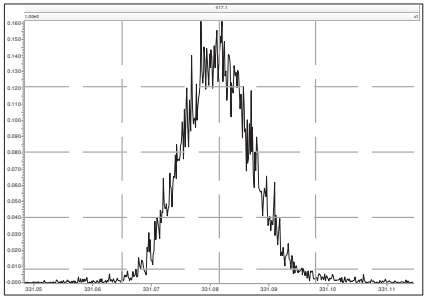
M 380.9760 R 11684



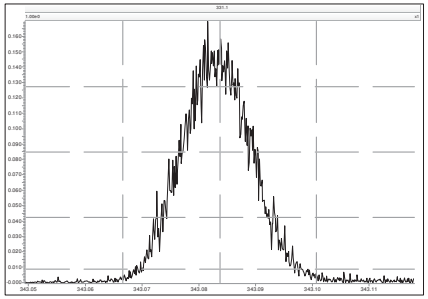
File: Experiment: df_cl4-8_db5MS.exp Reference: pfk.ref Function: 2 @ 200 (ppm)

Printed: Monday, June 15, 2020 08:39:47 Eastern Daylight Time

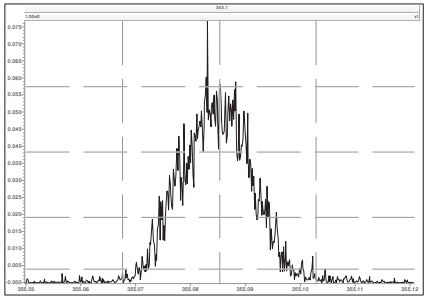
M 330.9792 R 13296



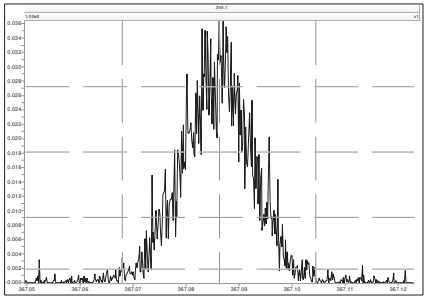
M 342.9792 R 12751



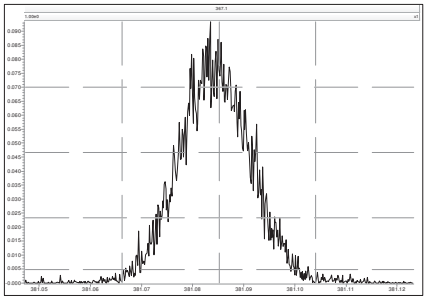
M 354.9792 R 13021



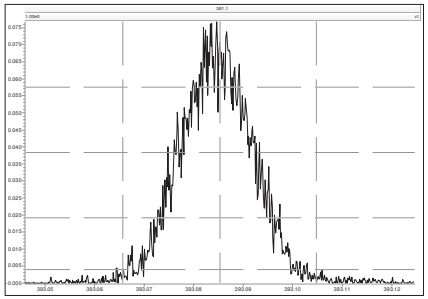
M 366.9792 R 13019



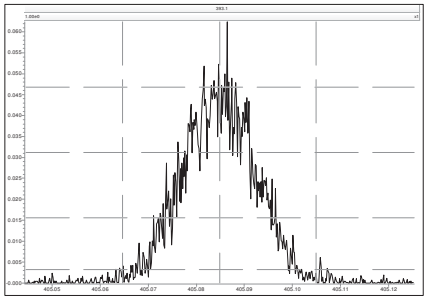
M 380.9760 R 12257



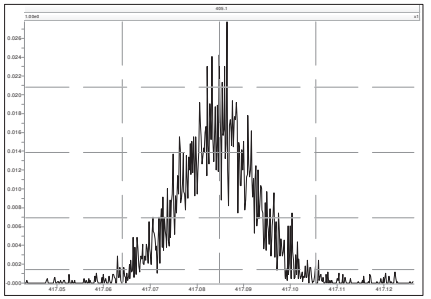
M 392.9760 R 13293



M 404.9760 R 13810



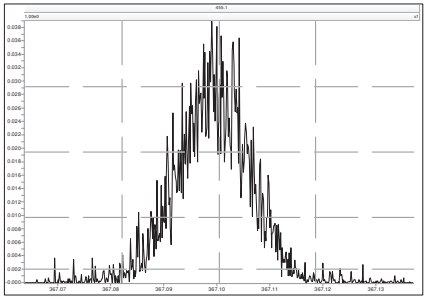
M 416.9760 R 12955



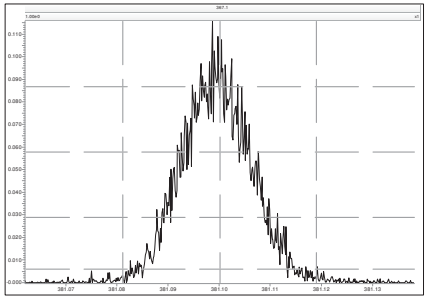
File: Experiment: df_cl4-8_db5MS.exp Reference: pfk.ref Function: 3 @ 200 (ppm)

Printed: Monday, June 15, 2020 08:40:03 Eastern Daylight Time

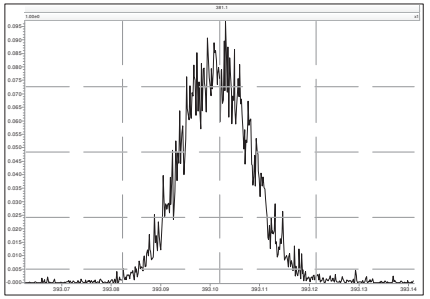
M 366.9792 R 13367



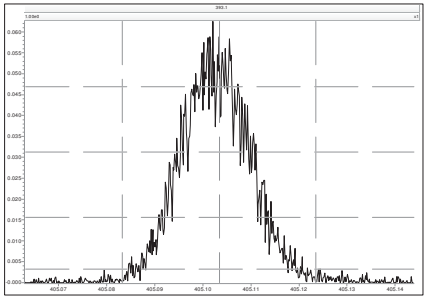
M 380.9760 R 13438



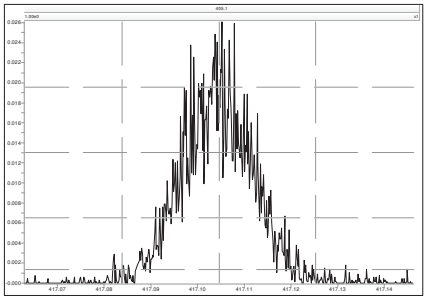
M 392.9760 R 12438



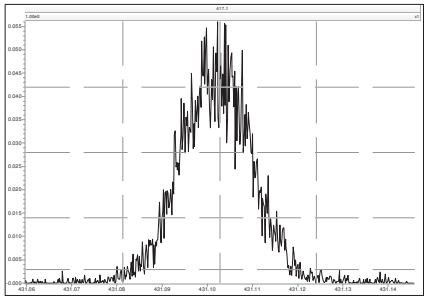
M 404.9760 R 13226



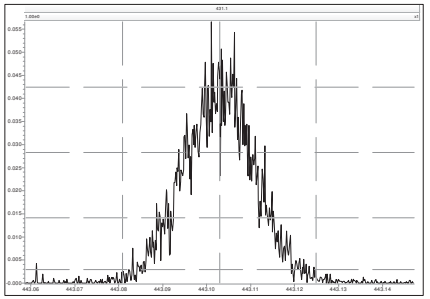
M 416.9760 R 12440



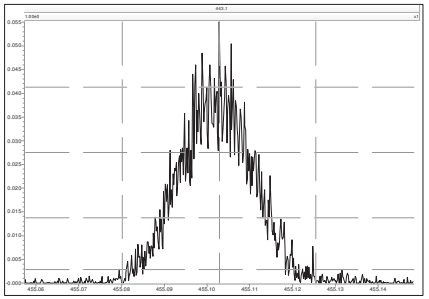
M 430.9728 R 12137



M 442.9728 R 12625



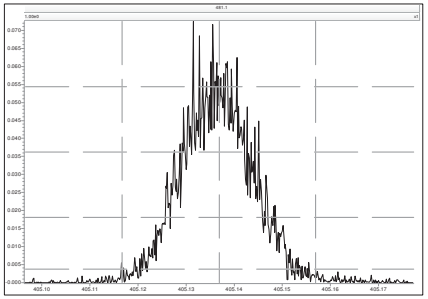
M 454.9728 R 12818



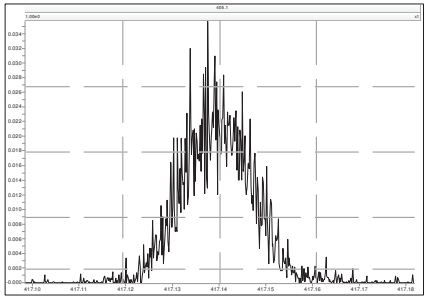
File: Experiment: df_cl4-8_db5MS.exp Reference: pfk.ref Function: 4 @ 200 (ppm)

Printed: Monday, June 15, 2020 08:40:22 Eastern Daylight Time

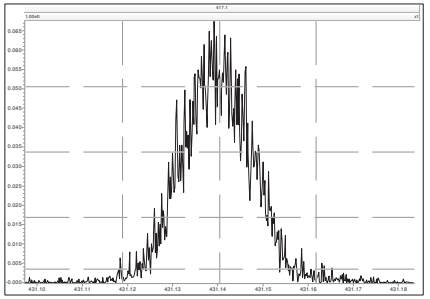
M 404.9760 R 13369



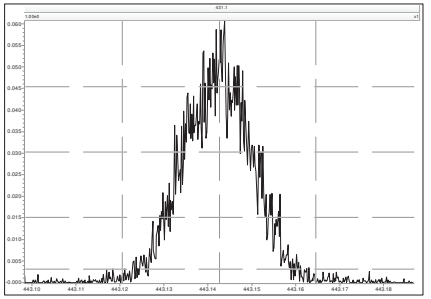
M 416.9760 R 14123



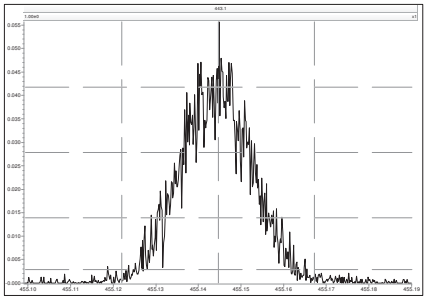
M 430.9728 R 15148



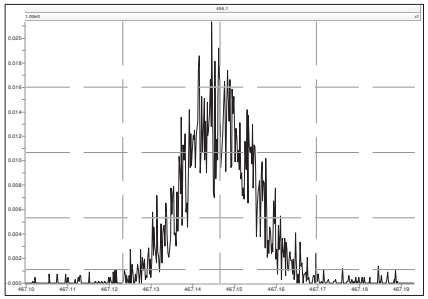
M 442.9728 R 13662



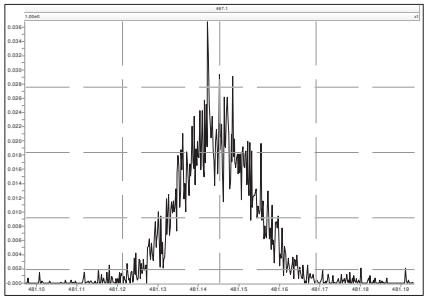
M 454.9728 R 11681



M 466.9728 R 16553



M 480.9696 R 13298



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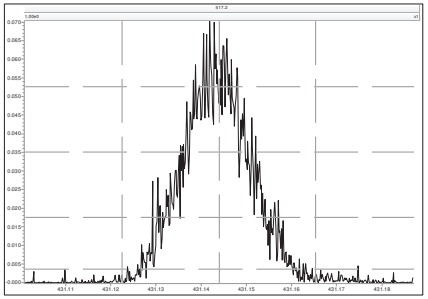

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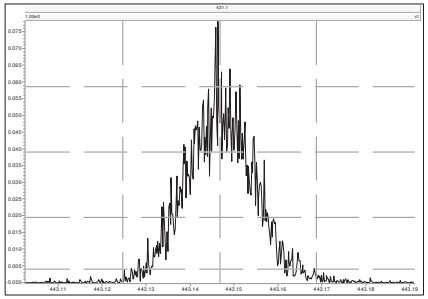

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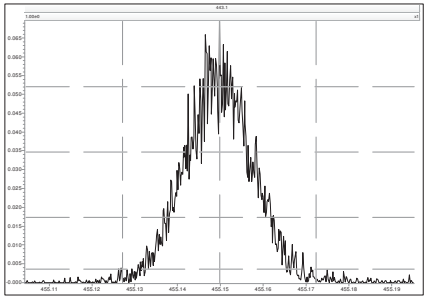
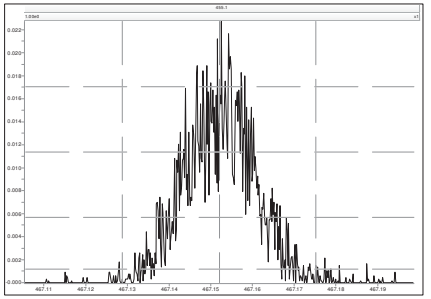


M 466.9728 R 14972



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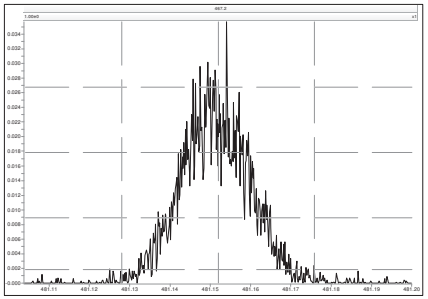

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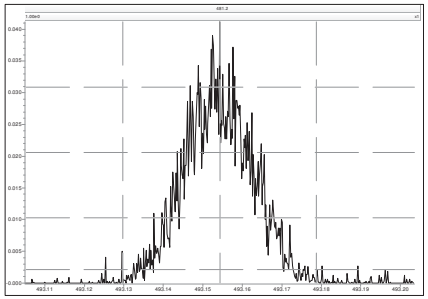

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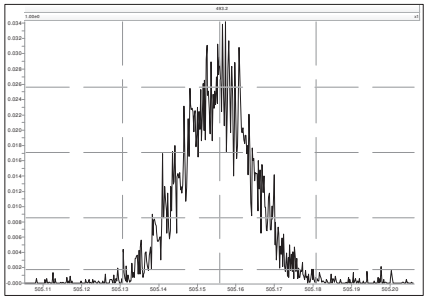

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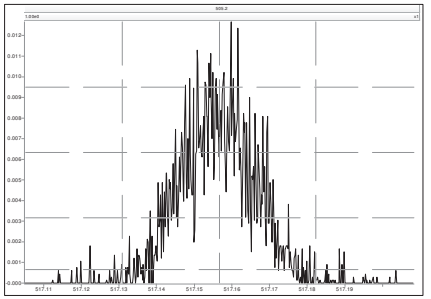

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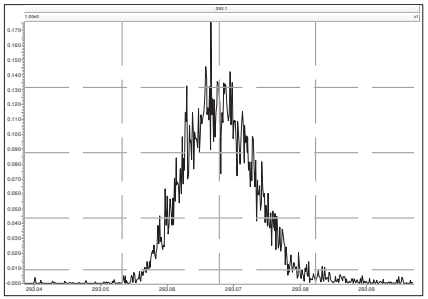

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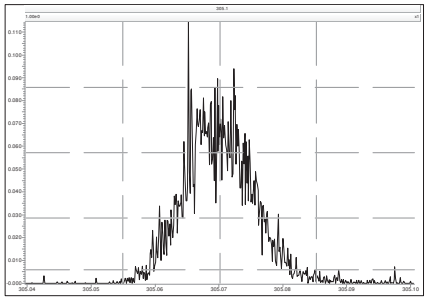

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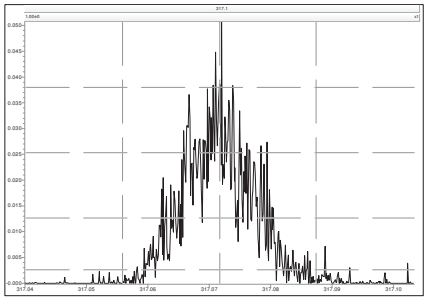

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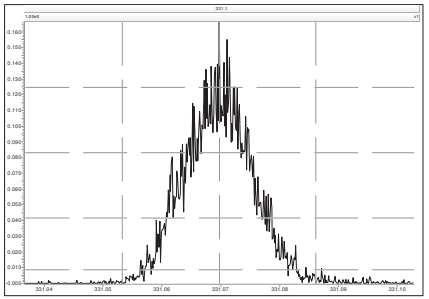

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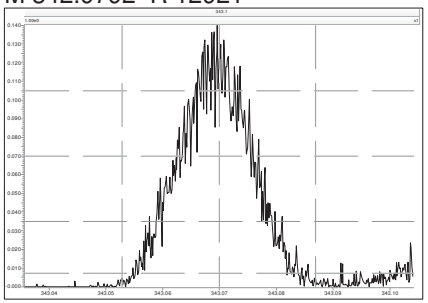

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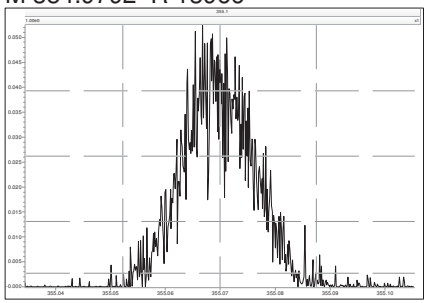
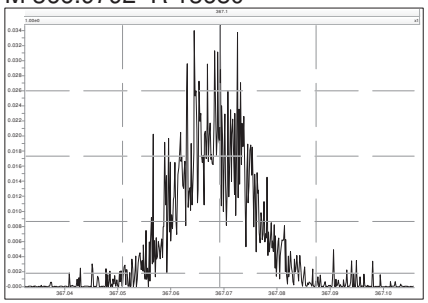


M 366.9792 R 13680



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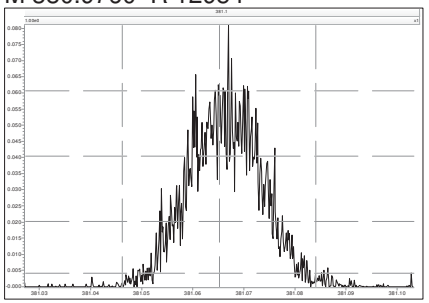

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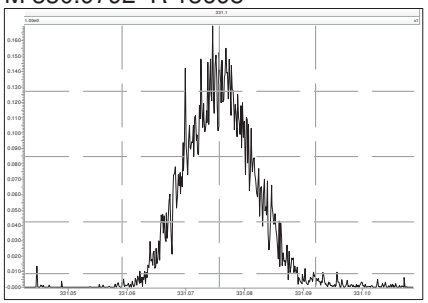

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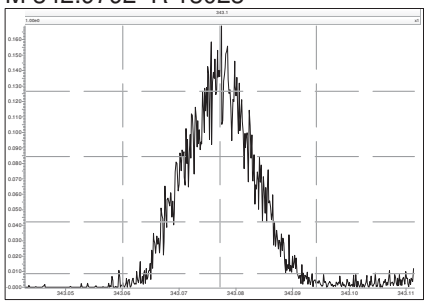

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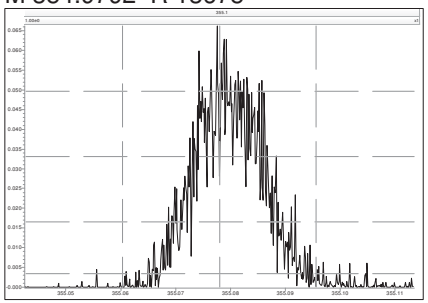

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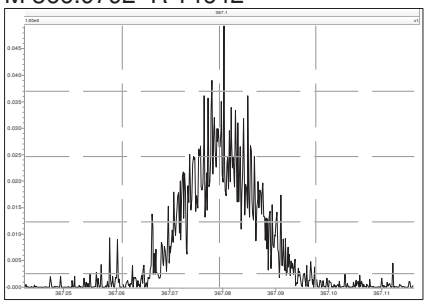

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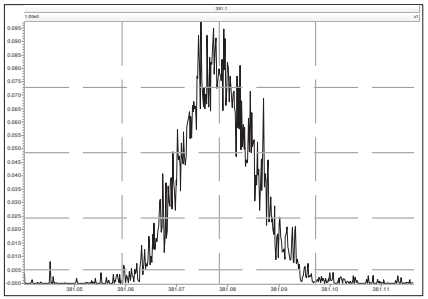

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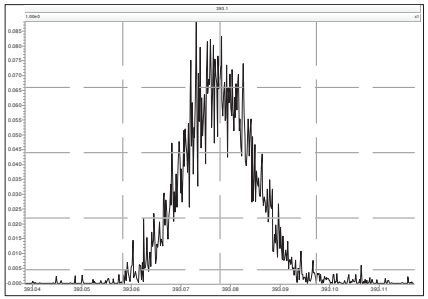

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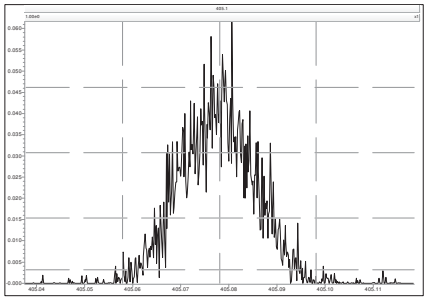

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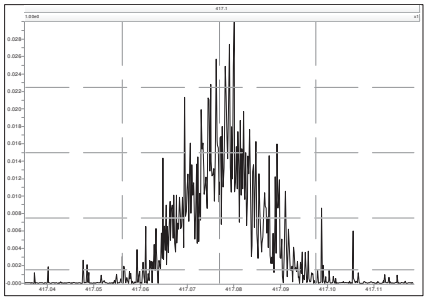

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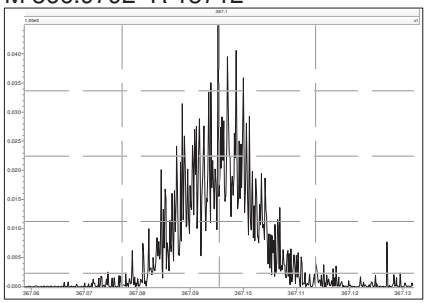

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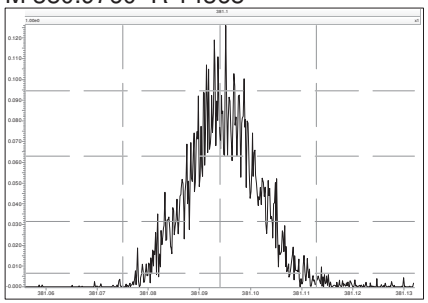

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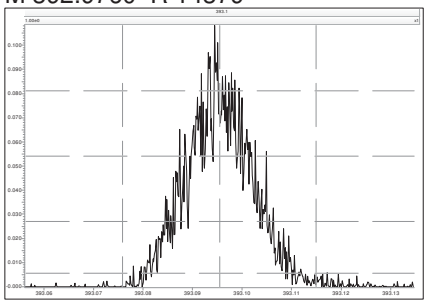

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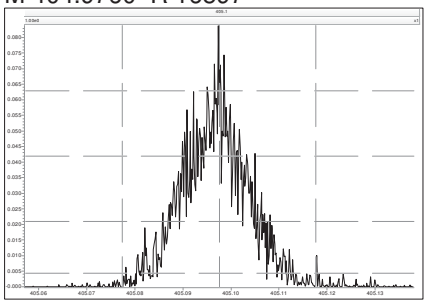

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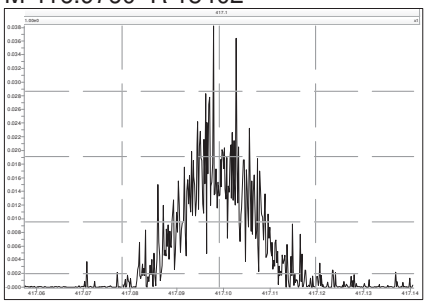

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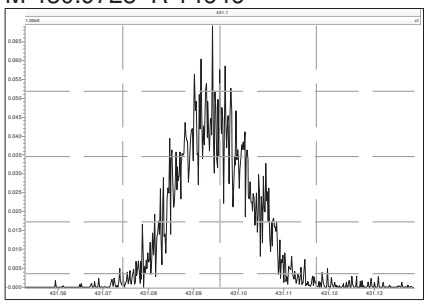

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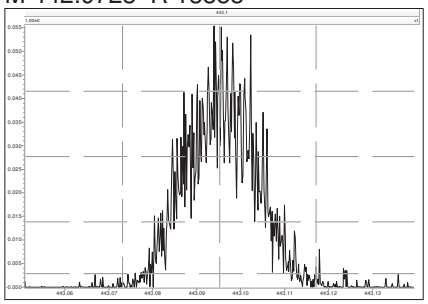
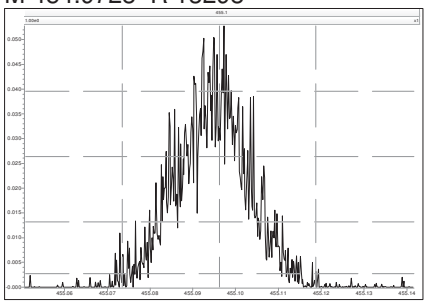


M 454.9728 R 13298



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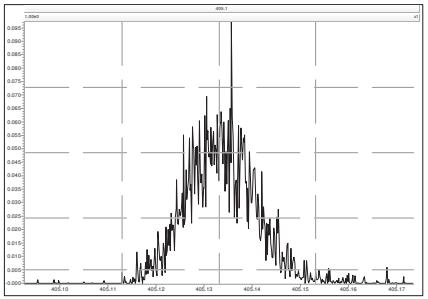

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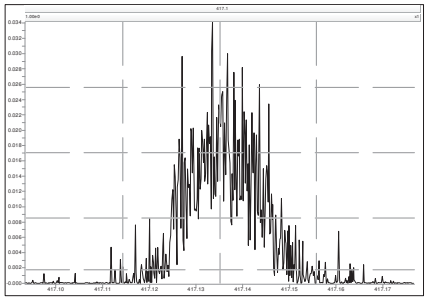

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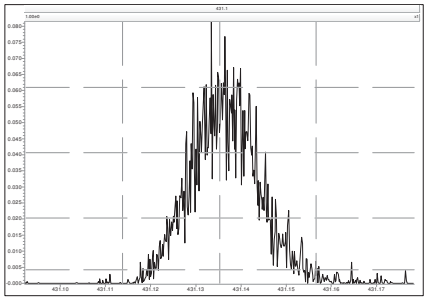

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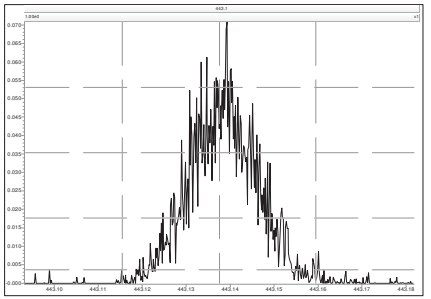

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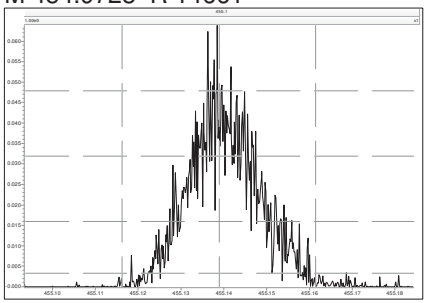

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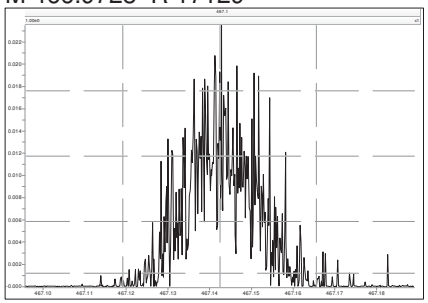

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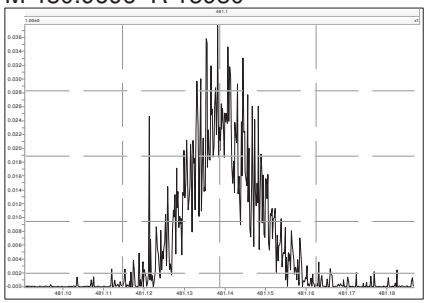

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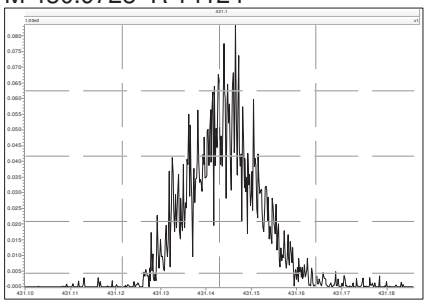

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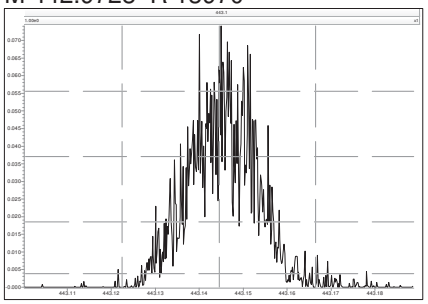

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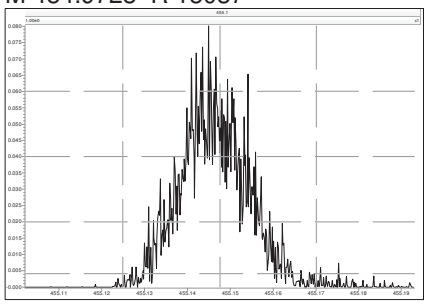

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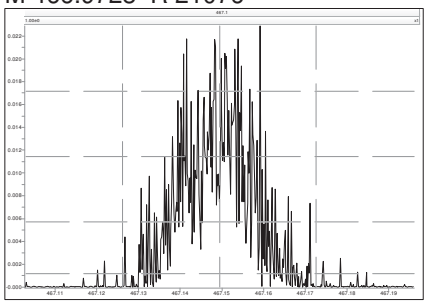

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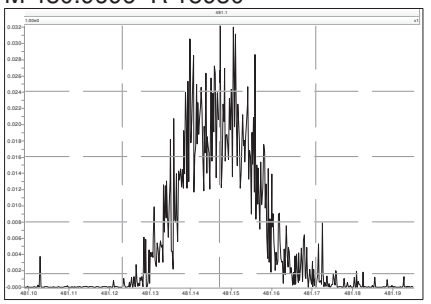
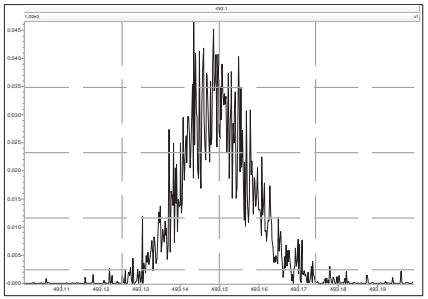


M 492.9696 R 14468



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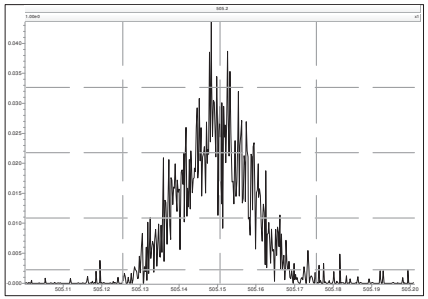

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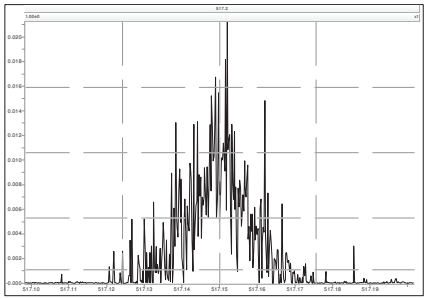

Lab ID: OPR1_17654_DF

APPROVED
Carla_Lyon , 15:24:53, 08/10/2020

Acq'd: 07 Aug 2020 14:39 PSW

Wt/Vol: 1 uL

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Report: 10 Aug 2020 09:06 pw

Stds (pg): JS: 100 ES: 100 CS/SS: 100, 40 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
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12378-PeCDD	32.83		1.0006	1.0006	0	3.79E+07	1.57	Y	1.14	47.3	4630	0.0534
123478-HxCDD	36.74		1.0004	1.0004	0	3.54E+07	1.27	Y	1.09	50.7	3368	0.039
123678-HxCDD	36.86		1.0035	1.0035	0	3.77E+07	1.26	Y	1.13	53.9	3368	0.0384
123789-HxCDD	37.16		1.0116	1.0116	0	3.94E+07	1.25	Y	1.05	48.6	3368	0.0355
1234678-HpCDD	39.96		1.0003	1.0003	0	2.91E+07	1.05	Y	0.98	52.6	3123	0.0326
OCDD	42.39		1.0003	1.0003	0	3.58E+07	0.91	Y	1.08	107	6514	0.132
2378-TCDF	26.37		1.0006	1.0008	+0.3	1.42E+07	0.76	Y	0.98	11.4	4515	0.0424
12378-PeCDF	31.34		1.0006	1.0006	0	5.70E+07	1.53	Y	0.95	50.2	8978	0.0803
23478-PeCDF	32.48		1.0005	1.0005	0	5.79E+07	1.58	Y	0.95	56.8	8978	0.0845
123478-HxCDF	35.78		1.0005	1.0005	0	4.71E+07	1.23	Y	1.20	51.4	9387	0.0858
123678-HxCDF	35.92		1.0004	1.0005	+0.2	5.36E+07	1.22	Y	1.07	54	9387	0.0777
234678-HxCDF	36.56		1.0005	1.0005	0	4.68E+07	1.25	Y	1.10	55.6	9387	0.0942
123789-HxCDF	37.54		1.0004	1.0005	+0.2	3.49E+07	1.24	Y	1.09	50.7	9387	0.111
1234678-HpCDF	39.05		1.0003	1.0003	0	5.00E+07	1.02	Y	1.28	53.7	3147	0.0215
1234789-HpCDF	40.38		1.0002	1.0003	+0.2	2.86E+07	1.06	Y	1.27	52	3147	0.0345
OCDF	42.55		1.0003	1.0002	-0.3	3.29E+07	0.89	Y	1.01	105	3577	0.0804

Name	Act RT	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	27.28	1.0255	1.0256	+0.2	7.90E+07	0.76	Y	1.01	88.4
ES 12378-PeCDD	32.81	1.2330	1.2339	+1.8	7.05E+07	1.64	Y	0.87	91.2
ES 123478-HxCDD	36.73	0.9917	0.9916	-0.2	6.40E+07	1.27	Y	1.10	77.4
ES 123678-HxCDD	36.84	0.9947	0.9946	-0.2	6.20E+07	1.26	Y	1.06	77.4
ES 123789-HxCDD	37.14	1.0028	1.0028	0	7.75E+07	1.28	Y	1.22	84.3
ES 1234678-HpCDD	39.95	1.0785	1.0787	+0.5	5.64E+07	1.08	Y	0.99	75.3
ES OCDD	42.37	1.1439	1.1440	+0.3	6.22E+07	0.91	Y	0.67	61.6
ES 2378-TCDF	26.35	1.0572	1.0576	+0.6	1.27E+08	0.78	Y	1.01	85.4
ES 12378-PeCDF	31.33	1.2558	1.2571	+2.4	1.20E+08	1.59	Y	0.90	90.6
ES 23478-PeCDF	32.46	1.3012	1.3026	+2.7	1.08E+08	1.58	Y	0.89	82.6
ES 123478-HxCDF	35.76	0.9655	0.9655	0	7.67E+07	0.53	Y	1.43	71.1
ES 123678-HxCDF	35.90	0.9693	0.9692	-0.2	9.26E+07	0.54	Y	1.63	75.2
ES 234678-HxCDF	36.55	0.9867	0.9867	0	7.67E+07	0.52	Y	1.48	68.7
ES 123789-HxCDF	37.52	1.0130	1.0130	0	6.31E+07	0.52	Y	1.29	64.8
ES 1234678-HpCDF	39.04	1.0540	1.0541	+0.2	7.26E+07	0.44	Y	1.15	84
ES 1234789-HpCDF	40.37	1.0898	1.0899	+0.2	4.34E+07	0.43	Y	0.91	63.5
ES OCDF	42.54	1.1484	1.1485	+0.3	6.22E+07	0.89	Y	0.83	49.8

Lab ID: OPR1_17654_DF | Acq'd: 07 Aug 2020 14:39 PSW | Wt/Vol: 1 uL | ICAL: MM3_DF_10012020_12JUN2020

Client ID: 0_17654_OPR001 | UTP: 10-Aug-2020 09:02:17 PSW | J-level: 0.25 pg/uL | Split: 1 | Checkcode: 184-198-RPK

Datafile: 200807R02 | Report: 10 Aug 2020 09:06 pw | Stds (pg): JS: 100 ES: 100 CS/SS: 100, 40 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %	
JS 1234-TCDD	26.59		-	-	-	8.88E+07	0.77	Y	-	-	
JS 1234-TCDF	24.92		-	-	-	1.47E+08	0.77	Y	-	-	
JS 123467-HxCDD	37.04		-	-	-	3.77E+07	1.22	Y	-	-	
CS 37Cl-2378-TCDD	27.30		1.0265	1.0265	0	3.66E+07	n/a	-	1.04	99.3	
CS 12347-PeCDD	32.31		1.2141	1.2149	+1.6	6.89E+07	1.66	Y	0.74	105	
CS 12346-PeCDF	30.79		1.2343	1.2356	+2.4	1.21E+08	1.61	Y	0.86	96.1	
CS 123469-HxCDF	36.21		0.9776	0.9775	-0.2	8.13E+07	0.51	Y	1.36	79.4	
CS 1234689-HpCDF	39.45		1.0650	1.0651	+0.2	6.42E+07	0.44	Y	1.05	80.6	
~~SS 37Cl-2378-TCDD~~	~~27.30~~		~~1.0265~~	~~1.0265~~	~~0~~	~~3.66E+07~~	~~n/a~~		~~1.04~~	~~112~~	Not used in this project.
~~SS 12347-PeCDD~~	~~32.31~~		~~1.2141~~	~~1.2149~~	~~+1.6~~	~~6.89E+07~~	~~1.66~~	~~Y~~	~~0.86~~	~~114~~	CL 10Aug20
~~SS 12346-PeCDF~~	~~30.79~~		~~1.2343~~	~~1.2356~~	~~+2.4~~	~~1.21E+08~~	~~1.61~~	~~Y~~	~~0.96~~	~~106~~	
~~SS 123469-HxCDF~~	~~36.21~~		~~0.9776~~	~~0.9775~~	~~-0.2~~	~~8.13E+07~~	~~0.51~~	~~Y~~	~~0.83~~	~~105~~	
~~SS 1234689-HpCDF~~	~~39.45~~		~~1.0650~~	~~1.0651~~	~~+0.2~~	~~6.42E+07~~	~~0.44~~	~~Y~~	~~0.92~~	~~95.6~~	

Totals	Conc	EMPC
Total TCDD	48.4	48.4
Total PeCDD	70.1	70.1
Total HxCDD	165	165
Total HpCDD	65.9	65.9
Total Tetra-Octa Dioxins	457	457
Total TCDF	55.3	55.3
Total PeCDF	127	127
Total HxCDF	225	225
Total HpCDF	106	106
Total Tetra-Octa Furans	617	617
Total Tetra-Octa Dioxins & Furans	1070	1070

* 37Cl correction has been applied to 2378-TCDD

	Original Values	Corrected Values
Ratio	0.78	0.78
Response	9.95E+06	9.93E+06

METHOD 8290A **PCDD/F ONGOING PRECISION AND RECOVERY (OPR)** **FORM 8A**

Lab Name:	SGS North America		
Initial Calibration:	ICAL: MM3_DF_10012020_12JUN2020		
Instrument ID:	MM3	GC Column ID:	ZB-5ms
VER Data Filename:	200807R02	Analysis Date:	07-AUG-2020 14:39:00
Lab ID:	OPR1_17654_DF		

NATIVE ANALYTES	SPIKE CONC.	CONC. FOUND	RANGE (ng/mL)			OK
2,3,7,8-TCDD	10	10.7	6.7	-	15.8	Y
1,2,3,7,8-PeCDD	50	47.3	35	-	71	Y
1,2,3,4,7,8-HxCDD	50	50.7	35	-	82	Y
1,2,3,6,7,8-HxCDD	50	53.9	38	-	67	Y
1,2,3,7,8,9-HxCDD	50	48.6	32	-	81	Y
1,2,3,4,6,7,8-HpCDD	50	52.6	35	-	70	Y
OCDD	100	107	78	-	144	Y
2,3,7,8-TCDF	10	11.4	7.5	-	15.8	Y
1,2,3,7,8-PeCDF	50	50.2	40	-	67	Y
2,3,4,7,8-PeCDF	50	56.8	34	-	80	Y
1,2,3,4,7,8-HxCDF	50	51.4	36	-	67	Y
1,2,3,6,7,8-HxCDF	50	54	42	-	65	Y
2,3,4,6,7,8-HxCDF	50	55.6	35	-	78	Y
1,2,3,7,8,9-HxCDF	50	50.7	39	-	65	Y
1,2,3,4,6,7,8-HpCDF	50	53.7	41	-	61	Y
1,2,3,4,7,8,9-HpCDF	50	52	39	-	69	Y
OCDF	100	105	63	-	170	Y

Contract-required concentration limits for OPR as specified in Table 6,
Method 1613. 10/94

Processed: 10 Aug 2020 09:06 Analyst: pw

METHOD 8290A **PCDD/F ONGOING PRECISION AND RECOVERY (OPR)** **FORM 8B**

Lab Name: SGS North America
Initial Calibration: ICAL: MM3_DF_10012020_12JUN2020
Instrument ID: MM3 GC Column ID: ZB-5ms
VER Data Filename: 200807R02 Analysis Date: 07-AUG-2020 14:39:00
Lab ID: OPR1_17654_DF

LABELED ANALYTES	SPIKE CONC.	CONC. FOUND	RANGE (ng/mL)			OK
13C-2,3,7,8-TCDD	100	88.4	20	-	175	Y
13C-1,2,3,7,8-PeCDD	100	91.2	21	-	227	Y
13C-1,2,3,4,7,8-HxCDD	100	77.4	21	-	193	Y
13C-1,2,3,6,7,8-HxCDD	100	77.4	25	-	163	Y
13C-1,2,3,7,8,9-HxCDD	100	84.3	26	-	166	Y
13C-1,2,3,4,6,7,8-HpCDD	100	75.3	26	-	166	Y
13C-OCDD	200	123	26	-	397	Y
13C-2,3,7,8-TCDF	100	85.4	22	-	152	Y
13C-1,2,3,7,8-PeCDF	100	90.6	21	-	192	Y
13C-2,3,4,7,8-PeCDF	100	82.6	13	-	328	Y
13C-1,2,3,4,7,8-HxCDF	100	71.1	19	-	202	Y
13C-1,2,3,6,7,8-HxCDF	100	75.2	21	-	159	Y
13C-2,3,4,6,7,8-HxCDF	100	68.7	22	-	176	Y
13C-1,2,3,7,8,9-HxCDF	100	64.8	17	-	205	Y
13C-1,2,3,4,6,7,8-HpCDF	100	84	21	-	158	Y
13C-1,2,3,4,7,8,9-HpCDF	100	63.5	20	-	186	Y
13C-OCDF	200	99.5	26	-	397	Y
CLEANUP STANDARD						
37Cl-2,3,7,8-TCDD	40	39.7	12.4	-	76.4	Y

Contract-required concentration limits for OPR as specified in Table 6,
Method 1613. 10/94

Processed: 10 Aug 2020 09:06 Analyst: pw

METHOD 8290A **COLUMN PERFORMANCE AND RETENTION TIME WINDOWS** **FORM CPSM**

Lab Name:	SGS North America		
Initial Calibration:	ICAL: MM3_DF_10012020_12JUN2020		
Instrument ID:	MM3	GC Column ID:	ZB-5ms
CPSM Data Filename:	200807R02	Analysis Date:	07-AUG-2020 14:39:00
Lab ID:	OPR1_17654_DF		

Window Defining Standards Results

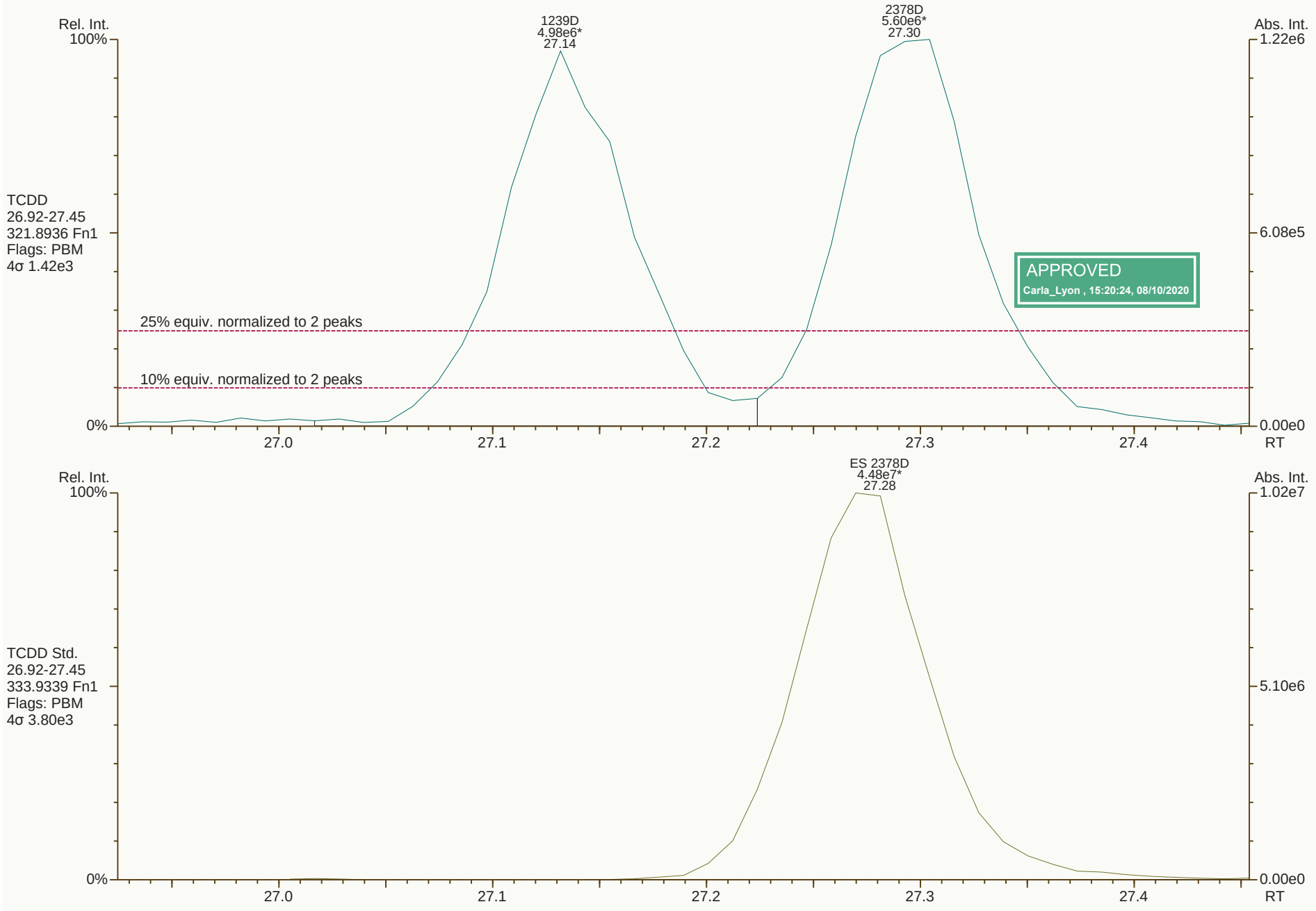
First Eluting Isomer	RT	Last Eluting Isomer	RT
1368-TCDD	23.41	1289-TCDD	28.31
12479/12468-PeCDD	30.28	12389-PeCDD	33.28
124679/124689-HxCDD	35.05	123789-HxCDD	37.16
1234679-HpCDD	39.32	1234678-HpCDD	39.96
1368-TCDF	21.17	1289-TCDF	28.48
13468/12468-PeCDF	28.43	12389-PeCDF	33.56
123468-HxCDF	34.39	123789-HxCDF	37.54
1234678-HpCDF	39.05	1234789-HpCDF	40.38

Isomer Specificity Test Standard Results

Closest Eluting Isomer	RT	2378 Specific Isomer	RT
1239-TCDD	27.14	2378-TCDD	27.30
2348-TCDF	26.26	2378-TCDF	26.37

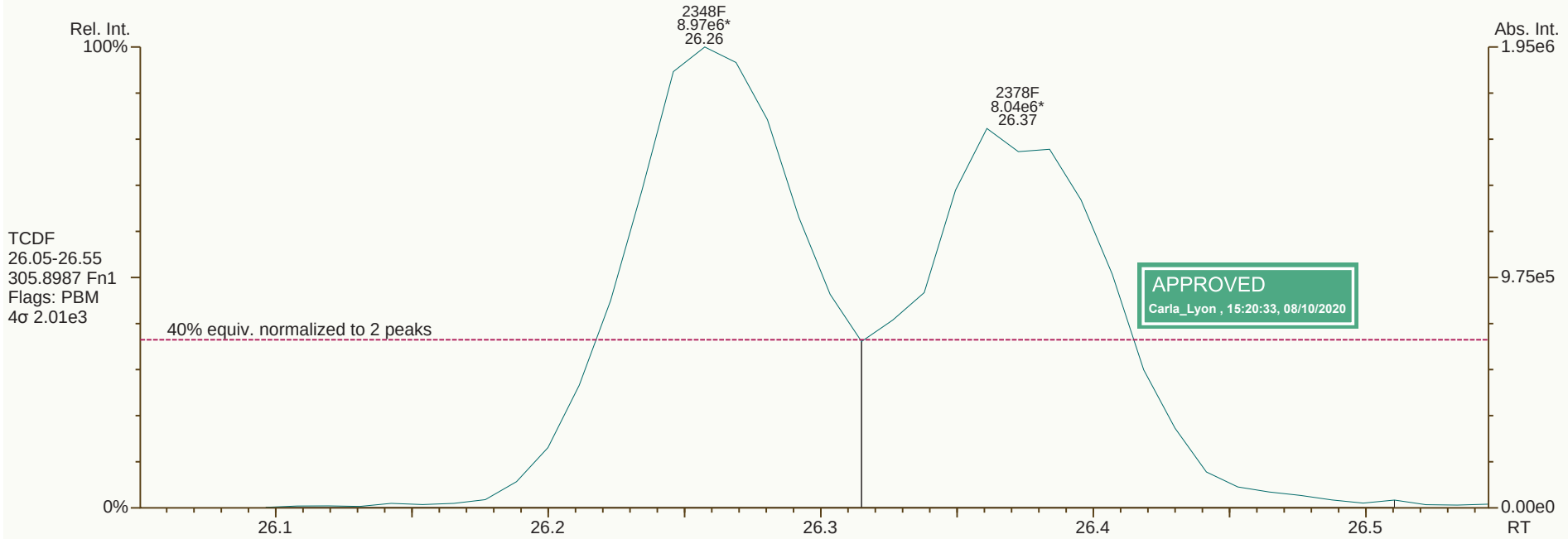
Processed: 10 Aug 2020 09:06 Analyst: pw

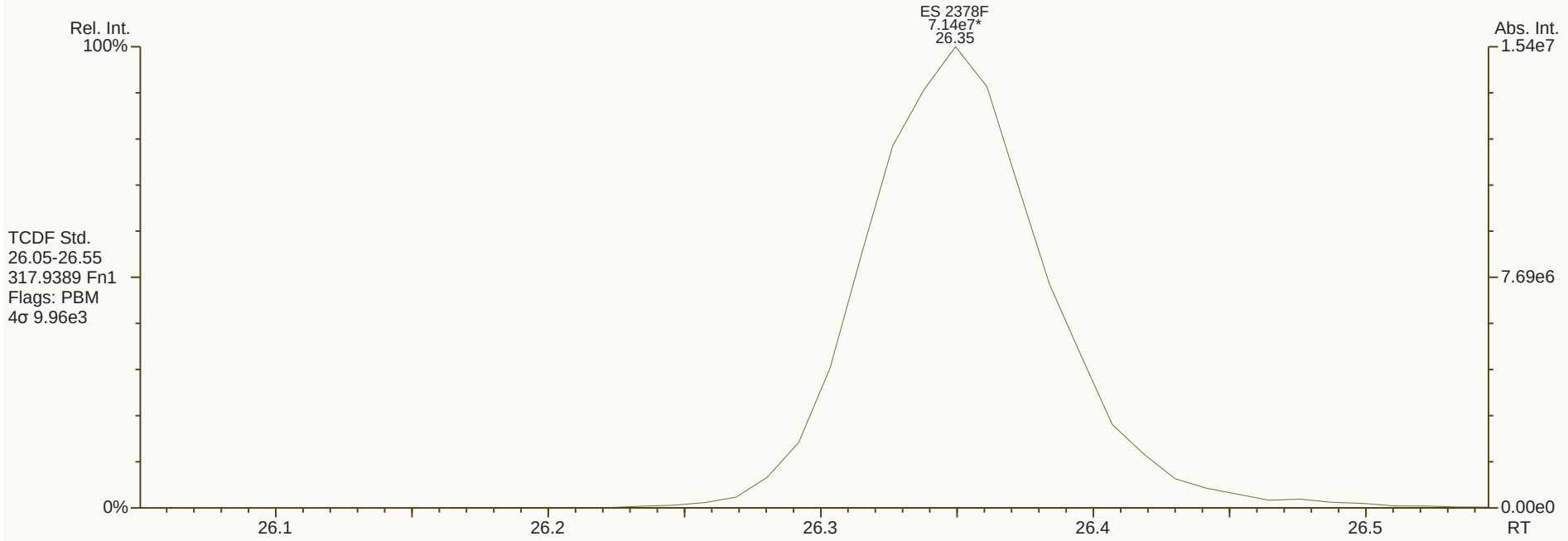
SGS ID: OPR1_17654_DF
Sample ID: 0_17654_OPR001
Acq: 07-Aug-2020 14:39:00
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 6
User: PSW Datafile: 200807R02



Results: P:\B4500_B4599\B4511\B4511_17654 DF\Resources\OPR1_17654_DF.utp_res, saved 10-Aug-2020 09:02 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027
PKD: 07-Aug-2020 15:27 Printed: 10-Aug-2020 09:13

SGS ID: OPR1_17654_DF
Sample ID: 0_17654_OPR001
Acq: 07-Aug-2020 14:39:00
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 6
User: PSW Datafile: 200807R02

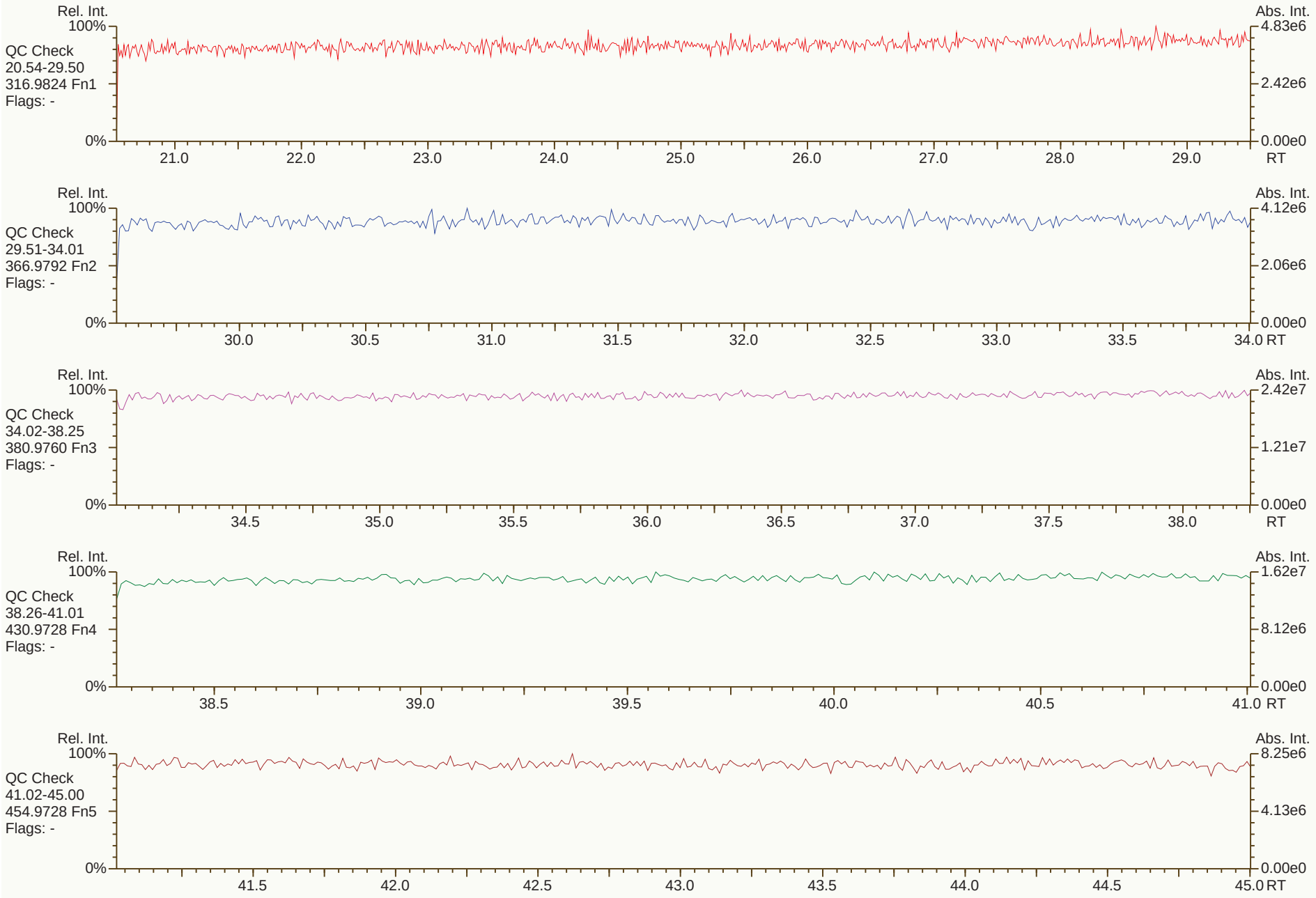




Results: P:\B4500_B4599\B4511\B4511_17654 DF\Resources\OPR1_17654_DF.utp_res, saved 10-Aug-2020 09:02 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027
PKD: 07-Aug-2020 15:27 Printed: 10-Aug-2020 09:13

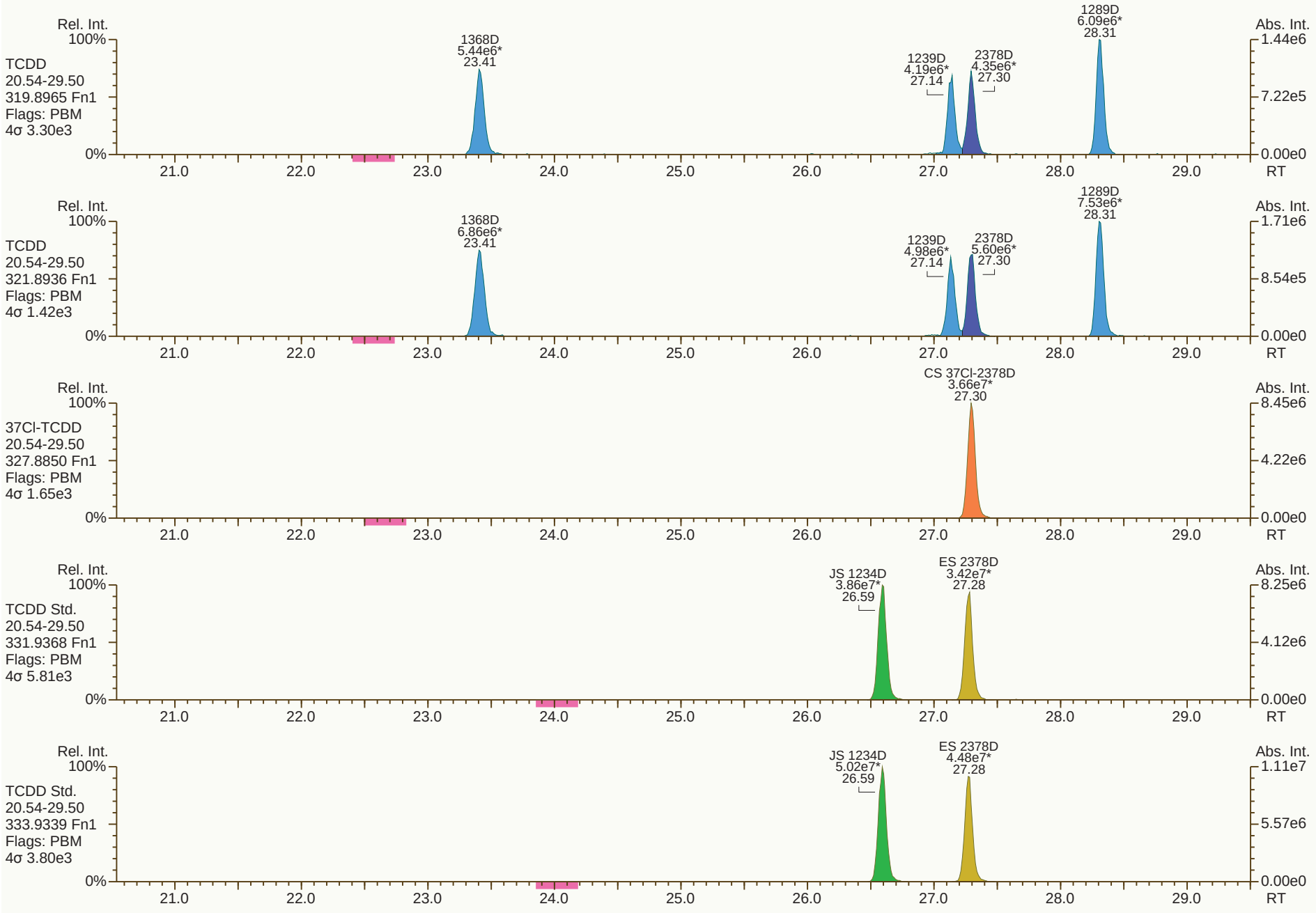
SGS ID: OPR1_17654_DF **Sample ID: 0_17654_OPR001** **Acq: 07-Aug-2020 14:39:00**

Instr: [ILM] AutoSpec-Ultima MM3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 6** **User: PSW Datafile: 200807R02**



Results: P:\B4500_B4599\B4511\B4511_17654 DF\Resources\OPR1_17654_DF.utp_res, saved 10-Aug-2020 09:02 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 scc: 184-198 *PKD: n/a Printed: 10-Aug-2020 09:15 Page 1 of 12*


Rel. Int.
100%
TCDD
20.54-29.50
319.8965 Fn1
Flags: PBM
4σ 3.30e3
0%
1368D
5.44e6*
23.41
1239D
4.19e6*
27.14
2378D
4.35e6*
27.30
1289D
6.09e6*
28.31
Abs. Int.
1.44e6
7.22e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD
20.54-29.50
321.8936 Fn1
Flags: PBM
4σ 1.42e3
0%
1368D
6.86e6*
23.41
1239D
4.98e6*
27.14
2378D
5.60e6*
27.30
1289D
7.53e6*
28.31
Abs. Int.
1.71e6
8.54e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
37Cl-TCDD
20.54-29.50
327.8850 Fn1
Flags: PBM
4σ 1.65e3
0%
CS 37Cl-2378D
3.66e7*
27.30
Abs. Int.
8.45e6
4.22e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
331.9368 Fn1
Flags: PBM
4σ 5.81e3
0%
JS 1234D
3.86e7*
26.59
ES 2378D
3.42e7*
27.28
Abs. Int.
8.25e6
4.12e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
333.9339 Fn1
Flags: PBM
4σ 3.80e3
0%
JS 1234D
5.02e7*
26.59
ES 2378D
4.48e7*
27.28
Abs. Int.
1.11e7
5.57e6
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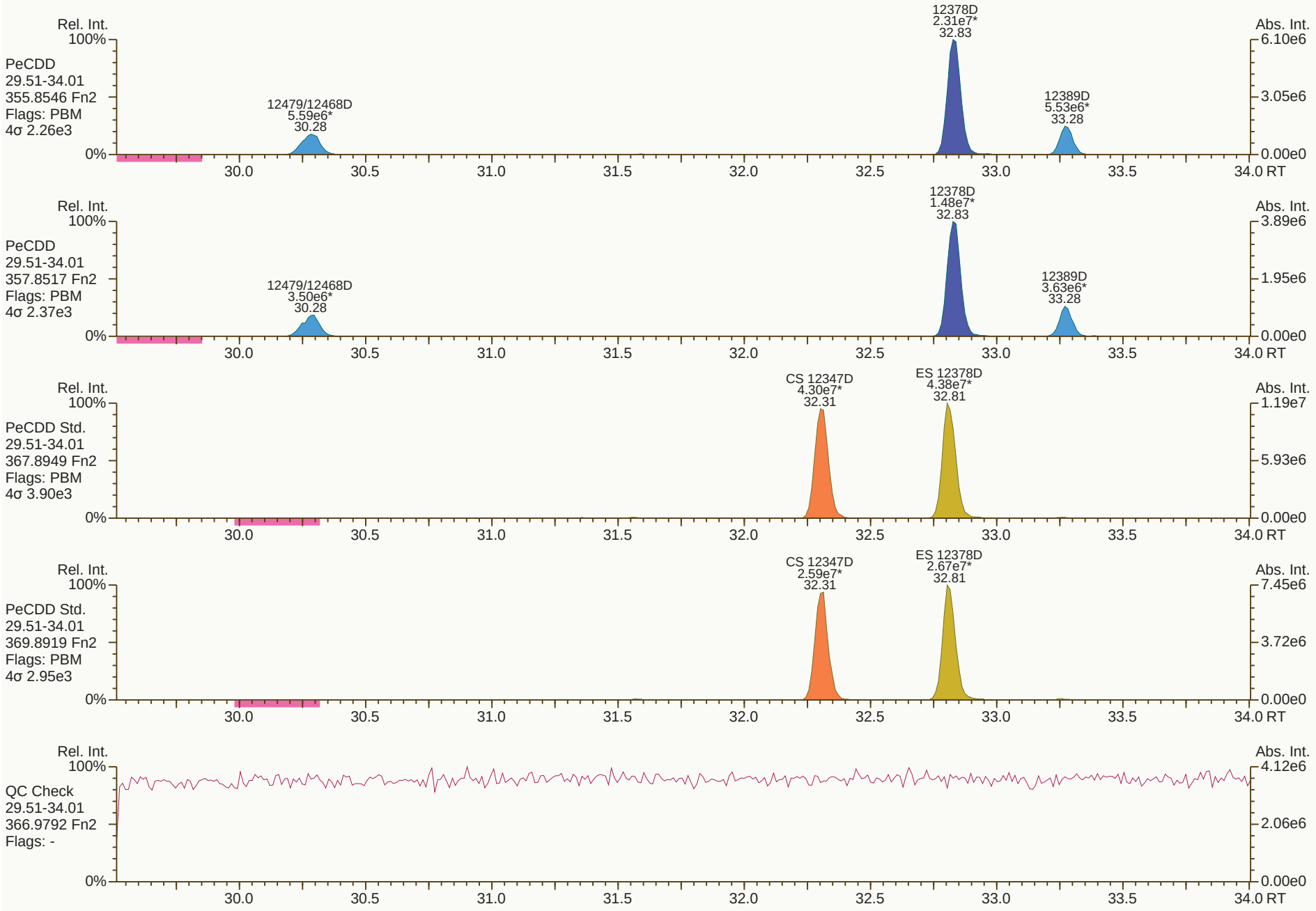
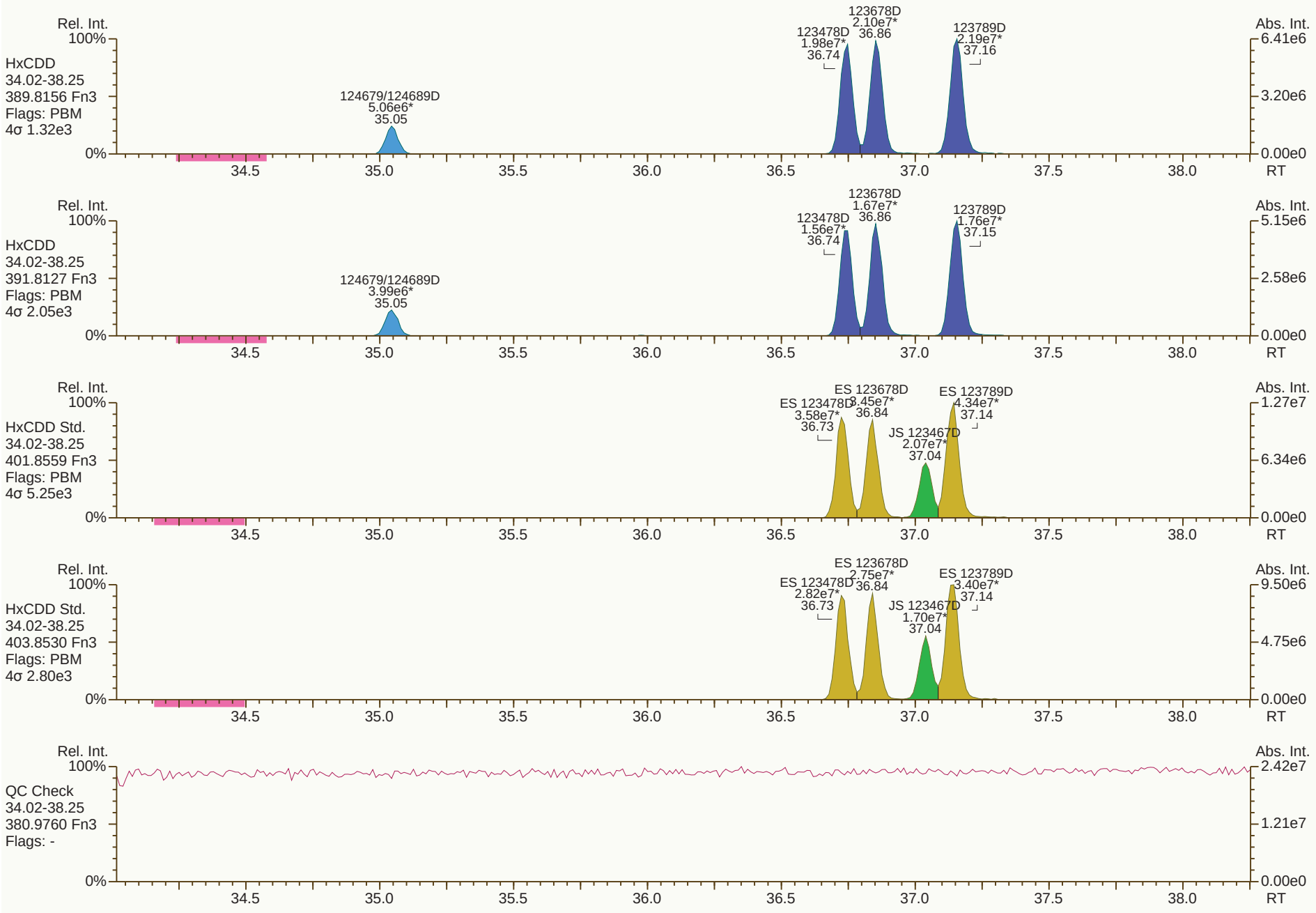
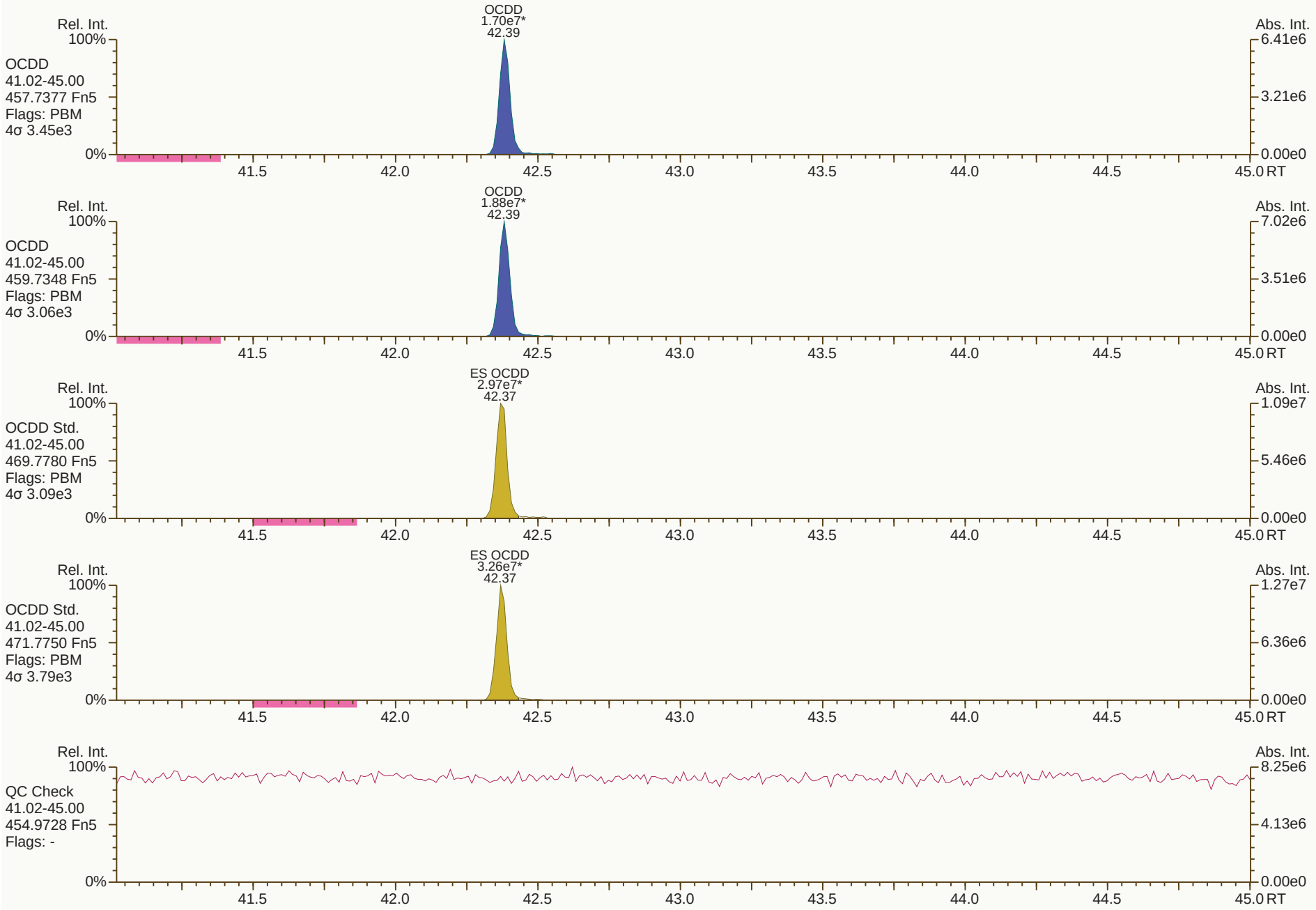
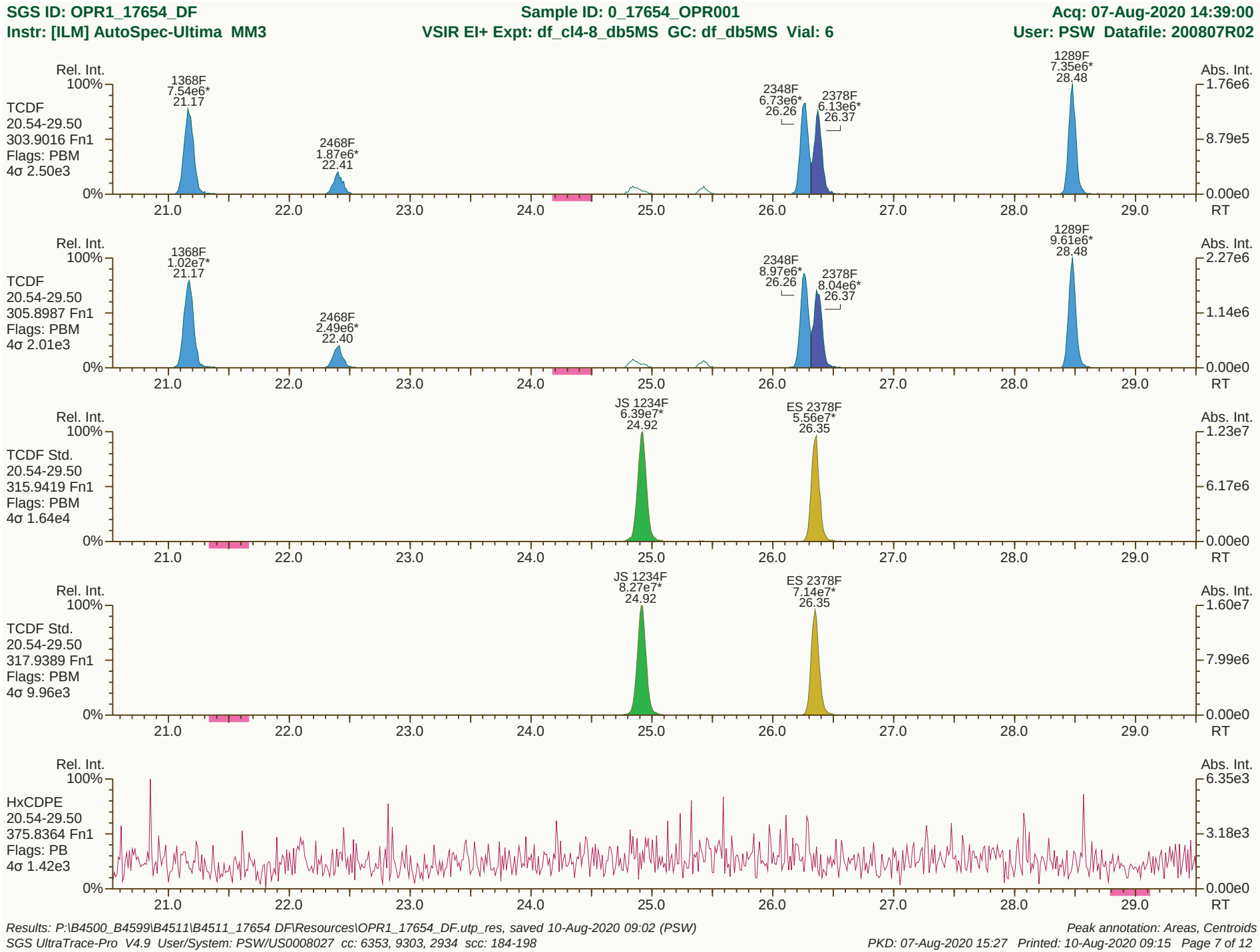
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT

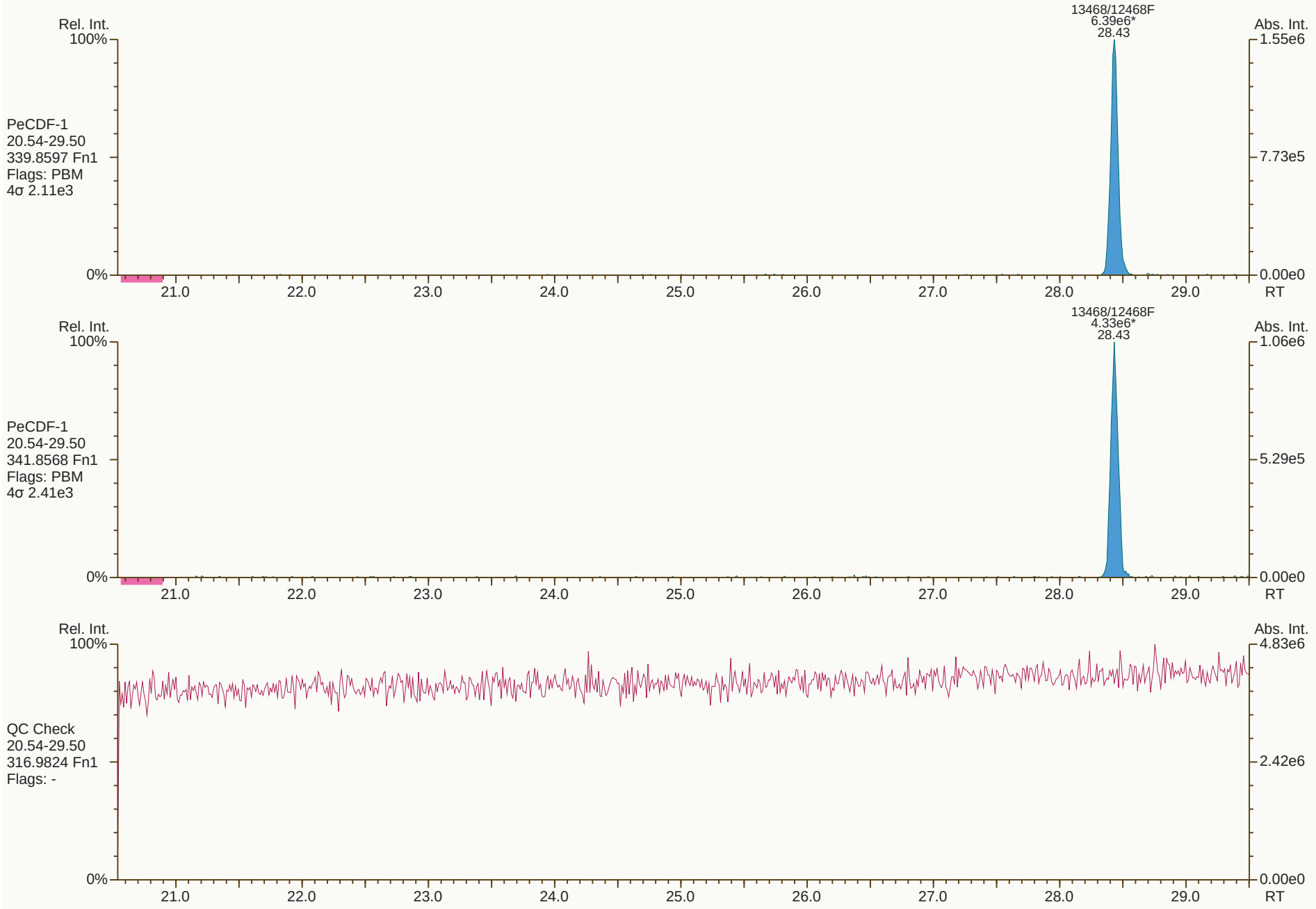

Rel. Int.
100%
PeCDD
29.51-34.01
355.8546 Fn2
Flags: PBM
4σ 2.26e3
12479/12468D
5.59e6*
30.28
12378D
2.31e7*
32.83
12389D
5.53e6*
33.28
Abs. Int.
6.10e6
3.05e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD
29.51-34.01
357.8517 Fn2
Flags: PBM
4σ 2.37e3
12479/12468D
3.50e6*
30.28
12378D
1.48e7*
32.83
12389D
3.63e6*
33.28
Abs. Int.
3.89e6
1.95e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
367.8949 Fn2
Flags: PBM
4σ 3.90e3
CS 12347D
4.30e7*
32.31
ES 12378D
4.38e7*
32.81
Abs. Int.
1.19e7
5.93e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
369.8919 Fn2
Flags: PBM
4σ 2.95e3
CS 12347D
2.59e7*
32.31
ES 12378D
2.67e7*
32.81
Abs. Int.
7.45e6
3.72e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
QC Check
29.51-34.01
366.9792 Fn2
Flags: -
Abs. Int.
4.12e6
2.06e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT

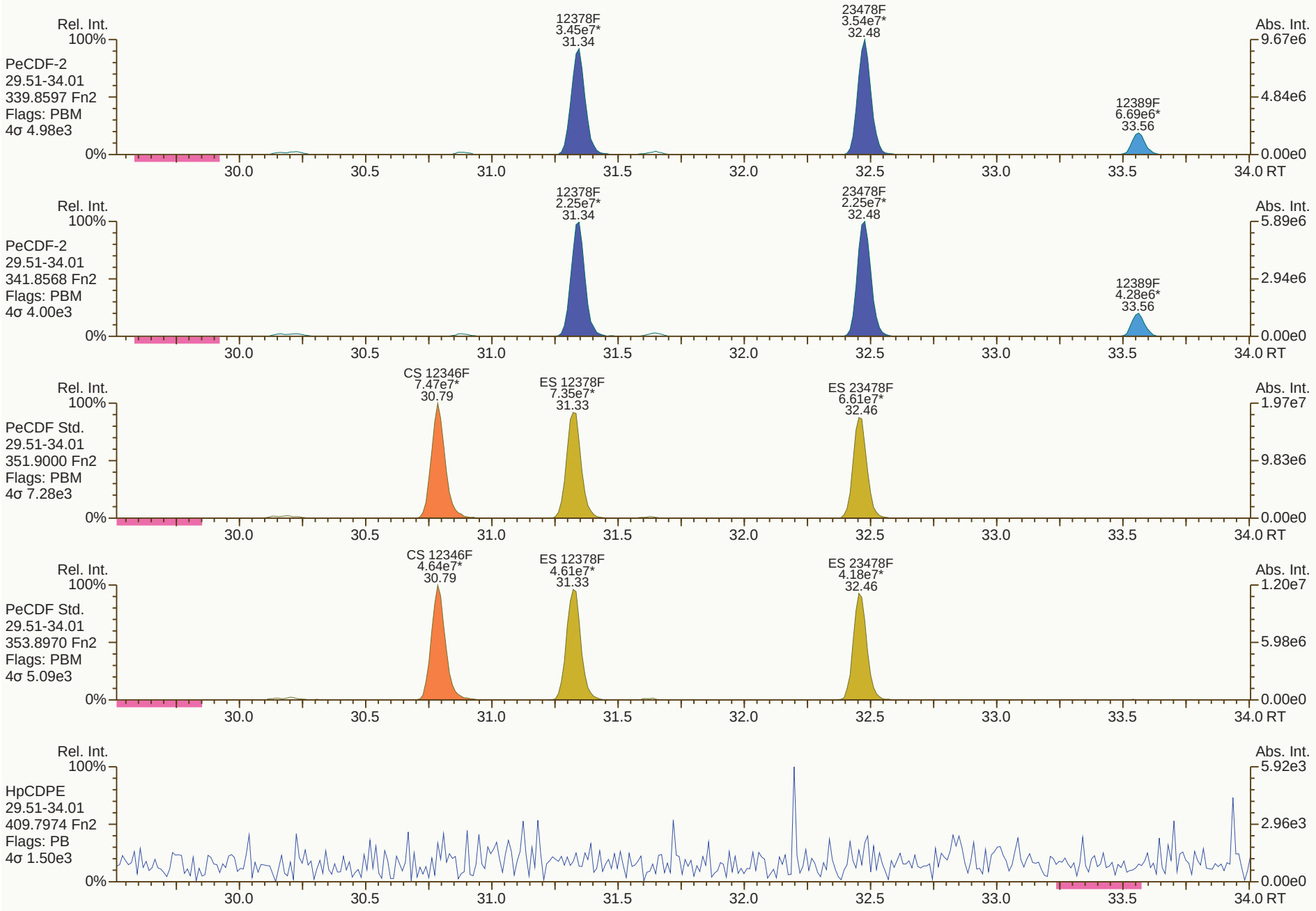

Rel. Int.
100%
HxCDD
34.02-38.25
389.8156 Fn3
Flags: PBM
4σ 1.32e3
124679/124689D
5.06e6*
35.05
123478D
1.98e7*
36.74
123678D
2.10e7*
36.86
123789D
2.19e7*
37.16
0%
Abs. Int.
6.41e6
3.20e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD
34.02-38.25
391.8127 Fn3
Flags: PBM
4σ 2.05e3
124679/124689D
3.99e6*
35.05
123478D
1.56e7*
36.74
123678D
1.67e7*
36.86
123789D
1.76e7*
37.15
0%
Abs. Int.
5.15e6
2.58e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
401.8559 Fn3
Flags: PBM
4σ 5.25e3
ES 123478D
3.58e7*
36.73
ES 123678D
3.45e7*
36.84
JS 123467D
2.07e7*
37.04
ES 123789D
4.34e7*
37.14
0%
Abs. Int.
1.27e7
6.34e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
403.8530 Fn3
Flags: PBM
4σ 2.80e3
ES 123478D
2.82e7*
36.73
ES 123678D
2.75e7*
36.84
JS 123467D
1.70e7*
37.04
ES 123789D
3.40e7*
37.14
0%
Abs. Int.
9.50e6
4.75e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
0%
Abs. Int.
2.42e7
1.21e7
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT


Rel. Int.
100%
HpCDD
38.26-41.01
423.7767 Fn4
Flags: PBM
4σ 1.32e3
0%
1234678D
1.50e7*
39.96
1234679D
3.81e6*
39.32
Abs. Int.
6.70e6
3.35e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.26-41.01
425.7737 Fn4
Flags: PBM
4σ 1.80e3
0%
1234678D
1.42e7*
39.96
1234679D
3.56e6*
39.32
Abs. Int.
6.49e6
3.24e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
435.8169 Fn4
Flags: PBM
4σ 2.22e3
0%
ES 1234678D
2.93e7*
39.95
Abs. Int.
1.26e7
6.32e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
437.8140 Fn4
Flags: PBM
4σ 3.47e3
0%
ES 1234678D
2.71e7*
39.95
Abs. Int.
1.16e7
5.82e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.26-41.01
430.9728 Fn4
Flags: -
0%
Abs. Int.
1.62e7
8.12e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT


Rel. Int.
100%
OCDD
41.02-45.00
457.7377 Fn5
Flags: PBM
4σ 3.45e3
0%
OCDD
1.70e7*
42.39
Abs. Int.
6.41e6
3.21e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDD
41.02-45.00
459.7348 Fn5
Flags: PBM
4σ 3.06e3
0%
OCDD
1.88e7*
42.39
Abs. Int.
7.02e6
3.51e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDD Std.
41.02-45.00
469.7780 Fn5
Flags: PBM
4σ 3.09e3
0%
ES OCDD
2.97e7*
42.37
Abs. Int.
1.09e7
5.46e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDD Std.
41.02-45.00
471.7750 Fn5
Flags: PBM
4σ 3.79e3
0%
ES OCDD
3.26e7*
42.37
Abs. Int.
1.27e7
6.36e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
8.25e6
4.13e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT


SGS ID: OPR1_17654_DF
Sample ID: 0_17654_OPR001
Acq: 07-Aug-2020 14:39:00
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 6
User: PSW Datafile: 200807R02
Rel. Int.
Abs. Int.
TCDF
20.54-29.50
303.9016 Fn1
Flags: PBM
4σ 2.50e3
1368F 7.54e6* 21.17
2468F 1.87e6* 22.41
2348F 6.73e6* 26.26
2378F 6.13e6* 26.37
1289F 7.35e6* 28.48
1.76e6
8.79e5
0.00e0
TCDF
20.54-29.50
305.8987 Fn1
Flags: PBM
4σ 2.01e3
1368F 1.02e7* 21.17
2468F 2.49e6* 22.40
2348F 8.97e6* 26.26
2378F 8.04e6* 26.37
1289F 9.61e6* 28.48
2.27e6
1.14e6
0.00e0
TCDF Std.
20.54-29.50
315.9419 Fn1
Flags: PBM
4σ 1.64e4
JS 1234F 6.39e7* 24.92
ES 2378F 5.56e7* 26.35
1.23e7
6.17e6
0.00e0
TCDF Std.
20.54-29.50
317.9389 Fn1
Flags: PBM
4σ 9.96e3
JS 1234F 8.27e7* 24.92
ES 2378F 7.14e7* 26.35
1.60e7
7.99e6
0.00e0
HxCDPE
20.54-29.50
375.8364 Fn1
Flags: PB
4σ 1.42e3
6.35e3
3.18e3
0.00e0
100%
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Results: P:\B4500_B4599\B4511\B4511_17654 DF\Resources\OPR1_17654_DF.utp_res, saved 10-Aug-2020 09:02 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 6353, 9303, 2934 scc: 184-198
PKD: 07-Aug-2020 15:27 Printed: 10-Aug-2020 09:15 Page 7 of 12

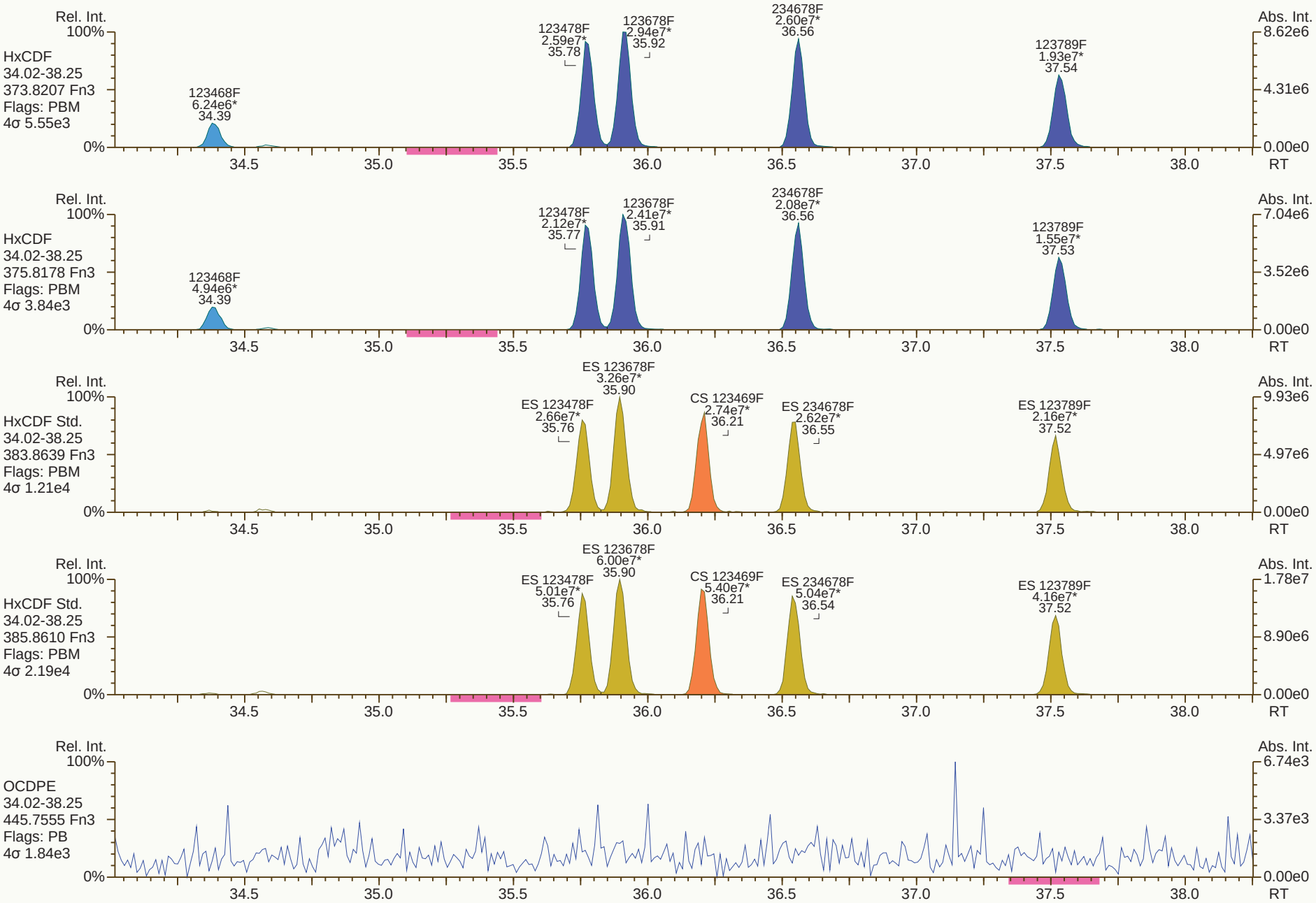

Rel. Int.
100%
0%
Abs. Int.
1.55e6
7.73e5
0.00e0
RT
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
13468/12468F
6.39e6*
28.43
PeCDF-1
20.54-29.50
339.8597 Fn1
Flags: PBM
4σ 2.11e3
13468/12468F
4.33e6*
28.43
1.06e6
5.29e5
PeCDF-1
20.54-29.50
341.8568 Fn1
Flags: PBM
4σ 2.41e3
4.83e6
2.42e6
QC Check
20.54-29.50
316.9824 Fn1
Flags: -


Rel. Int.
100%
PeCDF-2
29.51-34.01
339.8597 Fn2
Flags: PBM
4σ 4.98e3
0%
12378F
3.45e7*
31.34
23478F
3.54e7*
32.48
12389F
6.69e6*
33.56
Abs. Int.
9.67e6
4.84e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF-2
29.51-34.01
341.8568 Fn2
Flags: PBM
4σ 4.00e3
0%
12378F
2.25e7*
31.34
23478F
2.25e7*
32.48
12389F
4.28e6*
33.56
Abs. Int.
5.89e6
2.94e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
351.9000 Fn2
Flags: PBM
4σ 7.28e3
0%
CS 12346F
7.47e7*
30.79
ES 12378F
7.35e7*
31.33
ES 23478F
6.61e7*
32.46
Abs. Int.
1.97e7
9.83e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
353.8970 Fn2
Flags: PBM
4σ 5.09e3
0%
CS 12346F
4.64e7*
30.79
ES 12378F
4.61e7*
31.33
ES 23478F
4.18e7*
32.46
Abs. Int.
1.20e7
5.98e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
HpCDPE
29.51-34.01
409.7974 Fn2
Flags: PB
4σ 1.50e3
0%
Abs. Int.
5.92e3
2.96e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT

SGS ID: OPR1_17654_DF
Instr: [ILM] AutoSpec-Ultima MM3

Sample ID: 0_17654_OPR001
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 6

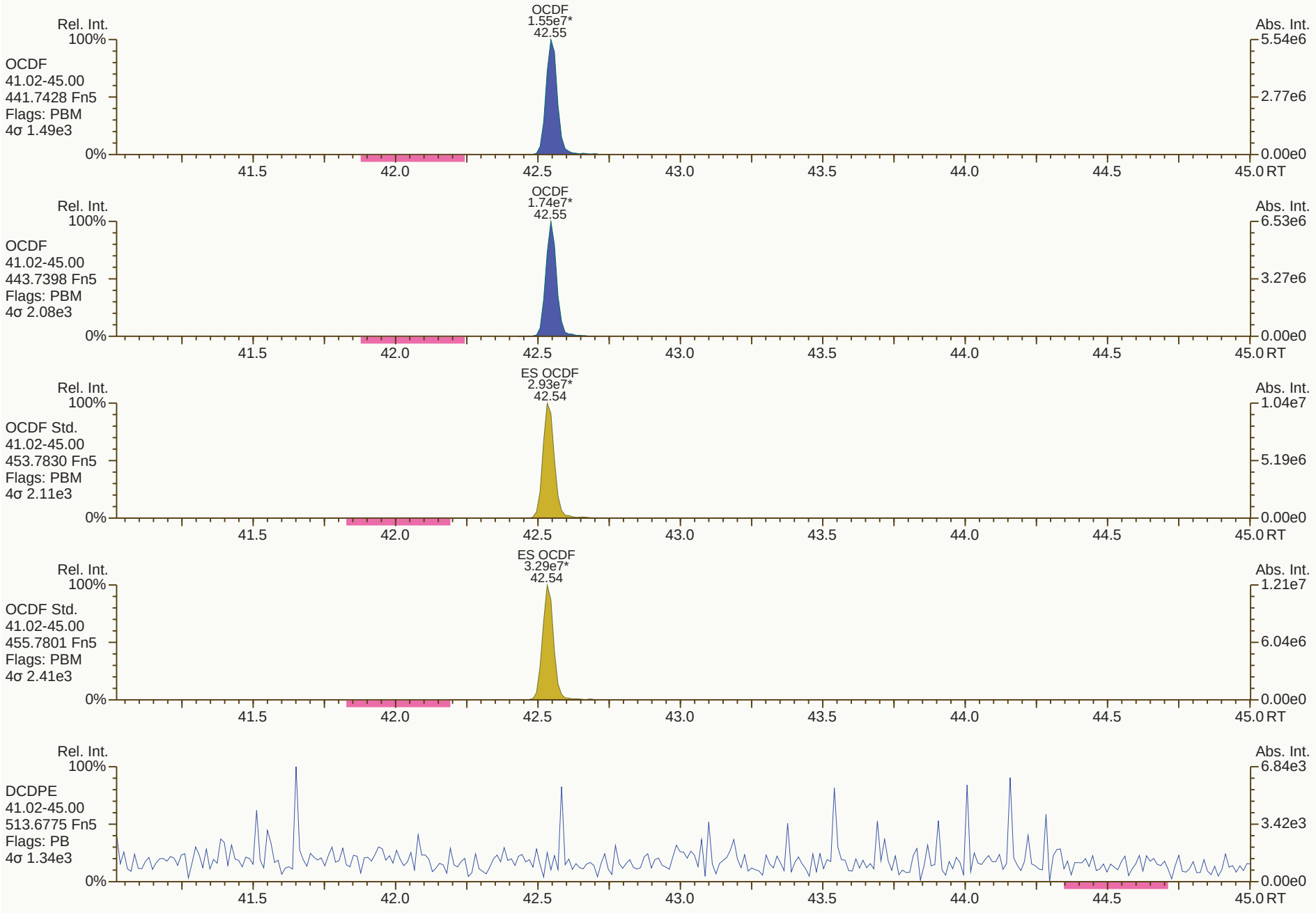
Acq: 07-Aug-2020 14:39:00
User: PSW Datafile: 200807R02



Results: P:\B4500_B4599\B4511\B4511_17654 DF\Resources\OPR1_17654_DF.utp_res, saved 10-Aug-2020 09:02 (PSW)
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 8080, 3725, 9302 scc: 184-198

Peak annotation: Areas, Centroids
PKD: 07-Aug-2020 15:27 Printed: 10-Aug-2020 09:15 Page 10 of 12


Rel. Int.
100%
HpCDF
38.26-41.01
407.7818 Fn4
Flags: PBM
4σ 1.92e3
0%
1234678F
2.52e7*
39.05
1234789F
1.47e7*
40.38
Abs. Int.
9.77e6
4.89e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF
38.26-41.01
409.7788 Fn4
Flags: PBM
4σ 1.22e3
0%
1234678F
2.48e7*
39.05
1234789F
1.39e7*
40.38
Abs. Int.
9.58e6
4.79e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.26-41.01
417.8253 Fn4
Flags: PBM
4σ 5.01e3
0%
ES 1234678F
2.23e7*
39.04
CS 1234689F
1.96e7*
39.45
ES 1234789F
1.31e7*
40.37
Abs. Int.
8.79e6
4.40e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.26-41.01
419.8220 Fn4
Flags: PBM
4σ 4.69e3
0%
ES 1234678F
5.03e7*
39.04
CS 1234689F
4.46e7*
39.45
ES 1234789F
3.04e7*
40.37
Abs. Int.
1.90e7
9.50e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
NCDPE
38.26-41.01
479.7165 Fn4
Flags: PB
4σ 1.62e3
0%
Abs. Int.
6.84e3
3.42e3
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT



Results: P:\B4500_B4599\B4511\B4511_17654 DF\Resources\OPR1_17654_DF.utp_res, saved 10-Aug-2020 09:02 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 4614, 4667, 1448 scc: 184-198
PKD: 07-Aug-2020 15:27 Printed: 10-Aug-2020 09:15 Page 12 of 12

CPSM only

METHOD 8290A **COLUMN PERFORMANCE AND RETENTION TIME WINDOWS** **FORM CPSM**

Lab Name:	SGS North America		
Initial Calibration:	ICAL: MM3_DF_10012020_12JUN2020		
Instrument ID:	MM3	GC Column ID:	ZB-5ms
CPSM Data Filename:	200807R13	Analysis Date:	07-AUG-2020 23:29:08
Lab ID:	OPR1_17654_DF-RJ		

Window Defining Standards Results

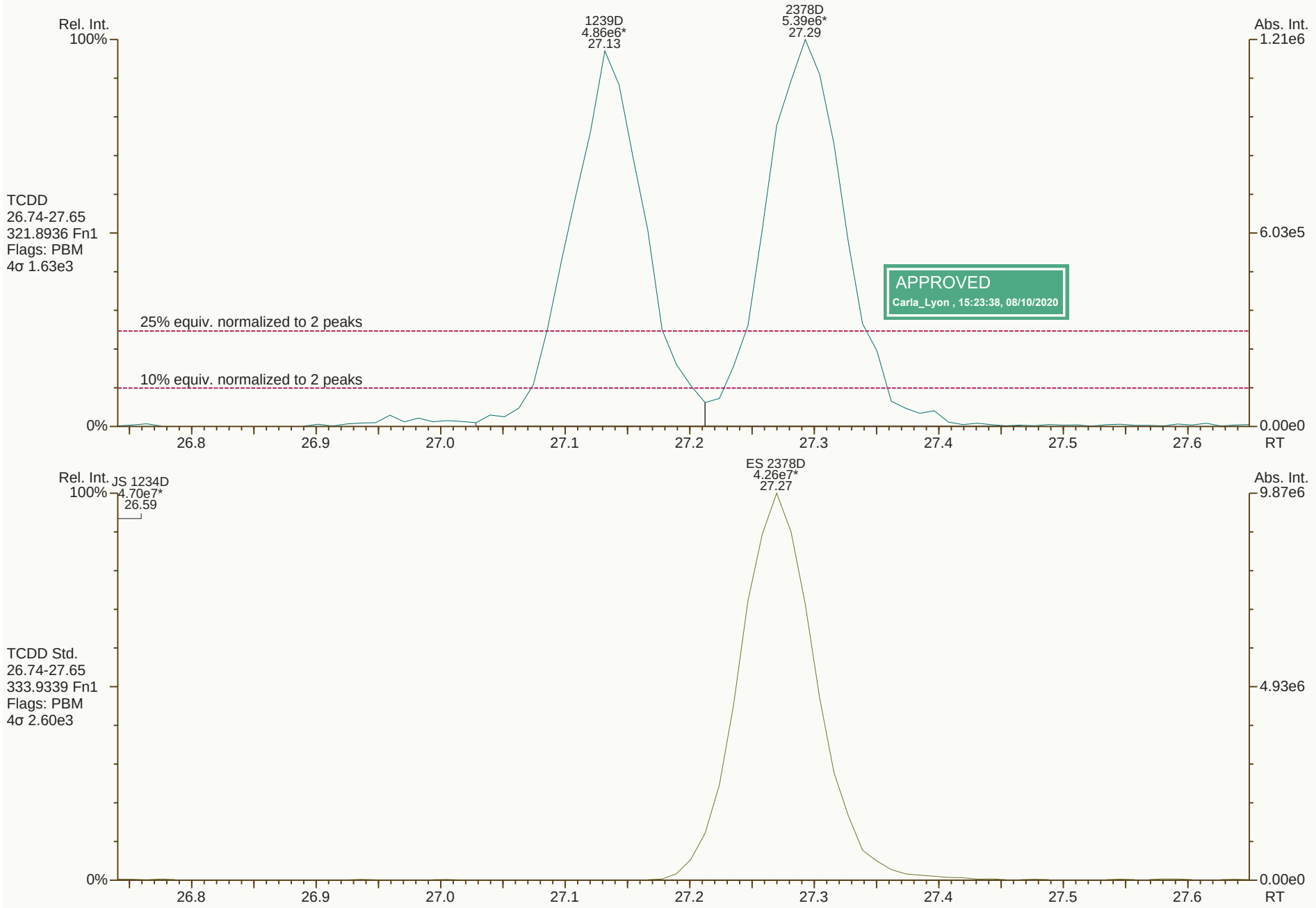
First Eluting Isomer	RT	Last Eluting Isomer	RT
1368-TCDD	23.41	1289-TCDD	28.31
12479/12468-PeCDD	30.28	12389-PeCDD	33.28
124679/124689-HxCDD	35.05	123789-HxCDD	37.15
1234679-HpCDD	39.32	1234678-HpCDD	39.96
1368-TCDF	21.17	1289-TCDF	28.48
13468/12468-PeCDF	28.43	12389-PeCDF	33.56
123468-HxCDF	34.39	123789-HxCDF	37.54
1234678-HpCDF	39.05	1234789-HpCDF	40.38

Isomer Specificity Test Standard Results

Closest Eluting Isomer	RT	2378 Specific Isomer	RT
1239-TCDD	27.13	2378-TCDD	27.30
2348-TCDF	26.26	2378-TCDF	26.37

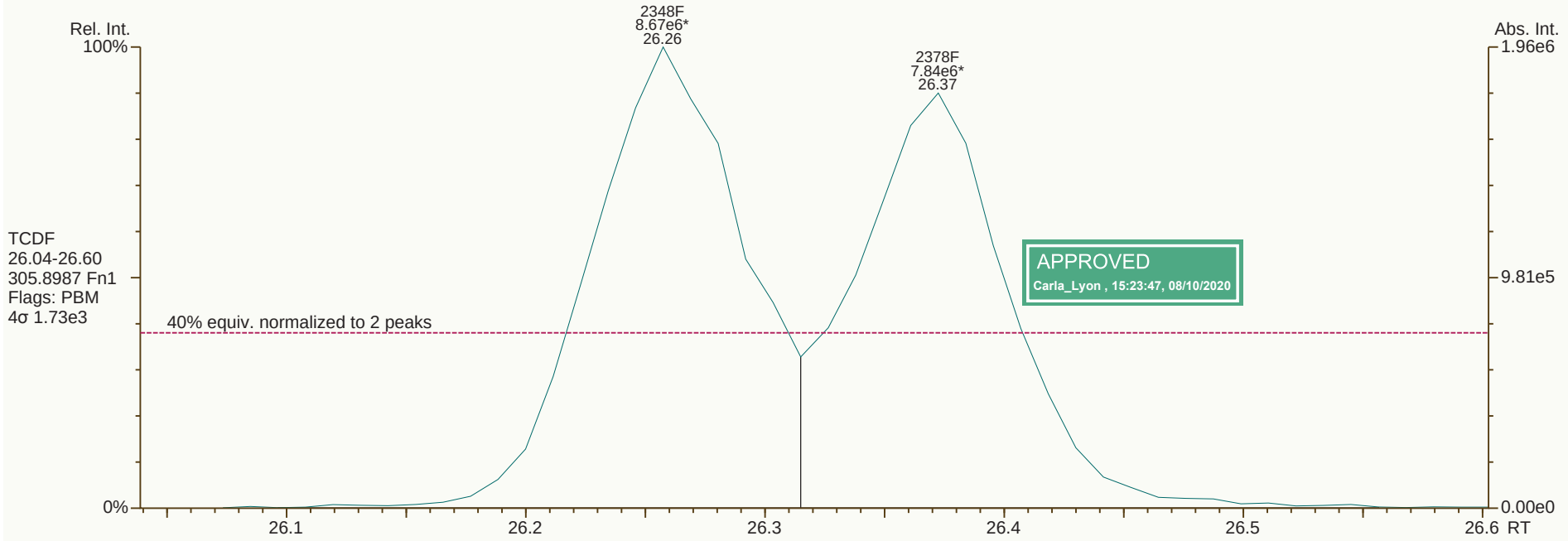
Processed: 10 Aug 2020 09:06 Analyst: pw

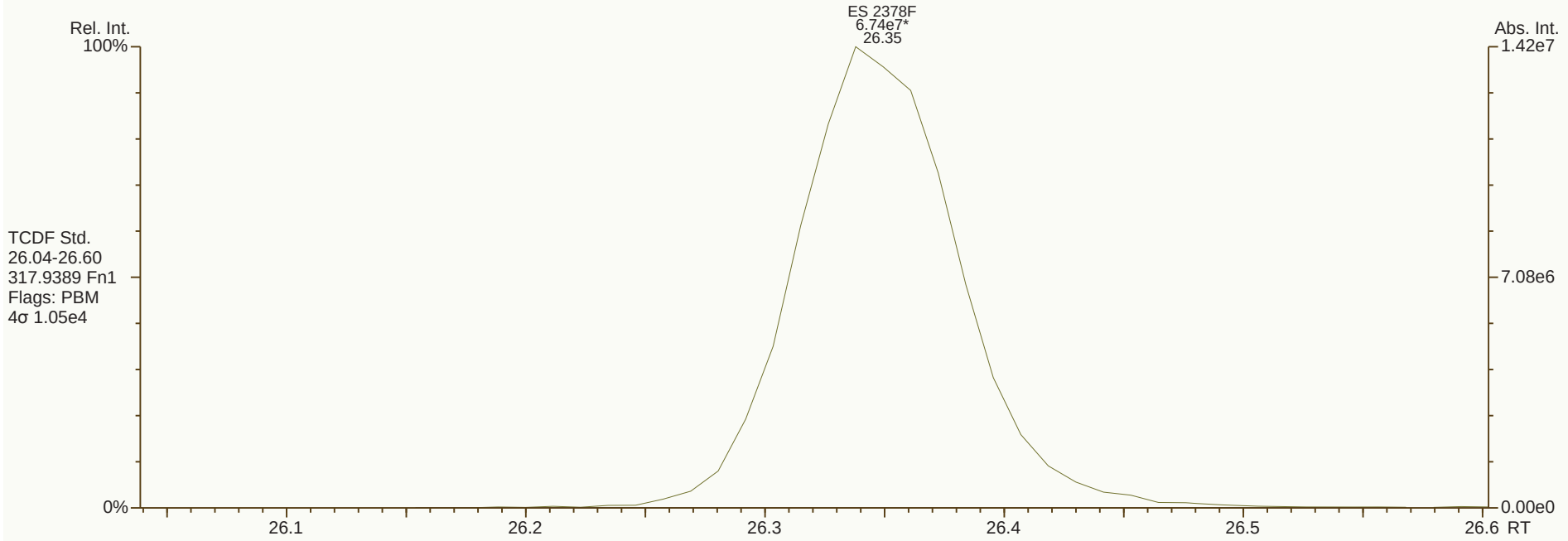
SGS ID: OPR1_17654_DF-RJ
Sample ID: 0_17654_OPR001
Acq: 07-Aug-2020 23:29:08
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 6
User: PSW Datafile: 200807R13



Results: P:\B4500_B4599\B4511\B4511_17654 DF\Resources\OPR1_17654_DF-RJ.utp_res, saved 10-Aug-2020 09:02 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027
PKD: 10-Aug-2020 08:04 Printed: 10-Aug-2020 09:11

SGS ID: OPR1_17654_DF-RJ | Sample ID: 0_17654_OPR001 | Acq: 07-Aug-2020 23:29:08
Instr: [ILM] AutoSpec-Ultima MM3 | VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 6 | User: PSW Datafile: 200807R13

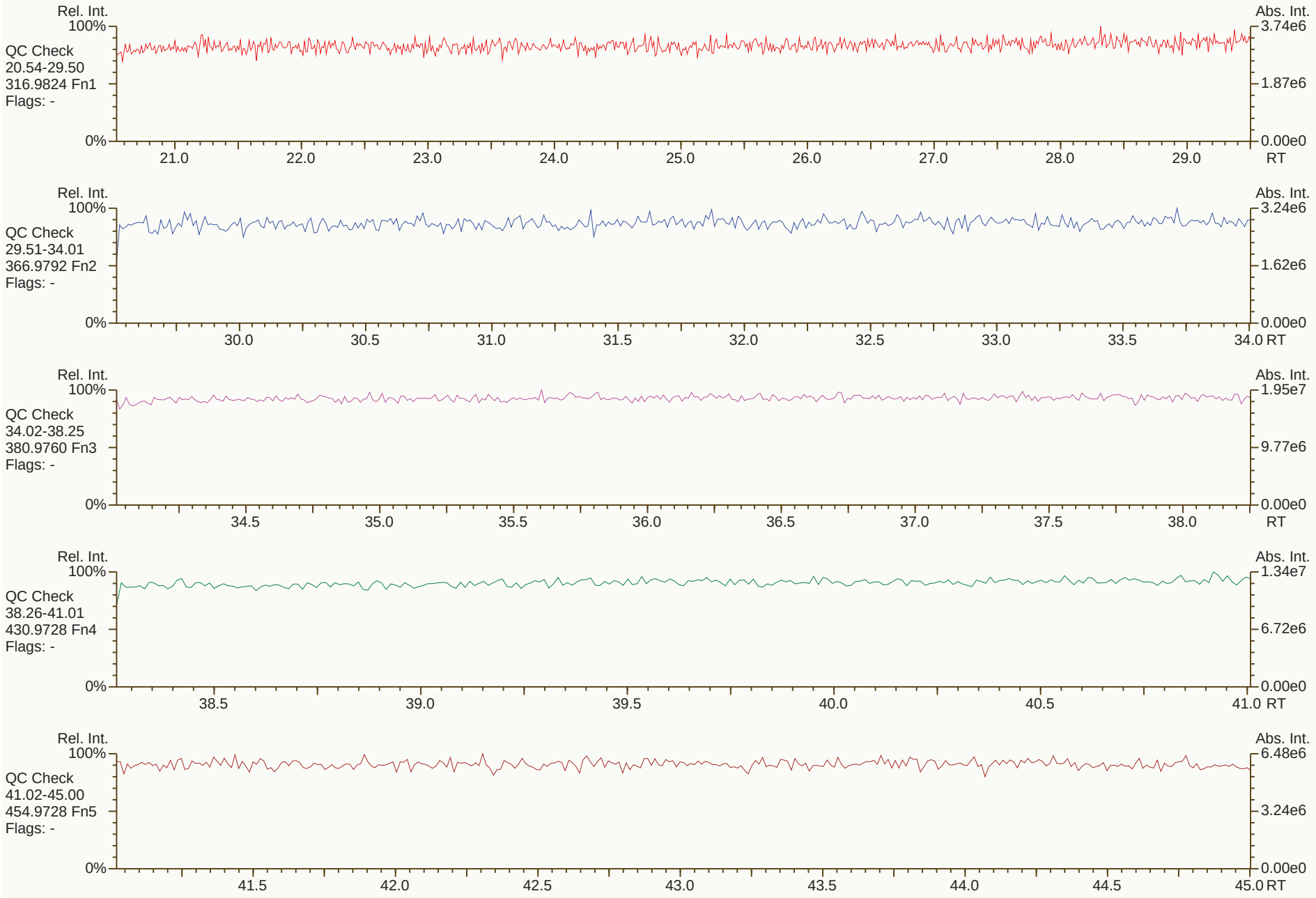




Results: P:\B4500_B4599\B4511\B4511_17654 DF\Resources\OPR1_17654_DF-RJ.utp_res, saved 10-Aug-2020 09:02 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027
PKD: 10-Aug-2020 08:04 Printed: 10-Aug-2020 09:11

SGS ID: OPR1_17654_DF-RJ | **Sample ID: 0_17654_OPR001** | **Acq: 07-Aug-2020 23:29:08**

Instr: [ILM] AutoSpec-Ultima MM3 | **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 6** | **User: PSW Datafile: 200807R13**

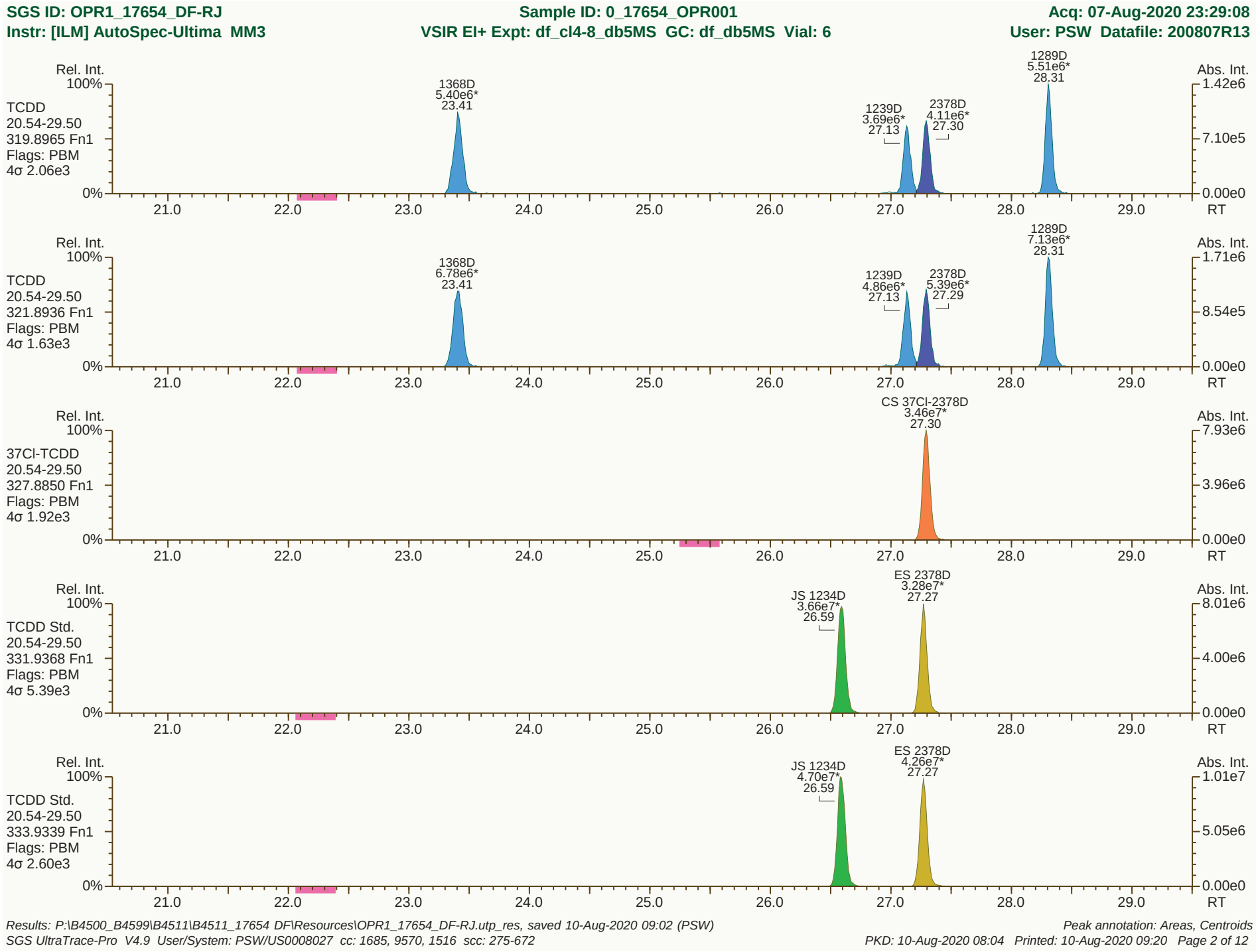


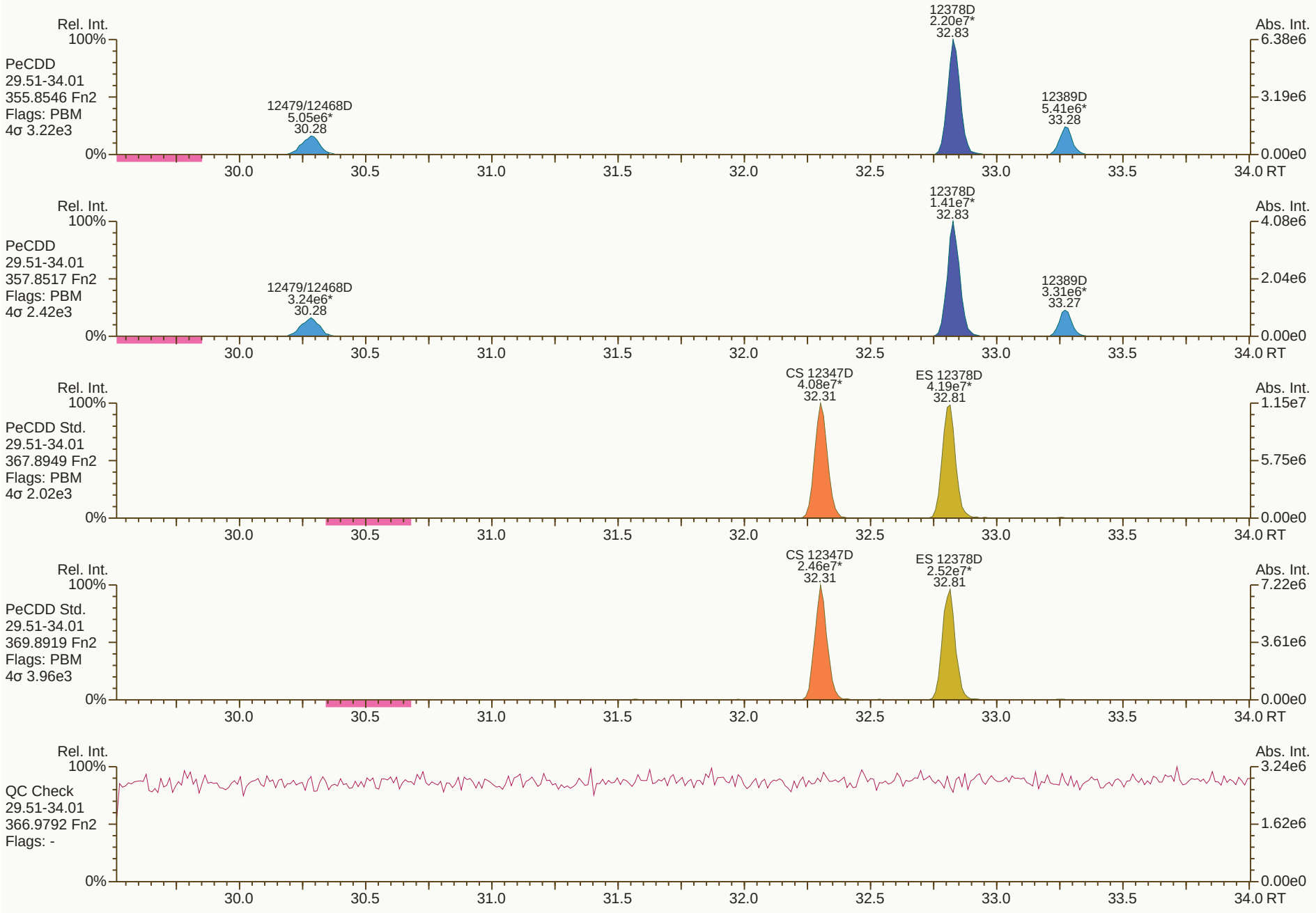
Results: P:\B4500_B4599\B4511\B4511_17654 DF\Resources\OPR1_17654_DF-RJ.utp_res, saved 10-Aug-2020 09:02 (PSW)

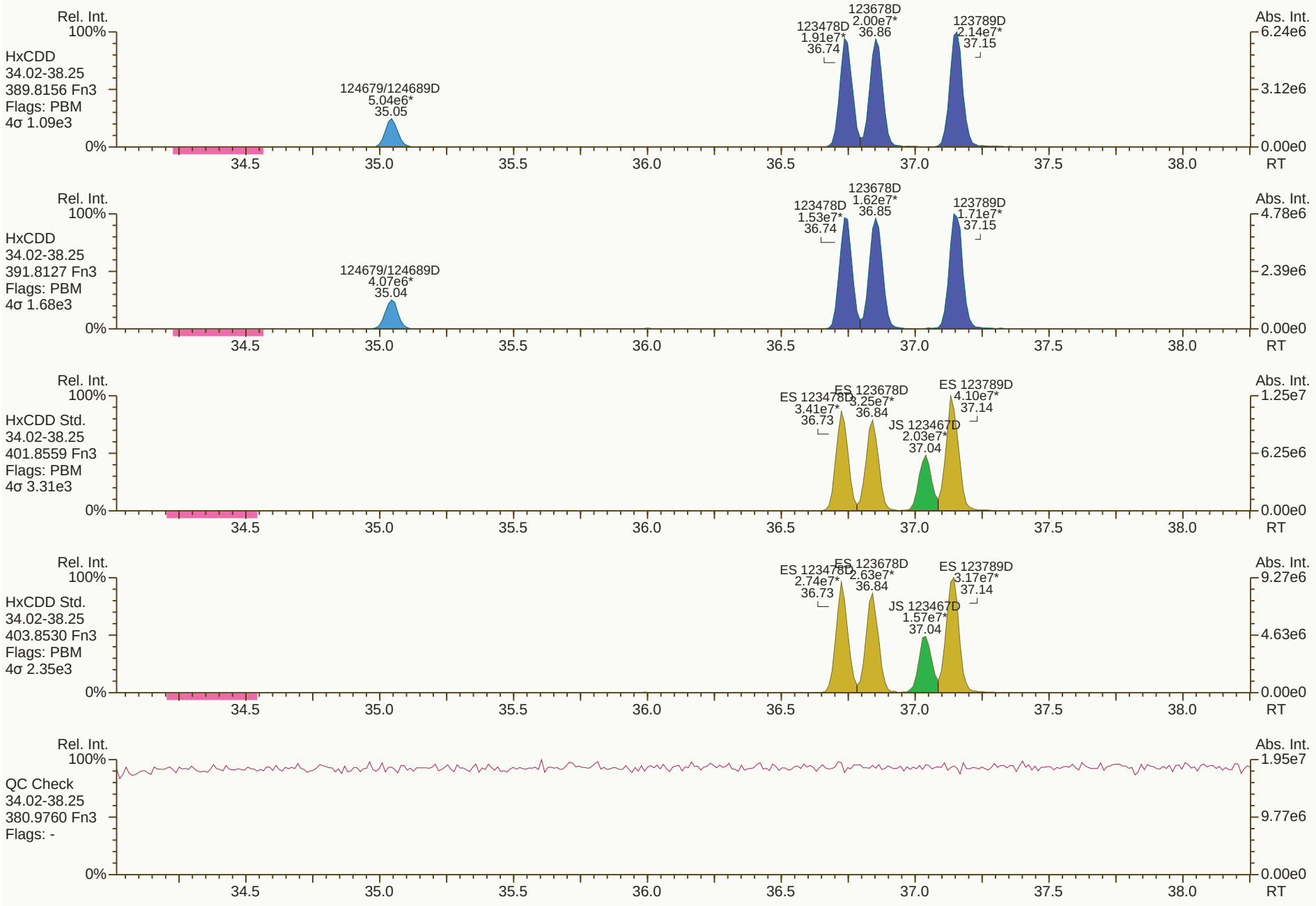
Peak annotation: Areas, Centroids

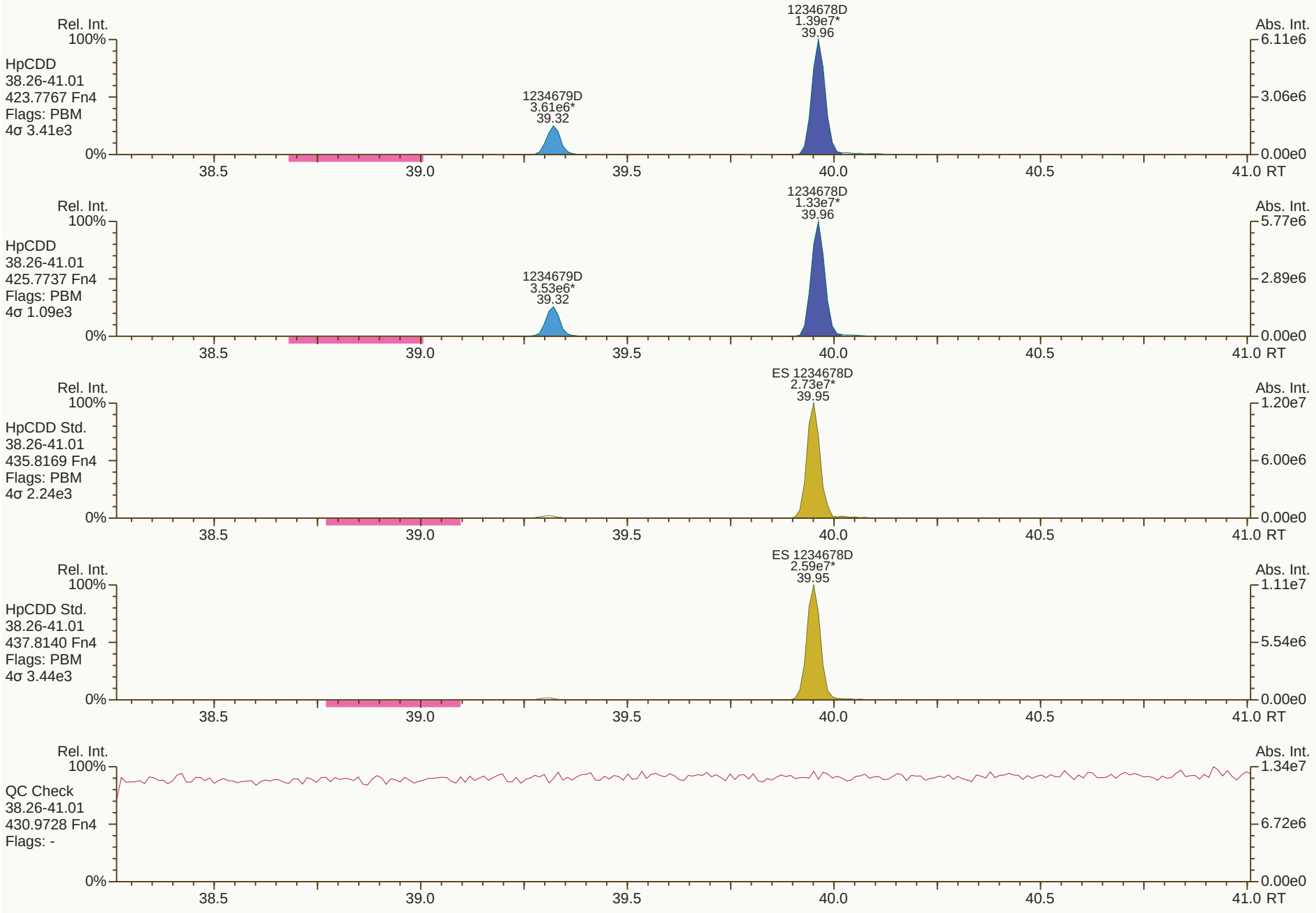
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 scc: 275-672

PKD: n/a Printed: 10-Aug-2020 09:20 Page 1 of 12


SGS ID: OPR1_17654_DF-RJ
Sample ID: 0_17654_OPR001
Acq: 07-Aug-2020 23:29:08
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 6
User: PSW Datafile: 200807R13
Rel. Int.
Abs. Int.
TCDD
20.54-29.50
319.8965 Fn1
Flags: PBM
4σ 2.06e3
1368D 5.40e6* 23.41
1239D 3.69e6* 27.13
2378D 4.11e6* 27.30
1289D 5.51e6* 28.31
1.42e6
7.10e5
0.00e0
TCDD
20.54-29.50
321.8936 Fn1
Flags: PBM
4σ 1.63e3
1368D 6.78e6* 23.41
1239D 4.86e6* 27.13
2378D 5.39e6* 27.29
1289D 7.13e6* 28.31
1.71e6
8.54e5
0.00e0
37Cl-TCDD
20.54-29.50
327.8850 Fn1
Flags: PBM
4σ 1.92e3
CS 37Cl-2378D 3.46e7* 27.30
7.93e6
3.96e6
0.00e0
TCDD Std.
20.54-29.50
331.9368 Fn1
Flags: PBM
4σ 5.39e3
JS 1234D 3.66e7* 26.59
ES 2378D 3.28e7* 27.27
8.01e6
4.00e6
0.00e0
TCDD Std.
20.54-29.50
333.9339 Fn1
Flags: PBM
4σ 2.60e3
JS 1234D 4.70e7* 26.59
ES 2378D 4.26e7* 27.27
1.01e7
5.05e6
0.00e0
100%
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Results: P:\B4500_B4599\B4511\B4511_17654 DF\Resources\OPR1_17654_DF-RJ.utp_res, saved 10-Aug-2020 09:02 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 1685, 9570, 1516 scc: 275-672
PKD: 10-Aug-2020 08:04 Printed: 10-Aug-2020 09:20 Page 2 of 12


Rel. Int.
100%
PeCDD
29.51-34.01
355.8546 Fn2
Flags: PBM
4σ 3.22e3
12479/12468D
5.05e6*
30.28
12378D
2.20e7*
32.83
12389D
5.41e6*
33.28
Abs. Int.
6.38e6
3.19e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD
29.51-34.01
357.8517 Fn2
Flags: PBM
4σ 2.42e3
12479/12468D
3.24e6*
30.28
12378D
1.41e7*
32.83
12389D
3.31e6*
33.27
Abs. Int.
4.08e6
2.04e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
367.8949 Fn2
Flags: PBM
4σ 2.02e3
CS 12347D
4.08e7*
32.31
ES 12378D
4.19e7*
32.81
Abs. Int.
1.15e7
5.75e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
369.8919 Fn2
Flags: PBM
4σ 3.96e3
CS 12347D
2.46e7*
32.31
ES 12378D
2.52e7*
32.81
Abs. Int.
7.22e6
3.61e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
QC Check
29.51-34.01
366.9792 Fn2
Flags: -
Abs. Int.
3.24e6
1.62e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT

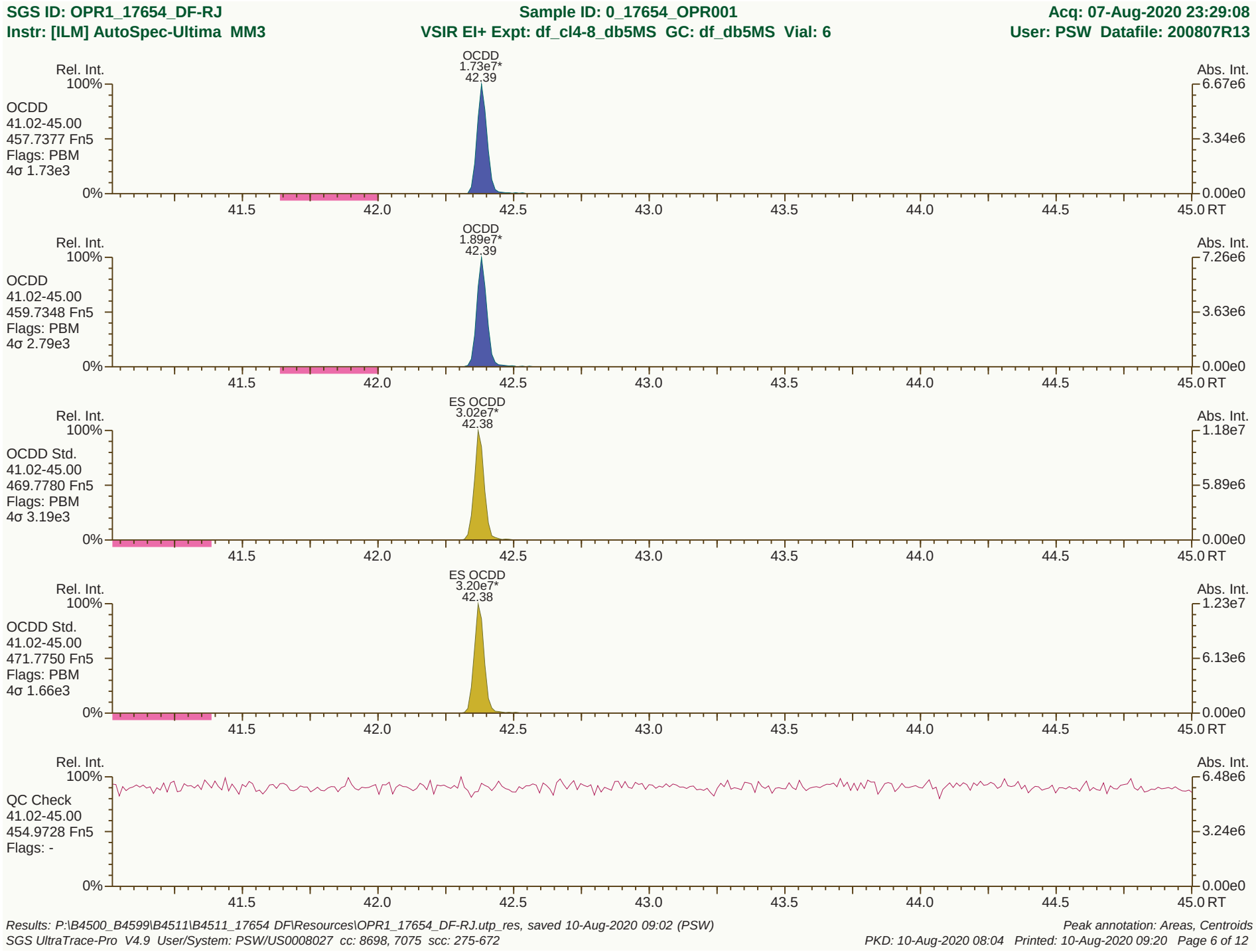

Rel. Int.
100%
HxCDD
34.02-38.25
389.8156 Fn3
Flags: PBM
4σ 1.09e3
124679/124689D
5.04e6*
35.05
123478D
1.91e7*
36.74
123678D
2.00e7*
36.86
123789D
2.14e7*
37.15
Abs. Int.
6.24e6
3.12e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD
34.02-38.25
391.8127 Fn3
Flags: PBM
4σ 1.68e3
124679/124689D
4.07e6*
35.04
123478D
1.53e7*
36.74
123678D
1.62e7*
36.85
123789D
1.71e7*
37.15
Abs. Int.
4.78e6
2.39e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
401.8559 Fn3
Flags: PBM
4σ 3.31e3
ES 123478D
3.41e7*
36.73
ES 123678D
3.25e7*
36.84
JS 123467D
2.03e7*
37.04
ES 123789D
4.10e7*
37.14
Abs. Int.
1.25e7
6.25e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
403.8530 Fn3
Flags: PBM
4σ 2.35e3
ES 123478D
2.74e7*
36.73
ES 123678D
2.63e7*
36.84
JS 123467D
1.57e7*
37.04
ES 123789D
3.17e7*
37.14
Abs. Int.
9.27e6
4.63e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
Abs. Int.
1.95e7
9.77e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT


Rel. Int.
100%
HpCDD
38.26-41.01
423.7767 Fn4
Flags: PBM
4σ 3.41e3
0%
1234678D
1.39e7*
39.96
1234679D
3.61e6*
39.32
Abs. Int.
6.11e6
3.06e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.26-41.01
425.7737 Fn4
Flags: PBM
4σ 1.09e3
0%
1234678D
1.33e7*
39.96
1234679D
3.53e6*
39.32
Abs. Int.
5.77e6
2.89e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
435.8169 Fn4
Flags: PBM
4σ 2.24e3
0%
ES 1234678D
2.73e7*
39.95
Abs. Int.
1.20e7
6.00e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
437.8140 Fn4
Flags: PBM
4σ 3.44e3
0%
ES 1234678D
2.59e7*
39.95
Abs. Int.
1.11e7
5.54e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.26-41.01
430.9728 Fn4
Flags: -
0%
Abs. Int.
1.34e7
6.72e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT

SGS ID: OPR1_17654_DF-RJ
Instr: [ILM] AutoSpec-Ultima MM3

Sample ID: 0_17654_OPR001
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 6

Acq: 07-Aug-2020 23:29:08
User: PSW Datafile: 200807R13



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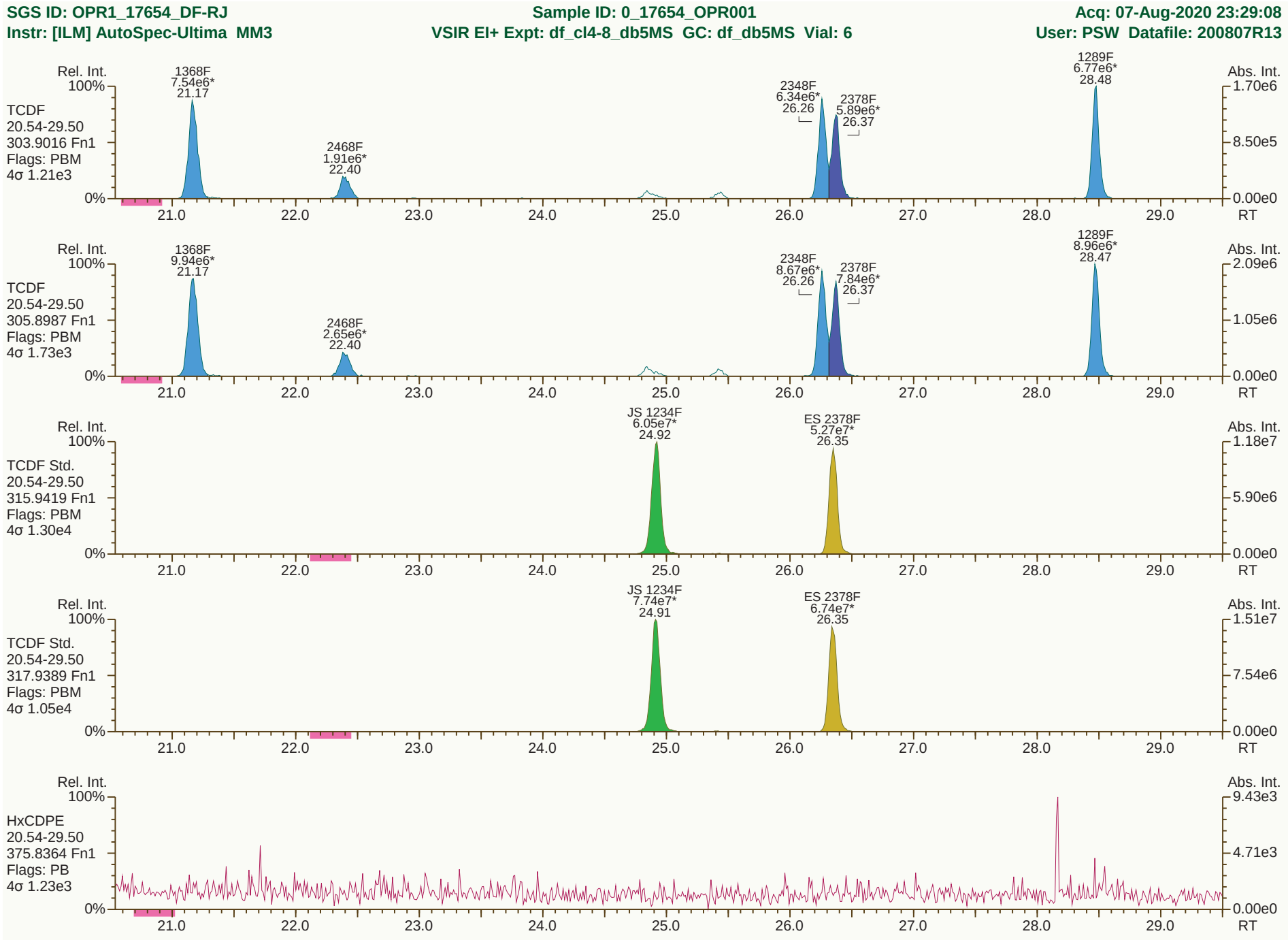
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 8698, 7075 scc: 275-672

Peak annotation: Areas, Centroids
PKD: 10-Aug-2020 08:04 Printed: 10-Aug-2020 09:20 Page 6 of 12



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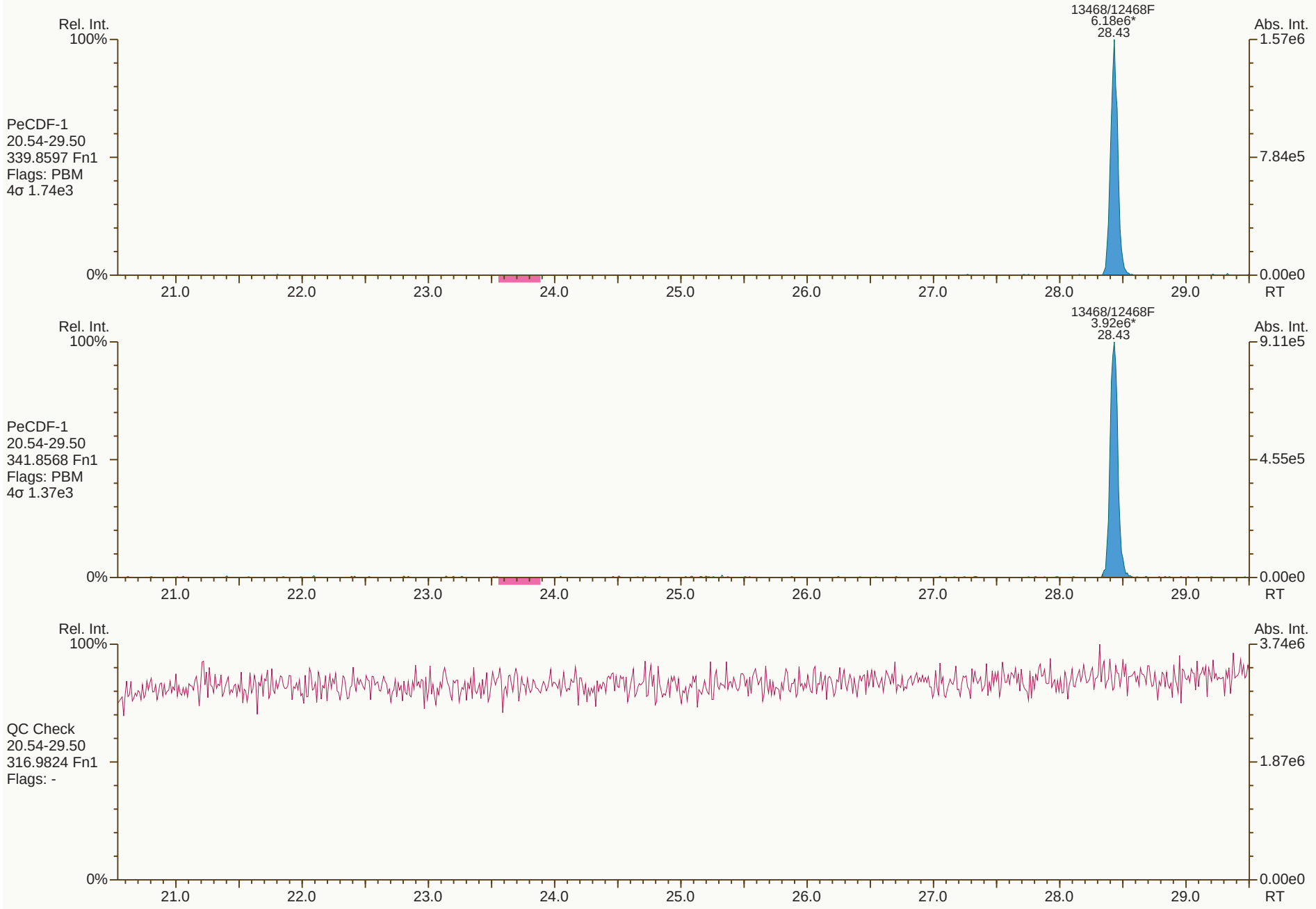
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 3541, 9703, 6991 scc: 275-672
PKD: 10-Aug-2020 08:04 Printed: 10-Aug-2020 09:21 Page 7 of 12

SGS ID: OPR1_17654_DF-RJ | **Sample ID: 0_17654_OPR001** | **Acq: 07-Aug-2020 23:29:08**

Instr: [ILM] AutoSpec-Ultima MM3 | **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 6** | **User: PSW Datafile: 200807R13**



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Peak annotation: Areas, Centroids

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 9554 scc: 275-672

PKD: 10-Aug-2020 08:04 Printed: 10-Aug-2020 09:21 Page 8 of 12

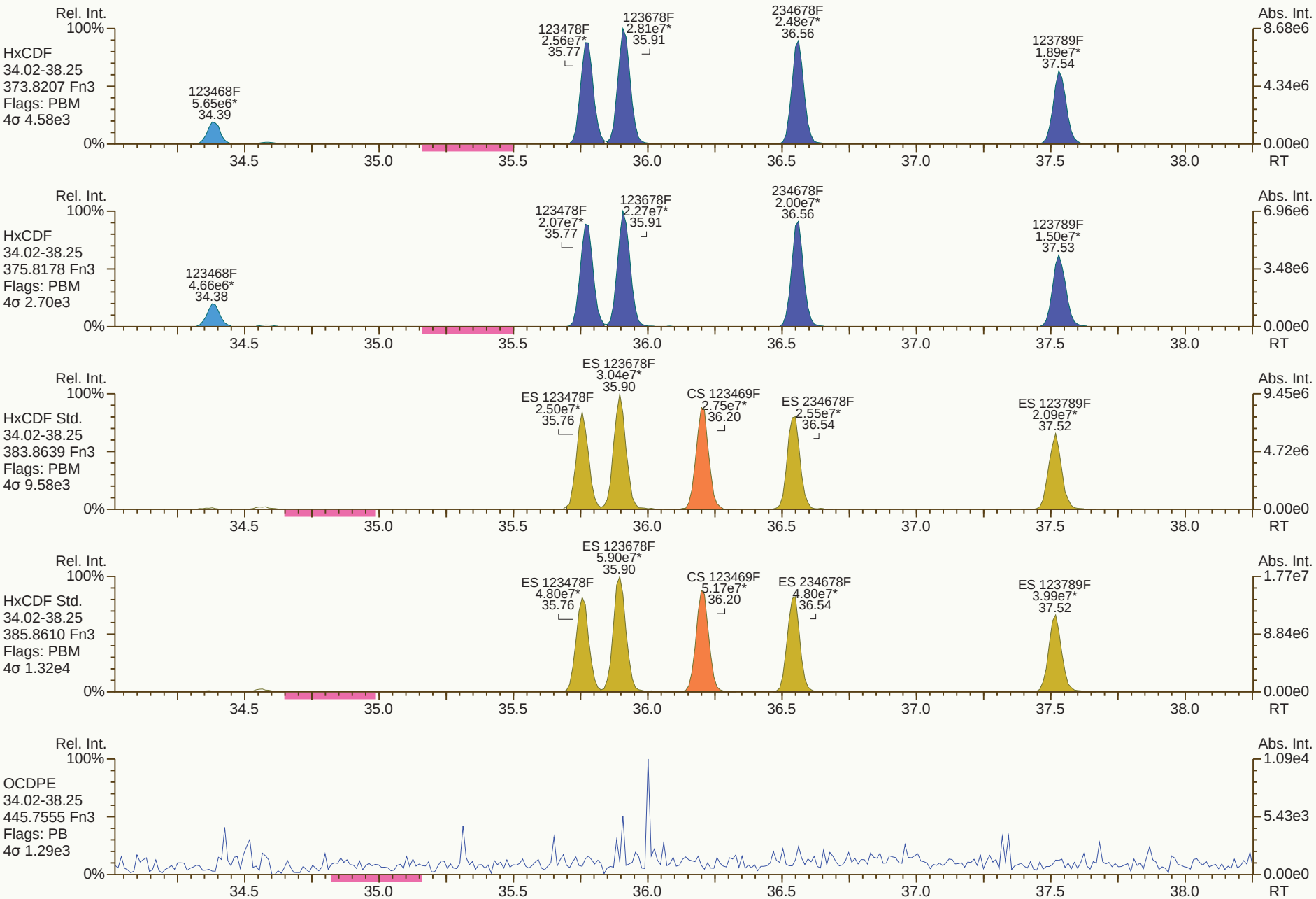


Results: P:\B4500_B4599\B4511\B4511_17654 DF\Resources\OPR1_17654_DF-RJ.utp_res, saved 10-Aug-2020 09:02 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 8682, 0197, 1807 scc: 275-672
PKD: 10-Aug-2020 08:04 Printed: 10-Aug-2020 09:21 Page 9 of 12

SGS ID: OPR1_17654_DF-RJ
Instr: [ILM] AutoSpec-Ultima MM3

Sample ID: 0_17654_OPR001
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 6

Acq: 07-Aug-2020 23:29:08
User: PSW Datafile: 200807R13



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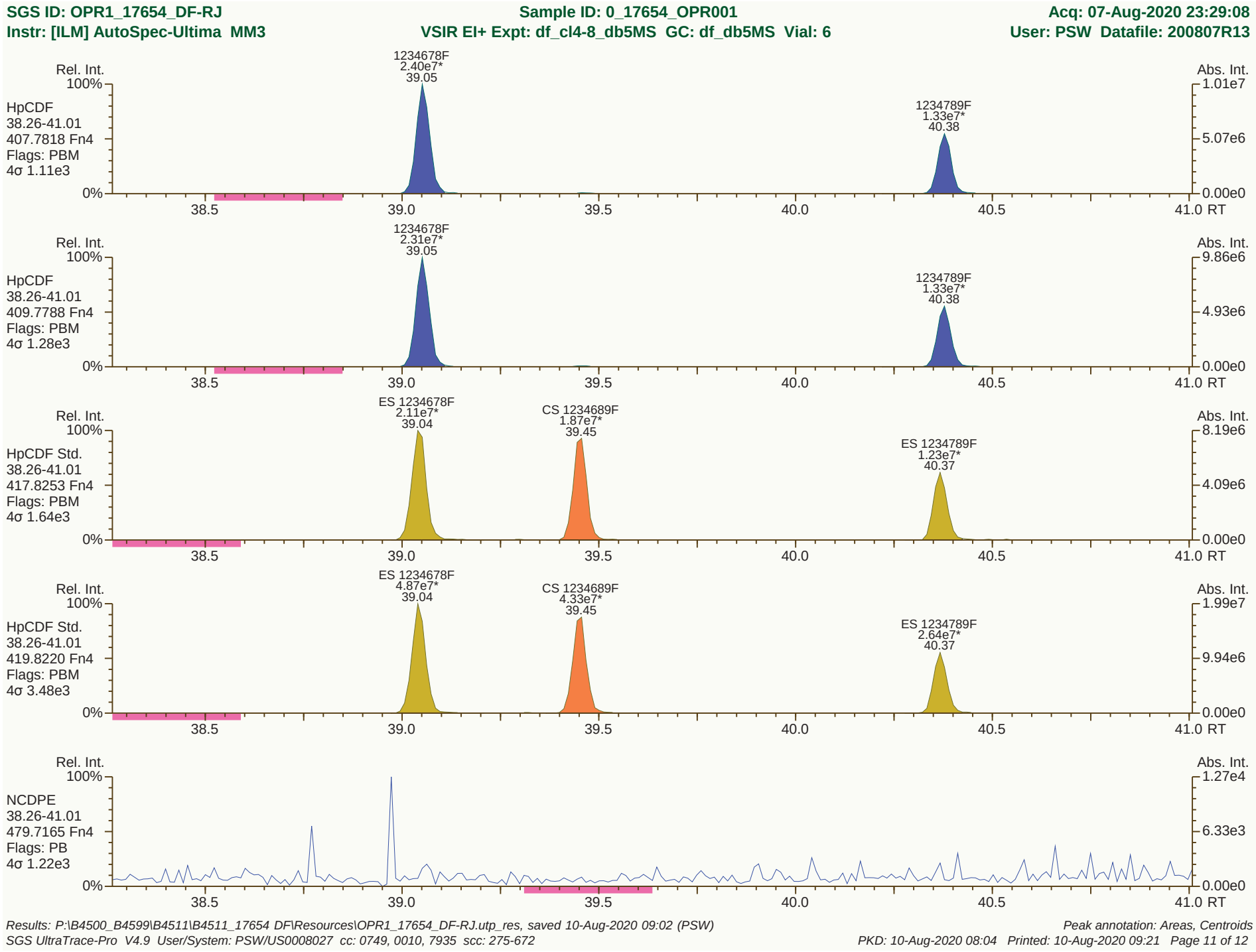
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 0228, 2405, 9931 scc: 275-672

Peak annotation: Areas, Centroids
PKD: 10-Aug-2020 08:04 Printed: 10-Aug-2020 09:21 Page 10 of 12

SGS ID: OPR1_17654_DF-RJ
Instr: [ILM] AutoSpec-Ultima MM3

Sample ID: 0_17654_OPR001
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 6

Acq: 07-Aug-2020 23:29:08
User: PSW Datafile: 200807R13



Results: P:\B4500_B4599\B4511\B4511_17654 DF\Resources\OPR1_17654_DF-RJ.utp_res, saved 10-Aug-2020 09:02 (PSW)
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 0749, 0010, 7935 scc: 275-672

Peak annotation: Areas, Centroids
PKD: 10-Aug-2020 08:04 Printed: 10-Aug-2020 09:21 Page 11 of 12

SGS ID: OPR1_17654_DF-RJ
Instr: [ILM] AutoSpec-Ultima MM3

Sample ID: 0_17654_OPR001
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 6

Acq: 07-Aug-2020 23:29:08
User: PSW Datafile: 200807R13



Results: P:\B4500_B4599\B4511\B4511_17654 DF\Resources\OPR1_17654_DF-RJ.utp_res, saved 10-Aug-2020 09:02 (PSW)
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 7005, 5200, 0664 scc: 275-672

Peak annotation: Areas, Centroids
PKD: 10-Aug-2020 08:04 Printed: 10-Aug-2020 09:21 Page 12 of 12



FINAL LAB REPORT

KMCC Navassa

B4519

11-Aug-2020

Prepared by

SGS NORTH AMERICA

Prepared for

EarthCon

Mary Brookshire

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Phone: 404-317-7748
Email: mbrookshire@earthcon.com

This report is approved by

Tamara Burkamper
C=US, OU=EHS, O=SGS North America Inc.,
CN=Tamara Burkamper,
E=tamara.morgan@sgs.com
I have reviewed this document
2020-08-11 16:02:56

Tamara Burkamper

Senior Project Manager

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Results reported relate only to the items tested.

PROJECT INFORMATION SUMMARY *(When applicable, see QC Annotations for details)*

Client Project	KMCC Navassa
SGS Project #	B4519
Analytical Protocol(s)	8290A
No. Samples Submitted	14
Additional QC Sample(s)	0
No. Laboratory Method Blanks	1
No. OPRs / Batch CS3	1
Date Received	06-Aug-20
Condition Received	Good
Temperature upon Receipt (ºC)	0.9
Extraction within Holding Time	Yes
Analysis within Holding Time	Yes

QC ANNOTATIONS:

1. Please see Appendices attached for data qualifier/attribute and lab identifier descriptions which may be contained in the project.

No difficulties were encountered during processing of the samples.

APPENDIX A: GENERAL DATA QUALIFIERS / DATA ATTRIBUTES

B	The analyte was found in the method blank, at a concentration that was at least 10% of the concentration in the sample.
C	Two or more congeners co-elute. In EDDs, C denotes the lowest IUPAC congener in a co-elution group and additional co-eluters for the group are shown with the number of the lowest IUPAC co-eluter.
E	The reported concentration exceeds the calibration range (upper point of the calibration curve) and is an estimated value.
EMPC	Represents an Estimated Maximum Possible Concentration. EMPCs arise in cases where the signal/noise ratio is not sufficient for peak identification (the determined ion-abundance ratio is outside the allowed theoretical range), or where there is a co-eluting interference.
H/h	If the standard recovery is below the method or SOP specified value “H” is assigned. If the obtained value is less than half the specified value “h” is assigned.
J	Indicates that an analyte has a concentration below the reporting limit (lowest point of the calibration curve) and is an estimated value.
ND	Indicates a non-detect.
NR or R	Indicates a value that is not reportable.
PR	Due to interference, the associated congener is poorly resolved.
QI	Indicates the presence of a quantitative interference.
SI	Denotes “Single Ion Mode” and is utilized for PCBs where the secondary ion trace has a significantly elevated noise level due to background PFK. Responses for such peaks are calculated using an EMPC approach based solely on the primary ion area(s) and may be considered estimates.
U	The analyte was not detected. The estimated detection limit (EDL) may be reported for this analyte.
V	The labeled standard recovery was found to be outside of the method control limits.

APPENDIX B: DRBC/TMDL SPECIFIC DATA QUALIFIERS / DATA ATTRIBUTES

J	The reported result is an estimate. The value is less than the minimum calibration level but greater than the estimated detection limit (EDL).
U	The analyte was not detected in the sample at the estimated detection limit (EDL).
E	The reported concentration is an estimate. The value exceeds the upper calibration range (upper point of the calibration curve).
D	Dilution Data. Result was obtained from the analysis of a dilution.
B	Analyte found in the sample and associated method blank.
C	Co-eluting congener
Cxx	Co-elutes with the indicated congener, data is reported under the lowest IUPAC congener. 'Xx' denotes the IUPAC number with the lowest numerical designated congener.
NR	Analyte is not reportable because of problems in sample preparation or analysis.
V	Labeled standard recovery is not within method control limits.
X	Results from re-injection/repeat/second-column analysis.
EMPC	Estimated maximum possible concentration. Indicates that a peak is identified but did not meet the method specified ion-abundance ratio.

APPENDIX C: LAB IDENTIFIERS

AR	Indicates use of the archived portion of the sample extract.
CU	Indicates a sample that required additional clean-up prior to MS injection/processing.
D	Indicates a dilution of the sample extract. The number that follows the "D" indicates the dilution factor.
DE	Indicates a dilution performed with the addition of ES (extraction standard) solution.
DUP	Designation for a duplicate sample.
MS	Designation for a matrix spike.
MSD	Designation for a matrix spike duplicate.
RJ	Indicates a reinjection of the sample extract.
S	Indicates a sample split. The number that follows the "S" indicates the split factor.

SGS CERTIFICATIONS

Alaska	17-012
Arkansas	88-0682
California (ELAP)	ELAP Cert #2914
CLIA	34D1013708
Connecticut	PH-0258
USDA Soil Permit	P330-20-00103
American Association for Laboratory Accreditation (A2LA)	2726.01 (ISO 17025:2005, 2009 TNI, DoD ELAP QSM 5.1)
Florida DOH	E87634
Louisiana DEQ	4115
Louisiana DOH	LA031
Maine	2018018
Massachusetts	M-NC919
Minnesota (Primary NELAP For Method 23)	037-999-459
Montana	0106
New Hampshire (Primary NELAP)	2085
New Hampshire (Secondary NELAP)	2083
New Jersey	NC100
New York	11685
North Carolina DEQ	481
North Dakota	R-197
Oregon	NC200002
Pennsylvania	68-03675
South Carolina	99029002
Texas	T104704260
US Coast Guard	16714/159.317/SGS
Vermont	VT-87634
Virginia	460214
Washington	C913

Rev. 13-Apr-2020

Sample ID: CS-27

Method 8290A

Client Data		Sample Data		Laboratory Data			
Name:	EarthCon	Matrix:	Solid	Lab Project ID:	B4519	Date Received:	06-Aug-2020
Project ID:	KMCC Navassa	Weight/Volume:	9.48 g	Lab Sample ID	B4519_17655_DF_001	Date Extracted:	07-Aug-2020
Date Collected:	06-Aug-2020	% Solid:	91.9 %	QC Batch No:	17655	Date Analyzed:	10-Aug-2020
		Split:	-	Dilution:	-	Time Analyzed:	17:59:44

Analyte	Conc. (pg/g)	DL (pg/g)	EMPC (pg/g)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	0.187			ES 2378-TCDD	75.4	
12378-PeCDD	EMPC		0.17	J	ES 12378-PeCDD	76.3	
123478-HxCDD	0.647			J	ES 123478-HxCDD	66.2	
123678-HxCDD	1.36			J	ES 123678-HxCDD	65.9	
123789-HxCDD	0.913			J	ES 123789-HxCDD	69.4	
1234678-HpCDD	45.5				ES 1234678-HpCDD	60.2	
OCDD	335				ES OCDD	41	
2378-TCDF	ND	0.129			ES 2378-TCDF	78.3	
12378-PeCDF	EMPC		0.165	J	ES 12378-PeCDF	79.3	
23478-PeCDF	0.537			J	ES 23478-PeCDF	75.5	
123478-HxCDF	EMPC		0.696	J	ES 123478-HxCDF	69	
123678-HxCDF	0.473			J	ES 123678-HxCDF	70	
234678-HxCDF	EMPC		0.641	J	ES 234678-HxCDF	65.4	
123789-HxCDF	ND	0.157			ES 123789-HxCDF	62.8	
1234678-HpCDF	10.3				ES 1234678-HpCDF	63	
1234789-HpCDF	EMPC		0.555	J	ES 1234789-HpCDF	59	
OCDF	21.5				ES OCDF	45	
Totals					**Standard**	**CS Recoveries**	
					CS 37Cl-2378-TCDD	85.5	
Total TCDD	ND		0.759		CS 12347-PeCDD	92.5	
Total PeCDD	1.69		2.75		CS 12346-PeCDF	86.1	
Total HxCDD	22.6		23.2		CS 123469-HxCDF	75.8	
Total HpCDD	222		222		CS 1234689-HpCDF	70.5	
Total TCDF	1.63		2.96				
Total PeCDF	2.92		5.44				
Total HxCDF	10.8		14.2				
Total HpCDF	30.4		30.9				
Total PCDD/Fs	**649**		**659**				
ITEF TEQs							
TEQ: ND=0	1.52		1.76				
TEQ: ND=DL/2	1.63	0.211	1.86				
TEQ: ND=DL	1.74	0.421	1.97				

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Tel: +1 910 794-1613; Toll-Free 866 846-8290

Sample ID: CS-27 — TEQ Summary — Method 8290A

Client Project Name:	EarthCon	Matrix:	Solid	Lab Sample ID:	B4519_17655_DF_001
Cliend Project ID:	KMCC Navassa	Weight/Volume:	9.48 g	QC Batch No.:	17655
Date Collected:	06-Aug-2020	Split:	-	Date Extracted:	07-Aug-2020
Date Received:	06-Aug-2020	Dilution:	-	Date Analyzed:	10-Aug-2020 17:59
Lab Project No:	B4519	Units	pg/g		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	(0.187)		0.187	(0.187)	(0.187)	(0.187)
12378-PeCDD	[0.17]	J	0.132	[0.0851]	[0.17]	[0.17]
123478-HxCDD	0.647	J	0.09	0.0647	0.0647	0.0647
123678-HxCDD	1.36	J	0.091	0.136	0.136	0.136
123789-HxCDD	0.913	J	0.0826	0.0913	0.0913	0.0913
1234678-HpCDD	45.5		0.108	0.455	0.455	0.455
OCDD	335		0.45	0.335	0.0335	0.101
2378-TCDF	(0.129)		0.129	(0.0129)	(0.0129)	(0.0129)
12378-PeCDF	[0.165]	J	0.131	[0.00826]	[0.00826]	[0.00496]
23478-PeCDF	0.537	J	0.138	0.268	0.268	0.161
123478-HxCDF	[0.696]	J	0.109	[0.0696]	[0.0696]	[0.0696]
123678-HxCDF	0.473	J	0.113	0.0473	0.0473	0.0473
234678-HxCDF	[0.641]	J	0.117	[0.0641]	[0.0641]	[0.0641]
123789-HxCDF	(0.157)		0.157	(0.0157)	(0.0157)	(0.0157)
1234678-HpCDF	10.3		0.0601	0.103	0.103	0.103
1234789-HpCDF	[0.555]	J	0.079	[0.00555]	[0.00555]	[0.00555]
OCDF	21.5		0.326	0.0215	0.00215	0.00646

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TEQ Summaries			
EMPC = 0, ND = 0	1.52	1.2	1.17
EMPC = 0, ND = DL / 2	1.63	1.31	1.27
EMPC = 0, ND = DL	1.74	1.42	1.38
EMPC = 0, < J-level = 0	0.914	0.594	0.665
EMPC = EMPC, ND = 0	1.76	1.52	1.48
EMPC = EMPC, ND = DL / 2	1.86	1.63	1.59
EMPC = EMPC, ND = DL	1.97	1.73	1.7
EMPC = EMPC, < J-level = 0	0.914	0.594	0.665

Checkcode: 108-741-XSN

Sample ID: CS-28

Method 8290A

Client Data		Sample Data		Laboratory Data			
Name:	EarthCon	Matrix:	Solid	Lab Project ID:	B4519	Date Received:	06-Aug-2020
Project ID:	KMCC Navassa	Weight/Volume:	9.25 g	Lab Sample ID	B4519_17655_DF_002	Date Extracted:	07-Aug-2020
Date Collected:	06-Aug-2020	% Solid:	92.3 %	QC Batch No:	17655	Date Analyzed:	10-Aug-2020
		Split:	-	Dilution:	-	Time Analyzed:	18:47:17

Analyte	Conc. (pg/g)	DL (pg/g)	EMPC (pg/g)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	0.171			ES 2378-TCDD	85.8	
12378-PeCDD	EMPC		0.272	J	ES 12378-PeCDD	83.4	
123478-HxCDD	1.33			J	ES 123478-HxCDD	71.8	
123678-HxCDD	2.22			J	ES 123678-HxCDD	73.9	
123789-HxCDD	1.49			J	ES 123789-HxCDD	80.4	
1234678-HpCDD	108				ES 1234678-HpCDD	67.8	
OCDD	935				ES OCDD	49.3	
2378-TCDF	0.228			J	ES 2378-TCDF	86.5	
12378-PeCDF	EMPC		0.142	J	ES 12378-PeCDF	87.4	
23478-PeCDF	EMPC		0.469	J	ES 23478-PeCDF	83.9	
123478-HxCDF	1.03			J	ES 123478-HxCDF	75.7	
123678-HxCDF	EMPC		0.429	J	ES 123678-HxCDF	75.9	
234678-HxCDF	EMPC		0.719	J	ES 234678-HxCDF	72	
123789-HxCDF	ND	0.214			ES 123789-HxCDF	72.8	
1234678-HpCDF	14.6				ES 1234678-HpCDF	69.6	
1234789-HpCDF	0.935			J	ES 1234789-HpCDF	68.6	
OCDF	44.8				ES OCDF	50.2	
Totals					**Standard**	**CS Recoveries**	
					CS 37Cl-2378-TCDD	94.7	
Total TCDD	0.742		1.5		CS 12347-PeCDD	103	
Total PeCDD	4.84		5.83		CS 12346-PeCDF	91.6	
Total HxCDD	62.1		64.5		CS 123469-HxCDF	80.2	
Total HpCDD	621		621		CS 1234689-HpCDF	78.9	
Total TCDF	3.29		5.19				
Total PeCDF	4.13		5.53				
Total HxCDF	13.8		15.2				
Total HpCDF	48.9		48.9				
Total PCDD/Fs	**1,740**		**1,750**				
ITEF TEQs							
TEQ: ND=0	2.85		3.34				
TEQ: ND=DL/2	2.94	0.232	3.43				
TEQ: ND=DL	3.04	0.463	3.53				

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Sample ID: CS-28 — TEQ Summary — Method 8290A

Client Project Name:	EarthCon	Matrix:	Solid	Lab Sample ID:	B4519_17655_DF_002
Cliend Project ID:	KMCC Navassa	Weight/Volume:	9.25 g	QC Batch No.:	17655
Date Collected:	06-Aug-2020	Split:	-	Date Extracted:	07-Aug-2020
Date Received:	06-Aug-2020	Dilution:	-	Date Analyzed:	10-Aug-2020 18:47
Lab Project No:	B4519	Units	pg/g		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	(0.171)		0.171	(0.171)	(0.171)	(0.171)
12378-PeCDD	[0.272]	J	0.148	[0.136]	[0.272]	[0.272]
123478-HxCDD	1.33	J	0.12	0.133	0.133	0.133
123678-HxCDD	2.22	J	0.113	0.222	0.222	0.222
123789-HxCDD	1.49	J	0.107	0.149	0.149	0.149
1234678-HpCDD	108		0.759	1.08	1.08	1.08
OCDD	935		0.262	0.935	0.0935	0.281
2378-TCDF	0.228	J	0.0866	0.0228	0.0228	0.0228
12378-PeCDF	[0.142]	J	0.166	[0.00712]	[0.00712]	[0.00427]
23478-PeCDF	[0.469]	J	0.158	[0.234]	[0.234]	[0.141]
123478-HxCDF	1.03	J	0.166	0.103	0.103	0.103
123678-HxCDF	[0.429]	J	0.154	[0.0429]	[0.0429]	[0.0429]
234678-HxCDF	[0.719]	J	0.175	[0.0719]	[0.0719]	[0.0719]
123789-HxCDF	(0.214)		0.214	(0.0214)	(0.0214)	(0.0214)
1234678-HpCDF	14.6		0.414	0.146	0.146	0.146
1234789-HpCDF	0.935	J	0.494	0.00935	0.00935	0.00935
OCDF	44.8		0.223	0.0448	0.00448	0.0134

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TEQ Summaries			
EMPC = 0, ND = 0	2.85	1.96	2.16
EMPC = 0, ND = DL / 2	2.94	2.06	2.26
EMPC = 0, ND = DL	3.04	2.16	2.35
EMPC = 0, < J-level = 0	2.21	1.33	1.52
EMPC = EMPC, ND = 0	3.34	2.59	2.69
EMPC = EMPC, ND = DL / 2	3.43	2.69	2.79
EMPC = EMPC, ND = DL	3.53	2.78	2.88
EMPC = EMPC, < J-level = 0	2.21	1.33	1.52

Sample ID: CS-32

Method 8290A

Client Data		Sample Data		Laboratory Data			
Name:	EarthCon	Matrix:	Solid	Lab Project ID:	B4519	Date Received:	06-Aug-2020
Project ID:	KMCC Navassa	Weight/Volume:	8.82 g	Lab Sample ID	B4519_17655_DF_003	Date Extracted:	07-Aug-2020
Date Collected:	06-Aug-2020	% Solid:	87.5 %	QC Batch No:	17655	Date Analyzed:	10-Aug-2020
		Split:	-	Dilution:	-	Time Analyzed:	19:34:43

Analyte	Conc. (pg/g)	DL (pg/g)	EMPC (pg/g)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	0.151			ES 2378-TCDD	82.9	
12378-PeCDD	0.18			J	ES 12378-PeCDD	84	
123478-HxCDD	EMPC		0.439	J	ES 123478-HxCDD	71.7	
123678-HxCDD	EMPC		0.849	J	ES 123678-HxCDD	72.8	
123789-HxCDD	0.824			J	ES 123789-HxCDD	74.9	
1234678-HpCDD	35.1				ES 1234678-HpCDD	68.1	
OCDD	326				ES OCDD	54.1	
2378-TCDF	EMPC		0.109	J	ES 2378-TCDF	80.7	
12378-PeCDF	EMPC		0.187	J	ES 12378-PeCDF	84.7	
23478-PeCDF	EMPC		0.308	J	ES 23478-PeCDF	82	
123478-HxCDF	0.494			J	ES 123478-HxCDF	73.4	
123678-HxCDF	0.306			J	ES 123678-HxCDF	74.6	
234678-HxCDF	EMPC		0.43	J	ES 234678-HxCDF	71.8	
123789-HxCDF	ND	0.15			ES 123789-HxCDF	70.3	
1234678-HpCDF	6.58				ES 1234678-HpCDF	70.4	
1234789-HpCDF	0.446			J	ES 1234789-HpCDF	69	
OCDF	16.3				ES OCDF	53.9	
Totals					**Standard**	**CS Recoveries**	
					CS 37Cl-2378-TCDD	90.5	
Total TCDD	ND		0.539		CS 12347-PeCDD	98.9	
Total PeCDD	2.08		2.73		CS 12346-PeCDF	89	
Total HxCDD	13.3		14.6		CS 123469-HxCDF	80.1	
Total HpCDD	117		117		CS 1234689-HpCDF	79.1	
Total TCDF	2.37		6.76				
Total PeCDF	3.93		4.43				
Total HxCDF	3.99		7.61				
Total HpCDF	18.5		18.5				
Total PCDD/Fs	**503**		**514**				
ITEF TEQs							
TEQ: ND=0	1.02		1.36				
TEQ: ND=DL/2	1.1	0.189	1.44				
TEQ: ND=DL	1.18	0.378	1.53				

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Sample ID: CS-32 — TEQ Summary — Method 8290A

Client Project Name:	EarthCon	Matrix:	Solid	Lab Sample ID:	B4519_17655_DF_003
Cliend Project ID:	KMCC Navassa	Weight/Volume:	8.82 g	QC Batch No.:	17655
Date Collected:	06-Aug-2020	Split:	-	Date Extracted:	07-Aug-2020
Date Received:	06-Aug-2020	Dilution:	-	Date Analyzed:	10-Aug-2020 19:34
Lab Project No:	B4519	Units	pg/g		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	(0.151)		0.151	(0.151)	(0.151)	(0.151)
12378-PeCDD	0.18	J	0.122	0.0898	0.18	0.18
123478-HxCDD	[0.439]	J	0.114	[0.0439]	[0.0439]	[0.0439]
123678-HxCDD	[0.849]	J	0.114	[0.0849]	[0.0849]	[0.0849]
123789-HxCDD	0.824	J	0.107	0.0824	0.0824	0.0824
1234678-HpCDD	35.1		0.0979	0.351	0.351	0.351
OCDD	326		0.315	0.326	0.0326	0.0977
2378-TCDF	[0.109]	J	0.0924	[0.0109]	[0.0109]	[0.0109]
12378-PeCDF	[0.187]	J	0.133	[0.00936]	[0.00936]	[0.00562]
23478-PeCDF	[0.308]	J	0.133	[0.154]	[0.154]	[0.0923]
123478-HxCDF	0.494	J	0.113	0.0494	0.0494	0.0494
123678-HxCDF	0.306	J	0.0987	0.0306	0.0306	0.0306
234678-HxCDF	[0.43]	J	0.118	[0.043]	[0.043]	[0.043]
123789-HxCDF	(0.15)		0.15	(0.015)	(0.015)	(0.015)
1234678-HpCDF	6.58		0.0437	0.0658	0.0658	0.0658
1234789-HpCDF	0.446	J	0.0555	0.00446	0.00446	0.00446
OCDF	16.3		0.173	0.0163	0.00163	0.00489

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TEQ Summaries			
EMPC = 0, ND = 0	1.02	0.798	0.866
EMPC = 0, ND = DL / 2	1.1	0.881	0.949
EMPC = 0, ND = DL	1.18	0.963	1.03
EMPC = 0, < J-level = 0	0.759	0.451	0.52
EMPC = EMPC, ND = 0	1.36	1.14	1.15
EMPC = EMPC, ND = DL / 2	1.44	1.23	1.23
EMPC = EMPC, ND = DL	1.53	1.31	1.31
EMPC = EMPC, < J-level = 0	0.759	0.451	0.52

Checkcode: 837-643-CCF

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Sample ID: CS-33

Method 8290A

Client Data		Sample Data		Laboratory Data			
Name:	EarthCon	Matrix:	Solid	Lab Project ID:	B4519	Date Received:	06-Aug-2020
Project ID:	KMCC Navassa	Weight/Volume:	9.42 g	Lab Sample ID	B4519_17655_DF_004	Date Extracted:	07-Aug-2020
Date Collected:	06-Aug-2020	% Solid:	92.3 %	QC Batch No:	17655	Date Analyzed:	10-Aug-2020
		Split:	-	Dilution:	-	Time Analyzed:	20:22:09

Analyte	Conc. (pg/g)	DL (pg/g)	EMPC (pg/g)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	0.184			ES 2378-TCDD	82	
12378-PeCDD	0.312			J	ES 12378-PeCDD	84.8	
123478-HxCDD	1.02			J	ES 123478-HxCDD	71	
123678-HxCDD	2.26			J	ES 123678-HxCDD	70.5	
123789-HxCDD	1.82			J	ES 123789-HxCDD	73.6	
1234678-HpCDD	85.6				ES 1234678-HpCDD	66	
OCDD	653				ES OCDD	48.7	
2378-TCDF	EMPC		0.125	J	ES 2378-TCDF	80.8	
12378-PeCDF	ND	0.134			ES 12378-PeCDF	83.9	
23478-PeCDF	EMPC		0.495	J	ES 23478-PeCDF	80.9	
123478-HxCDF	1.46			J	ES 123478-HxCDF	73.2	
123678-HxCDF	0.681			J	ES 123678-HxCDF	73.8	
234678-HxCDF	EMPC		1.05	J	ES 234678-HxCDF	71.2	
123789-HxCDF	ND	0.116			ES 123789-HxCDF	69.2	
1234678-HpCDF	18.6				ES 1234678-HpCDF	67.9	
1234789-HpCDF	1.62			J	ES 1234789-HpCDF	64.5	
OCDF	47.3				ES OCDF	49.9	
Totals					**Standard**	**CS Recoveries**	
					CS 37Cl-2378-TCDD	95.2	
Total TCDD	0.625		0.625		CS 12347-PeCDD	102	
Total PeCDD	2.01		2.67		CS 12346-PeCDF	91	
Total HxCDD	28.1		28.1		CS 123469-HxCDF	80.6	
Total HpCDD	264		264		CS 1234689-HpCDF	77.8	
Total TCDF	2.58		3.45				
Total PeCDF	5.25		6.28				
Total HxCDF	24.3		25.4				
Total HpCDF	61.3		61.3				
Total PCDD/Fs	**1,090**		**1,090**				
ITEF TEQs							
TEQ: ND=0	2.64		3				
TEQ: ND=DL/2	2.74	0.196	3.11				
TEQ: ND=DL	2.84	0.392	3.21				

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Sample ID: CS-33 — TEQ Summary — Method 8290A

Client Project Name:	EarthCon	Matrix:	Solid	Lab Sample ID:	B4519_17655_DF_004
Cliend Project ID:	KMCC Navassa	Weight/Volume:	9.42 g	QC Batch No.:	17655
Date Collected:	06-Aug-2020	Split:	-	Date Extracted:	07-Aug-2020
Date Received:	06-Aug-2020	Dilution:	-	Date Analyzed:	10-Aug-2020 20:22
Lab Project No:	B4519	Units	pg/g		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	(0.184)		0.184	(0.184)	(0.184)	(0.184)
12378-PeCDD	0.312	J	0.117	0.156	0.312	0.312
123478-HxCDD	1.02	J	0.099	0.102	0.102	0.102
123678-HxCDD	2.26	J	0.0993	0.226	0.226	0.226
123789-HxCDD	1.82	J	0.0927	0.182	0.182	0.182
1234678-HpCDD	85.6		0.126	0.856	0.856	0.856
OCDD	653		0.357	0.653	0.0653	0.196
2378-TCDF	[0.125]	J	0.0816	[0.0125]	[0.0125]	[0.0125]
12378-PeCDF	(0.134)		0.134	(0.00669)	(0.00669)	(0.00401)
23478-PeCDF	[0.495]	J	0.132	[0.247]	[0.247]	[0.148]
123478-HxCDF	1.46	J	0.0791	0.146	0.146	0.146
123678-HxCDF	0.681	J	0.0776	0.0681	0.0681	0.0681
234678-HxCDF	[1.05]	J	0.0877	[0.105]	[0.105]	[0.105]
123789-HxCDF	(0.116)		0.116	(0.0116)	(0.0116)	(0.0116)
1234678-HpCDF	18.6		0.0694	0.186	0.186	0.186
1234789-HpCDF	1.62	J	0.087	0.0162	0.0162	0.0162
OCDF	47.3		0.241	0.0473	0.00473	0.0142

TEQ Summaries			
EMPC = 0, ND = 0	2.64	2.16	2.3
EMPC = 0, ND = DL / 2	2.74	2.26	2.4
EMPC = 0, ND = DL	2.84	2.37	2.5
EMPC = 0, < J-level = 0	1.74	1.11	1.25
EMPC = EMPC, ND = 0	3	2.53	2.57
EMPC = EMPC, ND = DL / 2	3.11	2.63	2.67
EMPC = EMPC, ND = DL	3.21	2.73	2.77
EMPC = EMPC, < J-level = 0	1.74	1.11	1.25

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Checkcode: 132-368-VHH

Sample ID: CS-34

Method 8290A

Client Data		Sample Data		Laboratory Data			
Name:	EarthCon	Matrix:	Solid	Lab Project ID:	B4519	Date Received:	06-Aug-2020
Project ID:	KMCC Navassa	Weight/Volume:	9.40 g	Lab Sample ID	B4519_17655_DF_005	Date Extracted:	07-Aug-2020
Date Collected:	06-Aug-2020	% Solid:	93.0 %	QC Batch No:	17655	Date Analyzed:	10-Aug-2020
		Split:	-	Dilution:	-	Time Analyzed:	21:09:40

Analyte	Conc. (pg/g)	DL (pg/g)	EMPC (pg/g)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	0.172			ES 2378-TCDD	81.7	
12378-PeCDD	EMPC		0.3	J	ES 12378-PeCDD	86.8	
123478-HxCDD	EMPC		1.1	J	ES 123478-HxCDD	72.2	
123678-HxCDD	2.54			J	ES 123678-HxCDD	73.9	
123789-HxCDD	EMPC		1.58	J	ES 123789-HxCDD	78.2	
1234678-HpCDD	100				ES 1234678-HpCDD	68.4	
OCDD	750				ES OCDD	53	
2378-TCDF	EMPC		0.205	J	ES 2378-TCDF	78.5	
12378-PeCDF	0.24			J	ES 12378-PeCDF	86	
23478-PeCDF	0.455			J	ES 23478-PeCDF	84	
123478-HxCDF	1.3			J	ES 123478-HxCDF	75.6	
123678-HxCDF	0.577			J	ES 123678-HxCDF	76.1	
234678-HxCDF	EMPC		0.837	J	ES 234678-HxCDF	73.8	
123789-HxCDF	ND	0.238			ES 123789-HxCDF	71.2	
1234678-HpCDF	17.4				ES 1234678-HpCDF	72.6	
1234789-HpCDF	1.74			J	ES 1234789-HpCDF	67.1	
OCDF	49.4				ES OCDF	53.1	
Totals					**Standard**	**CS Recoveries**	
					CS 37Cl-2378-TCDD	88.4	
Total TCDD	0.498		0.498		CS 12347-PeCDD	99.3	
Total PeCDD	0.919		3.27		CS 12346-PeCDF	89.5	
Total HxCDD	35.7		38.4		CS 123469-HxCDF	78.6	
Total HpCDD	384		384		CS 1234689-HpCDF	76.8	
Total TCDF	1.18		3.03				
Total PeCDF	4.74		5.2				
Total HxCDF	21.9		23				
Total HpCDF	60.3		60.3				
Total PCDD/Fs	**1,310**		**1,320**				
ITEF TEQs							
TEQ: ND=0	2.67		3.2				
TEQ: ND=DL/2	2.77	0.201	3.29				
TEQ: ND=DL	2.87	0.401	3.39				

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Sample ID: CS-34 — TEQ Summary — Method 8290A

Client Project Name:	EarthCon	Matrix:	Solid	Lab Sample ID:	B4519_17655_DF_005
Cliend Project ID:	KMCC Navassa	Weight/Volume:	9.40 g	QC Batch No.:	17655
Date Collected:	06-Aug-2020	Split:	-	Date Extracted:	07-Aug-2020
Date Received:	06-Aug-2020	Dilution:	-	Date Analyzed:	10-Aug-2020 21:09
Lab Project No:	B4519	Units	pg/g		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	(0.172)		0.172	(0.172)	(0.172)	(0.172)
12378-PeCDD	[0.3]	J	0.125	[0.15]	[0.3]	[0.3]
123478-HxCDD	[1.1]	J	0.087	[0.11]	[0.11]	[0.11]
123678-HxCDD	2.54	J	0.0861	0.254	0.254	0.254
123789-HxCDD	[1.58]	J	0.0803	[0.158]	[0.158]	[0.158]
1234678-HpCDD	100		0.113	1	1	1
OCDD	750		0.382	0.75	0.075	0.225
2378-TCDF	[0.205]	J	0.0938	[0.0205]	[0.0205]	[0.0205]
12378-PeCDF	0.24	J	0.098	0.012	0.012	0.00721
23478-PeCDF	0.455	J	0.094	0.227	0.227	0.136
123478-HxCDF	1.3	J	0.165	0.13	0.13	0.13
123678-HxCDF	0.577	J	0.177	0.0577	0.0577	0.0577
234678-HxCDF	[0.837]	J	0.188	[0.0837]	[0.0837]	[0.0837]
123789-HxCDF	(0.238)		0.238	(0.0238)	(0.0238)	(0.0238)
1234678-HpCDF	17.4		0.0531	0.174	0.174	0.174
1234789-HpCDF	1.74	J	0.0664	0.0174	0.0174	0.0174
OCDF	49.4		0.253	0.0494	0.00494	0.0148

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TEQ Summaries			
EMPC = 0, ND = 0	2.67	1.95	2.02
EMPC = 0, ND = DL / 2	2.77	2.05	2.12
EMPC = 0, ND = DL	2.87	2.15	2.21
EMPC = 0, < J-level = 0	1.97	1.26	1.42
EMPC = EMPC, ND = 0	3.2	2.63	2.69
EMPC = EMPC, ND = DL / 2	3.29	2.72	2.79
EMPC = EMPC, ND = DL	3.39	2.82	2.89
EMPC = EMPC, < J-level = 0	1.97	1.26	1.42

Sample ID: CS-38

Method 8290A

Client Data		Sample Data		Laboratory Data			
Name:	EarthCon	Matrix:	Solid	Lab Project ID:	B4519	Date Received:	06-Aug-2020
Project ID:	KMCC Navassa	Weight/Volume:	9.09 g	Lab Sample ID	B4519_17655_DF_006	Date Extracted:	07-Aug-2020
Date Collected:	06-Aug-2020	% Solid:	89.6 %	QC Batch No:	17655	Date Analyzed:	10-Aug-2020
		Split:	-	Dilution:	-	Time Analyzed:	21:57:17

Analyte	Conc. (pg/g)	DL (pg/g)	EMPC (pg/g)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	0.211			ES 2378-TCDD	80	
12378-PeCDD	ND	0.197			ES 12378-PeCDD	81.8	
123478-HxCDD	EMPC		0.257	J	ES 123478-HxCDD	71.5	
123678-HxCDD	0.579			J	ES 123678-HxCDD	70.7	
123789-HxCDD	0.683			J	ES 123789-HxCDD	75.5	
1234678-HpCDD	EMPC		6.8		ES 1234678-HpCDD	64.1	
OCDD	52.3				ES OCDD	49.7	
2378-TCDF	ND	0.0903			ES 2378-TCDF	81.7	
12378-PeCDF	ND	0.149			ES 12378-PeCDF	81.8	
23478-PeCDF	0.247			J	ES 23478-PeCDF	78.6	
123478-HxCDF	0.241			J	ES 123478-HxCDF	74.2	
123678-HxCDF	EMPC		0.181	J	ES 123678-HxCDF	74.2	
234678-HxCDF	EMPC		0.397	J	ES 234678-HxCDF	69.6	
123789-HxCDF	ND	0.0994			ES 123789-HxCDF	69.3	
1234678-HpCDF	1.85			J	ES 1234678-HpCDF	67.5	
1234789-HpCDF	0.195			J	ES 1234789-HpCDF	65.2	
OCDF	2.37			J	ES OCDF	50.4	
Totals					**Standard**	**CS Recoveries**	
					CS 37Cl-2378-TCDD	92.4	
Total TCDD	ND		0.909		CS 12347-PeCDD	98.2	
Total PeCDD	1.37		1.83		CS 12346-PeCDF	88.5	
Total HxCDD	4.86		6.34		CS 123469-HxCDF	82	
Total HpCDD	12.1		18.9		CS 1234689-HpCDF	79.1	
Total TCDF	1.78		2.54				
Total PeCDF	1.26		2.29				
Total HxCDF	2.16		3.05				
Total HpCDF	3.72		4				
Total PCDD/Fs	**81.9**		**94.5**				
ITEF TEQs							
TEQ: ND=0	0.349		0.5				
TEQ: ND=DL/2	0.517	0.237	0.668				
TEQ: ND=DL	0.685	0.474	0.836				

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Sample ID: CS-38 — TEQ Summary — Method 8290A

Client Project Name:	EarthCon	Matrix:	Solid	Lab Sample ID:	B4519_17655_DF_006
Cliend Project ID:	KMCC Navassa	Weight/Volume:	9.09 g	QC Batch No.:	17655
Date Collected:	06-Aug-2020	Split:	-	Date Extracted:	07-Aug-2020
Date Received:	06-Aug-2020	Dilution:	-	Date Analyzed:	10-Aug-2020 21:57
Lab Project No:	B4519	Units	pg/g		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	(0.211)		0.211	(0.211)	(0.211)	(0.211)
12378-PeCDD	(0.197)		0.197	(0.0986)	(0.197)	(0.197)
123478-HxCDD	[0.257]	J	0.122	[0.0257]	[0.0257]	[0.0257]
123678-HxCDD	0.579	J	0.118	0.0579	0.0579	0.0579
123789-HxCDD	0.683	J	0.11	0.0683	0.0683	0.0683
1234678-HpCDD	[6.8]		0.147	[0.068]	[0.068]	[0.068]
OCDD	52.3		0.316	0.0523	0.00523	0.0157
2378-TCDF	(0.0903)		0.0903	(0.00903)	(0.00903)	(0.00903)
12378-PeCDF	(0.149)		0.149	(0.00746)	(0.00746)	(0.00447)
23478-PeCDF	0.247	J	0.151	0.123	0.123	0.0741
123478-HxCDF	0.241	J	0.0746	0.0241	0.0241	0.0241
123678-HxCDF	[0.181]	J	0.0771	[0.0181]	[0.0181]	[0.0181]
234678-HxCDF	[0.397]	J	0.0882	[0.0397]	[0.0397]	[0.0397]
123789-HxCDF	(0.0994)		0.0994	(0.00994)	(0.00994)	(0.00994)
1234678-HpCDF	1.85	J	0.0742	0.0185	0.0185	0.0185
1234789-HpCDF	0.195	J	0.0866	0.00195	0.00195	0.00195
OCDF	2.37	J	0.226	0.00237	0.000237	0.000711

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TEQ Summaries			
EMPC = 0, ND = 0	0.349	0.3	0.261
EMPC = 0, ND = DL / 2	0.517	0.517	0.477
EMPC = 0, ND = DL	0.685	0.734	0.693
EMPC = 0, < J-level = 0	0.0523	0.00523	0.0157
EMPC = EMPC, ND = 0	0.5	0.451	0.413
EMPC = EMPC, ND = DL / 2	0.668	0.668	0.629
EMPC = EMPC, ND = DL	0.836	0.886	0.844
EMPC = EMPC, < J-level = 0	0.12	0.0732	0.0837

Checkcode: 916-748-ZYH

Sample ID: CS-39

Method 8290A

Client Data		Sample Data		Laboratory Data			
Name:	EarthCon	Matrix:	Solid	Lab Project ID:	B4519	Date Received:	06-Aug-2020
Project ID:	KMCC Navassa	Weight/Volume:	9.24 g	Lab Sample ID	B4519_17655_DF_007	Date Extracted:	07-Aug-2020
Date Collected:	06-Aug-2020	% Solid:	91.0 %	QC Batch No:	17655	Date Analyzed:	11-Aug-2020
		Split:	-	Dilution:	-	Time Analyzed:	1:14:44

Analyte	Conc. (pg/g)	DL (pg/g)	EMPC (pg/g)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	0.166			ES 2378-TCDD	72.7	
12378-PeCDD	0.235			J	ES 12378-PeCDD	71.3	
123478-HxCDD	EMPC		0.329	J	ES 123478-HxCDD	64.1	
123678-HxCDD	0.717			J	ES 123678-HxCDD	60.9	
123789-HxCDD	0.727			J	ES 123789-HxCDD	66.2	
1234678-HpCDD	17.3				ES 1234678-HpCDD	56.2	
OCDD	304				ES OCDD	43.2	
2378-TCDF	0.171			J	ES 2378-TCDF	75.2	
12378-PeCDF	0.228			J	ES 12378-PeCDF	73.8	
23478-PeCDF	EMPC		0.285	J	ES 23478-PeCDF	72	
123478-HxCDF	EMPC		0.276	J	ES 123478-HxCDF	66.5	
123678-HxCDF	EMPC		0.358	J	ES 123678-HxCDF	66.2	
234678-HxCDF	0.342			J	ES 234678-HxCDF	62.5	
123789-HxCDF	ND	0.136			ES 123789-HxCDF	60.9	
1234678-HpCDF	1.87			J	ES 1234678-HpCDF	59.3	
1234789-HpCDF	EMPC		0.303	J	ES 1234789-HpCDF	55.9	
OCDF	EMPC		3.09	J	ES OCDF	42.1	
Totals					**Standard**	**CS Recoveries**	
					CS 37Cl-2378-TCDD	92.7	
Total TCDD	0.408		0.408		CS 12347-PeCDD	96.8	
Total PeCDD	1.98		2.14		CS 12346-PeCDF	89.1	
Total HxCDD	4.4		7.88		CS 123469-HxCDF	82.6	
Total HpCDD	52.4		52.4		CS 1234689-HpCDF	76.8	
Total TCDF	0.587		1.75				
Total PeCDF	0.228		2.05				
Total HxCDF	2.43		3.51				
Total HpCDF	4.36		4.66				
Total PCDD/Fs	**371**		**382**				
ITEF TEQs							
TEQ: ND=0	0.821		1.07				
TEQ: ND=DL/2	0.91	0.189	1.16				
TEQ: ND=DL	1	0.378	1.25				

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Sample ID: CS-39 — TEQ Summary — Method 8290A

Client Project Name:	EarthCon	Matrix:	Solid	Lab Sample ID:	B4519_17655_DF_007
Cliend Project ID:	KMCC Navassa	Weight/Volume:	9.24 g	QC Batch No.:	17655
Date Collected:	06-Aug-2020	Split:	-	Date Extracted:	07-Aug-2020
Date Received:	06-Aug-2020	Dilution:	-	Date Analyzed:	11-Aug-2020 01:14
Lab Project No:	B4519	Units	pg/g		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	(0.166)		0.166	(0.166)	(0.166)	(0.166)
12378-PeCDD	0.235	J	0.132	0.117	0.235	0.235
123478-HxCDD	[0.329]	J	0.109	[0.0329]	[0.0329]	[0.0329]
123678-HxCDD	0.717	J	0.118	0.0717	0.0717	0.0717
123789-HxCDD	0.727	J	0.102	0.0727	0.0727	0.0727
1234678-HpCDD	17.3		0.114	0.173	0.173	0.173
OCDD	304		0.484	0.304	0.0304	0.0913
2378-TCDF	0.171	J	0.0977	0.0171	0.0171	0.0171
12378-PeCDF	0.228	J	0.108	0.0114	0.0114	0.00683
23478-PeCDF	[0.285]	J	0.103	[0.143]	[0.143]	[0.0856]
123478-HxCDF	[0.276]	J	0.0907	[0.0276]	[0.0276]	[0.0276]
123678-HxCDF	[0.358]	J	0.0944	[0.0358]	[0.0358]	[0.0358]
234678-HxCDF	0.342	J	0.11	0.0342	0.0342	0.0342
123789-HxCDF	(0.136)		0.136	(0.0136)	(0.0136)	(0.0136)
1234678-HpCDF	1.87	J	0.0721	0.0187	0.0187	0.0187
1234789-HpCDF	[0.303]	J	0.0938	[0.00303]	[0.00303]	[0.00303]
OCDF	[3.09]	J	0.288	[0.00309]	[0.000309]	[0.000927]

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TEQ Summaries			
EMPC = 0, ND = 0	0.821	0.664	0.72
EMPC = 0, ND = DL / 2	0.91	0.754	0.81
EMPC = 0, ND = DL	1	0.843	0.9
EMPC = 0, < J-level = 0	0.478	0.204	0.265
EMPC = EMPC, ND = 0	1.07	0.907	0.906
EMPC = EMPC, ND = DL / 2	1.16	0.996	0.996
EMPC = EMPC, ND = DL	1.25	1.09	1.09
EMPC = EMPC, < J-level = 0	0.478	0.204	0.265

Checkcode: 970-709-FLQ

Sample ID: CS-35

Method 8290A

Client Data		Sample Data		Laboratory Data			
Name:	EarthCon	Matrix:	Solid	Lab Project ID:	B4519	Date Received:	06-Aug-2020
Project ID:	KMCC Navassa	Weight/Volume:	9.38 g	Lab Sample ID	B4519_17655_DF_008	Date Extracted:	07-Aug-2020
Date Collected:	06-Aug-2020	% Solid:	89.9 %	QC Batch No:	17655	Date Analyzed:	11-Aug-2020
		Split:	-	Dilution:	-	Time Analyzed:	2:02:16

Analyte	Conc. (pg/g)	DL (pg/g)	EMPC (pg/g)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	0.115			J	ES 2378-TCDD	81.8	
12378-PeCDD	EMPC		0.407	J	ES 12378-PeCDD	83.7	
123478-HxCDD	1.8			J	ES 123478-HxCDD	70.8	
123678-HxCDD	4.21				ES 123678-HxCDD	70.5	
123789-HxCDD	3.11				ES 123789-HxCDD	75.6	
1234678-HpCDD	158				ES 1234678-HpCDD	65.3	
OCDD	1,360				ES OCDD	50.3	
2378-TCDF	EMPC		0.254	J	ES 2378-TCDF	82.8	
12378-PeCDF	0.407			J	ES 12378-PeCDF	87.7	
23478-PeCDF	0.987			J	ES 23478-PeCDF	83.1	
123478-HxCDF	2.73				ES 123478-HxCDF	72.4	
123678-HxCDF	1.25			J	ES 123678-HxCDF	72	
234678-HxCDF	2.03			J	ES 234678-HxCDF	68.2	
123789-HxCDF	ND	0.3			ES 123789-HxCDF	69.6	
1234678-HpCDF	34.7				ES 1234678-HpCDF	66	
1234789-HpCDF	3.46				ES 1234789-HpCDF	65.2	
OCDF	109				ES OCDF	48.7	
Totals					**Standard**	**CS Recoveries**	
					CS 37Cl-2378-TCDD	90.5	
Total TCDD	1.88		3.06		CS 12347-PeCDD	97.2	
Total PeCDD	4.69		6.42		CS 12346-PeCDF	89.9	
Total HxCDD	53.5		54.9		CS 123469-HxCDF	74.1	
Total HpCDD	520		520		CS 1234689-HpCDF	75	
Total TCDF	5.3		8.18				
Total PeCDF	8.51		10.4				
Total HxCDF	43.6		43.6				
Total HpCDF	118		118				
Total PCDD/Fs	**2,220**		**2,230**				
ITEF TEQs							
TEQ: ND=0	5.57		5.8				
TEQ: ND=DL/2	5.58	0.23	5.81				
TEQ: ND=DL	5.6	0.46	5.83				

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Sample ID: CS-35 — TEQ Summary — Method 8290A

Client Project Name:	EarthCon	Matrix:	Solid	Lab Sample ID:	B4519_17655_DF_008
Cliend Project ID:	KMCC Navassa	Weight/Volume:	9.38 g	QC Batch No.:	17655
Date Collected:	06-Aug-2020	Split:	-	Date Extracted:	07-Aug-2020
Date Received:	06-Aug-2020	Dilution:	-	Date Analyzed:	11-Aug-2020 02:02
Lab Project No:	B4519	Units	pg/g		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	0.115	J	0.147	0.115	0.115	0.115
12378-PeCDD	[0.407]	J	0.158	[0.204]	[0.407]	[0.407]
123478-HxCDD	1.8	J	0.134	0.18	0.18	0.18
123678-HxCDD	4.21		0.147	0.421	0.421	0.421
123789-HxCDD	3.11		0.125	0.311	0.311	0.311
1234678-HpCDD	158		0.11	1.58	1.58	1.58
OCDD	1360		0.37	1.36	0.136	0.407
2378-TCDF	[0.254]	J	0.0837	[0.0254]	[0.0254]	[0.0254]
12378-PeCDF	0.407	J	0.147	0.0203	0.0203	0.0122
23478-PeCDF	0.987	J	0.153	0.494	0.494	0.296
123478-HxCDF	2.73		0.226	0.273	0.273	0.273
123678-HxCDF	1.25	J	0.222	0.125	0.125	0.125
234678-HxCDF	2.03	J	0.239	0.203	0.203	0.203
123789-HxCDF	(0.3)		0.3	(0.03)	(0.03)	(0.03)
1234678-HpCDF	34.7		0.064	0.347	0.347	0.347
1234789-HpCDF	3.46		0.0868	0.0346	0.0346	0.0346
OCDF	109		0.278	0.109	0.0109	0.0328

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TEQ Summaries			
EMPC = 0, ND = 0	5.57	4.25	4.33
EMPC = 0, ND = DL / 2	5.58	4.26	4.35
EMPC = 0, ND = DL	5.6	4.28	4.36
EMPC = 0, < J-level = 0	4.43	3.11	3.4
EMPC = EMPC, ND = 0	5.8	4.68	4.77
EMPC = EMPC, ND = DL / 2	5.81	4.69	4.78
EMPC = EMPC, ND = DL	5.83	4.71	4.8
EMPC = EMPC, < J-level = 0	4.43	3.11	3.4

Checkcode: 005-628-YFS

Sample ID: CS-36

Method 8290A

Client Data		Sample Data		Laboratory Data			
Name:	EarthCon	Matrix:	Solid	Lab Project ID:	B4519	Date Received:	06-Aug-2020
Project ID:	KMCC Navassa	Weight/Volume:	9.50 g	Lab Sample ID	B4519_17655_DF_009	Date Extracted:	07-Aug-2020
Date Collected:	06-Aug-2020	% Solid:	90.3 %	QC Batch No:	17655	Date Analyzed:	11-Aug-2020
		Split:	-	Dilution:	-	Time Analyzed:	2:49:50

Analyte	Conc. (pg/g)	DL (pg/g)	EMPC (pg/g)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	0.131			ES 2378-TCDD	87.8	
12378-PeCDD	0.577			J	ES 12378-PeCDD	86.9	
123478-HxCDD	3.18				ES 123478-HxCDD	73.8	
123678-HxCDD	7.94				ES 123678-HxCDD	72.9	
123789-HxCDD	5.77				ES 123789-HxCDD	78.4	
1234678-HpCDD	320				ES 1234678-HpCDD	67.1	
OCDD	2,280				ES OCDD	48.8	
2378-TCDF	EMPC		0.0626	J	ES 2378-TCDF	86.3	
12378-PeCDF	EMPC		0.151	J	ES 12378-PeCDF	89.6	
23478-PeCDF	EMPC		0.635	J	ES 23478-PeCDF	84.7	
123478-HxCDF	4.07				ES 123478-HxCDF	77.1	
123678-HxCDF	1.68			J	ES 123678-HxCDF	76.1	
234678-HxCDF	3.16				ES 234678-HxCDF	71.7	
123789-HxCDF	ND	0.381			ES 123789-HxCDF	73.5	
1234678-HpCDF	62				ES 1234678-HpCDF	70.6	
1234789-HpCDF	6.82				ES 1234789-HpCDF	67.8	
OCDF	193				ES OCDF	49.1	
Totals					**Standard**	**CS Recoveries**	
					CS 37Cl-2378-TCDD	95	
Total TCDD	0.86		1.03		CS 12347-PeCDD	101	
Total PeCDD	3.66		4.93		CS 12346-PeCDF	92.3	
Total HxCDD	78		78		CS 123469-HxCDF	82.3	
Total HpCDD	838		838		CS 1234689-HpCDF	78.4	
Total TCDF	2.08		3.48				
Total PeCDF	8.61		10.6				
Total HxCDF	79.6		79.6				
Total HpCDF	234		234				
Total PCDD/Fs	**3,710**		**3,720**				
ITEF TEQs							
TEQ: ND=0	9.23		9.56				
TEQ: ND=DL/2	9.31	0.223	9.64				
TEQ: ND=DL	9.4	0.445	9.73				

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Sample ID: CS-36 — TEQ Summary — Method 8290A

Client Project Name:	EarthCon	Matrix:	Solid	Lab Sample ID:	B4519_17655_DF_009
Cliend Project ID:	KMCC Navassa	Weight/Volume:	9.50 g	QC Batch No.:	17655
Date Collected:	06-Aug-2020	Split:	-	Date Extracted:	07-Aug-2020
Date Received:	06-Aug-2020	Dilution:	-	Date Analyzed:	11-Aug-2020 02:49
Lab Project No:	B4519	Units	pg/g		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	(0.131)		0.131	(0.131)	(0.131)	(0.131)
12378-PeCDD	0.577	J	0.142	0.288	0.577	0.577
123478-HxCDD	3.18		0.113	0.318	0.318	0.318
123678-HxCDD	7.94		0.122	0.794	0.794	0.794
123789-HxCDD	5.77		0.11	0.577	0.577	0.577
1234678-HpCDD	320		0.124	3.2	3.2	3.2
OCDD	2280		0.36	2.28	0.228	0.683
2378-TCDF	[0.0626]	J	0.0919	[0.00626]	[0.00626]	[0.00626]
12378-PeCDF	[0.151]	J	0.118	[0.00757]	[0.00757]	[0.00454]
23478-PeCDF	[0.635]	J	0.126	[0.318]	[0.318]	[0.191]
123478-HxCDF	4.07		0.277	0.407	0.407	0.407
123678-HxCDF	1.68	J	0.289	0.168	0.168	0.168
234678-HxCDF	3.16		0.319	0.316	0.316	0.316
123789-HxCDF	(0.381)		0.381	(0.0381)	(0.0381)	(0.0381)
1234678-HpCDF	62		0.0935	0.62	0.62	0.62
1234789-HpCDF	6.82		0.123	0.0682	0.0682	0.0682
OCDF	193		0.33	0.193	0.0193	0.0579

TEQ Summaries			
EMPC = 0, ND = 0	9.23	7.29	7.79
EMPC = 0, ND = DL / 2	9.31	7.38	7.87
EMPC = 0, ND = DL	9.4	7.46	7.95
EMPC = 0, < J-level = 0	8.77	6.55	7.04
EMPC = EMPC, ND = 0	9.56	7.62	7.99
EMPC = EMPC, ND = DL / 2	9.64	7.71	8.07
EMPC = EMPC, ND = DL	9.73	7.79	8.16
EMPC = EMPC, < J-level = 0	8.77	6.55	7.04

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Checkcode: 564-159-MLQ

Sample ID: CS-37

Method 8290A

Client Data		Sample Data		Laboratory Data			
Name:	EarthCon	Matrix:	Solid	Lab Project ID:	B4519	Date Received:	06-Aug-2020
Project ID:	KMCC Navassa	Weight/Volume:	9.14 g	Lab Sample ID	B4519_17655_DF_010	Date Extracted:	07-Aug-2020
Date Collected:	06-Aug-2020	% Solid:	90.5 %	QC Batch No:	17655	Date Analyzed:	11-Aug-2020
		Split:	-	Dilution:	-	Time Analyzed:	3:37:23

Analyte	Conc. (pg/g)	DL (pg/g)	EMPC (pg/g)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	EMPC		0.147	J	ES 2378-TCDD	85.1	
12378-PeCDD	EMPC		0.502	J	ES 12378-PeCDD	83.6	
123478-HxCDD	18.3				ES 123478-HxCDD	67.9	
123678-HxCDD	24.9				ES 123678-HxCDD	65.9	
123789-HxCDD	11.4				ES 123789-HxCDD	69.6	
1234678-HpCDD	2,280				ES 1234678-HpCDD	67.6	
OCDD	10,300				ES OCDD	54	
2378-TCDF	0.241			J	ES 2378-TCDF	80.8	
12378-PeCDF	0.275			J	ES 12378-PeCDF	88.5	
23478-PeCDF	EMPC		0.549	J	ES 23478-PeCDF	82.1	
123478-HxCDF	3.59				ES 123478-HxCDF	70.8	
123678-HxCDF	1.45			J	ES 123678-HxCDF	66.6	
234678-HxCDF	2.41			J	ES 234678-HxCDF	66.4	
123789-HxCDF	ND	0.483			ES 123789-HxCDF	68.6	
1234678-HpCDF	84.4				ES 1234678-HpCDF	65.9	
1234789-HpCDF	7.63				ES 1234789-HpCDF	66.5	
OCDF	369				ES OCDF	52.8	
Totals					**Standard**	**CS Recoveries**	
					CS 37Cl-2378-TCDD	95.7	
Total TCDD	0.82		1.85		CS 12347-PeCDD	99.8	
Total PeCDD	54		55.6		CS 12346-PeCDF	90.2	
Total HxCDD	1,880		1,880		CS 123469-HxCDF	73.9	
Total HpCDD	19,500		19,500	E	CS 1234689-HpCDF	76.8	
Total TCDF	3.14		5.47				
Total PeCDF	6.75		7.3				
Total HxCDF	81.3		81.3				
Total HpCDF	392		392				
Total PCDD/Fs	**32,600**		**32,600**	E			
ITEF TEQs							
TEQ: ND=0	40.7		41.3				
TEQ: ND=DL/2	40.7	0.251	41.4				
TEQ: ND=DL	40.7	0.503	41.4				

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Sample ID: CS-37 — TEQ Summary — Method 8290A

Client Project Name:	EarthCon	Matrix:	Solid	Lab Sample ID:	B4519_17655_DF_010
Cliend Project ID:	KMCC Navassa	Weight/Volume:	9.14 g	QC Batch No.:	17655
Date Collected:	06-Aug-2020	Split:	-	Date Extracted:	07-Aug-2020
Date Received:	06-Aug-2020	Dilution:	-	Date Analyzed:	11-Aug-2020 03:37
Lab Project No:	B4519	Units	pg/g		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	[0.147]	J	0.137	[0.147]	[0.147]	[0.147]
12378-PeCDD	[0.502]	J	0.169	[0.251]	[0.502]	[0.502]
123478-HxCDD	18.3		0.139	1.83	1.83	1.83
123678-HxCDD	24.9		0.149	2.49	2.49	2.49
123789-HxCDD	11.4		0.134	1.14	1.14	1.14
1234678-HpCDD	2280		0.106	22.8	22.8	22.8
OCDD	10300		0.426	10.3	1.03	3.08
2378-TCDF	0.241	J	0.103	0.0241	0.0241	0.0241
12378-PeCDF	0.275	J	0.0996	0.0138	0.0138	0.00826
23478-PeCDF	[0.549]	J	0.115	[0.275]	[0.275]	[0.165]
123478-HxCDF	3.59		0.355	0.359	0.359	0.359
123678-HxCDF	1.45	J	0.396	0.145	0.145	0.145
234678-HxCDF	2.41	J	0.396	0.241	0.241	0.241
123789-HxCDF	(0.483)		0.483	(0.0483)	(0.0483)	(0.0483)
1234678-HpCDF	84.4		0.0617	0.844	0.844	0.844
1234789-HpCDF	7.63		0.0807	0.0763	0.0763	0.0763
OCDF	369		0.197	0.369	0.0369	0.111

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TEQ Summaries			
EMPC = 0, ND = 0	40.7	31.1	33.2
EMPC = 0, ND = DL / 2	40.7	31.1	33.2
EMPC = 0, ND = DL	40.7	31.1	33.2
EMPC = 0, < J-level = 0	40.2	30.7	32.8
EMPC = EMPC, ND = 0	41.3	32	34
EMPC = EMPC, ND = DL / 2	41.4	32	34
EMPC = EMPC, ND = DL	41.4	32	34.1
EMPC = EMPC, < J-level = 0	40.2	30.7	32.8

Checkcode: 407-770-NGH

SGS North America - DF v0.7

Sample ID: DUP-02

Method 8290A

Client Data		Sample Data		Laboratory Data			
Name:	EarthCon	Matrix:	Solid	Lab Project ID:	B4519	Date Received:	06-Aug-2020
Project ID:	KMCC Navassa	Weight/Volume:	9.47 g	Lab Sample ID	B4519_17655_DF_011	Date Extracted:	07-Aug-2020
Date Collected:	06-Aug-2020	% Solid:	92.6 %	QC Batch No:	17655	Date Analyzed:	11-Aug-2020
		Split:	-	Dilution:	-	Time Analyzed:	4:24:50

Analyte	Conc. (pg/g)	DL (pg/g)	EMPC (pg/g)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	0.145			ES 2378-TCDD	81.8	
12378-PeCDD	EMPC		0.387	J	ES 12378-PeCDD	78.4	
123478-HxCDD	EMPC		1.26	J	ES 123478-HxCDD	68.4	
123678-HxCDD	3.34				ES 123678-HxCDD	68.2	
123789-HxCDD	2.19			J	ES 123789-HxCDD	70.4	
1234678-HpCDD	123				ES 1234678-HpCDD	61.9	
OCDD	1,040				ES OCDD	45.7	
2378-TCDF	EMPC		0.33	J	ES 2378-TCDF	81.8	
12378-PeCDF	EMPC		0.283	J	ES 12378-PeCDF	81.8	
23478-PeCDF	1.06			J	ES 23478-PeCDF	77.3	
123478-HxCDF	2.14			J	ES 123478-HxCDF	70.1	
123678-HxCDF	1.16			J	ES 123678-HxCDF	70.9	
234678-HxCDF	1.63			J	ES 234678-HxCDF	67.3	
123789-HxCDF	ND	0.243			ES 123789-HxCDF	66.9	
1234678-HpCDF	28.6				ES 1234678-HpCDF	64.4	
1234789-HpCDF	1.91			J	ES 1234789-HpCDF	64.3	
OCDF	72.8				ES OCDF	47.9	
Totals					**Standard**	**CS Recoveries**	
					CS 37Cl-2378-TCDD	90.4	
Total TCDD	1.19		2.62		CS 12347-PeCDD	92.5	
Total PeCDD	2.66		5.88		CS 12346-PeCDF	84.1	
Total HxCDD	42.7		45.4		CS 123469-HxCDF	72.4	
Total HpCDD	426		426		CS 1234689-HpCDF	71.3	
Total TCDF	6.28		9.8				
Total PeCDF	10.7		11.8				
Total HxCDF	33.2		33.8				
Total HpCDF	88.7		89.5				
Total PCDD/Fs	**1,730**		**1,740**				
ITEF TEQs							
TEQ: ND=0	4.22		4.59				
TEQ: ND=DL/2	4.31	0.241	4.68				
TEQ: ND=DL	4.39	0.481	4.76				

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Sample ID: DUP-02 — TEQ Summary — Method 8290A

Client Project Name:	EarthCon	Matrix:	Solid	Lab Sample ID:	B4519_17655_DF_011
Cliend Project ID:	KMCC Navassa	Weight/Volume:	9.47 g	QC Batch No.:	17655
Date Collected:	06-Aug-2020	Split:	-	Date Extracted:	07-Aug-2020
Date Received:	06-Aug-2020	Dilution:	-	Date Analyzed:	11-Aug-2020 04:24
Lab Project No:	B4519	Units	pg/g		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	(0.145)		0.145	(0.145)	(0.145)	(0.145)
12378-PeCDD	[0.387]	J	0.206	[0.194]	[0.387]	[0.387]
123478-HxCDD	[1.26]	J	0.191	[0.126]	[0.126]	[0.126]
123678-HxCDD	3.34		0.205	0.334	0.334	0.334
123789-HxCDD	2.19	J	0.192	0.219	0.219	0.219
1234678-HpCDD	123		0.421	1.23	1.23	1.23
OCDD	1040		0.362	1.04	0.104	0.313
2378-TCDF	[0.33]	J	0.0963	[0.033]	[0.033]	[0.033]
12378-PeCDF	[0.283]	J	0.14	[0.0141]	[0.0141]	[0.00848]
23478-PeCDF	1.06	J	0.144	0.53	0.53	0.318
123478-HxCDF	2.14	J	0.184	0.214	0.214	0.214
123678-HxCDF	1.16	J	0.174	0.116	0.116	0.116
234678-HxCDF	1.63	J	0.187	0.163	0.163	0.163
123789-HxCDF	(0.243)		0.243	(0.0243)	(0.0243)	(0.0243)
1234678-HpCDF	28.6		0.0973	0.286	0.286	0.286
1234789-HpCDF	1.91	J	0.12	0.0191	0.0191	0.0191
OCDF	72.8		0.259	0.0728	0.00728	0.0218

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TEQ Summaries			
EMPC = 0, ND = 0	4.22	3.22	3.23
EMPC = 0, ND = DL / 2	4.31	3.3	3.32
EMPC = 0, ND = DL	4.39	3.39	3.4
EMPC = 0, < J-level = 0	2.96	1.96	2.18
EMPC = EMPC, ND = 0	4.59	3.78	3.79
EMPC = EMPC, ND = DL / 2	4.68	3.87	3.87
EMPC = EMPC, ND = DL	4.76	3.95	3.96
EMPC = EMPC, < J-level = 0	2.96	1.96	2.18

Checkcode: 473-691-JNF

SGS North America - DF v0.7

Sample ID: CS-TB-07

Method 8290A

Client Data		Sample Data		Laboratory Data			
Name:	EarthCon	Matrix:	Solid	Lab Project ID:	B4519	Date Received:	06-Aug-2020
Project ID:	KMCC Navassa	Weight/Volume:	8.62 g	Lab Sample ID	B4519_17655_DF_012	Date Extracted:	07-Aug-2020
Date Collected:	06-Aug-2020	% Solid:	83.3 %	QC Batch No:	17655	Date Analyzed:	11-Aug-2020
		Split:	-	Dilution:	-	Time Analyzed:	5:12:17

Analyte	Conc. (pg/g)	DL (pg/g)	EMPC (pg/g)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	0.257			J	ES 2378-TCDD	73.9	
12378-PeCDD	1.33			J	ES 12378-PeCDD	74.5	
123478-HxCDD	2.72			J	ES 123478-HxCDD	63.3	
123678-HxCDD	5.47				ES 123678-HxCDD	63.2	
123789-HxCDD	4.25				ES 123789-HxCDD	66.8	
1234678-HpCDD	314				ES 1234678-HpCDD	60.1	
OCDD	3,030				ES OCDD	45.1	
2378-TCDF	1.12				ES 2378-TCDF	72.6	
12378-PeCDF	EMPC		1.13	J	ES 12378-PeCDF	75.6	
23478-PeCDF	EMPC		1.61	J	ES 23478-PeCDF	71.5	
123478-HxCDF	2.23			J	ES 123478-HxCDF	64.9	
123678-HxCDF	1.69			J	ES 123678-HxCDF	66	
234678-HxCDF	1.61			J	ES 234678-HxCDF	62.9	
123789-HxCDF	ND	0.234			ES 123789-HxCDF	62.5	
1234678-HpCDF	24.9				ES 1234678-HpCDF	59.6	
1234789-HpCDF	1.72			J	ES 1234789-HpCDF	58.9	
OCDF	81.5				ES OCDF	43.7	
Totals					**Standard**	**CS Recoveries**	
					CS 37Cl-2378-TCDD	88.1	
Total TCDD	26.2		33		CS 12347-PeCDD	93.1	
Total PeCDD	35.6		37.2		CS 12346-PeCDF	85	
Total HxCDD	94.7		94.7		CS 123469-HxCDF	72.4	
Total HpCDD	832		832		CS 1234689-HpCDF	71.3	
Total TCDF	20.5		26				
Total PeCDF	12.2		22				
Total HxCDF	30.7		30.7				
Total HpCDF	81.1		81.1				
Total PCDD/Fs	**4,250**		**4,270**				
ITEF TEQs							
TEQ: ND=0	9.35		10.2				
TEQ: ND=DL/2	9.37	0.253	10.2				
TEQ: ND=DL	9.38	0.507	10.2				

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Sample ID: CS-TB-07 — TEQ Summary — Method 8290A

Client Project Name:	EarthCon	Matrix:	Solid	Lab Sample ID:	B4519_17655_DF_012
Cliend Project ID:	KMCC Navassa	Weight/Volume:	8.62 g	QC Batch No.:	17655
Date Collected:	06-Aug-2020	Split:	-	Date Extracted:	07-Aug-2020
Date Received:	06-Aug-2020	Dilution:	-	Date Analyzed:	11-Aug-2020 05:12
Lab Project No:	B4519	Units	pg/g		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	0.257	J	0.173	0.257	0.257	0.257
12378-PeCDD	1.33	J	0.192	0.666	1.33	1.33
123478-HxCDD	2.72	J	0.215	0.272	0.272	0.272
123678-HxCDD	5.47		0.228	0.547	0.547	0.547
123789-HxCDD	4.25		0.204	0.425	0.425	0.425
1234678-HpCDD	314		0.181	3.14	3.14	3.14
OCDD	3030		0.654	3.03	0.303	0.91
2378-TCDF	1.12		0.13	0.112	0.112	0.112
12378-PeCDF	[1.13]	J	0.143	[0.0563]	[0.0563]	[0.0338]
23478-PeCDF	[1.61]	J	0.146	[0.804]	[0.804]	[0.482]
123478-HxCDF	2.23	J	0.176	0.223	0.223	0.223
123678-HxCDF	1.69	J	0.165	0.169	0.169	0.169
234678-HxCDF	1.61	J	0.179	0.161	0.161	0.161
123789-HxCDF	(0.234)		0.234	(0.0234)	(0.0234)	(0.0234)
1234678-HpCDF	24.9		0.0947	0.249	0.249	0.249
1234789-HpCDF	1.72	J	0.113	0.0172	0.0172	0.0172
OCDF	81.5		0.351	0.0815	0.00815	0.0244

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TEQ Summaries			
EMPC = 0, ND = 0	9.35	7.22	7.84
EMPC = 0, ND = DL / 2	9.37	7.23	7.85
EMPC = 0, ND = DL	9.38	7.24	7.86
EMPC = 0, < J-level = 0	7.59	4.79	5.41
EMPC = EMPC, ND = 0	10.2	8.08	8.36
EMPC = EMPC, ND = DL / 2	10.2	8.09	8.37
EMPC = EMPC, ND = DL	10.2	8.1	8.38
EMPC = EMPC, < J-level = 0	7.59	4.79	5.41

Checkcode: 394-371-QXV

Sample ID: CS-SS-106

Method 8290A

Client Data		Sample Data		Laboratory Data			
Name:	EarthCon	Matrix:	Solid	Lab Project ID:	B4519	Date Received:	06-Aug-2020
Project ID:	KMCC Navassa	Weight/Volume:	8.03 g	Lab Sample ID	B4519_17655_DF_013	Date Extracted:	07-Aug-2020
Date Collected:	06-Aug-2020	% Solid:	78.4 %	QC Batch No:	17655	Date Analyzed:	11-Aug-2020
		Split:	-	Dilution:	-	Time Analyzed:	5:59:49

Analyte	Conc. (pg/g)	DL (pg/g)	EMPC (pg/g)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	0.225			ES 2378-TCDD	69.2	
12378-PeCDD	EMPC		0.165	J	ES 12378-PeCDD	67.6	
123478-HxCDD	EMPC		0.544	J	ES 123478-HxCDD	59.6	
123678-HxCDD	1.19			J	ES 123678-HxCDD	59.6	
123789-HxCDD	EMPC		0.814	J	ES 123789-HxCDD	62.6	
1234678-HpCDD	59.7				ES 1234678-HpCDD	52.8	
OCDD	389				ES OCDD	36.2	
2378-TCDF	EMPC		0.174	J	ES 2378-TCDF	64.3	
12378-PeCDF	0.186			J	ES 12378-PeCDF	65.4	
23478-PeCDF	ND	0.186			ES 23478-PeCDF	66.8	
123478-HxCDF	EMPC		0.366	J	ES 123478-HxCDF	62.9	
123678-HxCDF	0.276			J	ES 123678-HxCDF	63.4	
234678-HxCDF	EMPC		0.37	J	ES 234678-HxCDF	58.7	
123789-HxCDF	ND	0.157			ES 123789-HxCDF	57.6	
1234678-HpCDF	5.17				ES 1234678-HpCDF	56.9	
1234789-HpCDF	0.463			J	ES 1234789-HpCDF	53.1	
OCDF	18				ES OCDF	37.4	
Totals					**Standard**	**CS Recoveries**	
					CS 37Cl-2378-TCDD	86.6	
Total TCDD	4.57		5.84		CS 12347-PeCDD	94	
Total PeCDD	4.75		5.95		CS 12346-PeCDF	81.6	
Total HxCDD	41.9		43.2		CS 123469-HxCDF	73.6	
Total HpCDD	388		388		CS 1234689-HpCDF	70.8	
Total TCDF	11.5		12.3				
Total PeCDF	2.32		3.51				
Total HxCDF	1.45		6.21				
Total HpCDF	16.7		17.1				
Total PCDD/Fs	**878**		**889**				
ITEF TEQs							
TEQ: ND=0	1.22		1.53				
TEQ: ND=DL/2	1.38	0.289	1.69				
TEQ: ND=DL	1.55	0.578	1.86				

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Sample ID: CS-SS-106 — TEQ Summary — Method 8290A

Client Project Name:	EarthCon	Matrix:	Solid	Lab Sample ID:	B4519_17655_DF_013
Cliend Project ID:	KMCC Navassa	Weight/Volume:	8.03 g	QC Batch No.:	17655
Date Collected:	06-Aug-2020	Split:	-	Date Extracted:	07-Aug-2020
Date Received:	06-Aug-2020	Dilution:	-	Date Analyzed:	11-Aug-2020 05:59
Lab Project No:	B4519	Units	pg/g		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	(0.225)		0.225	(0.225)	(0.225)	(0.225)
12378-PeCDD	[0.165]	J	0.209	[0.0823]	[0.165]	[0.165]
123478-HxCDD	[0.544]	J	0.271	[0.0544]	[0.0544]	[0.0544]
123678-HxCDD	1.19	J	0.263	0.119	0.119	0.119
123789-HxCDD	[0.814]	J	0.241	[0.0814]	[0.0814]	[0.0814]
1234678-HpCDD	59.7		0.258	0.597	0.597	0.597
OCDD	389		0.596	0.389	0.0389	0.117
2378-TCDF	[0.174]	J	0.146	[0.0174]	[0.0174]	[0.0174]
12378-PeCDF	0.186	J	0.183	0.00932	0.00932	0.00559
23478-PeCDF	(0.186)		0.186	(0.0928)	(0.0928)	(0.0557)
123478-HxCDF	[0.366]	J	0.108	[0.0366]	[0.0366]	[0.0366]
123678-HxCDF	0.276	J	0.106	0.0276	0.0276	0.0276
234678-HxCDF	[0.37]	J	0.131	[0.037]	[0.037]	[0.037]
123789-HxCDF	(0.157)		0.157	(0.0157)	(0.0157)	(0.0157)
1234678-HpCDF	5.17		0.0687	0.0517	0.0517	0.0517
1234789-HpCDF	0.463	J	0.0816	0.00463	0.00463	0.00463
OCDF	18		0.326	0.018	0.0018	0.0054

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TEQ Summaries			
EMPC = 0, ND = 0	1.22	0.85	0.927
EMPC = 0, ND = DL / 2	1.38	1.02	1.08
EMPC = 0, ND = DL	1.55	1.18	1.22
EMPC = 0, < J-level = 0	1.06	0.689	0.771
EMPC = EMPC, ND = 0	1.53	1.24	1.32
EMPC = EMPC, ND = DL / 2	1.69	1.41	1.47
EMPC = EMPC, ND = DL	1.86	1.57	1.62
EMPC = EMPC, < J-level = 0	1.06	0.689	0.771

Sample ID: CS-SS-109

Method 8290A

Client Data		Sample Data		Laboratory Data			
Name:	EarthCon	Matrix:	Solid	Lab Project ID:	B4519	Date Received:	06-Aug-2020
Project ID:	KMCC Navassa	Weight/Volume:	8.64 g	Lab Sample ID	B4519_17655_DF_014	Date Extracted:	07-Aug-2020
Date Collected:	06-Aug-2020	% Solid:	82.7 %	QC Batch No:	17655	Date Analyzed:	11-Aug-2020
		Split:	-	Dilution:	-	Time Analyzed:	8:01:38

Analyte	Conc. (pg/g)	DL (pg/g)	EMPC (pg/g)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	0.162			ES 2378-TCDD	80.4	
12378-PeCDD	0.291			J	ES 12378-PeCDD	84	
123478-HxCDD	1.44			J	ES 123478-HxCDD	71.3	
123678-HxCDD	EMPC		2.37	J	ES 123678-HxCDD	71.8	
123789-HxCDD	2.02			J	ES 123789-HxCDD	73.9	
1234678-HpCDD	133				ES 1234678-HpCDD	64.1	
OCDD	806				ES OCDD	49.5	
2378-TCDF	EMPC		0.174	J	ES 2378-TCDF	77.2	
12378-PeCDF	EMPC		0.573	J	ES 12378-PeCDF	81.4	
23478-PeCDF	0.642			J	ES 23478-PeCDF	78.4	
123478-HxCDF	1.82			J	ES 123478-HxCDF	72.9	
123678-HxCDF	0.786			J	ES 123678-HxCDF	73.2	
234678-HxCDF	0.787			J	ES 234678-HxCDF	69.2	
123789-HxCDF	ND	0.176			ES 123789-HxCDF	67.9	
1234678-HpCDF	17.2				ES 1234678-HpCDF	67.4	
1234789-HpCDF	1.49			J	ES 1234789-HpCDF	69.8	
OCDF	46.8				ES OCDF	49.3	
Totals					**Standard**	**CS Recoveries**	
					CS 37Cl-2378-TCDD	95	
Total TCDD	3.5		4.72		CS 12347-PeCDD	102	
Total PeCDD	6.11		8		CS 12346-PeCDF	89.4	
Total HxCDD	75.7		78		CS 123469-HxCDF	81.7	
Total HpCDD	760		760		CS 1234689-HpCDF	79.4	
Total TCDF	10.9		13.3				
Total PeCDF	5.81		7.23				
Total HxCDF	22.8		22.8				
Total HpCDF	56.8		56.8				
Total PCDD/Fs	**1,790**		**1,800**				
ITEF TEQs							
TEQ: ND=0	3.52		3.8				
TEQ: ND=DL/2	3.61	0.269	3.89				
TEQ: ND=DL	3.7	0.537	3.98				

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Sample ID: CS-SS-109 — TEQ Summary — Method 8290A

Client Project Name:	EarthCon	Matrix:	Solid	Lab Sample ID:	B4519_17655_DF_014
Cliend Project ID:	KMCC Navassa	Weight/Volume:	8.64 g	QC Batch No.:	17655
Date Collected:	06-Aug-2020	Split:	-	Date Extracted:	07-Aug-2020
Date Received:	06-Aug-2020	Dilution:	-	Date Analyzed:	11-Aug-2020 08:01
Lab Project No:	B4519	Units	pg/g		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	(0.162)		0.162	(0.162)	(0.162)	(0.162)
12378-PeCDD	0.291	J	0.188	0.145	0.291	0.291
123478-HxCDD	1.44	J	0.381	0.144	0.144	0.144
123678-HxCDD	[2.37]	J	0.397	[0.237]	[0.237]	[0.237]
123789-HxCDD	2.02	J	0.385	0.202	0.202	0.202
1234678-HpCDD	133		0.868	1.33	1.33	1.33
OCDD	806		0.506	0.806	0.0806	0.242
2378-TCDF	[0.174]	J	0.112	[0.0174]	[0.0174]	[0.0174]
12378-PeCDF	[0.573]	J	0.157	[0.0286]	[0.0286]	[0.0172]
23478-PeCDF	0.642	J	0.152	0.321	0.321	0.193
123478-HxCDF	1.82	J	0.134	0.182	0.182	0.182
123678-HxCDF	0.786	J	0.121	0.0786	0.0786	0.0786
234678-HxCDF	0.787	J	0.131	0.0787	0.0787	0.0787
123789-HxCDF	(0.176)		0.176	(0.0176)	(0.0176)	(0.0176)
1234678-HpCDF	17.2		0.192	0.172	0.172	0.172
1234789-HpCDF	1.49	J	0.222	0.0149	0.0149	0.0149
OCDF	46.8		0.3	0.0468	0.00468	0.014

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TEQ Summaries			
EMPC = 0, ND = 0	3.52	2.9	2.94
EMPC = 0, ND = DL / 2	3.61	2.99	3.03
EMPC = 0, ND = DL	3.7	3.08	3.12
EMPC = 0, < J-level = 0	2.36	1.59	1.76
EMPC = EMPC, ND = 0	3.8	3.18	3.21
EMPC = EMPC, ND = DL / 2	3.89	3.27	3.3
EMPC = EMPC, ND = DL	3.98	3.36	3.39
EMPC = EMPC, < J-level = 0	2.36	1.59	1.76

Sample ID: Method Blank B4519_17655 — Method 8290A

Client Data		Sample Data		Laboratory Data			
Name:	EarthCon	Matrix:	Solid	Lab Project ID:	B4519	Date Received:	n/a
Project ID:	KMCC Navassa	Weight/Volume:	10.00 g	Lab Sample ID	MB1_17655_DF_SDS	Date Extracted:	07-Aug-2020
Date Collected:	n/a	% Solid:	n/a	QC Batch No:	17655	Date Analyzed:	10-Aug-2020
		Split:	-	Dilution:	-	Time Analyzed:	17:12:11

Analyte	Conc. (pg/g)	DL (pg/g)	EMPC (pg/g)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	0.142			ES 2378-TCDD	95.5	
12378-PeCDD	ND	0.0842			ES 12378-PeCDD	98.4	
123478-HxCDD	ND	0.0822			ES 123478-HxCDD	85.1	
123678-HxCDD	ND	0.0833			ES 123678-HxCDD	86.6	
123789-HxCDD	ND	0.0741			ES 123789-HxCDD	92.6	
1234678-HpCDD	0.228			J	ES 1234678-HpCDD	80.5	
OCDD	0.554			J	ES OCDD	61.5	
2378-TCDF	ND	0.0614			ES 2378-TCDF	94.5	
12378-PeCDF	ND	0.0486			ES 12378-PeCDF	95.5	
23478-PeCDF	ND	0.0497			ES 23478-PeCDF	91.8	
123478-HxCDF	ND	0.036			ES 123478-HxCDF	85.2	
123678-HxCDF	ND	0.0344			ES 123678-HxCDF	89	
234678-HxCDF	ND	0.0409			ES 234678-HxCDF	84.4	
123789-HxCDF	ND	0.0507			ES 123789-HxCDF	80.7	
1234678-HpCDF	ND	0.0425			ES 1234678-HpCDF	85.4	
1234789-HpCDF	ND	0.0544			ES 1234789-HpCDF	77.4	
OCDF	ND	0.132			ES OCDF	61.1	
Totals					**Standard**	**CS Recoveries**	
					CS 37Cl-2378-TCDD	105	
Total TCDD	ND	0.142	ND		CS 12347-PeCDD	114	
Total PeCDD	ND	0.0842	ND		CS 12346-PeCDF	99.4	
Total HxCDD	ND	0.0794	ND		CS 123469-HxCDF	92	
Total HpCDD	0.228		0.228		CS 1234689-HpCDF	90.2	
Total TCDF	ND	0.0614	ND				
Total PeCDF	ND	0.0491	ND				
Total HxCDF	ND	0.0397	ND				
Total HpCDF	ND	0.0475	ND				
Total PCDD/Fs	**0.782**		**0.782**				
ITEF TEQs							
TEQ: ND=0	0.00283		0.00283				
TEQ: ND=DL/2	0.132	0.13	0.132				
TEQ: ND=DL	0.262	0.26	0.262				

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Sample ID: Method Blank B4519_17655 — TEQ Summary — Method 8290A

Client Project Name:	EarthCon	Matrix:	Solid	Lab Sample ID:	MB1_17655_DF_SDS
Cliend Project ID:	KMCC Navassa	Weight/Volume:	10.00 g	QC Batch No.:	17655
Date Collected:	n/a	Split:	-	Date Extracted:	07-Aug-2020
Date Received:	n/a	Dilution:	-	Date Analyzed:	10-Aug-2020 17:12
Lab Project No:	B4519	Units	pg/g		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	(0.142)		0.142	(0.142)	(0.142)	(0.142)
12378-PeCDD	(0.0842)		0.0842	(0.0421)	(0.0842)	(0.0842)
123478-HxCDD	(0.0822)		0.0822	(0.00822)	(0.00822)	(0.00822)
123678-HxCDD	(0.0833)		0.0833	(0.00833)	(0.00833)	(0.00833)
123789-HxCDD	(0.0741)		0.0741	(0.00741)	(0.00741)	(0.00741)
1234678-HpCDD	0.228	J	0.0607	0.00228	0.00228	0.00228
OCDD	0.554	J	0.178	0.000554	0.0000554	0.000166
2378-TCDF	(0.0614)		0.0614	(0.00614)	(0.00614)	(0.00614)
12378-PeCDF	(0.0486)		0.0486	(0.00243)	(0.00243)	(0.00146)
23478-PeCDF	(0.0497)		0.0497	(0.0249)	(0.0249)	(0.0149)
123478-HxCDF	(0.036)		0.036	(0.0036)	(0.0036)	(0.0036)
123678-HxCDF	(0.0344)		0.0344	(0.00344)	(0.00344)	(0.00344)
234678-HxCDF	(0.0409)		0.0409	(0.00409)	(0.00409)	(0.00409)
123789-HxCDF	(0.0507)		0.0507	(0.00507)	(0.00507)	(0.00507)
1234678-HpCDF	(0.0425)		0.0425	(0.000425)	(0.000425)	(0.000425)
1234789-HpCDF	(0.0544)		0.0544	(0.000544)	(0.000544)	(0.000544)
OCDF	(0.132)		0.132	(0.000132)	(0.0000132)	(0.0000396)

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TEQ Summaries			
EMPC = 0, ND = 0	0.00283	0.00233	0.00244
EMPC = 0, ND = DL / 2	0.132	0.153	0.147
EMPC = 0, ND = DL	0.262	0.303	0.292
EMPC = 0, < J-level = 0	0	0	0
EMPC = EMPC, ND = 0	0.00283	0.00233	0.00244
EMPC = EMPC, ND = DL / 2	0.132	0.153	0.147
EMPC = EMPC, ND = DL	0.262	0.303	0.292
EMPC = EMPC, < J-level = 0	0	0	0

Checkcode: 315-559-ZQL

METHOD 8290A **PCDD/F ONGOING PRECISION AND RECOVERY (OPR)** **FORM 8A**

Lab Name:	SGS North America		
Initial Calibration:	ICAL: MM3_DF_10012020_12JUN2020		
Instrument ID:	MM3	GC Column ID:	ZB-5ms
VER Data Filename:	200810R03	Analysis Date:	10-AUG-2020 15:38:07
Lab ID:	OPR1_17655_DF		

NATIVE ANALYTES	SPIKE CONC.	CONC. FOUND	RANGE (ng/mL)			OK
2,3,7,8-TCDD	10	10.2	6.7	-	15.8	Y
1,2,3,7,8-PeCDD	50	46.4	35	-	71	Y
1,2,3,4,7,8-HxCDD	50	50.8	35	-	82	Y
1,2,3,6,7,8-HxCDD	50	52.8	38	-	67	Y
1,2,3,7,8,9-HxCDD	50	49.9	32	-	81	Y
1,2,3,4,6,7,8-HpCDD	50	51.9	35	-	70	Y
OCDD	100	103	78	-	144	Y
2,3,7,8-TCDF	10	11.2	7.5	-	15.8	Y
1,2,3,7,8-PeCDF	50	48.8	40	-	67	Y
2,3,4,7,8-PeCDF	50	56	34	-	80	Y
1,2,3,4,7,8-HxCDF	50	50.6	36	-	67	Y
1,2,3,6,7,8-HxCDF	50	52.9	42	-	65	Y
2,3,4,6,7,8-HxCDF	50	53.9	35	-	78	Y
1,2,3,7,8,9-HxCDF	50	50.2	39	-	65	Y
1,2,3,4,6,7,8-HpCDF	50	51.5	41	-	61	Y
1,2,3,4,7,8,9-HpCDF	50	50.6	39	-	69	Y
OCDF	100	100	63	-	170	Y

Contract-required concentration limits for OPR as specified in Table 6,
Method 1613. 10/94

Processed: 11 Aug 2020 09:59 Analyst: pw

METHOD 8290A **PCDD/F ONGOING PRECISION AND RECOVERY (OPR)** **FORM 8B**

Lab Name: SGS North America
Initial Calibration: ICAL: MM3_DF_10012020_12JUN2020
Instrument ID: MM3 GC Column ID: ZB-5ms
VER Data Filename: 200810R03 Analysis Date: 10-AUG-2020 15:38:07
Lab ID: OPR1_17655_DF

LABELED ANALYTES	SPIKE CONC.	CONC. FOUND	RANGE (ng/mL)			OK
13C-2,3,7,8-TCDD	100	93.5	20	-	175	Y
13C-1,2,3,7,8-PeCDD	100	95.1	21	-	227	Y
13C-1,2,3,4,7,8-HxCDD	100	83.2	21	-	193	Y
13C-1,2,3,6,7,8-HxCDD	100	86.1	25	-	163	Y
13C-1,2,3,7,8,9-HxCDD	100	91	26	-	166	Y
13C-1,2,3,4,6,7,8-HpCDD	100	78.3	26	-	166	Y
13C-OCDD	200	119	26	-	397	Y
13C-2,3,7,8-TCDF	100	93.5	22	-	152	Y
13C-1,2,3,7,8-PeCDF	100	94.6	21	-	192	Y
13C-2,3,4,7,8-PeCDF	100	89.9	13	-	328	Y
13C-1,2,3,4,7,8-HxCDF	100	84.7	19	-	202	Y
13C-1,2,3,6,7,8-HxCDF	100	86.5	21	-	159	Y
13C-2,3,4,6,7,8-HxCDF	100	81.4	22	-	176	Y
13C-1,2,3,7,8,9-HxCDF	100	75.3	17	-	205	Y
13C-1,2,3,4,6,7,8-HpCDF	100	84.6	21	-	158	Y
13C-1,2,3,4,7,8,9-HpCDF	100	75.3	20	-	186	Y
13C-OCDF	200	118	26	-	397	Y
CLEANUP STANDARD						
37Cl-2,3,7,8-TCDD	40	40.6	12.4	-	76.4	Y

Contract-required concentration limits for OPR as specified in Table 6, Method 1613. 10/94

Processed: 11 Aug 2020 09:59 Analyst: pw

Sample Receipt Notification

5500 Business Drive
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Tel: 910 794-1613
Toll Free: 866 846-8290
Fax: 910 794-3919

Project Manager:	*Tamara Burkamper*
Receipt Date & Time:	*06-Aug-20 at 16:00*
AP Project name:	*B4519*
Requested TAT:	*3 business days*
Projected due date:	*12-Aug-20*
Matrix:	*Soil*
Phone#:	*910-794-1613*
Email Address:	*Tamara.Morgan@sgs.com*

Company Contact:	*Mary Brookshire*
Company:	*EarthCon*
Project Name & Site:	*KMCC Navassa*
Project PO#:	*02.20200007.00*
QAAP/Contract #:	*file*
Requested Analysis:	*SW-846 Method 8290A*
Phone#:	*404-317-7748*
Email Address:	*mbrookshire@earthcon.com*

Client Smp ID	AP Smp ID	Sample Condition & Notes	Quantity	Size	Sampling Date	Sampling Time	Received Temp (°C)	Container #	Shipping #
CS-27	B4519_001	SO	1	4 oz. Amber	8/6/2020	10:10	0.9	1	N/A
CS-28	B4519_002	SO	1	4 oz. Amber	8/6/2020	10:30	0.9	1	N/A
CS-32	B4519_003	SO	1	4 oz. Amber	8/6/2020	11:00	0.9	1	N/A
CS-33	B4519_004	SO	1	4 oz. Amber	8/6/2020	09:05	0.9	1	N/A
CS-34	B4519_005	SO	1	4 oz. Amber	8/6/2020	09:30	0.9	1	N/A
CS-38	B4519_006	SO	1	4 oz. Amber	8/6/2020	11:35	0.9	1	N/A
CS-39	B4519_007	SO	1	4 oz. Amber	8/6/2020	11:55	0.9	1	N/A
CS-35	B4519_008	SO	1	4 oz. Amber	8/6/2020	13:05	0.9	1	N/A
CS-36	B4519_009	SO	1	4 oz. Amber	8/6/2020	13:25	0.9	1	N/A
CS-37	B4519_010	SO	1	4 oz. Amber	8/6/2020	13:50	0.9	1	N/A
DUP-02	B4519_011	SO	1	4 oz. Amber	8/6/2020	00:00	0.9	1	N/A
CS-TB-07	B4519_012	SO	1	4 oz. Amber	8/6/2020	13:40	0.9	1	N/A
CS-SS-106	B4519_013	SO	1	4 oz. Amber	8/6/2020	11:25	0.9	1	N/A
CS-SS-109	B4519_014	SO	1	4 oz. Amber	8/6/2020	12:05	0.9	1	N/A

Preservation Type: **Sample Seals:** No

Notes/Comments:

Samples received intact

Any un-extracted sample will be stored for 90 days from reporting date. Additional storage fees may apply for any samples stored longer than 90 days.

Received by: Ashley Owens *Logged in by: Tamara Burkamper* *QC'ed by:* AK 7 Aug 20

All services are rendered in accordance with the applicable SGS General Conditions of Service accessible via: http://www.sgs.com/terms_and_conditions.htm

SGS North America

Rush: 3 day TAT

SGS North America Inc - Orlando

Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 FAX: 407-425-0707
www.sgs.com

SGS - ORLANDO JOB # : B4519 PAGE 1 OF 2

SGS - ORLANDO Quote # | SKIFF #

Client / Reporting Information

Company Name: Earth Con
Address: 1880 West Oak Pkwy
City: Marietta State: GA Zip: 30062
Project Contact: Email: MBrookshire mbrookshire@earthcon.com
Phone #: 404. 317-7748
Sampler(s) Name(s) (Printed) Sampler 1: C.Thibault Sampler 2: S.Tyler

Project Information

Project Name: KMCC Navassa
Street: 120 Quality Drive.
City: Navassa State: NC.
Project #: 02.20200007.00
Fax #:
Client Purchase Order #:

Analytical Information

Dioxins/Furans - 8290

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid

SGS Orlando Sample #	Field ID / Point of Collection	COLLECTION DATE	TIME	SAMPLED BY:	MATRIX	TOTAL # OF BOTTLES	OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NAOH+ZNAA	DI WATER	MEOH	Dioxins/Furans - 8290	LAB USE ONLY
	CS-27	8/6/20	1010	CT	SO	1	1									1	
	CS-28	8/6/20	1030	CT	SO	1	1									1	
	CS-32	8/6/20	1100	CT	SO	1	1									1	
	CS-33	8/6/20	0905	ST	SO	1	1									1	
	CS-34	8/6/20	0930	ST	SO	1	1									1	
	CS-38	8/6/20	1135	ST	SO	1	1									1	
	CS-39	8/6/20	1155	ST	SO	1	1									1	
	CS-35	8/6/20	1305	CT	SO	1	1									1	
	CS-36	8/6/20	1325	ST	SO	1	1									1	
	CS-37	8/6/20	1350	CT	SO	1	1									1	
	DUP-02	8/6/20	-	CT	SO	1	1									1	
	CS-TB-07	8/6/20	1340	DF		1	1									1	

Turnaround Time (Business days)

10 Day (Business) Approved By: / Date:
7 Day
5 Day
3 Day *RUSH*
2 Day *RUSH*
1 Day *RUSH*
Other

Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- [ ] COMMERCIAL "A" (RESULTS ONLY)
- [ ] COMMERCIAL "B" (RESULTS PLUS QC)
- [ ] REDT1 (EPA LEVEL 3)
- [x] FULLT1 (EPA LEVEL 4)
- [ ] EDD'S

Comments / Remarks

* 3 day TAT *
Rush samples on Separate SDG

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
1		8/6/20 1600	2 SGS-TLH 10.9° 11600	3		4
	Relinquished by/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
5			6	7		8

Lab Use Only : Cooler Temperature (s) Celsius (corrected):

http://www.sgs.com/en/terms-and-conditions

Rush: 3 day TAT

SGS North America Inc - Orlando
Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 FAX: 407-425-0707
www.sgs.com

SGS - ORLANDO JOB # : B4519 PAGE 2 OF 2

SGS - ORLANDO Quote # | SKIFF #

Client / Reporting Information

Company Name: EarthCon
Address: 1880 West Oak Pkwy.
City: Marietta State: GA Zip: 30062
Project Contact: M. Brookshire Email: mbrookshire@earthcon.com
Phone #: 404-317-7748
Sampler(s) Name(s) (Printed) Sampler 1: B Hatfield Sampler 2: D. Fulton

Project Information

Project Name: KMCC Navassa
Street: 120 Quality Drive
City: Navassa State: NC.
Project #: 02.20200007.00
Fax #:
Client Purchase Order #:

Analytical Information

Dioxins/Furans 8290

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL- Sludge; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid

SGS Orlando Sample #	Field ID / Point of Collection	COLLECTION DATE	TIME	SAMPLED BY:	CONTAINER INFORMATION MATRIX	TOTAL # OF BOTTLES	OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NAOH+ZNAC	DI WATER	MEOH	Dioxins/Furans 8290	LAB USE ONLY
	CS-SS-106	8/6/20	1125	BH	SO	1	1									1	
	CS-SS-109	8/6/20	1205	DF	SO	1	1									1	

Turnaround Time (Business days)

10 Day (Business) Approved By: / Date:
7 Day
5 Day
3 Day *RUSH* (circled)
2 Day *RUSH*
1 Day *RUSH*
Other
Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- [ ] COMMERCIAL "A" (RESULTS ONLY)
- [ ] COMMERCIAL "B" (RESULTS PLUS QC)
- [ ] REDT1 (EPA LEVEL 3)
- [x] FULLT1 (EPA LEVEL 4)
- [ ] EDD'S

Comments / Remarks

* 3 day TAT *
Rush samples on
Separate SDG

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
1 [signature]	8/6/20 1600	2 Ashley Owens SGS-TUM 0.9° 1600	3		4
Relinquished by/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
5		6	7		8

Lab Use Only : Cooler Temperature (s) Celsius (corrected):

http://www.sgs.com/en/terms-and-conditions

ORLD-SMT-0001-03-FORM-COC (4).xls Rev 031318

Project Initiation Form

Project Number:	B4519	Initiation Date:	07-Aug-20
Client Name:	EarthCon	Sample Matrix:	Soil
Analysis Method:	8290 PCDD/F	TAT:	3 days
		Project Manager:	Tamara

Special Instructions

M8290A w/OPR

10 g DWE extraction

May contain high levels

Reporting Instructions

M8290A w/OPR

May contain high levels

EQUIS4 file with headers and w/o VVL validation

EPA Region 4 Equis

PM Initials: akornegay Date: 7-Aug-20

SGS

Methods: PCB PCDD/F QUANTICS PAH WHO-2 USV PEST

Extraction Type: SDS TALEX CLL Carbon SPE

Solid

Final Volume: 20 uL

Batch# 17655 | Split: ~~1/2~~ ~~1/4~~ | Extract Initial/Date: [illegible] 8/7/2020 | Clean-up Initial/Date: [illegible] 8/10/2020 | Transfer Init/Date: [illegible] 8/10/2020

Lab Sample ID	Extraction Position Solvent: TOL	Extraction Weight/Volume g	mL	(Td)	ASECS #	Observations
B4519_17655_001	3	10.31				Brown, moist, sandy
B4519_17655_002	4	10.03				See 001
B4519_17655_003	5	10.08				Dark, moist, sandy
B4519_17655_004	6	10.20				See 001
B4519_17655_005	7	10.11				See 001
B4519_17655_006	8	10.14				See 003
B4519_17655_007	9	10.16				See 001
B4519_17655_008	10	10.43				See 003
B4519_17655_009	11	10.53				See 001
B4519_17655_010	12	10.10				See 003
B4519_17655_011	13	10.22				See 003
B4519_17655_012	14	10.35				Black, moist, sandy
B4519_17655_013	15	10.24				See 012
B4519_17655_014	16	10.45				See 012
MB1_17655	1	10.00				Sodium Sulfate
OPR1_17655	2	10.00				Sodium Sulfate

[illegible] 8/7/2020

Supply IDs

Toluene	STL 13-5
MeCHL	STL13.8
Florisil	SPL4.289B
Hexane	STL.13.7
Silica	SPL4.277B
S Nitrate	SPL4.290
Base Silica	SPL4.279
HydroMatrix	N/A
Tetradecane	SPL4-277A
H_2SO_4	N/A
A Silica	SPL4.287
Sodium Sulfate	SPL4-264A

Additional Cleanup

Acid Partition Date/Initial:	
Mini-Acid Date/Initial:	CL 11Aug20
Carbon Column Date/Initial:	n/a
GPC Date/Initial:	
Bond-Elute Date/Initial:	

Cycle Time

TOL	Start: 1415 Stop: 0900
HEX	Start: Stop:
DCM	Start: Stop:

SGS

Methods: PCB ~~PCDD/F~~ QUANTICS
PAH WHO-2 USV PEST

Solid

Batch# 17655

Inter-Department Communication Sheet

* Samples run overnight friday (8/7/20) and turned off @ 0900 Sat morning. Samples then turned back on monday just to concentrate down to smaller volume. BJ 8/10/2020

SGS

Wt. Volume Results

Batch #: 17655

Comments:

Lab Sample ID	Boat WT.	Sample Wt. + Boat Wt.	Dried Sample + Boat Wt.	% Solid	Average % Solid	RSD	Qtest Ratio (if Applicable)	Dry Wt. Equiv.	Extracted Wt.	Final Wt.
B4519_001	0.82	3.79	3.55	91.92%	91.92%			10.88	10.31	9.48
B4519_002	0.81	3.91	3.67	92.26%	92.26%			10.84	10.03	9.25
B4519_003	0.8	4.87	4.36	87.47%	87.47%			11.43	10.08	8.82
B4519_004	0.81	3.68	3.46	92.33%	92.33%			10.83	10.2	9.42
B4519_005	0.81	3.66	3.46	92.98%	92.98%			10.75	10.11	9.4
B4519_006	0.8	3.3	3.04	89.60%	89.60%			11.16	10.14	9.09
B4519_007	0.81	3.91	3.63	90.97%	90.97%			10.99	10.16	9.24
B4519_008	0.81	3.68	3.39	89.90%	89.90%			11.12	10.43	9.38
B4519_009	0.82	3.9	3.6	90.26%	90.26%			11.08	10.53	9.5
B4519_010	0.82	3.45	3.2	90.49%	90.49%			11.05	10.1	9.14
B4519_011	0.82	4.21	3.96	92.63%	92.63%			10.8	10.22	9.47
B4519_012	0.78	4.49	3.87	83.29%	83.29%			12.01	10.35	8.62
B4519_013	0.78	4.25	3.5	78.39%	78.39%			12.76	10.24	8.03
B4519_014	0.79	4.03	3.47	82.72%	82.72%			12.09	10.45	8.64

REVIEWED
Carla_Lyon , 12:02:56, 08/11/2020

% Solid Determination WorkSheet

SGS

Batch: 17655

Lab Sample ID	Boat Wt.	Sample Wt. + Boat Wt.	Dried Sample + Boat Wt.	Comments
B4519_17655_001	0.82	3.79	3.55	
B4519_17655_002	0.81	3.91	3.67	
B4519_17655_003	0.80	4.87	4.36	
B4519_17655_004	0.81	3.68	3.46	
B4519_17655_005	0.81	3.66	3.46	
B4519_17655_006	0.80	3.30	3.04	
B4519_17655_007	0.81	3.91	3.63	
B4519_17655_008	0.81	3.68	3.39	
B4519_17655_009	0.82	3.90	3.60	
B4519_17655_010	0.82	3.45	3.20	
B4519_17655_011	0.82	4.21	3.96	
B4519_17655_012	0.78	4.49	3.87	
B4519_17655_013	0.78	4.25	3.50	
B4519_17655_014	0.79	4.03	3.47	
Date/Initials:		8/7/2020	8/10/2020	

REVIEWED
Carla_Lyon , 12:03:18, 08/11/2020

SGS

Methods: PCB PAH | PCDD/F WHO-2 | QUANTICS USV | PEST

Solid

Batch # 17655

Lab Sample ID	D/F Ax-A	D/F Ax-B	D/F ES	D/F CS	D/F JS		
Spiker Initials/Date:	7/8/2020	7/8/2020	7/8/2020	RPB 8/10/2020	RPB 8/10/2020		
	Amount: 20µL	Amount: 20µL	Amount: 20µL	Amount: 20µL	Amount: 20µL	Amount:	Amount:
	Observer Initials	Observer Initials	Observer Initials	Observer Initials	Observer Initials	Observer Initials	Observer Initials
B4519_17655_001	—	—	RPB	2	2		
B4519_17655_002	—	—	RPB	2	2		
B4519_17655_003	—	—	RPB	2	2		
B4519_17655_004	—	—	RPB	2	2		
B4519_17655_005	—	—	RPB	2	2		
B4519_17655_006	—	—	RPB	2	2		
B4519_17655_007	—	—	RPB	2	2		
B4519_17655_008	—	—	RPB	2	2		
B4519_17655_009	—	—	RPB	2	2		
B4519_17655_010	—	—	RPB	2	2		
B4519_17655_011	—	—	RPB	2	2		
B4519_17655_012	—	—	RPB	2	2		
B4519_17655_013	—	—	RPB	2	2		
B4519_17655_014	—	—	RPB	2	2		
MB1_17655	—	—	RPB	2	2		
OPR1_17655	RPB	RPB	RPB	2	2		
	8/7/20	8/7/20	8/7/20	8/10/20	8/10/20		

RPB 8/10/2020

Standard Information

Spike ID	DF Ax-A	DF Ax-B	DF ES	D/F CS	D/F JS		
SIL #	23-12-15	20638-2	24-1-1	23-441-1	23-441-2		
Concentration	10 ng/mL	10 pg/uL	100 pg/uL	100 pg/µL	100 pg/µL		
Expiration Date	4-7-25	6-17-21	8/2028	5/21/21	5/21/21		

Instrument: MM3 (AutoSpec-Ultima) MS Experiment: df_cl4-8_db5MS GC Program: df_db5MS

#	Datafile	Vial#	Lab ID	Wt/Vol	Client/Sample ID		Analyst(s)	Checkcode	Acq Date	Acq Time
2	200810R02	3	CS3_200810_DF_RB	1.00	SIL 20-449-3		PSW	247-456	10-Aug-2020	14:22:08
3	200810R03	21	OPR1_17655_DF	1.00	0_17655_OPR001		PSW	180-044	10-Aug-2020	15:38:07
4	200810R04	2	SBS_200810_DF_RA	1.00	SIL 20-61-1		PSW	830-599	10-Aug-2020	16:24:45
5	200810R05	20	MB1_17655_DF_SDS	10.00	Method Blank		PSW	315-559	10-Aug-2020	17:12:11
6	200810R06	22	B4519_17655_DF_001	9.48	CS-27		PSW	108-741	10-Aug-2020	17:59:44
7	200810R07	23	B4519_17655_DF_002	9.25	CS-28		PSW	179-527	10-Aug-2020	18:47:17
8	200810R08	24	B4519_17655_DF_003	8.82	CS-32		PSW	837-643	10-Aug-2020	19:34:43
9	200810R09	25	B4519_17655_DF_004	9.42	CS-33		PSW	132-368	10-Aug-2020	20:22:09
10	200810R10	26	B4519_17655_DF_005	9.40	CS-34		PSW	745-007	10-Aug-2020	21:09:40
11	200810R11	27	B4519_17655_DF_006	9.09	CS-38		PSW	916-748	10-Aug-2020	21:57:17
12	200810R12	3	CS3_200810_DF_RC	1.00	SIL 20-449-3		PSW	828-092	10-Aug-2020	22:44:50
13	200810R13	21	OPR1_17655_DF-RJ	1.00	0_17655_OPR001	CPSM only	PSW	719-007	10-Aug-2020	23:40:28
14	200810R14	2	SBS_200810_DF_RB	1.00	SIL 20-61-1	CL 11Aug20	PSW	703-687	11-Aug-2020	00:27:11
15	200810R15	28	B4519_17655_DF_007	9.24	CS-39		PSW	970-709	11-Aug-2020	01:14:44
16	200810R16	29	B4519_17655_DF_008	9.38	CS-35		PSW	005-628	11-Aug-2020	02:02:16
17	200810R17	30	B4519_17655_DF_009	9.50	CS-36		PSW	564-159	11-Aug-2020	02:49:50
18	200810R18	31	B4519_17655_DF_010	9.14	CS-37		PSW	407-770	11-Aug-2020	03:37:23
19	200810R19	32	B4519_17655_DF_011	9.47	DUP-02		PSW	473-691	11-Aug-2020	04:24:50
20	200810R20	33	B4519_17655_DF_012	8.62	CS-TB-07		PSW	394-371	11-Aug-2020	05:12:17
21	200810R21	34	B4519_17655_DF_013	8.03	CS-SS-106		PSW	706-730	11-Aug-2020	05:59:49
22	200810R22	35	B4519_17655_DF_014	8.64	CS-SS-109		PSW	629-635	11-Aug-2020	08:01:38
23	200810R23	3	CS3_200810_DF_RD	1.00	SIL 20-449-3		PSW	480-308	11-Aug-2020	08:48:21

REVIEWED
By Paul Walton at 10:28 am, Aug 11, 2020

APPROVED
Carla_Lyon , 13:54:56, 08/11/2020

Project file: not saved
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027

Printed: 11-Aug-2020 10:28

Lab ID: MB1_17655_DF_SDS | **Acq'd:** 10 Aug 2020 17:12 PSW | **Wt/Vol:** 10.00 g | **ICAL:** MM3_DF_10012020_12JUN2020

Client ID: Method Blank B4519_17655 | **UTP:** 11-Aug-2020 08:14:16 PSW | **J-level:** 0.5 pg/g | **Split:** 1 | **Checkcode:** 315-559-ZQL

Datafile: 200810R05 | **Report:** 11 Aug 2020 09:59 pw | **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	NotFnd		1.0009	-		-	-	-	1.18	-	6028	0.142
12378-PeCDD	NotFnd		1.0006	-		-	-	-	1.14	-	3885	0.0842
123478-HxCDD	NotFnd		1.0004	-		-	-	-	1.09	-	3497	0.0822
123678-HxCDD	NotFnd		1.0035	-		-	-	-	1.13	-	3497	0.0833
123789-HxCDD	NotFnd		1.0116	-		-	-	-	1.05	-	3497	0.0741
1234678-HpCDD	39.95	J	1.0003	1.0002	-0.2	6.13E+04	0.95	Y	0.98	0.228	2743	0.0607
OCDD	42.38	J	1.0003	1.0003	0	8.40E+04	0.78	Y	1.08	0.554	3828	0.178
2378-TCDF	NotFnd		1.0006	-		-	-	-	0.98	-	3592	0.0614
12378-PeCDF	NotFnd		1.0006	-		-	-	-	0.95	-	3022	0.0486
23478-PeCDF	NotFnd		1.0005	-		-	-	-	0.95	-	3022	0.0497
123478-HxCDF	NotFnd		1.0005	-		-	-	-	1.20	-	2277	0.036
123678-HxCDF	NotFnd		1.0004	-		-	-	-	1.07	-	2277	0.0344
234678-HxCDF	NotFnd		1.0005	-		-	-	-	1.10	-	2277	0.0409
123789-HxCDF	NotFnd		1.0004	-		-	-	-	1.09	-	2277	0.0507
1234678-HpCDF	NotFnd		1.0003	-		-	-	-	1.28	-	2708	0.0425
1234789-HpCDF	NotFnd		1.0002	-		-	-	-	1.27	-	2708	0.0544
OCDF	NotFnd		1.0003	-		-	-	-	1.01	-	3443	0.132

Name	Act RT	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	27.26	1.0255	1.0257	+0.3	8.17E+07	0.76	Y	1.01	95.5
ES 12378-PeCDD	32.80	1.2330	1.2341	+2.2	7.28E+07	1.64	Y	0.87	98.4
ES 123478-HxCDD	36.72	0.9917	0.9916	-0.2	6.38E+07	1.32	Y	1.10	85.1
ES 123678-HxCDD	36.83	0.9947	0.9947	0	6.29E+07	1.28	Y	1.06	86.6
ES 123789-HxCDD	37.13	1.0028	1.0028	0	7.72E+07	1.30	Y	1.22	92.6
ES 1234678-HpCDD	39.94	1.0785	1.0788	+0.7	5.47E+07	1.07	Y	0.99	80.5
ES OCDD	42.37	1.1439	1.1443	+1.0	5.64E+07	0.89	Y	0.67	61.5
ES 2378-TCDF	26.34	1.0572	1.0576	+0.6	1.41E+08	0.80	Y	1.01	94.5
ES 12378-PeCDF	31.31	1.2558	1.2572	+2.6	1.26E+08	1.55	Y	0.90	95.5
ES 23478-PeCDF	32.45	1.3012	1.3027	+2.9	1.20E+08	1.61	Y	0.89	91.8
ES 123478-HxCDF	35.75	0.9655	0.9654	-0.2	8.34E+07	0.52	Y	1.43	85.2
ES 123678-HxCDF	35.89	0.9693	0.9692	-0.2	9.94E+07	0.52	Y	1.63	89
ES 234678-HxCDF	36.53	0.9867	0.9867	0	8.54E+07	0.52	Y	1.48	84.4
ES 123789-HxCDF	37.51	1.0130	1.0130	0	7.14E+07	0.52	Y	1.29	80.7
ES 1234678-HpCDF	39.04	1.0540	1.0543	+0.7	6.70E+07	0.46	Y	1.15	85.4
ES 1234789-HpCDF	40.36	1.0898	1.0901	+0.7	4.80E+07	0.45	Y	0.91	77.4
ES OCDF	42.53	1.1484	1.1487	+0.8	6.93E+07	0.90	Y	0.83	61.1

Lab ID: MB1_17655_DF_SDS | Acq'd: 10 Aug 2020 17:12 PSW | Wt/Vol: 10.00 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: Method Blank B4519_17655 | UTP: 11-Aug-2020 08:14:16 PSW | J-level: 0.5 pg/g | Split: 1 | Checkcode: 315-559-ZQL

Datafile: 200810R05 | Report: 11 Aug 2020 09:59 pw | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %	
JS 1234-TCDD	26.58		-	-	-	8.50E+07	0.79	Y	-	-	
JS 1234-TCDF	24.91		-	-	-	1.47E+08	0.79	Y	-	-	
JS 123467-HxCDD	37.03		-	-	-	3.42E+07	1.30	Y	-	-	
CS 37Cl-2378-TCDD	27.28		1.0265	1.0266	+0.2	3.69E+07	n/a	-	1.04	105	
CS 12347-PeCDD	32.29		1.2141	1.2150	+1.7	7.16E+07	1.65	Y	0.74	114	
CS 12346-PeCDF	30.77		1.2343	1.2356	+2.4	1.25E+08	1.57	Y	0.86	99.4	
CS 123469-HxCDF	36.19		0.9776	0.9775	-0.2	8.55E+07	0.53	Y	1.36	92	
CS 1234689-HpCDF	39.44		1.0650	1.0653	+0.7	6.51E+07	0.45	Y	1.05	90.2	
~~SS 37Cl-2378-TCDD~~	~~27.28~~		~~1.0265~~	~~1.0266~~	~~+0.2~~	~~3.69E+07~~	~~n/a~~		~~1.04~~	~~109~~	Not used in this project.
~~SS 12347-PeCDD~~	~~32.29~~		~~1.2141~~	~~1.2150~~	~~+1.7~~	~~7.16E+07~~	~~1.65~~	~~Y~~	~~0.86~~	~~115~~	CL 11Aug20
~~SS 12346-PeCDF~~	~~30.77~~		~~1.2343~~	~~1.2356~~	~~+2.4~~	~~1.25E+08~~	~~1.57~~	~~Y~~	~~0.96~~	~~104~~	
~~SS 123469-HxCDF~~	~~36.19~~		~~0.9776~~	~~0.9775~~	~~-0.2~~	~~8.55E+07~~	~~0.53~~	~~Y~~	~~0.83~~	~~103~~	
~~SS 1234689-HpCDF~~	~~39.44~~		~~1.0650~~	~~1.0653~~	~~+0.7~~	~~6.51E+07~~	~~0.45~~	~~Y~~	~~0.92~~	~~105~~	

Totals	Conc	EMPC
Total TCDD	0	0
Total PeCDD	0	0
Total HxCDD	0	0
Total HpCDD	0.228	0.228
Total Tetra-Octa Dioxins	0.782	0.782
Total TCDF	0	0
Total PeCDF	0	0
Total HxCDF	0	0
Total HpCDF	0	0
Total Tetra-Octa Furans	0	0
Total Tetra-Octa Dioxins & Furans	0.782	0.782

Lab ID: MB1_17655_DF_SDS **Acq'd:** 10 Aug 2020 17:12 PSW **Wt/Vol:** 10.00 g **ICAL:** MM3_DF_10012020_12JUN2020

Client ID: Method Blank B4519_17655 **UTP:** 11-Aug-2020 08:14:16 PSW **J-level:** 0.5 pg/g **Split:** 1 **Checkcode:** 315-559-ZQL

Datafile: 200810R05 **Report:** 11 Aug 2020 09:59 pw **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1368-TCDD	NotFnd		0.8591						1.18		6028	0.142
1379-TCDD	NotFnd		0.8732						1.18		6028	0.142
1369-TCDD	NotFnd		0.8901						1.18		6028	0.142
1469-TCDD	NotFnd		0.9205						1.18		6028	0.142
1247/1246/1248/1249-TCDD	NotFnd		0.9301						1.18		6028	0.142
1378-TCDD	NotFnd		0.9374						1.18		6028	0.142
1268-TCDD	NotFnd		0.9449						1.18		6028	0.142
1478-TCDD	NotFnd		0.9544						1.18		6028	0.142
1279-TCDD	NotFnd		0.9610						1.18		6028	0.142
1234/1269-TCDD	NotFnd		0.9746						1.18		6028	0.142
1236-TCDD	NotFnd		0.9802						1.18		6028	0.142
1237/1238-TCDD	NotFnd		0.9898						1.18		6028	0.142
1239-TCDD	NotFnd		0.9950						1.18		6028	0.142
2378-TCDD	**NotFnd**		**1.0009**						**1.18**		**6028**	**0.142**
1278-TCDD	NotFnd		1.0133						1.18		6028	0.142
1267-TCDD	NotFnd		1.0185						1.18		6028	0.142
1289-TCDD	NotFnd		1.0379						1.18		6028	0.142
12479/12468-PeCDD	NotFnd		0.9229						1.14		3885	0.0842
12469-PeCDD	NotFnd		0.9396						1.14		3885	0.0842
12368-PeCDD	NotFnd		0.9568						1.14		3885	0.0842
12478-PeCDD	NotFnd		0.9626						1.14		3885	0.0842
12379-PeCDD	NotFnd		0.9657						1.14		3885	0.0842
12369/12467/12489-PeCDD	NotFnd		0.9738						1.14		3885	0.0842
12346/12347-PeCDD	NotFnd		0.9853						1.14		3885	0.0842
12378-PeCDD	NotFnd		**1.0006**						**1.14**		**3885**	**0.0842**
12367-PeCDD	NotFnd		1.0034						1.14		3885	0.0842
12389-PeCDD	NotFnd		1.0141						1.14		3885	0.0842
124679/124689-HxCDD	NotFnd		0.9542						1.09		3497	0.0794
123468-HxCDD	NotFnd		0.9721						1.09		3497	0.0794
123679/123689-HxCDD	NotFnd		0.9799						1.09		3497	0.0794
123469-HxCDD	NotFnd		0.9835						1.09		3497	0.0794
123478-HxCDD	NotFnd		**1.0004**						1.09		**3497**	**0.0822**
123678-HxCDD	NotFnd		**1.0035**						1.13		**3497**	**0.0833**
123467-HxCDD	NotFnd		1.0088						1.09		3497	0.0794
123789-HxCDD	NotFnd		**1.0116**						1.05		**3497**	**0.0741**

Lab ID: MB1_17655_DF_SDS | **Acq'd:** 10 Aug 2020 17:12 PSW | **Wt/Vol:** 10.00 g | **ICAL:** MM3_DF_10012020_12JUN2020

Client ID: Method Blank B4519_17655 | **UTP:** 11-Aug-2020 08:14:16 PSW | **J-level:** 0.5 pg/g | **Split:** 1 | **Checkcode:** 315-559-ZQL

Datafile: 200810R05 | **Report:** 11 Aug 2020 09:59 pw | **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1234679-HpCDD	NotFnd		0.9843						0.98		2743	0.0607
1234678-HpCDD	**39.95**	J	**1.0003**	**1.0002**	**-0.2**	**6.13E+04**	**0.95**	**Y**	**0.98**	**0.228**	**2743**	**0.0607**
OCDD	**42.38**	**J**	**1.0003**	**1.0003**	**0**	**8.40E+04**	**0.78**	**Y**	**1.08**	**0.554**	**3828**	**0.178**
OCDD-a	NotFnd		1.0002						0.07		5018	3.78
1368-TCDF	NotFnd		0.8044						0.98		3592	0.0614
1468-TCDF	NotFnd		0.8261						0.98		3592	0.0614
2468-TCDF	NotFnd		0.8511						0.98		3592	0.0614
1346/1246-TCDF	NotFnd		0.8665						0.98		3592	0.0614
1347/1378/1247-TCDF	NotFnd		0.8723						0.98		3592	0.0614
1348-TCDF	NotFnd		0.8835						0.98		3592	0.0614
1248/1367/1379-TCDF	NotFnd		0.8888						0.98		3592	0.0614
1268-TCDF	NotFnd		0.9044						0.98		3592	0.0614
1467-TCDF	NotFnd		0.9098						0.98		3592	0.0614
1478-TCDF	NotFnd		0.9167						0.98		3592	0.0614
1369/1237-TCDF	NotFnd		0.9316						0.98		3592	0.0614
2467-TCDF	NotFnd		0.9369						0.98		3592	0.0614
2368-TCDF	NotFnd		0.9430						0.98		3592	0.0614
1238/1234/1678/1469/1236-TCDF	NotFnd		0.9468						0.98		3592	0.0614
1278-TCDF	NotFnd		0.9651						0.98		3592	0.0614
1349-TCDF	NotFnd		0.9704						0.98		3592	0.0614
1267-TCDF	NotFnd		0.9761						0.98		3592	0.0614
2346/1249-TCDF	NotFnd		0.9834						0.98		3592	0.0614
2347/1279-TCDF	NotFnd		0.9921						0.98		3592	0.0614
2348-TCDF	NotFnd		0.9964						0.98		3592	0.0614
2378-TCDF	**NotFnd**		**1.0006**						**0.98**		**3592**	**0.0614**
2367/3467-TCDF	NotFnd		1.0156						0.98		3592	0.0614
1269-TCDF	NotFnd		1.0249						0.98		3592	0.0614
1239-TCDF	NotFnd		1.0357						0.98		3592	0.0614
1289-TCDF	NotFnd		1.0799						0.98		3592	0.0614
13468/12468-PeCDF	NotFnd		0.9084						0.95		3683	0.0599
13678/13467/12467-PeCDF	NotFnd		0.9591						0.95		3022	0.0491
12368/13478/12478-PeCDF	NotFnd		0.9642						0.95		3022	0.0491
14678-PeCDF	NotFnd		0.9675						0.95		3022	0.0491
13479-PeCDF	NotFnd		0.9706						0.95		3022	0.0491
13469/12479-PeCDF	NotFnd		0.9787						0.95		3022	0.0491
12346-PeCDF	NotFnd		0.9833						0.95		3022	0.0491

Lab ID: MB1_17655_DF_SDS | **Acq'd:** 10 Aug 2020 17:12 PSW | **Wt/Vol:** 10.00 g | **ICAL:** MM3_DF_10012020_12JUN2020

Client ID: Method Blank B4519_17655 | **UTP:** 11-Aug-2020 08:14:16 PSW | **J-level:** 0.5 pg/g | **Split:** 1 | **Checkcode:** 315-559-ZQL

Datafile: 200810R05 | **Report:** 11 Aug 2020 09:59 pw | **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
23468/12469-PeCDF	NotFnd		0.9861						0.95		3022	0.0491
12347-PeCDF	NotFnd		0.9887						0.95		3022	0.0491
12348-PeCDF	NotFnd		0.9938						0.95		3022	0.0491
12378-PeCDF	**NotFnd**		**1.0006**						**0.95**		**3022**	**0.0486**
12678/12367-PeCDF	NotFnd		1.0095						0.95		3022	0.0491
12379-PeCDF	NotFnd		1.0150						0.95		3022	0.0491
12679-PeCDF	NotFnd		0.9926						0.95		3022	0.0491
23467/12369-PeCDF	NotFnd		0.9966						0.95		3022	0.0491
23478-PeCDF	**NotFnd**		**1.0005**						**0.95**		**3022**	**0.0497**
23478/12489-PeCDF	NotFnd		0.0000						0.95			
12489-PeCDF	NotFnd		1.0047						0.95		3022	0.0491
12349-PeCDF	NotFnd		1.0107						0.95		3022	0.0491
12389-PeCDF	NotFnd		1.0339						0.95		3022	0.0491
123468-HxCDF	NotFnd		0.9617						1.11		2277	0.0397
124678/134678-HxCDF	NotFnd		0.9673						1.11		2277	0.0397
134679-HxCDF	NotFnd		0.9737						1.11		2277	0.0397
124679-HxCDF	NotFnd		0.9792						1.11		2277	0.0397
124689-HxCDF	NotFnd		0.9854						1.11		2277	0.0397
123467-HxCDF	NotFnd		0.9972						1.11		2277	0.0397
123478-HxCDF	**NotFnd**		**1.0005**						**1.20**		**2277**	**0.036**
123678-HxCDF	**NotFnd**		**1.0004**						**1.07**		**2277**	**0.0344**
123479-HxCDF	NotFnd		1.0049						1.11		2277	0.0397
123469-HxCDF	NotFnd		1.0089						1.11		2277	0.0397
123679-HxCDF	NotFnd		0.9945						1.11		2277	0.0397
234678-HxCDF	**NotFnd**		**1.0005**						**1.10**		**2277**	**0.0409**
234678/123689-HxCDF	NotFnd		0.0000						1.10			
123689-HxCDF	NotFnd		1.0054						1.11		2277	0.0397
123789-HxCDF	**NotFnd**		**1.0004**						**1.09**		**2277**	**0.0507**
123789/123489-HxCDF	NotFnd		0.0000						1.09			
123489-HxCDF	NotFnd		1.0008						1.11		2277	0.0397
1234678-HpCDF	**NotFnd**		**1.0003**						**1.28**		**2708**	**0.0425**
1234679-HpCDF	NotFnd		1.0072						1.27		2708	0.0475
1234689-HpCDF	NotFnd		1.0107						1.27		2708	0.0475
1234789-HpCDF	**NotFnd**		**1.0002**						**1.27**		**2708**	**0.0544**
OCDF	**NotFnd**		**1.0003**						**1.01**		**3443**	**0.132**
OCDF-a	NotFnd		1.0002						0.06		4921	3.02


Rel. Int.
100%
0%
Abs. Int.
9.60e6
4.80e6
0.00e0
QC Check
20.54-29.50
316.9824 Fn1
Flags: -
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
0%
Abs. Int.
7.39e6
3.69e6
0.00e0
QC Check
29.51-34.00
366.9792 Fn2
Flags: -
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
0%
Abs. Int.
2.85e7
1.42e7
0.00e0
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
0%
Abs. Int.
1.72e7
8.58e6
0.00e0
QC Check
38.26-41.01
430.9728 Fn4
Flags: -
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
0%
Abs. Int.
1.56e7
7.79e6
0.00e0
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

SGS ID: MB1_17655_DF_SDS | **Sample ID: Method Blank** | **Acq: 10-Aug-2020 17:12:11**

Instr: [ILM] AutoSpec-Ultima MM3 | **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 20** | **User: PSW Datafile: 200810R05**



Results: P:\B4500_B4599\B4519\B4519_17655 DF\Resources\MB1_17655_DF_SDS.utp_res, saved 11-Aug-2020 08:14 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 9718, 2656, 1989 scc: 315-559 *PKD: 11-Aug-2020 08:13 Printed: 11-Aug-2020 10:10 Page 2 of 12*


Rel. Int.
100%
PeCDD
29.51-34.00
355.8546 Fn2
Flags: PB
4σ 2.26e3
0%
Abs. Int.
1.17e4
5.86e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD
29.51-34.00
357.8517 Fn2
Flags: PB
4σ 1.63e3
0%
Abs. Int.
8.76e3
4.38e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.00
367.8949 Fn2
Flags: PBM
4σ 4.00e3
0%
CS 12347D
4.46e7*
32.29
ES 12378D
4.52e7*
32.80
Abs. Int.
1.26e7
6.31e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.00
369.8919 Fn2
Flags: PBM
4σ 2.46e3
0%
CS 12347D
2.70e7*
32.29
ES 12378D
2.76e7*
32.80
Abs. Int.
7.62e6
3.81e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
QC Check
29.51-34.00
366.9792 Fn2
Flags: -
0%
Abs. Int.
7.39e6
3.69e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT


Rel. Int.
100%
HxCDD
34.02-38.25
389.8156 Fn3
Flags: PB
4σ 1.23e3
0%
Abs. Int.
1.78e4
8.88e3
0.00e0
RT
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
Rel. Int.
100%
HxCDD
34.02-38.25
391.8127 Fn3
Flags: B
4σ 2.27e3
0%
Abs. Int.
1.52e4
7.58e3
0.00e0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
401.8559 Fn3
Flags: PBM
4σ 3.40e3
0%
ES 123678D
3.54e7*
36.83
ES 123478D
3.63e7*
36.72
ES 123789D
4.36e7*
37.13
JS 123467D
1.94e7*
37.03
Abs. Int.
1.27e7
6.37e6
0.00e0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
403.8530 Fn3
Flags: PBM
4σ 2.52e3
0%
ES 123678D
2.75e7*
36.83
ES 123478D
2.75e7*
36.72
ES 123789D
3.35e7*
37.13
JS 123467D
1.49e7*
37.03
Abs. Int.
9.73e6
4.86e6
0.00e0
RT
Rel. Int.
100%
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
0%
Abs. Int.
2.85e7
1.42e7
0.00e0
RT

SGS ID: MB1_17655_DF_SDS **Sample ID: Method Blank** **Acq: 10-Aug-2020 17:12:11**

Instr: [ILM] AutoSpec-Ultima MM3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 20** **User: PSW Datafile: 200810R05**



Results: P:\B4500_B4599\B4519\B4519_17655 DF\Resources\MB1_17655_DF_SDS.utp_res, saved 11-Aug-2020 08:14 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 2912, 7955 scc: 315-559 *PKD: 11-Aug-2020 08:13 Printed: 11-Aug-2020 10:10 Page 5 of 12*

SGS ID: MB1_17655_DF_SDS **Sample ID: Method Blank** **Acq: 10-Aug-2020 17:12:11**

Instr: [ILM] AutoSpec-Ultima MM3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 20** **User: PSW Datafile: 200810R05**

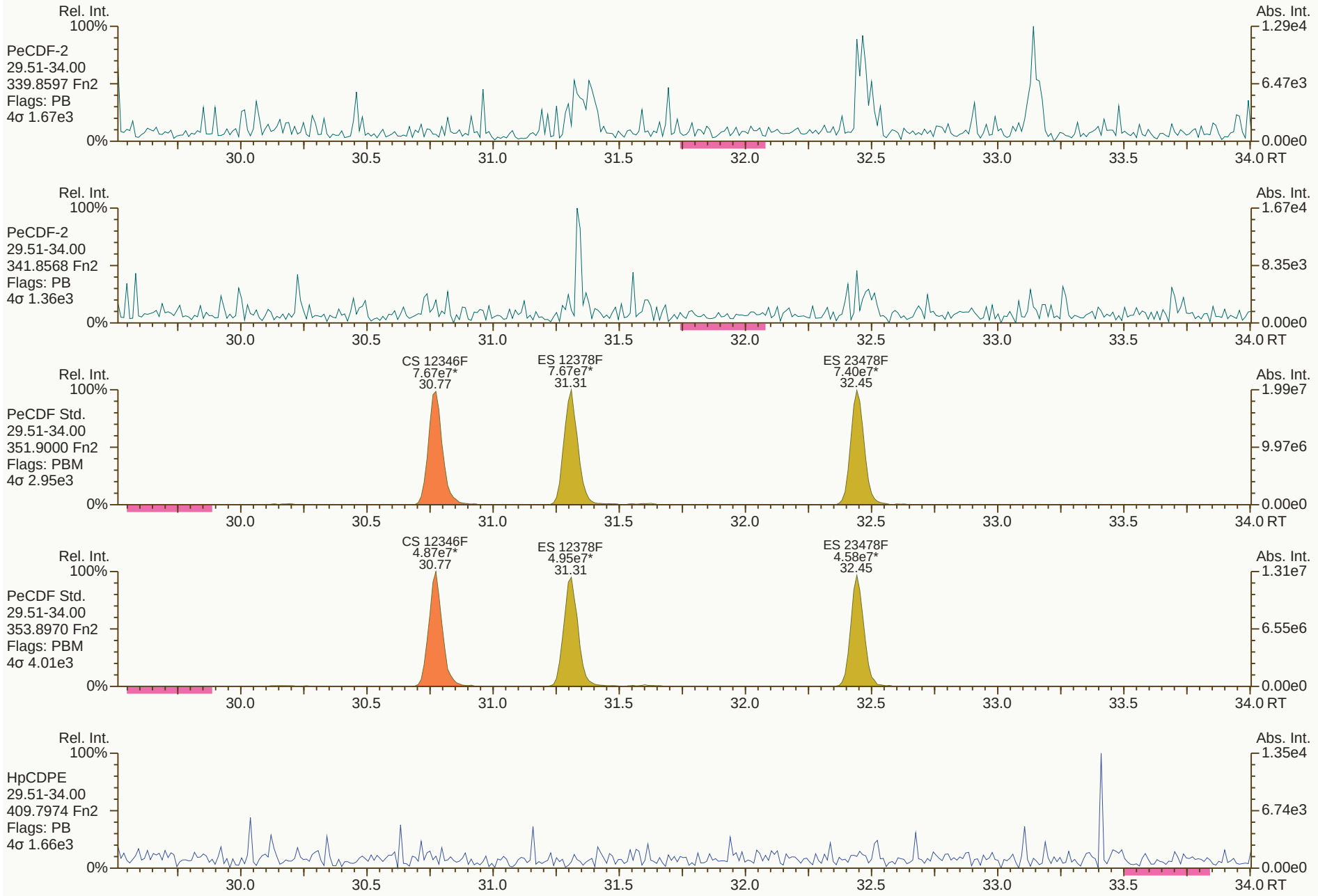


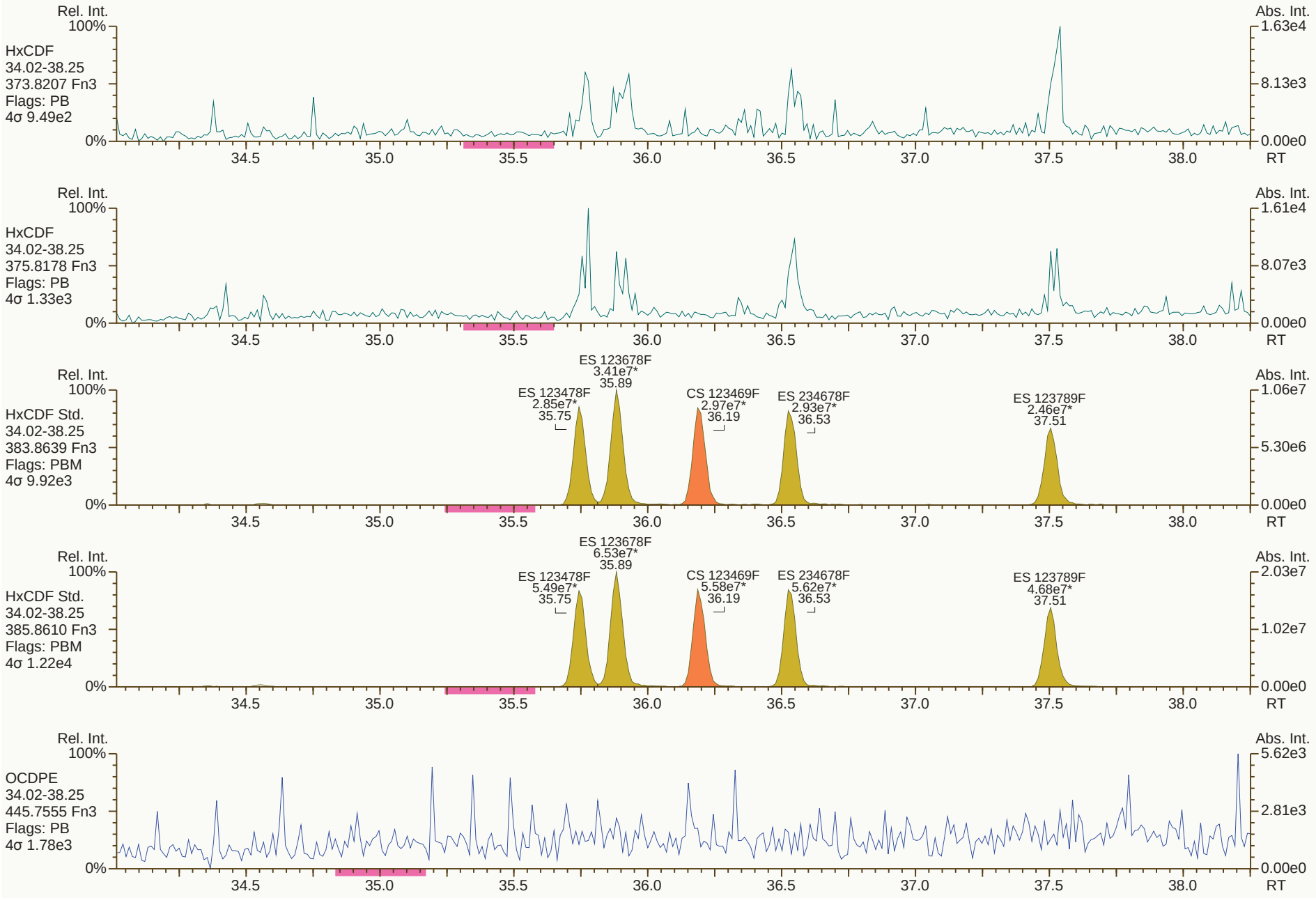
Results: P:\B4500_B4599\B4519\B4519_17655 DF\Resources\MB1_17655_DF_SDS.utp_res, saved 11-Aug-2020 08:14 (PSW) *Peak annotation: Areas, Centroids*

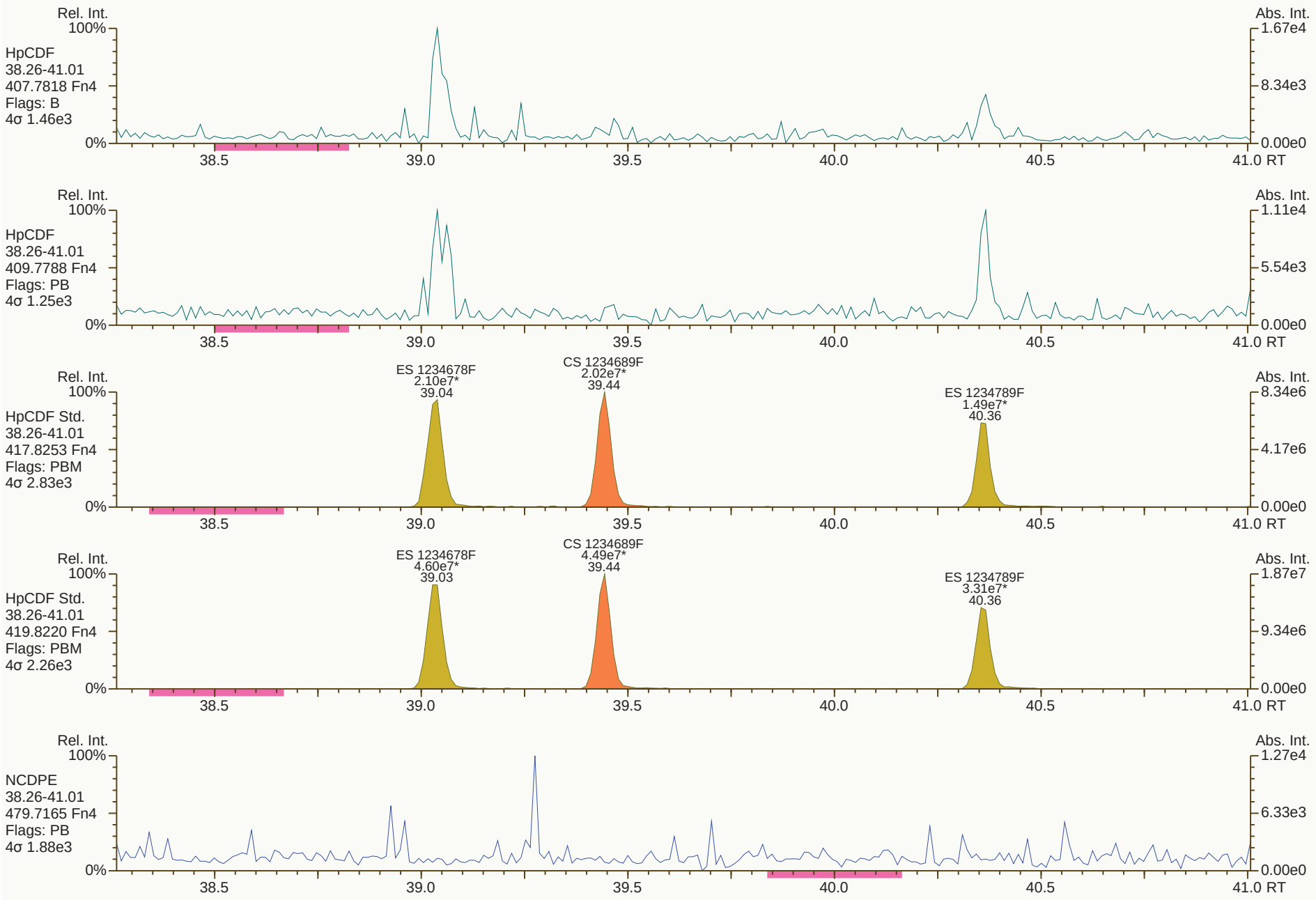
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 5689, 4235 scc: 315-559 *Revised: 11-Aug-2020 08:14 (PSW) Printed: 11-Aug-2020 10:10 Page 6 of 12*

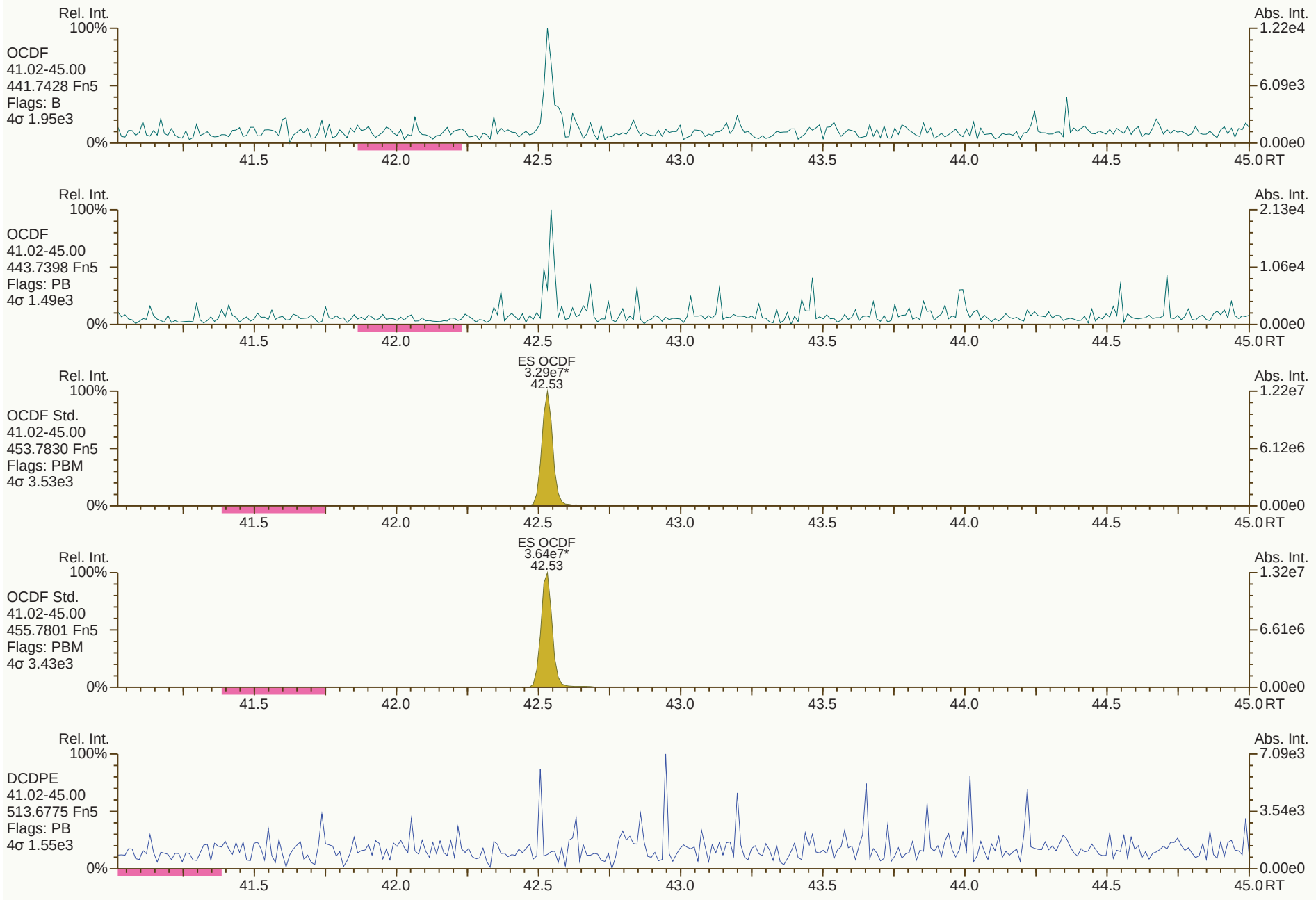

Rel. Int.
100%
TCDF
20.54-29.50
303.9016 Fn1
Flags: PB
4σ 1.52e3
0%
Abs. Int.
1.17e4
5.84e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF
20.54-29.50
305.8987 Fn1
Flags: PB
4σ 2.08e3
0%
Abs. Int.
1.04e4
5.22e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
315.9419 Fn1
Flags: PBM
4σ 2.46e4
0%
JS 1234F
6.49e7*
24.91
ES 2378F
6.25e7*
26.34
Abs. Int.
1.33e7
6.63e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
317.9389 Fn1
Flags: PBM
4σ 1.28e4
0%
JS 1234F
8.19e7*
24.90
ES 2378F
7.81e7*
26.34
Abs. Int.
1.64e7
8.20e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
HxCDPE
20.54-29.50
375.8364 Fn1
Flags: PB
4σ 1.55e3
0%
Abs. Int.
7.84e3
3.92e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
0%
Abs. Int.
1.03e4
5.15e3
0.00e0
PeCDF-1
20.54-29.50
339.8597 Fn1
Flags: PB
4σ 1.86e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
0%
Abs. Int.
9.31e3
4.66e3
0.00e0
PeCDF-1
20.54-29.50
341.8568 Fn1
Flags: PB
4σ 1.82e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
0%
Abs. Int.
9.60e6
4.80e6
0.00e0
QC Check
20.54-29.50
316.9824 Fn1
Flags: -
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
PeCDF-2
29.51-34.00
339.8597 Fn2
Flags: PB
4σ 1.67e3
0%
Abs. Int.
1.29e4
6.47e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF-2
29.51-34.00
341.8568 Fn2
Flags: PB
4σ 1.36e3
0%
Abs. Int.
1.67e4
8.35e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
CS 12346F
7.67e7*
30.77
ES 12378F
7.67e7*
31.31
ES 23478F
7.40e7*
32.45
Rel. Int.
100%
PeCDF Std.
29.51-34.00
351.9000 Fn2
Flags: PBM
4σ 2.95e3
0%
Abs. Int.
1.99e7
9.97e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
CS 12346F
4.87e7*
30.77
ES 12378F
4.95e7*
31.31
ES 23478F
4.58e7*
32.45
Rel. Int.
100%
PeCDF Std.
29.51-34.00
353.8970 Fn2
Flags: PBM
4σ 4.01e3
0%
Abs. Int.
1.31e7
6.55e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
HpCDPE
29.51-34.00
409.7974 Fn2
Flags: PB
4σ 1.66e3
0%
Abs. Int.
1.35e4
6.74e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT


Rel. Int.
100%
HxCDF
34.02-38.25
373.8207 Fn3
Flags: PB
4σ 9.49e2
0%
Abs. Int.
1.63e4
8.13e3
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDF
34.02-38.25
375.8178 Fn3
Flags: PB
4σ 1.33e3
0%
Abs. Int.
1.61e4
8.07e3
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDF Std.
34.02-38.25
383.8639 Fn3
Flags: PBM
4σ 9.92e3
0%
ES 123678F
3.41e7*
35.89
ES 123478F
2.85e7*
35.75
CS 123469F
2.97e7*
36.19
ES 234678F
2.93e7*
36.53
ES 123789F
2.46e7*
37.51
Abs. Int.
1.06e7
5.30e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDF Std.
34.02-38.25
385.8610 Fn3
Flags: PBM
4σ 1.22e4
0%
ES 123678F
6.53e7*
35.89
ES 123478F
5.49e7*
35.75
CS 123469F
5.58e7*
36.19
ES 234678F
5.62e7*
36.53
ES 123789F
4.68e7*
37.51
Abs. Int.
2.03e7
1.02e7
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
OCDPE
34.02-38.25
445.7555 Fn3
Flags: PB
4σ 1.78e3
0%
Abs. Int.
5.62e3
2.81e3
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT


Rel. Int.
100%
HpCDF
38.26-41.01
407.7818 Fn4
Flags: B
4σ 1.46e3
0%
Abs. Int.
1.67e4
8.34e3
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF
38.26-41.01
409.7788 Fn4
Flags: PB
4σ 1.25e3
0%
Abs. Int.
1.11e4
5.54e3
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.26-41.01
417.8253 Fn4
Flags: PBM
4σ 2.83e3
0%
ES 1234678F
2.10e7*
39.04
CS 1234689F
2.02e7*
39.44
ES 1234789F
1.49e7*
40.36
Abs. Int.
8.34e6
4.17e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.26-41.01
419.8220 Fn4
Flags: PBM
4σ 2.26e3
0%
ES 1234678F
4.60e7*
39.03
CS 1234689F
4.49e7*
39.44
ES 1234789F
3.31e7*
40.36
Abs. Int.
1.87e7
9.34e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
NCDPE
38.26-41.01
479.7165 Fn4
Flags: PB
4σ 1.88e3
0%
Abs. Int.
1.27e4
6.33e3
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT


Rel. Int.
100%
OCDF
41.02-45.00
441.7428 Fn5
Flags: B
4σ 1.95e3
0%
Abs. Int.
1.22e4
6.09e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF
41.02-45.00
443.7398 Fn5
Flags: PB
4σ 1.49e3
0%
Abs. Int.
2.13e4
1.06e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDF
3.29e7*
42.53
Rel. Int.
100%
OCDF Std.
41.02-45.00
453.7830 Fn5
Flags: PBM
4σ 3.53e3
0%
Abs. Int.
1.22e7
6.12e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDF
3.64e7*
42.53
Rel. Int.
100%
OCDF Std.
41.02-45.00
455.7801 Fn5
Flags: PBM
4σ 3.43e3
0%
Abs. Int.
1.32e7
6.61e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
DCDPE
41.02-45.00
513.6775 Fn5
Flags: PB
4σ 1.55e3
0%
Abs. Int.
7.09e3
3.54e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

Lab ID: B4519_17655_DF_001 **Acq'd:** 10 Aug 2020 17:59 PSW **Wt/Vol:** 9.48 g **ICAL:** MM3_DF_10012020_12JUN2020

Client ID: CS-27 **UTP:** 11-Aug-2020 08:21:33 PSW **J-level:** 0.528 pg/g **Split:** 1 **Checkcode:** 108-741-XSN

Datafile: 200810R06 **Report:** 11 Aug 2020 09:59 pw **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	NotFnd		1.0009	-		-	-	-	1.18	-	6141	0.187
12378-PeCDD	32.82	J EMPC	1.0006	1.0005	-0.2	5.31E+04	1.03	N	1.14	0.17	4617	0.132
123478-HxCDD	36.73	J	1.0004	1.0003	-0.2	1.68E+05	1.07	Y	1.09	0.647	2931	0.09
123678-HxCDD	36.85	J	1.0035	1.0035	0	3.52E+05	1.23	Y	1.13	1.36	2931	0.091
123789-HxCDD	37.15	J	1.0116	1.0116	0	2.65E+05	1.27	Y	1.05	0.913	2931	0.0826
1234678-HpCDD	39.96		1.0003	1.0003	0	8.76E+06	1.06	Y	0.98	45.5	3491	0.108
OCDD	42.38		1.0003	1.0003	0	3.24E+07	0.91	Y	1.08	335	6648	0.45
2378-TCDF	NotFnd		1.0006	-		-	-	-	0.98	-	5834	0.129
12378-PeCDF	31.33	J EMPC	1.0006	1.0004	-0.4	7.65E+04	1.90	N	0.95	0.165	6293	0.131
23478-PeCDF	32.49	J	1.0005	1.0011	+1.2	2.33E+05	1.43	Y	0.95	0.537	6293	0.138
123478-HxCDF	35.77	J EMPC	1.0005	1.0004	-0.2	2.69E+05	0.90	N	1.20	0.696	5142	0.109
123678-HxCDF	35.91	J	1.0004	1.0005	+0.2	1.89E+05	1.38	Y	1.07	0.473	5142	0.113
234678-HxCDF	36.55	J EMPC	1.0005	1.0003	-0.4	2.23E+05	1.47	N	1.10	0.641	5142	0.117
123789-HxCDF	NotFnd		1.0004	-		-	-	-	1.09	-	5142	0.157
1234678-HpCDF	39.05		1.0003	1.0003	0	3.12E+06	1.07	Y	1.28	10.3	2945	0.0601
1234789-HpCDF	40.38	J EMPC	1.0002	1.0003	+0.2	1.23E+05	1.33	N	1.27	0.555	2945	0.079
OCDF	42.55		1.0003	1.0002	-0.3	2.65E+06	0.91	Y	1.01	21.5	5514	0.326

Name	Act RT		Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	27.27		1.0255	1.0257	+0.3	6.63E+07	0.77	Y	1.01	75.4
ES 12378-PeCDD	32.81		1.2330	1.2341	+2.2	5.80E+07	1.62	Y	0.87	76.3
ES 123478-HxCDD	36.72		0.9917	0.9916	-0.2	5.01E+07	1.29	Y	1.10	66.2
ES 123678-HxCDD	36.84		0.9947	0.9947	0	4.83E+07	1.26	Y	1.06	65.9
ES 123789-HxCDD	37.14		1.0028	1.0028	0	5.84E+07	1.33	Y	1.22	69.4
ES 1234678-HpCDD	39.95		1.0785	1.0787	+0.5	4.13E+07	1.09	Y	0.99	60.2
ES OCDD	42.37		1.1439	1.1441	+0.5	3.80E+07	0.92	Y	0.67	41
ES 2378-TCDF	26.34		1.0572	1.0576	+0.6	1.15E+08	0.80	Y	1.01	78.3
ES 12378-PeCDF	31.32		1.2558	1.2573	+2.8	1.03E+08	1.59	Y	0.90	79.3
ES 23478-PeCDF	32.45		1.3012	1.3028	+3.1	9.69E+07	1.57	Y	0.89	75.5
ES 123478-HxCDF	35.75		0.9655	0.9654	-0.2	6.82E+07	0.51	Y	1.43	69
ES 123678-HxCDF	35.89		0.9693	0.9692	-0.2	7.89E+07	0.51	Y	1.63	70
ES 234678-HxCDF	36.54		0.9867	0.9866	-0.2	6.68E+07	0.52	Y	1.48	65.4
ES 123789-HxCDF	37.51		1.0130	1.0129	-0.2	5.61E+07	0.55	Y	1.29	62.8
ES 1234678-HpCDF	39.04		1.0540	1.0542	+0.5	4.99E+07	0.43	Y	1.15	63
ES 1234789-HpCDF	40.37		1.0898	1.0900	+0.5	3.69E+07	0.47	Y	0.91	59
ES OCDF	42.54		1.1484	1.1486	+0.5	5.15E+07	0.89	Y	0.83	45

Lab ID: B4519_17655_DF_001 | Acq'd: 10 Aug 2020 17:59 PSW | Wt/Vol: 9.48 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-27 | UTP: 11-Aug-2020 08:21:33 PSW | J-level: 0.528 pg/g | Split: 1 | Checkcode: 108-741-XSN

Datafile: 200810R06 | Report: 11 Aug 2020 09:59 pw | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %	
JS 1234-TCDD	26.58		-	-	-	8.73E+07	0.77	Y	-	-	
JS 1234-TCDF	24.91		-	-	-	1.44E+08	0.79	Y	-	-	
JS 123467-HxCDD	37.03		-	-	-	3.46E+07	1.24	Y	-	-	
CS 37Cl-2378-TCDD	27.29		1.0265	1.0265	0	3.10E+07	n/a	-	1.04	85.5	
CS 12347-PeCDD	32.30		1.2141	1.2150	+1.7	5.97E+07	1.65	Y	0.74	92.5	
CS 12346-PeCDF	30.78		1.2343	1.2357	+2.6	1.07E+08	1.54	Y	0.86	86.1	
CS 123469-HxCDF	36.20		0.9776	0.9775	-0.2	7.11E+07	0.51	Y	1.36	75.8	
CS 1234689-HpCDF	39.45		1.0650	1.0652	+0.5	5.14E+07	0.46	Y	1.05	70.5	
~~SS 37Cl-2378-TCDD~~	~~27.29~~		~~1.0265~~	~~1.0265~~	~~0~~	~~3.10E+07~~	~~n/a~~		~~1.04~~	~~113~~	Not used in this project.
~~SS 12347-PeCDD~~	~~32.30~~		~~1.2141~~	~~1.2150~~	~~+1.7~~	~~5.97E+07~~	~~1.65~~	~~Y~~	~~0.86~~	~~121~~	CL 11Aug20
~~SS 12346-PeCDF~~	~~30.78~~		~~1.2343~~	~~1.2357~~	~~+2.6~~	~~1.07E+08~~	~~1.54~~	~~Y~~	~~0.96~~	~~108~~	
~~SS 123469-HxCDF~~	~~36.20~~		~~0.9776~~	~~0.9775~~	~~-0.2~~	~~7.11E+07~~	~~0.51~~	~~Y~~	~~0.83~~	~~108~~	
~~SS 1234689-HpCDF~~	~~39.45~~		~~1.0650~~	~~1.0652~~	~~+0.5~~	~~5.14E+07~~	~~0.46~~	~~Y~~	~~0.92~~	~~111~~	

Totals	Conc	EMPC
Total TCDD	0	0.759
Total PeCDD	1.69	2.75
Total HxCDD	22.6	23.2
Total HpCDD	222	222
Total Tetra-Octa Dioxins	581	584
Total TCDF	1.63	2.96
Total PeCDF	2.92	5.44
Total HxCDF	10.8	14.2
Total HpCDF	30.4	30.9
Total Tetra-Octa Furans	67.3	75
Total Tetra-Octa Dioxins & Furans	649	659

Lab ID: B4519_17655_DF_001 **Acq'd: 10 Aug 2020 17:59 PSW** **Wt/Vol: 9.48 g** **ICAL: MM3_DF_10012020_12JUN2020**

Client ID: CS-27 **UTP: 11-Aug-2020 08:21:33 PSW** **J-level: 0.528 pg/g** **Split: 1** **Checkcode: 108-741-XSN**

Datafile: 200810R06 **Report: 11 Aug 2020 09:59 pw** **Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)**

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1368-TCDD	23.40	EMPC	0.8591	0.8583	-1.1	1.98E+05	0.95	N	1.18	0.535	6141	0.187
1379-TCDD	23.78	J EMPC	0.8732	0.8723	-1.3	8.28E+04	1.54	N	1.18	0.224	6141	0.187
1369-TCDD	NotFnd		0.8901						1.18		6141	0.187
1469-TCDD	NotFnd		0.9205						1.18		6141	0.187
1247/1246/1248/1249-TCDD	NotFnd		0.9301						1.18		6141	0.187
1378-TCDD	NotFnd		0.9374						1.18		6141	0.187
1268-TCDD	NotFnd		0.9449						1.18		6141	0.187
1478-TCDD	NotFnd		0.9544						1.18		6141	0.187
1279-TCDD	NotFnd		0.9610						1.18		6141	0.187
1234/1269-TCDD	NotFnd		0.9746						1.18		6141	0.187
1236-TCDD	NotFnd		0.9802						1.18		6141	0.187
1237/1238-TCDD	NotFnd		0.9898						1.18		6141	0.187
1239-TCDD	NotFnd		0.9950						1.18		6141	0.187
2378-TCDD	**NotFnd**		**1.0009**						**1.18**		**6141**	**0.187**
1278-TCDD	NotFnd		1.0133						1.18		6141	0.187
1267-TCDD	NotFnd		1.0185						1.18		6141	0.187
1289-TCDD	NotFnd		1.0379						1.18		6141	0.187
12479/12468-PeCDD	30.27	J	0.9229	0.9227	-0.4	2.12E+05	1.65	Y	1.14	0.679	4617	0.132
12469-PeCDD	30.81	J EMPC	0.9396	0.9390	-1.1	1.05E+05	1.79	N	1.14	0.337	4617	0.132
12368-PeCDD	31.38	J	0.9568	0.9565	-0.6	1.40E+05	1.50	Y	1.14	0.45	4617	0.132
12478-PeCDD	31.58	J EMPC	0.9626	0.9627	+0.2	8.03E+04	1.28	N	1.14	0.257	4617	0.132
12379-PeCDD	31.69	J	0.9657	0.9659	+0.4	8.11E+04	1.34	Y	1.14	0.26	4617	0.132
12369/12467/12489-PeCDD	31.94	J EMPC	0.9738	0.9734	-0.8	9.35E+04	1.98	N	1.14	0.3	4617	0.132
12346/12347-PeCDD	32.32	J	0.9853	0.9852	-0.2	9.29E+04	1.69	Y	1.14	0.298	4617	0.132
12378-PeCDD	32.82	J EMPC	**1.0006**	**1.0005**	**-0.2**	**5.31E+04**	**1.03**	**N**	**1.14**	**0.17**	**4617**	**0.132**
12367-PeCDD	NotFnd		1.0034						1.14		4617	0.132
12389-PeCDD	NotFnd		1.0141						1.14		4617	0.132
124679/124689-HxCDD	35.04		0.9542	0.9542	0	2.26E+06	1.18	Y	1.09	8.38	2931	0.0875
123468-HxCDD	35.70	J	0.9721	0.9720	-0.2	6.91E+05	1.26	Y	1.09	2.56	2931	0.0875
123679/123689-HxCDD	35.98		0.9799	0.9798	-0.2	1.64E+06	1.32	Y	1.09	6.09	2931	0.0875
123469-HxCDD	36.11	J	0.9835	0.9834	-0.2	7.07E+05	1.21	Y	1.09	2.62	2931	0.0875
123478-HxCDD	36.73	J	**1.0004**	**1.0003**	**-0.2**	**1.68E+05**	**1.07**	**Y**	1.09	**0.647**	**2931**	**0.09**
123678-HxCDD	36.85	J	**1.0035**	**1.0035**	**0**	**3.52E+05**	**1.23**	**Y**	1.13	**1.36**	**2931**	**0.091**
123467-HxCDD	37.05	J EMPC	1.0088	1.0088	0	1.81E+05	0.94	N	1.09	0.67	2931	0.0875
123789-HxCDD	37.15	J	**1.0116**	**1.0116**	**0**	**2.65E+05**	**1.27**	**Y**	1.05	**0.913**	**2931**	**0.0826**

Lab ID: B4519_17655_DF_001 **Acq'd:** 10 Aug 2020 17:59 PSW **Wt/Vol:** 9.48 g **ICAL:** MM3_DF_10012020_12JUN2020

Client ID: CS-27 **UTP:** 11-Aug-2020 08:21:33 PSW **J-level:** 0.528 pg/g **Split:** 1 **Checkcode:** 108-741-XSN

Datafile: 200810R06 **Report:** 11 Aug 2020 09:59 pw **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

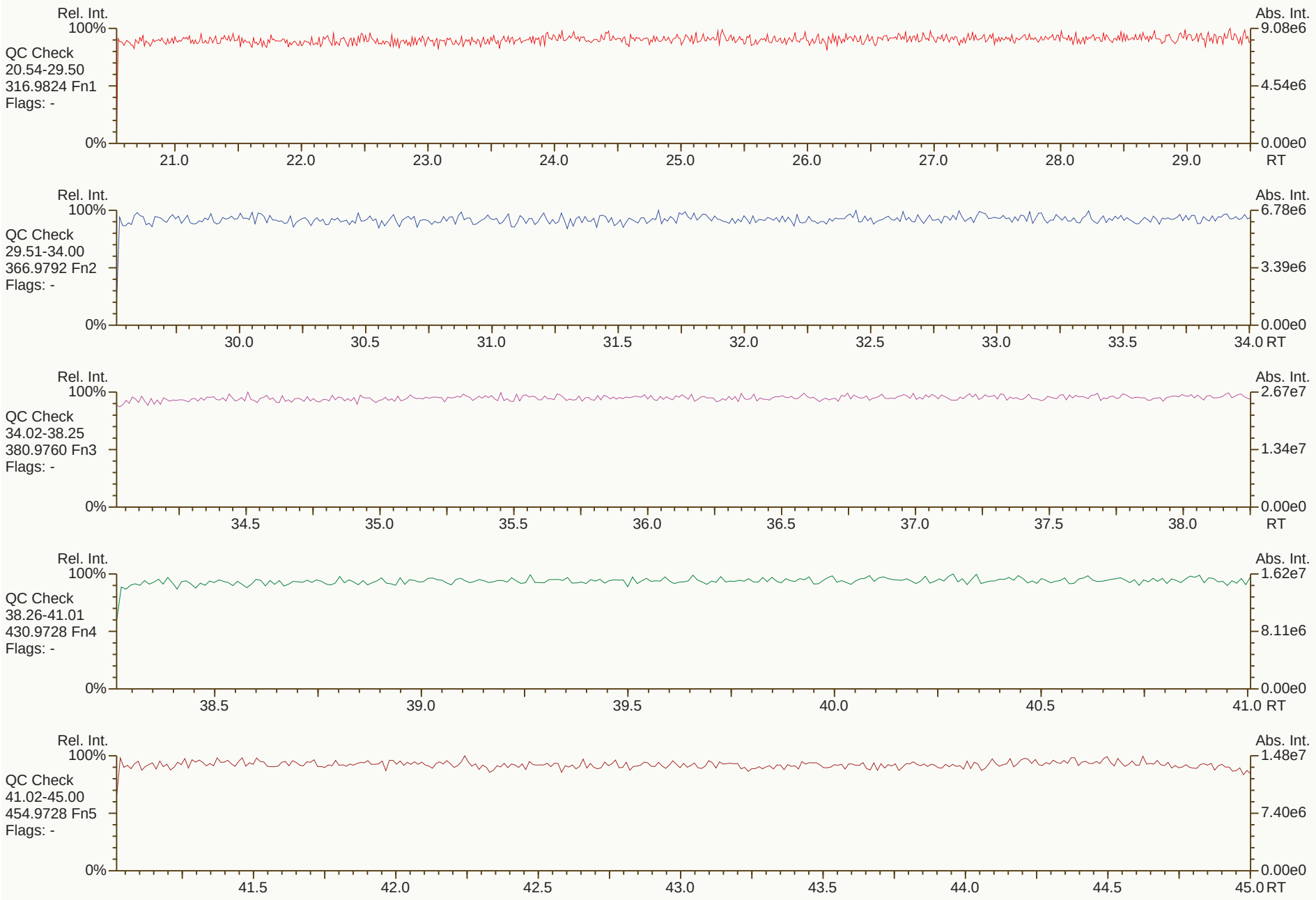
Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1234679-HpCDD	39.32		0.9843	0.9842	-0.2	3.40E+07	1.03	Y	0.98	177	3491	0.108
1234678-HpCDD	**39.96**		**1.0003**	**1.0003**	**0**	**8.76E+06**	**1.06**	**Y**	**0.98**	**45.5**	**3491**	**0.108**
OCDD	**42.38**		**1.0003**	**1.0003**	**0**	**3.24E+07**	**0.91**	**Y**	**1.08**	**335**	**6648**	**0.45**
OCDD-a	42.38		1.0002	1.0002	0	1.98E+06	2.66	Y	0.07	333	5801	6.37
1368-TCDF	21.17	J EMPC	0.8044	0.8037	-0.9	7.44E+04	1.21	N	0.98	0.14	5834	0.129
1468-TCDF	NotFnd		0.8261						0.98		5834	0.129
2468-TCDF	22.40	J EMPC	0.8511	0.8503	-1.1	2.07E+05	1.05	N	0.98	0.389	5834	0.129
1346/1246-TCDF	NotFnd		0.8665						0.98		5834	0.129
1347/1378/1247-TCDF	22.95	J	0.8723	0.8711	-1.7	2.49E+05	0.78	Y	0.98	0.467	5834	0.129
1348-TCDF	NotFnd		0.8835						0.98		5834	0.129
1248/1367/1379-TCDF	23.36	J	0.8888	0.8868	-2.8	1.50E+05	0.76	Y	0.98	0.282	5834	0.129
1268-TCDF	23.80	J EMPC	0.9044	0.9036	-1.1	1.20E+05	1.05	N	0.98	0.225	5834	0.129
1467-TCDF	23.94	J EMPC	0.9098	0.9087	-1.6	5.54E+04	1.27	N	0.98	0.104	5834	0.129
1478-TCDF	24.07	J	0.9167	0.9137	-4.3	2.00E+05	0.84	Y	0.98	0.376	5834	0.129
1369/1237-TCDF	NotFnd		0.9316						0.98		5834	0.129
2467-TCDF	NotFnd		0.9369						0.98		5834	0.129
2368-TCDF	24.84	J	0.9430	0.9428	-0.3	1.26E+05	0.70	Y	0.98	0.237	5834	0.129
1238/1234/1678/1469/1236-TCDF	24.95	J EMPC	0.9468	0.9469	+0.1	9.69E+04	1.06	N	0.98	0.182	5834	0.129
1278-TCDF	NotFnd		0.9651						0.98		5834	0.129
1349-TCDF	NotFnd		0.9704						0.98		5834	0.129
1267-TCDF	NotFnd		0.9761						0.98		5834	0.129
2346/1249-TCDF	NotFnd		0.9834						0.98		5834	0.129
2347/1279-TCDF	NotFnd		0.9921						0.98		5834	0.129
2348-TCDF	NotFnd		0.9964						0.98		5834	0.129
2378-TCDF	**NotFnd**		**1.0006**						**0.98**		**5834**	**0.129**
2367/3467-TCDF	26.75	J	1.0156	1.0153	-0.5	1.43E+05	0.69	Y	0.98	0.269	5834	0.129
1269-TCDF	NotFnd		1.0249						0.98		5834	0.129
1239-TCDF	NotFnd		1.0357						0.98		5834	0.129
1289-TCDF	28.46	J EMPC	1.0799	1.0802	+0.5	1.52E+05	1.25	N	0.98	0.285	5834	0.129
13468/12468-PeCDF	28.45	J	0.9084	0.9086	+0.3	9.39E+05	1.38	Y	0.95	2.09	5673	0.121
13678/13467/12467-PeCDF	30.04	J EMPC	0.9591	0.9593	+0.4	1.61E+05	1.81	N	0.95	0.36	6293	0.134
12368/13478/12478-PeCDF	30.21	J EMPC	0.9642	0.9647	+0.9	6.24E+05	1.82	N	0.95	1.39	6293	0.134
14678-PeCDF	NotFnd		0.9675						0.95		6293	0.134
13479-PeCDF	NotFnd		0.9706						0.95		6293	0.134
13469/12479-PeCDF	NotFnd		0.9787						0.95		6293	0.134
12346-PeCDF	NotFnd		0.9833						0.95		6293	0.134

Lab ID: B4519_17655_DF_001 **Acq'd:** 10 Aug 2020 17:59 PSW **Wt/Vol:** 9.48 g **ICAL:** MM3_DF_10012020_12JUN2020

Client ID: CS-27 **UTP:** 11-Aug-2020 08:21:33 PSW **J-level:** 0.528 pg/g **Split:** 1 **Checkcode:** 108-741-XSN

Datafile: 200810R06 **Report:** 11 Aug 2020 09:59 pw **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
23468/12469-PeCDF	30.89	J EMPC	0.9861	0.9862	+0.2	2.04E+05	1.12	N	0.95	0.454	6293	0.134
12347-PeCDF	NotFnd		0.9887						0.95		6293	0.134
12348-PeCDF	NotFnd		0.9938						0.95		6293	0.134
12378-PeCDF	**31.33**	J EMPC	**1.0006**	**1.0004**	**-0.4**	**7.65E+04**	**1.90**	**N**	**0.95**	**0.165**	**6293**	**0.131**
12678/12367-PeCDF	31.63	J	1.0095	1.0099	+0.8	1.33E+05	1.61	Y	0.95	0.297	6293	0.134
12379-PeCDF	NotFnd		1.0150						0.95		6293	0.134
12679-PeCDF	NotFnd		0.9926						0.95		6293	0.134
23467/12369-PeCDF	32.34	J EMPC	0.9966	0.9965	-0.2	6.78E+04	1.03	N	0.95	0.151	6293	0.134
23478-PeCDF	**32.49**	J	**1.0005**	**1.0011**	**+1.2**	**2.33E+05**	**1.43**	**Y**	**0.95**	**0.537**	**6293**	**0.138**
23478/12489-PeCDF	NotFnd		0.0000						0.95			
12489-PeCDF	NotFnd		1.0047						0.95		6293	0.134
12349-PeCDF	NotFnd		1.0107						0.95		6293	0.134
12389-PeCDF	NotFnd		1.0339						0.95		6293	0.134
123468-HxCDF	34.38	J EMPC	0.9617	0.9616	-0.2	5.11E+05	1.43	N	1.11	1.44	5142	0.122
124678/134678-HxCDF	34.58		0.9673	0.9671	-0.4	1.70E+06	1.22	Y	1.11	4.79	5142	0.122
134679-HxCDF	NotFnd		0.9737						1.11		5142	0.122
124679-HxCDF	35.01	J EMPC	0.9792	0.9792	0	4.93E+04	0.73	N	1.11	0.138	5142	0.122
124689-HxCDF	35.23		0.9854	0.9854	0	1.99E+06	1.24	Y	1.11	5.59	5142	0.122
123467-HxCDF	35.65	J EMPC	0.9972	0.9972	0	7.99E+04	1.55	N	1.11	0.224	5142	0.122
123478-HxCDF	**35.77**	J EMPC	**1.0005**	**1.0004**	**-0.2**	**2.69E+05**	**0.90**	**N**	**1.20**	**0.696**	**5142**	**0.109**
123678-HxCDF	**35.91**	J	**1.0004**	**1.0005**	**+0.2**	**1.89E+05**	**1.38**	**Y**	**1.07**	**0.473**	**5142**	**0.113**
123479-HxCDF	NotFnd		1.0049						1.11		5142	0.122
123469-HxCDF	NotFnd		1.0089						1.11		5142	0.122
123679-HxCDF	NotFnd		0.9945						1.11		5142	0.122
234678-HxCDF	**36.55**	J EMPC	**1.0005**	**1.0003**	**-0.4**	**2.23E+05**	**1.47**	**N**	**1.10**	**0.641**	**5142**	**0.117**
234678/123689-HxCDF	NotFnd		0.0000						1.10			
123689-HxCDF	NotFnd		1.0054						1.11		5142	0.122
123789-HxCDF	**NotFnd**		**1.0004**						**1.09**		**5142**	**0.157**
123789/123489-HxCDF	NotFnd		0.0000						1.09			
123489-HxCDF	37.54	J EMPC	1.0008	1.0008	0	7.48E+04	0.99	N	1.11	0.21	5142	0.122
1234678-HpCDF	**39.05**		**1.0003**	**1.0003**	**0**	**3.12E+06**	**1.07**	**Y**	**1.28**	**10.3**	**2945**	**0.0601**
1234679-HpCDF	39.32	**J**	1.0072	1.0072	0	1.27E+05	0.98	Y	1.27	0.485	2945	0.0681
1234689-HpCDF	39.46		1.0107	1.0107	0	5.13E+06	1.01	Y	1.27	19.6	2945	0.0681
1234789-HpCDF	**40.38**	**J EMPC**	**1.0002**	**1.0003**	**+0.2**	**1.23E+05**	**1.33**	**N**	**1.27**	**0.555**	**2945**	**0.079**
OCDF	**42.55**		**1.0003**	**1.0002**	**-0.3**	**2.65E+06**	**0.91**	**Y**	**1.01**	**21.5**	**5514**	**0.326**
OCDF-a	42.56	**EMPC**	1.0002	1.0005	+0.8	1.52E+05	3.01	N	0.06	19.7	5602	5.29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0%
Abs. Int.
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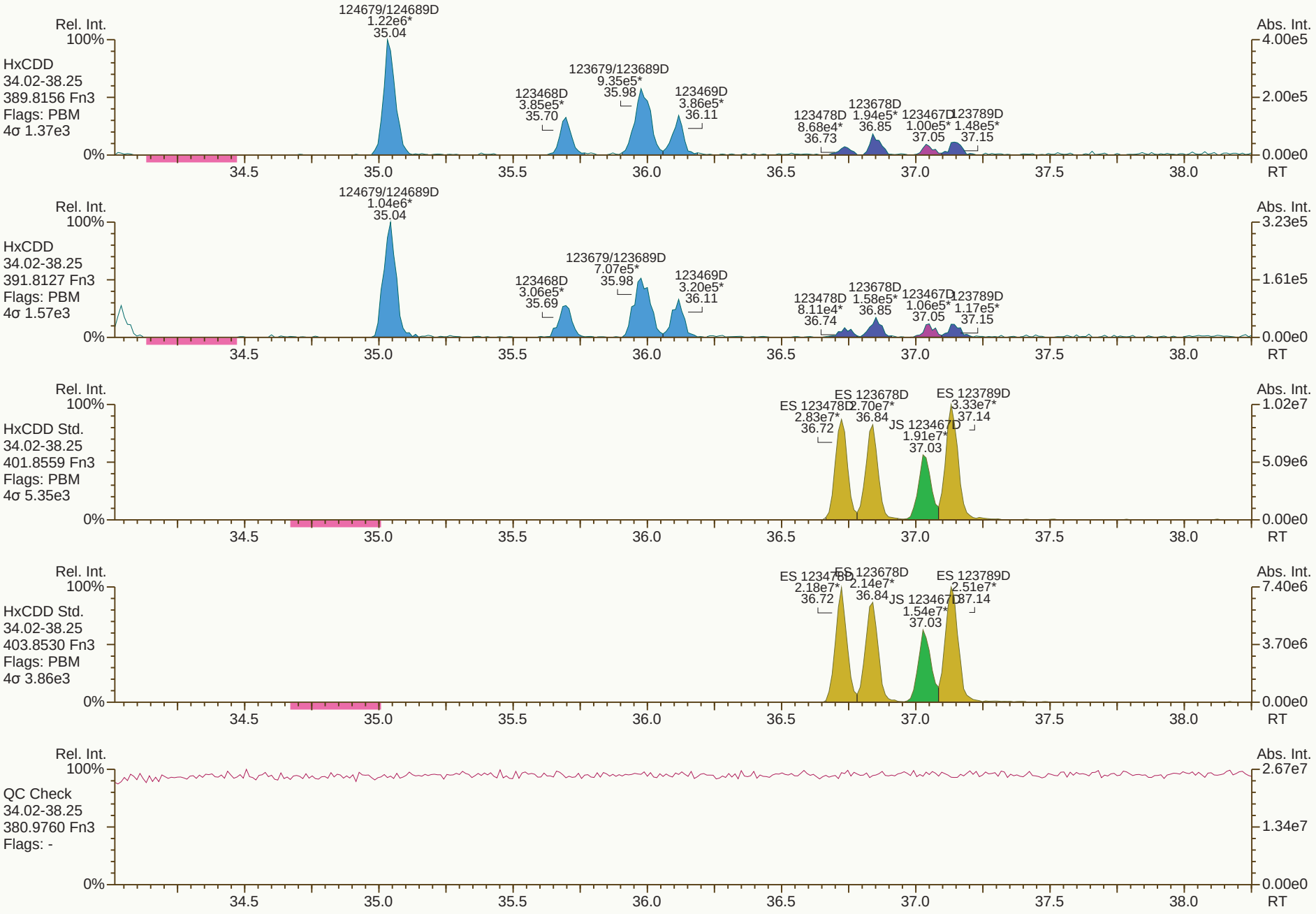
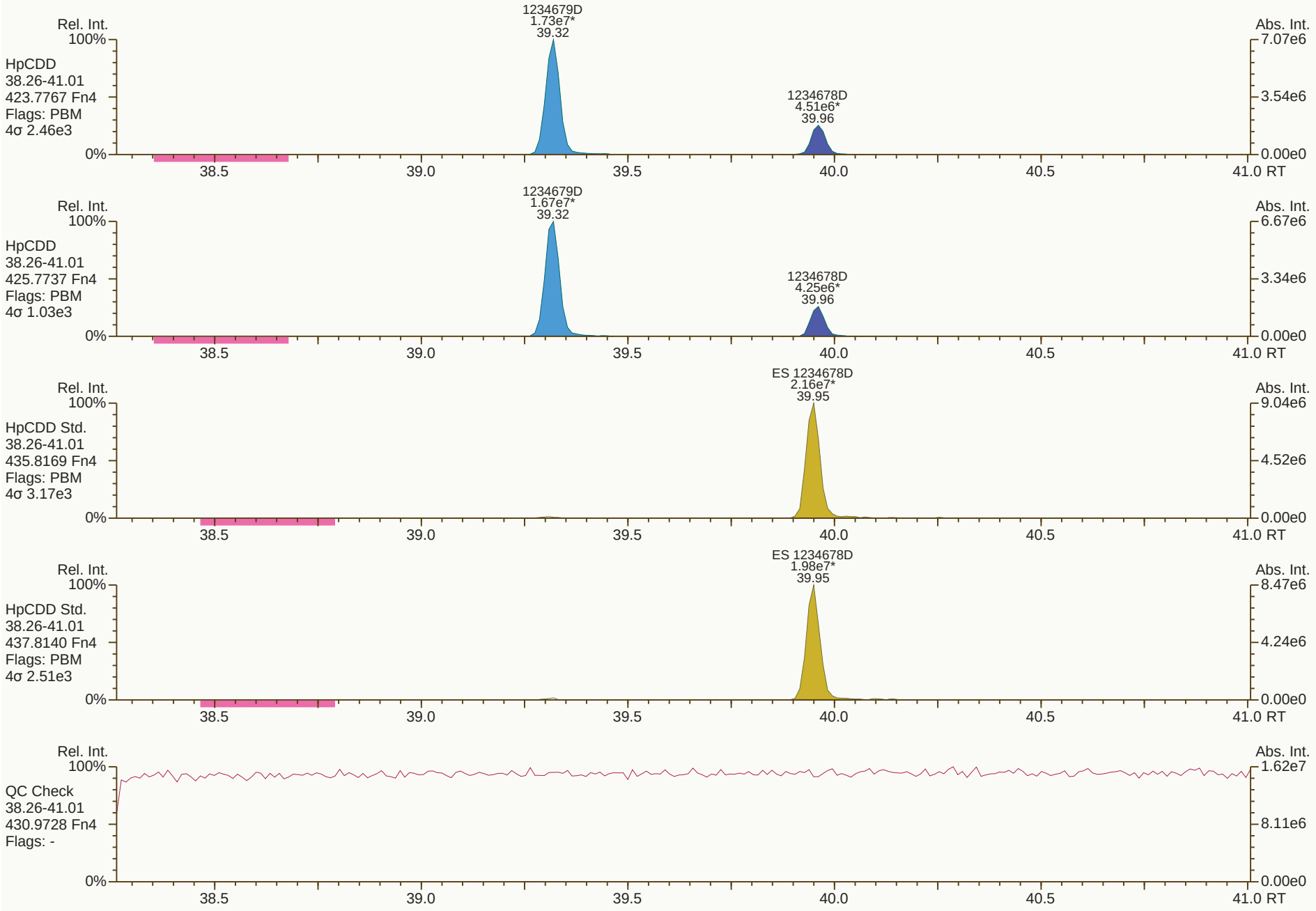
4.54e6
0.00e0
QC Check
20.54-29.50
316.9824 Fn1
Flags: -
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
0%
Abs. Int.
6.78e6
3.39e6
0.00e0
QC Check
29.51-34.00
366.9792 Fn2
Flags: -
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
0%
Abs. Int.
2.67e7
1.34e7
0.00e0
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
0%
Abs. Int.
1.62e7
8.11e6
0.00e0
QC Check
38.26-41.01
430.9728 Fn4
Flags: -
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
0%
Abs. Int.
1.48e7
7.40e6
0.00e0
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

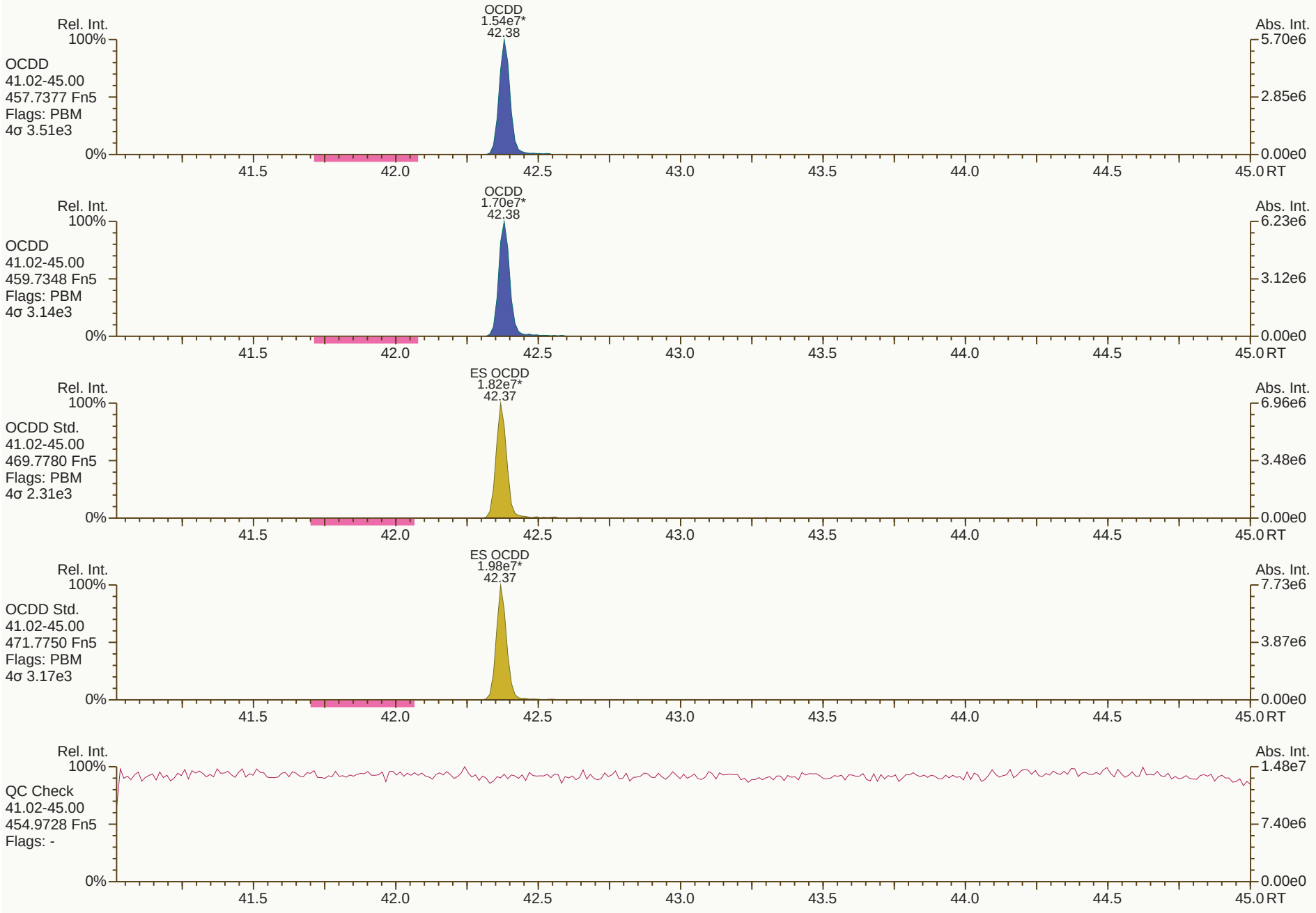

Rel. Int.
100%
TCDD
20.54-29.50
319.8965 Fn1
Flags: PBM
4σ 3.01e3
0%
1368D
1.07e5*
23.40
1379D
7.19e4*
23.78
Abs. Int.
3.82e4
1.91e4
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD
20.54-29.50
321.8936 Fn1
Flags: PBM
4σ 3.13e3
0%
1368D
1.12e5*
23.40
1379D
4.68e4*
23.79
Abs. Int.
4.37e4
2.19e4
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
37Cl-TCDD
20.54-29.50
327.8850 Fn1
Flags: PBM
4σ 2.69e3
0%
CS 37Cl-2378D
3.10e7*
27.29
Abs. Int.
6.80e6
3.40e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
331.9368 Fn1
Flags: PBM
4σ 7.68e3
0%
JS 1234D
3.81e7*
26.58
ES 2378D
2.89e7*
27.27
Abs. Int.
8.65e6
4.33e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
333.9339 Fn1
Flags: PBM
4σ 5.64e3
0%
JS 1234D
4.92e7*
26.58
ES 2378D
3.74e7*
27.27
Abs. Int.
1.12e7
5.59e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
PeCDD
29.51-34.00
355.8546 Fn2
Flags: PBM
4σ 2.05e3
12479/12468D
1.32e5*
30.27
12469D
7.38e4*
30.81
12368D
8.42e4*
31.38
12478D
4.88e4*
31.58
12369D...[3]
7.27e4*
31.94
12346/12347D
5.83e4*
32.32
12378D
3.23e4*
32.82
Abs. Int.
3.49e4
1.74e4
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD
29.51-34.00
357.8517 Fn2
Flags: PBM
4σ 2.57e3
12479/12468D
7.98e4*
30.27
12469D
4.13e4*
30.82
12368D
5.62e4*
31.40
12478D
3.82e4*
31.57
12369D...[3]
3.67e4*
31.95
12346/12347D
3.46e4*
32.32
12378D
3.14e4*
32.83
Abs. Int.
2.31e4
1.15e4
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.00
367.8949 Fn2
Flags: PBM
4σ 2.75e3
CS 12347D
3.72e7*
32.30
ES 12378D
3.59e7*
32.81
Abs. Int.
1.01e7
5.03e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.00
369.8919 Fn2
Flags: PBM
4σ 3.93e3
CS 12347D
2.25e7*
32.30
ES 12378D
2.21e7*
32.81
Abs. Int.
6.26e6
3.13e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
QC Check
29.51-34.00
366.9792 Fn2
Flags: -
Abs. Int.
6.78e6
3.39e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT



Results: P:\B4500_B4599\B4519\B4519_17655 DF\Resources\B4519_17655_DF_001.utp_res, saved 11-Aug-2020 08:21 (PSW) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 7189, 1159 scc: 108-741 *PKD: 11-Aug-2020 08:21 Printed: 11-Aug-2020 10:10 Page 4 of 12*

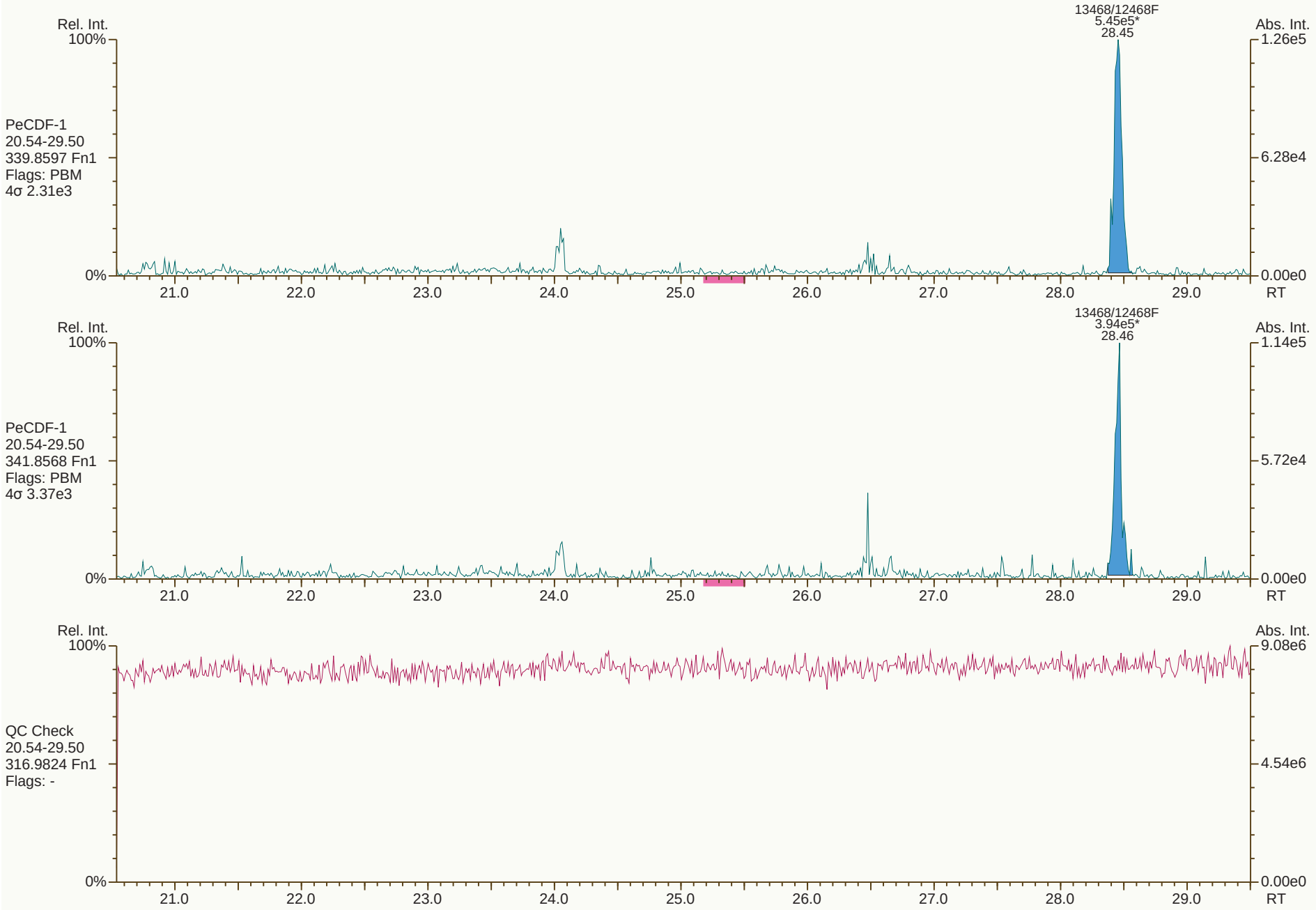

Rel. Int.
100%
HpCDD
38.26-41.01
423.7767 Fn4
Flags: PBM
4σ 2.46e3
0%
1234679D
1.73e7*
39.32
1234678D
4.51e6*
39.96
Abs. Int.
7.07e6
3.54e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.26-41.01
425.7737 Fn4
Flags: PBM
4σ 1.03e3
0%
1234679D
1.67e7*
39.32
1234678D
4.25e6*
39.96
Abs. Int.
6.67e6
3.34e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
435.8169 Fn4
Flags: PBM
4σ 3.17e3
0%
ES 1234678D
2.16e7*
39.95
Abs. Int.
9.04e6
4.52e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
437.8140 Fn4
Flags: PBM
4σ 2.51e3
0%
ES 1234678D
1.98e7*
39.95
Abs. Int.
8.47e6
4.24e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.26-41.01
430.9728 Fn4
Flags: -
0%
Abs. Int.
1.62e7
8.11e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT


OCDD
1.54e7*
42.38
Rel. Int.
100%
OCDD
41.02-45.00
457.7377 Fn5
Flags: PBM
4σ 3.51e3
0%
Abs. Int.
5.70e6
2.85e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDD
1.70e7*
42.38
Rel. Int.
100%
OCDD
41.02-45.00
459.7348 Fn5
Flags: PBM
4σ 3.14e3
0%
Abs. Int.
6.23e6
3.12e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
1.82e7*
42.37
Rel. Int.
100%
OCDD Std.
41.02-45.00
469.7780 Fn5
Flags: PBM
4σ 2.31e3
0%
Abs. Int.
6.96e6
3.48e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
1.98e7*
42.37
Rel. Int.
100%
OCDD Std.
41.02-45.00
471.7750 Fn5
Flags: PBM
4σ 3.17e3
0%
Abs. Int.
7.73e6
3.87e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
1.48e7
7.40e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT


Rel. Int.
100%
TCDF
20.54-29.50
303.9016 Fn1
Flags: PBM
4σ 2.09e3
1368F 5.08e4* 21.17
2468F 1.23e5* 22.40
1347F...[3] 1.09e5* 22.95
1248F...[3] 6.47e4* 23.36
1268F 7.08e4* 23.80
1478F 9.13e4* 24.07
2368F 5.19e4* 24.84
1238F...[5] 5.80e4* 24.95
2367/3467F 5.87e4* 26.75
1289F 1.07e5* 28.46
Abs. Int.
4.14e4
2.07e4
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
TCDF
20.54-29.50
305.8987 Fn1
Flags: PBM
4σ 3.75e3
1368F 4.21e4* 21.17
2468F 1.17e5* 22.40
1347F...[3] 1.40e5* 22.94
1248F...[3] 8.54e4* 23.37
1268F 6.76e4* 23.80
1478F 1.09e5* 24.07
2368F 7.42e4* 24.84
1238F...[5] 5.47e4* 24.95
2367/3467F 8.46e4* 26.75
1289F 8.59e4* 28.46
Abs. Int.
4.43e4
2.22e4
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
315.9419 Fn1
Flags: PBM
4σ 2.56e4
JS 1234F 6.35e7* 24.91
ES 2378F 5.09e7* 26.34
Abs. Int.
1.25e7
6.24e6
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
317.9389 Fn1
Flags: PBM
4σ 1.15e4
JS 1234F 8.08e7* 24.91
ES 2378F 6.37e7* 26.34
Abs. Int.
1.60e7
8.01e6
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
HxCDPE
20.54-29.50
375.8364 Fn1
Flags: PB
4σ 1.95e3
Abs. Int.
2.15e4
1.07e4
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT

SGS ID: B4519_17655_DF_001 | **Sample ID: CS-27** | **Acq: 10-Aug-2020 17:59:44**

Instr: [ILM] AutoSpec-Ultima MM3 | **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 22** | **User: PSW Datafile: 200810R06**



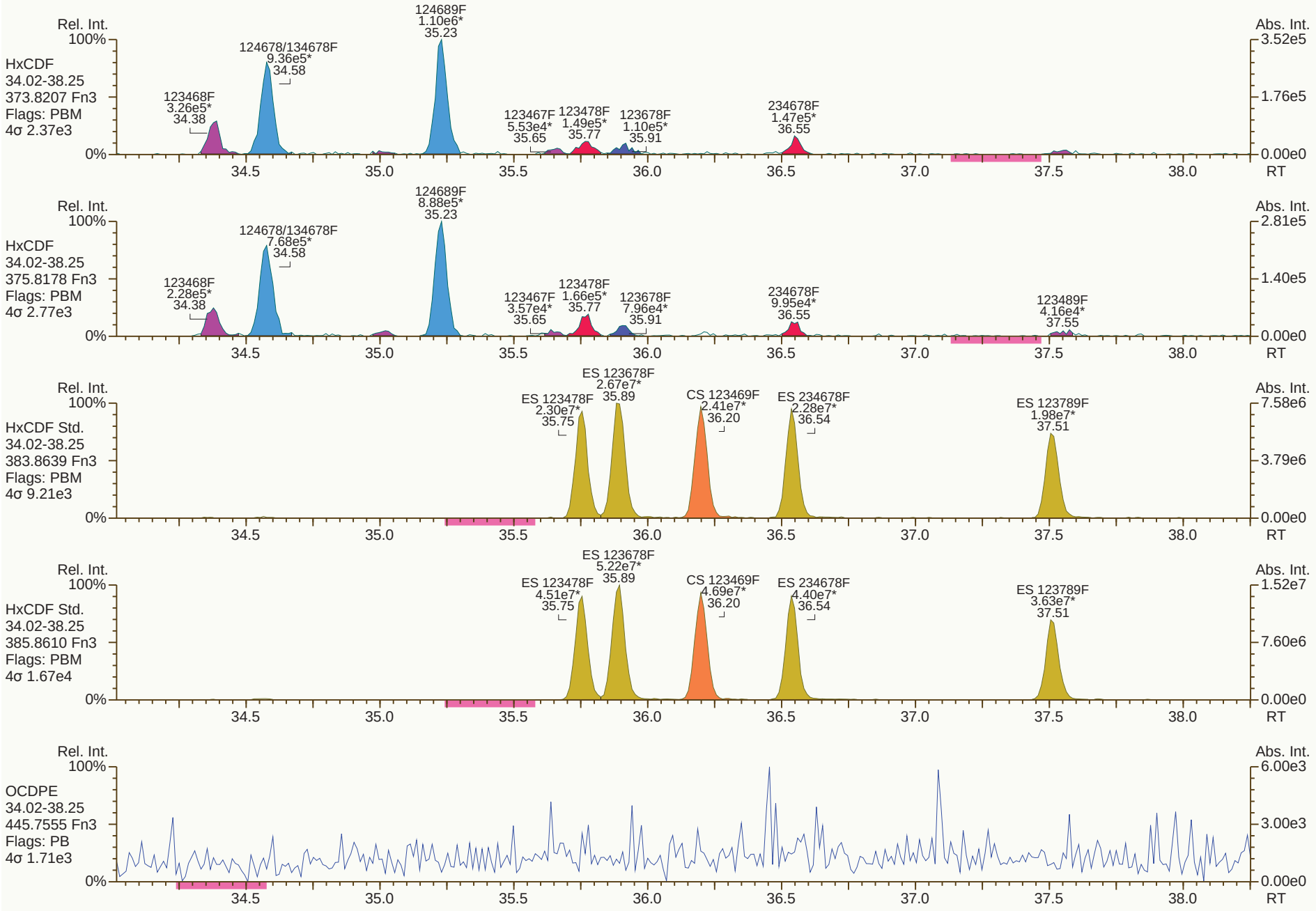
Results: P:\B4500_B4599\B4519\B4519_17655 DF\Resources\B4519_17655_DF_001.utp_res, saved 11-Aug-2020 08:21 (PSW)

Peak annotation: Areas, Centroids

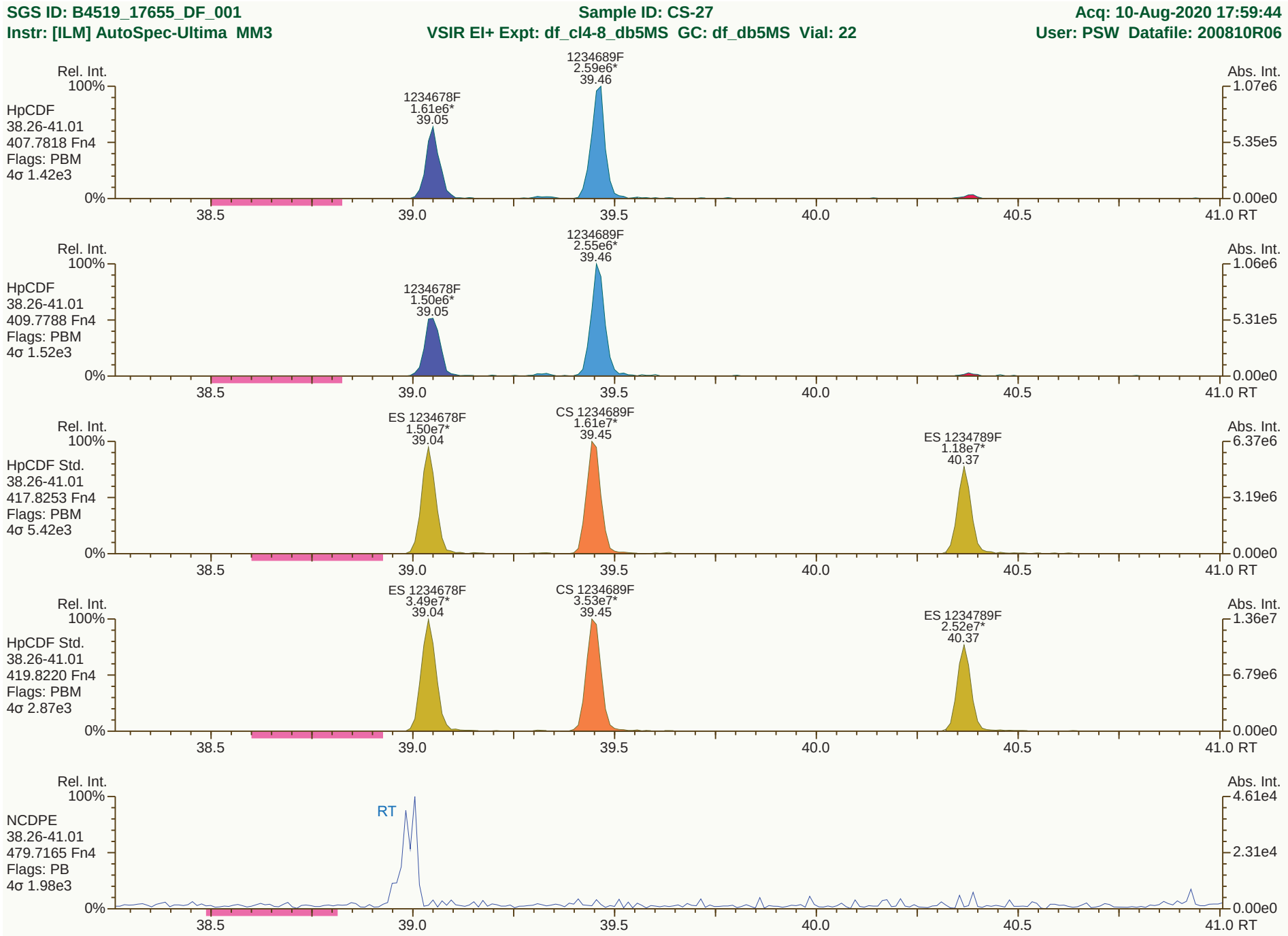
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 8388 scc: 108-741

PKD: 11-Aug-2020 08:21 Printed: 11-Aug-2020 10:11 Page 8 of 12


Rel. Int.
100%
PeCDF-2
29.51-34.00
339.8597 Fn2
Flags: PBM
4σ 3.08e3
12368F...[3]
4.46e5*
30.21
13678F...[3]
1.14e5*
30.04
23468/12469F
1.24e5*
30.89
12378F
5.71e4*
31.33
12678/12367F
8.21e4*
31.63
23467/12369F
4.12e4*
32.34
23478F
1.37e5*
32.49
PR
Abs. Int.
7.60e4
3.80e4
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF-2
29.51-34.00
341.8568 Fn2
Flags: PBM
4σ 3.22e3
12368F...[3]
2.45e5*
30.21
23468/12469F
1.10e5*
30.88
13678F...[3]
6.33e4*
30.05
12378F
3.00e4*
31.34
12678/12367F
5.10e4*
31.64
23467/12369F
4.01e4*
32.34
23478F
9.59e4*
32.48
Abs. Int.
4.37e4
2.19e4
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.00
351.9000 Fn2
Flags: PBM
4σ 4.79e3
CS 12346F
6.48e7*
30.78
ES 12378F
6.33e7*
31.32
ES 23478F
5.93e7*
32.45
Abs. Int.
1.66e7
8.32e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.00
353.8970 Fn2
Flags: PBM
4σ 2.88e3
CS 12346F
4.21e7*
30.78
ES 12378F
3.97e7*
31.32
ES 23478F
3.76e7*
32.45
Abs. Int.
1.13e7
5.65e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
HpCDPE
29.51-34.00
409.7974 Fn2
Flags: PB
4σ 1.70e3
Abs. Int.
7.76e3
3.88e3
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT


Rel. Int.
100%
HxCDF
34.02-38.25
373.8207 Fn3
Flags: PBM
4σ 2.37e3
124689F
1.10e6*
35.23
124678/134678F
9.36e5*
34.58
123468F
3.26e5*
34.38
123467F
5.53e4*
35.65
123478F
1.49e5*
35.77
123678F
1.10e5*
35.91
234678F
1.47e5*
36.55
Abs. Int.
3.52e5
1.76e5
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDF
34.02-38.25
375.8178 Fn3
Flags: PBM
4σ 2.77e3
124689F
8.88e5*
35.23
124678/134678F
7.68e5*
34.58
123468F
2.28e5*
34.38
123467F
3.57e4*
35.65
123478F
1.66e5*
35.77
123678F
7.96e4*
35.91
234678F
9.95e4*
36.55
123489F
4.16e4*
37.55
Abs. Int.
2.81e5
1.40e5
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDF Std.
34.02-38.25
383.8639 Fn3
Flags: PBM
4σ 9.21e3
ES 123678F
2.67e7*
35.89
ES 123478F
2.30e7*
35.75
CS 123469F
2.41e7*
36.20
ES 234678F
2.28e7*
36.54
ES 123789F
1.98e7*
37.51
Abs. Int.
7.58e6
3.79e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDF Std.
34.02-38.25
385.8610 Fn3
Flags: PBM
4σ 1.67e4
ES 123678F
5.22e7*
35.89
ES 123478F
4.51e7*
35.75
CS 123469F
4.69e7*
36.20
ES 234678F
4.40e7*
36.54
ES 123789F
3.63e7*
37.51
Abs. Int.
1.52e7
7.60e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
OCDPE
34.02-38.25
445.7555 Fn3
Flags: PB
4σ 1.71e3
Abs. Int.
6.00e3
3.00e3
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT

SGS ID: B4519_17655_DF_001 | Sample ID: CS-27 | Acq: 10-Aug-2020 17:59:44
Instr: [ILM] AutoSpec-Ultima MM3 | VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 22 | User: PSW Datafile: 200810R06



Results: P:\B4500_B4599\B4519\B4519_17655 DF\Resources\B4519_17655_DF_001.utp_res, saved 11-Aug-2020 08:21 (PSW) | Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 7671, 5765, 3308 scc: 108-741 | PKD: 11-Aug-2020 08:21 Printed: 11-Aug-2020 10:11 Page 11 of 12



Results: P:\B4500_B4599\B4519\B4519_17655 DF\Resources\B4519_17655_DF_001.utp_res, saved 11-Aug-2020 08:21 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 3894, 9884, 4860 scc: 108-741 *PKD: 11-Aug-2020 08:21 Printed: 11-Aug-2020 10:11 Page 12 of 12*

Lab ID: B4519_17655_DF_002 **Acq'd:** 10 Aug 2020 18:47 PSW **Wt/Vol:** 9.25 g **ICAL:** MM3_DF_10012020_12JUN2020

Client ID: CS-28 **UTP:** 11-Aug-2020 08:26:20 PSW **J-level:** 0.54 pg/g **Split:** 1 **Checkcode:** 179-527-GCN

Datafile: 200810R07 **Report:** 11 Aug 2020 09:59 pw **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	NotFnd		1.0009	-		-	-	-	1.18	-	6701	0.171
12378-PeCDD	32.83	J EMPC	1.0006	1.0006	0	9.72E+04	1.84	N	1.14	0.272	5974	0.148
123478-HxCDD	36.74	J	1.0004	1.0003	-0.2	4.05E+05	1.26	Y	1.09	1.33	4424	0.12
123678-HxCDD	36.86	J	1.0035	1.0035	0	6.96E+05	1.19	Y	1.13	2.22	4424	0.113
123789-HxCDD	37.16	J	1.0116	1.0117	+0.2	5.43E+05	1.37	Y	1.05	1.49	4424	0.107
1234678-HpCDD	39.97		1.0003	1.0004	+0.2	2.54E+07	1.03	Y	0.98	108	29663	0.759
OCDD	42.39		1.0003	1.0003	0	1.18E+08	0.91	Y	1.08	935	4866	0.262
2378-TCDF	26.37	J	1.0006	1.0008	+0.3	1.43E+05	0.79	Y	0.98	0.228	4594	0.0866
12378-PeCDF	31.34	J EMPC	1.0006	1.0007	+0.2	7.75E+04	2.48	N	0.95	0.142	9086	0.166
23478-PeCDF	32.48	J EMPC	1.0005	1.0007	+0.4	2.41E+05	1.98	N	0.95	0.469	9086	0.158
123478-HxCDF	35.77	J	1.0005	1.0004	-0.2	4.71E+05	1.27	Y	1.20	1.03	9088	0.166
123678-HxCDF	35.92	J EMPC	1.0004	1.0005	+0.2	2.02E+05	0.80	N	1.07	0.429	9088	0.154
234678-HxCDF	36.56	J EMPC	1.0005	1.0004	-0.2	2.98E+05	1.54	N	1.10	0.719	9088	0.175
123789-HxCDF	NotFnd		1.0004	-		-	-	-	1.09	-	9088	0.214
1234678-HpCDF	39.06		1.0003	1.0003	0	5.31E+06	1.07	Y	1.28	14.6	22010	0.414
1234789-HpCDF	40.38	J	1.0002	1.0002	0	2.62E+05	1.07	Y	1.27	0.935	22010	0.494
OCDF	42.55		1.0003	1.0002	-0.3	6.68E+06	0.90	Y	1.01	44.8	5133	0.223

Name	Act RT		Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	27.27		1.0255	1.0257	+0.3	8.09E+07	0.76	Y	1.01	85.8
ES 12378-PeCDD	32.81		1.2330	1.2339	+1.8	6.80E+07	1.66	Y	0.87	83.4
ES 123478-HxCDD	36.73		0.9917	0.9916	-0.2	6.03E+07	1.34	Y	1.10	71.8
ES 123678-HxCDD	36.84		0.9947	0.9947	0	6.01E+07	1.27	Y	1.06	73.9
ES 123789-HxCDD	37.14		1.0028	1.0028	0	7.51E+07	1.31	Y	1.22	80.4
ES 1234678-HpCDD	39.95		1.0785	1.0787	+0.5	5.16E+07	1.08	Y	0.99	67.8
ES OCDD	42.38		1.1439	1.1442	+0.8	5.06E+07	0.94	Y	0.67	49.3
ES 2378-TCDF	26.35		1.0572	1.0575	+0.5	1.38E+08	0.80	Y	1.01	86.5
ES 12378-PeCDF	31.32		1.2558	1.2571	+2.4	1.24E+08	1.58	Y	0.90	87.4
ES 23478-PeCDF	32.46		1.3012	1.3027	+2.9	1.18E+08	1.58	Y	0.89	83.9
ES 123478-HxCDF	35.76		0.9655	0.9655	0	8.30E+07	0.54	Y	1.43	75.7
ES 123678-HxCDF	35.90		0.9693	0.9692	-0.2	9.50E+07	0.53	Y	1.63	75.9
ES 234678-HxCDF	36.55		0.9867	0.9867	0	8.17E+07	0.54	Y	1.48	72
ES 123789-HxCDF	37.52		1.0130	1.0130	0	7.21E+07	0.52	Y	1.29	72.8
ES 1234678-HpCDF	39.05		1.0540	1.0542	+0.5	6.12E+07	0.46	Y	1.15	69.6
ES 1234789-HpCDF	40.37		1.0898	1.0900	+0.5	4.77E+07	0.43	Y	0.91	68.6
ES OCDF	42.54		1.1484	1.1486	+0.5	6.37E+07	0.92	Y	0.83	50.2

Lab ID: B4519_17655_DF_002 | Acq'd: 10 Aug 2020 18:47 PSW | Wt/Vol: 9.25 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-28 | UTP: 11-Aug-2020 08:26:20 PSW | J-level: 0.54 pg/g | Split: 1 | Checkcode: 179-527-GCN

Datafile: 200810R07 | Report: 11 Aug 2020 09:59 pw | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %	
JS 1234-TCDD	26.59		-	-	-	9.37E+07	0.78	Y	-	-	
JS 1234-TCDF	24.92		-	-	-	1.57E+08	0.76	Y	-	-	
JS 123467-HxCDD	37.04		-	-	-	3.84E+07	1.25	Y	-	-	
CS 37Cl-2378-TCDD	27.29		1.0265	1.0265	0	3.68E+07	n/a	-	1.04	94.7	
CS 12347-PeCDD	32.30		1.2141	1.2149	+1.6	7.16E+07	1.64	Y	0.74	103	
CS 12346-PeCDF	30.79		1.2343	1.2356	+2.4	1.24E+08	1.58	Y	0.86	91.6	
CS 123469-HxCDF	36.21		0.9776	0.9775	-0.2	8.35E+07	0.51	Y	1.36	80.2	
CS 1234689-HpCDF	39.46		1.0650	1.0653	+0.7	6.38E+07	0.46	Y	1.05	78.9	
~~SS 37Cl-2378-TCDD~~	~~27.29~~		~~1.0265~~	~~1.0265~~	~~0~~	~~3.68E+07~~	~~n/a~~		~~1.04~~	~~110~~	Not used in this project.
~~SS 12347-PeCDD~~	~~32.30~~		~~1.2141~~	~~1.2149~~	~~+1.6~~	~~7.16E+07~~	~~1.64~~	~~Y~~	~~0.86~~	~~123~~	CL 11Aug20
~~SS 12346-PeCDF~~	~~30.79~~		~~1.2343~~	~~1.2356~~	~~+2.4~~	~~1.24E+08~~	~~1.58~~	~~Y~~	~~0.96~~	~~104~~	
~~SS 123469-HxCDF~~	~~36.21~~		~~0.9776~~	~~0.9775~~	~~-0.2~~	~~8.35E+07~~	~~0.51~~	~~Y~~	~~0.83~~	~~105~~	
~~SS 1234689-HpCDF~~	~~39.46~~		~~1.0650~~	~~1.0653~~	~~+0.7~~	~~6.38E+07~~	~~0.46~~	~~Y~~	~~0.92~~	~~113~~	

Totals	Conc	EMPC
Total TCDD	0.742	1.5
Total PeCDD	4.84	5.83
Total HxCDD	62.1	64.5
Total HpCDD	621	621
Total Tetra-Octa Dioxins	1620	1630
Total TCDF	3.29	5.19
Total PeCDF	4.13	5.53
Total HxCDF	13.8	15.2
Total HpCDF	48.9	48.9
Total Tetra-Octa Furans	115	120
Total Tetra-Octa Dioxins & Furans	1740	1750

Lab ID: B4519_17655_DF_002 **Acq'd:** 10 Aug 2020 18:47 PSW **Wt/Vol:** 9.25 g **ICAL:** MM3_DF_10012020_12JUN2020

Client ID: CS-28 **UTP:** 11-Aug-2020 08:26:20 PSW **J-level:** 0.54 pg/g **Split:** 1 **Checkcode:** 179-527-GCN

Datafile: 200810R07 **Report:** 11 Aug 2020 09:59 pw **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1368-TCDD	23.40		0.8591	0.8582	-1.3	3.27E+05	0.72	Y	1.18	0.742	6701	0.171
1379-TCDD	23.79	J EMPC	0.8732	0.8724	-1.1	1.57E+05	0.60	N	1.18	0.356	6701	0.171
1369-TCDD	NotFnd		0.8901						1.18		6701	0.171
1469-TCDD	NotFnd		0.9205						1.18		6701	0.171
1247/1246/1248/1249-TCDD	25.33	J EMPC	0.9301	0.9288	-2.0	1.07E+05	1.04	N	1.18	0.242	6701	0.171
1378-TCDD	25.55	J EMPC	0.9374	0.9370	-0.6	6.93E+04	1.14	N	1.18	0.157	6701	0.171
1268-TCDD	NotFnd		0.9449						1.18		6701	0.171
1478-TCDD	NotFnd		0.9544						1.18		6701	0.171
1279-TCDD	NotFnd		0.9610						1.18		6701	0.171
1234/1269-TCDD	NotFnd		0.9746						1.18		6701	0.171
1236-TCDD	NotFnd		0.9802						1.18		6701	0.171
1237/1238-TCDD	NotFnd		0.9898						1.18		6701	0.171
1239-TCDD	NotFnd		0.9950						1.18		6701	0.171
2378-TCDD	**NotFnd**		**1.0009**						**1.18**		**6701**	**0.171**
1278-TCDD	NotFnd		1.0133						1.18		6701	0.171
1267-TCDD	NotFnd		1.0185						1.18		6701	0.171
1289-TCDD	NotFnd		1.0379						1.18		6701	0.171
12479/12468-PeCDD	30.27	J	0.9229	0.9227	-0.4	6.48E+05	1.71	Y	1.14	1.81	5974	0.148
12469-PeCDD	30.82	J	0.9396	0.9393	-0.6	3.23E+05	1.53	Y	1.14	0.904	5974	0.148
12368-PeCDD	31.38	J EMPC	0.9568	0.9564	-0.8	2.60E+05	2.02	N	1.14	0.727	5974	0.148
12478-PeCDD	31.58	J	0.9626	0.9626	0	1.33E+05	1.60	Y	1.14	0.372	5974	0.148
12379-PeCDD	31.69	J	0.9657	0.9657	0	2.36E+05	1.60	Y	1.14	0.66	5974	0.148
12369/12467/12489-PeCDD	31.95	J	0.9738	0.9737	-0.2	2.44E+05	1.50	Y	1.14	0.684	5974	0.148
12346/12347-PeCDD	32.33	J	0.9853	0.9853	0	1.44E+05	1.32	Y	1.14	0.402	5974	0.148
12378-PeCDD	32.83	J EMPC	**1.0006**	**1.0006**	**0**	**9.72E+04**	**1.84**	**N**	**1.14**	**0.272**	**5974**	**0.148**
12367-PeCDD	NotFnd		1.0034						1.14		5974	0.148
12389-PeCDD	NotFnd		1.0141						1.14		5974	0.148
124679/124689-HxCDD	35.05		0.9542	0.9542	0	8.00E+06	1.25	Y	1.09	24.3	4424	0.113
123468-HxCDD	35.70		0.9721	0.9720	-0.2	2.77E+06	1.29	Y	1.09	8.45	4424	0.113
123679/123689-HxCDD	35.99		0.9799	0.9798	-0.2	4.56E+06	1.23	Y	1.09	13.9	4424	0.113
123469-HxCDD	36.12		0.9835	0.9834	-0.2	3.43E+06	1.25	Y	1.09	10.4	4424	0.113
123478-HxCDD	36.74	J	**1.0004**	**1.0003**	**-0.2**	**4.05E+05**	**1.26**	**Y**	1.09	**1.33**	**4424**	**0.12**
123678-HxCDD	36.86	J	**1.0035**	**1.0035**	**0**	**6.96E+05**	**1.19**	**Y**	1.13	**2.22**	**4424**	**0.113**
123467-HxCDD	37.05	J EMPC	1.0088	1.0088	0	7.80E+05	1.04	N	1.09	2.37	4424	0.113
123789-HxCDD	37.16	J	**1.0116**	**1.0117**	**+0.2**	**5.43E+05**	**1.37**	**Y**	1.05	**1.49**	**4424**	**0.107**

Lab ID: B4519_17655_DF_002 | Acq'd: 10 Aug 2020 18:47 PSW | Wt/Vol: 9.25 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-28 | UTP: 11-Aug-2020 08:26:20 PSW | J-level: 0.54 pg/g | Split: 1 | Checkcode: 179-527-GCN

Datafile: 200810R07 | Report: 11 Aug 2020 09:59 pw | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1234679-HpCDD	39.32		0.9843	0.9842	-0.2	1.20E+08	1.04	Y	0.98	513	29663	0.759
1234678-HpCDD	**39.97**		**1.0003**	**1.0004**	**+0.2**	**2.54E+07**	**1.03**	**Y**	**0.98**	**108**	**29663**	**0.759**
OCDD	**42.39**		**1.0003**	**1.0003**	**0**	**1.18E+08**	**0.91**	**Y**	**1.08**	**935**	**4866**	**0.262**
OCDD-a	42.39		1.0002	1.0002	0	6.68E+06	2.60	Y	0.07	862	7069	6.19
1368-TCDF	21.17	J	0.8044	0.8033	-1.4	1.62E+05	0.78	Y	0.98	0.258	4594	0.0866
1468-TCDF	21.72	J	0.8261	0.8244	-2.2	9.63E+04	0.74	Y	0.98	0.154	4594	0.0866
2468-TCDF	22.40	EMPC	0.8511	0.8502	-1.2	3.92E+05	0.89	N	0.98	0.626	4594	0.0866
1346/1246-TCDF	22.80	J EMPC	0.8665	0.8652	-1.8	5.37E+04	0.97	N	0.98	0.0857	4594	0.0866
1347/1378/1247-TCDF	22.97		0.8723	0.8716	-1.0	4.26E+05	0.83	Y	0.98	0.68	4594	0.0866
1348-TCDF	23.29	J EMPC	0.8835	0.8838	+0.4	9.22E+04	0.94	N	0.98	0.147	4594	0.0866
1248/1367/1379-TCDF	23.40	J	0.8888	0.8882	-0.8	1.83E+05	0.78	Y	0.98	0.293	4594	0.0866
1268-TCDF	23.81	J	0.9044	0.9037	-1.0	1.61E+05	0.73	Y	0.98	0.257	4594	0.0866
1467-TCDF	23.98	J EMPC	0.9098	0.9102	+0.6	6.72E+04	1.40	N	0.98	0.107	4594	0.0866
1478-TCDF	24.14	J	0.9167	0.9161	-0.9	1.07E+05	0.83	Y	0.98	0.171	4594	0.0866
1369/1237-TCDF	24.54	J	0.9316	0.9313	-0.4	1.12E+05	0.70	Y	0.98	0.179	4594	0.0866
2467-TCDF	24.66	J EMPC	0.9369	0.9360	-1.3	1.17E+05	0.60	N	0.98	0.186	4594	0.0866
2368-TCDF	24.85	J	0.9430	0.9430	0	1.91E+05	0.76	Y	0.98	0.305	4594	0.0866
1238/1234/1678/1469/1236-TCDF	24.96	J	0.9468	0.9473	+0.7	2.34E+05	0.72	Y	0.98	0.374	4594	0.0866
1278-TCDF	25.42	J EMPC	0.9651	0.9648	-0.5	1.10E+05	0.89	N	0.98	0.175	4594	0.0866
1349-TCDF	NotFnd		0.9704						0.98		4594	0.0866
1267-TCDF	25.72	J EMPC	0.9761	0.9762	+0.2	8.15E+04	0.63	N	0.98	0.13	4594	0.0866
2346/1249-TCDF	NotFnd		0.9834						0.98		4594	0.0866
2347/1279-TCDF	26.14	J EMPC	0.9921	0.9922	+0.2	8.41E+04	0.49	N	0.98	0.134	4594	0.0866
2348-TCDF	26.24	J EMPC	0.9964	0.9960	-0.6	6.10E+04	0.56	N	0.98	0.0974	4594	0.0866
2378-TCDF	**26.37**	J	**1.0006**	**1.0008**	**+0.3**	**1.43E+05**	**0.79**	**Y**	**0.98**	**0.228**	**4594**	**0.0866**
2367/3467-TCDF	26.74	J	1.0156	1.0148	-1.3	2.47E+05	0.73	Y	0.98	0.395	4594	0.0866
1269-TCDF	NotFnd		1.0249						0.98		4594	0.0866
1239-TCDF	NotFnd		1.0357						0.98		4594	0.0866
1289-TCDF	28.46	J EMPC	1.0799	1.0801	+0.3	1.29E+05	1.30	N	0.98	0.205	4594	0.0866
13468/12468-PeCDF	28.46	J	0.9084	0.9086	+0.3	8.70E+05	1.39	Y	0.95	1.64	4372	0.0782
13678/13467/12467-PeCDF	30.04	J	0.9591	0.9592	+0.2	3.37E+05	1.34	Y	0.95	0.636	9086	0.162
12368/13478/12478-PeCDF	30.21	J	0.9642	0.9644	+0.4	7.68E+05	1.60	Y	0.95	1.45	9086	0.162
14678-PeCDF	30.31	J EMPC	0.9675	0.9676	+0.2	3.53E+04	0.41	N	0.95	0.0667	9086	0.162
13479-PeCDF	NotFnd		0.9706						0.95		9086	0.162
13469/12479-PeCDF	NotFnd		0.9787						0.95		9086	0.162
12346-PeCDF	NotFnd		0.9833						0.95		9086	0.162

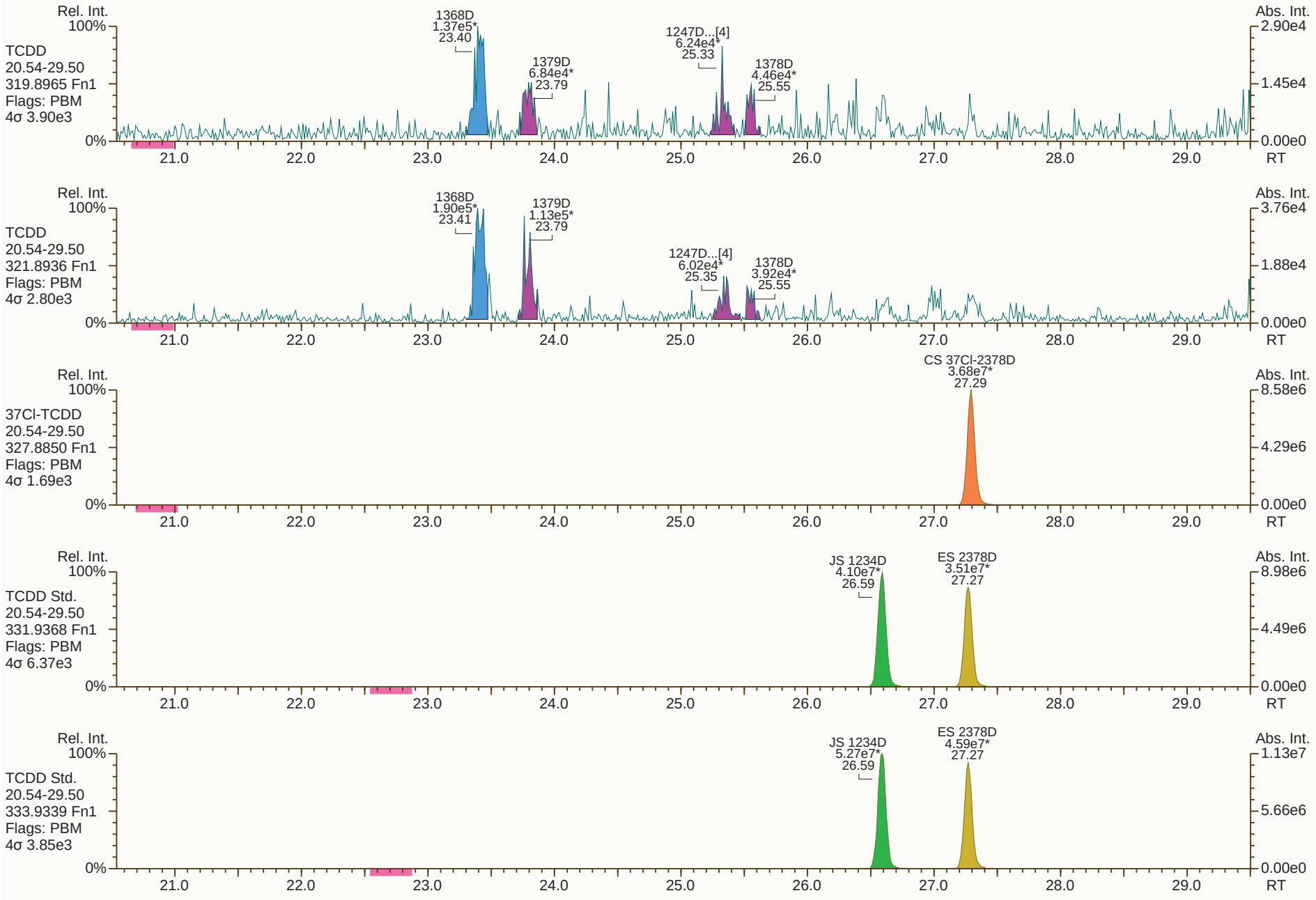
Lab ID: B4519_17655_DF_002 **Acq'd:** 10 Aug 2020 18:47 PSW **Wt/Vol:** 9.25 g **ICAL:** MM3_DF_10012020_12JUN2020

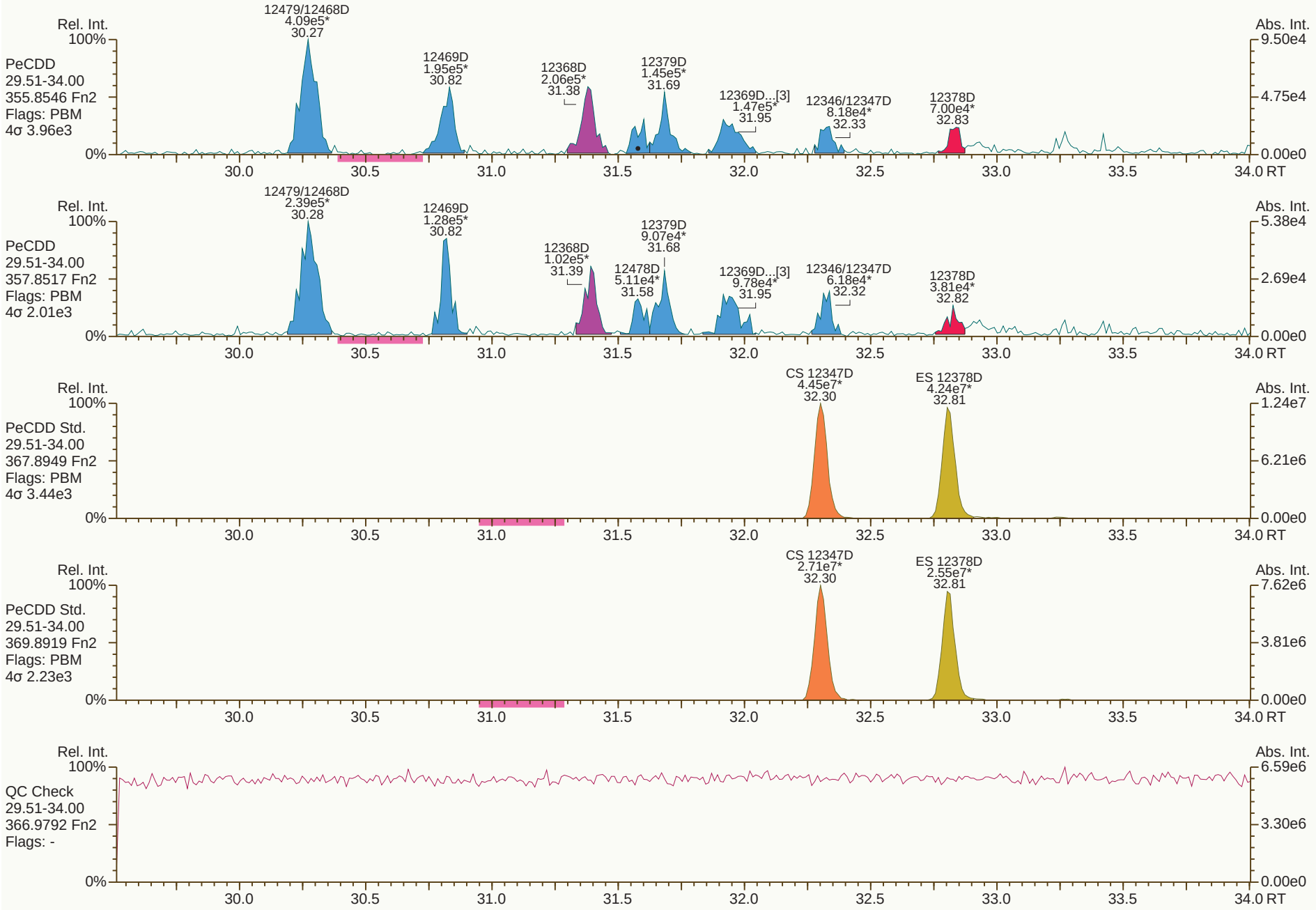
Client ID: CS-28 **UTP:** 11-Aug-2020 08:26:20 PSW **J-level:** 0.54 pg/g **Split:** 1 **Checkcode:** 179-527-GCN

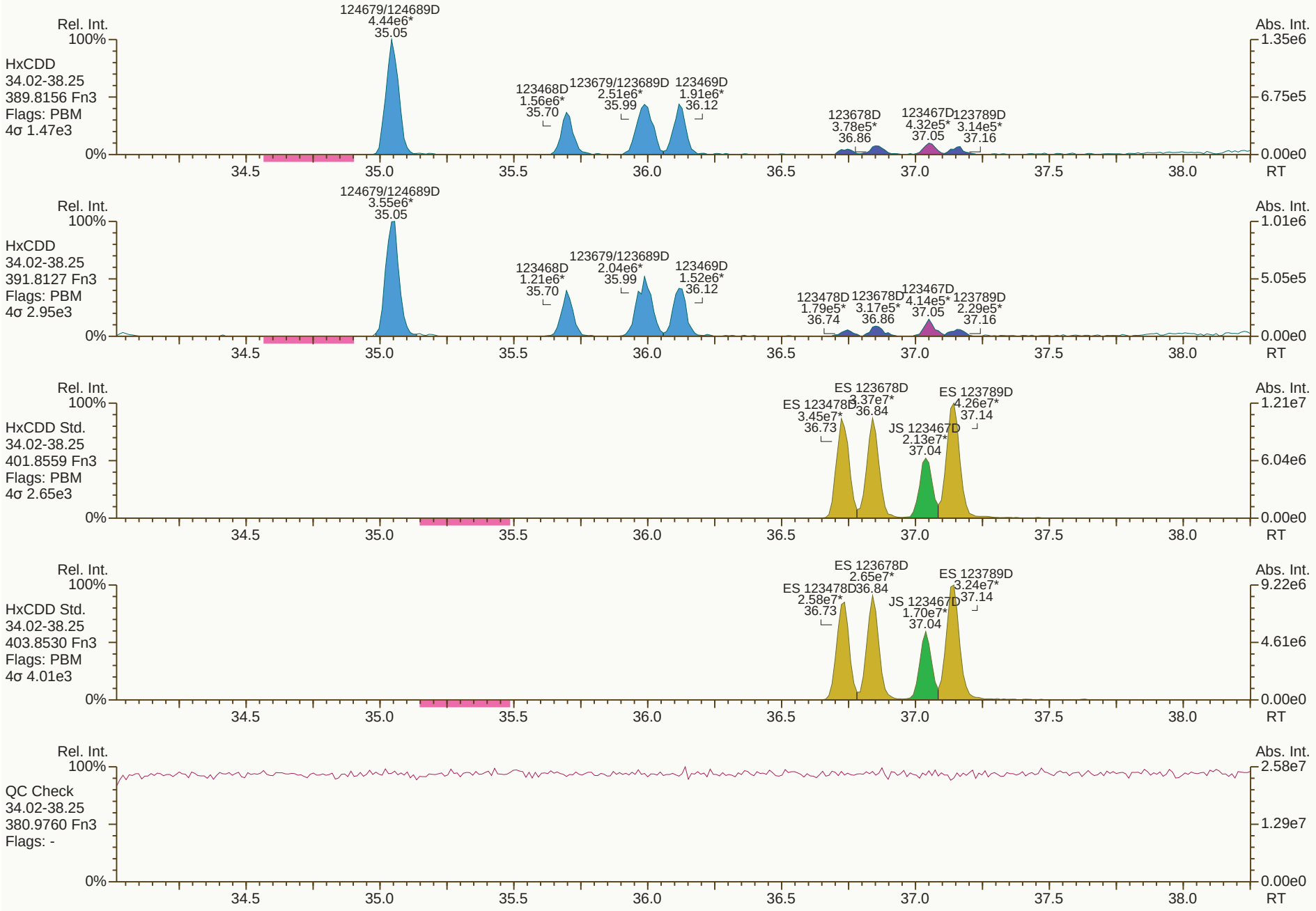
Datafile: 200810R07 **Report:** 11 Aug 2020 09:59 pw **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

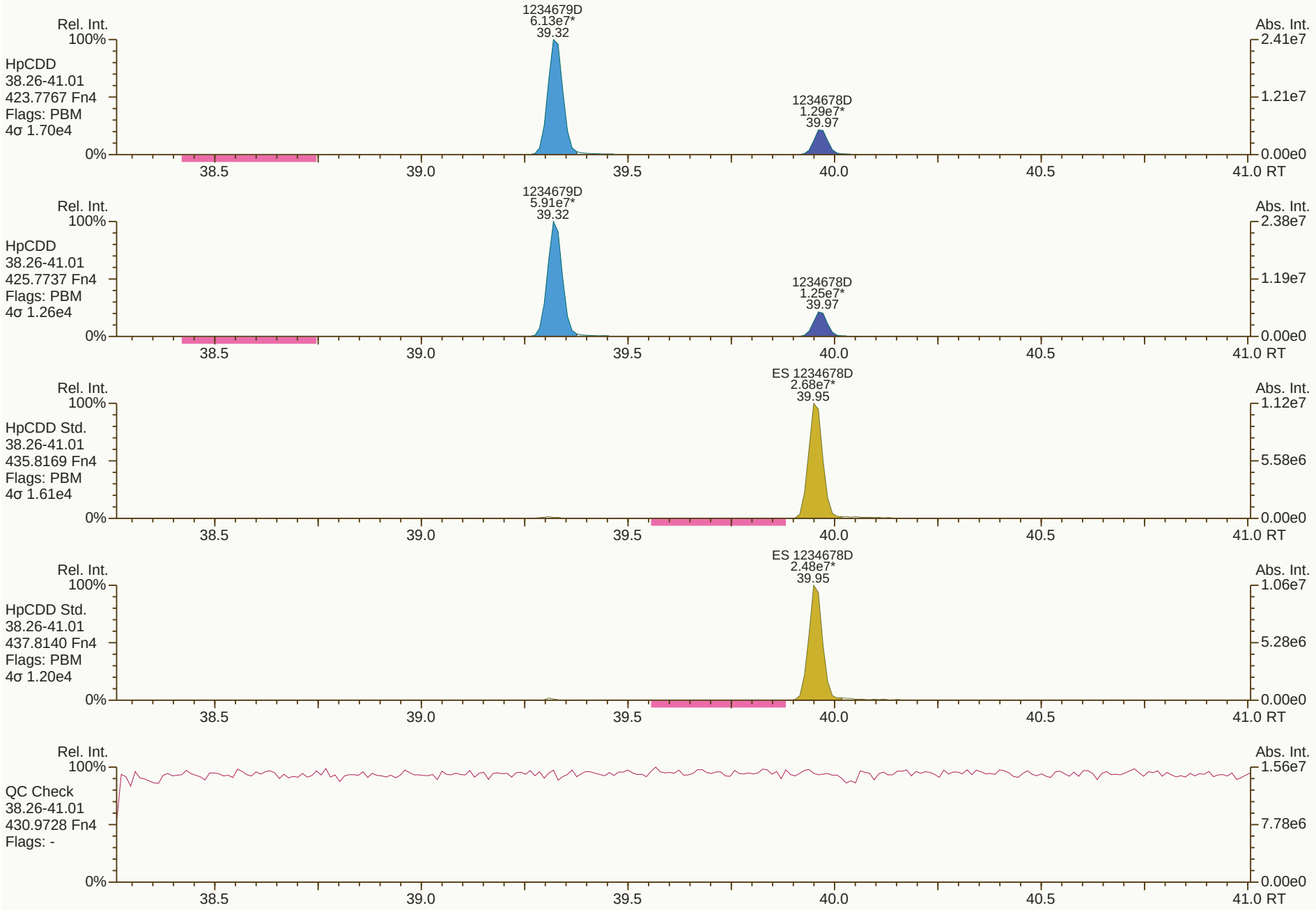
Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
23468/12469-PeCDF	30.88	J	0.9861	0.9859	-0.4	2.11E+05	1.50	Y	0.95	0.399	9086	0.162
12347-PeCDF	NotFnd		0.9887						0.95		9086	0.162
12348-PeCDF	31.14	J EMPC	0.9938	0.9940	+0.4	5.59E+04	1.03	N	0.95	0.106	9086	0.162
12378-PeCDF	**31.34**	J EMPC	**1.0006**	**1.0007**	**+0.2**	**7.75E+04**	**2.48**	**N**	**0.95**	**0.142**	**9086**	**0.166**
12678/12367-PeCDF	31.62	J EMPC	1.0095	1.0096	+0.2	1.90E+05	1.85	N	0.95	0.359	9086	0.162
12379-PeCDF	NotFnd		1.0150						0.95		9086	0.162
12679-PeCDF	NotFnd		0.9926						0.95		9086	0.162
23467/12369-PeCDF	32.35	J EMPC	0.9966	0.9965	-0.2	1.37E+05	0.97	N	0.95	0.259	9086	0.162
23478-PeCDF	**32.48**	J EMPC	**1.0005**	**1.0007**	**+0.4**	**2.41E+05**	**1.98**	**N**	**0.95**	**0.469**	**9086**	**0.158**
23478/12489-PeCDF	NotFnd		0.0000						0.95			
12489-PeCDF	NotFnd		1.0047						0.95		9086	0.162
12349-PeCDF	NotFnd		1.0107						0.95		9086	0.162
12389-PeCDF	NotFnd		1.0339						0.95		9086	0.162
123468-HxCDF	34.38	J	0.9617	0.9615	-0.4	5.40E+05	1.10	Y	1.11	1.26	9088	0.175
124678/134678-HxCDF	34.58		0.9673	0.9672	-0.2	2.01E+06	1.37	Y	1.11	4.7	9088	0.175
134679-HxCDF	NotFnd		0.9737						1.11		9088	0.175
124679-HxCDF	NotFnd		0.9792						1.11		9088	0.175
124689-HxCDF	35.24		0.9854	0.9854	0	2.89E+06	1.19	Y	1.11	6.77	9088	0.175
123467-HxCDF	35.66	J EMPC	0.9972	0.9973	+0.2	1.19E+05	1.83	N	1.11	0.277	9088	0.175
123478-HxCDF	**35.77**	J	**1.0005**	**1.0004**	**-0.2**	**4.71E+05**	**1.27**	**Y**	**1.20**	**1.03**	**9088**	**0.166**
123678-HxCDF	**35.92**	J EMPC	**1.0004**	**1.0005**	**+0.2**	**2.02E+05**	**0.80**	**N**	**1.07**	**0.429**	**9088**	**0.154**
123479-HxCDF	NotFnd		1.0049						1.11		9088	0.175
123469-HxCDF	NotFnd		1.0089						1.11		9088	0.175
123679-HxCDF	NotFnd		0.9945						1.11		9088	0.175
234678-HxCDF	**36.56**	J EMPC	**1.0005**	**1.0004**	**-0.2**	**2.98E+05**	**1.54**	**N**	**1.10**	**0.719**	**9088**	**0.175**
234678/123689-HxCDF	NotFnd		0.0000						1.10			
123689-HxCDF	NotFnd		1.0054						1.11		9088	0.175
123789-HxCDF	**NotFnd**		**1.0004**						**1.09**		**9088**	**0.214**
123789/123489-HxCDF	NotFnd		0.0000						1.09			
123489-HxCDF	NotFnd		1.0008						1.11		9088	0.175
1234678-HpCDF	**39.06**		**1.0003**	**1.0003**	**0**	**5.31E+06**	**1.07**	**Y**	**1.28**	**14.6**	**22010**	**0.414**
1234679-HpCDF	39.33	**J**	1.0072	1.0072	0	2.29E+05	1.13	Y	1.27	0.714	22010	0.449
1234689-HpCDF	39.47		1.0107	1.0107	0	1.05E+07	1.04	Y	1.27	32.6	22010	0.449
1234789-HpCDF	**40.38**	**J**	**1.0002**	**1.0002**	**0**	**2.62E+05**	**1.07**	**Y**	**1.27**	**0.935**	**22010**	**0.494**
OCDF	**42.55**		**1.0003**	**1.0002**	**-0.3**	**6.68E+06**	**0.90**	**Y**	**1.01**	**44.8**	**5133**	**0.223**
OCDF-a	42.55		1.0002	1.0002	0	3.71E+05	2.14	Y	0.06	39.7	6290	4.36


Rel. Int.
100%
QC Check
20.54-29.50
316.9824 Fn1
Flags: -
0%
Abs. Int.
8.58e6
4.29e6
0.00e0
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0 RT
Rel. Int.
100%
QC Check
29.51-34.00
366.9792 Fn2
Flags: -
0%
Abs. Int.
6.59e6
3.30e6
0.00e0
30.0 30.5 31.0 31.5 32.0 32.5 33.0 33.5 34.0 RT
Rel. Int.
100%
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
0%
Abs. Int.
2.58e7
1.29e7
0.00e0
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 RT
Rel. Int.
100%
QC Check
38.26-41.01
430.9728 Fn4
Flags: -
0%
Abs. Int.
1.56e7
7.78e6
0.00e0
38.5 39.0 39.5 40.0 40.5 41.0 RT
Rel. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
1.44e7
7.20e6
0.00e0
41.5 42.0 42.5 43.0 43.5 44.0 44.5 45.0 RT


Rel. Int.
100%
TCDD
20.54-29.50
319.8965 Fn1
Flags: PBM
4σ 3.90e3
0%
1368D
1.37e5*
23.40
1379D
6.84e4*
23.79
1247D...[4]
6.24e4*
25.33
1378D
4.46e4*
25.55
Abs. Int.
2.90e4
1.45e4
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD
20.54-29.50
321.8936 Fn1
Flags: PBM
4σ 2.80e3
0%
1368D
1.90e5*
23.41
1379D
1.13e5*
23.79
1247D...[4]
6.02e4*
25.35
1378D
3.92e4*
25.55
Abs. Int.
3.76e4
1.88e4
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
37Cl-TCDD
20.54-29.50
327.8850 Fn1
Flags: PBM
4σ 1.69e3
0%
CS 37Cl-2378D
3.68e7*
27.29
Abs. Int.
8.58e6
4.29e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
331.9368 Fn1
Flags: PBM
4σ 6.37e3
0%
JS 1234D
4.10e7*
26.59
ES 2378D
3.51e7*
27.27
Abs. Int.
8.98e6
4.49e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
333.9339 Fn1
Flags: PBM
4σ 3.85e3
0%
JS 1234D
5.27e7*
26.59
ES 2378D
4.59e7*
27.27
Abs. Int.
1.13e7
5.66e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT

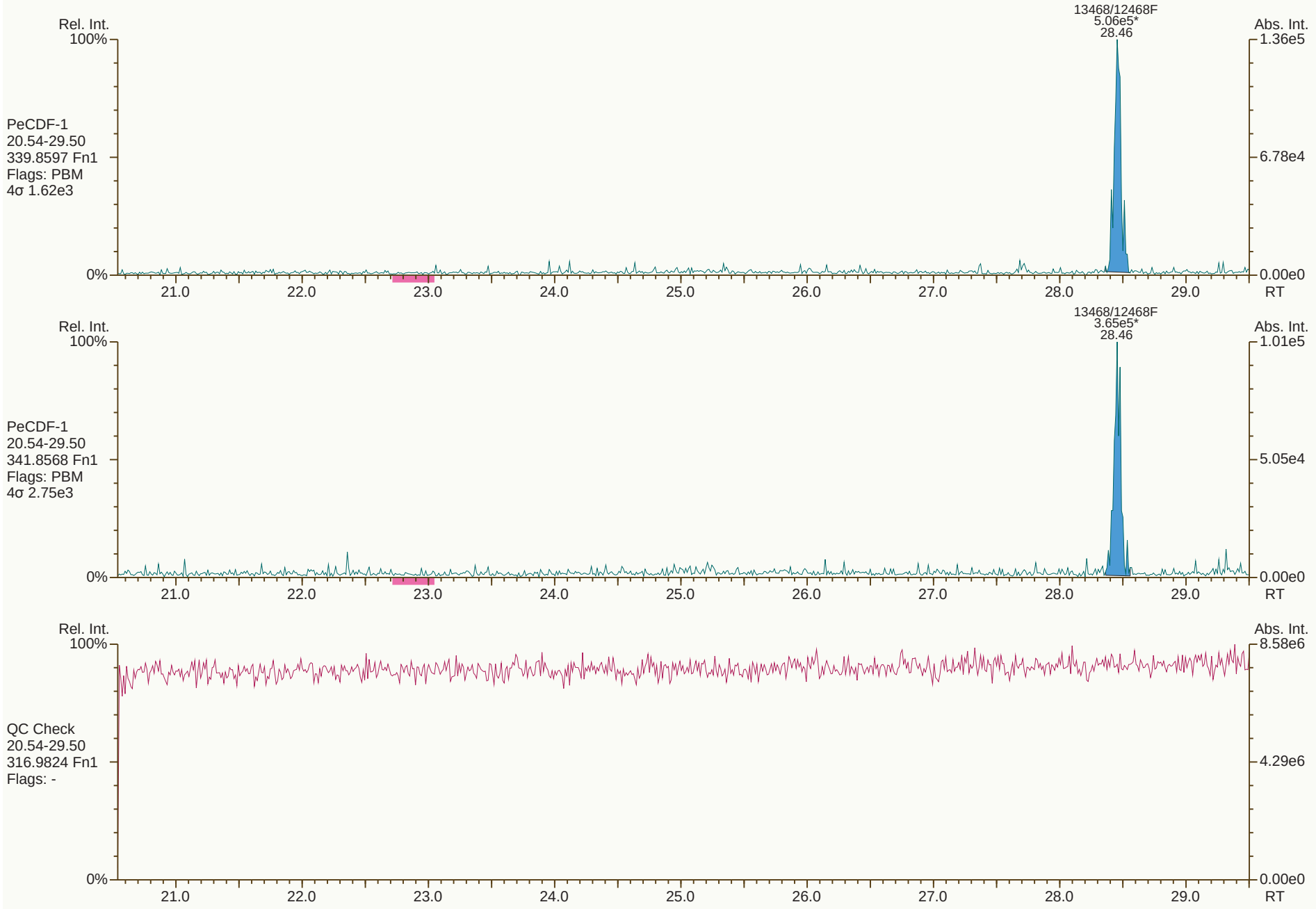

Rel. Int.
100%
0%
Abs. Int.
PeCDD
29.51-34.00
355.8546 Fn2
Flags: PBM
4σ 3.96e3
12479/12468D 4.09e5* 30.27
12469D 1.95e5* 30.82
12368D 2.06e5* 31.38
12379D 1.45e5* 31.69
12369D...[3] 1.47e5* 31.95
12346/12347D 8.18e4* 32.33
12378D 7.00e4* 32.83
9.50e4
4.75e4
0.00e0
PeCDD
29.51-34.00
357.8517 Fn2
Flags: PBM
4σ 2.01e3
12479/12468D 2.39e5* 30.28
12469D 1.28e5* 30.82
12368D 1.02e5* 31.39
12478D 5.11e4* 31.58
12379D 9.07e4* 31.68
12369D...[3] 9.78e4* 31.95
12346/12347D 6.18e4* 32.32
12378D 3.81e4* 32.82
5.38e4
2.69e4
0.00e0
PeCDD Std.
29.51-34.00
367.8949 Fn2
Flags: PBM
4σ 3.44e3
CS 12347D 4.45e7* 32.30
ES 12378D 4.24e7* 32.81
1.24e7
6.21e6
0.00e0
PeCDD Std.
29.51-34.00
369.8919 Fn2
Flags: PBM
4σ 2.23e3
CS 12347D 2.71e7* 32.30
ES 12378D 2.55e7* 32.81
7.62e6
3.81e6
0.00e0
QC Check
29.51-34.00
366.9792 Fn2
Flags: -
6.59e6
3.30e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT


Rel. Int.
100%
HxCDD
34.02-38.25
389.8156 Fn3
Flags: PBM
4σ 1.47e3
124679/124689D
4.44e6*
35.05
123468D
1.56e6*
35.70
123679/123689D
2.51e6*
35.99
123469D
1.91e6*
36.12
123678D
3.78e5*
36.86
123467D
4.32e5*
37.05
123789D
3.14e5*
37.16
Abs. Int.
1.35e6
6.75e5
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD
34.02-38.25
391.8127 Fn3
Flags: PBM
4σ 2.95e3
124679/124689D
3.55e6*
35.05
123468D
1.21e6*
35.70
123679/123689D
2.04e6*
35.99
123469D
1.52e6*
36.12
123478D
1.79e5*
36.74
123678D
3.17e5*
36.86
123467D
4.14e5*
37.05
123789D
2.29e5*
37.16
Abs. Int.
1.01e6
5.05e5
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
401.8559 Fn3
Flags: PBM
4σ 2.65e3
ES 123678D
3.37e7*
36.84
ES 123478D
3.45e7*
36.73
ES 123789D
4.26e7*
37.14
JS 123467D
2.13e7*
37.04
Abs. Int.
1.21e7
6.04e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
403.8530 Fn3
Flags: PBM
4σ 4.01e3
ES 123678D
2.65e7*
36.84
ES 123478D
2.58e7*
36.73
ES 123789D
3.24e7*
37.14
JS 123467D
1.70e7*
37.04
Abs. Int.
9.22e6
4.61e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
Abs. Int.
2.58e7
1.29e7
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT

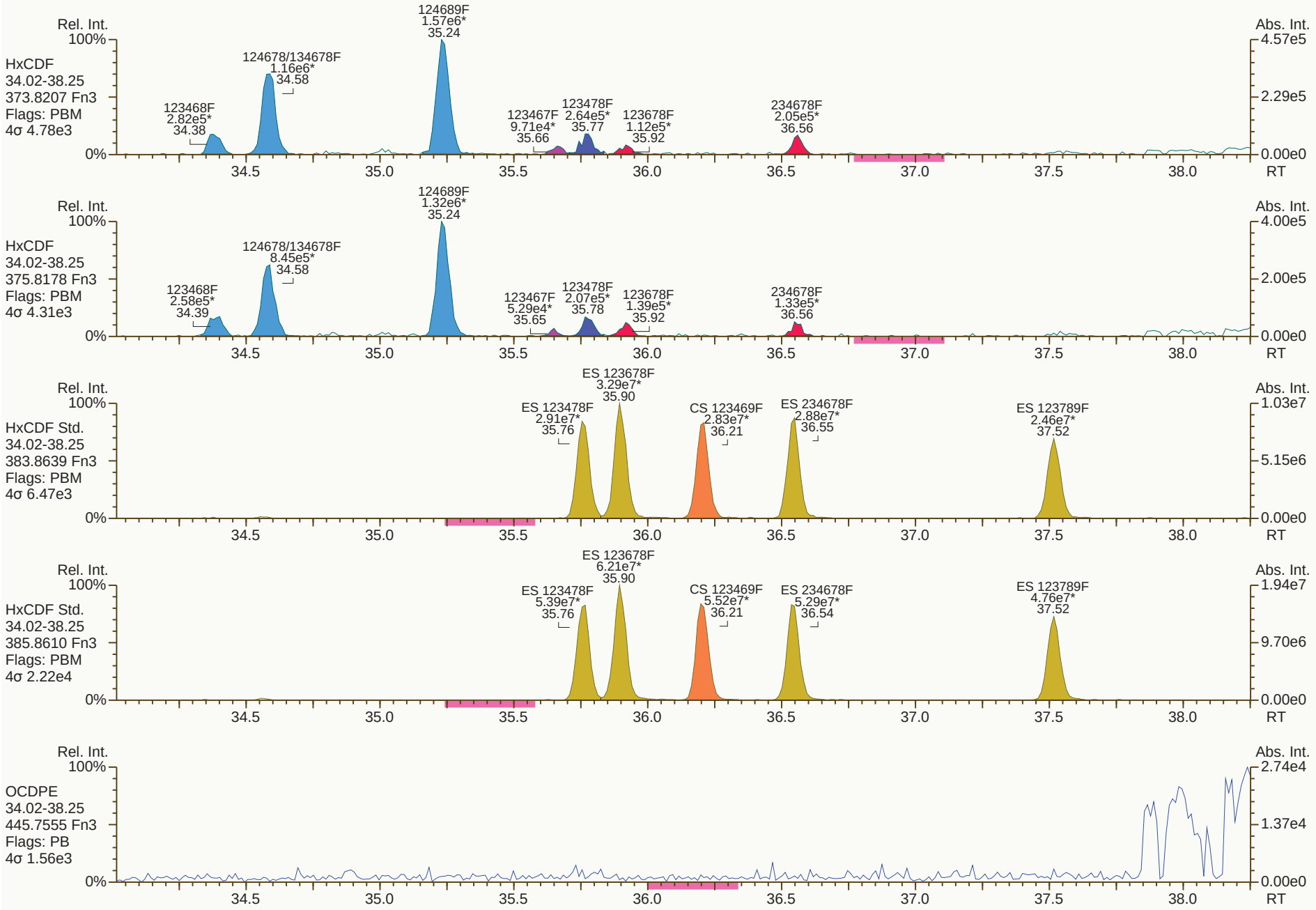

Rel. Int.
100%
HpCDD
38.26-41.01
423.7767 Fn4
Flags: PBM
4σ 1.70e4
0%
1234679D
6.13e7*
39.32
1234678D
1.29e7*
39.97
Abs. Int.
2.41e7
1.21e7
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.26-41.01
425.7737 Fn4
Flags: PBM
4σ 1.26e4
0%
1234679D
5.91e7*
39.32
1234678D
1.25e7*
39.97
Abs. Int.
2.38e7
1.19e7
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
435.8169 Fn4
Flags: PBM
4σ 1.61e4
0%
ES 1234678D
2.68e7*
39.95
Abs. Int.
1.12e7
5.58e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
437.8140 Fn4
Flags: PBM
4σ 1.20e4
0%
ES 1234678D
2.48e7*
39.95
Abs. Int.
1.06e7
5.28e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.26-41.01
430.9728 Fn4
Flags: -
0%
Abs. Int.
1.56e7
7.78e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT


OCDD
5.60e7*
42.39
Rel. Int.
100%
OCDD
41.02-45.00
457.7377 Fn5
Flags: PBM
4σ 1.51e3
0%
Abs. Int.
2.07e7
1.03e7
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDD
6.17e7*
42.39
Rel. Int.
100%
OCDD
41.02-45.00
459.7348 Fn5
Flags: PBM
4σ 3.35e3
0%
Abs. Int.
2.24e7
1.12e7
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
2.46e7*
42.38
Rel. Int.
100%
OCDD Std.
41.02-45.00
469.7780 Fn5
Flags: PBM
4σ 2.49e3
0%
Abs. Int.
9.06e6
4.53e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
2.60e7*
42.38
Rel. Int.
100%
OCDD Std.
41.02-45.00
471.7750 Fn5
Flags: PBM
4σ 3.24e3
0%
Abs. Int.
9.80e6
4.90e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
1.44e7
7.20e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

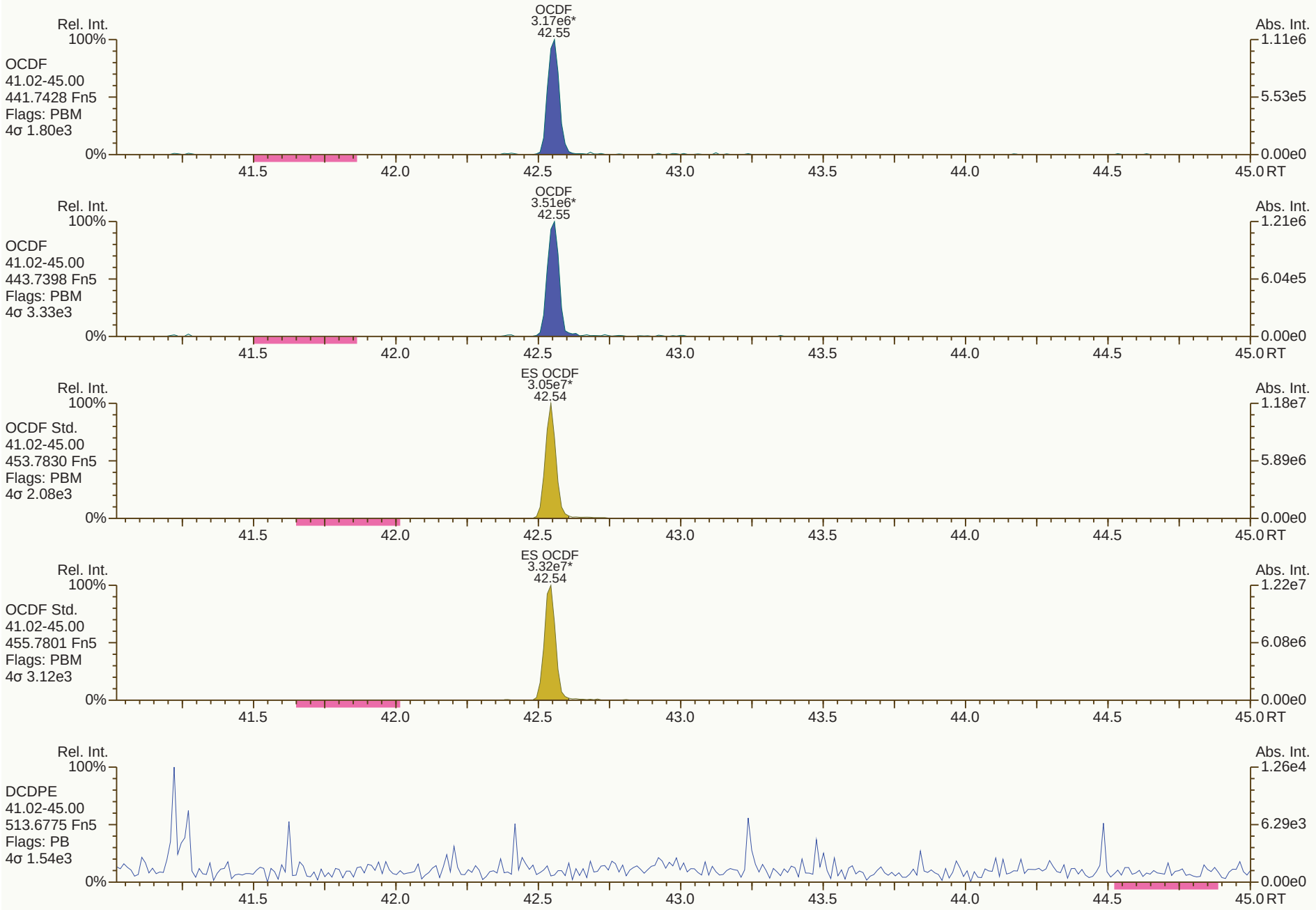

Rel. Int.
Abs. Int.
TCDF
20.54-29.50
303.9016 Fn1
Flags: PBM
4σ 2.63e3
1368F 7.07e4* 21.17
1468F 4.09e4* 21.72
2468F 1.96e5* 22.40
1346/1246F 2.94e4* 22.80
1347F...[3] 1.93e5* 22.97
1248F...[3] 8.06e4* 23.40
1268F 6.81e4* 23.81
1467F 5.30e4* 23.98
2368F 8.24e4* 24.85
1278F 5.51e4* 25.42
2378F 6.30e4* 26.37
2367/3467F 1.04e5* 26.74
1289F 9.46e4* 28.46
TCDF
20.54-29.50
305.8987 Fn1
Flags: PBM
4σ 1.96e3
1368F 9.10e4* 21.18
1468F 5.54e4* 21.74
2468F 2.22e5* 22.41
1346/1246F 3.04e4* 22.79
1347F...[3] 2.33e5* 22.96
1248F...[3] 1.03e5* 23.41
1348F 5.21e4* 23.29
1268F 9.28e4* 23.81
2467F 8.44e4* 24.67
2368F 1.09e5* 24.84
1278F 6.20e4* 25.41
2347/1279F 7.46e4* 26.13
2378F 7.97e4* 26.37
2367/3467F 1.43e5* 26.76
1289F 7.26e4* 28.48
TCDF Std.
20.54-29.50
315.9419 Fn1
Flags: PBM
4σ 2.62e4
Conc(2378F) = (6.30e4 + 7.97e4) * 2000pg / (6.16e7 + 7.66e7) * 0.98 * 9.253678g = 0.228pg/g
PSW 11-Aug-2020 10:04
VERIFIED
JS 1234F 6.79e7* 24.92
ES 2378F 6.16e7* 26.35
TCDF Std.
20.54-29.50
317.9389 Fn1
Flags: PBM
4σ 1.03e4
JS 1234F 8.96e7* 24.91
ES 2378F 7.66e7* 26.35
HxCDPE
20.54-29.50
375.8364 Fn1
Flags: PB
4σ 1.28e3
100%
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
4.03e4
2.01e4
0.00e0
5.42e4
2.71e4
1.42e7
7.08e6
1.82e7
9.12e6
1.06e4
5.32e3


Rel. Int.
100%
0%
Abs. Int.
1.36e5
6.78e4
0.00e0
RT
13468/12468F
5.06e5*
28.46
PeCDF-1
20.54-29.50
339.8597 Fn1
Flags: PBM
4σ 1.62e3
13468/12468F
3.65e5*
28.46
1.01e5
5.05e4
PeCDF-1
20.54-29.50
341.8568 Fn1
Flags: PBM
4σ 2.75e3
8.58e6
4.29e6
QC Check
20.54-29.50
316.9824 Fn1
Flags: -
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0


Rel. Int.
100%
PeCDF-2
29.51-34.00
339.8597 Fn2
Flags: PBM
4σ 5.81e3
12368F...[3] 4.72e5* 30.21
13678F...[3] 1.93e5* 30.04
14678F 2.15e4* 30.31
23468/12469F 1.27e5* 30.88
12348F 3.40e4* 31.14
12378F 7.55e4* 31.34
12678/12367F 1.38e5* 31.62
23467/12369F 8.34e4* 32.35
23478F 1.87e5* 32.48
Abs. Int.
1.20e5
5.99e4
0.00e0
0%
30.0 30.5 31.0 31.5 32.0 32.5 33.0 33.5 34.0 RT
Rel. Int.
100%
PeCDF-2
29.51-34.00
341.8568 Fn2
Flags: PBM
4σ 3.28e3
12368F...[3] 2.96e5* 30.21
13678F...[3] 1.44e5* 30.05
14678F 5.18e4* 30.30
23468/12469F 8.46e4* 30.89
12348F 3.29e4* 31.14
12378F 3.04e4* 31.34
12678/12367F 7.45e4* 31.63
23467/12369F 8.64e4* 32.34
23478F 9.47e4* 32.49
Abs. Int.
6.77e4
3.38e4
0.00e0
0%
30.0 30.5 31.0 31.5 32.0 32.5 33.0 33.5 34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.00
351.9000 Fn2
Flags: PBM
4σ 4.57e3
CS 12346F 7.60e7* 30.79
ES 12378F 7.59e7* 31.32
ES 23478F 7.19e7* 32.46
Abs. Int.
2.00e7
1.00e7
0.00e0
0%
30.0 30.5 31.0 31.5 32.0 32.5 33.0 33.5 34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.00
353.8970 Fn2
Flags: PBM
4σ 3.66e3
CS 12346F 4.81e7* 30.79
ES 12378F 4.80e7* 31.32
ES 23478F 4.57e7* 32.46
Abs. Int.
1.33e7
6.65e6
0.00e0
0%
30.0 30.5 31.0 31.5 32.0 32.5 33.0 33.5 34.0 RT
Rel. Int.
100%
HpCDPE
29.51-34.00
409.7974 Fn2
Flags: PB
4σ 2.26e3
Abs. Int.
9.97e3
4.98e3
0.00e0
0%
30.0 30.5 31.0 31.5 32.0 32.5 33.0 33.5 34.0 RT


Rel. Int.
100%
HxCDF
34.02-38.25
373.8207 Fn3
Flags: PBM
4σ 4.78e3
123468F
2.82e5*
34.38
124678/134678F
1.16e6*
34.58
124689F
1.57e6*
35.24
123467F
9.71e4*
35.66
123478F
2.64e5*
35.77
123678F
1.12e5*
35.92
234678F
2.05e5*
36.56
0%
Abs. Int.
4.57e5
2.29e5
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDF
34.02-38.25
375.8178 Fn3
Flags: PBM
4σ 4.31e3
123468F
2.58e5*
34.39
124678/134678F
8.45e5*
34.58
124689F
1.32e6*
35.24
123467F
5.29e4*
35.65
123478F
2.07e5*
35.78
123678F
1.39e5*
35.92
234678F
1.33e5*
36.56
0%
Abs. Int.
4.00e5
2.00e5
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDF Std.
34.02-38.25
383.8639 Fn3
Flags: PBM
4σ 6.47e3
ES 123478F
2.91e7*
35.76
ES 123678F
3.29e7*
35.90
CS 123469F
2.83e7*
36.21
ES 234678F
2.88e7*
36.55
ES 123789F
2.46e7*
37.52
0%
Abs. Int.
1.03e7
5.15e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDF Std.
34.02-38.25
385.8610 Fn3
Flags: PBM
4σ 2.22e4
ES 123478F
5.39e7*
35.76
ES 123678F
6.21e7*
35.90
CS 123469F
5.52e7*
36.21
ES 234678F
5.29e7*
36.54
ES 123789F
4.76e7*
37.52
0%
Abs. Int.
1.94e7
9.70e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
OCDPE
34.02-38.25
445.7555 Fn3
Flags: PB
4σ 1.56e3
0%
Abs. Int.
2.74e4
1.37e4
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT


Rel. Int.
100%
HpCDF
38.26-41.01
407.7818 Fn4
Flags: PBM
4σ 1.15e4
1234678F
2.75e6*
39.06
1234689F
5.34e6*
39.47
Abs. Int.
2.19e6
1.10e6
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF
38.26-41.01
409.7788 Fn4
Flags: PBM
4σ 1.05e4
1234678F
2.56e6*
39.06
1234689F
5.14e6*
39.47
Abs. Int.
2.20e6
1.10e6
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.26-41.01
417.8253 Fn4
Flags: PBM
4σ 2.31e4
ES 1234678F
1.92e7*
39.05
CS 1234689F
2.00e7*
39.46
ES 1234789F
1.43e7*
40.37
Abs. Int.
8.38e6
4.19e6
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.26-41.01
419.8220 Fn4
Flags: PBM
4σ 2.09e4
ES 1234678F
4.20e7*
39.05
CS 1234689F
4.38e7*
39.46
ES 1234789F
3.34e7*
40.37
Abs. Int.
1.80e7
8.98e6
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
NCDPE
38.26-41.01
479.7165 Fn4
Flags: PB
4σ 3.22e3
RT
Abs. Int.
1.47e5
7.33e4
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT


Rel. Int.
100%
OCDF
41.02-45.00
441.7428 Fn5
Flags: PBM
4σ 1.80e3
0%
OCDF
3.17e6*
42.55
Abs. Int.
1.11e6
5.53e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF
41.02-45.00
443.7398 Fn5
Flags: PBM
4σ 3.33e3
0%
OCDF
3.51e6*
42.55
Abs. Int.
1.21e6
6.04e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF Std.
41.02-45.00
453.7830 Fn5
Flags: PBM
4σ 2.08e3
0%
ES OCDF
3.05e7*
42.54
Abs. Int.
1.18e7
5.89e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF Std.
41.02-45.00
455.7801 Fn5
Flags: PBM
4σ 3.12e3
0%
ES OCDF
3.32e7*
42.54
Abs. Int.
1.22e7
6.08e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
DCDPE
41.02-45.00
513.6775 Fn5
Flags: PB
4σ 1.54e3
0%
Abs. Int.
1.26e4
6.29e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

Lab ID: B4519_17655_DF_003 **Acq'd:** 10 Aug 2020 19:34 PSW **Wt/Vol:** 8.82 g **ICAL:** MM3_DF_10012020_12JUN2020

Client ID: CS-32 **UTP:** 11-Aug-2020 08:30:47 PSW **J-level:** 0.567 pg/g **Split:** 1 **Checkcode:** 837-643-CCF

Datafile: 200810R08 **Report:** 11 Aug 2020 09:59 pw **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	NotFnd		1.0009	-		-	-	-	1.18	-	5831	0.151
12378-PeCDD	32.82	J	1.0006	1.0006	0	6.20E+04	1.47	Y	1.14	0.18	4696	0.122
123478-HxCDD	36.74	J EMPC	1.0004	1.0006	+0.4	1.29E+05	1.02	N	1.09	0.439	4174	0.114
123678-HxCDD	36.84	J EMPC	1.0035	1.0035	0	2.54E+05	1.45	N	1.13	0.849	4174	0.114
123789-HxCDD	37.14	J	1.0116	1.0116	0	2.71E+05	1.24	Y	1.05	0.824	4174	0.107
1234678-HpCDD	39.96		1.0003	1.0003	0	8.03E+06	1.05	Y	0.98	35.1	3799	0.0979
OCDD	42.38		1.0003	1.0003	0	4.35E+07	0.91	Y	1.08	326	6168	0.315
2378-TCDF	26.35	J EMPC	1.0006	1.0004	-0.3	6.02E+04	0.61	N	0.98	0.109	4557	0.0924
12378-PeCDF	31.33	J EMPC	1.0006	1.0007	+0.2	9.34E+04	1.80	N	0.95	0.187	6967	0.133
23478-PeCDF	32.47	J EMPC	1.0005	1.0008	+0.6	1.46E+05	2.06	N	0.95	0.308	6967	0.133
123478-HxCDF	35.76	J	1.0005	1.0005	0	2.13E+05	1.38	Y	1.20	0.494	5649	0.113
123678-HxCDF	35.90	J	1.0004	1.0005	+0.2	1.37E+05	1.11	Y	1.07	0.306	5649	0.0987
234678-HxCDF	36.55	J EMPC	1.0005	1.0005	0	1.72E+05	1.51	N	1.10	0.43	5649	0.118
123789-HxCDF	NotFnd		1.0004	-		-	-	-	1.09	-	5649	0.15
1234678-HpCDF	39.05		1.0003	1.0003	0	2.33E+06	1.03	Y	1.28	6.58	2328	0.0437
1234789-HpCDF	40.37	J	1.0002	1.0003	+0.2	1.21E+05	1.05	Y	1.27	0.446	2328	0.0555
OCDF	42.54		1.0003	1.0002	-0.3	2.52E+06	0.81	Y	1.01	16.3	3926	0.173

Name	Act RT		Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	27.26		1.0255	1.0256	+0.2	7.88E+07	0.75	Y	1.01	82.9
ES 12378-PeCDD	32.80		1.2330	1.2340	+2.0	6.90E+07	1.66	Y	0.87	84
ES 123478-HxCDD	36.72		0.9917	0.9917	0	6.12E+07	1.31	Y	1.10	71.7
ES 123678-HxCDD	36.83		0.9947	0.9947	0	6.02E+07	1.25	Y	1.06	72.8
ES 123789-HxCDD	37.13		1.0028	1.0028	0	7.11E+07	1.30	Y	1.22	74.9
ES 1234678-HpCDD	39.94		1.0785	1.0789	+1.0	5.27E+07	1.03	Y	0.99	68.1
ES OCDD	42.37		1.1439	1.1443	+1.0	5.64E+07	0.93	Y	0.67	54.1
ES 2378-TCDF	26.34		1.0572	1.0575	+0.5	1.28E+08	0.79	Y	1.01	80.7
ES 12378-PeCDF	31.31		1.2558	1.2570	+2.3	1.19E+08	1.56	Y	0.90	84.7
ES 23478-PeCDF	32.44		1.3012	1.3026	+2.7	1.14E+08	1.61	Y	0.89	82
ES 123478-HxCDF	35.75		0.9655	0.9655	0	8.19E+07	0.53	Y	1.43	73.4
ES 123678-HxCDF	35.89		0.9693	0.9692	-0.2	9.48E+07	0.53	Y	1.63	74.6
ES 234678-HxCDF	36.53		0.9867	0.9867	0	8.27E+07	0.53	Y	1.48	71.8
ES 123789-HxCDF	37.51		1.0130	1.0130	0	7.07E+07	0.50	Y	1.29	70.3
ES 1234678-HpCDF	39.04		1.0540	1.0543	+0.7	6.29E+07	0.45	Y	1.15	70.4
ES 1234789-HpCDF	40.36		1.0898	1.0901	+0.7	4.87E+07	0.46	Y	0.91	69
ES OCDF	42.53		1.1484	1.1487	+0.8	6.95E+07	0.95	Y	0.83	53.9

Lab ID: B4519_17655_DF_003 | Acq'd: 10 Aug 2020 19:34 PSW | Wt/Vol: 8.82 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-32 | UTP: 11-Aug-2020 08:30:47 PSW | J-level: 0.567 pg/g | Split: 1 | Checkcode: 837-643-CCF

Datafile: 200810R08 | Report: 11 Aug 2020 09:59 pw | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %	
JS 1234-TCDD	26.58		-	-	-	9.43E+07	0.77	Y	-	-	
JS 1234-TCDF	24.91		-	-	-	1.56E+08	0.80	Y	-	-	
JS 123467-HxCDD	37.03		-	-	-	3.90E+07	1.33	Y	-	-	
CS 37Cl-2378-TCDD	27.28		1.0265	1.0265	0	3.54E+07	n/a	-	1.04	90.5	
CS 12347-PeCDD	32.29		1.2141	1.2149	+1.5	6.90E+07	1.65	Y	0.74	98.9	
CS 12346-PeCDF	30.77		1.2343	1.2355	+2.2	1.20E+08	1.58	Y	0.86	89	
CS 123469-HxCDF	36.19		0.9776	0.9775	-0.2	8.48E+07	0.52	Y	1.36	80.1	
CS 1234689-HpCDF	39.44		1.0650	1.0653	+0.7	6.50E+07	0.46	Y	1.05	79.1	
~~SS 37Cl-2378-TCDD~~	~~27.28~~		~~1.0265~~	~~1.0265~~	~~0~~	~~3.54E+07~~	~~n/a~~		~~1.04~~	~~108~~	Not used in this project.
~~SS 12347-PeCDD~~	~~32.29~~		~~1.2141~~	~~1.2149~~	~~+1.5~~	~~6.90E+07~~	~~1.65~~	~~Y~~	~~0.86~~	~~117~~	CL 11Aug20
~~SS 12346-PeCDF~~	~~30.77~~		~~1.2343~~	~~1.2355~~	~~+2.2~~	~~1.20E+08~~	~~1.58~~	~~Y~~	~~0.96~~	~~105~~	
~~SS 123469-HxCDF~~	~~36.19~~		~~0.9776~~	~~0.9775~~	~~-0.2~~	~~8.48E+07~~	~~0.52~~	~~Y~~	~~0.83~~	~~107~~	
~~SS 1234689-HpCDF~~	~~39.44~~		~~1.0650~~	~~1.0653~~	~~+0.7~~	~~6.50E+07~~	~~0.46~~	~~Y~~	~~0.92~~	~~112~~	

Totals	Conc	EMPC
Total TCDD	0	0.539
Total PeCDD	2.08	2.73
Total HxCDD	13.3	14.6
Total HpCDD	117	117
Total Tetra-Octa Dioxins	458	461
Total TCDF	2.37	6.76
Total PeCDF	3.93	4.43
Total HxCDF	3.99	7.61
Total HpCDF	18.5	18.5
Total Tetra-Octa Furans	45.1	53.6
Total Tetra-Octa Dioxins & Furans	503	514

Lab ID: B4519_17655_DF_003 **Acq'd: 10 Aug 2020 19:34 PSW** **Wt/Vol: 8.82 g** **ICAL: MM3_DF_10012020_12JUN2020**

Client ID: CS-32 **UTP: 11-Aug-2020 08:30:47 PSW** **J-level: 0.567 pg/g** **Split: 1** **Checkcode: 837-643-CCF**

Datafile: 200810R08 **Report: 11 Aug 2020 09:59 pw** **Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)**

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1368-TCDD	23.40	J EMPC	0.8591	0.8584	-1.0	1.48E+05	0.54	N	1.18	0.361	5831	0.151
1379-TCDD	23.79	J EMPC	0.8732	0.8726	-0.9	7.25E+04	1.21	N	1.18	0.177	5831	0.151
1369-TCDD	NotFnd		0.8901						1.18		5831	0.151
1469-TCDD	NotFnd		0.9205						1.18		5831	0.151
1247/1246/1248/1249-TCDD	NotFnd		0.9301						1.18		5831	0.151
1378-TCDD	NotFnd		0.9374						1.18		5831	0.151
1268-TCDD	NotFnd		0.9449						1.18		5831	0.151
1478-TCDD	NotFnd		0.9544						1.18		5831	0.151
1279-TCDD	NotFnd		0.9610						1.18		5831	0.151
1234/1269-TCDD	NotFnd		0.9746						1.18		5831	0.151
1236-TCDD	NotFnd		0.9802						1.18		5831	0.151
1237/1238-TCDD	NotFnd		0.9898						1.18		5831	0.151
1239-TCDD	NotFnd		0.9950						1.18		5831	0.151
2378-TCDD	**NotFnd**		**1.0009**						**1.18**		**5831**	**0.151**
1278-TCDD	NotFnd		1.0133						1.18		5831	0.151
1267-TCDD	NotFnd		1.0185						1.18		5831	0.151
1289-TCDD	NotFnd		1.0379						1.18		5831	0.151
12479/12468-PeCDD	30.26	J	0.9229	0.9227	-0.4	3.32E+05	1.44	Y	1.14	0.961	4696	0.122
12469-PeCDD	30.79	J EMPC	0.9396	0.9388	-1.5	7.59E+04	2.08	N	1.14	0.22	4696	0.122
12368-PeCDD	31.37	J	0.9568	0.9565	-0.6	1.36E+05	1.50	Y	1.14	0.394	4696	0.122
12478-PeCDD	31.56	J EMPC	0.9626	0.9624	-0.4	6.16E+04	1.26	N	1.14	0.178	4696	0.122
12379-PeCDD	31.67	J	0.9657	0.9657	0	1.08E+05	1.51	Y	1.14	0.312	4696	0.122
12369/12467/12489-PeCDD	31.93	J EMPC	0.9738	0.9737	-0.2	8.50E+04	1.09	N	1.14	0.246	4696	0.122
12346/12347-PeCDD	32.33	J	0.9853	0.9856	+0.6	8.11E+04	1.64	Y	1.14	0.235	4696	0.122
12378-PeCDD	32.82	J	**1.0006**	**1.0006**	**0**	**6.20E+04**	**1.47**	**Y**	**1.14**	**0.18**	**4696**	**0.122**
12367-PeCDD	NotFnd		1.0034						1.14		4696	0.122
12389-PeCDD	NotFnd		1.0141						1.14		4696	0.122
124679/124689-HxCDD	35.04		0.9542	0.9542	0	1.55E+06	1.28	Y	1.09	5.02	4174	0.111
123468-HxCDD	35.69	J	0.9721	0.9721	0	5.80E+05	1.38	Y	1.09	1.88	4174	0.111
123679/123689-HxCDD	35.98		0.9799	0.9799	0	1.24E+06	1.23	Y	1.09	4.02	4174	0.111
123469-HxCDD	36.11	J	0.9835	0.9835	0	3.44E+05	1.22	Y	1.09	1.12	4174	0.111
123478-HxCDD	36.74	J EMPC	**1.0004**	**1.0006**	**+0.4**	**1.29E+05**	**1.02**	**N**	1.09	**0.439**	**4174**	**0.114**
123678-HxCDD	36.84	J EMPC	**1.0035**	**1.0035**	**0**	**2.54E+05**	**1.45**	**N**	1.13	**0.849**	**4174**	**0.114**
123467-HxCDD	37.04	J	1.0088	1.0088	0	1.49E+05	1.23	Y	1.09	0.482	4174	0.111
123789-HxCDD	37.14	J	**1.0116**	**1.0116**	**0**	**2.71E+05**	**1.24**	**Y**	1.05	**0.824**	**4174**	**0.107**

Lab ID: B4519_17655_DF_003 | Acq'd: 10 Aug 2020 19:34 PSW | Wt/Vol: 8.82 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-32 | UTP: 11-Aug-2020 08:30:47 PSW | J-level: 0.567 pg/g | Split: 1 | Checkcode: 837-643-CCF

Datafile: 200810R08 | Report: 11 Aug 2020 09:59 pw | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

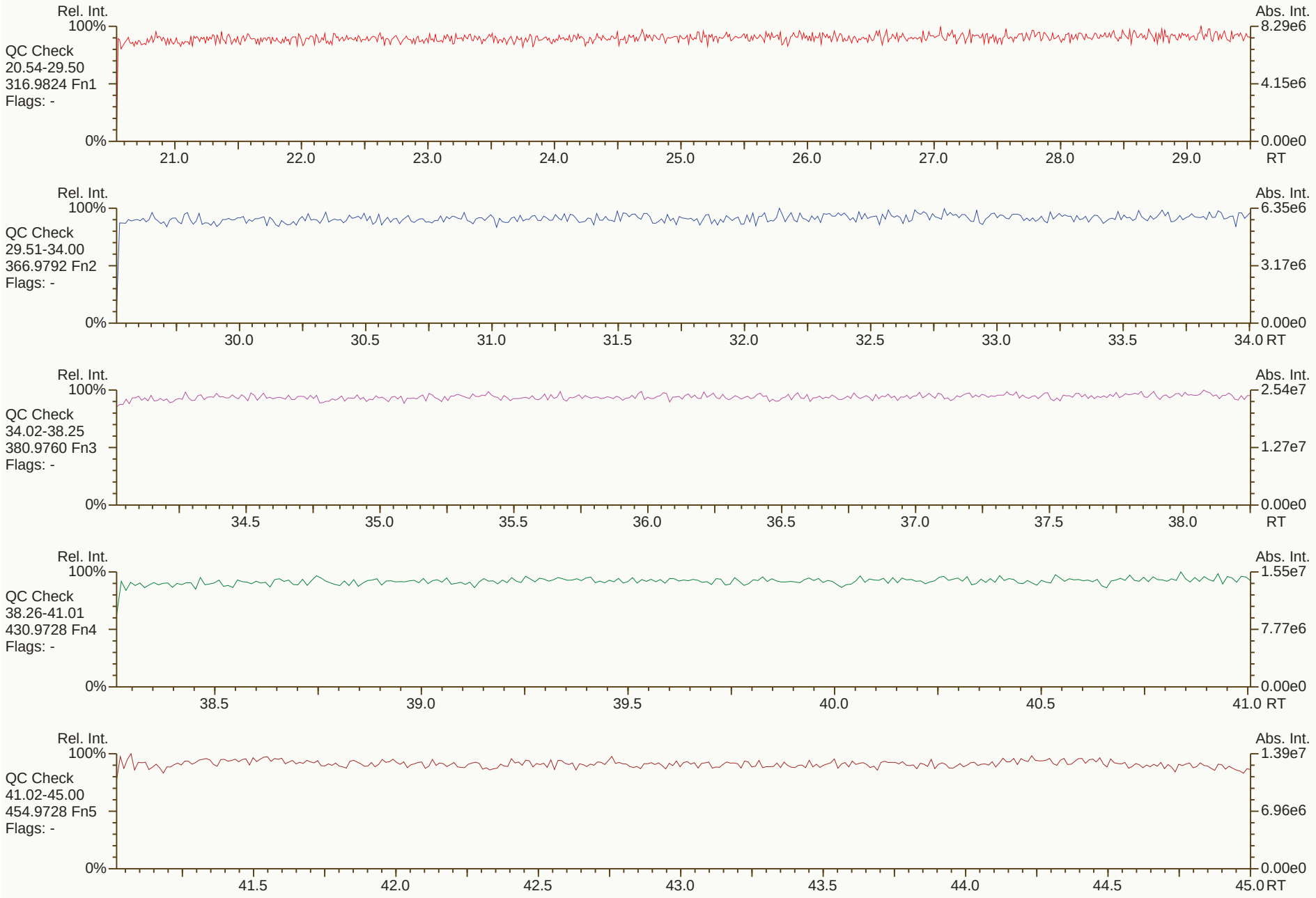
Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1234679-HpCDD	39.31		0.9843	0.9842	-0.2	1.87E+07	1.05	Y	0.98	82	3799	0.0979
1234678-HpCDD	**39.96**		**1.0003**	**1.0003**	**0**	**8.03E+06**	**1.05**	**Y**	**0.98**	**35.1**	**3799**	**0.0979**
OCDD	**42.38**		**1.0003**	**1.0003**	**0**	**4.35E+07**	**0.91**	**Y**	**1.08**	**326**	**6168**	**0.315**
OCDD-a	42.38		1.0002	1.0002	0	2.51E+06	2.41	Y	0.07	305	5058	4.2
1368-TCDF	21.16	J EMPC	0.8044	0.8036	-1.0	1.52E+05	1.22	N	0.98	0.274	4557	0.0924
1468-TCDF	21.72	J	0.8261	0.8248	-1.7	4.68E+04	0.72	Y	0.98	0.0846	4557	0.0924
2468-TCDF	22.39		0.8511	0.8502	-1.2	6.27E+05	0.87	Y	0.98	1.13	4557	0.0924
1346/1246-TCDF	22.87	J	0.8665	0.8685	+2.7	7.73E+04	0.83	Y	0.98	0.14	4557	0.0924
1347/1378/1247-TCDF	22.98	J	0.8723	0.8725	+0.3	1.26E+05	0.73	Y	0.98	0.228	4557	0.0924
1348-TCDF	NotFnd		0.8835						0.98		4557	0.0924
1248/1367/1379-TCDF	23.39	J	0.8888	0.8881	-1.0	9.77E+04	0.80	Y	0.98	0.177	4557	0.0924
1268-TCDF	23.81	J EMPC	0.9044	0.9040	-0.6	7.16E+04	0.61	N	0.98	0.129	4557	0.0924
1467-TCDF	23.94	J EMPC	0.9098	0.9090	-1.1	5.74E+04	0.61	N	0.98	0.104	4557	0.0924
1478-TCDF	NotFnd		0.9167						0.98		4557	0.0924
1369/1237-TCDF	NotFnd		0.9316						0.98		4557	0.0924
2467-TCDF	24.67	J	0.9369	0.9369	0	7.30E+04	0.77	Y	0.98	0.132	4557	0.0924
2368-TCDF	24.83	J EMPC	0.9430	0.9428	-0.3	1.27E+05	0.65	N	0.98	0.23	4557	0.0924
1238/1234/1678/1469/1236-TCDF	24.93	J	0.9468	0.9466	-0.3	9.39E+04	0.80	Y	0.98	0.17	4557	0.0924
1278-TCDF	25.42	J EMPC	0.9651	0.9650	-0.2	6.93E+04	0.98	N	0.98	0.125	4557	0.0924
1349-TCDF	NotFnd		0.9704						0.98		4557	0.0924
1267-TCDF	25.70	J EMPC	0.9761	0.9760	-0.2	4.05E+04	1.24	N	0.98	0.0732	4557	0.0924
2346/1249-TCDF	NotFnd		0.9834						0.98		4557	0.0924
2347/1279-TCDF	26.13	J	0.9921	0.9921	0	5.12E+04	0.80	Y	0.98	0.0927	4557	0.0924
2348-TCDF	NotFnd		0.9964						0.98		4557	0.0924
2378-TCDF	**26.35**	J EMPC	**1.0006**	**1.0004**	**-0.3**	**6.02E+04**	**0.61**	**N**	**0.98**	**0.109**	**4557**	**0.0924**
2367/3467-TCDF	26.74	J	1.0156	1.0152	-0.6	1.20E+05	0.68	Y	0.98	0.217	4557	0.0924
1269-TCDF	NotFnd		1.0249						0.98		4557	0.0924
1239-TCDF	NotFnd		1.0357						0.98		4557	0.0924
1289-TCDF	28.45	EMPC	1.0799	1.0802	+0.5	1.84E+06	2.05	N	0.98	3.34	4557	0.0924
13468/12468-PeCDF	28.45	J	0.9084	0.9086	+0.3	7.00E+05	1.69	Y	0.95	1.44	3707	0.0709
13678/13467/12467-PeCDF	30.04	J	0.9591	0.9595	+0.7	2.69E+05	1.66	Y	0.95	0.553	6967	0.133
12368/13478/12478-PeCDF	30.20	J	0.9642	0.9646	+0.7	5.81E+05	1.68	Y	0.95	1.19	6967	0.133
14678-PeCDF	NotFnd		0.9675						0.95		6967	0.133
13479-PeCDF	NotFnd		0.9706						0.95		6967	0.133
13469/12479-PeCDF	NotFnd		0.9787						0.95		6967	0.133
12346-PeCDF	NotFnd		0.9833						0.95		6967	0.133

Lab ID: B4519_17655_DF_003 **Acq'd: 10 Aug 2020 19:34 PSW** **Wt/Vol: 8.82 g** **ICAL: MM3_DF_10012020_12JUN2020**

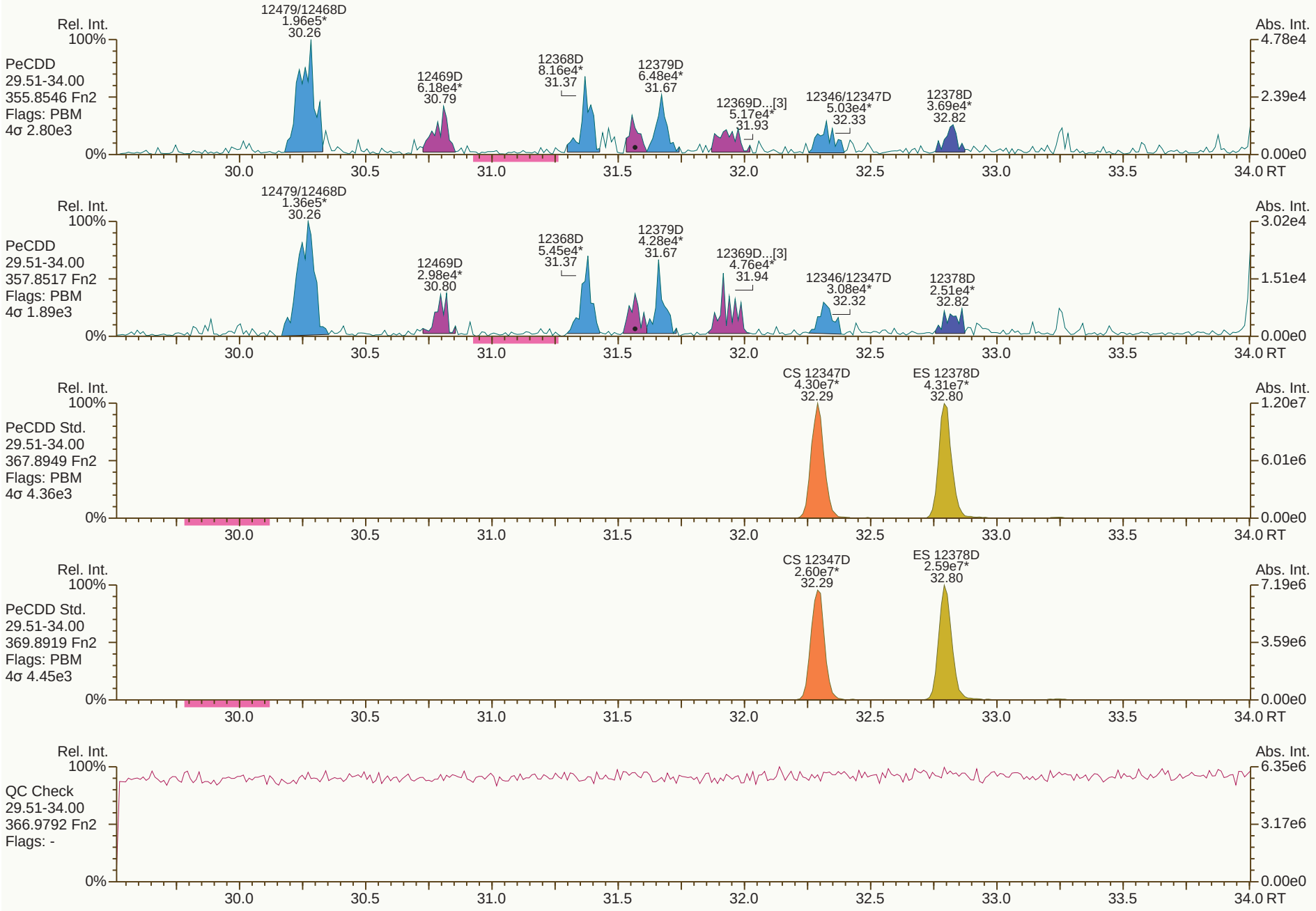
Client ID: CS-32 **UTP: 11-Aug-2020 08:30:47 PSW** **J-level: 0.567 pg/g** **Split: 1** **Checkcode: 837-643-CCF**

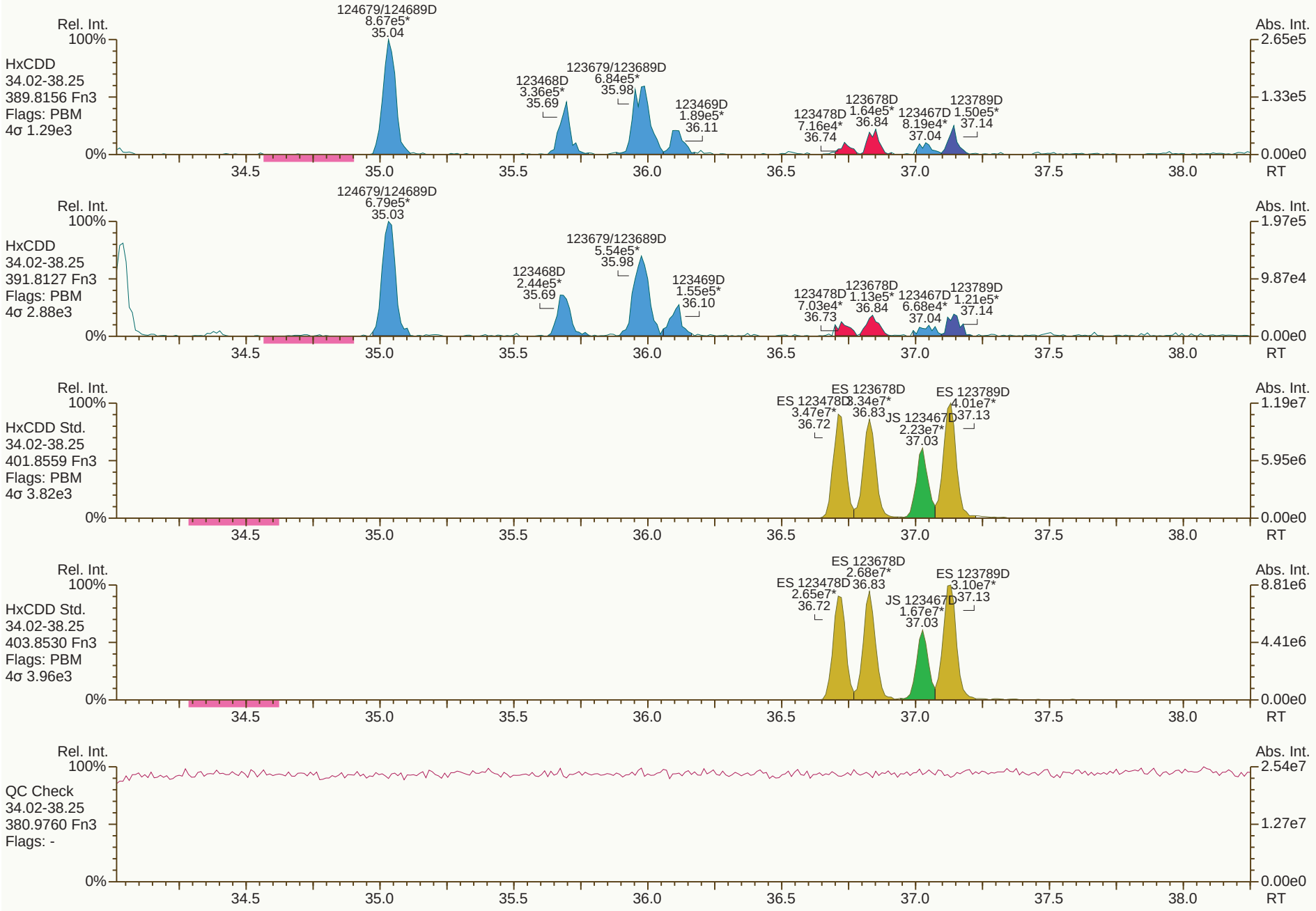
Datafile: 200810R08 **Report: 11 Aug 2020 09:59 pw** **Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)**

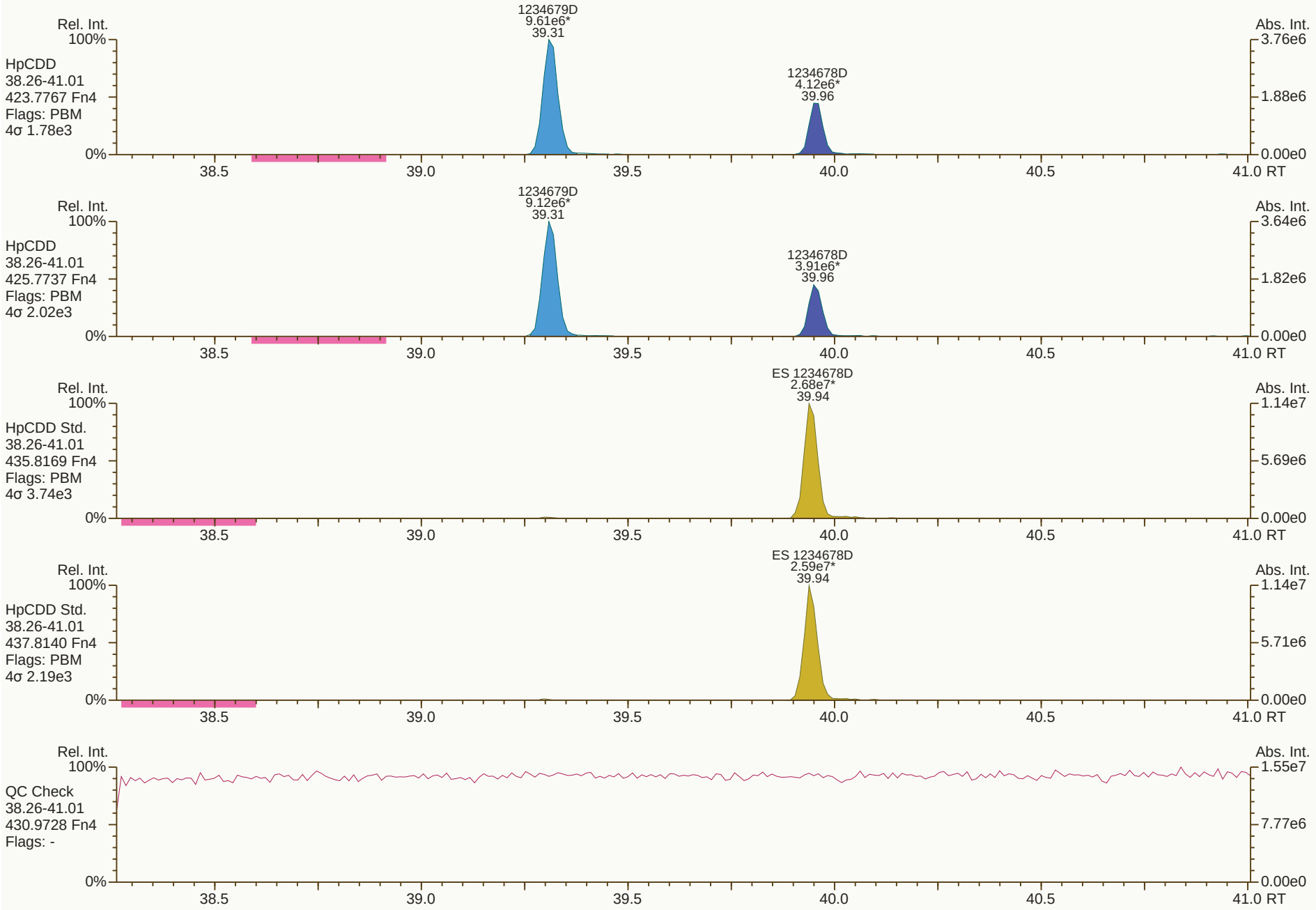
Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
23468/12469-PeCDF	30.87	J	0.9861	0.9860	-0.2	1.84E+05	1.39	Y	0.95	0.379	6967	0.133
12347-PeCDF	NotFnd		0.9887						0.95		6967	0.133
12348-PeCDF	NotFnd		0.9938						0.95		6967	0.133
12378-PeCDF	**31.33**	J EMPC	**1.0006**	**1.0007**	**+0.2**	**9.34E+04**	**1.80**	**N**	**0.95**	**0.187**	**6967**	**0.133**
12678/12367-PeCDF	31.62	J	1.0095	1.0099	+0.8	1.15E+05	1.76	Y	0.95	0.235	6967	0.133
12379-PeCDF	NotFnd		1.0150						0.95		6967	0.133
12679-PeCDF	NotFnd		0.9926						0.95		6967	0.133
23467/12369-PeCDF	32.34	J	0.9966	0.9966	0	6.68E+04	1.68	Y	0.95	0.137	6967	0.133
23478-PeCDF	**32.47**	J EMPC	**1.0005**	**1.0008**	**+0.6**	**1.46E+05**	**2.06**	**N**	**0.95**	**0.308**	**6967**	**0.133**
23478/12489-PeCDF	NotFnd		0.0000						0.95			
12489-PeCDF	NotFnd		1.0047						0.95		6967	0.133
12349-PeCDF	NotFnd		1.0107						0.95		6967	0.133
12389-PeCDF	NotFnd		1.0339						0.95		6967	0.133
123468-HxCDF	34.37	J EMPC	0.9617	0.9616	-0.2	2.56E+05	0.96	N	1.11	0.632	5649	0.118
124678/134678-HxCDF	34.57	J EMPC	0.9673	0.9672	-0.2	9.89E+05	1.55	N	1.11	2.44	5649	0.118
134679-HxCDF	NotFnd		0.9737						1.11		5649	0.118
124679-HxCDF	35.00	J	0.9792	0.9790	-0.4	3.90E+04	1.24	Y	1.11	0.0961	5649	0.118
124689-HxCDF	35.22		0.9854	0.9854	0	1.16E+06	1.16	Y	1.11	2.87	5649	0.118
123467-HxCDF	35.64	J	0.9972	0.9970	-0.4	9.00E+04	1.09	Y	1.11	0.222	5649	0.118
123478-HxCDF	**35.76**	J	**1.0005**	**1.0005**	**0**	**2.13E+05**	**1.38**	**Y**	**1.20**	**0.494**	**5649**	**0.113**
123678-HxCDF	**35.90**	J	**1.0004**	**1.0005**	**+0.2**	**1.37E+05**	**1.11**	**Y**	**1.07**	**0.306**	**5649**	**0.0987**
123479-HxCDF	NotFnd		1.0049						1.11		5649	0.118
123469-HxCDF	NotFnd		1.0089						1.11		5649	0.118
123679-HxCDF	NotFnd		0.9945						1.11		5649	0.118
234678-HxCDF	**36.55**	J EMPC	**1.0005**	**1.0005**	**0**	**1.72E+05**	**1.51**	**N**	**1.10**	**0.43**	**5649**	**0.118**
234678/123689-HxCDF	NotFnd		0.0000						1.10			
123689-HxCDF	NotFnd		1.0054						1.11		5649	0.118
123789-HxCDF	**NotFnd**		**1.0004**						**1.09**		**5649**	**0.15**
123789/123489-HxCDF	NotFnd		0.0000						1.09			
123489-HxCDF	37.54	J EMPC	1.0008	1.0009	+0.2	4.87E+04	1.04	N	1.11	0.12	5649	0.118
1234678-HpCDF	**39.05**		**1.0003**	**1.0003**	**0**	**2.33E+06**	**1.03**	**Y**	**1.28**	**6.58**	**2328**	**0.0437**
1234679-HpCDF	39.32	**J**	1.0072	1.0072	0	8.80E+04	1.18	Y	1.27	0.281	2328	0.0489
1234689-HpCDF	39.45		1.0107	1.0108	+0.2	3.53E+06	1.08	Y	1.27	11.2	2328	0.0489
1234789-HpCDF	**40.37**	**J**	**1.0002**	**1.0003**	**+0.2**	**1.21E+05**	**1.05**	**Y**	**1.27**	**0.446**	**2328**	**0.0555**
OCDF	**42.54**		**1.0003**	**1.0002**	**-0.3**	**2.52E+06**	**0.81**	**Y**	**1.01**	**16.3**	**3926**	**0.173**
OCDF-a	42.54	**EMPC**	1.0002	1.0001	-0.3	8.03E+04	1.19	N	0.06	8.28	4754	3.35

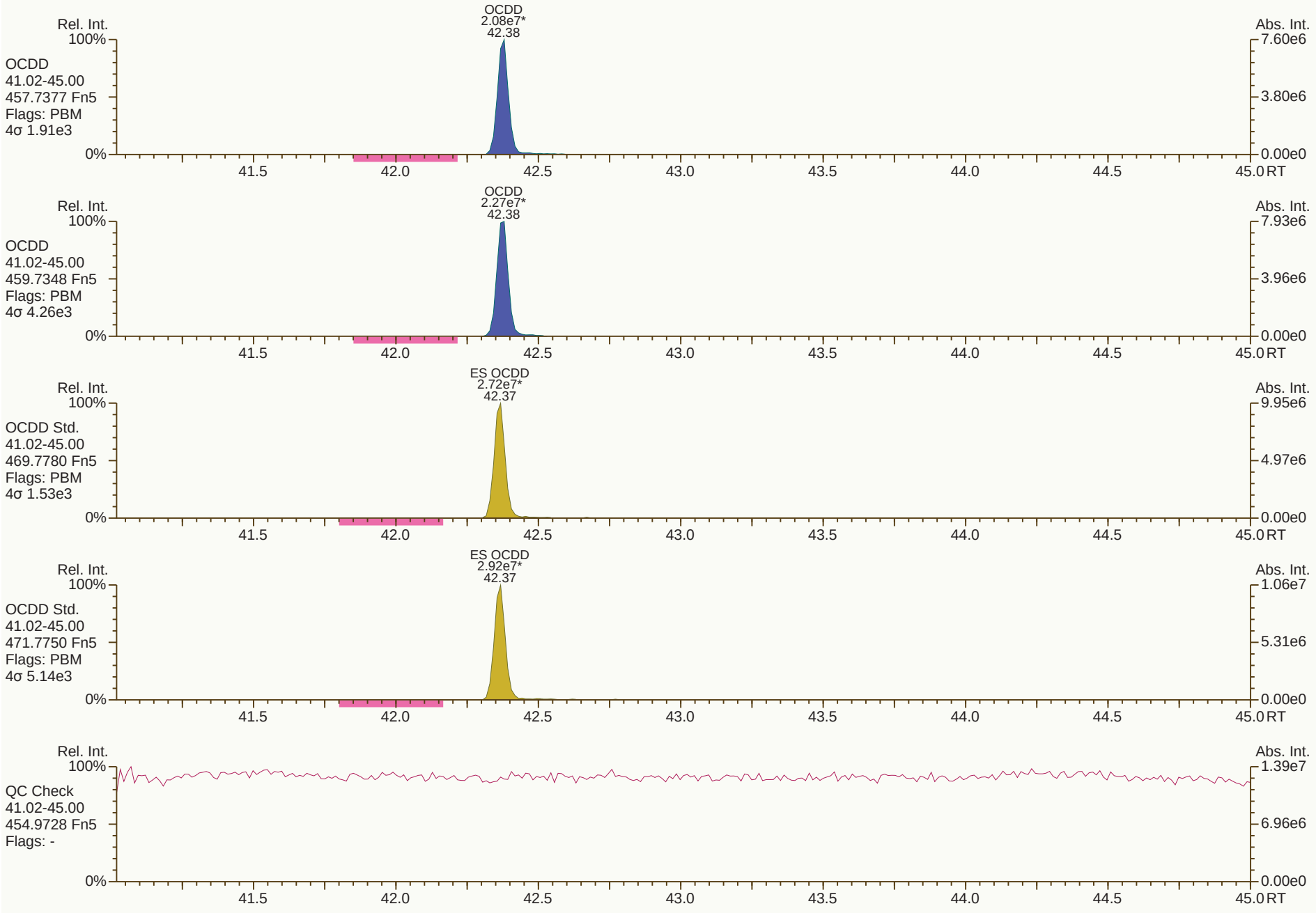

Rel. Int.
100%
0%
Abs. Int.
8.29e6
4.15e6
0.00e0
RT
QC Check
20.54-29.50
316.9824 Fn1
Flags: -
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
QC Check
29.51-34.00
366.9792 Fn2
Flags: -
6.35e6
3.17e6
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
2.54e7
1.27e7
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
QC Check
38.26-41.01
430.9728 Fn4
Flags: -
1.55e7
7.77e6
38.5
39.0
39.5
40.0
40.5
41.0
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
1.39e7
6.96e6
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0

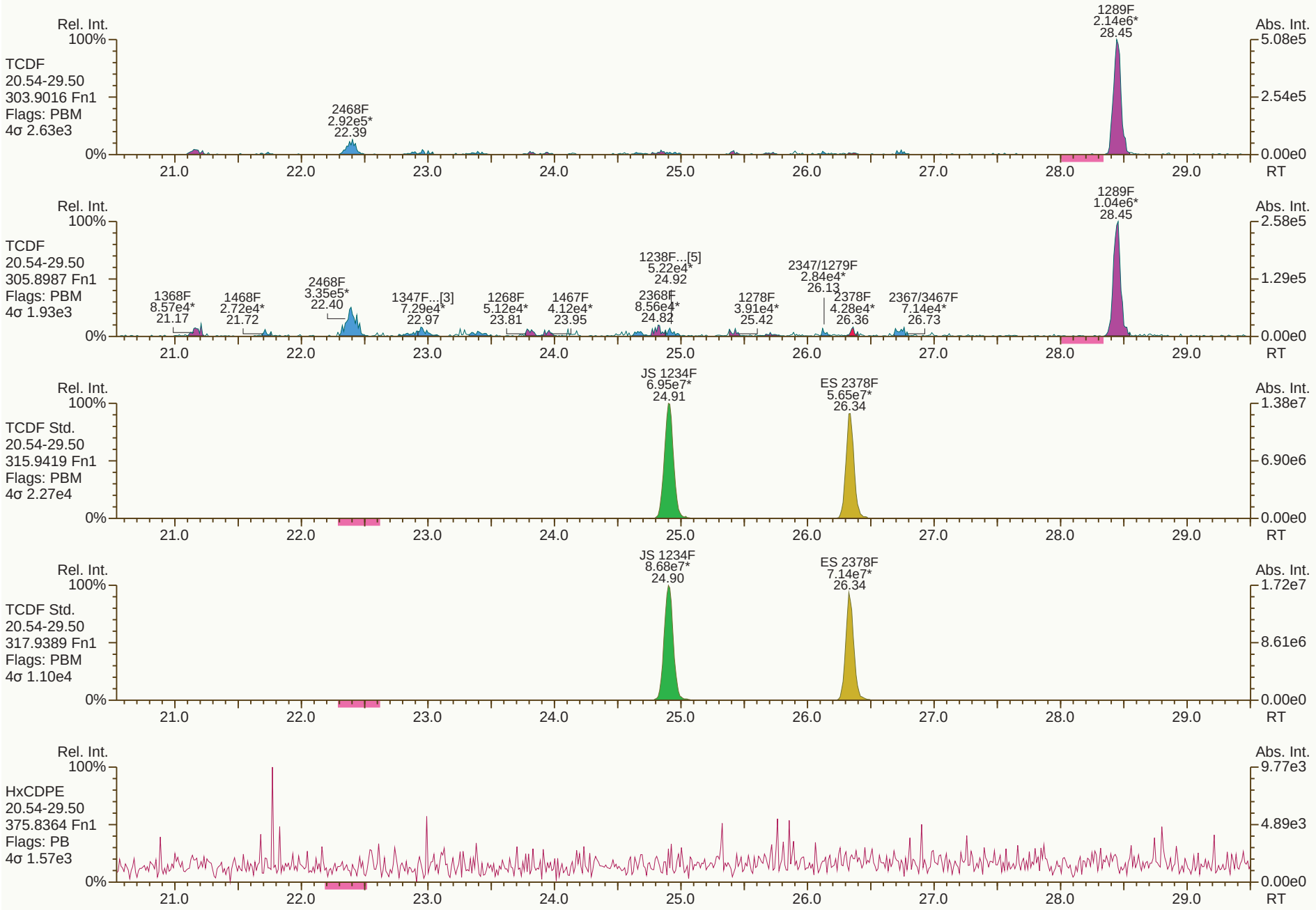

Rel. Int.
100%
TCDD
20.54-29.50
319.8965 Fn1
Flags: PBM
4σ 2.63e3
1368D
6.43e4*
23.40
1379D
4.97e4*
23.79
Abs. Int.
1.69e4
8.46e3
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD
20.54-29.50
321.8936 Fn1
Flags: PBM
4σ 3.20e3
1368D
1.18e5*
23.40
1379D
4.10e4*
23.78
Abs. Int.
2.63e4
1.32e4
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
37Cl-TCDD
20.54-29.50
327.8850 Fn1
Flags: PBM
4σ 1.62e3
CS 37Cl-2378D
3.54e7*
27.28
Abs. Int.
8.20e6
4.10e6
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
331.9368 Fn1
Flags: PBM
4σ 9.13e3
JS 1234D
4.10e7*
26.58
ES 2378D
3.38e7*
27.26
Abs. Int.
9.54e6
4.77e6
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
333.9339 Fn1
Flags: PBM
4σ 2.39e3
JS 1234D
5.33e7*
26.58
ES 2378D
4.49e7*
27.26
Abs. Int.
1.18e7
5.92e6
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT

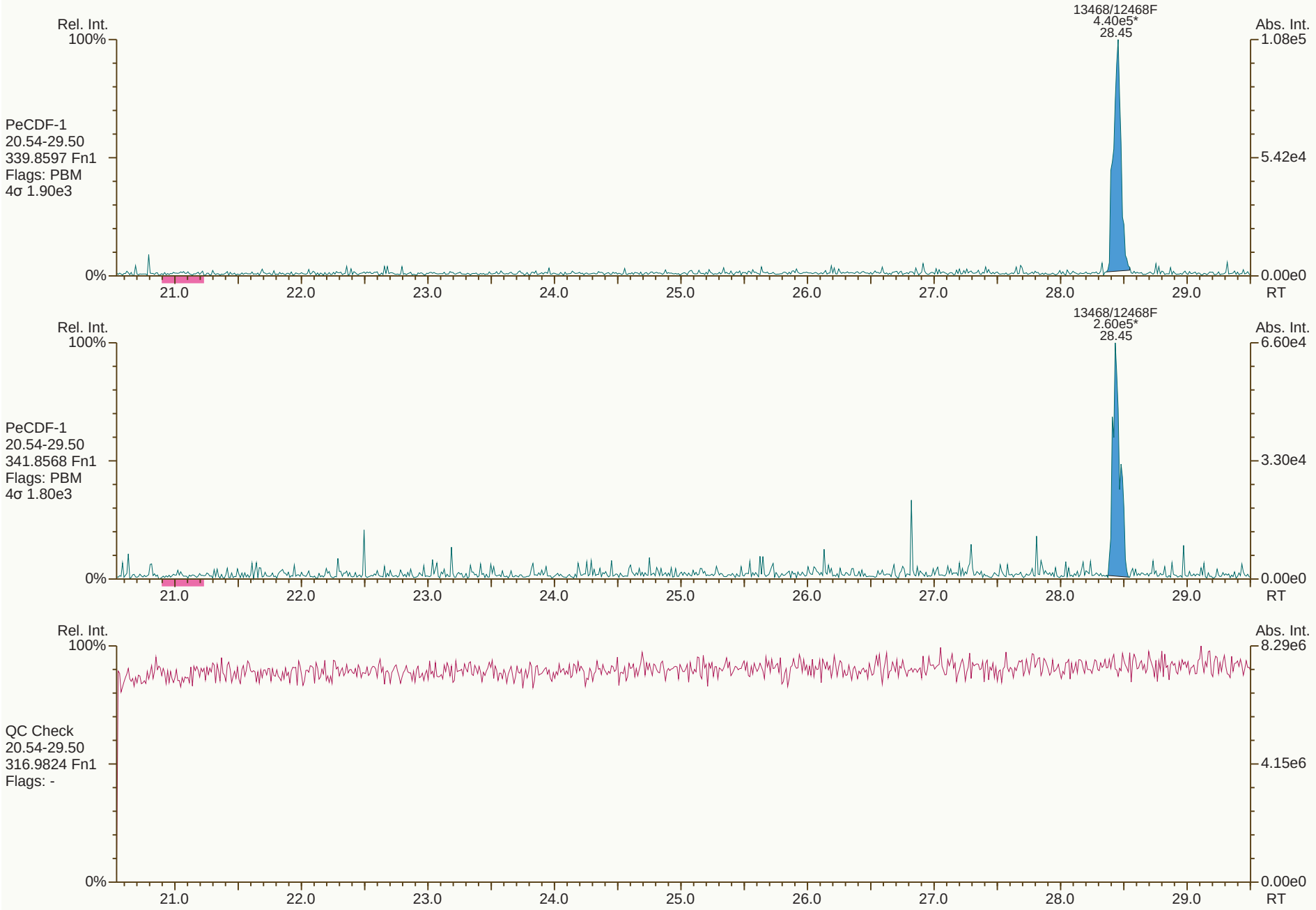

Rel. Int.
100%
PeCDD
29.51-34.00
355.8546 Fn2
Flags: PBM
4σ 2.80e3
12479/12468D
1.96e5*
30.26
12469D
6.18e4*
30.79
12368D
8.16e4*
31.37
12379D
6.48e4*
31.67
12369D...[3]
5.17e4*
31.93
12346/12347D
5.03e4*
32.33
12378D
3.69e4*
32.82
Abs. Int.
4.78e4
2.39e4
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD
29.51-34.00
357.8517 Fn2
Flags: PBM
4σ 1.89e3
12479/12468D
1.36e5*
30.26
12469D
2.98e4*
30.80
12368D
5.45e4*
31.37
12379D
4.28e4*
31.67
12369D...[3]
4.76e4*
31.94
12346/12347D
3.08e4*
32.32
12378D
2.51e4*
32.82
Abs. Int.
3.02e4
1.51e4
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.00
367.8949 Fn2
Flags: PBM
4σ 4.36e3
CS 12347D
4.30e7*
32.29
ES 12378D
4.31e7*
32.80
Abs. Int.
1.20e7
6.01e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.00
369.8919 Fn2
Flags: PBM
4σ 4.45e3
CS 12347D
2.60e7*
32.29
ES 12378D
2.59e7*
32.80
Abs. Int.
7.19e6
3.59e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
QC Check
29.51-34.00
366.9792 Fn2
Flags: -
Abs. Int.
6.35e6
3.17e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT

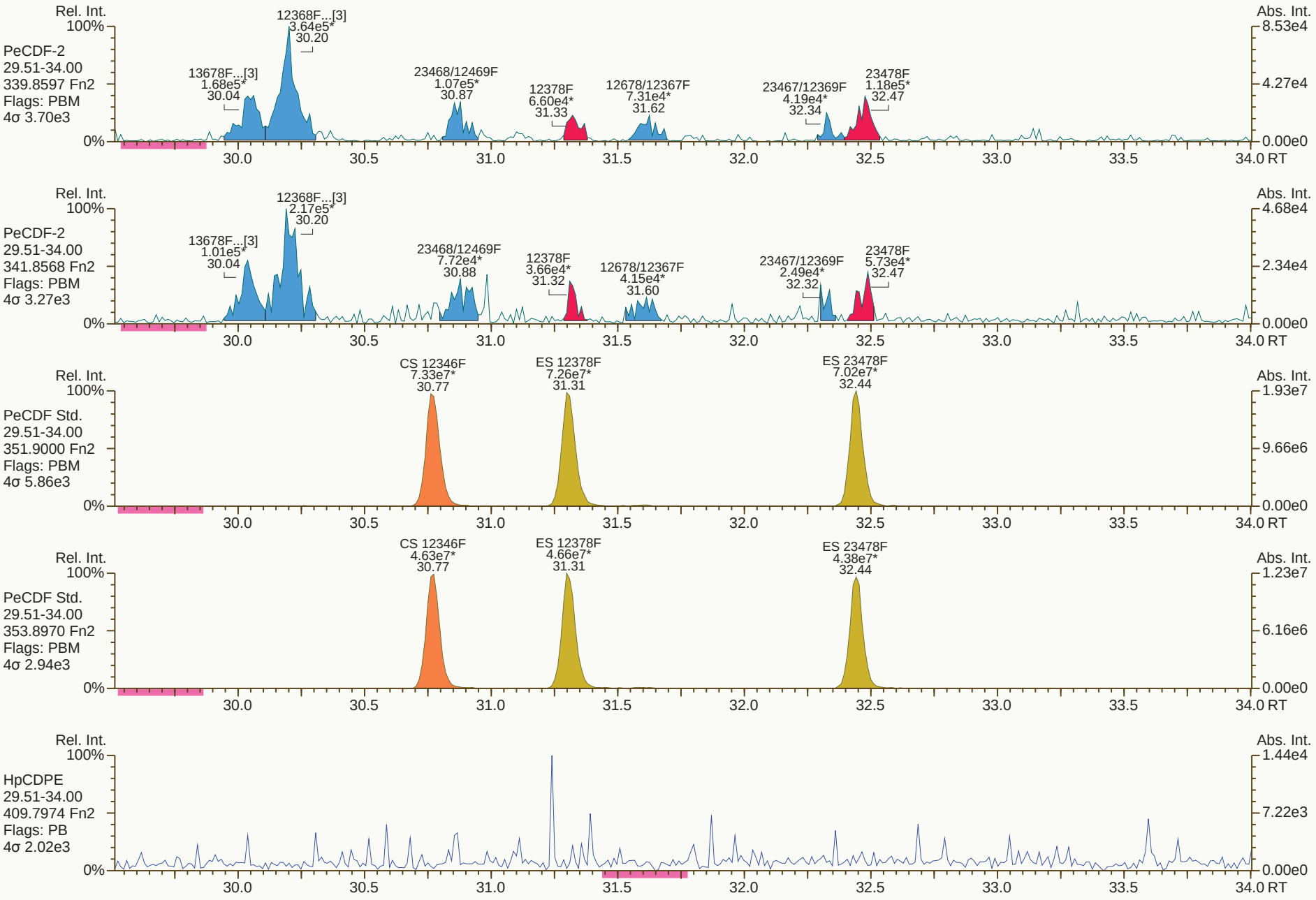

Rel. Int.
100%
HxCDD
34.02-38.25
389.8156 Fn3
Flags: PBM
4σ 1.29e3
124679/124689D
8.67e5*
35.04
123468D
3.36e5*
35.69
123679/123689D
6.84e5*
35.98
123469D
1.89e5*
36.11
123478D
7.16e4*
36.74
123678D
1.64e5*
36.84
123467D
8.19e4*
37.04
123789D
1.50e5*
37.14
Abs. Int.
2.65e5
1.33e5
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD
34.02-38.25
391.8127 Fn3
Flags: PBM
4σ 2.88e3
124679/124689D
6.79e5*
35.03
123468D
2.44e5*
35.69
123679/123689D
5.54e5*
35.98
123469D
1.55e5*
36.10
123478D
7.03e4*
36.73
123678D
1.13e5*
36.84
123467D
6.68e4*
37.04
123789D
1.21e5*
37.14
Abs. Int.
1.97e5
9.87e4
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
401.8559 Fn3
Flags: PBM
4σ 3.82e3
ES 123678D
3.34e7*
36.83
ES 123478D
3.47e7*
36.72
JS 123467D
2.23e7*
37.03
ES 123789D
4.01e7*
37.13
Abs. Int.
1.19e7
5.95e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
403.8530 Fn3
Flags: PBM
4σ 3.96e3
ES 123678D
2.68e7*
36.83
ES 123478D
2.65e7*
36.72
JS 123467D
1.67e7*
37.03
ES 123789D
3.10e7*
37.13
Abs. Int.
8.81e6
4.41e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
Abs. Int.
2.54e7
1.27e7
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT

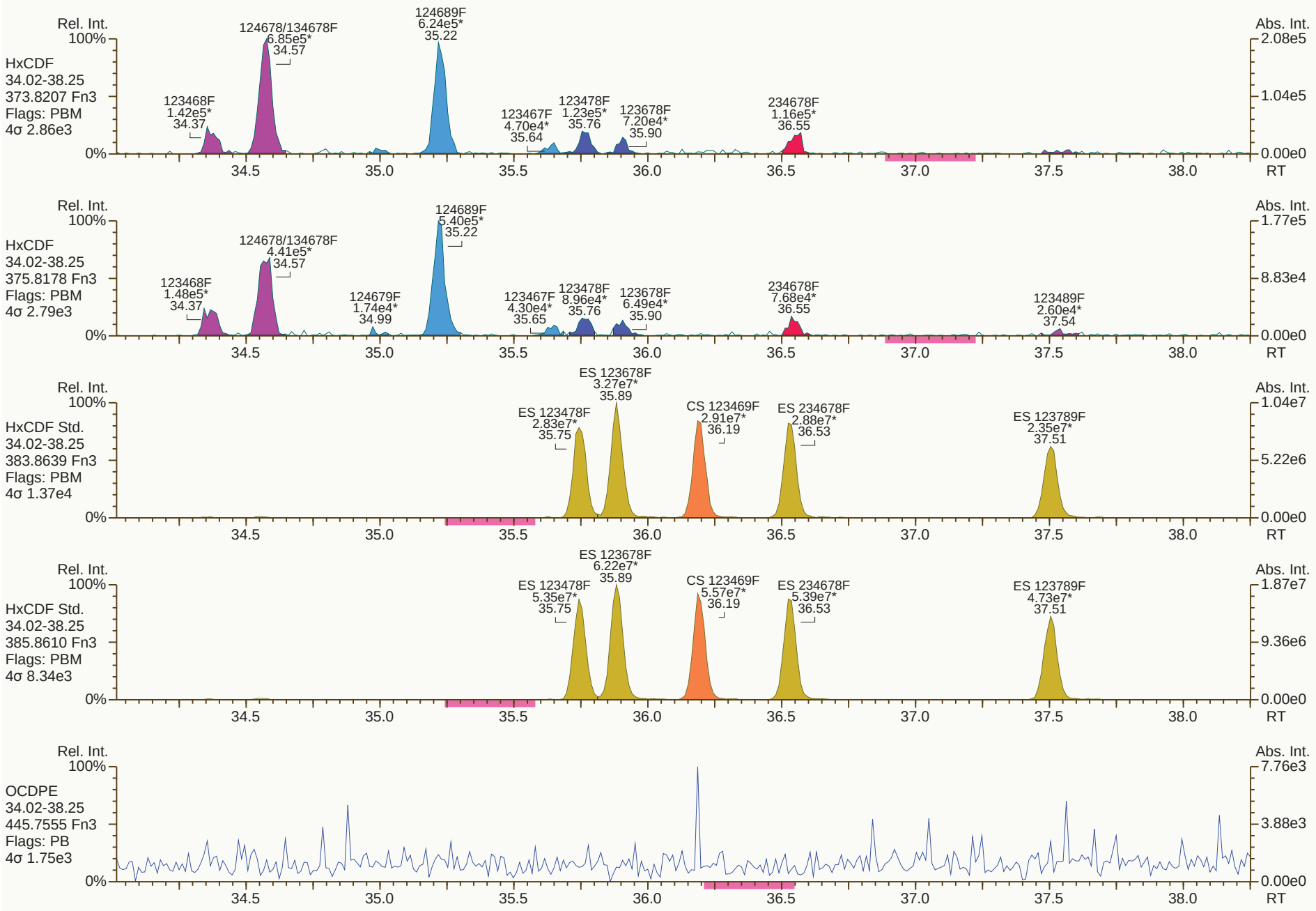

Rel. Int.
100%
HpCDD
38.26-41.01
423.7767 Fn4
Flags: PBM
4σ 1.78e3
0%
1234679D
9.61e6*
39.31
1234678D
4.12e6*
39.96
Abs. Int.
3.76e6
1.88e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.26-41.01
425.7737 Fn4
Flags: PBM
4σ 2.02e3
0%
1234679D
9.12e6*
39.31
1234678D
3.91e6*
39.96
Abs. Int.
3.64e6
1.82e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
435.8169 Fn4
Flags: PBM
4σ 3.74e3
0%
ES 1234678D
2.68e7*
39.94
Abs. Int.
1.14e7
5.69e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
437.8140 Fn4
Flags: PBM
4σ 2.19e3
0%
ES 1234678D
2.59e7*
39.94
Abs. Int.
1.14e7
5.71e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.26-41.01
430.9728 Fn4
Flags: -
0%
Abs. Int.
1.55e7
7.77e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT


OCDD
2.08e7*
42.38
Rel. Int.
100%
OCDD
41.02-45.00
457.7377 Fn5
Flags: PBM
4σ 1.91e3
0%
Abs. Int.
7.60e6
3.80e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDD
2.27e7*
42.38
Rel. Int.
100%
OCDD
41.02-45.00
459.7348 Fn5
Flags: PBM
4σ 4.26e3
0%
Abs. Int.
7.93e6
3.96e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
2.72e7*
42.37
Rel. Int.
100%
OCDD Std.
41.02-45.00
469.7780 Fn5
Flags: PBM
4σ 1.53e3
0%
Abs. Int.
9.95e6
4.97e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
2.92e7*
42.37
Rel. Int.
100%
OCDD Std.
41.02-45.00
471.7750 Fn5
Flags: PBM
4σ 5.14e3
0%
Abs. Int.
1.06e7
5.31e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
1.39e7
6.96e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

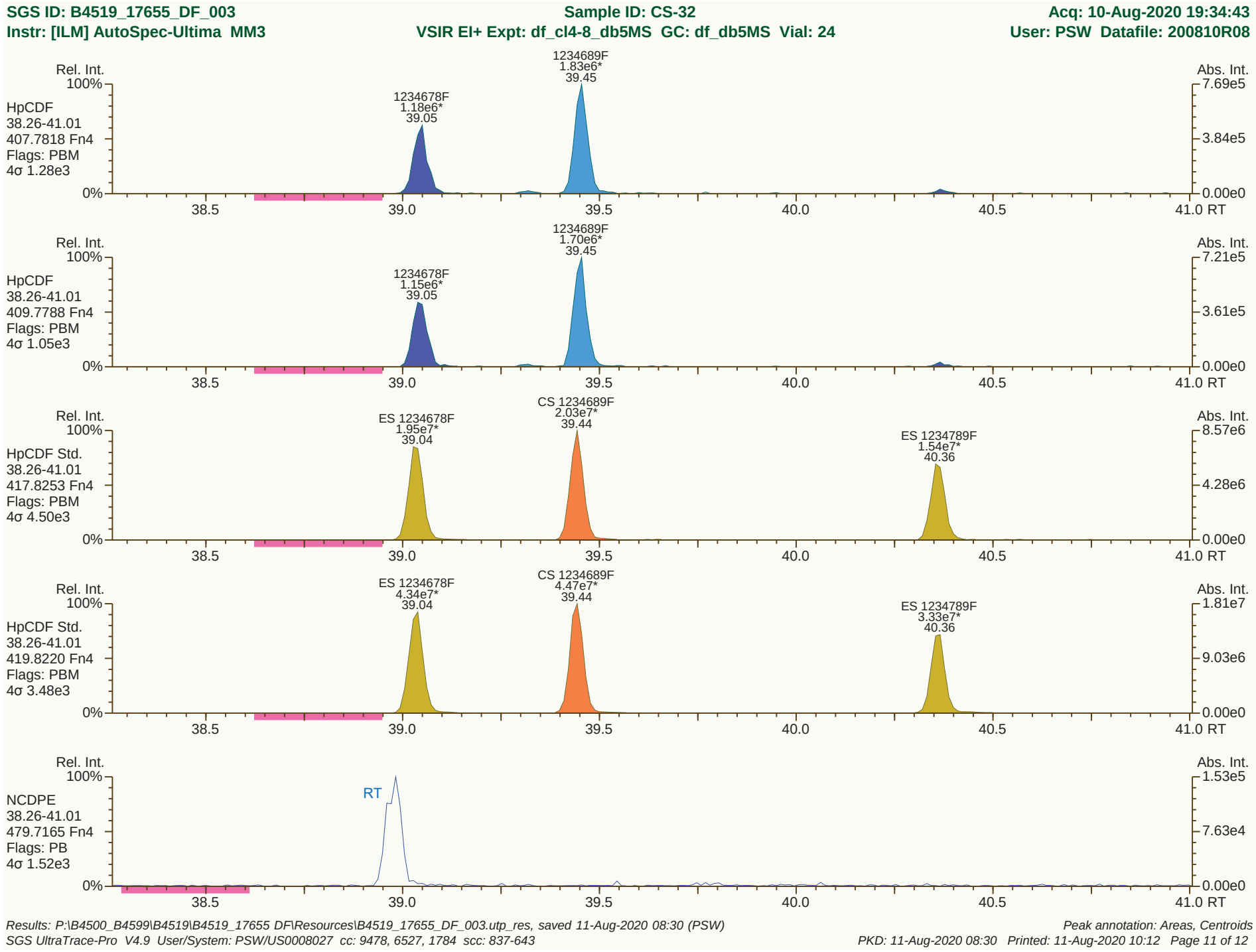

Rel. Int.
100%
TCDF
20.54-29.50
303.9016 Fn1
Flags: PBM
4σ 2.63e3
2468F
2.92e5*
22.39
1289F
2.14e6*
28.45
Abs. Int.
5.08e5
2.54e5
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF
20.54-29.50
305.8987 Fn1
Flags: PBM
4σ 1.93e3
1368F
8.57e4*
21.17
1468F
2.72e4*
21.72
2468F
3.35e5*
22.40
1347F...[3]
7.29e4*
22.97
1268F
5.12e4*
23.81
1467F
4.12e4*
23.95
1238F...[5]
5.22e4*
24.92
2368F
8.56e4*
24.82
1278F
3.91e4*
25.42
2347/1279F
2.84e4*
26.13
2378F
4.28e4*
26.36
2367/3467F
7.14e4*
26.73
1289F
1.04e6*
28.45
Abs. Int.
2.58e5
1.29e5
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
315.9419 Fn1
Flags: PBM
4σ 2.27e4
JS 1234F
6.95e7*
24.91
ES 2378F
5.65e7*
26.34
Abs. Int.
1.38e7
6.90e6
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
317.9389 Fn1
Flags: PBM
4σ 1.10e4
JS 1234F
8.68e7*
24.90
ES 2378F
7.14e7*
26.34
Abs. Int.
1.72e7
8.61e6
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
HxCDPE
20.54-29.50
375.8364 Fn1
Flags: PB
4σ 1.57e3
Abs. Int.
9.77e3
4.89e3
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


13468/12468F
4.40e5*
28.45
Rel. Int.
100%
0%
Abs. Int.
1.08e5
5.42e4
0.00e0
PeCDF-1
20.54-29.50
339.8597 Fn1
Flags: PBM
4σ 1.90e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
13468/12468F
2.60e5*
28.45
Rel. Int.
100%
0%
Abs. Int.
6.60e4
3.30e4
0.00e0
PeCDF-1
20.54-29.50
341.8568 Fn1
Flags: PBM
4σ 1.80e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
0%
Abs. Int.
8.29e6
4.15e6
0.00e0
QC Check
20.54-29.50
316.9824 Fn1
Flags: -
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
PeCDF-2
29.51-34.00
339.8597 Fn2
Flags: PBM
4σ 3.70e3
13678F...[3] 1.68e5* 30.04
12368F...[3] 3.64e5* 30.20
23468/12469F 1.07e5* 30.87
12378F 6.60e4* 31.33
12678/12367F 7.31e4* 31.62
23467/12369F 4.19e4* 32.34
23478F 1.18e5* 32.47
Abs. Int.
8.53e4
4.27e4
0.00e0
0%
30.0 30.5 31.0 31.5 32.0 32.5 33.0 33.5 34.0 RT
Rel. Int.
100%
PeCDF-2
29.51-34.00
341.8568 Fn2
Flags: PBM
4σ 3.27e3
13678F...[3] 1.01e5* 30.04
12368F...[3] 2.17e5* 30.20
23468/12469F 7.72e4* 30.88
12378F 3.66e4* 31.32
12678/12367F 4.15e4* 31.60
23467/12369F 2.49e4* 32.32
23478F 5.73e4* 32.47
Abs. Int.
4.68e4
2.34e4
0.00e0
0%
30.0 30.5 31.0 31.5 32.0 32.5 33.0 33.5 34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.00
351.9000 Fn2
Flags: PBM
4σ 5.86e3
CS 12346F 7.33e7* 30.77
ES 12378F 7.26e7* 31.31
ES 23478F 7.02e7* 32.44
Abs. Int.
1.93e7
9.66e6
0.00e0
0%
30.0 30.5 31.0 31.5 32.0 32.5 33.0 33.5 34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.00
353.8970 Fn2
Flags: PBM
4σ 2.94e3
CS 12346F 4.63e7* 30.77
ES 12378F 4.66e7* 31.31
ES 23478F 4.38e7* 32.44
Abs. Int.
1.23e7
6.16e6
0.00e0
0%
30.0 30.5 31.0 31.5 32.0 32.5 33.0 33.5 34.0 RT
Rel. Int.
100%
HpCDPE
29.51-34.00
409.7974 Fn2
Flags: PB
4σ 2.02e3
Abs. Int.
1.44e4
7.22e3
0.00e0
0%
30.0 30.5 31.0 31.5 32.0 32.5 33.0 33.5 34.0 RT


Rel. Int.
100%
HxCDF
34.02-38.25
373.8207 Fn3
Flags: PBM
4σ 2.86e3
123468F 1.42e5* 34.37
124678/134678F 6.85e5* 34.57
124689F 6.24e5* 35.22
123467F 4.70e4* 35.64
123478F 1.23e5* 35.76
123678F 7.20e4* 35.90
234678F 1.16e5* 36.55
Abs. Int.
2.08e5
1.04e5
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0
RT
Rel. Int.
100%
HxCDF
34.02-38.25
375.8178 Fn3
Flags: PBM
4σ 2.79e3
123468F 1.48e5* 34.37
124678/134678F 4.41e5* 34.57
124679F 1.74e4* 34.99
124689F 5.40e5* 35.22
123467F 4.30e4* 35.65
123478F 8.96e4* 35.76
123678F 6.49e4* 35.90
234678F 7.68e4* 36.55
123489F 2.60e4* 37.54
Abs. Int.
1.77e5
8.83e4
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0
RT
Rel. Int.
100%
HxCDF Std.
34.02-38.25
383.8639 Fn3
Flags: PBM
4σ 1.37e4
ES 123478F 2.83e7* 35.75
ES 123678F 3.27e7* 35.89
CS 123469F 2.91e7* 36.19
ES 234678F 2.88e7* 36.53
ES 123789F 2.35e7* 37.51
Abs. Int.
1.04e7
5.22e6
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0
RT
Rel. Int.
100%
HxCDF Std.
34.02-38.25
385.8610 Fn3
Flags: PBM
4σ 8.34e3
ES 123478F 5.35e7* 35.75
ES 123678F 6.22e7* 35.89
CS 123469F 5.57e7* 36.19
ES 234678F 5.39e7* 36.53
ES 123789F 4.73e7* 37.51
Abs. Int.
1.87e7
9.36e6
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0
RT
Rel. Int.
100%
OCDPE
34.02-38.25
445.7555 Fn3
Flags: PB
4σ 1.75e3
Abs. Int.
7.76e3
3.88e3
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0
RT

SGS ID: B4519_17655_DF_003 | Sample ID: CS-32 | Acq: 10-Aug-2020 19:34:43
Instr: [ILM] AutoSpec-Ultima MM3 | VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 24 | User: PSW Datafile: 200810R08



Results: P:\B4500_B4599\B4519\B4519_17655 DF\Resources\B4519_17655_DF_003.utp_res, saved 11-Aug-2020 08:30 (PSW) | Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 9478, 6527, 1784 scc: 837-643 | PKD: 11-Aug-2020 08:30 Printed: 11-Aug-2020 10:12 Page 11 of 12


Rel. Int.
100%
OCDF
41.02-45.00
441.7428 Fn5
Flags: PBM
4σ 1.74e3
0%
OCDF
1.13e6*
42.54
Abs. Int.
4.28e5
2.14e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF
41.02-45.00
443.7398 Fn5
Flags: PBM
4σ 2.19e3
0%
OCDF
1.39e6*
42.54
Abs. Int.
5.51e5
2.76e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF Std.
41.02-45.00
453.7830 Fn5
Flags: PBM
4σ 1.75e3
0%
ES OCDF
3.38e7*
42.53
Abs. Int.
1.24e7
6.19e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF Std.
41.02-45.00
455.7801 Fn5
Flags: PBM
4σ 2.32e3
0%
ES OCDF
3.57e7*
42.53
Abs. Int.
1.31e7
6.56e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
DCDPE
41.02-45.00
513.6775 Fn5
Flags: PB
4σ 1.38e3
0%
Abs. Int.
6.31e3
3.15e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

Lab ID: B4519_17655_DF_004 **Acq'd:** 10 Aug 2020 20:22 PSW **Wt/Vol:** 9.42 g **ICAL:** MM3_DF_10012020_12JUN2020

Client ID: CS-33 **UTP:** 11-Aug-2020 08:35:29 PSW **J-level:** 0.531 pg/g **Split:** 1 **Checkcode:** 132-368-VHH

Datafile: 200810R09 **Report:** 11 Aug 2020 09:59 pw **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	NotFnd		1.0009	-		-	-	-	1.18	-	6288	0.184
12378-PeCDD	32.83	J	1.0006	1.0008	+0.4	9.92E+04	1.72	Y	1.14	0.312	4035	0.117
123478-HxCDD	36.74	J	1.0004	1.0004	0	2.70E+05	1.19	Y	1.09	1.02	3285	0.099
123678-HxCDD	36.85	J	1.0035	1.0034	-0.2	5.91E+05	1.11	Y	1.13	2.26	3285	0.0993
123789-HxCDD	37.15	J	1.0116	1.0117	+0.2	5.30E+05	1.29	Y	1.05	1.82	3285	0.0927
1234678-HpCDD	39.96		1.0003	1.0003	0	1.71E+07	1.06	Y	0.98	85.6	4185	0.126
OCDD	42.38		1.0003	1.0002	-0.3	7.11E+07	0.90	Y	1.08	653	5637	0.357
2378-TCDF	26.38	J EMPC	1.0006	1.0015	+1.4	6.45E+04	1.27	N	0.98	0.125	3621	0.0816
12378-PeCDF	NotFnd		1.0006	-		-	-	-	0.95	-	6230	0.134
23478-PeCDF	32.49	J EMPC	1.0005	1.0011	+1.2	2.16E+05	1.96	N	0.95	0.495	6230	0.132
123478-HxCDF	35.77	J	1.0005	1.0005	0	5.70E+05	1.29	Y	1.20	1.46	3807	0.0791
123678-HxCDF	35.91	J	1.0004	1.0004	0	2.73E+05	1.08	Y	1.07	0.681	3807	0.0776
234678-HxCDF	36.55	J EMPC	1.0005	1.0003	-0.4	3.79E+05	1.47	N	1.10	1.05	3807	0.0877
123789-HxCDF	NotFnd		1.0004	-		-	-	-	1.09	-	3807	0.116
1234678-HpCDF	39.05		1.0003	1.0002	-0.2	5.76E+06	1.09	Y	1.28	18.6	3291	0.0694
1234789-HpCDF	40.38	J	1.0002	1.0003	+0.2	3.74E+05	1.05	Y	1.27	1.62	3291	0.087
OCDF	42.55		1.0003	1.0002	-0.3	6.13E+06	0.92	Y	1.01	47.3	4398	0.241

Name	Act RT		Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	27.26		1.0255	1.0257	+0.3	6.66E+07	0.77	Y	1.01	82
ES 12378-PeCDD	32.81		1.2330	1.2342	+2.4	5.96E+07	1.69	Y	0.87	84.8
ES 123478-HxCDD	36.72		0.9917	0.9916	-0.2	5.14E+07	1.32	Y	1.10	71
ES 123678-HxCDD	36.84		0.9947	0.9947	0	4.94E+07	1.31	Y	1.06	70.5
ES 123789-HxCDD	37.14		1.0028	1.0027	-0.2	5.91E+07	1.34	Y	1.22	73.6
ES 1234678-HpCDD	39.95		1.0785	1.0788	+0.7	4.32E+07	1.06	Y	0.99	66
ES OCDD	42.37		1.1439	1.1442	+0.8	4.30E+07	0.93	Y	0.67	48.7
ES 2378-TCDF	26.34		1.0572	1.0576	+0.6	1.12E+08	0.78	Y	1.01	80.8
ES 12378-PeCDF	31.32		1.2558	1.2574	+3.0	1.03E+08	1.56	Y	0.90	83.9
ES 23478-PeCDF	32.45		1.3012	1.3029	+3.3	9.81E+07	1.57	Y	0.89	80.9
ES 123478-HxCDF	35.75		0.9655	0.9654	-0.2	6.91E+07	0.51	Y	1.43	73.2
ES 123678-HxCDF	35.89		0.9693	0.9692	-0.2	7.94E+07	0.52	Y	1.63	73.8
ES 234678-HxCDF	36.54		0.9867	0.9866	-0.2	6.95E+07	0.52	Y	1.48	71.2
ES 123789-HxCDF	37.51		1.0130	1.0130	0	5.90E+07	0.55	Y	1.29	69.2
ES 1234678-HpCDF	39.04		1.0540	1.0542	+0.5	5.14E+07	0.44	Y	1.15	67.9
ES 1234789-HpCDF	40.37		1.0898	1.0900	+0.5	3.86E+07	0.43	Y	0.91	64.5
ES OCDF	42.54		1.1484	1.1486	+0.5	5.45E+07	0.86	Y	0.83	49.9

Lab ID: B4519_17655_DF_004 | Acq'd: 10 Aug 2020 20:22 PSW | Wt/Vol: 9.42 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-33 | UTP: 11-Aug-2020 08:35:29 PSW | J-level: 0.531 pg/g | Split: 1 | Checkcode: 132-368-VHH

Datafile: 200810R09 | Report: 11 Aug 2020 09:59 pw | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %	
JS 1234-TCDD	26.58		-	-	-	8.07E+07	0.78	Y	-	-	
JS 1234-TCDF	24.91		-	-	-	1.36E+08	0.77	Y	-	-	
JS 123467-HxCDD	37.03		-	-	-	3.30E+07	1.29	Y	-	-	
CS 37Cl-2378-TCDD	27.29		1.0265	1.0265	0	3.19E+07	n/a	-	1.04	95.2	
CS 12347-PeCDD	32.30		1.2141	1.2151	+1.9	6.08E+07	1.67	Y	0.74	102	
CS 12346-PeCDF	30.78		1.2343	1.2358	+2.8	1.07E+08	1.57	Y	0.86	91	
CS 123469-HxCDF	36.20		0.9776	0.9775	-0.2	7.22E+07	0.53	Y	1.36	80.6	
CS 1234689-HpCDF	39.45		1.0650	1.0652	+0.5	5.41E+07	0.45	Y	1.05	77.8	
~~SS 37Cl-2378-TCDD~~	~~27.29~~		~~1.0265~~	~~1.0265~~	~~0~~	~~3.19E+07~~	~~n/a~~		~~1.04~~	~~115~~	Not used in this project.
~~SS 12347-PeCDD~~	~~32.30~~		~~1.2141~~	~~1.2151~~	~~+1.9~~	~~6.08E+07~~	~~1.67~~	~~Y~~	~~0.86~~	~~119~~	CL 11Aug20
~~SS 12346-PeCDF~~	~~30.78~~		~~1.2343~~	~~1.2358~~	~~+2.8~~	~~1.07E+08~~	~~1.57~~	~~Y~~	~~0.96~~	~~108~~	
~~SS 123469-HxCDF~~	~~36.20~~		~~0.9776~~	~~0.9775~~	~~-0.2~~	~~7.22E+07~~	~~0.53~~	~~Y~~	~~0.83~~	~~109~~	
~~SS 1234689-HpCDF~~	~~39.45~~		~~1.0650~~	~~1.0652~~	~~+0.5~~	~~5.41E+07~~	~~0.45~~	~~Y~~	~~0.92~~	~~114~~	

Totals	Conc	EMPC
Total TCDD	0.625	0.625
Total PeCDD	2.01	2.67
Total HxCDD	28.1	28.1
Total HpCDD	264	264
Total Tetra-Octa Dioxins	948	949
Total TCDF	2.58	3.45
Total PeCDF	5.25	6.28
Total HxCDF	24.3	25.4
Total HpCDF	61.3	61.3
Total Tetra-Octa Furans	141	144
Total Tetra-Octa Dioxins & Furans	1090	1090

Lab ID: B4519_17655_DF_004 **Acq'd:** 10 Aug 2020 20:22 PSW **Wt/Vol:** 9.42 g **ICAL:** MM3_DF_10012020_12JUN2020

Client ID: CS-33 **UTP:** 11-Aug-2020 08:35:29 PSW **J-level:** 0.531 pg/g **Split:** 1 **Checkcode:** 132-368-VHH

Datafile: 200810R09 **Report:** 11 Aug 2020 09:59 pw **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1368-TCDD	23.40	J	0.8591	0.8582	-1.3	1.37E+05	0.87	Y	1.18	0.372	6288	0.184
1379-TCDD	NotFnd		0.8732						1.18		6288	0.184
1369-TCDD	NotFnd		0.8901						1.18		6288	0.184
1469-TCDD	NotFnd		0.9205						1.18		6288	0.184
1247/1246/1248/1249-TCDD	NotFnd		0.9301						1.18		6288	0.184
1378-TCDD	NotFnd		0.9374						1.18		6288	0.184
1268-TCDD	NotFnd		0.9449						1.18		6288	0.184
1478-TCDD	NotFnd		0.9544						1.18		6288	0.184
1279-TCDD	NotFnd		0.9610						1.18		6288	0.184
1234/1269-TCDD	26.60	J	0.9746	0.9756	+1.6	9.35E+04	0.86	Y	1.18	0.253	6288	0.184
1236-TCDD	NotFnd		0.9802						1.18		6288	0.184
1237/1238-TCDD	NotFnd		0.9898						1.18		6288	0.184
1239-TCDD	NotFnd		0.9950						1.18		6288	0.184
2378-TCDD	**NotFnd**		**1.0009**						**1.18**		**6288**	**0.184**
1278-TCDD	NotFnd		1.0133						1.18		6288	0.184
1267-TCDD	NotFnd		1.0185						1.18		6288	0.184
1289-TCDD	NotFnd		1.0379						1.18		6288	0.184
12479/12468-PeCDD	30.27	J	0.9229	0.9226	-0.5	2.19E+05	1.52	Y	1.14	0.689	4035	0.117
12469-PeCDD	30.81	J	0.9396	0.9391	-0.9	1.19E+05	1.53	Y	1.14	0.374	4035	0.117
12368-PeCDD	31.38	J EMPC	0.9568	0.9565	-0.6	7.26E+04	1.85	N	1.14	0.228	4035	0.117
12478-PeCDD	31.57	J EMPC	0.9626	0.9624	-0.4	6.49E+04	1.90	N	1.14	0.204	4035	0.117
12379-PeCDD	31.67	J EMPC	0.9657	0.9652	-1.0	7.27E+04	1.11	N	1.14	0.228	4035	0.117
12369/12467/12489-PeCDD	31.93	J	0.9738	0.9734	-0.8	1.11E+05	1.65	Y	1.14	0.348	4035	0.117
12346/12347-PeCDD	32.34	J	0.9853	0.9856	+0.6	9.24E+04	1.61	Y	1.14	0.29	4035	0.117
12378-PeCDD	32.83	J	**1.0006**	**1.0008**	**+0.4**	**9.92E+04**	**1.72**	**Y**	**1.14**	**0.312**	**4035**	**0.117**
12367-PeCDD	NotFnd		1.0034						1.14		4035	0.117
12389-PeCDD	NotFnd		1.0141						1.14		4035	0.117
124679/124689-HxCDD	35.04		0.9542	0.9542	0	2.46E+06	1.34	Y	1.09	9	3285	0.0966
123468-HxCDD	35.70	J	0.9721	0.9720	-0.2	7.09E+05	1.37	Y	1.09	2.6	3285	0.0966
123679/123689-HxCDD	35.98		0.9799	0.9799	0	2.08E+06	1.23	Y	1.09	7.63	3285	0.0966
123469-HxCDD	36.12		0.9835	0.9835	0	7.91E+05	1.21	Y	1.09	2.89	3285	0.0966
123478-HxCDD	36.74	J	**1.0004**	**1.0004**	**0**	**2.70E+05**	**1.19**	**Y**	1.09	**1.02**	**3285**	**0.099**
123678-HxCDD	36.85	J	**1.0035**	**1.0034**	**-0.2**	**5.91E+05**	**1.11**	**Y**	1.13	**2.26**	**3285**	**0.0993**
123467-HxCDD	37.04	J	1.0088	1.0087	-0.2	2.46E+05	1.33	Y	1.09	0.902	3285	0.0966
123789-HxCDD	37.15	J	**1.0116**	**1.0117**	**+0.2**	**5.30E+05**	**1.29**	**Y**	1.05	**1.82**	**3285**	**0.0927**

Lab ID: B4519_17655_DF_004 | Acq'd: 10 Aug 2020 20:22 PSW | Wt/Vol: 9.42 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-33 | UTP: 11-Aug-2020 08:35:29 PSW | J-level: 0.531 pg/g | Split: 1 | Checkcode: 132-368-VHH

Datafile: 200810R09 | Report: 11 Aug 2020 09:59 pw | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1234679-HpCDD	39.32		0.9843	0.9842	-0.2	3.56E+07	1.04	Y	0.98	178	4185	0.126
1234678-HpCDD	**39.96**		**1.0003**	**1.0003**	**0**	**1.71E+07**	**1.06**	**Y**	**0.98**	**85.6**	**4185**	**0.126**
OCDD	**42.38**		**1.0003**	**1.0002**	**-0.3**	**7.11E+07**	**0.90**	**Y**	**1.08**	**653**	**5637**	**0.357**
OCDD-a	42.38		1.0002	1.0002	0	4.84E+06	2.66	Y	0.07	722	4871	5.01
1368-TCDF	21.16	J	0.8044	0.8034	-1.3	1.04E+05	0.67	Y	0.98	0.201	3621	0.0816
1468-TCDF	21.73	J EMPC	0.8261	0.8249	-1.6	5.30E+04	1.29	N	0.98	0.103	3621	0.0816
2468-TCDF	22.39		0.8511	0.8499	-1.6	3.90E+05	0.68	Y	0.98	0.757	3621	0.0816
1346/1246-TCDF	22.79	J EMPC	0.8665	0.8652	-1.8	4.87E+04	0.59	N	0.98	0.0945	3621	0.0816
1347/1378/1247-TCDF	22.95	J	0.8723	0.8713	-1.4	1.73E+05	0.77	Y	0.98	0.336	3621	0.0816
1348-TCDF	NotFnd		0.8835						0.98		3621	0.0816
1248/1367/1379-TCDF	23.38	J	0.8888	0.8877	-1.5	1.22E+05	0.70	Y	0.98	0.237	3621	0.0816
1268-TCDF	23.80	J	0.9044	0.9036	-1.1	1.60E+05	0.76	Y	0.98	0.31	3621	0.0816
1467-TCDF	NotFnd		0.9098						0.98		3621	0.0816
1478-TCDF	NotFnd		0.9167						0.98		3621	0.0816
1369/1237-TCDF	NotFnd		0.9316						0.98		3621	0.0816
2467-TCDF	NotFnd		0.9369						0.98		3621	0.0816
2368-TCDF	24.84	J	0.9430	0.9430	0	1.64E+05	0.66	Y	0.98	0.319	3621	0.0816
1238/1234/1678/1469/1236-TCDF	24.95	J	0.9468	0.9472	+0.6	1.04E+05	0.68	Y	0.98	0.202	3621	0.0816
1278-TCDF	25.42	J	0.9651	0.9649	-0.3	6.69E+04	0.85	Y	0.98	0.13	3621	0.0816
1349-TCDF	NotFnd		0.9704						0.98		3621	0.0816
1267-TCDF	25.73	J EMPC	0.9761	0.9766	+0.8	2.05E+04	1.19	N	0.98	0.0398	3621	0.0816
2346/1249-TCDF	NotFnd		0.9834						0.98		3621	0.0816
2347/1279-TCDF	26.11	J	0.9921	0.9912	-1.4	4.45E+04	0.82	Y	0.98	0.0864	3621	0.0816
2348-TCDF	26.24	J EMPC	0.9964	0.9961	-0.5	2.23E+04	1.60	N	0.98	0.0432	3621	0.0816
2378-TCDF	**26.38**	J EMPC	**1.0006**	**1.0015**	**+1.4**	**6.45E+04**	**1.27**	**N**	**0.98**	**0.125**	**3621**	**0.0816**
2367/3467-TCDF	26.74	J EMPC	1.0156	1.0151	-0.8	1.08E+05	1.03	N	0.98	0.209	3621	0.0816
1269-TCDF	NotFnd		1.0249						0.98		3621	0.0816
1239-TCDF	NotFnd		1.0357						0.98		3621	0.0816
1289-TCDF	28.46	J EMPC	1.0799	1.0802	+0.5	1.33E+05	1.82	N	0.98	0.258	3621	0.0816
13468/12468-PeCDF	28.46		0.9084	0.9086	+0.3	1.32E+06	1.50	Y	0.95	2.95	3493	0.0746
13678/13467/12467-PeCDF	30.06	J EMPC	0.9591	0.9600	+1.6	2.38E+05	1.24	N	0.95	0.53	6230	0.133
12368/13478/12478-PeCDF	30.21	J	0.9642	0.9648	+1.1	7.94E+05	1.42	Y	0.95	1.77	6230	0.133
14678-PeCDF	NotFnd		0.9675						0.95		6230	0.133
13479-PeCDF	NotFnd		0.9706						0.95		6230	0.133
13469/12479-PeCDF	NotFnd		0.9787						0.95		6230	0.133
12346-PeCDF	NotFnd		0.9833						0.95		6230	0.133

Lab ID: B4519_17655_DF_004 | Acq'd: 10 Aug 2020 20:22 PSW | Wt/Vol: 9.42 g | ICAL: MM3_DF_10012020_12JUN2020

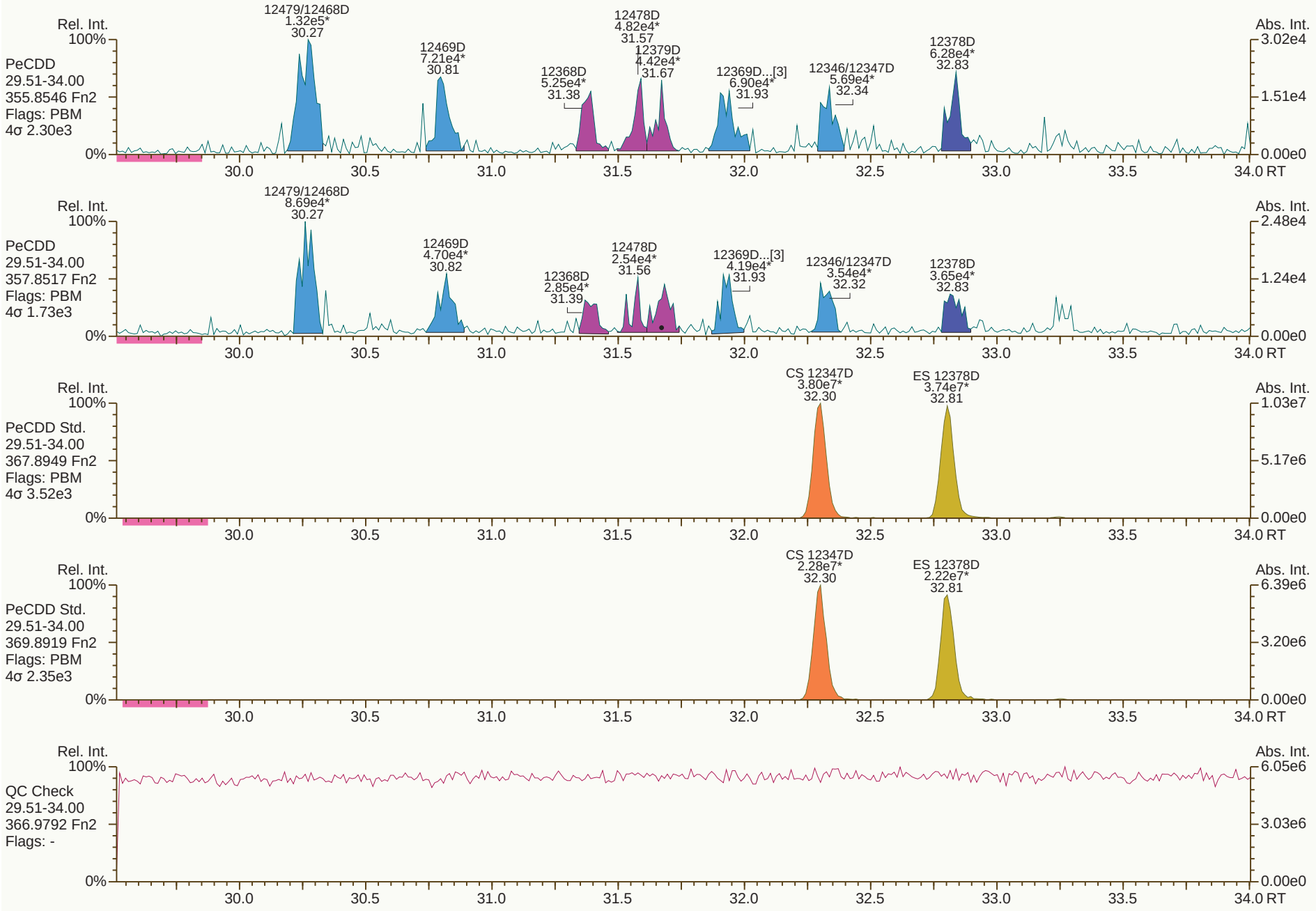
Client ID: CS-33 | UTP: 11-Aug-2020 08:35:29 PSW | J-level: 0.531 pg/g | Split: 1 | Checkcode: 132-368-VHH

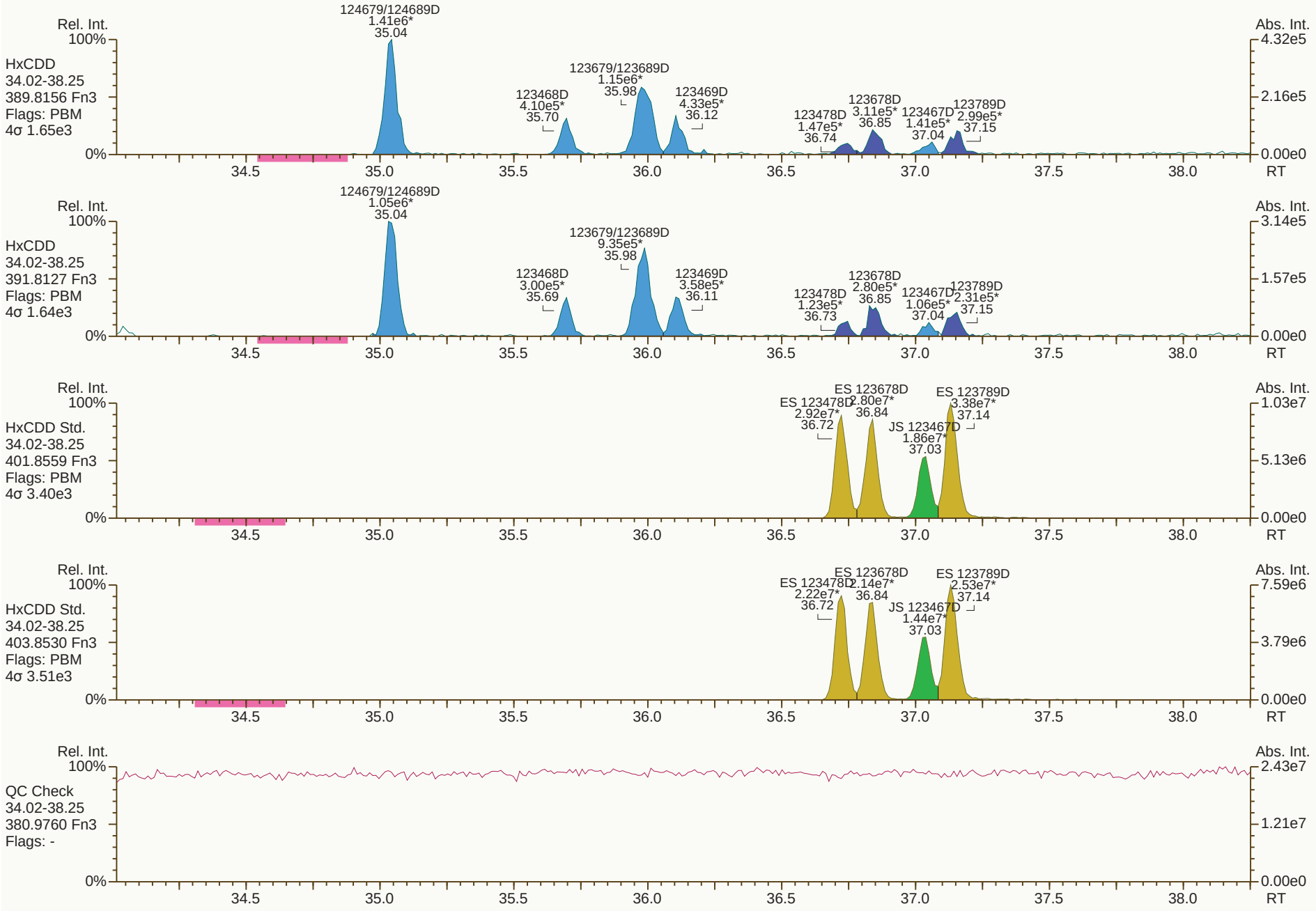
Datafile: 200810R09 | Report: 11 Aug 2020 09:59 pw | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

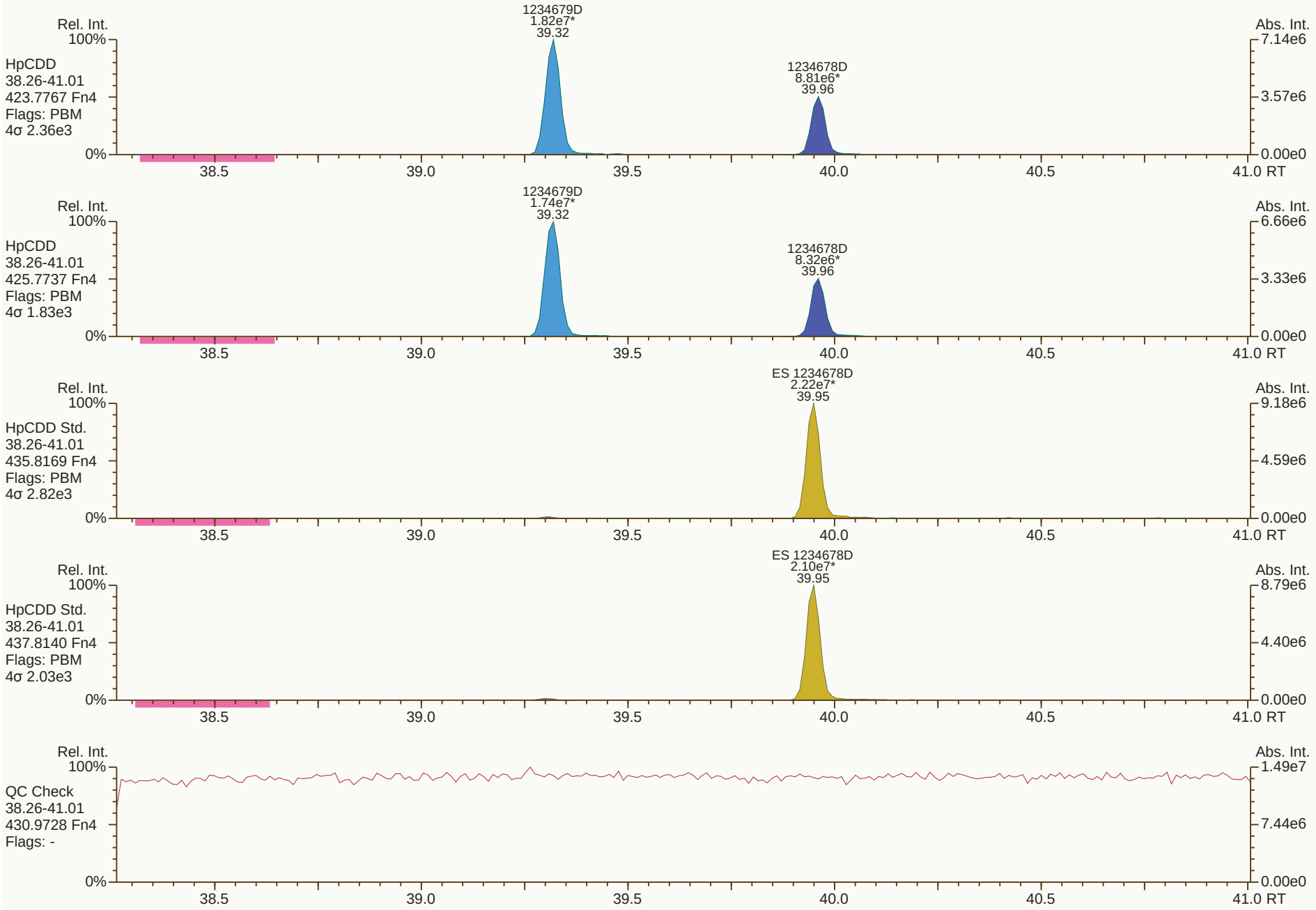
Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
23468/12469-PeCDF	30.89	J	0.9861	0.9863	+0.4	2.37E+05	1.76	Y	0.95	0.529	6230	0.133
12347-PeCDF	NotFnd		0.9887						0.95		6230	0.133
12348-PeCDF	NotFnd		0.9938						0.95		6230	0.133
12378-PeCDF	**NotFnd**		**1.0006**						**0.95**		**6230**	**0.134**
12678/12367-PeCDF	NotFnd		1.0095						0.95		6230	0.133
12379-PeCDF	NotFnd		1.0150						0.95		6230	0.133
12679-PeCDF	NotFnd		0.9926						0.95		6230	0.133
23467/12369-PeCDF	NotFnd		0.9966						0.95		6230	0.133
23478-PeCDF	**32.49**	J EMPC	**1.0005**	**1.0011**	**+1.2**	**2.16E+05**	**1.96**	**N**	**0.95**	**0.495**	**6230**	**0.132**
23478/12489-PeCDF	NotFnd		0.0000						0.95			
12489-PeCDF	NotFnd		1.0047						0.95		6230	0.133
12349-PeCDF	NotFnd		1.0107						0.95		6230	0.133
12389-PeCDF	NotFnd		1.0339						0.95		6230	0.133
123468-HxCDF	34.38	J	0.9617	0.9616	-0.2	8.43E+05	1.19	Y	1.11	2.32	3807	0.0884
124678/134678-HxCDF	34.58		0.9673	0.9671	-0.4	3.08E+06	1.29	Y	1.11	8.47	3807	0.0884
134679-HxCDF	NotFnd		0.9737						1.11		3807	0.0884
124679-HxCDF	35.01	J	0.9792	0.9791	-0.2	8.52E+04	1.34	Y	1.11	0.235	3807	0.0884
124689-HxCDF	35.23		0.9854	0.9854	0	3.91E+06	1.12	Y	1.11	10.8	3807	0.0884
123467-HxCDF	35.65	J	0.9972	0.9971	-0.2	1.35E+05	1.16	Y	1.11	0.373	3807	0.0884
123478-HxCDF	**35.77**	J	**1.0005**	**1.0005**	**0**	**5.70E+05**	**1.29**	**Y**	**1.20**	**1.46**	**3807**	**0.0791**
123678-HxCDF	**35.91**	J	**1.0004**	**1.0004**	**0**	**2.73E+05**	**1.08**	**Y**	**1.07**	**0.681**	**3807**	**0.0776**
123479-HxCDF	NotFnd		1.0049						1.11		3807	0.0884
123469-HxCDF	NotFnd		1.0089						1.11		3807	0.0884
123679-HxCDF	NotFnd		0.9945						1.11		3807	0.0884
234678-HxCDF	**36.55**	J EMPC	**1.0005**	**1.0003**	**-0.4**	**3.79E+05**	**1.47**	**N**	**1.10**	**1.05**	**3807**	**0.0877**
234678/123689-HxCDF	NotFnd		0.0000						1.10			
123689-HxCDF	NotFnd		1.0054						1.11		3807	0.0884
123789-HxCDF	**NotFnd**		**1.0004**						**1.09**		**3807**	**0.116**
123789/123489-HxCDF	NotFnd		0.0000						1.09			
123489-HxCDF	NotFnd		1.0008						1.11		3807	0.0884
1234678-HpCDF	**39.05**		**1.0003**	**1.0002**	**-0.2**	**5.76E+06**	**1.09**	**Y**	**1.28**	**18.6**	**3291**	**0.0694**
1234679-HpCDF	39.32	**J**	1.0072	1.0072	0	1.63E+05	0.96	Y	1.27	0.602	3291	0.077
1234689-HpCDF	39.46		1.0107	1.0107	0	1.09E+07	1.04	Y	1.27	40.5	3291	0.077
1234789-HpCDF	**40.38**	**J**	**1.0002**	**1.0003**	**+0.2**	**3.74E+05**	**1.05**	**Y**	**1.27**	**1.62**	**3291**	**0.087**
OCDF	**42.55**		**1.0003**	**1.0002**	**-0.3**	**6.13E+06**	**0.92**	**Y**	**1.01**	**47.3**	**4398**	**0.241**
OCDF-a	42.55		1.0002	1.0003	+0.3	4.08E+05	2.15	Y	0.06	50.3	4361	3.82


Rel. Int.
100%
QC Check
20.54-29.50
316.9824 Fn1
Flags: -
0%
Abs. Int.
7.87e6
3.93e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
QC Check
29.51-34.00
366.9792 Fn2
Flags: -
0%
Abs. Int.
6.05e6
3.03e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
0%
Abs. Int.
2.43e7
1.21e7
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
QC Check
38.26-41.01
430.9728 Fn4
Flags: -
0%
Abs. Int.
1.49e7
7.44e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
1.30e7
6.51e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT


Rel. Int.
100%
TCDD
20.54-29.50
319.8965 Fn1
Flags: PBM
4σ 3.88e3
0%
1368D
6.38e4*
23.40
1234/1269D
4.32e4*
26.60
Abs. Int.
2.01e4
1.01e4
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD
20.54-29.50
321.8936 Fn1
Flags: PBM
4σ 2.41e3
0%
1368D
7.36e4*
23.40
1234/1269D
5.03e4*
26.60
Abs. Int.
1.79e4
8.93e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
37Cl-TCDD
20.54-29.50
327.8850 Fn1
Flags: PBM
4σ 1.60e3
0%
CS 37Cl-2378D
3.19e7*
27.29
Abs. Int.
7.32e6
3.66e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
331.9368 Fn1
Flags: PBM
4σ 7.70e3
0%
JS 1234D
3.54e7*
26.58
ES 2378D
2.89e7*
27.26
Abs. Int.
7.86e6
3.93e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
333.9339 Fn1
Flags: PBM
4σ 3.28e3
0%
JS 1234D
4.53e7*
26.58
ES 2378D
3.77e7*
27.26
Abs. Int.
1.00e7
5.02e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
Abs. Int.
PeCDD
29.51-34.00
355.8546 Fn2
Flags: PBM
4σ 2.30e3
12479/12468D 1.32e5* 30.27
12469D 7.21e4* 30.81
12368D 5.25e4* 31.38
12478D 4.82e4* 31.57
12379D 4.42e4* 31.67
12369D...[3] 6.90e4* 31.93
12346/12347D 5.69e4* 32.34
12378D 6.28e4* 32.83
3.02e4
1.51e4
0.00e0
PeCDD
29.51-34.00
357.8517 Fn2
Flags: PBM
4σ 1.73e3
12479/12468D 8.69e4* 30.27
12469D 4.70e4* 30.82
12368D 2.85e4* 31.39
12478D 2.54e4* 31.56
12369D...[3] 4.19e4* 31.93
12346/12347D 3.54e4* 32.32
12378D 3.65e4* 32.83
2.48e4
1.24e4
0.00e0
PeCDD Std.
29.51-34.00
367.8949 Fn2
Flags: PBM
4σ 3.52e3
CS 12347D 3.80e7* 32.30
ES 12378D 3.74e7* 32.81
1.03e7
5.17e6
0.00e0
PeCDD Std.
29.51-34.00
369.8919 Fn2
Flags: PBM
4σ 2.35e3
CS 12347D 2.28e7* 32.30
ES 12378D 2.22e7* 32.81
6.39e6
3.20e6
0.00e0
QC Check
29.51-34.00
366.9792 Fn2
Flags: -
6.05e6
3.03e6
0.00e0
100%
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT


Rel. Int.
Abs. Int.
HxCDD
34.02-38.25
389.8156 Fn3
Flags: PBM
4σ 1.65e3
124679/124689D
1.41e6*
35.04
123679/123689D
1.15e6*
35.98
123468D
4.10e5*
35.70
123469D
4.33e5*
36.12
123678D
3.11e5*
36.85
123478D
1.47e5*
36.74
123467D
1.41e5*
37.04
123789D
2.99e5*
37.15
HxCDD
34.02-38.25
391.8127 Fn3
Flags: PBM
4σ 1.64e3
124679/124689D
1.05e6*
35.04
123679/123689D
9.35e5*
35.98
123468D
3.00e5*
35.69
123469D
3.58e5*
36.11
123678D
2.80e5*
36.85
123478D
1.23e5*
36.73
123467D
1.06e5*
37.04
123789D
2.31e5*
37.15
HxCDD Std.
34.02-38.25
401.8559 Fn3
Flags: PBM
4σ 3.40e3
ES 123678D
2.80e7*
36.84
ES 123478D
2.92e7*
36.72
ES 123789D
3.38e7*
37.14
JS 123467D
1.86e7*
37.03
HxCDD Std.
34.02-38.25
403.8530 Fn3
Flags: PBM
4σ 3.51e3
ES 123678D
2.14e7*
36.84
ES 123478D
2.22e7*
36.72
ES 123789D
2.53e7*
37.14
JS 123467D
1.44e7*
37.03
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
100%
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
4.32e5
2.16e5
0.00e0
3.14e5
1.57e5
1.03e7
5.13e6
7.59e6
3.79e6
2.43e7
1.21e7

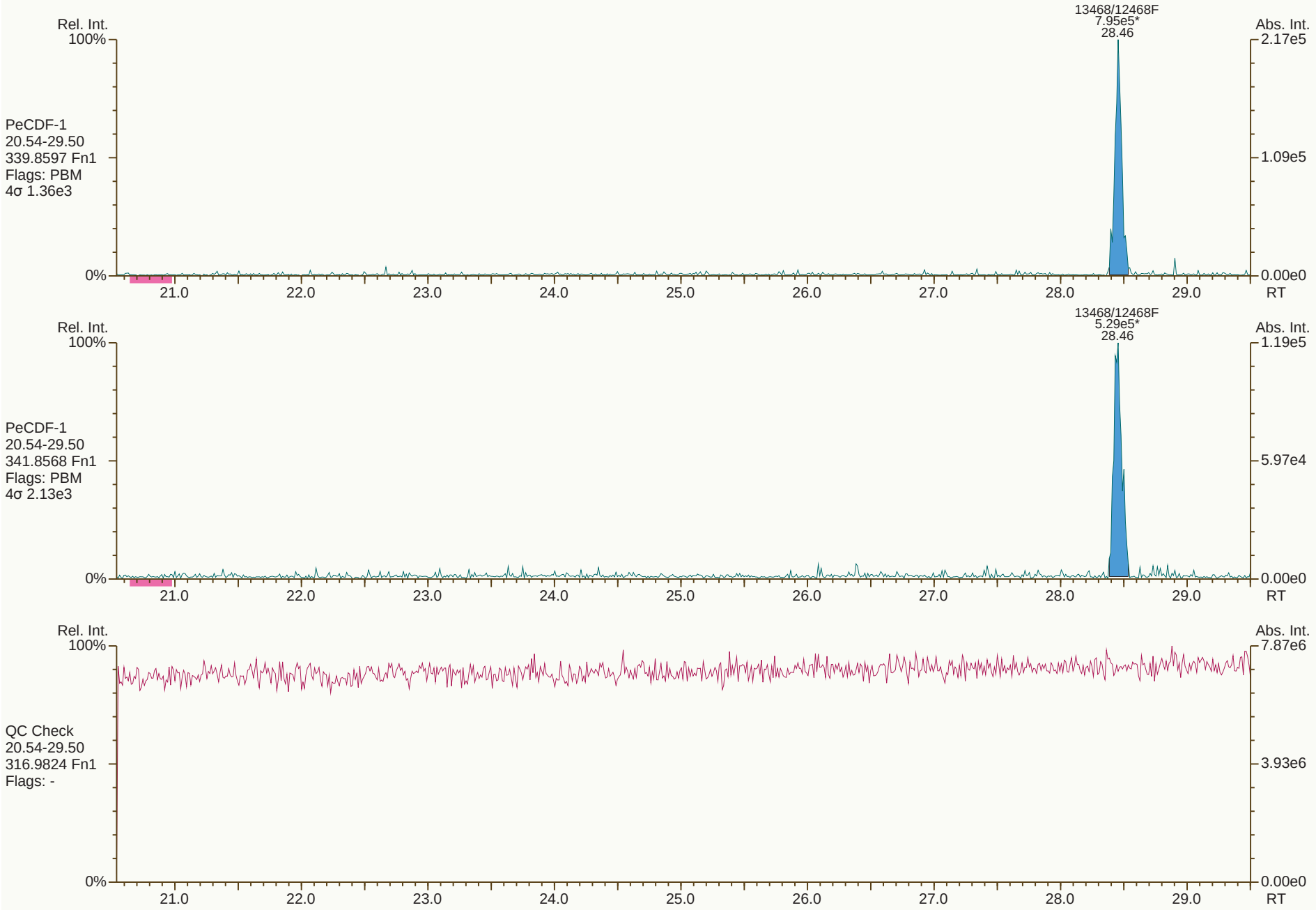

Rel. Int.
100%
HpCDD
38.26-41.01
423.7767 Fn4
Flags: PBM
4σ 2.36e3
1234679D
1.82e7*
39.32
1234678D
8.81e6*
39.96
Abs. Int.
7.14e6
3.57e6
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.26-41.01
425.7737 Fn4
Flags: PBM
4σ 1.83e3
1234679D
1.74e7*
39.32
1234678D
8.32e6*
39.96
Abs. Int.
6.66e6
3.33e6
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
435.8169 Fn4
Flags: PBM
4σ 2.82e3
ES 1234678D
2.22e7*
39.95
Abs. Int.
9.18e6
4.59e6
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
437.8140 Fn4
Flags: PBM
4σ 2.03e3
ES 1234678D
2.10e7*
39.95
Abs. Int.
8.79e6
4.40e6
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.26-41.01
430.9728 Fn4
Flags: -
Abs. Int.
1.49e7
7.44e6
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT


OCDD
3.37e7*
42.38
Rel. Int.
100%
OCDD
41.02-45.00
457.7377 Fn5
Flags: PBM
4σ 2.46e3
0%
Abs. Int.
1.24e7
6.22e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDD
3.75e7*
42.38
Rel. Int.
100%
OCDD
41.02-45.00
459.7348 Fn5
Flags: PBM
4σ 3.17e3
0%
Abs. Int.
1.39e7
6.93e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
2.08e7*
42.37
Rel. Int.
100%
OCDD Std.
41.02-45.00
469.7780 Fn5
Flags: PBM
4σ 2.03e3
0%
Abs. Int.
7.52e6
3.76e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
2.23e7*
42.37
Rel. Int.
100%
OCDD Std.
41.02-45.00
471.7750 Fn5
Flags: PBM
4σ 1.81e3
0%
Abs. Int.
8.24e6
4.12e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
1.30e7
6.51e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT


Rel. Int.
100%
TCDF
20.54-29.50
303.9016 Fn1
Flags: PBM
4σ 1.94e3
1368F 4.17e4* 21.16
1468F 3.86e4* 21.73
2468F 1.58e5* 22.39
1347F...[3] 7.54e4* 22.95
1248F...[3] 5.03e4* 23.38
1268F 6.90e4* 23.80
2368F 6.53e4* 24.84
1238F...[5] 4.21e4* 24.95
1278F 3.07e4* 25.42
noise
2378F 4.62e4* 26.38
2367/3467F 6.27e4* 26.74
1289F 1.37e5* 28.46
Abs. Int.
4.56e4
2.28e4
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
TCDF
20.54-29.50
305.8987 Fn1
Flags: PBM
4σ 1.68e3
1368F 6.21e4* 21.15
1468F 2.99e4* 21.73
2468F 2.32e5* 22.39
1347F...[3] 9.78e4* 22.96
1346/1246F 3.58e4* 22.82
1248F...[3] 7.17e4* 23.38
1268F 9.06e4* 23.80
2368F 9.89e4* 24.84
1238F...[5] 6.19e4* 24.94
1278F 3.62e4* 25.42
2378F 3.64e4* 26.37
2367/3467F 6.08e4* 26.74
1289F 7.52e4* 28.46
Abs. Int.
4.43e4
2.22e4
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
315.9419 Fn1
Flags: PBM
4σ 2.04e4
JS 1234F 5.95e7* 24.91
ES 2378F 4.88e7* 26.34
Abs. Int.
1.21e7
6.07e6
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
317.9389 Fn1
Flags: PBM
4σ 1.18e4
JS 1234F 7.68e7* 24.91
ES 2378F 6.28e7* 26.34
Abs. Int.
1.52e7
7.62e6
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
HxCDPE
20.54-29.50
375.8364 Fn1
Flags: PB
4σ 1.47e3
Abs. Int.
2.09e4
1.05e4
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT

SGS ID: B4519_17655_DF_004 | Sample ID: CS-33 | Acq: 10-Aug-2020 20:22:09

Instr: [ILM] AutoSpec-Ultima MM3 | VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 25 | User: PSW Datafile: 200810R09



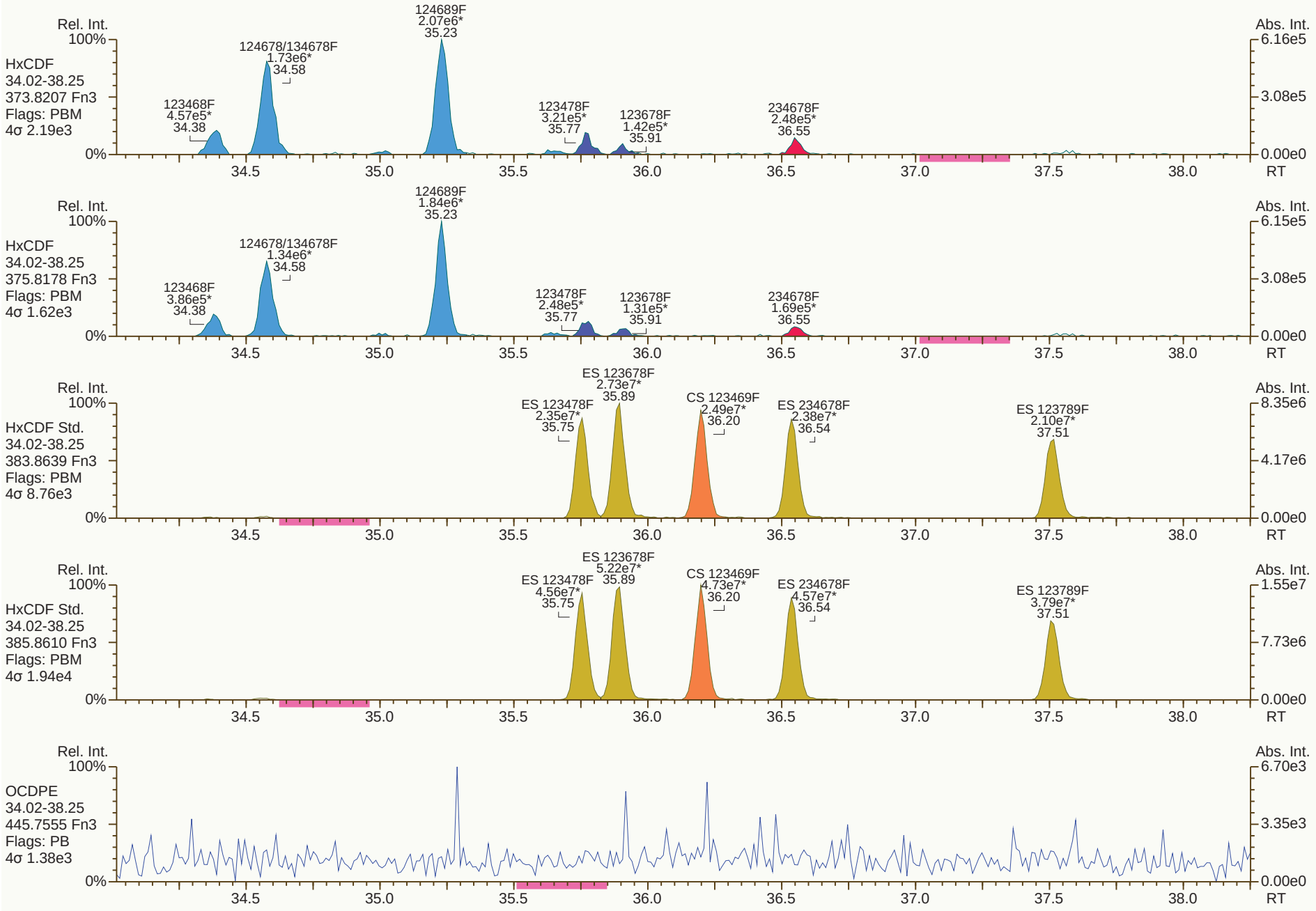
Results: P:\B4500_B4599\B4519\B4519_17655 DF\Resources\B4519_17655_DF_004.utp_res, saved 11-Aug-2020 08:35 (PSW)

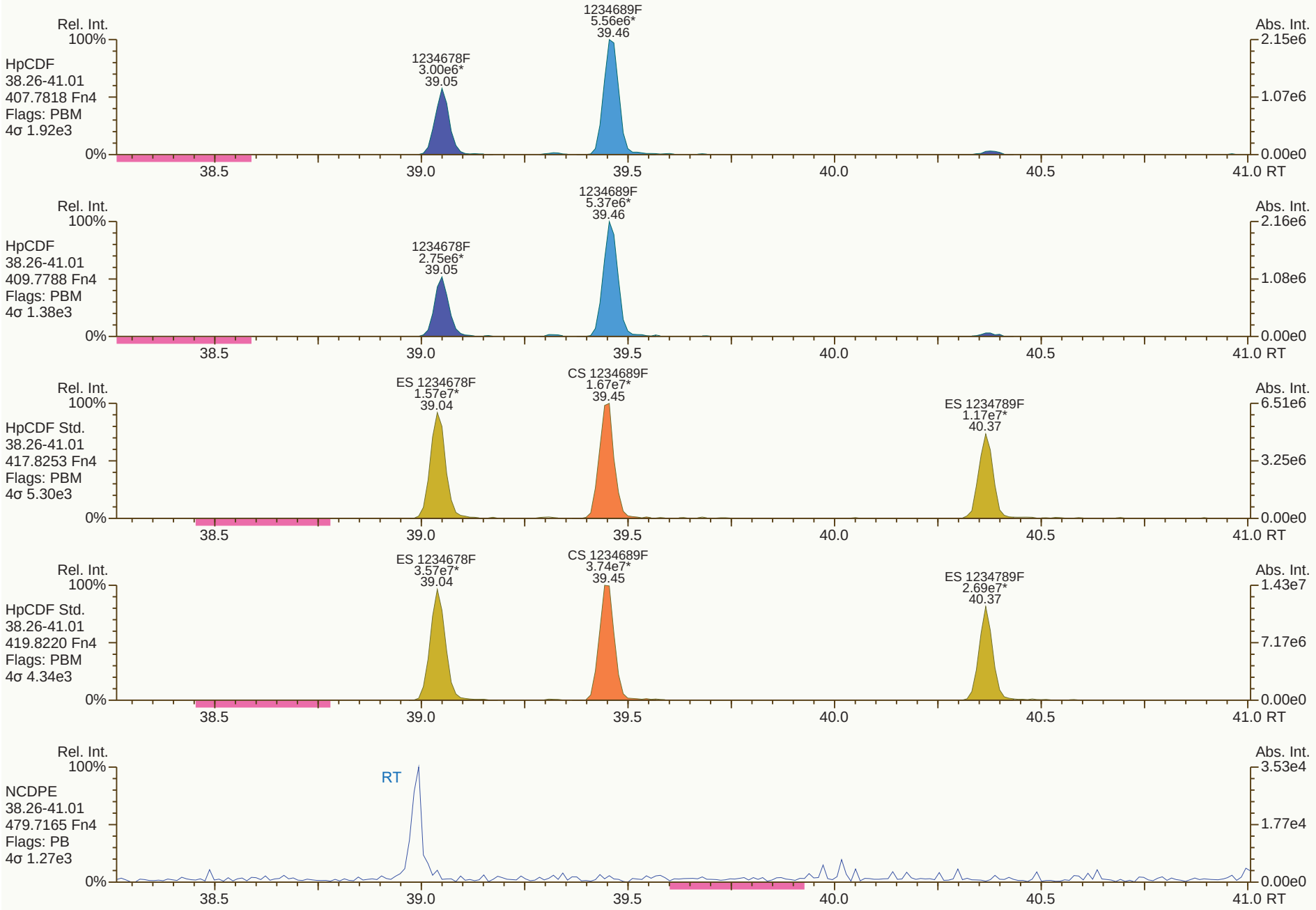
Peak annotation: Areas, Centroids

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 1148 scc: 132-368

PKD: 11-Aug-2020 08:35 Printed: 11-Aug-2020 10:12 Page 8 of 12


Rel. Int.
100%
PeCDF-2
29.51-34.00
339.8597 Fn2
Flags: PBM
4σ 2.98e3
12368F...[3]
4.66e5*
30.21
13678F...[3]
1.45e5*
30.06
23468/12469F
1.51e5*
30.89
23478F
1.66e5*
32.49
Abs. Int.
9.55e4
4.77e4
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF-2
29.51-34.00
341.8568 Fn2
Flags: PBM
4σ 3.25e3
12368F...[3]
3.27e5*
30.21
13678F...[3]
1.17e5*
30.06
23468/12469F
8.61e4*
30.89
23478F PR
8.47e4*
32.49
Abs. Int.
7.94e4
3.97e4
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.00
351.9000 Fn2
Flags: PBM
4σ 3.66e3
CS 12346F
6.51e7*
30.78
ES 12378F
6.27e7*
31.32
ES 23478F
5.99e7*
32.45
Abs. Int.
1.75e7
8.77e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.00
353.8970 Fn2
Flags: PBM
4σ 4.66e3
CS 12346F
4.15e7*
30.78
ES 12378F
4.03e7*
31.32
ES 23478F
3.81e7*
32.45
Abs. Int.
1.09e7
5.45e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
HpCDPE
29.51-34.00
409.7974 Fn2
Flags: PB
4σ 1.73e3
Abs. Int.
1.03e4
5.15e3
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT


Rel. Int.
100%
HxCDF
34.02-38.25
373.8207 Fn3
Flags: PBM
4σ 2.19e3
123468F 4.57e5* 34.38
124678/134678F 1.73e6* 34.58
124689F 2.07e6* 35.23
123478F 3.21e5* 35.77
123678F 1.42e5* 35.91
234678F 2.48e5* 36.55
Abs. Int.
6.16e5
3.08e5
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 RT
Rel. Int.
100%
HxCDF
34.02-38.25
375.8178 Fn3
Flags: PBM
4σ 1.62e3
123468F 3.86e5* 34.38
124678/134678F 1.34e6* 34.58
124689F 1.84e6* 35.23
123478F 2.48e5* 35.77
123678F 1.31e5* 35.91
234678F 1.69e5* 36.55
Abs. Int.
6.15e5
3.08e5
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 RT
Rel. Int.
100%
HxCDF Std.
34.02-38.25
383.8639 Fn3
Flags: PBM
4σ 8.76e3
ES 123478F 2.35e7* 35.75
ES 123678F 2.73e7* 35.89
CS 123469F 2.49e7* 36.20
ES 234678F 2.38e7* 36.54
ES 123789F 2.10e7* 37.51
Abs. Int.
8.35e6
4.17e6
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 RT
Rel. Int.
100%
HxCDF Std.
34.02-38.25
385.8610 Fn3
Flags: PBM
4σ 1.94e4
ES 123478F 4.56e7* 35.75
ES 123678F 5.22e7* 35.89
CS 123469F 4.73e7* 36.20
ES 234678F 4.57e7* 36.54
ES 123789F 3.79e7* 37.51
Abs. Int.
1.55e7
7.73e6
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 RT
Rel. Int.
100%
OCDPE
34.02-38.25
445.7555 Fn3
Flags: PB
4σ 1.38e3
Abs. Int.
6.70e3
3.35e3
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 RT


Rel. Int.
100%
HpCDF
38.26-41.01
407.7818 Fn4
Flags: PBM
4σ 1.92e3
1234678F
3.00e6*
39.05
1234689F
5.56e6*
39.46
Abs. Int.
2.15e6
1.07e6
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF
38.26-41.01
409.7788 Fn4
Flags: PBM
4σ 1.38e3
1234678F
2.75e6*
39.05
1234689F
5.37e6*
39.46
Abs. Int.
2.16e6
1.08e6
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.26-41.01
417.8253 Fn4
Flags: PBM
4σ 5.30e3
ES 1234678F
1.57e7*
39.04
CS 1234689F
1.67e7*
39.45
ES 1234789F
1.17e7*
40.37
Abs. Int.
6.51e6
3.25e6
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.26-41.01
419.8220 Fn4
Flags: PBM
4σ 4.34e3
ES 1234678F
3.57e7*
39.04
CS 1234689F
3.74e7*
39.45
ES 1234789F
2.69e7*
40.37
Abs. Int.
1.43e7
7.17e6
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
NCDPE
38.26-41.01
479.7165 Fn4
Flags: PB
4σ 1.27e3
RT
Abs. Int.
3.53e4
1.77e4
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT


OCDF
2.94e6*
42.55
Rel. Int.
100%
OCDF
41.02-45.00
441.7428 Fn5
Flags: PBM
4σ 1.55e3
0%
Abs. Int.
1.09e6
5.46e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDF
3.19e6*
42.55
Rel. Int.
100%
OCDF
41.02-45.00
443.7398 Fn5
Flags: PBM
4σ 2.85e3
0%
Abs. Int.
1.21e6
6.04e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDF
2.52e7*
42.54
Rel. Int.
100%
OCDF Std.
41.02-45.00
453.7830 Fn5
Flags: PBM
4σ 2.12e3
0%
Abs. Int.
8.86e6
4.43e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDF
2.93e7*
42.54
Rel. Int.
100%
OCDF Std.
41.02-45.00
455.7801 Fn5
Flags: PBM
4σ 2.61e3
0%
Abs. Int.
1.03e7
5.14e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
DCDPE
41.02-45.00
513.6775 Fn5
Flags: PB
4σ 1.13e3
0%
Abs. Int.
6.13e3
3.06e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

Lab ID: B4519_17655_DF_005 **Acq'd:** 10 Aug 2020 21:09 PSW **Wt/Vol:** 9.40 g **ICAL:** MM3_DF_10012020_12JUN2020

Client ID: CS-34 **UTP:** 11-Aug-2020 08:42:27 PSW **J-level:** 0.532 pg/g **Split:** 1 **Checkcode:** 745-007-DNL

Datafile: 200810R10 **Report:** 11 Aug 2020 10:00 pw **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	NotFnd		1.0009	-		-	-	-	1.18	-	5715	0.172
12378-PeCDD	32.83	J EMPC	1.0006	1.0004	-0.4	9.96E+04	1.30	N	1.14	0.3	4464	0.125
123478-HxCDD	36.74	J EMPC	1.0004	1.0003	-0.2	3.03E+05	1.70	N	1.09	1.1	2904	0.087
123678-HxCDD	36.85	J	1.0035	1.0034	-0.2	7.14E+05	1.39	Y	1.13	2.54	2904	0.0861
123789-HxCDD	37.15	J EMPC	1.0116	1.0116	0	5.03E+05	1.52	N	1.05	1.58	2904	0.0803
1234678-HpCDD	39.97		1.0003	1.0003	0	2.13E+07	1.06	Y	0.98	100	4022	0.113
OCDD	42.39		1.0003	1.0003	0	9.12E+07	0.90	Y	1.08	750	6793	0.382
2378-TCDF	26.36	J EMPC	1.0006	1.0005	-0.2	1.03E+05	0.92	N	0.98	0.205	4107	0.0938
12378-PeCDF	31.34	J	1.0006	1.0006	0	1.14E+05	1.66	Y	0.95	0.24	4766	0.098
23478-PeCDF	32.49	J	1.0005	1.0010	+1.0	2.08E+05	1.45	Y	0.95	0.455	4766	0.094
123478-HxCDF	35.78	J	1.0005	1.0005	0	5.34E+05	1.40	Y	1.20	1.3	8401	0.165
123678-HxCDF	35.91	J	1.0004	1.0004	0	2.44E+05	1.16	Y	1.07	0.577	8401	0.177
234678-HxCDF	36.56	J EMPC	1.0005	1.0005	0	3.20E+05	0.97	N	1.10	0.837	8401	0.188
123789-HxCDF	NotFnd		1.0004	-		-	-	-	1.09	-	8401	0.238
1234678-HpCDF	39.06		1.0003	1.0003	0	5.91E+06	1.01	Y	1.28	17.4	2704	0.0531
1234789-HpCDF	40.38	J	1.0002	1.0003	+0.2	4.28E+05	1.14	Y	1.27	1.74	2704	0.0664
OCDF	42.55		1.0003	1.0002	-0.3	7.00E+06	0.88	Y	1.01	49.4	5132	0.253

Name	Act RT		Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	27.27		1.0255	1.0257	+0.3	6.77E+07	0.76	Y	1.01	81.7
ES 12378-PeCDD	32.81		1.2330	1.2342	+2.4	6.22E+07	1.64	Y	0.87	86.8
ES 123478-HxCDD	36.73		0.9917	0.9917	0	5.37E+07	1.23	Y	1.10	72.2
ES 123678-HxCDD	36.84		0.9947	0.9947	0	5.31E+07	1.32	Y	1.06	73.9
ES 123789-HxCDD	37.14		1.0028	1.0028	0	6.46E+07	1.33	Y	1.22	78.2
ES 1234678-HpCDD	39.96		1.0785	1.0788	+0.7	4.61E+07	1.06	Y	0.99	68.4
ES OCDD	42.38		1.1439	1.1442	+0.8	4.82E+07	0.93	Y	0.67	53
ES 2378-TCDF	26.34		1.0572	1.0576	+0.6	1.10E+08	0.77	Y	1.01	78.5
ES 12378-PeCDF	31.32		1.2558	1.2575	+3.2	1.06E+08	1.61	Y	0.90	86
ES 23478-PeCDF	32.46		1.3012	1.3031	+3.7	1.03E+08	1.60	Y	0.89	84
ES 123478-HxCDF	35.76		0.9655	0.9655	0	7.33E+07	0.53	Y	1.43	75.6
ES 123678-HxCDF	35.90		0.9693	0.9692	-0.2	8.42E+07	0.53	Y	1.63	76.1
ES 234678-HxCDF	36.55		0.9867	0.9867	0	7.40E+07	0.51	Y	1.48	73.8
ES 123789-HxCDF	37.52		1.0130	1.0130	0	6.23E+07	0.51	Y	1.29	71.2
ES 1234678-HpCDF	39.05		1.0540	1.0542	+0.5	5.64E+07	0.44	Y	1.15	72.6
ES 1234789-HpCDF	40.37		1.0898	1.0900	+0.5	4.13E+07	0.45	Y	0.91	67.1
ES OCDF	42.55		1.1484	1.1487	+0.8	5.97E+07	0.89	Y	0.83	53.1

Lab ID: B4519_17655_DF_005 | Acq'd: 10 Aug 2020 21:09 PSW | Wt/Vol: 9.40 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-34 | UTP: 11-Aug-2020 08:42:27 PSW | J-level: 0.532 pg/g | Split: 1 | Checkcode: 745-007-DNL

Datafile: 200810R10 | Report: 11 Aug 2020 10:00 pw | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %	
JS 1234-TCDD	26.59		-	-	-	8.23E+07	0.74	Y	-	-	
JS 1234-TCDF	24.91		-	-	-	1.38E+08	0.80	Y	-	-	
JS 123467-HxCDD	37.04		-	-	-	3.39E+07	1.32	Y	-	-	
CS 37Cl-2378-TCDD	27.29		1.0265	1.0266	+0.2	3.02E+07	n/a	-	1.04	88.4	
CS 12347-PeCDD	32.31		1.2141	1.2152	+2.1	6.05E+07	1.69	Y	0.74	99.3	
CS 12346-PeCDF	30.79		1.2343	1.2359	+3.0	1.06E+08	1.58	Y	0.86	89.5	
CS 123469-HxCDF	36.21		0.9776	0.9775	-0.2	7.24E+07	0.54	Y	1.36	78.6	
CS 1234689-HpCDF	39.46		1.0650	1.0653	+0.7	5.50E+07	0.46	Y	1.05	76.8	
~~SS 37Cl-2378-TCDD~~	~~27.29~~		~~1.0265~~	~~1.0266~~	~~+0.2~~	~~3.02E+07~~	~~n/a~~		~~1.04~~	~~108~~	Not used in this project.
~~SS 12347-PeCDD~~	~~32.31~~		~~1.2141~~	~~1.2152~~	~~+2.1~~	~~6.05E+07~~	~~1.69~~	~~Y~~	~~0.86~~	~~114~~	CL 11Aug20
~~SS 12346-PeCDF~~	~~30.79~~		~~1.2343~~	~~1.2359~~	~~+3.0~~	~~1.06E+08~~	~~1.58~~	~~Y~~	~~0.96~~	~~104~~	
~~SS 123469-HxCDF~~	~~36.21~~		~~0.9776~~	~~0.9775~~	~~-0.2~~	~~7.24E+07~~	~~0.54~~	~~Y~~	~~0.83~~	~~103~~	
~~SS 1234689-HpCDF~~	~~39.46~~		~~1.0650~~	~~1.0653~~	~~+0.7~~	~~5.50E+07~~	~~0.46~~	~~Y~~	~~0.92~~	~~105~~	

Totals	Conc	EMPC
Total TCDD	0.498	0.498
Total PeCDD	0.919	3.27
Total HxCDD	35.7	38.4
Total HpCDD	384	384
Total Tetra-Octa Dioxins	1170	1180
Total TCDF	1.18	3.03
Total PeCDF	4.74	5.2
Total HxCDF	21.9	23
Total HpCDF	60.3	60.3
Total Tetra-Octa Furans	138	141
Total Tetra-Octa Dioxins & Furans	1310	1320

Lab ID: B4519_17655_DF_005 **Acq'd: 10 Aug 2020 21:09 PSW** **Wt/Vol: 9.40 g** **ICAL: MM3_DF_10012020_12JUN2020**

Client ID: CS-34 **UTP: 11-Aug-2020 08:42:27 PSW** **J-level: 0.532 pg/g** **Split: 1** **Checkcode: 745-007-DNL**

Datafile: 200810R10 **Report: 11 Aug 2020 10:00 pw** **Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)**

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1368-TCDD	23.41	J	0.8591	0.8583	-1.1	1.87E+05	0.82	Y	1.18	0.498	5715	0.172
1379-TCDD	NotFnd		0.8732						1.18		5715	0.172
1369-TCDD	NotFnd		0.8901						1.18		5715	0.172
1469-TCDD	NotFnd		0.9205						1.18		5715	0.172
1247/1246/1248/1249-TCDD	NotFnd		0.9301						1.18		5715	0.172
1378-TCDD	NotFnd		0.9374						1.18		5715	0.172
1268-TCDD	NotFnd		0.9449						1.18		5715	0.172
1478-TCDD	NotFnd		0.9544						1.18		5715	0.172
1279-TCDD	NotFnd		0.9610						1.18		5715	0.172
1234/1269-TCDD	NotFnd		0.9746						1.18		5715	0.172
1236-TCDD	NotFnd		0.9802						1.18		5715	0.172
1237/1238-TCDD	NotFnd		0.9898						1.18		5715	0.172
1239-TCDD	NotFnd		0.9950						1.18		5715	0.172
2378-TCDD	**NotFnd**		**1.0009**						**1.18**		**5715**	**0.172**
1278-TCDD	NotFnd		1.0133						1.18		5715	0.172
1267-TCDD	NotFnd		1.0185						1.18		5715	0.172
1289-TCDD	NotFnd		1.0379						1.18		5715	0.172
12479/12468-PeCDD	30.27	J	0.9229	0.9227	-0.4	3.05E+05	1.73	Y	1.14	0.919	4464	0.125
12469-PeCDD	30.81	J EMPC	0.9396	0.9391	-0.9	1.42E+05	2.40	N	1.14	0.429	4464	0.125
12368-PeCDD	31.39	J EMPC	0.9568	0.9566	-0.4	1.59E+05	1.30	N	1.14	0.478	4464	0.125
12478-PeCDD	31.58	J EMPC	0.9626	0.9624	-0.4	6.26E+04	0.86	N	1.14	0.188	4464	0.125
12379-PeCDD	31.69	J EMPC	0.9657	0.9657	0	8.30E+04	2.70	N	1.14	0.25	4464	0.125
12369/12467/12489-PeCDD	31.94	J EMPC	0.9738	0.9735	-0.6	1.30E+05	1.81	N	1.14	0.393	4464	0.125
12346/12347-PeCDD	32.33	J EMPC	0.9853	0.9853	0	1.04E+05	2.29	N	1.14	0.313	4464	0.125
12378-PeCDD	32.83	J EMPC	**1.0006**	**1.0004**	**-0.4**	**9.96E+04**	**1.30**	**N**	**1.14**	**0.3**	**4464**	**0.125**
12367-PeCDD	NotFnd		1.0034						1.14		4464	0.125
12389-PeCDD	NotFnd		1.0141						1.14		4464	0.125
124679/124689-HxCDD	35.05		0.9542	0.9542	0	3.86E+06	1.33	Y	1.09	13.2	2904	0.0841
123468-HxCDD	35.70		0.9721	0.9721	0	1.45E+06	1.20	Y	1.09	4.95	2904	0.0841
123679/123689-HxCDD	35.99		0.9799	0.9799	0	2.79E+06	1.34	Y	1.09	9.54	2904	0.0841
123469-HxCDD	36.12		0.9835	0.9834	-0.2	1.24E+06	1.16	Y	1.09	4.23	2904	0.0841
123478-HxCDD	36.74	J EMPC	**1.0004**	**1.0003**	**-0.2**	**3.03E+05**	**1.70**	**N**	1.09	**1.1**	**2904**	**0.087**
123678-HxCDD	36.85	J	**1.0035**	**1.0034**	**-0.2**	**7.14E+05**	**1.39**	**Y**	1.13	**2.54**	**2904**	**0.0861**
123467-HxCDD	37.05	J	1.0088	1.0088	0	3.70E+05	1.24	Y	1.09	1.27	2904	0.0841
123789-HxCDD	37.15	J EMPC	**1.0116**	**1.0116**	**0**	**5.03E+05**	**1.52**	**N**	1.05	**1.58**	**2904**	**0.0803**

Lab ID: B4519_17655_DF_005 | Acq'd: 10 Aug 2020 21:09 PSW | Wt/Vol: 9.40 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-34 | UTP: 11-Aug-2020 08:42:27 PSW | J-level: 0.532 pg/g | Split: 1 | Checkcode: 745-007-DNL

Datafile: 200810R10 | Report: 11 Aug 2020 10:00 pw | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

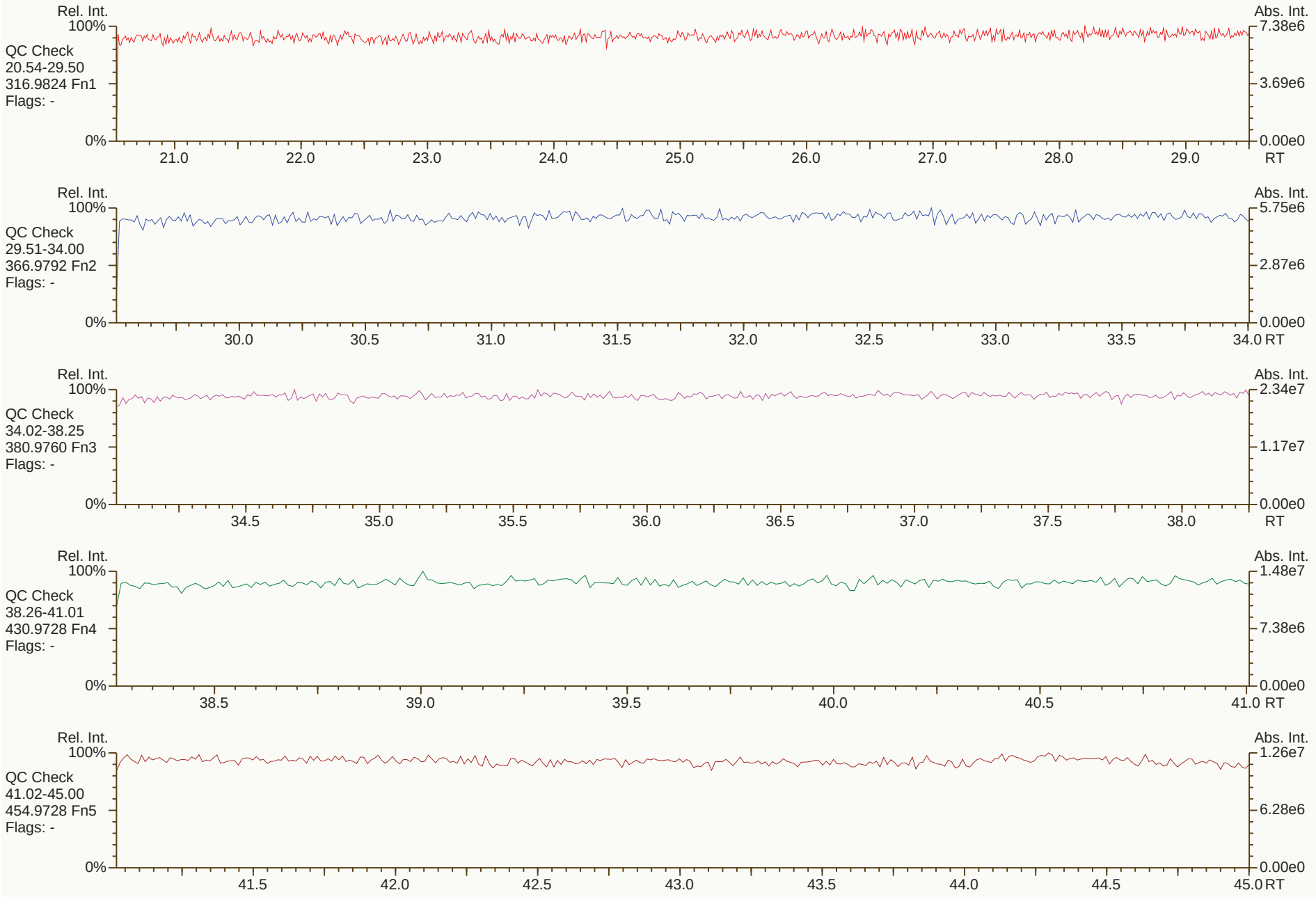
Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1234679-HpCDD	39.33		0.9843	0.9842	-0.2	6.04E+07	1.04	Y	0.98	284	4022	0.113
1234678-HpCDD	**39.97**		**1.0003**	**1.0003**	**0**	**2.13E+07**	**1.06**	**Y**	**0.98**	**100**	**4022**	**0.113**
OCDD	**42.39**		**1.0003**	**1.0003**	**0**	**9.12E+07**	**0.90**	**Y**	**1.08**	**750**	**6793**	**0.382**
OCDD-a	42.39		1.0002	1.0002	0	5.33E+06	2.48	Y	0.07	711	4572	4.17
1368-TCDF	21.17	J	0.8044	0.8035	-1.1	1.04E+05	0.78	Y	0.98	0.205	4107	0.0938
1468-TCDF	21.72	J EMPC	0.8261	0.8245	-2.1	5.04E+04	0.91	N	0.98	0.0998	4107	0.0938
2468-TCDF	22.40	J	0.8511	0.8503	-1.1	2.00E+05	0.75	Y	0.98	0.395	4107	0.0938
1346/1246-TCDF	NotFnd		0.8665						0.98		4107	0.0938
1347/1378/1247-TCDF	22.95	J EMPC	0.8723	0.8712	-1.5	2.38E+05	0.96	N	0.98	0.471	4107	0.0938
1348-TCDF	NotFnd		0.8835						0.98		4107	0.0938
1248/1367/1379-TCDF	23.39	J EMPC	0.8888	0.8878	-1.4	1.47E+05	0.64	N	0.98	0.291	4107	0.0938
1268-TCDF	23.80	J EMPC	0.9044	0.9032	-1.7	7.49E+04	0.62	N	0.98	0.148	4107	0.0938
1467-TCDF	NotFnd		0.9098						0.98		4107	0.0938
1478-TCDF	NotFnd		0.9167						0.98		4107	0.0938
1369/1237-TCDF	NotFnd		0.9316						0.98		4107	0.0938
2467-TCDF	24.68	J	0.9369	0.9367	-0.3	4.76E+04	0.80	Y	0.98	0.0943	4107	0.0938
2368-TCDF	24.83	J	0.9430	0.9425	-0.7	8.64E+04	0.87	Y	0.98	0.171	4107	0.0938
1238/1234/1678/1469/1236-TCDF	24.93	J	0.9468	0.9464	-0.6	1.58E+05	0.81	Y	0.98	0.313	4107	0.0938
1278-TCDF	25.42	J EMPC	0.9651	0.9648	-0.5	8.29E+04	0.97	N	0.98	0.164	4107	0.0938
1349-TCDF	NotFnd		0.9704						0.98		4107	0.0938
1267-TCDF	NotFnd		0.9761						0.98		4107	0.0938
2346/1249-TCDF	NotFnd		0.9834						0.98		4107	0.0938
2347/1279-TCDF	26.13	J EMPC	0.9921	0.9918	-0.5	5.40E+04	0.58	N	0.98	0.107	4107	0.0938
2348-TCDF	NotFnd		0.9964						0.98		4107	0.0938
2378-TCDF	**26.36**	J EMPC	**1.0006**	**1.0005**	**-0.2**	**1.03E+05**	**0.92**	**N**	**0.98**	**0.205**	**4107**	**0.0938**
2367/3467-TCDF	26.74	J EMPC	1.0156	1.0149	-1.1	1.04E+05	0.60	N	0.98	0.206	4107	0.0938
1269-TCDF	NotFnd		1.0249						0.98		4107	0.0938
1239-TCDF	NotFnd		1.0357						0.98		4107	0.0938
1289-TCDF	28.46	J EMPC	1.0799	1.0804	+0.9	7.77E+04	1.30	N	0.98	0.154	4107	0.0938
13468/12468-PeCDF	28.46	J	0.9084	0.9085	+0.2	9.49E+05	1.53	Y	0.95	2.04	3580	0.0722
13678/13467/12467-PeCDF	30.06	J EMPC	0.9591	0.9595	+0.7	2.14E+05	2.01	N	0.95	0.459	4766	0.0961
12368/13478/12478-PeCDF	30.22	J	0.9642	0.9647	+0.9	5.43E+05	1.56	Y	0.95	1.16	4766	0.0961
14678-PeCDF	30.30	J	0.9675	0.9674	-0.2	6.32E+04	1.72	Y	0.95	0.136	4766	0.0961
13479-PeCDF	NotFnd		0.9706						0.95		4766	0.0961
13469/12479-PeCDF	NotFnd		0.9787						0.95		4766	0.0961
12346-PeCDF	NotFnd		0.9833						0.95		4766	0.0961

Lab ID: B4519_17655_DF_005 **Acq'd:** 10 Aug 2020 21:09 PSW **Wt/Vol:** 9.40 g **ICAL:** MM3_DF_10012020_12JUN2020

Client ID: CS-34 **UTP:** 11-Aug-2020 08:42:27 PSW **J-level:** 0.532 pg/g **Split:** 1 **Checkcode:** 745-007-DNL

Datafile: 200810R10 **Report:** 11 Aug 2020 10:00 pw **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
23468/12469-PeCDF	30.88	J	0.9861	0.9859	-0.4	1.49E+05	1.78	Y	0.95	0.319	4766	0.0961
12347-PeCDF	NotFnd		0.9887						0.95		4766	0.0961
12348-PeCDF	NotFnd		0.9938						0.95		4766	0.0961
12378-PeCDF	**31.34**	J	**1.0006**	**1.0006**	**0**	**1.14E+05**	**1.66**	**Y**	**0.95**	**0.24**	**4766**	**0.098**
12678/12367-PeCDF	31.64	J	1.0095	1.0102	+1.3	9.12E+04	1.70	Y	0.95	0.196	4766	0.0961
12379-PeCDF	NotFnd		1.0150						0.95		4766	0.0961
12679-PeCDF	NotFnd		0.9926						0.95		4766	0.0961
23467/12369-PeCDF	32.35	J	0.9966	0.9966	0	8.89E+04	1.40	Y	0.95	0.191	4766	0.0961
23478-PeCDF	**32.49**	J	**1.0005**	**1.0010**	**+1.0**	**2.08E+05**	**1.45**	**Y**	**0.95**	**0.455**	**4766**	**0.094**
23478/12489-PeCDF	NotFnd		0.0000						0.95			
12489-PeCDF	NotFnd		1.0047						0.95		4766	0.0961
12349-PeCDF	NotFnd		1.0107						0.95		4766	0.0961
12389-PeCDF	NotFnd		1.0339						0.95		4766	0.0961
123468-HxCDF	34.39	J	0.9617	0.9616	-0.2	7.78E+05	1.18	Y	1.11	2.02	8401	0.189
124678/134678-HxCDF	34.59		0.9673	0.9672	-0.2	3.12E+06	1.26	Y	1.11	8.11	8401	0.189
134679-HxCDF	NotFnd		0.9737						1.11		8401	0.189
124679-HxCDF	NotFnd		0.9792						1.11		8401	0.189
124689-HxCDF	35.24		0.9854	0.9854	0	3.80E+06	1.19	Y	1.11	9.88	8401	0.189
123467-HxCDF	35.66	J EMPC	0.9972	0.9972	0	9.70E+04	1.83	N	1.11	0.252	8401	0.189
123478-HxCDF	**35.78**	J	**1.0005**	**1.0005**	**0**	**5.34E+05**	**1.40**	**Y**	**1.20**	**1.3**	**8401**	**0.165**
123678-HxCDF	**35.91**	J	**1.0004**	**1.0004**	**0**	**2.44E+05**	**1.16**	**Y**	**1.07**	**0.577**	**8401**	**0.177**
123479-HxCDF	NotFnd		1.0049						1.11		8401	0.189
123469-HxCDF	NotFnd		1.0089						1.11		8401	0.189
123679-HxCDF	NotFnd		0.9945						1.11		8401	0.189
234678-HxCDF	**36.56**	J EMPC	**1.0005**	**1.0005**	**0**	**3.20E+05**	**0.97**	**N**	**1.10**	**0.837**	**8401**	**0.188**
234678/123689-HxCDF	NotFnd		0.0000						1.10			
123689-HxCDF	NotFnd		1.0054						1.11		8401	0.189
123789-HxCDF	**NotFnd**		**1.0004**						**1.09**		**8401**	**0.238**
123789/123489-HxCDF	NotFnd		0.0000						1.09			
123489-HxCDF	NotFnd		1.0008						1.11		8401	0.189
1234678-HpCDF	**39.06**		**1.0003**	**1.0003**	**0**	**5.91E+06**	**1.01**	**Y**	**1.28**	**17.4**	**2704**	**0.0531**
1234679-HpCDF	39.33	**J**	1.0072	1.0073	+0.2	2.50E+05	1.00	Y	1.27	0.854	2704	0.0587
1234689-HpCDF	39.47		1.0107	1.0107	0	1.18E+07	1.03	Y	1.27	40.3	2704	0.0587
1234789-HpCDF	**40.38**	**J**	**1.0002**	**1.0003**	**+0.2**	**4.28E+05**	**1.14**	**Y**	**1.27**	**1.74**	**2704**	**0.0664**
OCDF	**42.55**		**1.0003**	**1.0002**	**-0.3**	**7.00E+06**	**0.88**	**Y**	**1.01**	**49.4**	**5132**	**0.253**
OCDF-a	42.55		1.0002	1.0002	0	3.73E+05	2.24	Y	0.06	42	3777	2.97

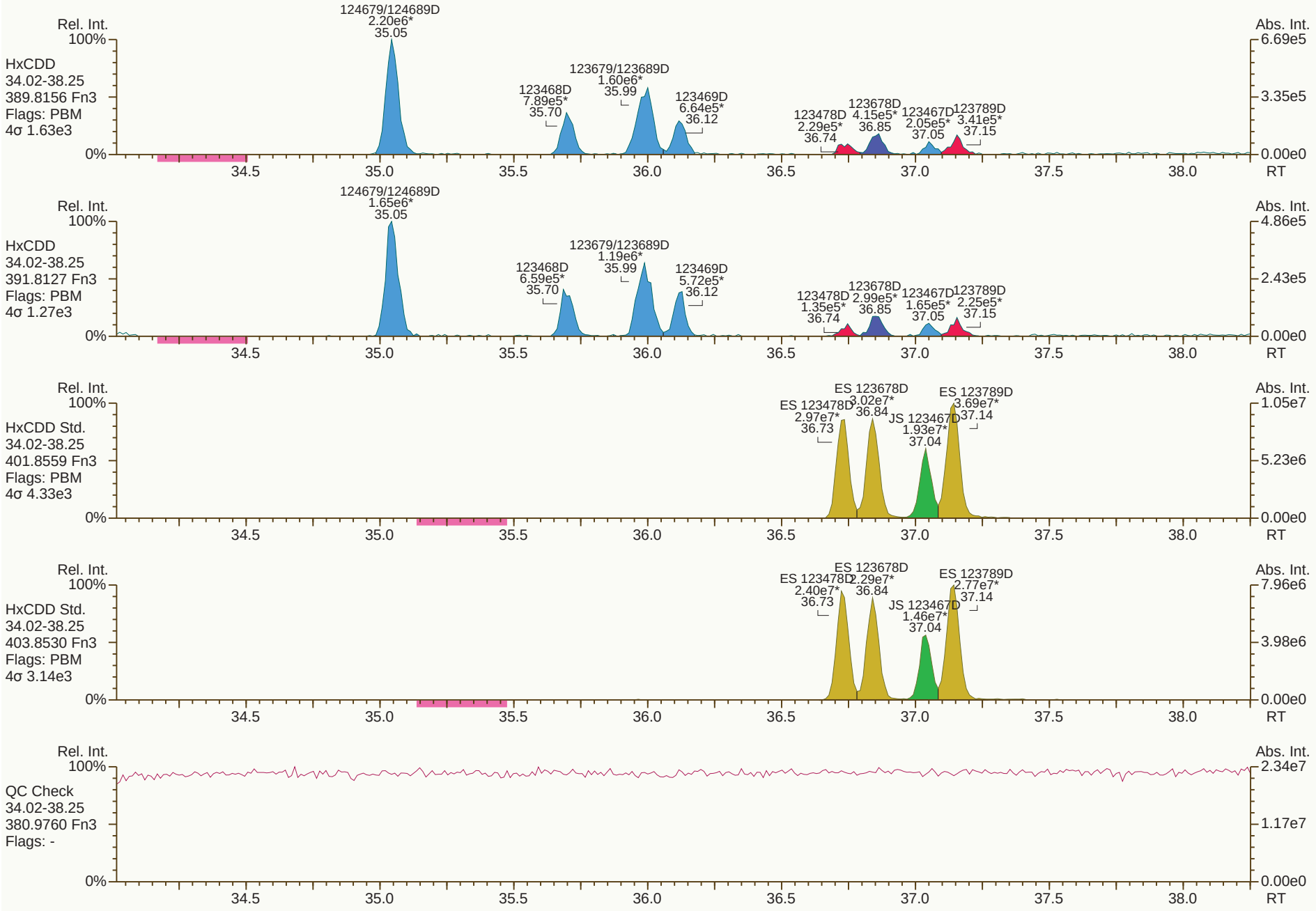

Rel. Int.
100%
QC Check
20.54-29.50
316.9824 Fn1
Flags: -
0%
Abs. Int.
7.38e6
3.69e6
0.00e0
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0 RT
Rel. Int.
100%
QC Check
29.51-34.00
366.9792 Fn2
Flags: -
0%
Abs. Int.
5.75e6
2.87e6
0.00e0
30.0 30.5 31.0 31.5 32.0 32.5 33.0 33.5 34.0 RT
Rel. Int.
100%
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
0%
Abs. Int.
2.34e7
1.17e7
0.00e0
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 RT
Rel. Int.
100%
QC Check
38.26-41.01
430.9728 Fn4
Flags: -
0%
Abs. Int.
1.48e7
7.38e6
0.00e0
38.5 39.0 39.5 40.0 40.5 41.0 RT
Rel. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
1.26e7
6.28e6
0.00e0
41.5 42.0 42.5 43.0 43.5 44.0 44.5 45.0 RT


Rel. Int.
100%
TCDD
20.54-29.50
319.8965 Fn1
Flags: PBM
4σ 3.33e3
0%
1368D
8.41e4*
23.41
Abs. Int.
2.50e4
1.25e4
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD
20.54-29.50
321.8936 Fn1
Flags: PBM
4σ 2.38e3
0%
1368D
1.02e5*
23.39
Abs. Int.
3.19e4
1.59e4
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
37Cl-TCDD
20.54-29.50
327.8850 Fn1
Flags: PBM
4σ 1.67e3
0%
CS 37Cl-2378D
3.02e7*
27.29
Abs. Int.
6.63e6
3.32e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
331.9368 Fn1
Flags: PBM
4σ 6.45e3
0%
JS 1234D
3.51e7*
26.59
ES 2378D
2.92e7*
27.27
Abs. Int.
7.16e6
3.58e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
333.9339 Fn1
Flags: PBM
4σ 5.60e3
0%
JS 1234D
4.73e7*
26.59
ES 2378D
3.85e7*
27.27
Abs. Int.
9.93e6
4.97e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT

SGS ID: B4519_17655_DF_005 **Sample ID: CS-34** **Acq: 10-Aug-2020 21:09:40**
Instr: [ILM] AutoSpec-Ultima MM3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 26** **User: PSW Datafile: 200810R10**



Results: P:\B4500_B4599\B4519\B4519_17655 DF\Resources\B4519_17655_DF_005.utp_res, saved 11-Aug-2020 08:42 (PSW) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 3940, 0669 scc: 745-007 *PKD: 11-Aug-2020 08:42 Printed: 11-Aug-2020 10:12 Page 3 of 12*


Rel. Int.
100%
HxCDD
34.02-38.25
389.8156 Fn3
Flags: PBM
4σ 1.63e3
124679/124689D
2.20e6*
35.05
123468D
7.89e5*
35.70
123679/123689D
1.60e6*
35.99
123469D
6.64e5*
36.12
123478D
2.29e5*
36.74
123678D
4.15e5*
36.85
123467D
2.05e5*
37.05
123789D
3.41e5*
37.15
Abs. Int.
6.69e5
3.35e5
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD
34.02-38.25
391.8127 Fn3
Flags: PBM
4σ 1.27e3
124679/124689D
1.65e6*
35.05
123468D
6.59e5*
35.70
123679/123689D
1.19e6*
35.99
123469D
5.72e5*
36.12
123478D
1.35e5*
36.74
123678D
2.99e5*
36.85
123467D
1.65e5*
37.05
123789D
2.25e5*
37.15
Abs. Int.
4.86e5
2.43e5
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
401.8559 Fn3
Flags: PBM
4σ 4.33e3
ES 123678D
3.02e7*
36.84
ES 123478D
2.97e7*
36.73
ES 123789D
3.69e7*
37.14
JS 123467D
1.93e7*
37.04
Abs. Int.
1.05e7
5.23e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
403.8530 Fn3
Flags: PBM
4σ 3.14e3
ES 123678D
2.29e7*
36.84
ES 123478D
2.40e7*
36.73
ES 123789D
2.77e7*
37.14
JS 123467D
1.46e7*
37.04
Abs. Int.
7.96e6
3.98e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
Abs. Int.
2.34e7
1.17e7
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT


Rel. Int.
100%
HpCDD
38.26-41.01
423.7767 Fn4
Flags: PBM
4σ 1.45e3
1234679D
3.07e7*
39.33
1234678D
1.10e7*
39.97
Abs. Int.
1.16e7
5.82e6
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.26-41.01
425.7737 Fn4
Flags: PBM
4σ 2.57e3
1234679D
2.97e7*
39.33
1234678D
1.03e7*
39.97
Abs. Int.
1.16e7
5.81e6
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
435.8169 Fn4
Flags: PBM
4σ 2.50e3
ES 1234678D
2.37e7*
39.96
Abs. Int.
9.90e6
4.95e6
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
437.8140 Fn4
Flags: PBM
4σ 1.86e3
ES 1234678D
2.24e7*
39.96
Abs. Int.
9.17e6
4.59e6
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.26-41.01
430.9728 Fn4
Flags: -
Abs. Int.
1.48e7
7.38e6
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT


OCDD
4.32e7*
42.39
Rel. Int.
100%
OCDD
41.02-45.00
457.7377 Fn5
Flags: PBM
4σ 3.35e3
0%
Abs. Int.
1.52e7
7.62e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDD
4.80e7*
42.39
Rel. Int.
100%
OCDD
41.02-45.00
459.7348 Fn5
Flags: PBM
4σ 3.45e3
0%
Abs. Int.
1.66e7
8.32e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
2.32e7*
42.38
Rel. Int.
100%
OCDD Std.
41.02-45.00
469.7780 Fn5
Flags: PBM
4σ 2.17e3
0%
Abs. Int.
8.48e6
4.24e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
2.50e7*
42.38
Rel. Int.
100%
OCDD Std.
41.02-45.00
471.7750 Fn5
Flags: PBM
4σ 2.87e3
0%
Abs. Int.
9.19e6
4.60e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
1.26e7
6.28e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT


Rel. Int.
100%
TCDF
20.54-29.50
303.9016 Fn1
Flags: PBM
4σ 1.47e3
1368F 4.54e4* 21.17
1468F 2.59e4* 21.72
2468F 8.56e4* 22.40
1347F...[3] 1.29e5* 22.95
1248F...[3] 6.39e4* 23.39
1268F 3.26e4* 23.80
2467F 2.12e4* 24.68
1238F...[5] 7.09e4* 24.93
2368F 4.02e4* 24.83
1278F 4.53e4* 25.42
2347/1279F 2.35e4* 26.13
2378F 5.35e4* 26.36
2367/3467F 4.53e4* 26.74
1289F 5.73e4* 28.46
Abs. Int.
3.31e4
1.65e4
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
TCDF
20.54-29.50
305.8987 Fn1
Flags: PBM
4σ 2.63e3
1368F 5.81e4* 21.15
1468F 2.85e4* 21.71
2468F 1.14e5* 22.40
1347F...[3] 1.34e5* 22.96
1248F...[3] 9.96e4* 23.39
1268F 5.29e4* 23.80
2467F 2.64e4* 24.68
1238F...[5] 8.73e4* 24.92
2368F 4.62e4* 24.83
1278F 4.68e4* 25.42
2378F 5.84e4* 26.36
2367/3467F 7.59e4* 26.75
1289F 4.39e4* 28.46
Abs. Int.
3.72e4
1.86e4
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
315.9419 Fn1
Flags: PBM
4σ 1.73e4
JS 1234F 6.10e7* 24.91
ES 2378F 4.78e7* 26.34
Abs. Int.
1.19e7
5.95e6
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
317.9389 Fn1
Flags: PBM
4σ 1.09e4
JS 1234F 7.65e7* 24.91
ES 2378F 6.17e7* 26.34
Abs. Int.
1.54e7
7.68e6
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
HxCDPE
20.54-29.50
375.8364 Fn1
Flags: PB
4σ 1.81e3
Abs. Int.
1.65e4
8.27e3
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT

SGS ID: B4519_17655_DF_005 **Sample ID: CS-34** **Acq: 10-Aug-2020 21:09:40**

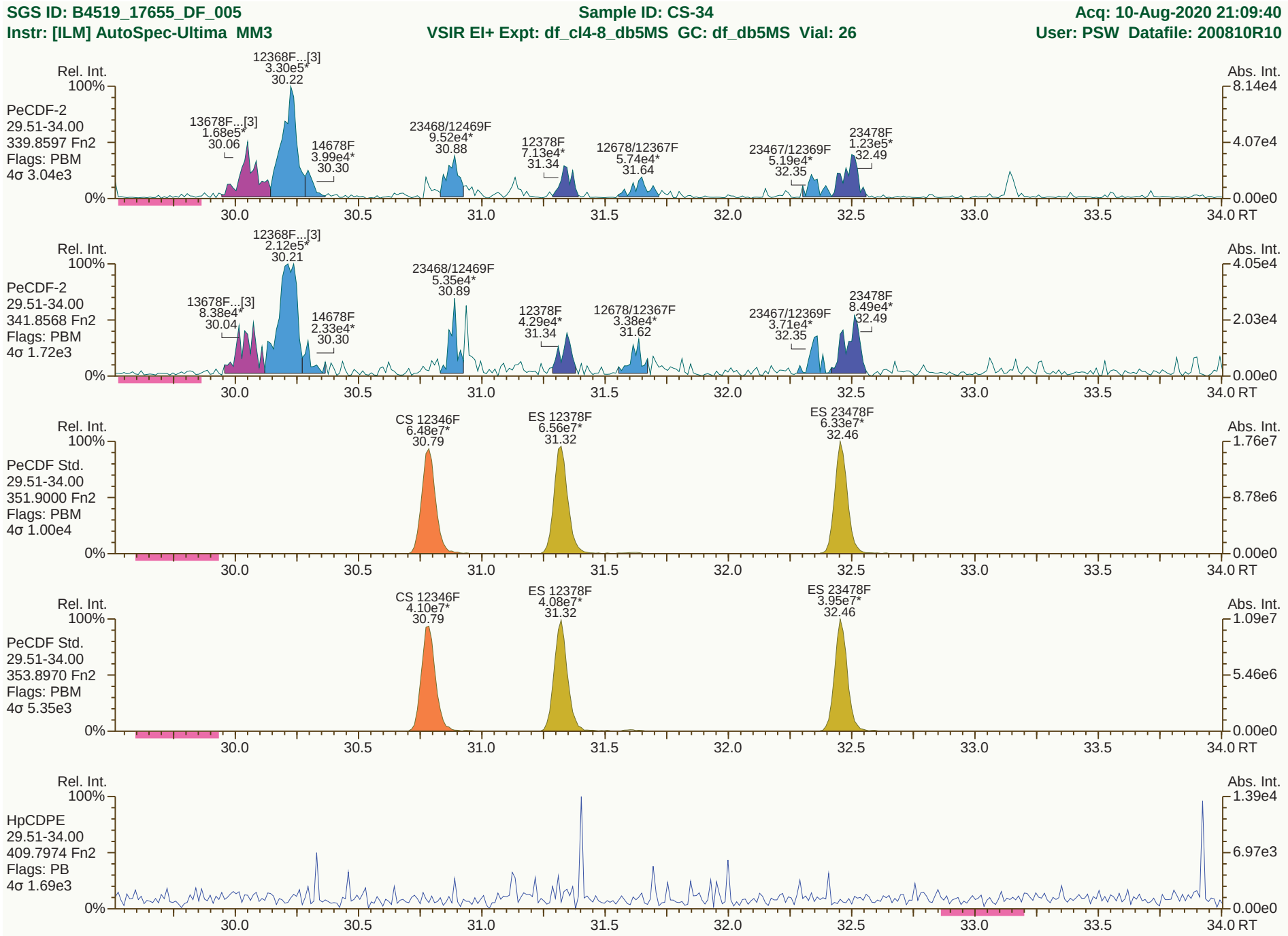
Instr: [ILM] AutoSpec-Ultima MM3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 26** **User: PSW Datafile: 200810R10**

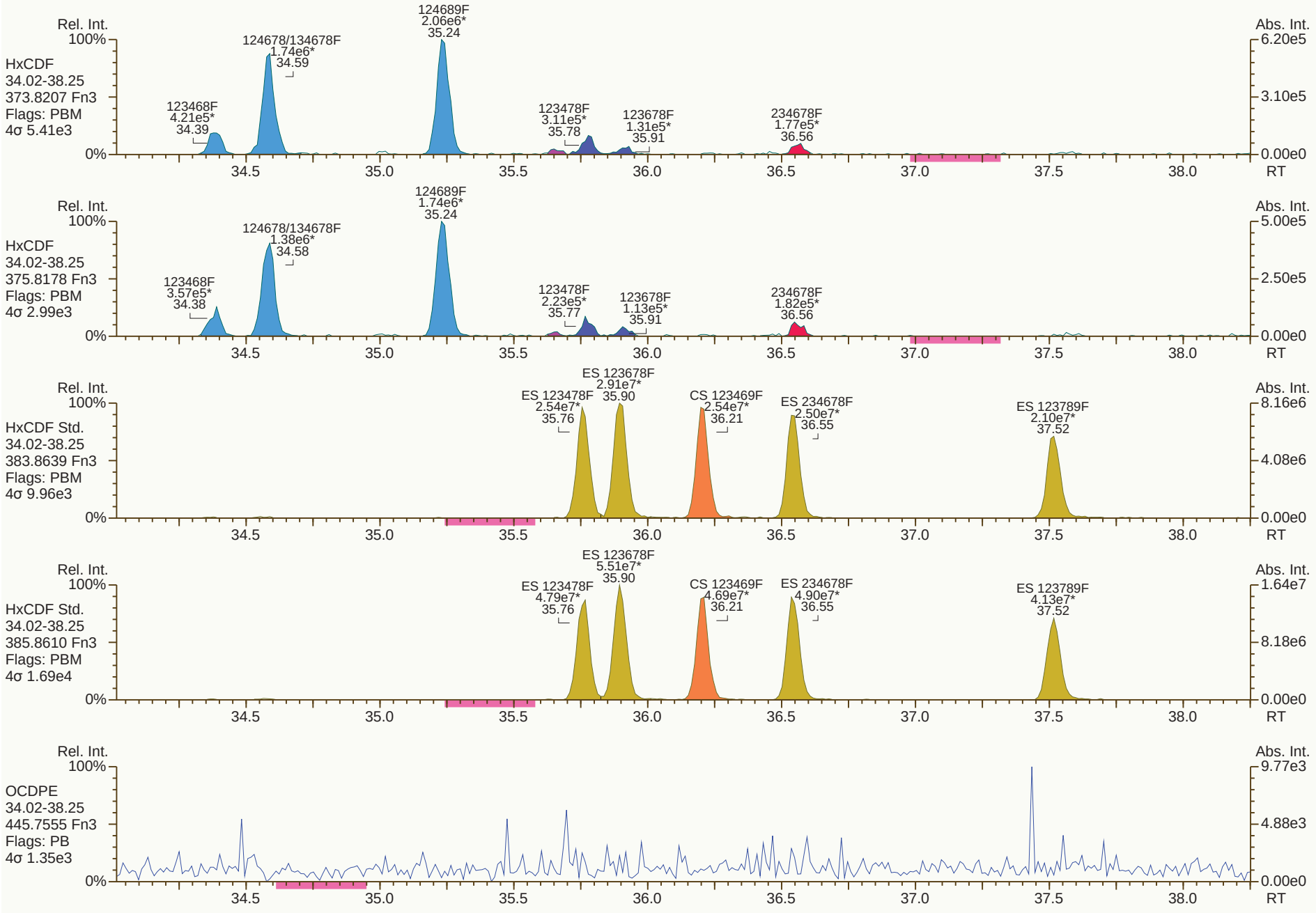


Results: P:\B4500_B4599\B4519\B4519_17655 DF\Resources\B4519_17655_DF_005.utp_res, saved 11-Aug-2020 08:42 (PSW) *Peak annotation: Areas, Centroids*

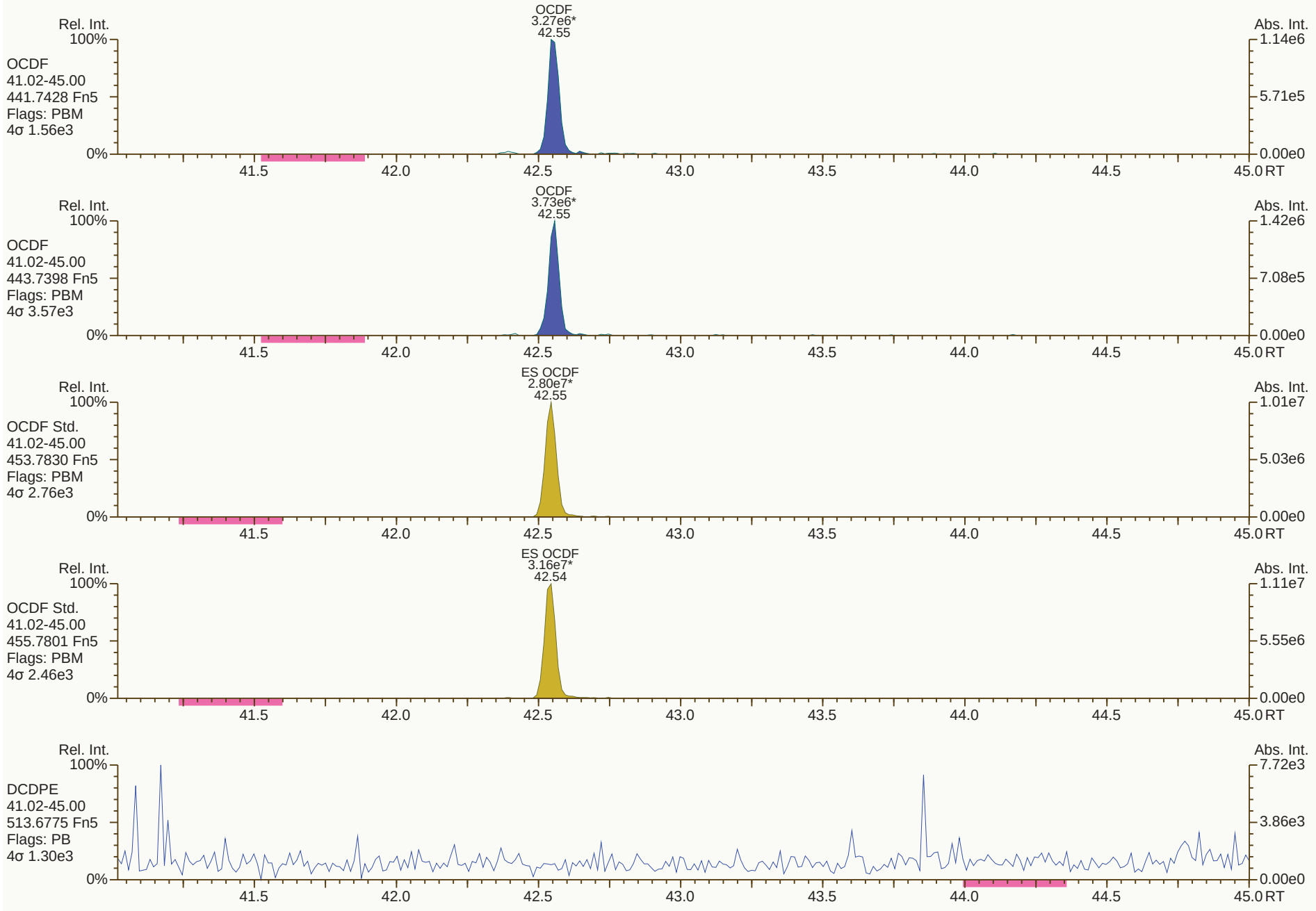
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 2013 scc: 745-007 *PKD: 11-Aug-2020 08:42 Printed: 11-Aug-2020 10:13 Page 8 of 12*

SGS ID: B4519_17655_DF_005 Sample ID: CS-34 Acq: 10-Aug-2020 21:09:40
Instr: [ILM] AutoSpec-Ultima MM3 VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 26 User: PSW Datafile: 200810R10




Rel. Int.
100%
HxCDF
34.02-38.25
373.8207 Fn3
Flags: PBM
4σ 5.41e3
123468F 4.21e5* 34.39
124678/134678F 1.74e6* 34.59
124689F 2.06e6* 35.24
123478F 3.11e5* 35.78
123678F 1.31e5* 35.91
234678F 1.77e5* 36.56
Abs. Int.
6.20e5
3.10e5
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 RT
Rel. Int.
100%
HxCDF
34.02-38.25
375.8178 Fn3
Flags: PBM
4σ 2.99e3
123468F 3.57e5* 34.38
124678/134678F 1.38e6* 34.58
124689F 1.74e6* 35.24
123478F 2.23e5* 35.77
123678F 1.13e5* 35.91
234678F 1.82e5* 36.56
Abs. Int.
5.00e5
2.50e5
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 RT
Rel. Int.
100%
HxCDF Std.
34.02-38.25
383.8639 Fn3
Flags: PBM
4σ 9.96e3
ES 123478F 2.54e7* 35.76
ES 123678F 2.91e7* 35.90
CS 123469F 2.54e7* 36.21
ES 234678F 2.50e7* 36.55
ES 123789F 2.10e7* 37.52
Abs. Int.
8.16e6
4.08e6
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 RT
Rel. Int.
100%
HxCDF Std.
34.02-38.25
385.8610 Fn3
Flags: PBM
4σ 1.69e4
ES 123478F 4.79e7* 35.76
ES 123678F 5.51e7* 35.90
CS 123469F 4.69e7* 36.21
ES 234678F 4.90e7* 36.55
ES 123789F 4.13e7* 37.52
Abs. Int.
1.64e7
8.18e6
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 RT
Rel. Int.
100%
OCDPE
34.02-38.25
445.7555 Fn3
Flags: PB
4σ 1.35e3
Abs. Int.
9.77e3
4.88e3
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 RT


Rel. Int.
100%
HpCDF
38.26-41.01
407.7818 Fn4
Flags: PBM
4σ 1.20e3
1234678F
2.97e6*
39.06
1234689F
5.98e6*
39.47
Abs. Int.
2.43e6
1.22e6
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF
38.26-41.01
409.7788 Fn4
Flags: PBM
4σ 1.50e3
1234678F
2.94e6*
39.06
1234689F
5.80e6*
39.46
Abs. Int.
2.36e6
1.18e6
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.26-41.01
417.8253 Fn4
Flags: PBM
4σ 2.26e3
ES 1234678F
1.73e7*
39.05
CS 1234689F
1.73e7*
39.46
ES 1234789F
1.28e7*
40.37
Abs. Int.
6.83e6
3.41e6
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.26-41.01
419.8220 Fn4
Flags: PBM
4σ 3.04e3
ES 1234678F
3.91e7*
39.05
CS 1234689F
3.76e7*
39.45
ES 1234789F
2.85e7*
40.37
Abs. Int.
1.54e7
7.72e6
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
NCDPE
38.26-41.01
479.7165 Fn4
Flags: PB
4σ 2.11e3
RT
Abs. Int.
2.50e4
1.25e4
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT


OCDF
3.27e6*
42.55
Rel. Int.
100%
OCDF
41.02-45.00
441.7428 Fn5
Flags: PBM
4σ 1.56e3
0%
Abs. Int.
1.14e6
5.71e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDF
3.73e6*
42.55
Rel. Int.
100%
OCDF
41.02-45.00
443.7398 Fn5
Flags: PBM
4σ 3.57e3
0%
Abs. Int.
1.42e6
7.08e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDF
2.80e7*
42.55
Rel. Int.
100%
OCDF Std.
41.02-45.00
453.7830 Fn5
Flags: PBM
4σ 2.76e3
0%
Abs. Int.
1.01e7
5.03e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDF
3.16e7*
42.54
Rel. Int.
100%
OCDF Std.
41.02-45.00
455.7801 Fn5
Flags: PBM
4σ 2.46e3
0%
Abs. Int.
1.11e7
5.55e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
DCDPE
41.02-45.00
513.6775 Fn5
Flags: PB
4σ 1.30e3
0%
Abs. Int.
7.72e3
3.86e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

Lab ID: B4519_17655_DF_006 **Acq'd:** 10 Aug 2020 21:57 PSW **Wt/Vol:** 9.09 g **ICAL:** MM3_DF_10012020_12JUN2020

Client ID: CS-38 **UTP:** 11-Aug-2020 08:48:00 PSW **J-level:** 0.55 pg/g **Split:** 1 **Checkcode:** 916-748-ZYH

Datafile: 200810R11 **Report:** 11 Aug 2020 10:00 pw **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	NotFnd		1.0009	-		-	-	-	1.18	-	5735	0.211
12378-PeCDD	NotFnd		1.0006	-		-	-	-	1.14	-	5904	0.197
123478-HxCDD	36.73	J EMPC	1.0004	1.0004	0	5.70E+04	1.02	N	1.09	0.257	3192	0.122
123678-HxCDD	36.85	J	1.0035	1.0035	0	1.27E+05	1.32	Y	1.13	0.579	3192	0.118
123789-HxCDD	37.14	J	1.0116	1.0115	-0.2	1.71E+05	1.19	Y	1.05	0.683	3192	0.11
1234678-HpCDD	39.96	EMPC	1.0003	1.0002	-0.2	1.10E+06	1.21	N	0.98	6.8	3912	0.147
OCDD	42.38		1.0003	1.0002	-0.3	4.86E+06	0.96	Y	1.08	52.3	4334	0.316
2378-TCDF	NotFnd		1.0006	-		-	-	-	0.98	-	3538	0.0903
12378-PeCDF	NotFnd		1.0006	-		-	-	-	0.95	-	5857	0.149
23478-PeCDF	32.47	J	1.0005	1.0005	0	9.03E+04	1.37	Y	0.95	0.247	5857	0.151
123478-HxCDF	35.77	J	1.0005	1.0005	0	7.95E+04	1.26	Y	1.20	0.241	2986	0.0746
123678-HxCDF	35.91	J EMPC	1.0004	1.0005	+0.2	6.09E+04	2.28	N	1.07	0.181	2986	0.0771
234678-HxCDF	36.55	J EMPC	1.0005	1.0003	-0.4	1.16E+05	0.95	N	1.10	0.397	2986	0.0882
123789-HxCDF	NotFnd		1.0004	-		-	-	-	1.09	-	2986	0.0994
1234678-HpCDF	39.05	J	1.0003	1.0003	0	4.75E+05	1.09	Y	1.28	1.85	2776	0.0742
1234789-HpCDF	40.37	J	1.0002	1.0001	-0.2	3.79E+04	1.01	Y	1.27	0.195	2776	0.0866
OCDF	42.54	J	1.0003	1.0001	-0.5	2.60E+05	0.79	Y	1.01	2.37	3536	0.226

Name	Act RT		Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	27.26		1.0255	1.0257	+0.3	5.83E+07	0.77	Y	1.01	80
ES 12378-PeCDD	32.80		1.2330	1.2342	+2.4	5.16E+07	1.62	Y	0.87	81.8
ES 123478-HxCDD	36.72		0.9917	0.9917	0	4.48E+07	1.32	Y	1.10	71.5
ES 123678-HxCDD	36.83		0.9947	0.9947	0	4.29E+07	1.35	Y	1.06	70.7
ES 123789-HxCDD	37.13		1.0028	1.0028	0	5.25E+07	1.28	Y	1.22	75.5
ES 1234678-HpCDD	39.95		1.0785	1.0789	+1.0	3.63E+07	1.08	Y	0.99	64.1
ES OCDD	42.37		1.1439	1.1443	+1.0	3.80E+07	0.91	Y	0.67	49.7
ES 2378-TCDF	26.34		1.0572	1.0576	+0.6	1.01E+08	0.78	Y	1.01	81.7
ES 12378-PeCDF	31.31		1.2558	1.2575	+3.2	8.97E+07	1.59	Y	0.90	81.8
ES 23478-PeCDF	32.45		1.3012	1.3030	+3.5	8.52E+07	1.54	Y	0.89	78.6
ES 123478-HxCDF	35.75		0.9655	0.9655	0	6.06E+07	0.51	Y	1.43	74.2
ES 123678-HxCDF	35.89		0.9693	0.9693	0	6.92E+07	0.51	Y	1.63	74.2
ES 234678-HxCDF	36.53		0.9867	0.9867	0	5.88E+07	0.54	Y	1.48	69.6
ES 123789-HxCDF	37.51		1.0130	1.0130	0	5.11E+07	0.53	Y	1.29	69.3
ES 1234678-HpCDF	39.04		1.0540	1.0543	+0.7	4.42E+07	0.44	Y	1.15	67.5
ES 1234789-HpCDF	40.37		1.0898	1.0902	+1.0	3.37E+07	0.46	Y	0.91	65.2
ES OCDF	42.53		1.1484	1.1487	+0.8	4.77E+07	0.91	Y	0.83	50.4

Lab ID: B4519_17655_DF_006 | Acq'd: 10 Aug 2020 21:57 PSW | Wt/Vol: 9.09 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-38 | UTP: 11-Aug-2020 08:48:00 PSW | J-level: 0.55 pg/g | Split: 1 | Checkcode: 916-748-ZYH

Datafile: 200810R11 | Report: 11 Aug 2020 10:00 pw | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %	
JS 1234-TCDD	26.58		-	-	-	7.24E+07	0.77	Y	-	-	
JS 1234-TCDF	24.90		-	-	-	1.22E+08	0.79	Y	-	-	
JS 123467-HxCDD	37.03		-	-	-	2.86E+07	1.30	Y	-	-	
CS 37Cl-2378-TCDD	27.28		1.0265	1.0266	+0.2	2.77E+07	n/a	-	1.04	92.4	
CS 12347-PeCDD	32.30		1.2141	1.2152	+2.1	5.26E+07	1.68	Y	0.74	98.2	
CS 12346-PeCDF	30.78		1.2343	1.2359	+3.0	9.27E+07	1.57	Y	0.86	88.5	
CS 123469-HxCDF	36.20		0.9776	0.9776	0	6.36E+07	0.53	Y	1.36	82	
CS 1234689-HpCDF	39.45		1.0650	1.0653	+0.7	4.77E+07	0.43	Y	1.05	79.1	
~~SS 37Cl-2378-TCDD~~	~~27.28~~		~~1.0265~~	~~1.0266~~	~~+0.2~~	~~2.77E+07~~	~~n/a~~		~~1.04~~	~~115~~	Not used in this project.
~~SS 12347-PeCDD~~	~~32.30~~		~~1.2141~~	~~1.2152~~	~~+2.1~~	~~5.26E+07~~	~~1.68~~	~~Y~~	~~0.86~~	~~119~~	CL 11Aug20
~~SS 12346-PeCDF~~	~~30.78~~		~~1.2343~~	~~1.2359~~	~~+3.0~~	~~9.27E+07~~	~~1.57~~	~~Y~~	~~0.96~~	~~108~~	
~~SS 123469-HxCDF~~	~~36.20~~		~~0.9776~~	~~0.9776~~	~~0~~	~~6.36E+07~~	~~0.53~~	~~Y~~	~~0.83~~	~~110~~	
~~SS 1234689-HpCDF~~	~~39.45~~		~~1.0650~~	~~1.0653~~	~~+0.7~~	~~4.77E+07~~	~~0.43~~	~~Y~~	~~0.92~~	~~117~~	

Totals	Conc	EMPC
Total TCDD	0	0.909
Total PeCDD	1.37	1.83
Total HxCDD	4.86	6.34
Total HpCDD	12.1	18.9
Total Tetra-Octa Dioxins	70.6	80.3
Total TCDF	1.78	2.54
Total PeCDF	1.26	2.29
Total HxCDF	2.16	3.05
Total HpCDF	3.72	4
Total Tetra-Octa Furans	11.3	14.2
Total Tetra-Octa Dioxins & Furans	81.9	94.5

Lab ID: B4519_17655_DF_006 **Acq'd:** 10 Aug 2020 21:57 PSW **Wt/Vol:** 9.09 g **ICAL:** MM3_DF_10012020_12JUN2020

Client ID: CS-38 **UTP:** 11-Aug-2020 08:48:00 PSW **J-level:** 0.55 pg/g **Split:** 1 **Checkcode:** 916-748-ZYH

Datafile: 200810R11 **Report:** 11 Aug 2020 10:00 pw **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1368-TCDD	23.38	EMPC	0.8591	0.8576	-2.1	2.05E+05	0.89	N	1.18	0.658	5735	0.211
1379-TCDD	23.78	J EMPC	0.8732	0.8723	-1.3	7.86E+04	1.53	N	1.18	0.252	5735	0.211
1369-TCDD	NotFnd		0.8901						1.18		5735	0.211
1469-TCDD	NotFnd		0.9205						1.18		5735	0.211
1247/1246/1248/1249-TCDD	NotFnd		0.9301						1.18		5735	0.211
1378-TCDD	NotFnd		0.9374						1.18		5735	0.211
1268-TCDD	NotFnd		0.9449						1.18		5735	0.211
1478-TCDD	NotFnd		0.9544						1.18		5735	0.211
1279-TCDD	NotFnd		0.9610						1.18		5735	0.211
1234/1269-TCDD	NotFnd		0.9746						1.18		5735	0.211
1236-TCDD	NotFnd		0.9802						1.18		5735	0.211
1237/1238-TCDD	NotFnd		0.9898						1.18		5735	0.211
1239-TCDD	NotFnd		0.9950						1.18		5735	0.211
2378-TCDD	**NotFnd**		**1.0009**						**1.18**		**5735**	**0.211**
1278-TCDD	NotFnd		1.0133						1.18		5735	0.211
1267-TCDD	NotFnd		1.0185						1.18		5735	0.211
1289-TCDD	NotFnd		1.0379						1.18		5735	0.211
12479/12468-PeCDD	30.27	J	0.9229	0.9228	-0.2	2.21E+05	1.46	Y	1.14	0.832	5904	0.197
12469-PeCDD	NotFnd		0.9396						1.14		5904	0.197
12368-PeCDD	31.38	J EMPC	0.9568	0.9566	-0.4	1.23E+05	2.19	N	1.14	0.463	5904	0.197
12478-PeCDD	NotFnd		0.9626						1.14		5904	0.197
12379-PeCDD	31.68	J	0.9657	0.9658	+0.2	1.43E+05	1.76	Y	1.14	0.537	5904	0.197
12369/12467/12489-PeCDD	NotFnd		0.9738						1.14		5904	0.197
12346/12347-PeCDD	NotFnd		0.9853						1.14		5904	0.197
12378-PeCDD	NotFnd		**1.0006**						**1.14**		**5904**	**0.197**
12367-PeCDD	NotFnd		1.0034						1.14		5904	0.197
12389-PeCDD	NotFnd		1.0141						1.14		5904	0.197
124679/124689-HxCDD	35.04	J EMPC	0.9542	0.9543	+0.2	2.51E+05	1.45	N	1.09	1.08	3192	0.116
123468-HxCDD	35.70	J	0.9721	0.9721	0	4.09E+05	1.19	Y	1.09	1.77	3192	0.116
123679/123689-HxCDD	35.98	J	0.9799	0.9799	0	4.22E+05	1.19	Y	1.09	1.83	3192	0.116
123469-HxCDD	NotFnd		0.9835						1.09		3192	0.116
123478-HxCDD	36.73	J EMPC	**1.0004**	**1.0004**	**0**	**5.70E+04**	**1.02**	**N**	1.09	**0.257**	**3192**	**0.122**
123678-HxCDD	36.85	J	**1.0035**	**1.0035**	**0**	**1.27E+05**	**1.32**	**Y**	1.13	**0.579**	**3192**	**0.118**
123467-HxCDD	37.04	J EMPC	1.0088	1.0087	-0.2	3.13E+04	0.69	N	1.09	0.135	3192	0.116
123789-HxCDD	37.14	J	**1.0116**	**1.0115**	**-0.2**	**1.71E+05**	**1.19**	**Y**	1.05	**0.683**	**3192**	**0.11**

Lab ID: B4519_17655_DF_006 | Acq'd: 10 Aug 2020 21:57 PSW | Wt/Vol: 9.09 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-38 | UTP: 11-Aug-2020 08:48:00 PSW | J-level: 0.55 pg/g | Split: 1 | Checkcode: 916-748-ZYH

Datafile: 200810R11 | Report: 11 Aug 2020 10:00 pw | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

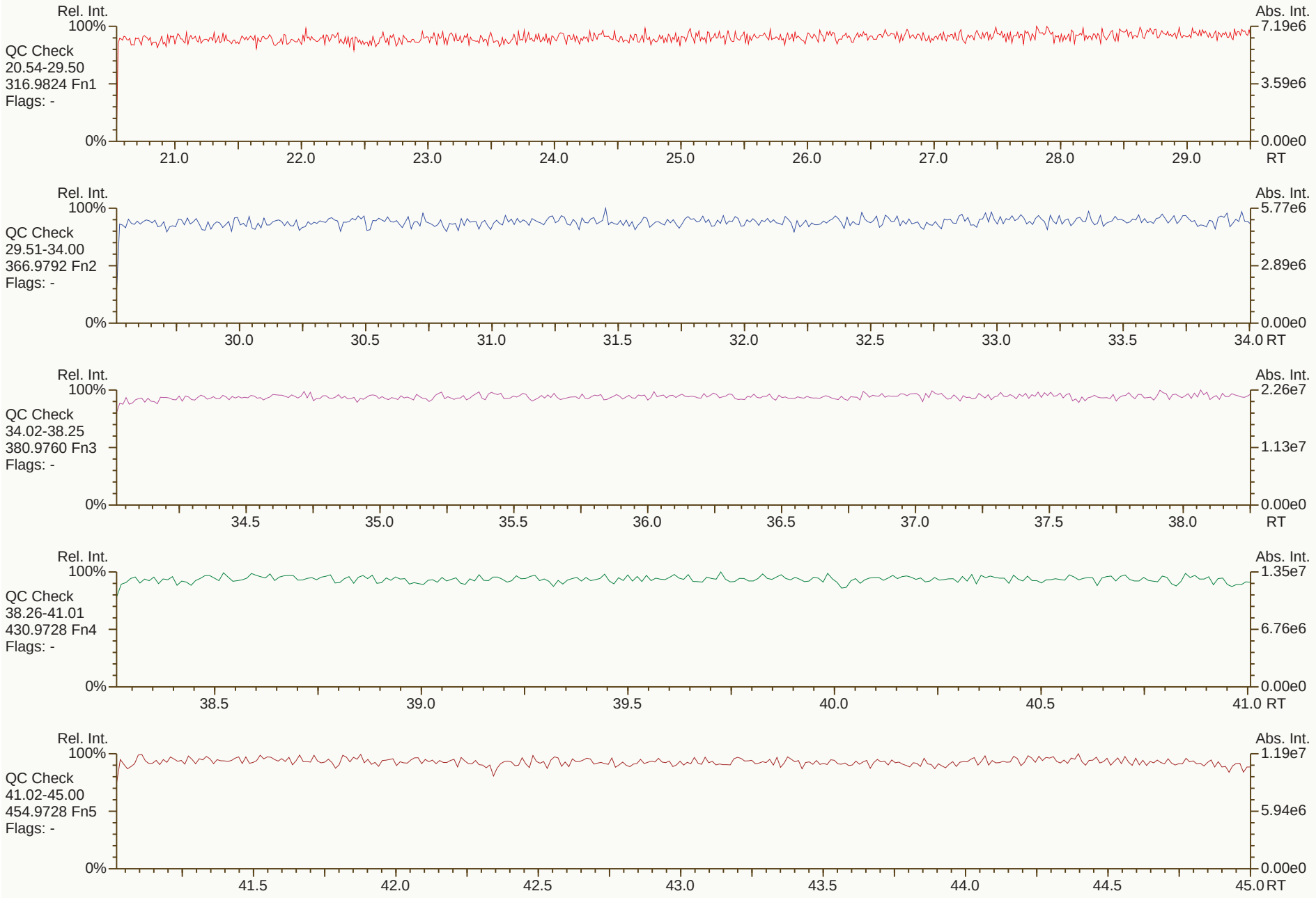
Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1234679-HpCDD	39.32		0.9843	0.9842	-0.2	1.96E+06	1.08	Y	0.98	12.1	3912	0.147
1234678-HpCDD	**39.96**	EMPC	**1.0003**	**1.0002**	**-0.2**	**1.10E+06**	**1.21**	**N**	**0.98**	**6.8**	**3912**	**0.147**
OCDD	**42.38**		**1.0003**	**1.0002**	**-0.3**	**4.86E+06**	**0.96**	**Y**	**1.08**	**52.3**	**4334**	**0.316**
OCDD-a	42.37	**EMPC**	1.0002	0.9999	-0.8	2.09E+05	3.02	N	0.07	36.5	4696	5.56
1368-TCDF	21.15	J	0.8044	0.8029	-1.9	1.45E+05	0.69	Y	0.98	0.322	3538	0.0903
1468-TCDF	NotFnd		0.8261						0.98		3538	0.0903
2468-TCDF	22.38		0.8511	0.8497	-1.9	2.86E+05	0.75	Y	0.98	0.636	3538	0.0903
1346/1246-TCDF	NotFnd		0.8665						0.98		3538	0.0903
1347/1378/1247-TCDF	22.95	J	0.8723	0.8714	-1.2	1.35E+05	0.75	Y	0.98	0.301	3538	0.0903
1348-TCDF	NotFnd		0.8835						0.98		3538	0.0903
1248/1367/1379-TCDF	23.39	J EMPC	0.8888	0.8880	-1.1	7.32E+04	0.52	N	0.98	0.163	3538	0.0903
1268-TCDF	NotFnd		0.9044						0.98		3538	0.0903
1467-TCDF	NotFnd		0.9098						0.98		3538	0.0903
1478-TCDF	NotFnd		0.9167						0.98		3538	0.0903
1369/1237-TCDF	NotFnd		0.9316						0.98		3538	0.0903
2467-TCDF	24.64	J	0.9369	0.9357	-1.8	5.88E+04	0.71	Y	0.98	0.131	3538	0.0903
2368-TCDF	24.83	J EMPC	0.9430	0.9426	-0.6	8.16E+04	0.97	N	0.98	0.182	3538	0.0903
1238/1234/1678/1469/1236-TCDF	24.93	J	0.9468	0.9465	-0.4	6.18E+04	0.67	Y	0.98	0.138	3538	0.0903
1278-TCDF	NotFnd		0.9651						0.98		3538	0.0903
1349-TCDF	NotFnd		0.9704						0.98		3538	0.0903
1267-TCDF	NotFnd		0.9761						0.98		3538	0.0903
2346/1249-TCDF	NotFnd		0.9834						0.98		3538	0.0903
2347/1279-TCDF	NotFnd		0.9921						0.98		3538	0.0903
2348-TCDF	NotFnd		0.9964						0.98		3538	0.0903
2378-TCDF	**NotFnd**		**1.0006**						**0.98**		**3538**	**0.0903**
2367/3467-TCDF	26.74	J	1.0156	1.0153	-0.5	1.15E+05	0.78	Y	0.98	0.255	3538	0.0903
1269-TCDF	NotFnd		1.0249						0.98		3538	0.0903
1239-TCDF	NotFnd		1.0357						0.98		3538	0.0903
1289-TCDF	28.45	J EMPC	1.0799	1.0803	+0.7	1.84E+05	1.94	N	0.98	0.409	3538	0.0903
13468/12468-PeCDF	28.44	J EMPC	0.9084	0.9082	-0.3	1.95E+05	1.97	N	0.95	0.519	3365	0.0862
13678/13467/12467-PeCDF	30.03	J	0.9591	0.9590	-0.2	1.46E+05	1.77	Y	0.95	0.388	5857	0.15
12368/13478/12478-PeCDF	30.19	J	0.9642	0.9641	-0.2	2.35E+05	1.42	Y	0.95	0.624	5857	0.15
14678-PeCDF	NotFnd		0.9675						0.95		5857	0.15
13479-PeCDF	NotFnd		0.9706						0.95		5857	0.15
13469/12479-PeCDF	NotFnd		0.9787						0.95		5857	0.15
12346-PeCDF	NotFnd		0.9833						0.95		5857	0.15

Lab ID: B4519_17655_DF_006 | Acq'd: 10 Aug 2020 21:57 PSW | Wt/Vol: 9.09 g | ICAL: MM3_DF_10012020_12JUN2020

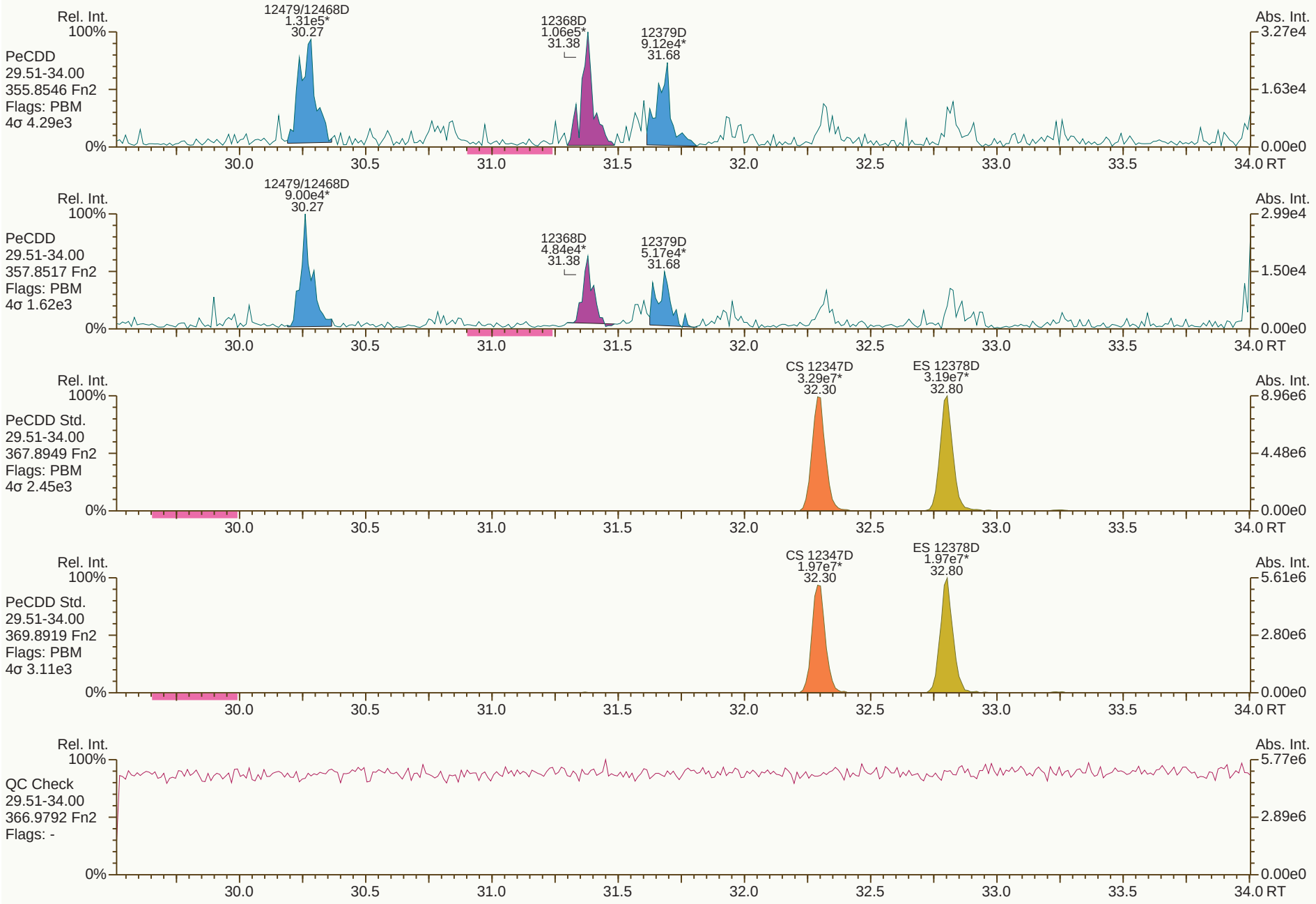
Client ID: CS-38 | UTP: 11-Aug-2020 08:48:00 PSW | J-level: 0.55 pg/g | Split: 1 | Checkcode: 916-748-ZYH

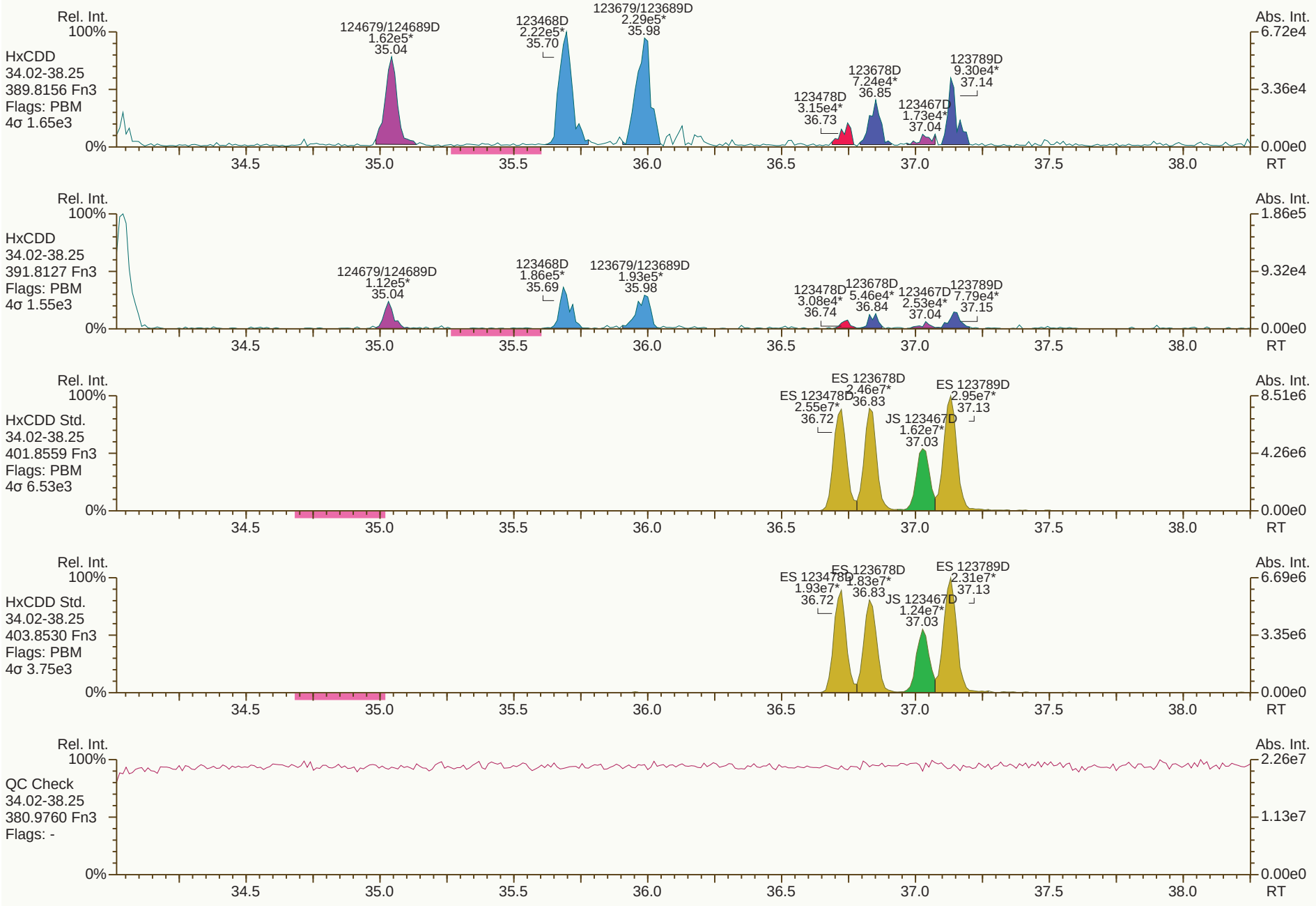
Datafile: 200810R11 | Report: 11 Aug 2020 10:00 pw | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
23468/12469-PeCDF	30.87	J EMPC	0.9861	0.9857	-0.7	9.13E+04	1.01	N	0.95	0.243	5857	0.15
12347-PeCDF	NotFnd		0.9887						0.95		5857	0.15
12348-PeCDF	NotFnd		0.9938						0.95		5857	0.15
12378-PeCDF	**NotFnd**		**1.0006**						**0.95**		**5857**	**0.149**
12678/12367-PeCDF	NotFnd		1.0095						0.95		5857	0.15
12379-PeCDF	NotFnd		1.0150						0.95		5857	0.15
12679-PeCDF	NotFnd		0.9926						0.95		5857	0.15
23467/12369-PeCDF	32.34	J EMPC	0.9966	0.9966	0	9.98E+04	1.27	N	0.95	0.265	5857	0.15
23478-PeCDF	**32.47**	J	**1.0005**	**1.0005**	**0**	**9.03E+04**	**1.37**	**Y**	**0.95**	**0.247**	**5857**	**0.151**
23478/12489-PeCDF	NotFnd		0.0000						0.95			
12489-PeCDF	NotFnd		1.0047						0.95		5857	0.15
12349-PeCDF	NotFnd		1.0107						0.95		5857	0.15
12389-PeCDF	NotFnd		1.0339						0.95		5857	0.15
123468-HxCDF	34.38	J	0.9617	0.9618	+0.2	8.58E+04	1.23	Y	1.11	0.283	2986	0.0838
124678/134678-HxCDF	34.58	J	0.9673	0.9673	0	3.48E+05	1.14	Y	1.11	1.15	2986	0.0838
134679-HxCDF	NotFnd		0.9737						1.11		2986	0.0838
124679-HxCDF	NotFnd		0.9792						1.11		2986	0.0838
124689-HxCDF	35.23	J	0.9854	0.9856	+0.4	1.47E+05	1.26	Y	1.11	0.485	2986	0.0838
123467-HxCDF	35.64	J EMPC	0.9972	0.9970	-0.4	6.15E+04	0.86	N	1.11	0.203	2986	0.0838
123478-HxCDF	**35.77**	J	**1.0005**	**1.0005**	**0**	**7.95E+04**	**1.26**	**Y**	**1.20**	**0.241**	**2986**	**0.0746**
123678-HxCDF	**35.91**	J EMPC	**1.0004**	**1.0005**	**+0.2**	**6.09E+04**	**2.28**	**N**	**1.07**	**0.181**	**2986**	**0.0771**
123479-HxCDF	NotFnd		1.0049						1.11		2986	0.0838
123469-HxCDF	NotFnd		1.0089						1.11		2986	0.0838
123679-HxCDF	NotFnd		0.9945						1.11		2986	0.0838
234678-HxCDF	**36.55**	J EMPC	**1.0005**	**1.0003**	**-0.4**	**1.16E+05**	**0.95**	**N**	**1.10**	**0.397**	**2986**	**0.0882**
234678/123689-HxCDF	NotFnd		0.0000						1.10			
123689-HxCDF	NotFnd		1.0054						1.11		2986	0.0838
123789-HxCDF	**NotFnd**		**1.0004**						**1.09**		**2986**	**0.0994**
123789/123489-HxCDF	NotFnd		0.0000						1.09			
123489-HxCDF	37.53	J EMPC	1.0008	1.0005	-0.7	3.48E+04	0.70	N	1.11	0.115	2986	0.0838
1234678-HpCDF	**39.05**	**J**	**1.0003**	**1.0003**	**0**	**4.75E+05**	**1.09**	**Y**	**1.28**	**1.85**	**2776**	**0.0742**
1234679-HpCDF	39.32	**J EMPC**	1.0072	1.0072	0	6.47E+04	0.81	N	1.27	0.287	2776	0.0796
1234689-HpCDF	39.45	**J**	1.0107	1.0107	0	3.78E+05	0.93	Y	1.27	1.67	2776	0.0796
1234789-HpCDF	**40.37**	**J**	**1.0002**	**1.0001**	**-0.2**	**3.79E+04**	**1.01**	**Y**	**1.27**	**0.195**	**2776**	**0.0866**
OCDF	**42.54**	**J**	**1.0003**	**1.0001**	**-0.5**	**2.60E+05**	**0.79**	**Y**	**1.01**	**2.37**	**3536**	**0.226**
OCDF-a	NotFnd		1.0002						0.06		3906	3.99

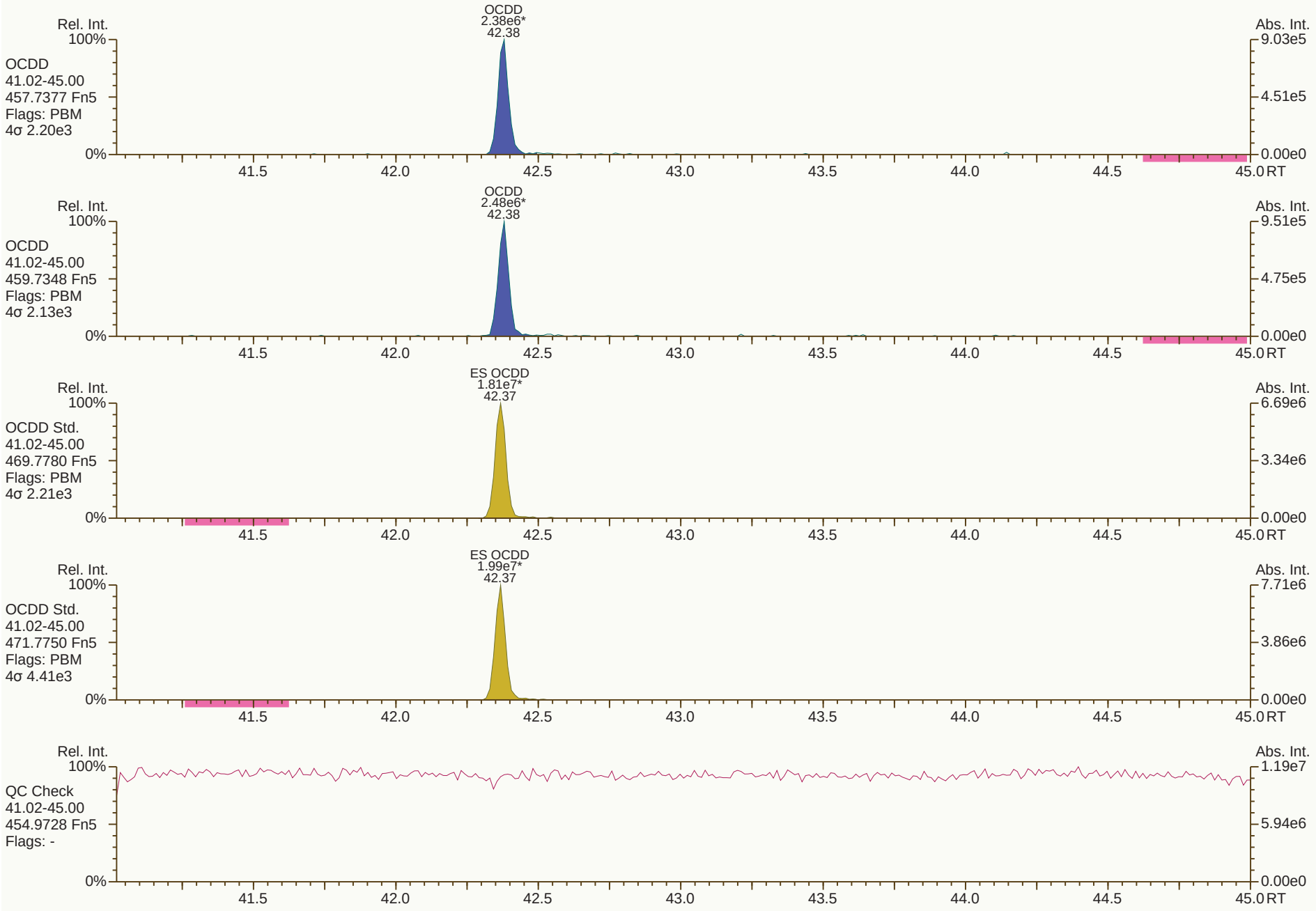

Rel. Int.
100%
QC Check
20.54-29.50
316.9824 Fn1
Flags: -
0%
Abs. Int.
7.19e6
3.59e6
0.00e0
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0 RT
Rel. Int.
100%
QC Check
29.51-34.00
366.9792 Fn2
Flags: -
0%
Abs. Int.
5.77e6
2.89e6
0.00e0
30.0 30.5 31.0 31.5 32.0 32.5 33.0 33.5 34.0 RT
Rel. Int.
100%
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
0%
Abs. Int.
2.26e7
1.13e7
0.00e0
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 RT
Rel. Int.
100%
QC Check
38.26-41.01
430.9728 Fn4
Flags: -
0%
Abs. Int.
1.35e7
6.76e6
0.00e0
38.5 39.0 39.5 40.0 40.5 41.0 RT
Rel. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
1.19e7
5.94e6
0.00e0
41.5 42.0 42.5 43.0 43.5 44.0 44.5 45.0 RT


Rel. Int.
100%
TCDD
20.54-29.50
319.8965 Fn1
Flags: PBM
4σ 4.08e3
1368D
1.03e5*
23.38
1379D
6.79e4*
23.78
Abs. Int.
2.70e4
1.35e4
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD
20.54-29.50
321.8936 Fn1
Flags: PBM
4σ 1.66e3
1368D
1.16e5*
23.38
1379D
4.44e4*
23.78
Abs. Int.
2.26e4
1.13e4
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
37Cl-TCDD
20.54-29.50
327.8850 Fn1
Flags: PBM
4σ 1.56e3
CS 37Cl-2378D
2.77e7*
27.28
Abs. Int.
5.89e6
2.95e6
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
331.9368 Fn1
Flags: PBM
4σ 7.97e3
JS 1234D
3.16e7*
26.58
ES 2378D
2.54e7*
27.26
Abs. Int.
7.07e6
3.53e6
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
333.9339 Fn1
Flags: PBM
4σ 1.72e3
JS 1234D
4.08e7*
26.58
ES 2378D
3.30e7*
27.26
Abs. Int.
9.04e6
4.52e6
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT

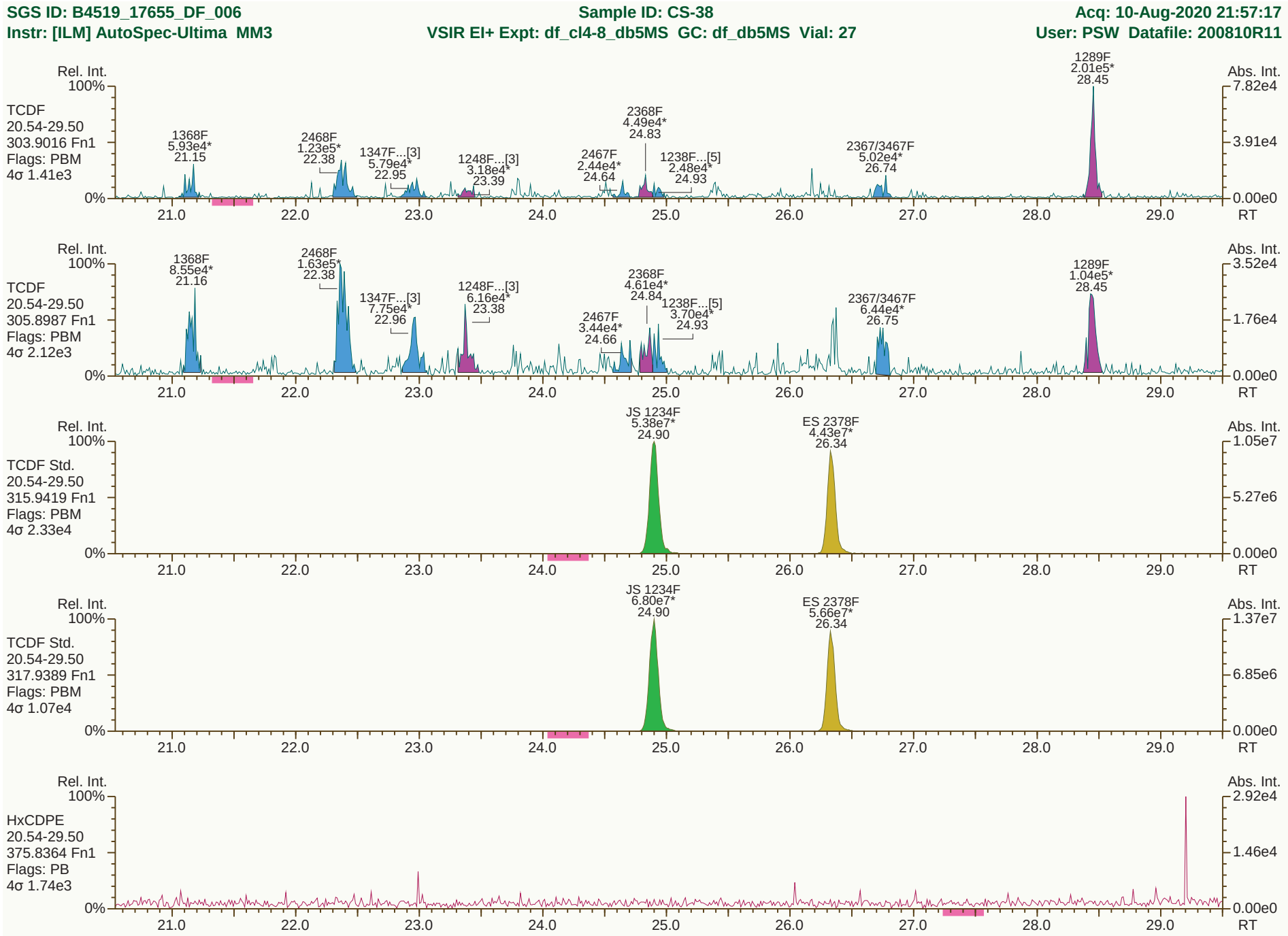

Rel. Int.
100%
PeCDD
29.51-34.00
355.8546 Fn2
Flags: PBM
4σ 4.29e3
12479/12468D
1.31e5*
30.27
12368D
1.06e5*
31.38
12379D
9.12e4*
31.68
Abs. Int.
3.27e4
1.63e4
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD
29.51-34.00
357.8517 Fn2
Flags: PBM
4σ 1.62e3
12479/12468D
9.00e4*
30.27
12368D
4.84e4*
31.38
12379D
5.17e4*
31.68
Abs. Int.
2.99e4
1.50e4
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.00
367.8949 Fn2
Flags: PBM
4σ 2.45e3
CS 12347D
3.29e7*
32.30
ES 12378D
3.19e7*
32.80
Abs. Int.
8.96e6
4.48e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.00
369.8919 Fn2
Flags: PBM
4σ 3.11e3
CS 12347D
1.97e7*
32.30
ES 12378D
1.97e7*
32.80
Abs. Int.
5.61e6
2.80e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
QC Check
29.51-34.00
366.9792 Fn2
Flags: -
Abs. Int.
5.77e6
2.89e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT


Rel. Int.
100%
HxCDD
34.02-38.25
389.8156 Fn3
Flags: PBM
4σ 1.65e3
124679/124689D
1.62e5*
35.04
123468D
2.22e5*
35.70
123679/123689D
2.29e5*
35.98
123478D
3.15e4*
36.73
123678D
7.24e4*
36.85
123467D
1.73e4*
37.04
123789D
9.30e4*
37.14
Abs. Int.
6.72e4
3.36e4
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD
34.02-38.25
391.8127 Fn3
Flags: PBM
4σ 1.55e3
124679/124689D
1.12e5*
35.04
123468D
1.86e5*
35.69
123679/123689D
1.93e5*
35.98
123478D
3.08e4*
36.74
123678D
5.46e4*
36.84
123467D
2.53e4*
37.04
123789D
7.79e4*
37.15
Abs. Int.
1.86e5
9.32e4
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
401.8559 Fn3
Flags: PBM
4σ 6.53e3
ES 123678D
2.46e7*
36.83
ES 123478D
2.55e7*
36.72
ES 123789D
2.95e7*
37.13
JS 123467D
1.62e7*
37.03
Abs. Int.
8.51e6
4.26e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
403.8530 Fn3
Flags: PBM
4σ 3.75e3
ES 123678D
1.83e7*
36.83
ES 123478D
1.93e7*
36.72
ES 123789D
2.31e7*
37.13
JS 123467D
1.24e7*
37.03
Abs. Int.
6.69e6
3.35e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
Abs. Int.
2.26e7
1.13e7
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT


Rel. Int.
100%
HpCDD
38.26-41.01
423.7767 Fn4
Flags: PBM
4σ 1.76e3
1234679D
1.02e6*
39.32
1234678D
6.54e5*
39.96
Abs. Int.
3.91e5
1.96e5
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.26-41.01
425.7737 Fn4
Flags: PBM
4σ 2.15e3
1234679D
9.41e5*
39.31
1234678D
5.41e5*
39.96
Abs. Int.
3.60e5
1.80e5
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
435.8169 Fn4
Flags: PBM
4σ 1.90e3
ES 1234678D
1.89e7*
39.95
Abs. Int.
7.76e6
3.88e6
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
437.8140 Fn4
Flags: PBM
4σ 1.92e3
ES 1234678D
1.74e7*
39.95
Abs. Int.
7.19e6
3.59e6
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.26-41.01
430.9728 Fn4
Flags: -
Abs. Int.
1.35e7
6.76e6
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT


OCDD
2.38e6*
42.38
Rel. Int.
100%
OCDD
41.02-45.00
457.7377 Fn5
Flags: PBM
4σ 2.20e3
0%
Abs. Int.
9.03e5
4.51e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDD
2.48e6*
42.38
Rel. Int.
100%
OCDD
41.02-45.00
459.7348 Fn5
Flags: PBM
4σ 2.13e3
0%
Abs. Int.
9.51e5
4.75e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
1.81e7*
42.37
Rel. Int.
100%
OCDD Std.
41.02-45.00
469.7780 Fn5
Flags: PBM
4σ 2.21e3
0%
Abs. Int.
6.69e6
3.34e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
1.99e7*
42.37
Rel. Int.
100%
OCDD Std.
41.02-45.00
471.7750 Fn5
Flags: PBM
4σ 4.41e3
0%
Abs. Int.
7.71e6
3.86e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
1.19e7
5.94e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

SGS ID: B4519_17655_DF_006 Sample ID: CS-38 Acq: 10-Aug-2020 21:57:17
Instr: [ILM] AutoSpec-Ultima MM3 VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 27 User: PSW Datafile: 200810R11



SGS ID: B4519_17655_DF_006 | Sample ID: CS-38 | Acq: 10-Aug-2020 21:57:17

Instr: [ILM] AutoSpec-Ultima MM3 | VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 27 | User: PSW Datafile: 200810R11

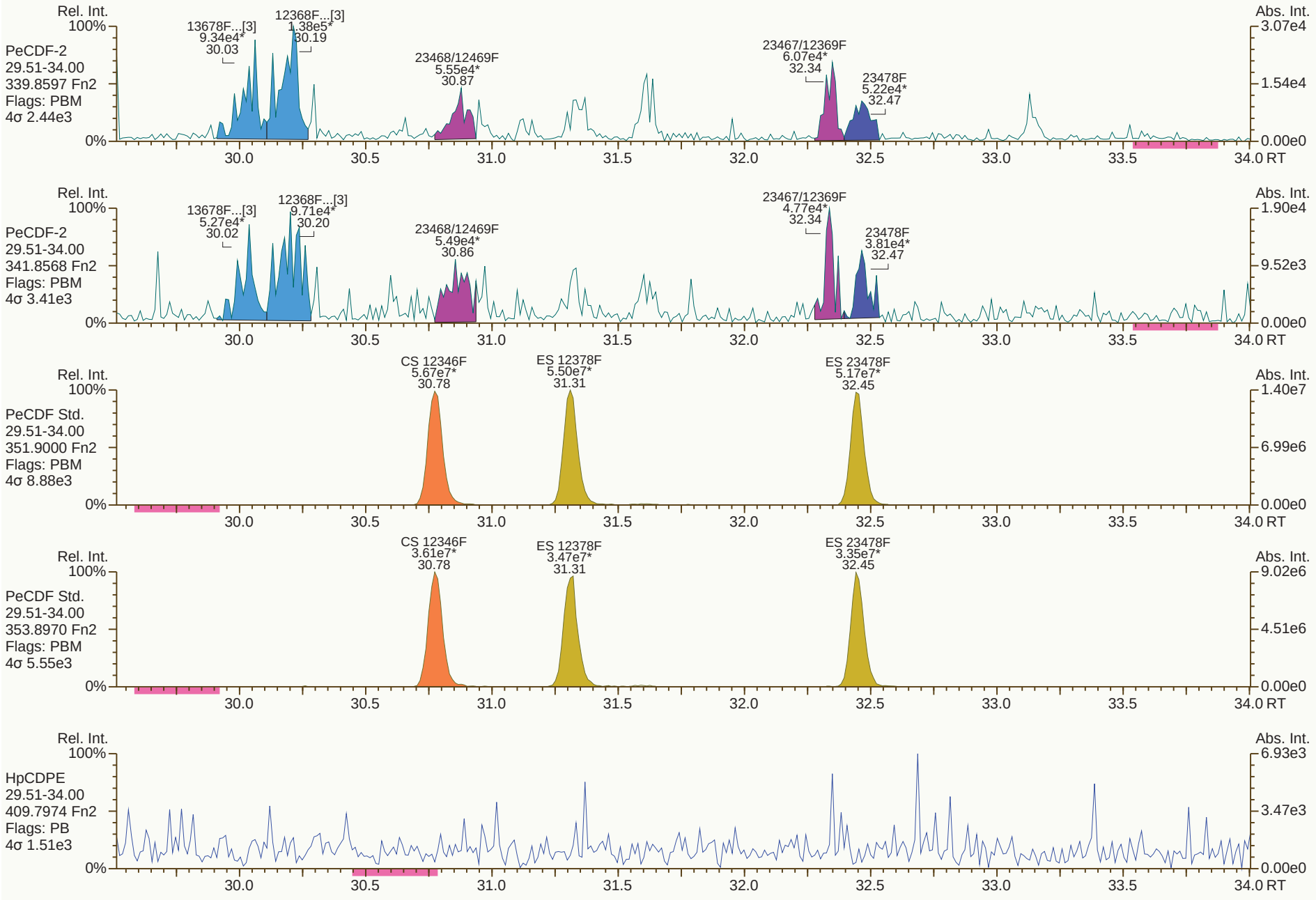


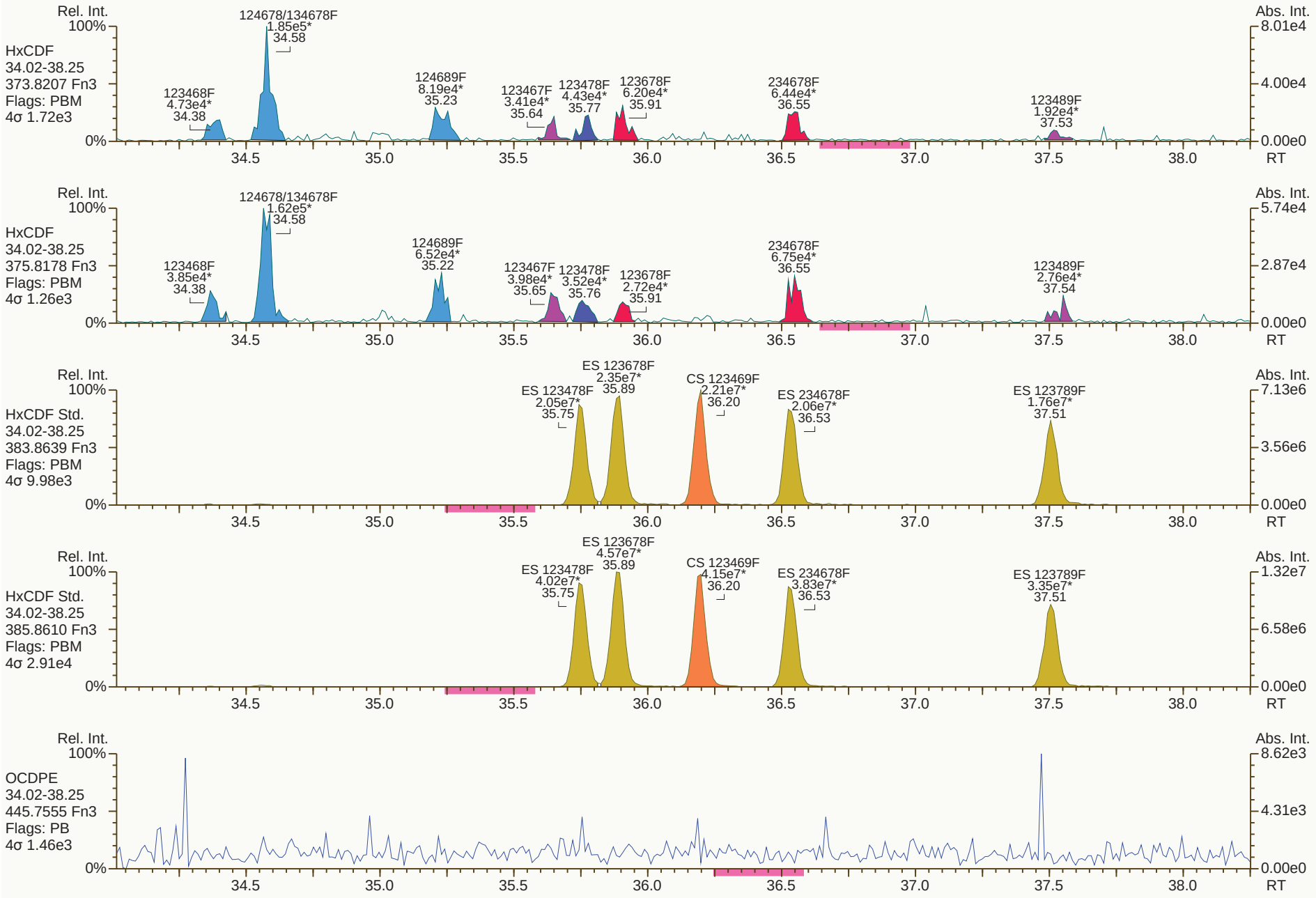
Results: P:\B4500_B4599\B4519\B4519_17655 DF\Resources\B4519_17655_DF_006.utp_res, saved 11-Aug-2020 08:48 (PSW)

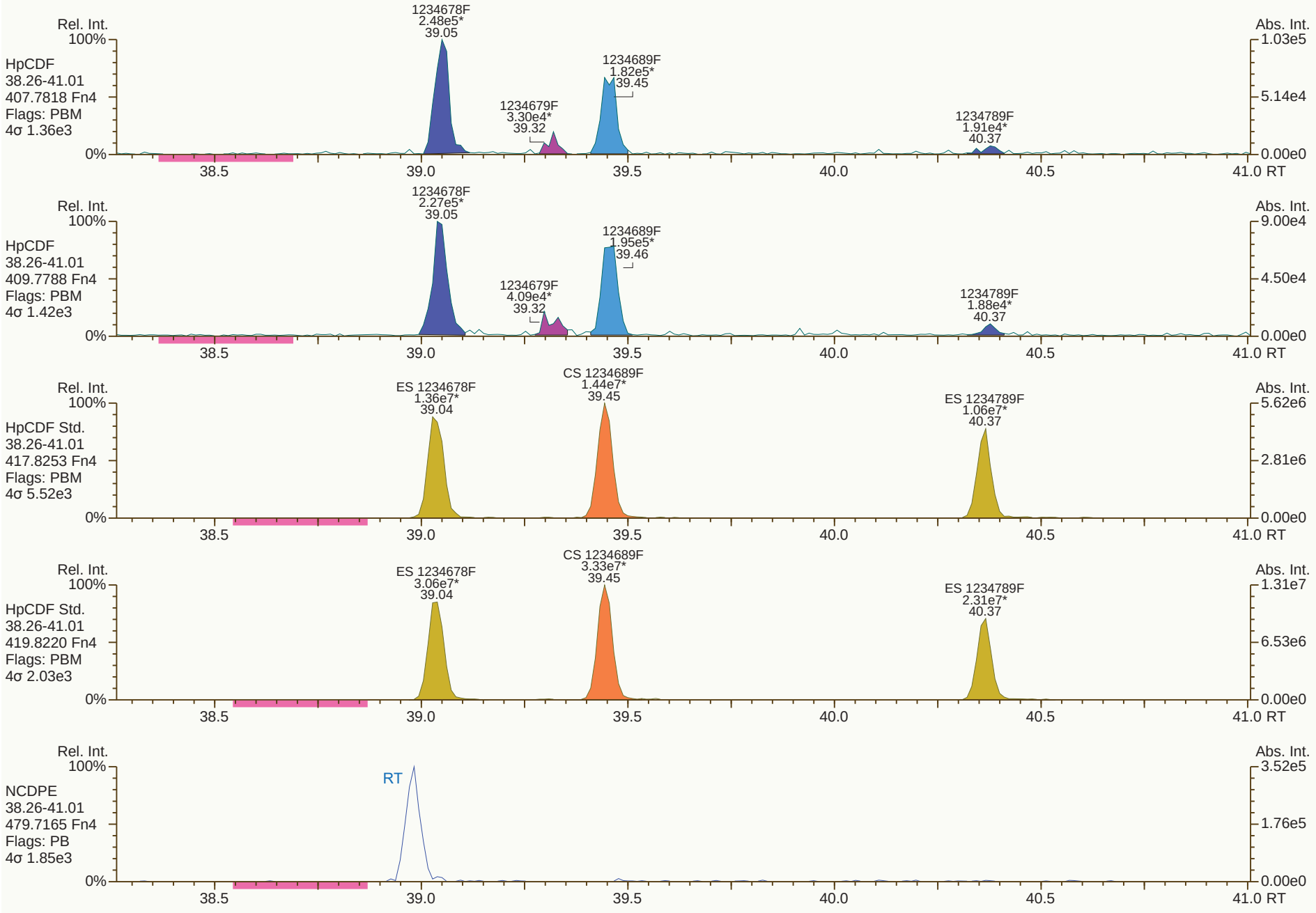
Peak annotation: Areas, Centroids

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 2160 scc: 916-748

PKD: 11-Aug-2020 08:47 Printed: 11-Aug-2020 10:13 Page 8 of 12


Rel. Int.
100%
PeCDF-2
29.51-34.00
339.8597 Fn2
Flags: PBM
4σ 2.44e3
13678F...[3]
9.34e4*
30.03
12368F...[3]
1.38e5*
30.19
23468/12469F
5.55e4*
30.87
23467/12369F
6.07e4*
32.34
23478F
5.22e4*
32.47
Abs. Int.
3.07e4
1.54e4
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
PeCDF-2
29.51-34.00
341.8568 Fn2
Flags: PBM
4σ 3.41e3
13678F...[3]
5.27e4*
30.02
12368F...[3]
9.71e4*
30.20
23468/12469F
5.49e4*
30.86
23467/12369F
4.77e4*
32.34
23478F
3.81e4*
32.47
1.90e4
9.52e3
PeCDF Std.
29.51-34.00
351.9000 Fn2
Flags: PBM
4σ 8.88e3
CS 12346F
5.67e7*
30.78
ES 12378F
5.50e7*
31.31
ES 23478F
5.17e7*
32.45
1.40e7
6.99e6
PeCDF Std.
29.51-34.00
353.8970 Fn2
Flags: PBM
4σ 5.55e3
CS 12346F
3.61e7*
30.78
ES 12378F
3.47e7*
31.31
ES 23478F
3.35e7*
32.45
9.02e6
4.51e6
HpCDPE
29.51-34.00
409.7974 Fn2
Flags: PB
4σ 1.51e3
6.93e3
3.47e3


Rel. Int.
100%
HxCDF
34.02-38.25
373.8207 Fn3
Flags: PBM
4σ 1.72e3
123468F 4.73e4* 34.38
124678/134678F 1.85e5* 34.58
124689F 8.19e4* 35.23
123467F 3.41e4* 35.64
123478F 4.43e4* 35.77
123678F 6.20e4* 35.91
234678F 6.44e4* 36.55
123489F 1.92e4* 37.53
Abs. Int.
8.01e4
4.00e4
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 RT
Rel. Int.
100%
HxCDF
34.02-38.25
375.8178 Fn3
Flags: PBM
4σ 1.26e3
123468F 3.85e4* 34.38
124678/134678F 1.62e5* 34.58
124689F 6.52e4* 35.22
123467F 3.98e4* 35.65
123478F 3.52e4* 35.76
123678F 2.72e4* 35.91
234678F 6.75e4* 36.55
123489F 2.76e4* 37.54
Abs. Int.
5.74e4
2.87e4
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 RT
Rel. Int.
100%
HxCDF Std.
34.02-38.25
383.8639 Fn3
Flags: PBM
4σ 9.98e3
ES 123478F 2.05e7* 35.75
ES 123678F 2.35e7* 35.89
CS 123469F 2.21e7* 36.20
ES 234678F 2.06e7* 36.53
ES 123789F 1.76e7* 37.51
Abs. Int.
7.13e6
3.56e6
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 RT
Rel. Int.
100%
HxCDF Std.
34.02-38.25
385.8610 Fn3
Flags: PBM
4σ 2.91e4
ES 123478F 4.02e7* 35.75
ES 123678F 4.57e7* 35.89
CS 123469F 4.15e7* 36.20
ES 234678F 3.83e7* 36.53
ES 123789F 3.35e7* 37.51
Abs. Int.
1.32e7
6.58e6
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 RT
Rel. Int.
100%
OCDPE
34.02-38.25
445.7555 Fn3
Flags: PB
4σ 1.46e3
Abs. Int.
8.62e3
4.31e3
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 RT


Rel. Int.
100%
HpCDF
38.26-41.01
407.7818 Fn4
Flags: PBM
4σ 1.36e3
1234678F
2.48e5*
39.05
1234679F
3.30e4*
39.32
1234689F
1.82e5*
39.45
1234789F
1.91e4*
40.37
Abs. Int.
1.03e5
5.14e4
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF
38.26-41.01
409.7788 Fn4
Flags: PBM
4σ 1.42e3
1234678F
2.27e5*
39.05
1234679F
4.09e4*
39.32
1234689F
1.95e5*
39.46
1234789F
1.88e4*
40.37
Abs. Int.
9.00e4
4.50e4
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.26-41.01
417.8253 Fn4
Flags: PBM
4σ 5.52e3
ES 1234678F
1.36e7*
39.04
CS 1234689F
1.44e7*
39.45
ES 1234789F
1.06e7*
40.37
Abs. Int.
5.62e6
2.81e6
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.26-41.01
419.8220 Fn4
Flags: PBM
4σ 2.03e3
ES 1234678F
3.06e7*
39.04
CS 1234689F
3.33e7*
39.45
ES 1234789F
2.31e7*
40.37
Abs. Int.
1.31e7
6.53e6
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
NCDPE
38.26-41.01
479.7165 Fn4
Flags: PB
4σ 1.85e3
RT
Abs. Int.
3.52e5
1.76e5
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT


OCDF
1.15e5*
42.54
Rel. Int.
100%
OCDF
41.02-45.00
441.7428 Fn5
Flags: PBM
4σ 1.61e3
0%
Abs. Int.
5.34e4
2.67e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDF
1.45e5*
42.55
Rel. Int.
100%
OCDF
41.02-45.00
443.7398 Fn5
Flags: PBM
4σ 1.92e3
0%
Abs. Int.
7.01e4
3.51e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDF
2.27e7*
42.53
Rel. Int.
100%
OCDF Std.
41.02-45.00
453.7830 Fn5
Flags: PBM
4σ 1.82e3
0%
Abs. Int.
8.11e6
4.05e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDF
2.50e7*
42.53
Rel. Int.
100%
OCDF Std.
41.02-45.00
455.7801 Fn5
Flags: PBM
4σ 2.31e3
0%
Abs. Int.
9.02e6
4.51e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
DCDPE
41.02-45.00
513.6775 Fn5
Flags: PB
4σ 1.71e3
0%
Abs. Int.
5.65e3
2.83e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

Lab ID: B4519_17655_DF_007 **Acq'd:** 11 Aug 2020 01:14 PSW **Wt/Vol:** 9.24 g **ICAL:** MM3_DF_10012020_12JUN2020

Client ID: CS-39 **UTP:** 11-Aug-2020 08:57:24 PSW **J-level:** 0.541 pg/g **Split:** 1 **Checkcode:** 970-709-FLQ

Datafile: 200810R15 **Report:** 11 Aug 2020 10:00 pw **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	NotFnd		1.0009	-		-	-	-	1.18	-	4591	0.166
12378-PeCDD	32.83	J	1.0006	1.0007	+0.2	5.88E+04	1.34	Y	1.14	0.235	3753	0.132
123478-HxCDD	36.74	J EMPC	1.0004	1.0004	0	7.03E+04	1.63	N	1.09	0.329	2996	0.109
123678-HxCDD	36.86	J	1.0035	1.0036	+0.2	1.45E+05	1.36	Y	1.13	0.717	2996	0.118
123789-HxCDD	37.16	J	1.0116	1.0117	+0.2	1.71E+05	1.21	Y	1.05	0.727	2996	0.102
1234678-HpCDD	39.97		1.0003	1.0003	0	2.65E+06	1.03	Y	0.98	17.3	3060	0.114
OCDD	42.39		1.0003	1.0002	-0.3	2.64E+07	0.90	Y	1.08	304	5961	0.484
2378-TCDF	26.36	J	1.0006	1.0006	0	7.48E+04	0.70	Y	0.98	0.171	3704	0.0977
12378-PeCDF	31.33	J	1.0006	1.0003	-0.6	8.41E+04	1.74	Y	0.95	0.228	4117	0.108
23478-PeCDF	32.48	J EMPC	1.0005	1.0008	+0.6	1.01E+05	1.88	N	0.95	0.285	4117	0.103
123478-HxCDF	35.78	J EMPC	1.0005	1.0007	+0.4	8.76E+04	1.02	N	1.20	0.276	3651	0.0907
123678-HxCDF	35.91	J EMPC	1.0004	1.0003	-0.2	1.15E+05	0.98	N	1.07	0.358	3651	0.0944
234678-HxCDF	36.55	J	1.0005	1.0003	-0.4	9.65E+04	1.18	Y	1.10	0.342	3651	0.11
123789-HxCDF	NotFnd		1.0004	-		-	-	-	1.09	-	3651	0.136
1234678-HpCDF	39.06	J	1.0003	1.0003	0	4.53E+05	1.00	Y	1.28	1.87	2821	0.0721
1234789-HpCDF	40.38	J EMPC	1.0002	1.0001	-0.2	5.41E+04	0.80	N	1.27	0.303	2821	0.0938
OCDF	42.55	J EMPC	1.0003	1.0002	-0.3	3.03E+05	1.07	N	1.01	3.09	3949	0.288

Name	Act RT		Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	27.27		1.0255	1.0257	+0.3	5.63E+07	0.78	Y	1.01	72.7
ES 12378-PeCDD	32.81		1.2330	1.2341	+2.2	4.77E+07	1.71	Y	0.87	71.3
ES 123478-HxCDD	36.73		0.9917	0.9916	-0.2	4.24E+07	1.29	Y	1.10	64.1
ES 123678-HxCDD	36.84		0.9947	0.9947	0	3.89E+07	1.30	Y	1.06	60.9
ES 123789-HxCDD	37.14		1.0028	1.0028	0	4.86E+07	1.27	Y	1.22	66.2
ES 1234678-HpCDD	39.96		1.0785	1.0788	+0.7	3.36E+07	1.08	Y	0.99	56.2
ES OCDD	42.38		1.1439	1.1442	+0.8	3.49E+07	0.96	Y	0.67	43.2
ES 2378-TCDF	26.34		1.0572	1.0575	+0.5	9.66E+07	0.81	Y	1.01	75.2
ES 12378-PeCDF	31.32		1.2558	1.2573	+2.8	8.42E+07	1.60	Y	0.90	73.8
ES 23478-PeCDF	32.45		1.3012	1.3028	+3.1	8.12E+07	1.59	Y	0.89	72
ES 123478-HxCDF	35.76		0.9655	0.9655	0	5.74E+07	0.56	Y	1.43	66.5
ES 123678-HxCDF	35.90		0.9693	0.9692	-0.2	6.51E+07	0.54	Y	1.63	66.2
ES 234678-HxCDF	36.54		0.9867	0.9867	0	5.57E+07	0.53	Y	1.48	62.5
ES 123789-HxCDF	37.52		1.0130	1.0129	-0.2	4.74E+07	0.52	Y	1.29	60.9
ES 1234678-HpCDF	39.05		1.0540	1.0542	+0.5	4.10E+07	0.47	Y	1.15	59.3
ES 1234789-HpCDF	40.37		1.0898	1.0901	+0.7	3.05E+07	0.45	Y	0.91	55.9
ES OCDF	42.54		1.1484	1.1487	+0.8	4.20E+07	0.95	Y	0.83	42.1

Lab ID: B4519_17655_DF_007 | Acq'd: 11 Aug 2020 01:14 PSW | Wt/Vol: 9.24 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-39 | UTP: 11-Aug-2020 08:57:24 PSW | J-level: 0.541 pg/g | Split: 1 | Checkcode: 970-709-FLQ

Datafile: 200810R15 | Report: 11 Aug 2020 10:00 pw | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %	
JS 1234-TCDD	26.58		-	-	-	7.69E+07	0.77	Y	-	-	
JS 1234-TCDF	24.91		-	-	-	1.27E+08	0.80	Y	-	-	
JS 123467-HxCDD	37.04		-	-	-	3.02E+07	1.35	Y	-	-	
CS 37Cl-2378-TCDD	27.29		1.0265	1.0265	0	2.95E+07	n/a	-	1.04	92.7	
CS 12347-PeCDD	32.30		1.2141	1.2151	+1.9	5.51E+07	1.65	Y	0.74	96.8	
CS 12346-PeCDF	30.78		1.2343	1.2357	+2.6	9.71E+07	1.58	Y	0.86	89.1	
CS 123469-HxCDF	36.20		0.9776	0.9775	-0.2	6.76E+07	0.53	Y	1.36	82.6	
CS 1234689-HpCDF	39.45		1.0650	1.0653	+0.7	4.88E+07	0.45	Y	1.05	76.8	
~~SS 37Cl-2378-TCDD~~	~~27.29~~		~~1.0265~~	~~1.0265~~	~~0~~	~~2.95E+07~~	~~n/a~~		~~1.04~~	~~127~~	Not used in this project.
~~SS 12347-PeCDD~~	~~32.30~~	~~V~~	~~1.2141~~	~~1.2151~~	~~+1.9~~	~~5.51E+07~~	~~1.65~~	~~Y~~	~~0.86~~	~~135~~	CL 11Aug20
~~SS 12346-PeCDF~~	~~30.78~~		~~1.2343~~	~~1.2357~~	~~+2.6~~	~~9.71E+07~~	~~1.58~~	~~Y~~	~~0.96~~	~~120~~	
~~SS 123469-HxCDF~~	~~36.20~~		~~0.9776~~	~~0.9775~~	~~-0.2~~	~~6.76E+07~~	~~0.53~~	~~Y~~	~~0.83~~	~~124~~	
~~SS 1234689-HpCDF~~	~~39.45~~		~~1.0650~~	~~1.0653~~	~~+0.7~~	~~4.88E+07~~	~~0.45~~	~~Y~~	~~0.92~~	~~120~~	

Totals	Conc	EMPC
Total TCDD	0.408	0.408
Total PeCDD	1.98	2.14
Total HxCDD	4.4	7.88
Total HpCDD	52.4	52.4
Total Tetra-Octa Dioxins	364	367
Total TCDF	0.587	1.75
Total PeCDF	0.228	2.05
Total HxCDF	2.43	3.51
Total HpCDF	4.36	4.66
Total Tetra-Octa Furans	7.6	15.1
Total Tetra-Octa Dioxins & Furans	371	382

Lab ID: B4519_17655_DF_007 **Acq'd: 11 Aug 2020 01:14 PSW** **Wt/Vol: 9.24 g** **ICAL: MM3_DF_10012020_12JUN2020**

Client ID: CS-39 **UTP: 11-Aug-2020 08:57:24 PSW** **J-level: 0.541 pg/g** **Split: 1** **Checkcode: 970-709-FLQ**

Datafile: 200810R15 **Report: 11 Aug 2020 10:00 pw** **Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)**

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1368-TCDD	23.40	J	0.8591	0.8580	-1.5	1.25E+05	0.72	Y	1.18	0.408	4591	0.166
1379-TCDD	NotFnd		0.8732						1.18		4591	0.166
1369-TCDD	NotFnd		0.8901						1.18		4591	0.166
1469-TCDD	NotFnd		0.9205						1.18		4591	0.166
1247/1246/1248/1249-TCDD	NotFnd		0.9301						1.18		4591	0.166
1378-TCDD	NotFnd		0.9374						1.18		4591	0.166
1268-TCDD	NotFnd		0.9449						1.18		4591	0.166
1478-TCDD	NotFnd		0.9544						1.18		4591	0.166
1279-TCDD	NotFnd		0.9610						1.18		4591	0.166
1234/1269-TCDD	NotFnd		0.9746						1.18		4591	0.166
1236-TCDD	NotFnd		0.9802						1.18		4591	0.166
1237/1238-TCDD	NotFnd		0.9898						1.18		4591	0.166
1239-TCDD	NotFnd		0.9950						1.18		4591	0.166
2378-TCDD	**NotFnd**		**1.0009**						**1.18**		**4591**	**0.166**
1278-TCDD	NotFnd		1.0133						1.18		4591	0.166
1267-TCDD	NotFnd		1.0185						1.18		4591	0.166
1289-TCDD	NotFnd		1.0379						1.18		4591	0.166
12479/12468-PeCDD	30.26	J	0.9229	0.9225	-0.7	1.87E+05	1.49	Y	1.14	0.745	3753	0.132
12469-PeCDD	NotFnd		0.9396						1.14		3753	0.132
12368-PeCDD	31.38	J	0.9568	0.9565	-0.6	8.48E+04	1.58	Y	1.14	0.339	3753	0.132
12478-PeCDD	31.59	J	0.9626	0.9628	+0.4	3.74E+04	1.38	Y	1.14	0.149	3753	0.132
12379-PeCDD	31.68	J	0.9657	0.9656	-0.2	7.12E+04	1.66	Y	1.14	0.284	3753	0.132
12369/12467/12489-PeCDD	31.94	J	0.9738	0.9735	-0.6	5.72E+04	1.45	Y	1.14	0.229	3753	0.132
12346/12347-PeCDD	32.32	J EMPC	0.9853	0.9850	-0.6	4.03E+04	1.94	N	1.14	0.161	3753	0.132
12378-PeCDD	32.83	J	**1.0006**	**1.0007**	**+0.2**	**5.88E+04**	**1.34**	**Y**	**1.14**	**0.235**	**3753**	**0.132**
12367-PeCDD	NotFnd		1.0034						1.14		3753	0.132
12389-PeCDD	NotFnd		1.0141						1.14		3753	0.132
124679/124689-HxCDD	35.04		0.9542	0.9542	0	6.43E+05	1.09	Y	1.09	2.95	2996	0.109
123468-HxCDD	35.70	J EMPC	0.9721	0.9721	0	2.08E+05	0.87	N	1.09	0.953	2996	0.109
123679/123689-HxCDD	35.99	J EMPC	0.9799	0.9799	0	4.41E+05	1.47	N	1.09	2.02	2996	0.109
123469-HxCDD	NotFnd		0.9835						1.09		2996	0.109
123478-HxCDD	36.74	J EMPC	**1.0004**	**1.0004**	**0**	**7.03E+04**	**1.63**	**N**	1.09	**0.329**	**2996**	**0.109**
123678-HxCDD	36.86	J	**1.0035**	**1.0036**	**+0.2**	**1.45E+05**	**1.36**	**Y**	1.13	**0.717**	**2996**	**0.118**
123467-HxCDD	37.05	J EMPC	1.0088	1.0089	+0.2	3.87E+04	1.66	N	1.09	0.177	2996	0.109
123789-HxCDD	37.16	J	**1.0116**	**1.0117**	**+0.2**	**1.71E+05**	**1.21**	**Y**	1.05	**0.727**	**2996**	**0.102**

Lab ID: B4519_17655_DF_007 | Acq'd: 11 Aug 2020 01:14 PSW | Wt/Vol: 9.24 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-39 | UTP: 11-Aug-2020 08:57:24 PSW | J-level: 0.541 pg/g | Split: 1 | Checkcode: 970-709-FLQ

Datafile: 200810R15 | Report: 11 Aug 2020 10:00 pw | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1234679-HpCDD	39.33		0.9843	0.9842	-0.2	5.36E+06	1.04	Y	0.98	35.1	3060	0.114
1234678-HpCDD	**39.97**		**1.0003**	**1.0003**	**0**	**2.65E+06**	**1.03**	**Y**	**0.98**	**17.3**	**3060**	**0.114**
OCDD	**42.39**		**1.0003**	**1.0002**	**-0.3**	**2.64E+07**	**0.90**	**Y**	**1.08**	**304**	**5961**	**0.484**
OCDD-a	42.39	**EMPC**	1.0002	1.0002	0	1.43E+06	1.78	N	0.07	267	6864	9.04
1368-TCDF	21.14	J EMPC	0.8044	0.8026	-2.3	8.39E+04	0.59	N	0.98	0.192	3704	0.0977
1468-TCDF	NotFnd		0.8261						0.98		3704	0.0977
2468-TCDF	22.38	J EMPC	0.8511	0.8496	-2.0	1.44E+05	0.61	N	0.98	0.329	3704	0.0977
1346/1246-TCDF	NotFnd		0.8665						0.98		3704	0.0977
1347/1378/1247-TCDF	22.94	J	0.8723	0.8708	-2.1	1.28E+05	0.73	Y	0.98	0.293	3704	0.0977
1348-TCDF	23.27	J EMPC	0.8835	0.8834	-0.1	5.59E+04	0.94	N	0.98	0.128	3704	0.0977
1248/1367/1379-TCDF	23.42	J EMPC	0.8888	0.8889	+0.1	6.99E+04	1.03	N	0.98	0.16	3704	0.0977
1268-TCDF	NotFnd		0.9044						0.98		3704	0.0977
1467-TCDF	NotFnd		0.9098						0.98		3704	0.0977
1478-TCDF	NotFnd		0.9167						0.98		3704	0.0977
1369/1237-TCDF	NotFnd		0.9316						0.98		3704	0.0977
2467-TCDF	NotFnd		0.9369						0.98		3704	0.0977
2368-TCDF	NotFnd		0.9430						0.98		3704	0.0977
1238/1234/1678/1469/1236-TCDF	NotFnd		0.9468						0.98		3704	0.0977
1278-TCDF	25.41	J	0.9651	0.9646	-0.8	5.38E+04	0.82	Y	0.98	0.123	3704	0.0977
1349-TCDF	NotFnd		0.9704						0.98		3704	0.0977
1267-TCDF	NotFnd		0.9761						0.98		3704	0.0977
2346/1249-TCDF	NotFnd		0.9834						0.98		3704	0.0977
2347/1279-TCDF	NotFnd		0.9921						0.98		3704	0.0977
2348-TCDF	NotFnd		0.9964						0.98		3704	0.0977
2378-TCDF	**26.36**	J	**1.0006**	**1.0006**	**0**	**7.48E+04**	**0.70**	**Y**	**0.98**	**0.171**	**3704**	**0.0977**
2367/3467-TCDF	26.74	J EMPC	1.0156	1.0148	-1.3	6.84E+04	0.56	N	0.98	0.156	3704	0.0977
1269-TCDF	NotFnd		1.0249						0.98		3704	0.0977
1239-TCDF	NotFnd		1.0357						0.98		3704	0.0977
1289-TCDF	28.46	J EMPC	1.0799	1.0802	+0.5	8.55E+04	1.47	N	0.98	0.195	3704	0.0977
13468/12468-PeCDF	28.45	J EMPC	0.9084	0.9085	+0.2	2.20E+05	1.94	N	0.95	0.607	3516	0.0901
13678/13467/12467-PeCDF	30.05	J EMPC	0.9591	0.9594	+0.5	1.04E+05	1.81	N	0.95	0.286	4117	0.106
12368/13478/12478-PeCDF	30.19	J EMPC	0.9642	0.9640	-0.4	1.63E+05	1.26	N	0.95	0.451	4117	0.106
14678-PeCDF	NotFnd		0.9675						0.95		4117	0.106
13479-PeCDF	NotFnd		0.9706						0.95		4117	0.106
13469/12479-PeCDF	NotFnd		0.9787						0.95		4117	0.106
12346-PeCDF	NotFnd		0.9833						0.95		4117	0.106

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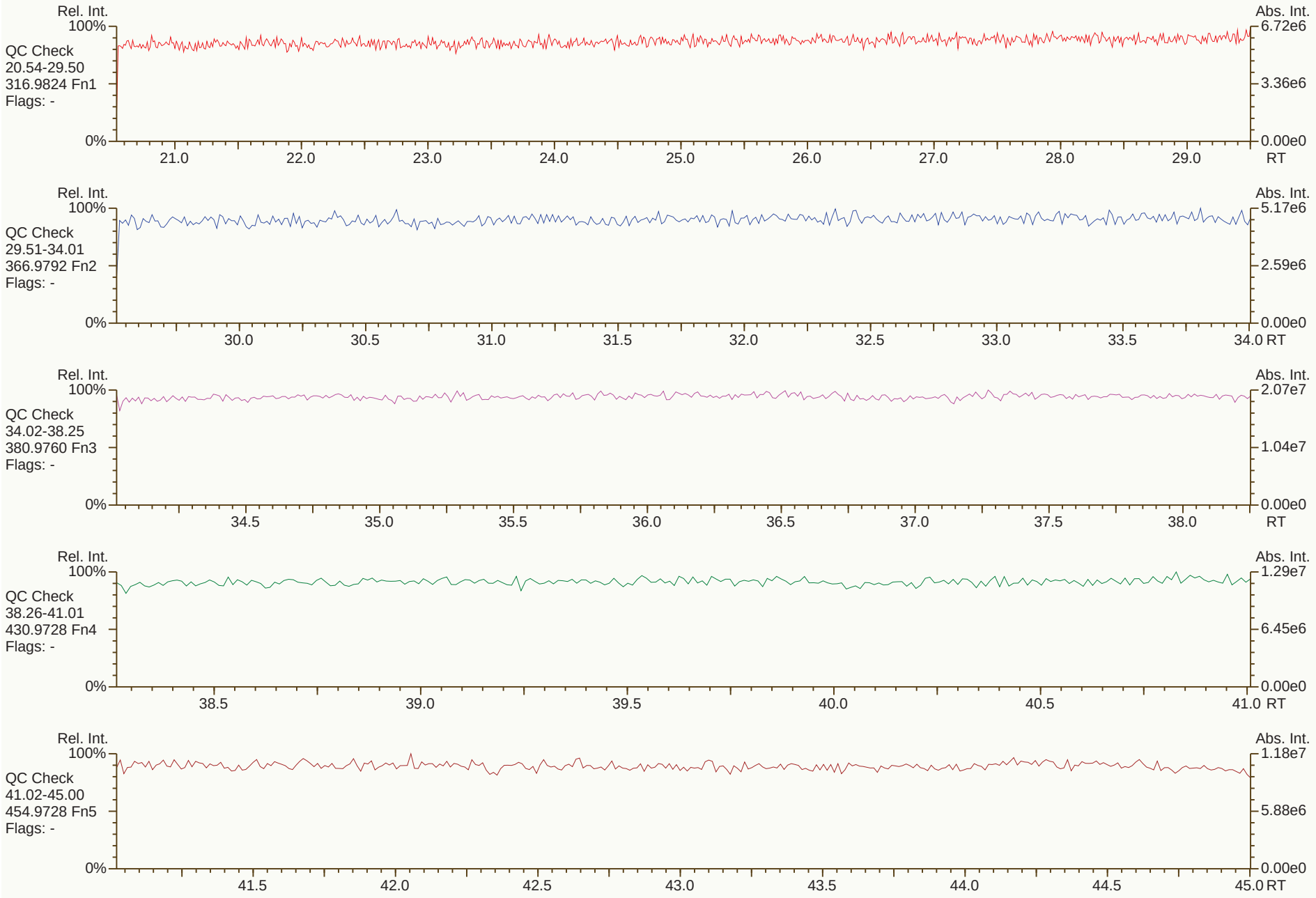
Client ID: CS-39 | UTP: 11-Aug-2020 08:57:24 PSW | J-level: 0.541 pg/g | Split: 1 | Checkcode: 970-709-FLQ

Datafile: 200810R15 | Report: 11 Aug 2020 10:00 pw | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
23468/12469-PeCDF	NotFnd		0.9861						0.95		4117	0.106
12347-PeCDF	NotFnd		0.9887						0.95		4117	0.106
12348-PeCDF	NotFnd		0.9938						0.95		4117	0.106
12378-PeCDF	**31.33**	J	**1.0006**	**1.0003**	**-0.6**	**8.41E+04**	**1.74**	**Y**	**0.95**	**0.228**	**4117**	**0.108**
12678/12367-PeCDF	31.62	J EMPC	1.0095	1.0094	-0.2	7.02E+04	1.18	N	0.95	0.194	4117	0.106
12379-PeCDF	NotFnd		1.0150						0.95		4117	0.106
12679-PeCDF	NotFnd		0.9926						0.95		4117	0.106
23467/12369-PeCDF	NotFnd		0.9966						0.95		4117	0.106
23478-PeCDF	**32.48**	J EMPC	**1.0005**	**1.0008**	**+0.6**	**1.01E+05**	**1.88**	**N**	**0.95**	**0.285**	**4117**	**0.103**
23478/12489-PeCDF	NotFnd		0.0000						0.95			
12489-PeCDF	NotFnd		1.0047						0.95		4117	0.106
12349-PeCDF	NotFnd		1.0107						0.95		4117	0.106
12389-PeCDF	NotFnd		1.0339						0.95		4117	0.106
123468-HxCDF	34.39	J EMPC	0.9617	0.9617	0	8.44E+04	1.05	N	1.11	0.291	3651	0.106
124678/134678-HxCDF	34.58	J	0.9673	0.9672	-0.2	3.10E+05	1.31	Y	1.11	1.07	3651	0.106
134679-HxCDF	NotFnd		0.9737						1.11		3651	0.106
124679-HxCDF	35.02	J	0.9792	0.9793	+0.2	5.70E+04	1.22	Y	1.11	0.197	3651	0.106
124689-HxCDF	35.23	J	0.9854	0.9853	-0.2	1.44E+05	1.35	Y	1.11	0.498	3651	0.106
123467-HxCDF	35.67	J EMPC	0.9972	0.9974	+0.4	4.40E+04	2.03	N	1.11	0.152	3651	0.106
123478-HxCDF	**35.78**	J EMPC	**1.0005**	**1.0007**	**+0.4**	**8.76E+04**	**1.02**	**N**	**1.20**	**0.276**	**3651**	**0.0907**
123678-HxCDF	**35.91**	J EMPC	**1.0004**	**1.0003**	**-0.2**	**1.15E+05**	**0.98**	**N**	**1.07**	**0.358**	**3651**	**0.0944**
123479-HxCDF	NotFnd		1.0049						1.11		3651	0.106
123469-HxCDF	NotFnd		1.0089						1.11		3651	0.106
123679-HxCDF	NotFnd		0.9945						1.11		3651	0.106
234678-HxCDF	**36.55**	J	**1.0005**	**1.0003**	**-0.4**	**9.65E+04**	**1.18**	**Y**	**1.10**	**0.342**	**3651**	**0.11**
234678/123689-HxCDF	NotFnd		0.0000						1.10			
123689-HxCDF	NotFnd		1.0054						1.11		3651	0.106
123789-HxCDF	**NotFnd**		**1.0004**						**1.09**		**3651**	**0.136**
123789/123489-HxCDF	NotFnd		0.0000						1.09			
123489-HxCDF	37.53	J	1.0008	1.0004	-0.9	9.43E+04	1.06	Y	1.11	0.325	3651	0.106
1234678-HpCDF	**39.06**	**J**	**1.0003**	**1.0003**	**0**	**4.53E+05**	**1.00**	**Y**	**1.28**	**1.87**	**2821**	**0.0721**
1234679-HpCDF	39.33	**J**	1.0072	1.0074	+0.5	3.17E+04	1.10	Y	1.27	0.151	2821	0.0813
1234689-HpCDF	39.46	**J**	1.0107	1.0107	0	4.93E+05	1.09	Y	1.27	2.34	2821	0.0813
1234789-HpCDF	**40.38**	**J EMPC**	**1.0002**	**1.0001**	**-0.2**	**5.41E+04**	**0.80**	**N**	**1.27**	**0.303**	**2821**	**0.0938**
OCDF	**42.55**	**J EMPC**	**1.0003**	**1.0002**	**-0.3**	**3.03E+05**	**1.07**	**N**	**1.01**	**3.09**	**3949**	**0.288**
OCDF-a	NotFnd		1.0002						0.06		4441	5.17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QC Check
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Flags: -
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23.0
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25.0
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27.0
28.0
29.0
Rel. Int.
100%
0%
Abs. Int.
5.17e6
2.59e6
0.00e0
RT
QC Check
29.51-34.01
366.9792 Fn2
Flags: -
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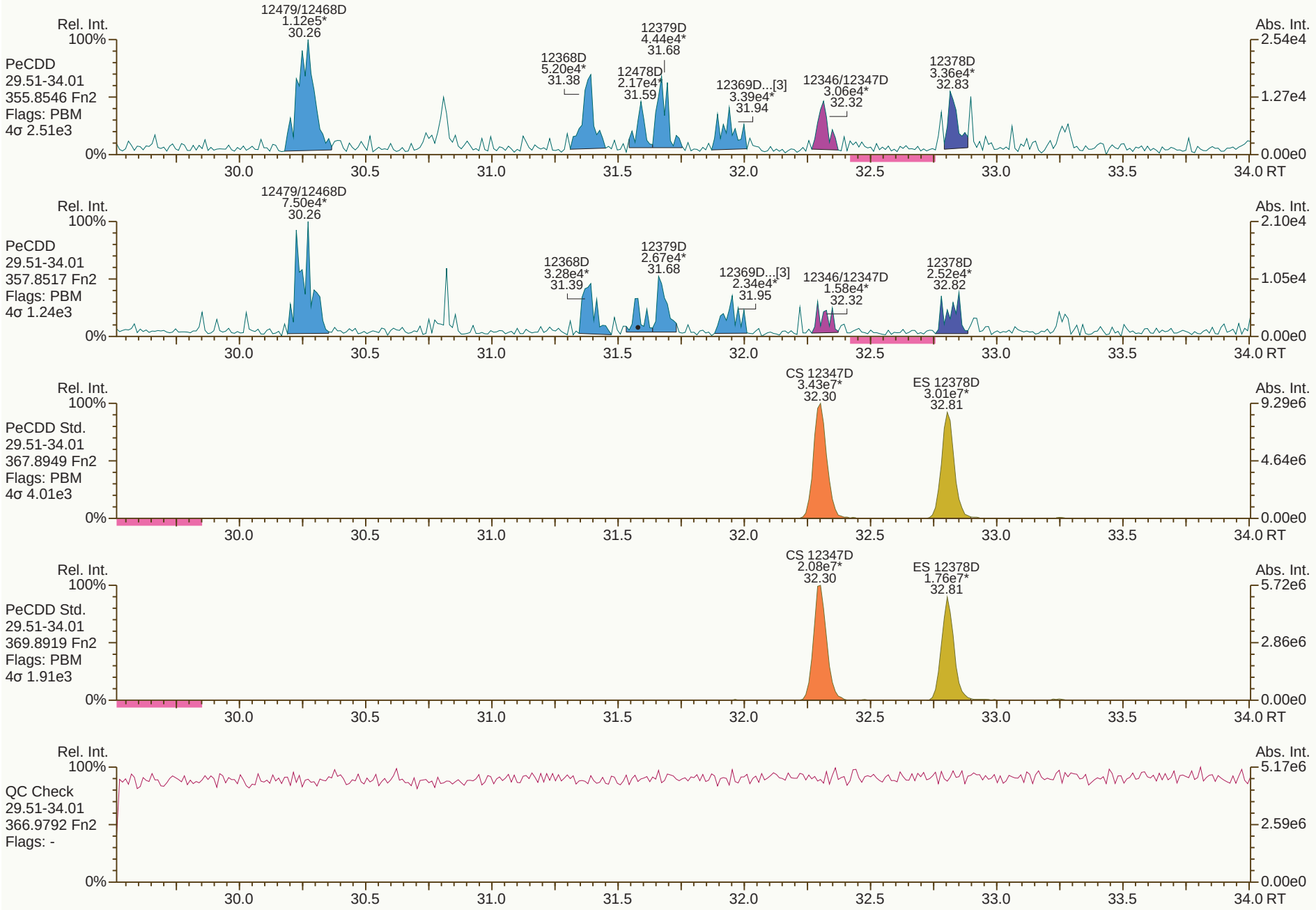
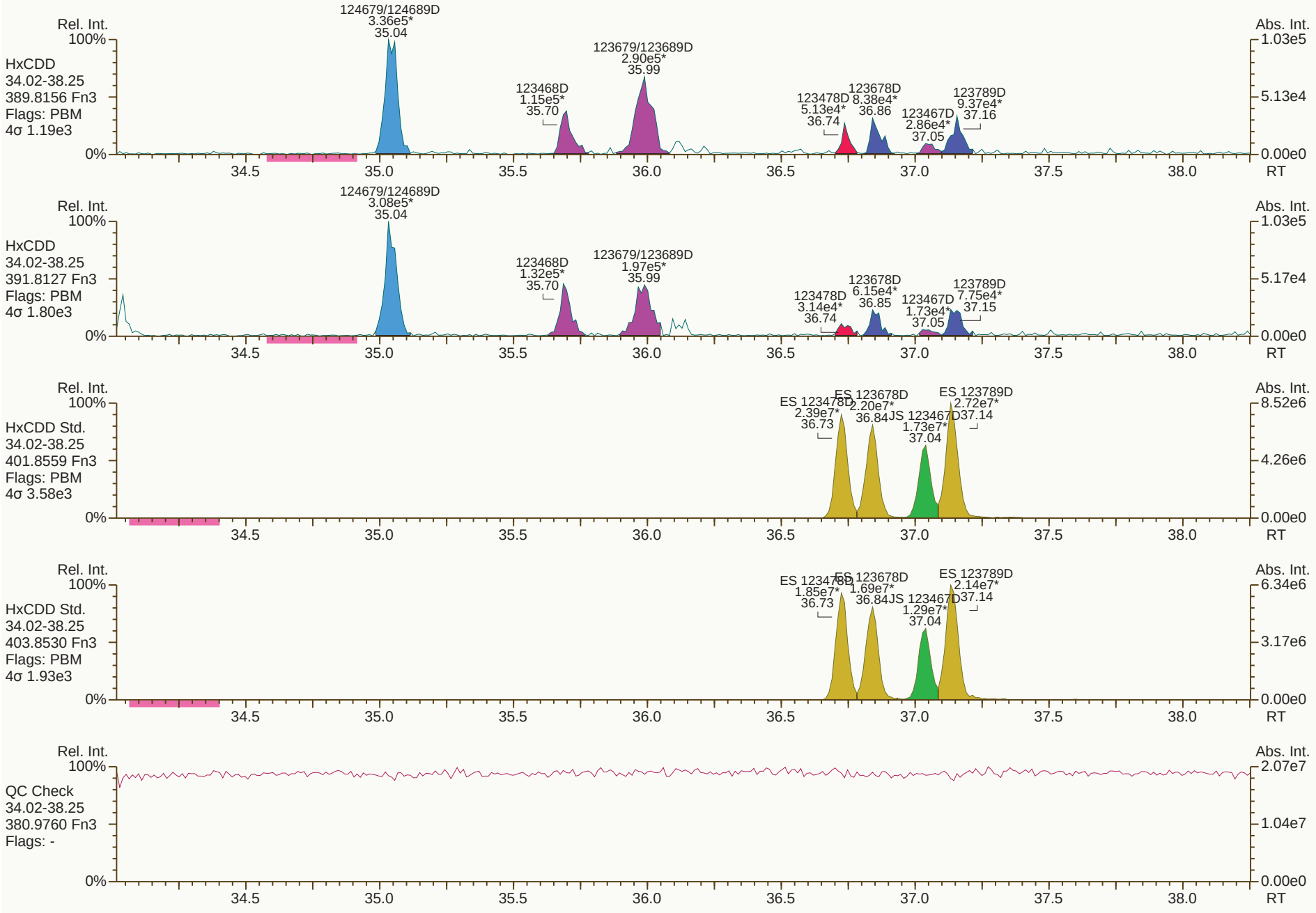
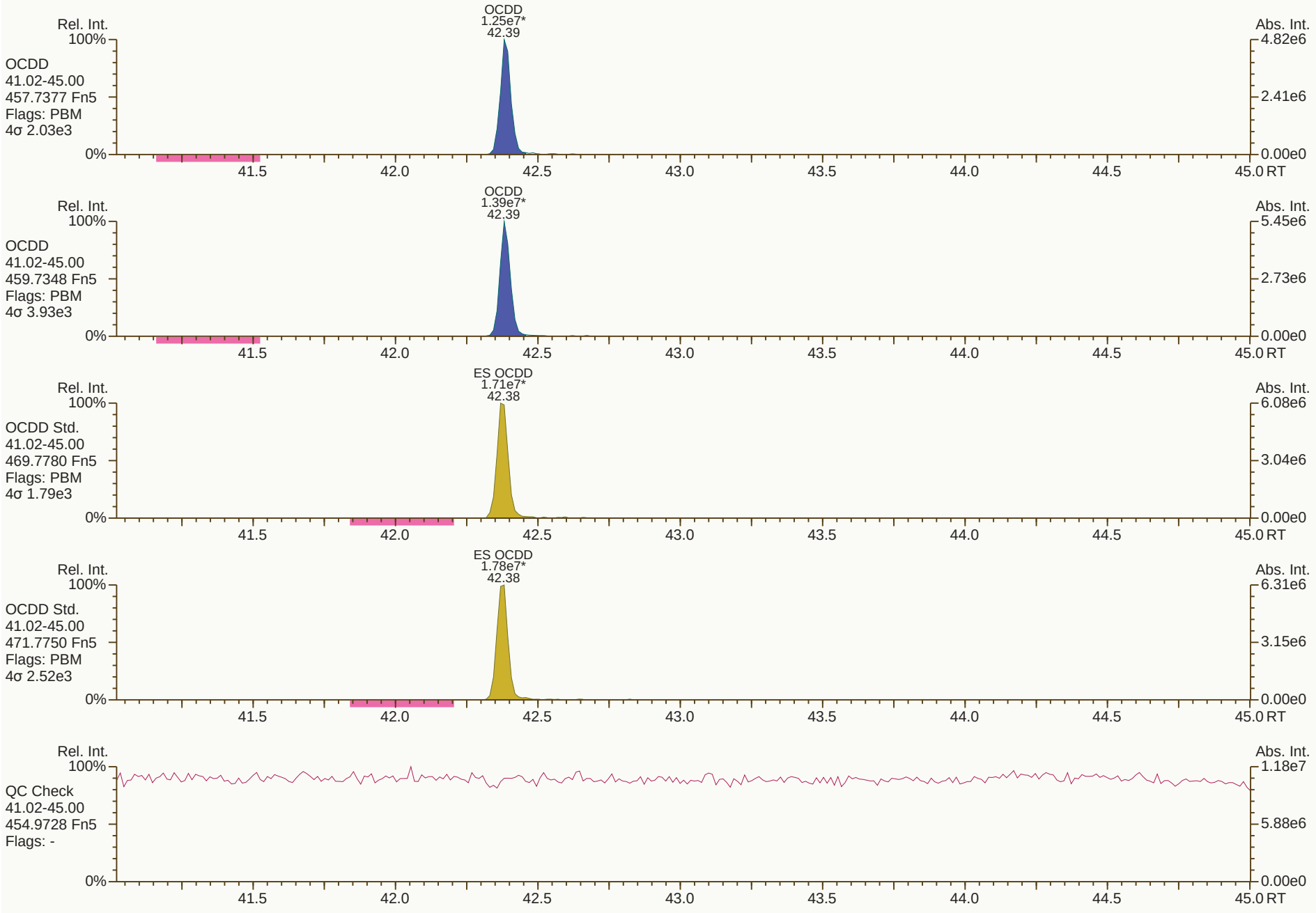
RT
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
Rel. Int.
100%
0%
Abs. Int.
1.29e7
6.45e6
0.00e0
RT
QC Check
38.26-41.01
430.9728 Fn4
Flags: -
38.5
39.0
39.5
40.0
40.5
41.0
Rel. Int.
100%
0%
Abs. Int.
1.18e7
5.88e6
0.00e0
RT
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0


Rel. Int.
100%
TCDD
20.54-29.50
319.8965 Fn1
Flags: PBM
4σ 3.32e3
0%
1368D
5.24e4*
23.40
Abs. Int.
1.51e4
7.56e3
0.00e0
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
TCDD
20.54-29.50
321.8936 Fn1
Flags: PBM
4σ 1.27e3
0%
1368D
7.26e4*
23.39
Abs. Int.
2.09e4
1.04e4
0.00e0
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
37Cl-TCDD
20.54-29.50
327.8850 Fn1
Flags: PBM
4σ 1.60e3
0%
CS 37Cl-2378D
2.95e7*
27.29
Abs. Int.
6.56e6
3.28e6
0.00e0
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
331.9368 Fn1
Flags: PBM
4σ 7.15e3
0%
JS 1234D
3.34e7*
26.58
ES 2378D
2.47e7*
27.27
Abs. Int.
7.38e6
3.69e6
0.00e0
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
333.9339 Fn1
Flags: PBM
4σ 2.75e3
0%
JS 1234D
4.35e7*
26.58
ES 2378D
3.16e7*
27.27
Abs. Int.
9.56e6
4.78e6
0.00e0
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT


Rel. Int.
Abs. Int.
PeCDD
29.51-34.01
355.8546 Fn2
Flags: PBM
4σ 2.51e3
12479/12468D
1.12e5*
30.26
12368D
5.20e4*
31.38
12379D
4.44e4*
31.68
12478D
2.17e4*
31.59
12369D...[3]
3.39e4*
31.94
12346/12347D
3.06e4*
32.32
12378D
3.36e4*
32.83
PeCDD
29.51-34.01
357.8517 Fn2
Flags: PBM
4σ 1.24e3
12479/12468D
7.50e4*
30.26
12368D
3.28e4*
31.39
12379D
2.67e4*
31.68
12369D...[3]
2.34e4*
31.95
12346/12347D
1.58e4*
32.32
12378D
2.52e4*
32.82
PeCDD Std.
29.51-34.01
367.8949 Fn2
Flags: PBM
4σ 4.01e3
CS 12347D
3.43e7*
32.30
ES 12378D
3.01e7*
32.81
PeCDD Std.
29.51-34.01
369.8919 Fn2
Flags: PBM
4σ 1.91e3
CS 12347D
2.08e7*
32.30
ES 12378D
1.76e7*
32.81
QC Check
29.51-34.01
366.9792 Fn2
Flags: -
100%
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT

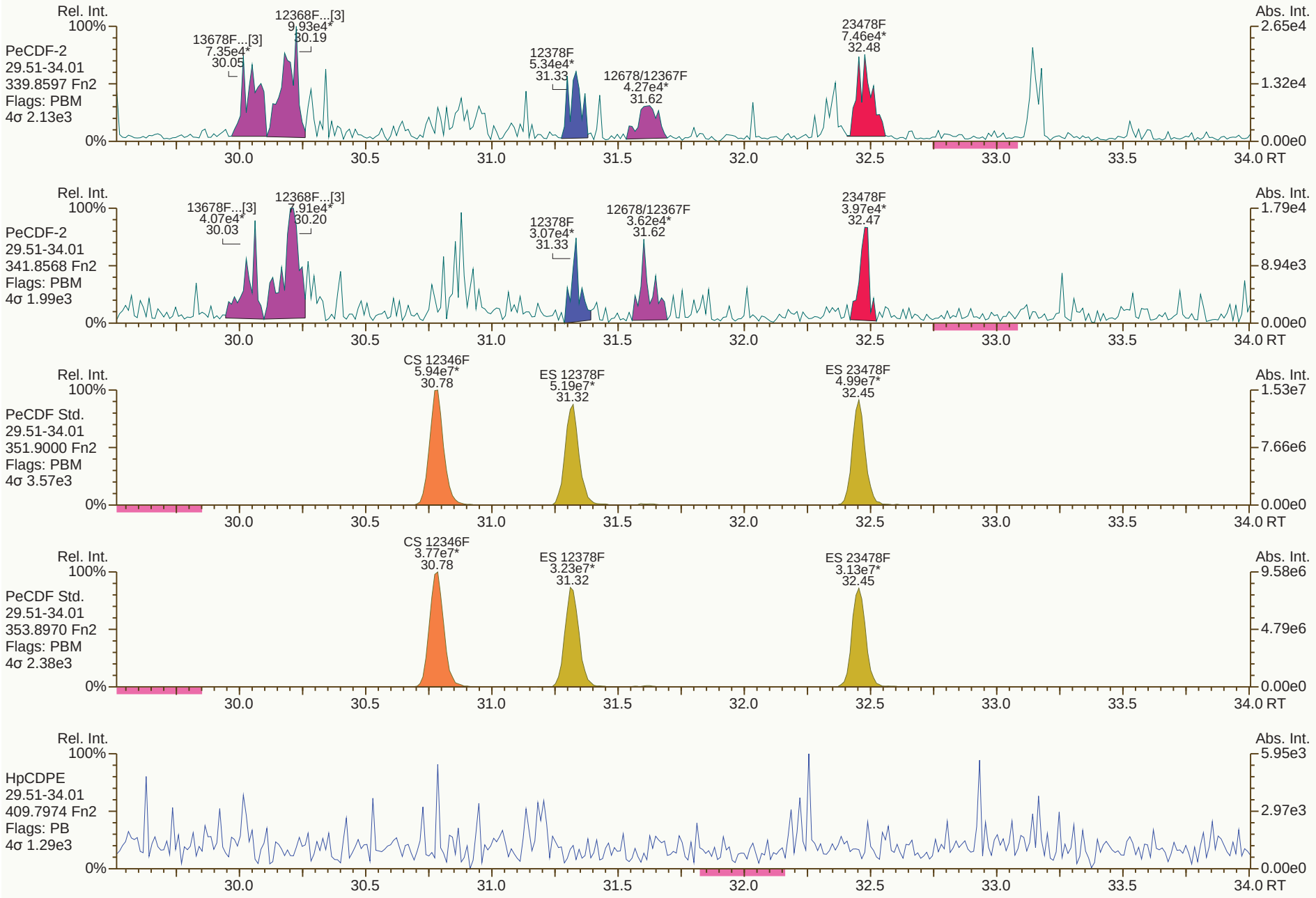

Rel. Int.
100%
HxCDD
34.02-38.25
389.8156 Fn3
Flags: PBM
4σ 1.19e3
124679/124689D
3.36e5*
35.04
123679/123689D
2.90e5*
35.99
123468D
1.15e5*
35.70
123478D
5.13e4*
36.74
123678D
8.38e4*
36.86
123467D
2.86e4*
37.05
123789D
9.37e4*
37.16
Abs. Int.
1.03e5
5.13e4
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD
34.02-38.25
391.8127 Fn3
Flags: PBM
4σ 1.80e3
124679/124689D
3.08e5*
35.04
123679/123689D
1.97e5*
35.99
123468D
1.32e5*
35.70
123478D
3.14e4*
36.74
123678D
6.15e4*
36.85
123467D
1.73e4*
37.05
123789D
7.75e4*
37.15
Abs. Int.
1.03e5
5.17e4
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
401.8559 Fn3
Flags: PBM
4σ 3.58e3
ES 123478D
2.39e7*
36.73
ES 123678D
2.20e7*
36.84
JS 123467D
1.73e7*
37.04
ES 123789D
2.72e7*
37.14
Abs. Int.
8.52e6
4.26e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
403.8530 Fn3
Flags: PBM
4σ 1.93e3
ES 123478D
1.85e7*
36.73
ES 123678D
1.69e7*
36.84
JS 123467D
1.29e7*
37.04
ES 123789D
2.14e7*
37.14
Abs. Int.
6.34e6
3.17e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
Abs. Int.
2.07e7
1.04e7
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT

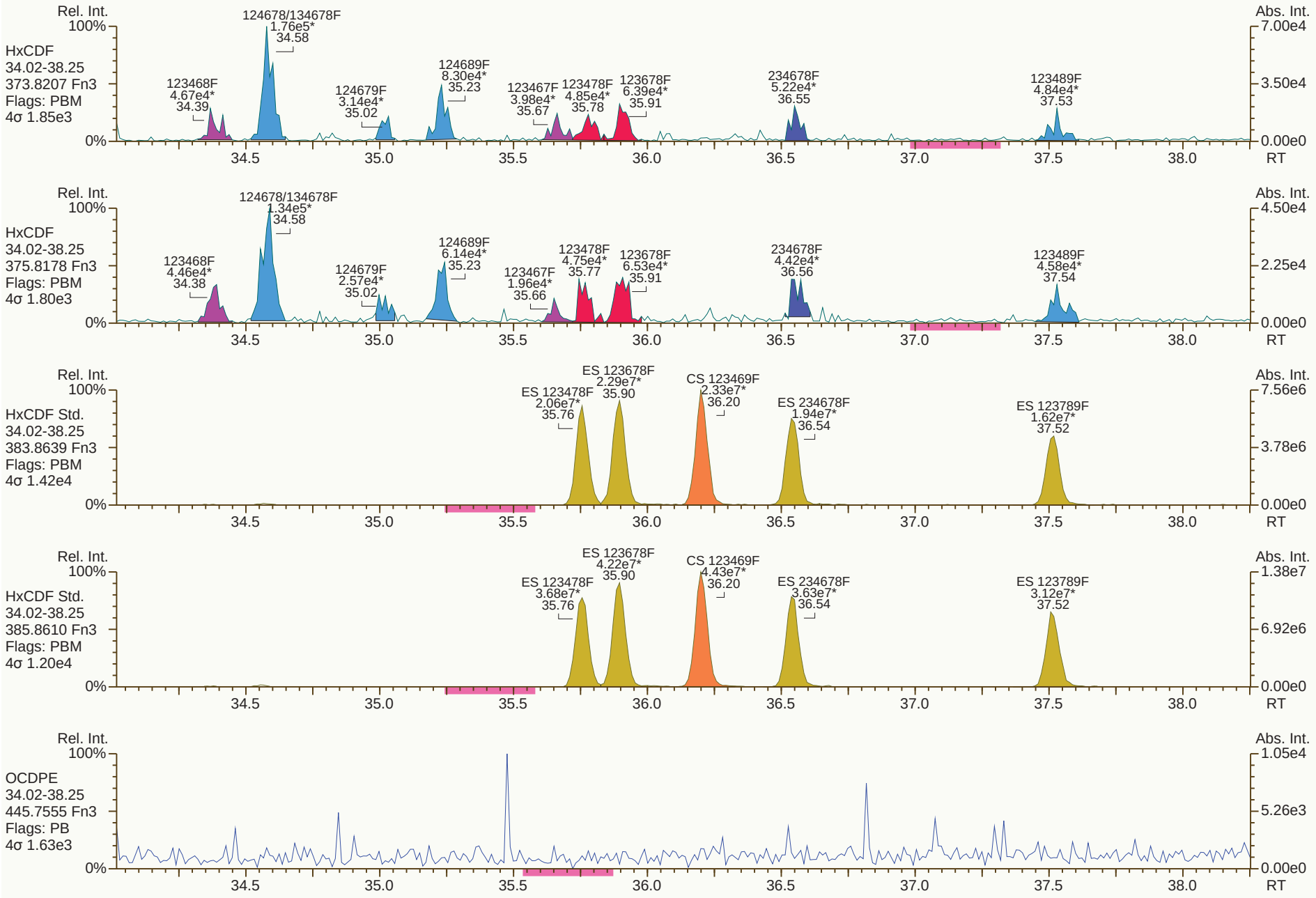

Rel. Int.
100%
HpCDD
38.26-41.01
423.7767 Fn4
Flags: PBM
4σ 2.02e3
1234679D
2.73e6*
39.33
1234678D
1.34e6*
39.97
Abs. Int.
1.05e6
5.23e5
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.26-41.01
425.7737 Fn4
Flags: PBM
4σ 1.05e3
1234679D
2.62e6*
39.32
1234678D
1.31e6*
39.97
Abs. Int.
1.07e6
5.34e5
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
435.8169 Fn4
Flags: PBM
4σ 2.16e3
ES 1234678D
1.75e7*
39.96
Abs. Int.
7.67e6
3.83e6
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
437.8140 Fn4
Flags: PBM
4σ 2.61e3
ES 1234678D
1.61e7*
39.96
Abs. Int.
6.95e6
3.47e6
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.26-41.01
430.9728 Fn4
Flags: -
Abs. Int.
1.29e7
6.45e6
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT


OCDD
1.25e7*
42.39
Rel. Int.
100%
OCDD
41.02-45.00
457.7377 Fn5
Flags: PBM
4σ 2.03e3
0%
Abs. Int.
4.82e6
2.41e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDD
1.39e7*
42.39
Rel. Int.
100%
OCDD
41.02-45.00
459.7348 Fn5
Flags: PBM
4σ 3.93e3
0%
Abs. Int.
5.45e6
2.73e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
1.71e7*
42.38
Rel. Int.
100%
OCDD Std.
41.02-45.00
469.7780 Fn5
Flags: PBM
4σ 1.79e3
0%
Abs. Int.
6.08e6
3.04e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
1.78e7*
42.38
Rel. Int.
100%
OCDD Std.
41.02-45.00
471.7750 Fn5
Flags: PBM
4σ 2.52e3
0%
Abs. Int.
6.31e6
3.15e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
1.18e7
5.88e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT


Rel. Int.
100%
TCDF
20.54-29.50
303.9016 Fn1
Flags: PBM
4σ 1.86e3
1368F 3.65e4* 21.14
2468F 6.26e4* 22.38
1347F...[3] 5.42e4* 22.94
1348F 2.98e4* 23.27
1248F...[3] 4.06e4* 23.42
1278F 2.43e4* 25.41
2378F 3.09e4* 26.36
2367/3467F 2.97e4* 26.74
1289F 7.12e4* 28.46
Abs. Int.
2.16e4
1.08e4
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
TCDF
20.54-29.50
305.8987 Fn1
Flags: PBM
4σ 1.84e3
1368F 6.22e4* 21.16
2468F 1.02e5* 22.39
1347F...[3] 7.40e4* 22.97
1348F 3.16e4* 23.28
1248F...[3] 3.95e4* 23.40
1278F 2.95e4* 25.41
2378F 4.39e4* 26.38
2367/3467F 5.34e4* 26.75
1289F 4.83e4* 28.45
Abs. Int.
2.84e4
1.42e4
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
315.9419 Fn1
Flags: PBM
4σ 1.74e4
JS 1234F 5.64e7* 24.91
ES 2378F 4.32e7* 26.34
Abs. Int.
1.09e7
5.46e6
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
317.9389 Fn1
Flags: PBM
4σ 1.16e4
JS 1234F 7.03e7* 24.91
ES 2378F 5.34e7* 26.34
Abs. Int.
1.39e7
6.95e6
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
HxCDPE
20.54-29.50
375.8364 Fn1
Flags: PB
4σ 1.63e3
Abs. Int.
5.12e3
2.56e3
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT


13468/12468F
1.67e5*
28.45
Rel. Int.
100%
Abs. Int.
4.65e4
PeCDF-1
20.54-29.50
339.8597 Fn1
Flags: PBM
4σ 2.04e3
2.33e4
0%
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
13468/12468F
8.62e4*
28.45
Rel. Int.
100%
Abs. Int.
2.35e4
PeCDF-1
20.54-29.50
341.8568 Fn1
Flags: PBM
4σ 1.47e3
1.18e4
0%
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
Abs. Int.
6.72e6
QC Check
20.54-29.50
316.9824 Fn1
Flags: -
3.36e6
0%
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
PeCDF-2
29.51-34.01
339.8597 Fn2
Flags: PBM
4σ 2.13e3
13678F...[3]
7.35e4*
30.05
12368F...[3]
9.93e4*
30.19
12378F
5.34e4*
31.33
12678/12367F
4.27e4*
31.62
23478F
7.46e4*
32.48
Abs. Int.
2.65e4
1.32e4
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF-2
29.51-34.01
341.8568 Fn2
Flags: PBM
4σ 1.99e3
13678F...[3]
4.07e4*
30.03
12368F...[3]
7.91e4*
30.20
12378F
3.07e4*
31.33
12678/12367F
3.62e4*
31.62
23478F
3.97e4*
32.47
Abs. Int.
1.79e4
8.94e3
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
351.9000 Fn2
Flags: PBM
4σ 3.57e3
CS 12346F
5.94e7*
30.78
ES 12378F
5.19e7*
31.32
ES 23478F
4.99e7*
32.45
Abs. Int.
1.53e7
7.66e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
353.8970 Fn2
Flags: PBM
4σ 2.38e3
CS 12346F
3.77e7*
30.78
ES 12378F
3.23e7*
31.32
ES 23478F
3.13e7*
32.45
Abs. Int.
9.58e6
4.79e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
HpCDPE
29.51-34.01
409.7974 Fn2
Flags: PB
4σ 1.29e3
Abs. Int.
5.95e3
2.97e3
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT


Rel. Int.
100%
HxCDF
34.02-38.25
373.8207 Fn3
Flags: PBM
4σ 1.85e3
123468F 4.67e4* 34.39
124678/134678F 1.76e5* 34.58
124679F 3.14e4* 35.02
124689F 8.30e4* 35.23
123467F 3.98e4* 35.67
123478F 4.85e4* 35.78
123678F 6.39e4* 35.91
234678F 5.22e4* 36.55
123489F 4.84e4* 37.53
Abs. Int.
7.00e4
3.50e4
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0
RT
Rel. Int.
100%
HxCDF
34.02-38.25
375.8178 Fn3
Flags: PBM
4σ 1.80e3
123468F 4.46e4* 34.38
124678/134678F 1.34e5* 34.58
124679F 2.57e4* 35.02
124689F 6.14e4* 35.23
123467F 1.96e4* 35.66
123478F 4.75e4* 35.77
123678F 6.53e4* 35.91
234678F 4.42e4* 36.56
123489F 4.58e4* 37.54
Abs. Int.
4.50e4
2.25e4
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0
RT
Rel. Int.
100%
HxCDF Std.
34.02-38.25
383.8639 Fn3
Flags: PBM
4σ 1.42e4
ES 123478F 2.06e7* 35.76
ES 123678F 2.29e7* 35.90
CS 123469F 2.33e7* 36.20
ES 234678F 1.94e7* 36.54
ES 123789F 1.62e7* 37.52
Abs. Int.
7.56e6
3.78e6
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0
RT
Rel. Int.
100%
HxCDF Std.
34.02-38.25
385.8610 Fn3
Flags: PBM
4σ 1.20e4
ES 123478F 3.68e7* 35.76
ES 123678F 4.22e7* 35.90
CS 123469F 4.43e7* 36.20
ES 234678F 3.63e7* 36.54
ES 123789F 3.12e7* 37.52
Abs. Int.
1.38e7
6.92e6
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0
RT
Rel. Int.
100%
OCDPE
34.02-38.25
445.7555 Fn3
Flags: PB
4σ 1.63e3
Abs. Int.
1.05e4
5.26e3
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0
RT


Rel. Int.
100%
HpCDF
38.26-41.01
407.7818 Fn4
Flags: PBM
4σ 1.30e3
1234678F
2.27e5*
39.06
1234679F
1.66e4*
39.33
1234689F
2.57e5*
39.46
1234789F
2.76e4*
40.38
Abs. Int.
1.11e5
5.55e4
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF
38.26-41.01
409.7788 Fn4
Flags: PBM
4σ 1.52e3
1234678F
2.27e5*
39.05
1234679F
1.51e4*
39.33
1234689F
2.35e5*
39.46
1234789F
3.45e4*
40.39
Abs. Int.
1.03e5
5.15e4
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.26-41.01
417.8253 Fn4
Flags: PBM
4σ 2.92e3
ES 1234678F
1.31e7*
39.05
CS 1234689F
1.50e7*
39.45
ES 1234789F
9.41e6*
40.37
Abs. Int.
6.47e6
3.23e6
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.26-41.01
419.8220 Fn4
Flags: PBM
4σ 1.96e3
ES 1234678F
2.79e7*
39.05
CS 1234689F
3.38e7*
39.45
ES 1234789F
2.11e7*
40.37
Abs. Int.
1.33e7
6.66e6
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
NCDPE
38.26-41.01
479.7165 Fn4
Flags: PB
4σ 1.48e3
Abs. Int.
1.11e4
5.53e3
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT


OCDF
1.72e5*
42.55
Rel. Int.
100%
OCDF
41.02-45.00
441.7428 Fn5
Flags: PBM
4σ 1.07e3
0%
Abs. Int.
8.17e4
4.08e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDF
1.60e5*
42.55
Rel. Int.
100%
OCDF
41.02-45.00
443.7398 Fn5
Flags: PBM
4σ 2.88e3
0%
Abs. Int.
5.96e4
2.98e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDF
2.05e7*
42.54
Rel. Int.
100%
OCDF Std.
41.02-45.00
453.7830 Fn5
Flags: PBM
4σ 4.01e3
0%
Abs. Int.
7.17e6
3.59e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDF
2.15e7*
42.54
Rel. Int.
100%
OCDF Std.
41.02-45.00
455.7801 Fn5
Flags: PBM
4σ 2.33e3
0%
Abs. Int.
8.10e6
4.05e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
DCDPE
41.02-45.00
513.6775 Fn5
Flags: PB
4σ 1.30e3
0%
Abs. Int.
1.07e4
5.36e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

Lab ID: B4519_17655_DF_008 **Acq'd:** 11 Aug 2020 02:02 PSW **Wt/Vol:** 9.38 g **ICAL:** MM3_DF_10012020_12JUN2020

Client ID: CS-35 **UTP:** 11-Aug-2020 09:02:00 PSW **J-level:** 0.533 pg/g **Split:** 1 **Checkcode:** 005-628-YFS

Datafile: 200810R16 **Report:** 11 Aug 2020 10:00 pw **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	27.29	J	1.0009	1.0012	+0.5	4.13E+04	0.80	Y	1.18	0.115	4770	0.147
12378-PeCDD	32.82	J EMPC	1.0006	1.0007	+0.2	1.25E+05	2.73	N	1.14	0.407	5288	0.158
123478-HxCDD	36.73	J	1.0004	1.0004	0	4.77E+05	1.31	Y	1.09	1.8	4580	0.134
123678-HxCDD	36.84		1.0035	1.0035	0	1.11E+06	1.13	Y	1.13	4.21	4580	0.147
123789-HxCDD	37.14		1.0116	1.0116	0	9.40E+05	1.22	Y	1.05	3.11	4580	0.125
1234678-HpCDD	39.96		1.0003	1.0003	0	3.15E+07	1.05	Y	0.98	158	3882	0.11
OCDD	42.38		1.0003	1.0003	0	1.54E+08	0.89	Y	1.08	1,360	5866	0.37
2378-TCDF	26.37	J EMPC	1.0006	1.0015	+1.4	1.29E+05	0.92	N	0.98	0.254	3619	0.0837
12378-PeCDF	31.33	J	1.0006	1.0006	0	1.88E+05	1.54	Y	0.95	0.407	7378	0.147
23478-PeCDF	32.48	J	1.0005	1.0010	+1.0	4.26E+05	1.54	Y	0.95	0.987	7378	0.153
123478-HxCDF	35.76		1.0005	1.0005	0	1.06E+06	1.15	Y	1.20	2.73	10439	0.226
123678-HxCDF	35.90	J	1.0004	1.0005	+0.2	4.91E+05	1.37	Y	1.07	1.25	10439	0.222
234678-HxCDF	36.54	J	1.0005	1.0003	-0.4	7.04E+05	1.35	Y	1.10	2.03	10439	0.239
123789-HxCDF	NotFnd		1.0004	-		-	-	-	1.09	-	10439	0.3
1234678-HpCDF	39.05		1.0003	1.0003	0	1.05E+07	1.08	Y	1.28	34.7	3246	0.064
1234789-HpCDF	40.37		1.0002	1.0002	0	8.12E+05	0.98	Y	1.27	3.46	3246	0.0868
OCDF	42.54		1.0003	1.0003	0	1.39E+07	0.90	Y	1.01	109	5022	0.278

Name	Act RT	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	27.25	1.0255	1.0257	+0.3	6.51E+07	0.78	Y	1.01	81.8
ES 12378-PeCDD	32.80	1.2330	1.2343	+2.6	5.77E+07	1.71	Y	0.87	83.7
ES 123478-HxCDD	36.71	0.9917	0.9916	-0.2	5.18E+07	1.28	Y	1.10	70.8
ES 123678-HxCDD	36.83	0.9947	0.9947	0	4.99E+07	1.31	Y	1.06	70.5
ES 123789-HxCDD	37.13	1.0028	1.0028	0	6.14E+07	1.30	Y	1.22	75.6
ES 1234678-HpCDD	39.94	1.0785	1.0788	+0.7	4.33E+07	1.05	Y	0.99	65.3
ES OCDD	42.37	1.1439	1.1442	+0.8	4.50E+07	0.90	Y	0.67	50.3
ES 2378-TCDF	26.33	1.0572	1.0577	+0.8	1.11E+08	0.77	Y	1.01	82.8
ES 12378-PeCDF	31.31	1.2558	1.2578	+3.8	1.04E+08	1.56	Y	0.90	87.7
ES 23478-PeCDF	32.44	1.3012	1.3032	+3.9	9.73E+07	1.58	Y	0.89	83.1
ES 123478-HxCDF	35.75	0.9655	0.9654	-0.2	6.91E+07	0.52	Y	1.43	72.4
ES 123678-HxCDF	35.89	0.9693	0.9692	-0.2	7.85E+07	0.53	Y	1.63	72
ES 234678-HxCDF	36.53	0.9867	0.9867	0	6.74E+07	0.52	Y	1.48	68.2
ES 123789-HxCDF	37.50	1.0130	1.0129	-0.2	6.00E+07	0.53	Y	1.29	69.6
ES 1234678-HpCDF	39.03	1.0540	1.0542	+0.5	5.05E+07	0.43	Y	1.15	66
ES 1234789-HpCDF	40.36	1.0898	1.0901	+0.7	3.95E+07	0.44	Y	0.91	65.2
ES OCDF	42.53	1.1484	1.1487	+0.8	5.38E+07	0.93	Y	0.83	48.7

Lab ID: B4519_17655_DF_008 | Acq'd: 11 Aug 2020 02:02 PSW | Wt/Vol: 9.38 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-35 | UTP: 11-Aug-2020 09:02:00 PSW | J-level: 0.533 pg/g | Split: 1 | Checkcode: 005-628-YFS

Datafile: 200810R16 | Report: 11 Aug 2020 10:00 pw | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %	
JS 1234-TCDD	26.57		-	-	-	7.91E+07	0.79	Y	-	-	
JS 1234-TCDF	24.90		-	-	-	1.32E+08	0.79	Y	-	-	
JS 123467-HxCDD	37.03		-	-	-	3.34E+07	1.31	Y	-	-	
CS 37Cl-2378-TCDD	27.28		1.0265	1.0265	0	2.97E+07	n/a	-	1.04	90.5	
CS 12347-PeCDD	32.29		1.2141	1.2153	+2.3	5.69E+07	1.64	Y	0.74	97.2	
CS 12346-PeCDF	30.78		1.2343	1.2361	+3.3	1.02E+08	1.58	Y	0.86	89.9	
CS 123469-HxCDF	36.19		0.9776	0.9775	-0.2	6.72E+07	0.54	Y	1.36	74.1	
CS 1234689-HpCDF	39.44		1.0650	1.0653	+0.7	5.28E+07	0.45	Y	1.05	75	
~~SS 37Cl-2378-TCDD~~	~~27.28~~		~~1.0265~~	~~1.0265~~	~~0~~	~~2.97E+07~~	~~n/a~~		~~1.04~~	~~110~~	Not used in this project.
~~SS 12347-PeCDD~~	~~32.29~~		~~1.2141~~	~~1.2153~~	~~+2.3~~	~~5.69E+07~~	~~1.64~~	~~Y~~	~~0.86~~	~~115~~	CL 11Aug20
~~SS 12346-PeCDF~~	~~30.78~~		~~1.2343~~	~~1.2361~~	~~+3.3~~	~~1.02E+08~~	~~1.58~~	~~Y~~	~~0.96~~	~~102~~	
~~SS 123469-HxCDF~~	~~36.19~~		~~0.9776~~	~~0.9775~~	~~-0.2~~	~~6.72E+07~~	~~0.54~~	~~Y~~	~~0.83~~	~~102~~	
~~SS 1234689-HpCDF~~	~~39.44~~		~~1.0650~~	~~1.0653~~	~~+0.7~~	~~5.28E+07~~	~~0.45~~	~~Y~~	~~0.92~~	~~113~~	

Totals	Conc	EMPC
Total TCDD	1.88	3.06
Total PeCDD	4.69	6.42
Total HxCDD	53.5	54.9
Total HpCDD	520	520
Total Tetra-Octa Dioxins	1940	1940
Total TCDF	5.3	8.18
Total PeCDF	8.51	10.4
Total HxCDF	43.6	43.6
Total HpCDF	118	118
Total Tetra-Octa Furans	285	290
Total Tetra-Octa Dioxins & Furans	2220	2230

* 37Cl correction has been applied to 2378-TCDD

	Original Values	Corrected Values
Ratio	0.45	0.80
Response	5.92E+04	4.13E+04

Lab ID: B4519_17655_DF_008 **Acq'd:** 11 Aug 2020 02:02 PSW **Wt/Vol:** 9.38 g **ICAL:** MM3_DF_10012020_12JUN2020

Client ID: CS-35 **UTP:** 11-Aug-2020 09:02:00 PSW **J-level:** 0.533 pg/g **Split:** 1 **Checkcode:** 005-628-YFS

Datafile: 200810R16 **Report:** 11 Aug 2020 10:00 pw **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1368-TCDD	23.38		0.8591	0.8580	-1.5	3.99E+05	0.86	Y	1.18	1.11	4770	0.147
1379-TCDD	23.76		0.8732	0.8719	-1.9	2.36E+05	0.86	Y	1.18	0.658	4770	0.147
1369-TCDD	24.22	J EMPC	0.8901	0.8887	-2.0	3.72E+04	1.81	N	1.18	0.103	4770	0.147
1469-TCDD	NotFnd		0.9205						1.18		4770	0.147
1247/1246/1248/1249-TCDD	25.32	J EMPC	0.9301	0.9289	-1.8	1.53E+05	0.60	N	1.18	0.426	4770	0.147
1378-TCDD	25.52	J EMPC	0.9374	0.9365	-1.4	5.92E+04	1.14	N	1.18	0.165	4770	0.147
1268-TCDD	NotFnd		0.9449						1.18		4770	0.147
1478-TCDD	NotFnd		0.9544						1.18		4770	0.147
1279-TCDD	NotFnd		0.9610						1.18		4770	0.147
1234/1269-TCDD	26.59	J EMPC	0.9746	0.9757	+1.8	1.25E+05	0.62	N	1.18	0.349	4770	0.147
1236-TCDD	NotFnd		0.9802						1.18		4770	0.147
1237/1238-TCDD	26.98	J EMPC	0.9898	0.9898	0	4.87E+04	1.07	N	1.18	0.135	4770	0.147
1239-TCDD	NotFnd		0.9950						1.18		4770	0.147
2378-TCDD	**27.29**	J	**1.0009**	1.0012	**+0.5**	4.13E+04	0.80	Y	**1.18**	**0.115**	**4770**	**0.147**
1278-TCDD	NotFnd		1.0133						1.18		4770	0.147
1267-TCDD	NotFnd		1.0185						1.18		4770	0.147
1289-TCDD	NotFnd		1.0379						1.18		4770	0.147
12479/12468-PeCDD	30.27	J	0.9229	0.9228	-0.2	5.60E+05	1.50	Y	1.14	1.82	5288	0.158
12469-PeCDD	30.80	J	0.9396	0.9391	-0.9	2.77E+05	1.54	Y	1.14	0.902	5288	0.158
12368-PeCDD	31.38	J EMPC	0.9568	0.9566	-0.4	2.21E+05	1.99	N	1.14	0.72	5288	0.158
12478-PeCDD	31.57	J	0.9626	0.9625	-0.2	1.35E+05	1.48	Y	1.14	0.441	5288	0.158
12379-PeCDD	31.67	J	0.9657	0.9656	-0.2	2.35E+05	1.35	Y	1.14	0.764	5288	0.158
12369/12467/12489-PeCDD	31.93	J	0.9738	0.9735	-0.6	2.33E+05	1.57	Y	1.14	0.757	5288	0.158
12346/12347-PeCDD	32.32	J EMPC	0.9853	0.9854	+0.2	1.87E+05	2.01	N	1.14	0.609	5288	0.158
12378-PeCDD	32.82	J EMPC	**1.0006**	**1.0007**	**+0.2**	**1.25E+05**	**2.73**	**N**	**1.14**	**0.407**	**5288**	**0.158**
12367-PeCDD	NotFnd		1.0034						1.14		5288	0.158
12389-PeCDD	NotFnd		1.0141						1.14		5288	0.158
124679/124689-HxCDD	35.03		0.9542	0.9542	0	5.57E+06	1.28	Y	1.09	20.1	4580	0.135
123468-HxCDD	35.69		0.9721	0.9720	-0.2	1.34E+06	1.11	Y	1.09	4.82	4580	0.135
123679/123689-HxCDD	35.98		0.9799	0.9799	0	3.99E+06	1.28	Y	1.09	14.4	4580	0.135
123469-HxCDD	36.11		0.9835	0.9834	-0.2	1.43E+06	1.34	Y	1.09	5.16	4580	0.135
123478-HxCDD	36.73	J	**1.0004**	**1.0004**	**0**	**4.77E+05**	**1.31**	**Y**	1.09	**1.8**	**4580**	**0.134**
123678-HxCDD	36.84		**1.0035**	**1.0035**	**0**	**1.11E+06**	**1.13**	**Y**	1.13	**4.21**	**4580**	**0.147**
123467-HxCDD	37.04	J EMPC	1.0088	1.0088	0	3.84E+05	1.03	N	1.09	1.38	4580	0.135
123789-HxCDD	37.14		**1.0116**	**1.0116**	**0**	**9.40E+05**	**1.22**	**Y**	1.05	**3.11**	**4580**	**0.125**

Lab ID: B4519_17655_DF_008 | Acq'd: 11 Aug 2020 02:02 PSW | Wt/Vol: 9.38 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-35 | UTP: 11-Aug-2020 09:02:00 PSW | J-level: 0.533 pg/g | Split: 1 | Checkcode: 005-628-YFS

Datafile: 200810R16 | Report: 11 Aug 2020 10:00 pw | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1234679-HpCDD	39.31		0.9843	0.9841	-0.5	7.24E+07	1.04	Y	0.98	362	3882	0.11
1234678-HpCDD	**39.96**		**1.0003**	**1.0003**	**0**	**3.15E+07**	**1.05**	**Y**	**0.98**	**158**	**3882**	**0.11**
OCDD	**42.38**		**1.0003**	**1.0003**	**0**	**1.54E+08**	**0.89**	**Y**	**1.08**	**1,360**	**5866**	**0.37**
OCDD-a	42.37		1.0002	1.0002	0	9.24E+06	2.37	Y	0.07	1,320	8363	8.56
1368-TCDF	21.15		0.8044	0.8033	-1.4	3.43E+05	0.82	Y	0.98	0.675	3619	0.0837
1468-TCDF	21.70	J EMPC	0.8261	0.8240	-2.7	1.09E+05	0.53	N	0.98	0.214	3619	0.0837
2468-TCDF	22.37		0.8511	0.8497	-1.9	7.86E+05	0.80	Y	0.98	1.55	3619	0.0837
1346/1246-TCDF	NotFnd		0.8665						0.98		3619	0.0837
1347/1378/1247-TCDF	22.92		0.8723	0.8705	-2.5	4.39E+05	0.67	Y	0.98	0.865	3619	0.0837
1348-TCDF	23.22	J	0.8835	0.8817	-2.5	6.70E+04	0.72	Y	0.98	0.132	3619	0.0837
1248/1367/1379-TCDF	23.34		0.8888	0.8865	-3.2	3.22E+05	0.76	Y	0.98	0.634	3619	0.0837
1268-TCDF	23.79	J	0.9044	0.9036	-1.1	2.15E+05	0.68	Y	0.98	0.424	3619	0.0837
1467-TCDF	23.93	J EMPC	0.9098	0.9087	-1.6	8.74E+04	0.95	N	0.98	0.172	3619	0.0837
1478-TCDF	24.12	J EMPC	0.9167	0.9159	-1.2	1.51E+05	0.53	N	0.98	0.298	3619	0.0837
1369/1237-TCDF	24.52	J EMPC	0.9316	0.9310	-0.9	6.80E+04	1.23	N	0.98	0.134	3619	0.0837
2467-TCDF	24.66	J	0.9369	0.9366	-0.4	1.24E+05	0.80	Y	0.98	0.244	3619	0.0837
2368-TCDF	24.83	J EMPC	0.9430	0.9428	-0.3	2.15E+05	1.10	N	0.98	0.422	3619	0.0837
1238/1234/1678/1469/1236-TCDF	24.94	J EMPC	0.9468	0.9471	+0.4	1.91E+05	0.50	N	0.98	0.375	3619	0.0837
1278-TCDF	25.41	J	0.9651	0.9649	-0.3	1.67E+05	0.68	Y	0.98	0.328	3619	0.0837
1349-TCDF	NotFnd		0.9704						0.98		3619	0.0837
1267-TCDF	25.70	J	0.9761	0.9760	-0.2	9.25E+04	0.84	Y	0.98	0.182	3619	0.0837
2346/1249-TCDF	NotFnd		0.9834						0.98		3619	0.0837
2347/1279-TCDF	26.12	J	0.9921	0.9918	-0.5	8.76E+04	0.80	Y	0.98	0.172	3619	0.0837
2348-TCDF	26.23	J	0.9964	0.9962	-0.3	4.78E+04	0.82	Y	0.98	0.094	3619	0.0837
2378-TCDF	**26.37**	J EMPC	**1.0006**	**1.0015**	**+1.4**	**1.29E+05**	**0.92**	**N**	**0.98**	**0.254**	**3619**	**0.0837**
2367/3467-TCDF	26.74	J EMPC	1.0156	1.0154	-0.3	2.56E+05	0.65	N	0.98	0.503	3619	0.0837
1269-TCDF	26.97	J EMPC	1.0249	1.0242	-1.1	2.31E+04	1.13	N	0.98	0.0455	3619	0.0837
1239-TCDF	NotFnd		1.0357						0.98		3619	0.0837
1289-TCDF	28.45	J EMPC	1.0799	1.0805	+1.0	2.33E+05	1.31	N	0.98	0.459	3619	0.0837
13468/12468-PeCDF	28.45		0.9084	0.9085	+0.2	1.76E+06	1.36	Y	0.95	3.95	3666	0.0745
13678/13467/12467-PeCDF	30.04	J EMPC	0.9591	0.9593	+0.4	2.89E+05	1.81	N	0.95	0.647	7378	0.15
12368/13478/12478-PeCDF	30.20		0.9642	0.9645	+0.5	1.30E+06	1.49	Y	0.95	2.91	7378	0.15
14678-PeCDF	NotFnd		0.9675						0.95		7378	0.15
13479-PeCDF	NotFnd		0.9706						0.95		7378	0.15
13469/12479-PeCDF	NotFnd		0.9787						0.95		7378	0.15
12346-PeCDF	30.79	J	0.9833	0.9833	0	1.16E+05	1.54	Y	0.95	0.259	7378	0.15

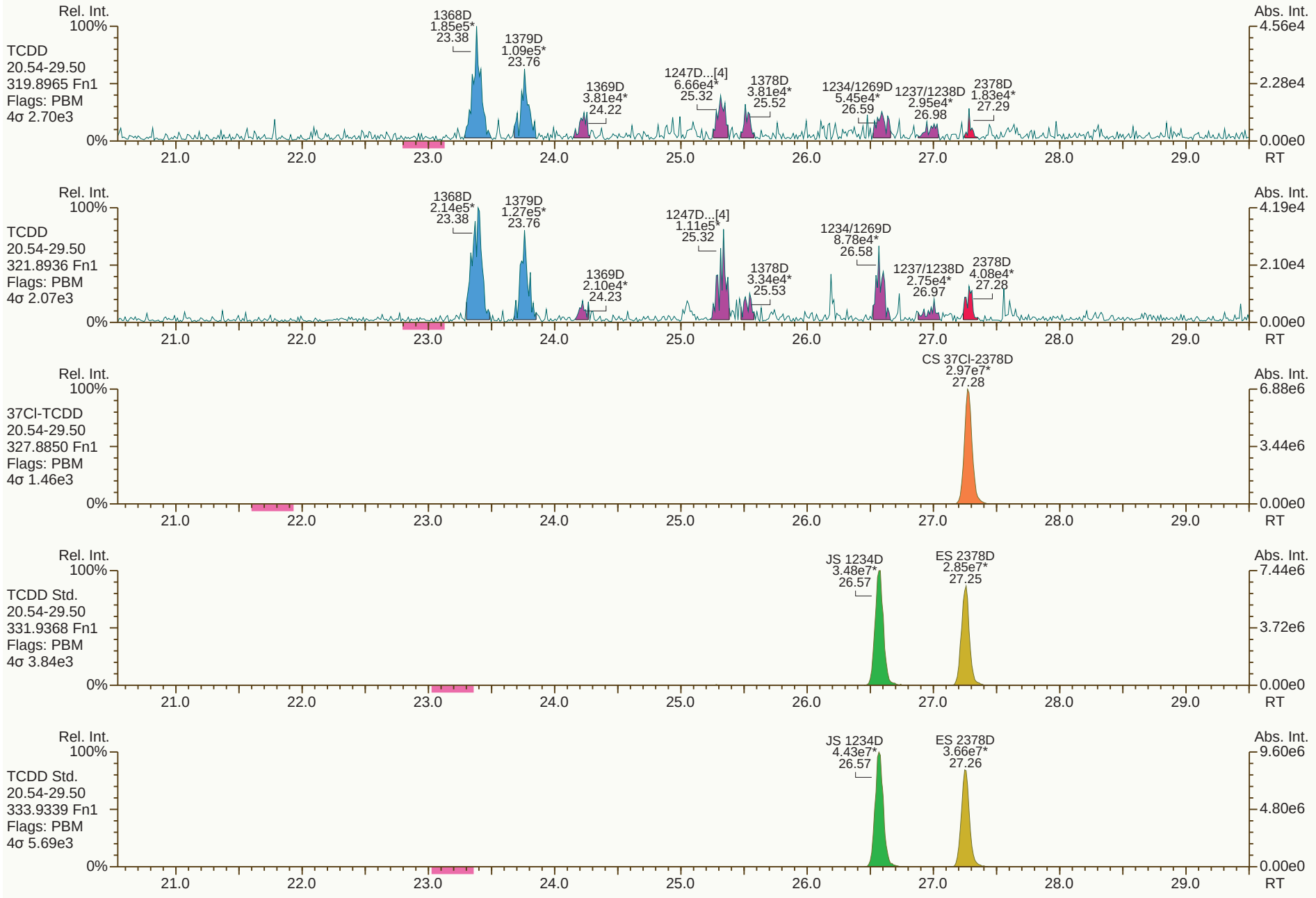
Lab ID: B4519_17655_DF_008 **Acq'd:** 11 Aug 2020 02:02 PSW **Wt/Vol:** 9.38 g **ICAL:** MM3_DF_10012020_12JUN2020

Client ID: CS-35 **UTP:** 11-Aug-2020 09:02:00 PSW **J-level:** 0.533 pg/g **Split:** 1 **Checkcode:** 005-628-YFS

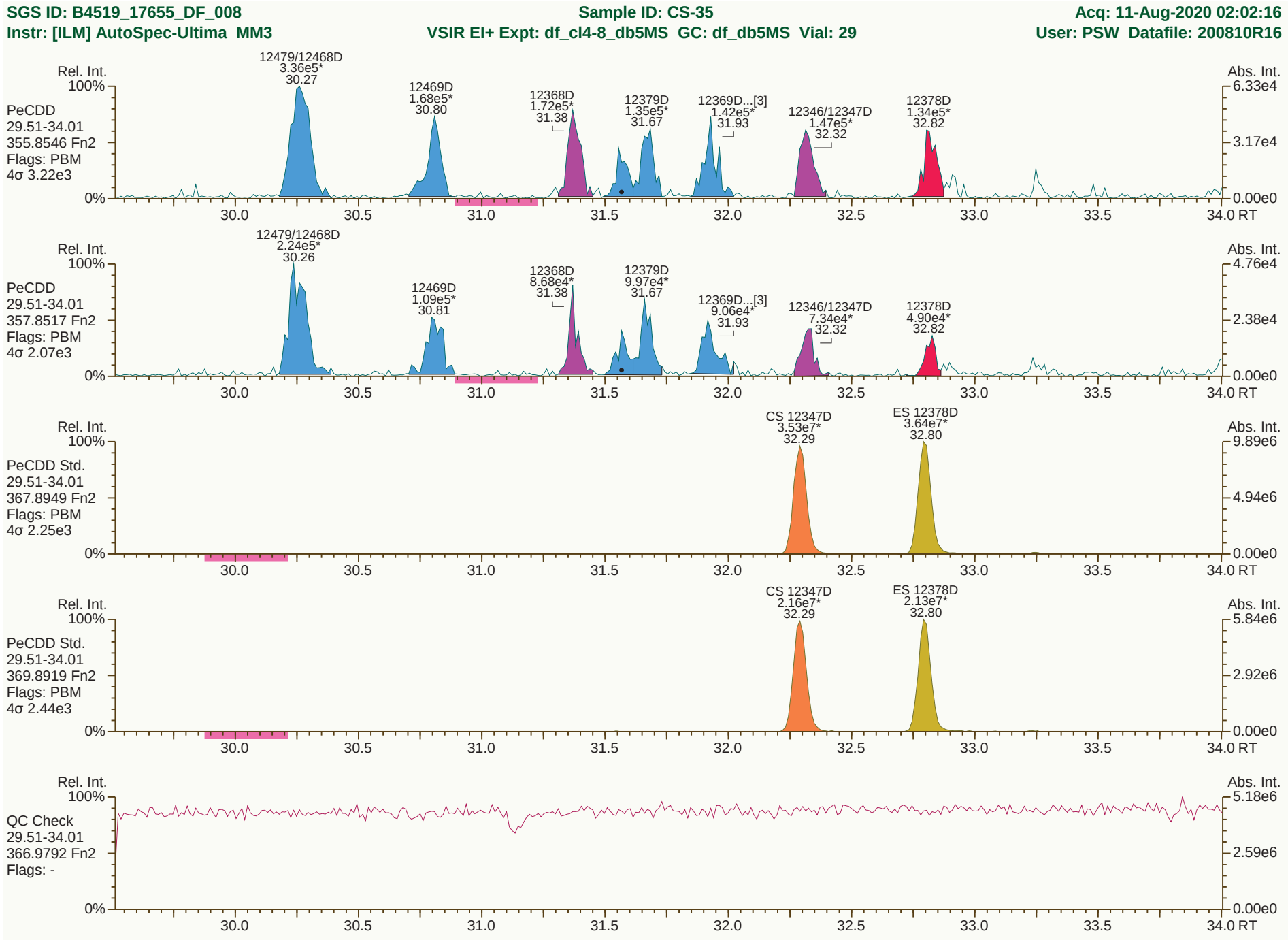
Datafile: 200810R16 **Report:** 11 Aug 2020 10:00 pw **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
23468/12469-PeCDF	30.88	J EMPC	0.9861	0.9862	+0.2	2.07E+05	2.66	N	0.95	0.464	7378	0.15
12347-PeCDF	NotFnd		0.9887						0.95		7378	0.15
12348-PeCDF	NotFnd		0.9938						0.95		7378	0.15
12378-PeCDF	**31.33**	J	**1.0006**	**1.0006**	**0**	**1.88E+05**	**1.54**	**Y**	**0.95**	**0.407**	**7378**	**0.147**
12678/12367-PeCDF	31.62	J EMPC	1.0095	1.0099	+0.8	2.40E+05	1.25	N	0.95	0.538	7378	0.15
12379-PeCDF	NotFnd		1.0150						0.95		7378	0.15
12679-PeCDF	NotFnd		0.9926						0.95		7378	0.15
23467/12369-PeCDF	32.33	J EMPC	0.9966	0.9965	-0.2	9.21E+04	2.07	N	0.95	0.206	7378	0.15
23478-PeCDF	**32.48**	J	**1.0005**	**1.0010**	**+1.0**	**4.26E+05**	**1.54**	**Y**	**0.95**	**0.987**	**7378**	**0.153**
23478/12489-PeCDF	NotFnd		0.0000						0.95			
12489-PeCDF	NotFnd		1.0047						0.95		7378	0.15
12349-PeCDF	NotFnd		1.0107						0.95		7378	0.15
12389-PeCDF	NotFnd		1.0339						0.95		7378	0.15
123468-HxCDF	34.37		0.9617	0.9615	-0.4	1.24E+06	1.15	Y	1.11	3.45	10439	0.244
124678/134678-HxCDF	34.57		0.9673	0.9671	-0.4	5.05E+06	1.24	Y	1.11	14.1	10439	0.244
134679-HxCDF	NotFnd		0.9737						1.11		10439	0.244
124679-HxCDF	35.00	J	0.9792	0.9791	-0.2	1.36E+05	1.31	Y	1.11	0.38	10439	0.244
124689-HxCDF	35.22		0.9854	0.9854	0	6.66E+06	1.22	Y	1.11	18.6	10439	0.244
123467-HxCDF	35.65	J	0.9972	0.9972	0	2.07E+05	1.42	Y	1.11	0.578	10439	0.244
123478-HxCDF	**35.76**		**1.0005**	**1.0005**	**0**	**1.06E+06**	**1.15**	**Y**	**1.20**	**2.73**	**10439**	**0.226**
123678-HxCDF	**35.90**	J	**1.0004**	**1.0005**	**+0.2**	**4.91E+05**	**1.37**	**Y**	**1.07**	**1.25**	**10439**	**0.222**
123479-HxCDF	NotFnd		1.0049						1.11		10439	0.244
123469-HxCDF	NotFnd		1.0089						1.11		10439	0.244
123679-HxCDF	NotFnd		0.9945						1.11		10439	0.244
234678-HxCDF	**36.54**	J	**1.0005**	**1.0003**	**-0.4**	**7.04E+05**	**1.35**	**Y**	**1.10**	**2.03**	**10439**	**0.239**
234678/123689-HxCDF	NotFnd		0.0000						1.10			
123689-HxCDF	NotFnd		1.0054						1.11		10439	0.244
123789-HxCDF	**NotFnd**		**1.0004**						**1.09**		**10439**	**0.3**
123789/123489-HxCDF	NotFnd		0.0000						1.09			
123489-HxCDF	37.55	J	1.0008	1.0013	+1.1	1.81E+05	1.10	Y	1.11	0.504	10439	0.244
1234678-HpCDF	**39.05**		**1.0003**	**1.0003**	**0**	**1.05E+07**	**1.08**	**Y**	**1.28**	**34.7**	**3246**	**0.064**
1234679-HpCDF	39.31	**J**	1.0072	1.0072	0	3.74E+05	1.16	Y	1.27	1.39	3246	0.074
1234689-HpCDF	39.45		1.0107	1.0107	0	2.12E+07	1.08	Y	1.27	78.9	3246	0.074
1234789-HpCDF	**40.37**		**1.0002**	**1.0002**	**0**	**8.12E+05**	**0.98**	**Y**	**1.27**	**3.46**	**3246**	**0.0868**
OCDF	**42.54**		**1.0003**	**1.0003**	**0**	**1.39E+07**	**0.90**	**Y**	**1.01**	**109**	**5022**	**0.278**
OCDF-a	42.54		1.0002	1.0002	0	8.65E+05	2.18	Y	0.06	108	4579	4.04

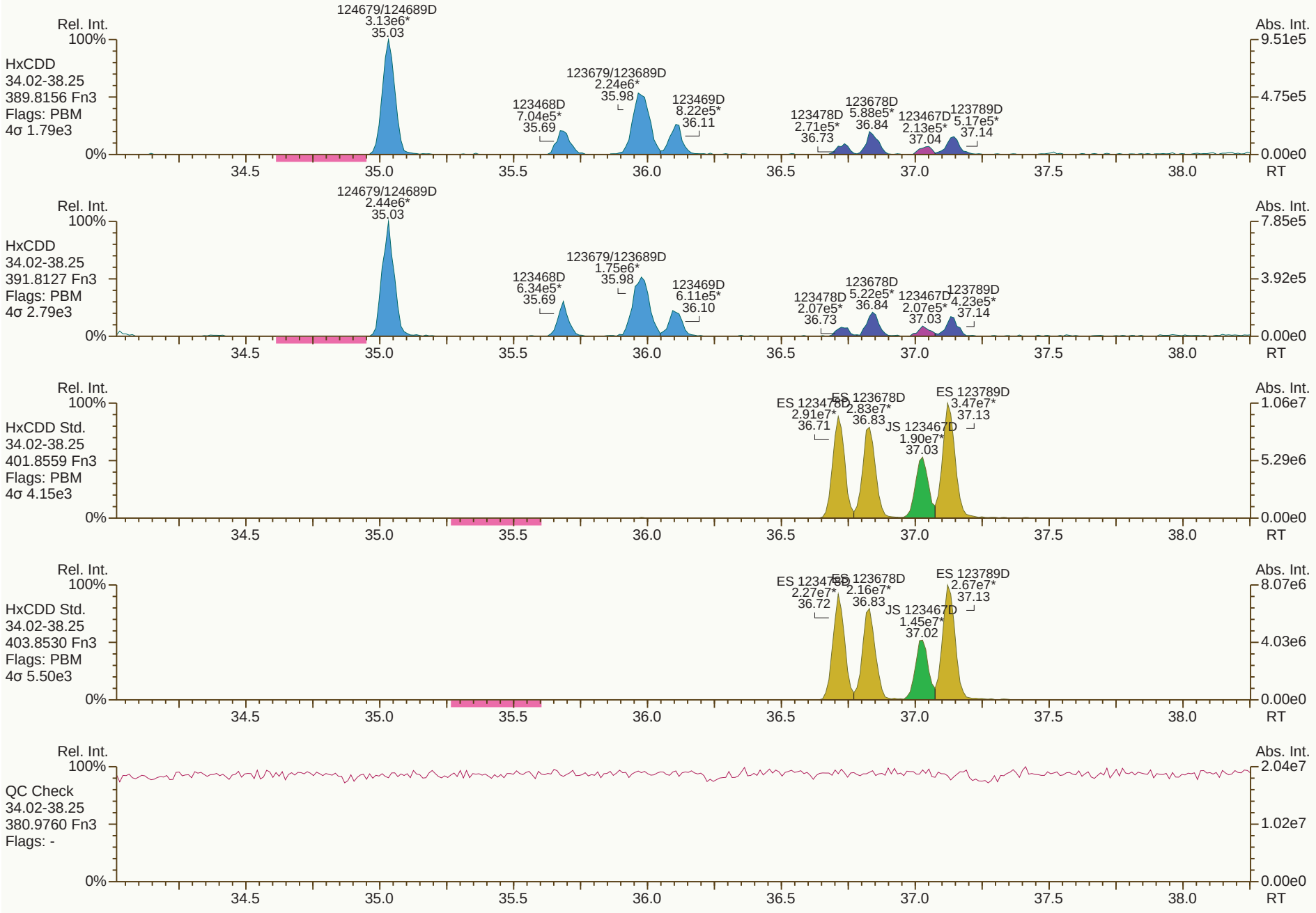

Rel. Int.
100%
QC Check
20.54-29.50
316.9824 Fn1
Flags: -
0%
Abs. Int.
6.35e6
3.17e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
QC Check
29.51-34.01
366.9792 Fn2
Flags: -
0%
Abs. Int.
5.18e6
2.59e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
0%
Abs. Int.
2.04e7
1.02e7
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
QC Check
38.26-41.01
430.9728 Fn4
Flags: -
0%
Abs. Int.
1.24e7
6.22e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
1.09e7
5.46e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

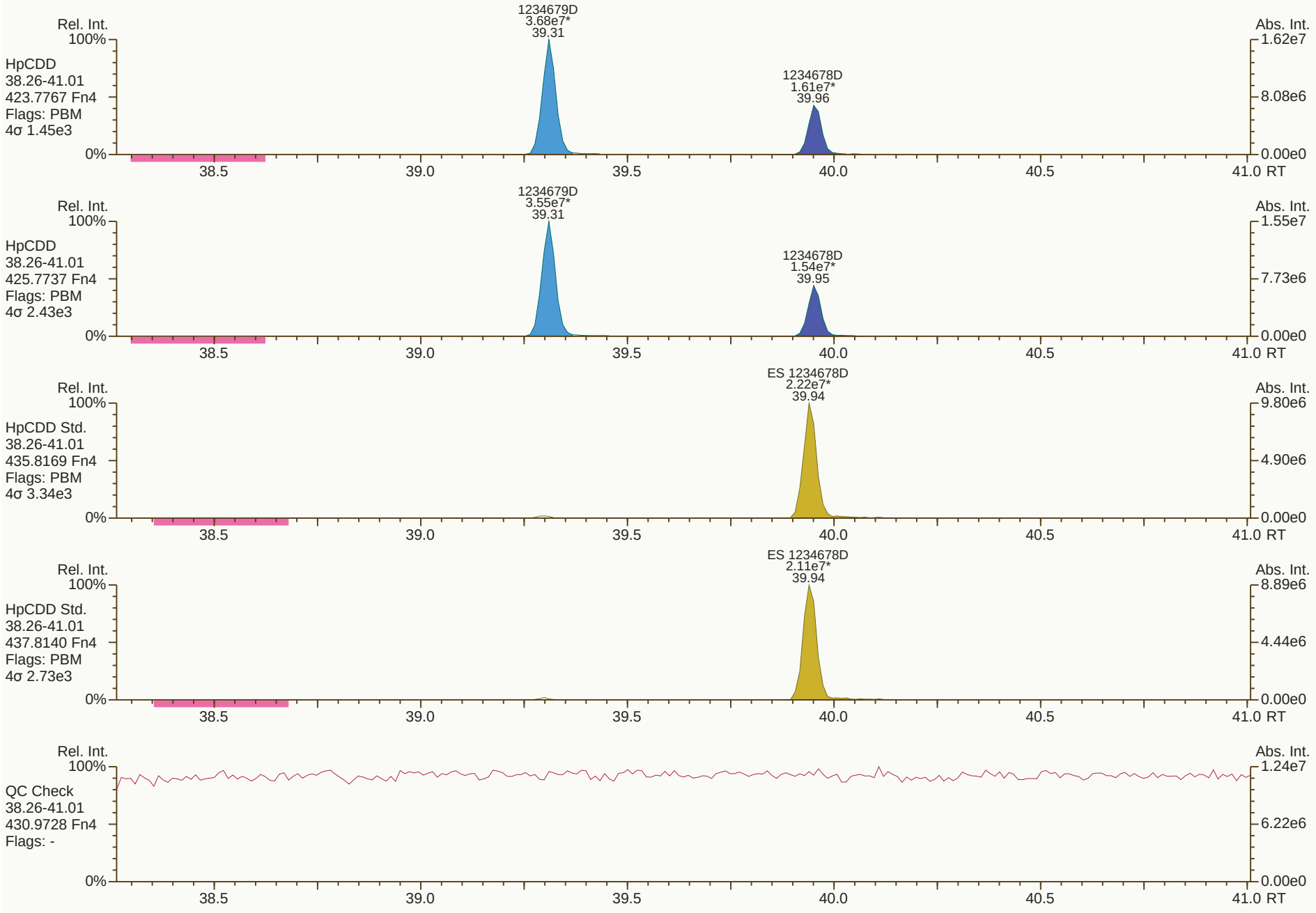

Rel. Int.
100%
TCDD
20.54-29.50
319.8965 Fn1
Flags: PBM
4σ 2.70e3
1368D 1.85e5* 23.38
1379D 1.09e5* 23.76
1369D 3.81e4* 24.22
1247D...[4] 6.66e4* 25.32
1378D 3.81e4* 25.52
1234/1269D 5.45e4* 26.59
1237/1238D 2.95e4* 26.98
2378D 1.83e4* 27.29
Abs. Int.
4.56e4
2.28e4
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
TCDD
20.54-29.50
321.8936 Fn1
Flags: PBM
4σ 2.07e3
1368D 2.14e5* 23.38
1379D 1.27e5* 23.76
1369D 2.10e4* 24.23
1247D...[4] 1.11e5* 25.32
1378D 3.34e4* 25.53
1234/1269D 8.78e4* 26.58
1237/1238D 2.75e4* 26.97
2378D 4.08e4* 27.28
Abs. Int.
4.19e4
2.10e4
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
37Cl-TCDD
20.54-29.50
327.8850 Fn1
Flags: PBM
4σ 1.46e3
CS 37Cl-2378D 2.97e7* 27.28
Abs. Int.
6.88e6
3.44e6
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
331.9368 Fn1
Flags: PBM
4σ 3.84e3
JS 1234D 3.48e7* 26.57
ES 2378D 2.85e7* 27.25
Abs. Int.
7.44e6
3.72e6
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
333.9339 Fn1
Flags: PBM
4σ 5.69e3
JS 1234D 4.43e7* 26.57
ES 2378D 3.66e7* 27.26
Abs. Int.
9.60e6
4.80e6
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT

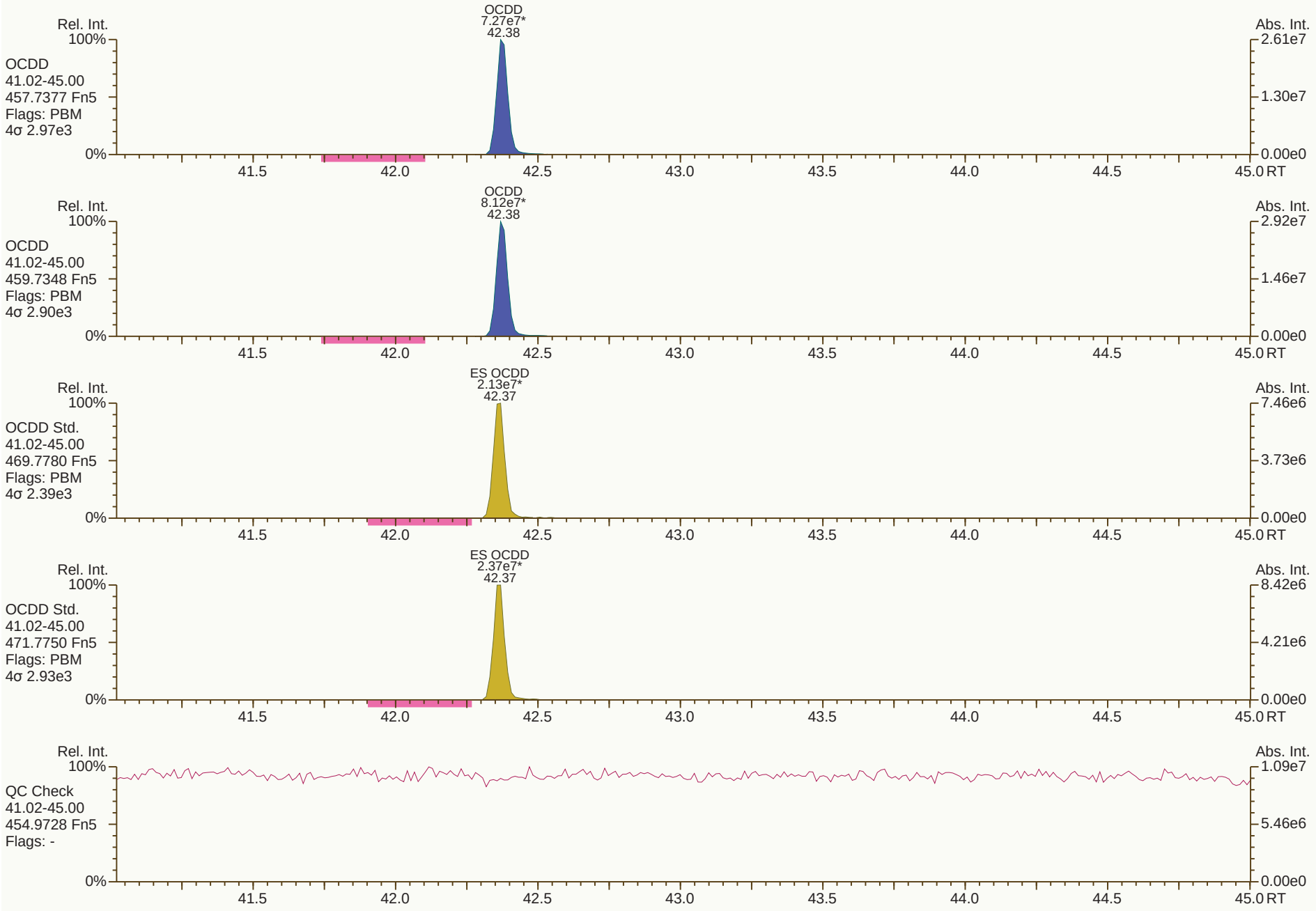
SGS ID: B4519_17655_DF_008 | Sample ID: CS-35 | Acq: 11-Aug-2020 02:02:16
Instr: [ILM] AutoSpec-Ultima MM3 | VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 29 | User: PSW Datafile: 200810R16

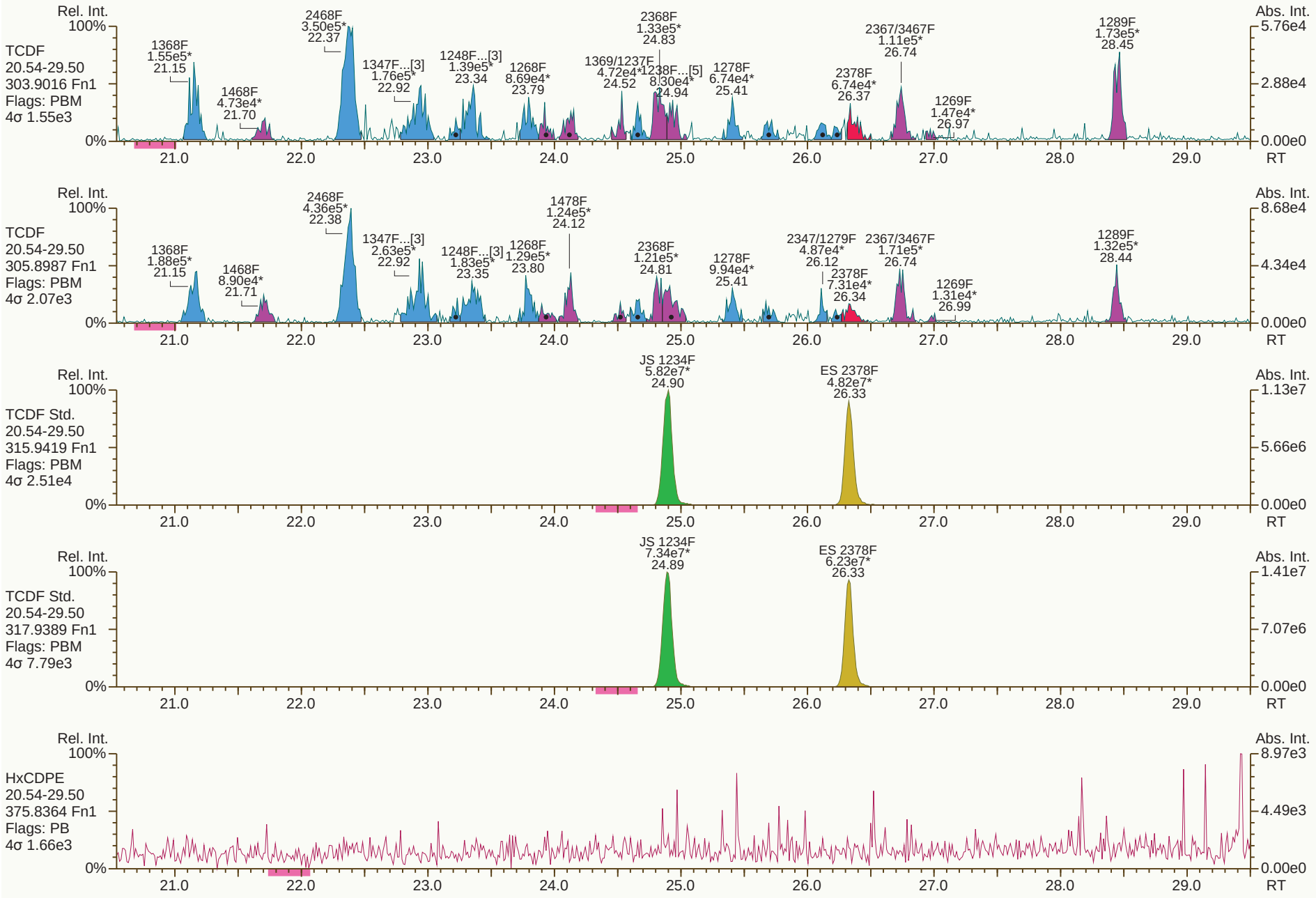


Results: P:\B4500_B4599\B4519\B4519_17655 DF\Resources\B4519_17655_DF_008.utp_res, saved 11-Aug-2020 09:02 (PSW) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 7174, 6135 scc: 005-628 *PKD: 11-Aug-2020 09:01 Printed: 11-Aug-2020 10:16 Page 3 of 12*


Rel. Int.
100%
HxCDD
34.02-38.25
389.8156 Fn3
Flags: PBM
4σ 1.79e3
124679/124689D
3.13e6*
35.03
123679/123689D
2.24e6*
35.98
123468D
7.04e5*
35.69
123469D
8.22e5*
36.11
123478D
2.71e5*
36.73
123678D
5.88e5*
36.84
123467D
2.13e5*
37.04
123789D
5.17e5*
37.14
Abs. Int.
9.51e5
4.75e5
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD
34.02-38.25
391.8127 Fn3
Flags: PBM
4σ 2.79e3
124679/124689D
2.44e6*
35.03
123679/123689D
1.75e6*
35.98
123468D
6.34e5*
35.69
123469D
6.11e5*
36.10
123478D
2.07e5*
36.73
123678D
5.22e5*
36.84
123467D
2.07e5*
37.03
123789D
4.23e5*
37.14
Abs. Int.
7.85e5
3.92e5
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
401.8559 Fn3
Flags: PBM
4σ 4.15e3
ES 123478D
2.91e7*
36.71
ES 123678D
2.83e7*
36.83
JS 123467D
1.90e7*
37.03
ES 123789D
3.47e7*
37.13
Abs. Int.
1.06e7
5.29e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
403.8530 Fn3
Flags: PBM
4σ 5.50e3
ES 123478D
2.27e7*
36.72
ES 123678D
2.16e7*
36.83
JS 123467D
1.45e7*
37.02
ES 123789D
2.67e7*
37.13
Abs. Int.
8.07e6
4.03e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
Abs. Int.
2.04e7
1.02e7
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT

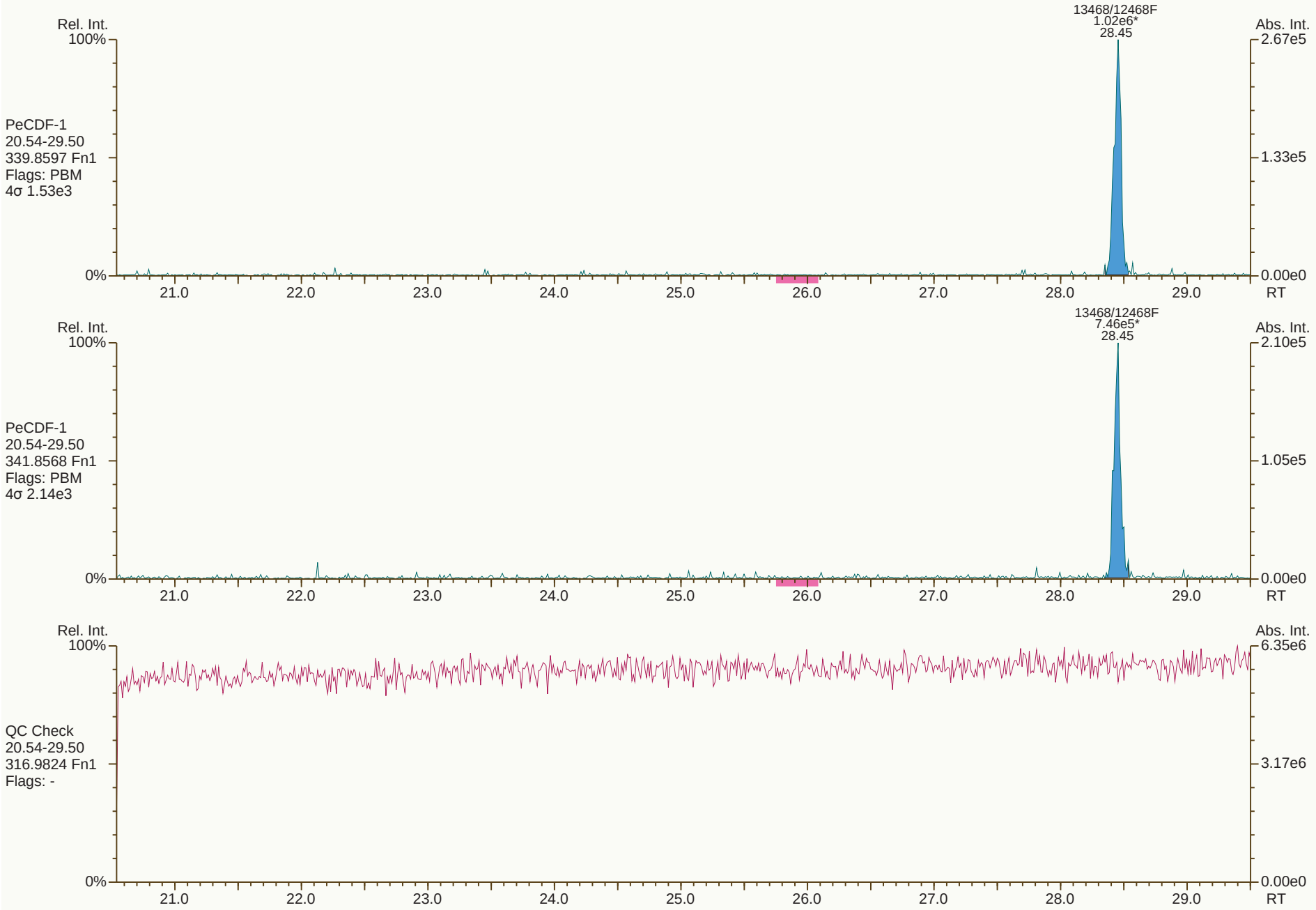

Rel. Int.
100%
HpCDD
38.26-41.01
423.7767 Fn4
Flags: PBM
4σ 1.45e3
0%
1234679D
3.68e7*
39.31
1234678D
1.61e7*
39.96
Abs. Int.
1.62e7
8.08e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.26-41.01
425.7737 Fn4
Flags: PBM
4σ 2.43e3
0%
1234679D
3.55e7*
39.31
1234678D
1.54e7*
39.95
Abs. Int.
1.55e7
7.73e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
435.8169 Fn4
Flags: PBM
4σ 3.34e3
0%
ES 1234678D
2.22e7*
39.94
Abs. Int.
9.80e6
4.90e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
437.8140 Fn4
Flags: PBM
4σ 2.73e3
0%
ES 1234678D
2.11e7*
39.94
Abs. Int.
8.89e6
4.44e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.26-41.01
430.9728 Fn4
Flags: -
0%
Abs. Int.
1.24e7
6.22e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT


OCDD
7.27e7*
42.38
Rel. Int.
100%
OCDD
41.02-45.00
457.7377 Fn5
Flags: PBM
4σ 2.97e3
0%
Abs. Int.
2.61e7
1.30e7
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDD
8.12e7*
42.38
Rel. Int.
100%
OCDD
41.02-45.00
459.7348 Fn5
Flags: PBM
4σ 2.90e3
0%
Abs. Int.
2.92e7
1.46e7
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
2.13e7*
42.37
Rel. Int.
100%
OCDD Std.
41.02-45.00
469.7780 Fn5
Flags: PBM
4σ 2.39e3
0%
Abs. Int.
7.46e6
3.73e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
2.37e7*
42.37
Rel. Int.
100%
OCDD Std.
41.02-45.00
471.7750 Fn5
Flags: PBM
4σ 2.93e3
0%
Abs. Int.
8.42e6
4.21e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
1.09e7
5.46e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT


Rel. Int.
100%
TCDF
20.54-29.50
303.9016 Fn1
Flags: PBM
4σ 1.55e3
1368F 1.55e5* 21.15
1468F 4.73e4* 21.70
2468F 3.50e5* 22.37
1347F...[3] 1.76e5* 22.92
1248F...[3] 1.39e5* 23.34
1268F 8.69e4* 23.79
1369/1237F 4.72e4* 24.52
2368F 1.33e5* 24.83
1238F...[5] 8.30e4* 24.94
1278F 6.74e4* 25.41
2378F 6.74e4* 26.37
2367/3467F 1.11e5* 26.74
1269F 1.47e4* 26.97
1289F 1.73e5* 28.45
Abs. Int.
5.76e4
2.88e4
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
TCDF
20.54-29.50
305.8987 Fn1
Flags: PBM
4σ 2.07e3
1368F 1.88e5* 21.15
1468F 8.90e4* 21.71
2468F 4.36e5* 22.38
1347F...[3] 2.63e5* 22.92
1248F...[3] 1.83e5* 23.35
1268F 1.29e5* 23.80
1478F 1.24e5* 24.12
2368F 1.21e5* 24.81
1278F 9.94e4* 25.41
2347/1279F 4.87e4* 26.12
2378F 7.31e4* 26.34
2367/3467F 1.71e5* 26.74
1269F 1.31e4* 26.99
1289F 1.32e5* 28.44
Abs. Int.
8.68e4
4.34e4
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
315.9419 Fn1
Flags: PBM
4σ 2.51e4
JS 1234F 5.82e7* 24.90
ES 2378F 4.82e7* 26.33
Abs. Int.
1.13e7
5.66e6
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
317.9389 Fn1
Flags: PBM
4σ 7.79e3
JS 1234F 7.34e7* 24.89
ES 2378F 6.23e7* 26.33
Abs. Int.
1.41e7
7.07e6
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
HxCDPE
20.54-29.50
375.8364 Fn1
Flags: PB
4σ 1.66e3
Abs. Int.
8.97e3
4.49e3
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT

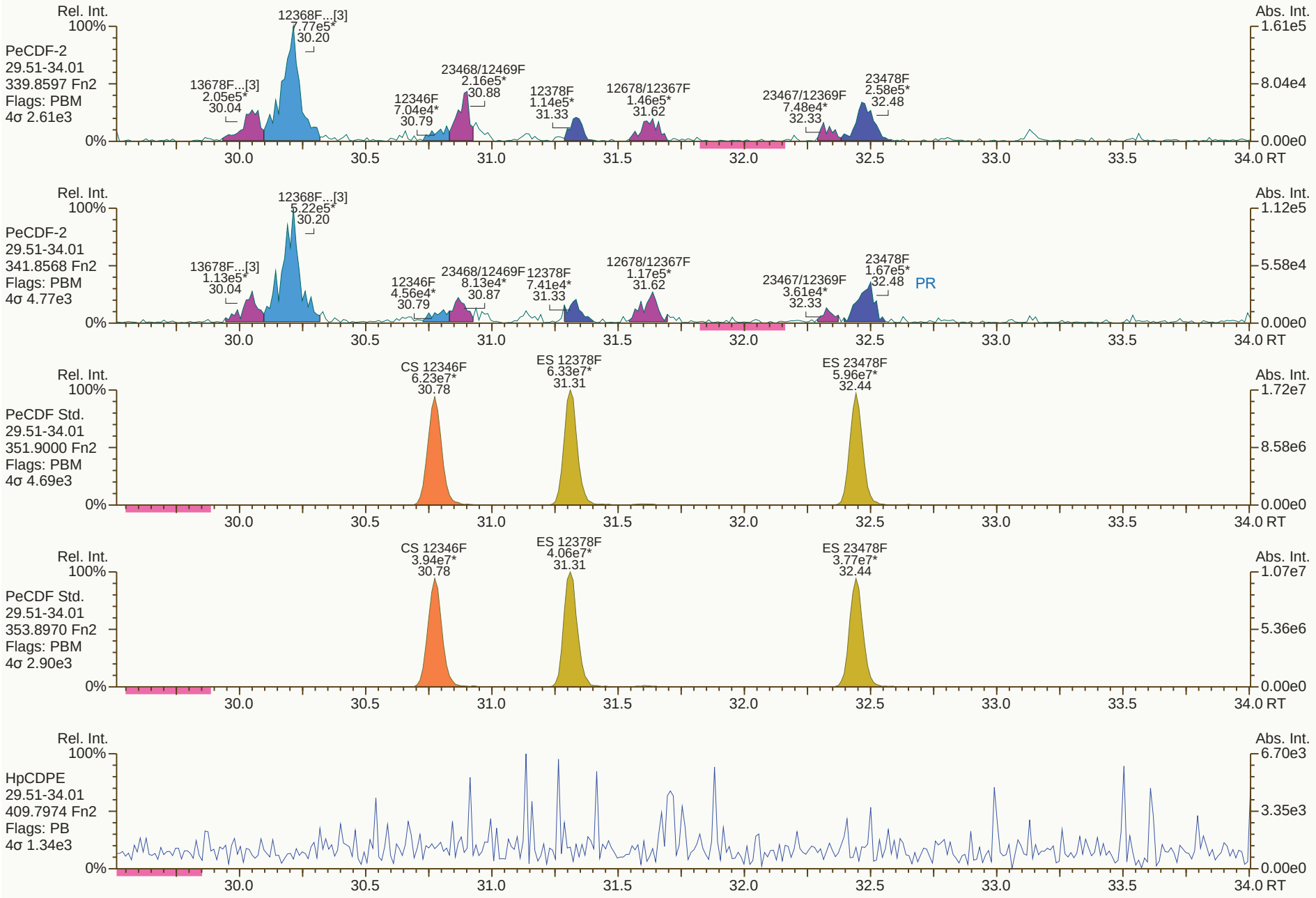
SGS ID: B4519_17655_DF_008 | Sample ID: CS-35 | Acq: 11-Aug-2020 02:02:16

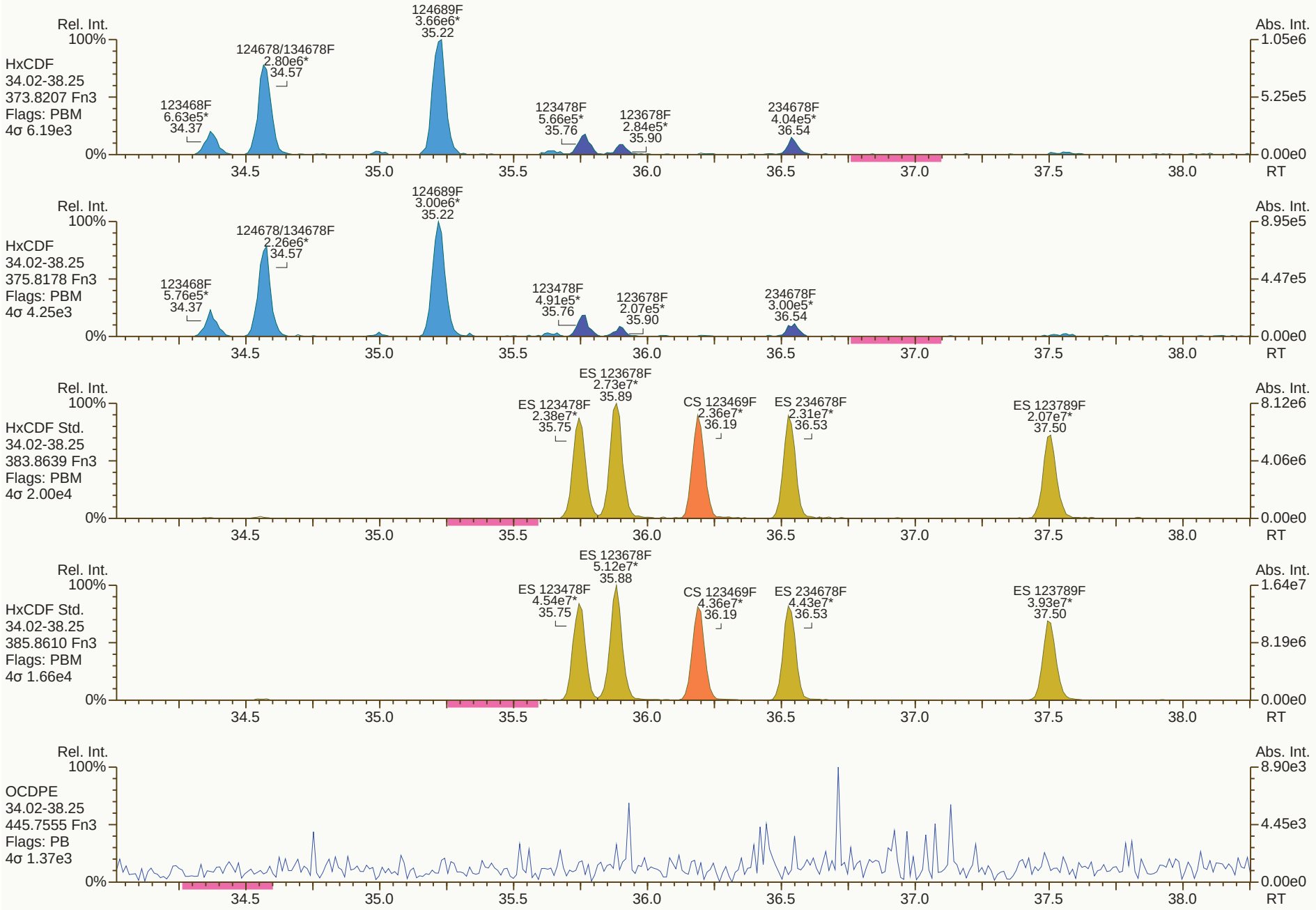
Instr: [ILM] AutoSpec-Ultima MM3 | VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 29 | User: PSW Datafile: 200810R16



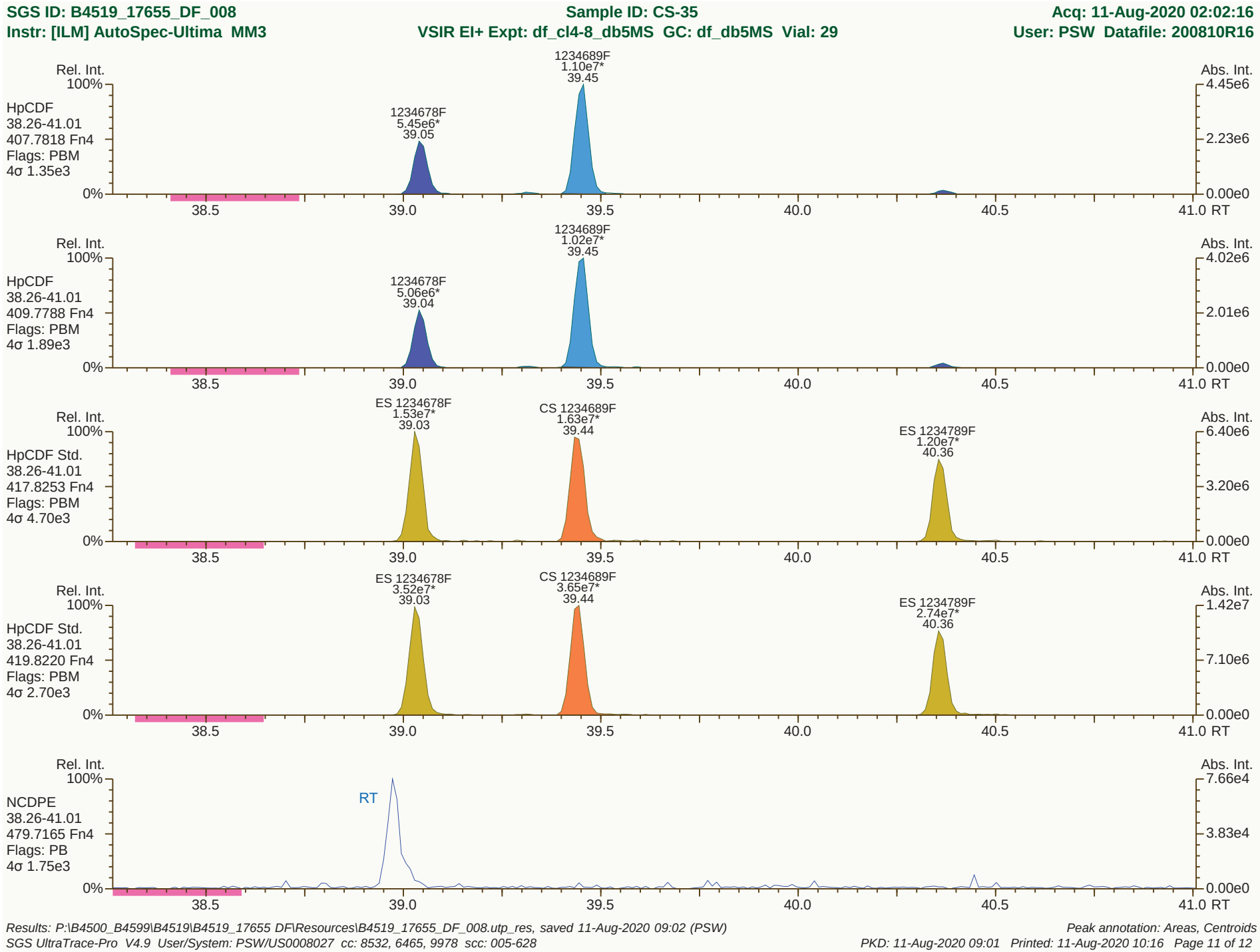
Results: P:\B4500_B4599\B4519\B4519_17655 DF\Resources\B4519_17655_DF_008.utp_res, saved 11-Aug-2020 09:02 (PSW) | *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 0875 scc: 005-628 | *PKD: 11-Aug-2020 09:01 Printed: 11-Aug-2020 10:16 Page 8 of 12*


Rel. Int.
100%
PeCDF-2
29.51-34.01
339.8597 Fn2
Flags: PBM
4σ 2.61e3
12368F...[3]
7.77e5*
30.20
13678F...[3]
2.05e5*
30.04
12346F
7.04e4*
30.79
23468/12469F
2.16e5*
30.88
12378F
1.14e5*
31.33
12678/12367F
1.46e5*
31.62
23467/12369F
7.48e4*
32.33
23478F
2.58e5*
32.48
Abs. Int.
1.61e5
8.04e4
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF-2
29.51-34.01
341.8568 Fn2
Flags: PBM
4σ 4.77e3
12368F...[3]
5.22e5*
30.20
13678F...[3]
1.13e5*
30.04
12346F
4.56e4*
30.79
23468/12469F
8.13e4*
30.87
12378F
7.41e4*
31.33
12678/12367F
1.17e5*
31.62
23467/12369F
3.61e4*
32.33
23478F
1.67e5*
32.48
PR
Abs. Int.
1.12e5
5.58e4
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
351.9000 Fn2
Flags: PBM
4σ 4.69e3
CS 12346F
6.23e7*
30.78
ES 12378F
6.33e7*
31.31
ES 23478F
5.96e7*
32.44
Abs. Int.
1.72e7
8.58e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
353.8970 Fn2
Flags: PBM
4σ 2.90e3
CS 12346F
3.94e7*
30.78
ES 12378F
4.06e7*
31.31
ES 23478F
3.77e7*
32.44
Abs. Int.
1.07e7
5.36e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
HpCDPE
29.51-34.01
409.7974 Fn2
Flags: PB
4σ 1.34e3
Abs. Int.
6.70e3
3.35e3
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT

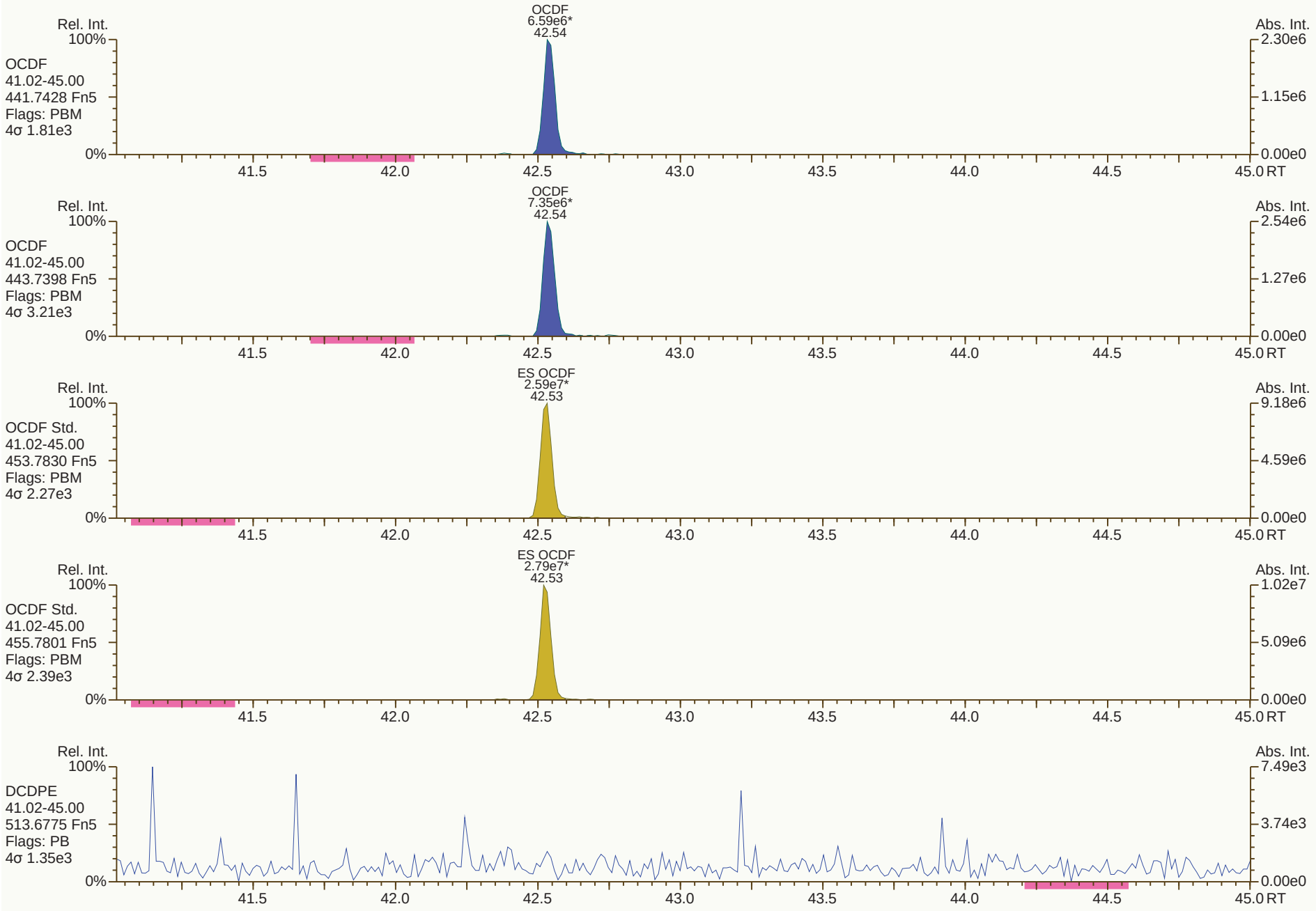

Rel. Int.
100%
HxCDF
34.02-38.25
373.8207 Fn3
Flags: PBM
4σ 6.19e3
123468F
6.63e5*
34.37
124678/134678F
2.80e6*
34.57
124689F
3.66e6*
35.22
123478F
5.66e5*
35.76
123678F
2.84e5*
35.90
234678F
4.04e5*
36.54
Abs. Int.
1.05e6
5.25e5
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDF
34.02-38.25
375.8178 Fn3
Flags: PBM
4σ 4.25e3
123468F
5.76e5*
34.37
124678/134678F
2.26e6*
34.57
124689F
3.00e6*
35.22
123478F
4.91e5*
35.76
123678F
2.07e5*
35.90
234678F
3.00e5*
36.54
Abs. Int.
8.95e5
4.47e5
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDF Std.
34.02-38.25
383.8639 Fn3
Flags: PBM
4σ 2.00e4
ES 123478F
2.38e7*
35.75
ES 123678F
2.73e7*
35.89
CS 123469F
2.36e7*
36.19
ES 234678F
2.31e7*
36.53
ES 123789F
2.07e7*
37.50
Abs. Int.
8.12e6
4.06e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDF Std.
34.02-38.25
385.8610 Fn3
Flags: PBM
4σ 1.66e4
ES 123478F
4.54e7*
35.75
ES 123678F
5.12e7*
35.88
CS 123469F
4.36e7*
36.19
ES 234678F
4.43e7*
36.53
ES 123789F
3.93e7*
37.50
Abs. Int.
1.64e7
8.19e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
OCDPE
34.02-38.25
445.7555 Fn3
Flags: PB
4σ 1.37e3
Abs. Int.
8.90e3
4.45e3
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT

SGS ID: B4519_17655_DF_008 | Sample ID: CS-35 | Acq: 11-Aug-2020 02:02:16
Instr: [ILM] AutoSpec-Ultima MM3 | VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 29 | User: PSW Datafile: 200810R16



Results: P:\B4500_B4599\B4519\B4519_17655 DF\Resources\B4519_17655_DF_008.utp_res, saved 11-Aug-2020 09:02 (PSW) | Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 8532, 6465, 9978 scc: 005-628 | PKD: 11-Aug-2020 09:01 Printed: 11-Aug-2020 10:16 Page 11 of 12

SGS ID: B4519_17655_DF_008 **Sample ID: CS-35** **Acq: 11-Aug-2020 02:02:16**
Instr: [ILM] AutoSpec-Ultima MM3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 29** **User: PSW Datafile: 200810R16**



Results: P:\B4500_B4599\B4519\B4519_17655 DF\Resources\B4519_17655_DF_008.utp_res, saved 11-Aug-2020 09:02 (PSW) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 9898, 5130, 6267 scc: 005-628 *PKD: 11-Aug-2020 09:01 Printed: 11-Aug-2020 10:16 Page 12 of 12*

Lab ID: B4519_17655_DF_009 **Acq'd:** 11 Aug 2020 02:49 PSW **Wt/Vol:** 9.50 g **ICAL:** MM3_DF_10012020_12JUN2020

Client ID: CS-36 **UTP:** 11-Aug-2020 09:07:35 PSW **J-level:** 0.526 pg/g **Split:** 1 **Checkcode:** 564-159-MLQ

Datafile: 200810R17 **Report:** 11 Aug 2020 10:00 pw **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	NotFnd		1.0009	-		-	-	-	1.18	-	4238	0.131
12378-PeCDD	32.82	J	1.0006	1.0006	0	1.78E+05	1.34	Y	1.14	0.577	4943	0.142
123478-HxCDD	36.74		1.0004	1.0004	0	8.41E+05	1.18	Y	1.09	3.18	3872	0.113
123678-HxCDD	36.85		1.0035	1.0034	-0.2	2.07E+06	1.30	Y	1.13	7.94	3872	0.122
123789-HxCDD	37.15		1.0116	1.0115	-0.2	1.73E+06	1.14	Y	1.05	5.77	3872	0.11
1234678-HpCDD	39.96		1.0003	1.0003	0	6.27E+07	1.05	Y	0.98	320	4297	0.124
OCDD	42.38		1.0003	1.0002	-0.3	2.40E+08	0.90	Y	1.08	2,280	5374	0.36
2378-TCDF	26.35	J EMPC	1.0006	1.0005	-0.2	3.27E+04	0.47	N	0.98	0.0626	4101	0.0919
12378-PeCDF	31.34	J EMPC	1.0006	1.0005	-0.2	7.05E+04	1.23	N	0.95	0.151	5890	0.118
23478-PeCDF	32.48	J EMPC	1.0005	1.0009	+0.8	2.75E+05	1.27	N	0.95	0.635	5890	0.126
123478-HxCDF	35.77		1.0005	1.0005	0	1.61E+06	1.23	Y	1.20	4.07	13470	0.277
123678-HxCDF	35.91	J	1.0004	1.0005	+0.2	6.68E+05	1.16	Y	1.07	1.68	13470	0.289
234678-HxCDF	36.55		1.0005	1.0003	-0.4	1.10E+06	1.37	Y	1.10	3.16	13470	0.319
123789-HxCDF	NotFnd		1.0004	-		-	-	-	1.09	-	13470	0.381
1234678-HpCDF	39.05		1.0003	1.0003	0	1.92E+07	1.04	Y	1.28	62	4792	0.0935
1234789-HpCDF	40.38		1.0002	1.0002	0	1.59E+06	1.05	Y	1.27	6.82	4792	0.123
OCDF	42.55		1.0003	1.0002	-0.3	2.38E+07	0.85	Y	1.01	193	5864	0.33

Name	Act RT	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	27.26	1.0255	1.0256	+0.2	6.68E+07	0.76	Y	1.01	87.8
ES 12378-PeCDD	32.81	1.2330	1.2341	+2.2	5.71E+07	1.60	Y	0.87	86.9
ES 123478-HxCDD	36.72	0.9917	0.9917	0	5.09E+07	1.30	Y	1.10	73.8
ES 123678-HxCDD	36.84	0.9947	0.9947	0	4.87E+07	1.25	Y	1.06	72.9
ES 123789-HxCDD	37.13	1.0028	1.0028	0	6.02E+07	1.27	Y	1.22	78.4
ES 1234678-HpCDD	39.95	1.0785	1.0788	+0.7	4.20E+07	1.10	Y	0.99	67.1
ES OCDD	42.38	1.1439	1.1443	+1.0	4.12E+07	0.91	Y	0.67	48.8
ES 2378-TCDF	26.34	1.0572	1.0575	+0.5	1.12E+08	0.80	Y	1.01	86.3
ES 12378-PeCDF	31.32	1.2558	1.2574	+3.0	1.03E+08	1.60	Y	0.90	89.6
ES 23478-PeCDF	32.45	1.3012	1.3028	+3.1	9.64E+07	1.57	Y	0.89	84.7
ES 123478-HxCDF	35.75	0.9655	0.9655	0	6.95E+07	0.51	Y	1.43	77.1
ES 123678-HxCDF	35.89	0.9693	0.9693	0	7.82E+07	0.55	Y	1.63	76.1
ES 234678-HxCDF	36.54	0.9867	0.9867	0	6.68E+07	0.52	Y	1.48	71.7
ES 123789-HxCDF	37.51	1.0130	1.0130	0	5.98E+07	0.51	Y	1.29	73.5
ES 1234678-HpCDF	39.04	1.0540	1.0543	+0.7	5.10E+07	0.44	Y	1.15	70.6
ES 1234789-HpCDF	40.37	1.0898	1.0901	+0.7	3.87E+07	0.45	Y	0.91	67.8
ES OCDF	42.54	1.1484	1.1487	+0.8	5.13E+07	0.90	Y	0.83	49.1

Lab ID: B4519_17655_DF_009 | Acq'd: 11 Aug 2020 02:49 PSW | Wt/Vol: 9.50 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-36 | UTP: 11-Aug-2020 09:07:35 PSW | J-level: 0.526 pg/g | Split: 1 | Checkcode: 564-159-MLQ

Datafile: 200810R17 | Report: 11 Aug 2020 10:00 pw | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %	
JS 1234-TCDD	26.58		-	-	-	7.55E+07	0.78	Y	-	-	
JS 1234-TCDF	24.91		-	-	-	1.28E+08	0.80	Y	-	-	
JS 123467-HxCDD	37.03		-	-	-	3.15E+07	1.23	Y	-	-	
CS 37Cl-2378-TCDD	27.29		1.0265	1.0265	0	2.98E+07	n/a	-	1.04	95	
CS 12347-PeCDD	32.30		1.2141	1.2151	+1.9	5.66E+07	1.70	Y	0.74	101	
CS 12346-PeCDF	30.78		1.2343	1.2358	+2.8	1.01E+08	1.59	Y	0.86	92.3	
CS 123469-HxCDF	36.20		0.9776	0.9775	-0.2	7.04E+07	0.53	Y	1.36	82.3	
CS 1234689-HpCDF	39.45		1.0650	1.0653	+0.7	5.21E+07	0.45	Y	1.05	78.4	
~~SS 37Cl-2378-TCDD~~	~~27.29~~		~~1.0265~~	~~1.0265~~	~~0~~	~~2.98E+07~~	~~n/a~~		~~1.04~~	~~108~~	Not used in this project.
~~SS 12347-PeCDD~~	~~32.30~~		~~1.2141~~	~~1.2151~~	~~+1.9~~	~~5.66E+07~~	~~1.70~~	~~Y~~	~~0.86~~	~~116~~	CL 11Aug20
~~SS 12346-PeCDF~~	~~30.78~~		~~1.2343~~	~~1.2358~~	~~+2.8~~	~~1.01E+08~~	~~1.59~~	~~Y~~	~~0.96~~	~~102~~	
~~SS 123469-HxCDF~~	~~36.20~~		~~0.9776~~	~~0.9775~~	~~-0.2~~	~~7.04E+07~~	~~0.53~~	~~Y~~	~~0.83~~	~~108~~	
~~SS 1234689-HpCDF~~	~~39.45~~		~~1.0650~~	~~1.0653~~	~~+0.7~~	~~5.21E+07~~	~~0.45~~	~~Y~~	~~0.92~~	~~111~~	

Totals	Conc	EMPC
Total TCDD	0.86	1.03
Total PeCDD	3.66	4.93
Total HxCDD	78	78
Total HpCDD	838	838
Total Tetra-Octa Dioxins	3200	3200
Total TCDF	2.08	3.48
Total PeCDF	8.61	10.6
Total HxCDF	79.6	79.6
Total HpCDF	234	234
Total Tetra-Octa Furans	517	521
Total Tetra-Octa Dioxins & Furans	3710	3720

Lab ID: B4519_17655_DF_009 **Acq'd:** 11 Aug 2020 02:49 PSW **Wt/Vol:** 9.50 g **ICAL:** MM3_DF_10012020_12JUN2020

Client ID: CS-36 **UTP:** 11-Aug-2020 09:07:35 PSW **J-level:** 0.526 pg/g **Split:** 1 **Checkcode:** 564-159-MLQ

Datafile: 200810R17 **Report:** 11 Aug 2020 10:00 pw **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1368-TCDD	23.39	J	0.8591	0.8579	-1.7	1.30E+05	0.86	Y	1.18	0.347	4238	0.131
1379-TCDD	23.77	J EMPC	0.8732	0.8718	-2.0	6.23E+04	1.05	N	1.18	0.167	4238	0.131
1369-TCDD	NotFnd		0.8901						1.18		4238	0.131
1469-TCDD	NotFnd		0.9205						1.18		4238	0.131
1247/1246/1248/1249-TCDD	NotFnd		0.9301						1.18		4238	0.131
1378-TCDD	NotFnd		0.9374						1.18		4238	0.131
1268-TCDD	NotFnd		0.9449						1.18		4238	0.131
1478-TCDD	NotFnd		0.9544						1.18		4238	0.131
1279-TCDD	NotFnd		0.9610						1.18		4238	0.131
1234/1269-TCDD	26.60	J	0.9746	0.9758	+1.9	1.92E+05	0.72	Y	1.18	0.513	4238	0.131
1236-TCDD	NotFnd		0.9802						1.18		4238	0.131
1237/1238-TCDD	NotFnd		0.9898						1.18		4238	0.131
1239-TCDD	NotFnd		0.9950						1.18		4238	0.131
2378-TCDD	**NotFnd**		**1.0009**						**1.18**		**4238**	**0.131**
1278-TCDD	NotFnd		1.0133						1.18		4238	0.131
1267-TCDD	NotFnd		1.0185						1.18		4238	0.131
1289-TCDD	NotFnd		1.0379						1.18		4238	0.131
12479/12468-PeCDD	30.27	J	0.9229	0.9228	-0.2	2.97E+05	1.69	Y	1.14	0.963	4943	0.142
12469-PeCDD	30.81	J EMPC	0.9396	0.9391	-0.9	2.90E+05	1.89	N	1.14	0.942	4943	0.142
12368-PeCDD	31.37	J	0.9568	0.9562	-1.1	1.16E+05	1.71	Y	1.14	0.378	4943	0.142
12478-PeCDD	31.57	J	0.9626	0.9625	-0.2	1.34E+05	1.59	Y	1.14	0.435	4943	0.142
12379-PeCDD	31.68	J EMPC	0.9657	0.9658	+0.2	1.01E+05	1.18	N	1.14	0.326	4943	0.142
12369/12467/12489-PeCDD	31.94	J	0.9738	0.9737	-0.2	2.55E+05	1.76	Y	1.14	0.826	4943	0.142
12346/12347-PeCDD	32.33	J	0.9853	0.9854	+0.2	1.48E+05	1.76	Y	1.14	0.479	4943	0.142
12378-PeCDD	32.82	J	**1.0006**	**1.0006**	**0**	**1.78E+05**	**1.34**	**Y**	**1.14**	**0.577**	**4943**	**0.142**
12367-PeCDD	NotFnd		1.0034						1.14		4943	0.142
12389-PeCDD	NotFnd		1.0141						1.14		4943	0.142
124679/124689-HxCDD	35.04		0.9542	0.9542	0	6.31E+06	1.24	Y	1.09	22.9	3872	0.114
123468-HxCDD	35.70		0.9721	0.9721	0	1.71E+06	1.18	Y	1.09	6.2	3872	0.114
123679/123689-HxCDD	35.99		0.9799	0.9799	0	5.65E+06	1.23	Y	1.09	20.5	3872	0.114
123469-HxCDD	36.12		0.9835	0.9835	0	2.45E+06	1.26	Y	1.09	8.9	3872	0.114
123478-HxCDD	36.74		**1.0004**	**1.0004**	**0**	**8.41E+05**	**1.18**	**Y**	1.09	**3.18**	**3872**	**0.113**
123678-HxCDD	36.85		**1.0035**	**1.0034**	**-0.2**	**2.07E+06**	**1.30**	**Y**	1.13	**7.94**	**3872**	**0.122**
123467-HxCDD	37.05		1.0088	1.0089	+0.2	7.36E+05	1.29	Y	1.09	2.67	3872	0.114
123789-HxCDD	37.15		**1.0116**	**1.0115**	**-0.2**	**1.73E+06**	**1.14**	**Y**	1.05	**5.77**	**3872**	**0.11**

Lab ID: B4519_17655_DF_009 | Acq'd: 11 Aug 2020 02:49 PSW | Wt/Vol: 9.50 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-36 | UTP: 11-Aug-2020 09:07:35 PSW | J-level: 0.526 pg/g | Split: 1 | Checkcode: 564-159-MLQ

Datafile: 200810R17 | Report: 11 Aug 2020 10:00 pw | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

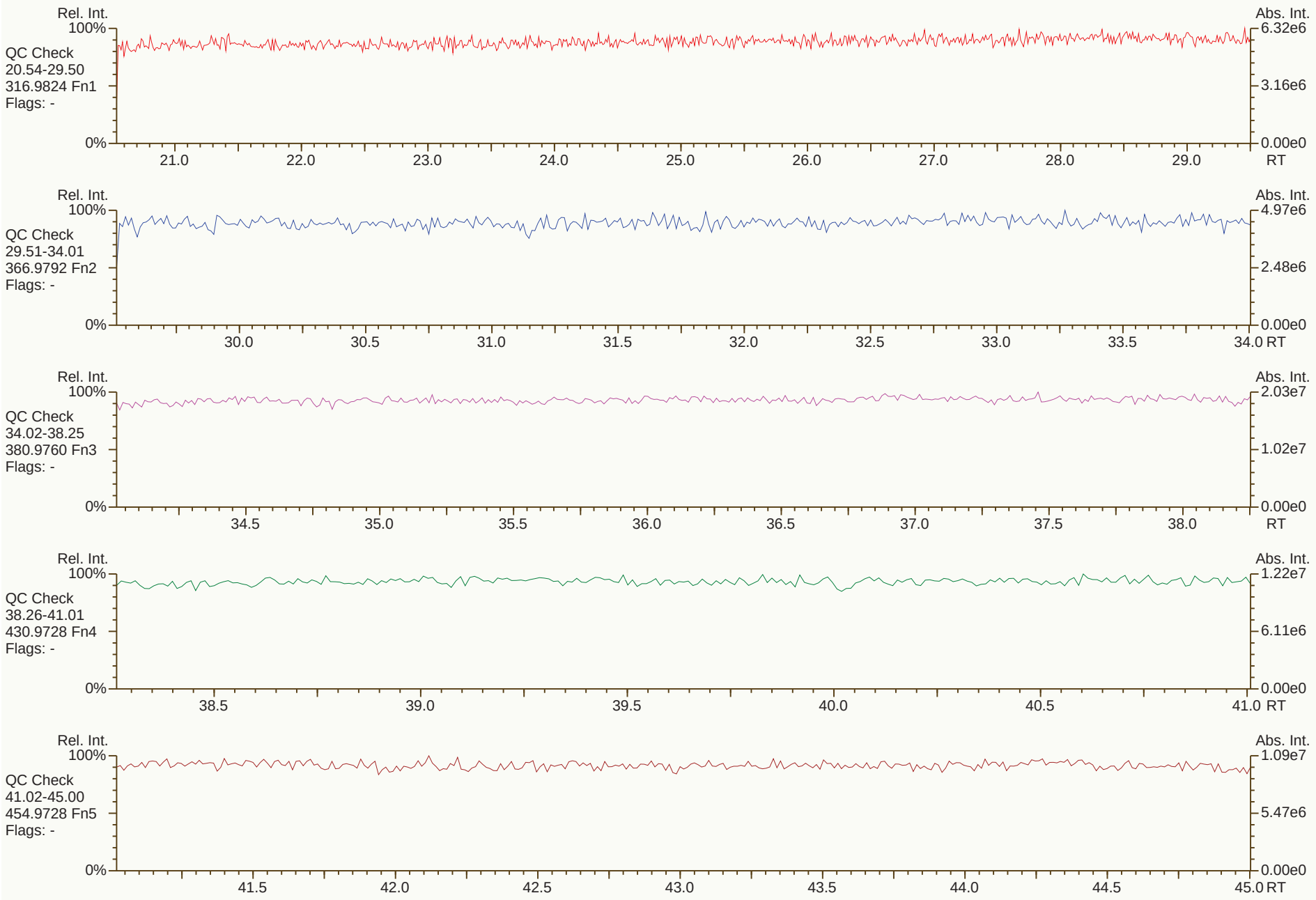
Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1234679-HpCDD	39.32		0.9843	0.9842	-0.2	1.02E+08	1.05	Y	0.98	518	4297	0.124
1234678-HpCDD	**39.96**		**1.0003**	**1.0003**	**0**	**6.27E+07**	**1.05**	**Y**	**0.98**	**320**	**4297**	**0.124**
OCDD	**42.38**		**1.0003**	**1.0002**	**-0.3**	**2.40E+08**	**0.90**	**Y**	**1.08**	**2,280**	**5374**	**0.36**
OCDD-a	42.38		1.0002	1.0002	0	1.41E+07	2.48	Y	0.07	2,180	9013	9.81
1368-TCDF	21.17	J EMPC	0.8044	0.8037	-0.9	1.15E+05	1.08	N	0.98	0.221	4101	0.0919
1468-TCDF	21.73	J	0.8261	0.8249	-1.6	5.57E+04	0.69	Y	0.98	0.107	4101	0.0919
2468-TCDF	22.38	J	0.8511	0.8497	-1.9	2.74E+05	0.83	Y	0.98	0.526	4101	0.0919
1346/1246-TCDF	22.83	J EMPC	0.8665	0.8665	0	1.11E+05	0.97	N	0.98	0.213	4101	0.0919
1347/1378/1247-TCDF	22.97	J	0.8723	0.8721	-0.3	1.24E+05	0.72	Y	0.98	0.239	4101	0.0919
1348-TCDF	NotFnd		0.8835						0.98		4101	0.0919
1248/1367/1379-TCDF	23.39	J	0.8888	0.8878	-1.4	1.49E+05	0.76	Y	0.98	0.287	4101	0.0919
1268-TCDF	23.80	J EMPC	0.9044	0.9037	-1.0	1.13E+05	0.60	N	0.98	0.216	4101	0.0919
1467-TCDF	NotFnd		0.9098						0.98		4101	0.0919
1478-TCDF	NotFnd		0.9167						0.98		4101	0.0919
1369/1237-TCDF	NotFnd		0.9316						0.98		4101	0.0919
2467-TCDF	24.68	J	0.9369	0.9367	-0.3	5.22E+04	0.66	Y	0.98	0.1	4101	0.0919
2368-TCDF	24.83	J	0.9430	0.9425	-0.7	1.36E+05	0.72	Y	0.98	0.261	4101	0.0919
1238/1234/1678/1469/1236-TCDF	24.94		0.9468	0.9468	0	2.90E+05	0.75	Y	0.98	0.557	4101	0.0919
1278-TCDF	25.41	J EMPC	0.9651	0.9646	-0.8	6.95E+04	1.21	N	0.98	0.133	4101	0.0919
1349-TCDF	NotFnd		0.9704						0.98		4101	0.0919
1267-TCDF	NotFnd		0.9761						0.98		4101	0.0919
2346/1249-TCDF	NotFnd		0.9834						0.98		4101	0.0919
2347/1279-TCDF	NotFnd		0.9921						0.98		4101	0.0919
2348-TCDF	NotFnd		0.9964						0.98		4101	0.0919
2378-TCDF	**26.35**	J EMPC	**1.0006**	**1.0005**	**-0.2**	**3.27E+04**	**0.47**	**N**	**0.98**	**0.0626**	**4101**	**0.0919**
2367/3467-TCDF	26.75	J EMPC	1.0156	1.0154	-0.3	1.04E+05	1.04	N	0.98	0.2	4101	0.0919
1269-TCDF	NotFnd		1.0249						0.98		4101	0.0919
1239-TCDF	NotFnd		1.0357						0.98		4101	0.0919
1289-TCDF	28.45	J EMPC	1.0799	1.0801	+0.3	1.89E+05	1.44	N	0.98	0.362	4101	0.0919
13468/12468-PeCDF	28.46		0.9084	0.9086	+0.3	2.23E+06	1.67	Y	0.95	4.96	3438	0.0709
13678/13467/12467-PeCDF	30.05	J	0.9591	0.9594	+0.5	2.89E+05	1.52	Y	0.95	0.643	5890	0.121
12368/13478/12478-PeCDF	30.21	J	0.9642	0.9644	+0.4	1.08E+06	1.56	Y	0.95	2.41	5890	0.121
14678-PeCDF	30.29	J	0.9675	0.9672	-0.5	8.83E+04	1.73	Y	0.95	0.197	5890	0.121
13479-PeCDF	NotFnd		0.9706						0.95		5890	0.121
13469/12479-PeCDF	NotFnd		0.9787						0.95		5890	0.121
12346-PeCDF	30.79	J EMPC	0.9833	0.9832	-0.2	9.89E+04	0.90	N	0.95	0.22	5890	0.121

Lab ID: B4519_17655_DF_009 **Acq'd:** 11 Aug 2020 02:49 PSW **Wt/Vol:** 9.50 g **ICAL:** MM3_DF_10012020_12JUN2020

Client ID: CS-36 **UTP:** 11-Aug-2020 09:07:35 PSW **J-level:** 0.526 pg/g **Split:** 1 **Checkcode:** 564-159-MLQ

Datafile: 200810R17 **Report:** 11 Aug 2020 10:00 pw **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
23468/12469-PeCDF	30.89	J EMPC	0.9861	0.9861	0	2.17E+05	1.99	N	0.95	0.482	5890	0.121
12347-PeCDF	30.96	J EMPC	0.9887	0.9884	-0.6	5.07E+04	0.78	N	0.95	0.113	5890	0.121
12348-PeCDF	31.13	J	0.9938	0.9939	+0.2	1.20E+05	1.49	Y	0.95	0.267	5890	0.121
12378-PeCDF	**31.34**	J EMPC	**1.0006**	**1.0005**	**-0.2**	**7.05E+04**	**1.23**	**N**	**0.95**	**0.151**	**5890**	**0.118**
12678/12367-PeCDF	31.63	J EMPC	1.0095	1.0100	+0.9	1.26E+05	2.19	N	0.95	0.28	5890	0.121
12379-PeCDF	NotFnd		1.0150						0.95		5890	0.121
12679-PeCDF	NotFnd		0.9926						0.95		5890	0.121
23467/12369-PeCDF	32.35	J	0.9966	0.9969	+0.6	6.08E+04	1.35	Y	0.95	0.135	5890	0.121
23478-PeCDF	**32.48**	J EMPC	**1.0005**	**1.0009**	**+0.8**	**2.75E+05**	**1.27**	**N**	**0.95**	**0.635**	**5890**	**0.126**
23478/12489-PeCDF	NotFnd		0.0000						0.95			
12489-PeCDF	NotFnd		1.0047						0.95		5890	0.121
12349-PeCDF	NotFnd		1.0107						0.95		5890	0.121
12389-PeCDF	33.57	J EMPC	1.0339	1.0345	+1.2	3.50E+04	0.95	N	0.95	0.0779	5890	0.121
123468-HxCDF	34.38		0.9617	0.9616	-0.2	2.21E+06	1.15	Y	1.11	6.1	13470	0.312
124678/134678-HxCDF	34.58		0.9673	0.9671	-0.4	9.65E+06	1.27	Y	1.11	26.6	13470	0.312
134679-HxCDF	NotFnd		0.9737						1.11		13470	0.312
124679-HxCDF	35.01	J	0.9792	0.9793	+0.2	1.38E+05	1.23	Y	1.11	0.38	13470	0.312
124689-HxCDF	35.23		0.9854	0.9854	0	1.34E+07	1.28	Y	1.11	37	13470	0.312
123467-HxCDF	35.65	J	0.9972	0.9972	0	2.24E+05	1.32	Y	1.11	0.616	13470	0.312
123478-HxCDF	**35.77**		**1.0005**	**1.0005**	**0**	**1.61E+06**	**1.23**	**Y**	**1.20**	**4.07**	**13470**	**0.277**
123678-HxCDF	**35.91**	J	**1.0004**	**1.0005**	**+0.2**	**6.68E+05**	**1.16**	**Y**	**1.07**	**1.68**	**13470**	**0.289**
123479-HxCDF	NotFnd		1.0049						1.11		13470	0.312
123469-HxCDF	NotFnd		1.0089						1.11		13470	0.312
123679-HxCDF	NotFnd		0.9945						1.11		13470	0.312
234678-HxCDF	**36.55**		**1.0005**	**1.0003**	**-0.4**	**1.10E+06**	**1.37**	**Y**	**1.10**	**3.16**	**13470**	**0.319**
234678/123689-HxCDF	NotFnd		0.0000						1.10			
123689-HxCDF	NotFnd		1.0054						1.11		13470	0.312
123789-HxCDF	**NotFnd**		**1.0004**						**1.09**		**13470**	**0.381**
123789/123489-HxCDF	NotFnd		0.0000						1.09			
123489-HxCDF	NotFnd		1.0008						1.11		13470	0.312
1234678-HpCDF	**39.05**		**1.0003**	**1.0003**	**0**	**1.92E+07**	**1.04**	**Y**	**1.28**	**62**	**4792**	**0.0935**
1234679-HpCDF	39.32	**J**	1.0072	1.0072	0	5.56E+05	1.19	Y	1.27	2.05	4792	0.106
1234689-HpCDF	39.46		1.0107	1.0108	+0.2	4.43E+07	1.05	Y	1.27	163	4792	0.106
1234789-HpCDF	**40.38**		**1.0002**	**1.0002**	**0**	**1.59E+06**	**1.05**	**Y**	**1.27**	**6.82**	**4792**	**0.123**
OCDF	**42.55**		**1.0003**	**1.0002**	**-0.3**	**2.38E+07**	**0.85**	**Y**	**1.01**	**193**	**5864**	**0.33**
OCDF-a	42.55		1.0002	1.0002	0	1.24E+06	2.14	Y	0.06	161	4692	4.22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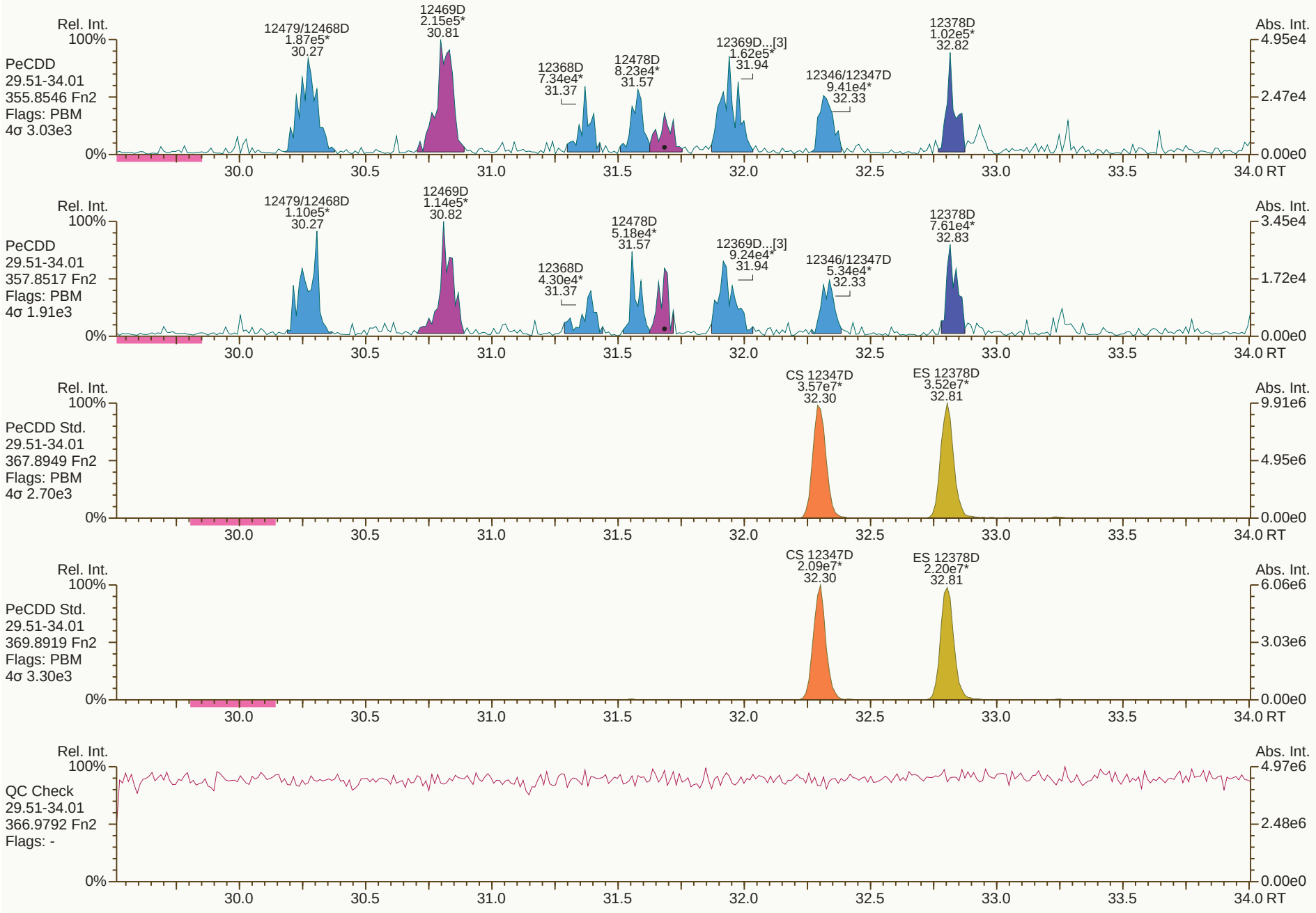
100%
QC Check
20.54-29.50
316.9824 Fn1
Flags: -
0%
Abs. Int.
6.32e6
3.16e6
0.00e0
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0 RT
Rel. Int.
100%
QC Check
29.51-34.01
366.9792 Fn2
Flags: -
0%
Abs. Int.
4.97e6
2.48e6
0.00e0
30.0 30.5 31.0 31.5 32.0 32.5 33.0 33.5 34.0 RT
Rel. Int.
100%
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
0%
Abs. Int.
2.03e7
1.02e7
0.00e0
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 RT
Rel. Int.
100%
QC Check
38.26-41.01
430.9728 Fn4
Flags: -
0%
Abs. Int.
1.22e7
6.11e6
0.00e0
38.5 39.0 39.5 40.0 40.5 41.0 RT
Rel. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
1.09e7
5.47e6
0.00e0
41.5 42.0 42.5 43.0 43.5 44.0 44.5 45.0 RT


Rel. Int.
100%
TCDD
20.54-29.50
319.8965 Fn1
Flags: PBM
4σ 2.24e3
0%
1368D
5.99e4*
23.39
1379D
3.71e4*
23.77
1234/1269D
8.02e4*
26.60
Abs. Int.
2.65e4
1.33e4
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD
20.54-29.50
321.8936 Fn1
Flags: PBM
4σ 2.00e3
0%
1368D
6.98e4*
23.39
1379D
3.52e4*
23.80
1234/1269D
1.12e5*
26.60
Abs. Int.
3.07e4
1.53e4
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
37Cl-TCDD
20.54-29.50
327.8850 Fn1
Flags: PBM
4σ 1.14e3
0%
CS 37Cl-2378D
2.98e7*
27.29
Abs. Int.
6.64e6
3.32e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
331.9368 Fn1
Flags: PBM
4σ 7.47e3
0%
JS 1234D
3.30e7*
26.58
ES 2378D
2.88e7*
27.26
Abs. Int.
7.42e6
3.71e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
333.9339 Fn1
Flags: PBM
4σ 3.96e3
0%
JS 1234D
4.25e7*
26.58
ES 2378D
3.79e7*
27.26
Abs. Int.
9.39e6
4.69e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
PeCDD
29.51-34.01
355.8546 Fn2
Flags: PBM
4σ 3.03e3
0%
12479/12468D
1.87e5*
30.27
12469D
2.15e5*
30.81
12368D
7.34e4*
31.37
12478D
8.23e4*
31.57
12369D...[3]
1.62e5*
31.94
12346/12347D
9.41e4*
32.33
12378D
1.02e5*
32.82
Abs. Int.
4.95e4
2.47e4
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD
29.51-34.01
357.8517 Fn2
Flags: PBM
4σ 1.91e3
0%
12479/12468D
1.10e5*
30.27
12469D
1.14e5*
30.82
12368D
4.30e4*
31.37
12478D
5.18e4*
31.57
12369D...[3]
9.24e4*
31.94
12346/12347D
5.34e4*
32.33
12378D
7.61e4*
32.83
Abs. Int.
3.45e4
1.72e4
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
367.8949 Fn2
Flags: PBM
4σ 2.70e3
0%
CS 12347D
3.57e7*
32.30
ES 12378D
3.52e7*
32.81
Abs. Int.
9.91e6
4.95e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
369.8919 Fn2
Flags: PBM
4σ 3.30e3
0%
CS 12347D
2.09e7*
32.30
ES 12378D
2.20e7*
32.81
Abs. Int.
6.06e6
3.03e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
QC Check
29.51-34.01
366.9792 Fn2
Flags: -
0%
Abs. Int.
4.97e6
2.48e6
0.00e0
30.0
30.5
31.0
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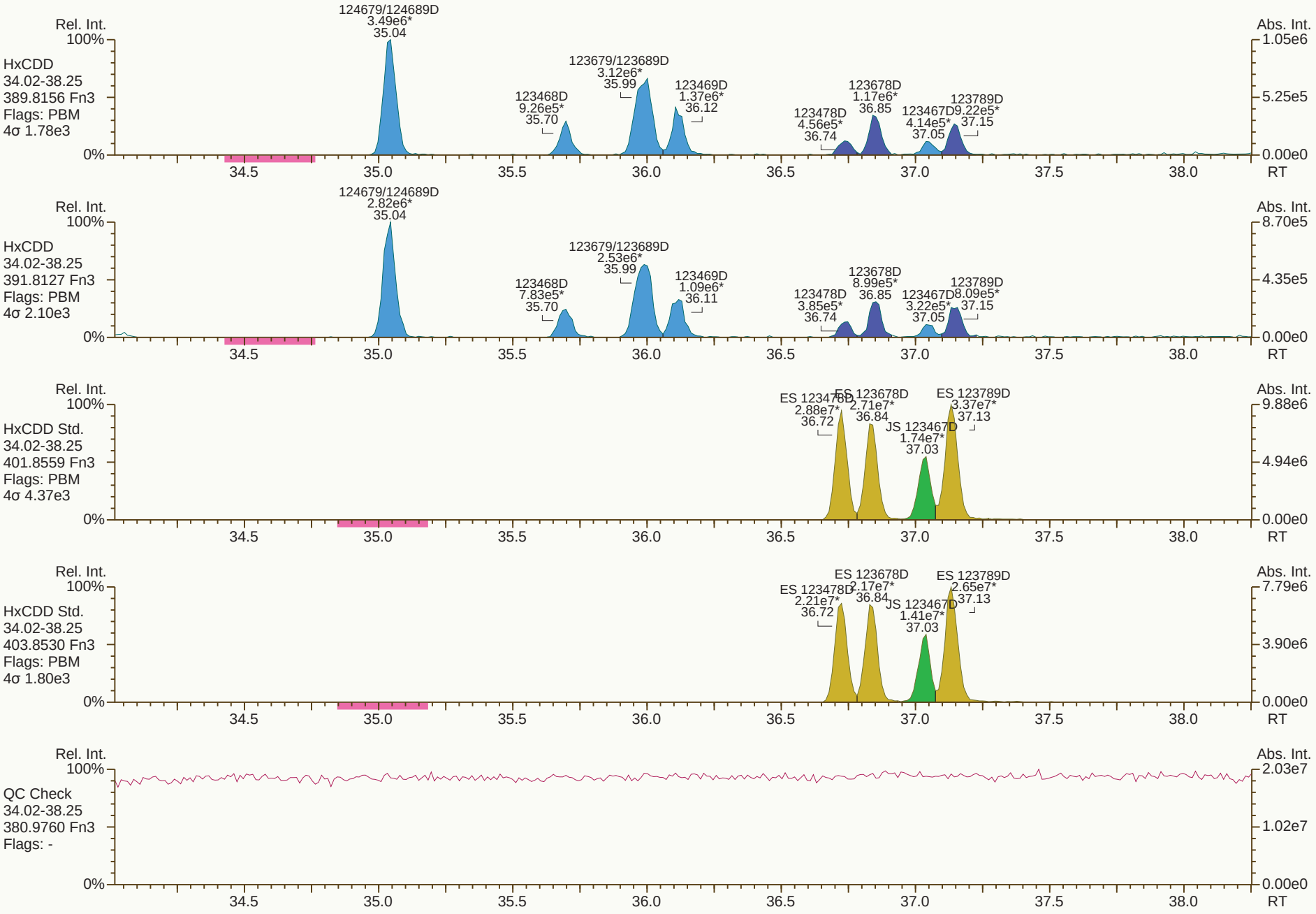
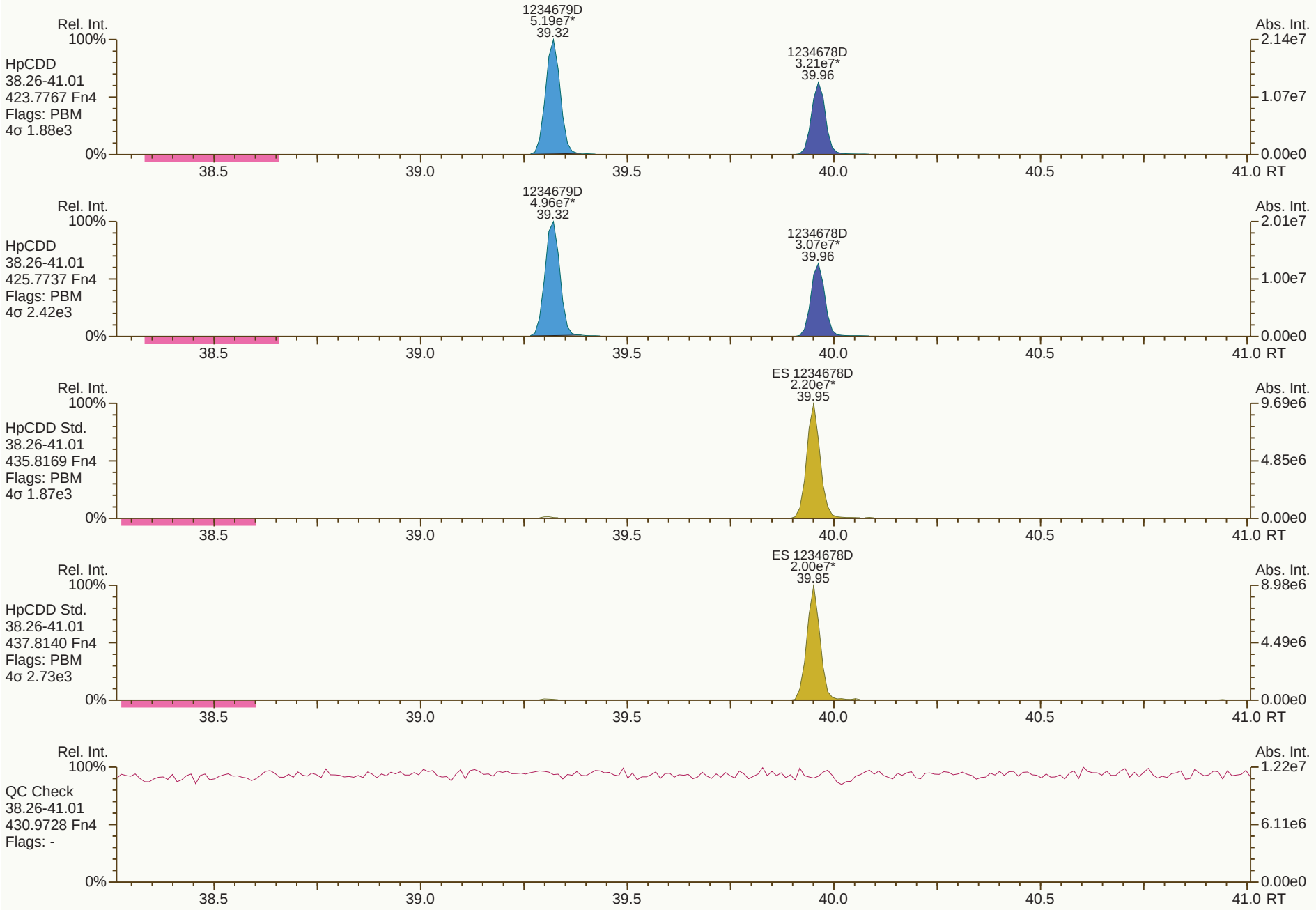
32.0
32.5
33.0
33.5
34.0 RT


Rel. Int.
100%
HxCDD
34.02-38.25
389.8156 Fn3
Flags: PBM
4σ 1.78e3
124679/124689D
3.49e6*
35.04
123679/123689D
3.12e6*
35.99
123468D
9.26e5*
35.70
123469D
1.37e6*
36.12
123678D
1.17e6*
36.85
123478D
4.56e5*
36.74
123467D
4.14e5*
37.05
123789D
9.22e5*
37.15
Abs. Int.
1.05e6
5.25e5
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD
34.02-38.25
391.8127 Fn3
Flags: PBM
4σ 2.10e3
124679/124689D
2.82e6*
35.04
123679/123689D
2.53e6*
35.99
123468D
7.83e5*
35.70
123469D
1.09e6*
36.11
123678D
8.99e5*
36.85
123478D
3.85e5*
36.74
123467D
3.22e5*
37.05
123789D
8.09e5*
37.15
Abs. Int.
8.70e5
4.35e5
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
401.8559 Fn3
Flags: PBM
4σ 4.37e3
ES 123478D
2.88e7*
36.72
ES 123678D
2.71e7*
36.84
JS 123467D
1.74e7*
37.03
ES 123789D
3.37e7*
37.13
Abs. Int.
9.88e6
4.94e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
403.8530 Fn3
Flags: PBM
4σ 1.80e3
ES 123478D
2.21e7*
36.72
ES 123678D
2.17e7*
36.84
JS 123467D
1.41e7*
37.03
ES 123789D
2.65e7*
37.13
Abs. Int.
7.79e6
3.90e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
Abs. Int.
2.03e7
1.02e7
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT


Rel. Int.
100%
HpCDD
38.26-41.01
423.7767 Fn4
Flags: PBM
4σ 1.88e3
0%
1234679D
5.19e7*
39.32
1234678D
3.21e7*
39.96
Abs. Int.
2.14e7
1.07e7
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.26-41.01
425.7737 Fn4
Flags: PBM
4σ 2.42e3
0%
1234679D
4.96e7*
39.32
1234678D
3.07e7*
39.96
Abs. Int.
2.01e7
1.00e7
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
435.8169 Fn4
Flags: PBM
4σ 1.87e3
0%
ES 1234678D
2.20e7*
39.95
Abs. Int.
9.69e6
4.85e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
437.8140 Fn4
Flags: PBM
4σ 2.73e3
0%
ES 1234678D
2.00e7*
39.95
Abs. Int.
8.98e6
4.49e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.26-41.01
430.9728 Fn4
Flags: -
0%
Abs. Int.
1.22e7
6.11e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT

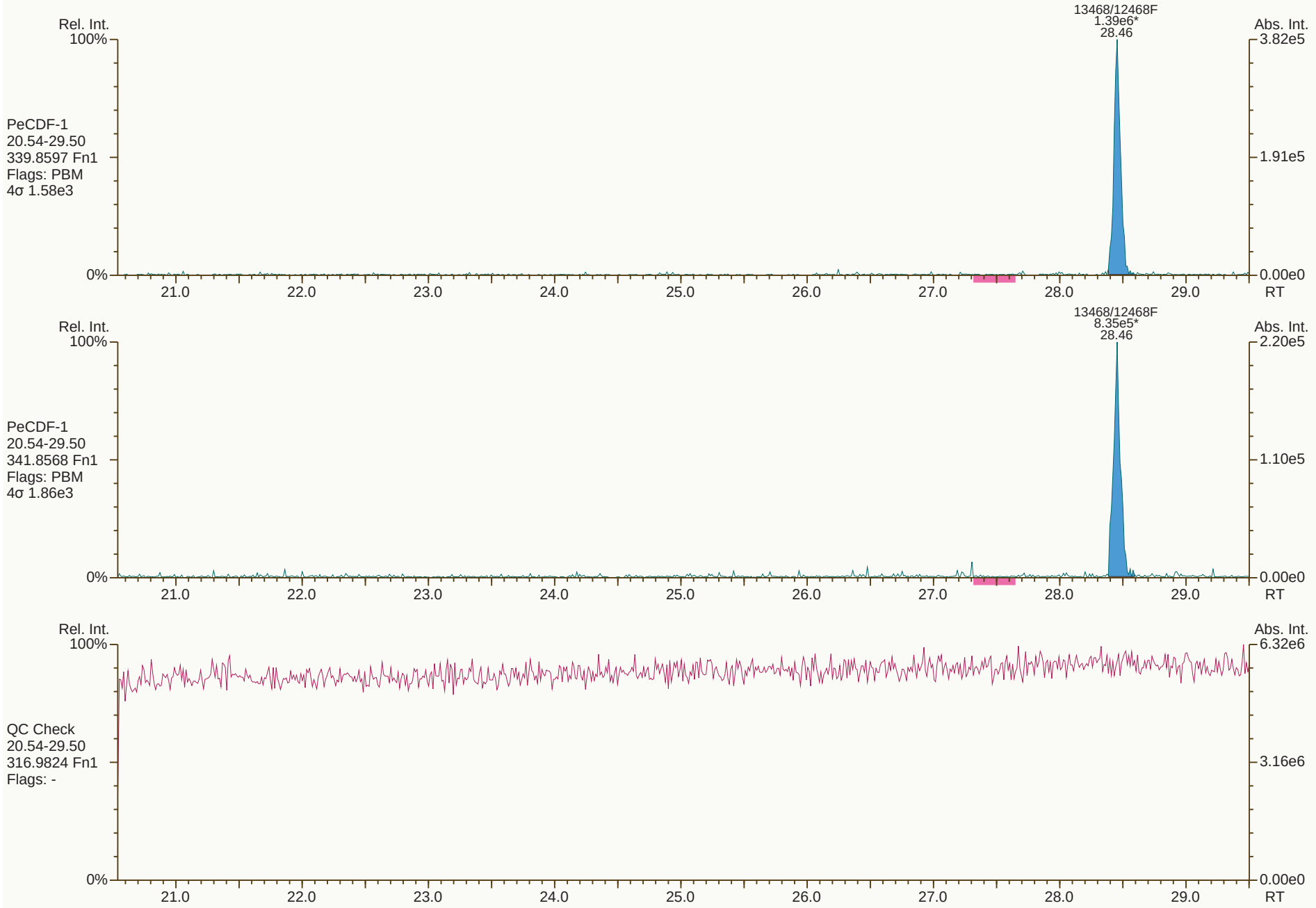

OCDD
1.13e8*
42.38
Rel. Int.
100%
OCDD
41.02-45.00
457.7377 Fn5
Flags: PBM
4σ 2.32e3
0%
Abs. Int.
4.46e7
2.23e7
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDD
1.26e8*
42.38
Rel. Int.
100%
OCDD
41.02-45.00
459.7348 Fn5
Flags: PBM
4σ 3.05e3
0%
Abs. Int.
4.98e7
2.49e7
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
1.96e7*
42.38
Rel. Int.
100%
OCDD Std.
41.02-45.00
469.7780 Fn5
Flags: PBM
4σ 2.31e3
0%
Abs. Int.
6.96e6
3.48e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
2.16e7*
42.38
Rel. Int.
100%
OCDD Std.
41.02-45.00
471.7750 Fn5
Flags: PBM
4σ 2.64e3
0%
Abs. Int.
8.50e6
4.25e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
1.09e7
5.47e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

SGS ID: B4519_17655_DF_009 Sample ID: CS-36 Acq: 11-Aug-2020 02:49:50
Instr: [ILM] AutoSpec-Ultima MM3 VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 30 User: PSW Datafile: 200810R17



SGS ID: B4519_17655_DF_009 | Sample ID: CS-36 | Acq: 11-Aug-2020 02:49:50

Instr: [ILM] AutoSpec-Ultima MM3 | VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 30 | User: PSW Datafile: 200810R17

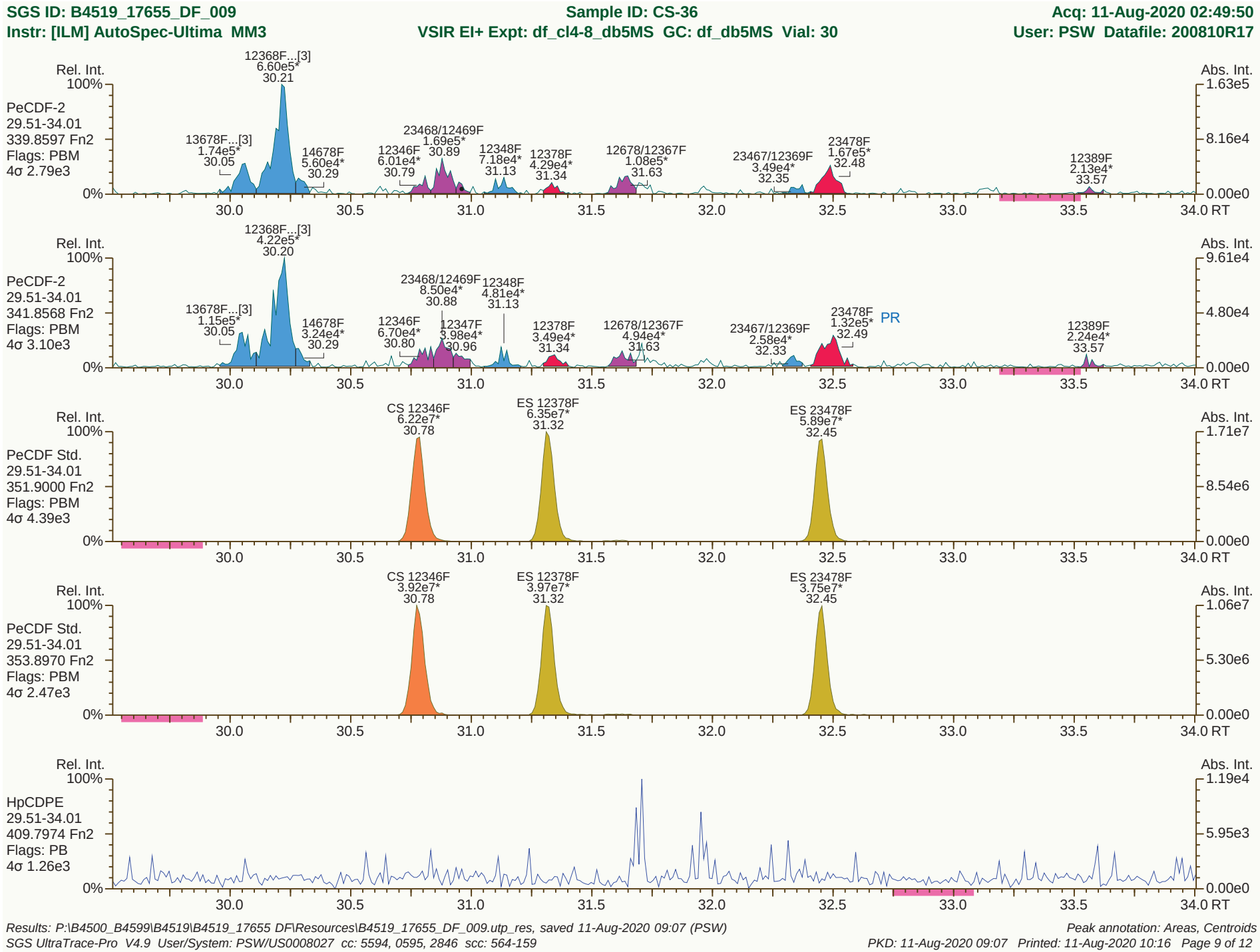


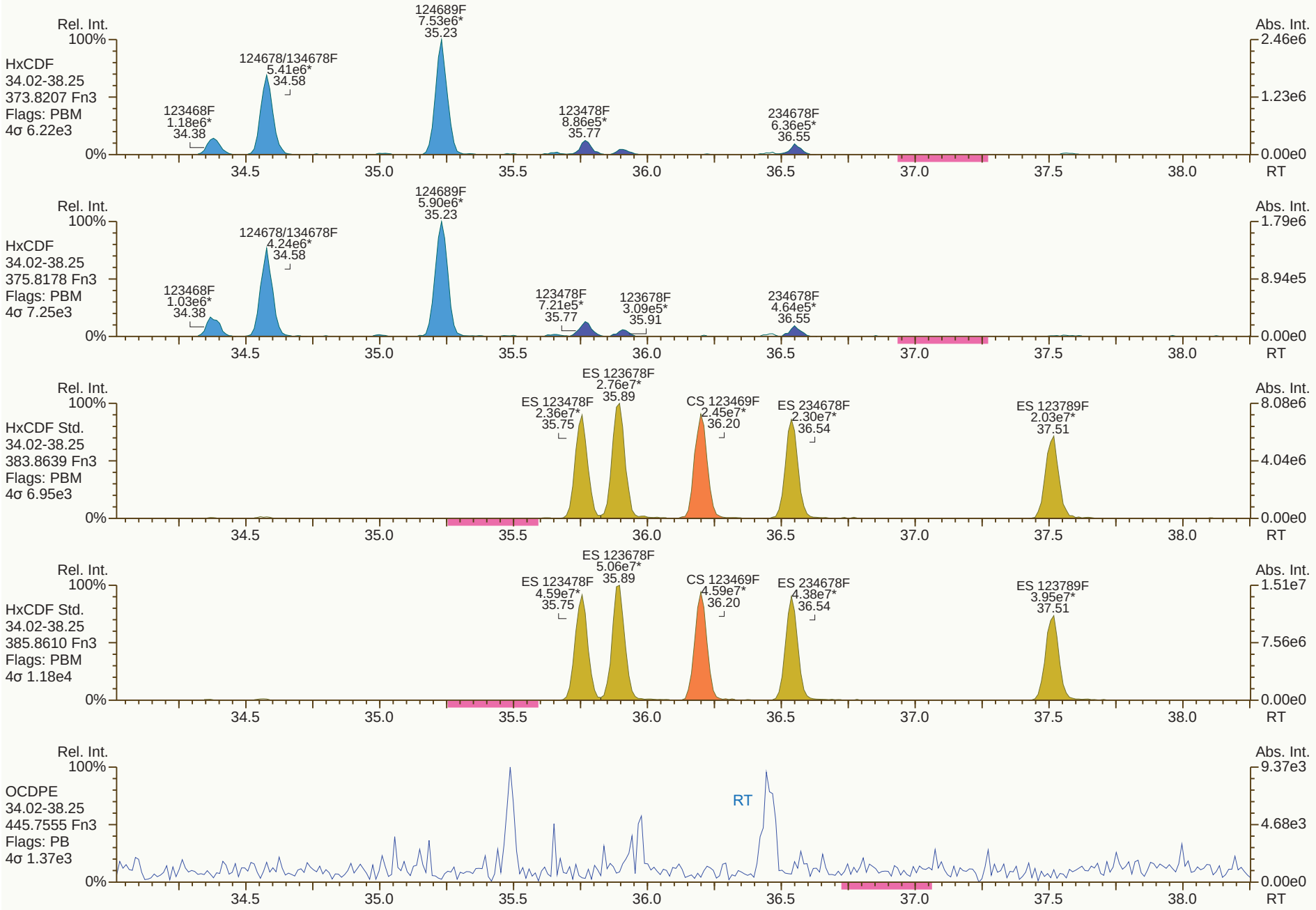
Results: P:\B4500_B4599\B4519\B4519_17655 DF\Resources\B4519_17655_DF_009.utp_res, saved 11-Aug-2020 09:07 (PSW)

Peak annotation: Areas, Centroids

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 1291 scc: 564-159

PKD: 11-Aug-2020 09:07 Printed: 11-Aug-2020 10:16 Page 8 of 12


SGS ID: B4519_17655_DF_009
Instr: [ILM] AutoSpec-Ultima MM3
Sample ID: CS-36
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 30
Acq: 11-Aug-2020 02:49:50
User: PSW Datafile: 200810R17
Rel. Int.
Abs. Int.
PeCDF-2
29.51-34.01
339.8597 Fn2
Flags: PBM
4σ 2.79e3
13678F...[3] 1.74e5* 30.05
12368F...[3] 6.60e5* 30.21
14678F 5.60e4* 30.29
12346F 6.01e4* 30.79
23468/12469F 1.69e5* 30.89
12348F 7.18e4* 31.13
12378F 4.29e4* 31.34
12678/12367F 1.08e5* 31.63
23467/12369F 3.49e4* 32.35
23478F 1.67e5* 32.48
12389F 2.13e4* 33.57
PeCDF-2
29.51-34.01
341.8568 Fn2
Flags: PBM
4σ 3.10e3
13678F...[3] 1.15e5* 30.05
12368F...[3] 4.22e5* 30.20
14678F 3.24e4* 30.29
12346F 6.70e4* 30.80
23468/12469F 8.50e4* 30.88
12347F 3.98e4* 30.96
12348F 4.81e4* 31.13
12378F 3.49e4* 31.34
12678/12367F 4.94e4* 31.63
23467/12369F 2.58e4* 32.33
23478F 1.32e5* 32.49
PR
12389F 2.24e4* 33.57
PeCDF Std.
29.51-34.01
351.9000 Fn2
Flags: PBM
4σ 4.39e3
CS 12346F 6.22e7* 30.78
ES 12378F 6.35e7* 31.32
ES 23478F 5.89e7* 32.45
PeCDF Std.
29.51-34.01
353.8970 Fn2
Flags: PBM
4σ 2.47e3
CS 12346F 3.92e7* 30.78
ES 12378F 3.97e7* 31.32
ES 23478F 3.75e7* 32.45
HpCDPE
29.51-34.01
409.7974 Fn2
Flags: PB
4σ 1.26e3
RT
Results: P:\B4500_B4599\B4519\B4519_17655 DF\Resources\B4519_17655_DF_009.utp_res, saved 11-Aug-2020 09:07 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 5594, 0595, 2846 scc: 564-159
PKD: 11-Aug-2020 09:07 Printed: 11-Aug-2020 10:16 Page 9 of 12


Rel. Int.
100%
HxCDF
34.02-38.25
373.8207 Fn3
Flags: PBM
4σ 6.22e3
123468F
1.18e6*
34.38
124678/134678F
5.41e6*
34.58
124689F
7.53e6*
35.23
123478F
8.86e5*
35.77
234678F
6.36e5*
36.55
0%
Abs. Int.
2.46e6
1.23e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDF
34.02-38.25
375.8178 Fn3
Flags: PBM
4σ 7.25e3
123468F
1.03e6*
34.38
124678/134678F
4.24e6*
34.58
124689F
5.90e6*
35.23
123478F
7.21e5*
35.77
123678F
3.09e5*
35.91
234678F
4.64e5*
36.55
0%
Abs. Int.
1.79e6
8.94e5
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDF Std.
34.02-38.25
383.8639 Fn3
Flags: PBM
4σ 6.95e3
ES 123478F
2.36e7*
35.75
ES 123678F
2.76e7*
35.89
CS 123469F
2.45e7*
36.20
ES 234678F
2.30e7*
36.54
ES 123789F
2.03e7*
37.51
0%
Abs. Int.
8.08e6
4.04e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDF Std.
34.02-38.25
385.8610 Fn3
Flags: PBM
4σ 1.18e4
ES 123478F
4.59e7*
35.75
ES 123678F
5.06e7*
35.89
CS 123469F
4.59e7*
36.20
ES 234678F
4.38e7*
36.54
ES 123789F
3.95e7*
37.51
0%
Abs. Int.
1.51e7
7.56e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
OCDPE
34.02-38.25
445.7555 Fn3
Flags: PB
4σ 1.37e3
RT
0%
Abs. Int.
9.37e3
4.68e3
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT

SGS ID: B4519_17655_DF_009 | Sample ID: CS-36 | Acq: 11-Aug-2020 02:49:50

Instr: [ILM] AutoSpec-Ultima MM3 | VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 30 | User: PSW Datafile: 200810R17

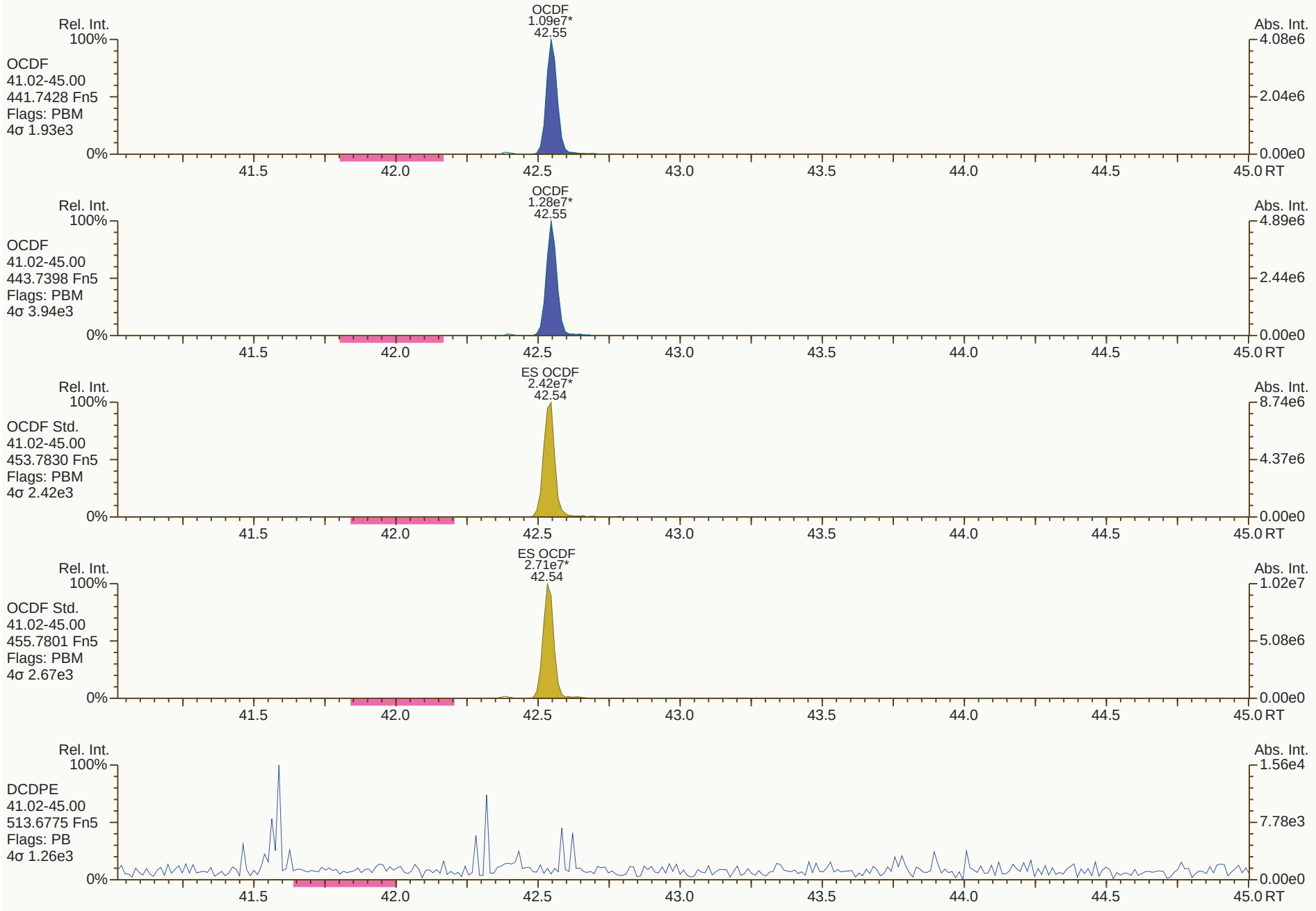


Results: P:\B4500_B4599\B4519\B4519_17655 DF\Resources\B4519_17655_DF_009.utp_res, saved 11-Aug-2020 09:07 (PSW)

Peak annotation: Areas, Centroids

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 5409, 9336, 7312 scc: 564-159

PKD: 11-Aug-2020 09:07 Printed: 11-Aug-2020 10:16 Page 11 of 12


Rel. Int.
100%
OCDF
41.02-45.00
441.7428 Fn5
Flags: PBM
4σ 1.93e3
0%
OCDF
1.09e7*
42.55
Abs. Int.
4.08e6
2.04e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF
41.02-45.00
443.7398 Fn5
Flags: PBM
4σ 3.94e3
0%
OCDF
1.28e7*
42.55
Abs. Int.
4.89e6
2.44e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF Std.
41.02-45.00
453.7830 Fn5
Flags: PBM
4σ 2.42e3
0%
ES OCDF
2.42e7*
42.54
Abs. Int.
8.74e6
4.37e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF Std.
41.02-45.00
455.7801 Fn5
Flags: PBM
4σ 2.67e3
0%
ES OCDF
2.71e7*
42.54
Abs. Int.
1.02e7
5.08e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
DCDPE
41.02-45.00
513.6775 Fn5
Flags: PB
4σ 1.26e3
0%
Abs. Int.
1.56e4
7.78e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

Lab ID: B4519_17655_DF_010 **Acq'd:** 11 Aug 2020 03:37 PSW **Wt/Vol:** 9.14 g **ICAL:** MM3_DF_10012020_12JUN2020

Client ID: CS-37 **UTP:** 11-Aug-2020 09:11:46 PSW **J-level:** 0.547 pg/g **Split:** 1 **Checkcode:** 407-770-NGH

Datafile: 200810R18 **Report:** 11 Aug 2020 10:00 pw **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	27.28	J EMPC	1.0009	1.0011	+0.3	5.33E+04	0.63	N	1.18	0.147	4584	0.137
12378-PeCDD	32.81	J EMPC	1.0006	1.0005	-0.2	1.50E+05	2.38	N	1.14	0.502	6056	0.169
123478-HxCDD	36.72		1.0004	1.0003	-0.2	4.87E+06	1.19	Y	1.09	18.3	4739	0.139
123678-HxCDD	36.84		1.0035	1.0035	0	6.43E+06	1.16	Y	1.13	24.9	4739	0.149
123789-HxCDD	37.15		1.0116	1.0119	+0.7	3.33E+06	1.28	Y	1.05	11.4	4739	0.134
1234678-HpCDD	39.95		1.0003	1.0003	0	4.93E+08	1.04	Y	0.98	2,280	4089	0.106
OCDD	42.38		1.0003	1.0003	0	1.31E+09	0.90	Y	1.08	10,300	7526	0.426
2378-TCDF	26.34	J	1.0006	1.0007	+0.2	1.16E+05	0.88	Y	0.98	0.241	4245	0.103
12378-PeCDF	31.33	J	1.0006	1.0006	0	1.25E+05	1.45	Y	0.95	0.275	5170	0.0996
23478-PeCDF	32.47	J EMPC	1.0005	1.0011	+1.2	2.29E+05	2.01	N	0.95	0.549	5170	0.115
123478-HxCDF	35.76		1.0005	1.0004	-0.2	1.42E+06	1.19	Y	1.20	3.59	17298	0.355
123678-HxCDF	35.91	J	1.0004	1.0007	+0.6	5.53E+05	1.29	Y	1.07	1.45	17298	0.396
234678-HxCDF	36.54	J	1.0005	1.0003	-0.4	8.48E+05	1.20	Y	1.10	2.41	17298	0.396
123789-HxCDF	NotFnd		1.0004	-		-	-	-	1.09	-	17298	0.483
1234678-HpCDF	39.04		1.0003	1.0003	0	2.67E+07	1.02	Y	1.28	84.4	3329	0.0617
1234789-HpCDF	40.36		1.0002	1.0002	0	1.91E+06	0.97	Y	1.27	7.63	3329	0.0807
OCDF	42.54		1.0003	1.0003	0	5.33E+07	0.90	Y	1.01	369	3854	0.197

Name	Act RT	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	27.25	1.0255	1.0257	+0.3	6.76E+07	0.78	Y	1.01	85.1
ES 12378-PeCDD	32.79	1.2330	1.2344	+2.8	5.74E+07	1.65	Y	0.87	83.6
ES 123478-HxCDD	36.71	0.9917	0.9916	-0.2	5.33E+07	1.34	Y	1.10	67.9
ES 123678-HxCDD	36.82	0.9947	0.9947	0	5.01E+07	1.30	Y	1.06	65.9
ES 123789-HxCDD	37.12	1.0028	1.0028	0	6.07E+07	1.31	Y	1.22	69.6
ES 1234678-HpCDD	39.94	1.0785	1.0788	+0.7	4.80E+07	1.01	Y	0.99	67.6
ES OCDD	42.36	1.1439	1.1443	+1.0	5.18E+07	0.91	Y	0.67	54
ES 2378-TCDF	26.33	1.0572	1.0576	+0.6	1.08E+08	0.78	Y	1.01	80.8
ES 12378-PeCDF	31.31	1.2558	1.2579	+3.9	1.05E+08	1.54	Y	0.90	88.5
ES 23478-PeCDF	32.44	1.3012	1.3032	+3.9	9.62E+07	1.63	Y	0.89	82.1
ES 123478-HxCDF	35.74	0.9655	0.9654	-0.2	7.25E+07	0.53	Y	1.43	70.8
ES 123678-HxCDF	35.88	0.9693	0.9692	-0.2	7.78E+07	0.54	Y	1.63	66.6
ES 234678-HxCDF	36.53	0.9867	0.9866	-0.2	7.03E+07	0.53	Y	1.48	66.4
ES 123789-HxCDF	37.50	1.0130	1.0130	0	6.35E+07	0.53	Y	1.29	68.6
ES 1234678-HpCDF	39.03	1.0540	1.0542	+0.5	5.40E+07	0.44	Y	1.15	65.9
ES 1234789-HpCDF	40.36	1.0898	1.0901	+0.7	4.31E+07	0.45	Y	0.91	66.5
ES OCDF	42.53	1.1484	1.1487	+0.8	6.26E+07	0.89	Y	0.83	52.8

Lab ID: B4519_17655_DF_010 | Acq'd: 11 Aug 2020 03:37 PSW | Wt/Vol: 9.14 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-37 | UTP: 11-Aug-2020 09:11:46 PSW | J-level: 0.547 pg/g | Split: 1 | Checkcode: 407-770-NGH

Datafile: 200810R18 | Report: 11 Aug 2020 10:00 pw | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
JS 1234-TCDD	26.57		-	-	-	7.88E+07	0.77	Y	-	-
JS 1234-TCDF	24.89		-	-	-	1.32E+08	0.78	Y	-	-
JS 123467-HxCDD	37.02		-	-	-	3.58E+07	1.32	Y	-	-
CS 37Cl-2378-TCDD	27.27		1.0265	1.0266	+0.2	3.13E+07	n/a	-	1.04	95.7
CS 12347-PeCDD	32.29		1.2141	1.2153	+2.3	5.82E+07	1.67	Y	0.74	99.8
CS 12346-PeCDF	30.78		1.2343	1.2364	+3.9	1.02E+08	1.56	Y	0.86	90.2
CS 123469-HxCDF	36.19		0.9776	0.9775	-0.2	7.18E+07	0.53	Y	1.36	73.9
CS 1234689-HpCDF	39.44		1.0650	1.0653	+0.7	5.80E+07	0.45	Y	1.05	76.8
~~SS 37Cl-2378-TCDD~~	~~27.27~~		~~1.0265~~	~~1.0266~~	~~+0.2~~	~~3.13E+07~~	~~n/a~~		~~1.04~~	~~112~~ Not used in this project.
~~SS 12347-PeCDD~~	~~32.29~~		~~1.2141~~	~~1.2153~~	~~+2.3~~	~~5.82E+07~~	~~1.67~~	~~Y~~	~~0.86~~	~~119~~ CL 11Aug20
~~SS 12346-PeCDF~~	~~30.78~~		~~1.2343~~	~~1.2364~~	~~+3.9~~	~~1.02E+08~~	~~1.56~~	~~Y~~	~~0.96~~	~~101~~
~~SS 123469-HxCDF~~	~~36.19~~		~~0.9776~~	~~0.9775~~	~~-0.2~~	~~7.18E+07~~	~~0.53~~	~~Y~~	~~0.83~~	~~110~~
~~SS 1234689-HpCDF~~	~~39.44~~		~~1.0650~~	~~1.0653~~	~~+0.7~~	~~5.80E+07~~	~~0.45~~	~~Y~~	~~0.92~~	~~116~~

Totals	Conc	EMPC
Total TCDD	0.82	1.85
Total PeCDD	54	55.6
Total HxCDD	1880	1880
Total HpCDD	19500	19500
Total Tetra-Octa Dioxins	31700	31700
Total TCDF	3.14	5.47
Total PeCDF	6.75	7.3
Total HxCDF	81.3	81.3
Total HpCDF	392	392
Total Tetra-Octa Furans	852	855
Total Tetra-Octa Dioxins & Furans	32600	32600

* 37Cl correction has been applied to 2378-TCDD

	Original Values	Corrected Values
Ratio	0.42	0.63
Response	7.89E+04	6.02E+04

Lab ID: B4519_17655_DF_010 **Acq'd:** 11 Aug 2020 03:37 PSW **Wt/Vol:** 9.14 g **ICAL:** MM3_DF_10012020_12JUN2020

Client ID: CS-37 **UTP:** 11-Aug-2020 09:11:46 PSW **J-level:** 0.547 pg/g **Split:** 1 **Checkcode:** 407-770-NGH

Datafile: 200810R18 **Report:** 11 Aug 2020 10:00 pw **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1368-TCDD	23.37		0.8591	0.8577	-2.0	2.98E+05	0.70	Y	1.18	0.82	4584	0.137
1379-TCDD	23.77	J EMPC	0.8732	0.8723	-1.3	1.44E+05	1.11	N	1.18	0.395	4584	0.137
1369-TCDD	NotFnd		0.8901						1.18		4584	0.137
1469-TCDD	NotFnd		0.9205						1.18		4584	0.137
1247/1246/1248/1249-TCDD	25.32	J EMPC	0.9301	0.9290	-1.7	1.02E+05	1.03	N	1.18	0.281	4584	0.137
1378-TCDD	NotFnd		0.9374						1.18		4584	0.137
1268-TCDD	NotFnd		0.9449						1.18		4584	0.137
1478-TCDD	NotFnd		0.9544						1.18		4584	0.137
1279-TCDD	NotFnd		0.9610						1.18		4584	0.137
1234/1269-TCDD	26.58	J EMPC	0.9746	0.9754	+1.3	7.59E+04	1.01	N	1.18	0.209	4584	0.137
1236-TCDD	NotFnd		0.9802						1.18		4584	0.137
1237/1238-TCDD	NotFnd		0.9898						1.18		4584	0.137
1239-TCDD	NotFnd		0.9950						1.18		4584	0.137
2378-TCDD	**27.28**	J EMPC	**1.0009**	1.0011	**+0.3**	5.33E+04	0.63	N	**1.18**	**0.147**	**4584**	**0.137**
1278-TCDD	NotFnd		1.0133						1.18		4584	0.137
1267-TCDD	NotFnd		1.0185						1.18		4584	0.137
1289-TCDD	NotFnd		1.0379						1.18		4584	0.137
12479/12468-PeCDD	30.27		0.9229	0.9230	+0.2	2.47E+06	1.63	Y	1.14	8.29	6056	0.169
12469-PeCDD	30.82		0.9396	0.9397	+0.2	7.96E+06	1.59	Y	1.14	26.7	6056	0.169
12368-PeCDD	31.38	J	0.9568	0.9568	0	6.52E+05	1.75	Y	1.14	2.19	6056	0.169
12478-PeCDD	31.56	J EMPC	0.9626	0.9625	-0.2	3.28E+05	1.78	N	1.14	1.1	6056	0.169
12379-PeCDD	31.67	J	0.9657	0.9657	0	5.07E+05	1.72	Y	1.14	1.7	6056	0.169
12369/12467/12489-PeCDD	31.92		0.9738	0.9733	-1.0	3.65E+06	1.56	Y	1.14	12.3	6056	0.169
12346/12347-PeCDD	32.32	J	0.9853	0.9854	+0.2	4.56E+05	1.58	Y	1.14	1.53	6056	0.169
12378-PeCDD	32.81	J EMPC	**1.0006**	**1.0005**	**-0.2**	**1.50E+05**	**2.38**	**N**	**1.14**	**0.502**	**6056**	**0.169**
12367-PeCDD	32.91	J	1.0034	1.0034	0	2.00E+05	1.58	Y	1.14	0.67	6056	0.169
12389-PeCDD	33.26	J	1.0141	1.0141	0	2.00E+05	1.59	Y	1.14	0.67	6056	0.169
124679/124689-HxCDD	35.03		0.9542	0.9542	0	2.11E+08	1.26	Y	1.09	775	4739	0.14
123468-HxCDD	35.68		0.9721	0.9720	-0.2	5.71E+07	1.26	Y	1.09	210	4739	0.14
123679/123689-HxCDD	35.97		0.9799	0.9798	-0.2	9.42E+07	1.25	Y	1.09	346	4739	0.14
123469-HxCDD	36.10		0.9835	0.9834	-0.2	1.12E+08	1.25	Y	1.09	413	4739	0.14
123478-HxCDD	36.72		**1.0004**	**1.0003**	**-0.2**	**4.87E+06**	**1.19**	**Y**	1.09	**18.3**	**4739**	**0.139**
123678-HxCDD	36.84		**1.0035**	**1.0035**	**0**	**6.43E+06**	**1.16**	**Y**	1.13	**24.9**	**4739**	**0.149**
123467-HxCDD	37.04		1.0088	1.0089	+0.2	2.27E+07	1.28	Y	1.09	83.6	4739	0.14
123789-HxCDD	37.15		**1.0116**	**1.0119**	**+0.7**	**3.33E+06**	**1.28**	**Y**	1.05	**11.4**	**4739**	**0.134**

Lab ID: B4519_17655_DF_010 | Acq'd: 11 Aug 2020 03:37 PSW | Wt/Vol: 9.14 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-37 | UTP: 11-Aug-2020 09:11:46 PSW | J-level: 0.547 pg/g | Split: 1 | Checkcode: 407-770-NGH

Datafile: 200810R18 | Report: 11 Aug 2020 10:00 pw | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1234679-HpCDD	39.31	E	0.9843	0.9843	0	3.71E+09	1.04	Y	0.98	17,200	4089	0.106
1234678-HpCDD	**39.95**		**1.0003**	**1.0003**	**0**	**4.93E+08**	**1.04**	**Y**	**0.98**	**2,280**	**4089**	**0.106**
OCDD	**42.38**		**1.0003**	**1.0003**	**0**	**1.31E+09**	**0.90**	**Y**	**1.08**	**10,300**	**7526**	**0.426**
OCDD-a	42.37		1.0002	1.0002	0	7.84E+07	2.55	Y	0.07	10,000	5921	5.44
1368-TCDF	21.17	J	0.8044	0.8039	-0.6	1.49E+05	0.85	Y	0.98	0.308	4245	0.103
1468-TCDF	21.72	J EMPC	0.8261	0.8248	-1.7	7.41E+04	0.61	N	0.98	0.153	4245	0.103
2468-TCDF	22.38	EMPC	0.8511	0.8502	-1.2	2.98E+05	0.92	N	0.98	0.617	4245	0.103
1346/1246-TCDF	NotFnd		0.8665						0.98		4245	0.103
1347/1378/1247-TCDF	22.93		0.8723	0.8709	-1.9	3.41E+05	0.78	Y	0.98	0.705	4245	0.103
1348-TCDF	23.28	J	0.8835	0.8841	+0.8	8.67E+04	0.80	Y	0.98	0.179	4245	0.103
1248/1367/1379-TCDF	23.37	J EMPC	0.8888	0.8878	-1.4	1.33E+05	0.65	N	0.98	0.274	4245	0.103
1268-TCDF	23.79	J EMPC	0.9044	0.9034	-1.4	7.76E+04	0.39	N	0.98	0.16	4245	0.103
1467-TCDF	NotFnd		0.9098						0.98		4245	0.103
1478-TCDF	24.12	J	0.9167	0.9161	-0.9	7.10E+04	0.85	Y	0.98	0.147	4245	0.103
1369/1237-TCDF	24.51	J EMPC	0.9316	0.9309	-1.0	4.33E+04	0.59	N	0.98	0.0897	4245	0.103
2467-TCDF	24.64	J EMPC	0.9369	0.9358	-1.6	5.76E+04	0.49	N	0.98	0.119	4245	0.103
2368-TCDF	24.83	J	0.9430	0.9432	+0.3	1.47E+05	0.69	Y	0.98	0.305	4245	0.103
1238/1234/1678/1469/1236-TCDF	24.94	J	0.9468	0.9472	+0.6	1.62E+05	0.84	Y	0.98	0.336	4245	0.103
1278-TCDF	25.40	J	0.9651	0.9648	-0.5	1.09E+05	0.76	Y	0.98	0.226	4245	0.103
1349-TCDF	NotFnd		0.9704						0.98		4245	0.103
1267-TCDF	NotFnd		0.9761						0.98		4245	0.103
2346/1249-TCDF	NotFnd		0.9834						0.98		4245	0.103
2347/1279-TCDF	26.11	J	0.9921	0.9919	-0.3	9.08E+04	0.76	Y	0.98	0.188	4245	0.103
2348-TCDF	NotFnd		0.9964						0.98		4245	0.103
2378-TCDF	**26.34**	J	**1.0006**	**1.0007**	**+0.2**	**1.16E+05**	**0.88**	**Y**	**0.98**	**0.241**	**4245**	**0.103**
2367/3467-TCDF	26.74	J	1.0156	1.0158	+0.3	2.42E+05	0.68	Y	0.98	0.501	4245	0.103
1269-TCDF	NotFnd		1.0249						0.98		4245	0.103
1239-TCDF	NotFnd		1.0357						0.98		4245	0.103
1289-TCDF	28.44	EMPC	1.0799	1.0803	+0.7	4.44E+05	1.70	N	0.98	0.919	4245	0.103
13468/12468-PeCDF	28.45	J	0.9084	0.9085	+0.2	9.72E+05	1.37	Y	0.95	2.23	3266	0.0676
13678/13467/12467-PeCDF	30.04	J	0.9591	0.9592	+0.2	2.81E+05	1.72	Y	0.95	0.645	5170	0.107
12368/13478/12478-PeCDF	30.20	J	0.9642	0.9646	+0.7	7.72E+05	1.36	Y	0.95	1.77	5170	0.107
14678-PeCDF	30.31	J	0.9675	0.9682	+1.3	5.10E+04	1.33	Y	0.95	0.117	5170	0.107
13479-PeCDF	NotFnd		0.9706						0.95		5170	0.107
13469/12479-PeCDF	NotFnd		0.9787						0.95		5170	0.107
12346-PeCDF	30.78	J	0.9833	0.9830	-0.6	4.78E+04	1.35	Y	0.95	0.11	5170	0.107

Lab ID: B4519_17655_DF_010 **Acq'd:** 11 Aug 2020 03:37 PSW **Wt/Vol:** 9.14 g **ICAL:** MM3_DF_10012020_12JUN2020

Client ID: CS-37 **UTP:** 11-Aug-2020 09:11:46 PSW **J-level:** 0.547 pg/g **Split:** 1 **Checkcode:** 407-770-NGH

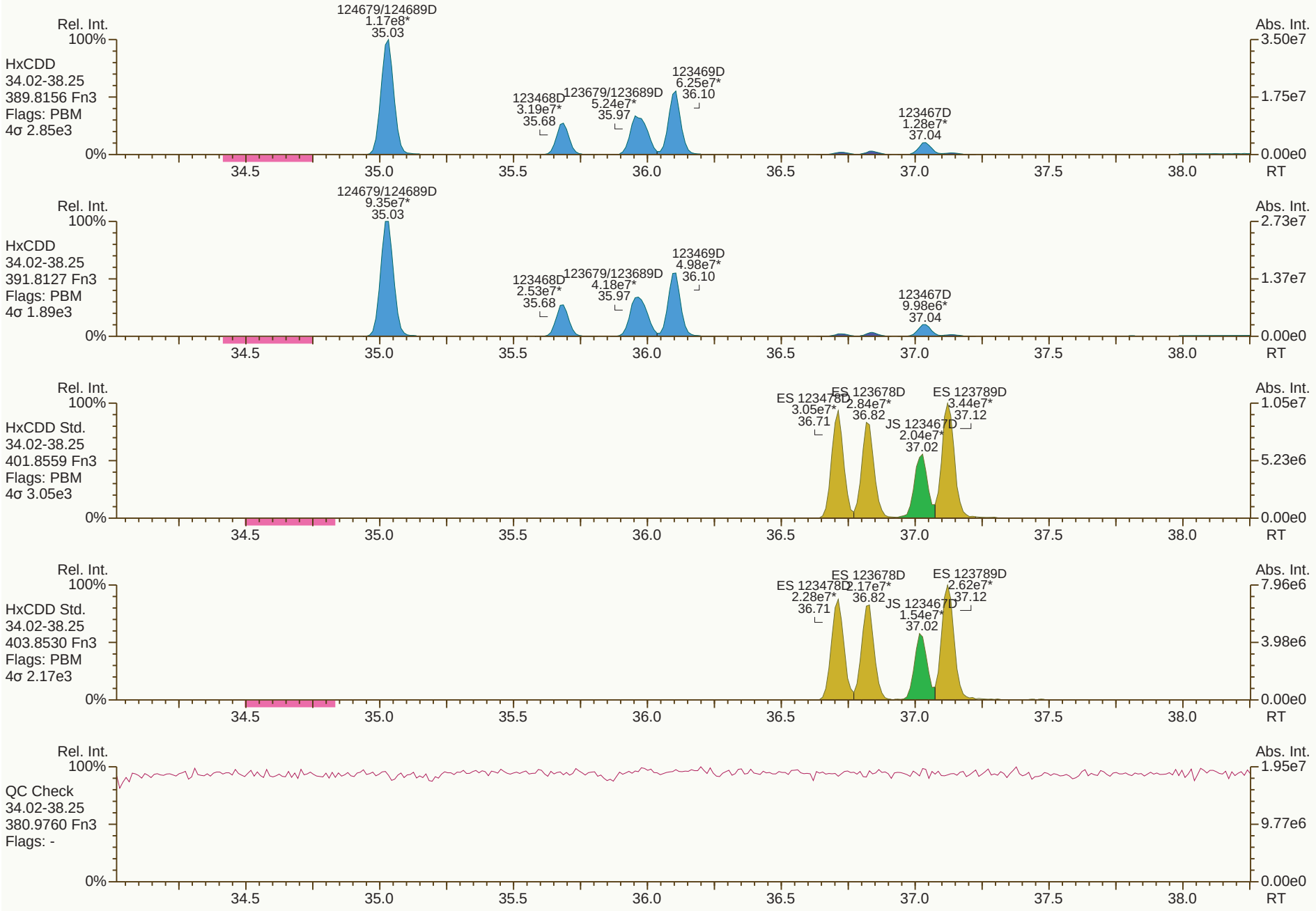
Datafile: 200810R18 **Report:** 11 Aug 2020 10:00 pw **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

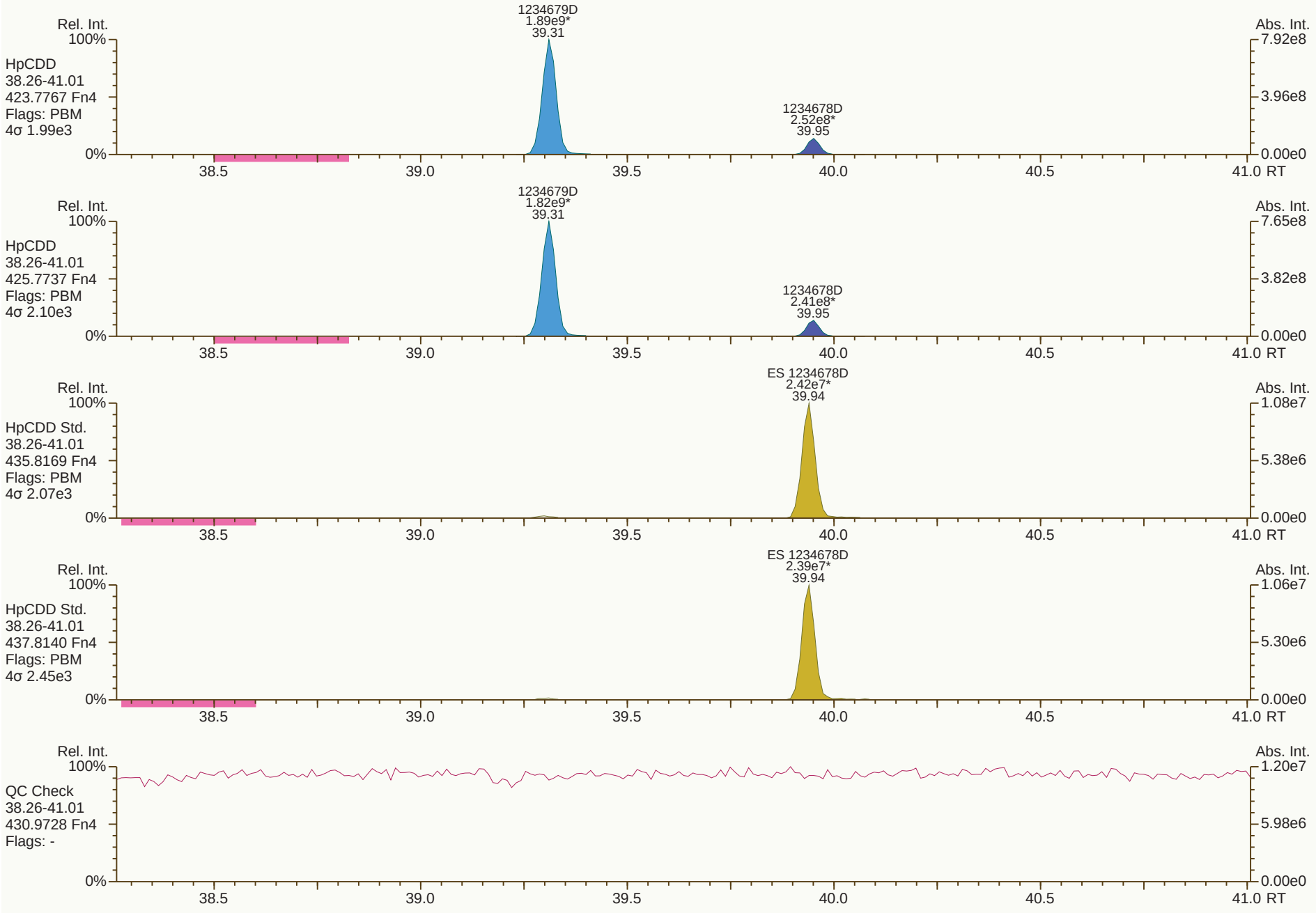
Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
23468/12469-PeCDF	30.90	J	0.9861	0.9868	+1.3	3.08E+05	1.72	Y	0.95	0.708	5170	0.107
12347-PeCDF	NotFnd		0.9887						0.95		5170	0.107
12348-PeCDF	31.14	J	0.9938	0.9946	+1.5	7.30E+04	1.72	Y	0.95	0.168	5170	0.107
12378-PeCDF	**31.33**	J	**1.0006**	**1.0006**	**0**	**1.25E+05**	**1.45**	**Y**	**0.95**	**0.275**	**5170**	**0.0996**
12678/12367-PeCDF	31.64	J	1.0095	1.0104	+1.7	2.02E+05	1.73	Y	0.95	0.464	5170	0.107
12379-PeCDF	NotFnd		1.0150						0.95		5170	0.107
12679-PeCDF	NotFnd		0.9926						0.95		5170	0.107
23467/12369-PeCDF	32.33	J	0.9966	0.9968	+0.4	1.12E+05	1.72	Y	0.95	0.257	5170	0.107
23478-PeCDF	**32.47**	J EMPC	**1.0005**	**1.0011**	**+1.2**	**2.29E+05**	**2.01**	**N**	**0.95**	**0.549**	**5170**	**0.115**
23478/12489-PeCDF	NotFnd		0.0000						0.95			
12489-PeCDF	NotFnd		1.0047						0.95		5170	0.107
12349-PeCDF	NotFnd		1.0107						0.95		5170	0.107
12389-PeCDF	NotFnd		1.0339						0.95		5170	0.107
123468-HxCDF	34.37		0.9617	0.9616	-0.2	1.02E+06	1.26	Y	1.11	2.83	17298	0.404
124678/134678-HxCDF	34.57		0.9673	0.9671	-0.4	5.90E+06	1.26	Y	1.11	16.3	17298	0.404
134679-HxCDF	NotFnd		0.9737						1.11		17298	0.404
124679-HxCDF	35.01	J	0.9792	0.9797	+1.1	3.67E+05	1.12	Y	1.11	1.02	17298	0.404
124689-HxCDF	35.22		0.9854	0.9854	0	1.92E+07	1.22	Y	1.11	53	17298	0.404
123467-HxCDF	NotFnd		0.9972						1.11		17298	0.404
123478-HxCDF	**35.76**		**1.0005**	**1.0004**	**-0.2**	**1.42E+06**	**1.19**	**Y**	**1.20**	**3.59**	**17298**	**0.355**
123678-HxCDF	**35.91**	J	**1.0004**	**1.0007**	**+0.6**	**5.53E+05**	**1.29**	**Y**	**1.07**	**1.45**	**17298**	**0.396**
123479-HxCDF	NotFnd		1.0049						1.11		17298	0.404
123469-HxCDF	NotFnd		1.0089						1.11		17298	0.404
123679-HxCDF	NotFnd		0.9945						1.11		17298	0.404
234678-HxCDF	**36.54**	J	**1.0005**	**1.0003**	**-0.4**	**8.48E+05**	**1.20**	**Y**	**1.10**	**2.41**	**17298**	**0.396**
234678/123689-HxCDF	NotFnd		0.0000						1.10			
123689-HxCDF	NotFnd		1.0054						1.11		17298	0.404
123789-HxCDF	**NotFnd**		**1.0004**						**1.09**		**17298**	**0.483**
123789/123489-HxCDF	NotFnd		0.0000						1.09			
123489-HxCDF	37.55	J	1.0008	1.0013	+1.1	2.50E+05	1.08	Y	1.11	0.691	17298	0.404
1234678-HpCDF	**39.04**		**1.0003**	**1.0003**	**0**	**2.67E+07**	**1.02**	**Y**	**1.28**	**84.4**	**3329**	**0.0617**
1234679-HpCDF	39.32		1.0072	1.0073	+0.2	4.00E+06	1.08	Y	1.27	14.1	3329	0.0701
1234689-HpCDF	39.45		1.0107	1.0107	0	8.09E+07	1.04	Y	1.27	286	3329	0.0701
1234789-HpCDF	**40.36**		**1.0002**	**1.0002**	**0**	**1.91E+06**	**0.97**	**Y**	**1.27**	**7.63**	**3329**	**0.0807**
OCDF	**42.54**		**1.0003**	**1.0003**	**0**	**5.33E+07**	**0.90**	**Y**	**1.01**	**369**	**3854**	**0.197**
OCDF-a	NotFnd		1.0002						0.06		4736	3.86


Rel. Int.
100%
0%
Abs. Int.
6.19e6
3.09e6
0.00e0
QC Check
20.54-29.50
316.9824 Fn1
Flags: -
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
0%
Abs. Int.
4.91e6
2.46e6
0.00e0
QC Check
29.51-34.01
366.9792 Fn2
Flags: -
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
0%
Abs. Int.
1.95e7
9.77e6
0.00e0
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
0%
Abs. Int.
1.20e7
5.98e6
0.00e0
QC Check
38.26-41.01
430.9728 Fn4
Flags: -
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
0%
Abs. Int.
1.09e7
5.45e6
0.00e0
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT


Rel. Int.
100%
TCDD
20.54-29.50
319.8965 Fn1
Flags: PBM
4σ 2.27e3
0%
1368D
1.22e5*
23.37
1379D
8.97e4*
23.77
1247D...[4]
5.94e4*
25.32
1234/1269D
4.32e4*
26.58
2378D
2.32e4*
27.28
Abs. Int.
2.64e4
1.32e4
0.00e0
RT
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
Rel. Int.
100%
TCDD
20.54-29.50
321.8936 Fn1
Flags: PBM
4σ 2.31e3
0%
1368D
1.76e5*
23.38
1379D
8.11e4*
23.76
1247D...[4]
5.78e4*
25.31
1234/1269D
4.29e4*
26.59
2378D
5.58e4*
27.27
Abs. Int.
3.36e4
1.68e4
0.00e0
RT
Rel. Int.
100%
37Cl-TCDD
20.54-29.50
327.8850 Fn1
Flags: PBM
4σ 1.57e3
0%
CS 37Cl-2378D
3.13e7*
27.27
Abs. Int.
7.52e6
3.76e6
0.00e0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
331.9368 Fn1
Flags: PBM
4σ 5.03e3
0%
JS 1234D
3.43e7*
26.57
ES 2378D
2.96e7*
27.25
Abs. Int.
7.51e6
3.76e6
0.00e0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
333.9339 Fn1
Flags: PBM
4σ 3.49e3
0%
JS 1234D
4.45e7*
26.57
ES 2378D
3.79e7*
27.25
Abs. Int.
9.56e6
4.78e6
0.00e0
RT

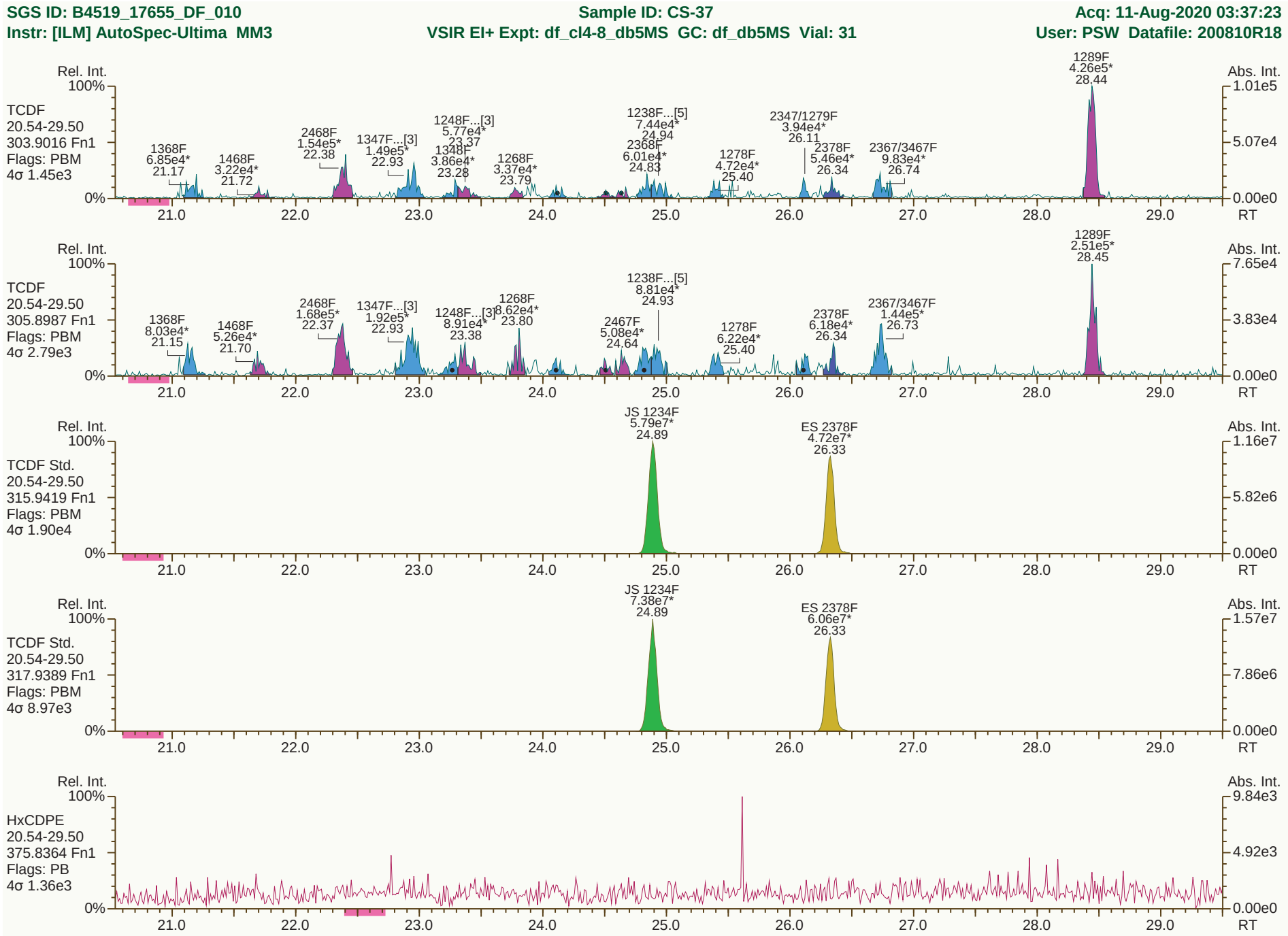

Rel. Int.
100%
PeCDD
29.51-34.01
355.8546 Fn2
Flags: PBM
4σ 2.94e3
12469D
4.89e6*
30.82
12479/12468D
1.53e6*
30.27
12368D
4.14e5*
31.38
12478D
2.30e5*
31.56
12379D
3.21e5*
31.67
12369D...[3]
2.23e6*
31.92
12346/12347D
2.79e5*
32.32
Abs. Int.
1.28e6
6.41e5
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD
29.51-34.01
357.8517 Fn2
Flags: PBM
4σ 3.12e3
12469D
3.07e6*
30.82
12479/12468D
9.40e5*
30.27
12368D
2.37e5*
31.38
12478D
1.29e5*
31.56
12369D...[3]
1.43e6*
31.92
12346/12347D
1.77e5*
32.32
Abs. Int.
7.64e5
3.82e5
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
367.8949 Fn2
Flags: PBM
4σ 2.61e3
CS 12347D
3.65e7*
32.29
ES 12378D
3.58e7*
32.79
Abs. Int.
1.08e7
5.39e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
369.8919 Fn2
Flags: PBM
4σ 2.46e3
CS 12347D
2.18e7*
32.29
ES 12378D
2.16e7*
32.79
Abs. Int.
6.35e6
3.17e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
QC Check
29.51-34.01
366.9792 Fn2
Flags: -
Abs. Int.
4.91e6
2.46e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT


Rel. Int.
100%
HxCDD
34.02-38.25
389.8156 Fn3
Flags: PBM
4σ 2.85e3
124679/124689D
1.17e8*
35.03
123468D
3.19e7*
35.68
123679/123689D
5.24e7*
35.97
123469D
6.25e7*
36.10
123467D
1.28e7*
37.04
Abs. Int.
3.50e7
1.75e7
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD
34.02-38.25
391.8127 Fn3
Flags: PBM
4σ 1.89e3
124679/124689D
9.35e7*
35.03
123468D
2.53e7*
35.68
123679/123689D
4.18e7*
35.97
123469D
4.98e7*
36.10
123467D
9.98e6*
37.04
Abs. Int.
2.73e7
1.37e7
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
401.8559 Fn3
Flags: PBM
4σ 3.05e3
ES 123478D
3.05e7*
36.71
ES 123678D
2.84e7*
36.82
JS 123467D
2.04e7*
37.02
ES 123789D
3.44e7*
37.12
Abs. Int.
1.05e7
5.23e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
403.8530 Fn3
Flags: PBM
4σ 2.17e3
ES 123478D
2.28e7*
36.71
ES 123678D
2.17e7*
36.82
JS 123467D
1.54e7*
37.02
ES 123789D
2.62e7*
37.12
Abs. Int.
7.96e6
3.98e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
Abs. Int.
1.95e7
9.77e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT


Rel. Int.
100%
HpCDD
38.26-41.01
423.7767 Fn4
Flags: PBM
4σ 1.99e3
1234679D
1.89e9*
39.31
1234678D
2.52e8*
39.95
Abs. Int.
7.92e8
3.96e8
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.26-41.01
425.7737 Fn4
Flags: PBM
4σ 2.10e3
1234679D
1.82e9*
39.31
1234678D
2.41e8*
39.95
Abs. Int.
7.65e8
3.82e8
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
435.8169 Fn4
Flags: PBM
4σ 2.07e3
ES 1234678D
2.42e7*
39.94
Abs. Int.
1.08e7
5.38e6
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
437.8140 Fn4
Flags: PBM
4σ 2.45e3
ES 1234678D
2.39e7*
39.94
Abs. Int.
1.06e7
5.30e6
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.26-41.01
430.9728 Fn4
Flags: -
Abs. Int.
1.20e7
5.98e6
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT


OCDD
6.19e8*
42.38
Rel. Int.
100%
OCDD
41.02-45.00
457.7377 Fn5
Flags: PBM
4σ 2.72e3
0%
Abs. Int.
2.21e8
1.10e8
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDD
6.87e8*
42.37
Rel. Int.
100%
OCDD
41.02-45.00
459.7348 Fn5
Flags: PBM
4σ 4.80e3
0%
Abs. Int.
2.47e8
1.24e8
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
2.47e7*
42.36
Rel. Int.
100%
OCDD Std.
41.02-45.00
469.7780 Fn5
Flags: PBM
4σ 5.72e3
0%
Abs. Int.
8.58e6
4.29e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
2.71e7*
42.36
Rel. Int.
100%
OCDD Std.
41.02-45.00
471.7750 Fn5
Flags: PBM
4σ 2.36e3
0%
Abs. Int.
9.28e6
4.64e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
1.09e7
5.45e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

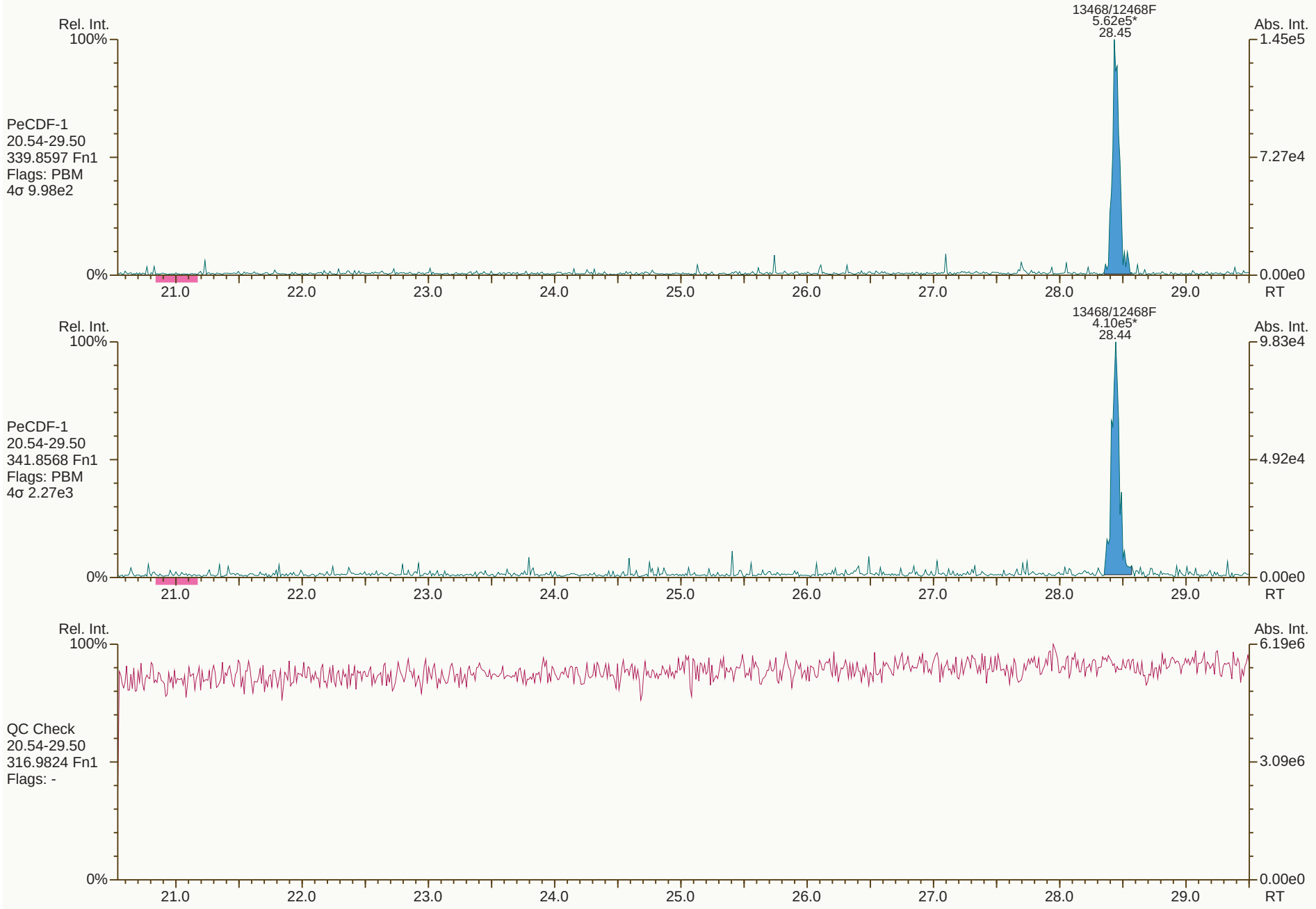
SGS ID: B4519_17655_DF_010 **Sample ID: CS-37** **Acq: 11-Aug-2020 03:37:23**
Instr: [ILM] AutoSpec-Ultima MM3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 31** **User: PSW Datafile: 200810R18**



Results: P:\B4500_B4599\B4519\B4519_17655 DF\Resources\B4519_17655_DF_010.utp_res, saved 11-Aug-2020 09:11 (PSW) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 9123, 5409, 8008 scc: 407-770 *PKD: 11-Aug-2020 09:11 Printed: 11-Aug-2020 10:17 Page 7 of 12*

SGS ID: B4519_17655_DF_010 | **Sample ID: CS-37** | **Acq: 11-Aug-2020 03:37:23**

Instr: [ILM] AutoSpec-Ultima MM3 | **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 31** | **User: PSW Datafile: 200810R18**

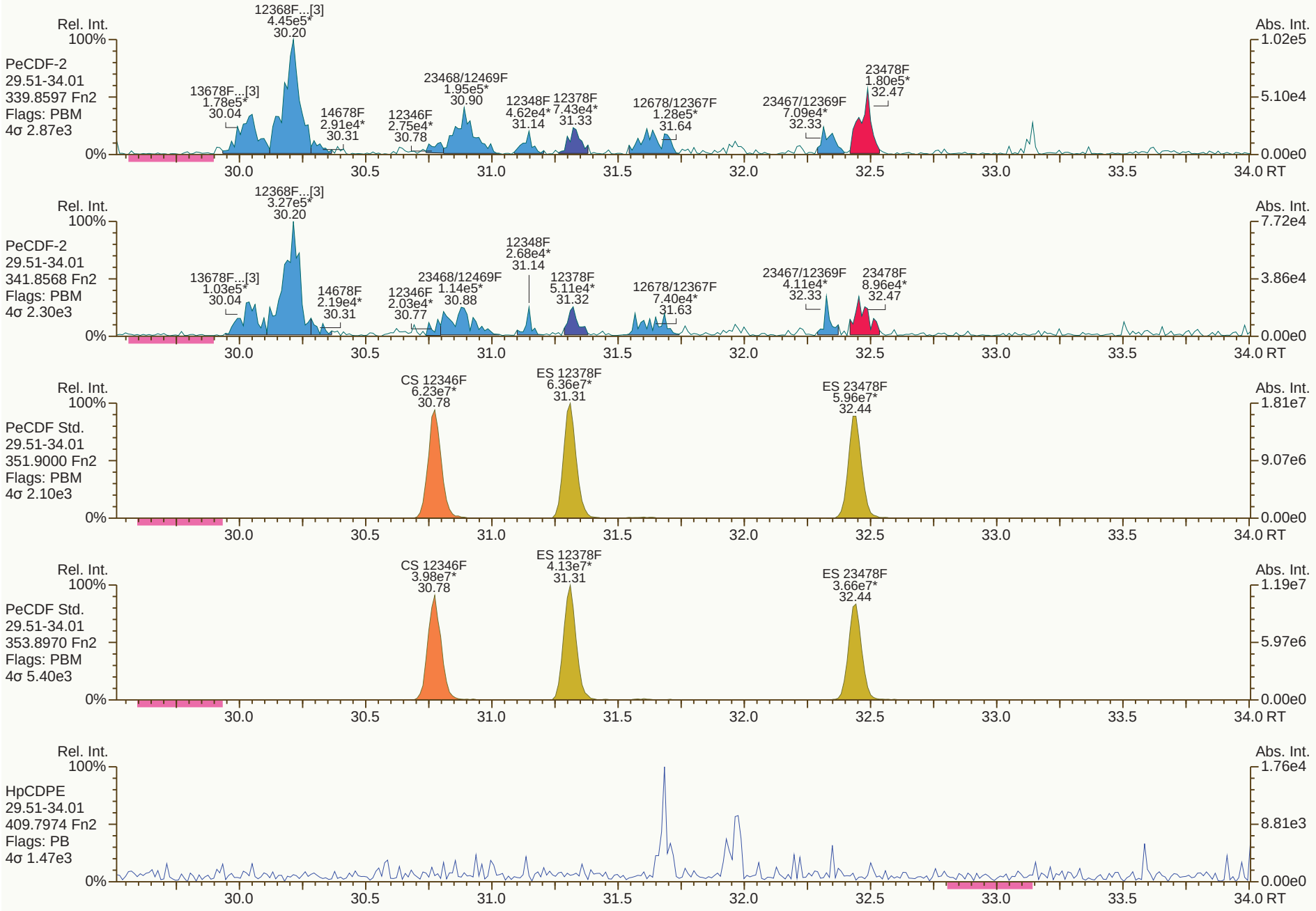


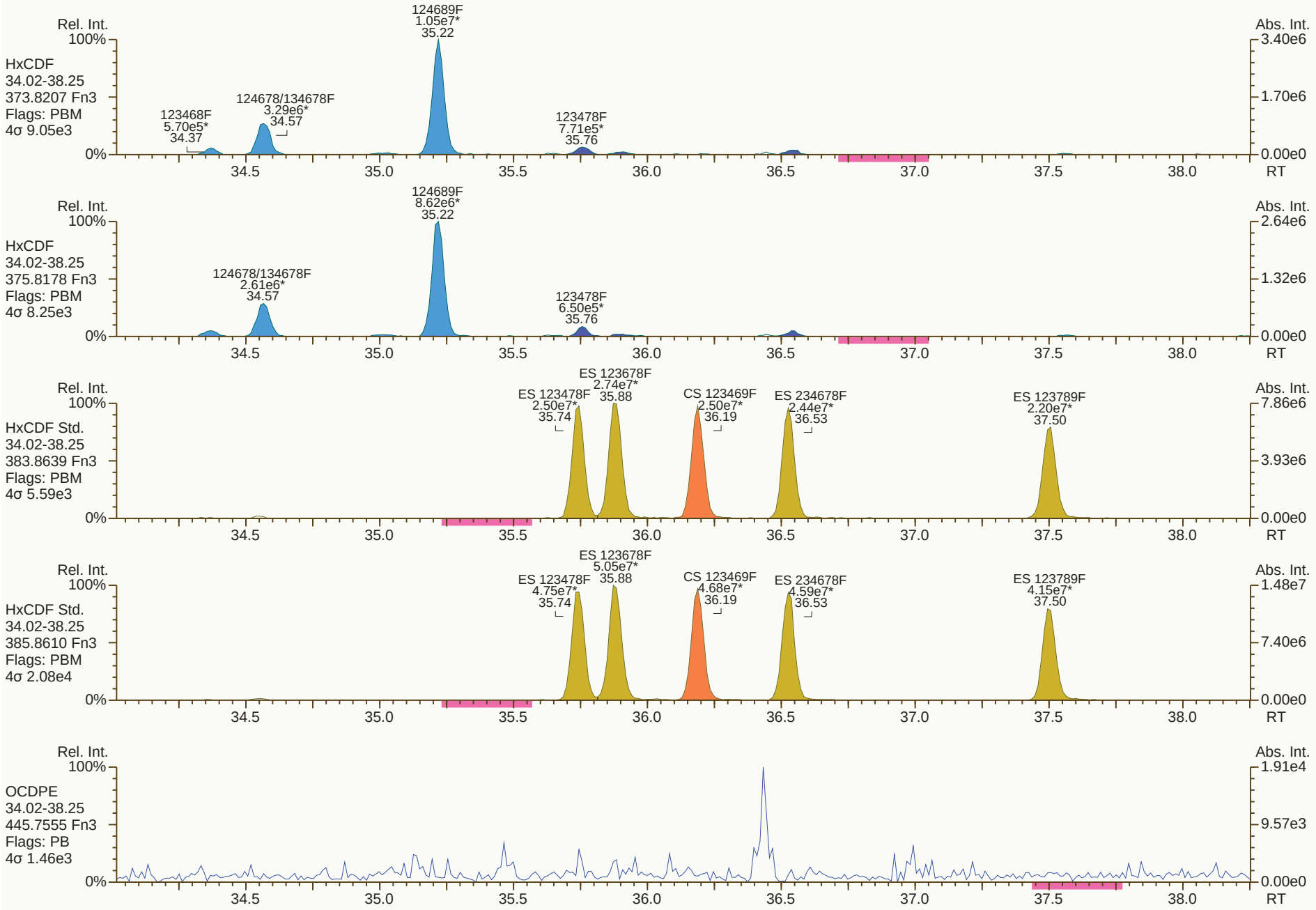
Results: P:\B4500_B4599\B4519\B4519_17655 DF\Resources\B4519_17655_DF_010.utp_res, saved 11-Aug-2020 09:11 (PSW)

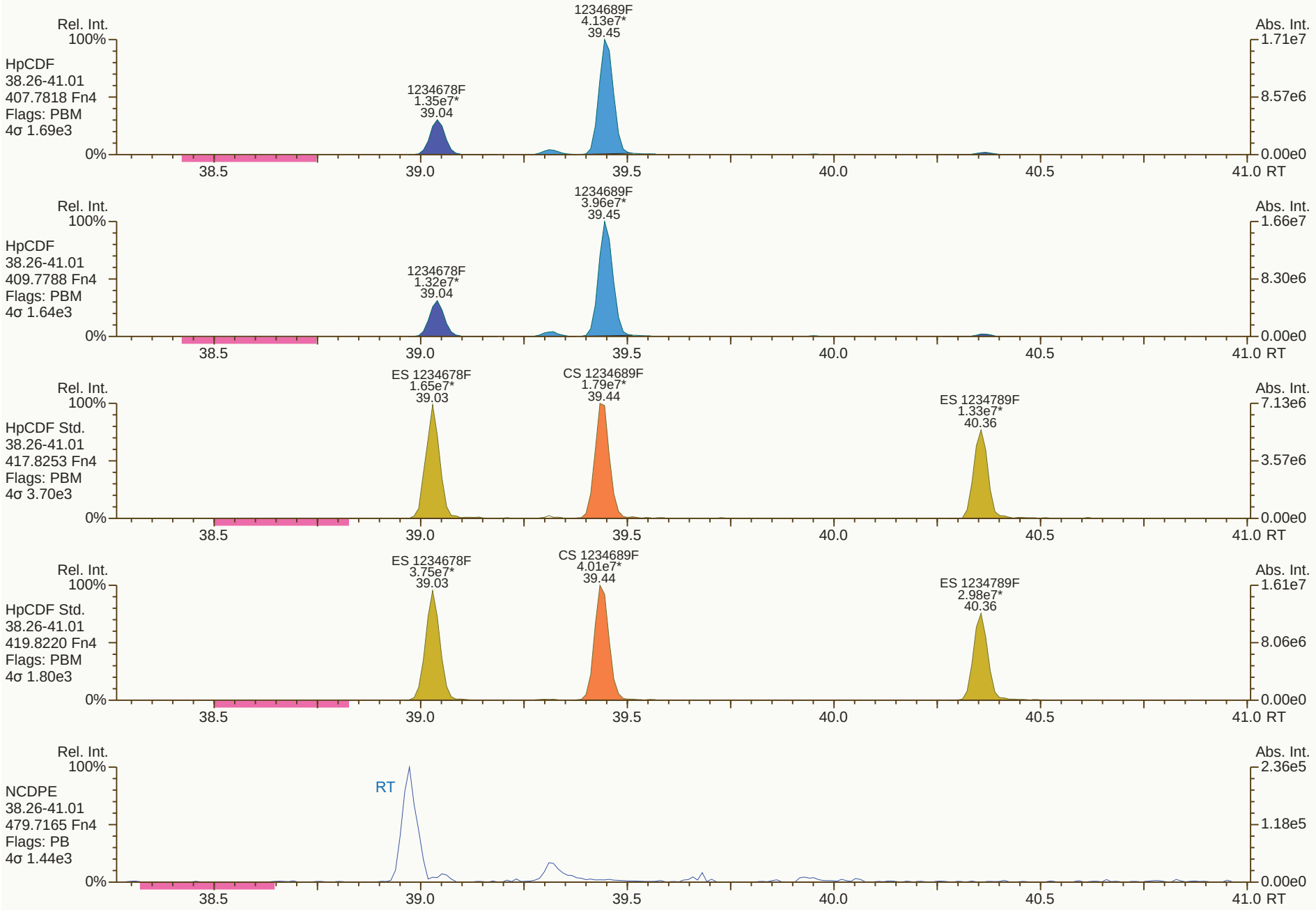
Peak annotation: Areas, Centroids

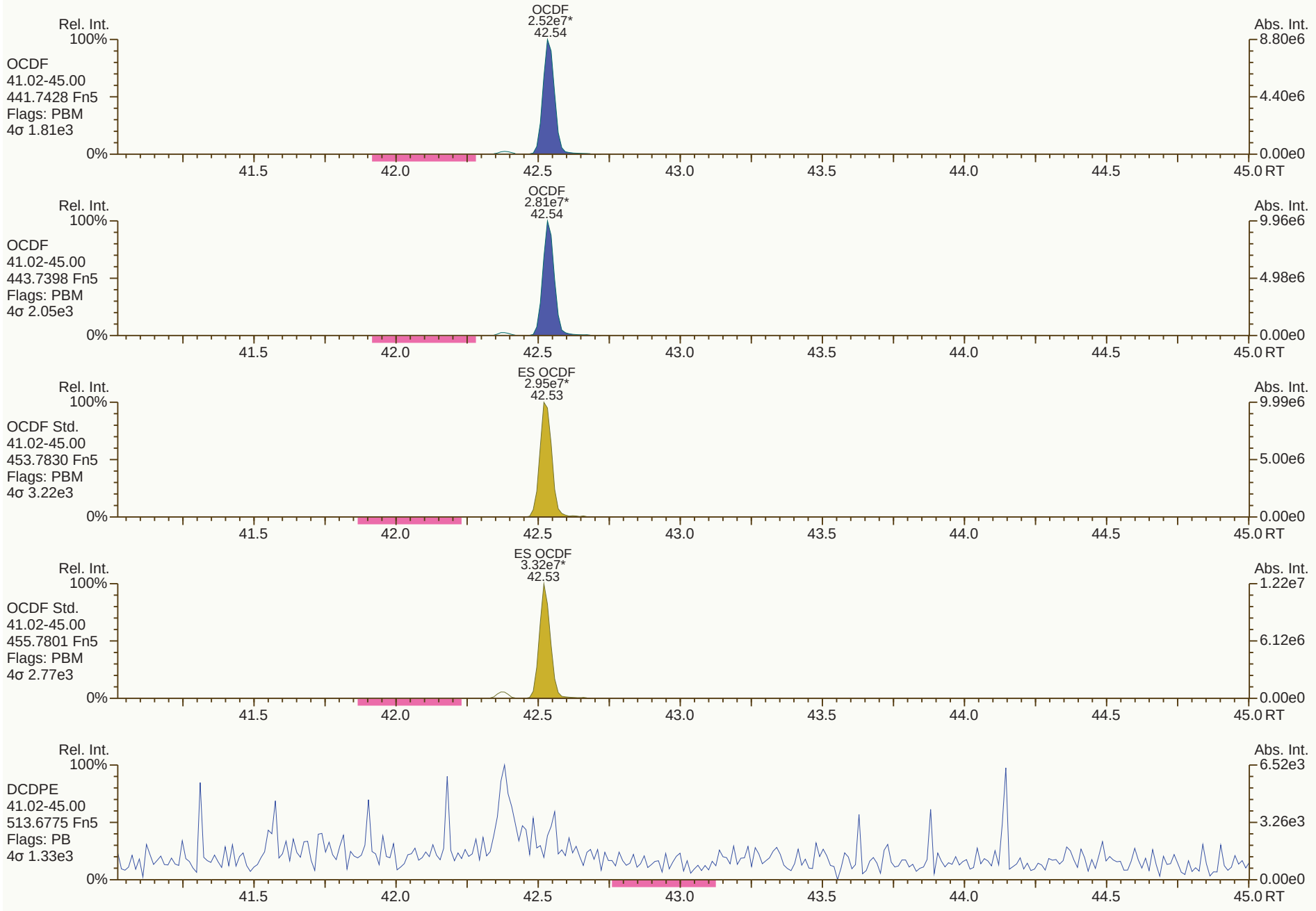
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 7860 scc: 407-770

PKD: 11-Aug-2020 09:11 Printed: 11-Aug-2020 10:17 Page 8 of 12


Rel. Int.
Abs. Int.
PeCDF-2
29.51-34.01
339.8597 Fn2
Flags: PBM
4σ 2.87e3
12368F...[3] 4.45e5* 30.20
13678F...[3] 1.78e5* 30.04
14678F 2.91e4* 30.31
12346F 2.75e4* 30.78
23468/12469F 1.95e5* 30.90
12348F 4.62e4* 31.14
12378F 7.43e4* 31.33
12678/12367F 1.28e5* 31.64
23467/12369F 7.09e4* 32.33
23478F 1.80e5* 32.47
PeCDF-2
29.51-34.01
341.8568 Fn2
Flags: PBM
4σ 2.30e3
12368F...[3] 3.27e5* 30.20
13678F...[3] 1.03e5* 30.04
14678F 2.19e4* 30.31
12346F 2.03e4* 30.77
23468/12469F 1.14e5* 30.88
12348F 2.68e4* 31.14
12378F 5.11e4* 31.32
12678/12367F 7.40e4* 31.63
23467/12369F 4.11e4* 32.33
23478F 8.96e4* 32.47
PeCDF Std.
29.51-34.01
351.9000 Fn2
Flags: PBM
4σ 2.10e3
CS 12346F 6.23e7* 30.78
ES 12378F 6.36e7* 31.31
ES 23478F 5.96e7* 32.44
PeCDF Std.
29.51-34.01
353.8970 Fn2
Flags: PBM
4σ 5.40e3
CS 12346F 3.98e7* 30.78
ES 12378F 4.13e7* 31.31
ES 23478F 3.66e7* 32.44
HpCDPE
29.51-34.01
409.7974 Fn2
Flags: PB
4σ 1.47e3
100%
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
1.02e5
5.10e4
0.00e0
7.72e4
3.86e4
1.81e7
9.07e6
1.19e7
5.97e6
1.76e4
8.81e3


Rel. Int.
100%
HxCDF
34.02-38.25
373.8207 Fn3
Flags: PBM
4σ 9.05e3
123468F
5.70e5*
34.37
124678/134678F
3.29e6*
34.57
124689F
1.05e7*
35.22
123478F
7.71e5*
35.76
0%
Abs. Int.
3.40e6
1.70e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDF
34.02-38.25
375.8178 Fn3
Flags: PBM
4σ 8.25e3
124678/134678F
2.61e6*
34.57
124689F
8.62e6*
35.22
123478F
6.50e5*
35.76
0%
Abs. Int.
2.64e6
1.32e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDF Std.
34.02-38.25
383.8639 Fn3
Flags: PBM
4σ 5.59e3
ES 123478F
2.50e7*
35.74
ES 123678F
2.74e7*
35.88
CS 123469F
2.50e7*
36.19
ES 234678F
2.44e7*
36.53
ES 123789F
2.20e7*
37.50
0%
Abs. Int.
7.86e6
3.93e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDF Std.
34.02-38.25
385.8610 Fn3
Flags: PBM
4σ 2.08e4
ES 123478F
4.75e7*
35.74
ES 123678F
5.05e7*
35.88
CS 123469F
4.68e7*
36.19
ES 234678F
4.59e7*
36.53
ES 123789F
4.15e7*
37.50
0%
Abs. Int.
1.48e7
7.40e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
OCDPE
34.02-38.25
445.7555 Fn3
Flags: PB
4σ 1.46e3
0%
Abs. Int.
1.91e4
9.57e3
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT


Rel. Int.
100%
HpCDF
38.26-41.01
407.7818 Fn4
Flags: PBM
4σ 1.69e3
0%
1234689F
4.13e7*
39.45
1234678F
1.35e7*
39.04
Abs. Int.
1.71e7
8.57e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF
38.26-41.01
409.7788 Fn4
Flags: PBM
4σ 1.64e3
0%
1234689F
3.96e7*
39.45
1234678F
1.32e7*
39.04
Abs. Int.
1.66e7
8.30e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.26-41.01
417.8253 Fn4
Flags: PBM
4σ 3.70e3
0%
ES 1234678F
1.65e7*
39.03
CS 1234689F
1.79e7*
39.44
ES 1234789F
1.33e7*
40.36
Abs. Int.
7.13e6
3.57e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.26-41.01
419.8220 Fn4
Flags: PBM
4σ 1.80e3
0%
ES 1234678F
3.75e7*
39.03
CS 1234689F
4.01e7*
39.44
ES 1234789F
2.98e7*
40.36
Abs. Int.
1.61e7
8.06e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
NCDPE
38.26-41.01
479.7165 Fn4
Flags: PB
4σ 1.44e3
0%
RT
Abs. Int.
2.36e5
1.18e5
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT


Rel. Int.
100%
OCDF
41.02-45.00
441.7428 Fn5
Flags: PBM
4σ 1.81e3
0%
OCDF
2.52e7*
42.54
Abs. Int.
8.80e6
4.40e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF
41.02-45.00
443.7398 Fn5
Flags: PBM
4σ 2.05e3
0%
OCDF
2.81e7*
42.54
Abs. Int.
9.96e6
4.98e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF Std.
41.02-45.00
453.7830 Fn5
Flags: PBM
4σ 3.22e3
0%
ES OCDF
2.95e7*
42.53
Abs. Int.
9.99e6
5.00e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF Std.
41.02-45.00
455.7801 Fn5
Flags: PBM
4σ 2.77e3
0%
ES OCDF
3.32e7*
42.53
Abs. Int.
1.22e7
6.12e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
DCDPE
41.02-45.00
513.6775 Fn5
Flags: PB
4σ 1.33e3
0%
Abs. Int.
6.52e3
3.26e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

Lab ID: B4519_17655_DF_011 **Acq'd:** 11 Aug 2020 04:24 PSW **Wt/Vol:** 9.47 g **ICAL:** MM3_DF_10012020_12JUN2020

Client ID: DUP-02 **UTP:** 11-Aug-2020 09:15:47 PSW **J-level:** 0.528 pg/g **Split:** 1 **Checkcode:** 473-691-JNF

Datafile: 200810R19 **Report:** 11 Aug 2020 10:00 pw **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	NotFnd		1.0009	-		-	-	-	1.18	-	5009	0.145
12378-PeCDD	32.82	J EMPC	1.0006	1.0006	0	1.19E+05	1.94	N	1.14	0.387	6831	0.206
123478-HxCDD	36.73	J EMPC	1.0004	1.0004	0	3.35E+05	1.00	N	1.09	1.26	6475	0.191
123678-HxCDD	36.85		1.0035	1.0035	0	8.81E+05	1.09	Y	1.13	3.34	6475	0.205
123789-HxCDD	37.15	J	1.0116	1.0117	+0.2	6.36E+05	1.30	Y	1.05	2.19	6475	0.192
1234678-HpCDD	39.96		1.0003	1.0003	0	2.40E+07	1.03	Y	0.98	123	13578	0.421
OCDD	42.38		1.0003	1.0003	0	1.11E+08	0.88	Y	1.08	1,040	5638	0.362
2378-TCDF	26.36	J EMPC	1.0006	1.0010	+0.6	1.80E+05	0.98	N	0.98	0.33	4190	0.0963
12378-PeCDF	31.33	J EMPC	1.0006	1.0005	-0.2	1.32E+05	1.97	N	0.95	0.283	6903	0.14
23478-PeCDF	32.48	J	1.0005	1.0011	+1.2	4.62E+05	1.37	Y	0.95	1.06	6903	0.144
123478-HxCDF	35.76	J	1.0005	1.0004	-0.2	8.29E+05	1.17	Y	1.20	2.14	8445	0.184
123678-HxCDF	35.91	J	1.0004	1.0005	+0.2	4.68E+05	1.12	Y	1.07	1.16	8445	0.174
234678-HxCDF	36.55	J	1.0005	1.0003	-0.4	5.77E+05	1.30	Y	1.10	1.63	8445	0.187
123789-HxCDF	NotFnd		1.0004	-		-	-	-	1.09	-	8445	0.243
1234678-HpCDF	39.05		1.0003	1.0003	0	8.75E+06	1.08	Y	1.28	28.6	4478	0.0973
1234789-HpCDF	40.37	J	1.0002	1.0002	0	4.58E+05	1.13	Y	1.27	1.91	4478	0.12
OCDF	42.54		1.0003	1.0002	-0.3	9.44E+06	0.90	Y	1.01	72.8	4950	0.259

Name	Act RT	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	27.26	1.0255	1.0257	+0.3	6.88E+07	0.78	Y	1.01	81.8
ES 12378-PeCDD	32.80	1.2330	1.2343	+2.6	5.70E+07	1.66	Y	0.87	78.4
ES 123478-HxCDD	36.72	0.9917	0.9916	-0.2	5.13E+07	1.29	Y	1.10	68.4
ES 123678-HxCDD	36.83	0.9947	0.9947	0	4.94E+07	1.31	Y	1.06	68.2
ES 123789-HxCDD	37.13	1.0028	1.0028	0	5.86E+07	1.32	Y	1.22	70.4
ES 1234678-HpCDD	39.94	1.0785	1.0788	+0.7	4.20E+07	1.10	Y	0.99	61.9
ES OCDD	42.37	1.1439	1.1443	+1.0	4.18E+07	0.94	Y	0.67	45.7
ES 2378-TCDF	26.33	1.0572	1.0576	+0.6	1.17E+08	0.78	Y	1.01	81.8
ES 12378-PeCDF	31.31	1.2558	1.2577	+3.6	1.04E+08	1.56	Y	0.90	81.8
ES 23478-PeCDF	32.45	1.3012	1.3032	+3.9	9.73E+07	1.59	Y	0.89	77.3
ES 123478-HxCDF	35.75	0.9655	0.9655	0	6.86E+07	0.52	Y	1.43	70.1
ES 123678-HxCDF	35.89	0.9693	0.9692	-0.2	7.92E+07	0.53	Y	1.63	70.9
ES 234678-HxCDF	36.53	0.9867	0.9867	0	6.80E+07	0.53	Y	1.48	67.3
ES 123789-HxCDF	37.51	1.0130	1.0129	-0.2	5.91E+07	0.53	Y	1.29	66.9
ES 1234678-HpCDF	39.04	1.0540	1.0543	+0.7	5.05E+07	0.45	Y	1.15	64.4
ES 1234789-HpCDF	40.36	1.0898	1.0901	+0.7	3.99E+07	0.44	Y	0.91	64.3
ES OCDF	42.53	1.1484	1.1487	+0.8	5.43E+07	0.92	Y	0.83	47.9

Lab ID: B4519_17655_DF_011 | Acq'd: 11 Aug 2020 04:24 PSW | Wt/Vol: 9.47 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: DUP-02 | UTP: 11-Aug-2020 09:15:47 PSW | J-level: 0.528 pg/g | Split: 1 | Checkcode: 473-691-JNF

Datafile: 200810R19 | Report: 11 Aug 2020 10:00 pw | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %	
JS 1234-TCDD	26.57		-	-	-	8.35E+07	0.77	Y	-	-	
JS 1234-TCDF	24.90		-	-	-	1.41E+08	0.79	Y	-	-	
JS 123467-HxCDD	37.03		-	-	-	3.42E+07	1.30	Y	-	-	
CS 37Cl-2378-TCDD	27.28		1.0265	1.0266	+0.2	3.13E+07	n/a	-	1.04	90.4	
CS 12347-PeCDD	32.29		1.2141	1.2152	+2.1	5.71E+07	1.70	Y	0.74	92.5	
CS 12346-PeCDF	30.78		1.2343	1.2360	+3.1	1.02E+08	1.56	Y	0.86	84.1	
CS 123469-HxCDF	36.19		0.9776	0.9775	-0.2	6.72E+07	0.53	Y	1.36	72.4	
CS 1234689-HpCDF	39.45		1.0650	1.0653	+0.7	5.14E+07	0.44	Y	1.05	71.3	
~~SS 37Cl-2378-TCDD~~	~~27.28~~		~~1.0265~~	~~1.0266~~	~~+0.2~~	~~3.13E+07~~	~~n/a~~		~~1.04~~	~~110~~	Not used in this project.
~~SS 12347-PeCDD~~	~~32.29~~		~~1.2141~~	~~1.2152~~	~~+2.1~~	~~5.71E+07~~	~~1.70~~	~~Y~~	~~0.86~~	~~117~~	CL 11Aug20
~~SS 12346-PeCDF~~	~~30.78~~		~~1.2343~~	~~1.2360~~	~~+3.1~~	~~1.02E+08~~	~~1.56~~	~~Y~~	~~0.96~~	~~102~~	
~~SS 123469-HxCDF~~	~~36.19~~		~~0.9776~~	~~0.9775~~	~~-0.2~~	~~6.72E+07~~	~~0.53~~	~~Y~~	~~0.83~~	~~102~~	
~~SS 1234689-HpCDF~~	~~39.45~~		~~1.0650~~	~~1.0653~~	~~+0.7~~	~~5.14E+07~~	~~0.44~~	~~Y~~	~~0.92~~	~~110~~	

Totals	Conc	EMPC
Total TCDD	1.19	2.62
Total PeCDD	2.66	5.88
Total HxCDD	42.7	45.4
Total HpCDD	426	426
Total Tetra-Octa Dioxins	1510	1520
Total TCDF	6.28	9.8
Total PeCDF	10.7	11.8
Total HxCDF	33.2	33.8
Total HpCDF	88.7	89.5
Total Tetra-Octa Furans	212	218
Total Tetra-Octa Dioxins & Furans	1730	1740

Lab ID: B4519_17655_DF_011 **Acq'd: 11 Aug 2020 04:24 PSW** **Wt/Vol: 9.47 g** **ICAL: MM3_DF_10012020_12JUN2020**

Client ID: DUP-02 **UTP: 11-Aug-2020 09:15:47 PSW** **J-level: 0.528 pg/g** **Split: 1** **Checkcode: 473-691-JNF**

Datafile: 200810R19 **Report: 11 Aug 2020 10:00 pw** **Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)**

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1368-TCDD	23.39	EMPC	0.8591	0.8580	-1.5	3.28E+05	0.92	N	1.18	0.857	5009	0.145
1379-TCDD	23.77	J	0.8732	0.8721	-1.6	1.71E+05	0.67	Y	1.18	0.446	5009	0.145
1369-TCDD	NotFnd		0.8901						1.18		5009	0.145
1469-TCDD	NotFnd		0.9205						1.18		5009	0.145
1247/1246/1248/1249-TCDD	25.33		0.9301	0.9292	-1.4	2.87E+05	0.77	Y	1.18	0.748	5009	0.145
1378-TCDD	25.53	J EMPC	0.9374	0.9366	-1.2	5.29E+04	0.89	N	1.18	0.138	5009	0.145
1268-TCDD	NotFnd		0.9449						1.18		5009	0.145
1478-TCDD	NotFnd		0.9544						1.18		5009	0.145
1279-TCDD	NotFnd		0.9610						1.18		5009	0.145
1234/1269-TCDD	26.58	J EMPC	0.9746	0.9751	+0.8	1.64E+05	1.11	N	1.18	0.428	5009	0.145
1236-TCDD	NotFnd		0.9802						1.18		5009	0.145
1237/1238-TCDD	NotFnd		0.9898						1.18		5009	0.145
1239-TCDD	NotFnd		0.9950						1.18		5009	0.145
2378-TCDD	**NotFnd**		**1.0009**						**1.18**		**5009**	**0.145**
1278-TCDD	NotFnd		1.0133						1.18		5009	0.145
1267-TCDD	NotFnd		1.0185						1.18		5009	0.145
1289-TCDD	NotFnd		1.0379						1.18		5009	0.145
12479/12468-PeCDD	30.26	J	0.9229	0.9226	-0.5	4.72E+05	1.75	Y	1.14	1.54	6831	0.206
12469-PeCDD	30.81	J EMPC	0.9396	0.9393	-0.6	2.04E+05	1.88	N	1.14	0.665	6831	0.206
12368-PeCDD	31.38	J EMPC	0.9568	0.9566	-0.4	1.42E+05	2.04	N	1.14	0.462	6831	0.206
12478-PeCDD	31.57	J EMPC	0.9626	0.9625	-0.2	1.12E+05	1.27	N	1.14	0.367	6831	0.206
12379-PeCDD	31.67	J EMPC	0.9657	0.9656	-0.2	1.07E+05	2.33	N	1.14	0.35	6831	0.206
12369/12467/12489-PeCDD	31.93	J EMPC	0.9738	0.9736	-0.4	2.59E+05	1.80	N	1.14	0.844	6831	0.206
12346/12347-PeCDD	32.32	J	0.9853	0.9855	+0.4	3.44E+05	1.46	Y	1.14	1.12	6831	0.206
12378-PeCDD	32.82	J EMPC	**1.0006**	**1.0006**	**0**	**1.19E+05**	**1.94**	**N**	**1.14**	**0.387**	**6831**	**0.206**
12367-PeCDD	32.91	J EMPC	1.0034	1.0035	+0.2	4.43E+04	1.00	N	1.14	0.145	6831	0.206
12389-PeCDD	NotFnd		1.0141						1.14		6831	0.206
124679/124689-HxCDD	35.04		0.9542	0.9542	0	4.52E+06	1.25	Y	1.09	16.5	6475	0.196
123468-HxCDD	35.69		0.9721	0.9721	0	1.01E+06	1.19	Y	1.09	3.7	6475	0.196
123679/123689-HxCDD	35.98		0.9799	0.9799	0	3.42E+06	1.22	Y	1.09	12.5	6475	0.196
123469-HxCDD	36.11		0.9835	0.9835	0	1.21E+06	1.34	Y	1.09	4.42	6475	0.196
123478-HxCDD	36.73	J EMPC	**1.0004**	**1.0004**	**0**	**3.35E+05**	**1.00**	**N**	1.09	**1.26**	**6475**	**0.191**
123678-HxCDD	36.85		**1.0035**	**1.0035**	**0**	**8.81E+05**	**1.09**	**Y**	1.13	**3.34**	**6475**	**0.205**
123467-HxCDD	37.05	J EMPC	1.0088	1.0090	+0.4	4.14E+05	1.48	N	1.09	1.51	6475	0.196
123789-HxCDD	37.15	J	**1.0116**	**1.0117**	**+0.2**	**6.36E+05**	**1.30**	**Y**	1.05	**2.19**	**6475**	**0.192**

Lab ID: B4519_17655_DF_011 | Acq'd: 11 Aug 2020 04:24 PSW | Wt/Vol: 9.47 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: DUP-02 | UTP: 11-Aug-2020 09:15:47 PSW | J-level: 0.528 pg/g | Split: 1 | Checkcode: 473-691-JNF

Datafile: 200810R19 | Report: 11 Aug 2020 10:00 pw | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1234679-HpCDD	39.31		0.9843	0.9842	-0.2	5.93E+07	1.03	Y	0.98	303	13578	0.421
1234678-HpCDD	**39.96**		**1.0003**	**1.0003**	**0**	**2.40E+07**	**1.03**	**Y**	**0.98**	**123**	**13578**	**0.421**
OCDD	**42.38**		**1.0003**	**1.0003**	**0**	**1.11E+08**	**0.88**	**Y**	**1.08**	**1,040**	**5638**	**0.362**
OCDD-a	42.38		1.0002	1.0002	0	6.55E+06	2.52	Y	0.07	998	4046	4.21
1368-TCDF	21.15	EMPC	0.8044	0.8031	-1.6	3.34E+05	0.99	N	0.98	0.613	4190	0.0963
1468-TCDF	21.71	J EMPC	0.8261	0.8245	-2.1	1.48E+05	1.12	N	0.98	0.272	4190	0.0963
2468-TCDF	22.37		0.8511	0.8496	-2.0	1.06E+06	0.75	Y	0.98	1.94	4190	0.0963
1346/1246-TCDF	22.82	J	0.8665	0.8666	+0.1	2.73E+05	0.81	Y	0.98	0.501	4190	0.0963
1347/1378/1247-TCDF	22.95	EMPC	0.8723	0.8717	-0.8	3.85E+05	0.94	N	0.98	0.706	4190	0.0963
1348-TCDF	23.26	J	0.8835	0.8834	-0.1	1.64E+05	0.80	Y	0.98	0.301	4190	0.0963
1248/1367/1379-TCDF	23.36		0.8888	0.8872	-2.2	3.34E+05	0.75	Y	0.98	0.614	4190	0.0963
1268-TCDF	23.80		0.9044	0.9038	-0.9	3.02E+05	0.69	Y	0.98	0.555	4190	0.0963
1467-TCDF	23.94	J	0.9098	0.9092	-0.9	1.55E+05	0.81	Y	0.98	0.284	4190	0.0963
1478-TCDF	24.11	J	0.9167	0.9157	-1.4	1.71E+05	0.86	Y	0.98	0.313	4190	0.0963
1369/1237-TCDF	24.53	J	0.9316	0.9314	-0.3	1.19E+05	0.66	Y	0.98	0.218	4190	0.0963
2467-TCDF	24.66	J	0.9369	0.9366	-0.4	1.11E+05	0.87	Y	0.98	0.204	4190	0.0963
2368-TCDF	24.82		0.9430	0.9425	-0.7	3.25E+05	0.79	Y	0.98	0.596	4190	0.0963
1238/1234/1678/1469/1236-TCDF	24.95	EMPC	0.9468	0.9474	+0.9	3.00E+05	0.94	N	0.98	0.551	4190	0.0963
1278-TCDF	25.41	J	0.9651	0.9647	-0.6	1.76E+05	0.67	Y	0.98	0.323	4190	0.0963
1349-TCDF	NotFnd		0.9704						0.98		4190	0.0963
1267-TCDF	25.71	J EMPC	0.9761	0.9762	+0.2	9.31E+04	1.19	N	0.98	0.171	4190	0.0963
2346/1249-TCDF	25.90	J EMPC	0.9834	0.9836	+0.3	5.44E+04	0.65	N	0.98	0.0998	4190	0.0963
2347/1279-TCDF	26.11	J	0.9921	0.9916	-0.8	1.25E+05	0.76	Y	0.98	0.229	4190	0.0963
2348-TCDF	26.24	J	0.9964	0.9965	+0.2	1.09E+05	0.73	Y	0.98	0.2	4190	0.0963
2378-TCDF	**26.36**	J EMPC	**1.0006**	**1.0010**	**+0.6**	**1.80E+05**	**0.98**	**N**	**0.98**	**0.33**	**4190**	**0.0963**
2367/3467-TCDF	26.74	J EMPC	1.0156	1.0153	-0.5	2.60E+05	0.58	N	0.98	0.478	4190	0.0963
1269-TCDF	NotFnd		1.0249						0.98		4190	0.0963
1239-TCDF	NotFnd		1.0357						0.98		4190	0.0963
1289-TCDF	28.44	J EMPC	1.0799	1.0801	+0.3	1.66E+05	1.91	N	0.98	0.305	4190	0.0963
13468/12468-PeCDF	28.45		0.9084	0.9085	+0.2	2.00E+06	1.35	Y	0.95	4.42	3345	0.0687
13678/13467/12467-PeCDF	30.04	J	0.9591	0.9594	+0.5	3.24E+05	1.35	Y	0.95	0.718	6903	0.142
12368/13478/12478-PeCDF	30.20		0.9642	0.9644	+0.4	1.36E+06	1.48	Y	0.95	3	6903	0.142
14678-PeCDF	30.31	J EMPC	0.9675	0.9680	+0.9	6.39E+04	2.18	N	0.95	0.141	6903	0.142
13479-PeCDF	NotFnd		0.9706						0.95		6903	0.142
13469/12479-PeCDF	NotFnd		0.9787						0.95		6903	0.142
12346-PeCDF	30.80	J	0.9833	0.9836	+0.6	1.25E+05	1.70	Y	0.95	0.278	6903	0.142

Lab ID: B4519_17655_DF_011 **Acq'd: 11 Aug 2020 04:24 PSW** **Wt/Vol: 9.47 g** **ICAL: MM3_DF_10012020_12JUN2020**

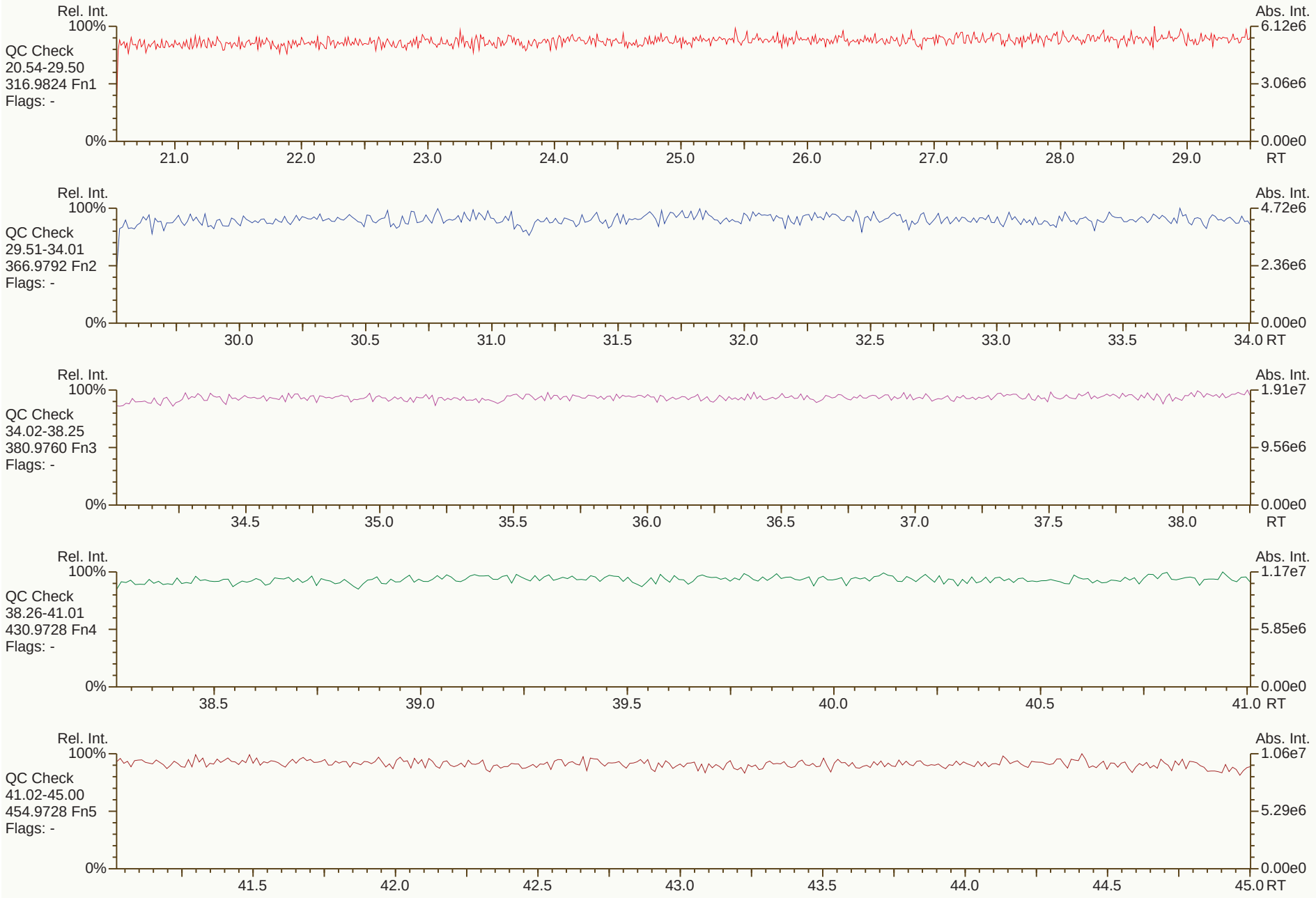
Client ID: DUP-02 **UTP: 11-Aug-2020 09:15:47 PSW** **J-level: 0.528 pg/g** **Split: 1** **Checkcode: 473-691-JNF**

Datafile: 200810R19 **Report: 11 Aug 2020 10:00 pw** **Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)**

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
23468/12469-PeCDF	30.88	J	0.9861	0.9861	0	3.57E+05	1.44	Y	0.95	0.79	6903	0.142
12347-PeCDF	30.95	J	0.9887	0.9883	-0.7	8.07E+04	1.46	Y	0.95	0.179	6903	0.142
12348-PeCDF	31.14	J EMPC	0.9938	0.9943	+0.9	7.08E+04	2.38	N	0.95	0.157	6903	0.142
12378-PeCDF	**31.33**	J EMPC	**1.0006**	**1.0005**	**-0.2**	**1.32E+05**	**1.97**	**N**	**0.95**	**0.283**	**6903**	**0.14**
12678/12367-PeCDF	31.62	J EMPC	1.0095	1.0098	+0.6	2.39E+05	1.26	N	0.95	0.529	6903	0.142
12379-PeCDF	NotFnd		1.0150						0.95		6903	0.142
12679-PeCDF	NotFnd		0.9926						0.95		6903	0.142
23467/12369-PeCDF	32.34	J	0.9966	0.9967	+0.2	1.24E+05	1.61	Y	0.95	0.276	6903	0.142
23478-PeCDF	**32.48**	J	**1.0005**	**1.0011**	**+1.2**	**4.62E+05**	**1.37**	**Y**	**0.95**	**1.06**	**6903**	**0.144**
23478/12489-PeCDF	NotFnd		0.0000						0.95			
12489-PeCDF	NotFnd		1.0047						0.95		6903	0.142
12349-PeCDF	NotFnd		1.0107						0.95		6903	0.142
12389-PeCDF	NotFnd		1.0339						0.95		6903	0.142
123468-HxCDF	34.37		0.9617	0.9615	-0.4	1.07E+06	1.20	Y	1.11	2.97	8445	0.194
124678/134678-HxCDF	34.57		0.9673	0.9671	-0.4	3.87E+06	1.26	Y	1.11	10.7	8445	0.194
134679-HxCDF	NotFnd		0.9737						1.11		8445	0.194
124679-HxCDF	35.01	J	0.9792	0.9792	0	1.15E+05	1.38	Y	1.11	0.318	8445	0.194
124689-HxCDF	35.23		0.9854	0.9854	0	5.16E+06	1.21	Y	1.11	14.3	8445	0.194
123467-HxCDF	35.65	J EMPC	0.9972	0.9972	0	2.43E+05	1.03	N	1.11	0.672	8445	0.194
123478-HxCDF	**35.76**	J	**1.0005**	**1.0004**	**-0.2**	**8.29E+05**	**1.17**	**Y**	**1.20**	**2.14**	**8445**	**0.184**
123678-HxCDF	**35.91**	J	**1.0004**	**1.0005**	**+0.2**	**4.68E+05**	**1.12**	**Y**	**1.07**	**1.16**	**8445**	**0.174**
123479-HxCDF	NotFnd		1.0049						1.11		8445	0.194
123469-HxCDF	NotFnd		1.0089						1.11		8445	0.194
123679-HxCDF	NotFnd		0.9945						1.11		8445	0.194
234678-HxCDF	**36.55**	J	**1.0005**	**1.0003**	**-0.4**	**5.77E+05**	**1.30**	**Y**	**1.10**	**1.63**	**8445**	**0.187**
234678/123689-HxCDF	NotFnd		0.0000						1.10			
123689-HxCDF	NotFnd		1.0054						1.11		8445	0.194
123789-HxCDF	**NotFnd**		**1.0004**						**1.09**		**8445**	**0.243**
123789/123489-HxCDF	NotFnd		0.0000						1.09			
123489-HxCDF	NotFnd		1.0008						1.11		8445	0.194
1234678-HpCDF	**39.05**		**1.0003**	**1.0003**	**0**	**8.75E+06**	**1.08**	**Y**	**1.28**	**28.6**	**4478**	**0.0973**
1234679-HpCDF	39.32	**J EMPC**	1.0072	1.0072	0	2.37E+05	1.20	N	1.27	0.87	4478	0.107
1234689-HpCDF	39.46		1.0107	1.0107	0	1.58E+07	1.07	Y	1.27	58.2	4478	0.107
1234789-HpCDF	**40.37**	**J**	**1.0002**	**1.0002**	**0**	**4.58E+05**	**1.13**	**Y**	**1.27**	**1.91**	**4478**	**0.12**
OCDF	**42.54**		**1.0003**	**1.0002**	**-0.3**	**9.44E+06**	**0.90**	**Y**	**1.01**	**72.8**	**4950**	**0.259**
OCDF-a	42.54	**EMPC**	1.0002	1.0002	0	5.62E+05	2.98	N	0.06	69.2	4503	3.77

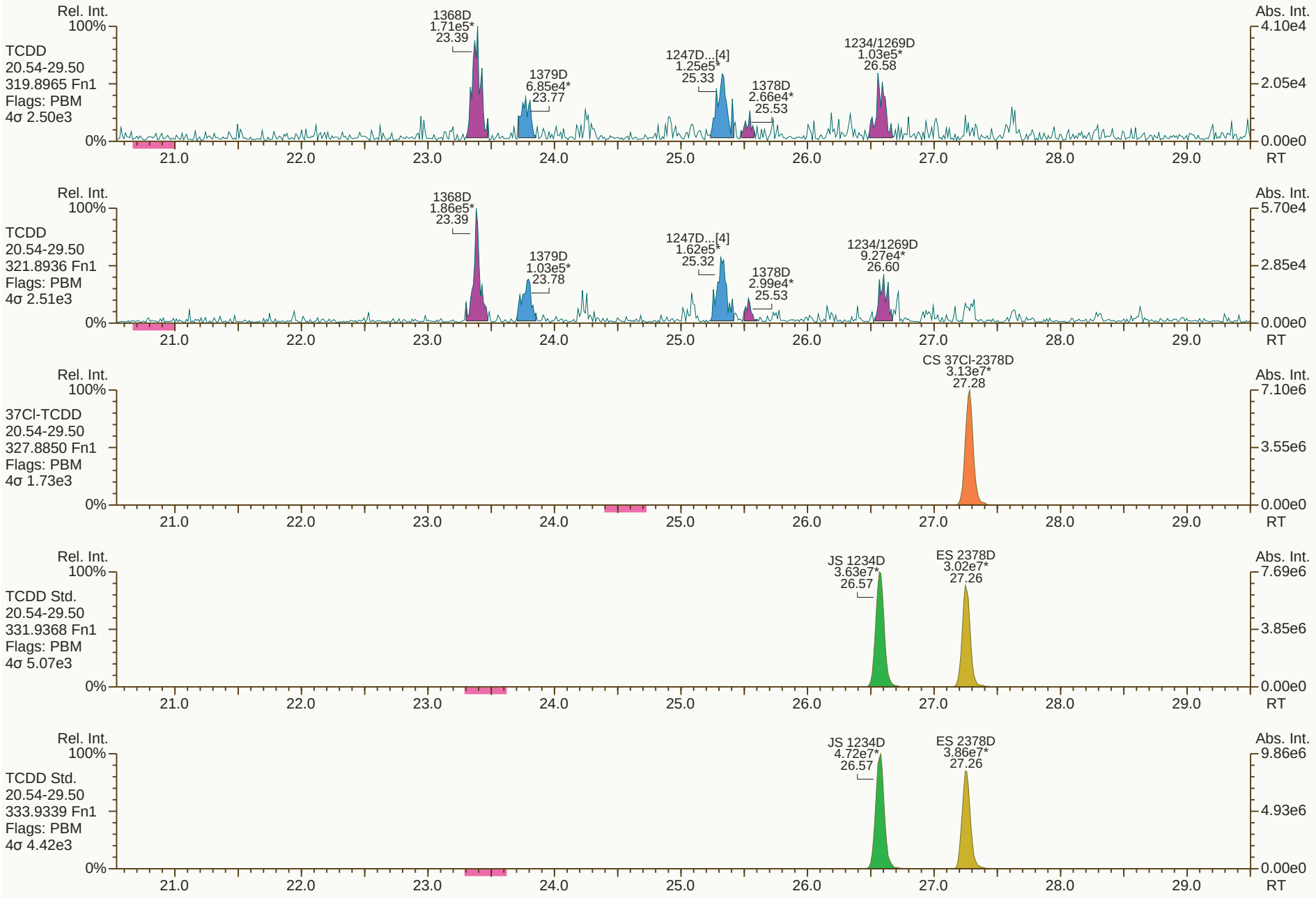
SGS ID: B4519_17655_DF_011 **Sample ID: DUP-02** **Acq: 11-Aug-2020 04:24:50**

Instr: [ILM] AutoSpec-Ultima MM3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 32** **User: PSW Datafile: 200810R19**

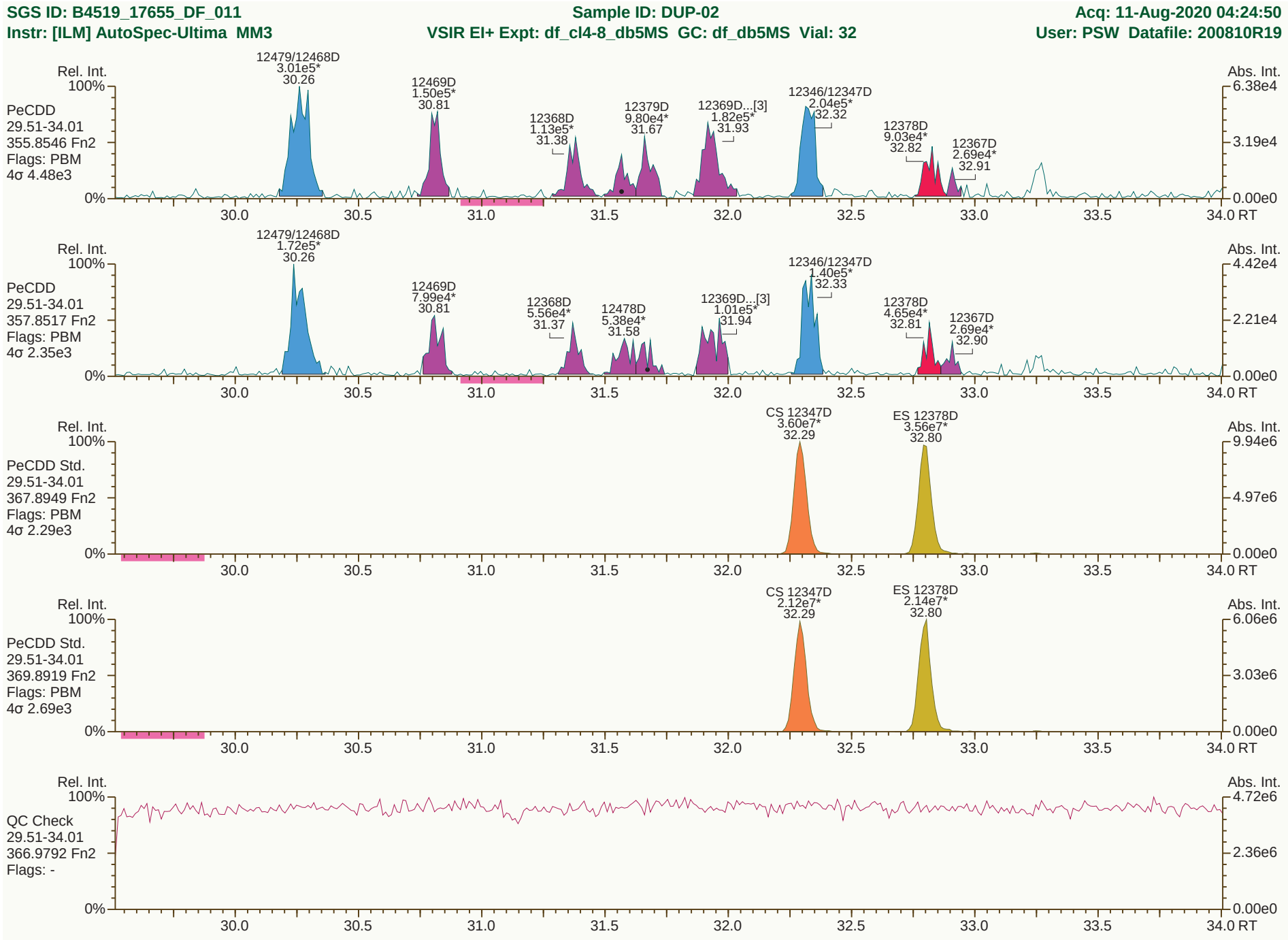


Results: P:\B4500_B4599\B4519\B4519_17655 DF\Resources\B4519_17655_DF_011.utp_res, saved 11-Aug-2020 09:15 (PSW) *Peak annotation: Areas, Centroids*

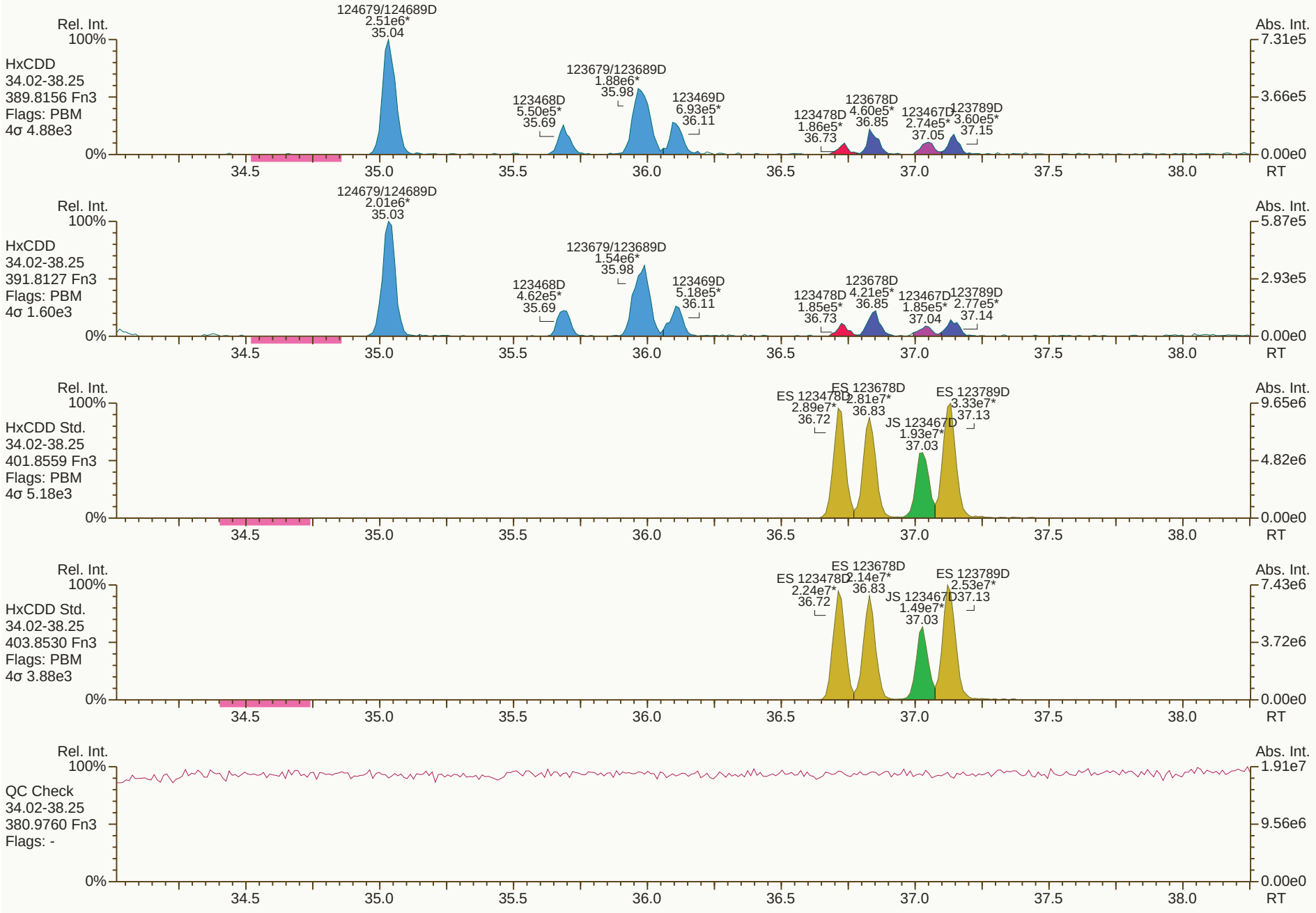
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 scc: 473-691 *PKD: n/a Printed: 11-Aug-2020 10:17 Page 1 of 12*

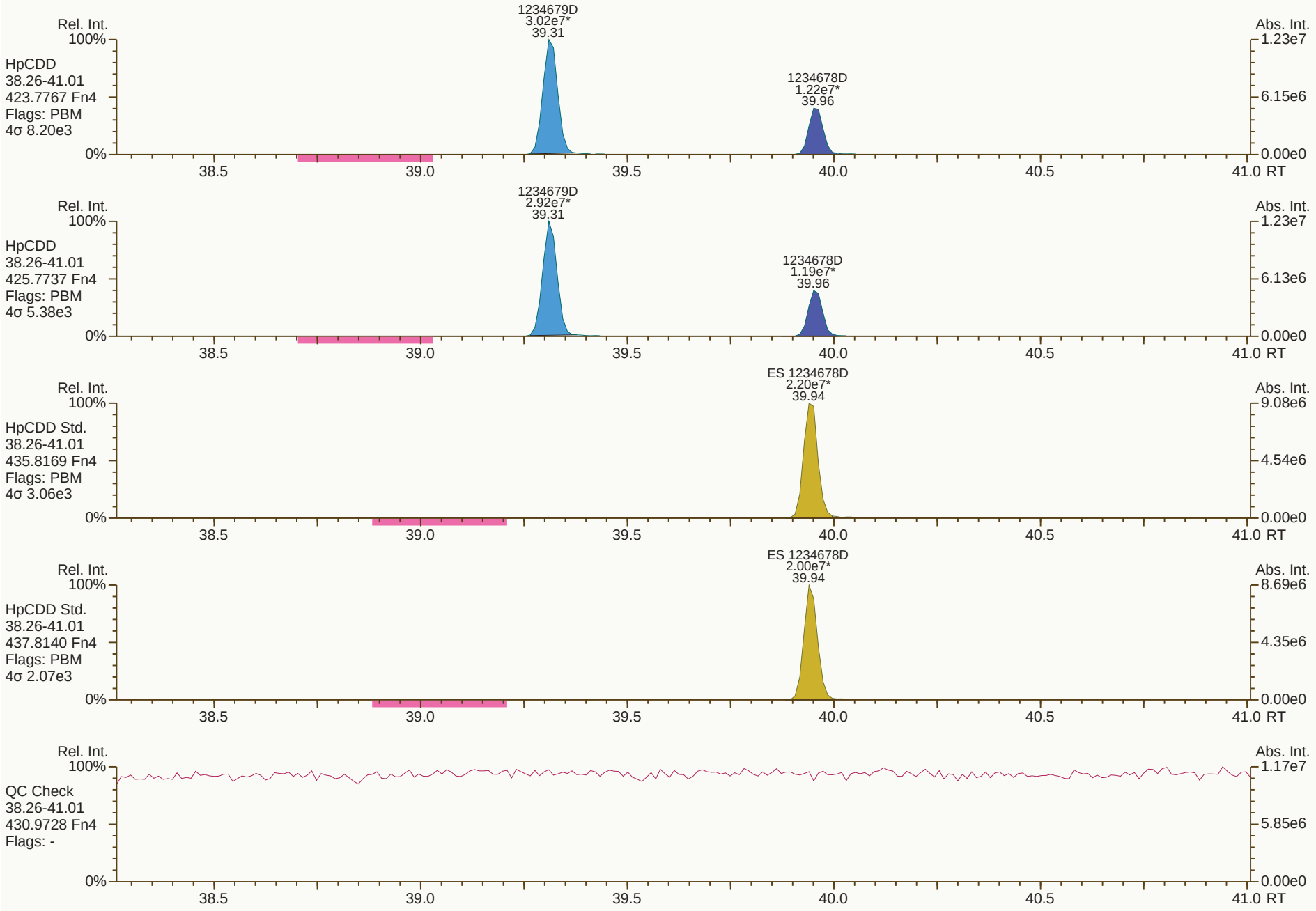

Rel. Int.
100%
TCDD
20.54-29.50
319.8965 Fn1
Flags: PBM
4σ 2.50e3
0%
1368D
1.71e5*
23.39
1379D
6.85e4*
23.77
1247D...[4]
1.25e5*
25.33
1378D
2.66e4*
25.53
1234/1269D
1.03e5*
26.58
Abs. Int.
4.10e4
2.05e4
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD
20.54-29.50
321.8936 Fn1
Flags: PBM
4σ 2.51e3
0%
1368D
1.86e5*
23.39
1379D
1.03e5*
23.78
1247D...[4]
1.62e5*
25.32
1378D
2.99e4*
25.53
1234/1269D
9.27e4*
26.60
Abs. Int.
5.70e4
2.85e4
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
37Cl-TCDD
20.54-29.50
327.8850 Fn1
Flags: PBM
4σ 1.73e3
0%
CS 37Cl-2378D
3.13e7*
27.28
Abs. Int.
7.10e6
3.55e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
331.9368 Fn1
Flags: PBM
4σ 5.07e3
0%
JS 1234D
3.63e7*
26.57
ES 2378D
3.02e7*
27.26
Abs. Int.
7.69e6
3.85e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
333.9339 Fn1
Flags: PBM
4σ 4.42e3
0%
JS 1234D
4.72e7*
26.57
ES 2378D
3.86e7*
27.26
Abs. Int.
9.86e6
4.93e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT

SGS ID: B4519_17655_DF_011 | Sample ID: DUP-02 | Acq: 11-Aug-2020 04:24:50
Instr: [ILM] AutoSpec-Ultima MM3 | VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 32 | User: PSW Datafile: 200810R19

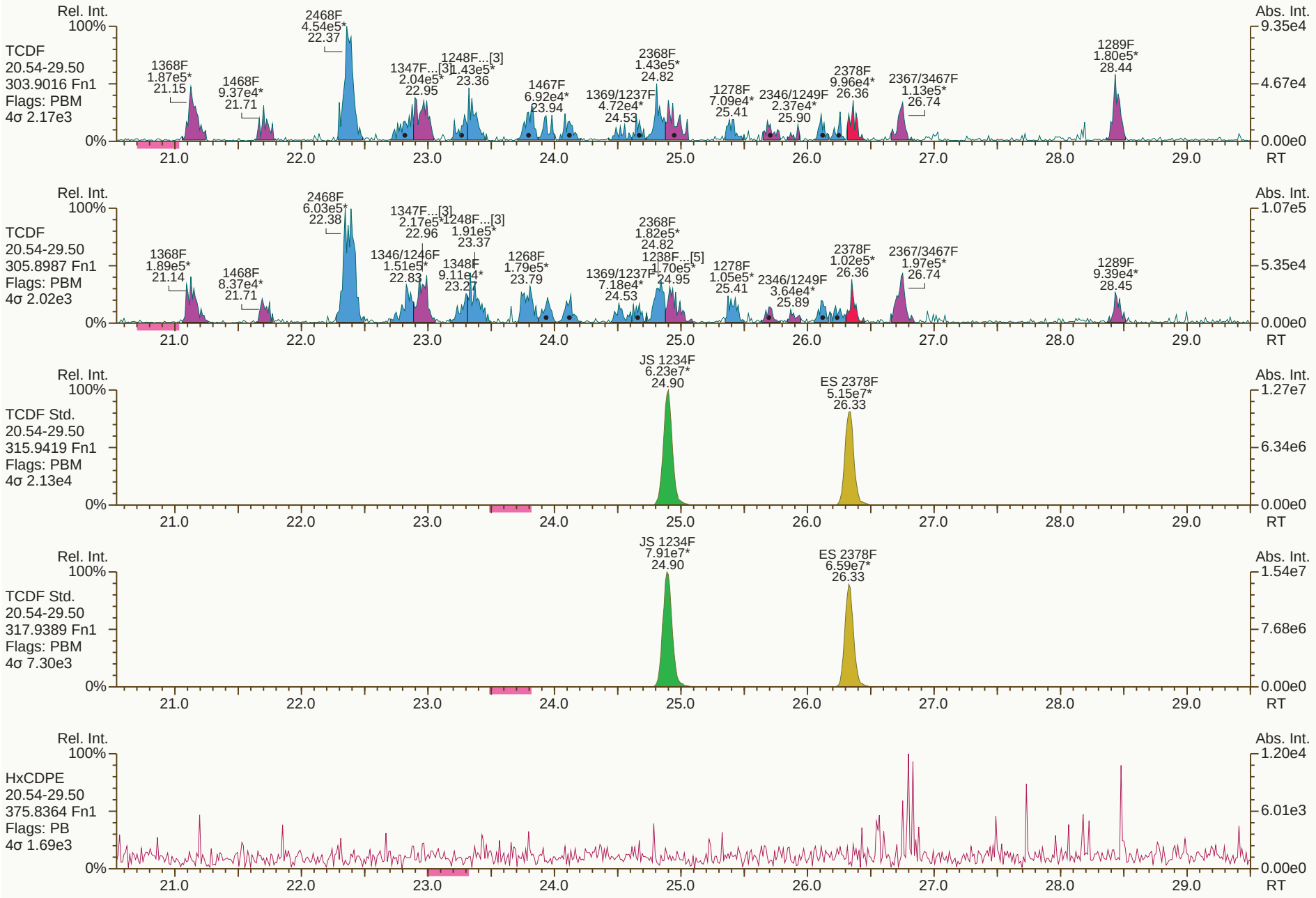


Results: P:\B4500_B4599\B4519\B4519_17655 DF\Resources\B4519_17655_DF_011.utp_res, saved 11-Aug-2020 09:15 (PSW) | Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 7285, 1263 scc: 473-691 | PKD: 11-Aug-2020 09:15 Printed: 11-Aug-2020 10:17 Page 3 of 12


Rel. Int.
100%
HxCDD
34.02-38.25
389.8156 Fn3
Flags: PBM
4σ 4.88e3
0%
124679/124689D
2.51e6*
35.04
123679/123689D
1.88e6*
35.98
123468D
5.50e5*
35.69
123469D
6.93e5*
36.11
123478D
1.86e5*
36.73
123678D
4.60e5*
36.85
123467D
2.74e5*
37.05
123789D
3.60e5*
37.15
Abs. Int.
7.31e5
3.66e5
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD
34.02-38.25
391.8127 Fn3
Flags: PBM
4σ 1.60e3
0%
124679/124689D
2.01e6*
35.03
123679/123689D
1.54e6*
35.98
123468D
4.62e5*
35.69
123469D
5.18e5*
36.11
123478D
1.85e5*
36.73
123678D
4.21e5*
36.85
123467D
1.85e5*
37.04
123789D
2.77e5*
37.14
Abs. Int.
5.87e5
2.93e5
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
401.8559 Fn3
Flags: PBM
4σ 5.18e3
0%
ES 123478D
2.89e7*
36.72
ES 123678D
2.81e7*
36.83
JS 123467D
1.93e7*
37.03
ES 123789D
3.33e7*
37.13
Abs. Int.
9.65e6
4.82e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
403.8530 Fn3
Flags: PBM
4σ 3.88e3
0%
ES 123478D
2.24e7*
36.72
ES 123678D
2.14e7*
36.83
JS 123467D
1.49e7*
37.03
ES 123789D
2.53e7*
37.13
Abs. Int.
7.43e6
3.72e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
0%
Abs. Int.
1.91e7
9.56e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT


Rel. Int.
100%
HpCDD
38.26-41.01
423.7767 Fn4
Flags: PBM
4σ 8.20e3
0%
1234679D
3.02e7*
39.31
1234678D
1.22e7*
39.96
Abs. Int.
1.23e7
6.15e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.26-41.01
425.7737 Fn4
Flags: PBM
4σ 5.38e3
0%
1234679D
2.92e7*
39.31
1234678D
1.19e7*
39.96
Abs. Int.
1.23e7
6.13e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
435.8169 Fn4
Flags: PBM
4σ 3.06e3
0%
ES 1234678D
2.20e7*
39.94
Abs. Int.
9.08e6
4.54e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
437.8140 Fn4
Flags: PBM
4σ 2.07e3
0%
ES 1234678D
2.00e7*
39.94
Abs. Int.
8.69e6
4.35e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.26-41.01
430.9728 Fn4
Flags: -
0%
Abs. Int.
1.17e7
5.85e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT


OCDD
5.20e7*
42.38
Rel. Int.
Abs. Int.
OCDD
41.02-45.00
457.7377 Fn5
Flags: PBM
4σ 3.42e3
OCDD
5.90e7*
42.38
OCDD
41.02-45.00
459.7348 Fn5
Flags: PBM
4σ 2.22e3
ES OCDD
2.03e7*
42.37
OCDD Std.
41.02-45.00
469.7780 Fn5
Flags: PBM
4σ 2.80e3
ES OCDD
2.15e7*
42.37
OCDD Std.
41.02-45.00
471.7750 Fn5
Flags: PBM
4σ 3.93e3
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
100%
0%
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT


Rel. Int.
100%
TCDF
20.54-29.50
303.9016 Fn1
Flags: PBM
4σ 2.17e3
1368F 1.87e5* 21.15
1468F 9.37e4* 21.71
2468F 4.54e5* 22.37
1347F...[3] 2.04e5* 22.95
1248F...[3] 1.43e5* 23.36
1467F 6.92e4* 23.94
1369/1237F 4.72e4* 24.53
2368F 1.43e5* 24.82
1278F 7.09e4* 25.41
2346/1249F 2.37e4* 25.90
2378F 9.96e4* 26.36
2367/3467F 1.13e5* 26.74
1289F 1.80e5* 28.44
Abs. Int.
9.35e4
4.67e4
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
TCDF
20.54-29.50
305.8987 Fn1
Flags: PBM
4σ 2.02e3
1368F 1.89e5* 21.14
1468F 8.37e4* 21.71
2468F 6.03e5* 22.38
1347F...[3] 2.17e5* 22.96
1248F...[3] 1.91e5* 23.37
1346/1246F 1.51e5* 22.83
1348F 9.11e4* 23.27
1268F 1.79e5* 23.79
1369/1237F 7.18e4* 24.53
2368F 1.82e5* 24.82
1238F...[5] 1.70e5* 24.95
1278F 1.05e5* 25.41
2346/1249F 3.64e4* 25.89
2378F 1.02e5* 26.36
2367/3467F 1.97e5* 26.74
1289F 9.39e4* 28.45
Abs. Int.
1.07e5
5.35e4
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
315.9419 Fn1
Flags: PBM
4σ 2.13e4
JS 1234F 6.23e7* 24.90
ES 2378F 5.15e7* 26.33
Abs. Int.
1.27e7
6.34e6
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
317.9389 Fn1
Flags: PBM
4σ 7.30e3
JS 1234F 7.91e7* 24.90
ES 2378F 6.59e7* 26.33
Abs. Int.
1.54e7
7.68e6
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
HxCDPE
20.54-29.50
375.8364 Fn1
Flags: PB
4σ 1.69e3
Abs. Int.
1.20e4
6.01e3
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT

SGS ID: B4519_17655_DF_011 **Sample ID: DUP-02** **Acq: 11-Aug-2020 04:24:50**

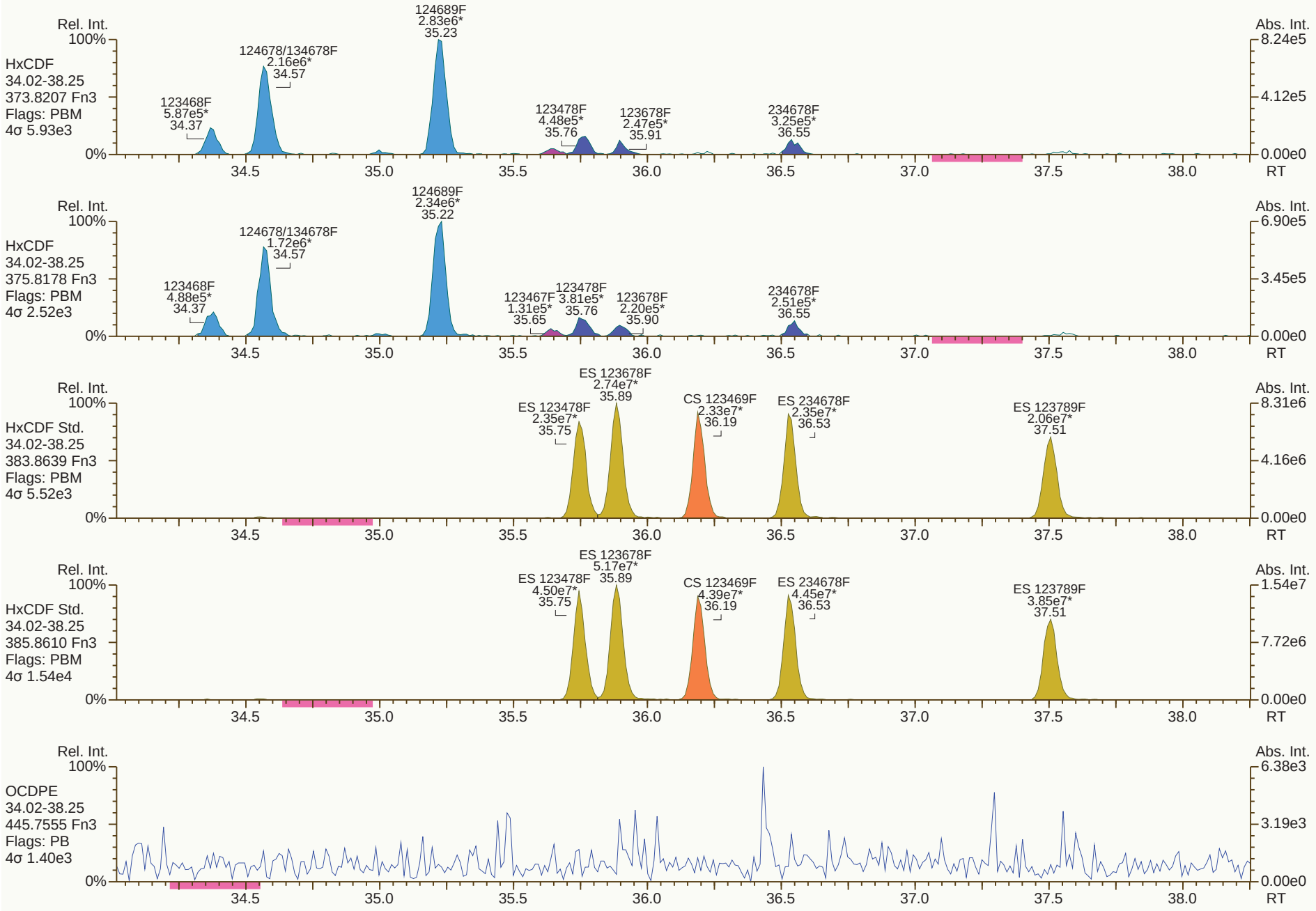
Instr: [ILM] AutoSpec-Ultima MM3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 32** **User: PSW Datafile: 200810R19**

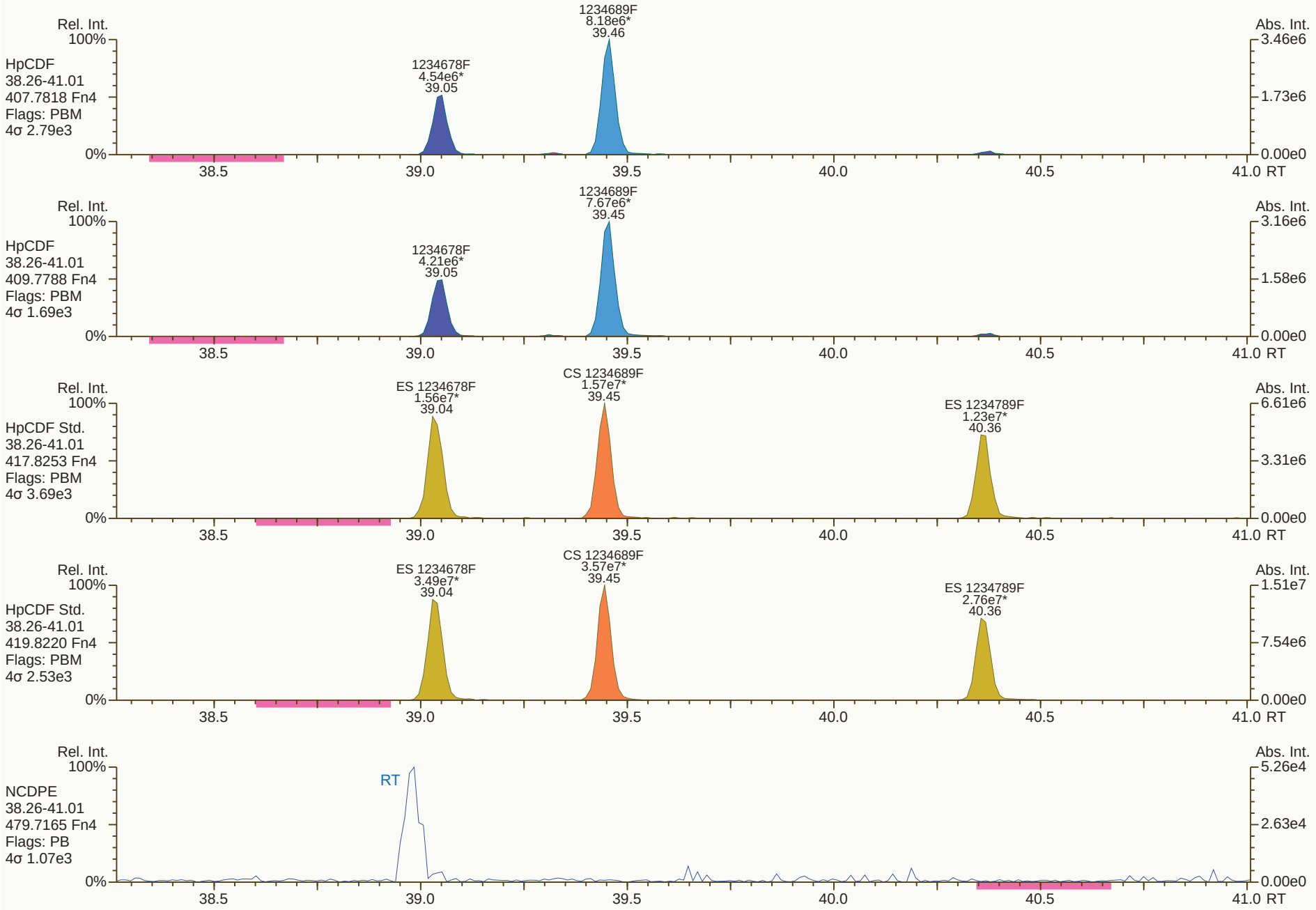


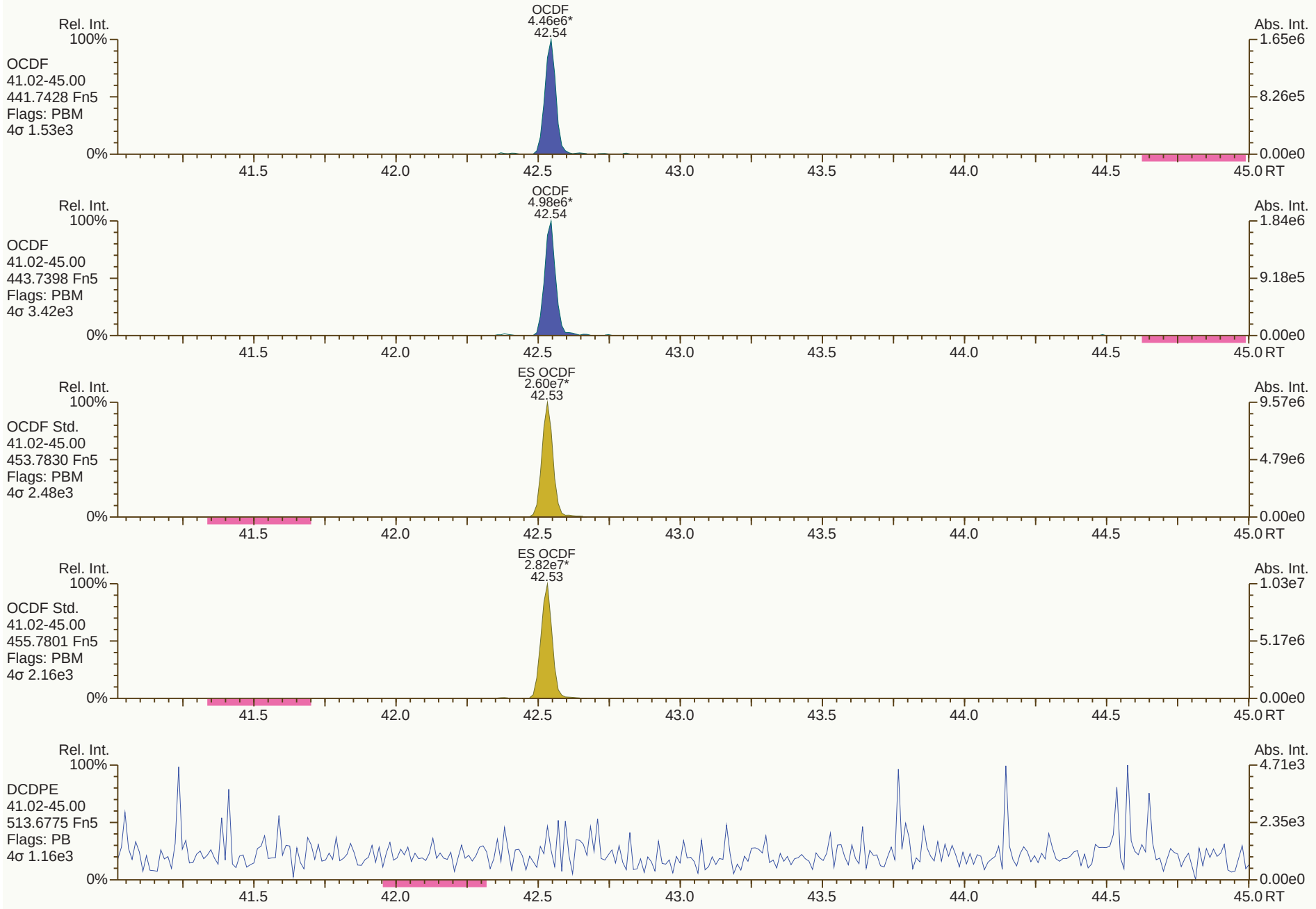
Results: P:\B4500_B4599\B4519\B4519_17655 DF\Resources\B4519_17655_DF_011.utp_res, saved 11-Aug-2020 09:15 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 5793 scc: 473-691 *PKD: 11-Aug-2020 09:15 Printed: 11-Aug-2020 10:17 Page 8 of 12*


Rel. Int.
Abs. Int.
PeCDF-2
29.51-34.01
339.8597 Fn2
Flags: PBM
4σ 3.67e3
12368F...[3] 8.10e5* 30.20
13678F...[3] 1.86e5* 30.04
14678F 5.46e4* 30.31
23468/12469F 2.11e5* 30.88
12346F 7.90e4* 30.80
12347F 4.78e4* 30.95
12348F 6.61e4* 31.14
12378F 1.02e5* 31.33
12678/12367F 1.45e5* 31.62
23467/12369F 7.68e4* 32.34
23478F 2.67e5* 32.48
PeCDF-2
29.51-34.01
341.8568 Fn2
Flags: PBM
4σ 3.24e3
12368F...[3] 5.48e5* 30.20
13678F...[3] 1.38e5* 30.03
14678F 2.51e4* 30.31
23468/12469F 1.46e5* 30.88
12346F 4.65e4* 30.80
12347F 3.28e4* 30.95
12348F 2.78e4* 31.13
12378F 5.19e4* 31.32
12678/12367F 1.16e5* 31.62
23467/12369F 4.77e4* 32.33
23478F 1.95e5* 32.48
PeCDF Std.
29.51-34.01
351.9000 Fn2
Flags: PBM
4σ 2.21e3
CS 12346F 6.23e7* 30.78
ES 12378F 6.35e7* 31.31
ES 23478F 5.98e7* 32.45
PeCDF Std.
29.51-34.01
353.8970 Fn2
Flags: PBM
4σ 1.04e4
CS 12346F 4.00e7* 30.78
ES 12378F 4.07e7* 31.31
ES 23478F 3.75e7* 32.45
HpCDPE
29.51-34.01
409.7974 Fn2
Flags: PB
4σ 1.62e3
100%
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
1.59e5
7.93e4
0.00e0
1.09e5
5.46e4
1.68e7
8.39e6
1.11e7
5.54e6
1.00e4
5.01e3


Rel. Int.
100%
HxCDF
34.02-38.25
373.8207 Fn3
Flags: PBM
4σ 5.93e3
123468F 5.87e5* 34.37
124678/134678F 2.16e6* 34.57
124689F 2.83e6* 35.23
123478F 4.48e5* 35.76
123678F 2.47e5* 35.91
234678F 3.25e5* 36.55
Abs. Int.
8.24e5
4.12e5
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 RT
HxCDF
34.02-38.25
375.8178 Fn3
Flags: PBM
4σ 2.52e3
123468F 4.88e5* 34.37
124678/134678F 1.72e6* 34.57
124689F 2.34e6* 35.22
123467F 1.31e5* 35.65
123478F 3.81e5* 35.76
123678F 2.20e5* 35.90
234678F 2.51e5* 36.55
6.90e5
3.45e5
HxCDF Std.
34.02-38.25
383.8639 Fn3
Flags: PBM
4σ 5.52e3
ES 123678F 2.74e7* 35.89
ES 123478F 2.35e7* 35.75
CS 123469F 2.33e7* 36.19
ES 234678F 2.35e7* 36.53
ES 123789F 2.06e7* 37.51
8.31e6
4.16e6
HxCDF Std.
34.02-38.25
385.8610 Fn3
Flags: PBM
4σ 1.54e4
ES 123678F 5.17e7* 35.89
ES 123478F 4.50e7* 35.75
CS 123469F 4.39e7* 36.19
ES 234678F 4.45e7* 36.53
ES 123789F 3.85e7* 37.51
1.54e7
7.72e6
OCDPE
34.02-38.25
445.7555 Fn3
Flags: PB
4σ 1.40e3
6.38e3
3.19e3


Rel. Int.
100%
HpCDF
38.26-41.01
407.7818 Fn4
Flags: PBM
4σ 2.79e3
0%
1234678F
4.54e6*
39.05
1234689F
8.18e6*
39.46
Abs. Int.
3.46e6
1.73e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF
38.26-41.01
409.7788 Fn4
Flags: PBM
4σ 1.69e3
0%
1234678F
4.21e6*
39.05
1234689F
7.67e6*
39.45
Abs. Int.
3.16e6
1.58e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.26-41.01
417.8253 Fn4
Flags: PBM
4σ 3.69e3
0%
ES 1234678F
1.56e7*
39.04
CS 1234689F
1.57e7*
39.45
ES 1234789F
1.23e7*
40.36
Abs. Int.
6.61e6
3.31e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.26-41.01
419.8220 Fn4
Flags: PBM
4σ 2.53e3
0%
ES 1234678F
3.49e7*
39.04
CS 1234689F
3.57e7*
39.45
ES 1234789F
2.76e7*
40.36
Abs. Int.
1.51e7
7.54e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
NCDPE
38.26-41.01
479.7165 Fn4
Flags: PB
4σ 1.07e3
0%
RT
Abs. Int.
5.26e4
2.63e4
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT


OCDF
4.46e6*
42.54
Rel. Int.
100%
OCDF
41.02-45.00
441.7428 Fn5
Flags: PBM
4σ 1.53e3
0%
Abs. Int.
1.65e6
8.26e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDF
4.98e6*
42.54
Rel. Int.
100%
OCDF
41.02-45.00
443.7398 Fn5
Flags: PBM
4σ 3.42e3
0%
Abs. Int.
1.84e6
9.18e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDF
2.60e7*
42.53
Rel. Int.
100%
OCDF Std.
41.02-45.00
453.7830 Fn5
Flags: PBM
4σ 2.48e3
0%
Abs. Int.
9.57e6
4.79e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDF
2.82e7*
42.53
Rel. Int.
100%
OCDF Std.
41.02-45.00
455.7801 Fn5
Flags: PBM
4σ 2.16e3
0%
Abs. Int.
1.03e7
5.17e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
DCDPE
41.02-45.00
513.6775 Fn5
Flags: PB
4σ 1.16e3
0%
Abs. Int.
4.71e3
2.35e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

Lab ID: B4519_17655_DF_012 **Acq'd:** 11 Aug 2020 05:12 PSW **Wt/Vol:** 8.62 g **ICAL:** MM3_DF_10012020_12JUN2020

Client ID: CS-TB-07 **UTP:** 11-Aug-2020 09:19:11 PSW **J-level:** 0.58 pg/g **Split:** 1 **Checkcode:** 394-371-QXV

Datafile: 200810R20 **Report:** 11 Aug 2020 10:00 pw **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	27.29	J	1.0009	1.0010	+0.2	7.77E+04	0.84	Y	1.18	0.257	4678	0.173
12378-PeCDD	32.82	J	1.0006	1.0005	-0.2	3.39E+05	1.75	Y	1.14	1.33	5353	0.192
123478-HxCDD	36.74	J	1.0004	1.0004	0	5.83E+05	1.20	Y	1.09	2.72	5837	0.215
123678-HxCDD	36.85		1.0035	1.0035	0	1.17E+06	1.28	Y	1.13	5.47	5837	0.228
123789-HxCDD	37.15		1.0116	1.0117	+0.2	1.03E+06	1.23	Y	1.05	4.25	5837	0.204
1234678-HpCDD	39.96		1.0003	1.0003	0	5.22E+07	1.04	Y	0.98	314	5322	0.181
OCDD	42.39		1.0003	1.0003	0	2.79E+08	0.92	Y	1.08	3,030	9024	0.654
2378-TCDF	26.36		1.0006	1.0006	0	4.65E+05	0.79	Y	0.98	1.12	4554	0.13
12378-PeCDF	31.34	J EMPC	1.0006	1.0005	-0.2	4.19E+05	1.90	N	0.95	1.13	5511	0.143
23478-PeCDF	32.48	J EMPC	1.0005	1.0008	+0.6	5.57E+05	1.81	N	0.95	1.61	5511	0.146
123478-HxCDF	35.77	J	1.0005	1.0005	0	6.99E+05	1.11	Y	1.20	2.23	6366	0.176
123678-HxCDF	35.91	J	1.0004	1.0004	0	5.54E+05	1.25	Y	1.07	1.69	6366	0.165
234678-HxCDF	36.56	J	1.0005	1.0005	0	4.65E+05	1.22	Y	1.10	1.61	6366	0.179
123789-HxCDF	NotFnd		1.0004	-		-	-	-	1.09	-	6366	0.234
1234678-HpCDF	39.05		1.0003	1.0003	0	6.18E+06	1.10	Y	1.28	24.9	3741	0.0947
1234789-HpCDF	40.38	J	1.0002	1.0002	0	3.29E+05	1.05	Y	1.27	1.72	3741	0.113
OCDF	42.55		1.0003	1.0002	-0.3	8.43E+06	0.88	Y	1.01	81.5	5077	0.351

Name	Act RT		Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	27.26		1.0255	1.0257	+0.3	5.96E+07	0.77	Y	1.01	73.9
ES 12378-PeCDD	32.81		1.2330	1.2343	+2.6	5.20E+07	1.66	Y	0.87	74.5
ES 123478-HxCDD	36.72		0.9917	0.9916	-0.2	4.56E+07	1.28	Y	1.10	63.3
ES 123678-HxCDD	36.84		0.9947	0.9947	0	4.40E+07	1.28	Y	1.06	63.2
ES 123789-HxCDD	37.14		1.0028	1.0027	-0.2	5.34E+07	1.26	Y	1.22	66.8
ES 1234678-HpCDD	39.95		1.0785	1.0788	+0.7	3.92E+07	1.04	Y	0.99	60.1
ES OCDD	42.38		1.1439	1.1442	+0.8	3.96E+07	0.91	Y	0.67	45.1
ES 2378-TCDF	26.34		1.0572	1.0577	+0.8	9.84E+07	0.80	Y	1.01	72.6
ES 12378-PeCDF	31.32		1.2558	1.2578	+3.8	9.09E+07	1.59	Y	0.90	75.6
ES 23478-PeCDF	32.45		1.3012	1.3032	+3.9	8.50E+07	1.56	Y	0.89	71.5
ES 123478-HxCDF	35.75		0.9655	0.9654	-0.2	6.09E+07	0.53	Y	1.43	64.9
ES 123678-HxCDF	35.89		0.9693	0.9692	-0.2	7.08E+07	0.52	Y	1.63	66
ES 234678-HxCDF	36.54		0.9867	0.9866	-0.2	6.11E+07	0.54	Y	1.48	62.9
ES 123789-HxCDF	37.51		1.0130	1.0129	-0.2	5.31E+07	0.52	Y	1.29	62.5
ES 1234678-HpCDF	39.04		1.0540	1.0542	+0.5	4.49E+07	0.46	Y	1.15	59.6
ES 1234789-HpCDF	40.37		1.0898	1.0900	+0.5	3.50E+07	0.45	Y	0.91	58.9
ES OCDF	42.54		1.1484	1.1487	+0.8	4.75E+07	0.93	Y	0.83	43.7

Lab ID: B4519_17655_DF_012 | Acq'd: 11 Aug 2020 05:12 PSW | Wt/Vol: 8.62 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-TB-07 | UTP: 11-Aug-2020 09:19:11 PSW | J-level: 0.58 pg/g | Split: 1 | Checkcode: 394-371-QXV

Datafile: 200810R20 | Report: 11 Aug 2020 10:00 pw | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %	
JS 1234-TCDD	26.58		-	-	-	8.01E+07	0.78	Y	-	-	
JS 1234-TCDF	24.90		-	-	-	1.34E+08	0.80	Y	-	-	
JS 123467-HxCDD	37.03		-	-	-	3.29E+07	1.30	Y	-	-	
CS 37Cl-2378-TCDD	27.29		1.0265	1.0266	+0.2	2.93E+07	n/a	-	1.04	88.1	
CS 12347-PeCDD	32.30		1.2141	1.2153	+2.3	5.52E+07	1.66	Y	0.74	93.1	
CS 12346-PeCDF	30.78		1.2343	1.2362	+3.5	9.77E+07	1.61	Y	0.86	85	
CS 123469-HxCDF	36.20		0.9776	0.9775	-0.2	6.46E+07	0.54	Y	1.36	72.4	
CS 1234689-HpCDF	39.45		1.0650	1.0652	+0.5	4.94E+07	0.42	Y	1.05	71.3	
~~SS 37Cl-2378-TCDD~~	~~27.29~~		~~1.0265~~	~~1.0266~~	~~+0.2~~	~~2.93E+07~~	~~n/a~~		~~1.04~~	~~118~~	Not used in this project.
~~SS 12347-PeCDD~~	~~32.30~~		~~1.2141~~	~~1.2153~~	~~+2.3~~	~~5.52E+07~~	~~1.66~~	~~Y~~	~~0.86~~	~~124~~	CL 11Aug20
~~SS 12346-PeCDF~~	~~30.78~~		~~1.2343~~	~~1.2362~~	~~+3.5~~	~~9.77E+07~~	~~1.61~~	~~Y~~	~~0.96~~	~~112~~	
~~SS 123469-HxCDF~~	~~36.20~~		~~0.9776~~	~~0.9775~~	~~-0.2~~	~~6.46E+07~~	~~0.54~~	~~Y~~	~~0.83~~	~~109~~	
~~SS 1234689-HpCDF~~	~~39.45~~		~~1.0650~~	~~1.0652~~	~~+0.5~~	~~4.94E+07~~	~~0.42~~	~~Y~~	~~0.92~~	~~119~~	

Totals	Conc	EMPC
Total TCDD	26.2	33
Total PeCDD	35.6	37.2
Total HxCDD	94.7	94.7
Total HpCDD	832	832
Total Tetra-Octa Dioxins	4020	4030
Total TCDF	20.5	26
Total PeCDF	12.2	22
Total HxCDF	30.7	30.7
Total HpCDF	81.1	81.1
Total Tetra-Octa Furans	226	241
Total Tetra-Octa Dioxins & Furans	4250	4270

* 37Cl correction has been applied to 2378-TCDD

	Original Values	Corrected Values
Ratio	0.59	0.84
Response	9.53E+04	7.77E+04

Lab ID: B4519_17655_DF_012 **Acq'd:** 11 Aug 2020 05:12 PSW **Wt/Vol:** 8.62 g **ICAL:** MM3_DF_10012020_12JUN2020

Client ID: CS-TB-07 **UTP:** 11-Aug-2020 09:19:11 PSW **J-level:** 0.58 pg/g **Split:** 1 **Checkcode:** 394-371-QXV

Datafile: 200810R20 **Report:** 11 Aug 2020 10:00 pw **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1368-TCDD	23.39		0.8591	0.8579	-1.7	4.74E+06	0.75	Y	1.18	15.7	4678	0.173
1379-TCDD	23.78	EMPC	0.8732	0.8723	-1.3	1.38E+06	0.90	N	1.18	4.57	4678	0.173
1369-TCDD	24.24	EMPC	0.8901	0.8890	-1.6	1.82E+05	0.91	N	1.18	0.601	4678	0.173
1469-TCDD	25.09	J	0.9205	0.9201	-0.6	9.49E+04	0.72	Y	1.18	0.314	4678	0.173
1247/1246/1248/1249-TCDD	25.33		0.9301	0.9291	-1.5	1.53E+06	0.88	Y	1.18	5.06	4678	0.173
1378-TCDD	25.54		0.9374	0.9368	-0.9	6.44E+05	0.66	Y	1.18	2.13	4678	0.173
1268-TCDD	NotFnd		0.9449						1.18		4678	0.173
1478-TCDD	NotFnd		0.9544						1.18		4678	0.173
1279-TCDD	26.20	J EMPC	0.9610	0.9609	-0.2	1.56E+05	0.96	N	1.18	0.515	4678	0.173
1234/1269-TCDD	26.59	EMPC	0.9746	0.9753	+1.1	2.31E+05	1.08	N	1.18	0.763	4678	0.173
1236-TCDD	26.72	J EMPC	0.9802	0.9800	-0.3	3.03E+04	1.90	N	1.18	0.1	4678	0.173
1237/1238-TCDD	26.98		0.9898	0.9896	-0.3	7.63E+05	0.83	Y	1.18	2.52	4678	0.173
1239-TCDD	27.14	J EMPC	0.9950	0.9955	+0.8	7.92E+04	0.94	N	1.18	0.262	4678	0.173
2378-TCDD	**27.29**	J	**1.0009**	1.0010	**+0.2**	7.77E+04	0.84	Y	**1.18**	**0.257**	**4678**	**0.173**
1278-TCDD	27.63	J	1.0133	1.0134	+0.2	9.40E+04	0.79	Y	1.18	0.311	4678	0.173
1267-TCDD	NotFnd		1.0185						1.18		4678	0.173
1289-TCDD	NotFnd		1.0379						1.18		4678	0.173
12479/12468-PeCDD	30.27		0.9229	0.9227	-0.4	2.95E+06	1.62	Y	1.14	11.6	5353	0.192
12469-PeCDD	30.82	J	0.9396	0.9394	-0.4	2.94E+05	1.60	Y	1.14	1.16	5353	0.192
12368-PeCDD	31.39		0.9568	0.9567	-0.2	2.20E+06	1.52	Y	1.14	8.66	5353	0.192
12478-PeCDD	31.58	J EMPC	0.9626	0.9626	0	2.84E+05	2.12	N	1.14	1.12	5353	0.192
12379-PeCDD	31.68		0.9657	0.9657	0	1.27E+06	1.61	Y	1.14	4.98	5353	0.192
12369/12467/12489-PeCDD	31.94	J	0.9738	0.9737	-0.2	3.44E+05	1.53	Y	1.14	1.35	5353	0.192
12346/12347-PeCDD	32.32		0.9853	0.9852	-0.2	1.55E+06	1.56	Y	1.14	6.07	5353	0.192
12378-PeCDD	32.82	J	**1.0006**	**1.0005**	**-0.2**	**3.39E+05**	**1.75**	**Y**	**1.14**	**1.33**	**5353**	**0.192**
12367-PeCDD	32.91	J	1.0034	1.0032	-0.4	1.21E+05	1.62	Y	1.14	0.475	5353	0.192
12389-PeCDD	33.27	J EMPC	1.0141	1.0141	0	1.22E+05	1.91	N	1.14	0.481	5353	0.192
124679/124689-HxCDD	35.04		0.9542	0.9542	0	6.24E+06	1.27	Y	1.09	27.9	5837	0.214
123468-HxCDD	35.70		0.9721	0.9720	-0.2	4.82E+06	1.25	Y	1.09	21.5	5837	0.214
123679/123689-HxCDD	35.99		0.9799	0.9799	0	5.90E+06	1.27	Y	1.09	26.4	5837	0.214
123469-HxCDD	36.12		0.9835	0.9835	0	8.56E+05	1.36	Y	1.09	3.83	5837	0.214
123478-HxCDD	36.74	J	**1.0004**	**1.0004**	**0**	**5.83E+05**	**1.20**	**Y**	1.09	**2.72**	**5837**	**0.215**
123678-HxCDD	36.85		**1.0035**	**1.0035**	**0**	**1.17E+06**	**1.28**	**Y**	1.13	**5.47**	**5837**	**0.228**
123467-HxCDD	37.05	J	1.0088	1.0089	+0.2	5.95E+05	1.24	Y	1.09	2.66	5837	0.214
123789-HxCDD	37.15		**1.0116**	**1.0117**	**+0.2**	**1.03E+06**	**1.23**	**Y**	1.05	**4.25**	**5837**	**0.204**

Lab ID: B4519_17655_DF_012 | Acq'd: 11 Aug 2020 05:12 PSW | Wt/Vol: 8.62 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-TB-07 | UTP: 11-Aug-2020 09:19:11 PSW | J-level: 0.58 pg/g | Split: 1 | Checkcode: 394-371-QXV

Datafile: 200810R20 | Report: 11 Aug 2020 10:00 pw | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

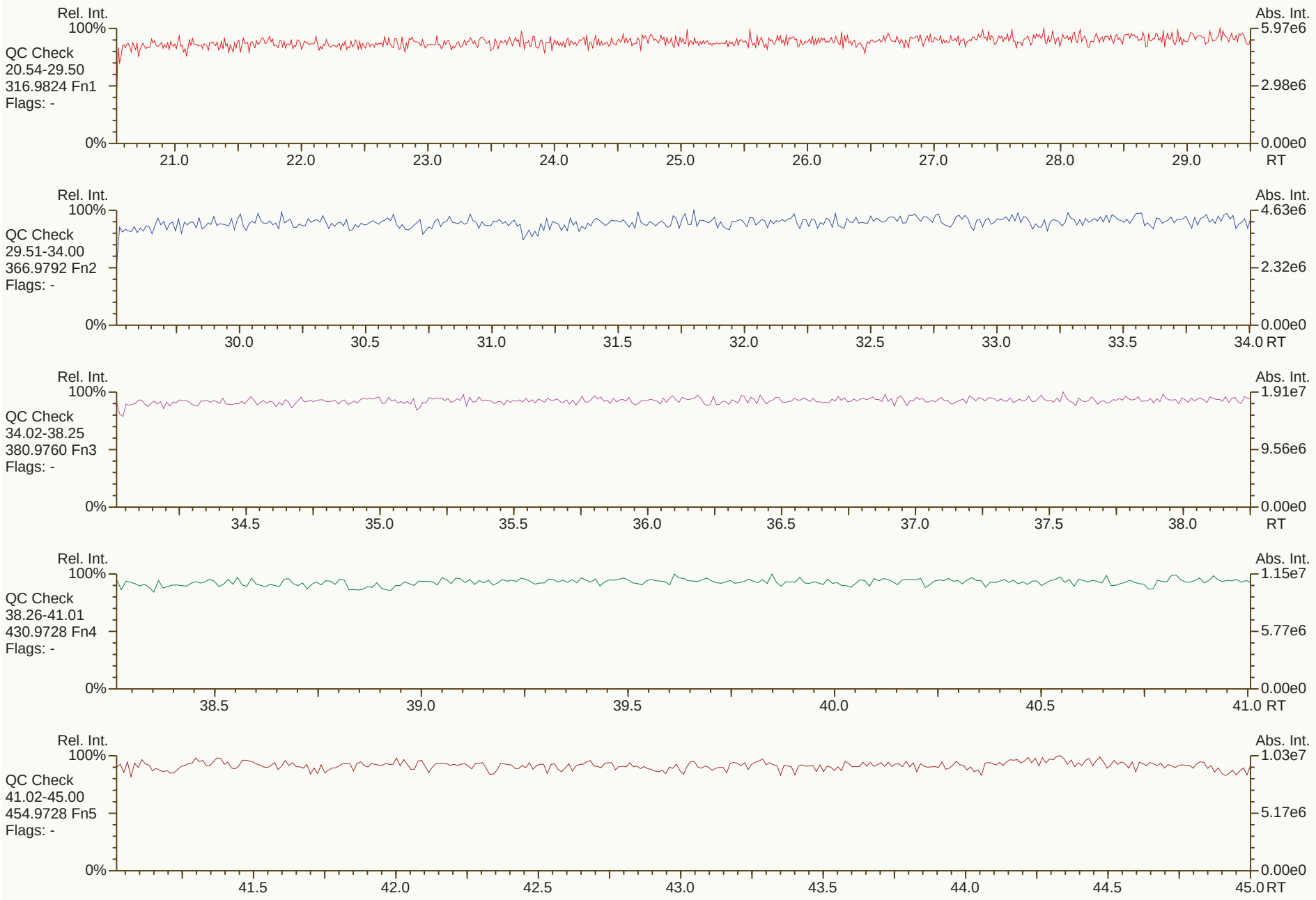
Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1234679-HpCDD	39.32		0.9843	0.9842	-0.2	8.61E+07	1.04	Y	0.98	518	5322	0.181
1234678-HpCDD	**39.96**		**1.0003**	**1.0003**	**0**	**5.22E+07**	**1.04**	**Y**	**0.98**	**314**	**5322**	**0.181**
OCDD	**42.39**		**1.0003**	**1.0003**	**0**	**2.79E+08**	**0.92**	**Y**	**1.08**	**3,030**	**9024**	**0.654**
OCDD-a	42.38		1.0002	1.0002	0	1.59E+07	2.55	Y	0.07	2,810	9892	11.6
1368-TCDF	21.15	EMPC	0.8044	0.8029	-1.9	7.15E+05	0.65	N	0.98	1.72	4554	0.13
1468-TCDF	21.72		0.8261	0.8247	-1.8	4.31E+05	0.73	Y	0.98	1.04	4554	0.13
2468-TCDF	22.38		0.8511	0.8497	-1.9	2.01E+06	0.81	Y	0.98	4.84	4554	0.13
1346/1246-TCDF	22.82		0.8665	0.8663	-0.3	4.53E+05	0.71	Y	0.98	1.09	4554	0.13
1347/1378/1247-TCDF	22.95		0.8723	0.8714	-1.2	1.02E+06	0.70	Y	0.98	2.45	4554	0.13
1348-TCDF	23.26		0.8835	0.8830	-0.7	2.46E+05	0.87	Y	0.98	0.591	4554	0.13
1248/1367/1379-TCDF	23.37		0.8888	0.8874	-2.0	4.69E+05	0.73	Y	0.98	1.13	4554	0.13
1268-TCDF	23.79		0.9044	0.9034	-1.4	5.15E+05	0.72	Y	0.98	1.24	4554	0.13
1467-TCDF	23.94	J EMPC	0.9098	0.9088	-1.4	2.04E+05	0.91	N	0.98	0.49	4554	0.13
1478-TCDF	24.12		0.9167	0.9156	-1.6	3.13E+05	0.71	Y	0.98	0.752	4554	0.13
1369/1237-TCDF	24.52		0.9316	0.9309	-1.0	2.96E+05	0.78	Y	0.98	0.712	4554	0.13
2467-TCDF	24.66		0.9369	0.9362	-1.0	3.76E+05	0.74	Y	0.98	0.904	4554	0.13
2368-TCDF	24.83		0.9430	0.9427	-0.4	7.35E+05	0.79	Y	0.98	1.77	4554	0.13
1238/1234/1678/1469/1236-TCDF	24.94		0.9468	0.9468	0	5.59E+05	0.73	Y	0.98	1.34	4554	0.13
1278-TCDF	25.41	EMPC	0.9651	0.9647	-0.6	2.85E+05	0.96	N	0.98	0.685	4554	0.13
1349-TCDF	NotFnd		0.9704						0.98		4554	0.13
1267-TCDF	25.70		0.9761	0.9757	-0.6	2.73E+05	0.74	Y	0.98	0.656	4554	0.13
2346/1249-TCDF	25.89	J	0.9834	0.9829	-0.8	1.92E+05	0.73	Y	0.98	0.461	4554	0.13
2347/1279-TCDF	26.12	EMPC	0.9921	0.9918	-0.5	2.93E+05	0.57	N	0.98	0.704	4554	0.13
2348-TCDF	26.23	J	0.9964	0.9959	-0.8	1.90E+05	0.66	Y	0.98	0.456	4554	0.13
2378-TCDF	**26.36**		**1.0006**	**1.0006**	**0**	**4.65E+05**	**0.79**	**Y**	**0.98**	**1.12**	**4554**	**0.13**
2367/3467-TCDF	26.74	EMPC	1.0156	1.0152	-0.6	5.90E+05	0.65	N	0.98	1.42	4554	0.13
1269-TCDF	NotFnd		1.0249						0.98		4554	0.13
1239-TCDF	NotFnd		1.0357						0.98		4554	0.13
1289-TCDF	28.46	J EMPC	1.0799	1.0804	+0.9	2.04E+05	1.42	N	0.98	0.492	4554	0.13
13468/12468-PeCDF	28.45	EMPC	0.9084	0.9084	0	1.73E+06	1.82	N	0.95	4.81	2948	0.0773
13678/13467/12467-PeCDF	30.04	J	0.9591	0.9592	+0.2	8.65E+05	1.49	Y	0.95	2.41	5511	0.145
12368/13478/12478-PeCDF	30.20		0.9642	0.9642	0	1.83E+06	1.51	Y	0.95	5.1	5511	0.145
14678-PeCDF	30.30	J EMPC	0.9675	0.9675	0	1.63E+05	1.89	N	0.95	0.453	5511	0.145
13479-PeCDF	30.38	J	0.9706	0.9700	-1.1	8.27E+04	1.38	Y	0.95	0.23	5511	0.145
13469/12479-PeCDF	30.65	J	0.9787	0.9787	0	9.64E+04	1.57	Y	0.95	0.268	5511	0.145
12346-PeCDF	30.80	J	0.9833	0.9832	-0.2	1.97E+05	1.44	Y	0.95	0.548	5511	0.145

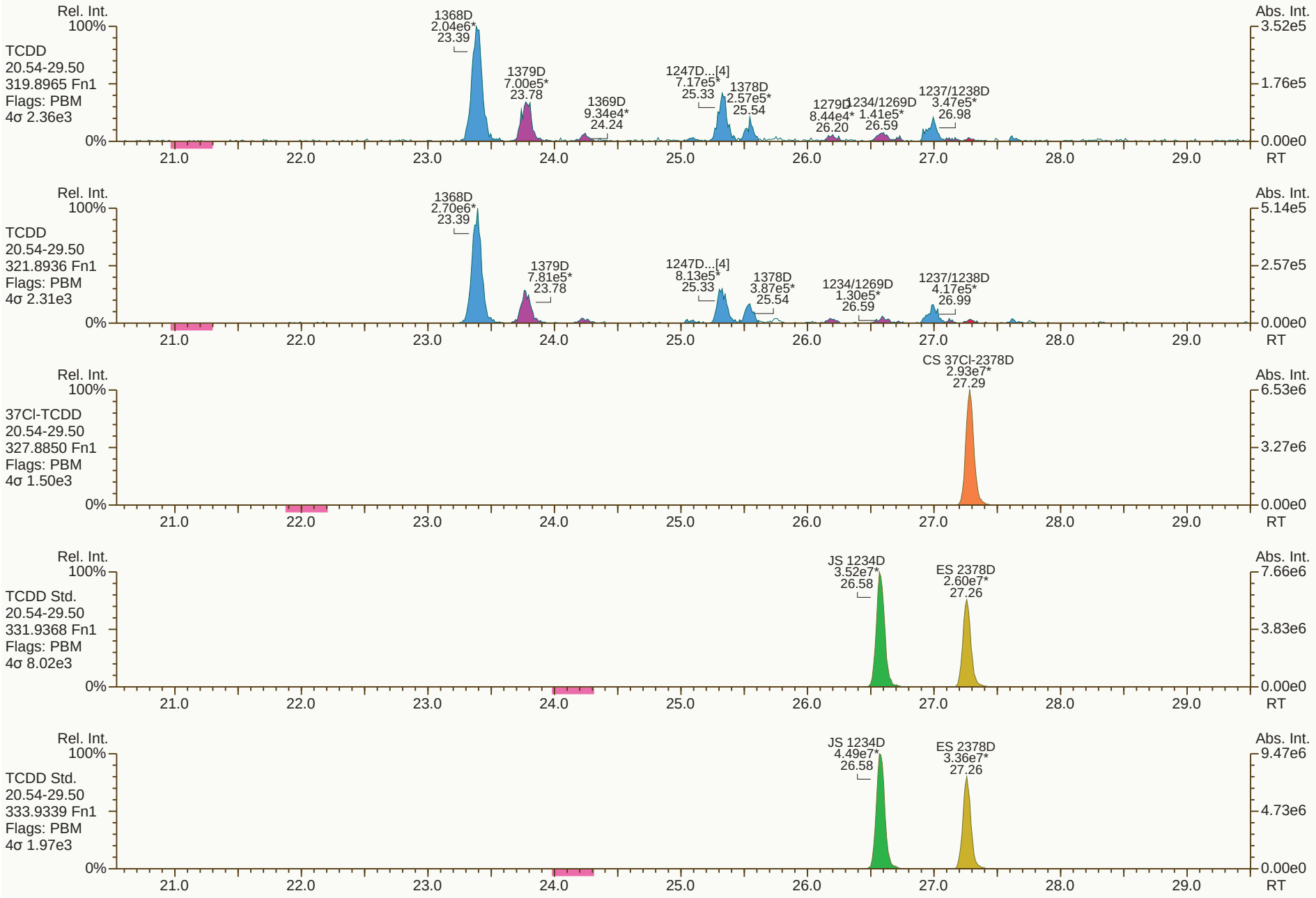
Lab ID: B4519_17655_DF_012 **Acq'd:** 11 Aug 2020 05:12 PSW **Wt/Vol:** 8.62 g **ICAL:** MM3_DF_10012020_12JUN2020

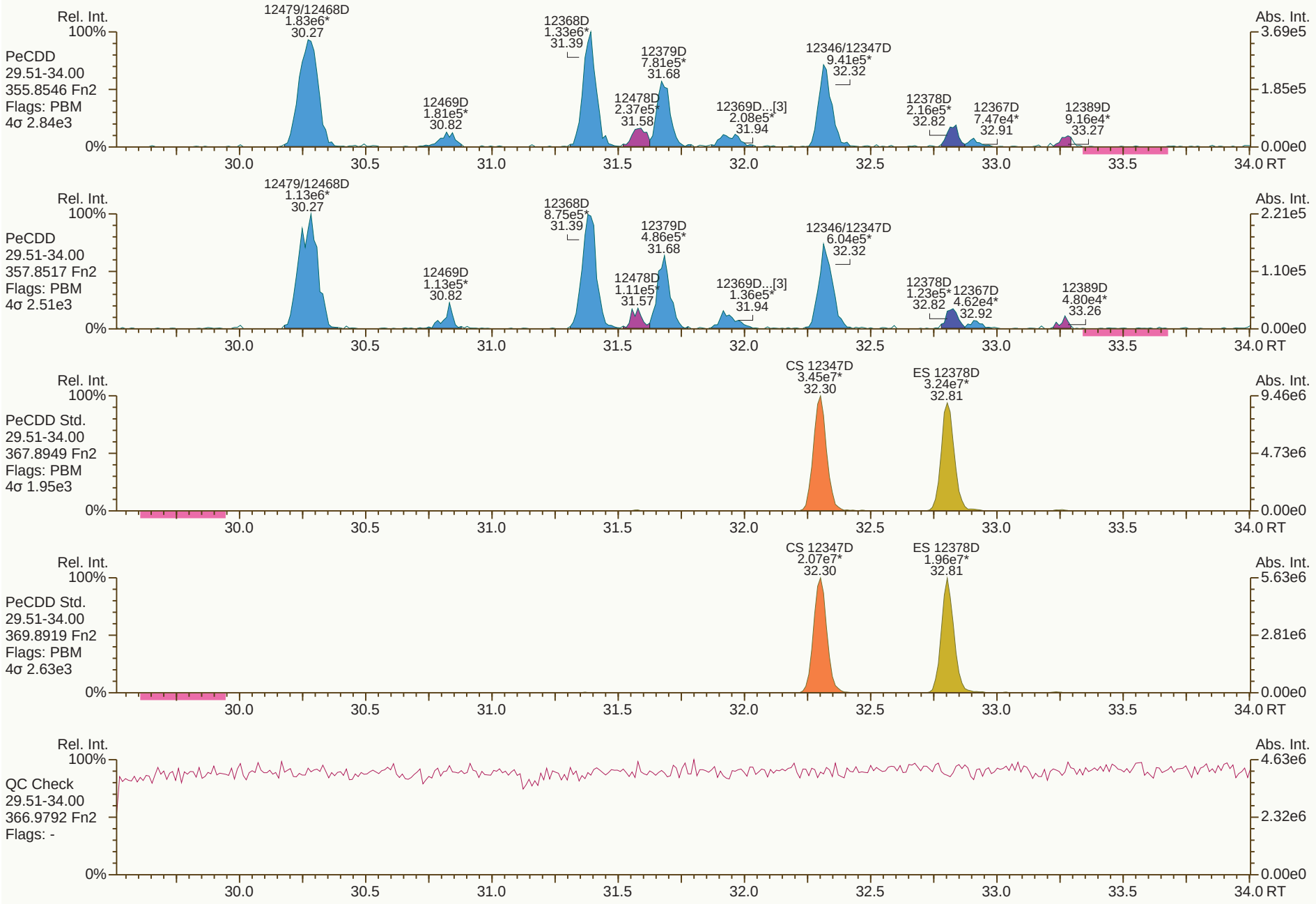
Client ID: CS-TB-07 **UTP:** 11-Aug-2020 09:19:11 PSW **J-level:** 0.58 pg/g **Split:** 1 **Checkcode:** 394-371-QXV

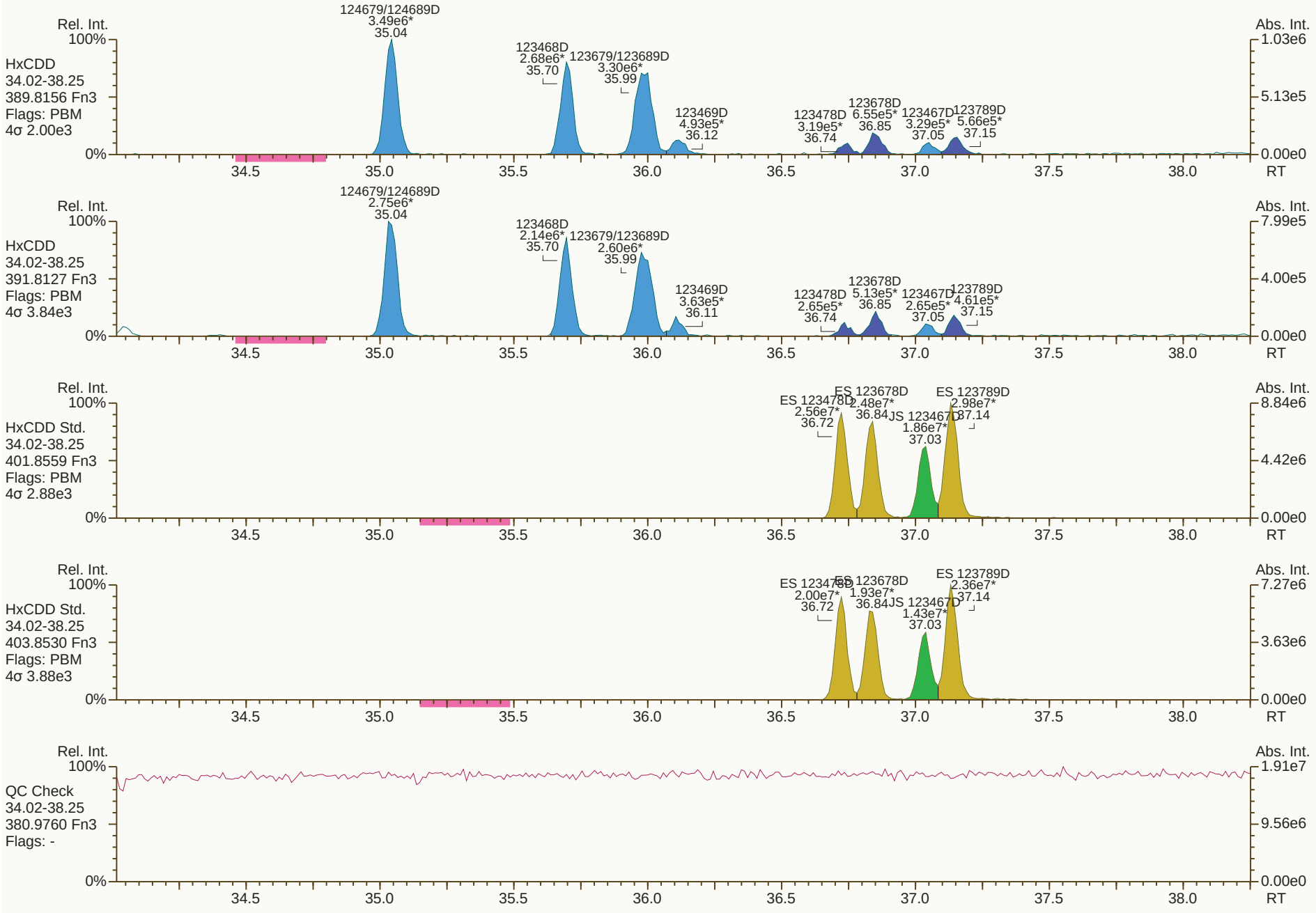
Datafile: 200810R20 **Report:** 11 Aug 2020 10:00 pw **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

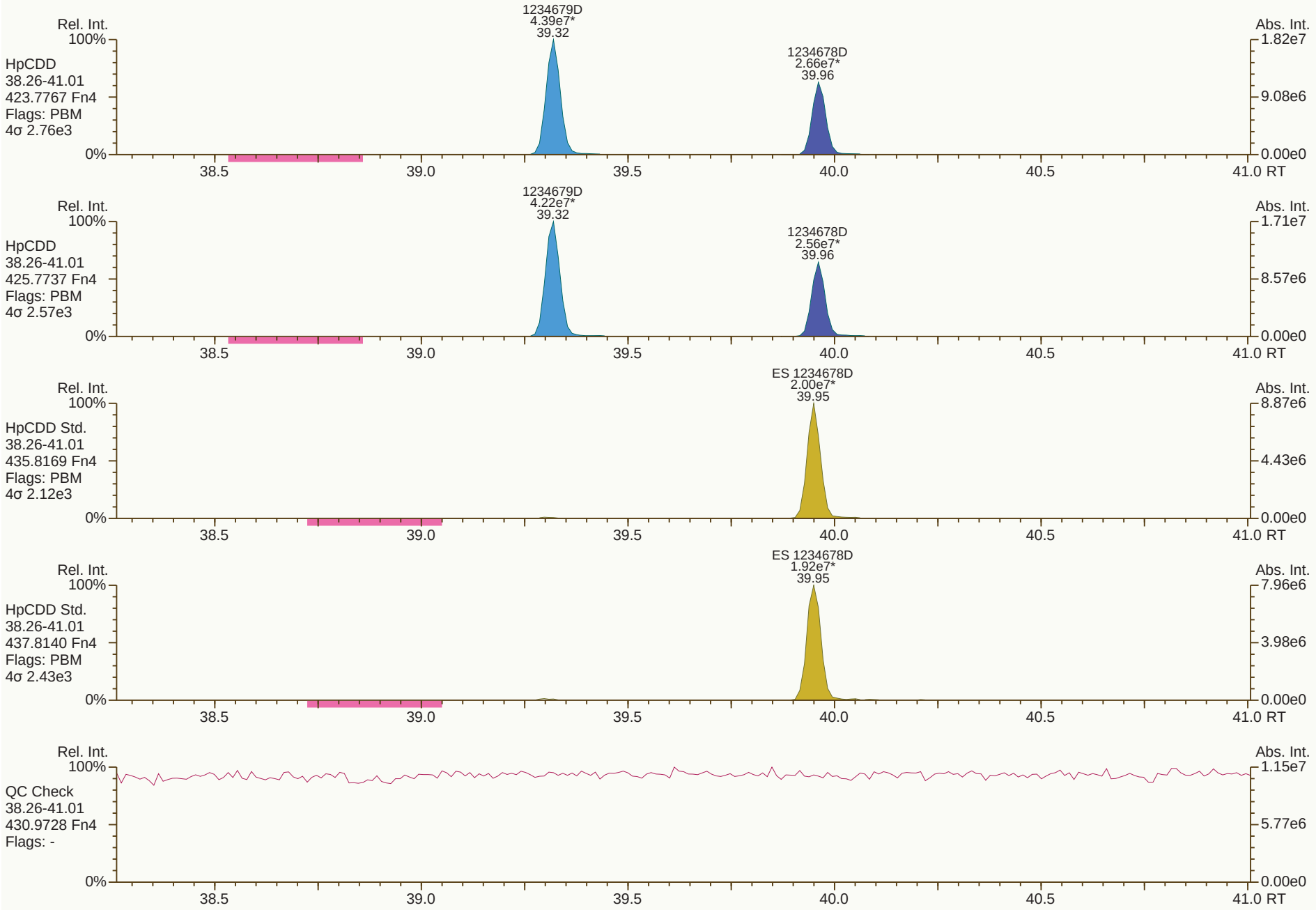
Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
23468/12469-PeCDF	30.88	J	0.9861	0.9859	-0.4	4.43E+05	1.69	Y	0.95	1.23	5511	0.145
12347-PeCDF	30.96	J EMPC	0.9887	0.9883	-0.7	3.24E+05	1.25	N	0.95	0.901	5511	0.145
12348-PeCDF	31.14	J	0.9938	0.9941	+0.6	2.54E+05	1.42	Y	0.95	0.706	5511	0.145
12378-PeCDF	**31.34**	J EMPC	**1.0006**	**1.0005**	**-0.2**	**4.19E+05**	**1.90**	**N**	**0.95**	**1.13**	**5511**	**0.143**
12678/12367-PeCDF	31.62	J	1.0095	1.0096	+0.2	6.13E+05	1.64	Y	0.95	1.71	5511	0.145
12379-PeCDF	NotFnd		1.0150						0.95		5511	0.145
12679-PeCDF	NotFnd		0.9926						0.95		5511	0.145
23467/12369-PeCDF	32.34	J EMPC	0.9966	0.9966	0	3.12E+05	1.11	N	0.95	0.868	5511	0.145
23478-PeCDF	**32.48**	J EMPC	**1.0005**	**1.0008**	**+0.6**	**5.57E+05**	**1.81**	**N**	**0.95**	**1.61**	**5511**	**0.146**
23478/12489-PeCDF	NotFnd		0.0000						0.95			
12489-PeCDF	NotFnd		1.0047						0.95		5511	0.145
12349-PeCDF	NotFnd		1.0107						0.95		5511	0.145
12389-PeCDF	NotFnd		1.0339						0.95		5511	0.145
123468-HxCDF	34.38	J	0.9617	0.9616	-0.2	8.55E+05	1.31	Y	1.11	2.9	6366	0.186
124678/134678-HxCDF	34.58		0.9673	0.9671	-0.4	2.57E+06	1.22	Y	1.11	8.7	6366	0.186
134679-HxCDF	NotFnd		0.9737						1.11		6366	0.186
124679-HxCDF	35.01	J	0.9792	0.9792	0	1.63E+05	1.14	Y	1.11	0.552	6366	0.186
124689-HxCDF	35.23		0.9854	0.9854	0	3.07E+06	1.20	Y	1.11	10.4	6366	0.186
123467-HxCDF	35.65	J	0.9972	0.9971	-0.2	5.81E+05	1.12	Y	1.11	1.97	6366	0.186
123478-HxCDF	**35.77**	J	**1.0005**	**1.0005**	**0**	**6.99E+05**	**1.11**	**Y**	**1.20**	**2.23**	**6366**	**0.176**
123678-HxCDF	**35.91**	J	**1.0004**	**1.0004**	**0**	**5.54E+05**	**1.25**	**Y**	**1.07**	**1.69**	**6366**	**0.165**
123479-HxCDF	NotFnd		1.0049						1.11		6366	0.186
123469-HxCDF	NotFnd		1.0089						1.11		6366	0.186
123679-HxCDF	NotFnd		0.9945						1.11		6366	0.186
234678-HxCDF	**36.56**	J	**1.0005**	**1.0005**	**0**	**4.65E+05**	**1.22**	**Y**	**1.10**	**1.61**	**6366**	**0.179**
234678/123689-HxCDF	NotFnd		0.0000						1.10			
123689-HxCDF	NotFnd		1.0054						1.11		6366	0.186
123789-HxCDF	**NotFnd**		**1.0004**						**1.09**		**6366**	**0.234**
123789/123489-HxCDF	NotFnd		0.0000						1.09			
123489-HxCDF	37.55	J	1.0008	1.0009	+0.2	1.79E+05	1.24	Y	1.11	0.608	6366	0.186
1234678-HpCDF	**39.05**		**1.0003**	**1.0003**	**0**	**6.18E+06**	**1.10**	**Y**	**1.28**	**24.9**	**3741**	**0.0947**
1234679-HpCDF	39.32	**J**	1.0072	1.0072	0	3.55E+05	1.12	Y	1.27	1.62	3741	0.103
1234689-HpCDF	39.46		1.0107	1.0107	0	1.16E+07	1.01	Y	1.27	52.8	3741	0.103
1234789-HpCDF	**40.38**	**J**	**1.0002**	**1.0002**	**0**	**3.29E+05**	**1.05**	**Y**	**1.27**	**1.72**	**3741**	**0.113**
OCDF	**42.55**		**1.0003**	**1.0002**	**-0.3**	**8.43E+06**	**0.88**	**Y**	**1.01**	**81.5**	**5077**	**0.351**
OCDF-a	42.55		1.0002	1.0001	-0.3	4.68E+05	2.36	Y	0.06	72.2	3651	4.03


Rel. Int.
100%
0%
Abs. Int.
5.97e6
2.98e6
0.00e0
RT
QC Check
20.54-29.50
316.9824 Fn1
Flags: -
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
QC Check
29.51-34.00
366.9792 Fn2
Flags: -
4.63e6
2.32e6
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
1.91e7
9.56e6
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
QC Check
38.26-41.01
430.9728 Fn4
Flags: -
1.15e7
5.77e6
38.5
39.0
39.5
40.0
40.5
41.0
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
1.03e7
5.17e6
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0


Rel. Int.
100%
TCDD
20.54-29.50
319.8965 Fn1
Flags: PBM
4σ 2.36e3
0%
1368D
2.04e6*
23.39
1379D
7.00e5*
23.78
1369D
9.34e4*
24.24
1247D...[4]
7.17e5*
25.33
1378D
2.57e5*
25.54
1279D
8.44e4*
26.20
1234/1269D
1.41e5*
26.59
1237/1238D
3.47e5*
26.98
Abs. Int.
3.52e5
1.76e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD
20.54-29.50
321.8936 Fn1
Flags: PBM
4σ 2.31e3
0%
1368D
2.70e6*
23.39
1379D
7.81e5*
23.78
1247D...[4]
8.13e5*
25.33
1378D
3.87e5*
25.54
1234/1269D
1.30e5*
26.59
1237/1238D
4.17e5*
26.99
Abs. Int.
5.14e5
2.57e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
37Cl-TCDD
20.54-29.50
327.8850 Fn1
Flags: PBM
4σ 1.50e3
0%
CS 37Cl-2378D
2.93e7*
27.29
Abs. Int.
6.53e6
3.27e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
331.9368 Fn1
Flags: PBM
4σ 8.02e3
0%
JS 1234D
3.52e7*
26.58
ES 2378D
2.60e7*
27.26
Abs. Int.
7.66e6
3.83e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
333.9339 Fn1
Flags: PBM
4σ 1.97e3
0%
JS 1234D
4.49e7*
26.58
ES 2378D
3.36e7*
27.26
Abs. Int.
9.47e6
4.73e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
PeCDD
29.51-34.00
355.8546 Fn2
Flags: PBM
4σ 2.84e3
12479/12468D
1.83e6*
30.27
12469D
1.81e5*
30.82
12368D
1.33e6*
31.39
12478D
2.37e5*
31.58
12379D
7.81e5*
31.68
12369D...[3]
2.08e5*
31.94
12346/12347D
9.41e5*
32.32
12378D
2.16e5*
32.82
12367D
7.47e4*
32.91
12389D
9.16e4*
33.27
Abs. Int.
3.69e5
1.85e5
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD
29.51-34.00
357.8517 Fn2
Flags: PBM
4σ 2.51e3
12479/12468D
1.13e6*
30.27
12469D
1.13e5*
30.82
12368D
8.75e5*
31.39
12478D
1.11e5*
31.57
12379D
4.86e5*
31.68
12369D...[3]
1.36e5*
31.94
12346/12347D
6.04e5*
32.32
12378D
1.23e5*
32.82
12367D
4.62e4*
32.92
12389D
4.80e4*
33.26
Abs. Int.
2.21e5
1.10e5
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.00
367.8949 Fn2
Flags: PBM
4σ 1.95e3
CS 12347D
3.45e7*
32.30
ES 12378D
3.24e7*
32.81
Abs. Int.
9.46e6
4.73e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.00
369.8919 Fn2
Flags: PBM
4σ 2.63e3
CS 12347D
2.07e7*
32.30
ES 12378D
1.96e7*
32.81
Abs. Int.
5.63e6
2.81e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
QC Check
29.51-34.00
366.9792 Fn2
Flags: -
Abs. Int.
4.63e6
2.32e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT


Rel. Int.
100%
HxCDD
34.02-38.25
389.8156 Fn3
Flags: PBM
4σ 2.00e3
124679/124689D 3.49e6* 35.04
123468D 2.68e6* 35.70
123679/123689D 3.30e6* 35.99
123469D 4.93e5* 36.12
123478D 3.19e5* 36.74
123678D 6.55e5* 36.85
123467D 3.29e5* 37.05
123789D 5.66e5* 37.15
Abs. Int.
1.03e6
5.13e5
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 RT
Rel. Int.
100%
HxCDD
34.02-38.25
391.8127 Fn3
Flags: PBM
4σ 3.84e3
124679/124689D 2.75e6* 35.04
123468D 2.14e6* 35.70
123679/123689D 2.60e6* 35.99
123469D 3.63e5* 36.11
123478D 2.65e5* 36.74
123678D 5.13e5* 36.85
123467D 2.65e5* 37.05
123789D 4.61e5* 37.15
Abs. Int.
7.99e5
4.00e5
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
401.8559 Fn3
Flags: PBM
4σ 2.88e3
ES 123478D 2.56e7* 36.72
ES 123678D 2.48e7* 36.84
JS 123467D 1.86e7* 37.03
ES 123789D 2.98e7* 37.14
Abs. Int.
8.84e6
4.42e6
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
403.8530 Fn3
Flags: PBM
4σ 3.88e3
ES 123478D 2.00e7* 36.72
ES 123678D 1.93e7* 36.84
JS 123467D 1.43e7* 37.03
ES 123789D 2.36e7* 37.14
Abs. Int.
7.27e6
3.63e6
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 RT
Rel. Int.
100%
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
Abs. Int.
1.91e7
9.56e6
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 RT

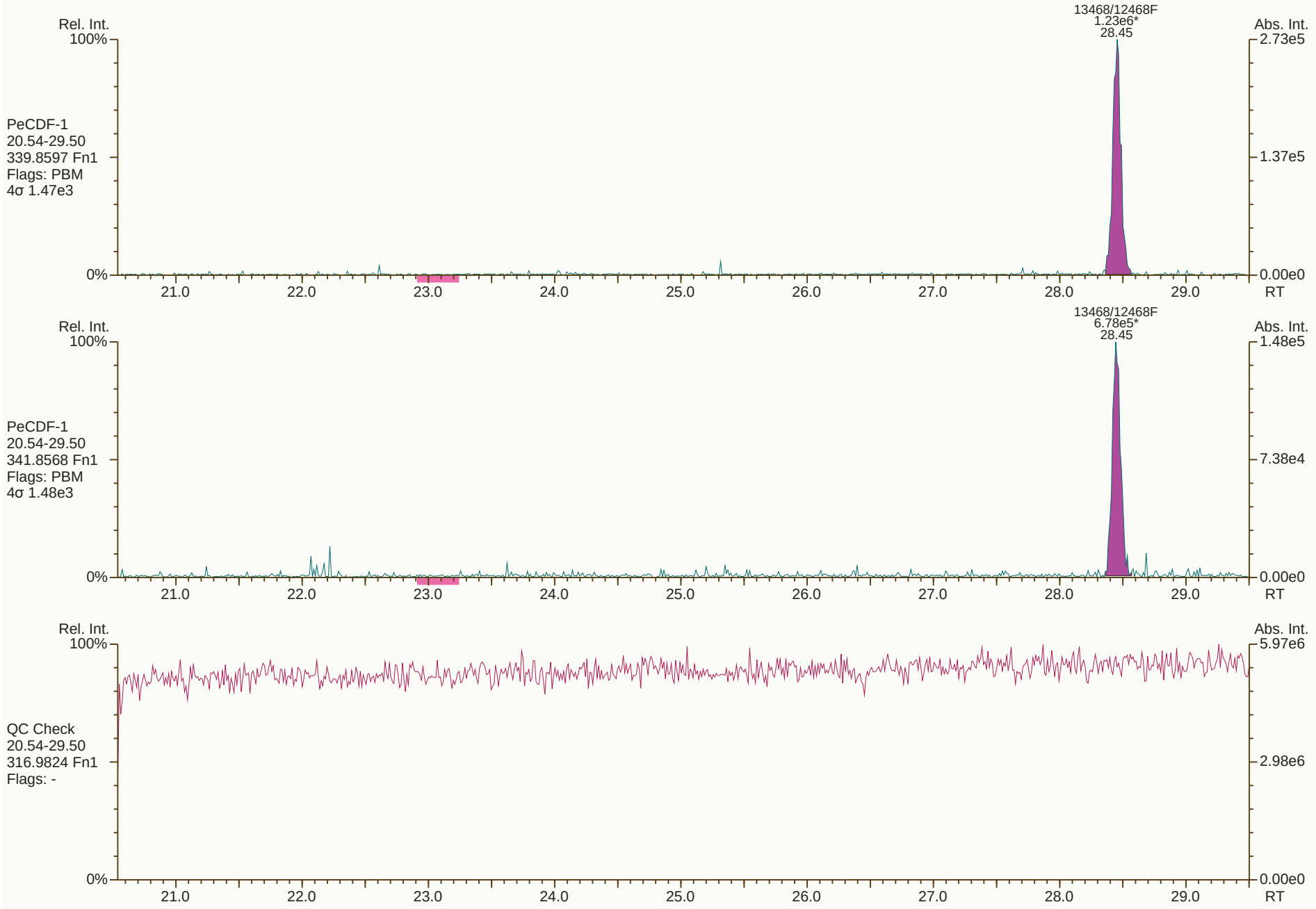

Rel. Int.
100%
HpCDD
38.26-41.01
423.7767 Fn4
Flags: PBM
4σ 2.76e3
0%
1234679D
4.39e7*
39.32
1234678D
2.66e7*
39.96
Abs. Int.
1.82e7
9.08e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.26-41.01
425.7737 Fn4
Flags: PBM
4σ 2.57e3
0%
1234679D
4.22e7*
39.32
1234678D
2.56e7*
39.96
Abs. Int.
1.71e7
8.57e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
435.8169 Fn4
Flags: PBM
4σ 2.12e3
0%
ES 1234678D
2.00e7*
39.95
Abs. Int.
8.87e6
4.43e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
437.8140 Fn4
Flags: PBM
4σ 2.43e3
0%
ES 1234678D
1.92e7*
39.95
Abs. Int.
7.96e6
3.98e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.26-41.01
430.9728 Fn4
Flags: -
0%
Abs. Int.
1.15e7
5.77e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT


OCDD
1.33e8*
42.39
Rel. Int.
100%
OCDD
41.02-45.00
457.7377 Fn5
Flags: PBM
4σ 3.03e3
0%
Abs. Int.
4.98e7
2.49e7
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDD
1.45e8*
42.39
Rel. Int.
100%
OCDD
41.02-45.00
459.7348 Fn5
Flags: PBM
4σ 6.00e3
0%
Abs. Int.
5.40e7
2.70e7
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
1.88e7*
42.38
Rel. Int.
100%
OCDD Std.
41.02-45.00
469.7780 Fn5
Flags: PBM
4σ 2.19e3
0%
Abs. Int.
7.08e6
3.54e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
2.08e7*
42.37
Rel. Int.
100%
OCDD Std.
41.02-45.00
471.7750 Fn5
Flags: PBM
4σ 2.16e3
0%
Abs. Int.
7.44e6
3.72e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
1.03e7
5.17e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT


Rel. Int.
100%
TCDF
20.54-29.50
303.9016 Fn1
Flags: PBM
4σ 2.69e3
1368F 3.11e5* 21.15
1468F 1.82e5* 21.72
2468F 9.03e5* 22.38
1347F...[3] 4.21e5* 22.95
1346/1246F 1.88e5* 22.82
1248F...[3] 1.98e5* 23.37
1268F 2.15e5* 23.79
2368F 3.25e5* 24.83
1278F 1.54e5* 25.41
2346/1249F 8.08e4* 25.89
2378F 2.05e5* 26.36
2367/3467F 2.57e5* 26.74
1289F 1.64e5* 28.46
Abs. Int.
1.68e5
8.39e4
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
TCDF
20.54-29.50
305.8987 Fn1
Flags: PBM
4σ 1.87e3
1368F 4.76e5* 21.14
1468F 2.49e5* 21.72
2468F 1.11e6* 22.38
1347F...[3] 5.97e5* 22.96
1346/1246F 2.65e5* 22.81
1248F...[3] 2.71e5* 23.38
1268F 3.00e5* 23.80
2368F 4.09e5* 24.83
2467F 2.16e5* 24.66
1238F...[5] 3.22e5* 24.94
1267F 1.57e5* 25.70
2347/1279F 2.25e5* 26.12
2378F 2.59e5* 26.36
2367/3467F 3.93e5* 26.74
1289F 1.15e5* 28.46
Abs. Int.
1.95e5
9.77e4
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
315.9419 Fn1
Flags: PBM
4σ 1.85e4
JS 1234F 5.94e7* 24.90
ES 2378F 4.38e7* 26.34
Abs. Int.
1.15e7
5.77e6
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
317.9389 Fn1
Flags: PBM
4σ 7.19e3
JS 1234F 7.42e7* 24.90
ES 2378F 5.46e7* 26.34
Abs. Int.
1.46e7
7.32e6
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
HxCDPE
20.54-29.50
375.8364 Fn1
Flags: PB
4σ 1.47e3
Abs. Int.
7.78e3
3.89e3
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT

SGS ID: B4519_17655_DF_012 | Sample ID: CS-TB-07 | Acq: 11-Aug-2020 05:12:17

Instr: [ILM] AutoSpec-Ultima MM3 | VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 33 | User: PSW Datafile: 200810R20

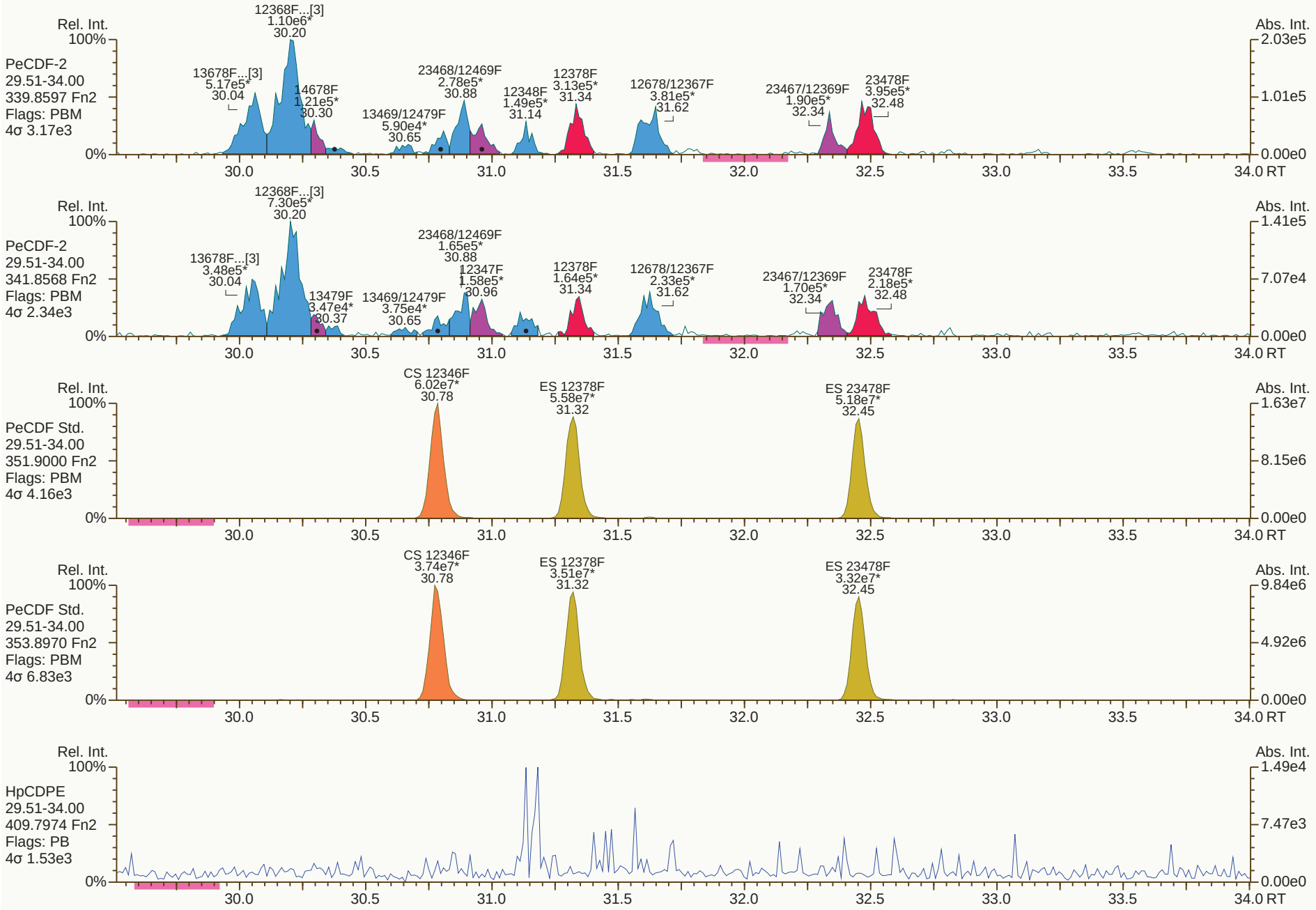


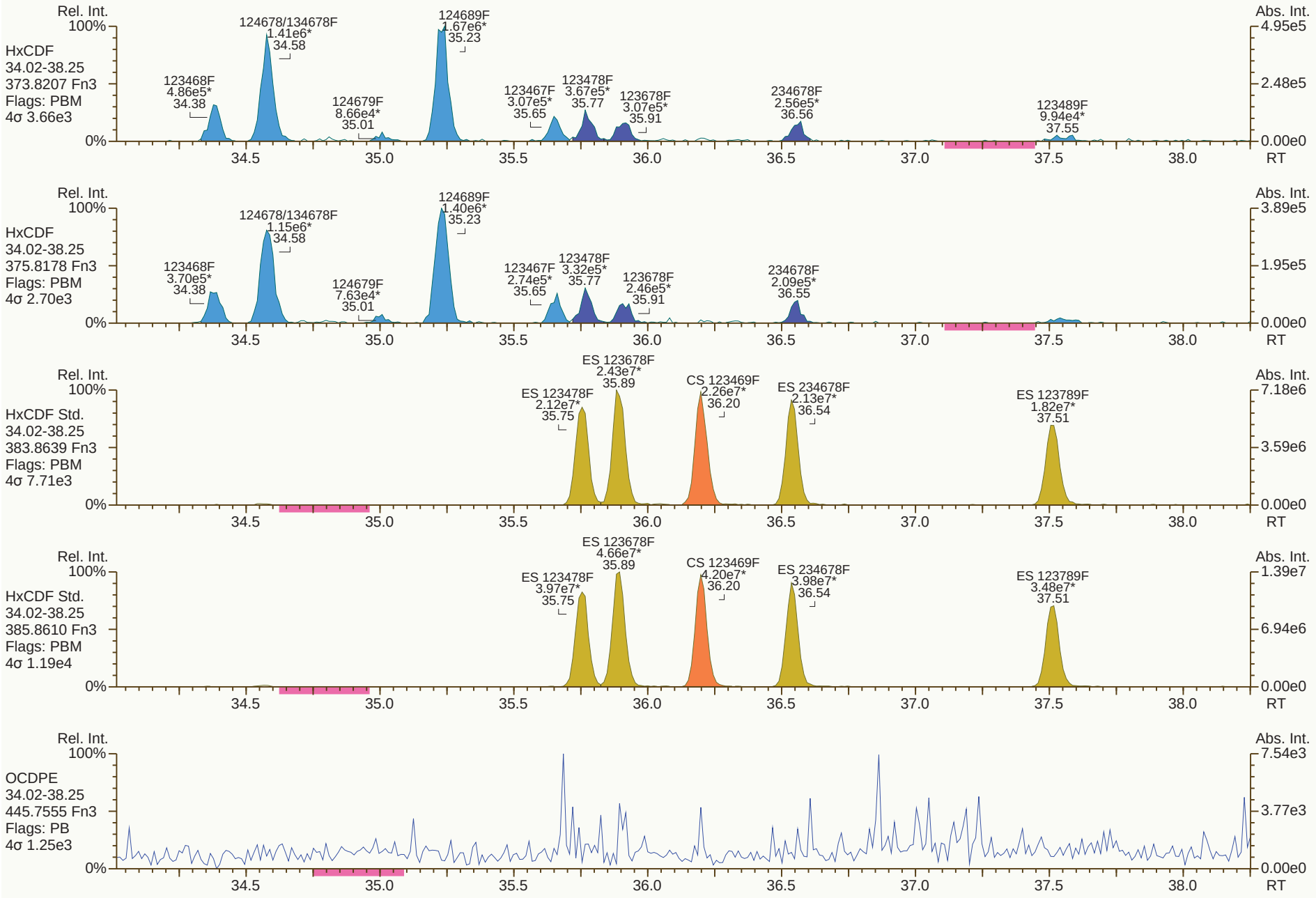
Results: P:\B4500_B4599\B4519\B4519_17655 DF\Resources\B4519_17655_DF_012.utp_res, saved 11-Aug-2020 09:19 (PSW)

Peak annotation: Areas, Centroids

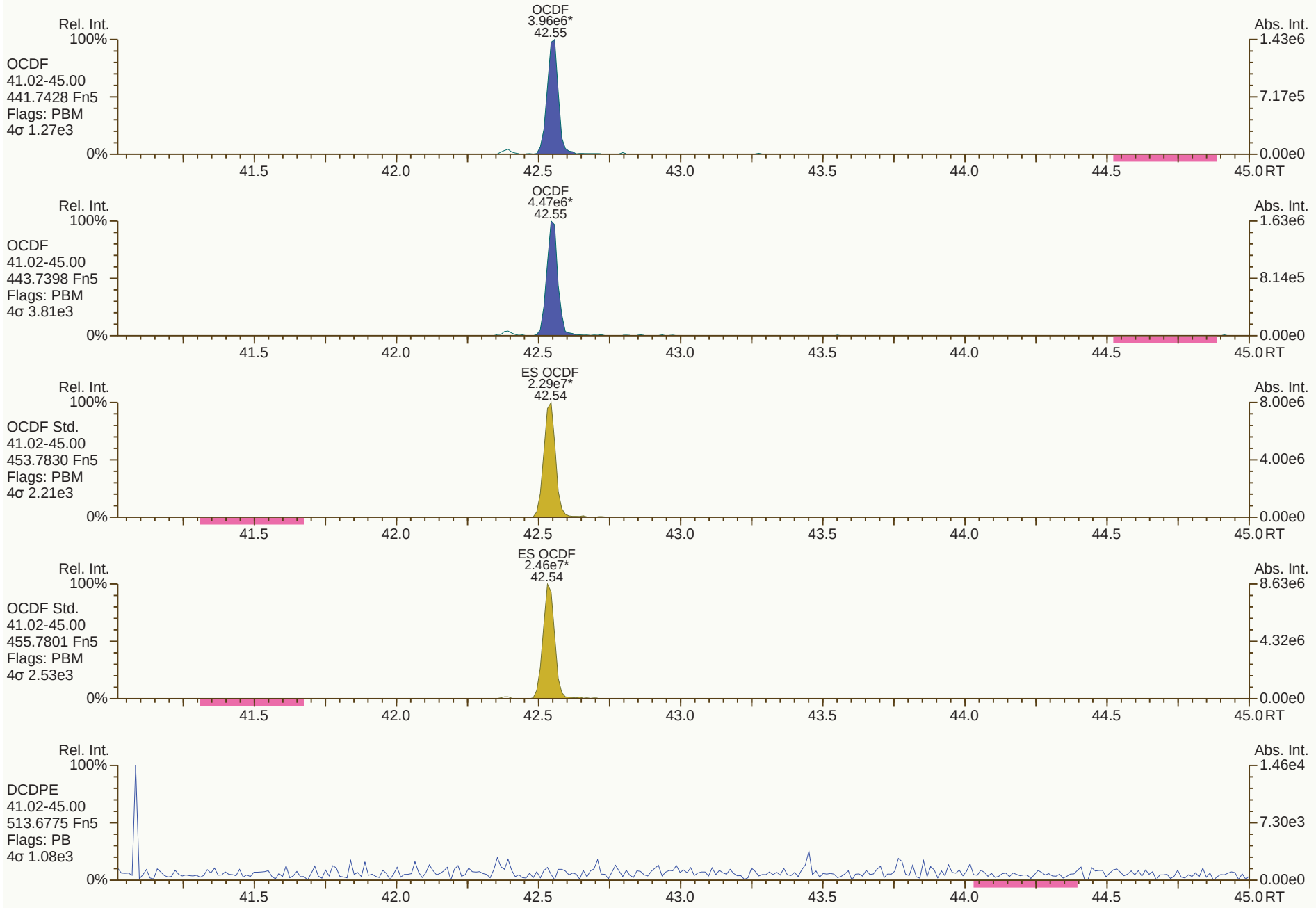
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 7151 scc: 394-371

PKD: 11-Aug-2020 09:18 Printed: 11-Aug-2020 10:18 Page 8 of 12


Rel. Int.
100%
0%
Abs. Int.
PeCDF-2
29.51-34.00
339.8597 Fn2
Flags: PBM
4σ 3.17e3
12368F...[3] 1.10e6* 30.20
13678F...[3] 5.17e5* 30.04
14678F 1.21e5* 30.30
13469/12479F 5.90e4* 30.65
23468/12469F 2.78e5* 30.88
12348F 1.49e5* 31.14
12378F 3.13e5* 31.34
12678/12367F 3.81e5* 31.62
23467/12369F 1.90e5* 32.34
23478F 3.95e5* 32.48
2.03e5
1.01e5
0.00e0
PeCDF-2
29.51-34.00
341.8568 Fn2
Flags: PBM
4σ 2.34e3
12368F...[3] 7.30e5* 30.20
13678F...[3] 3.48e5* 30.04
13479F 3.47e4* 30.37
13469/12479F 3.75e4* 30.65
23468/12469F 1.65e5* 30.88
12347F 1.58e5* 30.96
12378F 1.64e5* 31.34
12678/12367F 2.33e5* 31.62
23467/12369F 1.70e5* 32.34
23478F 2.18e5* 32.48
1.41e5
7.07e4
0.00e0
PeCDF Std.
29.51-34.00
351.9000 Fn2
Flags: PBM
4σ 4.16e3
CS 12346F 6.02e7* 30.78
ES 12378F 5.58e7* 31.32
ES 23478F 5.18e7* 32.45
1.63e7
8.15e6
0.00e0
PeCDF Std.
29.51-34.00
353.8970 Fn2
Flags: PBM
4σ 6.83e3
CS 12346F 3.74e7* 30.78
ES 12378F 3.51e7* 31.32
ES 23478F 3.32e7* 32.45
9.84e6
4.92e6
0.00e0
HpCDPE
29.51-34.00
409.7974 Fn2
Flags: PB
4σ 1.53e3
1.49e4
7.47e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT


Rel. Int.
100%
HxCDF
34.02-38.25
373.8207 Fn3
Flags: PBM
4σ 3.66e3
123468F 4.86e5* 34.38
124678/134678F 1.41e6* 34.58
124679F 8.66e4* 35.01
124689F 1.67e6* 35.23
123467F 3.07e5* 35.65
123478F 3.67e5* 35.77
123678F 3.07e5* 35.91
234678F 2.56e5* 36.56
123489F 9.94e4* 37.55
Abs. Int.
4.95e5
2.48e5
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 RT
Rel. Int.
100%
HxCDF
34.02-38.25
375.8178 Fn3
Flags: PBM
4σ 2.70e3
123468F 3.70e5* 34.38
124678/134678F 1.15e6* 34.58
124679F 7.63e4* 35.01
124689F 1.40e6* 35.23
123467F 2.74e5* 35.65
123478F 3.32e5* 35.77
123678F 2.46e5* 35.91
234678F 2.09e5* 36.55
Abs. Int.
3.89e5
1.95e5
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 RT
Rel. Int.
100%
HxCDF Std.
34.02-38.25
383.8639 Fn3
Flags: PBM
4σ 7.71e3
ES 123478F 2.12e7* 35.75
ES 123678F 2.43e7* 35.89
CS 123469F 2.26e7* 36.20
ES 234678F 2.13e7* 36.54
ES 123789F 1.82e7* 37.51
Abs. Int.
7.18e6
3.59e6
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 RT
Rel. Int.
100%
HxCDF Std.
34.02-38.25
385.8610 Fn3
Flags: PBM
4σ 1.19e4
ES 123478F 3.97e7* 35.75
ES 123678F 4.66e7* 35.89
CS 123469F 4.20e7* 36.20
ES 234678F 3.98e7* 36.54
ES 123789F 3.48e7* 37.51
Abs. Int.
1.39e7
6.94e6
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 RT
Rel. Int.
100%
OCDPE
34.02-38.25
445.7555 Fn3
Flags: PB
4σ 1.25e3
Abs. Int.
7.54e3
3.77e3
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 RT


Rel. Int.
100%
HpCDF
38.26-41.01
407.7818 Fn4
Flags: PBM
4σ 1.48e3
1234678F
3.24e6*
39.05
1234689F
5.84e6*
39.46
Abs. Int.
2.43e6
1.22e6
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF
38.26-41.01
409.7788 Fn4
Flags: PBM
4σ 2.26e3
1234678F
2.94e6*
39.05
1234689F
5.76e6*
39.46
Abs. Int.
2.41e6
1.21e6
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.26-41.01
417.8253 Fn4
Flags: PBM
4σ 4.80e3
ES 1234678F
1.41e7*
39.04
CS 1234689F
1.46e7*
39.45
ES 1234789F
1.09e7*
40.37
Abs. Int.
6.40e6
3.20e6
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.26-41.01
419.8220 Fn4
Flags: PBM
4σ 2.25e3
ES 1234678F
3.08e7*
39.04
CS 1234689F
3.48e7*
39.45
ES 1234789F
2.41e7*
40.37
Abs. Int.
1.41e7
7.06e6
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
NCDPE
38.26-41.01
479.7165 Fn4
Flags: PB
4σ 1.32e3
RT
Abs. Int.
4.70e4
2.35e4
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT



Results: P:\B4500_B4599\B4519\B4519_17655 DF\Resources\B4519_17655_DF_012.utp_res, saved 11-Aug-2020 09:19 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 8751, 0431, 8472 scc: 394-371 *PKD: 11-Aug-2020 09:18 Printed: 11-Aug-2020 10:18 Page 12 of 12*

Lab ID: B4519_17655_DF_013 **Acq'd:** 11 Aug 2020 05:59 PSW **Wt/Vol:** 8.03 g **ICAL:** MM3_DF_10012020_12JUN2020

Client ID: CS-SS-106 **UTP:** 11-Aug-2020 09:23:47 PSW **J-level:** 0.623 pg/g **Split:** 1 **Checkcode:** 706-730-FXT

Datafile: 200810R21 **Report:** 11 Aug 2020 10:00 pw **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	NotFnd		1.0009	-		-	-	-	1.18	-	5030	0.225
12378-PeCDD	32.81	J EMPC	1.0006	1.0005	-0.2	3.26E+04	1.00	N	1.14	0.165	4794	0.209
123478-HxCDD	36.73	J EMPC	1.0004	1.0005	+0.2	9.21E+04	1.71	N	1.09	0.544	5402	0.271
123678-HxCDD	36.84	J	1.0035	1.0034	-0.2	2.01E+05	1.39	Y	1.13	1.19	5402	0.263
123789-HxCDD	37.14	J EMPC	1.0116	1.0117	+0.2	1.55E+05	1.00	N	1.05	0.814	5402	0.241
1234678-HpCDD	39.95		1.0003	1.0003	0	7.31E+06	1.03	Y	0.98	59.7	5495	0.258
OCDD	42.38		1.0003	1.0003	0	2.41E+07	0.89	Y	1.08	389	5927	0.596
2378-TCDF	26.34	J EMPC	1.0006	1.0003	-0.5	5.68E+04	0.93	N	0.98	0.174	4194	0.146
12378-PeCDF	31.32	J	1.0006	1.0004	-0.4	5.31E+04	1.74	Y	0.95	0.186	5489	0.183
23478-PeCDF	NotFnd		1.0005	-		-	-	-	0.95	-	5489	0.186
123478-HxCDF	35.76	J EMPC	1.0005	1.0004	-0.2	9.34E+04	1.63	N	1.20	0.366	3319	0.108
123678-HxCDF	35.90	J	1.0004	1.0003	-0.2	7.25E+04	1.13	Y	1.07	0.276	3319	0.106
234678-HxCDF	36.54	J EMPC	1.0005	1.0003	-0.4	8.36E+04	1.04	N	1.10	0.37	3319	0.131
123789-HxCDF	NotFnd		1.0004	-		-	-	-	1.09	-	3319	0.157
1234678-HpCDF	39.04		1.0003	1.0003	0	1.03E+06	1.08	Y	1.28	5.17	2054	0.0687
1234789-HpCDF	40.37	J	1.0002	1.0004	+0.5	6.71E+04	1.14	Y	1.27	0.463	2054	0.0816
OCDF	42.54		1.0003	1.0002	-0.3	1.34E+06	0.76	Y	1.01	18	3619	0.326

Name	Act RT		Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	27.25		1.0255	1.0257	+0.3	5.15E+07	0.75	Y	1.01	69.2
ES 12378-PeCDD	32.80		1.2330	1.2343	+2.6	4.35E+07	1.68	Y	0.87	67.6
ES 123478-HxCDD	36.71		0.9917	0.9916	-0.2	3.86E+07	1.26	Y	1.10	59.6
ES 123678-HxCDD	36.83		0.9947	0.9947	0	3.74E+07	1.31	Y	1.06	59.6
ES 123789-HxCDD	37.13		1.0028	1.0028	0	4.51E+07	1.28	Y	1.22	62.6
ES 1234678-HpCDD	39.94		1.0785	1.0788	+0.7	3.10E+07	1.03	Y	0.99	52.8
ES OCDD	42.36		1.1439	1.1442	+0.8	2.87E+07	0.93	Y	0.67	36.2
ES 2378-TCDF	26.33		1.0572	1.0577	+0.8	8.29E+07	0.79	Y	1.01	64.3
ES 12378-PeCDF	31.31		1.2558	1.2576	+3.4	7.49E+07	1.59	Y	0.90	65.4
ES 23478-PeCDF	32.44		1.3012	1.3032	+3.9	7.55E+07	1.60	Y	0.89	66.8
ES 123478-HxCDF	35.74		0.9655	0.9655	0	5.33E+07	0.53	Y	1.43	62.9
ES 123678-HxCDF	35.88		0.9693	0.9692	-0.2	6.12E+07	0.54	Y	1.63	63.4
ES 234678-HxCDF	36.53		0.9867	0.9867	0	5.13E+07	0.53	Y	1.48	58.7
ES 123789-HxCDF	37.50		1.0130	1.0129	-0.2	4.40E+07	0.51	Y	1.29	57.6
ES 1234678-HpCDF	39.03		1.0540	1.0543	+0.7	3.86E+07	0.45	Y	1.15	56.9
ES 1234789-HpCDF	40.36		1.0898	1.0901	+0.7	2.85E+07	0.44	Y	0.91	53.1
ES OCDF	42.53		1.1484	1.1487	+0.8	3.66E+07	0.91	Y	0.83	37.4

Lab ID: B4519_17655_DF_013 | Acq'd: 11 Aug 2020 05:59 PSW | Wt/Vol: 8.03 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-SS-106 | UTP: 11-Aug-2020 09:23:47 PSW | J-level: 0.623 pg/g | Split: 1 | Checkcode: 706-730-FXT

Datafile: 200810R21 | Report: 11 Aug 2020 10:00 pw | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %	
JS 1234-TCDD	26.57		-	-	-	7.39E+07	0.78	Y	-	-	
JS 1234-TCDF	24.89		-	-	-	1.27E+08	0.77	Y	-	-	
JS 123467-HxCDD	37.02		-	-	-	2.96E+07	1.28	Y	-	-	
CS 37Cl-2378-TCDD	27.28		1.0265	1.0266	+0.2	2.66E+07	n/a	-	1.04	86.6	
CS 12347-PeCDD	32.29		1.2141	1.2153	+2.3	5.14E+07	1.65	Y	0.74	94	
CS 12346-PeCDF	30.77		1.2343	1.2361	+3.3	8.92E+07	1.58	Y	0.86	81.6	
CS 123469-HxCDF	36.19		0.9776	0.9775	-0.2	5.91E+07	0.54	Y	1.36	73.6	
CS 1234689-HpCDF	39.44		1.0650	1.0653	+0.7	4.42E+07	0.44	Y	1.05	70.8	
~~SS 37Cl-2378-TCDD~~	~~27.28~~		~~1.0265~~	~~1.0266~~	~~+0.2~~	~~2.66E+07~~	~~n/a~~		~~1.04~~	~~124~~	Not used in this project.
~~SS 12347-PeCDD~~	~~32.29~~	~~V~~	~~1.2141~~	~~1.2153~~	~~+2.3~~	~~5.14E+07~~	~~1.65~~	~~Y~~	~~0.86~~	~~138~~	CL 11Aug20
~~SS 12346-PeCDF~~	~~30.77~~		~~1.2343~~	~~1.2361~~	~~+3.3~~	~~8.92E+07~~	~~1.58~~	~~Y~~	~~0.96~~	~~124~~	
~~SS 123469-HxCDF~~	~~36.19~~		~~0.9776~~	~~0.9775~~	~~-0.2~~	~~5.91E+07~~	~~0.54~~	~~Y~~	~~0.83~~	~~116~~	
~~SS 1234689-HpCDF~~	~~39.44~~		~~1.0650~~	~~1.0653~~	~~+0.7~~	~~4.42E+07~~	~~0.44~~	~~Y~~	~~0.92~~	~~124~~	

Totals	Conc	EMPC
Total TCDD	4.57	5.84
Total PeCDD	4.75	5.95
Total HxCDD	41.9	43.2
Total HpCDD	388	388
Total Tetra-Octa Dioxins	828	831
Total TCDF	11.5	12.3
Total PeCDF	2.32	3.51
Total HxCDF	1.45	6.21
Total HpCDF	16.7	17.1
Total Tetra-Octa Furans	50	57.2
Total Tetra-Octa Dioxins & Furans	878	889

Lab ID: B4519_17655_DF_013 **Acq'd:** 11 Aug 2020 05:59 PSW **Wt/Vol:** 8.03 g **ICAL:** MM3_DF_10012020_12JUN2020

Client ID: CS-SS-106 **UTP:** 11-Aug-2020 09:23:47 PSW **J-level:** 0.623 pg/g **Split:** 1 **Checkcode:** 706-730-FXT

Datafile: 200810R21 **Report:** 11 Aug 2020 10:00 pw **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1368-TCDD	23.38		0.8591	0.8577	-2.0	6.76E+05	0.83	Y	1.18	2.78	5030	0.225
1379-TCDD	23.76		0.8732	0.8720	-1.7	4.36E+05	0.70	Y	1.18	1.79	5030	0.225
1369-TCDD	NotFnd		0.8901						1.18		5030	0.225
1469-TCDD	NotFnd		0.9205						1.18		5030	0.225
1247/1246/1248/1249-TCDD	25.32	EMPC	0.9301	0.9289	-1.8	3.08E+05	1.07	N	1.18	1.27	5030	0.225
1378-TCDD	NotFnd		0.9374						1.18		5030	0.225
1268-TCDD	NotFnd		0.9449						1.18		5030	0.225
1478-TCDD	NotFnd		0.9544						1.18		5030	0.225
1279-TCDD	NotFnd		0.9610						1.18		5030	0.225
1234/1269-TCDD	NotFnd		0.9746						1.18		5030	0.225
1236-TCDD	NotFnd		0.9802						1.18		5030	0.225
1237/1238-TCDD	NotFnd		0.9898						1.18		5030	0.225
1239-TCDD	NotFnd		0.9950						1.18		5030	0.225
2378-TCDD	**NotFnd**		**1.0009**						**1.18**		**5030**	**0.225**
1278-TCDD	NotFnd		1.0133						1.18		5030	0.225
1267-TCDD	NotFnd		1.0185						1.18		5030	0.225
1289-TCDD	NotFnd		1.0379						1.18		5030	0.225
12479/12468-PeCDD	30.25	J	0.9229	0.9225	-0.7	4.81E+05	1.59	Y	1.14	2.42	4794	0.209
12469-PeCDD	30.80	J	0.9396	0.9391	-0.9	1.81E+05	1.70	Y	1.14	0.912	4794	0.209
12368-PeCDD	31.37	J EMPC	0.9568	0.9566	-0.4	1.00E+05	2.23	N	1.14	0.505	4794	0.209
12478-PeCDD	31.56	J EMPC	0.9626	0.9624	-0.4	4.17E+04	1.22	N	1.14	0.21	4794	0.209
12379-PeCDD	31.68	J EMPC	0.9657	0.9660	+0.6	6.38E+04	0.71	N	1.14	0.322	4794	0.209
12369/12467/12489-PeCDD	31.93	J	0.9738	0.9736	-0.4	1.10E+05	1.35	Y	1.14	0.556	4794	0.209
12346/12347-PeCDD	32.32	J	0.9853	0.9856	+0.6	1.70E+05	1.52	Y	1.14	0.857	4794	0.209
12378-PeCDD	32.81	J EMPC	**1.0006**	**1.0005**	**-0.2**	**3.26E+04**	**1.00**	**N**	**1.14**	**0.165**	**4794**	**0.209**
12367-PeCDD	NotFnd		1.0034						1.14		4794	0.209
12389-PeCDD	NotFnd		1.0141						1.14		4794	0.209
124679/124689-HxCDD	35.03		0.9542	0.9542	0	3.04E+06	1.20	Y	1.09	17.2	5402	0.257
123468-HxCDD	35.69		0.9721	0.9720	-0.2	1.00E+06	1.32	Y	1.09	5.68	5402	0.257
123679/123689-HxCDD	35.97		0.9799	0.9799	0	1.63E+06	1.32	Y	1.09	9.21	5402	0.257
123469-HxCDD	36.11		0.9835	0.9835	0	1.20E+06	1.23	Y	1.09	6.8	5402	0.257
123478-HxCDD	36.73	J EMPC	**1.0004**	**1.0005**	**+0.2**	**9.21E+04**	**1.71**	**N**	1.09	**0.544**	**5402**	**0.271**
123678-HxCDD	36.84	J	**1.0035**	**1.0034**	**-0.2**	**2.01E+05**	**1.39**	**Y**	1.13	**1.19**	**5402**	**0.263**
123467-HxCDD	37.04	J	1.0088	1.0089	+0.2	3.10E+05	1.36	Y	1.09	1.75	5402	0.257
123789-HxCDD	37.14	J EMPC	**1.0116**	**1.0117**	**+0.2**	**1.55E+05**	**1.00**	**N**	1.05	**0.814**	**5402**	**0.241**

Lab ID: B4519_17655_DF_013 | Acq'd: 11 Aug 2020 05:59 PSW | Wt/Vol: 8.03 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-SS-106 | UTP: 11-Aug-2020 09:23:47 PSW | J-level: 0.623 pg/g | Split: 1 | Checkcode: 706-730-FXT

Datafile: 200810R21 | Report: 11 Aug 2020 10:00 pw | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1234679-HpCDD	39.31		0.9843	0.9842	-0.2	4.02E+07	1.04	Y	0.98	328	5495	0.258
1234678-HpCDD	**39.95**		**1.0003**	**1.0003**	**0**	**7.31E+06**	**1.03**	**Y**	**0.98**	**59.7**	**5495**	**0.258**
OCDD	**42.38**		**1.0003**	**1.0003**	**0**	**2.41E+07**	**0.89**	**Y**	**1.08**	**389**	**5927**	**0.596**
OCDD-a	42.37		1.0002	1.0001	-0.3	1.30E+06	2.19	Y	0.07	341	5166	8.44
1368-TCDF	21.14		0.8044	0.8030	-1.8	8.76E+05	0.71	Y	0.98	2.68	4194	0.146
1468-TCDF	21.71	J	0.8261	0.8243	-2.3	7.52E+04	0.88	Y	0.98	0.231	4194	0.146
2468-TCDF	22.37		0.8511	0.8497	-1.9	1.98E+06	0.75	Y	0.98	6.06	4194	0.146
1346/1246-TCDF	NotFnd		0.8665						0.98		4194	0.146
1347/1378/1247-TCDF	22.95	J	0.8723	0.8717	-0.8	1.79E+05	0.83	Y	0.98	0.548	4194	0.146
1348-TCDF	NotFnd		0.8835						0.98		4194	0.146
1248/1367/1379-TCDF	23.40	J	0.8888	0.8887	-0.1	1.77E+05	0.77	Y	0.98	0.541	4194	0.146
1268-TCDF	NotFnd		0.9044						0.98		4194	0.146
1467-TCDF	NotFnd		0.9098						0.98		4194	0.146
1478-TCDF	NotFnd		0.9167						0.98		4194	0.146
1369/1237-TCDF	NotFnd		0.9316						0.98		4194	0.146
2467-TCDF	NotFnd		0.9369						0.98		4194	0.146
2368-TCDF	24.83		0.9430	0.9430	0	2.34E+05	0.75	Y	0.98	0.719	4194	0.146
1238/1234/1678/1469/1236-TCDF	24.94	J	0.9468	0.9471	+0.4	1.23E+05	0.86	Y	0.98	0.378	4194	0.146
1278-TCDF	25.39	J EMPC	0.9651	0.9644	-1.1	9.16E+04	0.92	N	0.98	0.281	4194	0.146
1349-TCDF	NotFnd		0.9704						0.98		4194	0.146
1267-TCDF	NotFnd		0.9761						0.98		4194	0.146
2346/1249-TCDF	NotFnd		0.9834						0.98		4194	0.146
2347/1279-TCDF	NotFnd		0.9921						0.98		4194	0.146
2348-TCDF	NotFnd		0.9964						0.98		4194	0.146
2378-TCDF	**26.34**	J EMPC	**1.0006**	**1.0003**	**-0.5**	**5.68E+04**	**0.93**	**N**	**0.98**	**0.174**	**4194**	**0.146**
2367/3467-TCDF	26.73	J	1.0156	1.0153	-0.5	1.22E+05	0.76	Y	0.98	0.372	4194	0.146
1269-TCDF	NotFnd		1.0249						0.98		4194	0.146
1239-TCDF	NotFnd		1.0357						0.98		4194	0.146
1289-TCDF	28.44	J EMPC	1.0799	1.0802	+0.5	1.08E+05	1.76	N	0.98	0.33	4194	0.146
13468/12468-PeCDF	28.45	J	0.9084	0.9086	+0.3	3.00E+05	1.45	Y	0.95	1.05	3476	0.117
13678/13467/12467-PeCDF	30.03	J EMPC	0.9591	0.9592	+0.2	1.53E+05	2.07	N	0.95	0.534	5489	0.184
12368/13478/12478-PeCDF	30.18	J	0.9642	0.9640	-0.4	3.12E+05	1.67	Y	0.95	1.09	5489	0.184
14678-PeCDF	NotFnd		0.9675						0.95		5489	0.184
13479-PeCDF	NotFnd		0.9706						0.95		5489	0.184
13469/12479-PeCDF	NotFnd		0.9787						0.95		5489	0.184
12346-PeCDF	NotFnd		0.9833						0.95		5489	0.184

Lab ID: B4519_17655_DF_013 **Acq'd:** 11 Aug 2020 05:59 PSW **Wt/Vol:** 8.03 g **ICAL:** MM3_DF_10012020_12JUN2020

Client ID: CS-SS-106 **UTP:** 11-Aug-2020 09:23:47 PSW **J-level:** 0.623 pg/g **Split:** 1 **Checkcode:** 706-730-FXT

Datafile: 200810R21 **Report:** 11 Aug 2020 10:00 pw **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
23468/12469-PeCDF	30.86	J EMPC	0.9861	0.9858	-0.6	8.40E+04	1.08	N	0.95	0.294	5489	0.184
12347-PeCDF	NotFnd		0.9887						0.95		5489	0.184
12348-PeCDF	NotFnd		0.9938						0.95		5489	0.184
12378-PeCDF	**31.32**	J	**1.0006**	**1.0004**	**-0.4**	**5.31E+04**	**1.74**	**Y**	**0.95**	**0.186**	**5489**	**0.183**
12678/12367-PeCDF	31.61	J EMPC	1.0095	1.0097	+0.4	1.03E+05	2.11	N	0.95	0.36	5489	0.184
12379-PeCDF	NotFnd		1.0150						0.95		5489	0.184
12679-PeCDF	NotFnd		0.9926						0.95		5489	0.184
23467/12369-PeCDF	NotFnd		0.9966						0.95		5489	0.184
23478-PeCDF	**NotFnd**		**1.0005**						**0.95**		**5489**	**0.186**
23478/12489-PeCDF	NotFnd		0.0000						0.95			
12489-PeCDF	NotFnd		1.0047						0.95		5489	0.184
12349-PeCDF	NotFnd		1.0107						0.95		5489	0.184
12389-PeCDF	NotFnd		1.0339						0.95		5489	0.184
123468-HxCDF	34.37	J	0.9617	0.9615	-0.4	1.39E+05	1.21	Y	1.11	0.594	3319	0.123
124678/134678-HxCDF	34.57	J EMPC	0.9673	0.9670	-0.6	3.99E+05	1.50	N	1.11	1.7	3319	0.123
134679-HxCDF	NotFnd		0.9737						1.11		3319	0.123
124679-HxCDF	NotFnd		0.9792						1.11		3319	0.123
124689-HxCDF	35.22	J EMPC	0.9854	0.9853	-0.2	5.16E+05	1.05	N	1.11	2.2	3319	0.123
123467-HxCDF	35.64	J EMPC	0.9972	0.9972	0	2.92E+04	1.70	N	1.11	0.125	3319	0.123
123478-HxCDF	**35.76**	J EMPC	**1.0005**	**1.0004**	**-0.2**	**9.34E+04**	**1.63**	**N**	**1.20**	**0.366**	**3319**	**0.108**
123678-HxCDF	**35.90**	J	**1.0004**	**1.0003**	**-0.2**	**7.25E+04**	**1.13**	**Y**	**1.07**	**0.276**	**3319**	**0.106**
123479-HxCDF	36.06	J	1.0049	1.0048	-0.2	4.37E+04	1.19	Y	1.11	0.186	3319	0.123
123469-HxCDF	NotFnd		1.0089						1.11		3319	0.123
123679-HxCDF	NotFnd		0.9945						1.11		3319	0.123
234678-HxCDF	**36.54**	J EMPC	**1.0005**	**1.0003**	**-0.4**	**8.36E+04**	**1.04**	**N**	**1.10**	**0.37**	**3319**	**0.131**
234678/123689-HxCDF	NotFnd		0.0000						1.10			
123689-HxCDF	NotFnd		1.0054						1.11		3319	0.123
123789-HxCDF	**NotFnd**		**1.0004**						**1.09**		**3319**	**0.157**
123789/123489-HxCDF	NotFnd		0.0000						1.09			
123489-HxCDF	37.52	J	1.0008	1.0006	-0.5	9.22E+04	1.31	Y	1.11	0.394	3319	0.123
1234678-HpCDF	**39.04**		**1.0003**	**1.0003**	**0**	**1.03E+06**	**1.08**	**Y**	**1.28**	**5.17**	**2054**	**0.0687**
1234679-HpCDF	39.31	**J EMPC**	1.0072	1.0072	0	6.66E+04	1.56	N	1.27	0.389	2054	0.0742
1234689-HpCDF	39.45		1.0107	1.0107	0	1.90E+06	0.99	Y	1.27	11.1	2054	0.0742
1234789-HpCDF	**40.37**	**J**	**1.0002**	**1.0004**	**+0.5**	**6.71E+04**	**1.14**	**Y**	**1.27**	**0.463**	**2054**	**0.0816**
OCDF	**42.54**		**1.0003**	**1.0002**	**-0.3**	**1.34E+06**	**0.76**	**Y**	**1.01**	**18**	**3619**	**0.326**
OCDF-a	42.54	**EMPC**	1.0002	1.0002	0	3.60E+04	5.04	N	0.06	7.73	4922	7.08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20.54-29.50
316.9824 Fn1
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2.92e6
0.00e0
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0 RT
Rel. Int.
100%
QC Check
29.51-34.00
366.9792 Fn2
Flags: -
0%
Abs. Int.
4.45e6
2.22e6
0.00e0
30.0 30.5 31.0 31.5 32.0 32.5 33.0 33.5 34.0 RT
Rel. Int.
100%
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
0%
Abs. Int.
1.80e7
9.00e6
0.00e0
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 RT
Rel. Int.
100%
QC Check
38.26-41.01
430.9728 Fn4
Flags: -
0%
Abs. Int.
1.12e7
5.60e6
0.00e0
38.5 39.0 39.5 40.0 40.5 41.0 RT
Rel. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
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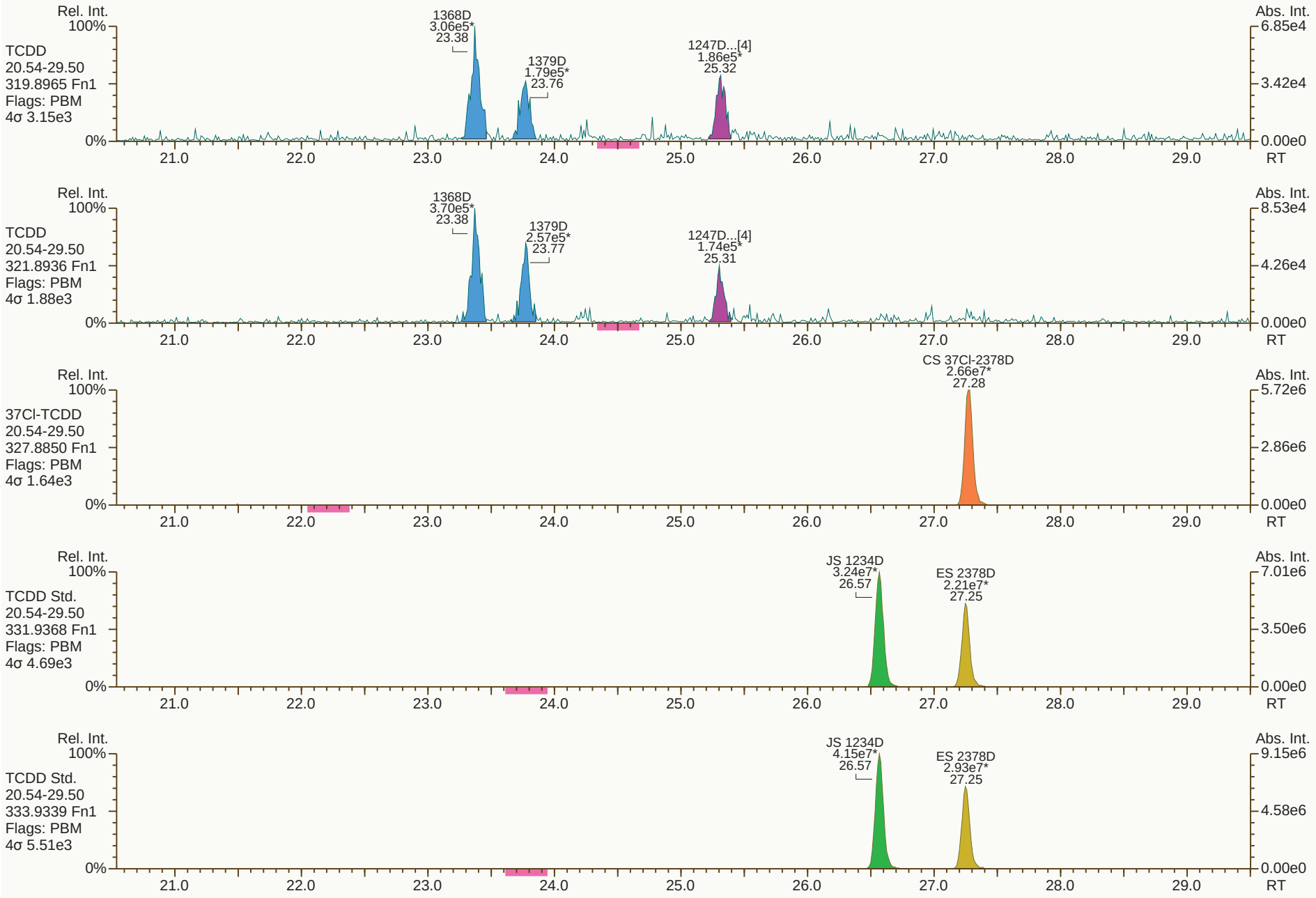
5.05e6
0.00e0
41.5 42.0 42.5 43.0 43.5 44.0 44.5 45.0 RT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TCDD
20.54-29.50
319.8965 Fn1
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0%
1368D
3.06e5*
23.38
1379D
1.79e5*
23.76
1247D...[4]
1.86e5*
25.32
Abs. Int.
6.85e4
3.42e4
0.00e0
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
TCDD
20.54-29.50
321.8936 Fn1
Flags: PBM
4σ 1.88e3
0%
1368D
3.70e5*
23.38
1379D
2.57e5*
23.77
1247D...[4]
1.74e5*
25.31
Abs. Int.
8.53e4
4.26e4
0.00e0
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
37Cl-TCDD
20.54-29.50
327.8850 Fn1
Flags: PBM
4σ 1.64e3
0%
CS 37Cl-2378D
2.66e7*
27.28
Abs. Int.
5.72e6
2.86e6
0.00e0
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
331.9368 Fn1
Flags: PBM
4σ 4.69e3
0%
JS 1234D
3.24e7*
26.57
ES 2378D
2.21e7*
27.25
Abs. Int.
7.01e6
3.50e6
0.00e0
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
333.9339 Fn1
Flags: PBM
4σ 5.51e3
0%
JS 1234D
4.15e7*
26.57
ES 2378D
2.93e7*
27.25
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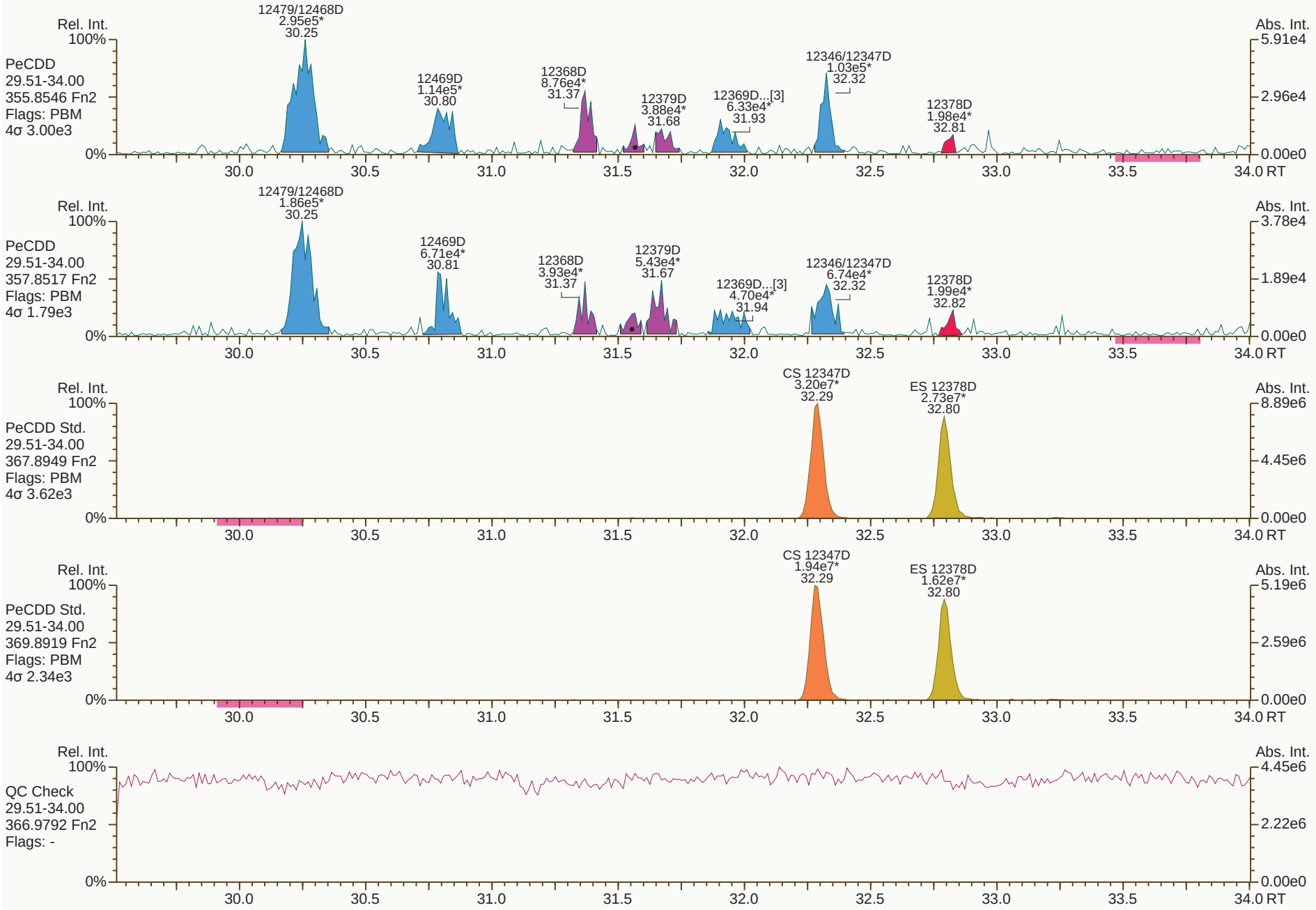
RT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12469D 1.14e5* 30.80
12368D 8.76e4* 31.37
12379D 3.88e4* 31.68
12369D...[3] 6.33e4* 31.93
12346/12347D 1.03e5* 32.32
12378D 1.98e4* 32.81
PeCDD
29.51-34.00
357.8517 Fn2
Flags: PBM
4σ 1.79e3
12479/12468D 1.86e5* 30.25
12469D 6.71e4* 30.81
12368D 3.93e4* 31.37
12379D 5.43e4* 31.67
12369D...[3] 4.70e4* 31.94
12346/12347D 6.74e4* 32.32
12378D 1.99e4* 32.82
PeCDD Std.
29.51-34.00
367.8949 Fn2
Flags: PBM
4σ 3.62e3
CS 12347D 3.20e7* 32.29
ES 12378D 2.73e7* 32.80
PeCDD Std.
29.51-34.00
369.8919 Fn2
Flags: PBM
4σ 2.34e3
CS 12347D 1.94e7* 32.29
ES 12378D 1.62e7* 32.80
QC Check
29.51-34.00
366.9792 Fn2
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0%
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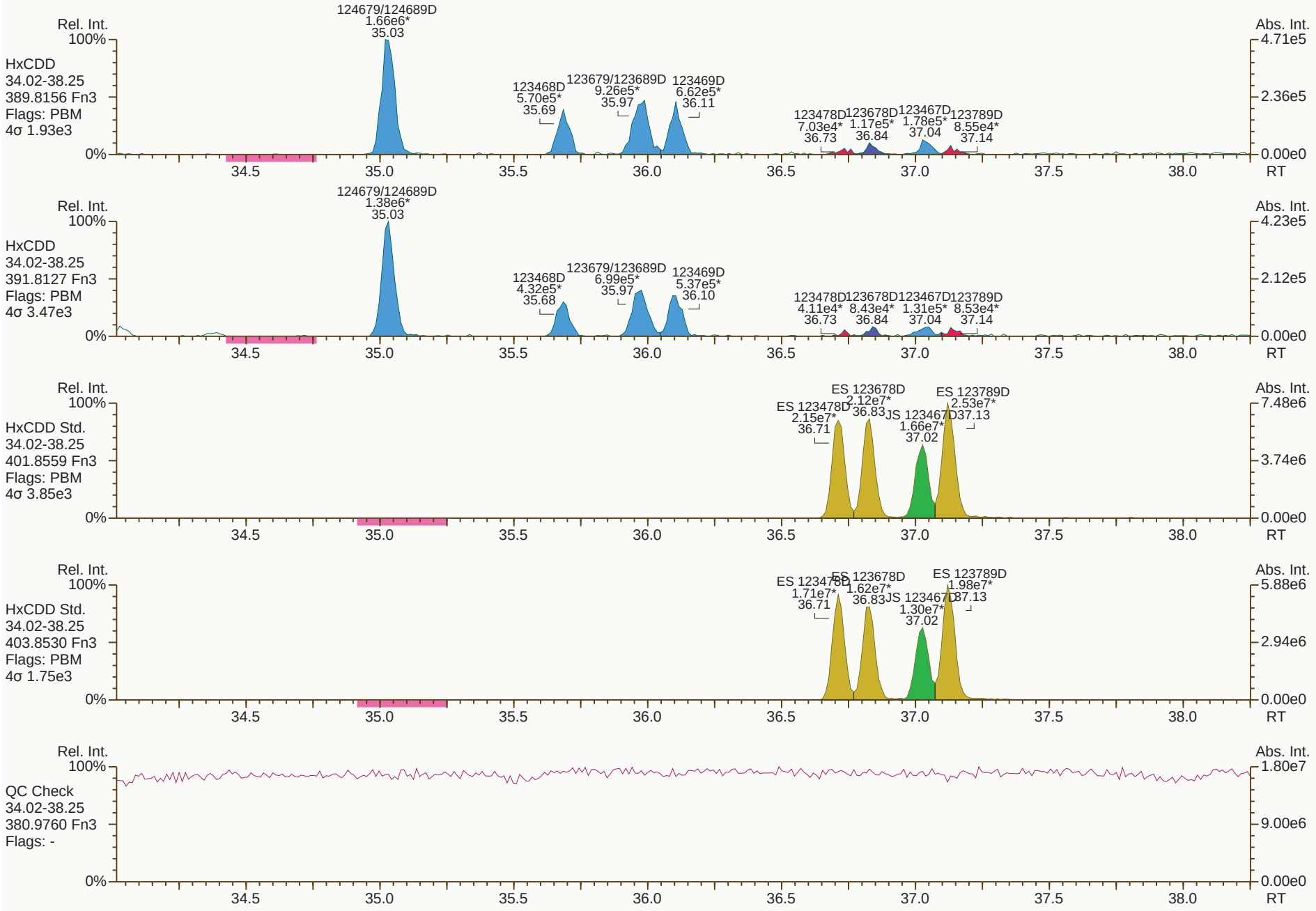
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT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Abs. Int.
HxCDD
34.02-38.25
389.8156 Fn3
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123468D 5.70e5* 35.69
123679/123689D 9.26e5* 35.97
123469D 6.62e5* 36.11
123478D 7.03e4* 36.73
123678D 1.17e5* 36.84
123467D 1.78e5* 37.04
123789D 8.55e4* 37.14
HxCDD
34.02-38.25
391.8127 Fn3
Flags: PBM
4σ 3.47e3
124679/124689D 1.38e6* 35.03
123468D 4.32e5* 35.68
123679/123689D 6.99e5* 35.97
123469D 5.37e5* 36.10
123478D 4.11e4* 36.73
123678D 8.43e4* 36.84
123467D 1.31e5* 37.04
123789D 8.53e4* 37.14
HxCDD Std.
34.02-38.25
401.8559 Fn3
Flags: PBM
4σ 3.85e3
ES 123678D 2.12e7* 36.83
ES 123478D 2.15e7* 36.71
JS 123467D 1.66e7* 37.02
ES 123789D 2.53e7* 37.13
HxCDD Std.
34.02-38.25
403.8530 Fn3
Flags: PBM
4σ 1.75e3
ES 123478D 1.71e7* 36.71
ES 123678D 1.62e7* 36.83
JS 123467D 1.30e7* 37.02
ES 123789D 1.98e7* 37.13
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
100%
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
4.71e5
2.36e5
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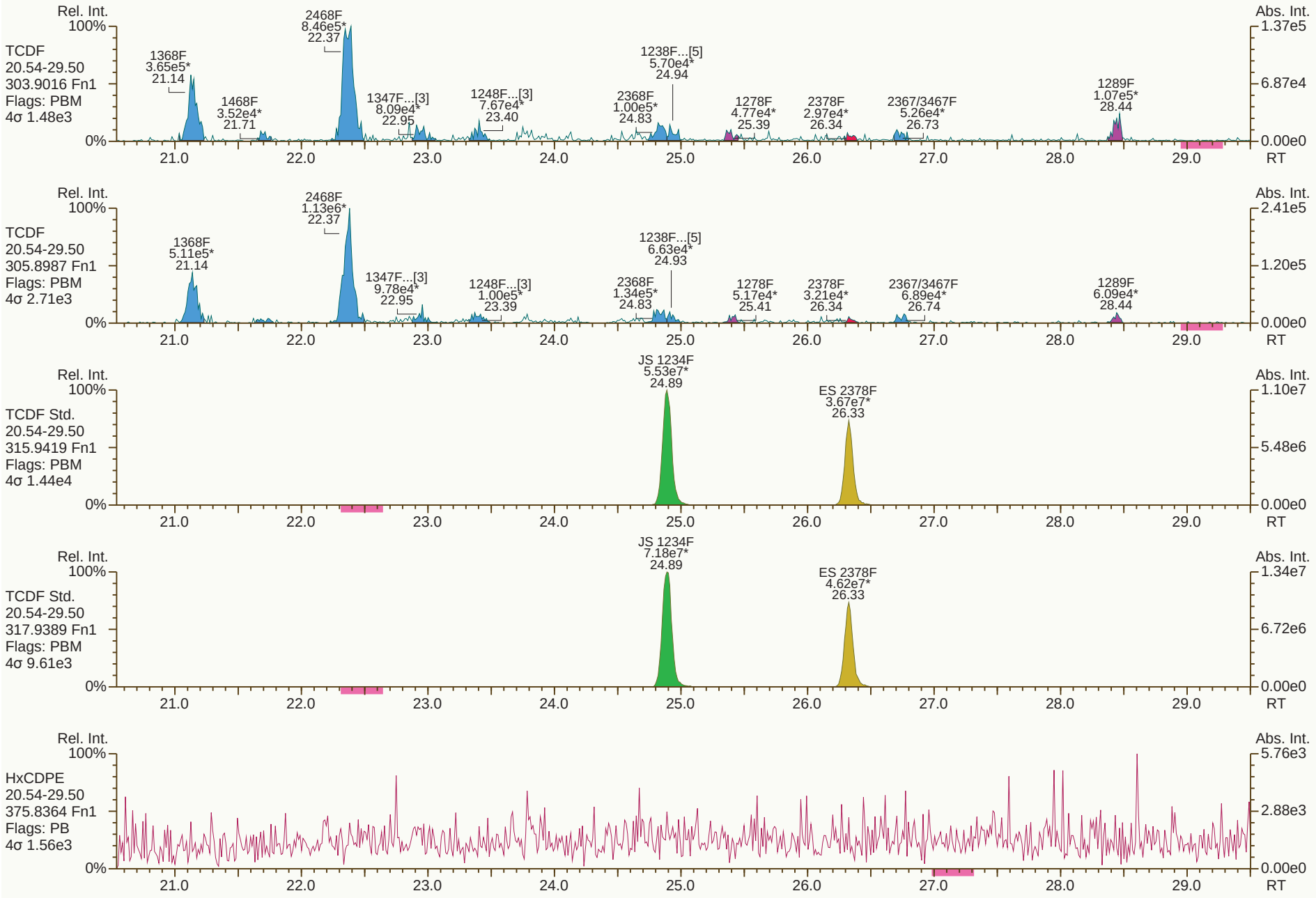
4.23e5
2.12e5
7.48e6
3.74e6
5.88e6
2.94e6
1.80e7
9.00e6


Rel. Int.
100%
HpCDD
38.26-41.01
423.7767 Fn4
Flags: PBM
4σ 1.98e3
1234679D
2.05e7*
39.31
1234678D
3.70e6*
39.95
Abs. Int.
8.34e6
4.17e6
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.26-41.01
425.7737 Fn4
Flags: PBM
4σ 3.51e3
1234679D
1.97e7*
39.31
1234678D
3.61e6*
39.95
Abs. Int.
7.73e6
3.87e6
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
435.8169 Fn4
Flags: PBM
4σ 2.63e3
ES 1234678D
1.57e7*
39.94
Abs. Int.
6.83e6
3.41e6
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
437.8140 Fn4
Flags: PBM
4σ 2.09e3
ES 1234678D
1.53e7*
39.94
Abs. Int.
6.35e6
3.17e6
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.26-41.01
430.9728 Fn4
Flags: -
Abs. Int.
1.12e7
5.60e6
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT


OCDD
1.13e7*
42.38
Rel. Int.
100%
OCDD
41.02-45.00
457.7377 Fn5
Flags: PBM
4σ 2.71e3
0%
Abs. Int.
4.22e6
2.11e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDD
1.27e7*
42.37
Rel. Int.
100%
OCDD
41.02-45.00
459.7348 Fn5
Flags: PBM
4σ 3.22e3
0%
Abs. Int.
4.77e6
2.38e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
1.38e7*
42.36
Rel. Int.
100%
OCDD Std.
41.02-45.00
469.7780 Fn5
Flags: PBM
4σ 2.42e3
0%
Abs. Int.
5.54e6
2.77e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
1.49e7*
42.36
Rel. Int.
100%
OCDD Std.
41.02-45.00
471.7750 Fn5
Flags: PBM
4σ 2.05e3
0%
Abs. Int.
5.56e6
2.78e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
1.01e7
5.05e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT


Rel. Int.
100%
TCDF
20.54-29.50
303.9016 Fn1
Flags: PBM
4σ 1.48e3
1368F
3.65e5*
21.14
1468F
3.52e4*
21.71
2468F
8.46e5*
22.37
1347F...[3]
8.09e4*
22.95
1248F...[3]
7.67e4*
23.40
2368F
1.00e5*
24.83
1238F...[5]
5.70e4*
24.94
1278F
4.77e4*
25.39
2378F
2.97e4*
26.34
2367/3467F
5.26e4*
26.73
1289F
1.07e5*
28.44
Abs. Int.
1.37e5
6.87e4
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF
20.54-29.50
305.8987 Fn1
Flags: PBM
4σ 2.71e3
1368F
5.11e5*
21.14
2468F
1.13e6*
22.37
1347F...[3]
9.78e4*
22.95
1248F...[3]
1.00e5*
23.39
2368F
1.34e5*
24.83
1238F...[5]
6.63e4*
24.93
1278F
5.17e4*
25.41
2378F
3.21e4*
26.34
2367/3467F
6.89e4*
26.74
1289F
6.09e4*
28.44
Abs. Int.
2.41e5
1.20e5
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
315.9419 Fn1
Flags: PBM
4σ 1.44e4
JS 1234F
5.53e7*
24.89
ES 2378F
3.67e7*
26.33
Abs. Int.
1.10e7
5.48e6
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
317.9389 Fn1
Flags: PBM
4σ 9.61e3
JS 1234F
7.18e7*
24.89
ES 2378F
4.62e7*
26.33
Abs. Int.
1.34e7
6.72e6
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
HxCDPE
20.54-29.50
375.8364 Fn1
Flags: PB
4σ 1.56e3
Abs. Int.
5.76e3
2.88e3
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT

SGS ID: B4519_17655_DF_013 | Sample ID: CS-SS-106 | Acq: 11-Aug-2020 05:59:49

Instr: [ILM] AutoSpec-Ultima MM3 | VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 34 | User: PSW Datafile: 200810R21

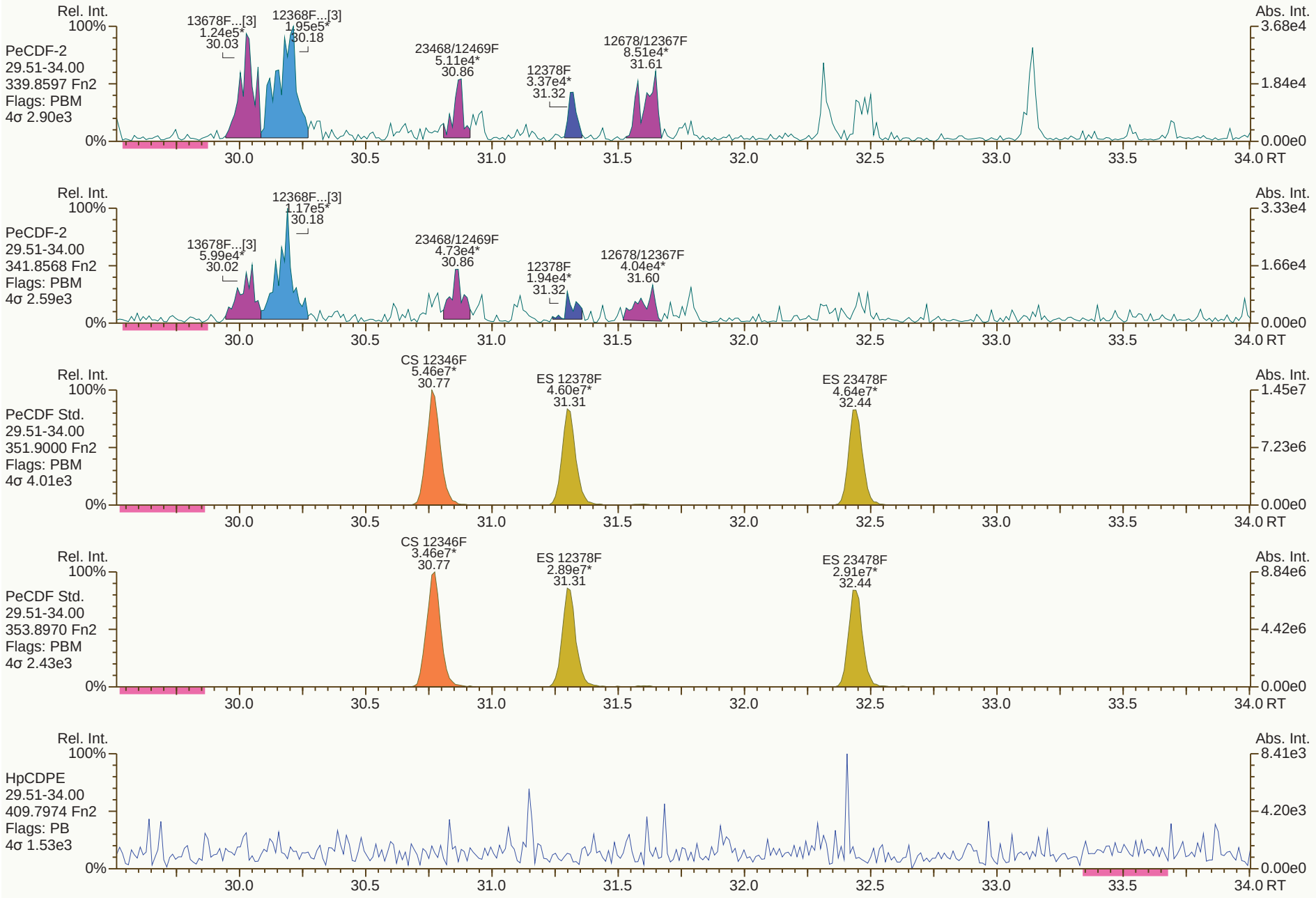


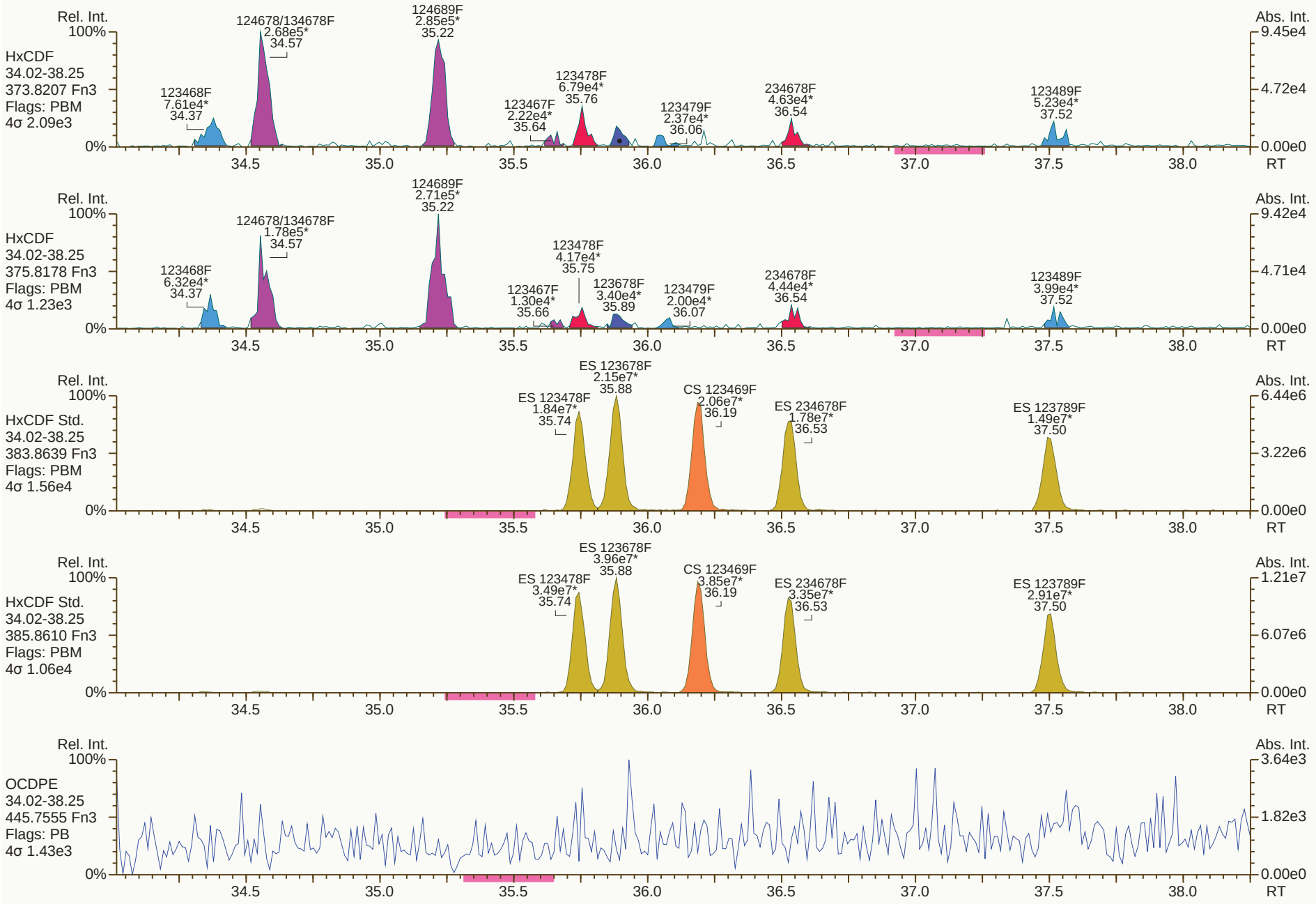
Results: P:\B4500_B4599\B4519\B4519_17655 DF\Resources\B4519_17655_DF_013.utp_res, saved 11-Aug-2020 09:23 (PSW)

Peak annotation: Areas, Centroids

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 3913 scc: 706-730

PKD: 11-Aug-2020 09:23 Printed: 11-Aug-2020 10:18 Page 8 of 12


Rel. Int.
100%
PeCDF-2
29.51-34.00
339.8597 Fn2
Flags: PBM
4σ 2.90e3
13678F...[3]
1.24e5*
30.03
12368F...[3]
1.95e5*
30.18
23468/12469F
5.11e4*
30.86
12378F
3.37e4*
31.32
12678/12367F
8.51e4*
31.61
Abs. Int.
3.68e4
1.84e4
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF-2
29.51-34.00
341.8568 Fn2
Flags: PBM
4σ 2.59e3
12368F...[3]
1.17e5*
30.18
13678F...[3]
5.99e4*
30.02
23468/12469F
4.73e4*
30.86
12378F
1.94e4*
31.32
12678/12367F
4.04e4*
31.60
Abs. Int.
3.33e4
1.66e4
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.00
351.9000 Fn2
Flags: PBM
4σ 4.01e3
CS 12346F
5.46e7*
30.77
ES 12378F
4.60e7*
31.31
ES 23478F
4.64e7*
32.44
Abs. Int.
1.45e7
7.23e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.00
353.8970 Fn2
Flags: PBM
4σ 2.43e3
CS 12346F
3.46e7*
30.77
ES 12378F
2.89e7*
31.31
ES 23478F
2.91e7*
32.44
Abs. Int.
8.84e6
4.42e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
HpCDPE
29.51-34.00
409.7974 Fn2
Flags: PB
4σ 1.53e3
Abs. Int.
8.41e3
4.20e3
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT


Rel. Int.
100%
HxCDF
34.02-38.25
373.8207 Fn3
Flags: PBM
4σ 2.09e3
123468F 7.61e4* 34.37
124678/134678F 2.68e5* 34.57
124689F 2.85e5* 35.22
123467F 2.22e4* 35.64
123478F 6.79e4* 35.76
123479F 2.37e4* 36.06
234678F 4.63e4* 36.54
123489F 5.23e4* 37.52
Abs. Int.
9.45e4
4.72e4
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0
RT
Rel. Int.
100%
HxCDF
34.02-38.25
375.8178 Fn3
Flags: PBM
4σ 1.23e3
123468F 6.32e4* 34.37
124678/134678F 1.78e5* 34.57
124689F 2.71e5* 35.22
123467F 1.30e4* 35.66
123478F 4.17e4* 35.75
123678F 3.40e4* 35.89
123479F 2.00e4* 36.07
234678F 4.44e4* 36.54
123489F 3.99e4* 37.52
Abs. Int.
9.42e4
4.71e4
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0
RT
Rel. Int.
100%
HxCDF Std.
34.02-38.25
383.8639 Fn3
Flags: PBM
4σ 1.56e4
ES 123478F 1.84e7* 35.74
ES 123678F 2.15e7* 35.88
CS 123469F 2.06e7* 36.19
ES 234678F 1.78e7* 36.53
ES 123789F 1.49e7* 37.50
Abs. Int.
6.44e6
3.22e6
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0
RT
Rel. Int.
100%
HxCDF Std.
34.02-38.25
385.8610 Fn3
Flags: PBM
4σ 1.06e4
ES 123478F 3.49e7* 35.74
ES 123678F 3.96e7* 35.88
CS 123469F 3.85e7* 36.19
ES 234678F 3.35e7* 36.53
ES 123789F 2.91e7* 37.50
Abs. Int.
1.21e7
6.07e6
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0
RT
Rel. Int.
100%
OCDPE
34.02-38.25
445.7555 Fn3
Flags: PB
4σ 1.43e3
Abs. Int.
3.64e3
1.82e3
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0
RT


Rel. Int.
100%
HpCDF
38.26-41.01
407.7818 Fn4
Flags: PBM
4σ 1.18e3
1234678F
5.33e5*
39.04
1234679F
5.09e4*
39.31
1234689F
9.50e5*
39.45
Abs. Int.
3.81e5
1.91e5
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF
38.26-41.01
409.7788 Fn4
Flags: PBM
4σ 8.73e2
1234678F
4.93e5*
39.04
1234689F
9.55e5*
39.45
Abs. Int.
4.09e5
2.05e5
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.26-41.01
417.8253 Fn4
Flags: PBM
4σ 2.71e3
ES 1234678F
1.19e7*
39.03
CS 1234689F
1.36e7*
39.44
ES 1234789F
8.71e6*
40.36
Abs. Int.
5.46e6
2.73e6
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.26-41.01
419.8220 Fn4
Flags: PBM
4σ 3.74e3
ES 1234678F
2.67e7*
39.03
CS 1234689F
3.06e7*
39.44
ES 1234789F
1.97e7*
40.36
Abs. Int.
1.25e7
6.23e6
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
NCDPE
38.26-41.01
479.7165 Fn4
Flags: PB
4σ 1.55e3
RT
Abs. Int.
4.39e4
2.19e4
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT


OCDF
5.79e5*
42.54
Rel. Int.
100%
OCDF
41.02-45.00
441.7428 Fn5
Flags: PBM
4σ 1.64e3
0%
Abs. Int.
2.27e5
1.14e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDF
7.59e5*
42.54
Rel. Int.
100%
OCDF
41.02-45.00
443.7398 Fn5
Flags: PBM
4σ 1.98e3
0%
Abs. Int.
3.14e5
1.57e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDF
1.74e7*
42.53
Rel. Int.
100%
OCDF Std.
41.02-45.00
453.7830 Fn5
Flags: PBM
4σ 1.93e3
0%
Abs. Int.
6.52e6
3.26e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDF
1.92e7*
42.53
Rel. Int.
100%
OCDF Std.
41.02-45.00
455.7801 Fn5
Flags: PBM
4σ 2.53e3
0%
Abs. Int.
6.63e6
3.32e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
DCDPE
41.02-45.00
513.6775 Fn5
Flags: PB
4σ 1.63e3
0%
Abs. Int.
6.88e3
3.44e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

Lab ID: B4519_17655_DF_014 **Acq'd:** 11 Aug 2020 08:01 PSW **Wt/Vol:** 8.64 g **ICAL:** MM3_DF_10012020_12JUN2020

Client ID: CS-SS-109 **UTP:** 11-Aug-2020 09:27:43 PSW **J-level:** 0.578 pg/g **Split:** 1 **Checkcode:** 629-635-GPM

Datafile: 200810R22 **Report:** 11 Aug 2020 10:00 pw **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	NotFnd		1.0009	-		-	-	-	1.18	-	4437	0.162
12378-PeCDD	32.83	J	1.0006	1.0007	+0.2	7.79E+04	1.47	Y	1.14	0.291	5437	0.188
123478-HxCDD	36.74	J	1.0004	1.0005	+0.2	3.25E+05	1.30	Y	1.09	1.44	10937	0.381
123678-HxCDD	36.84	J EMPC	1.0035	1.0034	-0.2	5.37E+05	1.50	N	1.13	2.37	10937	0.397
123789-HxCDD	37.14	J	1.0116	1.0115	-0.2	5.04E+05	1.40	Y	1.05	2.02	10937	0.385
1234678-HpCDD	39.96		1.0003	1.0003	0	2.20E+07	1.08	Y	0.98	133	25490	0.868
OCDD	42.38		1.0003	1.0002	-0.3	7.59E+07	0.89	Y	1.08	806	6543	0.506
2378-TCDF	26.36	J EMPC	1.0006	1.0010	+0.6	7.35E+04	0.58	N	0.98	0.174	3985	0.112
12378-PeCDF	31.33	J EMPC	1.0006	1.0004	-0.4	2.19E+05	1.28	N	0.95	0.573	6143	0.157
23478-PeCDF	32.47	J	1.0005	1.0008	+0.6	2.33E+05	1.38	Y	0.95	0.642	6143	0.152
123478-HxCDF	35.77	J	1.0005	1.0005	0	5.99E+05	1.14	Y	1.20	1.82	5169	0.134
123678-HxCDF	35.90	J	1.0004	1.0004	0	2.66E+05	1.39	Y	1.07	0.786	5169	0.121
234678-HxCDF	36.55	J	1.0005	1.0004	-0.2	2.34E+05	1.14	Y	1.10	0.787	5169	0.131
123789-HxCDF	NotFnd		1.0004	-		-	-	-	1.09	-	5169	0.176
1234678-HpCDF	39.05		1.0003	1.0003	0	4.50E+06	1.02	Y	1.28	17.2	7393	0.192
1234789-HpCDF	40.37	J	1.0002	1.0002	0	3.16E+05	1.07	Y	1.27	1.49	7393	0.222
OCDF	42.55		1.0003	1.0003	0	5.10E+06	0.83	Y	1.01	46.8	4694	0.3

Name	Act RT		Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	27.26		1.0255	1.0256	+0.2	6.04E+07	0.76	Y	1.01	80.4
ES 12378-PeCDD	32.80		1.2330	1.2342	+2.4	5.46E+07	1.67	Y	0.87	84
ES 123478-HxCDD	36.72		0.9917	0.9916	-0.2	4.78E+07	1.35	Y	1.10	71.3
ES 123678-HxCDD	36.83		0.9947	0.9947	0	4.66E+07	1.30	Y	1.06	71.8
ES 123789-HxCDD	37.13		1.0028	1.0028	0	5.50E+07	1.27	Y	1.22	73.9
ES 1234678-HpCDD	39.95		1.0785	1.0788	+0.7	3.89E+07	1.06	Y	0.99	64.1
ES OCDD	42.37		1.1439	1.1442	+0.8	4.06E+07	0.94	Y	0.67	49.5
ES 2378-TCDF	26.34		1.0572	1.0577	+0.8	9.97E+07	0.78	Y	1.01	77.2
ES 12378-PeCDF	31.31		1.2558	1.2575	+3.2	9.33E+07	1.59	Y	0.90	81.4
ES 23478-PeCDF	32.45		1.3012	1.3031	+3.7	8.89E+07	1.57	Y	0.89	78.4
ES 123478-HxCDF	35.75		0.9655	0.9654	-0.2	6.38E+07	0.53	Y	1.43	72.9
ES 123678-HxCDF	35.89		0.9693	0.9692	-0.2	7.32E+07	0.53	Y	1.63	73.2
ES 234678-HxCDF	36.54		0.9867	0.9867	0	6.27E+07	0.53	Y	1.48	69.2
ES 123789-HxCDF	37.51		1.0130	1.0129	-0.2	5.37E+07	0.52	Y	1.29	67.9
ES 1234678-HpCDF	39.04		1.0540	1.0542	+0.5	4.73E+07	0.44	Y	1.15	67.4
ES 1234789-HpCDF	40.36		1.0898	1.0901	+0.7	3.88E+07	0.47	Y	0.91	69.8
ES OCDF	42.53		1.1484	1.1487	+0.8	5.00E+07	0.89	Y	0.83	49.3

Lab ID: B4519_17655_DF_014 | Acq'd: 11 Aug 2020 08:01 PSW | Wt/Vol: 8.64 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-SS-109 | UTP: 11-Aug-2020 09:27:43 PSW | J-level: 0.578 pg/g | Split: 1 | Checkcode: 629-635-GPM

Datafile: 200810R22 | Report: 11 Aug 2020 10:00 pw | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %	
JS 1234-TCDD	26.58		-	-	-	7.46E+07	0.76	Y	-	-	
JS 1234-TCDF	24.90		-	-	-	1.27E+08	0.78	Y	-	-	
JS 123467-HxCDD	37.03		-	-	-	3.06E+07	1.25	Y	-	-	
CS 37Cl-2378-TCDD	27.28		1.0265	1.0265	0	2.94E+07	n/a	-	1.04	95	
CS 12347-PeCDD	32.30		1.2141	1.2151	+1.9	5.63E+07	1.76	Y	0.74	102	
CS 12346-PeCDF	30.78		1.2343	1.2360	+3.1	9.79E+07	1.56	Y	0.86	89.4	
CS 123469-HxCDF	36.20		0.9776	0.9775	-0.2	6.79E+07	0.53	Y	1.36	81.7	
CS 1234689-HpCDF	39.45		1.0650	1.0653	+0.7	5.13E+07	0.45	Y	1.05	79.4	
~~SS 37Cl-2378-TCDD~~	~~27.28~~		~~1.0265~~	~~1.0265~~	~~0~~	~~2.94E+07~~	~~n/a~~		~~1.04~~	~~117~~	Not used in this project.
~~SS 12347-PeCDD~~	~~32.30~~		~~1.2141~~	~~1.2151~~	~~+1.9~~	~~5.63E+07~~	~~1.76~~	~~Y~~	~~0.86~~	~~121~~	CL 11Aug20
~~SS 12346-PeCDF~~	~~30.78~~		~~1.2343~~	~~1.2360~~	~~+3.1~~	~~9.79E+07~~	~~1.56~~	~~Y~~	~~0.96~~	~~109~~	
~~SS 123469-HxCDF~~	~~36.20~~		~~0.9776~~	~~0.9775~~	~~-0.2~~	~~6.79E+07~~	~~0.53~~	~~Y~~	~~0.83~~	~~111~~	
~~SS 1234689-HpCDF~~	~~39.45~~		~~1.0650~~	~~1.0653~~	~~+0.7~~	~~5.13E+07~~	~~0.45~~	~~Y~~	~~0.92~~	~~117~~	

Totals	Conc	EMPC
Total TCDD	3.5	4.72
Total PeCDD	6.11	8
Total HxCDD	75.7	78
Total HpCDD	760	760
Total Tetra-Octa Dioxins	1650	1660
Total TCDF	10.9	13.3
Total PeCDF	5.81	7.23
Total HxCDF	22.8	22.8
Total HpCDF	56.8	56.8
Total Tetra-Octa Furans	143	147
Total Tetra-Octa Dioxins & Furans	1790	1800

Lab ID: B4519_17655_DF_014 **Acq'd:** 11 Aug 2020 08:01 PSW **Wt/Vol:** 8.64 g **ICAL:** MM3_DF_10012020_12JUN2020

Client ID: CS-SS-109 **UTP:** 11-Aug-2020 09:27:43 PSW **J-level:** 0.578 pg/g **Split:** 1 **Checkcode:** 629-635-GPM

Datafile: 200810R22 **Report:** 11 Aug 2020 10:00 pw **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1368-TCDD	23.38		0.8591	0.8578	-1.8	6.00E+05	0.88	Y	1.18	1.95	4437	0.162
1379-TCDD	23.78		0.8732	0.8724	-1.1	4.05E+05	0.71	Y	1.18	1.32	4437	0.162
1369-TCDD	NotFnd		0.8901						1.18		4437	0.162
1469-TCDD	NotFnd		0.9205						1.18		4437	0.162
1247/1246/1248/1249-TCDD	25.33	EMPC	0.9301	0.9292	-1.4	3.26E+05	1.07	N	1.18	1.06	4437	0.162
1378-TCDD	NotFnd		0.9374						1.18		4437	0.162
1268-TCDD	NotFnd		0.9449						1.18		4437	0.162
1478-TCDD	NotFnd		0.9544						1.18		4437	0.162
1279-TCDD	NotFnd		0.9610						1.18		4437	0.162
1234/1269-TCDD	26.61	J	0.9746	0.9761	+2.4	6.87E+04	0.87	Y	1.18	0.224	4437	0.162
1236-TCDD	NotFnd		0.9802						1.18		4437	0.162
1237/1238-TCDD	26.99	J EMPC	0.9898	0.9901	+0.5	5.04E+04	0.61	N	1.18	0.164	4437	0.162
1239-TCDD	NotFnd		0.9950						1.18		4437	0.162
2378-TCDD	**NotFnd**		**1.0009**						**1.18**		**4437**	**0.162**
1278-TCDD	NotFnd		1.0133						1.18		4437	0.162
1267-TCDD	NotFnd		1.0185						1.18		4437	0.162
1289-TCDD	NotFnd		1.0379						1.18		4437	0.162
12479/12468-PeCDD	30.26	J	0.9229	0.9225	-0.7	6.35E+05	1.51	Y	1.14	2.37	5437	0.188
12469-PeCDD	30.81	J EMPC	0.9396	0.9393	-0.6	3.30E+05	1.28	N	1.14	1.23	5437	0.188
12368-PeCDD	31.37	J EMPC	0.9568	0.9563	-0.9	1.74E+05	1.11	N	1.14	0.649	5437	0.188
12478-PeCDD	31.57	J	0.9626	0.9623	-0.6	1.14E+05	1.52	Y	1.14	0.425	5437	0.188
12379-PeCDD	31.66	J	0.9657	0.9652	-0.9	1.82E+05	1.39	Y	1.14	0.68	5437	0.188
12369/12467/12489-PeCDD	31.94	J	0.9738	0.9736	-0.4	2.38E+05	1.58	Y	1.14	0.887	5437	0.188
12346/12347-PeCDD	32.33	J	0.9853	0.9856	+0.6	3.40E+05	1.43	Y	1.14	1.27	5437	0.188
12378-PeCDD	32.83	J	**1.0006**	**1.0007**	**+0.2**	**7.79E+04**	**1.47**	**Y**	**1.14**	**0.291**	**5437**	**0.188**
12367-PeCDD	NotFnd		1.0034						1.14		5437	0.188
12389-PeCDD	33.26	J	1.0141	1.0139	-0.4	5.06E+04	1.62	Y	1.14	0.189	5437	0.188
124679/124689-HxCDD	35.04		0.9542	0.9542	0	6.94E+06	1.25	Y	1.09	29.6	10937	0.387
123468-HxCDD	35.69		0.9721	0.9720	-0.2	2.15E+06	1.30	Y	1.09	9.17	10937	0.387
123679/123689-HxCDD	35.98		0.9799	0.9799	0	4.21E+06	1.22	Y	1.09	17.9	10937	0.387
123469-HxCDD	36.11		0.9835	0.9834	-0.2	2.94E+06	1.25	Y	1.09	12.5	10937	0.387
123478-HxCDD	36.74	J	**1.0004**	**1.0005**	**+0.2**	**3.25E+05**	**1.30**	**Y**	1.09	**1.44**	**10937**	**0.381**
123678-HxCDD	36.84	J EMPC	**1.0035**	**1.0034**	**-0.2**	**5.37E+05**	**1.50**	**N**	1.13	**2.37**	**10937**	**0.397**
123467-HxCDD	37.04		1.0088	1.0088	0	6.97E+05	1.24	Y	1.09	2.97	10937	0.387
123789-HxCDD	37.14	J	**1.0116**	**1.0115**	**-0.2**	**5.04E+05**	**1.40**	**Y**	1.05	**2.02**	**10937**	**0.385**

Lab ID: B4519_17655_DF_014 | Acq'd: 11 Aug 2020 08:01 PSW | Wt/Vol: 8.64 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-SS-109 | UTP: 11-Aug-2020 09:27:43 PSW | J-level: 0.578 pg/g | Split: 1 | Checkcode: 629-635-GPM

Datafile: 200810R22 | Report: 11 Aug 2020 10:00 pw | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

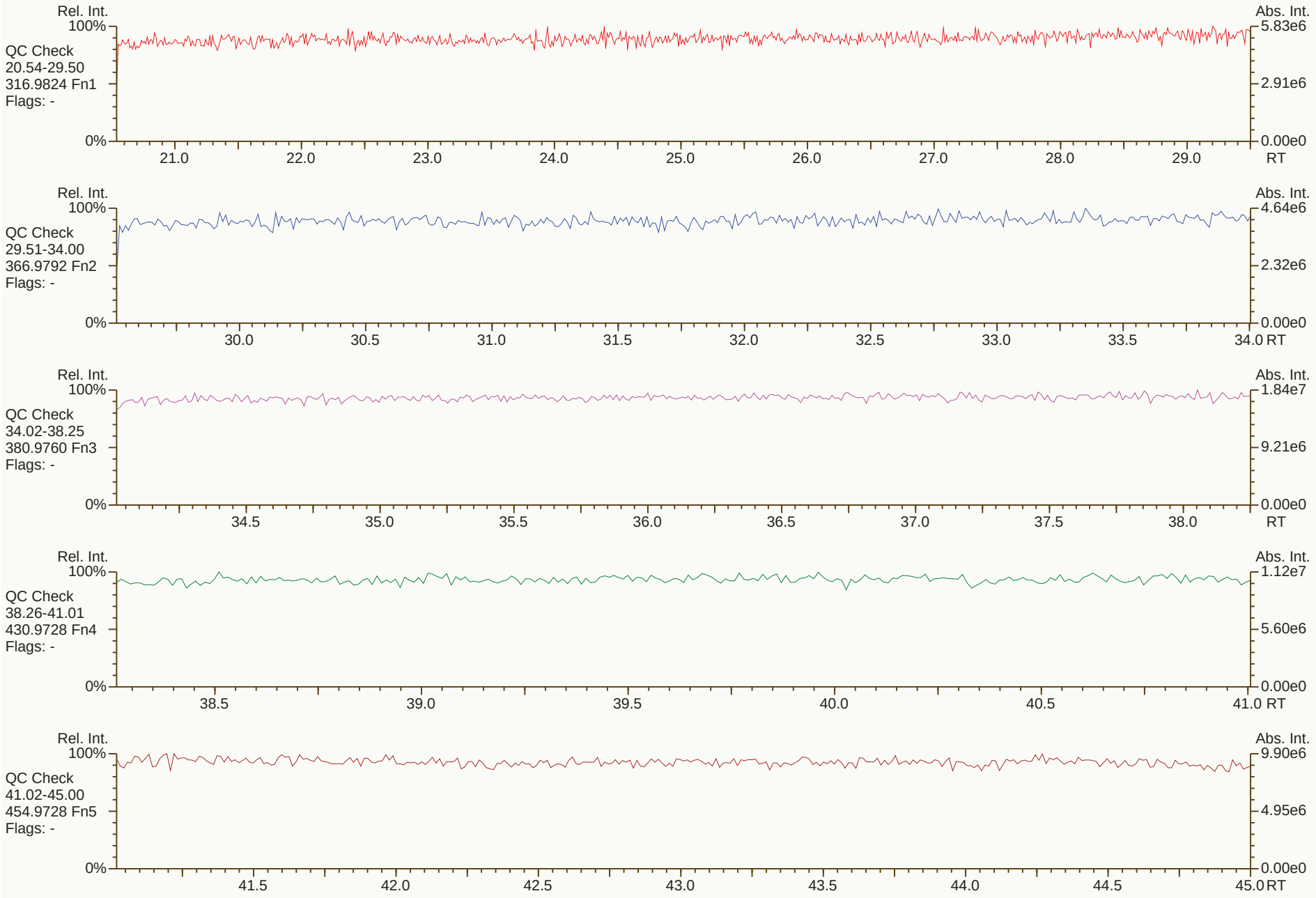
Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1234679-HpCDD	39.31		0.9843	0.9842	-0.2	1.04E+08	1.05	Y	0.98	627	25490	0.868
1234678-HpCDD	**39.96**		**1.0003**	**1.0003**	**0**	**2.20E+07**	**1.08**	**Y**	**0.98**	**133**	**25490**	**0.868**
OCDD	**42.38**		**1.0003**	**1.0002**	**-0.3**	**7.59E+07**	**0.89**	**Y**	**1.08**	**806**	**6543**	**0.506**
OCDD-a	42.38		1.0002	1.0001	-0.3	4.66E+06	2.57	Y	0.07	803	5223	6.56
1368-TCDF	21.15		0.8044	0.8031	-1.6	8.98E+05	0.87	Y	0.98	2.12	3985	0.112
1468-TCDF	21.72	J	0.8261	0.8246	-2.0	1.38E+05	0.69	Y	0.98	0.326	3985	0.112
2468-TCDF	22.38		0.8511	0.8497	-1.9	2.56E+06	0.77	Y	0.98	6.05	3985	0.112
1346/1246-TCDF	22.84	J EMPC	0.8665	0.8671	+0.8	1.06E+05	0.60	N	0.98	0.25	3985	0.112
1347/1378/1247-TCDF	22.95	J	0.8723	0.8713	-1.4	2.39E+05	0.79	Y	0.98	0.567	3985	0.112
1348-TCDF	23.26	J	0.8835	0.8832	-0.4	5.84E+04	0.67	Y	0.98	0.138	3985	0.112
1248/1367/1379-TCDF	23.38	J	0.8888	0.8876	-1.7	2.02E+05	0.70	Y	0.98	0.478	3985	0.112
1268-TCDF	23.81	J	0.9044	0.9039	-0.7	1.61E+05	0.73	Y	0.98	0.38	3985	0.112
1467-TCDF	NotFnd		0.9098						0.98		3985	0.112
1478-TCDF	24.11	J EMPC	0.9167	0.9154	-1.9	5.71E+04	1.06	N	0.98	0.135	3985	0.112
1369/1237-TCDF	24.52	J	0.9316	0.9311	-0.7	8.74E+04	0.69	Y	0.98	0.207	3985	0.112
2467-TCDF	24.67	J EMPC	0.9369	0.9368	-0.1	9.33E+04	1.13	N	0.98	0.221	3985	0.112
2368-TCDF	24.82	J EMPC	0.9430	0.9425	-0.7	2.26E+05	1.08	N	0.98	0.535	3985	0.112
1238/1234/1678/1469/1236-TCDF	24.93	J	0.9468	0.9465	-0.4	1.83E+05	0.70	Y	0.98	0.433	3985	0.112
1278-TCDF	25.42	J EMPC	0.9651	0.9651	0	7.21E+04	1.18	N	0.98	0.171	3985	0.112
1349-TCDF	NotFnd		0.9704						0.98		3985	0.112
1267-TCDF	25.68	J EMPC	0.9761	0.9752	-1.4	3.73E+04	0.90	N	0.98	0.0882	3985	0.112
2346/1249-TCDF	25.91	J EMPC	0.9834	0.9839	+0.8	2.70E+04	1.40	N	0.98	0.0638	3985	0.112
2347/1279-TCDF	26.14	J	0.9921	0.9926	+0.8	7.59E+04	0.69	Y	0.98	0.18	3985	0.112
2348-TCDF	26.26	J EMPC	0.9964	0.9971	+1.1	5.84E+04	0.63	N	0.98	0.138	3985	0.112
2378-TCDF	**26.36**	J EMPC	**1.0006**	**1.0010**	**+0.6**	**7.35E+04**	**0.58**	**N**	**0.98**	**0.174**	**3985**	**0.112**
2367/3467-TCDF	26.75	J EMPC	1.0156	1.0156	0	1.25E+05	1.13	N	0.98	0.296	3985	0.112
1269-TCDF	NotFnd		1.0249						0.98		3985	0.112
1239-TCDF	NotFnd		1.0357						0.98		3985	0.112
1289-TCDF	28.45	J EMPC	1.0799	1.0802	+0.5	1.27E+05	1.56	N	0.98	0.3	3985	0.112
13468/12468-PeCDF	28.45	J	0.9084	0.9085	+0.2	8.09E+05	1.60	Y	0.95	2.17	3628	0.0912
13678/13467/12467-PeCDF	30.03	J	0.9591	0.9590	-0.2	1.82E+05	1.54	Y	0.95	0.489	6143	0.154
12368/13478/12478-PeCDF	30.19	J	0.9642	0.9643	+0.2	7.16E+05	1.69	Y	0.95	1.92	6143	0.154
14678-PeCDF	30.30	J EMPC	0.9675	0.9675	0	3.60E+04	0.67	N	0.95	0.0966	6143	0.154
13479-PeCDF	NotFnd		0.9706						0.95		6143	0.154
13469/12479-PeCDF	NotFnd		0.9787						0.95		6143	0.154
12346-PeCDF	NotFnd		0.9833						0.95		6143	0.154

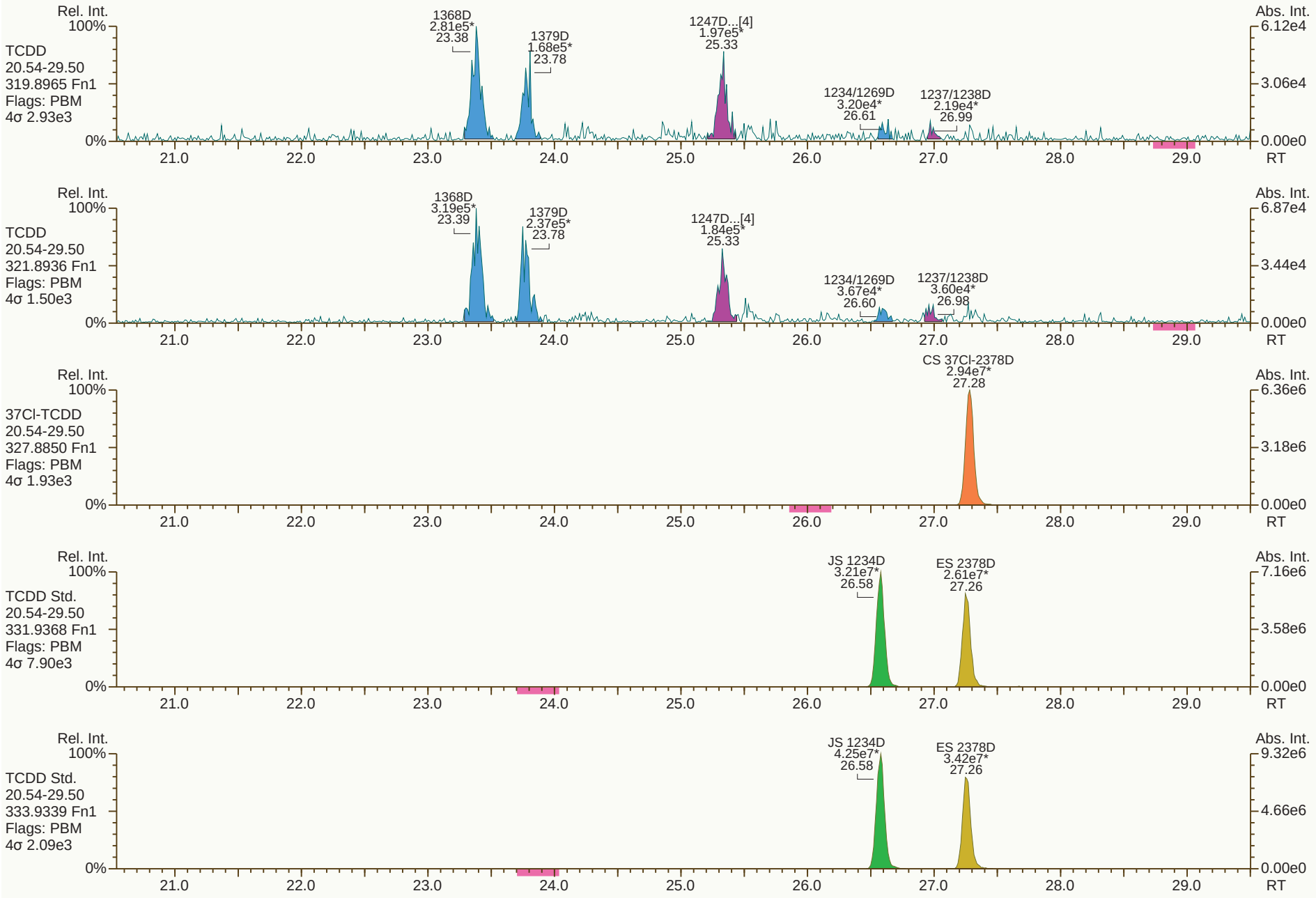
Lab ID: B4519_17655_DF_014 **Acq'd:** 11 Aug 2020 08:01 PSW **Wt/Vol:** 8.64 g **ICAL:** MM3_DF_10012020_12JUN2020

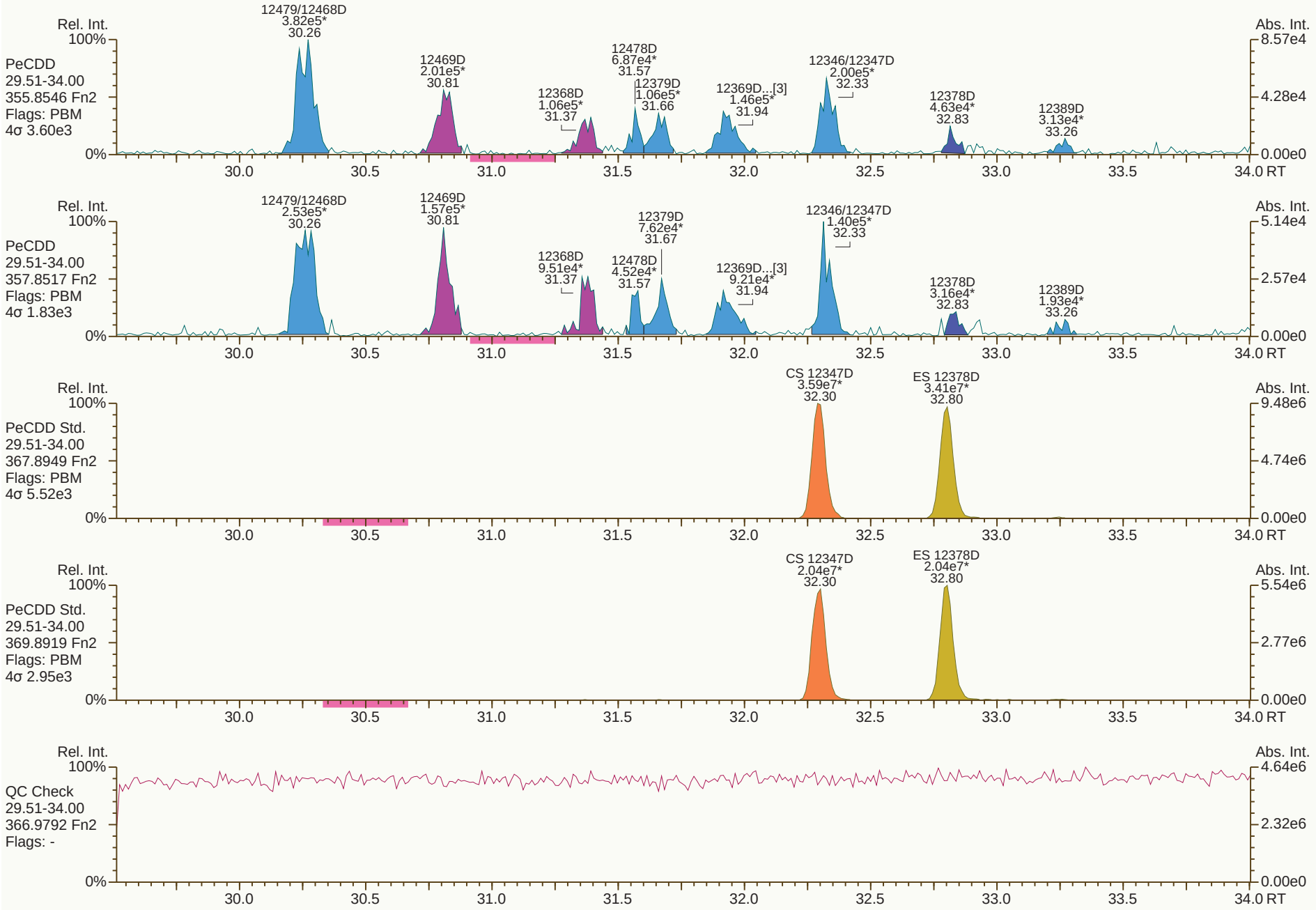
Client ID: CS-SS-109 **UTP:** 11-Aug-2020 09:27:43 PSW **J-level:** 0.578 pg/g **Split:** 1 **Checkcode:** 629-635-GPM

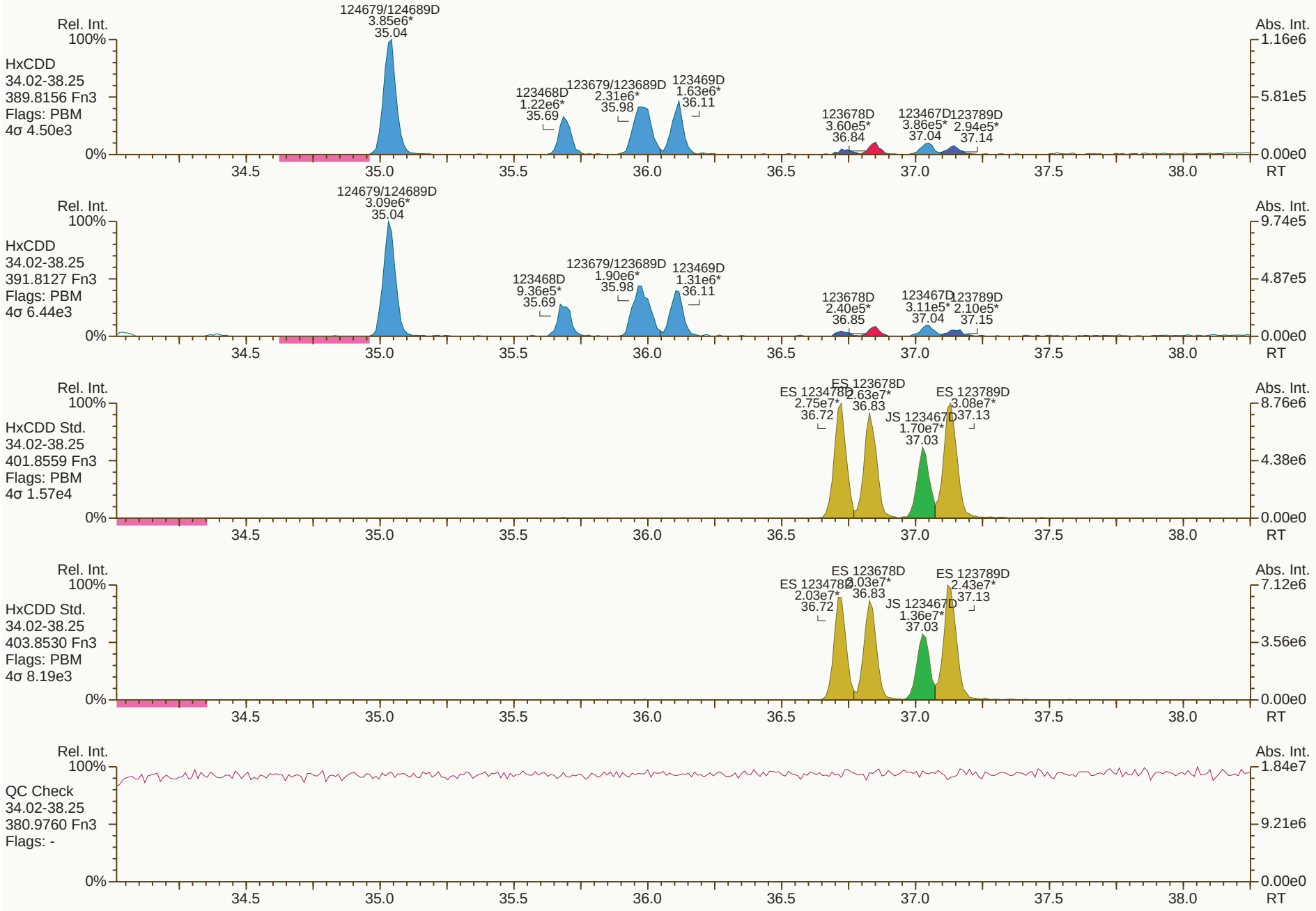
Datafile: 200810R22 **Report:** 11 Aug 2020 10:00 pw **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
23468/12469-PeCDF	30.87	J	0.9861	0.9857	-0.7	2.21E+05	1.69	Y	0.95	0.592	6143	0.154
12347-PeCDF	NotFnd		0.9887						0.95		6143	0.154
12348-PeCDF	31.11	J EMPC	0.9938	0.9935	-0.6	5.14E+04	0.94	N	0.95	0.138	6143	0.154
12378-PeCDF	**31.33**	J EMPC	**1.0006**	**1.0004**	**-0.4**	**2.19E+05**	**1.28**	**N**	**0.95**	**0.573**	**6143**	**0.157**
12678/12367-PeCDF	31.61	J EMPC	1.0095	1.0096	+0.2	1.43E+05	1.04	N	0.95	0.383	6143	0.154
12379-PeCDF	NotFnd		1.0150						0.95		6143	0.154
12679-PeCDF	NotFnd		0.9926						0.95		6143	0.154
23467/12369-PeCDF	32.34	J EMPC	0.9966	0.9967	+0.2	8.47E+04	2.13	N	0.95	0.227	6143	0.154
23478-PeCDF	**32.47**	J	**1.0005**	**1.0008**	**+0.6**	**2.33E+05**	**1.38**	**Y**	**0.95**	**0.642**	**6143**	**0.152**
23478/12489-PeCDF	NotFnd		0.0000						0.95			
12489-PeCDF	NotFnd		1.0047						0.95		6143	0.154
12349-PeCDF	NotFnd		1.0107						0.95		6143	0.154
12389-PeCDF	NotFnd		1.0339						0.95		6143	0.154
123468-HxCDF	34.38	J	0.9617	0.9617	0	6.05E+05	1.32	Y	1.11	1.99	5169	0.138
124678/134678-HxCDF	34.58		0.9673	0.9672	-0.2	2.15E+06	1.13	Y	1.11	7.05	5169	0.138
134679-HxCDF	NotFnd		0.9737						1.11		5169	0.138
124679-HxCDF	35.00	J	0.9792	0.9792	0	9.40E+04	1.18	Y	1.11	0.308	5169	0.138
124689-HxCDF	35.23		0.9854	0.9854	0	2.82E+06	1.26	Y	1.11	9.25	5169	0.138
123467-HxCDF	35.65	J	0.9972	0.9972	0	1.13E+05	1.16	Y	1.11	0.369	5169	0.138
123478-HxCDF	**35.77**	J	**1.0005**	**1.0005**	**0**	**5.99E+05**	**1.14**	**Y**	**1.20**	**1.82**	**5169**	**0.134**
123678-HxCDF	**35.90**	J	**1.0004**	**1.0004**	**0**	**2.66E+05**	**1.39**	**Y**	**1.07**	**0.786**	**5169**	**0.121**
123479-HxCDF	NotFnd		1.0049						1.11		5169	0.138
123469-HxCDF	NotFnd		1.0089						1.11		5169	0.138
123679-HxCDF	NotFnd		0.9945						1.11		5169	0.138
234678-HxCDF	**36.55**	J	**1.0005**	**1.0004**	**-0.2**	**2.34E+05**	**1.14**	**Y**	**1.10**	**0.787**	**5169**	**0.131**
234678/123689-HxCDF	NotFnd		0.0000						1.10			
123689-HxCDF	NotFnd		1.0054						1.11		5169	0.138
123789-HxCDF	**NotFnd**		**1.0004**						**1.09**		**5169**	**0.176**
123789/123489-HxCDF	NotFnd		0.0000						1.09			
123489-HxCDF	37.53	J	1.0008	1.0007	-0.2	1.42E+05	1.22	Y	1.11	0.465	5169	0.138
1234678-HpCDF	**39.05**		**1.0003**	**1.0003**	**0**	**4.50E+06**	**1.02**	**Y**	**1.28**	**17.2**	**7393**	**0.192**
1234679-HpCDF	39.32	**J**	1.0072	1.0072	0	2.41E+05	1.16	Y	1.27	1.02	7393	0.206
1234689-HpCDF	39.46		1.0107	1.0107	0	8.80E+06	1.02	Y	1.27	37.1	7393	0.206
1234789-HpCDF	**40.37**	**J**	**1.0002**	**1.0002**	**0**	**3.16E+05**	**1.07**	**Y**	**1.27**	**1.49**	**7393**	**0.222**
OCDF	**42.55**		**1.0003**	**1.0003**	**0**	**5.10E+06**	**0.83**	**Y**	**1.01**	**46.8**	**4694**	**0.3**
OCDF-a	42.54	**EMPC**	1.0002	1.0002	0	2.92E+05	3.24	N	0.06	42.7	4294	4.39

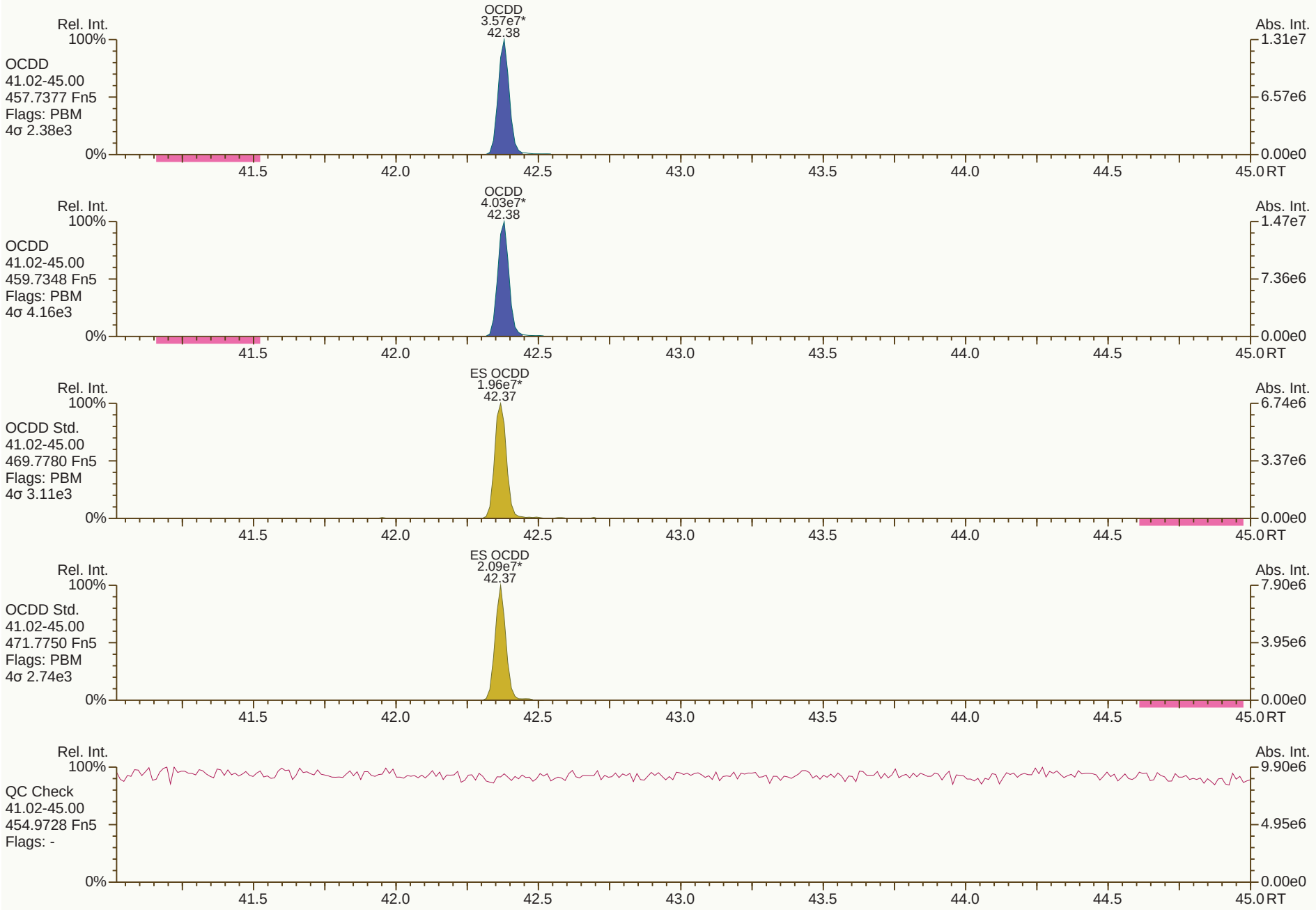

Rel. Int.
100%
0%
Abs. Int.
5.83e6
2.91e6
0.00e0
QC Check
20.54-29.50
316.9824 Fn1
Flags: -
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
0%
Abs. Int.
4.64e6
2.32e6
0.00e0
QC Check
29.51-34.00
366.9792 Fn2
Flags: -
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
0%
Abs. Int.
1.84e7
9.21e6
0.00e0
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
0%
Abs. Int.
1.12e7
5.60e6
0.00e0
QC Check
38.26-41.01
430.9728 Fn4
Flags: -
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
0%
Abs. Int.
9.90e6
4.95e6
0.00e0
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT


Rel. Int.
100%
TCDD
20.54-29.50
319.8965 Fn1
Flags: PBM
4σ 2.93e3
1368D
2.81e5*
23.38
1379D
1.68e5*
23.78
1247D...[4]
1.97e5*
25.33
1234/1269D
3.20e4*
26.61
1237/1238D
2.19e4*
26.99
Abs. Int.
6.12e4
3.06e4
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD
20.54-29.50
321.8936 Fn1
Flags: PBM
4σ 1.50e3
1368D
3.19e5*
23.39
1379D
2.37e5*
23.78
1247D...[4]
1.84e5*
25.33
1234/1269D
3.67e4*
26.60
1237/1238D
3.60e4*
26.98
Abs. Int.
6.87e4
3.44e4
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
37Cl-TCDD
20.54-29.50
327.8850 Fn1
Flags: PBM
4σ 1.93e3
CS 37Cl-2378D
2.94e7*
27.28
Abs. Int.
6.36e6
3.18e6
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
331.9368 Fn1
Flags: PBM
4σ 7.90e3
JS 1234D
3.21e7*
26.58
ES 2378D
2.61e7*
27.26
Abs. Int.
7.16e6
3.58e6
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
333.9339 Fn1
Flags: PBM
4σ 2.09e3
JS 1234D
4.25e7*
26.58
ES 2378D
3.42e7*
27.26
Abs. Int.
9.32e6
4.66e6
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
Abs. Int.
PeCDD
29.51-34.00
355.8546 Fn2
Flags: PBM
4σ 3.60e3
12479/12468D 3.82e5* 30.26
12469D 2.01e5* 30.81
12368D 1.06e5* 31.37
12478D 6.87e4* 31.57
12379D 1.06e5* 31.66
12369D...[3] 1.46e5* 31.94
12346/12347D 2.00e5* 32.33
12378D 4.63e4* 32.83
12389D 3.13e4* 33.26
PeCDD
29.51-34.00
357.8517 Fn2
Flags: PBM
4σ 1.83e3
12479/12468D 2.53e5* 30.26
12469D 1.57e5* 30.81
12368D 9.51e4* 31.37
12478D 4.52e4* 31.57
12379D 7.62e4* 31.67
12369D...[3] 9.21e4* 31.94
12346/12347D 1.40e5* 32.33
12378D 3.16e4* 32.83
12389D 1.93e4* 33.26
PeCDD Std.
29.51-34.00
367.8949 Fn2
Flags: PBM
4σ 5.52e3
CS 12347D 3.59e7* 32.30
ES 12378D 3.41e7* 32.80
PeCDD Std.
29.51-34.00
369.8919 Fn2
Flags: PBM
4σ 2.95e3
CS 12347D 2.04e7* 32.30
ES 12378D 2.04e7* 32.80
QC Check
29.51-34.00
366.9792 Fn2
Flags: -
100%
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
8.57e4
4.28e4
0.00e0
5.14e4
2.57e4
9.48e6
4.74e6
5.54e6
2.77e6
4.64e6
2.32e6


Rel. Int.
100%
HxCDD
34.02-38.25
389.8156 Fn3
Flags: PBM
4σ 4.50e3
124679/124689D
3.85e6*
35.04
123468D
1.22e6*
35.69
123679/123689D
2.31e6*
35.98
123469D
1.63e6*
36.11
123678D
3.60e5*
36.84
123467D
3.86e5*
37.04
123789D
2.94e5*
37.14
Abs. Int.
1.16e6
5.81e5
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD
34.02-38.25
391.8127 Fn3
Flags: PBM
4σ 6.44e3
124679/124689D
3.09e6*
35.04
123468D
9.36e5*
35.69
123679/123689D
1.90e6*
35.98
123469D
1.31e6*
36.11
123678D
2.40e5*
36.85
123467D
3.11e5*
37.04
123789D
2.10e5*
37.15
Abs. Int.
9.74e5
4.87e5
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
401.8559 Fn3
Flags: PBM
4σ 1.57e4
ES 123678D
2.63e7*
36.83
ES 123478D
2.75e7*
36.72
ES 123789D
3.08e7*
37.13
JS 123467D
1.70e7*
37.03
Abs. Int.
8.76e6
4.38e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
403.8530 Fn3
Flags: PBM
4σ 8.19e3
ES 123678D
2.03e7*
36.83
ES 123478D
2.03e7*
36.72
ES 123789D
2.43e7*
37.13
JS 123467D
1.36e7*
37.03
Abs. Int.
7.12e6
3.56e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
Abs. Int.
1.84e7
9.21e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT

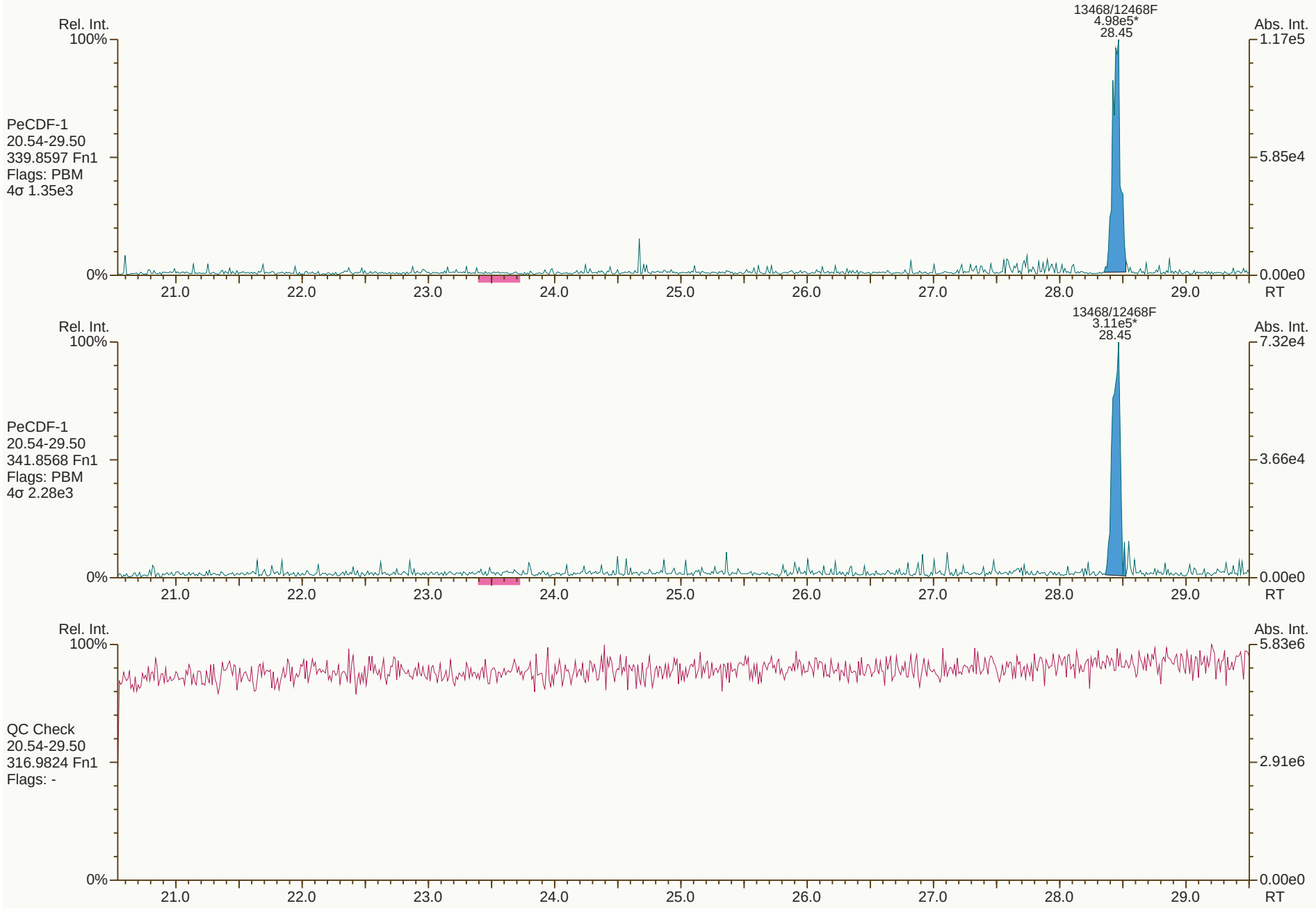

Rel. Int.
100%
HpCDD
38.26-41.01
423.7767 Fn4
Flags: PBM
4σ 9.33e3
0%
1234679D
5.33e7*
39.31
1234678D
1.14e7*
39.96
Abs. Int.
2.20e7
1.10e7
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.26-41.01
425.7737 Fn4
Flags: PBM
4σ 1.62e4
0%
1234679D
5.06e7*
39.31
1234678D
1.06e7*
39.96
Abs. Int.
2.10e7
1.05e7
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
435.8169 Fn4
Flags: PBM
4σ 8.40e3
0%
ES 1234678D
2.00e7*
39.95
Abs. Int.
8.87e6
4.44e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
437.8140 Fn4
Flags: PBM
4σ 8.03e3
0%
ES 1234678D
1.89e7*
39.95
Abs. Int.
8.17e6
4.08e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.26-41.01
430.9728 Fn4
Flags: -
0%
Abs. Int.
1.12e7
5.60e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT


OCDD
3.57e7*
42.38
Rel. Int.
100%
OCDD
41.02-45.00
457.7377 Fn5
Flags: PBM
4σ 2.38e3
0%
Abs. Int.
1.31e7
6.57e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDD
4.03e7*
42.38
Rel. Int.
100%
OCDD
41.02-45.00
459.7348 Fn5
Flags: PBM
4σ 4.16e3
0%
Abs. Int.
1.47e7
7.36e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
1.96e7*
42.37
Rel. Int.
100%
OCDD Std.
41.02-45.00
469.7780 Fn5
Flags: PBM
4σ 3.11e3
0%
Abs. Int.
6.74e6
3.37e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
2.09e7*
42.37
Rel. Int.
100%
OCDD Std.
41.02-45.00
471.7750 Fn5
Flags: PBM
4σ 2.74e3
0%
Abs. Int.
7.90e6
3.95e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
9.90e6
4.95e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT


Rel. Int.
100%
TCDF
20.54-29.50
303.9016 Fn1
Flags: PBM
4σ 1.31e3
1368F 4.18e5* 21.15
1468F 5.62e4* 21.72
2468F 1.11e6* 22.38
1347F...[3] 1.06e5* 22.95
1248F...[3] 8.34e4* 23.38
1268F 6.78e4* 23.81
1478F 3.41e4* 24.11
1369/1237F 3.57e4* 24.52
2467F 5.97e4* 24.67
1238F...[5] 7.54e4* 24.93
1267F 1.89e4* 25.68
2347/1279F 3.09e4* 26.14
2378F 3.20e4* 26.36
2367/3467F 7.95e4* 26.75
1289F 1.12e5* 28.45
Abs. Int.
1.93e5
9.66e4
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
TCDF
20.54-29.50
305.8987 Fn1
Flags: PBM
4σ 2.67e3
1368F 4.80e5* 21.15
1468F 8.16e4* 21.72
2468F 1.45e6* 22.38
1347F...[3] 1.34e5* 22.95
1346/1246F 7.60e4* 22.83
1248F...[3] 1.19e5* 23.37
1268F 9.28e4* 23.80
1478F 3.23e4* 24.12
1369/1237F 5.17e4* 24.52
2368F 1.28e5* 24.83
1238F...[5] 1.07e5* 24.94
1278F 4.07e4* 25.41
2348F 4.01e4* 26.26
2378F 5.53e4* 26.36
2367/3467F 7.07e4* 26.75
1289F 7.15e4* 28.46
Abs. Int.
2.59e5
1.29e5
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
315.9419 Fn1
Flags: PBM
4σ 1.58e4
JS 1234F 5.58e7* 24.90
ES 2378F 4.38e7* 26.34
Abs. Int.
1.08e7
5.38e6
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
317.9389 Fn1
Flags: PBM
4σ 1.16e4
JS 1234F 7.15e7* 24.90
ES 2378F 5.59e7* 26.34
Abs. Int.
1.37e7
6.83e6
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
HxCDPE
20.54-29.50
375.8364 Fn1
Flags: PB
4σ 1.46e3
Abs. Int.
6.57e3
3.28e3
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT

SGS ID: B4519_17655_DF_014 | **Sample ID: CS-SS-109** | **Acq: 11-Aug-2020 08:01:38**

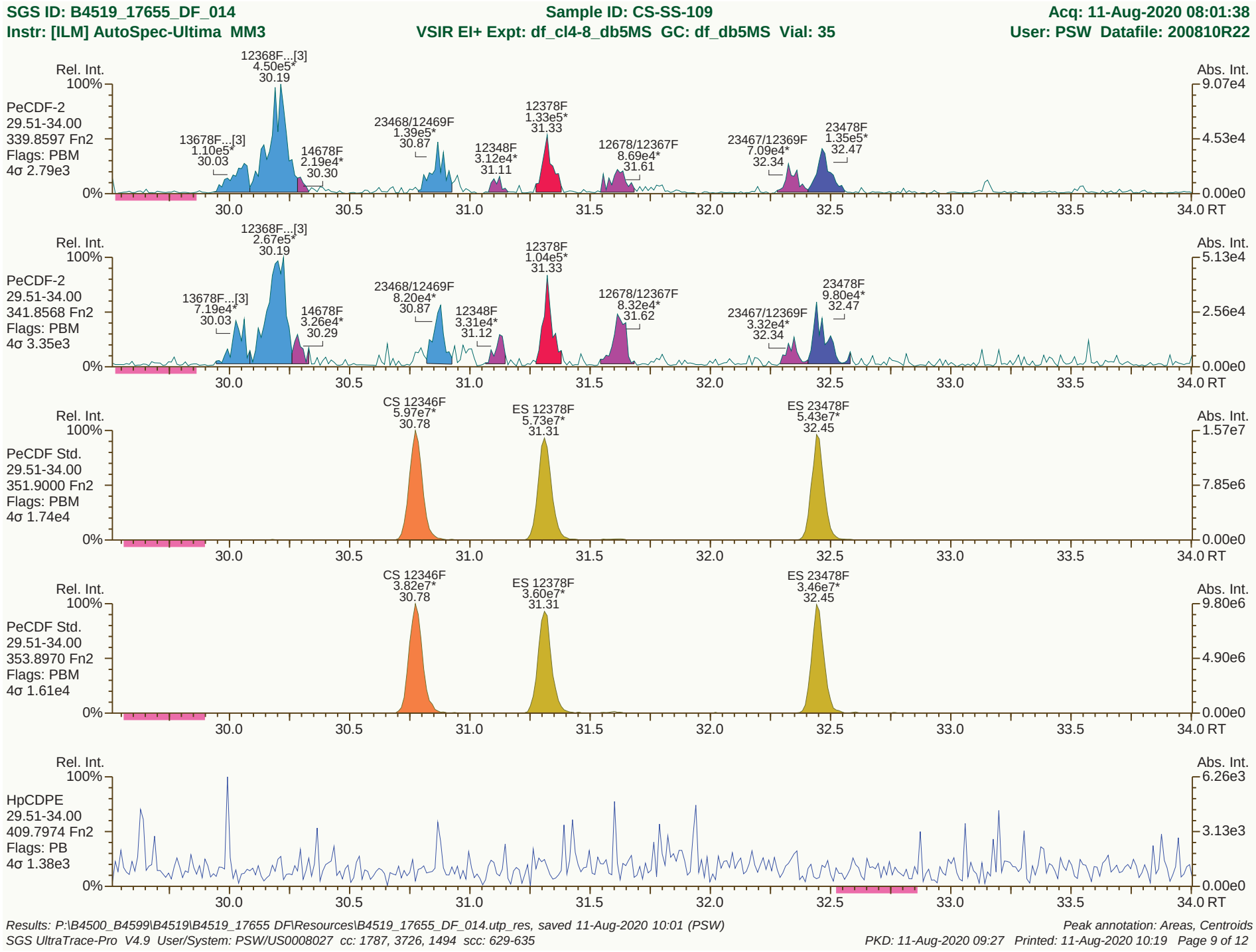
Instr: [ILM] AutoSpec-Ultima MM3 | **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 35** | **User: PSW Datafile: 200810R22**

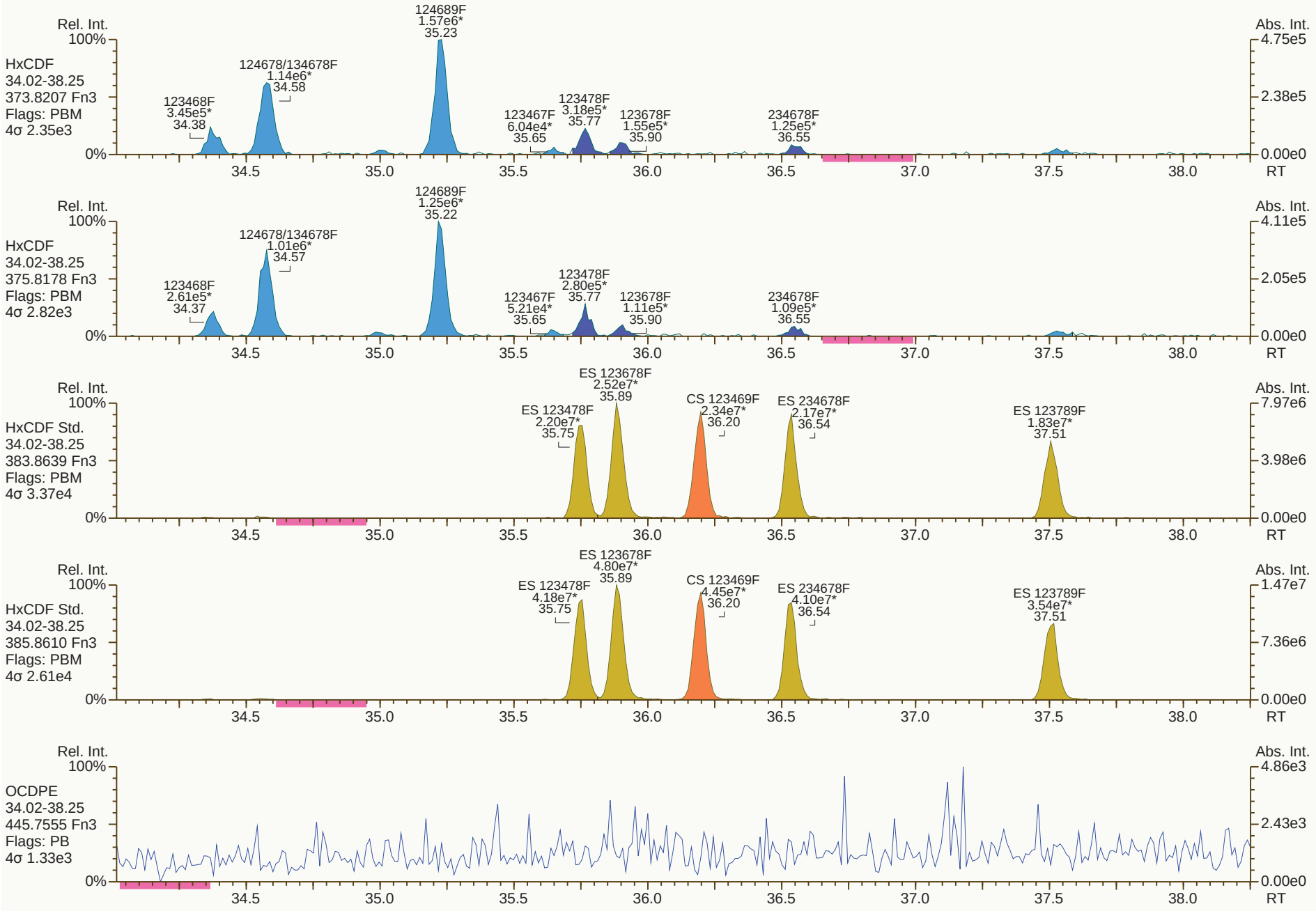


Results: P:\B4500_B4599\B4519\B4519_17655 DF\Resources\B4519_17655_DF_014.utp_res, saved 11-Aug-2020 10:01 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 8208 scc: 629-635 *PKD: 11-Aug-2020 09:27 Printed: 11-Aug-2020 10:19 Page 8 of 12*

SGS ID: B4519_17655_DF_014 Sample ID: CS-SS-109 Acq: 11-Aug-2020 08:01:38
Instr: [ILM] AutoSpec-Ultima MM3 VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 35 User: PSW Datafile: 200810R22




Rel. Int.
100%
HxCDF
34.02-38.25
373.8207 Fn3
Flags: PBM
4σ 2.35e3
123468F 3.45e5* 34.38
124678/134678F 1.14e6* 34.58
124689F 1.57e6* 35.23
123467F 6.04e4* 35.65
123478F 3.18e5* 35.77
123678F 1.55e5* 35.90
234678F 1.25e5* 36.55
Abs. Int.
4.75e5
2.38e5
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 RT
Rel. Int.
100%
HxCDF
34.02-38.25
375.8178 Fn3
Flags: PBM
4σ 2.82e3
123468F 2.61e5* 34.37
124678/134678F 1.01e6* 34.57
124689F 1.25e6* 35.22
123467F 5.21e4* 35.65
123478F 2.80e5* 35.77
123678F 1.11e5* 35.90
234678F 1.09e5* 36.55
Abs. Int.
4.11e5
2.05e5
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 RT
Rel. Int.
100%
HxCDF Std.
34.02-38.25
383.8639 Fn3
Flags: PBM
4σ 3.37e4
ES 123478F 2.20e7* 35.75
ES 123678F 2.52e7* 35.89
CS 123469F 2.34e7* 36.20
ES 234678F 2.17e7* 36.54
ES 123789F 1.83e7* 37.51
Abs. Int.
7.97e6
3.98e6
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 RT
Rel. Int.
100%
HxCDF Std.
34.02-38.25
385.8610 Fn3
Flags: PBM
4σ 2.61e4
ES 123478F 4.18e7* 35.75
ES 123678F 4.80e7* 35.89
CS 123469F 4.45e7* 36.20
ES 234678F 4.10e7* 36.54
ES 123789F 3.54e7* 37.51
Abs. Int.
1.47e7
7.36e6
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 RT
Rel. Int.
100%
OCDPE
34.02-38.25
445.7555 Fn3
Flags: PB
4σ 1.33e3
Abs. Int.
4.86e3
2.43e3
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 RT


Rel. Int.
100%
HpCDF
38.26-41.01
407.7818 Fn4
Flags: PBM
4σ 3.38e3
0%
1234678F
2.27e6*
39.05
1234689F
4.45e6*
39.46
Abs. Int.
1.78e6
8.92e5
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF
38.26-41.01
409.7788 Fn4
Flags: PBM
4σ 4.01e3
0%
1234678F
2.23e6*
39.05
1234689F
4.35e6*
39.46
Abs. Int.
1.69e6
8.47e5
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.26-41.01
417.8253 Fn4
Flags: PBM
4σ 8.74e3
0%
ES 1234678F
1.44e7*
39.04
CS 1234689F
1.59e7*
39.45
ES 1234789F
1.23e7*
40.36
Abs. Int.
6.59e6
3.30e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.26-41.01
419.8220 Fn4
Flags: PBM
4σ 1.80e4
0%
ES 1234678F
3.29e7*
39.04
CS 1234689F
3.54e7*
39.45
ES 1234789F
2.64e7*
40.36
Abs. Int.
1.46e7
7.30e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
NCDPE
38.26-41.01
479.7165 Fn4
Flags: PB
4σ 1.69e3
0%
Abs. Int.
1.15e4
5.73e3
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT


OCDF
2.31e6*
42.55
Rel. Int.
100%
OCDF
41.02-45.00
441.7428 Fn5
Flags: PBM
4σ 1.97e3
0%
Abs. Int.
8.49e5
4.25e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Conc(OCDF) = (2.31e6 + 2.79e6) * 4000pg / (2.35e7 + 2.65e7) * 1.01 * 8.64424g = 46.7pg/g
PSW 11-Aug-2020 10:01
VERIFIED
OCDF
2.79e6*
42.54
Rel. Int.
100%
OCDF
41.02-45.00
443.7398 Fn5
Flags: PBM
4σ 2.72e3
0%
Abs. Int.
1.08e6
5.39e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDF
2.35e7*
42.53
Rel. Int.
100%
OCDF Std.
41.02-45.00
453.7830 Fn5
Flags: PBM
4σ 1.97e3
0%
Abs. Int.
8.42e6
4.21e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDF
2.65e7*
42.53
Rel. Int.
100%
OCDF Std.
41.02-45.00
455.7801 Fn5
Flags: PBM
4σ 3.09e3
0%
Abs. Int.
9.44e6
4.72e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
DCDPE
41.02-45.00
513.6775 Fn5
Flags: PB
4σ 1.48e3
0%
Abs. Int.
8.96e3
4.48e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

Instrument: MM3 (AutoSpec-Ultima) MS Experiment: df_cl4-8_db5MS GC Program: df_db5MS

#	Datafile	Vial#	Lab ID	Wt/Vol	Client/Sample ID		Analyst(s)	Checkcode	Acq Date	Acq Time
2	200810R02	3	CS3_200810_DF_RB	1.00	SIL 20-449-3		PSW	247-456	10-Aug-2020	14:22:08
3	200810R03	21	OPR1_17655_DF	1.00	0_17655_OPR001		PSW	180-044	10-Aug-2020	15:38:07
4	200810R04	2	SBS_200810_DF_RA	1.00	SIL 20-61-1		PSW	830-599	10-Aug-2020	16:24:45
5	200810R05	20	MB1_17655_DF_SDS	10.00	Method Blank		PSW	315-559	10-Aug-2020	17:12:11
6	200810R06	22	B4519_17655_DF_001	9.48	CS-27		PSW	108-741	10-Aug-2020	17:59:44
7	200810R07	23	B4519_17655_DF_002	9.25	CS-28		PSW	179-527	10-Aug-2020	18:47:17
8	200810R08	24	B4519_17655_DF_003	8.82	CS-32		PSW	837-643	10-Aug-2020	19:34:43
9	200810R09	25	B4519_17655_DF_004	9.42	CS-33		PSW	132-368	10-Aug-2020	20:22:09
10	200810R10	26	B4519_17655_DF_005	9.40	CS-34		PSW	745-007	10-Aug-2020	21:09:40
11	200810R11	27	B4519_17655_DF_006	9.09	CS-38		PSW	916-748	10-Aug-2020	21:57:17
12	200810R12	3	CS3_200810_DF_RC	1.00	SIL 20-449-3		PSW	828-092	10-Aug-2020	22:44:50
13	200810R13	21	OPR1_17655_DF-RJ	1.00	0_17655_OPR001	CPSM only	PSW	719-007	10-Aug-2020	23:40:28
14	200810R14	2	SBS_200810_DF_RB	1.00	SIL 20-61-1	CL 11Jul20	PSW	703-687	11-Aug-2020	00:27:11
15	200810R15	28	B4519_17655_DF_007	9.24	CS-39		PSW	970-709	11-Aug-2020	01:14:44
16	200810R16	29	B4519_17655_DF_008	9.38	CS-35		PSW	005-628	11-Aug-2020	02:02:16
17	200810R17	30	B4519_17655_DF_009	9.50	CS-36		PSW	564-159	11-Aug-2020	02:49:50
18	200810R18	31	B4519_17655_DF_010	9.14	CS-37		PSW	407-770	11-Aug-2020	03:37:23
19	200810R19	32	B4519_17655_DF_011	9.47	DUP-02		PSW	473-691	11-Aug-2020	04:24:50
20	200810R20	33	B4519_17655_DF_012	8.62	CS-TB-07		PSW	394-371	11-Aug-2020	05:12:17
21	200810R21	34	B4519_17655_DF_013	8.03	CS-SS-106		PSW	706-730	11-Aug-2020	05:59:49
22	200810R22	35	B4519_17655_DF_014	8.64	CS-SS-109		PSW	629-635	11-Aug-2020	08:01:38
23	200810R23	3	CS3_200810_DF_RD	1.00	SIL 20-449-3		PSW	480-308	11-Aug-2020	08:48:21

REVIEWED
By Paul Walton at 10:28 am, Aug 11, 2020

APPROVED
Carla_Lyon , 11:36:07, 08/11/2020

Project file: not saved
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027

Printed: 11-Aug-2020 10:28

Dioxin/Furan QC Summary	Acq'd: 10 Aug 2020 14:22 PSW	ICAL: MM3_DF_10012020_12JUN2020
Lab ID: CS3_200810_DF_RB	UTP: 11-Aug-2020 08:14:14 PSW	Checkcode: 247-456-MPD
Sample ID: SIL 20-449-3	Report: 11 Aug 2020 09:59 pw	Datafile: 200810R02

Name	RT	Response	RA	OK	Ref. RRFs	Calc. RRFs	Dev'n
2378-TCDD	27.30	8.66E+06	0.81	Y	1.18	1.27	8%
12378-PeCDD	32.83	3.60E+07	1.56	Y	1.14	1.14	1%
123478-HxCDD	36.74	3.30E+07	1.25	Y	1.09	1.10	0%
123678-HxCDD	36.86	3.40E+07	1.27	Y	1.13	1.16	3%
123789-HxCDD	37.16	3.66E+07	1.27	Y	1.05	1.05	0%
1234678-HpCDD	39.97	2.63E+07	1.07	Y	0.98	1.05	7%
OCDD	42.39	3.33E+07	0.92	Y	1.08	1.14	6%
2378-TCDF	26.37	1.29E+07	0.77	Y	0.98	1.05	7%
12378-PeCDF	31.34	5.47E+07	1.53	Y	0.95	0.97	2%
23478-PeCDF	32.48	5.40E+07	1.57	Y	0.95	1.00	5%
123478-HxCDF	35.78	5.09E+07	1.25	Y	1.20	1.22	2%
123678-HxCDF	35.92	5.29E+07	1.25	Y	1.07	1.13	6%
234678-HxCDF	36.56	4.65E+07	1.23	Y	1.10	1.11	1%
123789-HxCDF	37.54	3.74E+07	1.25	Y	1.09	1.10	1%
1234678-HpCDF	39.06	4.11E+07	1.03	Y	1.28	1.34	4%
1234789-HpCDF	40.38	3.15E+07	1.02	Y	1.27	1.33	5%
OCDF	42.55	3.90E+07	0.94	Y	1.01	1.04	3%
ES 2378-TCDD	27.27	6.80E+07	0.77	Y	1.01	0.91	-9%
ES 12378-PeCDD	32.81	6.31E+07	1.64	Y	0.87	0.85	-3%
ES 123478-HxCDD	36.73	6.02E+07	1.27	Y	1.10	0.99	-10%
ES 123678-HxCDD	36.84	5.86E+07	1.27	Y	1.06	0.96	-9%
ES 123789-HxCDD	37.14	6.98E+07	1.29	Y	1.22	1.15	-6%
ES 1234678-HpCDD	39.95	4.99E+07	1.06	Y	0.99	0.82	-17%
ES OCDD	42.37	5.82E+07	0.90	Y	0.67	0.48	-29%
ES 2378-TCDF	26.35	1.23E+08	0.80	Y	1.01	0.93	-8%
ES 12378-PeCDF	31.33	1.13E+08	1.62	Y	0.90	0.85	-5%
ES 23478-PeCDF	32.46	1.08E+08	1.60	Y	0.89	0.82	-7%
ES 123478-HxCDF	35.76	8.31E+07	0.51	Y	1.43	1.36	-5%
ES 123678-HxCDF	35.9	9.36E+07	0.54	Y	1.63	1.54	-6%
ES 234678-HxCDF	36.55	8.41E+07	0.53	Y	1.48	1.38	-7%
ES 123789-HxCDF	37.52	6.79E+07	0.52	Y	1.29	1.12	-14%
ES 1234678-HpCDF	39.05	6.15E+07	0.46	Y	1.15	1.01	-12%
ES 1234789-HpCDF	40.37	4.73E+07	0.46	Y	0.91	0.78	-14%
ES OCDF	42.54	7.49E+07	0.92	Y	0.83	0.61	-26%

Dioxin/Furan QC Summary	Acq'd: 10 Aug 2020 14:22 PSW	ICAL: MM3_DF_10012020_12JUN2020
Lab ID: CS3_200810_DF_RB	UTP: 11-Aug-2020 08:14:14 PSW	Checkcode: 247-456-MPD
Sample ID: SIL 20-449-3	Report: 11 Aug 2020 09:59 pw	Datafile: 200810R02

Name	RT	Response	RA	OK	Ref. RRFs	Calc. RRFs	Dev'n
JS 1234-TCDD	26.59	7.44E+07	0.77	Y	-	-	-
JS 1234-TCDF	24.92	1.32E+08	0.80	Y	-	-	-
JS 123467-HxCDD	37.04	3.04E+07	1.30	Y	-	-	-
CS 37Cl-2378-TCDD	27.30	7.16E+06	n/a	-	1.04	0.96	-7%
CS 12347-PeCDD	32.31	5.71E+07	1.67	Y	0.74	0.77	4%
CS 12346-PeCDF	30.79	1.21E+08	1.60	Y	0.86	0.92	6%
CS 123469-HxCDF	36.21	8.37E+07	0.52	Y	1.36	1.37	1%
CS 1234689-HpCDF	39.45	5.67E+07	0.45	Y	1.05	0.93	-12%
~~SS 37Cl-2378-TCDD~~	~~27.30~~	~~7.16E+06~~	~~n/a~~	~~-~~	~~1.04~~	~~1.05~~	~~1%~~
~~SS 12347-PeCDD~~	~~32.31~~	~~5.71E+07~~	~~1.67~~	~~Y~~	~~0.86~~	~~0.91~~	~~6%~~
~~SS 12346-PeCDF~~	~~30.79~~	~~1.21E+08~~	~~1.60~~	~~Y~~	~~0.96~~	~~1.07~~	~~12%~~
~~SS 123469-HxCDF~~	~~36.21~~	~~8.37E+07~~	~~0.52~~	~~Y~~	~~0.83~~	~~0.89~~	~~7%~~
~~SS 1234689-HpCDF~~	~~39.45~~	~~5.67E+07~~	~~0.45~~	~~Y~~	~~0.92~~	~~0.92~~	~~0%~~
Not used in this project.							
CL 11Aug20							
~~OCDD-a~~	~~42.38~~	~~1.98E+06~~	~~2.29~~	~~Y~~	~~0.07~~	~~0.07~~	~~3%~~
~~OCDF-a~~	~~42.55~~	~~2.36E+06~~	~~2.43~~	~~Y~~	~~0.06~~	~~0.06~~	~~0%~~

METHOD 8290A **PCDD/F CALIBRATION VERIFICATION** **FORM 4A**

Lab Name: SGS North America

Initial Calibration: ICAL: MM3_DF_10012020_12JUN2020

Instrument ID: MM3 GC Column ID: ZB-5ms

VER Data Filename: 200810R02 Analysis Date: 10-AUG-2020 14:22:08

NATIVE ANALYTES	M/Z's FORMING RATIO	ION ABUND. RATIO	QC LIMITS			OK	CONC. FOUND	RANGE (ng/mL)			OK
2,3,7,8-TCDD	M/M+2	0.81	0.65	-	0.89	Y	10.8	8	-	12	Y
1,2,3,7,8-PeCDD	M+2/M+4	1.56	1.32	-	1.78	Y	50.3	40	-	60	Y
1,2,3,4,7,8-HxCDD	M+2/M+4	1.25	1.05	-	1.43	Y	50.2	40	-	60	Y
1,2,3,6,7,8-HxCDD	M+2/M+4	1.27	1.05	-	1.43	Y	51.5	40	-	60	Y
1,2,3,7,8,9-HxCDD	M+2/M+4	1.27	1.05	-	1.43	Y	49.9	40	-	60	Y
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.07	0.88	-	1.20	Y	53.5	40	-	60	Y
OCDD	M+2/M+4	0.92	0.76	-	1.02	Y	106	80	-	120	Y
2,3,7,8-TCDF	M/M+2	0.77	0.65	-	0.89	Y	10.7	8	-	12	Y
1,2,3,7,8-PeCDF	M+2/M+4	1.53	1.32	-	1.78	Y	51.2	40	-	60	Y
2,3,4,7,8-PeCDF	M+2/M+4	1.57	1.32	-	1.78	Y	52.7	40	-	60	Y
1,2,3,4,7,8-HxCDF	M+2/M+4	1.25	1.05	-	1.43	Y	51.2	40	-	60	Y
1,2,3,6,7,8-HxCDF	M+2/M+4	1.25	1.05	-	1.43	Y	52.8	40	-	60	Y
2,3,4,6,7,8-HxCDF	M+2/M+4	1.23	1.05	-	1.43	Y	50.4	40	-	60	Y
1,2,3,7,8,9-HxCDF	M+2/M+4	1.25	1.05	-	1.43	Y	50.5	40	-	60	Y
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.03	0.88	-	1.20	Y	52.2	40	-	60	Y
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.02	0.88	-	1.20	Y	52.4	40	-	60	Y
OCDF	M+2/M+4	0.94	0.76	-	1.02	Y	103	80	-	120	Y

Processed: 11 Aug 2020 09:59 Analyst: pw

METHOD 8290A **PCDD/F CALIBRATION VERIFICATION** **FORM 4B**

Lab Name: SGS North America

Initial Calibration: ICAL: MM3_DF_10012020_12JUN2020

Instrument ID: MM3 GC Column ID: ZB-5ms

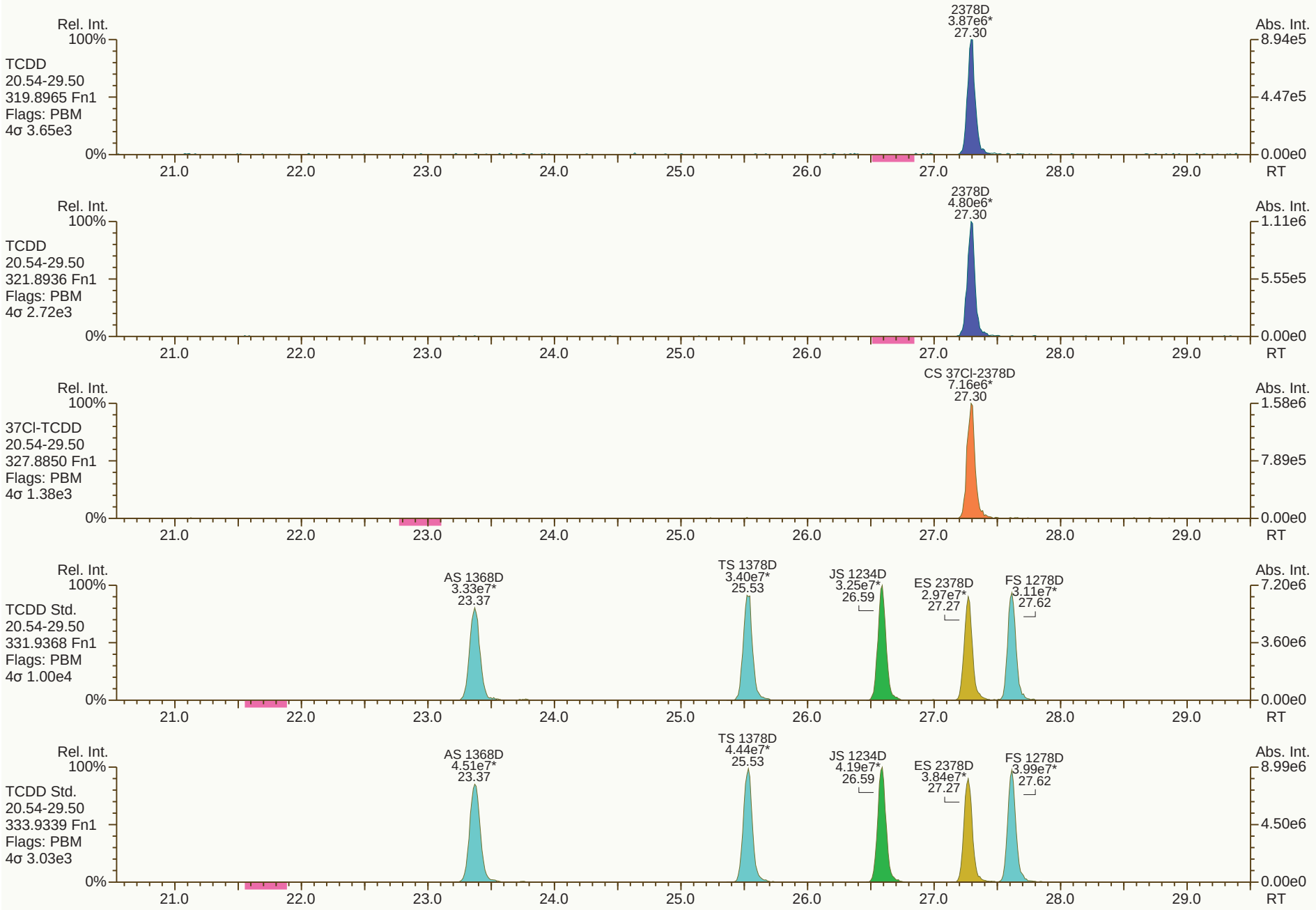
VER Data Filename: 200810R02 Analysis Date: 10-AUG-2020 14:22:08

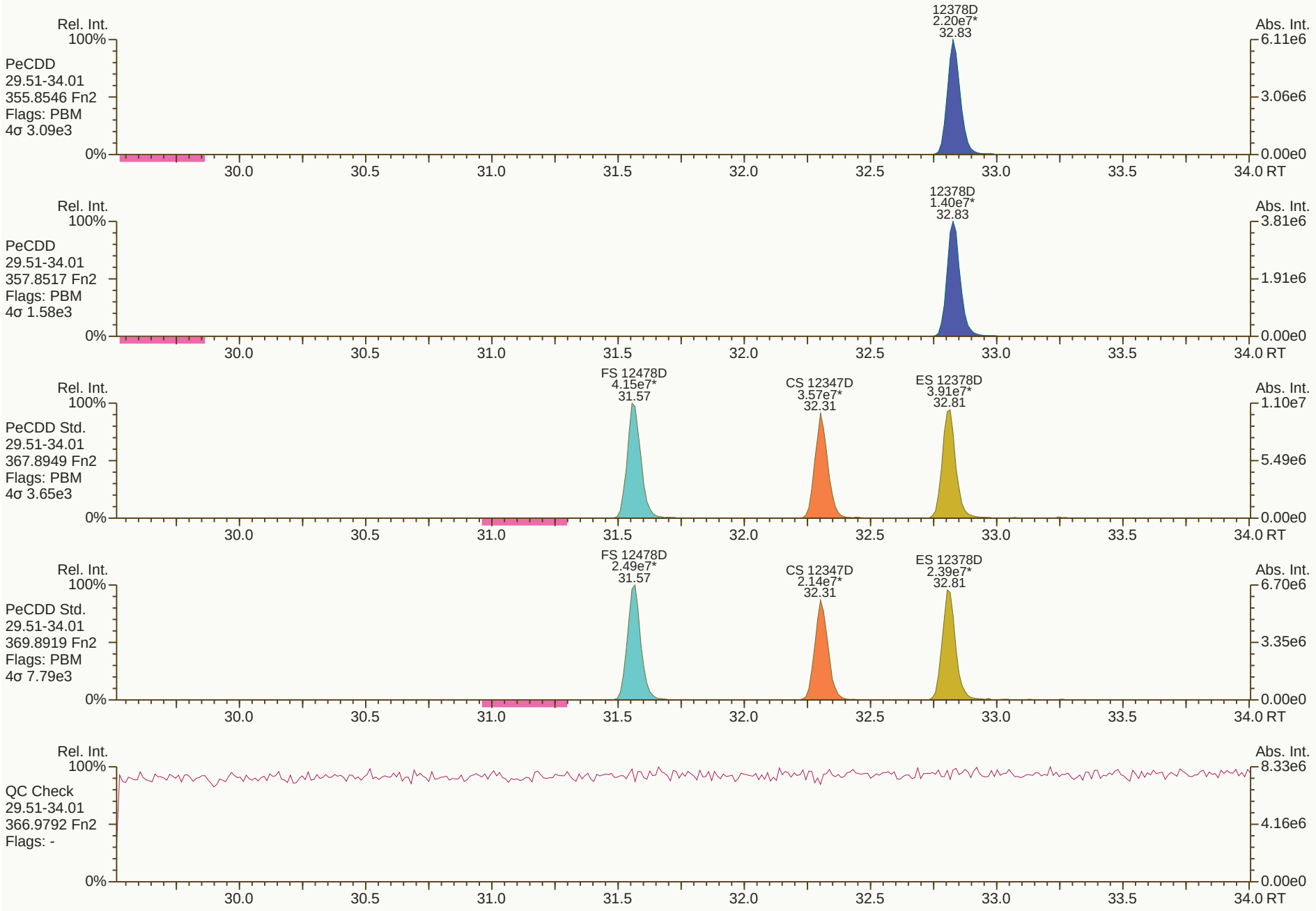
LABELED ANALYTES	M/Z's FORMING RATIO	ION ABUND. RATIO	QC LIMITS			OK	CONC. FOUND	RANGE (ng/mL)			OK
13C-2,3,7,8-TCDD	M/M+2	0.77	0.65	-	0.89	Y	90.8	70	-	130	Y
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.64	1.32	-	1.78	Y	97.4	70	-	130	Y
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.27	1.05	-	1.43	Y	90.3	70	-	130	Y
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.27	1.05	-	1.43	Y	90.8	70	-	130	Y
13C-1,2,3,7,8,9-HxCDD	M+2/M+4	1.29	1.05	-	1.43	Y	94.3	70	-	130	Y
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.06	0.88	-	1.20	Y	82.6	70	-	130	Y
13C-OCDD	M+2/M+4	0.90	0.76	-	1.02	Y	143	140	-	260	Y
13C-2,3,7,8-TCDF	M/M+2	0.80	0.65	-	0.89	Y	92	70	-	130	Y
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.62	1.32	-	1.78	Y	94.9	70	-	130	Y
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.60	1.32	-	1.78	Y	92.5	70	-	130	Y
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.51	0.43	-	0.59	Y	95.5	70	-	130	Y
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.54	0.43	-	0.59	Y	94.2	70	-	130	Y
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.53	0.43	-	0.59	Y	93.4	70	-	130	Y
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	86.4	70	-	130	Y
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.46	0.37	-	0.51	Y	88.1	70	-	130	Y
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.46	0.37	-	0.51	Y	85.8	70	-	130	Y
13C-OCDF	M+2/M+4	0.92	0.76	-	1.02	Y	149	140	-	260	Y
CLEANUP STANDARDS											
37Cl-2,3,7,8-TCDD	n/a						9.28	7.9	-	12.7	Y
13C-1,2,3,4,7-PeCDD	M+2/M+4	1.67	1.32	-	1.78	Y	104	70	-	130	Y
13C-1,2,3,4,6-PeCDF	M+2/M+4	1.60	1.32	-	1.78	Y	106	70	-	130	Y
13C-1,2,3,4,6,9-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	101	70	-	130	Y
13C-1,2,3,4,6,8,9-HpCDF	M/M+2	0.45	0.37	-	0.51	Y	88.4	70	-	130	Y

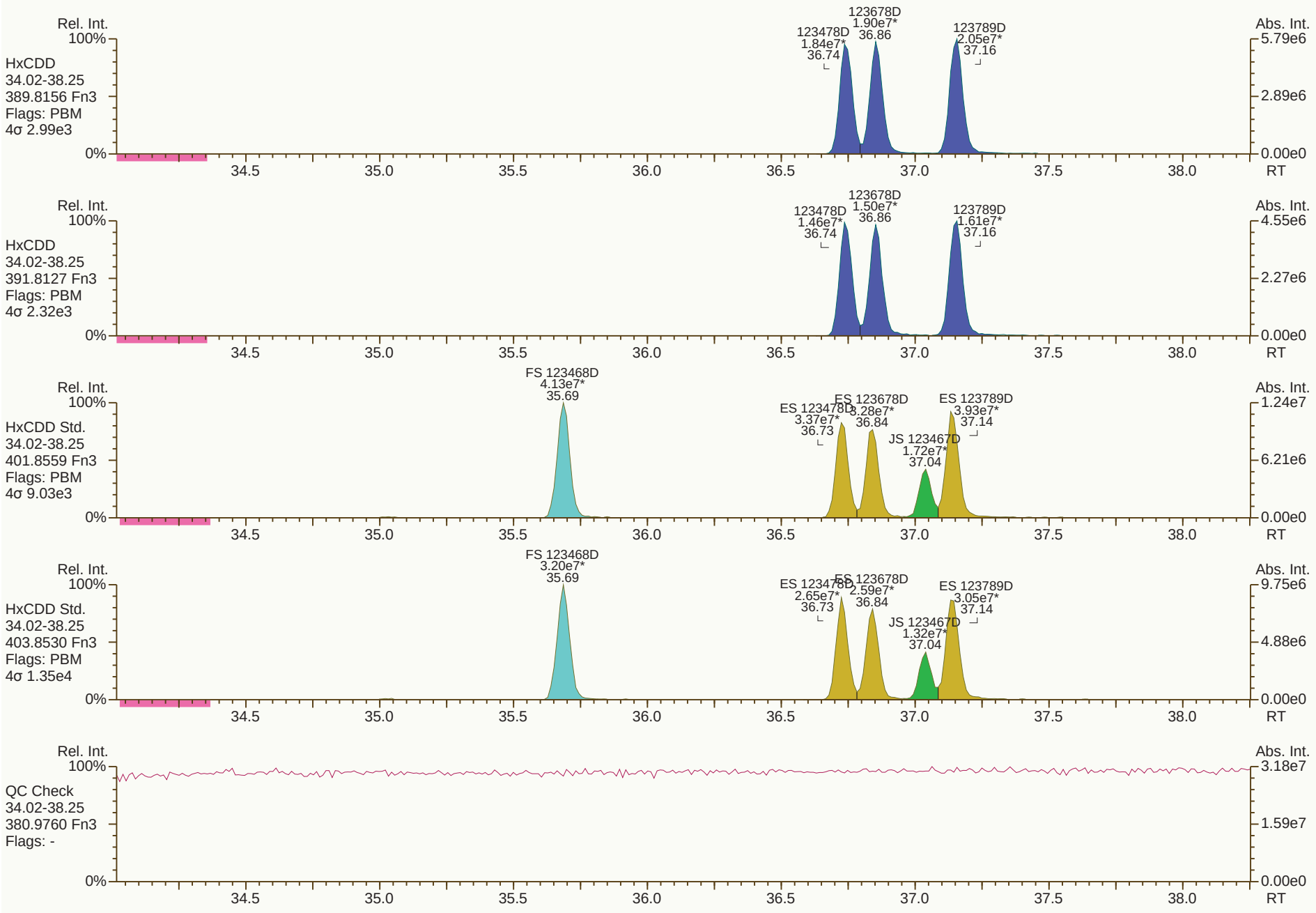
Processed: 11 Aug 2020 09:59 Analyst: pw

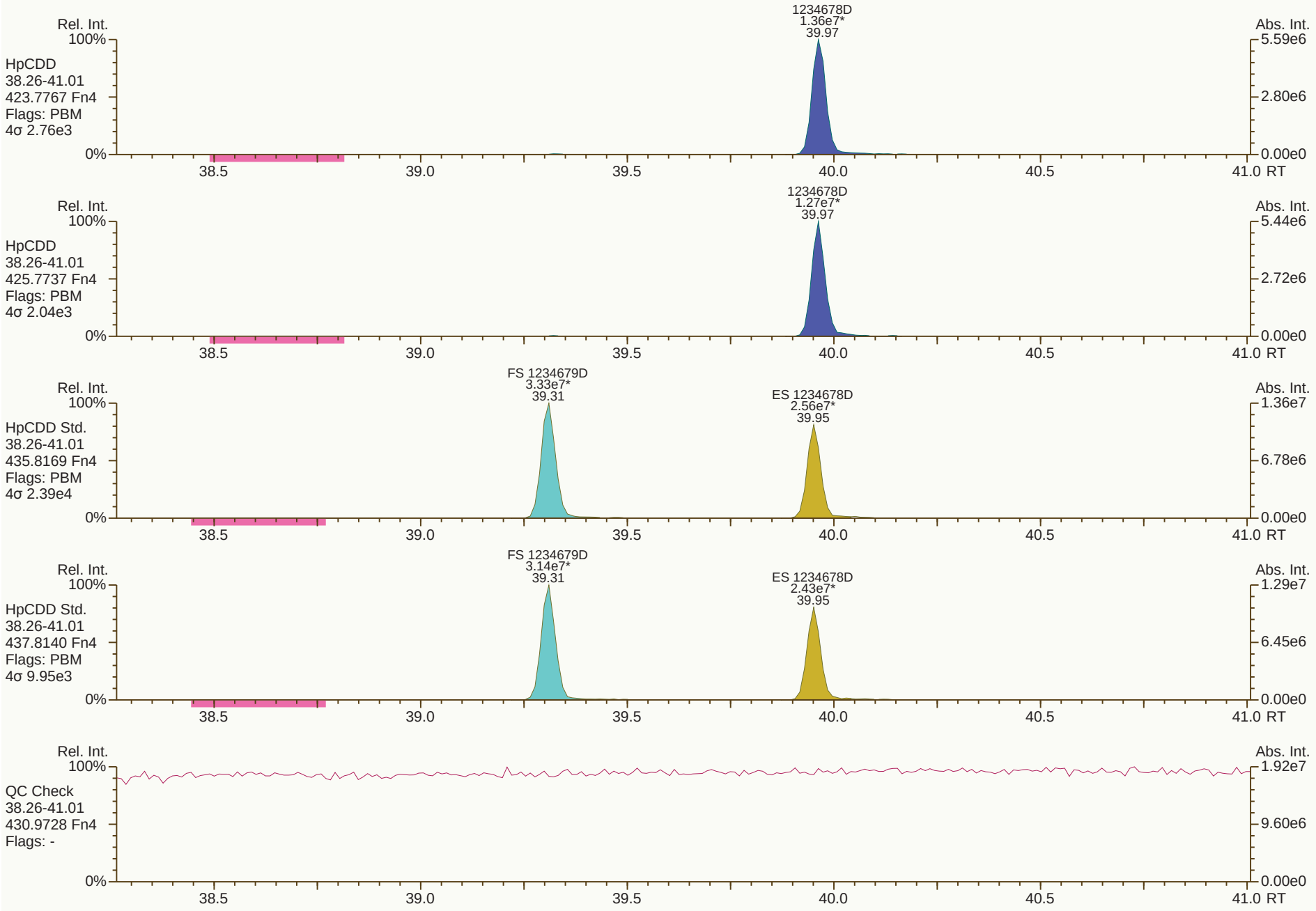


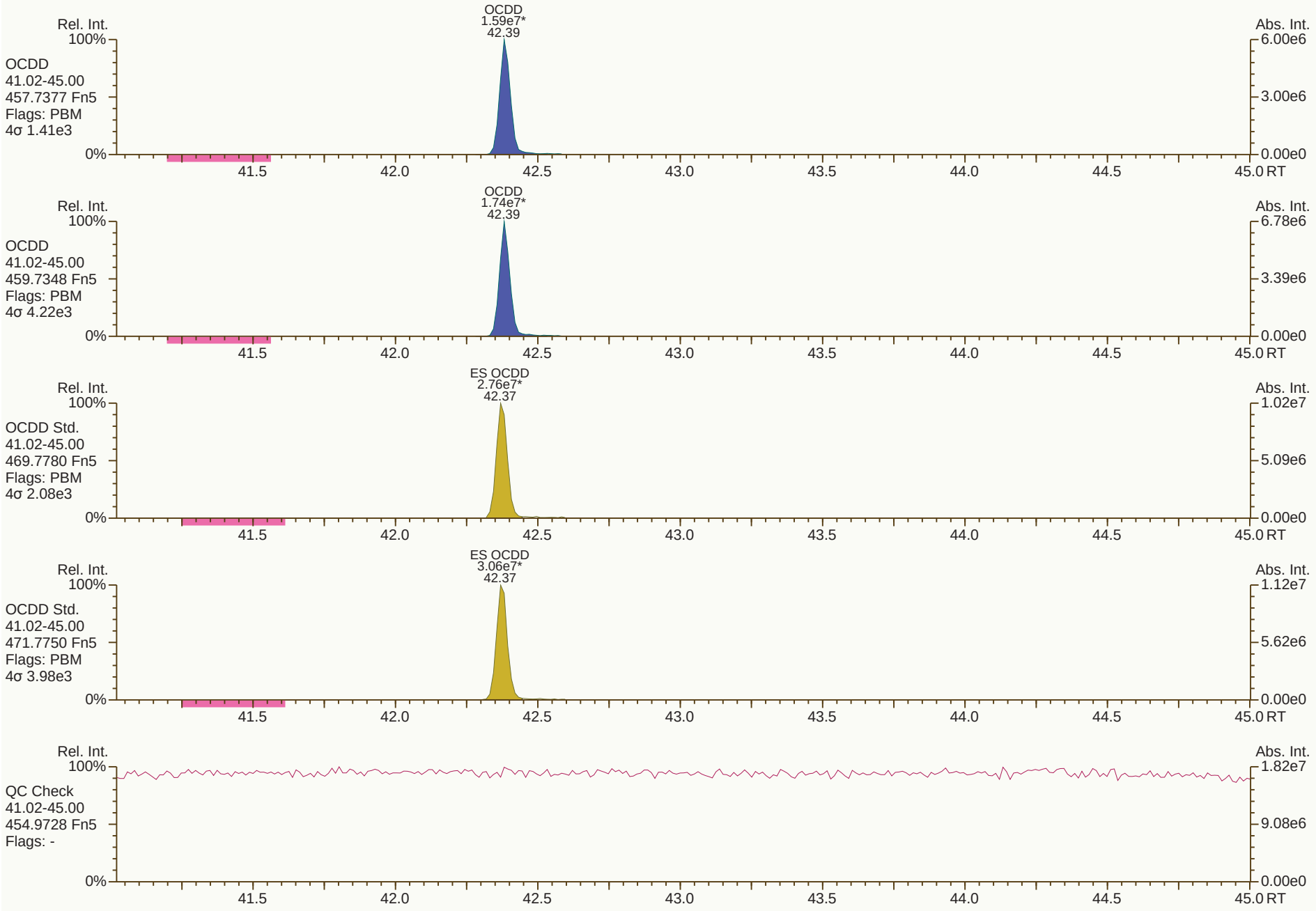
Results: P:\B4500_B4599\B4519\B4519_17655 DF\Resources\CS3_200810_DF_RB.utp_res, saved 11-Aug-2020 10:05 (PSW) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 scc: 247-456 *PKD: n/a Printed: 11-Aug-2020 10:08 Page 1 of 12*

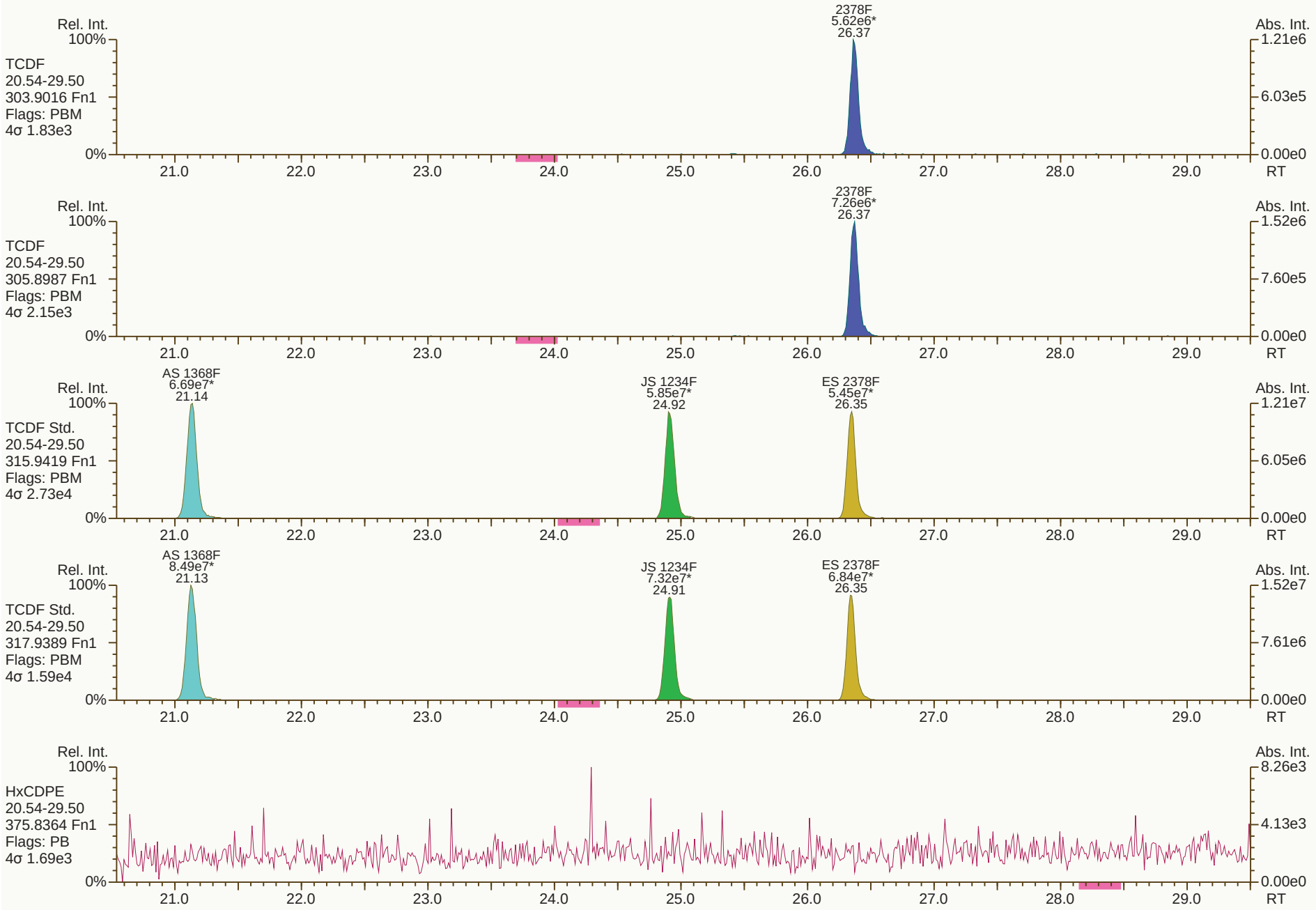

Rel. Int.
100%
TCDD
20.54-29.50
319.8965 Fn1
Flags: PBM
4σ 3.65e3
0%
2378D
3.87e6*
27.30
Abs. Int.
8.94e5
4.47e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD
20.54-29.50
321.8936 Fn1
Flags: PBM
4σ 2.72e3
0%
2378D
4.80e6*
27.30
Abs. Int.
1.11e6
5.55e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
37Cl-TCDD
20.54-29.50
327.8850 Fn1
Flags: PBM
4σ 1.38e3
0%
CS 37Cl-2378D
7.16e6*
27.30
Abs. Int.
1.58e6
7.89e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
331.9368 Fn1
Flags: PBM
4σ 1.00e4
0%
AS 1368D
3.33e7*
23.37
TS 1378D
3.40e7*
25.53
JS 1234D
3.25e7*
26.59
ES 2378D
2.97e7*
27.27
FS 1278D
3.11e7*
27.62
Abs. Int.
7.20e6
3.60e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
333.9339 Fn1
Flags: PBM
4σ 3.03e3
0%
AS 1368D
4.51e7*
23.37
TS 1378D
4.44e7*
25.53
JS 1234D
4.19e7*
26.59
ES 2378D
3.84e7*
27.27
FS 1278D
3.99e7*
27.62
Abs. Int.
8.99e6
4.50e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
PeCDD
29.51-34.01
355.8546 Fn2
Flags: PBM
4σ 3.09e3
0%
12378D
2.20e7*
32.83
Abs. Int.
6.11e6
3.06e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD
29.51-34.01
357.8517 Fn2
Flags: PBM
4σ 1.58e3
0%
12378D
1.40e7*
32.83
Abs. Int.
3.81e6
1.91e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
367.8949 Fn2
Flags: PBM
4σ 3.65e3
0%
FS 12478D
4.15e7*
31.57
CS 12347D
3.57e7*
32.31
ES 12378D
3.91e7*
32.81
Abs. Int.
1.10e7
5.49e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
369.8919 Fn2
Flags: PBM
4σ 7.79e3
0%
FS 12478D
2.49e7*
31.57
CS 12347D
2.14e7*
32.31
ES 12378D
2.39e7*
32.81
Abs. Int.
6.70e6
3.35e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
QC Check
29.51-34.01
366.9792 Fn2
Flags: -
0%
Abs. Int.
8.33e6
4.16e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT


Rel. Int.
100%
HxCDD
34.02-38.25
389.8156 Fn3
Flags: PBM
4σ 2.99e3
123678D
1.90e7*
36.86
123478D
1.84e7*
36.74
123789D
2.05e7*
37.16
Abs. Int.
5.79e6
2.89e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD
34.02-38.25
391.8127 Fn3
Flags: PBM
4σ 2.32e3
123678D
1.50e7*
36.86
123478D
1.46e7*
36.74
123789D
1.61e7*
37.16
Abs. Int.
4.55e6
2.27e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
401.8559 Fn3
Flags: PBM
4σ 9.03e3
FS 123468D
4.13e7*
35.69
ES 123478D
3.37e7*
36.73
ES 123678D
3.28e7*
36.84
JS 123467D
1.72e7*
37.04
ES 123789D
3.93e7*
37.14
Abs. Int.
1.24e7
6.21e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
403.8530 Fn3
Flags: PBM
4σ 1.35e4
FS 123468D
3.20e7*
35.69
ES 123478D
2.65e7*
36.73
ES 123678D
2.59e7*
36.84
JS 123467D
1.32e7*
37.04
ES 123789D
3.05e7*
37.14
Abs. Int.
9.75e6
4.88e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
Abs. Int.
3.18e7
1.59e7
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT


Rel. Int.
100%
HpCDD
38.26-41.01
423.7767 Fn4
Flags: PBM
4σ 2.76e3
0%
1234678D
1.36e7*
39.97
Abs. Int.
5.59e6
2.80e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.26-41.01
425.7737 Fn4
Flags: PBM
4σ 2.04e3
0%
1234678D
1.27e7*
39.97
Abs. Int.
5.44e6
2.72e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
435.8169 Fn4
Flags: PBM
4σ 2.39e4
0%
FS 1234679D
3.33e7*
39.31
ES 1234678D
2.56e7*
39.95
Abs. Int.
1.36e7
6.78e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
437.8140 Fn4
Flags: PBM
4σ 9.95e3
0%
FS 1234679D
3.14e7*
39.31
ES 1234678D
2.43e7*
39.95
Abs. Int.
1.29e7
6.45e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.26-41.01
430.9728 Fn4
Flags: -
0%
Abs. Int.
1.92e7
9.60e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT


OCDD
1.59e7*
42.39
Rel. Int.
Abs. Int.
100%
OCDD
41.02-45.00
457.7377 Fn5
Flags: PBM
4σ 1.41e3
6.00e6
3.00e6
0%
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDD
1.74e7*
42.39
Rel. Int.
Abs. Int.
100%
OCDD
41.02-45.00
459.7348 Fn5
Flags: PBM
4σ 4.22e3
6.78e6
3.39e6
0%
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
2.76e7*
42.37
Rel. Int.
Abs. Int.
100%
OCDD Std.
41.02-45.00
469.7780 Fn5
Flags: PBM
4σ 2.08e3
1.02e7
5.09e6
0%
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
3.06e7*
42.37
Rel. Int.
Abs. Int.
100%
OCDD Std.
41.02-45.00
471.7750 Fn5
Flags: PBM
4σ 3.98e3
1.12e7
5.62e6
0%
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
Abs. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
1.82e7
9.08e6
0%
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

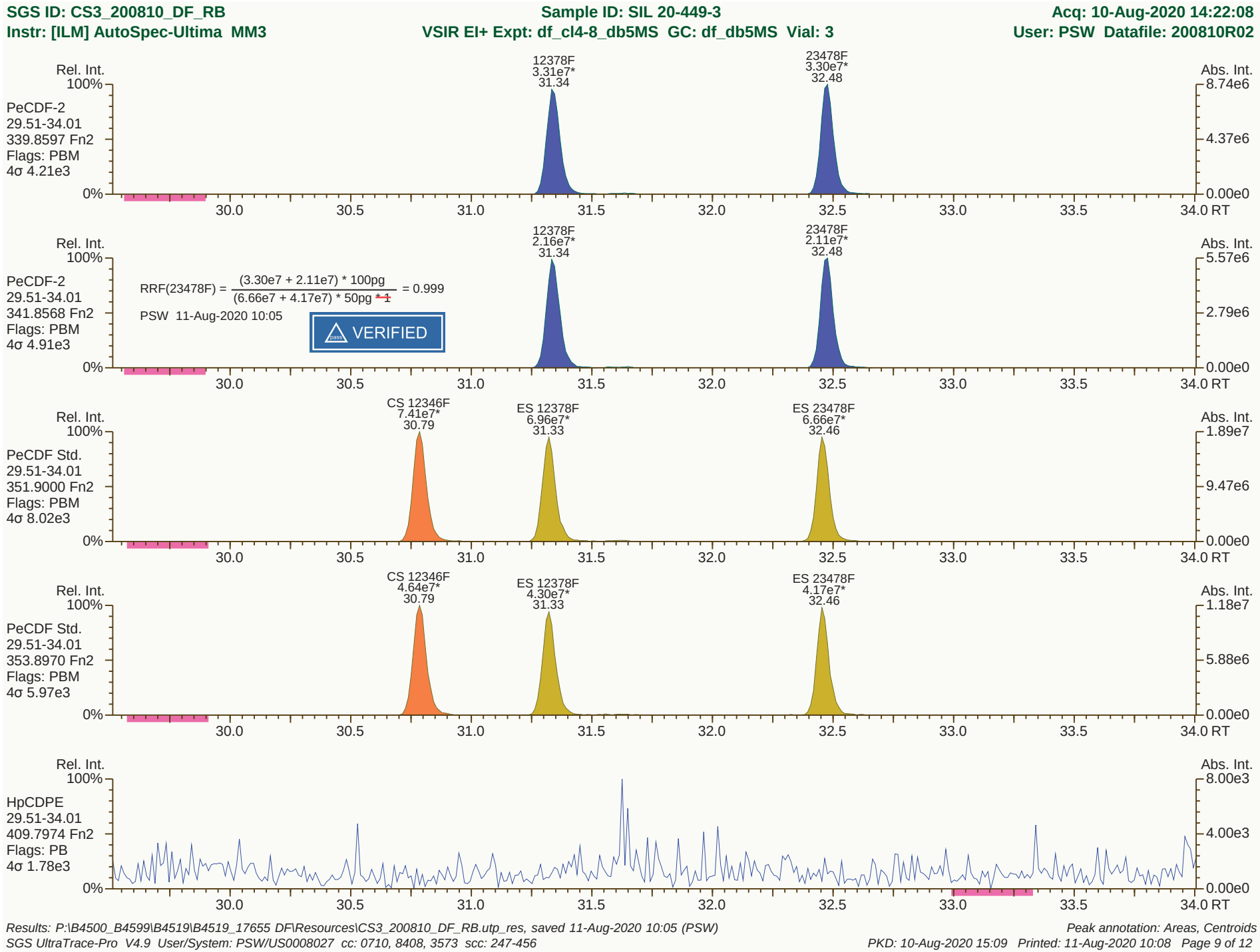

Rel. Int.
100%
TCDF
20.54-29.50
303.9016 Fn1
Flags: PBM
4σ 1.83e3
2378F
5.62e6*
26.37
Abs. Int.
1.21e6
6.03e5
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF
20.54-29.50
305.8987 Fn1
Flags: PBM
4σ 2.15e3
2378F
7.26e6*
26.37
Abs. Int.
1.52e6
7.60e5
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
315.9419 Fn1
Flags: PBM
4σ 2.73e4
AS 1368F
6.69e7*
21.14
JS 1234F
5.85e7*
24.92
ES 2378F
5.45e7*
26.35
Abs. Int.
1.21e7
6.05e6
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
317.9389 Fn1
Flags: PBM
4σ 1.59e4
AS 1368F
8.49e7*
21.13
JS 1234F
7.32e7*
24.91
ES 2378F
6.84e7*
26.35
Abs. Int.
1.52e7
7.61e6
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
HxCDPE
20.54-29.50
375.8364 Fn1
Flags: PB
4σ 1.69e3
Abs. Int.
8.26e3
4.13e3
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT

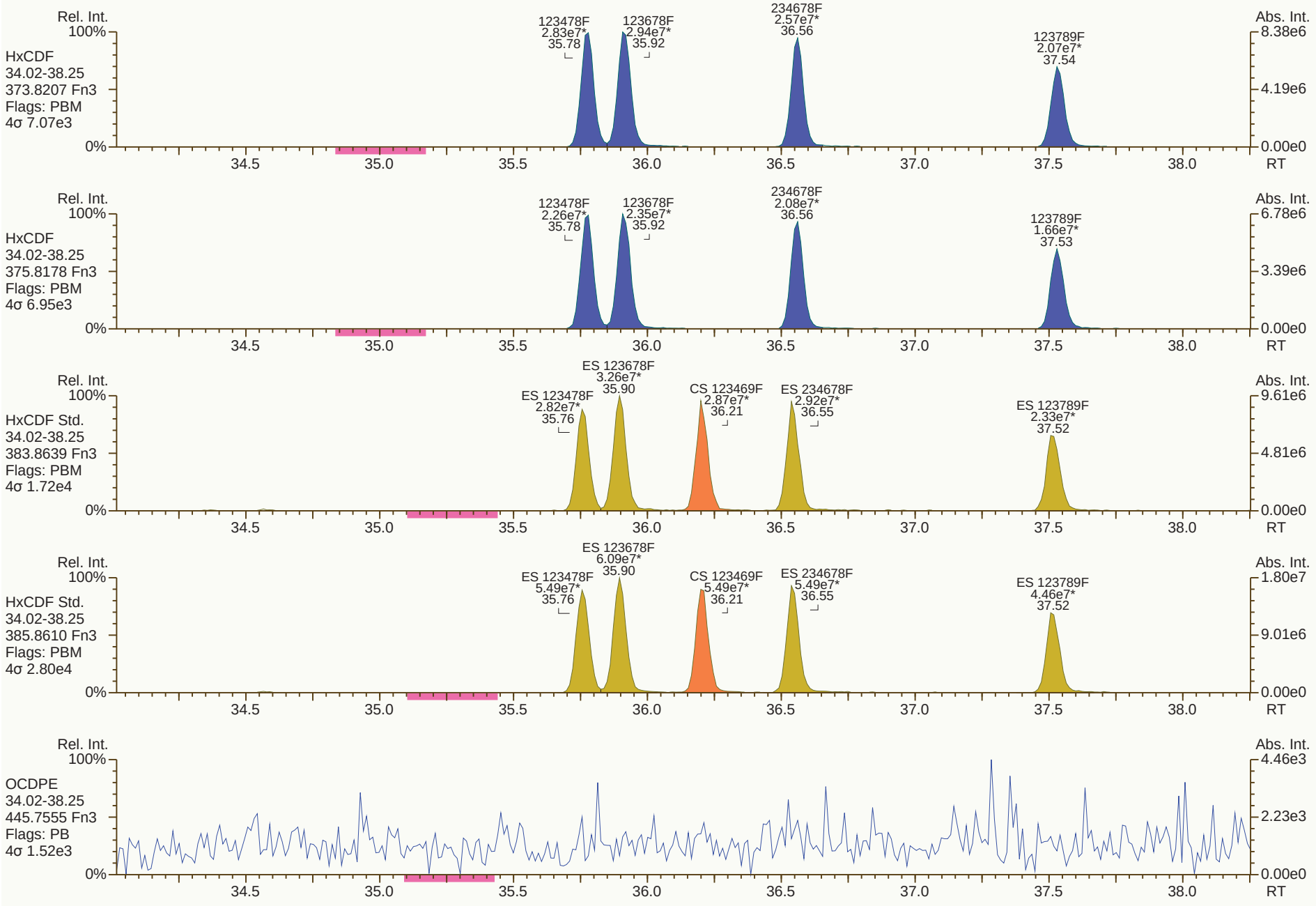
SGS ID: CS3_200810_DF_RB **Sample ID: SIL 20-449-3** **Acq: 10-Aug-2020 14:22:08**
Instr: [ILM] AutoSpec-Ultima MM3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 3** **User: PSW Datafile: 200810R02**



Results: P:\B4500_B4599\B4519\B4519_17655 DF\Resources\CS3_200810_DF_RB.utp_res, saved 11-Aug-2020 10:05 (PSW) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 0250 scc: 247-456 *PKD: 10-Aug-2020 15:09 Printed: 11-Aug-2020 10:08 Page 8 of 12*

SGS ID: CS3_200810_DF_RB
Instr: [ILM] AutoSpec-Ultima MM3
Sample ID: SIL 20-449-3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 3
Acq: 10-Aug-2020 14:22:08
User: PSW Datafile: 200810R02




Rel. Int.
100%
HxCDF
34.02-38.25
373.8207 Fn3
Flags: PBM
4σ 7.07e3
123478F
2.83e7*
35.78
123678F
2.94e7*
35.92
234678F
2.57e7*
36.56
123789F
2.07e7*
37.54
Abs. Int.
8.38e6
4.19e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDF
34.02-38.25
375.8178 Fn3
Flags: PBM
4σ 6.95e3
123478F
2.26e7*
35.78
123678F
2.35e7*
35.92
234678F
2.08e7*
36.56
123789F
1.66e7*
37.53
Abs. Int.
6.78e6
3.39e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDF Std.
34.02-38.25
383.8639 Fn3
Flags: PBM
4σ 1.72e4
ES 123678F
3.26e7*
35.90
ES 123478F
2.82e7*
35.76
CS 123469F
2.87e7*
36.21
ES 234678F
2.92e7*
36.55
ES 123789F
2.33e7*
37.52
Abs. Int.
9.61e6
4.81e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDF Std.
34.02-38.25
385.8610 Fn3
Flags: PBM
4σ 2.80e4
ES 123678F
6.09e7*
35.90
ES 123478F
5.49e7*
35.76
CS 123469F
5.49e7*
36.21
ES 234678F
5.49e7*
36.55
ES 123789F
4.46e7*
37.52
Abs. Int.
1.80e7
9.01e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
OCDPE
34.02-38.25
445.7555 Fn3
Flags: PB
4σ 1.52e3
Abs. Int.
4.46e3
2.23e3
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT


Rel. Int.
100%
HpCDF
38.26-41.01
407.7818 Fn4
Flags: PBM
4σ 7.52e3
1234678F
2.09e7*
39.06
1234789F
1.59e7*
40.38
Abs. Int.
7.82e6
3.91e6
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF
38.26-41.01
409.7788 Fn4
Flags: PBM
4σ 5.16e3
1234678F
2.02e7*
39.06
1234789F
1.55e7*
40.38
Abs. Int.
7.58e6
3.79e6
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.26-41.01
417.8253 Fn4
Flags: PBM
4σ 1.72e4
ES 1234678F
1.93e7*
39.05
CS 1234689F
1.76e7*
39.45
ES 1234789F
1.49e7*
40.37
Abs. Int.
6.98e6
3.49e6
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.26-41.01
419.8220 Fn4
Flags: PBM
4σ 1.62e4
ES 1234678F
4.22e7*
39.05
CS 1234689F
3.91e7*
39.45
ES 1234789F
3.24e7*
40.37
Abs. Int.
1.60e7
8.01e6
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
NCDPE
38.26-41.01
479.7165 Fn4
Flags: PB
4σ 1.10e3
Abs. Int.
3.81e3
1.91e3
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT

SGS ID: CS3_200810_DF_RB **Sample ID: SIL 20-449-3** **Acq: 10-Aug-2020 14:22:08**

Instr: [ILM] AutoSpec-Ultima MM3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 3** **User: PSW Datafile: 200810R02**



Results: P:\B4500_B4599\B4519\B4519_17655 DF\Resources\CS3_200810_DF_RB.utp_res, saved 11-Aug-2020 10:05 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 0115, 0973, 3924 scc: 247-456 *PKD: 10-Aug-2020 15:09 Printed: 11-Aug-2020 10:09 Page 12 of 12*

Dioxin/Furan QC Summary		Acq'd: 10 Aug 2020 22:44 PSW				ICAL: MM3_DF_10012020_12JUN2020	
Lab ID: CS3_200810_DF_RC		UTP: 11-Aug-2020 08:48:07 PSW				Checkcode: 828-092-FFM	
Sample ID: SIL 20-449-3		Report: 11 Aug 2020 09:59 pw				Datafile: 200810R12	
Name	**RT**	**Response**	**RA**	**OK**	**Ref. RRFs**	**Calc. RRFs**	**Dev'n**
2378-TCDD	27.29	1.24E+07	0.78	Y	1.18	1.27	8%
12378-PeCDD	32.83	4.88E+07	1.56	Y	1.14	1.13	-1%
123478-HxCDD	36.74	4.31E+07	1.27	Y	1.09	1.11	2%
123678-HxCDD	36.85	4.32E+07	1.26	Y	1.13	1.16	3%
123789-HxCDD	37.15	4.56E+07	1.26	Y	1.05	1.04	-1%
1234678-HpCDD	39.96	3.31E+07	1.05	Y	0.98	1.02	3%
OCDD	42.39	4.02E+07	0.91	Y	1.08	1.08	1%
2378-TCDF	26.36	1.79E+07	0.81	Y	0.98	1.05	7%
12378-PeCDF	31.34	7.42E+07	1.58	Y	0.95	1.00	5%
23478-PeCDF	32.47	7.14E+07	1.58	Y	0.95	0.99	5%
123478-HxCDF	35.77	6.50E+07	1.25	Y	1.20	1.22	2%
123678-HxCDF	35.91	6.79E+07	1.28	Y	1.07	1.12	5%
234678-HxCDF	36.56	6.18E+07	1.26	Y	1.10	1.17	6%
123789-HxCDF	37.53	4.98E+07	1.23	Y	1.09	1.15	5%
1234678-HpCDF	39.05	5.30E+07	1.03	Y	1.28	1.32	3%
1234789-HpCDF	40.38	3.86E+07	1.04	Y	1.27	1.35	6%
OCDF	42.55	4.73E+07	0.90	Y	1.01	1.03	2%
ES 2378-TCDD	27.26	9.77E+07	0.76	Y	1.01	0.97	-4%
ES 12378-PeCDD	32.81	8.67E+07	1.62	Y	0.87	0.86	-2%
ES 123478-HxCDD	36.72	7.74E+07	1.30	Y	1.10	1.02	-7%
ES 123678-HxCDD	36.84	7.45E+07	1.31	Y	1.06	0.98	-7%
ES 123789-HxCDD	37.14	8.79E+07	1.31	Y	1.22	1.16	-5%
ES 1234678-HpCDD	39.95	6.52E+07	1.05	Y	0.99	0.86	-13%
ES OCDD	42.38	7.40E+07	0.91	Y	0.67	0.49	-27%
ES 2378-TCDF	26.34	1.71E+08	0.79	Y	1.01	0.99	-3%
ES 12378-PeCDF	31.32	1.48E+08	1.58	Y	0.90	0.86	-5%
ES 23478-PeCDF	32.45	1.44E+08	1.59	Y	0.89	0.83	-6%
ES 123478-HxCDF	35.75	1.06E+08	0.52	Y	1.43	1.40	-2%
ES 123678-HxCDF	35.89	1.21E+08	0.52	Y	1.63	1.59	-2%
ES 234678-HxCDF	36.54	1.06E+08	0.53	Y	1.48	1.40	-5%
ES 123789-HxCDF	37.51	8.67E+07	0.53	Y	1.29	1.14	-11%
ES 1234678-HpCDF	39.04	8.02E+07	0.45	Y	1.15	1.06	-8%
ES 1234789-HpCDF	40.37	5.73E+07	0.44	Y	0.91	0.75	-17%
ES OCDF	42.54	9.14E+07	0.90	Y	0.83	0.60	-27%

Dioxin/Furan QC Summary	Acq'd: 10 Aug 2020 22:44 PSW	ICAL: MM3_DF_10012020_12JUN2020
Lab ID: CS3_200810_DF_RC	UTP: 11-Aug-2020 08:48:07 PSW	Checkcode: 828-092-FFM
Sample ID: SIL 20-449-3	Report: 11 Aug 2020 09:59 pw	Datafile: 200810R12

Name	RT	Response	RA	OK	Ref. RRFs	Calc. RRFs	Dev'n
JS 1234-TCDD	26.58	1.01E+08	0.80	Y	-	-	-
JS 1234-TCDF	24.90	1.73E+08	0.79	Y	-	-	-
JS 123467-HxCDD	37.03	3.79E+07	1.31	Y	-	-	-
CS 37Cl-2378-TCDD	27.29	1.06E+07	n/a	-	1.04	1.05	1%
CS 12347-PeCDD	32.30	7.70E+07	1.67	Y	0.74	0.76	3%
CS 12346-PeCDF	30.78	1.59E+08	1.57	Y	0.86	0.92	7%
CS 123469-HxCDF	36.20	1.05E+08	0.52	Y	1.36	1.39	2%
CS 1234689-HpCDF	39.45	7.44E+07	0.46	Y	1.05	0.98	-7%
~~SS 37Cl-2378-TCDD~~	~~27.29~~	~~1.06E+07~~	~~n/a~~	~~-~~	~~1.04~~	~~1.08~~	~~4%~~
~~SS 12347-PeCDD~~	~~32.30~~	~~7.70E+07~~	~~1.67~~	~~Y~~	~~0.86~~	~~0.89~~	~~4%~~
~~SS 12346-PeCDF~~	~~30.78~~	~~1.59E+08~~	~~1.57~~	~~Y~~	~~0.96~~	~~1.07~~	~~12%~~
~~SS 123469-HxCDF~~	~~36.20~~	~~1.05E+08~~	~~0.52~~	~~Y~~	~~0.83~~	~~0.87~~	~~4%~~
~~SS 1234689-HpCDF~~	~~39.45~~	~~7.44E+07~~	~~0.46~~	~~Y~~	~~0.92~~	~~0.93~~	~~0%~~
Not used in this project.							
CL 11Aug20							
~~OCDD-a~~	~~42.38~~	~~2.26E+06~~	~~2.23~~	~~Y~~	~~0.07~~	~~0.06~~	~~-8%~~
~~OCDF-a~~	~~42.55~~	~~2.73E+06~~	~~2.36~~	~~Y~~	~~0.06~~	~~0.06~~	~~-6%~~

METHOD 8290A **PCDD/F CALIBRATION VERIFICATION** **FORM 4A**

Lab Name: SGS North America

Initial Calibration: ICAL: MM3_DF_10012020_12JUN2020

Instrument ID: MM3 GC Column ID: ZB-5ms

VER Data Filename: 200810R12 Analysis Date: 10-AUG-2020 22:44:50

NATIVE ANALYTES	M/Z's FORMING RATIO	ION ABUND. RATIO	QC LIMITS			OK	CONC. FOUND	RANGE (ng/mL)			OK
2,3,7,8-TCDD	M/M+2	0.78	0.65	-	0.89	Y	10.8	8	-	12	Y
1,2,3,7,8-PeCDD	M+2/M+4	1.56	1.32	-	1.78	Y	49.6	40	-	60	Y
1,2,3,4,7,8-HxCDD	M+2/M+4	1.27	1.05	-	1.43	Y	51	40	-	60	Y
1,2,3,6,7,8-HxCDD	M+2/M+4	1.26	1.05	-	1.43	Y	51.5	40	-	60	Y
1,2,3,7,8,9-HxCDD	M+2/M+4	1.26	1.05	-	1.43	Y	49.5	40	-	60	Y
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.05	0.88	-	1.20	Y	51.6	40	-	60	Y
OCDD	M+2/M+4	0.91	0.76	-	1.02	Y	101	80	-	120	Y
2,3,7,8-TCDF	M/M+2	0.81	0.65	-	0.89	Y	10.7	8	-	12	Y
1,2,3,7,8-PeCDF	M+2/M+4	1.58	1.32	-	1.78	Y	52.7	40	-	60	Y
2,3,4,7,8-PeCDF	M+2/M+4	1.58	1.32	-	1.78	Y	52.5	40	-	60	Y
1,2,3,4,7,8-HxCDF	M+2/M+4	1.25	1.05	-	1.43	Y	51.1	40	-	60	Y
1,2,3,6,7,8-HxCDF	M+2/M+4	1.28	1.05	-	1.43	Y	52.4	40	-	60	Y
2,3,4,6,7,8-HxCDF	M+2/M+4	1.26	1.05	-	1.43	Y	53.1	40	-	60	Y
1,2,3,7,8,9-HxCDF	M+2/M+4	1.23	1.05	-	1.43	Y	52.6	40	-	60	Y
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.03	0.88	-	1.20	Y	51.6	40	-	60	Y
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.04	0.88	-	1.20	Y	53.1	40	-	60	Y
OCDF	M+2/M+4	0.90	0.76	-	1.02	Y	102	80	-	120	Y

Processed: 11 Aug 2020 09:59 Analyst: pw

METHOD 8290A **PCDD/F CALIBRATION VERIFICATION** **FORM 4B**

Lab Name: SGS North America

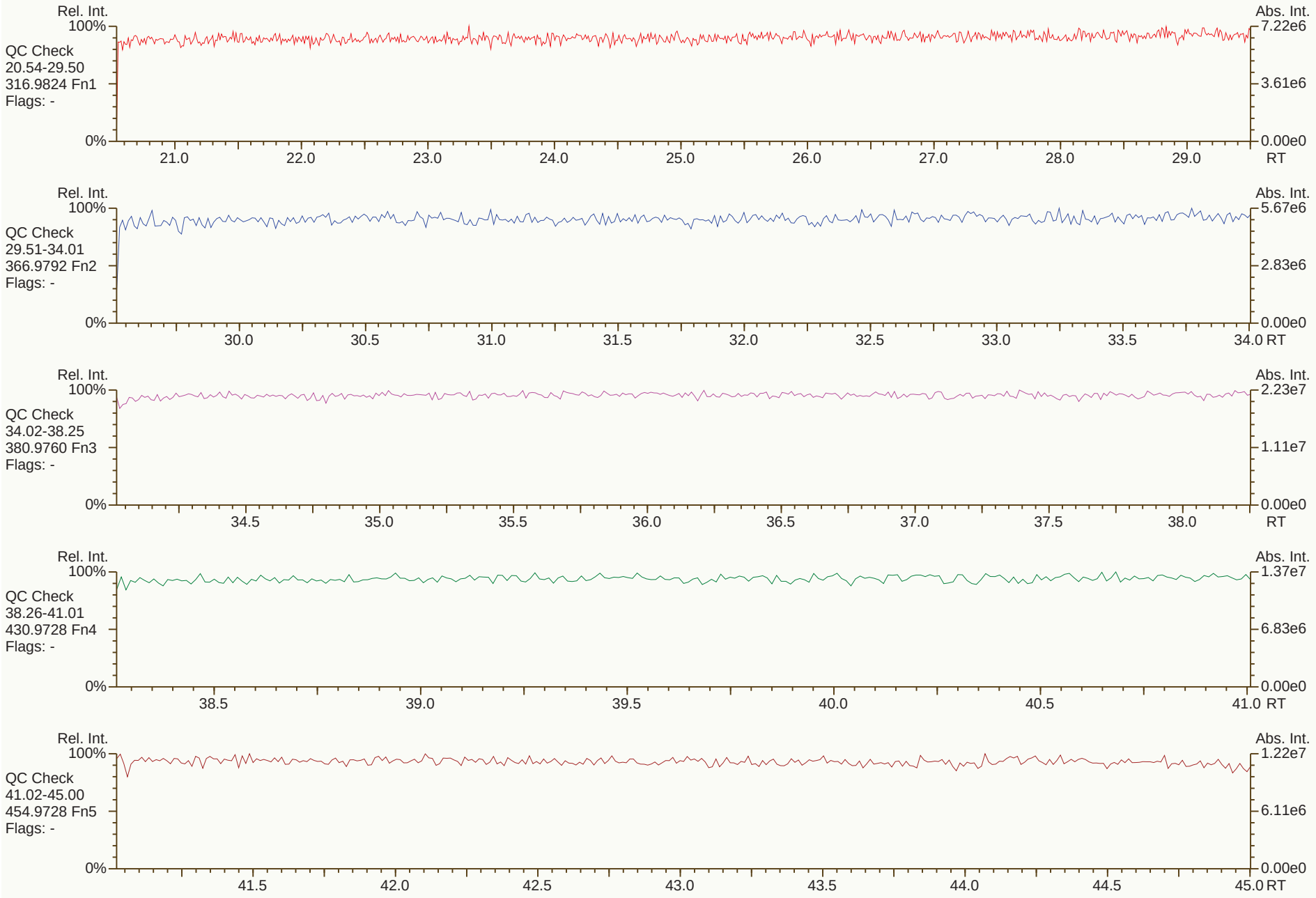
Initial Calibration: ICAL: MM3_DF_10012020_12JUN2020

Instrument ID: MM3 GC Column ID: ZB-5ms

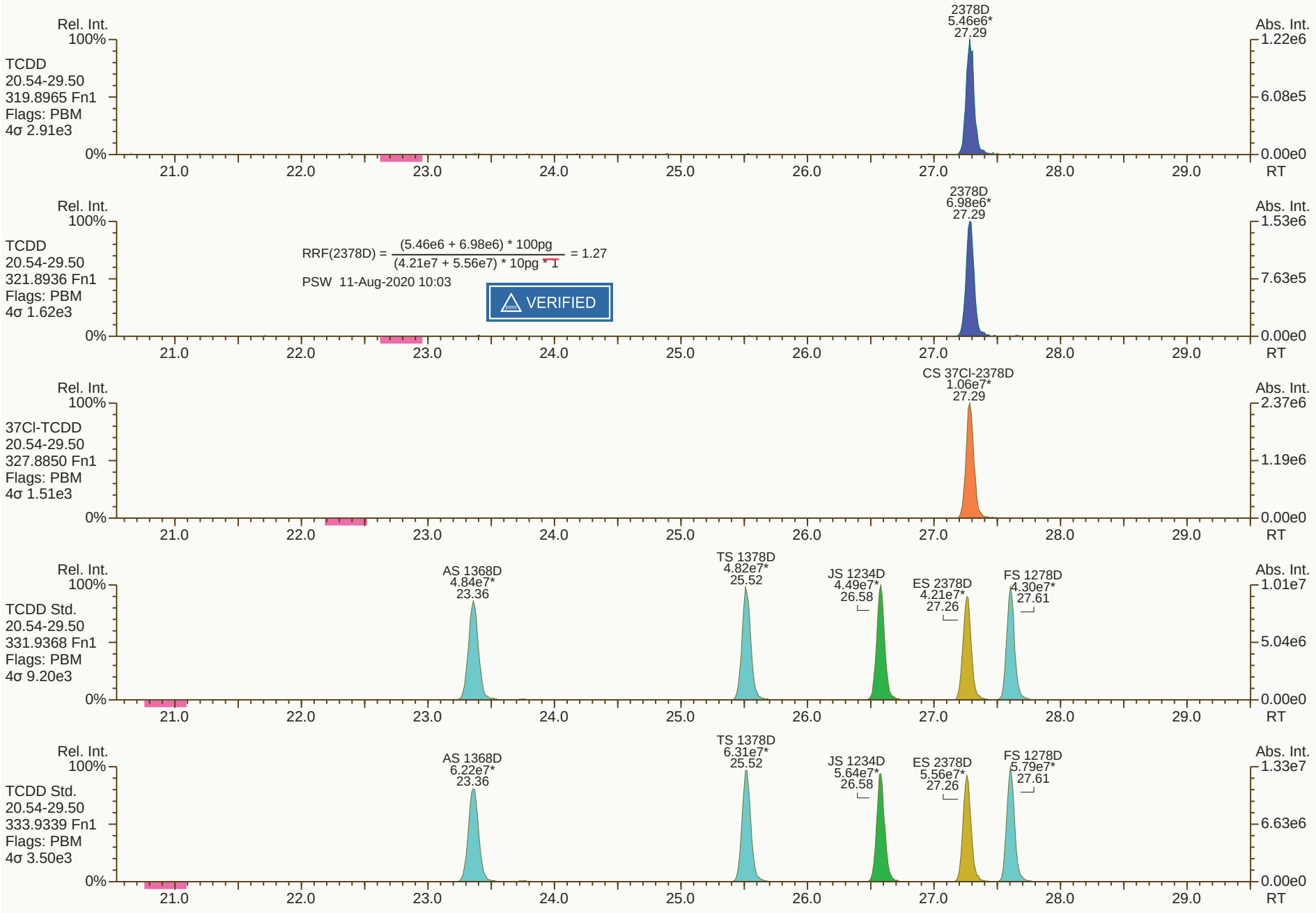
VER Data Filename: 200810R12 Analysis Date: 10-AUG-2020 22:44:50

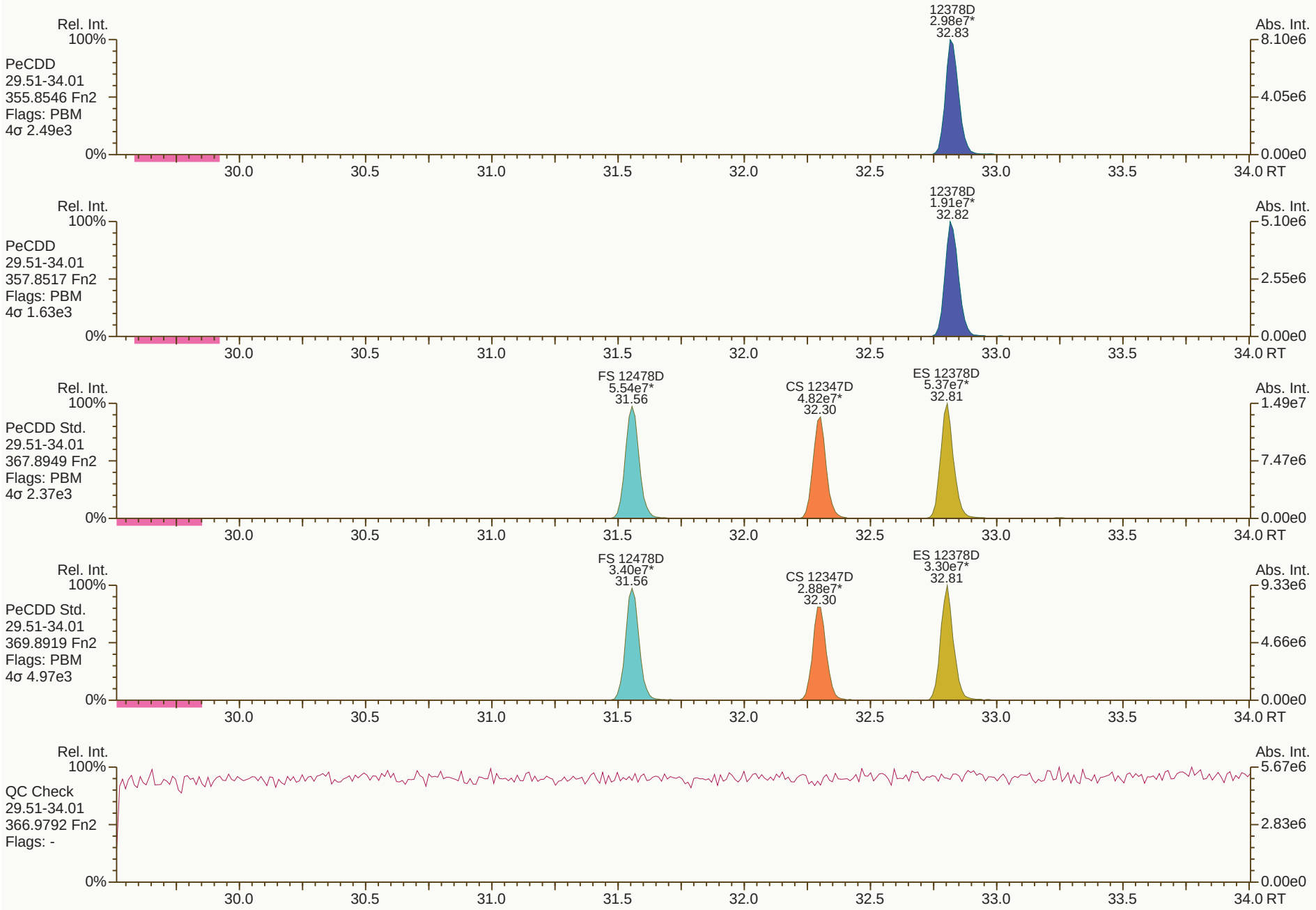
LABELED ANALYTES	M/Z's FORMING RATIO	ION ABUND. RATIO	QC LIMITS			OK	CONC. FOUND	RANGE (ng/mL)			OK
13C-2,3,7,8-TCDD	M/M+2	0.76	0.65	-	0.89	Y	95.9	70	-	130	Y
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.62	1.32	-	1.78	Y	98.3	70	-	130	Y
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.30	1.05	-	1.43	Y	93.1	70	-	130	Y
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.31	1.05	-	1.43	Y	92.5	70	-	130	Y
13C-1,2,3,7,8,9-HxCDD	M+2/M+4	1.31	1.05	-	1.43	Y	95.3	70	-	130	Y
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.05	0.88	-	1.20	Y	86.6	70	-	130	Y
13C-OCDD	M+2/M+4	0.91	0.76	-	1.02	Y	146	140	-	260	Y
13C-2,3,7,8-TCDF	M/M+2	0.79	0.65	-	0.89	Y	97.4	70	-	130	Y
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.58	1.32	-	1.78	Y	95.3	70	-	130	Y
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.59	1.32	-	1.78	Y	93.6	70	-	130	Y
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	98.1	70	-	130	Y
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	97.7	70	-	130	Y
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.53	0.43	-	0.59	Y	94.5	70	-	130	Y
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.53	0.43	-	0.59	Y	88.6	70	-	130	Y
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.45	0.37	-	0.51	Y	92.3	70	-	130	Y
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.44	0.37	-	0.51	Y	83.4	70	-	130	Y
13C-OCDF	M+2/M+4	0.90	0.76	-	1.02	Y	146	140	-	260	Y
CLEANUP STANDARDS											
37Cl-2,3,7,8-TCDD	n/a						10.1	7.9	-	12.7	Y
13C-1,2,3,4,7-PeCDD	M+2/M+4	1.67	1.32	-	1.78	Y	103	70	-	130	Y
13C-1,2,3,4,6-PeCDF	M+2/M+4	1.57	1.32	-	1.78	Y	107	70	-	130	Y
13C-1,2,3,4,6,9-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	102	70	-	130	Y
13C-1,2,3,4,6,8,9-HpCDF	M/M+2	0.46	0.37	-	0.51	Y	93.1	70	-	130	Y

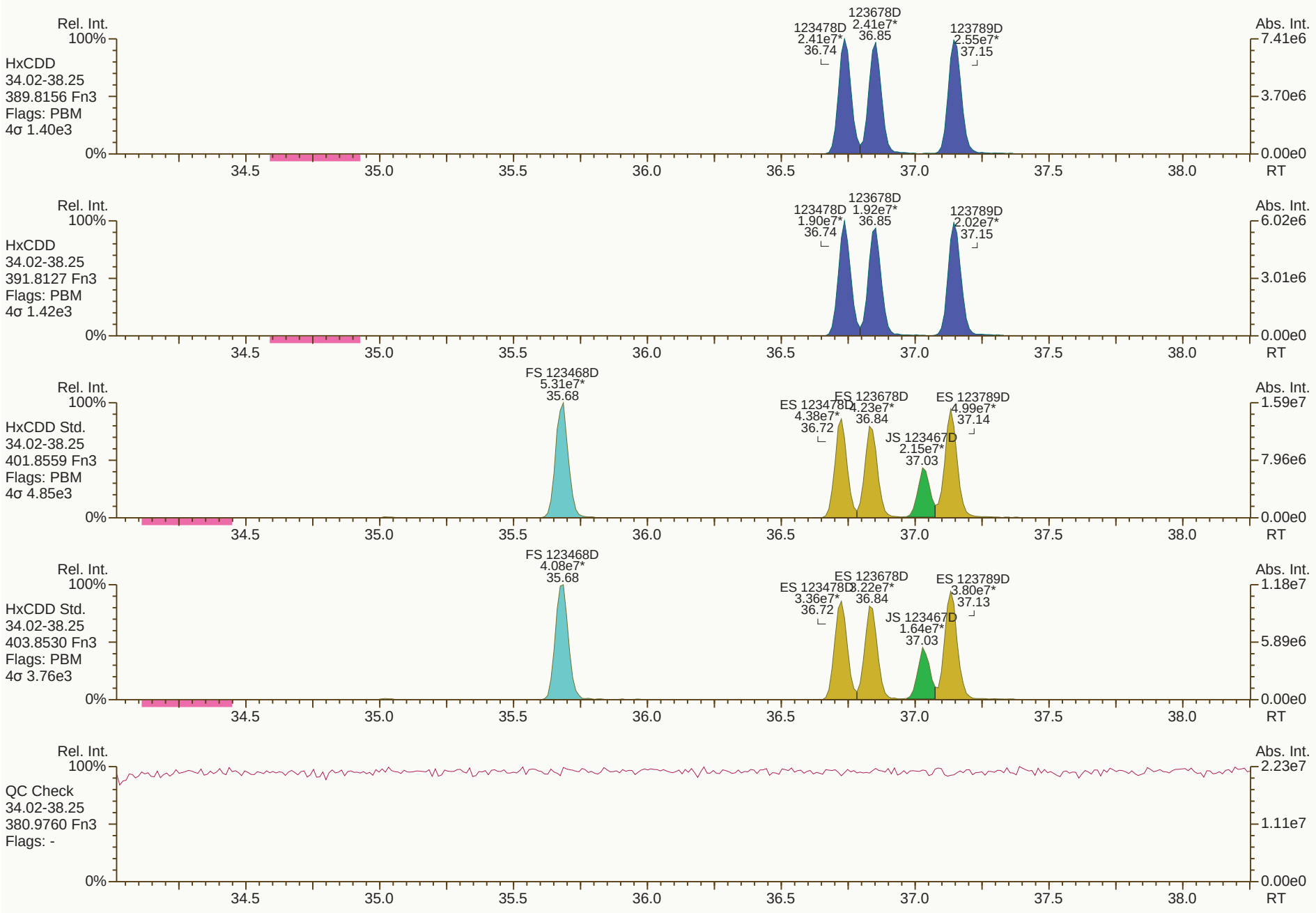
Processed: 11 Aug 2020 09:59 Analyst: pw



Results: P:\B4500_B4599\B4519\B4519_17655 DF\Resources\CS3_200810_DF_RC.utp_res, saved 11-Aug-2020 10:03 (PSW) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 scc: 828-092 *PKD: n/a Printed: 11-Aug-2020 10:13 Page 1 of 12*

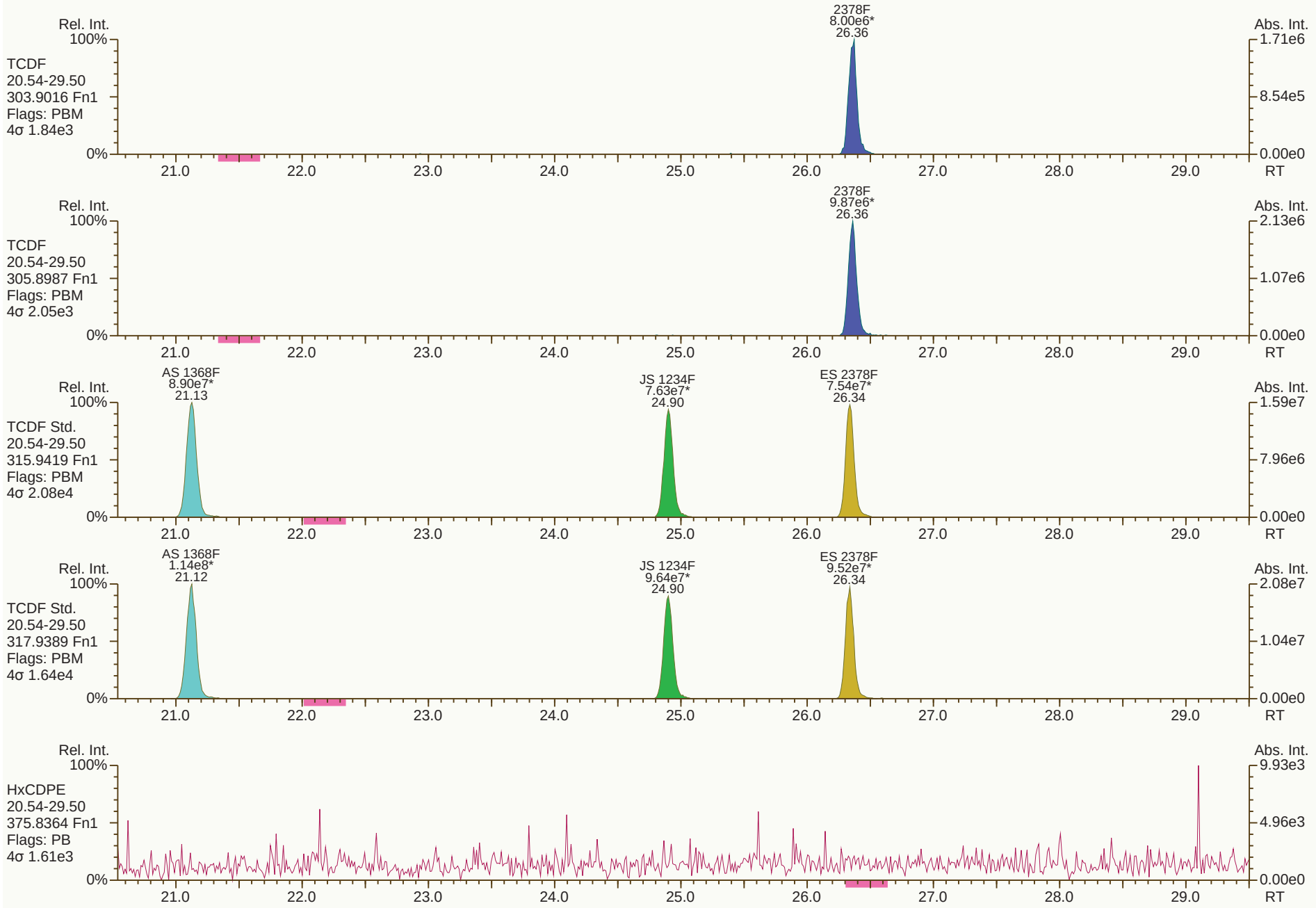

Rel. Int.
100%
TCDD
20.54-29.50
319.8965 Fn1
Flags: PBM
4σ 2.91e3
0%
2378D
5.46e6*
27.29
Abs. Int.
1.22e6
6.08e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD
20.54-29.50
321.8936 Fn1
Flags: PBM
4σ 1.62e3
0%
RRF(2378D) = (5.46e6 + 6.98e6) * 100pg / (4.21e7 + 5.56e7) * 10pg * 1 = 1.27
PSW 11-Aug-2020 10:03
VERIFIED
2378D
6.98e6*
27.29
Abs. Int.
1.53e6
7.63e5
0.00e0
Rel. Int.
100%
37Cl-TCDD
20.54-29.50
327.8850 Fn1
Flags: PBM
4σ 1.51e3
0%
CS 37Cl-2378D
1.06e7*
27.29
Abs. Int.
2.37e6
1.19e6
0.00e0
Rel. Int.
100%
TCDD Std.
20.54-29.50
331.9368 Fn1
Flags: PBM
4σ 9.20e3
0%
AS 1368D
4.84e7*
23.36
TS 1378D
4.82e7*
25.52
JS 1234D
4.49e7*
26.58
ES 2378D
4.21e7*
27.26
FS 1278D
4.30e7*
27.61
Abs. Int.
1.01e7
5.04e6
0.00e0
Rel. Int.
100%
TCDD Std.
20.54-29.50
333.9339 Fn1
Flags: PBM
4σ 3.50e3
0%
AS 1368D
6.22e7*
23.36
TS 1378D
6.31e7*
25.52
JS 1234D
5.64e7*
26.58
ES 2378D
5.56e7*
27.26
FS 1278D
5.79e7*
27.61
Abs. Int.
1.33e7
6.63e6
0.00e0


Rel. Int.
100%
PeCDD
29.51-34.01
355.8546 Fn2
Flags: PBM
4σ 2.49e3
0%
12378D
2.98e7*
32.83
Abs. Int.
8.10e6
4.05e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD
29.51-34.01
357.8517 Fn2
Flags: PBM
4σ 1.63e3
0%
12378D
1.91e7*
32.82
Abs. Int.
5.10e6
2.55e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
367.8949 Fn2
Flags: PBM
4σ 2.37e3
0%
FS 12478D
5.54e7*
31.56
CS 12347D
4.82e7*
32.30
ES 12378D
5.37e7*
32.81
Abs. Int.
1.49e7
7.47e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
369.8919 Fn2
Flags: PBM
4σ 4.97e3
0%
FS 12478D
3.40e7*
31.56
CS 12347D
2.88e7*
32.30
ES 12378D
3.30e7*
32.81
Abs. Int.
9.33e6
4.66e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
QC Check
29.51-34.01
366.9792 Fn2
Flags: -
0%
Abs. Int.
5.67e6
2.83e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT


Rel. Int.
100%
HxCDD
34.02-38.25
389.8156 Fn3
Flags: PBM
4σ 1.40e3
123478D 2.41e7* 36.74
123678D 2.41e7* 36.85
123789D 2.55e7* 37.15
Abs. Int.
7.41e6
3.70e6
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0
RT
Rel. Int.
100%
HxCDD
34.02-38.25
391.8127 Fn3
Flags: PBM
4σ 1.42e3
123478D 1.90e7* 36.74
123678D 1.92e7* 36.85
123789D 2.02e7* 37.15
Abs. Int.
6.02e6
3.01e6
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
401.8559 Fn3
Flags: PBM
4σ 4.85e3
FS 123468D 5.31e7* 35.68
ES 123478D 4.38e7* 36.72
ES 123678D 4.23e7* 36.84
JS 123467D 2.15e7* 37.03
ES 123789D 4.99e7* 37.14
Abs. Int.
1.59e7
7.96e6
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
403.8530 Fn3
Flags: PBM
4σ 3.76e3
FS 123468D 4.08e7* 35.68
ES 123478D 3.36e7* 36.72
ES 123678D 3.22e7* 36.84
JS 123467D 1.64e7* 37.03
ES 123789D 3.80e7* 37.13
Abs. Int.
1.18e7
5.89e6
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0
RT
Rel. Int.
100%
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
Abs. Int.
2.23e7
1.11e7
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0
RT


Rel. Int.
100%
HpCDD
38.26-41.01
423.7767 Fn4
Flags: PBM
4σ 1.85e3
1234678D
1.70e7*
39.96
Abs. Int.
7.33e6
3.66e6
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.26-41.01
425.7737 Fn4
Flags: PBM
4σ 1.35e3
1234678D
1.62e7*
39.96
Abs. Int.
7.09e6
3.54e6
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
435.8169 Fn4
Flags: PBM
4σ 3.24e3
FS 1234679D
4.22e7*
39.31
ES 1234678D
3.34e7*
39.95
Abs. Int.
1.70e7
8.50e6
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
437.8140 Fn4
Flags: PBM
4σ 3.16e3
FS 1234679D
4.03e7*
39.31
ES 1234678D
3.18e7*
39.95
Abs. Int.
1.65e7
8.23e6
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.26-41.01
430.9728 Fn4
Flags: -
Abs. Int.
1.37e7
6.83e6
0.00e0
0%
38.5
39.0
39.5
40.0
40.5
41.0 RT


OCDD
1.91e7*
42.39
Rel. Int.
Abs. Int.
100%
7.01e6
OCDD
41.02-45.00
457.7377 Fn5
Flags: PBM
4σ 2.32e3
3.50e6
0%
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDD
2.11e7*
42.38
Rel. Int.
Abs. Int.
100%
7.91e6
OCDD
41.02-45.00
459.7348 Fn5
Flags: PBM
4σ 2.48e3
3.96e6
0%
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
3.53e7*
42.38
Rel. Int.
Abs. Int.
100%
1.33e7
OCDD Std.
41.02-45.00
469.7780 Fn5
Flags: PBM
4σ 2.57e3
6.63e6
0%
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
3.88e7*
42.38
Rel. Int.
Abs. Int.
100%
1.45e7
OCDD Std.
41.02-45.00
471.7750 Fn5
Flags: PBM
4σ 2.00e3
7.24e6
0%
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
Abs. Int.
100%
1.22e7
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
6.11e6
0%
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT


Rel. Int.
100%
TCDF
20.54-29.50
303.9016 Fn1
Flags: PBM
4σ 1.84e3
0%
2378F
8.00e6*
26.36
Abs. Int.
1.71e6
8.54e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF
20.54-29.50
305.8987 Fn1
Flags: PBM
4σ 2.05e3
0%
2378F
9.87e6*
26.36
Abs. Int.
2.13e6
1.07e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
315.9419 Fn1
Flags: PBM
4σ 2.08e4
0%
AS 1368F
8.90e7*
21.13
JS 1234F
7.63e7*
24.90
ES 2378F
7.54e7*
26.34
Abs. Int.
1.59e7
7.96e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
317.9389 Fn1
Flags: PBM
4σ 1.64e4
0%
AS 1368F
1.14e8*
21.12
JS 1234F
9.64e7*
24.90
ES 2378F
9.52e7*
26.34
Abs. Int.
2.08e7
1.04e7
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
HxCDPE
20.54-29.50
375.8364 Fn1
Flags: PB
4σ 1.61e3
0%
Abs. Int.
9.93e3
4.96e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT

SGS ID: CS3_200810_DF_RC **Sample ID: SIL 20-449-3** **Acq: 10-Aug-2020 22:44:50**

Instr: [ILM] AutoSpec-Ultima MM3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 3** **User: PSW Datafile: 200810R12**

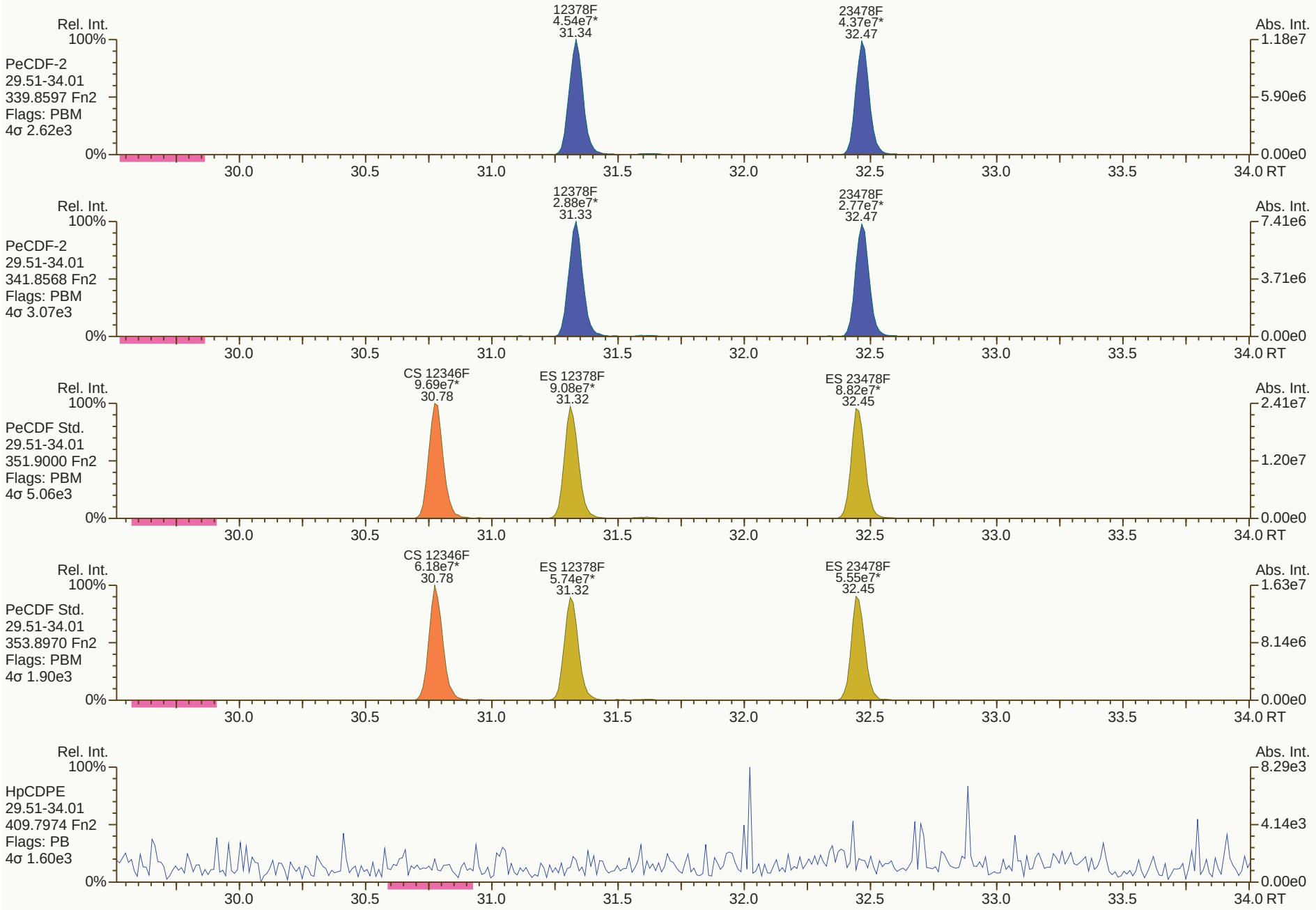


Results: P:\B4500_B4599\B4519\B4519_17655 DF\Resources\CS3_200810_DF_RC.utp_res, saved 11-Aug-2020 10:03 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 0479 scc: 828-092 *PKD: 11-Aug-2020 08:06 Printed: 11-Aug-2020 10:14 Page 8 of 12*

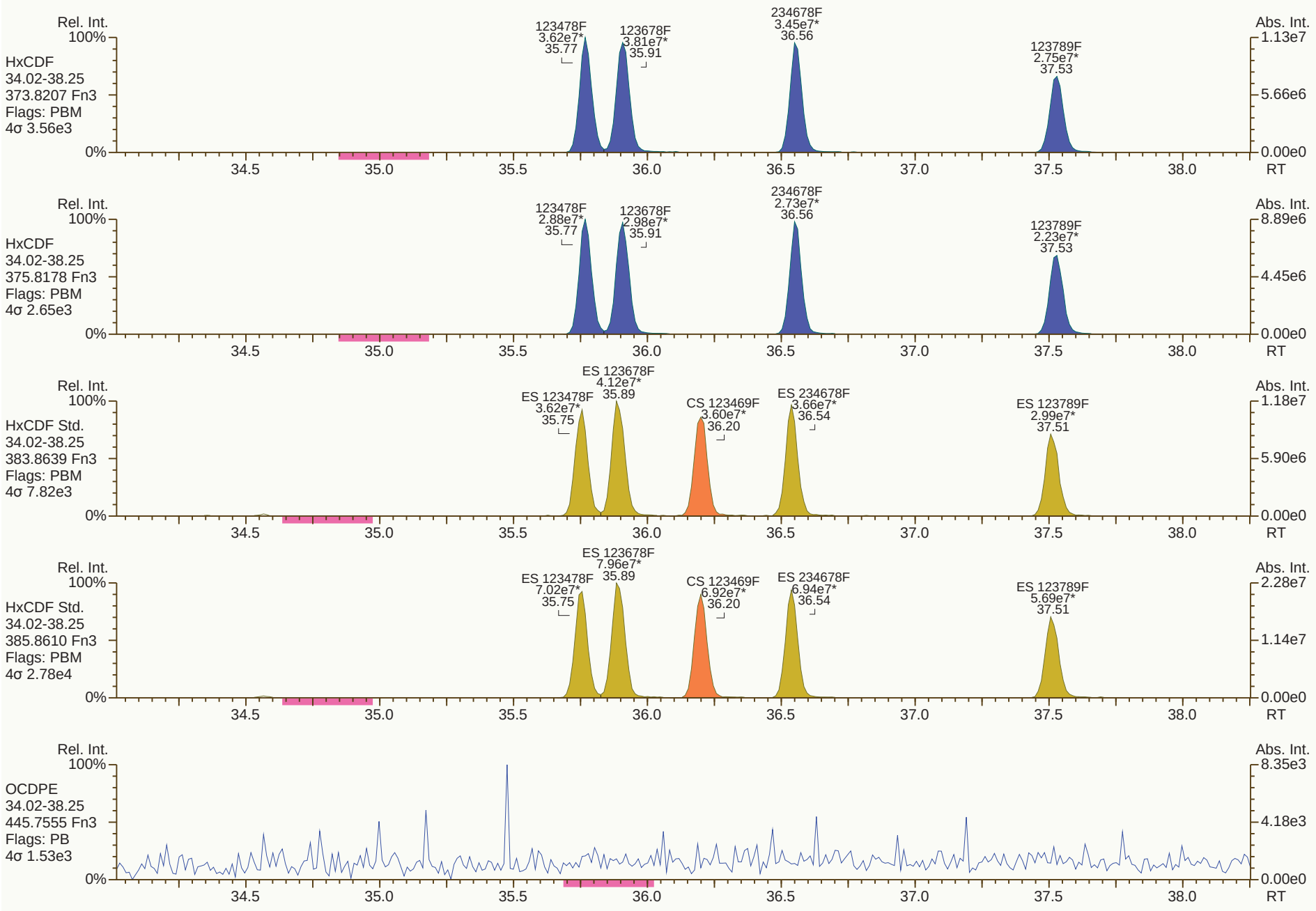
SGS ID: CS3_200810_DF_RC **Sample ID: SIL 20-449-3** **Acq: 10-Aug-2020 22:44:50**

Instr: [ILM] AutoSpec-Ultima MM3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 3** **User: PSW Datafile: 200810R12**



Results: P:\B4500_B4599\B4519\B4519_17655 DF\Resources\CS3_200810_DF_RC.utp_res, saved 11-Aug-2020 10:03 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 5384, 3625, 3109 scc: 828-092 *PKD: 11-Aug-2020 08:06 Printed: 11-Aug-2020 10:14 Page 9 of 12*


Rel. Int.
100%
HxCDF
34.02-38.25
373.8207 Fn3
Flags: PBM
4σ 3.56e3
123478F
3.62e7*
35.77
123678F
3.81e7*
35.91
234678F
3.45e7*
36.56
123789F
2.75e7*
37.53
Abs. Int.
1.13e7
5.66e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDF
34.02-38.25
375.8178 Fn3
Flags: PBM
4σ 2.65e3
123478F
2.88e7*
35.77
123678F
2.98e7*
35.91
234678F
2.73e7*
36.56
123789F
2.23e7*
37.53
Abs. Int.
8.89e6
4.45e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDF Std.
34.02-38.25
383.8639 Fn3
Flags: PBM
4σ 7.82e3
ES 123678F
4.12e7*
35.89
ES 123478F
3.62e7*
35.75
CS 123469F
3.60e7*
36.20
ES 234678F
3.66e7*
36.54
ES 123789F
2.99e7*
37.51
Abs. Int.
1.18e7
5.90e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDF Std.
34.02-38.25
385.8610 Fn3
Flags: PBM
4σ 2.78e4
ES 123678F
7.96e7*
35.89
ES 123478F
7.02e7*
35.75
CS 123469F
6.92e7*
36.20
ES 234678F
6.94e7*
36.54
ES 123789F
5.69e7*
37.51
Abs. Int.
2.28e7
1.14e7
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
OCDPE
34.02-38.25
445.7555 Fn3
Flags: PB
4σ 1.53e3
Abs. Int.
8.35e3
4.18e3
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT


Rel. Int.
100%
0%
Abs. Int.
HpCDF
38.26-41.01
407.7818 Fn4
Flags: PBM
4σ 1.52e3
1234678F
2.69e7*
39.05
1234789F
1.97e7*
40.38
1.06e7
5.28e6
0.00e0
HpCDF
38.26-41.01
409.7788 Fn4
Flags: PBM
4σ 2.19e3
1234678F
2.61e7*
39.05
1234789F
1.89e7*
40.38
1.04e7
5.18e6
0.00e0
HpCDF Std.
38.26-41.01
417.8253 Fn4
Flags: PBM
4σ 2.31e3
ES 1234678F
2.50e7*
39.04
CS 1234689F
2.33e7*
39.45
ES 1234789F
1.75e7*
40.37
9.83e6
4.92e6
0.00e0
HpCDF Std.
38.26-41.01
419.8220 Fn4
Flags: PBM
4σ 2.59e3
ES 1234678F
5.52e7*
39.04
CS 1234689F
5.11e7*
39.45
ES 1234789F
3.98e7*
40.37
2.19e7
1.09e7
0.00e0
NCDPE
38.26-41.01
479.7165 Fn4
Flags: PB
4σ 1.50e3
4.63e3
2.32e3
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT


OCDF
2.24e7*
42.55
Rel. Int.
Abs. Int.
OCDF
41.02-45.00
441.7428 Fn5
Flags: PBM
4σ 2.07e3
OCDF
2.49e7*
42.55
OCDF
41.02-45.00
443.7398 Fn5
Flags: PBM
4σ 2.88e3
ES OCDF
4.32e7*
42.54
OCDF Std.
41.02-45.00
453.7830 Fn5
Flags: PBM
4σ 2.57e3
ES OCDF
4.82e7*
42.54
OCDF Std.
41.02-45.00
455.7801 Fn5
Flags: PBM
4σ 4.01e3
DCDPE
41.02-45.00
513.6775 Fn5
Flags: PB
4σ 1.43e3
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

Dioxin/Furan QC Summary	Acq'd: 11 Aug 2020 08:48 PSW	ICAL: MM3_DF_10012020_12JUN2020
Lab ID: CS3_200810_DF_RD	UTP: 11-Aug-2020 09:38:52 PSW	Checkcode: 480-308-QVC
Sample ID: SIL 20-449-3	Report: 11 Aug 2020 09:59 pw	Datafile: 200810R23

Name	RT	Response	RA	OK	Ref. RRFs	Calc. RRFs	Dev'n
2378-TCDD	27.29	1.12E+07	0.82	Y	1.18	1.26	7%
12378-PeCDD	32.83	4.48E+07	1.57	Y	1.14	1.15	1%
123478-HxCDD	36.74	3.95E+07	1.28	Y	1.09	1.08	-1%
123678-HxCDD	36.85	4.01E+07	1.25	Y	1.13	1.16	3%
123789-HxCDD	37.15	4.38E+07	1.29	Y	1.05	1.05	0%
1234678-HpCDD	39.97	3.26E+07	1.04	Y	0.98	1.04	5%
OCDD	42.39	4.18E+07	0.90	Y	1.08	1.13	5%
2378-TCDF	26.36	1.62E+07	0.77	Y	0.98	1.04	6%
12378-PeCDF	31.34	6.83E+07	1.55	Y	0.95	1.00	6%
23478-PeCDF	32.47	6.60E+07	1.56	Y	0.95	0.99	5%
123478-HxCDF	35.77	6.22E+07	1.25	Y	1.20	1.27	6%
123678-HxCDF	35.91	6.26E+07	1.23	Y	1.07	1.15	7%
234678-HxCDF	36.56	5.79E+07	1.25	Y	1.10	1.16	6%
123789-HxCDF	37.53	4.80E+07	1.24	Y	1.09	1.15	6%
1234678-HpCDF	39.05	5.09E+07	1.04	Y	1.28	1.36	6%
1234789-HpCDF	40.38	3.83E+07	1.03	Y	1.27	1.31	3%
OCDF	42.55	4.94E+07	0.90	Y	1.01	1.07	6%
ES 2378-TCDD	27.26	8.84E+07	0.76	Y	1.01	0.98	-3%
ES 12378-PeCDD	32.81	7.79E+07	1.65	Y	0.87	0.86	-1%
ES 123478-HxCDD	36.72	7.34E+07	1.31	Y	1.10	1.03	-6%
ES 123678-HxCDD	36.84	6.95E+07	1.31	Y	1.06	0.98	-8%
ES 123789-HxCDD	37.14	8.36E+07	1.31	Y	1.22	1.18	-3%
ES 1234678-HpCDD	39.95	6.29E+07	1.05	Y	0.99	0.89	-11%
ES OCDD	42.38	7.39E+07	0.90	Y	0.67	0.52	-22%
ES 2378-TCDF	26.34	1.55E+08	0.79	Y	1.01	0.98	-4%
ES 12378-PeCDF	31.32	1.36E+08	1.61	Y	0.90	0.86	-5%
ES 23478-PeCDF	32.45	1.33E+08	1.62	Y	0.89	0.84	-6%
ES 123478-HxCDF	35.75	9.78E+07	0.52	Y	1.43	1.38	-4%
ES 123678-HxCDF	35.89	1.09E+08	0.54	Y	1.63	1.54	-6%
ES 234678-HxCDF	36.54	9.94E+07	0.54	Y	1.48	1.40	-5%
ES 123789-HxCDF	37.51	8.32E+07	0.53	Y	1.29	1.17	-9%
ES 1234678-HpCDF	39.04	7.47E+07	0.45	Y	1.15	1.05	-8%
ES 1234789-HpCDF	40.37	5.83E+07	0.44	Y	0.91	0.82	-9%
ES OCDF	42.54	9.20E+07	0.90	Y	0.83	0.65	-22%

Dioxin/Furan QC Summary	Acq'd: 11 Aug 2020 08:48 PSW	ICAL: MM3_DF_10012020_12JUN2020
Lab ID: CS3_200810_DF_RD	UTP: 11-Aug-2020 09:38:52 PSW	Checkcode: 480-308-QVC
Sample ID: SIL 20-449-3	Report: 11 Aug 2020 09:59 pw	Datafile: 200810R23

Name	RT	Response	RA	OK	Ref. RRFs	Calc. RRFs	Dev'n
JS 1234-TCDD	26.58	9.05E+07	0.76	Y	-	-	-
JS 1234-TCDF	24.90	1.59E+08	0.78	Y	-	-	-
JS 123467-HxCDD	37.03	3.55E+07	1.28	Y	-	-	-
CS 37Cl-2378-TCDD	27.29	9.63E+06	n/a	-	1.04	1.06	3%
CS 12347-PeCDD	32.30	6.96E+07	1.66	Y	0.74	0.77	4%
CS 12346-PeCDF	30.78	1.44E+08	1.56	Y	0.86	0.91	5%
CS 123469-HxCDF	36.20	9.86E+07	0.54	Y	1.36	1.39	2%
CS 1234689-HpCDF	39.45	7.02E+07	0.47	Y	1.05	0.99	-6%
~~SS 37Cl-2378-TCDD~~	~~27.29~~	~~9.63E+06~~	~~n/a~~	~~-~~	~~1.04~~	~~1.09~~	~~5%~~
~~SS 12347-PeCDD~~	~~32.30~~	~~6.96E+07~~	~~1.66~~	~~Y~~	~~0.86~~	~~0.89~~	~~5%~~
~~SS 12346-PeCDF~~	~~30.78~~	~~1.44E+08~~	~~1.56~~	~~Y~~	~~0.96~~	~~1.06~~	~~10%~~
~~SS 123469-HxCDF~~	~~36.20~~	~~9.86E+07~~	~~0.54~~	~~Y~~	~~0.83~~	~~0.90~~	~~8%~~
~~SS 1234689-HpCDF~~	~~39.45~~	~~7.02E+07~~	~~0.47~~	~~Y~~	~~0.92~~	~~0.94~~	~~2%~~
Not used in this project.							
CL 11Aug20							
~~OCDD-a~~	~~42.38~~	~~2.33E+06~~	~~2.96~~	~~N~~	~~0.07~~	~~0.06~~	~~-5%~~
~~OCDF-a~~	~~42.55~~	~~2.44E+06~~	~~2.88~~	~~N~~	~~0.06~~	~~0.05~~	~~-16%~~

METHOD 8290A **PCDD/F CALIBRATION VERIFICATION** **FORM 4A**

Lab Name: SGS North America

Initial Calibration: ICAL: MM3_DF_10012020_12JUN2020

Instrument ID: MM3 GC Column ID: ZB-5ms

VER Data Filename: 200810R23 Analysis Date: 11-AUG-2020 08:48:21

NATIVE ANALYTES	M/Z's FORMING RATIO	ION ABUND. RATIO	QC LIMITS			OK	CONC. FOUND	RANGE (ng/mL)			OK
2,3,7,8-TCDD	M/M+2	0.82	0.65	-	0.89	Y	10.7	8	-	12	Y
1,2,3,7,8-PeCDD	M+2/M+4	1.57	1.32	-	1.78	Y	50.7	40	-	60	Y
1,2,3,4,7,8-HxCDD	M+2/M+4	1.28	1.05	-	1.43	Y	49.3	40	-	60	Y
1,2,3,6,7,8-HxCDD	M+2/M+4	1.25	1.05	-	1.43	Y	51.3	40	-	60	Y
1,2,3,7,8,9-HxCDD	M+2/M+4	1.29	1.05	-	1.43	Y	50	40	-	60	Y
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	0.88	-	1.20	Y	52.7	40	-	60	Y
OCDD	M+2/M+4	0.90	0.76	-	1.02	Y	105	80	-	120	Y
2,3,7,8-TCDF	M/M+2	0.77	0.65	-	0.89	Y	10.6	8	-	12	Y
1,2,3,7,8-PeCDF	M+2/M+4	1.55	1.32	-	1.78	Y	52.8	40	-	60	Y
2,3,4,7,8-PeCDF	M+2/M+4	1.56	1.32	-	1.78	Y	52.4	40	-	60	Y
1,2,3,4,7,8-HxCDF	M+2/M+4	1.25	1.05	-	1.43	Y	53.2	40	-	60	Y
1,2,3,6,7,8-HxCDF	M+2/M+4	1.23	1.05	-	1.43	Y	53.5	40	-	60	Y
2,3,4,6,7,8-HxCDF	M+2/M+4	1.25	1.05	-	1.43	Y	53	40	-	60	Y
1,2,3,7,8,9-HxCDF	M+2/M+4	1.24	1.05	-	1.43	Y	52.9	40	-	60	Y
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.04	0.88	-	1.20	Y	53.2	40	-	60	Y
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.03	0.88	-	1.20	Y	51.7	40	-	60	Y
OCDF	M+2/M+4	0.90	0.76	-	1.02	Y	106	80	-	120	Y

Processed: 11 Aug 2020 09:58 Analyst: pw

METHOD 8290A **PCDD/F CALIBRATION VERIFICATION** **FORM 4B**

Lab Name: SGS North America

Initial Calibration: ICAL: MM3_DF_10012020_12JUN2020

Instrument ID: MM3 GC Column ID: ZB-5ms

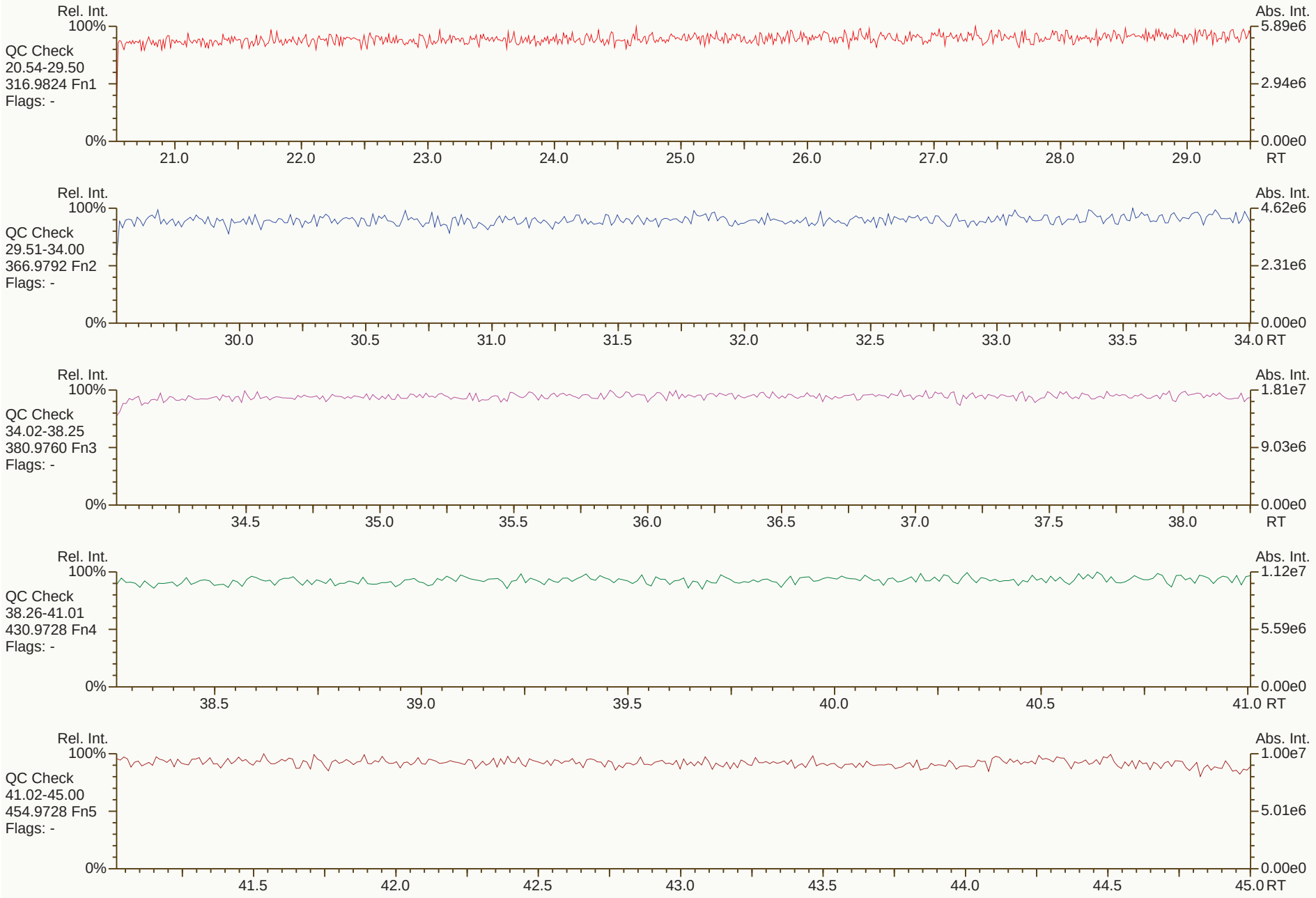
VER Data Filename: 200810R23 Analysis Date: 11-AUG-2020 08:48:21

LABELED ANALYTES	M/Z's FORMING RATIO	ION ABUND. RATIO	QC LIMITS			OK	CONC. FOUND	RANGE (ng/mL)			OK
13C-2,3,7,8-TCDD	M/M+2	0.76	0.65	-	0.89	Y	97	70	-	130	Y
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.65	1.32	-	1.78	Y	98.8	70	-	130	Y
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.31	1.05	-	1.43	Y	94.4	70	-	130	Y
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.31	1.05	-	1.43	Y	92.3	70	-	130	Y
13C-1,2,3,7,8,9-HxCDD	M+2/M+4	1.31	1.05	-	1.43	Y	96.7	70	-	130	Y
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.05	0.88	-	1.20	Y	89.2	70	-	130	Y
13C-OCDD	M+2/M+4	0.90	0.76	-	1.02	Y	156	140	-	260	Y
13C-2,3,7,8-TCDF	M/M+2	0.79	0.65	-	0.89	Y	96.4	70	-	130	Y
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.61	1.32	-	1.78	Y	95.2	70	-	130	Y
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.62	1.32	-	1.78	Y	94	70	-	130	Y
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	96.3	70	-	130	Y
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.54	0.43	-	0.59	Y	94.3	70	-	130	Y
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.54	0.43	-	0.59	Y	94.7	70	-	130	Y
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.53	0.43	-	0.59	Y	90.8	70	-	130	Y
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.45	0.37	-	0.51	Y	91.8	70	-	130	Y
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.44	0.37	-	0.51	Y	90.6	70	-	130	Y
13C-OCDF	M+2/M+4	0.90	0.76	-	1.02	Y	157	140	-	260	Y
CLEANUP STANDARDS											
37Cl-2,3,7,8-TCDD	n/a						10.3	7.9	-	12.7	Y
13C-1,2,3,4,7-PeCDD	M+2/M+4	1.66	1.32	-	1.78	Y	104	70	-	130	Y
13C-1,2,3,4,6-PeCDF	M+2/M+4	1.56	1.32	-	1.78	Y	105	70	-	130	Y
13C-1,2,3,4,6,9-HxCDF	M/M+2	0.54	0.43	-	0.59	Y	102	70	-	130	Y
13C-1,2,3,4,6,8,9-HpCDF	M/M+2	0.47	0.37	-	0.51	Y	93.8	70	-	130	Y

Processed: 11 Aug 2020 09:58 Analyst: pw

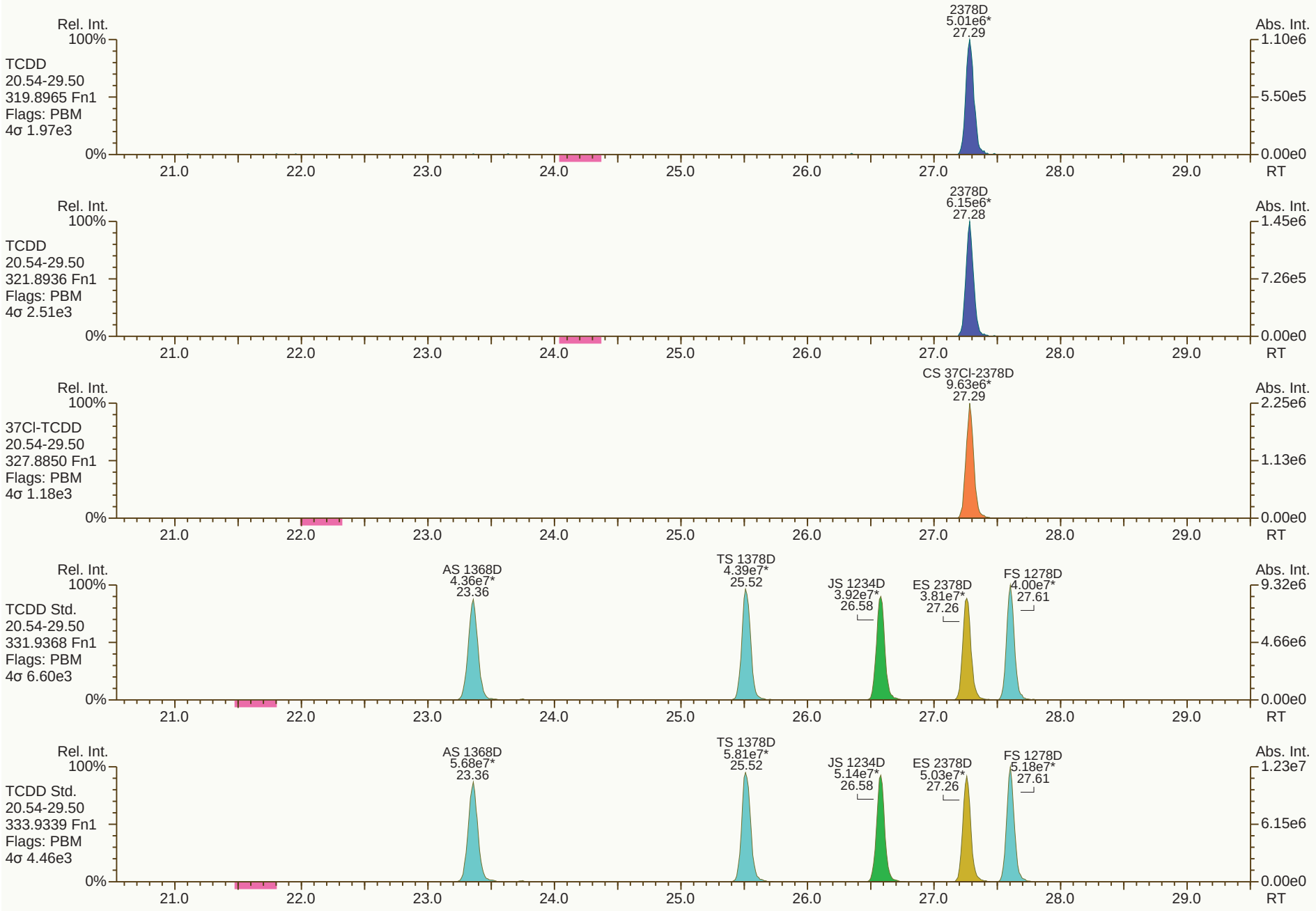
SGS ID: CS3_200810_DF_RD **Sample ID: SIL 20-449-3** **Acq: 11-Aug-2020 08:48:21**

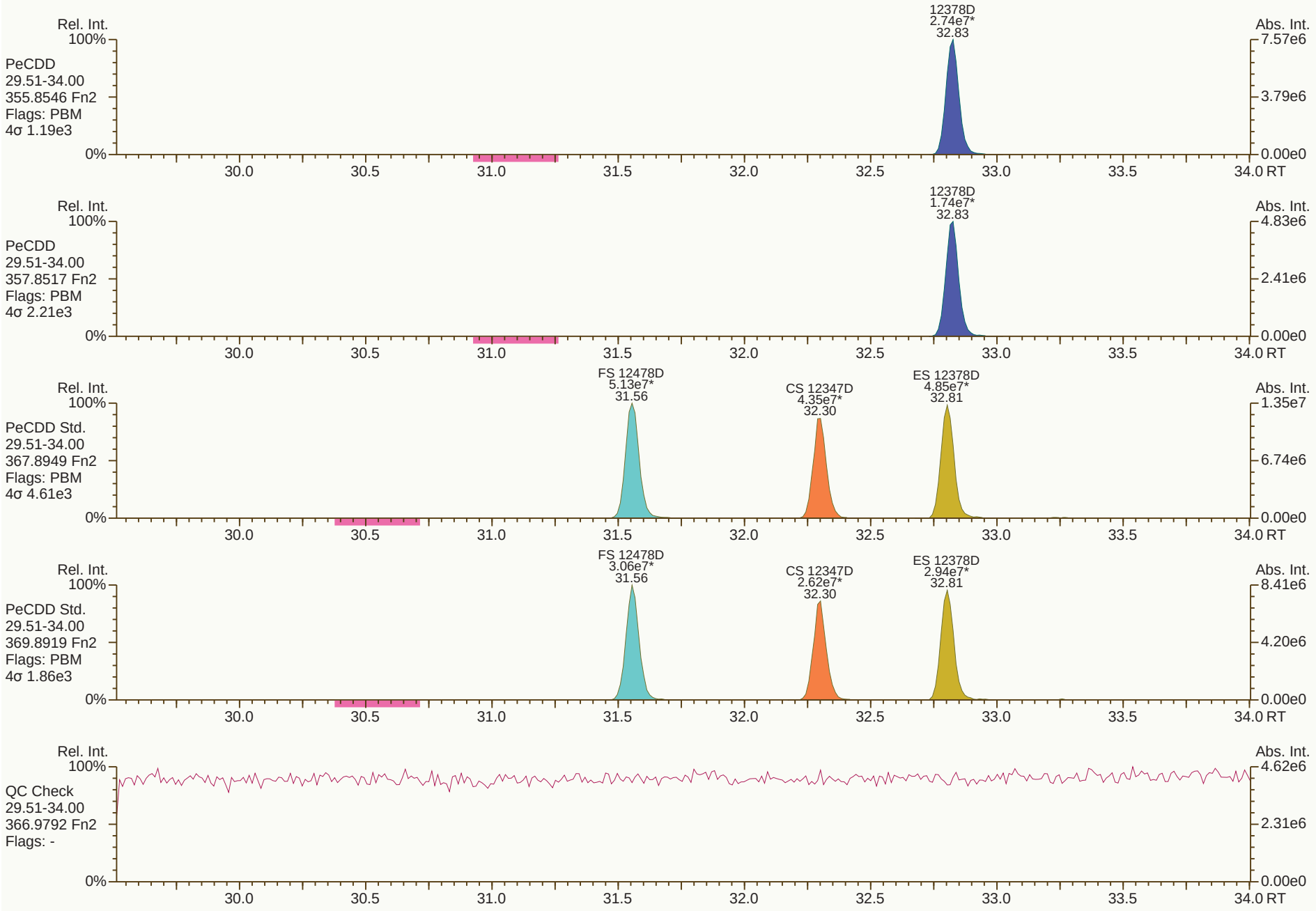
Instr: [ILM] AutoSpec-Ultima MM3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 3** **User: PSW Datafile: 200810R23**

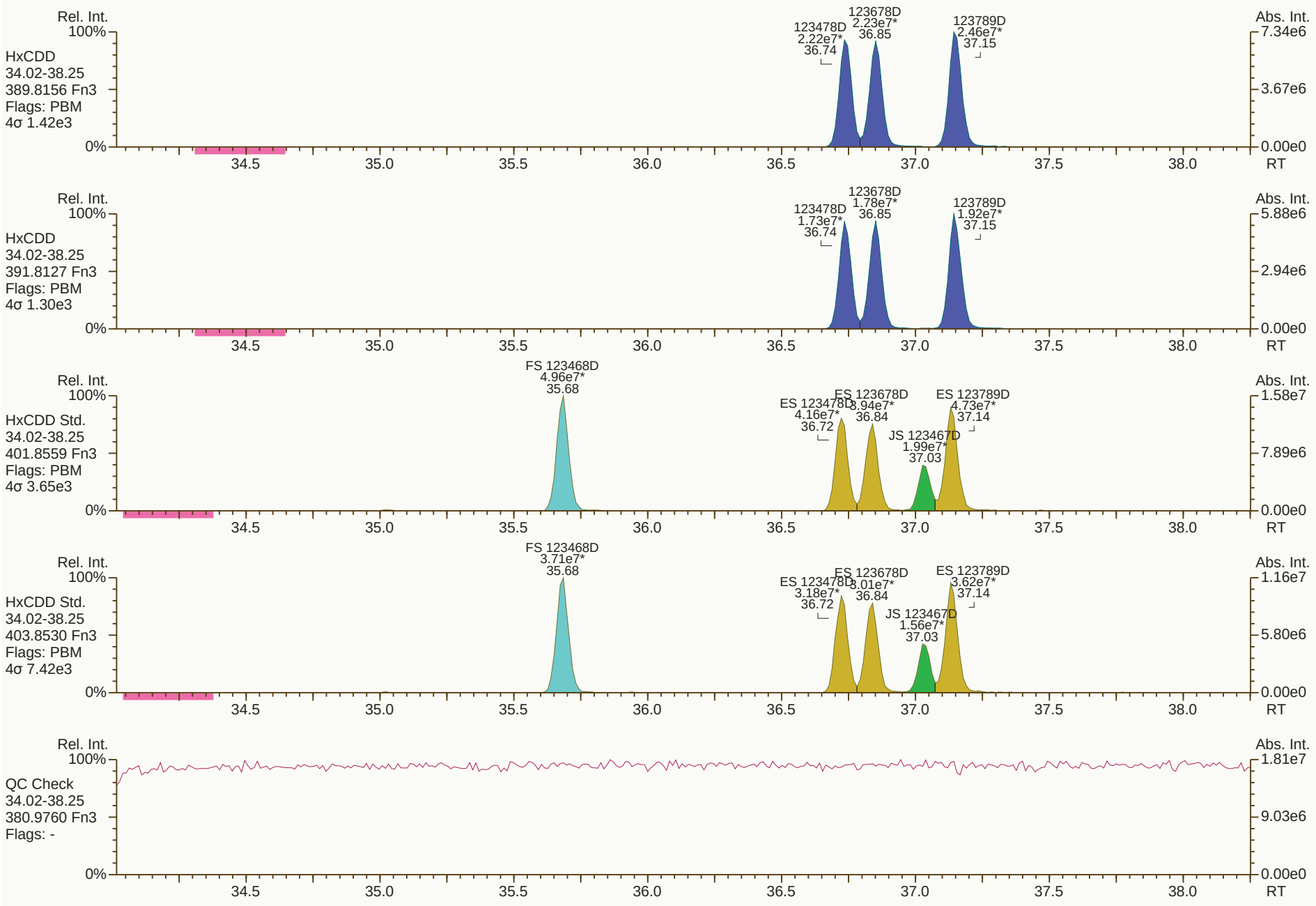


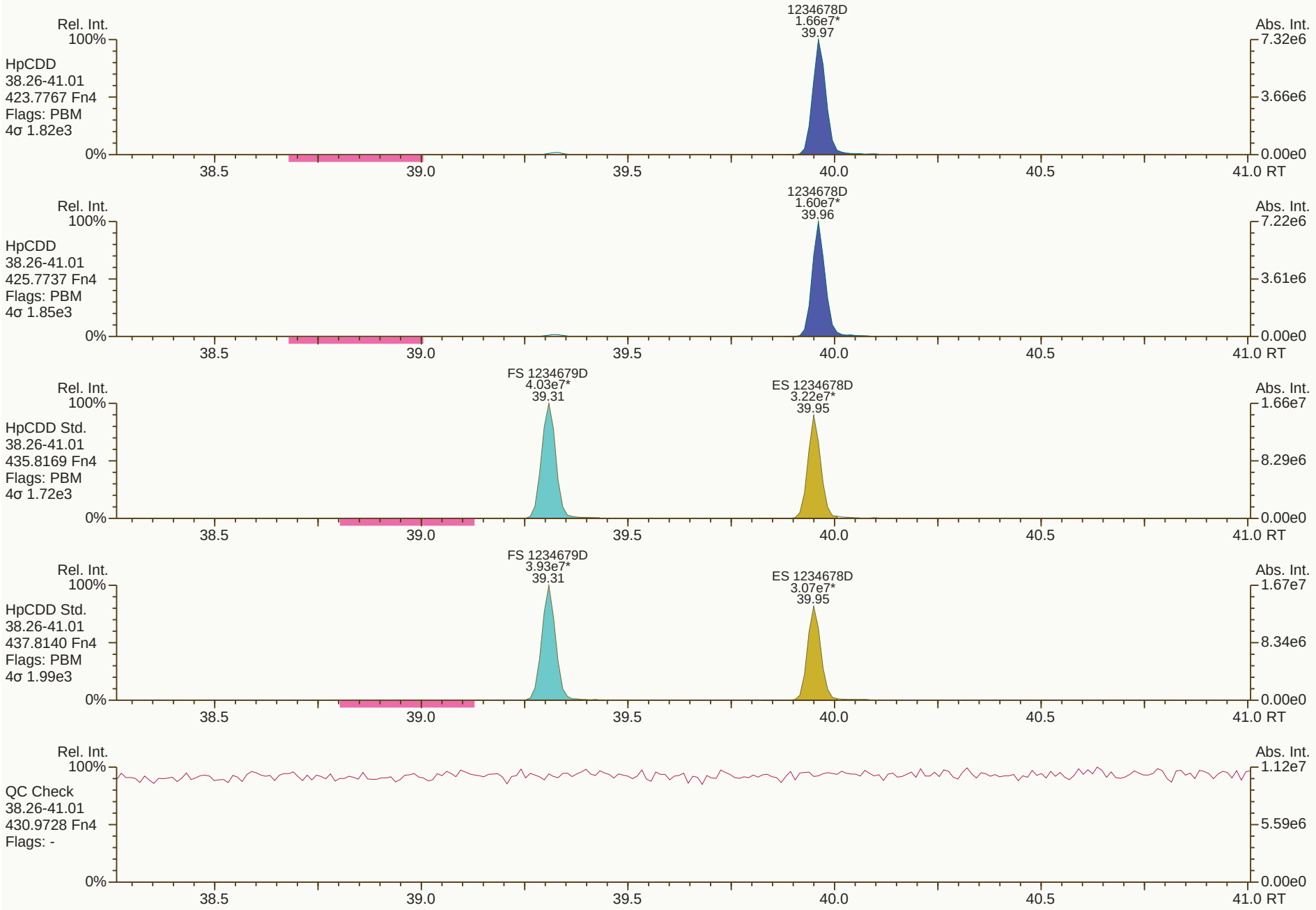
Results: P:\B4500_B4599\B4519\B4519_17655 DF\Resources\CS3_200810_DF_RD.utp_res, saved 11-Aug-2020 09:38 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 scc: 480-308 *PKD: n/a Printed: 11-Aug-2020 10:19 Page 1 of 12*

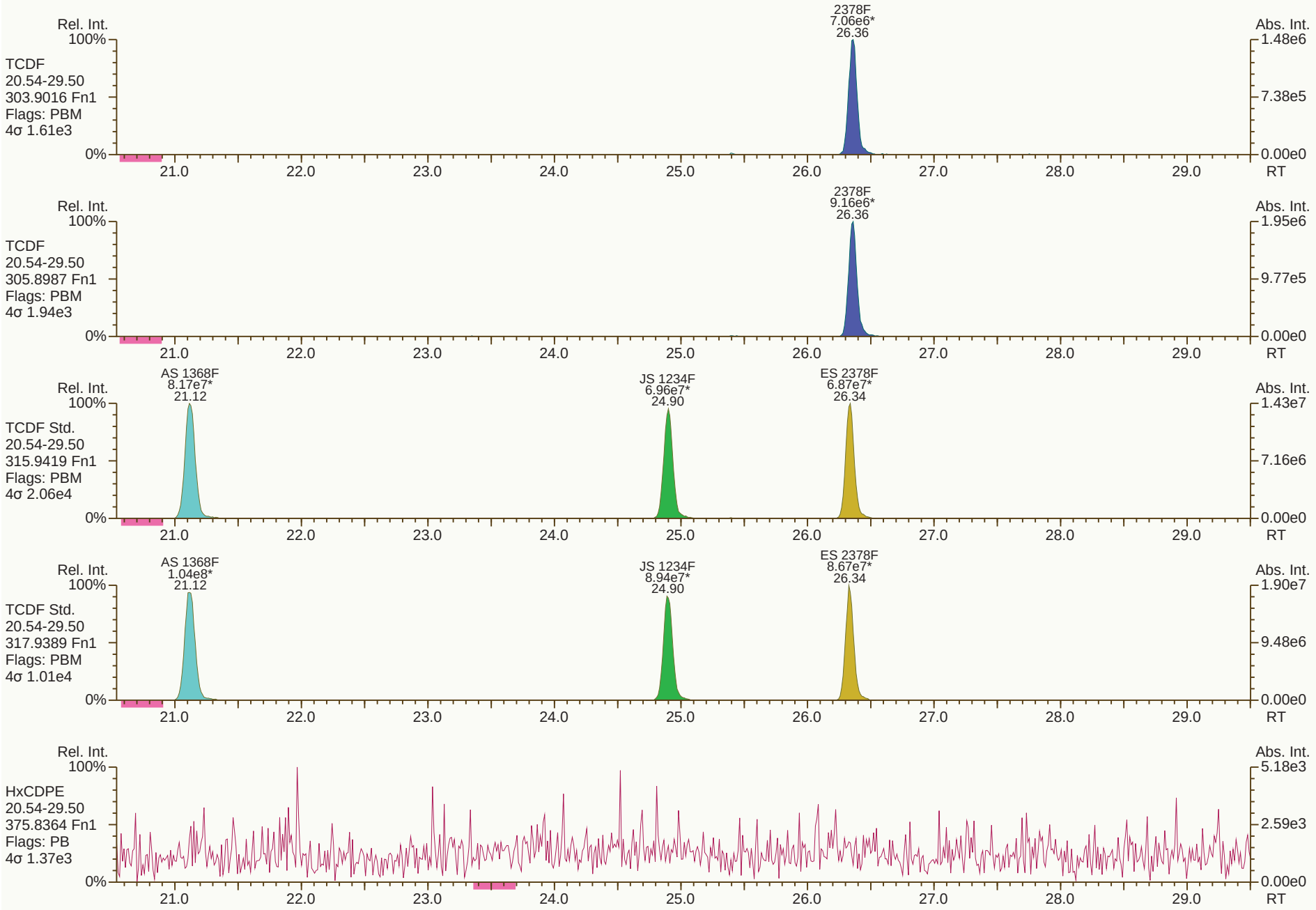

Rel. Int.
100%
TCDD
20.54-29.50
319.8965 Fn1
Flags: PBM
4σ 1.97e3
0%
2378D
5.01e6*
27.29
Abs. Int.
1.10e6
5.50e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD
20.54-29.50
321.8936 Fn1
Flags: PBM
4σ 2.51e3
0%
2378D
6.15e6*
27.28
Abs. Int.
1.45e6
7.26e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
37Cl-TCDD
20.54-29.50
327.8850 Fn1
Flags: PBM
4σ 1.18e3
0%
CS 37Cl-2378D
9.63e6*
27.29
Abs. Int.
2.25e6
1.13e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
331.9368 Fn1
Flags: PBM
4σ 6.60e3
0%
AS 1368D
4.36e7*
23.36
TS 1378D
4.39e7*
25.52
JS 1234D
3.92e7*
26.58
ES 2378D
3.81e7*
27.26
FS 1278D
4.00e7*
27.61
Abs. Int.
9.32e6
4.66e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
333.9339 Fn1
Flags: PBM
4σ 4.46e3
0%
AS 1368D
5.68e7*
23.36
TS 1378D
5.81e7*
25.52
JS 1234D
5.14e7*
26.58
ES 2378D
5.03e7*
27.26
FS 1278D
5.18e7*
27.61
Abs. Int.
1.23e7
6.15e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
PeCDD
29.51-34.00
355.8546 Fn2
Flags: PBM
4σ 1.19e3
0%
12378D
2.74e7*
32.83
Abs. Int.
7.57e6
3.79e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD
29.51-34.00
357.8517 Fn2
Flags: PBM
4σ 2.21e3
0%
12378D
1.74e7*
32.83
Abs. Int.
4.83e6
2.41e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.00
367.8949 Fn2
Flags: PBM
4σ 4.61e3
0%
FS 12478D
5.13e7*
31.56
CS 12347D
4.35e7*
32.30
ES 12378D
4.85e7*
32.81
Abs. Int.
1.35e7
6.74e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.00
369.8919 Fn2
Flags: PBM
4σ 1.86e3
0%
FS 12478D
3.06e7*
31.56
CS 12347D
2.62e7*
32.30
ES 12378D
2.94e7*
32.81
Abs. Int.
8.41e6
4.20e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
QC Check
29.51-34.00
366.9792 Fn2
Flags: -
0%
Abs. Int.
4.62e6
2.31e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT

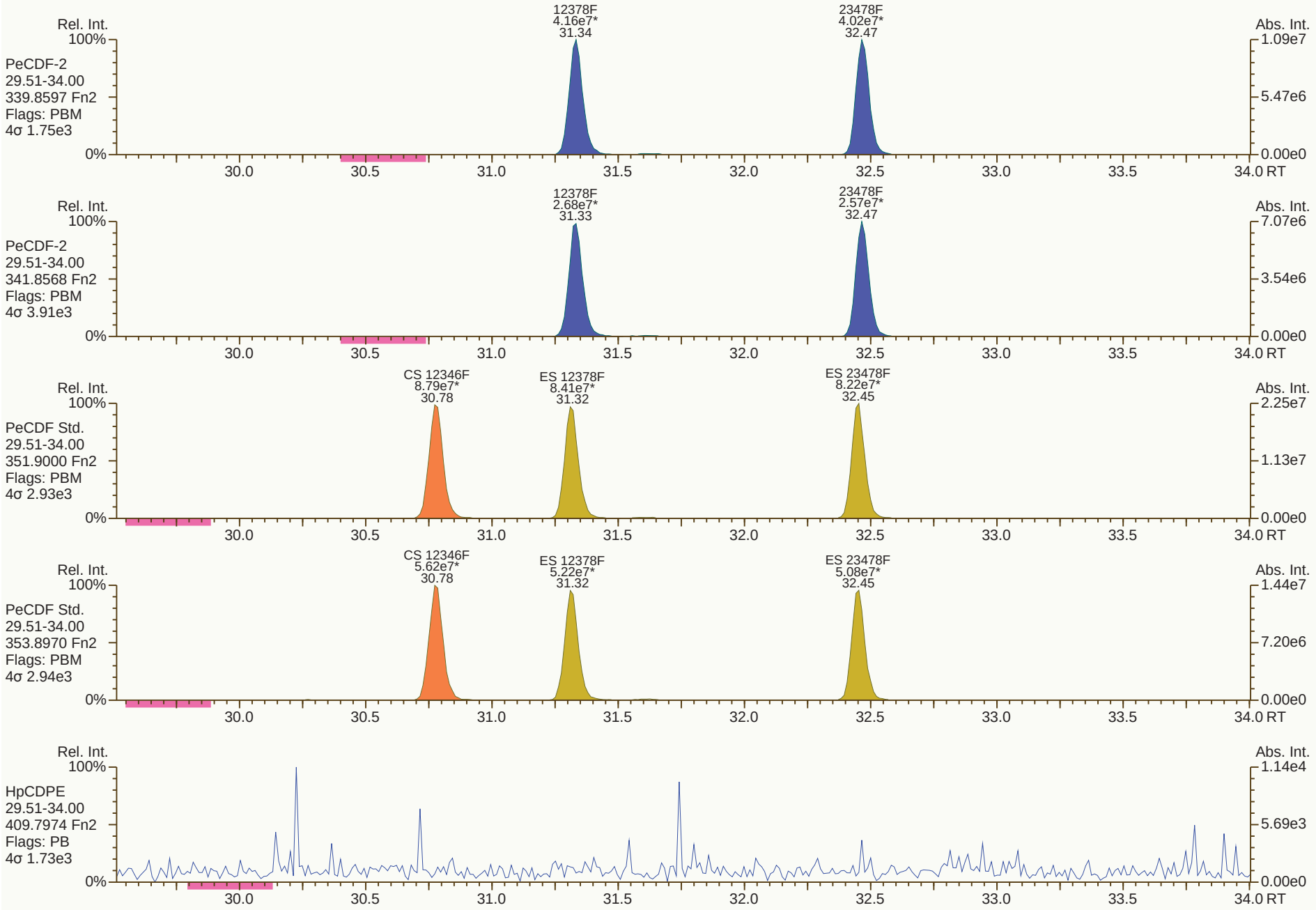

Rel. Int.
100%
HxCDD
34.02-38.25
389.8156 Fn3
Flags: PBM
4σ 1.42e3
123478D 2.22e7* 36.74
123678D 2.23e7* 36.85
123789D 2.46e7* 37.15
Abs. Int.
7.34e6
3.67e6
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 RT
Rel. Int.
100%
HxCDD
34.02-38.25
391.8127 Fn3
Flags: PBM
4σ 1.30e3
123478D 1.73e7* 36.74
123678D 1.78e7* 36.85
123789D 1.92e7* 37.15
Abs. Int.
5.88e6
2.94e6
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
401.8559 Fn3
Flags: PBM
4σ 3.65e3
FS 123468D 4.96e7* 35.68
ES 123478D 4.16e7* 36.72
ES 123678D 3.94e7* 36.84
JS 123467D 1.99e7* 37.03
ES 123789D 4.73e7* 37.14
Abs. Int.
1.58e7
7.89e6
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
403.8530 Fn3
Flags: PBM
4σ 7.42e3
FS 123468D 3.71e7* 35.68
ES 123478D 3.18e7* 36.72
ES 123678D 3.01e7* 36.84
JS 123467D 1.56e7* 37.03
ES 123789D 3.62e7* 37.14
Abs. Int.
1.16e7
5.80e6
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 RT
Rel. Int.
100%
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
Abs. Int.
1.81e7
9.03e6
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 RT

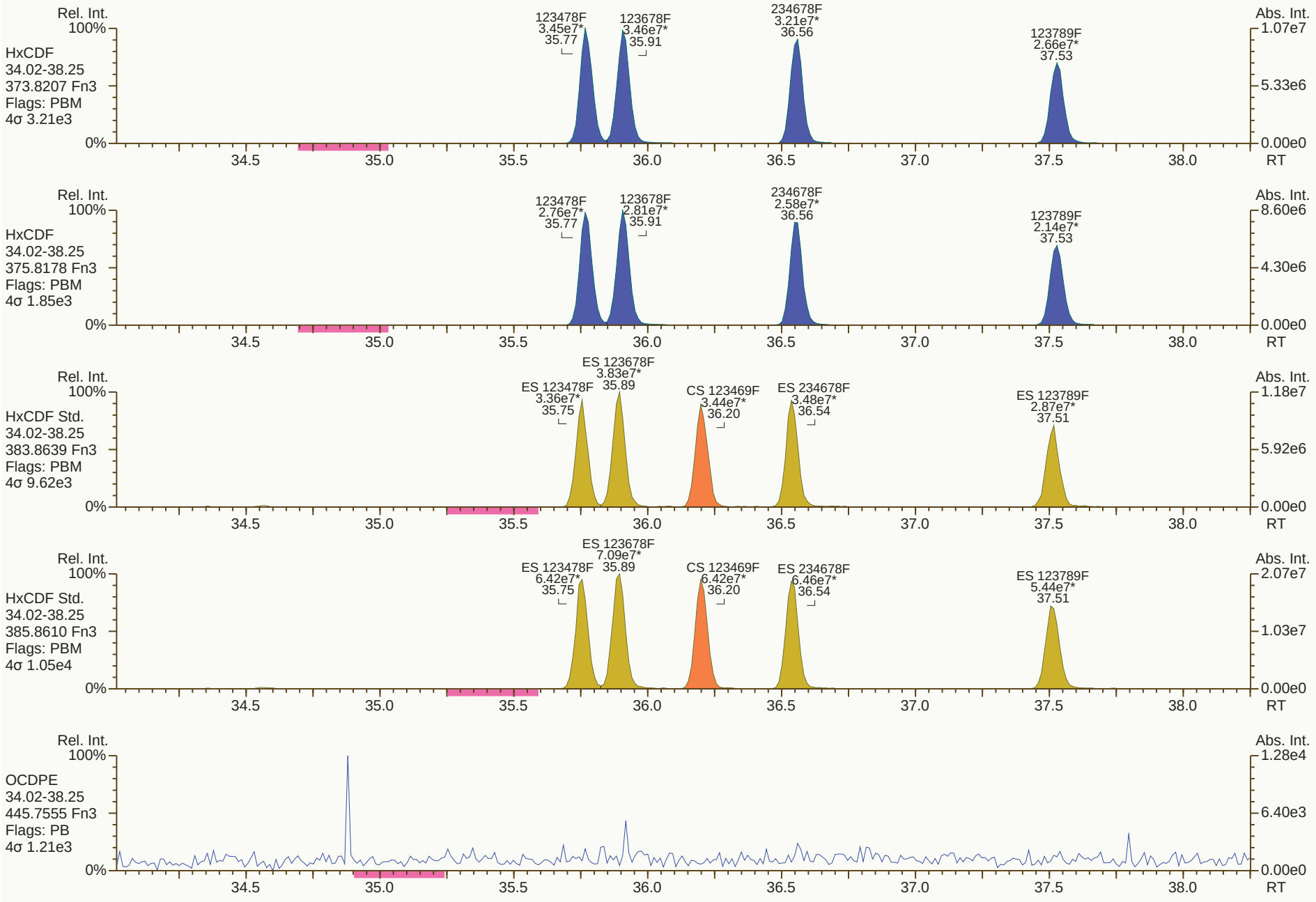

Rel. Int.
100%
HpCDD
38.26-41.01
423.7767 Fn4
Flags: PBM
4σ 1.82e3
0%
1234678D
1.66e7*
39.97
Abs. Int.
7.32e6
3.66e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.26-41.01
425.7737 Fn4
Flags: PBM
4σ 1.85e3
0%
1234678D
1.60e7*
39.96
Abs. Int.
7.22e6
3.61e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
435.8169 Fn4
Flags: PBM
4σ 1.72e3
0%
FS 1234679D
4.03e7*
39.31
ES 1234678D
3.22e7*
39.95
Abs. Int.
1.66e7
8.29e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
437.8140 Fn4
Flags: PBM
4σ 1.99e3
0%
FS 1234679D
3.93e7*
39.31
ES 1234678D
3.07e7*
39.95
Abs. Int.
1.67e7
8.34e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.26-41.01
430.9728 Fn4
Flags: -
0%
Abs. Int.
1.12e7
5.59e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT


OCDD
1.98e7*
42.39
Rel. Int.
100%
OCDD
41.02-45.00
457.7377 Fn5
Flags: PBM
4σ 1.71e3
0%
Abs. Int.
7.17e6
3.59e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDD
2.21e7*
42.38
Rel. Int.
100%
OCDD
41.02-45.00
459.7348 Fn5
Flags: PBM
4σ 3.88e3
0%
Abs. Int.
8.07e6
4.03e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
3.50e7*
42.38
Rel. Int.
100%
OCDD Std.
41.02-45.00
469.7780 Fn5
Flags: PBM
4σ 5.39e3
0%
Abs. Int.
1.22e7
6.10e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
3.89e7*
42.38
Rel. Int.
100%
OCDD Std.
41.02-45.00
471.7750 Fn5
Flags: PBM
4σ 1.91e3
0%
Abs. Int.
1.37e7
6.86e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
1.00e7
5.01e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT


Rel. Int.
100%
TCDF
20.54-29.50
303.9016 Fn1
Flags: PBM
4σ 1.61e3
0%
2378F
7.06e6*
26.36
Abs. Int.
1.48e6
7.38e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF
20.54-29.50
305.8987 Fn1
Flags: PBM
4σ 1.94e3
0%
2378F
9.16e6*
26.36
Abs. Int.
1.95e6
9.77e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
315.9419 Fn1
Flags: PBM
4σ 2.06e4
0%
AS 1368F
8.17e7*
21.12
JS 1234F
6.96e7*
24.90
ES 2378F
6.87e7*
26.34
Abs. Int.
1.43e7
7.16e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
317.9389 Fn1
Flags: PBM
4σ 1.01e4
0%
AS 1368F
1.04e8*
21.12
JS 1234F
8.94e7*
24.90
ES 2378F
8.67e7*
26.34
Abs. Int.
1.90e7
9.48e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
HxCDPE
20.54-29.50
375.8364 Fn1
Flags: PB
4σ 1.37e3
0%
Abs. Int.
5.18e3
2.59e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
0%
Abs. Int.
1.37e4
6.86e3
0.00e0
PeCDF-1
20.54-29.50
339.8597 Fn1
Flags: PB
4σ 2.08e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
0%
Abs. Int.
1.04e4
5.21e3
0.00e0
PeCDF-1
20.54-29.50
341.8568 Fn1
Flags: PB
4σ 1.63e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
0%
Abs. Int.
5.89e6
2.94e6
0.00e0
QC Check
20.54-29.50
316.9824 Fn1
Flags: -
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT

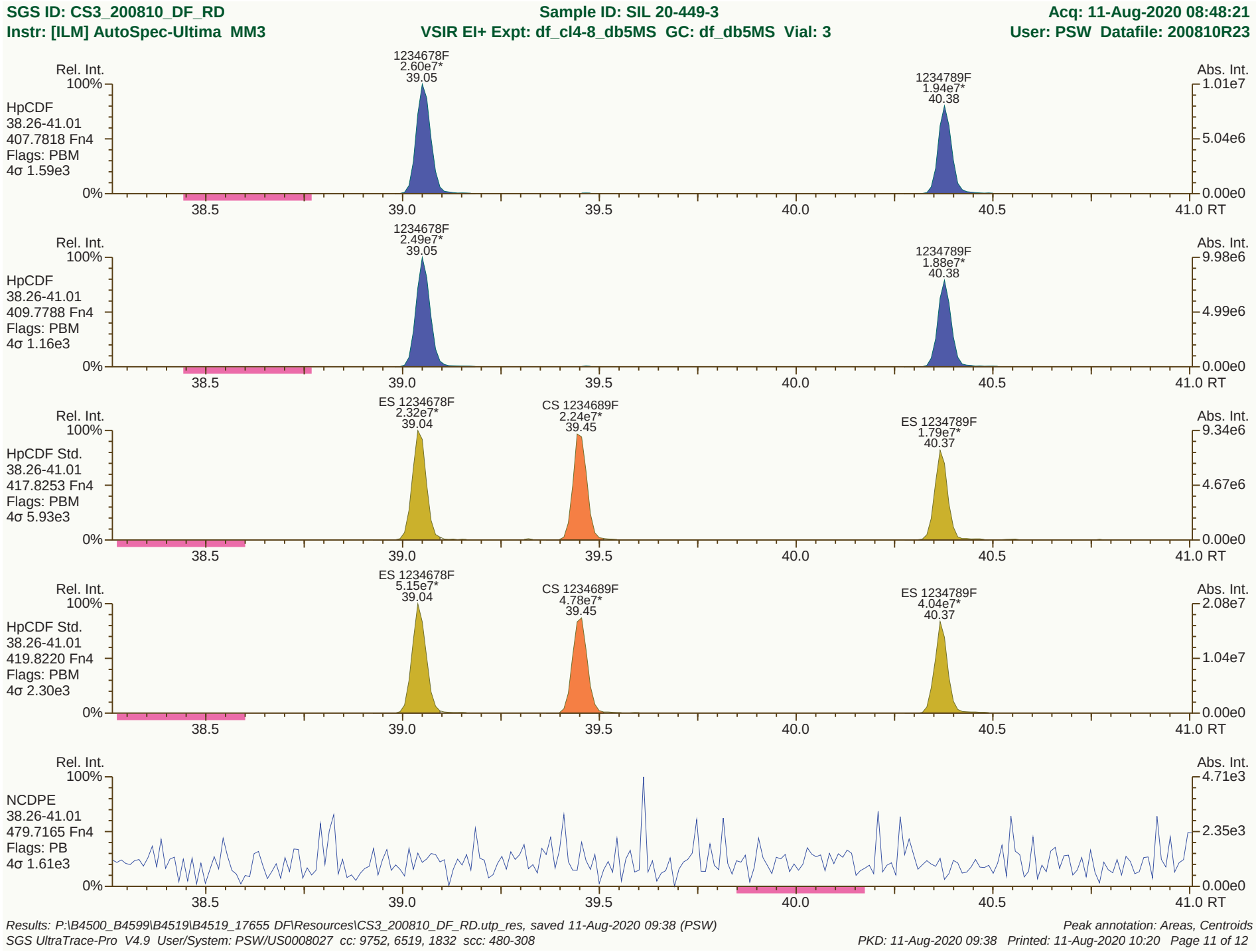

Rel. Int.
100%
PeCDF-2
29.51-34.00
339.8597 Fn2
Flags: PBM
4σ 1.75e3
0%
12378F
4.16e7*
31.34
23478F
4.02e7*
32.47
Abs. Int.
1.09e7
5.47e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF-2
29.51-34.00
341.8568 Fn2
Flags: PBM
4σ 3.91e3
0%
12378F
2.68e7*
31.33
23478F
2.57e7*
32.47
Abs. Int.
7.07e6
3.54e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.00
351.9000 Fn2
Flags: PBM
4σ 2.93e3
0%
CS 12346F
8.79e7*
30.78
ES 12378F
8.41e7*
31.32
ES 23478F
8.22e7*
32.45
Abs. Int.
2.25e7
1.13e7
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.00
353.8970 Fn2
Flags: PBM
4σ 2.94e3
0%
CS 12346F
5.62e7*
30.78
ES 12378F
5.22e7*
31.32
ES 23478F
5.08e7*
32.45
Abs. Int.
1.44e7
7.20e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
HpCDPE
29.51-34.00
409.7974 Fn2
Flags: PB
4σ 1.73e3
0%
Abs. Int.
1.14e4
5.69e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT


Rel. Int.
100%
HxCDF
34.02-38.25
373.8207 Fn3
Flags: PBM
4σ 3.21e3
123478F
3.45e7*
35.77
123678F
3.46e7*
35.91
234678F
3.21e7*
36.56
123789F
2.66e7*
37.53
Abs. Int.
1.07e7
5.33e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDF
34.02-38.25
375.8178 Fn3
Flags: PBM
4σ 1.85e3
123478F
2.76e7*
35.77
123678F
2.81e7*
35.91
234678F
2.58e7*
36.56
123789F
2.14e7*
37.53
Abs. Int.
8.60e6
4.30e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDF Std.
34.02-38.25
383.8639 Fn3
Flags: PBM
4σ 9.62e3
ES 123678F
3.83e7*
35.89
ES 123478F
3.36e7*
35.75
CS 123469F
3.44e7*
36.20
ES 234678F
3.48e7*
36.54
ES 123789F
2.87e7*
37.51
Abs. Int.
1.18e7
5.92e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDF Std.
34.02-38.25
385.8610 Fn3
Flags: PBM
4σ 1.05e4
ES 123678F
7.09e7*
35.89
ES 123478F
6.42e7*
35.75
CS 123469F
6.42e7*
36.20
ES 234678F
6.46e7*
36.54
ES 123789F
5.44e7*
37.51
Abs. Int.
2.07e7
1.03e7
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
OCDPE
34.02-38.25
445.7555 Fn3
Flags: PB
4σ 1.21e3
Abs. Int.
1.28e4
6.40e3
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT

SGS ID: CS3_200810_DF_RD
Instr: [ILM] AutoSpec-Ultima MM3

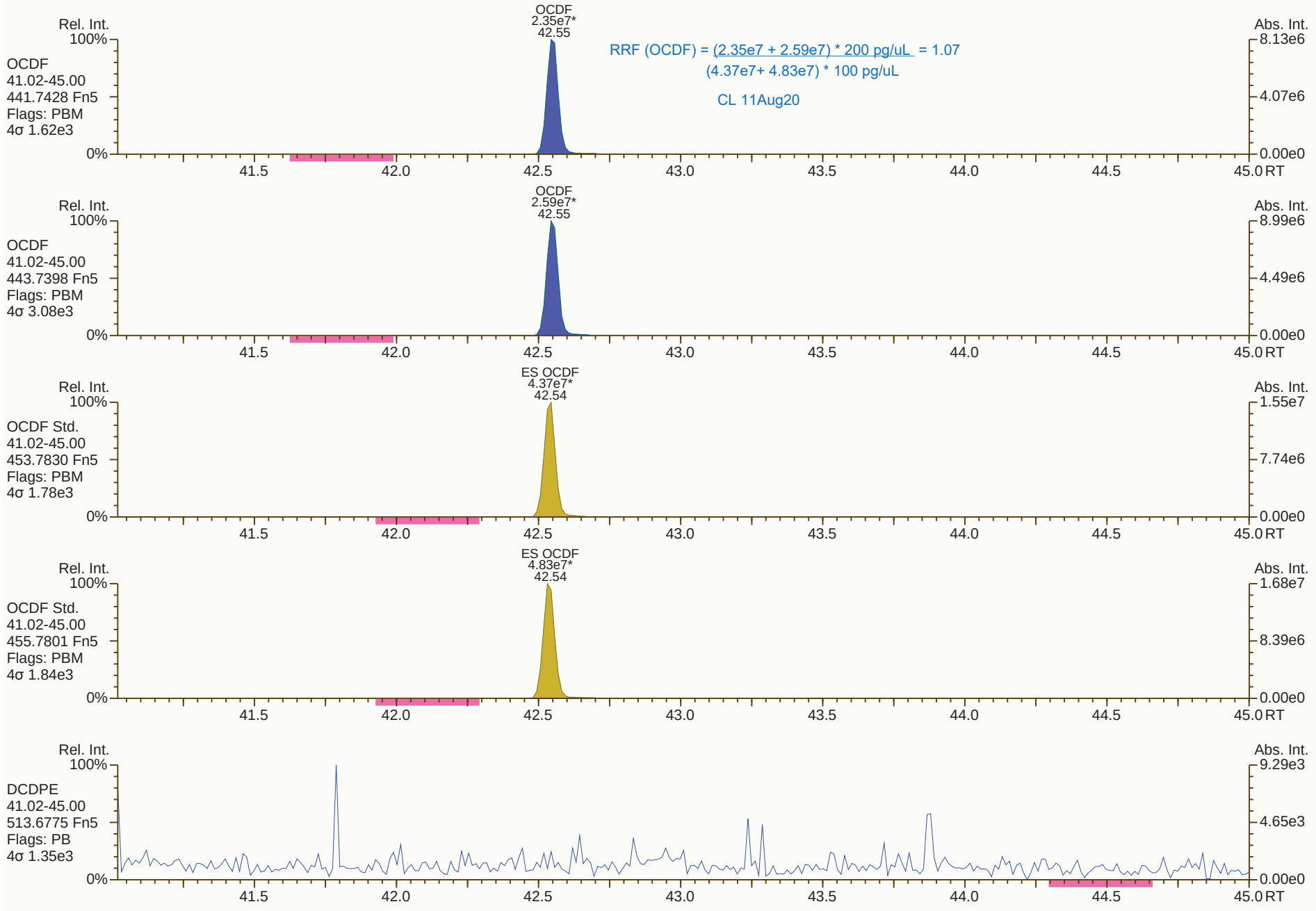
Sample ID: SIL 20-449-3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 3

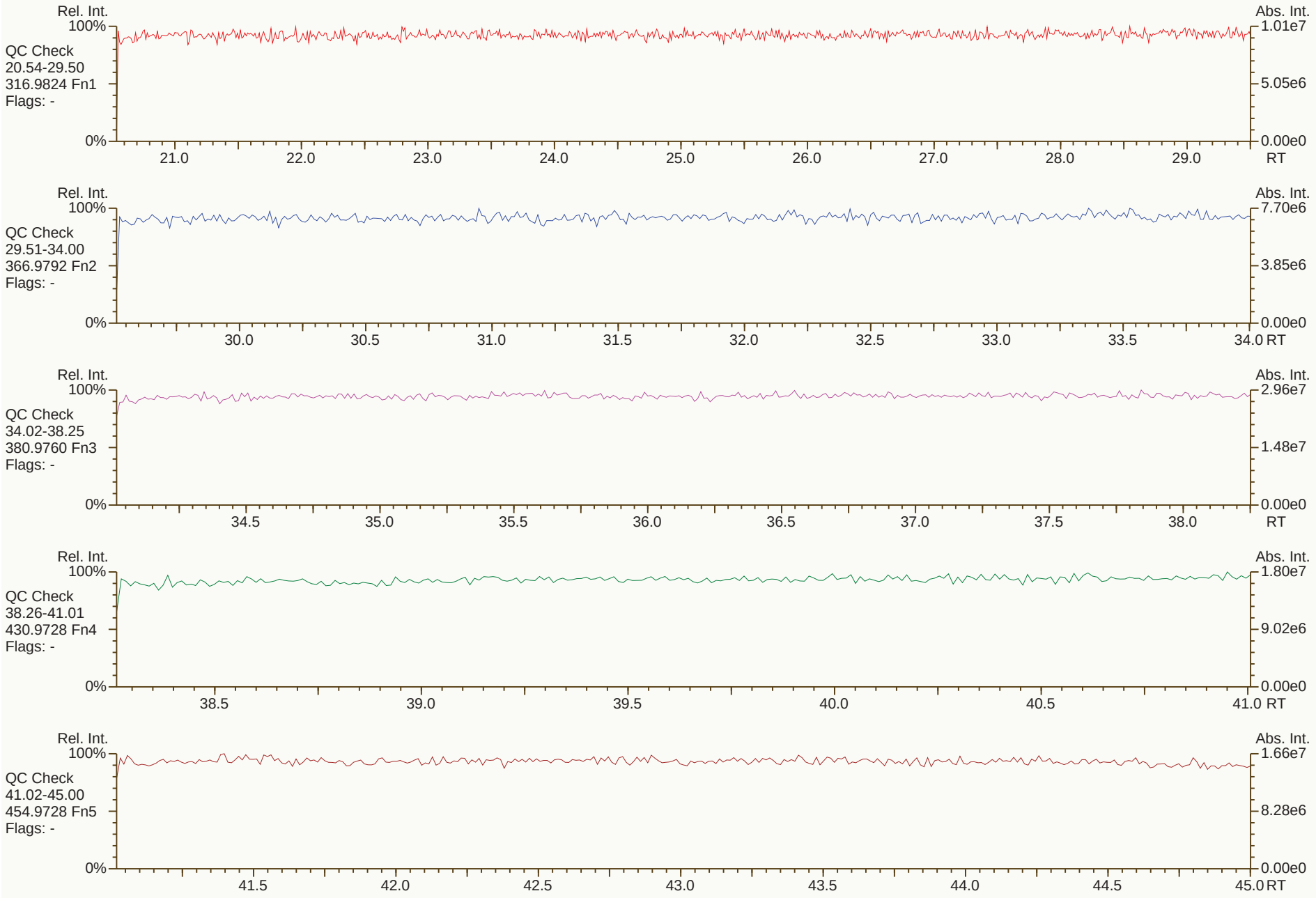
Acq: 11-Aug-2020 08:48:21
User: PSW Datafile: 200810R23



Results: P:\B4500_B4599\B4519\B4519_17655 DF\Resources\CS3_200810_DF_RD.utp_res, saved 11-Aug-2020 09:38 (PSW)
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 9752, 6519, 1832 scc: 480-308

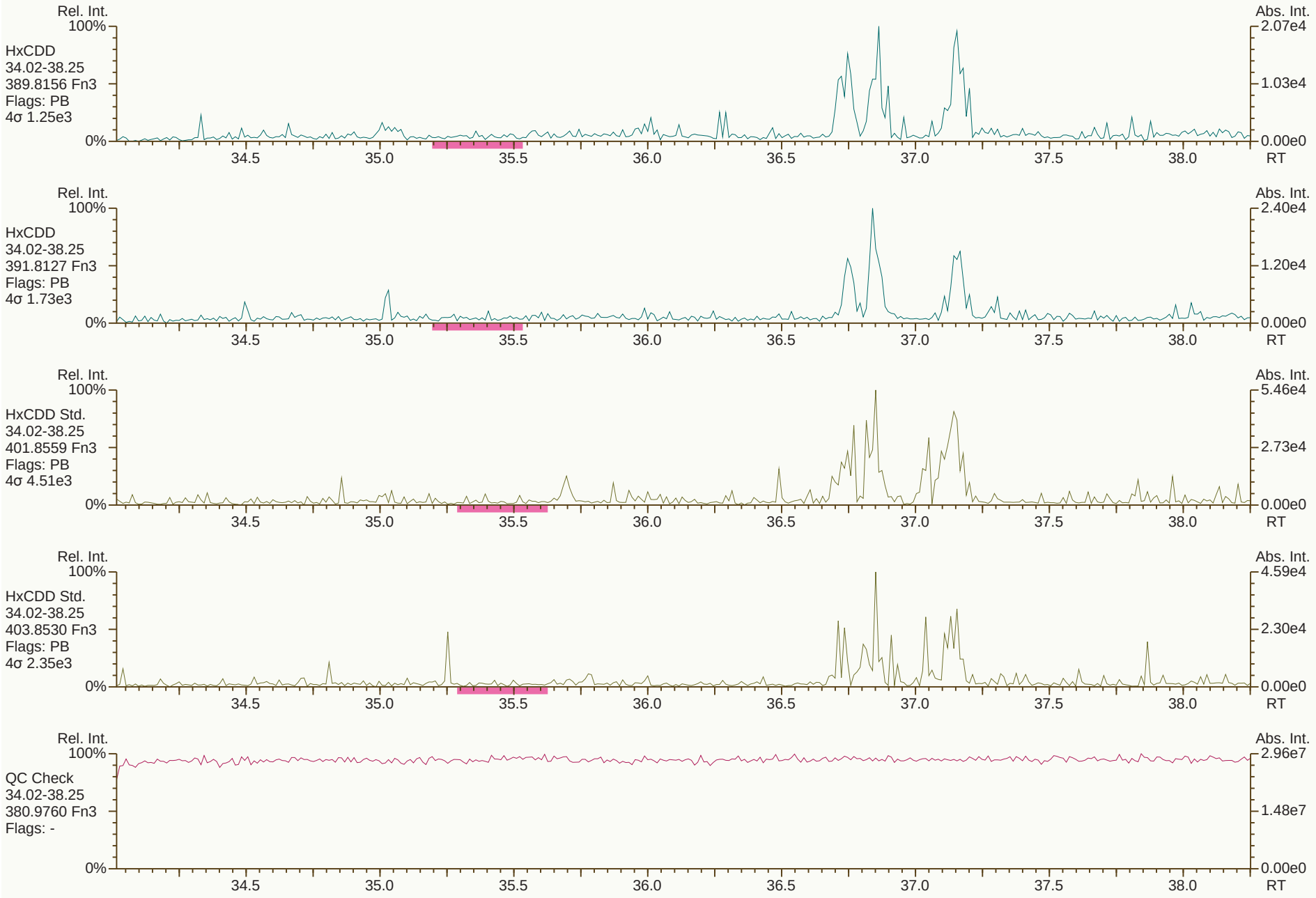
Peak annotation: Areas, Centroids
PKD: 11-Aug-2020 09:38 Printed: 11-Aug-2020 10:20 Page 11 of 12


Rel. Int.
100%
OCDF
41.02-45.00
441.7428 Fn5
Flags: PBM
4σ 1.62e3
0%
OCDF
2.35e7*
42.55
RRF (OCDF) = (2.35e7 + 2.59e7) * 200 pg/uL = 1.07
(4.37e7+ 4.83e7) * 100 pg/uL
CL 11Aug20
Abs. Int.
8.13e6
4.07e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF
41.02-45.00
443.7398 Fn5
Flags: PBM
4σ 3.08e3
0%
OCDF
2.59e7*
42.55
Abs. Int.
8.99e6
4.49e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF Std.
41.02-45.00
453.7830 Fn5
Flags: PBM
4σ 1.78e3
0%
ES OCDF
4.37e7*
42.54
Abs. Int.
1.55e7
7.74e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF Std.
41.02-45.00
455.7801 Fn5
Flags: PBM
4σ 1.84e3
0%
ES OCDF
4.83e7*
42.54
Abs. Int.
1.68e7
8.39e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
DCDPE
41.02-45.00
513.6775 Fn5
Flags: PB
4σ 1.35e3
0%
Abs. Int.
9.29e3
4.65e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT


Rel. Int.
100%
0%
Abs. Int.
1.01e7
5.05e6
0.00e0
QC Check
20.54-29.50
316.9824 Fn1
Flags: -
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
0%
Abs. Int.
7.70e6
3.85e6
0.00e0
QC Check
29.51-34.00
366.9792 Fn2
Flags: -
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
0%
Abs. Int.
2.96e7
1.48e7
0.00e0
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
0%
Abs. Int.
1.80e7
9.02e6
0.00e0
QC Check
38.26-41.01
430.9728 Fn4
Flags: -
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
0%
Abs. Int.
1.66e7
8.28e6
0.00e0
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

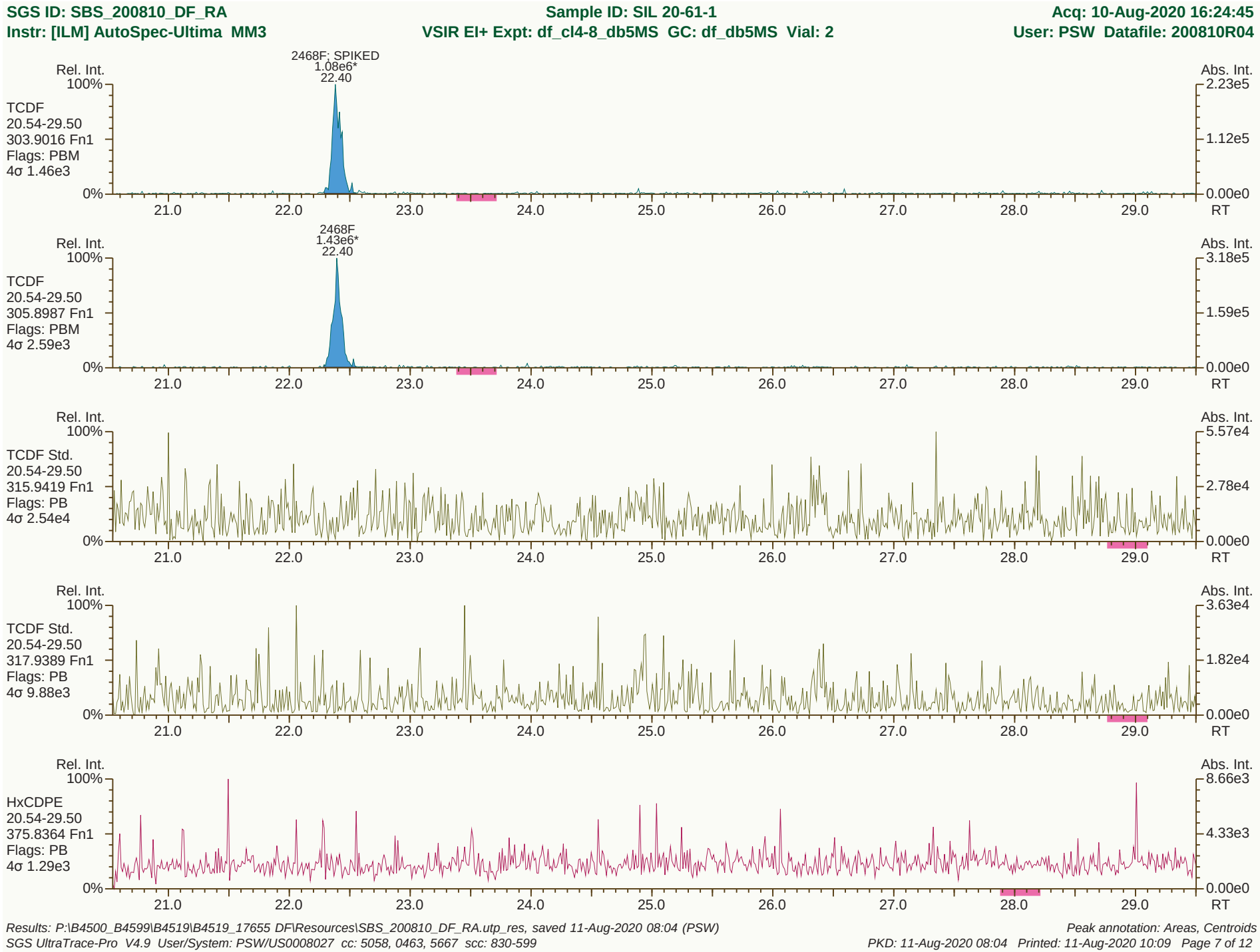

Rel. Int.
100%
TCDD
20.54-29.50
319.8965 Fn1
Flags: PB
4σ 2.57e3
0%
Abs. Int.
1.20e4
6.01e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD
20.54-29.50
321.8936 Fn1
Flags: PB
4σ 3.56e3
0%
Abs. Int.
7.59e3
3.80e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
37Cl-TCDD
20.54-29.50
327.8850 Fn1
Flags: PB
4σ 1.68e3
0%
Abs. Int.
1.50e4
7.52e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
331.9368 Fn1
Flags: PB
4σ 6.80e3
0%
Abs. Int.
4.29e4
2.14e4
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
333.9339 Fn1
Flags: PB
4σ 6.04e3
0%
Abs. Int.
2.34e4
1.17e4
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
PeCDD
29.51-34.00
355.8546 Fn2
Flags: PB
4σ 3.13e3
0%
Abs. Int.
1.99e4
9.93e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD
29.51-34.00
357.8517 Fn2
Flags: PB
4σ 1.24e3
0%
Abs. Int.
1.56e4
7.82e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.00
367.8949 Fn2
Flags: PB
4σ 3.73e3
0%
Abs. Int.
3.98e4
1.99e4
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.00
369.8919 Fn2
Flags: PB
4σ 3.86e3
0%
Abs. Int.
2.36e4
1.18e4
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
QC Check
29.51-34.00
366.9792 Fn2
Flags: -
0%
Abs. Int.
7.70e6
3.85e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT


Rel. Int.
100%
HxCDD
34.02-38.25
389.8156 Fn3
Flags: PB
4σ 1.25e3
0%
Abs. Int.
2.07e4
1.03e4
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD
34.02-38.25
391.8127 Fn3
Flags: PB
4σ 1.73e3
0%
Abs. Int.
2.40e4
1.20e4
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
401.8559 Fn3
Flags: PB
4σ 4.51e3
0%
Abs. Int.
5.46e4
2.73e4
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
403.8530 Fn3
Flags: PB
4σ 2.35e3
0%
Abs. Int.
4.59e4
2.30e4
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
0%
Abs. Int.
2.96e7
1.48e7
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT


Rel. Int.
100%
HpCDD
38.26-41.01
423.7767 Fn4
Flags: PB
4σ 1.68e3
0%
Abs. Int.
2.05e4
1.03e4
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.26-41.01
425.7737 Fn4
Flags: PB
4σ 1.34e3
0%
Abs. Int.
2.49e4
1.25e4
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
435.8169 Fn4
Flags: PB
4σ 2.03e3
0%
Abs. Int.
4.83e4
2.42e4
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
437.8140 Fn4
Flags: PB
4σ 1.67e3
0%
Abs. Int.
5.30e4
2.65e4
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.26-41.01
430.9728 Fn4
Flags: -
0%
Abs. Int.
1.80e7
9.02e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT


Rel. Int.
100%
OCDD
41.02-45.00
457.7377 Fn5
Flags: PB
4σ 2.02e3
0%
Abs. Int.
3.81e4
1.91e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDD
41.02-45.00
459.7348 Fn5
Flags: PB
4σ 2.47e3
0%
Abs. Int.
5.36e4
2.68e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDD Std.
41.02-45.00
469.7780 Fn5
Flags: PB
4σ 2.01e3
0%
Abs. Int.
5.70e4
2.85e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDD Std.
41.02-45.00
471.7750 Fn5
Flags: PB
4σ 2.35e3
0%
Abs. Int.
7.19e4
3.59e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
1.66e7
8.28e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT


SGS ID: SBS_200810_DF_RA
Sample ID: SIL 20-61-1
Acq: 10-Aug-2020 16:24:45
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 2
User: PSW Datafile: 200810R04
2468F; SPIKED
1.08e6*
22.40
Rel. Int.
Abs. Int.
100%
0%
TCDF
20.54-29.50
303.9016 Fn1
Flags: PBM
4σ 1.46e3
2.23e5
1.12e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
2468F
1.43e6*
22.40
TCDF
20.54-29.50
305.8987 Fn1
Flags: PBM
4σ 2.59e3
3.18e5
1.59e5
TCDF Std.
20.54-29.50
315.9419 Fn1
Flags: PB
4σ 2.54e4
5.57e4
2.78e4
TCDF Std.
20.54-29.50
317.9389 Fn1
Flags: PB
4σ 9.88e3
3.63e4
1.82e4
HxCDPE
20.54-29.50
375.8364 Fn1
Flags: PB
4σ 1.29e3
8.66e3
4.33e3
Results: P:\B4500_B4599\B4519\B4519_17655 DF\Resources\SBS_200810_DF_RA.utp_res, saved 11-Aug-2020 08:04 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 5058, 0463, 5667 scc: 830-599
PKD: 11-Aug-2020 08:04 Printed: 11-Aug-2020 10:09 Page 7 of 12

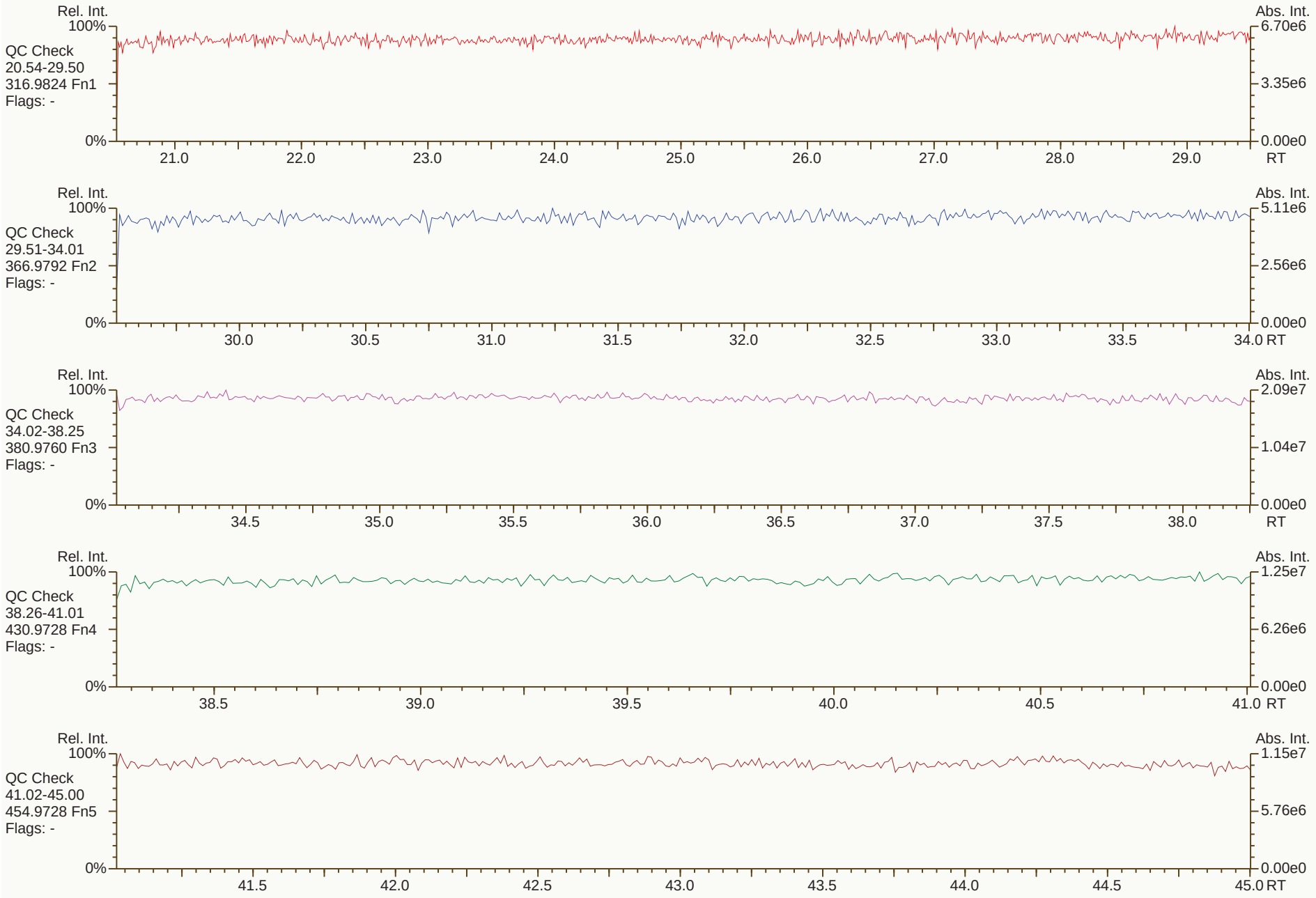

Rel. Int.
100%
0%
Abs. Int.
1.23e4
6.15e3
0.00e0
PeCDF-1
20.54-29.50
339.8597 Fn1
Flags: PB
4σ 1.80e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
0%
Abs. Int.
2.33e4
1.17e4
0.00e0
PeCDF-1
20.54-29.50
341.8568 Fn1
Flags: PB
4σ 2.18e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
0%
Abs. Int.
1.01e7
5.05e6
0.00e0
QC Check
20.54-29.50
316.9824 Fn1
Flags: -
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
PeCDF-2
29.51-34.00
339.8597 Fn2
Flags: PB
4σ 1.80e3
0%
Abs. Int.
2.39e4
1.19e4
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF-2
29.51-34.00
341.8568 Fn2
Flags: PB
4σ 2.94e3
0%
Abs. Int.
1.73e4
8.67e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.00
351.9000 Fn2
Flags: PB
4σ 3.34e3
0%
Abs. Int.
6.02e4
3.01e4
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.00
353.8970 Fn2
Flags: PB
4σ 2.18e3
0%
Abs. Int.
4.43e4
2.21e4
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
HpCDPE
29.51-34.00
409.7974 Fn2
Flags: PB
4σ 1.40e3
0%
Abs. Int.
7.26e3
3.63e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT


Rel. Int.
100%
HxCDF
34.02-38.25
373.8207 Fn3
Flags: PB
4σ 1.25e3
0%
Abs. Int.
2.90e4
1.45e4
0.00e0
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0
RT
Rel. Int.
100%
HxCDF
34.02-38.25
375.8178 Fn3
Flags: PB
4σ 1.22e3
0%
Abs. Int.
3.60e4
1.80e4
0.00e0
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0
RT
Rel. Int.
100%
HxCDF Std.
34.02-38.25
383.8639 Fn3
Flags: PB
4σ 3.13e3
0%
Abs. Int.
5.07e4
2.54e4
0.00e0
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0
RT
Rel. Int.
100%
HxCDF Std.
34.02-38.25
385.8610 Fn3
Flags: PB
4σ 4.93e3
0%
Abs. Int.
6.71e4
3.36e4
0.00e0
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0
RT
Rel. Int.
100%
OCDPE
34.02-38.25
445.7555 Fn3
Flags: PB
4σ 1.37e3
0%
Abs. Int.
5.22e3
2.61e3
0.00e0
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0
RT


Rel. Int.
100%
HpCDF
38.26-41.01
407.7818 Fn4
Flags: PB
4σ 1.62e3
0%
Abs. Int.
4.37e4
2.18e4
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF
38.26-41.01
409.7788 Fn4
Flags: PB
4σ 1.81e3
0%
Abs. Int.
3.04e4
1.52e4
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.26-41.01
417.8253 Fn4
Flags: PB
4σ 2.99e3
0%
Abs. Int.
5.01e4
2.51e4
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.26-41.01
419.8220 Fn4
Flags: PB
4σ 4.51e3
0%
Abs. Int.
7.34e4
3.67e4
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
NCDPE
38.26-41.01
479.7165 Fn4
Flags: PB
4σ 1.50e3
0%
Abs. Int.
8.40e3
4.20e3
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT


Rel. Int.
100%
OCDF
41.02-45.00
441.7428 Fn5
Flags: PB
4σ 1.46e3
0%
Abs. Int.
3.60e4
1.80e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF
41.02-45.00
443.7398 Fn5
Flags: PB
4σ 2.41e3
0%
Abs. Int.
4.35e4
2.17e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF Std.
41.02-45.00
453.7830 Fn5
Flags: PB
4σ 1.84e3
0%
Abs. Int.
7.82e4
3.91e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF Std.
41.02-45.00
455.7801 Fn5
Flags: PB
4σ 2.58e3
0%
Abs. Int.
8.04e4
4.02e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
DCDPE
41.02-45.00
513.6775 Fn5
Flags: PB
4σ 1.34e3
0%
Abs. Int.
9.45e3
4.73e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT


Rel. Int.
100%
0%
Abs. Int.
6.70e6
3.35e6
0.00e0
QC Check
20.54-29.50
316.9824 Fn1
Flags: -
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
0%
Abs. Int.
5.11e6
2.56e6
0.00e0
QC Check
29.51-34.01
366.9792 Fn2
Flags: -
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
0%
Abs. Int.
2.09e7
1.04e7
0.00e0
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
0%
Abs. Int.
1.25e7
6.26e6
0.00e0
QC Check
38.26-41.01
430.9728 Fn4
Flags: -
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
0%
Abs. Int.
1.15e7
5.76e6
0.00e0
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

SGS ID: SBS_200810_DF_RB | **Sample ID: SIL 20-61-1** | **Acq: 11-Aug-2020 00:27:11**

Instr: [ILM] AutoSpec-Ultima MM3 | **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 2** | **User: PSW Datafile: 200810R14**



Results: P:\B4500_B4599\B4519\B4519_17655 DF\Resources\SBS_200810_DF_RB.utp_res, saved 11-Aug-2020 08:08 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 1298, 9798, 1429 scc: 703-687 *PKD: 11-Aug-2020 08:08 Printed: 11-Aug-2020 10:14 Page 2 of 12*


Rel. Int.
100%
PeCDD
29.51-34.01
355.8546 Fn2
Flags: PB
4σ 2.47e3
0%
Abs. Int.
1.22e4
6.10e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD
29.51-34.01
357.8517 Fn2
Flags: PB
4σ 1.64e3
0%
Abs. Int.
6.47e3
3.23e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
367.8949 Fn2
Flags: PB
4σ 3.12e3
0%
Abs. Int.
3.80e4
1.90e4
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
369.8919 Fn2
Flags: PB
4σ 2.12e3
0%
Abs. Int.
1.24e4
6.19e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
QC Check
29.51-34.01
366.9792 Fn2
Flags: -
0%
Abs. Int.
5.11e6
2.56e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT


Rel. Int.
100%
HxCDD
34.02-38.25
389.8156 Fn3
Flags: PB
4σ 1.07e3
0%
Abs. Int.
2.45e4
1.22e4
0.00e0
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0
RT
Rel. Int.
100%
HxCDD
34.02-38.25
391.8127 Fn3
Flags: PB
4σ 1.23e3
0%
Abs. Int.
1.54e4
7.70e3
0.00e0
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
401.8559 Fn3
Flags: PB
4σ 2.91e3
0%
Abs. Int.
4.24e4
2.12e4
0.00e0
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
403.8530 Fn3
Flags: PB
4σ 4.69e3
0%
Abs. Int.
3.35e4
1.67e4
0.00e0
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0
RT
Rel. Int.
100%
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
0%
Abs. Int.
2.09e7
1.04e7
0.00e0
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0
RT


Rel. Int.
100%
HpCDD
38.26-41.01
423.7767 Fn4
Flags: PB
4σ 1.10e3
0%
Abs. Int.
2.80e4
1.40e4
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.26-41.01
425.7737 Fn4
Flags: PB
4σ 1.39e3
0%
Abs. Int.
2.23e4
1.12e4
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
435.8169 Fn4
Flags: PB
4σ 1.71e3
0%
Abs. Int.
6.86e4
3.43e4
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
437.8140 Fn4
Flags: PB
4σ 2.21e3
0%
Abs. Int.
4.99e4
2.49e4
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.26-41.01
430.9728 Fn4
Flags: -
0%
Abs. Int.
1.25e7
6.26e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT

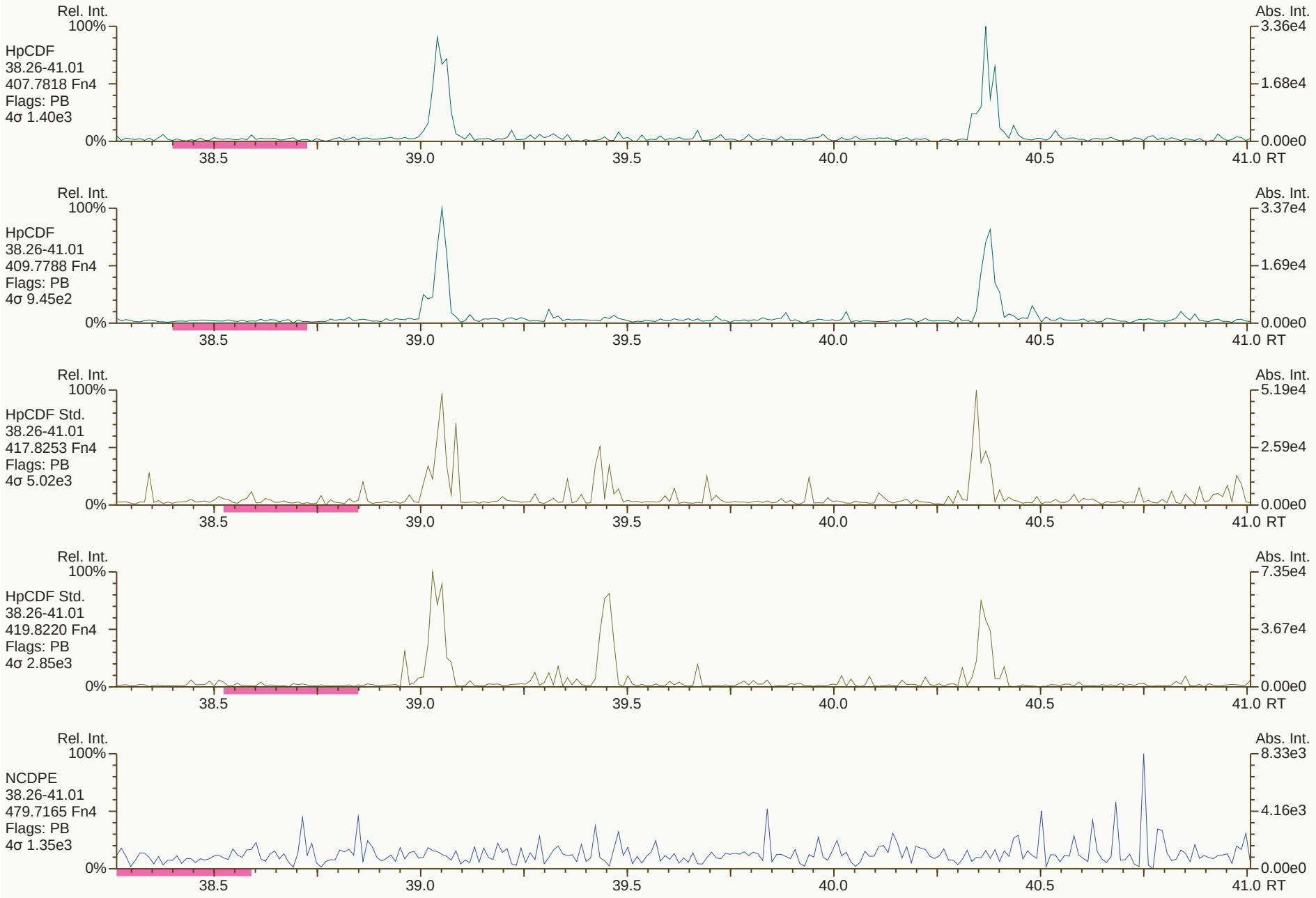

Rel. Int.
100%
OCDD
41.02-45.00
457.7377 Fn5
Flags: PB
4σ 1.86e3
0%
Abs. Int.
3.09e4
1.54e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDD
41.02-45.00
459.7348 Fn5
Flags: PB
4σ 1.74e3
0%
Abs. Int.
6.33e4
3.16e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDD Std.
41.02-45.00
469.7780 Fn5
Flags: PB
4σ 1.57e3
0%
Abs. Int.
6.50e4
3.25e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDD Std.
41.02-45.00
471.7750 Fn5
Flags: PB
4σ 2.14e3
0%
Abs. Int.
1.38e5
6.90e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
1.15e7
5.76e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

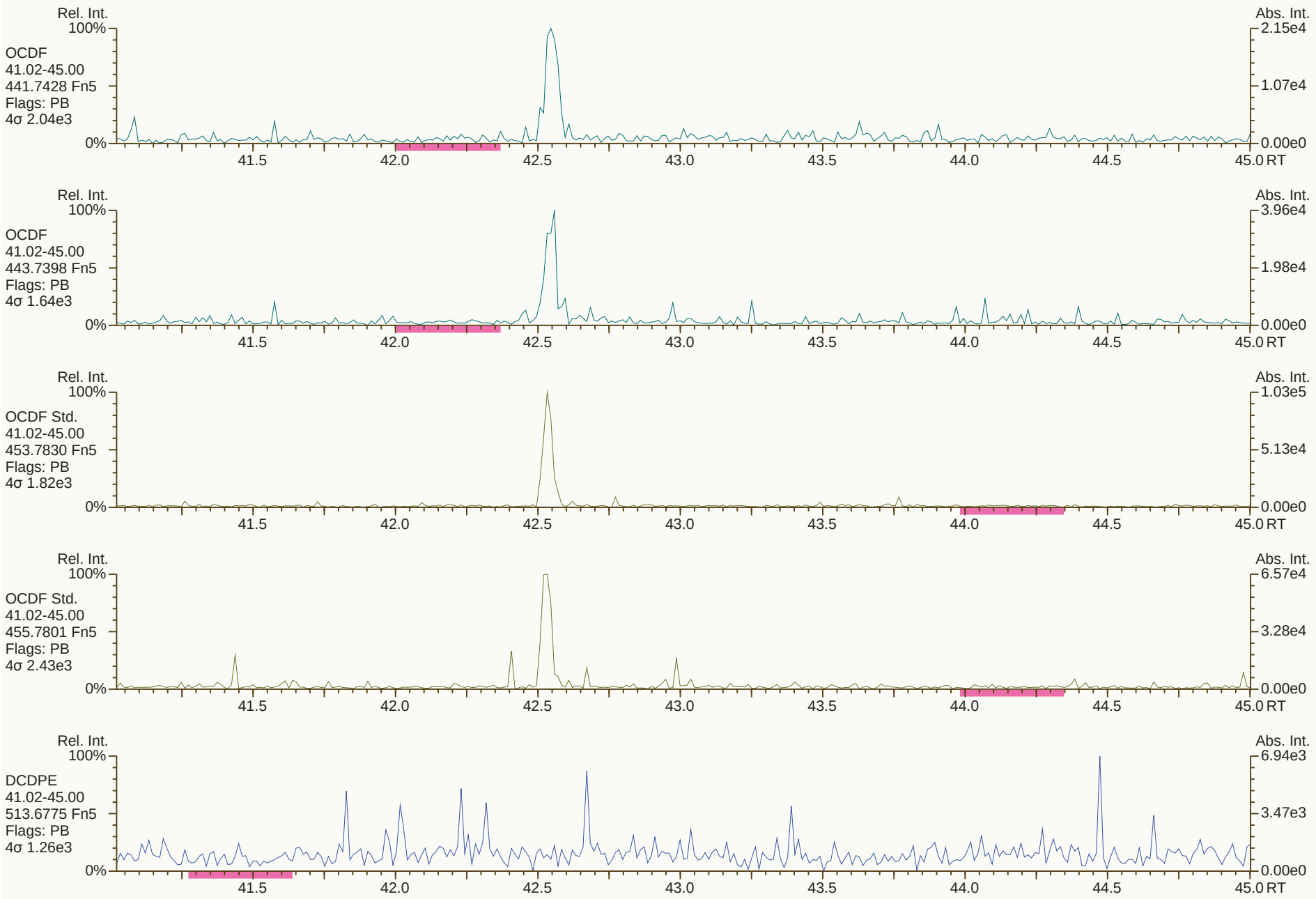

2468F; SPIKED
1.08e6*
22.38
Rel. Int.
100%
TCDF
20.54-29.50
303.9016 Fn1
Flags: PBM
4σ 1.62e3
0%
Abs. Int.
2.01e5
1.00e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
2468F
1.43e6*
22.39
TCDF
20.54-29.50
305.8987 Fn1
Flags: PBM
4σ 1.51e3
2.58e5
1.29e5
TCDF Std.
20.54-29.50
315.9419 Fn1
Flags: PB
4σ 1.95e4
6.58e4
3.29e4
TCDF Std.
20.54-29.50
317.9389 Fn1
Flags: PB
4σ 9.02e3
3.52e4
1.76e4
HxCDPE
20.54-29.50
375.8364 Fn1
Flags: PB
4σ 1.49e3
6.59e3
3.30e3


Rel. Int.
100%
0%
Abs. Int.
1.04e4
5.19e3
0.00e0
PeCDF-1
20.54-29.50
339.8597 Fn1
Flags: PB
4σ 2.45e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
0%
Abs. Int.
9.05e3
4.53e3
0.00e0
PeCDF-1
20.54-29.50
341.8568 Fn1
Flags: PB
4σ 1.37e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
0%
Abs. Int.
6.70e6
3.35e6
0.00e0
QC Check
20.54-29.50
316.9824 Fn1
Flags: -
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
PeCDF-2
29.51-34.01
339.8597 Fn2
Flags: PB
4σ 1.40e3
0%
Abs. Int.
2.32e4
1.16e4
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF-2
29.51-34.01
341.8568 Fn2
Flags: PB
4σ 2.26e3
0%
Abs. Int.
2.43e4
1.21e4
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
351.9000 Fn2
Flags: PB
4σ 1.97e3
0%
Abs. Int.
4.72e4
2.36e4
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
353.8970 Fn2
Flags: PB
4σ 2.50e3
0%
Abs. Int.
4.57e4
2.29e4
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
HpCDPE
29.51-34.01
409.7974 Fn2
Flags: PB
4σ 1.57e3
0%
Abs. Int.
6.60e3
3.30e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT


Rel. Int.
100%
HxCDF
34.02-38.25
373.8207 Fn3
Flags: PB
4σ 1.99e3
0%
Abs. Int.
2.40e4
1.20e4
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDF
34.02-38.25
375.8178 Fn3
Flags: PB
4σ 1.32e3
0%
Abs. Int.
2.21e4
1.10e4
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDF Std.
34.02-38.25
383.8639 Fn3
Flags: PB
4σ 3.19e3
0%
Abs. Int.
7.26e4
3.63e4
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDF Std.
34.02-38.25
385.8610 Fn3
Flags: PB
4σ 3.41e3
0%
Abs. Int.
6.75e4
3.37e4
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
OCDPE
34.02-38.25
445.7555 Fn3
Flags: PB
4σ 1.45e3
0%
Abs. Int.
5.48e3
2.74e3
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT

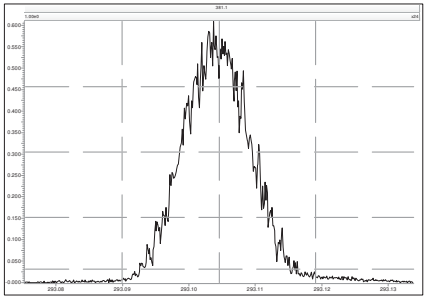

Rel. Int.
100%
HpCDF
38.26-41.01
407.7818 Fn4
Flags: PB
4σ 1.40e3
0%
Abs. Int.
3.36e4
1.68e4
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF
38.26-41.01
409.7788 Fn4
Flags: PB
4σ 9.45e2
0%
Abs. Int.
3.37e4
1.69e4
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.26-41.01
417.8253 Fn4
Flags: PB
4σ 5.02e3
0%
Abs. Int.
5.19e4
2.59e4
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.26-41.01
419.8220 Fn4
Flags: PB
4σ 2.85e3
0%
Abs. Int.
7.35e4
3.67e4
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
NCDPE
38.26-41.01
479.7165 Fn4
Flags: PB
4σ 1.35e3
0%
Abs. Int.
8.33e3
4.16e3
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT


Rel. Int.
100%
OCDF
41.02-45.00
441.7428 Fn5
Flags: PB
4σ 2.04e3
0%
Abs. Int.
2.15e4
1.07e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF
41.02-45.00
443.7398 Fn5
Flags: PB
4σ 1.64e3
0%
Abs. Int.
3.96e4
1.98e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF Std.
41.02-45.00
453.7830 Fn5
Flags: PB
4σ 1.82e3
0%
Abs. Int.
1.03e5
5.13e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF Std.
41.02-45.00
455.7801 Fn5
Flags: PB
4σ 2.43e3
0%
Abs. Int.
6.57e4
3.28e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
DCDPE
41.02-45.00
513.6775 Fn5
Flags: PB
4σ 1.26e3
0%
Abs. Int.
6.94e3
3.47e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

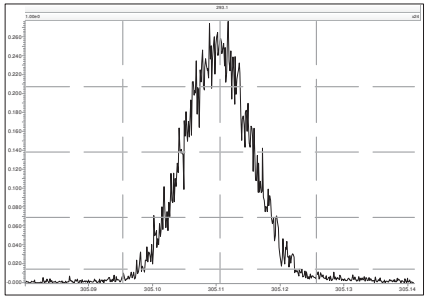
File: Experiment: df_cl4-8_db5MS.exp Reference: pfk.ref Function: 1 @ 200 (ppm)

Printed: Monday, August 10, 2020 14:20:00 Eastern Daylight Time

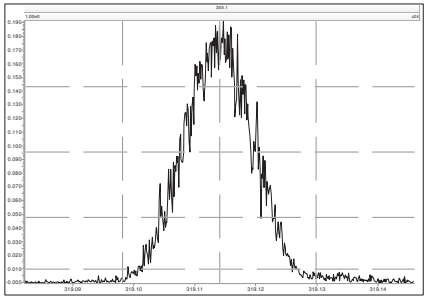
M 292.9824 R 12885



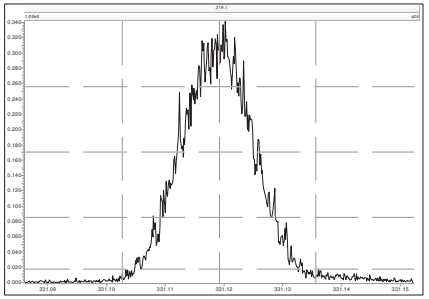
M 304.9824 R 13018



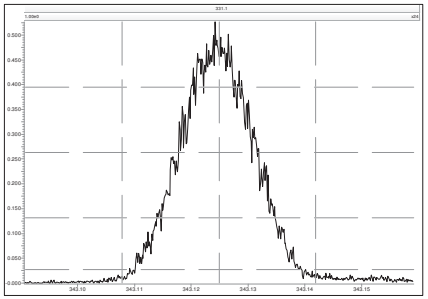
M 318.9792 R 13022



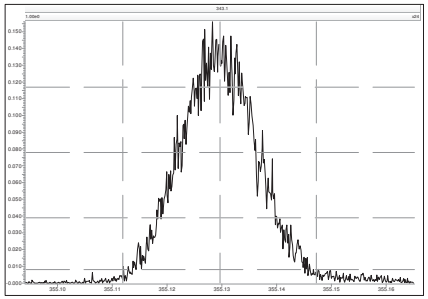
M 330.9792 R 11574



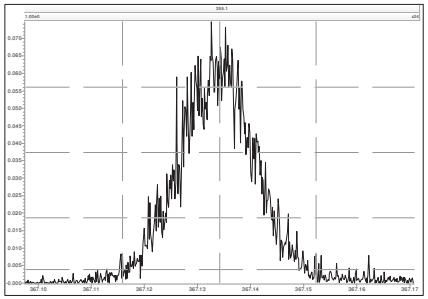
M 342.9792 R 11631



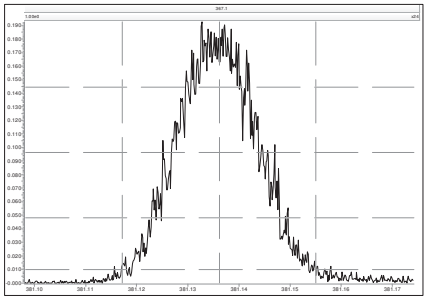
M 354.9792 R 11309



M 366.9792 R 11905



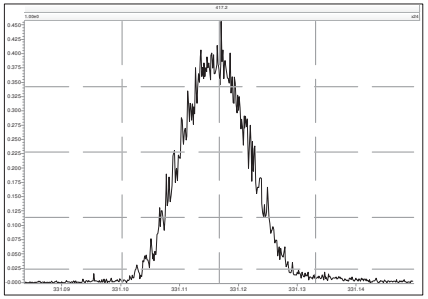
M 380.9760 R 10920



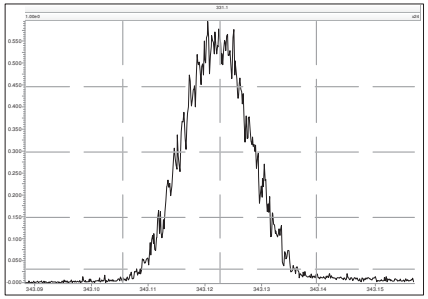
File: Experiment: df_cl4-8_db5MS.exp Reference: pfk.ref Function: 2 @ 200 (ppm)

Printed: Monday, August 10, 2020 14:20:21 Eastern Daylight Time

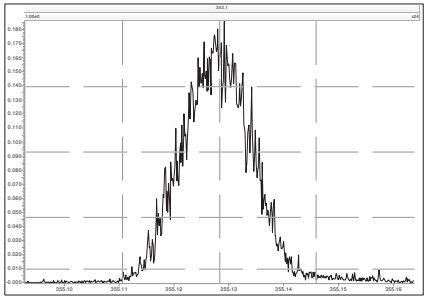
M 330.9792 R 13157



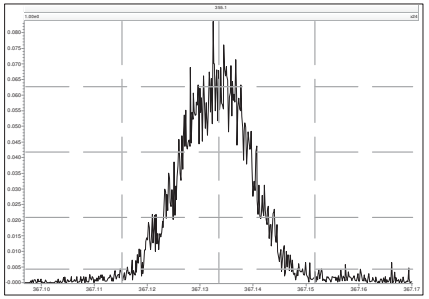
M 342.9792 R 13019



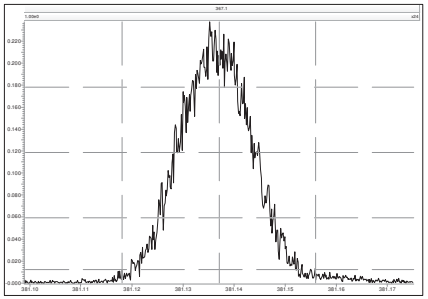
M 354.9792 R 13017



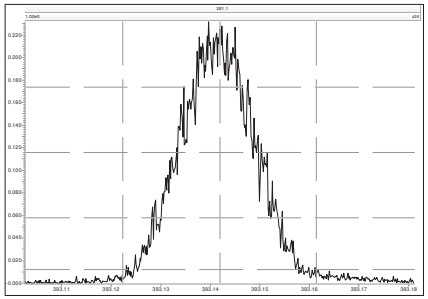
M 366.9792 R 13587



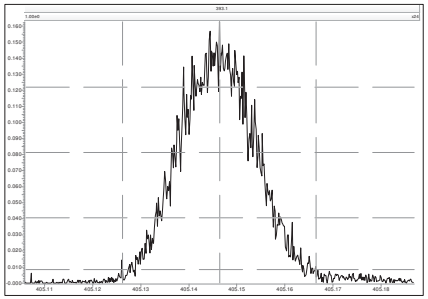
M 380.9760 R 12254



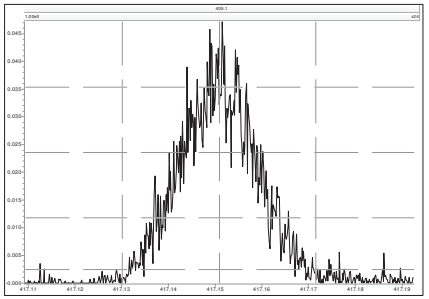
M 392.9760 R 12138



M 404.9760 R 11682



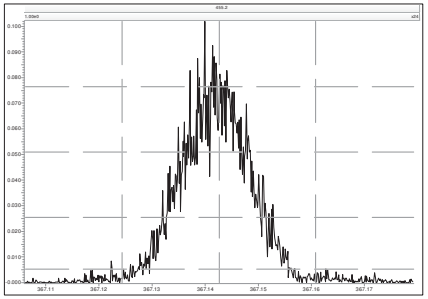
M 416.9760 R 12952



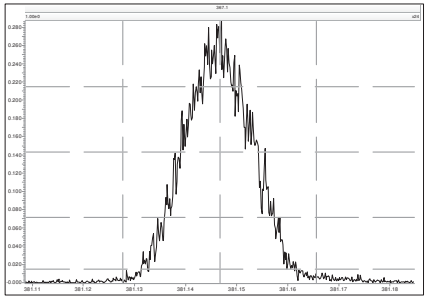
File: Experiment: df_cl4-8_db5MS.exp Reference: pfk.ref Function: 3 @ 200 (ppm)

Printed: Monday, August 10, 2020 14:20:42 Eastern Daylight Time

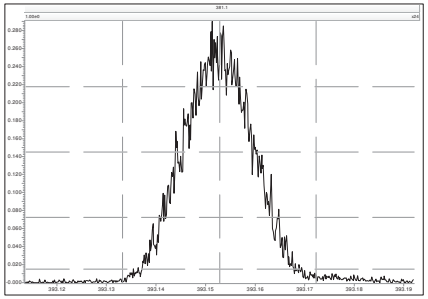
M 366.9792 R 13441



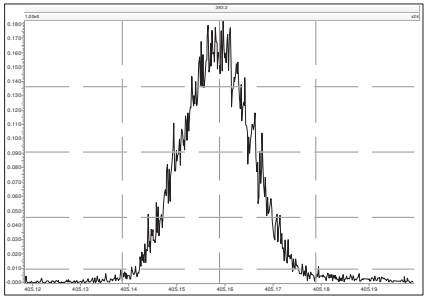
M 380.9760 R 13368



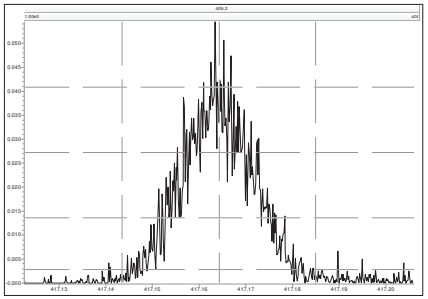
M 392.9760 R 12752



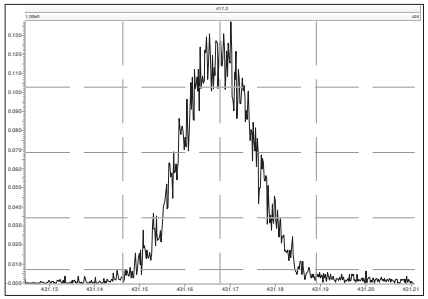
M 404.9760 R 12691



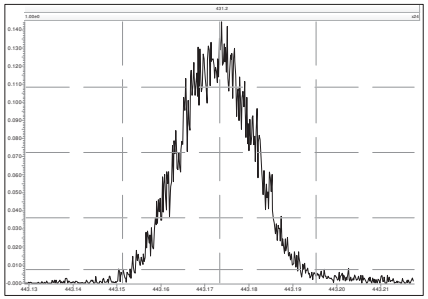
M 416.9760 R 12499



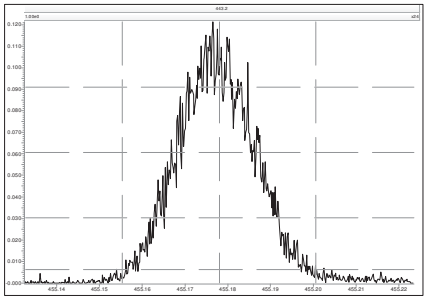
M 430.9728 R 12693



M 442.9728 R 11738



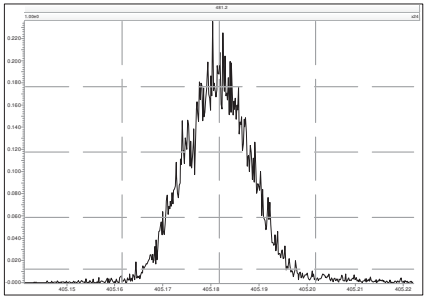
M 454.9728 R 10869



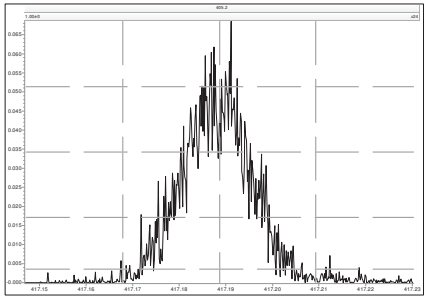
File: Experiment: df_cl4-8_db5MS.exp Reference: pfk.ref Function: 4 @ 200 (ppm)

Printed: Monday, August 10, 2020 14:21:01 Eastern Daylight Time

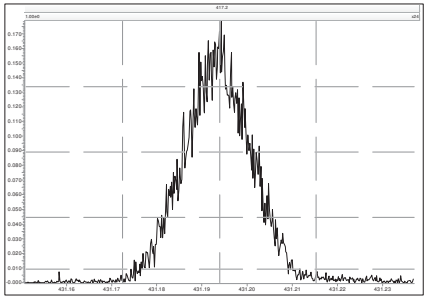
M 404.9760 R 12822



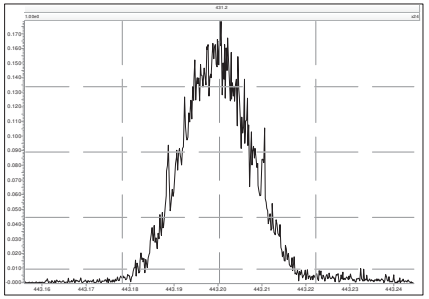
M 416.9760 R 14535



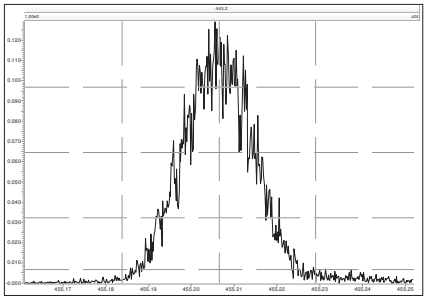
M 430.9728 R 13226



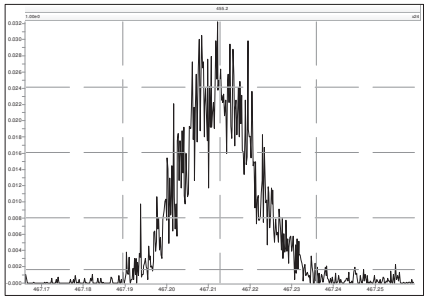
M 442.9728 R 13023



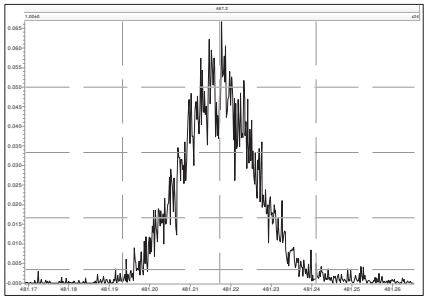
M 454.9728 R 12691



M 466.9728 R 13297



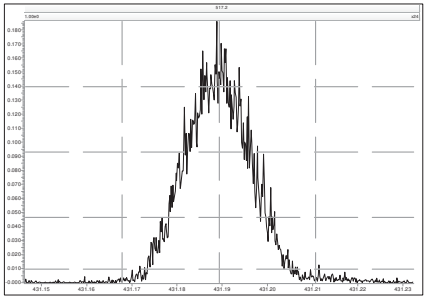
M 480.9696 R 11791



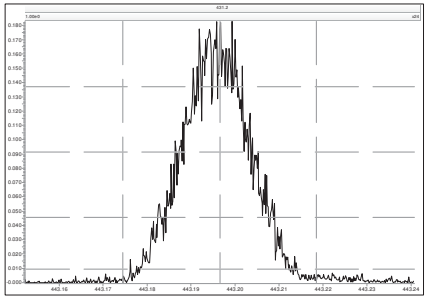
File: Experiment: df_cl4-8_db5MS.exp Reference: pfk.ref Function: 5 @ 200 (ppm)

Printed: Monday, August 10, 2020 14:21:21 Eastern Daylight Time

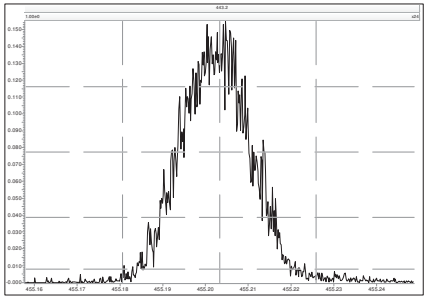
M 430.9728 R 13586



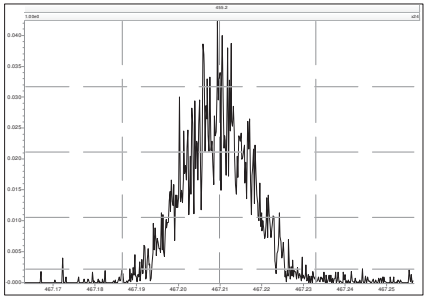
M 442.9728 R 12888



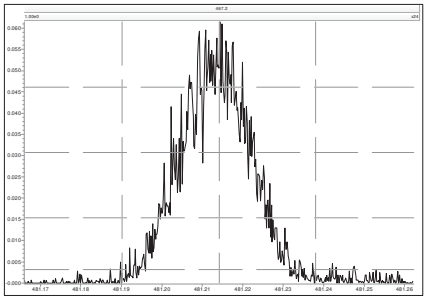
M 454.9728 R 12691



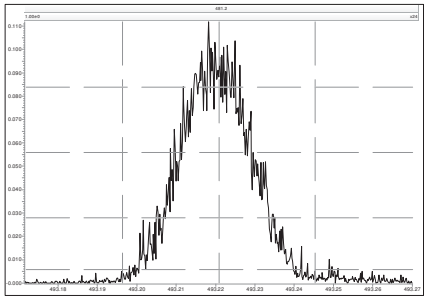
M 466.9728 R 14619



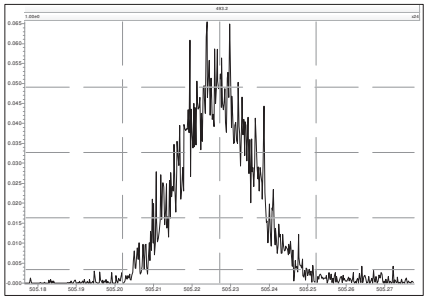
M 480.9696 R 12885



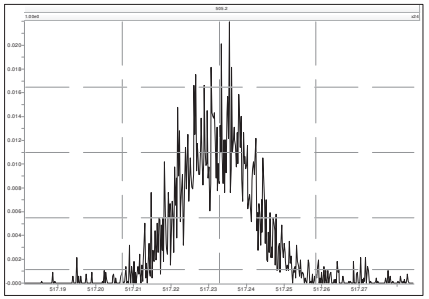
M 492.9696 R 12501



M 504.9696 R 12019



M 516.9697 R 13887



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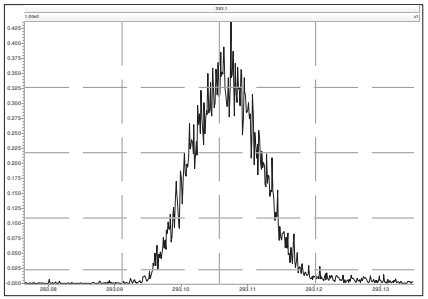
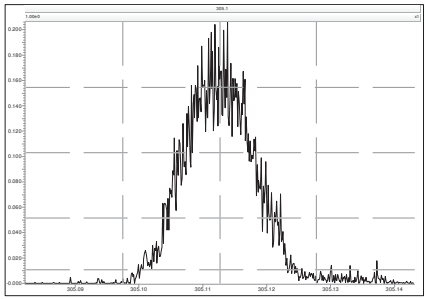
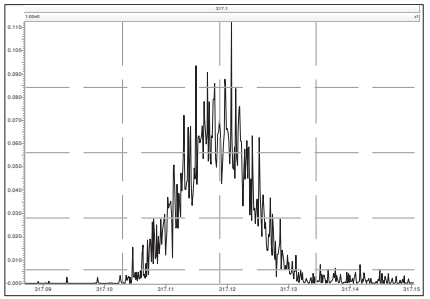
M 292.9824 R 12722



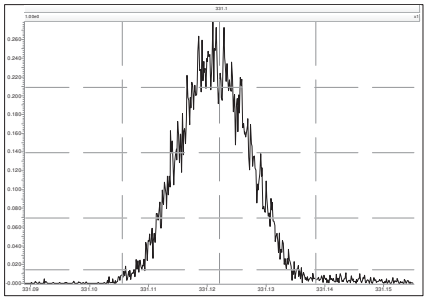
M 304.9824 R 12667



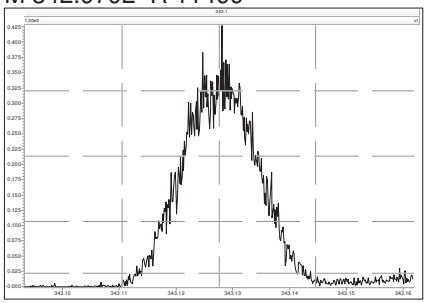
M 316.9824 R 13262



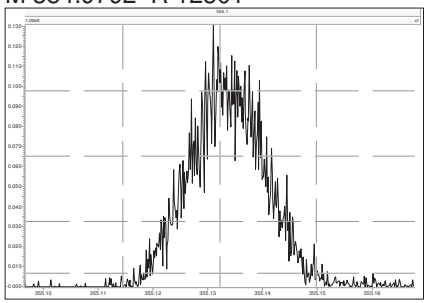
M 330.9792 R 12499



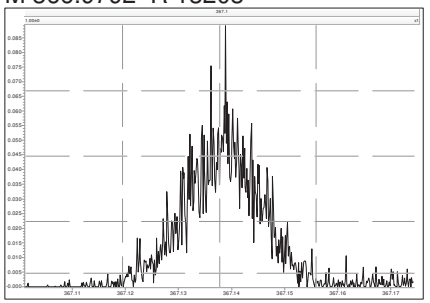
M 342.9792 R 11499



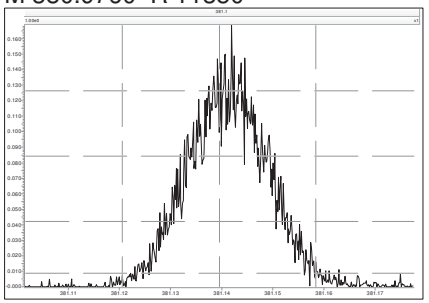
M 354.9792 R 12501



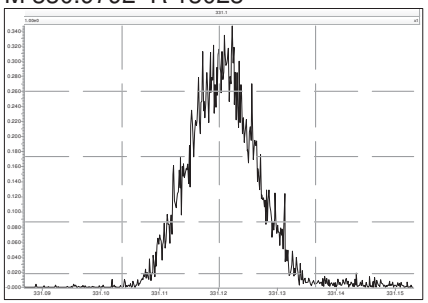
M 366.9792 R 13203



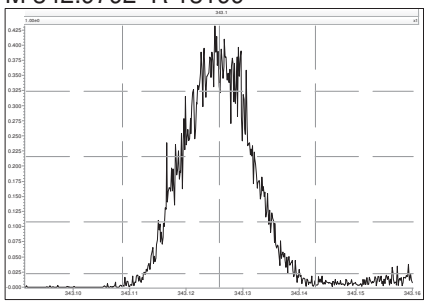
M 380.9760 R 11350



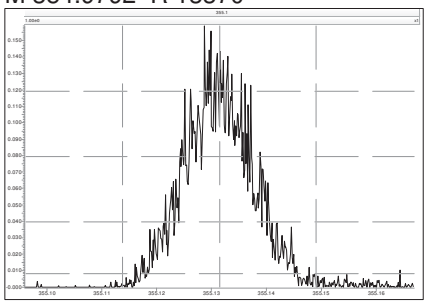
M 330.9792 R 13023



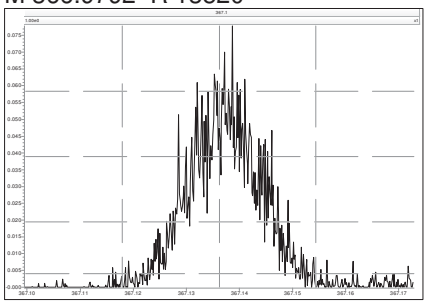
M 342.9792 R 13199



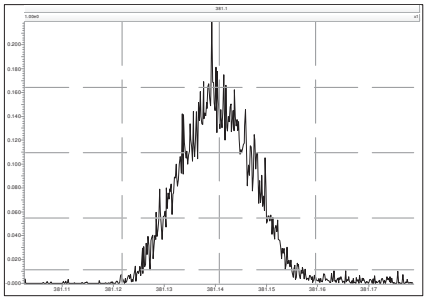
M 354.9792 R 13370



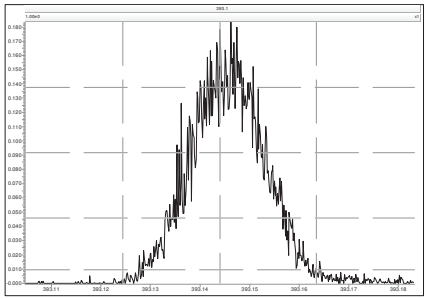
M 366.9792 R 13520



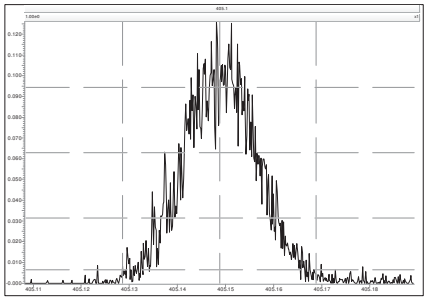
M 380.9760 R 12524



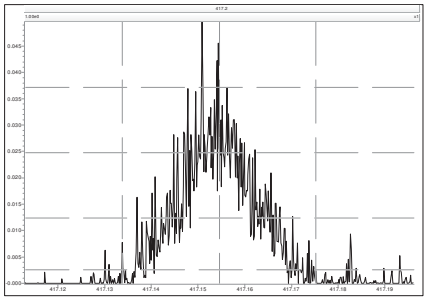
M 392.9760 R 12392



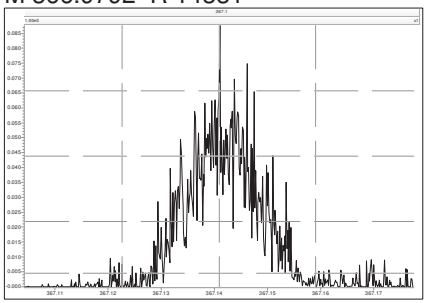
M 404.9760 R 12698



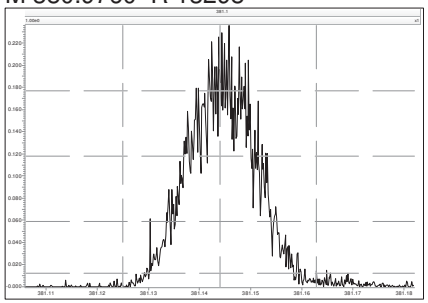
M 416.9760 R 14271



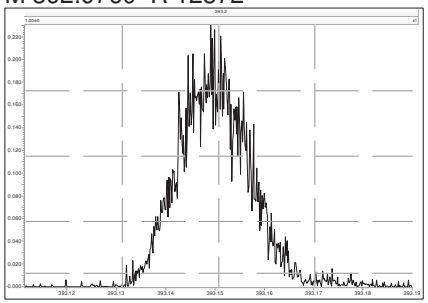
M 366.9792 R 14331



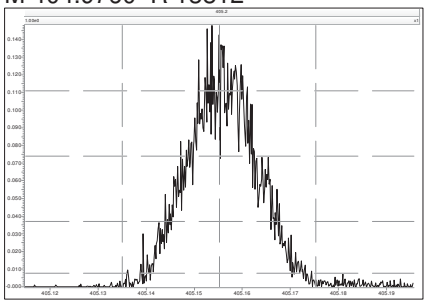
M 380.9760 R 13298



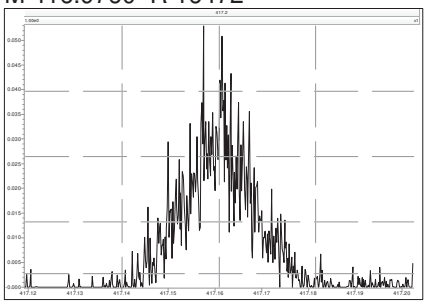
M 392.9760 R 12872



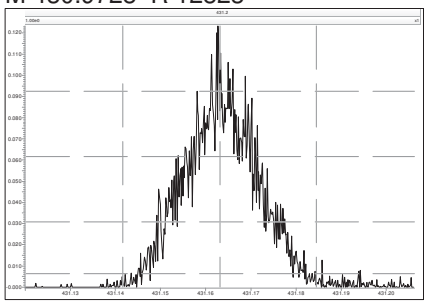
M 404.9760 R 13812



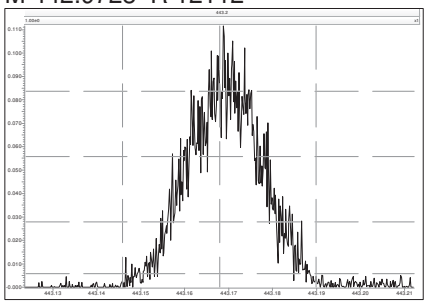
M 416.9760 R 16472



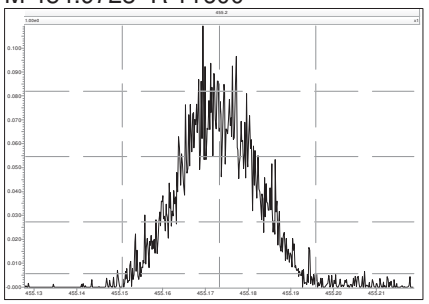
M 430.9728 R 12823



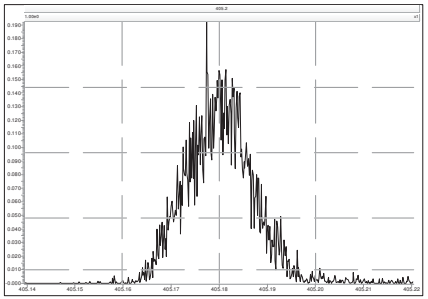
M 442.9728 R 12112



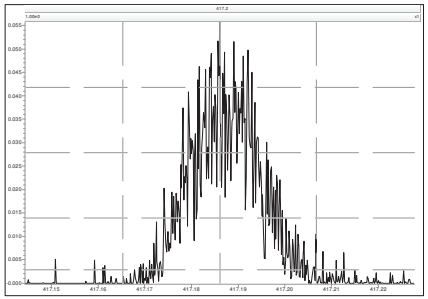
M 454.9728 R 11600



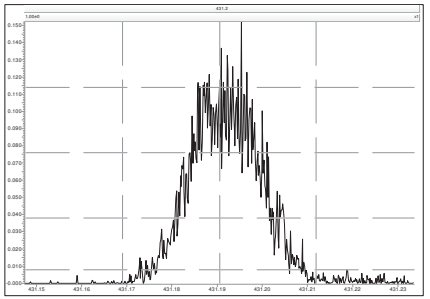
M 404.9760 R 14752



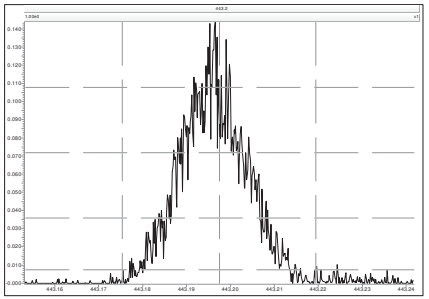
M 416.9760 R 15196



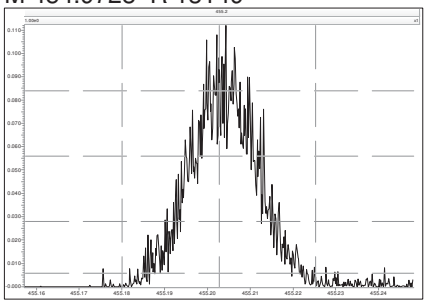
M 430.9728 R 13906



M 442.9728 R 12923



M 454.9728 R 13149



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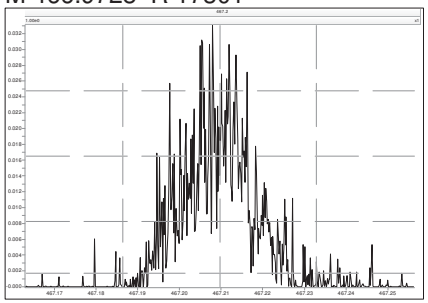

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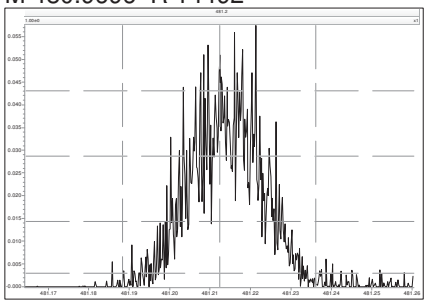

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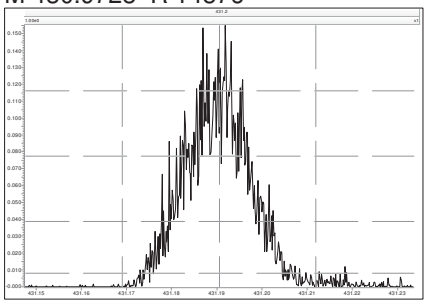

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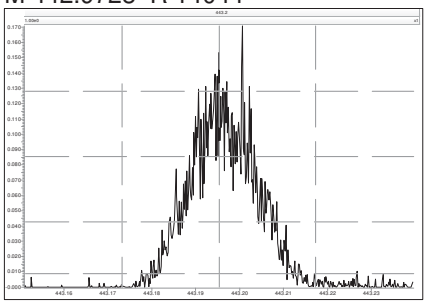

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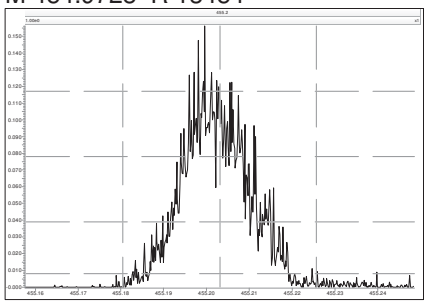

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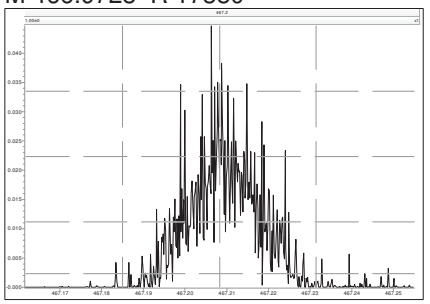

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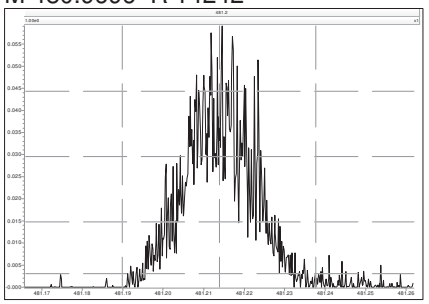
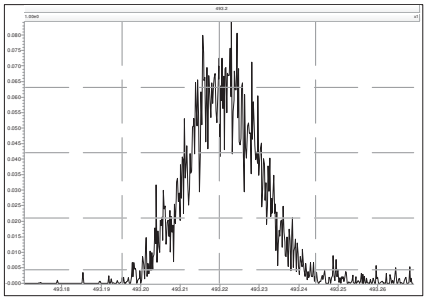


M 492.9696 R 13132



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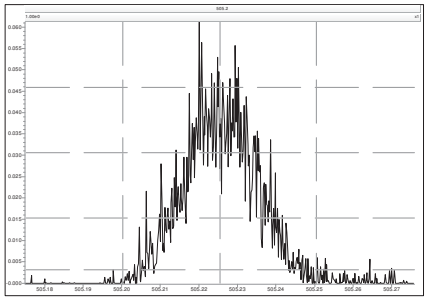

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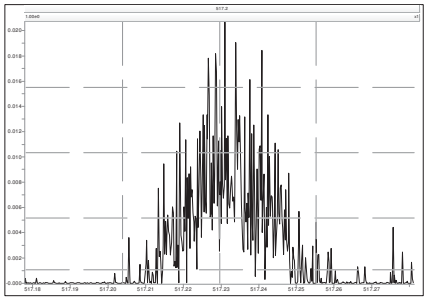

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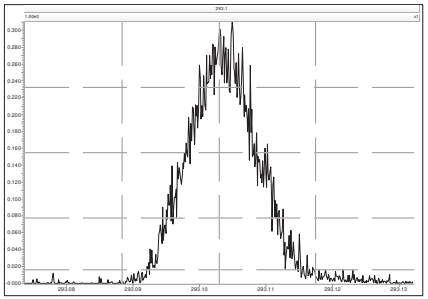

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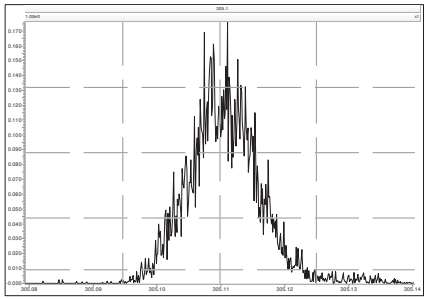

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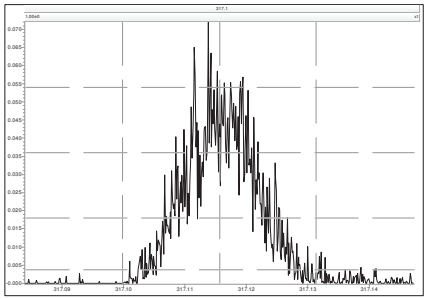

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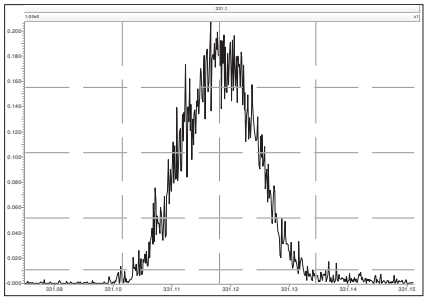

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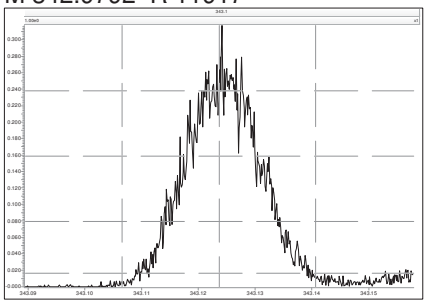

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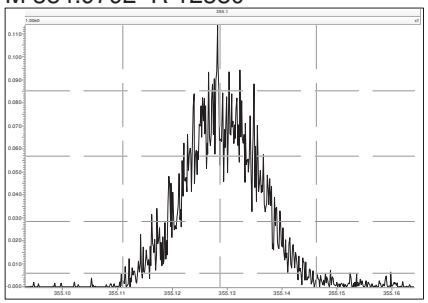

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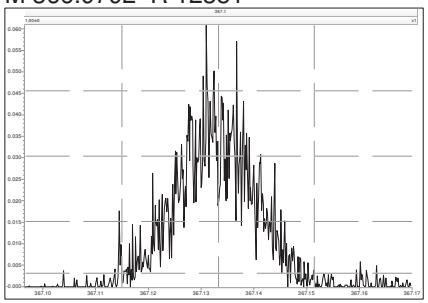

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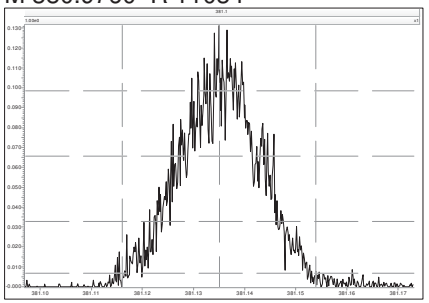

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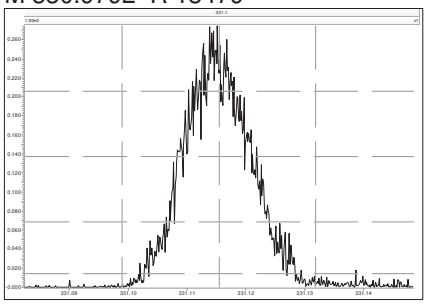

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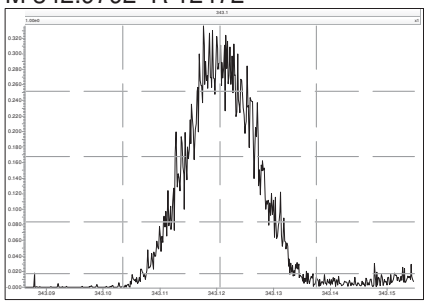

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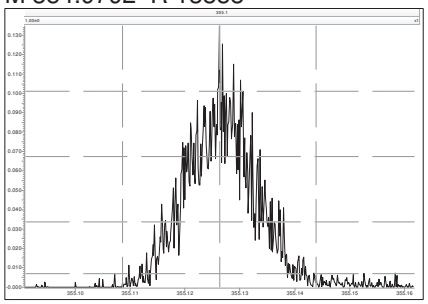

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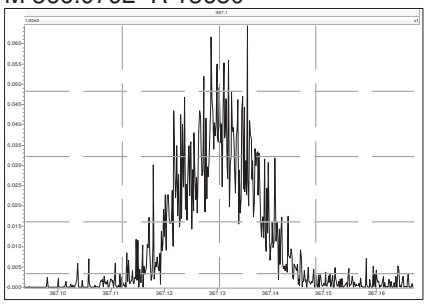

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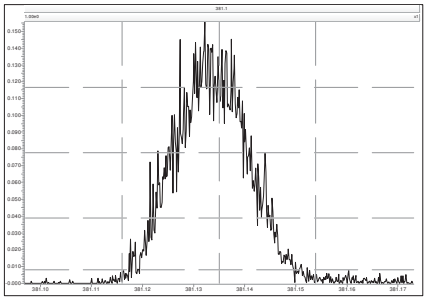

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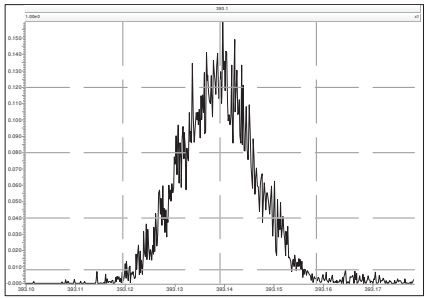

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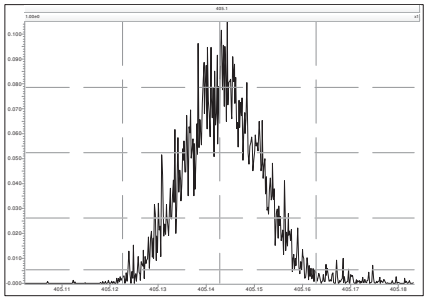
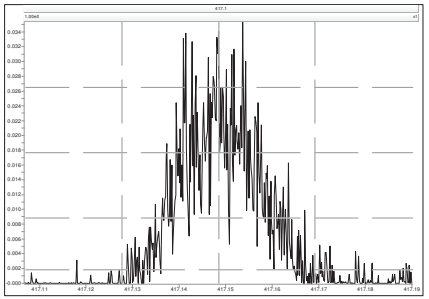


M 416.9760 R 13479



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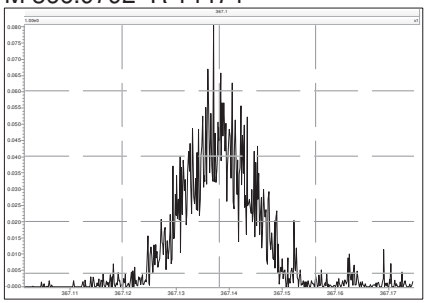

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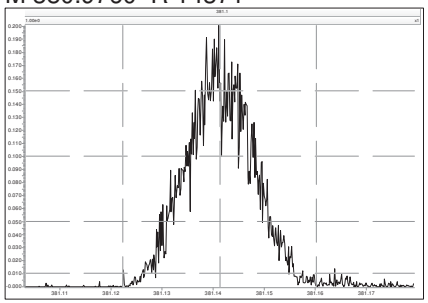

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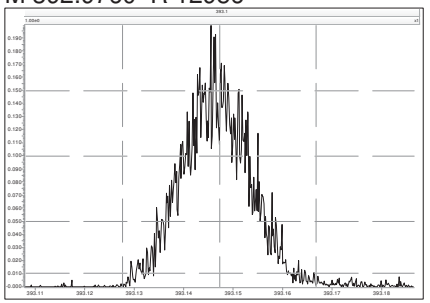
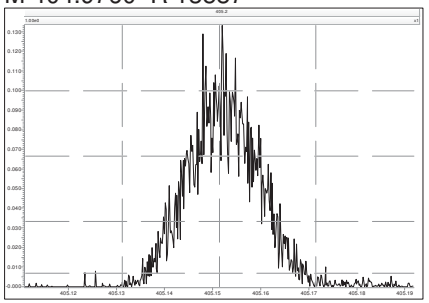


M 404.9760 R 13587



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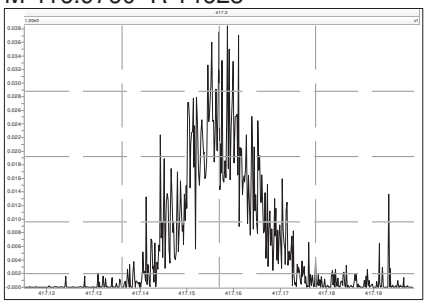
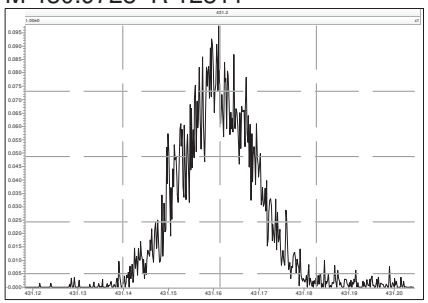


M 430.9728 R 12811



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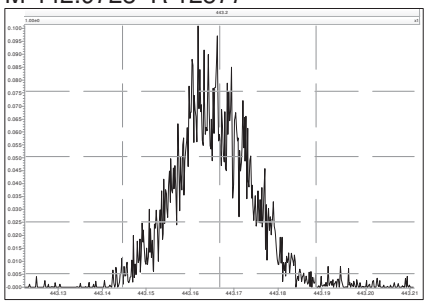
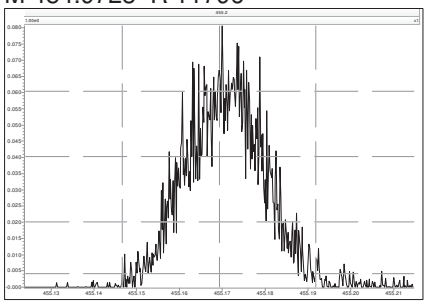


M 454.9728 R 11796



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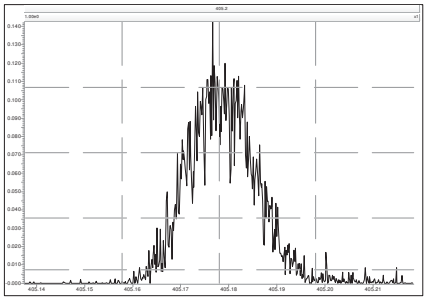

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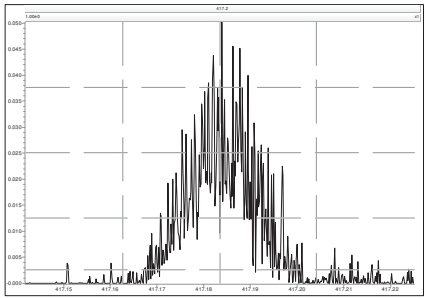

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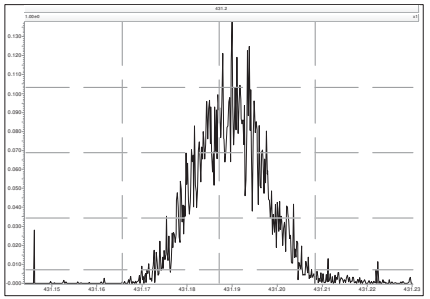
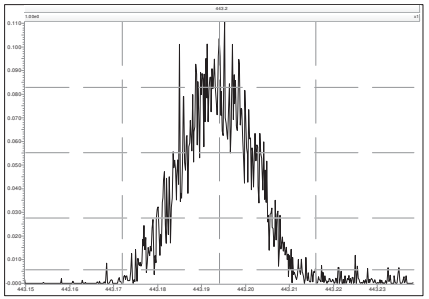


M 442.9728 R 12987



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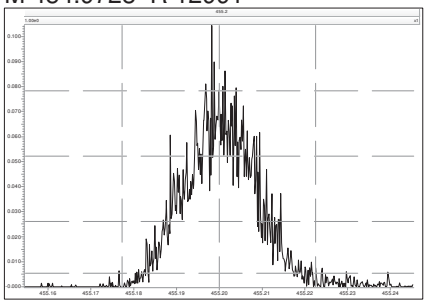

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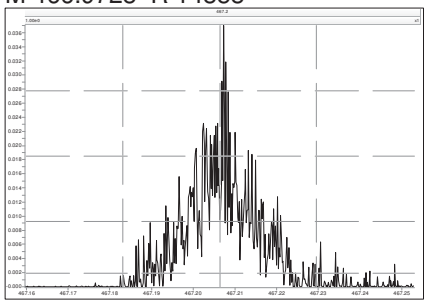

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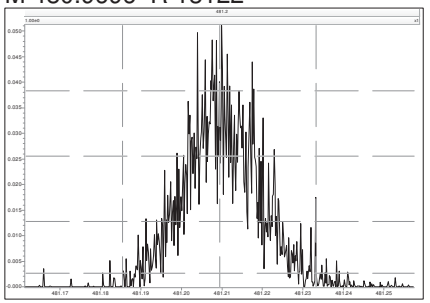

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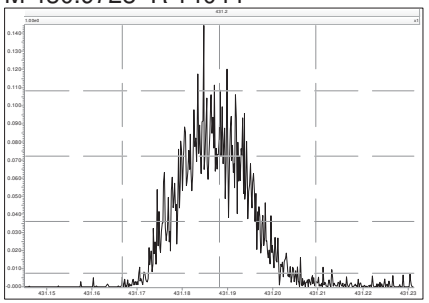

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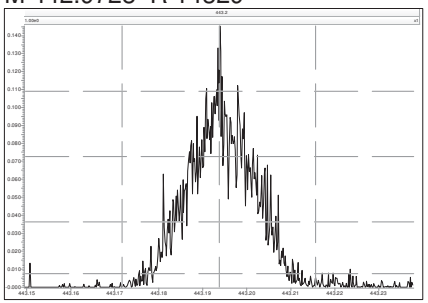

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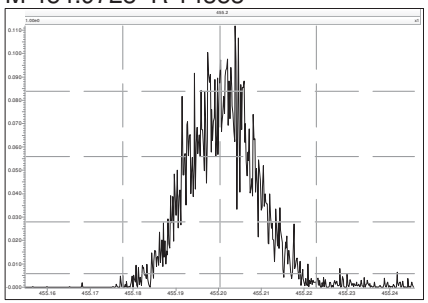

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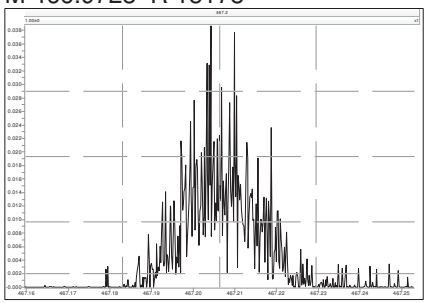

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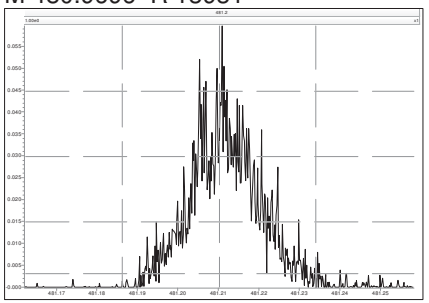

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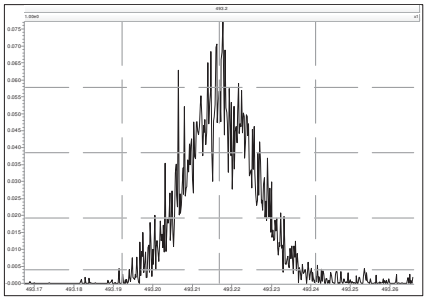

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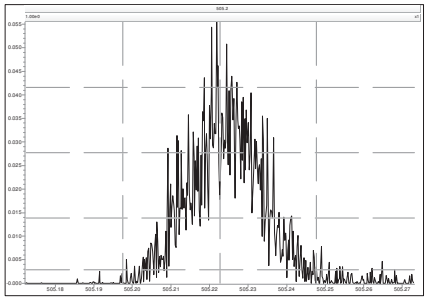

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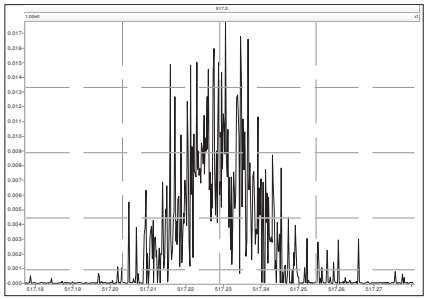


Dioxin/Furan ICAL Summary — SGS North America — Processed: 15 Jun 2020 11:54

ICAL: MM3_DF_10012020_12JUN2020
Data Acquired: 12-Jun-2020

Name	Mean	% RSD	200612R03 0.25 pg/uL CS0	200612R04 0.5 pg/uL CS1	200612R05 2 pg/uL CS2	200612R06 10 pg/uL CS3	200612R07 40 pg/uL CS4	200612R08 200 pg/uL CS5	200612R11 500 pg/uL CS6
2378-TCDD	1.18	5.9%	1.06	1.13	1.16	1.17	1.21	1.24	1.27
12378-PeCDD	1.14	4.7%	1.07	1.09	1.09	1.15	1.17	1.19	1.20
123478-HxCDD	1.09	3.7%	1.08	1.04	1.05	1.08	1.09	1.14	1.15
123678-HxCDD	1.13	5.2%	1.06	1.08	1.07	1.16	1.13	1.20	1.19
123789-HxCDD	1.05	3.9%	1.00	1.00	1.03	1.06	1.06	1.09	1.10
1234678-HpCDD	0.98	6.4%	0.91	0.91	0.94	1.02	1.02	1.04	1.05
OCDD	1.08	5.1%	1.00	1.01	1.05	1.09	1.10	1.14	1.13
2378-TCDF	0.98	6.4%	0.98	0.88	0.92	0.99	1.01	1.05	1.04
12378-PeCDF	0.95	4.9%	0.88	0.91	0.92	0.96	0.97	1.00	1.00
23478-PeCDF	0.95	4.7%	0.91	0.88	0.92	0.96	0.96	1.00	0.99
123478-HxCDF	1.20	3.8%	1.14	1.15	1.17	1.19	1.21	1.25	1.25
123678-HxCDF	1.07	5.4%	0.98	1.03	1.04	1.10	1.10	1.13	1.13
234678-HxCDF	1.10	4.2%	1.06	1.02	1.08	1.13	1.11	1.13	1.15
123789-HxCDF	1.09	5.1%	1.01	1.06	1.04	1.11	1.13	1.16	1.14
1234678-HpCDF	1.28	4.5%	1.21	1.21	1.25	1.31	1.30	1.34	1.35
1234789-HpCDF	1.27	4.3%	1.20	1.25	1.20	1.28	1.29	1.31	1.34
OCDF	1.01	6.4%	0.93	0.96	0.95	1.00	1.05	1.08	1.09
ES 2378-TCDD	1.01	4.0%	0.98	0.98	0.99	0.97	0.99	1.06	1.07
ES 12378-PeCDD	0.87	9.5%	0.82	0.82	0.83	0.81	0.85	0.95	1.02
ES 123478-HxCDD	1.10	4.9%	1.04	1.05	1.08	1.07	1.10	1.13	1.20
ES 123678-HxCDD	1.06	6.4%	1.00	1.01	1.04	1.01	1.08	1.10	1.19
ES 123789-HxCDD	1.22	6.1%	1.11	1.18	1.20	1.20	1.21	1.26	1.35
ES 1234678-HpCDD	0.99	11.2%	0.83	0.97	0.97	0.94	0.97	1.07	1.19
ES OCDD	0.67	18.7%	0.46	0.66	0.69	0.64	0.64	0.74	0.87
ES 2378-TCDF	1.01	2.9%	0.99	0.99	1.00	0.99	1.02	1.03	1.07
ES 12378-PeCDF	0.90	8.3%	0.85	0.84	0.87	0.85	0.90	0.97	1.04
ES 23478-PeCDF	0.89	8.2%	0.83	0.84	0.85	0.84	0.89	0.95	1.02
ES 123478-HxCDF	1.43	5.0%	1.38	1.41	1.42	1.37	1.40	1.45	1.58
ES 123678-HxCDF	1.63	6.3%	1.56	1.57	1.62	1.55	1.59	1.69	1.84
ES 234678-HxCDF	1.48	6.0%	1.38	1.44	1.46	1.41	1.47	1.54	1.64
ES 123789-HxCDF	1.29	9.8%	1.15	1.22	1.29	1.23	1.25	1.35	1.54
ES 1234678-HpCDF	1.15	8.6%	1.02	1.12	1.13	1.07	1.14	1.22	1.32
ES 1234789-HpCDF	0.91	13.3%	0.72	0.86	0.91	0.86	0.89	0.98	1.11
ES OCDF	0.83	19.8%	0.56	0.82	0.85	0.77	0.77	0.93	1.10

APPROVED
Carla_Lyon , 11:39:55, 06/17/2020

Dioxin/Furan ICAL Summary — SGS North America — Processed: 17 Jun 2020 08:13

ICAL: MM3_DF_10012020_12JUN2020
Data Acquired: 12-Jun-2020

Name	Mean	% RSD	200612R03 0.25 pg/uL CS0	200612R04 0.5 pg/uL CS1	200612R05 2 pg/uL CS2	200612R06 10 pg/uL CS3	200612R07 40 pg/uL CS4	200612R08 200 pg/uL CS5	200612R11 500 pg/uL CS6
CS 37Cl-2378-TCDD	1.04	7.5%	-	1.02	0.96	0.99	1.06	1.16	-
CS 12347-PeCDD	0.74	1.9%	0.72	0.74	0.75	0.72	0.74	0.76	0.75
CS 12346-PeCDF	0.86	1.3%	0.86	0.85	0.88	0.85	0.87	0.85	0.87
CS 123469-HxCDF	1.36	3.4%	1.39	1.40	1.42	1.32	1.33	1.30	1.33
CS 1234689-HpCDF	1.05	4.0%	0.98	1.09	1.10	1.02	1.04	1.06	1.09
SS 37Cl-2378-TCDD	1.04	4.9%	-	1.04	0.96	1.02	1.06	1.10	-
SS 12347-PeCDD	0.86	7.7%	0.88	0.91	0.90	0.89	0.87	0.80	0.73
SS 12346-PeCDF	0.96	7.4%	1.01	1.01	1.01	1.00	0.97	0.88	0.84
SS 123469-HxCDF	0.83	7.7%	0.90	0.89	0.88	0.85	0.84	0.77	0.73
SS 1234689-HpCDF	0.92	6.1%	0.97	0.97	0.97	0.95	0.91	0.87	0.83
AS 1368-TCDD	1.08	1.1%	1.05	1.09	1.08	1.09	1.07	1.08	1.07
AS 1368-TCDF	1.18	0.9%	1.17	1.18	1.18	1.20	1.18	1.17	1.18
OCDD-a	0.07	5.4%	-	-	0.06	0.06	0.07	0.07	0.07
OCDF-a	0.06	3.1%	-	-	0.06	0.06	0.06	0.06	0.07
Totals									
Total TCDD	1.18	5.9%	1.06	1.13	1.16	1.17	1.21	1.24	1.27
Total PeCDD	1.14	4.7%	1.07	1.09	1.09	1.15	1.17	1.19	1.20
Total HxCDD	1.09	4.1%	1.05	1.04	1.05	1.10	1.09	1.14	1.15
Total HpCDD	0.98	6.4%	0.91	0.91	0.94	1.02	1.02	1.04	1.05
Total TCDF	0.98	6.4%	0.98	0.88	0.92	0.99	1.01	1.05	1.04
Total PeCDF	0.95	4.7%	0.90	0.89	0.92	0.96	0.97	1.00	1.00
Total HxCDF	1.11	4.4%	1.05	1.06	1.08	1.13	1.14	1.17	1.17
Total HpCDF	1.27	4.2%	1.21	1.23	1.22	1.30	1.30	1.32	1.35
FS 1278-TCDD	1.00	2.9%	1.03	1.01	1.00	1.01	1.00	0.97	0.95
FS 12478-PeCDD	1.00	7.8%	1.02	1.05	1.05	1.03	1.04	0.92	0.85
FS 123468-HxCDD	1.11	7.4%	1.20	1.18	1.15	1.15	1.08	1.03	0.98
FS 1234679-HpCDD	1.19	9.4%	1.32	1.24	1.25	1.25	1.20	1.06	1.01
TS 1378-TCDD	1.06	4.3%	1.07	1.08	1.06	1.12	1.06	1.01	0.98

Instrument: MM3 (AutoSpec-Ultima) MS Experiment: df_cl4-8_db5MS GC Program: df_db5MS

#	Datafile	Vial#	Lab ID	Wt/Vol	Client/Sample ID	Analyst(s)	Checkcode	Acq Date	Acq Time
2	200612R02	2	SBS_200612_DF_RA	1.00	SIL 20-61-1	PSW	041-322	12-Jun-2020	13:34:23
3	200612R03	5	CS0_200612_DF_RA	1.00	SIL 20-282-3	PSW	545-220	12-Jun-2020	14:21:06
4	200612R04	6	CS1_200612_DF_RA	1.00	SIL 20-282-2	PSW	407-197	12-Jun-2020	15:11:28
5	200612R05	7	CS2_200612_DF_RA	1.00	SIL 20-282-1	PSW	434-640	12-Jun-2020	16:02:35
6	200612R06	8	CS3_200612_DF_RB	1.00	SIL 20-449-3	PSW	726-607	12-Jun-2020	16:49:17
7	200612R07	9	CS4_200612_DF_RA	1.00	SIL 20-281-2	PSW	711-420	12-Jun-2020	17:36:49
8	200612R08	10	CS5_200612_DF_RA	1.00	SIL 20-281-1	PSW	104-974	12-Jun-2020	18:24:22
11	200612R11	11	CS6_200612_DF_RA	1.00	SIL 20-280-4	PSW	630-787	12-Jun-2020	20:46:44

REVIEWED
By Paul Walton at 8:47 am, Jun 17, 2020

Dioxin/Furan ICAL Concentrations	SGS Environmental Services							
	Concentration							
Individual Native Standards	CS0 pg/uL	CS1 pg/uL	CS2 pg/uL	CS3 pg/uL	CS4 pg/uL	CS5 pg/uL	CS6 pg/uL	Working Standards pg/uL
2378-TCDD	0.25	0.5	2	10	40	200	500	1
12378-PeCDD	1.25	2.5	10	50	200	1000	2500	1
123478-HxCDD	1.25	2.5	10	50	200	200	2500	1
123678-HxCDD	1.25	2.5	10	50	200	200	2500	1
123789-HxCDD	1.25	2.5	10	50	200	200	2500	1
1234678-HpCDD	1.25	2.5	10	50	200	200	2500	1
OCDD	2.5	5	20	100	400	2000	5000	1
2378-TCDF	0.25	0.5	2	10	40	200	500	1
12378-PeCDF	1.25	2.5	10	50	200	1000	2500	1
23478-PeCDF	1.25	2.5	10	50	200	200	2500	1
123478-HxCDF	1.25	2.5	10	50	200	200	2500	1
123678-HxCDF	1.25	2.5	10	50	200	200	2500	1
234678-HxCDF	1.25	2.5	10	50	200	200	2500	1
123789-HxCDF	1.25	2.5	10	50	200	200	2500	1
1234678-HpCDF	1.25	2.5	10	50	200	200	2500	1
1234789-HpCDF	1.25	2.5	10	50	200	200	2500	1
OCDF	2.5	5	20	100	400	2000	5000	1
Extraction Standards								
ES 2378-TCDD	100	100	100	100	100	100	100	10
ES 12378-PeCDD	100	100	100	100	100	100	100	10
ES 123478-HxCDD	100	100	100	100	100	100	100	10
ES 123678-HxCDD	100	100	100	100	100	100	100	10
ES 123789-HxCDD	100	100	100	100	100	100	100	10
ES 1234678-HpCDD	100	100	100	100	100	100	100	10
ES OCDD	200	200	200	200	200	200	200	10
ES 2378-TCDF	100	100	100	100	100	100	100	10
ES 12378-PeCDF	100	100	100	100	100	100	100	10
ES 23478-PeCDF	100	100	100	100	100	100	100	10
ES 123478-HxCDF	100	100	100	100	100	100	100	10
ES 123678-HxCDF	100	100	100	100	100	100	100	10
ES 234678-HxCDF	100	100	100	100	100	100	100	10
ES 123789-HxCDF	100	100	100	100	100	100	100	10
ES 1234678-HpCDF	100	100	100	100	100	100	100	10
ES 1234789-HpCDF	100	100	100	100	100	100	100	10
ES OCDF	200	200	200	200	200	200	200	10
Cleanup/Sampling Standards								
CS 37Cl-2378-TCDD	-	0.5	2	10	40	200	-	4
CS 12347-PeCDD	100	100	100	100	100	100	100	10
CS 12346-PeCDF	100	100	100	100	100	100	100	10
CS 123469-HxCDF	100	100	100	100	100	100	100	10
CS 1234689-HpCDF	100	100	100	100	100	100	100	10
Alternate Standards								
AS 1368-TCDD	100	100	100	100	100	100	100	10
AS 1368-TCDF	100	100	100	100	100	100	100	10
Shipping Standards								
FS 1278-TCDD	100	100	100	100	100	100	100	100
FS 12478-PeCDD	100	100	100	100	100	100	100	100
FS 123468-HxCDD	100	100	100	100	100	100	100	100
FS 1234679-HpCDD	100	100	100	100	100	100	100	100
TS 1378-TCDD	100	100	100	100	100	100	100	100
Injection Standards								
1234 TCDD 13C12	100	100	100	100	100	100	100	10
1234 TCDF 13C12	100	100	100	100	100	100	100	10
123467 HxCDD 13C12	50	50	50	50	50	50	50	5

Dioxin/Furan STD Association	SGS Environmental Services

Individual Native Standards

2378-TCDD	ES 2378-TCDD
12378-PeCDD	ES 12378-PeCDD
123478-HxCDD	ES 123478-HxCDD
123678-HxCDD	ES 123678-HxCDD
123789-HxCDD	ES 123789-HxCDD
1234678-HpCDD	ES 1234678-HpCDD
OCDD	ES OCDD
2378-TCDF	ES 2378-TCDF
12378-PeCDF	ES 12378-PeCDF
23478-PeCDF	ES 23478-PeCDF
123478-HxCDF	ES 123478-HxCDF
123678-HxCDF	ES 123678-HxCDF
234678-HxCDF	ES 234678-HxCDF
123789-HxCDF	ES 123789-HxCDF
1234678-HpCDF	ES 1234678-HpCDF
1234789-HpCDF	ES 1234789-HpCDF
OCDF	ES OCDF

Cleanup/Sampling Standards

CS 37Cl-2378-TCDD	1234 TCDD 13C12
CS 12347-PeCDD	1234 TCDD 13C12
CS 12346-PeCDF	1234 TCDF 13C12
CS 123469-HxCDF	123467 HxCDD 13C12
CS 1234689-HpCDF	123467 HxCDD 13C12

Alternate Standards

AS 1368-TCDD	1234 TCDD 13C12
AS 1368-TCDF	1234 TCDF 13C12

Shipping Standards

FS 1278-TCDD	ES 2378-TCDD
FS 12478-PeCDD	ES 12378-PeCDD
FS 123468-HxCDD	ES 123478-HxCDD
FS 1234679-HpCDD	ES 1234678-HpCDD
TS 1378-TCDD	ES 2378-TCDD

Extraction Standards

ES 2378-TCDD	1234 TCDD 13C12
ES 12378-PeCDD	1234 TCDD 13C12
ES 123478-HxCDD	123467 HxCDD 13C12
ES 123678-HxCDD	123467 HxCDD 13C12
ES 123789-HxCDD	123467 HxCDD 13C12
ES 1234678-HpCDD	123467 HxCDD 13C12
ES OCDD	123467 HxCDD 13C12
ES 2378-TCDF	1234 TCDF 13C12
ES 12378-PeCDF	1234 TCDF 13C12
ES 23478-PeCDF	1234 TCDF 13C12
ES 123478-HxCDF	123467 HxCDD 13C12
ES 123678-HxCDF	123467 HxCDD 13C12
ES 234678-HxCDF	123467 HxCDD 13C12
ES 123789-HxCDF	123467 HxCDD 13C12
ES 1234678-HpCDF	123467 HxCDD 13C12
ES 1234789-HpCDF	123467 HxCDD 13C12
ES OCDF	123467 HxCDD 13C12

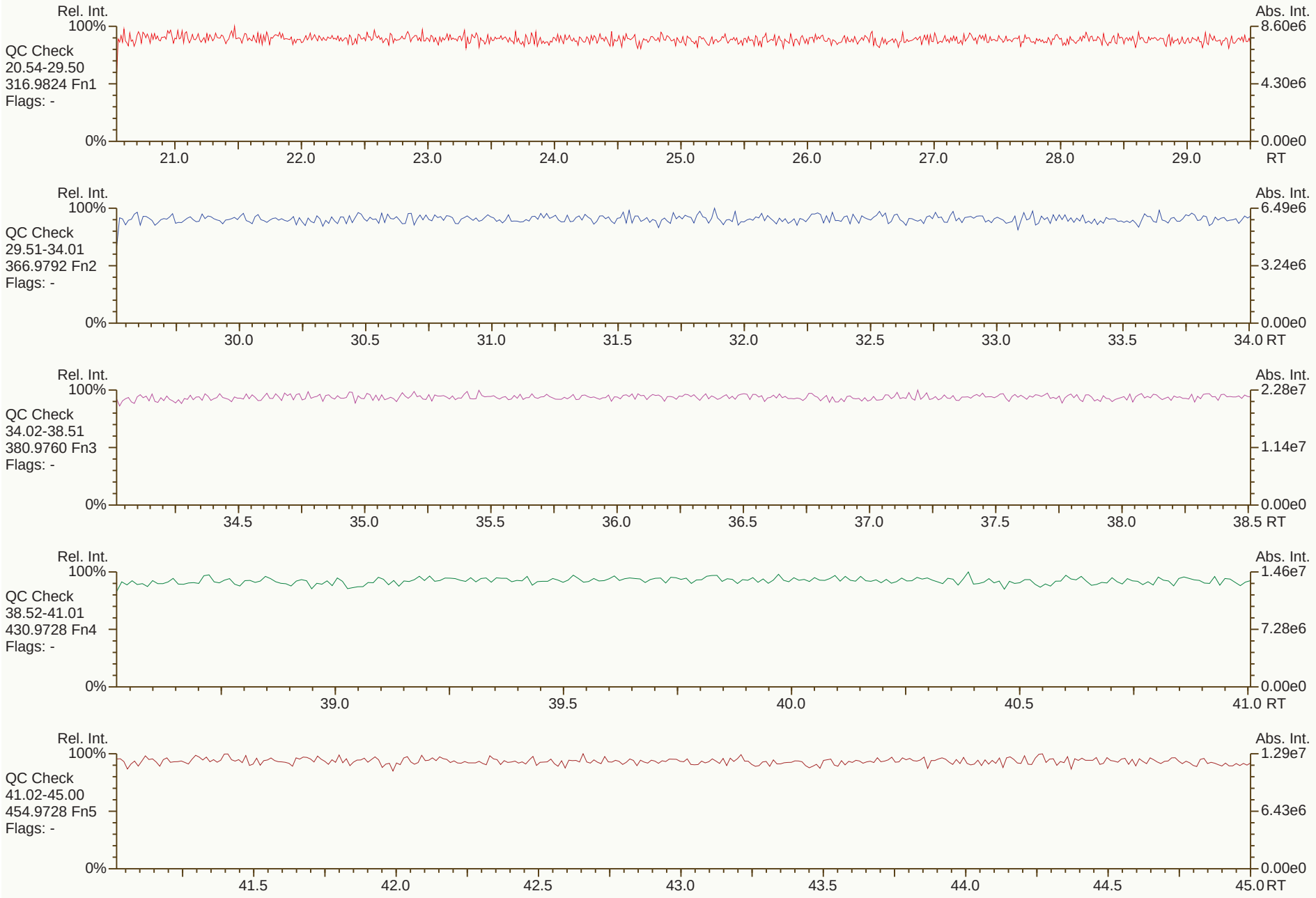
Injection Standards

1234 TCDD 13C12
1234 TCDF 13C12
123467 HxCDD 13C12

Dioxin/Furan QC Summary		Acq'd: 12 Jun 2020 14:21 PSW				ICAL: MM3_DF_10012020_12JUN2020	
Lab ID: CS0_200612_DF_RA		UTP: 17-Jun-2020 08:02:40 PSW				Checkcode: 545-220-ZXZ	
Sample ID: SIL 20-282-3		Report: 17 Jun 2020 08:13 pw				Datafile: 200612R03	
Name	**RT**	**Response**	**RA**	**OK**	**Ref. RRFs**	**Calc. RRFs**	**Dev'n**
2378-TCDD	27.57	3.69E+05	0.84	Y	1.18	1.06	-10%
12378-PeCDD	33.04	1.55E+06	1.62	Y	1.14	1.07	-6%
123478-HxCDD	36.94	1.53E+06	1.25	Y	1.09	1.08	-1%
123678-HxCDD	37.06	1.43E+06	1.24	Y	1.13	1.06	-6%
123789-HxCDD	37.36	1.52E+06	1.22	Y	1.05	1.00	-4%
1234678-HpCDD	40.12	1.03E+06	1.08	Y	0.98	0.91	-8%
OCDD	42.57	1.25E+06	0.82	Y	1.08	1.00	-7%
2378-TCDF	26.67	5.62E+05	0.67	Y	0.98	0.98	-1%
12378-PeCDF	31.57	2.18E+06	1.62	Y	0.95	0.88	-7%
23478-PeCDF	32.69	2.19E+06	1.48	Y	0.95	0.91	-4%
123478-HxCDF	35.97	2.12E+06	1.30	Y	1.20	1.14	-5%
123678-HxCDF	36.11	2.06E+06	1.30	Y	1.07	0.98	-9%
234678-HxCDF	36.76	2.00E+06	1.26	Y	1.10	1.06	-3%
123789-HxCDF	37.74	1.58E+06	1.29	Y	1.09	1.01	-7%
1234678-HpCDF	39.22	1.67E+06	1.03	Y	1.28	1.21	-6%
1234789-HpCDF	40.54	1.18E+06	1.03	Y	1.27	1.20	-5%
OCDF	42.74	1.41E+06	0.83	Y	1.01	0.93	-8%
ES 2378-TCDD	27.55	1.39E+08	0.75	Y	1.01	0.98	-3%
ES 12378-PeCDD	33.03	1.16E+08	1.65	Y	0.87	0.82	-6%
ES 123478-HxCDD	36.93	1.13E+08	1.30	Y	1.10	1.04	-5%
ES 123678-HxCDD	37.04	1.08E+08	1.27	Y	1.06	1.00	-6%
ES 123789-HxCDD	37.35	1.21E+08	1.28	Y	1.22	1.11	-8%
ES 1234678-HpCDD	40.11	9.07E+07	1.07	Y	0.99	0.83	-16%
ES OCDD	42.56	9.93E+07	0.87	Y	0.67	0.46	-32%
ES 2378-TCDF	26.64	2.30E+08	0.79	Y	1.01	0.99	-2%
ES 12378-PeCDF	31.55	1.98E+08	1.57	Y	0.90	0.85	-5%
ES 23478-PeCDF	32.67	1.93E+08	1.60	Y	0.89	0.83	-7%
ES 123478-HxCDF	35.96	1.50E+08	0.52	Y	1.43	1.38	-4%
ES 123678-HxCDF	36.1	1.69E+08	0.52	Y	1.63	1.56	-5%
ES 234678-HxCDF	36.74	1.50E+08	0.54	Y	1.48	1.38	-7%
ES 123789-HxCDF	37.73	1.25E+08	0.51	Y	1.29	1.15	-11%
ES 1234678-HpCDF	39.21	1.10E+08	0.45	Y	1.15	1.02	-11%
ES 1234789-HpCDF	40.53	7.87E+07	0.46	Y	0.91	0.72	-20%
ES OCDF	42.73	1.21E+08	0.90	Y	0.83	0.56	-33%

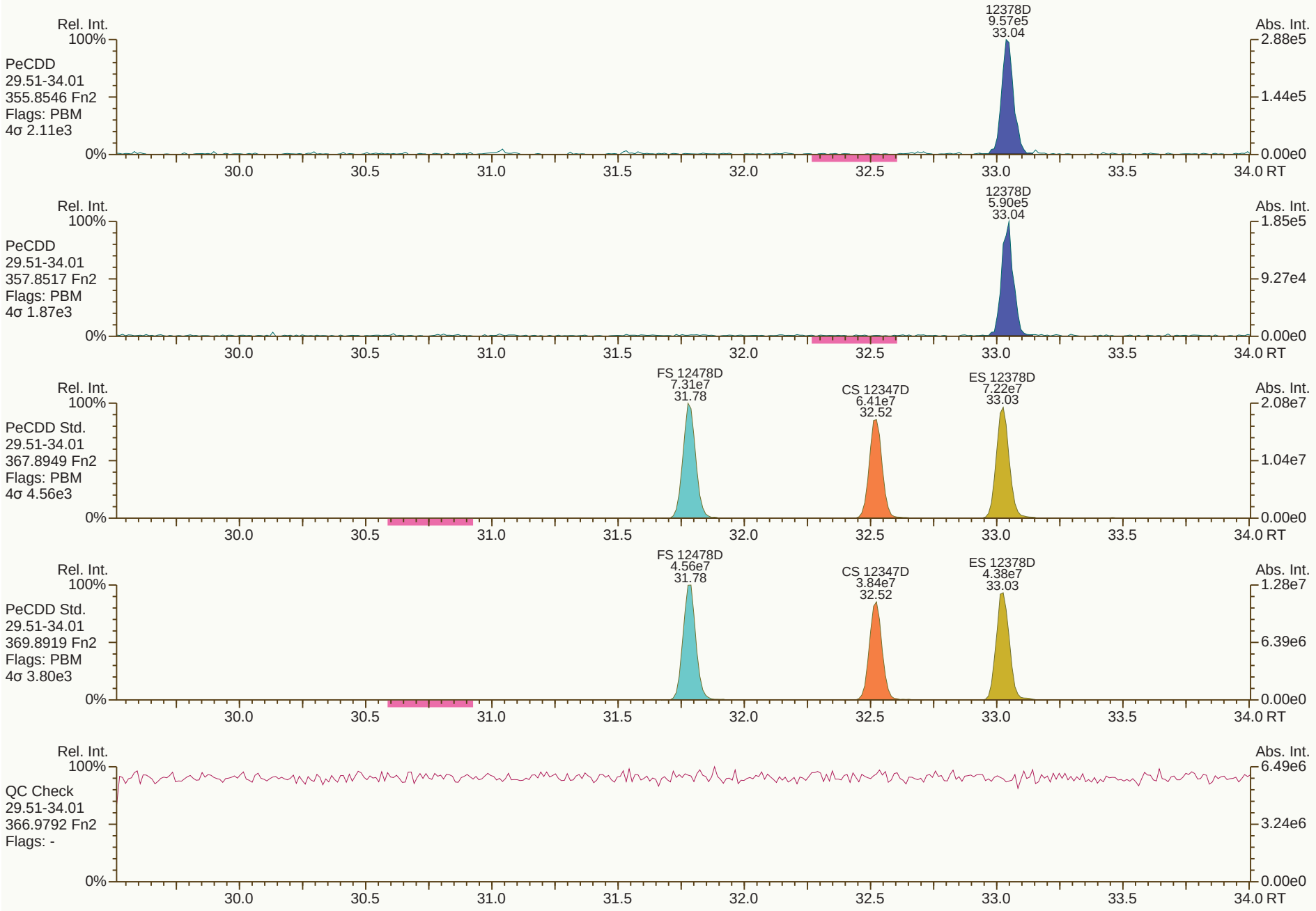
Dioxin/Furan QC Summary	Acq'd: 12 Jun 2020 14:21 PSW	ICAL: MM3_DF_10012020_12JUN2020
Lab ID: CS0_200612_DF_RA	UTP: 17-Jun-2020 08:02:40 PSW	Checkcode: 545-220-ZXZ
Sample ID: SIL 20-282-3	Report: 17 Jun 2020 08:13 pw	Datafile: 200612R03

Name	RT	Response	RA	OK	Ref. RRFs	Calc. RRFs	Dev'n
JS 1234-TCDD	26.87	1.42E+08	0.79	Y	-	-	-
JS 1234-TCDF	25.24	2.32E+08	0.77	Y	-	-	-
JS 123467-HxCDD	37.24	5.44E+07	1.29	Y	-	-	-
CS 37Cl-2378-TCDD	NotFnd		n/a	-	1.04		
CS 12347-PeCDD	32.52	1.02E+08	1.67	Y	0.74	0.72	-3%
CS 12346-PeCDF	31.01	1.99E+08	1.55	Y	0.86	0.86	0%
CS 123469-HxCDF	36.40	1.52E+08	0.53	Y	1.36	1.39	3%
CS 1234689-HpCDF	39.61	1.07E+08	0.45	Y	1.05	0.98	-7%
SS 37Cl-2378-TCDD	NotFnd		n/a	-	1.04		
SS 12347-PeCDD	32.52	1.02E+08	1.67	Y	0.86	0.88	3%
SS 12346-PeCDF	31.01	1.99E+08	1.55	Y	0.96	1.01	5%
SS 123469-HxCDF	36.40	1.52E+08	0.53	Y	0.83	0.90	7%
SS 1234689-HpCDF	39.61	1.07E+08	0.45	Y	0.92	0.97	5%
AS 1368-TCDD	23.73	1.50E+08	0.76	Y	1.08	1.05	-2%
AS 1368-TCDF	21.52	2.72E+08	0.79	Y	1.18	1.17	-1%
FS 1278-TCDD	27.89	1.44E+08	0.77	Y	1.00	1.03	4%
FS 12478-PeCDD	31.78	1.19E+08	1.60	Y	1.00	1.02	3%
FS 123468-HxCDD	35.88	1.36E+08	1.27	Y	1.11	1.20	8%
FS 1234679-HpCDD	39.47	1.20E+08	1.08	Y	1.19	1.32	11%
TS 1378-TCDD	25.83	1.49E+08	0.76	Y	1.06	1.07	1%
~~OCDD-a~~	~~NotFnd~~				~~0.07~~		
~~OCDF-a~~	~~NotFnd~~				~~0.06~~		

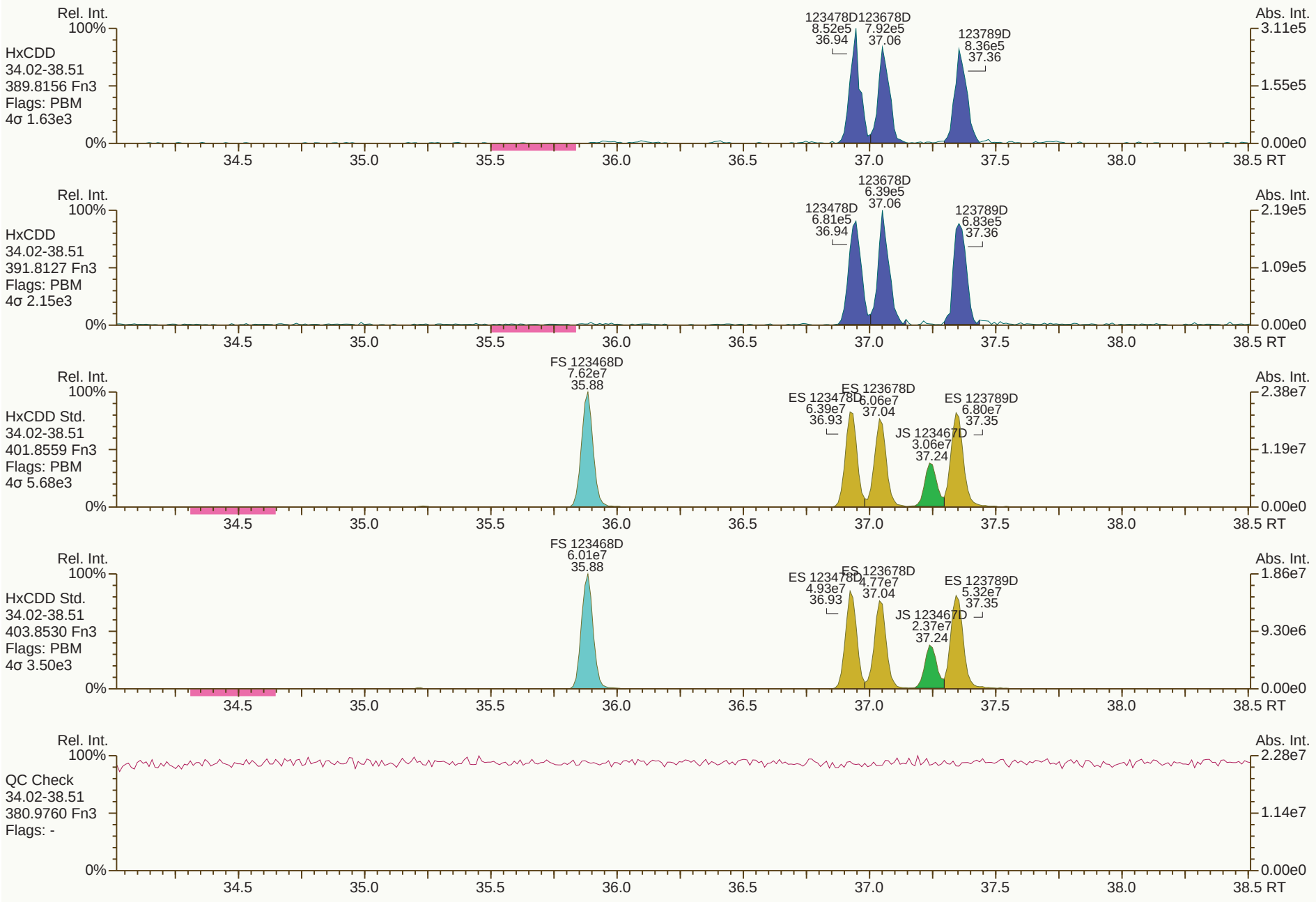

Rel. Int.
100%
QC Check
20.54-29.50
316.9824 Fn1
Flags: -
0%
Abs. Int.
8.60e6
4.30e6
0.00e0
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0 RT
Rel. Int.
100%
QC Check
29.51-34.01
366.9792 Fn2
Flags: -
0%
Abs. Int.
6.49e6
3.24e6
0.00e0
30.0 30.5 31.0 31.5 32.0 32.5 33.0 33.5 34.0 RT
Rel. Int.
100%
QC Check
34.02-38.51
380.9760 Fn3
Flags: -
0%
Abs. Int.
2.28e7
1.14e7
0.00e0
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 RT
Rel. Int.
100%
QC Check
38.52-41.01
430.9728 Fn4
Flags: -
0%
Abs. Int.
1.46e7
7.28e6
0.00e0
39.0 39.5 40.0 40.5 41.0 RT
Rel. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
1.29e7
6.43e6
0.00e0
41.5 42.0 42.5 43.0 43.5 44.0 44.5 45.0 RT

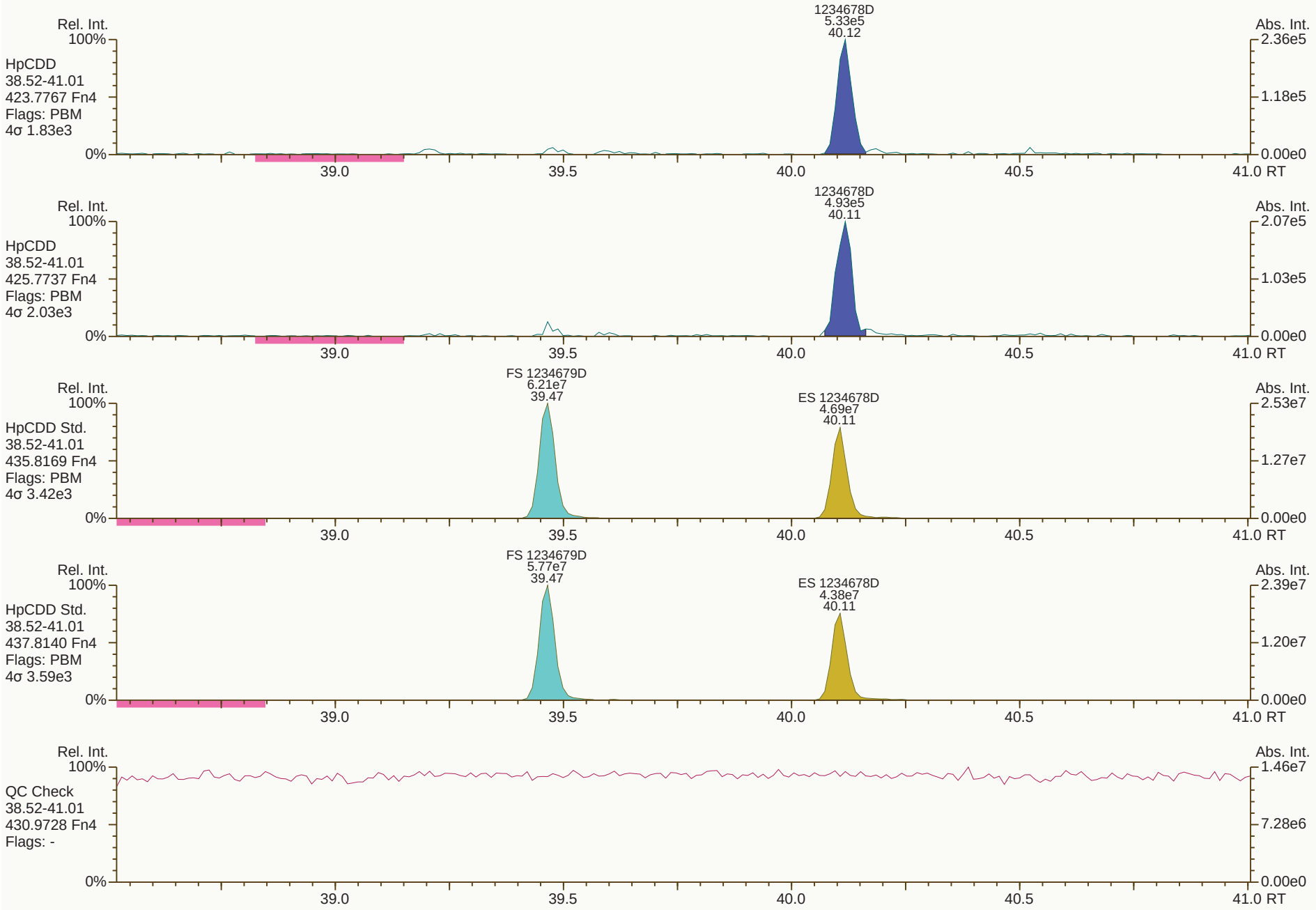


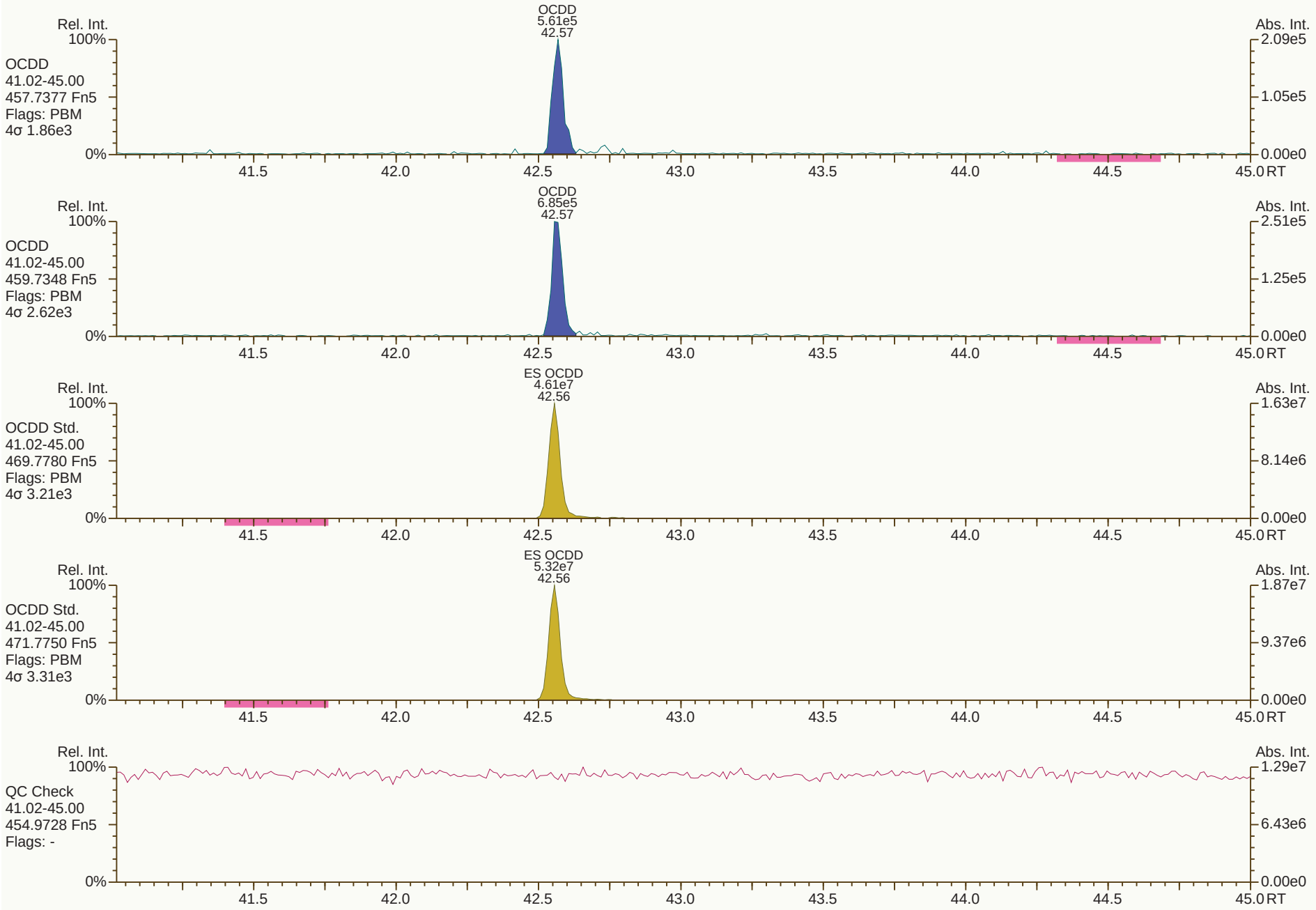
Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS0_200612_DF_RA.utp_res, saved 17-Jun-2020 08:02 (PSW)
Peak annotation: Areas, Centroids



Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS0_200612_DF_RA.utp_res, saved 17-Jun-2020 08:02 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 2254, 4927 scc: 545-220
PKD: 12-Jun-2020 15:10 Printed: 17-Jun-2020 08:17 Page 3 of 12


Rel. Int.
100%
HxCDD
34.02-38.51
389.8156 Fn3
Flags: PBM
4σ 1.63e3
123478D 8.52e5 36.94
123678D 7.92e5 37.06
123789D 8.36e5 37.36
Abs. Int.
3.11e5
1.55e5
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 RT
Rel. Int.
100%
HxCDD
34.02-38.51
391.8127 Fn3
Flags: PBM
4σ 2.15e3
123678D 6.39e5 37.06
123478D 6.81e5 36.94
123789D 6.83e5 37.36
Abs. Int.
2.19e5
1.09e5
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 RT
Rel. Int.
100%
HxCDD Std.
34.02-38.51
401.8559 Fn3
Flags: PBM
4σ 5.68e3
FS 123468D 7.62e7 35.88
ES 123478D 6.39e7 36.93
ES 123678D 6.06e7 37.04
JS 123467D 3.06e7 37.24
ES 123789D 6.80e7 37.35
Abs. Int.
2.38e7
1.19e7
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 RT
Rel. Int.
100%
HxCDD Std.
34.02-38.51
403.8530 Fn3
Flags: PBM
4σ 3.50e3
FS 123468D 6.01e7 35.88
ES 123478D 4.93e7 36.93
ES 123678D 4.77e7 37.04
JS 123467D 2.37e7 37.24
ES 123789D 5.32e7 37.35
Abs. Int.
1.86e7
9.30e6
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 RT
Rel. Int.
100%
QC Check
34.02-38.51
380.9760 Fn3
Flags: -
Abs. Int.
2.28e7
1.14e7
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 RT


Rel. Int.
100%
HpCDD
38.52-41.01
423.7767 Fn4
Flags: PBM
4σ 1.83e3
1234678D
5.33e5
40.12
Abs. Int.
2.36e5
1.18e5
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.52-41.01
425.7737 Fn4
Flags: PBM
4σ 2.03e3
1234678D
4.93e5
40.11
Abs. Int.
2.07e5
1.03e5
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.52-41.01
435.8169 Fn4
Flags: PBM
4σ 3.42e3
FS 1234679D
6.21e7
39.47
ES 1234678D
4.69e7
40.11
Abs. Int.
2.53e7
1.27e7
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.52-41.01
437.8140 Fn4
Flags: PBM
4σ 3.59e3
FS 1234679D
5.77e7
39.47
ES 1234678D
4.38e7
40.11
Abs. Int.
2.39e7
1.20e7
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.52-41.01
430.9728 Fn4
Flags: -
Abs. Int.
1.46e7
7.28e6
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT


OCDD
5.61e5
42.57
Rel. Int.
Abs. Int.
OCDD
41.02-45.00
457.7377 Fn5
Flags: PBM
4σ 1.86e3
OCDD
6.85e5
42.57
OCDD
41.02-45.00
459.7348 Fn5
Flags: PBM
4σ 2.62e3
ES OCDD
4.61e7
42.56
OCDD Std.
41.02-45.00
469.7780 Fn5
Flags: PBM
4σ 3.21e3
ES OCDD
5.32e7
42.56
OCDD Std.
41.02-45.00
471.7750 Fn5
Flags: PBM
4σ 3.31e3
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
RT

SGS ID: CS0_200612_DF_RA
Sample ID: SIL 20-282-3
Acq: 12-Jun-2020 14:21:06
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 5
User: PSW Datafile: 200612R03



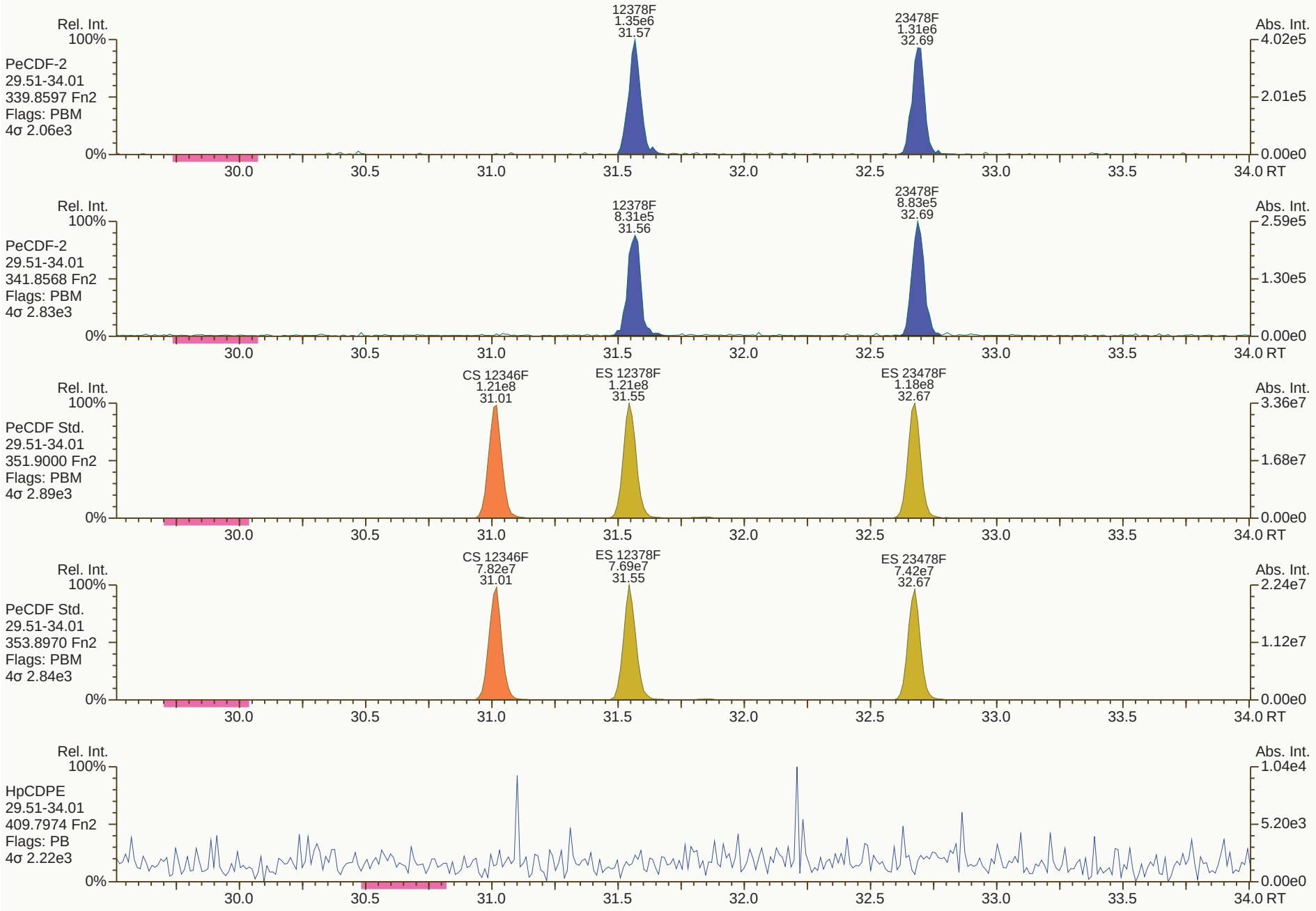
Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS0_200612_DF_RA.utp_res, saved 17-Jun-2020 08:02 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 4634, 9599
Revised: 17-Jun-2020 08:02 (PSW) Printed: 17-Jun-2020 08:27

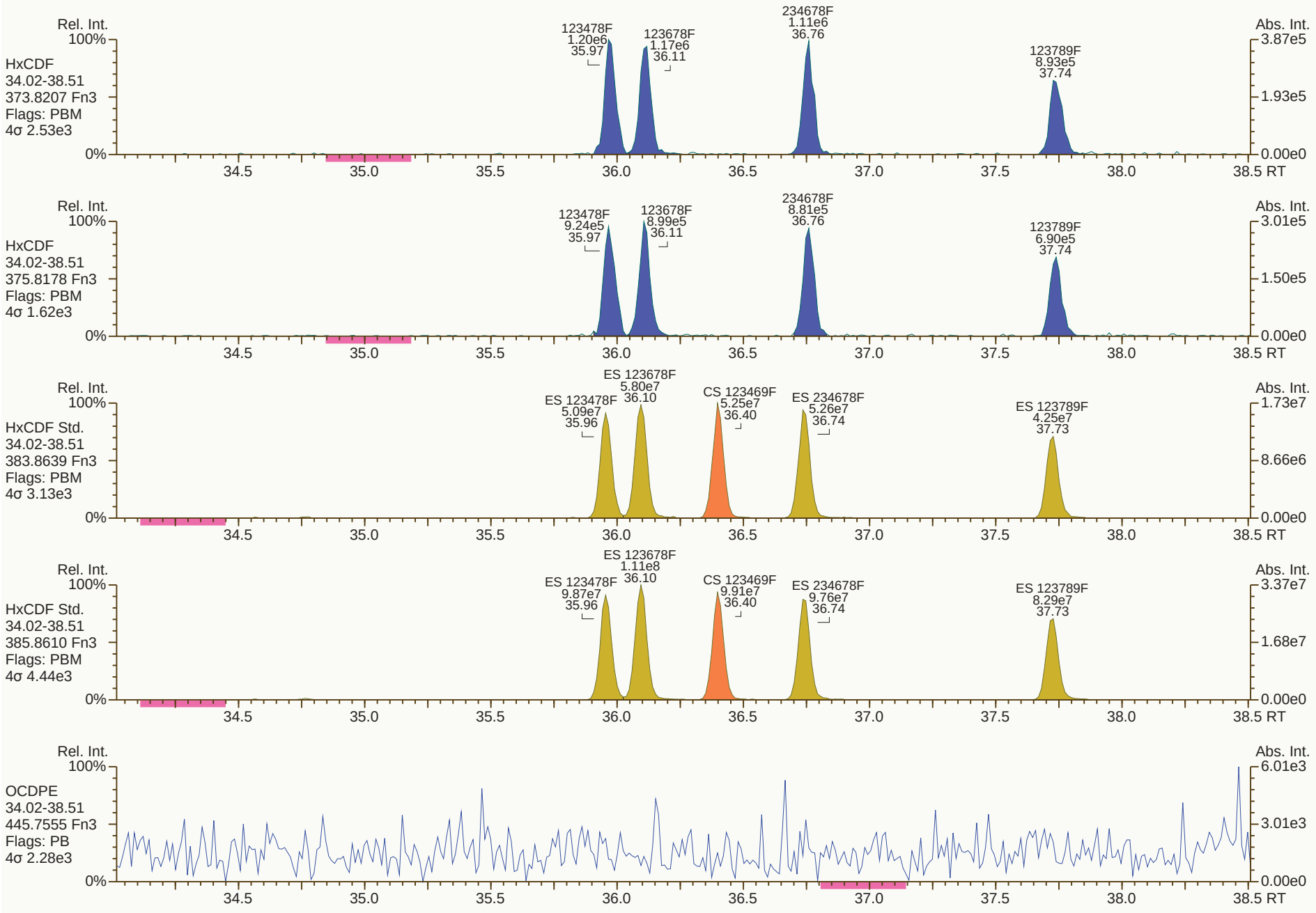

Rel. Int.
100%
TCDF
20.54-29.50
303.9016 Fn1
Flags: PBM
4σ 2.02e3
0%
2378F
2.26e5
26.67
Abs. Int.
5.59e4
2.79e4
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF
20.54-29.50
305.8987 Fn1
Flags: PBM
4σ 2.32e3
0%
2378F
3.35e5
26.66
Abs. Int.
7.84e4
3.92e4
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
315.9419 Fn1
Flags: PBM
4σ 2.31e4
0%
AS 1368F
1.20e8
21.52
JS 1234F
1.01e8
25.24
ES 2378F
1.02e8
26.64
Abs. Int.
2.37e7
1.19e7
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
317.9389 Fn1
Flags: PBM
4σ 1.38e4
0%
AS 1368F
1.52e8
21.52
JS 1234F
1.31e8
25.23
ES 2378F
1.28e8
26.64
Abs. Int.
2.93e7
1.47e7
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
HxCDPE
20.54-29.50
375.8364 Fn1
Flags: PB
4σ 2.35e3
0%
Abs. Int.
7.91e3
3.96e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT

SGS ID: CS0_200612_DF_RA **Sample ID: SIL 20-282-3** **Acq: 12-Jun-2020 14:21:06**
Instr: [ILM] AutoSpec-Ultima MM3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 5** **User: PSW Datafile: 200612R03**



Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS0_200612_DF_RA.utp_res, saved 17-Jun-2020 08:02 (PSW) *Peak annotation: Areas, Centroids*

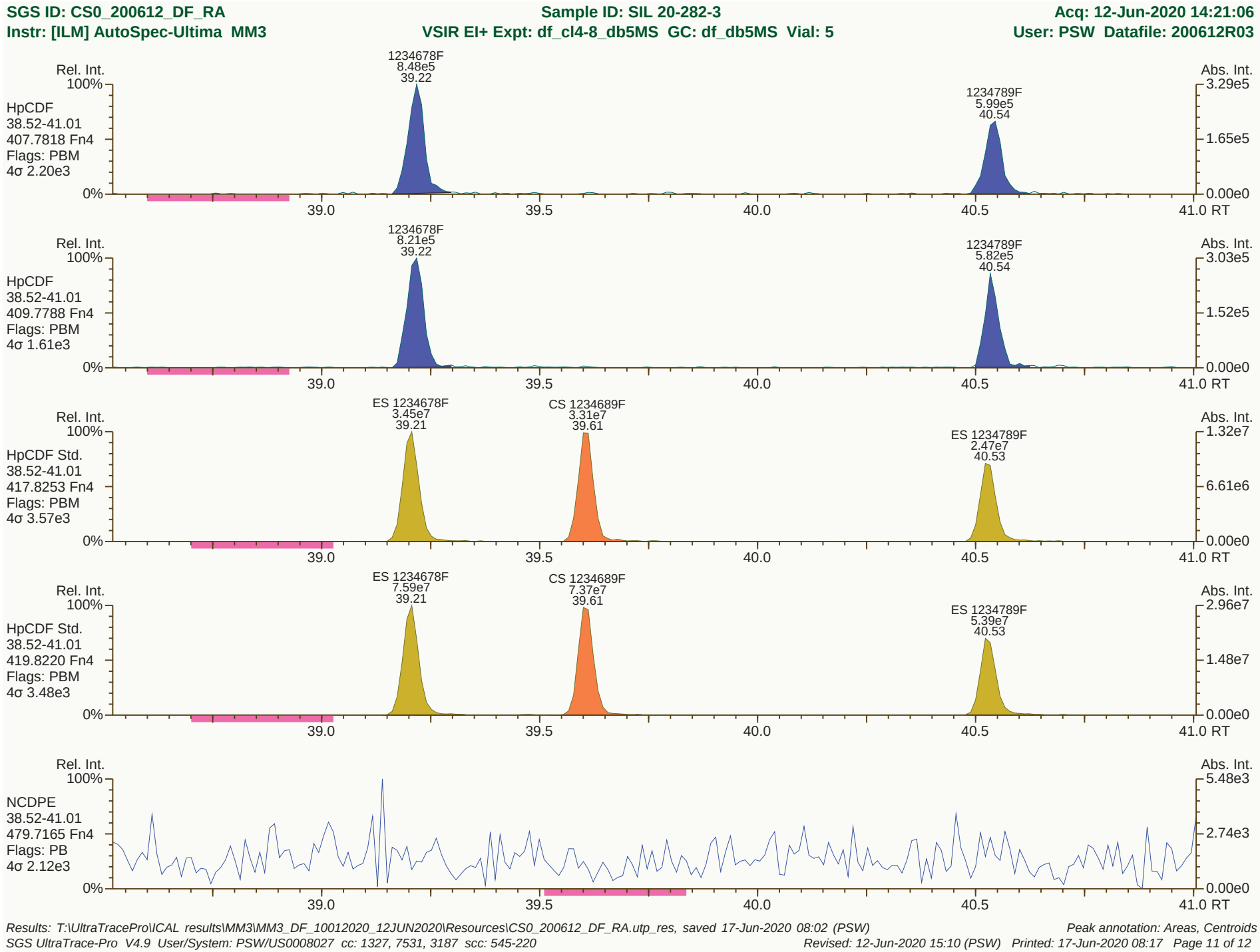

Rel. Int.
100%
PeCDF-2
29.51-34.01
339.8597 Fn2
Flags: PBM
4σ 2.06e3
0%
12378F
1.35e6
31.57
23478F
1.31e6
32.69
Abs. Int.
4.02e5
2.01e5
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF-2
29.51-34.01
341.8568 Fn2
Flags: PBM
4σ 2.83e3
0%
12378F
8.31e5
31.56
23478F
8.83e5
32.69
Abs. Int.
2.59e5
1.30e5
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
351.9000 Fn2
Flags: PBM
4σ 2.89e3
0%
CS 12346F
1.21e8
31.01
ES 12378F
1.21e8
31.55
ES 23478F
1.18e8
32.67
Abs. Int.
3.36e7
1.68e7
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
353.8970 Fn2
Flags: PBM
4σ 2.84e3
0%
CS 12346F
7.82e7
31.01
ES 12378F
7.69e7
31.55
ES 23478F
7.42e7
32.67
Abs. Int.
2.24e7
1.12e7
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
HpCDPE
29.51-34.01
409.7974 Fn2
Flags: PB
4σ 2.22e3
0%
Abs. Int.
1.04e4
5.20e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT


Rel. Int.
100%
HxCDF
34.02-38.51
373.8207 Fn3
Flags: PBM
4σ 2.53e3
0%
123478F
1.20e6
35.97
123678F
1.17e6
36.11
234678F
1.11e6
36.76
123789F
8.93e5
37.74
Abs. Int.
3.87e5
1.93e5
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDF
34.02-38.51
375.8178 Fn3
Flags: PBM
4σ 1.62e3
0%
123478F
9.24e5
35.97
123678F
8.99e5
36.11
234678F
8.81e5
36.76
123789F
6.90e5
37.74
Abs. Int.
3.01e5
1.50e5
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDF Std.
34.02-38.51
383.8639 Fn3
Flags: PBM
4σ 3.13e3
0%
ES 123678F
5.80e7
36.10
ES 123478F
5.09e7
35.96
CS 123469F
5.25e7
36.40
ES 234678F
5.26e7
36.74
ES 123789F
4.25e7
37.73
Abs. Int.
1.73e7
8.66e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDF Std.
34.02-38.51
385.8610 Fn3
Flags: PBM
4σ 4.44e3
0%
ES 123678F
1.11e8
36.10
ES 123478F
9.87e7
35.96
CS 123469F
9.91e7
36.40
ES 234678F
9.76e7
36.74
ES 123789F
8.29e7
37.73
Abs. Int.
3.37e7
1.68e7
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
OCDPE
34.02-38.51
445.7555 Fn3
Flags: PB
4σ 2.28e3
0%
Abs. Int.
6.01e3
3.01e3
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT

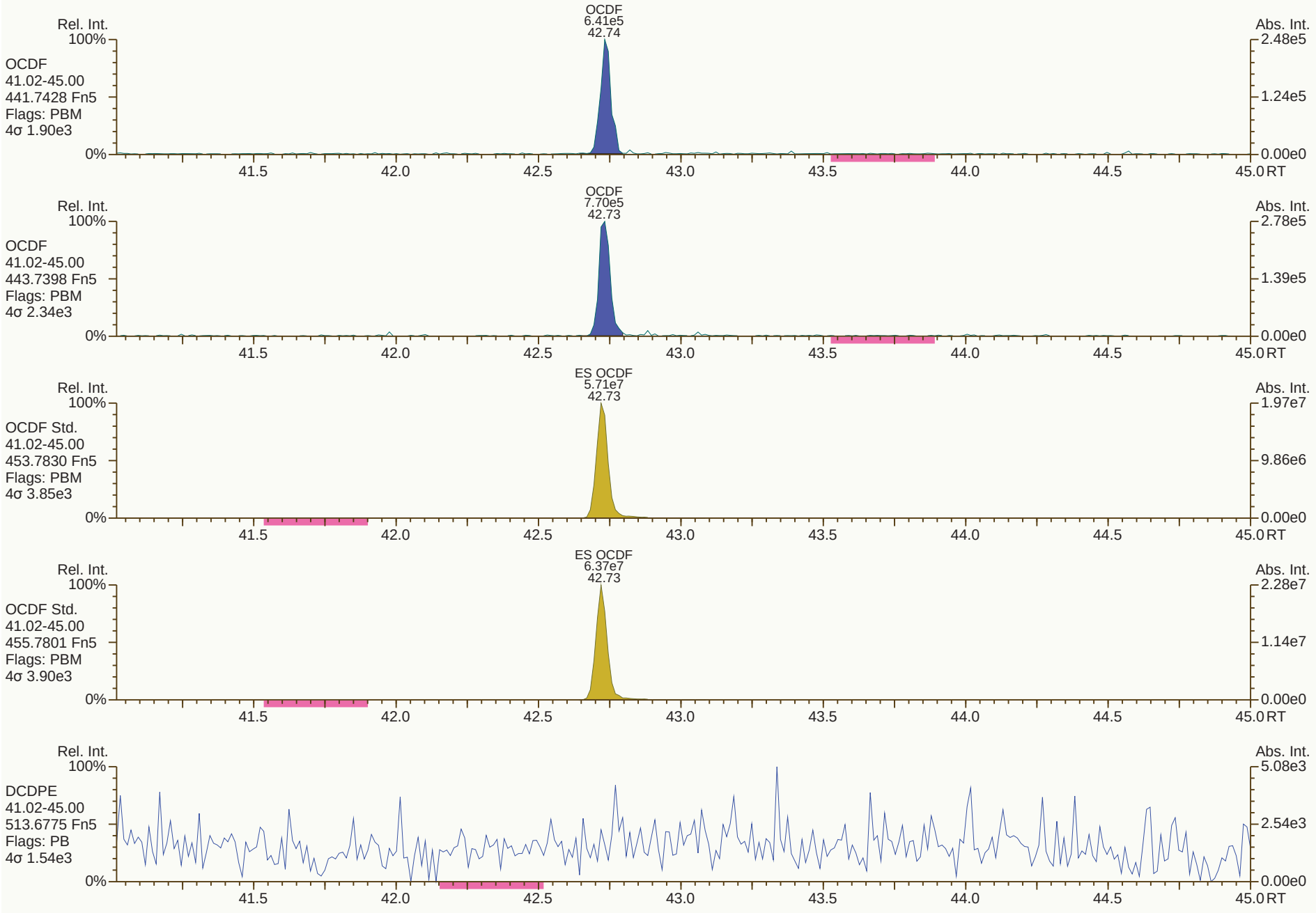
SGS ID: CS0_200612_DF_RA
Instr: [ILM] AutoSpec-Ultima MM3

Sample ID: SIL 20-282-3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 5

Acq: 12-Jun-2020 14:21:06
User: PSW Datafile: 200612R03



Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS0_200612_DF_RA.utp_res, saved 17-Jun-2020 08:02 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 1327, 7531, 3187 scc: 545-220
Revised: 12-Jun-2020 15:10 (PSW) Printed: 17-Jun-2020 08:17 Page 11 of 12



Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS0_200612_DF_RA.utp_res, saved 17-Jun-2020 08:02 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 8894, 4260, 8480 scc: 545-220
Revised: 15-Jun-2020 08:19 (PSW) Printed: 17-Jun-2020 08:17 Page 12 of 12

SGS ID: CS0_200612_DF_RA | Sample ID: SIL 20-282-3 | Acq: 12-Jun-2020 14:21:06

Instr: [ILM] AutoSpec-Ultima MM3 | VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 5 | User: PSW Datafile: 200612R03



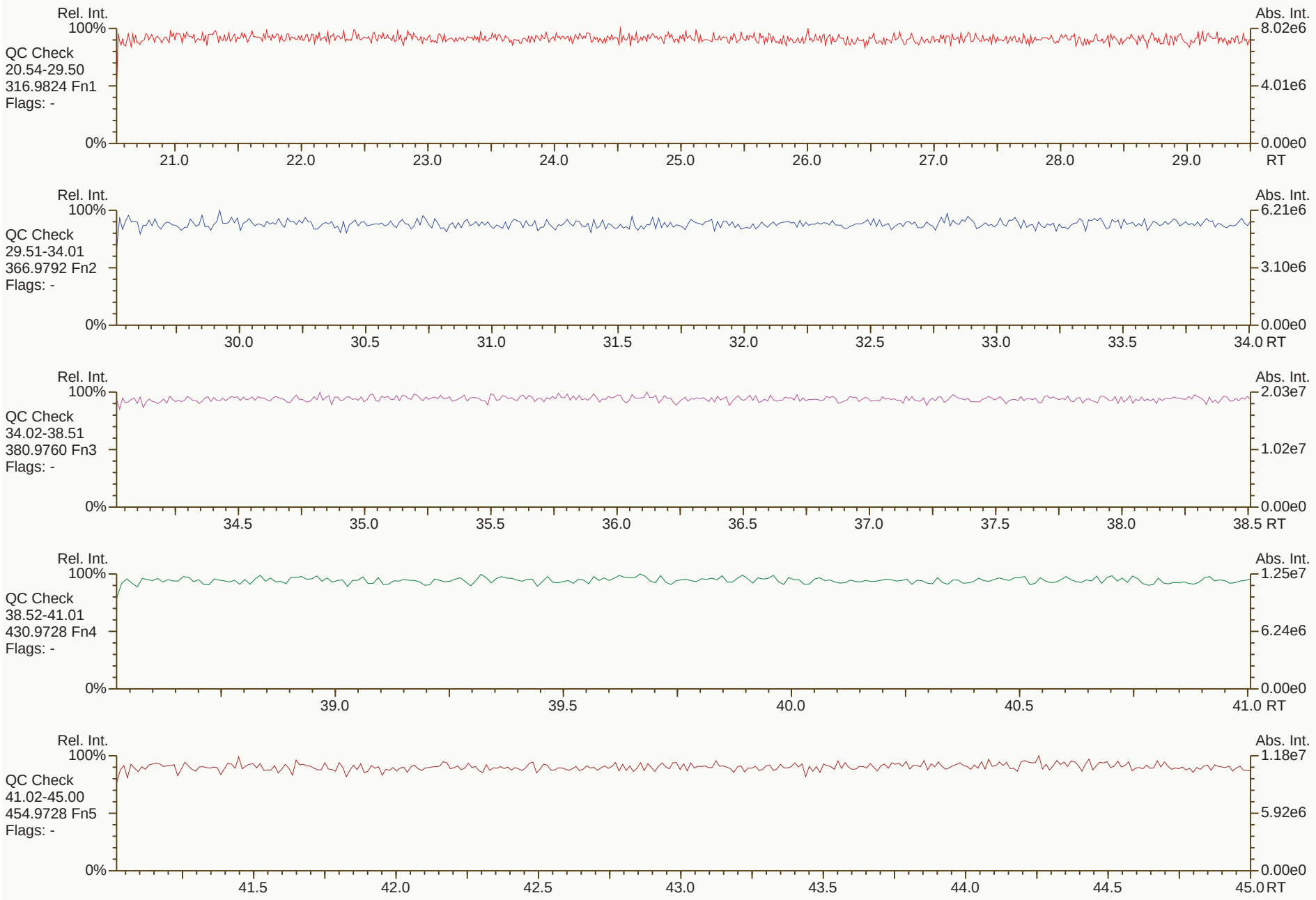
Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS0_200612_DF_RA.utp_res, saved 17-Jun-2020 08:02 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 5618, 4260 *Revised: 17-Jun-2020 08:02 (PSW) Printed: 17-Jun-2020 08:27*

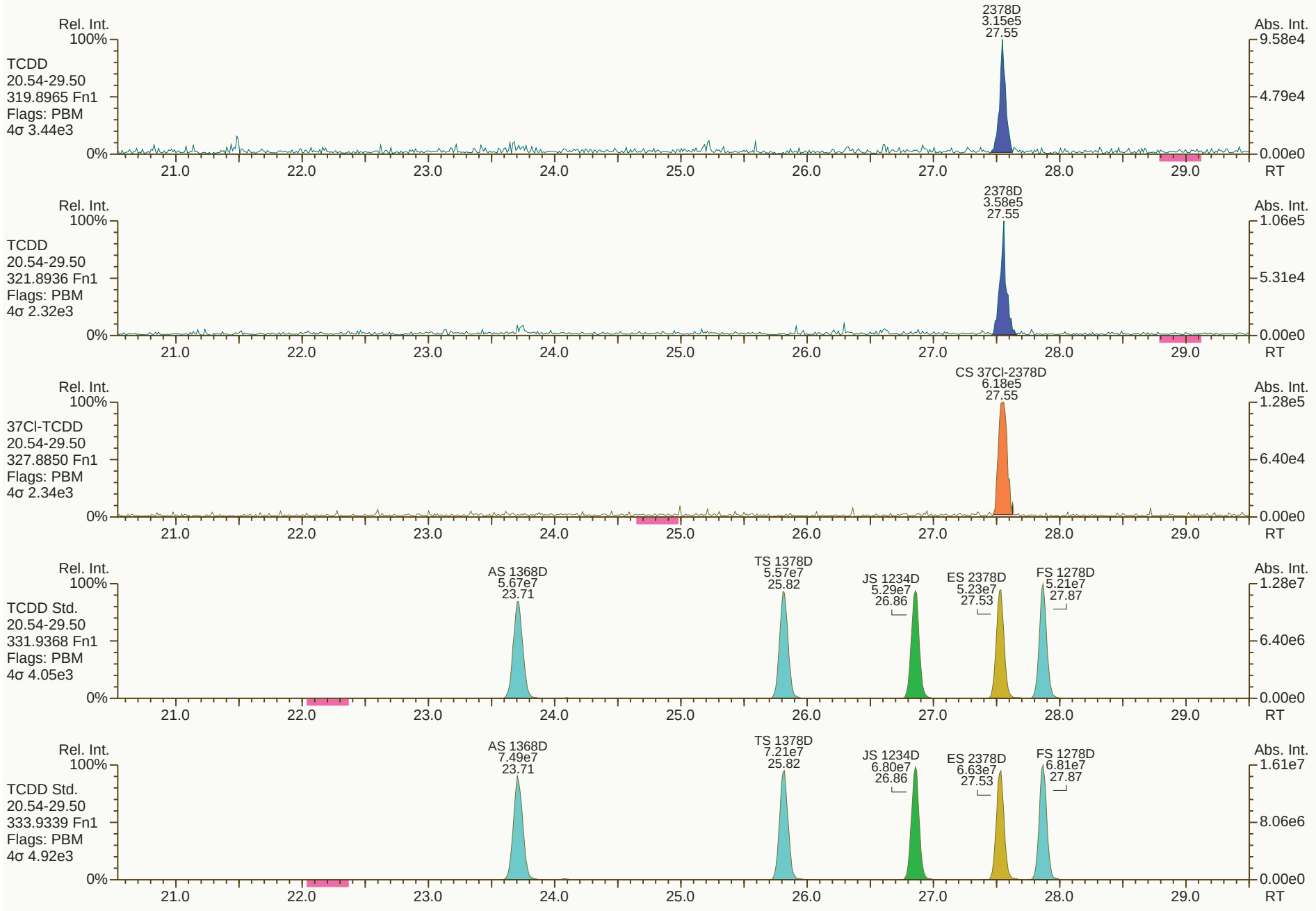
Dioxin/Furan QC Summary		Acq'd: 12 Jun 2020 15:11 PSW				ICAL: MM3_DF_10012020_12JUN2020	
Lab ID: CS1_200612_DF_RA		UTP: 17-Jun-2020 08:05:59 PSW				Checkcode: 407-197-HVF	
Sample ID: SIL 20-282-2		Report: 17 Jun 2020 08:13 pw				Datafile: 200612R04	
Name	**RT**	**Response**	**RA**	**OK**	**Ref. RRFs**	**Calc. RRFs**	**Dev'n**
2378-TCDD	27.55	6.73E+05	0.88	Y	1.18	1.13	-4%
12378-PeCDD	33.03	2.70E+06	1.68	Y	1.14	1.09	-4%
123478-HxCDD	36.93	2.50E+06	1.31	Y	1.09	1.04	-4%
123678-HxCDD	37.04	2.49E+06	1.29	Y	1.13	1.08	-4%
123789-HxCDD	37.35	2.68E+06	1.24	Y	1.05	1.00	-5%
1234678-HpCDD	40.10	2.02E+06	1.07	Y	0.98	0.91	-7%
OCDD	42.56	3.01E+06	0.88	Y	1.08	1.01	-6%
2378-TCDF	26.64	8.94E+05	0.82	Y	0.98	0.88	-10%
12378-PeCDF	31.55	3.87E+06	1.53	Y	0.95	0.91	-5%
23478-PeCDF	32.68	3.78E+06	1.61	Y	0.95	0.88	-7%
123478-HxCDF	35.96	3.69E+06	1.19	Y	1.20	1.15	-4%
123678-HxCDF	36.10	3.70E+06	1.27	Y	1.07	1.03	-4%
234678-HxCDF	36.74	3.33E+06	1.35	Y	1.10	1.02	-7%
123789-HxCDF	37.73	2.92E+06	1.17	Y	1.09	1.06	-3%
1234678-HpCDF	39.20	3.10E+06	1.06	Y	1.28	1.21	-5%
1234789-HpCDF	40.53	2.46E+06	1.05	Y	1.27	1.25	-1%
OCDF	42.72	3.58E+06	0.95	Y	1.01	0.96	-5%
ES 2378-TCDD	27.53	1.19E+08	0.79	Y	1.01	0.98	-3%
ES 12378-PeCDD	33.01	9.89E+07	1.61	Y	0.87	0.82	-6%
ES 123478-HxCDD	36.91	9.57E+07	1.29	Y	1.10	1.05	-4%
ES 123678-HxCDD	37.03	9.19E+07	1.28	Y	1.06	1.01	-5%
ES 123789-HxCDD	37.33	1.07E+08	1.29	Y	1.22	1.18	-3%
ES 1234678-HpCDD	40.09	8.86E+07	1.09	Y	0.99	0.97	-2%
ES OCDD	42.55	1.20E+08	0.92	Y	0.67	0.66	-2%
ES 2378-TCDF	26.62	2.04E+08	0.80	Y	1.01	0.99	-2%
ES 12378-PeCDF	31.53	1.71E+08	1.60	Y	0.90	0.84	-7%
ES 23478-PeCDF	32.66	1.72E+08	1.59	Y	0.89	0.84	-6%
ES 123478-HxCDF	35.94	1.28E+08	0.52	Y	1.43	1.41	-2%
ES 123678-HxCDF	36.08	1.43E+08	0.51	Y	1.63	1.57	-3%
ES 234678-HxCDF	36.73	1.31E+08	0.52	Y	1.48	1.44	-3%
ES 123789-HxCDF	37.71	1.11E+08	0.52	Y	1.29	1.22	-6%
ES 1234678-HpCDF	39.19	1.02E+08	0.45	Y	1.15	1.12	-2%
ES 1234789-HpCDF	40.52	7.85E+07	0.44	Y	0.91	0.86	-5%
ES OCDF	42.72	1.50E+08	0.91	Y	0.83	0.82	-1%

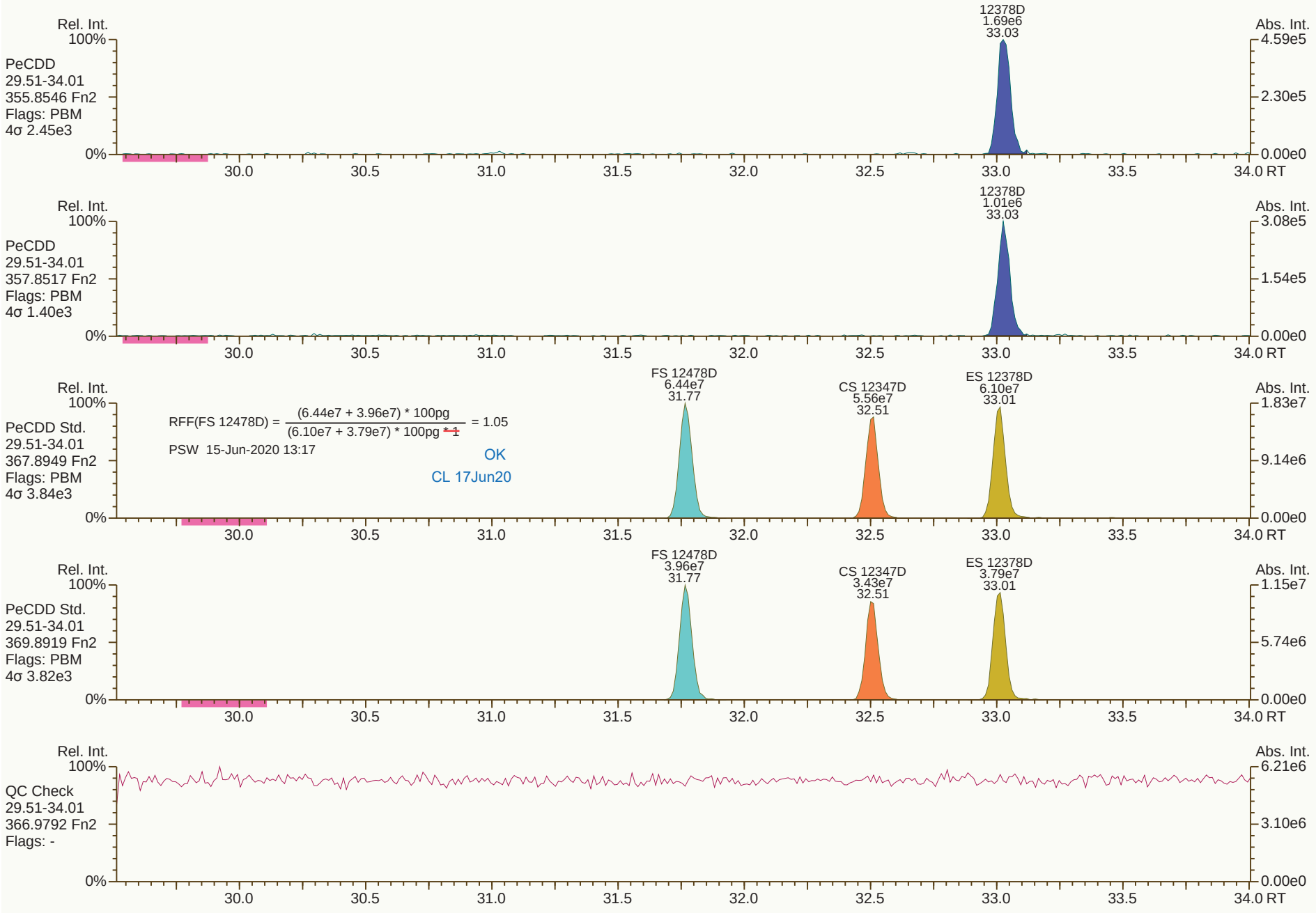
Dioxin/Furan QC Summary	Acq'd: 12 Jun 2020 15:11 PSW	ICAL: MM3_DF_10012020_12JUN2020
Lab ID: CS1_200612_DF_RA	UTP: 17-Jun-2020 08:05:59 PSW	Checkcode: 407-197-HVF
Sample ID: SIL 20-282-2	Report: 17 Jun 2020 08:13 pw	Datafile: 200612R04

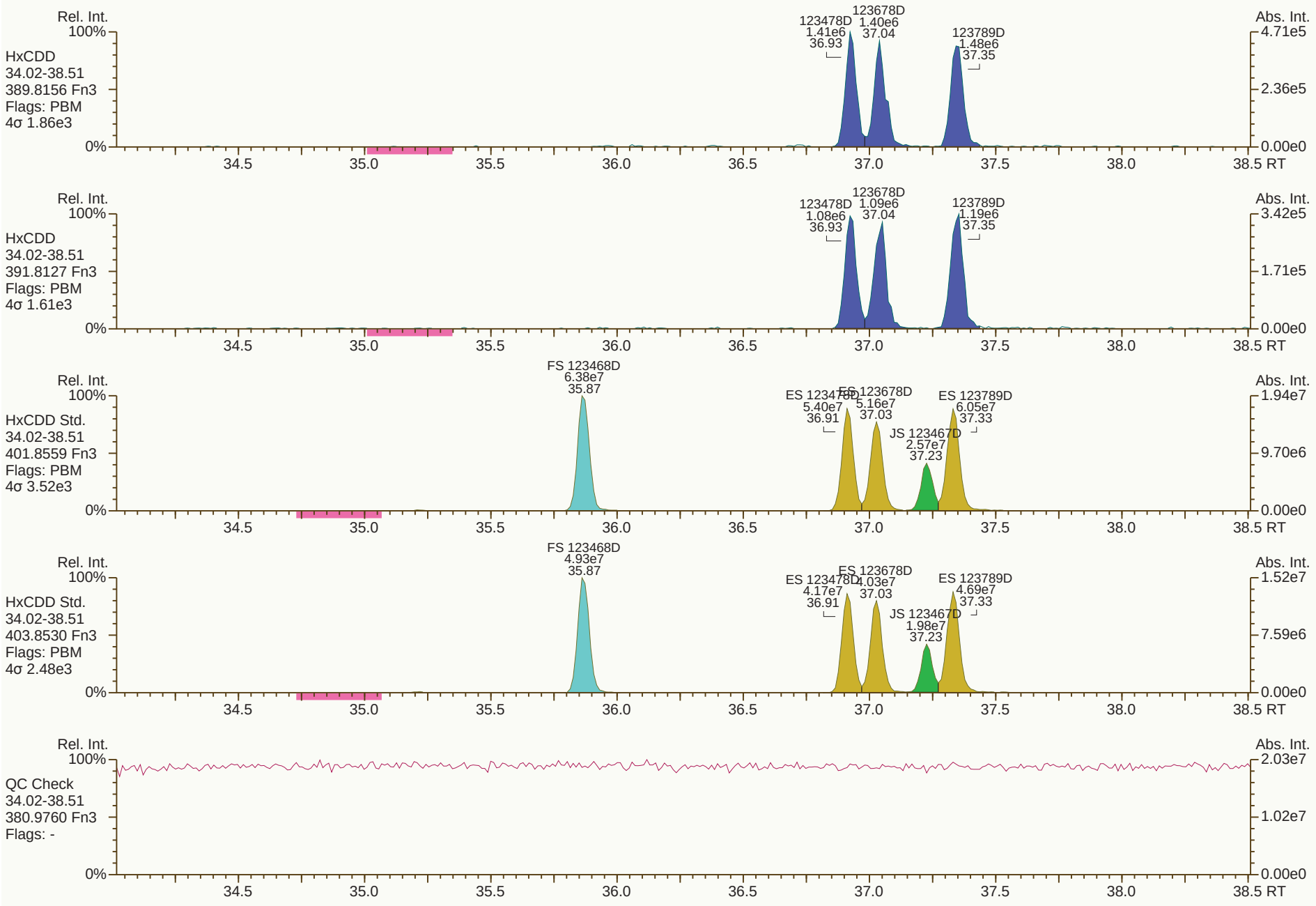
Name	RT	Response	RA	OK	Ref. RRFs	Calc. RRFs	Dev'n
JS 1234-TCDD	26.86	1.21E+08	0.78	Y	-	-	-
JS 1234-TCDF	25.22	2.05E+08	0.78	Y	-	-	-
JS 123467-HxCDD	37.23	4.56E+07	1.30	Y	-	-	-
CS 37Cl-2378-TCDD	27.55	6.18E+05	n/a	-	1.04	1.02	-1%
CS 12347-PeCDD	32.51	8.99E+07	1.62	Y	0.74	0.74	1%
CS 12346-PeCDF	31.00	1.73E+08	1.57	Y	0.86	0.85	-2%
CS 123469-HxCDF	36.39	1.28E+08	0.52	Y	1.36	1.40	3%
CS 1234689-HpCDF	39.59	9.91E+07	0.45	Y	1.05	1.09	3%
SS 37Cl-2378-TCDD	27.55	6.18E+05	n/a	-	1.04	1.04	0%
SS 12347-PeCDD	32.51	8.99E+07	1.62	Y	0.86	0.91	6%
SS 12346-PeCDF	31.00	1.73E+08	1.57	Y	0.96	1.01	5%
SS 123469-HxCDF	36.39	1.28E+08	0.52	Y	0.83	0.89	7%
SS 1234689-HpCDF	39.59	9.91E+07	0.45	Y	0.92	0.97	5%
AS 1368-TCDD	23.71	1.32E+08	0.76	Y	1.08	1.09	1%
AS 1368-TCDF	21.49	2.41E+08	0.80	Y	1.18	1.18	0%
FS 1278-TCDD	27.87	1.20E+08	0.76	Y	1.00	1.01	2%
FS 12478-PeCDD	31.77	1.04E+08	1.63	Y	1.00	1.05	6%
FS 123468-HxCDD	35.87	1.13E+08	1.29	Y	1.11	1.18	6%
FS 1234679-HpCDD	39.45	1.10E+08	1.09	Y	1.19	1.24	4%
TS 1378-TCDD	25.82	1.28E+08	0.77	Y	1.06	1.08	2%
~~OCDD-a~~	~~NotFnd~~				~~0.07~~		
~~OCDF-a~~	~~NotFnd~~				~~0.06~~		

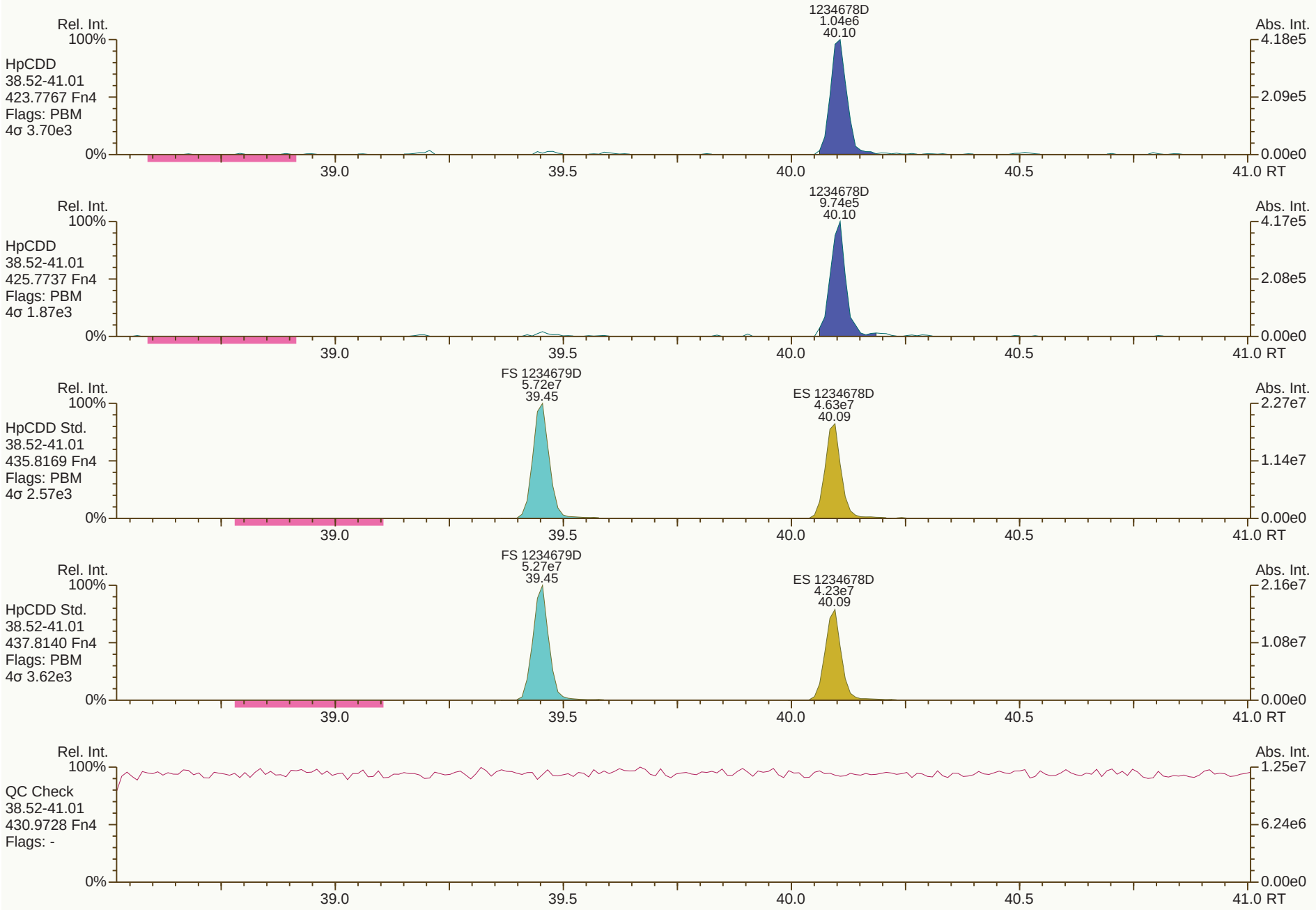


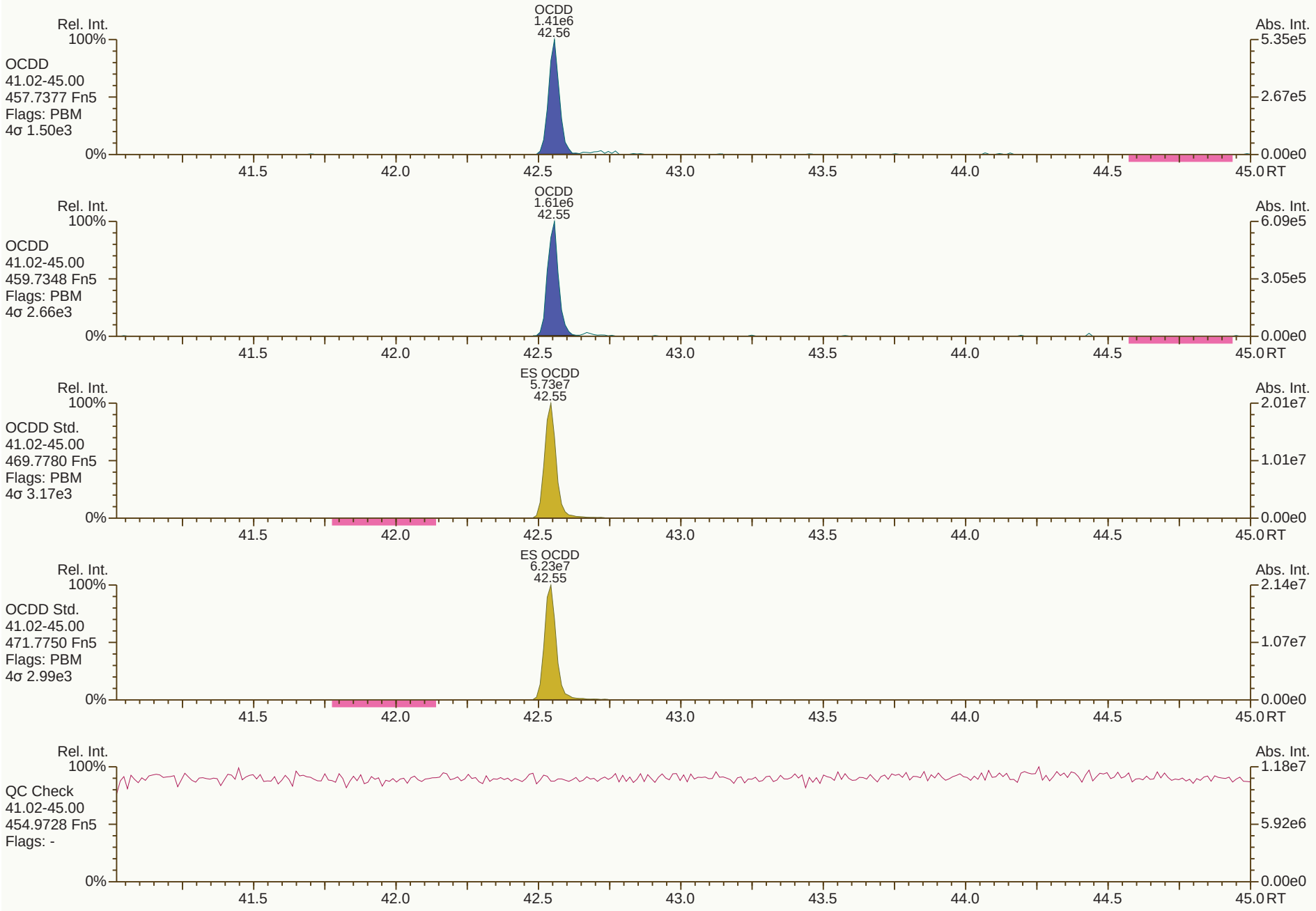
Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS1_200612_DF_RA.utp_res, saved 17-Jun-2020 08:06 (PSW) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 scc: 407-197 *PKD: n/a Printed: 17-Jun-2020 08:18 Page 1 of 12*


Rel. Int.
100%
TCDD
20.54-29.50
319.8965 Fn1
Flags: PBM
4σ 3.44e3
0%
2378D
3.15e5
27.55
Abs. Int.
9.58e4
4.79e4
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD
20.54-29.50
321.8936 Fn1
Flags: PBM
4σ 2.32e3
0%
2378D
3.58e5
27.55
Abs. Int.
1.06e5
5.31e4
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
37Cl-TCDD
20.54-29.50
327.8850 Fn1
Flags: PBM
4σ 2.34e3
0%
CS 37Cl-2378D
6.18e5
27.55
Abs. Int.
1.28e5
6.40e4
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
331.9368 Fn1
Flags: PBM
4σ 4.05e3
0%
AS 1368D
5.67e7
23.71
TS 1378D
5.57e7
25.82
JS 1234D
5.29e7
26.86
ES 2378D
5.23e7
27.53
FS 1278D
5.21e7
27.87
Abs. Int.
1.28e7
6.40e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
333.9339 Fn1
Flags: PBM
4σ 4.92e3
0%
AS 1368D
7.49e7
23.71
TS 1378D
7.21e7
25.82
JS 1234D
6.80e7
26.86
ES 2378D
6.63e7
27.53
FS 1278D
6.81e7
27.87
Abs. Int.
1.61e7
8.06e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT

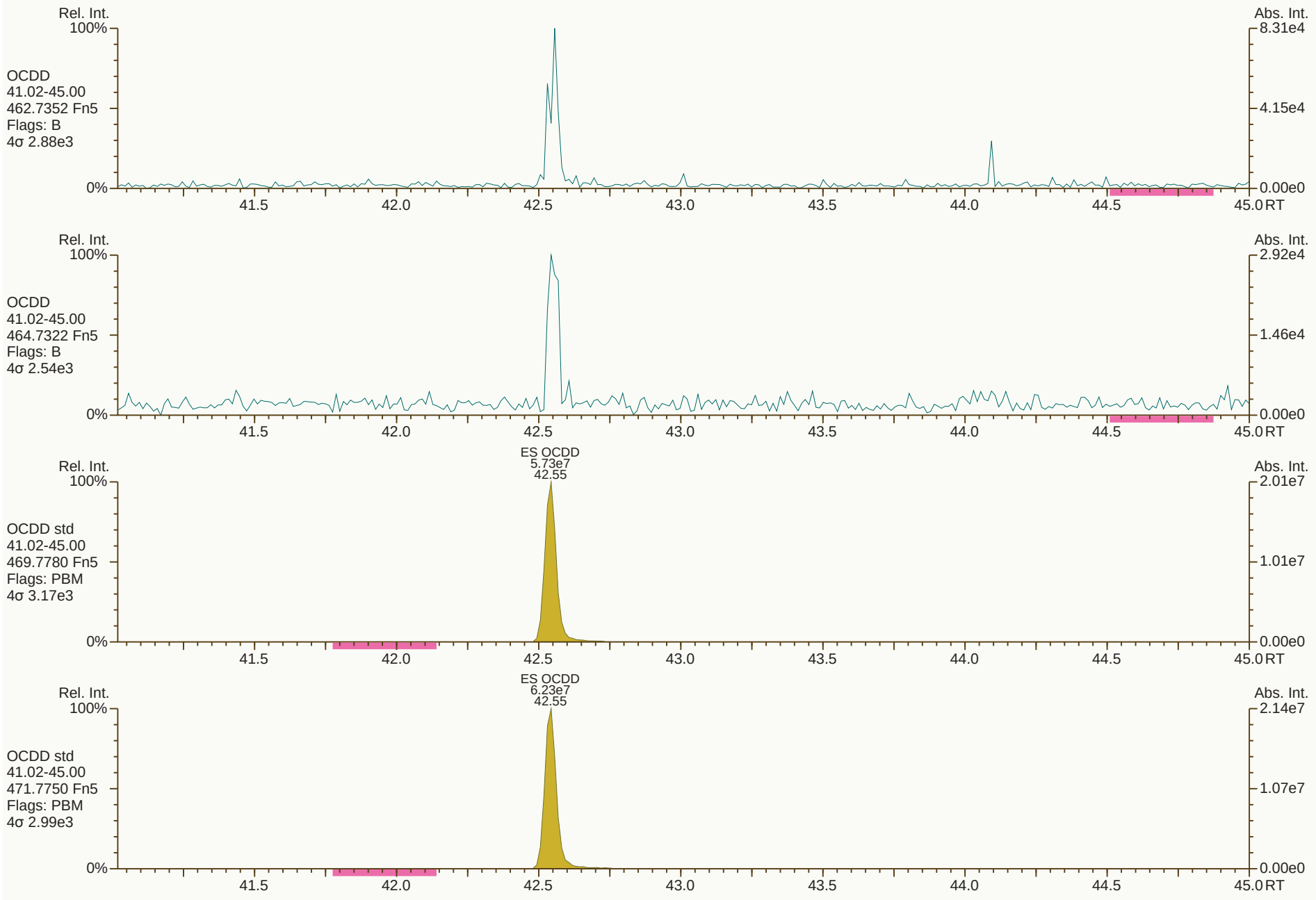

Rel. Int.
100%
PeCDD
29.51-34.01
355.8546 Fn2
Flags: PBM
4σ 2.45e3
0%
12378D
1.69e6
33.03
Abs. Int.
4.59e5
2.30e5
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD
29.51-34.01
357.8517 Fn2
Flags: PBM
4σ 1.40e3
0%
12378D
1.01e6
33.03
Abs. Int.
3.08e5
1.54e5
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
367.8949 Fn2
Flags: PBM
4σ 3.84e3
0%
RFF(FS 12478D) = (6.44e7 + 3.96e7) * 100pg / (6.10e7 + 3.79e7) * 100pg * 1 = 1.05
PSW 15-Jun-2020 13:17
OK
CL 17Jun20
FS 12478D
6.44e7
31.77
CS 12347D
5.56e7
32.51
ES 12378D
6.10e7
33.01
Abs. Int.
1.83e7
9.14e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
369.8919 Fn2
Flags: PBM
4σ 3.82e3
0%
FS 12478D
3.96e7
31.77
CS 12347D
3.43e7
32.51
ES 12378D
3.79e7
33.01
Abs. Int.
1.15e7
5.74e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
QC Check
29.51-34.01
366.9792 Fn2
Flags: -
0%
Abs. Int.
6.21e6
3.10e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT


Rel. Int.
100%
HxCDD
34.02-38.51
389.8156 Fn3
Flags: PBM
4σ 1.86e3
123478D
1.41e6
36.93
123678D
1.40e6
37.04
123789D
1.48e6
37.35
Abs. Int.
4.71e5
2.36e5
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDD
34.02-38.51
391.8127 Fn3
Flags: PBM
4σ 1.61e3
123478D
1.08e6
36.93
123678D
1.09e6
37.04
123789D
1.19e6
37.35
Abs. Int.
3.42e5
1.71e5
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDD Std.
34.02-38.51
401.8559 Fn3
Flags: PBM
4σ 3.52e3
FS 123468D
6.38e7
35.87
ES 123478D
5.40e7
36.91
ES 123678D
5.16e7
37.03
ES 123789D
6.05e7
37.33
JS 123467D
2.57e7
37.23
Abs. Int.
1.94e7
9.70e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDD Std.
34.02-38.51
403.8530 Fn3
Flags: PBM
4σ 2.48e3
FS 123468D
4.93e7
35.87
ES 123478D
4.17e7
36.91
ES 123678D
4.03e7
37.03
ES 123789D
4.69e7
37.33
JS 123467D
1.98e7
37.23
Abs. Int.
1.52e7
7.59e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
QC Check
34.02-38.51
380.9760 Fn3
Flags: -
Abs. Int.
2.03e7
1.02e7
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT


Rel. Int.
100%
HpCDD
38.52-41.01
423.7767 Fn4
Flags: PBM
4σ 3.70e3
1234678D
1.04e6
40.10
Abs. Int.
4.18e5
2.09e5
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.52-41.01
425.7737 Fn4
Flags: PBM
4σ 1.87e3
1234678D
9.74e5
40.10
Abs. Int.
4.17e5
2.08e5
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.52-41.01
435.8169 Fn4
Flags: PBM
4σ 2.57e3
FS 1234679D
5.72e7
39.45
ES 1234678D
4.63e7
40.09
Abs. Int.
2.27e7
1.14e7
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.52-41.01
437.8140 Fn4
Flags: PBM
4σ 3.62e3
FS 1234679D
5.27e7
39.45
ES 1234678D
4.23e7
40.09
Abs. Int.
2.16e7
1.08e7
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.52-41.01
430.9728 Fn4
Flags: -
Abs. Int.
1.25e7
6.24e6
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT


OCDD
1.41e6
42.56
Rel. Int.
100%
OCDD
41.02-45.00
457.7377 Fn5
Flags: PBM
4σ 1.50e3
0%
Abs. Int.
5.35e5
2.67e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDD
1.61e6
42.55
Rel. Int.
100%
OCDD
41.02-45.00
459.7348 Fn5
Flags: PBM
4σ 2.66e3
0%
Abs. Int.
6.09e5
3.05e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
5.73e7
42.55
Rel. Int.
100%
OCDD Std.
41.02-45.00
469.7780 Fn5
Flags: PBM
4σ 3.17e3
0%
Abs. Int.
2.01e7
1.01e7
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
6.23e7
42.55
Rel. Int.
100%
OCDD Std.
41.02-45.00
471.7750 Fn5
Flags: PBM
4σ 2.99e3
0%
Abs. Int.
2.14e7
1.07e7
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
1.18e7
5.92e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

SGS ID: CS1_200612_DF_RA **Sample ID: SIL 20-282-2** **Acq: 12-Jun-2020 15:11:28**
Instr: [ILM] AutoSpec-Ultima MM3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 6** **User: PSW Datafile: 200612R04**



Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS1_200612_DF_RA.utp_res, saved 17-Jun-2020 08:06 (PSW) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 2343, 1842 *Revised: 17-Jun-2020 08:05 (PSW) Printed: 17-Jun-2020 08:27*


Rel. Int.
100%
TCDF
20.54-29.50
303.9016 Fn1
Flags: PBM
4σ 1.87e3
0%
2378F
4.02e5
26.64
Abs. Int.
1.08e5
5.41e4
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF
20.54-29.50
305.8987 Fn1
Flags: PBM
4σ 1.77e3
0%
2378F
4.92e5
26.64
Abs. Int.
1.11e5
5.55e4
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
315.9419 Fn1
Flags: PBM
4σ 2.42e4
0%
AS 1368F
1.07e8
21.49
JS 1234F
9.00e7
25.22
ES 2378F
9.04e7
26.62
Abs. Int.
2.09e7
1.05e7
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
317.9389 Fn1
Flags: PBM
4σ 1.21e4
0%
AS 1368F
1.34e8
21.49
JS 1234F
1.15e8
25.21
ES 2378F
1.13e8
26.62
Abs. Int.
2.54e7
1.27e7
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
HxCDPE
20.54-29.50
375.8364 Fn1
Flags: PB
4σ 2.31e3
0%
Abs. Int.
7.58e3
3.79e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT

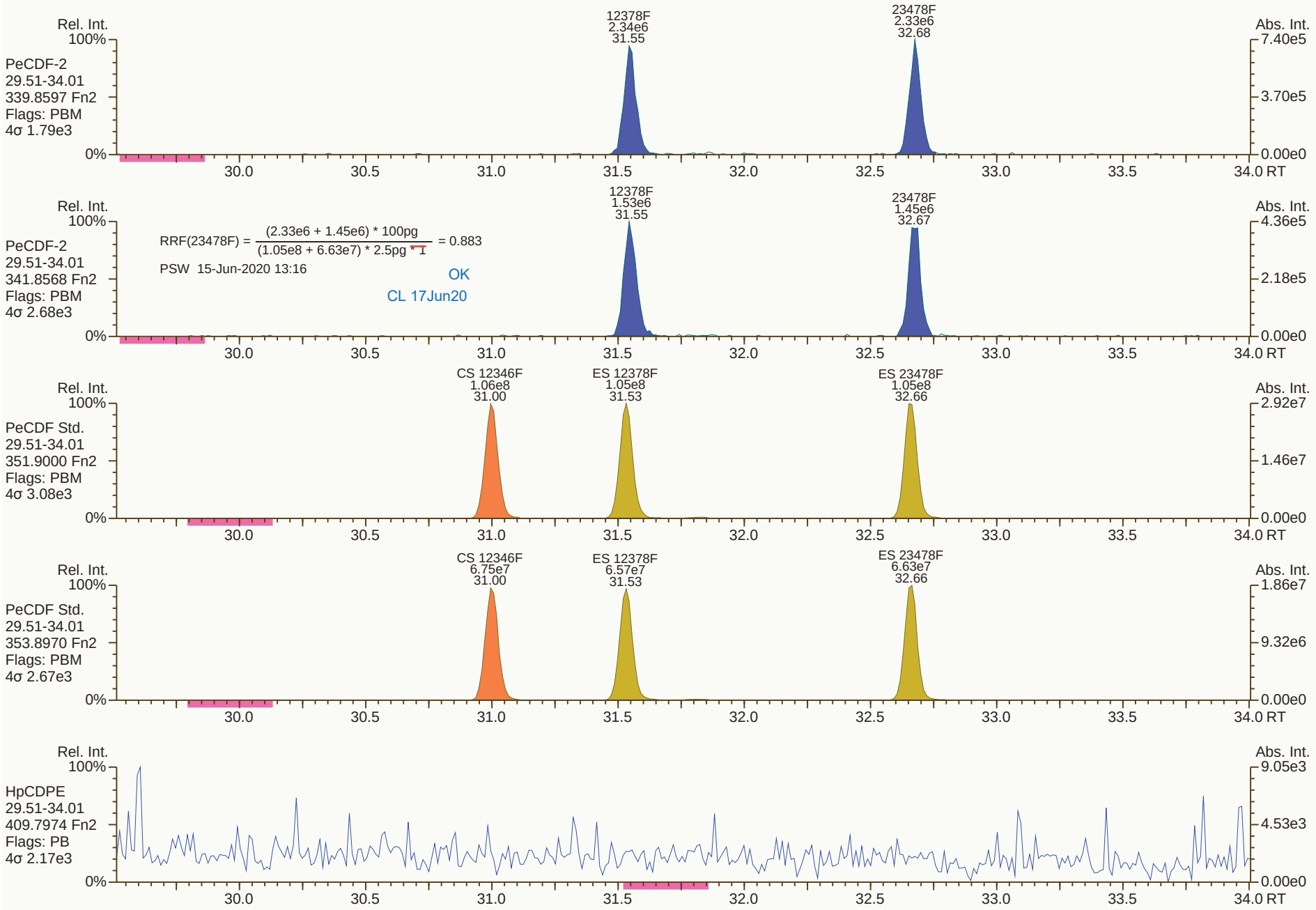
SGS ID: CS1_200612_DF_RA | **Sample ID: SIL 20-282-2** | **Acq: 12-Jun-2020 15:11:28**

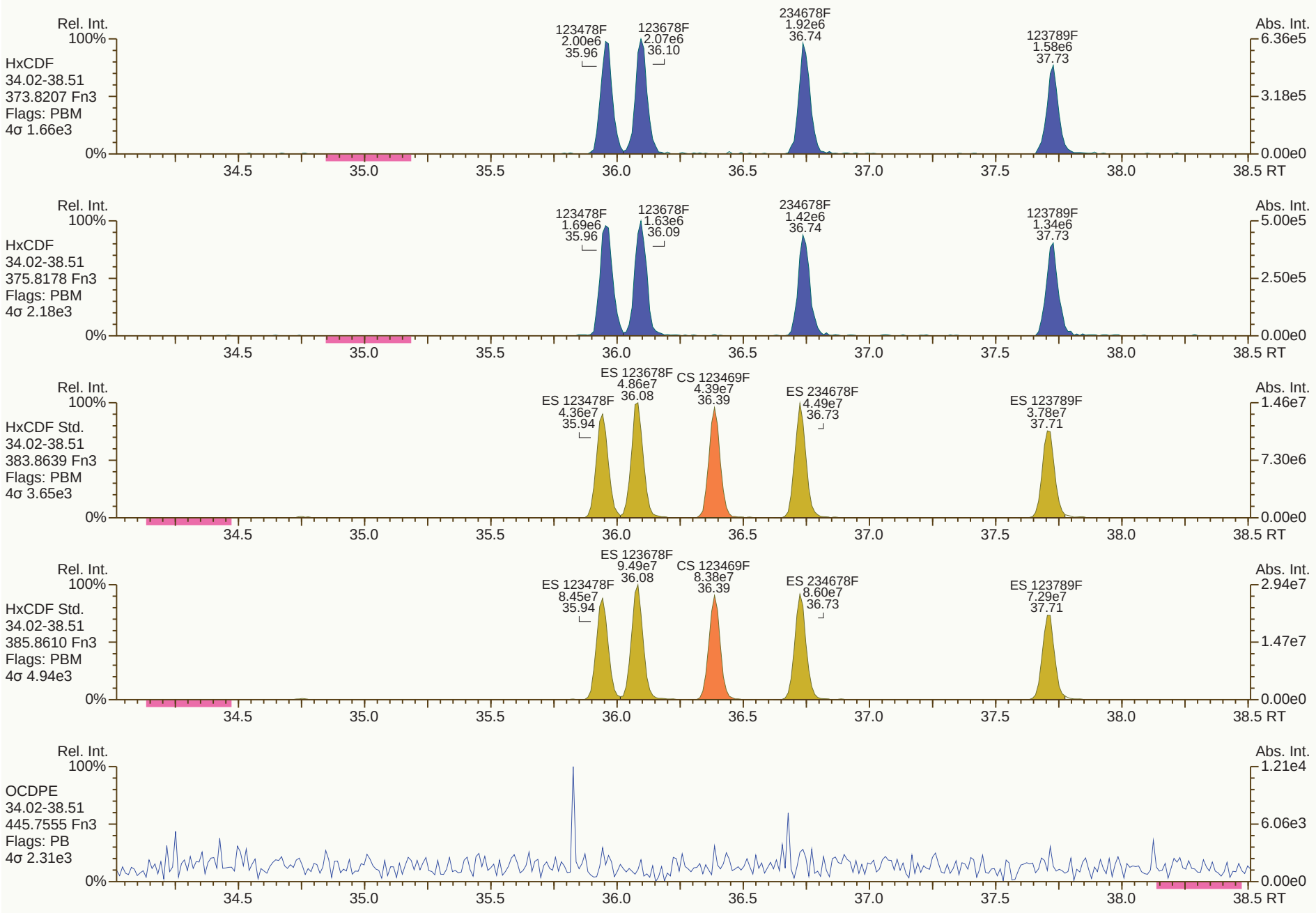
Instr: [ILM] AutoSpec-Ultima MM3 | **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 6** | **User: PSW Datafile: 200612R04**



Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS1_200612_DF_RA.utp_res, saved 17-Jun-2020 08:06 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 9812 scc: 407-197 *PKD: 12-Jun-2020 15:59 Printed: 17-Jun-2020 08:18 Page 8 of 12*

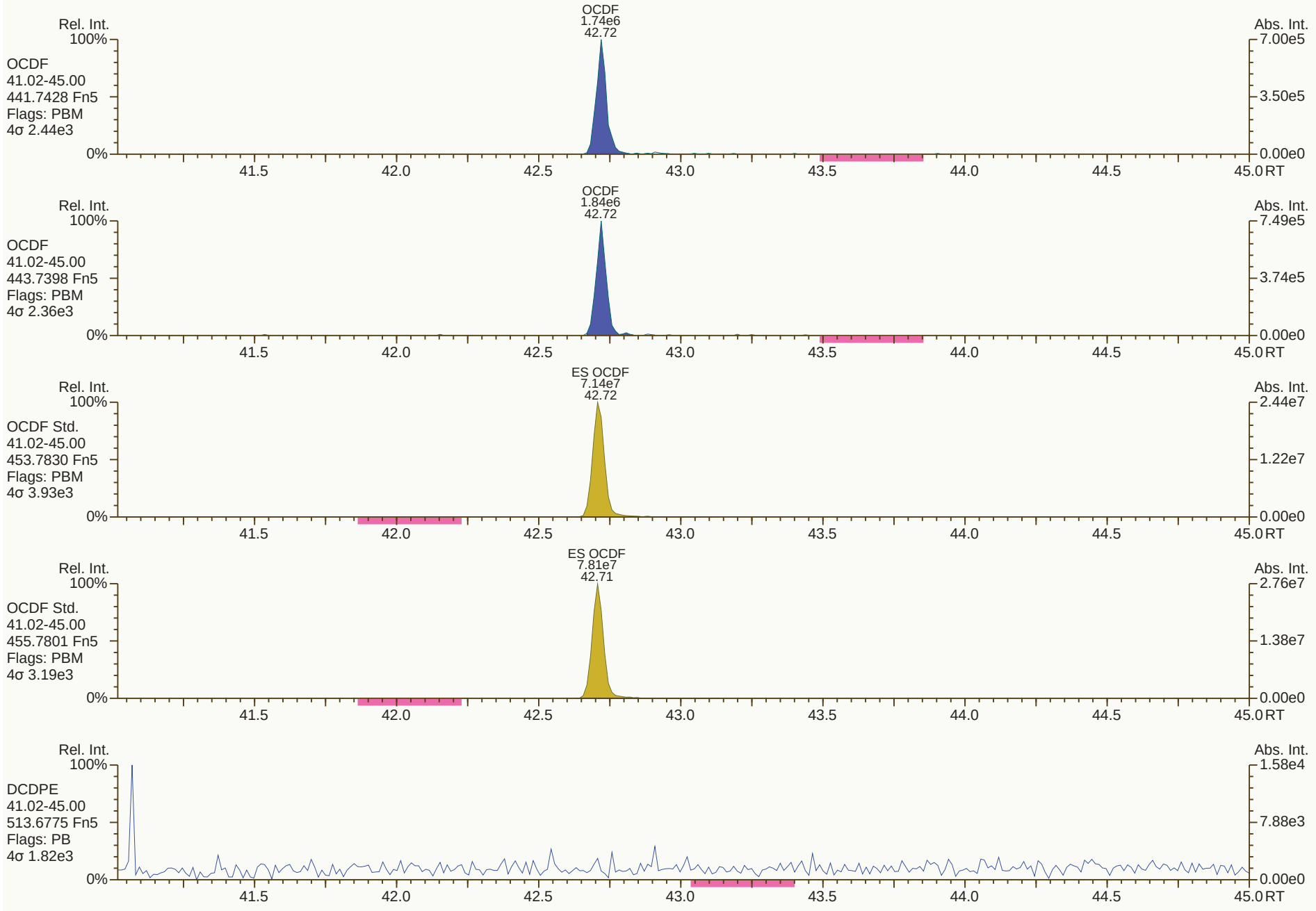

Rel. Int.
100%
PeCDF-2
29.51-34.01
339.8597 Fn2
Flags: PBM
4σ 1.79e3
0%
12378F
2.34e6
31.55
23478F
2.33e6
32.68
Abs. Int.
7.40e5
3.70e5
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF-2
29.51-34.01
341.8568 Fn2
Flags: PBM
4σ 2.68e3
0%
RRF(23478F) = (2.33e6 + 1.45e6) * 100pg / (1.05e8 + 6.63e7) * 2.5pg * 1 = 0.883
PSW 15-Jun-2020 13:16
OK
CL 17Jun20
12378F
1.53e6
31.55
23478F
1.45e6
32.67
Abs. Int.
4.36e5
2.18e5
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
351.9000 Fn2
Flags: PBM
4σ 3.08e3
0%
CS 12346F
1.06e8
31.00
ES 12378F
1.05e8
31.53
ES 23478F
1.05e8
32.66
Abs. Int.
2.92e7
1.46e7
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
353.8970 Fn2
Flags: PBM
4σ 2.67e3
0%
CS 12346F
6.75e7
31.00
ES 12378F
6.57e7
31.53
ES 23478F
6.63e7
32.66
Abs. Int.
1.86e7
9.32e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
HpCDPE
29.51-34.01
409.7974 Fn2
Flags: PB
4σ 2.17e3
0%
Abs. Int.
9.05e3
4.53e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT


Rel. Int.
100%
HxCDF
34.02-38.51
373.8207 Fn3
Flags: PBM
4σ 1.66e3
123478F 2.00e6 35.96
123678F 2.07e6 36.10
234678F 1.92e6 36.74
123789F 1.58e6 37.73
Abs. Int.
6.36e5
3.18e5
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 RT
Rel. Int.
100%
HxCDF
34.02-38.51
375.8178 Fn3
Flags: PBM
4σ 2.18e3
123478F 1.69e6 35.96
123678F 1.63e6 36.09
234678F 1.42e6 36.74
123789F 1.34e6 37.73
Abs. Int.
5.00e5
2.50e5
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 RT
Rel. Int.
100%
HxCDF Std.
34.02-38.51
383.8639 Fn3
Flags: PBM
4σ 3.65e3
ES 123478F 4.36e7 35.94
ES 123678F 4.86e7 36.08
CS 123469F 4.39e7 36.39
ES 234678F 4.49e7 36.73
ES 123789F 3.78e7 37.71
Abs. Int.
1.46e7
7.30e6
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 RT
Rel. Int.
100%
HxCDF Std.
34.02-38.51
385.8610 Fn3
Flags: PBM
4σ 4.94e3
ES 123478F 8.45e7 35.94
ES 123678F 9.49e7 36.08
CS 123469F 8.38e7 36.39
ES 234678F 8.60e7 36.73
ES 123789F 7.29e7 37.71
Abs. Int.
2.94e7
1.47e7
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 RT
Rel. Int.
100%
OCDPE
34.02-38.51
445.7555 Fn3
Flags: PB
4σ 2.31e3
Abs. Int.
1.21e4
6.06e3
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 RT



Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS1_200612_DF_RA.utp_res, saved 17-Jun-2020 08:06 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 0765, 7131, 9485 scc: 407-197 *PKD: 12-Jun-2020 15:59 Printed: 17-Jun-2020 08:18 Page 11 of 12*


OCDF
1.74e6
42.72
Rel. Int.
100%
OCDF
41.02-45.00
441.7428 Fn5
Flags: PBM
4σ 2.44e3
0%
Abs. Int.
7.00e5
3.50e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDF
1.84e6
42.72
Rel. Int.
100%
OCDF
41.02-45.00
443.7398 Fn5
Flags: PBM
4σ 2.36e3
0%
Abs. Int.
7.49e5
3.74e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDF
7.14e7
42.72
Rel. Int.
100%
OCDF Std.
41.02-45.00
453.7830 Fn5
Flags: PBM
4σ 3.93e3
0%
Abs. Int.
2.44e7
1.22e7
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDF
7.81e7
42.71
Rel. Int.
100%
OCDF Std.
41.02-45.00
455.7801 Fn5
Flags: PBM
4σ 3.19e3
0%
Abs. Int.
2.76e7
1.38e7
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
DCDPE
41.02-45.00
513.6775 Fn5
Flags: PB
4σ 1.82e3
0%
Abs. Int.
1.58e4
7.88e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

SGS ID: CS1_200612_DF_RA **Sample ID: SIL 20-282-2** **Acq: 12-Jun-2020 15:11:28**
Instr: [ILM] AutoSpec-Ultima MM3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 6** **User: PSW Datafile: 200612R04**



Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS1_200612_DF_RA.utp_res, saved 17-Jun-2020 08:06 (PSW) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 8083, 8647 *Revised: 17-Jun-2020 08:03 (PSW) Printed: 17-Jun-2020 08:27*

Dioxin/Furan QC Summary	Acq'd: 12 Jun 2020 16:02 PSW	ICAL: MM3_DF_10012020_12JUN2020
Lab ID: CS2_200612_DF_RA	UTP: 15-Jun-2020 11:50:00 PSW	Checkcode: 434-640-RQY
Sample ID: SIL 20-282-1	Report: 15 Jun 2020 11:54 pw	Datafile: 200612R05

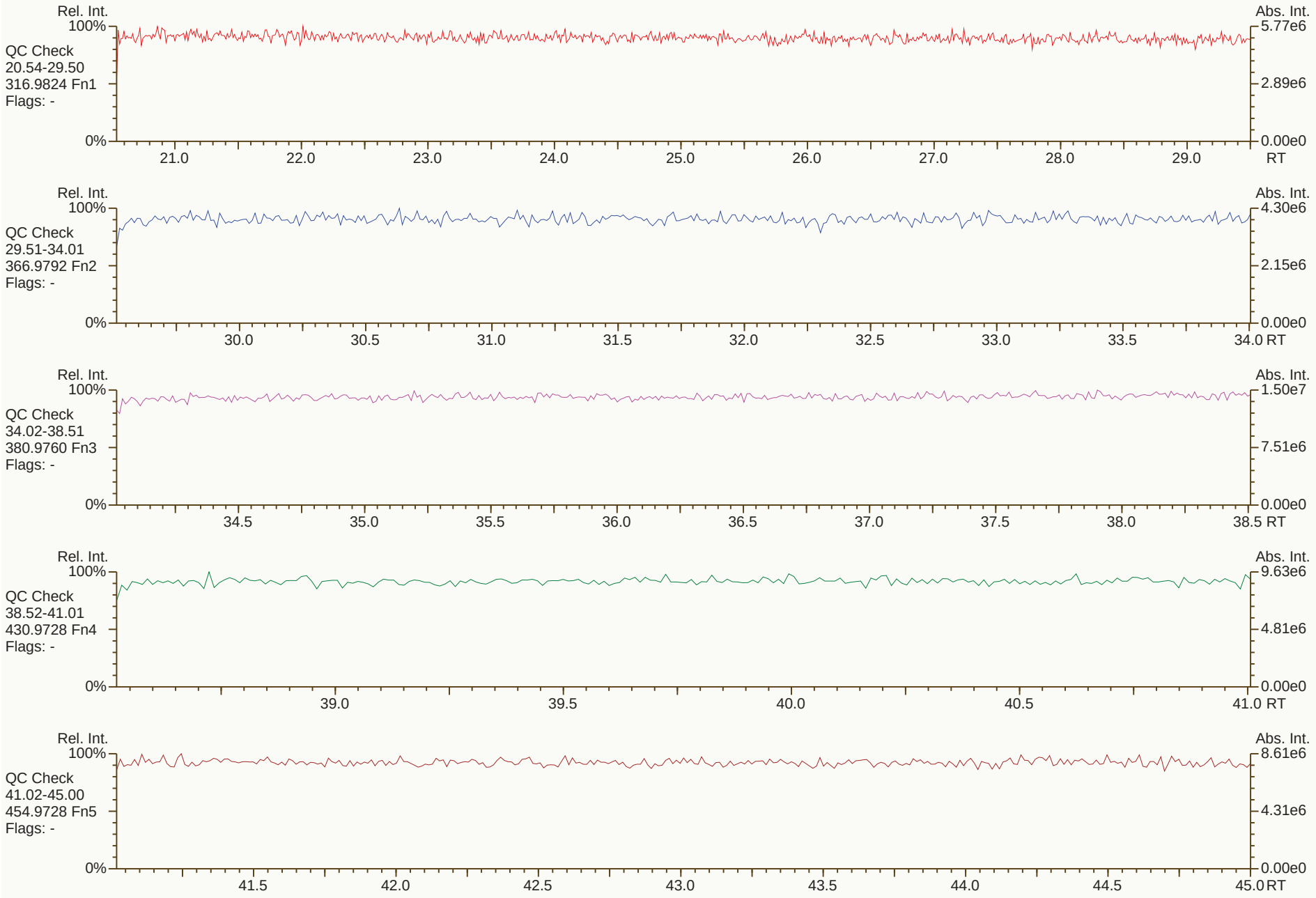
Name	RT	Response	RA	OK	Ref. RRFs	Calc. RRFs	Dev'n
2378-TCDD	27.56	2.06E+06	0.78	Y	1.18	1.16	-2%
12378-PeCDD	33.03	8.11E+06	1.59	Y	1.14	1.09	-4%
123478-HxCDD	36.93	7.68E+06	1.27	Y	1.09	1.05	-4%
123678-HxCDD	37.05	7.51E+06	1.25	Y	1.13	1.07	-5%
123789-HxCDD	37.35	8.32E+06	1.29	Y	1.05	1.03	-2%
1234678-HpCDD	40.11	6.15E+06	1.08	Y	0.98	0.94	-5%
OCDD	42.56	9.73E+06	0.90	Y	1.08	1.05	-2%
2378-TCDF	26.65	2.78E+06	0.75	Y	0.98	0.92	-6%
12378-PeCDF	31.55	1.20E+07	1.48	Y	0.95	0.92	-3%
23478-PeCDF	32.68	1.18E+07	1.60	Y	0.95	0.92	-3%
123478-HxCDF	35.96	1.12E+07	1.27	Y	1.20	1.17	-2%
123678-HxCDF	36.10	1.13E+07	1.28	Y	1.07	1.04	-3%
234678-HxCDF	36.75	1.06E+07	1.19	Y	1.10	1.08	-2%
123789-HxCDF	37.73	9.06E+06	1.26	Y	1.09	1.04	-4%
1234678-HpCDF	39.21	9.50E+06	1.05	Y	1.28	1.25	-3%
1234789-HpCDF	40.53	7.36E+06	1.02	Y	1.27	1.20	-6%
OCDF	42.73	1.09E+07	0.88	Y	1.01	0.95	-6%
ES 2378-TCDD	27.53	8.93E+07	0.77	Y	1.01	0.99	-1%
ES 12378-PeCDD	33.01	7.47E+07	1.58	Y	0.87	0.83	-5%
ES 123478-HxCDD	36.92	7.29E+07	1.31	Y	1.10	1.08	-1%
ES 123678-HxCDD	37.03	7.03E+07	1.27	Y	1.06	1.04	-1%
ES 123789-HxCDD	37.34	8.09E+07	1.30	Y	1.22	1.20	-1%
ES 1234678-HpCDD	40.1	6.55E+07	1.07	Y	0.99	0.97	-2%
ES OCDD	42.55	9.24E+07	0.92	Y	0.67	0.69	3%
ES 2378-TCDF	26.63	1.51E+08	0.78	Y	1.01	1.00	-1%
ES 12378-PeCDF	31.54	1.30E+08	1.60	Y	0.90	0.87	-4%
ES 23478-PeCDF	32.66	1.28E+08	1.59	Y	0.89	0.85	-5%
ES 123478-HxCDF	35.95	9.56E+07	0.52	Y	1.43	1.42	-1%
ES 123678-HxCDF	36.08	1.09E+08	0.53	Y	1.63	1.62	-1%
ES 234678-HxCDF	36.73	9.85E+07	0.53	Y	1.48	1.46	-1%
ES 123789-HxCDF	37.71	8.68E+07	0.52	Y	1.29	1.29	0%
ES 1234678-HpCDF	39.2	7.63E+07	0.44	Y	1.15	1.13	-1%
ES 1234789-HpCDF	40.52	6.14E+07	0.45	Y	0.91	0.91	1%
ES OCDF	42.72	1.14E+08	0.88	Y	0.83	0.85	3%

Dioxin/Furan QC Summary	Acq'd: 12 Jun 2020 16:02 PSW	ICAL: MM3_DF_10012020_12JUN2020
Lab ID: CS2_200612_DF_RA	UTP: 15-Jun-2020 11:50:00 PSW	Checkcode: 434-640-RQY
Sample ID: SIL 20-282-1	Report: 15 Jun 2020 11:54 pw	Datafile: 200612R05

Name	RT	Response	RA	OK	Ref. RRFs	Calc. RRFs	Dev'n
JS 1234-TCDD	26.86	8.99E+07	0.77	Y	-	-	-
JS 1234-TCDF	25.22	1.50E+08	0.80	Y	-	-	-
JS 123467-HxCDD	37.23	3.37E+07	1.27	Y	-	-	-
CS 37Cl-2378-TCDD	27.55	1.72E+06	n/a	-	1.04	0.96	-8%
CS 12347-PeCDD	32.51	6.75E+07	1.66	Y	0.74	0.75	1%
CS 12346-PeCDF	31.00	1.32E+08	1.54	Y	0.86	0.88	2%
CS 123469-HxCDF	36.39	9.55E+07	0.52	Y	1.36	1.42	5%
CS 1234689-HpCDF	39.60	7.38E+07	0.45	Y	1.05	1.10	4%
SS 37Cl-2378-TCDD	27.55	1.72E+06	n/a	-	1.04	0.96	-7%
SS 12347-PeCDD	32.51	6.75E+07	1.66	Y	0.86	0.90	6%
SS 12346-PeCDF	31.00	1.32E+08	1.54	Y	0.96	1.01	6%
SS 123469-HxCDF	36.39	9.55E+07	0.52	Y	0.83	0.88	5%
SS 1234689-HpCDF	39.60	7.38E+07	0.45	Y	0.92	0.97	5%
AS 1368-TCDD	23.72	9.67E+07	0.79	Y	1.08	1.08	0%
AS 1368-TCDF	21.50	1.78E+08	0.79	Y	1.18	1.18	0%
FS 1278-TCDD	27.87	8.97E+07	0.79	Y	1.00	1.00	1%
FS 12478-PeCDD	31.77	7.82E+07	1.65	Y	1.00	1.05	5%
FS 123468-HxCDD	35.87	8.35E+07	1.28	Y	1.11	1.15	3%
FS 1234679-HpCDD	39.46	8.16E+07	1.03	Y	1.19	1.25	5%
TS 1378-TCDD	25.82	9.50E+07	0.77	Y	1.06	1.06	1%
OCDD-a	42.55	5.74E+05	2.47	Y	0.07	0.06	-12%
OCDF-a	42.72	7.29E+05	2.64	Y	0.06	0.06	8%

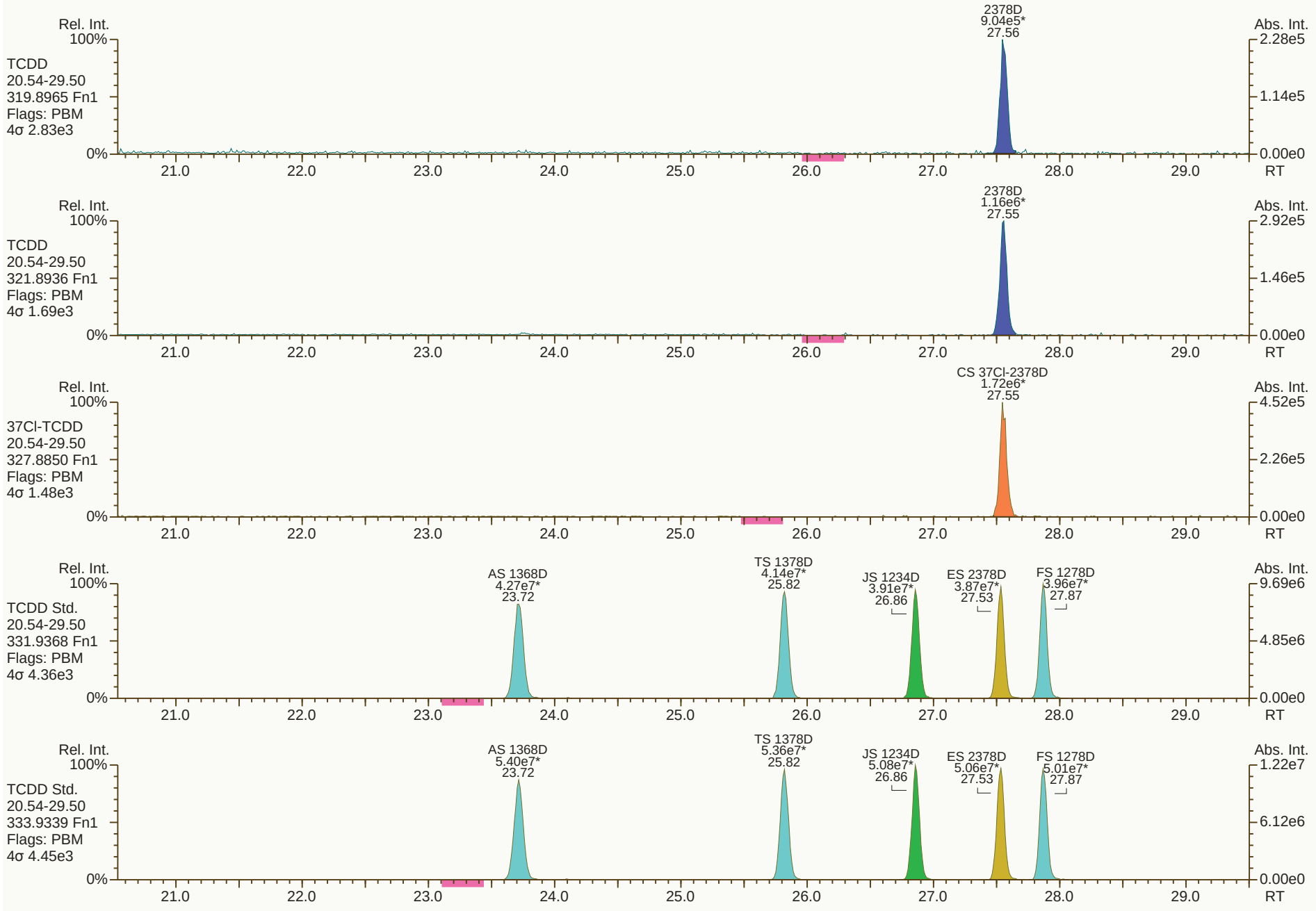
SGS ID: CS2_200612_DF_RA **Sample ID: SIL 20-282-1** **Acq: 12-Jun-2020 16:02:35**

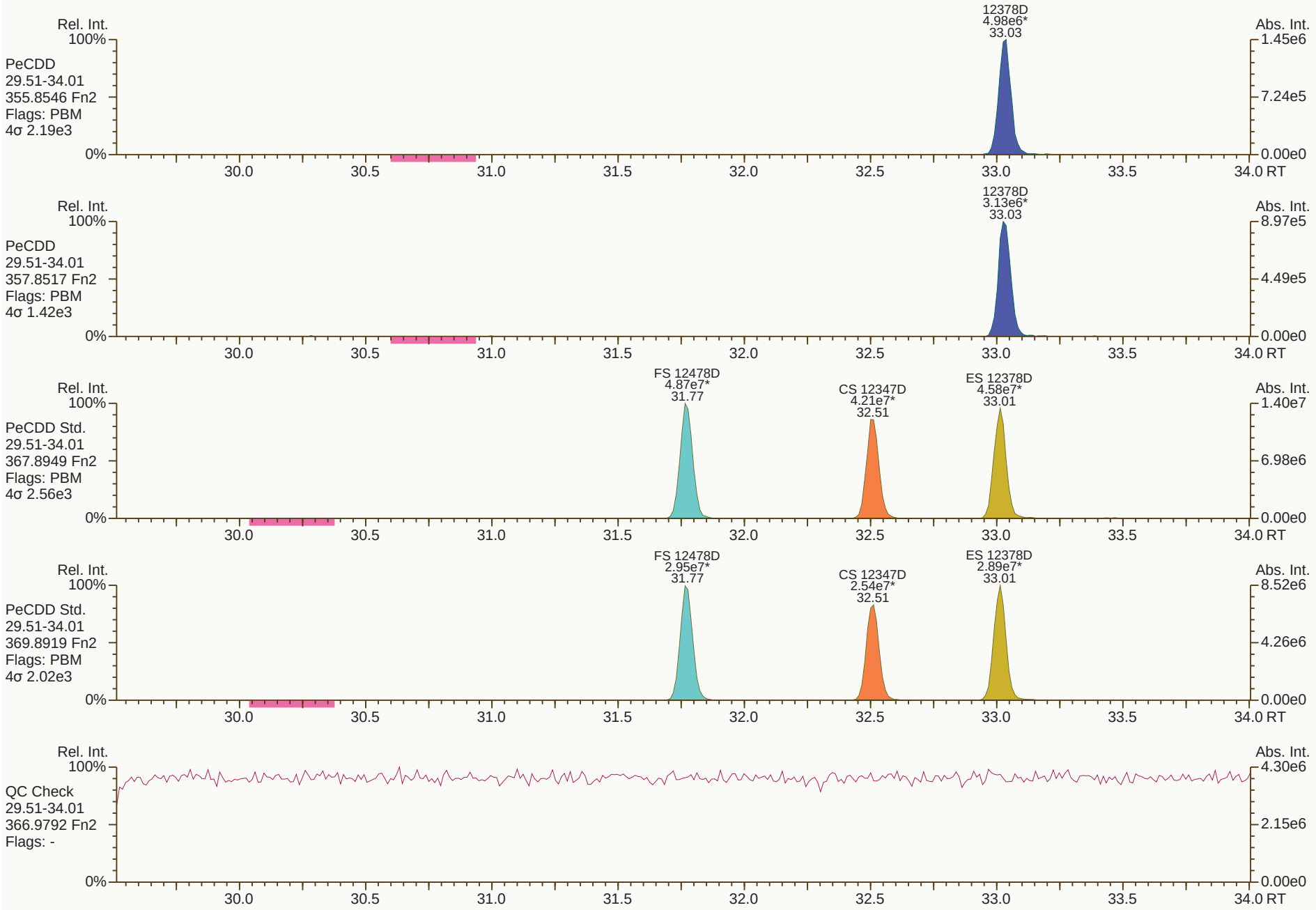
Instr: [ILM] AutoSpec-Ultima MM3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 7** **User: PSW Datafile: 200612R05**



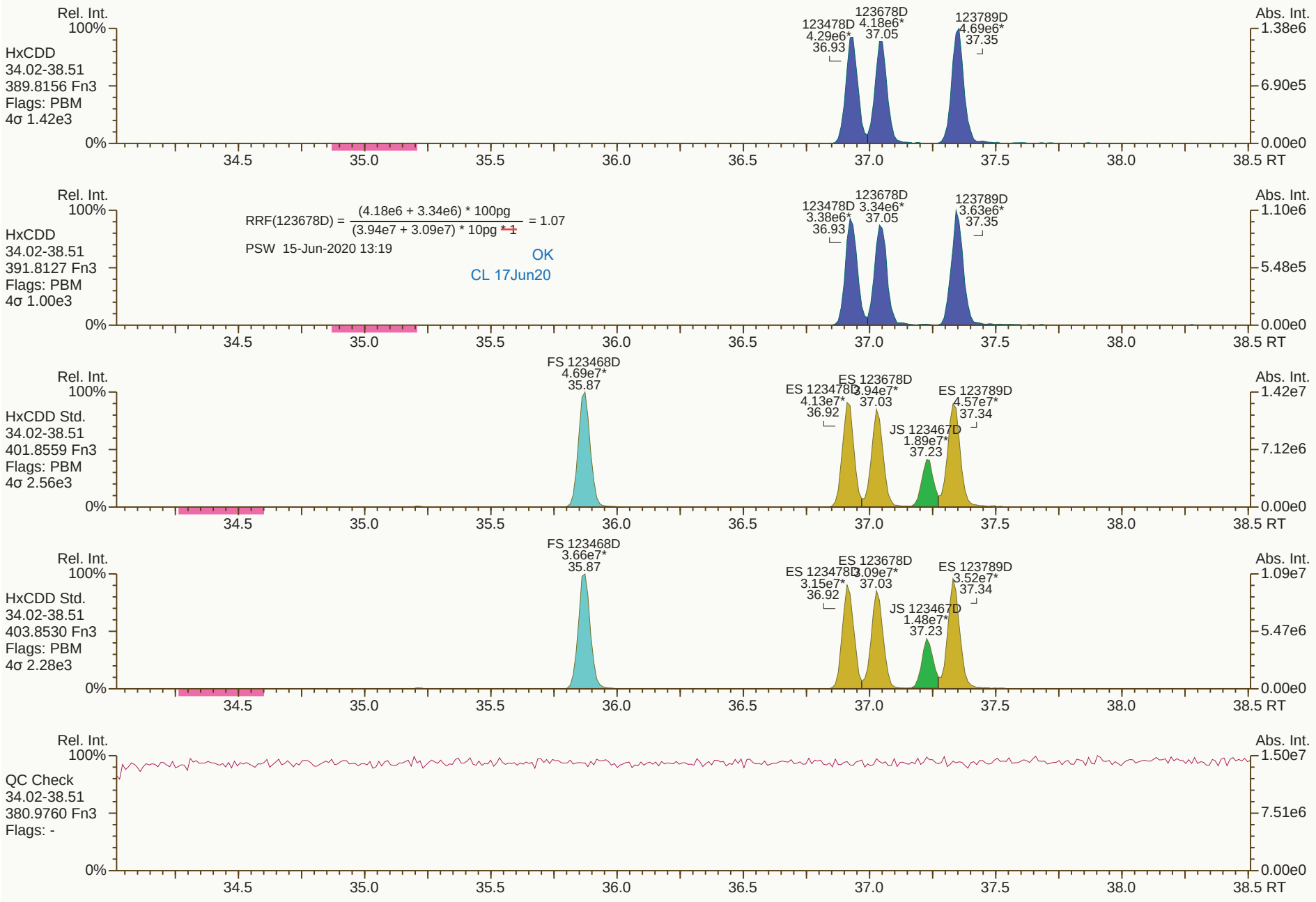
Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS2_200612_DF_RA.utp_res, saved 15-Jun-2020 13:21 (PSW) *Peak annotation: Areas, Centroids*

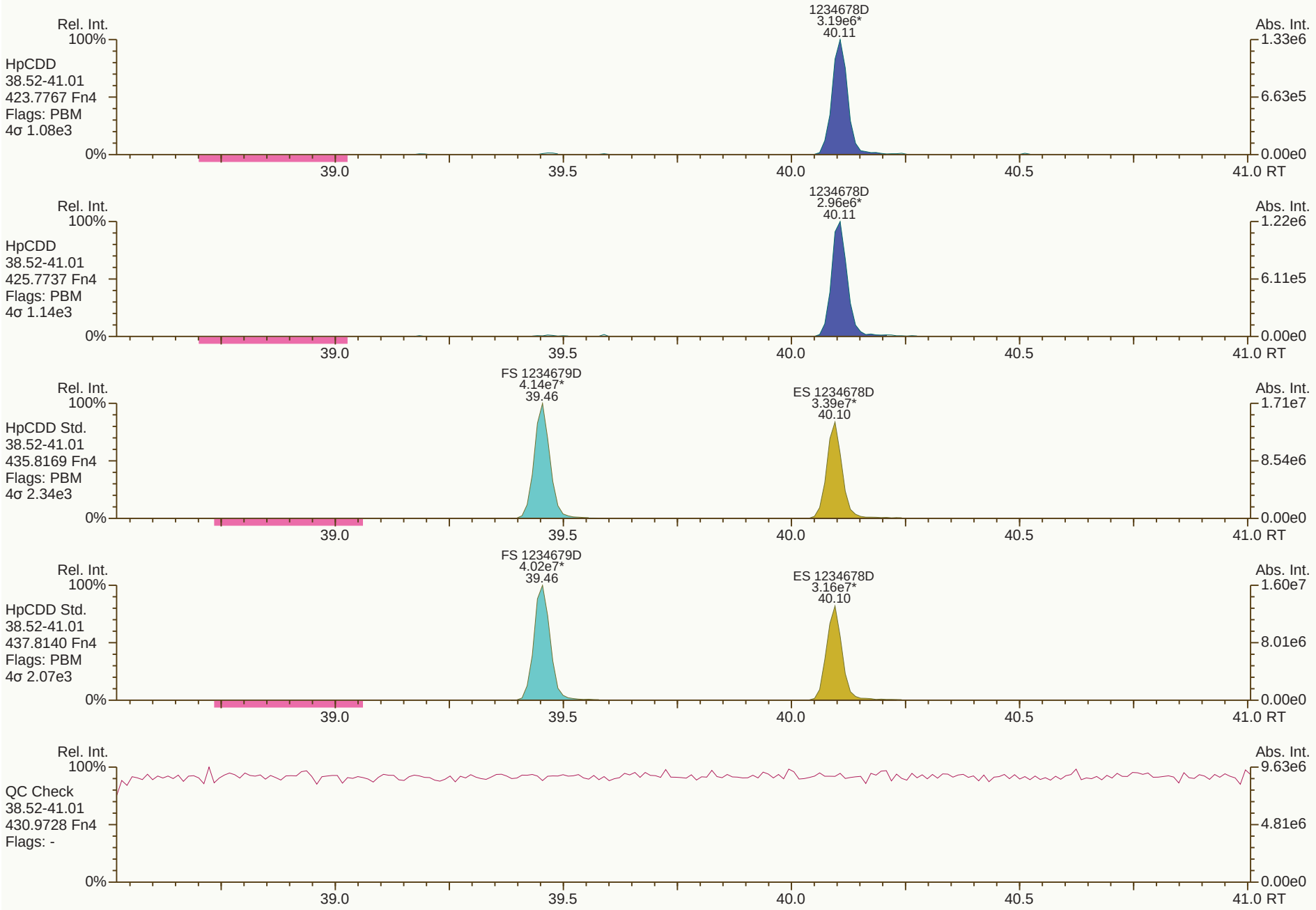
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 scc: 434-640 *PKD: n/a Printed: 15-Jun-2020 13:39 Page 1 of 12*

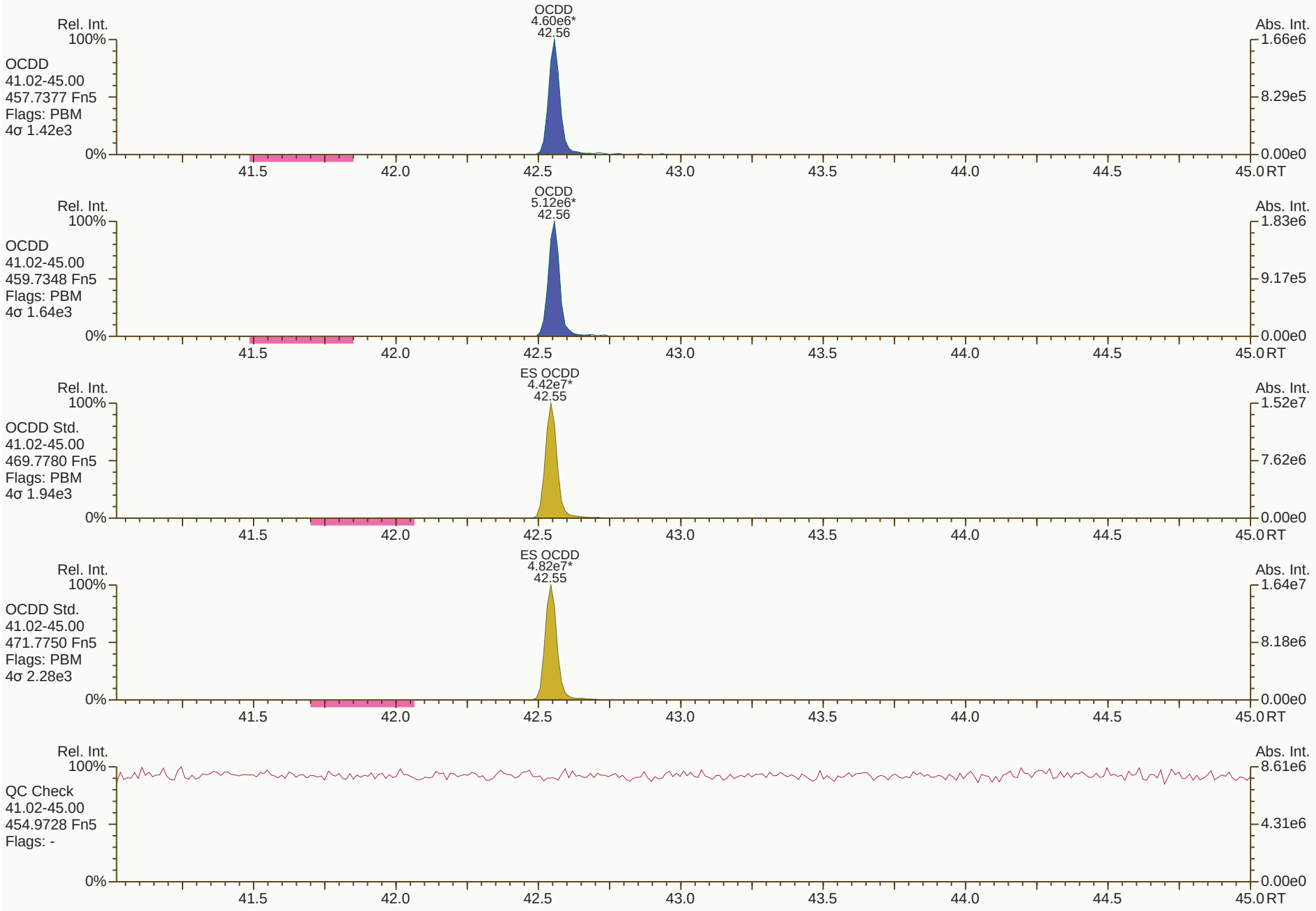

Rel. Int.
100%
TCDD
20.54-29.50
319.8965 Fn1
Flags: PBM
4σ 2.83e3
0%
2378D
9.04e5*
27.56
Abs. Int.
2.28e5
1.14e5
0.00e0
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
TCDD
20.54-29.50
321.8936 Fn1
Flags: PBM
4σ 1.69e3
0%
2378D
1.16e6*
27.55
Abs. Int.
2.92e5
1.46e5
0.00e0
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
37Cl-TCDD
20.54-29.50
327.8850 Fn1
Flags: PBM
4σ 1.48e3
0%
CS 37Cl-2378D
1.72e6*
27.55
Abs. Int.
4.52e5
2.26e5
0.00e0
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
331.9368 Fn1
Flags: PBM
4σ 4.36e3
0%
AS 1368D
4.27e7*
23.72
TS 1378D
4.14e7*
25.82
JS 1234D
3.91e7*
26.86
ES 2378D
3.87e7*
27.53
FS 1278D
3.96e7*
27.87
Abs. Int.
9.69e6
4.85e6
0.00e0
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
333.9339 Fn1
Flags: PBM
4σ 4.45e3
0%
AS 1368D
5.40e7*
23.72
TS 1378D
5.36e7*
25.82
JS 1234D
5.08e7*
26.86
ES 2378D
5.06e7*
27.53
FS 1278D
5.01e7*
27.87
Abs. Int.
1.22e7
6.12e6
0.00e0
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT



Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS2_200612_DF_RA.utp_res, saved 15-Jun-2020 13:21 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 6518, 3044 scc: 434-640
PKD: 15-Jun-2020 08:09 Printed: 15-Jun-2020 13:39 Page 3 of 12

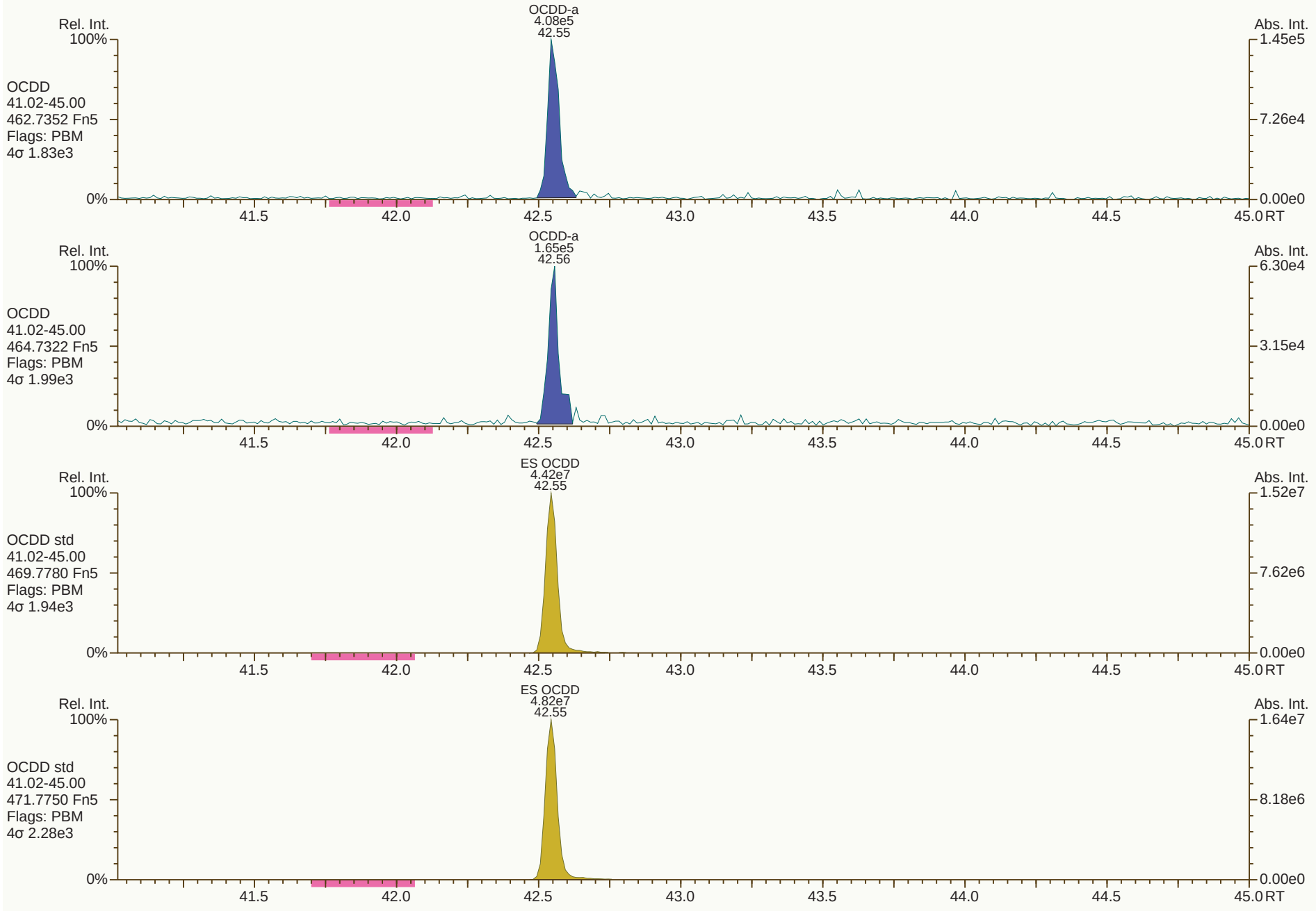

Rel. Int.
100%
HxCDD
34.02-38.51
389.8156 Fn3
Flags: PBM
4σ 1.42e3
0%
123478D 4.29e6* 36.93
123678D 4.18e6* 37.05
123789D 4.69e6* 37.35
Abs. Int.
1.38e6
6.90e5
0.00e0
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 RT
Rel. Int.
100%
HxCDD
34.02-38.51
391.8127 Fn3
Flags: PBM
4σ 1.00e3
RRF(123678D) = (4.18e6 + 3.34e6) * 100pg / (3.94e7 + 3.09e7) * 10pg * 1 = 1.07
PSW 15-Jun-2020 13:19
OK
CL 17Jun20
123478D 3.38e6* 36.93
123678D 3.34e6* 37.05
123789D 3.63e6* 37.35
Abs. Int.
1.10e6
5.48e5
0.00e0
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 RT
Rel. Int.
100%
HxCDD Std.
34.02-38.51
401.8559 Fn3
Flags: PBM
4σ 2.56e3
FS 123468D 4.69e7* 35.87
ES 123478D 4.13e7* 36.92
ES 123678D 3.94e7* 37.03
JS 123467D 1.89e7* 37.23
ES 123789D 4.57e7* 37.34
Abs. Int.
1.42e7
7.12e6
0.00e0
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 RT
Rel. Int.
100%
HxCDD Std.
34.02-38.51
403.8530 Fn3
Flags: PBM
4σ 2.28e3
FS 123468D 3.66e7* 35.87
ES 123478D 3.15e7* 36.92
ES 123678D 3.09e7* 37.03
JS 123467D 1.48e7* 37.23
ES 123789D 3.52e7* 37.34
Abs. Int.
1.09e7
5.47e6
0.00e0
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 RT
Rel. Int.
100%
QC Check
34.02-38.51
380.9760 Fn3
Flags: -
Abs. Int.
1.50e7
7.51e6
0.00e0
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 RT


Rel. Int.
100%
HpCDD
38.52-41.01
423.7767 Fn4
Flags: PBM
4σ 1.08e3
1234678D
3.19e6*
40.11
Abs. Int.
1.33e6
6.63e5
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.52-41.01
425.7737 Fn4
Flags: PBM
4σ 1.14e3
1234678D
2.96e6*
40.11
Abs. Int.
1.22e6
6.11e5
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.52-41.01
435.8169 Fn4
Flags: PBM
4σ 2.34e3
FS 1234679D
4.14e7*
39.46
ES 1234678D
3.39e7*
40.10
Abs. Int.
1.71e7
8.54e6
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.52-41.01
437.8140 Fn4
Flags: PBM
4σ 2.07e3
FS 1234679D
4.02e7*
39.46
ES 1234678D
3.16e7*
40.10
Abs. Int.
1.60e7
8.01e6
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.52-41.01
430.9728 Fn4
Flags: -
Abs. Int.
9.63e6
4.81e6
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT


OCDD
4.60e6*
42.56
Rel. Int.
100%
OCDD
41.02-45.00
457.7377 Fn5
Flags: PBM
4σ 1.42e3
0%
Abs. Int.
1.66e6
8.29e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDD
5.12e6*
42.56
Rel. Int.
100%
OCDD
41.02-45.00
459.7348 Fn5
Flags: PBM
4σ 1.64e3
0%
Abs. Int.
1.83e6
9.17e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
4.42e7*
42.55
Rel. Int.
100%
OCDD Std.
41.02-45.00
469.7780 Fn5
Flags: PBM
4σ 1.94e3
0%
Abs. Int.
1.52e7
7.62e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
4.82e7*
42.55
Rel. Int.
100%
OCDD Std.
41.02-45.00
471.7750 Fn5
Flags: PBM
4σ 2.28e3
0%
Abs. Int.
1.64e7
8.18e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
8.61e6
4.31e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

SGS ID: CS2_200612_DF_RA | Sample ID: SIL 20-282-1 | Acq: 12-Jun-2020 16:02:35

Instr: [ILM] AutoSpec-Ultima MM3 | VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 7 | User: PSW Datafile: 200612R05



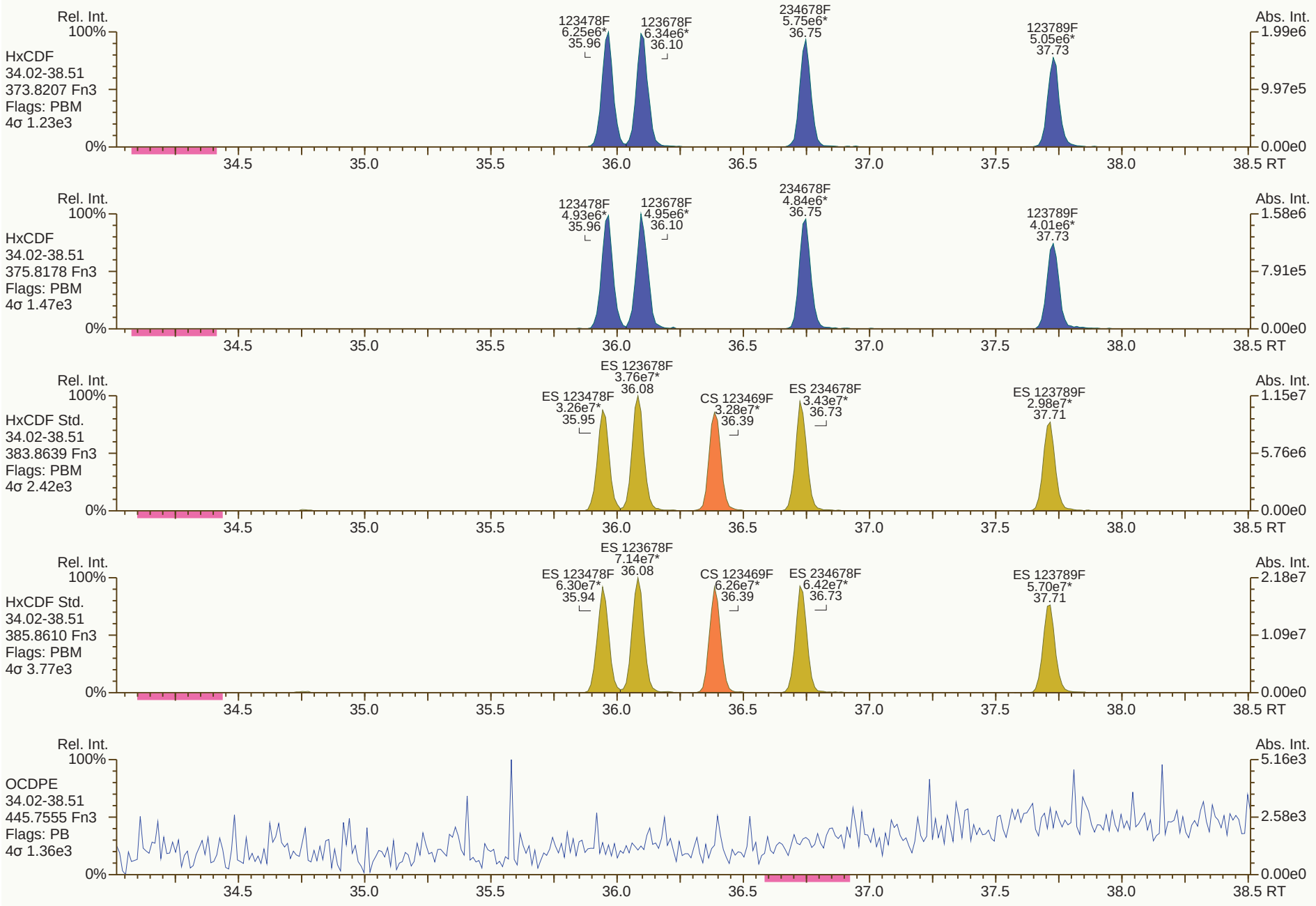
Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS2_200612_DF_RA.utp_res, saved 15-Jun-2020 13:21 (PSW) *Peak annotation: Areas, Centroids*

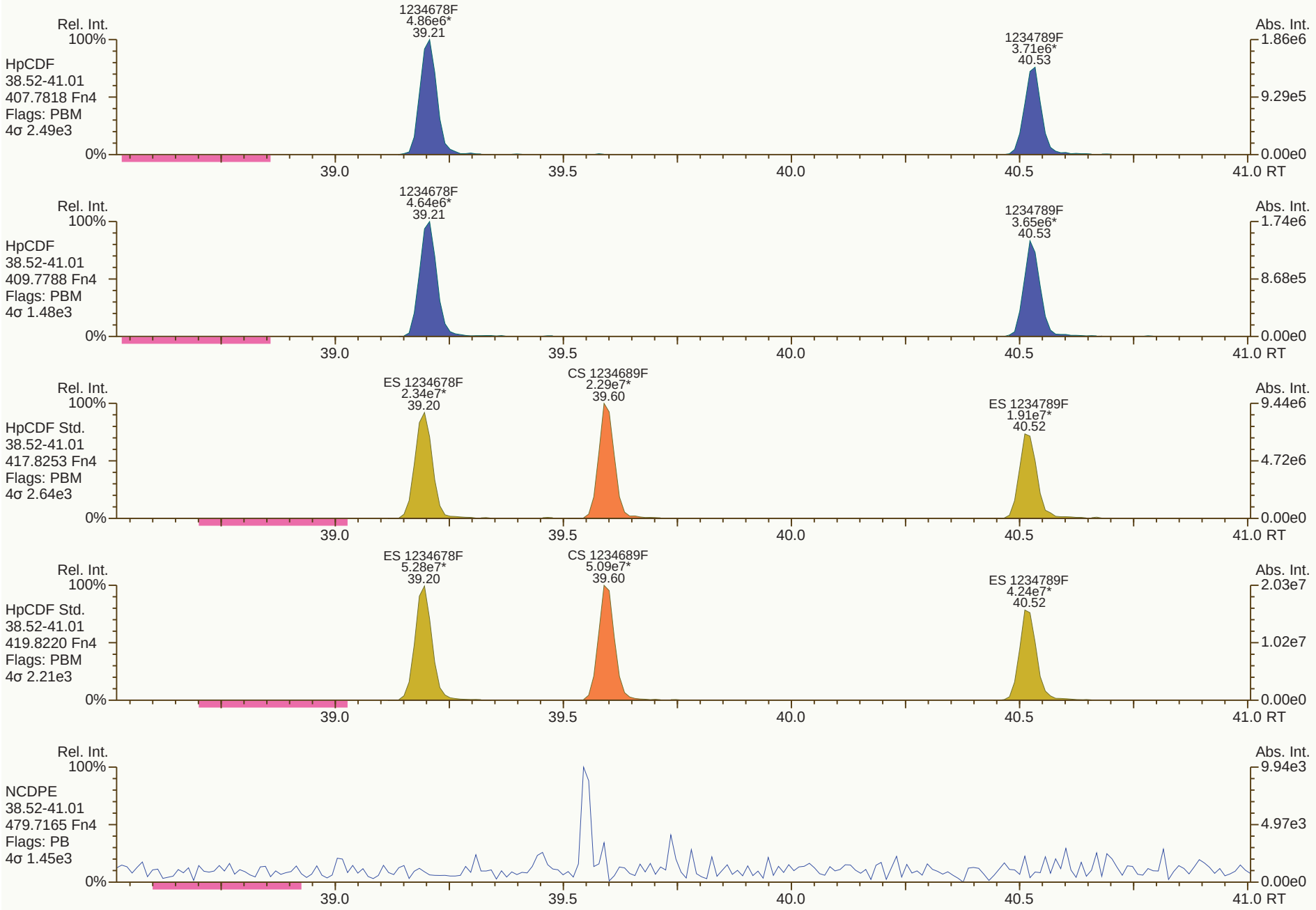
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 3493, 2172 *Revised: 15-Jun-2020 11:49 (PSW) Printed: 17-Jun-2020 08:04*

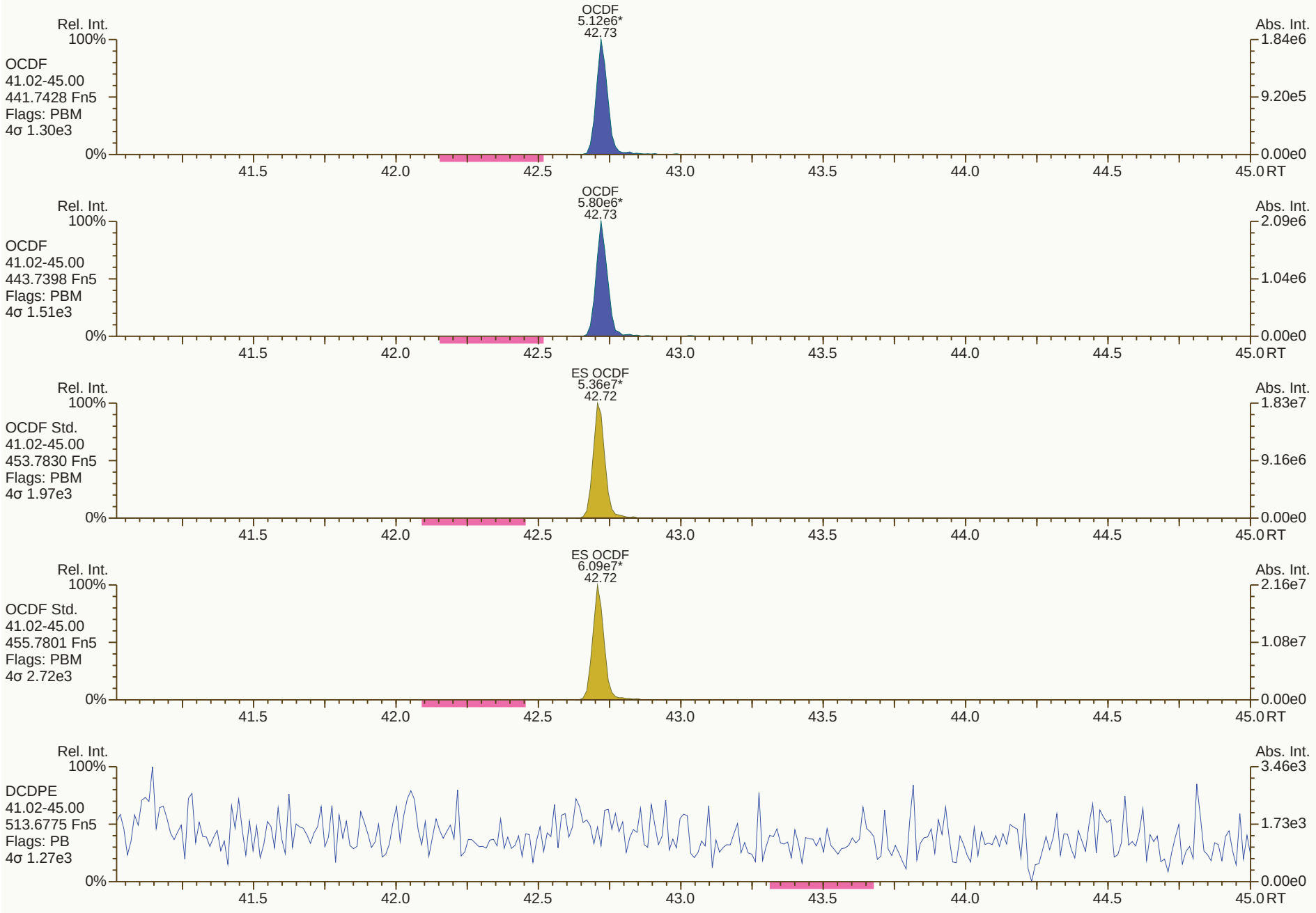

Rel. Int.
100%
TCDF
20.54-29.50
303.9016 Fn1
Flags: PBM
4σ 1.48e3
0%
2378F
1.19e6*
26.65
Abs. Int.
3.09e5
1.54e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
TCDF
20.54-29.50
305.8987 Fn1
Flags: PBM
4σ 1.51e3
2378F
1.59e6*
26.65
3.70e5
1.85e5
TCDF Std.
20.54-29.50
315.9419 Fn1
Flags: PBM
4σ 1.45e4
AS 1368F
7.83e7*
21.50
JS 1234F
6.67e7*
25.22
ES 2378F
6.62e7*
26.63
1.50e7
7.48e6
RRF(ES 2378F) = (6.62e7 + 8.46e7) * 100pg / (6.67e7 + 8.36e7) * 100pg = 1.00
PSW 15-Jun-2020 13:20
OK
CL 17Jun20
TCDF Std.
20.54-29.50
317.9389 Fn1
Flags: PBM
4σ 6.51e3
AS 1368F
9.95e7*
21.50
JS 1234F
8.36e7*
25.22
ES 2378F
8.46e7*
26.62
1.85e7
9.26e6
HxCDPE
20.54-29.50
375.8364 Fn1
Flags: PB
4σ 1.63e3
6.44e3
3.22e3


Rel. Int.
100%
0%
Abs. Int.
9.65e3
4.83e3
0.00e0
PeCDF-1
20.54-29.50
339.8597 Fn1
Flags: PB
4σ 1.73e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
0%
Abs. Int.
7.47e3
3.73e3
0.00e0
PeCDF-1
20.54-29.50
341.8568 Fn1
Flags: PB
4σ 1.70e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
0%
Abs. Int.
5.77e6
2.89e6
0.00e0
QC Check
20.54-29.50
316.9824 Fn1
Flags: -
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
PeCDF-2
29.51-34.01
339.8597 Fn2
Flags: PBM
4σ 1.68e3
0%
12378F
7.15e6*
31.55
23478F
7.22e6*
32.68
Abs. Int.
2.14e6
1.07e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF-2
29.51-34.01
341.8568 Fn2
Flags: PBM
4σ 1.47e3
0%
12378F
4.82e6*
31.55
23478F
4.53e6*
32.68
Abs. Int.
1.34e6
6.70e5
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
351.9000 Fn2
Flags: PBM
4σ 2.78e3
0%
CS 12346F
7.99e7*
31.00
ES 12378F
8.01e7*
31.54
ES 23478F
7.84e7*
32.66
Abs. Int.
2.22e7
1.11e7
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
353.8970 Fn2
Flags: PBM
4σ 1.94e3
0%
CS 12346F
5.18e7*
31.00
ES 12378F
5.00e7*
31.54
ES 23478F
4.92e7*
32.66
Abs. Int.
1.42e7
7.12e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
HpCDPE
29.51-34.01
409.7974 Fn2
Flags: PB
4σ 1.55e3
0%
Abs. Int.
4.45e3
2.22e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT

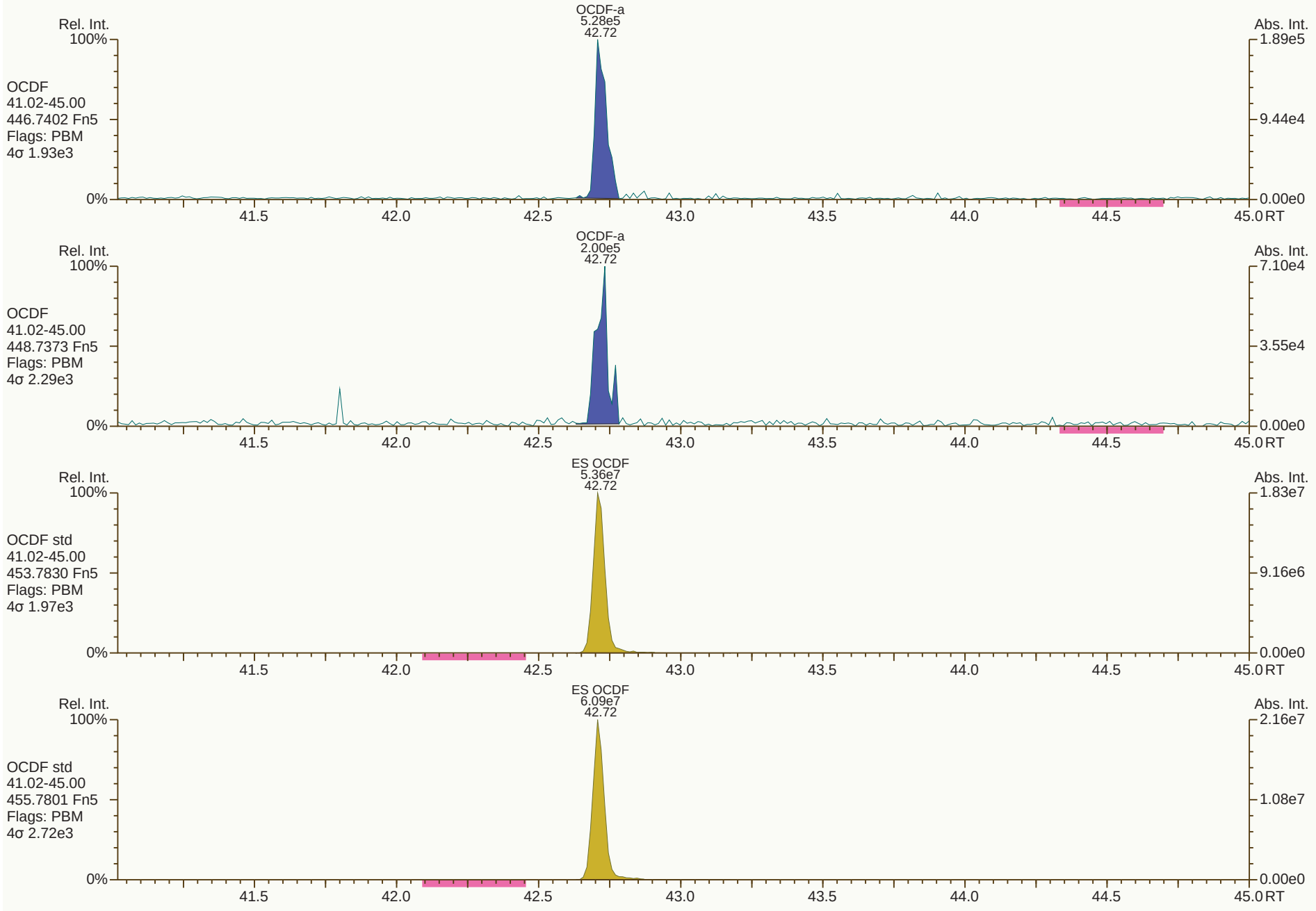

Rel. Int.
100%
HxCDF
34.02-38.51
373.8207 Fn3
Flags: PBM
4σ 1.23e3
0%
123478F
6.25e6*
35.96
123678F
6.34e6*
36.10
234678F
5.75e6*
36.75
123789F
5.05e6*
37.73
Abs. Int.
1.99e6
9.97e5
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDF
34.02-38.51
375.8178 Fn3
Flags: PBM
4σ 1.47e3
0%
123478F
4.93e6*
35.96
123678F
4.95e6*
36.10
234678F
4.84e6*
36.75
123789F
4.01e6*
37.73
Abs. Int.
1.58e6
7.91e5
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDF Std.
34.02-38.51
383.8639 Fn3
Flags: PBM
4σ 2.42e3
0%
ES 123678F
3.76e7*
36.08
ES 123478F
3.26e7*
35.95
CS 123469F
3.28e7*
36.39
ES 234678F
3.43e7*
36.73
ES 123789F
2.98e7*
37.71
Abs. Int.
1.15e7
5.76e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDF Std.
34.02-38.51
385.8610 Fn3
Flags: PBM
4σ 3.77e3
0%
ES 123678F
7.14e7*
36.08
ES 123478F
6.30e7*
35.94
CS 123469F
6.26e7*
36.39
ES 234678F
6.42e7*
36.73
ES 123789F
5.70e7*
37.71
Abs. Int.
2.18e7
1.09e7
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
OCDPE
34.02-38.51
445.7555 Fn3
Flags: PB
4σ 1.36e3
0%
Abs. Int.
5.16e3
2.58e3
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT


Rel. Int.
100%
HpCDF
38.52-41.01
407.7818 Fn4
Flags: PBM
4σ 2.49e3
0%
1234678F
4.86e6*
39.21
1234789F
3.71e6*
40.53
Abs. Int.
1.86e6
9.29e5
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF
38.52-41.01
409.7788 Fn4
Flags: PBM
4σ 1.48e3
0%
1234678F
4.64e6*
39.21
1234789F
3.65e6*
40.53
Abs. Int.
1.74e6
8.68e5
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.52-41.01
417.8253 Fn4
Flags: PBM
4σ 2.64e3
0%
ES 1234678F
2.34e7*
39.20
CS 1234689F
2.29e7*
39.60
ES 1234789F
1.91e7*
40.52
Abs. Int.
9.44e6
4.72e6
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.52-41.01
419.8220 Fn4
Flags: PBM
4σ 2.21e3
0%
ES 1234678F
5.28e7*
39.20
CS 1234689F
5.09e7*
39.60
ES 1234789F
4.24e7*
40.52
Abs. Int.
2.03e7
1.02e7
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
NCDPE
38.52-41.01
479.7165 Fn4
Flags: PB
4σ 1.45e3
0%
Abs. Int.
9.94e3
4.97e3
0.00e0
39.0
39.5
40.0
40.5
41.0 RT


OCDF
5.12e6*
42.73
Rel. Int.
100%
OCDF
41.02-45.00
441.7428 Fn5
Flags: PBM
4σ 1.30e3
0%
Abs. Int.
1.84e6
9.20e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDF
5.80e6*
42.73
Rel. Int.
100%
OCDF
41.02-45.00
443.7398 Fn5
Flags: PBM
4σ 1.51e3
0%
Abs. Int.
2.09e6
1.04e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDF
5.36e7*
42.72
Rel. Int.
100%
OCDF Std.
41.02-45.00
453.7830 Fn5
Flags: PBM
4σ 1.97e3
0%
Abs. Int.
1.83e7
9.16e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDF
6.09e7*
42.72
Rel. Int.
100%
OCDF Std.
41.02-45.00
455.7801 Fn5
Flags: PBM
4σ 2.72e3
0%
Abs. Int.
2.16e7
1.08e7
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
DCDPE
41.02-45.00
513.6775 Fn5
Flags: PB
4σ 1.27e3
0%
Abs. Int.
3.46e3
1.73e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

SGS ID: CS2_200612_DF_RA | Sample ID: SIL 20-282-1 | Acq: 12-Jun-2020 16:02:35

Instr: [ILM] AutoSpec-Ultima MM3 | VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 7 | User: PSW Datafile: 200612R05



Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS2_200612_DF_RA.utp_res, saved 15-Jun-2020 13:21 (PSW)

Peak annotation: Areas, Centroids

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 1474, 4551

Revised: 15-Jun-2020 11:49 (PSW) Printed: 17-Jun-2020 08:04

Dioxin/Furan QC Summary	Acq'd: 12 Jun 2020 16:49 PSW	ICAL: MM3_DF_10012020_12JUN2020
Lab ID: CS3_200612_DF_RB	UTP: 15-Jun-2020 11:50:28 PSW	Checkcode: 726-607-FQH
Sample ID: SIL 20-449-3	Report: 15 Jun 2020 11:54 pw	Datafile: 200612R06

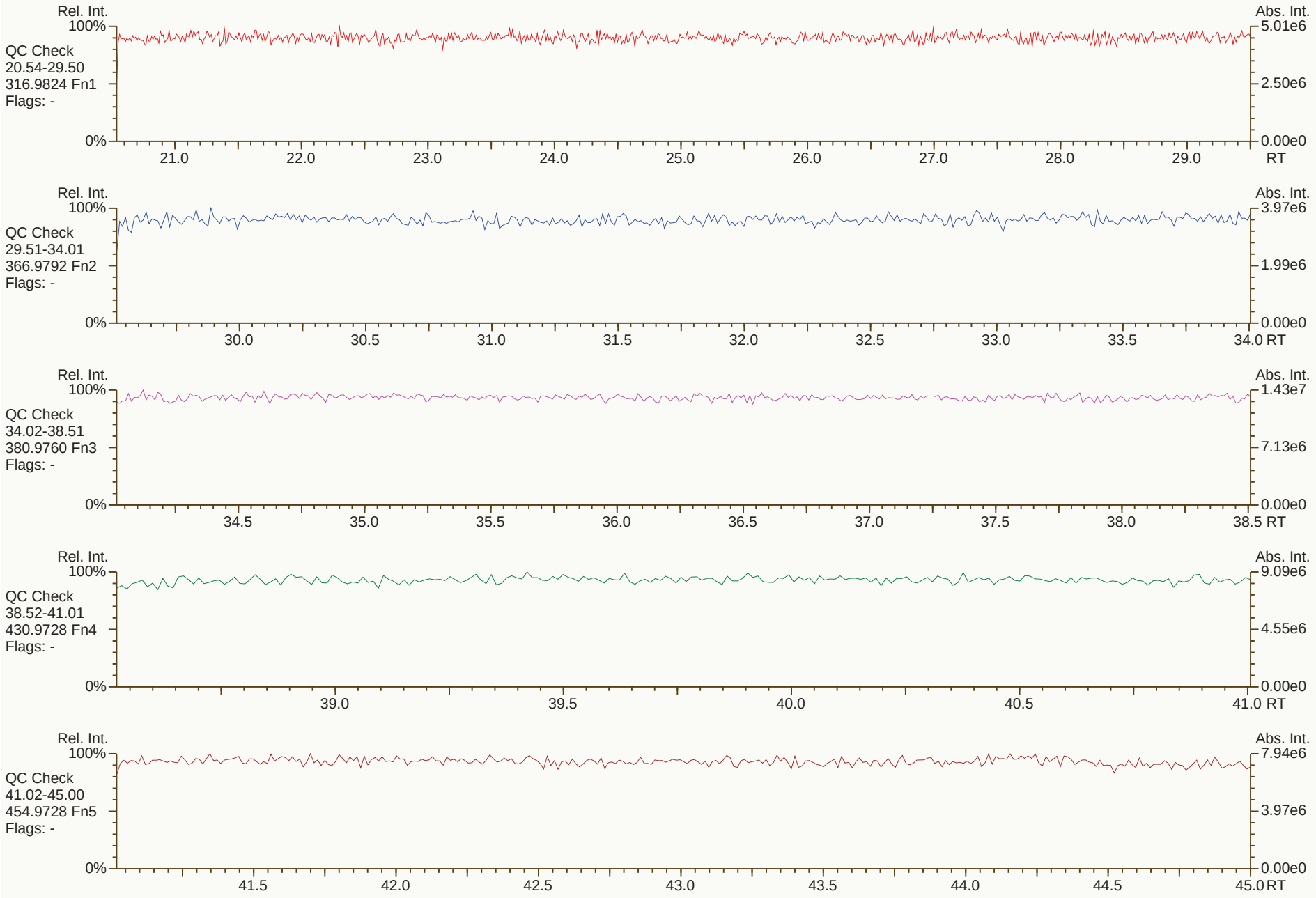
Name	RT	Response	RA	OK	Ref. RRFs	Calc. RRFs	Dev'n
2378-TCDD	27.56	1.07E+07	0.84	Y	1.18	1.17	-1%
12378-PeCDD	33.04	4.34E+07	1.59	Y	1.14	1.15	1%
123478-HxCDD	36.94	4.07E+07	1.25	Y	1.09	1.08	-1%
123678-HxCDD	37.05	4.14E+07	1.24	Y	1.13	1.16	3%
123789-HxCDD	37.36	4.45E+07	1.24	Y	1.05	1.06	1%
1234678-HpCDD	40.12	3.37E+07	1.05	Y	0.98	1.02	4%
OCDD	42.57	4.86E+07	0.89	Y	1.08	1.09	1%
2378-TCDF	26.65	1.47E+07	0.76	Y	0.98	0.99	1%
12378-PeCDF	31.56	6.16E+07	1.56	Y	0.95	0.96	1%
23478-PeCDF	32.69	6.09E+07	1.54	Y	0.95	0.96	1%
123478-HxCDF	35.97	5.76E+07	1.23	Y	1.20	1.19	0%
123678-HxCDF	36.11	5.99E+07	1.25	Y	1.07	1.10	3%
234678-HxCDF	36.76	5.60E+07	1.22	Y	1.10	1.13	3%
123789-HxCDF	37.74	4.77E+07	1.26	Y	1.09	1.11	1%
1234678-HpCDF	39.21	4.94E+07	1.04	Y	1.28	1.31	2%
1234789-HpCDF	40.54	3.88E+07	1.02	Y	1.27	1.28	1%
OCDF	42.73	5.47E+07	0.92	Y	1.01	1.00	-1%
ES 2378-TCDD	27.54	9.10E+07	0.77	Y	1.01	0.97	-3%
ES 12378-PeCDD	33.02	7.56E+07	1.64	Y	0.87	0.81	-7%
ES 123478-HxCDD	36.92	7.51E+07	1.29	Y	1.10	1.07	-2%
ES 123678-HxCDD	37.04	7.11E+07	1.29	Y	1.06	1.01	-5%
ES 123789-HxCDD	37.34	8.42E+07	1.32	Y	1.22	1.20	-1%
ES 1234678-HpCDD	40.1	6.61E+07	1.08	Y	0.99	0.94	-5%
ES OCDD	42.56	8.93E+07	0.90	Y	0.67	0.64	-5%
ES 2378-TCDF	26.63	1.49E+08	0.79	Y	1.01	0.99	-2%
ES 12378-PeCDF	31.54	1.28E+08	1.59	Y	0.90	0.85	-6%
ES 23478-PeCDF	32.67	1.27E+08	1.55	Y	0.89	0.84	-5%
ES 123478-HxCDF	35.95	9.65E+07	0.52	Y	1.43	1.37	-4%
ES 123678-HxCDF	36.09	1.09E+08	0.53	Y	1.63	1.55	-5%
ES 234678-HxCDF	36.74	9.91E+07	0.53	Y	1.48	1.41	-5%
ES 123789-HxCDF	37.72	8.63E+07	0.52	Y	1.29	1.23	-5%
ES 1234678-HpCDF	39.2	7.54E+07	0.46	Y	1.15	1.07	-6%
ES 1234789-HpCDF	40.53	6.06E+07	0.44	Y	0.91	0.86	-5%
ES OCDF	42.73	1.09E+08	0.88	Y	0.83	0.77	-6%

Dioxin/Furan QC Summary	Acq'd: 12 Jun 2020 16:49 PSW	ICAL: MM3_DF_10012020_12JUN2020
Lab ID: CS3_200612_DF_RB	UTP: 15-Jun-2020 11:50:28 PSW	Checkcode: 726-607-FQH
Sample ID: SIL 20-449-3	Report: 15 Jun 2020 11:54 pw	Datafile: 200612R06

Name	RT	Response	RA	OK	Ref. RRFs	Calc. RRFs	Dev'n
JS 1234-TCDD	26.87	9.36E+07	0.77	Y	-	-	-
JS 1234-TCDF	25.22	1.51E+08	0.79	Y	-	-	-
JS 123467-HxCDD	37.24	3.51E+07	1.26	Y	-	-	-
CS 37Cl-2378-TCDD	27.56	9.25E+06	n/a	-	1.04	0.99	-5%
CS 12347-PeCDD	32.52	6.77E+07	1.65	Y	0.74	0.72	-2%
CS 12346-PeCDF	31.01	1.28E+08	1.59	Y	0.86	0.85	-1%
CS 123469-HxCDF	36.40	9.30E+07	0.51	Y	1.36	1.32	-2%
CS 1234689-HpCDF	39.61	7.18E+07	0.45	Y	1.05	1.02	-3%
SS 37Cl-2378-TCDD	27.56	9.25E+06	n/a	-	1.04	1.02	-2%
SS 12347-PeCDD	32.52	6.77E+07	1.65	Y	0.86	0.89	5%
SS 12346-PeCDF	31.01	1.28E+08	1.59	Y	0.96	1.00	4%
SS 123469-HxCDF	36.40	9.30E+07	0.51	Y	0.83	0.85	2%
SS 1234689-HpCDF	39.61	7.18E+07	0.45	Y	0.92	0.95	3%
AS 1368-TCDD	23.72	1.02E+08	0.76	Y	1.08	1.09	1%
AS 1368-TCDF	21.50	1.81E+08	0.79	Y	1.18	1.20	2%
FS 1278-TCDD	27.88	9.15E+07	0.78	Y	1.00	1.01	1%
FS 12478-PeCDD	31.78	7.82E+07	1.64	Y	1.00	1.03	4%
FS 123468-HxCDD	35.88	8.61E+07	1.28	Y	1.11	1.15	3%
FS 1234679-HpCDD	39.46	8.24E+07	1.04	Y	1.19	1.25	5%
TS 1378-TCDD	25.82	1.02E+08	0.76	Y	1.06	1.12	6%
OCDD-a	42.56	2.79E+06	2.64	Y	0.07	0.06	-11%
OCDF-a	42.73	3.35E+06	2.46	Y	0.06	0.06	5%

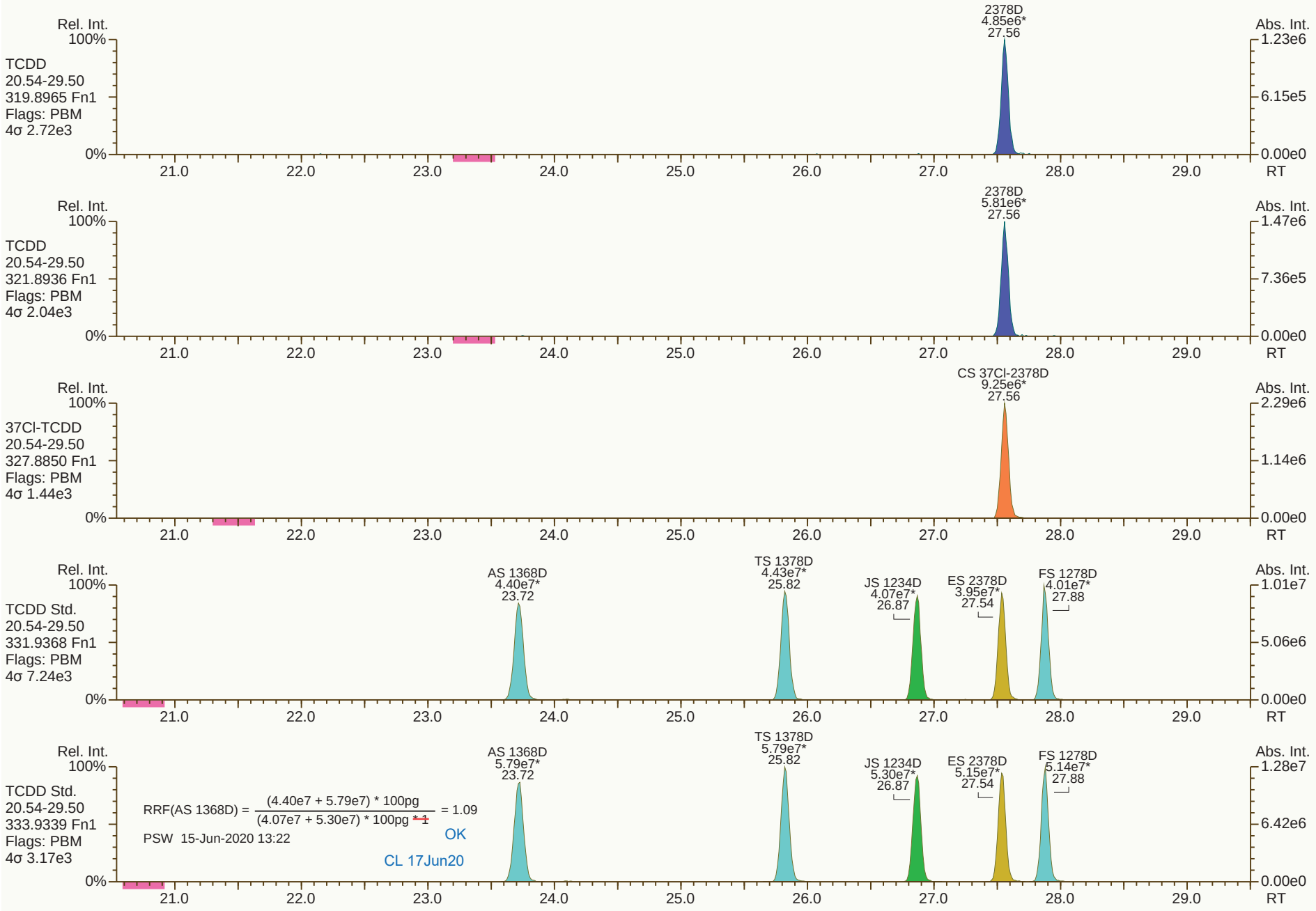
SGS ID: CS3_200612_DF_RB **Sample ID: SIL 20-449-3** **Acq: 12-Jun-2020 16:49:17**

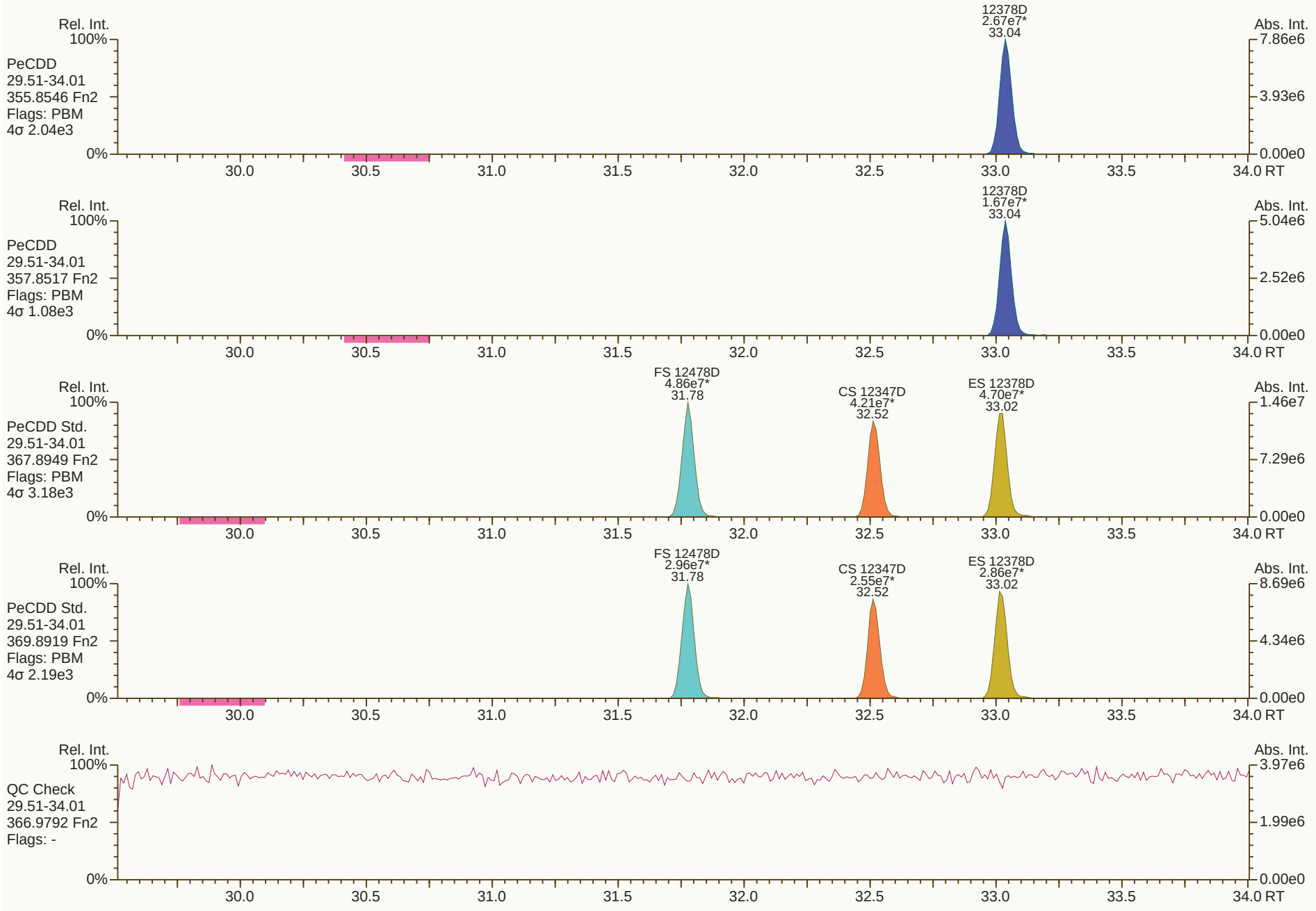
Instr: [ILM] AutoSpec-Ultima MM3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 8** **User: PSW Datafile: 200612R06**

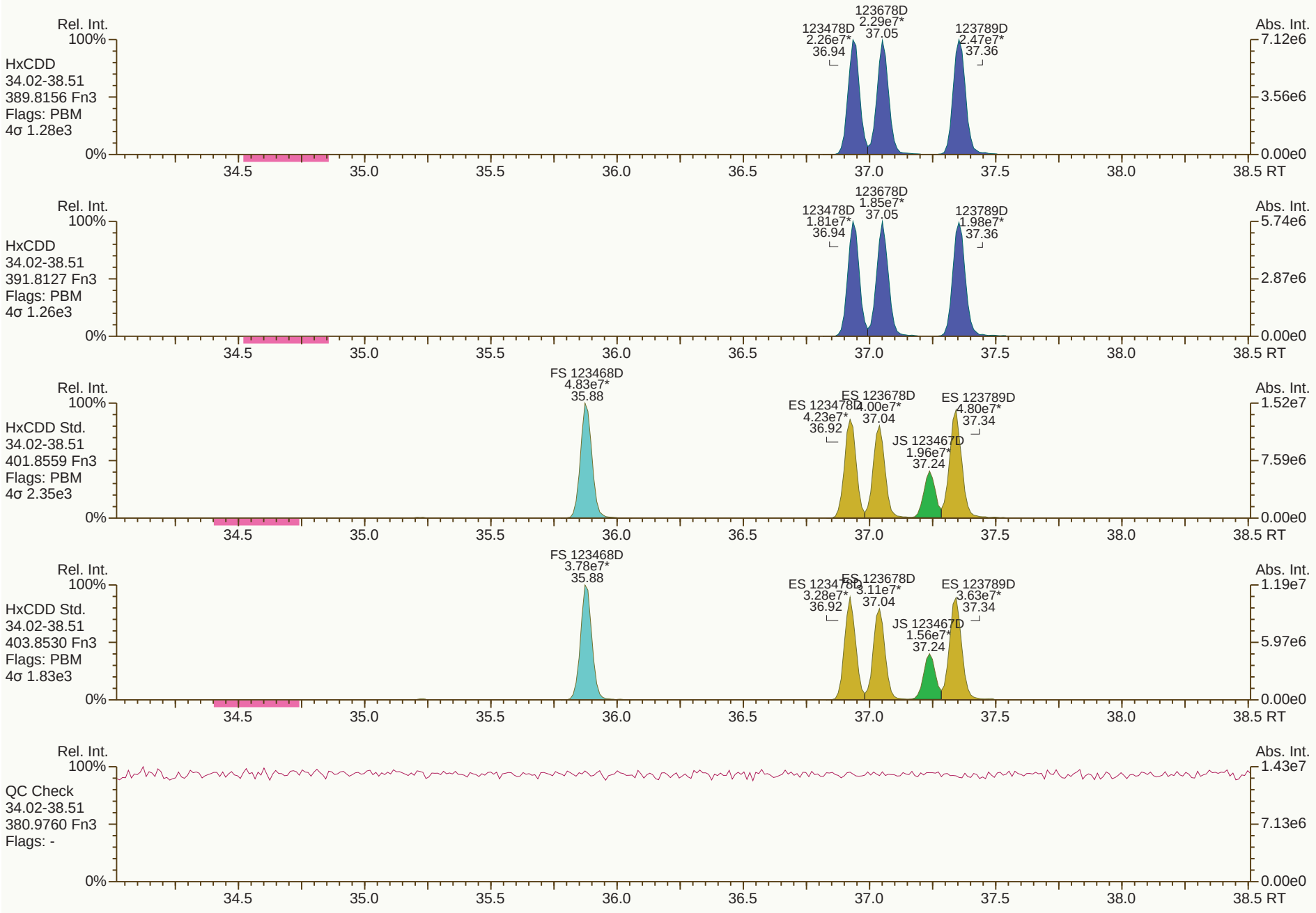


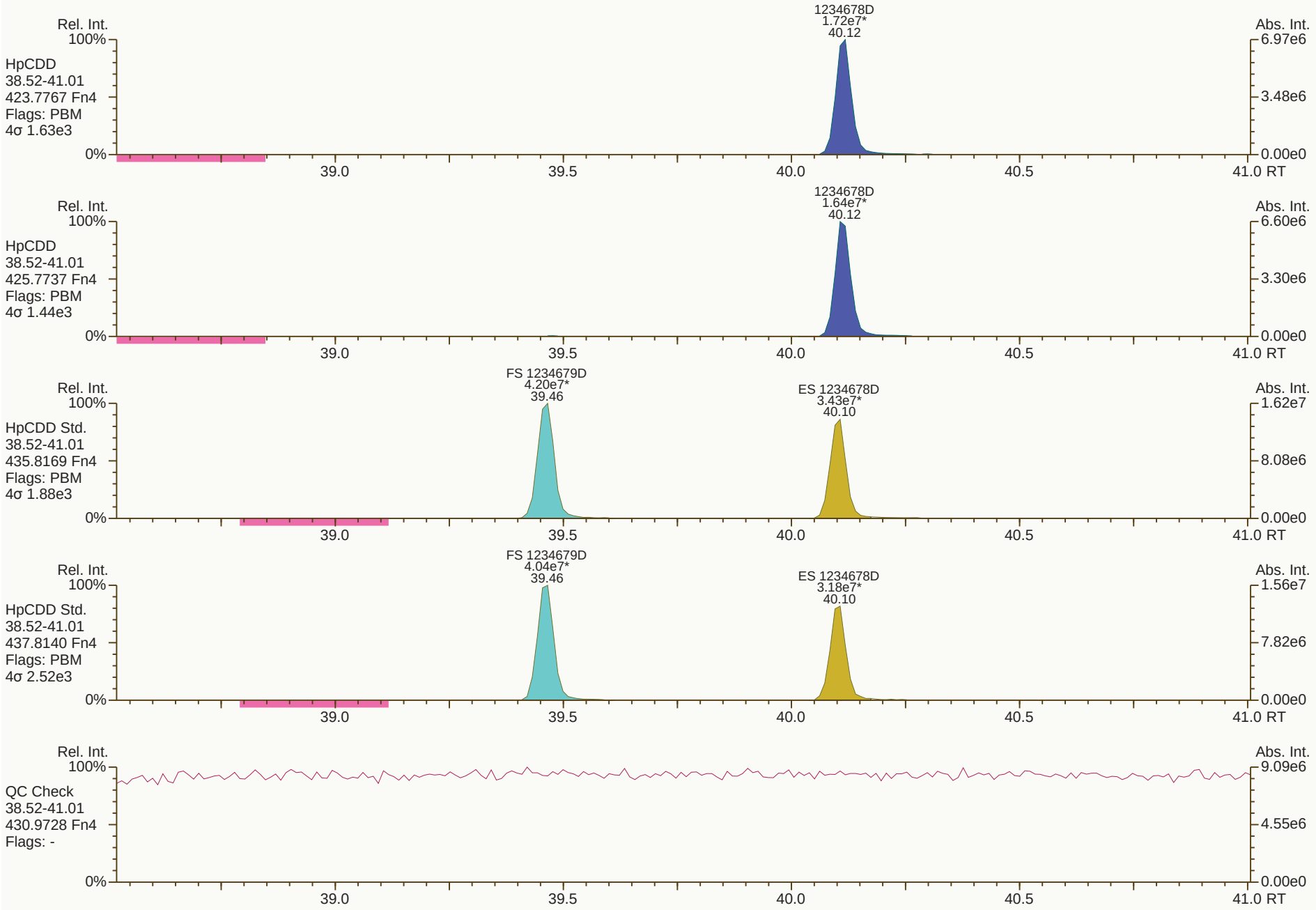
Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS3_200612_DF_RB.utp_res, saved 15-Jun-2020 13:24 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 scc: 726-607 *PKD: n/a Printed: 15-Jun-2020 13:39 Page 1 of 12*


Rel. Int.
100%
TCDD
20.54-29.50
319.8965 Fn1
Flags: PBM
4σ 2.72e3
0%
2378D
4.85e6*
27.56
Abs. Int.
1.23e6
6.15e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD
20.54-29.50
321.8936 Fn1
Flags: PBM
4σ 2.04e3
0%
2378D
5.81e6*
27.56
Abs. Int.
1.47e6
7.36e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
37Cl-TCDD
20.54-29.50
327.8850 Fn1
Flags: PBM
4σ 1.44e3
0%
CS 37Cl-2378D
9.25e6*
27.56
Abs. Int.
2.29e6
1.14e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
331.9368 Fn1
Flags: PBM
4σ 7.24e3
0%
AS 1368D
4.40e7*
23.72
TS 1378D
4.43e7*
25.82
JS 1234D
4.07e7*
26.87
ES 2378D
3.95e7*
27.54
FS 1278D
4.01e7*
27.88
Abs. Int.
1.01e7
5.06e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
333.9339 Fn1
Flags: PBM
4σ 3.17e3
0%
AS 1368D
5.79e7*
23.72
TS 1378D
5.79e7*
25.82
JS 1234D
5.30e7*
26.87
ES 2378D
5.15e7*
27.54
FS 1278D
5.14e7*
27.88
RRF(AS 1368D) = (4.40e7 + 5.79e7) * 100pg / (4.07e7 + 5.30e7) * 100pg * 1 = 1.09
PSW 15-Jun-2020 13:22
OK
CL 17Jun20
Abs. Int.
1.28e7
6.42e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT

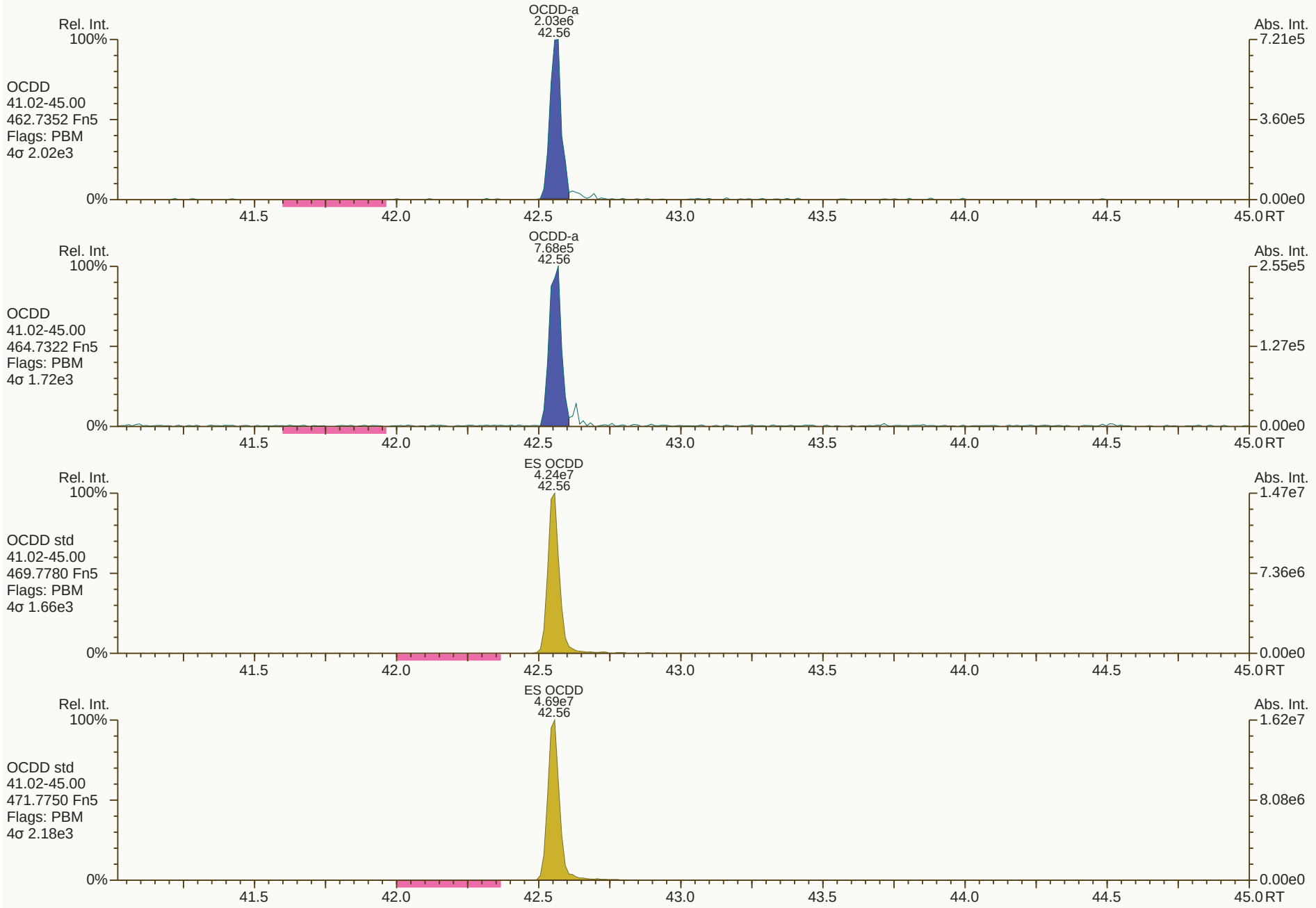

Rel. Int.
100%
PeCDD
29.51-34.01
355.8546 Fn2
Flags: PBM
4σ 2.04e3
0%
12378D
2.67e7*
33.04
Abs. Int.
7.86e6
3.93e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD
29.51-34.01
357.8517 Fn2
Flags: PBM
4σ 1.08e3
0%
12378D
1.67e7*
33.04
Abs. Int.
5.04e6
2.52e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
367.8949 Fn2
Flags: PBM
4σ 3.18e3
0%
FS 12478D
4.86e7*
31.78
CS 12347D
4.21e7*
32.52
ES 12378D
4.70e7*
33.02
Abs. Int.
1.46e7
7.29e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
369.8919 Fn2
Flags: PBM
4σ 2.19e3
0%
FS 12478D
2.96e7*
31.78
CS 12347D
2.55e7*
32.52
ES 12378D
2.86e7*
33.02
Abs. Int.
8.69e6
4.34e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
QC Check
29.51-34.01
366.9792 Fn2
Flags: -
0%
Abs. Int.
3.97e6
1.99e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT


Rel. Int.
100%
HxCDD
34.02-38.51
389.8156 Fn3
Flags: PBM
4σ 1.28e3
123478D 2.26e7* 36.94
123678D 2.29e7* 37.05
123789D 2.47e7* 37.36
Abs. Int.
7.12e6
3.56e6
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 RT
HxCDD
34.02-38.51
391.8127 Fn3
Flags: PBM
4σ 1.26e3
123478D 1.81e7* 36.94
123678D 1.85e7* 37.05
123789D 1.98e7* 37.36
5.74e6
2.87e6
HxCDD Std.
34.02-38.51
401.8559 Fn3
Flags: PBM
4σ 2.35e3
FS 123468D 4.83e7* 35.88
ES 123478D 4.23e7* 36.92
ES 123678D 4.00e7* 37.04
JS 123467D 1.96e7* 37.24
ES 123789D 4.80e7* 37.34
1.52e7
7.59e6
HxCDD Std.
34.02-38.51
403.8530 Fn3
Flags: PBM
4σ 1.83e3
FS 123468D 3.78e7* 35.88
ES 123478D 3.28e7* 36.92
ES 123678D 3.11e7* 37.04
JS 123467D 1.56e7* 37.24
ES 123789D 3.63e7* 37.34
1.19e7
5.97e6
QC Check
34.02-38.51
380.9760 Fn3
Flags: -
1.43e7
7.13e6


Rel. Int.
100%
HpCDD
38.52-41.01
423.7767 Fn4
Flags: PBM
4σ 1.63e3
1234678D
1.72e7*
40.12
Abs. Int.
6.97e6
3.48e6
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.52-41.01
425.7737 Fn4
Flags: PBM
4σ 1.44e3
1234678D
1.64e7*
40.12
Abs. Int.
6.60e6
3.30e6
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.52-41.01
435.8169 Fn4
Flags: PBM
4σ 1.88e3
FS 1234679D
4.20e7*
39.46
ES 1234678D
3.43e7*
40.10
Abs. Int.
1.62e7
8.08e6
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.52-41.01
437.8140 Fn4
Flags: PBM
4σ 2.52e3
FS 1234679D
4.04e7*
39.46
ES 1234678D
3.18e7*
40.10
Abs. Int.
1.56e7
7.82e6
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.52-41.01
430.9728 Fn4
Flags: -
Abs. Int.
9.09e6
4.55e6
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT


Rel. Int.
100%
OCDD
41.02-45.00
457.7377 Fn5
Flags: PBM
4σ 1.40e3
0%
OCDD
2.29e7*
42.57
Abs. Int.
7.73e6
3.87e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDD
41.02-45.00
459.7348 Fn5
Flags: PBM
4σ 1.67e3
0%
OCDD
2.56e7*
42.57
Abs. Int.
8.90e6
4.45e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDD Std.
41.02-45.00
469.7780 Fn5
Flags: PBM
4σ 1.66e3
0%
ES OCDD
4.24e7*
42.56
Abs. Int.
1.47e7
7.36e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDD Std.
41.02-45.00
471.7750 Fn5
Flags: PBM
4σ 2.18e3
0%
ES OCDD
4.69e7*
42.56
Abs. Int.
1.62e7
8.08e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
7.94e6
3.97e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

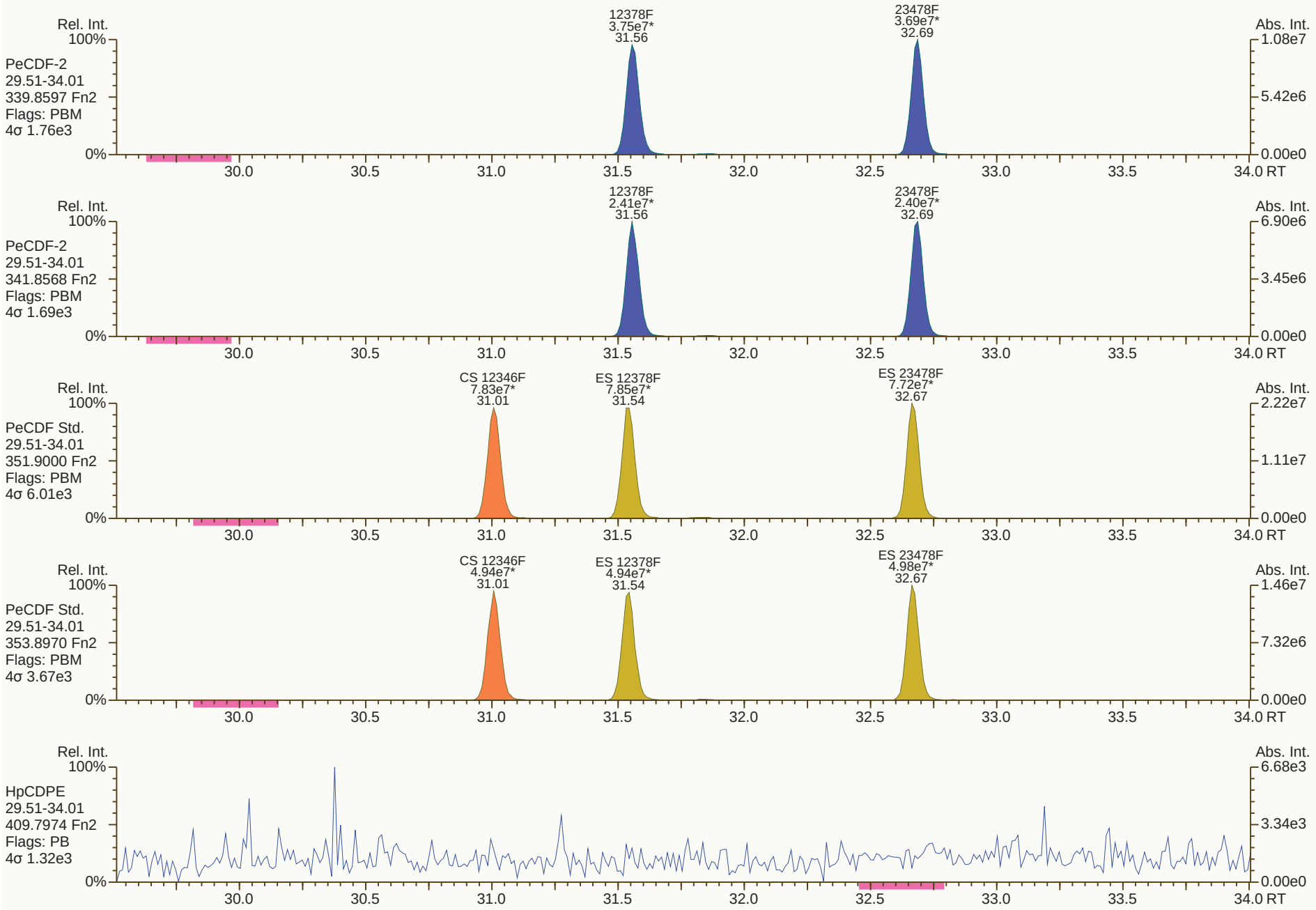
SGS ID: CS3_200612_DF_RB **Sample ID: SIL 20-449-3** **Acq: 12-Jun-2020 16:49:17**
Instr: [ILM] AutoSpec-Ultima MM3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 8** **User: PSW Datafile: 200612R06**

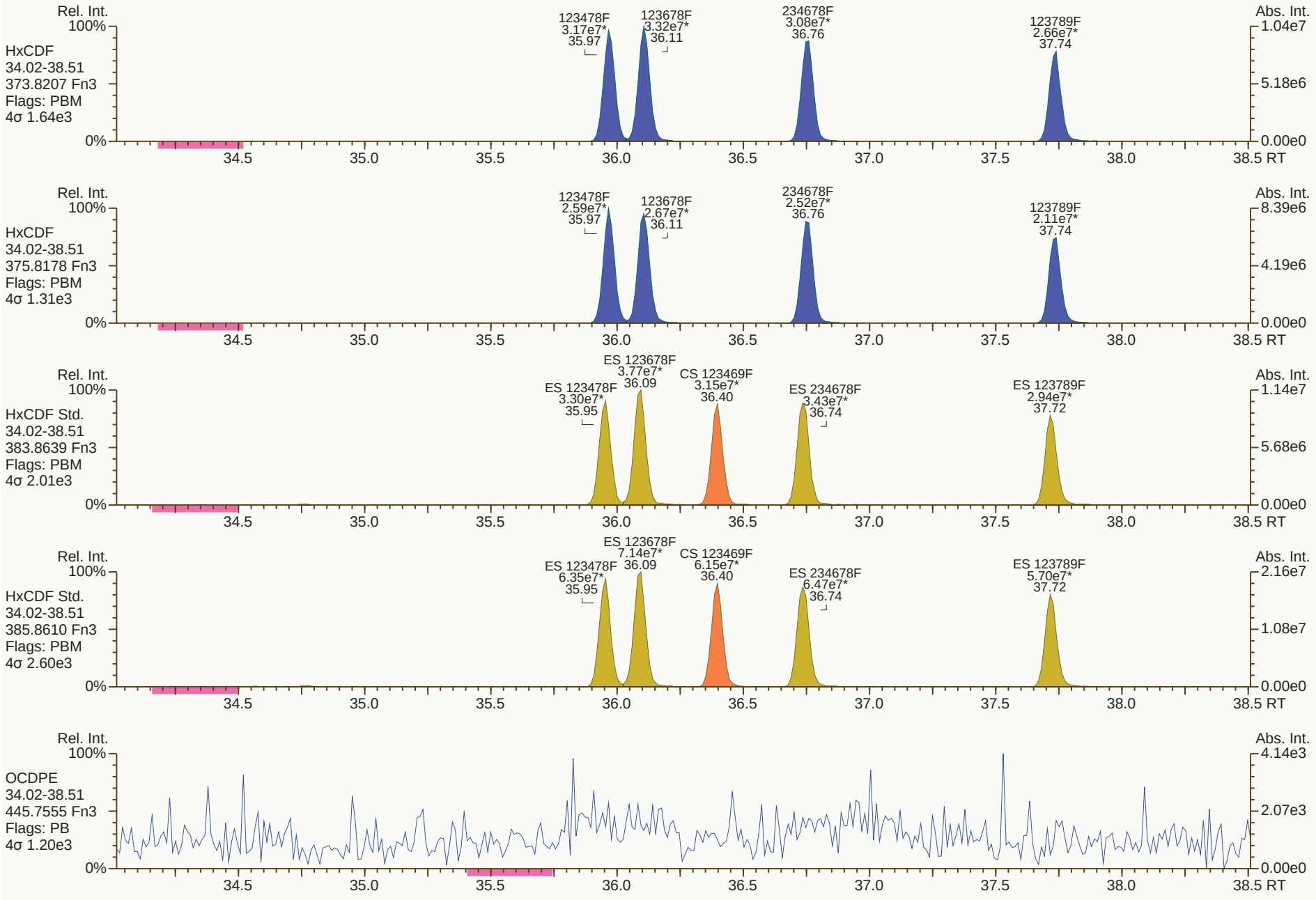


Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS3_200612_DF_RB.utp_res, saved 15-Jun-2020 13:24 (PSW) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 7102, 8891 *Revised: 15-Jun-2020 11:50 (PSW) Printed: 17-Jun-2020 08:04*


Rel. Int.
100%
TCDF
20.54-29.50
303.9016 Fn1
Flags: PBM
4σ 1.27e3
0%
2378F
6.37e6*
26.65
Abs. Int.
1.42e6
7.10e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF
20.54-29.50
305.8987 Fn1
Flags: PBM
4σ 1.48e3
0%
2378F
8.34e6*
26.65
Abs. Int.
1.82e6
9.11e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
315.9419 Fn1
Flags: PBM
4σ 1.46e4
0%
AS 1368F
8.00e7*
21.50
JS 1234F
6.65e7*
25.22
ES 2378F
6.57e7*
26.63
Abs. Int.
1.52e7
7.59e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
317.9389 Fn1
Flags: PBM
4σ 6.98e3
0%
AS 1368F
1.01e8*
21.50
JS 1234F
8.40e7*
25.22
ES 2378F
8.33e7*
26.63
Abs. Int.
1.93e7
9.64e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
HxCDPE
20.54-29.50
375.8364 Fn1
Flags: PB
4σ 1.68e3
0%
Abs. Int.
1.01e4
5.03e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT

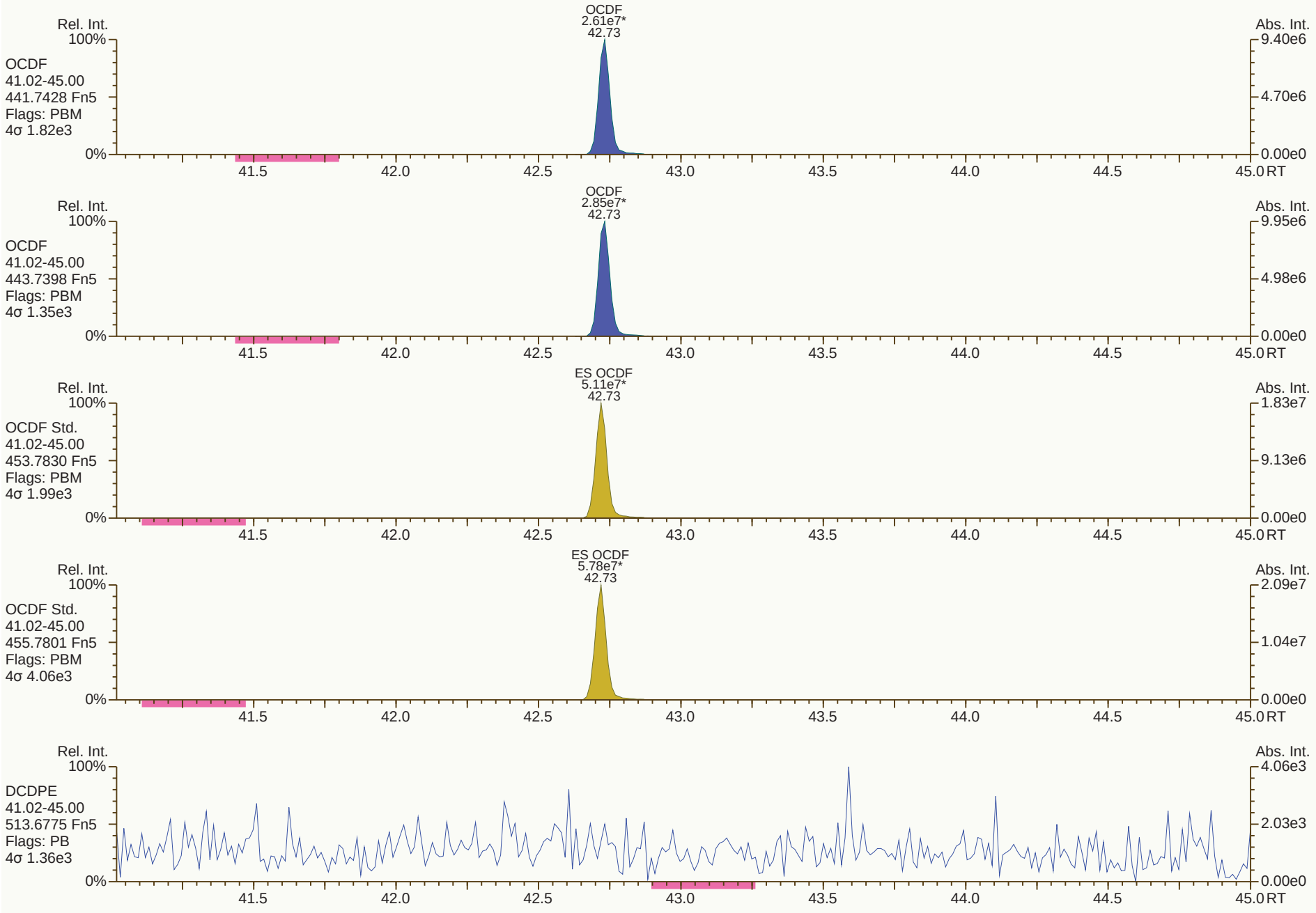

Rel. Int.
100%
0%
Abs. Int.
6.04e3
3.02e3
0.00e0
PeCDF-1
20.54-29.50
339.8597 Fn1
Flags: PB
4σ 1.54e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
0%
Abs. Int.
7.56e3
3.78e3
0.00e0
PeCDF-1
20.54-29.50
341.8568 Fn1
Flags: PB
4σ 1.63e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
0%
Abs. Int.
5.01e6
2.50e6
0.00e0
QC Check
20.54-29.50
316.9824 Fn1
Flags: -
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
PeCDF-2
29.51-34.01
339.8597 Fn2
Flags: PBM
4σ 1.76e3
0%
12378F
3.75e7*
31.56
23478F
3.69e7*
32.69
Abs. Int.
1.08e7
5.42e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF-2
29.51-34.01
341.8568 Fn2
Flags: PBM
4σ 1.69e3
0%
12378F
2.41e7*
31.56
23478F
2.40e7*
32.69
Abs. Int.
6.90e6
3.45e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
351.9000 Fn2
Flags: PBM
4σ 6.01e3
0%
CS 12346F
7.83e7*
31.01
ES 12378F
7.85e7*
31.54
ES 23478F
7.72e7*
32.67
Abs. Int.
2.22e7
1.11e7
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
353.8970 Fn2
Flags: PBM
4σ 3.67e3
0%
CS 12346F
4.94e7*
31.01
ES 12378F
4.94e7*
31.54
ES 23478F
4.98e7*
32.67
Abs. Int.
1.46e7
7.32e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
HpCDPE
29.51-34.01
409.7974 Fn2
Flags: PB
4σ 1.32e3
0%
Abs. Int.
6.68e3
3.34e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT


Rel. Int.
100%
HxCDF
34.02-38.51
373.8207 Fn3
Flags: PBM
4σ 1.64e3
0%
123478F
3.17e7*
35.97
123678F
3.32e7*
36.11
234678F
3.08e7*
36.76
123789F
2.66e7*
37.74
Abs. Int.
1.04e7
5.18e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
HxCDF
34.02-38.51
375.8178 Fn3
Flags: PBM
4σ 1.31e3
123478F
2.59e7*
35.97
123678F
2.67e7*
36.11
234678F
2.52e7*
36.76
123789F
2.11e7*
37.74
8.39e6
4.19e6
HxCDF Std.
34.02-38.51
383.8639 Fn3
Flags: PBM
4σ 2.01e3
ES 123478F
3.30e7*
35.95
ES 123678F
3.77e7*
36.09
CS 123469F
3.15e7*
36.40
ES 234678F
3.43e7*
36.74
ES 123789F
2.94e7*
37.72
1.14e7
5.68e6
HxCDF Std.
34.02-38.51
385.8610 Fn3
Flags: PBM
4σ 2.60e3
ES 123478F
6.35e7*
35.95
ES 123678F
7.14e7*
36.09
CS 123469F
6.15e7*
36.40
ES 234678F
6.47e7*
36.74
ES 123789F
5.70e7*
37.72
2.16e7
1.08e7
OCDPE
34.02-38.51
445.7555 Fn3
Flags: PB
4σ 1.20e3
4.14e3
2.07e3

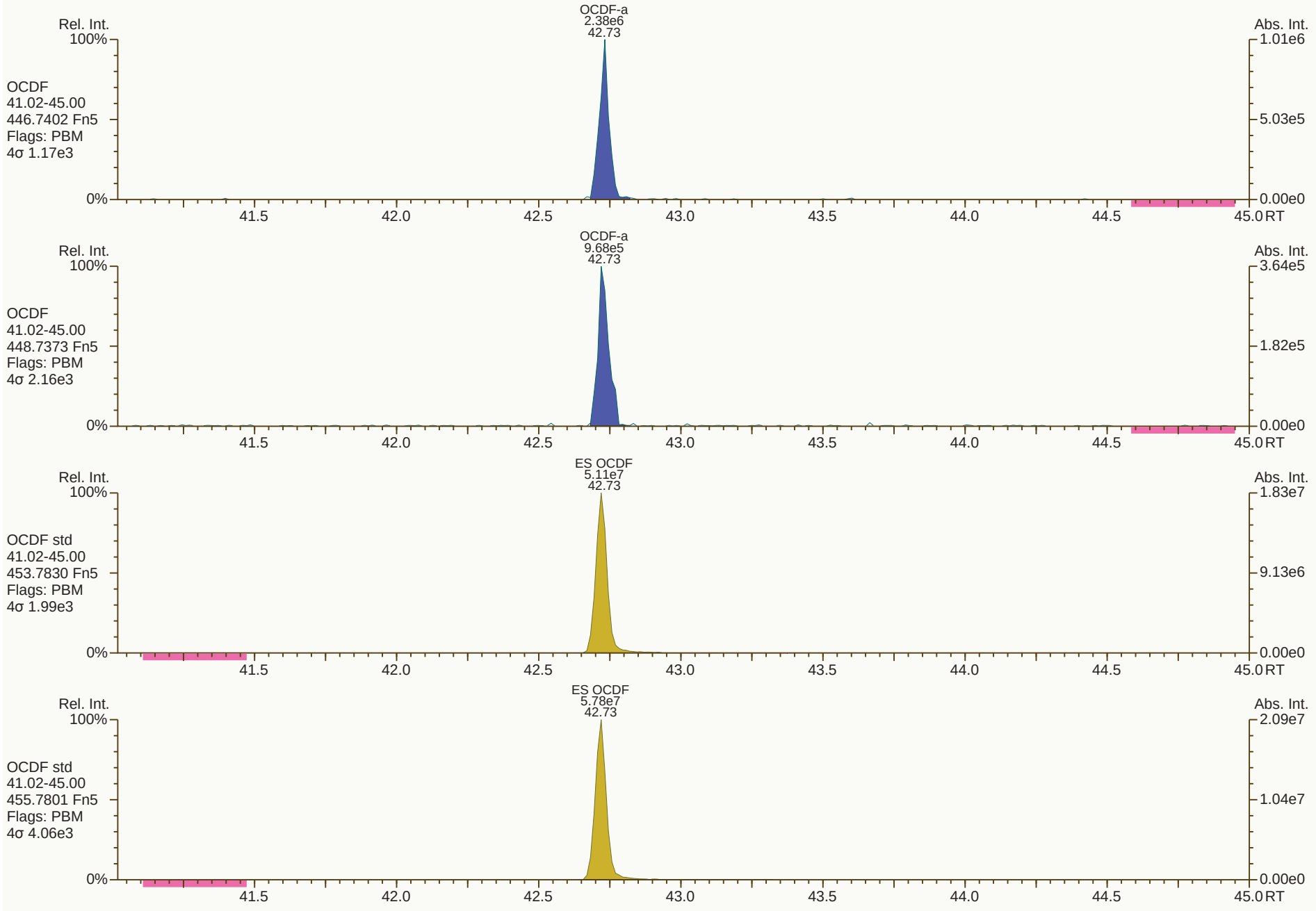


Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS3_200612_DF_RB.utp_res, saved 15-Jun-2020 13:24 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 3706, 2088, 7667 scc: 726-607
PKD: 15-Jun-2020 08:10 Printed: 15-Jun-2020 13:39 Page 11 of 12


OCDF
2.61e7*
42.73
Rel. Int.
100%
OCDF
41.02-45.00
441.7428 Fn5
Flags: PBM
4σ 1.82e3
0%
Abs. Int.
9.40e6
4.70e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDF
2.85e7*
42.73
Rel. Int.
100%
OCDF
41.02-45.00
443.7398 Fn5
Flags: PBM
4σ 1.35e3
0%
Abs. Int.
9.95e6
4.98e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDF
5.11e7*
42.73
Rel. Int.
100%
OCDF Std.
41.02-45.00
453.7830 Fn5
Flags: PBM
4σ 1.99e3
0%
Abs. Int.
1.83e7
9.13e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDF
5.78e7*
42.73
Rel. Int.
100%
OCDF Std.
41.02-45.00
455.7801 Fn5
Flags: PBM
4σ 4.06e3
0%
Abs. Int.
2.09e7
1.04e7
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
DCDPE
41.02-45.00
513.6775 Fn5
Flags: PB
4σ 1.36e3
0%
Abs. Int.
4.06e3
2.03e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

SGS ID: CS3_200612_DF_RB | Sample ID: SIL 20-449-3 | Acq: 12-Jun-2020 16:49:17

Instr: [ILM] AutoSpec-Ultima MM3 | VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 8 | User: PSW Datafile: 200612R06



Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS3_200612_DF_RB.utp_res, saved 15-Jun-2020 13:24 (PSW)

Peak annotation: Areas, Centroids

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 2514, 6240

Revised: 15-Jun-2020 08:21 (PSW) Printed: 17-Jun-2020 08:04

Dioxin/Furan QC Summary		Acq'd: 12 Jun 2020 17:36 PSW				ICAL: MM3_DF_10012020_12JUN2020	
Lab ID: CS4_200612_DF_RA		UTP: 15-Jun-2020 11:50:46 PSW				Checkcode: 711-420-WZT	
Sample ID: SIL 20-281-2		Report: 15 Jun 2020 11:54 pw				Datafile: 200612R07	
Name	**RT**	**Response**	**RA**	**OK**	**Ref. RRFs**	**Calc. RRFs**	**Dev'n**
2378-TCDD	27.55	4.57E+07	0.81	Y	1.18	1.21	3%
12378-PeCDD	33.03	1.89E+08	1.60	Y	1.14	1.17	3%
123478-HxCDD	36.93	1.77E+08	1.27	Y	1.09	1.09	0%
123678-HxCDD	37.04	1.79E+08	1.25	Y	1.13	1.13	0%
123789-HxCDD	37.35	1.91E+08	1.25	Y	1.05	1.06	1%
1234678-HpCDD	40.11	1.46E+08	1.05	Y	0.98	1.02	4%
OCDD	42.56	2.09E+08	0.89	Y	1.08	1.10	3%
2378-TCDF	26.64	6.34E+07	0.76	Y	0.98	1.01	3%
12378-PeCDF	31.55	2.69E+08	1.55	Y	0.95	0.97	3%
23478-PeCDF	32.68	2.64E+08	1.54	Y	0.95	0.96	1%
123478-HxCDF	35.96	2.51E+08	1.23	Y	1.20	1.21	1%
123678-HxCDF	36.10	2.58E+08	1.24	Y	1.07	1.10	3%
234678-HxCDF	36.74	2.42E+08	1.22	Y	1.10	1.11	2%
123789-HxCDF	37.73	2.09E+08	1.25	Y	1.09	1.13	3%
1234678-HpCDF	39.20	2.19E+08	1.04	Y	1.28	1.30	2%
1234789-HpCDF	40.53	1.70E+08	1.03	Y	1.27	1.29	2%
OCDF	42.72	2.40E+08	0.90	Y	1.01	1.05	4%
ES 2378-TCDD	27.53	9.44E+07	0.79	Y	1.01	0.99	-1%
ES 12378-PeCDD	33.01	8.06E+07	1.65	Y	0.87	0.85	-2%
ES 123478-HxCDD	36.91	8.16E+07	1.33	Y	1.10	1.10	1%
ES 123678-HxCDD	37.03	7.97E+07	1.30	Y	1.06	1.08	2%
ES 123789-HxCDD	37.33	8.98E+07	1.27	Y	1.22	1.21	0%
ES 1234678-HpCDD	40.09	7.16E+07	1.05	Y	0.99	0.97	-3%
ES OCDD	42.54	9.48E+07	0.92	Y	0.67	0.64	-4%
ES 2378-TCDF	26.62	1.57E+08	0.81	Y	1.01	1.02	0%
ES 12378-PeCDF	31.53	1.38E+08	1.56	Y	0.90	0.90	-1%
ES 23478-PeCDF	32.66	1.38E+08	1.56	Y	0.89	0.89	0%
ES 123478-HxCDF	35.94	1.04E+08	0.53	Y	1.43	1.40	-2%
ES 123678-HxCDF	36.08	1.17E+08	0.53	Y	1.63	1.59	-3%
ES 234678-HxCDF	36.73	1.09E+08	0.53	Y	1.48	1.47	-1%
ES 123789-HxCDF	37.71	9.28E+07	0.52	Y	1.29	1.25	-3%
ES 1234678-HpCDF	39.19	8.43E+07	0.45	Y	1.15	1.14	-1%
ES 1234789-HpCDF	40.52	6.56E+07	0.44	Y	0.91	0.89	-2%
ES OCDF	42.71	1.14E+08	0.90	Y	0.83	0.77	-7%

Dioxin/Furan QC Summary	Acq'd: 12 Jun 2020 17:36 PSW	ICAL: MM3_DF_10012020_12JUN2020
Lab ID: CS4_200612_DF_RA	UTP: 15-Jun-2020 11:50:46 PSW	Checkcode: 711-420-WZT
Sample ID: SIL 20-281-2	Report: 15 Jun 2020 11:54 pw	Datafile: 200612R07

Name	RT	Response	RA	OK	Ref. RRFs	Calc. RRFs	Dev'n
JS 1234-TCDD	26.86	9.50E+07	0.78	Y	-	-	-
JS 1234-TCDF	25.22	1.54E+08	0.79	Y	-	-	-
JS 123467-HxCDD	37.23	3.70E+07	1.34	Y	-	-	-
CS 37Cl-2378-TCDD	27.55	4.02E+07	n/a	-	1.04	1.06	2%
CS 12347-PeCDD	32.51	6.98E+07	1.67	Y	0.74	0.74	-1%
CS 12346-PeCDF	31.00	1.34E+08	1.56	Y	0.86	0.87	1%
CS 123469-HxCDF	36.39	9.83E+07	0.52	Y	1.36	1.33	-2%
CS 1234689-HpCDF	39.59	7.71E+07	0.44	Y	1.05	1.04	-1%
SS 37Cl-2378-TCDD	27.55	4.02E+07	n/a	-	1.04	1.06	3%
SS 12347-PeCDD	32.51	6.98E+07	1.67	Y	0.86	0.87	1%
SS 12346-PeCDF	31.00	1.34E+08	1.56	Y	0.96	0.97	1%
SS 123469-HxCDF	36.39	9.83E+07	0.52	Y	0.83	0.84	0%
SS 1234689-HpCDF	39.59	7.71E+07	0.44	Y	0.92	0.91	-1%
AS 1368-TCDD	23.71	1.02E+08	0.76	Y	1.08	1.07	0%
AS 1368-TCDF	21.50	1.82E+08	0.80	Y	1.18	1.18	0%
FS 1278-TCDD	27.87	9.49E+07	0.77	Y	1.00	1.00	1%
FS 12478-PeCDD	31.77	8.39E+07	1.63	Y	1.00	1.04	4%
FS 123468-HxCDD	35.87	8.84E+07	1.29	Y	1.11	1.08	-2%
FS 1234679-HpCDD	39.45	8.59E+07	1.06	Y	1.19	1.20	1%
TS 1378-TCDD	25.82	9.98E+07	0.78	Y	1.06	1.06	0%
OCDD-a	42.55	1.29E+07	2.43	Y	0.07	0.07	-3%
OCDF-a	42.72	1.39E+07	2.38	Y	0.06	0.06	4%

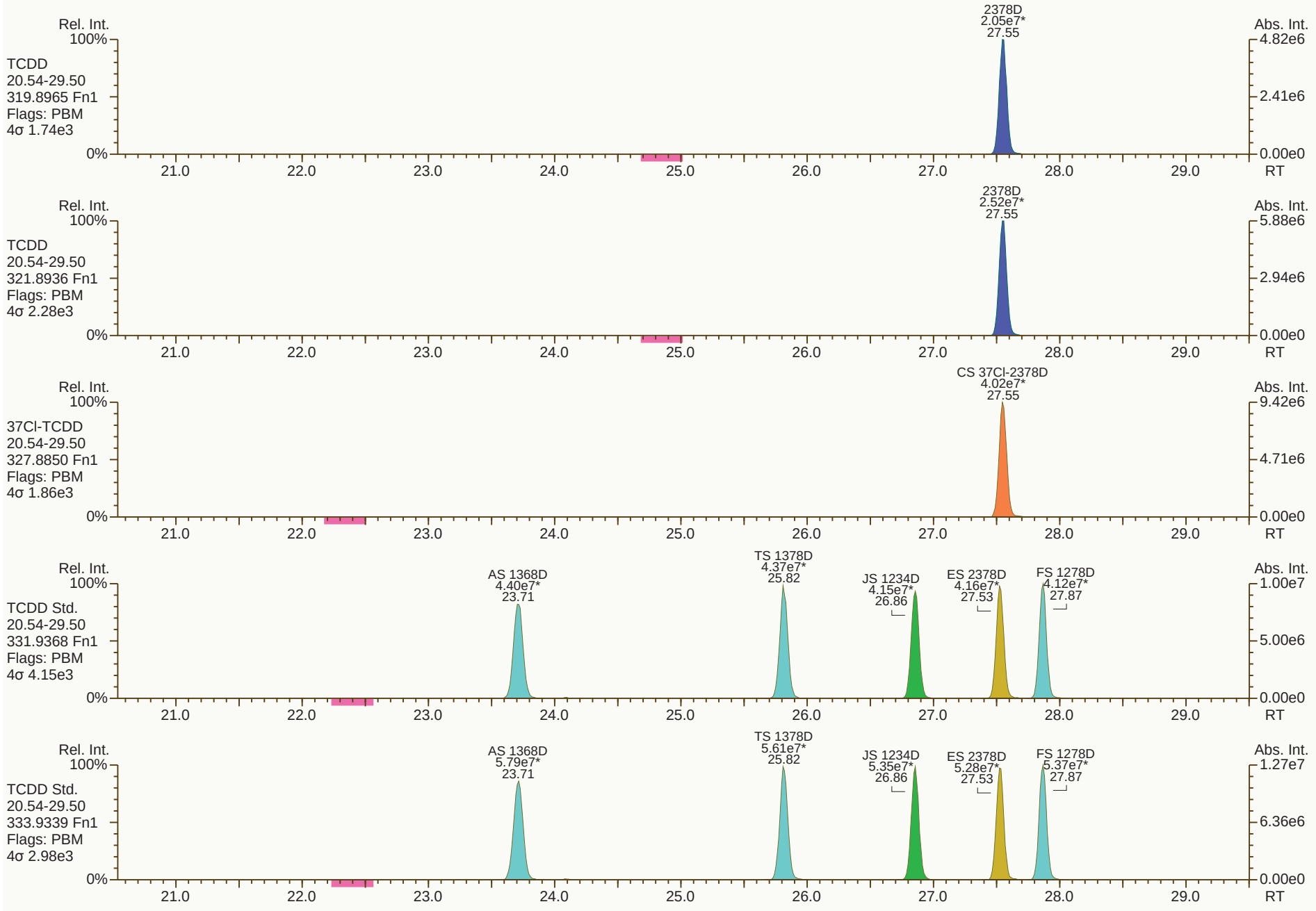
SGS ID: CS4_200612_DF_RA **Sample ID: SIL 20-281-2** **Acq: 12-Jun-2020 17:36:49**

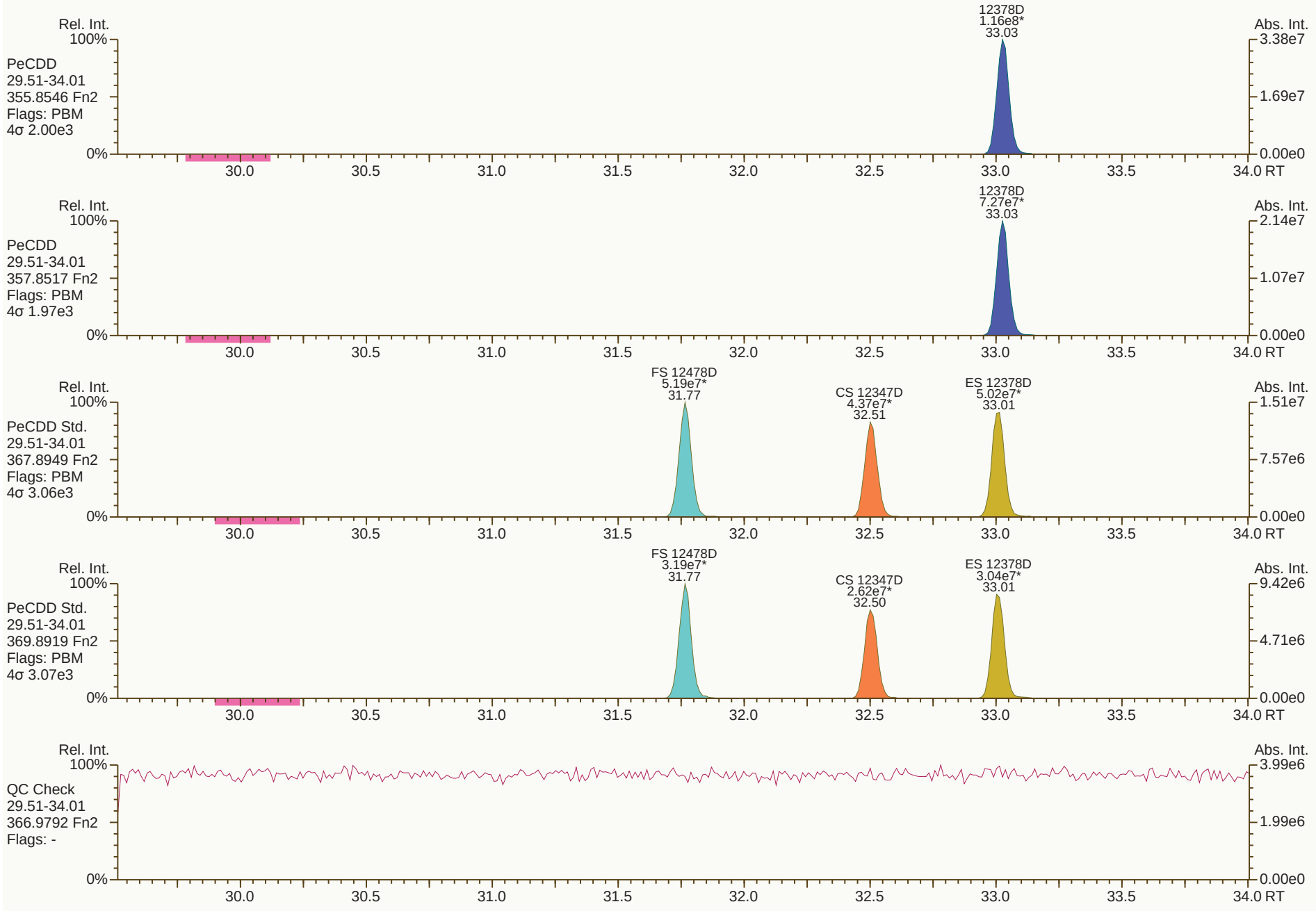
Instr: [ILM] AutoSpec-Ultima MM3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 9** **User: PSW Datafile: 200612R07**

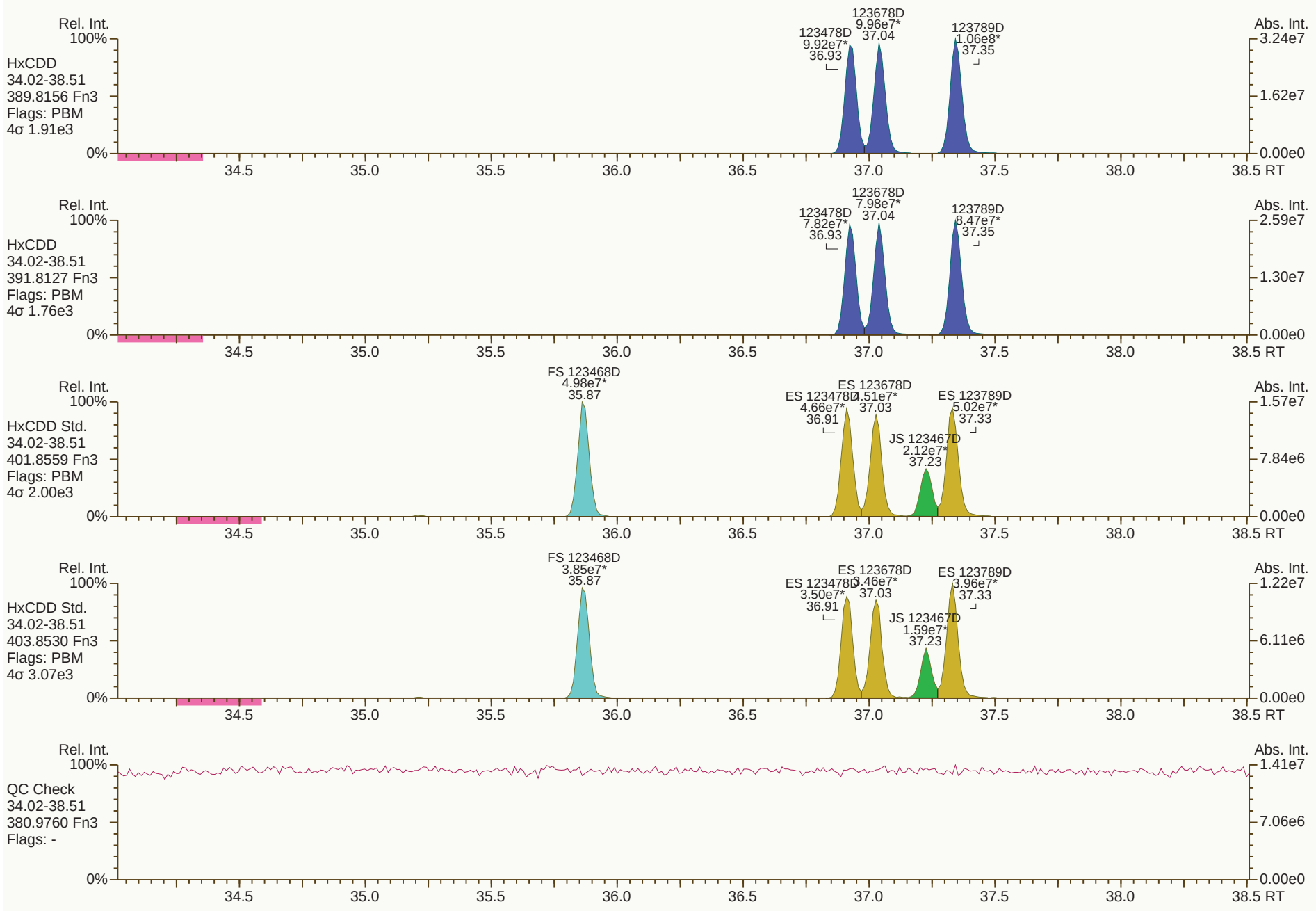


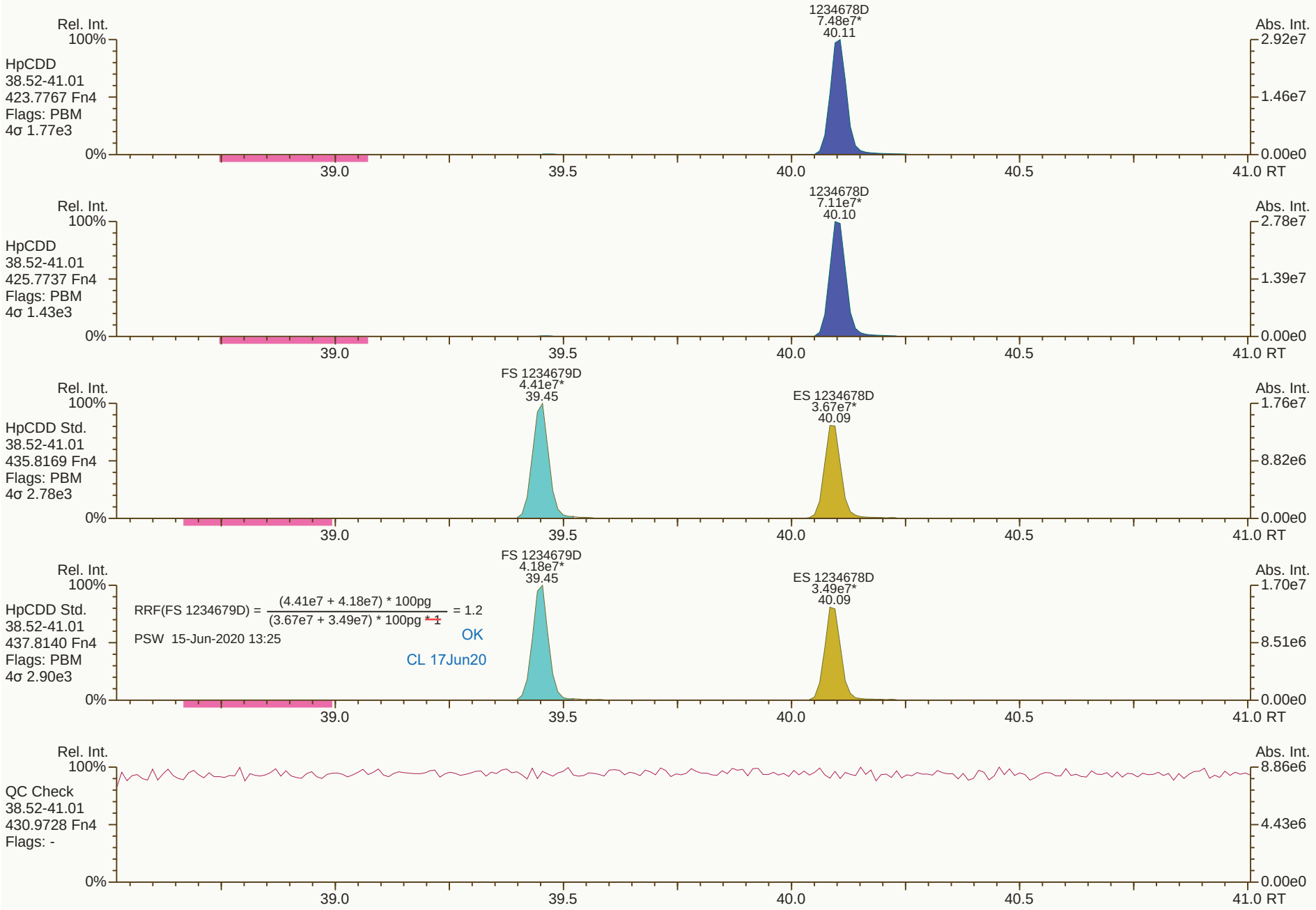
Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS4_200612_DF_RA.utp_res, saved 15-Jun-2020 13:27 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 scc: 711-420 *PKD: n/a Printed: 15-Jun-2020 13:39 Page 1 of 12*


Rel. Int.
100%
TCDD
20.54-29.50
319.8965 Fn1
Flags: PBM
4σ 1.74e3
0%
2378D
2.05e7*
27.55
Abs. Int.
4.82e6
2.41e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD
20.54-29.50
321.8936 Fn1
Flags: PBM
4σ 2.28e3
0%
2378D
2.52e7*
27.55
Abs. Int.
5.88e6
2.94e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
37Cl-TCDD
20.54-29.50
327.8850 Fn1
Flags: PBM
4σ 1.86e3
0%
CS 37Cl-2378D
4.02e7*
27.55
Abs. Int.
9.42e6
4.71e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
331.9368 Fn1
Flags: PBM
4σ 4.15e3
0%
AS 1368D
4.40e7*
23.71
TS 1378D
4.37e7*
25.82
JS 1234D
4.15e7*
26.86
ES 2378D
4.16e7*
27.53
FS 1278D
4.12e7*
27.87
Abs. Int.
1.00e7
5.00e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
333.9339 Fn1
Flags: PBM
4σ 2.98e3
0%
AS 1368D
5.79e7*
23.71
TS 1378D
5.61e7*
25.82
JS 1234D
5.35e7*
26.86
ES 2378D
5.28e7*
27.53
FS 1278D
5.37e7*
27.87
Abs. Int.
1.27e7
6.36e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT

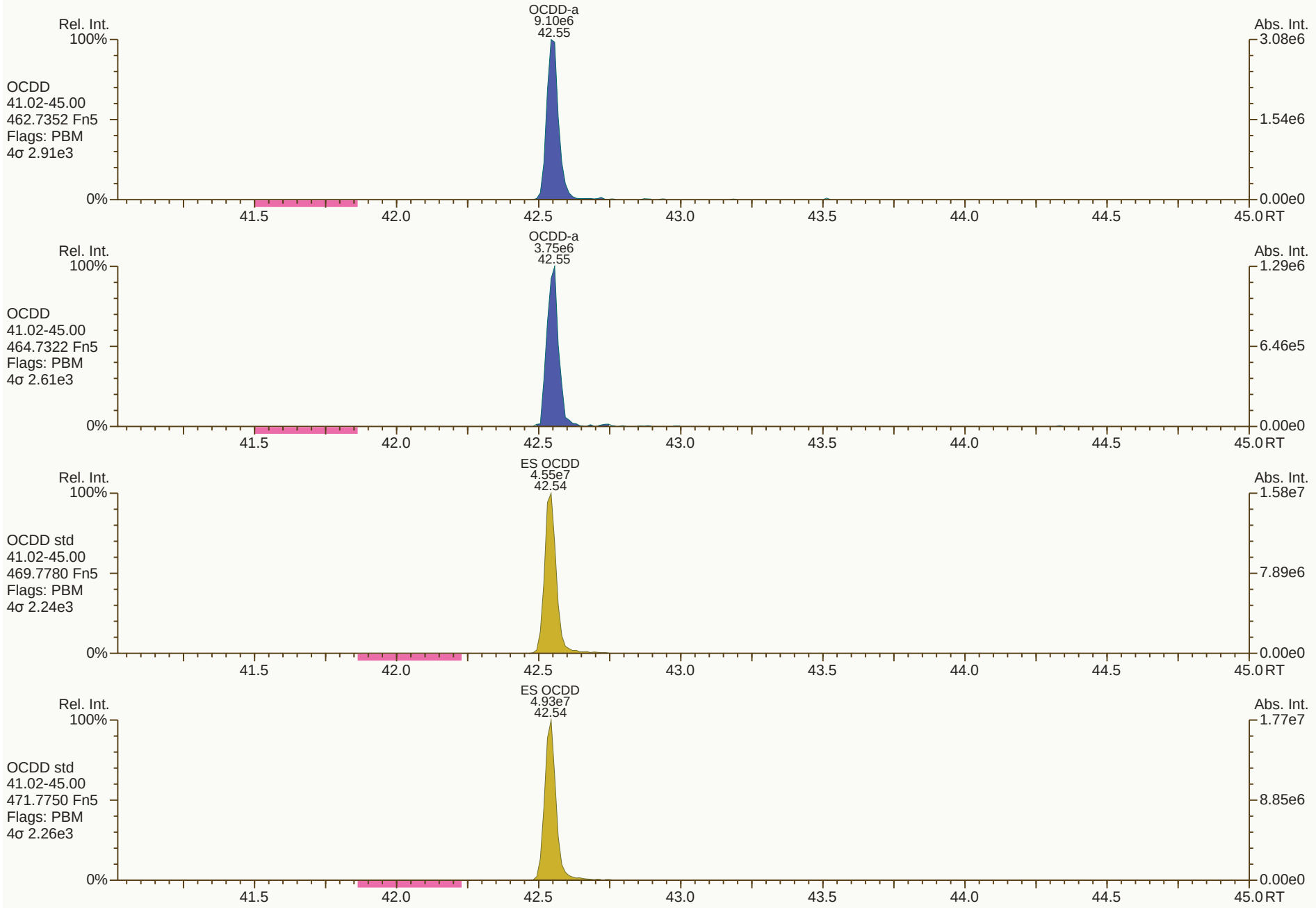

Rel. Int.
100%
PeCDD
29.51-34.01
355.8546 Fn2
Flags: PBM
4σ 2.00e3
0%
12378D
1.16e8*
33.03
Abs. Int.
3.38e7
1.69e7
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD
29.51-34.01
357.8517 Fn2
Flags: PBM
4σ 1.97e3
0%
12378D
7.27e7*
33.03
Abs. Int.
2.14e7
1.07e7
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
367.8949 Fn2
Flags: PBM
4σ 3.06e3
0%
FS 12478D
5.19e7*
31.77
CS 12347D
4.37e7*
32.51
ES 12378D
5.02e7*
33.01
Abs. Int.
1.51e7
7.57e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
369.8919 Fn2
Flags: PBM
4σ 3.07e3
0%
FS 12478D
3.19e7*
31.77
CS 12347D
2.62e7*
32.50
ES 12378D
3.04e7*
33.01
Abs. Int.
9.42e6
4.71e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
QC Check
29.51-34.01
366.9792 Fn2
Flags: -
0%
Abs. Int.
3.99e6
1.99e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT


Rel. Int.
100%
HxCDD
34.02-38.51
389.8156 Fn3
Flags: PBM
4σ 1.91e3
123678D
9.96e7*
37.04
123478D
9.92e7*
36.93
123789D
1.06e8*
37.35
Abs. Int.
3.24e7
1.62e7
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDD
34.02-38.51
391.8127 Fn3
Flags: PBM
4σ 1.76e3
123678D
7.98e7*
37.04
123478D
7.82e7*
36.93
123789D
8.47e7*
37.35
Abs. Int.
2.59e7
1.30e7
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDD Std.
34.02-38.51
401.8559 Fn3
Flags: PBM
4σ 2.00e3
FS 123468D
4.98e7*
35.87
ES 123678D
4.51e7*
37.03
ES 123478D
4.66e7*
36.91
ES 123789D
5.02e7*
37.33
JS 123467D
2.12e7*
37.23
Abs. Int.
1.57e7
7.84e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDD Std.
34.02-38.51
403.8530 Fn3
Flags: PBM
4σ 3.07e3
FS 123468D
3.85e7*
35.87
ES 123678D
3.46e7*
37.03
ES 123478D
3.50e7*
36.91
ES 123789D
3.96e7*
37.33
JS 123467D
1.59e7*
37.23
Abs. Int.
1.22e7
6.11e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
QC Check
34.02-38.51
380.9760 Fn3
Flags: -
Abs. Int.
1.41e7
7.06e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT


Rel. Int.
100%
HpCDD
38.52-41.01
423.7767 Fn4
Flags: PBM
4σ 1.77e3
0%
1234678D
7.48e7*
40.11
Abs. Int.
2.92e7
1.46e7
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.52-41.01
425.7737 Fn4
Flags: PBM
4σ 1.43e3
0%
1234678D
7.11e7*
40.10
Abs. Int.
2.78e7
1.39e7
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.52-41.01
435.8169 Fn4
Flags: PBM
4σ 2.78e3
0%
FS 1234679D
4.41e7*
39.45
ES 1234678D
3.67e7*
40.09
Abs. Int.
1.76e7
8.82e6
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.52-41.01
437.8140 Fn4
Flags: PBM
4σ 2.90e3
0%
RRF(FS 1234679D) = (4.41e7 + 4.18e7) * 100pg / (3.67e7 + 3.49e7) * 100pg * 1 = 1.2
PSW 15-Jun-2020 13:25
OK
CL 17Jun20
FS 1234679D
4.18e7*
39.45
ES 1234678D
3.49e7*
40.09
Abs. Int.
1.70e7
8.51e6
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.52-41.01
430.9728 Fn4
Flags: -
0%
Abs. Int.
8.86e6
4.43e6
0.00e0
39.0
39.5
40.0
40.5
41.0 RT


OCDD
9.83e7*
42.56
Rel. Int.
100%
OCDD
41.02-45.00
457.7377 Fn5
Flags: PBM
4σ 1.89e3
0%
Abs. Int.
3.51e7
1.75e7
0.00e0
RRF(OCDD) = (9.83e7 + 1.11e8) * 200pg / (4.55e7 + 4.93e7) * 400pg * 1 = 1.1
PSW 15-Jun-2020 13:26
OK
CL 17Jun20
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDD
1.11e8*
42.55
Rel. Int.
100%
OCDD
41.02-45.00
459.7348 Fn5
Flags: PBM
4σ 1.52e3
0%
Abs. Int.
3.84e7
1.92e7
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
4.55e7*
42.54
Rel. Int.
100%
OCDD Std.
41.02-45.00
469.7780 Fn5
Flags: PBM
4σ 2.24e3
0%
Abs. Int.
1.58e7
7.89e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
4.93e7*
42.54
Rel. Int.
100%
OCDD Std.
41.02-45.00
471.7750 Fn5
Flags: PBM
4σ 2.26e3
0%
Abs. Int.
1.77e7
8.85e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
8.14e6
4.07e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

SGS ID: CS4_200612_DF_RA **Sample ID: SIL 20-281-2** **Acq: 12-Jun-2020 17:36:49**
Instr: [ILM] AutoSpec-Ultima MM3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 9** **User: PSW Datafile: 200612R07**



Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS4_200612_DF_RA.utp_res, saved 15-Jun-2020 13:27 (PSW) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 4156, 1579 *PKD: 15-Jun-2020 08:11 Printed: 17-Jun-2020 08:04*


Rel. Int.
100%
TCDF
20.54-29.50
303.9016 Fn1
Flags: PBM
4σ 1.86e3
0%
2378F
2.75e7*
26.64
Abs. Int.
6.26e6
3.13e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF
20.54-29.50
305.8987 Fn1
Flags: PBM
4σ 1.09e3
0%
2378F
3.59e7*
26.64
Abs. Int.
8.11e6
4.05e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
315.9419 Fn1
Flags: PBM
4σ 1.31e4
0%
AS 1368F
8.09e7*
21.50
JS 1234F
6.82e7*
25.22
ES 2378F
7.02e7*
26.62
Abs. Int.
1.62e7
8.09e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
317.9389 Fn1
Flags: PBM
4σ 1.46e4
0%
AS 1368F
1.01e8*
21.49
JS 1234F
8.61e7*
25.21
ES 2378F
8.69e7*
26.62
Abs. Int.
2.06e7
1.03e7
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
HxCDPE
20.54-29.50
375.8364 Fn1
Flags: PB
4σ 1.71e3
0%
Abs. Int.
4.98e3
2.49e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT

SGS ID: CS4_200612_DF_RA | **Sample ID: SIL 20-281-2** | **Acq: 12-Jun-2020 17:36:49**

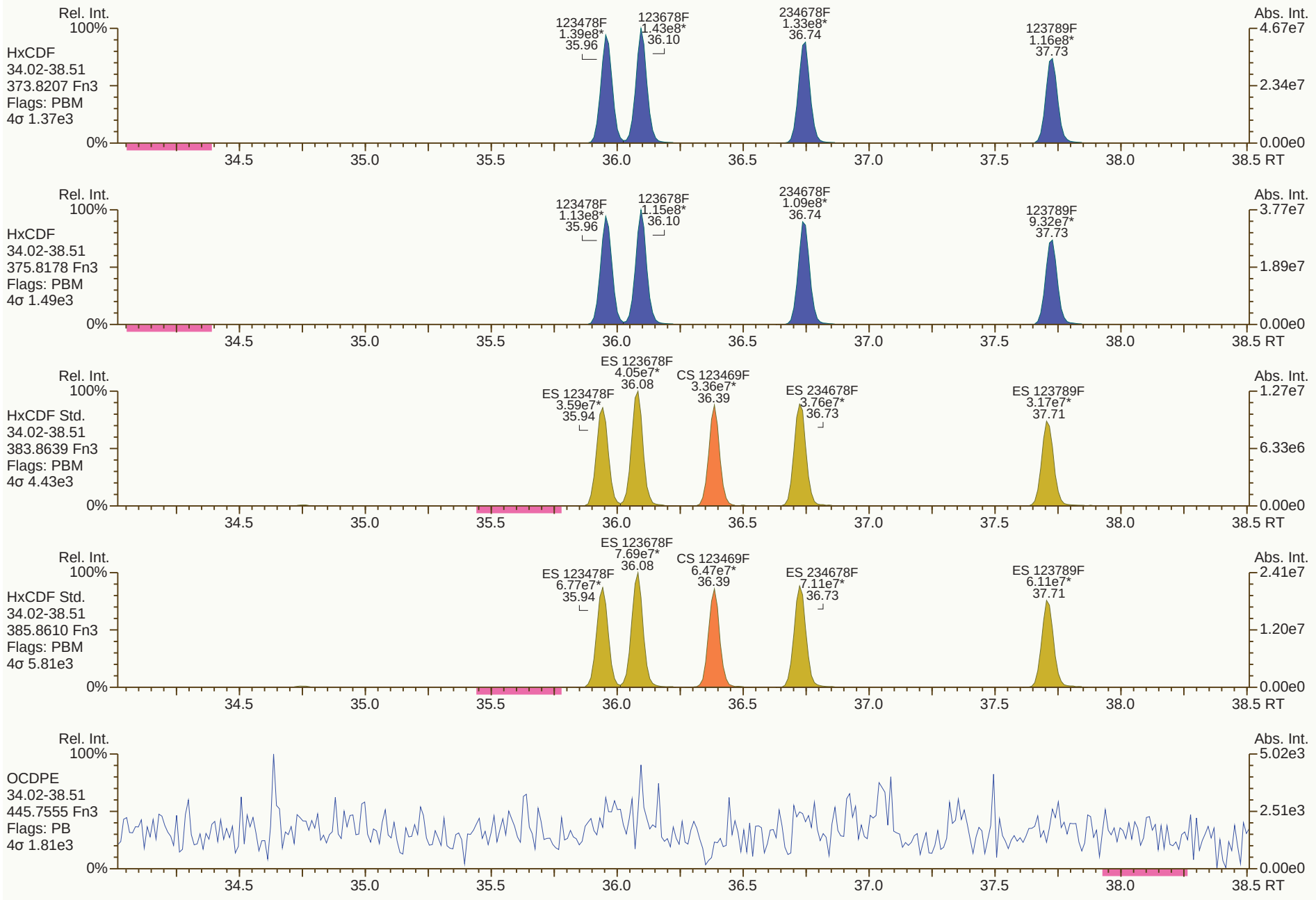
Instr: [ILM] AutoSpec-Ultima MM3 | **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 9** | **User: PSW Datafile: 200612R07**

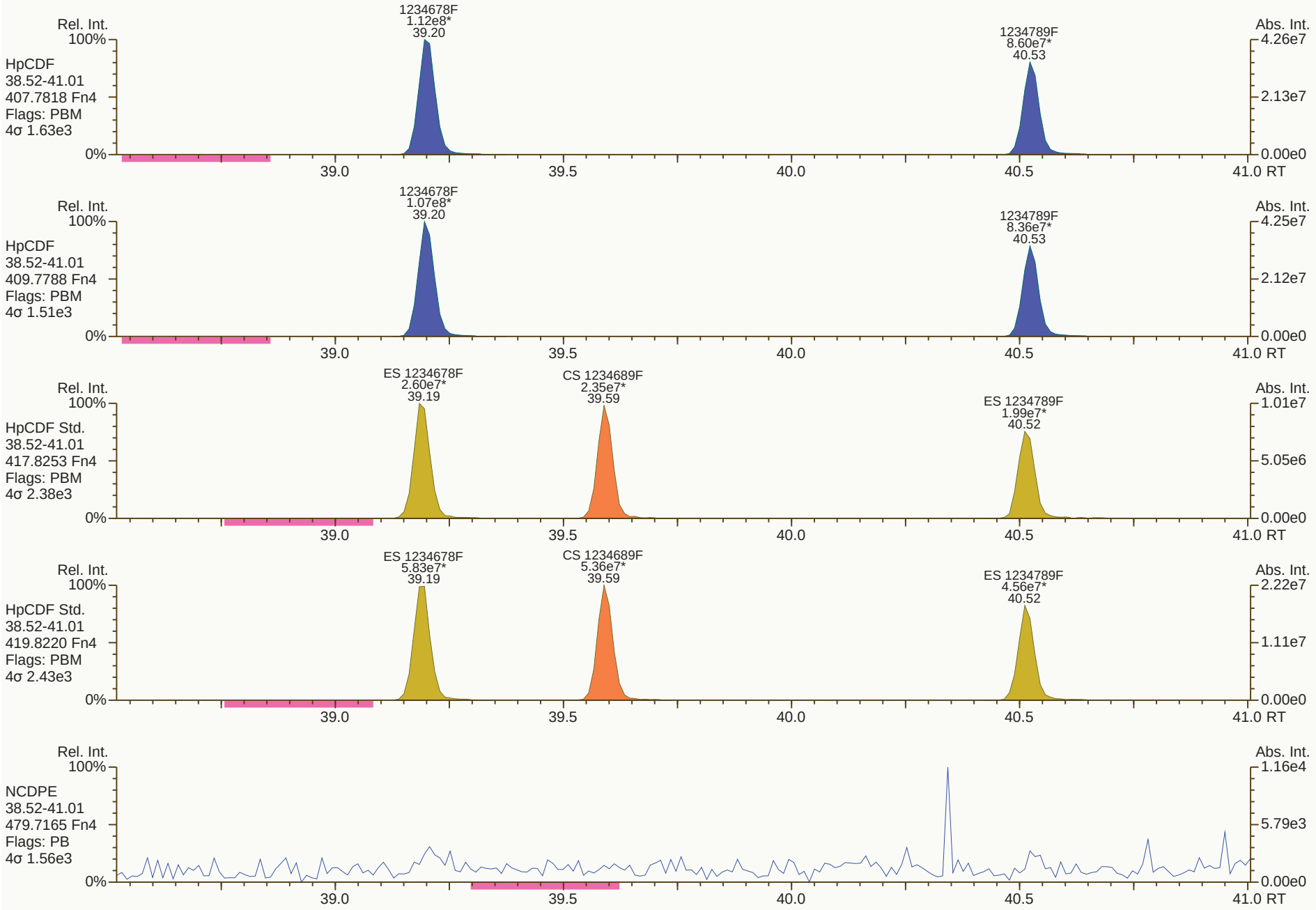


Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS4_200612_DF_RA.utp_res, saved 15-Jun-2020 13:27 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 5267 scc: 711-420 *PKD: 15-Jun-2020 08:11 Printed: 15-Jun-2020 13:40 Page 8 of 12*


Rel. Int.
100%
PeCDF-2
29.51-34.01
339.8597 Fn2
Flags: PBM
4σ 1.62e3
0%
12378F
1.64e8*
31.55
23478F
1.60e8*
32.68
Abs. Int.
4.65e7
2.32e7
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF-2
29.51-34.01
341.8568 Fn2
Flags: PBM
4σ 1.93e3
0%
12378F
1.06e8*
31.55
23478F
1.04e8*
32.67
Abs. Int.
3.04e7
1.52e7
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
351.9000 Fn2
Flags: PBM
4σ 4.66e3
0%
CS 12346F
8.16e7*
31.00
ES 12378F
8.43e7*
31.53
ES 23478F
8.41e7*
32.66
Abs. Int.
2.38e7
1.19e7
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
353.8970 Fn2
Flags: PBM
4σ 3.28e3
0%
CS 12346F
5.23e7*
31.00
ES 12378F
5.40e7*
31.53
ES 23478F
5.38e7*
32.66
Abs. Int.
1.57e7
7.84e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
HpCDPE
29.51-34.01
409.7974 Fn2
Flags: PB
4σ 2.04e3
0%
Abs. Int.
6.95e3
3.48e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT

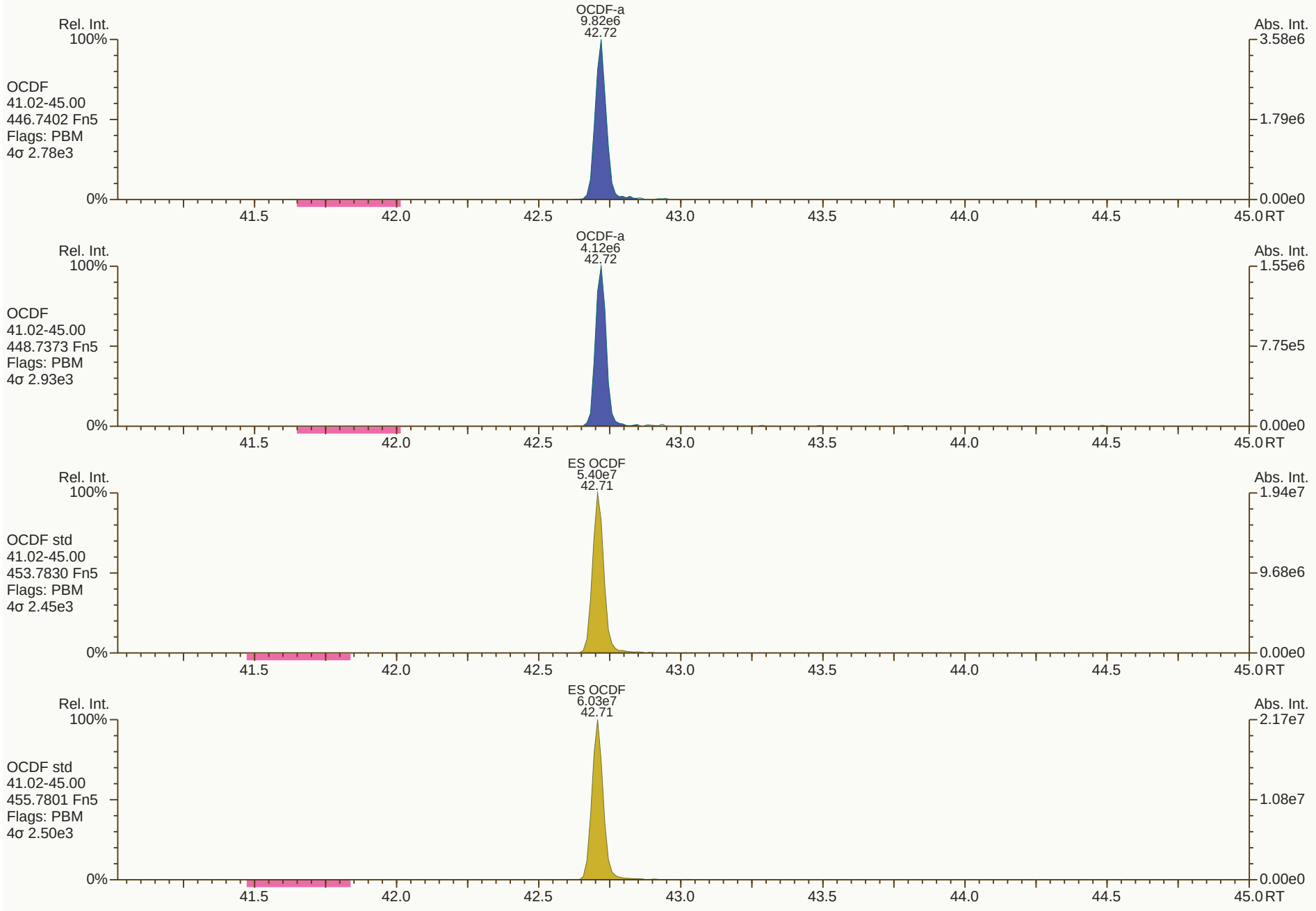

Rel. Int.
100%
HxCDF
34.02-38.51
373.8207 Fn3
Flags: PBM
4σ 1.37e3
0%
123478F
1.39e8*
35.96
123678F
1.43e8*
36.10
234678F
1.33e8*
36.74
123789F
1.16e8*
37.73
Abs. Int.
4.67e7
2.34e7
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDF
34.02-38.51
375.8178 Fn3
Flags: PBM
4σ 1.49e3
0%
123478F
1.13e8*
35.96
123678F
1.15e8*
36.10
234678F
1.09e8*
36.74
123789F
9.32e7*
37.73
Abs. Int.
3.77e7
1.89e7
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDF Std.
34.02-38.51
383.8639 Fn3
Flags: PBM
4σ 4.43e3
0%
ES 123478F
3.59e7*
35.94
ES 123678F
4.05e7*
36.08
CS 123469F
3.36e7*
36.39
ES 234678F
3.76e7*
36.73
ES 123789F
3.17e7*
37.71
Abs. Int.
1.27e7
6.33e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDF Std.
34.02-38.51
385.8610 Fn3
Flags: PBM
4σ 5.81e3
0%
ES 123478F
6.77e7*
35.94
ES 123678F
7.69e7*
36.08
CS 123469F
6.47e7*
36.39
ES 234678F
7.11e7*
36.73
ES 123789F
6.11e7*
37.71
Abs. Int.
2.41e7
1.20e7
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
OCDPE
34.02-38.51
445.7555 Fn3
Flags: PB
4σ 1.81e3
0%
Abs. Int.
5.02e3
2.51e3
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT


Rel. Int.
100%
HpCDF
38.52-41.01
407.7818 Fn4
Flags: PBM
4σ 1.63e3
0%
1234678F
1.12e8*
39.20
1234789F
8.60e7*
40.53
Abs. Int.
4.26e7
2.13e7
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF
38.52-41.01
409.7788 Fn4
Flags: PBM
4σ 1.51e3
0%
1234678F
1.07e8*
39.20
1234789F
8.36e7*
40.53
Abs. Int.
4.25e7
2.12e7
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.52-41.01
417.8253 Fn4
Flags: PBM
4σ 2.38e3
0%
ES 1234678F
2.60e7*
39.19
CS 1234689F
2.35e7*
39.59
ES 1234789F
1.99e7*
40.52
Abs. Int.
1.01e7
5.05e6
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.52-41.01
419.8220 Fn4
Flags: PBM
4σ 2.43e3
0%
ES 1234678F
5.83e7*
39.19
CS 1234689F
5.36e7*
39.59
ES 1234789F
4.56e7*
40.52
Abs. Int.
2.22e7
1.11e7
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
NCDPE
38.52-41.01
479.7165 Fn4
Flags: PB
4σ 1.56e3
0%
Abs. Int.
1.16e4
5.79e3
0.00e0
39.0
39.5
40.0
40.5
41.0 RT


OCDF
1.13e8*
42.72
Rel. Int.
100%
OCDF
41.02-45.00
441.7428 Fn5
Flags: PBM
4σ 2.42e3
0%
Abs. Int.
4.11e7
2.05e7
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDF
1.27e8*
42.72
OCDF
41.02-45.00
443.7398 Fn5
Flags: PBM
4σ 1.38e3
4.58e7
2.29e7
ES OCDF
5.40e7*
42.71
OCDF Std.
41.02-45.00
453.7830 Fn5
Flags: PBM
4σ 2.45e3
1.94e7
9.68e6
ES OCDF
6.03e7*
42.71
OCDF Std.
41.02-45.00
455.7801 Fn5
Flags: PBM
4σ 2.50e3
2.17e7
1.08e7
DCDPE
41.02-45.00
513.6775 Fn5
Flags: PB
4σ 1.56e3
4.07e3
2.03e3

SGS ID: CS4_200612_DF_RA | Sample ID: SIL 20-281-2 | Acq: 12-Jun-2020 17:36:49

Instr: [ILM] AutoSpec-Ultima MM3 | VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 9 | User: PSW Datafile: 200612R07



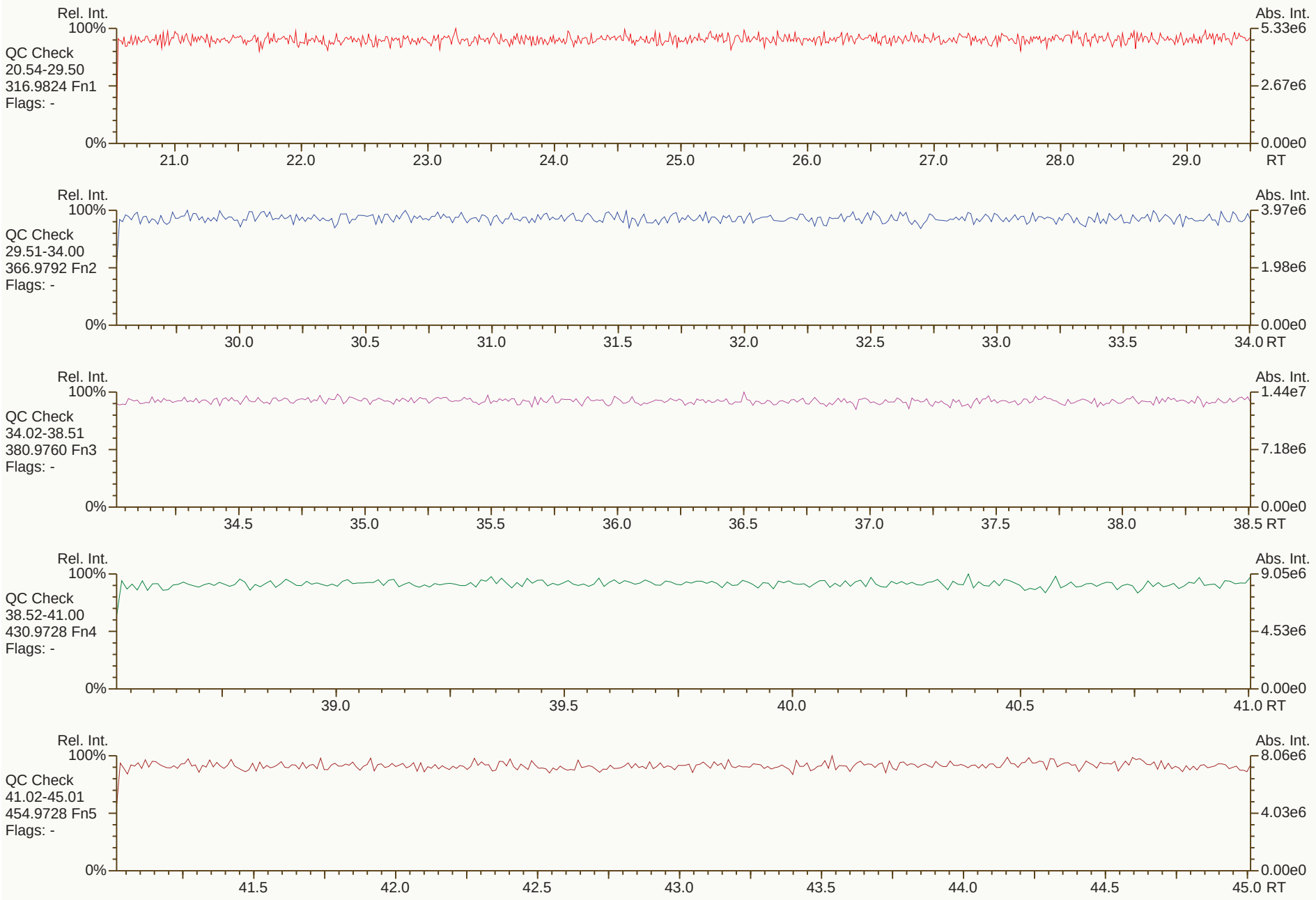
Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS4_200612_DF_RA.utp_res, saved 15-Jun-2020 13:27 (PSW) *Peak annotation: Areas, Centroids*

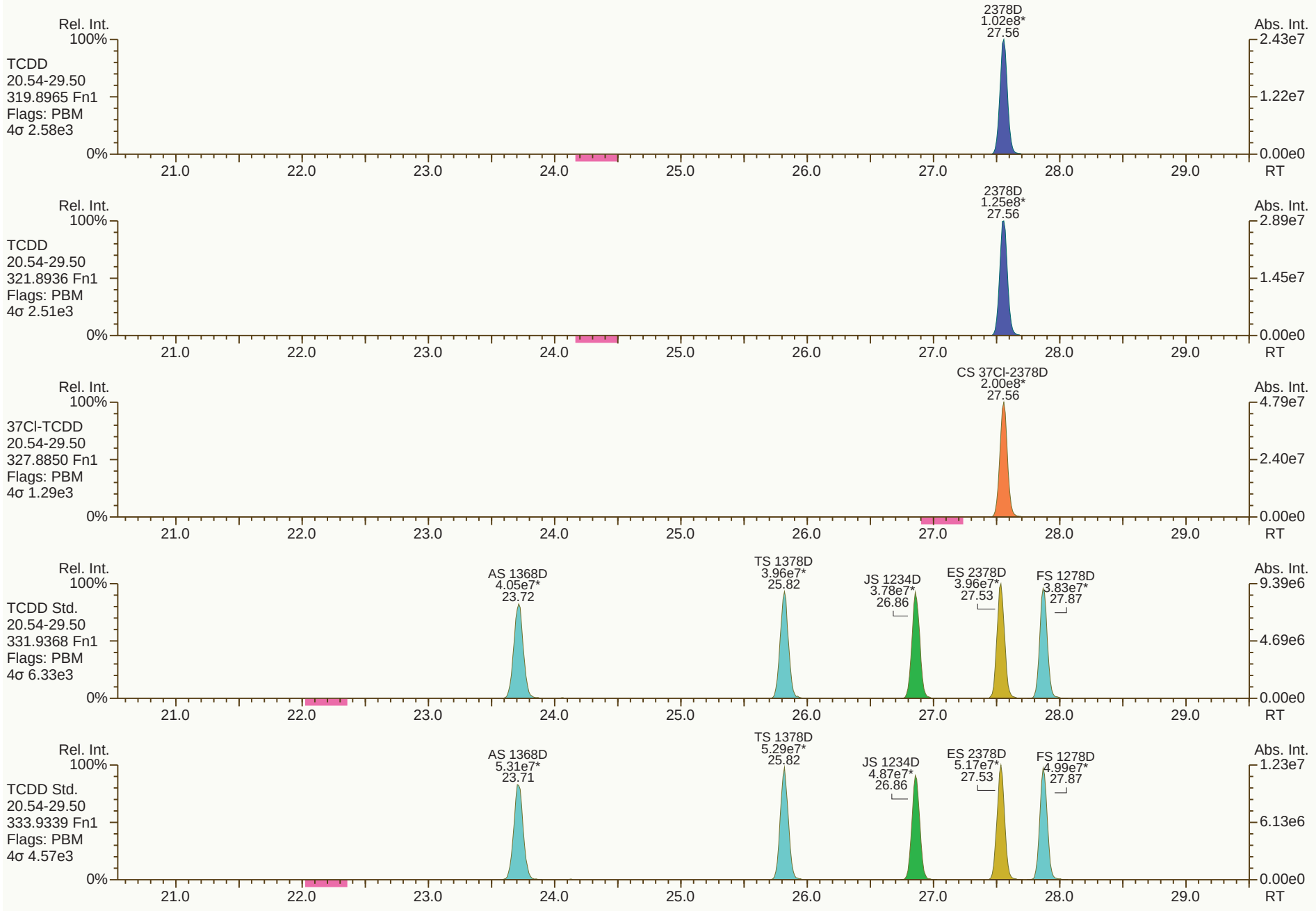
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 8790, 9665 *Revised: 15-Jun-2020 08:21 (PSW) Printed: 17-Jun-2020 08:05*

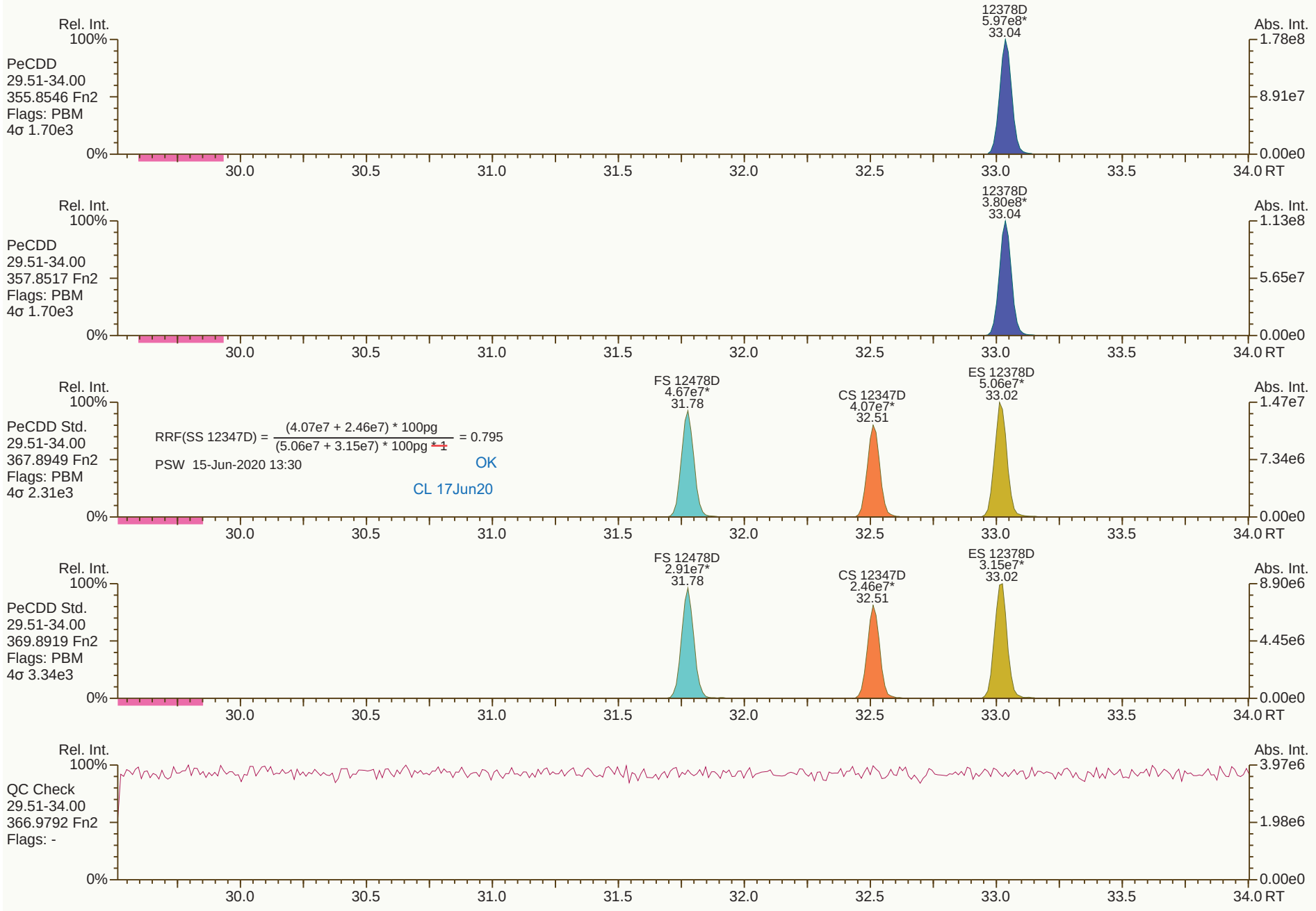
Dioxin/Furan QC Summary		Acq'd: 12 Jun 2020 18:24 PSW				ICAL: MM3_DF_10012020_12JUN2020	
Lab ID: CS5_200612_DF_RA		UTP: 15-Jun-2020 11:51:19 PSW				Checkcode: 104-974-GYN	
Sample ID: SIL 20-281-1		Report: 15 Jun 2020 11:54 pw				Datafile: 200612R08	
Name	**RT**	**Response**	**RA**	**OK**	**Ref. RRFs**	**Calc. RRFs**	**Dev'n**
2378-TCDD	27.56	2.27E+08	0.81	Y	1.18	1.24	6%
12378-PeCDD	33.04	9.77E+08	1.57	Y	1.14	1.19	5%
123478-HxCDD	36.94	9.26E+08	1.26	Y	1.09	1.14	5%
123678-HxCDD	37.05	9.44E+08	1.25	Y	1.13	1.20	6%
123789-HxCDD	37.36	9.89E+08	1.24	Y	1.05	1.09	4%
1234678-HpCDD	40.11	7.97E+08	1.04	Y	0.98	1.04	5%
OCDD	42.56	1.21E+09	0.89	Y	1.08	1.14	6%
2378-TCDF	26.65	3.13E+08	0.77	Y	0.98	1.05	7%
12378-PeCDF	31.56	1.40E+09	1.55	Y	0.95	1.00	5%
23478-PeCDF	32.69	1.38E+09	1.55	Y	0.95	1.00	6%
123478-HxCDF	35.97	1.31E+09	1.25	Y	1.20	1.25	5%
123678-HxCDF	36.11	1.37E+09	1.25	Y	1.07	1.13	5%
234678-HxCDF	36.75	1.25E+09	1.24	Y	1.10	1.13	3%
123789-HxCDF	37.74	1.13E+09	1.24	Y	1.09	1.16	6%
1234678-HpCDF	39.21	1.17E+09	1.04	Y	1.28	1.34	4%
1234789-HpCDF	40.53	9.23E+08	1.03	Y	1.27	1.31	3%
OCDF	42.73	1.44E+09	0.90	Y	1.01	1.08	7%
ES 2378-TCDD	27.53	9.13E+07	0.77	Y	1.01	1.06	5%
ES 12378-PeCDD	33.02	8.20E+07	1.61	Y	0.87	0.95	9%
ES 123478-HxCDD	36.92	8.10E+07	1.30	Y	1.10	1.13	3%
ES 123678-HxCDD	37.04	7.89E+07	1.29	Y	1.06	1.10	3%
ES 123789-HxCDD	37.34	9.05E+07	1.28	Y	1.22	1.26	3%
ES 1234678-HpCDD	40.1	7.68E+07	1.09	Y	0.99	1.07	8%
ES OCDD	42.55	1.06E+08	0.92	Y	0.67	0.74	10%
ES 2378-TCDF	26.63	1.49E+08	0.79	Y	1.01	1.03	1%
ES 12378-PeCDF	31.54	1.40E+08	1.56	Y	0.90	0.97	7%
ES 23478-PeCDF	32.67	1.38E+08	1.56	Y	0.89	0.95	7%
ES 123478-HxCDF	35.95	1.05E+08	0.53	Y	1.43	1.45	2%
ES 123678-HxCDF	36.09	1.22E+08	0.51	Y	1.63	1.69	4%
ES 234678-HxCDF	36.74	1.11E+08	0.52	Y	1.48	1.54	4%
ES 123789-HxCDF	37.72	9.75E+07	0.53	Y	1.29	1.35	5%
ES 1234678-HpCDF	39.2	8.77E+07	0.44	Y	1.15	1.22	6%
ES 1234789-HpCDF	40.53	7.06E+07	0.44	Y	0.91	0.98	8%
ES OCDF	42.72	1.33E+08	0.90	Y	0.83	0.93	12%

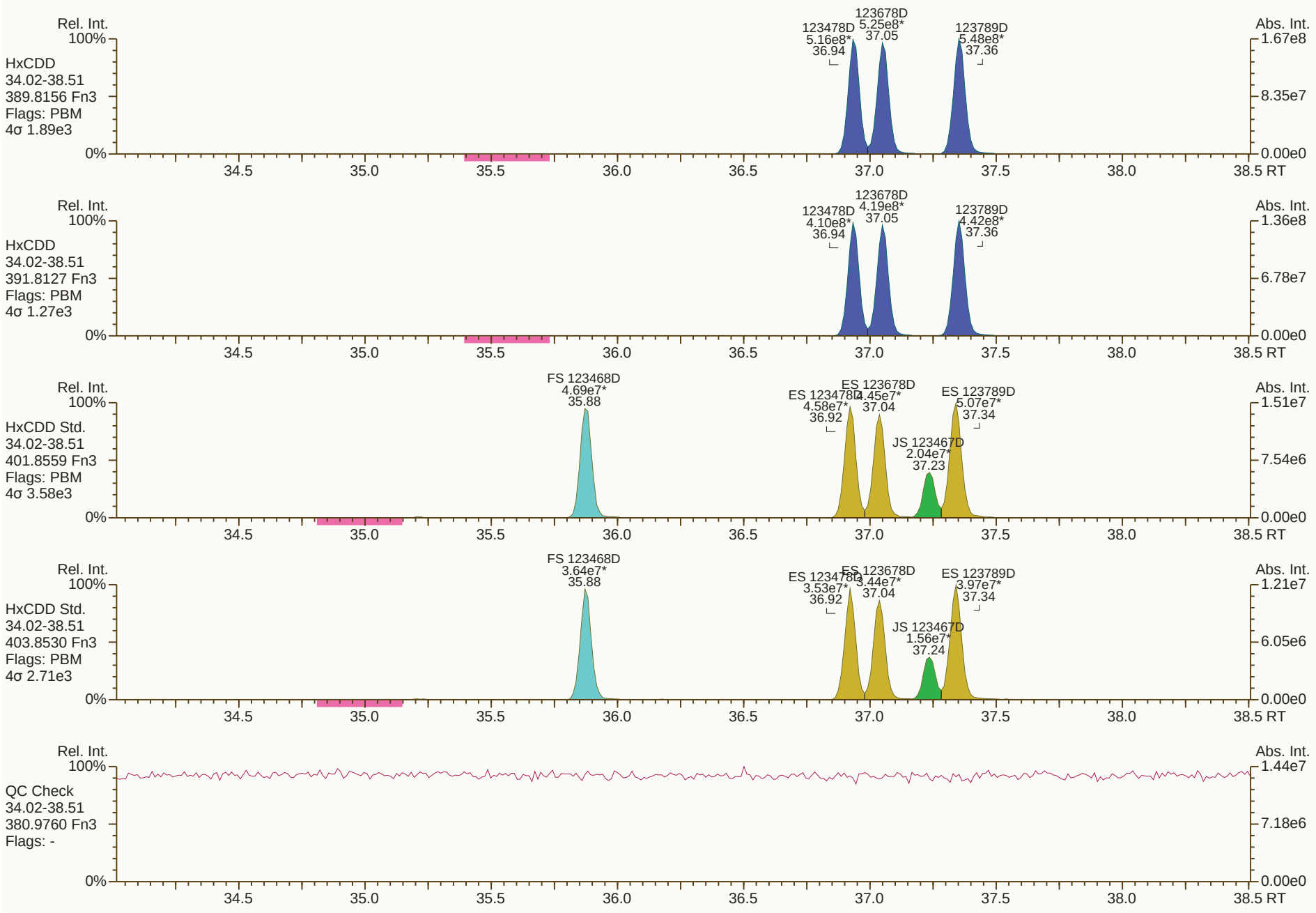
Dioxin/Furan QC Summary	Acq'd: 12 Jun 2020 18:24 PSW	ICAL: MM3_DF_10012020_12JUN2020
Lab ID: CS5_200612_DF_RA	UTP: 15-Jun-2020 11:51:19 PSW	Checkcode: 104-974-GYN
Sample ID: SIL 20-281-1	Report: 15 Jun 2020 11:54 pw	Datafile: 200612R08

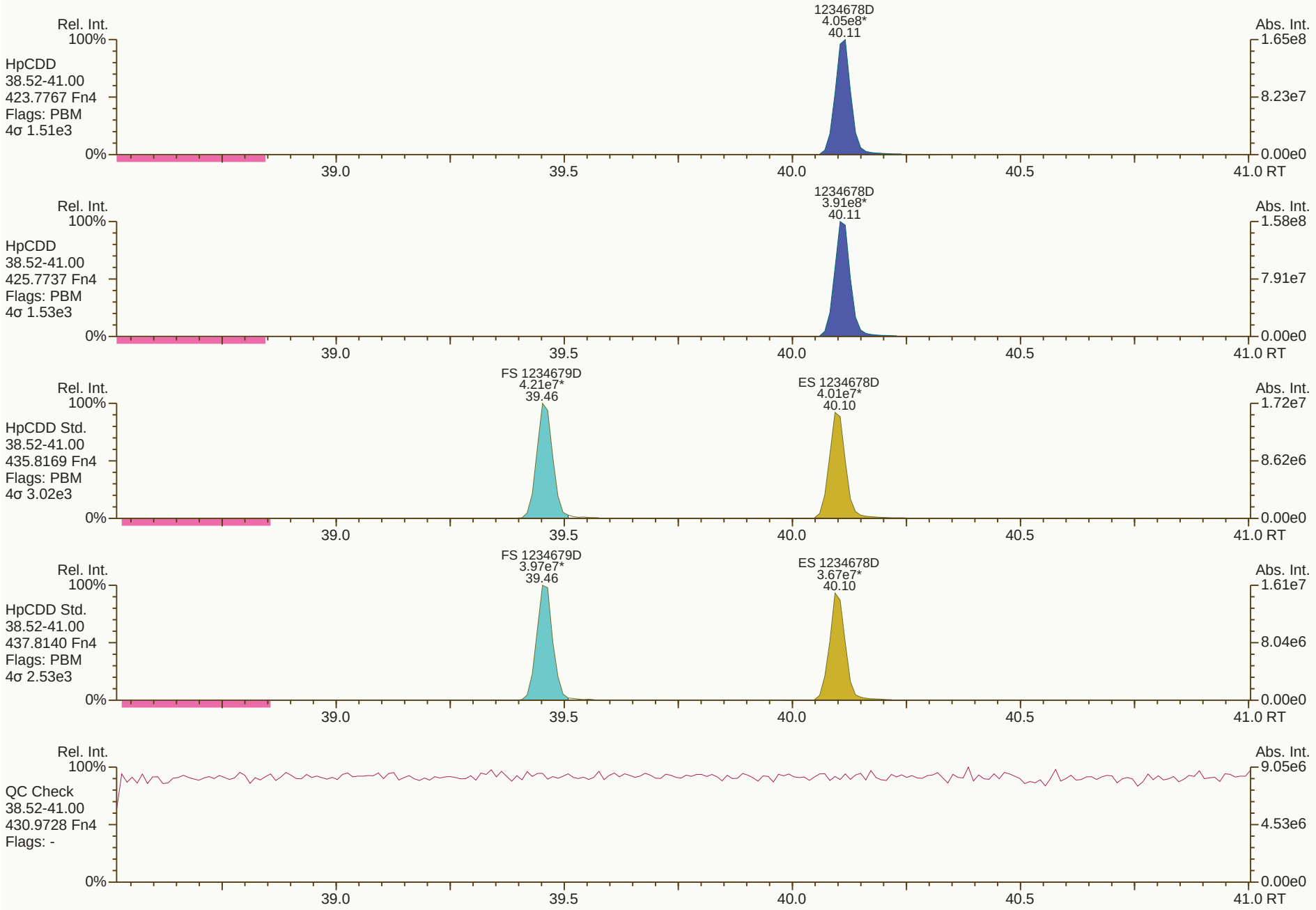
Name	RT	Response	RA	OK	Ref. RRFs	Calc. RRFs	Dev'n
JS 1234-TCDD	26.86	8.64E+07	0.78	Y	-	-	-
JS 1234-TCDF	25.22	1.45E+08	0.79	Y	-	-	-
JS 123467-HxCDD	37.23	3.60E+07	1.31	Y	-	-	-
CS 37Cl-2378-TCDD	27.56	2.00E+08	n/a	-	1.04	1.16	12%
CS 12347-PeCDD	32.51	6.53E+07	1.65	Y	0.74	0.76	2%
CS 12346-PeCDF	31.01	1.24E+08	1.58	Y	0.86	0.85	-1%
CS 123469-HxCDF	36.39	9.37E+07	0.52	Y	1.36	1.30	-4%
CS 1234689-HpCDF	39.60	7.63E+07	0.45	Y	1.05	1.06	1%
SS 37Cl-2378-TCDD	27.56	2.00E+08	n/a	-	1.04	1.10	6%
SS 12347-PeCDD	32.51	6.53E+07	1.65	Y	0.86	0.80	-7%
SS 12346-PeCDF	31.01	1.24E+08	1.58	Y	0.96	0.88	-8%
SS 123469-HxCDF	36.39	9.37E+07	0.52	Y	0.83	0.77	-8%
SS 1234689-HpCDF	39.60	7.63E+07	0.45	Y	0.92	0.87	-6%
AS 1368-TCDD	23.72	9.37E+07	0.76	Y	1.08	1.08	1%
AS 1368-TCDF	21.50	1.70E+08	0.78	Y	1.18	1.17	-1%
FS 1278-TCDD	27.87	8.82E+07	0.77	Y	1.00	0.97	-3%
FS 12478-PeCDD	31.78	7.59E+07	1.61	Y	1.00	0.92	-7%
FS 123468-HxCDD	35.88	8.33E+07	1.29	Y	1.11	1.03	-7%
FS 1234679-HpCDD	39.46	8.18E+07	1.06	Y	1.19	1.06	-11%
TS 1378-TCDD	25.82	9.25E+07	0.75	Y	1.06	1.01	-4%
OCDD-a	42.56	7.36E+07	2.50	Y	0.07	0.07	-1%
OCDF-a	42.73	8.63E+07	2.50	Y	0.06	0.06	10%

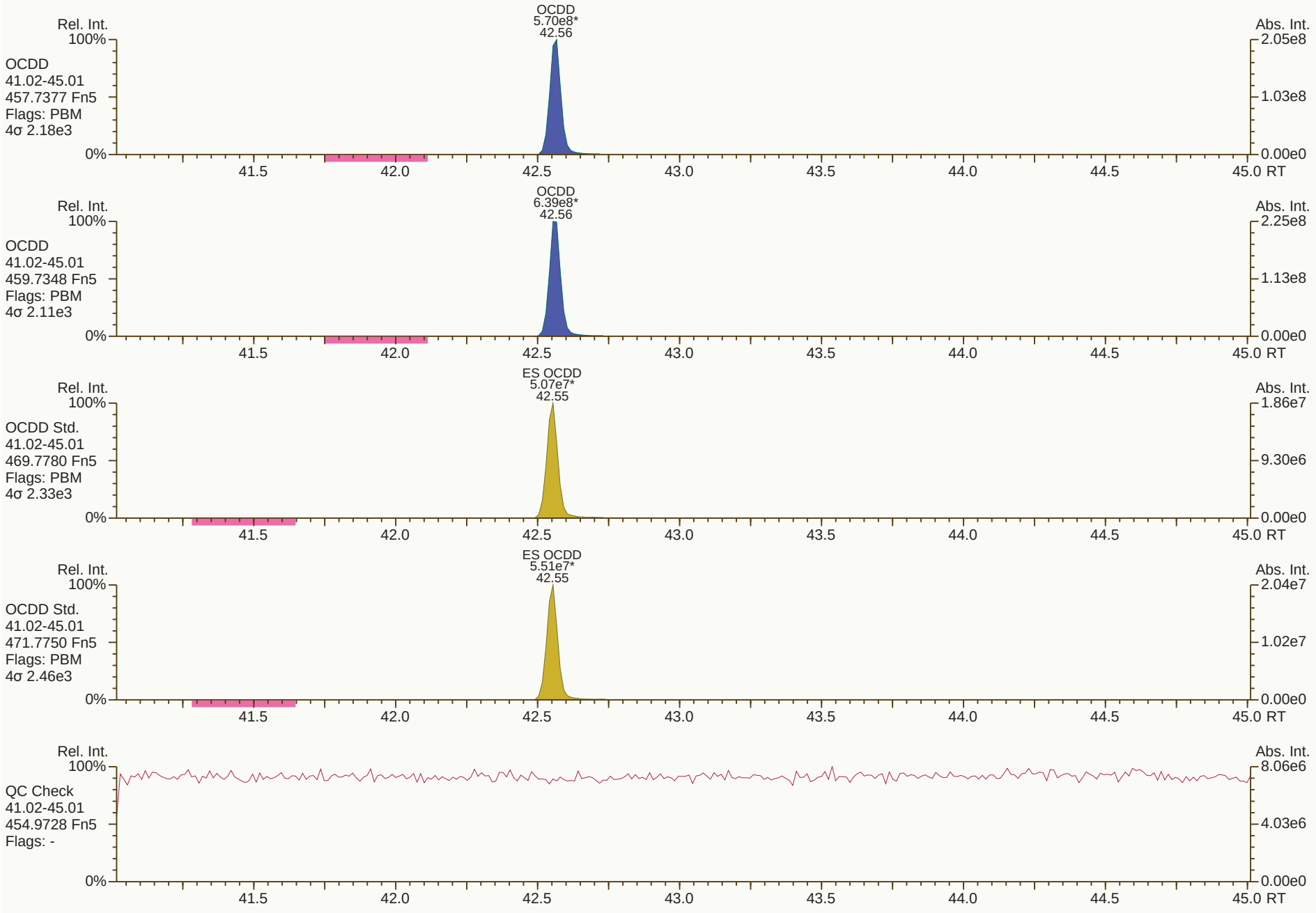

Rel. Int.
100%
QC Check
20.54-29.50
316.9824 Fn1
Flags: -
0%
Abs. Int.
5.33e6
2.67e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
QC Check
29.51-34.00
366.9792 Fn2
Flags: -
0%
Abs. Int.
3.97e6
1.98e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
QC Check
34.02-38.51
380.9760 Fn3
Flags: -
0%
Abs. Int.
1.44e7
7.18e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
QC Check
38.52-41.00
430.9728 Fn4
Flags: -
0%
Abs. Int.
9.05e6
4.53e6
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
41.02-45.01
454.9728 Fn5
Flags: -
0%
Abs. Int.
8.06e6
4.03e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT


Rel. Int.
100%
TCDD
20.54-29.50
319.8965 Fn1
Flags: PBM
4σ 2.58e3
0%
2378D
1.02e8*
27.56
Abs. Int.
2.43e7
1.22e7
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD
20.54-29.50
321.8936 Fn1
Flags: PBM
4σ 2.51e3
0%
2378D
1.25e8*
27.56
Abs. Int.
2.89e7
1.45e7
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
37Cl-TCDD
20.54-29.50
327.8850 Fn1
Flags: PBM
4σ 1.29e3
0%
CS 37Cl-2378D
2.00e8*
27.56
Abs. Int.
4.79e7
2.40e7
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
331.9368 Fn1
Flags: PBM
4σ 6.33e3
0%
AS 1368D
4.05e7*
23.72
TS 1378D
3.96e7*
25.82
JS 1234D
3.78e7*
26.86
ES 2378D
3.96e7*
27.53
FS 1278D
3.83e7*
27.87
Abs. Int.
9.39e6
4.69e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
333.9339 Fn1
Flags: PBM
4σ 4.57e3
0%
AS 1368D
5.31e7*
23.71
TS 1378D
5.29e7*
25.82
JS 1234D
4.87e7*
26.86
ES 2378D
5.17e7*
27.53
FS 1278D
4.99e7*
27.87
Abs. Int.
1.23e7
6.13e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
PeCDD
29.51-34.00
355.8546 Fn2
Flags: PBM
4σ 1.70e3
0%
12378D
5.97e8*
33.04
Abs. Int.
1.78e8
8.91e7
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
PeCDD
29.51-34.00
357.8517 Fn2
Flags: PBM
4σ 1.70e3
12378D
3.80e8*
33.04
1.13e8
5.65e7
PeCDD Std.
29.51-34.00
367.8949 Fn2
Flags: PBM
4σ 2.31e3
RRF(SS 12347D) = (4.07e7 + 2.46e7) * 100pg / (5.06e7 + 3.15e7) * 100pg * 1 = 0.795
PSW 15-Jun-2020 13:30
OK
CL 17Jun20
FS 12478D
4.67e7*
31.78
CS 12347D
4.07e7*
32.51
ES 12378D
5.06e7*
33.02
1.47e7
7.34e6
PeCDD Std.
29.51-34.00
369.8919 Fn2
Flags: PBM
4σ 3.34e3
FS 12478D
2.91e7*
31.78
CS 12347D
2.46e7*
32.51
ES 12378D
3.15e7*
33.02
8.90e6
4.45e6
QC Check
29.51-34.00
366.9792 Fn2
Flags: -
3.97e6
1.98e6

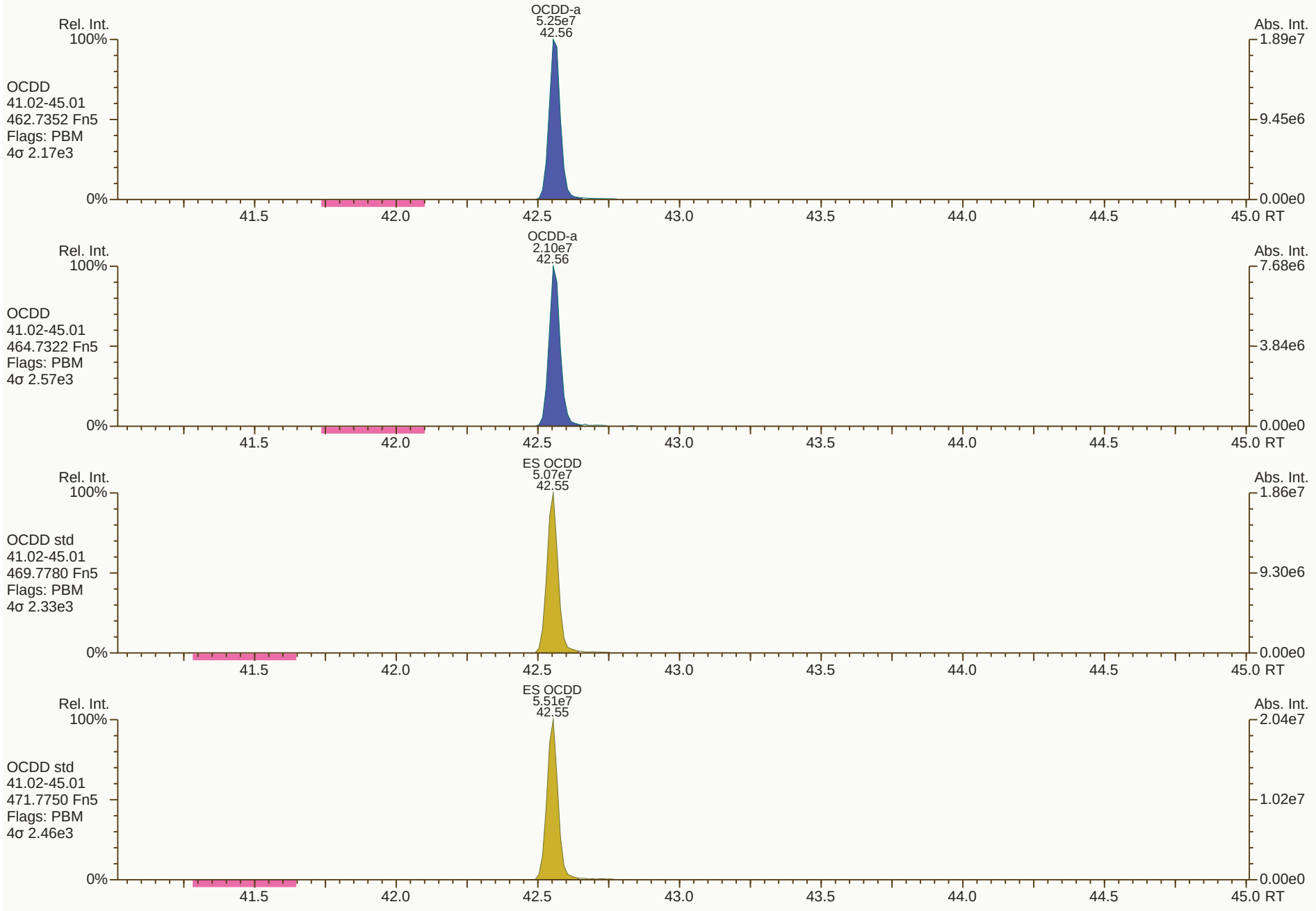

Rel. Int.
100%
HxCDD
34.02-38.51
389.8156 Fn3
Flags: PBM
4σ 1.89e3
123478D
5.16e8*
36.94
123678D
5.25e8*
37.05
123789D
5.48e8*
37.36
Abs. Int.
1.67e8
8.35e7
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDD
34.02-38.51
391.8127 Fn3
Flags: PBM
4σ 1.27e3
123478D
4.10e8*
36.94
123678D
4.19e8*
37.05
123789D
4.42e8*
37.36
Abs. Int.
1.36e8
6.78e7
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDD Std.
34.02-38.51
401.8559 Fn3
Flags: PBM
4σ 3.58e3
FS 123468D
4.69e7*
35.88
ES 123478D
4.58e7*
36.92
ES 123678D
4.45e7*
37.04
JS 123467D
2.04e7*
37.23
ES 123789D
5.07e7*
37.34
Abs. Int.
1.51e7
7.54e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDD Std.
34.02-38.51
403.8530 Fn3
Flags: PBM
4σ 2.71e3
FS 123468D
3.64e7*
35.88
ES 123478D
3.53e7*
36.92
ES 123678D
3.44e7*
37.04
JS 123467D
1.56e7*
37.24
ES 123789D
3.97e7*
37.34
Abs. Int.
1.21e7
6.05e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
QC Check
34.02-38.51
380.9760 Fn3
Flags: -
Abs. Int.
1.44e7
7.18e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT


Rel. Int.
100%
HpCDD
38.52-41.00
423.7767 Fn4
Flags: PBM
4σ 1.51e3
1234678D
4.05e8*
40.11
Abs. Int.
1.65e8
8.23e7
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.52-41.00
425.7737 Fn4
Flags: PBM
4σ 1.53e3
1234678D
3.91e8*
40.11
Abs. Int.
1.58e8
7.91e7
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.52-41.00
435.8169 Fn4
Flags: PBM
4σ 3.02e3
FS 1234679D
4.21e7*
39.46
ES 1234678D
4.01e7*
40.10
Abs. Int.
1.72e7
8.62e6
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.52-41.00
437.8140 Fn4
Flags: PBM
4σ 2.53e3
FS 1234679D
3.97e7*
39.46
ES 1234678D
3.67e7*
40.10
Abs. Int.
1.61e7
8.04e6
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.52-41.00
430.9728 Fn4
Flags: -
Abs. Int.
9.05e6
4.53e6
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT


OCDD
5.70e8*
42.56
Rel. Int.
100%
OCDD
41.02-45.01
457.7377 Fn5
Flags: PBM
4σ 2.18e3
0%
Abs. Int.
2.05e8
1.03e8
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDD
6.39e8*
42.56
Rel. Int.
100%
OCDD
41.02-45.01
459.7348 Fn5
Flags: PBM
4σ 2.11e3
0%
Abs. Int.
2.25e8
1.13e8
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
5.07e7*
42.55
Rel. Int.
100%
OCDD Std.
41.02-45.01
469.7780 Fn5
Flags: PBM
4σ 2.33e3
0%
Abs. Int.
1.86e7
9.30e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
5.51e7*
42.55
Rel. Int.
100%
OCDD Std.
41.02-45.01
471.7750 Fn5
Flags: PBM
4σ 2.46e3
0%
Abs. Int.
2.04e7
1.02e7
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
QC Check
41.02-45.01
454.9728 Fn5
Flags: -
0%
Abs. Int.
8.06e6
4.03e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

SGS ID: CS5_200612_DF_RA | Sample ID: SIL 20-281-1 | Acq: 12-Jun-2020 18:24:22

Instr: [ILM] AutoSpec-Ultima MM3 | VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 10 | User: PSW Datafile: 200612R08



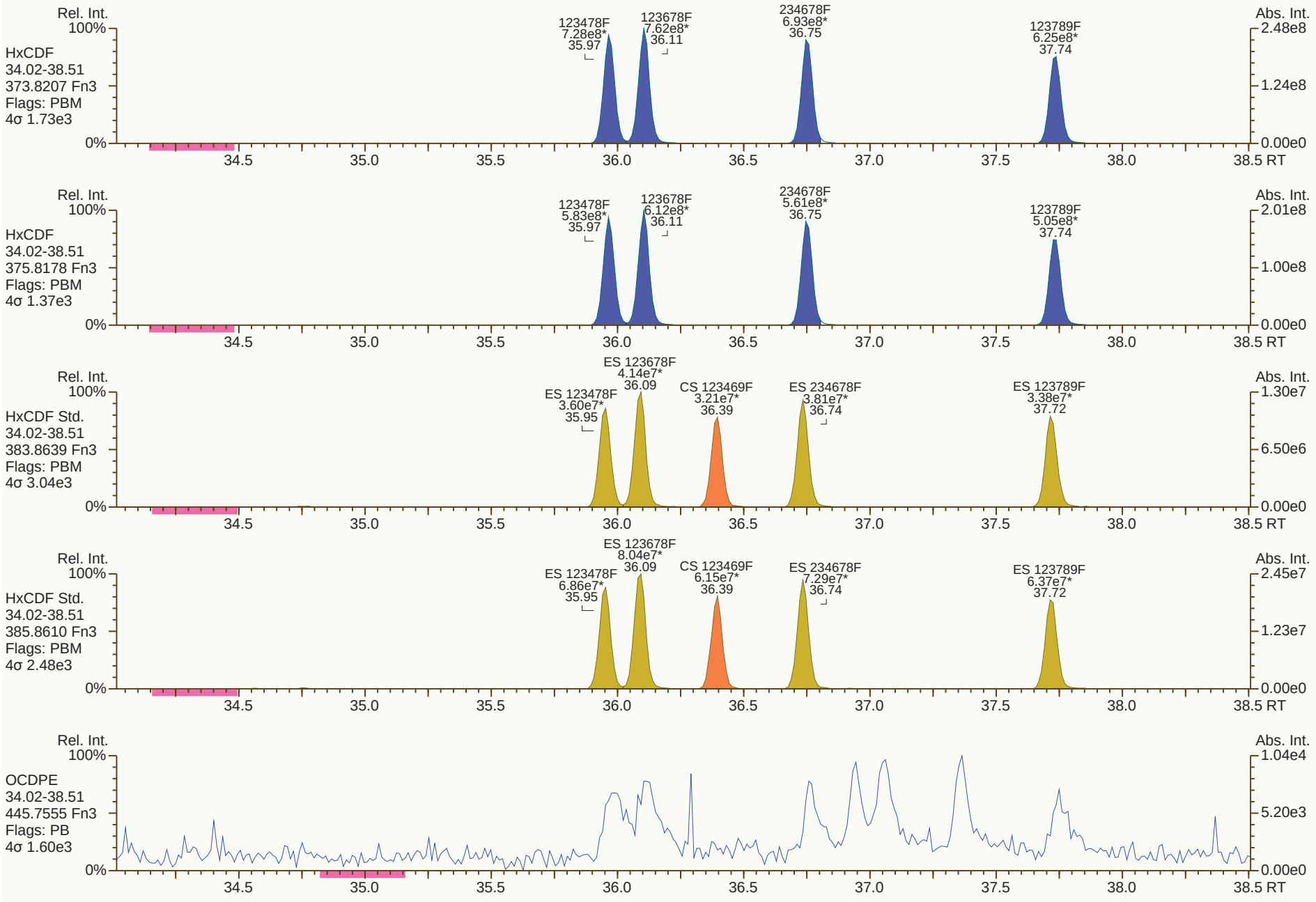
Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS5_200612_DF_RA.utp_res, saved 15-Jun-2020 13:31 (PSW) *Peak annotation: Areas, Centroids*

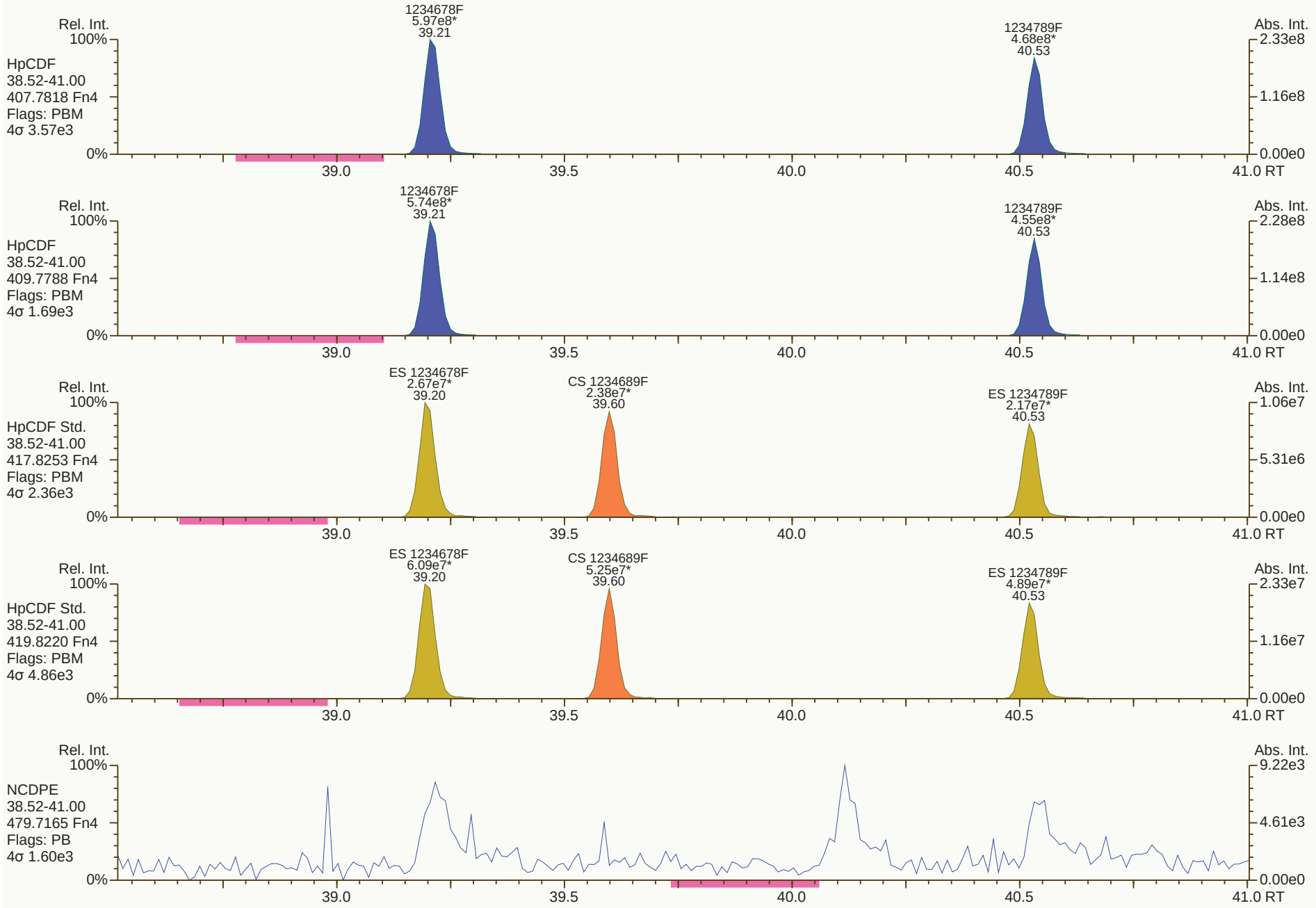
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 9146, 8773 *Revised: 15-Jun-2020 11:51 (PSW) Printed: 17-Jun-2020 08:05*

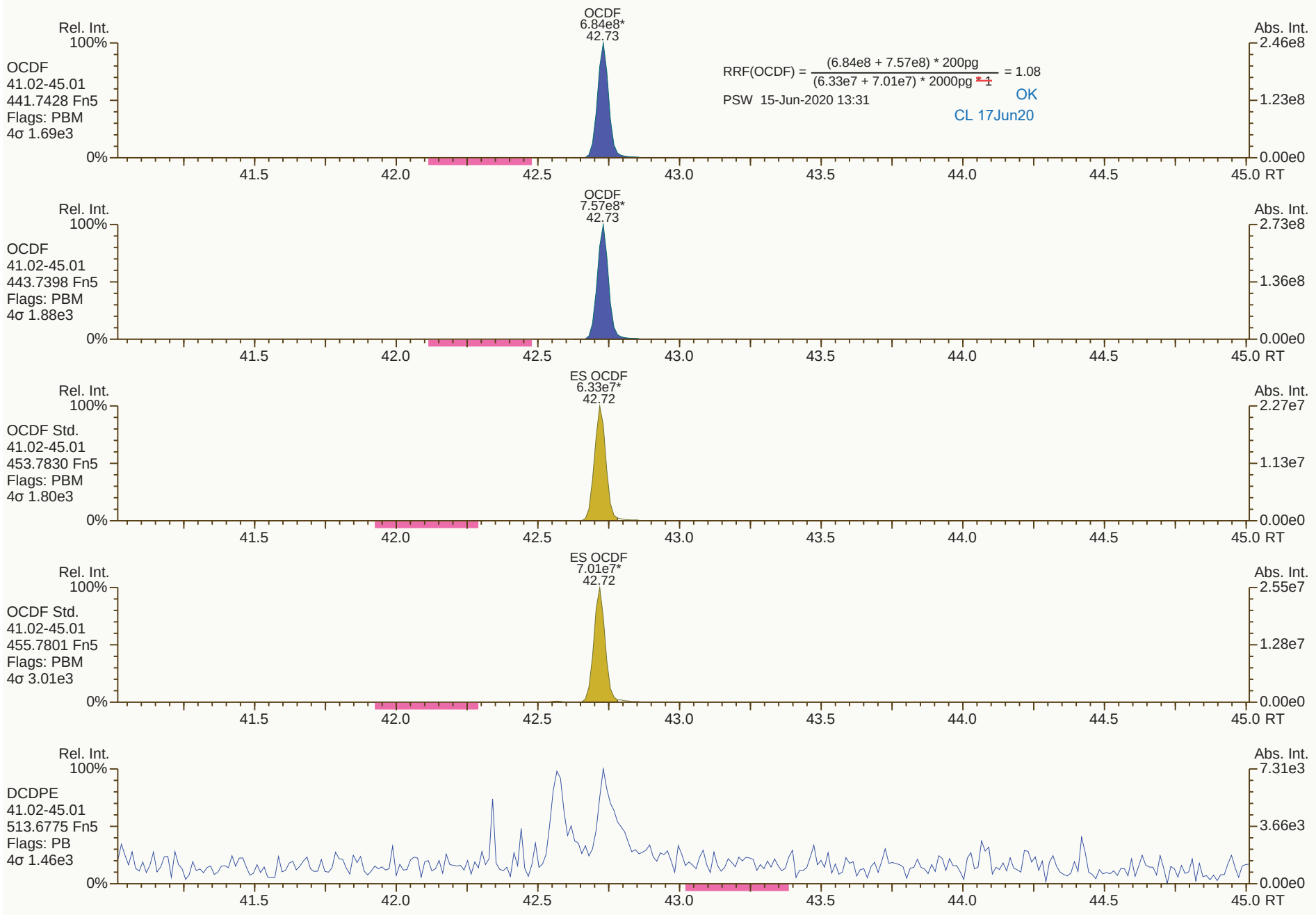

Rel. Int.
100%
TCDF
20.54-29.50
303.9016 Fn1
Flags: PBM
4σ 2.41e3
0%
2378F
1.36e8*
26.65
Abs. Int.
3.06e7
1.53e7
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF
20.54-29.50
305.8987 Fn1
Flags: PBM
4σ 2.01e3
0%
2378F
1.76e8*
26.65
Abs. Int.
3.98e7
1.99e7
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
315.9419 Fn1
Flags: PBM
4σ 1.57e4
0%
AS 1368F
7.46e7*
21.50
JS 1234F
6.40e7*
25.22
ES 2378F
6.55e7*
26.63
Abs. Int.
1.50e7
7.49e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
317.9389 Fn1
Flags: PBM
4σ 8.67e3
0%
AS 1368F
9.50e7*
21.50
JS 1234F
8.10e7*
25.22
ES 2378F
8.33e7*
26.62
Abs. Int.
1.83e7
9.15e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
HxCDPE
20.54-29.50
375.8364 Fn1
Flags: PB
4σ 1.48e3
0%
Abs. Int.
8.16e3
4.08e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
0%
Abs. Int.
9.49e3
4.75e3
0.00e0
PeCDF-1
20.54-29.50
339.8597 Fn1
Flags: PB
4σ 2.09e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
0%
Abs. Int.
2.15e4
1.08e4
0.00e0
PeCDF-1
20.54-29.50
341.8568 Fn1
Flags: PB
4σ 2.44e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
0%
Abs. Int.
5.33e6
2.67e6
0.00e0
QC Check
20.54-29.50
316.9824 Fn1
Flags: -
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
PeCDF-2
29.51-34.00
339.8597 Fn2
Flags: PBM
4σ 2.25e3
0%
12378F
8.50e8*
31.56
23478F
8.37e8*
32.69
Abs. Int.
2.51e8
1.25e8
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF-2
29.51-34.00
341.8568 Fn2
Flags: PBM
4σ 1.72e3
0%
12378F
5.49e8*
31.56
23478F
5.41e8*
32.68
Abs. Int.
1.62e8
8.09e7
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.00
351.9000 Fn2
Flags: PBM
4σ 2.76e3
0%
CS 12346F
7.57e7*
31.01
ES 12378F
8.53e7*
31.54
ES 23478F
8.38e7*
32.67
Abs. Int.
2.42e7
1.21e7
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.00
353.8970 Fn2
Flags: PBM
4σ 4.14e3
0%
CS 12346F
4.79e7*
31.01
ES 12378F
5.48e7*
31.54
ES 23478F
5.38e7*
32.67
Abs. Int.
1.54e7
7.70e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
HpCDPE
29.51-34.00
409.7974 Fn2
Flags: PB
4σ 1.56e3
0%
Abs. Int.
1.55e4
7.77e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT

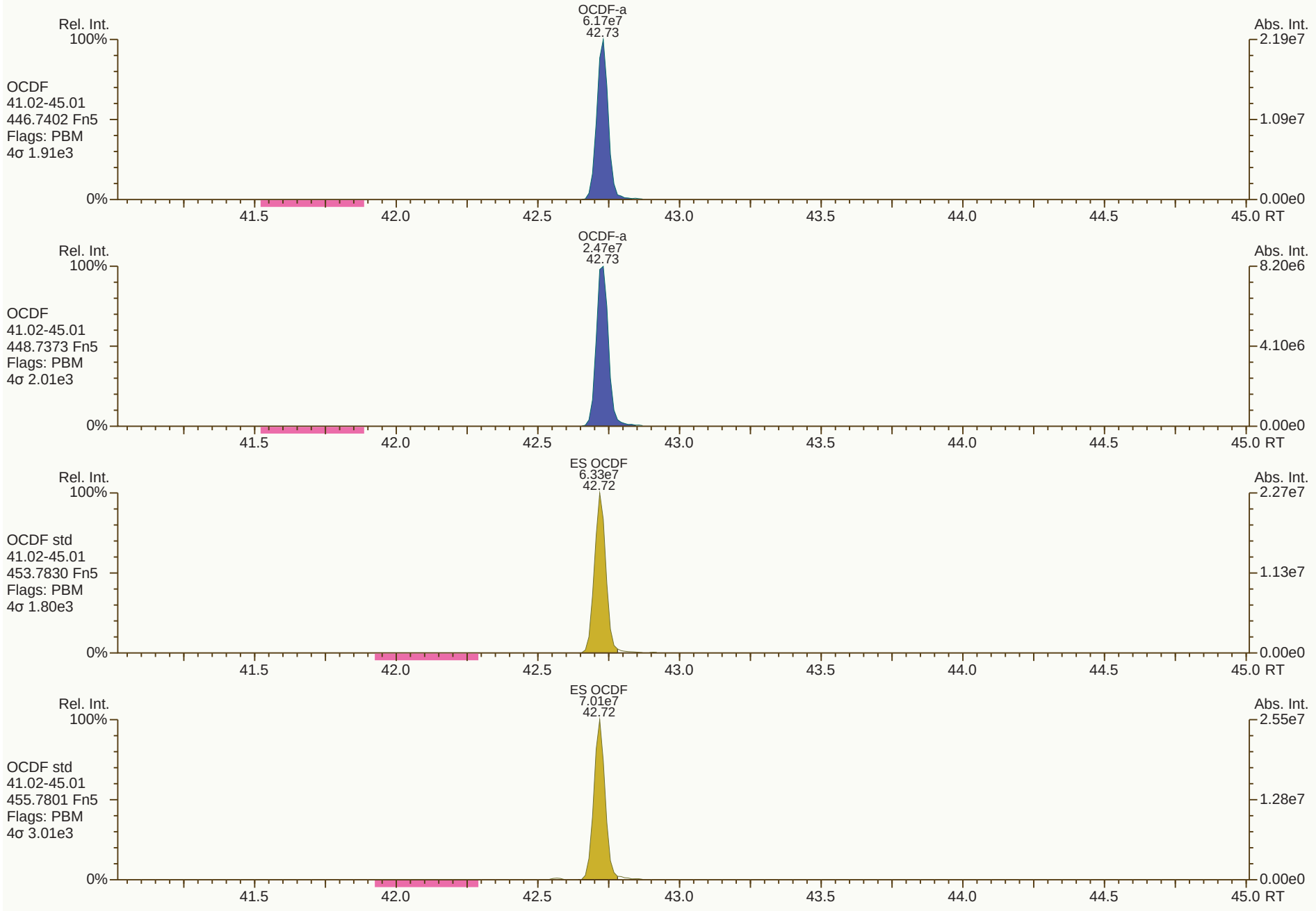

Rel. Int.
100%
HxCDF
34.02-38.51
373.8207 Fn3
Flags: PBM
4σ 1.73e3
0%
123478F
7.28e8*
35.97
123678F
7.62e8*
36.11
234678F
6.93e8*
36.75
123789F
6.25e8*
37.74
Abs. Int.
2.48e8
1.24e8
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDF
34.02-38.51
375.8178 Fn3
Flags: PBM
4σ 1.37e3
0%
123478F
5.83e8*
35.97
123678F
6.12e8*
36.11
234678F
5.61e8*
36.75
123789F
5.05e8*
37.74
Abs. Int.
2.01e8
1.00e8
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDF Std.
34.02-38.51
383.8639 Fn3
Flags: PBM
4σ 3.04e3
0%
ES 123678F
4.14e7*
36.09
ES 123478F
3.60e7*
35.95
CS 123469F
3.21e7*
36.39
ES 234678F
3.81e7*
36.74
ES 123789F
3.38e7*
37.72
Abs. Int.
1.30e7
6.50e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDF Std.
34.02-38.51
385.8610 Fn3
Flags: PBM
4σ 2.48e3
0%
ES 123678F
8.04e7*
36.09
ES 123478F
6.86e7*
35.95
CS 123469F
6.15e7*
36.39
ES 234678F
7.29e7*
36.74
ES 123789F
6.37e7*
37.72
Abs. Int.
2.45e7
1.23e7
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
OCDPE
34.02-38.51
445.7555 Fn3
Flags: PB
4σ 1.60e3
0%
Abs. Int.
1.04e4
5.20e3
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT


Rel. Int.
100%
HpCDF
38.52-41.00
407.7818 Fn4
Flags: PBM
4σ 3.57e3
1234678F
5.97e8*
39.21
1234789F
4.68e8*
40.53
Abs. Int.
2.33e8
1.16e8
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF
38.52-41.00
409.7788 Fn4
Flags: PBM
4σ 1.69e3
1234678F
5.74e8*
39.21
1234789F
4.55e8*
40.53
Abs. Int.
2.28e8
1.14e8
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.52-41.00
417.8253 Fn4
Flags: PBM
4σ 2.36e3
ES 1234678F
2.67e7*
39.20
CS 1234689F
2.38e7*
39.60
ES 1234789F
2.17e7*
40.53
Abs. Int.
1.06e7
5.31e6
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.52-41.00
419.8220 Fn4
Flags: PBM
4σ 4.86e3
ES 1234678F
6.09e7*
39.20
CS 1234689F
5.25e7*
39.60
ES 1234789F
4.89e7*
40.53
Abs. Int.
2.33e7
1.16e7
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
NCDPE
38.52-41.00
479.7165 Fn4
Flags: PB
4σ 1.60e3
Abs. Int.
9.22e3
4.61e3
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT


OCDF
6.84e8*
42.73
Rel. Int.
100%
OCDF
41.02-45.01
441.7428 Fn5
Flags: PBM
4σ 1.69e3
0%
Abs. Int.
2.46e8
1.23e8
0.00e0
RRF(OCDF) = (6.84e8 + 7.57e8) * 200pg / (6.33e7 + 7.01e7) * 2000pg * 1 = 1.08
PSW 15-Jun-2020 13:31
OK
CL 17Jun20
OCDF
7.57e8*
42.73
OCDF
41.02-45.01
443.7398 Fn5
Flags: PBM
4σ 1.88e3
2.73e8
1.36e8
ES OCDF
6.33e7*
42.72
OCDF Std.
41.02-45.01
453.7830 Fn5
Flags: PBM
4σ 1.80e3
2.27e7
1.13e7
ES OCDF
7.01e7*
42.72
OCDF Std.
41.02-45.01
455.7801 Fn5
Flags: PBM
4σ 3.01e3
2.55e7
1.28e7
DCDPE
41.02-45.01
513.6775 Fn5
Flags: PB
4σ 1.46e3
7.31e3
3.66e3
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

SGS ID: CS5_200612_DF_RA | Sample ID: SIL 20-281-1 | Acq: 12-Jun-2020 18:24:22

Instr: [ILM] AutoSpec-Ultima MM3 | VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 10 | User: PSW Datafile: 200612R08



Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS5_200612_DF_RA.utp_res, saved 15-Jun-2020 13:31 (PSW)

Peak annotation: Areas, Centroids

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 7188, 4904

Revised: 15-Jun-2020 11:51 (PSW) Printed: 17-Jun-2020 08:05

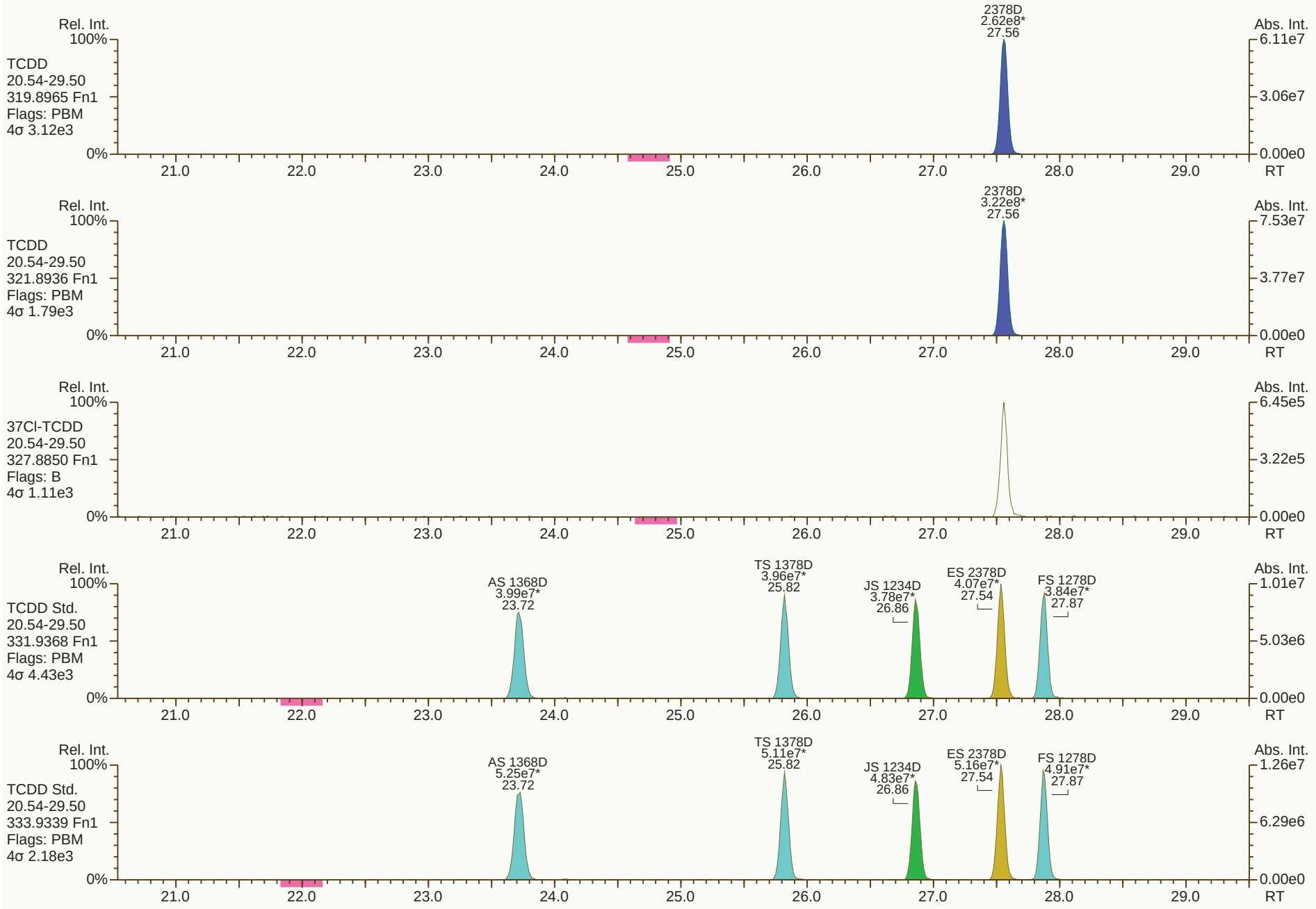
Dioxin/Furan QC Summary	Acq'd: 12 Jun 2020 20:46 PSW	ICAL: MM3_DF_10012020_12JUN2020
Lab ID: CS6_200612_DF_RA	UTP: 15-Jun-2020 11:51:53 PSW	Checkcode: 630-787-MDT
Sample ID: SIL 20-280-4	Report: 15 Jun 2020 11:54 pw	Datafile: 200612R11

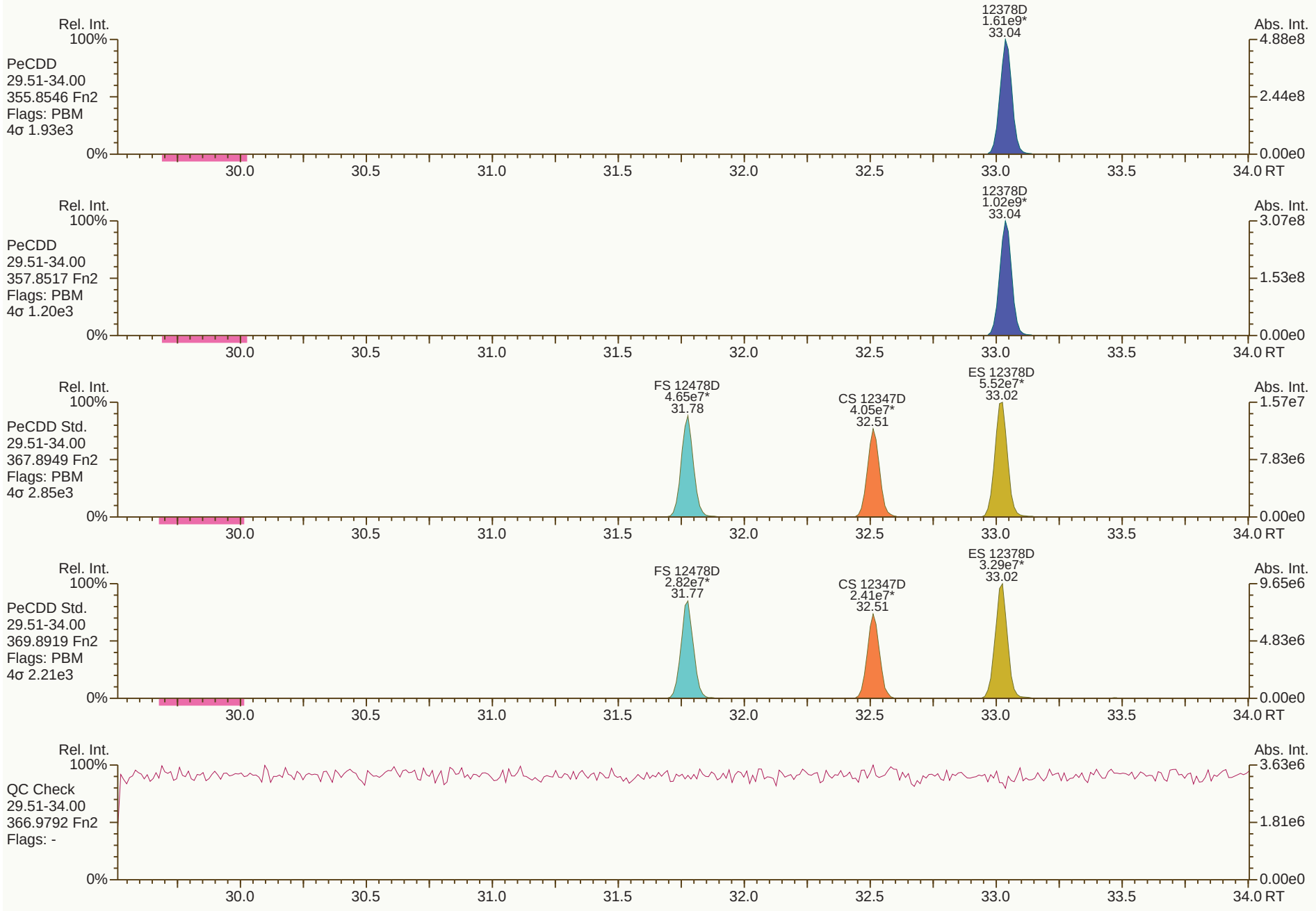
Name	RT	Response	RA	OK	Ref. RRFs	Calc. RRFs	Dev'n
2378-TCDD	27.56	5.84E+08	0.81	Y	1.18	1.27	7%
12378-PeCDD	33.04	2.64E+09	1.57	Y	1.14	1.20	5%
123478-HxCDD	36.94	2.47E+09	1.26	Y	1.09	1.15	5%
123678-HxCDD	37.05	2.55E+09	1.26	Y	1.13	1.19	6%
123789-HxCDD	37.36	2.67E+09	1.26	Y	1.05	1.10	5%
1234678-HpCDD	40.12	2.26E+09	1.04	Y	0.98	1.05	7%
OCDD	42.57	3.54E+09	0.90	Y	1.08	1.13	5%
2378-TCDF	26.65	8.06E+08	0.77	Y	0.98	1.04	6%
12378-PeCDF	31.56	3.74E+09	1.55	Y	0.95	1.00	5%
23478-PeCDF	32.69	3.66E+09	1.54	Y	0.95	0.99	5%
123478-HxCDF	35.97	3.55E+09	1.25	Y	1.20	1.25	4%
123678-HxCDF	36.11	3.73E+09	1.24	Y	1.07	1.13	5%
234678-HxCDF	36.75	3.40E+09	1.24	Y	1.10	1.15	5%
123789-HxCDF	37.74	3.15E+09	1.24	Y	1.09	1.14	4%
1234678-HpCDF	39.21	3.20E+09	1.04	Y	1.28	1.35	5%
1234789-HpCDF	40.54	2.69E+09	1.04	Y	1.27	1.34	6%
OCDF	42.74	4.30E+09	0.90	Y	1.01	1.09	8%
ES 2378-TCDD	27.54	9.23E+07	0.79	Y	1.01	1.07	6%
ES 12378-PeCDD	33.02	8.81E+07	1.68	Y	0.87	1.02	17%
ES 123478-HxCDD	36.92	8.62E+07	1.32	Y	1.10	1.20	9%
ES 123678-HxCDD	37.04	8.56E+07	1.27	Y	1.06	1.19	12%
ES 123789-HxCDD	37.34	9.73E+07	1.35	Y	1.22	1.35	11%
ES 1234678-HpCDD	40.1	8.57E+07	1.08	Y	0.99	1.19	20%
ES OCDD	42.56	1.26E+08	0.92	Y	0.67	0.87	31%
ES 2378-TCDF	26.63	1.55E+08	0.81	Y	1.01	1.07	6%
ES 12378-PeCDF	31.54	1.50E+08	1.54	Y	0.90	1.04	15%
ES 23478-PeCDF	32.67	1.48E+08	1.56	Y	0.89	1.02	15%
ES 123478-HxCDF	35.95	1.14E+08	0.52	Y	1.43	1.58	11%
ES 123678-HxCDF	36.09	1.32E+08	0.53	Y	1.63	1.84	13%
ES 234678-HxCDF	36.74	1.18E+08	0.55	Y	1.48	1.64	11%
ES 123789-HxCDF	37.72	1.11E+08	0.54	Y	1.29	1.54	19%
ES 1234678-HpCDF	39.2	9.49E+07	0.46	Y	1.15	1.32	15%
ES 1234789-HpCDF	40.53	8.02E+07	0.44	Y	0.91	1.11	23%
ES OCDF	42.73	1.58E+08	0.90	Y	0.83	1.10	32%

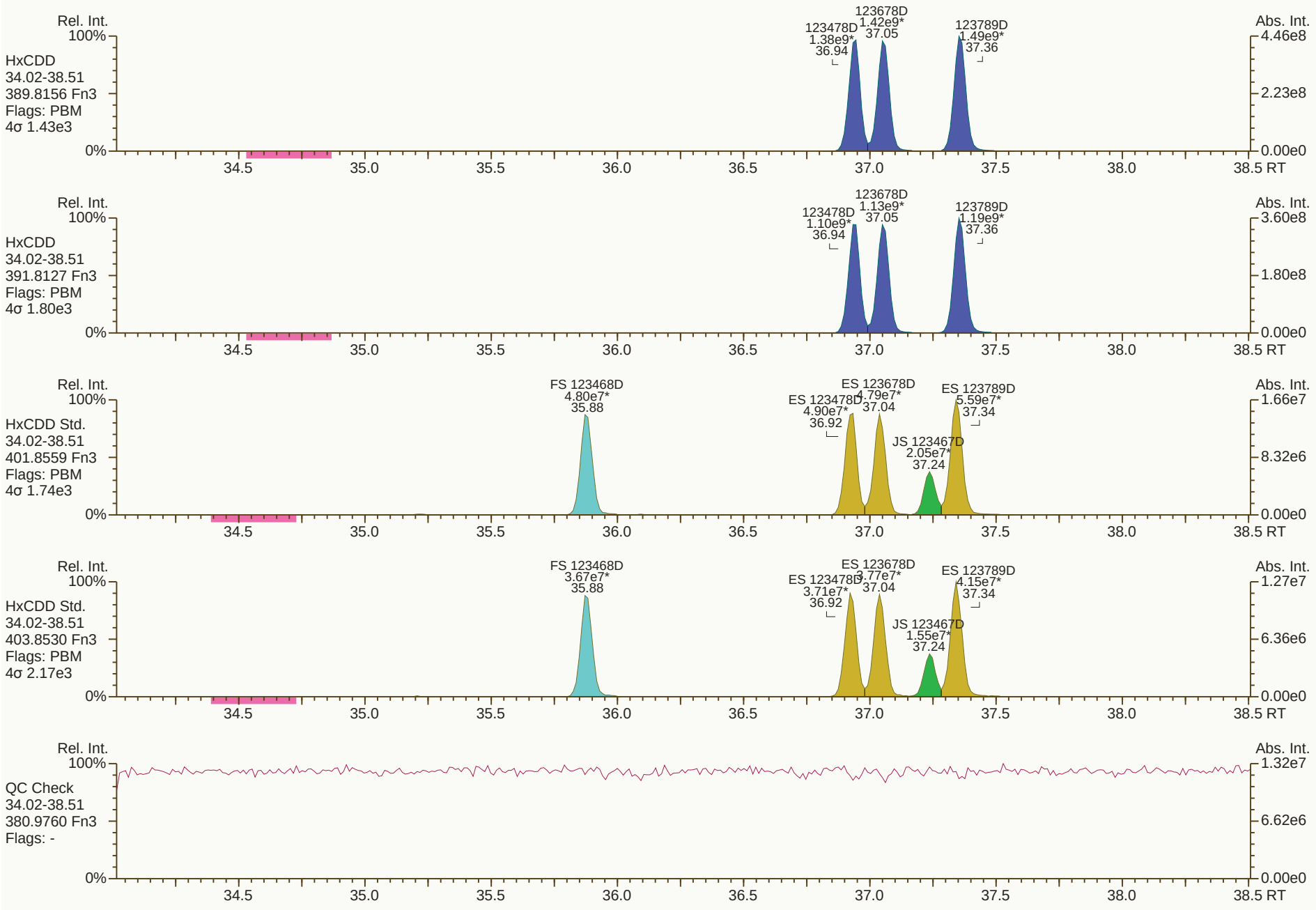
Dioxin/Furan QC Summary	Acq'd: 12 Jun 2020 20:46 PSW	ICAL: MM3_DF_10012020_12JUN2020
Lab ID: CS6_200612_DF_RA	UTP: 15-Jun-2020 11:51:53 PSW	Checkcode: 630-787-MDT
Sample ID: SIL 20-280-4	Report: 15 Jun 2020 11:54 pw	Datafile: 200612R11

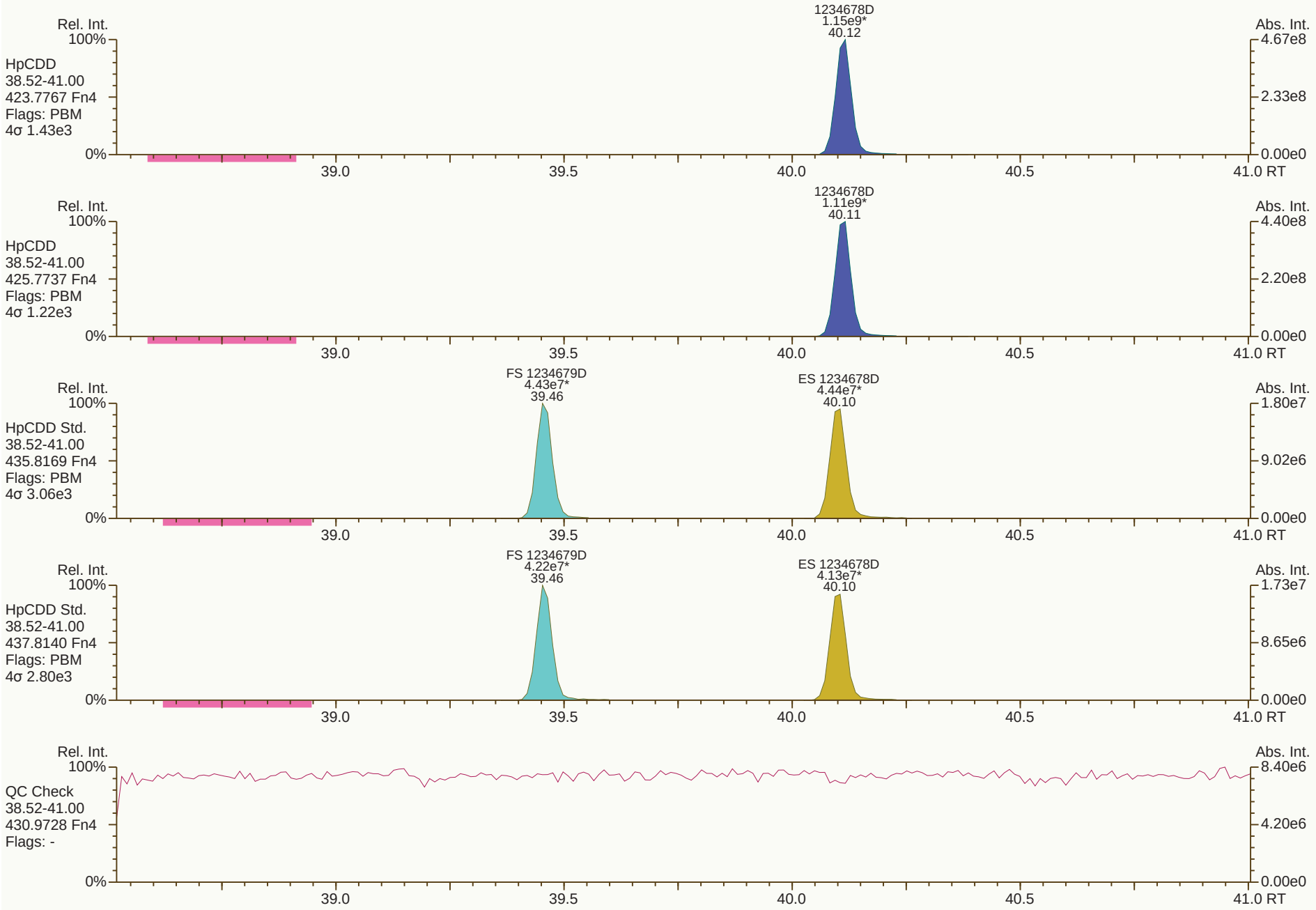
Name	RT	Response	RA	OK	Ref. RRFs	Calc. RRFs	Dev'n
JS 1234-TCDD	26.86	8.61E+07	0.78	Y	-	-	-
JS 1234-TCDF	25.22	1.44E+08	0.79	Y	-	-	-
JS 123467-HxCDD	37.24	3.60E+07	1.33	Y	-	-	-
CS 37Cl-2378-TCDD	NotFnd		n/a	-	1.04		
CS 12347-PeCDD	32.51	6.46E+07	1.68	Y	0.74	0.75	1%
CS 12346-PeCDF	31.01	1.25E+08	1.60	Y	0.86	0.87	1%
CS 123469-HxCDF	36.39	9.59E+07	0.53	Y	1.36	1.33	-2%
CS 1234689-HpCDF	39.60	7.85E+07	0.45	Y	1.05	1.09	4%
SS 37Cl-2378-TCDD	NotFnd		n/a	-	1.04		
SS 12347-PeCDD	32.51	6.46E+07	1.68	Y	0.86	0.73	-14%
SS 12346-PeCDF	31.01	1.25E+08	1.60	Y	0.96	0.84	-13%
SS 123469-HxCDF	36.39	9.59E+07	0.53	Y	0.83	0.73	-13%
SS 1234689-HpCDF	39.60	7.85E+07	0.45	Y	0.92	0.83	-10%
AS 1368-TCDD	23.72	9.24E+07	0.76	Y	1.08	1.07	0%
AS 1368-TCDF	21.50	1.70E+08	0.78	Y	1.18	1.18	0%
FS 1278-TCDD	27.87	8.75E+07	0.78	Y	1.00	0.95	-5%
FS 12478-PeCDD	31.78	7.48E+07	1.65	Y	1.00	0.85	-15%
FS 123468-HxCDD	35.88	8.47E+07	1.31	Y	1.11	0.98	-12%
FS 1234679-HpCDD	39.46	8.66E+07	1.05	Y	1.19	1.01	-15%
TS 1378-TCDD	25.82	9.07E+07	0.78	Y	1.06	0.98	-7%
OCDD-a	42.57	2.17E+08	2.55	Y	0.07	0.07	-2%
OCDF-a	42.74	2.58E+08	2.55	Y	0.06	0.07	12%

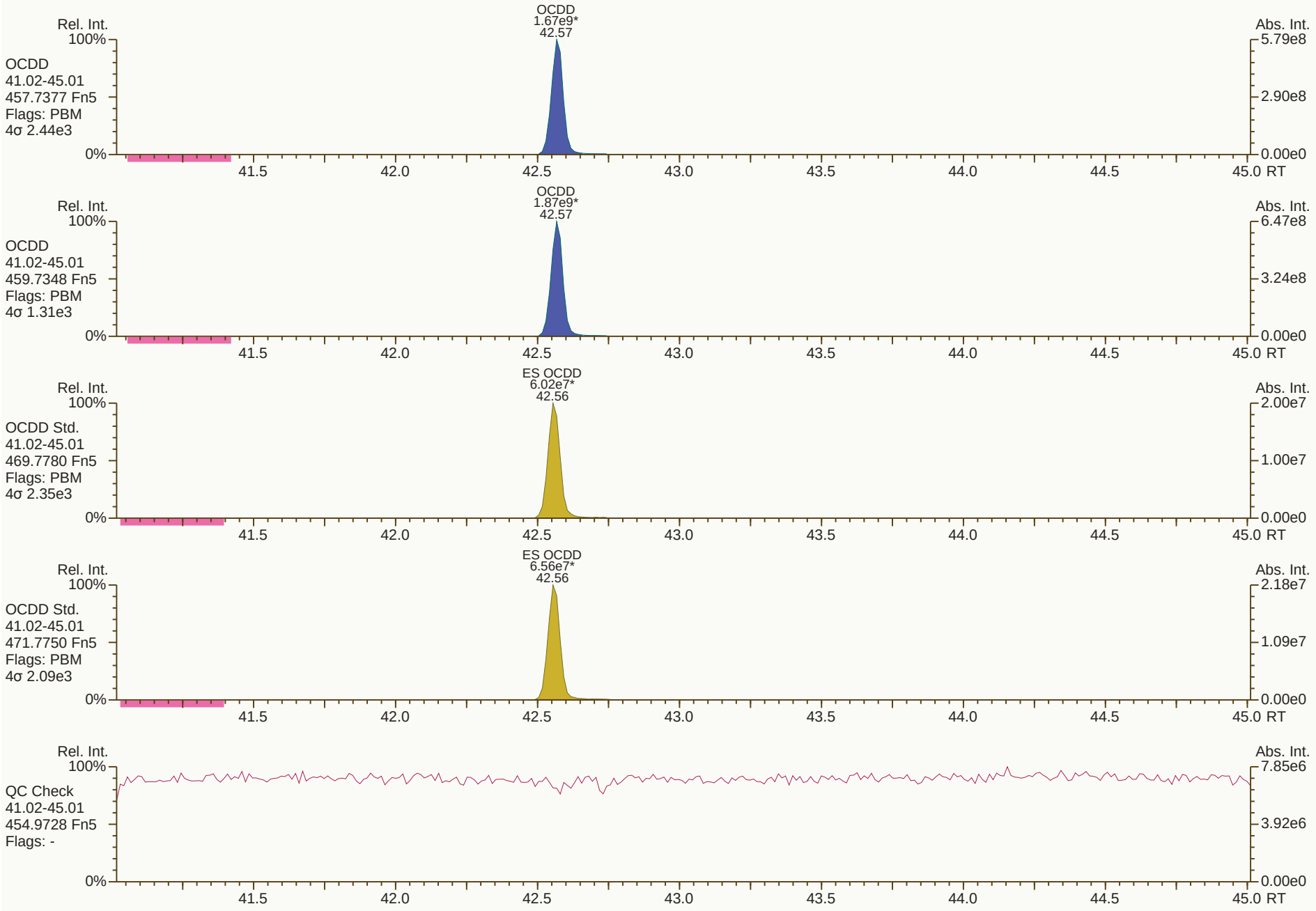

Rel. Int.
100%
QC Check
20.54-29.50
316.9824 Fn1
Flags: -
0%
Abs. Int.
4.88e6
2.44e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
QC Check
29.51-34.00
366.9792 Fn2
Flags: -
0%
Abs. Int.
3.63e6
1.81e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
QC Check
34.02-38.51
380.9760 Fn3
Flags: -
0%
Abs. Int.
1.32e7
6.62e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
QC Check
38.52-41.00
430.9728 Fn4
Flags: -
0%
Abs. Int.
8.40e6
4.20e6
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
41.02-45.01
454.9728 Fn5
Flags: -
0%
Abs. Int.
7.85e6
3.92e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT


Rel. Int.
100%
TCDD
20.54-29.50
319.8965 Fn1
Flags: PBM
4σ 3.12e3
0%
2378D
2.62e8*
27.56
Abs. Int.
6.11e7
3.06e7
0.00e0
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
TCDD
20.54-29.50
321.8936 Fn1
Flags: PBM
4σ 1.79e3
0%
2378D
3.22e8*
27.56
Abs. Int.
7.53e7
3.77e7
0.00e0
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
37Cl-TCDD
20.54-29.50
327.8850 Fn1
Flags: B
4σ 1.11e3
0%
Abs. Int.
6.45e5
3.22e5
0.00e0
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
331.9368 Fn1
Flags: PBM
4σ 4.43e3
0%
AS 1368D
3.99e7*
23.72
TS 1378D
3.96e7*
25.82
JS 1234D
3.78e7*
26.86
ES 2378D
4.07e7*
27.54
FS 1278D
3.84e7*
27.87
Abs. Int.
1.01e7
5.03e6
0.00e0
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
333.9339 Fn1
Flags: PBM
4σ 2.18e3
0%
AS 1368D
5.25e7*
23.72
TS 1378D
5.11e7*
25.82
JS 1234D
4.83e7*
26.86
ES 2378D
5.16e7*
27.54
FS 1278D
4.91e7*
27.87
Abs. Int.
1.26e7
6.29e6
0.00e0
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT


Rel. Int.
100%
PeCDD
29.51-34.00
355.8546 Fn2
Flags: PBM
4σ 1.93e3
12378D
1.61e9*
33.04
Abs. Int.
4.88e8
2.44e8
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD
29.51-34.00
357.8517 Fn2
Flags: PBM
4σ 1.20e3
12378D
1.02e9*
33.04
Abs. Int.
3.07e8
1.53e8
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.00
367.8949 Fn2
Flags: PBM
4σ 2.85e3
FS 12478D
4.65e7*
31.78
CS 12347D
4.05e7*
32.51
ES 12378D
5.52e7*
33.02
Abs. Int.
1.57e7
7.83e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.00
369.8919 Fn2
Flags: PBM
4σ 2.21e3
FS 12478D
2.82e7*
31.77
CS 12347D
2.41e7*
32.51
ES 12378D
3.29e7*
33.02
Abs. Int.
9.65e6
4.83e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
QC Check
29.51-34.00
366.9792 Fn2
Flags: -
Abs. Int.
3.63e6
1.81e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT

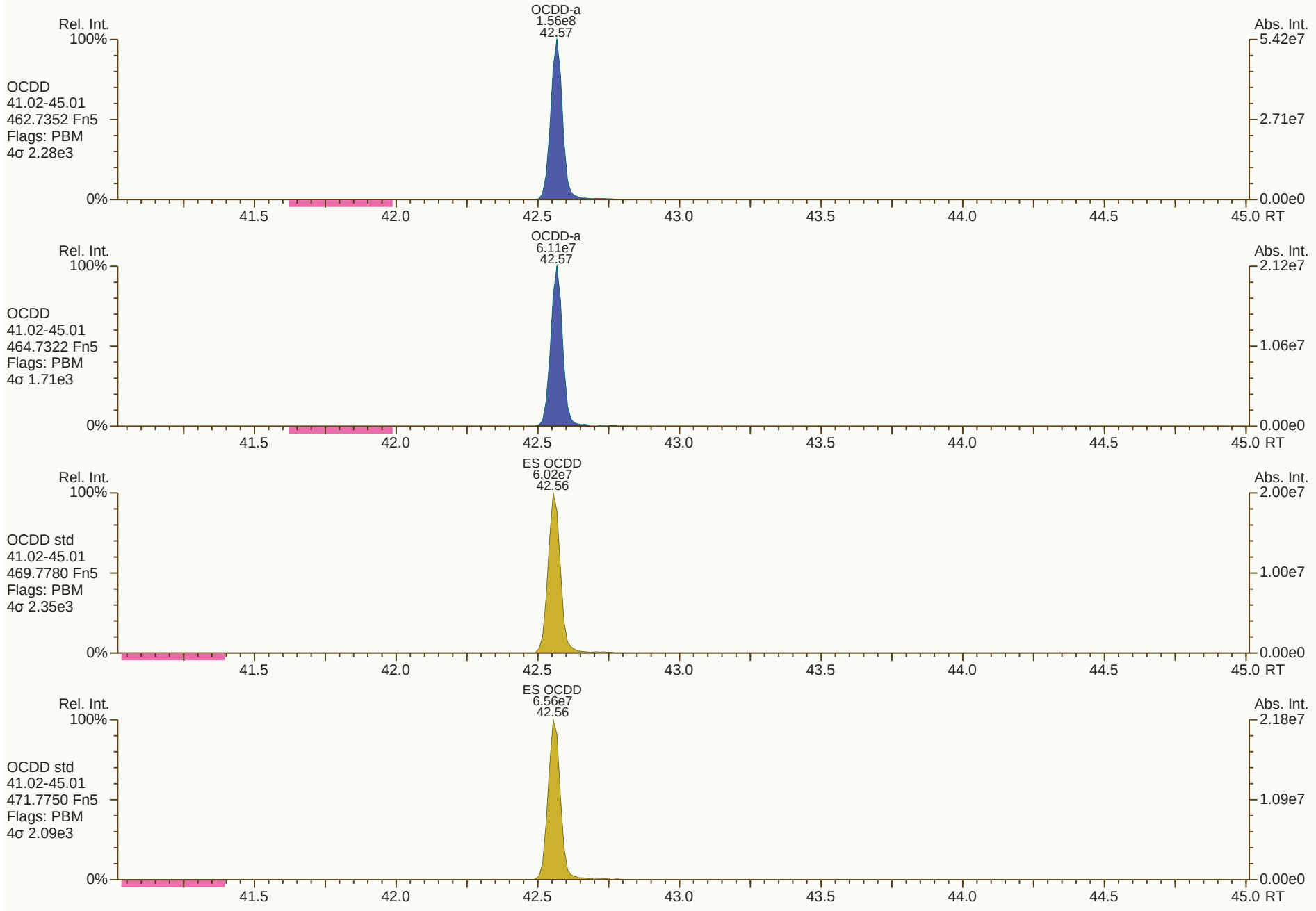

Rel. Int.
100%
HxCDD
34.02-38.51
389.8156 Fn3
Flags: PBM
4σ 1.43e3
123678D
1.42e9*
37.05
123478D
1.38e9*
36.94
123789D
1.49e9*
37.36
Abs. Int.
4.46e8
2.23e8
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDD
34.02-38.51
391.8127 Fn3
Flags: PBM
4σ 1.80e3
123678D
1.13e9*
37.05
123478D
1.10e9*
36.94
123789D
1.19e9*
37.36
Abs. Int.
3.60e8
1.80e8
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDD Std.
34.02-38.51
401.8559 Fn3
Flags: PBM
4σ 1.74e3
FS 123468D
4.80e7*
35.88
ES 123678D
4.79e7*
37.04
ES 123478D
4.90e7*
36.92
ES 123789D
5.59e7*
37.34
JS 123467D
2.05e7*
37.24
Abs. Int.
1.66e7
8.32e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDD Std.
34.02-38.51
403.8530 Fn3
Flags: PBM
4σ 2.17e3
FS 123468D
3.67e7*
35.88
ES 123678D
3.77e7*
37.04
ES 123478D
3.71e7*
36.92
ES 123789D
4.15e7*
37.34
JS 123467D
1.55e7*
37.24
Abs. Int.
1.27e7
6.36e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
QC Check
34.02-38.51
380.9760 Fn3
Flags: -
Abs. Int.
1.32e7
6.62e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT


Rel. Int.
100%
HpCDD
38.52-41.00
423.7767 Fn4
Flags: PBM
4σ 1.43e3
1234678D
1.15e9*
40.12
Abs. Int.
4.67e8
2.33e8
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.52-41.00
425.7737 Fn4
Flags: PBM
4σ 1.22e3
1234678D
1.11e9*
40.11
Abs. Int.
4.40e8
2.20e8
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.52-41.00
435.8169 Fn4
Flags: PBM
4σ 3.06e3
FS 1234679D
4.43e7*
39.46
ES 1234678D
4.44e7*
40.10
Abs. Int.
1.80e7
9.02e6
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.52-41.00
437.8140 Fn4
Flags: PBM
4σ 2.80e3
FS 1234679D
4.22e7*
39.46
ES 1234678D
4.13e7*
40.10
Abs. Int.
1.73e7
8.65e6
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.52-41.00
430.9728 Fn4
Flags: -
Abs. Int.
8.40e6
4.20e6
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT


Rel. Int.
100%
OCDD
41.02-45.01
457.7377 Fn5
Flags: PBM
4σ 2.44e3
0%
OCDD
1.67e9*
42.57
Abs. Int.
5.79e8
2.90e8
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDD
41.02-45.01
459.7348 Fn5
Flags: PBM
4σ 1.31e3
0%
OCDD
1.87e9*
42.57
Abs. Int.
6.47e8
3.24e8
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDD Std.
41.02-45.01
469.7780 Fn5
Flags: PBM
4σ 2.35e3
0%
ES OCDD
6.02e7*
42.56
Abs. Int.
2.00e7
1.00e7
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDD Std.
41.02-45.01
471.7750 Fn5
Flags: PBM
4σ 2.09e3
0%
ES OCDD
6.56e7*
42.56
Abs. Int.
2.18e7
1.09e7
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
QC Check
41.02-45.01
454.9728 Fn5
Flags: -
0%
Abs. Int.
7.85e6
3.92e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

SGS ID: CS6_200612_DF_RA | Sample ID: SIL 20-280-4 | Acq: 12-Jun-2020 20:46:44

Instr: [ILM] AutoSpec-Ultima MM3 | VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 11 | User: PSW Datafile: 200612R11



Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS6_200612_DF_RA.utp_res, saved 15-Jun-2020 13:33 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 5708, 6109 *Revised: 15-Jun-2020 11:51 (PSW) Printed: 17-Jun-2020 08:05*


Rel. Int.
100%
TCDF
20.54-29.50
303.9016 Fn1
Flags: PBM
4σ 1.53e3
2378F
3.51e8*
26.65
Abs. Int.
8.02e7
4.01e7
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF
20.54-29.50
305.8987 Fn1
Flags: PBM
4σ 1.88e3
2378F
4.56e8*
26.65
Abs. Int.
1.03e8
5.16e7
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
315.9419 Fn1
Flags: PBM
4σ 1.28e4
AS 1368F
7.45e7*
21.50
JS 1234F
6.37e7*
25.22
ES 2378F
6.93e7*
26.63
Abs. Int.
1.53e7
7.64e6
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
317.9389 Fn1
Flags: PBM
4σ 8.21e3
AS 1368F
9.53e7*
21.50
JS 1234F
8.05e7*
25.22
ES 2378F
8.55e7*
26.63
Abs. Int.
1.88e7
9.41e6
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
HxCDPE
20.54-29.50
375.8364 Fn1
Flags: PB
4σ 1.74e3
Abs. Int.
6.90e3
3.45e3
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT

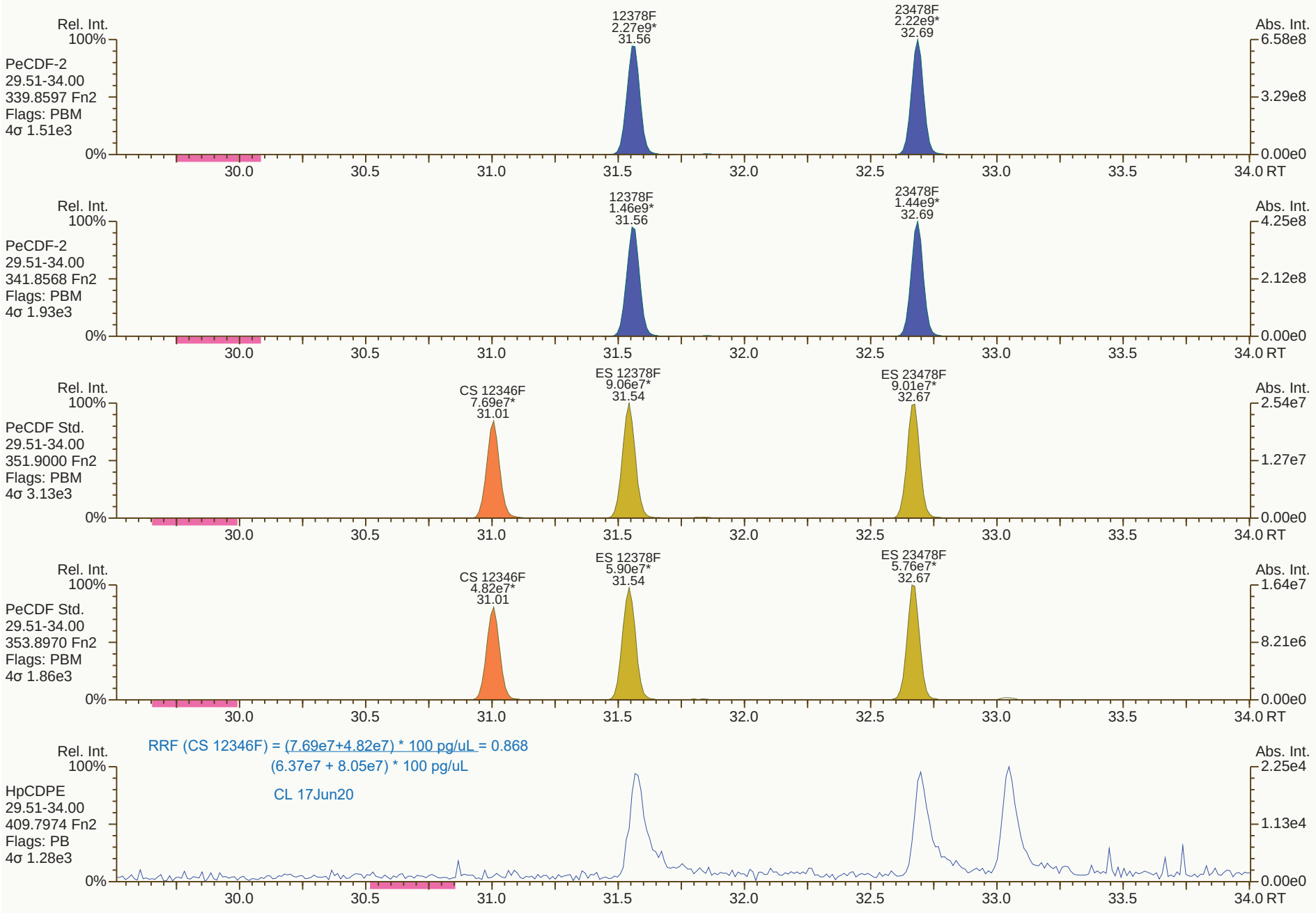
SGS ID: CS6_200612_DF_RA **Sample ID: SIL 20-280-4** **Acq: 12-Jun-2020 20:46:44**

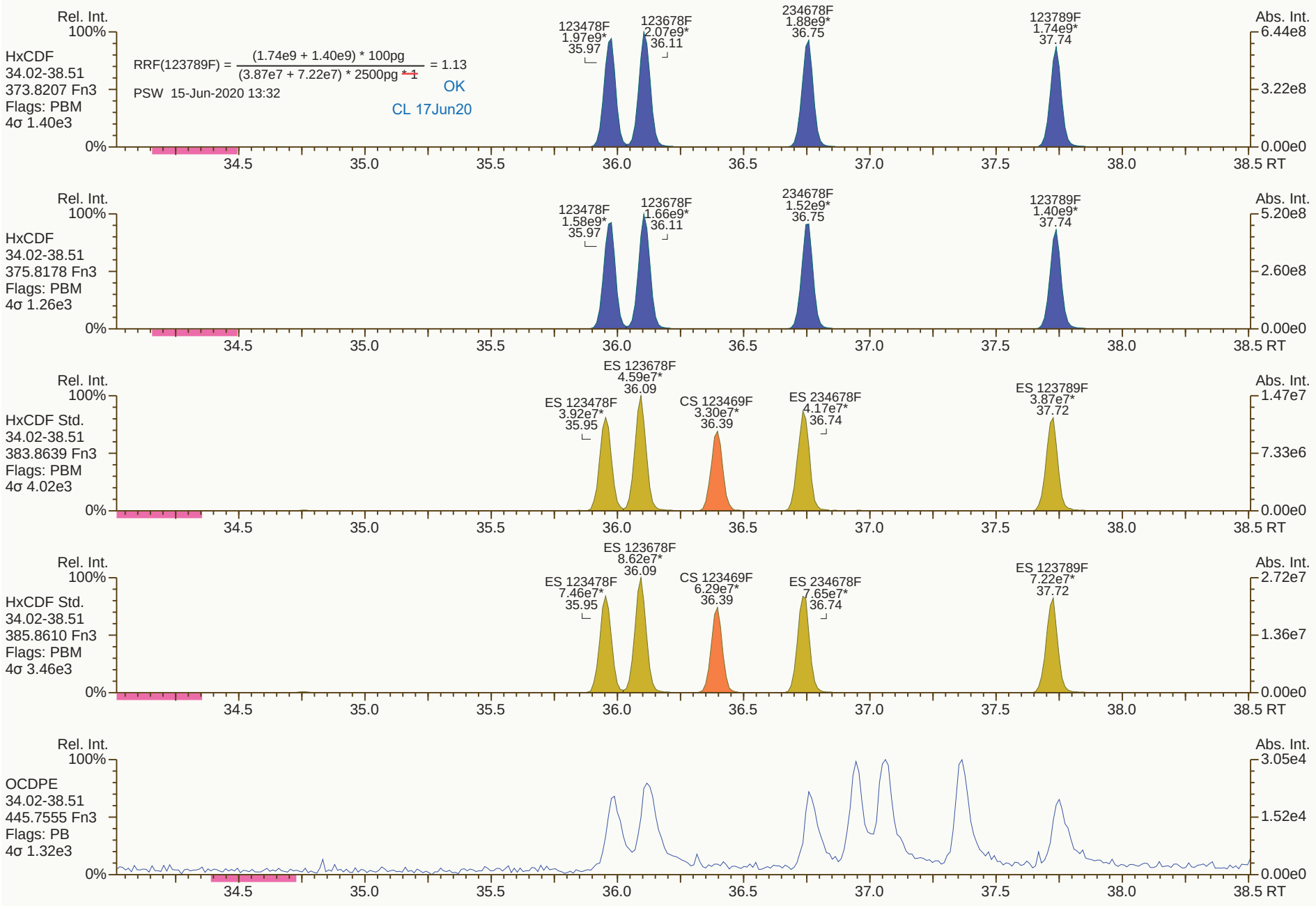
Instr: [ILM] AutoSpec-Ultima MM3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 11** **User: PSW Datafile: 200612R11**

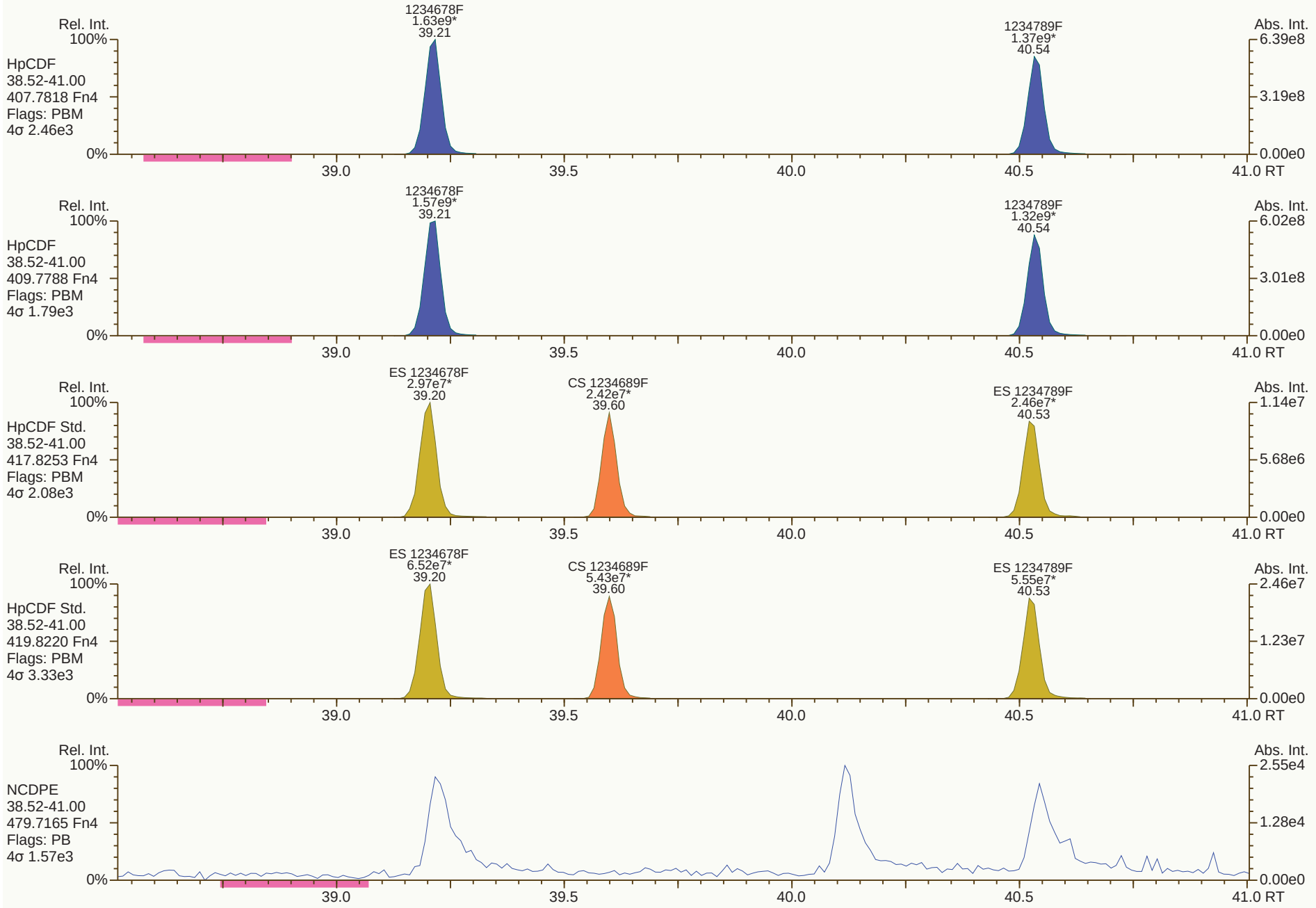


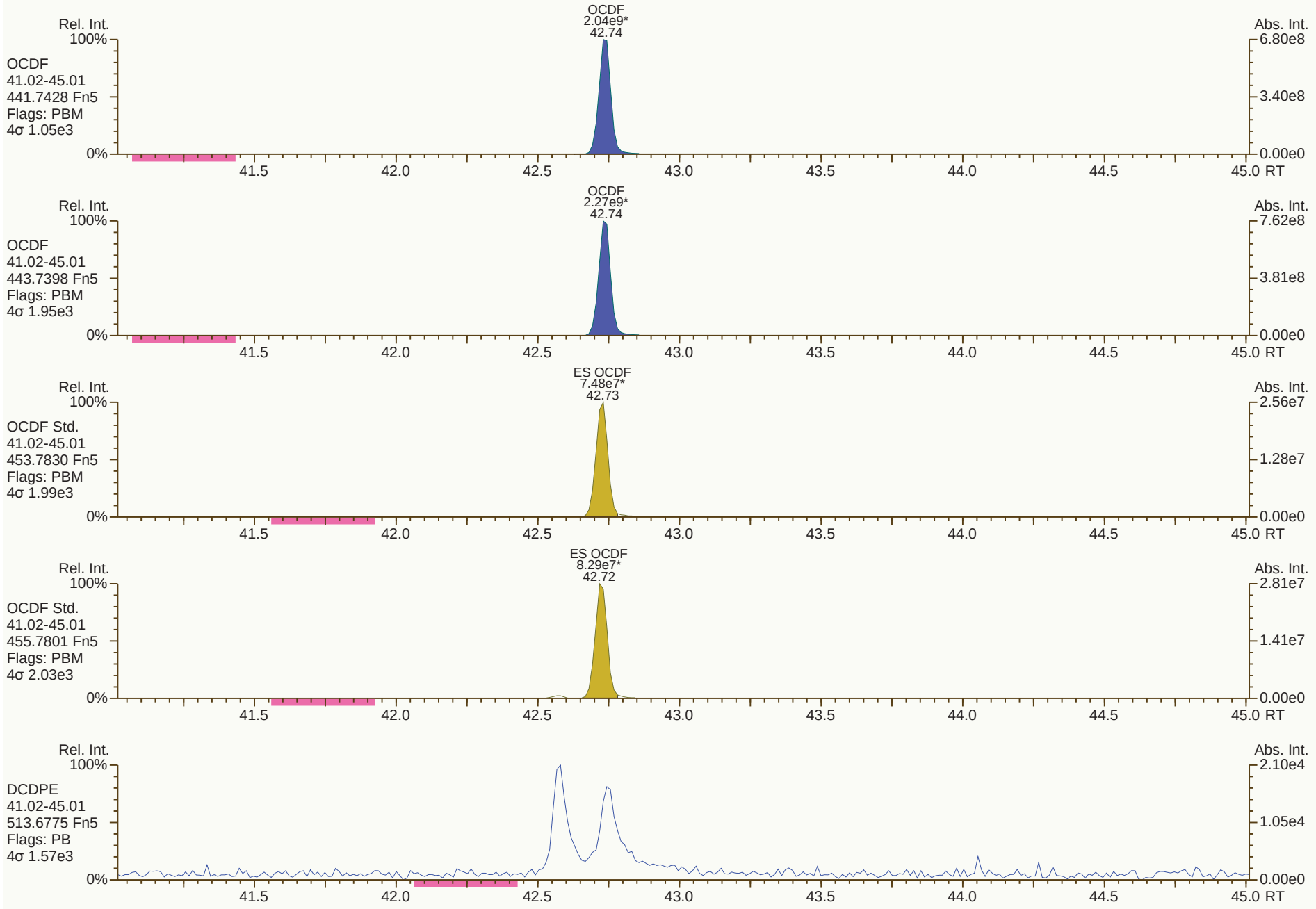
Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS6_200612_DF_RA.utp_res, saved 15-Jun-2020 13:33 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 1009 scc: 630-787 *PKD: 15-Jun-2020 08:14 Printed: 15-Jun-2020 13:41 Page 8 of 12*


Rel. Int.
100%
PeCDF-2
29.51-34.00
339.8597 Fn2
Flags: PBM
4σ 1.51e3
0%
12378F
2.27e9*
31.56
23478F
2.22e9*
32.69
Abs. Int.
6.58e8
3.29e8
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF-2
29.51-34.00
341.8568 Fn2
Flags: PBM
4σ 1.93e3
0%
12378F
1.46e9*
31.56
23478F
1.44e9*
32.69
Abs. Int.
4.25e8
2.12e8
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.00
351.9000 Fn2
Flags: PBM
4σ 3.13e3
0%
CS 12346F
7.69e7*
31.01
ES 12378F
9.06e7*
31.54
ES 23478F
9.01e7*
32.67
Abs. Int.
2.54e7
1.27e7
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.00
353.8970 Fn2
Flags: PBM
4σ 1.86e3
0%
CS 12346F
4.82e7*
31.01
ES 12378F
5.90e7*
31.54
ES 23478F
5.76e7*
32.67
Abs. Int.
1.64e7
8.21e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
RRF (CS 12346F) = (7.69e7+4.82e7) * 100 pg/uL = 0.868
(6.37e7 + 8.05e7) * 100 pg/uL
CL 17Jun20
Rel. Int.
100%
HpCDPE
29.51-34.00
409.7974 Fn2
Flags: PB
4σ 1.28e3
0%
Abs. Int.
2.25e4
1.13e4
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT

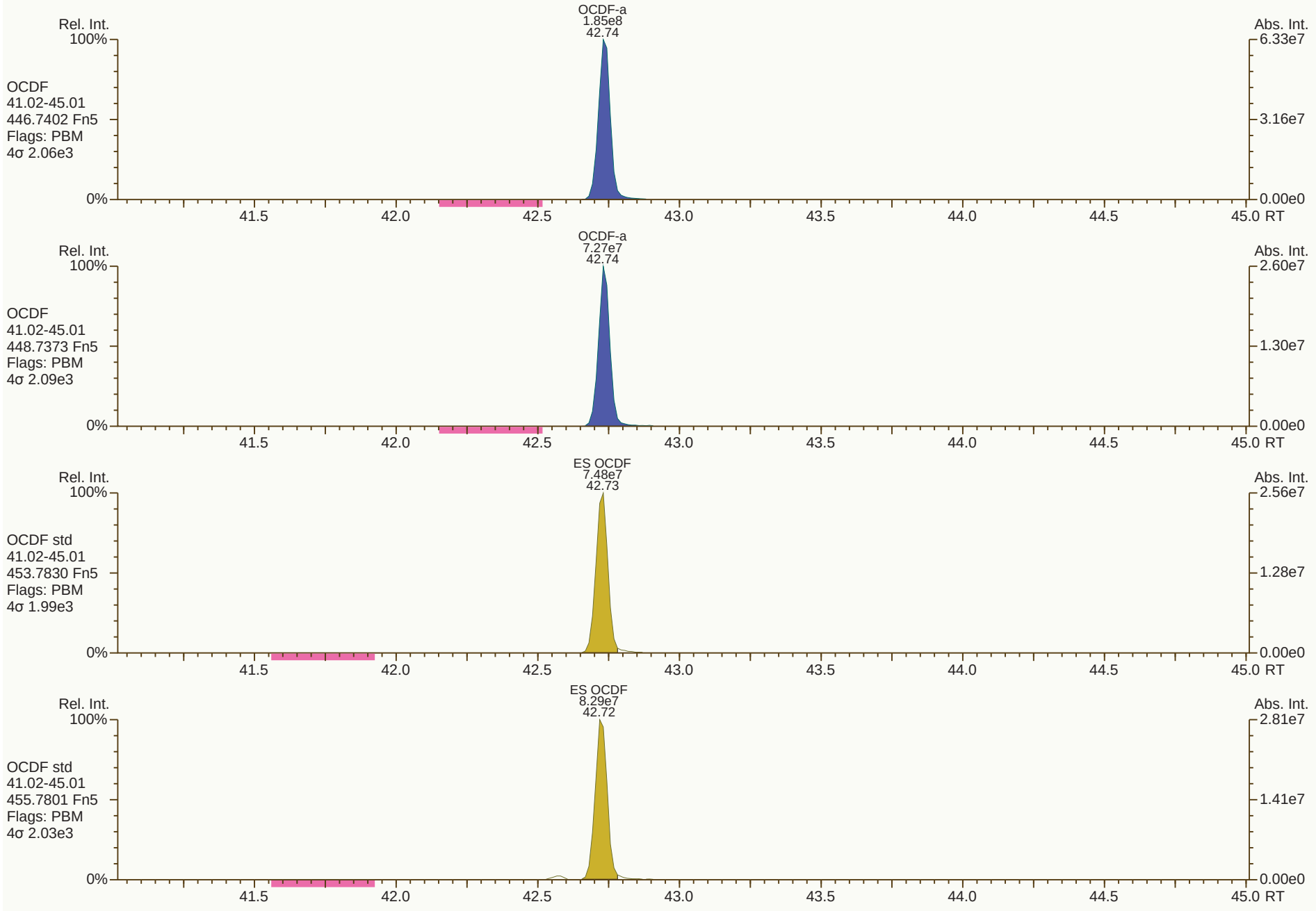

Rel. Int.
100%
HxCDF
34.02-38.51
373.8207 Fn3
Flags: PBM
4σ 1.40e3
0%
RRF(123789F) = (1.74e9 + 1.40e9) * 100pg / (3.87e7 + 7.22e7) * 2500pg * 1 = 1.13
PSW 15-Jun-2020 13:32
OK
CL 17Jun20
123478F 1.97e9* 35.97
123678F 2.07e9* 36.11
234678F 1.88e9* 36.75
123789F 1.74e9* 37.74
Abs. Int.
6.44e8
3.22e8
0.00e0
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 RT
HxCDF
34.02-38.51
375.8178 Fn3
Flags: PBM
4σ 1.26e3
123478F 1.58e9* 35.97
123678F 1.66e9* 36.11
234678F 1.52e9* 36.75
123789F 1.40e9* 37.74
5.20e8
2.60e8
HxCDF Std.
34.02-38.51
383.8639 Fn3
Flags: PBM
4σ 4.02e3
ES 123678F 4.59e7* 36.09
ES 123478F 3.92e7* 35.95
CS 123469F 3.30e7* 36.39
ES 234678F 4.17e7* 36.74
ES 123789F 3.87e7* 37.72
1.47e7
7.33e6
HxCDF Std.
34.02-38.51
385.8610 Fn3
Flags: PBM
4σ 3.46e3
ES 123678F 8.62e7* 36.09
ES 123478F 7.46e7* 35.95
CS 123469F 6.29e7* 36.39
ES 234678F 7.65e7* 36.74
ES 123789F 7.22e7* 37.72
2.72e7
1.36e7
OCDPE
34.02-38.51
445.7555 Fn3
Flags: PB
4σ 1.32e3
3.05e4
1.52e4


Rel. Int.
100%
HpCDF
38.52-41.00
407.7818 Fn4
Flags: PBM
4σ 2.46e3
0%
1234678F
1.63e9*
39.21
1234789F
1.37e9*
40.54
Abs. Int.
6.39e8
3.19e8
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF
38.52-41.00
409.7788 Fn4
Flags: PBM
4σ 1.79e3
0%
1234678F
1.57e9*
39.21
1234789F
1.32e9*
40.54
Abs. Int.
6.02e8
3.01e8
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.52-41.00
417.8253 Fn4
Flags: PBM
4σ 2.08e3
0%
ES 1234678F
2.97e7*
39.20
CS 1234689F
2.42e7*
39.60
ES 1234789F
2.46e7*
40.53
Abs. Int.
1.14e7
5.68e6
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.52-41.00
419.8220 Fn4
Flags: PBM
4σ 3.33e3
0%
ES 1234678F
6.52e7*
39.20
CS 1234689F
5.43e7*
39.60
ES 1234789F
5.55e7*
40.53
Abs. Int.
2.46e7
1.23e7
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
NCDPE
38.52-41.00
479.7165 Fn4
Flags: PB
4σ 1.57e3
0%
Abs. Int.
2.55e4
1.28e4
0.00e0
39.0
39.5
40.0
40.5
41.0 RT


Rel. Int.
100%
OCDF
41.02-45.01
441.7428 Fn5
Flags: PBM
4σ 1.05e3
0%
OCDF
2.04e9*
42.74
Abs. Int.
6.80e8
3.40e8
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF
41.02-45.01
443.7398 Fn5
Flags: PBM
4σ 1.95e3
0%
OCDF
2.27e9*
42.74
Abs. Int.
7.62e8
3.81e8
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF Std.
41.02-45.01
453.7830 Fn5
Flags: PBM
4σ 1.99e3
0%
ES OCDF
7.48e7*
42.73
Abs. Int.
2.56e7
1.28e7
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF Std.
41.02-45.01
455.7801 Fn5
Flags: PBM
4σ 2.03e3
0%
ES OCDF
8.29e7*
42.72
Abs. Int.
2.81e7
1.41e7
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
DCDPE
41.02-45.01
513.6775 Fn5
Flags: PB
4σ 1.57e3
0%
Abs. Int.
2.10e4
1.05e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

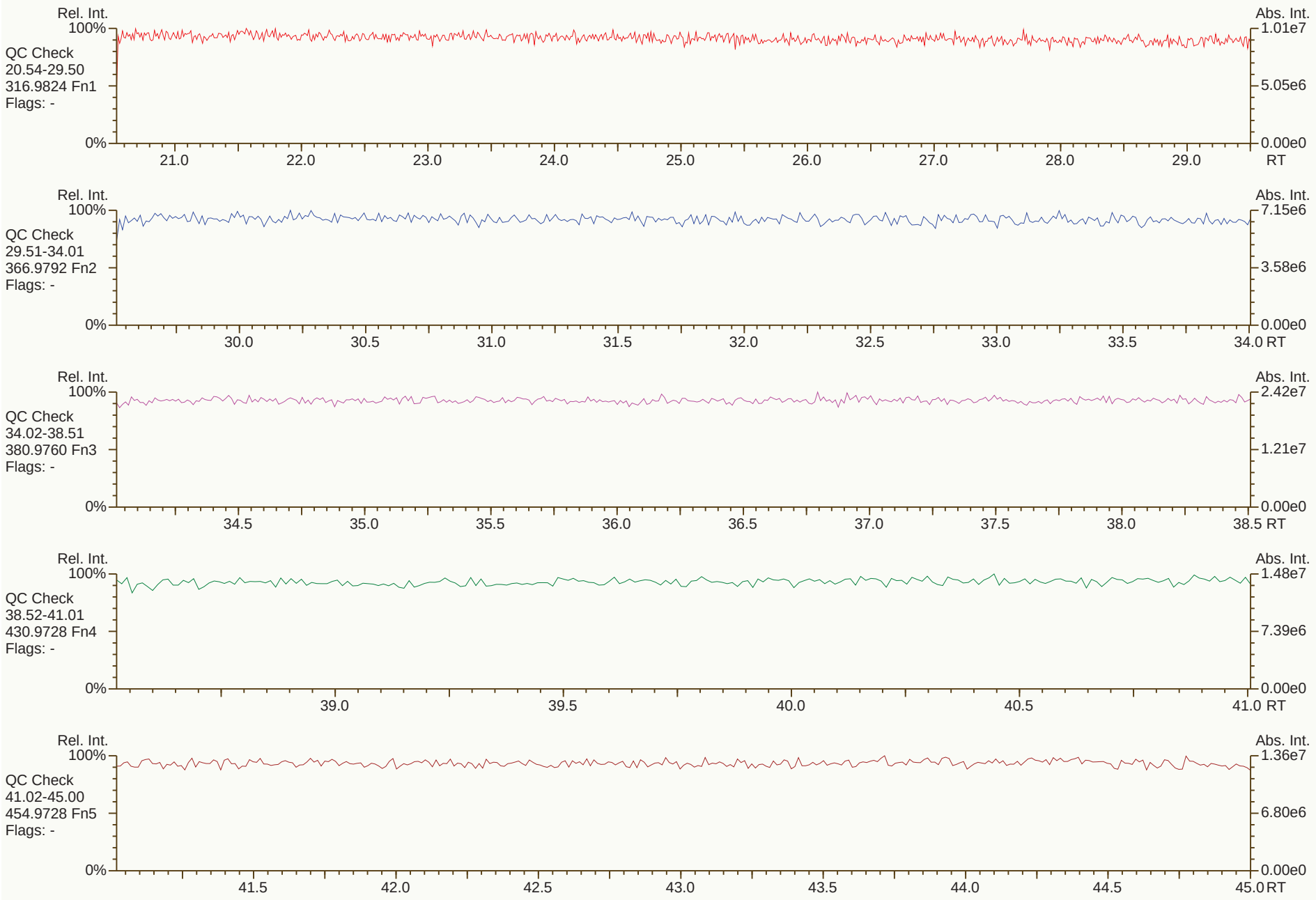
SGS ID: CS6_200612_DF_RA | Sample ID: SIL 20-280-4 | Acq: 12-Jun-2020 20:46:44

Instr: [ILM] AutoSpec-Ultima MM3 | VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 11 | User: PSW Datafile: 200612R11



Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS6_200612_DF_RA.utp_res, saved 15-Jun-2020 13:33 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 9008, 9795 *Revised: 15-Jun-2020 11:51 (PSW) Printed: 17-Jun-2020 08:05*



Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\SBS_200612_DF_RA.utp_res, saved 12-Jun-2020 14:33 (PSW) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 scc: 041-322 *PKD: n/a Printed: 15-Jun-2020 13:37 Page 1 of 12*


Rel. Int.
100%
0%
Abs. Int.
TCDD
20.54-29.50
319.8965 Fn1
Flags: PB
4σ 3.23e3
1.00e4
5.00e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
TCDD
20.54-29.50
321.8936 Fn1
Flags: PB
4σ 3.90e3
1.53e4
7.65e3
37Cl-TCDD
20.54-29.50
327.8850 Fn1
Flags: PB
4σ 2.19e3
1.06e4
5.29e3
TCDD Std.
20.54-29.50
331.9368 Fn1
Flags: PB
4σ 9.11e3
2.23e4
1.11e4
TCDD Std.
20.54-29.50
333.9339 Fn1
Flags: PB
4σ 5.44e3
2.39e4
1.20e4


Rel. Int.
100%
PeCDD
29.51-34.01
355.8546 Fn2
Flags: PB
4σ 2.84e3
0%
Abs. Int.
9.71e3
4.85e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD
29.51-34.01
357.8517 Fn2
Flags: PB
4σ 1.59e3
0%
Abs. Int.
4.98e3
2.49e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
367.8949 Fn2
Flags: PB
4σ 8.83e3
0%
Abs. Int.
2.09e4
1.05e4
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
369.8919 Fn2
Flags: PB
4σ 3.20e3
0%
Abs. Int.
1.78e4
8.92e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
QC Check
29.51-34.01
366.9792 Fn2
Flags: -
0%
Abs. Int.
7.15e6
3.58e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT

SGS ID: SBS_200612_DF_RA | **Sample ID: SIL 20-61-1** | **Acq: 12-Jun-2020 13:34:23**

Instr: [ILM] AutoSpec-Ultima MM3 | **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 2** | **User: PSW Datafile: 200612R02**



Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\SBS_200612_DF_RA.utp_res, saved 12-Jun-2020 14:33 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 5571, 9888 scc: 041-322 *PKD: 12-Jun-2020 14:32 Printed: 15-Jun-2020 13:37 Page 4 of 12*


Rel. Int.
100%
HpCDD
38.52-41.01
423.7767 Fn4
Flags: PB
4σ 2.59e3
0%
Abs. Int.
1.14e4
5.68e3
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.52-41.01
425.7737 Fn4
Flags: PB
4σ 2.19e3
0%
Abs. Int.
1.51e4
7.55e3
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.52-41.01
435.8169 Fn4
Flags: PB
4σ 3.17e3
0%
Abs. Int.
3.39e4
1.70e4
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.52-41.01
437.8140 Fn4
Flags: PB
4σ 7.18e3
0%
Abs. Int.
4.62e4
2.31e4
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.52-41.01
430.9728 Fn4
Flags: -
0%
Abs. Int.
1.48e7
7.39e6
0.00e0
39.0
39.5
40.0
40.5
41.0 RT


Rel. Int.
100%
OCDD
41.02-45.00
457.7377 Fn5
Flags: PB
4σ 2.02e3
0%
Abs. Int.
2.62e4
1.31e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDD
41.02-45.00
459.7348 Fn5
Flags: PB
4σ 2.26e3
0%
Abs. Int.
2.83e4
1.41e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDD Std.
41.02-45.00
469.7780 Fn5
Flags: PB
4σ 2.55e3
0%
Abs. Int.
5.24e4
2.62e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDD Std.
41.02-45.00
471.7750 Fn5
Flags: PB
4σ 3.88e3
0%
Abs. Int.
9.97e4
4.99e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
1.36e7
6.80e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT


2468F: SPIKED
1.60e6*
22.78
Rel. Int.
100%
TCDF
20.54-29.50
303.9016 Fn1
Flags: PBM
4σ 2.19e3
0%
Abs. Int.
2.88e5
1.44e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
2468F
1.98e6*
22.78
TCDF
20.54-29.50
305.8987 Fn1
Flags: PBM
4σ 2.71e3
4.00e5
2.00e5
TCDF Std.
20.54-29.50
315.9419 Fn1
Flags: PB
4σ 1.67e4
4.78e4
2.39e4
TCDF Std.
20.54-29.50
317.9389 Fn1
Flags: PB
4σ 1.11e4
5.02e4
2.51e4
HxCDPE
20.54-29.50
375.8364 Fn1
Flags: PB
4σ 2.44e3
1.20e4
6.00e3


Rel. Int.
100%
0%
Abs. Int.
9.00e3
4.50e3
0.00e0
PeCDF-1
20.54-29.50
339.8597 Fn1
Flags: PB
4σ 2.50e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
0%
Abs. Int.
1.76e4
8.81e3
0.00e0
PeCDF-1
20.54-29.50
341.8568 Fn1
Flags: PB
4σ 3.10e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
0%
Abs. Int.
1.01e7
5.05e6
0.00e0
QC Check
20.54-29.50
316.9824 Fn1
Flags: -
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
PeCDF-2
29.51-34.01
339.8597 Fn2
Flags: PB
4σ 1.97e3
0%
Abs. Int.
1.93e4
9.66e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF-2
29.51-34.01
341.8568 Fn2
Flags: PB
4σ 2.98e3
0%
Abs. Int.
1.18e4
5.88e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
351.9000 Fn2
Flags: PB
4σ 5.91e3
0%
Abs. Int.
4.44e4
2.22e4
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
353.8970 Fn2
Flags: PB
4σ 3.85e3
0%
Abs. Int.
2.67e4
1.34e4
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
HpCDPE
29.51-34.01
409.7974 Fn2
Flags: PB
4σ 1.84e3
0%
Abs. Int.
6.79e3
3.40e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT


Rel. Int.
100%
HxCDF
34.02-38.51
373.8207 Fn3
Flags: PB
4σ 1.94e3
0%
Abs. Int.
1.58e4
7.91e3
0.00e0
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 RT
Rel. Int.
100%
HxCDF
34.02-38.51
375.8178 Fn3
Flags: PB
4σ 3.92e3
0%
Abs. Int.
1.54e4
7.69e3
0.00e0
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 RT
Rel. Int.
100%
HxCDF Std.
34.02-38.51
383.8639 Fn3
Flags: PB
4σ 3.44e3
0%
Abs. Int.
3.56e4
1.78e4
0.00e0
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 RT
Rel. Int.
100%
HxCDF Std.
34.02-38.51
385.8610 Fn3
Flags: PB
4σ 5.38e3
0%
Abs. Int.
6.98e4
3.49e4
0.00e0
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 RT
Rel. Int.
100%
OCDPE
34.02-38.51
445.7555 Fn3
Flags: PB
4σ 2.14e3
0%
Abs. Int.
6.58e3
3.29e3
0.00e0
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 RT

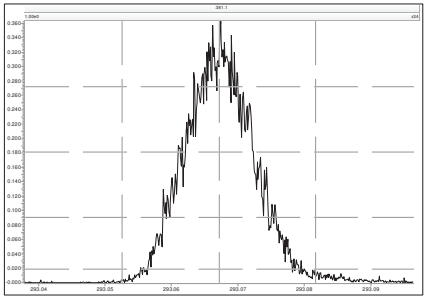

Rel. Int.
100%
HpCDF
38.52-41.01
407.7818 Fn4
Flags: PB
4σ 2.99e3
0%
Abs. Int.
3.18e4
1.59e4
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF
38.52-41.01
409.7788 Fn4
Flags: PB
4σ 2.83e3
0%
Abs. Int.
2.04e4
1.02e4
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.52-41.01
417.8253 Fn4
Flags: PB
4σ 3.04e3
0%
Abs. Int.
4.57e4
2.29e4
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.52-41.01
419.8220 Fn4
Flags: PB
4σ 7.57e3
0%
Abs. Int.
5.34e4
2.67e4
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
NCDPE
38.52-41.01
479.7165 Fn4
Flags: PB
4σ 2.61e3
0%
Abs. Int.
7.35e3
3.68e3
0.00e0
39.0
39.5
40.0
40.5
41.0 RT


Rel. Int.
100%
OCDF
41.02-45.00
441.7428 Fn5
Flags: PB
4σ 2.29e3
0%
Abs. Int.
1.99e4
9.97e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF
41.02-45.00
443.7398 Fn5
Flags: PB
4σ 1.92e3
0%
Abs. Int.
2.80e4
1.40e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF Std.
41.02-45.00
453.7830 Fn5
Flags: PB
4σ 3.07e3
0%
Abs. Int.
8.16e4
4.08e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF Std.
41.02-45.00
455.7801 Fn5
Flags: PB
4σ 2.50e3
0%
Abs. Int.
6.16e4
3.08e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
DCDPE
41.02-45.00
513.6775 Fn5
Flags: PB
4σ 1.70e3
0%
Abs. Int.
9.01e3
4.51e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

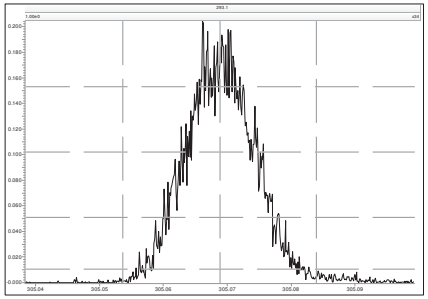
File: Experiment: df_cl4-8_db5MS.exp Reference: pfk.ref Function: 1 @ 200 (ppm)

Printed: Friday, June 12, 2020 13:32:38 Eastern Daylight Time

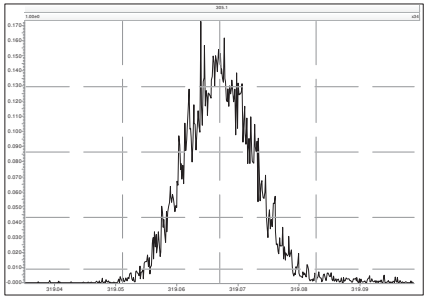
M 292.9824 R 13438



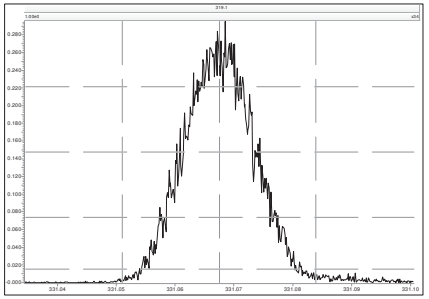
M 304.9824 R 12888



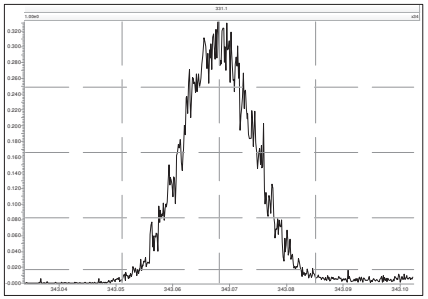
M 318.9792 R 13661



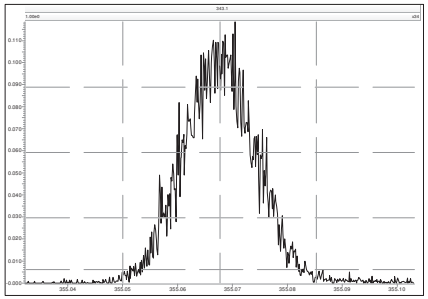
M 330.9792 R 12498



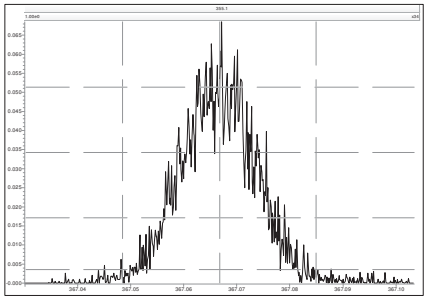
M 342.9792 R 11963



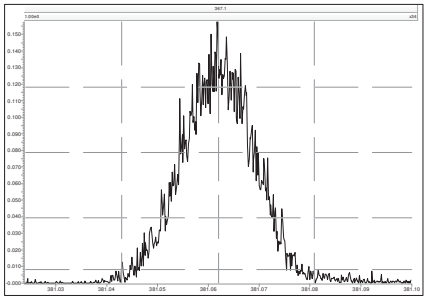
M 354.9792 R 12505



M 366.9792 R 12133



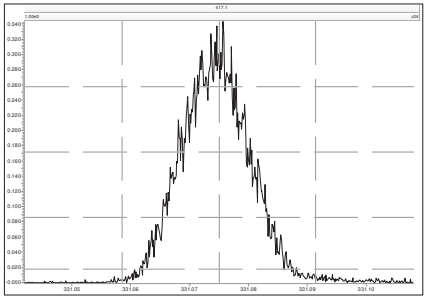
M 380.9760 R 12132



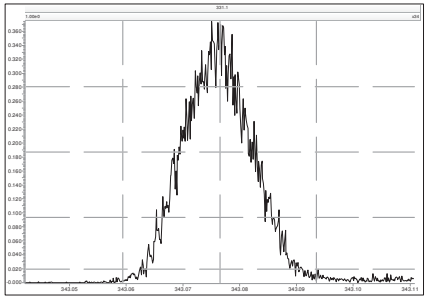
File: Experiment: df_cl4-8_db5MS.exp Reference: pfk.ref Function: 2 @ 200 (ppm)

Printed: Friday, June 12, 2020 13:32:59 Eastern Daylight Time

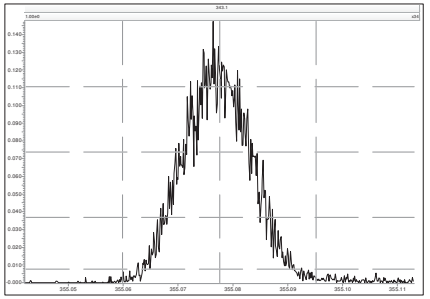
M 330.9792 R 12885



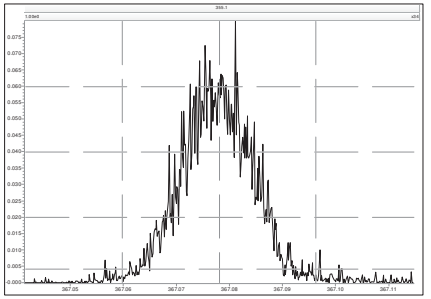
M 342.9792 R 13085



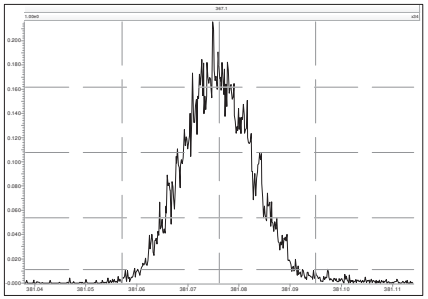
M 354.9792 R 12500



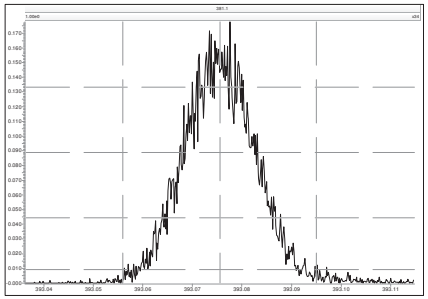
M 366.9792 R 13367



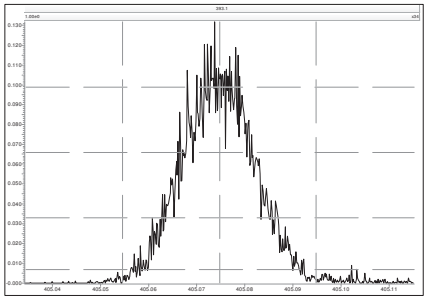
M 380.9760 R 12439



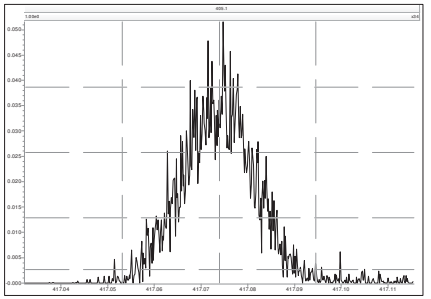
M 392.9760 R 12136



M 404.9760 R 12139



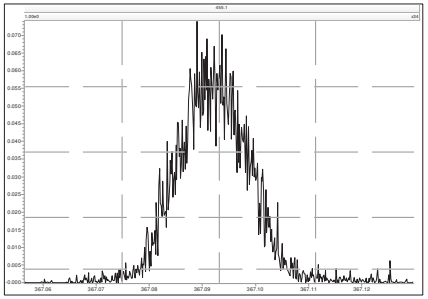
M 416.9760 R 14621



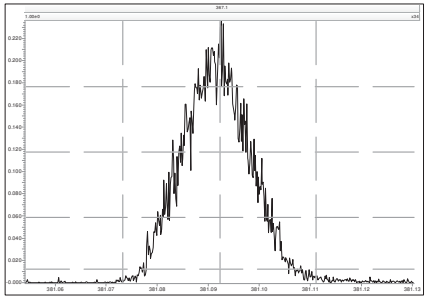
File: Experiment: df_cl4-8_db5MS.exp Reference: pfk.ref Function: 3 @ 200 (ppm)

Printed: Friday, June 12, 2020 13:33:16 Eastern Daylight Time

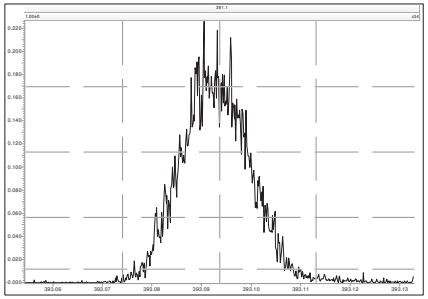
M 366.9792 R 13226



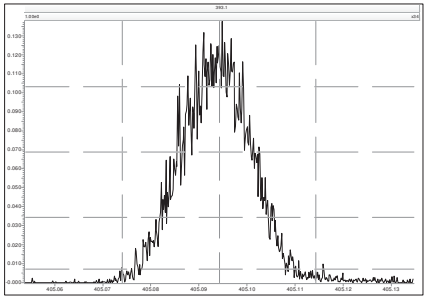
M 380.9760 R 13584



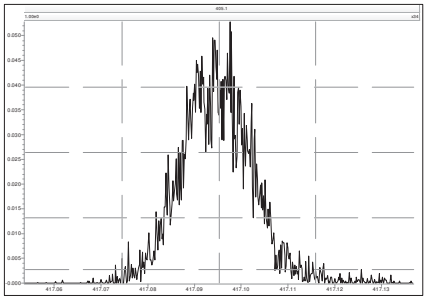
M 392.9760 R 13089



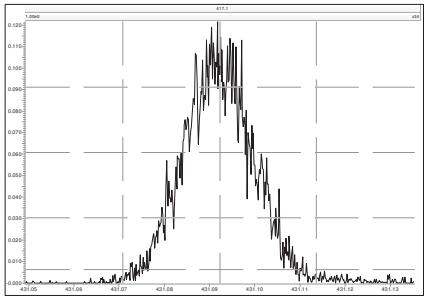
M 404.9760 R 13439



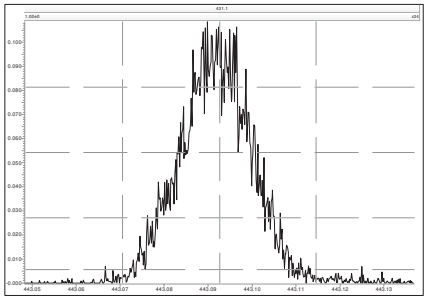
M 416.9760 R 14453



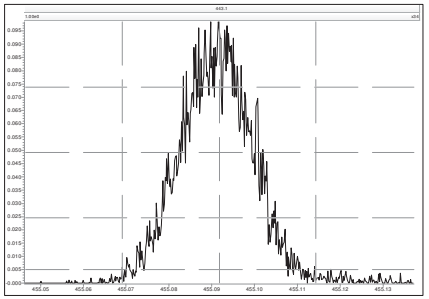
M 430.9728 R 13228



M 442.9728 R 12754



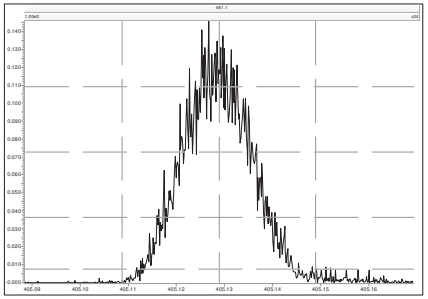
M 454.9728 R 12752



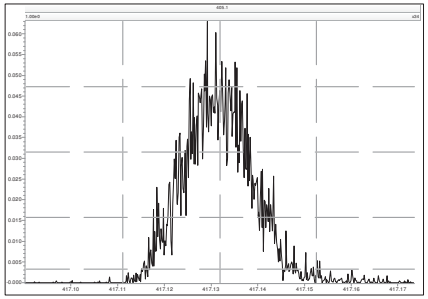
File: Experiment: df_cl4-8_db5MS.exp Reference: pfk.ref Function: 4 @ 200 (ppm)

Printed: Friday, June 12, 2020 13:33:35 Eastern Daylight Time

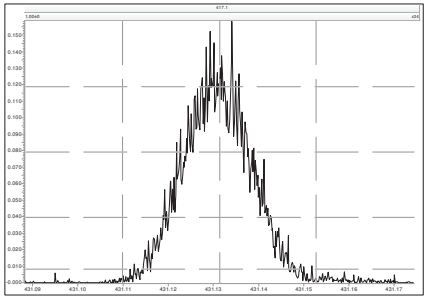
M 404.9760 R 13021



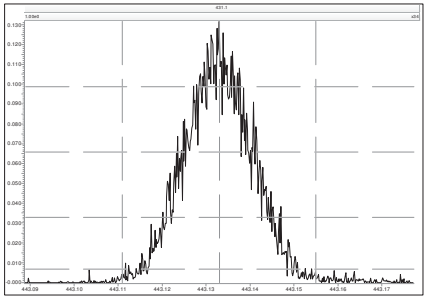
M 416.9760 R 14449



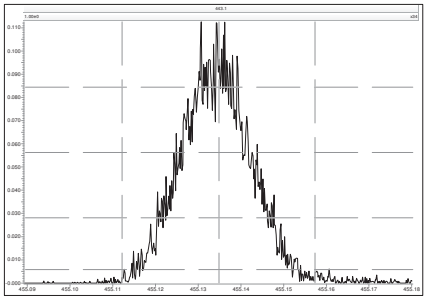
M 430.9728 R 12757



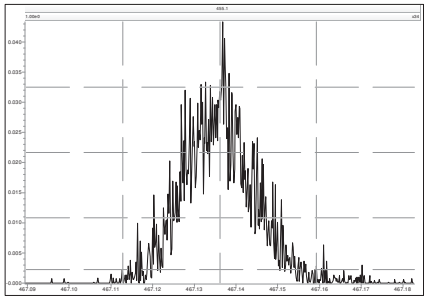
M 442.9728 R 13967



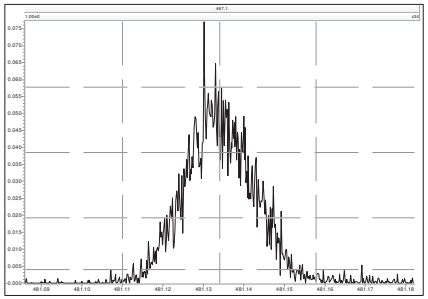
M 454.9728 R 12754



M 466.9728 R 13515



M 480.9696 R 14706



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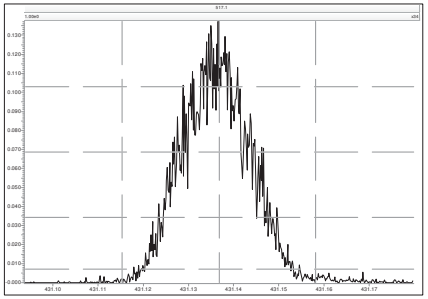

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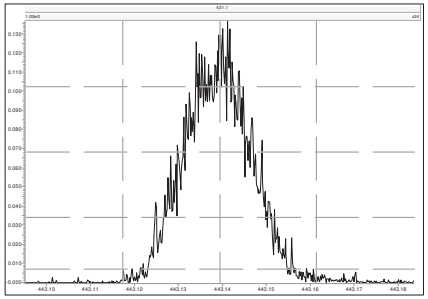

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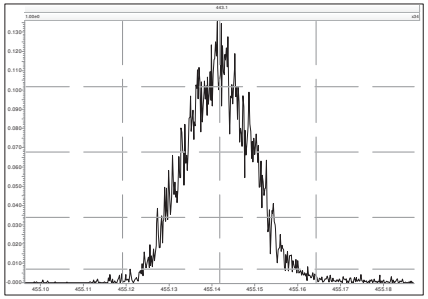

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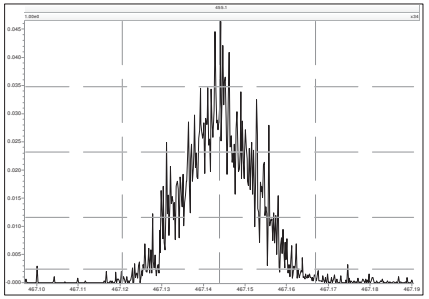
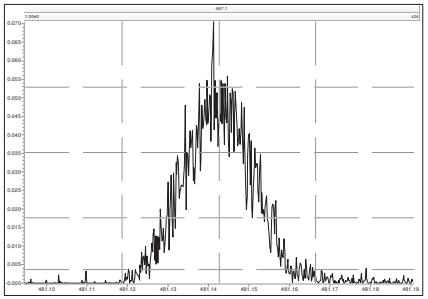
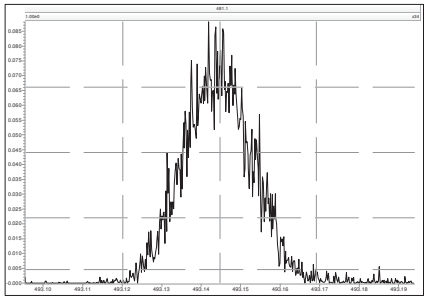


M 480.9696 R 13662



M 492.9696 R 13660



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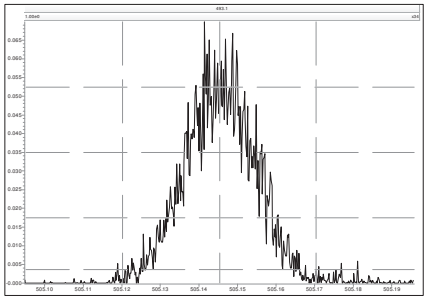

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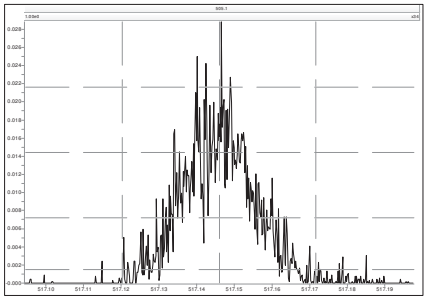

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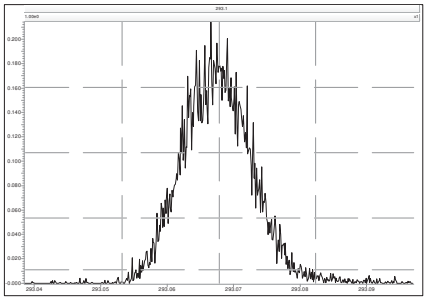

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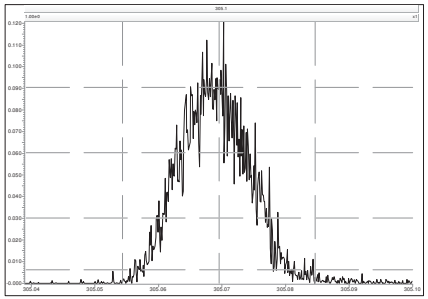

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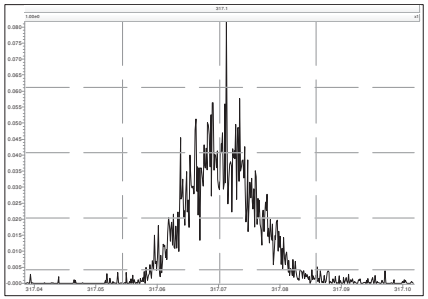

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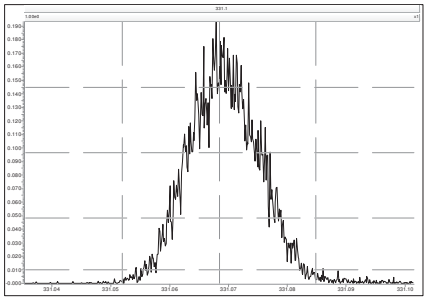

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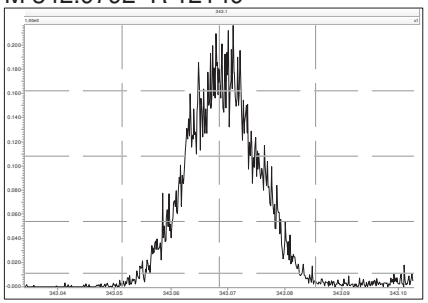

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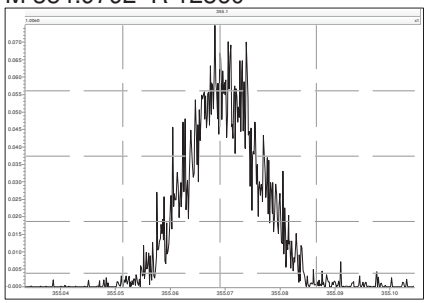

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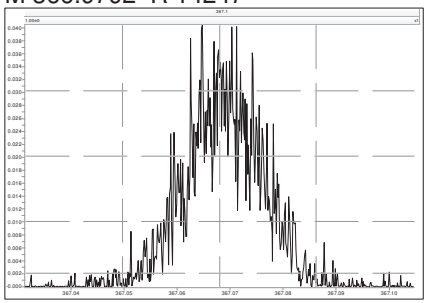

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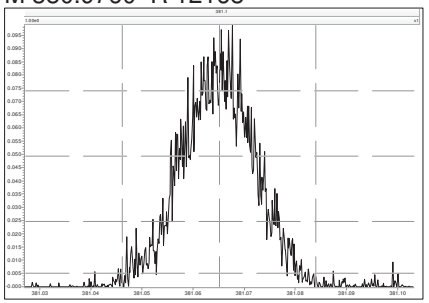

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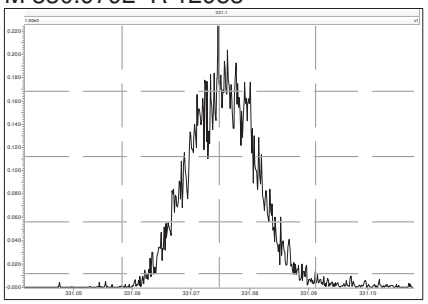

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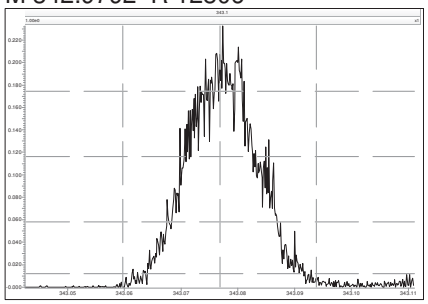

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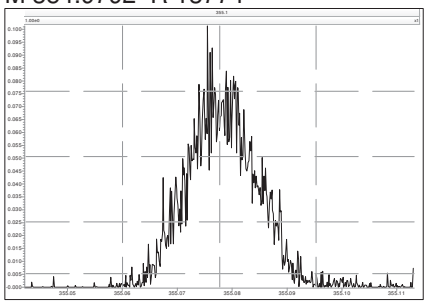

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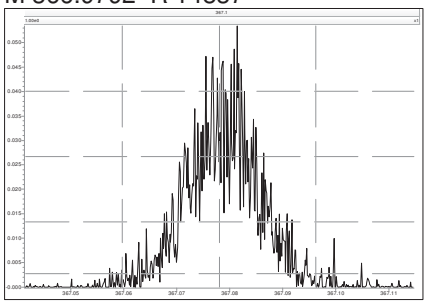

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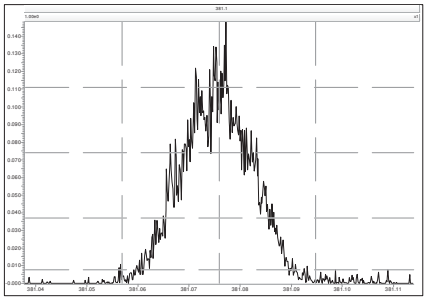

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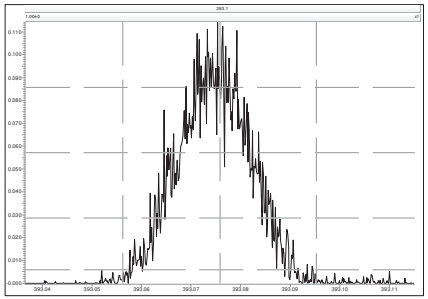

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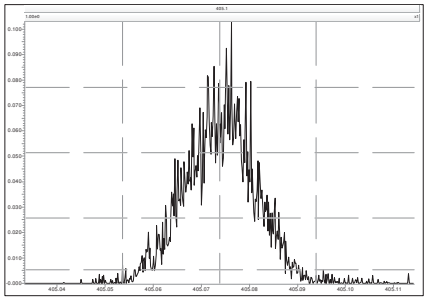

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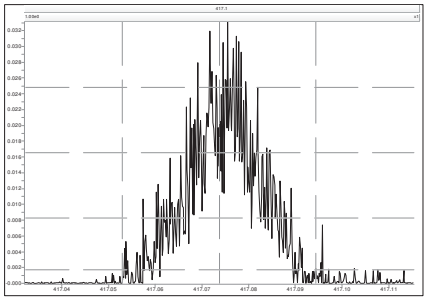

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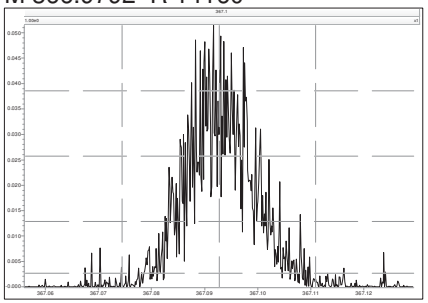

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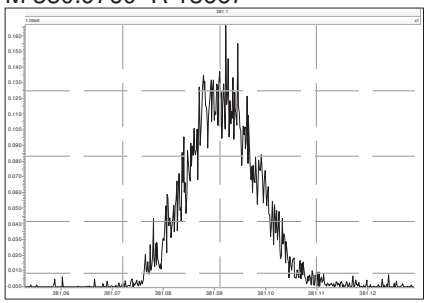

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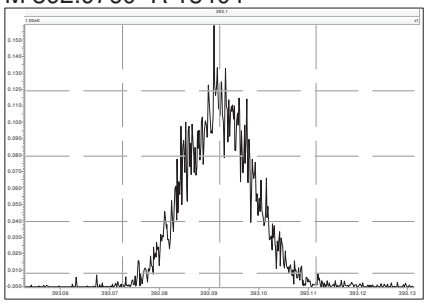

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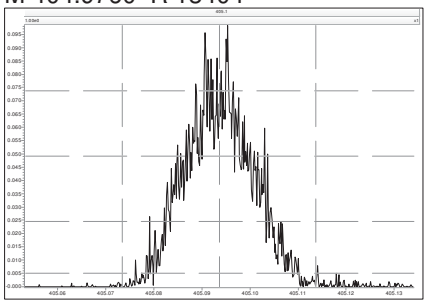

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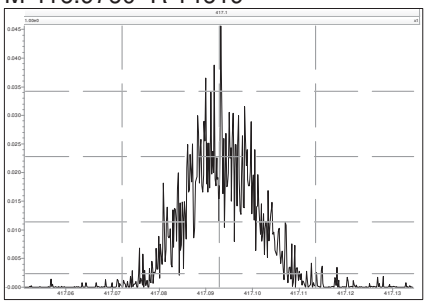

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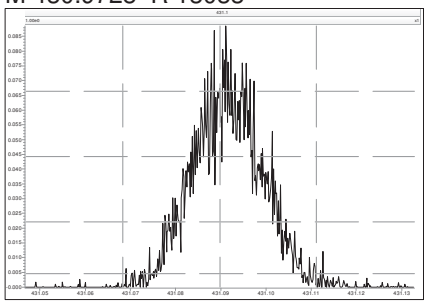

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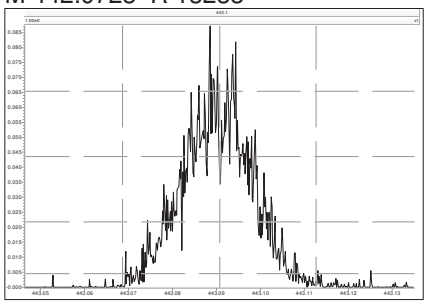

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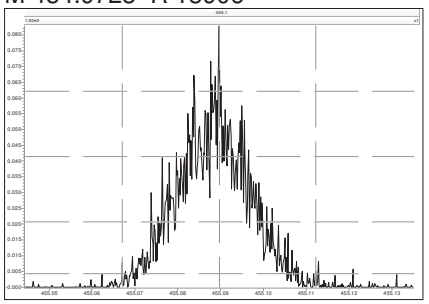

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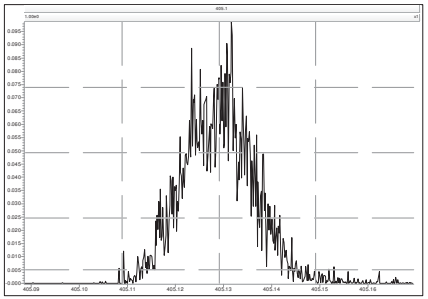

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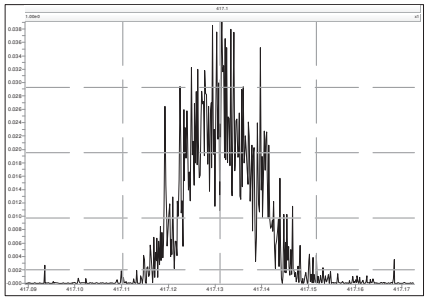

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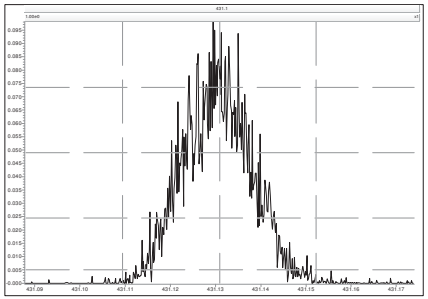

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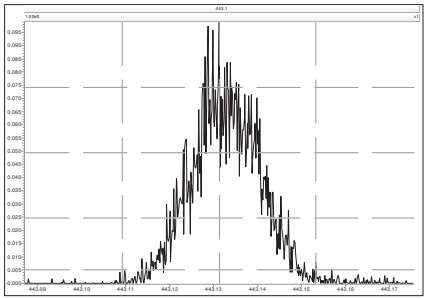

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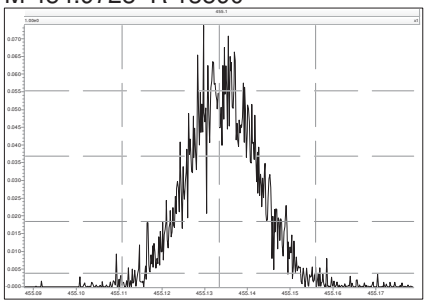

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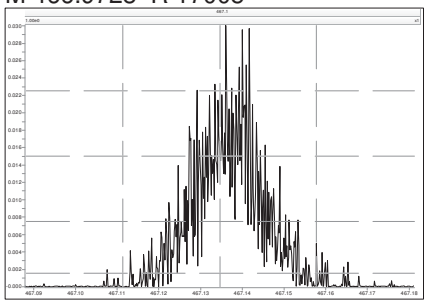

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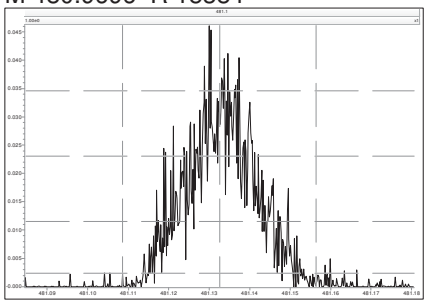

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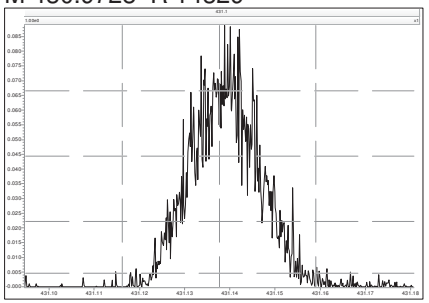

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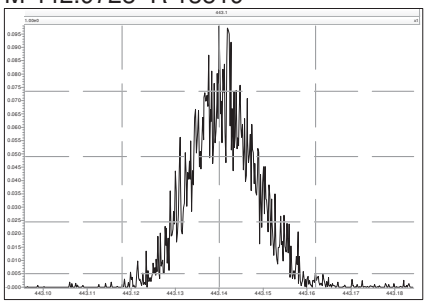

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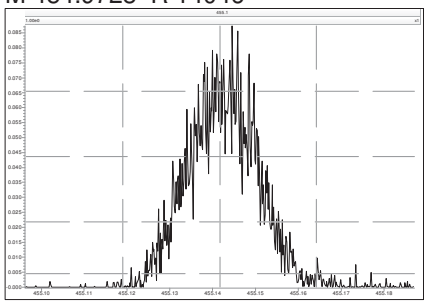

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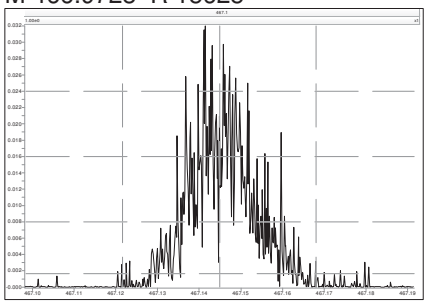

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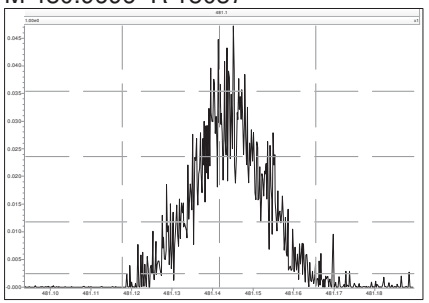

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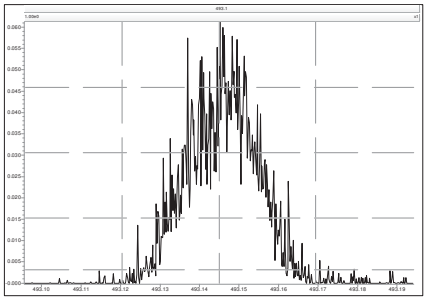

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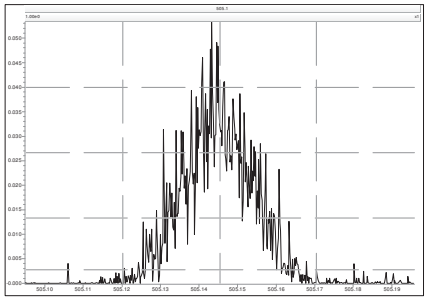

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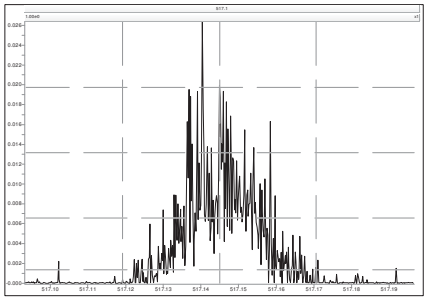


Instrument: MM3 (AutoSpec-Ultima) MS Experiment: df_cl4-8_db5MS GC Program: df_db5MS

#	Datafile	Vial#	Lab ID	Wt/Vol	Client/Sample ID	Analyst(s)	Checkcode	Acq Date	Acq Time
2	200615R02	3	CS3_200615_DF_RA	1.00	SIL 20-449-3	PSW	411-513	15-Jun-2020	09:27:48
3	200615R03	13	CS3_200615_DF_RB	1.00	ICV SIL 23-12-15	PSW	776-449	15-Jun-2020	10:28:16

REVIEWED
By Paul Walton at 8:47 am, Jun 17, 2020

APPROVED
Carla_Lyon , 11:40:07, 06/17/2020

Dioxin/Furan QC Summary	Acq'd: 15 Jun 2020 09:27 PSW	ICAL: MM3_DF_10012020_12JUN2020
Lab ID: CS3_200615_DF_RA	UTP: 15-Jun-2020 10:22:45 PSW	Checkcode: 411-513-RYV
Sample ID: SIL 20-449-3	Report: 17 Jun 2020 08:16 pw	Datafile: 200615R02

Name	RT	Response	RA	OK	Ref. RRFs	Calc. RRFs	Dev'n
2378-TCDD	27.55	1.02E+07	0.84	Y	1.18	1.24	5%
12378-PeCDD	33.02	4.07E+07	1.58	Y	1.14	1.14	1%
123478-HxCDD	36.92	3.72E+07	1.25	Y	1.09	1.11	1%
123678-HxCDD	37.04	3.77E+07	1.26	Y	1.13	1.17	4%
123789-HxCDD	37.34	3.87E+07	1.25	Y	1.05	1.07	2%
1234678-HpCDD	40.10	2.88E+07	1.04	Y	0.98	0.99	1%
OCDD	42.55	3.71E+07	0.88	Y	1.08	1.11	3%
2378-TCDF	26.64	1.50E+07	0.76	Y	0.98	1.01	3%
12378-PeCDF	31.54	6.19E+07	1.52	Y	0.95	0.97	3%
23478-PeCDF	32.67	6.02E+07	1.55	Y	0.95	0.96	1%
123478-HxCDF	35.95	5.68E+07	1.26	Y	1.20	1.21	1%
123678-HxCDF	36.09	5.97E+07	1.26	Y	1.07	1.12	5%
234678-HxCDF	36.74	5.28E+07	1.23	Y	1.10	1.12	2%
123789-HxCDF	37.72	4.40E+07	1.23	Y	1.09	1.14	4%
1234678-HpCDF	39.20	4.69E+07	1.02	Y	1.28	1.34	4%
1234789-HpCDF	40.53	3.45E+07	1.02	Y	1.27	1.29	2%
OCDF	42.72	4.46E+07	0.92	Y	1.01	1.02	1%
ES 2378-TCDD	27.52	8.29E+07	0.78	Y	1.01	0.98	-3%
ES 12378-PeCDD	33.01	7.13E+07	1.64	Y	0.87	0.84	-4%
ES 123478-HxCDD	36.91	6.72E+07	1.29	Y	1.10	0.99	-9%
ES 123678-HxCDD	37.02	6.45E+07	1.30	Y	1.06	0.95	-10%
ES 123789-HxCDD	37.33	7.20E+07	1.30	Y	1.22	1.07	-12%
ES 1234678-HpCDD	40.09	5.80E+07	1.10	Y	0.99	0.86	-14%
ES OCDD	42.55	6.69E+07	0.89	Y	0.67	0.49	-26%
ES 2378-TCDF	26.62	1.48E+08	0.79	Y	1.01	0.98	-4%
ES 12378-PeCDF	31.53	1.27E+08	1.57	Y	0.90	0.84	-7%
ES 23478-PeCDF	32.65	1.26E+08	1.62	Y	0.89	0.83	-7%
ES 123478-HxCDF	35.94	9.37E+07	0.52	Y	1.43	1.39	-3%
ES 123678-HxCDF	36.08	1.07E+08	0.52	Y	1.63	1.58	-3%
ES 234678-HxCDF	36.72	9.40E+07	0.52	Y	1.48	1.39	-6%
ES 123789-HxCDF	37.71	7.73E+07	0.53	Y	1.29	1.14	-11%
ES 1234678-HpCDF	39.19	7.01E+07	0.45	Y	1.15	1.04	-9%
ES 1234789-HpCDF	40.52	5.34E+07	0.44	Y	0.91	0.79	-13%
ES OCDF	42.71	8.73E+07	0.90	Y	0.83	0.65	-22%

Dioxin/Furan QC Summary	Acq'd: 15 Jun 2020 09:27 PSW	ICAL: MM3_DF_10012020_12JUN2020
Lab ID: CS3_200615_DF_RA	UTP: 15-Jun-2020 10:22:45 PSW	Checkcode: 411-513-RYV
Sample ID: SIL 20-449-3	Report: 17 Jun 2020 08:16 pw	Datafile: 200615R02

Name	RT	Response	RA	OK	Ref. RRFs	Calc. RRFs	Dev'n
JS 1234-TCDD	26.85	8.50E+07	0.79	Y	-	-	-
JS 1234-TCDF	25.21	1.51E+08	0.79	Y	-	-	-
JS 123467-HxCDD	37.22	3.38E+07	1.28	Y	-	-	-
CS 37Cl-2378-TCDD	27.55	8.47E+06	n/a	-	1.04	1.00	-4%
CS 12347-PeCDD	32.50	6.22E+07	1.66	Y	0.74	0.73	-1%
CS 12346-PeCDF	30.99	1.28E+08	1.57	Y	0.86	0.85	-1%
CS 123469-HxCDF	36.38	9.16E+07	0.52	Y	1.36	1.36	0%
CS 1234689-HpCDF	39.59	6.58E+07	0.45	Y	1.05	0.97	-8%
SS 37Cl-2378-TCDD	27.55	8.47E+06	n/a	-	1.04	1.02	-1%
SS 12347-PeCDD	32.50	6.22E+07	1.66	Y	0.86	0.87	2%
SS 12346-PeCDF	30.99	1.28E+08	1.57	Y	0.96	1.01	5%
SS 123469-HxCDF	36.38	9.16E+07	0.52	Y	0.83	0.86	3%
SS 1234689-HpCDF	39.59	6.58E+07	0.45	Y	0.92	0.94	2%
OCDD-a	42.55	2.36E+06	2.36	Y	0.07	0.07	7%
OCDF-a	42.71	2.56E+06	2.47	Y	0.06	0.06	-7%

METHOD 1613B **PCDD/F CALIBRATION VERIFICATION** **FORM 4A**

Lab Name: SGS North America

Initial Calibration: ICAL: MM3_DF_10012020_12JUN2020

Instrument ID: MM3 GC Column ID: ZB-5ms

VER Data Filename: 200615R02 Analysis Date: 15-JUN-2020 09:27:48

NATIVE ANALYTES	M/Z's FORMING RATIO	ION ABUND. RATIO	QC LIMITS	OK	CONC. FOUND	RANGE (ng/mL)	OK
2,3,7,8-TCDD	M/M+2	0.84	0.65 - 0.89	Y	10.5	7.8 - 12.9	Y
1,2,3,7,8-PeCDD	M+2/M+4	1.58	1.32 - 1.78	Y	50.3	39 - 65	Y
1,2,3,4,7,8-HxCDD	M+2/M+4	1.25	1.05 - 1.43	Y	50.7	39 - 64	Y
1,2,3,6,7,8-HxCDD	M+2/M+4	1.26	1.05 - 1.43	Y	51.8	39 - 64	Y
1,2,3,7,8,9-HxCDD	M+2/M+4	1.25	1.05 - 1.43	Y	51.2	41 - 61	Y
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	0.88 - 1.20	Y	50.6	43 - 58	Y
OCDD	M+2/M+4	0.88	0.76 - 1.02	Y	103	79 - 126	Y
2,3,7,8-TCDF	M/M+2	0.76	0.65 - 0.89	Y	10.3	8.4 - 12	Y
1,2,3,7,8-PeCDF	M+2/M+4	1.52	1.32 - 1.78	Y	51.3	41 - 60	Y
2,3,4,7,8-PeCDF	M+2/M+4	1.55	1.32 - 1.78	Y	50.6	41 - 61	Y
1,2,3,4,7,8-HxCDF	M+2/M+4	1.26	1.05 - 1.43	Y	50.7	45 - 56	Y
1,2,3,6,7,8-HxCDF	M+2/M+4	1.26	1.05 - 1.43	Y	52.3	44 - 57	Y
2,3,4,6,7,8-HxCDF	M+2/M+4	1.23	1.05 - 1.43	Y	51.2	44 - 57	Y
1,2,3,7,8,9-HxCDF	M+2/M+4	1.23	1.05 - 1.43	Y	52.1	45 - 56	Y
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.02	0.88 - 1.20	Y	52.2	45 - 55	Y
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.02	0.88 - 1.20	Y	50.9	43 - 58	Y
OCDF	M+2/M+4	0.92	0.76 - 1.02	Y	101	63 - 159	Y

See Table 9, Method 1613, for m/z specifications.

Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

Contract-required concentration range as specified in Table 6, Method 1613.

Processed: 17 Jun 2020 08:16 Analyst: pw

METHOD 1613B **PCDD/F CALIBRATION VERIFICATION** **FORM 4B**

Lab Name: SGS North America

Initial Calibration: ICAL: MM3_DF_10012020_12JUN2020

Instrument ID: MM3 GC Column ID: ZB-5ms

VER Data Filename: 200615R02 Analysis Date: 15-JUN-2020 09:27:48

LABELED ANALYTES	M/Z's FORMING RATIO	ION ABUND. RATIO	QC LIMITS			OK	CONC. FOUND	RANGE (ng/mL)			OK
13C-2,3,7,8-TCDD	M/M+2	0.78	0.65	-	0.89	Y	96.9	82	-	121	Y
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.64	1.32	-	1.78	Y	96.3	62	-	160	Y
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.29	1.05	-	1.43	Y	90.8	85	-	117	Y
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.30	1.05	-	1.43	Y	90.1	85	-	118	Y
13C-1,2,3,7,8,9-HxCDD	M+2/M+4	1.30	1.05	-	1.43	Y	87.6	85	-	118	Y
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.10	0.88	-	1.20	Y	86.5	72	-	138	Y
13C-OCDD	M+2/M+4	0.89	0.76	-	1.02	Y	148	96	-	415	Y
13C-2,3,7,8-TCDF	M/M+2	0.79	0.65	-	0.89	Y	96.3	71	-	140	Y
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.57	1.32	-	1.78	Y	93.3	76	-	130	Y
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.62	1.32	-	1.78	Y	93.3	77	-	130	Y
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	97	76	-	131	Y
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	96.8	70	-	143	Y
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	94.1	73	-	137	Y
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.53	0.43	-	0.59	Y	88.6	74	-	135	Y
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.45	0.37	-	0.51	Y	90.5	78	-	129	Y
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.44	0.37	-	0.51	Y	87.3	77	-	129	Y
13C-OCDF	M+2/M+4	0.90	0.76	-	1.02	Y	156	96	-	415	Y
CLEANUP STANDARDS											
37Cl-2,3,7,8-TCDD	n/a						9.62	7.9	-	12.7	Y
13C-1,2,3,4,7-PeCDD	M+2/M+4	1.66	1.32	-	1.78	Y	98.9	70	-	130	Y
13C-1,2,3,4,6-PeCDF	M+2/M+4	1.57	1.32	-	1.78	Y	98.6	70	-	130	Y
13C-1,2,3,4,6,9-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	99.9	70	-	130	Y
13C-1,2,3,4,6,8,9-HpCDF	M/M+2	0.45	0.37	-	0.51	Y	92.4	70	-	130	Y

Processed: 17 Jun 2020 08:16 Analyst: pw

METHOD 8290A **PCDD/F CALIBRATION VERIFICATION** **FORM 4A**

Lab Name: SGS North America

Initial Calibration: ICAL: MM3_DF_10012020_12JUN2020

Instrument ID: MM3 GC Column ID: ZB-5ms

VER Data Filename: 200615R02 Analysis Date: 15-JUN-2020 09:27:48

NATIVE ANALYTES	M/Z's FORMING RATIO	ION ABUND. RATIO	QC LIMITS			OK	CONC. FOUND	RANGE (ng/mL)			OK
2,3,7,8-TCDD	M/M+2	0.84	0.65	-	0.89	Y	10.5	8	-	12	Y
1,2,3,7,8-PeCDD	M+2/M+4	1.58	1.32	-	1.78	Y	50.3	40	-	60	Y
1,2,3,4,7,8-HxCDD	M+2/M+4	1.25	1.05	-	1.43	Y	50.7	40	-	60	Y
1,2,3,6,7,8-HxCDD	M+2/M+4	1.26	1.05	-	1.43	Y	51.8	40	-	60	Y
1,2,3,7,8,9-HxCDD	M+2/M+4	1.25	1.05	-	1.43	Y	51.2	40	-	60	Y
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	0.88	-	1.20	Y	50.6	40	-	60	Y
OCDD	M+2/M+4	0.88	0.76	-	1.02	Y	103	80	-	120	Y
2,3,7,8-TCDF	M/M+2	0.76	0.65	-	0.89	Y	10.3	8	-	12	Y
1,2,3,7,8-PeCDF	M+2/M+4	1.52	1.32	-	1.78	Y	51.3	40	-	60	Y
2,3,4,7,8-PeCDF	M+2/M+4	1.55	1.32	-	1.78	Y	50.6	40	-	60	Y
1,2,3,4,7,8-HxCDF	M+2/M+4	1.26	1.05	-	1.43	Y	50.7	40	-	60	Y
1,2,3,6,7,8-HxCDF	M+2/M+4	1.26	1.05	-	1.43	Y	52.3	40	-	60	Y
2,3,4,6,7,8-HxCDF	M+2/M+4	1.23	1.05	-	1.43	Y	51.2	40	-	60	Y
1,2,3,7,8,9-HxCDF	M+2/M+4	1.23	1.05	-	1.43	Y	52.1	40	-	60	Y
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.02	0.88	-	1.20	Y	52.2	40	-	60	Y
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.02	0.88	-	1.20	Y	50.9	40	-	60	Y
OCDF	M+2/M+4	0.92	0.76	-	1.02	Y	101	80	-	120	Y

Processed: 17 Jun 2020 08:15 Analyst: pw

METHOD 8290A **PCDD/F CALIBRATION VERIFICATION** **FORM 4B**

Lab Name: SGS North America

Initial Calibration: ICAL: MM3_DF_10012020_12JUN2020

Instrument ID: MM3 GC Column ID: ZB-5ms

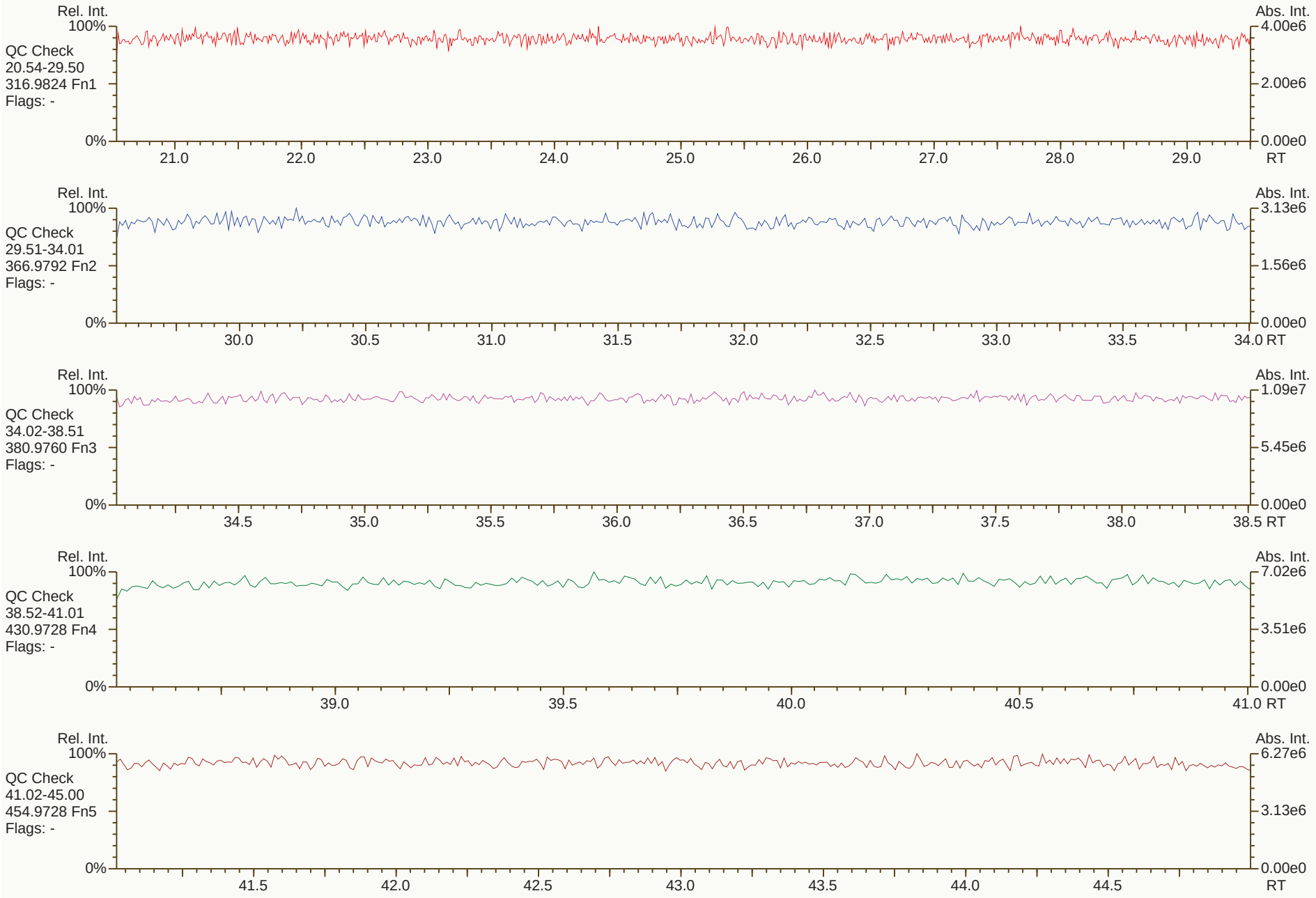
VER Data Filename: 200615R02 Analysis Date: 15-JUN-2020 09:27:48

LABELED ANALYTES	M/Z's FORMING RATIO	ION ABUND. RATIO	QC LIMITS			OK	CONC. FOUND	RANGE (ng/mL)			OK
13C-2,3,7,8-TCDD	M/M+2	0.78	0.65	-	0.89	Y	96.9	70	-	130	Y
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.64	1.32	-	1.78	Y	96.3	70	-	130	Y
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.29	1.05	-	1.43	Y	90.8	70	-	130	Y
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.30	1.05	-	1.43	Y	90.1	70	-	130	Y
13C-1,2,3,7,8,9-HxCDD	M+2/M+4	1.30	1.05	-	1.43	Y	87.6	70	-	130	Y
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.10	0.88	-	1.20	Y	86.5	70	-	130	Y
13C-OCDD	M+2/M+4	0.89	0.76	-	1.02	Y	148	140	-	260	Y
13C-2,3,7,8-TCDF	M/M+2	0.79	0.65	-	0.89	Y	96.3	70	-	130	Y
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.57	1.32	-	1.78	Y	93.3	70	-	130	Y
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.62	1.32	-	1.78	Y	93.3	70	-	130	Y
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	97	70	-	130	Y
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	96.8	70	-	130	Y
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	94.1	70	-	130	Y
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.53	0.43	-	0.59	Y	88.6	70	-	130	Y
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.45	0.37	-	0.51	Y	90.5	70	-	130	Y
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.44	0.37	-	0.51	Y	87.3	70	-	130	Y
13C-OCDF	M+2/M+4	0.90	0.76	-	1.02	Y	156	140	-	260	Y
CLEANUP STANDARDS											
37Cl-2,3,7,8-TCDD	n/a						9.62	7.9	-	12.7	Y
13C-1,2,3,4,7-PeCDD	M+2/M+4	1.66	1.32	-	1.78	Y	98.9	70	-	130	Y
13C-1,2,3,4,6-PeCDF	M+2/M+4	1.57	1.32	-	1.78	Y	98.6	70	-	130	Y
13C-1,2,3,4,6,9-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	99.9	70	-	130	Y
13C-1,2,3,4,6,8,9-HpCDF	M/M+2	0.45	0.37	-	0.51	Y	92.4	70	-	130	Y

Processed: 17 Jun 2020 08:15 Analyst: pw

SGS ID: CS3_200615_DF_RA **Sample ID: SIL 20-449-3** **Acq: 15-Jun-2020 09:27:48**

Instr: [ILM] AutoSpec-Ultima MM3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 3** **User: PSW Datafile: 200615R02**



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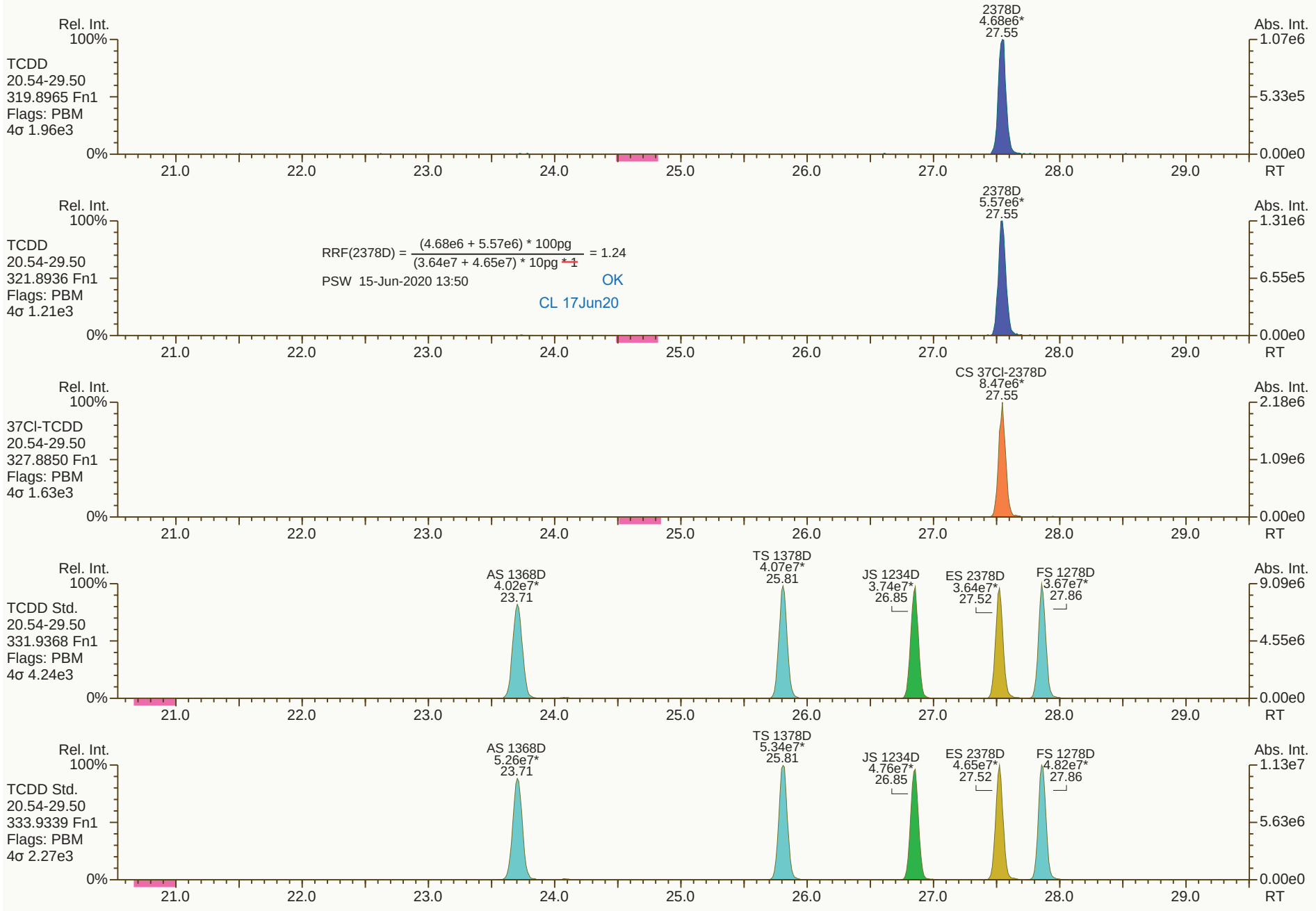
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 scc: 411-513 *PKD: n/a Printed: 15-Jun-2020 13:51 Page 1 of 12*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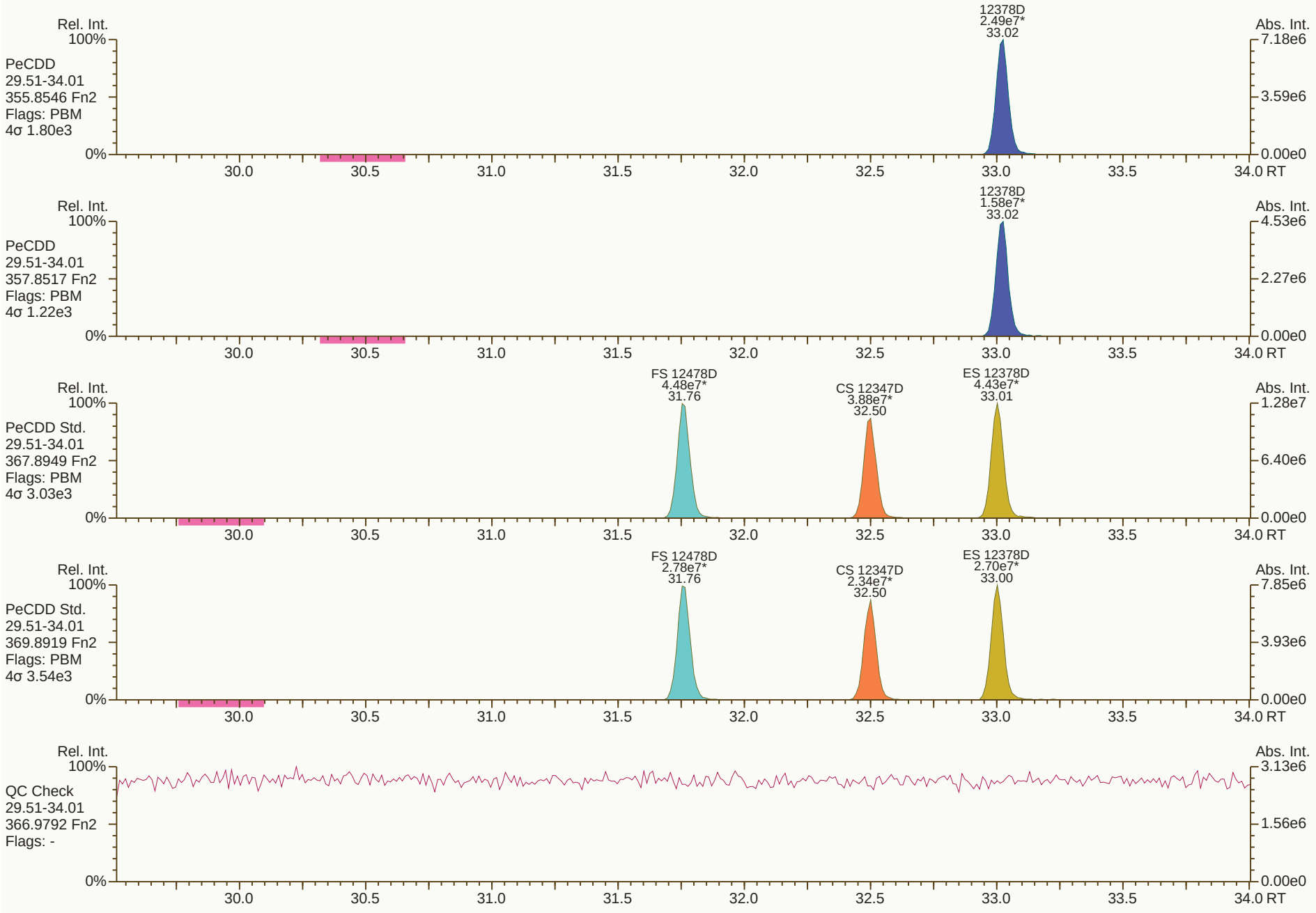
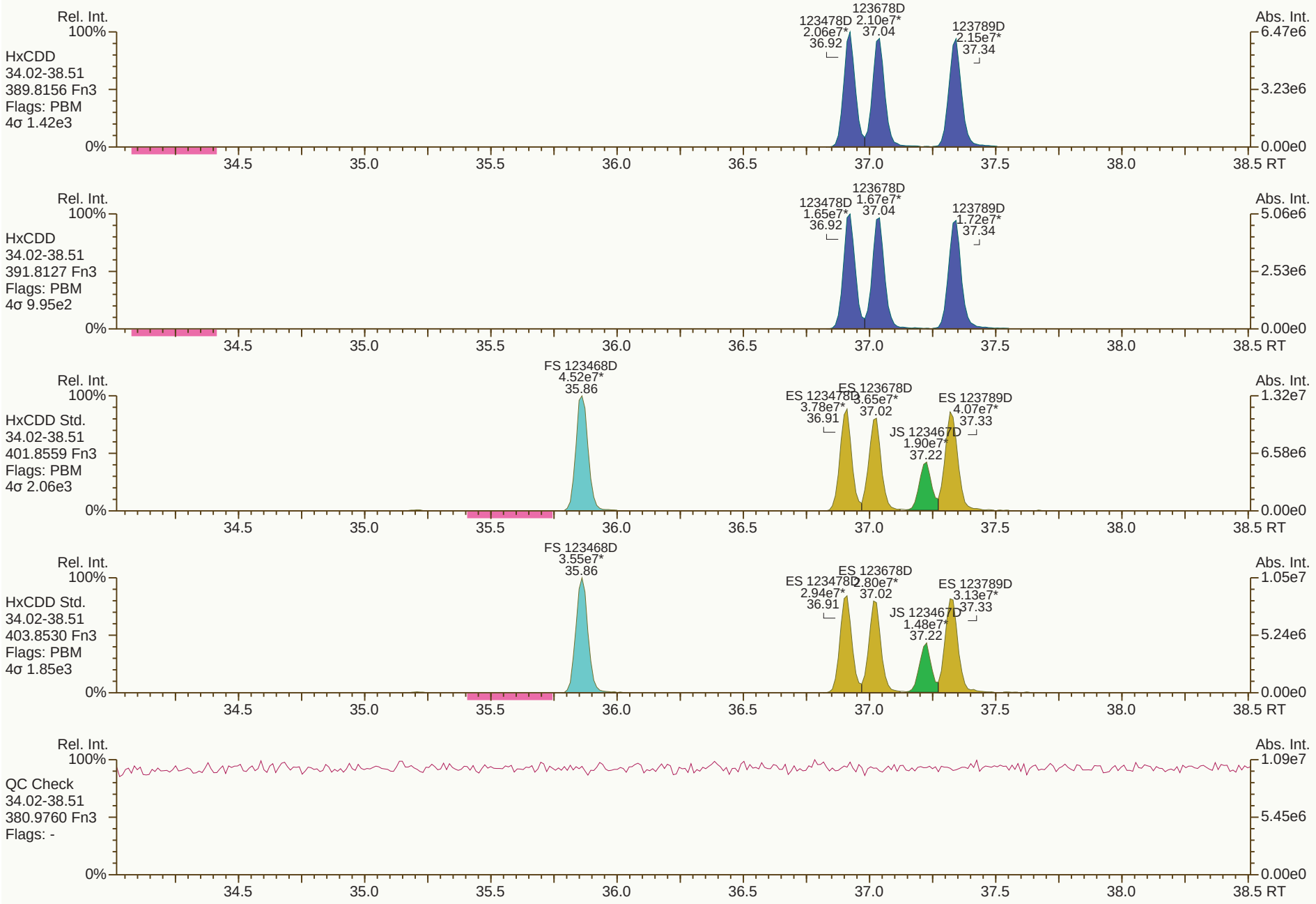
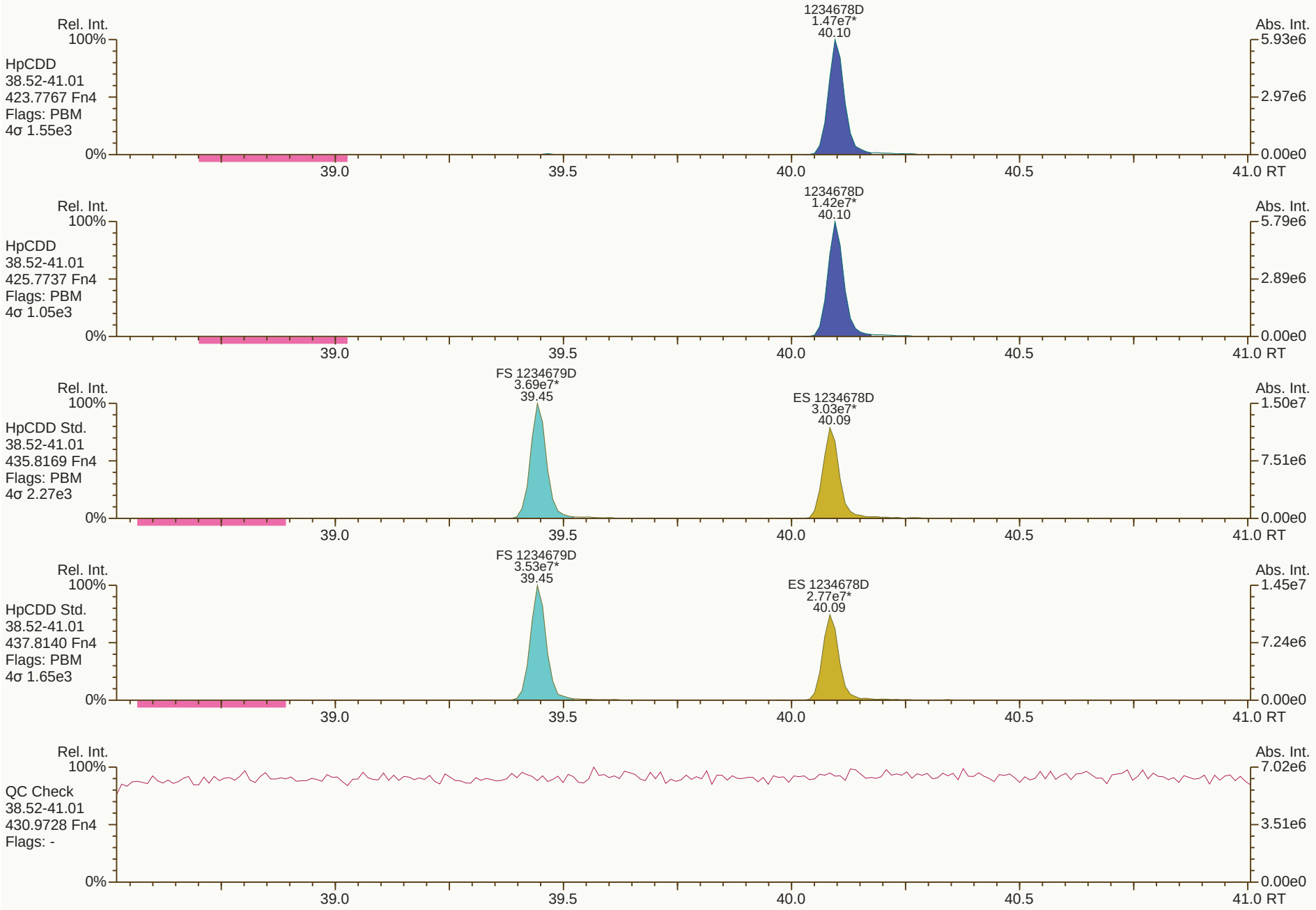
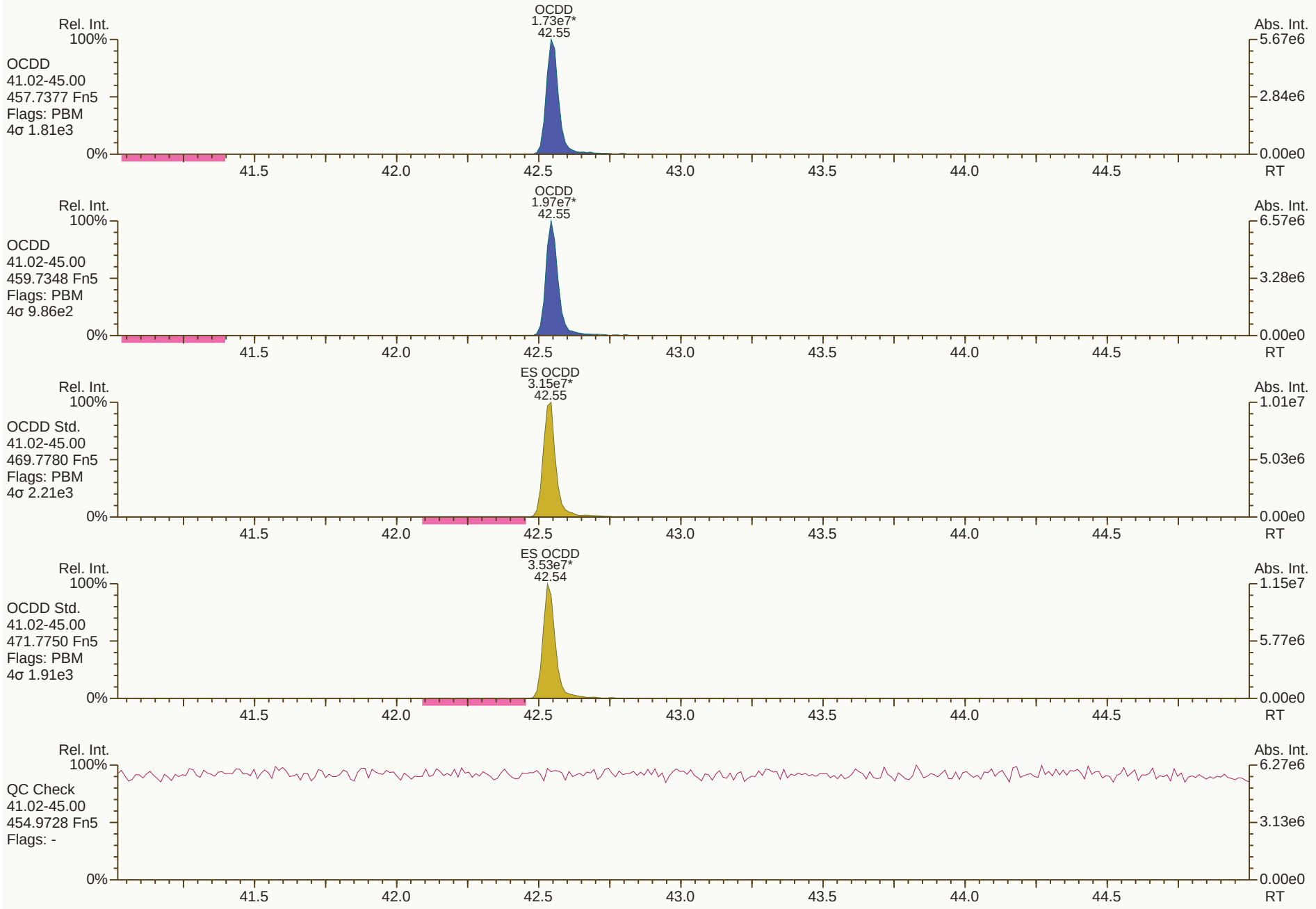
100%
TCDD
20.54-29.50
319.8965 Fn1
Flags: PBM
4σ 1.96e3
0%
2378D
4.68e6*
27.55
Abs. Int.
1.07e6
5.33e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD
20.54-29.50
321.8936 Fn1
Flags: PBM
4σ 1.21e3
0%
2378D
5.57e6*
27.55
Abs. Int.
1.31e6
6.55e5
0.00e0
RRF(2378D) = (4.68e6 + 5.57e6) * 100pg / (3.64e7 + 4.65e7) * 10pg * 1 = 1.24
PSW 15-Jun-2020 13:50
OK
CL 17Jun20
Rel. Int.
100%
37Cl-TCDD
20.54-29.50
327.8850 Fn1
Flags: PBM
4σ 1.63e3
0%
CS 37Cl-2378D
8.47e6*
27.55
Abs. Int.
2.18e6
1.09e6
0.00e0
Rel. Int.
100%
TCDD Std.
20.54-29.50
331.9368 Fn1
Flags: PBM
4σ 4.24e3
0%
AS 1368D
4.02e7*
23.71
TS 1378D
4.07e7*
25.81
JS 1234D
3.74e7*
26.85
ES 2378D
3.64e7*
27.52
FS 1278D
3.67e7*
27.86
Abs. Int.
9.09e6
4.55e6
0.00e0
Rel. Int.
100%
TCDD Std.
20.54-29.50
333.9339 Fn1
Flags: PBM
4σ 2.27e3
0%
AS 1368D
5.26e7*
23.71
TS 1378D
5.34e7*
25.81
JS 1234D
4.76e7*
26.85
ES 2378D
4.65e7*
27.52
FS 1278D
4.82e7*
27.86
Abs. Int.
1.13e7
5.63e6
0.00e0


Rel. Int.
100%
PeCDD
29.51-34.01
355.8546 Fn2
Flags: PBM
4σ 1.80e3
12378D
2.49e7*
33.02
Abs. Int.
7.18e6
3.59e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD
29.51-34.01
357.8517 Fn2
Flags: PBM
4σ 1.22e3
12378D
1.58e7*
33.02
Abs. Int.
4.53e6
2.27e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
367.8949 Fn2
Flags: PBM
4σ 3.03e3
FS 12478D
4.48e7*
31.76
CS 12347D
3.88e7*
32.50
ES 12378D
4.43e7*
33.01
Abs. Int.
1.28e7
6.40e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
369.8919 Fn2
Flags: PBM
4σ 3.54e3
FS 12478D
2.78e7*
31.76
CS 12347D
2.34e7*
32.50
ES 12378D
2.70e7*
33.00
Abs. Int.
7.85e6
3.93e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
QC Check
29.51-34.01
366.9792 Fn2
Flags: -
Abs. Int.
3.13e6
1.56e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT

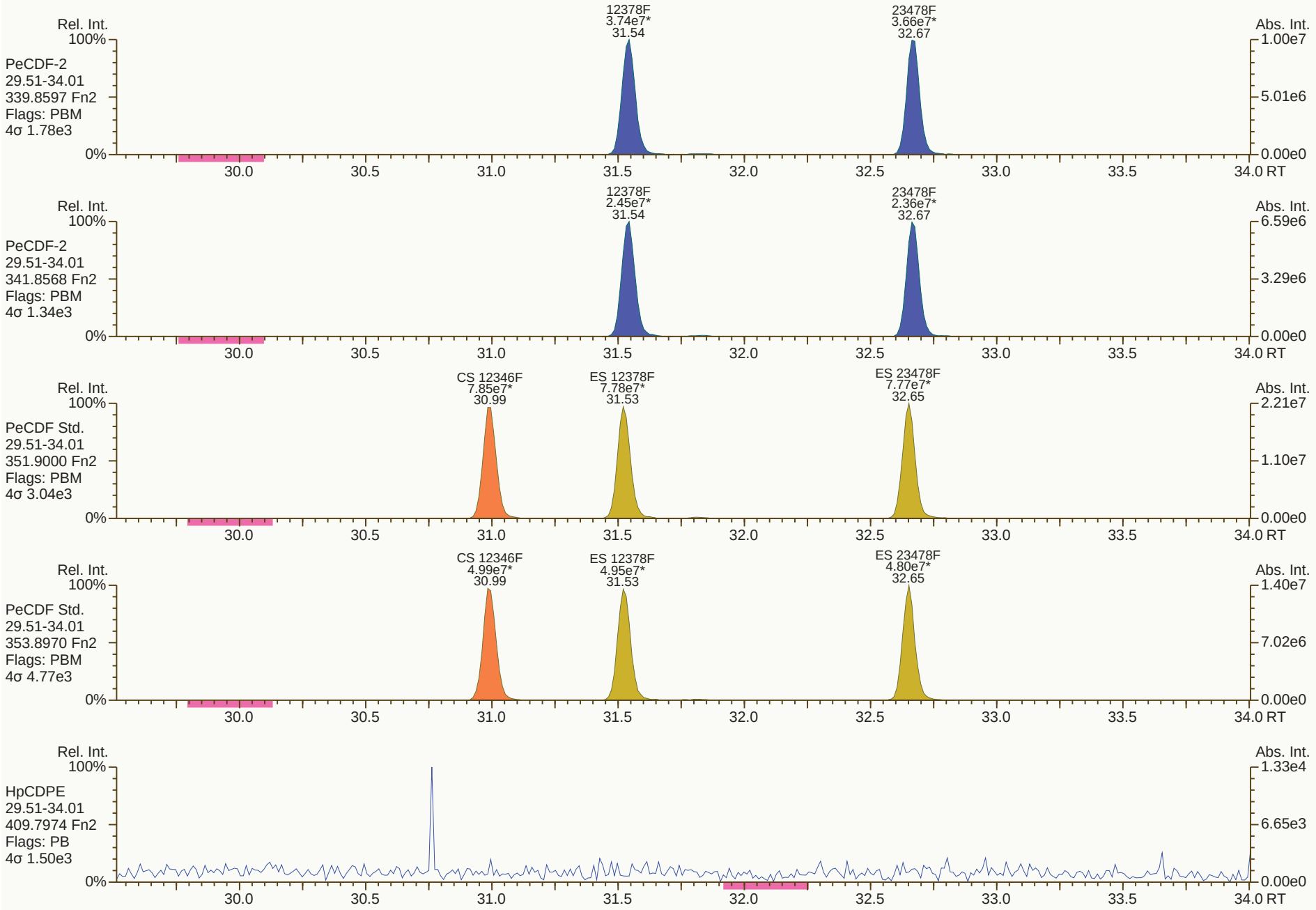

Rel. Int.
100%
HxCDD
34.02-38.51
389.8156 Fn3
Flags: PBM
4σ 1.42e3
123678D
123478D 2.10e7*
2.06e7* 37.04
36.92
123789D
2.15e7*
37.34
Abs. Int.
6.47e6
3.23e6
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 RT
Rel. Int.
100%
HxCDD
34.02-38.51
391.8127 Fn3
Flags: PBM
4σ 9.95e2
123678D
123478D 1.67e7*
1.65e7* 37.04
36.92
123789D
1.72e7*
37.34
Abs. Int.
5.06e6
2.53e6
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 RT
Rel. Int.
100%
HxCDD Std.
34.02-38.51
401.8559 Fn3
Flags: PBM
4σ 2.06e3
FS 123468D
4.52e7*
35.86
ES 123678D
ES 123478D 3.65e7*
3.78e7* 37.02
36.91
ES 123789D
4.07e7*
37.33
JS 123467D
1.90e7*
37.22
Abs. Int.
1.32e7
6.58e6
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 RT
Rel. Int.
100%
HxCDD Std.
34.02-38.51
403.8530 Fn3
Flags: PBM
4σ 1.85e3
FS 123468D
3.55e7*
35.86
ES 123678D
ES 123478D 2.80e7*
2.94e7* 37.02
36.91
ES 123789D
3.13e7*
37.33
JS 123467D
1.48e7*
37.22
Abs. Int.
1.05e7
5.24e6
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 RT
Rel. Int.
100%
QC Check
34.02-38.51
380.9760 Fn3
Flags: -
Abs. Int.
1.09e7
5.45e6
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 RT

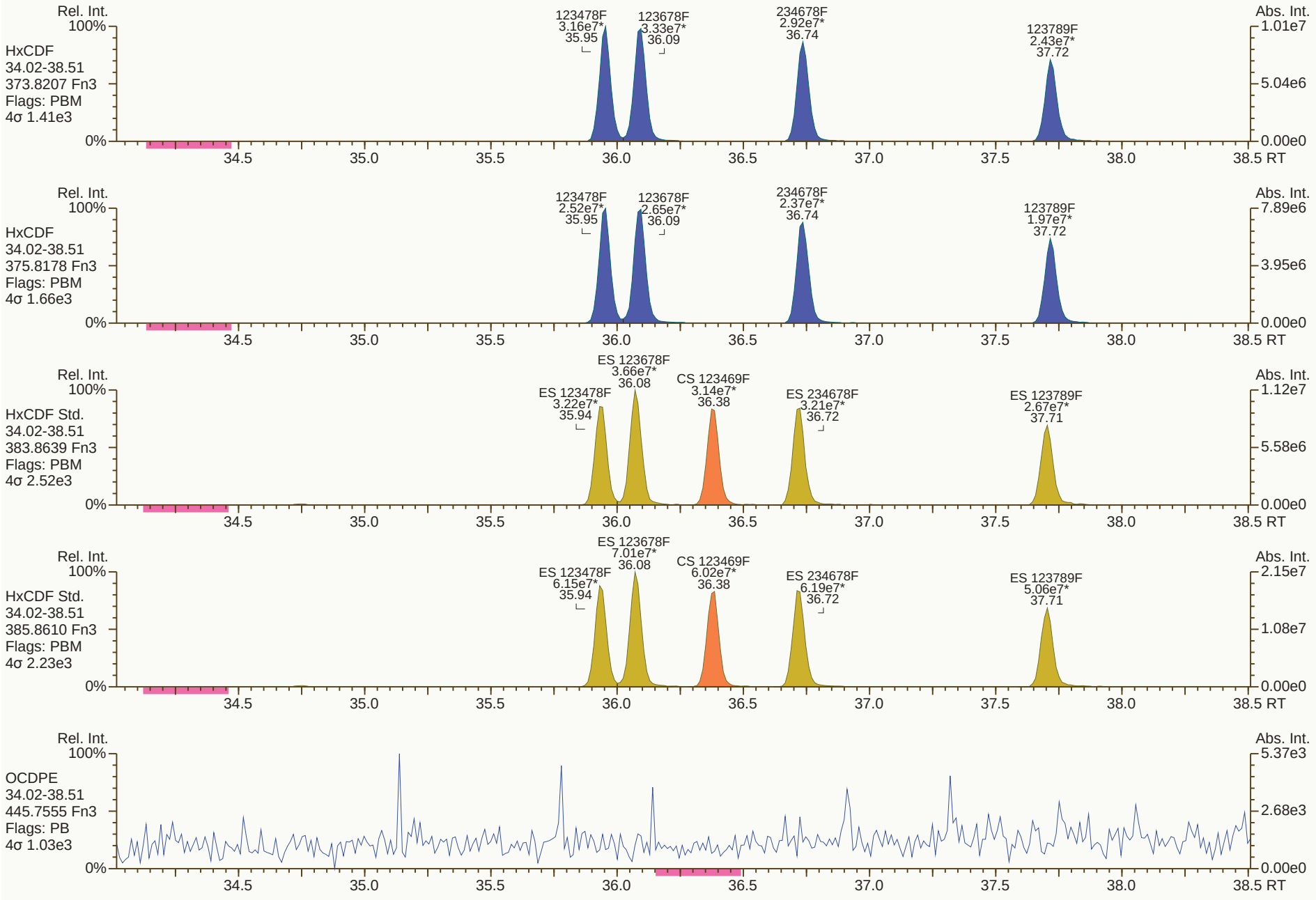

Rel. Int.
100%
HpCDD
38.52-41.01
423.7767 Fn4
Flags: PBM
4σ 1.55e3
0%
1234678D
1.47e7*
40.10
Abs. Int.
5.93e6
2.97e6
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.52-41.01
425.7737 Fn4
Flags: PBM
4σ 1.05e3
0%
1234678D
1.42e7*
40.10
Abs. Int.
5.79e6
2.89e6
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.52-41.01
435.8169 Fn4
Flags: PBM
4σ 2.27e3
0%
FS 1234679D
3.69e7*
39.45
ES 1234678D
3.03e7*
40.09
Abs. Int.
1.50e7
7.51e6
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.52-41.01
437.8140 Fn4
Flags: PBM
4σ 1.65e3
0%
FS 1234679D
3.53e7*
39.45
ES 1234678D
2.77e7*
40.09
Abs. Int.
1.45e7
7.24e6
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.52-41.01
430.9728 Fn4
Flags: -
0%
Abs. Int.
7.02e6
3.51e6
0.00e0
39.0
39.5
40.0
40.5
41.0 RT

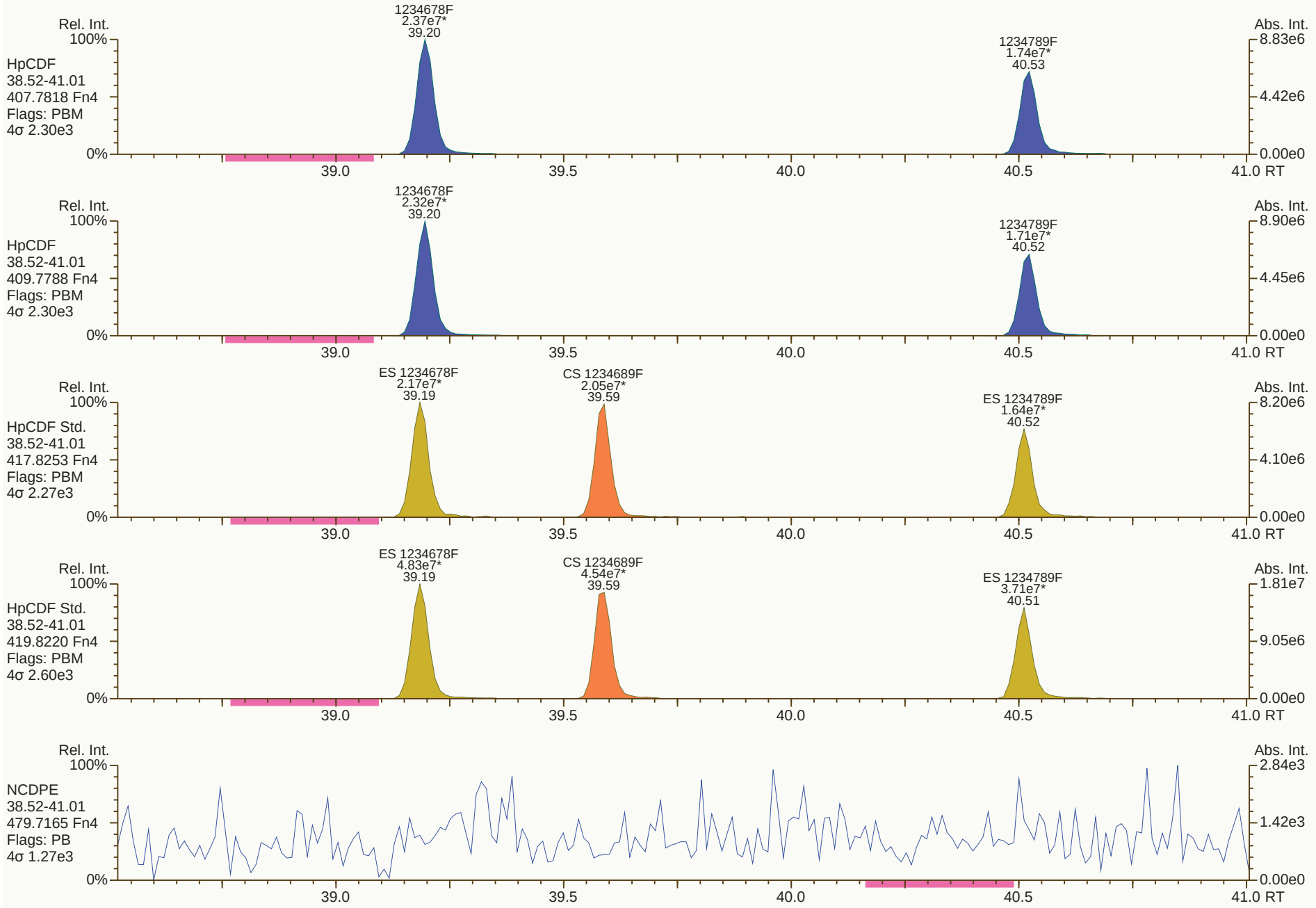

OCDD
1.73e7*
42.55
Rel. Int.
100%
OCDD
41.02-45.00
457.7377 Fn5
Flags: PBM
4σ 1.81e3
0%
Abs. Int.
5.67e6
2.84e6
0.00e0
RT
41.5
42.0
42.5
43.0
43.5
44.0
44.5
OCDD
1.97e7*
42.55
Rel. Int.
100%
OCDD
41.02-45.00
459.7348 Fn5
Flags: PBM
4σ 9.86e2
0%
Abs. Int.
6.57e6
3.28e6
0.00e0
RT
41.5
42.0
42.5
43.0
43.5
44.0
44.5
ES OCDD
3.15e7*
42.55
Rel. Int.
100%
OCDD Std.
41.02-45.00
469.7780 Fn5
Flags: PBM
4σ 2.21e3
0%
Abs. Int.
1.01e7
5.03e6
0.00e0
RT
41.5
42.0
42.5
43.0
43.5
44.0
44.5
ES OCDD
3.53e7*
42.54
Rel. Int.
100%
OCDD Std.
41.02-45.00
471.7750 Fn5
Flags: PBM
4σ 1.91e3
0%
Abs. Int.
1.15e7
5.77e6
0.00e0
RT
41.5
42.0
42.5
43.0
43.5
44.0
44.5
Rel. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
6.27e6
3.13e6
0.00e0
RT
41.5
42.0
42.5
43.0
43.5
44.0
44.5

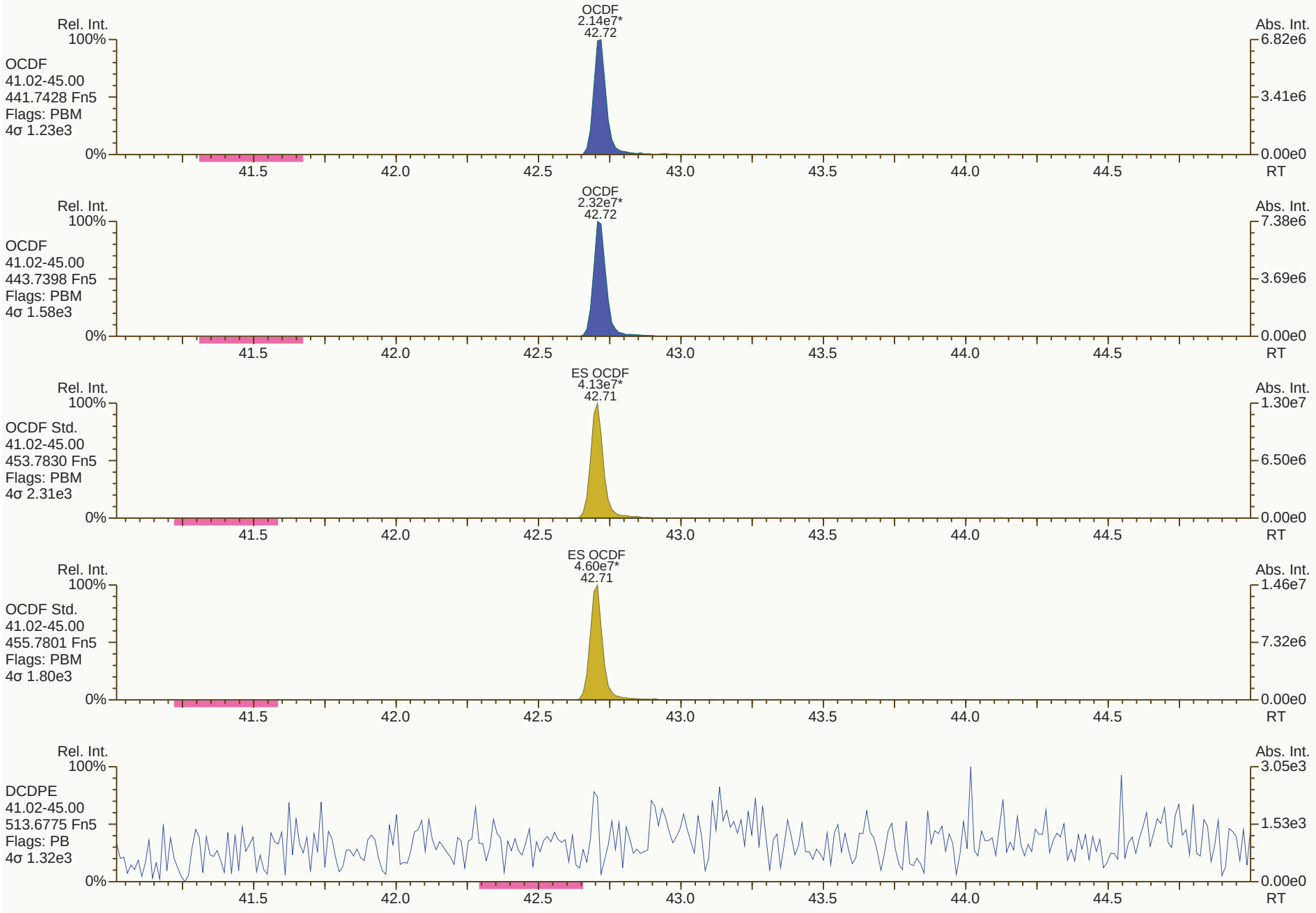

Rel. Int.
100%
TCDF
20.54-29.50
303.9016 Fn1
Flags: PBM
4σ 1.55e3
0%
2378F
6.46e6*
26.64
Abs. Int.
1.50e6
7.49e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF
20.54-29.50
305.8987 Fn1
Flags: PBM
4σ 1.34e3
0%
2378F
8.54e6*
26.64
Abs. Int.
1.91e6
9.54e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
315.9419 Fn1
Flags: PBM
4σ 1.05e4
0%
AS 1368F
7.92e7*
21.49
JS 1234F
6.66e7*
25.21
ES 2378F
6.54e7*
26.62
Abs. Int.
1.52e7
7.61e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
317.9389 Fn1
Flags: PBM
4σ 3.69e3
0%
AS 1368F
1.02e8*
21.49
JS 1234F
8.48e7*
25.21
ES 2378F
8.26e7*
26.61
Abs. Int.
1.92e7
9.59e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
HxCDPE
20.54-29.50
375.8364 Fn1
Flags: PB
4σ 1.61e3
0%
Abs. Int.
3.74e3
1.87e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
0%
Abs. Int.
5.04e3
2.52e3
0.00e0
RT
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
PeCDF-1
20.54-29.50
339.8597 Fn1
Flags: PB
4σ 1.36e3
PeCDF-1
20.54-29.50
341.8568 Fn1
Flags: PB
4σ 1.90e3
9.41e3
4.71e3
QC Check
20.54-29.50
316.9824 Fn1
Flags: -
4.00e6
2.00e6


Rel. Int.
100%
PeCDF-2
29.51-34.01
339.8597 Fn2
Flags: PBM
4σ 1.78e3
0%
12378F
3.74e7*
31.54
23478F
3.66e7*
32.67
Abs. Int.
1.00e7
5.01e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF-2
29.51-34.01
341.8568 Fn2
Flags: PBM
4σ 1.34e3
0%
12378F
2.45e7*
31.54
23478F
2.36e7*
32.67
Abs. Int.
6.59e6
3.29e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
351.9000 Fn2
Flags: PBM
4σ 3.04e3
0%
CS 12346F
7.85e7*
30.99
ES 12378F
7.78e7*
31.53
ES 23478F
7.77e7*
32.65
Abs. Int.
2.21e7
1.10e7
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
353.8970 Fn2
Flags: PBM
4σ 4.77e3
0%
CS 12346F
4.99e7*
30.99
ES 12378F
4.95e7*
31.53
ES 23478F
4.80e7*
32.65
Abs. Int.
1.40e7
7.02e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
HpCDPE
29.51-34.01
409.7974 Fn2
Flags: PB
4σ 1.50e3
0%
Abs. Int.
1.33e4
6.65e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT


Rel. Int.
100%
HxCDF
34.02-38.51
373.8207 Fn3
Flags: PBM
4σ 1.41e3
123478F
3.16e7*
35.95
123678F
3.33e7*
36.09
234678F
2.92e7*
36.74
123789F
2.43e7*
37.72
Abs. Int.
1.01e7
5.04e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDF
34.02-38.51
375.8178 Fn3
Flags: PBM
4σ 1.66e3
123478F
2.52e7*
35.95
123678F
2.65e7*
36.09
234678F
2.37e7*
36.74
123789F
1.97e7*
37.72
Abs. Int.
7.89e6
3.95e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDF Std.
34.02-38.51
383.8639 Fn3
Flags: PBM
4σ 2.52e3
ES 123678F
3.66e7*
36.08
ES 123478F
3.22e7*
35.94
CS 123469F
3.14e7*
36.38
ES 234678F
3.21e7*
36.72
ES 123789F
2.67e7*
37.71
Abs. Int.
1.12e7
5.58e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDF Std.
34.02-38.51
385.8610 Fn3
Flags: PBM
4σ 2.23e3
ES 123678F
7.01e7*
36.08
ES 123478F
6.15e7*
35.94
CS 123469F
6.02e7*
36.38
ES 234678F
6.19e7*
36.72
ES 123789F
5.06e7*
37.71
Abs. Int.
2.15e7
1.08e7
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
OCDPE
34.02-38.51
445.7555 Fn3
Flags: PB
4σ 1.03e3
Abs. Int.
5.37e3
2.68e3
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT


Rel. Int.
100%
HpCDF
38.52-41.01
407.7818 Fn4
Flags: PBM
4σ 2.30e3
0%
1234678F
2.37e7*
39.20
1234789F
1.74e7*
40.53
Abs. Int.
8.83e6
4.42e6
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF
38.52-41.01
409.7788 Fn4
Flags: PBM
4σ 2.30e3
0%
1234678F
2.32e7*
39.20
1234789F
1.71e7*
40.52
Abs. Int.
8.90e6
4.45e6
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.52-41.01
417.8253 Fn4
Flags: PBM
4σ 2.27e3
0%
ES 1234678F
2.17e7*
39.19
CS 1234689F
2.05e7*
39.59
ES 1234789F
1.64e7*
40.52
Abs. Int.
8.20e6
4.10e6
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.52-41.01
419.8220 Fn4
Flags: PBM
4σ 2.60e3
0%
ES 1234678F
4.83e7*
39.19
CS 1234689F
4.54e7*
39.59
ES 1234789F
3.71e7*
40.51
Abs. Int.
1.81e7
9.05e6
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
NCDPE
38.52-41.01
479.7165 Fn4
Flags: PB
4σ 1.27e3
0%
Abs. Int.
2.84e3
1.42e3
0.00e0
39.0
39.5
40.0
40.5
41.0 RT


Rel. Int.
100%
0%
OCDF
41.02-45.00
441.7428 Fn5
Flags: PBM
4σ 1.23e3
OCDF
2.14e7*
42.72
Abs. Int.
6.82e6
3.41e6
0.00e0
RT
OCDF
41.02-45.00
443.7398 Fn5
Flags: PBM
4σ 1.58e3
OCDF
2.32e7*
42.72
7.38e6
3.69e6
OCDF Std.
41.02-45.00
453.7830 Fn5
Flags: PBM
4σ 2.31e3
ES OCDF
4.13e7*
42.71
1.30e7
6.50e6
OCDF Std.
41.02-45.00
455.7801 Fn5
Flags: PBM
4σ 1.80e3
ES OCDF
4.60e7*
42.71
1.46e7
7.32e6
DCDPE
41.02-45.00
513.6775 Fn5
Flags: PB
4σ 1.32e3
3.05e3
1.53e3
41.5
42.0
42.5
43.0
43.5
44.0
44.5

Dioxin/Furan QC Summary		Acq'd: 15 Jun 2020 10:28 PSW				ICAL: MM3_DF_10012020_12JUN2020	
Lab ID: CS3_200615_DF_RB		UTP: 15-Jun-2020 11:31:34 PSW				Checkcode: 776-449-FTJ	
Sample ID: ICV SIL 23-12-15		Report: 17 Jun 2020 08:16 pw				Datafile: 200615R03	
Name	**RT**	**Response**	**RA**	**OK**	**Ref. RRFs**	**Calc. RRFs**	**Dev'n**
2378-TCDD	27.56	9.27E+06	0.83	Y	1.18	1.20	2%
12378-PeCDD	33.03	3.83E+07	1.59	Y	1.14	1.14	0%
123478-HxCDD	36.93	3.81E+07	1.26	Y	1.09	1.20	10%
123678-HxCDD	37.05	3.92E+07	1.25	Y	1.13	1.23	9%
123789-HxCDD	37.35	4.77E+07	1.24	Y	1.05	1.10	5%
1234678-HpCDD	40.11	3.10E+07	1.04	Y	0.98	1.07	9%
OCDD	42.56	4.89E+07	0.92	Y	1.08	1.22	13%
2378-TCDF	26.65	1.43E+07	0.77	Y	0.98	1.07	9%
12378-PeCDF	31.55	6.03E+07	1.57	Y	0.95	0.97	3%
23478-PeCDF	32.68	6.65E+07	1.55	Y	0.95	1.11	17%
123478-HxCDF	35.96	5.68E+07	1.23	Y	1.20	1.28	7%
123678-HxCDF	36.10	5.89E+07	1.24	Y	1.07	1.16	9%
234678-HxCDF	36.75	5.48E+07	1.24	Y	1.10	1.22	11%
123789-HxCDF	37.73	4.60E+07	1.24	Y	1.09	1.14	4%
1234678-HpCDF	39.21	5.06E+07	1.03	Y	1.28	1.40	9%
1234789-HpCDF	40.53	3.82E+07	1.02	Y	1.27	1.32	4%
OCDF	42.73	5.27E+07	0.89	Y	1.01	1.04	3%
ES 2378-TCDD	27.54	7.71E+07	0.77	Y	1.01	1.06	5%
ES 12378-PeCDD	33.01	6.73E+07	1.67	Y	0.87	0.93	6%
ES 123478-HxCDD	36.92	6.35E+07	1.32	Y	1.10	1.02	-7%
ES 123678-HxCDD	37.03	6.38E+07	1.27	Y	1.06	1.02	-4%
ES 123789-HxCDD	37.34	8.67E+07	1.29	Y	1.22	1.39	14%
ES 1234678-HpCDD	40.1	5.78E+07	1.06	Y	0.99	0.92	-7%
ES OCDD	42.55	8.04E+07	0.91	Y	0.67	0.64	-4%
ES 2378-TCDF	26.63	1.34E+08	0.80	Y	1.01	1.09	8%
ES 12378-PeCDF	31.54	1.24E+08	1.54	Y	0.90	1.01	12%
ES 23478-PeCDF	32.66	1.20E+08	1.56	Y	0.89	0.98	10%
ES 123478-HxCDF	35.95	8.88E+07	0.51	Y	1.43	1.42	-1%
ES 123678-HxCDF	36.08	1.01E+08	0.52	Y	1.63	1.62	-1%
ES 234678-HxCDF	36.73	8.98E+07	0.52	Y	1.48	1.44	-3%
ES 123789-HxCDF	37.72	8.11E+07	0.52	Y	1.29	1.30	0%
ES 1234678-HpCDF	39.2	7.25E+07	0.45	Y	1.15	1.16	1%
ES 1234789-HpCDF	40.52	5.78E+07	0.46	Y	0.91	0.92	2%
ES OCDF	42.72	1.01E+08	0.89	Y	0.83	0.81	-3%

Dioxin/Furan QC Summary	Acq'd: 15 Jun 2020 10:28 PSW	ICAL: MM3_DF_10012020_12JUN2020
Lab ID: CS3_200615_DF_RB	UTP: 15-Jun-2020 11:31:34 PSW	Checkcode: 776-449-FTJ
Sample ID: ICV SIL 23-12-15	Report: 17 Jun 2020 08:16 pw	Datafile: 200615R03

Name	RT	Response	RA	OK	Ref. RRFs	Calc. RRFs	Dev'n	
JS 1234-TCDD	26.86	7.27E+07	0.77	Y	-	-	-	
JS 1234-TCDF	25.22	1.23E+08	0.79	Y	-	-	-	
JS 123467-HxCDD	37.23	3.13E+07	1.30	Y	-	-	-	
								OK
CS 37Cl-2378-TCDD	27.56	3.32E+07	n/a	-	1.04	4.56 /4	340%	spike level 40 pg/uL
CS 12347-PeCDD	32.51	6.36E+07	1.69	Y	0.74	0.88	18%	
CS 12346-PeCDF	31.00	1.15E+08	1.57	Y	0.86	0.94	9%	
CS 123469-HxCDF	36.39	8.60E+07	0.52	Y	1.36	1.37	1%	CL 17Jun20
CS 1234689-HpCDF	39.60	6.99E+07	0.44	Y	1.05	1.12	6%	
SS 37Cl-2378-TCDD	27.56	3.32E+07	n/a	-	1.04	4.30/4	315%	
SS 12347-PeCDD	32.51	6.36E+07	1.69	Y	0.86	0.95	11%	
SS 12346-PeCDF	31.00	1.15E+08	1.57	Y	0.96	0.93	-3%	
SS 123469-HxCDF	36.39	8.60E+07	0.52	Y	0.83	0.85	2%	
SS 1234689-HpCDF	39.60	6.99E+07	0.44	Y	0.92	0.97	4%	

n/a CL 17Jun20

~~OCDD-a~~	~~42.56~~	~~2.45E+06~~	~~3.00~~	~~N~~	~~0.07~~	~~0.06~~	~~-8%~~
~~OCDF-a~~	~~42.72~~	~~3.32E+06~~	~~2.37~~	~~Y~~	~~0.06~~	~~0.07~~	~~4%~~

METHOD 1613B **PCDD/F CALIBRATION VERIFICATION** **FORM 4A**

Lab Name: SGS North America

Initial Calibration: ICAL: MM3_DF_10012020_12JUN2020

Instrument ID: MM3 GC Column ID: ZB-5ms

VER Data Filename: 200615R03 Analysis Date: 15-JUN-2020 10:28:16

NATIVE ANALYTES	M/Z's FORMING RATIO	ION ABUND. RATIO	QC LIMITS	OK	CONC. FOUND	RANGE (ng/mL)	OK
2,3,7,8-TCDD	M/M+2	0.83	0.65 - 0.89	Y	10.2	7.8 - 12.9	Y
1,2,3,7,8-PeCDD	M+2/M+4	1.59	1.32 - 1.78	Y	50.1	39 - 65	Y
1,2,3,4,7,8-HxCDD	M+2/M+4	1.26	1.05 - 1.43	Y	54.9	39 - 64	Y
1,2,3,6,7,8-HxCDD	M+2/M+4	1.25	1.05 - 1.43	Y	54.5	39 - 64	Y
1,2,3,7,8,9-HxCDD	M+2/M+4	1.24	1.05 - 1.43	Y	52.4	41 - 61	Y
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	0.88 - 1.20	Y	54.5	43 - 58	Y
OCDD	M+2/M+4	0.92	0.76 - 1.02	Y	113	79 - 126	Y
2,3,7,8-TCDF	M/M+2	0.77	0.65 - 0.89	Y	10.9	8.4 - 12	Y
1,2,3,7,8-PeCDF	M+2/M+4	1.57	1.32 - 1.78	Y	51.3	41 - 60	Y
2,3,4,7,8-PeCDF	M+2/M+4	1.55	1.32 - 1.78	Y	58.6	41 - 61	Y
1,2,3,4,7,8-HxCDF	M+2/M+4	1.23	1.05 - 1.43	Y	53.5	45 - 56	Y
1,2,3,6,7,8-HxCDF	M+2/M+4	1.24	1.05 - 1.43	Y	54.3	44 - 57	Y
2,3,4,6,7,8-HxCDF	M+2/M+4	1.24	1.05 - 1.43	Y	55.6	44 - 57	Y
1,2,3,7,8,9-HxCDF	M+2/M+4	1.24	1.05 - 1.43	Y	52	45 - 56	Y
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.03	0.88 - 1.20	Y	54.5	45 - 55	Y
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.02	0.88 - 1.20	Y	52.1	43 - 58	Y
OCDF	M+2/M+4	0.89	0.76 - 1.02	Y	103	63 - 159	Y

See Table 9, Method 1613, for m/z specifications.

Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

Contract-required concentration range as specified in Table 6, Method 1613.

Processed: 17 Jun 2020 08:16 Analyst: pw

METHOD 1613B **PCDD/F CALIBRATION VERIFICATION** **FORM 4B**

Lab Name: SGS North America

Initial Calibration: ICAL: MM3_DF_10012020_12JUN2020

Instrument ID: MM3 GC Column ID: ZB-5ms

VER Data Filename: 200615R03 Analysis Date: 15-JUN-2020 10:28:16

LABELED ANALYTES	M/Z's FORMING RATIO	ION ABUND. RATIO	QC LIMITS			OK	CONC. FOUND	RANGE (ng/mL)			OK	
13C-2,3,7,8-TCDD	M/M+2	0.77	0.65	-	0.89	Y	105	82	-	121	Y	
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.67	1.32	-	1.78	Y	106	62	-	160	Y	
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.32	1.05	-	1.43	Y	92.7	85	-	117	Y	
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.27	1.05	-	1.43	Y	96.2	85	-	118	Y	
13C-1,2,3,7,8,9-HxCDD	M+2/M+4	1.29	1.05	-	1.43	Y	114	85	-	118	Y	
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.06	0.88	-	1.20	Y	93.1	72	-	138	Y	
13C-OCDD	M+2/M+4	0.91	0.76	-	1.02	Y	192	96	-	415	Y	
13C-2,3,7,8-TCDF	M/M+2	0.80	0.65	-	0.89	Y	108	71	-	140	Y	
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.54	1.32	-	1.78	Y	112	76	-	130	Y	
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.56	1.32	-	1.78	Y	110	77	-	130	Y	
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.51	0.43	-	0.59	Y	99.3	76	-	131	Y	
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	99.3	70	-	143	Y	
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	97.2	73	-	137	Y	
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	100	74	-	135	Y	
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.45	0.37	-	0.51	Y	101	78	-	129	Y	
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.46	0.37	-	0.51	Y	102	77	-	129	Y	
13C-OCDF	M+2/M+4	0.89	0.76	-	1.02	Y	195	96	-	415	Y	
CLEANUP STANDARDS												
								31.6	-	50.8	Y	
37Cl-2,3,7,8-TCDD	n/a						44	~~7.9~~	~~-~~	~~12.7~~	~~N~~	spike level 40 CL 17Jun20
13C-1,2,3,4,7-PeCDD	M+2/M+4	1.69	1.32	-	1.78	Y	118	70	-	130	Y	
13C-1,2,3,4,6-PeCDF	M+2/M+4	1.57	1.32	-	1.78	Y	109	70	-	130	Y	
13C-1,2,3,4,6,9-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	101	70	-	130	Y	
13C-1,2,3,4,6,8,9-HpCDF	M/M+2	0.44	0.37	-	0.51	Y	106	70	-	130	Y	

Processed: 17 Jun 2020 08:16 Analyst: pw

METHOD 8290A **PCDD/F CALIBRATION VERIFICATION** **FORM 4A**

Lab Name: SGS North America

Initial Calibration: ICAL: MM3_DF_10012020_12JUN2020

Instrument ID: MM3 GC Column ID: ZB-5ms

VER Data Filename: 200615R03 Analysis Date: 15-JUN-2020 10:28:16

NATIVE ANALYTES	M/Z's FORMING RATIO	ION ABUND. RATIO	QC LIMITS			OK	CONC. FOUND	RANGE (ng/mL)			OK
2,3,7,8-TCDD	M/M+2	0.83	0.65	-	0.89	Y	10.2	8	-	12	Y
1,2,3,7,8-PeCDD	M+2/M+4	1.59	1.32	-	1.78	Y	50.1	40	-	60	Y
1,2,3,4,7,8-HxCDD	M+2/M+4	1.26	1.05	-	1.43	Y	54.9	40	-	60	Y
1,2,3,6,7,8-HxCDD	M+2/M+4	1.25	1.05	-	1.43	Y	54.5	40	-	60	Y
1,2,3,7,8,9-HxCDD	M+2/M+4	1.24	1.05	-	1.43	Y	52.4	40	-	60	Y
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	0.88	-	1.20	Y	54.5	40	-	60	Y
OCDD	M+2/M+4	0.92	0.76	-	1.02	Y	113	80	-	120	Y
2,3,7,8-TCDF	M/M+2	0.77	0.65	-	0.89	Y	10.9	8	-	12	Y
1,2,3,7,8-PeCDF	M+2/M+4	1.57	1.32	-	1.78	Y	51.3	40	-	60	Y
2,3,4,7,8-PeCDF	M+2/M+4	1.55	1.32	-	1.78	Y	58.6	40	-	60	Y
1,2,3,4,7,8-HxCDF	M+2/M+4	1.23	1.05	-	1.43	Y	53.5	40	-	60	Y
1,2,3,6,7,8-HxCDF	M+2/M+4	1.24	1.05	-	1.43	Y	54.3	40	-	60	Y
2,3,4,6,7,8-HxCDF	M+2/M+4	1.24	1.05	-	1.43	Y	55.6	40	-	60	Y
1,2,3,7,8,9-HxCDF	M+2/M+4	1.24	1.05	-	1.43	Y	52	40	-	60	Y
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.03	0.88	-	1.20	Y	54.5	40	-	60	Y
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.02	0.88	-	1.20	Y	52.1	40	-	60	Y
OCDF	M+2/M+4	0.89	0.76	-	1.02	Y	103	80	-	120	Y

Processed: 17 Jun 2020 08:15 Analyst: pw

METHOD 8290A **PCDD/F CALIBRATION VERIFICATION** **FORM 4B**

Lab Name: SGS North America

Initial Calibration: ICAL: MM3_DF_10012020_12JUN2020

Instrument ID: MM3 GC Column ID: ZB-5ms

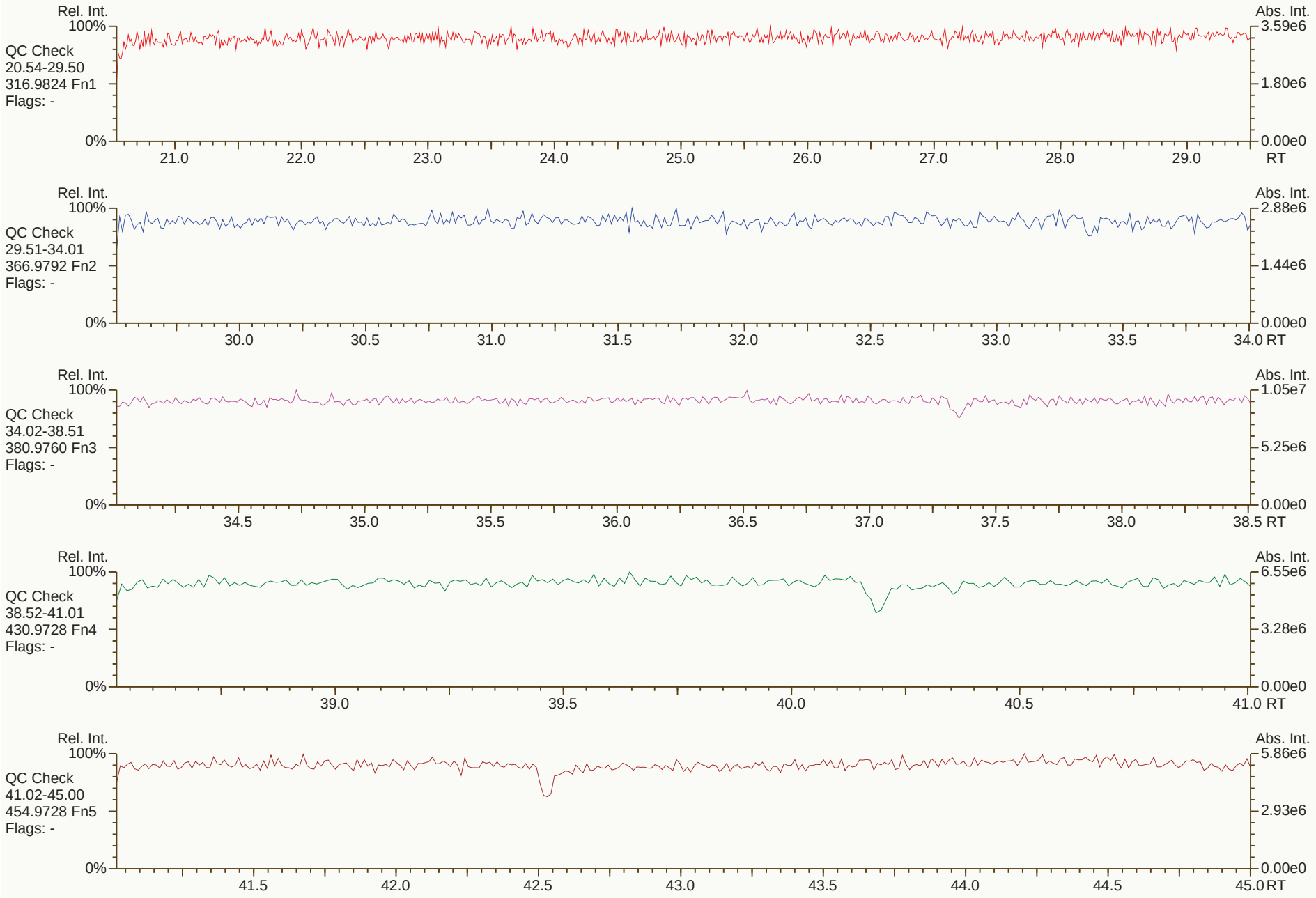
VER Data Filename: 200615R03 Analysis Date: 15-JUN-2020 10:28:16

LABELED ANALYTES	M/Z's FORMING RATIO	ION ABUND. RATIO	QC LIMITS			OK	CONC. FOUND	RANGE (ng/mL)			OK	
13C-2,3,7,8-TCDD	M/M+2	0.77	0.65	-	0.89	Y	105	70	-	130	Y	
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.67	1.32	-	1.78	Y	106	70	-	130	Y	
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.32	1.05	-	1.43	Y	92.7	70	-	130	Y	
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.27	1.05	-	1.43	Y	96.2	70	-	130	Y	
13C-1,2,3,7,8,9-HxCDD	M+2/M+4	1.29	1.05	-	1.43	Y	114	70	-	130	Y	
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.06	0.88	-	1.20	Y	93.1	70	-	130	Y	
13C-OCDD	M+2/M+4	0.91	0.76	-	1.02	Y	192	140	-	260	Y	
13C-2,3,7,8-TCDF	M/M+2	0.80	0.65	-	0.89	Y	108	70	-	130	Y	
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.54	1.32	-	1.78	Y	112	70	-	130	Y	
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.56	1.32	-	1.78	Y	110	70	-	130	Y	
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.51	0.43	-	0.59	Y	99.3	70	-	130	Y	
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	99.3	70	-	130	Y	
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	97.2	70	-	130	Y	
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	100	70	-	130	Y	
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.45	0.37	-	0.51	Y	101	70	-	130	Y	
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.46	0.37	-	0.51	Y	102	70	-	130	Y	
13C-OCDF	M+2/M+4	0.89	0.76	-	1.02	Y	195	140	-	260	Y	
CLEANUP STANDARDS												
								31.6	-	50.8	Y	
37Cl-2,3,7,8-TCDD	n/a						44	~~7.9~~	~~-~~	~~12.7~~	~~N~~	spike level 40
13C-1,2,3,4,7-PeCDD	M+2/M+4	1.69	1.32	-	1.78	Y	118	70	-	130	Y	CL 17Jun20
13C-1,2,3,4,6-PeCDF	M+2/M+4	1.57	1.32	-	1.78	Y	109	70	-	130	Y	
13C-1,2,3,4,6,9-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	101	70	-	130	Y	
13C-1,2,3,4,6,8,9-HpCDF	M/M+2	0.44	0.37	-	0.51	Y	106	70	-	130	Y	

Processed: 17 Jun 2020 08:15 Analyst: pw

SGS ID: CS3_200615_DF_RB **Sample ID: ICV SIL 23-12-15** **Acq: 15-Jun-2020 10:28:16**

Instr: [ILM] AutoSpec-Ultima MM3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 13** **User: PSW Datafile: 200615R03**



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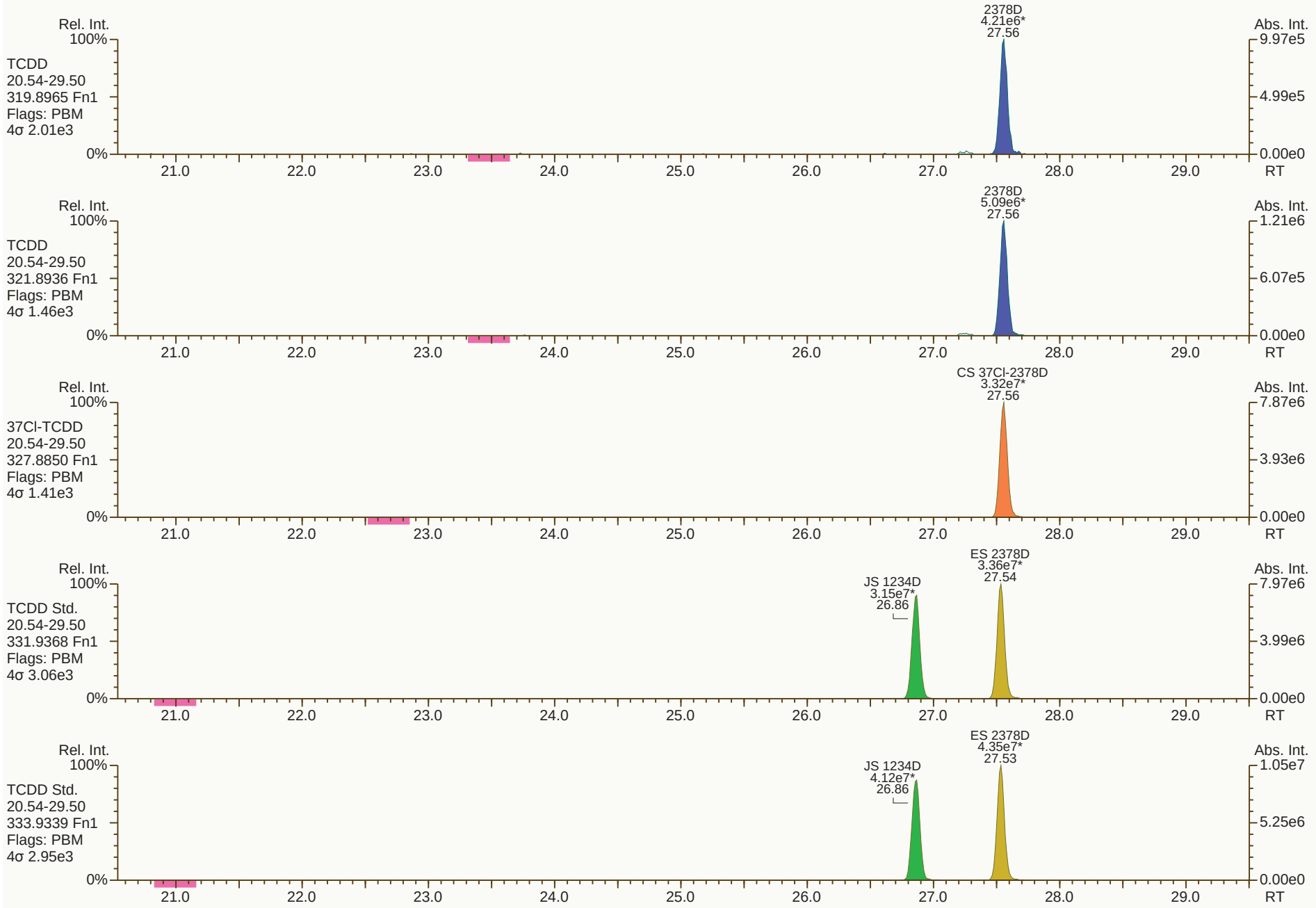
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 scc: 776-449 *PKD: n/a Printed: 15-Jun-2020 13:51 Page 1 of 12*

SGS ID: CS3_200615_DF_RB **Sample ID: ICV SIL 23-12-15** **Acq: 15-Jun-2020 10:28:16**

Instr: [ILM] AutoSpec-Ultima MM3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 13** **User: PSW Datafile: 200615R03**



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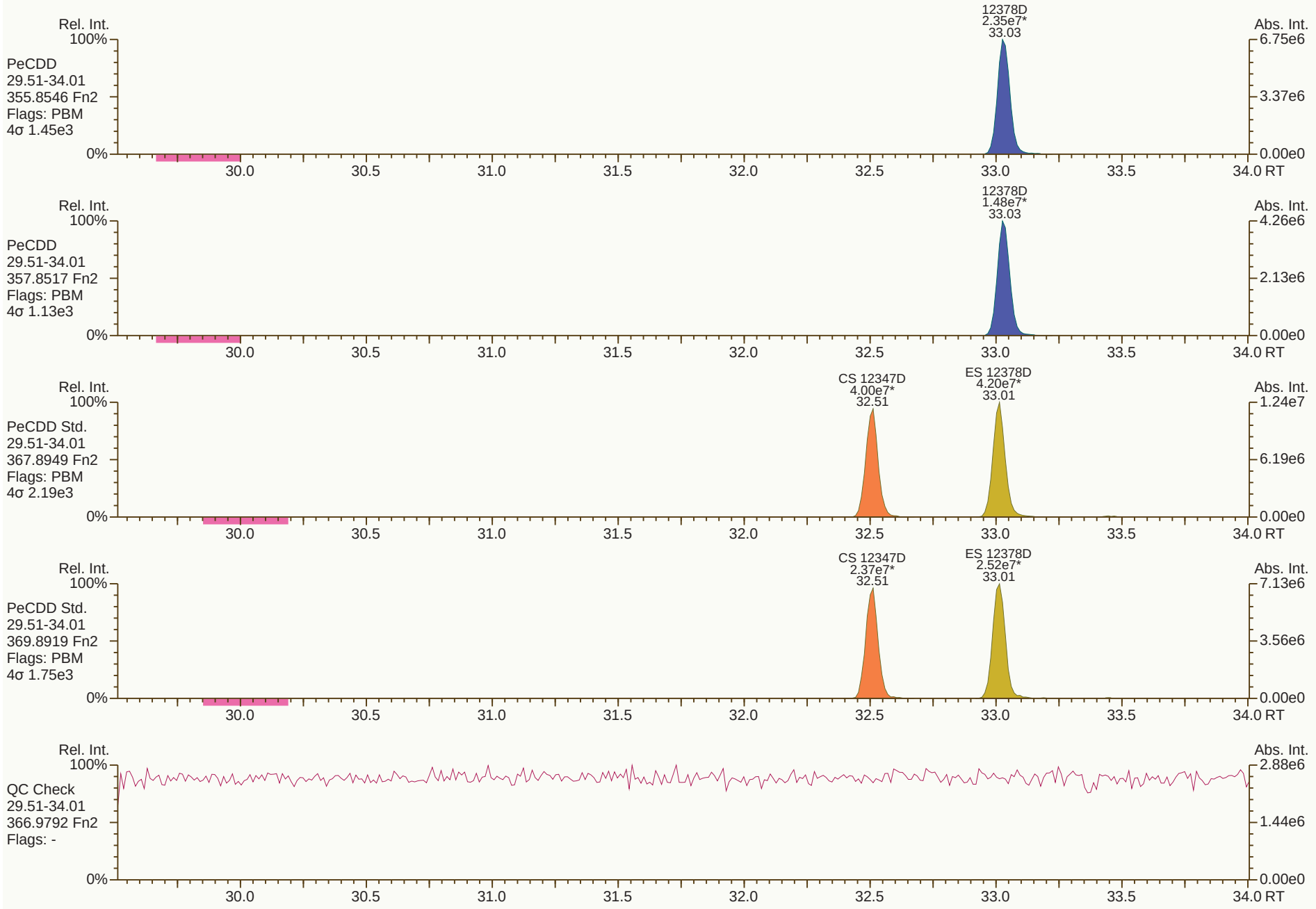
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 0398, 0344, 0937 scc: 776-449 *Revised: 15-Jun-2020 11:31 (PSW) Printed: 15-Jun-2020 13:51 Page 2 of 12*

SGS ID: CS3_200615_DF_RB **Sample ID: ICV SIL 23-12-15** **Acq: 15-Jun-2020 10:28:16**

Instr: [ILM] AutoSpec-Ultima MM3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 13** **User: PSW Datafile: 200615R03**



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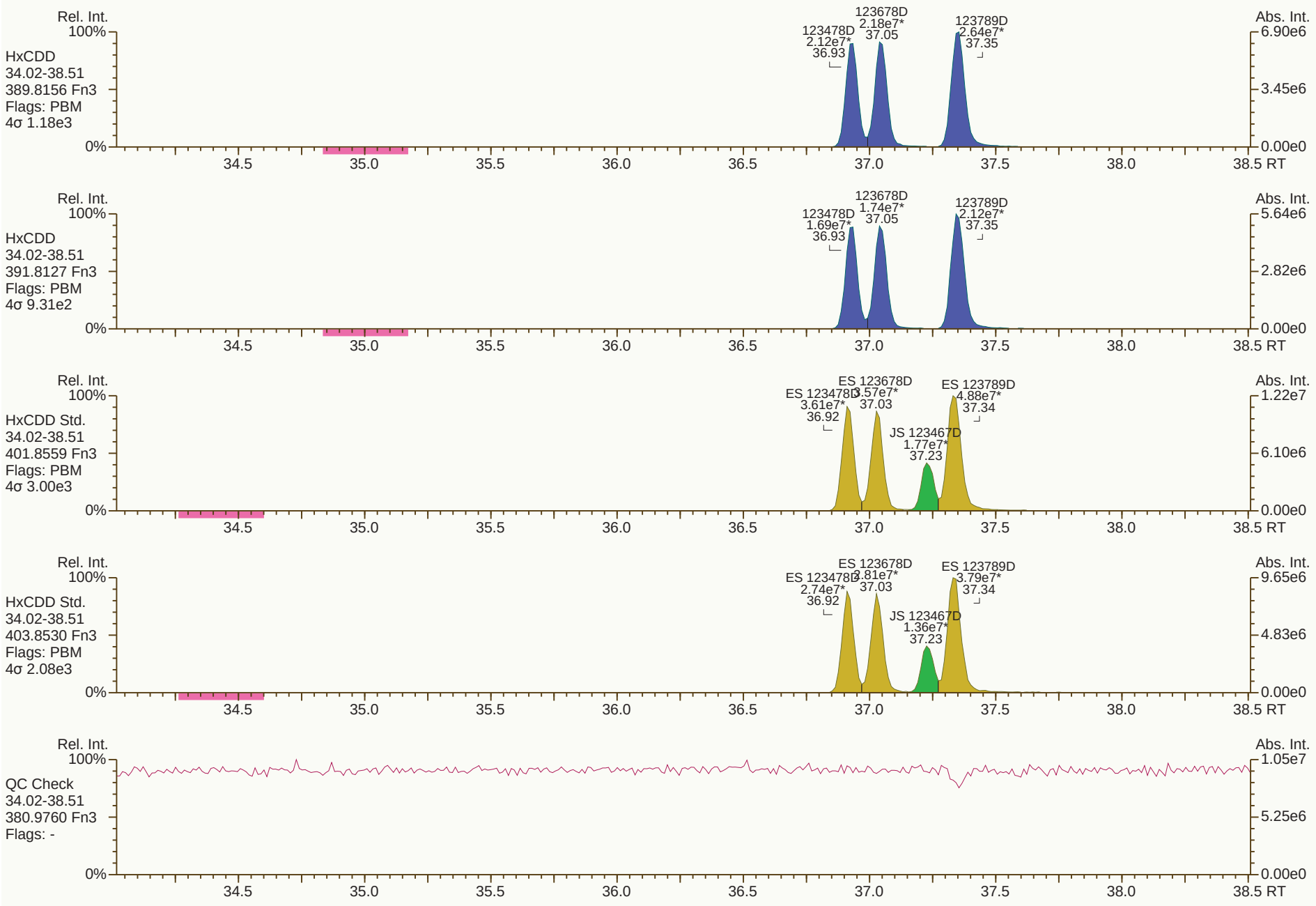
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 8418, 9158 scc: 776-449 *PKD: 15-Jun-2020 11:29 Printed: 15-Jun-2020 13:51 Page 3 of 12*

SGS ID: CS3_200615_DF_RB **Sample ID: ICV SIL 23-12-15** **Acq: 15-Jun-2020 10:28:16**
Instr: [ILM] AutoSpec-Ultima MM3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 13** **User: PSW Datafile: 200615R03**



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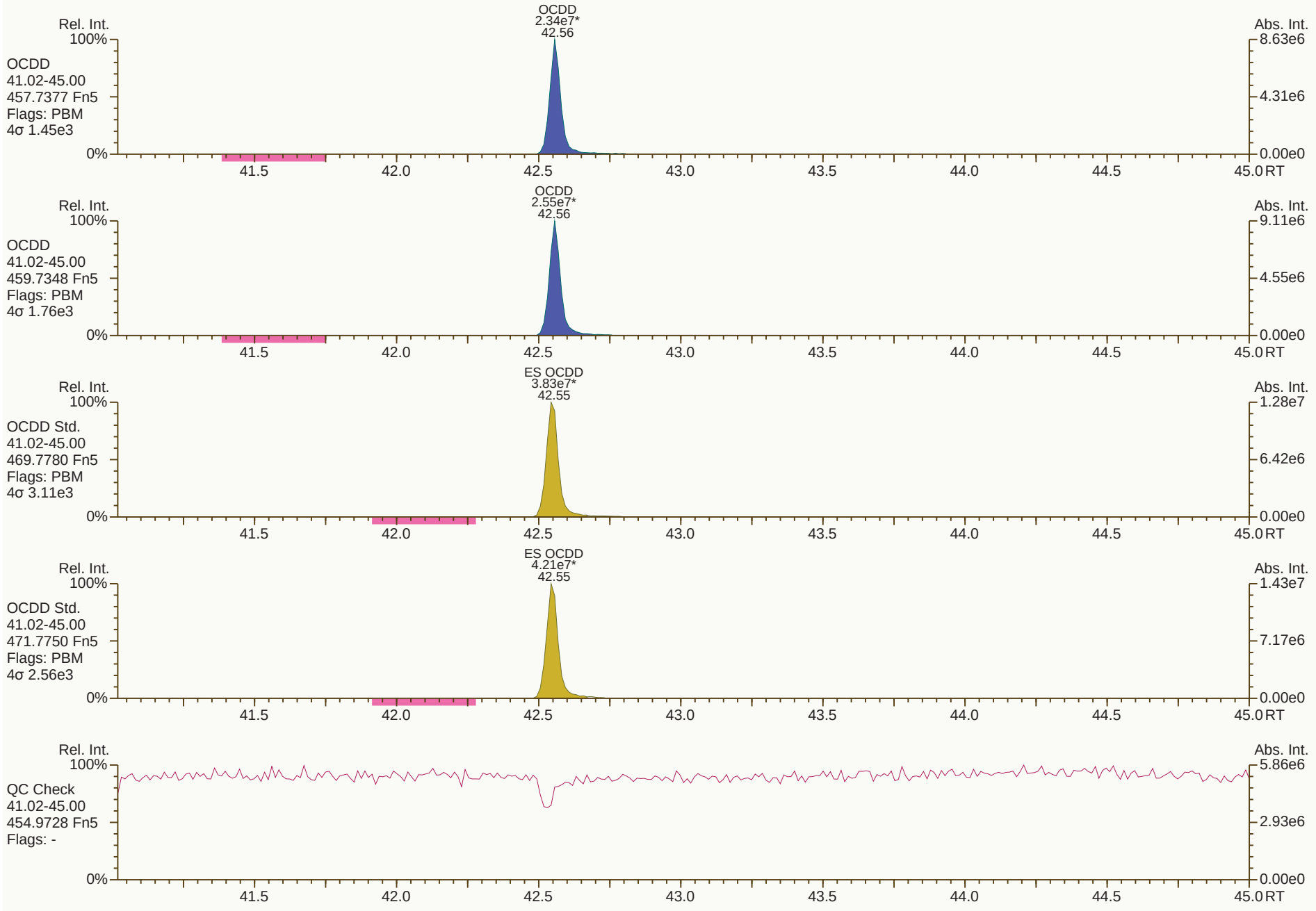
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 6601, 3145 scc: 776-449 *PKD: 15-Jun-2020 11:29 Printed: 15-Jun-2020 13:51 Page 4 of 12*


Rel. Int.
100%
HpCDD
38.52-41.01
423.7767 Fn4
Flags: PBM
4σ 1.41e3
0%
1234678D
1.58e7*
40.11
Abs. Int.
6.20e6
3.10e6
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.52-41.01
425.7737 Fn4
Flags: PBM
4σ 1.76e3
0%
1234678D
1.52e7*
40.11
Abs. Int.
6.13e6
3.07e6
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.52-41.01
435.8169 Fn4
Flags: PBM
4σ 1.54e3
0%
ES 1234678D
2.97e7*
40.10
Abs. Int.
1.23e7
6.15e6
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.52-41.01
437.8140 Fn4
Flags: PBM
4σ 2.01e3
0%
ES 1234678D
2.81e7*
40.10
Abs. Int.
1.11e7
5.56e6
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.52-41.01
430.9728 Fn4
Flags: -
0%
Abs. Int.
6.55e6
3.28e6
0.00e0
39.0
39.5
40.0
40.5
41.0 RT


OCDD
2.34e7*
42.56
Rel. Int.
100%
OCDD
41.02-45.00
457.7377 Fn5
Flags: PBM
4σ 1.45e3
0%
Abs. Int.
8.63e6
4.31e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDD
2.55e7*
42.56
Rel. Int.
100%
OCDD
41.02-45.00
459.7348 Fn5
Flags: PBM
4σ 1.76e3
0%
Abs. Int.
9.11e6
4.55e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
3.83e7*
42.55
Rel. Int.
100%
OCDD Std.
41.02-45.00
469.7780 Fn5
Flags: PBM
4σ 3.11e3
0%
Abs. Int.
1.28e7
6.42e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
4.21e7*
42.55
Rel. Int.
100%
OCDD Std.
41.02-45.00
471.7750 Fn5
Flags: PBM
4σ 2.56e3
0%
Abs. Int.
1.43e7
7.17e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
5.86e6
2.93e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

SGS ID: CS3_200615_DF_RB **Sample ID: ICV SIL 23-12-15** **Acq: 15-Jun-2020 10:28:16**

Instr: [ILM] AutoSpec-Ultima MM3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 13** **User: PSW Datafile: 200615R03**



Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS3_200615_DF_RB.utp_res, saved 15-Jun-2020 13:50 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 9229, 6226, 5470 scc: 776-449 *PKD: 15-Jun-2020 11:29 Printed: 15-Jun-2020 13:51 Page 7 of 12*

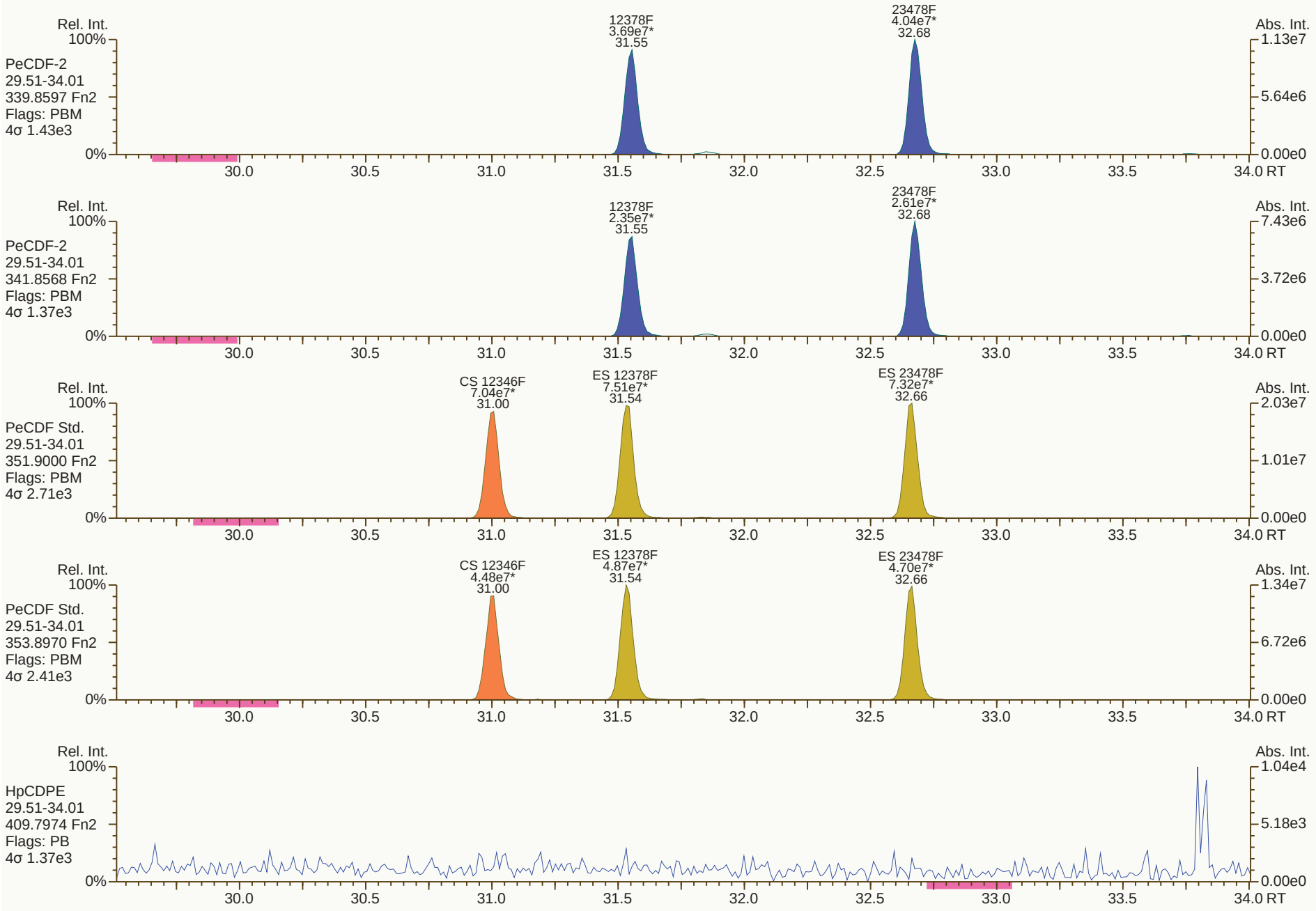
SGS ID: CS3_200615_DF_RB **Sample ID: ICV SIL 23-12-15** **Acq: 15-Jun-2020 10:28:16**

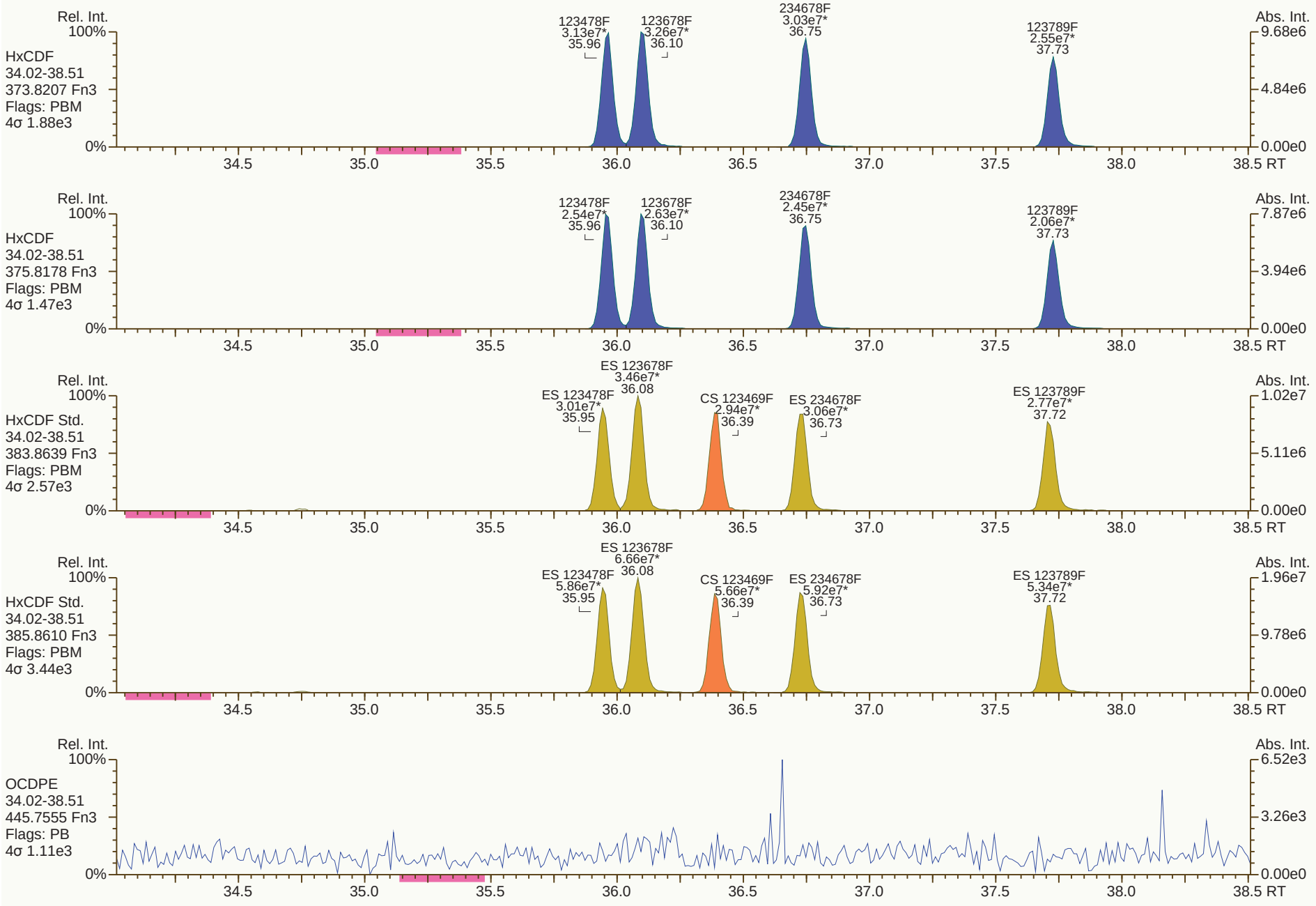
Instr: [ILM] AutoSpec-Ultima MM3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 13** **User: PSW Datafile: 200615R03**

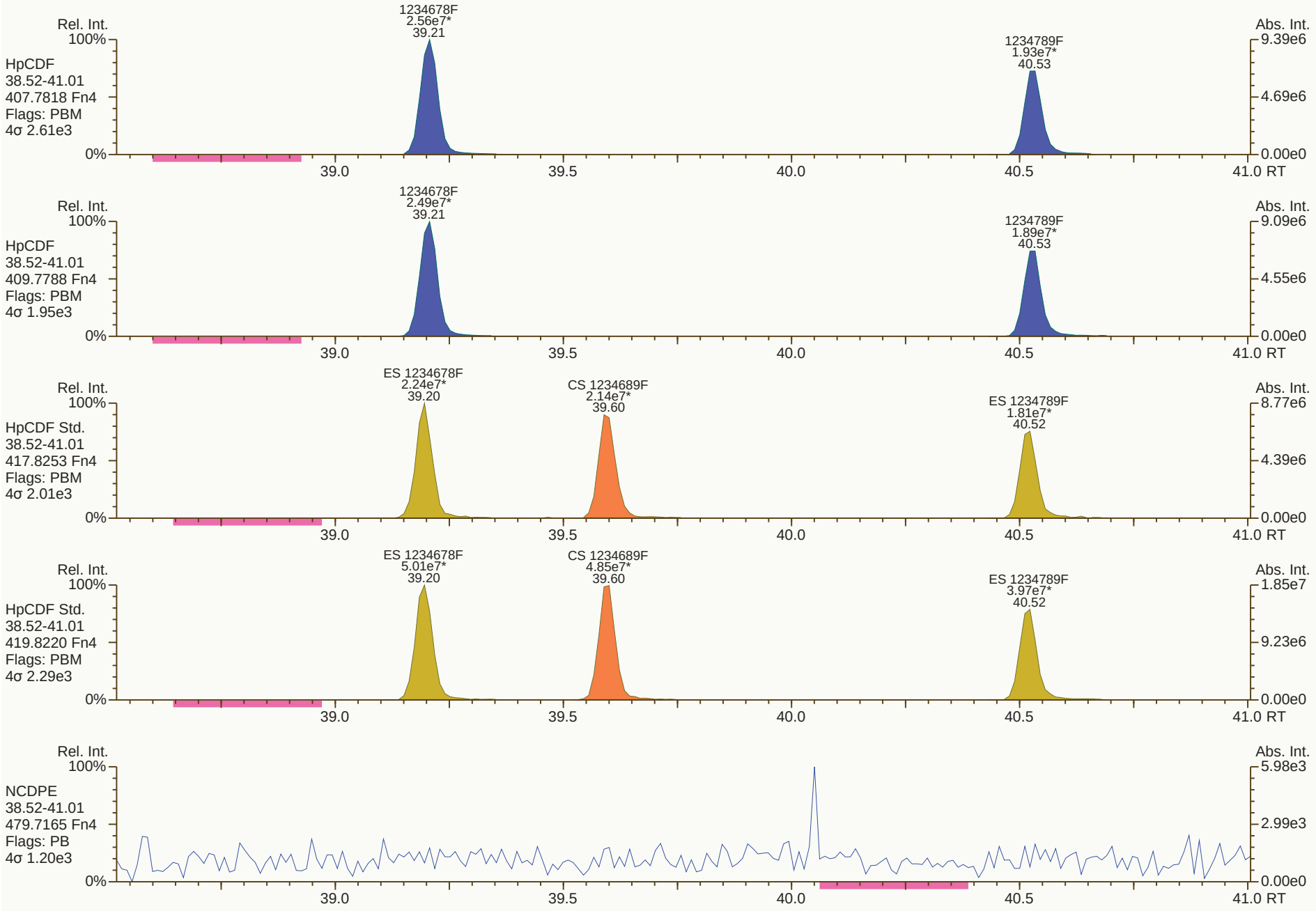


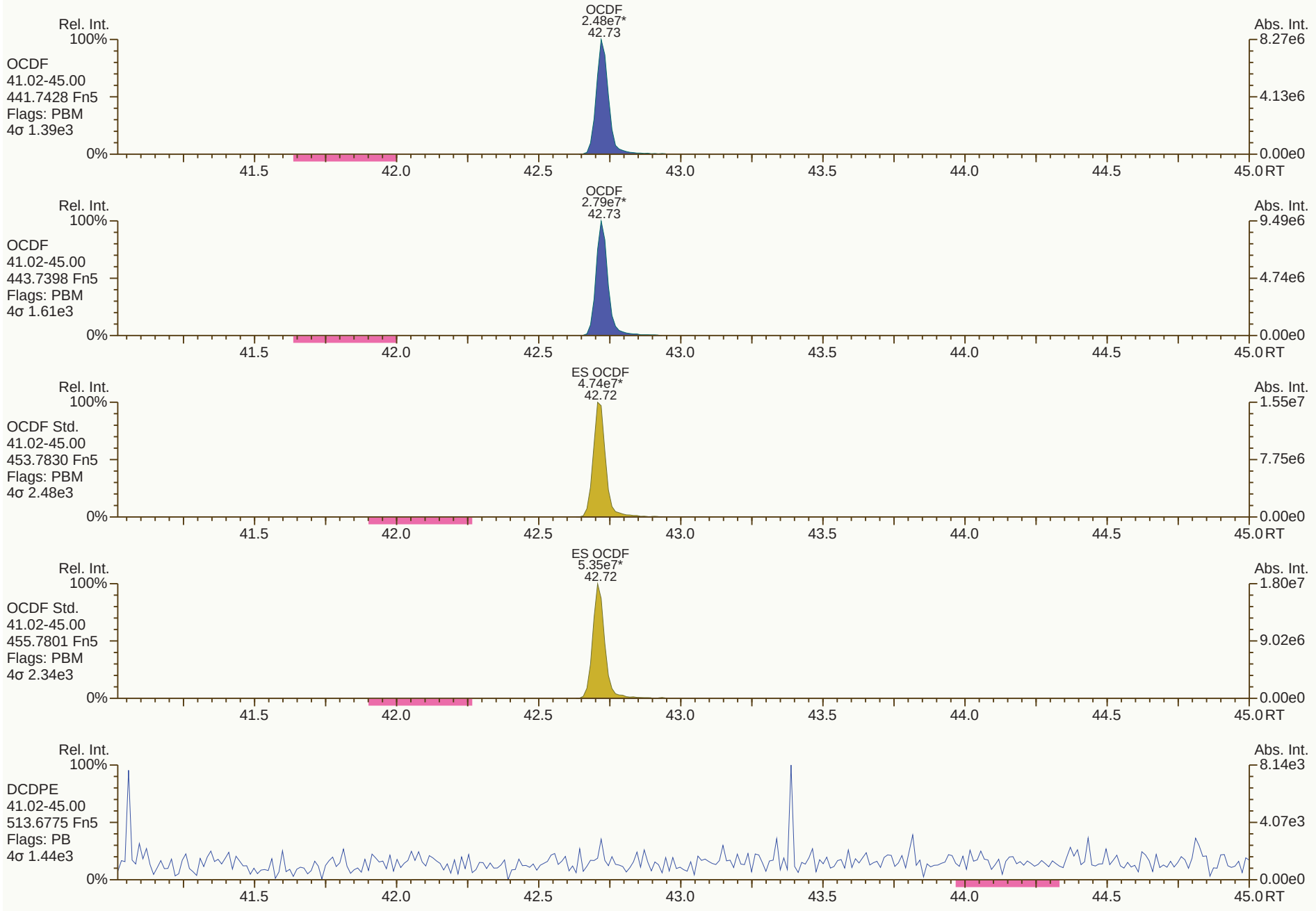
Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS3_200615_DF_RB.utp_res, saved 15-Jun-2020 13:50 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 5095 scc: 776-449 *Revised: 15-Jun-2020 11:28 (PSW) Printed: 15-Jun-2020 13:51 Page 8 of 12*


Rel. Int.
100%
PeCDF-2
29.51-34.01
339.8597 Fn2
Flags: PBM
4σ 1.43e3
0%
12378F
3.69e7*
31.55
23478F
4.04e7*
32.68
Abs. Int.
1.13e7
5.64e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF-2
29.51-34.01
341.8568 Fn2
Flags: PBM
4σ 1.37e3
0%
12378F
2.35e7*
31.55
23478F
2.61e7*
32.68
Abs. Int.
7.43e6
3.72e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
351.9000 Fn2
Flags: PBM
4σ 2.71e3
0%
CS 12346F
7.04e7*
31.00
ES 12378F
7.51e7*
31.54
ES 23478F
7.32e7*
32.66
Abs. Int.
2.03e7
1.01e7
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
353.8970 Fn2
Flags: PBM
4σ 2.41e3
0%
CS 12346F
4.48e7*
31.00
ES 12378F
4.87e7*
31.54
ES 23478F
4.70e7*
32.66
Abs. Int.
1.34e7
6.72e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
HpCDPE
29.51-34.01
409.7974 Fn2
Flags: PB
4σ 1.37e3
0%
Abs. Int.
1.04e4
5.18e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT


Rel. Int.
100%
HxCDF
34.02-38.51
373.8207 Fn3
Flags: PBM
4σ 1.88e3
123478F
3.13e7*
35.96
123678F
3.26e7*
36.10
234678F
3.03e7*
36.75
123789F
2.55e7*
37.73
Abs. Int.
9.68e6
4.84e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDF
34.02-38.51
375.8178 Fn3
Flags: PBM
4σ 1.47e3
123478F
2.54e7*
35.96
123678F
2.63e7*
36.10
234678F
2.45e7*
36.75
123789F
2.06e7*
37.73
Abs. Int.
7.87e6
3.94e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDF Std.
34.02-38.51
383.8639 Fn3
Flags: PBM
4σ 2.57e3
ES 123678F
3.46e7*
36.08
ES 123478F
3.01e7*
35.95
CS 123469F
2.94e7*
36.39
ES 234678F
3.06e7*
36.73
ES 123789F
2.77e7*
37.72
Abs. Int.
1.02e7
5.11e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDF Std.
34.02-38.51
385.8610 Fn3
Flags: PBM
4σ 3.44e3
ES 123678F
6.66e7*
36.08
ES 123478F
5.86e7*
35.95
CS 123469F
5.66e7*
36.39
ES 234678F
5.92e7*
36.73
ES 123789F
5.34e7*
37.72
Abs. Int.
1.96e7
9.78e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
OCDPE
34.02-38.51
445.7555 Fn3
Flags: PB
4σ 1.11e3
Abs. Int.
6.52e3
3.26e3
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT

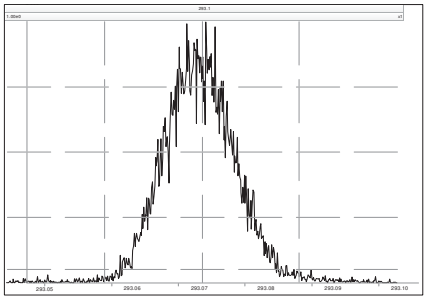

Rel. Int.
100%
HpCDF
38.52-41.01
407.7818 Fn4
Flags: PBM
4σ 2.61e3
1234678F
2.56e7*
39.21
1234789F
1.93e7*
40.53
Abs. Int.
9.39e6
4.69e6
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF
38.52-41.01
409.7788 Fn4
Flags: PBM
4σ 1.95e3
1234678F
2.49e7*
39.21
1234789F
1.89e7*
40.53
Abs. Int.
9.09e6
4.55e6
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.52-41.01
417.8253 Fn4
Flags: PBM
4σ 2.01e3
ES 1234678F
2.24e7*
39.20
CS 1234689F
2.14e7*
39.60
ES 1234789F
1.81e7*
40.52
Abs. Int.
8.77e6
4.39e6
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.52-41.01
419.8220 Fn4
Flags: PBM
4σ 2.29e3
ES 1234678F
5.01e7*
39.20
CS 1234689F
4.85e7*
39.60
ES 1234789F
3.97e7*
40.52
Abs. Int.
1.85e7
9.23e6
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
NCDPE
38.52-41.01
479.7165 Fn4
Flags: PB
4σ 1.20e3
Abs. Int.
5.98e3
2.99e3
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT


OCDF
2.48e7*
42.73
Rel. Int.
100%
OCDF
41.02-45.00
441.7428 Fn5
Flags: PBM
4σ 1.39e3
0%
Abs. Int.
8.27e6
4.13e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDF
2.79e7*
42.73
Rel. Int.
100%
OCDF
41.02-45.00
443.7398 Fn5
Flags: PBM
4σ 1.61e3
0%
Abs. Int.
9.49e6
4.74e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDF
4.74e7*
42.72
Rel. Int.
100%
OCDF Std.
41.02-45.00
453.7830 Fn5
Flags: PBM
4σ 2.48e3
0%
Abs. Int.
1.55e7
7.75e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDF
5.35e7*
42.72
Rel. Int.
100%
OCDF Std.
41.02-45.00
455.7801 Fn5
Flags: PBM
4σ 2.34e3
0%
Abs. Int.
1.80e7
9.02e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
DCDPE
41.02-45.00
513.6775 Fn5
Flags: PB
4σ 1.44e3
0%
Abs. Int.
8.14e3
4.07e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

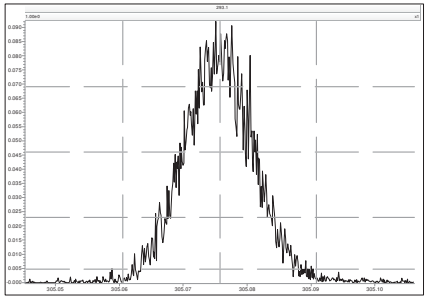
File: Experiment: df_cl4-8_db5MS.exp Reference: pfk.ref Function: 1 @ 200 (ppm)

Printed: Monday, June 15, 2020 08:39:26 Eastern Daylight Time

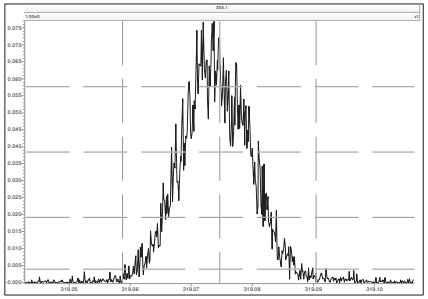
M 292.9824 R 12688



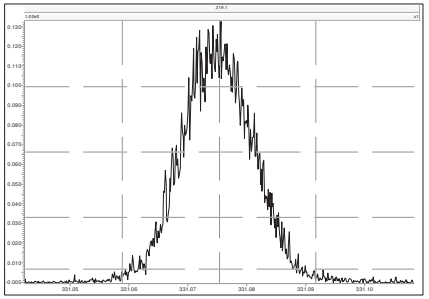
M 304.9824 R 12564



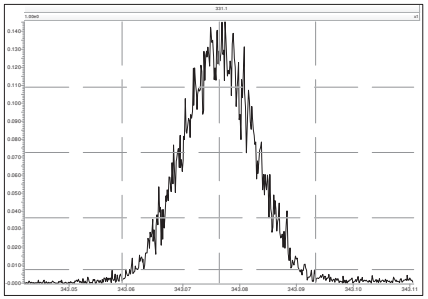
M 318.9792 R 13369



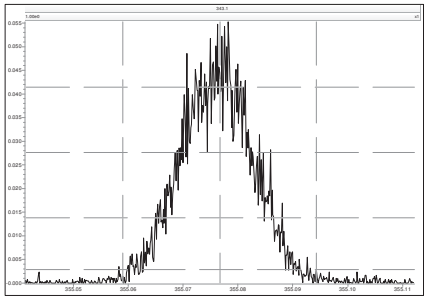
M 330.9792 R 12957



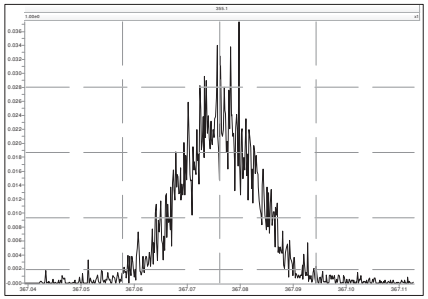
M 342.9792 R 11570



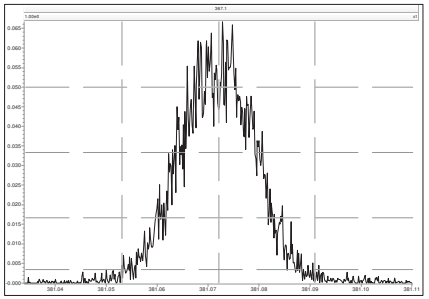
M 354.9792 R 12690



M 366.9792 R 12253



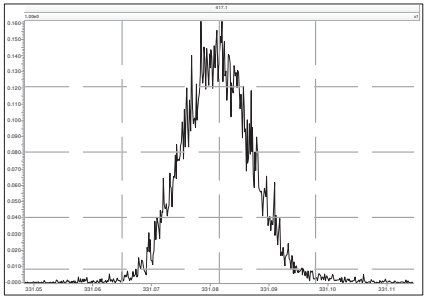
M 380.9760 R 11684



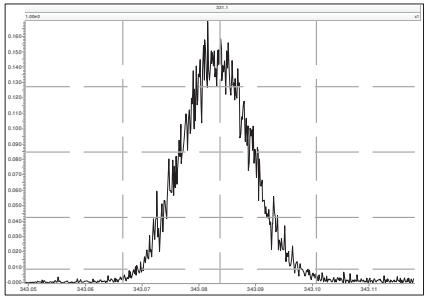
File: Experiment: df_cl4-8_db5MS.exp Reference: pfk.ref Function: 2 @ 200 (ppm)

Printed: Monday, June 15, 2020 08:39:47 Eastern Daylight Time

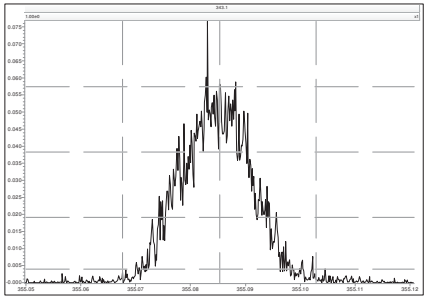
M 330.9792 R 13296



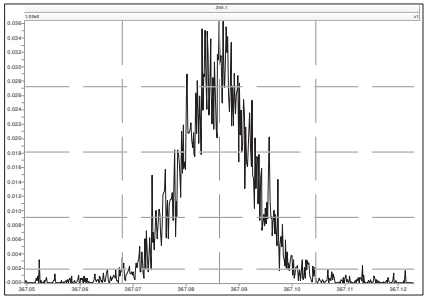
M 342.9792 R 12751



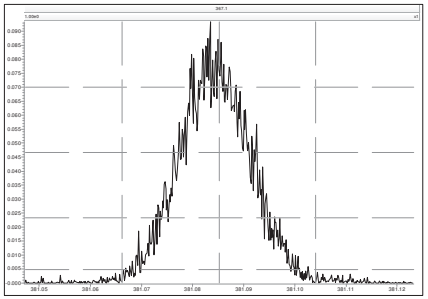
M 354.9792 R 13021



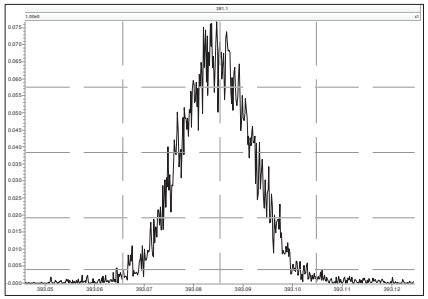
M 366.9792 R 13019



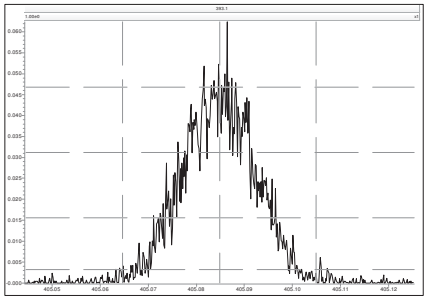
M 380.9760 R 12257



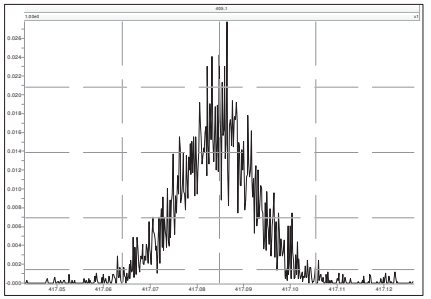
M 392.9760 R 13293



M 404.9760 R 13810



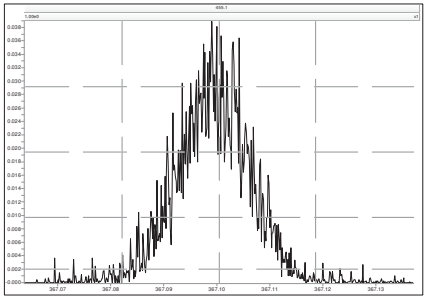
M 416.9760 R 12955



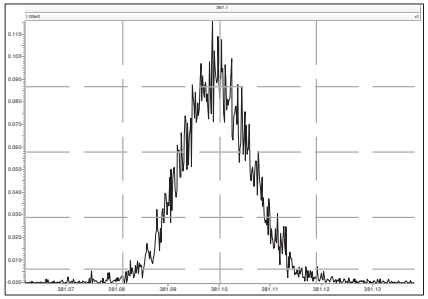
File: Experiment: df_cl4-8_db5MS.exp Reference: pfk.ref Function: 3 @ 200 (ppm)

Printed: Monday, June 15, 2020 08:40:03 Eastern Daylight Time

M 366.9792 R 13367



M 380.9760 R 13438



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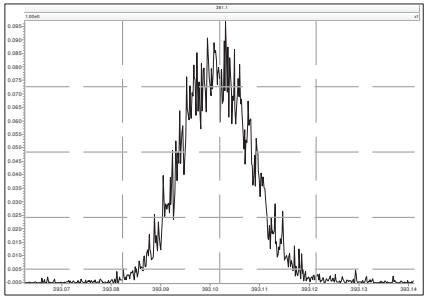

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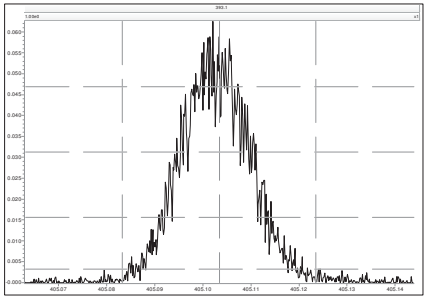
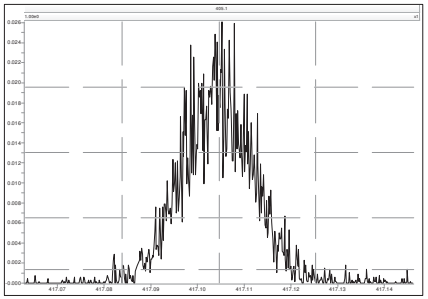
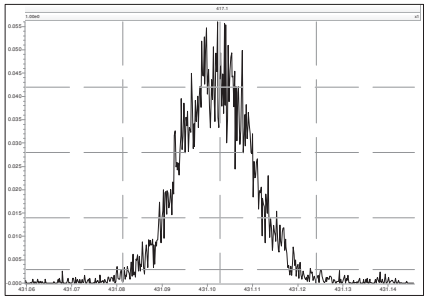


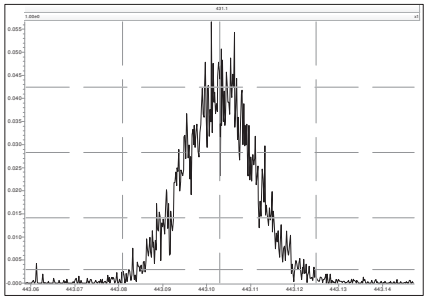
M 416.9760 R 12440



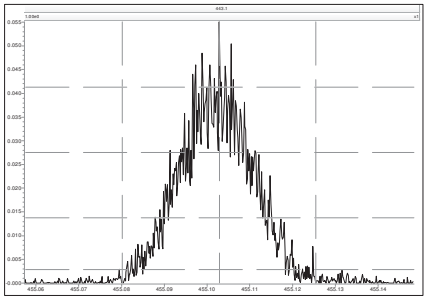
M 430.9728 R 12137



M 442.9728 R 12625



M 454.9728 R 12818



File: Experiment: df_cl4-8_db5MS.exp Reference: pfk.ref Function: 4 @ 200 (ppm)

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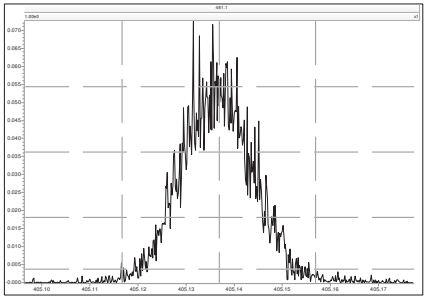
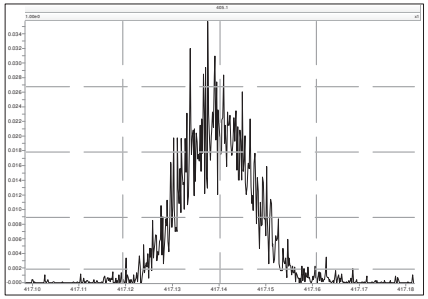
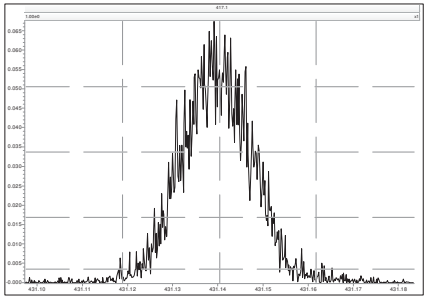
M 404.9760 R 13369



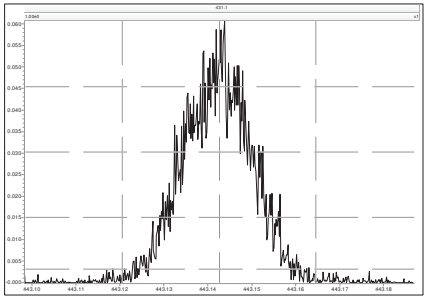
M 416.9760 R 14123



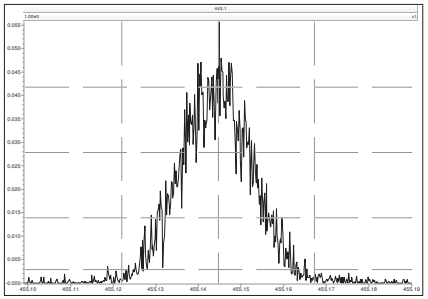
M 430.9728 R 15148



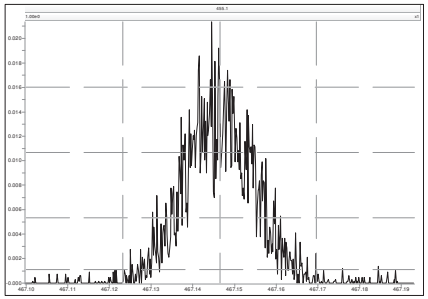
M 442.9728 R 13662



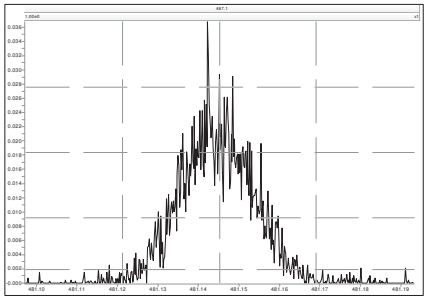
M 454.9728 R 11681



M 466.9728 R 16553



M 480.9696 R 13298



File: Experiment: df_cl4-8_db5MS.exp Reference: pfk.ref Function: 5 @ 200 (ppm)

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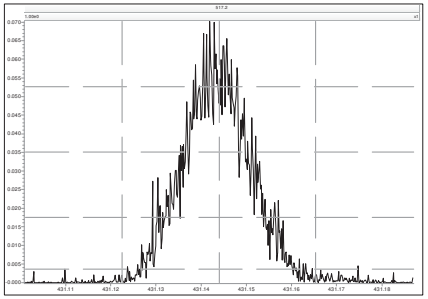
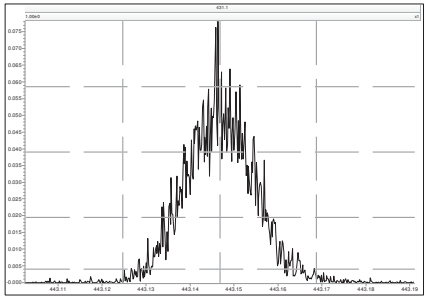
M 430.9728 R 13295



M 442.9728 R 14286



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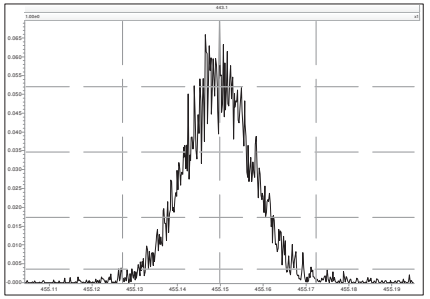
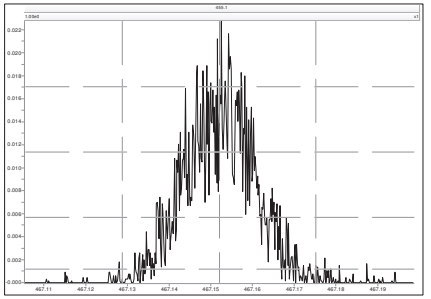
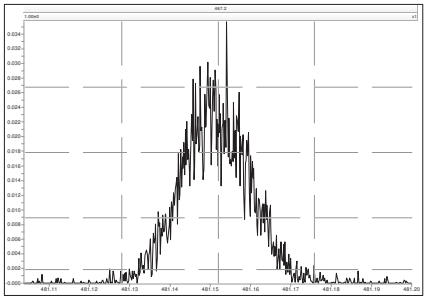


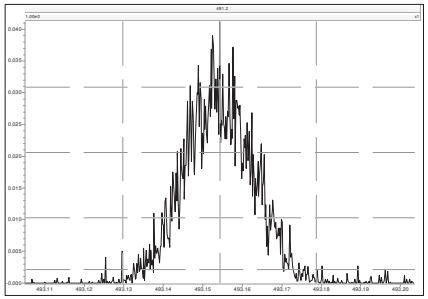
M 466.9728 R 14972



M 480.9696 R 14536



M 492.9696 R 13020



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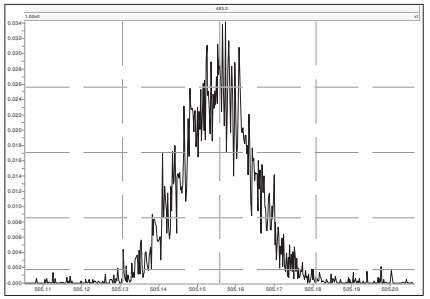
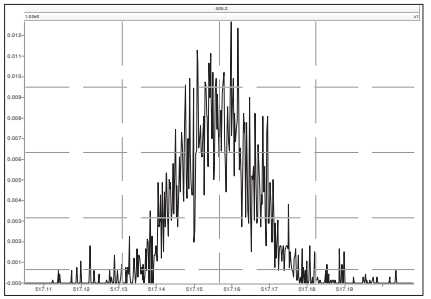


M 516.9697 R 13583



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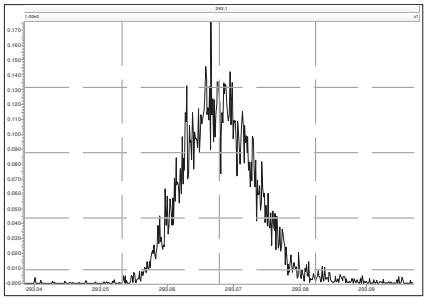

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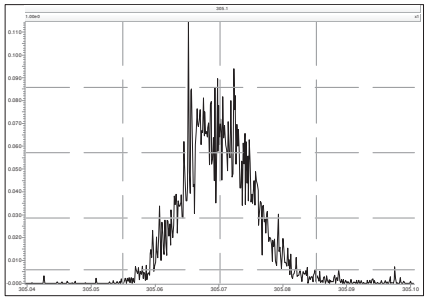
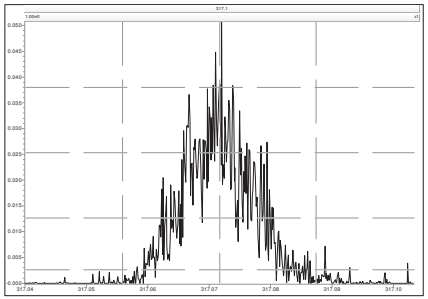
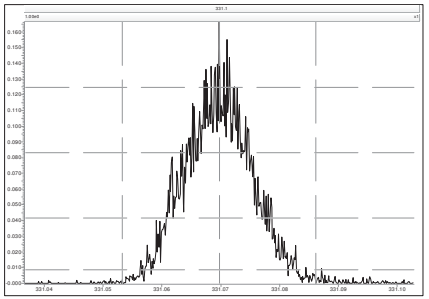


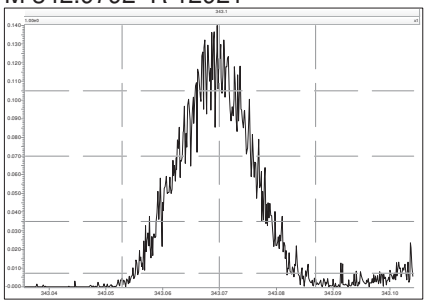
M 316.9824 R 15086



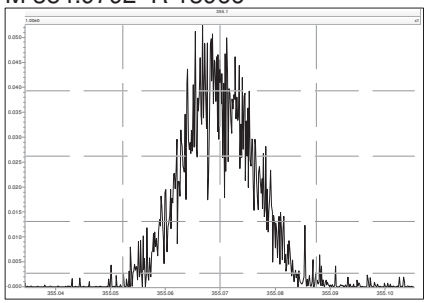
M 330.9792 R 13699



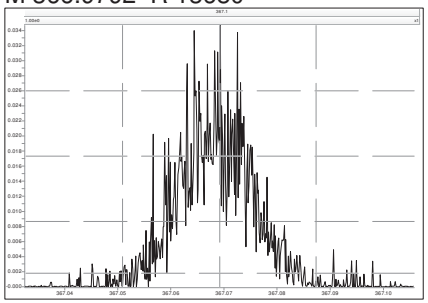
M 342.9792 R 12921



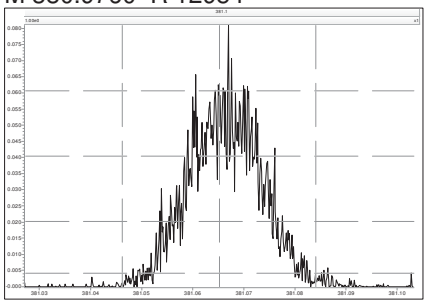
M 354.9792 R 13966



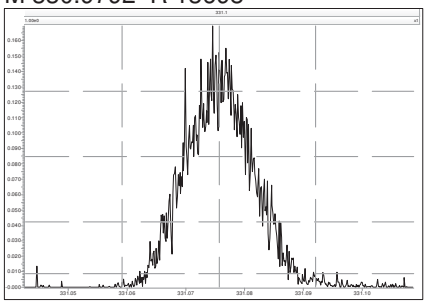
M 366.9792 R 13680



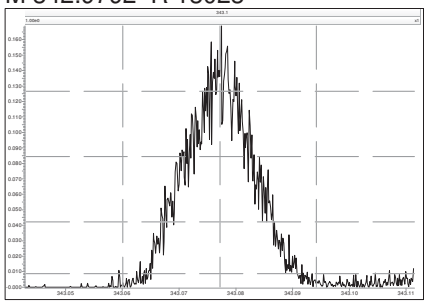
M 380.9760 R 12954



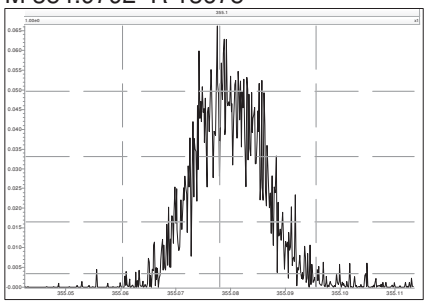
M 330.9792 R 13698



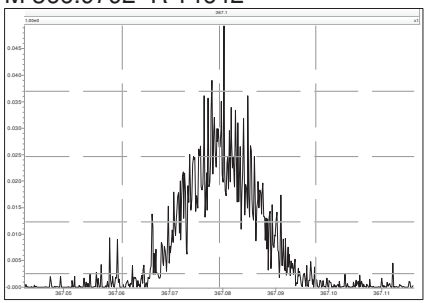
M 342.9792 R 13023



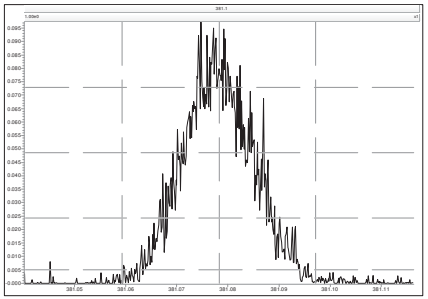
M 354.9792 R 13675



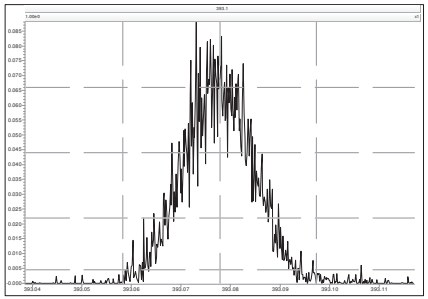
M 366.9792 R 14642



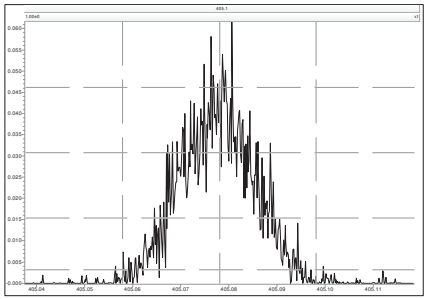
M 380.9760 R 13124



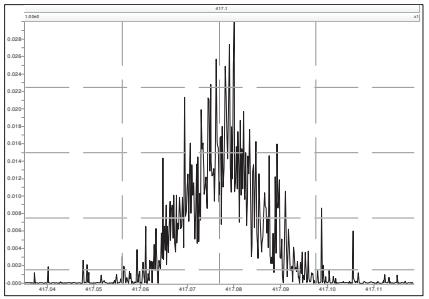
M 392.9760 R 13251



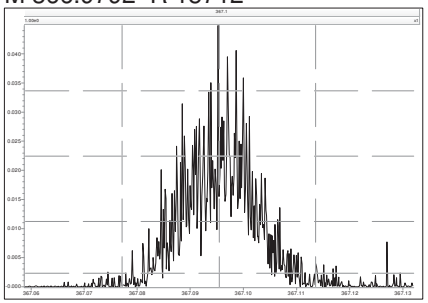
M 404.9760 R 13883



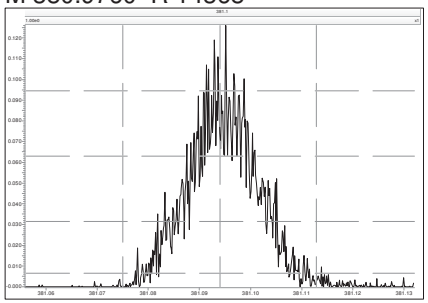
M 416.9760 R 16036



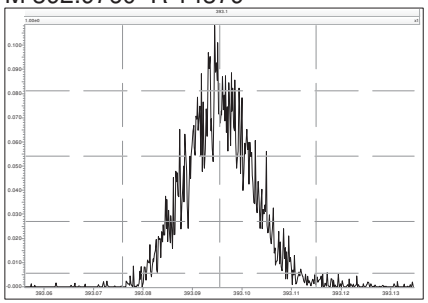
M 366.9792 R 15712



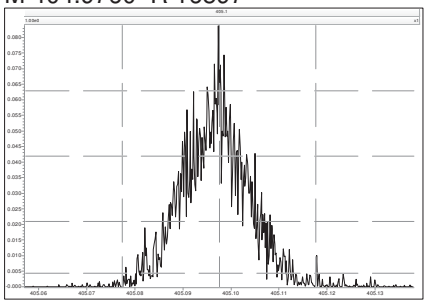
M 380.9760 R 14368



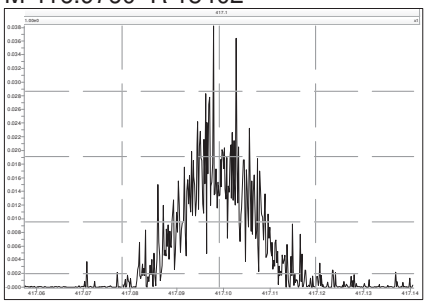
M 392.9760 R 14379



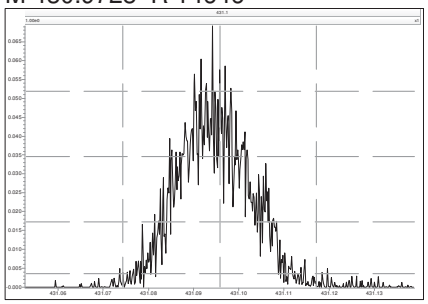
M 404.9760 R 16597



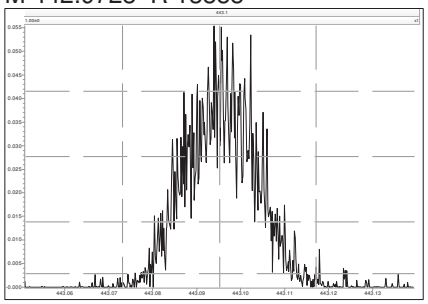
M 416.9760 R 15402



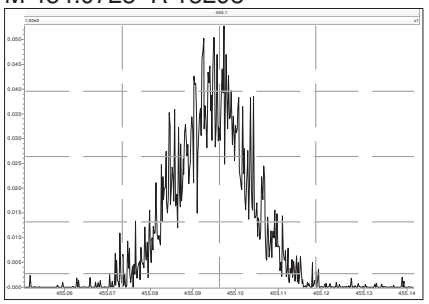
M 430.9728 R 14646



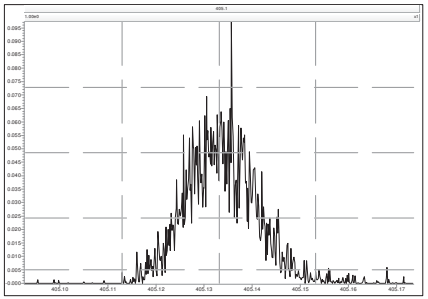
M 442.9728 R 13855



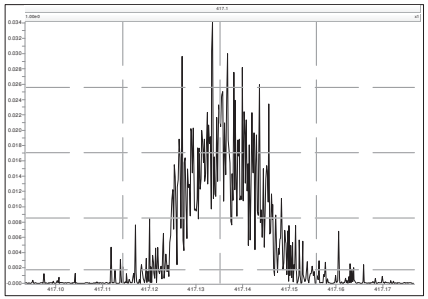
M 454.9728 R 13298



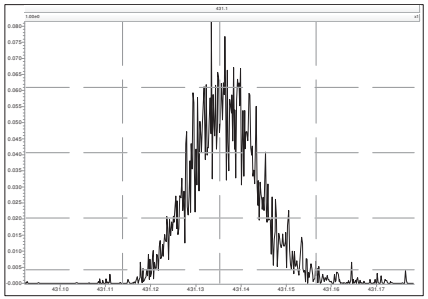
M 404.9760 R 14429



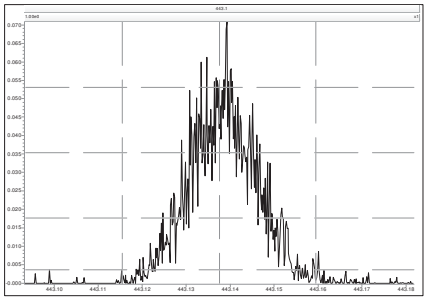
M 416.9760 R 16281



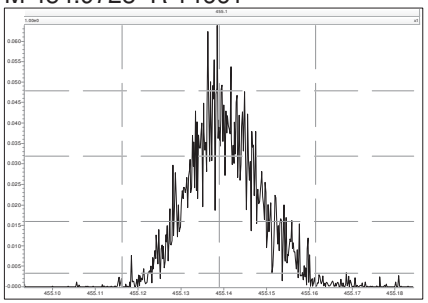
M 430.9728 R 13739



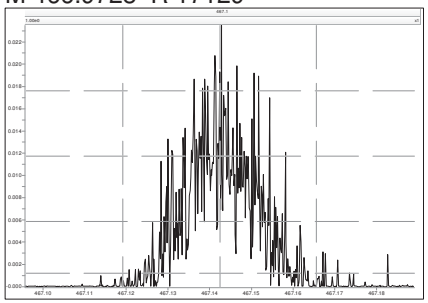
M 442.9728 R 13091



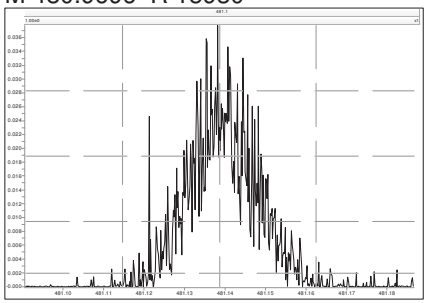
M 454.9728 R 14661



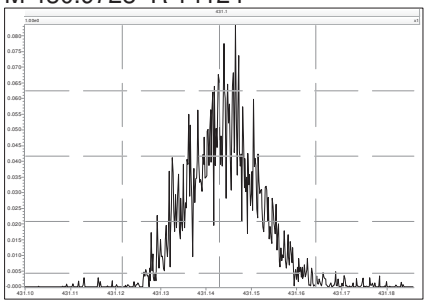
M 466.9728 R 17129



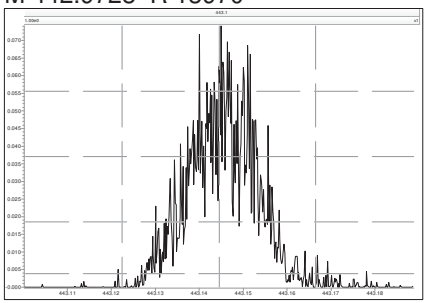
M 480.9696 R 15930



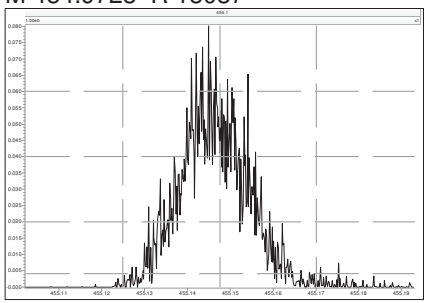
M 430.9728 R 14124



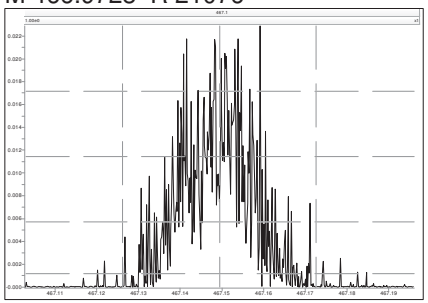
M 442.9728 R 13970



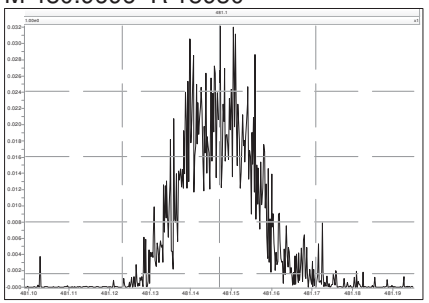
M 454.9728 R 15037



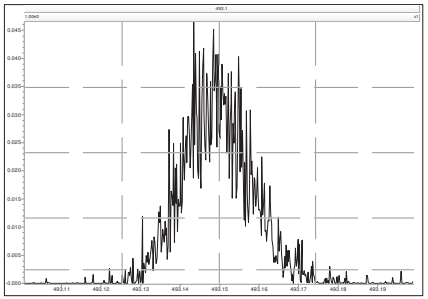
M 466.9728 R 21076



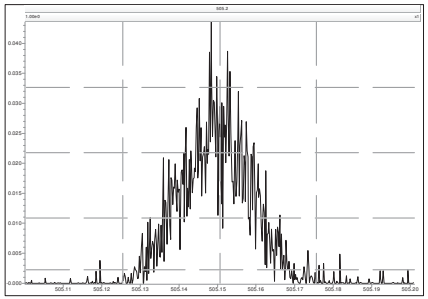
M 480.9696 R 15930



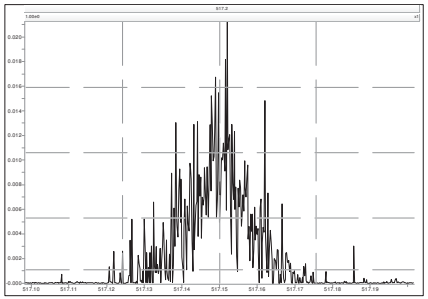
M 492.9696 R 14468



M 504.9696 R 14213



M 516.9697 R 24568



Lab ID: OPR1_17655_DF

APPROVED
Carla_Lyon , 11:45:16, 08/11/2020

Acq'd: 10 Aug 2020 15:38 PSW

Wt/Vol: 1 uL

ICAL: MM3_DF_10012020_12JUN2020

Client ID: 0_17655_OPR001

UTP: 11-Aug-2020 08:14:15 PSW

J-level: 0.25 pg/uL Split: 1

Checkcode: 180-044-FSB

Datafile: 200810R03

Report: 11 Aug 2020 09:59 pw

Stds (pg): JS: 100 ES: 100 CS/SS: 100, 40 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	27.29		1.0009	1.0009	0	7.93E+06	0.83	Y	1.18	10.2	7209	0.0997
12378-PeCDD	32.83		1.0006	1.0006	0	3.07E+07	1.56	Y	1.14	46.4	5627	0.0789
123478-HxCDD	36.74		1.0004	1.0004	0	2.85E+07	1.25	Y	1.09	50.8	3285	0.0459
123678-HxCDD	36.85		1.0035	1.0035	0	3.06E+07	1.28	Y	1.13	52.8	3285	0.0494
123789-HxCDD	37.15		1.0116	1.0116	0	3.26E+07	1.24	Y	1.05	49.9	3285	0.0437
1234678-HpCDD	39.96		1.0003	1.0003	0	2.23E+07	1.01	Y	0.98	51.9	3215	0.0443
OCDD	42.38		1.0003	1.0003	0	2.48E+07	0.88	Y	1.08	103	5535	0.15
2378-TCDF	26.36		1.0006	1.0006	0	1.27E+07	0.79	Y	0.98	11.2	5807	0.059
12378-PeCDF	31.34		1.0006	1.0006	0	4.83E+07	1.55	Y	0.95	48.8	8725	0.0876
23478-PeCDF	32.47		1.0005	1.0006	+0.2	5.19E+07	1.55	Y	0.95	56	8725	0.0858
123478-HxCDF	35.77		1.0005	1.0005	0	4.12E+07	1.22	Y	1.20	50.6	16242	0.17
123678-HxCDF	35.91		1.0004	1.0005	+0.2	4.50E+07	1.26	Y	1.07	52.9	16242	0.152
234678-HxCDF	36.56		1.0005	1.0004	-0.2	4.00E+07	1.24	Y	1.10	53.9	16242	0.185
123789-HxCDF	37.53		1.0004	1.0005	+0.2	2.99E+07	1.26	Y	1.09	50.2	16242	0.241
1234678-HpCDF	39.05		1.0003	1.0003	0	3.60E+07	1.05	Y	1.28	51.5	14553	0.135
1234789-HpCDF	40.38		1.0002	1.0003	+0.2	2.46E+07	1.07	Y	1.27	50.6	14553	0.174
OCDF	42.55		1.0003	1.0003	0	2.80E+07	0.90	Y	1.01	100	5374	0.134

Name	Act RT	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	27.27	1.0255	1.0256	+0.2	6.61E+07	0.77	Y	1.01	93.5
ES 12378-PeCDD	32.81	1.2330	1.2340	+2.0	5.82E+07	1.66	Y	0.87	95.1
ES 123478-HxCDD	36.73	0.9917	0.9916	-0.2	5.13E+07	1.29	Y	1.10	83.2
ES 123678-HxCDD	36.84	0.9947	0.9947	0	5.14E+07	1.27	Y	1.06	86.1
ES 123789-HxCDD	37.14	1.0028	1.0028	0	6.23E+07	1.27	Y	1.22	91
ES 1234678-HpCDD	39.95	1.0785	1.0787	+0.5	4.37E+07	1.07	Y	0.99	78.3
ES OCDD	42.37	1.1439	1.1441	+0.5	4.47E+07	0.93	Y	0.67	59.3
ES 2378-TCDF	26.35	1.0572	1.0576	+0.6	1.16E+08	0.80	Y	1.01	93.5
ES 12378-PeCDF	31.32	1.2558	1.2573	+2.8	1.04E+08	1.58	Y	0.90	94.6
ES 23478-PeCDF	32.46	1.3012	1.3028	+3.1	9.80E+07	1.60	Y	0.89	89.9
ES 123478-HxCDF	35.76	0.9655	0.9655	0	6.82E+07	0.51	Y	1.43	84.7
ES 123678-HxCDF	35.90	0.9693	0.9692	-0.2	7.95E+07	0.51	Y	1.63	86.5
ES 234678-HxCDF	36.54	0.9867	0.9867	0	6.77E+07	0.54	Y	1.48	81.4
ES 123789-HxCDF	37.51	1.0130	1.0130	0	5.47E+07	0.53	Y	1.29	75.3
ES 1234678-HpCDF	39.04	1.0540	1.0542	+0.5	5.46E+07	0.45	Y	1.15	84.6
ES 1234789-HpCDF	40.37	1.0898	1.0900	+0.5	3.84E+07	0.44	Y	0.91	75.3
ES OCDF	42.54	1.1484	1.1486	+0.5	5.51E+07	0.93	Y	0.83	59.1

Lab ID: OPR1_17655_DF | Acq'd: 10 Aug 2020 15:38 PSW | Wt/Vol: 1 uL | ICAL: MM3_DF_10012020_12JUN2020

Client ID: 0_17655_OPR001 | UTP: 11-Aug-2020 08:14:15 PSW | J-level: 0.25 pg/uL | Split: 1 | Checkcode: 180-044-FSB

Datafile: 200810R03 | Report: 11 Aug 2020 09:59 pw | Stds (pg): JS: 100 ES: 100 CS/SS: 100, 40 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %	
JS 1234-TCDD	26.59		-	-	-	7.02E+07	0.78	Y	-	-	
JS 1234-TCDF	24.91		-	-	-	1.23E+08	0.80	Y	-	-	
JS 123467-HxCDD	37.03		-	-	-	2.82E+07	1.30	Y	-	-	
CS 37Cl-2378-TCDD	27.29		1.0265	1.0265	0	2.96E+07	n/a	-	1.04	101	
CS 12347-PeCDD	32.30		1.2141	1.2150	+1.7	5.74E+07	1.68	Y	0.74	110	
CS 12346-PeCDF	30.79		1.2343	1.2358	+2.8	1.03E+08	1.57	Y	0.86	98	
CS 123469-HxCDF	36.20		0.9776	0.9775	-0.2	6.94E+07	0.50	Y	1.36	90.9	
CS 1234689-HpCDF	39.45		1.0650	1.0652	+0.5	5.09E+07	0.45	Y	1.05	85.8	
~~SS 37Cl-2378-TCDD~~	~~27.29~~		~~1.0265~~	~~1.0265~~	~~0~~	~~2.96E+07~~	~~n/a~~		~~1.04~~	~~108~~	Not used in this project.
~~SS 12347-PeCDD~~	~~32.30~~		~~1.2141~~	~~1.2150~~	~~+1.7~~	~~5.74E+07~~	~~1.68~~	~~Y~~	~~0.86~~	~~115~~	CL 11Aug20
~~SS 12346-PeCDF~~	~~30.79~~		~~1.2343~~	~~1.2358~~	~~+2.8~~	~~1.03E+08~~	~~1.57~~	~~Y~~	~~0.96~~	~~103~~	
~~SS 123469-HxCDF~~	~~36.20~~		~~0.9776~~	~~0.9775~~	~~-0.2~~	~~6.94E+07~~	~~0.50~~	~~Y~~	~~0.83~~	~~105~~	
~~SS 1234689-HpCDF~~	~~39.45~~		~~1.0650~~	~~1.0652~~	~~+0.5~~	~~5.09E+07~~	~~0.45~~	~~Y~~	~~0.92~~	~~101~~	

Totals	Conc	EMPC
Total TCDD	47.4	47.4
Total PeCDD	70	70
Total HxCDD	167	167
Total HpCDD	65.3	65.3
Total Tetra-Octa Dioxins	453	453
Total TCDF	54.9	54.9
Total PeCDF	125	125
Total HxCDF	221	221
Total HpCDF	102	102
Total Tetra-Octa Furans	604	604
Total Tetra-Octa Dioxins & Furans	1060	1060

* 37Cl correction has been applied to 2378-TCDD

	Original Values	Corrected Values
Ratio	0.82	0.83
Response	7.95E+06	7.93E+06

METHOD 8290A **PCDD/F ONGOING PRECISION AND RECOVERY (OPR)** **FORM 8A**

Lab Name:	SGS North America		
Initial Calibration:	ICAL: MM3_DF_10012020_12JUN2020		
Instrument ID:	MM3	GC Column ID:	ZB-5ms
VER Data Filename:	200810R03	Analysis Date:	10-AUG-2020 15:38:07
Lab ID:	OPR1_17655_DF		

NATIVE ANALYTES	SPIKE CONC.	CONC. FOUND	RANGE (ng/mL)			OK
2,3,7,8-TCDD	10	10.2	6.7	-	15.8	Y
1,2,3,7,8-PeCDD	50	46.4	35	-	71	Y
1,2,3,4,7,8-HxCDD	50	50.8	35	-	82	Y
1,2,3,6,7,8-HxCDD	50	52.8	38	-	67	Y
1,2,3,7,8,9-HxCDD	50	49.9	32	-	81	Y
1,2,3,4,6,7,8-HpCDD	50	51.9	35	-	70	Y
OCDD	100	103	78	-	144	Y
2,3,7,8-TCDF	10	11.2	7.5	-	15.8	Y
1,2,3,7,8-PeCDF	50	48.8	40	-	67	Y
2,3,4,7,8-PeCDF	50	56	34	-	80	Y
1,2,3,4,7,8-HxCDF	50	50.6	36	-	67	Y
1,2,3,6,7,8-HxCDF	50	52.9	42	-	65	Y
2,3,4,6,7,8-HxCDF	50	53.9	35	-	78	Y
1,2,3,7,8,9-HxCDF	50	50.2	39	-	65	Y
1,2,3,4,6,7,8-HpCDF	50	51.5	41	-	61	Y
1,2,3,4,7,8,9-HpCDF	50	50.6	39	-	69	Y
OCDF	100	100	63	-	170	Y

Contract-required concentration limits for OPR as specified in Table 6,
Method 1613. 10/94

Processed: 11 Aug 2020 09:59 Analyst: pw

METHOD 8290A **PCDD/F ONGOING PRECISION AND RECOVERY (OPR)** **FORM 8B**

Lab Name: SGS North America

Initial Calibration: ICAL: MM3_DF_10012020_12JUN2020

Instrument ID: MM3 GC Column ID: ZB-5ms

VER Data Filename: 200810R03 Analysis Date: 10-AUG-2020 15:38:07

Lab ID: OPR1_17655_DF

LABELED ANALYTES	SPIKE CONC.	CONC. FOUND	RANGE (ng/mL)			OK
13C-2,3,7,8-TCDD	100	93.5	20	-	175	Y
13C-1,2,3,7,8-PeCDD	100	95.1	21	-	227	Y
13C-1,2,3,4,7,8-HxCDD	100	83.2	21	-	193	Y
13C-1,2,3,6,7,8-HxCDD	100	86.1	25	-	163	Y
13C-1,2,3,7,8,9-HxCDD	100	91	26	-	166	Y
13C-1,2,3,4,6,7,8-HpCDD	100	78.3	26	-	166	Y
13C-OCDD	200	119	26	-	397	Y
13C-2,3,7,8-TCDF	100	93.5	22	-	152	Y
13C-1,2,3,7,8-PeCDF	100	94.6	21	-	192	Y
13C-2,3,4,7,8-PeCDF	100	89.9	13	-	328	Y
13C-1,2,3,4,7,8-HxCDF	100	84.7	19	-	202	Y
13C-1,2,3,6,7,8-HxCDF	100	86.5	21	-	159	Y
13C-2,3,4,6,7,8-HxCDF	100	81.4	22	-	176	Y
13C-1,2,3,7,8,9-HxCDF	100	75.3	17	-	205	Y
13C-1,2,3,4,6,7,8-HpCDF	100	84.6	21	-	158	Y
13C-1,2,3,4,7,8,9-HpCDF	100	75.3	20	-	186	Y
13C-OCDF	200	118	26	-	397	Y
CLEANUP STANDARD						
37Cl-2,3,7,8-TCDD	40	40.6	12.4	-	76.4	Y

Contract-required concentration limits for OPR as specified in Table 6, Method 1613. 10/94

Processed: 11 Aug 2020 09:59 Analyst: pw

METHOD 8290A **COLUMN PERFORMANCE AND RETENTION TIME WINDOWS** **FORM CPSM**

Lab Name:	SGS North America		
Initial Calibration:	ICAL: MM3_DF_10012020_12JUN2020		
Instrument ID:	MM3	GC Column ID:	ZB-5ms
CPSM Data Filename:	200810R03	Analysis Date:	10-AUG-2020 15:38:07
Lab ID:	OPR1_17655_DF		

Window Defining Standards Results

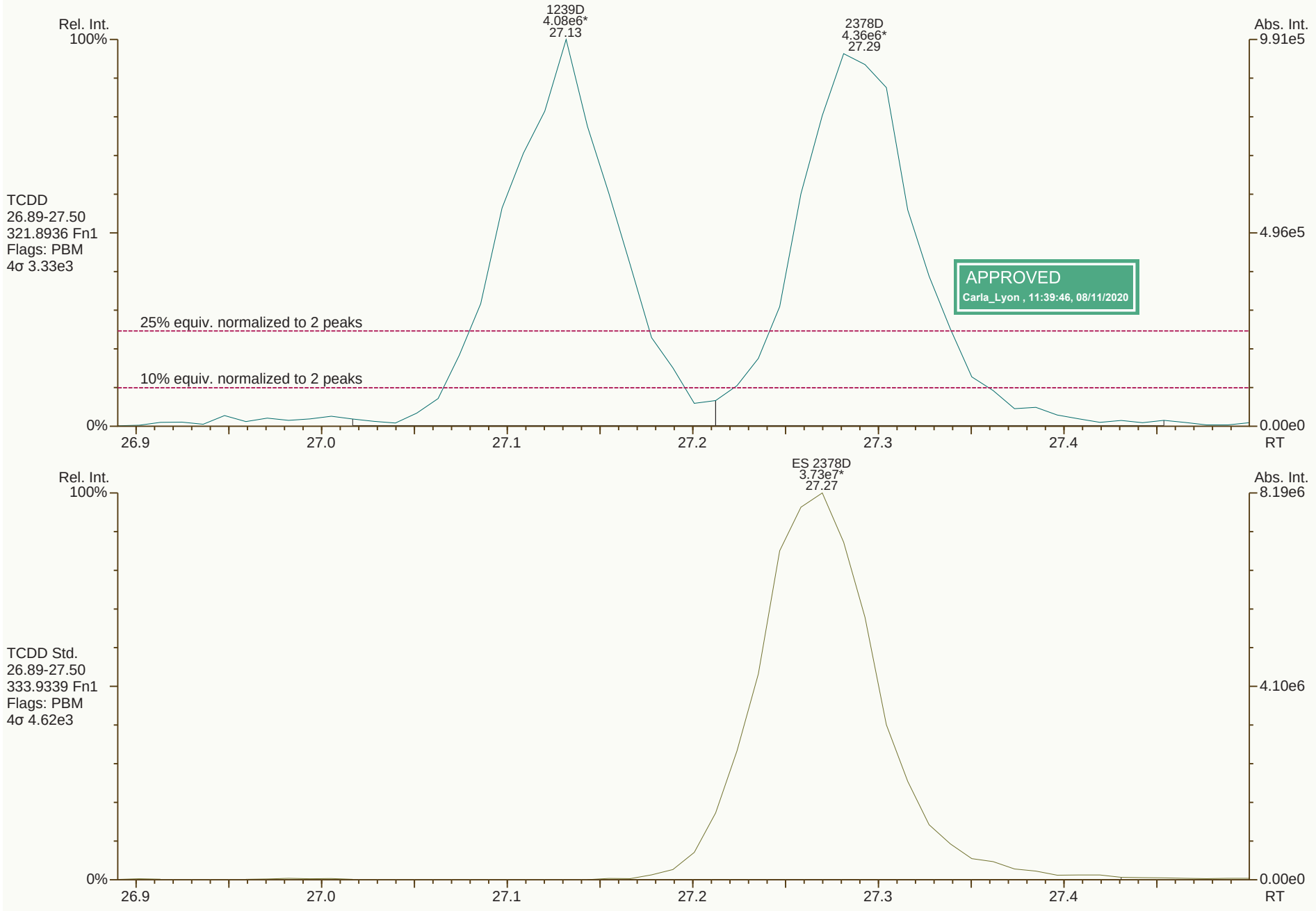
First Eluting Isomer	RT	Last Eluting Isomer	RT
1368-TCDD	23.40	1289-TCDD	28.31
12479/12468-PeCDD	30.28	12389-PeCDD	33.27
124679/124689-HxCDD	35.04	123789-HxCDD	37.15
1234679-HpCDD	39.32	1234678-HpCDD	39.96
1368-TCDF	21.16	1289-TCDF	28.48
13468/12468-PeCDF	28.43	12389-PeCDF	33.56
123468-HxCDF	34.38	123789-HxCDF	37.53
1234678-HpCDF	39.05	1234789-HpCDF	40.38

Isomer Specificity Test Standard Results

Closest Eluting Isomer	RT	2378 Specific Isomer	RT
1239-TCDD	27.13	2378-TCDD	27.29
2348-TCDF	26.25	2378-TCDF	26.36

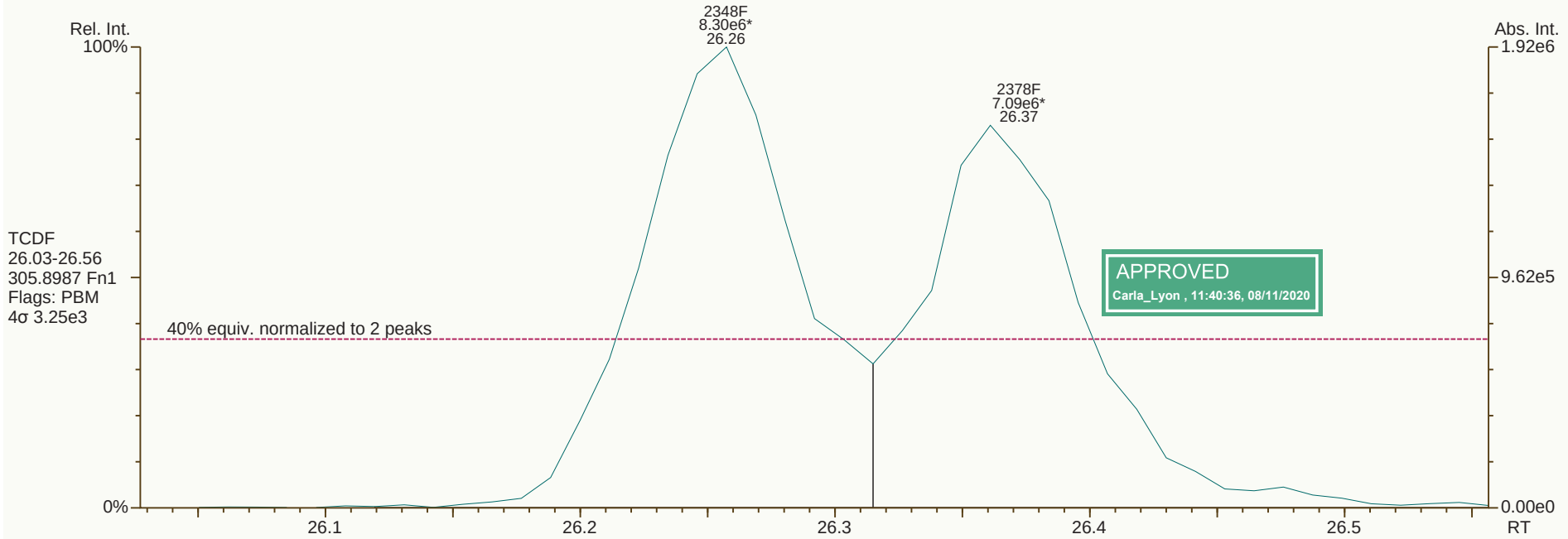
Processed: 11 Aug 2020 09:59 Analyst: pw

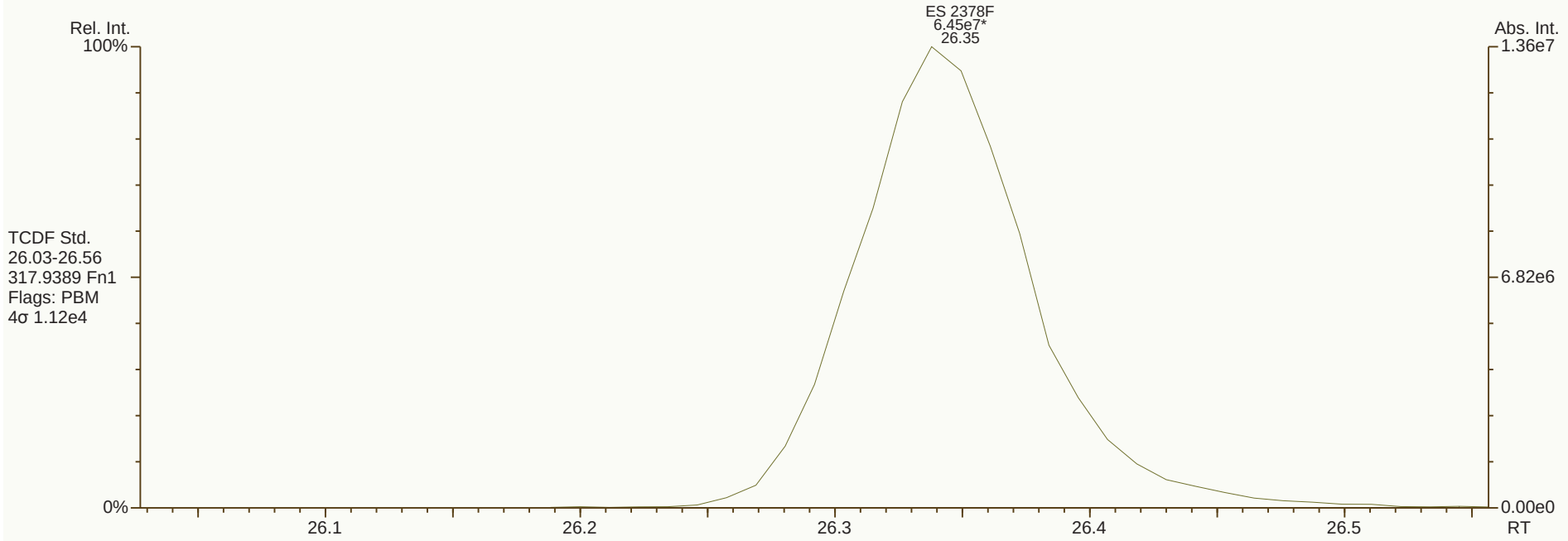
SGS ID: OPR1_17655_DF
Sample ID: 0_17655_OPR001
Acq: 10-Aug-2020 15:38:07
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 21
User: PSW Datafile: 200810R03



Results: P:\B4500_B4599\B4519\B4519_17655 DF\Resources\OPR1_17655_DF.utp_res, saved 11-Aug-2020 08:14 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027
PKD: 11-Aug-2020 08:12 Printed: 11-Aug-2020 10:04

SGS ID: OPR1_17655_DF
Sample ID: 0_17655_OPR001
Acq: 10-Aug-2020 15:38:07
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 21
User: PSW Datafile: 200810R03





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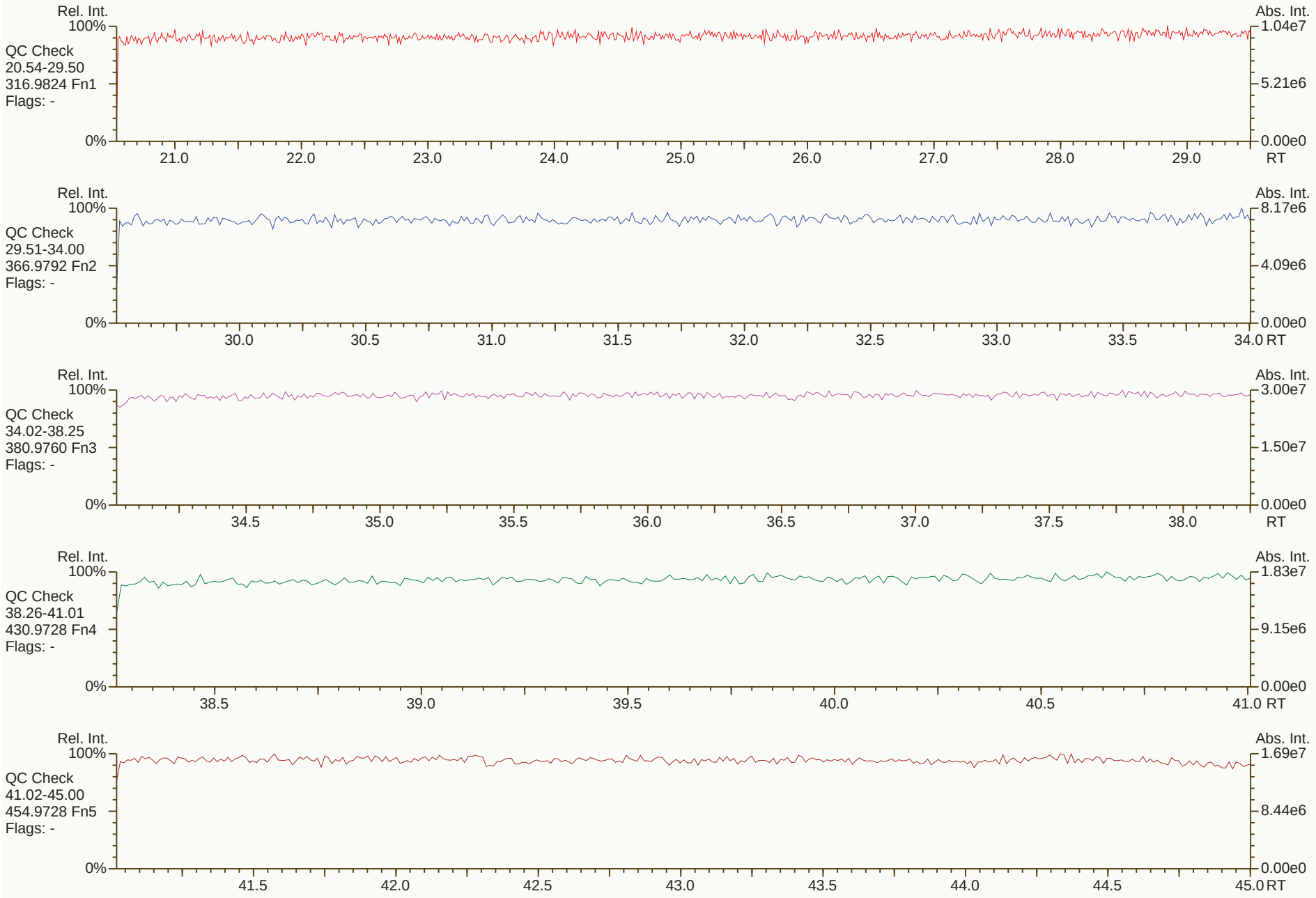
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027
PKD: 11-Aug-2020 08:12 Printed: 11-Aug-2020 10:04

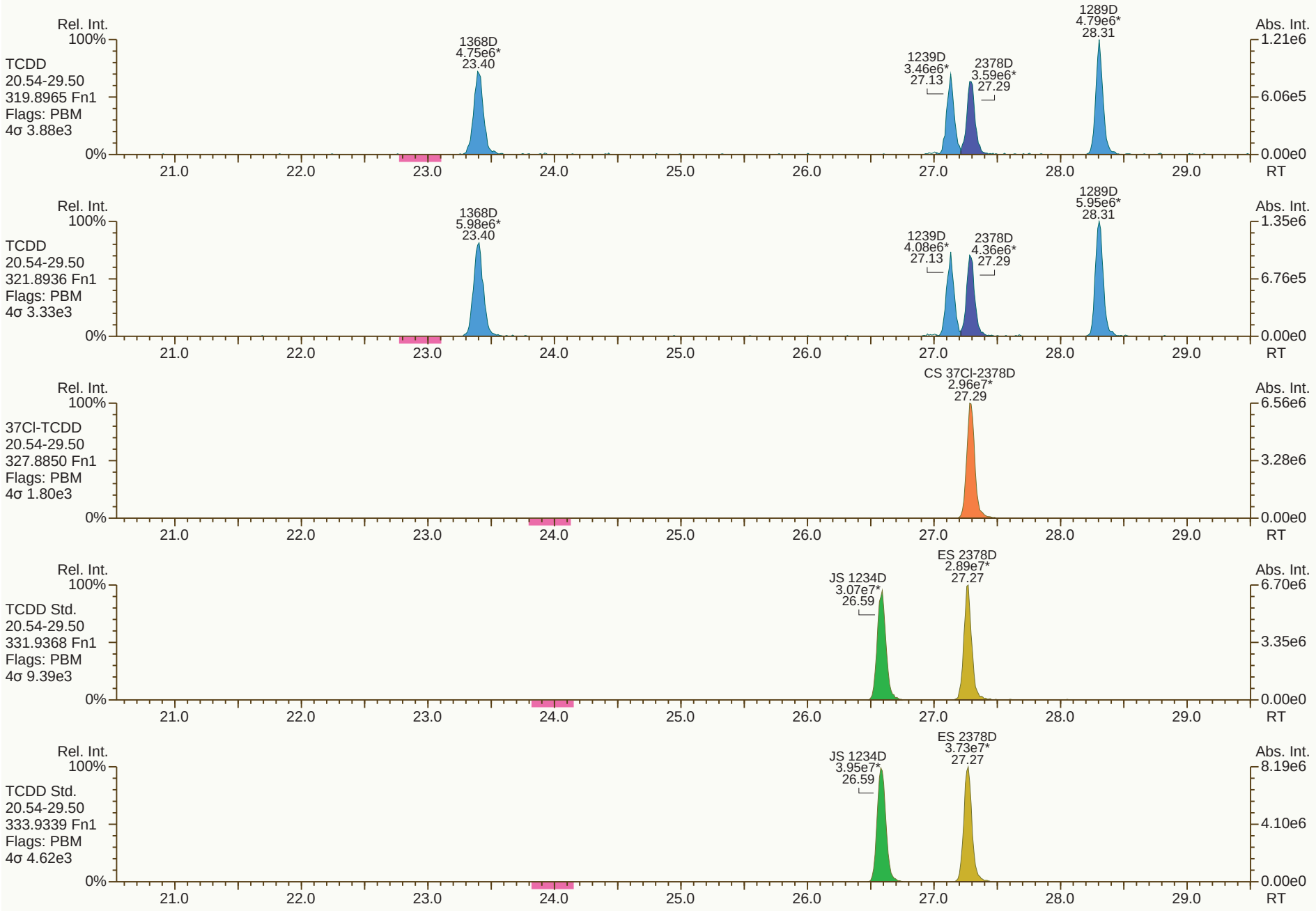
SGS ID: OPR1_17655_DF **Sample ID: 0_17655_OPR001** **Acq: 10-Aug-2020 15:38:07**

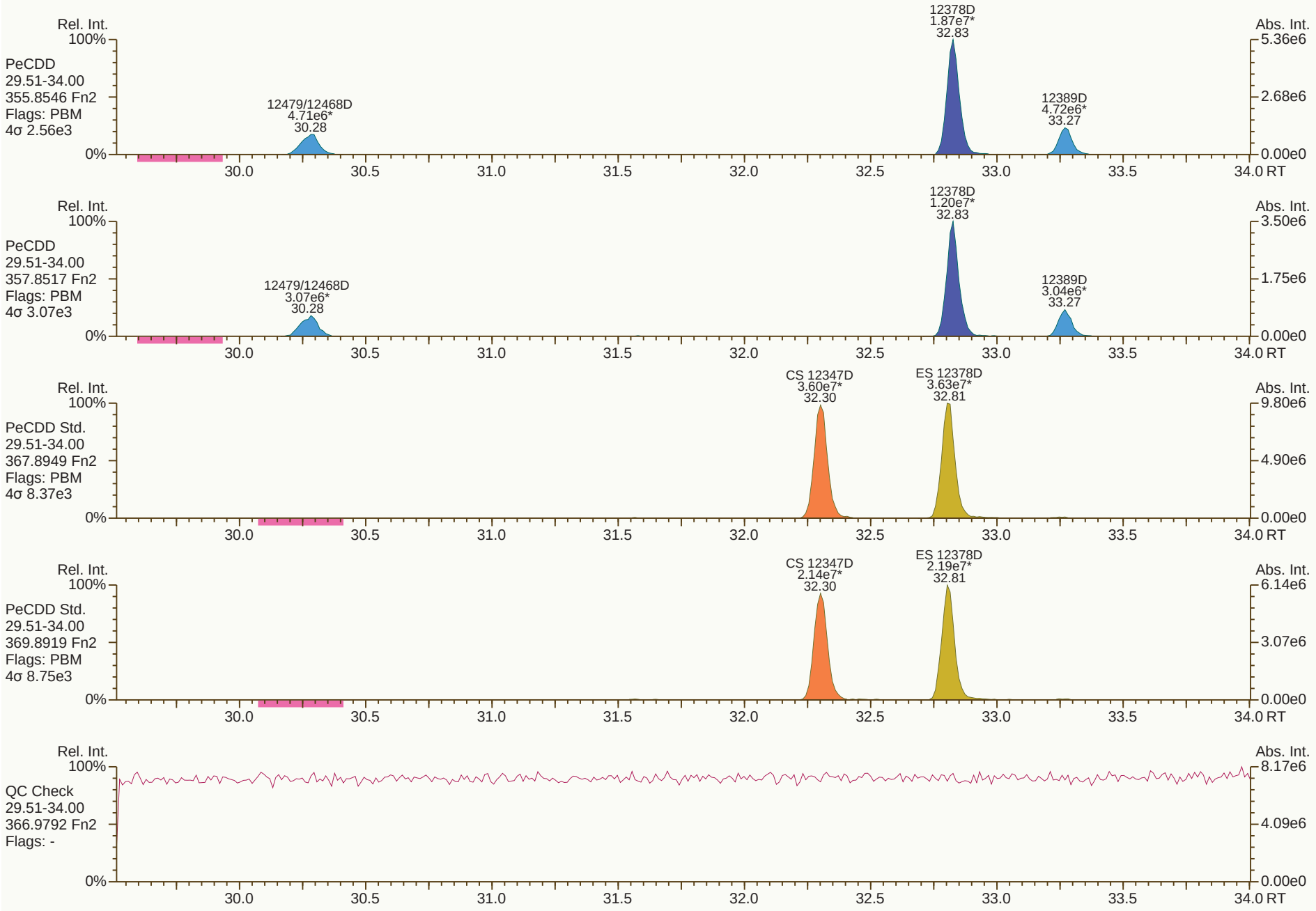
Instr: [ILM] AutoSpec-Ultima MM3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 21** **User: PSW Datafile: 200810R03**

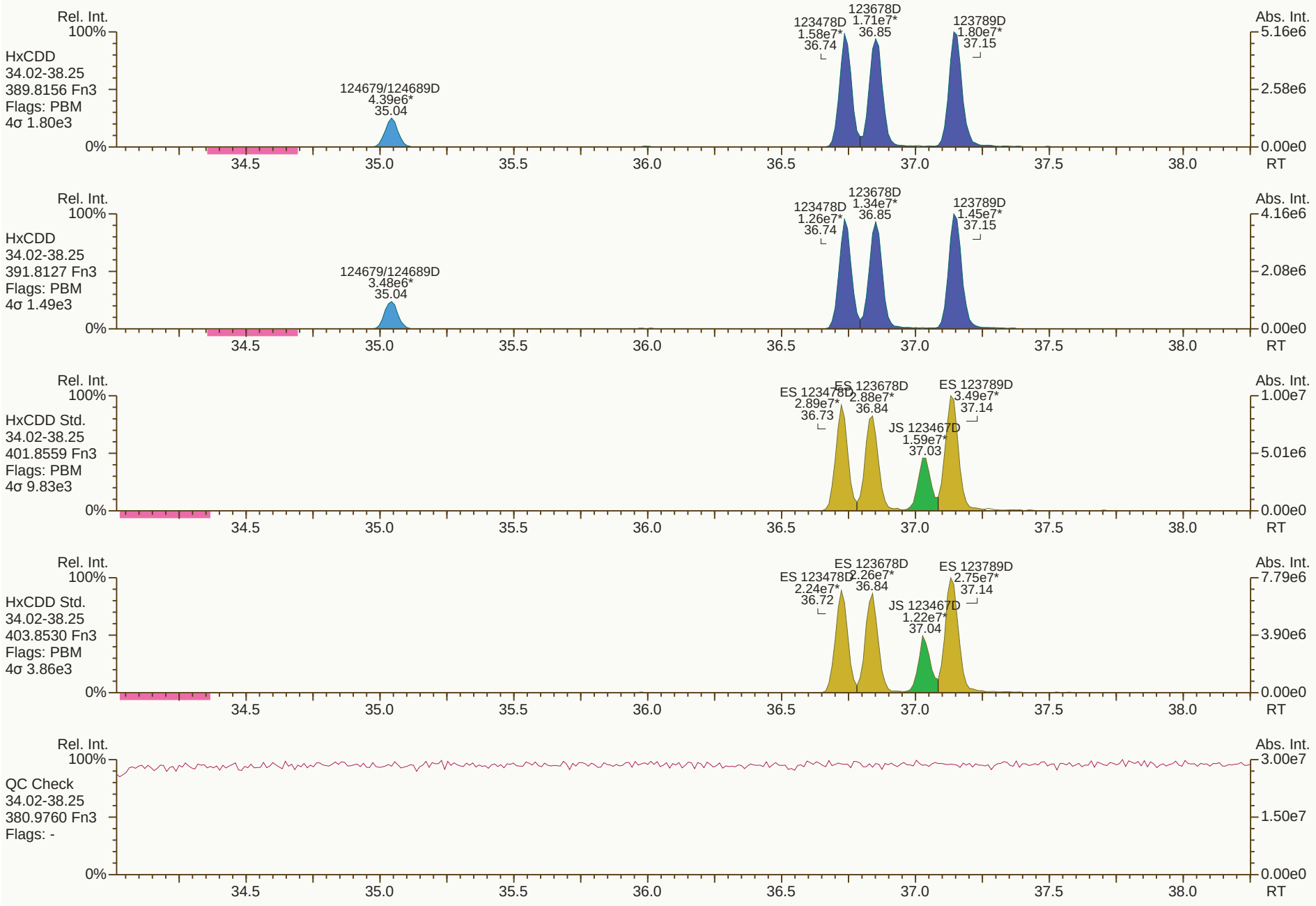


Results: P:\B4500_B4599\B4519\B4519_17655 DF\Resources\OPR1_17655_DF.utp_res, saved 11-Aug-2020 08:14 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 scc: 180-044 *PKD: n/a Printed: 11-Aug-2020 10:09 Page 1 of 12*


Rel. Int.
100%
TCDD
20.54-29.50
319.8965 Fn1
Flags: PBM
4σ 3.88e3
1368D
4.75e6*
23.40
1239D
3.46e6*
27.13
2378D
3.59e6*
27.29
1289D
4.79e6*
28.31
Abs. Int.
1.21e6
6.06e5
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD
20.54-29.50
321.8936 Fn1
Flags: PBM
4σ 3.33e3
1368D
5.98e6*
23.40
1239D
4.08e6*
27.13
2378D
4.36e6*
27.29
1289D
5.95e6*
28.31
Abs. Int.
1.35e6
6.76e5
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
37Cl-TCDD
20.54-29.50
327.8850 Fn1
Flags: PBM
4σ 1.80e3
CS 37Cl-2378D
2.96e7*
27.29
Abs. Int.
6.56e6
3.28e6
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
331.9368 Fn1
Flags: PBM
4σ 9.39e3
JS 1234D
3.07e7*
26.59
ES 2378D
2.89e7*
27.27
Abs. Int.
6.70e6
3.35e6
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
333.9339 Fn1
Flags: PBM
4σ 4.62e3
JS 1234D
3.95e7*
26.59
ES 2378D
3.73e7*
27.27
Abs. Int.
8.19e6
4.10e6
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
PeCDD
29.51-34.00
355.8546 Fn2
Flags: PBM
4σ 2.56e3
12479/12468D
4.71e6*
30.28
12378D
1.87e7*
32.83
12389D
4.72e6*
33.27
Abs. Int.
5.36e6
2.68e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD
29.51-34.00
357.8517 Fn2
Flags: PBM
4σ 3.07e3
12479/12468D
3.07e6*
30.28
12378D
1.20e7*
32.83
12389D
3.04e6*
33.27
Abs. Int.
3.50e6
1.75e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.00
367.8949 Fn2
Flags: PBM
4σ 8.37e3
CS 12347D
3.60e7*
32.30
ES 12378D
3.63e7*
32.81
Abs. Int.
9.80e6
4.90e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.00
369.8919 Fn2
Flags: PBM
4σ 8.75e3
CS 12347D
2.14e7*
32.30
ES 12378D
2.19e7*
32.81
Abs. Int.
6.14e6
3.07e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
QC Check
29.51-34.00
366.9792 Fn2
Flags: -
Abs. Int.
8.17e6
4.09e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT


Rel. Int.
100%
HxCDD
34.02-38.25
389.8156 Fn3
Flags: PBM
4σ 1.80e3
0%
124679/124689D
4.39e6*
35.04
123478D
1.58e7*
36.74
123678D
1.71e7*
36.85
123789D
1.80e7*
37.15
Abs. Int.
5.16e6
2.58e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD
34.02-38.25
391.8127 Fn3
Flags: PBM
4σ 1.49e3
0%
124679/124689D
3.48e6*
35.04
123478D
1.26e7*
36.74
123678D
1.34e7*
36.85
123789D
1.45e7*
37.15
Abs. Int.
4.16e6
2.08e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
401.8559 Fn3
Flags: PBM
4σ 9.83e3
0%
ES 123478D
2.89e7*
36.73
ES 123678D
2.88e7*
36.84
JS 123467D
1.59e7*
37.03
ES 123789D
3.49e7*
37.14
Abs. Int.
1.00e7
5.01e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
403.8530 Fn3
Flags: PBM
4σ 3.86e3
0%
ES 123478D
2.24e7*
36.72
ES 123678D
2.26e7*
36.84
JS 123467D
1.22e7*
37.04
ES 123789D
2.75e7*
37.14
Abs. Int.
7.79e6
3.90e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
0%
Abs. Int.
3.00e7
1.50e7
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT

SGS ID: OPR1_17655_DF | **Sample ID: 0_17655_OPR001** | **Acq: 10-Aug-2020 15:38:07**

Instr: [ILM] AutoSpec-Ultima MM3 | **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 21** | **User: PSW Datafile: 200810R03**



Results: P:\B4500_B4599\B4519\B4519_17655 DF\Resources\OPR1_17655_DF.utp_res, saved 11-Aug-2020 08:14 (PSW)

Peak annotation: Areas, Centroids

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 1465, 0849 scc: 180-044

PKD: 11-Aug-2020 08:12 Printed: 11-Aug-2020 10:09 Page 5 of 12

SGS ID: OPR1_17655_DF | **Sample ID: 0_17655_OPR001** | **Acq: 10-Aug-2020 15:38:07**

Instr: [ILM] AutoSpec-Ultima MM3 | **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 21** | **User: PSW Datafile: 200810R03**



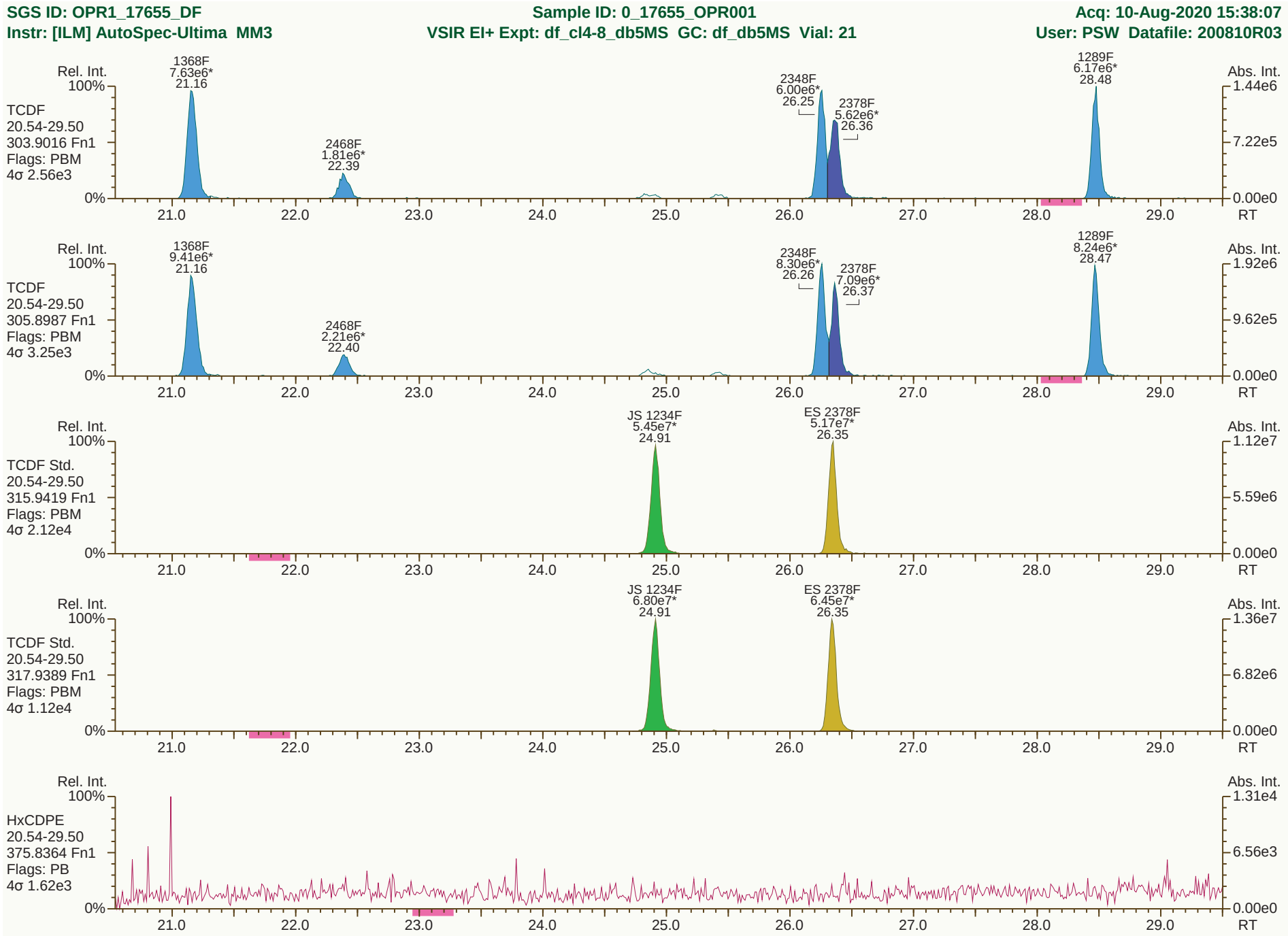
Results: P:\B4500_B4599\B4519\B4519_17655 DF\Resources\OPR1_17655_DF.utp_res, saved 11-Aug-2020 08:14 (PSW)

Peak annotation: Areas, Centroids

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 3601, 4896 scc: 180-044

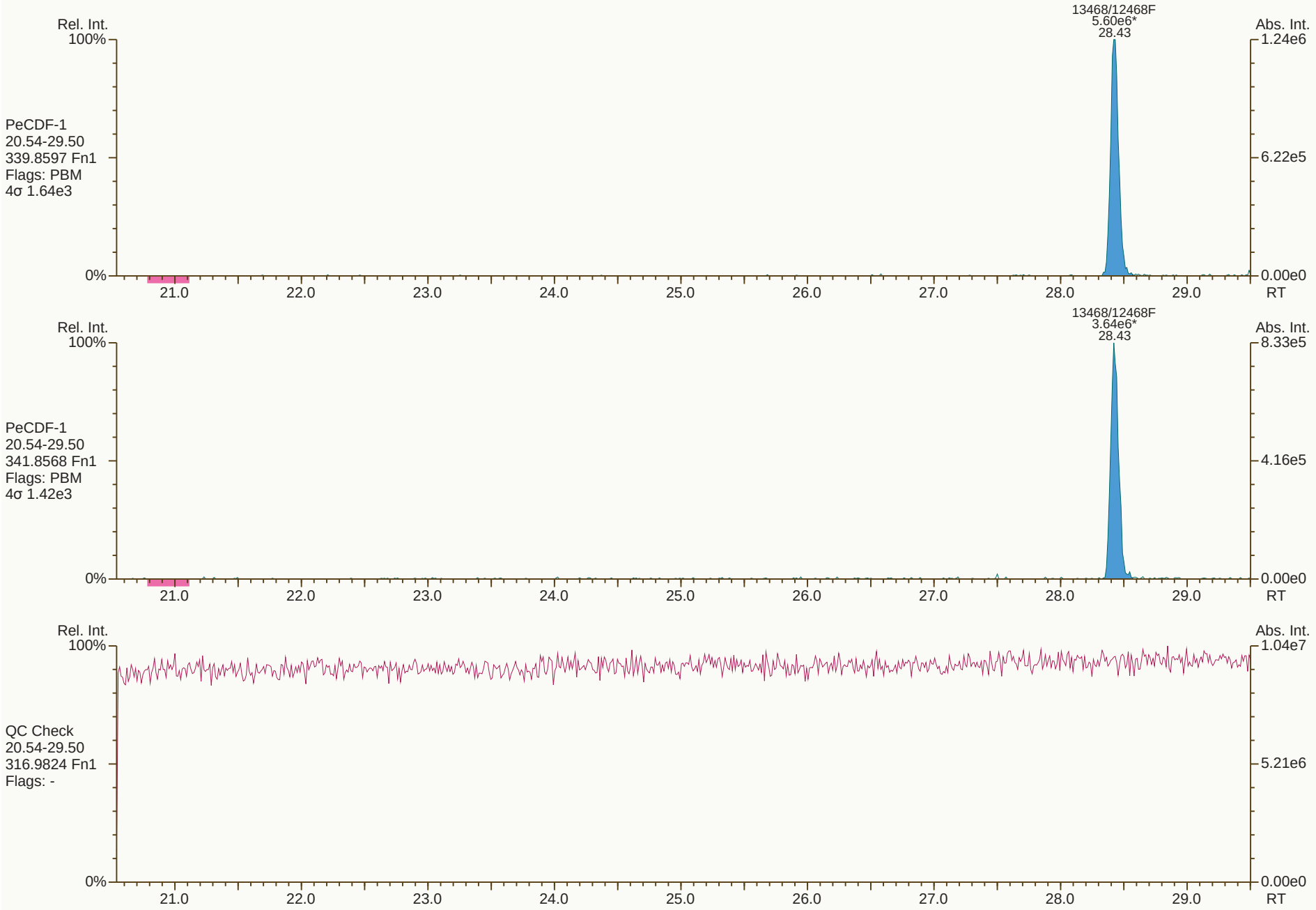
PKD: 11-Aug-2020 08:12 Printed: 11-Aug-2020 10:09 Page 6 of 12

SGS ID: OPR1_17655_DF
Instr: [ILM] AutoSpec-Ultima MM3
Sample ID: 0_17655_OPR001
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 21
Acq: 10-Aug-2020 15:38:07
User: PSW Datafile: 200810R03



SGS ID: OPR1_17655_DF | **Sample ID: 0_17655_OPR001** | **Acq: 10-Aug-2020 15:38:07**

Instr: [ILM] AutoSpec-Ultima MM3 | **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 21** | **User: PSW Datafile: 200810R03**

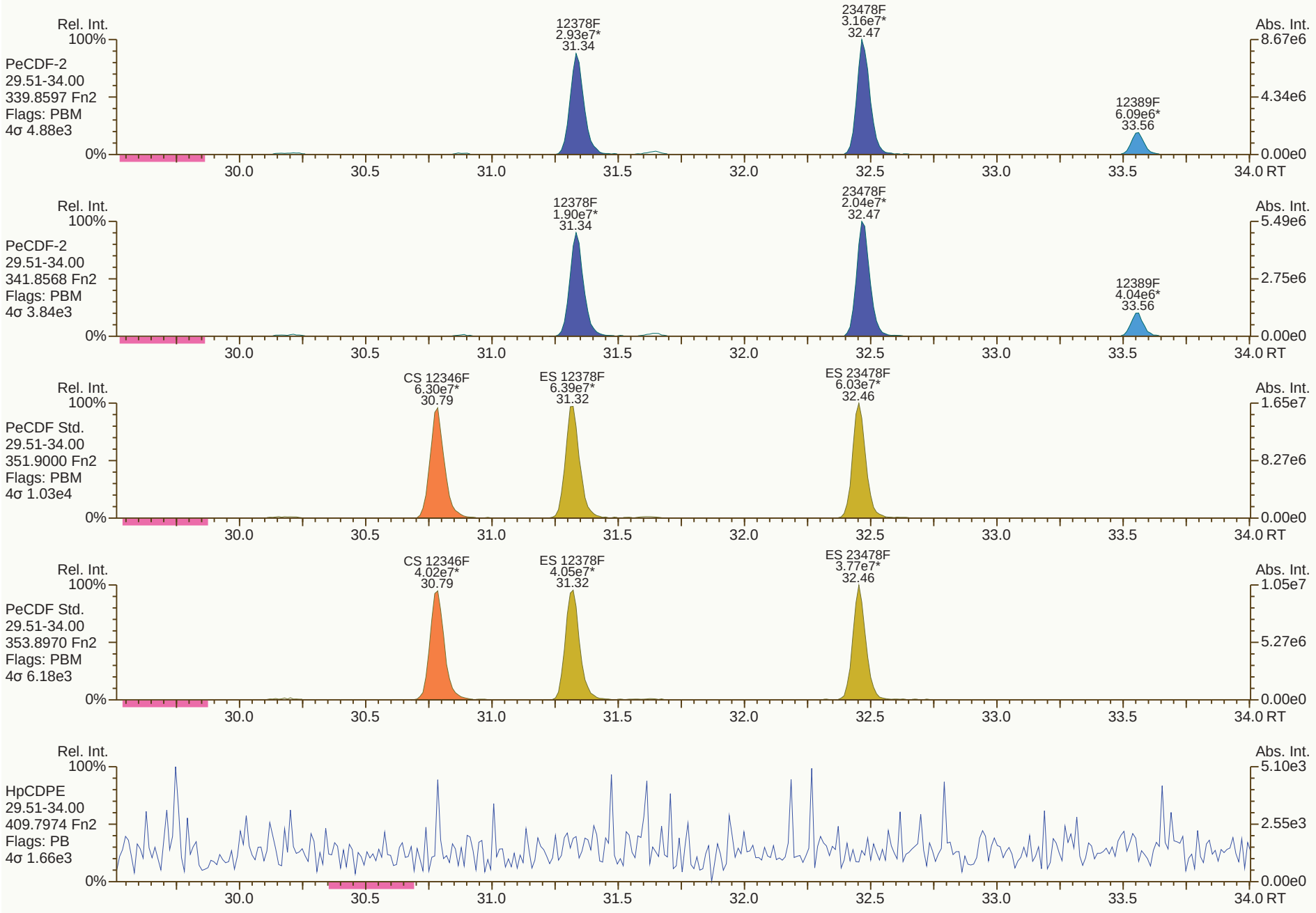


Results: P:\B4500_B4599\B4519\B4519_17655 DF\Resources\OPR1_17655_DF.utp_res, saved 11-Aug-2020 08:14 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 5495 scc: 180-044 *PKD: 11-Aug-2020 08:12 Printed: 11-Aug-2020 10:09 Page 8 of 12*

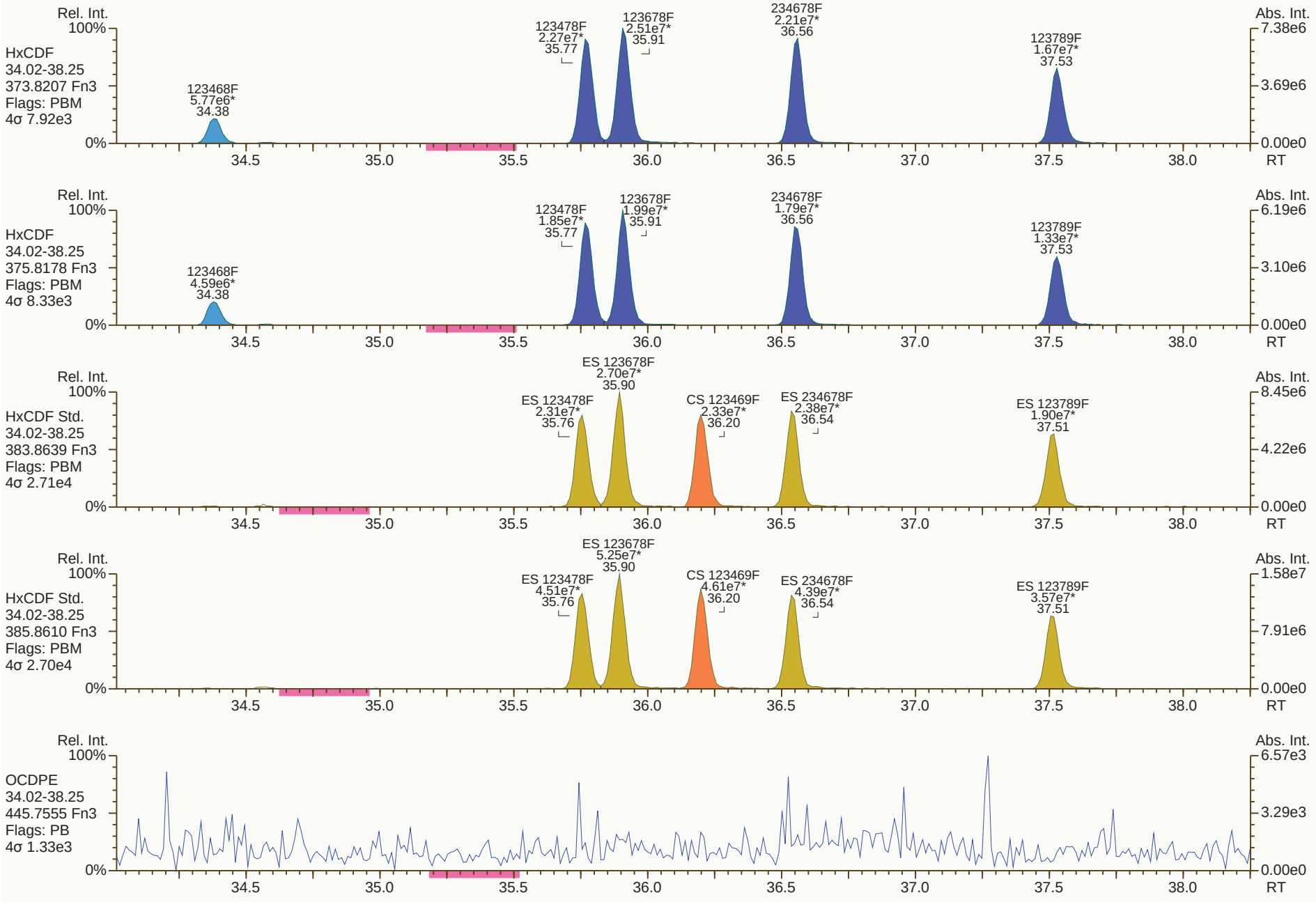
SGS ID: OPR1_17655_DF | Sample ID: 0_17655_OPR001 | Acq: 10-Aug-2020 15:38:07

Instr: [ILM] AutoSpec-Ultima MM3 | VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 21 | User: PSW Datafile: 200810R03



Results: P:\B4500_B4599\B4519\B4519_17655 DF\Resources\OPR1_17655_DF.utp_res, saved 11-Aug-2020 08:14 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 6449, 8897, 5177 scc: 180-044 *PKD: 11-Aug-2020 08:12 Printed: 11-Aug-2020 10:09 Page 9 of 12*


Rel. Int.
100%
HxCDF
34.02-38.25
373.8207 Fn3
Flags: PBM
4σ 7.92e3
123468F
5.77e6*
34.38
123478F
2.27e7*
35.77
123678F
2.51e7*
35.91
234678F
2.21e7*
36.56
123789F
1.67e7*
37.53
Abs. Int.
7.38e6
3.69e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDF
34.02-38.25
375.8178 Fn3
Flags: PBM
4σ 8.33e3
123468F
4.59e6*
34.38
123478F
1.85e7*
35.77
123678F
1.99e7*
35.91
234678F
1.79e7*
36.56
123789F
1.33e7*
37.53
Abs. Int.
6.19e6
3.10e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDF Std.
34.02-38.25
383.8639 Fn3
Flags: PBM
4σ 2.71e4
ES 123678F
2.70e7*
35.90
ES 123478F
2.31e7*
35.76
CS 123469F
2.33e7*
36.20
ES 234678F
2.38e7*
36.54
ES 123789F
1.90e7*
37.51
Abs. Int.
8.45e6
4.22e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDF Std.
34.02-38.25
385.8610 Fn3
Flags: PBM
4σ 2.70e4
ES 123678F
5.25e7*
35.90
ES 123478F
4.51e7*
35.76
CS 123469F
4.61e7*
36.20
ES 234678F
4.39e7*
36.54
ES 123789F
3.57e7*
37.51
Abs. Int.
1.58e7
7.91e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
OCDPE
34.02-38.25
445.7555 Fn3
Flags: PB
4σ 1.33e3
Abs. Int.
6.57e3
3.29e3
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT

SGS ID: OPR1_17655_DF
Instr: [ILM] AutoSpec-Ultima MM3

Sample ID: 0_17655_OPR001
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 21

Acq: 10-Aug-2020 15:38:07
User: PSW Datafile: 200810R03



Results: P:\B4500_B4599\B4519\B4519_17655 DF\Resources\OPR1_17655_DF.utp_res, saved 11-Aug-2020 08:14 (PSW)
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 5446, 5248, 2929 scc: 180-044

Peak annotation: Areas, Centroids
PKD: 11-Aug-2020 08:12 Printed: 11-Aug-2020 10:09 Page 11 of 12


OCDF
1.32e7*
42.55
Rel. Int.
100%
OCDF
41.02-45.00
441.7428 Fn5
Flags: PBM
4σ 1.75e3
0%
Abs. Int.
4.82e6
2.41e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDF
1.47e7*
42.55
Rel. Int.
100%
OCDF
41.02-45.00
443.7398 Fn5
Flags: PBM
4σ 3.62e3
0%
Abs. Int.
5.28e6
2.64e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDF
2.65e7*
42.54
Rel. Int.
100%
OCDF Std.
41.02-45.00
453.7830 Fn5
Flags: PBM
4σ 2.02e3
0%
Abs. Int.
9.51e6
4.76e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDF
2.86e7*
42.53
Rel. Int.
100%
OCDF Std.
41.02-45.00
455.7801 Fn5
Flags: PBM
4σ 3.96e3
0%
Abs. Int.
9.91e6
4.96e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
DCDPE
41.02-45.00
513.6775 Fn5
Flags: PB
4σ 1.29e3
0%
Abs. Int.
6.42e3
3.21e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

CPSM only

METHOD 8290A **COLUMN PERFORMANCE AND RETENTION TIME WINDOWS** **FORM CPSM**

Lab Name:	SGS North America		
Initial Calibration:	ICAL: MM3_DF_10012020_12JUN2020		
Instrument ID:	MM3	GC Column ID:	ZB-5ms
CPSM Data Filename:	200810R13	Analysis Date:	10-AUG-2020 23:40:28
Lab ID:	OPR1_17655_DF-RJ		

Window Defining Standards Results

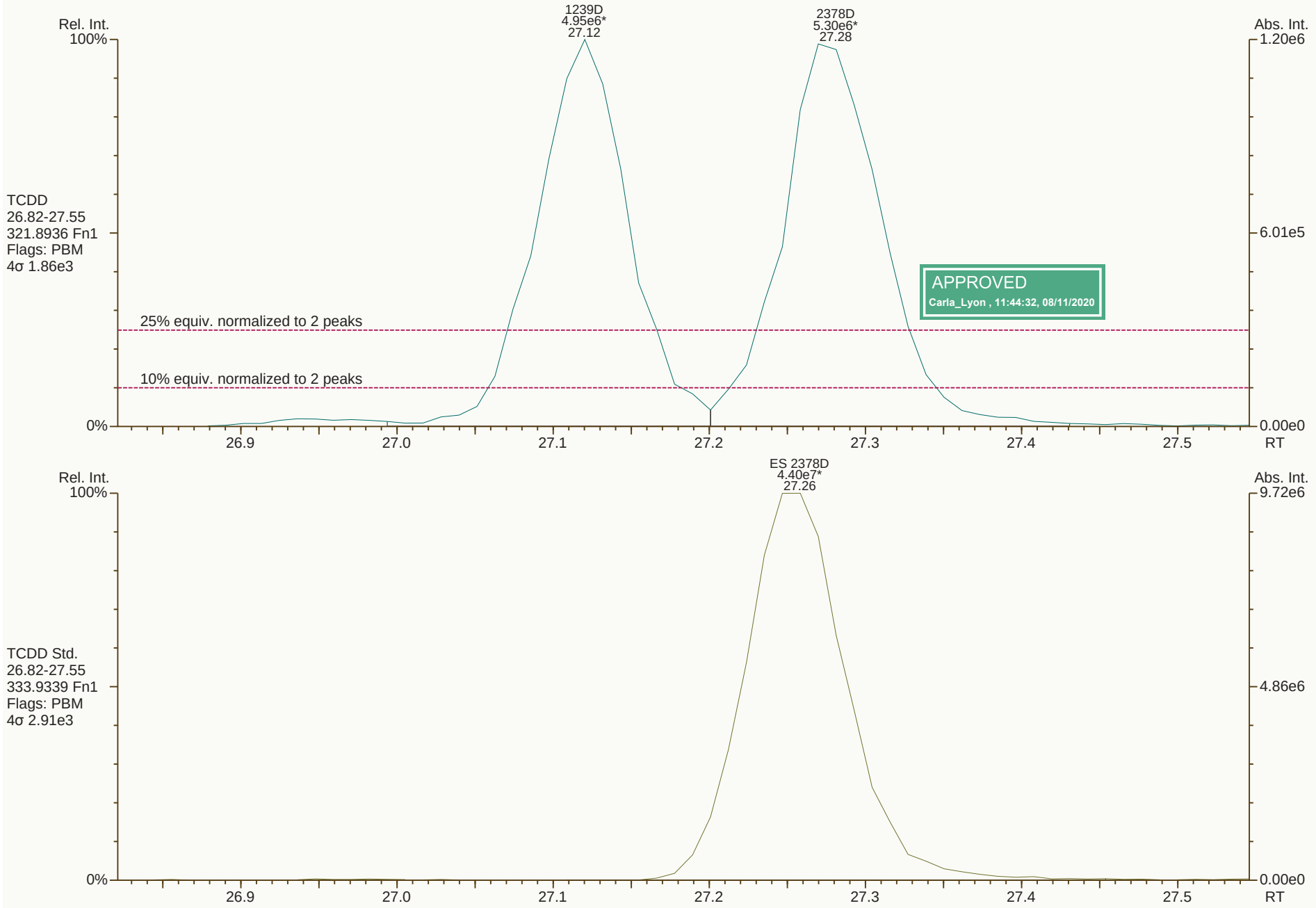
First Eluting Isomer	RT	Last Eluting Isomer	RT
1368-TCDD	23.39	1289-TCDD	28.30
12479/12468-PeCDD	30.27	12389-PeCDD	33.26
124679/124689-HxCDD	35.03	123789-HxCDD	37.14
1234679-HpCDD	39.31	1234678-HpCDD	39.96
1368-TCDF	21.16	1289-TCDF	28.46
13468/12468-PeCDF	28.42	12389-PeCDF	33.55
123468-HxCDF	34.37	123789-HxCDF	37.52
1234678-HpCDF	39.04	1234789-HpCDF	40.37

Isomer Specificity Test Standard Results

Closest Eluting Isomer	RT	2378 Specific Isomer	RT
1239-TCDD	27.12	2378-TCDD	27.28
2348-TCDF	26.25	2378-TCDF	26.36

Processed: 11 Aug 2020 10:00 Analyst: pw

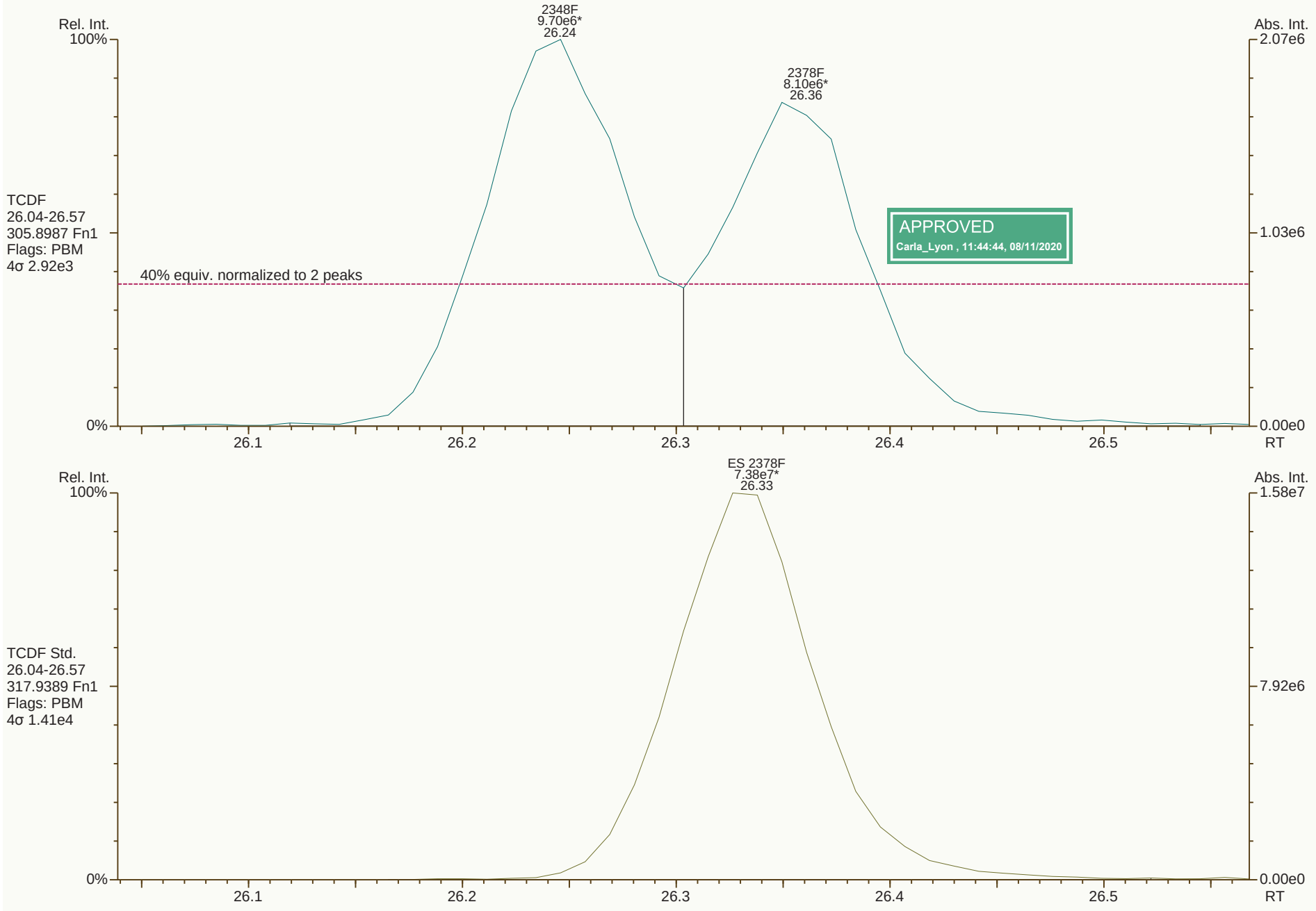
SGS ID: OPR1_17655_DF-RJ
Sample ID: 0_17655_OPR001
Acq: 10-Aug-2020 23:40:28
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 21
User: PSW Datafile: 200810R13



Results: P:\B4500_B4599\B4519\B4519_17655 DF\Resources\OPR1_17655_DF-RJ.utp_res, saved 11-Aug-2020 08:49 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027
PKD: 11-Aug-2020 08:49 Printed: 11-Aug-2020 10:01

SGS ID: OPR1_17655_DF-RJ | Sample ID: 0_17655_OPR001 | Acq: 10-Aug-2020 23:40:28

Instr: [ILM] AutoSpec-Ultima MM3 | VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 21 | User: PSW Datafile: 200810R13



Results: P:\B4500_B4599\B4519\B4519_17655 DF\Resources\OPR1_17655_DF-RJ.utp_res, saved 11-Aug-2020 08:49 (PSW)

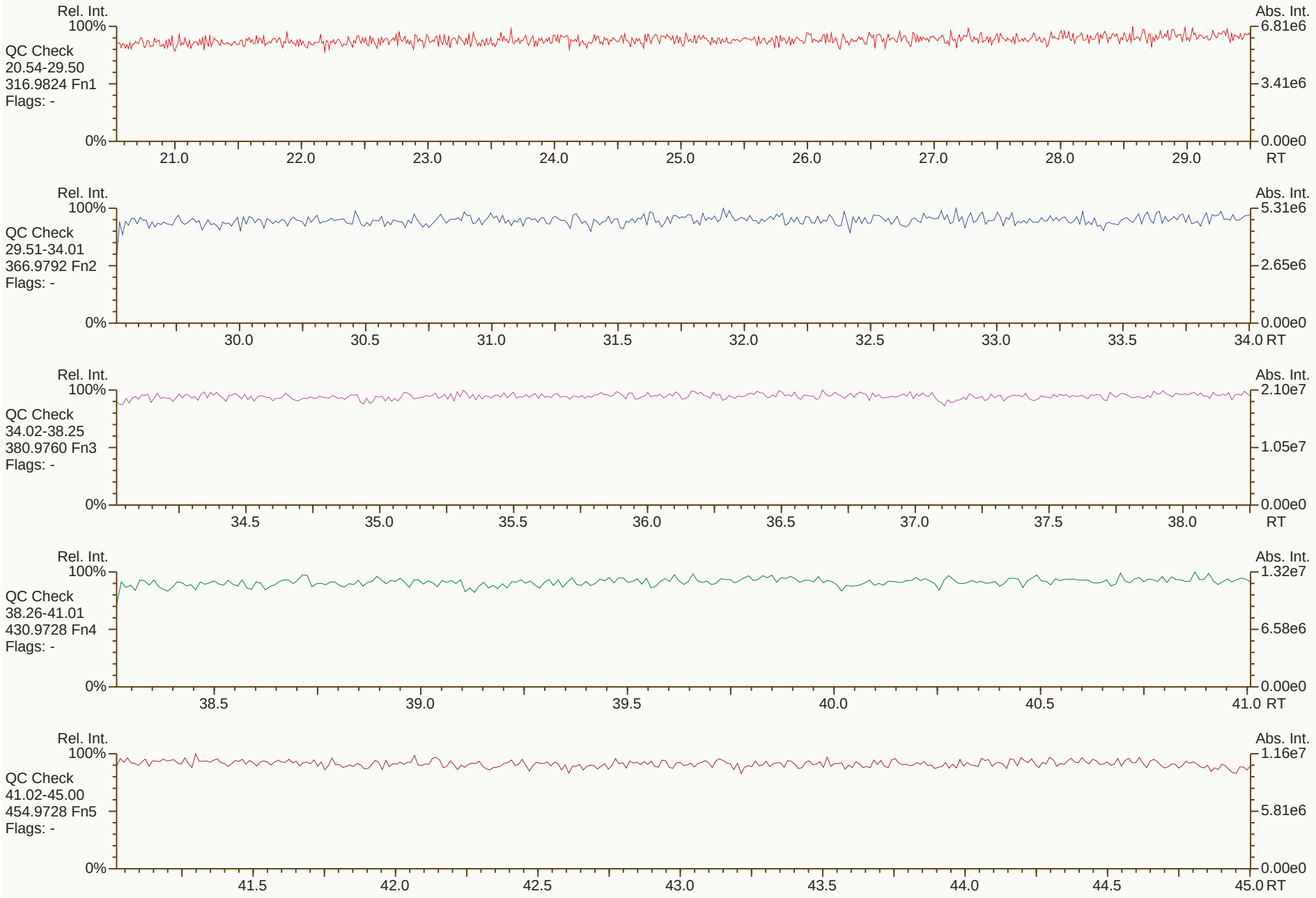
Peak annotation: Areas, Centroids

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027

PKD: 11-Aug-2020 08:49 Printed: 11-Aug-2020 10:02

SGS ID: OPR1_17655_DF-RJ | **Sample ID: 0_17655_OPR001** | **Acq: 10-Aug-2020 23:40:28**

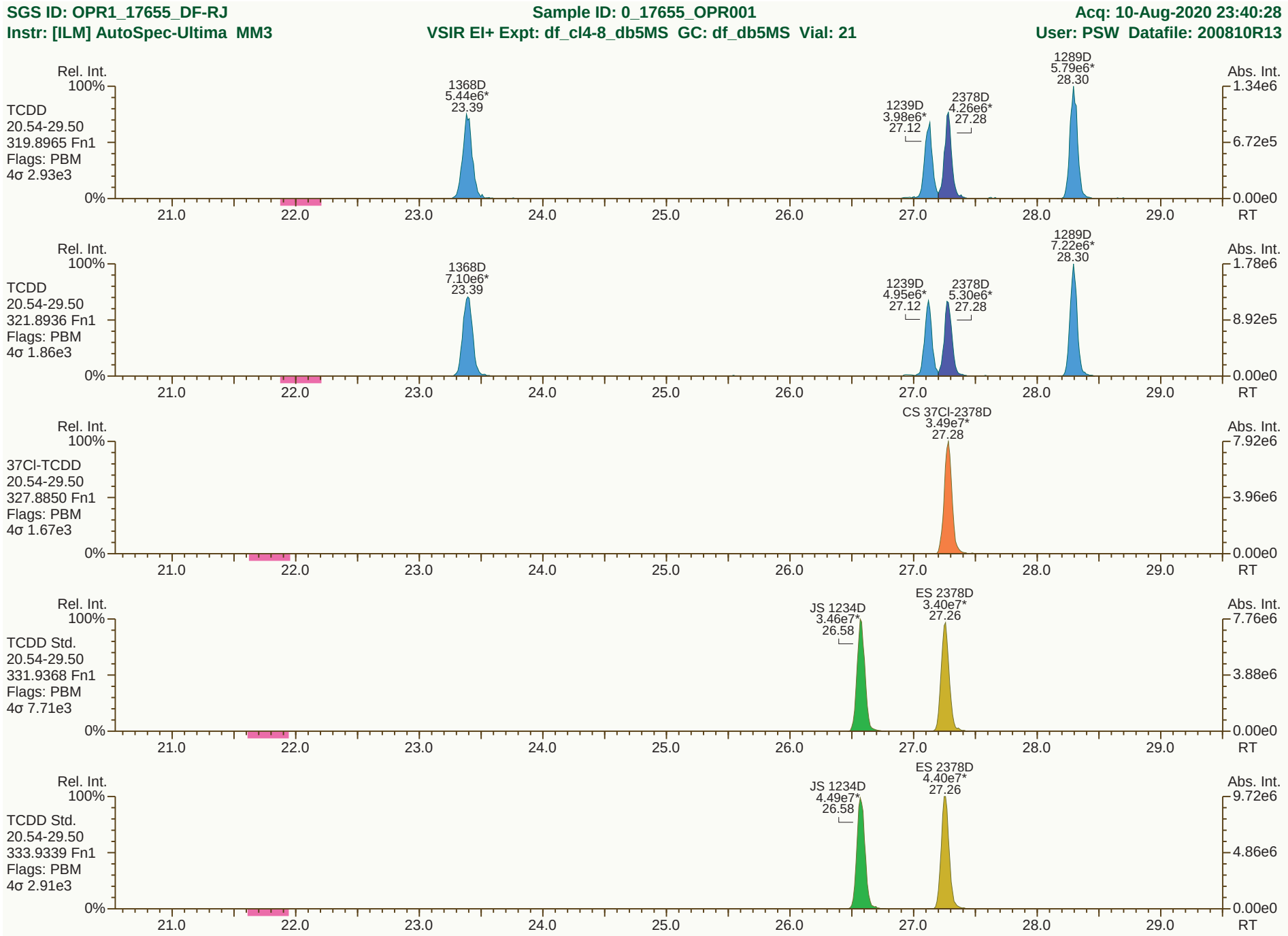
Instr: [ILM] AutoSpec-Ultima MM3 | **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 21** | **User: PSW Datafile: 200810R13**

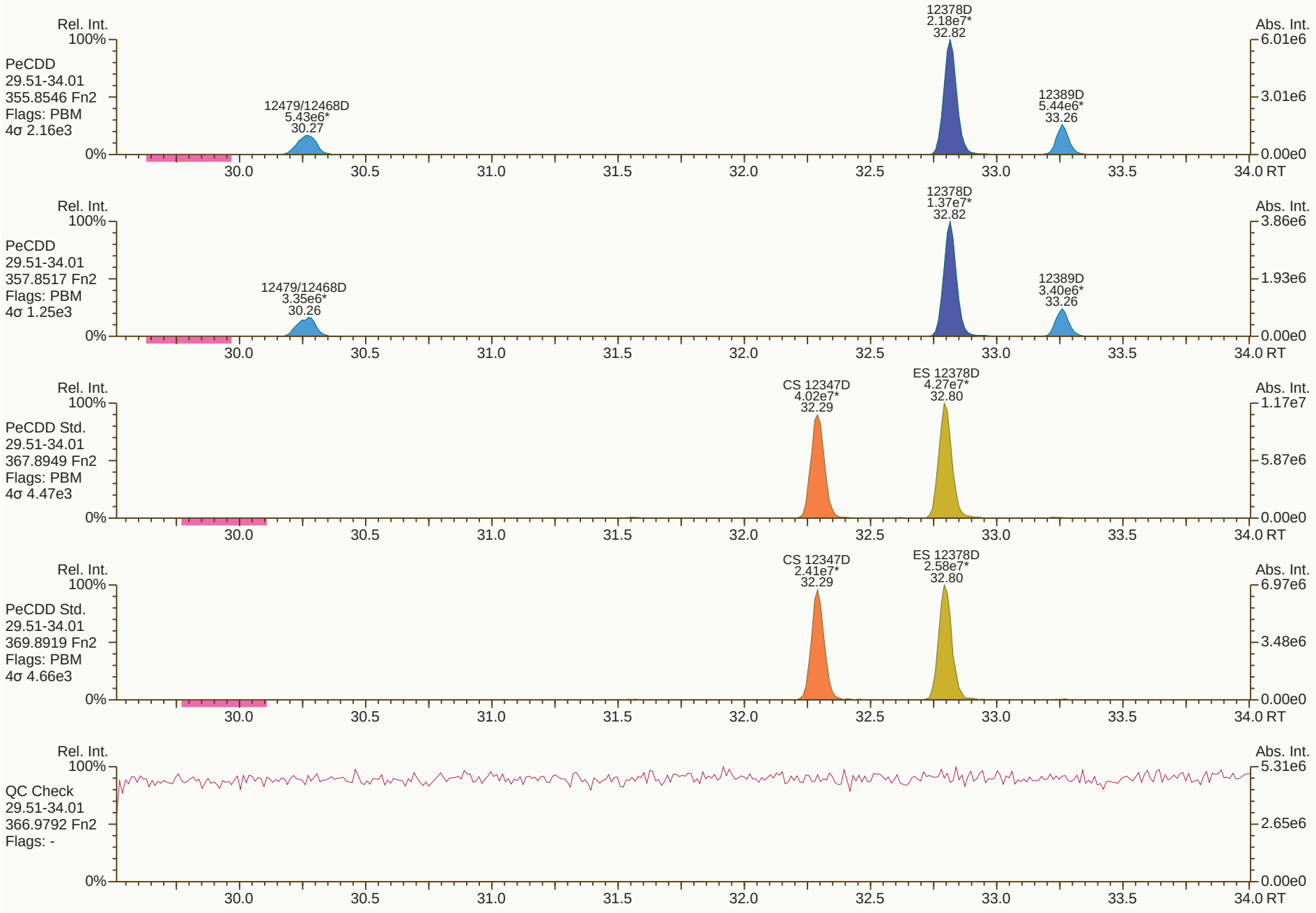


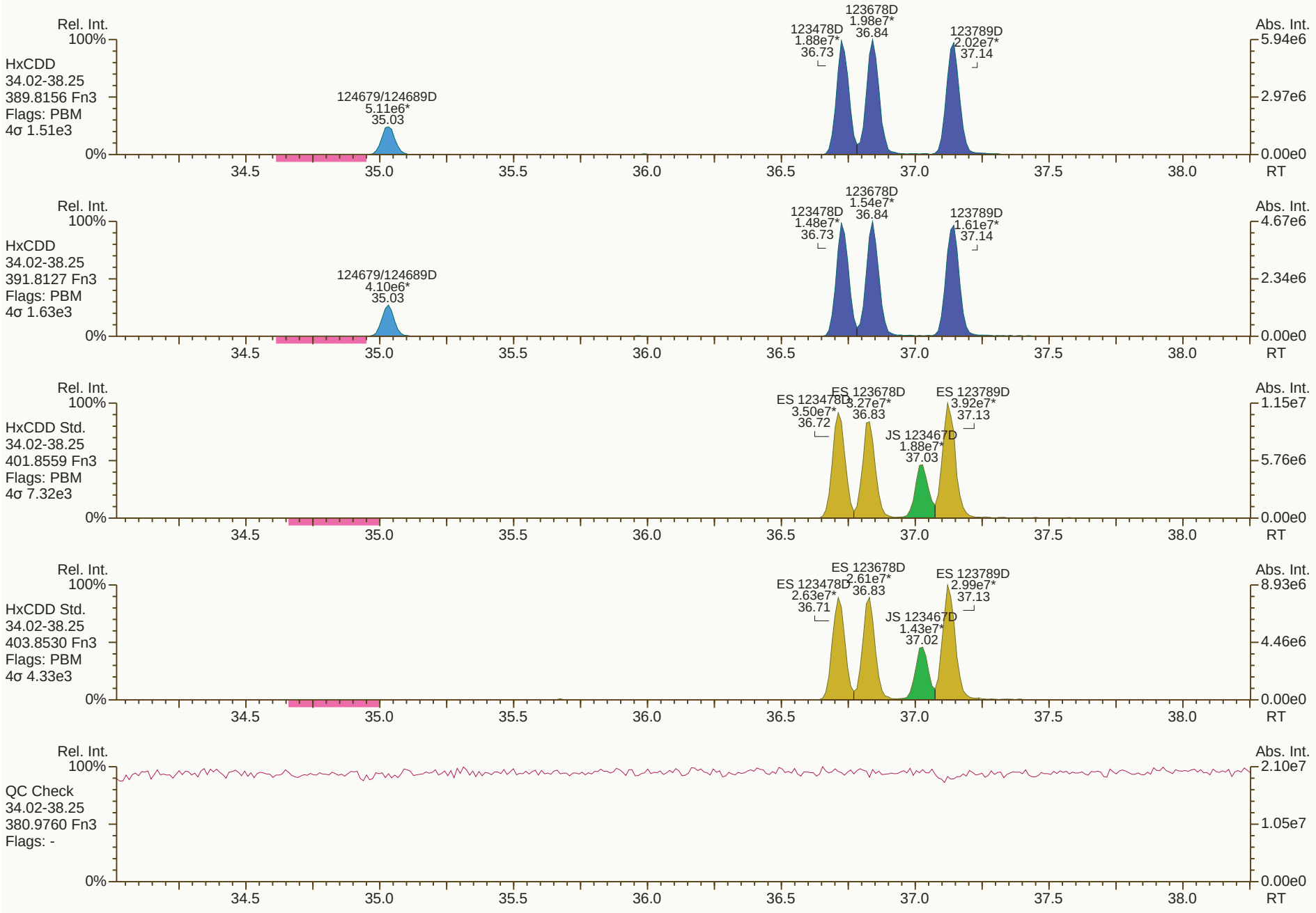
Results: P:\B4500_B4599\B4519\B4519_17655 DF\Resources\OPR1_17655_DF-RJ.utp_res, saved 11-Aug-2020 08:49 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 scc: 719-007 *PKD: n/a Printed: 11-Aug-2020 10:14 Page 1 of 12*

SGS ID: OPR1_17655_DF-RJ
Instr: [ILM] AutoSpec-Ultima MM3
Sample ID: 0_17655_OPR001
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 21
Acq: 10-Aug-2020 23:40:28
User: PSW Datafile: 200810R13

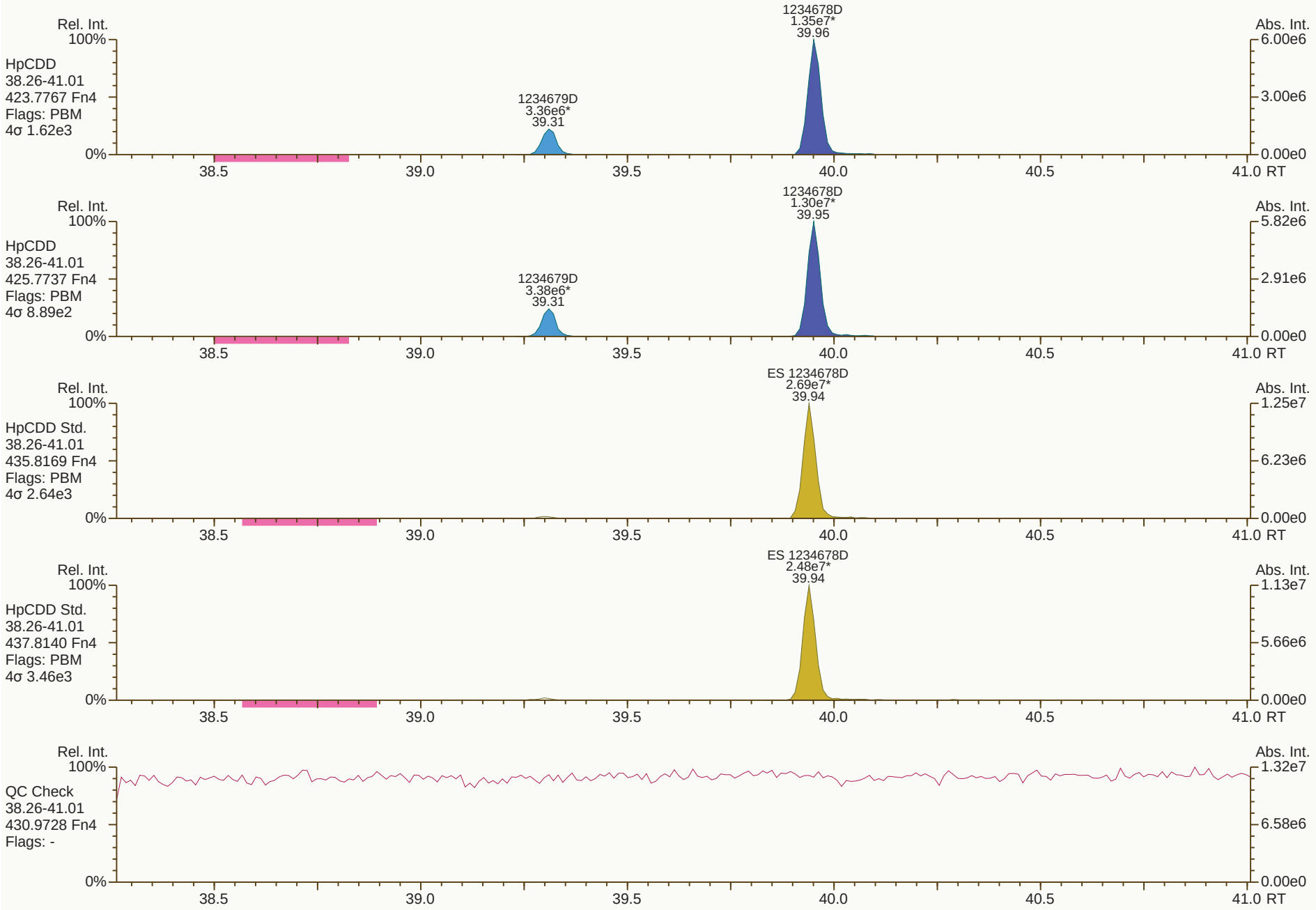



Rel. Int.
100%
PeCDD
29.51-34.01
355.8546 Fn2
Flags: PBM
4σ 2.16e3
12479/12468D
5.43e6*
30.27
12378D
2.18e7*
32.82
12389D
5.44e6*
33.26
Abs. Int.
6.01e6
3.01e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD
29.51-34.01
357.8517 Fn2
Flags: PBM
4σ 1.25e3
12479/12468D
3.35e6*
30.26
12378D
1.37e7*
32.82
12389D
3.40e6*
33.26
Abs. Int.
3.86e6
1.93e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
367.8949 Fn2
Flags: PBM
4σ 4.47e3
CS 12347D
4.02e7*
32.29
ES 12378D
4.27e7*
32.80
Abs. Int.
1.17e7
5.87e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
369.8919 Fn2
Flags: PBM
4σ 4.66e3
CS 12347D
2.41e7*
32.29
ES 12378D
2.58e7*
32.80
Abs. Int.
6.97e6
3.48e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
QC Check
29.51-34.01
366.9792 Fn2
Flags: -
Abs. Int.
5.31e6
2.65e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT


Rel. Int.
100%
HxCDD
34.02-38.25
389.8156 Fn3
Flags: PBM
4σ 1.51e3
124679/124689D
5.11e6*
35.03
123478D
1.88e7*
36.73
123678D
1.98e7*
36.84
123789D
2.02e7*
37.14
Abs. Int.
5.94e6
2.97e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD
34.02-38.25
391.8127 Fn3
Flags: PBM
4σ 1.63e3
124679/124689D
4.10e6*
35.03
123478D
1.48e7*
36.73
123678D
1.54e7*
36.84
123789D
1.61e7*
37.14
Abs. Int.
4.67e6
2.34e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
401.8559 Fn3
Flags: PBM
4σ 7.32e3
ES 123478D
3.50e7*
36.72
ES 123678D
3.27e7*
36.83
JS 123467D
1.88e7*
37.03
ES 123789D
3.92e7*
37.13
Abs. Int.
1.15e7
5.76e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
403.8530 Fn3
Flags: PBM
4σ 4.33e3
ES 123478D
2.63e7*
36.71
ES 123678D
2.61e7*
36.83
JS 123467D
1.43e7*
37.02
ES 123789D
2.99e7*
37.13
Abs. Int.
8.93e6
4.46e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
Abs. Int.
2.10e7
1.05e7
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT

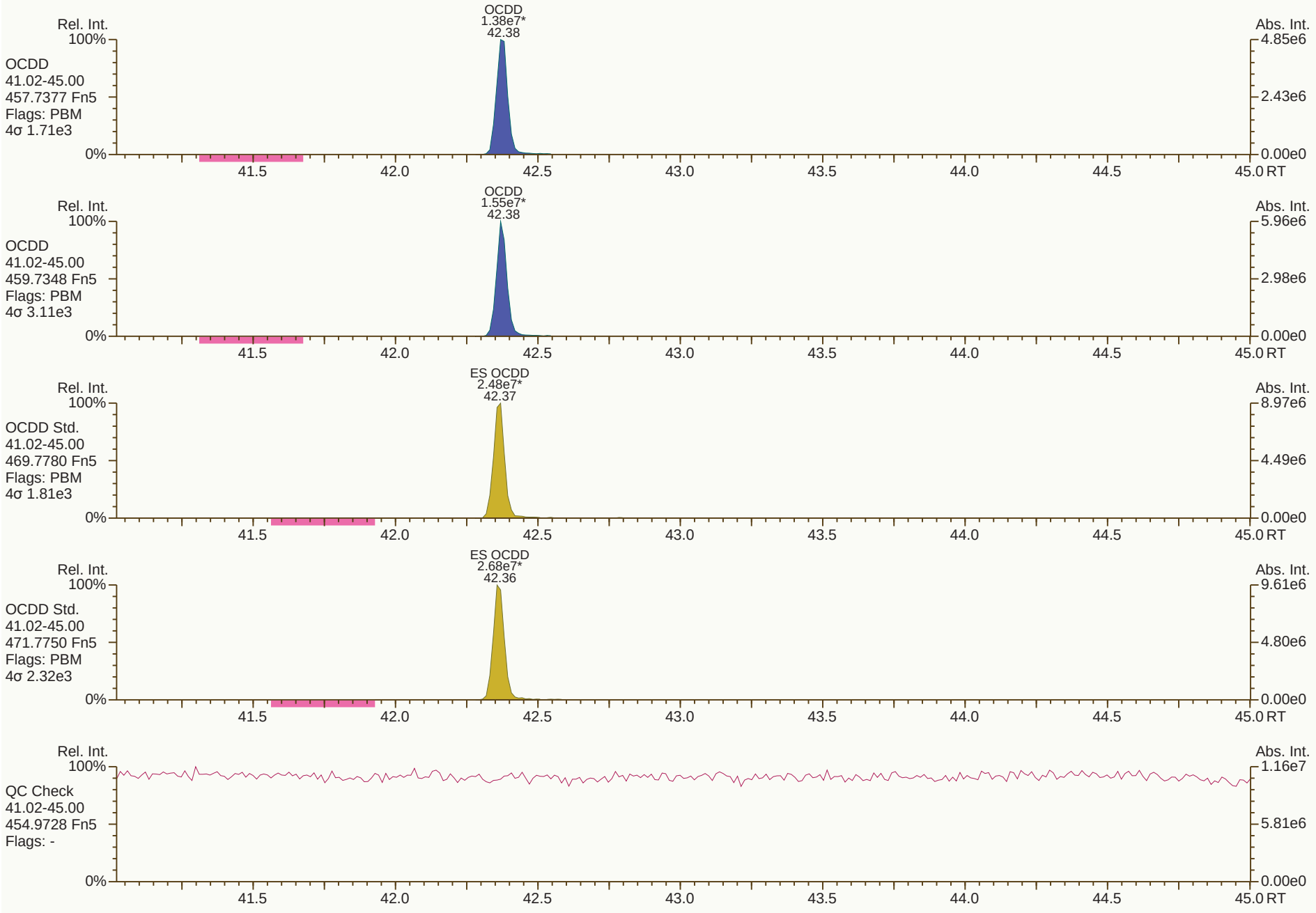
SGS ID: OPR1_17655_DF-RJ **Sample ID: 0_17655_OPR001** **Acq: 10-Aug-2020 23:40:28**

Instr: [ILM] AutoSpec-Ultima MM3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 21** **User: PSW Datafile: 200810R13**



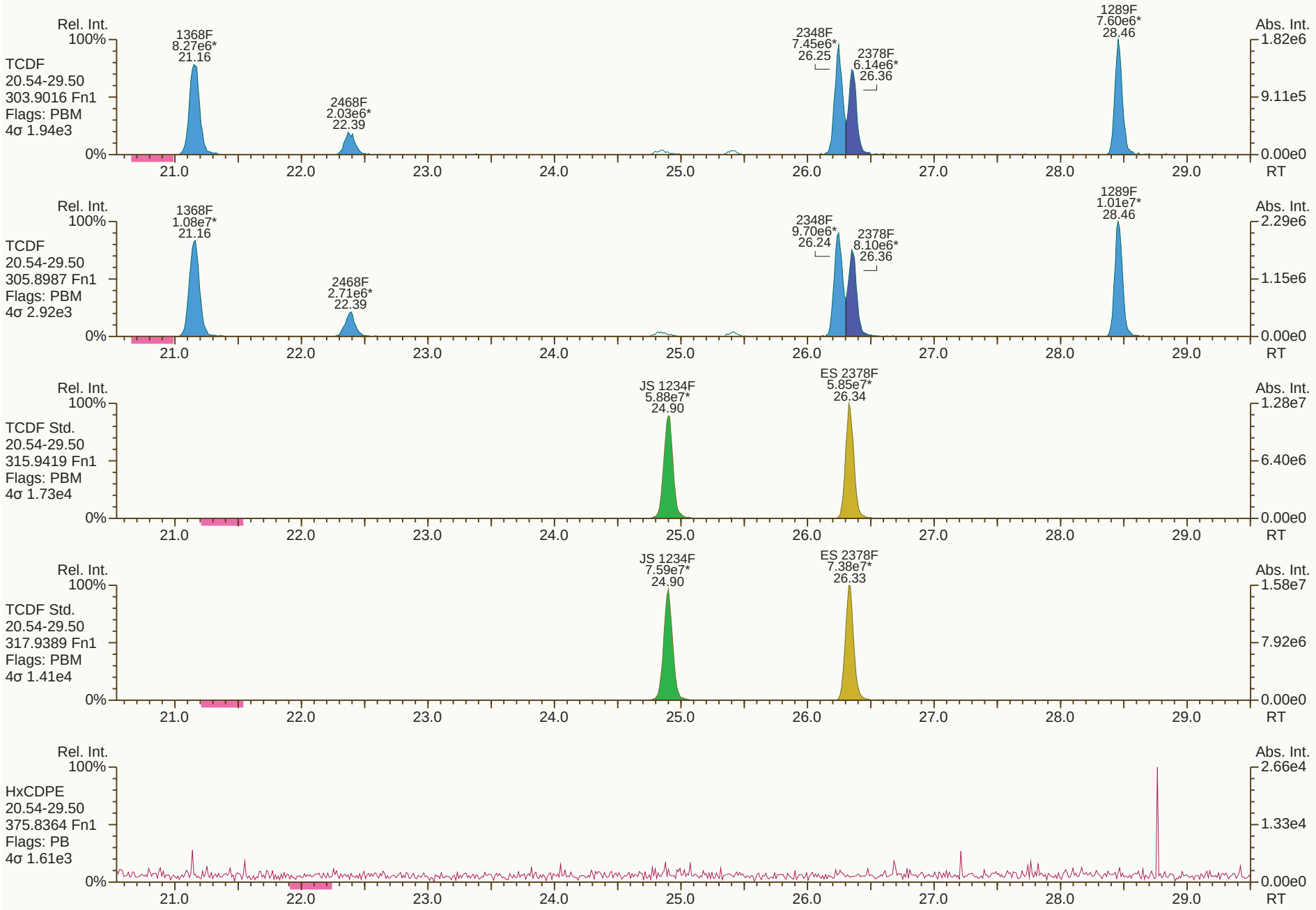
Results: P:\B4500_B4599\B4519\B4519_17655 DF\Resources\OPR1_17655_DF-RJ.utp_res, saved 11-Aug-2020 08:49 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 6474, 9033 scc: 719-007 *PKD: 11-Aug-2020 08:49 Printed: 11-Aug-2020 10:14 Page 5 of 12*


OCDD
1.38e7*
42.38
Rel. Int.
Abs. Int.
OCDD
41.02-45.00
457.7377 Fn5
Flags: PBM
4σ 1.71e3
OCDD
1.55e7*
42.38
OCDD
41.02-45.00
459.7348 Fn5
Flags: PBM
4σ 3.11e3
ES OCDD
2.48e7*
42.37
OCDD Std.
41.02-45.00
469.7780 Fn5
Flags: PBM
4σ 1.81e3
ES OCDD
2.68e7*
42.36
OCDD Std.
41.02-45.00
471.7750 Fn5
Flags: PBM
4σ 2.32e3
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
100%
0%
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

SGS ID: OPR1_17655_DF-RJ | Sample ID: 0_17655_OPR001 | Acq: 10-Aug-2020 23:40:28

Instr: [ILM] AutoSpec-Ultima MM3 | VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 21 | User: PSW Datafile: 200810R13

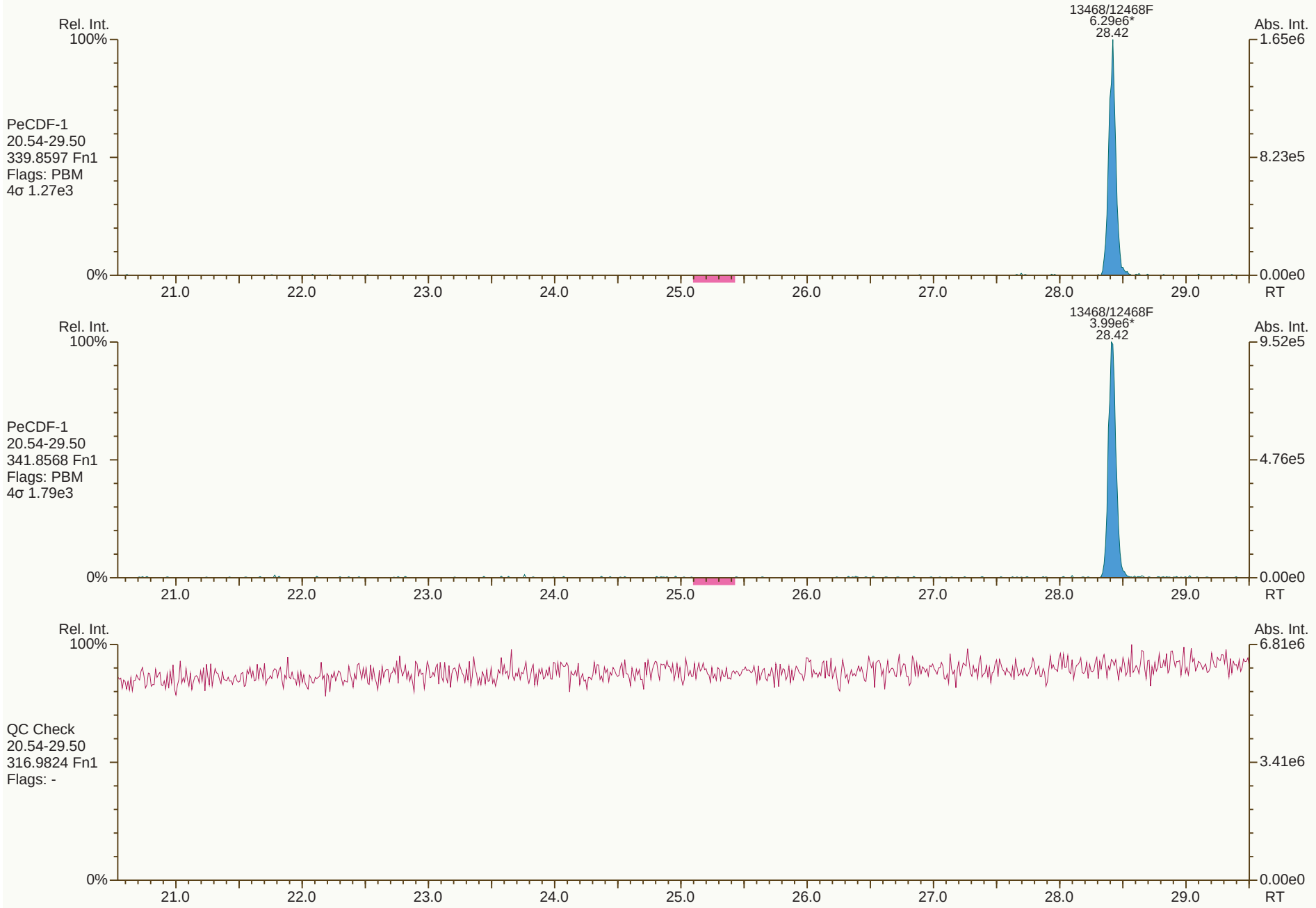


Results: P:\B4500_B4599\B4519\B4519_17655 DF\Resources\OPR1_17655_DF-RJ.utp_res, saved 11-Aug-2020 08:49 (PSW) | *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 5377, 0058, 0681 scc: 719-007 | *PKD: 11-Aug-2020 08:49 Printed: 11-Aug-2020 10:14 Page 7 of 12*

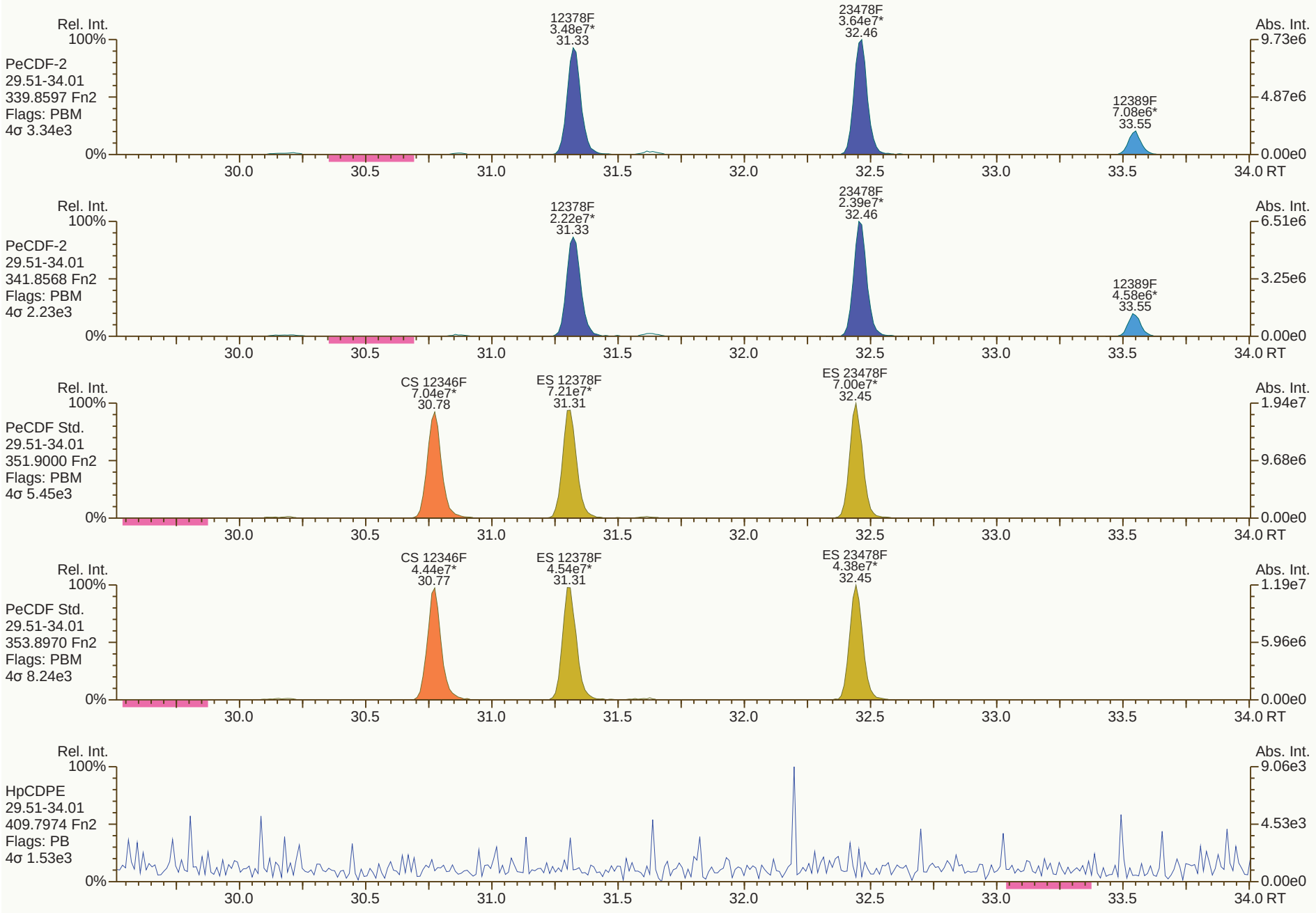
SGS ID: OPR1_17655_DF-RJ | Sample ID: 0_17655_OPR001 | Acq: 10-Aug-2020 23:40:28

Instr: [ILM] AutoSpec-Ultima MM3 | VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 21 | User: PSW Datafile: 200810R13



Results: P:\B4500_B4599\B4519\B4519_17655 DF\Resources\OPR1_17655_DF-RJ.utp_res, saved 11-Aug-2020 08:49 (PSW) | *Peak annotation: Areas, Centroids*

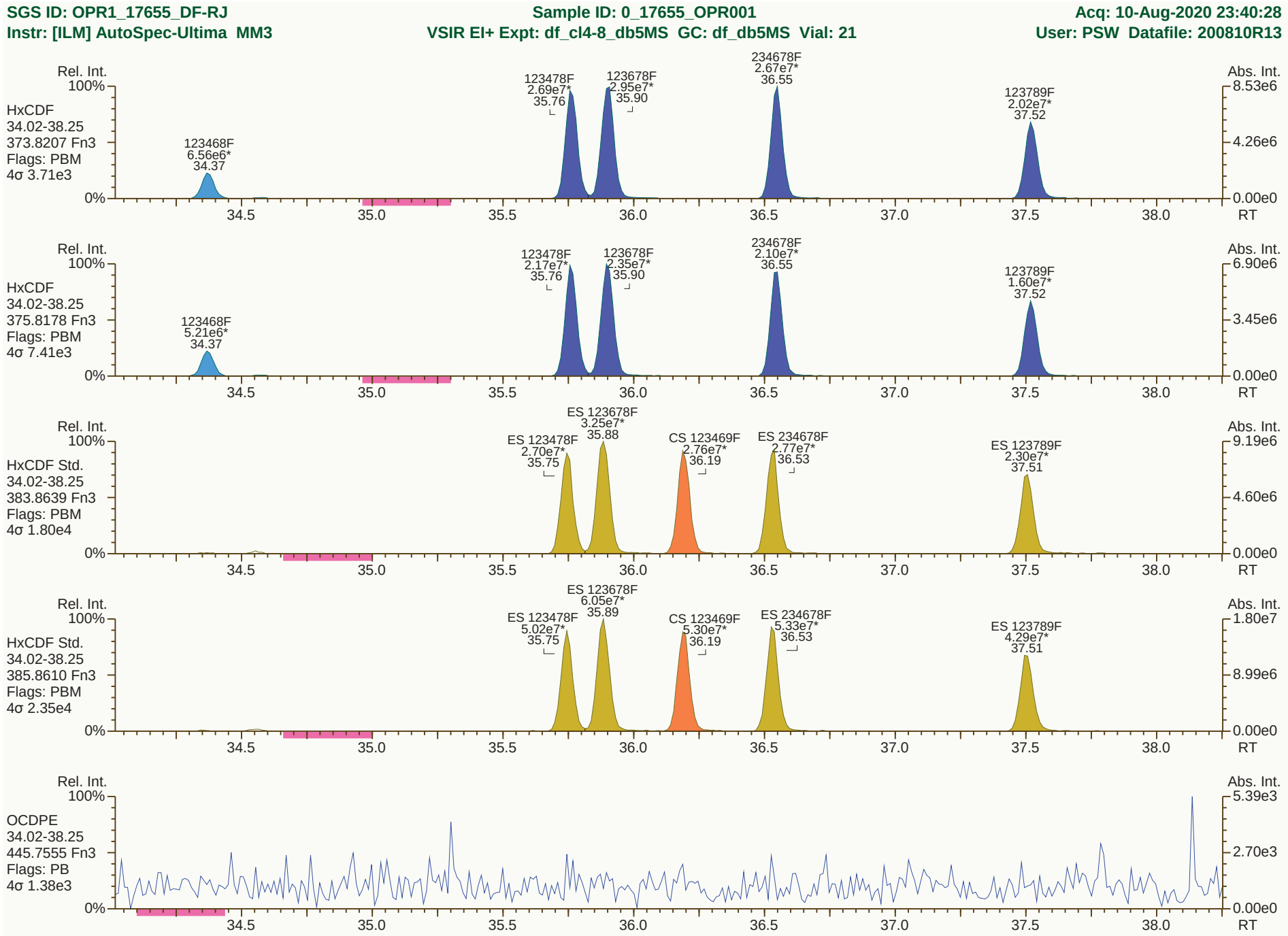
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 4315 scc: 719-007 | *PKD: 11-Aug-2020 08:49 Printed: 11-Aug-2020 10:14 Page 8 of 12*


Rel. Int.
100%
PeCDF-2
29.51-34.01
339.8597 Fn2
Flags: PBM
4σ 3.34e3
0%
12378F
3.48e7*
31.33
23478F
3.64e7*
32.46
12389F
7.08e6*
33.55
Abs. Int.
9.73e6
4.87e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF-2
29.51-34.01
341.8568 Fn2
Flags: PBM
4σ 2.23e3
0%
12378F
2.22e7*
31.33
23478F
2.39e7*
32.46
12389F
4.58e6*
33.55
Abs. Int.
6.51e6
3.25e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
351.9000 Fn2
Flags: PBM
4σ 5.45e3
0%
CS 12346F
7.04e7*
30.78
ES 12378F
7.21e7*
31.31
ES 23478F
7.00e7*
32.45
Abs. Int.
1.94e7
9.68e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
353.8970 Fn2
Flags: PBM
4σ 8.24e3
0%
CS 12346F
4.44e7*
30.77
ES 12378F
4.54e7*
31.31
ES 23478F
4.38e7*
32.45
Abs. Int.
1.19e7
5.96e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
HpCDPE
29.51-34.01
409.7974 Fn2
Flags: PB
4σ 1.53e3
0%
Abs. Int.
9.06e3
4.53e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT

SGS ID: OPR1_17655_DF-RJ
Instr: [ILM] AutoSpec-Ultima MM3

Sample ID: 0_17655_OPR001
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 21

Acq: 10-Aug-2020 23:40:28
User: PSW Datafile: 200810R13



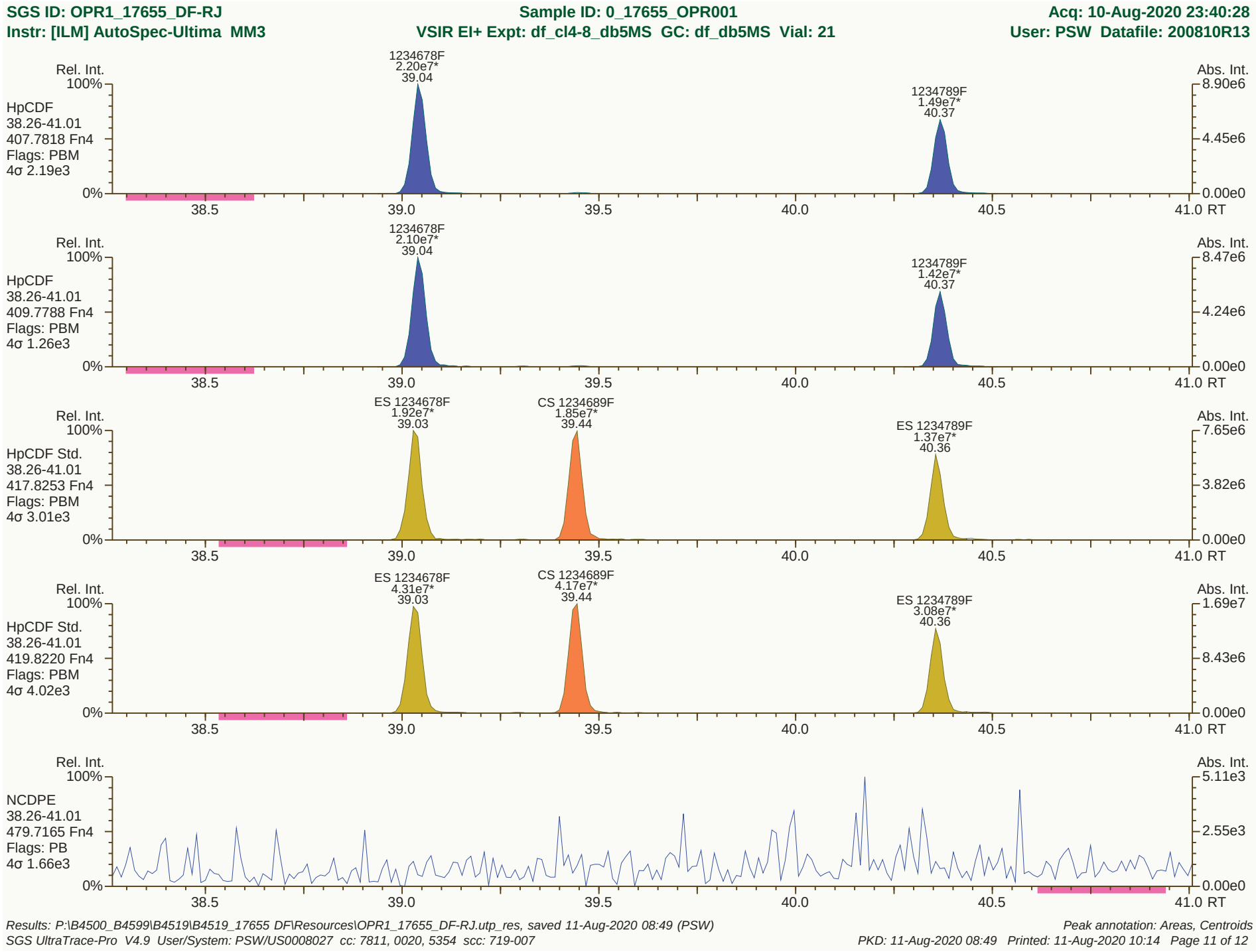
Results: P:\B4500_B4599\B4519\B4519_17655 DF\Resources\OPR1_17655_DF-RJ.utp_res, saved 11-Aug-2020 08:49 (PSW)
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 6362, 8263, 4778 scc: 719-007

Peak annotation: Areas, Centroids
PKD: 11-Aug-2020 08:49 Printed: 11-Aug-2020 10:14 Page 10 of 12

SGS ID: OPR1_17655_DF-RJ
Instr: [ILM] AutoSpec-Ultima MM3

Sample ID: 0_17655_OPR001
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 21

Acq: 10-Aug-2020 23:40:28
User: PSW Datafile: 200810R13

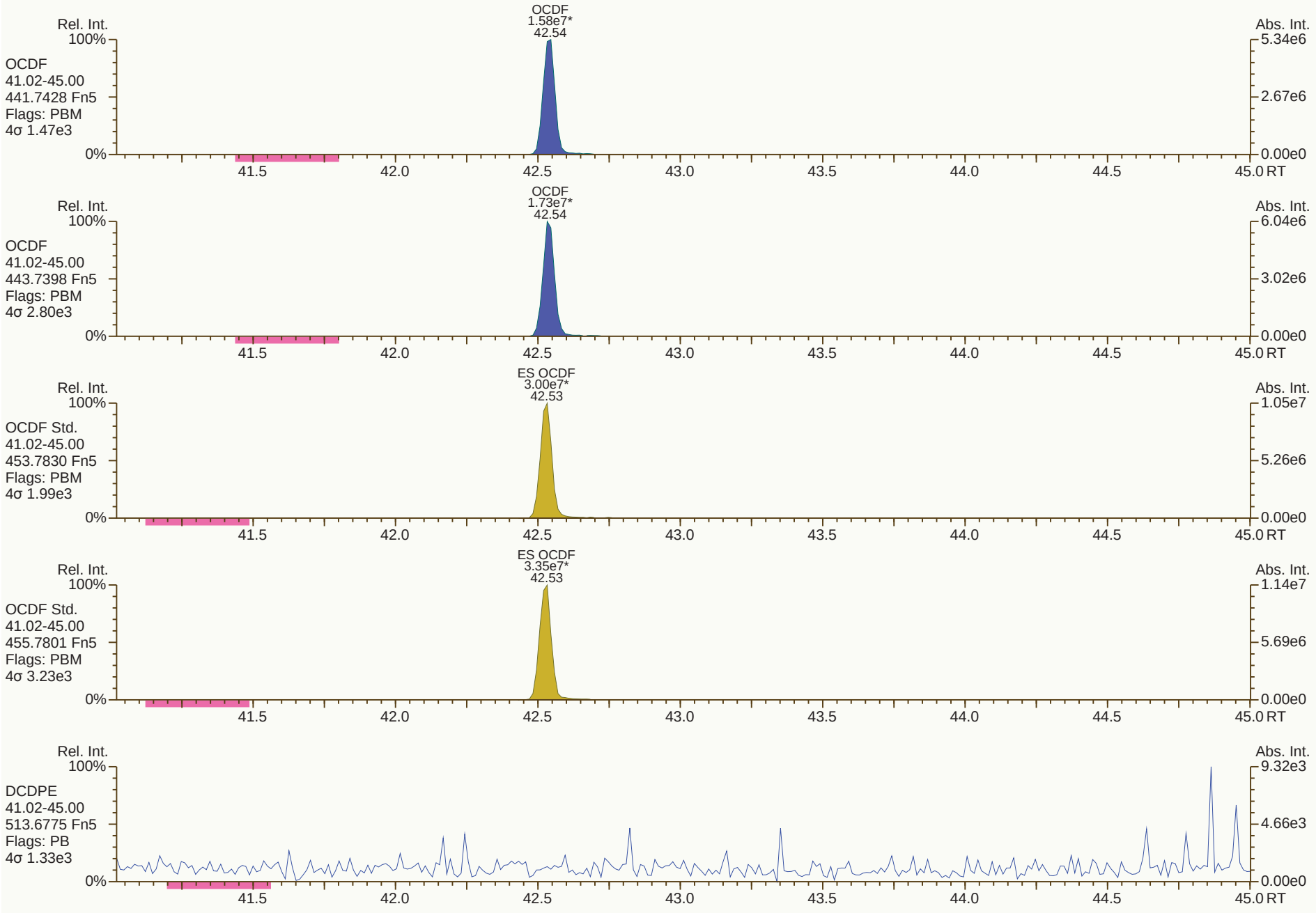


Results: P:\B4500_B4599\B4519\B4519_17655 DF\Resources\OPR1_17655_DF-RJ.utp_res, saved 11-Aug-2020 08:49 (PSW)
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 7811, 0020, 5354 scc: 719-007

Peak annotation: Areas, Centroids
PKD: 11-Aug-2020 08:49 Printed: 11-Aug-2020 10:14 Page 11 of 12

SGS ID: OPR1_17655_DF-RJ **Sample ID: 0_17655_OPR001** **Acq: 10-Aug-2020 23:40:28**

Instr: [ILM] AutoSpec-Ultima MM3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 21** **User: PSW Datafile: 200810R13**



Results: P:\B4500_B4599\B4519\B4519_17655 DF\Resources\OPR1_17655_DF-RJ.utp_res, saved 11-Aug-2020 08:49 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 5677, 0474, 4680 scc: 719-007 *PKD: 11-Aug-2020 08:49 Printed: 11-Aug-2020 10:14 Page 12 of 12*



FINAL LAB REPORT

KMCC Navassa

B4526

13-Aug-2020

Prepared by

SGS NORTH AMERICA

Prepared for

EarthCon

Mary Brookshire

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Phone: 404-317-7748
Email: mbrookshire@earthcon.com

This report is approved by

Tamara Burkamper
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CN=Tamara Burkamper,
E=tamara.morgan@sgs.com
I have reviewed this document
2020-08-13 14:21:43

Tamara Burkamper

Senior Project Manager

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Results reported relate only to the items tested.

PROJECT INFORMATION SUMMARY *(When applicable, see QC Annotations for details)*

Client Project	KMCC Navassa
SGS Project #	B4526
Analytical Protocol(s)	8290A
No. Samples Submitted	13
Additional QC Sample(s)	MS/MSD
No. Laboratory Method Blanks	1
No. OPRs / Batch CS3	1
Date Received	07-Aug-20
Condition Received	Good
Temperature upon Receipt (ºC)	0.8
Extraction within Holding Time	Yes
Analysis within Holding Time	Yes

QC ANNOTATIONS:

1. Please see Appendices attached for data qualifier/attribute and lab identifier descriptions which may be contained in the project.

CS-41 MS: the reported percent recovery of OCDD is above SOP criteria; the compound meets precision criteria.

APPENDIX A: GENERAL DATA QUALIFIERS / DATA ATTRIBUTES

B	The analyte was found in the method blank, at a concentration that was at least 10% of the concentration in the sample.
C	Two or more congeners co-elute. In EDDs, C denotes the lowest IUPAC congener in a co-elution group and additional co-eluters for the group are shown with the number of the lowest IUPAC co-eluter.
E	The reported concentration exceeds the calibration range (upper point of the calibration curve) and is an estimated value.
EMPC	Represents an Estimated Maximum Possible Concentration. EMPCs arise in cases where the signal/noise ratio is not sufficient for peak identification (the determined ion-abundance ratio is outside the allowed theoretical range), or where there is a co-eluting interference.
H/h	If the standard recovery is below the method or SOP specified value “H” is assigned. If the obtained value is less than half the specified value “h” is assigned.
J	Indicates that an analyte has a concentration below the reporting limit (lowest point of the calibration curve) and is an estimated value.
ND	Indicates a non-detect.
NR or R	Indicates a value that is not reportable.
PR	Due to interference, the associated congener is poorly resolved.
QI	Indicates the presence of a quantitative interference.
SI	Denotes “Single Ion Mode” and is utilized for PCBs where the secondary ion trace has a significantly elevated noise level due to background PFK. Responses for such peaks are calculated using an EMPC approach based solely on the primary ion area(s) and may be considered estimates.
U	The analyte was not detected. The estimated detection limit (EDL) may be reported for this analyte.
V	The labeled standard recovery was found to be outside of the method control limits.

APPENDIX B: DRBC/TMDL SPECIFIC DATA QUALIFIERS / DATA ATTRIBUTES

J	The reported result is an estimate. The value is less than the minimum calibration level but greater than the estimated detection limit (EDL).
U	The analyte was not detected in the sample at the estimated detection limit (EDL).
E	The reported concentration is an estimate. The value exceeds the upper calibration range (upper point of the calibration curve).
D	Dilution Data. Result was obtained from the analysis of a dilution.
B	Analyte found in the sample and associated method blank.
C	Co-eluting congener
Cxx	Co-elutes with the indicated congener, data is reported under the lowest IUPAC congener. 'Xx' denotes the IUPAC number with the lowest numerical designated congener.
NR	Analyte is not reportable because of problems in sample preparation or analysis.
V	Labeled standard recovery is not within method control limits.
X	Results from re-injection/repeat/second-column analysis.
EMPC	Estimated maximum possible concentration. Indicates that a peak is identified but did not meet the method specified ion-abundance ratio.

APPENDIX C: LAB IDENTIFIERS

AR	Indicates use of the archived portion of the sample extract.
CU	Indicates a sample that required additional clean-up prior to MS injection/processing.
D	Indicates a dilution of the sample extract. The number that follows the "D" indicates the dilution factor.
DE	Indicates a dilution performed with the addition of ES (extraction standard) solution.
DUP	Designation for a duplicate sample.
MS	Designation for a matrix spike.
MSD	Designation for a matrix spike duplicate.
RJ	Indicates a reinjection of the sample extract.
S	Indicates a sample split. The number that follows the "S" indicates the split factor.

SGS CERTIFICATIONS

Alaska	17-012
Arkansas	88-0682
California (ELAP)	ELAP Cert #2914
CLIA	34D1013708
Connecticut	PH-0258
USDA Soil Permit	P330-20-00103
American Association for Laboratory Accreditation (A2LA)	2726.01 (ISO 17025:2005, 2009 TNI, DoD ELAP QSM 5.1)
Florida DOH	E87634
Louisiana DEQ	4115
Louisiana DOH	LA031
Maine	2018018
Massachusetts	M-NC919
Minnesota (Primary NELAP For Method 23)	037-999-459
Montana	0106
New Hampshire (Primary NELAP)	2085
New Hampshire (Secondary NELAP)	2083
New Jersey	NC100
New York	11685
North Carolina DEQ	481
North Dakota	R-197
Oregon	NC200002
Pennsylvania	68-03675
South Carolina	99029002
Texas	T104704260
US Coast Guard	16714/159.317/SGS
Vermont	VT-87634
Virginia	460214
Washington	C913

Rev. 13-Apr-2020

Sample ID: CS-29

Method 8290A

Client Data		Sample Data		Laboratory Data			
Name:	EarthCon	Matrix:	Soil	Lab Project ID:	B4526	Date Received:	07-Aug-2020
Project ID:	KMCC Navassa	Weight/Volume:	9.61 g	Lab Sample ID	B4526_17662_DF_001	Date Extracted:	10-Aug-2020
Date Collected:	06-Aug-2020	% Solid:	91.8 %	QC Batch No:	17662	Date Analyzed:	11-Aug-2020
		Split:	-	Dilution:	-	Time Analyzed:	18:21:06

Analyte	Conc. (pg/g)	DL (pg/g)	EMPC (pg/g)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	0.191			ES 2378-TCDD	88.3	
12378-PeCDD	ND	0.167			ES 12378-PeCDD	80.4	
123478-HxCDD	ND	0.401			ES 123478-HxCDD	81.1	
123678-HxCDD	ND	0.419			ES 123678-HxCDD	78.1	
123789-HxCDD	ND	0.437			ES 123789-HxCDD	73.4	
1234678-HpCDD	5.78				ES 1234678-HpCDD	70.1	
OCDD	292				ES OCDD	54.1	
2378-TCDF	ND	0.105			ES 2378-TCDF	88.6	
12378-PeCDF	ND	0.121			ES 12378-PeCDF	87	
23478-PeCDF	ND	0.122			ES 23478-PeCDF	85.2	
123478-HxCDF	ND	0.14			ES 123478-HxCDF	87.4	
123678-HxCDF	ND	0.145			ES 123678-HxCDF	85.1	
234678-HxCDF	ND	0.162			ES 234678-HxCDF	83.1	
123789-HxCDF	ND	0.171			ES 123789-HxCDF	86.9	
1234678-HpCDF	EMPC		0.421	J	ES 1234678-HpCDF	80.3	
1234789-HpCDF	ND	0.154			ES 1234789-HpCDF	71.3	
OCDF	ND	0.661			ES OCDF	56.2	
Totals					**Standard**	**CS Recoveries**	
					CS 37Cl-2378-TCDD	84.8	
Total TCDD	ND	0.191	ND		CS 12347-PeCDD	90.4	
Total PeCDD	ND	0.167	ND		CS 12346-PeCDF	89.1	
Total HxCDD	1.81		1.81		CS 123469-HxCDF	87.7	
Total HpCDD	16		16		CS 1234689-HpCDF	81.3	
Total TCDF	ND		0.295				
Total PeCDF	ND	0.121	ND				
Total HxCDF	0.27		0.27				
Total HpCDF	ND		0.421				
Total PCDD/Fs	**310**		**311**				
ITEF TEQs							
TEQ: ND=0	0.35		0.354				
TEQ: ND=DL/2	0.621	0.273	0.625				
TEQ: ND=DL	0.892	0.546	0.896				

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Sample ID: CS-29 — TEQ Summary — Method 8290A

Client Project Name:	EarthCon	Matrix:	Soil	Lab Sample ID:	B4526_17662_DF_001
Cliend Project ID:	KMCC Navassa	Weight/Volume:	9.61 g	QC Batch No.:	17662
Date Collected:	06-Aug-2020	Split:	-	Date Extracted:	10-Aug-2020
Date Received:	07-Aug-2020	Dilution:	-	Date Analyzed:	11-Aug-2020 18:21
Lab Project No:	B4526	Units	pg/g		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	(0.191)		0.191	(0.191)	(0.191)	(0.191)
12378-PeCDD	(0.167)		0.167	(0.0837)	(0.167)	(0.167)
123478-HxCDD	(0.401)		0.401	(0.0401)	(0.0401)	(0.0401)
123678-HxCDD	(0.419)		0.419	(0.0419)	(0.0419)	(0.0419)
123789-HxCDD	(0.437)		0.437	(0.0437)	(0.0437)	(0.0437)
1234678-HpCDD	5.78		0.207	0.0578	0.0578	0.0578
OCDD	292		0.899	0.292	0.0292	0.0875
2378-TCDF	(0.105)		0.105	(0.0105)	(0.0105)	(0.0105)
12378-PeCDF	(0.121)		0.121	(0.00603)	(0.00603)	(0.00362)
23478-PeCDF	(0.122)		0.122	(0.0612)	(0.0612)	(0.0367)
123478-HxCDF	(0.14)		0.14	(0.014)	(0.014)	(0.014)
123678-HxCDF	(0.145)		0.145	(0.0145)	(0.0145)	(0.0145)
234678-HxCDF	(0.162)		0.162	(0.0162)	(0.0162)	(0.0162)
123789-HxCDF	(0.171)		0.171	(0.0171)	(0.0171)	(0.0171)
1234678-HpCDF	[0.421]	J	0.1	[0.00421]	[0.00421]	[0.00421]
1234789-HpCDF	(0.154)		0.154	(0.00154)	(0.00154)	(0.00154)
OCDF	(0.661)		0.661	(0.000661)	(0.0000661)	(0.000198)

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TEQ Summaries			
EMPC = 0, ND = 0	0.35	0.0869	0.145
EMPC = 0, ND = DL / 2	0.621	0.399	0.444
EMPC = 0, ND = DL	0.892	0.712	0.744
EMPC = 0, < J-level = 0	0.35	0.0869	0.145
EMPC = EMPC, ND = 0	0.354	0.0911	0.15
EMPC = EMPC, ND = DL / 2	0.625	0.404	0.449
EMPC = EMPC, ND = DL	0.896	0.716	0.748
EMPC = EMPC, < J-level = 0	0.35	0.0869	0.145

Checkcode: 961-528-HYR

Sample ID: CS-30

Method 8290A

Client Data		Sample Data		Laboratory Data			
Name:	EarthCon	Matrix:	Soil	Lab Project ID:	B4526	Date Received:	07-Aug-2020
Project ID:	KMCC Navassa	Weight/Volume:	9.57 g	Lab Sample ID	B4526_17662_DF_002	Date Extracted:	10-Aug-2020
Date Collected:	06-Aug-2020	% Solid:	90.0 %	QC Batch No:	17662	Date Analyzed:	11-Aug-2020
		Split:	-	Dilution:	-	Time Analyzed:	19:07:39

Analyte	Conc. (pg/g)	DL (pg/g)	EMPC (pg/g)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	0.196			ES 2378-TCDD	85.9	
12378-PeCDD	ND	0.4			ES 12378-PeCDD	76.6	
123478-HxCDD	ND	0.55			ES 123478-HxCDD	75	
123678-HxCDD	0.854			J	ES 123678-HxCDD	74.2	
123789-HxCDD	EMPC		0.762	J	ES 123789-HxCDD	66.7	
1234678-HpCDD	21.1				ES 1234678-HpCDD	62.3	
OCDD	318				ES OCDD	46.5	
2378-TCDF	ND	0.144			ES 2378-TCDF	86	
12378-PeCDF	ND	0.218			ES 12378-PeCDF	81.9	
23478-PeCDF	EMPC		0.208	J	ES 23478-PeCDF	79.9	
123478-HxCDF	EMPC		0.324	J	ES 123478-HxCDF	80.5	
123678-HxCDF	0.307			J	ES 123678-HxCDF	81.1	
234678-HxCDF	EMPC		0.416	J	ES 234678-HxCDF	77.1	
123789-HxCDF	ND	0.172			ES 123789-HxCDF	73.2	
1234678-HpCDF	3.33				ES 1234678-HpCDF	69.7	
1234789-HpCDF	ND	0.247			ES 1234789-HpCDF	60.7	
OCDF	4.78			J	ES OCDF	49.5	
Totals					**Standard**	**CS Recoveries**	
					CS 37Cl-2378-TCDD	85.9	
Total TCDD	ND	0.196	ND		CS 12347-PeCDD	89.2	
Total PeCDD	0.703		0.703		CS 12346-PeCDF	85.2	
Total HxCDD	10.1		10.9		CS 123469-HxCDF	86.6	
Total HpCDD	63.2		63.2		CS 1234689-HpCDF	73.5	
Total TCDF	0.37		0.687				
Total PeCDF	ND		1.84				
Total HxCDF	2.06		4.7				
Total HpCDF	7.61		7.61				
Total PCDD/Fs	**406**		**412**				
ITEF TEQs							
TEQ: ND=0	0.682		0.936				
TEQ: ND=DL/2	0.93	0.375	1.18				
TEQ: ND=DL	1.18	0.75	1.43				

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Sample ID: CS-30 — TEQ Summary — Method 8290A

Client Project Name:	EarthCon	Matrix:	Soil	Lab Sample ID:	B4526_17662_DF_002
Cliend Project ID:	KMCC Navassa	Weight/Volume:	9.57 g	QC Batch No.:	17662
Date Collected:	06-Aug-2020	Split:	-	Date Extracted:	10-Aug-2020
Date Received:	07-Aug-2020	Dilution:	-	Date Analyzed:	11-Aug-2020 19:07
Lab Project No:	B4526	Units	pg/g		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	(0.196)		0.196	(0.196)	(0.196)	(0.196)
12378-PeCDD	(0.4)		0.4	(0.2)	(0.4)	(0.4)
123478-HxCDD	(0.55)		0.55	(0.055)	(0.055)	(0.055)
123678-HxCDD	0.854	J	0.515	0.0854	0.0854	0.0854
123789-HxCDD	[0.762]	J	0.556	[0.0762]	[0.0762]	[0.0762]
1234678-HpCDD	21.1		0.215	0.211	0.211	0.211
OCDD	318		1.01	0.318	0.0318	0.0953
2378-TCDF	(0.144)		0.144	(0.0144)	(0.0144)	(0.0144)
12378-PeCDF	(0.218)		0.218	(0.0109)	(0.0109)	(0.00655)
23478-PeCDF	[0.208]	J	0.208	[0.104]	[0.104]	[0.0623]
123478-HxCDF	[0.324]	J	0.12	[0.0324]	[0.0324]	[0.0324]
123678-HxCDF	0.307	J	0.126	0.0307	0.0307	0.0307
234678-HxCDF	[0.416]	J	0.137	[0.0416]	[0.0416]	[0.0416]
123789-HxCDF	(0.172)		0.172	(0.0172)	(0.0172)	(0.0172)
1234678-HpCDF	3.33		0.134	0.0333	0.0333	0.0333
1234789-HpCDF	(0.247)		0.247	(0.00247)	(0.00247)	(0.00247)
OCDF	4.78	J	0.768	0.00478	0.000478	0.00143

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TEQ Summaries			
EMPC = 0, ND = 0	0.682	0.392	0.457
EMPC = 0, ND = DL / 2	0.93	0.74	0.802
EMPC = 0, ND = DL	1.18	1.09	1.15
EMPC = 0, < J-level = 0	0.562	0.276	0.339
EMPC = EMPC, ND = 0	0.936	0.646	0.669
EMPC = EMPC, ND = DL / 2	1.18	0.994	1.01
EMPC = EMPC, ND = DL	1.43	1.34	1.36
EMPC = EMPC, < J-level = 0	0.562	0.276	0.339

Checkcode: 142-051-RXJ

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Sample ID: CS-31

Method 8290A

Client Data		Sample Data		Laboratory Data			
Name:	EarthCon	Matrix:	Soil	Lab Project ID:	B4526	Date Received:	07-Aug-2020
Project ID:	KMCC Navassa	Weight/Volume:	9.31 g	Lab Sample ID	B4526_17662_DF_003	Date Extracted:	10-Aug-2020
Date Collected:	06-Aug-2020	% Solid:	90.6 %	QC Batch No:	17662	Date Analyzed:	11-Aug-2020
		Split:	-	Dilution:	-	Time Analyzed:	19:54:13

Analyte	Conc. (pg/g)	DL (pg/g)	EMPC (pg/g)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	0.327			ES 2378-TCDD	77.7	
12378-PeCDD	ND	0.217			ES 12378-PeCDD	72	
123478-HxCDD	EMPC		0.654	J	ES 123478-HxCDD	72.8	
123678-HxCDD	0.94			J	ES 123678-HxCDD	71.5	
123789-HxCDD	1.19			J	ES 123789-HxCDD	67.7	
1234678-HpCDD	32.8				ES 1234678-HpCDD	59.8	
OCDD	521				ES OCDD	46.5	
2378-TCDF	ND	0.241			ES 2378-TCDF	77.2	
12378-PeCDF	ND	0.107			ES 12378-PeCDF	74.2	
23478-PeCDF	EMPC		0.368	J	ES 23478-PeCDF	74.6	
123478-HxCDF	0.48			J	ES 123478-HxCDF	77.9	
123678-HxCDF	EMPC		0.362	J	ES 123678-HxCDF	76	
234678-HxCDF	EMPC		0.371	J	ES 234678-HxCDF	74	
123789-HxCDF	ND	0.193			ES 123789-HxCDF	70.8	
1234678-HpCDF	4.33				ES 1234678-HpCDF	66	
1234789-HpCDF	ND	0.187			ES 1234789-HpCDF	59.9	
OCDF	6.24				ES OCDF	48.3	
Totals					**Standard**	**CS Recoveries**	
					CS 37Cl-2378-TCDD	83	
Total TCDD	ND		0.651		CS 12347-PeCDD	90.6	
Total PeCDD	1.66		2.13		CS 12346-PeCDF	82.6	
Total HxCDD	16.8		17.4		CS 123469-HxCDF	86.1	
Total HpCDD	98.1		98.1		CS 1234689-HpCDF	75.1	
Total TCDF	3.03		4.44				
Total PeCDF	4.49		5.1				
Total HxCDF	3.7		6.06				
Total HpCDF	9.25		9.25				
Total PCDD/Fs	**664**		**671**				
ITEF TEQs							
TEQ: ND=0	1.16		1.48				
TEQ: ND=DL/2	1.4	0.326	1.73				
TEQ: ND=DL	1.65	0.651	1.97				

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Sample ID: CS-31 — TEQ Summary — Method 8290A

Client Project Name:	EarthCon	Matrix:	Soil	Lab Sample ID:	B4526_17662_DF_003
Cliend Project ID:	KMCC Navassa	Weight/Volume:	9.31 g	QC Batch No.:	17662
Date Collected:	06-Aug-2020	Split:	-	Date Extracted:	10-Aug-2020
Date Received:	07-Aug-2020	Dilution:	-	Date Analyzed:	11-Aug-2020 19:54
Lab Project No:	B4526	Units	pg/g		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	(0.327)		0.327	(0.327)	(0.327)	(0.327)
12378-PeCDD	(0.217)		0.217	(0.108)	(0.217)	(0.217)
123478-HxCDD	[0.654]	J	0.215	[0.0654]	[0.0654]	[0.0654]
123678-HxCDD	0.94	J	0.209	0.094	0.094	0.094
123789-HxCDD	1.19	J	0.229	0.119	0.119	0.119
1234678-HpCDD	32.8		0.303	0.328	0.328	0.328
OCDD	521		0.902	0.521	0.0521	0.156
2378-TCDF	(0.241)		0.241	(0.0241)	(0.0241)	(0.0241)
12378-PeCDF	(0.107)		0.107	(0.00537)	(0.00537)	(0.00322)
23478-PeCDF	[0.368]	J	0.104	[0.184]	[0.184]	[0.111]
123478-HxCDF	0.48	J	0.135	0.048	0.048	0.048
123678-HxCDF	[0.362]	J	0.143	[0.0362]	[0.0362]	[0.0362]
234678-HxCDF	[0.371]	J	0.147	[0.0371]	[0.0371]	[0.0371]
123789-HxCDF	(0.193)		0.193	(0.0193)	(0.0193)	(0.0193)
1234678-HpCDF	4.33		0.124	0.0433	0.0433	0.0433
1234789-HpCDF	(0.187)		0.187	(0.00187)	(0.00187)	(0.00187)
OCDF	6.24		0.578	0.00624	0.000624	0.00187

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TEQ Summaries			
EMPC = 0, ND = 0	1.16	0.685	0.79
EMPC = 0, ND = DL / 2	1.4	0.982	1.09
EMPC = 0, ND = DL	1.65	1.28	1.38
EMPC = 0, < J-level = 0	0.899	0.424	0.53
EMPC = EMPC, ND = 0	1.48	1.01	1.04
EMPC = EMPC, ND = DL / 2	1.73	1.3	1.34
EMPC = EMPC, ND = DL	1.97	1.6	1.63
EMPC = EMPC, < J-level = 0	0.899	0.424	0.53

Checkcode: 967-394-KCM

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Sample ID: DUP-01

Method 8290A

Client Data		Sample Data		Laboratory Data			
Name:	EarthCon	Matrix:	Soil	Lab Project ID:	B4526	Date Received:	07-Aug-2020
Project ID:	KMCC Navassa	Weight/Volume:	9.59 g	Lab Sample ID	B4526_17662_DF_004	Date Extracted:	10-Aug-2020
Date Collected:	06-Aug-2020	% Solid:	92.0 %	QC Batch No:	17662	Date Analyzed:	11-Aug-2020
		Split:	-	Dilution:	-	Time Analyzed:	20:40:40

Analyte	Conc. (pg/g)	DL (pg/g)	EMPC (pg/g)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	0.181			ES 2378-TCDD	78.1	
12378-PeCDD	ND	0.211			ES 12378-PeCDD	71.7	
123478-HxCDD	ND	0.177			ES 123478-HxCDD	74.7	
123678-HxCDD	ND	0.167			ES 123678-HxCDD	72.9	
123789-HxCDD	EMPC		0.31	J	ES 123789-HxCDD	69.3	
1234678-HpCDD	4.51				ES 1234678-HpCDD	61.5	
OCDD	193				ES OCDD	45.1	
2378-TCDF	ND	0.111			ES 2378-TCDF	80.6	
12378-PeCDF	ND	0.112			ES 12378-PeCDF	74.4	
23478-PeCDF	ND	0.115			ES 23478-PeCDF	76.3	
123478-HxCDF	ND	0.104			ES 123478-HxCDF	78.2	
123678-HxCDF	ND	0.102			ES 123678-HxCDF	77.7	
234678-HxCDF	ND	0.111			ES 234678-HxCDF	76.3	
123789-HxCDF	ND	0.145			ES 123789-HxCDF	71.5	
1234678-HpCDF	0.847			J	ES 1234678-HpCDF	68.4	
1234789-HpCDF	ND	0.12			ES 1234789-HpCDF	60.6	
OCDF	ND	0.589			ES OCDF	47.4	
Totals					**Standard**	**CS Recoveries**	
					CS 37Cl-2378-TCDD	89.4	
Total TCDD	ND	0.181	ND		CS 12347-PeCDD	94.7	
Total PeCDD	ND	0.211	ND		CS 12346-PeCDF	86	
Total HxCDD	0.389		2.18		CS 123469-HxCDF	89.5	
Total HpCDD	13		13		CS 1234689-HpCDF	74.5	
Total TCDF	ND		0.177				
Total PeCDF	ND	0.113	ND				
Total HxCDF	0.26		0.26				
Total HpCDF	1.48		1.48				
Total PCDD/Fs	**208**		**210**				
ITEF TEQs							
TEQ: ND=0	0.247		0.278				
TEQ: ND=DL/2	0.468	0.233	0.499				
TEQ: ND=DL	0.689	0.466	0.72				

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Sample ID: DUP-01 — TEQ Summary — Method 8290A

Client Project Name:	EarthCon	Matrix:	Soil	Lab Sample ID:	B4526_17662_DF_004
Cliend Project ID:	KMCC Navassa	Weight/Volume:	9.59 g	QC Batch No.:	17662
Date Collected:	06-Aug-2020	Split:	-	Date Extracted:	10-Aug-2020
Date Received:	07-Aug-2020	Dilution:	-	Date Analyzed:	11-Aug-2020 20:40
Lab Project No:	B4526	Units	pg/g		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	(0.181)		0.181	(0.181)	(0.181)	(0.181)
12378-PeCDD	(0.211)		0.211	(0.105)	(0.211)	(0.211)
123478-HxCDD	(0.177)		0.177	(0.0177)	(0.0177)	(0.0177)
123678-HxCDD	(0.167)		0.167	(0.0167)	(0.0167)	(0.0167)
123789-HxCDD	[0.31]	J	0.193	[0.031]	[0.031]	[0.031]
1234678-HpCDD	4.51		0.233	0.0451	0.0451	0.0451
OCDD	193		1.33	0.193	0.0193	0.058
2378-TCDF	(0.111)		0.111	(0.0111)	(0.0111)	(0.0111)
12378-PeCDF	(0.112)		0.112	(0.00561)	(0.00561)	(0.00336)
23478-PeCDF	(0.115)		0.115	(0.0574)	(0.0574)	(0.0344)
123478-HxCDF	(0.104)		0.104	(0.0104)	(0.0104)	(0.0104)
123678-HxCDF	(0.102)		0.102	(0.0102)	(0.0102)	(0.0102)
234678-HxCDF	(0.111)		0.111	(0.0111)	(0.0111)	(0.0111)
123789-HxCDF	(0.145)		0.145	(0.0145)	(0.0145)	(0.0145)
1234678-HpCDF	0.847	J	0.0833	0.00847	0.00847	0.00847
1234789-HpCDF	(0.12)		0.12	(0.0012)	(0.0012)	(0.0012)
OCDF	(0.589)		0.589	(0.000589)	(0.0000589)	(0.000177)

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TEQ Summaries			
EMPC = 0, ND = 0	0.247	0.0729	0.112
EMPC = 0, ND = DL / 2	0.468	0.347	0.373
EMPC = 0, ND = DL	0.689	0.62	0.634
EMPC = 0, < J-level = 0	0.238	0.0645	0.103
EMPC = EMPC, ND = 0	0.278	0.104	0.143
EMPC = EMPC, ND = DL / 2	0.499	0.378	0.404
EMPC = EMPC, ND = DL	0.72	0.651	0.665
EMPC = EMPC, < J-level = 0	0.238	0.0645	0.103

Sample ID: CS-40

Method 8290A

Client Data		Sample Data		Laboratory Data			
Name:	EarthCon	Matrix:	Soil	Lab Project ID:	B4526	Date Received:	07-Aug-2020
Project ID:	KMCC Navassa	Weight/Volume:	9.37 g	Lab Sample ID	B4526_17662_DF_005	Date Extracted:	10-Aug-2020
Date Collected:	07-Aug-2020	% Solid:	90.1 %	QC Batch No:	17662	Date Analyzed:	11-Aug-2020
		Split:	-	Dilution:	-	Time Analyzed:	21:27:12

Analyte	Conc. (pg/g)	DL (pg/g)	EMPC (pg/g)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	0.175			ES 2378-TCDD	84	
12378-PeCDD	ND	0.192			ES 12378-PeCDD	75.5	
123478-HxCDD	ND	0.409			ES 123478-HxCDD	77.2	
123678-HxCDD	ND	0.419			ES 123678-HxCDD	74.4	
123789-HxCDD	ND	0.447			ES 123789-HxCDD	69.7	
1234678-HpCDD	11.9				ES 1234678-HpCDD	62.8	
OCDD	116				ES OCDD	48.5	
2378-TCDF	ND	0.0929			ES 2378-TCDF	84.8	
12378-PeCDF	ND	0.171			ES 12378-PeCDF	78.7	
23478-PeCDF	EMPC		0.334	J	ES 23478-PeCDF	79.7	
123478-HxCDF	0.386			J	ES 123478-HxCDF	82.5	
123678-HxCDF	EMPC		0.221	J	ES 123678-HxCDF	79.9	
234678-HxCDF	EMPC		0.273	J	ES 234678-HxCDF	78.4	
123789-HxCDF	ND	0.177			ES 123789-HxCDF	76	
1234678-HpCDF	3.24				ES 1234678-HpCDF	71.9	
1234789-HpCDF	ND	0.155			ES 1234789-HpCDF	63.3	
OCDF	3.84			J	ES OCDF	51.7	
Totals					**Standard**	**CS Recoveries**	
					CS 37Cl-2378-TCDD	83.1	
Total TCDD	0.673		1.64		CS 12347-PeCDD	85.8	
Total PeCDD	2.06		3.03		CS 12346-PeCDF	80.2	
Total HxCDD	5.04		7.13		CS 123469-HxCDF	83.5	
Total HpCDD	37.8		37.8		CS 1234689-HpCDF	71.5	
Total TCDF	1.69		2.15				
Total PeCDF	1.1		3.04				
Total HxCDF	3.94		4.61				
Total HpCDF	6.46		6.46				
Total PCDD/Fs	**178**		**186**				
ITEF TEQs							
TEQ: ND=0	0.309		0.526				
TEQ: ND=DL/2	0.527	0.282	0.743				
TEQ: ND=DL	0.745	0.564	0.961				

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Sample ID: CS-40 — TEQ Summary — Method 8290A

Client Project Name:	EarthCon	Matrix:	Soil	Lab Sample ID:	B4526_17662_DF_005
Cliend Project ID:	KMCC Navassa	Weight/Volume:	9.37 g	QC Batch No.:	17662
Date Collected:	07-Aug-2020	Split:	-	Date Extracted:	10-Aug-2020
Date Received:	07-Aug-2020	Dilution:	-	Date Analyzed:	11-Aug-2020 21:27
Lab Project No:	B4526	Units	pg/g		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	(0.175)		0.175	(0.175)	(0.175)	(0.175)
12378-PeCDD	(0.192)		0.192	(0.0958)	(0.192)	(0.192)
123478-HxCDD	(0.409)		0.409	(0.0409)	(0.0409)	(0.0409)
123678-HxCDD	(0.419)		0.419	(0.0419)	(0.0419)	(0.0419)
123789-HxCDD	(0.447)		0.447	(0.0447)	(0.0447)	(0.0447)
1234678-HpCDD	11.9		0.241	0.119	0.119	0.119
OCDD	116		1.01	0.116	0.0116	0.0348
2378-TCDF	(0.0929)		0.0929	(0.00929)	(0.00929)	(0.00929)
12378-PeCDF	(0.171)		0.171	(0.00853)	(0.00853)	(0.00512)
23478-PeCDF	[0.334]	J	0.166	[0.167]	[0.167]	[0.1]
123478-HxCDF	0.386	J	0.125	0.0386	0.0386	0.0386
123678-HxCDF	[0.221]	J	0.13	[0.0221]	[0.0221]	[0.0221]
234678-HxCDF	[0.273]	J	0.151	[0.0273]	[0.0273]	[0.0273]
123789-HxCDF	(0.177)		0.177	(0.0177)	(0.0177)	(0.0177)
1234678-HpCDF	3.24		0.0992	0.0324	0.0324	0.0324
1234789-HpCDF	(0.155)		0.155	(0.00155)	(0.00155)	(0.00155)
OCDF	3.84	J	0.579	0.00384	0.000384	0.00115

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TEQ Summaries			
EMPC = 0, ND = 0	0.309	0.202	0.225
EMPC = 0, ND = DL / 2	0.527	0.467	0.489
EMPC = 0, ND = DL	0.745	0.733	0.753
EMPC = 0, < J-level = 0	0.267	0.163	0.186
EMPC = EMPC, ND = 0	0.526	0.418	0.375
EMPC = EMPC, ND = DL / 2	0.743	0.683	0.639
EMPC = EMPC, ND = DL	0.961	0.949	0.903
EMPC = EMPC, < J-level = 0	0.267	0.163	0.186

Checkcode: 675-832-DJN

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Sample ID: CS-41

Method 8290A

Client Data		Sample Data		Laboratory Data			
Name:	EarthCon	Matrix:	Soil	Lab Project ID:	B4526	Date Received:	07-Aug-2020
Project ID:	KMCC Navassa	Weight/Volume:	9.19 g	Lab Sample ID	B4526_17662_DF_006	Date Extracted:	10-Aug-2020
Date Collected:	07-Aug-2020	% Solid:	86.9 %	QC Batch No:	17662	Date Analyzed:	12-Aug-2020
		Split:	-	Dilution:	-	Time Analyzed:	2:13:58

Analyte	Conc. (pg/g)	DL (pg/g)	EMPC (pg/g)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	0.259			ES 2378-TCDD	84.8	
12378-PeCDD	0.709			J	ES 12378-PeCDD	78.9	
123478-HxCDD	EMPC		1.12	J	ES 123478-HxCDD	80.2	
123678-HxCDD	2.15			J	ES 123678-HxCDD	77.4	
123789-HxCDD	EMPC		1.45	J	ES 123789-HxCDD	73.3	
1234678-HpCDD	59.7				ES 1234678-HpCDD	62.5	
OCDD	590				ES OCDD	46.4	
2378-TCDF	0.559				ES 2378-TCDF	89.2	
12378-PeCDF	EMPC		0.708	J	ES 12378-PeCDF	86.2	
23478-PeCDF	0.874			J	ES 23478-PeCDF	84.8	
123478-HxCDF	1.24			J	ES 123478-HxCDF	84.4	
123678-HxCDF	0.809			J	ES 123678-HxCDF	83.7	
234678-HxCDF	0.967			J	ES 234678-HxCDF	81.7	
123789-HxCDF	ND	0.25			ES 123789-HxCDF	76.4	
1234678-HpCDF	8.14				ES 1234678-HpCDF	74.6	
1234789-HpCDF	EMPC		0.729	J	ES 1234789-HpCDF	61.9	
OCDF	16.6				ES OCDF	49	
Totals					**Standard**	**CS Recoveries**	
					CS 37Cl-2378-TCDD	85.4	
Total TCDD	2.76		3.94		CS 12347-PeCDD	92.6	
Total PeCDD	11.1		11.1		CS 12346-PeCDF	90.9	
Total HxCDD	30		33.4		CS 123469-HxCDF	88.7	
Total HpCDD	211		211		CS 1234689-HpCDF	76.6	
Total TCDF	10.4		13.7				
Total PeCDF	8.59		10.7				
Total HxCDF	9.47		13				
Total HpCDF	19.6		20.3				
Total PCDD/Fs	**909**		**924**				
ITEF TEQs							
TEQ: ND=0	2.65		2.95				
TEQ: ND=DL/2	2.79	0.329	3.09				
TEQ: ND=DL	2.93	0.659	3.23				

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Sample ID: CS-41 — TEQ Summary — Method 8290A

Client Project Name:	EarthCon	Matrix:	Soil	Lab Sample ID:	B4526_17662_DF_006
Cliend Project ID:	KMCC Navassa	Weight/Volume:	9.19 g	QC Batch No.:	17662
Date Collected:	07-Aug-2020	Split:	-	Date Extracted:	10-Aug-2020
Date Received:	07-Aug-2020	Dilution:	-	Date Analyzed:	12-Aug-2020 02:13
Lab Project No:	B4526	Units	pg/g		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	(0.259)		0.259	(0.259)	(0.259)	(0.259)
12378-PeCDD	0.709	J	0.319	0.355	0.709	0.709
123478-HxCDD	[1.12]	J	0.278	[0.112]	[0.112]	[0.112]
123678-HxCDD	2.15	J	0.269	0.215	0.215	0.215
123789-HxCDD	[1.45]	J	0.288	[0.145]	[0.145]	[0.145]
1234678-HpCDD	59.7		0.331	0.597	0.597	0.597
OCDD	590		1.51	0.59	0.059	0.177
2378-TCDF	0.559		0.0945	0.0559	0.0559	0.0559
12378-PeCDF	[0.708]	J	0.1	[0.0354]	[0.0354]	[0.0212]
23478-PeCDF	0.874	J	0.102	0.437	0.437	0.262
123478-HxCDF	1.24	J	0.18	0.124	0.124	0.124
123678-HxCDF	0.809	J	0.184	0.0809	0.0809	0.0809
234678-HxCDF	0.967	J	0.21	0.0967	0.0967	0.0967
123789-HxCDF	(0.25)		0.25	(0.025)	(0.025)	(0.025)
1234678-HpCDF	8.14		0.136	0.0814	0.0814	0.0814
1234789-HpCDF	[0.729]	J	0.237	[0.00729]	[0.00729]	[0.00729]
OCDF	16.6		0.592	0.0166	0.00166	0.00498

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TEQ Summaries			
EMPC = 0, ND = 0	2.65	2.46	2.4
EMPC = 0, ND = DL / 2	2.79	2.6	2.55
EMPC = 0, ND = DL	2.93	2.74	2.69
EMPC = 0, < J-level = 0	1.34	0.795	0.916
EMPC = EMPC, ND = 0	2.95	2.76	2.69
EMPC = EMPC, ND = DL / 2	3.09	2.9	2.83
EMPC = EMPC, ND = DL	3.23	3.04	2.97
EMPC = EMPC, < J-level = 0	1.34	0.795	0.916

Checkcode: 379-455-GFL

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Sample ID: CS-41-MS

Method 8290A

Client Data		Sample Data		Laboratory Data			
Name:	EarthCon	Matrix:	Soil	Lab Project ID:	B4526	Date Received:	07-Aug-2020
Project ID:	KMCC Navassa	Weight/Volume:	9.01 g	Lab Sample ID	B4526_17662_DF_006MS	Date Extracted:	10-Aug-2020
Date Collected:	07-Aug-2020	% Solid:	86.9 %	QC Batch No:	17662	Date Analyzed:	12-Aug-2020
		Split:	-	Dilution:	-	Time Analyzed:	3:00:28

Analyte	Conc. (pg/g)	DL (pg/g)	EMPC (pg/g)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	22.8				ES 2378-TCDD	83.1	
12378-PeCDD	112				ES 12378-PeCDD	78.9	
123478-HxCDD	123				ES 123478-HxCDD	80.6	
123678-HxCDD	130				ES 123678-HxCDD	75.2	
123789-HxCDD	121				ES 123789-HxCDD	72.8	
1234678-HpCDD	182				ES 1234678-HpCDD	65.6	
OCDD	888				ES OCDD	45.8	
2378-TCDF	27				ES 2378-TCDF	86.8	
12378-PeCDF	118				ES 12378-PeCDF	86.7	
23478-PeCDF	126				ES 23478-PeCDF	83.6	
123478-HxCDF	122				ES 123478-HxCDF	81.3	
123678-HxCDF	119				ES 123678-HxCDF	78.9	
234678-HxCDF	121				ES 234678-HxCDF	79.8	
123789-HxCDF	116				ES 123789-HxCDF	76.6	
1234678-HpCDF	124				ES 1234678-HpCDF	76.5	
1234789-HpCDF	117				ES 1234789-HpCDF	62.9	
OCDF	252				ES OCDF	48.9	
Totals					**Standard**	**CS Recoveries**	
					CS 37Cl-2378-TCDD	86.7	
Total TCDD	109		110		CS 12347-PeCDD	96.2	
Total PeCDD	186		187		CS 12346-PeCDF	89.5	
Total HxCDD	433		436		CS 123469-HxCDF	86.7	
Total HpCDD	372		372		CS 1234689-HpCDF	76.1	
Total TCDF	143		147				
Total PeCDF	308		308				
Total HxCDF	521		521				
Total HpCDF	256		256				
Total PCDD/Fs	**3,470**		**3,480**				
ITEF TEQs							
TEQ: ND=0	241		241				
TEQ: ND=DL/2	241	0.297	241				
TEQ: ND=DL	241	0.594	241				

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Sample ID: CS-41-MS — TEQ Summary — Method 8290A

Client Project Name:	EarthCon	Matrix:	Soil	Lab Sample ID:	B4526_17662_DF_006MS
Cliend Project ID:	KMCC Navassa	Weight/Volume:	9.01 g	QC Batch No.:	17662
Date Collected:	07-Aug-2020	Split:	-	Date Extracted:	10-Aug-2020
Date Received:	07-Aug-2020	Dilution:	-	Date Analyzed:	12-Aug-2020 03:00
Lab Project No:	B4526	Units	pg/g		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	22.8		0.208	22.8	22.8	22.8
12378-PeCDD	112		0.242	56.2	112	112
123478-HxCDD	123		0.198	12.3	12.3	12.3
123678-HxCDD	130		0.206	13	13	13
123789-HxCDD	121		0.215	12.1	12.1	12.1
1234678-HpCDD	182		0.385	1.82	1.82	1.82
OCDD	888		1.53	0.888	0.0888	0.266
2378-TCDF	27		0.107	2.7	2.7	2.7
12378-PeCDF	118		0.162	5.91	5.91	3.54
23478-PeCDF	126		0.166	62.8	62.8	37.7
123478-HxCDF	122		0.206	12.2	12.2	12.2
123678-HxCDF	119		0.199	11.9	11.9	11.9
234678-HxCDF	121		0.216	12.1	12.1	12.1
123789-HxCDF	116		0.271	11.6	11.6	11.6
1234678-HpCDF	124		0.192	1.24	1.24	1.24
1234789-HpCDF	117		0.292	1.17	1.17	1.17
OCDF	252		1.24	0.252	0.0252	0.0755

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TEQ Summaries			
EMPC = 0, ND = 0	241	296	269
EMPC = 0, ND = DL / 2	241	296	269
EMPC = 0, ND = DL	241	296	269
EMPC = 0, < J-level = 0	241	296	269
EMPC = EMPC, ND = 0	241	296	269
EMPC = EMPC, ND = DL / 2	241	296	269
EMPC = EMPC, ND = DL	241	296	269
EMPC = EMPC, < J-level = 0	241	296	269

Checkcode: 194-587-JZL

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Sample ID: CS-41-MSD

Method 8290A

Client Data		Sample Data		Laboratory Data			
Name:	EarthCon	Matrix:	Soil	Lab Project ID:	B4526	Date Received:	07-Aug-2020
Project ID:	KMCC Navassa	Weight/Volume:	9.18 g	Lab Sample ID	B4526_17662_DF_006MSD	Date Extracted:	10-Aug-2020
Date Collected:	07-Aug-2020	% Solid:	86.9 %	QC Batch No:	17662	Date Analyzed:	12-Aug-2020
		Split:	-	Dilution:	-	Time Analyzed:	3:46:59

Analyte	Conc. (pg/g)	DL (pg/g)	EMPC (pg/g)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	21.8				ES 2378-TCDD	86.8	
12378-PeCDD	111				ES 12378-PeCDD	79.4	
123478-HxCDD	121				ES 123478-HxCDD	78.2	
123678-HxCDD	126				ES 123678-HxCDD	76.4	
123789-HxCDD	116				ES 123789-HxCDD	72	
1234678-HpCDD	179				ES 1234678-HpCDD	66.9	
OCDD	844				ES OCDD	49	
2378-TCDF	24.8				ES 2378-TCDF	86.9	
12378-PeCDF	114				ES 12378-PeCDF	85.2	
23478-PeCDF	120				ES 23478-PeCDF	83.6	
123478-HxCDF	119				ES 123478-HxCDF	79.7	
123678-HxCDF	117				ES 123678-HxCDF	78.8	
234678-HxCDF	117				ES 234678-HxCDF	80.7	
123789-HxCDF	112				ES 123789-HxCDF	78.8	
1234678-HpCDF	120				ES 1234678-HpCDF	79.9	
1234789-HpCDF	113				ES 1234789-HpCDF	65.5	
OCDF	242				ES OCDF	52.2	
Totals					**Standard**	**CS Recoveries**	
					CS 37Cl-2378-TCDD	86.7	
Total TCDD	102		102		CS 12347-PeCDD	89	
Total PeCDD	175		178		CS 12346-PeCDF	86.1	
Total HxCDD	424		424		CS 123469-HxCDF	83.9	
Total HpCDD	363		363		CS 1234689-HpCDF	78.7	
Total TCDF	142		142				
Total PeCDF	299		299				
Total HxCDF	505		505				
Total HpCDF	246		246				
Total PCDD/Fs	**3,340**		**3,340**				
ITEF TEQs							
TEQ: ND=0	233		233				
TEQ: ND=DL/2	233	0.299	233				
TEQ: ND=DL	233	0.598	233				

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Sample ID: CS-41-MSD — TEQ Summary — Method 8290A

Client Project Name:	EarthCon	Matrix:	Soil	Lab Sample ID:	B4526_17662_DF_006MSD
Cliend Project ID:	KMCC Navassa	Weight/Volume:	9.18 g	QC Batch No.:	17662
Date Collected:	07-Aug-2020	Split:	-	Date Extracted:	10-Aug-2020
Date Received:	07-Aug-2020	Dilution:	-	Date Analyzed:	12-Aug-2020 03:46
Lab Project No:	B4526	Units	pg/g		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	21.8		0.172	21.8	21.8	21.8
12378-PeCDD	111		0.265	55.3	111	111
123478-HxCDD	121		0.256	12.1	12.1	12.1
123678-HxCDD	126		0.272	12.6	12.6	12.6
123789-HxCDD	116		0.273	11.6	11.6	11.6
1234678-HpCDD	179		0.266	1.79	1.79	1.79
OCDD	844		0.79	0.844	0.0844	0.253
2378-TCDF	24.8		0.0957	2.48	2.48	2.48
12378-PeCDF	114		0.181	5.69	5.69	3.42
23478-PeCDF	120		0.174	60.1	60.1	36.1
123478-HxCDF	119		0.228	11.9	11.9	11.9
123678-HxCDF	117		0.227	11.7	11.7	11.7
234678-HxCDF	117		0.238	11.7	11.7	11.7
123789-HxCDF	112		0.289	11.2	11.2	11.2
1234678-HpCDF	120		0.186	1.2	1.2	1.2
1234789-HpCDF	113		0.297	1.13	1.13	1.13
OCDF	242		0.557	0.242	0.0242	0.0726

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TEQ Summaries			
EMPC = 0, ND = 0	233	288	262
EMPC = 0, ND = DL / 2	233	288	262
EMPC = 0, ND = DL	233	288	262
EMPC = 0, < J-level = 0	233	288	262
EMPC = EMPC, ND = 0	233	288	262
EMPC = EMPC, ND = DL / 2	233	288	262
EMPC = EMPC, ND = DL	233	288	262
EMPC = EMPC, < J-level = 0	233	288	262

Checkcode: 184-857-GMW

MS/MSD Comparison

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Method 8290A

Sample ID: CS-41

Analyte	Native Conc.	MS Spike	MS Conc.	MS Rec.	MSD Spike	MSD Conc.	MSD Rec.	RPD
	(pg/g)	(pg/g)	(pg/g)	%	(pg/g)	(pg/g)	%	
2,3,7,8-TCDD	ND	22.2	22.8	103	21.8	21.8	100	3%
1,2,3,7,8-PeCDD	0.709	111	112	101	109	111	101	0%
1,2,3,4,7,8-HxCDD	1.12	111	123	109	109	121	110	1%
1,2,3,6,7,8-HxCDD	2.15	111	130	116	109	126	113	3%
1,2,3,7,8,9-HxCDD	1.45	111	121	108	109	116	106	2%
1,2,3,4,6,7,8-HpCDD	59.7	111	182	111	109	179	110	1%
OCDD	590	222	888	134	218	844	116	14%
2,3,7,8-TCDF	0.559	22.2	27	119	21.8	24.8	111	7%
1,2,3,7,8-PeCDF	0.708	111	118	106	109	114	104	2%
2,3,4,7,8-PeCDF	0.874	111	126	112	109	120	110	2%
1,2,3,4,7,8-HxCDF	1.24	111	122	109	109	119	108	1%
1,2,3,6,7,8-HxCDF	0.809	111	119	107	109	117	107	0%
2,3,4,6,7,8-HxCDF	0.967	111	121	108	109	117	106	2%
1,2,3,7,8,9-HxCDF	ND	111	116	105	109	112	103	2%
1,2,3,4,6,7,8-HpCDF	8.14	111	124	104	109	120	102	2%
1,2,3,4,7,8,9-HpCDF	0.729	111	117	105	109	113	103	2%
OCDF	16.6	222	252	106	218	242	103	3%

* % Recovery limits for MS and MSD: 70-130% of expected value, if native < RL
* RPD limit for MS vs. MSD recoveries: +/- 20%, if native < RL

Sample ID: CS-42

Method 8290A

Client Data		Sample Data		Laboratory Data			
Name:	EarthCon	Matrix:	Soil	Lab Project ID:	B4526	Date Received:	07-Aug-2020
Project ID:	KMCC Navassa	Weight/Volume:	8.60 g	Lab Sample ID	B4526_17662_DF_007	Date Extracted:	10-Aug-2020
Date Collected:	07-Aug-2020	% Solid:	84.6 %	QC Batch No:	17662	Date Analyzed:	12-Aug-2020
		Split:	-	Dilution:	-	Time Analyzed:	4:33:31

Analyte	Conc. (pg/g)	DL (pg/g)	EMPC (pg/g)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	0.314			ES 2378-TCDD	86.3	
12378-PeCDD	1.06			J	ES 12378-PeCDD	80	
123478-HxCDD	1.75			J	ES 123478-HxCDD	75.9	
123678-HxCDD	3.06				ES 123678-HxCDD	72.1	
123789-HxCDD	2.5			J	ES 123789-HxCDD	70.2	
1234678-HpCDD	73.8				ES 1234678-HpCDD	68.5	
OCDD	1,070				ES OCDD	55	
2378-TCDF	0.781				ES 2378-TCDF	88.7	
12378-PeCDF	1.16			J	ES 12378-PeCDF	86.9	
23478-PeCDF	1.37			J	ES 23478-PeCDF	82.9	
123478-HxCDF	1.55			J	ES 123478-HxCDF	78.4	
123678-HxCDF	EMPC		1.2	J	ES 123678-HxCDF	77.7	
234678-HxCDF	1.49			J	ES 234678-HxCDF	77	
123789-HxCDF	1.2			J	ES 123789-HxCDF	79.2	
1234678-HpCDF	10.8				ES 1234678-HpCDF	78.7	
1234789-HpCDF	EMPC		1.22	J	ES 1234789-HpCDF	71.3	
OCDF	23.9				ES OCDF	58.8	
Totals					**Standard**	**CS Recoveries**	
					CS 37Cl-2378-TCDD	87.1	
Total TCDD	5.25		6.91		CS 12347-PeCDD	96.4	
Total PeCDD	13.2		14.7		CS 12346-PeCDF	91.2	
Total HxCDD	41.5		41.5		CS 123469-HxCDF	83.5	
Total HpCDD	232		232		CS 1234689-HpCDF	83.9	
Total TCDF	14.4		16.9				
Total PeCDF	13.3		14				
Total HxCDF	16.4		17.6				
Total HpCDF	26.6		28.5				
Total PCDD/Fs	**1,460**		**1,470**				
ITEF TEQs							
TEQ: ND=0	4.45		4.58				
TEQ: ND=DL/2	4.61	0.369	4.74				
TEQ: ND=DL	4.76	0.738	4.9				

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Sample ID: CS-42 — TEQ Summary — Method 8290A

Client Project Name:	EarthCon	Matrix:	Soil	Lab Sample ID:	B4526_17662_DF_007
Cliend Project ID:	KMCC Navassa	Weight/Volume:	8.60 g	QC Batch No.:	17662
Date Collected:	07-Aug-2020	Split:	-	Date Extracted:	10-Aug-2020
Date Received:	07-Aug-2020	Dilution:	-	Date Analyzed:	12-Aug-2020 04:33
Lab Project No:	B4526	Units	pg/g		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	(0.314)		0.314	(0.314)	(0.314)	(0.314)
12378-PeCDD	1.06	J	0.292	0.529	1.06	1.06
123478-HxCDD	1.75	J	0.285	0.175	0.175	0.175
123678-HxCDD	3.06		0.273	0.306	0.306	0.306
123789-HxCDD	2.5	J	0.269	0.25	0.25	0.25
1234678-HpCDD	73.8		0.275	0.738	0.738	0.738
OCDD	1070		0.83	1.07	0.107	0.322
2378-TCDF	0.781		0.121	0.0781	0.0781	0.0781
12378-PeCDF	1.16	J	0.146	0.0578	0.0578	0.0347
23478-PeCDF	1.37	J	0.14	0.685	0.685	0.411
123478-HxCDF	1.55	J	0.232	0.155	0.155	0.155
123678-HxCDF	[1.2]	J	0.214	[0.12]	[0.12]	[0.12]
234678-HxCDF	1.49	J	0.242	0.149	0.149	0.149
123789-HxCDF	1.2	J	0.28	0.12	0.12	0.12
1234678-HpCDF	10.8		0.221	0.108	0.108	0.108
1234789-HpCDF	[1.22]	J	0.343	[0.0122]	[0.0122]	[0.0122]
OCDF	23.9		0.602	0.0239	0.00239	0.00718

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TEQ Summaries			
EMPC = 0, ND = 0	4.45	3.99	3.91
EMPC = 0, ND = DL / 2	4.61	4.15	4.07
EMPC = 0, ND = DL	4.76	4.3	4.23
EMPC = 0, < J-level = 0	2.33	1.34	1.56
EMPC = EMPC, ND = 0	4.58	4.12	4.05
EMPC = EMPC, ND = DL / 2	4.74	4.28	4.2
EMPC = EMPC, ND = DL	4.9	4.44	4.36
EMPC = EMPC, < J-level = 0	2.33	1.34	1.56

Sample ID: CS-43

Method 8290A

Client Data		Sample Data		Laboratory Data			
Name:	EarthCon	Matrix:	Soil	Lab Project ID:	B4526	Date Received:	07-Aug-2020
Project ID:	KMCC Navassa	Weight/Volume:	9.26 g	Lab Sample ID	B4526_17662_DF_008	Date Extracted:	10-Aug-2020
Date Collected:	07-Aug-2020	% Solid:	89.5 %	QC Batch No:	17662	Date Analyzed:	12-Aug-2020
		Split:	-	Dilution:	-	Time Analyzed:	5:20:01

Analyte	Conc. (pg/g)	DL (pg/g)	EMPC (pg/g)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	0.471			ES 2378-TCDD	84.6	
12378-PeCDD	ND	0.815			ES 12378-PeCDD	85.3	
123478-HxCDD	EMPC		0.539	J	ES 123478-HxCDD	76	
123678-HxCDD	1.25			J	ES 123678-HxCDD	74.7	
123789-HxCDD	1.08			J	ES 123789-HxCDD	70.8	
1234678-HpCDD	29.5				ES 1234678-HpCDD	67.7	
OCDD	313				ES OCDD	33.9	
2378-TCDF	0.513			J	ES 2378-TCDF	85.7	
12378-PeCDF	0.523			J	ES 12378-PeCDF	87.7	
23478-PeCDF	1.38			J	ES 23478-PeCDF	90.1	
123478-HxCDF	0.923			J	ES 123478-HxCDF	76.3	
123678-HxCDF	0.814			J	ES 123678-HxCDF	74.5	
234678-HxCDF	1.07			J	ES 234678-HxCDF	75.1	
123789-HxCDF	ND	0.311			ES 123789-HxCDF	74.2	
1234678-HpCDF	19.4				ES 1234678-HpCDF	75.3	
1234789-HpCDF	ND	0.428			ES 1234789-HpCDF	65.9	
OCDF	19.6				ES OCDF	37.2	
Totals					**Standard**	**CS Recoveries**	
					CS 37Cl-2378-TCDD	84.4	
Total TCDD	1.65		1.65		CS 12347-PeCDD	98.2	
Total PeCDD	3.11		3.11		CS 12346-PeCDF	86.4	
Total HxCDD	13.2		16.3		CS 123469-HxCDF	75.7	
Total HpCDD	96.7		96.7		CS 1234689-HpCDF	77.9	
Total TCDF	8.29		11.7				
Total PeCDF	13.3		14				
Total HxCDF	17.1		17.1				
Total HpCDF	37.6		37.6				
Total PCDD/Fs	**523**		**531**				
ITEF TEQs							
TEQ: ND=0	2.1		2.16				
TEQ: ND=DL/2	2.56	0.621	2.61				
TEQ: ND=DL	3.02	1.24	3.07				

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Sample ID: CS-43 — TEQ Summary — Method 8290A

Client Project Name:	EarthCon	Matrix:	Soil	Lab Sample ID:	B4526_17662_DF_008
Cliend Project ID:	KMCC Navassa	Weight/Volume:	9.26 g	QC Batch No.:	17662
Date Collected:	07-Aug-2020	Split:	-	Date Extracted:	10-Aug-2020
Date Received:	07-Aug-2020	Dilution:	-	Date Analyzed:	12-Aug-2020 05:20
Lab Project No:	B4526	Units	pg/g		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	(0.471)		0.471	(0.471)	(0.471)	(0.471)
12378-PeCDD	(0.815)		0.815	(0.408)	(0.815)	(0.815)
123478-HxCDD	[0.539]	J	0.4	[0.0539]	[0.0539]	[0.0539]
123678-HxCDD	1.25	J	0.398	0.125	0.125	0.125
123789-HxCDD	1.08	J	0.436	0.108	0.108	0.108
1234678-HpCDD	29.5		0.398	0.295	0.295	0.295
OCDD	313		2.13	0.313	0.0313	0.0938
2378-TCDF	0.513	J	0.255	0.0513	0.0513	0.0513
12378-PeCDF	0.523	J	0.166	0.0262	0.0262	0.0157
23478-PeCDF	1.38	J	0.166	0.69	0.69	0.414
123478-HxCDF	0.923	J	0.245	0.0923	0.0923	0.0923
123678-HxCDF	0.814	J	0.253	0.0814	0.0814	0.0814
234678-HxCDF	1.07	J	0.28	0.107	0.107	0.107
123789-HxCDF	(0.311)		0.311	(0.0311)	(0.0311)	(0.0311)
1234678-HpCDF	19.4		0.268	0.194	0.194	0.194
1234789-HpCDF	(0.428)		0.428	(0.00428)	(0.00428)	(0.00428)
OCDF	19.6		0.882	0.0196	0.00196	0.00588

TEQ Summaries			
EMPC = 0, ND = 0	2.1	1.8	1.58
EMPC = 0, ND = DL / 2	2.56	2.46	2.24
EMPC = 0, ND = DL	3.02	3.12	2.9
EMPC = 0, < J-level = 0	0.821	0.522	0.588
EMPC = EMPC, ND = 0	2.16	1.86	1.64
EMPC = EMPC, ND = DL / 2	2.61	2.52	2.3
EMPC = EMPC, ND = DL	3.07	3.18	2.96
EMPC = EMPC, < J-level = 0	0.821	0.522	0.588

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Checkcode: 877-121-VFX

Sample ID: CS-44

Method 8290A

Client Data		Sample Data		Laboratory Data			
Name:	EarthCon	Matrix:	Soil	Lab Project ID:	B4526	Date Received:	07-Aug-2020
Project ID:	KMCC Navassa	Weight/Volume:	9.27 g	Lab Sample ID	B4526_17662_DF_009	Date Extracted:	10-Aug-2020
Date Collected:	07-Aug-2020	% Solid:	87.1 %	QC Batch No:	17662	Date Analyzed:	12-Aug-2020
		Split:	-	Dilution:	-	Time Analyzed:	6:06:32

Analyte	Conc. (pg/g)	DL (pg/g)	EMPC (pg/g)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	0.184			ES 2378-TCDD	79.4	
12378-PeCDD	EMPC		0.326	J	ES 12378-PeCDD	77.7	
123478-HxCDD	0.574			J	ES 123478-HxCDD	75.6	
123678-HxCDD	EMPC		0.897	J	ES 123678-HxCDD	72.4	
123789-HxCDD	1.14			J	ES 123789-HxCDD	68.4	
1234678-HpCDD	28.4				ES 1234678-HpCDD	67.8	
OCDD	598				ES OCDD	43.4	
2378-TCDF	0.288			J	ES 2378-TCDF	77.2	
12378-PeCDF	0.375			J	ES 12378-PeCDF	76.6	
23478-PeCDF	0.899			J	ES 23478-PeCDF	77	
123478-HxCDF	EMPC		0.412	J	ES 123478-HxCDF	78	
123678-HxCDF	EMPC		0.424	J	ES 123678-HxCDF	76.4	
234678-HxCDF	0.759			J	ES 234678-HxCDF	73.9	
123789-HxCDF	ND	0.172			ES 123789-HxCDF	74.3	
1234678-HpCDF	5.26				ES 1234678-HpCDF	74.2	
1234789-HpCDF	ND	0.141			ES 1234789-HpCDF	67	
OCDF	EMPC		5.31	J	ES OCDF	46.4	
Totals					**Standard**	**CS Recoveries**	
					CS 37Cl-2378-TCDD	81.9	
Total TCDD	3.89		3.89		CS 12347-PeCDD	97.3	
Total PeCDD	3.25		5.98		CS 12346-PeCDF	82.7	
Total HxCDD	17.4		18.8		CS 123469-HxCDF	83.5	
Total HpCDD	86.5		86.5		CS 1234689-HpCDF	80.1	
Total TCDF	12.5		13.9				
Total PeCDF	9.25		10				
Total HxCDF	7.52		8.62				
Total HpCDF	10		10				
Total PCDD/Fs	**748**		**761**				
ITEF TEQs							
TEQ: ND=0	1.68		2.02				
TEQ: ND=DL/2	1.78	0.308	2.12				
TEQ: ND=DL	1.88	0.616	2.22				

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Sample ID: CS-44 — TEQ Summary — Method 8290A

Client Project Name:	EarthCon	Matrix:	Soil	Lab Sample ID:	B4526_17662_DF_009
Cliend Project ID:	KMCC Navassa	Weight/Volume:	9.27 g	QC Batch No.:	17662
Date Collected:	07-Aug-2020	Split:	-	Date Extracted:	10-Aug-2020
Date Received:	07-Aug-2020	Dilution:	-	Date Analyzed:	12-Aug-2020 06:06
Lab Project No:	B4526	Units	pg/g		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	(0.184)		0.184	(0.184)	(0.184)	(0.184)
12378-PeCDD	[0.326]	J	0.293	[0.163]	[0.326]	[0.326]
123478-HxCDD	0.574	J	0.39	0.0574	0.0574	0.0574
123678-HxCDD	[0.897]	J	0.409	[0.0897]	[0.0897]	[0.0897]
123789-HxCDD	1.14	J	0.446	0.114	0.114	0.114
1234678-HpCDD	28.4		0.282	0.284	0.284	0.284
OCDD	598		1.44	0.598	0.0598	0.179
2378-TCDF	0.288	J	0.188	0.0288	0.0288	0.0288
12378-PeCDF	0.375	J	0.137	0.0188	0.0188	0.0113
23478-PeCDF	0.899	J	0.136	0.45	0.45	0.27
123478-HxCDF	[0.412]	J	0.137	[0.0412]	[0.0412]	[0.0412]
123678-HxCDF	[0.424]	J	0.14	[0.0424]	[0.0424]	[0.0424]
234678-HxCDF	0.759	J	0.155	0.0759	0.0759	0.0759
123789-HxCDF	(0.172)		0.172	(0.0172)	(0.0172)	(0.0172)
1234678-HpCDF	5.26		0.0889	0.0526	0.0526	0.0526
1234789-HpCDF	(0.141)		0.141	(0.00141)	(0.00141)	(0.00141)
OCDF	[5.31]	J	0.962	[0.00531]	[0.000531]	[0.00159]

TEQ Summaries			
EMPC = 0, ND = 0	1.68	1.14	1.07
EMPC = 0, ND = DL / 2	1.78	1.24	1.17
EMPC = 0, ND = DL	1.88	1.34	1.28
EMPC = 0, < J-level = 0	0.935	0.397	0.516
EMPC = EMPC, ND = 0	2.02	1.64	1.57
EMPC = EMPC, ND = DL / 2	2.12	1.74	1.68
EMPC = EMPC, ND = DL	2.22	1.84	1.78
EMPC = EMPC, < J-level = 0	0.935	0.397	0.516

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Sample ID: CS-45

Method 8290A

Client Data		Sample Data		Laboratory Data			
Name:	EarthCon	Matrix:	Soil	Lab Project ID:	B4526	Date Received:	07-Aug-2020
Project ID:	KMCC Navassa	Weight/Volume:	9.18 g	Lab Sample ID	B4526_17662_DF_010	Date Extracted:	10-Aug-2020
Date Collected:	07-Aug-2020	% Solid:	90.8 %	QC Batch No:	17662	Date Analyzed:	12-Aug-2020
		Split:	-	Dilution:	-	Time Analyzed:	6:53:04

Analyte	Conc. (pg/g)	DL (pg/g)	EMPC (pg/g)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	0.16			ES 2378-TCDD	84.9	
12378-PeCDD	EMPC		1.8	J	ES 12378-PeCDD	83.9	
123478-HxCDD	9.54				ES 123478-HxCDD	77.5	
123678-HxCDD	21.6				ES 123678-HxCDD	72.9	
123789-HxCDD	17				ES 123789-HxCDD	70.4	
1234678-HpCDD	741				ES 1234678-HpCDD	66.5	
OCDD	5,320				ES OCDD	45.2	
2378-TCDF	0.466			J	ES 2378-TCDF	81.8	
12378-PeCDF	0.729			J	ES 12378-PeCDF	82.2	
23478-PeCDF	2.33			J	ES 23478-PeCDF	82.7	
123478-HxCDF	12.7				ES 123478-HxCDF	81.7	
123678-HxCDF	6.03				ES 123678-HxCDF	78.2	
234678-HxCDF	9.54				ES 234678-HxCDF	72.9	
123789-HxCDF	ND	0.222			ES 123789-HxCDF	76.2	
1234678-HpCDF	170				ES 1234678-HpCDF	71.6	
1234789-HpCDF	18				ES 1234789-HpCDF	68.2	
OCDF	480				ES OCDF	48.9	
Totals					**Standard**	**CS Recoveries**	
					CS 37Cl-2378-TCDD	86.7	
Total TCDD	4.86		4.86		CS 12347-PeCDD	102	
Total PeCDD	10.4		13		CS 12346-PeCDF	82.4	
Total HxCDD	143		143		CS 123469-HxCDF	81.2	
Total HpCDD	1,340		1,340		CS 1234689-HpCDF	77	
Total TCDF	15		16.8				
Total PeCDF	36.2		36.2				
Total HxCDF	237		239				
Total HpCDF	578		578				
Total PCDD/Fs	**8,170**		**8,180**				
ITEF TEQs							
TEQ: ND=0	24		24.9				
TEQ: ND=DL/2	24.1	0.274	25				
TEQ: ND=DL	24.2	0.548	25.1				

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Sample ID: CS-45 — TEQ Summary — Method 8290A

Client Project Name:	EarthCon	Matrix:	Soil	Lab Sample ID:	B4526_17662_DF_010
Cliend Project ID:	KMCC Navassa	Weight/Volume:	9.18 g	QC Batch No.:	17662
Date Collected:	07-Aug-2020	Split:	-	Date Extracted:	10-Aug-2020
Date Received:	07-Aug-2020	Dilution:	-	Date Analyzed:	12-Aug-2020 06:53
Lab Project No:	B4526	Units	pg/g		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	(0.16)		0.16	(0.16)	(0.16)	(0.16)
12378-PeCDD	[1.8]	J	0.183	[0.901]	[1.8]	[1.8]
123478-HxCDD	9.54		0.32	0.954	0.954	0.954
123678-HxCDD	21.6		0.34	2.16	2.16	2.16
123789-HxCDD	17		0.363	1.7	1.7	1.7
1234678-HpCDD	741		0.328	7.41	7.41	7.41
OCDD	5320		1.28	5.32	0.532	1.6
2378-TCDF	0.466	J	0.233	0.0466	0.0466	0.0466
12378-PeCDF	0.729	J	0.159	0.0365	0.0365	0.0219
23478-PeCDF	2.33	J	0.152	1.17	1.17	0.699
123478-HxCDF	12.7		0.18	1.27	1.27	1.27
123678-HxCDF	6.03		0.18	0.603	0.603	0.603
234678-HxCDF	9.54		0.208	0.954	0.954	0.954
123789-HxCDF	(0.222)		0.222	(0.0222)	(0.0222)	(0.0222)
1234678-HpCDF	170		0.108	1.7	1.7	1.7
1234789-HpCDF	18		0.162	0.18	0.18	0.18
OCDF	480		0.801	0.48	0.048	0.144

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TEQ Summaries			
EMPC = 0, ND = 0	24	18.8	19.4
EMPC = 0, ND = DL / 2	24.1	18.8	19.5
EMPC = 0, ND = DL	24.2	18.9	19.6
EMPC = 0, < J-level = 0	22.7	17.5	18.7
EMPC = EMPC, ND = 0	24.9	20.6	21.2
EMPC = EMPC, ND = DL / 2	25	20.6	21.3
EMPC = EMPC, ND = DL	25.1	20.7	21.4
EMPC = EMPC, < J-level = 0	22.7	17.5	18.7

Checkcode: 659-912-SVC

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Sample ID: CS-54

Method 8290A

Client Data		Sample Data		Laboratory Data			
Name:	EarthCon	Matrix:	Soil	Lab Project ID:	B4526	Date Received:	07-Aug-2020
Project ID:	KMCC Navassa	Weight/Volume:	9.11 g	Lab Sample ID	B4526_17662_DF_011	Date Extracted:	10-Aug-2020
Date Collected:	07-Aug-2020	% Solid:	88.5 %	QC Batch No:	17662	Date Analyzed:	12-Aug-2020
		Split:	-	Dilution:	-	Time Analyzed:	7:39:34

Analyte	Conc. (pg/g)	DL (pg/g)	EMPC (pg/g)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	0.143			ES 2378-TCDD	86.4	
12378-PeCDD	ND	0.233			ES 12378-PeCDD	85.2	
123478-HxCDD	ND	0.395			ES 123478-HxCDD	80.7	
123678-HxCDD	0.521			J	ES 123678-HxCDD	75.8	
123789-HxCDD	0.654			J	ES 123789-HxCDD	73.2	
1234678-HpCDD	13.1				ES 1234678-HpCDD	68.8	
OCDD	132				ES OCDD	46.8	
2378-TCDF	EMPC		0.342	J	ES 2378-TCDF	88.3	
12378-PeCDF	EMPC		0.218	J	ES 12378-PeCDF	87.2	
23478-PeCDF	EMPC		0.319	J	ES 23478-PeCDF	88.4	
123478-HxCDF	0.344			J	ES 123478-HxCDF	83.6	
123678-HxCDF	0.19			J	ES 123678-HxCDF	82.2	
234678-HxCDF	EMPC		0.274	J	ES 234678-HxCDF	78.3	
123789-HxCDF	0.505			J	ES 123789-HxCDF	79.2	
1234678-HpCDF	4.54				ES 1234678-HpCDF	79.8	
1234789-HpCDF	ND	0.229			ES 1234789-HpCDF	68.7	
OCDF	6.14				ES OCDF	50	
Totals					**Standard**	**CS Recoveries**	
					CS 37Cl-2378-TCDD	85.7	
Total TCDD	6.65		6.65		CS 12347-PeCDD	103	
Total PeCDD	0.717		4.31		CS 12346-PeCDF	88.1	
Total HxCDD	11.8		11.8		CS 123469-HxCDF	86.5	
Total HpCDD	36.6		36.6		CS 1234689-HpCDF	79.8	
Total TCDF	11.3		13.1				
Total PeCDF	2.98		4.48				
Total HxCDF	4.96		5.24				
Total HpCDF	8.79		8.79				
Total PCDD/Fs	**222**		**229**				
ITEF TEQs							
TEQ: ND=0	0.536		0.768				
TEQ: ND=DL/2	0.687	0.258	0.919				
TEQ: ND=DL	0.838	0.516	1.07				

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Sample ID: CS-54 — TEQ Summary — Method 8290A

Client Project Name:	EarthCon	Matrix:	Soil	Lab Sample ID:	B4526_17662_DF_011
Cliend Project ID:	KMCC Navassa	Weight/Volume:	9.11 g	QC Batch No.:	17662
Date Collected:	07-Aug-2020	Split:	-	Date Extracted:	10-Aug-2020
Date Received:	07-Aug-2020	Dilution:	-	Date Analyzed:	12-Aug-2020 07:39
Lab Project No:	B4526	Units	pg/g		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	(0.143)		0.143	(0.143)	(0.143)	(0.143)
12378-PeCDD	(0.233)		0.233	(0.117)	(0.233)	(0.233)
123478-HxCDD	(0.395)		0.395	(0.0395)	(0.0395)	(0.0395)
123678-HxCDD	0.521	J	0.407	0.0521	0.0521	0.0521
123789-HxCDD	0.654	J	0.416	0.0654	0.0654	0.0654
1234678-HpCDD	13.1		0.316	0.131	0.131	0.131
OCDD	132		1.07	0.132	0.0132	0.0395
2378-TCDF	[0.342]	J	0.207	[0.0342]	[0.0342]	[0.0342]
12378-PeCDF	[0.218]	J	0.0932	[0.0109]	[0.0109]	[0.00653]
23478-PeCDF	[0.319]	J	0.0915	[0.16]	[0.16]	[0.0958]
123478-HxCDF	0.344	J	0.119	0.0344	0.0344	0.0344
123678-HxCDF	0.19	J	0.122	0.019	0.019	0.019
234678-HxCDF	[0.274]	J	0.144	[0.0274]	[0.0274]	[0.0274]
123789-HxCDF	0.505	J	0.164	0.0505	0.0505	0.0505
1234678-HpCDF	4.54		0.147	0.0454	0.0454	0.0454
1234789-HpCDF	(0.229)		0.229	(0.00229)	(0.00229)	(0.00229)
OCDF	6.14		0.538	0.00614	0.000614	0.00184

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TEQ Summaries			
EMPC = 0, ND = 0	0.536	0.412	0.44
EMPC = 0, ND = DL / 2	0.687	0.621	0.649
EMPC = 0, ND = DL	0.838	0.83	0.858
EMPC = 0, < J-level = 0	0.315	0.191	0.218
EMPC = EMPC, ND = 0	0.768	0.644	0.603
EMPC = EMPC, ND = DL / 2	0.919	0.853	0.813
EMPC = EMPC, ND = DL	1.07	1.06	1.02
EMPC = EMPC, < J-level = 0	0.315	0.191	0.218

Checkcode: 657-818-YGM

Sample ID: CS-46

Method 8290A

Client Data		Sample Data		Laboratory Data			
Name:	EarthCon	Matrix:	Soil	Lab Project ID:	B4526	Date Received:	07-Aug-2020
Project ID:	KMCC Navassa	Weight/Volume:	8.86 g	Lab Sample ID	B4526_17662_DF_012	Date Extracted:	10-Aug-2020
Date Collected:	07-Aug-2020	% Solid:	86.7 %	QC Batch No:	17662	Date Analyzed:	12-Aug-2020
		Split:	-	Dilution:	-	Time Analyzed:	8:26:04

Analyte	Conc. (pg/g)	DL (pg/g)	EMPC (pg/g)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	0.171			ES 2378-TCDD	81.3	
12378-PeCDD	1.6			J	ES 12378-PeCDD	77.3	
123478-HxCDD	6.86				ES 123478-HxCDD	74.5	
123678-HxCDD	15				ES 123678-HxCDD	73.3	
123789-HxCDD	12.9				ES 123789-HxCDD	67.8	
1234678-HpCDD	510				ES 1234678-HpCDD	70.1	
OCDD	3,690				ES OCDD	48.1	
2378-TCDF	EMPC		0.399	J	ES 2378-TCDF	83.6	
12378-PeCDF	EMPC		0.644	J	ES 12378-PeCDF	78.7	
23478-PeCDF	EMPC		1.4	J	ES 23478-PeCDF	80.5	
123478-HxCDF	9.24				ES 123478-HxCDF	80	
123678-HxCDF	4.41				ES 123678-HxCDF	79.3	
234678-HxCDF	6.65				ES 234678-HxCDF	74.1	
123789-HxCDF	ND	0.224			ES 123789-HxCDF	75	
1234678-HpCDF	118				ES 1234678-HpCDF	73.2	
1234789-HpCDF	13.3				ES 1234789-HpCDF	66.3	
OCDF	354				ES OCDF	52.1	
Totals					**Standard**	**CS Recoveries**	
					CS 37Cl-2378-TCDD	85.6	
Total TCDD	5.59		5.59		CS 12347-PeCDD	94.6	
Total PeCDD	7.32		10.3		CS 12346-PeCDF	84	
Total HxCDD	102		104		CS 123469-HxCDF	86.4	
Total HpCDD	925		925		CS 1234689-HpCDF	80	
Total TCDF	12.5		16				
Total PeCDF	21		25.7				
Total HxCDF	162		162				
Total HpCDF	409		409				
Total PCDD/Fs	**5,690**		**5,700**				
ITEF TEQs							
TEQ: ND=0	16.8		17.5				
TEQ: ND=DL/2	16.9	0.309	17.6				
TEQ: ND=DL	17	0.618	17.7				

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Sample ID: CS-46 — TEQ Summary — Method 8290A

Client Project Name:	EarthCon	Matrix:	Soil	Lab Sample ID:	B4526_17662_DF_012
Cliend Project ID:	KMCC Navassa	Weight/Volume:	8.86 g	QC Batch No.:	17662
Date Collected:	07-Aug-2020	Split:	-	Date Extracted:	10-Aug-2020
Date Received:	07-Aug-2020	Dilution:	-	Date Analyzed:	12-Aug-2020 08:26
Lab Project No:	B4526	Units	pg/g		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	(0.171)		0.171	(0.171)	(0.171)	(0.171)
12378-PeCDD	1.6	J	0.264	0.799	1.6	1.6
123478-HxCDD	6.86		0.322	0.686	0.686	0.686
123678-HxCDD	15		0.317	1.5	1.5	1.5
123789-HxCDD	12.9		0.338	1.29	1.29	1.29
1234678-HpCDD	510		0.306	5.1	5.1	5.1
OCDD	3690		1.21	3.69	0.369	1.11
2378-TCDF	[0.399]	J	0.29	[0.0399]	[0.0399]	[0.0399]
12378-PeCDF	[0.644]	J	0.195	[0.0322]	[0.0322]	[0.0193]
23478-PeCDF	[1.4]	J	0.19	[0.702]	[0.702]	[0.421]
123478-HxCDF	9.24		0.169	0.924	0.924	0.924
123678-HxCDF	4.41		0.172	0.441	0.441	0.441
234678-HxCDF	6.65		0.183	0.665	0.665	0.665
123789-HxCDF	(0.224)		0.224	(0.0224)	(0.0224)	(0.0224)
1234678-HpCDF	118		0.147	1.18	1.18	1.18
1234789-HpCDF	13.3		0.227	0.133	0.133	0.133
OCDF	354		0.832	0.354	0.0354	0.106

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TEQ Summaries			
EMPC = 0, ND = 0	16.8	13.9	14.7
EMPC = 0, ND = DL / 2	16.9	14	14.8
EMPC = 0, ND = DL	17	14.1	14.9
EMPC = 0, < J-level = 0	16	12.3	13.1
EMPC = EMPC, ND = 0	17.5	14.7	15.2
EMPC = EMPC, ND = DL / 2	17.6	14.8	15.3
EMPC = EMPC, ND = DL	17.7	14.9	15.4
EMPC = EMPC, < J-level = 0	16	12.3	13.1

Checkcode: 313-403-MPJ

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Sample ID: CS-47

Method 8290A

Client Data		Sample Data		Laboratory Data			
Name:	EarthCon	Matrix:	Soil	Lab Project ID:	B4526	Date Received:	07-Aug-2020
Project ID:	KMCC Navassa	Weight/Volume:	8.43 g	Lab Sample ID	B4526_17662_DF_013	Date Extracted:	10-Aug-2020
Date Collected:	07-Aug-2020	% Solid:	83.1 %	QC Batch No:	17662	Date Analyzed:	12-Aug-2020
		Split:	-	Dilution:	-	Time Analyzed:	9:12:35

Analyte	Conc. (pg/g)	DL (pg/g)	EMPC (pg/g)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	0.206			ES 2378-TCDD	83.7	
12378-PeCDD	0.361			J	ES 12378-PeCDD	81.5	
123478-HxCDD	0.532			J	ES 123478-HxCDD	79.8	
123678-HxCDD	1.18			J	ES 123678-HxCDD	76.5	
123789-HxCDD	0.981			J	ES 123789-HxCDD	71.5	
1234678-HpCDD	28.1				ES 1234678-HpCDD	68.9	
OCDD	245				ES OCDD	44.5	
2378-TCDF	EMPC		0.34	J	ES 2378-TCDF	83.5	
12378-PeCDF	0.404			J	ES 12378-PeCDF	81.2	
23478-PeCDF	0.741			J	ES 23478-PeCDF	83.3	
123478-HxCDF	EMPC		0.568	J	ES 123478-HxCDF	86.4	
123678-HxCDF	0.592			J	ES 123678-HxCDF	81.7	
234678-HxCDF	0.797			J	ES 234678-HxCDF	79.6	
123789-HxCDF	ND	0.198			ES 123789-HxCDF	79.6	
1234678-HpCDF	8.56				ES 1234678-HpCDF	75.6	
1234789-HpCDF	ND	0.267			ES 1234789-HpCDF	66.8	
OCDF	11.7				ES OCDF	47.2	
Totals					**Standard**	**CS Recoveries**	
					CS 37Cl-2378-TCDD	83.7	
Total TCDD	4.95		4.95		CS 12347-PeCDD	97.4	
Total PeCDD	5.02		7.65		CS 12346-PeCDF	79.8	
Total HxCDD	20.1		21.1		CS 123469-HxCDF	86.3	
Total HpCDD	116		116		CS 1234689-HpCDF	79	
Total TCDF	8.23		12.5				
Total PeCDF	7.81		9.15				
Total HxCDF	9.25		10.2				
Total HpCDF	16.5		16.5				
Total PCDD/Fs	**445**		**455**				
ITEF TEQs							
TEQ: ND=0	1.6		1.69				
TEQ: ND=DL/2	1.72	0.266	1.81				
TEQ: ND=DL	1.83	0.531	1.92				

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Sample ID: CS-47 — TEQ Summary — Method 8290A

Client Project Name:	EarthCon	Matrix:	Soil	Lab Sample ID:	B4526_17662_DF_013
Cliend Project ID:	KMCC Navassa	Weight/Volume:	8.43 g	QC Batch No.:	17662
Date Collected:	07-Aug-2020	Split:	-	Date Extracted:	10-Aug-2020
Date Received:	07-Aug-2020	Dilution:	-	Date Analyzed:	12-Aug-2020 09:12
Lab Project No:	B4526	Units	pg/g		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	(0.206)		0.206	(0.206)	(0.206)	(0.206)
12378-PeCDD	0.361	J	0.223	0.18	0.361	0.361
123478-HxCDD	0.532	J	0.185	0.0532	0.0532	0.0532
123678-HxCDD	1.18	J	0.2	0.118	0.118	0.118
123789-HxCDD	0.981	J	0.203	0.0981	0.0981	0.0981
1234678-HpCDD	28.1		0.443	0.281	0.281	0.281
OCDD	245		1.46	0.245	0.0245	0.0736
2378-TCDF	[0.34]	J	0.111	[0.034]	[0.034]	[0.034]
12378-PeCDF	0.404	J	0.124	0.0202	0.0202	0.0121
23478-PeCDF	0.741	J	0.114	0.371	0.371	0.222
123478-HxCDF	[0.568]	J	0.164	[0.0568]	[0.0568]	[0.0568]
123678-HxCDF	0.592	J	0.157	0.0592	0.0592	0.0592
234678-HxCDF	0.797	J	0.173	0.0797	0.0797	0.0797
123789-HxCDF	(0.198)		0.198	(0.0198)	(0.0198)	(0.0198)
1234678-HpCDF	8.56		0.161	0.0856	0.0856	0.0856
1234789-HpCDF	(0.267)		0.267	(0.00267)	(0.00267)	(0.00267)
OCDF	11.7		0.888	0.0117	0.00117	0.0035

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TEQ Summaries			
EMPC = 0, ND = 0	1.6	1.55	1.45
EMPC = 0, ND = DL / 2	1.72	1.67	1.56
EMPC = 0, ND = DL	1.83	1.78	1.68
EMPC = 0, < J-level = 0	0.624	0.392	0.444
EMPC = EMPC, ND = 0	1.69	1.64	1.54
EMPC = EMPC, ND = DL / 2	1.81	1.76	1.65
EMPC = EMPC, ND = DL	1.92	1.87	1.77
EMPC = EMPC, < J-level = 0	0.624	0.392	0.444

Checkcode: 033-297-JVV

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Sample ID: Method Blank B4526_17662 — Method 8290A

Client Data		Sample Data		Laboratory Data			
Name:	EarthCon	Matrix:	Soil	Lab Project ID:	B4526	Date Received:	n/a
Project ID:	KMCC Navassa	Weight/Volume:	10.00 g	Lab Sample ID	MB1_17662_DF_SDS	Date Extracted:	10-Aug-2020
Date Collected:	n/a	% Solid:	n/a	QC Batch No:	17662	Date Analyzed:	11-Aug-2020
		Split:	-	Dilution:	-	Time Analyzed:	17:34:32

Analyte	Conc. (pg/g)	DL (pg/g)	EMPC (pg/g)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	0.462			ES 2378-TCDD	91.4	
12378-PeCDD	ND	0.673			ES 12378-PeCDD	92.1	
123478-HxCDD	ND	0.3			ES 123478-HxCDD	90.8	
123678-HxCDD	ND	0.295			ES 123678-HxCDD	93	
123789-HxCDD	ND	0.324			ES 123789-HxCDD	84.9	
1234678-HpCDD	ND	0.317			ES 1234678-HpCDD	72	
OCDD	ND	0.833			ES OCDD	46.1	
2378-TCDF	ND	0.127			ES 2378-TCDF	101	
12378-PeCDF	ND	0.128			ES 12378-PeCDF	99.1	
23478-PeCDF	ND	0.0904			ES 23478-PeCDF	96.1	
123478-HxCDF	ND	0.131			ES 123478-HxCDF	90.2	
123678-HxCDF	ND	0.117			ES 123678-HxCDF	90.3	
234678-HxCDF	ND	0.133			ES 234678-HxCDF	88.9	
123789-HxCDF	ND	0.178			ES 123789-HxCDF	81.1	
1234678-HpCDF	ND	0.178			ES 1234678-HpCDF	89.5	
1234789-HpCDF	ND	0.315			ES 1234789-HpCDF	67.7	
OCDF	ND	0.569			ES OCDF	45.8	
Totals					**Standard**	**CS Recoveries**	
					CS 37Cl-2378-TCDD	86.3	
Total TCDD	ND	0.462	ND		CS 12347-PeCDD	110	
Total PeCDD	ND	0.673	ND		CS 12346-PeCDF	95.9	
Total HxCDD	ND	0.306	ND		CS 123469-HxCDF	90.5	
Total HpCDD	ND	0.317	ND		CS 1234689-HpCDF	79.4	
Total TCDF	ND	0.127	ND				
Total PeCDF	ND	0.11	ND				
Total HxCDF	ND	0.137	ND				
Total HpCDF	ND	0.233	ND				
Total PCDD/Fs	**ND**		**ND**				
ITEF TEQs							
TEQ: ND=0	0		0				
TEQ: ND=DL/2	0.51	0.51	0.51				
TEQ: ND=DL	1.02	1.02	1.02				

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Sample ID: Method Blank B4526_17662 — TEQ Summary — Method 8290A

Client Project Name:	EarthCon	Matrix:	Soil	Lab Sample ID:	MB1_17662_DF_SDS
Cliend Project ID:	KMCC Navassa	Weight/Volume:	10.00 g	QC Batch No.:	17662
Date Collected:	n/a	Split:	-	Date Extracted:	10-Aug-2020
Date Received:	n/a	Dilution:	-	Date Analyzed:	11-Aug-2020 17:34
Lab Project No:	B4526	Units	pg/g		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	(0.462)		0.462	(0.462)	(0.462)	(0.462)
12378-PeCDD	(0.673)		0.673	(0.337)	(0.673)	(0.673)
123478-HxCDD	(0.3)		0.3	(0.03)	(0.03)	(0.03)
123678-HxCDD	(0.295)		0.295	(0.0295)	(0.0295)	(0.0295)
123789-HxCDD	(0.324)		0.324	(0.0324)	(0.0324)	(0.0324)
1234678-HpCDD	(0.317)		0.317	(0.00317)	(0.00317)	(0.00317)
OCDD	(0.833)		0.833	(0.000833)	(0.0000833)	(0.00025)
2378-TCDF	(0.127)		0.127	(0.0127)	(0.0127)	(0.0127)
12378-PeCDF	(0.128)		0.128	(0.00641)	(0.00641)	(0.00385)
23478-PeCDF	(0.0904)		0.0904	(0.0452)	(0.0452)	(0.0271)
123478-HxCDF	(0.131)		0.131	(0.0131)	(0.0131)	(0.0131)
123678-HxCDF	(0.117)		0.117	(0.0117)	(0.0117)	(0.0117)
234678-HxCDF	(0.133)		0.133	(0.0133)	(0.0133)	(0.0133)
123789-HxCDF	(0.178)		0.178	(0.0178)	(0.0178)	(0.0178)
1234678-HpCDF	(0.178)		0.178	(0.00178)	(0.00178)	(0.00178)
1234789-HpCDF	(0.315)		0.315	(0.00315)	(0.00315)	(0.00315)
OCDF	(0.569)		0.569	(0.000569)	(0.0000569)	(0.000171)

TEQ Summaries			
EMPC = 0, ND = 0	0	0	0
EMPC = 0, ND = DL / 2	0.51	0.678	0.668
EMPC = 0, ND = DL	1.02	1.36	1.34
EMPC = 0, < J-level = 0	0	0	0
EMPC = EMPC, ND = 0	0	0	0
EMPC = EMPC, ND = DL / 2	0.51	0.678	0.668
EMPC = EMPC, ND = DL	1.02	1.36	1.34
EMPC = EMPC, < J-level = 0	0	0	0

5500 Business Drive
Wilmington, NC 28405, USA
Tel: +1 910 794-1613; Toll-Free 866 846-8290
www.us.sgs.com



Checkcode: 538-153-BTS

METHOD 8290A **PCDD/F ONGOING PRECISION AND RECOVERY (OPR)** **FORM 8A**

Lab Name:	SGS North America		
Initial Calibration:	ICAL: HRMS3_DF_10122018_28AUG2019		
Instrument ID:	HRMS3	GC Column ID:	ZB-5ms
VER Data Filename:	200811C03	Analysis Date:	11-AUG-2020 16:01:53
Lab ID:	OPR1_17662_DF		

NATIVE ANALYTES	SPIKE CONC.	CONC. FOUND	RANGE (ng/mL)			OK
2,3,7,8-TCDD	10	9.92	6.7	-	15.8	Y
1,2,3,7,8-PeCDD	50	50.6	35	-	71	Y
1,2,3,4,7,8-HxCDD	50	57.5	35	-	82	Y
1,2,3,6,7,8-HxCDD	50	54.8	38	-	67	Y
1,2,3,7,8,9-HxCDD	50	55	32	-	81	Y
1,2,3,4,6,7,8-HpCDD	50	54	35	-	70	Y
OCDD	100	108	78	-	144	Y
2,3,7,8-TCDF	10	11.9	7.5	-	15.8	Y
1,2,3,7,8-PeCDF	50	50.7	40	-	67	Y
2,3,4,7,8-PeCDF	50	56.2	34	-	80	Y
1,2,3,4,7,8-HxCDF	50	53.6	36	-	67	Y
1,2,3,6,7,8-HxCDF	50	51.9	42	-	65	Y
2,3,4,6,7,8-HxCDF	50	55.6	35	-	78	Y
1,2,3,7,8,9-HxCDF	50	52.7	39	-	65	Y
1,2,3,4,6,7,8-HpCDF	50	52.5	41	-	61	Y
1,2,3,4,7,8,9-HpCDF	50	51.8	39	-	69	Y
OCDF	100	107	63	-	170	Y

Contract-required concentration limits for OPR as specified in Table 6,
Method 1613. 10/94

Processed: 12 Aug 2020 15:21 Analyst: TF

METHOD 8290A **PCDD/F ONGOING PRECISION AND RECOVERY (OPR)** **FORM 8B**

Lab Name: SGS North America
Initial Calibration: ICAL: HRMS3_DF_10122018_28AUG2019
Instrument ID: HRMS3 GC Column ID: ZB-5ms
VER Data Filename: 200811C03 Analysis Date: 11-AUG-2020 16:01:53
Lab ID: OPR1_17662_DF

LABELED ANALYTES	SPIKE CONC.	CONC. FOUND	RANGE (ng/mL)			OK
13C-2,3,7,8-TCDD	100	94.1	20	-	175	Y
13C-1,2,3,7,8-PeCDD	100	89.3	21	-	227	Y
13C-1,2,3,4,7,8-HxCDD	100	86.9	21	-	193	Y
13C-1,2,3,6,7,8-HxCDD	100	86.1	25	-	163	Y
13C-1,2,3,7,8,9-HxCDD	100	78.6	26	-	166	Y
13C-1,2,3,4,6,7,8-HpCDD	100	78.9	26	-	166	Y
13C-OCDD	200	118	26	-	397	Y
13C-2,3,7,8-TCDF	100	96	22	-	152	Y
13C-1,2,3,7,8-PeCDF	100	86.8	21	-	192	Y
13C-2,3,4,7,8-PeCDF	100	89.2	13	-	328	Y
13C-1,2,3,4,7,8-HxCDF	100	98.3	19	-	202	Y
13C-1,2,3,6,7,8-HxCDF	100	95.6	21	-	159	Y
13C-2,3,4,6,7,8-HxCDF	100	92.6	22	-	176	Y
13C-1,2,3,7,8,9-HxCDF	100	88.2	17	-	205	Y
13C-1,2,3,4,6,7,8-HpCDF	100	88.9	21	-	158	Y
13C-1,2,3,4,7,8,9-HpCDF	100	78	20	-	186	Y
13C-OCDF	200	119	26	-	397	Y
CLEANUP STANDARD						
37Cl-2,3,7,8-TCDD	40	34	12.4	-	76.4	Y

Contract-required concentration limits for OPR as specified in Table 6,
Method 1613. 10/94

Processed: 12 Aug 2020 15:21 Analyst: TF

Sample Receipt Notification

5500 Business Drive
Wilmington, NC 28405 USA
Tel: 910 794-1613
Toll Free: 866 846-8290
Fax: 910 794-3919

Project Manager:	*Tamara Burkamper*
Receipt Date & Time:	*07-Aug-20 at 15:19*
AP Project name:	*B4526*
Requested TAT:	*3 business days*
Projected due date:	*13-Aug-20*
Matrix:	*Soil*
Phone#:	*910-794-1613*
Email Address:	*Tamara.Morgan@sgs.com*

Company Contact:	*Mary Brookshire*
Company:	*EarthCon*
Project Name & Site:	*KMCC Navassa*
Project PO#:	*02.20200007.00*
QAAP/Contract #:	*on file*
Requested Analysis:	*SW-846 Method 8290A*
Phone#:	*404-317-7748*
Email Address:	*mbrookshire@earthcon.com*

Client Smp ID	AP Smp ID	Sample Condition & Notes	Quantity	Size	Sampling Date	Sampling Time	Received Temp (°C)	Container #	Shipping #
CS-29	B4526_001	SO	1	4 oz. Amber	06-Aug-20	14:45	0.8	1	n/a
CS-30	B4526_002	SO	1	4 oz. Amber	06-Aug-20	14:20	0.8	1	n/a
CS-31	B4526_003	SO	1	4 oz. Amber	06-Aug-20	15:10	0.8	1	n/a
DUP-01	B4526_004	SO	1	4 oz. Amber	06-Aug-20	00:00	0.8	1	n/a
CS-40	B4526_005	SO	1	4 oz. Amber	07-Aug-20	08:40	0.8	1	n/a
CS-41	B4526_006	SO - MS/MSD	3	4 oz. Amber	07-Aug-20	09:11	0.8	1	n/a
CS-42	B4526_007	SO	1	4 oz. Amber	07-Aug-20	09:45	0.8	1	n/a
CS-43	B4526_008	SO	1	4 oz. Amber	07-Aug-20	10:10	0.8	1	n/a
CS-44	B4526_009	SO	1	4 oz. Amber	07-Aug-20	10:45	0.8	1	n/a
CS-45	B4526_010	SO	1	4 oz. Amber	07-Aug-20	11:30	0.8	1	n/a
CS-54	B4526_011	SO	1	4 oz. Amber	07-Aug-20	11:50	0.8	1	n/a
CS-46	B4526_012	SO	1	4 oz. Amber	07-Aug-20	12:12	0.8	1	n/a
CS-47	B4526_013	SO	1	4 oz. Amber	07-Aug-20	12:42	0.8	1	n/a

Preservation Type: **Sample Seals:** No

Notes/Comments:

Samples received intact

Any un-extracted sample will be stored for 90 days from reporting date. Additional storage fees may apply for any samples stored longer than 90 days.

Received by: Ashley Owens *Logged in by: Tamara Burkamper* *QC'ed by:* AK 10 Aug 20

All services are rendered in accordance with the applicable SGS General Conditions of Service accessible via: http://www.sgs.com/terms_and_conditions.htm

Rush - 3 day TAT
ou1

SGS North America Inc - Orlando
Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 FAX: 407-425-0707
www.sgs.com

SGS - ~~ORLANDO~~ JOB # : B4526 PAGE 1 OF 2

SGS - ORLANDO Quote # | SKIFF #

Client / Reporting Information

Company Name: EarthCon
Address: 1880 W. Oak Pkwy
City: Marietta State: GA Zip: 30062
Project Contact: M. Brookshire Email: mbrookshire@earthcon.com
Phone #: 404-317-7748
Sampler(s) Name(s) (Printed)
Sampler 1: S. Tyler Sampler 2:

Project Information

Project Name: KMCC Navassa
Street 120 Quality Dr
City Navassa State NC
Project # 02.20200007.00
Fax #
Client Purchase Order #

Analytical Information

SGS ~~Orlando~~ Sample #	Field ID / Point of Collection	COLLECTION DATE	TIME	SAMPLED BY:	CONTAINER INFORMATION MATRIX	TOTAL # OF BOTTLES	OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NAOH+ZNAC	DI WATER	MEOH	Dioxins/Furans 8290	LAB USE ONLY
001	CS-29	8/6/20	1445	ST	SO	1	1									1	
002	CS-30	8/6/20	1420	ST	SO	1	1									1	
003	CS-31	8/6/20	1510	ST	SO	1	1									1	
004	DUP-01	8/6/20	—	ST	SO	1	1									1	
005	CS-40	8/7/20	0840	ST	SO	1	1									1	
006	CS-41	8/7/20	0911	ST	SO	1	1									1	
006	CS-41 MS	8/7/20	0911	ST	SO	1	1									1	
006	CS-41 MSD	8/7/20	0911	ST	SO	1	1									1	
007	CS-42	8/7/20	0945	ST	SO	1	1									1	
008	CS-43	8/7/20	1010	ST	SO	1	1									1	
009	CS-44	8/7/20	1045	ST	SO	1	1									1	
010	CS-45	8/7/20	1130	ST	SO	1	1									1	

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid

Turnaround Time (Business days)

10 Day (Business) Approved By: / Date:
7 Day
5 Day
3 Day *RUSH* _____
2 Day *RUSH* _____
1 Day *RUSH* _____
Other _____
Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- [ ] COMMERCIAL "A" (RESULTS ONLY)
- [ ] COMMERCIAL "B" (RESULTS PLUS QC)
- [ ] REDT1 (EPA LEVEL 3)
- [ ] FULLT1 (EPA LEVEL 4)
- [ ] EDD'S

Comments / Remarks

Rush - 3 day TAT

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
1	Mary Brook	8/7/20 1519	2	3		4
5	Relinquished by/Affiliation	Date Time:	Received By/Affiliation 6	Relinquished By/Affiliation 7	Date Time:	Received By/Affiliation 8

SGS-ILM 0.8°

Lab Use Only : Cooler Temperature (s) Celsius (corrected): _____

http://www.sgs.com/en/terms-and-conditions

ORLD-SMT-0001-03-FORM-COC (4).xls Rev 031318

Rush 3 day TAT
DUI

SGS North America Inc - Orlando
Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 FAX: 407-425-0707
www.sgs.com

B4526

SGS - ~~ORLANDO~~ JOB # :

SGS - ORLANDO Quote #

SKIFF #

Client / Reporting Information

Company Name: EarthCon
Address: 1880 W. Oak Pkwy
City: Marietta State: GA Zip: 30062
Project Contact: M. Brookshire Email: mbrookshire@earthcon.com
Phone #: 404-317-7748
Sampler(s) Name(s) (Printed)
Sampler 1: S. Tyler Sampler 2:

Project Information

Project Name: KMCC Navassa
Street: 120 Quality Dr
City: Navassa State: NC
Project #: 02.20200007.00
Fax #:
Client Purchase Order #:

Analytical Information

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid

SGS ~~Orlando~~ Sample #	Field ID / Point of Collection	COLLECTION DATE	TIME	SAMPLED BY:	CONTAINER INFORMATION MATRIX	TOTAL # OF BOTTLES	OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NAOH+ZNA	DI WATER	MEOH	DIOXINS 8290	LAB USE ONLY
011	CS-54	8/7/20	1150	ST	SO	1	1									1	
012	CS-46	8/7/20	1212	ST	SO	1	1									1	
013	CS-47	8/7/20	1242	ST	SO	1	1									1	

Turnaround Time (Business days)

10 Day (Business) Approved By: / Date:
7 Day
5 Day
3 Day *RUSH*
2 Day *RUSH*
1 Day *RUSH*
Other

Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- [ ] COMMERCIAL "A" (RESULTS ONLY)
- [ ] COMMERCIAL "B" (RESULTS PLUS QC)
- [ ] REDT1 (EPA LEVEL 3)
- [ ] FULLT1 (EPA LEVEL 4)
- [ ] EDD'S

Comments / Remarks

Rush - 3 day TAT

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
1	8/7/20 1519	2	3		4
Relinquished by/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
5		6	7		8

SGS-10M 0.8°

Lab Use Only : Cooler Temperature (s) Celsius (corrected):

http://www.sgs.com/en/terms-and-conditions

SGS

Project Initiation Form

Project Number: B4526

Initiation Date: 10-Aug-20

Client Name: EarthCon

Analysis Method: 8290 PCDD/F

Sample Matrix: Soil

TAT: 3 days

Project Manager: Tamara

Special Instructions

M8290A w/OPR

10 g DWE extraction

Create MS/MSD from B4526_006

May contain high levels

Reporting Instructions

M8290A w/OPR

Create MS/MSD summary for B4526_006

May contain high levels
EQUIS4 file with headers and w/o VVL validation

EPA Region 4 Equis

Full Report TB 8/12/2020

PM Initials: akornegay Date: 10-Aug-20

SGS

Methods: PCB PAH (PCDD/F) WHO-2 QUANTICS USV PEST

Extraction Type: (SDS) CLL TALEX Carbon SPE

Solid

Final Volume: 20 mL

Batch# 17662 | Split: 1/2 ~~1/4~~ | Extract Initial/Date: 8/3/10/2020 | Clean-up Initial/Date: RAB 8/11/2020 | Transfer Init/Date: RAB 8/11/2020

Lab Sample ID	Extraction Position / Solvent: TOL	Extraction Weight/Volume g	mL	(Td)	ASECS #	Observations
B4526_17662_001	3	10.46				Brown, moist, sandy
B4526_17662_002	4	10.63				See 001
B4526_17662_003	5	10.28				Dark, moist, sandy
B4526_17662_004	6	10.43				See 001
B4526_17662_005	7	10.40				See 003
B4526_17662_006	8	10.57				See 003
B4526_17662_006MS	9	10.37				See 003
B4526_17662_006MSD	10	10.56				See 003
B4526_17662_007	11	10.17				See 003
B4526_17662_008	12	10.34				See 003
B4526_17662_009	13	10.65				See 003
B4526_17662_010	14	10.11				See 003
B4526_17662_011	15	10.29				See 003
B4526_17662_012	16	10.22				See 003
B4526_17662_013	17	10.14				See 003
MB1_17662	1	10.00				Sodium sulfate
OPR1_17662	2	10.00				Sodium sulfate

~~RAB~~ 8/11/2020

Supply IDs

Toluene	STL 13-5
MeCHL	STL13-8
Florisil	SPL4-289B
Hexane	STL13-7
Silica	SPL4-279B
S Nitrate	SPL4-290
Base Silica	SPL4-291
HydroMatrix	N/A
Tetradecane	SPL4-277A
H_2SO_4	N/A
A Silica	SPL4-287
Sodium Sulfate	SPL4-264A

Additional Cleanup

Acid Partition Date/Initial:	
Mini-Acid Date/Initial:	
Carbon Column Date/Initial:	TB 8/13/2020
GPC Date/Initial:	
Bond-Elute Date/Initial:	

Cycle Time

TOL	Start:	1650
	Stop:	0815
HEX	Start:	
	Stop:	
DCM	Start:	
	Stop:	

SGS

Methods: PCB PCDD/F QUANTICS PAH WHO-2 USV PEST

Solid

Batch# 17662

Inter-Department Communication Sheet

- Valley check for TCDF failed in opening clock failed. All samples in first clock were ND for TCDF and its close eluter. DTF 8/12/20

8/13/2020

TB

SGS

Wt. Volume Results

Batch #: 17662

Comments:

TB 8/13/2020

Lab Sample ID	Boat WT.	Sample Wt. + Boat Wt.	Dried Sample + Boat Wt.	% Solid	Average % Solid	RSD	Qtest Ratio (if Applicable)	Dry Wt. Equiv.	Extracted Wt.	Final Wt.
B4526_001	0.8	4.11	3.84	91.84%	91.84%			10.89	10.46	9.61
B4526_002	0.8	3.6	3.32	90.00%	90.00%			11.11	10.63	9.57
B4526_003	0.8	3.78	3.5	90.60%	90.60%			11.04	10.28	9.31
B4526_004	0.79	3.53	3.31	91.97%	91.97%			10.87	10.43	9.59
B4526_005	0.8	3.84	3.54	90.13%	90.13%			11.09	10.4	9.37
B4526_006	0.8	3.63	3.26	86.93%	86.93%			11.5	10.57	9.19
B4526_006MS	0.8	3.63	3.26	86.93%	86.93%			11.5	10.37	9.01
B4526_006MSD	0.8	3.63	3.26	86.93%	86.93%			11.5	10.56	9.18
B4526_007	0.8	3.52	3.1	84.56%	84.56%			11.83	10.17	8.6
B4526_008	0.81	3.77	3.46	89.53%	89.53%			11.17	10.34	9.26
B4526_009	0.81	4.52	4.04	87.06%	87.06%			11.49	10.65	9.27
B4526_010	0.81	3.52	3.27	90.77%	90.77%			11.02	10.11	9.18
B4526_011	0.8	3.59	3.27	88.53%	88.53%			11.3	10.29	9.11
B4526_012	0.79	3.35	3.01	86.72%	86.72%			11.53	10.22	8.86
B4526_013	0.8	3.35	2.92	83.14%	83.14%			12.03	10.14	8.43

TB 8/13/2020

% Solid Determination WorkSheet

SGS

Batch: 17662

Lab Sample ID	Boat Wt.	Sample Wt. + Boat Wt.	Dried Sample + Boat Wt.	Comments
B4526_17662_001	0.80	4.11	3.84	
B4526_17662_002	0.80	3.60	3.32	
B4526_17662_003	0.80	3.78	3.50	
B4526_17662_004	0.79	3.53	3.31	
B4526_17662_005	0.80	3.84	3.54	
B4526_17662_006	0.80	3.63	3.26	
B4526_17662_006MS	—	—	—	
B4526_17662_006MSD	—	—	—	
B4526_17662_007	0.80	3.52	3.10	TB 8/13/2020
B4526_17662_008	0.81	3.77	3.46	
B4526_17662_009	0.81	4.52	4.04	
B4526_17662_010	0.81	3.52	3.27	
B4526_17662_011	0.80	3.59	3.27	
B4526_17662_012	0.79	3.35	3.01	
B4526_17662_013	0.80	3.35	2.92	
		TB 8/13/2020		
Date/Initials:		8/10/2020	8/11/20	

SGS

Methods: PCB / PAH | PCDD/F / WHO-2 | QUANTICS / USV | PEST

Solid

Batch # 17662

Lab Sample ID	D/F Ax-A	D/F Ax-B	D/F ES	D/F CS	D/F JS		
Spiker Initials/Date:	8/10/20	8/10/20	8/10/20	RJS 8/11/2020	RJS 8/11/2020		
	Amount: 20µL	Amount: 20µL	Amount: 20µL	Amount: 20µL	Amount: 20µL	Amount:	Amount:
	Observer Initials	Observer Initials	Observer Initials	Observer Initials	Observer Initials	Observer Initials	Observer Initials
B4526_17662_001	–	–	AH	RJS	RJS		
B4526_17662_002	–	–	AH	RJS	RJS		
B4526_17662_003	–	–	AH	RJS	RJS		
B4526_17662_004	–	–	AH	RJS	RJS		
B4526_17662_005	–	–	AH	RJS	RJS		
B4526_17662_006	–	–	AH	RJS	RJS		
B4526_17662_006MS	AH	AH	AH	RJS	RJS		
B4526_17662_006MSD	AH	AH	AH	RJS	RJS		
B4526_17662_007	–	–	AH	RJS	RJS		
B4526_17662_008	–	–	AH	RJS	RJS		
B4526_17662_009	–	–	AH	RJS	RJS		
B4526_17662_010	–	–	AH	RJS	RJS		
B4526_17662_011	–	–	AH	RJS	RJS		
B4526_17662_012	–	–	AH	RJS	RJS		
B4526_17662_013	–	–	AH	RJS	RJS		
MB1_17662	–	–	AH	RJS	RJS		
OPR1_17662	AH	AH	AH	RJS	RJS		
	8/10/20	8/10/20	8/10/20	8/11/20	8/11/20		
		RJS 8/11/2020					

Standard Information

Spike ID	DF Ax-A	DF Ax-B	DF ES	D/F CS	D/F JS		
SIL #	23-12-15	20-1638-2	24-2-1	23-4411-1	23-4411-2		
Concentration	10 ng/mL	10 pg/uL	100 pg/uL	100 P/µL	100 P/µL		
Expiration Date	4-7-25	6-17-21	8/2028	5/21/21	5/21/21		

Instrument: HRMS3 (AutoSpec-Ultima) MS Experiment: df_cl4-8_db5MS GC Program: df_db5MS

#	Datafile	Vial#	Lab ID	Wt/Vol	Client/Sample ID	Analyst(s)	Checkcode	Acq Date	Acq Time
1	200811C01	3	CS3_200811_DF_CA	1.00	20-449-3	DTF	192-644	11-Aug-2020	14:07:14
3	200811C03	13	OPR1_17662_DF	1.00	0_17662_OPR001	DTF	588-924	11-Aug-2020	16:01:53
4	200811C04	2	SBS_200811_DF_CA	1.00	20-61-1	DTF	763-428	11-Aug-2020	16:47:59
5	200811C05	12	MB1_17662_DF_SDS	10.00	Method Blank	DTF	538-153	11-Aug-2020	17:34:32
6	200811C06	14	B4526_17662_DF_001	9.61	CS-29	DTF	961-528	11-Aug-2020	18:21:06
7	200811C07	15	B4526_17662_DF_002	9.57	CS-30	DTF	142-051	11-Aug-2020	19:07:39
8	200811C08	16	B4526_17662_DF_003	9.31	CS-31	DTF	967-394	11-Aug-2020	19:54:13
9	200811C09	17	B4526_17662_DF_004	9.59	DUP-01	DTF	789-289	11-Aug-2020	20:40:40
10	200811C10	18	B4526_17662_DF_005	9.37	CS-40	DTF	675-832	11-Aug-2020	21:27:12
12	200811C12	2	SBS_200811_DF_CB	1.00	20-61-1	DTF	635-275	11-Aug-2020	23:00:18
13	200811C13	3	CS3_200811_DF_CB	1.00	20-449-3 CL 13Aug20	DTF	691-754	11-Aug-2020	23:46:51
14	200811C14	13	OPR1_17662_DF-RJ	1.00	0_17662_OPR001 CPSM	DTF	590-786	12-Aug-2020	00:41:26
15	200811C15	2	SBS_200811_DF_CC	1.00	20-61-1 only	DTF	428-898	12-Aug-2020	01:27:28
16	200811C16	19	B4526_17662_DF_006	9.19	CS-41	DTF	379-455	12-Aug-2020	02:13:58
17	200811C17	20	B4526_17662_DF_006MS	9.01	CS-41-MS	DTF	194-587	12-Aug-2020	03:00:28
18	200811C18	21	B4526_17662_DF_006MSD	9.18	CS-41-MSD	DTF	184-857	12-Aug-2020	03:46:59
19	200811C19	22	B4526_17662_DF_007	8.60	CS-42	DTF	726-292	12-Aug-2020	04:33:31
20	200811C20	23	B4526_17662_DF_008	9.26	CS-43	DTF	877-121	12-Aug-2020	05:20:01
21	200811C21	24	B4526_17662_DF_009	9.27	CS-44	DTF	738-667	12-Aug-2020	06:06:32
22	200811C22	25	B4526_17662_DF_010	9.18	CS-45	DTF	659-912	12-Aug-2020	06:53:04
23	200811C23	26	B4526_17662_DF_011	9.11	CS-54	DTF	657-818	12-Aug-2020	07:39:34
24	200811C24	27	B4526_17662_DF_012	8.86	CS-46	DTF	313-403	12-Aug-2020	08:26:04
25	200811C25	28	B4526_17662_DF_013	8.43	CS-47	DTF	033-297	12-Aug-2020	09:12:35
26	200811C26	2	SBS_200811_DF_CD	1.00	20-61-1	DTF	057-830	12-Aug-2020	09:59:05
27	200811C27	3	CS3_200811_DF_CC	1.00	20-449-3	DTF	593-054	12-Aug-2020	10:45:34

APPROVED
Carla_Lyon , 11:49:36, 08/13/2020

REVIEWED
By Tyler_Fritz at 3:54 pm, Aug 12, 2020

Project file: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\B4526_17662_DF.utp_prj, saved 12-Aug-2020 15:50
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689

Printed: 12-Aug-2020 15:51

Lab ID: MB1_17662_DF_SDS **Acq'd:** 11 Aug 2020 17:34 DTF **Wt/Vol:** 10.00 g **ICAL:** HRMS3_DF_10122018_28AUG2019

Client ID: Method Blank B4526_17662 **UTP:** 12-Aug-2020 15:18:28 DTF **J-level:** 0.5 pg/g **Split:** 1 **Checkcode:** 538-153-BTS

Datafile: 200811C05 **Report:** 12 Aug 2020 15:21 TF **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	NotFnd		1.0008	-		-	-	-	1.19	-	14493	0.462
12378-PeCDD	NotFnd		1.0006	-		-	-	-	0.98	-	13346	0.673
123478-HxCDD	NotFnd		1.0004	-		-	-	-	1.02	-	7464	0.3
123678-HxCDD	NotFnd		1.0036	-		-	-	-	1.09	-	7464	0.295
123789-HxCDD	NotFnd		1.0118	-		-	-	-	0.97	-	7464	0.324
1234678-HpCDD	NotFnd		1.0003	-		-	-	-	0.98	-	4753	0.317
OCDD	NotFnd		1.0003	-		-	-	-	1.07	-	3583	0.833
2378-TCDF	NotFnd		1.0009	-		-	-	-	1.01	-	4642	0.127
12378-PeCDF	NotFnd		1.0006	-		-	-	-	0.96	-	4591	0.128
23478-PeCDF	NotFnd		1.0005	-		-	-	-	0.99	-	4591	0.0904
123478-HxCDF	NotFnd		1.0005	-		-	-	-	1.21	-	4389	0.131
123678-HxCDF	NotFnd		1.0005	-		-	-	-	1.11	-	4389	0.117
234678-HxCDF	NotFnd		1.0004	-		-	-	-	1.12	-	4389	0.133
123789-HxCDF	NotFnd		1.0005	-		-	-	-	1.11	-	4389	0.178
1234678-HpCDF	NotFnd		1.0003	-		-	-	-	1.32	-	4981	0.178
1234789-HpCDF	NotFnd		1.0003	-		-	-	-	1.26	-	4981	0.315
OCDF	NotFnd		1.0003	-		-	-	-	1.03	-	2923	0.569

Name	Act RT	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	26.92	1.0266	1.0267	+0.2	6.08E+07	0.80	Y	0.99	91.4
ES 12378-PeCDD	32.67	1.2430	1.2460	+5.9	5.14E+07	1.55	Y	0.83	92.1
ES 123478-HxCDD	36.69	0.9916	0.9916	0	4.20E+07	1.24	Y	0.95	90.8
ES 123678-HxCDD	36.81	0.9947	0.9948	+0.2	4.42E+07	1.24	Y	0.98	93
ES 123789-HxCDD	37.11	1.0029	1.0029	0	4.71E+07	1.29	Y	1.14	84.9
ES 1234678-HpCDD	40.17	1.0851	1.0857	+1.4	3.15E+07	1.03	Y	0.90	72
ES OCDD	42.89	1.1584	1.1593	+2.3	2.82E+07	0.86	Y	0.63	46.1
ES 2378-TCDF	25.97	1.0602	1.0608	+0.9	9.02E+07	0.82	Y	1.00	101
ES 12378-PeCDF	31.10	1.2683	1.2704	+3.9	7.39E+07	1.58	Y	0.83	99.1
ES 23478-PeCDF	32.28	1.3156	1.3186	+5.8	6.95E+07	1.54	Y	0.81	96.1
ES 123478-HxCDF	35.68	0.9644	0.9644	0	4.94E+07	0.52	Y	1.12	90.2
ES 123678-HxCDF	35.83	0.9682	0.9683	+0.2	5.87E+07	0.53	Y	1.33	90.3
ES 234678-HxCDF	36.50	0.9864	0.9865	+0.2	5.24E+07	0.54	Y	1.21	88.9
ES 123789-HxCDF	37.47	1.0128	1.0128	0	4.43E+07	0.54	Y	1.12	81.1
ES 1234678-HpCDF	39.15	1.0578	1.0582	+0.9	4.04E+07	0.47	Y	0.92	89.5
ES 1234789-HpCDF	40.60	1.0967	1.0973	+1.5	2.71E+07	0.47	Y	0.82	67.7
ES OCDF	43.04	1.1623	1.1632	+2.3	3.49E+07	0.88	Y	0.78	45.8

Lab ID: MB1_17662_DF_SDS | Acq'd: 11 Aug 2020 17:34 DTF | Wt/Vol: 10.00 g | ICAL: HRMS3_DF_10122018_28AUG2019

Client ID: Method Blank B4526_17662 | UTP: 12-Aug-2020 15:18:28 DTF | J-level: 0.5 pg/g | Split: 1 | Checkcode: 538-153-BTS

Datafile: 200811C05 | Report: 12 Aug 2020 15:21 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %	
JS 1234-TCDD	26.22		-	-	-	6.72E+07	0.81	Y	-	-	
JS 1234-TCDF	24.48		-	-	-	8.99E+07	0.79	Y	-	-	
JS 123467-HxCDD	37.00		-	-	-	2.44E+07	1.20	Y	-	-	
CS 37Cl-2378-TCDD	26.95		1.0276	1.0276	0	2.60E+07	n/a	-	1.12	86.3	
CS 12347-PeCDD	32.12		1.2233	1.2249	+3.1	5.28E+07	1.58	Y	0.71	110	
CS 12346-PeCDF	30.55		1.2459	1.2479	+3.7	6.97E+07	1.55	Y	0.81	95.9	
CS 123469-HxCDF	36.14		0.9767	0.9767	0	4.96E+07	0.55	Y	1.12	90.5	
CS 1234689-HpCDF	39.59		1.0696	1.0701	+1.2	3.47E+07	0.46	Y	0.90	79.4	
~~SS 37Cl-2378-TCDD~~	~~26.95~~		~~1.0276~~	~~1.0276~~	~~0~~	~~2.60E+07~~	~~n/a~~		~~1.14~~	~~93.7~~	Not used in this project.
~~SS 12347-PeCDD~~	~~32.12~~		~~1.2233~~	~~1.2249~~	~~+3.1~~	~~5.28E+07~~	~~1.58~~	~~Y~~	~~0.86~~	~~119~~	CL 13Aug20
~~SS 12346-PeCDF~~	~~30.55~~		~~1.2459~~	~~1.2479~~	~~+3.7~~	~~6.97E+07~~	~~1.55~~	~~Y~~	~~0.98~~	~~96.4~~	
~~SS 123469-HxCDF~~	~~36.14~~		~~0.9767~~	~~0.9767~~	~~0~~	~~4.96E+07~~	~~0.55~~	~~Y~~	~~0.85~~	~~99.8~~	
~~SS 1234689-HpCDF~~	~~39.59~~		~~1.0696~~	~~1.0701~~	~~+1.2~~	~~3.47E+07~~	~~0.46~~	~~Y~~	~~0.97~~	~~88.3~~	

Totals	Conc	EMPC
Total TCDD	0	0
Total PeCDD	0	0
Total HxCDD	0	0
Total HpCDD	0	0
Total Tetra-Octa Dioxins	0	0
Total TCDF	0	0
Total PeCDF	0	0
Total HxCDF	0	0
Total HpCDF	0	0
Total Tetra-Octa Furans	0	0
Total Tetra-Octa Dioxins & Furans	0	0

Lab ID: MB1_17662_DF_SDS | Acq'd: 11 Aug 2020 17:34 DTF | Wt/Vol: 10.00 g | ICAL: HRMS3_DF_10122018_28AUG2019

Client ID: Method Blank B4526_17662 | UTP: 12-Aug-2020 15:18:28 DTF | J-level: 0.5 pg/g | Split: 1 | Checkcode: 538-153-BTS

Datafile: 200811C05 | Report: 12 Aug 2020 15:21 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1368-TCDD	NotFnd		0.8523						1.19		14493	0.462
1379-TCDD	NotFnd		0.8682						1.19		14493	0.462
1369-TCDD	NotFnd		0.8858						1.19		14493	0.462
1469-TCDD	NotFnd		0.9177						1.19		14493	0.462
1247/1246/1248/1249-TCDD	NotFnd		0.9274						1.19		14493	0.462
1378-TCDD	NotFnd		0.9349						1.19		14493	0.462
1268-TCDD	NotFnd		0.9430						1.19		14493	0.462
1478-TCDD	NotFnd		0.9529						1.19		14493	0.462
1279-TCDD	NotFnd		0.9597						1.19		14493	0.462
1234/1269-TCDD	NotFnd		0.9739						1.19		14493	0.462
1236-TCDD	NotFnd		0.9794						1.19		14493	0.462
1237/1238-TCDD	NotFnd		0.9895						1.19		14493	0.462
1239-TCDD	NotFnd		0.9950						1.19		14493	0.462
2378-TCDD	**NotFnd**		**1.0008**						**1.19**		**14493**	**0.462**
1278-TCDD	NotFnd		1.0139						1.19		14493	0.462
1267-TCDD	NotFnd		1.0194						1.19		14493	0.462
1289-TCDD	NotFnd		1.0397						1.19		14493	0.462
12479/12468-PeCDD	NotFnd		0.9209						0.98		13346	0.673
12469-PeCDD	NotFnd		0.9382						0.98		13346	0.673
12368-PeCDD	NotFnd		0.9557						0.98		13346	0.673
12478-PeCDD	NotFnd		0.9617						0.98		13346	0.673
12379-PeCDD	NotFnd		0.9649						0.98		13346	0.673
12369/12467/12489-PeCDD	NotFnd		0.9732						0.98		13346	0.673
12346/12347-PeCDD	NotFnd		0.9850						0.98		13346	0.673
12378-PeCDD	NotFnd		**1.0006**						**0.98**		**13346**	**0.673**
12367-PeCDD	NotFnd		1.0038						0.98		13346	0.673
12389-PeCDD	NotFnd		1.0146						0.98		13346	0.673
124679/124689-HxCDD	NotFnd		0.9530						1.03		7464	0.306
123468-HxCDD	NotFnd		0.9715						1.03		7464	0.306
123679/123689-HxCDD	NotFnd		0.9795						1.03		7464	0.306
123469-HxCDD	NotFnd		0.9832						1.03		7464	0.306
123478-HxCDD	NotFnd		**1.0004**						1.02		**7464**	**0.3**
123678-HxCDD	NotFnd		**1.0036**						1.09		**7464**	**0.295**
123467-HxCDD	NotFnd		1.0089						1.03		7464	0.306
123789-HxCDD	NotFnd		**1.0118**						0.97		**7464**	**0.324**

Lab ID: MB1_17662_DF_SDS | Acq'd: 11 Aug 2020 17:34 DTF | Wt/Vol: 10.00 g | ICAL: HRMS3_DF_10122018_28AUG2019

Client ID: Method Blank B4526_17662 | UTP: 12-Aug-2020 15:18:28 DTF | J-level: 0.5 pg/g | Split: 1 | Checkcode: 538-153-BTS

Datafile: 200811C05 | Report: 12 Aug 2020 15:21 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

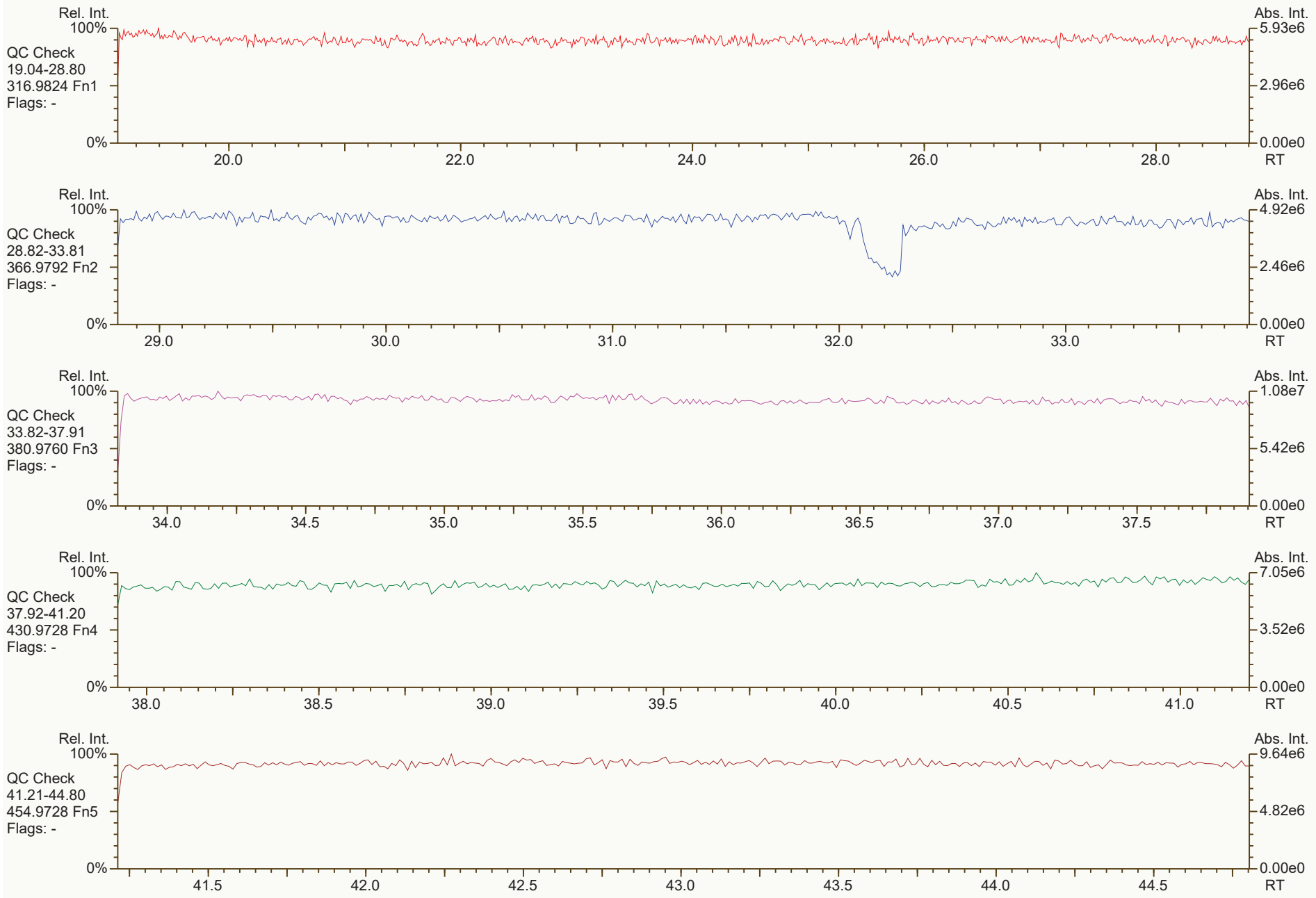
Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1234679-HpCDD	NotFnd		0.9826						0.98		4753	0.317
1234678-HpCDD	**NotFnd**		**1.0003**						**0.98**		**4753**	**0.317**
OCDD	**NotFnd**		**1.0003**						**1.07**		**3583**	**0.833**
OCDD-a	NotFnd	**#VALUE!**	1.0002						-		6622	#VALUE!
1368-TCDF	NotFnd		0.7980						1.01		4642	0.127
1468-TCDF	NotFnd		0.8204						1.01		4642	0.127
2468-TCDF	NotFnd		0.8443						1.01		4642	0.127
1346/1246-TCDF	NotFnd		0.8597						1.01		4642	0.127
1347/1378/1247-TCDF	NotFnd		0.8665						1.01		4642	0.127
1348-TCDF	NotFnd		0.8785						1.01		4642	0.127
1248/1367/1379-TCDF	NotFnd		0.8840						1.01		4642	0.127
1268-TCDF	NotFnd		0.9004						1.01		4642	0.127
1467-TCDF	NotFnd		0.9060						1.01		4642	0.127
1478-TCDF	NotFnd		0.9132						1.01		4642	0.127
1369/1237-TCDF	NotFnd		0.9287						1.01		4642	0.127
2467-TCDF	NotFnd		0.9345						1.01		4642	0.127
2368-TCDF	NotFnd		0.9409						1.01		4642	0.127
1238/1234/1678/1469/1236-TCDF	NotFnd		0.9450						1.01		4642	0.127
1278-TCDF	NotFnd		0.9638						1.01		4642	0.127
1349-TCDF	NotFnd		0.9685						1.01		4642	0.127
1267-TCDF	NotFnd		0.9751						1.01		4642	0.127
2346/1249-TCDF	NotFnd		0.9831						1.01		4642	0.127
2347/1279-TCDF	NotFnd		0.9920						1.01		4642	0.127
2348-TCDF	NotFnd		0.9964						1.01		4642	0.127
2378-TCDF	**NotFnd**		**1.0009**						**1.01**		**4642**	**0.127**
2367/3467-TCDF	NotFnd		1.0164						1.01		4642	0.127
1269-TCDF	NotFnd		1.0259						1.01		4642	0.127
1239-TCDF	NotFnd		1.0373						1.01		4642	0.127
1289-TCDF	NotFnd		1.0838						1.01		4642	0.127
13468/12468-PeCDF	NotFnd		0.9052						0.98		3171	0.0758
13678/13467/12467-PeCDF	NotFnd		0.9582						0.98		4591	0.11
12368/13478/12478-PeCDF	NotFnd		0.9634						0.98		4591	0.11
14678-PeCDF	NotFnd		0.9668						0.98		4591	0.11
13479-PeCDF	NotFnd		0.9700						0.98		4591	0.11
13469/12479-PeCDF	NotFnd		0.9781						0.98		4591	0.11
12346-PeCDF	NotFnd		0.9829						0.98		4591	0.11

Lab ID: MB1_17662_DF_SDS | Acq'd: 11 Aug 2020 17:34 DTF | Wt/Vol: 10.00 g | ICAL: HRMS3_DF_10122018_28AUG2019

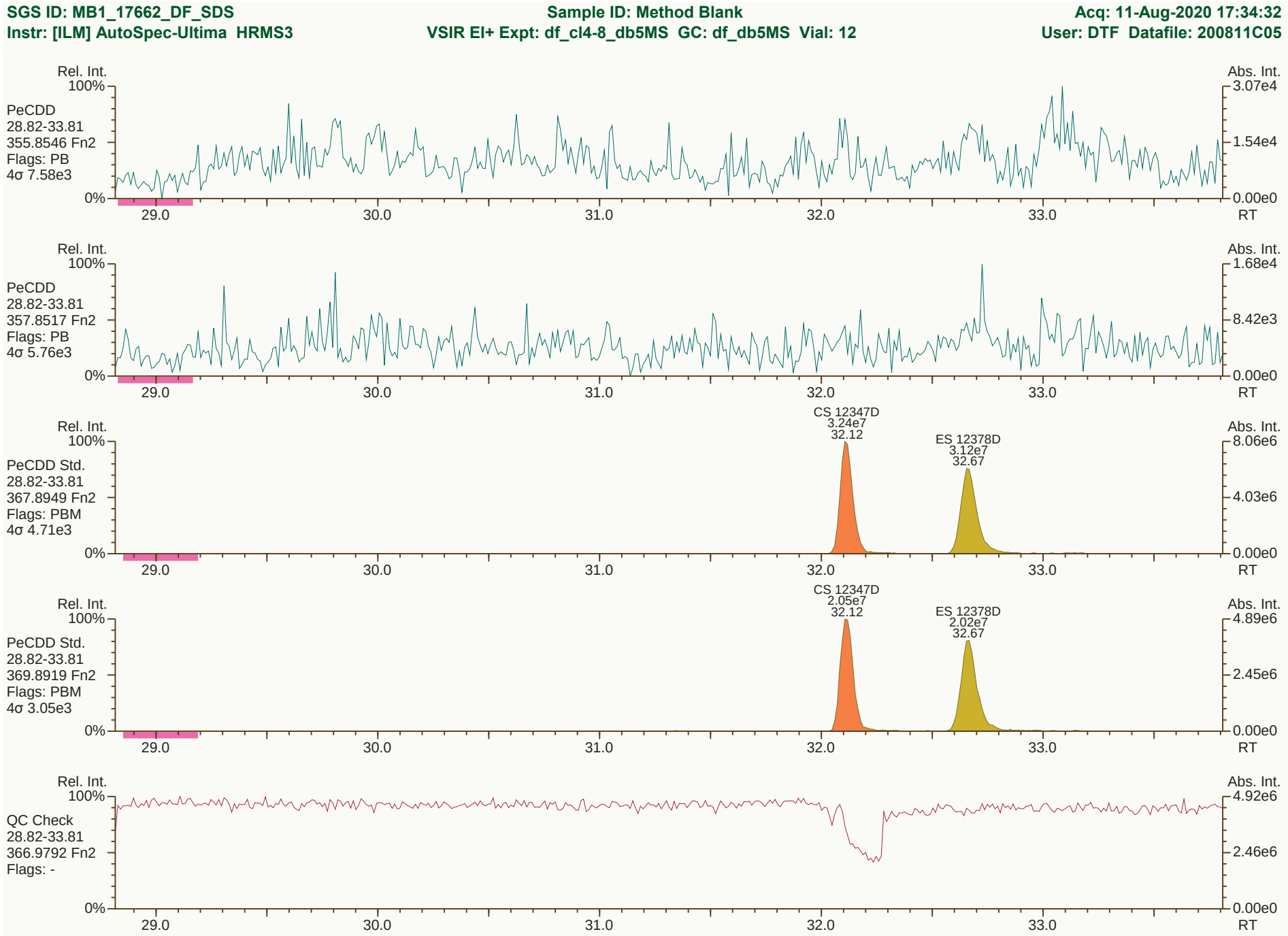
Client ID: Method Blank B4526_17662 | UTP: 12-Aug-2020 15:18:28 DTF | J-level: 0.5 pg/g | Split: 1 | Checkcode: 538-153-BTS

Datafile: 200811C05 | Report: 12 Aug 2020 15:21 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
23468/12469-PeCDF	NotFnd		0.9859						0.98		4591	0.11
12347-PeCDF	NotFnd		0.9884						0.98		4591	0.11
12348-PeCDF	NotFnd		0.9937						0.98		4591	0.11
12378-PeCDF	**NotFnd**		**1.0006**						**0.96**		**4591**	**0.128**
12678/12367-PeCDF	NotFnd		1.0097						0.98		4591	0.11
12379-PeCDF	NotFnd		1.0152						0.98		4591	0.11
12679-PeCDF	NotFnd		0.9923						0.98		4591	0.11
23467/12369-PeCDF	NotFnd		0.9966						0.98		4591	0.11
23478-PeCDF	**NotFnd**		**1.0005**						**0.99**		**4591**	**0.0904**
23478/12489-PeCDF	NotFnd		0.0000						0.99			
12489-PeCDF	NotFnd		1.0043						0.98		4591	0.11
12349-PeCDF	NotFnd		1.0107						0.98		4591	0.11
12389-PeCDF	NotFnd		1.0349						0.98		4591	0.11
123468-HxCDF	NotFnd		0.9607						1.13		4389	0.137
124678/134678-HxCDF	NotFnd		0.9666						1.13		4389	0.137
134679-HxCDF	NotFnd		0.9730						1.13		4389	0.137
124679-HxCDF	NotFnd		0.9787						1.13		4389	0.137
124689-HxCDF	NotFnd		0.9850						1.13		4389	0.137
123467-HxCDF	NotFnd		0.9971						1.13		4389	0.137
123478-HxCDF	**NotFnd**		**1.0005**						**1.21**		**4389**	**0.131**
123678-HxCDF	**NotFnd**		**1.0005**						**1.11**		**4389**	**0.117**
123479-HxCDF	NotFnd		1.0049						1.13		4389	0.137
123469-HxCDF	NotFnd		1.0090						1.13		4389	0.137
123679-HxCDF	NotFnd		0.9941						1.13		4389	0.137
234678-HxCDF	**NotFnd**		**1.0004**						**1.12**		**4389**	**0.133**
234678/123689-HxCDF	NotFnd		0.0000						1.12			
123689-HxCDF	NotFnd		1.0041						1.13		4389	0.137
123789-HxCDF	**NotFnd**		**1.0005**						**1.11**		**4389**	**0.178**
123789/123489-HxCDF	NotFnd		0.0000						1.11			
123489-HxCDF	NotFnd		1.0009						1.13		4389	0.137
1234678-HpCDF	**NotFnd**		**1.0003**						**1.32**		**4981**	**0.178**
1234679-HpCDF	NotFnd		1.0075						1.29		4981	0.233
1234689-HpCDF	NotFnd		1.0112						1.29		4981	0.233
1234789-HpCDF	**NotFnd**		**1.0003**						**1.26**		**4981**	**0.315**
OCDF	**NotFnd**		**1.0003**						**1.03**		**2923**	**0.569**
OCDF-a	NotFnd	**#VALUE!**	1.0002						-		3387	#VALUE!


Rel. Int.
100%
QC Check
19.04-28.80
316.9824 Fn1
Flags: -
0%
20.0
22.0
24.0
26.0
28.0
Abs. Int.
5.93e6
2.96e6
0.00e0
RT
Rel. Int.
100%
QC Check
28.82-33.81
366.9792 Fn2
Flags: -
0%
29.0
30.0
31.0
32.0
33.0
Abs. Int.
4.92e6
2.46e6
0.00e0
RT
Rel. Int.
100%
QC Check
33.82-37.91
380.9760 Fn3
Flags: -
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
Abs. Int.
1.08e7
5.42e6
0.00e0
RT
Rel. Int.
100%
QC Check
37.92-41.20
430.9728 Fn4
Flags: -
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
Abs. Int.
7.05e6
3.52e6
0.00e0
RT
Rel. Int.
100%
QC Check
41.21-44.80
454.9728 Fn5
Flags: -
0%
41.5
42.0
42.5
43.0
43.5
44.0
44.5
Abs. Int.
9.64e6
4.82e6
0.00e0
RT

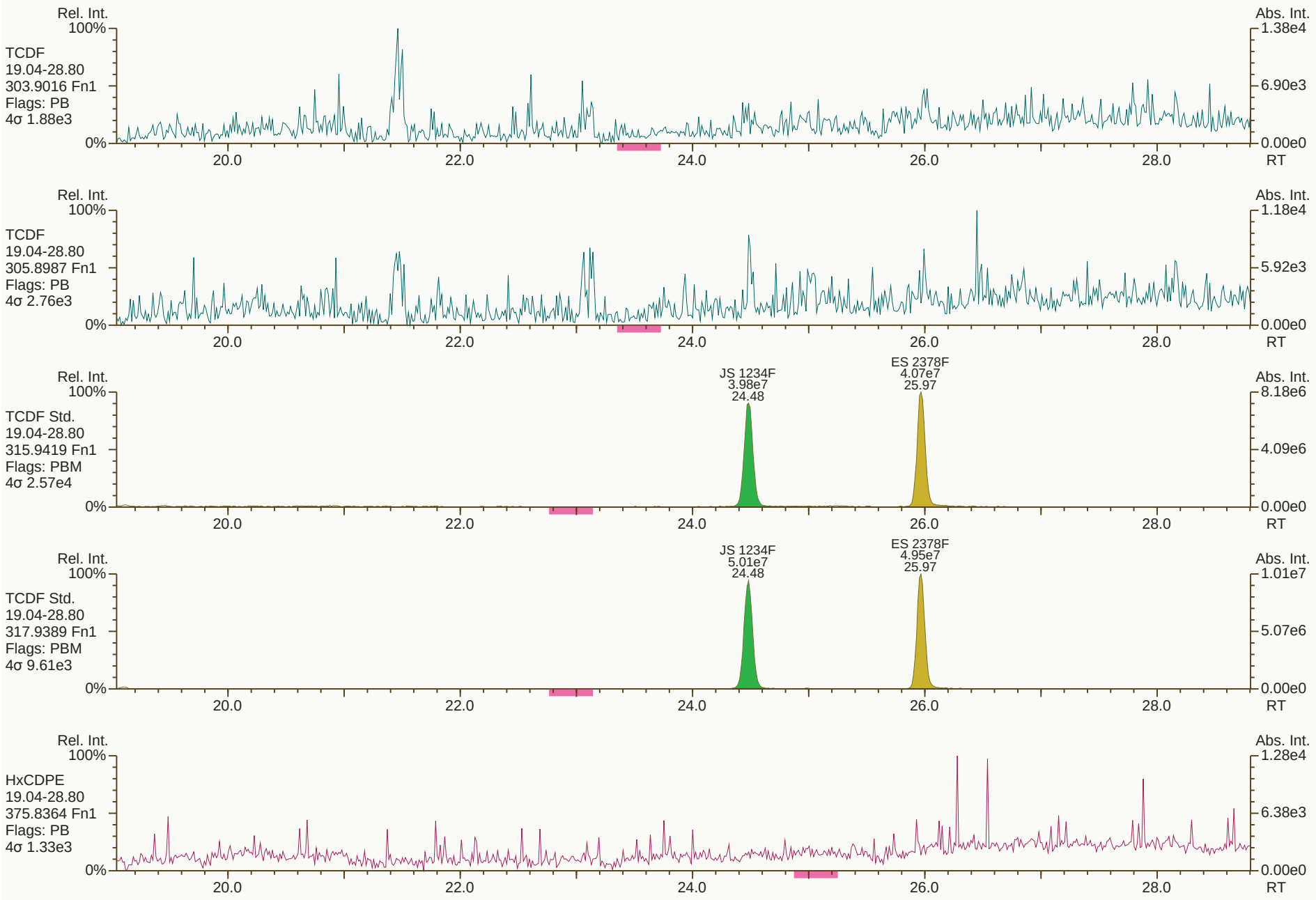

Rel. Int.
100%
TCDD
19.04-28.80
319.8965 Fn1
Flags: B
4σ 9.63e3
0%
Abs. Int.
1.11e5
5.54e4
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD
19.04-28.80
321.8936 Fn1
Flags: B
4σ 4.86e3
0%
Abs. Int.
5.43e4
2.72e4
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
37Cl-TCDD
19.04-28.80
327.8850 Fn1
Flags: PBM
4σ 5.51e3
0%
CS 37Cl-2378D
2.60e7
26.95
Abs. Int.
5.50e6
2.75e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.80
331.9368 Fn1
Flags: PBM
4σ 7.91e3
0%
JS 1234D
3.01e7
26.22
ES 2378D
2.69e7
26.92
Abs. Int.
6.33e6
3.16e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.80
333.9339 Fn1
Flags: PBM
4σ 3.66e3
0%
JS 1234D
3.71e7
26.22
ES 2378D
3.38e7
26.92
Abs. Int.
8.08e6
4.04e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT


SGS ID: MB1_17662_DF_SDS
Sample ID: Method Blank
Acq: 11-Aug-2020 17:34:32
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 12
User: DTF Datafile: 200811C05
Rel. Int.
Abs. Int.
PeCDD
28.82-33.81
355.8546 Fn2
Flags: PB
4σ 7.58e3
3.07e4
1.54e4
0.00e0
PeCDD
28.82-33.81
357.8517 Fn2
Flags: PB
4σ 5.76e3
1.68e4
8.42e3
PeCDD Std.
28.82-33.81
367.8949 Fn2
Flags: PBM
4σ 4.71e3
CS 12347D
3.24e7
32.12
ES 12378D
3.12e7
32.67
8.06e6
4.03e6
PeCDD Std.
28.82-33.81
369.8919 Fn2
Flags: PBM
4σ 3.05e3
CS 12347D
2.05e7
32.12
ES 12378D
2.02e7
32.67
4.89e6
2.45e6
QC Check
28.82-33.81
366.9792 Fn2
Flags: -
4.92e6
2.46e6
100%
0%
29.0
30.0
31.0
32.0
33.0
RT
Results: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\MB1_17662_DF_SDS.utp_res, saved 12-Aug-2020 15:18 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 7556, 1152 scc: 538-153
Revised: 12-Aug-2020 10:29 (DTF) Printed: 12-Aug-2020 15:33 Page 3 of 12

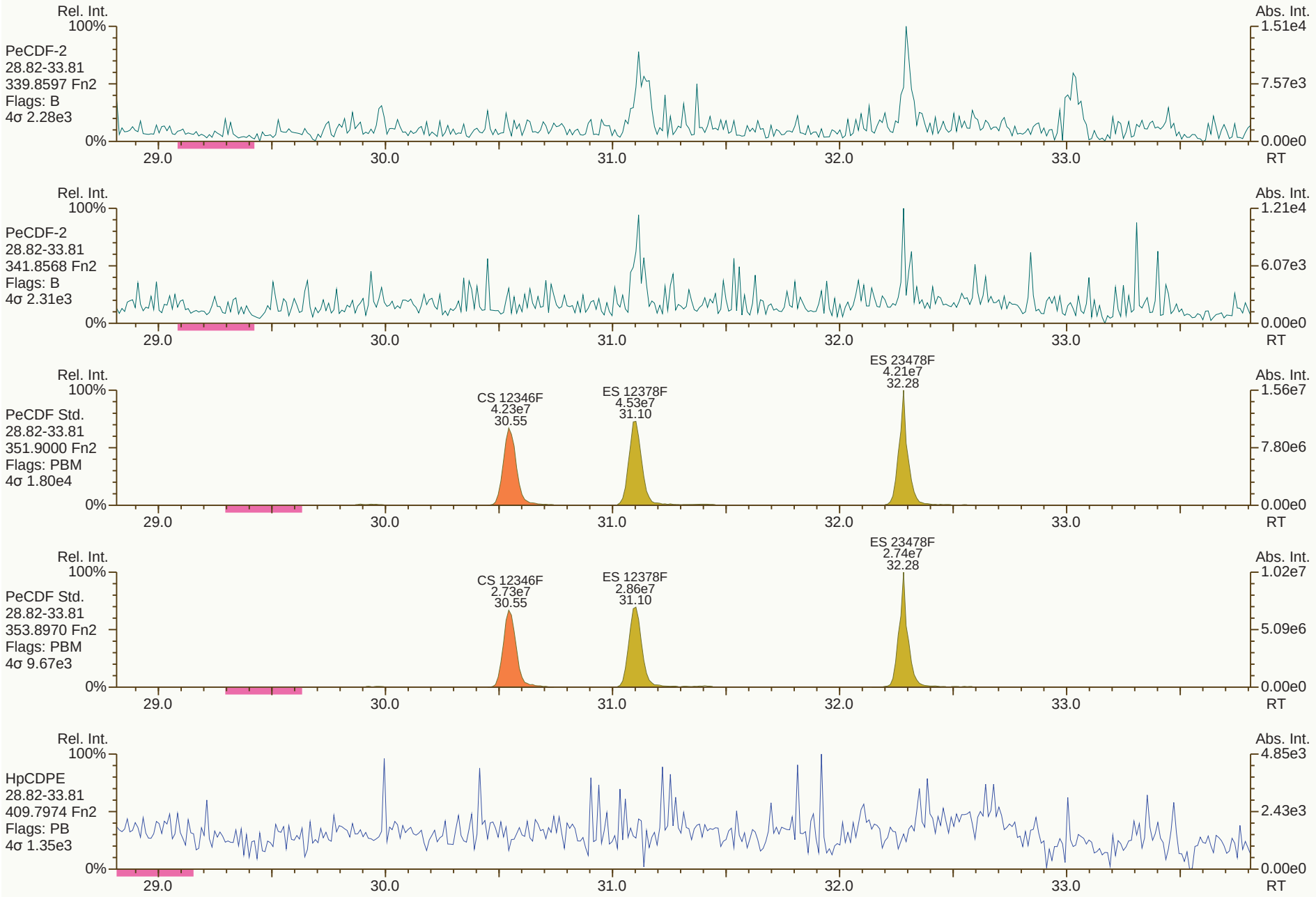

Rel. Int.
100%
HxCDD
33.82-37.91
389.8156 Fn3
Flags: PB
4σ 4.66e3
0%
Abs. Int.
1.18e4
5.88e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD
33.82-37.91
391.8127 Fn3
Flags: PB
4σ 2.80e3
0%
Abs. Int.
1.03e4
5.13e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.82-37.91
401.8559 Fn3
Flags: PBM
4σ 5.07e3
0%
ES 123678D
2.45e7
36.81
ES 123478D
2.32e7
36.69
ES 123789D
2.65e7
37.11
JS 123467D
1.33e7
37.00
Abs. Int.
6.71e6
3.35e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.82-37.91
403.8530 Fn3
Flags: PBM
4σ 3.21e3
0%
ES 123678D
1.98e7
36.81
ES 123478D
1.88e7
36.69
ES 123789D
2.06e7
37.11
JS 123467D
1.11e7
37.00
Abs. Int.
5.44e6
2.72e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
QC Check
33.82-37.91
380.9760 Fn3
Flags: -
0%
Abs. Int.
1.08e7
5.42e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT

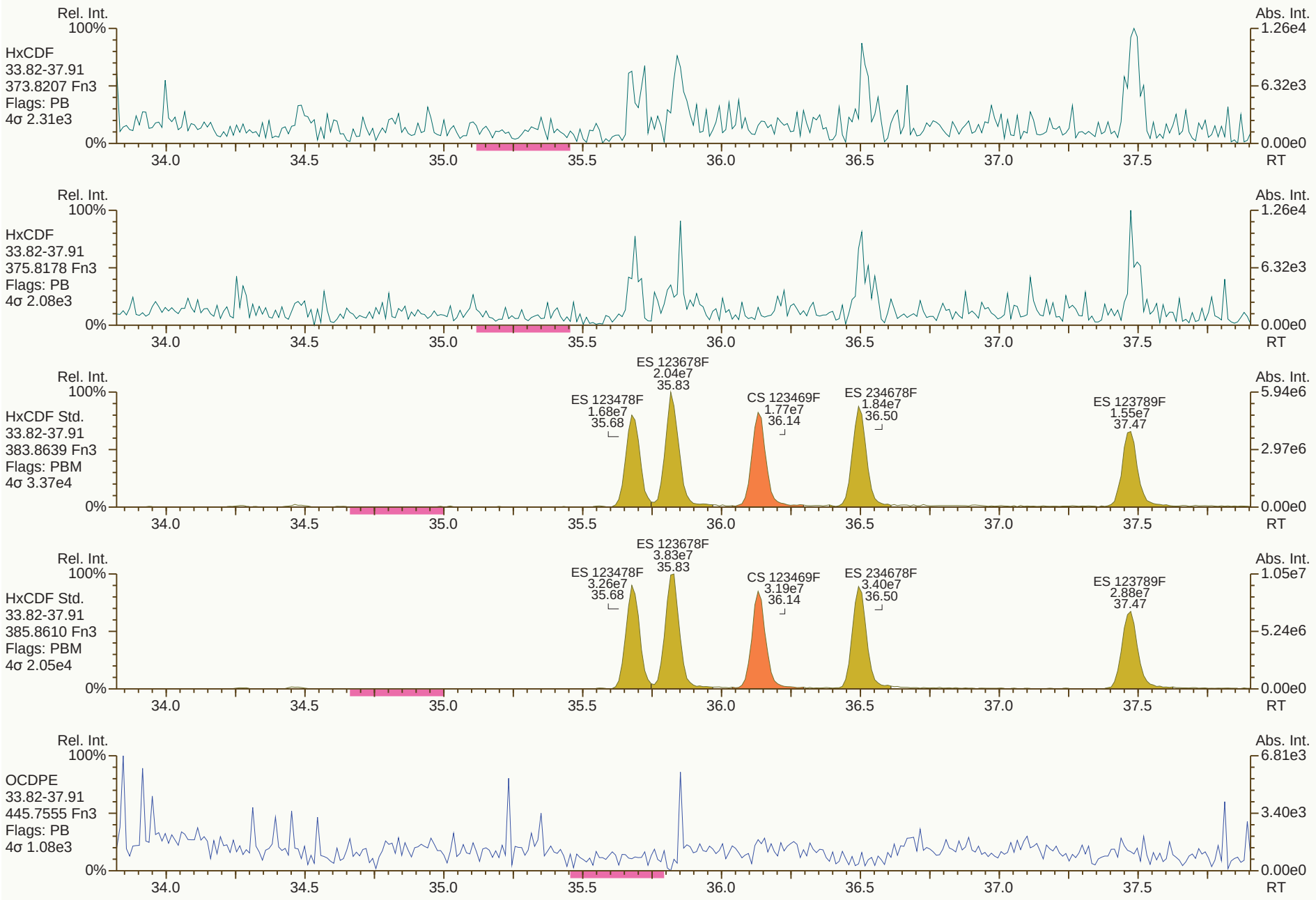

Rel. Int.
100%
HpCDD
37.92-41.20
423.7767 Fn4
Flags: PB
4σ 3.12e3
0%
Abs. Int.
1.13e4
5.63e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD
37.92-41.20
425.7737 Fn4
Flags: PB
4σ 1.63e3
0%
Abs. Int.
1.32e4
6.60e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
ES 1234678D
1.60e7
40.17
Rel. Int.
100%
HpCDD Std.
37.92-41.20
435.8169 Fn4
Flags: PBM
4σ 2.89e3
0%
Abs. Int.
3.88e6
1.94e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
ES 1234678D
1.55e7
40.17
Rel. Int.
100%
HpCDD Std.
37.92-41.20
437.8140 Fn4
Flags: PBM
4σ 1.49e3
0%
Abs. Int.
3.50e6
1.75e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
QC Check
37.92-41.20
430.9728 Fn4
Flags: -
0%
Abs. Int.
7.05e6
3.52e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT

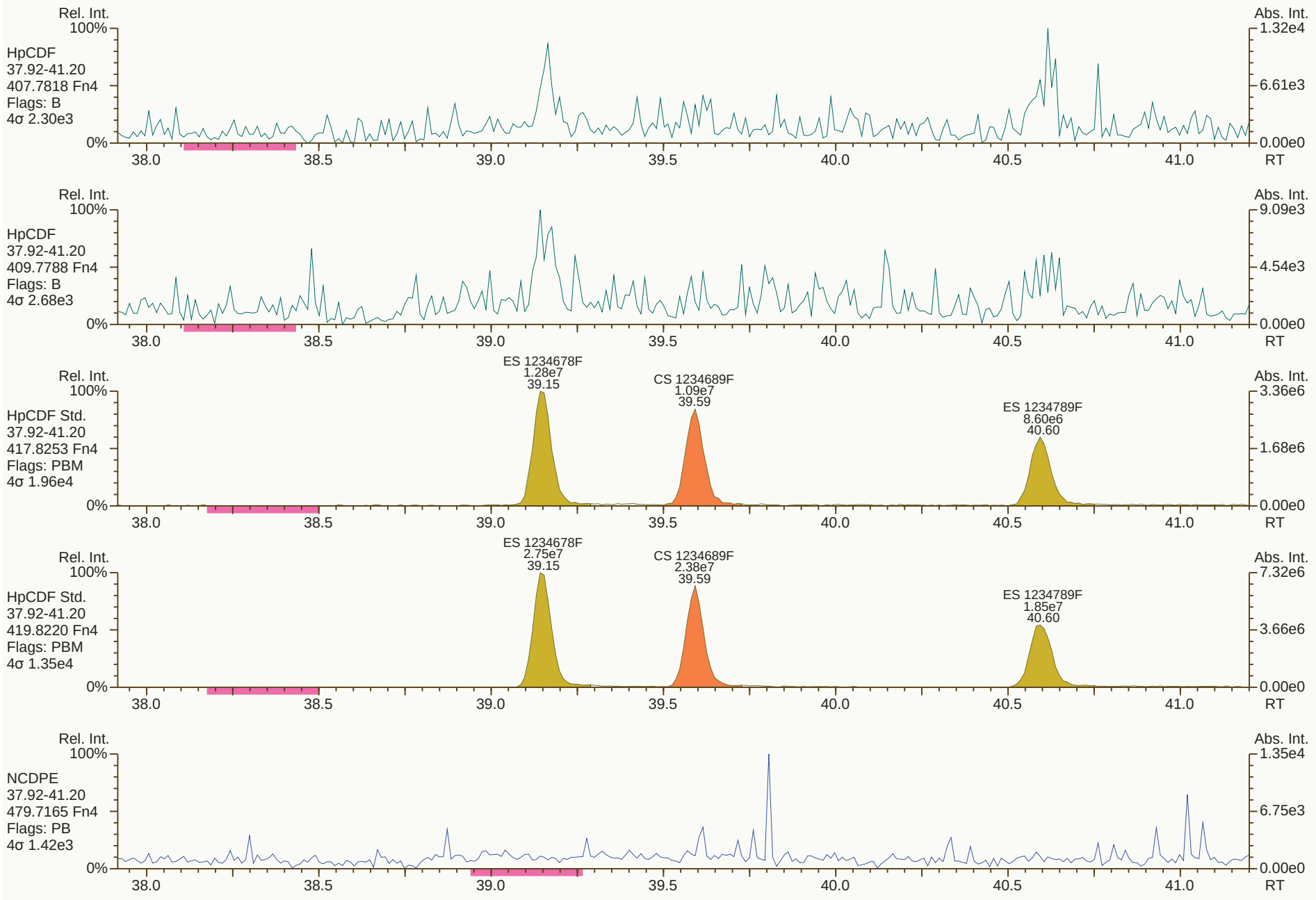

Rel. Int.
100%
OCDD
41.21-44.80
457.7377 Fn5
Flags: B
4σ 1.55e3
0%
Abs. Int.
7.63e3
3.81e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDD
41.21-44.80
459.7348 Fn5
Flags: B
4σ 2.04e3
0%
Abs. Int.
1.08e4
5.42e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDD
1.30e7
42.89
Rel. Int.
100%
OCDD Std.
41.21-44.80
469.7780 Fn5
Flags: PBM
4σ 1.35e3
0%
Abs. Int.
1.86e6
9.28e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDD
1.52e7
42.89
Rel. Int.
100%
OCDD Std.
41.21-44.80
471.7750 Fn5
Flags: PBM
4σ 1.34e3
0%
Abs. Int.
2.23e6
1.12e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
QC Check
41.21-44.80
454.9728 Fn5
Flags: -
0%
Abs. Int.
9.64e6
4.82e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT


Rel. Int.
100%
TCDF
19.04-28.80
303.9016 Fn1
Flags: PB
4σ 1.88e3
0%
Abs. Int.
1.38e4
6.90e3
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDF
19.04-28.80
305.8987 Fn1
Flags: PB
4σ 2.76e3
0%
Abs. Int.
1.18e4
5.92e3
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDF Std.
19.04-28.80
315.9419 Fn1
Flags: PBM
4σ 2.57e4
0%
JS 1234F
3.98e7
24.48
ES 2378F
4.07e7
25.97
Abs. Int.
8.18e6
4.09e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDF Std.
19.04-28.80
317.9389 Fn1
Flags: PBM
4σ 9.61e3
0%
JS 1234F
5.01e7
24.48
ES 2378F
4.95e7
25.97
Abs. Int.
1.01e7
5.07e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
HxCDPE
19.04-28.80
375.8364 Fn1
Flags: PB
4σ 1.33e3
0%
Abs. Int.
1.28e4
6.38e3
0.00e0
20.0
22.0
24.0
26.0
28.0
RT


Rel. Int.
100%
0%
Abs. Int.
9.66e3
4.83e3
0.00e0
PeCDF-1
19.04-28.80
339.8597 Fn1
Flags: PB
4σ 1.57e3
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
0%
Abs. Int.
1.41e4
7.04e3
0.00e0
PeCDF-1
19.04-28.80
341.8568 Fn1
Flags: PB
4σ 1.60e3
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
0%
Abs. Int.
5.93e6
2.96e6
0.00e0
QC Check
19.04-28.80
316.9824 Fn1
Flags: -
20.0
22.0
24.0
26.0
28.0
RT


Rel. Int.
100%
PeCDF-2
28.82-33.81
339.8597 Fn2
Flags: B
4σ 2.28e3
0%
Abs. Int.
1.51e4
7.57e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF-2
28.82-33.81
341.8568 Fn2
Flags: B
4σ 2.31e3
0%
Abs. Int.
1.21e4
6.07e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.82-33.81
351.9000 Fn2
Flags: PBM
4σ 1.80e4
0%
CS 12346F
4.23e7
30.55
ES 12378F
4.53e7
31.10
ES 23478F
4.21e7
32.28
Abs. Int.
1.56e7
7.80e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.82-33.81
353.8970 Fn2
Flags: PBM
4σ 9.67e3
0%
CS 12346F
2.73e7
30.55
ES 12378F
2.86e7
31.10
ES 23478F
2.74e7
32.28
Abs. Int.
1.02e7
5.09e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
HpCDPE
28.82-33.81
409.7974 Fn2
Flags: PB
4σ 1.35e3
0%
Abs. Int.
4.85e3
2.43e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT


Rel. Int.
100%
HxCDF
33.82-37.91
373.8207 Fn3
Flags: PB
4σ 2.31e3
0%
Abs. Int.
1.26e4
6.32e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF
33.82-37.91
375.8178 Fn3
Flags: PB
4σ 2.08e3
0%
Abs. Int.
1.26e4
6.32e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF Std.
33.82-37.91
383.8639 Fn3
Flags: PBM
4σ 3.37e4
0%
ES 123678F
2.04e7
35.83
ES 123478F
1.68e7
35.68
CS 123469F
1.77e7
36.14
ES 234678F
1.84e7
36.50
ES 123789F
1.55e7
37.47
Abs. Int.
5.94e6
2.97e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF Std.
33.82-37.91
385.8610 Fn3
Flags: PBM
4σ 2.05e4
0%
ES 123678F
3.83e7
35.83
ES 123478F
3.26e7
35.68
CS 123469F
3.19e7
36.14
ES 234678F
3.40e7
36.50
ES 123789F
2.88e7
37.47
Abs. Int.
1.05e7
5.24e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
OCDPE
33.82-37.91
445.7555 Fn3
Flags: PB
4σ 1.08e3
0%
Abs. Int.
6.81e3
3.40e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT


Rel. Int.
100%
HpCDF
37.92-41.20
407.7818 Fn4
Flags: B
4σ 2.30e3
0%
Abs. Int.
1.32e4
6.61e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF
37.92-41.20
409.7788 Fn4
Flags: B
4σ 2.68e3
0%
Abs. Int.
9.09e3
4.54e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.92-41.20
417.8253 Fn4
Flags: PBM
4σ 1.96e4
0%
ES 1234678F
1.28e7
39.15
CS 1234689F
1.09e7
39.59
ES 1234789F
8.60e6
40.60
Abs. Int.
3.36e6
1.68e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.92-41.20
419.8220 Fn4
Flags: PBM
4σ 1.35e4
0%
ES 1234678F
2.75e7
39.15
CS 1234689F
2.38e7
39.59
ES 1234789F
1.85e7
40.60
Abs. Int.
7.32e6
3.66e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
NCDPE
37.92-41.20
479.7165 Fn4
Flags: PB
4σ 1.42e3
0%
Abs. Int.
1.35e4
6.75e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT


Rel. Int.
100%
OCDF
41.21-44.80
441.7428 Fn5
Flags: B
4σ 9.99e2
0%
Abs. Int.
1.07e4
5.33e3
0.00e0
RT
41.5
42.0
42.5
43.0
43.5
44.0
44.5
Rel. Int.
100%
OCDF
41.21-44.80
443.7398 Fn5
Flags: B
4σ 1.92e3
0%
Abs. Int.
7.66e3
3.83e3
0.00e0
RT
ES OCDF
1.63e7
43.04
Rel. Int.
100%
OCDF Std.
41.21-44.80
453.7830 Fn5
Flags: PBM
4σ 4.28e3
0%
Abs. Int.
2.33e6
1.16e6
0.00e0
RT
ES OCDF
1.86e7
43.03
Rel. Int.
100%
OCDF Std.
41.21-44.80
455.7801 Fn5
Flags: PBM
4σ 6.40e3
0%
Abs. Int.
2.83e6
1.42e6
0.00e0
RT
Rel. Int.
100%
DCDPE
41.21-44.80
513.6775 Fn5
Flags: PB
4σ 1.24e3
0%
Abs. Int.
5.46e3
2.73e3
0.00e0
RT

Lab ID: B4526_17662_DF_001 **Acq'd:** 11 Aug 2020 18:21 DTF **Wt/Vol:** 9.61 g **ICAL:** HRMS3_DF_10122018_28AUG2019

Client ID: CS-29 **UTP:** 12-Aug-2020 15:18:29 DTF **J-level:** 0.52 pg/g **Split:** 1 **Checkcode:** 961-528-HYR

Datafile: 200811C06 **Report:** 12 Aug 2020 15:21 TF **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	NotFnd		1.0008	-		-	-	-	1.19	-	4219	0.191
12378-PeCDD	NotFnd		1.0006	-		-	-	-	0.98	-	2979	0.167
123478-HxCDD	NotFnd		1.0004	-		-	-	-	1.02	-	6569	0.401
123678-HxCDD	NotFnd		1.0036	-		-	-	-	1.09	-	6569	0.419
123789-HxCDD	NotFnd		1.0118	-		-	-	-	0.97	-	6569	0.437
1234678-HpCDD	40.16		1.0003	1.0004	+0.2	6.23E+05	1.10	Y	0.98	5.78	2263	0.207
OCDD	42.87		1.0003	1.0003	0	1.86E+07	0.90	Y	1.07	292	3413	0.899
2378-TCDF	NotFnd		1.0009	-		-	-	-	1.01	-	2836	0.105
12378-PeCDF	NotFnd		1.0006	-		-	-	-	0.96	-	3153	0.121
23478-PeCDF	NotFnd		1.0005	-		-	-	-	0.99	-	3153	0.122
123478-HxCDF	NotFnd		1.0005	-		-	-	-	1.21	-	3486	0.14
123678-HxCDF	NotFnd		1.0005	-		-	-	-	1.11	-	3486	0.145
234678-HxCDF	NotFnd		1.0004	-		-	-	-	1.12	-	3486	0.162
123789-HxCDF	NotFnd		1.0005	-		-	-	-	1.11	-	3486	0.171
1234678-HpCDF	39.14	J EMPC	1.0003	1.0002	-0.2	7.25E+04	1.25	N	1.32	0.421	1957	0.1
1234789-HpCDF	NotFnd		1.0003	-		-	-	-	1.26	-	1957	0.154
OCDF	NotFnd		1.0003	-		-	-	-	1.03	-	3350	0.661

Name	Act RT	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	26.90	1.0266	1.0268	+0.3	4.56E+07	0.78	Y	0.99	88.3
ES 12378-PeCDD	32.61	1.2430	1.2447	+3.3	3.49E+07	1.54	Y	0.83	80.4
ES 123478-HxCDD	36.67	0.9916	0.9916	0	2.80E+07	1.33	Y	0.95	81.1
ES 123678-HxCDD	36.79	0.9947	0.9947	0	2.78E+07	1.30	Y	0.98	78.1
ES 123789-HxCDD	37.09	1.0029	1.0029	0	3.05E+07	1.25	Y	1.14	73.4
ES 1234678-HpCDD	40.15	1.0851	1.0857	+1.4	2.30E+07	1.06	Y	0.90	70.1
ES OCDD	42.86	1.1584	1.1589	+1.3	2.47E+07	0.90	Y	0.63	54.1
ES 2378-TCDF	25.95	1.0602	1.0607	+0.8	6.51E+07	0.79	Y	1.00	88.6
ES 12378-PeCDF	31.08	1.2683	1.2704	+3.9	5.33E+07	1.58	Y	0.83	87
ES 23478-PeCDF	32.25	1.3156	1.3179	+4.5	5.07E+07	1.56	Y	0.81	85.2
ES 123478-HxCDF	35.66	0.9644	0.9642	-0.4	3.58E+07	0.53	Y	1.12	87.4
ES 123678-HxCDF	35.80	0.9682	0.9681	-0.2	4.13E+07	0.55	Y	1.33	85.1
ES 234678-HxCDF	36.48	0.9864	0.9864	0	3.66E+07	0.53	Y	1.21	83.1
ES 123789-HxCDF	37.46	1.0128	1.0128	0	3.55E+07	0.54	Y	1.12	86.9
ES 1234678-HpCDF	39.13	1.0578	1.0581	+0.7	2.71E+07	0.46	Y	0.92	80.3
ES 1234789-HpCDF	40.58	1.0967	1.0972	+1.2	2.13E+07	0.46	Y	0.82	71.3
ES OCDF	43.00	1.1623	1.1628	+1.3	3.20E+07	0.91	Y	0.78	56.2

Lab ID: B4526_17662_DF_001 | Acq'd: 11 Aug 2020 18:21 DTF | Wt/Vol: 9.61 g | ICAL: HRMS3_DF_10122018_28AUG2019

Client ID: CS-29 | UTP: 12-Aug-2020 15:18:29 DTF | J-level: 0.52 pg/g | Split: 1 | Checkcode: 961-528-HYR

Datafile: 200811C06 | Report: 12 Aug 2020 15:21 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %	
JS 1234-TCDD	26.20		-	-	-	5.22E+07	0.81	Y	-	-	
JS 1234-TCDF	24.47		-	-	-	7.39E+07	0.81	Y	-	-	
JS 123467-HxCDD	36.98		-	-	-	1.83E+07	1.23	Y	-	-	
CS 37Cl-2378-TCDD	26.93		1.0276	1.0276	0	1.99E+07	n/a	-	1.12	84.8	
CS 12347-PeCDD	32.09		1.2233	1.2248	+2.9	3.37E+07	1.55	Y	0.71	90.4	
CS 12346-PeCDF	30.53		1.2459	1.2479	+3.7	5.32E+07	1.55	Y	0.81	89.1	
CS 123469-HxCDF	36.11		0.9767	0.9765	-0.4	3.60E+07	0.54	Y	1.12	87.7	
CS 1234689-HpCDF	39.57		1.0696	1.0701	+1.2	2.66E+07	0.43	Y	0.90	81.3	
~~SS 37Cl-2378-TCDD~~	~~26.93~~		~~1.0276~~	~~1.0276~~	~~0~~	~~1.99E+07~~	~~n/a~~		~~1.14~~	~~95.3~~	Not used in this project.
~~SS 12347-PeCDD~~	~~32.09~~		~~1.2233~~	~~1.2248~~	~~+2.9~~	~~3.37E+07~~	~~1.55~~	~~Y~~	~~0.86~~	~~112~~	CL 13Aug20
~~SS 12346-PeCDF~~	~~30.53~~		~~1.2459~~	~~1.2479~~	~~+3.7~~	~~5.32E+07~~	~~1.55~~	~~Y~~	~~0.98~~	~~102~~	
~~SS 123469-HxCDF~~	~~36.11~~		~~0.9767~~	~~0.9765~~	~~-0.4~~	~~3.60E+07~~	~~0.54~~	~~Y~~	~~0.85~~	~~103~~	
~~SS 1234689-HpCDF~~	~~39.57~~		~~1.0696~~	~~1.0701~~	~~+1.2~~	~~2.66E+07~~	~~0.43~~	~~Y~~	~~0.97~~	~~101~~	

Totals	Conc	EMPC
Total TCDD	0	0
Total PeCDD	0	0
Total HxCDD	1.81	1.81
Total HpCDD	16	16
Total Tetra-Octa Dioxins	310	310
Total TCDF	0	0.295
Total PeCDF	0	0
Total HxCDF	0.27	0.27
Total HpCDF	0	0.421
Total Tetra-Octa Furans	0.27	0.987
Total Tetra-Octa Dioxins & Furans	310	311

Lab ID: B4526_17662_DF_001 | Acq'd: 11 Aug 2020 18:21 DTF | Wt/Vol: 9.61 g | ICAL: HRMS3_DF_10122018_28AUG2019

Client ID: CS-29 | UTP: 12-Aug-2020 15:18:29 DTF | J-level: 0.52 pg/g | Split: 1 | Checkcode: 961-528-HYR

Datafile: 200811C06 | Report: 12 Aug 2020 15:21 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1368-TCDD	NotFnd		0.8523						1.19		4219	0.191
1379-TCDD	NotFnd		0.8682						1.19		4219	0.191
1369-TCDD	NotFnd		0.8858						1.19		4219	0.191
1469-TCDD	NotFnd		0.9177						1.19		4219	0.191
1247/1246/1248/1249-TCDD	NotFnd		0.9274						1.19		4219	0.191
1378-TCDD	NotFnd		0.9349						1.19		4219	0.191
1268-TCDD	NotFnd		0.9430						1.19		4219	0.191
1478-TCDD	NotFnd		0.9529						1.19		4219	0.191
1279-TCDD	NotFnd		0.9597						1.19		4219	0.191
1234/1269-TCDD	NotFnd		0.9739						1.19		4219	0.191
1236-TCDD	NotFnd		0.9794						1.19		4219	0.191
1237/1238-TCDD	NotFnd		0.9895						1.19		4219	0.191
1239-TCDD	NotFnd		0.9950						1.19		4219	0.191
2378-TCDD	**NotFnd**		**1.0008**						**1.19**		**4219**	**0.191**
1278-TCDD	NotFnd		1.0139						1.19		4219	0.191
1267-TCDD	NotFnd		1.0194						1.19		4219	0.191
1289-TCDD	NotFnd		1.0397						1.19		4219	0.191
12479/12468-PeCDD	NotFnd		0.9209						0.98		2979	0.167
12469-PeCDD	NotFnd		0.9382						0.98		2979	0.167
12368-PeCDD	NotFnd		0.9557						0.98		2979	0.167
12478-PeCDD	NotFnd		0.9617						0.98		2979	0.167
12379-PeCDD	NotFnd		0.9649						0.98		2979	0.167
12369/12467/12489-PeCDD	NotFnd		0.9732						0.98		2979	0.167
12346/12347-PeCDD	NotFnd		0.9850						0.98		2979	0.167
12378-PeCDD	NotFnd		**1.0006**						**0.98**		**2979**	**0.167**
12367-PeCDD	NotFnd		1.0038						0.98		2979	0.167
12389-PeCDD	NotFnd		1.0146						0.98		2979	0.167
124679/124689-HxCDD	34.93	J	0.9530	0.9527	-0.6	1.53E+05	1.06	Y	1.03	1.08	6569	0.419
123468-HxCDD	NotFnd		0.9715						1.03		6569	0.419
123679/123689-HxCDD	35.91	J	0.9795	0.9792	-0.6	1.04E+05	1.08	Y	1.03	0.732	6569	0.419
123469-HxCDD	NotFnd		0.9832						1.03		6569	0.419
123478-HxCDD	NotFnd		**1.0004**						1.02		**6569**	**0.401**
123678-HxCDD	NotFnd		**1.0036**						1.09		**6569**	**0.419**
123467-HxCDD	NotFnd		1.0089						1.03		6569	0.419
123789-HxCDD	NotFnd		**1.0118**						0.97		**6569**	**0.437**

Lab ID: B4526_17662_DF_001 | Acq'd: 11 Aug 2020 18:21 DTF | Wt/Vol: 9.61 g | ICAL: HRMS3_DF_10122018_28AUG2019

Client ID: CS-29 | UTP: 12-Aug-2020 15:18:29 DTF | J-level: 0.52 pg/g | Split: 1 | Checkcode: 961-528-HYR

Datafile: 200811C06 | Report: 12 Aug 2020 15:21 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

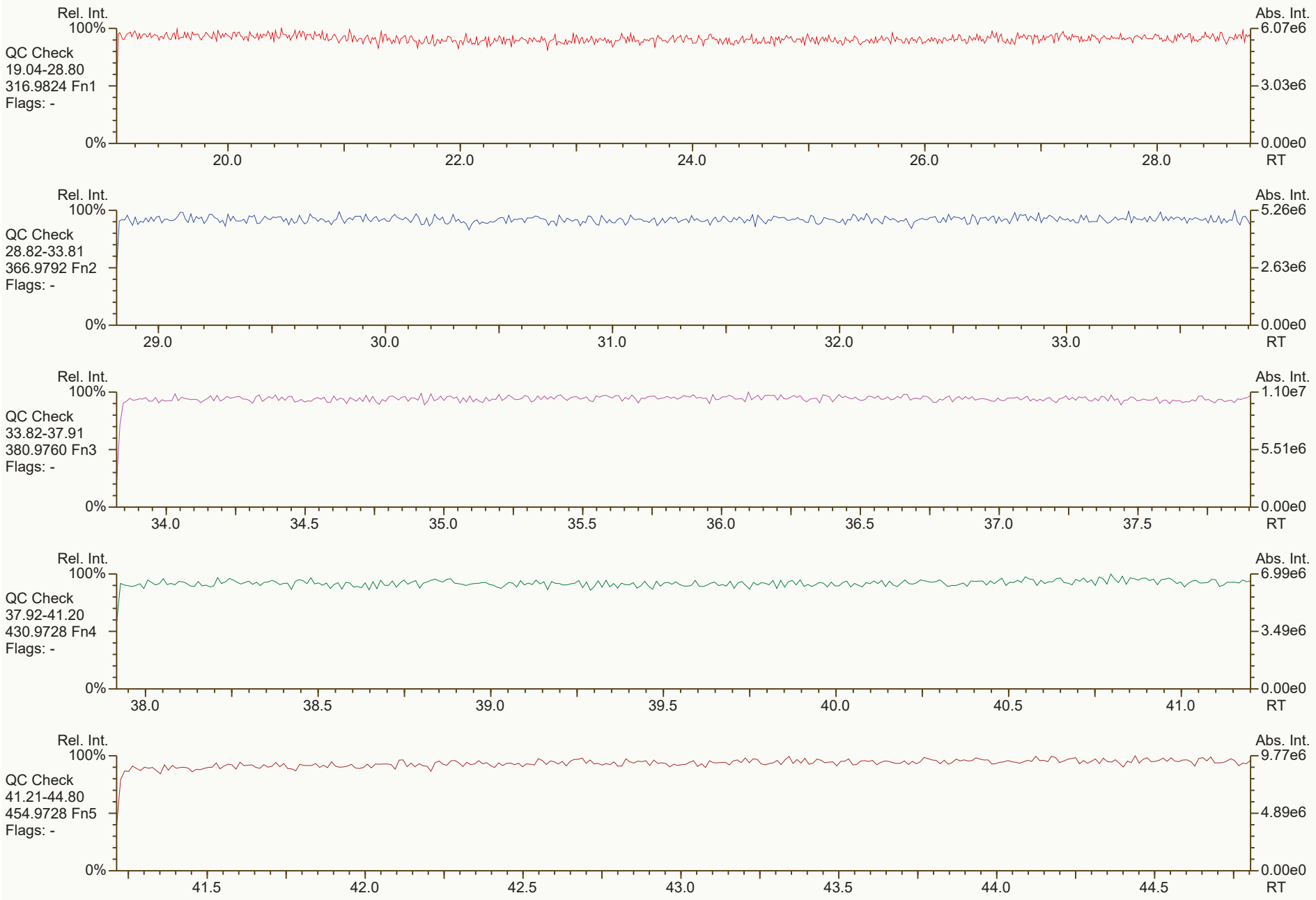
Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1234679-HpCDD	39.45		0.9826	0.9826	0	1.11E+06	1.00	Y	0.98	10.2	2263	0.207
1234678-HpCDD	**40.16**		**1.0003**	**1.0004**	**+0.2**	**6.23E+05**	**1.10**	**Y**	**0.98**	**5.78**	**2263**	**0.207**
OCDD	**42.87**		**1.0003**	**1.0003**	**0**	**1.86E+07**	**0.90**	**Y**	**1.07**	**292**	**3413**	**0.899**
OCDD-a	42.86	**#VALUE!**	1.0002	1.0001	-0.3	1.23E+06	2.17	Y	-	#VALUE!	4168	#VALUE!
1368-TCDF	NotFnd		0.7980						1.01		2836	0.105
1468-TCDF	NotFnd		0.8204						1.01		2836	0.105
2468-TCDF	NotFnd		0.8443						1.01		2836	0.105
1346/1246-TCDF	NotFnd		0.8597						1.01		2836	0.105
1347/1378/1247-TCDF	NotFnd		0.8665						1.01		2836	0.105
1348-TCDF	NotFnd		0.8785						1.01		2836	0.105
1248/1367/1379-TCDF	NotFnd		0.8840						1.01		2836	0.105
1268-TCDF	NotFnd		0.9004						1.01		2836	0.105
1467-TCDF	NotFnd		0.9060						1.01		2836	0.105
1478-TCDF	NotFnd		0.9132						1.01		2836	0.105
1369/1237-TCDF	NotFnd		0.9287						1.01		2836	0.105
2467-TCDF	NotFnd		0.9345						1.01		2836	0.105
2368-TCDF	NotFnd		0.9409						1.01		2836	0.105
1238/1234/1678/1469/1236-TCDF	NotFnd		0.9450						1.01		2836	0.105
1278-TCDF	NotFnd		0.9638						1.01		2836	0.105
1349-TCDF	NotFnd		0.9685						1.01		2836	0.105
1267-TCDF	NotFnd		0.9751						1.01		2836	0.105
2346/1249-TCDF	NotFnd		0.9831						1.01		2836	0.105
2347/1279-TCDF	NotFnd		0.9920						1.01		2836	0.105
2348-TCDF	NotFnd		0.9964						1.01		2836	0.105
2378-TCDF	**NotFnd**		**1.0009**						**1.01**		**2836**	**0.105**
2367/3467-TCDF	NotFnd		1.0164						1.01		2836	0.105
1269-TCDF	NotFnd		1.0259						1.01		2836	0.105
1239-TCDF	NotFnd		1.0373						1.01		2836	0.105
1289-TCDF	28.14	J EMPC	1.0838	1.0843	+0.8	9.35E+04	1.66	N	1.01	0.295	2836	0.105
13468/12468-PeCDF	NotFnd		0.9052						0.98		2616	0.101
13678/13467/12467-PeCDF	NotFnd		0.9582						0.98		3153	0.121
12368/13478/12478-PeCDF	NotFnd		0.9634						0.98		3153	0.121
14678-PeCDF	NotFnd		0.9668						0.98		3153	0.121
13479-PeCDF	NotFnd		0.9700						0.98		3153	0.121
13469/12479-PeCDF	NotFnd		0.9781						0.98		3153	0.121
12346-PeCDF	NotFnd		0.9829						0.98		3153	0.121

Lab ID: B4526_17662_DF_001 | Acq'd: 11 Aug 2020 18:21 DTF | Wt/Vol: 9.61 g | ICAL: HRMS3_DF_10122018_28AUG2019

Client ID: CS-29 | UTP: 12-Aug-2020 15:18:29 DTF | J-level: 0.52 pg/g | Split: 1 | Checkcode: 961-528-HYR

Datafile: 200811C06 | Report: 12 Aug 2020 15:21 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
23468/12469-PeCDF	NotFnd		0.9859						0.98		3153	0.121
12347-PeCDF	NotFnd		0.9884						0.98		3153	0.121
12348-PeCDF	NotFnd		0.9937						0.98		3153	0.121
12378-PeCDF	**NotFnd**		**1.0006**						**0.96**		**3153**	**0.121**
12678/12367-PeCDF	NotFnd		1.0097						0.98		3153	0.121
12379-PeCDF	NotFnd		1.0152						0.98		3153	0.121
12679-PeCDF	NotFnd		0.9923						0.98		3153	0.121
23467/12369-PeCDF	NotFnd		0.9966						0.98		3153	0.121
23478-PeCDF	**NotFnd**		**1.0005**						**0.99**		**3153**	**0.122**
23478/12489-PeCDF	NotFnd		0.0000						0.99			
12489-PeCDF	NotFnd		1.0043						0.98		3153	0.121
12349-PeCDF	NotFnd		1.0107						0.98		3153	0.121
12389-PeCDF	NotFnd		1.0349						0.98		3153	0.121
123468-HxCDF	NotFnd		0.9607						1.13		3486	0.154
124678/134678-HxCDF	34.46	J	0.9666	0.9663	-0.6	5.50E+04	1.30	Y	1.13	0.27	3486	0.154
134679-HxCDF	NotFnd		0.9730						1.13		3486	0.154
124679-HxCDF	NotFnd		0.9787						1.13		3486	0.154
124689-HxCDF	NotFnd		0.9850						1.13		3486	0.154
123467-HxCDF	NotFnd		0.9971						1.13		3486	0.154
123478-HxCDF	**NotFnd**		**1.0005**						**1.21**		**3486**	**0.14**
123678-HxCDF	**NotFnd**		**1.0005**						**1.11**		**3486**	**0.145**
123479-HxCDF	NotFnd		1.0049						1.13		3486	0.154
123469-HxCDF	NotFnd		1.0090						1.13		3486	0.154
123679-HxCDF	NotFnd		0.9941						1.13		3486	0.154
234678-HxCDF	**NotFnd**		**1.0004**						**1.12**		**3486**	**0.162**
234678/123689-HxCDF	NotFnd		0.0000						1.12			
123689-HxCDF	NotFnd		1.0041						1.13		3486	0.154
123789-HxCDF	**NotFnd**		**1.0005**						**1.11**		**3486**	**0.171**
123789/123489-HxCDF	NotFnd		0.0000						1.11			
123489-HxCDF	NotFnd		1.0009						1.13		3486	0.154
1234678-HpCDF	**39.14**	**J EMPC**	**1.0003**	**1.0002**	**-0.2**	**7.25E+04**	**1.25**	**N**	**1.32**	**0.421**	**1957**	**0.1**
1234679-HpCDF	NotFnd		1.0075						1.29		1957	0.124
1234689-HpCDF	NotFnd		1.0112						1.29		1957	0.124
1234789-HpCDF	**NotFnd**		**1.0003**						**1.26**		**1957**	**0.154**
OCDF	**NotFnd**		**1.0003**						**1.03**		**3350**	**0.661**
OCDF-a	NotFnd	**#VALUE!**	1.0002						-		3144	#VALUE!


Rel. Int.
100%
QC Check
19.04-28.80
316.9824 Fn1
Flags: -
0%
Abs. Int.
6.07e6
3.03e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
QC Check
28.82-33.81
366.9792 Fn2
Flags: -
0%
Abs. Int.
5.26e6
2.63e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
QC Check
33.82-37.91
380.9760 Fn3
Flags: -
0%
Abs. Int.
1.10e7
5.51e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
QC Check
37.92-41.20
430.9728 Fn4
Flags: -
0%
Abs. Int.
6.99e6
3.49e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
QC Check
41.21-44.80
454.9728 Fn5
Flags: -
0%
Abs. Int.
9.77e6
4.89e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT

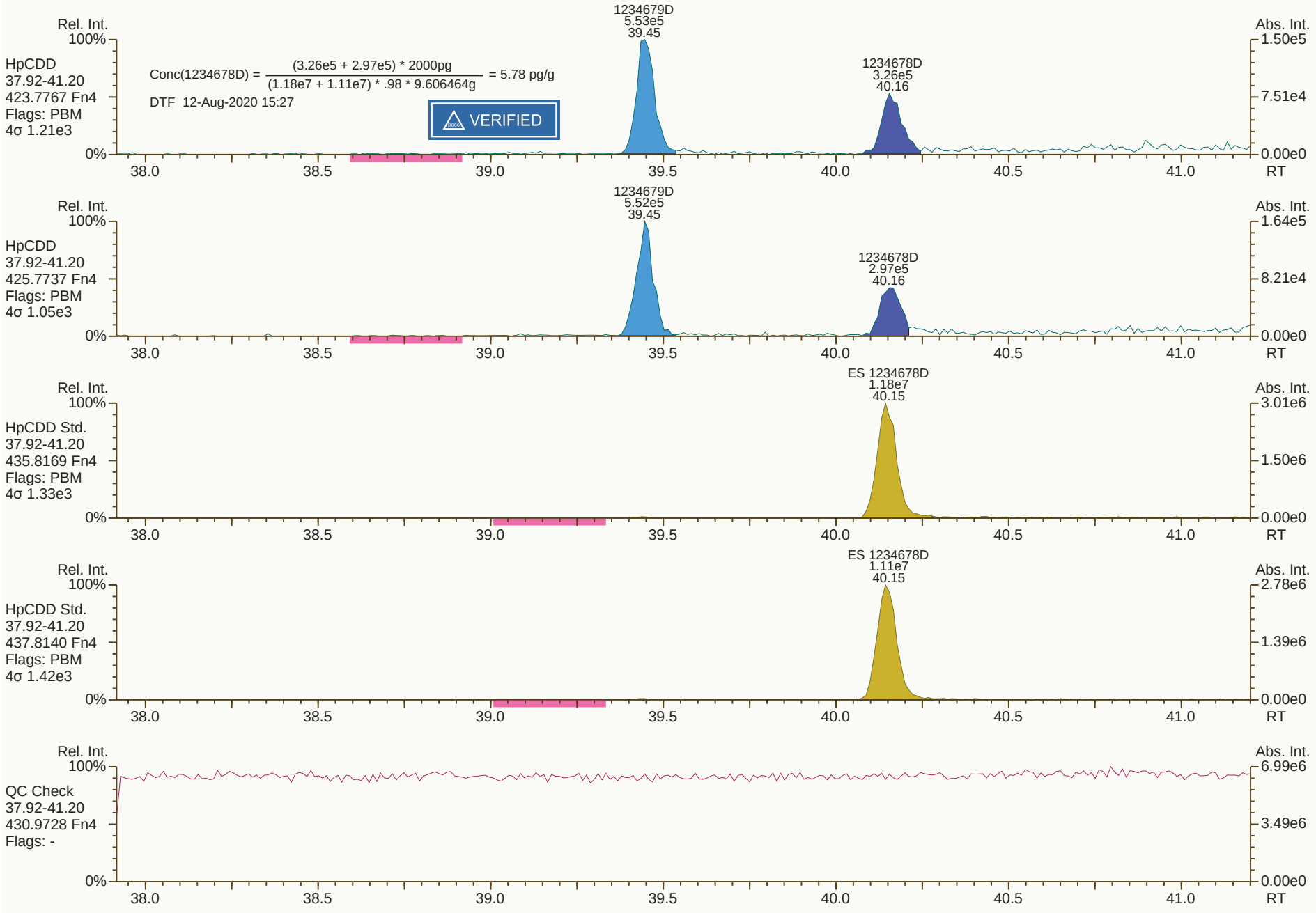

Rel. Int.
100%
TCDD
19.04-28.80
319.8965 Fn1
Flags: PB
4σ 2.67e3
0%
Abs. Int.
5.83e3
2.92e3
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD
19.04-28.80
321.8936 Fn1
Flags: PB
4σ 1.55e3
0%
Abs. Int.
6.78e3
3.39e3
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
37Cl-TCDD
19.04-28.80
327.8850 Fn1
Flags: PBM
4σ 1.46e3
0%
CS 37Cl-2378D
1.99e7
26.93
Abs. Int.
4.33e6
2.16e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.80
331.9368 Fn1
Flags: PBM
4σ 5.78e3
0%
JS 1234D
2.33e7
26.20
ES 2378D
2.00e7
26.90
Abs. Int.
5.04e6
2.52e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.80
333.9339 Fn1
Flags: PBM
4σ 2.55e3
0%
JS 1234D
2.89e7
26.20
ES 2378D
2.56e7
26.90
Abs. Int.
6.37e6
3.19e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT

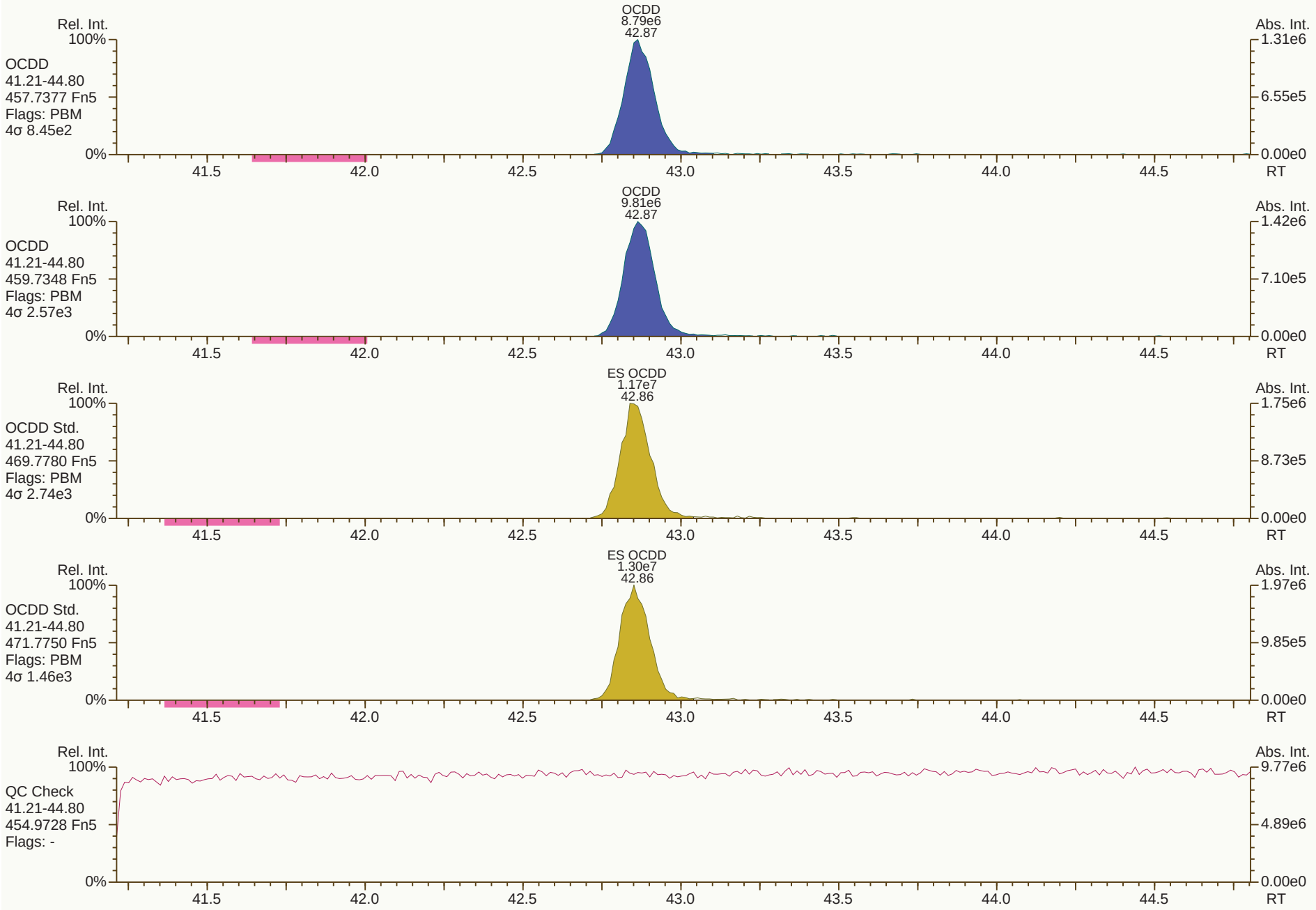

Rel. Int.
100%
PeCDD
28.82-33.81
355.8546 Fn2
Flags: PB
4σ 1.87e3
0%
Abs. Int.
7.85e3
3.93e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD
28.82-33.81
357.8517 Fn2
Flags: PB
4σ 1.11e3
0%
Abs. Int.
6.13e3
3.07e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.82-33.81
367.8949 Fn2
Flags: PBM
4σ 2.69e3
0%
CS 12347D
2.05e7
32.09
ES 12378D
2.11e7
32.61
Abs. Int.
5.70e6
2.85e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.82-33.81
369.8919 Fn2
Flags: PBM
4σ 2.11e3
0%
CS 12347D
1.32e7
32.09
ES 12378D
1.37e7
32.61
Abs. Int.
3.68e6
1.84e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
QC Check
28.82-33.81
366.9792 Fn2
Flags: -
0%
Abs. Int.
5.26e6
2.63e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT

SGS ID: B4526_17662_DF_001 | Sample ID: CS-29 | Acq: 11-Aug-2020 18:21:06
Instr: [ILM] AutoSpec-Ultima HRMS3 | VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 14 | User: DTF Datafile: 200811C06



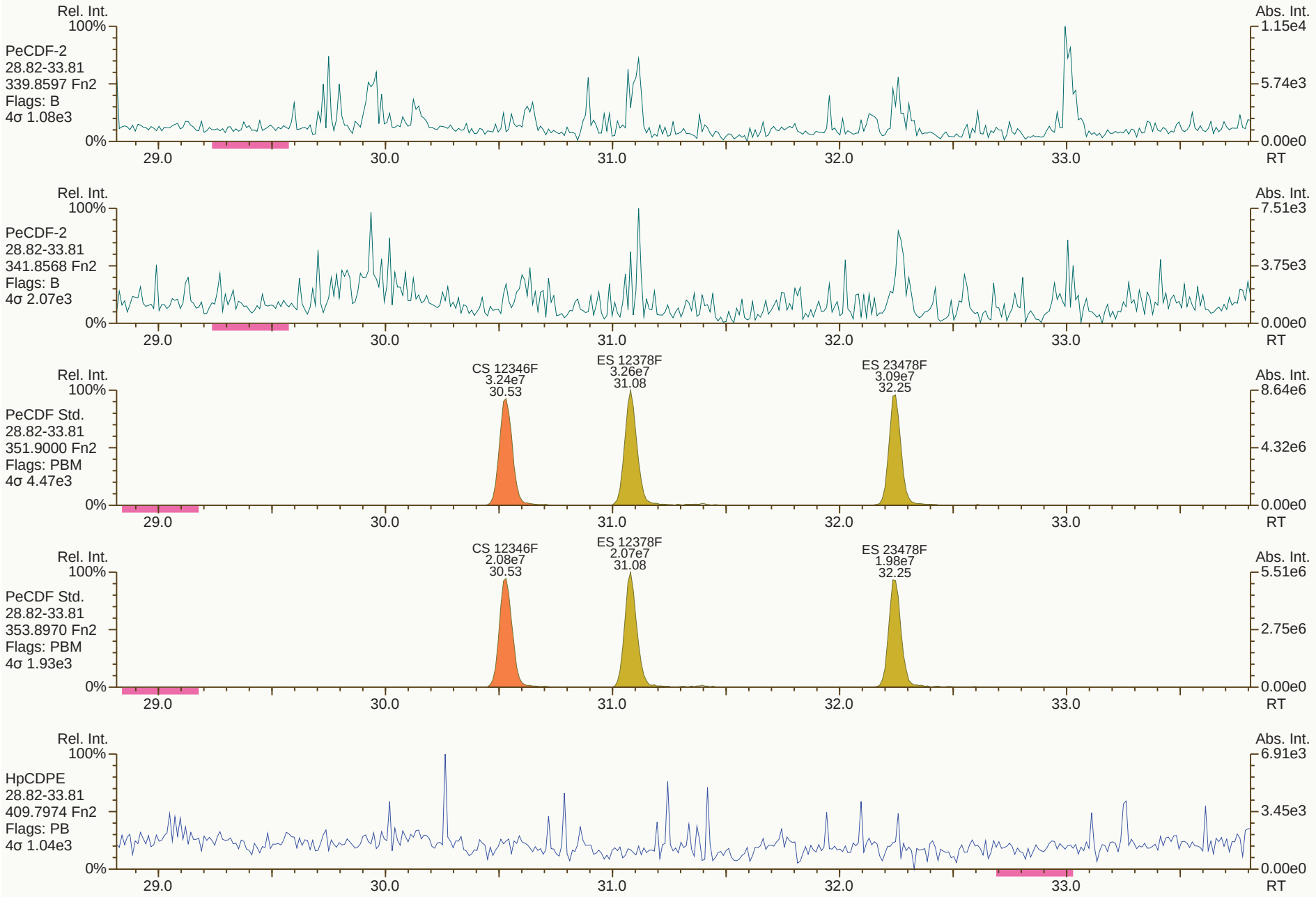
Results: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\B4526_17662_DF_001.utp_res, saved 12-Aug-2020 15:28 (DTF) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 7266, 1678 scc: 961-528 *Revised: 12-Aug-2020 10:31 (DTF) Printed: 12-Aug-2020 15:33 Page 4 of 12*


Rel. Int.
100%
HpCDD
37.92-41.20
423.7767 Fn4
Flags: PBM
4σ 1.21e3
Conc(1234678D) = (3.26e5 + 2.97e5) * 2000pg / (1.18e7 + 1.11e7) * .98 * 9.606464g = 5.78 pg/g
DTF 12-Aug-2020 15:27
VERIFIED
1234679D
5.53e5
39.45
1234678D
3.26e5
40.16
Abs. Int.
1.50e5
7.51e4
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD
37.92-41.20
425.7737 Fn4
Flags: PBM
4σ 1.05e3
1234679D
5.52e5
39.45
1234678D
2.97e5
40.16
Abs. Int.
1.64e5
8.21e4
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.92-41.20
435.8169 Fn4
Flags: PBM
4σ 1.33e3
ES 1234678D
1.18e7
40.15
Abs. Int.
3.01e6
1.50e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.92-41.20
437.8140 Fn4
Flags: PBM
4σ 1.42e3
ES 1234678D
1.11e7
40.15
Abs. Int.
2.78e6
1.39e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
QC Check
37.92-41.20
430.9728 Fn4
Flags: -
Abs. Int.
6.99e6
3.49e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT

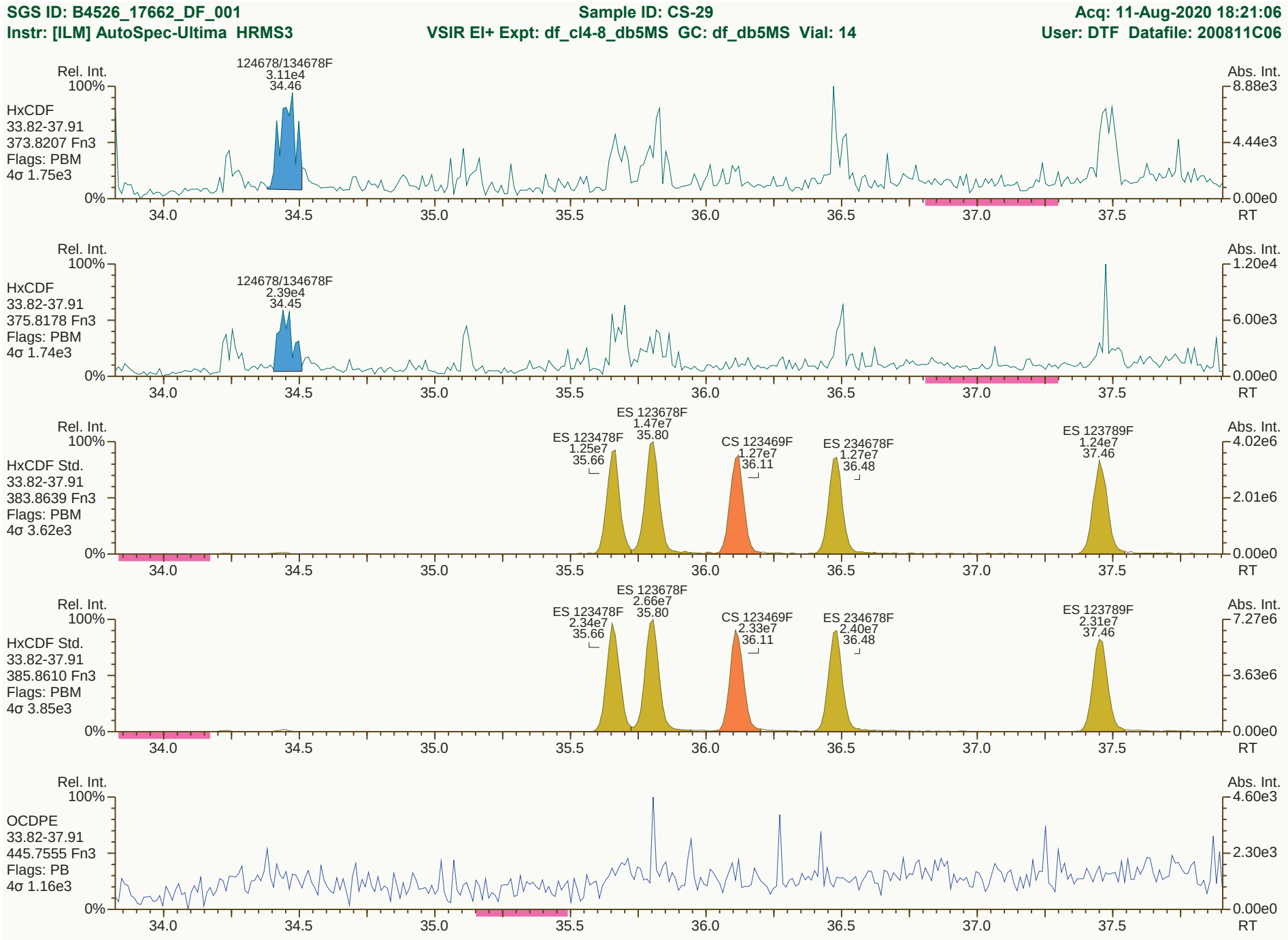

OCDD
8.79e6
42.87
Rel. Int.
100%
OCDD
41.21-44.80
457.7377 Fn5
Flags: PBM
4σ 8.45e2
0%
Abs. Int.
1.31e6
6.55e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
OCDD
9.81e6
42.87
Rel. Int.
100%
OCDD
41.21-44.80
459.7348 Fn5
Flags: PBM
4σ 2.57e3
0%
Abs. Int.
1.42e6
7.10e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDD
1.17e7
42.86
Rel. Int.
100%
OCDD Std.
41.21-44.80
469.7780 Fn5
Flags: PBM
4σ 2.74e3
0%
Abs. Int.
1.75e6
8.73e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDD
1.30e7
42.86
Rel. Int.
100%
OCDD Std.
41.21-44.80
471.7750 Fn5
Flags: PBM
4σ 1.46e3
0%
Abs. Int.
1.97e6
9.85e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
QC Check
41.21-44.80
454.9728 Fn5
Flags: -
0%
Abs. Int.
9.77e6
4.89e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT


Rel. Int.
100%
TCDF
19.04-28.80
303.9016 Fn1
Flags: PBM
4σ 7.91e2
0%
1289F
8.75e4
28.14
Abs. Int.
2.16e4
1.08e4
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDF
19.04-28.80
305.8987 Fn1
Flags: PBM
4σ 2.05e3
0%
1289F
5.28e4
28.14
Abs. Int.
1.81e4
9.03e3
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDF Std.
19.04-28.80
315.9419 Fn1
Flags: PBM
4σ 1.02e4
0%
JS 1234F
3.30e7
24.47
ES 2378F
2.87e7
25.95
Abs. Int.
6.78e6
3.39e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDF Std.
19.04-28.80
317.9389 Fn1
Flags: PBM
4σ 6.44e3
0%
JS 1234F
4.08e7
24.46
ES 2378F
3.64e7
25.95
Abs. Int.
7.97e6
3.98e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
HxCDPE
19.04-28.80
375.8364 Fn1
Flags: PB
4σ 1.12e3
0%
Abs. Int.
7.65e3
3.83e3
0.00e0
20.0
22.0
24.0
26.0
28.0
RT


Rel. Int.
100%
0%
Abs. Int.
1.22e4
6.11e3
0.00e0
PeCDF-1
19.04-28.80
339.8597 Fn1
Flags: PB
4σ 1.08e3
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
0%
Abs. Int.
1.62e4
8.12e3
0.00e0
PeCDF-1
19.04-28.80
341.8568 Fn1
Flags: PB
4σ 1.54e3
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
0%
Abs. Int.
6.07e6
3.03e6
0.00e0
QC Check
19.04-28.80
316.9824 Fn1
Flags: -
20.0
22.0
24.0
26.0
28.0
RT

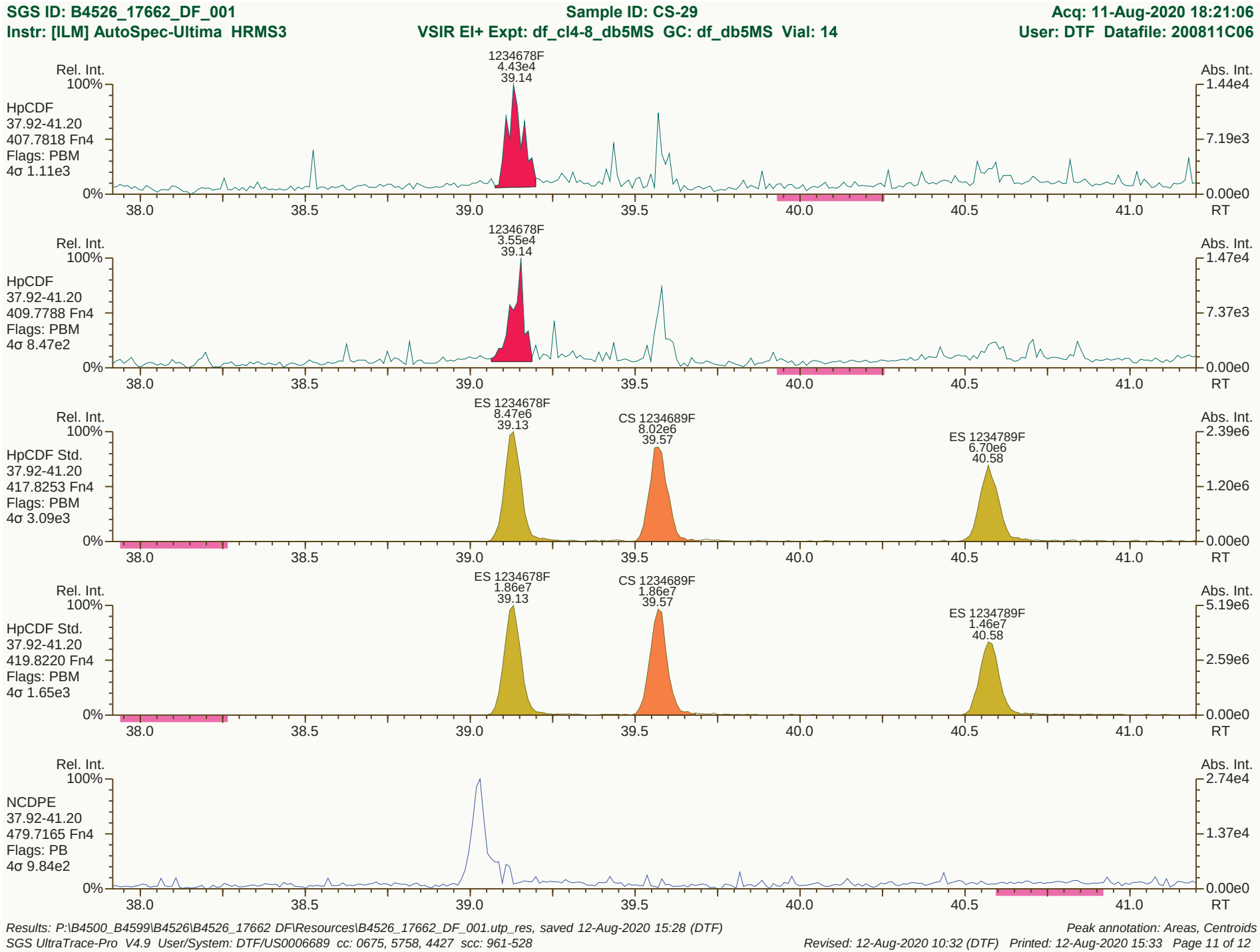

Rel. Int.
100%
PeCDF-2
28.82-33.81
339.8597 Fn2
Flags: B
4σ 1.08e3
0%
Abs. Int.
1.15e4
5.74e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF-2
28.82-33.81
341.8568 Fn2
Flags: B
4σ 2.07e3
0%
Abs. Int.
7.51e3
3.75e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.82-33.81
351.9000 Fn2
Flags: PBM
4σ 4.47e3
0%
CS 12346F
3.24e7
30.53
ES 12378F
3.26e7
31.08
ES 23478F
3.09e7
32.25
Abs. Int.
8.64e6
4.32e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.82-33.81
353.8970 Fn2
Flags: PBM
4σ 1.93e3
0%
CS 12346F
2.08e7
30.53
ES 12378F
2.07e7
31.08
ES 23478F
1.98e7
32.25
Abs. Int.
5.51e6
2.75e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
HpCDPE
28.82-33.81
409.7974 Fn2
Flags: PB
4σ 1.04e3
0%
Abs. Int.
6.91e3
3.45e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT

SGS ID: B4526_17662_DF_001 | Sample ID: CS-29 | Acq: 11-Aug-2020 18:21:06
Instr: [ILM] AutoSpec-Ultima HRMS3 | VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 14 | User: DTF Datafile: 200811C06



Results: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\B4526_17662_DF_001.utp_res, saved 12-Aug-2020 15:28 (DTF) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 8159, 9942, 0560 scc: 961-528 *Revised: 12-Aug-2020 10:32 (DTF) Printed: 12-Aug-2020 15:33 Page 10 of 12*

SGS ID: B4526_17662_DF_001 | Sample ID: CS-29 | Acq: 11-Aug-2020 18:21:06
Instr: [ILM] AutoSpec-Ultima HRMS3 | VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 14 | User: DTF Datafile: 200811C06



Results: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\B4526_17662_DF_001.utp_res, saved 12-Aug-2020 15:28 (DTF) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 0675, 5758, 4427 scc: 961-528 *Revised: 12-Aug-2020 10:32 (DTF) Printed: 12-Aug-2020 15:33 Page 11 of 12*


Rel. Int.
100%
OCDF
41.21-44.80
441.7428 Fn5
Flags: PB
4σ 1.35e3
0%
Abs. Int.
1.34e4
6.70e3
0.00e0
RT
41.5
42.0
42.5
43.0
43.5
44.0
44.5
Rel. Int.
100%
OCDF
41.21-44.80
443.7398 Fn5
Flags: PB
4σ 2.00e3
0%
Abs. Int.
1.35e4
6.73e3
0.00e0
RT
ES OCDF
1.52e7
43.00
Rel. Int.
100%
OCDF Std.
41.21-44.80
453.7830 Fn5
Flags: PBM
4σ 1.43e3
0%
Abs. Int.
2.44e6
1.22e6
0.00e0
RT
ES OCDF
1.68e7
43.00
Rel. Int.
100%
OCDF Std.
41.21-44.80
455.7801 Fn5
Flags: PBM
4σ 1.07e3
0%
Abs. Int.
2.62e6
1.31e6
0.00e0
RT
Rel. Int.
100%
DCDPE
41.21-44.80
513.6775 Fn5
Flags: PB
4σ 9.71e2
0%
Abs. Int.
1.41e4
7.05e3
0.00e0
RT

Lab ID: B4526_17662_DF_002 **Acq'd:** 11 Aug 2020 19:07 DTF **Wt/Vol:** 9.57 g **ICAL:** HRMS3_DF_10122018_28AUG2019

Client ID: CS-30 **UTP:** 12-Aug-2020 15:18:30 DTF **J-level:** 0.523 pg/g **Split:** 1 **Checkcode:** 142-051-RXJ

Datafile: 200811C07 **Report:** 12 Aug 2020 15:21 TF **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	NotFnd		1.0008	-		-	-	-	1.19	-	4278	0.196
12378-PeCDD	NotFnd		1.0006	-		-	-	-	0.98	-	6722	0.4
123478-HxCDD	NotFnd		1.0004	-		-	-	-	1.02	-	8041	0.55
123678-HxCDD	36.80	J	1.0036	1.0034	-0.4	1.19E+05	1.35	Y	1.09	0.854	8041	0.515
123789-HxCDD	37.11	J EMPC	1.0118	1.0119	+0.2	9.94E+04	1.05	N	0.97	0.762	8041	0.556
1234678-HpCDD	40.16		1.0003	1.0002	-0.2	2.04E+06	1.12	Y	0.98	21.1	2072	0.215
OCDD	42.87		1.0003	1.0003	0	1.76E+07	0.89	Y	1.07	318	3437	1.01
2378-TCDF	NotFnd		1.0009	-		-	-	-	1.01	-	3830	0.144
12378-PeCDF	NotFnd		1.0006	-		-	-	-	0.96	-	5266	0.218
23478-PeCDF	32.26	J EMPC	1.0005	1.0003	-0.4	4.78E+04	1.10	N	0.99	0.208	5266	0.208
123478-HxCDF	35.68	J EMPC	1.0005	1.0003	-0.4	6.26E+04	1.46	N	1.21	0.324	2801	0.12
123678-HxCDF	35.82	J	1.0005	1.0004	-0.2	6.49E+04	1.13	Y	1.11	0.307	2801	0.126
234678-HxCDF	36.50	J EMPC	1.0004	1.0003	-0.2	7.67E+04	0.99	N	1.12	0.416	2801	0.137
123789-HxCDF	NotFnd		1.0005	-		-	-	-	1.11	-	2801	0.172
1234678-HpCDF	39.15		1.0003	1.0003	0	5.04E+05	0.96	Y	1.32	3.33	2615	0.134
1234789-HpCDF	NotFnd		1.0003	-		-	-	-	1.26	-	2615	0.247
OCDF	43.00	J	1.0003	0.9999	-1.0	3.37E+05	1.01	Y	1.03	4.78	3318	0.768

Name	Act RT		Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	26.91		1.0266	1.0268	+0.3	4.49E+07	0.81	Y	0.99	85.9
ES 12378-PeCDD	32.62		1.2430	1.2447	+3.3	3.36E+07	1.55	Y	0.83	76.6
ES 123478-HxCDD	36.68		0.9916	0.9915	-0.2	2.63E+07	1.26	Y	0.95	75
ES 123678-HxCDD	36.79		0.9947	0.9946	-0.2	2.68E+07	1.24	Y	0.98	74.2
ES 123789-HxCDD	37.10		1.0029	1.0028	-0.2	2.81E+07	1.26	Y	1.14	66.7
ES 1234678-HpCDD	40.15		1.0851	1.0855	+1.0	2.07E+07	1.07	Y	0.90	62.3
ES OCDD	42.86		1.1584	1.1588	+1.0	2.16E+07	0.89	Y	0.63	46.5
ES 2378-TCDF	25.96		1.0602	1.0608	+0.9	6.49E+07	0.82	Y	1.00	86
ES 12378-PeCDF	31.09		1.2683	1.2706	+4.3	5.16E+07	1.57	Y	0.83	81.9
ES 23478-PeCDF	32.25		1.3156	1.3181	+4.8	4.88E+07	1.54	Y	0.81	79.9
ES 123478-HxCDF	35.67		0.9644	0.9642	-0.4	3.35E+07	0.54	Y	1.12	80.5
ES 123678-HxCDF	35.81		0.9682	0.9681	-0.2	4.00E+07	0.54	Y	1.33	81.1
ES 234678-HxCDF	36.49		0.9864	0.9863	-0.2	3.45E+07	0.53	Y	1.21	77.1
ES 123789-HxCDF	37.46		1.0128	1.0127	-0.2	3.03E+07	0.55	Y	1.12	73.2
ES 1234678-HpCDF	39.13		1.0578	1.0580	+0.5	2.39E+07	0.47	Y	0.92	69.7
ES 1234789-HpCDF	40.58		1.0967	1.0970	+0.7	1.84E+07	0.47	Y	0.82	60.7
ES OCDF	43.01		1.1623	1.1626	+0.8	2.86E+07	0.94	Y	0.78	49.5

Lab ID: B4526_17662_DF_002 | Acq'd: 11 Aug 2020 19:07 DTF | Wt/Vol: 9.57 g | ICAL: HRMS3_DF_10122018_28AUG2019

Client ID: CS-30 | UTP: 12-Aug-2020 15:18:30 DTF | J-level: 0.523 pg/g | Split: 1 | Checkcode: 142-051-RXJ

Datafile: 200811C07 | Report: 12 Aug 2020 15:21 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %	
JS 1234-TCDD	26.21		-	-	-	5.29E+07	0.82	Y	-	-	
JS 1234-TCDF	24.47		-	-	-	7.58E+07	0.80	Y	-	-	
JS 123467-HxCDD	36.99		-	-	-	1.85E+07	1.23	Y	-	-	
CS 37Cl-2378-TCDD	26.93		1.0276	1.0277	+0.2	2.03E+07	n/a	-	1.12	85.9	
CS 12347-PeCDD	32.10		1.2233	1.2249	+3.1	3.36E+07	1.62	Y	0.71	89.2	
CS 12346-PeCDF	30.54		1.2459	1.2480	+3.8	5.23E+07	1.59	Y	0.81	85.2	
CS 123469-HxCDF	36.12		0.9767	0.9764	-0.7	3.60E+07	0.55	Y	1.12	86.6	
CS 1234689-HpCDF	39.58		1.0696	1.0699	+0.7	2.44E+07	0.47	Y	0.90	73.5	
~~SS 37Cl-2378-TCDD~~	~~26.93~~		~~1.0276~~	~~1.0277~~	~~+0.2~~	~~2.03E+07~~	~~n/a~~		~~1.14~~	~~99.1~~	Not used in this project.
~~SS 12347-PeCDD~~	~~32.10~~		~~1.2233~~	~~1.2249~~	~~+3.1~~	~~3.36E+07~~	~~1.62~~	~~Y~~	~~0.86~~	~~116~~	CL 13Aug20
~~SS 12346-PeCDF~~	~~30.54~~		~~1.2459~~	~~1.2480~~	~~+3.8~~	~~5.23E+07~~	~~1.59~~	~~Y~~	~~0.98~~	~~104~~	
~~SS 123469-HxCDF~~	~~36.12~~		~~0.9767~~	~~0.9764~~	~~-0.7~~	~~3.60E+07~~	~~0.55~~	~~Y~~	~~0.85~~	~~106~~	
~~SS 1234689-HpCDF~~	~~39.58~~		~~1.0696~~	~~1.0699~~	~~+0.7~~	~~2.44E+07~~	~~0.47~~	~~Y~~	~~0.97~~	~~105~~	

Totals	Conc	EMPC
Total TCDD	0	0
Total PeCDD	0.703	0.703
Total HxCDD	10.1	10.9
Total HpCDD	63.2	63.2
Total Tetra-Octa Dioxins	392	392
Total TCDF	0.37	0.687
Total PeCDF	0	1.84
Total HxCDF	2.06	4.7
Total HpCDF	7.61	7.61
Total Tetra-Octa Furans	14.8	19.6
Total Tetra-Octa Dioxins & Furans	406	412

Lab ID: B4526_17662_DF_002 **Acq'd:** 11 Aug 2020 19:07 DTF **Wt/Vol:** 9.57 g **ICAL:** HRMS3_DF_10122018_28AUG2019

Client ID: CS-30 **UTP:** 12-Aug-2020 15:18:30 DTF **J-level:** 0.523 pg/g **Split:** 1 **Checkcode:** 142-051-RXJ

Datafile: 200811C07 **Report:** 12 Aug 2020 15:21 TF **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1368-TCDD	NotFnd		0.8523						1.19		4278	0.196
1379-TCDD	NotFnd		0.8682						1.19		4278	0.196
1369-TCDD	NotFnd		0.8858						1.19		4278	0.196
1469-TCDD	NotFnd		0.9177						1.19		4278	0.196
1247/1246/1248/1249-TCDD	NotFnd		0.9274						1.19		4278	0.196
1378-TCDD	NotFnd		0.9349						1.19		4278	0.196
1268-TCDD	NotFnd		0.9430						1.19		4278	0.196
1478-TCDD	NotFnd		0.9529						1.19		4278	0.196
1279-TCDD	NotFnd		0.9597						1.19		4278	0.196
1234/1269-TCDD	NotFnd		0.9739						1.19		4278	0.196
1236-TCDD	NotFnd		0.9794						1.19		4278	0.196
1237/1238-TCDD	NotFnd		0.9895						1.19		4278	0.196
1239-TCDD	NotFnd		0.9950						1.19		4278	0.196
2378-TCDD	**NotFnd**		**1.0008**						**1.19**		**4278**	**0.196**
1278-TCDD	NotFnd		1.0139						1.19		4278	0.196
1267-TCDD	NotFnd		1.0194						1.19		4278	0.196
1289-TCDD	NotFnd		1.0397						1.19		4278	0.196
12479/12468-PeCDD	30.03	J	0.9209	0.9205	-0.7	1.11E+05	1.65	Y	0.98	0.703	6722	0.4
12469-PeCDD	NotFnd		0.9382						0.98		6722	0.4
12368-PeCDD	NotFnd		0.9557						0.98		6722	0.4
12478-PeCDD	NotFnd		0.9617						0.98		6722	0.4
12379-PeCDD	NotFnd		0.9649						0.98		6722	0.4
12369/12467/12489-PeCDD	NotFnd		0.9732						0.98		6722	0.4
12346/12347-PeCDD	NotFnd		0.9850						0.98		6722	0.4
12378-PeCDD	NotFnd		**1.0006**						**0.98**		**6722**	**0.4**
12367-PeCDD	NotFnd		1.0038						0.98		6722	0.4
12389-PeCDD	NotFnd		1.0146						0.98		6722	0.4
124679/124689-HxCDD	34.95		0.9530	0.9528	-0.4	5.86E+05	1.25	Y	1.03	4.41	8041	0.539
123468-HxCDD	35.62	J	0.9715	0.9711	-0.9	2.44E+05	1.17	Y	1.03	1.84	8041	0.539
123679/123689-HxCDD	35.92		0.9795	0.9793	-0.4	4.00E+05	1.24	Y	1.03	3.01	8041	0.539
123469-HxCDD	NotFnd		0.9832						1.03		8041	0.539
123478-HxCDD	NotFnd		**1.0004**						1.02		**8041**	**0.55**
123678-HxCDD	36.80	J	**1.0036**	**1.0034**	**-0.4**	**1.19E+05**	**1.35**	**Y**	1.09	**0.854**	**8041**	**0.515**
123467-HxCDD	NotFnd		1.0089						1.03		8041	0.539
123789-HxCDD	37.11	J EMPC	**1.0118**	**1.0119**	**+0.2**	**9.94E+04**	**1.05**	**N**	0.97	**0.762**	**8041**	**0.556**

Lab ID: B4526_17662_DF_002 **Acq'd:** 11 Aug 2020 19:07 DTF **Wt/Vol:** 9.57 g **ICAL:** HRMS3_DF_10122018_28AUG2019

Client ID: CS-30 **UTP:** 12-Aug-2020 15:18:30 DTF **J-level:** 0.523 pg/g **Split:** 1 **Checkcode:** 142-051-RXJ

Datafile: 200811C07 **Report:** 12 Aug 2020 15:21 TF **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

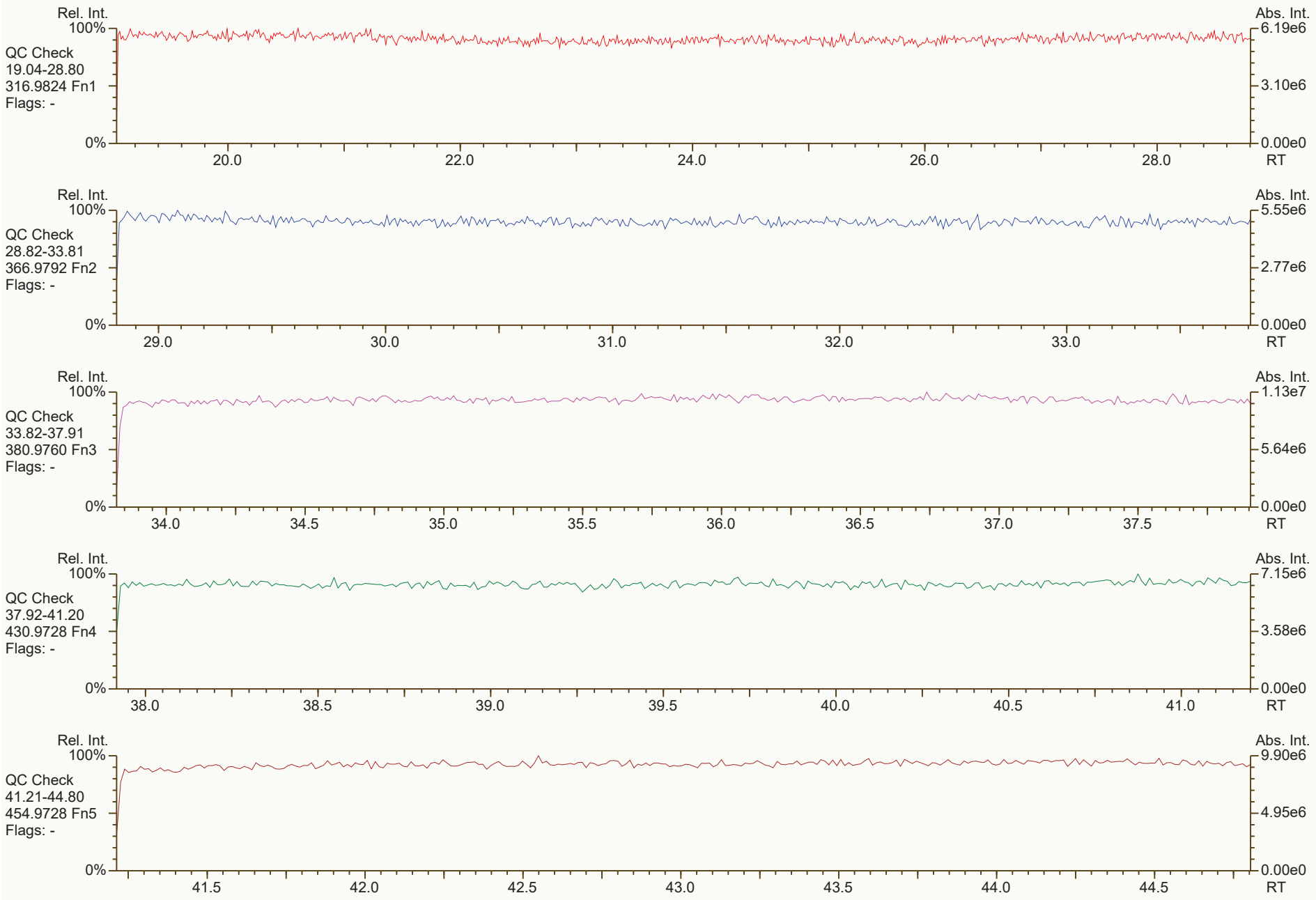
Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1234679-HpCDD	39.45		0.9826	0.9825	-0.2	4.08E+06	0.99	Y	0.98	42.2	2072	0.215
1234678-HpCDD	**40.16**		**1.0003**	**1.0002**	**-0.2**	**2.04E+06**	**1.12**	**Y**	**0.98**	**21.1**	**2072**	**0.215**
OCDD	**42.87**		**1.0003**	**1.0003**	**0**	**1.76E+07**	**0.89**	**Y**	**1.07**	**318**	**3437**	**1.01**
OCDD-a	42.87	**#VALUE!**	1.0002	1.0001	-0.3	8.49E+05	3.35	N	-	#VALUE!	4090	#VALUE!
1368-TCDF	NotFnd		0.7980						1.01		3830	0.144
1468-TCDF	NotFnd		0.8204						1.01		3830	0.144
2468-TCDF	21.88	J	0.8443	0.8430	-1.7	1.16E+05	0.82	Y	1.01	0.37	3830	0.144
1346/1246-TCDF	NotFnd		0.8597						1.01		3830	0.144
1347/1378/1247-TCDF	NotFnd		0.8665						1.01		3830	0.144
1348-TCDF	NotFnd		0.8785						1.01		3830	0.144
1248/1367/1379-TCDF	NotFnd		0.8840						1.01		3830	0.144
1268-TCDF	NotFnd		0.9004						1.01		3830	0.144
1467-TCDF	NotFnd		0.9060						1.01		3830	0.144
1478-TCDF	NotFnd		0.9132						1.01		3830	0.144
1369/1237-TCDF	NotFnd		0.9287						1.01		3830	0.144
2467-TCDF	NotFnd		0.9345						1.01		3830	0.144
2368-TCDF	NotFnd		0.9409						1.01		3830	0.144
1238/1234/1678/1469/1236-TCDF	NotFnd		0.9450						1.01		3830	0.144
1278-TCDF	NotFnd		0.9638						1.01		3830	0.144
1349-TCDF	NotFnd		0.9685						1.01		3830	0.144
1267-TCDF	NotFnd		0.9751						1.01		3830	0.144
2346/1249-TCDF	NotFnd		0.9831						1.01		3830	0.144
2347/1279-TCDF	NotFnd		0.9920						1.01		3830	0.144
2348-TCDF	NotFnd		0.9964						1.01		3830	0.144
2378-TCDF	**NotFnd**		**1.0009**						**1.01**		**3830**	**0.144**
2367/3467-TCDF	NotFnd		1.0164						1.01		3830	0.144
1269-TCDF	NotFnd		1.0259						1.01		3830	0.144
1239-TCDF	NotFnd		1.0373						1.01		3830	0.144
1289-TCDF	28.15	J EMPC	1.0838	1.0844	+1.0	9.95E+04	1.86	N	1.01	0.317	3830	0.144
13468/12468-PeCDF	28.16	J EMPC	0.9052	0.9056	+0.7	2.47E+05	1.11	N	0.98	1.05	2631	0.106
13678/13467/12467-PeCDF	NotFnd		0.9582						0.98		5266	0.213
12368/13478/12478-PeCDF	29.95	J EMPC	0.9634	0.9635	+0.2	1.35E+05	1.31	N	0.98	0.579	5266	0.213
14678-PeCDF	NotFnd		0.9668						0.98		5266	0.213
13479-PeCDF	NotFnd		0.9700						0.98		5266	0.213
13469/12479-PeCDF	NotFnd		0.9781						0.98		5266	0.213
12346-PeCDF	NotFnd		0.9829						0.98		5266	0.213

Lab ID: B4526_17662_DF_002 | Acq'd: 11 Aug 2020 19:07 DTF | Wt/Vol: 9.57 g | ICAL: HRMS3_DF_10122018_28AUG2019

Client ID: CS-30 | UTP: 12-Aug-2020 15:18:30 DTF | J-level: 0.523 pg/g | Split: 1 | Checkcode: 142-051-RXJ

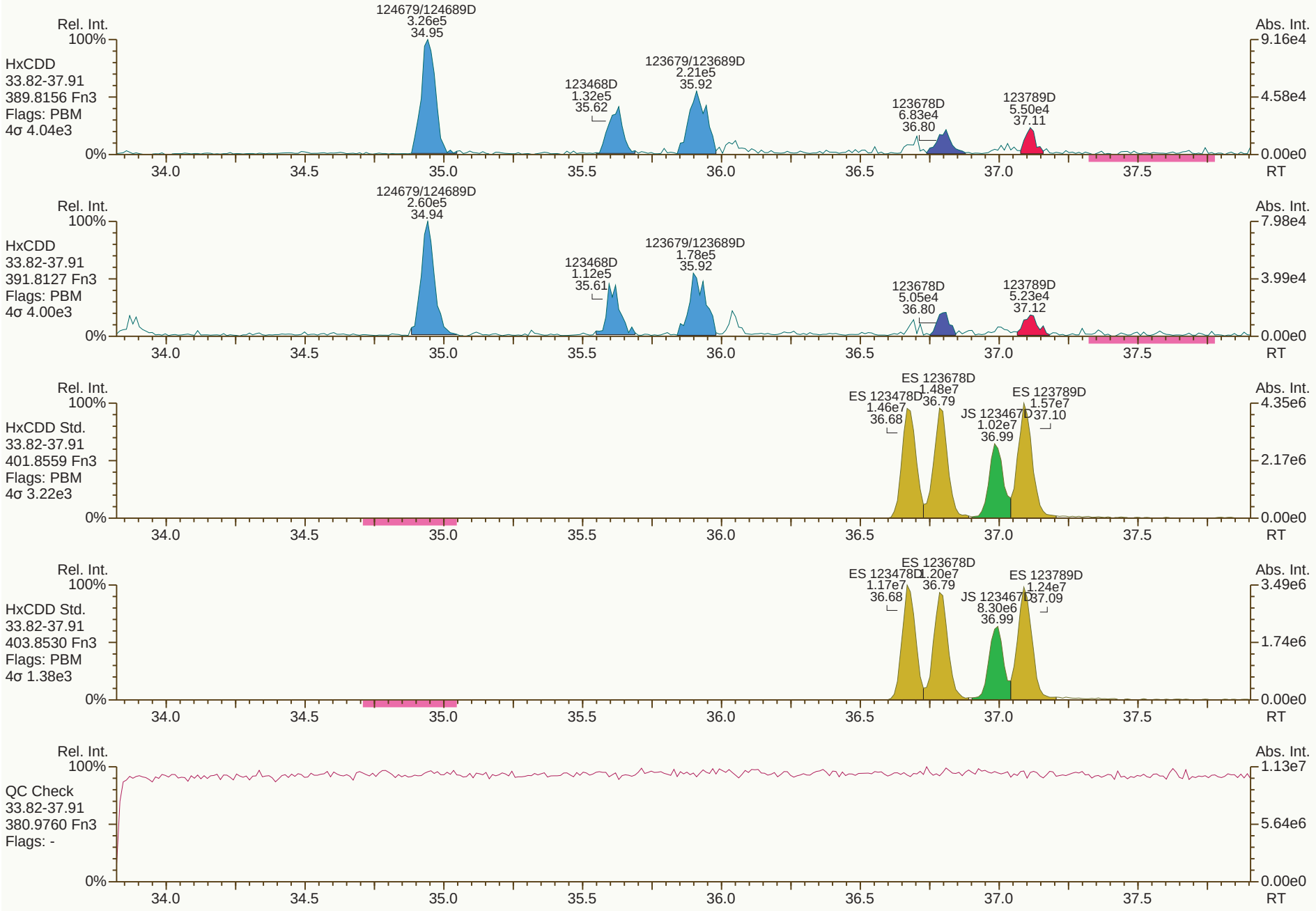
Datafile: 200811C07 | Report: 12 Aug 2020 15:21 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
23468/12469-PeCDF	NotFnd		0.9859						0.98		5266	0.213
12347-PeCDF	NotFnd		0.9884						0.98		5266	0.213
12348-PeCDF	NotFnd		0.9937						0.98		5266	0.213
12378-PeCDF	**NotFnd**		**1.0006**						**0.96**		**5266**	**0.218**
12678/12367-PeCDF	NotFnd		1.0097						0.98		5266	0.213
12379-PeCDF	NotFnd		1.0152						0.98		5266	0.213
12679-PeCDF	NotFnd		0.9923						0.98		5266	0.213
23467/12369-PeCDF	NotFnd		0.9966						0.98		5266	0.213
23478-PeCDF	**32.26**	J EMPC	**1.0005**	**1.0003**	**-0.4**	**4.78E+04**	**1.10**	**N**	**0.99**	**0.208**	**5266**	**0.208**
23478/12489-PeCDF	NotFnd		0.0000						0.99			
12489-PeCDF	NotFnd		1.0043						0.98		5266	0.213
12349-PeCDF	NotFnd		1.0107						0.98		5266	0.213
12389-PeCDF	NotFnd		1.0349						0.98		5266	0.213
123468-HxCDF	34.26	J EMPC	0.9607	0.9605	-0.4	7.55E+04	1.55	N	1.13	0.403	2801	0.137
124678/134678-HxCDF	34.46	J	0.9666	0.9663	-0.6	3.30E+05	1.22	Y	1.13	1.76	2801	0.137
134679-HxCDF	NotFnd		0.9730						1.13		2801	0.137
124679-HxCDF	NotFnd		0.9787						1.13		2801	0.137
124689-HxCDF	35.13	J EMPC	0.9850	0.9850	0	2.43E+05	1.52	N	1.13	1.3	2801	0.137
123467-HxCDF	35.56	J EMPC	0.9971	0.9970	-0.2	3.61E+04	0.96	N	1.13	0.192	2801	0.137
123478-HxCDF	**35.68**	J EMPC	**1.0005**	**1.0003**	**-0.4**	**6.26E+04**	**1.46**	**N**	**1.21**	**0.324**	**2801**	**0.12**
123678-HxCDF	**35.82**	J	**1.0005**	**1.0004**	**-0.2**	**6.49E+04**	**1.13**	**Y**	**1.11**	**0.307**	**2801**	**0.126**
123479-HxCDF	NotFnd		1.0049						1.13		2801	0.137
123469-HxCDF	NotFnd		1.0090						1.13		2801	0.137
123679-HxCDF	NotFnd		0.9941						1.13		2801	0.137
234678-HxCDF	**36.50**	J EMPC	**1.0004**	**1.0003**	**-0.2**	**7.67E+04**	**0.99**	**N**	**1.12**	**0.416**	**2801**	**0.137**
234678/123689-HxCDF	NotFnd		0.0000						1.12			
123689-HxCDF	NotFnd		1.0041						1.13		2801	0.137
123789-HxCDF	**NotFnd**		**1.0005**						**1.11**		**2801**	**0.172**
123789/123489-HxCDF	NotFnd		0.0000						1.11			
123489-HxCDF	NotFnd		1.0009						1.13		2801	0.137
1234678-HpCDF	**39.15**		**1.0003**	**1.0003**	**0**	**5.04E+05**	**0.96**	**Y**	**1.32**	**3.33**	**2615**	**0.134**
1234679-HpCDF	NotFnd		1.0075						1.29		2615	0.182
1234689-HpCDF	39.59		1.0112	1.0116	+1.0	5.57E+05	1.00	Y	1.29	4.27	2615	0.182
1234789-HpCDF	**NotFnd**		**1.0003**						**1.26**		**2615**	**0.247**
OCDF	**43.00**	**J**	**1.0003**	**0.9999**	**-1.0**	**3.37E+05**	**1.01**	**Y**	**1.03**	**4.78**	**3318**	**0.768**
OCDF-a	NotFnd	**#VALUE!**	1.0002						-		4266	#VALUE!


Rel. Int.
100%
QC Check
19.04-28.80
316.9824 Fn1
Flags: -
0%
20.0
22.0
24.0
26.0
28.0
RT
Abs. Int.
6.19e6
3.10e6
0.00e0
Rel. Int.
100%
QC Check
28.82-33.81
366.9792 Fn2
Flags: -
0%
29.0
30.0
31.0
32.0
33.0
RT
Abs. Int.
5.55e6
2.77e6
0.00e0
Rel. Int.
100%
QC Check
33.82-37.91
380.9760 Fn3
Flags: -
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Abs. Int.
1.13e7
5.64e6
0.00e0
Rel. Int.
100%
QC Check
37.92-41.20
430.9728 Fn4
Flags: -
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Abs. Int.
7.15e6
3.58e6
0.00e0
Rel. Int.
100%
QC Check
41.21-44.80
454.9728 Fn5
Flags: -
0%
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Abs. Int.
9.90e6
4.95e6
0.00e0

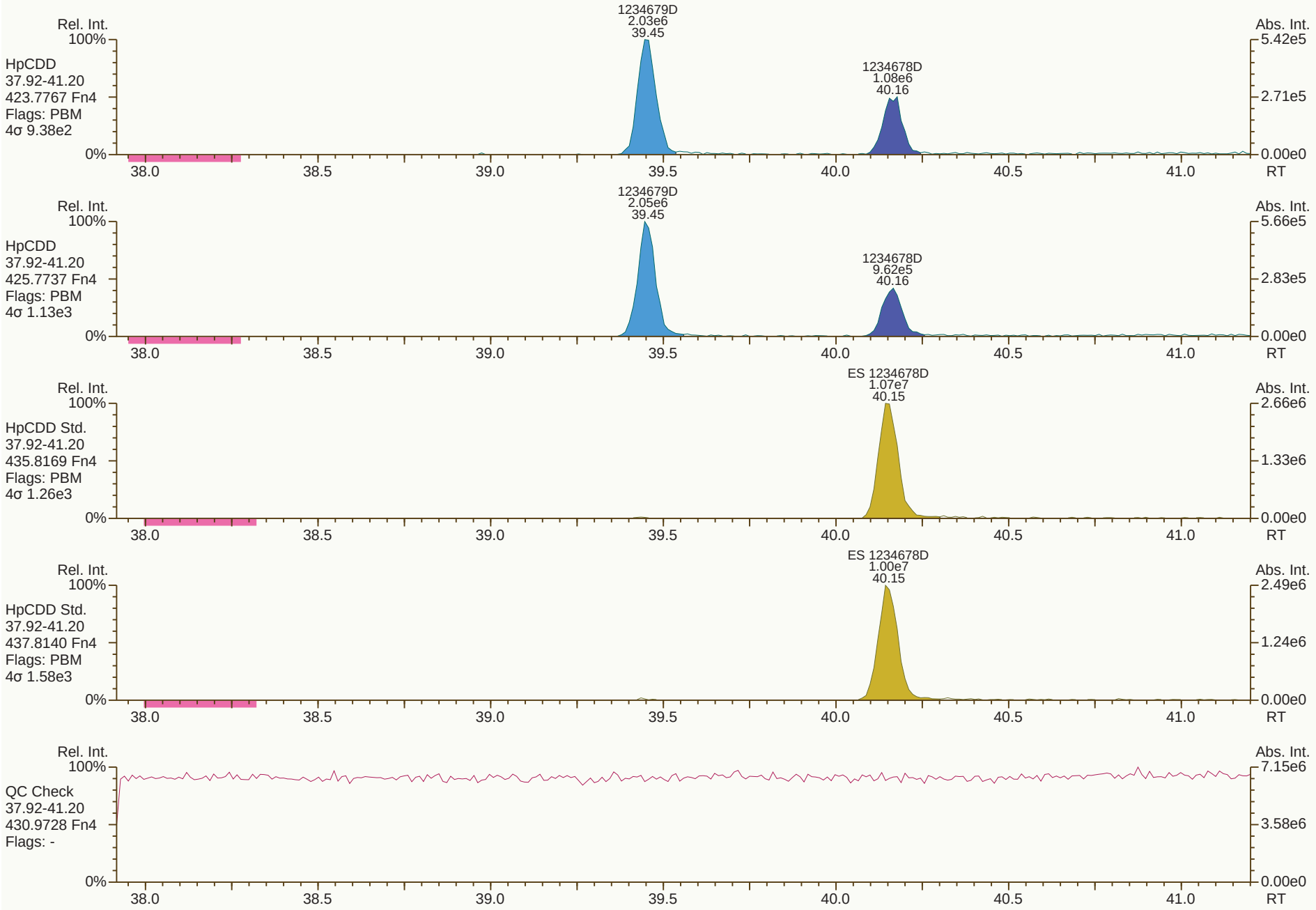

Rel. Int.
100%
TCDD
19.04-28.80
319.8965 Fn1
Flags: PB
4σ 2.63e3
0%
Abs. Int.
1.07e4
5.35e3
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD
19.04-28.80
321.8936 Fn1
Flags: PB
4σ 1.65e3
0%
Abs. Int.
1.16e4
5.80e3
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
37Cl-TCDD
19.04-28.80
327.8850 Fn1
Flags: PBM
4σ 1.21e3
0%
CS 37Cl-2378D
2.03e7
26.93
Abs. Int.
4.55e6
2.28e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.80
331.9368 Fn1
Flags: PBM
4σ 5.43e3
0%
JS 1234D
2.39e7
26.21
ES 2378D
2.00e7
26.91
Abs. Int.
5.08e6
2.54e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.80
333.9339 Fn1
Flags: PBM
4σ 2.42e3
0%
JS 1234D
2.90e7
26.21
ES 2378D
2.49e7
26.91
Abs. Int.
6.27e6
3.13e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT


Rel. Int.
100%
PeCDD
28.82-33.81
355.8546 Fn2
Flags: PBM
4σ 3.43e3
12479/12468D
6.94e4
30.03
Abs. Int.
1.60e4
7.99e3
0.00e0
0%
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD
28.82-33.81
357.8517 Fn2
Flags: PBM
4σ 3.29e3
12479/12468D
4.20e4
30.02
Abs. Int.
1.48e4
7.38e3
0.00e0
0%
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.82-33.81
367.8949 Fn2
Flags: PBM
4σ 1.53e3
CS 12347D
2.08e7
32.10
ES 12378D
2.05e7
32.62
Abs. Int.
6.07e6
3.03e6
0.00e0
0%
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.82-33.81
369.8919 Fn2
Flags: PBM
4σ 3.17e3
CS 12347D
1.28e7
32.10
ES 12378D
1.32e7
32.62
Abs. Int.
3.67e6
1.83e6
0.00e0
0%
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
QC Check
28.82-33.81
366.9792 Fn2
Flags: -
Abs. Int.
5.55e6
2.77e6
0.00e0
0%
29.0
30.0
31.0
32.0
33.0
RT



Results: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\B4526_17662_DF_002.utp_res, saved 12-Aug-2020 15:18 (DTF) *Peak annotation: Areas, Centroids*

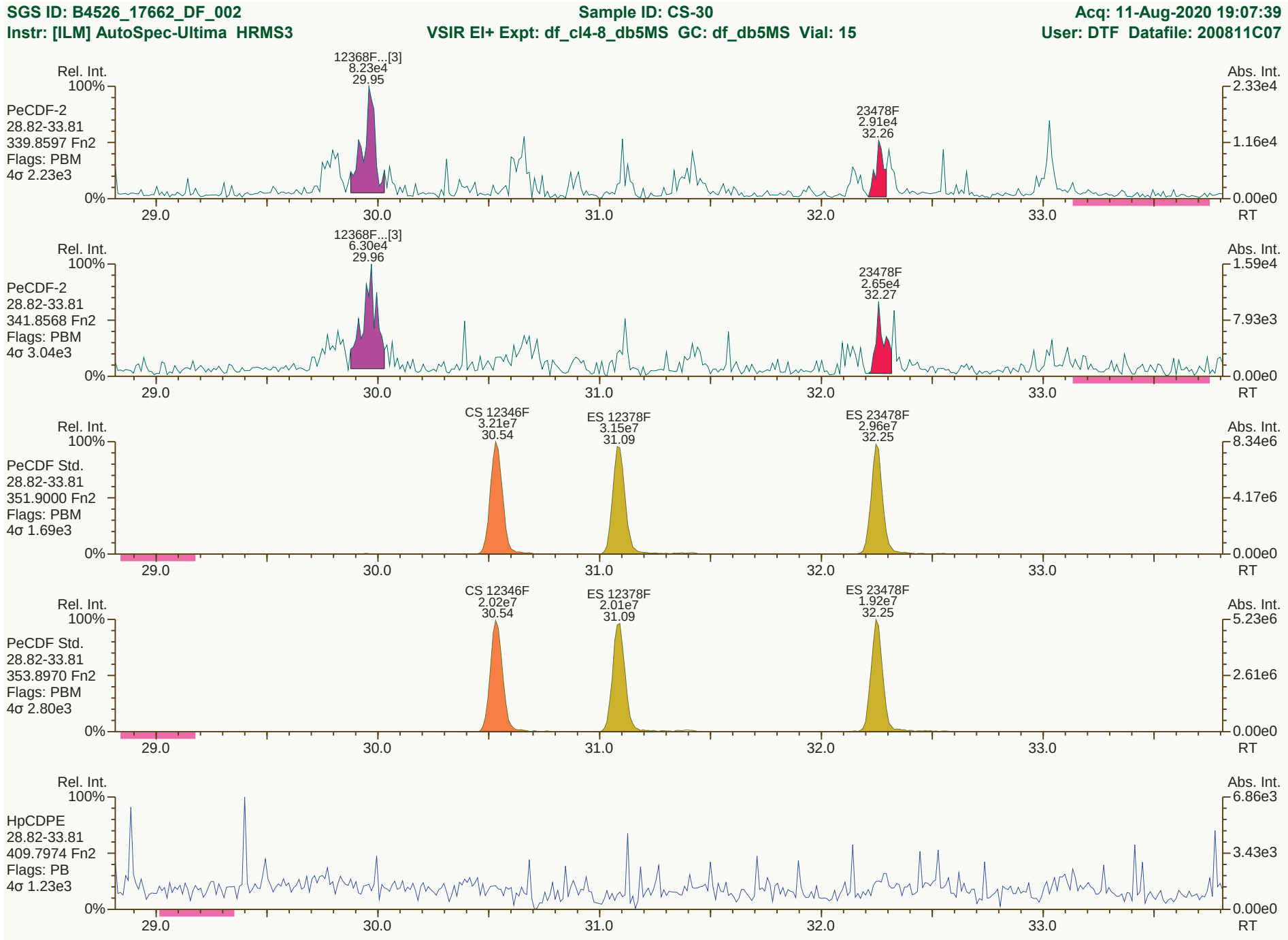
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 3460, 0189 scc: 142-051 *Revised: 12-Aug-2020 10:36 (DTF) Printed: 12-Aug-2020 15:34 Page 4 of 12*


Rel. Int.
100%
HpCDD
37.92-41.20
423.7767 Fn4
Flags: PBM
4σ 9.38e2
0%
1234679D
2.03e6
39.45
1234678D
1.08e6
40.16
Abs. Int.
5.42e5
2.71e5
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD
37.92-41.20
425.7737 Fn4
Flags: PBM
4σ 1.13e3
0%
1234679D
2.05e6
39.45
1234678D
9.62e5
40.16
Abs. Int.
5.66e5
2.83e5
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.92-41.20
435.8169 Fn4
Flags: PBM
4σ 1.26e3
0%
ES 1234678D
1.07e7
40.15
Abs. Int.
2.66e6
1.33e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.92-41.20
437.8140 Fn4
Flags: PBM
4σ 1.58e3
0%
ES 1234678D
1.00e7
40.15
Abs. Int.
2.49e6
1.24e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
QC Check
37.92-41.20
430.9728 Fn4
Flags: -
0%
Abs. Int.
7.15e6
3.58e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT

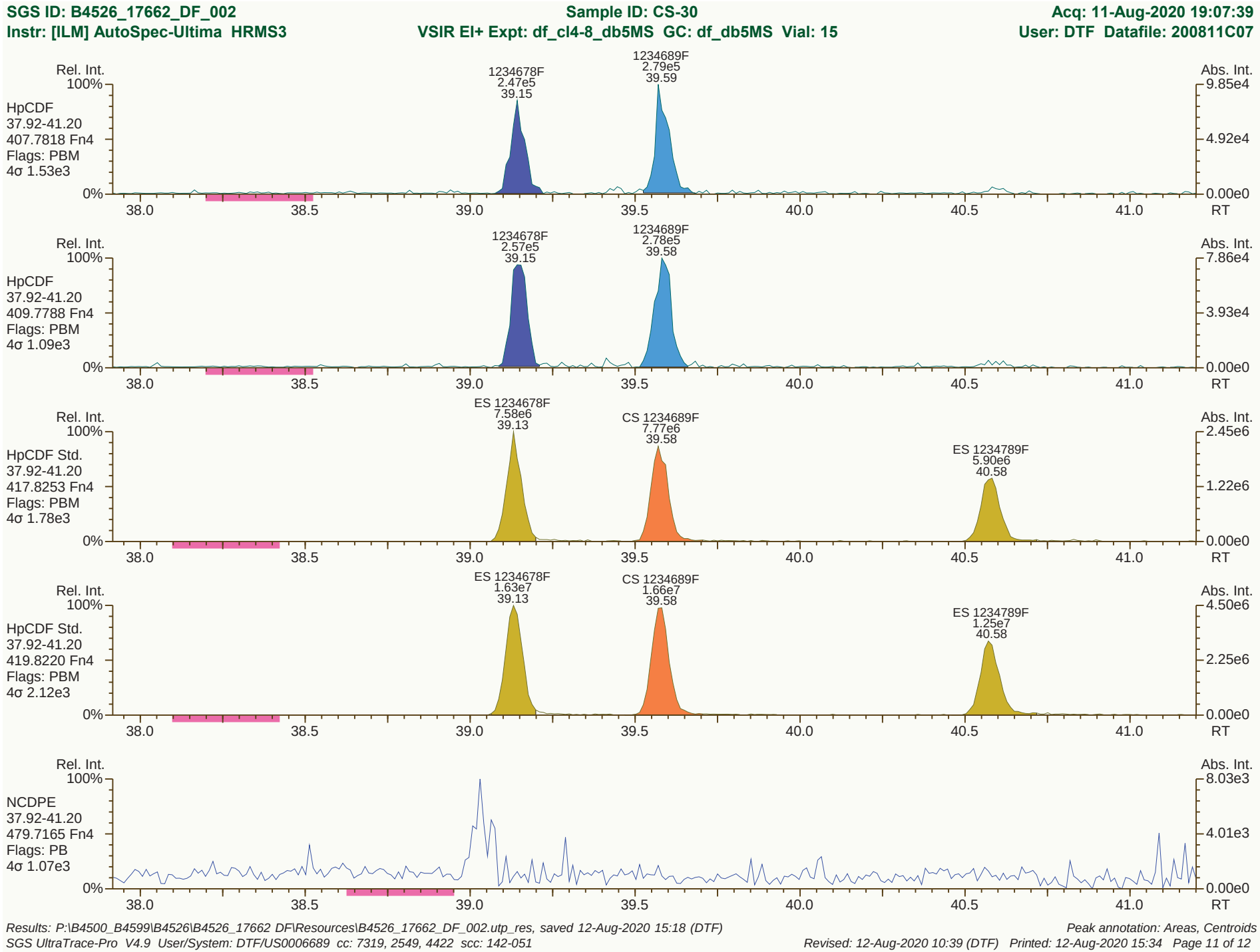

OCDD
8.30e6
42.87
Rel. Int.
100%
OCDD
41.21-44.80
457.7377 Fn5
Flags: PBM
4σ 1.62e3
0%
Abs. Int.
1.24e6
6.20e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
OCDD
9.29e6
42.87
Rel. Int.
100%
OCDD
41.21-44.80
459.7348 Fn5
Flags: PBM
4σ 1.82e3
0%
Abs. Int.
1.42e6
7.09e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDD
1.01e7
42.86
Rel. Int.
100%
OCDD Std.
41.21-44.80
469.7780 Fn5
Flags: PBM
4σ 1.73e3
0%
Abs. Int.
1.56e6
7.79e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDD
1.14e7
42.86
Rel. Int.
100%
OCDD Std.
41.21-44.80
471.7750 Fn5
Flags: PBM
4σ 1.73e3
0%
Abs. Int.
1.73e6
8.66e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
QC Check
41.21-44.80
454.9728 Fn5
Flags: -
0%
Abs. Int.
9.90e6
4.95e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT


SGS ID: B4526_17662_DF_002
Sample ID: CS-30
Acq: 11-Aug-2020 19:07:39
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 15
User: DTF Datafile: 200811C07
Rel. Int.
Abs. Int.
TCDF
19.04-28.80
303.9016 Fn1
Flags: PBM
4σ 1.58e3
2468F
5.23e4
21.88
1289F
1.05e5
28.15
3.04e4
1.52e4
0.00e0
TCDF
19.04-28.80
305.8987 Fn1
Flags: PBM
4σ 2.25e3
2468F
6.41e4
21.89
1289F
5.62e4
28.14
1.84e4
9.19e3
TCDF Std.
19.04-28.80
315.9419 Fn1
Flags: PBM
4σ 1.14e4
JS 1234F
3.38e7
24.47
ES 2378F
2.92e7
25.96
6.54e6
3.27e6
TCDF Std.
19.04-28.80
317.9389 Fn1
Flags: PBM
4σ 6.17e3
JS 1234F
4.21e7
24.47
ES 2378F
3.57e7
25.95
7.85e6
3.92e6
HxCDPE
19.04-28.80
375.8364 Fn1
Flags: PB
4σ 1.03e3
5.63e3
2.82e3
100%
0%
20.0
22.0
24.0
26.0
28.0
RT
Results: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\B4526_17662_DF_002.utp_res, saved 12-Aug-2020 15:18 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 2624, 3807, 2036 scc: 142-051
Revised: 12-Aug-2020 10:36 (DTF) Printed: 12-Aug-2020 15:34 Page 7 of 12


Rel. Int.
100%
0%
Abs. Int.
3.23e4
1.62e4
0.00e0
RT
20.0
22.0
24.0
26.0
28.0
PeCDF-1
19.04-28.80
339.8597 Fn1
Flags: PBM
4σ 1.22e3
13468/12468F
1.50e5
28.16
PeCDF-1
19.04-28.80
341.8568 Fn1
Flags: PBM
4σ 1.41e3
13468/12468F
1.35e5
28.15
3.14e4
1.57e4
QC Check
19.04-28.80
316.9824 Fn1
Flags: -
6.19e6
3.10e6


SGS ID: B4526_17662_DF_002
Sample ID: CS-30
Acq: 11-Aug-2020 19:07:39
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 15
User: DTF Datafile: 200811C07
Rel. Int.
Abs. Int.
PeCDF-2
28.82-33.81
339.8597 Fn2
Flags: PBM
4σ 2.23e3
12368F...[3]
8.23e4
29.95
23478F
2.91e4
32.26
2.33e4
1.16e4
0.00e0
PeCDF-2
28.82-33.81
341.8568 Fn2
Flags: PBM
4σ 3.04e3
12368F...[3]
6.30e4
29.96
23478F
2.65e4
32.27
1.59e4
7.93e3
PeCDF Std.
28.82-33.81
351.9000 Fn2
Flags: PBM
4σ 1.69e3
CS 12346F
3.21e7
30.54
ES 12378F
3.15e7
31.09
ES 23478F
2.96e7
32.25
8.34e6
4.17e6
PeCDF Std.
28.82-33.81
353.8970 Fn2
Flags: PBM
4σ 2.80e3
CS 12346F
2.02e7
30.54
ES 12378F
2.01e7
31.09
ES 23478F
1.92e7
32.25
5.23e6
2.61e6
HpCDPE
28.82-33.81
409.7974 Fn2
Flags: PB
4σ 1.23e3
6.86e3
3.43e3
100%
0%
29.0
30.0
31.0
32.0
33.0
RT
Results: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\B4526_17662_DF_002.utp_res, saved 12-Aug-2020 15:18 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 6827, 8842, 8037 scc: 142-051
Revised: 12-Aug-2020 10:38 (DTF) Printed: 12-Aug-2020 15:34 Page 9 of 12


Rel. Int.
100%
HxCDF
33.82-37.91
373.8207 Fn3
Flags: PBM
4σ 1.36e3
123468F 5.23e4 34.26
124678/134678F 1.81e5 34.46
124689F 1.66e5 35.13
123467F 2.00e4 35.56
123478F 4.08e4 35.68
123678F 3.43e4 35.82
234678F 4.24e4 36.50
Abs. Int.
5.86e4
2.93e4
0.00e0
0%
34.0 34.5 35.0 35.5 36.0 36.5 37.0 37.5
RT
Rel. Int.
100%
HxCDF
33.82-37.91
375.8178 Fn3
Flags: PBM
4σ 1.44e3
123468F 3.37e4 34.25
124678/134678F 1.49e5 34.46
124689F 1.09e5 35.13
123467F 2.09e4 35.57
123478F 2.79e4 35.68
123678F 3.05e4 35.83
234678F 4.27e4 36.50
Abs. Int.
4.77e4
2.39e4
0.00e0
0%
34.0 34.5 35.0 35.5 36.0 36.5 37.0 37.5
RT
Rel. Int.
100%
HxCDF Std.
33.82-37.91
383.8639 Fn3
Flags: PBM
4σ 4.07e3
ES 123478F 1.18e7 35.67
ES 123678F 1.40e7 35.81
CS 123469F 1.27e7 36.12
ES 234678F 1.19e7 36.49
ES 123789F 1.07e7 37.46
Abs. Int.
3.70e6
1.85e6
0.00e0
0%
34.0 34.5 35.0 35.5 36.0 36.5 37.0 37.5
RT
Rel. Int.
100%
HxCDF Std.
33.82-37.91
385.8610 Fn3
Flags: PBM
4σ 2.01e3
ES 123478F 2.17e7 35.67
ES 123678F 2.59e7 35.81
CS 123469F 2.33e7 36.12
ES 234678F 2.25e7 36.49
ES 123789F 1.96e7 37.46
Abs. Int.
7.03e6
3.51e6
0.00e0
0%
34.0 34.5 35.0 35.5 36.0 36.5 37.0 37.5
RT
Rel. Int.
100%
OCDPE
33.82-37.91
445.7555 Fn3
Flags: PB
4σ 9.36e2
Abs. Int.
3.47e3
1.73e3
0.00e0
0%
34.0 34.5 35.0 35.5 36.0 36.5 37.0 37.5
RT


SGS ID: B4526_17662_DF_002
Sample ID: CS-30
Acq: 11-Aug-2020 19:07:39
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 15
User: DTF Datafile: 200811C07
Rel. Int.
Abs. Int.
HpCDF
37.92-41.20
407.7818 Fn4
Flags: PBM
4σ 1.53e3
1234678F
2.47e5
39.15
1234689F
2.79e5
39.59
9.85e4
4.92e4
0.00e0
HpCDF
37.92-41.20
409.7788 Fn4
Flags: PBM
4σ 1.09e3
1234678F
2.57e5
39.15
1234689F
2.78e5
39.58
7.86e4
3.93e4
0.00e0
HpCDF Std.
37.92-41.20
417.8253 Fn4
Flags: PBM
4σ 1.78e3
ES 1234678F
7.58e6
39.13
CS 1234689F
7.77e6
39.58
ES 1234789F
5.90e6
40.58
2.45e6
1.22e6
0.00e0
HpCDF Std.
37.92-41.20
419.8220 Fn4
Flags: PBM
4σ 2.12e3
ES 1234678F
1.63e7
39.13
CS 1234689F
1.66e7
39.58
ES 1234789F
1.25e7
40.58
4.50e6
2.25e6
0.00e0
NCDPE
37.92-41.20
479.7165 Fn4
Flags: PB
4σ 1.07e3
8.03e3
4.01e3
0.00e0
100%
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Results: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\B4526_17662_DF_002.utp_res, saved 12-Aug-2020 15:18 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 7319, 2549, 4422 scc: 142-051
Revised: 12-Aug-2020 10:39 (DTF) Printed: 12-Aug-2020 15:34 Page 11 of 12


OCDF
1.69e5
43.00
Rel. Int.
100%
OCDF
41.21-44.80
441.7428 Fn5
Flags: PBM
4σ 1.29e3
0%
Abs. Int.
3.62e4
1.81e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
OCDF
1.68e5
43.01
Rel. Int.
100%
OCDF
41.21-44.80
443.7398 Fn5
Flags: PBM
4σ 2.03e3
0%
Abs. Int.
3.65e4
1.82e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDF
1.38e7
43.01
Rel. Int.
100%
OCDF Std.
41.21-44.80
453.7830 Fn5
Flags: PBM
4σ 1.27e3
0%
Abs. Int.
2.12e6
1.06e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDF
1.48e7
43.00
Rel. Int.
100%
OCDF Std.
41.21-44.80
455.7801 Fn5
Flags: PBM
4σ 2.68e3
0%
Abs. Int.
2.15e6
1.08e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
DCDPE
41.21-44.80
513.6775 Fn5
Flags: PB
4σ 1.10e3
0%
Abs. Int.
4.05e3
2.03e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT

Lab ID: B4526_17662_DF_003 **Acq'd:** 11 Aug 2020 19:54 DTF **Wt/Vol:** 9.31 g **ICAL:** HRMS3_DF_10122018_28AUG2019

Client ID: CS-31 **UTP:** 12-Aug-2020 15:18:31 DTF **J-level:** 0.537 pg/g **Split:** 1 **Checkcode:** 967-394-KCM

Datafile: 200811C08 **Report:** 12 Aug 2020 15:21 TF **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	NotFnd		1.0008	-		-	-	-	1.19	-	7161	0.327
12378-PeCDD	NotFnd		1.0006	-		-	-	-	0.98	-	3706	0.217
123478-HxCDD	36.69	J EMPC	1.0004	1.0003	-0.2	8.52E+04	1.02	N	1.02	0.654	3304	0.215
123678-HxCDD	36.81	J	1.0036	1.0035	-0.2	1.31E+05	1.31	Y	1.09	0.94	3304	0.209
123789-HxCDD	37.12	J	1.0118	1.0118	0	1.64E+05	1.35	Y	0.97	1.19	3304	0.229
1234678-HpCDD	40.18		1.0003	1.0003	0	3.17E+06	0.99	Y	0.98	32.8	2852	0.303
OCDD	42.88		1.0003	1.0003	0	3.00E+07	0.89	Y	1.07	521	3249	0.902
2378-TCDF	NotFnd		1.0009	-		-	-	-	1.01	-	6345	0.241
12378-PeCDF	NotFnd		1.0006	-		-	-	-	0.96	-	2687	0.107
23478-PeCDF	32.28	J EMPC	1.0005	1.0006	+0.2	8.73E+04	1.82	N	0.99	0.368	2687	0.104
123478-HxCDF	35.69	J	1.0005	1.0004	-0.2	9.35E+04	1.29	Y	1.21	0.48	3109	0.135
123678-HxCDF	35.83	J EMPC	1.0005	1.0004	-0.2	7.47E+04	0.96	N	1.11	0.362	3109	0.143
234678-HxCDF	36.51	J EMPC	1.0004	1.0004	0	6.83E+04	0.80	N	1.12	0.371	3109	0.147
123789-HxCDF	NotFnd		1.0005	-		-	-	-	1.11	-	3109	0.193
1234678-HpCDF	39.16		1.0003	1.0003	0	6.45E+05	1.00	Y	1.32	4.33	1943	0.124
1234789-HpCDF	NotFnd		1.0003	-		-	-	-	1.26	-	1943	0.187
OCDF	43.03		1.0003	1.0004	+0.3	4.47E+05	0.79	Y	1.03	6.24	2628	0.578

Name	Act RT		Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	26.92		1.0266	1.0268	+0.3	4.51E+07	0.80	Y	0.99	77.7
ES 12378-PeCDD	32.63		1.2430	1.2444	+2.7	3.51E+07	1.55	Y	0.83	72
ES 123478-HxCDD	36.68		0.9916	0.9916	0	2.73E+07	1.27	Y	0.95	72.8
ES 123678-HxCDD	36.80		0.9947	0.9947	0	2.76E+07	1.26	Y	0.98	71.5
ES 123789-HxCDD	37.10		1.0029	1.0029	0	3.05E+07	1.24	Y	1.14	67.7
ES 1234678-HpCDD	40.16		1.0851	1.0857	+1.4	2.13E+07	1.07	Y	0.90	59.8
ES OCDD	42.87		1.1584	1.1588	+1.0	2.31E+07	0.91	Y	0.63	46.5
ES 2378-TCDF	25.97		1.0602	1.0606	+0.6	6.60E+07	0.80	Y	1.00	77.2
ES 12378-PeCDF	31.10		1.2683	1.2700	+3.2	5.29E+07	1.55	Y	0.83	74.2
ES 23478-PeCDF	32.26		1.3156	1.3175	+3.7	5.16E+07	1.57	Y	0.81	74.6
ES 123478-HxCDF	35.67		0.9644	0.9643	-0.2	3.47E+07	0.52	Y	1.12	77.9
ES 123678-HxCDF	35.81		0.9682	0.9681	-0.2	4.01E+07	0.54	Y	1.33	76
ES 234678-HxCDF	36.49		0.9864	0.9864	0	3.54E+07	0.53	Y	1.21	74
ES 123789-HxCDF	37.47		1.0128	1.0128	0	3.14E+07	0.55	Y	1.12	70.8
ES 1234678-HpCDF	39.14		1.0578	1.0581	+0.7	2.42E+07	0.45	Y	0.92	66
ES 1234789-HpCDF	40.59		1.0967	1.0972	+1.2	1.94E+07	0.46	Y	0.82	59.9
ES OCDF	43.01		1.1623	1.1627	+1.0	2.98E+07	0.92	Y	0.78	48.3

Lab ID: B4526_17662_DF_003 | Acq'd: 11 Aug 2020 19:54 DTF | Wt/Vol: 9.31 g | ICAL: HRMS3_DF_10122018_28AUG2019

Client ID: CS-31 | UTP: 12-Aug-2020 15:18:31 DTF | J-level: 0.537 pg/g | Split: 1 | Checkcode: 967-394-KCM

Datafile: 200811C08 | Report: 12 Aug 2020 15:21 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %	
JS 1234-TCDD	26.22		-	-	-	5.88E+07	0.81	Y	-	-	
JS 1234-TCDF	24.49		-	-	-	8.58E+07	0.80	Y	-	-	
JS 123467-HxCDD	36.99		-	-	-	1.98E+07	1.25	Y	-	-	
CS 37Cl-2378-TCDD	26.94		1.0276	1.0277	+0.2	2.19E+07	n/a	-	1.12	83	
CS 12347-PeCDD	32.11		1.2233	1.2246	+2.5	3.80E+07	1.56	Y	0.71	90.6	
CS 12346-PeCDF	30.55		1.2459	1.2475	+2.9	5.73E+07	1.58	Y	0.81	82.6	
CS 123469-HxCDF	36.13		0.9767	0.9765	-0.4	3.83E+07	0.55	Y	1.12	86.1	
CS 1234689-HpCDF	39.59		1.0696	1.0700	+1.0	2.67E+07	0.47	Y	0.90	75.1	
~~SS 37Cl-2378-TCDD~~	~~26.94~~		~~1.0276~~	~~1.0277~~	~~+0.2~~	~~2.19E+07~~	~~n/a~~		~~1.14~~	~~106~~	Not used in this project.
~~SS 12347-PeCDD~~	~~32.11~~		~~1.2233~~	~~1.2246~~	~~+2.5~~	~~3.80E+07~~	~~1.56~~	~~Y~~	~~0.86~~	~~125~~	CL 13Aug20
~~SS 12346-PeCDF~~	~~30.55~~		~~1.2459~~	~~1.2475~~	~~+2.9~~	~~5.73E+07~~	~~1.58~~	~~Y~~	~~0.98~~	~~111~~	
~~SS 123469-HxCDF~~	~~36.13~~		~~0.9767~~	~~0.9765~~	~~-0.4~~	~~3.83E+07~~	~~0.55~~	~~Y~~	~~0.85~~	~~113~~	
~~SS 1234689-HpCDF~~	~~39.59~~		~~1.0696~~	~~1.0700~~	~~+1.0~~	~~2.67E+07~~	~~0.47~~	~~Y~~	~~0.97~~	~~113~~	

Totals	Conc	EMPC
Total TCDD	0	0.651
Total PeCDD	1.66	2.13
Total HxCDD	16.8	17.4
Total HpCDD	98.1	98.1
Total Tetra-Octa Dioxins	638	640
Total TCDF	3.03	4.44
Total PeCDF	4.49	5.1
Total HxCDF	3.7	6.06
Total HpCDF	9.25	9.25
Total Tetra-Octa Furans	26.7	31.1
Total Tetra-Octa Dioxins & Furans	664	671

Lab ID: B4526_17662_DF_003 | Acq'd: 11 Aug 2020 19:54 DTF | Wt/Vol: 9.31 g | ICAL: HRMS3_DF_10122018_28AUG2019

Client ID: CS-31 | UTP: 12-Aug-2020 15:18:31 DTF | J-level: 0.537 pg/g | Split: 1 | Checkcode: 967-394-KCM

Datafile: 200811C08 | Report: 12 Aug 2020 15:21 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1368-TCDD	22.92	EMPC	0.8523	0.8515	-1.1	1.63E+05	0.91	N	1.19	0.651	7161	0.327
1379-TCDD	NotFnd		0.8682						1.19		7161	0.327
1369-TCDD	NotFnd		0.8858						1.19		7161	0.327
1469-TCDD	NotFnd		0.9177						1.19		7161	0.327
1247/1246/1248/1249-TCDD	NotFnd		0.9274						1.19		7161	0.327
1378-TCDD	NotFnd		0.9349						1.19		7161	0.327
1268-TCDD	NotFnd		0.9430						1.19		7161	0.327
1478-TCDD	NotFnd		0.9529						1.19		7161	0.327
1279-TCDD	NotFnd		0.9597						1.19		7161	0.327
1234/1269-TCDD	NotFnd		0.9739						1.19		7161	0.327
1236-TCDD	NotFnd		0.9794						1.19		7161	0.327
1237/1238-TCDD	NotFnd		0.9895						1.19		7161	0.327
1239-TCDD	NotFnd		0.9950						1.19		7161	0.327
2378-TCDD	**NotFnd**		**1.0008**						**1.19**		**7161**	**0.327**
1278-TCDD	NotFnd		1.0139						1.19		7161	0.327
1267-TCDD	NotFnd		1.0194						1.19		7161	0.327
1289-TCDD	NotFnd		1.0397						1.19		7161	0.327
12479/12468-PeCDD	30.04	J	0.9209	0.9206	-0.5	1.89E+05	1.52	Y	0.98	1.17	3706	0.217
12469-PeCDD	30.58	J	0.9382	0.9374	-1.5	7.77E+04	1.49	Y	0.98	0.482	3706	0.217
12368-PeCDD	31.17	J EMPC	0.9557	0.9554	-0.6	7.59E+04	1.98	N	0.98	0.471	3706	0.217
12478-PeCDD	NotFnd		0.9617						0.98		3706	0.217
12379-PeCDD	NotFnd		0.9649						0.98		3706	0.217
12369/12467/12489-PeCDD	NotFnd		0.9732						0.98		3706	0.217
12346/12347-PeCDD	NotFnd		0.9850						0.98		3706	0.217
12378-PeCDD	NotFnd		**1.0006**						**0.98**		**3706**	**0.217**
12367-PeCDD	NotFnd		1.0038						0.98		3706	0.217
12389-PeCDD	NotFnd		1.0146						0.98		3706	0.217
124679/124689-HxCDD	34.95		0.9530	0.9528	-0.4	1.01E+06	1.27	Y	1.03	7.42	3304	0.218
123468-HxCDD	35.63	J	0.9715	0.9712	-0.6	2.54E+05	1.35	Y	1.03	1.86	3304	0.218
123679/123689-HxCDD	35.93		0.9795	0.9794	-0.2	6.58E+05	1.40	Y	1.03	4.83	3304	0.218
123469-HxCDD	NotFnd		0.9832						1.03		3304	0.218
123478-HxCDD	36.69	J EMPC	**1.0004**	**1.0003**	**-0.2**	**8.52E+04**	**1.02**	**N**	1.02	**0.654**	**3304**	**0.215**
123678-HxCDD	36.81	J	**1.0036**	**1.0035**	**-0.2**	**1.31E+05**	**1.31**	**Y**	1.09	**0.94**	**3304**	**0.209**
123467-HxCDD	37.01	J	1.0089	1.0089	0	7.06E+04	1.41	Y	1.03	0.519	3304	0.218
123789-HxCDD	37.12	J	**1.0118**	**1.0118**	**0**	**1.64E+05**	**1.35**	**Y**	0.97	**1.19**	**3304**	**0.229**

Lab ID: B4526_17662_DF_003 | Acq'd: 11 Aug 2020 19:54 DTF | Wt/Vol: 9.31 g | ICAL: HRMS3_DF_10122018_28AUG2019

Client ID: CS-31 | UTP: 12-Aug-2020 15:18:31 DTF | J-level: 0.537 pg/g | Split: 1 | Checkcode: 967-394-KCM

Datafile: 200811C08 | Report: 12 Aug 2020 15:21 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

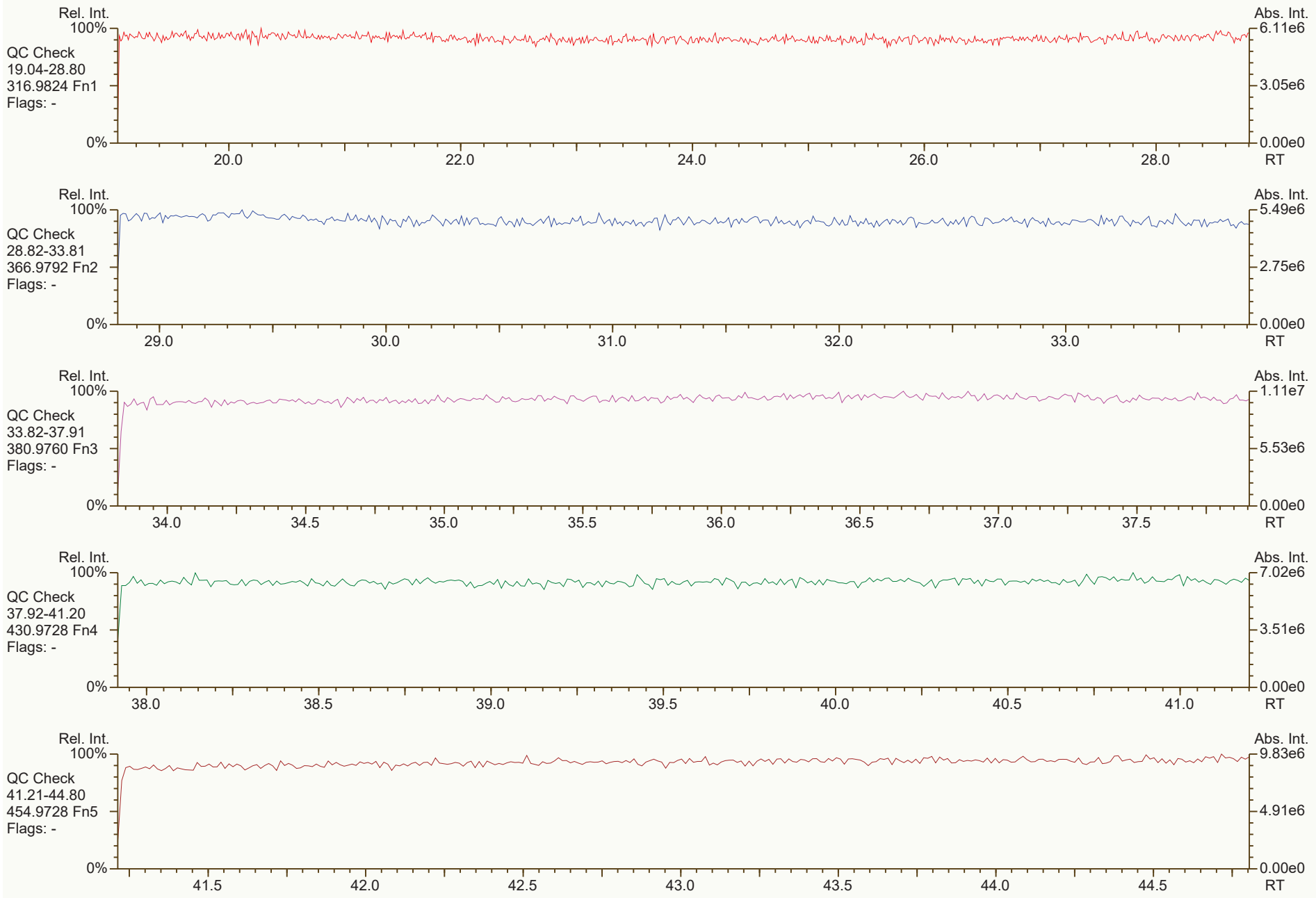
Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1234679-HpCDD	39.46		0.9826	0.9825	-0.2	6.32E+06	1.02	Y	0.98	65.3	2852	0.303
1234678-HpCDD	**40.18**		**1.0003**	**1.0003**	**0**	**3.17E+06**	**0.99**	**Y**	**0.98**	**32.8**	**2852**	**0.303**
OCDD	**42.88**		**1.0003**	**1.0003**	**0**	**3.00E+07**	**0.89**	**Y**	**1.07**	**521**	**3249**	**0.902**
OCDD-a	42.86	**#VALUE!**	1.0002	0.9998	-1.0	1.37E+06	2.41	Y	-	#VALUE!	5868	#VALUE!
1368-TCDF	20.71	J	0.7980	0.7974	-0.7	1.03E+05	0.76	Y	1.01	0.332	6345	0.241
1468-TCDF	NotFnd		0.8204						1.01		6345	0.241
2468-TCDF	21.91		0.8443	0.8436	-0.9	2.70E+05	0.82	Y	1.01	0.868	6345	0.241
1346/1246-TCDF	NotFnd		0.8597						1.01		6345	0.241
1347/1378/1247-TCDF	22.47		0.8665	0.8654	-1.5	1.95E+05	0.77	Y	1.01	0.627	6345	0.241
1348-TCDF	NotFnd		0.8785						1.01		6345	0.241
1248/1367/1379-TCDF	NotFnd		0.8840						1.01		6345	0.241
1268-TCDF	NotFnd		0.9004						1.01		6345	0.241
1467-TCDF	NotFnd		0.9060						1.01		6345	0.241
1478-TCDF	NotFnd		0.9132						1.01		6345	0.241
1369/1237-TCDF	NotFnd		0.9287						1.01		6345	0.241
2467-TCDF	NotFnd		0.9345						1.01		6345	0.241
2368-TCDF	24.42	J	0.9409	0.9402	-1.0	1.18E+05	0.78	Y	1.01	0.379	6345	0.241
1238/1234/1678/1469/1236-TCDF	24.53	J	0.9450	0.9444	-0.9	9.92E+04	0.77	Y	1.01	0.319	6345	0.241
1278-TCDF	NotFnd		0.9638						1.01		6345	0.241
1349-TCDF	NotFnd		0.9685						1.01		6345	0.241
1267-TCDF	NotFnd		0.9751						1.01		6345	0.241
2346/1249-TCDF	NotFnd		0.9831						1.01		6345	0.241
2347/1279-TCDF	NotFnd		0.9920						1.01		6345	0.241
2348-TCDF	NotFnd		0.9964						1.01		6345	0.241
2378-TCDF	**NotFnd**		**1.0009**						**1.01**		**6345**	**0.241**
2367/3467-TCDF	26.40	J	1.0164	1.0164	0	1.57E+05	0.84	Y	1.01	0.505	6345	0.241
1269-TCDF	NotFnd		1.0259						1.01		6345	0.241
1239-TCDF	NotFnd		1.0373						1.01		6345	0.241
1289-TCDF	28.15	EMPC	1.0838	1.0840	+0.3	4.38E+05	1.94	N	1.01	1.41	6345	0.241
13468/12468-PeCDF	28.16	J	0.9052	0.9057	+0.8	4.88E+05	1.52	Y	0.98	2.06	2416	0.095
13678/13467/12467-PeCDF	29.80	J	0.9582	0.9583	+0.2	1.42E+05	1.38	Y	0.98	0.598	2687	0.106
12368/13478/12478-PeCDF	29.97	J	0.9634	0.9636	+0.4	3.27E+05	1.61	Y	0.98	1.38	2687	0.106
14678-PeCDF	NotFnd		0.9668						0.98		2687	0.106
13479-PeCDF	NotFnd		0.9700						0.98		2687	0.106
13469/12479-PeCDF	NotFnd		0.9781						0.98		2687	0.106
12346-PeCDF	NotFnd		0.9829						0.98		2687	0.106

Lab ID: B4526_17662_DF_003 | Acq'd: 11 Aug 2020 19:54 DTF | Wt/Vol: 9.31 g | ICAL: HRMS3_DF_10122018_28AUG2019

Client ID: CS-31 | UTP: 12-Aug-2020 15:18:31 DTF | J-level: 0.537 pg/g | Split: 1 | Checkcode: 967-394-KCM

Datafile: 200811C08 | Report: 12 Aug 2020 15:21 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
23468/12469-PeCDF	NotFnd		0.9859						0.98		2687	0.106
12347-PeCDF	NotFnd		0.9884						0.98		2687	0.106
12348-PeCDF	NotFnd		0.9937						0.98		2687	0.106
12378-PeCDF	**NotFnd**		**1.0006**						**0.96**		**2687**	**0.107**
12678/12367-PeCDF	31.41	J	1.0097	1.0101	+0.8	1.10E+05	1.66	Y	0.98	0.463	2687	0.106
12379-PeCDF	NotFnd		1.0152						0.98		2687	0.106
12679-PeCDF	NotFnd		0.9923						0.98		2687	0.106
23467/12369-PeCDF	32.15	J EMPC	0.9966	0.9967	+0.2	5.59E+04	1.97	N	0.98	0.236	2687	0.106
23478-PeCDF	**32.28**	J EMPC	**1.0005**	**1.0006**	**+0.2**	**8.73E+04**	**1.82**	**N**	**0.99**	**0.368**	**2687**	**0.104**
23478/12489-PeCDF	NotFnd		0.0000						0.99			
12489-PeCDF	NotFnd		1.0043						0.98		2687	0.106
12349-PeCDF	NotFnd		1.0107						0.98		2687	0.106
12389-PeCDF	NotFnd		1.0349						0.98		2687	0.106
123468-HxCDF	34.27	J	0.9607	0.9606	-0.2	1.08E+05	1.12	Y	1.13	0.577	3109	0.153
124678/134678-HxCDF	34.47	J	0.9666	0.9662	-0.8	4.34E+05	1.18	Y	1.13	2.32	3109	0.153
134679-HxCDF	NotFnd		0.9730						1.13		3109	0.153
124679-HxCDF	NotFnd		0.9787						1.13		3109	0.153
124689-HxCDF	35.14	J EMPC	0.9850	0.9850	0	3.03E+05	1.44	N	1.13	1.62	3109	0.153
123467-HxCDF	35.57	J	0.9971	0.9971	0	6.10E+04	1.35	Y	1.13	0.326	3109	0.153
123478-HxCDF	**35.69**	J	**1.0005**	**1.0004**	**-0.2**	**9.35E+04**	**1.29**	**Y**	**1.21**	**0.48**	**3109**	**0.135**
123678-HxCDF	**35.83**	J EMPC	**1.0005**	**1.0004**	**-0.2**	**7.47E+04**	**0.96**	**N**	**1.11**	**0.362**	**3109**	**0.143**
123479-HxCDF	NotFnd		1.0049						1.13		3109	0.153
123469-HxCDF	NotFnd		1.0090						1.13		3109	0.153
123679-HxCDF	NotFnd		0.9941						1.13		3109	0.153
234678-HxCDF	**36.51**	J EMPC	**1.0004**	**1.0004**	**0**	**6.83E+04**	**0.80**	**N**	**1.12**	**0.371**	**3109**	**0.147**
234678/123689-HxCDF	NotFnd		0.0000						1.12			
123689-HxCDF	NotFnd		1.0041						1.13		3109	0.153
123789-HxCDF	**NotFnd**		**1.0005**						**1.11**		**3109**	**0.193**
123789/123489-HxCDF	NotFnd		0.0000						1.11			
123489-HxCDF	NotFnd		1.0009						1.13		3109	0.153
1234678-HpCDF	**39.16**		**1.0003**	**1.0003**	**0**	**6.45E+05**	**1.00**	**Y**	**1.32**	**4.33**	**1943**	**0.124**
1234679-HpCDF	NotFnd		1.0075						1.29		1943	0.151
1234689-HpCDF	39.60		1.0112	1.0116	+1.0	6.45E+05	1.05	Y	1.29	4.92	1943	0.151
1234789-HpCDF	**NotFnd**		**1.0003**						**1.26**		**1943**	**0.187**
OCDF	**43.03**		**1.0003**	**1.0004**	**+0.3**	**4.47E+05**	**0.79**	**Y**	**1.03**	**6.24**	**2628**	**0.578**
OCDF-a	NotFnd	**#VALUE!**	1.0002						-		3371	#VALUE!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19.04-28.80
316.9824 Fn1
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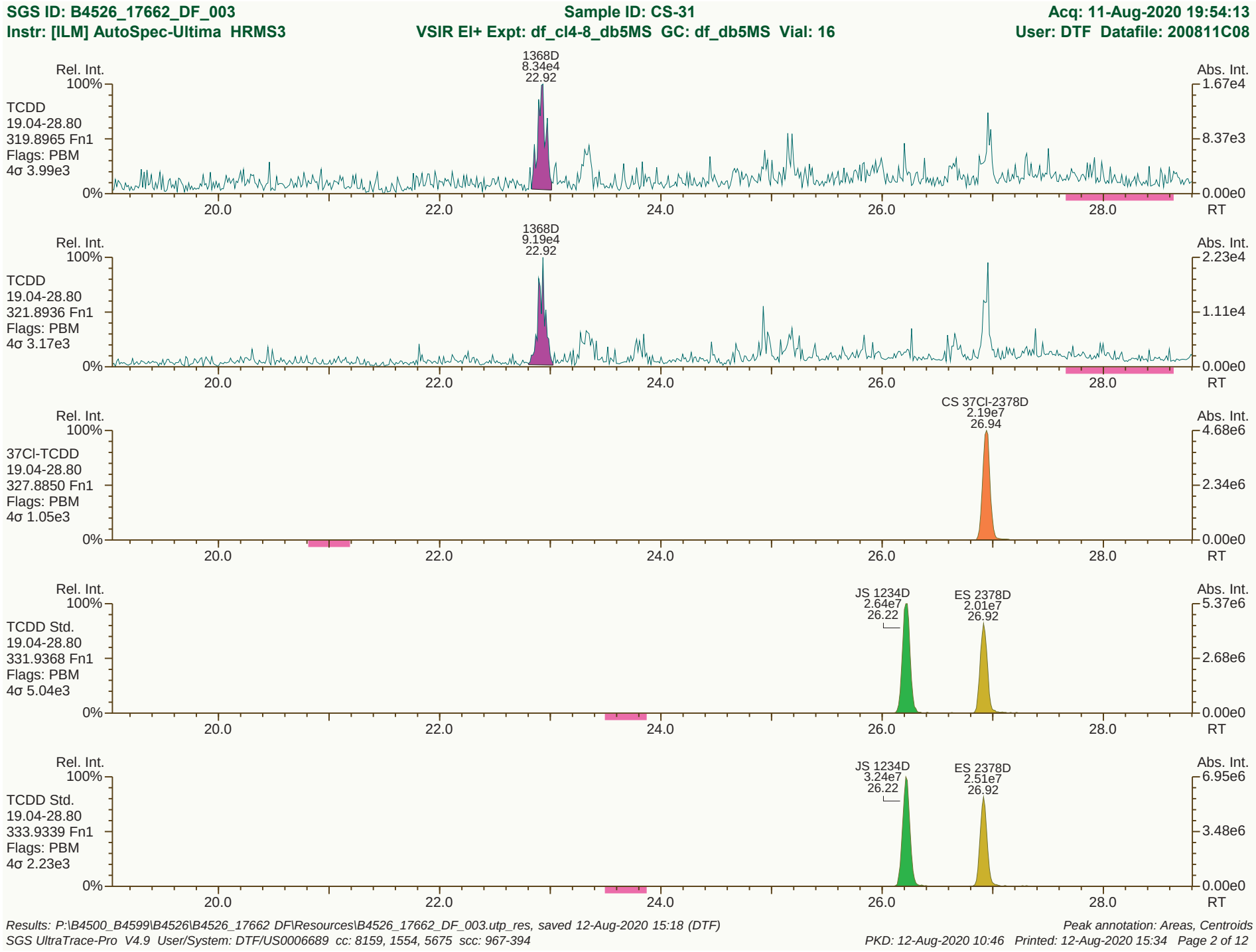
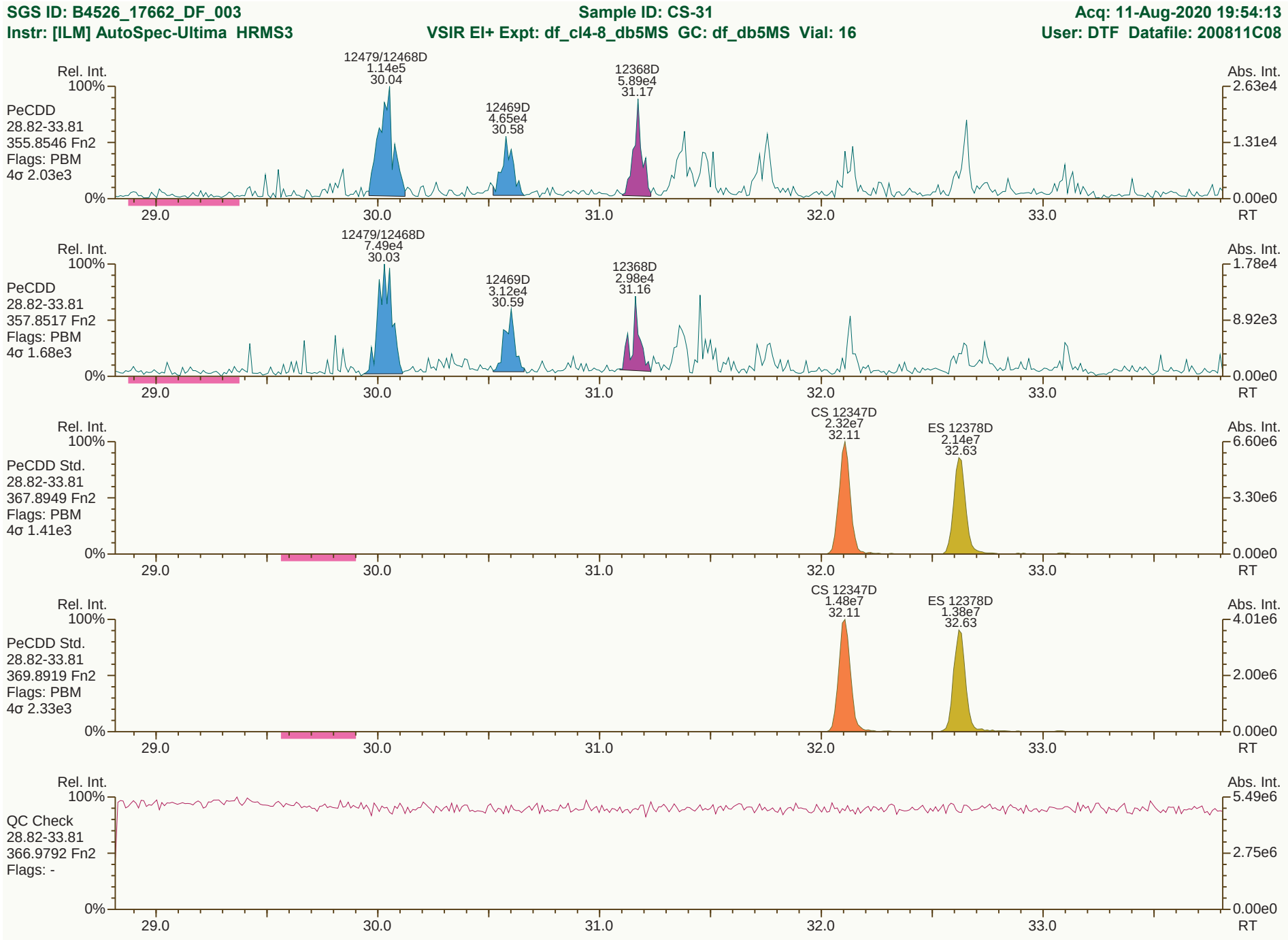
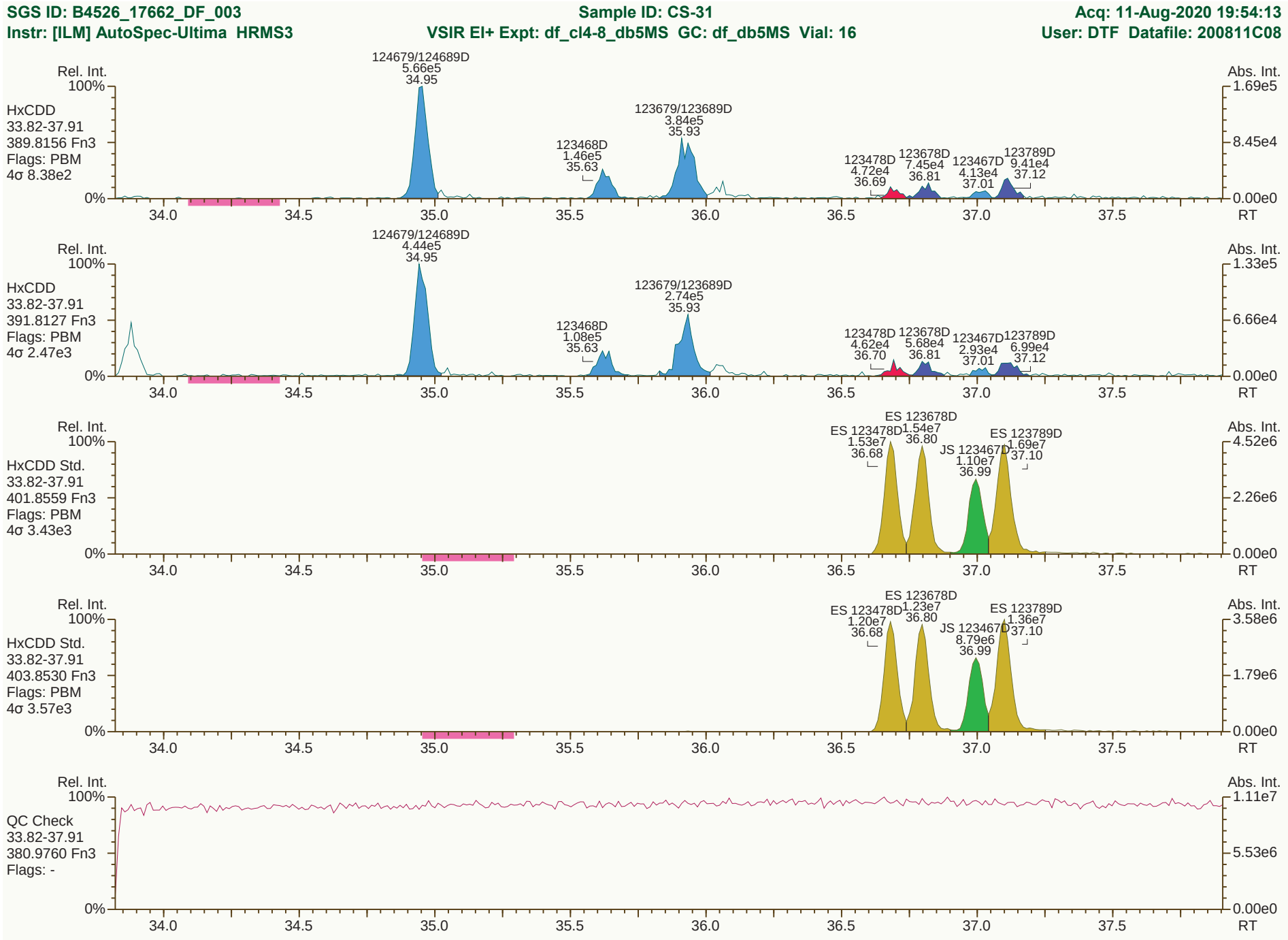
22.0
24.0
26.0
28.0
Abs. Int.
6.11e6
3.05e6
0.00e0
RT
Rel. Int.
100%
QC Check
28.82-33.81
366.9792 Fn2
Flags: -
0%
29.0
30.0
31.0
32.0
33.0
Abs. Int.
5.49e6
2.75e6
0.00e0
RT
Rel. Int.
100%
QC Check
33.82-37.91
380.9760 Fn3
Flags: -
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
Abs. Int.
1.11e7
5.53e6
0.00e0
RT
Rel. Int.
100%
QC Check
37.92-41.20
430.9728 Fn4
Flags: -
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
Abs. Int.
7.02e6
3.51e6
0.00e0
RT
Rel. Int.
100%
QC Check
41.21-44.80
454.9728 Fn5
Flags: -
0%
41.5
42.0
42.5
43.0
43.5
44.0
44.5
Abs. Int.
9.83e6
4.91e6
0.00e0
RT

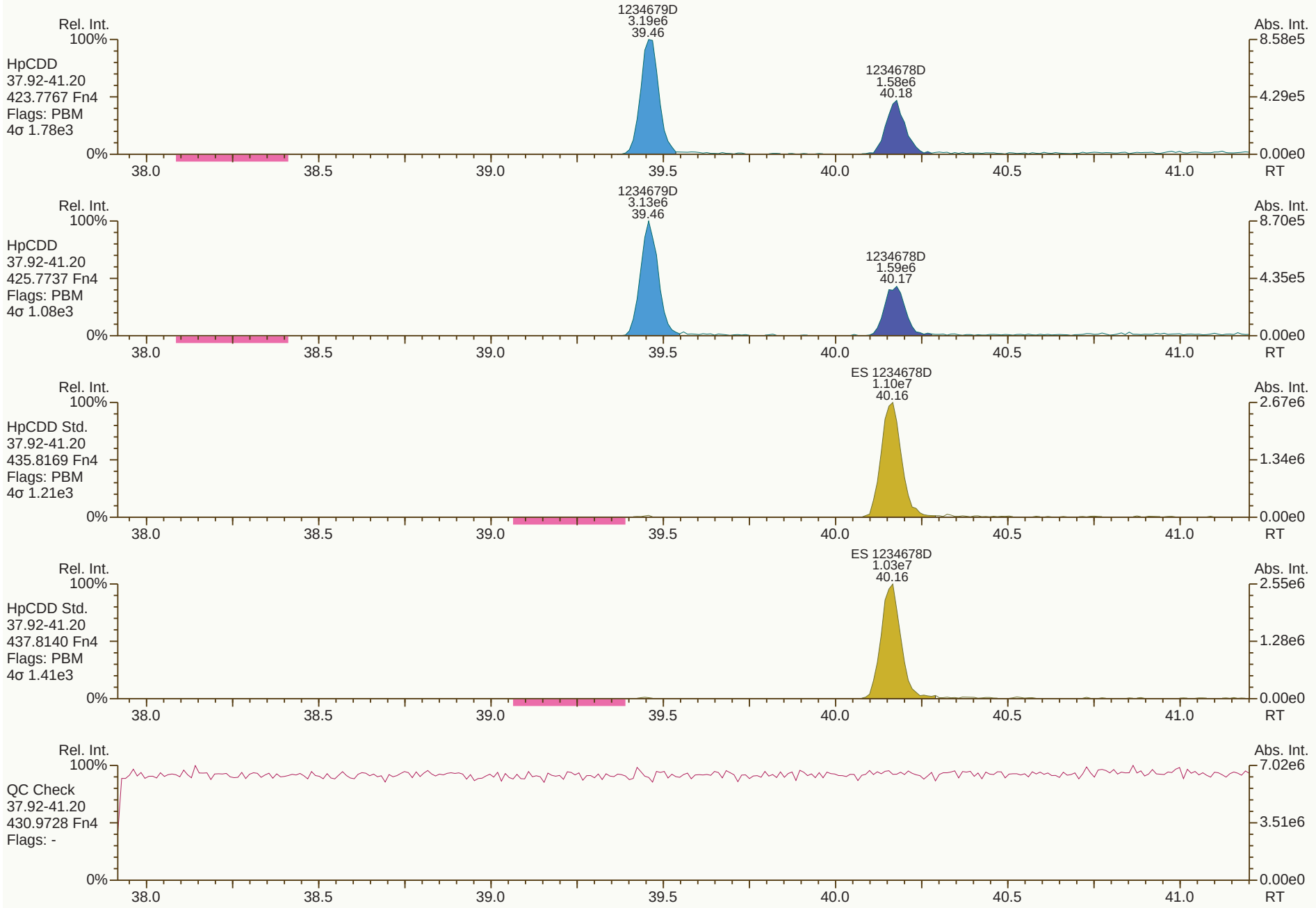
SGS ID: B4526_17662_DF_003 | Sample ID: CS-31 | Acq: 11-Aug-2020 19:54:13
Instr: [ILM] AutoSpec-Ultima HRMS3 | VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 16 | User: DTF Datafile: 200811C08

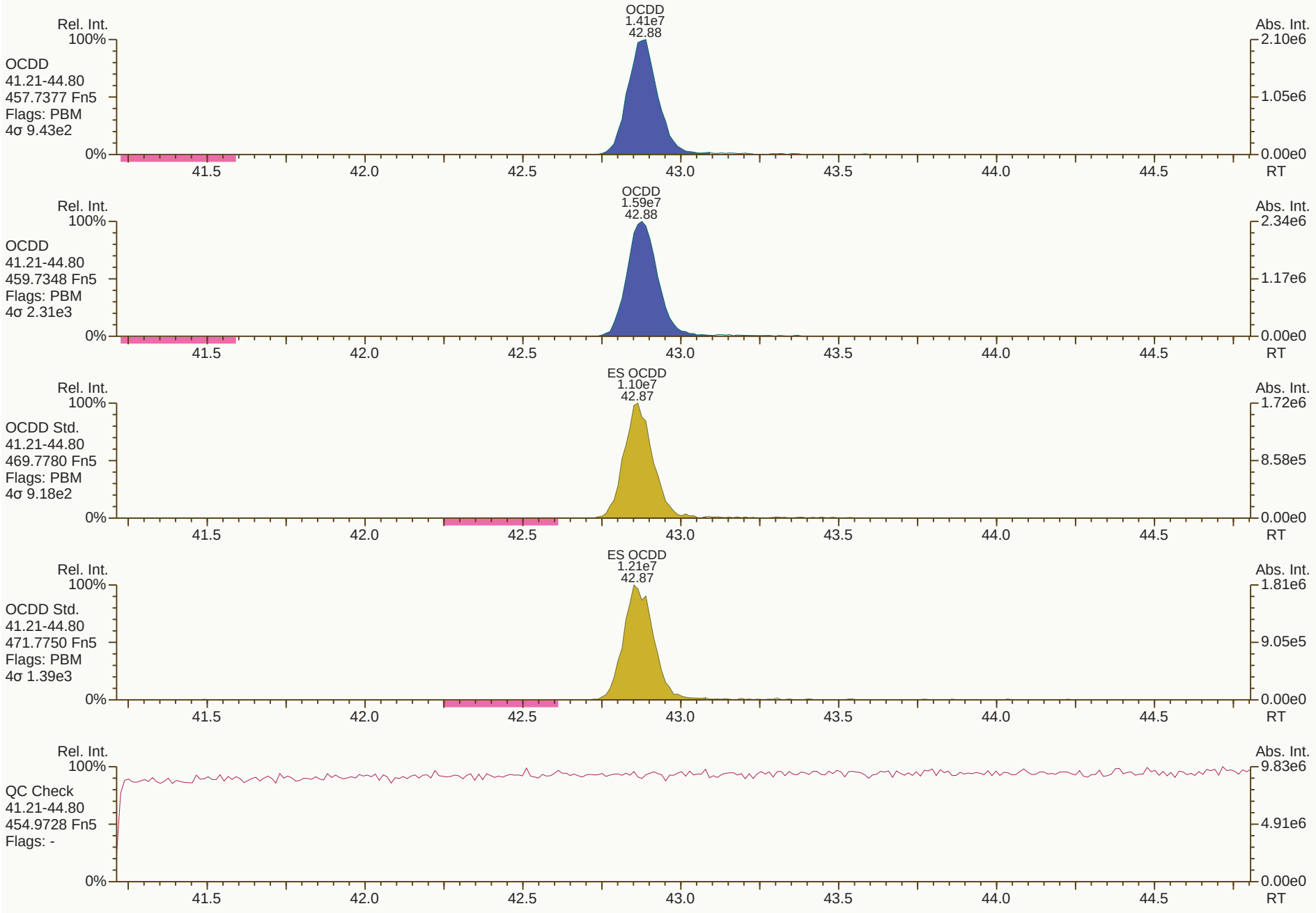


Results: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\B4526_17662_DF_003.utp_res, saved 12-Aug-2020 15:18 (DTF) | *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 8159, 1554, 5675 scc: 967-394 | *PKD: 12-Aug-2020 10:46 Printed: 12-Aug-2020 15:34 Page 2 of 12*


SGS ID: B4526_17662_DF_003
Sample ID: CS-31
Acq: 11-Aug-2020 19:54:13
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 16
User: DTF Datafile: 200811C08
Rel. Int.
Abs. Int.
PeCDD
28.82-33.81
355.8546 Fn2
Flags: PBM
4σ 2.03e3
12479/12468D
1.14e5
30.04
12469D
4.65e4
30.58
12368D
5.89e4
31.17
2.63e4
1.31e4
0.00e0
PeCDD
28.82-33.81
357.8517 Fn2
Flags: PBM
4σ 1.68e3
12479/12468D
7.49e4
30.03
12469D
3.12e4
30.59
12368D
2.98e4
31.16
1.78e4
8.92e3
0.00e0
PeCDD Std.
28.82-33.81
367.8949 Fn2
Flags: PBM
4σ 1.41e3
CS 12347D
2.32e7
32.11
ES 12378D
2.14e7
32.63
6.60e6
3.30e6
0.00e0
PeCDD Std.
28.82-33.81
369.8919 Fn2
Flags: PBM
4σ 2.33e3
CS 12347D
1.48e7
32.11
ES 12378D
1.38e7
32.63
4.01e6
2.00e6
0.00e0
QC Check
28.82-33.81
366.9792 Fn2
Flags: -
5.49e6
2.75e6
0.00e0
100%
0%
29.0
30.0
31.0
32.0
33.0
RT
Results: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\B4526_17662_DF_003.utp_res, saved 12-Aug-2020 15:18 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 3932, 8720 scc: 967-394
PKD: 12-Aug-2020 10:46 Printed: 12-Aug-2020 15:34 Page 3 of 12


SGS ID: B4526_17662_DF_003
Sample ID: CS-31
Acq: 11-Aug-2020 19:54:13
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 16
User: DTF Datafile: 200811C08
Rel. Int.
Abs. Int.
HxCDD
33.82-37.91
389.8156 Fn3
Flags: PBM
4σ 8.38e2
124679/124689D
5.66e5
34.95
123679/123689D
3.84e5
35.93
123468D
1.46e5
35.63
123478D
4.72e4
36.69
123678D
7.45e4
36.81
123467D
4.13e4
37.01
123789D
9.41e4
37.12
HxCDD
33.82-37.91
391.8127 Fn3
Flags: PBM
4σ 2.47e3
124679/124689D
4.44e5
34.95
123679/123689D
2.74e5
35.93
123468D
1.08e5
35.63
123478D
4.62e4
36.70
123678D
5.68e4
36.81
123467D
2.93e4
37.01
123789D
6.99e4
37.12
HxCDD Std.
33.82-37.91
401.8559 Fn3
Flags: PBM
4σ 3.43e3
ES 123678D
1.54e7
36.80
ES 123478D
1.53e7
36.68
JS 123467D
1.10e7
36.99
ES 123789D
1.69e7
37.10
HxCDD Std.
33.82-37.91
403.8530 Fn3
Flags: PBM
4σ 3.57e3
ES 123678D
1.23e7
36.80
ES 123478D
1.20e7
36.68
JS 123467D
8.79e6
36.99
ES 123789D
1.36e7
37.10
QC Check
33.82-37.91
380.9760 Fn3
Flags: -
RT
Results: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\B4526_17662_DF_003.utp_res, saved 12-Aug-2020 15:18 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 2976, 4491 scc: 967-394
Revised: 12-Aug-2020 10:43 (DTF) Printed: 12-Aug-2020 15:34 Page 4 of 12


Rel. Int.
100%
HpCDD
37.92-41.20
423.7767 Fn4
Flags: PBM
4σ 1.78e3
0%
1234679D
3.19e6
39.46
1234678D
1.58e6
40.18
Abs. Int.
8.58e5
4.29e5
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD
37.92-41.20
425.7737 Fn4
Flags: PBM
4σ 1.08e3
0%
1234679D
3.13e6
39.46
1234678D
1.59e6
40.17
Abs. Int.
8.70e5
4.35e5
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.92-41.20
435.8169 Fn4
Flags: PBM
4σ 1.21e3
0%
ES 1234678D
1.10e7
40.16
Abs. Int.
2.67e6
1.34e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.92-41.20
437.8140 Fn4
Flags: PBM
4σ 1.41e3
0%
ES 1234678D
1.03e7
40.16
Abs. Int.
2.55e6
1.28e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
QC Check
37.92-41.20
430.9728 Fn4
Flags: -
0%
Abs. Int.
7.02e6
3.51e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT


OCDD
1.41e7
42.88
Rel. Int.
100%
OCDD
41.21-44.80
457.7377 Fn5
Flags: PBM
4σ 9.43e2
0%
Abs. Int.
2.10e6
1.05e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
OCDD
1.59e7
42.88
Rel. Int.
100%
OCDD
41.21-44.80
459.7348 Fn5
Flags: PBM
4σ 2.31e3
0%
Abs. Int.
2.34e6
1.17e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDD
1.10e7
42.87
Rel. Int.
100%
OCDD Std.
41.21-44.80
469.7780 Fn5
Flags: PBM
4σ 9.18e2
0%
Abs. Int.
1.72e6
8.58e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDD
1.21e7
42.87
Rel. Int.
100%
OCDD Std.
41.21-44.80
471.7750 Fn5
Flags: PBM
4σ 1.39e3
0%
Abs. Int.
1.81e6
9.05e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
QC Check
41.21-44.80
454.9728 Fn5
Flags: -
0%
Abs. Int.
9.83e6
4.91e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT



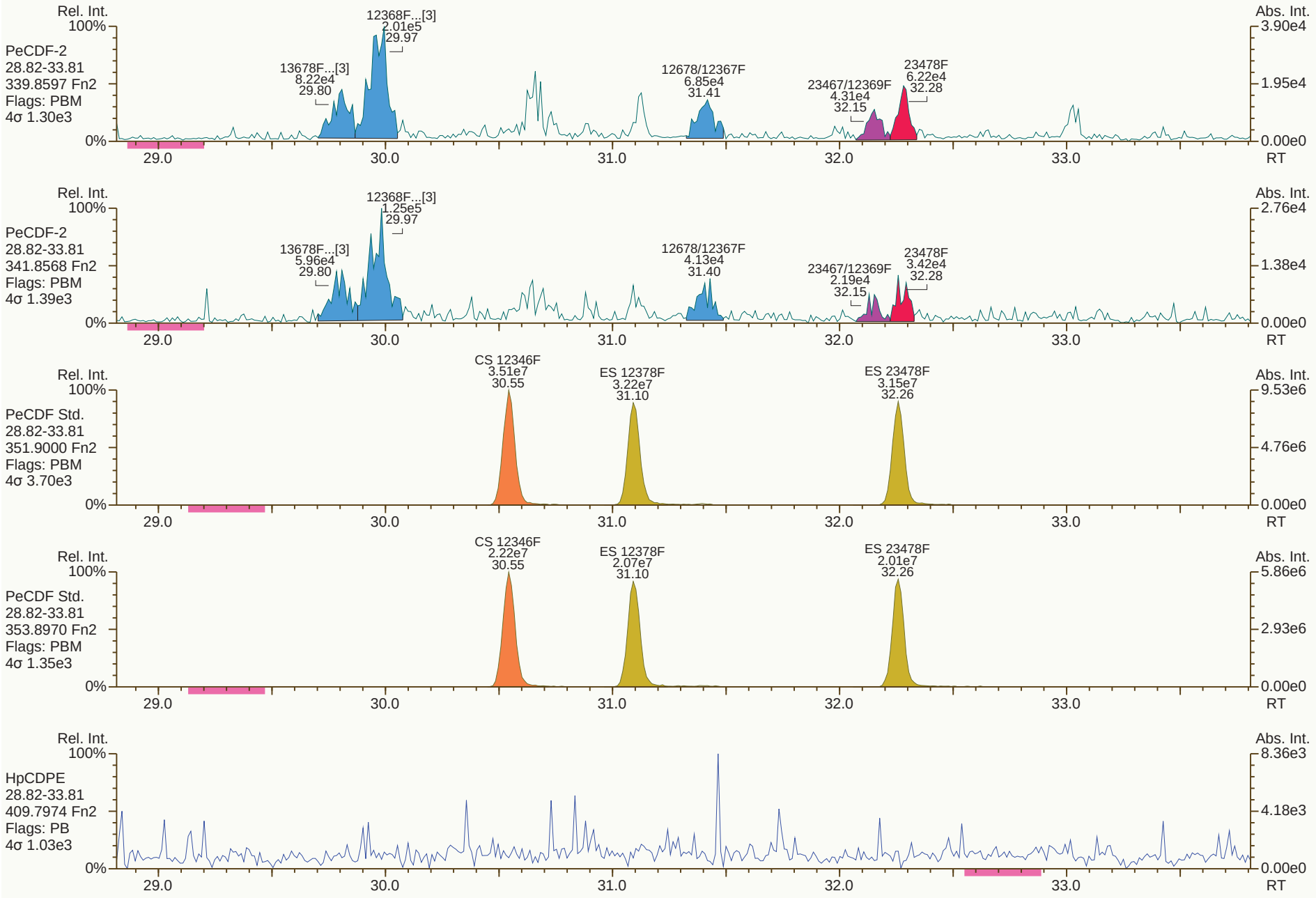
Results: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\B4526_17662_DF_003.utp_res, saved 12-Aug-2020 15:18 (DTF) *Peak annotation: Areas, Centroids*

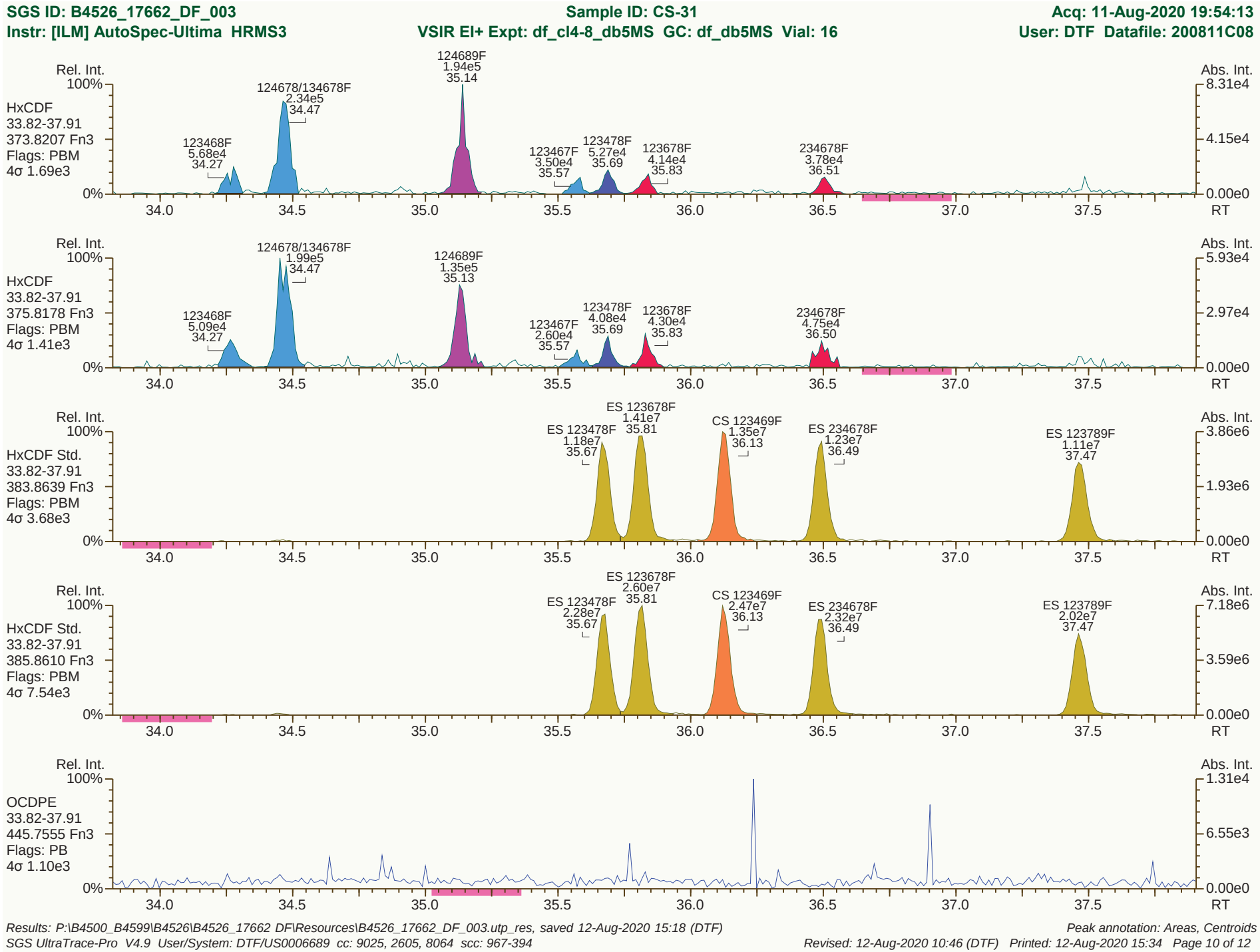
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 4912, 8031, 0649 scc: 967-394 *Revised: 12-Aug-2020 10:45 (DTF) Printed: 12-Aug-2020 15:34 Page 7 of 12*

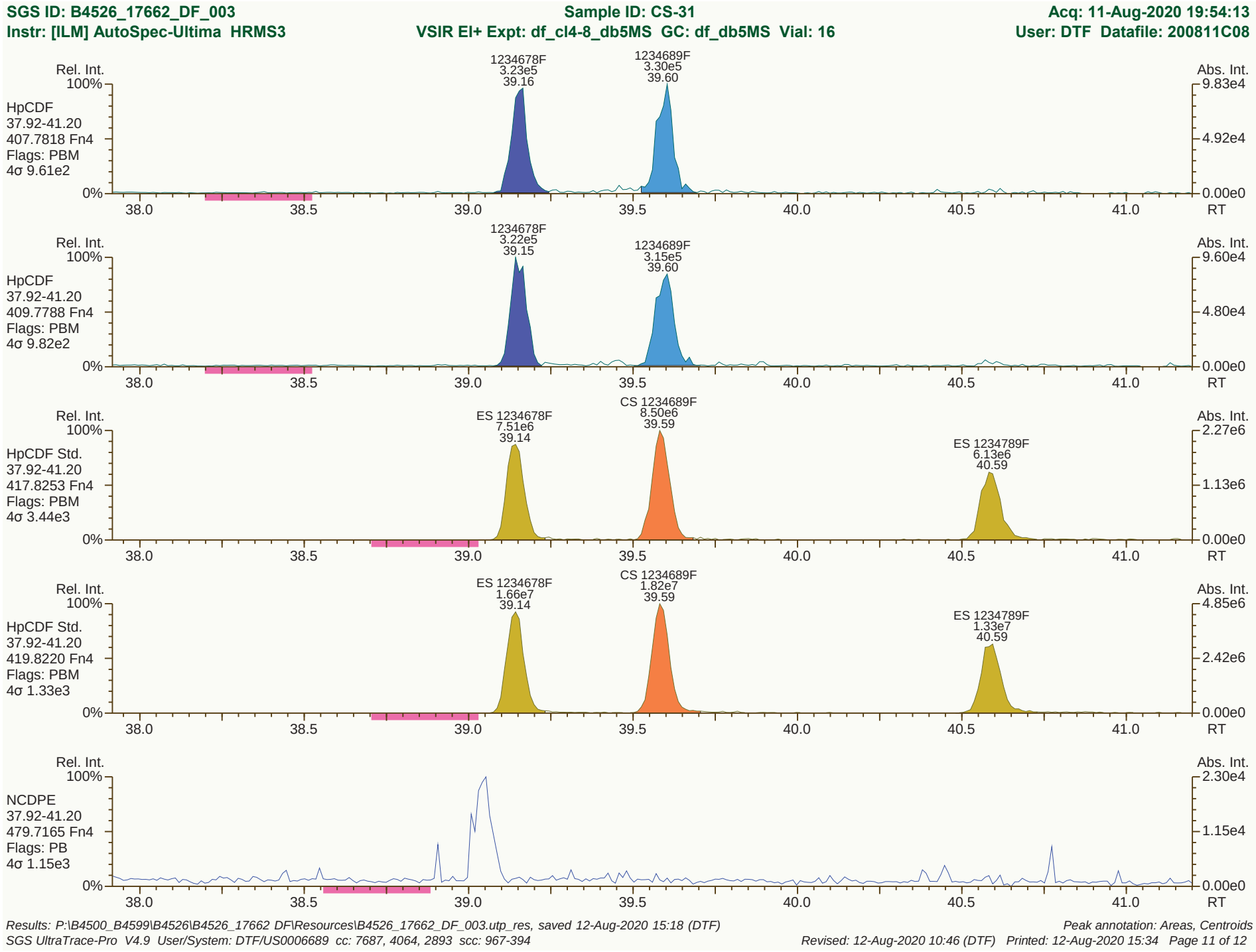
SGS ID: B4526_17662_DF_003 | Sample ID: CS-31 | Acq: 11-Aug-2020 19:54:13
Instr: [ILM] AutoSpec-Ultima HRMS3 | VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 16 | User: DTF Datafile: 200811C08



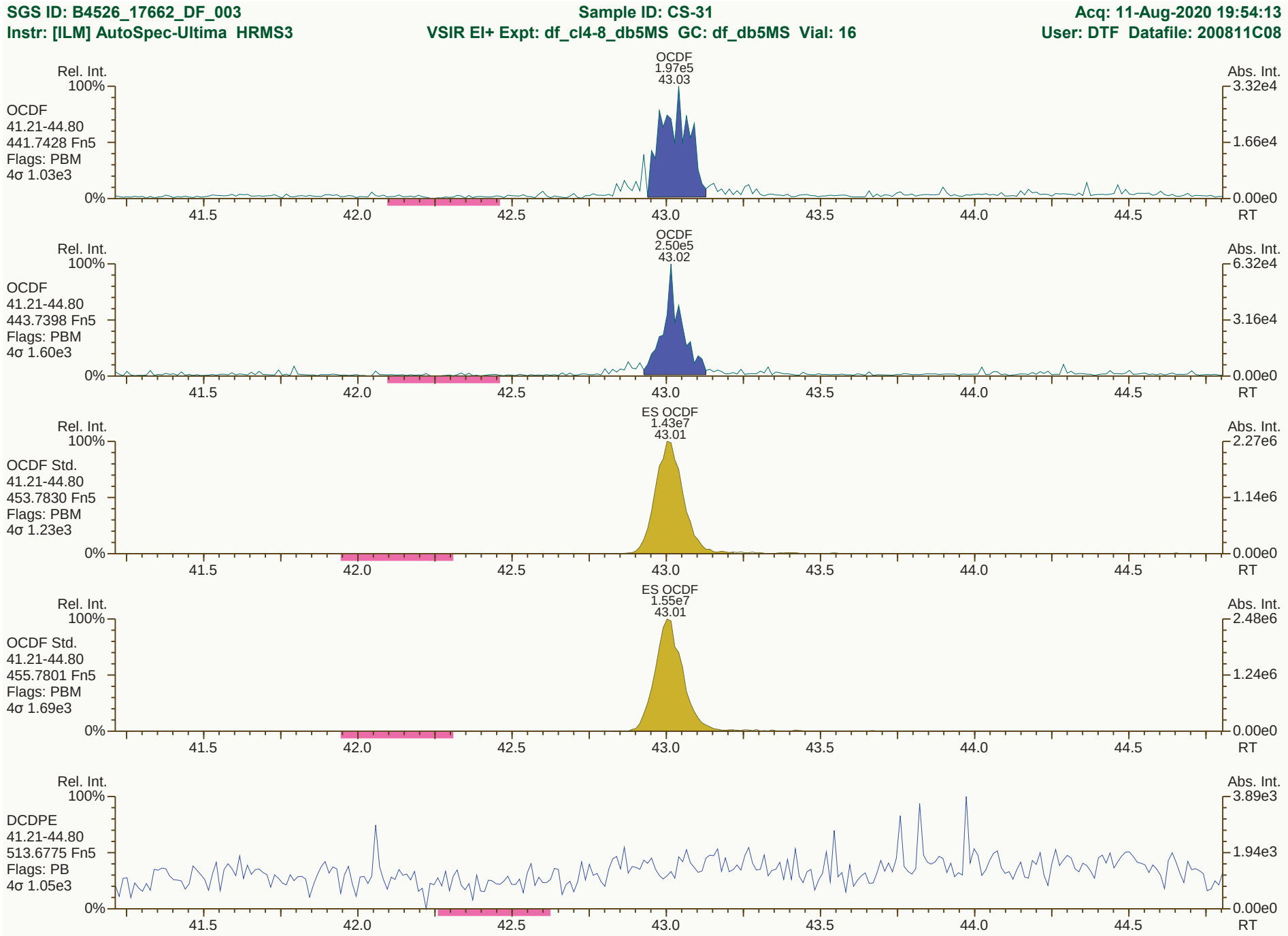
Results: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\B4526_17662_DF_003.utp_res, saved 12-Aug-2020 15:18 (DTF) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 0350 scc: 967-394 *PKD: 12-Aug-2020 10:40 Printed: 12-Aug-2020 15:34 Page 8 of 12*


Rel. Int.
100%
PeCDF-2
28.82-33.81
339.8597 Fn2
Flags: PBM
4σ 1.30e3
0%
12368F...[3]
2.01e5
29.97
13678F...[3]
8.22e4
29.80
12678/12367F
6.85e4
31.41
23467/12369F
4.31e4
32.15
23478F
6.22e4
32.28
Abs. Int.
3.90e4
1.95e4
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF-2
28.82-33.81
341.8568 Fn2
Flags: PBM
4σ 1.39e3
0%
12368F...[3]
1.25e5
29.97
13678F...[3]
5.96e4
29.80
12678/12367F
4.13e4
31.40
23467/12369F
2.19e4
32.15
23478F
3.42e4
32.28
Abs. Int.
2.76e4
1.38e4
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.82-33.81
351.9000 Fn2
Flags: PBM
4σ 3.70e3
0%
CS 12346F
3.51e7
30.55
ES 12378F
3.22e7
31.10
ES 23478F
3.15e7
32.26
Abs. Int.
9.53e6
4.76e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.82-33.81
353.8970 Fn2
Flags: PBM
4σ 1.35e3
0%
CS 12346F
2.22e7
30.55
ES 12378F
2.07e7
31.10
ES 23478F
2.01e7
32.26
Abs. Int.
5.86e6
2.93e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
HpCDPE
28.82-33.81
409.7974 Fn2
Flags: PB
4σ 1.03e3
0%
Abs. Int.
8.36e3
4.18e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT


SGS ID: B4526_17662_DF_003
Sample ID: CS-31
Acq: 11-Aug-2020 19:54:13
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 16
User: DTF Datafile: 200811C08
Rel. Int.
Abs. Int.
HxCDF
33.82-37.91
373.8207 Fn3
Flags: PBM
4σ 1.69e3
123468F 5.68e4 34.27
124678/134678F 2.34e5 34.47
124689F 1.94e5 35.14
123467F 3.50e4 35.57
123478F 5.27e4 35.69
123678F 4.14e4 35.83
234678F 3.78e4 36.51
HxCDF
33.82-37.91
375.8178 Fn3
Flags: PBM
4σ 1.41e3
123468F 5.09e4 34.27
124678/134678F 1.99e5 34.47
124689F 1.35e5 35.13
123467F 2.60e4 35.57
123478F 4.08e4 35.69
123678F 4.30e4 35.83
234678F 4.75e4 36.50
HxCDF Std.
33.82-37.91
383.8639 Fn3
Flags: PBM
4σ 3.68e3
ES 123478F 1.18e7 35.67
ES 123678F 1.41e7 35.81
CS 123469F 1.35e7 36.13
ES 234678F 1.23e7 36.49
ES 123789F 1.11e7 37.47
HxCDF Std.
33.82-37.91
385.8610 Fn3
Flags: PBM
4σ 7.54e3
ES 123478F 2.28e7 35.67
ES 123678F 2.60e7 35.81
CS 123469F 2.47e7 36.13
ES 234678F 2.32e7 36.49
ES 123789F 2.02e7 37.47
OCDPE
33.82-37.91
445.7555 Fn3
Flags: PB
4σ 1.10e3
RT


SGS ID: B4526_17662_DF_003
Instr: [ILM] AutoSpec-Ultima HRMS3
Sample ID: CS-31
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 16
Acq: 11-Aug-2020 19:54:13
User: DTF Datafile: 200811C08
Rel. Int.
100%
0%
HpCDF
37.92-41.20
407.7818 Fn4
Flags: PBM
4σ 9.61e2
1234678F
3.23e5
39.16
1234689F
3.30e5
39.60
Abs. Int.
9.83e4
4.92e4
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
HpCDF
37.92-41.20
409.7788 Fn4
Flags: PBM
4σ 9.82e2
1234678F
3.22e5
39.15
1234689F
3.15e5
39.60
9.60e4
4.80e4
HpCDF Std.
37.92-41.20
417.8253 Fn4
Flags: PBM
4σ 3.44e3
ES 1234678F
7.51e6
39.14
CS 1234689F
8.50e6
39.59
ES 1234789F
6.13e6
40.59
2.27e6
1.13e6
HpCDF Std.
37.92-41.20
419.8220 Fn4
Flags: PBM
4σ 1.33e3
ES 1234678F
1.66e7
39.14
CS 1234689F
1.82e7
39.59
ES 1234789F
1.33e7
40.59
4.85e6
2.42e6
NCDPE
37.92-41.20
479.7165 Fn4
Flags: PB
4σ 1.15e3
2.30e4
1.15e4
Results: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\B4526_17662_DF_003.utp_res, saved 12-Aug-2020 15:18 (DTF)
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 7687, 4064, 2893 scc: 967-394
Peak annotation: Areas, Centroids
Revised: 12-Aug-2020 10:46 (DTF) Printed: 12-Aug-2020 15:34 Page 11 of 12

SGS ID: B4526_17662_DF_003 | Sample ID: CS-31 | Acq: 11-Aug-2020 19:54:13
Instr: [ILM] AutoSpec-Ultima HRMS3 | VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 16 | User: DTF Datafile: 200811C08



Results: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\B4526_17662_DF_003.utp_res, saved 12-Aug-2020 15:18 (DTF) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 5640, 6518, 0486 scc: 967-394 *Revised: 12-Aug-2020 10:46 (DTF) Printed: 12-Aug-2020 15:34 Page 12 of 12*

Lab ID: B4526_17662_DF_004 | Acq'd: 11 Aug 2020 20:40 DTF | Wt/Vol: 9.59 g | ICAL: HRMS3_DF_10122018_28AUG2019

Client ID: DUP-01 | UTP: 12-Aug-2020 15:18:32 DTF | J-level: 0.521 pg/g | Split: 1 | Checkcode: 789-289-VMB

Datafile: 200811C09 | Report: 12 Aug 2020 15:21 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	NotFnd		1.0008	-		-	-	-	1.19	-	4126	0.181
12378-PeCDD	NotFnd		1.0006	-		-	-	-	0.98	-	3775	0.211
123478-HxCDD	NotFnd		1.0004	-		-	-	-	1.02	-	2797	0.177
123678-HxCDD	NotFnd		1.0036	-		-	-	-	1.09	-	2797	0.167
123789-HxCDD	37.11	J EMPC	1.0118	1.0118	0	4.59E+04	1.61	N	0.97	0.31	2797	0.193
1234678-HpCDD	40.17		1.0003	1.0004	+0.2	4.70E+05	1.05	Y	0.98	4.51	2400	0.233
OCDD	42.88		1.0003	1.0003	0	1.13E+07	0.86	Y	1.07	193	4398	1.33
2378-TCDF	NotFnd		1.0009	-		-	-	-	1.01	-	3044	0.111
12378-PeCDF	NotFnd		1.0006	-		-	-	-	0.96	-	2956	0.112
23478-PeCDF	NotFnd		1.0005	-		-	-	-	0.99	-	2956	0.115
123478-HxCDF	NotFnd		1.0005	-		-	-	-	1.21	-	2476	0.104
123678-HxCDF	NotFnd		1.0005	-		-	-	-	1.11	-	2476	0.102
234678-HxCDF	NotFnd		1.0004	-		-	-	-	1.12	-	2476	0.111
123789-HxCDF	NotFnd		1.0005	-		-	-	-	1.11	-	2476	0.145
1234678-HpCDF	39.15	J	1.0003	1.0003	0	1.37E+05	0.90	Y	1.32	0.847	1485	0.0833
1234789-HpCDF	NotFnd		1.0003	-		-	-	-	1.26	-	1485	0.12
OCDF	NotFnd		1.0003	-		-	-	-	1.03	-	2525	0.589

Name	Act RT	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	26.90	1.0266	1.0268	+0.3	4.60E+07	0.80	Y	0.99	78.1
ES 12378-PeCDD	32.61	1.2430	1.2447	+3.3	3.54E+07	1.60	Y	0.83	71.7
ES 123478-HxCDD	36.67	0.9916	0.9915	-0.2	2.85E+07	1.27	Y	0.95	74.7
ES 123678-HxCDD	36.79	0.9947	0.9946	-0.2	2.86E+07	1.22	Y	0.98	72.9
ES 123789-HxCDD	37.09	1.0029	1.0029	0	3.18E+07	1.28	Y	1.14	69.3
ES 1234678-HpCDD	40.16	1.0851	1.0858	+1.7	2.22E+07	1.07	Y	0.90	61.5
ES OCDD	42.87	1.1584	1.1590	+1.5	2.28E+07	0.90	Y	0.63	45.1
ES 2378-TCDF	25.95	1.0602	1.0608	+0.9	6.95E+07	0.79	Y	1.00	80.6
ES 12378-PeCDF	31.08	1.2683	1.2706	+4.3	5.35E+07	1.58	Y	0.83	74.4
ES 23478-PeCDF	32.25	1.3156	1.3182	+5.0	5.33E+07	1.56	Y	0.81	76.3
ES 123478-HxCDF	35.66	0.9644	0.9642	-0.4	3.54E+07	0.54	Y	1.12	78.2
ES 123678-HxCDF	35.81	0.9682	0.9681	-0.2	4.17E+07	0.55	Y	1.33	77.7
ES 234678-HxCDF	36.48	0.9864	0.9864	0	3.72E+07	0.55	Y	1.21	76.3
ES 123789-HxCDF	37.46	1.0128	1.0128	0	3.22E+07	0.53	Y	1.12	71.5
ES 1234678-HpCDF	39.14	1.0578	1.0581	+0.7	2.55E+07	0.47	Y	0.92	68.4
ES 1234789-HpCDF	40.59	1.0967	1.0973	+1.5	2.00E+07	0.46	Y	0.82	60.6
ES OCDF	43.01	1.1623	1.1629	+1.5	2.98E+07	0.89	Y	0.78	47.4

Lab ID: B4526_17662_DF_004 | Acq'd: 11 Aug 2020 20:40 DTF | Wt/Vol: 9.59 g | ICAL: HRMS3_DF_10122018_28AUG2019

Client ID: DUP-01 | UTP: 12-Aug-2020 15:18:32 DTF | J-level: 0.521 pg/g | Split: 1 | Checkcode: 789-289-VMB

Datafile: 200811C09 | Report: 12 Aug 2020 15:21 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %	
JS 1234-TCDD	26.20		-	-	-	5.96E+07	0.81	Y	-	-	
JS 1234-TCDF	24.46		-	-	-	8.67E+07	0.80	Y	-	-	
JS 123467-HxCDD	36.99		-	-	-	2.02E+07	1.27	Y	-	-	
CS 37Cl-2378-TCDD	26.93		1.0276	1.0277	+0.2	2.39E+07	n/a	-	1.12	89.4	
CS 12347-PeCDD	32.09		1.2233	1.2250	+3.3	4.02E+07	1.59	Y	0.71	94.7	
CS 12346-PeCDF	30.53		1.2459	1.2480	+3.8	6.03E+07	1.57	Y	0.81	86	
CS 123469-HxCDF	36.12		0.9767	0.9765	-0.4	4.05E+07	0.52	Y	1.12	89.5	
CS 1234689-HpCDF	39.58		1.0696	1.0701	+1.2	2.69E+07	0.46	Y	0.90	74.5	
~~SS 37Cl-2378-TCDD~~	~~26.93~~		~~1.0276~~	~~1.0277~~	~~+0.2~~	~~2.39E+07~~	~~n/a~~		~~1.14~~	~~114~~	Not used in this project.
~~SS 12347-PeCDD~~	~~32.09~~	~~V~~	~~1.2233~~	~~1.2250~~	~~+3.3~~	~~4.02E+07~~	~~1.59~~	~~Y~~	~~0.86~~	~~132~~	CL 13Aug20
~~SS 12346-PeCDF~~	~~30.53~~		~~1.2459~~	~~1.2480~~	~~+3.8~~	~~6.03E+07~~	~~1.57~~	~~Y~~	~~0.98~~	~~115~~	
~~SS 123469-HxCDF~~	~~36.12~~		~~0.9767~~	~~0.9765~~	~~-0.4~~	~~4.05E+07~~	~~0.52~~	~~Y~~	~~0.85~~	~~115~~	
~~SS 1234689-HpCDF~~	~~39.58~~		~~1.0696~~	~~1.0701~~	~~+1.2~~	~~2.69E+07~~	~~0.46~~	~~Y~~	~~0.97~~	~~108~~	

Totals	Conc	EMPC
Total TCDD	0	0
Total PeCDD	0	0
Total HxCDD	0.389	2.18
Total HpCDD	13	13
Total Tetra-Octa Dioxins	207	208
Total TCDF	0	0.177
Total PeCDF	0	0
Total HxCDF	0.26	0.26
Total HpCDF	1.48	1.48
Total Tetra-Octa Furans	1.73	1.91
Total Tetra-Octa Dioxins & Furans	208	210

Lab ID: B4526_17662_DF_004 **Acq'd:** 11 Aug 2020 20:40 DTF **Wt/Vol:** 9.59 g **ICAL:** HRMS3_DF_10122018_28AUG2019

Client ID: DUP-01 **UTP:** 12-Aug-2020 15:18:32 DTF **J-level:** 0.521 pg/g **Split:** 1 **Checkcode:** 789-289-VMB

Datafile: 200811C09 **Report:** 12 Aug 2020 15:21 TF **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1368-TCDD	NotFnd		0.8523						1.19		4126	0.181
1379-TCDD	NotFnd		0.8682						1.19		4126	0.181
1369-TCDD	NotFnd		0.8858						1.19		4126	0.181
1469-TCDD	NotFnd		0.9177						1.19		4126	0.181
1247/1246/1248/1249-TCDD	NotFnd		0.9274						1.19		4126	0.181
1378-TCDD	NotFnd		0.9349						1.19		4126	0.181
1268-TCDD	NotFnd		0.9430						1.19		4126	0.181
1478-TCDD	NotFnd		0.9529						1.19		4126	0.181
1279-TCDD	NotFnd		0.9597						1.19		4126	0.181
1234/1269-TCDD	NotFnd		0.9739						1.19		4126	0.181
1236-TCDD	NotFnd		0.9794						1.19		4126	0.181
1237/1238-TCDD	NotFnd		0.9895						1.19		4126	0.181
1239-TCDD	NotFnd		0.9950						1.19		4126	0.181
2378-TCDD	**NotFnd**		**1.0008**						**1.19**		**4126**	**0.181**
1278-TCDD	NotFnd		1.0139						1.19		4126	0.181
1267-TCDD	NotFnd		1.0194						1.19		4126	0.181
1289-TCDD	NotFnd		1.0397						1.19		4126	0.181
12479/12468-PeCDD	NotFnd		0.9209						0.98		3775	0.211
12469-PeCDD	NotFnd		0.9382						0.98		3775	0.211
12368-PeCDD	NotFnd		0.9557						0.98		3775	0.211
12478-PeCDD	NotFnd		0.9617						0.98		3775	0.211
12379-PeCDD	NotFnd		0.9649						0.98		3775	0.211
12369/12467/12489-PeCDD	NotFnd		0.9732						0.98		3775	0.211
12346/12347-PeCDD	NotFnd		0.9850						0.98		3775	0.211
12378-PeCDD	NotFnd		**1.0006**						**0.98**		**3775**	**0.211**
12367-PeCDD	NotFnd		1.0038						0.98		3775	0.211
12389-PeCDD	NotFnd		1.0146						0.98		3775	0.211
124679/124689-HxCDD	34.94	J EMPC	0.9530	0.9528	-0.4	1.35E+05	1.01	N	1.03	0.924	2797	0.179
123468-HxCDD	35.60	J	0.9715	0.9708	-1.5	5.69E+04	1.14	Y	1.03	0.389	2797	0.179
123679/123689-HxCDD	35.92	J EMPC	0.9795	0.9794	-0.2	8.12E+04	1.43	N	1.03	0.556	2797	0.179
123469-HxCDD	NotFnd		0.9832						1.03		2797	0.179
123478-HxCDD	NotFnd		**1.0004**						1.02		**2797**	**0.177**
123678-HxCDD	NotFnd		**1.0036**						1.09		**2797**	**0.167**
123467-HxCDD	NotFnd		1.0089						1.03		2797	0.179
123789-HxCDD	37.11	J EMPC	**1.0118**	**1.0118**	**0**	**4.59E+04**	**1.61**	**N**	0.97	**0.31**	**2797**	**0.193**

Lab ID: B4526_17662_DF_004 **Acq'd:** 11 Aug 2020 20:40 DTF **Wt/Vol:** 9.59 g **ICAL:** HRMS3_DF_10122018_28AUG2019

Client ID: DUP-01 **UTP:** 12-Aug-2020 15:18:32 DTF **J-level:** 0.521 pg/g **Split:** 1 **Checkcode:** 789-289-VMB

Datafile: 200811C09 **Report:** 12 Aug 2020 15:21 TF **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1234679-HpCDD	39.46		0.9826	0.9825	-0.2	8.83E+05	1.04	Y	0.98	8.47	2400	0.233
1234678-HpCDD	**40.17**		**1.0003**	**1.0004**	**+0.2**	**4.70E+05**	**1.05**	**Y**	**0.98**	**4.51**	**2400**	**0.233**
OCDD	**42.88**		**1.0003**	**1.0003**	**0**	**1.13E+07**	**0.86**	**Y**	**1.07**	**193**	**4398**	**1.33**
OCDD-a	42.87	**#VALUE!**	1.0002	1.0002	0	7.43E+05	2.47	Y	-	#VALUE!	5093	#VALUE!
1368-TCDF	NotFnd		0.7980						1.01		3044	0.111
1468-TCDF	NotFnd		0.8204						1.01		3044	0.111
2468-TCDF	NotFnd		0.8443						1.01		3044	0.111
1346/1246-TCDF	NotFnd		0.8597						1.01		3044	0.111
1347/1378/1247-TCDF	NotFnd		0.8665						1.01		3044	0.111
1348-TCDF	NotFnd		0.8785						1.01		3044	0.111
1248/1367/1379-TCDF	NotFnd		0.8840						1.01		3044	0.111
1268-TCDF	NotFnd		0.9004						1.01		3044	0.111
1467-TCDF	NotFnd		0.9060						1.01		3044	0.111
1478-TCDF	NotFnd		0.9132						1.01		3044	0.111
1369/1237-TCDF	NotFnd		0.9287						1.01		3044	0.111
2467-TCDF	NotFnd		0.9345						1.01		3044	0.111
2368-TCDF	NotFnd		0.9409						1.01		3044	0.111
1238/1234/1678/1469/1236-TCDF	NotFnd		0.9450						1.01		3044	0.111
1278-TCDF	NotFnd		0.9638						1.01		3044	0.111
1349-TCDF	NotFnd		0.9685						1.01		3044	0.111
1267-TCDF	NotFnd		0.9751						1.01		3044	0.111
2346/1249-TCDF	NotFnd		0.9831						1.01		3044	0.111
2347/1279-TCDF	NotFnd		0.9920						1.01		3044	0.111
2348-TCDF	NotFnd		0.9964						1.01		3044	0.111
2378-TCDF	**NotFnd**		**1.0009**						**1.01**		**3044**	**0.111**
2367/3467-TCDF	NotFnd		1.0164						1.01		3044	0.111
1269-TCDF	NotFnd		1.0259						1.01		3044	0.111
1239-TCDF	NotFnd		1.0373						1.01		3044	0.111
1289-TCDF	28.14	J EMPC	1.0838	1.0843	+0.8	5.97E+04	2.20	N	1.01	0.177	3044	0.111
13468/12468-PeCDF	NotFnd		0.9052						0.98		3016	0.116
13678/13467/12467-PeCDF	NotFnd		0.9582						0.98		2956	0.113
12368/13478/12478-PeCDF	NotFnd		0.9634						0.98		2956	0.113
14678-PeCDF	NotFnd		0.9668						0.98		2956	0.113
13479-PeCDF	NotFnd		0.9700						0.98		2956	0.113
13469/12479-PeCDF	NotFnd		0.9781						0.98		2956	0.113
12346-PeCDF	NotFnd		0.9829						0.98		2956	0.113

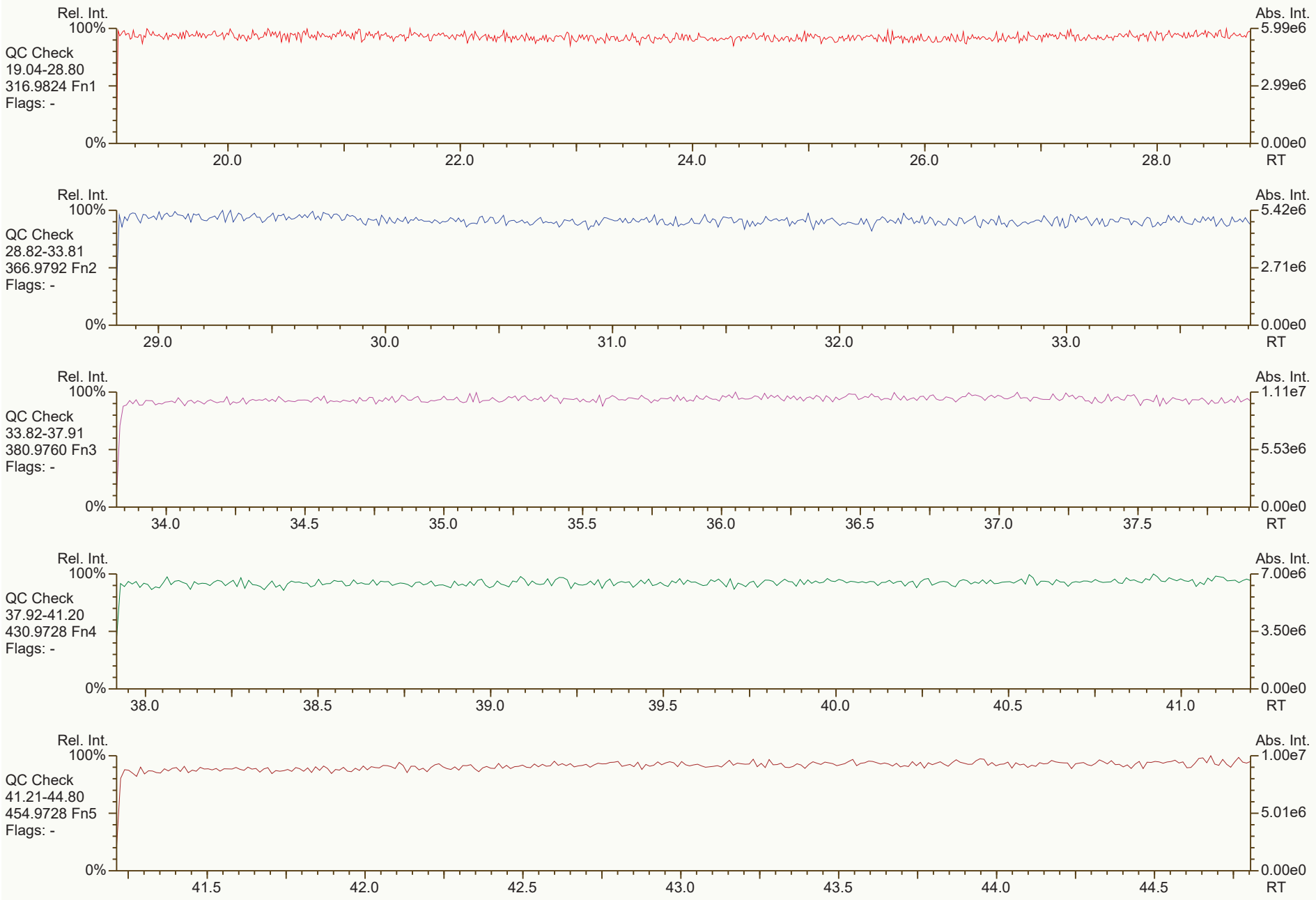
Lab ID: B4526_17662_DF_004 | Acq'd: 11 Aug 2020 20:40 DTF | Wt/Vol: 9.59 g | ICAL: HRMS3_DF_10122018_28AUG2019

Client ID: DUP-01 | UTP: 12-Aug-2020 15:18:32 DTF | J-level: 0.521 pg/g | Split: 1 | Checkcode: 789-289-VMB

Datafile: 200811C09 | Report: 12 Aug 2020 15:21 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
23468/12469-PeCDF	NotFnd		0.9859						0.98		2956	0.113
12347-PeCDF	NotFnd		0.9884						0.98		2956	0.113
12348-PeCDF	NotFnd		0.9937						0.98		2956	0.113
12378-PeCDF	**NotFnd**		**1.0006**						**0.96**		**2956**	**0.112**
12678/12367-PeCDF	NotFnd		1.0097						0.98		2956	0.113
12379-PeCDF	NotFnd		1.0152						0.98		2956	0.113
12679-PeCDF	NotFnd		0.9923						0.98		2956	0.113
23467/12369-PeCDF	NotFnd		0.9966						0.98		2956	0.113
23478-PeCDF	**NotFnd**		**1.0005**						**0.99**		**2956**	**0.115**
23478/12489-PeCDF	NotFnd		0.0000						0.99			
12489-PeCDF	NotFnd		1.0043						0.98		2956	0.113
12349-PeCDF	NotFnd		1.0107						0.98		2956	0.113
12389-PeCDF	NotFnd		1.0349						0.98		2956	0.113
123468-HxCDF	NotFnd		0.9607						1.13		2476	0.114
124678/134678-HxCDF	34.46	J	0.9666	0.9662	-0.8	5.17E+04	1.10	Y	1.13	0.26	2476	0.114
134679-HxCDF	NotFnd		0.9730						1.13		2476	0.114
124679-HxCDF	NotFnd		0.9787						1.13		2476	0.114
124689-HxCDF	NotFnd		0.9850						1.13		2476	0.114
123467-HxCDF	NotFnd		0.9971						1.13		2476	0.114
123478-HxCDF	**NotFnd**		**1.0005**						**1.21**		**2476**	**0.104**
123678-HxCDF	**NotFnd**		**1.0005**						**1.11**		**2476**	**0.102**
123479-HxCDF	NotFnd		1.0049						1.13		2476	0.114
123469-HxCDF	NotFnd		1.0090						1.13		2476	0.114
123679-HxCDF	NotFnd		0.9941						1.13		2476	0.114
234678-HxCDF	**NotFnd**		**1.0004**						**1.12**		**2476**	**0.111**
234678/123689-HxCDF	NotFnd		0.0000						1.12			
123689-HxCDF	NotFnd		1.0041						1.13		2476	0.114
123789-HxCDF	**NotFnd**		**1.0005**						**1.11**		**2476**	**0.145**
123789/123489-HxCDF	NotFnd		0.0000						1.11			
123489-HxCDF	NotFnd		1.0009						1.13		2476	0.114
1234678-HpCDF	**39.15**	**J**	**1.0003**	**1.0003**	**0**	**1.37E+05**	**0.90**	**Y**	**1.32**	**0.847**	**1485**	**0.0833**
1234679-HpCDF	NotFnd		1.0075						1.29		1485	0.0994
1234689-HpCDF	39.59	**J**	1.0112	1.0116	+1.0	8.84E+04	1.02	Y	1.29	0.628	1485	0.0994
1234789-HpCDF	**NotFnd**		**1.0003**						**1.26**		**1485**	**0.12**
OCDF	**NotFnd**		**1.0003**						**1.03**		**2525**	**0.589**
OCDF-a	NotFnd	**#VALUE!**	1.0002						-		2852	#VALUE!

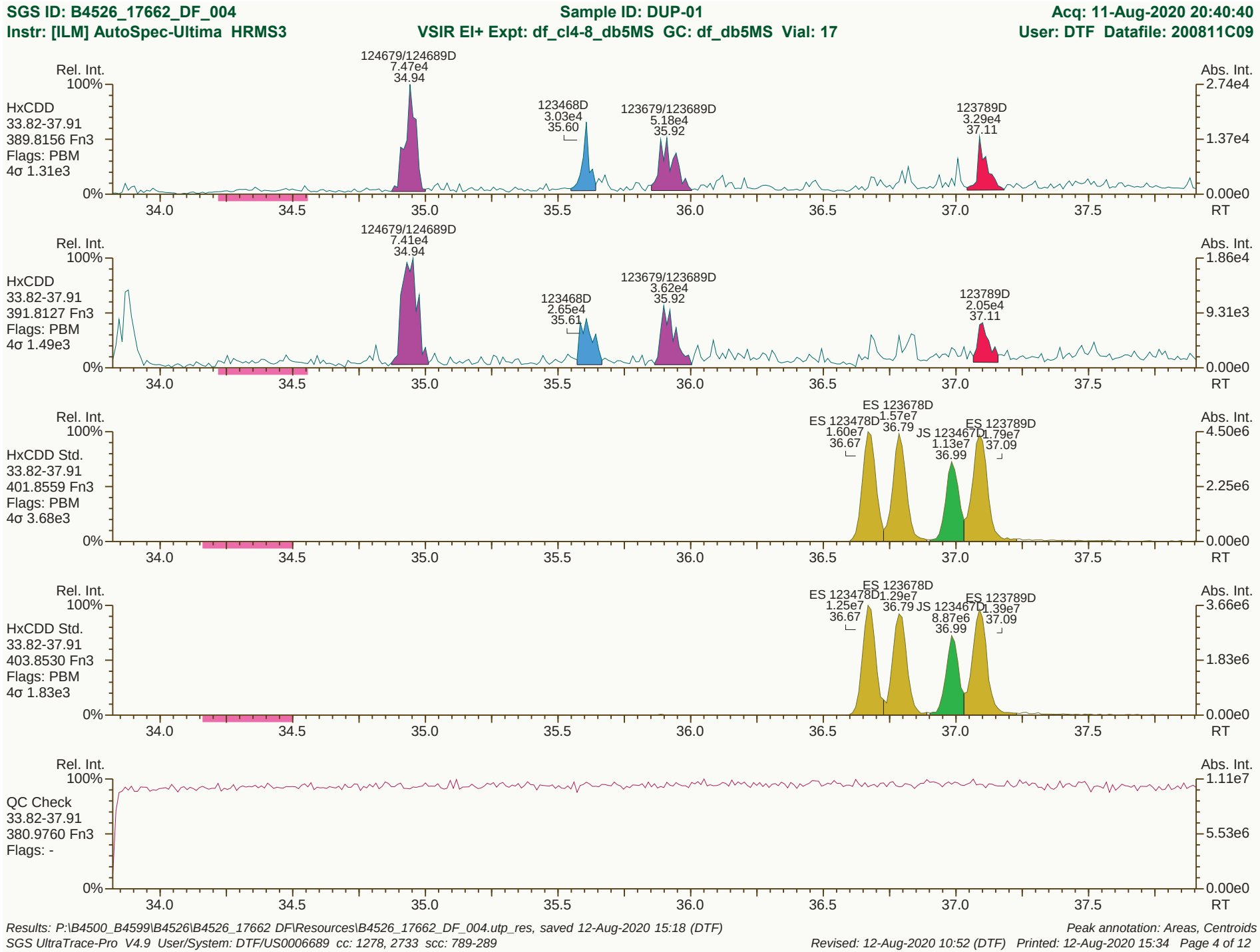
SGS ID: B4526_17662_DF_004 **Sample ID: DUP-01** **Acq: 11-Aug-2020 20:40:40**
Instr: [ILM] AutoSpec-Ultima HRMS3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 17** **User: DTF Datafile: 200811C09**

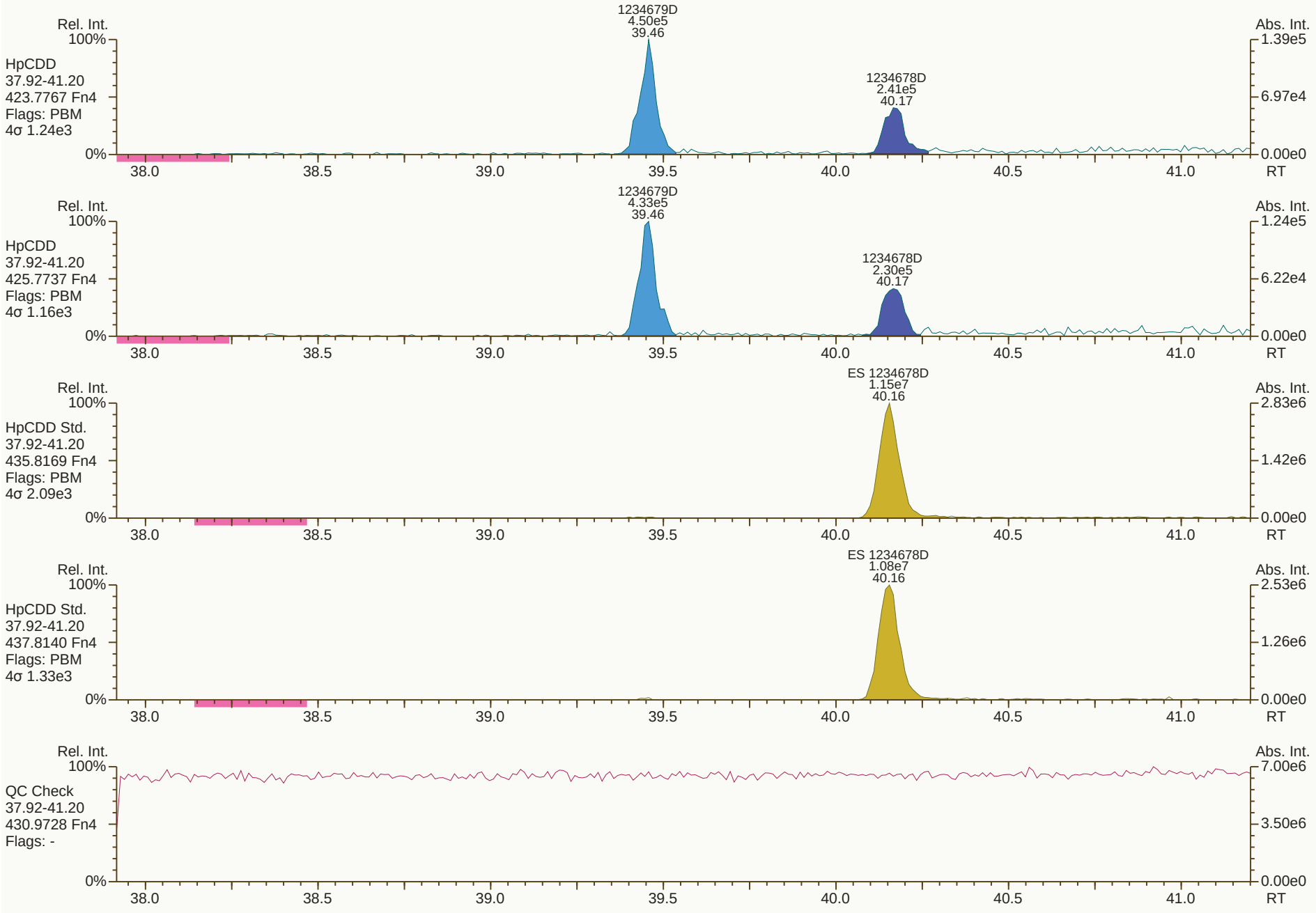


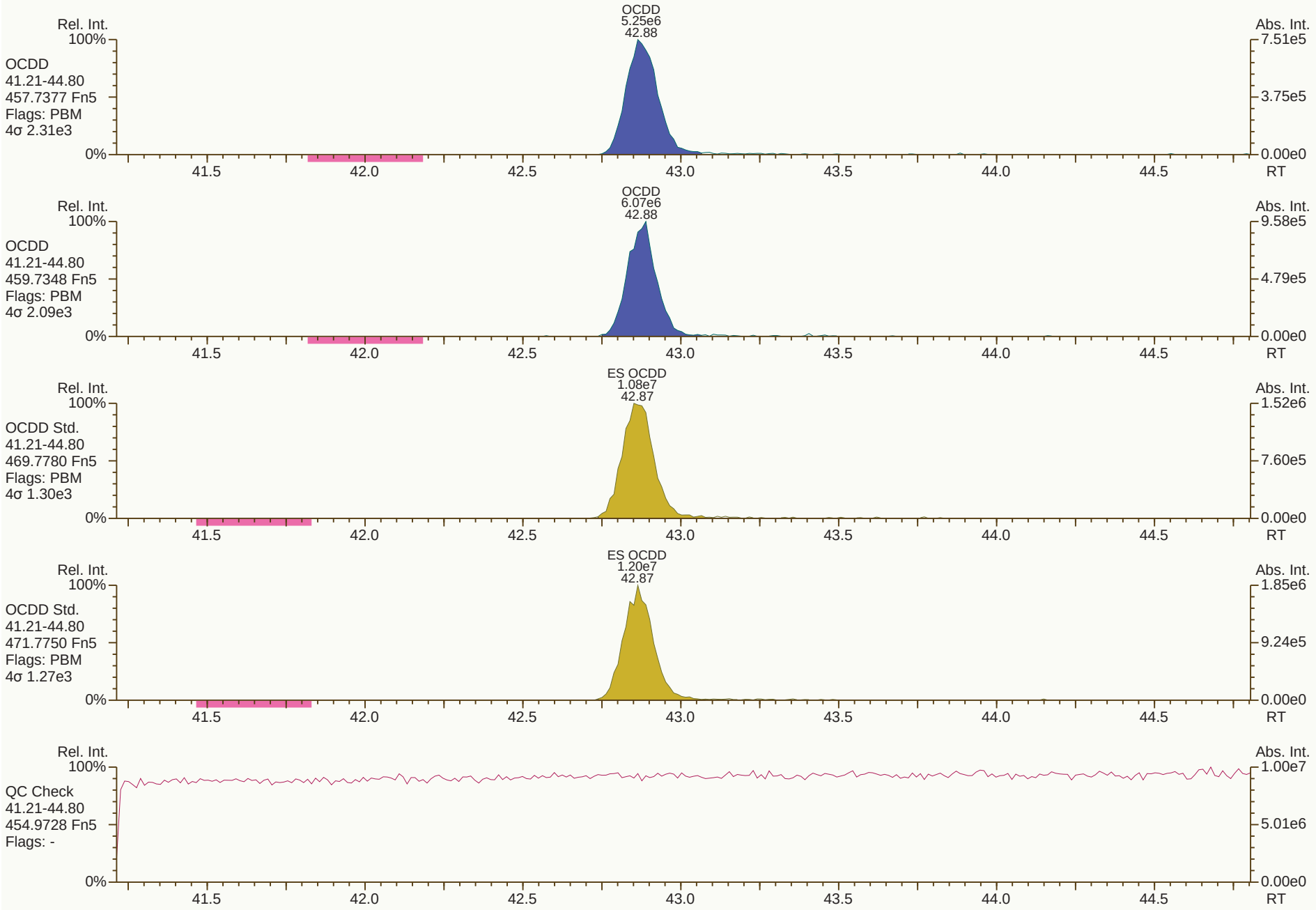
Results: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\B4526_17662_DF_004.utp_res, saved 12-Aug-2020 15:18 (DTF) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 scc: 789-289 *PKD: n/a Printed: 12-Aug-2020 15:34 Page 1 of 12*


Rel. Int.
100%
TCDD
19.04-28.80
319.8965 Fn1
Flags: PB
4σ 2.44e3
0%
Abs. Int.
9.15e3
4.57e3
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD
19.04-28.80
321.8936 Fn1
Flags: PB
4σ 1.68e3
0%
Abs. Int.
6.90e3
3.45e3
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
37Cl-TCDD
19.04-28.80
327.8850 Fn1
Flags: PBM
4σ 1.02e3
0%
CS 37Cl-2378D
2.39e7
26.93
Abs. Int.
5.15e6
2.58e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.80
331.9368 Fn1
Flags: PBM
4σ 5.72e3
0%
JS 1234D
2.67e7
26.20
ES 2378D
2.04e7
26.90
Abs. Int.
5.68e6
2.84e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.80
333.9339 Fn1
Flags: PBM
4σ 2.27e3
0%
JS 1234D
3.28e7
26.20
ES 2378D
2.56e7
26.90
Abs. Int.
7.04e6
3.52e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT


Rel. Int.
100%
PeCDD
28.82-33.81
355.8546 Fn2
Flags: B
4σ 2.48e3
0%
Abs. Int.
1.08e4
5.41e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD
28.82-33.81
357.8517 Fn2
Flags: B
4σ 1.29e3
0%
Abs. Int.
6.80e3
3.40e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.82-33.81
367.8949 Fn2
Flags: PBM
4σ 2.09e3
0%
CS 12347D
2.47e7
32.09
ES 12378D
2.18e7
32.61
Abs. Int.
6.98e6
3.49e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.82-33.81
369.8919 Fn2
Flags: PBM
4σ 1.13e3
0%
CS 12347D
1.55e7
32.09
ES 12378D
1.36e7
32.61
Abs. Int.
4.16e6
2.08e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
QC Check
28.82-33.81
366.9792 Fn2
Flags: -
0%
Abs. Int.
5.42e6
2.71e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT


SGS ID: B4526_17662_DF_004
Sample ID: DUP-01
Acq: 11-Aug-2020 20:40:40
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 17
User: DTF Datafile: 200811C09
Rel. Int.
Abs. Int.
HxCDD
33.82-37.91
389.8156 Fn3
Flags: PBM
4σ 1.31e3
124679/124689D
7.47e4
34.94
123468D
3.03e4
35.60
123679/123689D
5.18e4
35.92
123789D
3.29e4
37.11
HxCDD
33.82-37.91
391.8127 Fn3
Flags: PBM
4σ 1.49e3
124679/124689D
7.41e4
34.94
123468D
2.65e4
35.61
123679/123689D
3.62e4
35.92
123789D
2.05e4
37.11
HxCDD Std.
33.82-37.91
401.8559 Fn3
Flags: PBM
4σ 3.68e3
ES 123678D
1.57e7
36.79
ES 123478D
1.60e7
36.67
JS 123467D
1.13e7
36.99
ES 123789D
1.79e7
37.09
HxCDD Std.
33.82-37.91
403.8530 Fn3
Flags: PBM
4σ 1.83e3
ES 123678D
1.29e7
36.79
ES 123478D
1.25e7
36.67
JS 123467D
8.87e6
36.99
ES 123789D
1.39e7
37.09
QC Check
33.82-37.91
380.9760 Fn3
Flags: -
RT
Results: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\B4526_17662_DF_004.utp_res, saved 12-Aug-2020 15:18 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 1278, 2733 scc: 789-289
Revised: 12-Aug-2020 10:52 (DTF) Printed: 12-Aug-2020 15:34 Page 4 of 12


Rel. Int.
100%
HpCDD
37.92-41.20
423.7767 Fn4
Flags: PBM
4σ 1.24e3
1234679D
4.50e5
39.46
1234678D
2.41e5
40.17
Abs. Int.
1.39e5
6.97e4
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD
37.92-41.20
425.7737 Fn4
Flags: PBM
4σ 1.16e3
1234679D
4.33e5
39.46
1234678D
2.30e5
40.17
Abs. Int.
1.24e5
6.22e4
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.92-41.20
435.8169 Fn4
Flags: PBM
4σ 2.09e3
ES 1234678D
1.15e7
40.16
Abs. Int.
2.83e6
1.42e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.92-41.20
437.8140 Fn4
Flags: PBM
4σ 1.33e3
ES 1234678D
1.08e7
40.16
Abs. Int.
2.53e6
1.26e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
QC Check
37.92-41.20
430.9728 Fn4
Flags: -
Abs. Int.
7.00e6
3.50e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT


OCDD
5.25e6
42.88
Rel. Int.
100%
OCDD
41.21-44.80
457.7377 Fn5
Flags: PBM
4σ 2.31e3
0%
Abs. Int.
7.51e5
3.75e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
OCDD
6.07e6
42.88
Rel. Int.
100%
OCDD
41.21-44.80
459.7348 Fn5
Flags: PBM
4σ 2.09e3
0%
Abs. Int.
9.58e5
4.79e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDD
1.08e7
42.87
Rel. Int.
100%
OCDD Std.
41.21-44.80
469.7780 Fn5
Flags: PBM
4σ 1.30e3
0%
Abs. Int.
1.52e6
7.60e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDD
1.20e7
42.87
Rel. Int.
100%
OCDD Std.
41.21-44.80
471.7750 Fn5
Flags: PBM
4σ 1.27e3
0%
Abs. Int.
1.85e6
9.24e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
QC Check
41.21-44.80
454.9728 Fn5
Flags: -
0%
Abs. Int.
1.00e7
5.01e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT


Rel. Int.
100%
TCDF
19.04-28.80
303.9016 Fn1
Flags: PBM
4σ 1.53e3
0%
1289F
7.43e4
28.14
Abs. Int.
2.32e4
1.16e4
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDF
19.04-28.80
305.8987 Fn1
Flags: PBM
4σ 1.51e3
0%
1289F
3.37e4
28.15
Abs. Int.
1.03e4
5.15e3
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDF Std.
19.04-28.80
315.9419 Fn1
Flags: PBM
4σ 1.18e4
0%
JS 1234F
3.86e7
24.46
ES 2378F
3.07e7
25.95
Abs. Int.
7.57e6
3.78e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDF Std.
19.04-28.80
317.9389 Fn1
Flags: PBM
4σ 6.06e3
0%
JS 1234F
4.81e7
24.46
ES 2378F
3.88e7
25.95
Abs. Int.
9.30e6
4.65e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
HxCDPE
19.04-28.80
375.8364 Fn1
Flags: PB
4σ 9.83e2
0%
Abs. Int.
6.89e3
3.44e3
0.00e0
20.0
22.0
24.0
26.0
28.0
RT

SGS ID: B4526_17662_DF_004 | **Sample ID: DUP-01** | **Acq: 11-Aug-2020 20:40:40**

Instr: [ILM] AutoSpec-Ultima HRMS3 | **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 17** | **User: DTF Datafile: 200811C09**

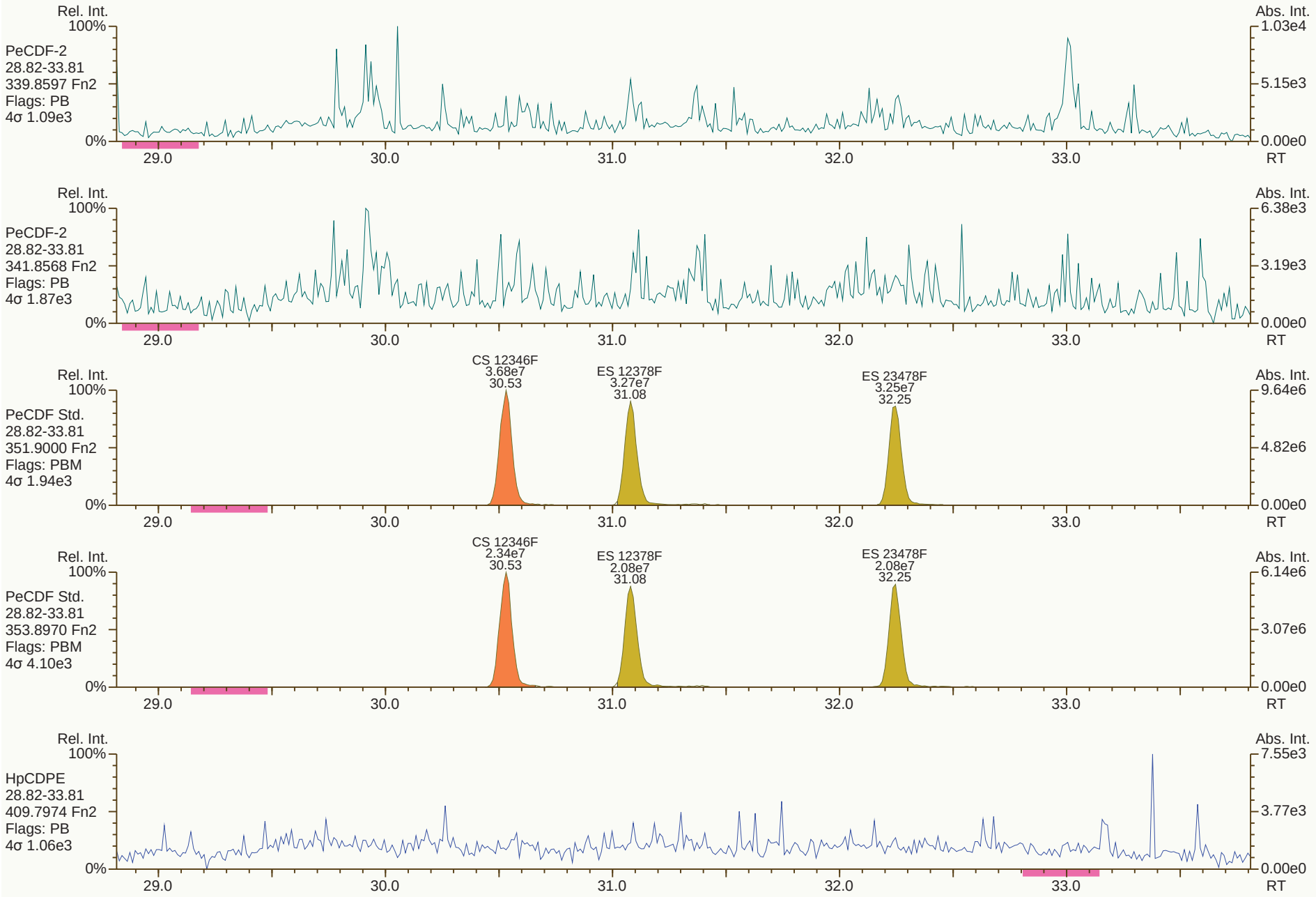


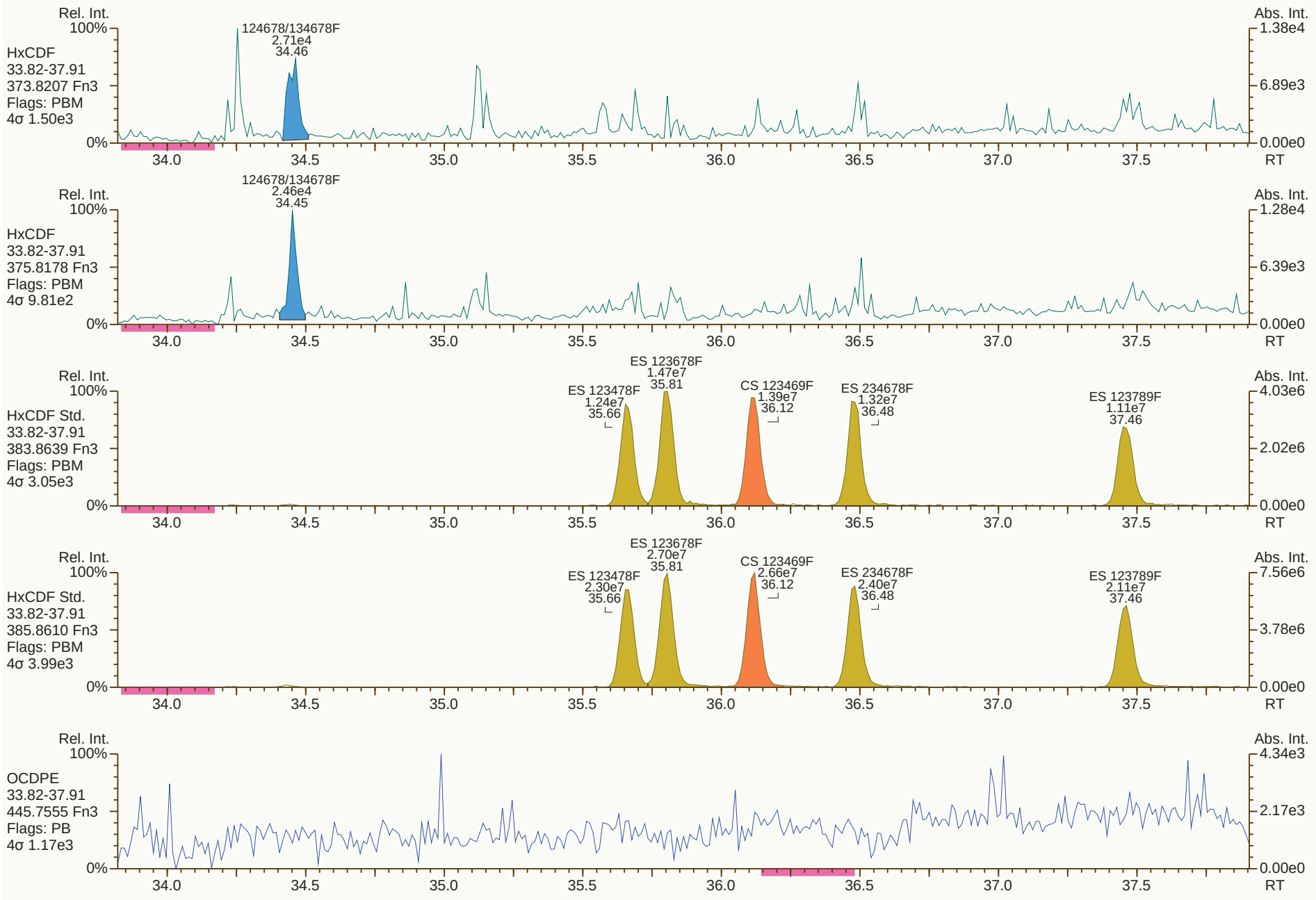
Results: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\B4526_17662_DF_004.utp_res, saved 12-Aug-2020 15:18 (DTF)

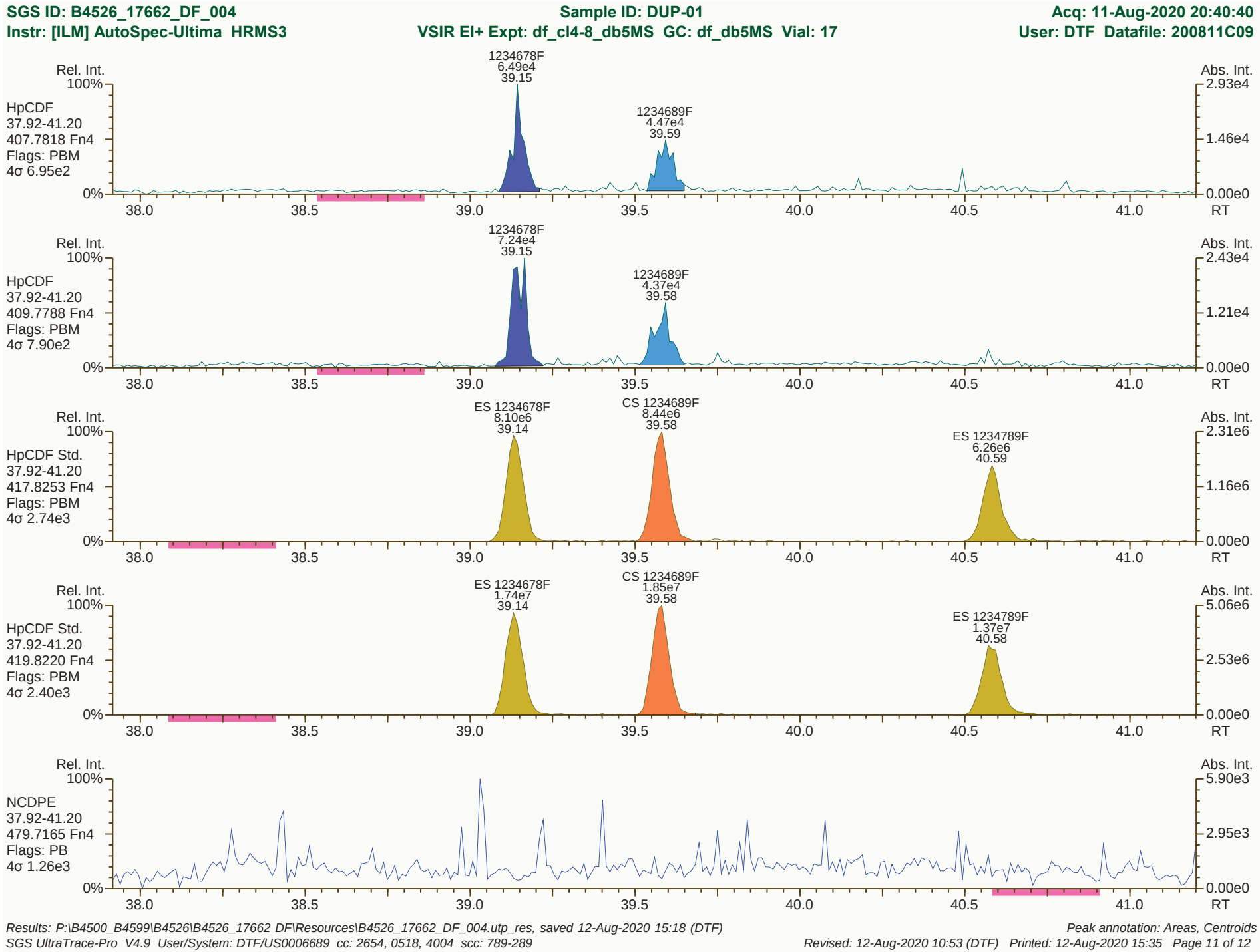
Peak annotation: Areas, Centroids

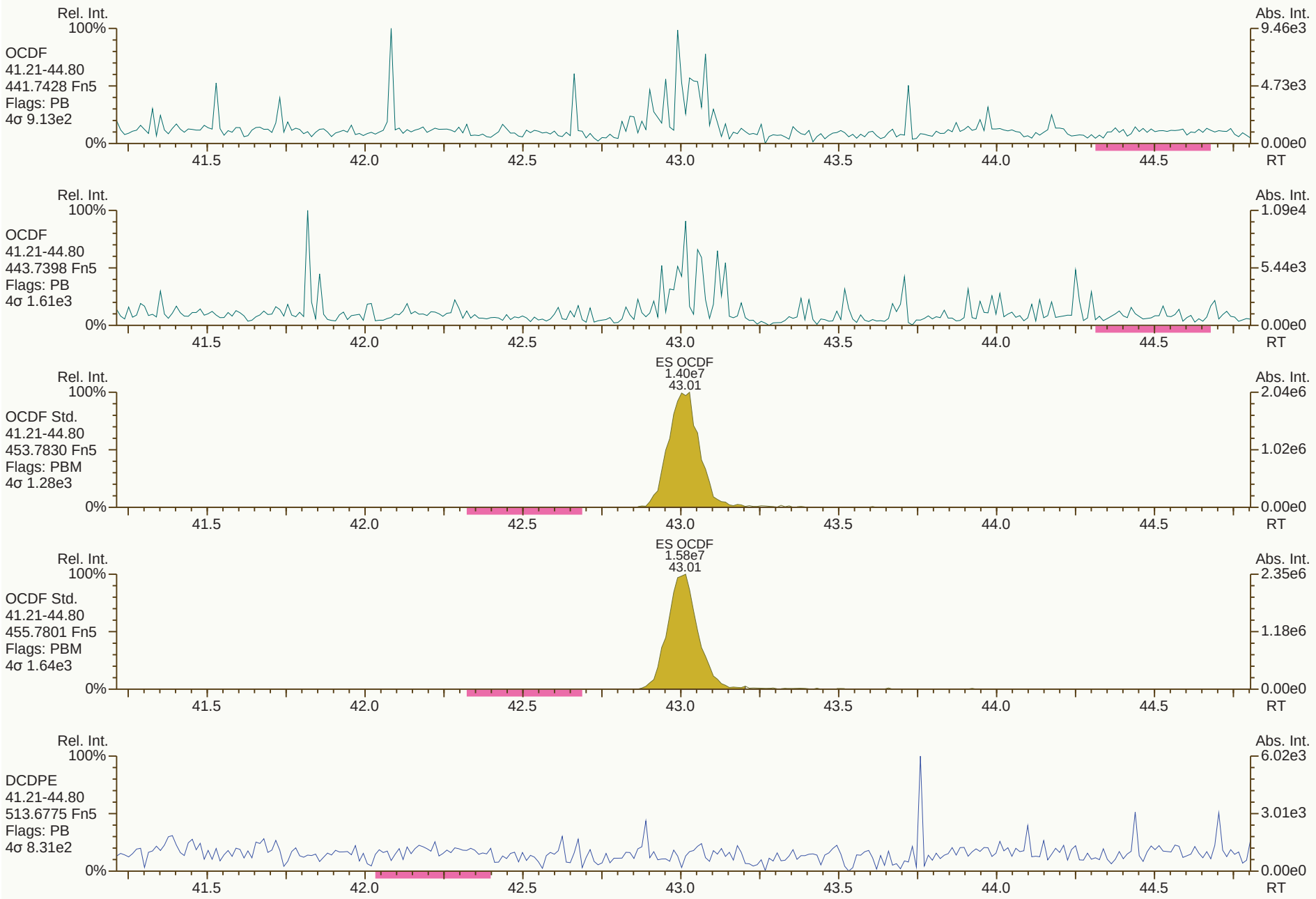
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 4755 scc: 789-289

PKD: 12-Aug-2020 10:48 Printed: 12-Aug-2020 15:35 Page 8 of 12


Rel. Int.
100%
PeCDF-2
28.82-33.81
339.8597 Fn2
Flags: PB
4σ 1.09e3
0%
Abs. Int.
1.03e4
5.15e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF-2
28.82-33.81
341.8568 Fn2
Flags: PB
4σ 1.87e3
0%
Abs. Int.
6.38e3
3.19e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.82-33.81
351.9000 Fn2
Flags: PBM
4σ 1.94e3
0%
CS 12346F
3.68e7
30.53
ES 12378F
3.27e7
31.08
ES 23478F
3.25e7
32.25
Abs. Int.
9.64e6
4.82e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.82-33.81
353.8970 Fn2
Flags: PBM
4σ 4.10e3
0%
CS 12346F
2.34e7
30.53
ES 12378F
2.08e7
31.08
ES 23478F
2.08e7
32.25
Abs. Int.
6.14e6
3.07e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
HpCDPE
28.82-33.81
409.7974 Fn2
Flags: PB
4σ 1.06e3
0%
Abs. Int.
7.55e3
3.77e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT


Rel. Int.
100%
HxCDF
33.82-37.91
373.8207 Fn3
Flags: PBM
4σ 1.50e3
124678/134678F
2.71e4
34.46
Abs. Int.
1.38e4
6.89e3
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF
33.82-37.91
375.8178 Fn3
Flags: PBM
4σ 9.81e2
124678/134678F
2.46e4
34.45
Abs. Int.
1.28e4
6.39e3
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF Std.
33.82-37.91
383.8639 Fn3
Flags: PBM
4σ 3.05e3
ES 123478F
1.24e7
35.66
ES 123678F
1.47e7
35.81
CS 123469F
1.39e7
36.12
ES 234678F
1.32e7
36.48
ES 123789F
1.11e7
37.46
Abs. Int.
4.03e6
2.02e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF Std.
33.82-37.91
385.8610 Fn3
Flags: PBM
4σ 3.99e3
ES 123478F
2.30e7
35.66
ES 123678F
2.70e7
35.81
CS 123469F
2.66e7
36.12
ES 234678F
2.40e7
36.48
ES 123789F
2.11e7
37.46
Abs. Int.
7.56e6
3.78e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
OCDPE
33.82-37.91
445.7555 Fn3
Flags: PB
4σ 1.17e3
Abs. Int.
4.34e3
2.17e3
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT


SGS ID: B4526_17662_DF_004
Sample ID: DUP-01
Acq: 11-Aug-2020 20:40:40
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 17
User: DTF Datafile: 200811C09
Rel. Int.
Abs. Int.
HpCDF
37.92-41.20
407.7818 Fn4
Flags: PBM
4σ 6.95e2
1234678F
6.49e4
39.15
1234689F
4.47e4
39.59
2.93e4
1.46e4
0.00e0
HpCDF
37.92-41.20
409.7788 Fn4
Flags: PBM
4σ 7.90e2
1234678F
7.24e4
39.15
1234689F
4.37e4
39.58
2.43e4
1.21e4
0.00e0
HpCDF Std.
37.92-41.20
417.8253 Fn4
Flags: PBM
4σ 2.74e3
ES 1234678F
8.10e6
39.14
CS 1234689F
8.44e6
39.58
ES 1234789F
6.26e6
40.59
2.31e6
1.16e6
0.00e0
HpCDF Std.
37.92-41.20
419.8220 Fn4
Flags: PBM
4σ 2.40e3
ES 1234678F
1.74e7
39.14
CS 1234689F
1.85e7
39.58
ES 1234789F
1.37e7
40.58
5.06e6
2.53e6
0.00e0
NCDPE
37.92-41.20
479.7165 Fn4
Flags: PB
4σ 1.26e3
5.90e3
2.95e3
0.00e0
100%
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Results: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\B4526_17662_DF_004.utp_res, saved 12-Aug-2020 15:18 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 2654, 0518, 4004 scc: 789-289
Revised: 12-Aug-2020 10:53 (DTF) Printed: 12-Aug-2020 15:35 Page 11 of 12


Rel. Int.
100%
OCDF
41.21-44.80
441.7428 Fn5
Flags: PB
4σ 9.13e2
0%
Abs. Int.
9.46e3
4.73e3
0.00e0
RT
41.5
42.0
42.5
43.0
43.5
44.0
44.5
Rel. Int.
100%
OCDF
41.21-44.80
443.7398 Fn5
Flags: PB
4σ 1.61e3
0%
Abs. Int.
1.09e4
5.44e3
0.00e0
RT
ES OCDF
1.40e7
43.01
Rel. Int.
100%
OCDF Std.
41.21-44.80
453.7830 Fn5
Flags: PBM
4σ 1.28e3
0%
Abs. Int.
2.04e6
1.02e6
0.00e0
RT
ES OCDF
1.58e7
43.01
Rel. Int.
100%
OCDF Std.
41.21-44.80
455.7801 Fn5
Flags: PBM
4σ 1.64e3
0%
Abs. Int.
2.35e6
1.18e6
0.00e0
RT
Rel. Int.
100%
DCDPE
41.21-44.80
513.6775 Fn5
Flags: PB
4σ 8.31e2
0%
Abs. Int.
6.02e3
3.01e3
0.00e0
RT

Lab ID: B4526_17662_DF_005 **Acq'd:** 11 Aug 2020 21:27 DTF **Wt/Vol:** 9.37 g **ICAL:** HRMS3_DF_10122018_28AUG2019

Client ID: CS-40 **UTP:** 12-Aug-2020 15:18:32 DTF **J-level:** 0.533 pg/g **Split:** 1 **Checkcode:** 675-832-DJN

Datafile: 200811C10 **Report:** 12 Aug 2020 15:21 TF **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	NotFnd		1.0008	-		-	-	-	1.19	-	3815	0.175
12378-PeCDD	NotFnd		1.0006	-		-	-	-	0.98	-	3403	0.192
123478-HxCDD	NotFnd		1.0004	-		-	-	-	1.02	-	6388	0.409
123678-HxCDD	NotFnd		1.0036	-		-	-	-	1.09	-	6388	0.419
123789-HxCDD	NotFnd		1.0118	-		-	-	-	0.97	-	6388	0.447
1234678-HpCDD	40.18		1.0003	1.0003	0	1.16E+06	1.04	Y	0.98	11.9	2356	0.241
OCDD	42.89		1.0003	1.0004	+0.3	6.72E+06	0.91	Y	1.07	116	3469	1.01
2378-TCDF	NotFnd		1.0009	-		-	-	-	1.01	-	2480	0.0929
12378-PeCDF	NotFnd		1.0006	-		-	-	-	0.96	-	4281	0.171
23478-PeCDF	32.28	J EMPC	1.0005	1.0009	+0.8	7.86E+04	1.99	N	0.99	0.334	4281	0.166
123478-HxCDF	35.68	J	1.0005	1.0003	-0.4	7.67E+04	1.19	Y	1.21	0.386	3098	0.125
123678-HxCDF	35.82	J EMPC	1.0005	1.0004	-0.2	4.63E+04	0.83	N	1.11	0.221	3098	0.13
234678-HxCDF	36.50	J EMPC	1.0004	1.0003	-0.2	5.14E+04	0.80	N	1.12	0.273	3098	0.151
123789-HxCDF	NotFnd		1.0005	-		-	-	-	1.11	-	3098	0.177
1234678-HpCDF	39.15		1.0003	1.0003	0	5.07E+05	1.04	Y	1.32	3.24	1818	0.0992
1234789-HpCDF	NotFnd		1.0003	-		-	-	-	1.26	-	1818	0.155
OCDF	43.04	J	1.0003	1.0005	+0.5	2.84E+05	0.77	Y	1.03	3.84	2548	0.579

Name	Act RT		Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	26.91		1.0266	1.0268	+0.3	4.55E+07	0.81	Y	0.99	84
ES 12378-PeCDD	32.62		1.2430	1.2448	+3.5	3.43E+07	1.51	Y	0.83	75.5
ES 123478-HxCDD	36.68		0.9916	0.9915	-0.2	2.77E+07	1.30	Y	0.95	77.2
ES 123678-HxCDD	36.79		0.9947	0.9947	0	2.75E+07	1.28	Y	0.98	74.4
ES 123789-HxCDD	37.10		1.0029	1.0028	-0.2	3.00E+07	1.27	Y	1.14	69.7
ES 1234678-HpCDD	40.16		1.0851	1.0858	+1.7	2.14E+07	1.05	Y	0.90	62.8
ES OCDD	42.88		1.1584	1.1591	+1.8	2.31E+07	0.89	Y	0.63	48.5
ES 2378-TCDF	25.95		1.0602	1.0608	+0.9	6.69E+07	0.80	Y	1.00	84.8
ES 12378-PeCDF	31.09		1.2683	1.2707	+4.5	5.19E+07	1.61	Y	0.83	78.7
ES 23478-PeCDF	32.25		1.3156	1.3182	+5.0	5.09E+07	1.58	Y	0.81	79.7
ES 123478-HxCDF	35.67		0.9644	0.9642	-0.4	3.51E+07	0.52	Y	1.12	82.5
ES 123678-HxCDF	35.81		0.9682	0.9680	-0.4	4.04E+07	0.55	Y	1.33	79.9
ES 234678-HxCDF	36.49		0.9864	0.9864	0	3.59E+07	0.54	Y	1.21	78.4
ES 123789-HxCDF	37.47		1.0128	1.0128	0	3.22E+07	0.53	Y	1.12	76
ES 1234678-HpCDF	39.14		1.0578	1.0582	+0.9	2.52E+07	0.46	Y	0.92	71.9
ES 1234789-HpCDF	40.59		1.0967	1.0973	+1.5	1.97E+07	0.46	Y	0.82	63.3
ES OCDF	43.02		1.1623	1.1630	+1.8	3.06E+07	0.89	Y	0.78	51.7

Lab ID: B4526_17662_DF_005 | Acq'd: 11 Aug 2020 21:27 DTF | Wt/Vol: 9.37 g | ICAL: HRMS3_DF_10122018_28AUG2019

Client ID: CS-40 | UTP: 12-Aug-2020 15:18:32 DTF | J-level: 0.533 pg/g | Split: 1 | Checkcode: 675-832-DJN

Datafile: 200811C10 | Report: 12 Aug 2020 15:21 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %	
JS 1234-TCDD	26.20		-	-	-	5.47E+07	0.82	Y	-	-	
JS 1234-TCDF	24.47		-	-	-	7.93E+07	0.77	Y	-	-	
JS 123467-HxCDD	36.99		-	-	-	1.90E+07	1.30	Y	-	-	
CS 37Cl-2378-TCDD	26.93		1.0276	1.0277	+0.2	2.04E+07	n/a	-	1.12	83.1	
CS 12347-PeCDD	32.10		1.2233	1.2250	+3.3	3.35E+07	1.58	Y	0.71	85.8	
CS 12346-PeCDF	30.54		1.2459	1.2481	+4.0	5.14E+07	1.53	Y	0.81	80.2	
CS 123469-HxCDF	36.12		0.9767	0.9765	-0.4	3.56E+07	0.54	Y	1.12	83.5	
CS 1234689-HpCDF	39.59		1.0696	1.0701	+1.2	2.43E+07	0.45	Y	0.90	71.5	
~~SS 37Cl-2378-TCDD~~	~~26.93~~		~~1.0276~~	~~1.0277~~	~~+0.2~~	~~2.04E+07~~	~~n/a~~		~~1.14~~	~~98.1~~	Not used in this project.
~~SS 12347-PeCDD~~	~~32.10~~		~~1.2233~~	~~1.2250~~	~~+3.3~~	~~3.35E+07~~	~~1.58~~	~~Y~~	~~0.86~~	~~113~~	CL 13Aug20
~~SS 12346-PeCDF~~	~~30.54~~		~~1.2459~~	~~1.2481~~	~~+4.0~~	~~5.14E+07~~	~~1.53~~	~~Y~~	~~0.98~~	~~102~~	
~~SS 123469-HxCDF~~	~~36.12~~		~~0.9767~~	~~0.9765~~	~~-0.4~~	~~3.56E+07~~	~~0.54~~	~~Y~~	~~0.85~~	~~104~~	
~~SS 1234689-HpCDF~~	~~39.59~~		~~1.0696~~	~~1.0701~~	~~+1.2~~	~~2.43E+07~~	~~0.45~~	~~Y~~	~~0.97~~	~~99~~	

Totals	Conc	EMPC
Total TCDD	0.673	1.64
Total PeCDD	2.06	3.03
Total HxCDD	5.04	7.13
Total HpCDD	37.8	37.8
Total Tetra-Octa Dioxins	161	165
Total TCDF	1.69	2.15
Total PeCDF	1.1	3.04
Total HxCDF	3.94	4.61
Total HpCDF	6.46	6.46
Total Tetra-Octa Furans	17	20.1
Total Tetra-Octa Dioxins & Furans	178	186

Lab ID: B4526_17662_DF_005 **Acq'd:** 11 Aug 2020 21:27 DTF **Wt/Vol:** 9.37 g **ICAL:** HRMS3_DF_10122018_28AUG2019

Client ID: CS-40 **UTP:** 12-Aug-2020 15:18:32 DTF **J-level:** 0.533 pg/g **Split:** 1 **Checkcode:** 675-832-DJN

Datafile: 200811C10 **Report:** 12 Aug 2020 15:21 TF **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1368-TCDD	22.91	EMPC	0.8523	0.8514	-1.2	2.46E+05	0.92	N	1.19	0.969	3815	0.175
1379-TCDD	23.31		0.8682	0.8663	-2.7	1.71E+05	0.80	Y	1.19	0.673	3815	0.175
1369-TCDD	NotFnd		0.8858						1.19		3815	0.175
1469-TCDD	NotFnd		0.9177						1.19		3815	0.175
1247/1246/1248/1249-TCDD	NotFnd		0.9274						1.19		3815	0.175
1378-TCDD	NotFnd		0.9349						1.19		3815	0.175
1268-TCDD	NotFnd		0.9430						1.19		3815	0.175
1478-TCDD	NotFnd		0.9529						1.19		3815	0.175
1279-TCDD	NotFnd		0.9597						1.19		3815	0.175
1234/1269-TCDD	NotFnd		0.9739						1.19		3815	0.175
1236-TCDD	NotFnd		0.9794						1.19		3815	0.175
1237/1238-TCDD	NotFnd		0.9895						1.19		3815	0.175
1239-TCDD	NotFnd		0.9950						1.19		3815	0.175
2378-TCDD	**NotFnd**		**1.0008**						**1.19**		**3815**	**0.175**
1278-TCDD	NotFnd		1.0139						1.19		3815	0.175
1267-TCDD	NotFnd		1.0194						1.19		3815	0.175
1289-TCDD	NotFnd		1.0397						1.19		3815	0.175
12479/12468-PeCDD	30.02	J EMPC	0.9209	0.9205	-0.7	1.54E+05	1.19	N	0.98	0.973	3403	0.192
12469-PeCDD	NotFnd		0.9382						0.98		3403	0.192
12368-PeCDD	31.17	J	0.9557	0.9556	-0.2	1.36E+05	1.60	Y	0.98	0.858	3403	0.192
12478-PeCDD	NotFnd		0.9617						0.98		3403	0.192
12379-PeCDD	31.48	J	0.9649	0.9649	0	1.25E+05	1.51	Y	0.98	0.786	3403	0.192
12369/12467/12489-PeCDD	NotFnd		0.9732						0.98		3403	0.192
12346/12347-PeCDD	32.13	J	0.9850	0.9850	0	6.58E+04	1.68	Y	0.98	0.415	3403	0.192
12378-PeCDD	NotFnd		**1.0006**						**0.98**		**3403**	**0.192**
12367-PeCDD	NotFnd		1.0038						0.98		3403	0.192
12389-PeCDD	NotFnd		1.0146						0.98		3403	0.192
124679/124689-HxCDD	34.94	J	0.9530	0.9527	-0.6	3.48E+05	1.22	Y	1.03	2.54	6388	0.424
123468-HxCDD	35.62	J	0.9715	0.9711	-0.9	3.42E+05	1.16	Y	1.03	2.5	6388	0.424
123679/123689-HxCDD	35.92	J EMPC	0.9795	0.9793	-0.4	2.85E+05	1.45	N	1.03	2.09	6388	0.424
123469-HxCDD	NotFnd		0.9832						1.03		6388	0.424
123478-HxCDD	NotFnd		**1.0004**						1.02		**6388**	**0.409**
123678-HxCDD	NotFnd		**1.0036**						1.09		**6388**	**0.419**
123467-HxCDD	NotFnd		1.0089						1.03		6388	0.424
123789-HxCDD	NotFnd		**1.0118**						0.97		**6388**	**0.447**

Lab ID: B4526_17662_DF_005 | Acq'd: 11 Aug 2020 21:27 DTF | Wt/Vol: 9.37 g | ICAL: HRMS3_DF_10122018_28AUG2019

Client ID: CS-40 | UTP: 12-Aug-2020 15:18:32 DTF | J-level: 0.533 pg/g | Split: 1 | Checkcode: 675-832-DJN

Datafile: 200811C10 | Report: 12 Aug 2020 15:21 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

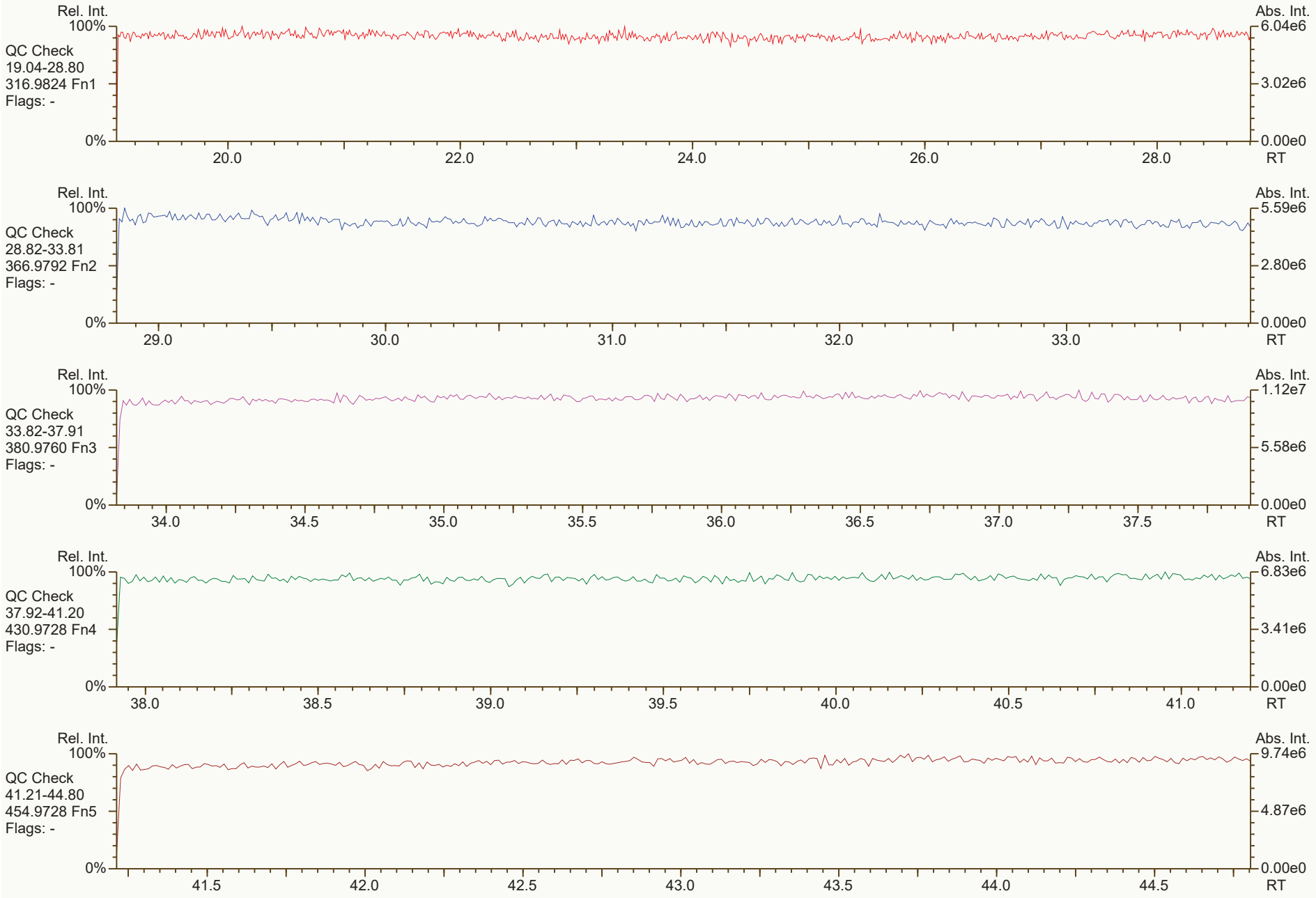
Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1234679-HpCDD	39.46		0.9826	0.9826	0	2.54E+06	1.03	Y	0.98	25.9	2356	0.241
1234678-HpCDD	**40.18**		**1.0003**	**1.0003**	**0**	**1.16E+06**	**1.04**	**Y**	**0.98**	**11.9**	**2356**	**0.241**
OCDD	**42.89**		**1.0003**	**1.0004**	**+0.3**	**6.72E+06**	**0.91**	**Y**	**1.07**	**116**	**3469**	**1.01**
OCDD-a	42.89	**#VALUE!**	1.0002	1.0004	+0.5	3.93E+05	2.54	Y	-	#VALUE!	3511	#VALUE!
1368-TCDF	20.68	J	0.7980	0.7969	-1.4	1.17E+05	0.71	Y	1.01	0.367	2480	0.0929
1468-TCDF	NotFnd		0.8204						1.01		2480	0.0929
2468-TCDF	21.88		0.8443	0.8432	-1.4	4.20E+05	0.78	Y	1.01	1.32	2480	0.0929
1346/1246-TCDF	NotFnd		0.8597						1.01		2480	0.0929
1347/1378/1247-TCDF	NotFnd		0.8665						1.01		2480	0.0929
1348-TCDF	NotFnd		0.8785						1.01		2480	0.0929
1248/1367/1379-TCDF	NotFnd		0.8840						1.01		2480	0.0929
1268-TCDF	NotFnd		0.9004						1.01		2480	0.0929
1467-TCDF	NotFnd		0.9060						1.01		2480	0.0929
1478-TCDF	NotFnd		0.9132						1.01		2480	0.0929
1369/1237-TCDF	NotFnd		0.9287						1.01		2480	0.0929
2467-TCDF	NotFnd		0.9345						1.01		2480	0.0929
2368-TCDF	NotFnd		0.9409						1.01		2480	0.0929
1238/1234/1678/1469/1236-TCDF	NotFnd		0.9450						1.01		2480	0.0929
1278-TCDF	NotFnd		0.9638						1.01		2480	0.0929
1349-TCDF	NotFnd		0.9685						1.01		2480	0.0929
1267-TCDF	NotFnd		0.9751						1.01		2480	0.0929
2346/1249-TCDF	NotFnd		0.9831						1.01		2480	0.0929
2347/1279-TCDF	NotFnd		0.9920						1.01		2480	0.0929
2348-TCDF	NotFnd		0.9964						1.01		2480	0.0929
2378-TCDF	**NotFnd**		**1.0009**						**1.01**		**2480**	**0.0929**
2367/3467-TCDF	NotFnd		1.0164						1.01		2480	0.0929
1269-TCDF	NotFnd		1.0259						1.01		2480	0.0929
1239-TCDF	NotFnd		1.0373						1.01		2480	0.0929
1289-TCDF	28.14	J EMPC	1.0838	1.0843	+0.8	1.44E+05	1.77	N	1.01	0.454	2480	0.0929
13468/12468-PeCDF	28.16	J EMPC	0.9052	0.9058	+1.0	3.19E+05	1.99	N	0.98	1.36	2601	0.102
13678/13467/12467-PeCDF	29.80	J EMPC	0.9582	0.9585	+0.5	5.86E+04	0.98	N	0.98	0.249	4281	0.168
12368/13478/12478-PeCDF	29.96	J	0.9634	0.9635	+0.2	2.57E+05	1.47	Y	0.98	1.1	4281	0.168
14678-PeCDF	NotFnd		0.9668						0.98		4281	0.168
13479-PeCDF	NotFnd		0.9700						0.98		4281	0.168
13469/12479-PeCDF	NotFnd		0.9781						0.98		4281	0.168
12346-PeCDF	NotFnd		0.9829						0.98		4281	0.168

Lab ID: B4526_17662_DF_005 | Acq'd: 11 Aug 2020 21:27 DTF | Wt/Vol: 9.37 g | ICAL: HRMS3_DF_10122018_28AUG2019

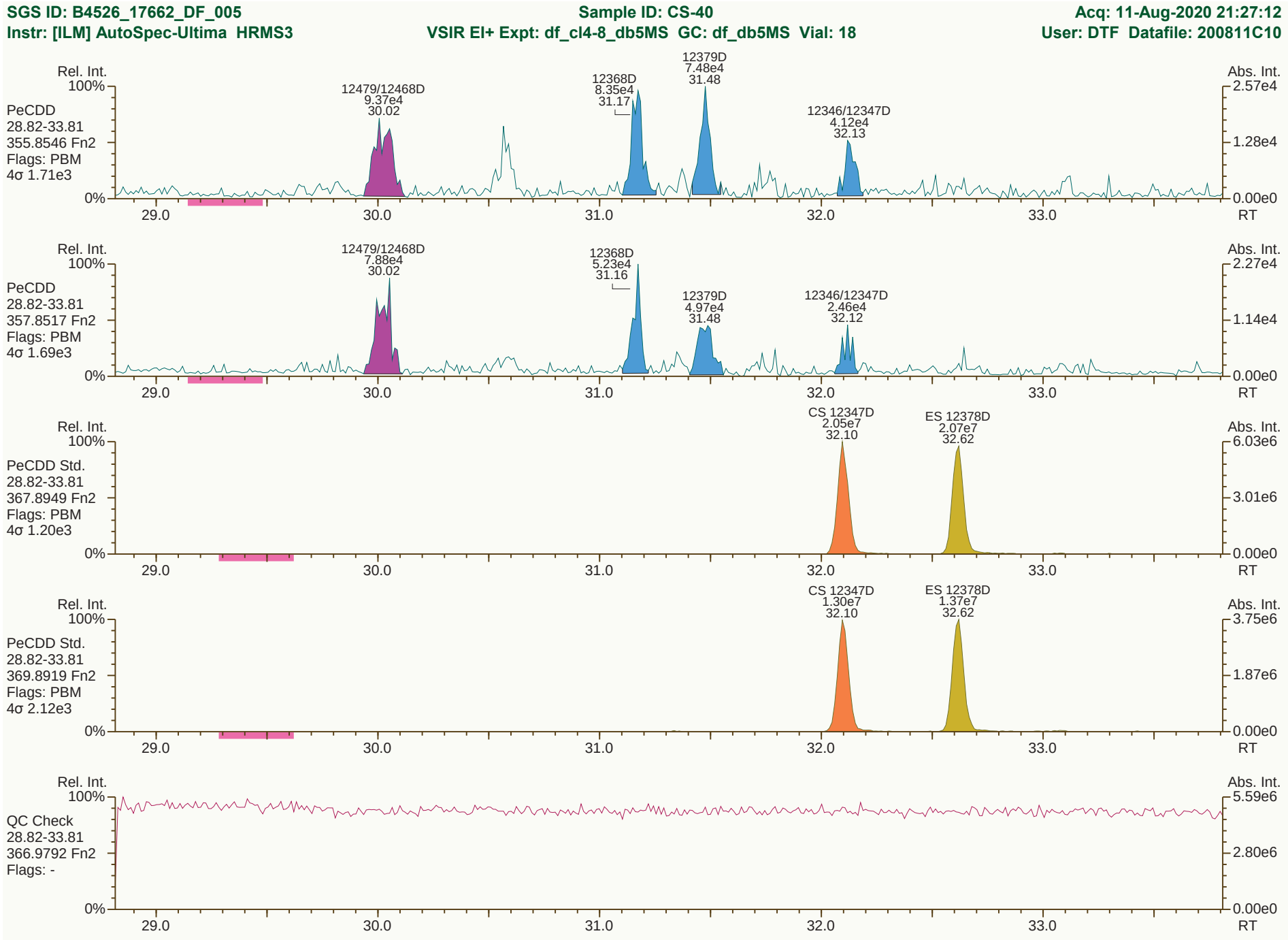
Client ID: CS-40 | UTP: 12-Aug-2020 15:18:32 DTF | J-level: 0.533 pg/g | Split: 1 | Checkcode: 675-832-DJN

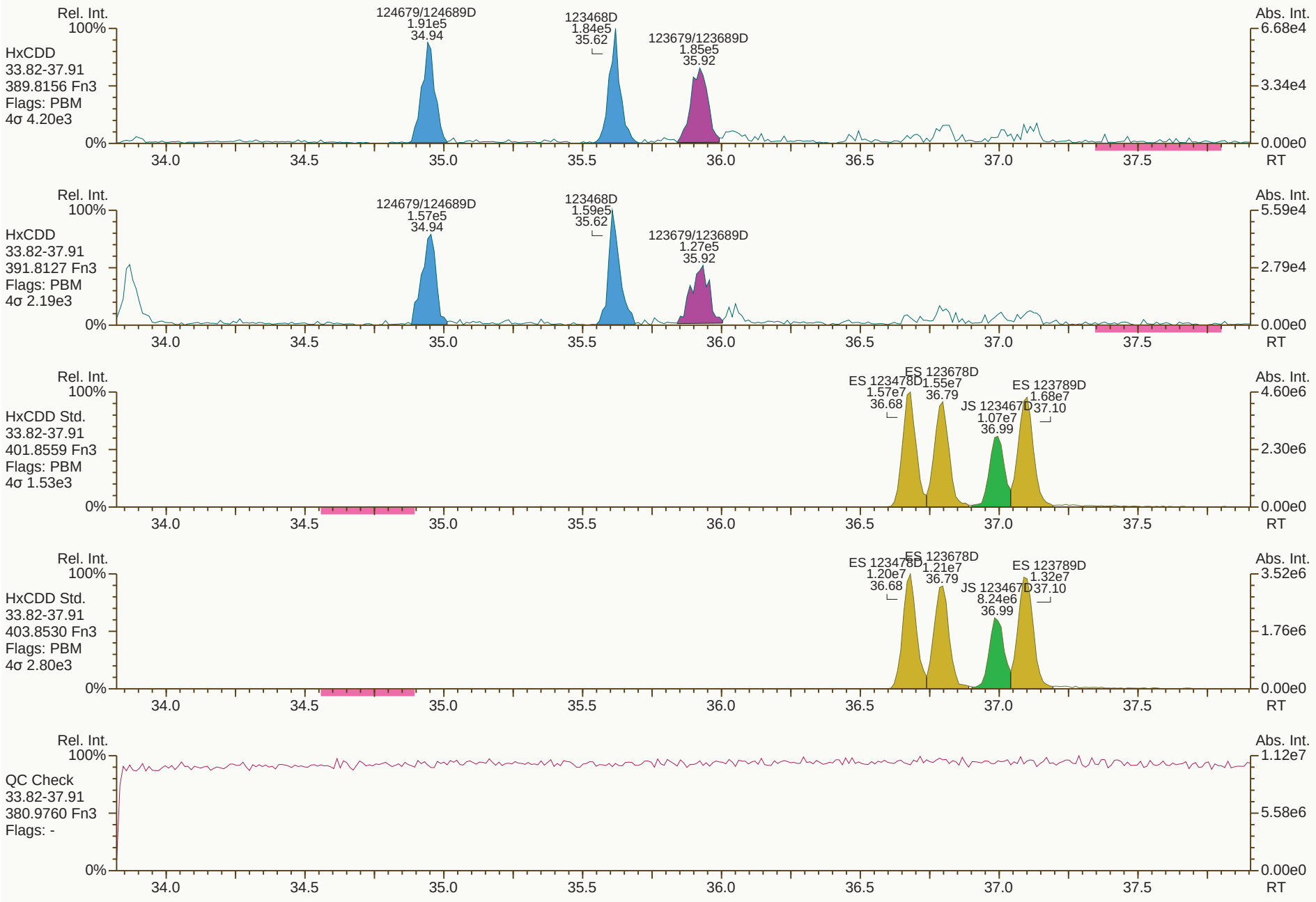
Datafile: 200811C10 | Report: 12 Aug 2020 15:21 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

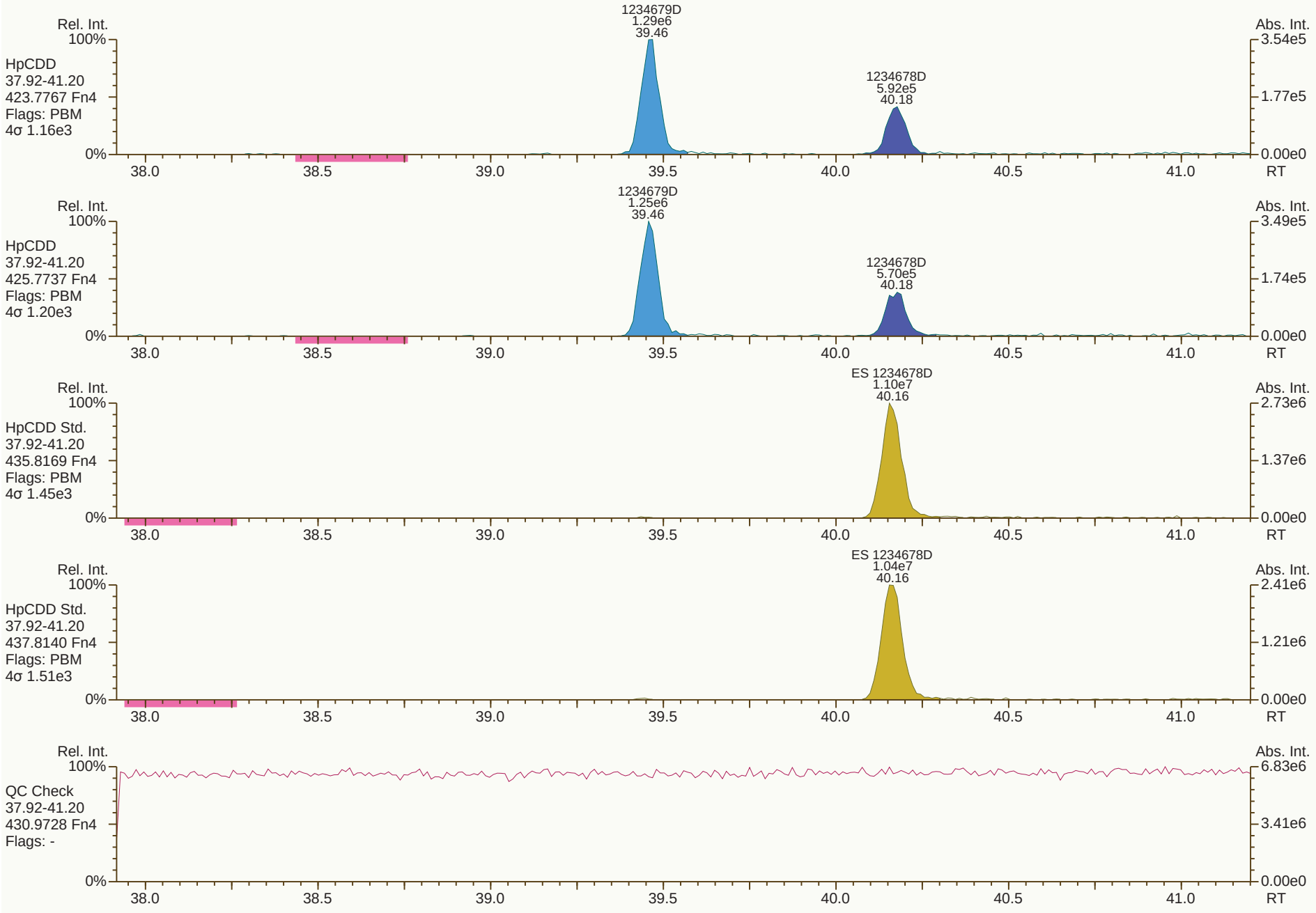
Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
23468/12469-PeCDF	NotFnd		0.9859						0.98		4281	0.168
12347-PeCDF	NotFnd		0.9884						0.98		4281	0.168
12348-PeCDF	NotFnd		0.9937						0.98		4281	0.168
12378-PeCDF	**NotFnd**		**1.0006**						**0.96**		**4281**	**0.171**
12678/12367-PeCDF	NotFnd		1.0097						0.98		4281	0.168
12379-PeCDF	NotFnd		1.0152						0.98		4281	0.168
12679-PeCDF	NotFnd		0.9923						0.98		4281	0.168
23467/12369-PeCDF	NotFnd		0.9966						0.98		4281	0.168
23478-PeCDF	**32.28**	J EMPC	**1.0005**	**1.0009**	**+0.8**	**7.86E+04**	**1.99**	**N**	**0.99**	**0.334**	**4281**	**0.166**
23478/12489-PeCDF	NotFnd		0.0000						0.99			
12489-PeCDF	NotFnd		1.0043						0.98		4281	0.168
12349-PeCDF	NotFnd		1.0107						0.98		4281	0.168
12389-PeCDF	NotFnd		1.0349						0.98		4281	0.168
123468-HxCDF	34.26	J	0.9607	0.9606	-0.2	1.02E+05	1.16	Y	1.13	0.532	3098	0.144
124678/134678-HxCDF	34.46	J	0.9666	0.9663	-0.6	3.12E+05	1.12	Y	1.13	1.63	3098	0.144
134679-HxCDF	NotFnd		0.9730						1.13		3098	0.144
124679-HxCDF	NotFnd		0.9787						1.13		3098	0.144
124689-HxCDF	35.13	J	0.9850	0.9849	-0.2	2.64E+05	1.19	Y	1.13	1.38	3098	0.144
123467-HxCDF	35.56	J EMPC	0.9971	0.9970	-0.2	3.39E+04	1.01	N	1.13	0.177	3098	0.144
123478-HxCDF	**35.68**	J	**1.0005**	**1.0003**	**-0.4**	**7.67E+04**	**1.19**	**Y**	**1.21**	**0.386**	**3098**	**0.125**
123678-HxCDF	**35.82**	J EMPC	**1.0005**	**1.0004**	**-0.2**	**4.63E+04**	**0.83**	**N**	**1.11**	**0.221**	**3098**	**0.13**
123479-HxCDF	NotFnd		1.0049						1.13		3098	0.144
123469-HxCDF	NotFnd		1.0090						1.13		3098	0.144
123679-HxCDF	NotFnd		0.9941						1.13		3098	0.144
234678-HxCDF	**36.50**	J EMPC	**1.0004**	**1.0003**	**-0.2**	**5.14E+04**	**0.80**	**N**	**1.12**	**0.273**	**3098**	**0.151**
234678/123689-HxCDF	NotFnd		0.0000						1.12			
123689-HxCDF	NotFnd		1.0041						1.13		3098	0.144
123789-HxCDF	**NotFnd**		**1.0005**						**1.11**		**3098**	**0.177**
123789/123489-HxCDF	NotFnd		0.0000						1.11			
123489-HxCDF	NotFnd		1.0009						1.13		3098	0.144
1234678-HpCDF	**39.15**		**1.0003**	**1.0003**	**0**	**5.07E+05**	**1.04**	**Y**	**1.32**	**3.24**	**1818**	**0.0992**
1234679-HpCDF	NotFnd		1.0075						1.29		1818	0.123
1234689-HpCDF	39.59		1.0112	1.0115	+0.7	4.37E+05	1.12	Y	1.29	3.22	1818	0.123
1234789-HpCDF	**NotFnd**		**1.0003**						**1.26**		**1818**	**0.155**
OCDF	**43.04**	**J**	**1.0003**	**1.0005**	**+0.5**	**2.84E+05**	**0.77**	**Y**	**1.03**	**3.84**	**2548**	**0.579**
OCDF-a	NotFnd	**#VALUE!**	1.0002						-		4275	#VALUE!

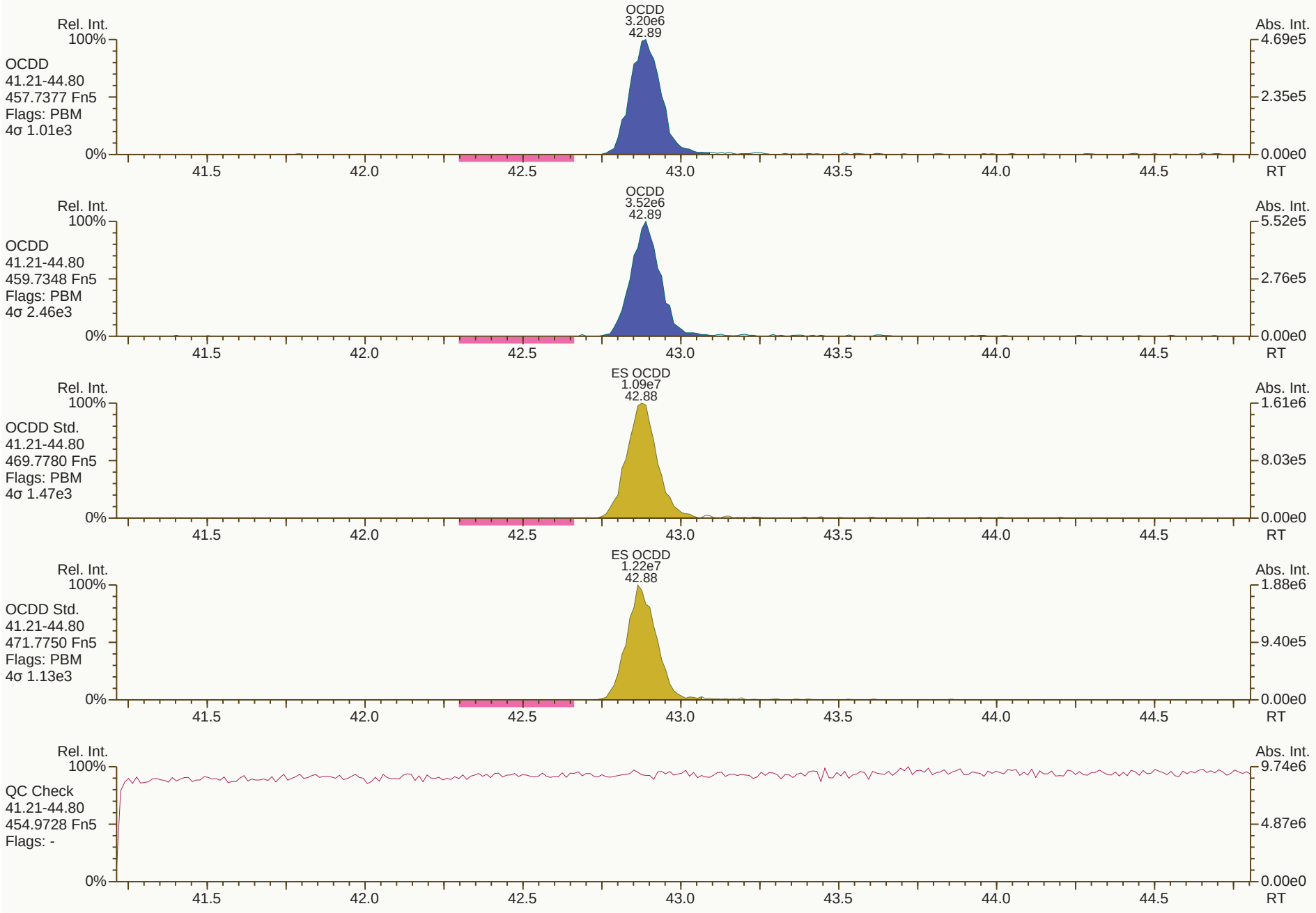

Rel. Int.
100%
QC Check
19.04-28.80
316.9824 Fn1
Flags: -
0%
Abs. Int.
6.04e6
3.02e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
QC Check
28.82-33.81
366.9792 Fn2
Flags: -
0%
Abs. Int.
5.59e6
2.80e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
QC Check
33.82-37.91
380.9760 Fn3
Flags: -
0%
Abs. Int.
1.12e7
5.58e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
QC Check
37.92-41.20
430.9728 Fn4
Flags: -
0%
Abs. Int.
6.83e6
3.41e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
QC Check
41.21-44.80
454.9728 Fn5
Flags: -
0%
Abs. Int.
9.74e6
4.87e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT

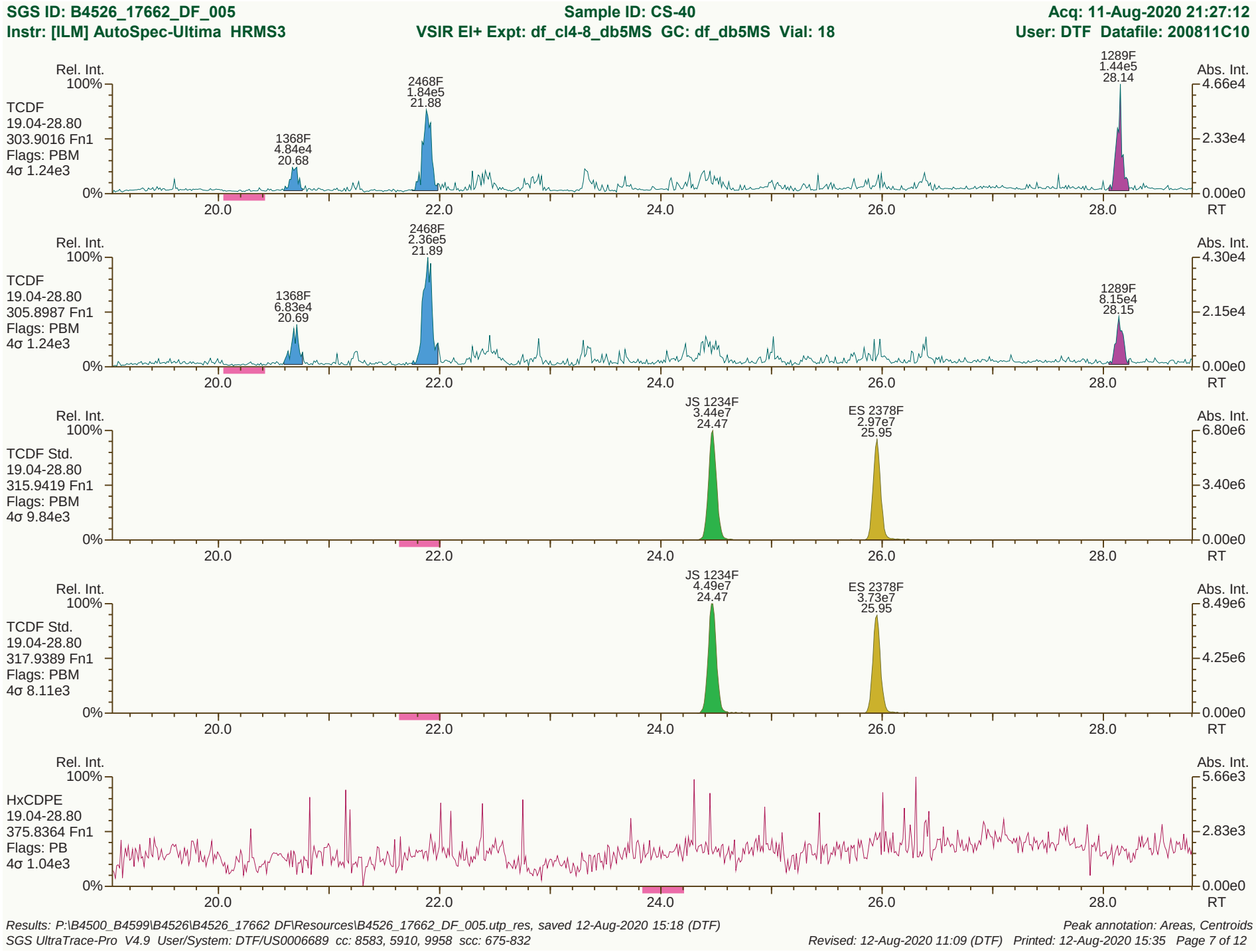

Rel. Int.
100%
TCDD
19.04-28.80
319.8965 Fn1
Flags: PBM
4σ 1.66e3
0%
1368D
1.28e5
22.91
1379D
7.60e4
23.31
Abs. Int.
2.20e4
1.10e4
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD
19.04-28.80
321.8936 Fn1
Flags: PBM
4σ 2.15e3
0%
1368D
1.39e5
22.91
1379D
9.47e4
23.32
Abs. Int.
2.44e4
1.22e4
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
37Cl-TCDD
19.04-28.80
327.8850 Fn1
Flags: PBM
4σ 1.30e3
0%
CS 37Cl-2378D
2.04e7
26.93
Abs. Int.
4.36e6
2.18e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.80
331.9368 Fn1
Flags: PBM
4σ 5.72e3
0%
JS 1234D
2.47e7
26.20
ES 2378D
2.03e7
26.91
Abs. Int.
5.01e6
2.51e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.80
333.9339 Fn1
Flags: PBM
4σ 3.01e3
0%
JS 1234D
3.01e7
26.20
ES 2378D
2.52e7
26.91
Abs. Int.
6.58e6
3.29e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT


SGS ID: B4526_17662_DF_005
Sample ID: CS-40
Acq: 11-Aug-2020 21:27:12
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 18
User: DTF Datafile: 200811C10
Rel. Int.
Abs. Int.
PeCDD
28.82-33.81
355.8546 Fn2
Flags: PBM
4σ 1.71e3
12479/12468D
9.37e4
30.02
12368D
8.35e4
31.17
12379D
7.48e4
31.48
12346/12347D
4.12e4
32.13
2.57e4
1.28e4
0.00e0
PeCDD
28.82-33.81
357.8517 Fn2
Flags: PBM
4σ 1.69e3
12479/12468D
7.88e4
30.02
12368D
5.23e4
31.16
12379D
4.97e4
31.48
12346/12347D
2.46e4
32.12
2.27e4
1.14e4
0.00e0
PeCDD Std.
28.82-33.81
367.8949 Fn2
Flags: PBM
4σ 1.20e3
CS 12347D
2.05e7
32.10
ES 12378D
2.07e7
32.62
6.03e6
3.01e6
0.00e0
PeCDD Std.
28.82-33.81
369.8919 Fn2
Flags: PBM
4σ 2.12e3
CS 12347D
1.30e7
32.10
ES 12378D
1.37e7
32.62
3.75e6
1.87e6
0.00e0
QC Check
28.82-33.81
366.9792 Fn2
Flags: -
5.59e6
2.80e6
0.00e0
100%
0%
29.0
30.0
31.0
32.0
33.0
RT


Rel. Int.
100%
HxCDD
33.82-37.91
389.8156 Fn3
Flags: PBM
4σ 4.20e3
124679/124689D
1.91e5
34.94
123468D
1.84e5
35.62
123679/123689D
1.85e5
35.92
Abs. Int.
6.68e4
3.34e4
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD
33.82-37.91
391.8127 Fn3
Flags: PBM
4σ 2.19e3
124679/124689D
1.57e5
34.94
123468D
1.59e5
35.62
123679/123689D
1.27e5
35.92
Abs. Int.
5.59e4
2.79e4
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.82-37.91
401.8559 Fn3
Flags: PBM
4σ 1.53e3
ES 123478D
1.57e7
36.68
ES 123678D
1.55e7
36.79
JS 123467D
1.07e7
36.99
ES 123789D
1.68e7
37.10
Abs. Int.
4.60e6
2.30e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.82-37.91
403.8530 Fn3
Flags: PBM
4σ 2.80e3
ES 123478D
1.20e7
36.68
ES 123678D
1.21e7
36.79
JS 123467D
8.24e6
36.99
ES 123789D
1.32e7
37.10
Abs. Int.
3.52e6
1.76e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
QC Check
33.82-37.91
380.9760 Fn3
Flags: -
Abs. Int.
1.12e7
5.58e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT

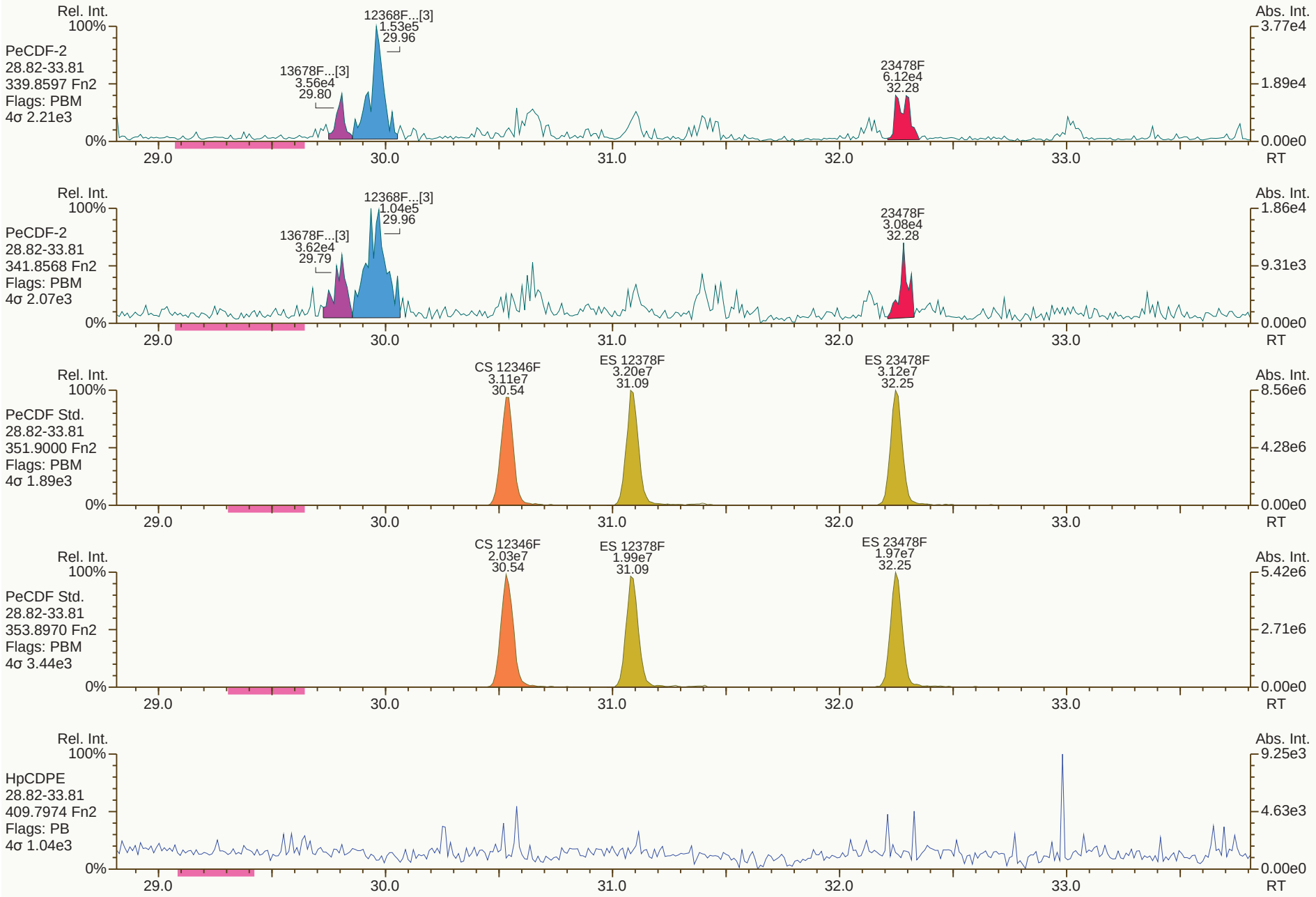

Rel. Int.
100%
HpCDD
37.92-41.20
423.7767 Fn4
Flags: PBM
4σ 1.16e3
1234679D
1.29e6
39.46
1234678D
5.92e5
40.18
Abs. Int.
3.54e5
1.77e5
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD
37.92-41.20
425.7737 Fn4
Flags: PBM
4σ 1.20e3
1234679D
1.25e6
39.46
1234678D
5.70e5
40.18
Abs. Int.
3.49e5
1.74e5
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.92-41.20
435.8169 Fn4
Flags: PBM
4σ 1.45e3
ES 1234678D
1.10e7
40.16
Abs. Int.
2.73e6
1.37e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.92-41.20
437.8140 Fn4
Flags: PBM
4σ 1.51e3
ES 1234678D
1.04e7
40.16
Abs. Int.
2.41e6
1.21e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
QC Check
37.92-41.20
430.9728 Fn4
Flags: -
Abs. Int.
6.83e6
3.41e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT

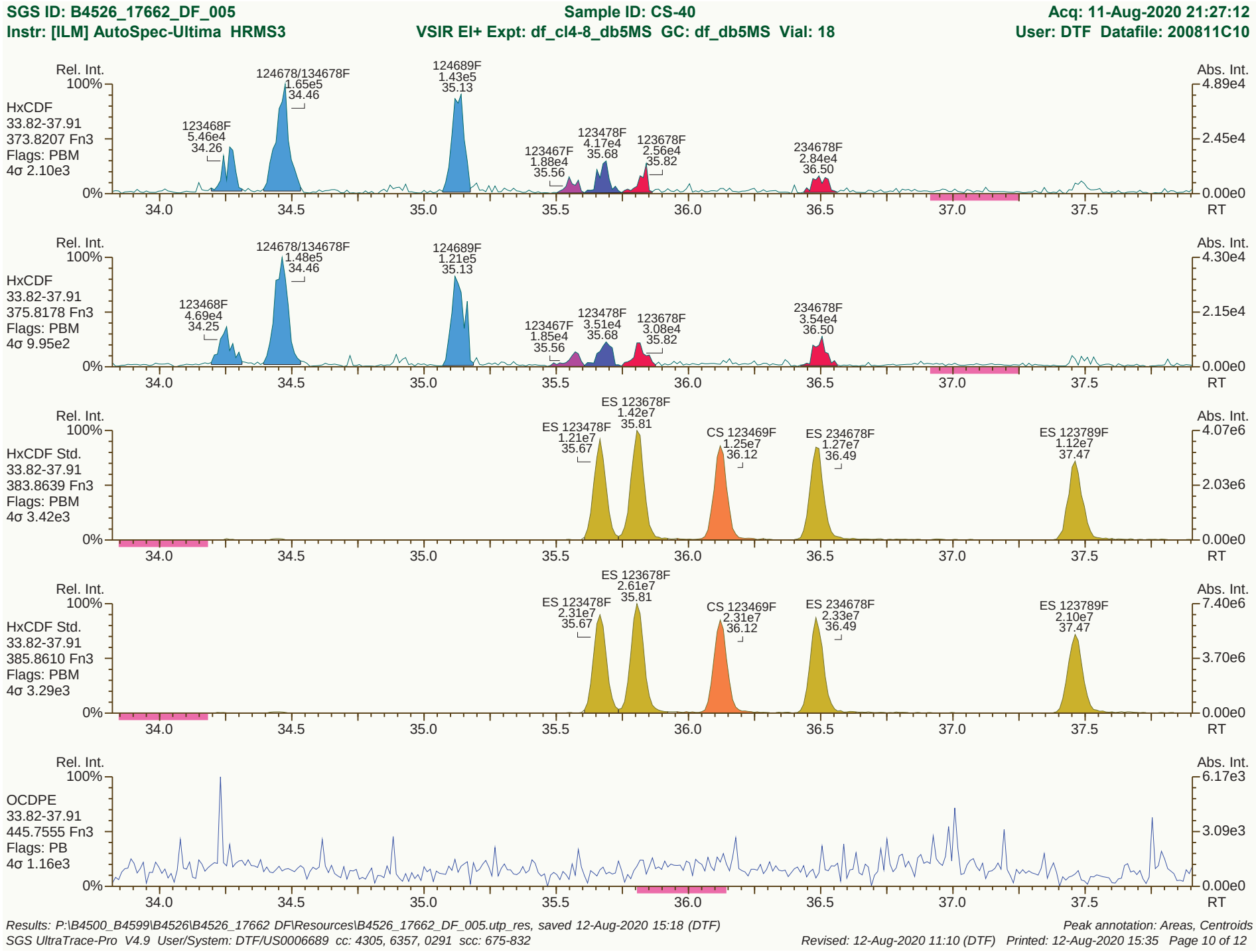

OCDD
3.20e6
42.89
Rel. Int.
100%
OCDD
41.21-44.80
457.7377 Fn5
Flags: PBM
4σ 1.01e3
0%
Abs. Int.
4.69e5
2.35e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
OCDD
3.52e6
42.89
Rel. Int.
100%
OCDD
41.21-44.80
459.7348 Fn5
Flags: PBM
4σ 2.46e3
0%
Abs. Int.
5.52e5
2.76e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDD
1.09e7
42.88
Rel. Int.
100%
OCDD Std.
41.21-44.80
469.7780 Fn5
Flags: PBM
4σ 1.47e3
0%
Abs. Int.
1.61e6
8.03e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDD
1.22e7
42.88
Rel. Int.
100%
OCDD Std.
41.21-44.80
471.7750 Fn5
Flags: PBM
4σ 1.13e3
0%
Abs. Int.
1.88e6
9.40e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
QC Check
41.21-44.80
454.9728 Fn5
Flags: -
0%
Abs. Int.
9.74e6
4.87e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT



Results: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\B4526_17662_DF_005.utp_res, saved 12-Aug-2020 15:18 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 8583, 5910, 9958 scc: 675-832
Revised: 12-Aug-2020 11:09 (DTF) Printed: 12-Aug-2020 15:35 Page 7 of 12

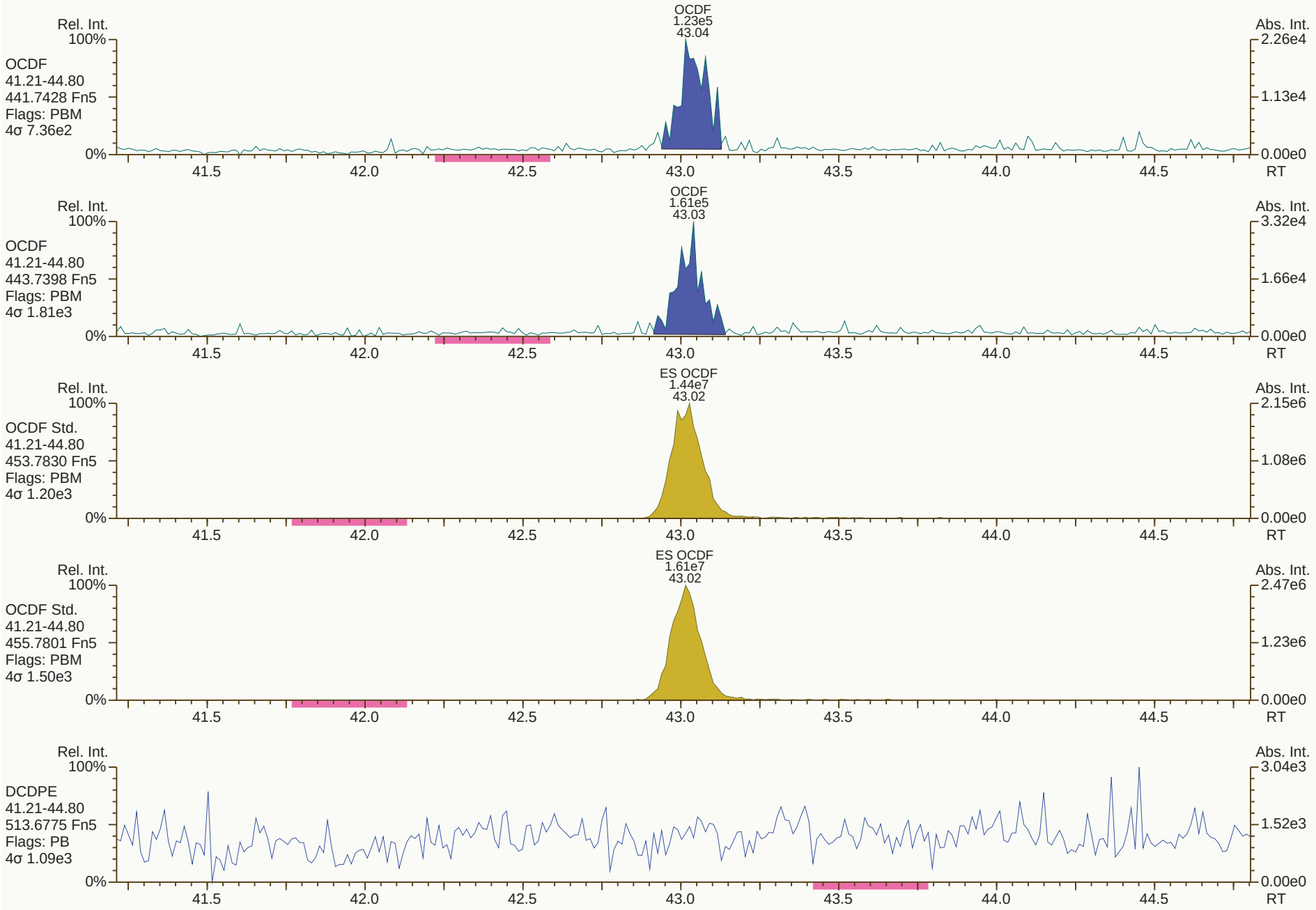

Rel. Int.
100%
0%
PeCDF-1
19.04-28.80
339.8597 Fn1
Flags: PBM
4σ 1.30e3
13468/12468F
2.49e5
28.16
Abs. Int.
7.19e4
3.60e4
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
0%
PeCDF-1
19.04-28.80
341.8568 Fn1
Flags: PBM
4σ 1.30e3
13468/12468F
1.25e5
28.16
Abs. Int.
3.38e4
1.69e4
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
0%
QC Check
19.04-28.80
316.9824 Fn1
Flags: -
Abs. Int.
6.04e6
3.02e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT


Rel. Int.
100%
PeCDF-2
28.82-33.81
339.8597 Fn2
Flags: PBM
4σ 2.21e3
13678F...[3]
3.56e4
29.80
12368F...[3]
1.53e5
29.96
23478F
6.12e4
32.28
0%
Abs. Int.
3.77e4
1.89e4
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF-2
28.82-33.81
341.8568 Fn2
Flags: PBM
4σ 2.07e3
13678F...[3]
3.62e4
29.79
12368F...[3]
1.04e5
29.96
23478F
3.08e4
32.28
0%
Abs. Int.
1.86e4
9.31e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.82-33.81
351.9000 Fn2
Flags: PBM
4σ 1.89e3
CS 12346F
3.11e7
30.54
ES 12378F
3.20e7
31.09
ES 23478F
3.12e7
32.25
0%
Abs. Int.
8.56e6
4.28e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.82-33.81
353.8970 Fn2
Flags: PBM
4σ 3.44e3
CS 12346F
2.03e7
30.54
ES 12378F
1.99e7
31.09
ES 23478F
1.97e7
32.25
0%
Abs. Int.
5.42e6
2.71e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
HpCDPE
28.82-33.81
409.7974 Fn2
Flags: PB
4σ 1.04e3
0%
Abs. Int.
9.25e3
4.63e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT



Results: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\B4526_17662_DF_005.utp_res, saved 12-Aug-2020 15:18 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 4305, 6357, 0291 scc: 675-832
Revised: 12-Aug-2020 11:10 (DTF) Printed: 12-Aug-2020 15:35 Page 10 of 12


Rel. Int.
100%
HpCDF
37.92-41.20
407.7818 Fn4
Flags: PBM
4σ 8.23e2
1234678F
2.58e5
39.15
1234689F
2.31e5
39.59
Abs. Int.
8.74e4
4.37e4
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF
37.92-41.20
409.7788 Fn4
Flags: PBM
4σ 9.95e2
1234678F
2.48e5
39.15
1234689F
2.07e5
39.59
Abs. Int.
7.45e4
3.73e4
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.92-41.20
417.8253 Fn4
Flags: PBM
4σ 2.04e3
ES 1234678F
7.97e6
39.14
CS 1234689F
7.59e6
39.59
ES 1234789F
6.19e6
40.59
Abs. Int.
2.33e6
1.17e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.92-41.20
419.8220 Fn4
Flags: PBM
4σ 2.11e3
ES 1234678F
1.72e7
39.14
CS 1234689F
1.68e7
39.59
ES 1234789F
1.35e7
40.59
Abs. Int.
4.72e6
2.36e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
NCDPE
37.92-41.20
479.7165 Fn4
Flags: PB
4σ 1.22e3
Abs. Int.
2.01e4
1.00e4
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT


OCDF
1.23e5
43.04
Rel. Int.
100%
OCDF
41.21-44.80
441.7428 Fn5
Flags: PBM
4σ 7.36e2
0%
Abs. Int.
2.26e4
1.13e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
OCDF
1.61e5
43.03
Rel. Int.
100%
OCDF
41.21-44.80
443.7398 Fn5
Flags: PBM
4σ 1.81e3
0%
Abs. Int.
3.32e4
1.66e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDF
1.44e7
43.02
Rel. Int.
100%
OCDF Std.
41.21-44.80
453.7830 Fn5
Flags: PBM
4σ 1.20e3
0%
Abs. Int.
2.15e6
1.08e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDF
1.61e7
43.02
Rel. Int.
100%
OCDF Std.
41.21-44.80
455.7801 Fn5
Flags: PBM
4σ 1.50e3
0%
Abs. Int.
2.47e6
1.23e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
DCDPE
41.21-44.80
513.6775 Fn5
Flags: PB
4σ 1.09e3
0%
Abs. Int.
3.04e3
1.52e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT

Lab ID: B4526_17662_DF_006 | Acq'd: 12 Aug 2020 02:13 DTF | Wt/Vol: 9.19 g | ICAL: HRMS3_DF_10122018_28AUG2019

Client ID: CS-41 | UTP: 12-Aug-2020 15:18:35 DTF | J-level: 0.544 pg/g | Split: 1 | Checkcode: 379-455-GFL

Datafile: 200811C16 | Report: 12 Aug 2020 15:22 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	NotFnd		1.0008	-		-	-	-	1.19	-	6195	0.259
12378-PeCDD	32.63	J	1.0006	1.0004	-0.4	1.23E+05	1.61	Y	0.98	0.709	6160	0.319
123478-HxCDD	36.70	J EMPC	1.0004	1.0004	0	1.61E+05	1.68	N	1.02	1.12	4579	0.278
123678-HxCDD	36.81	J	1.0036	1.0036	0	3.27E+05	1.16	Y	1.09	2.15	4579	0.269
123789-HxCDD	37.11	J EMPC	1.0118	1.0117	-0.2	2.17E+05	1.49	N	0.97	1.45	4579	0.288
1234678-HpCDD	40.18		1.0003	1.0003	0	6.06E+06	1.03	Y	0.98	59.7	3347	0.331
OCDD	42.89		1.0003	1.0003	0	3.41E+07	0.91	Y	1.07	590	5104	1.51
2378-TCDF	25.98		1.0009	1.0008	-0.2	1.93E+05	0.77	Y	1.01	0.559	2626	0.0945
12378-PeCDF	31.11	J EMPC	1.0006	1.0005	-0.2	1.88E+05	1.85	N	0.96	0.708	2851	0.1
23478-PeCDF	32.29	J	1.0005	1.0009	+0.8	2.26E+05	1.74	Y	0.99	0.874	2851	0.102
123478-HxCDF	35.69	J	1.0005	1.0006	+0.2	2.63E+05	1.14	Y	1.21	1.24	4595	0.18
123678-HxCDF	35.83	J	1.0005	1.0005	0	1.85E+05	1.08	Y	1.11	0.809	4595	0.184
234678-HxCDF	36.50	J	1.0004	1.0002	-0.4	1.98E+05	1.34	Y	1.12	0.967	4595	0.21
123789-HxCDF	NotFnd		1.0005	-		-	-	-	1.11	-	4595	0.25
1234678-HpCDF	39.16		1.0003	1.0003	0	1.38E+06	0.98	Y	1.32	8.14	2485	0.136
1234789-HpCDF	40.61	J EMPC	1.0003	1.0003	0	8.61E+04	0.82	N	1.26	0.729	2485	0.237
OCDF	43.02		1.0003	1.0001	-0.5	1.21E+06	0.86	Y	1.03	16.6	2658	0.592

Name	Act RT		Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	26.91		1.0266	1.0267	+0.2	4.89E+07	0.79	Y	0.99	84.8
ES 12378-PeCDD	32.62		1.2430	1.2446	+3.1	3.82E+07	1.57	Y	0.83	78.9
ES 123478-HxCDD	36.68		0.9916	0.9916	0	3.07E+07	1.25	Y	0.95	80.2
ES 123678-HxCDD	36.80		0.9947	0.9947	0	3.05E+07	1.27	Y	0.98	77.4
ES 123789-HxCDD	37.10		1.0029	1.0029	0	3.36E+07	1.27	Y	1.14	73.3
ES 1234678-HpCDD	40.17		1.0851	1.0858	+1.7	2.26E+07	1.05	Y	0.90	62.5
ES OCDD	42.87		1.1584	1.1590	+1.5	2.35E+07	0.90	Y	0.63	46.4
ES 2378-TCDF	25.96		1.0602	1.0607	+0.8	7.43E+07	0.79	Y	1.00	89.2
ES 12378-PeCDF	31.09		1.2683	1.2704	+3.9	5.98E+07	1.53	Y	0.83	86.2
ES 23478-PeCDF	32.26		1.3156	1.3179	+4.5	5.71E+07	1.56	Y	0.81	84.8
ES 123478-HxCDF	35.67		0.9644	0.9642	-0.4	3.82E+07	0.54	Y	1.12	84.4
ES 123678-HxCDF	35.81		0.9682	0.9681	-0.2	4.50E+07	0.55	Y	1.33	83.7
ES 234678-HxCDF	36.49		0.9864	0.9864	0	3.99E+07	0.53	Y	1.21	81.7
ES 123789-HxCDF	37.47		1.0128	1.0128	0	3.45E+07	0.55	Y	1.12	76.4
ES 1234678-HpCDF	39.15		1.0578	1.0583	+1.2	2.78E+07	0.48	Y	0.92	74.6
ES 1234789-HpCDF	40.60		1.0967	1.0974	+1.7	2.05E+07	0.46	Y	0.82	61.9
ES OCDF	43.02		1.1623	1.1629	+1.5	3.08E+07	0.89	Y	0.78	49

Lab ID: B4526_17662_DF_006 | Acq'd: 12 Aug 2020 02:13 DTF | Wt/Vol: 9.19 g | ICAL: HRMS3_DF_10122018_28AUG2019

Client ID: CS-41 | UTP: 12-Aug-2020 15:18:35 DTF | J-level: 0.544 pg/g | Split: 1 | Checkcode: 379-455-GFL

Datafile: 200811C16 | Report: 12 Aug 2020 15:22 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %	
JS 1234-TCDD	26.21		-	-	-	5.83E+07	0.81	Y	-	-	
JS 1234-TCDF	24.48		-	-	-	8.36E+07	0.80	Y	-	-	
JS 123467-HxCDD	36.99		-	-	-	2.02E+07	1.29	Y	-	-	
CS 37Cl-2378-TCDD	26.94		1.0276	1.0276	0	2.23E+07	n/a	-	1.12	85.4	
CS 12347-PeCDD	32.10		1.2233	1.2248	+2.9	3.85E+07	1.57	Y	0.71	92.6	
CS 12346-PeCDF	30.54		1.2459	1.2478	+3.5	6.15E+07	1.61	Y	0.81	90.9	
CS 123469-HxCDF	36.13		0.9767	0.9765	-0.4	4.02E+07	0.54	Y	1.12	88.7	
CS 1234689-HpCDF	39.59		1.0696	1.0703	+1.7	2.77E+07	0.46	Y	0.90	76.6	
~~SS 37Cl-2378-TCDD~~	~~26.94~~		~~1.0276~~	~~1.0276~~	~~0~~	~~2.23E+07~~	~~n/a~~		~~1.14~~	~~99.9~~	Not used in this project.
~~SS 12347-PeCDD~~	~~32.10~~		~~1.2233~~	~~1.2248~~	~~+2.9~~	~~3.85E+07~~	~~1.57~~	~~Y~~	~~0.86~~	~~117~~	CL 13Aug20
~~SS 12346-PeCDF~~	~~30.54~~		~~1.2459~~	~~1.2478~~	~~+3.5~~	~~6.15E+07~~	~~1.61~~	~~Y~~	~~0.98~~	~~105~~	
~~SS 123469-HxCDF~~	~~36.13~~		~~0.9767~~	~~0.9765~~	~~-0.4~~	~~4.02E+07~~	~~0.54~~	~~Y~~	~~0.85~~	~~105~~	
~~SS 1234689-HpCDF~~	~~39.59~~		~~1.0696~~	~~1.0703~~	~~+1.7~~	~~2.77E+07~~	~~0.46~~	~~Y~~	~~0.97~~	~~102~~	

Totals	Conc	EMPC
Total TCDD	2.76	3.94
Total PeCDD	11.1	11.1
Total HxCDD	30	33.4
Total HpCDD	211	211
Total Tetra-Octa Dioxins	845	849
Total TCDF	10.4	13.7
Total PeCDF	8.59	10.7
Total HxCDF	9.47	13
Total HpCDF	19.6	20.3
Total Tetra-Octa Furans	64.7	74.4
Total Tetra-Octa Dioxins & Furans	909	924

Lab ID: B4526_17662_DF_006 **Acq'd: 12 Aug 2020 02:13 DTF** **Wt/Vol: 9.19 g** **ICAL: HRMS3_DF_10122018_28AUG2019**

Client ID: CS-41 **UTP: 12-Aug-2020 15:18:35 DTF** **J-level: 0.544 pg/g** **Split: 1** **Checkcode: 379-455-GFL**

Datafile: 200811C16 **Report: 12 Aug 2020 15:22 TF** **Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)**

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1368-TCDD	22.91		0.8523	0.8514	-1.2	5.56E+05	0.79	Y	1.19	2.08	6195	0.259
1379-TCDD	23.32	EMPC	0.8682	0.8665	-2.4	3.15E+05	0.98	N	1.19	1.18	6195	0.259
1369-TCDD	NotFnd		0.8858						1.19		6195	0.259
1469-TCDD	NotFnd		0.9177						1.19		6195	0.259
1247/1246/1248/1249-TCDD	24.92		0.9274	0.9261	-1.9	1.83E+05	0.78	Y	1.19	0.684	6195	0.259
1378-TCDD	NotFnd		0.9349						1.19		6195	0.259
1268-TCDD	NotFnd		0.9430						1.19		6195	0.259
1478-TCDD	NotFnd		0.9529						1.19		6195	0.259
1279-TCDD	NotFnd		0.9597						1.19		6195	0.259
1234/1269-TCDD	NotFnd		0.9739						1.19		6195	0.259
1236-TCDD	NotFnd		0.9794						1.19		6195	0.259
1237/1238-TCDD	NotFnd		0.9895						1.19		6195	0.259
1239-TCDD	NotFnd		0.9950						1.19		6195	0.259
2378-TCDD	**NotFnd**		**1.0008**						**1.19**		**6195**	**0.259**
1278-TCDD	NotFnd		1.0139						1.19		6195	0.259
1267-TCDD	NotFnd		1.0194						1.19		6195	0.259
1289-TCDD	NotFnd		1.0397						1.19		6195	0.259
12479/12468-PeCDD	30.03		0.9209	0.9204	-0.9	5.90E+05	1.53	Y	0.98	3.42	6160	0.319
12469-PeCDD	30.59	J	0.9382	0.9377	-0.9	1.53E+05	1.73	Y	0.98	0.883	6160	0.319
12368-PeCDD	31.17	J	0.9557	0.9554	-0.6	3.22E+05	1.33	Y	0.98	1.86	6160	0.319
12478-PeCDD	31.37	J	0.9617	0.9617	0	1.30E+05	1.75	Y	0.98	0.751	6160	0.319
12379-PeCDD	31.48	J	0.9649	0.9649	0	2.34E+05	1.57	Y	0.98	1.35	6160	0.319
12369/12467/12489-PeCDD	31.75	J	0.9732	0.9732	0	1.68E+05	1.40	Y	0.98	0.971	6160	0.319
12346/12347-PeCDD	32.12	J	0.9850	0.9846	-0.8	2.05E+05	1.50	Y	0.98	1.19	6160	0.319
12378-PeCDD	32.63	J	**1.0006**	**1.0004**	**-0.4**	**1.23E+05**	**1.61**	**Y**	**0.98**	**0.709**	**6160**	**0.319**
12367-PeCDD	NotFnd		1.0038						0.98		6160	0.319
12389-PeCDD	NotFnd		1.0146						0.98		6160	0.319
124679/124689-HxCDD	34.95		0.9530	0.9528	-0.4	1.63E+06	1.31	Y	1.03	10.9	4579	0.278
123468-HxCDD	35.62		0.9715	0.9711	-0.9	8.55E+05	1.25	Y	1.03	5.73	4579	0.278
123679/123689-HxCDD	35.92		0.9795	0.9793	-0.4	1.32E+06	1.26	Y	1.03	8.85	4579	0.278
123469-HxCDD	36.04	J	0.9832	0.9826	-1.3	3.38E+05	1.41	Y	1.03	2.27	4579	0.278
123478-HxCDD	36.70	J EMPC	**1.0004**	**1.0004**	**0**	**1.61E+05**	**1.68**	**N**	1.02	**1.12**	**4579**	**0.278**
123678-HxCDD	36.81	J	**1.0036**	**1.0036**	**0**	**3.27E+05**	**1.16**	**Y**	1.09	**2.15**	**4579**	**0.269**
123467-HxCDD	37.01	J EMPC	1.0089	1.0090	+0.2	1.33E+05	1.01	N	1.03	0.892	4579	0.278
123789-HxCDD	37.11	J EMPC	**1.0118**	**1.0117**	**-0.2**	**2.17E+05**	**1.49**	**N**	0.97	**1.45**	**4579**	**0.288**

Lab ID: B4526_17662_DF_006 | Acq'd: 12 Aug 2020 02:13 DTF | Wt/Vol: 9.19 g | ICAL: HRMS3_DF_10122018_28AUG2019

Client ID: CS-41 | UTP: 12-Aug-2020 15:18:35 DTF | J-level: 0.544 pg/g | Split: 1 | Checkcode: 379-455-GFL

Datafile: 200811C16 | Report: 12 Aug 2020 15:22 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1234679-HpCDD	39.47		0.9826	0.9826	0	1.54E+07	1.04	Y	0.98	151	3347	0.331
1234678-HpCDD	**40.18**		**1.0003**	**1.0003**	**0**	**6.06E+06**	**1.03**	**Y**	**0.98**	**59.7**	**3347**	**0.331**
OCDD	**42.89**		**1.0003**	**1.0003**	**0**	**3.41E+07**	**0.91**	**Y**	**1.07**	**590**	**5104**	**1.51**
OCDD-a	42.89	**#VALUE!**	1.0002	1.0003	+0.3	2.17E+06	2.75	Y	-	#VALUE!	2904	#VALUE!
1368-TCDF	20.70		0.7980	0.7973	-0.9	2.88E+05	0.75	Y	1.01	0.835	2626	0.0945
1468-TCDF	21.25	J EMPC	0.8204	0.8186	-2.3	1.33E+05	0.94	N	1.01	0.386	2626	0.0945
2468-TCDF	21.89		0.8443	0.8432	-1.4	7.56E+05	0.76	Y	1.01	2.19	2626	0.0945
1346/1246-TCDF	22.31	J	0.8597	0.8594	-0.4	1.27E+05	0.75	Y	1.01	0.367	2626	0.0945
1347/1378/1247-TCDF	22.47		0.8665	0.8655	-1.3	4.24E+05	0.84	Y	1.01	1.23	2626	0.0945
1348-TCDF	22.76	J	0.8785	0.8768	-2.3	9.74E+04	0.87	Y	1.01	0.282	2626	0.0945
1248/1367/1379-TCDF	22.90	EMPC	0.8840	0.8819	-2.9	2.45E+05	0.94	N	1.01	0.71	2626	0.0945
1268-TCDF	23.33		0.9004	0.8988	-2.2	2.10E+05	0.71	Y	1.01	0.607	2626	0.0945
1467-TCDF	23.50	J	0.9060	0.9051	-1.3	1.28E+05	0.78	Y	1.01	0.369	2626	0.0945
1478-TCDF	23.68	J	0.9132	0.9120	-1.7	1.49E+05	0.73	Y	1.01	0.43	2626	0.0945
1369/1237-TCDF	24.09	J	0.9287	0.9279	-1.2	1.28E+05	0.87	Y	1.01	0.37	2626	0.0945
2467-TCDF	24.24	J EMPC	0.9345	0.9338	-1.0	1.37E+05	1.02	N	1.01	0.397	2626	0.0945
2368-TCDF	24.41		0.9409	0.9404	-0.7	3.06E+05	0.75	Y	1.01	0.887	2626	0.0945
1238/1234/1678/1469/1236-TCDF	24.54	J	0.9450	0.9452	+0.3	1.85E+05	0.74	Y	1.01	0.535	2626	0.0945
1278-TCDF	25.01	J	0.9638	0.9635	-0.5	1.55E+05	0.75	Y	1.01	0.45	2626	0.0945
1349-TCDF	NotFnd		0.9685						1.01		2626	0.0945
1267-TCDF	25.32	J EMPC	0.9751	0.9753	+0.3	1.20E+05	0.64	N	1.01	0.346	2626	0.0945
2346/1249-TCDF	25.50	J EMPC	0.9831	0.9823	-1.2	6.59E+04	0.91	N	1.01	0.191	2626	0.0945
2347/1279-TCDF	25.74	J	0.9920	0.9916	-0.6	1.43E+05	0.68	Y	1.01	0.414	2626	0.0945
2348-TCDF	25.87	J EMPC	0.9964	0.9964	0	5.36E+04	1.16	N	1.01	0.155	2626	0.0945
2378-TCDF	**25.98**		**1.0009**	**1.0008**	**-0.2**	**1.93E+05**	**0.77**	**Y**	**1.01**	**0.559**	**2626**	**0.0945**
2367/3467-TCDF	26.39		1.0164	1.0165	+0.2	3.01E+05	0.88	Y	1.01	0.87	2626	0.0945
1269-TCDF	NotFnd		1.0259						1.01		2626	0.0945
1239-TCDF	NotFnd		1.0373						1.01		2626	0.0945
1289-TCDF	28.14	EMPC	1.0838	1.0841	+0.5	3.97E+05	2.45	N	1.01	1.15	2626	0.0945
13468/12468-PeCDF	28.16		0.9052	0.9057	+0.8	7.66E+05	1.71	Y	0.98	2.92	2894	0.103
13678/13467/12467-PeCDF	29.79	J	0.9582	0.9581	-0.2	3.35E+05	1.61	Y	0.98	1.28	2851	0.101
12368/13478/12478-PeCDF	29.96	J	0.9634	0.9636	+0.4	6.88E+05	1.61	Y	0.98	2.63	2851	0.101
14678-PeCDF	NotFnd		0.9668						0.98		2851	0.101
13479-PeCDF	NotFnd		0.9700						0.98		2851	0.101
13469/12479-PeCDF	NotFnd		0.9781						0.98		2851	0.101
12346-PeCDF	30.57	J EMPC	0.9829	0.9832	+0.6	8.89E+04	1.29	N	0.98	0.339	2851	0.101

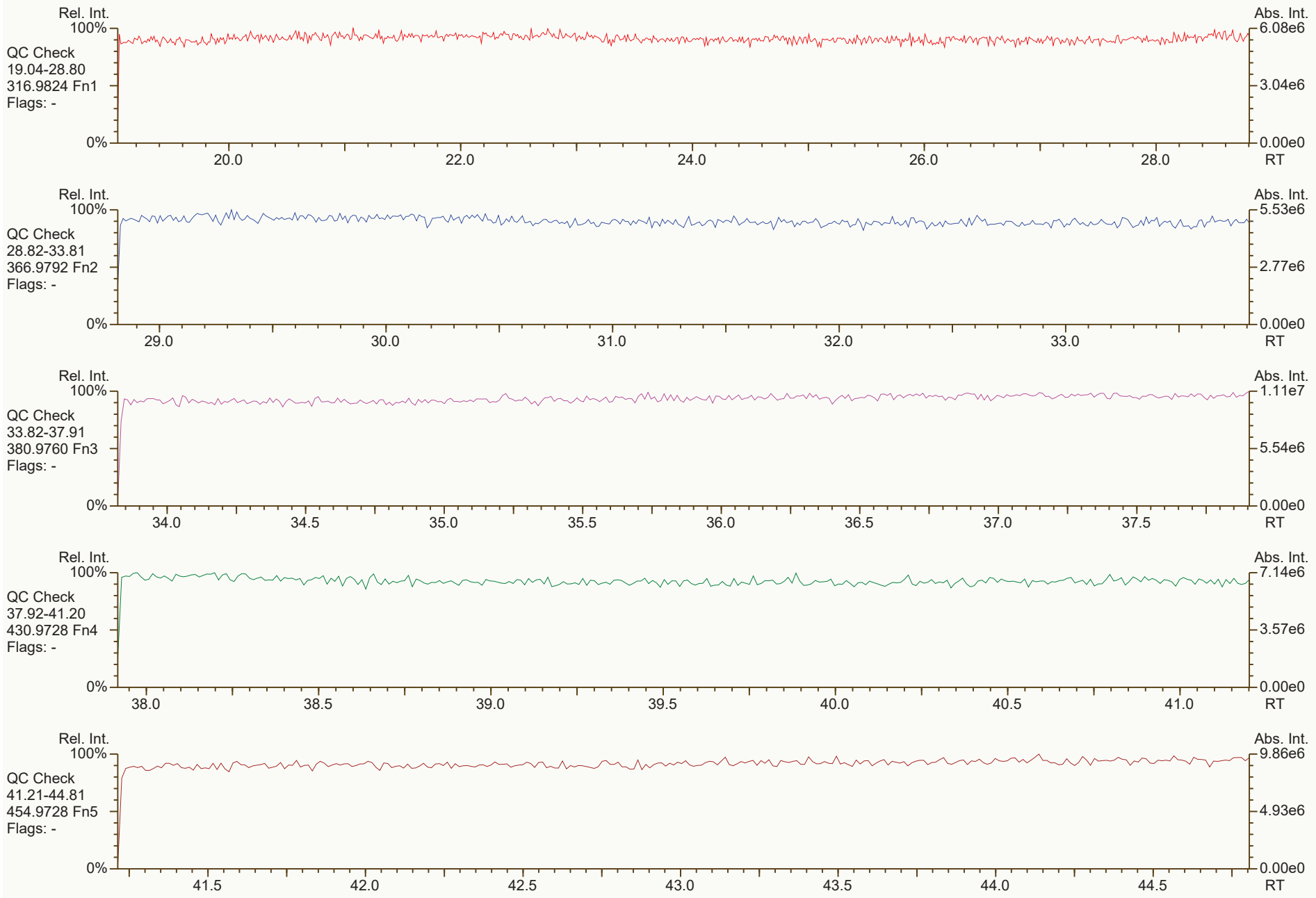
Lab ID: B4526_17662_DF_006 | Acq'd: 12 Aug 2020 02:13 DTF | Wt/Vol: 9.19 g | ICAL: HRMS3_DF_10122018_28AUG2019

Client ID: CS-41 | UTP: 12-Aug-2020 15:18:35 DTF | J-level: 0.544 pg/g | Split: 1 | Checkcode: 379-455-GFL

Datafile: 200811C16 | Report: 12 Aug 2020 15:22 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

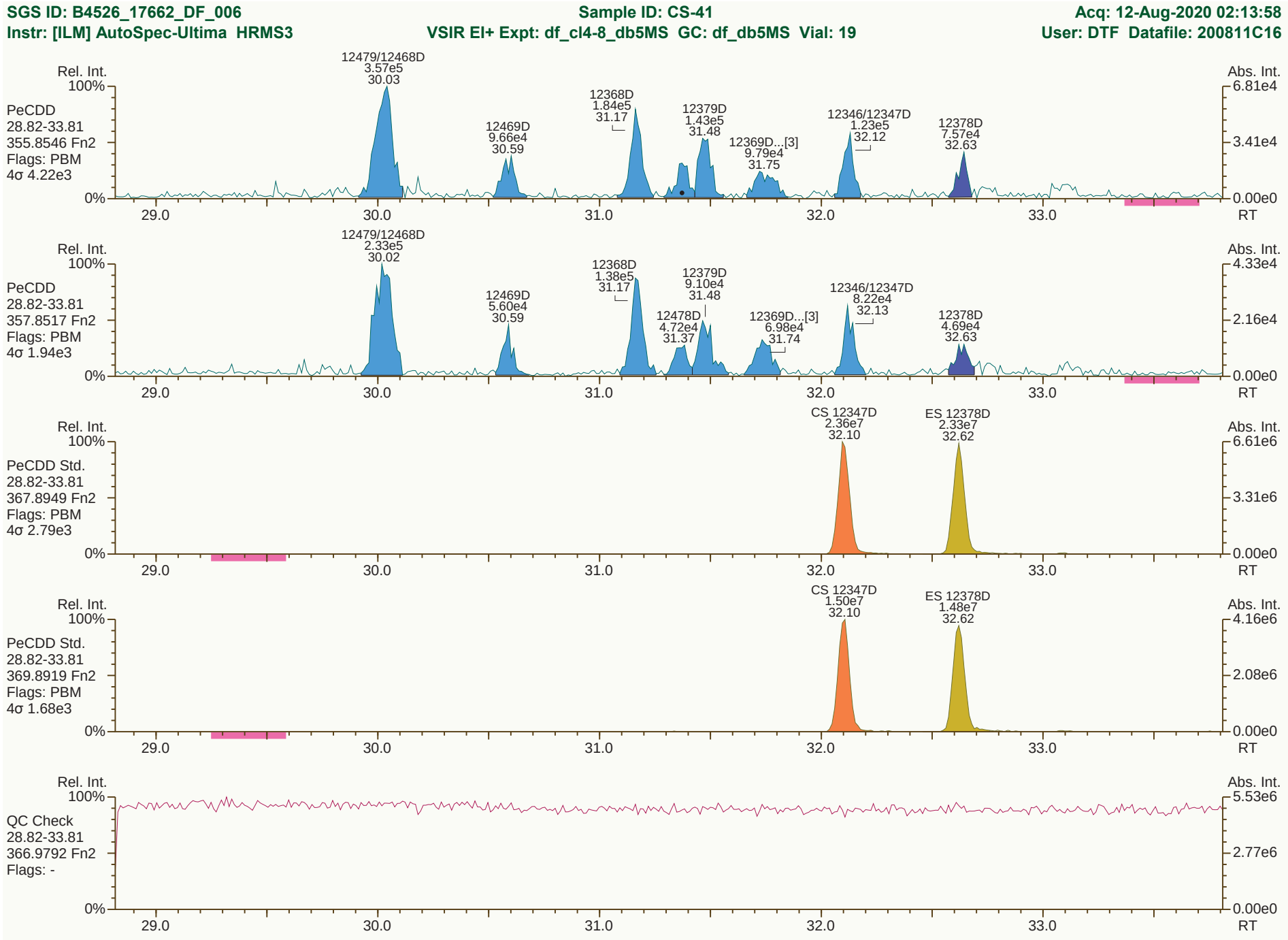
Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
23468/12469-PeCDF	30.68	J	0.9859	0.9866	+1.3	2.35E+05	1.41	Y	0.98	0.896	2851	0.101
12347-PeCDF	NotFnd		0.9884						0.98		2851	0.101
12348-PeCDF	NotFnd		0.9937						0.98		2851	0.101
12378-PeCDF	**31.11**	J EMPC	**1.0006**	**1.0005**	**-0.2**	**1.88E+05**	**1.85**	**N**	**0.96**	**0.708**	**2851**	**0.1**
12678/12367-PeCDF	31.40	J EMPC	1.0097	1.0097	0	1.67E+05	1.25	N	0.98	0.639	2851	0.101
12379-PeCDF	NotFnd		1.0152						0.98		2851	0.101
12679-PeCDF	NotFnd		0.9923						0.98		2851	0.101
23467/12369-PeCDF	32.15	J EMPC	0.9966	0.9966	0	1.17E+05	1.82	N	0.98	0.447	2851	0.101
23478-PeCDF	**32.29**	J	**1.0005**	**1.0009**	**+0.8**	**2.26E+05**	**1.74**	**Y**	**0.99**	**0.874**	**2851**	**0.102**
23478/12489-PeCDF	NotFnd		0.0000						0.99			
12489-PeCDF	NotFnd		1.0043						0.98		2851	0.101
12349-PeCDF	NotFnd		1.0107						0.98		2851	0.101
12389-PeCDF	NotFnd		1.0349						0.98		2851	0.101
123468-HxCDF	34.26	J	0.9607	0.9606	-0.2	2.91E+05	1.14	Y	1.13	1.42	4595	0.203
124678/134678-HxCDF	34.46		0.9666	0.9663	-0.6	9.40E+05	1.07	Y	1.13	4.58	4595	0.203
134679-HxCDF	NotFnd		0.9730						1.13		4595	0.203
124679-HxCDF	NotFnd		0.9787						1.13		4595	0.203
124689-HxCDF	35.13	EMPC	0.9850	0.9850	0	6.05E+05	1.04	N	1.13	2.95	4595	0.203
123467-HxCDF	35.57	J EMPC	0.9971	0.9971	0	1.28E+05	0.97	N	1.13	0.621	4595	0.203
123478-HxCDF	**35.69**	J	**1.0005**	**1.0006**	**+0.2**	**2.63E+05**	**1.14**	**Y**	**1.21**	**1.24**	**4595**	**0.18**
123678-HxCDF	**35.83**	J	**1.0005**	**1.0005**	**0**	**1.85E+05**	**1.08**	**Y**	**1.11**	**0.809**	**4595**	**0.184**
123479-HxCDF	NotFnd		1.0049						1.13		4595	0.203
123469-HxCDF	NotFnd		1.0090						1.13		4595	0.203
123679-HxCDF	NotFnd		0.9941						1.13		4595	0.203
234678-HxCDF	**36.50**	J	**1.0004**	**1.0002**	**-0.4**	**1.98E+05**	**1.34**	**Y**	**1.12**	**0.967**	**4595**	**0.21**
234678/123689-HxCDF	NotFnd		0.0000						1.12			
123689-HxCDF	NotFnd		1.0041						1.13		4595	0.203
123789-HxCDF	**NotFnd**		**1.0005**						**1.11**		**4595**	**0.25**
123789/123489-HxCDF	NotFnd		0.0000						1.11			
123489-HxCDF	37.50	J	1.0009	1.0008	-0.2	9.34E+04	1.25	Y	1.13	0.455	4595	0.203
1234678-HpCDF	**39.16**		**1.0003**	**1.0003**	**0**	**1.38E+06**	**0.98**	**Y**	**1.32**	**8.14**	**2485**	**0.136**
1234679-HpCDF	NotFnd		1.0075						1.29		2485	0.178
1234689-HpCDF	39.60		1.0112	1.0115	+0.7	1.64E+06	1.04	Y	1.29	11.5	2485	0.178
1234789-HpCDF	**40.61**	**J EMPC**	**1.0003**	**1.0003**	**0**	**8.61E+04**	**0.82**	**N**	**1.26**	**0.729**	**2485**	**0.237**
OCDF	**43.02**		**1.0003**	**1.0001**	**-0.5**	**1.21E+06**	**0.86**	**Y**	**1.03**	**16.6**	**2658**	**0.592**
OCDF-a	NotFnd	**#VALUE!**	1.0002						-		2547	#VALUE!

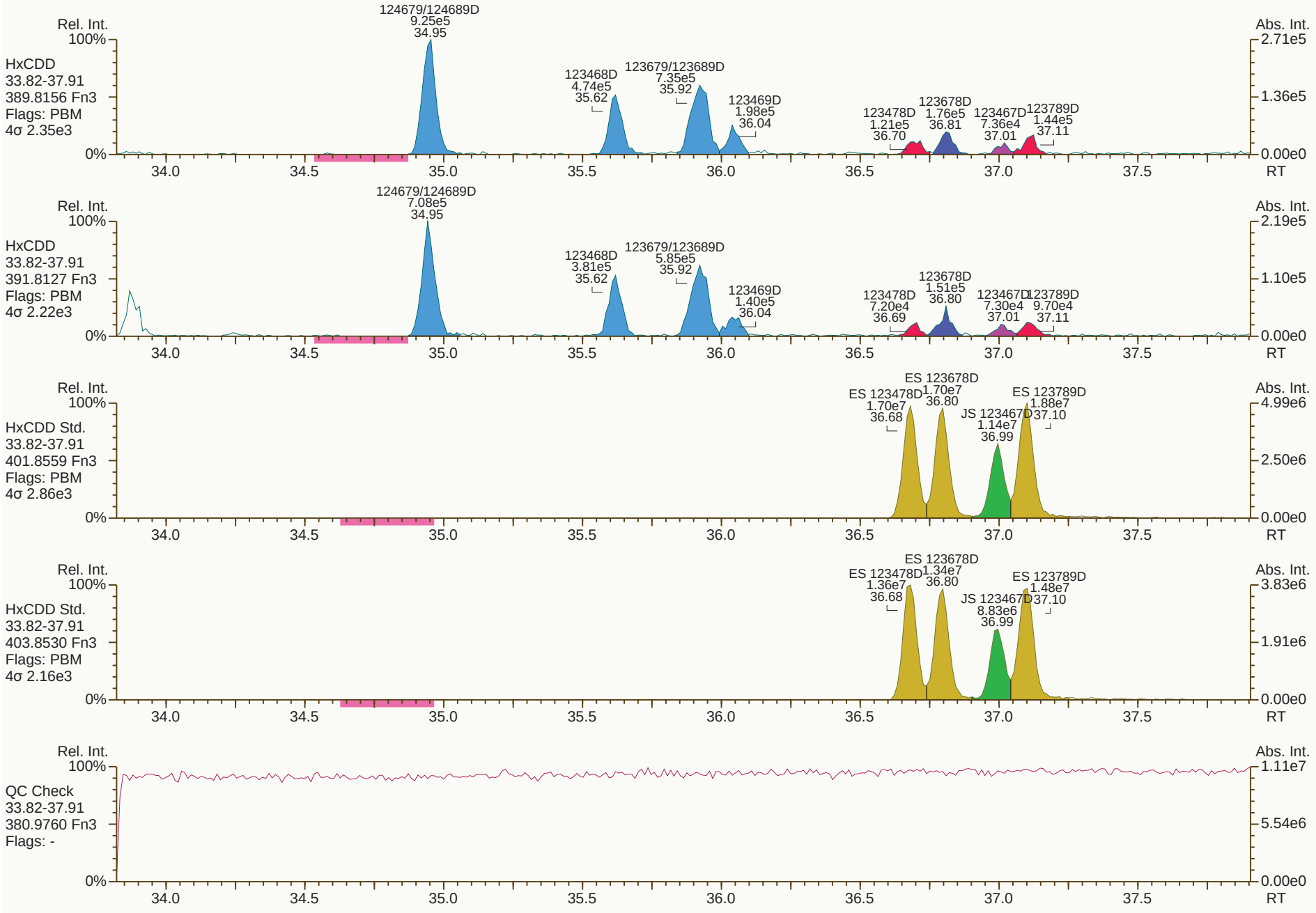
SGS ID: B4526_17662_DF_006 **Sample ID: CS-41** **Acq: 12-Aug-2020 02:13:58**
Instr: [ILM] AutoSpec-Ultima HRMS3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 19** **User: DTF Datafile: 200811C16**

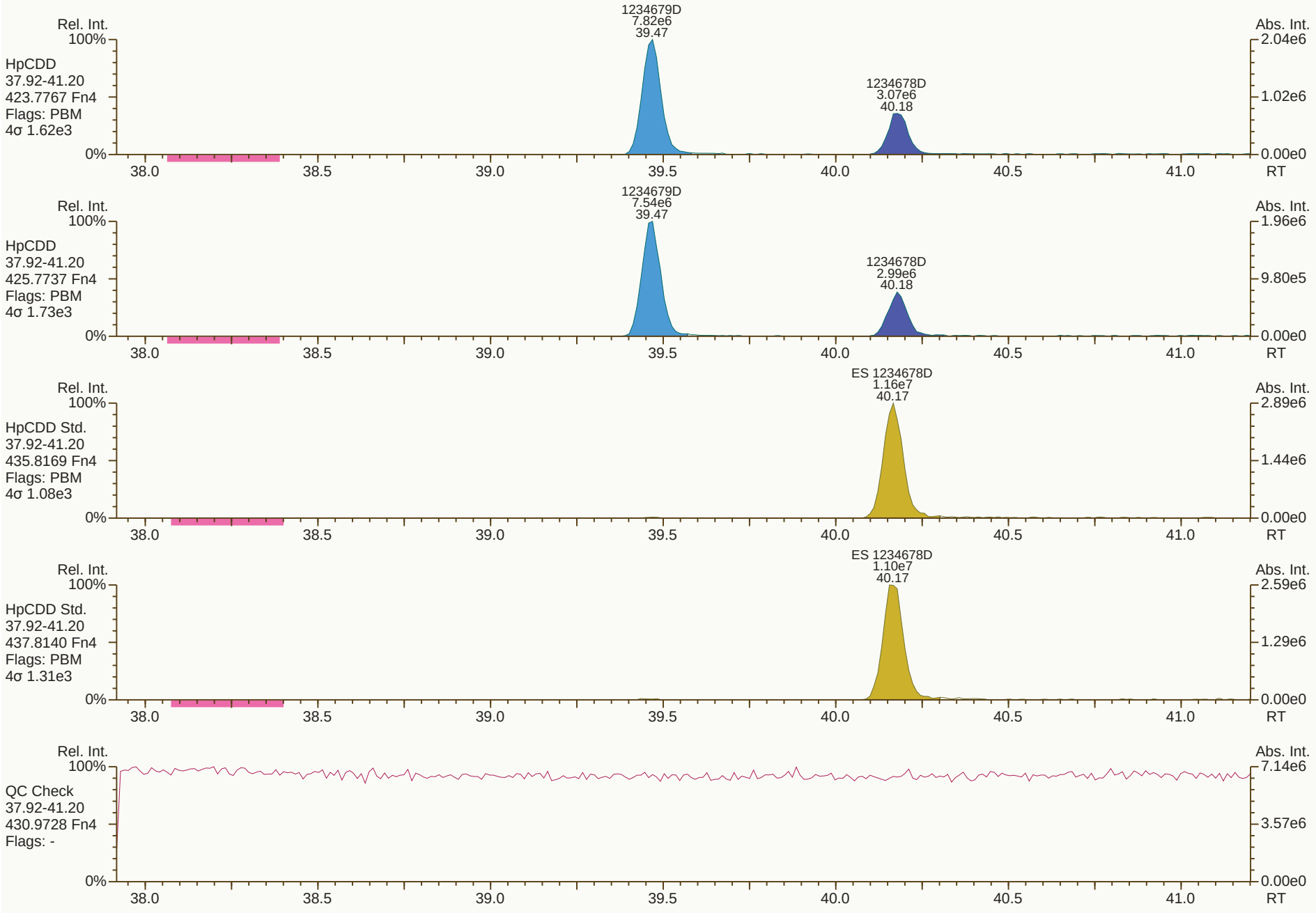


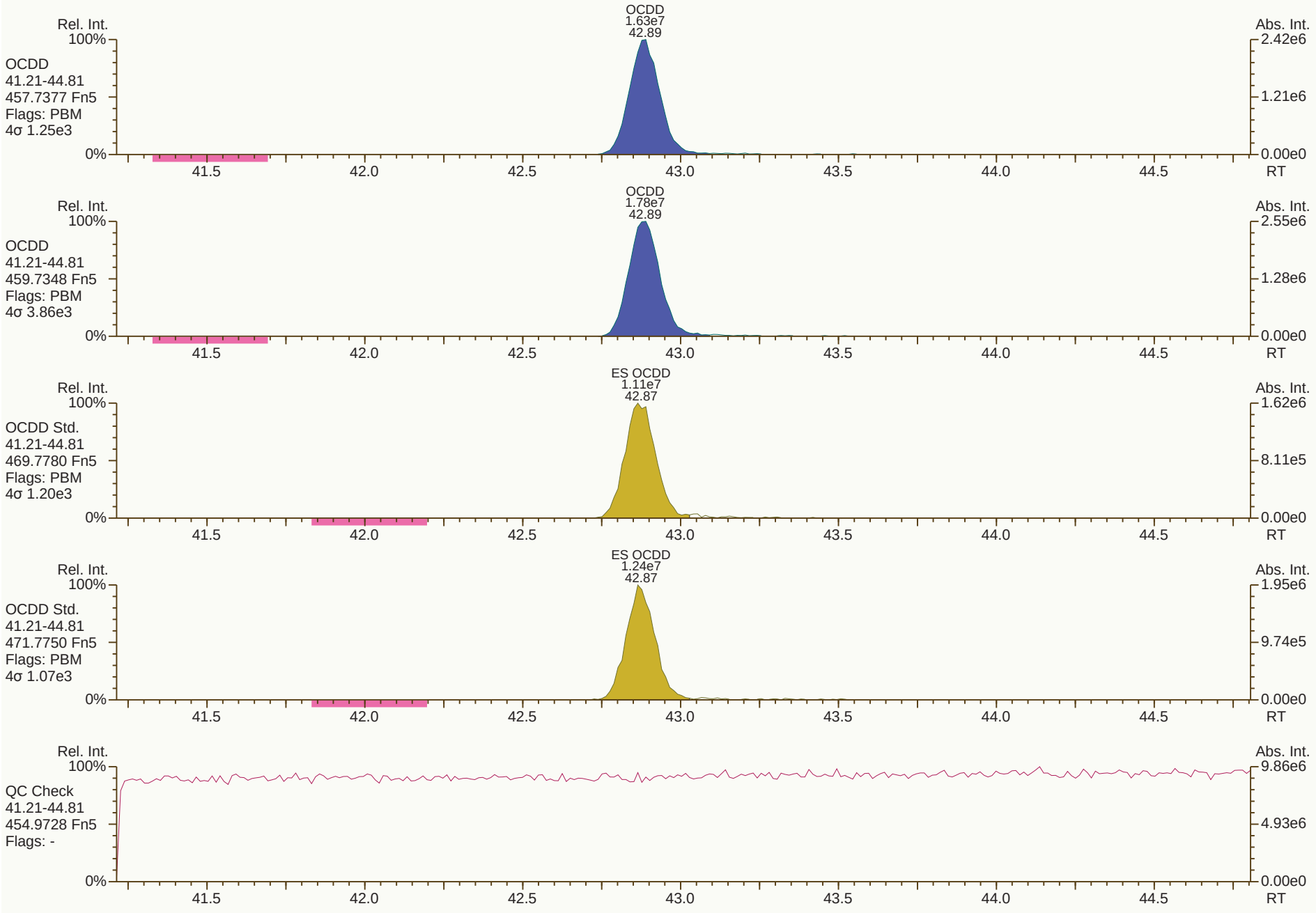
Results: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\B4526_17662_DF_006.utp_res, saved 12-Aug-2020 15:18 (DTF) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 scc: 379-455 *PKD: n/a Printed: 12-Aug-2020 15:36 Page 1 of 12*

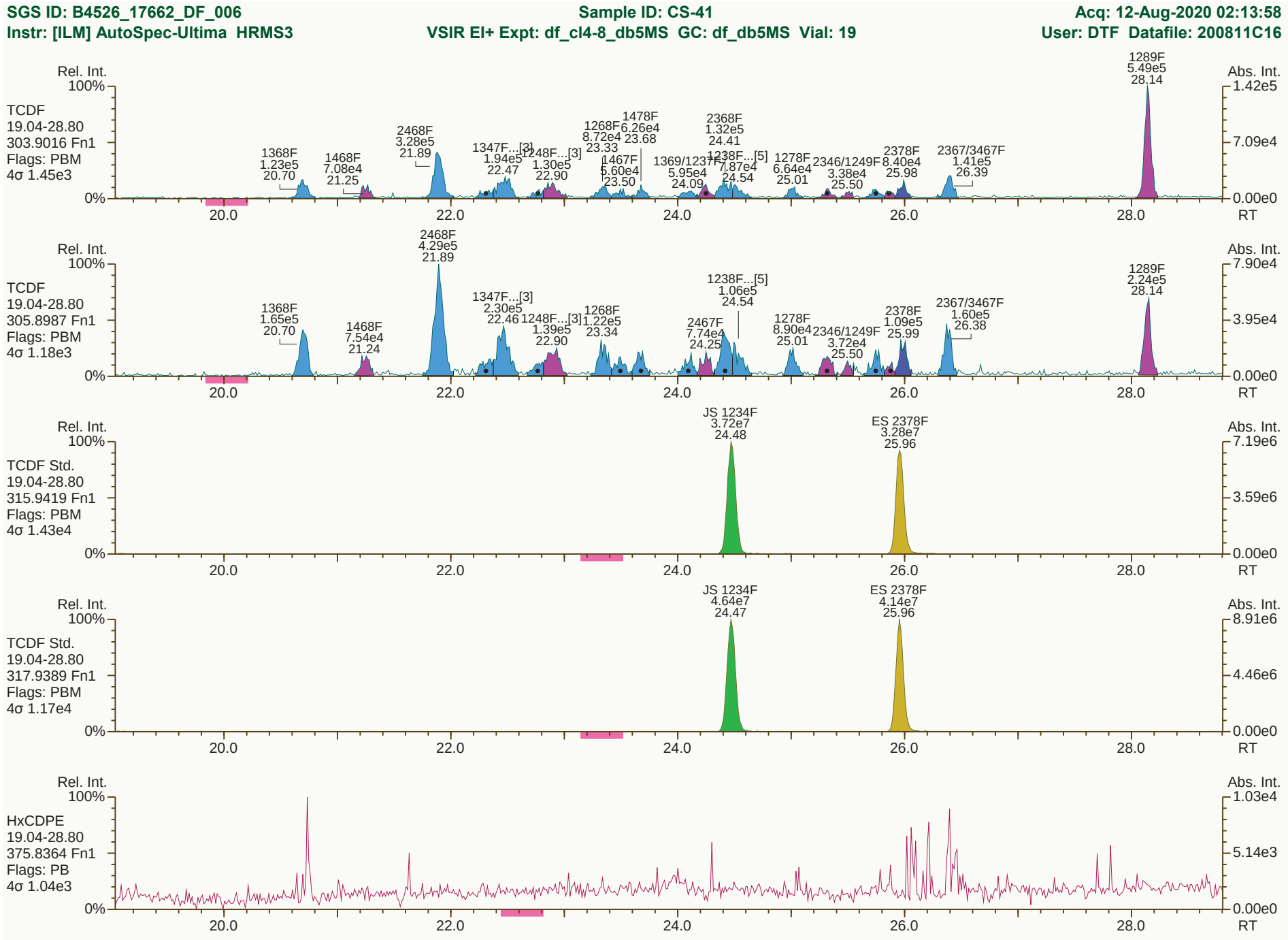

Rel. Int.
100%
TCDD
19.04-28.80
319.8965 Fn1
Flags: PBM
4σ 3.89e3
0%
1368D
2.45e5
22.91
1379D
1.75e5
23.32
1247D...[4]
8.02e4
24.92
Abs. Int.
4.77e4
2.39e4
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD
19.04-28.80
321.8936 Fn1
Flags: PBM
4σ 2.31e3
0%
1368D
3.11e5
22.91
1379D
1.78e5
23.32
1247D...[4]
1.03e5
24.93
Abs. Int.
5.35e4
2.68e4
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
37Cl-TCDD
19.04-28.80
327.8850 Fn1
Flags: PBM
4σ 1.16e3
0%
CS 37Cl-2378D
2.23e7
26.94
Abs. Int.
4.86e6
2.43e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.80
331.9368 Fn1
Flags: PBM
4σ 6.79e3
0%
JS 1234D
2.61e7
26.21
ES 2378D
2.16e7
26.91
Abs. Int.
5.71e6
2.85e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.80
333.9339 Fn1
Flags: PBM
4σ 1.56e3
0%
JS 1234D
3.22e7
26.21
ES 2378D
2.74e7
26.91
Abs. Int.
6.83e6
3.42e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT


SGS ID: B4526_17662_DF_006
Sample ID: CS-41
Acq: 12-Aug-2020 02:13:58
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 19
User: DTF Datafile: 200811C16
PeCDD
28.82-33.81
355.8546 Fn2
Flags: PBM
4σ 4.22e3
12479/12468D 3.57e5 30.03
12469D 9.66e4 30.59
12368D 1.84e5 31.17
12379D 1.43e5 31.48
12369D...[3] 9.79e4 31.75
12346/12347D 1.23e5 32.12
12378D 7.57e4 32.63
PeCDD
28.82-33.81
357.8517 Fn2
Flags: PBM
4σ 1.94e3
12479/12468D 2.33e5 30.02
12469D 5.60e4 30.59
12368D 1.38e5 31.17
12379D 9.10e4 31.48
12478D 4.72e4 31.37
12369D...[3] 6.98e4 31.74
12346/12347D 8.22e4 32.13
12378D 4.69e4 32.63
PeCDD Std.
28.82-33.81
367.8949 Fn2
Flags: PBM
4σ 2.79e3
CS 12347D 2.36e7 32.10
ES 12378D 2.33e7 32.62
PeCDD Std.
28.82-33.81
369.8919 Fn2
Flags: PBM
4σ 1.68e3
CS 12347D 1.50e7 32.10
ES 12378D 1.48e7 32.62
QC Check
28.82-33.81
366.9792 Fn2
Flags: -
Rel. Int.
Abs. Int.
RT
29.0
30.0
31.0
32.0
33.0
Results: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\B4526_17662_DF_006.utp_res, saved 12-Aug-2020 15:18 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 8609, 8786 scc: 379-455
PKD: 12-Aug-2020 11:24 Printed: 12-Aug-2020 15:36 Page 3 of 12

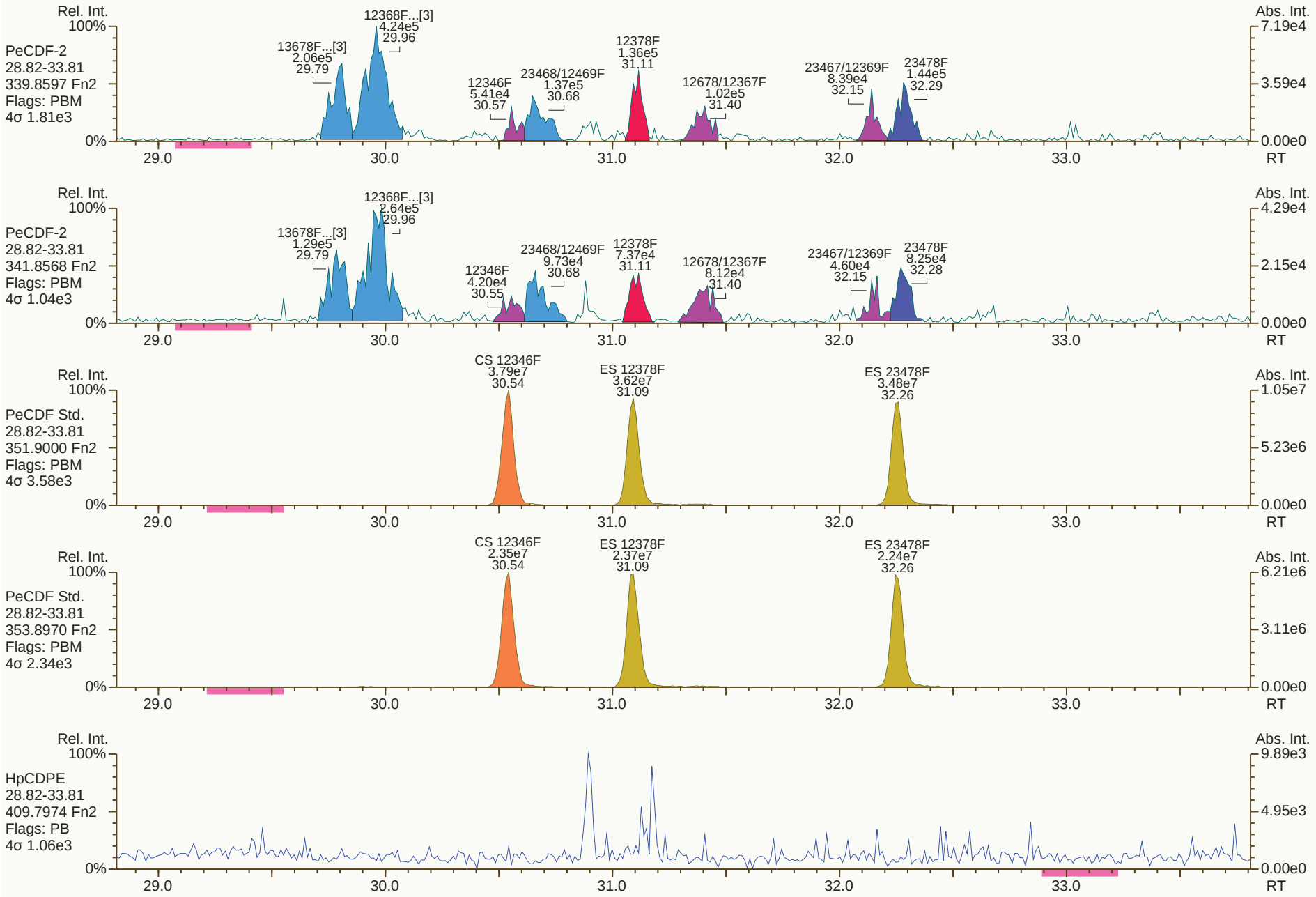

Rel. Int.
100%
HxCDD
33.82-37.91
389.8156 Fn3
Flags: PBM
4σ 2.35e3
124679/124689D
9.25e5
34.95
123468D
4.74e5
35.62
123679/123689D
7.35e5
35.92
123469D
1.98e5
36.04
123478D
1.21e5
36.70
123678D
1.76e5
36.81
123467D
7.36e4
37.01
123789D
1.44e5
37.11
Abs. Int.
2.71e5
1.36e5
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD
33.82-37.91
391.8127 Fn3
Flags: PBM
4σ 2.22e3
124679/124689D
7.08e5
34.95
123468D
3.81e5
35.62
123679/123689D
5.85e5
35.92
123469D
1.40e5
36.04
123478D
7.20e4
36.69
123678D
1.51e5
36.80
123467D
7.30e4
37.01
123789D
9.70e4
37.11
Abs. Int.
2.19e5
1.10e5
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.82-37.91
401.8559 Fn3
Flags: PBM
4σ 2.86e3
ES 123678D
1.70e7
36.80
ES 123478D
1.70e7
36.68
JS 123467D
1.14e7
36.99
ES 123789D
1.88e7
37.10
Abs. Int.
4.99e6
2.50e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.82-37.91
403.8530 Fn3
Flags: PBM
4σ 2.16e3
ES 123678D
1.34e7
36.80
ES 123478D
1.36e7
36.68
JS 123467D
8.83e6
36.99
ES 123789D
1.48e7
37.10
Abs. Int.
3.83e6
1.91e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
QC Check
33.82-37.91
380.9760 Fn3
Flags: -
Abs. Int.
1.11e7
5.54e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT

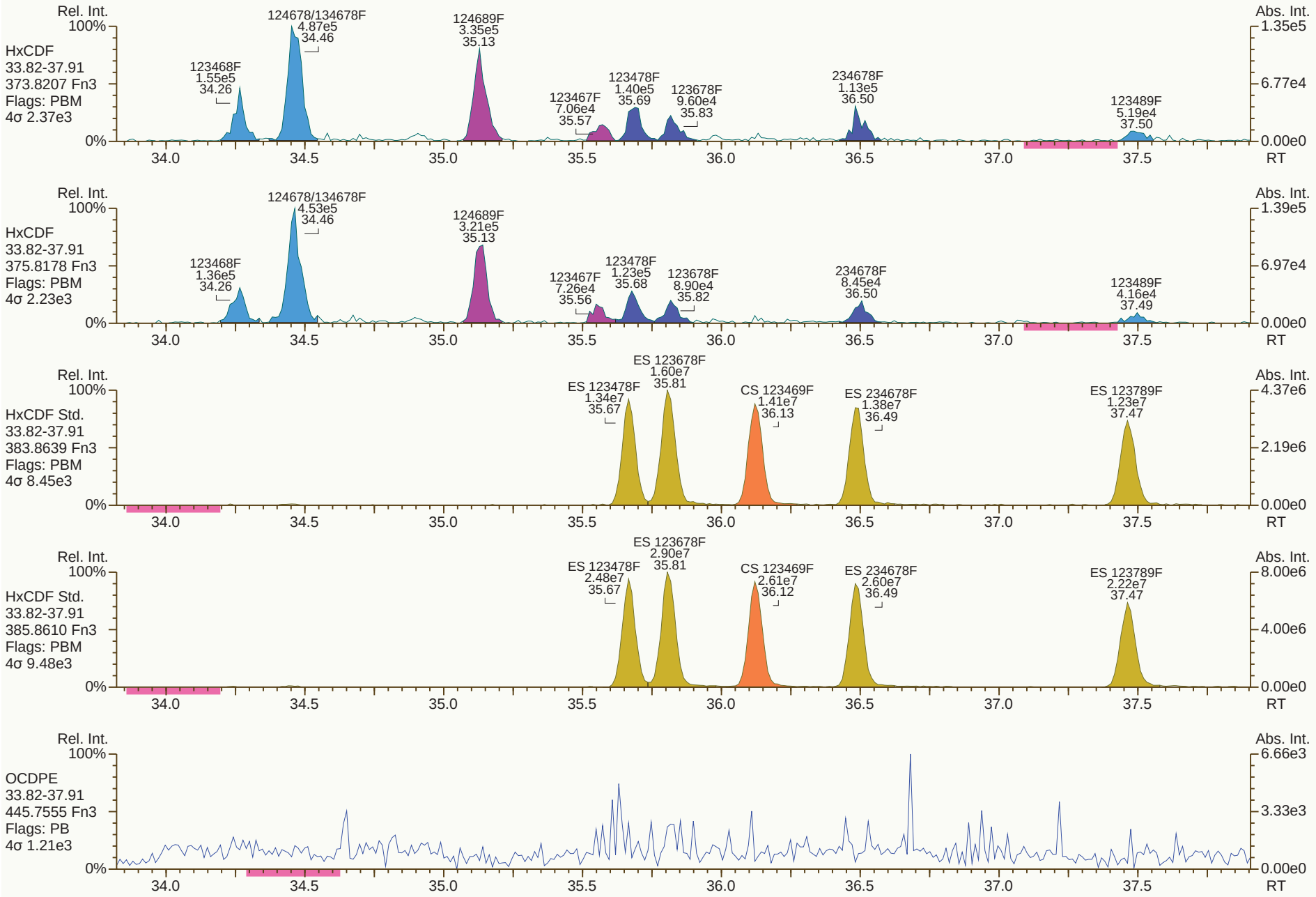

Rel. Int.
100%
HpCDD
37.92-41.20
423.7767 Fn4
Flags: PBM
4σ 1.62e3
1234679D
7.82e6
39.47
1234678D
3.07e6
40.18
Abs. Int.
2.04e6
1.02e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD
37.92-41.20
425.7737 Fn4
Flags: PBM
4σ 1.73e3
1234679D
7.54e6
39.47
1234678D
2.99e6
40.18
Abs. Int.
1.96e6
9.80e5
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.92-41.20
435.8169 Fn4
Flags: PBM
4σ 1.08e3
ES 1234678D
1.16e7
40.17
Abs. Int.
2.89e6
1.44e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.92-41.20
437.8140 Fn4
Flags: PBM
4σ 1.31e3
ES 1234678D
1.10e7
40.17
Abs. Int.
2.59e6
1.29e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
QC Check
37.92-41.20
430.9728 Fn4
Flags: -
Abs. Int.
7.14e6
3.57e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT

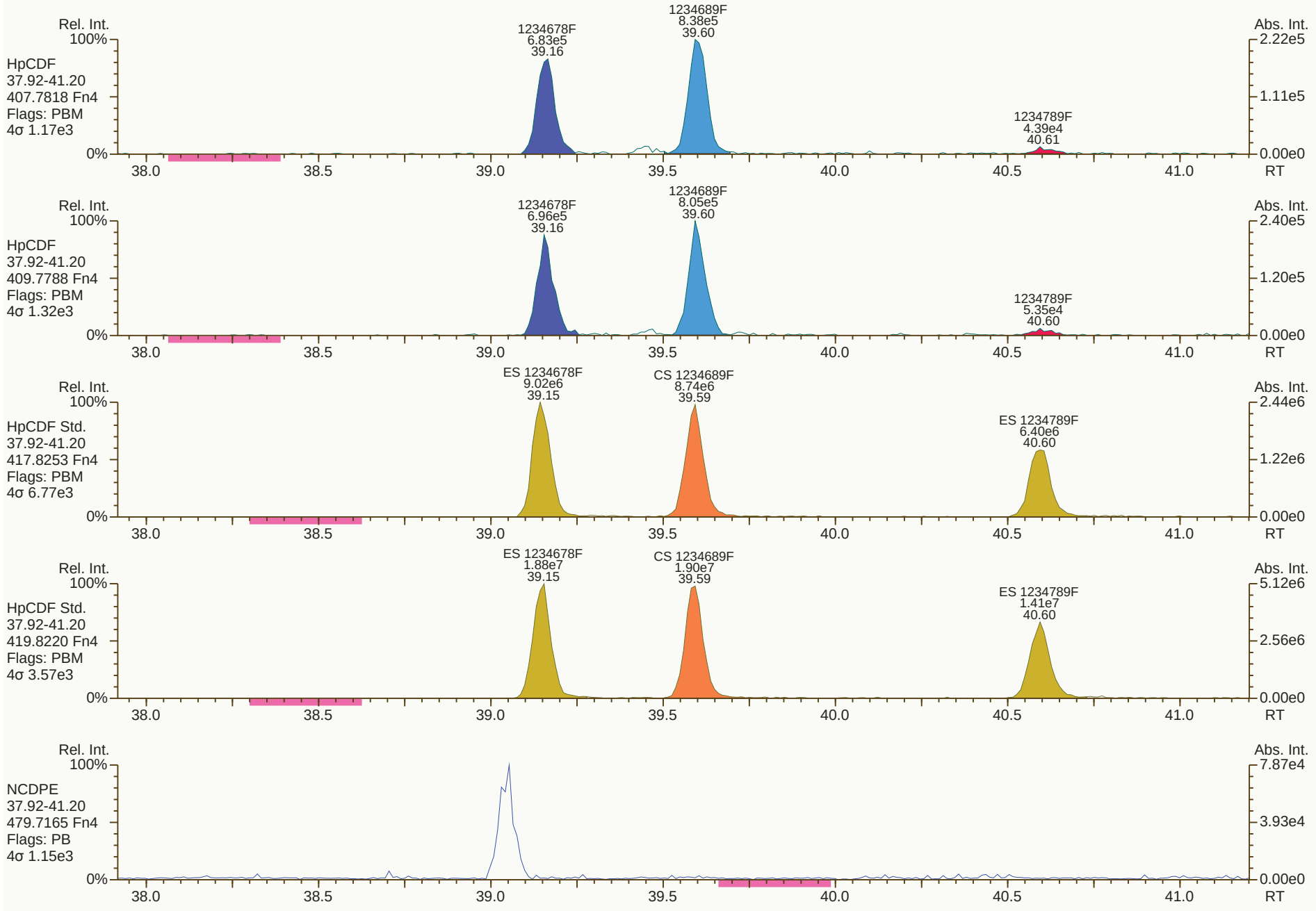

OCDD
1.63e7
42.89
Rel. Int.
Abs. Int.
OCDD
41.21-44.81
457.7377 Fn5
Flags: PBM
4σ 1.25e3
OCDD
1.78e7
42.89
OCDD
41.21-44.81
459.7348 Fn5
Flags: PBM
4σ 3.86e3
ES OCDD
1.11e7
42.87
OCDD Std.
41.21-44.81
469.7780 Fn5
Flags: PBM
4σ 1.20e3
ES OCDD
1.24e7
42.87
OCDD Std.
41.21-44.81
471.7750 Fn5
Flags: PBM
4σ 1.07e3
QC Check
41.21-44.81
454.9728 Fn5
Flags: -
RT


SGS ID: B4526_17662_DF_006
Sample ID: CS-41
Acq: 12-Aug-2020 02:13:58
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 19
User: DTF Datafile: 200811C16
Rel. Int.
Abs. Int.
TCDF
19.04-28.80
303.9016 Fn1
Flags: PBM
4σ 1.45e3
1289F 5.49e5 28.14
1368F 1.23e5 20.70
1468F 7.08e4 21.25
2468F 3.28e5 21.89
1347F...[3] 1.94e5 22.47
1248F...[3] 1.30e5 22.90
1268F 8.72e4 23.33
1478F 6.26e4 23.68
1467F 5.60e4 23.50
1369/1237F 5.95e4 24.09
2368F 1.32e5 24.41
1238F...[5] 7.87e4 24.54
1278F 6.64e4 25.01
2346/1249F 3.38e4 25.50
2378F 8.40e4 25.98
2367/3467F 1.41e5 26.39
TCDF
19.04-28.80
305.8987 Fn1
Flags: PBM
4σ 1.18e3
2468F 4.29e5 21.89
1368F 1.65e5 20.70
1468F 7.54e4 21.24
1347F...[3] 2.30e5 22.46
1248F...[3] 1.39e5 22.90
1268F 1.22e5 23.34
2467F 7.74e4 24.25
1238F...[5] 1.06e5 24.54
1278F 8.90e4 25.01
2346/1249F 3.72e4 25.50
2378F 1.09e5 25.99
2367/3467F 1.60e5 26.38
1289F 2.24e5 28.14
TCDF Std.
19.04-28.80
315.9419 Fn1
Flags: PBM
4σ 1.43e4
JS 1234F 3.72e7 24.48
ES 2378F 3.28e7 25.96
TCDF Std.
19.04-28.80
317.9389 Fn1
Flags: PBM
4σ 1.17e4
JS 1234F 4.64e7 24.47
ES 2378F 4.14e7 25.96
HxCDPE
19.04-28.80
375.8364 Fn1
Flags: PB
4σ 1.04e3
20.0
22.0
24.0
26.0
28.0
RT
Results: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\B4526_17662_DF_006.utp_res, saved 12-Aug-2020 15:18 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 0849, 7139, 1853 scc: 379-455
Revised: 12-Aug-2020 11:19 (DTF) Printed: 12-Aug-2020 15:37 Page 7 of 12


Rel. Int.
100%
0%
Abs. Int.
1.10e5
5.52e4
0.00e0
RT
20.0
22.0
24.0
26.0
28.0
PeCDF-1
19.04-28.80
339.8597 Fn1
Flags: PBM
4σ 1.64e3
13468/12468F
4.83e5
28.16
PeCDF-1
19.04-28.80
341.8568 Fn1
Flags: PBM
4σ 1.25e3
13468/12468F
2.83e5
28.15
9.17e4
4.59e4
QC Check
19.04-28.80
316.9824 Fn1
Flags: -
6.08e6
3.04e6


Rel. Int.
100%
PeCDF-2
28.82-33.81
339.8597 Fn2
Flags: PBM
4σ 1.81e3
13678F...[3] 2.06e5 29.79
12368F...[3] 4.24e5 29.96
12346F 5.41e4 30.57
23468/12469F 1.37e5 30.68
12378F 1.36e5 31.11
12678/12367F 1.02e5 31.40
23467/12369F 8.39e4 32.15
23478F 1.44e5 32.29
Abs. Int.
7.19e4
3.59e4
0.00e0
0%
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF-2
28.82-33.81
341.8568 Fn2
Flags: PBM
4σ 1.04e3
13678F...[3] 1.29e5 29.79
12368F...[3] 2.64e5 29.96
12346F 4.20e4 30.55
23468/12469F 9.73e4 30.68
12378F 7.37e4 31.11
12678/12367F 8.12e4 31.40
23467/12369F 4.60e4 32.15
23478F 8.25e4 32.28
Abs. Int.
4.29e4
2.15e4
0.00e0
0%
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.82-33.81
351.9000 Fn2
Flags: PBM
4σ 3.58e3
CS 12346F 3.79e7 30.54
ES 12378F 3.62e7 31.09
ES 23478F 3.48e7 32.26
Abs. Int.
1.05e7
5.23e6
0.00e0
0%
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.82-33.81
353.8970 Fn2
Flags: PBM
4σ 2.34e3
CS 12346F 2.35e7 30.54
ES 12378F 2.37e7 31.09
ES 23478F 2.24e7 32.26
Abs. Int.
6.21e6
3.11e6
0.00e0
0%
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
HpCDPE
28.82-33.81
409.7974 Fn2
Flags: PB
4σ 1.06e3
Abs. Int.
9.89e3
4.95e3
0.00e0
0%
29.0
30.0
31.0
32.0
33.0
RT


Rel. Int.
100%
HxCDF
33.82-37.91
373.8207 Fn3
Flags: PBM
4σ 2.37e3
123468F 1.55e5 34.26
124678/134678F 4.87e5 34.46
124689F 3.35e5 35.13
123467F 7.06e4 35.57
123478F 1.40e5 35.69
123678F 9.60e4 35.83
234678F 1.13e5 36.50
123489F 5.19e4 37.50
Abs. Int.
1.35e5
6.77e4
0.00e0
0%
34.0 34.5 35.0 35.5 36.0 36.5 37.0 37.5
RT
Rel. Int.
100%
HxCDF
33.82-37.91
375.8178 Fn3
Flags: PBM
4σ 2.23e3
123468F 1.36e5 34.26
124678/134678F 4.53e5 34.46
124689F 3.21e5 35.13
123467F 7.26e4 35.56
123478F 1.23e5 35.68
123678F 8.90e4 35.82
234678F 8.45e4 36.50
123489F 4.16e4 37.49
Abs. Int.
1.39e5
6.97e4
0.00e0
0%
34.0 34.5 35.0 35.5 36.0 36.5 37.0 37.5
RT
Rel. Int.
100%
HxCDF Std.
33.82-37.91
383.8639 Fn3
Flags: PBM
4σ 8.45e3
ES 123678F 1.60e7 35.81
ES 123478F 1.34e7 35.67
CS 123469F 1.41e7 36.13
ES 234678F 1.38e7 36.49
ES 123789F 1.23e7 37.47
Abs. Int.
4.37e6
2.19e6
0.00e0
0%
34.0 34.5 35.0 35.5 36.0 36.5 37.0 37.5
RT
Rel. Int.
100%
HxCDF Std.
33.82-37.91
385.8610 Fn3
Flags: PBM
4σ 9.48e3
ES 123678F 2.90e7 35.81
ES 123478F 2.48e7 35.67
CS 123469F 2.61e7 36.12
ES 234678F 2.60e7 36.49
ES 123789F 2.22e7 37.47
Abs. Int.
8.00e6
4.00e6
0.00e0
0%
34.0 34.5 35.0 35.5 36.0 36.5 37.0 37.5
RT
Rel. Int.
100%
OCDPE
33.82-37.91
445.7555 Fn3
Flags: PB
4σ 1.21e3
Abs. Int.
6.66e3
3.33e3
0.00e0
0%
34.0 34.5 35.0 35.5 36.0 36.5 37.0 37.5
RT


Rel. Int.
100%
HpCDF
37.92-41.20
407.7818 Fn4
Flags: PBM
4σ 1.17e3
1234678F
6.83e5
39.16
1234689F
8.38e5
39.60
1234789F
4.39e4
40.61
Abs. Int.
2.22e5
1.11e5
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF
37.92-41.20
409.7788 Fn4
Flags: PBM
4σ 1.32e3
1234678F
6.96e5
39.16
1234689F
8.05e5
39.60
1234789F
5.35e4
40.60
Abs. Int.
2.40e5
1.20e5
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.92-41.20
417.8253 Fn4
Flags: PBM
4σ 6.77e3
ES 1234678F
9.02e6
39.15
CS 1234689F
8.74e6
39.59
ES 1234789F
6.40e6
40.60
Abs. Int.
2.44e6
1.22e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.92-41.20
419.8220 Fn4
Flags: PBM
4σ 3.57e3
ES 1234678F
1.88e7
39.15
CS 1234689F
1.90e7
39.59
ES 1234789F
1.41e7
40.60
Abs. Int.
5.12e6
2.56e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
NCDPE
37.92-41.20
479.7165 Fn4
Flags: PB
4σ 1.15e3
Abs. Int.
7.87e4
3.93e4
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT


OCDF
5.60e5
43.02
Rel. Int.
100%
OCDF
41.21-44.81
441.7428 Fn5
Flags: PBM
4σ 1.33e3
0%
Abs. Int.
8.62e4
4.31e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
OCDF
6.52e5
43.02
Rel. Int.
100%
OCDF
41.21-44.81
443.7398 Fn5
Flags: PBM
4σ 1.33e3
0%
Abs. Int.
1.03e5
5.14e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDF
1.45e7
43.02
Rel. Int.
100%
OCDF Std.
41.21-44.81
453.7830 Fn5
Flags: PBM
4σ 1.54e3
0%
Abs. Int.
2.23e6
1.12e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDF
1.63e7
43.02
Rel. Int.
100%
OCDF Std.
41.21-44.81
455.7801 Fn5
Flags: PBM
4σ 1.47e3
0%
Abs. Int.
2.47e6
1.23e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
DCDPE
41.21-44.81
513.6775 Fn5
Flags: PB
4σ 9.60e2
0%
Abs. Int.
5.90e3
2.95e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT

Lab ID: B4526_17662_DF_006MS | Acq'd: 12 Aug 2020 03:00 DTF | Wt/Vol: 9.01 g | ICAL: HRMS3_DF_10122018_28AUG2019

Client ID: CS-41-MS | UTP: 12-Aug-2020 15:18:36 DTF | J-level: 0.555 pg/g | Split: 1 | Checkcode: 194-587-JZL

Datafile: 200811C17 | Report: 12 Aug 2020 15:22 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	26.93		1.0008	1.0009	+0.2	5.62E+06	0.81	Y	1.19	22.8	4731	0.208
12378-PeCDD	32.64		1.0006	1.0006	0	1.82E+07	1.53	Y	0.98	112	4327	0.242
123478-HxCDD	36.69		1.0004	1.0004	0	1.65E+07	1.25	Y	1.02	123	3090	0.198
123678-HxCDD	36.81		1.0036	1.0035	-0.2	1.79E+07	1.26	Y	1.09	130	3090	0.206
123789-HxCDD	37.11		1.0118	1.0118	0	1.68E+07	1.27	Y	0.97	121	3090	0.215
1234678-HpCDD	40.19		1.0003	1.0004	+0.2	1.81E+07	1.03	Y	0.98	182	3673	0.385
OCDD	42.89		1.0003	1.0003	0	4.72E+07	0.92	Y	1.07	888	4817	1.53
2378-TCDF	25.98		1.0009	1.0008	-0.2	8.58E+06	0.79	Y	1.01	27	2810	0.107
12378-PeCDF	31.11		1.0006	1.0006	0	2.98E+07	1.53	Y	0.96	118	4260	0.162
23478-PeCDF	32.27		1.0005	1.0005	0	3.03E+07	1.51	Y	0.99	126	4260	0.166
123478-HxCDF	35.69		1.0005	1.0005	0	2.32E+07	1.22	Y	1.21	122	4538	0.206
123678-HxCDF	35.83		1.0005	1.0005	0	2.39E+07	1.22	Y	1.11	119	4538	0.199
234678-HxCDF	36.50		1.0004	1.0004	0	2.24E+07	1.25	Y	1.12	121	4538	0.216
123789-HxCDF	37.49		1.0005	1.0005	0	1.90E+07	1.22	Y	1.11	116	4538	0.271
1234678-HpCDF	39.17		1.0003	1.0003	0	2.01E+07	1.02	Y	1.32	124	3190	0.192
1234789-HpCDF	40.61		1.0003	1.0003	0	1.31E+07	1.03	Y	1.26	117	3190	0.292
OCDF	43.03		1.0003	1.0003	0	1.71E+07	0.89	Y	1.03	252	5375	1.24

Name	Act RT	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	26.91	1.0266	1.0267	+0.2	4.59E+07	0.80	Y	0.99	83.1
ES 12378-PeCDD	32.62	1.2430	1.2448	+3.5	3.66E+07	1.54	Y	0.83	78.9
ES 123478-HxCDD	36.68	0.9916	0.9916	0	2.92E+07	1.26	Y	0.95	80.6
ES 123678-HxCDD	36.79	0.9947	0.9946	-0.2	2.81E+07	1.25	Y	0.98	75.2
ES 123789-HxCDD	37.10	1.0029	1.0029	0	3.17E+07	1.29	Y	1.14	72.8
ES 1234678-HpCDD	40.18	1.0851	1.0860	+2.2	2.26E+07	1.07	Y	0.90	65.6
ES OCDD	42.88	1.1584	1.1591	+1.8	2.20E+07	0.93	Y	0.63	45.8
ES 2378-TCDF	25.96	1.0602	1.0607	+0.8	6.95E+07	0.83	Y	1.00	86.8
ES 12378-PeCDF	31.09	1.2683	1.2706	+4.3	5.80E+07	1.57	Y	0.83	86.7
ES 23478-PeCDF	32.26	1.3156	1.3182	+5.0	5.42E+07	1.59	Y	0.81	83.6
ES 123478-HxCDF	35.67	0.9644	0.9642	-0.4	3.50E+07	0.54	Y	1.12	81.3
ES 123678-HxCDF	35.81	0.9682	0.9680	-0.4	4.02E+07	0.53	Y	1.33	78.9
ES 234678-HxCDF	36.49	0.9864	0.9864	0	3.69E+07	0.54	Y	1.21	79.8
ES 123789-HxCDF	37.47	1.0128	1.0128	0	3.28E+07	0.52	Y	1.12	76.6
ES 1234678-HpCDF	39.16	1.0578	1.0584	+1.4	2.71E+07	0.46	Y	0.92	76.5
ES 1234789-HpCDF	40.60	1.0967	1.0975	+1.9	1.97E+07	0.47	Y	0.82	62.9
ES OCDF	43.02	1.1623	1.1630	+1.8	2.92E+07	0.95	Y	0.78	48.9

Lab ID: B4526_17662_DF_006MS | Acq'd: 12 Aug 2020 03:00 DTF | Wt/Vol: 9.01 g | ICAL: HRMS3_DF_10122018_28AUG2019

Client ID: CS-41-MS | UTP: 12-Aug-2020 15:18:36 DTF | J-level: 0.555 pg/g | Split: 1 | Checkcode: 194-587-JZL

Datafile: 200811C17 | Report: 12 Aug 2020 15:22 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
JS 1234-TCDD	26.21		-	-	-	5.59E+07	0.79	Y	-	-
JS 1234-TCDF	24.47		-	-	-	8.05E+07	0.80	Y	-	-
JS 123467-HxCDD	36.99		-	-	-	1.92E+07	1.31	Y	-	-
CS 37Cl-2378-TCDD	26.94		1.0276	1.0277	+0.2	2.17E+07	n/a	-	1.12	86.7
CS 12347-PeCDD	32.10		1.2233	1.2250	+3.3	3.83E+07	1.58	Y	0.71	96.2
CS 12346-PeCDF	30.54		1.2459	1.2481	+4.0	5.83E+07	1.59	Y	0.81	89.5
CS 123469-HxCDF	36.12		0.9767	0.9764	-0.7	3.73E+07	0.55	Y	1.12	86.7
CS 1234689-HpCDF	39.60		1.0696	1.0705	+2.1	2.62E+07	0.46	Y	0.90	76.1
~~SS 37Cl-2378-TCDD~~	~~26.94~~		~~1.0276~~	~~1.0277~~	~~+0.2~~	~~2.17E+07~~	~~n/a~~		~~1.14~~	~~103~~ Not used in this project.
~~SS 12347-PeCDD~~	~~32.10~~		~~1.2233~~	~~1.2250~~	~~+3.3~~	~~3.83E+07~~	~~1.58~~	~~Y~~	~~0.86~~	~~121~~ CL 13Aug20
~~SS 12346-PeCDF~~	~~30.54~~		~~1.2459~~	~~1.2481~~	~~+4.0~~	~~5.83E+07~~	~~1.59~~	~~Y~~	~~0.98~~	~~103~~
~~SS 123469-HxCDF~~	~~36.12~~		~~0.9767~~	~~0.9764~~	~~-0.7~~	~~3.73E+07~~	~~0.55~~	~~Y~~	~~0.85~~	~~109~~
~~SS 1234689-HpCDF~~	~~39.60~~		~~1.0696~~	~~1.0705~~	~~+2.1~~	~~2.62E+07~~	~~0.46~~	~~Y~~	~~0.97~~	~~99~~

Totals	Conc	EMPC
Total TCDD	109	110
Total PeCDD	186	187
Total HxCDD	433	436
Total HpCDD	372	372
Total Tetra-Octa Dioxins	1990	1990
Total TCDF	143	147
Total PeCDF	308	308
Total HxCDF	521	521
Total HpCDF	256	256
Total Tetra-Octa Furans	1,480	1480
Total Tetra-Octa Dioxins & Furans	3470	3480

* 37Cl correction has been applied to 2378-TCDD

	Original Values	Corrected Values
Ratio	0.8	0.81
Response	5.63E+06	5.62E+06

Lab ID: B4526_17662_DF_006MS **Acq'd:** 12 Aug 2020 03:00 DTF **Wt/Vol:** 9.01 g **ICAL:** HRMS3_DF_10122018_28AUG2019

Client ID: CS-41-MS **UTP:** 12-Aug-2020 15:18:36 DTF **J-level:** 0.555 pg/g **Split:** 1 **Checkcode:** 194-587-JZL

Datafile: 200811C17 **Report:** 12 Aug 2020 15:22 TF **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1368-TCDD	22.91		0.8523	0.8512	-1.5	8.46E+06	0.81	Y	1.19	34.4	4731	0.208
1379-TCDD	23.32		0.8682	0.8668	-2.0	6.70E+05	0.78	Y	1.19	2.73	4731	0.208
1369-TCDD	NotFnd		0.8858						1.19		4731	0.208
1469-TCDD	NotFnd		0.9177						1.19		4731	0.208
1247/1246/1248/1249-TCDD	NotFnd		0.9274						1.19		4731	0.208
1378-TCDD	NotFnd		0.9349						1.19		4731	0.208
1268-TCDD	NotFnd		0.9430						1.19		4731	0.208
1478-TCDD	NotFnd		0.9529						1.19		4731	0.208
1279-TCDD	NotFnd		0.9597						1.19		4731	0.208
1234/1269-TCDD	NotFnd		0.9739						1.19		4731	0.208
1236-TCDD	NotFnd		0.9794						1.19		4731	0.208
1237/1238-TCDD	26.61	EMPC	0.9895	0.9890	-0.8	2.75E+05	0.97	N	1.19	1.12	4731	0.208
1239-TCDD	26.77		0.9950	0.9950	0	5.19E+06	0.79	Y	1.19	21.1	4731	0.208
2378-TCDD	**26.93**		**1.0008**	1.0009	**+0.2**	5.62E+06	0.81	Y	**1.19**	**22.8**	**4731**	**0.208**
1278-TCDD	NotFnd		1.0139						1.19		4731	0.208
1267-TCDD	NotFnd		1.0194						1.19		4731	0.208
1289-TCDD	27.99		1.0397	1.0401	+0.7	6.85E+06	0.81	Y	1.19	27.9	4731	0.208
12479/12468-PeCDD	30.03		0.9209	0.9206	-0.5	5.64E+06	1.60	Y	0.98	34.7	4327	0.242
12469-PeCDD	30.59	J EMPC	0.9382	0.9375	-1.3	1.34E+05	2.24	N	0.98	0.823	4327	0.242
12368-PeCDD	31.17		0.9557	0.9553	-0.7	4.61E+05	1.61	Y	0.98	2.84	4327	0.242
12478-PeCDD	31.37	J	0.9617	0.9615	-0.4	1.83E+05	1.44	Y	0.98	1.13	4327	0.242
12379-PeCDD	31.48	J	0.9649	0.9648	-0.2	3.45E+05	1.54	Y	0.98	2.12	4327	0.242
12369/12467/12489-PeCDD	31.75	J	0.9732	0.9732	0	1.71E+05	1.42	Y	0.98	1.05	4327	0.242
12346/12347-PeCDD	32.13	J	0.9850	0.9848	-0.4	3.84E+05	1.56	Y	0.98	2.36	4327	0.242
12378-PeCDD	32.64		**1.0006**	**1.0006**	**0**	**1.82E+07**	**1.53**	**Y**	**0.98**	**112**	**4327**	**0.242**
12367-PeCDD	NotFnd		1.0038						0.98		4327	0.242
12389-PeCDD	33.10		1.0146	1.0147	+0.2	4.78E+06	1.59	Y	0.98	29.4	4327	0.242
124679/124689-HxCDD	34.95		0.9530	0.9527	-0.6	5.70E+06	1.24	Y	1.03	41.5	3090	0.206
123468-HxCDD	35.62		0.9715	0.9711	-0.9	9.56E+05	1.22	Y	1.03	6.95	3090	0.206
123679/123689-HxCDD	35.92		0.9795	0.9793	-0.4	1.49E+06	1.25	Y	1.03	10.9	3090	0.206
123469-HxCDD	36.05	J EMPC	0.9832	0.9828	-0.9	3.52E+05	1.49	N	1.03	2.56	3090	0.206
123478-HxCDD	36.69		**1.0004**	**1.0004**	**0**	**1.65E+07**	**1.25**	**Y**	1.02	**123**	**3090**	**0.198**
123678-HxCDD	36.81		**1.0036**	**1.0035**	**-0.2**	**1.79E+07**	**1.26**	**Y**	1.09	**130**	**3090**	**0.206**
123467-HxCDD	NotFnd		1.0089						1.03		3090	0.206
123789-HxCDD	37.11		**1.0118**	**1.0118**	**0**	**1.68E+07**	**1.27**	**Y**	0.97	**121**	**3090**	**0.215**

Lab ID: B4526_17662_DF_006MS | **Acq'd:** 12 Aug 2020 03:00 DTF | **Wt/Vol:** 9.01 g | **ICAL:** HRMS3_DF_10122018_28AUG2019

Client ID: CS-41-MS | **UTP:** 12-Aug-2020 15:18:36 DTF | **J-level:** 0.555 pg/g | **Split:** 1 | **Checkcode:** 194-587-JZL

Datafile: 200811C17 | **Report:** 12 Aug 2020 15:22 TF | **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1234679-HpCDD	39.48		0.9826	0.9826	0	1.89E+07	1.05	Y	0.98	190	3673	0.385
1234678-HpCDD	**40.19**		**1.0003**	**1.0004**	**+0.2**	**1.81E+07**	**1.03**	**Y**	**0.98**	**182**	**3673**	**0.385**
OCDD	**42.89**		**1.0003**	**1.0003**	**0**	**4.72E+07**	**0.92**	**Y**	**1.07**	**888**	**4817**	**1.53**
OCDD-a	42.89	**#VALUE!**	1.0002	1.0001	-0.3	3.03E+06	2.60	Y	-	#VALUE!	5076	#VALUE!
1368-TCDF	20.69		0.7980	0.7972	-1.0	1.16E+07	0.77	Y	1.01	36.6	2810	0.107
1468-TCDF	21.25	J	0.8204	0.8185	-2.4	1.74E+05	0.88	Y	1.01	0.549	2810	0.107
2468-TCDF	21.89		0.8443	0.8432	-1.4	3.44E+06	0.78	Y	1.01	10.9	2810	0.107
1346/1246-TCDF	NotFnd		0.8597						1.01		2810	0.107
1347/1378/1247-TCDF	22.45		0.8665	0.8648	-2.3	5.82E+05	0.71	Y	1.01	1.83	2810	0.107
1348-TCDF	22.80	J EMPC	0.8785	0.8783	-0.3	1.61E+05	0.89	N	1.01	0.506	2810	0.107
1248/1367/1379-TCDF	22.91		0.8840	0.8826	-1.9	2.61E+05	0.84	Y	1.01	0.821	2810	0.107
1268-TCDF	23.33	EMPC	0.9004	0.8987	-2.4	1.90E+05	0.89	N	1.01	0.598	2810	0.107
1467-TCDF	23.48	J EMPC	0.9060	0.9046	-2.0	1.12E+05	0.91	N	1.01	0.352	2810	0.107
1478-TCDF	23.69	J	0.9132	0.9125	-1.0	1.48E+05	0.66	Y	1.01	0.467	2810	0.107
1369/1237-TCDF	24.08	J	0.9287	0.9276	-1.6	1.55E+05	0.72	Y	1.01	0.487	2810	0.107
2467-TCDF	24.24	J EMPC	0.9345	0.9338	-1.0	1.63E+05	0.93	N	1.01	0.512	2810	0.107
2368-TCDF	24.41		0.9409	0.9403	-0.9	3.11E+05	0.72	Y	1.01	0.979	2810	0.107
1238/1234/1678/1469/1236-TCDF	24.51		0.9450	0.9444	-0.9	3.92E+05	0.84	Y	1.01	1.23	2810	0.107
1278-TCDF	25.01		0.9638	0.9635	-0.5	3.65E+05	0.88	Y	1.01	1.15	2810	0.107
1349-TCDF	NotFnd		0.9685						1.01		2810	0.107
1267-TCDF	25.30	J EMPC	0.9751	0.9749	-0.3	1.32E+05	0.64	N	1.01	0.417	2810	0.107
2346/1249-TCDF	NotFnd		0.9831						1.01		2810	0.107
2347/1279-TCDF	NotFnd		0.9920						1.01		2810	0.107
2348-TCDF	25.86		0.9964	0.9964	0	9.33E+06	0.77	Y	1.01	29.4	2810	0.107
2378-TCDF	**25.98**		**1.0009**	**1.0008**	**-0.2**	**8.58E+06**	**0.79**	**Y**	**1.01**	**27**	**2810**	**0.107**
2367/3467-TCDF	26.39	EMPC	1.0164	1.0166	+0.3	3.51E+05	0.89	N	1.01	1.11	2810	0.107
1269-TCDF	NotFnd		1.0259						1.01		2810	0.107
1239-TCDF	NotFnd		1.0373						1.01		2810	0.107
1289-TCDF	28.15		1.0838	1.0845	+1.2	1.01E+07	0.82	Y	1.01	31.7	2810	0.107
13468/12468-PeCDF	28.13		0.9052	0.9048	-0.7	6.67E+06	1.57	Y	0.98	27.1	2524	0.0972
13678/13467/12467-PeCDF	29.79	J	0.9582	0.9579	-0.5	3.58E+05	1.44	Y	0.98	1.45	4260	0.164
12368/13478/12478-PeCDF	29.96		0.9634	0.9635	+0.2	1.04E+06	1.65	Y	0.98	4.22	4260	0.164
14678-PeCDF	NotFnd		0.9668						0.98		4260	0.164
13479-PeCDF	NotFnd		0.9700						0.98		4260	0.164
13469/12479-PeCDF	NotFnd		0.9781						0.98		4260	0.164
12346-PeCDF	30.56	J EMPC	0.9829	0.9828	-0.2	5.97E+04	1.81	N	0.98	0.242	4260	0.164

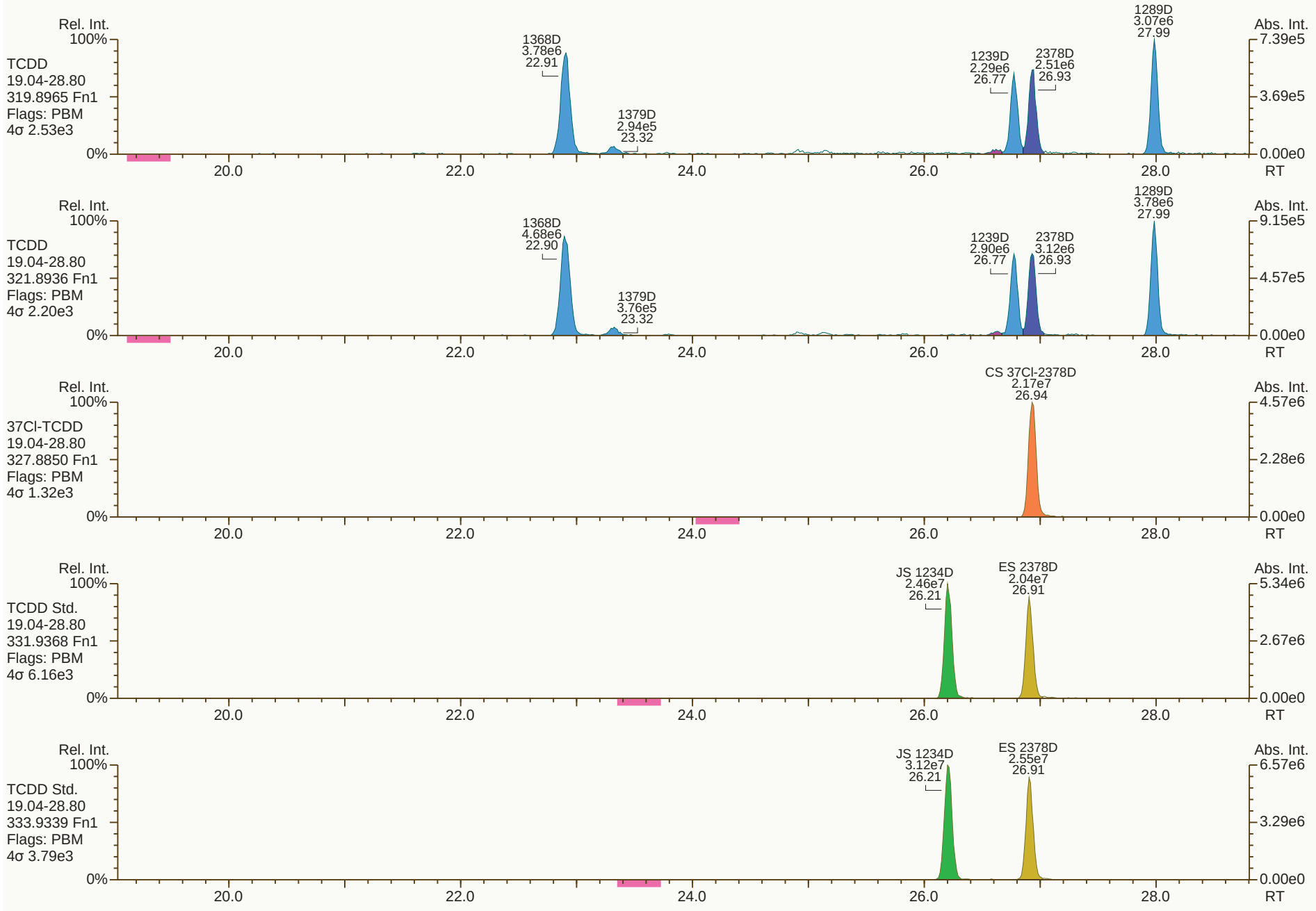
Lab ID: B4526_17662_DF_006MS | **Acq'd:** 12 Aug 2020 03:00 DTF | **Wt/Vol:** 9.01 g | **ICAL:** HRMS3_DF_10122018_28AUG2019

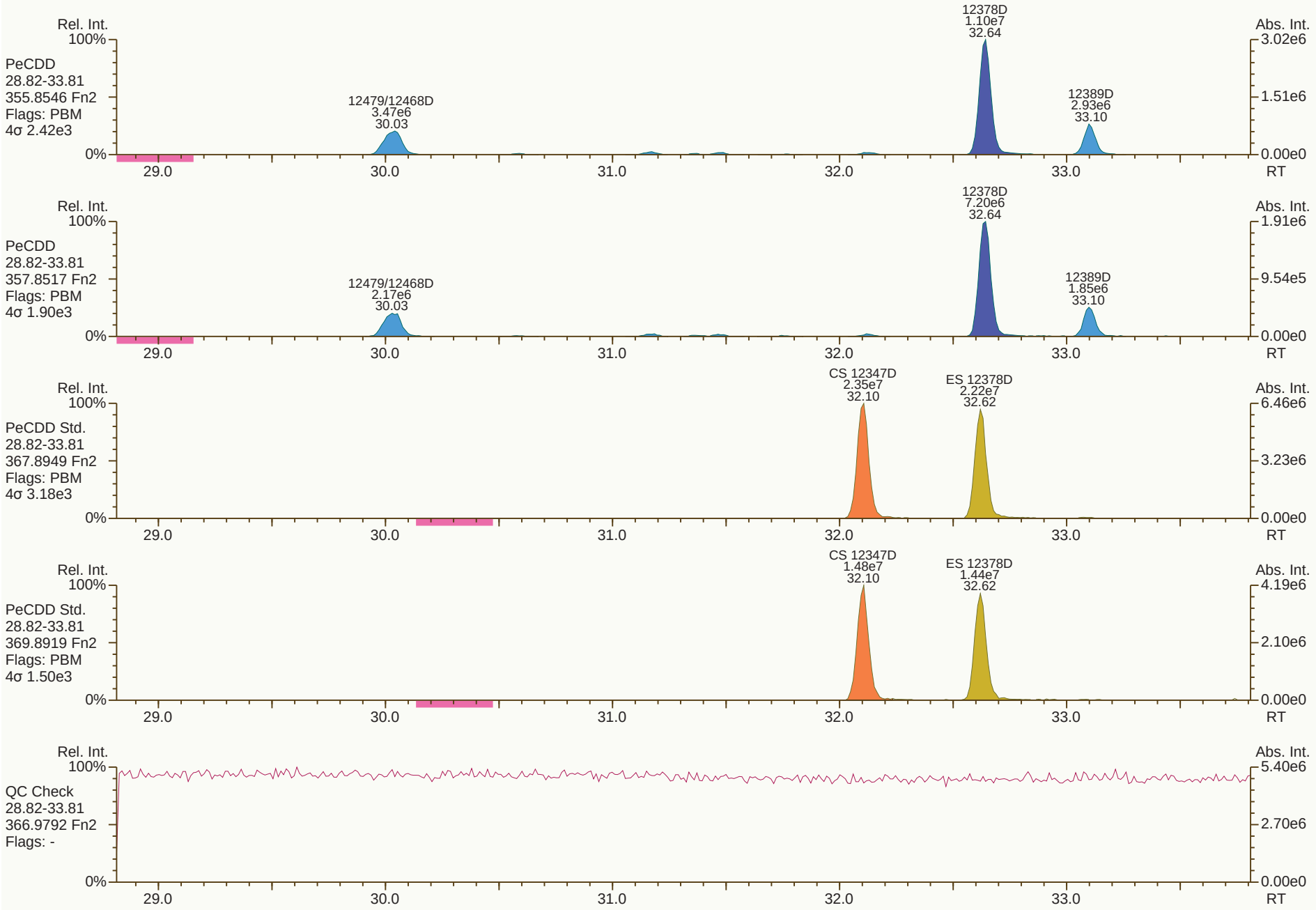
Client ID: CS-41-MS | **UTP:** 12-Aug-2020 15:18:36 DTF | **J-level:** 0.555 pg/g | **Split:** 1 | **Checkcode:** 194-587-JZL

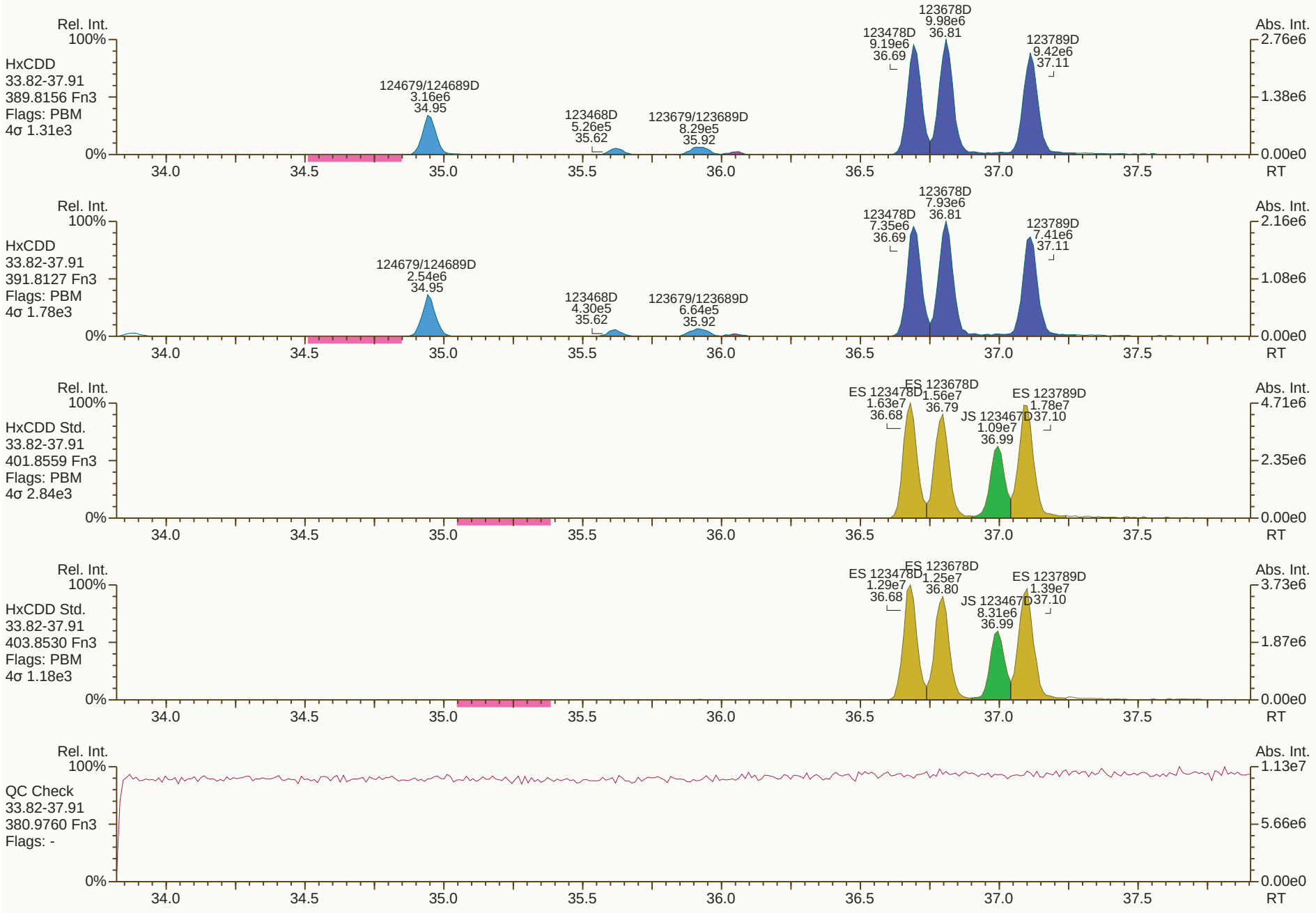
Datafile: 200811C17 | **Report:** 12 Aug 2020 15:22 TF | **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
23468/12469-PeCDF	30.67	J	0.9859	0.9864	+0.9	3.54E+05	1.71	Y	0.98	1.44	4260	0.164
12347-PeCDF	NotFnd		0.9884						0.98		4260	0.164
12348-PeCDF	NotFnd		0.9937						0.98		4260	0.164
12378-PeCDF	**31.11**		**1.0006**	**1.0006**	**0**	**2.98E+07**	**1.53**	**Y**	**0.96**	**118**	**4260**	**0.162**
12678/12367-PeCDF	31.42		1.0097	1.0103	+1.1	1.34E+06	1.43	Y	0.98	5.43	4260	0.164
12379-PeCDF	NotFnd		1.0152						0.98		4260	0.164
12679-PeCDF	NotFnd		0.9923						0.98		4260	0.164
23467/12369-PeCDF	32.14	J	0.9966	0.9964	-0.4	1.91E+05	1.46	Y	0.98	0.775	4260	0.164
23478-PeCDF	**32.27**		**1.0005**	**1.0005**	**0**	**3.03E+07**	**1.51**	**Y**	**0.99**	**126**	**4260**	**0.166**
23478/12489-PeCDF	NotFnd		0.0000						0.99			
12489-PeCDF	NotFnd		1.0043						0.98		4260	0.164
12349-PeCDF	NotFnd		1.0107						0.98		4260	0.164
12389-PeCDF	33.39		1.0349	1.0351	+0.4	5.89E+06	1.51	Y	0.98	23.9	4260	0.164
123468-HxCDF	34.26		0.9607	0.9606	-0.2	5.95E+06	1.22	Y	1.13	32.1	4538	0.221
124678/134678-HxCDF	34.47		0.9666	0.9663	-0.6	1.11E+06	1.23	Y	1.13	5.99	4538	0.221
134679-HxCDF	NotFnd		0.9730						1.13		4538	0.221
124679-HxCDF	NotFnd		0.9787						1.13		4538	0.221
124689-HxCDF	35.13		0.9850	0.9850	0	6.81E+05	1.33	Y	1.13	3.67	4538	0.221
123467-HxCDF	35.56	J	0.9971	0.9969	-0.4	1.69E+05	1.40	Y	1.13	0.913	4538	0.221
123478-HxCDF	**35.69**		**1.0005**	**1.0005**	**0**	**2.32E+07**	**1.22**	**Y**	**1.21**	**122**	**4538**	**0.206**
123678-HxCDF	**35.83**		**1.0005**	**1.0005**	**0**	**2.39E+07**	**1.22**	**Y**	**1.11**	**119**	**4538**	**0.199**
123479-HxCDF	NotFnd		1.0049						1.13		4538	0.221
123469-HxCDF	NotFnd		1.0090						1.13		4538	0.221
123679-HxCDF	NotFnd		0.9941						1.13		4538	0.221
234678-HxCDF	**36.50**		**1.0004**	**1.0004**	**0**	**2.24E+07**	**1.25**	**Y**	**1.12**	**121**	**4538**	**0.216**
234678/123689-HxCDF	NotFnd		0.0000						1.12			
123689-HxCDF	NotFnd		1.0041						1.13		4538	0.221
123789-HxCDF	**37.49**		**1.0005**	**1.0005**	**0**	**1.90E+07**	**1.22**	**Y**	**1.11**	**116**	**4538**	**0.271**
123789/123489-HxCDF	NotFnd		0.0000						1.11			
123489-HxCDF	NotFnd		1.0009						1.13		4538	0.221
1234678-HpCDF	**39.17**		**1.0003**	**1.0003**	**0**	**2.01E+07**	**1.02**	**Y**	**1.32**	**124**	**3190**	**0.192**
1234679-HpCDF	NotFnd		1.0075						1.29		3190	0.234
1234689-HpCDF	39.61		1.0112	1.0116	+1.0	1.95E+06	1.00	Y	1.29	14.4	3190	0.234
1234789-HpCDF	**40.61**		**1.0003**	**1.0003**	**0**	**1.31E+07**	**1.03**	**Y**	**1.26**	**117**	**3190**	**0.292**
OCDF	**43.03**		**1.0003**	**1.0003**	**0**	**1.71E+07**	**0.89**	**Y**	**1.03**	**252**	**5375**	**1.24**
OCDF-a	43.06	**#VALUE!**	1.0002	1.0008	+1.6	4.33E+05	1.88	N	-	#VALUE!	2696	#VALUE!

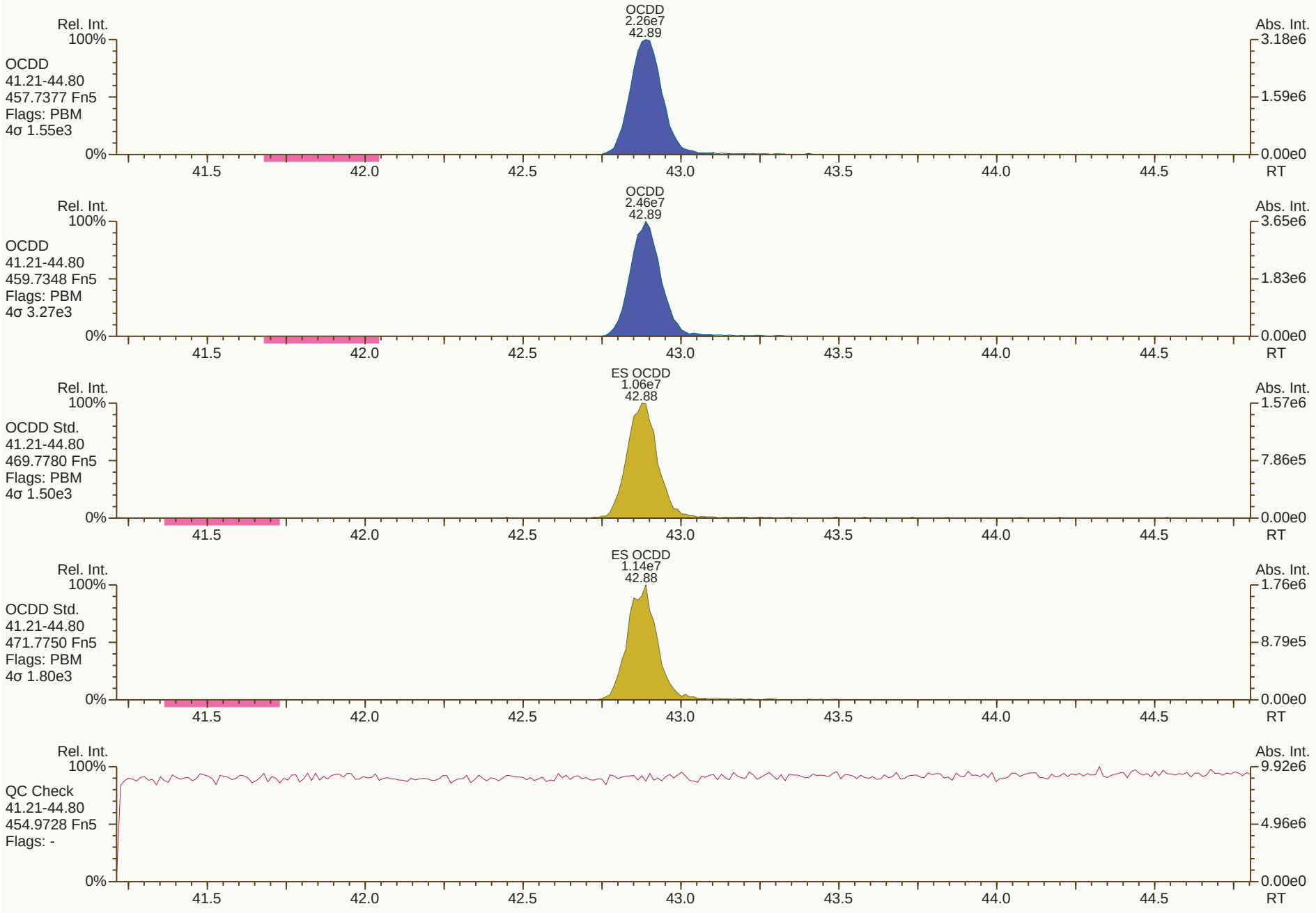

Rel. Int.
100%
QC Check
19.04-28.80
316.9824 Fn1
Flags: -
0%
20.0
22.0
24.0
26.0
28.0
RT
Abs. Int.
5.97e6
2.99e6
0.00e0
Rel. Int.
100%
QC Check
28.82-33.81
366.9792 Fn2
Flags: -
0%
29.0
30.0
31.0
32.0
33.0
RT
Abs. Int.
5.40e6
2.70e6
0.00e0
Rel. Int.
100%
QC Check
33.82-37.91
380.9760 Fn3
Flags: -
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Abs. Int.
1.13e7
5.66e6
0.00e0
Rel. Int.
100%
QC Check
37.92-41.20
430.9728 Fn4
Flags: -
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Abs. Int.
7.36e6
3.68e6
0.00e0
Rel. Int.
100%
QC Check
41.21-44.80
454.9728 Fn5
Flags: -
0%
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Abs. Int.
9.92e6
4.96e6
0.00e0

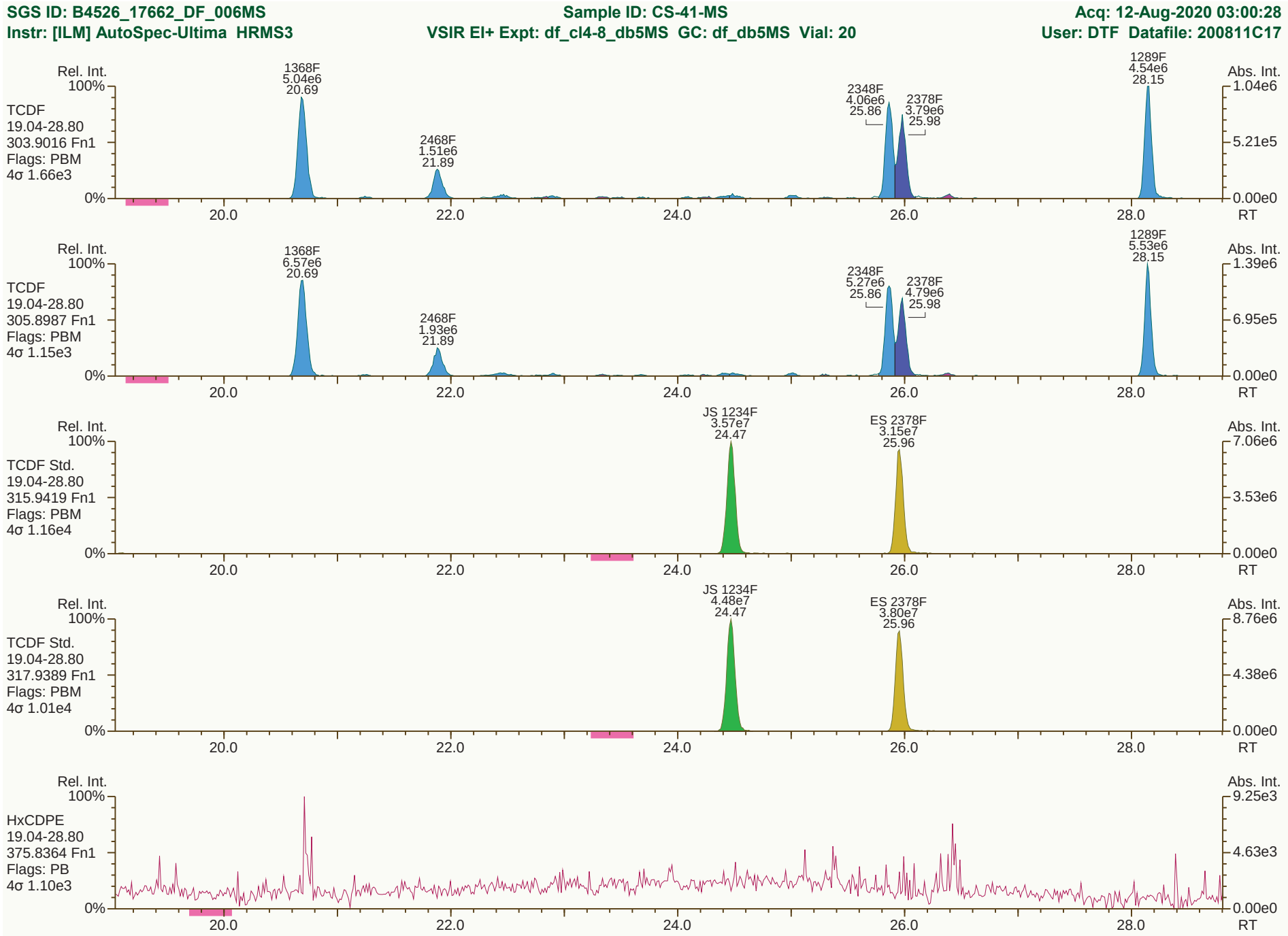

Rel. Int.
100%
TCDD
19.04-28.80
319.8965 Fn1
Flags: PBM
4σ 2.53e3
0%
1368D
3.78e6
22.91
1379D
2.94e5
23.32
1239D
2.29e6
26.77
2378D
2.51e6
26.93
1289D
3.07e6
27.99
Abs. Int.
7.39e5
3.69e5
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD
19.04-28.80
321.8936 Fn1
Flags: PBM
4σ 2.20e3
0%
1368D
4.68e6
22.90
1379D
3.76e5
23.32
1239D
2.90e6
26.77
2378D
3.12e6
26.93
1289D
3.78e6
27.99
Abs. Int.
9.15e5
4.57e5
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
37Cl-TCDD
19.04-28.80
327.8850 Fn1
Flags: PBM
4σ 1.32e3
0%
CS 37Cl-2378D
2.17e7
26.94
Abs. Int.
4.57e6
2.28e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.80
331.9368 Fn1
Flags: PBM
4σ 6.16e3
0%
JS 1234D
2.46e7
26.21
ES 2378D
2.04e7
26.91
Abs. Int.
5.34e6
2.67e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.80
333.9339 Fn1
Flags: PBM
4σ 3.79e3
0%
JS 1234D
3.12e7
26.21
ES 2378D
2.55e7
26.91
Abs. Int.
6.57e6
3.29e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT


Rel. Int.
100%
PeCDD
28.82-33.81
355.8546 Fn2
Flags: PBM
4σ 2.42e3
12479/12468D
3.47e6
30.03
12378D
1.10e7
32.64
12389D
2.93e6
33.10
Abs. Int.
3.02e6
1.51e6
0.00e0
0%
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD
28.82-33.81
357.8517 Fn2
Flags: PBM
4σ 1.90e3
12479/12468D
2.17e6
30.03
12378D
7.20e6
32.64
12389D
1.85e6
33.10
Abs. Int.
1.91e6
9.54e5
0.00e0
0%
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.82-33.81
367.8949 Fn2
Flags: PBM
4σ 3.18e3
CS 12347D
2.35e7
32.10
ES 12378D
2.22e7
32.62
Abs. Int.
6.46e6
3.23e6
0.00e0
0%
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.82-33.81
369.8919 Fn2
Flags: PBM
4σ 1.50e3
CS 12347D
1.48e7
32.10
ES 12378D
1.44e7
32.62
Abs. Int.
4.19e6
2.10e6
0.00e0
0%
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
QC Check
28.82-33.81
366.9792 Fn2
Flags: -
Abs. Int.
5.40e6
2.70e6
0.00e0
0%
29.0
30.0
31.0
32.0
33.0
RT

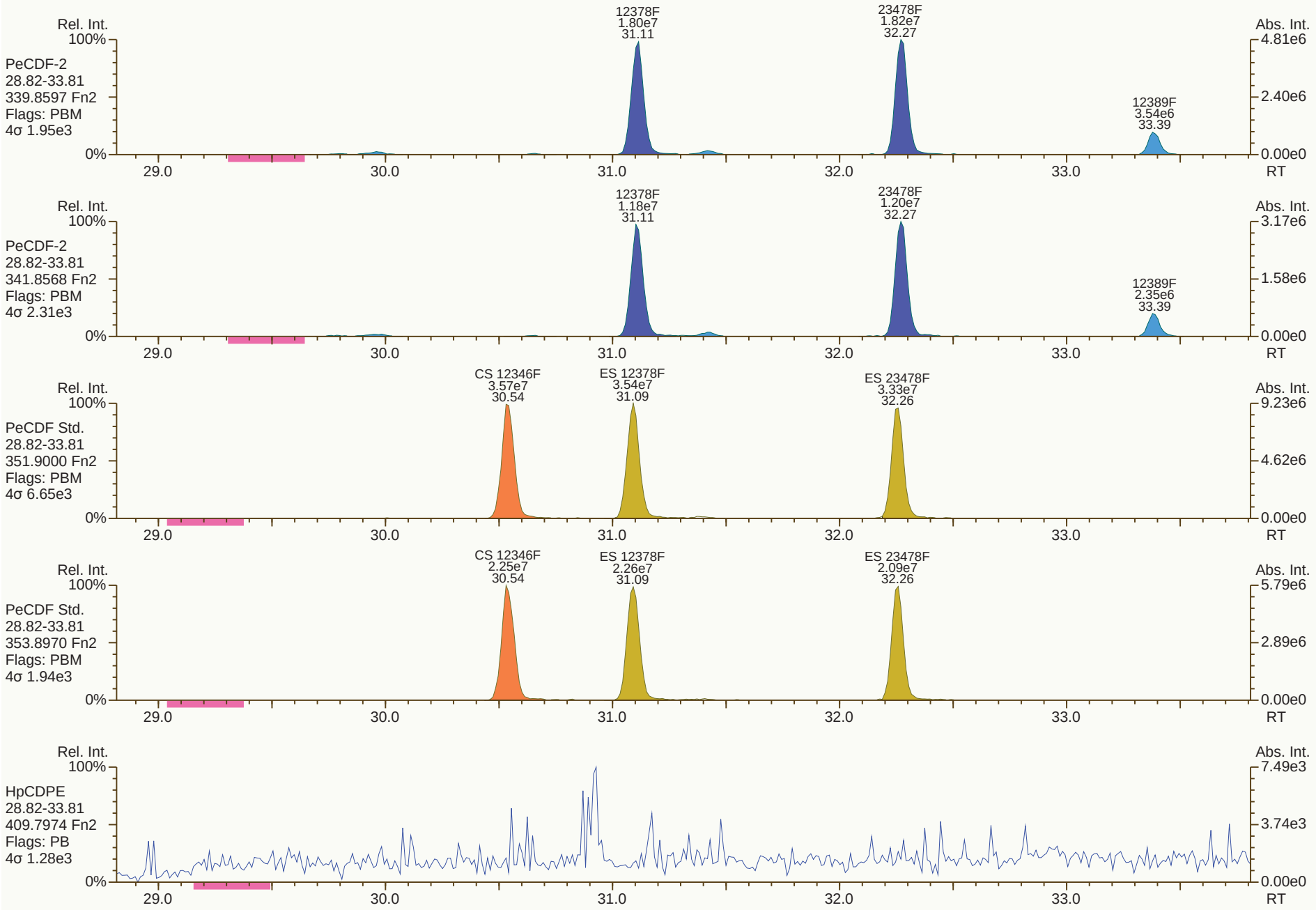

Rel. Int.
100%
HxCDD
33.82-37.91
389.8156 Fn3
Flags: PBM
4σ 1.31e3
124679/124689D
3.16e6
34.95
123468D
5.26e5
35.62
123679/123689D
8.29e5
35.92
123478D
9.19e6
36.69
123678D
9.98e6
36.81
123789D
9.42e6
37.11
Abs. Int.
2.76e6
1.38e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD
33.82-37.91
391.8127 Fn3
Flags: PBM
4σ 1.78e3
124679/124689D
2.54e6
34.95
123468D
4.30e5
35.62
123679/123689D
6.64e5
35.92
123478D
7.35e6
36.69
123678D
7.93e6
36.81
123789D
7.41e6
37.11
Abs. Int.
2.16e6
1.08e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.82-37.91
401.8559 Fn3
Flags: PBM
4σ 2.84e3
ES 123478D
1.63e7
36.68
ES 123678D
1.56e7
36.79
JS 123467D
1.09e7
36.99
ES 123789D
1.78e7
37.10
Abs. Int.
4.71e6
2.35e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.82-37.91
403.8530 Fn3
Flags: PBM
4σ 1.18e3
ES 123478D
1.29e7
36.68
ES 123678D
1.25e7
36.80
JS 123467D
8.31e6
36.99
ES 123789D
1.39e7
37.10
Abs. Int.
3.73e6
1.87e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
QC Check
33.82-37.91
380.9760 Fn3
Flags: -
Abs. Int.
1.13e7
5.66e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT

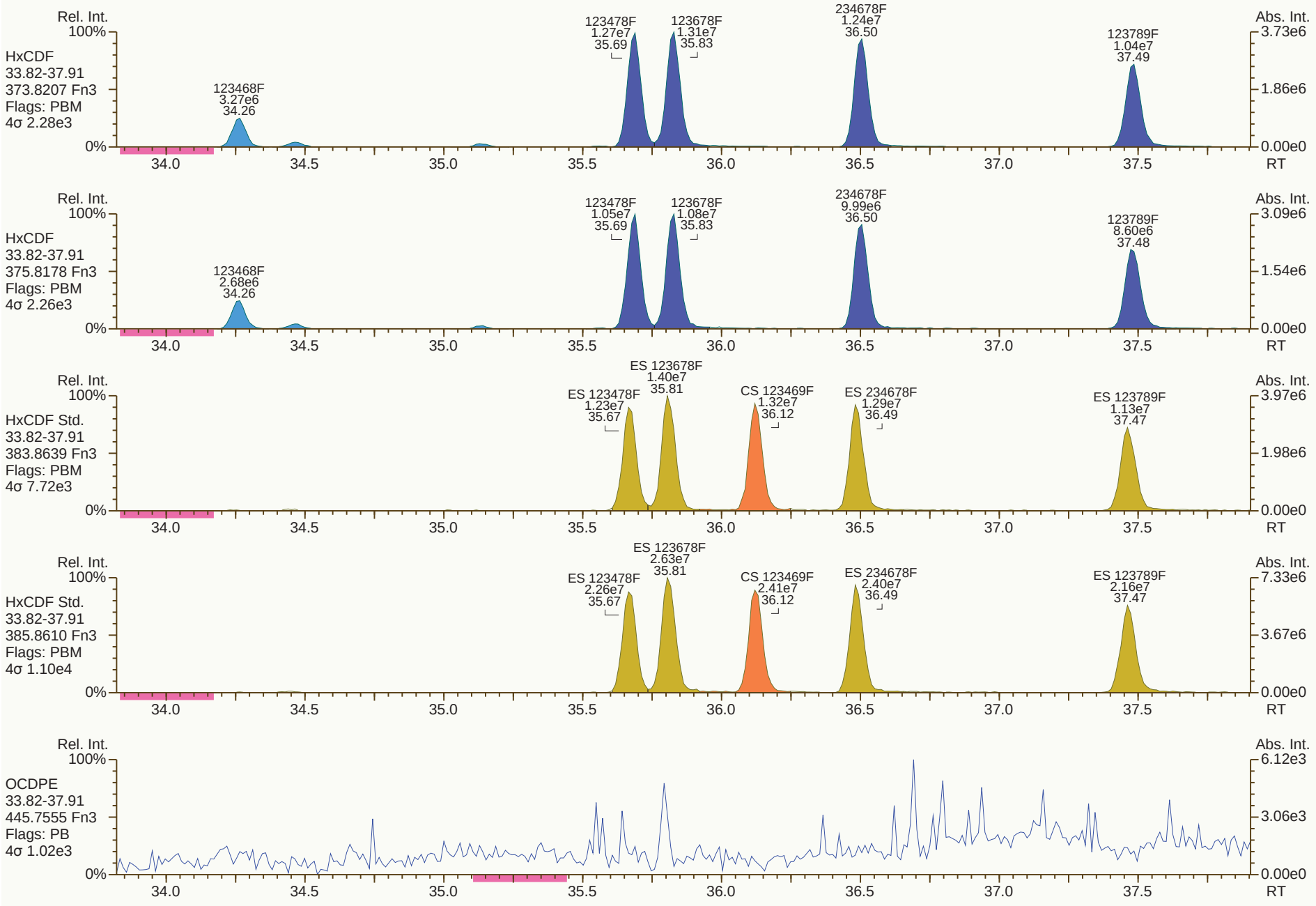

Rel. Int.
100%
HpCDD
37.92-41.20
423.7767 Fn4
Flags: PBM
4σ 1.82e3
1234679D
9.66e6
39.48
1234678D
9.21e6
40.19
Abs. Int.
2.48e6
1.24e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD
37.92-41.20
425.7737 Fn4
Flags: PBM
4σ 1.86e3
1234679D
9.23e6
39.48
1234678D
8.91e6
40.19
Abs. Int.
2.39e6
1.19e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.92-41.20
435.8169 Fn4
Flags: PBM
4σ 2.23e3
ES 1234678D
1.17e7
40.18
Abs. Int.
2.80e6
1.40e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.92-41.20
437.8140 Fn4
Flags: PBM
4σ 1.99e3
ES 1234678D
1.09e7
40.18
Abs. Int.
2.61e6
1.30e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
QC Check
37.92-41.20
430.9728 Fn4
Flags: -
Abs. Int.
7.36e6
3.68e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT

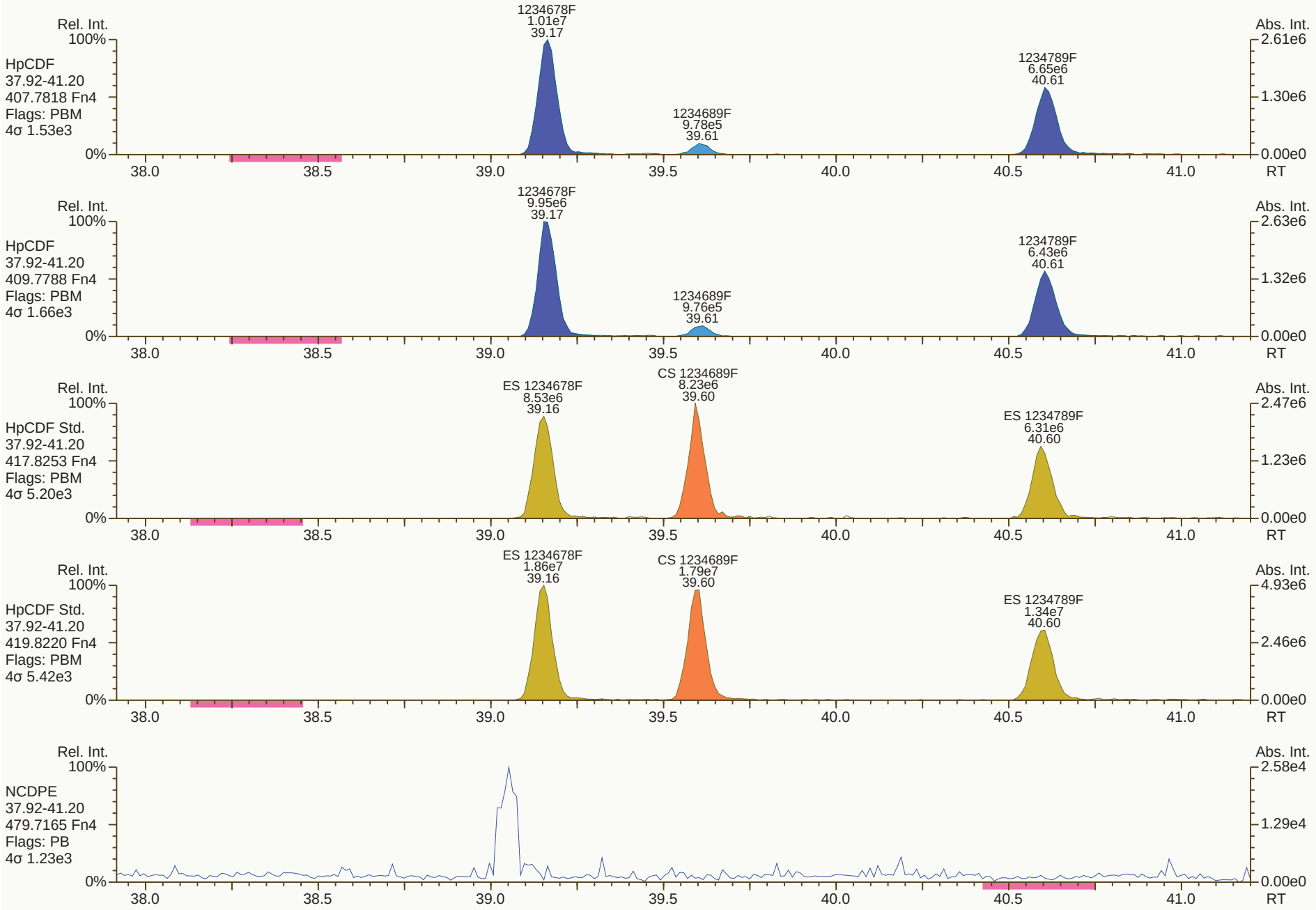

OCDD
2.26e7
42.89
Rel. Int.
Abs. Int.
OCDD
41.21-44.80
457.7377 Fn5
Flags: PBM
4σ 1.55e3
OCDD
2.46e7
42.89
OCDD
41.21-44.80
459.7348 Fn5
Flags: PBM
4σ 3.27e3
ES OCDD
1.06e7
42.88
OCDD Std.
41.21-44.80
469.7780 Fn5
Flags: PBM
4σ 1.50e3
ES OCDD
1.14e7
42.88
OCDD Std.
41.21-44.80
471.7750 Fn5
Flags: PBM
4σ 1.80e3
QC Check
41.21-44.80
454.9728 Fn5
Flags: -
RT

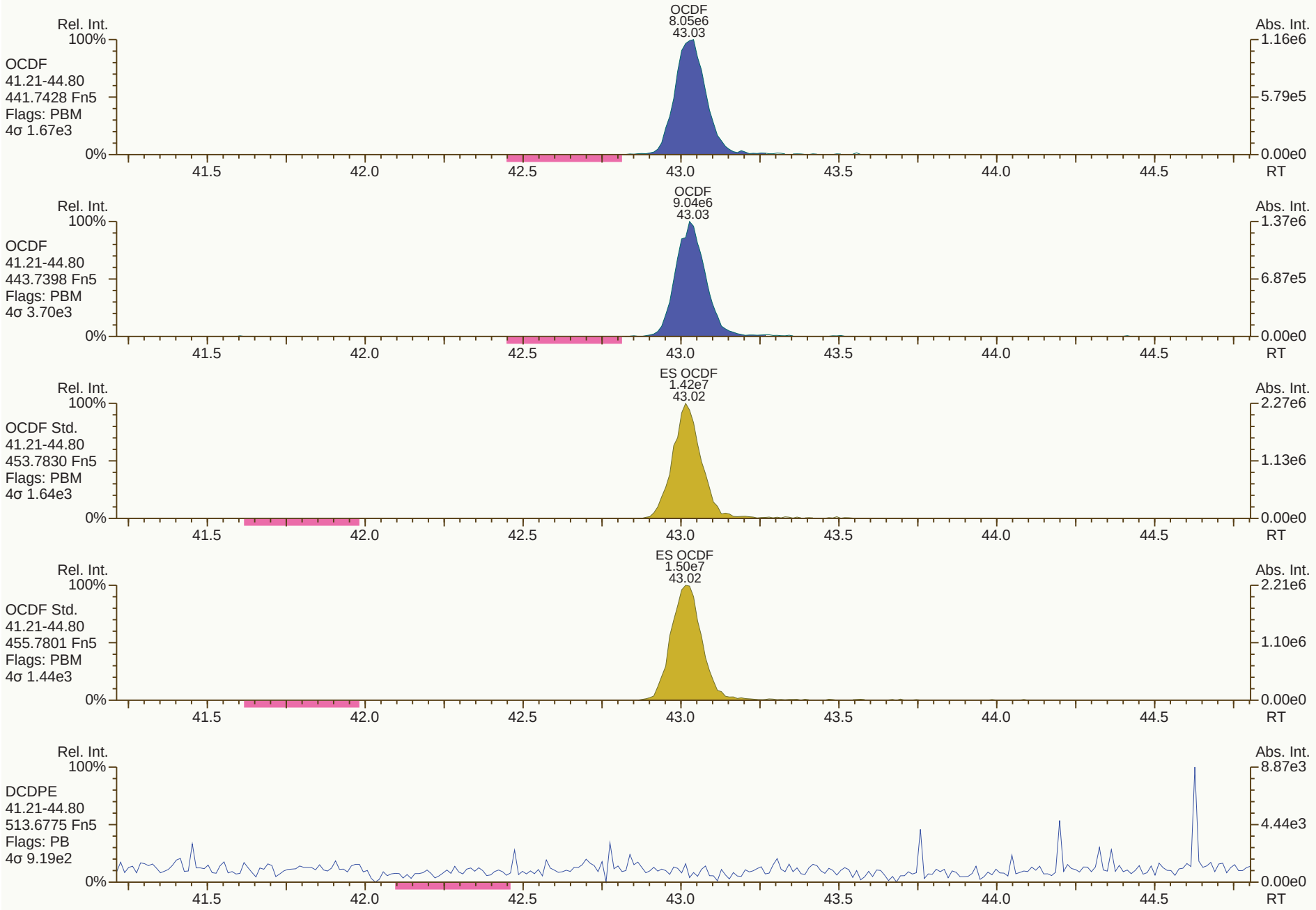

SGS ID: B4526_17662_DF_006MS
Sample ID: CS-41-MS
Acq: 12-Aug-2020 03:00:28
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 20
User: DTF Datafile: 200811C17
Rel. Int.
Abs. Int.
TCDF
19.04-28.80
303.9016 Fn1
Flags: PBM
4σ 1.66e3
1368F
5.04e6
20.69
2468F
1.51e6
21.89
2348F
4.06e6
25.86
2378F
3.79e6
25.98
1289F
4.54e6
28.15
1.04e6
5.21e5
0.00e0
TCDF
19.04-28.80
305.8987 Fn1
Flags: PBM
4σ 1.15e3
1368F
6.57e6
20.69
2468F
1.93e6
21.89
2348F
5.27e6
25.86
2378F
4.79e6
25.98
1289F
5.53e6
28.15
1.39e6
6.95e5
0.00e0
TCDF Std.
19.04-28.80
315.9419 Fn1
Flags: PBM
4σ 1.16e4
JS 1234F
3.57e7
24.47
ES 2378F
3.15e7
25.96
7.06e6
3.53e6
0.00e0
TCDF Std.
19.04-28.80
317.9389 Fn1
Flags: PBM
4σ 1.01e4
JS 1234F
4.48e7
24.47
ES 2378F
3.80e7
25.96
8.76e6
4.38e6
0.00e0
HxCDPE
19.04-28.80
375.8364 Fn1
Flags: PB
4σ 1.10e3
9.25e3
4.63e3
0.00e0
100%
0%
20.0
22.0
24.0
26.0
28.0
RT
Results: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\B4526_17662_DF_006MS.utp_res, saved 12-Aug-2020 15:18 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 4968, 6449, 4383 scc: 194-587
Revised: 12-Aug-2020 11:26 (DTF) Printed: 12-Aug-2020 15:37 Page 7 of 12


Rel. Int.
100%
0%
PeCDF-1
19.04-28.80
339.8597 Fn1
Flags: PBM
4σ 1.22e3
13468/12468F
4.07e6
28.13
Abs. Int.
9.07e5
4.53e5
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
PeCDF-1
19.04-28.80
341.8568 Fn1
Flags: PBM
4σ 1.30e3
13468/12468F
2.60e6
28.13
6.04e5
3.02e5
QC Check
19.04-28.80
316.9824 Fn1
Flags: -
5.97e6
2.99e6


Rel. Int.
100%
PeCDF-2
28.82-33.81
339.8597 Fn2
Flags: PBM
4σ 1.95e3
0%
12378F
1.80e7
31.11
23478F
1.82e7
32.27
12389F
3.54e6
33.39
Abs. Int.
4.81e6
2.40e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF-2
28.82-33.81
341.8568 Fn2
Flags: PBM
4σ 2.31e3
0%
12378F
1.18e7
31.11
23478F
1.20e7
32.27
12389F
2.35e6
33.39
Abs. Int.
3.17e6
1.58e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.82-33.81
351.9000 Fn2
Flags: PBM
4σ 6.65e3
0%
CS 12346F
3.57e7
30.54
ES 12378F
3.54e7
31.09
ES 23478F
3.33e7
32.26
Abs. Int.
9.23e6
4.62e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.82-33.81
353.8970 Fn2
Flags: PBM
4σ 1.94e3
0%
CS 12346F
2.25e7
30.54
ES 12378F
2.26e7
31.09
ES 23478F
2.09e7
32.26
Abs. Int.
5.79e6
2.89e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
HpCDPE
28.82-33.81
409.7974 Fn2
Flags: PB
4σ 1.28e3
0%
Abs. Int.
7.49e3
3.74e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT


Rel. Int.
100%
HxCDF
33.82-37.91
373.8207 Fn3
Flags: PBM
4σ 2.28e3
123468F
3.27e6
34.26
123478F
1.27e7
35.69
123678F
1.31e7
35.83
234678F
1.24e7
36.50
123789F
1.04e7
37.49
Abs. Int.
3.73e6
1.86e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF
33.82-37.91
375.8178 Fn3
Flags: PBM
4σ 2.26e3
123468F
2.68e6
34.26
123478F
1.05e7
35.69
123678F
1.08e7
35.83
234678F
9.99e6
36.50
123789F
8.60e6
37.48
Abs. Int.
3.09e6
1.54e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF Std.
33.82-37.91
383.8639 Fn3
Flags: PBM
4σ 7.72e3
ES 123478F
1.23e7
35.67
ES 123678F
1.40e7
35.81
CS 123469F
1.32e7
36.12
ES 234678F
1.29e7
36.49
ES 123789F
1.13e7
37.47
Abs. Int.
3.97e6
1.98e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF Std.
33.82-37.91
385.8610 Fn3
Flags: PBM
4σ 1.10e4
ES 123478F
2.26e7
35.67
ES 123678F
2.63e7
35.81
CS 123469F
2.41e7
36.12
ES 234678F
2.40e7
36.49
ES 123789F
2.16e7
37.47
Abs. Int.
7.33e6
3.67e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
OCDPE
33.82-37.91
445.7555 Fn3
Flags: PB
4σ 1.02e3
Abs. Int.
6.12e3
3.06e3
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT


Rel. Int.
100%
HpCDF
37.92-41.20
407.7818 Fn4
Flags: PBM
4σ 1.53e3
1234678F
1.01e7
39.17
1234689F
9.78e5
39.61
1234789F
6.65e6
40.61
Abs. Int.
2.61e6
1.30e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF
37.92-41.20
409.7788 Fn4
Flags: PBM
4σ 1.66e3
1234678F
9.95e6
39.17
1234689F
9.76e5
39.61
1234789F
6.43e6
40.61
Abs. Int.
2.63e6
1.32e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.92-41.20
417.8253 Fn4
Flags: PBM
4σ 5.20e3
ES 1234678F
8.53e6
39.16
CS 1234689F
8.23e6
39.60
ES 1234789F
6.31e6
40.60
Abs. Int.
2.47e6
1.23e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.92-41.20
419.8220 Fn4
Flags: PBM
4σ 5.42e3
ES 1234678F
1.86e7
39.16
CS 1234689F
1.79e7
39.60
ES 1234789F
1.34e7
40.60
Abs. Int.
4.93e6
2.46e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
NCDPE
37.92-41.20
479.7165 Fn4
Flags: PB
4σ 1.23e3
Abs. Int.
2.58e4
1.29e4
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT


OCDF
8.05e6
43.03
Rel. Int.
100%
OCDF
41.21-44.80
441.7428 Fn5
Flags: PBM
4σ 1.67e3
0%
Abs. Int.
1.16e6
5.79e5
0.00e0
RT
41.5
42.0
42.5
43.0
43.5
44.0
44.5
OCDF
9.04e6
43.03
Rel. Int.
100%
OCDF
41.21-44.80
443.7398 Fn5
Flags: PBM
4σ 3.70e3
0%
Abs. Int.
1.37e6
6.87e5
0.00e0
RT
ES OCDF
1.42e7
43.02
Rel. Int.
100%
OCDF Std.
41.21-44.80
453.7830 Fn5
Flags: PBM
4σ 1.64e3
0%
Abs. Int.
2.27e6
1.13e6
0.00e0
RT
ES OCDF
1.50e7
43.02
Rel. Int.
100%
OCDF Std.
41.21-44.80
455.7801 Fn5
Flags: PBM
4σ 1.44e3
0%
Abs. Int.
2.21e6
1.10e6
0.00e0
RT
Rel. Int.
100%
DCDPE
41.21-44.80
513.6775 Fn5
Flags: PB
4σ 9.19e2
0%
Abs. Int.
8.87e3
4.44e3
0.00e0
RT

Lab ID: B4526_17662_DF_006MSD | Acq'd: 12 Aug 2020 03:46 DTF | Wt/Vol: 9.18 g | ICAL: HRMS3_DF_10122018_28AUG2019

Client ID: CS-41-MSD | UTP: 12-Aug-2020 15:18:36 DTF | J-level: 0.545 pg/g | Split: 1 | Checkcode: 184-857-GMW

Datafile: 200811C18 | Report: 12 Aug 2020 15:22 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	26.92		1.0008	1.0008	0	5.63E+06	0.81	Y	1.19	21.8	4025	0.172
12378-PeCDD	32.63		1.0006	1.0007	+0.2	1.81E+07	1.56	Y	0.98	111	4717	0.265
123478-HxCDD	36.68		1.0004	1.0004	0	1.63E+07	1.23	Y	1.02	121	4092	0.256
123678-HxCDD	36.80		1.0036	1.0036	0	1.81E+07	1.24	Y	1.09	126	4092	0.272
123789-HxCDD	37.11		1.0118	1.0119	+0.2	1.65E+07	1.28	Y	0.97	116	4092	0.273
1234678-HpCDD	40.18		1.0003	1.0003	0	1.87E+07	1.04	Y	0.98	179	2489	0.266
OCDD	42.89		1.0003	1.0003	0	4.94E+07	0.89	Y	1.07	844	2760	0.79
2378-TCDF	25.97		1.0009	1.0010	+0.2	8.09E+06	0.76	Y	1.01	24.8	2687	0.0957
12378-PeCDF	31.10		1.0006	1.0006	0	2.90E+07	1.53	Y	0.96	114	4653	0.181
23478-PeCDF	32.26		1.0005	1.0006	+0.2	2.98E+07	1.51	Y	0.99	120	4653	0.174
123478-HxCDF	35.68		1.0005	1.0005	0	2.28E+07	1.21	Y	1.21	119	5053	0.228
123678-HxCDF	35.82		1.0005	1.0005	0	2.41E+07	1.20	Y	1.11	117	5053	0.227
234678-HxCDF	36.50		1.0004	1.0005	+0.2	2.26E+07	1.23	Y	1.12	117	5053	0.238
123789-HxCDF	37.47		1.0005	1.0005	0	1.95E+07	1.22	Y	1.11	112	5053	0.289
1234678-HpCDF	39.16		1.0003	1.0003	0	2.08E+07	1.03	Y	1.32	120	3453	0.186
1234789-HpCDF	40.61		1.0003	1.0003	0	1.36E+07	1.04	Y	1.26	113	3453	0.297
OCDF	43.03		1.0003	1.0002	-0.3	1.80E+07	0.90	Y	1.03	242	2785	0.557

Name	Act RT	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	26.90	1.0266	1.0268	+0.3	4.73E+07	0.79	Y	0.99	86.8
ES 12378-PeCDD	32.61	1.2430	1.2450	+3.9	3.63E+07	1.51	Y	0.83	79.4
ES 123478-HxCDD	36.67	0.9916	0.9916	0	2.87E+07	1.25	Y	0.95	78.2
ES 123678-HxCDD	36.78	0.9947	0.9947	0	2.89E+07	1.25	Y	0.98	76.4
ES 123789-HxCDD	37.09	1.0029	1.0029	0	3.17E+07	1.26	Y	1.14	72
ES 1234678-HpCDD	40.17	1.0851	1.0861	+2.4	2.33E+07	1.05	Y	0.90	66.9
ES OCDD	42.88	1.1584	1.1593	+2.3	2.38E+07	0.89	Y	0.63	49
ES 2378-TCDF	25.94	1.0602	1.0608	+0.9	7.02E+07	0.78	Y	1.00	86.9
ES 12378-PeCDF	31.08	1.2683	1.2709	+4.8	5.74E+07	1.54	Y	0.83	85.2
ES 23478-PeCDF	32.25	1.3156	1.3185	+5.6	5.47E+07	1.56	Y	0.81	83.6
ES 123478-HxCDF	35.66	0.9644	0.9642	-0.4	3.47E+07	0.53	Y	1.12	79.7
ES 123678-HxCDF	35.80	0.9682	0.9681	-0.2	4.07E+07	0.52	Y	1.33	78.8
ES 234678-HxCDF	36.48	0.9864	0.9864	0	3.78E+07	0.55	Y	1.21	80.7
ES 123789-HxCDF	37.46	1.0128	1.0128	0	3.41E+07	0.52	Y	1.12	78.8
ES 1234678-HpCDF	39.14	1.0578	1.0585	+1.6	2.86E+07	0.46	Y	0.92	79.9
ES 1234789-HpCDF	40.59	1.0967	1.0977	+2.4	2.08E+07	0.43	Y	0.82	65.5
ES OCDF	43.02	1.1623	1.1632	+2.3	3.15E+07	0.93	Y	0.78	52.2

Lab ID: B4526_17662_DF_006MSD | Acq'd: 12 Aug 2020 03:46 DTF | Wt/Vol: 9.18 g | ICAL: HRMS3_DF_10122018_28AUG2019

Client ID: CS-41-MSD | UTP: 12-Aug-2020 15:18:36 DTF | J-level: 0.545 pg/g | Split: 1 | Checkcode: 184-857-GMW

Datafile: 200811C18 | Report: 12 Aug 2020 15:22 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %	
JS 1234-TCDD	26.20		-	-	-	5.50E+07	0.82	Y	-	-	
JS 1234-TCDF	24.46		-	-	-	8.12E+07	0.80	Y	-	-	
JS 123467-HxCDD	36.98		-	-	-	1.94E+07	1.29	Y	-	-	
CS 37Cl-2378-TCDD	26.92		1.0276	1.0278	+0.3	2.14E+07	n/a	-	1.12	86.7	
CS 12347-PeCDD	32.09		1.2233	1.2252	+3.7	3.49E+07	1.56	Y	0.71	89	
CS 12346-PeCDF	30.53		1.2459	1.2483	+4.4	5.65E+07	1.59	Y	0.81	86.1	
CS 123469-HxCDF	36.11		0.9767	0.9765	-0.4	3.65E+07	0.52	Y	1.12	83.9	
CS 1234689-HpCDF	39.59		1.0696	1.0705	+2.1	2.74E+07	0.45	Y	0.90	78.7	
~~SS 37Cl-2378-TCDD~~	~~26.92~~		~~1.0276~~	~~1.0278~~	~~+0.3~~	~~2.14E+07~~	~~n/a~~		~~1.14~~	~~99~~	Not used in this project.
~~SS 12347-PeCDD~~	~~32.09~~		~~1.2233~~	~~1.2252~~	~~+3.7~~	~~3.49E+07~~	~~1.56~~	~~Y~~	~~0.86~~	~~112~~	CL 13Aug20
~~SS 12346-PeCDF~~	~~30.53~~		~~1.2459~~	~~1.2483~~	~~+4.4~~	~~5.65E+07~~	~~1.59~~	~~Y~~	~~0.98~~	~~101~~	
~~SS 123469-HxCDF~~	~~36.11~~		~~0.9767~~	~~0.9765~~	~~-0.4~~	~~3.65E+07~~	~~0.52~~	~~Y~~	~~0.85~~	~~106~~	
~~SS 1234689-HpCDF~~	~~39.59~~		~~1.0696~~	~~1.0705~~	~~+2.1~~	~~2.74E+07~~	~~0.45~~	~~Y~~	~~0.97~~	~~98.1~~	

Totals	Conc	EMPC
Total TCDD	102	102
Total PeCDD	175	178
Total HxCDD	424	424
Total HpCDD	363	363
Total Tetra-Octa Dioxins	1910	1910
Total TCDF	142	142
Total PeCDF	299	299
Total HxCDF	505	505
Total HpCDF	246	246
Total Tetra-Octa Furans	1,430	1430
Total Tetra-Octa Dioxins & Furans	3340	3340

* 37Cl correction has been applied to 2378-TCDD

	Original Values	Corrected Values
Ratio	0.8	0.81
Response	5.65E+06	5.63E+06

Lab ID: B4526_17662_DF_006MSD | **Acq'd:** 12 Aug 2020 03:46 DTF | **Wt/Vol:** 9.18 g | **ICAL:** HRMS3_DF_10122018_28AUG2019

Client ID: CS-41-MSD | **UTP:** 12-Aug-2020 15:18:36 DTF | **J-level:** 0.545 pg/g | **Split:** 1 | **Checkcode:** 184-857-GMW

Datafile: 200811C18 | **Report:** 12 Aug 2020 15:22 TF | **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1368-TCDD	22.89		0.8523	0.8511	-1.6	8.21E+06	0.77	Y	1.19	31.8	4025	0.172
1379-TCDD	NotFnd		0.8682						1.19		4025	0.172
1369-TCDD	NotFnd		0.8858						1.19		4025	0.172
1469-TCDD	NotFnd		0.9177						1.19		4025	0.172
1247/1246/1248/1249-TCDD	NotFnd		0.9274						1.19		4025	0.172
1378-TCDD	NotFnd		0.9349						1.19		4025	0.172
1268-TCDD	NotFnd		0.9430						1.19		4025	0.172
1478-TCDD	NotFnd		0.9529						1.19		4025	0.172
1279-TCDD	NotFnd		0.9597						1.19		4025	0.172
1234/1269-TCDD	NotFnd		0.9739						1.19		4025	0.172
1236-TCDD	NotFnd		0.9794						1.19		4025	0.172
1237/1238-TCDD	NotFnd		0.9895						1.19		4025	0.172
1239-TCDD	26.76		0.9950	0.9949	-0.2	5.31E+06	0.79	Y	1.19	20.6	4025	0.172
2378-TCDD	**26.92**		**1.0008**	1.0008	**0**	5.63E+06	0.81	Y	**1.19**	**21.8**	**4025**	**0.172**
1278-TCDD	NotFnd		1.0139						1.19		4025	0.172
1267-TCDD	NotFnd		1.0194						1.19		4025	0.172
1289-TCDD	27.98		1.0397	1.0401	+0.7	7.17E+06	0.79	Y	1.19	27.8	4025	0.172
12479/12468-PeCDD	30.02		0.9209	0.9205	-0.7	5.20E+06	1.51	Y	0.98	31.7	4717	0.265
12469-PeCDD	30.58	J	0.9382	0.9376	-1.1	1.25E+05	1.76	Y	0.98	0.761	4717	0.265
12368-PeCDD	31.16	J	0.9557	0.9553	-0.7	3.44E+05	1.77	Y	0.98	2.1	4717	0.265
12478-PeCDD	31.36	J	0.9617	0.9616	-0.2	1.60E+05	1.50	Y	0.98	0.974	4717	0.265
12379-PeCDD	31.47	J EMPC	0.9649	0.9648	-0.2	2.30E+05	1.84	N	0.98	1.4	4717	0.265
12369/12467/12489-PeCDD	31.73	J	0.9732	0.9729	-0.6	1.28E+05	1.75	Y	0.98	0.778	4717	0.265
12346/12347-PeCDD	32.11	J EMPC	0.9850	0.9847	-0.6	1.75E+05	2.02	N	0.98	1.07	4717	0.265
12378-PeCDD	32.63		**1.0006**	**1.0007**	**+0.2**	**1.81E+07**	**1.56**	**Y**	**0.98**	**111**	**4717**	**0.265**
12367-PeCDD	NotFnd		1.0038						0.98		4717	0.265
12389-PeCDD	33.09		1.0146	1.0148	+0.4	4.63E+06	1.49	Y	0.98	28.2	4717	0.265
124679/124689-HxCDD	34.94		0.9530	0.9528	-0.4	5.93E+06	1.27	Y	1.03	42.2	4092	0.267
123468-HxCDD	35.61		0.9715	0.9711	-0.9	8.47E+05	1.28	Y	1.03	6.03	4092	0.267
123679/123689-HxCDD	35.91		0.9795	0.9793	-0.4	1.40E+06	1.26	Y	1.03	10	4092	0.267
123469-HxCDD	36.04	J	0.9832	0.9828	-0.9	3.63E+05	1.22	Y	1.03	2.59	4092	0.267
123478-HxCDD	36.68		**1.0004**	**1.0004**	**0**	**1.63E+07**	**1.23**	**Y**	1.02	**121**	**4092**	**0.256**
123678-HxCDD	36.80		**1.0036**	**1.0036**	**0**	**1.81E+07**	**1.24**	**Y**	1.09	**126**	**4092**	**0.272**
123467-HxCDD	NotFnd		1.0089						1.03		4092	0.267
123789-HxCDD	37.11		**1.0118**	**1.0119**	**+0.2**	**1.65E+07**	**1.28**	**Y**	0.97	**116**	**4092**	**0.273**

Lab ID: B4526_17662_DF_006MSD | **Acq'd:** 12 Aug 2020 03:46 DTF | **Wt/Vol:** 9.18 g | **ICAL:** HRMS3_DF_10122018_28AUG2019

Client ID: CS-41-MSD | **UTP:** 12-Aug-2020 15:18:36 DTF | **J-level:** 0.545 pg/g | **Split:** 1 | **Checkcode:** 184-857-GMW

Datafile: 200811C18 | **Report:** 12 Aug 2020 15:22 TF | **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

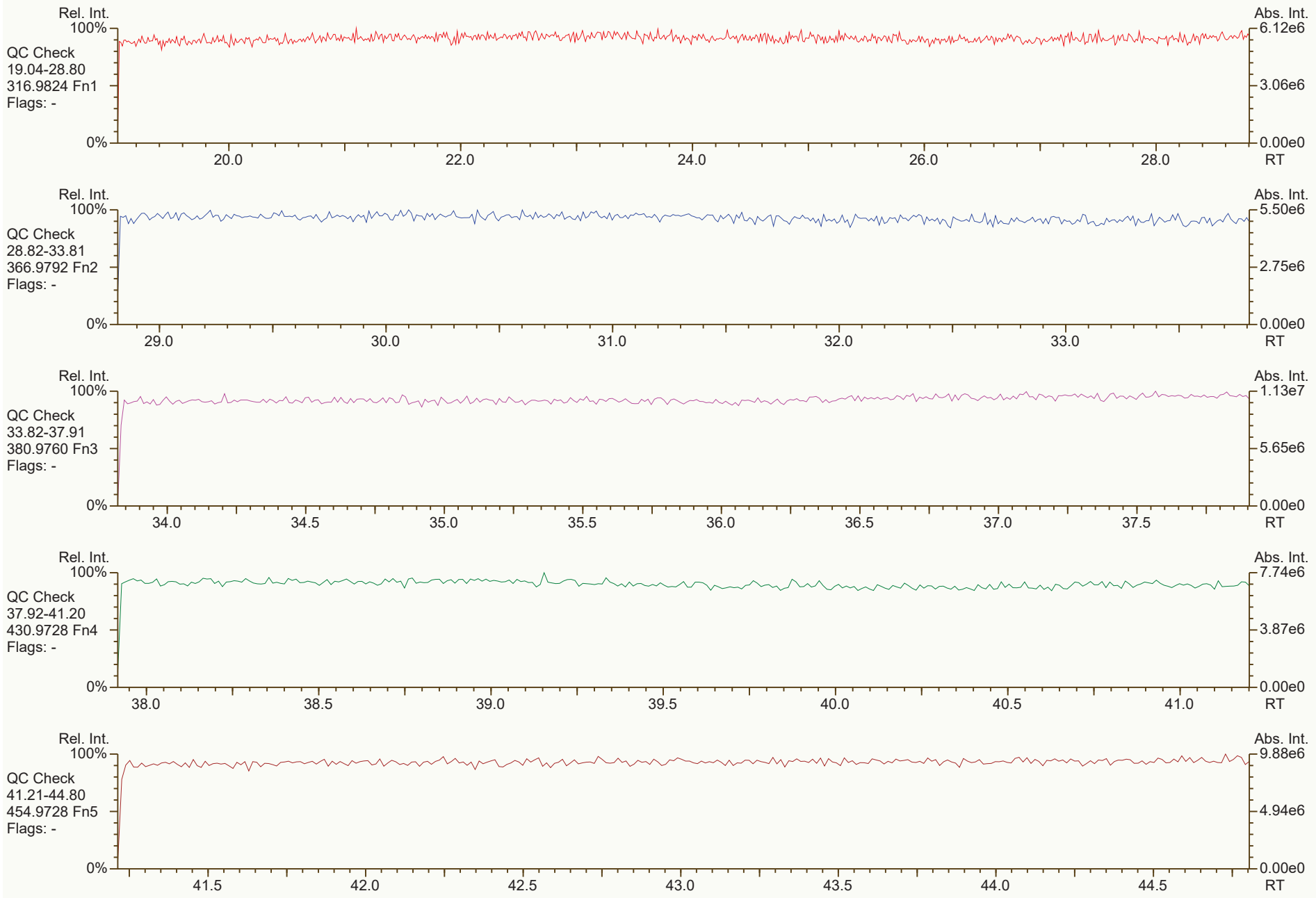
Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1234679-HpCDD	39.47		0.9826	0.9825	-0.2	1.92E+07	1.04	Y	0.98	184	2489	0.266
1234678-HpCDD	**40.18**		**1.0003**	**1.0003**	**0**	**1.87E+07**	**1.04**	**Y**	**0.98**	**179**	**2489**	**0.266**
OCDD	**42.89**		**1.0003**	**1.0003**	**0**	**4.94E+07**	**0.89**	**Y**	**1.07**	**844**	**2760**	**0.79**
OCDD-a	42.88	**#VALUE!**	1.0002	1.0001	-0.3	3.19E+06	2.67	Y	-	#VALUE!	6279	#VALUE!
1368-TCDF	20.68		0.7980	0.7969	-1.4	1.16E+07	0.77	Y	1.01	35.6	2687	0.0957
1468-TCDF	21.24	J	0.8204	0.8186	-2.3	1.61E+05	0.71	Y	1.01	0.494	2687	0.0957
2468-TCDF	21.88		0.8443	0.8432	-1.4	3.43E+06	0.78	Y	1.01	10.5	2687	0.0957
1346/1246-TCDF	NotFnd		0.8597						1.01		2687	0.0957
1347/1378/1247-TCDF	22.42		0.8665	0.8643	-3.0	5.04E+05	0.83	Y	1.01	1.54	2687	0.0957
1348-TCDF	22.76	J	0.8785	0.8772	-1.8	1.20E+05	0.87	Y	1.01	0.368	2687	0.0957
1248/1367/1379-TCDF	22.88		0.8840	0.8819	-2.9	2.46E+05	0.85	Y	1.01	0.753	2687	0.0957
1268-TCDF	23.32	J EMPC	0.9004	0.8989	-2.1	1.61E+05	0.91	N	1.01	0.494	2687	0.0957
1467-TCDF	NotFnd		0.9060						1.01		2687	0.0957
1478-TCDF	23.66		0.9132	0.9118	-2.0	1.78E+05	0.81	Y	1.01	0.545	2687	0.0957
1369/1237-TCDF	NotFnd		0.9287						1.01		2687	0.0957
2467-TCDF	24.22	J	0.9345	0.9335	-1.5	1.67E+05	0.75	Y	1.01	0.512	2687	0.0957
2368-TCDF	24.39		0.9409	0.9402	-1.0	3.20E+05	0.80	Y	1.01	0.982	2687	0.0957
1238/1234/1678/1469/1236-TCDF	24.50		0.9450	0.9444	-0.9	3.38E+05	0.87	Y	1.01	1.04	2687	0.0957
1278-TCDF	25.00		0.9638	0.9635	-0.4	3.23E+05	0.81	Y	1.01	0.991	2687	0.0957
1349-TCDF	NotFnd		0.9685						1.01		2687	0.0957
1267-TCDF	25.29	J EMPC	0.9751	0.9749	-0.3	1.38E+05	0.90	N	1.01	0.424	2687	0.0957
2346/1249-TCDF	NotFnd		0.9831						1.01		2687	0.0957
2347/1279-TCDF	NotFnd		0.9920						1.01		2687	0.0957
2348-TCDF	25.85		0.9964	0.9964	0	1.01E+07	0.78	Y	1.01	31.1	2687	0.0957
2378-TCDF	**25.97**		**1.0009**	**1.0010**	**+0.2**	**8.09E+06**	**0.76**	**Y**	**1.01**	**24.8**	**2687**	**0.0957**
2367/3467-TCDF	26.36		1.0164	1.0161	-0.5	3.64E+05	0.78	Y	1.01	1.11	2687	0.0957
1269-TCDF	NotFnd		1.0259						1.01		2687	0.0957
1239-TCDF	NotFnd		1.0373						1.01		2687	0.0957
1289-TCDF	28.14		1.0838	1.0845	+1.2	1.02E+07	0.81	Y	1.01	31.2	2687	0.0957
13468/12468-PeCDF	28.12		0.9052	0.9047	-0.8	7.04E+06	1.54	Y	0.98	28	2452	0.0934
13678/13467/12467-PeCDF	29.78	J	0.9582	0.9580	-0.4	3.20E+05	1.47	Y	0.98	1.27	4653	0.177
12368/13478/12478-PeCDF	29.94		0.9634	0.9634	0	8.63E+05	1.37	Y	0.98	3.44	4653	0.177
14678-PeCDF	NotFnd		0.9668						0.98		4653	0.177
13479-PeCDF	NotFnd		0.9700						0.98		4653	0.177
13469/12479-PeCDF	NotFnd		0.9781						0.98		4653	0.177
12346-PeCDF	NotFnd		0.9829						0.98		4653	0.177

Lab ID: B4526_17662_DF_006MSD | Acq'd: 12 Aug 2020 03:46 DTF | Wt/Vol: 9.18 g | ICAL: HRMS3_DF_10122018_28AUG2019

Client ID: CS-41-MSD | UTP: 12-Aug-2020 15:18:36 DTF | J-level: 0.545 pg/g | Split: 1 | Checkcode: 184-857-GMW

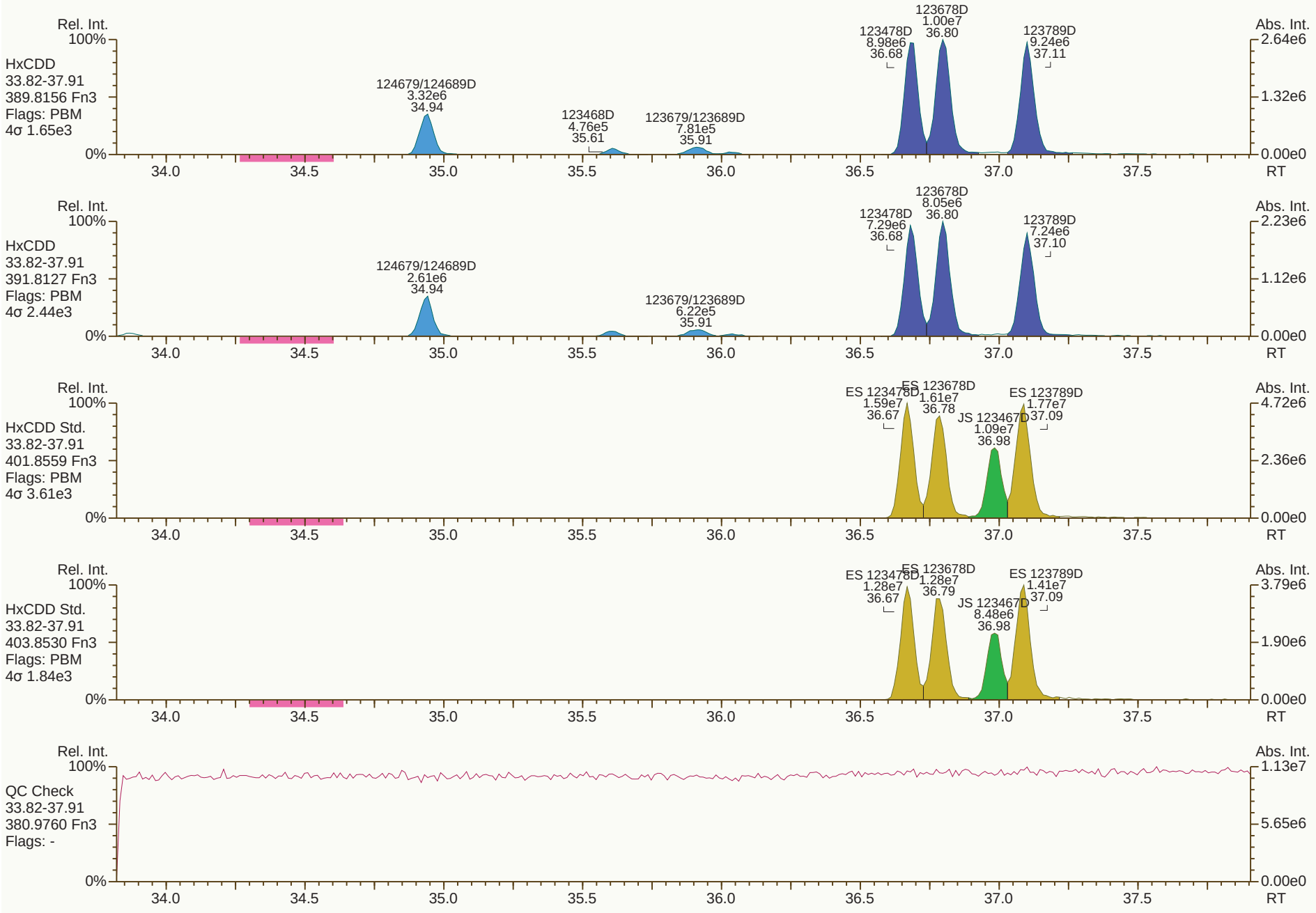
Datafile: 200811C18 | Report: 12 Aug 2020 15:22 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

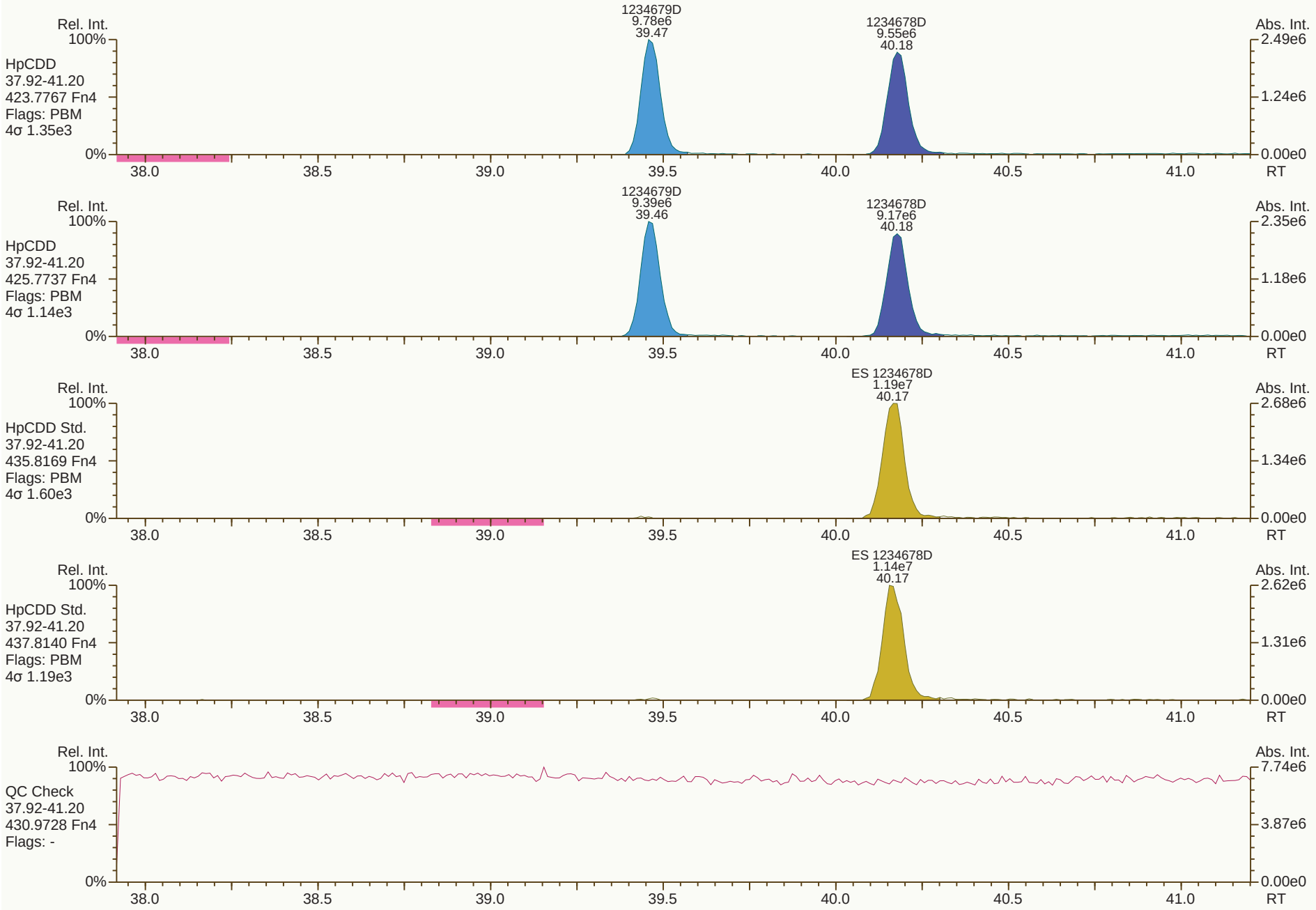
Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
23468/12469-PeCDF	30.65	J	0.9859	0.9861	+0.4	3.40E+05	1.48	Y	0.98	1.36	4653	0.177
12347-PeCDF	NotFnd		0.9884						0.98		4653	0.177
12348-PeCDF	30.89	J	0.9937	0.9937	0	1.23E+05	1.45	Y	0.98	0.49	4653	0.177
12378-PeCDF	**31.10**		**1.0006**	**1.0006**	**0**	**2.90E+07**	**1.53**	**Y**	**0.96**	**114**	**4653**	**0.181**
12678/12367-PeCDF	31.40		1.0097	1.0103	+1.1	1.41E+06	1.50	Y	0.98	5.62	4653	0.177
12379-PeCDF	NotFnd		1.0152						0.98		4653	0.177
12679-PeCDF	NotFnd		0.9923						0.98		4653	0.177
23467/12369-PeCDF	32.13	J	0.9966	0.9965	-0.2	1.97E+05	1.45	Y	0.98	0.783	4653	0.177
23478-PeCDF	**32.26**		**1.0005**	**1.0006**	**+0.2**	**2.98E+07**	**1.51**	**Y**	**0.99**	**120**	**4653**	**0.174**
23478/12489-PeCDF	NotFnd		0.0000						0.99			
12489-PeCDF	NotFnd		1.0043						0.98		4653	0.177
12349-PeCDF	NotFnd		1.0107						0.98		4653	0.177
12389-PeCDF	33.38		1.0349	1.0352	+0.6	6.01E+06	1.45	Y	0.98	23.9	4653	0.177
123468-HxCDF	34.25		0.9607	0.9606	-0.2	5.80E+06	1.22	Y	1.13	30.2	5053	0.244
124678/134678-HxCDF	34.46		0.9666	0.9662	-0.8	1.05E+06	1.27	Y	1.13	5.49	5053	0.244
134679-HxCDF	NotFnd		0.9730						1.13		5053	0.244
124679-HxCDF	NotFnd		0.9787						1.13		5053	0.244
124689-HxCDF	35.13		0.9850	0.9850	0	6.38E+05	1.17	Y	1.13	3.33	5053	0.244
123467-HxCDF	35.55	J	0.9971	0.9970	-0.2	1.70E+05	1.16	Y	1.13	0.889	5053	0.244
123478-HxCDF	**35.68**		**1.0005**	**1.0005**	**0**	**2.28E+07**	**1.21**	**Y**	**1.21**	**119**	**5053**	**0.228**
123678-HxCDF	**35.82**		**1.0005**	**1.0005**	**0**	**2.41E+07**	**1.20**	**Y**	**1.11**	**117**	**5053**	**0.227**
123479-HxCDF	NotFnd		1.0049						1.13		5053	0.244
123469-HxCDF	NotFnd		1.0090						1.13		5053	0.244
123679-HxCDF	NotFnd		0.9941						1.13		5053	0.244
234678-HxCDF	**36.50**		**1.0004**	**1.0005**	**+0.2**	**2.26E+07**	**1.23**	**Y**	**1.12**	**117**	**5053**	**0.238**
234678/123689-HxCDF	NotFnd		0.0000						1.12			
123689-HxCDF	NotFnd		1.0041						1.13		5053	0.244
123789-HxCDF	**37.47**		**1.0005**	**1.0005**	**0**	**1.95E+07**	**1.22**	**Y**	**1.11**	**112**	**5053**	**0.289**
123789/123489-HxCDF	NotFnd		0.0000						1.11			
123489-HxCDF	NotFnd		1.0009						1.13		5053	0.244
1234678-HpCDF	**39.16**		**1.0003**	**1.0003**	**0**	**2.08E+07**	**1.03**	**Y**	**1.32**	**120**	**3453**	**0.186**
1234679-HpCDF	NotFnd		1.0075						1.29		3453	0.233
1234689-HpCDF	39.60		1.0112	1.0117	+1.2	1.94E+06	1.02	Y	1.29	13.2	3453	0.233
1234789-HpCDF	**40.61**		**1.0003**	**1.0003**	**0**	**1.36E+07**	**1.04**	**Y**	**1.26**	**113**	**3453**	**0.297**
OCDF	**43.03**		**1.0003**	**1.0002**	**-0.3**	**1.80E+07**	**0.90**	**Y**	**1.03**	**242**	**2785**	**0.557**
OCDF-a	43.04	**#VALUE!**	1.0002	1.0006	+1.0	7.03E+05	2.09	N	-	#VALUE!	2379	#VALUE!

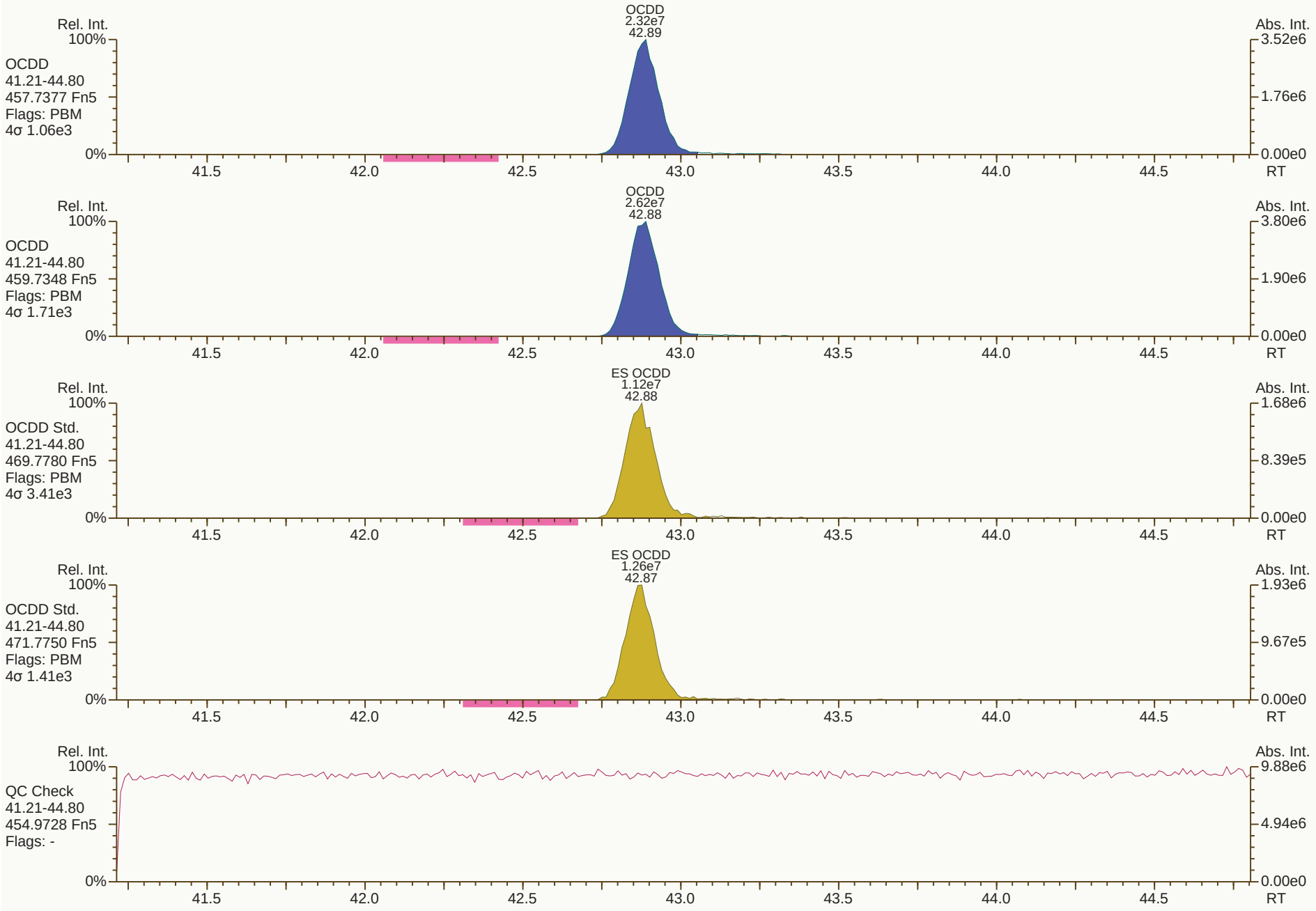

Rel. Int.
100%
0%
Abs. Int.
6.12e6
3.06e6
0.00e0
RT
QC Check
19.04-28.80
316.9824 Fn1
Flags: -
20.0
22.0
24.0
26.0
28.0
QC Check
28.82-33.81
366.9792 Fn2
Flags: -
5.50e6
2.75e6
29.0
30.0
31.0
32.0
33.0
QC Check
33.82-37.91
380.9760 Fn3
Flags: -
1.13e7
5.65e6
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
QC Check
37.92-41.20
430.9728 Fn4
Flags: -
7.74e6
3.87e6
38.0
38.5
39.0
39.5
40.0
40.5
41.0
QC Check
41.21-44.80
454.9728 Fn5
Flags: -
9.88e6
4.94e6
41.5
42.0
42.5
43.0
43.5
44.0
44.5


Rel. Int.
100%
TCDD
19.04-28.80
319.8965 Fn1
Flags: PBM
4σ 2.07e3
0%
1368D
3.56e6
22.89
1239D
2.33e6
26.76
2378D
2.52e6
26.92
1289D
3.17e6
27.98
Abs. Int.
7.66e5
3.83e5
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD
19.04-28.80
321.8936 Fn1
Flags: PBM
4σ 1.95e3
0%
1368D
4.64e6
22.89
1239D
2.97e6
26.76
2378D
3.13e6
26.92
1289D
4.00e6
27.97
Abs. Int.
9.41e5
4.71e5
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
37Cl-TCDD
19.04-28.80
327.8850 Fn1
Flags: PBM
4σ 1.08e3
0%
CS 37Cl-2378D
2.14e7
26.92
Abs. Int.
4.66e6
2.33e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.80
331.9368 Fn1
Flags: PBM
4σ 3.52e3
0%
JS 1234D
2.48e7
26.20
ES 2378D
2.09e7
26.90
Abs. Int.
5.27e6
2.64e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.80
333.9339 Fn1
Flags: PBM
4σ 2.49e3
0%
JS 1234D
3.03e7
26.20
ES 2378D
2.63e7
26.90
Abs. Int.
6.59e6
3.29e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT


Rel. Int.
100%
PeCDD
28.82-33.81
355.8546 Fn2
Flags: PBM
4σ 2.49e3
12479/12468D
3.13e6
30.02
12378D
1.11e7
32.63
12389D
2.77e6
33.09
Abs. Int.
3.04e6
1.52e6
0.00e0
0%
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD
28.82-33.81
357.8517 Fn2
Flags: PBM
4σ 2.23e3
12479/12468D
2.07e6
30.02
12378D
7.07e6
32.63
12389D
1.86e6
33.09
Abs. Int.
1.98e6
9.89e5
0.00e0
0%
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.82-33.81
367.8949 Fn2
Flags: PBM
4σ 2.71e3
CS 12347D
2.13e7
32.09
ES 12378D
2.18e7
32.61
Abs. Int.
5.92e6
2.96e6
0.00e0
0%
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.82-33.81
369.8919 Fn2
Flags: PBM
4σ 1.51e3
CS 12347D
1.36e7
32.09
ES 12378D
1.44e7
32.61
Abs. Int.
3.97e6
1.99e6
0.00e0
0%
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
QC Check
28.82-33.81
366.9792 Fn2
Flags: -
Abs. Int.
5.50e6
2.75e6
0.00e0
0%
29.0
30.0
31.0
32.0
33.0
RT


Rel. Int.
100%
HxCDD
33.82-37.91
389.8156 Fn3
Flags: PBM
4σ 1.65e3
0%
124679/124689D
3.32e6
34.94
123468D
4.76e5
35.61
123679/123689D
7.81e5
35.91
123478D
8.98e6
36.68
123678D
1.00e7
36.80
123789D
9.24e6
37.11
Abs. Int.
2.64e6
1.32e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD
33.82-37.91
391.8127 Fn3
Flags: PBM
4σ 2.44e3
0%
124679/124689D
2.61e6
34.94
123679/123689D
6.22e5
35.91
123478D
7.29e6
36.68
123678D
8.05e6
36.80
123789D
7.24e6
37.10
Abs. Int.
2.23e6
1.12e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.82-37.91
401.8559 Fn3
Flags: PBM
4σ 3.61e3
0%
ES 123478D
1.59e7
36.67
ES 123678D
1.61e7
36.78
JS 123467D
1.09e7
36.98
ES 123789D
1.77e7
37.09
Abs. Int.
4.72e6
2.36e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.82-37.91
403.8530 Fn3
Flags: PBM
4σ 1.84e3
0%
ES 123478D
1.28e7
36.67
ES 123678D
1.28e7
36.79
JS 123467D
8.48e6
36.98
ES 123789D
1.41e7
37.09
Abs. Int.
3.79e6
1.90e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
QC Check
33.82-37.91
380.9760 Fn3
Flags: -
0%
Abs. Int.
1.13e7
5.65e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT


Rel. Int.
100%
HpCDD
37.92-41.20
423.7767 Fn4
Flags: PBM
4σ 1.35e3
1234679D
9.78e6
39.47
1234678D
9.55e6
40.18
Abs. Int.
2.49e6
1.24e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD
37.92-41.20
425.7737 Fn4
Flags: PBM
4σ 1.14e3
1234679D
9.39e6
39.46
1234678D
9.17e6
40.18
Abs. Int.
2.35e6
1.18e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.92-41.20
435.8169 Fn4
Flags: PBM
4σ 1.60e3
ES 1234678D
1.19e7
40.17
Abs. Int.
2.68e6
1.34e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.92-41.20
437.8140 Fn4
Flags: PBM
4σ 1.19e3
ES 1234678D
1.14e7
40.17
Abs. Int.
2.62e6
1.31e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
QC Check
37.92-41.20
430.9728 Fn4
Flags: -
Abs. Int.
7.74e6
3.87e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT


OCDD
2.32e7
42.89
Rel. Int.
100%
OCDD
41.21-44.80
457.7377 Fn5
Flags: PBM
4σ 1.06e3
0%
Abs. Int.
3.52e6
1.76e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
OCDD
2.62e7
42.88
Rel. Int.
100%
OCDD
41.21-44.80
459.7348 Fn5
Flags: PBM
4σ 1.71e3
0%
Abs. Int.
3.80e6
1.90e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDD
1.12e7
42.88
Rel. Int.
100%
OCDD Std.
41.21-44.80
469.7780 Fn5
Flags: PBM
4σ 3.41e3
0%
Abs. Int.
1.68e6
8.39e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDD
1.26e7
42.87
Rel. Int.
100%
OCDD Std.
41.21-44.80
471.7750 Fn5
Flags: PBM
4σ 1.41e3
0%
Abs. Int.
1.93e6
9.67e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
QC Check
41.21-44.80
454.9728 Fn5
Flags: -
0%
Abs. Int.
9.88e6
4.94e6
0.00e0
41.5
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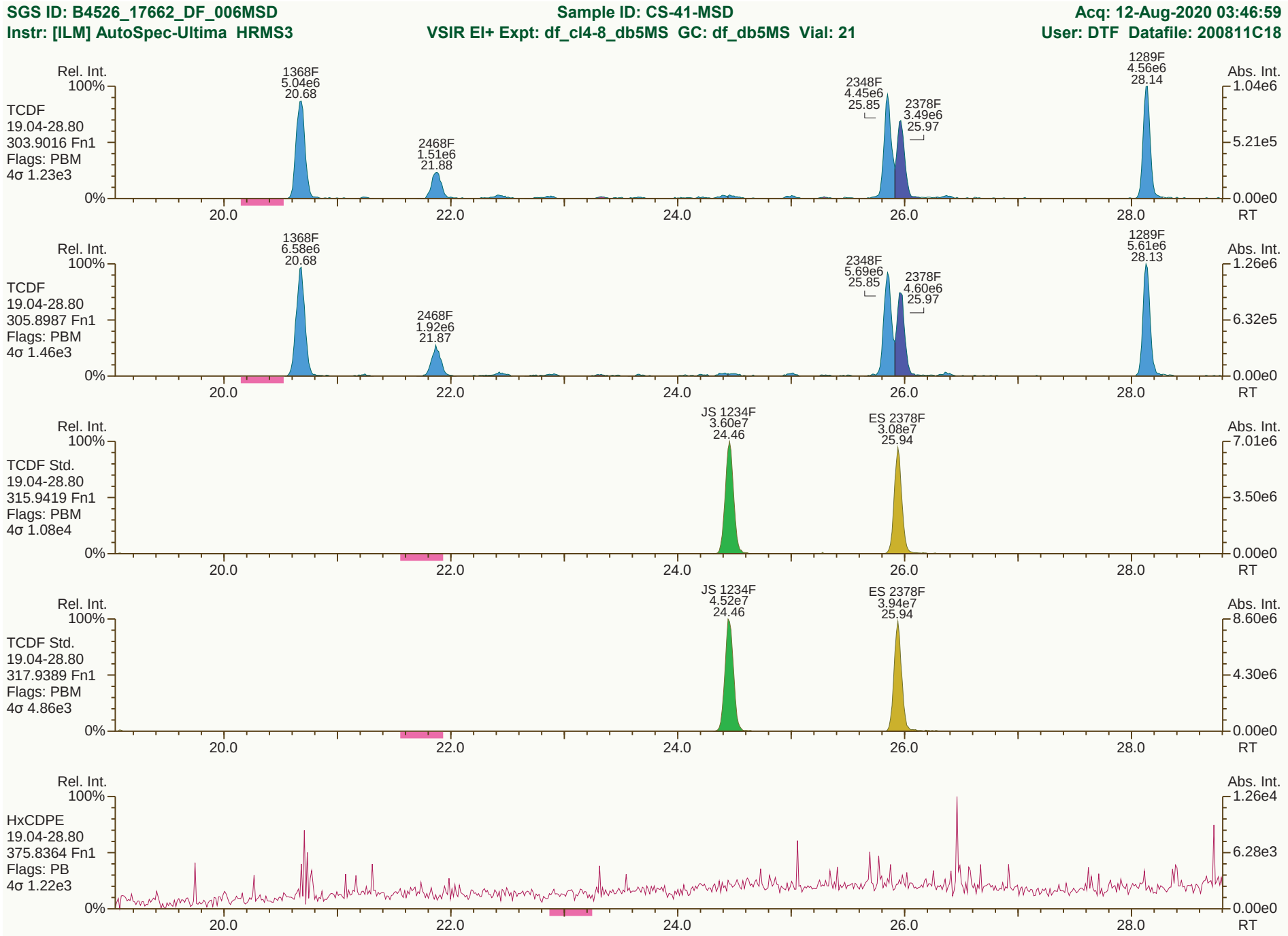
42.5
43.0
43.5
44.0
44.5
RT



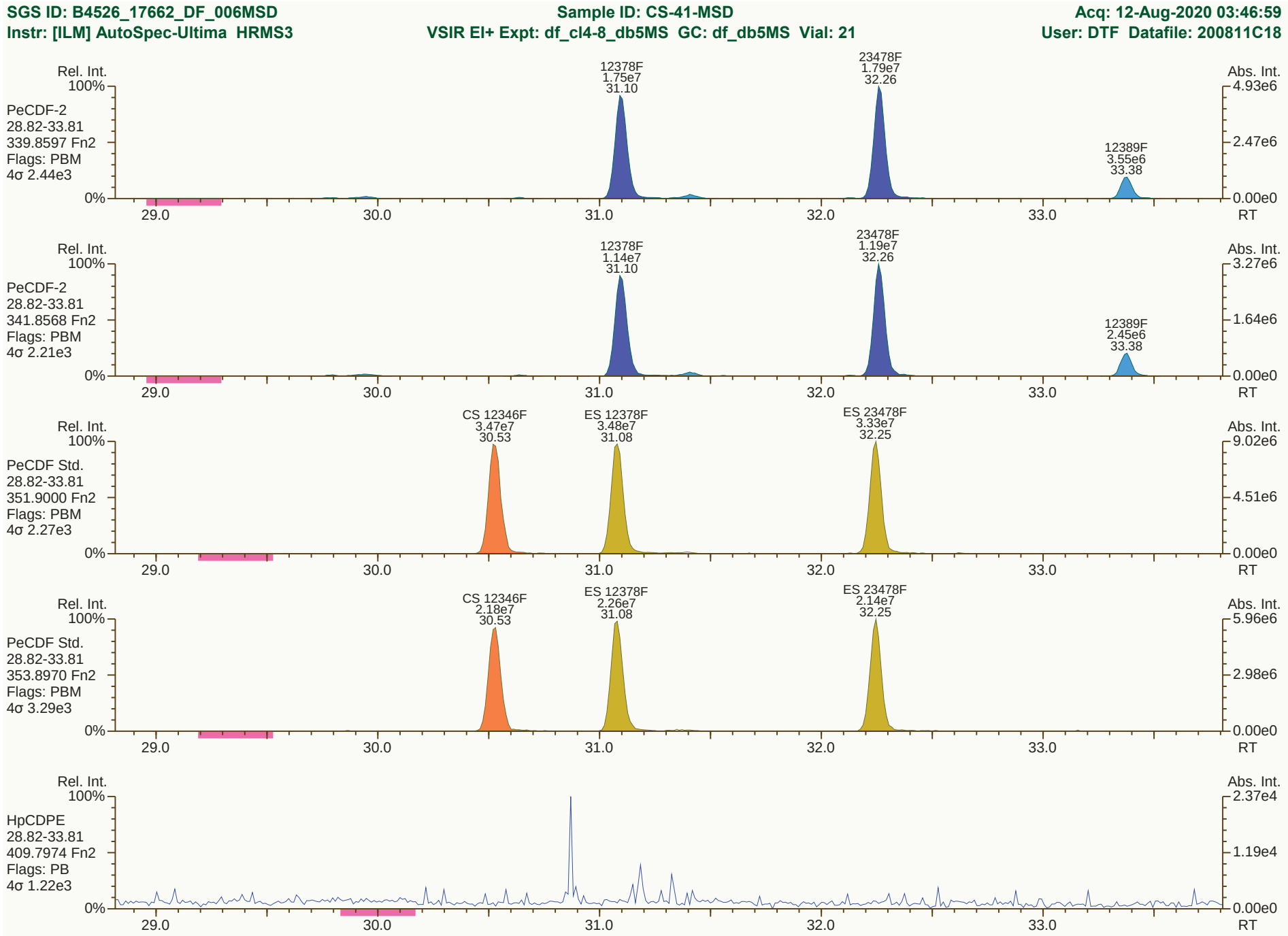
Results: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\B4526_17662_DF_006MSD.utp_res, saved 12-Aug-2020 15:18 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 7873, 7370, 7386 scc: 184-857
Revised: 12-Aug-2020 11:37 (DTF) Printed: 12-Aug-2020 15:37 Page 7 of 12


Rel. Int.
100%
0%
PeCDF-1
19.04-28.80
339.8597 Fn1
Flags: PBM
4σ 1.15e3
13468/12468F
4.27e6
28.12
Abs. Int.
9.73e5
4.86e5
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
0%
PeCDF-1
19.04-28.80
341.8568 Fn1
Flags: PBM
4σ 1.30e3
13468/12468F
2.77e6
28.12
Abs. Int.
5.80e5
2.90e5
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
0%
QC Check
19.04-28.80
316.9824 Fn1
Flags: -
Abs. Int.
6.12e6
3.06e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT

SGS ID: B4526_17662_DF_006MSD
Instr: [ILM] AutoSpec-Ultima HRMS3

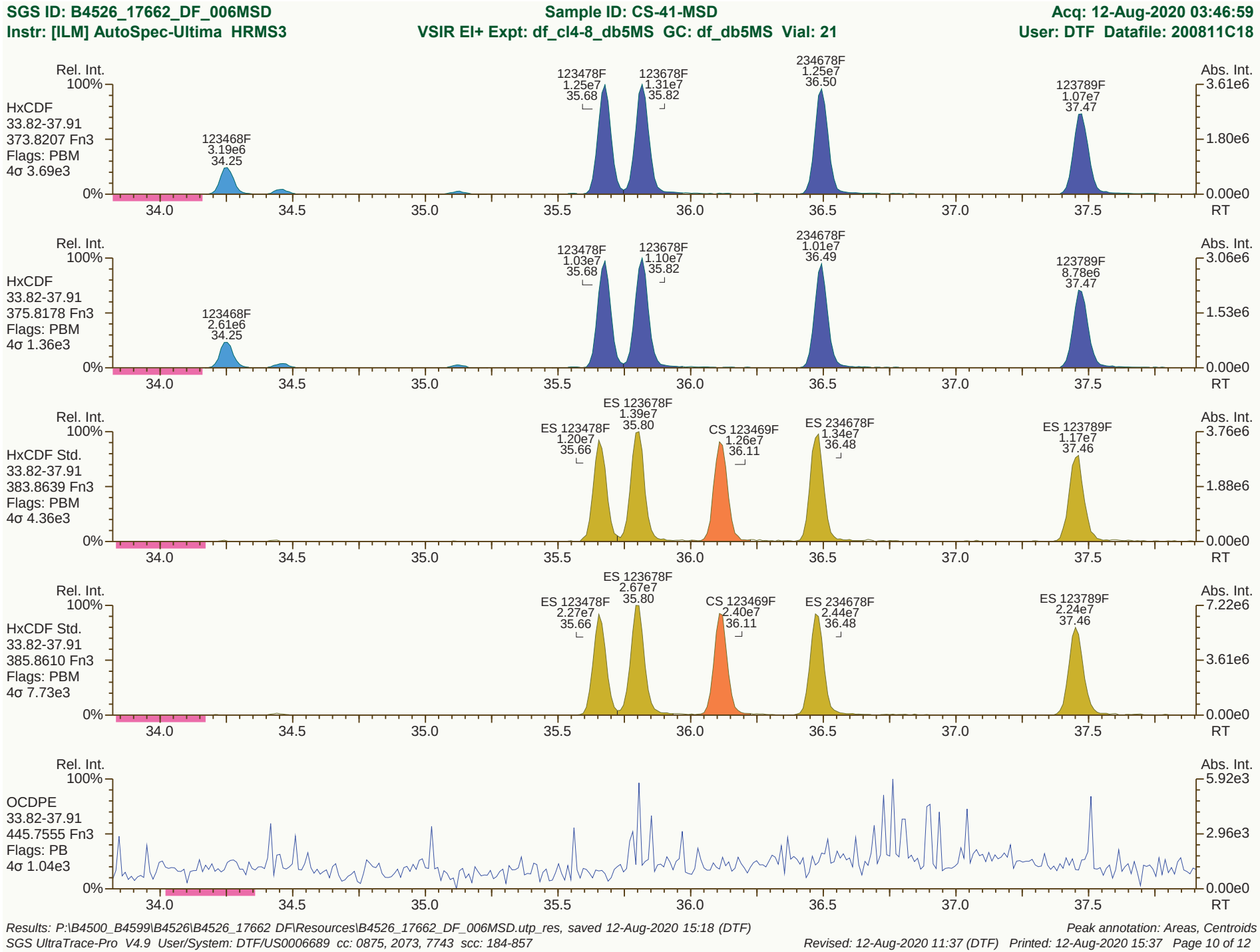
Sample ID: CS-41-MSD
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 21

Acq: 12-Aug-2020 03:46:59
User: DTF Datafile: 200811C18



Results: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\B4526_17662_DF_006MSD.utp_res, saved 12-Aug-2020 15:18 (DTF)
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 2637, 7913, 0520 scc: 184-857

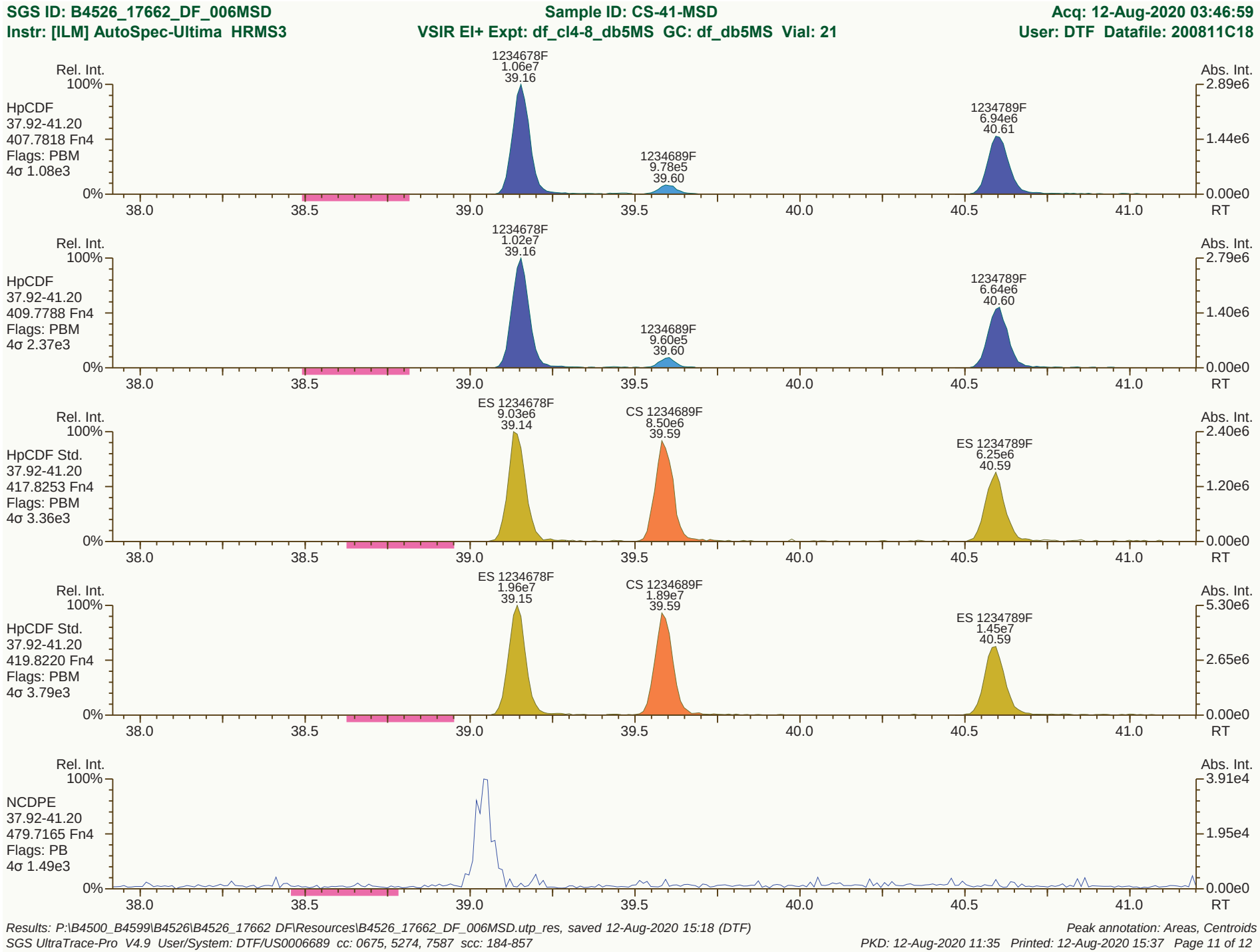
Peak annotation: Areas, Centroids
Revised: 12-Aug-2020 11:37 (DTF) Printed: 12-Aug-2020 15:37 Page 9 of 12


SGS ID: B4526_17662_DF_006MSD
Sample ID: CS-41-MSD
Acq: 12-Aug-2020 03:46:59
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 21
User: DTF Datafile: 200811C18
Rel. Int.
Abs. Int.
HxCDF
33.82-37.91
373.8207 Fn3
Flags: PBM
4σ 3.69e3
123468F 3.19e6 34.25
123478F 1.25e7 35.68
123678F 1.31e7 35.82
234678F 1.25e7 36.50
123789F 1.07e7 37.47
HxCDF
33.82-37.91
375.8178 Fn3
Flags: PBM
4σ 1.36e3
123468F 2.61e6 34.25
123478F 1.03e7 35.68
123678F 1.10e7 35.82
234678F 1.01e7 36.49
123789F 8.78e6 37.47
HxCDF Std.
33.82-37.91
383.8639 Fn3
Flags: PBM
4σ 4.36e3
ES 123478F 1.20e7 35.66
ES 123678F 1.39e7 35.80
CS 123469F 1.26e7 36.11
ES 234678F 1.34e7 36.48
ES 123789F 1.17e7 37.46
HxCDF Std.
33.82-37.91
385.8610 Fn3
Flags: PBM
4σ 7.73e3
ES 123478F 2.27e7 35.66
ES 123678F 2.67e7 35.80
CS 123469F 2.40e7 36.11
ES 234678F 2.44e7 36.48
ES 123789F 2.24e7 37.46
OCDPE
33.82-37.91
445.7555 Fn3
Flags: PB
4σ 1.04e3
100%
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
3.61e6
1.80e6
0.00e0
3.06e6
1.53e6
3.76e6
1.88e6
7.22e6
3.61e6
5.92e3
2.96e3

SGS ID: B4526_17662_DF_006MSD
Instr: [ILM] AutoSpec-Ultima HRMS3

Sample ID: CS-41-MSD
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 21

Acq: 12-Aug-2020 03:46:59
User: DTF Datafile: 200811C18



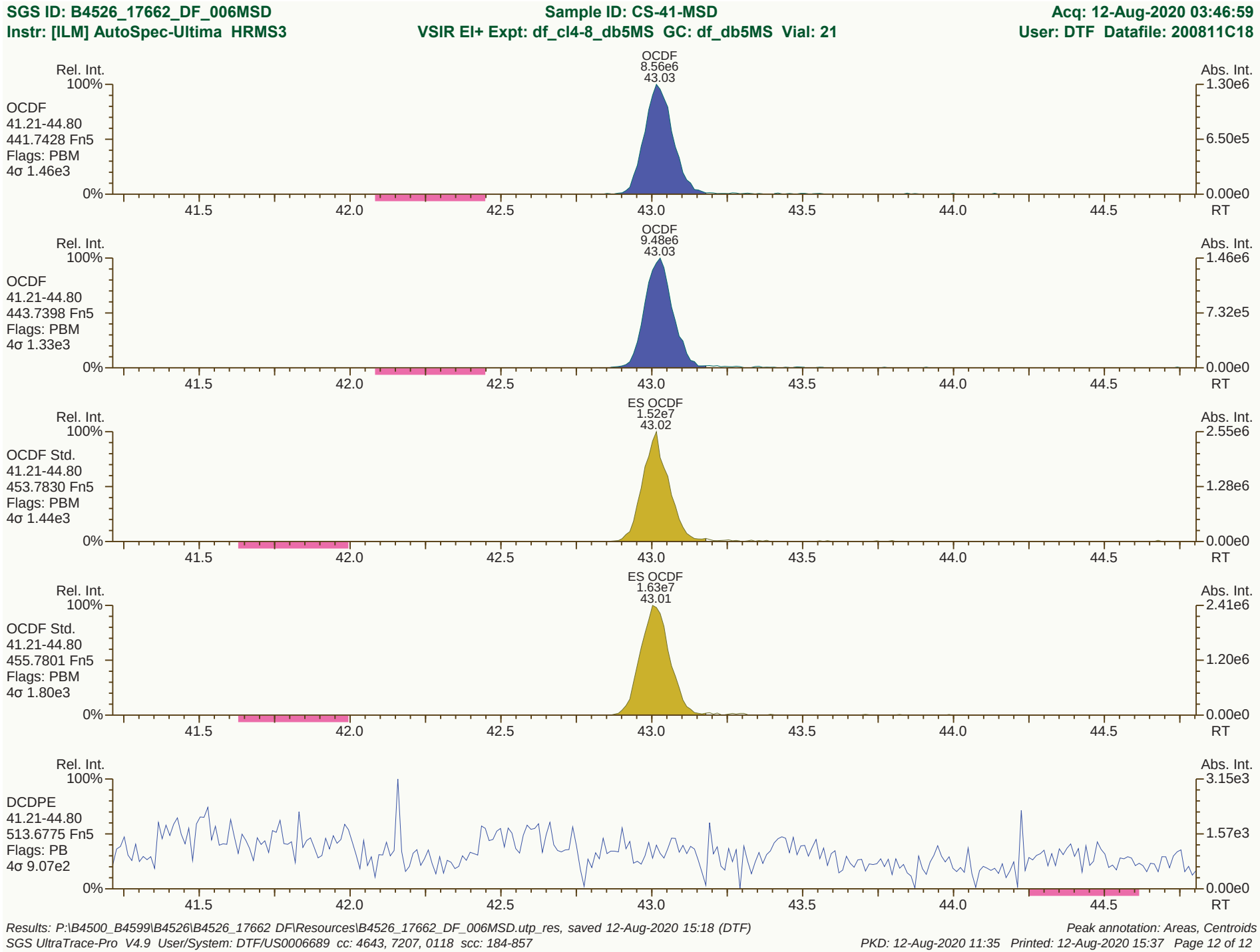
Results: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\B4526_17662_DF_006MSD.utp_res, saved 12-Aug-2020 15:18 (DTF)
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 0675, 5274, 7587 scc: 184-857

Peak annotation: Areas, Centroids
PKD: 12-Aug-2020 11:35 Printed: 12-Aug-2020 15:37 Page 11 of 12

SGS ID: B4526_17662_DF_006MSD
Instr: [ILM] AutoSpec-Ultima HRMS3

Sample ID: CS-41-MSD
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 21

Acq: 12-Aug-2020 03:46:59
User: DTF Datafile: 200811C18



Results: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\B4526_17662_DF_006MSD.utp_res, saved 12-Aug-2020 15:18 (DTF)
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 4643, 7207, 0118 scc: 184-857

Peak annotation: Areas, Centroids
PKD: 12-Aug-2020 11:35 Printed: 12-Aug-2020 15:37 Page 12 of 12

Lab ID: B4526_17662_DF_007 **Acq'd:** 12 Aug 2020 04:33 DTF **Wt/Vol:** 8.60 g **ICAL:** HRMS3_DF_10122018_28AUG2019

Client ID: CS-42 **UTP:** 12-Aug-2020 15:18:37 DTF **J-level:** 0.581 pg/g **Split:** 1 **Checkcode:** 726-292-LFR

Datafile: 200811C19 **Report:** 12 Aug 2020 15:22 TF **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	NotFnd		1.0008	-		-	-	-	1.19	-	6934	0.314
12378-PeCDD	32.64	J	1.0006	1.0006	0	1.80E+05	1.49	Y	0.98	1.06	5419	0.292
123478-HxCDD	36.69	J	1.0004	1.0004	0	2.47E+05	1.09	Y	1.02	1.75	4412	0.285
123678-HxCDD	36.80		1.0036	1.0035	-0.2	4.48E+05	1.26	Y	1.09	3.06	4412	0.273
123789-HxCDD	37.11	J	1.0118	1.0118	0	3.71E+05	1.29	Y	0.97	2.5	4412	0.269
1234678-HpCDD	40.19		1.0003	1.0004	+0.2	8.50E+06	1.02	Y	0.98	73.8	3091	0.275
OCDD	42.89		1.0003	1.0003	0	7.61E+07	0.90	Y	1.07	1,070	3445	0.83
2378-TCDF	25.97		1.0009	1.0009	0	2.65E+05	0.78	Y	1.01	0.781	3383	0.121
12378-PeCDF	31.10	J	1.0006	1.0005	-0.2	3.05E+05	1.43	Y	0.96	1.16	3957	0.146
23478-PeCDF	32.28	J	1.0005	1.0007	+0.4	3.42E+05	1.44	Y	0.99	1.37	3957	0.14
123478-HxCDF	35.68	J	1.0005	1.0006	+0.2	3.16E+05	1.34	Y	1.21	1.55	5505	0.232
123678-HxCDF	35.82	J EMPC	1.0005	1.0004	-0.2	2.63E+05	1.03	N	1.11	1.2	5505	0.214
234678-HxCDF	36.50	J	1.0004	1.0005	+0.2	2.97E+05	1.12	Y	1.12	1.49	5505	0.242
123789-HxCDF	37.49	J	1.0005	1.0007	+0.4	2.27E+05	1.13	Y	1.11	1.2	5505	0.28
1234678-HpCDF	39.16		1.0003	1.0003	0	2.00E+06	1.02	Y	1.32	10.8	4442	0.221
1234789-HpCDF	40.60	J EMPC	1.0003	1.0001	-0.5	1.72E+05	1.32	N	1.26	1.22	4442	0.343
OCDF	43.03		1.0003	1.0002	-0.3	2.17E+06	0.88	Y	1.03	23.9	3266	0.602

Name	Act RT		Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	26.90		1.0266	1.0268	+0.3	5.16E+07	0.80	Y	0.99	86.3
ES 12378-PeCDD	32.62		1.2430	1.2450	+3.9	4.01E+07	1.55	Y	0.83	80
ES 123478-HxCDD	36.68		0.9916	0.9915	-0.2	3.20E+07	1.31	Y	0.95	75.9
ES 123678-HxCDD	36.79		0.9947	0.9946	-0.2	3.13E+07	1.19	Y	0.98	72.1
ES 123789-HxCDD	37.09		1.0029	1.0028	-0.2	3.56E+07	1.25	Y	1.14	70.2
ES 1234678-HpCDD	40.17		1.0851	1.0860	+2.2	2.74E+07	1.06	Y	0.90	68.5
ES OCDD	42.88		1.1584	1.1592	+2.1	3.07E+07	0.92	Y	0.63	55
ES 2378-TCDF	25.95		1.0602	1.0608	+0.9	7.79E+07	0.79	Y	1.00	88.7
ES 12378-PeCDF	31.09		1.2683	1.2708	+4.7	6.36E+07	1.56	Y	0.83	86.9
ES 23478-PeCDF	32.25		1.3156	1.3184	+5.4	5.89E+07	1.58	Y	0.81	82.9
ES 123478-HxCDF	35.66		0.9644	0.9642	-0.4	3.92E+07	0.53	Y	1.12	78.4
ES 123678-HxCDF	35.81		0.9682	0.9681	-0.2	4.61E+07	0.52	Y	1.33	77.7
ES 234678-HxCDF	36.48		0.9864	0.9863	-0.2	4.15E+07	0.54	Y	1.21	77
ES 123789-HxCDF	37.46		1.0128	1.0128	0	3.95E+07	0.52	Y	1.12	79.2
ES 1234678-HpCDF	39.15		1.0578	1.0583	+1.2	3.24E+07	0.45	Y	0.92	78.7
ES 1234789-HpCDF	40.60		1.0967	1.0976	+2.2	2.60E+07	0.47	Y	0.82	71.3
ES OCDF	43.02		1.1623	1.1630	+1.8	4.09E+07	0.90	Y	0.78	58.8

Lab ID: B4526_17662_DF_007 | Acq'd: 12 Aug 2020 04:33 DTF | Wt/Vol: 8.60 g | ICAL: HRMS3_DF_10122018_28AUG2019

Client ID: CS-42 | UTP: 12-Aug-2020 15:18:37 DTF | J-level: 0.581 pg/g | Split: 1 | Checkcode: 726-292-LFR

Datafile: 200811C19 | Report: 12 Aug 2020 15:22 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %	
JS 1234-TCDD	26.20		-	-	-	6.05E+07	0.83	Y	-	-	
JS 1234-TCDF	24.46		-	-	-	8.82E+07	0.78	Y	-	-	
JS 123467-HxCDD	36.99		-	-	-	2.23E+07	1.27	Y	-	-	
CS 37Cl-2378-TCDD	26.93		1.0276	1.0277	+0.2	2.36E+07	n/a	-	1.12	87.1	
CS 12347-PeCDD	32.10		1.2233	1.2251	+3.5	4.16E+07	1.58	Y	0.71	96.4	
CS 12346-PeCDF	30.54		1.2459	1.2482	+4.2	6.50E+07	1.51	Y	0.81	91.2	
CS 123469-HxCDF	36.12		0.9767	0.9765	-0.4	4.18E+07	0.52	Y	1.12	83.5	
CS 1234689-HpCDF	39.59		1.0696	1.0703	+1.7	3.36E+07	0.47	Y	0.90	83.9	
~~SS 37Cl-2378-TCDD~~	~~26.93~~		~~1.0276~~	~~1.0277~~	~~+0.2~~	~~2.36E+07~~	~~n/a~~		~~1.14~~	~~100~~	Not used in this project.
~~SS 12347-PeCDD~~	~~32.10~~		~~1.2233~~	~~1.2251~~	~~+3.5~~	~~4.16E+07~~	~~1.58~~	~~Y~~	~~0.86~~	~~120~~	CL 13Aug20
~~SS 12346-PeCDF~~	~~30.54~~		~~1.2459~~	~~1.2482~~	~~+4.2~~	~~6.50E+07~~	~~1.51~~	~~Y~~	~~0.98~~	~~105~~	
~~SS 123469-HxCDF~~	~~36.12~~		~~0.9767~~	~~0.9765~~	~~-0.4~~	~~4.18E+07~~	~~0.52~~	~~Y~~	~~0.85~~	~~107~~	
~~SS 1234689-HpCDF~~	~~39.59~~		~~1.0696~~	~~1.0703~~	~~+1.7~~	~~3.36E+07~~	~~0.47~~	~~Y~~	~~0.97~~	~~106~~	

Totals	Conc	EMPC
Total TCDD	5.25	6.91
Total PeCDD	13.2	14.7
Total HxCDD	41.5	41.5
Total HpCDD	232	232
Total Tetra-Octa Dioxins	1370	1370
Total TCDF	14.4	16.9
Total PeCDF	13.3	14
Total HxCDF	16.4	17.6
Total HpCDF	26.6	28.5
Total Tetra-Octa Furans	94.7	101
Total Tetra-Octa Dioxins & Furans	1460	1470

Lab ID: B4526_17662_DF_007 **Acq'd:** 12 Aug 2020 04:33 DTF **Wt/Vol:** 8.60 g **ICAL:** HRMS3_DF_10122018_28AUG2019

Client ID: CS-42 **UTP:** 12-Aug-2020 15:18:37 DTF **J-level:** 0.581 pg/g **Split:** 1 **Checkcode:** 726-292-LFR

Datafile: 200811C19 **Report:** 12 Aug 2020 15:22 TF **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1368-TCDD	22.90		0.8523	0.8511	-1.6	7.19E+05	0.73	Y	1.19	2.73	6934	0.314
1379-TCDD	23.31		0.8682	0.8663	-2.7	4.15E+05	0.84	Y	1.19	1.57	6934	0.314
1369-TCDD	NotFnd		0.8858						1.19		6934	0.314
1469-TCDD	NotFnd		0.9177						1.19		6934	0.314
1247/1246/1248/1249-TCDD	24.91		0.9274	0.9258	-2.4	2.52E+05	0.77	Y	1.19	0.955	6934	0.314
1378-TCDD	25.14	EMPC	0.9349	0.9343	-0.9	1.61E+05	0.97	N	1.19	0.61	6934	0.314
1268-TCDD	NotFnd		0.9430						1.19		6934	0.314
1478-TCDD	NotFnd		0.9529						1.19		6934	0.314
1279-TCDD	NotFnd		0.9597						1.19		6934	0.314
1234/1269-TCDD	26.21	J EMPC	0.9739	0.9743	+0.6	1.11E+05	0.93	N	1.19	0.421	6934	0.314
1236-TCDD	NotFnd		0.9794						1.19		6934	0.314
1237/1238-TCDD	26.61	EMPC	0.9895	0.9892	-0.5	1.64E+05	0.64	N	1.19	0.624	6934	0.314
1239-TCDD	NotFnd		0.9950						1.19		6934	0.314
2378-TCDD	**NotFnd**		**1.0008**						**1.19**		**6934**	**0.314**
1278-TCDD	NotFnd		1.0139						1.19		6934	0.314
1267-TCDD	NotFnd		1.0194						1.19		6934	0.314
1289-TCDD	NotFnd		1.0397						1.19		6934	0.314
12479/12468-PeCDD	30.02		0.9209	0.9202	-1.3	6.89E+05	1.32	Y	0.98	4.06	5419	0.292
12469-PeCDD	30.58	J EMPC	0.9382	0.9375	-1.3	1.43E+05	2.27	N	0.98	0.84	5419	0.292
12368-PeCDD	31.16	J	0.9557	0.9554	-0.6	4.31E+05	1.34	Y	0.98	2.54	5419	0.292
12478-PeCDD	31.36	J EMPC	0.9617	0.9613	-0.8	1.16E+05	1.89	N	0.98	0.682	5419	0.292
12379-PeCDD	31.47	J	0.9649	0.9648	-0.2	3.64E+05	1.66	Y	0.98	2.14	5419	0.292
12369/12467/12489-PeCDD	31.74	J	0.9732	0.9730	-0.4	1.68E+05	1.54	Y	0.98	0.989	5419	0.292
12346/12347-PeCDD	32.12	J	0.9850	0.9848	-0.4	3.21E+05	1.58	Y	0.98	1.89	5419	0.292
12378-PeCDD	32.64	J	**1.0006**	**1.0006**	**0**	**1.80E+05**	**1.49**	**Y**	**0.98**	**1.06**	**5419**	**0.292**
12367-PeCDD	NotFnd		1.0038						0.98		5419	0.292
12389-PeCDD	33.11	J	1.0146	1.0149	+0.6	8.08E+04	1.51	Y	0.98	0.476	5419	0.292
124679/124689-HxCDD	34.95		0.9530	0.9528	-0.4	1.86E+06	1.32	Y	1.03	12.8	4412	0.275
123468-HxCDD	35.62		0.9715	0.9711	-0.9	1.07E+06	1.24	Y	1.03	7.34	4412	0.275
123679/123689-HxCDD	35.91		0.9795	0.9792	-0.6	1.50E+06	1.31	Y	1.03	10.3	4412	0.275
123469-HxCDD	36.05	J	0.9832	0.9828	-0.9	3.44E+05	1.32	Y	1.03	2.36	4412	0.275
123478-HxCDD	36.69	J	**1.0004**	**1.0004**	**0**	**2.47E+05**	**1.09**	**Y**	1.02	**1.75**	**4412**	**0.285**
123678-HxCDD	36.80		**1.0036**	**1.0035**	**-0.2**	**4.48E+05**	**1.26**	**Y**	1.09	**3.06**	**4412**	**0.273**
123467-HxCDD	37.00	J	1.0089	1.0088	-0.2	2.00E+05	1.32	Y	1.03	1.38	4412	0.275
123789-HxCDD	37.11	J	**1.0118**	**1.0118**	**0**	**3.71E+05**	**1.29**	**Y**	0.97	**2.5**	**4412**	**0.269**

Lab ID: B4526_17662_DF_007 **Acq'd:** 12 Aug 2020 04:33 DTF **Wt/Vol:** 8.60 g **ICAL:** HRMS3_DF_10122018_28AUG2019

Client ID: CS-42 **UTP:** 12-Aug-2020 15:18:37 DTF **J-level:** 0.581 pg/g **Split:** 1 **Checkcode:** 726-292-LFR

Datafile: 200811C19 **Report:** 12 Aug 2020 15:22 TF **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

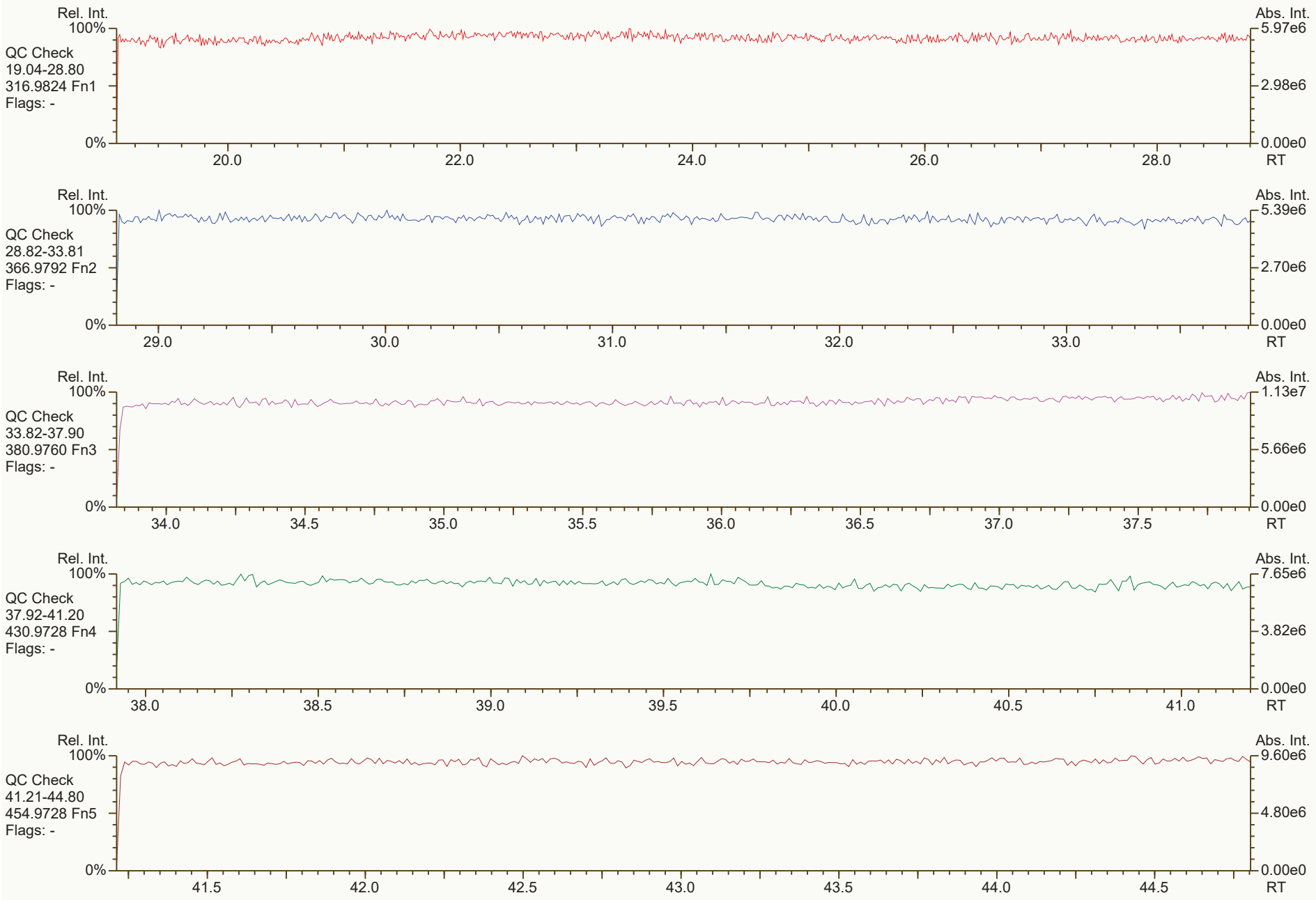
Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1234679-HpCDD	39.47		0.9826	0.9825	-0.2	1.82E+07	1.06	Y	0.98	158	3091	0.275
1234678-HpCDD	**40.19**		**1.0003**	**1.0004**	**+0.2**	**8.50E+06**	**1.02**	**Y**	**0.98**	**73.8**	**3091**	**0.275**
OCDD	**42.89**		**1.0003**	**1.0003**	**0**	**7.61E+07**	**0.90**	**Y**	**1.07**	**1,070**	**3445**	**0.83**
OCDD-a	42.89	**#VALUE!**	1.0002	1.0002	0	4.97E+06	2.42	Y	-	#VALUE!	7068	#VALUE!
1368-TCDF	20.68		0.7980	0.7970	-1.2	3.34E+05	0.76	Y	1.01	0.984	3383	0.121
1468-TCDF	21.23	J EMPC	0.8204	0.8181	-2.9	1.27E+05	0.46	N	1.01	0.376	3383	0.121
2468-TCDF	21.88		0.8443	0.8431	-1.6	7.38E+05	0.74	Y	1.01	2.18	3383	0.121
1346/1246-TCDF	22.29	J	0.8597	0.8589	-1.1	1.69E+05	0.70	Y	1.01	0.499	3383	0.121
1347/1378/1247-TCDF	22.45		0.8665	0.8651	-1.9	6.35E+05	0.73	Y	1.01	1.87	3383	0.121
1348-TCDF	22.75	J EMPC	0.8785	0.8765	-2.7	8.85E+04	0.54	N	1.01	0.261	3383	0.121
1248/1367/1379-TCDF	22.89		0.8840	0.8822	-2.5	3.82E+05	0.83	Y	1.01	1.13	3383	0.121
1268-TCDF	23.33	EMPC	0.9004	0.8989	-2.1	2.15E+05	1.04	N	1.01	0.634	3383	0.121
1467-TCDF	23.47	J	0.9060	0.9045	-2.1	1.17E+05	0.68	Y	1.01	0.344	3383	0.121
1478-TCDF	23.66		0.9132	0.9119	-1.8	2.13E+05	0.74	Y	1.01	0.627	3383	0.121
1369/1237-TCDF	24.07	J	0.9287	0.9274	-1.9	1.72E+05	0.71	Y	1.01	0.506	3383	0.121
2467-TCDF	24.22		0.9345	0.9333	-1.7	2.37E+05	0.75	Y	1.01	0.699	3383	0.121
2368-TCDF	24.39		0.9409	0.9400	-1.3	3.28E+05	0.76	Y	1.01	0.968	3383	0.121
1238/1234/1678/1469/1236-TCDF	24.51		0.9450	0.9443	-1.0	3.82E+05	0.86	Y	1.01	1.13	3383	0.121
1278-TCDF	25.00		0.9638	0.9636	-0.3	2.68E+05	0.84	Y	1.01	0.792	3383	0.121
1349-TCDF	NotFnd		0.9685						1.01		3383	0.121
1267-TCDF	25.29	J	0.9751	0.9747	-0.6	1.32E+05	0.69	Y	1.01	0.39	3383	0.121
2346/1249-TCDF	25.51	J	0.9831	0.9831	0	1.40E+05	0.83	Y	1.01	0.412	3383	0.121
2347/1279-TCDF	25.74	J EMPC	0.9920	0.9919	-0.2	1.95E+05	0.93	N	1.01	0.576	3383	0.121
2348-TCDF	25.85	J EMPC	0.9964	0.9962	-0.3	1.36E+05	1.03	N	1.01	0.402	3383	0.121
2378-TCDF	**25.97**		**1.0009**	**1.0009**	**0**	**2.65E+05**	**0.78**	**Y**	**1.01**	**0.781**	**3383**	**0.121**
2367/3467-TCDF	26.38		1.0164	1.0164	0	3.76E+05	0.81	Y	1.01	1.11	3383	0.121
1269-TCDF	NotFnd		1.0259						1.01		3383	0.121
1239-TCDF	NotFnd		1.0373						1.01		3383	0.121
1289-TCDF	28.14	J EMPC	1.0838	1.0843	+0.8	9.78E+04	1.60	N	1.01	0.288	3383	0.121
13468/12468-PeCDF	28.16		0.9052	0.9057	+0.8	7.62E+05	1.45	Y	0.98	2.96	2836	0.102
13678/13467/12467-PeCDF	29.78	J	0.9582	0.9579	-0.5	4.34E+05	1.57	Y	0.98	1.69	3957	0.143
12368/13478/12478-PeCDF	29.94		0.9634	0.9631	-0.5	7.93E+05	1.61	Y	0.98	3.09	3957	0.143
14678-PeCDF	30.06	J	0.9668	0.9668	0	1.51E+05	1.59	Y	0.98	0.588	3957	0.143
13479-PeCDF	NotFnd		0.9700						0.98		3957	0.143
13469/12479-PeCDF	NotFnd		0.9781						0.98		3957	0.143
12346-PeCDF	NotFnd		0.9829						0.98		3957	0.143

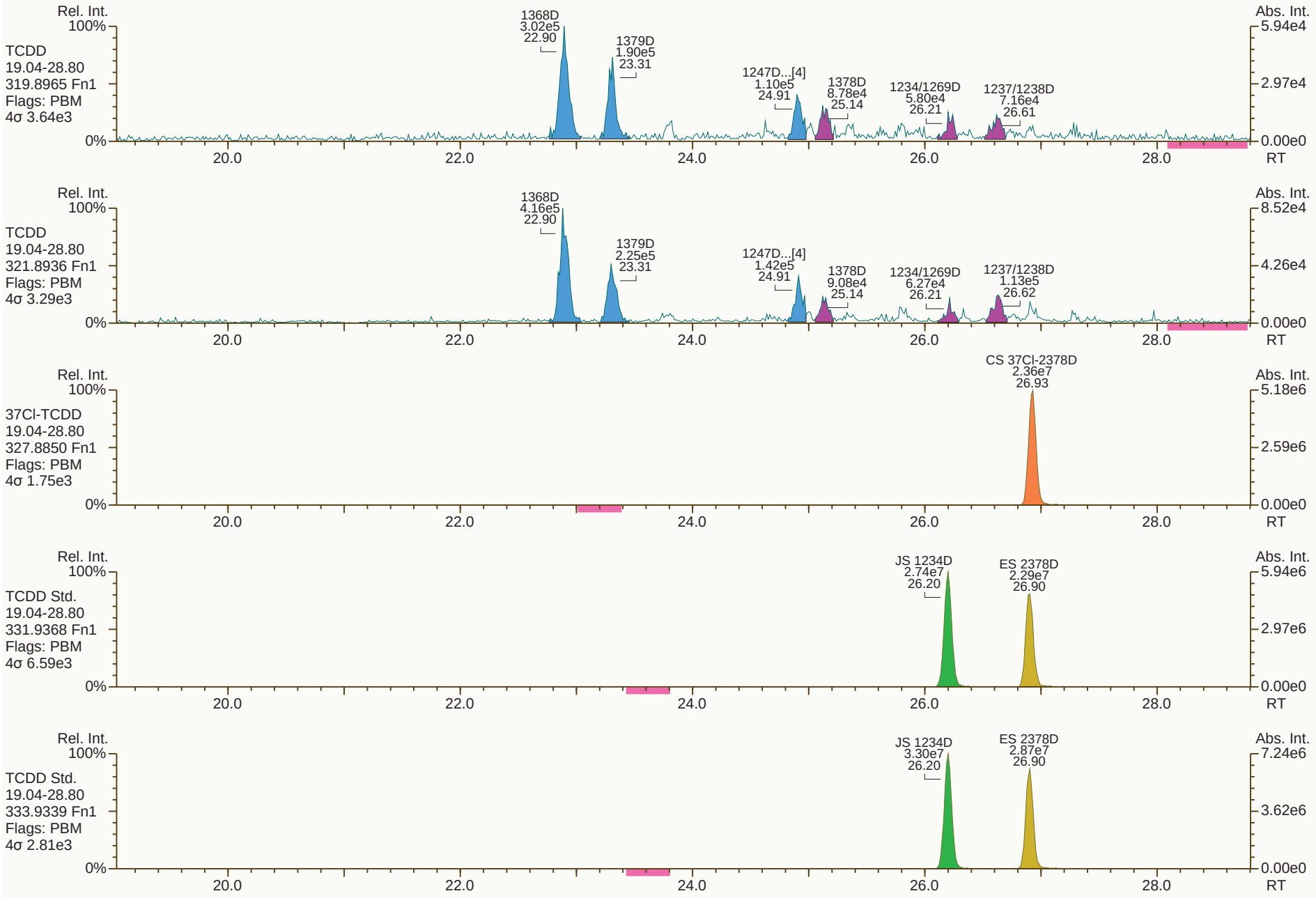
Lab ID: B4526_17662_DF_007 **Acq'd:** 12 Aug 2020 04:33 DTF **Wt/Vol:** 8.60 g **ICAL:** HRMS3_DF_10122018_28AUG2019

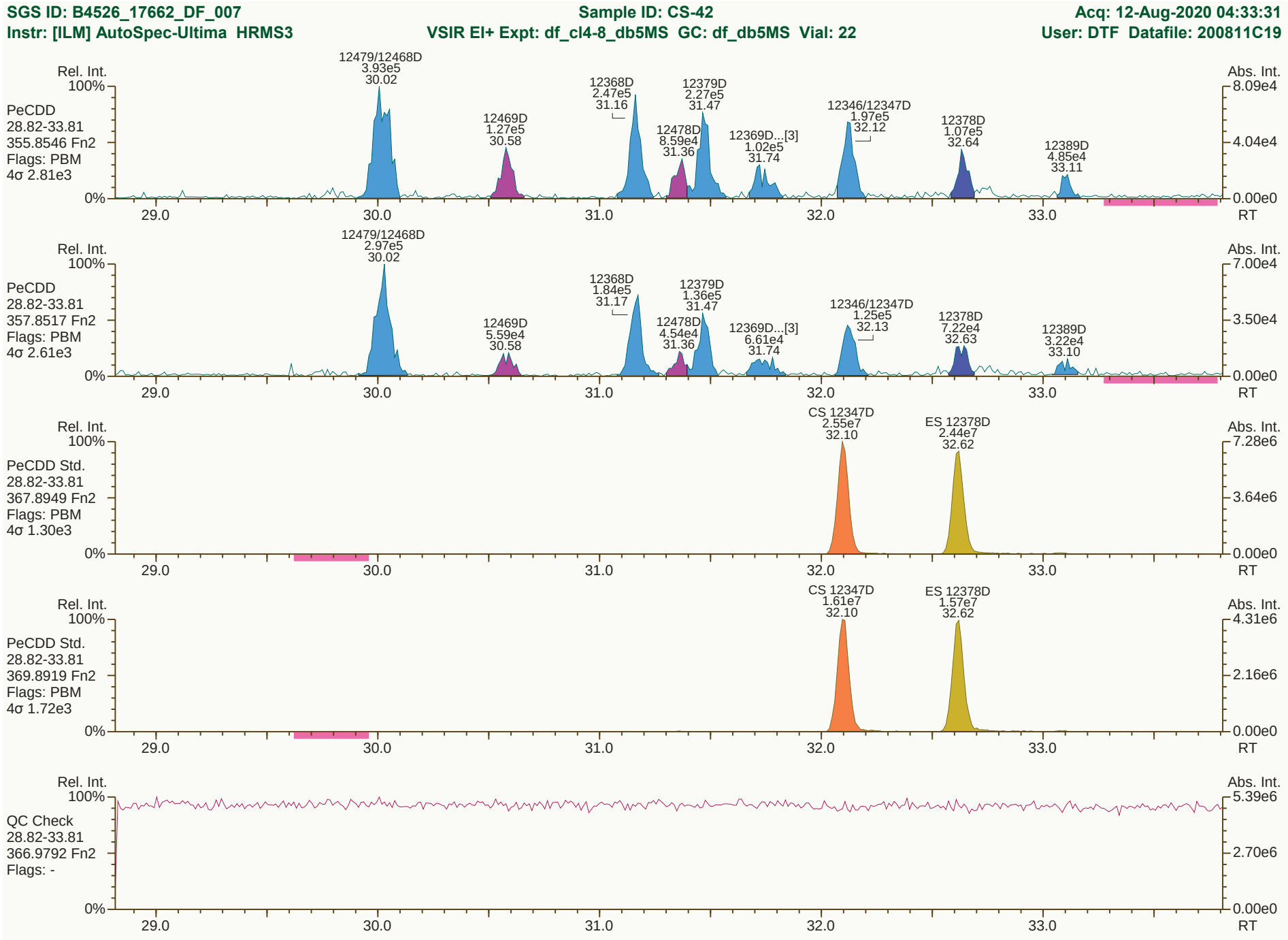
Client ID: CS-42 **UTP:** 12-Aug-2020 15:18:37 DTF **J-level:** 0.581 pg/g **Split:** 1 **Checkcode:** 726-292-LFR

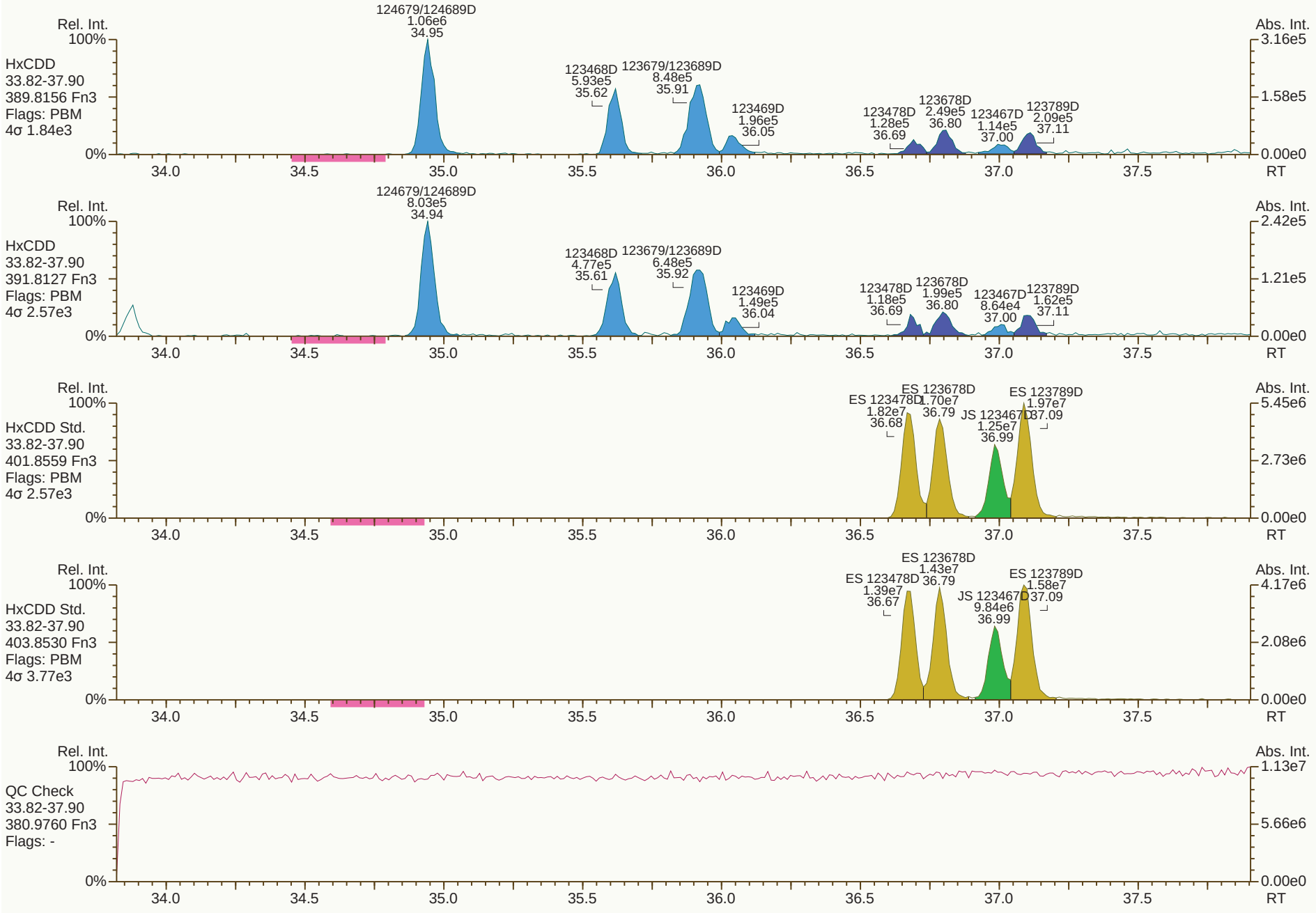
Datafile: 200811C19 **Report:** 12 Aug 2020 15:22 TF **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

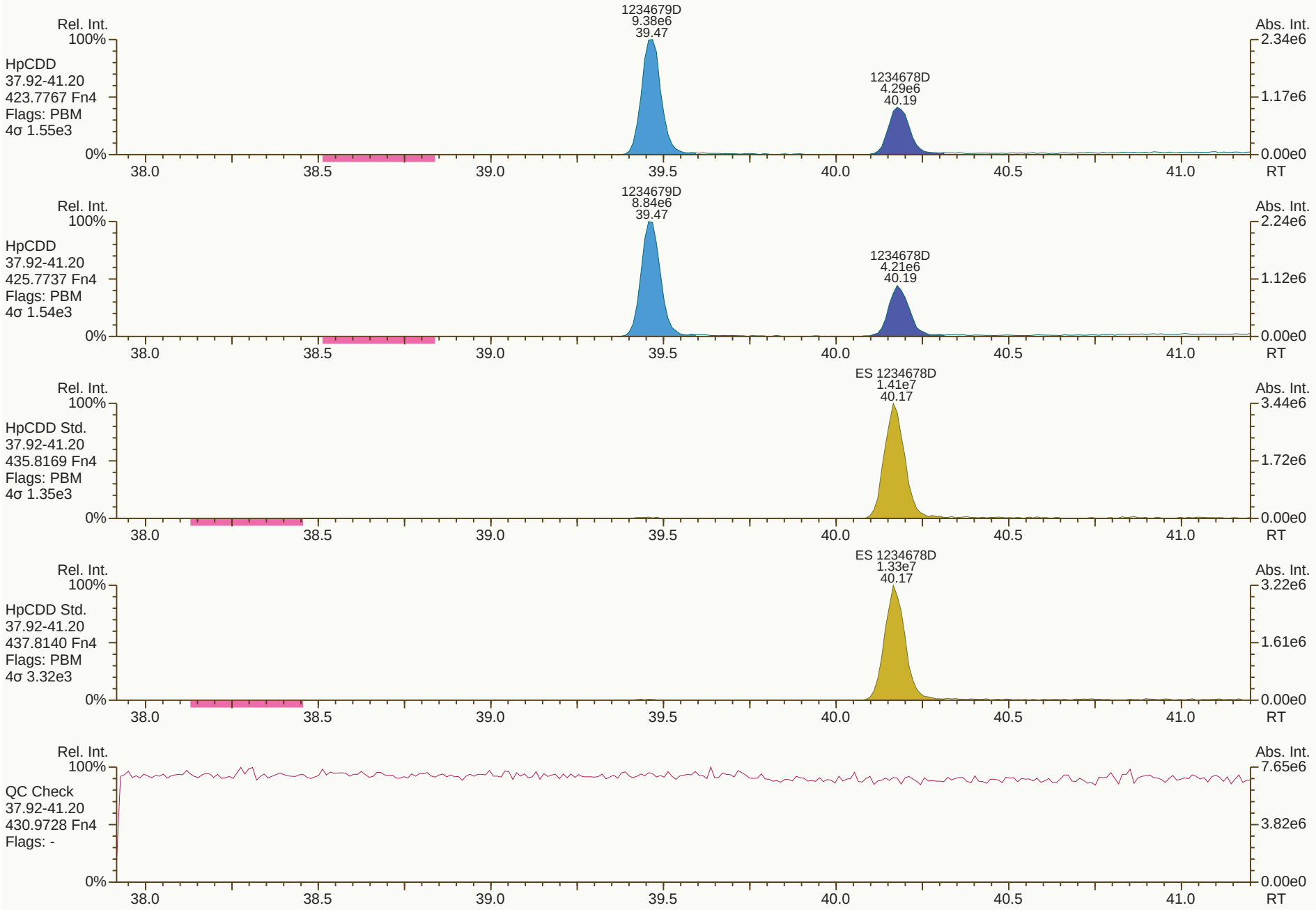
Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
23468/12469-PeCDF	30.66	J	0.9859	0.9861	+0.4	3.28E+05	1.37	Y	0.98	1.28	3957	0.143
12347-PeCDF	NotFnd		0.9884						0.98		3957	0.143
12348-PeCDF	NotFnd		0.9937						0.98		3957	0.143
12378-PeCDF	**31.10**	J	**1.0006**	**1.0005**	**-0.2**	**3.05E+05**	**1.43**	**Y**	**0.96**	**1.16**	**3957**	**0.146**
12678/12367-PeCDF	31.40	J	1.0097	1.0099	+0.4	3.06E+05	1.48	Y	0.98	1.19	3957	0.143
12379-PeCDF	NotFnd		1.0152						0.98		3957	0.143
12679-PeCDF	NotFnd		0.9923						0.98		3957	0.143
23467/12369-PeCDF	32.14	J EMPC	0.9966	0.9967	+0.2	1.71E+05	1.14	N	0.98	0.667	3957	0.143
23478-PeCDF	**32.28**	J	**1.0005**	**1.0007**	**+0.4**	**3.42E+05**	**1.44**	**Y**	**0.99**	**1.37**	**3957**	**0.14**
23478/12489-PeCDF	NotFnd		0.0000						0.99			
12489-PeCDF	NotFnd		1.0043						0.98		3957	0.143
12349-PeCDF	NotFnd		1.0107						0.98		3957	0.143
12389-PeCDF	NotFnd		1.0349						0.98		3957	0.143
123468-HxCDF	34.26	J	0.9607	0.9605	-0.4	3.30E+05	1.42	Y	1.13	1.63	5505	0.241
124678/134678-HxCDF	34.46		0.9666	0.9663	-0.6	1.09E+06	1.32	Y	1.13	5.38	5505	0.241
134679-HxCDF	NotFnd		0.9730						1.13		5505	0.241
124679-HxCDF	NotFnd		0.9787						1.13		5505	0.241
124689-HxCDF	35.13		0.9850	0.9850	0	8.69E+05	1.28	Y	1.13	4.29	5505	0.241
123467-HxCDF	35.56	J	0.9971	0.9971	0	1.74E+05	1.16	Y	1.13	0.859	5505	0.241
123478-HxCDF	**35.68**	J	**1.0005**	**1.0006**	**+0.2**	**3.16E+05**	**1.34**	**Y**	**1.21**	**1.55**	**5505**	**0.232**
123678-HxCDF	**35.82**	J EMPC	**1.0005**	**1.0004**	**-0.2**	**2.63E+05**	**1.03**	**N**	**1.11**	**1.2**	**5505**	**0.214**
123479-HxCDF	NotFnd		1.0049						1.13		5505	0.241
123469-HxCDF	NotFnd		1.0090						1.13		5505	0.241
123679-HxCDF	NotFnd		0.9941						1.13		5505	0.241
234678-HxCDF	**36.50**	J	**1.0004**	**1.0005**	**+0.2**	**2.97E+05**	**1.12**	**Y**	**1.12**	**1.49**	**5505**	**0.242**
234678/123689-HxCDF	NotFnd		0.0000						1.12			
123689-HxCDF	NotFnd		1.0041						1.13		5505	0.241
123789-HxCDF	**37.49**	J	**1.0005**	**1.0007**	**+0.4**	**2.27E+05**	**1.13**	**Y**	**1.11**	**1.2**	**5505**	**0.28**
123789/123489-HxCDF	NotFnd		0.0000						1.11			
123489-HxCDF	NotFnd		1.0009						1.13		5505	0.241
1234678-HpCDF	**39.16**		**1.0003**	**1.0003**	**0**	**2.00E+06**	**1.02**	**Y**	**1.32**	**10.8**	**4442**	**0.221**
1234679-HpCDF	39.45	**J EMPC**	1.0075	1.0079	+0.9	1.00E+05	1.28	N	1.29	0.619	4442	0.275
1234689-HpCDF	39.60		1.0112	1.0116	+1.0	2.56E+06	1.05	Y	1.29	15.8	4442	0.275
1234789-HpCDF	**40.60**	**J EMPC**	**1.0003**	**1.0001**	**-0.5**	**1.72E+05**	**1.32**	**N**	**1.26**	**1.22**	**4442**	**0.343**
OCDF	**43.03**		**1.0003**	**1.0002**	**-0.3**	**2.17E+06**	**0.88**	**Y**	**1.03**	**23.9**	**3266**	**0.602**
OCDF-a	NotFnd	**#VALUE!**	1.0002						-		3291	#VALUE!


Rel. Int.
100%
QC Check
19.04-28.80
316.9824 Fn1
Flags: -
0%
20.0
22.0
24.0
26.0
28.0
RT
Abs. Int.
5.97e6
2.98e6
0.00e0
Rel. Int.
100%
QC Check
28.82-33.81
366.9792 Fn2
Flags: -
0%
29.0
30.0
31.0
32.0
33.0
RT
Abs. Int.
5.39e6
2.70e6
0.00e0
Rel. Int.
100%
QC Check
33.82-37.90
380.9760 Fn3
Flags: -
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Abs. Int.
1.13e7
5.66e6
0.00e0
Rel. Int.
100%
QC Check
37.92-41.20
430.9728 Fn4
Flags: -
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Abs. Int.
7.65e6
3.82e6
0.00e0
Rel. Int.
100%
QC Check
41.21-44.80
454.9728 Fn5
Flags: -
0%
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Abs. Int.
9.60e6
4.80e6
0.00e0


Rel. Int.
100%
TCDD
19.04-28.80
319.8965 Fn1
Flags: PBM
4σ 3.64e3
0%
1368D
3.02e5
22.90
1379D
1.90e5
23.31
1247D...[4]
1.10e5
24.91
1378D
8.78e4
25.14
1234/1269D
5.80e4
26.21
1237/1238D
7.16e4
26.61
Abs. Int.
5.94e4
2.97e4
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD
19.04-28.80
321.8936 Fn1
Flags: PBM
4σ 3.29e3
0%
1368D
4.16e5
22.90
1379D
2.25e5
23.31
1247D...[4]
1.42e5
24.91
1378D
9.08e4
25.14
1234/1269D
6.27e4
26.21
1237/1238D
1.13e5
26.62
Abs. Int.
8.52e4
4.26e4
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
37Cl-TCDD
19.04-28.80
327.8850 Fn1
Flags: PBM
4σ 1.75e3
0%
CS 37Cl-2378D
2.36e7
26.93
Abs. Int.
5.18e6
2.59e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.80
331.9368 Fn1
Flags: PBM
4σ 6.59e3
0%
JS 1234D
2.74e7
26.20
ES 2378D
2.29e7
26.90
Abs. Int.
5.94e6
2.97e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.80
333.9339 Fn1
Flags: PBM
4σ 2.81e3
0%
JS 1234D
3.30e7
26.20
ES 2378D
2.87e7
26.90
Abs. Int.
7.24e6
3.62e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT


SGS ID: B4526_17662_DF_007
Sample ID: CS-42
Acq: 12-Aug-2020 04:33:31
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 22
User: DTF Datafile: 200811C19
Rel. Int.
Abs. Int.
PeCDD
28.82-33.81
355.8546 Fn2
Flags: PBM
4σ 2.81e3
12479/12468D
3.93e5
30.02
12469D
1.27e5
30.58
12368D
2.47e5
31.16
12478D
8.59e4
31.36
12379D
2.27e5
31.47
12369D...[3]
1.02e5
31.74
12346/12347D
1.97e5
32.12
12378D
1.07e5
32.64
12389D
4.85e4
33.11
PeCDD
28.82-33.81
357.8517 Fn2
Flags: PBM
4σ 2.61e3
12479/12468D
2.97e5
30.02
12469D
5.59e4
30.58
12368D
1.84e5
31.17
12478D
4.54e4
31.36
12379D
1.36e5
31.47
12369D...[3]
6.61e4
31.74
12346/12347D
1.25e5
32.13
12378D
7.22e4
32.63
12389D
3.22e4
33.10
PeCDD Std.
28.82-33.81
367.8949 Fn2
Flags: PBM
4σ 1.30e3
CS 12347D
2.55e7
32.10
ES 12378D
2.44e7
32.62
PeCDD Std.
28.82-33.81
369.8919 Fn2
Flags: PBM
4σ 1.72e3
CS 12347D
1.61e7
32.10
ES 12378D
1.57e7
32.62
QC Check
28.82-33.81
366.9792 Fn2
Flags: -
RT
Results: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\B4526_17662_DF_007.utp_res, saved 12-Aug-2020 15:18 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 5072, 7833 scc: 726-292
Revised: 12-Aug-2020 11:44 (DTF) Printed: 12-Aug-2020 15:37 Page 3 of 12

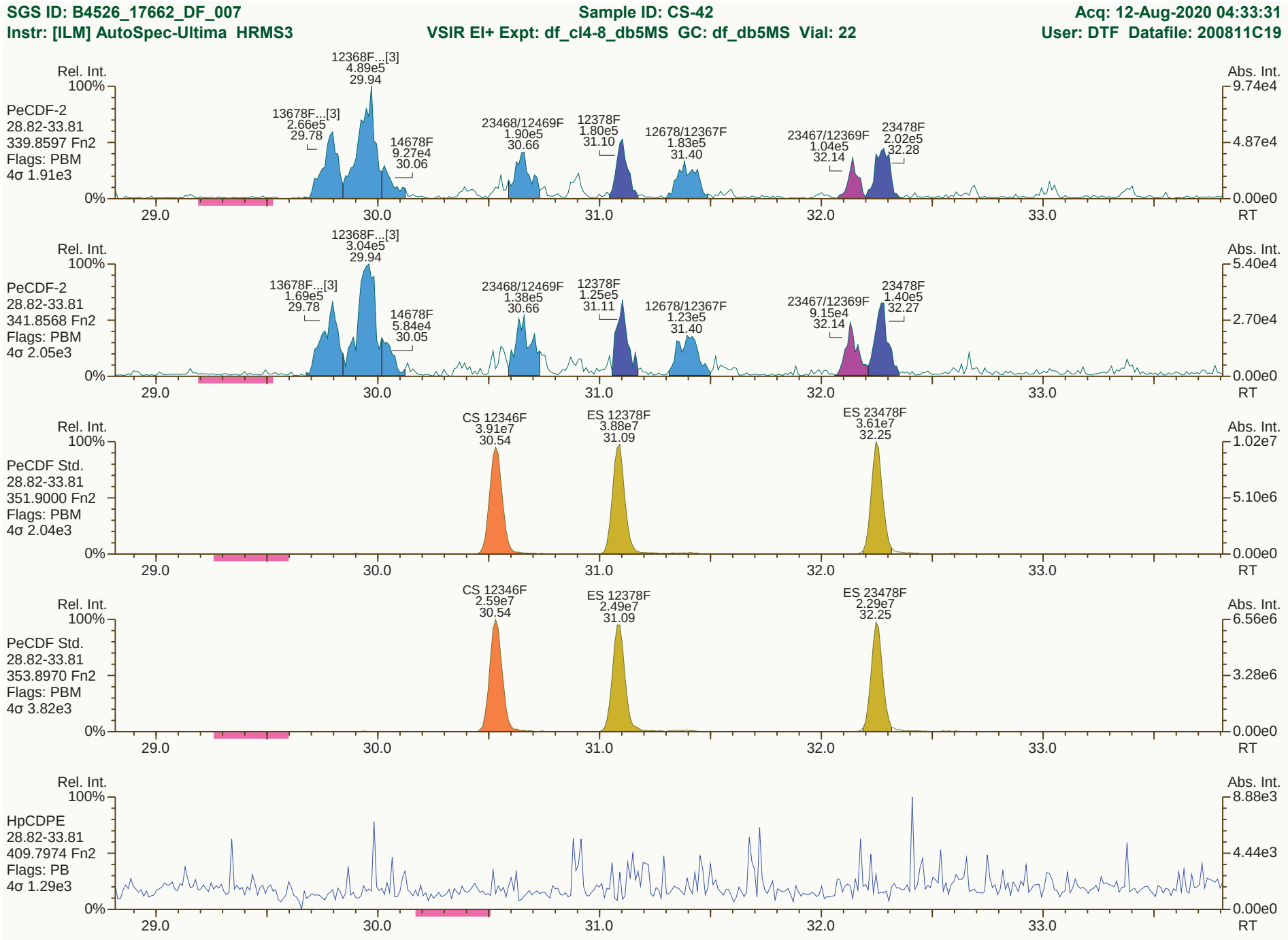

Rel. Int.
100%
HxCDD
33.82-37.90
389.8156 Fn3
Flags: PBM
4σ 1.84e3
124679/124689D
1.06e6
34.95
123468D
5.93e5
35.62
123679/123689D
8.48e5
35.91
123469D
1.96e5
36.05
123478D
1.28e5
36.69
123678D
2.49e5
36.80
123467D
1.14e5
37.00
123789D
2.09e5
37.11
Abs. Int.
3.16e5
1.58e5
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD
33.82-37.90
391.8127 Fn3
Flags: PBM
4σ 2.57e3
124679/124689D
8.03e5
34.94
123468D
4.77e5
35.61
123679/123689D
6.48e5
35.92
123469D
1.49e5
36.04
123478D
1.18e5
36.69
123678D
1.99e5
36.80
123467D
8.64e4
37.00
123789D
1.62e5
37.11
Abs. Int.
2.42e5
1.21e5
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.82-37.90
401.8559 Fn3
Flags: PBM
4σ 2.57e3
ES 123478D
1.82e7
36.68
ES 123678D
1.70e7
36.79
JS 123467D
1.25e7
36.99
ES 123789D
1.97e7
37.09
Abs. Int.
5.45e6
2.73e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.82-37.90
403.8530 Fn3
Flags: PBM
4σ 3.77e3
ES 123478D
1.39e7
36.67
ES 123678D
1.43e7
36.79
JS 123467D
9.84e6
36.99
ES 123789D
1.58e7
37.09
Abs. Int.
4.17e6
2.08e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
QC Check
33.82-37.90
380.9760 Fn3
Flags: -
Abs. Int.
1.13e7
5.66e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT


Rel. Int.
100%
HpCDD
37.92-41.20
423.7767 Fn4
Flags: PBM
4σ 1.55e3
0%
1234679D
9.38e6
39.47
1234678D
4.29e6
40.19
Abs. Int.
2.34e6
1.17e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD
37.92-41.20
425.7737 Fn4
Flags: PBM
4σ 1.54e3
0%
1234679D
8.84e6
39.47
1234678D
4.21e6
40.19
Abs. Int.
2.24e6
1.12e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.92-41.20
435.8169 Fn4
Flags: PBM
4σ 1.35e3
0%
ES 1234678D
1.41e7
40.17
Abs. Int.
3.44e6
1.72e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.92-41.20
437.8140 Fn4
Flags: PBM
4σ 3.32e3
0%
ES 1234678D
1.33e7
40.17
Abs. Int.
3.22e6
1.61e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
QC Check
37.92-41.20
430.9728 Fn4
Flags: -
0%
Abs. Int.
7.65e6
3.82e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT


OCDD
3.61e7
42.89
Rel. Int.
Abs. Int.
OCDD
41.21-44.80
457.7377 Fn5
Flags: PBM
4σ 1.35e3
OCDD
4.00e7
42.89
OCDD
41.21-44.80
459.7348 Fn5
Flags: PBM
4σ 2.09e3
ES OCDD
1.47e7
42.88
OCDD Std.
41.21-44.80
469.7780 Fn5
Flags: PBM
4σ 2.24e3
ES OCDD
1.60e7
42.88
OCDD Std.
41.21-44.80
471.7750 Fn5
Flags: PBM
4σ 2.11e3
QC Check
41.21-44.80
454.9728 Fn5
Flags: -
RT

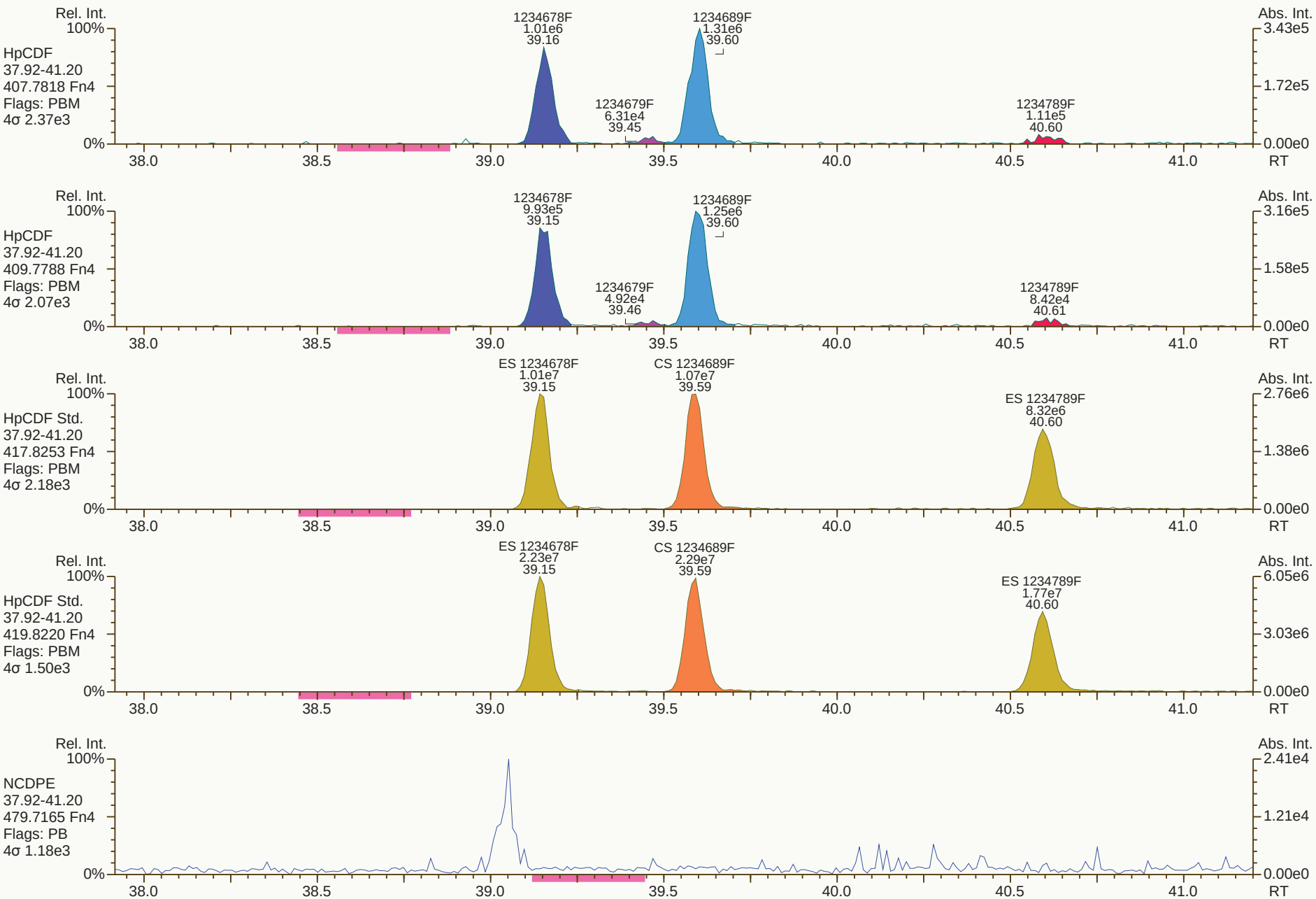

SGS ID: B4526_17662_DF_007
Sample ID: CS-42
Acq: 12-Aug-2020 04:33:31
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 22
User: DTF Datafile: 200811C19
Rel. Int.
Abs. Int.
TCDF
19.04-28.80
303.9016 Fn1
Flags: PBM
4σ 1.90e3
1368F 1.45e5 20.68
1468F 5.54e4 21.23
2468F 3.14e5 21.88
1347F...[3] 2.68e5 22.45
1346/1246F 6.94e4 22.29
1248F...[3] 1.73e5 22.89
1268F 1.26e5 23.33
1369/1237F 7.14e4 24.07
2368F 1.42e5 24.39
1278F 1.22e5 25.00
2346/1249F 6.34e4 25.51
2378F 1.16e5 25.97
2367/3467F 1.69e5 26.38
1289F 8.82e4 28.14
TCDF
19.04-28.80
305.8987 Fn1
Flags: PBM
4σ 1.48e3
1368F 1.89e5 20.68
1468F 1.20e5 21.24
2468F 4.24e5 21.88
1347F...[3] 3.66e5 22.45
1346/1246F 9.97e4 22.29
1248F...[3] 2.09e5 22.89
1478F 1.22e5 23.66
2368F 1.86e5 24.39
1238F...[5] 2.05e5 24.51
1267F 7.83e4 25.30
2378F 1.49e5 25.96
2367/3467F 2.07e5 26.37
1289F 5.53e4 28.14
TCDF Std.
19.04-28.80
315.9419 Fn1
Flags: PBM
4σ 1.40e4
JS 1234F 3.86e7 24.46
ES 2378F 3.45e7 25.95
TCDF Std.
19.04-28.80
317.9389 Fn1
Flags: PBM
4σ 5.23e3
JS 1234F 4.96e7 24.46
ES 2378F 4.34e7 25.95
HxCDPE
19.04-28.80
375.8364 Fn1
Flags: PB
4σ 1.02e3
20.0
22.0
24.0
26.0
28.0
RT
Results: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\B4526_17662_DF_007.utp_res, saved 12-Aug-2020 15:18 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 4355, 8893, 3007 scc: 726-292
Revised: 12-Aug-2020 11:46 (DTF) Printed: 12-Aug-2020 15:37 Page 7 of 12

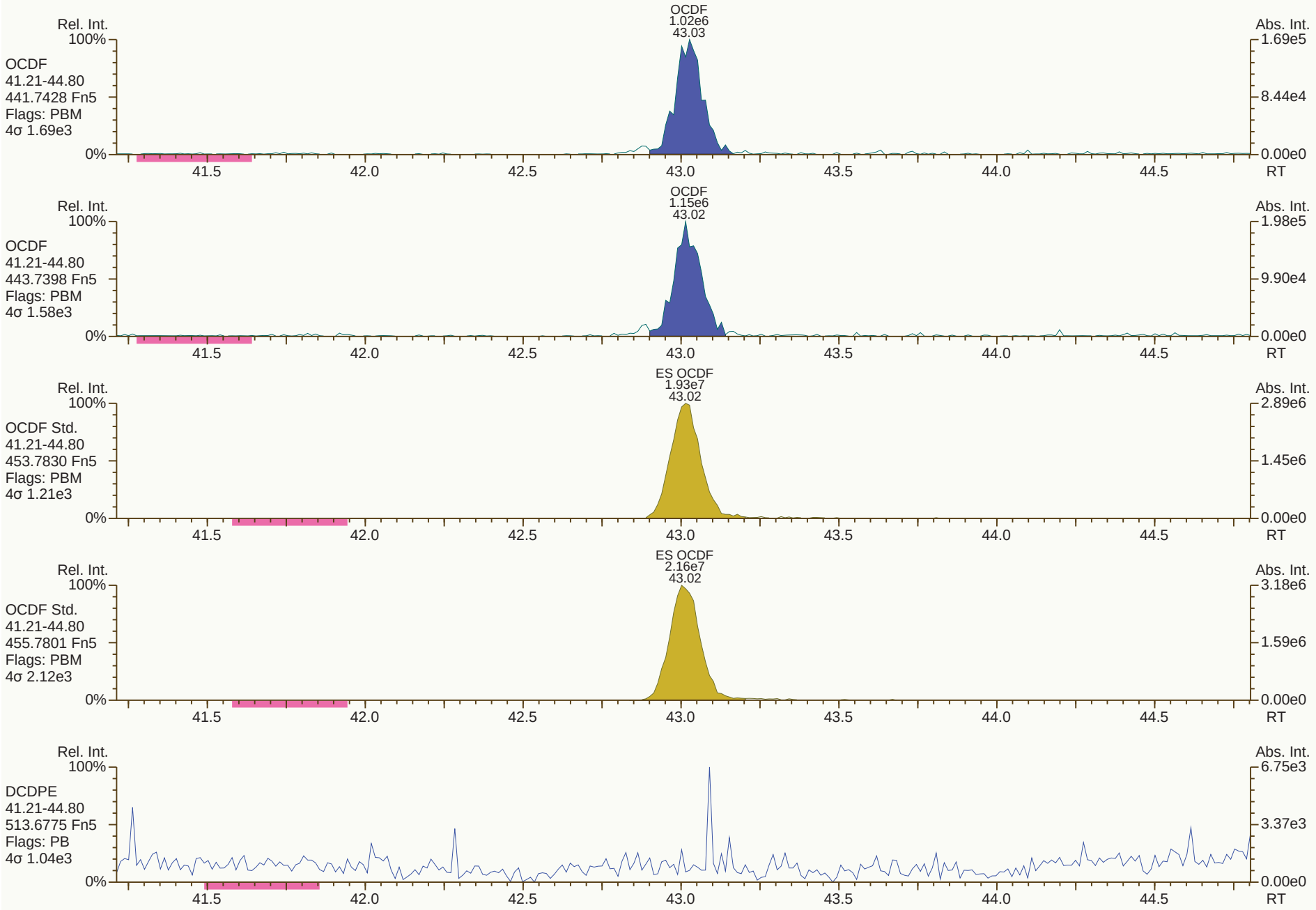

Rel. Int.
100%
0%
PeCDF-1
19.04-28.80
339.8597 Fn1
Flags: PBM
4σ 1.48e3
13468/12468F
4.51e5
28.16
Abs. Int.
1.19e5
5.94e4
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
0%
PeCDF-1
19.04-28.80
341.8568 Fn1
Flags: PBM
4σ 1.36e3
13468/12468F
3.11e5
28.15
Abs. Int.
8.36e4
4.18e4
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
0%
QC Check
19.04-28.80
316.9824 Fn1
Flags: -
Abs. Int.
5.97e6
2.98e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT


SGS ID: B4526_17662_DF_007
Sample ID: CS-42
Acq: 12-Aug-2020 04:33:31
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 22
User: DTF Datafile: 200811C19
PeCDF-2
28.82-33.81
339.8597 Fn2
Flags: PBM
4σ 1.91e3
12368F...[3] 4.89e5 29.94
13678F...[3] 2.66e5 29.78
14678F 9.27e4 30.06
23468/12469F 1.90e5 30.66
12378F 1.80e5 31.10
12678/12367F 1.83e5 31.40
23467/12369F 1.04e5 32.14
23478F 2.02e5 32.28
PeCDF-2
28.82-33.81
341.8568 Fn2
Flags: PBM
4σ 2.05e3
12368F...[3] 3.04e5 29.94
13678F...[3] 1.69e5 29.78
14678F 5.84e4 30.05
23468/12469F 1.38e5 30.66
12378F 1.25e5 31.11
12678/12367F 1.23e5 31.40
23467/12369F 9.15e4 32.14
23478F 1.40e5 32.27
PeCDF Std.
28.82-33.81
351.9000 Fn2
Flags: PBM
4σ 2.04e3
CS 12346F 3.91e7 30.54
ES 12378F 3.88e7 31.09
ES 23478F 3.61e7 32.25
PeCDF Std.
28.82-33.81
353.8970 Fn2
Flags: PBM
4σ 3.82e3
CS 12346F 2.59e7 30.54
ES 12378F 2.49e7 31.09
ES 23478F 2.29e7 32.25
HpCDPE
28.82-33.81
409.7974 Fn2
Flags: PB
4σ 1.29e3
Rel. Int.
Abs. Int.
RT
29.0
30.0
31.0
32.0
33.0
Results: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\B4526_17662_DF_007.utp_res, saved 12-Aug-2020 15:18 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 4623, 1498, 6968 scc: 726-292
Revised: 12-Aug-2020 11:47 (DTF) Printed: 12-Aug-2020 15:37 Page 9 of 12


SGS ID: B4526_17662_DF_007
Sample ID: CS-42
Acq: 12-Aug-2020 04:33:31
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 22
User: DTF Datafile: 200811C19
Rel. Int.
Abs. Int.
HxCDF
33.82-37.90
373.8207 Fn3
Flags: PBM
4σ 2.76e3
123468F 1.94e5 34.26
124678/134678F 6.20e5 34.46
124689F 4.88e5 35.13
123467F 9.35e4 35.56
123478F 1.81e5 35.68
123678F 1.46e5 35.82
234678F 1.57e5 36.50
123789F 1.20e5 37.49
HxCDF
33.82-37.90
375.8178 Fn3
Flags: PBM
4σ 2.75e3
123468F 1.37e5 34.26
124678/134678F 4.71e5 34.46
124689F 3.82e5 35.13
123467F 8.08e4 35.56
123478F 1.35e5 35.68
123678F 1.41e5 35.82
234678F 1.40e5 36.49
123789F 1.07e5 37.48
HxCDF Std.
33.82-37.90
383.8639 Fn3
Flags: PBM
4σ 8.36e3
ES 123478F 1.35e7 35.66
ES 123678F 1.59e7 35.81
CS 123469F 1.43e7 36.12
ES 234678F 1.45e7 36.48
ES 123789F 1.35e7 37.46
HxCDF Std.
33.82-37.90
385.8610 Fn3
Flags: PBM
4σ 1.14e4
ES 123478F 2.57e7 35.66
ES 123678F 3.03e7 35.81
CS 123469F 2.76e7 36.12
ES 234678F 2.70e7 36.48
ES 123789F 2.60e7 37.46
OCDPE
33.82-37.90
445.7555 Fn3
Flags: PB
4σ 1.16e3
100%
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
1.73e5
8.64e4
0.00e0
1.23e5
6.17e4
4.65e6
2.33e6
8.56e6
4.28e6
8.29e3
4.14e3

SGS ID: B4526_17662_DF_007 Sample ID: CS-42 Acq: 12-Aug-2020 04:33:31
Instr: [ILM] AutoSpec-Ultima HRMS3 VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 22 User: DTF Datafile: 200811C19




OCDF
1.02e6
43.03
Rel. Int.
100%
OCDF
41.21-44.80
441.7428 Fn5
Flags: PBM
4σ 1.69e3
0%
Abs. Int.
1.69e5
8.44e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
OCDF
1.15e6
43.02
Rel. Int.
100%
OCDF
41.21-44.80
443.7398 Fn5
Flags: PBM
4σ 1.58e3
0%
Abs. Int.
1.98e5
9.90e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDF
1.93e7
43.02
Rel. Int.
100%
OCDF Std.
41.21-44.80
453.7830 Fn5
Flags: PBM
4σ 1.21e3
0%
Abs. Int.
2.89e6
1.45e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDF
2.16e7
43.02
Rel. Int.
100%
OCDF Std.
41.21-44.80
455.7801 Fn5
Flags: PBM
4σ 2.12e3
0%
Abs. Int.
3.18e6
1.59e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
DCDPE
41.21-44.80
513.6775 Fn5
Flags: PB
4σ 1.04e3
0%
Abs. Int.
6.75e3
3.37e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT

Lab ID: B4526_17662_DF_008 **Acq'd:** 12 Aug 2020 05:20 DTF **Wt/Vol:** 9.26 g **ICAL:** HRMS3_DF_10122018_28AUG2019

Client ID: CS-43 **UTP:** 12-Aug-2020 15:18:38 DTF **J-level:** 0.54 pg/g **Split:** 1 **Checkcode:** 877-121-VFX

Datafile: 200811C20 **Report:** 12 Aug 2020 15:22 TF **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	NotFnd		1.0008	-		-	-	-	1.19	-	14495	0.471
12378-PeCDD	NotFnd		1.0006	-		-	-	-	0.98	-	16682	0.815
123478-HxCDD	36.71	J EMPC	1.0004	1.0003	-0.2	1.02E+05	0.96	N	1.02	0.539	8870	0.4
123678-HxCDD	36.82	J	1.0036	1.0035	-0.2	2.55E+05	1.23	Y	1.09	1.25	8870	0.398
123789-HxCDD	37.12	J	1.0118	1.0116	-0.4	2.17E+05	1.32	Y	0.97	1.08	8870	0.436
1234678-HpCDD	40.21		1.0003	1.0004	+0.2	4.51E+06	1.02	Y	0.98	29.5	5655	0.398
OCDD	42.92		1.0003	1.0003	0	1.83E+07	0.89	Y	1.07	313	7476	2.13
2378-TCDF	25.99	J	1.0009	1.0007	-0.3	2.02E+05	0.87	Y	1.01	0.513	8352	0.255
12378-PeCDF	31.12	J	1.0006	1.0004	-0.4	1.68E+05	1.70	Y	0.96	0.523	5565	0.166
23478-PeCDF	32.31	J	1.0005	1.0010	+1.0	4.50E+05	1.47	Y	0.99	1.38	5565	0.166
123478-HxCDF	35.70	J	1.0005	1.0006	+0.2	2.46E+05	1.32	Y	1.21	0.923	7884	0.245
123678-HxCDF	35.84	J	1.0005	1.0004	-0.2	2.30E+05	1.26	Y	1.11	0.814	7884	0.253
234678-HxCDF	36.51	J	1.0004	1.0002	-0.4	2.79E+05	1.15	Y	1.12	1.07	7884	0.28
123789-HxCDF	NotFnd		1.0005	-		-	-	-	1.11	-	7884	0.311
1234678-HpCDF	39.18		1.0003	1.0003	0	4.60E+06	1.07	Y	1.32	19.4	6431	0.268
1234789-HpCDF	NotFnd		1.0003	-		-	-	-	1.26	-	6431	0.428
OCDF	43.05		1.0003	1.0002	-0.3	1.51E+06	0.90	Y	1.03	19.6	4041	0.882

Name	Act RT	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	26.92	1.0266	1.0267	+0.2	5.82E+07	0.81	Y	0.99	84.6
ES 12378-PeCDD	32.66	1.2430	1.2455	+4.9	4.92E+07	1.58	Y	0.83	85.3
ES 123478-HxCDD	36.69	0.9916	0.9916	0	4.00E+07	1.24	Y	0.95	76
ES 123678-HxCDD	36.81	0.9947	0.9947	0	4.05E+07	1.27	Y	0.98	74.7
ES 123789-HxCDD	37.11	1.0029	1.0029	0	4.48E+07	1.24	Y	1.14	70.8
ES 1234678-HpCDD	40.19	1.0851	1.0861	+2.4	3.38E+07	1.06	Y	0.90	67.7
ES OCDD	42.90	1.1584	1.1594	+2.6	2.36E+07	0.93	Y	0.63	33.9
ES 2378-TCDF	25.97	1.0602	1.0607	+0.8	8.40E+07	0.82	Y	1.00	85.7
ES 12378-PeCDF	31.10	1.2683	1.2704	+3.9	7.17E+07	1.57	Y	0.83	87.7
ES 23478-PeCDF	32.28	1.3156	1.3183	+5.2	7.14E+07	1.57	Y	0.81	90.1
ES 123478-HxCDF	35.68	0.9644	0.9643	-0.2	4.77E+07	0.53	Y	1.12	76.3
ES 123678-HxCDF	35.83	0.9682	0.9681	-0.2	5.51E+07	0.55	Y	1.33	74.5
ES 234678-HxCDF	36.50	0.9864	0.9864	0	5.05E+07	0.55	Y	1.21	75.1
ES 123789-HxCDF	37.48	1.0128	1.0128	0	4.62E+07	0.54	Y	1.12	74.2
ES 1234678-HpCDF	39.17	1.0578	1.0584	+1.4	3.87E+07	0.45	Y	0.92	75.3
ES 1234789-HpCDF	40.62	1.0967	1.0977	+2.4	3.00E+07	0.46	Y	0.82	65.9
ES OCDF	43.04	1.1623	1.1632	+2.3	3.22E+07	0.90	Y	0.78	37.2

Lab ID: B4526_17662_DF_008 | Acq'd: 12 Aug 2020 05:20 DTF | Wt/Vol: 9.26 g | ICAL: HRMS3_DF_10122018_28AUG2019

Client ID: CS-43 | UTP: 12-Aug-2020 15:18:38 DTF | J-level: 0.54 pg/g | Split: 1 | Checkcode: 877-121-VFX

Datafile: 200811C20 | Report: 12 Aug 2020 15:22 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %	
JS 1234-TCDD	26.22		-	-	-	6.96E+07	0.80	Y	-	-	
JS 1234-TCDF	24.48		-	-	-	9.84E+07	0.80	Y	-	-	
JS 123467-HxCDD	37.01		-	-	-	2.78E+07	1.22	Y	-	-	
CS 37Cl-2378-TCDD	26.95		1.0276	1.0276	0	2.63E+07	n/a	-	1.12	84.4	
CS 12347-PeCDD	32.12		1.2233	1.2249	+3.1	4.87E+07	1.58	Y	0.71	98.2	
CS 12346-PeCDF	30.55		1.2459	1.2478	+3.5	6.88E+07	1.59	Y	0.81	86.4	
CS 123469-HxCDF	36.14		0.9767	0.9766	-0.2	4.73E+07	0.54	Y	1.12	75.7	
CS 1234689-HpCDF	39.61		1.0696	1.0704	+1.9	3.89E+07	0.48	Y	0.90	77.9	
~~SS 37Cl-2378-TCDD~~	~~26.95~~		~~1.0276~~	~~1.0276~~	~~0~~	~~2.63E+07~~	~~n/a~~		~~1.14~~	~~98.8~~	Not used in this project.
~~SS 12347-PeCDD~~	~~32.12~~		~~1.2233~~	~~1.2249~~	~~+3.1~~	~~4.87E+07~~	~~1.58~~	~~Y~~	~~0.86~~	~~115~~	CL 13Aug20
~~SS 12346-PeCDF~~	~~30.55~~		~~1.2459~~	~~1.2478~~	~~+3.5~~	~~6.88E+07~~	~~1.59~~	~~Y~~	~~0.98~~	~~98.2~~	
~~SS 123469-HxCDF~~	~~36.14~~		~~0.9767~~	~~0.9766~~	~~-0.2~~	~~4.73E+07~~	~~0.54~~	~~Y~~	~~0.85~~	~~101~~	
~~SS 1234689-HpCDF~~	~~39.61~~		~~1.0696~~	~~1.0704~~	~~+1.9~~	~~3.89E+07~~	~~0.48~~	~~Y~~	~~0.97~~	~~103~~	

Totals	Conc	EMPC
Total TCDD	1.65	1.65
Total PeCDD	3.11	3.11
Total HxCDD	13.2	16.3
Total HpCDD	96.7	96.7
Total Tetra-Octa Dioxins	427	430
Total TCDF	8.29	11.7
Total PeCDF	13.3	14
Total HxCDF	17.1	17.1
Total HpCDF	37.6	37.6
Total Tetra-Octa Furans	95.9	100
Total Tetra-Octa Dioxins & Furans	523	531

Lab ID: B4526_17662_DF_008 **Acq'd:** 12 Aug 2020 05:20 DTF **Wt/Vol:** 9.26 g **ICAL:** HRMS3_DF_10122018_28AUG2019

Client ID: CS-43 **UTP:** 12-Aug-2020 15:18:38 DTF **J-level:** 0.54 pg/g **Split:** 1 **Checkcode:** 877-121-VFX

Datafile: 200811C20 **Report:** 12 Aug 2020 15:22 TF **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1368-TCDD	22.92		0.8523	0.8513	-1.4	5.29E+05	0.80	Y	1.19	1.65	14495	0.471
1379-TCDD	NotFnd		0.8682						1.19		14495	0.471
1369-TCDD	NotFnd		0.8858						1.19		14495	0.471
1469-TCDD	NotFnd		0.9177						1.19		14495	0.471
1247/1246/1248/1249-TCDD	NotFnd		0.9274						1.19		14495	0.471
1378-TCDD	NotFnd		0.9349						1.19		14495	0.471
1268-TCDD	NotFnd		0.9430						1.19		14495	0.471
1478-TCDD	NotFnd		0.9529						1.19		14495	0.471
1279-TCDD	NotFnd		0.9597						1.19		14495	0.471
1234/1269-TCDD	NotFnd		0.9739						1.19		14495	0.471
1236-TCDD	NotFnd		0.9794						1.19		14495	0.471
1237/1238-TCDD	NotFnd		0.9895						1.19		14495	0.471
1239-TCDD	NotFnd		0.9950						1.19		14495	0.471
2378-TCDD	**NotFnd**		**1.0008**						**1.19**		**14495**	**0.471**
1278-TCDD	NotFnd		1.0139						1.19		14495	0.471
1267-TCDD	NotFnd		1.0194						1.19		14495	0.471
1289-TCDD	NotFnd		1.0397						1.19		14495	0.471
12479/12468-PeCDD	30.03	J	0.9209	0.9194	-2.7	4.95E+05	1.43	Y	0.98	2.21	16682	0.815
12469-PeCDD	NotFnd		0.9382						0.98		16682	0.815
12368-PeCDD	31.18	J	0.9557	0.9548	-1.7	2.03E+05	1.64	Y	0.98	0.906	16682	0.815
12478-PeCDD	NotFnd		0.9617						0.98		16682	0.815
12379-PeCDD	NotFnd		0.9649						0.98		16682	0.815
12369/12467/12489-PeCDD	NotFnd		0.9732						0.98		16682	0.815
12346/12347-PeCDD	NotFnd		0.9850						0.98		16682	0.815
12378-PeCDD	NotFnd		**1.0006**						**0.98**		**16682**	**0.815**
12367-PeCDD	NotFnd		1.0038						0.98		16682	0.815
12389-PeCDD	NotFnd		1.0146						0.98		16682	0.815
124679/124689-HxCDD	34.97		0.9530	0.9529	-0.2	1.04E+06	1.31	Y	1.03	5.23	8870	0.411
123468-HxCDD	35.63	J EMPC	0.9715	0.9711	-0.9	4.35E+05	1.45	N	1.03	2.19	8870	0.411
123679/123689-HxCDD	35.94		0.9795	0.9794	-0.2	9.81E+05	1.25	Y	1.03	4.94	8870	0.411
123469-HxCDD	36.07	J	0.9832	0.9830	-0.4	1.46E+05	1.11	Y	1.03	0.733	8870	0.411
123478-HxCDD	36.71	J EMPC	**1.0004**	**1.0003**	**-0.2**	**1.02E+05**	**0.96**	**N**	1.02	**0.539**	**8870**	**0.4**
123678-HxCDD	36.82	J	**1.0036**	**1.0035**	**-0.2**	**2.55E+05**	**1.23**	**Y**	1.09	**1.25**	**8870**	**0.398**
123467-HxCDD	37.01	J EMPC	1.0089	1.0086	-0.7	7.47E+04	1.01	N	1.03	0.376	8870	0.411
123789-HxCDD	37.12	J	**1.0118**	**1.0116**	**-0.4**	**2.17E+05**	**1.32**	**Y**	0.97	**1.08**	**8870**	**0.436**

Lab ID: B4526_17662_DF_008 | Acq'd: 12 Aug 2020 05:20 DTF | Wt/Vol: 9.26 g | ICAL: HRMS3_DF_10122018_28AUG2019

Client ID: CS-43 | UTP: 12-Aug-2020 15:18:38 DTF | J-level: 0.54 pg/g | Split: 1 | Checkcode: 877-121-VFX

Datafile: 200811C20 | Report: 12 Aug 2020 15:22 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

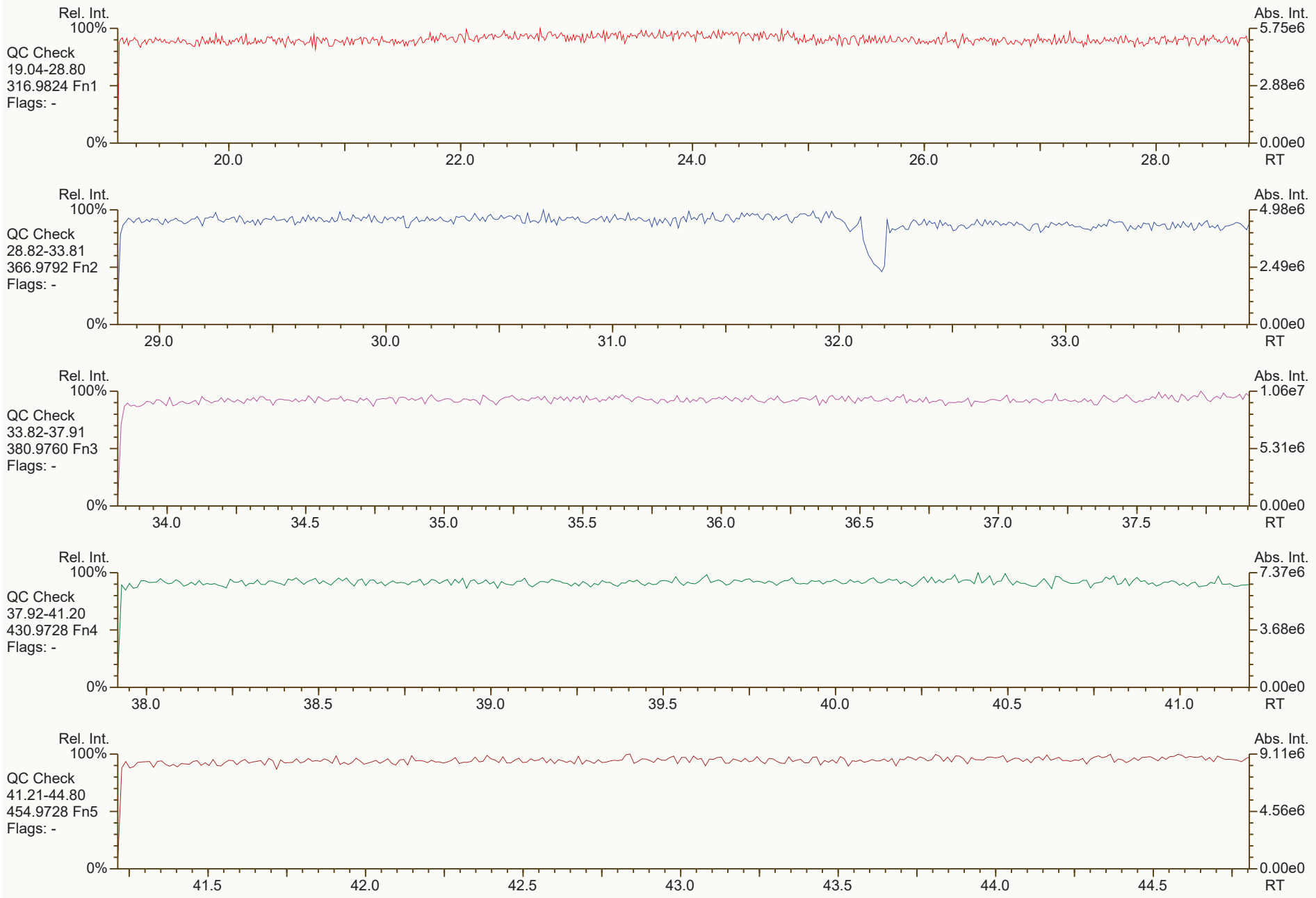
Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1234679-HpCDD	39.49		0.9826	0.9825	-0.2	1.03E+07	1.04	Y	0.98	67.3	5655	0.398
1234678-HpCDD	**40.21**		**1.0003**	**1.0004**	**+0.2**	**4.51E+06**	**1.02**	**Y**	**0.98**	**29.5**	**5655**	**0.398**
OCDD	**42.92**		**1.0003**	**1.0003**	**0**	**1.83E+07**	**0.89**	**Y**	**1.07**	**313**	**7476**	**2.13**
OCDD-a	42.91	**#VALUE!**	1.0002	1.0002	0	1.07E+06	2.56	Y	-	#VALUE!	6897	#VALUE!
1368-TCDF	20.71		0.7980	0.7975	-0.6	4.16E+05	0.78	Y	1.01	1.06	8352	0.255
1468-TCDF	21.25	J	0.8204	0.8184	-2.6	1.68E+05	0.81	Y	1.01	0.427	8352	0.255
2468-TCDF	21.90		0.8443	0.8433	-1.3	1.32E+06	0.77	Y	1.01	3.37	8352	0.255
1346/1246-TCDF	22.34	J EMPC	0.8597	0.8603	+0.8	1.23E+05	1.20	N	1.01	0.313	8352	0.255
1347/1378/1247-TCDF	22.47		0.8665	0.8652	-1.8	3.46E+05	0.70	Y	1.01	0.88	8352	0.255
1348-TCDF	NotFnd		0.8785						1.01		8352	0.255
1248/1367/1379-TCDF	22.88	EMPC	0.8840	0.8809	-4.3	3.67E+05	1.00	N	1.01	0.933	8352	0.255
1268-TCDF	23.34	EMPC	0.9004	0.8987	-2.4	3.18E+05	0.90	N	1.01	0.807	8352	0.255
1467-TCDF	NotFnd		0.9060						1.01		8352	0.255
1478-TCDF	NotFnd		0.9132						1.01		8352	0.255
1369/1237-TCDF	NotFnd		0.9287						1.01		8352	0.255
2467-TCDF	24.26	J EMPC	0.9345	0.9341	-0.6	1.21E+05	0.98	N	1.01	0.306	8352	0.255
2368-TCDF	24.44		0.9409	0.9412	+0.4	5.68E+05	0.86	Y	1.01	1.44	8352	0.255
1238/1234/1678/1469/1236-TCDF	NotFnd		0.9450						1.01		8352	0.255
1278-TCDF	25.03	EMPC	0.9638	0.9636	-0.3	2.40E+05	0.96	N	1.01	0.61	8352	0.255
1349-TCDF	NotFnd		0.9685						1.01		8352	0.255
1267-TCDF	NotFnd		0.9751						1.01		8352	0.255
2346/1249-TCDF	NotFnd		0.9831						1.01		8352	0.255
2347/1279-TCDF	NotFnd		0.9920						1.01		8352	0.255
2348-TCDF	NotFnd		0.9964						1.01		8352	0.255
2378-TCDF	**25.99**	J	**1.0009**	**1.0007**	**-0.3**	**2.02E+05**	**0.87**	**Y**	**1.01**	**0.513**	**8352**	**0.255**
2367/3467-TCDF	26.39		1.0164	1.0161	-0.5	2.35E+05	0.75	Y	1.01	0.598	8352	0.255
1269-TCDF	NotFnd		1.0259						1.01		8352	0.255
1239-TCDF	NotFnd		1.0373						1.01		8352	0.255
1289-TCDF	28.16	J EMPC	1.0838	1.0845	+1.2	1.90E+05	1.45	N	1.01	0.483	8352	0.255
13468/12468-PeCDF	28.17		0.9052	0.9057	+0.8	1.98E+06	1.39	Y	0.98	6.14	3543	0.106
13678/13467/12467-PeCDF	29.80	J	0.9582	0.9579	-0.5	2.51E+05	1.60	Y	0.98	0.778	5565	0.166
12368/13478/12478-PeCDF	29.96		0.9634	0.9631	-0.5	1.00E+06	1.43	Y	0.98	3.11	5565	0.166
14678-PeCDF	NotFnd		0.9668						0.98		5565	0.166
13479-PeCDF	NotFnd		0.9700						0.98		5565	0.166
13469/12479-PeCDF	NotFnd		0.9781						0.98		5565	0.166
12346-PeCDF	NotFnd		0.9829						0.98		5565	0.166

Lab ID: B4526_17662_DF_008 | Acq'd: 12 Aug 2020 05:20 DTF | Wt/Vol: 9.26 g | ICAL: HRMS3_DF_10122018_28AUG2019

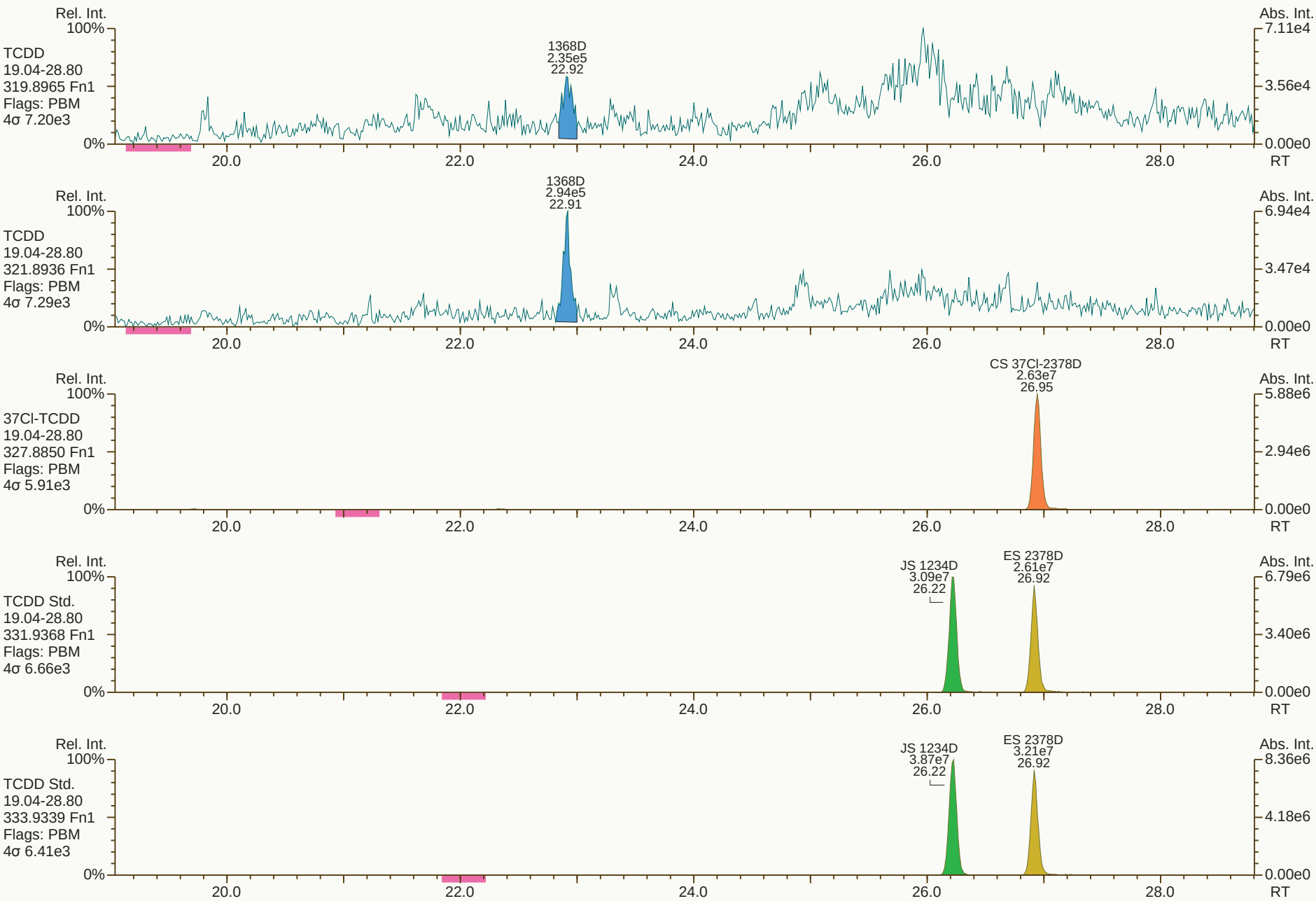
Client ID: CS-43 | UTP: 12-Aug-2020 15:18:38 DTF | J-level: 0.54 pg/g | Split: 1 | Checkcode: 877-121-VFX

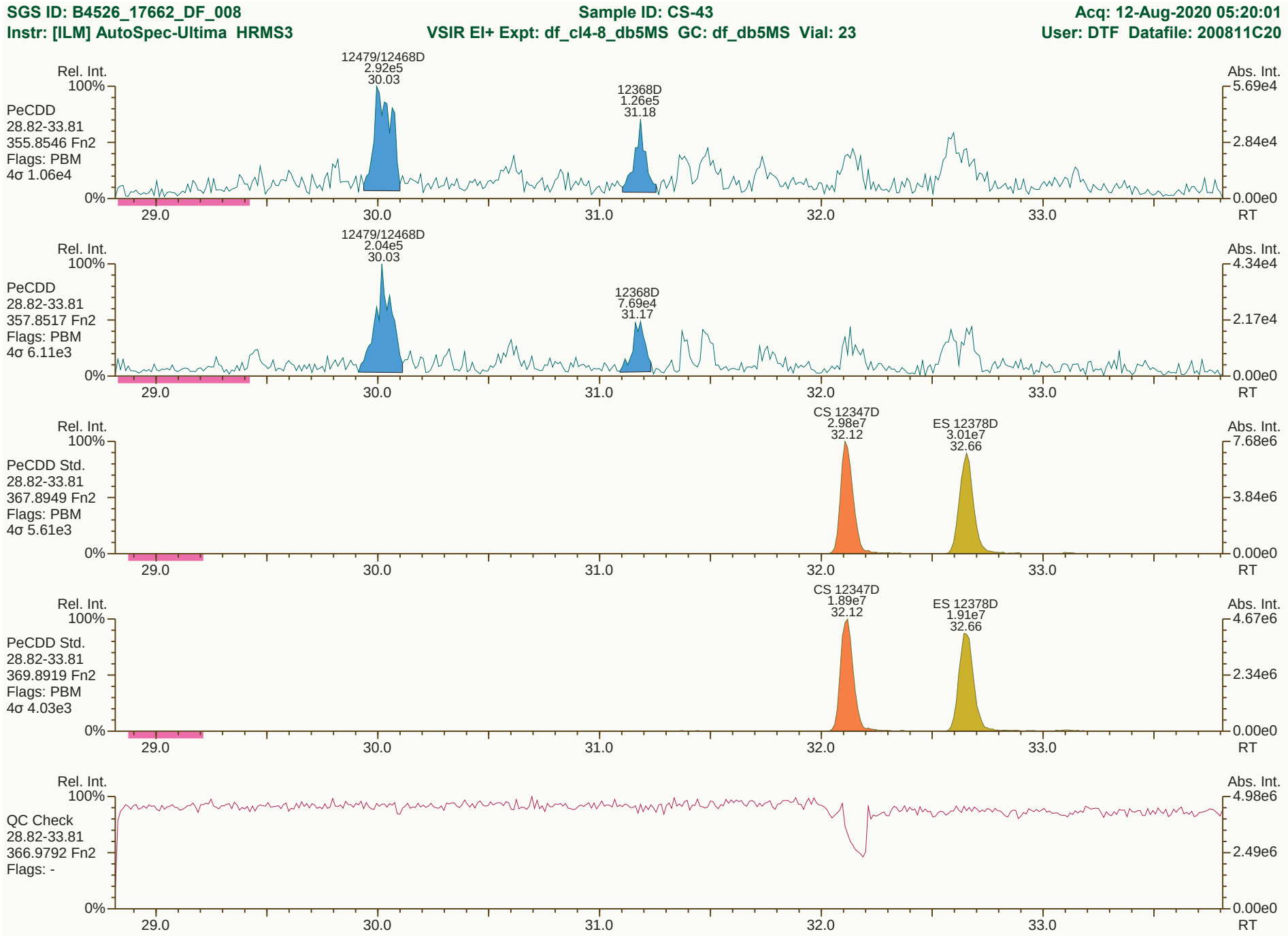
Datafile: 200811C20 | Report: 12 Aug 2020 15:22 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

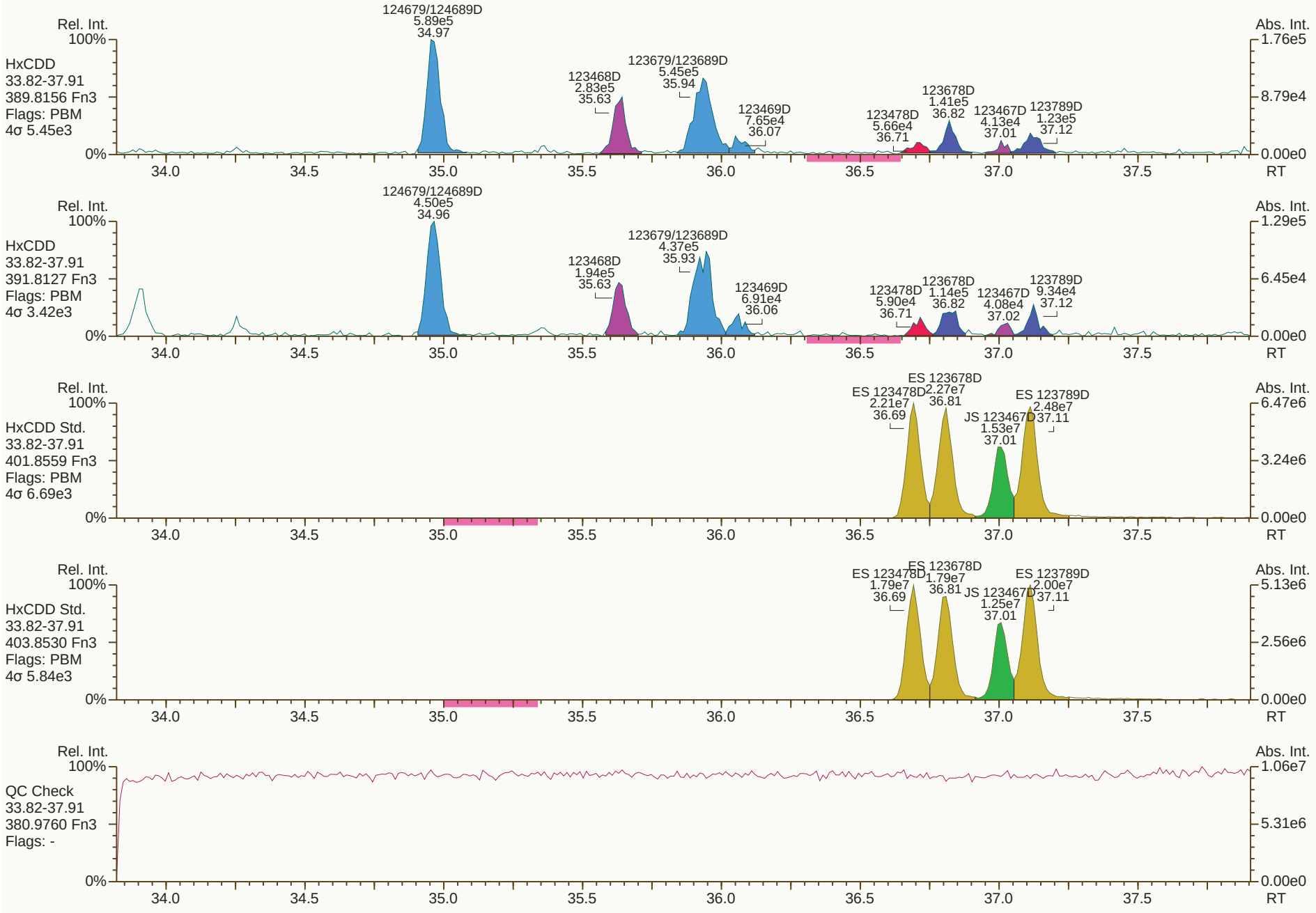
Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
23468/12469-PeCDF	30.67	J	0.9859	0.9860	+0.2	4.30E+05	1.42	Y	0.98	1.33	5565	0.166
12347-PeCDF	NotFnd		0.9884						0.98		5565	0.166
12348-PeCDF	NotFnd		0.9937						0.98		5565	0.166
12378-PeCDF	**31.12**	J	**1.0006**	**1.0004**	**-0.4**	**1.68E+05**	**1.70**	**Y**	**0.96**	**0.523**	**5565**	**0.166**
12678/12367-PeCDF	31.43	J EMPC	1.0097	1.0105	+1.5	2.26E+05	1.24	N	0.98	0.699	5565	0.166
12379-PeCDF	NotFnd		1.0152						0.98		5565	0.166
12679-PeCDF	NotFnd		0.9923						0.98		5565	0.166
23467/12369-PeCDF	NotFnd		0.9966						0.98		5565	0.166
23478-PeCDF	**32.31**	J	**1.0005**	**1.0010**	**+1.0**	**4.50E+05**	**1.47**	**Y**	**0.99**	**1.38**	**5565**	**0.166**
23478/12489-PeCDF	NotFnd		0.0000						0.99			
12489-PeCDF	NotFnd		1.0043						0.98		5565	0.166
12349-PeCDF	NotFnd		1.0107						0.98		5565	0.166
12389-PeCDF	NotFnd		1.0349						0.98		5565	0.166
123468-HxCDF	34.28	J	0.9607	0.9607	0	3.57E+05	1.42	Y	1.13	1.36	7884	0.27
124678/134678-HxCDF	34.49		0.9666	0.9665	-0.2	1.53E+06	1.14	Y	1.13	5.85	7884	0.27
134679-HxCDF	NotFnd		0.9730						1.13		7884	0.27
124679-HxCDF	NotFnd		0.9787						1.13		7884	0.27
124689-HxCDF	35.15		0.9850	0.9850	0	1.65E+06	1.18	Y	1.13	6.31	7884	0.27
123467-HxCDF	35.58	J	0.9971	0.9971	0	1.01E+05	1.37	Y	1.13	0.386	7884	0.27
123478-HxCDF	**35.70**	J	**1.0005**	**1.0006**	**+0.2**	**2.46E+05**	**1.32**	**Y**	**1.21**	**0.923**	**7884**	**0.245**
123678-HxCDF	**35.84**	J	**1.0005**	**1.0004**	**-0.2**	**2.30E+05**	**1.26**	**Y**	**1.11**	**0.814**	**7884**	**0.253**
123479-HxCDF	NotFnd		1.0049						1.13		7884	0.27
123469-HxCDF	NotFnd		1.0090						1.13		7884	0.27
123679-HxCDF	NotFnd		0.9941						1.13		7884	0.27
234678-HxCDF	**36.51**	J	**1.0004**	**1.0002**	**-0.4**	**2.79E+05**	**1.15**	**Y**	**1.12**	**1.07**	**7884**	**0.28**
234678/123689-HxCDF	NotFnd		0.0000						1.12			
123689-HxCDF	NotFnd		1.0041						1.13		7884	0.27
123789-HxCDF	**NotFnd**		**1.0005**						**1.11**		**7884**	**0.311**
123789/123489-HxCDF	NotFnd		0.0000						1.11			
123489-HxCDF	37.51	J	1.0009	1.0007	-0.5	1.00E+05	1.15	Y	1.13	0.384	7884	0.27
1234678-HpCDF	**39.18**		**1.0003**	**1.0003**	**0**	**4.60E+06**	**1.07**	**Y**	**1.32**	**19.4**	**6431**	**0.268**
1234679-HpCDF	NotFnd		1.0075						1.29		6431	0.337
1234689-HpCDF	39.62		1.0112	1.0117	+1.2	3.74E+06	1.04	Y	1.29	18.2	6431	0.337
1234789-HpCDF	**NotFnd**		**1.0003**						**1.26**		**6431**	**0.428**
OCDF	**43.05**		**1.0003**	**1.0002**	**-0.3**	**1.51E+06**	**0.90**	**Y**	**1.03**	**19.6**	**4041**	**0.882**
OCDF-a	43.07	**#VALUE!**	1.0002	1.0005	+0.8	6.31E+04	1.44	N	-	#VALUE!	5199	#VALUE!


Rel. Int.
100%
QC Check
19.04-28.80
316.9824 Fn1
Flags: -
0%
20.0
22.0
24.0
26.0
28.0
RT
Abs. Int.
5.75e6
2.88e6
0.00e0
Rel. Int.
100%
QC Check
28.82-33.81
366.9792 Fn2
Flags: -
0%
29.0
30.0
31.0
32.0
33.0
RT
Abs. Int.
4.98e6
2.49e6
0.00e0
Rel. Int.
100%
QC Check
33.82-37.91
380.9760 Fn3
Flags: -
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Abs. Int.
1.06e7
5.31e6
0.00e0
Rel. Int.
100%
QC Check
37.92-41.20
430.9728 Fn4
Flags: -
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Abs. Int.
7.37e6
3.68e6
0.00e0
Rel. Int.
100%
QC Check
41.21-44.80
454.9728 Fn5
Flags: -
0%
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Abs. Int.
9.11e6
4.56e6
0.00e0

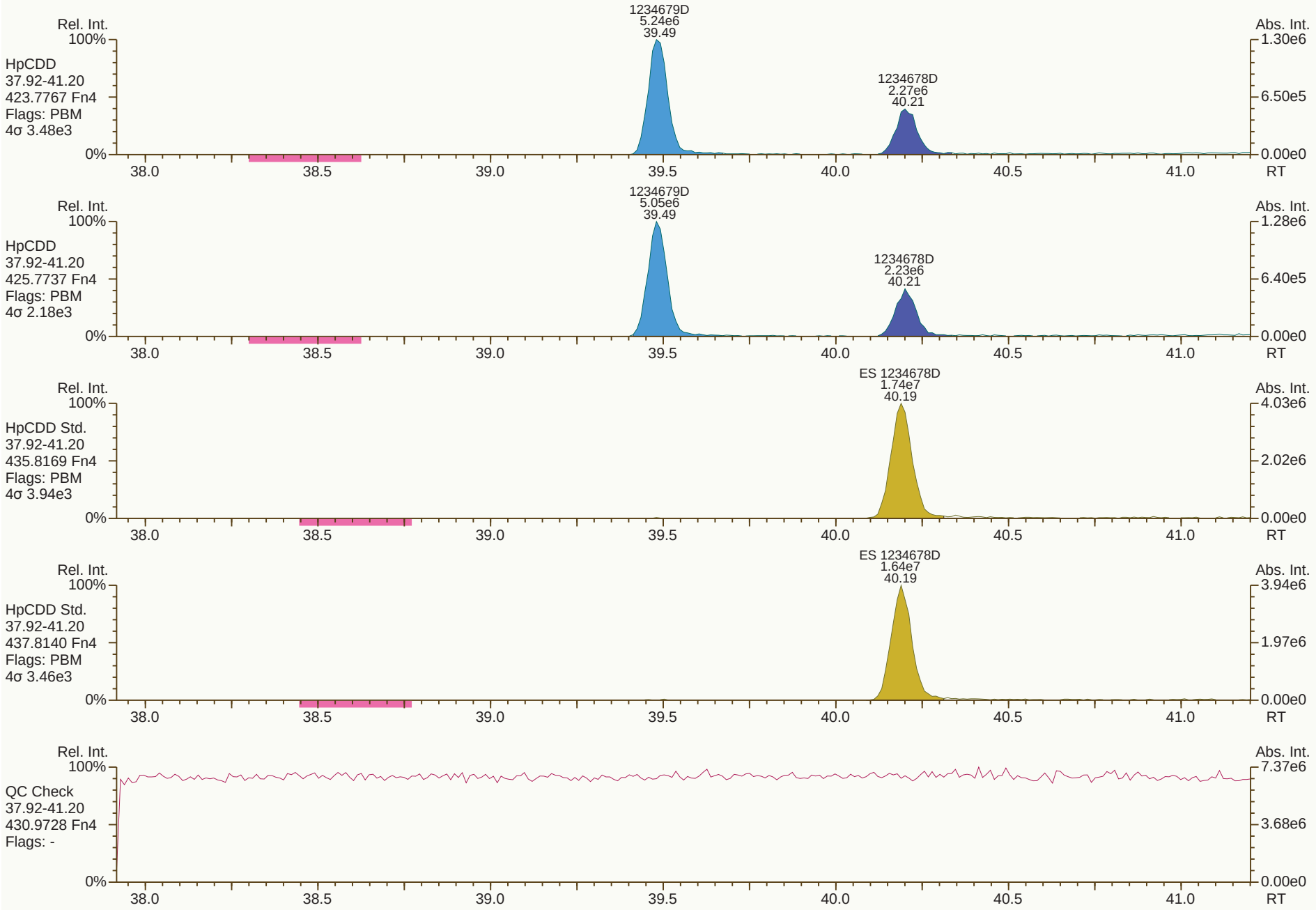
SGS ID: B4526_17662_DF_008 Sample ID: CS-43 Acq: 12-Aug-2020 05:20:01
Instr: [ILM] AutoSpec-Ultima HRMS3 VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 23 User: DTF Datafile: 200811C20

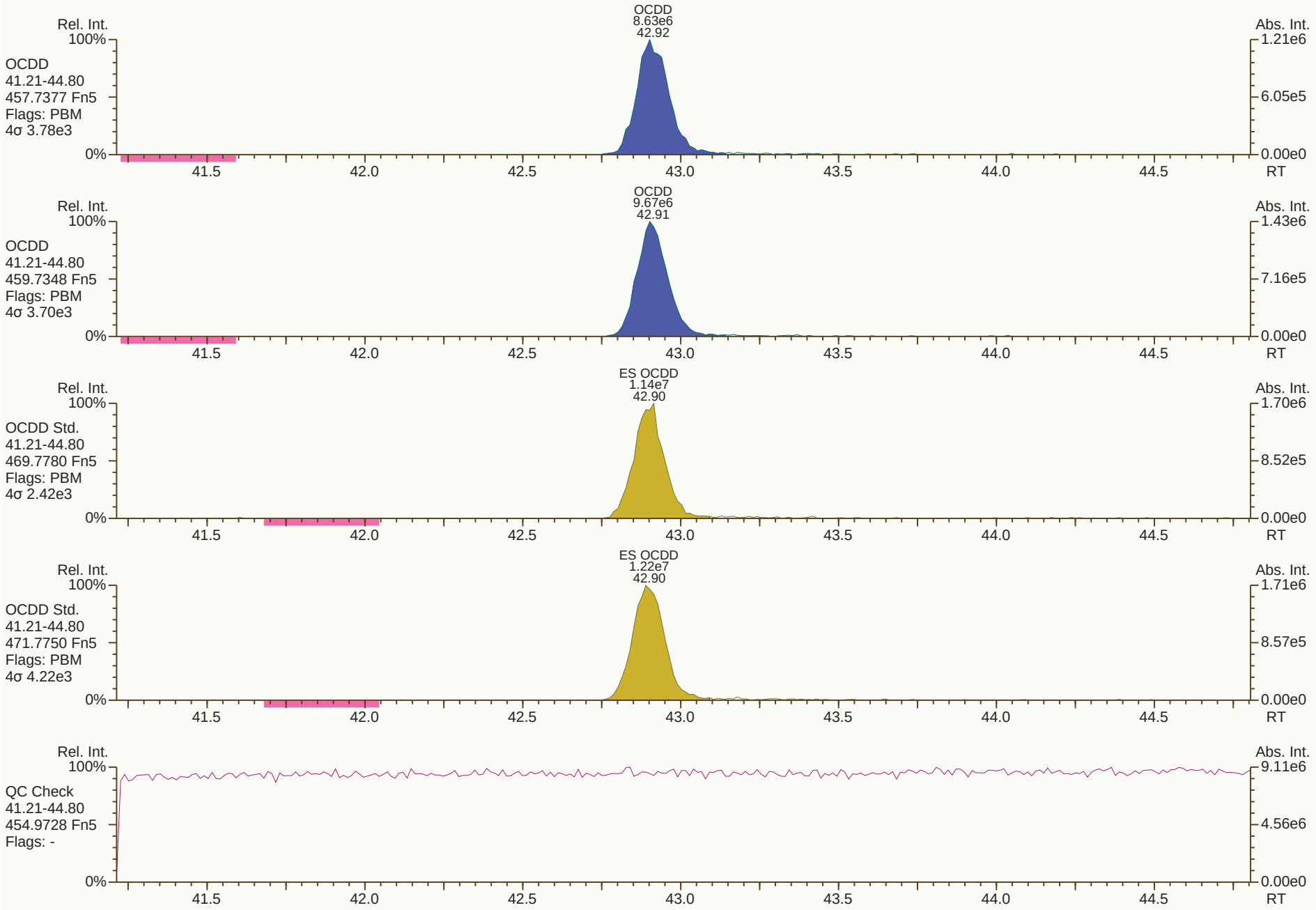


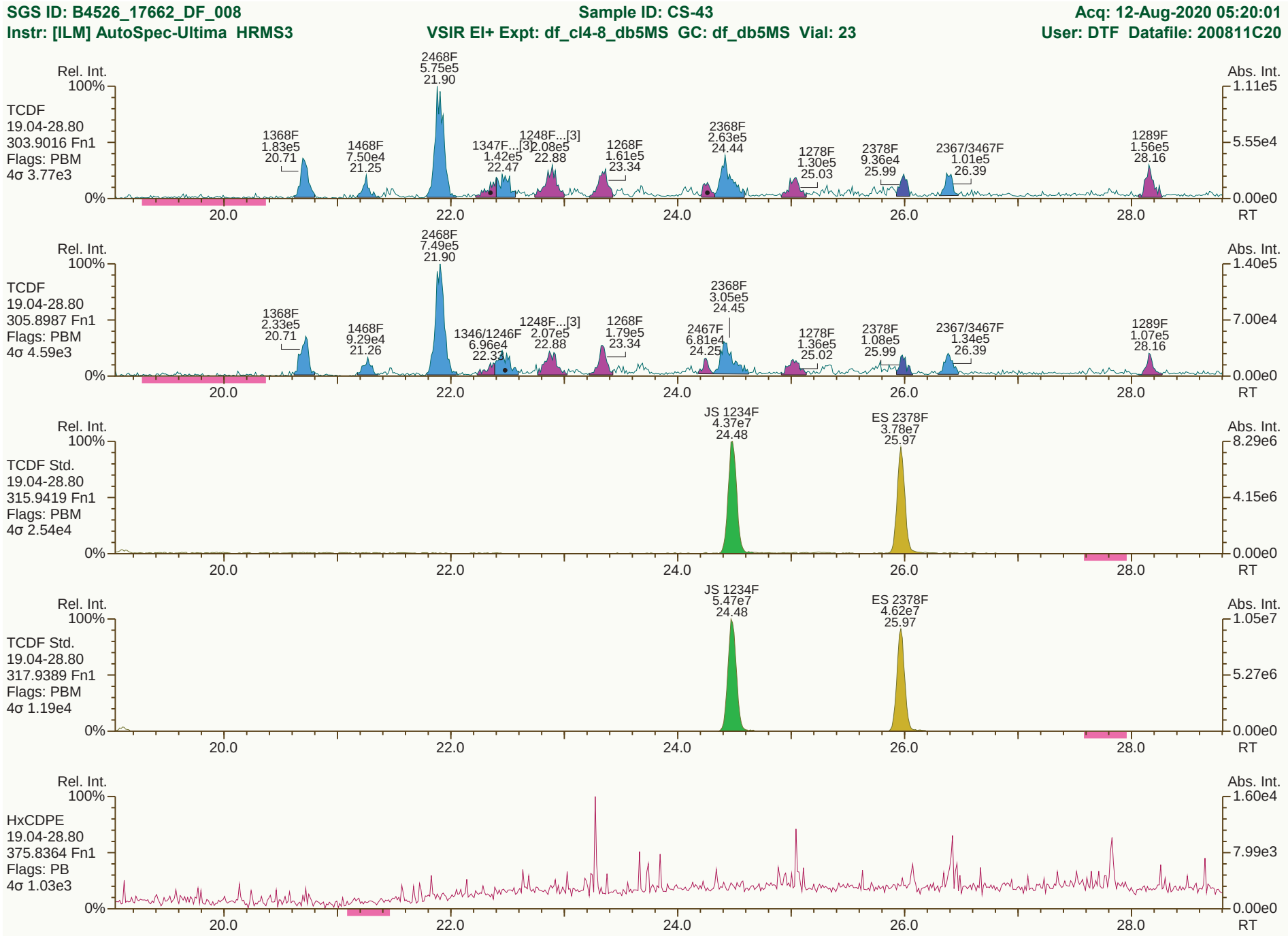

SGS ID: B4526_17662_DF_008
Sample ID: CS-43
Acq: 12-Aug-2020 05:20:01
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 23
User: DTF Datafile: 200811C20
Rel. Int.
Abs. Int.
PeCDD
28.82-33.81
355.8546 Fn2
Flags: PBM
4σ 1.06e4
12479/12468D
2.92e5
30.03
12368D
1.26e5
31.18
5.69e4
2.84e4
0.00e0
PeCDD
28.82-33.81
357.8517 Fn2
Flags: PBM
4σ 6.11e3
12479/12468D
2.04e5
30.03
12368D
7.69e4
31.17
4.34e4
2.17e4
PeCDD Std.
28.82-33.81
367.8949 Fn2
Flags: PBM
4σ 5.61e3
CS 12347D
2.98e7
32.12
ES 12378D
3.01e7
32.66
7.68e6
3.84e6
PeCDD Std.
28.82-33.81
369.8919 Fn2
Flags: PBM
4σ 4.03e3
CS 12347D
1.89e7
32.12
ES 12378D
1.91e7
32.66
4.67e6
2.34e6
QC Check
28.82-33.81
366.9792 Fn2
Flags: -
4.98e6
2.49e6
100%
0%
29.0
30.0
31.0
32.0
33.0
RT
Results: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\B4526_17662_DF_008.utp_res, saved 12-Aug-2020 15:18 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 2498, 6136 scc: 877-121
Revised: 12-Aug-2020 13:56 (DTF) Printed: 12-Aug-2020 15:38 Page 3 of 12



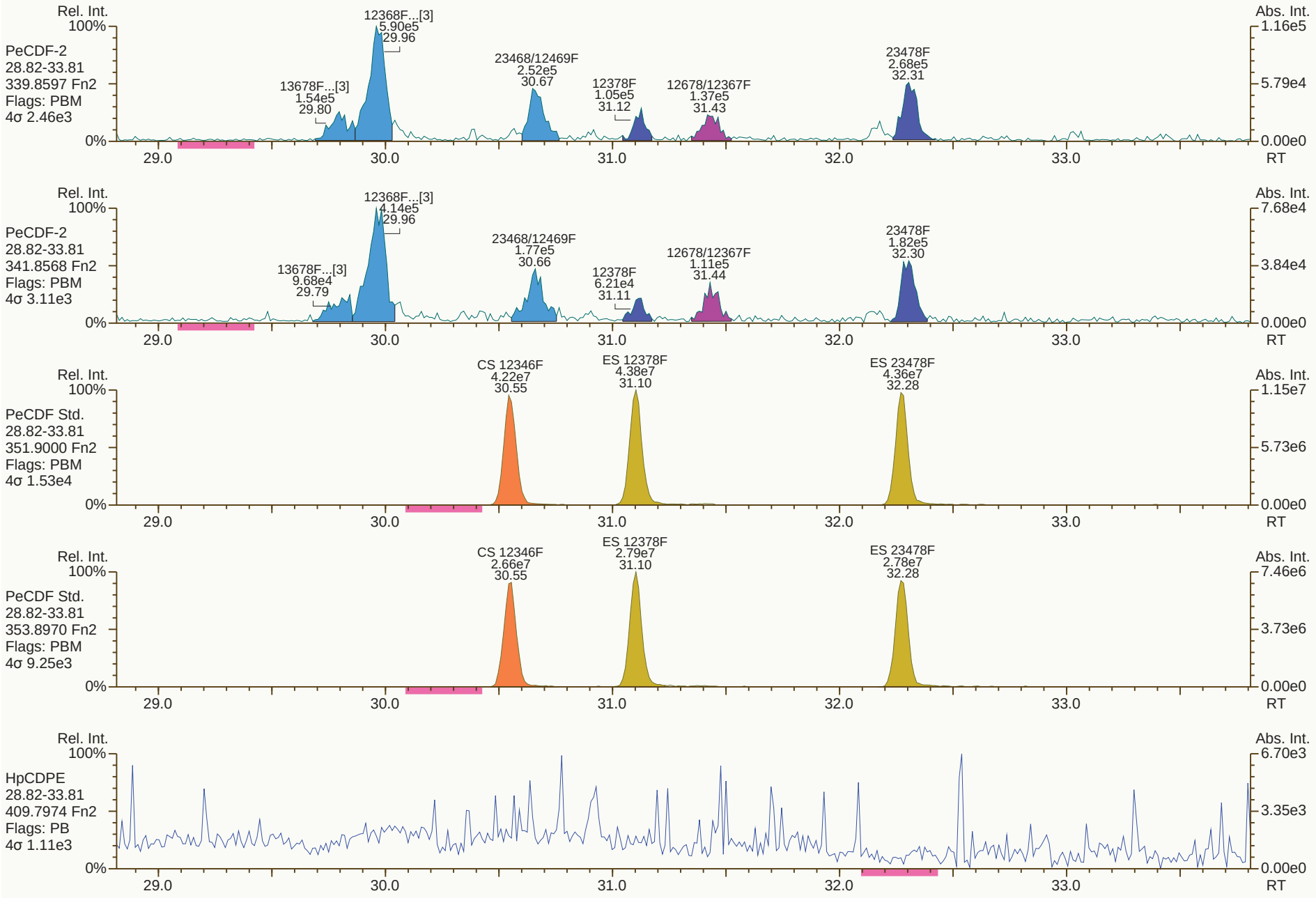
Results: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\B4526_17662_DF_008.utp_res, saved 12-Aug-2020 15:18 (DTF) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 6954, 9335 scc: 877-121 *Revised: 12-Aug-2020 13:57 (DTF) Printed: 12-Aug-2020 15:38 Page 4 of 12*

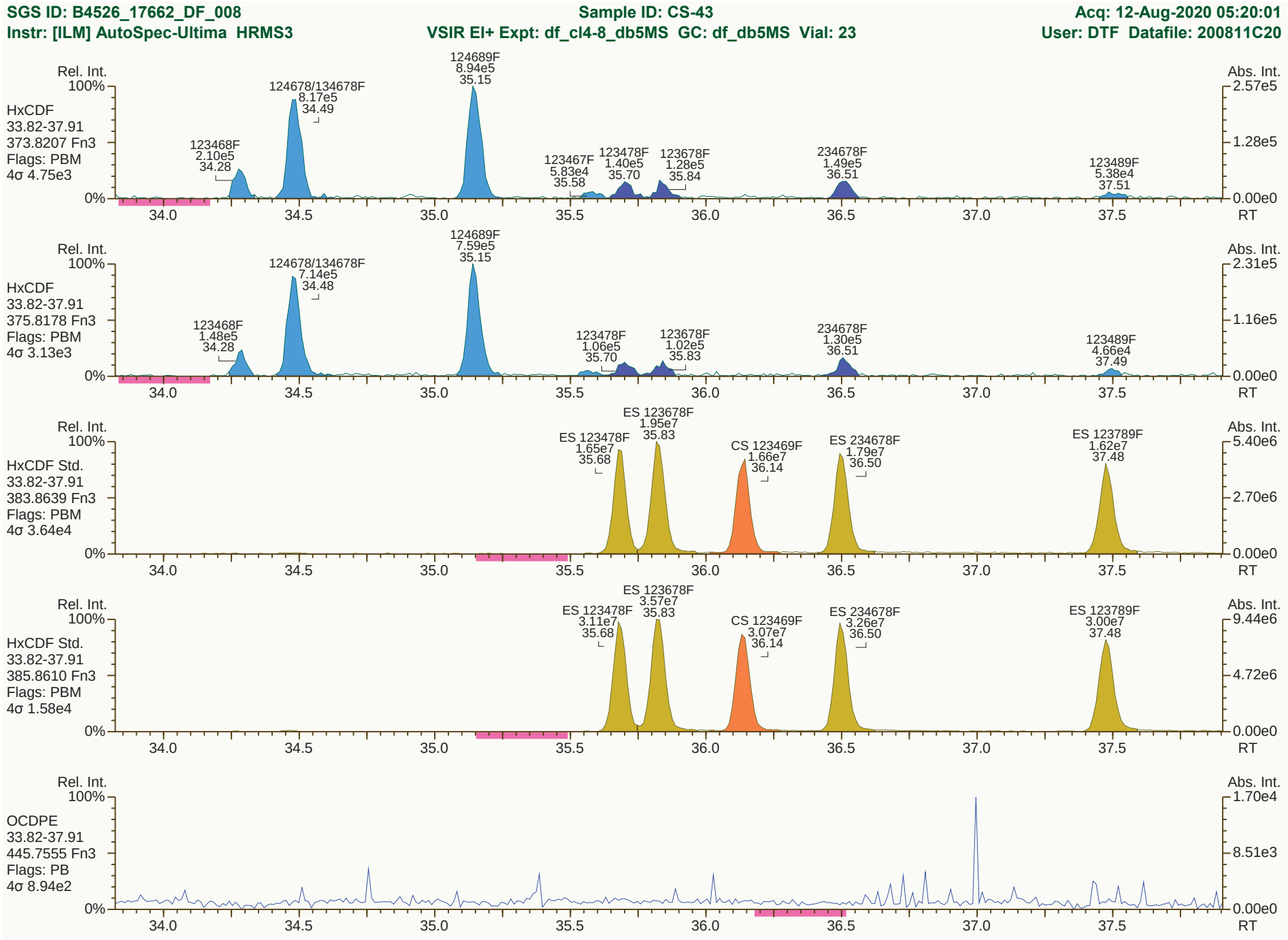

Rel. Int.
100%
HpCDD
37.92-41.20
423.7767 Fn4
Flags: PBM
4σ 3.48e3
0%
1234679D
5.24e6
39.49
1234678D
2.27e6
40.21
Abs. Int.
1.30e6
6.50e5
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD
37.92-41.20
425.7737 Fn4
Flags: PBM
4σ 2.18e3
0%
1234679D
5.05e6
39.49
1234678D
2.23e6
40.21
Abs. Int.
1.28e6
6.40e5
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.92-41.20
435.8169 Fn4
Flags: PBM
4σ 3.94e3
0%
ES 1234678D
1.74e7
40.19
Abs. Int.
4.03e6
2.02e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.92-41.20
437.8140 Fn4
Flags: PBM
4σ 3.46e3
0%
ES 1234678D
1.64e7
40.19
Abs. Int.
3.94e6
1.97e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
QC Check
37.92-41.20
430.9728 Fn4
Flags: -
0%
Abs. Int.
7.37e6
3.68e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT

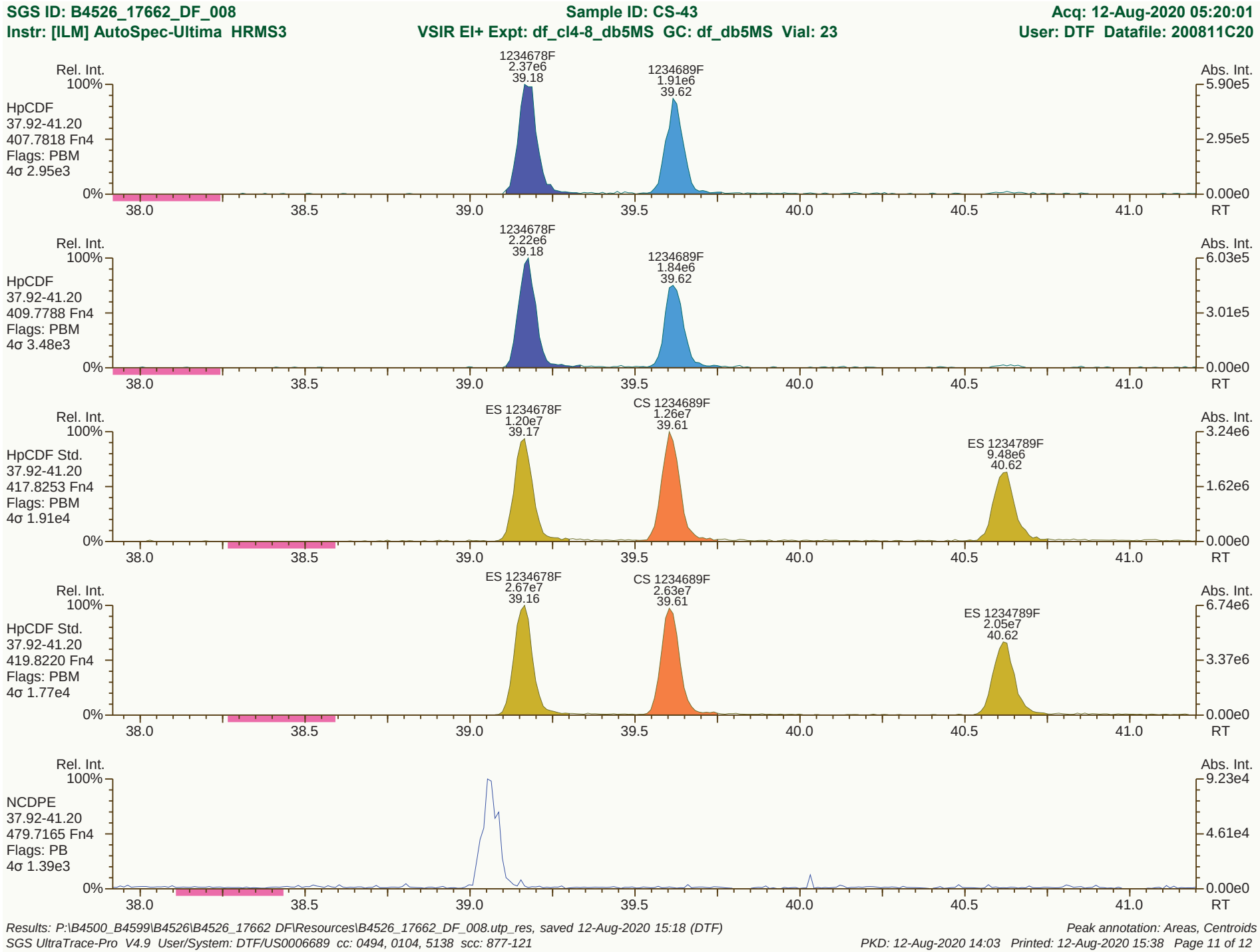

OCDD
8.63e6
42.92
Rel. Int.
100%
OCDD
41.21-44.80
457.7377 Fn5
Flags: PBM
4σ 3.78e3
0%
Abs. Int.
1.21e6
6.05e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
OCDD
9.67e6
42.91
Rel. Int.
100%
OCDD
41.21-44.80
459.7348 Fn5
Flags: PBM
4σ 3.70e3
0%
Abs. Int.
1.43e6
7.16e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDD
1.14e7
42.90
Rel. Int.
100%
OCDD Std.
41.21-44.80
469.7780 Fn5
Flags: PBM
4σ 2.42e3
0%
Abs. Int.
1.70e6
8.52e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDD
1.22e7
42.90
Rel. Int.
100%
OCDD Std.
41.21-44.80
471.7750 Fn5
Flags: PBM
4σ 4.22e3
0%
Abs. Int.
1.71e6
8.57e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
QC Check
41.21-44.80
454.9728 Fn5
Flags: -
0%
Abs. Int.
9.11e6
4.56e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT


SGS ID: B4526_17662_DF_008
Sample ID: CS-43
Acq: 12-Aug-2020 05:20:01
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 23
User: DTF Datafile: 200811C20
Rel. Int.
Abs. Int.
TCDF
19.04-28.80
303.9016 Fn1
Flags: PBM
4σ 3.77e3
1368F 1.83e5 20.71
1468F 7.50e4 21.25
2468F 5.75e5 21.90
1347F...[3] 1.42e5 22.47
1248F...[3] 2.08e5 22.88
1268F 1.61e5 23.34
2368F 2.63e5 24.44
1278F 1.30e5 25.03
2378F 9.36e4 25.99
2367/3467F 1.01e5 26.39
1289F 1.56e5 28.16
TCDF
19.04-28.80
305.8987 Fn1
Flags: PBM
4σ 4.59e3
1368F 2.33e5 20.71
1468F 9.29e4 21.26
2468F 7.49e5 21.90
1346/1246F 6.96e4 22.33
1248F...[3] 2.07e5 22.88
1268F 1.79e5 23.34
2467F 6.81e4 24.25
2368F 3.05e5 24.45
1278F 1.36e5 25.02
2378F 1.08e5 25.99
2367/3467F 1.34e5 26.39
1289F 1.07e5 28.16
TCDF Std.
19.04-28.80
315.9419 Fn1
Flags: PBM
4σ 2.54e4
JS 1234F 4.37e7 24.48
ES 2378F 3.78e7 25.97
TCDF Std.
19.04-28.80
317.9389 Fn1
Flags: PBM
4σ 1.19e4
JS 1234F 5.47e7 24.48
ES 2378F 4.62e7 25.97
HxCDPE
19.04-28.80
375.8364 Fn1
Flags: PB
4σ 1.03e3
20.0
22.0
24.0
26.0
28.0
RT
Results: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\B4526_17662_DF_008.utp_res, saved 12-Aug-2020 15:18 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 2667, 8914, 3702 scc: 877-121
Revised: 12-Aug-2020 14:01 (DTF) Printed: 12-Aug-2020 15:38 Page 7 of 12


Rel. Int.
100%
0%
PeCDF-1
19.04-28.80
339.8597 Fn1
Flags: PBM
4σ 1.93e3
13468/12468F
1.15e6
28.17
Abs. Int.
2.39e5
1.19e5
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
0%
PeCDF-1
19.04-28.80
341.8568 Fn1
Flags: PBM
4σ 1.62e3
13468/12468F
8.30e5
28.17
Abs. Int.
1.95e5
9.77e4
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
0%
QC Check
19.04-28.80
316.9824 Fn1
Flags: -
Abs. Int.
5.75e6
2.88e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT


Rel. Int.
100%
PeCDF-2
28.82-33.81
339.8597 Fn2
Flags: PBM
4σ 2.46e3
0%
12368F...[3]
5.90e5
29.96
13678F...[3]
1.54e5
29.80
23468/12469F
2.52e5
30.67
12378F
1.05e5
31.12
12678/12367F
1.37e5
31.43
23478F
2.68e5
32.31
Abs. Int.
1.16e5
5.79e4
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF-2
28.82-33.81
341.8568 Fn2
Flags: PBM
4σ 3.11e3
0%
12368F...[3]
4.14e5
29.96
13678F...[3]
9.68e4
29.79
23468/12469F
1.77e5
30.66
12378F
6.21e4
31.11
12678/12367F
1.11e5
31.44
23478F
1.82e5
32.30
Abs. Int.
7.68e4
3.84e4
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.82-33.81
351.9000 Fn2
Flags: PBM
4σ 1.53e4
0%
CS 12346F
4.22e7
30.55
ES 12378F
4.38e7
31.10
ES 23478F
4.36e7
32.28
Abs. Int.
1.15e7
5.73e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.82-33.81
353.8970 Fn2
Flags: PBM
4σ 9.25e3
0%
CS 12346F
2.66e7
30.55
ES 12378F
2.79e7
31.10
ES 23478F
2.78e7
32.28
Abs. Int.
7.46e6
3.73e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
HpCDPE
28.82-33.81
409.7974 Fn2
Flags: PB
4σ 1.11e3
0%
Abs. Int.
6.70e3
3.35e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT


SGS ID: B4526_17662_DF_008
Sample ID: CS-43
Acq: 12-Aug-2020 05:20:01
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 23
User: DTF Datafile: 200811C20
Rel. Int.
Abs. Int.
HxCDF
33.82-37.91
373.8207 Fn3
Flags: PBM
4σ 4.75e3
123468F 2.10e5 34.28
124678/134678F 8.17e5 34.49
124689F 8.94e5 35.15
123467F 5.83e4 35.58
123478F 1.40e5 35.70
123678F 1.28e5 35.84
234678F 1.49e5 36.51
123489F 5.38e4 37.51
HxCDF
33.82-37.91
375.8178 Fn3
Flags: PBM
4σ 3.13e3
123468F 1.48e5 34.28
124678/134678F 7.14e5 34.48
124689F 7.59e5 35.15
123478F 1.06e5 35.70
123678F 1.02e5 35.83
234678F 1.30e5 36.51
123489F 4.66e4 37.49
HxCDF Std.
33.82-37.91
383.8639 Fn3
Flags: PBM
4σ 3.64e4
ES 123478F 1.65e7 35.68
ES 123678F 1.95e7 35.83
CS 123469F 1.66e7 36.14
ES 234678F 1.79e7 36.50
ES 123789F 1.62e7 37.48
HxCDF Std.
33.82-37.91
385.8610 Fn3
Flags: PBM
4σ 1.58e4
ES 123478F 3.11e7 35.68
ES 123678F 3.57e7 35.83
CS 123469F 3.07e7 36.14
ES 234678F 3.26e7 36.50
ES 123789F 3.00e7 37.48
OCDPE
33.82-37.91
445.7555 Fn3
Flags: PB
4σ 8.94e2
100%
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
2.57e5
1.28e5
0.00e0
2.31e5
1.16e5
5.40e6
2.70e6
9.44e6
4.72e6
1.70e4
8.51e3


SGS ID: B4526_17662_DF_008
Sample ID: CS-43
Acq: 12-Aug-2020 05:20:01
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 23
User: DTF Datafile: 200811C20
Rel. Int.
Abs. Int.
HpCDF
37.92-41.20
407.7818 Fn4
Flags: PBM
4σ 2.95e3
1234678F
2.37e6
39.18
1234689F
1.91e6
39.62
5.90e5
2.95e5
0.00e0
HpCDF
37.92-41.20
409.7788 Fn4
Flags: PBM
4σ 3.48e3
1234678F
2.22e6
39.18
1234689F
1.84e6
39.62
6.03e5
3.01e5
0.00e0
HpCDF Std.
37.92-41.20
417.8253 Fn4
Flags: PBM
4σ 1.91e4
ES 1234678F
1.20e7
39.17
CS 1234689F
1.26e7
39.61
ES 1234789F
9.48e6
40.62
3.24e6
1.62e6
0.00e0
HpCDF Std.
37.92-41.20
419.8220 Fn4
Flags: PBM
4σ 1.77e4
ES 1234678F
2.67e7
39.16
CS 1234689F
2.63e7
39.61
ES 1234789F
2.05e7
40.62
6.74e6
3.37e6
0.00e0
NCDPE
37.92-41.20
479.7165 Fn4
Flags: PB
4σ 1.39e3
9.23e4
4.61e4
0.00e0
100%
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Results: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\B4526_17662_DF_008.utp_res, saved 12-Aug-2020 15:18 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 0494, 0104, 5138 scc: 877-121
PKD: 12-Aug-2020 14:03 Printed: 12-Aug-2020 15:38 Page 11 of 12


OCDF
7.14e5
43.05
Rel. Int.
100%
OCDF
41.21-44.80
441.7428 Fn5
Flags: PBM
4σ 2.04e3
0%
Abs. Int.
1.14e5
5.71e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
OCDF
7.93e5
43.05
Rel. Int.
100%
OCDF
41.21-44.80
443.7398 Fn5
Flags: PBM
4σ 2.00e3
0%
Abs. Int.
1.34e5
6.72e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDF
1.53e7
43.04
Rel. Int.
100%
OCDF Std.
41.21-44.80
453.7830 Fn5
Flags: PBM
4σ 2.84e3
0%
Abs. Int.
2.27e6
1.14e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDF
1.70e7
43.04
Rel. Int.
100%
OCDF Std.
41.21-44.80
455.7801 Fn5
Flags: PBM
4σ 3.58e3
0%
Abs. Int.
2.47e6
1.23e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
DCDPE
41.21-44.80
513.6775 Fn5
Flags: PB
4σ 1.19e3
0%
Abs. Int.
4.85e3
2.43e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT

Lab ID: B4526_17662_DF_009 **Acq'd:** 12 Aug 2020 06:06 DTF **Wt/Vol:** 9.27 g **ICAL:** HRMS3_DF_10122018_28AUG2019

Client ID: CS-44 **UTP:** 12-Aug-2020 15:18:39 DTF **J-level:** 0.539 pg/g **Split:** 1 **Checkcode:** 738-667-XZT

Datafile: 200811C21 **Report:** 12 Aug 2020 15:22 TF **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	NotFnd		1.0008	-		-	-	-	1.19	-	4516	0.184
12378-PeCDD	32.63	J EMPC	1.0006	1.0006	0	5.95E+04	1.15	N	0.98	0.326	5840	0.293
123478-HxCDD	36.68	J	1.0004	1.0004	0	8.13E+04	1.11	Y	1.02	0.574	6621	0.39
123678-HxCDD	36.80	J EMPC	1.0036	1.0035	-0.2	1.33E+05	1.49	N	1.09	0.897	6621	0.409
123789-HxCDD	37.10	J	1.0118	1.0118	0	1.66E+05	1.34	Y	0.97	1.14	6621	0.446
1234678-HpCDD	40.18		1.0003	1.0003	0	3.26E+06	1.08	Y	0.98	28.4	3119	0.282
OCDD	42.89		1.0003	1.0003	0	3.36E+07	0.89	Y	1.07	598	5021	1.44
2378-TCDF	25.98	J	1.0009	1.0014	+0.8	9.71E+04	0.67	Y	1.01	0.288	5270	0.188
12378-PeCDF	31.10	J	1.0006	1.0005	-0.2	9.98E+04	1.35	Y	0.96	0.375	3815	0.137
23478-PeCDF	32.28	J	1.0005	1.0009	+0.8	2.38E+05	1.35	Y	0.99	0.899	3815	0.136
123478-HxCDF	35.68	J EMPC	1.0005	1.0006	+0.2	8.40E+04	0.93	N	1.21	0.412	3190	0.137
123678-HxCDF	35.82	J EMPC	1.0005	1.0004	-0.2	9.20E+04	0.98	N	1.11	0.424	3190	0.14
234678-HxCDF	36.49	J	1.0004	1.0002	-0.4	1.46E+05	1.29	Y	1.12	0.759	3190	0.155
123789-HxCDF	NotFnd		1.0005	-		-	-	-	1.11	-	3190	0.172
1234678-HpCDF	39.15		1.0003	1.0003	0	9.23E+05	1.02	Y	1.32	5.26	1742	0.0889
1234789-HpCDF	NotFnd		1.0003	-		-	-	-	1.26	-	1742	0.141
OCDF	43.02	J EMPC	1.0003	1.0001	-0.5	3.83E+05	1.04	N	1.03	5.31	4072	0.962

Name	Act RT	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	26.90	1.0266	1.0268	+0.3	4.88E+07	0.80	Y	0.99	79.4
ES 12378-PeCDD	32.62	1.2430	1.2451	+4.1	4.00E+07	1.55	Y	0.83	77.7
ES 123478-HxCDD	36.67	0.9916	0.9916	0	2.98E+07	1.26	Y	0.95	75.6
ES 123678-HxCDD	36.79	0.9947	0.9947	0	2.94E+07	1.27	Y	0.98	72.4
ES 123789-HxCDD	37.09	1.0029	1.0028	-0.2	3.24E+07	1.27	Y	1.14	68.4
ES 1234678-HpCDD	40.17	1.0851	1.0861	+2.4	2.53E+07	1.07	Y	0.90	67.8
ES OCDD	42.88	1.1584	1.1594	+2.6	2.26E+07	0.94	Y	0.63	43.4
ES 2378-TCDF	25.94	1.0602	1.0608	+0.9	7.18E+07	0.81	Y	1.00	77.2
ES 12378-PeCDF	31.08	1.2683	1.2709	+4.8	5.95E+07	1.55	Y	0.83	76.6
ES 23478-PeCDF	32.25	1.3156	1.3185	+5.6	5.80E+07	1.56	Y	0.81	77
ES 123478-HxCDF	35.66	0.9644	0.9642	-0.4	3.65E+07	0.53	Y	1.12	78
ES 123678-HxCDF	35.80	0.9682	0.9681	-0.2	4.24E+07	0.55	Y	1.33	76.4
ES 234678-HxCDF	36.48	0.9864	0.9864	0	3.72E+07	0.54	Y	1.21	73.9
ES 123789-HxCDF	37.46	1.0128	1.0128	0	3.46E+07	0.54	Y	1.12	74.3
ES 1234678-HpCDF	39.14	1.0578	1.0584	+1.4	2.86E+07	0.48	Y	0.92	74.2
ES 1234789-HpCDF	40.60	1.0967	1.0977	+2.4	2.29E+07	0.46	Y	0.82	67
ES OCDF	43.02	1.1623	1.1632	+2.3	3.01E+07	0.89	Y	0.78	46.4

Lab ID: B4526_17662_DF_009 | Acq'd: 12 Aug 2020 06:06 DTF | Wt/Vol: 9.27 g | ICAL: HRMS3_DF_10122018_28AUG2019

Client ID: CS-44 | UTP: 12-Aug-2020 15:18:39 DTF | J-level: 0.539 pg/g | Split: 1 | Checkcode: 738-667-XZT

Datafile: 200811C21 | Report: 12 Aug 2020 15:22 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %	
JS 1234-TCDD	26.20		-	-	-	6.21E+07	0.82	Y	-	-	
JS 1234-TCDF	24.46		-	-	-	9.35E+07	0.80	Y	-	-	
JS 123467-HxCDD	36.98		-	-	-	2.08E+07	1.31	Y	-	-	
CS 37Cl-2378-TCDD	26.92		1.0276	1.0277	+0.2	2.28E+07	n/a	-	1.12	81.9	
CS 12347-PeCDD	32.10		1.2233	1.2252	+3.7	4.31E+07	1.60	Y	0.71	97.3	
CS 12346-PeCDF	30.53		1.2459	1.2483	+4.4	6.25E+07	1.56	Y	0.81	82.7	
CS 123469-HxCDF	36.12		0.9767	0.9766	-0.2	3.90E+07	0.54	Y	1.12	83.5	
CS 1234689-HpCDF	39.59		1.0696	1.0705	+2.1	2.99E+07	0.45	Y	0.90	80.1	
~~SS 37Cl-2378-TCDD~~	~~26.92~~		~~1.0276~~	~~1.0277~~	~~+0.2~~	~~2.28E+07~~	~~n/a~~		~~1.14~~	~~102~~	Not used in this project.
~~SS 12347-PeCDD~~	~~32.10~~		~~1.2233~~	~~1.2252~~	~~+3.7~~	~~4.31E+07~~	~~1.60~~	~~Y~~	~~0.86~~	~~125~~	CL 13Aug20
~~SS 12346-PeCDF~~	~~30.53~~		~~1.2459~~	~~1.2483~~	~~+4.4~~	~~6.25E+07~~	~~1.56~~	~~Y~~	~~0.98~~	~~108~~	
~~SS 123469-HxCDF~~	~~36.12~~		~~0.9767~~	~~0.9766~~	~~-0.2~~	~~3.90E+07~~	~~0.54~~	~~Y~~	~~0.85~~	~~109~~	
~~SS 1234689-HpCDF~~	~~39.59~~		~~1.0696~~	~~1.0705~~	~~+2.1~~	~~2.99E+07~~	~~0.45~~	~~Y~~	~~0.97~~	~~107~~	

Totals	Conc	EMPC
Total TCDD	3.89	3.89
Total PeCDD	3.25	5.98
Total HxCDD	17.4	18.8
Total HpCDD	86.5	86.5
Total Tetra-Octa Dioxins	709	713
Total TCDF	12.5	13.9
Total PeCDF	9.25	10
Total HxCDF	7.52	8.62
Total HpCDF	10	10
Total Tetra-Octa Furans	39.2	47.9
Total Tetra-Octa Dioxins & Furans	748	761

Lab ID: B4526_17662_DF_009 **Acq'd:** 12 Aug 2020 06:06 DTF **Wt/Vol:** 9.27 g **ICAL:** HRMS3_DF_10122018_28AUG2019

Client ID: CS-44 **UTP:** 12-Aug-2020 15:18:39 DTF **J-level:** 0.539 pg/g **Split:** 1 **Checkcode:** 738-667-XZT

Datafile: 200811C21 **Report:** 12 Aug 2020 15:22 TF **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1368-TCDD	22.88		0.8523	0.8508	-2.1	5.39E+05	0.83	Y	1.19	2.01	4516	0.184
1379-TCDD	23.30		0.8682	0.8663	-2.7	2.73E+05	0.82	Y	1.19	1.02	4516	0.184
1369-TCDD	NotFnd		0.8858						1.19		4516	0.184
1469-TCDD	NotFnd		0.9177						1.19		4516	0.184
1247/1246/1248/1249-TCDD	24.91		0.9274	0.9261	-1.9	2.34E+05	0.86	Y	1.19	0.871	4516	0.184
1378-TCDD	NotFnd		0.9349						1.19		4516	0.184
1268-TCDD	NotFnd		0.9430						1.19		4516	0.184
1478-TCDD	NotFnd		0.9529						1.19		4516	0.184
1279-TCDD	NotFnd		0.9597						1.19		4516	0.184
1234/1269-TCDD	NotFnd		0.9739						1.19		4516	0.184
1236-TCDD	NotFnd		0.9794						1.19		4516	0.184
1237/1238-TCDD	NotFnd		0.9895						1.19		4516	0.184
1239-TCDD	NotFnd		0.9950						1.19		4516	0.184
2378-TCDD	**NotFnd**		**1.0008**						**1.19**		**4516**	**0.184**
1278-TCDD	NotFnd		1.0139						1.19		4516	0.184
1267-TCDD	NotFnd		1.0194						1.19		4516	0.184
1289-TCDD	NotFnd		1.0397						1.19		4516	0.184
12479/12468-PeCDD	30.01	J	0.9209	0.9202	-1.3	3.94E+05	1.68	Y	0.98	2.16	5840	0.293
12469-PeCDD	30.57	J	0.9382	0.9374	-1.5	1.35E+05	1.66	Y	0.98	0.739	5840	0.293
12368-PeCDD	31.16	J EMPC	0.9557	0.9554	-0.6	1.46E+05	2.21	N	0.98	0.801	5840	0.293
12478-PeCDD	31.36	J	0.9617	0.9614	-0.6	6.40E+04	1.46	Y	0.98	0.351	5840	0.293
12379-PeCDD	31.47	J EMPC	0.9649	0.9648	-0.2	1.15E+05	1.24	N	0.98	0.63	5840	0.293
12369/12467/12489-PeCDD	NotFnd		0.9732						0.98		5840	0.293
12346/12347-PeCDD	32.12	J EMPC	0.9850	0.9848	-0.4	1.79E+05	1.80	N	0.98	0.978	5840	0.293
12378-PeCDD	32.63	J EMPC	**1.0006**	**1.0006**	**0**	**5.95E+04**	**1.15**	**N**	**0.98**	**0.326**	**5840**	**0.293**
12367-PeCDD	NotFnd		1.0038						0.98		5840	0.293
12389-PeCDD	NotFnd		1.0146						0.98		5840	0.293
124679/124689-HxCDD	34.94		0.9530	0.9529	-0.2	1.25E+06	1.30	Y	1.03	8.6	6621	0.415
123468-HxCDD	35.61	J	0.9715	0.9712	-0.6	3.03E+05	1.09	Y	1.03	2.08	6621	0.415
123679/123689-HxCDD	35.91		0.9795	0.9793	-0.4	6.21E+05	1.19	Y	1.03	4.27	6621	0.415
123469-HxCDD	36.03	J EMPC	0.9832	0.9826	-1.3	7.98E+04	1.43	N	1.03	0.549	6621	0.415
123478-HxCDD	36.68	J	**1.0004**	**1.0004**	**0**	**8.13E+04**	**1.11**	**Y**	1.02	**0.574**	**6621**	**0.39**
123678-HxCDD	36.80	J EMPC	**1.0036**	**1.0035**	**-0.2**	**1.33E+05**	**1.49**	**N**	1.09	**0.897**	**6621**	**0.409**
123467-HxCDD	36.99	J	1.0089	1.0088	-0.2	9.93E+04	1.38	Y	1.03	0.683	6621	0.415
123789-HxCDD	37.10	J	**1.0118**	**1.0118**	**0**	**1.66E+05**	**1.34**	**Y**	0.97	**1.14**	**6621**	**0.446**

Lab ID: B4526_17662_DF_009 | Acq'd: 12 Aug 2020 06:06 DTF | Wt/Vol: 9.27 g | ICAL: HRMS3_DF_10122018_28AUG2019

Client ID: CS-44 | UTP: 12-Aug-2020 15:18:39 DTF | J-level: 0.539 pg/g | Split: 1 | Checkcode: 738-667-XZT

Datafile: 200811C21 | Report: 12 Aug 2020 15:22 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

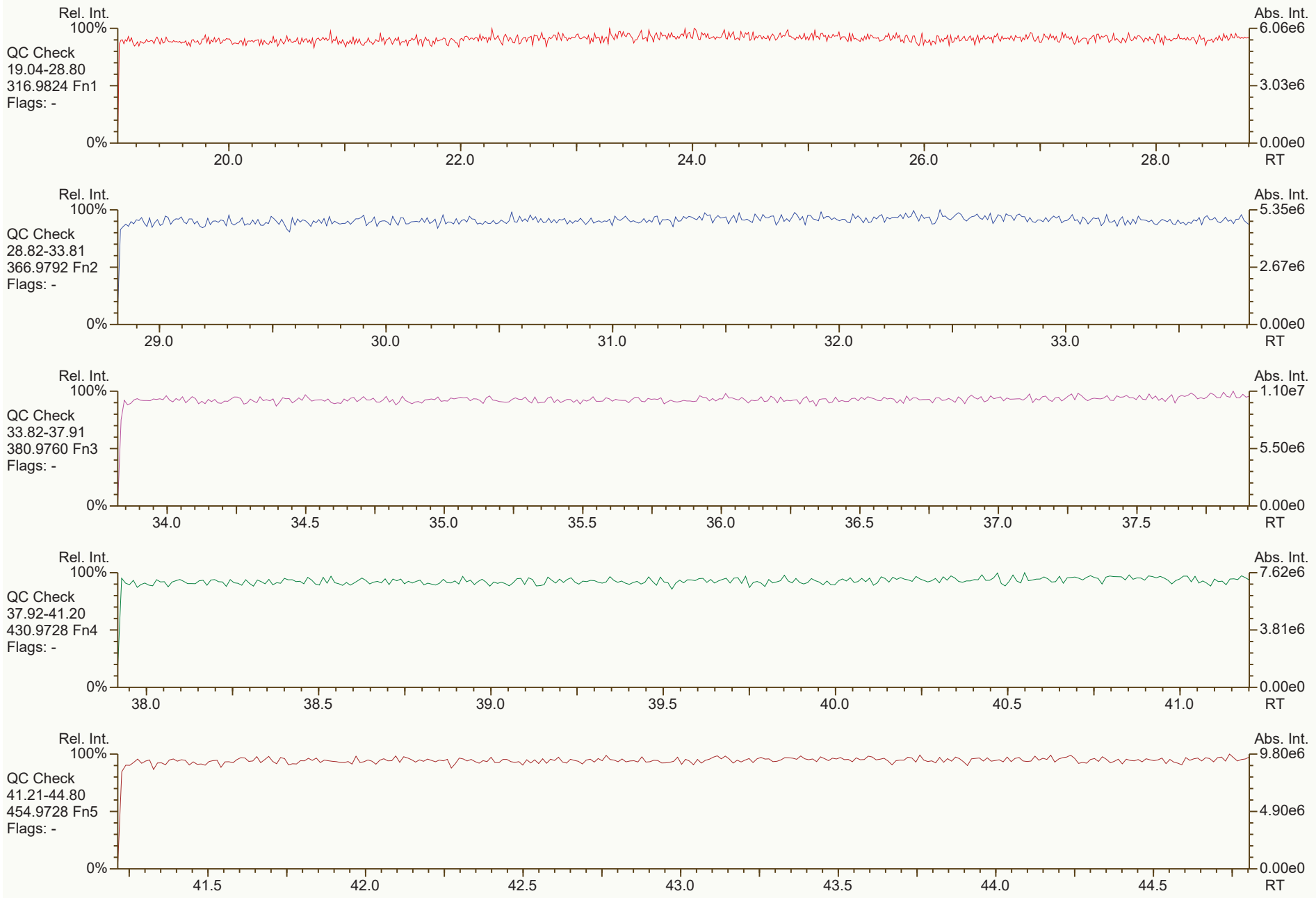
Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1234679-HpCDD	39.46		0.9826	0.9825	-0.2	6.66E+06	1.00	Y	0.98	58	3119	0.282
1234678-HpCDD	**40.18**		**1.0003**	**1.0003**	**0**	**3.26E+06**	**1.08**	**Y**	**0.98**	**28.4**	**3119**	**0.282**
OCDD	**42.89**		**1.0003**	**1.0003**	**0**	**3.36E+07**	**0.89**	**Y**	**1.07**	**598**	**5021**	**1.44**
OCDD-a	42.85	**#VALUE!**	1.0002	0.9995	-1.8	1.22E+06	2.50	Y	-	#VALUE!	7809	#VALUE!
1368-TCDF	20.68		0.7980	0.7970	-1.2	8.18E+05	0.76	Y	1.01	2.43	5270	0.188
1468-TCDF	21.23	J EMPC	0.8204	0.8182	-2.8	1.37E+05	0.89	N	1.01	0.407	5270	0.188
2468-TCDF	21.87		0.8443	0.8430	-1.7	2.12E+06	0.74	Y	1.01	6.27	5270	0.188
1346/1246-TCDF	NotFnd		0.8597						1.01		5270	0.188
1347/1378/1247-TCDF	22.42		0.8665	0.8641	-3.2	2.21E+05	0.80	Y	1.01	0.656	5270	0.188
1348-TCDF	NotFnd		0.8785						1.01		5270	0.188
1248/1367/1379-TCDF	22.88	J	0.8840	0.8820	-2.7	1.81E+05	0.78	Y	1.01	0.537	5270	0.188
1268-TCDF	23.31		0.9004	0.8986	-2.5	2.50E+05	0.87	Y	1.01	0.743	5270	0.188
1467-TCDF	NotFnd		0.9060						1.01		5270	0.188
1478-TCDF	NotFnd		0.9132						1.01		5270	0.188
1369/1237-TCDF	NotFnd		0.9287						1.01		5270	0.188
2467-TCDF	NotFnd		0.9345						1.01		5270	0.188
2368-TCDF	24.42		0.9409	0.9413	+0.6	5.15E+05	0.80	Y	1.01	1.53	5270	0.188
1238/1234/1678/1469/1236-TCDF	NotFnd		0.9450						1.01		5270	0.188
1278-TCDF	NotFnd		0.9638						1.01		5270	0.188
1349-TCDF	NotFnd		0.9685						1.01		5270	0.188
1267-TCDF	NotFnd		0.9751						1.01		5270	0.188
2346/1249-TCDF	NotFnd		0.9831						1.01		5270	0.188
2347/1279-TCDF	25.74	J EMPC	0.9920	0.9921	+0.2	6.53E+04	0.63	N	1.01	0.194	5270	0.188
2348-TCDF	NotFnd		0.9964						1.01		5270	0.188
2378-TCDF	**25.98**	J	**1.0009**	**1.0014**	**+0.8**	**9.71E+04**	**0.67**	**Y**	**1.01**	**0.288**	**5270**	**0.188**
2367/3467-TCDF	26.37	J EMPC	1.0164	1.0165	+0.2	1.34E+05	0.65	N	1.01	0.398	5270	0.188
1269-TCDF	NotFnd		1.0259						1.01		5270	0.188
1239-TCDF	NotFnd		1.0373						1.01		5270	0.188
1289-TCDF	28.13	J EMPC	1.0838	1.0843	+0.8	1.66E+05	1.73	N	1.01	0.493	5270	0.188
13468/12468-PeCDF	28.15		0.9052	0.9056	+0.7	1.06E+06	1.77	Y	0.98	3.99	3655	0.131
13678/13467/12467-PeCDF	29.79	J	0.9582	0.9584	+0.4	1.71E+05	1.56	Y	0.98	0.645	3815	0.137
12368/13478/12478-PeCDF	29.95	J	0.9634	0.9634	0	6.79E+05	1.50	Y	0.98	2.56	3815	0.137
14678-PeCDF	NotFnd		0.9668						0.98		3815	0.137
13479-PeCDF	NotFnd		0.9700						0.98		3815	0.137
13469/12479-PeCDF	NotFnd		0.9781						0.98		3815	0.137
12346-PeCDF	NotFnd		0.9829						0.98		3815	0.137

Lab ID: B4526_17662_DF_009 | Acq'd: 12 Aug 2020 06:06 DTF | Wt/Vol: 9.27 g | ICAL: HRMS3_DF_10122018_28AUG2019

Client ID: CS-44 | UTP: 12-Aug-2020 15:18:39 DTF | J-level: 0.539 pg/g | Split: 1 | Checkcode: 738-667-XZT

Datafile: 200811C21 | Report: 12 Aug 2020 15:22 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
23468/12469-PeCDF	30.65	J EMPC	0.9859	0.9859	0	2.03E+05	1.25	N	0.98	0.765	3815	0.137
12347-PeCDF	NotFnd		0.9884						0.98		3815	0.137
12348-PeCDF	NotFnd		0.9937						0.98		3815	0.137
12378-PeCDF	**31.10**	J	**1.0006**	**1.0005**	**-0.2**	**9.98E+04**	**1.35**	**Y**	**0.96**	**0.375**	**3815**	**0.137**
12678/12367-PeCDF	31.40	J	1.0097	1.0101	+0.8	1.19E+05	1.54	Y	0.98	0.446	3815	0.137
12379-PeCDF	NotFnd		1.0152						0.98		3815	0.137
12679-PeCDF	NotFnd		0.9923						0.98		3815	0.137
23467/12369-PeCDF	32.13	J	0.9966	0.9964	-0.4	8.79E+04	1.35	Y	0.98	0.331	3815	0.137
23478-PeCDF	**32.28**	J	**1.0005**	**1.0009**	**+0.8**	**2.38E+05**	**1.35**	**Y**	**0.99**	**0.899**	**3815**	**0.136**
23478/12489-PeCDF	NotFnd		0.0000						0.99			
12489-PeCDF	NotFnd		1.0043						0.98		3815	0.137
12349-PeCDF	NotFnd		1.0107						0.98		3815	0.137
12389-PeCDF	NotFnd		1.0349						0.98		3815	0.137
123468-HxCDF	34.26	J	0.9607	0.9606	-0.2	1.86E+05	1.09	Y	1.13	0.94	3190	0.15
124678/134678-HxCDF	34.46		0.9666	0.9662	-0.8	6.24E+05	1.26	Y	1.13	3.15	3190	0.15
134679-HxCDF	NotFnd		0.9730						1.13		3190	0.15
124679-HxCDF	NotFnd		0.9787						1.13		3190	0.15
124689-HxCDF	35.13	J	0.9850	0.9850	0	4.42E+05	1.31	Y	1.13	2.23	3190	0.15
123467-HxCDF	35.56	J EMPC	0.9971	0.9973	+0.4	5.23E+04	0.93	N	1.13	0.264	3190	0.15
123478-HxCDF	**35.68**	J EMPC	**1.0005**	**1.0006**	**+0.2**	**8.40E+04**	**0.93**	**N**	**1.21**	**0.412**	**3190**	**0.137**
123678-HxCDF	**35.82**	J EMPC	**1.0005**	**1.0004**	**-0.2**	**9.20E+04**	**0.98**	**N**	**1.11**	**0.424**	**3190**	**0.14**
123479-HxCDF	NotFnd		1.0049						1.13		3190	0.15
123469-HxCDF	NotFnd		1.0090						1.13		3190	0.15
123679-HxCDF	NotFnd		0.9941						1.13		3190	0.15
234678-HxCDF	**36.49**	J	**1.0004**	**1.0002**	**-0.4**	**1.46E+05**	**1.29**	**Y**	**1.12**	**0.759**	**3190**	**0.155**
234678/123689-HxCDF	NotFnd		0.0000						1.12			
123689-HxCDF	NotFnd		1.0041						1.13		3190	0.15
123789-HxCDF	**NotFnd**		**1.0005**						**1.11**		**3190**	**0.172**
123789/123489-HxCDF	NotFnd		0.0000						1.11			
123489-HxCDF	37.48	J	1.0009	1.0006	-0.7	8.74E+04	1.39	Y	1.13	0.441	3190	0.15
1234678-HpCDF	**39.15**		**1.0003**	**1.0003**	**0**	**9.23E+05**	**1.02**	**Y**	**1.32**	**5.26**	**1742**	**0.0889**
1234679-HpCDF	NotFnd		1.0075						1.29		1742	0.112
1234689-HpCDF	39.60		1.0112	1.0117	+1.2	7.29E+05	1.07	Y	1.29	4.74	1742	0.112
1234789-HpCDF	**NotFnd**		**1.0003**						**1.26**		**1742**	**0.141**
OCDF	**43.02**	**J EMPC**	**1.0003**	**1.0001**	**-0.5**	**3.83E+05**	**1.04**	**N**	**1.03**	**5.31**	**4072**	**0.962**
OCDF-a	NotFnd	**#VALUE!**	1.0002						-		3947	#VALUE!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QC Check
19.04-28.80
316.9824 Fn1
Flags: -
0%
Abs. Int.
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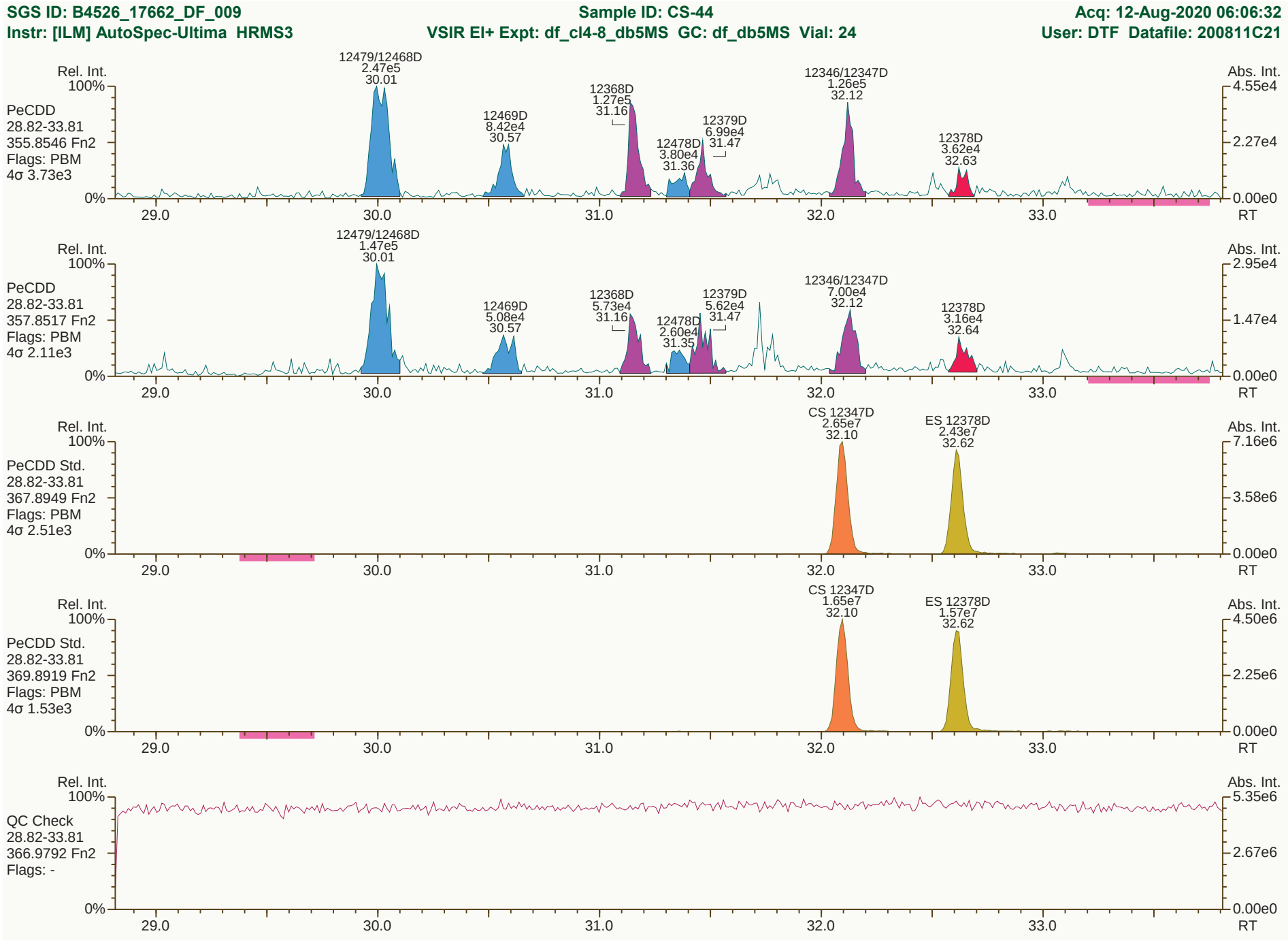
3.03e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
QC Check
28.82-33.81
366.9792 Fn2
Flags: -
0%
Abs. Int.
5.35e6
2.67e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
QC Check
33.82-37.91
380.9760 Fn3
Flags: -
0%
Abs. Int.
1.10e7
5.50e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
QC Check
37.92-41.20
430.9728 Fn4
Flags: -
0%
Abs. Int.
7.62e6
3.81e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
QC Check
41.21-44.80
454.9728 Fn5
Flags: -
0%
Abs. Int.
9.80e6
4.90e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT


Rel. Int.
100%
TCDD
19.04-28.80
319.8965 Fn1
Flags: PBM
4σ 2.61e3
0%
1368D
2.44e5
22.88
1379D
1.23e5
23.30
1247D...[4]
1.08e5
24.91
Abs. Int.
4.73e4
2.37e4
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD
19.04-28.80
321.8936 Fn1
Flags: PBM
4σ 1.91e3
0%
1368D
2.95e5
22.89
1379D
1.50e5
23.30
1247D...[4]
1.26e5
24.90
Abs. Int.
5.86e4
2.93e4
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
37Cl-TCDD
19.04-28.80
327.8850 Fn1
Flags: PBM
4σ 1.52e3
0%
CS 37Cl-2378D
2.28e7
26.92
Abs. Int.
5.26e6
2.63e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.80
331.9368 Fn1
Flags: PBM
4σ 6.35e3
0%
JS 1234D
2.80e7
26.20
ES 2378D
2.17e7
26.90
Abs. Int.
6.08e6
3.04e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.80
333.9339 Fn1
Flags: PBM
4σ 2.24e3
0%
JS 1234D
3.40e7
26.20
ES 2378D
2.71e7
26.90
Abs. Int.
7.21e6
3.61e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT


SGS ID: B4526_17662_DF_009
Sample ID: CS-44
Acq: 12-Aug-2020 06:06:32
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 24
User: DTF Datafile: 200811C21
PeCDD
28.82-33.81
355.8546 Fn2
Flags: PBM
4σ 3.73e3
12479/12468D
2.47e5
30.01
12469D
8.42e4
30.57
12368D
1.27e5
31.16
12478D
3.80e4
31.36
12379D
6.99e4
31.47
12346/12347D
1.26e5
32.12
12378D
3.62e4
32.63
PeCDD
28.82-33.81
357.8517 Fn2
Flags: PBM
4σ 2.11e3
12479/12468D
1.47e5
30.01
12469D
5.08e4
30.57
12368D
5.73e4
31.16
12478D
2.60e4
31.35
12379D
5.62e4
31.47
12346/12347D
7.00e4
32.12
12378D
3.16e4
32.64
PeCDD Std.
28.82-33.81
367.8949 Fn2
Flags: PBM
4σ 2.51e3
CS 12347D
2.65e7
32.10
ES 12378D
2.43e7
32.62
PeCDD Std.
28.82-33.81
369.8919 Fn2
Flags: PBM
4σ 1.53e3
CS 12347D
1.65e7
32.10
ES 12378D
1.57e7
32.62
QC Check
28.82-33.81
366.9792 Fn2
Flags: -
Rel. Int.
Abs. Int.
RT
29.0
30.0
31.0
32.0
33.0
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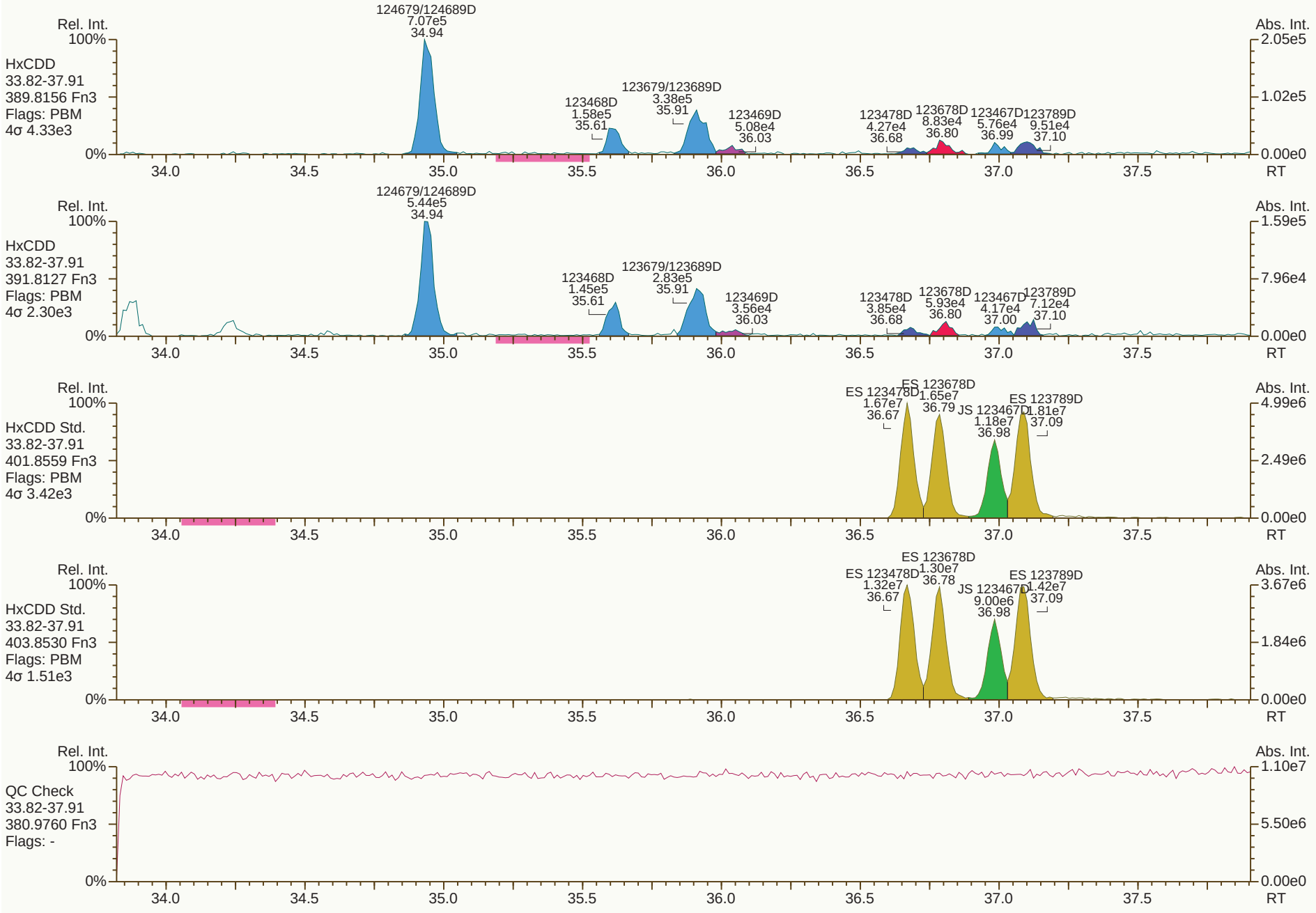
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 3374, 7775 scc: 738-667
Revised: 12-Aug-2020 14:18 (DTF) Printed: 12-Aug-2020 15:38 Page 3 of 12


Rel. Int.
Abs. Int.
HxCDD
33.82-37.91
389.8156 Fn3
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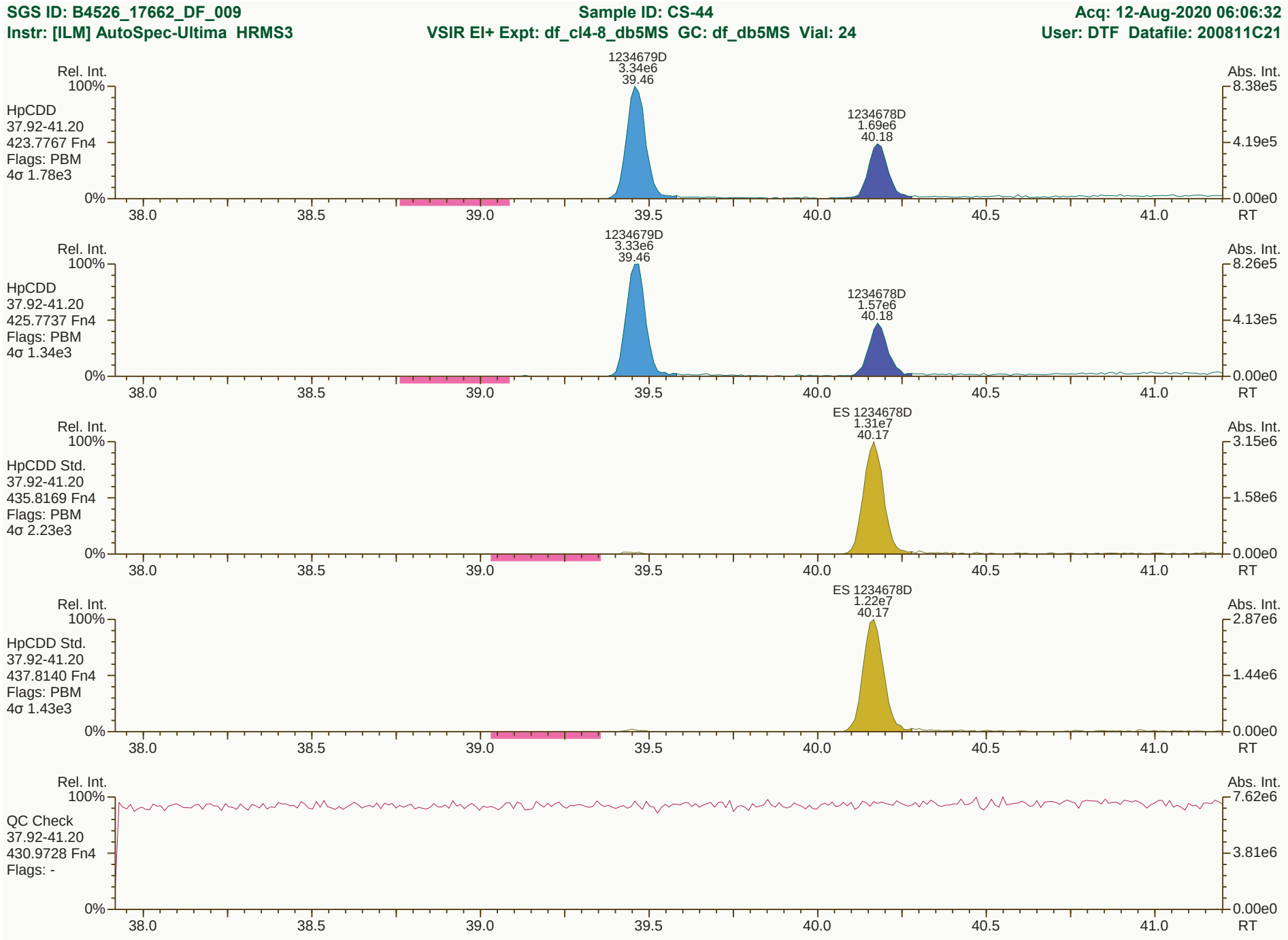
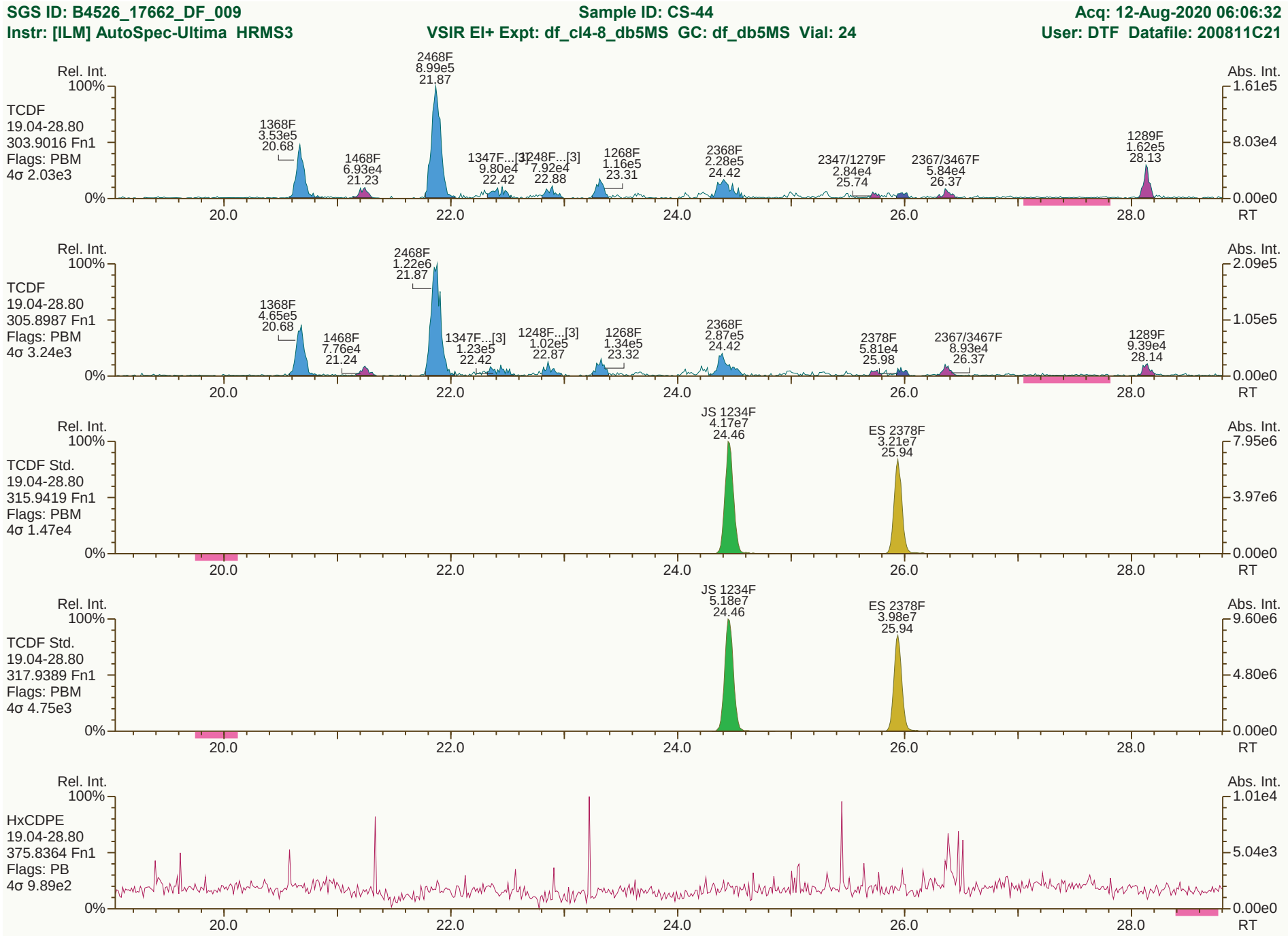
4σ 4.33e3
124679/124689D
7.07e5
34.94
123468D
1.58e5
35.61
123679/123689D
3.38e5
35.91
123469D
5.08e4
36.03
123478D
4.27e4
36.68
123678D
8.83e4
36.80
123467D
5.76e4
36.99
123789D
9.51e4
37.10
HxCDD
33.82-37.91
391.8127 Fn3
Flags: PBM
4σ 2.30e3
124679/124689D
5.44e5
34.94
123468D
1.45e5
35.61
123679/123689D
2.83e5
35.91
123469D
3.56e4
36.03
123478D
3.85e4
36.68
123678D
5.93e4
36.80
123467D
4.17e4
37.00
123789D
7.12e4
37.10
HxCDD Std.
33.82-37.91
401.8559 Fn3
Flags: PBM
4σ 3.42e3
ES 123478D
1.67e7
36.67
ES 123678D
1.65e7
36.79
JS 123467D
1.18e7
36.98
ES 123789D
1.81e7
37.09
HxCDD Std.
33.82-37.91
403.8530 Fn3
Flags: PBM
4σ 1.51e3
ES 123478D
1.32e7
36.67
ES 123678D
1.30e7
36.78
JS 123467D
9.00e6
36.98
ES 123789D
1.42e7
37.09
QC Check
33.82-37.91
380.9760 Fn3
Flags: -
100%
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
2.05e5
1.02e5
0.00e0
1.59e5
7.96e4
4.99e6
2.49e6
3.67e6
1.84e6
1.10e7
5.50e6

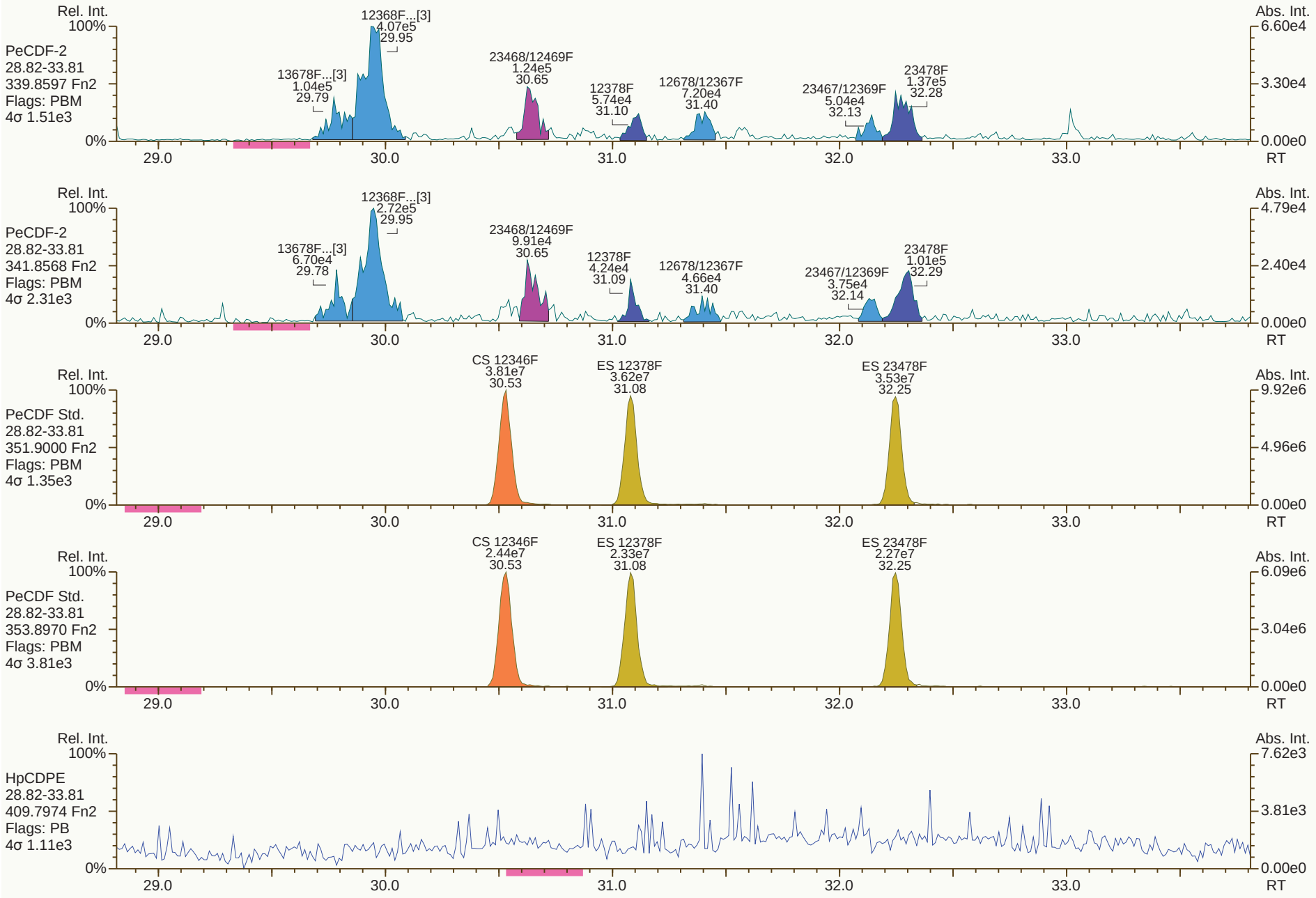
SGS ID: B4526_17662_DF_009 Sample ID: CS-44 Acq: 12-Aug-2020 06:06:32
Instr: [ILM] AutoSpec-Ultima HRMS3 VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 24 User: DTF Datafile: 200811C21

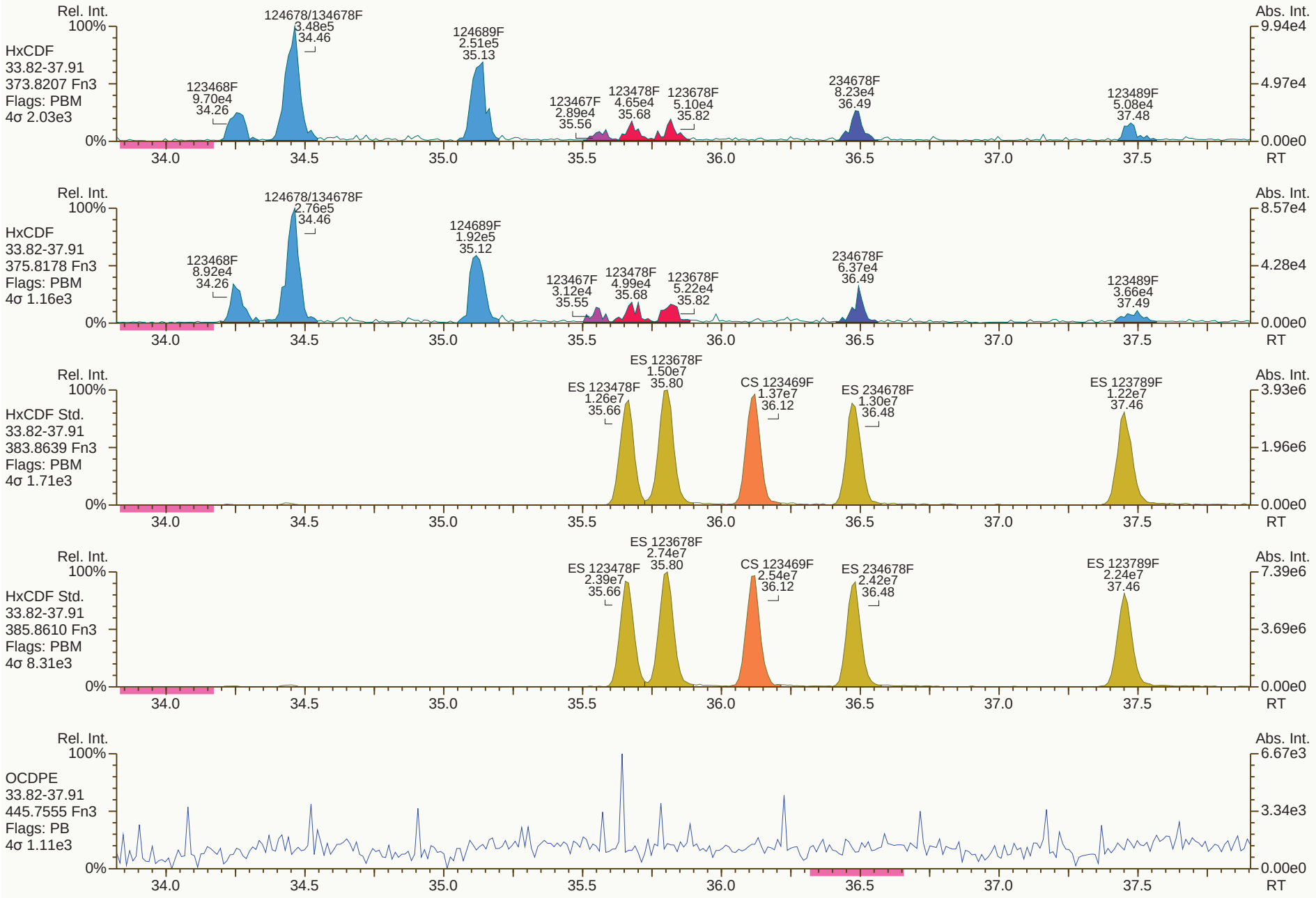



OCDD
1.59e7
42.89
Rel. Int.
100%
OCDD
41.21-44.80
457.7377 Fn5
Flags: PBM
4σ 2.59e3
0%
Abs. Int.
2.42e6
1.21e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
OCDD
1.78e7
42.89
Rel. Int.
100%
OCDD
41.21-44.80
459.7348 Fn5
Flags: PBM
4σ 2.43e3
0%
Abs. Int.
2.59e6
1.30e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDD
1.10e7
42.88
Rel. Int.
100%
OCDD Std.
41.21-44.80
469.7780 Fn5
Flags: PBM
4σ 1.48e3
0%
Abs. Int.
1.70e6
8.51e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDD
1.17e7
42.88
Rel. Int.
100%
OCDD Std.
41.21-44.80
471.7750 Fn5
Flags: PBM
4σ 1.43e3
0%
Abs. Int.
1.82e6
9.08e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
QC Check
41.21-44.80
454.9728 Fn5
Flags: -
0%
Abs. Int.
9.80e6
4.90e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT

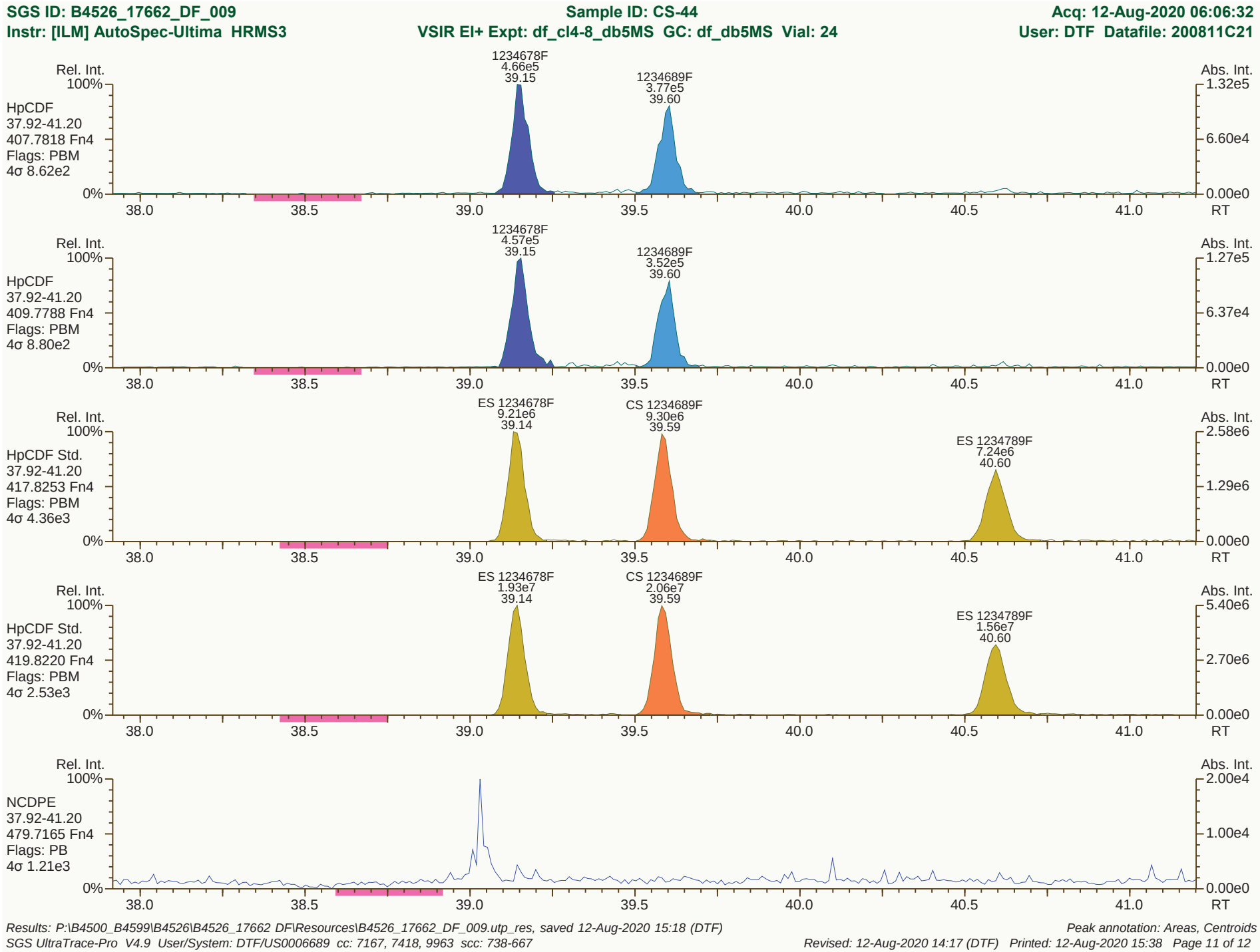

SGS ID: B4526_17662_DF_009
Sample ID: CS-44
Acq: 12-Aug-2020 06:06:32
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 24
User: DTF Datafile: 200811C21
Rel. Int.
Abs. Int.
TCDF
19.04-28.80
303.9016 Fn1
Flags: PBM
4σ 2.03e3
1368F 3.53e5 20.68
1468F 6.93e4 21.23
2468F 8.99e5 21.87
1347F...[3] 9.80e4 22.42
1248F...[3] 7.92e4 22.88
1268F 1.16e5 23.31
2368F 2.28e5 24.42
2347/1279F 2.84e4 25.74
2367/3467F 5.84e4 26.37
1289F 1.62e5 28.13
TCDF
19.04-28.80
305.8987 Fn1
Flags: PBM
4σ 3.24e3
1368F 4.65e5 20.68
1468F 7.76e4 21.24
2468F 1.22e6 21.87
1347F...[3] 1.23e5 22.42
1248F...[3] 1.02e5 22.87
1268F 1.34e5 23.32
2368F 2.87e5 24.42
2378F 5.81e4 25.98
2367/3467F 8.93e4 26.37
1289F 9.39e4 28.14
TCDF Std.
19.04-28.80
315.9419 Fn1
Flags: PBM
4σ 1.47e4
JS 1234F 4.17e7 24.46
ES 2378F 3.21e7 25.94
TCDF Std.
19.04-28.80
317.9389 Fn1
Flags: PBM
4σ 4.75e3
JS 1234F 5.18e7 24.46
ES 2378F 3.98e7 25.94
HxCDPE
19.04-28.80
375.8364 Fn1
Flags: PB
4σ 9.89e2
100%
0%
20.0
22.0
24.0
26.0
28.0
RT
1.61e5
8.03e4
0.00e0
2.09e5
1.05e5
7.95e6
3.97e6
9.60e6
4.80e6
1.01e4
5.04e3
Results: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\B4526_17662_DF_009.utp_res, saved 12-Aug-2020 15:18 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 7801, 2686, 9158 scc: 738-667
Revised: 12-Aug-2020 14:21 (DTF) Printed: 12-Aug-2020 15:38 Page 7 of 12


Rel. Int.
100%
0%
Abs. Int.
1.62e5
8.08e4
0.00e0
RT
20.0
22.0
24.0
26.0
28.0
PeCDF-1
19.04-28.80
339.8597 Fn1
Flags: PBM
4σ 1.42e3
13468/12468F
6.78e5
28.15
PeCDF-1
19.04-28.80
341.8568 Fn1
Flags: PBM
4σ 2.24e3
13468/12468F
3.83e5
28.15
9.72e4
4.86e4
QC Check
19.04-28.80
316.9824 Fn1
Flags: -
6.06e6
3.03e6


Rel. Int.
100%
PeCDF-2
28.82-33.81
339.8597 Fn2
Flags: PBM
4σ 1.51e3
0%
12368F...[3]
4.07e5
29.95
13678F...[3]
1.04e5
29.79
23468/12469F
1.24e5
30.65
12378F
5.74e4
31.10
12678/12367F
7.20e4
31.40
23467/12369F
5.04e4
32.13
23478F
1.37e5
32.28
Abs. Int.
6.60e4
3.30e4
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF-2
28.82-33.81
341.8568 Fn2
Flags: PBM
4σ 2.31e3
0%
12368F...[3]
2.72e5
29.95
13678F...[3]
6.70e4
29.78
23468/12469F
9.91e4
30.65
12378F
4.24e4
31.09
12678/12367F
4.66e4
31.40
23467/12369F
3.75e4
32.14
23478F
1.01e5
32.29
Abs. Int.
4.79e4
2.40e4
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.82-33.81
351.9000 Fn2
Flags: PBM
4σ 1.35e3
0%
CS 12346F
3.81e7
30.53
ES 12378F
3.62e7
31.08
ES 23478F
3.53e7
32.25
Abs. Int.
9.92e6
4.96e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.82-33.81
353.8970 Fn2
Flags: PBM
4σ 3.81e3
0%
CS 12346F
2.44e7
30.53
ES 12378F
2.33e7
31.08
ES 23478F
2.27e7
32.25
Abs. Int.
6.09e6
3.04e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
HpCDPE
28.82-33.81
409.7974 Fn2
Flags: PB
4σ 1.11e3
0%
Abs. Int.
7.62e3
3.81e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT


Rel. Int.
100%
HxCDF
33.82-37.91
373.8207 Fn3
Flags: PBM
4σ 2.03e3
124678/134678F 3.48e5 34.46
124689F 2.51e5 35.13
123468F 9.70e4 34.26
123467F 2.89e4 35.56
123478F 4.65e4 35.68
123678F 5.10e4 35.82
234678F 8.23e4 36.49
123489F 5.08e4 37.48
Abs. Int.
9.94e4
4.97e4
0.00e0
0%
34.0 34.5 35.0 35.5 36.0 36.5 37.0 37.5 RT
HxCDF
33.82-37.91
375.8178 Fn3
Flags: PBM
4σ 1.16e3
124678/134678F 2.76e5 34.46
124689F 1.92e5 35.12
123468F 8.92e4 34.26
123467F 3.12e4 35.55
123478F 4.99e4 35.68
123678F 5.22e4 35.82
234678F 6.37e4 36.49
123489F 3.66e4 37.49
8.57e4
4.28e4
HxCDF Std.
33.82-37.91
383.8639 Fn3
Flags: PBM
4σ 1.71e3
ES 123678F 1.50e7 35.80
ES 123478F 1.26e7 35.66
CS 123469F 1.37e7 36.12
ES 234678F 1.30e7 36.48
ES 123789F 1.22e7 37.46
3.93e6
1.96e6
HxCDF Std.
33.82-37.91
385.8610 Fn3
Flags: PBM
4σ 8.31e3
ES 123678F 2.74e7 35.80
ES 123478F 2.39e7 35.66
CS 123469F 2.54e7 36.12
ES 234678F 2.42e7 36.48
ES 123789F 2.24e7 37.46
7.39e6
3.69e6
OCDPE
33.82-37.91
445.7555 Fn3
Flags: PB
4σ 1.11e3
6.67e3
3.34e3

SGS ID: B4526_17662_DF_009 Sample ID: CS-44 Acq: 12-Aug-2020 06:06:32
Instr: [ILM] AutoSpec-Ultima HRMS3 VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 24 User: DTF Datafile: 200811C21




OCDF
2.10e5
43.02
Rel. Int.
100%
OCDF
41.21-44.80
441.7428 Fn5
Flags: PBM
4σ 1.75e3
0%
Abs. Int.
3.91e4
1.96e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
OCDF
2.02e5
43.02
Rel. Int.
100%
OCDF
41.21-44.80
443.7398 Fn5
Flags: PBM
4σ 2.32e3
0%
Abs. Int.
4.13e4
2.06e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDF
1.42e7
43.02
Rel. Int.
100%
OCDF Std.
41.21-44.80
453.7830 Fn5
Flags: PBM
4σ 1.98e3
0%
Abs. Int.
2.09e6
1.04e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDF
1.59e7
43.02
Rel. Int.
100%
OCDF Std.
41.21-44.80
455.7801 Fn5
Flags: PBM
4σ 2.52e3
0%
Abs. Int.
2.33e6
1.17e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
DCDPE
41.21-44.80
513.6775 Fn5
Flags: PB
4σ 9.75e2
0%
Abs. Int.
4.56e3
2.28e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT

Lab ID: B4526_17662_DF_010 **Acq'd:** 12 Aug 2020 06:53 DTF **Wt/Vol:** 9.18 g **ICAL:** HRMS3_DF_10122018_28AUG2019

Client ID: CS-45 **UTP:** 12-Aug-2020 15:18:40 DTF **J-level:** 0.545 pg/g **Split:** 1 **Checkcode:** 659-912-SVC

Datafile: 200811C22 **Report:** 12 Aug 2020 15:22 TF **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	NotFnd		1.0008	-		-	-	-	1.19	-	3886	0.16
12378-PeCDD	32.64	J EMPC	1.0006	1.0006	0	3.50E+05	1.84	N	0.98	1.8	3912	0.183
123478-HxCDD	36.69		1.0004	1.0003	-0.2	1.39E+06	1.21	Y	1.02	9.54	5642	0.32
123678-HxCDD	36.81		1.0036	1.0036	0	3.23E+06	1.32	Y	1.09	21.6	5642	0.34
123789-HxCDD	37.11		1.0118	1.0118	0	2.57E+06	1.34	Y	0.97	17	5642	0.363
1234678-HpCDD	40.19		1.0003	1.0003	0	8.39E+07	1.03	Y	0.98	741	3595	0.328
OCDD	42.90		1.0003	1.0003	0	3.14E+08	0.90	Y	1.07	5,320	4254	1.28
2378-TCDF	25.98	J	1.0009	1.0013	+0.6	1.66E+05	0.79	Y	1.01	0.466	6788	0.233
12378-PeCDF	31.11	J	1.0006	1.0006	0	2.08E+05	1.40	Y	0.96	0.729	4779	0.159
23478-PeCDF	32.29	J	1.0005	1.0010	+1.0	6.63E+05	1.61	Y	0.99	2.33	4779	0.152
123478-HxCDF	35.68		1.0005	1.0005	0	2.73E+06	1.27	Y	1.21	12.7	4502	0.18
123678-HxCDF	35.83		1.0005	1.0005	0	1.35E+06	1.21	Y	1.11	6.03	4502	0.18
234678-HxCDF	36.49		1.0004	1.0003	-0.2	1.82E+06	1.29	Y	1.12	9.54	4502	0.208
123789-HxCDF	NotFnd		1.0005	-		-	-	-	1.11	-	4502	0.222
1234678-HpCDF	39.16		1.0003	1.0003	0	2.89E+07	1.00	Y	1.32	170	1943	0.108
1234789-HpCDF	40.61		1.0003	1.0002	-0.2	2.45E+06	0.94	Y	1.26	18	1943	0.162
OCDF	43.04		1.0003	1.0002	-0.3	3.67E+07	0.87	Y	1.03	480	3681	0.801

Name	Act RT	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	26.90	1.0266	1.0268	+0.3	5.18E+07	0.80	Y	0.99	84.9
ES 12378-PeCDD	32.62	1.2430	1.2450	+3.9	4.30E+07	1.55	Y	0.83	83.9
ES 123478-HxCDD	36.68	0.9916	0.9917	+0.2	3.11E+07	1.33	Y	0.95	77.5
ES 123678-HxCDD	36.79	0.9947	0.9947	0	3.01E+07	1.25	Y	0.98	72.9
ES 123789-HxCDD	37.09	1.0029	1.0029	0	3.39E+07	1.32	Y	1.14	70.4
ES 1234678-HpCDD	40.18	1.0851	1.0862	+2.7	2.53E+07	1.08	Y	0.90	66.5
ES OCDD	42.89	1.1584	1.1596	+3.1	2.40E+07	0.94	Y	0.63	45.2
ES 2378-TCDF	25.95	1.0602	1.0607	+0.8	7.67E+07	0.78	Y	1.00	81.8
ES 12378-PeCDF	31.09	1.2683	1.2708	+4.7	6.44E+07	1.56	Y	0.83	82.2
ES 23478-PeCDF	32.25	1.3156	1.3184	+5.4	6.28E+07	1.57	Y	0.81	82.7
ES 123478-HxCDF	35.67	0.9644	0.9643	-0.2	3.88E+07	0.52	Y	1.12	81.7
ES 123678-HxCDF	35.81	0.9682	0.9682	0	4.41E+07	0.54	Y	1.33	78.2
ES 234678-HxCDF	36.48	0.9864	0.9864	0	3.73E+07	0.54	Y	1.21	72.9
ES 123789-HxCDF	37.46	1.0128	1.0129	+0.2	3.61E+07	0.53	Y	1.12	76.2
ES 1234678-HpCDF	39.15	1.0578	1.0584	+1.4	2.80E+07	0.45	Y	0.92	71.6
ES 1234789-HpCDF	40.61	1.0967	1.0978	+2.7	2.37E+07	0.45	Y	0.82	68.2
ES OCDF	43.03	1.1623	1.1634	+2.8	3.23E+07	0.88	Y	0.78	48.9

Lab ID: B4526_17662_DF_010 | Acq'd: 12 Aug 2020 06:53 DTF | Wt/Vol: 9.18 g | ICAL: HRMS3_DF_10122018_28AUG2019

Client ID: CS-45 | UTP: 12-Aug-2020 15:18:40 DTF | J-level: 0.545 pg/g | Split: 1 | Checkcode: 659-912-SVC

Datafile: 200811C22 | Report: 12 Aug 2020 15:22 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %	
JS 1234-TCDD	26.20		-	-	-	6.18E+07	0.82	Y	-	-	
JS 1234-TCDF	24.46		-	-	-	9.43E+07	0.81	Y	-	-	
JS 123467-HxCDD	36.99		-	-	-	2.12E+07	1.16	Y	-	-	
CS 37Cl-2378-TCDD	26.93		1.0276	1.0277	+0.2	2.40E+07	n/a	-	1.12	86.7	
CS 12347-PeCDD	32.10		1.2233	1.2251	+3.5	4.48E+07	1.55	Y	0.71	102	
CS 12346-PeCDF	30.54		1.2459	1.2482	+4.2	6.28E+07	1.57	Y	0.81	82.4	
CS 123469-HxCDF	36.12		0.9767	0.9766	-0.2	3.86E+07	0.55	Y	1.12	81.2	
CS 1234689-HpCDF	39.59		1.0696	1.0705	+2.1	2.92E+07	0.45	Y	0.90	77	
~~SS 37Cl-2378-TCDD~~	~~26.93~~		~~1.0276~~	~~1.0277~~	~~+0.2~~	~~2.40E+07~~	~~n/a~~		~~1.14~~	~~101~~	Not used in this project.
~~SS 12347-PeCDD~~	~~32.10~~		~~1.2233~~	~~1.2251~~	~~+3.5~~	~~4.48E+07~~	~~1.55~~	~~Y~~	~~0.86~~	~~121~~	CL 13Aug20
~~SS 12346-PeCDF~~	~~30.54~~		~~1.2459~~	~~1.2482~~	~~+4.2~~	~~6.28E+07~~	~~1.57~~	~~Y~~	~~0.98~~	~~100~~	
~~SS 123469-HxCDF~~	~~36.12~~		~~0.9767~~	~~0.9766~~	~~-0.2~~	~~3.86E+07~~	~~0.55~~	~~Y~~	~~0.85~~	~~103~~	
~~SS 1234689-HpCDF~~	~~39.59~~		~~1.0696~~	~~1.0705~~	~~+2.1~~	~~2.92E+07~~	~~0.45~~	~~Y~~	~~0.97~~	~~107~~	

Totals	Conc	EMPC
Total TCDD	4.86	4.86
Total PeCDD	10.4	13
Total HxCDD	143	143
Total HpCDD	1340	1340
Total Tetra-Octa Dioxins	6820	6830
Total TCDF	15	16.8
Total PeCDF	36.2	36.2
Total HxCDF	237	239
Total HpCDF	578	578
Total Tetra-Octa Furans	1,350	1350
Total Tetra-Octa Dioxins & Furans	8170	8180

Lab ID: B4526_17662_DF_010 **Acq'd:** 12 Aug 2020 06:53 DTF **Wt/Vol:** 9.18 g **ICAL:** HRMS3_DF_10122018_28AUG2019

Client ID: CS-45 **UTP:** 12-Aug-2020 15:18:40 DTF **J-level:** 0.545 pg/g **Split:** 1 **Checkcode:** 659-912-SVC

Datafile: 200811C22 **Report:** 12 Aug 2020 15:22 TF **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1368-TCDD	22.90		0.8523	0.8510	-1.8	4.34E+05	0.73	Y	1.19	1.54	3886	0.16
1379-TCDD	23.30		0.8682	0.8662	-2.8	2.61E+05	0.68	Y	1.19	0.924	3886	0.16
1369-TCDD	NotFnd		0.8858						1.19		3886	0.16
1469-TCDD	NotFnd		0.9177						1.19		3886	0.16
1247/1246/1248/1249-TCDD	24.92		0.9274	0.9261	-1.9	3.89E+05	0.84	Y	1.19	1.38	3886	0.16
1378-TCDD	NotFnd		0.9349						1.19		3886	0.16
1268-TCDD	NotFnd		0.9430						1.19		3886	0.16
1478-TCDD	NotFnd		0.9529						1.19		3886	0.16
1279-TCDD	NotFnd		0.9597						1.19		3886	0.16
1234/1269-TCDD	26.22		0.9739	0.9746	+1.1	2.90E+05	0.80	Y	1.19	1.02	3886	0.16
1236-TCDD	NotFnd		0.9794						1.19		3886	0.16
1237/1238-TCDD	NotFnd		0.9895						1.19		3886	0.16
1239-TCDD	NotFnd		0.9950						1.19		3886	0.16
2378-TCDD	**NotFnd**		**1.0008**						**1.19**		**3886**	**0.16**
1278-TCDD	NotFnd		1.0139						1.19		3886	0.16
1267-TCDD	NotFnd		1.0194						1.19		3886	0.16
1289-TCDD	NotFnd		1.0397						1.19		3886	0.16
12479/12468-PeCDD	30.02		0.9209	0.9202	-1.3	6.02E+05	1.63	Y	0.98	3.1	3912	0.183
12469-PeCDD	30.58	J	0.9382	0.9374	-1.5	2.65E+05	1.58	Y	0.98	1.36	3912	0.183
12368-PeCDD	31.17	J	0.9557	0.9554	-0.6	2.36E+05	1.47	Y	0.98	1.22	3912	0.183
12478-PeCDD	31.36	J	0.9617	0.9615	-0.4	3.10E+05	1.37	Y	0.98	1.6	3912	0.183
12379-PeCDD	31.47	J EMPC	0.9649	0.9648	-0.2	1.51E+05	1.91	N	0.98	0.778	3912	0.183
12369/12467/12489-PeCDD	31.73	J	0.9732	0.9728	-0.8	2.45E+05	1.52	Y	0.98	1.26	3912	0.183
12346/12347-PeCDD	32.13	J	0.9850	0.9850	0	2.43E+05	1.74	Y	0.98	1.25	3912	0.183
12378-PeCDD	32.64	J EMPC	**1.0006**	**1.0006**	**0**	**3.50E+05**	**1.84**	**N**	**0.98**	**1.8**	**3912**	**0.183**
12367-PeCDD	NotFnd		1.0038						0.98		3912	0.183
12389-PeCDD	33.10	J	1.0146	1.0146	0	1.22E+05	1.62	Y	0.98	0.626	3912	0.183
124679/124689-HxCDD	34.95		0.9530	0.9528	-0.4	4.38E+06	1.26	Y	1.03	29.3	5642	0.341
123468-HxCDD	35.62		0.9715	0.9711	-0.9	1.08E+06	1.15	Y	1.03	7.21	5642	0.341
123679/123689-HxCDD	35.92		0.9795	0.9793	-0.4	7.25E+06	1.24	Y	1.03	48.6	5642	0.341
123469-HxCDD	36.05		0.9832	0.9829	-0.6	9.77E+05	1.27	Y	1.03	6.54	5642	0.341
123478-HxCDD	36.69		**1.0004**	**1.0003**	**-0.2**	**1.39E+06**	**1.21**	**Y**	1.02	**9.54**	**5642**	**0.32**
123678-HxCDD	36.81		**1.0036**	**1.0036**	**0**	**3.23E+06**	**1.32**	**Y**	1.09	**21.6**	**5642**	**0.34**
123467-HxCDD	37.01		1.0089	1.0090	+0.2	5.01E+05	1.16	Y	1.03	3.35	5642	0.341
123789-HxCDD	37.11		**1.0118**	**1.0118**	**0**	**2.57E+06**	**1.34**	**Y**	0.97	**17**	**5642**	**0.363**

Lab ID: B4526_17662_DF_010 | Acq'd: 12 Aug 2020 06:53 DTF | Wt/Vol: 9.18 g | ICAL: HRMS3_DF_10122018_28AUG2019

Client ID: CS-45 | UTP: 12-Aug-2020 15:18:40 DTF | J-level: 0.545 pg/g | Split: 1 | Checkcode: 659-912-SVC

Datafile: 200811C22 | Report: 12 Aug 2020 15:22 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

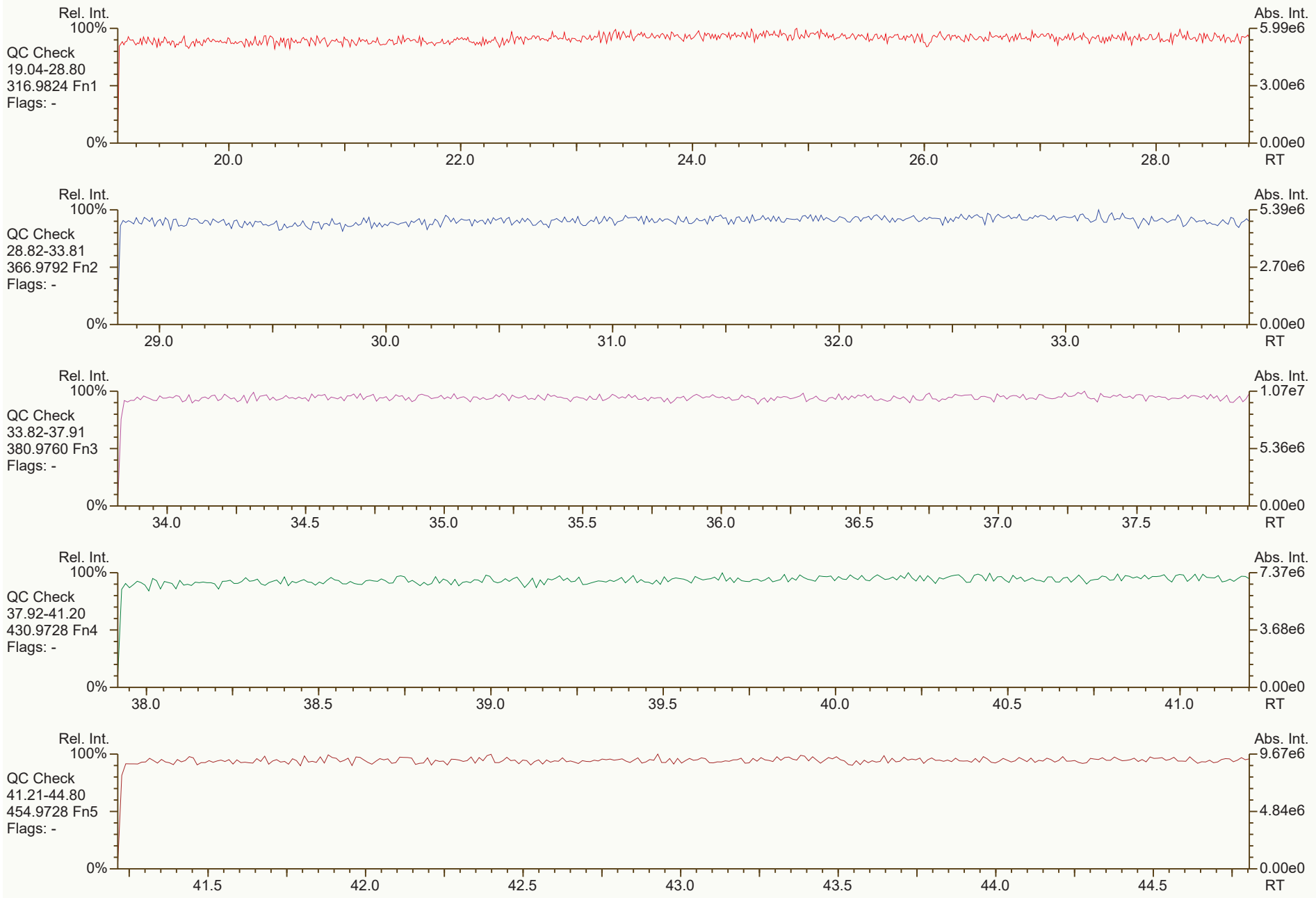
Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1234679-HpCDD	39.47		0.9826	0.9825	-0.2	6.81E+07	1.04	Y	0.98	601	3595	0.328
1234678-HpCDD	**40.19**		**1.0003**	**1.0003**	**0**	**8.39E+07**	**1.03**	**Y**	**0.98**	**741**	**3595**	**0.328**
OCDD	**42.90**		**1.0003**	**1.0003**	**0**	**3.14E+08**	**0.90**	**Y**	**1.07**	**5,320**	**4254**	**1.28**
OCDD-a	42.90	**#VALUE!**	1.0002	1.0002	0	2.03E+07	2.55	Y	-	#VALUE!	10318	#VALUE!
1368-TCDF	20.68		0.7980	0.7971	-1.1	3.84E+05	0.82	Y	1.01	1.08	6788	0.233
1468-TCDF	21.23	J	0.8204	0.8182	-2.8	1.74E+05	0.73	Y	1.01	0.487	6788	0.233
2468-TCDF	21.88		0.8443	0.8432	-1.4	1.39E+06	0.80	Y	1.01	3.91	6788	0.233
1346/1246-TCDF	22.33		0.8597	0.8605	+1.1	2.60E+05	0.72	Y	1.01	0.728	6788	0.233
1347/1378/1247-TCDF	22.46		0.8665	0.8654	-1.5	3.48E+05	0.81	Y	1.01	0.977	6788	0.233
1348-TCDF	NotFnd		0.8785						1.01		6788	0.233
1248/1367/1379-TCDF	22.87		0.8840	0.8814	-3.6	4.08E+05	0.77	Y	1.01	1.14	6788	0.233
1268-TCDF	23.31		0.9004	0.8985	-2.7	3.25E+05	0.72	Y	1.01	0.912	6788	0.233
1467-TCDF	23.46	J	0.9060	0.9041	-2.7	1.07E+05	0.85	Y	1.01	0.299	6788	0.233
1478-TCDF	23.64	J	0.9132	0.9111	-3.0	1.43E+05	0.87	Y	1.01	0.4	6788	0.233
1369/1237-TCDF	NotFnd		0.9287						1.01		6788	0.233
2467-TCDF	24.23	J	0.9345	0.9335	-1.5	1.21E+05	0.75	Y	1.01	0.339	6788	0.233
2368-TCDF	24.40		0.9409	0.9401	-1.2	4.57E+05	0.75	Y	1.01	1.28	6788	0.233
1238/1234/1678/1469/1236-TCDF	24.50		0.9450	0.9440	-1.5	5.21E+05	0.70	Y	1.01	1.46	6788	0.233
1278-TCDF	25.01	J EMPC	0.9638	0.9636	-0.3	1.76E+05	0.96	N	1.01	0.495	6788	0.233
1349-TCDF	NotFnd		0.9685						1.01		6788	0.233
1267-TCDF	25.30	J EMPC	0.9751	0.9751	0	1.08E+05	0.89	N	1.01	0.304	6788	0.233
2346/1249-TCDF	NotFnd		0.9831						1.01		6788	0.233
2347/1279-TCDF	25.73	J	0.9920	0.9917	-0.5	1.29E+05	0.70	Y	1.01	0.362	6788	0.233
2348-TCDF	25.87	J	0.9964	0.9969	+0.8	1.27E+05	0.75	Y	1.01	0.356	6788	0.233
2378-TCDF	**25.98**	J	**1.0009**	**1.0013**	**+0.6**	**1.66E+05**	**0.79**	**Y**	**1.01**	**0.466**	**6788**	**0.233**
2367/3467-TCDF	26.37		1.0164	1.0161	-0.5	2.94E+05	0.84	Y	1.01	0.824	6788	0.233
1269-TCDF	NotFnd		1.0259						1.01		6788	0.233
1239-TCDF	NotFnd		1.0373						1.01		6788	0.233
1289-TCDF	28.14	EMPC	1.0838	1.0845	+1.2	3.57E+05	1.70	N	1.01	1	6788	0.233
13468/12468-PeCDF	28.16		0.9052	0.9057	+0.8	5.21E+06	1.69	Y	0.98	18.3	3427	0.111
13678/13467/12467-PeCDF	29.78	J	0.9582	0.9580	-0.4	3.75E+05	1.44	Y	0.98	1.32	4779	0.155
12368/13478/12478-PeCDF	29.96		0.9634	0.9637	+0.5	2.42E+06	1.59	Y	0.98	8.51	4779	0.155
14678-PeCDF	NotFnd		0.9668						0.98		4779	0.155
13479-PeCDF	NotFnd		0.9700						0.98		4779	0.155
13469/12479-PeCDF	NotFnd		0.9781						0.98		4779	0.155
12346-PeCDF	30.55	J	0.9829	0.9827	-0.4	1.45E+05	1.32	Y	0.98	0.511	4779	0.155

Lab ID: B4526_17662_DF_010 **Acq'd:** 12 Aug 2020 06:53 DTF **Wt/Vol:** 9.18 g **ICAL:** HRMS3_DF_10122018_28AUG2019

Client ID: CS-45 **UTP:** 12-Aug-2020 15:18:40 DTF **J-level:** 0.545 pg/g **Split:** 1 **Checkcode:** 659-912-SVC

Datafile: 200811C22 **Report:** 12 Aug 2020 15:22 TF **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
23468/12469-PeCDF	30.66	J	0.9859	0.9861	+0.4	6.20E+05	1.63	Y	0.98	2.18	4779	0.155
12347-PeCDF	NotFnd		0.9884						0.98		4779	0.155
12348-PeCDF	30.89	J	0.9937	0.9936	-0.2	1.51E+05	1.76	Y	0.98	0.531	4779	0.155
12378-PeCDF	**31.11**	J	**1.0006**	**1.0006**	**0**	**2.08E+05**	**1.40**	**Y**	**0.96**	**0.729**	**4779**	**0.159**
12678/12367-PeCDF	31.42	J	1.0097	1.0105	+1.5	3.83E+05	1.68	Y	0.98	1.35	4779	0.155
12379-PeCDF	NotFnd		1.0152						0.98		4779	0.155
12679-PeCDF	NotFnd		0.9923						0.98		4779	0.155
23467/12369-PeCDF	32.14	J	0.9966	0.9965	-0.2	1.28E+05	1.63	Y	0.98	0.449	4779	0.155
23478-PeCDF	**32.29**	J	**1.0005**	**1.0010**	**+1.0**	**6.63E+05**	**1.61**	**Y**	**0.99**	**2.33**	**4779**	**0.152**
23478/12489-PeCDF	NotFnd		0.0000						0.99			
12489-PeCDF	NotFnd		1.0043						0.98		4779	0.155
12349-PeCDF	NotFnd		1.0107						0.98		4779	0.155
12389-PeCDF	NotFnd		1.0349						0.98		4779	0.155
123468-HxCDF	34.26		0.9607	0.9606	-0.2	4.21E+06	1.18	Y	1.13	20.7	4502	0.196
124678/134678-HxCDF	34.46		0.9666	0.9663	-0.6	1.63E+07	1.24	Y	1.13	80.4	4502	0.196
134679-HxCDF	NotFnd		0.9730						1.13		4502	0.196
124679-HxCDF	34.90	J	0.9787	0.9786	-0.2	3.57E+05	1.33	Y	1.13	1.75	4502	0.196
124689-HxCDF	35.13		0.9850	0.9850	0	2.15E+07	1.24	Y	1.13	106	4502	0.196
123467-HxCDF	35.56	J EMPC	0.9971	0.9970	-0.2	3.41E+05	1.48	N	1.13	1.67	4502	0.196
123478-HxCDF	**35.68**		**1.0005**	**1.0005**	**0**	**2.73E+06**	**1.27**	**Y**	**1.21**	**12.7**	**4502**	**0.18**
123678-HxCDF	**35.83**		**1.0005**	**1.0005**	**0**	**1.35E+06**	**1.21**	**Y**	**1.11**	**6.03**	**4502**	**0.18**
123479-HxCDF	NotFnd		1.0049						1.13		4502	0.196
123469-HxCDF	NotFnd		1.0090						1.13		4502	0.196
123679-HxCDF	NotFnd		0.9941						1.13		4502	0.196
234678-HxCDF	**36.49**		**1.0004**	**1.0003**	**-0.2**	**1.82E+06**	**1.29**	**Y**	**1.12**	**9.54**	**4502**	**0.208**
234678/123689-HxCDF	NotFnd		0.0000						1.12			
123689-HxCDF	NotFnd		1.0041						1.13		4502	0.196
123789-HxCDF	**NotFnd**		**1.0005**						**1.11**		**4502**	**0.222**
123789/123489-HxCDF	NotFnd		0.0000						1.11			
123489-HxCDF	NotFnd		1.0009						1.13		4502	0.196
1234678-HpCDF	**39.16**		**1.0003**	**1.0003**	**0**	**2.89E+07**	**1.00**	**Y**	**1.32**	**170**	**1943**	**0.108**
1234679-HpCDF	39.45		1.0075	1.0077	+0.5	8.37E+05	0.93	Y	1.29	5.47	1943	0.132
1234689-HpCDF	39.61		1.0112	1.0117	+1.2	5.88E+07	1.01	Y	1.29	384	1943	0.132
1234789-HpCDF	**40.61**		**1.0003**	**1.0002**	**-0.2**	**2.45E+06**	**0.94**	**Y**	**1.26**	**18**	**1943**	**0.162**
OCDF	**43.04**		**1.0003**	**1.0002**	**-0.3**	**3.67E+07**	**0.87**	**Y**	**1.03**	**480**	**3681**	**0.801**
OCDF-a	43.04	**#VALUE!**	1.0002	1.0002	0	2.44E+06	2.48	Y	-	#VALUE!	6611	#VALUE!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28.0
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Abs. Int.
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3.00e6
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Rel. Int.
100%
QC Check
28.82-33.81
366.9792 Fn2
Flags: -
0%
29.0
30.0
31.0
32.0
33.0
RT
Abs. Int.
5.39e6
2.70e6
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Rel. Int.
100%
QC Check
33.82-37.91
380.9760 Fn3
Flags: -
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Abs. Int.
1.07e7
5.36e6
0.00e0
Rel. Int.
100%
QC Check
37.92-41.20
430.9728 Fn4
Flags: -
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Abs. Int.
7.37e6
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Rel. Int.
100%
QC Check
41.21-44.80
454.9728 Fn5
Flags: -
0%
41.5
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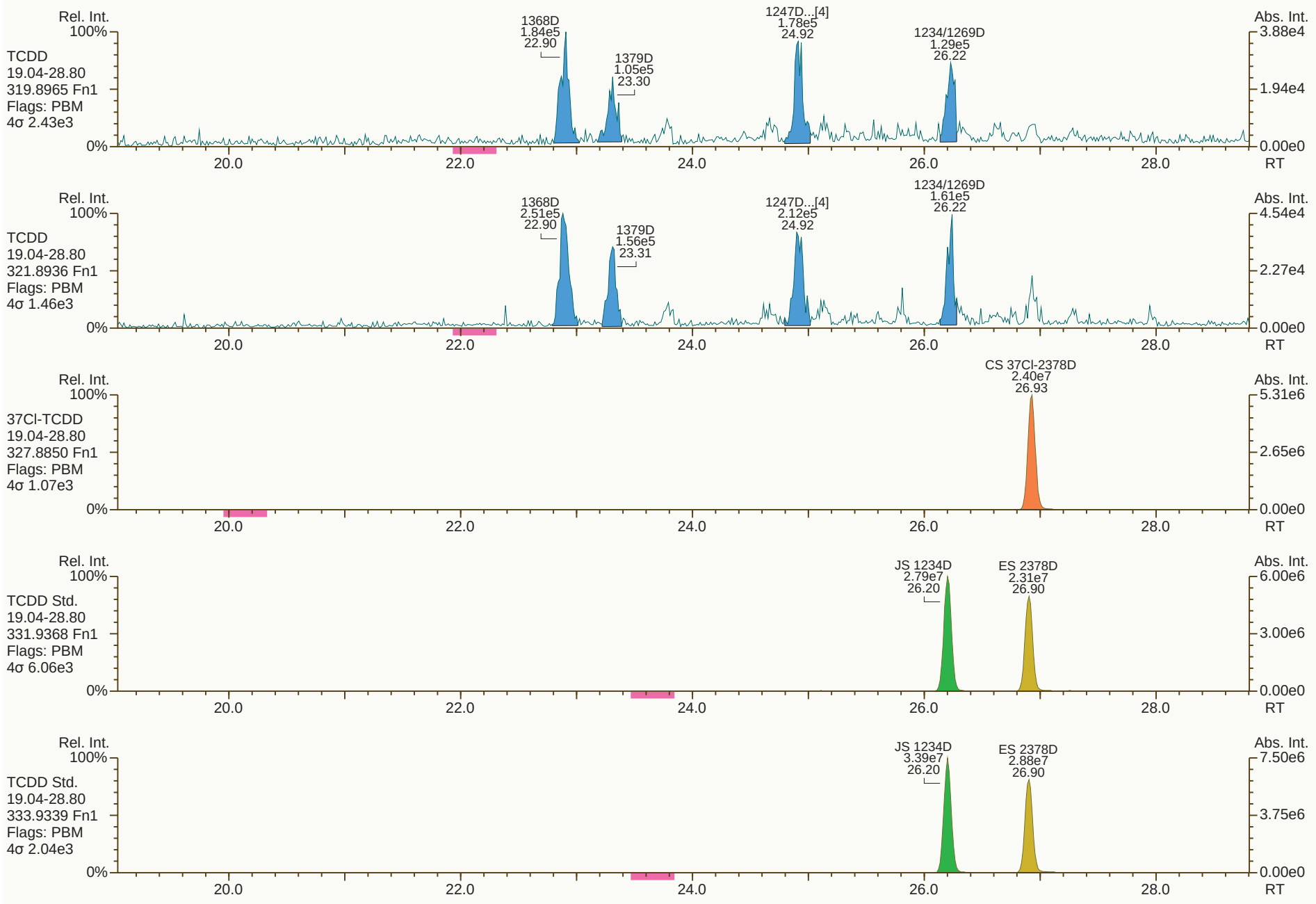
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19.04-28.80
319.8965 Fn1
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0%
1368D
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22.90
1379D
1.05e5
23.30
1247D...[4]
1.78e5
24.92
1234/1269D
1.29e5
26.22
Abs. Int.
3.88e4
1.94e4
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD
19.04-28.80
321.8936 Fn1
Flags: PBM
4σ 1.46e3
0%
1368D
2.51e5
22.90
1379D
1.56e5
23.31
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24.92
1234/1269D
1.61e5
26.22
Abs. Int.
4.54e4
2.27e4
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
37Cl-TCDD
19.04-28.80
327.8850 Fn1
Flags: PBM
4σ 1.07e3
0%
CS 37Cl-2378D
2.40e7
26.93
Abs. Int.
5.31e6
2.65e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.80
331.9368 Fn1
Flags: PBM
4σ 6.06e3
0%
JS 1234D
2.79e7
26.20
ES 2378D
2.31e7
26.90
Abs. Int.
6.00e6
3.00e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.80
333.9339 Fn1
Flags: PBM
4σ 2.04e3
0%
JS 1234D
3.39e7
26.20
ES 2378D
2.88e7
26.90
Abs. Int.
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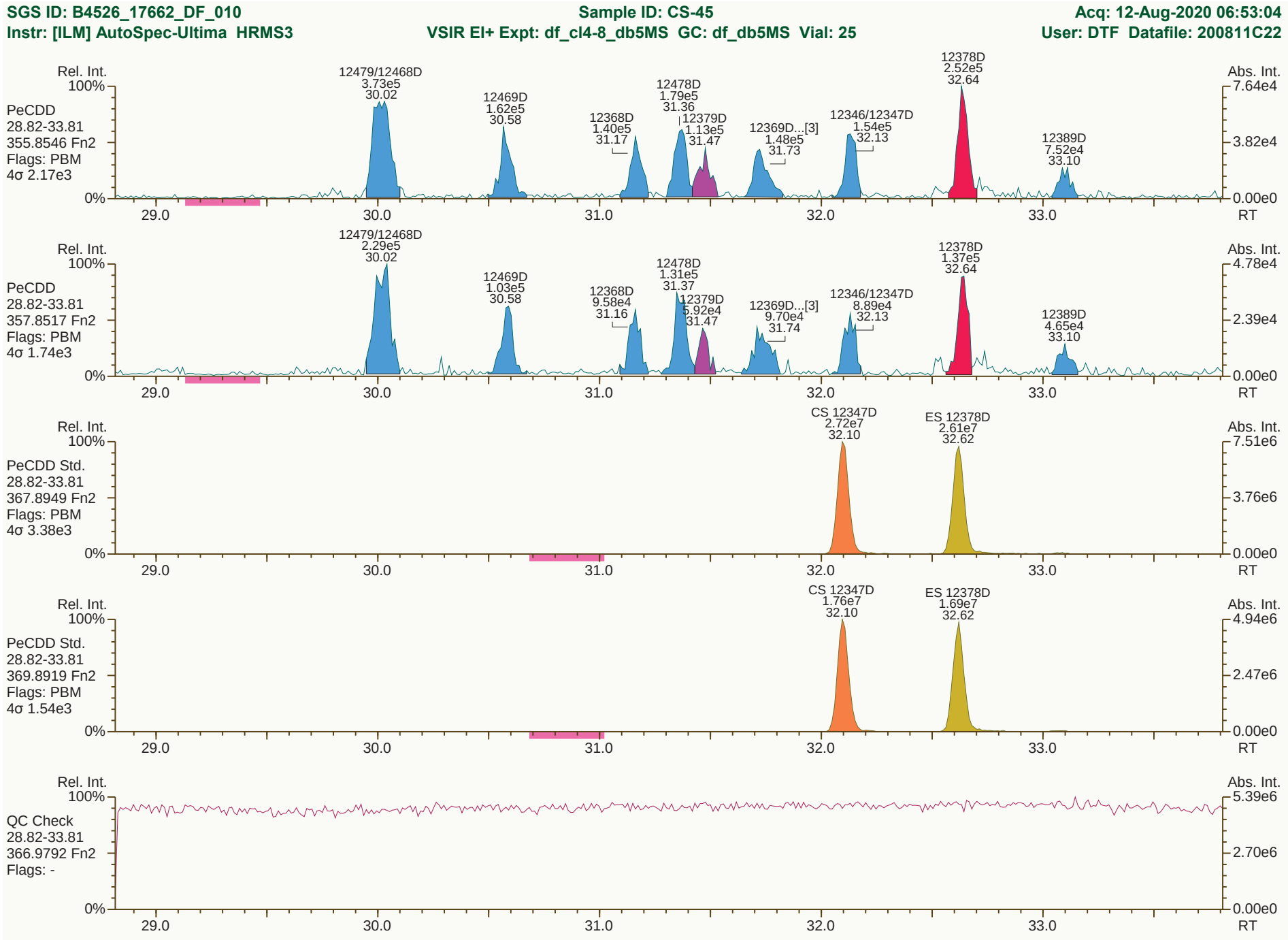
22.0
24.0
26.0
28.0
RT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Sample ID: CS-45
Acq: 12-Aug-2020 06:53:04
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VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 25
User: DTF Datafile: 200811C22
Rel. Int.
Abs. Int.
PeCDD
28.82-33.81
355.8546 Fn2
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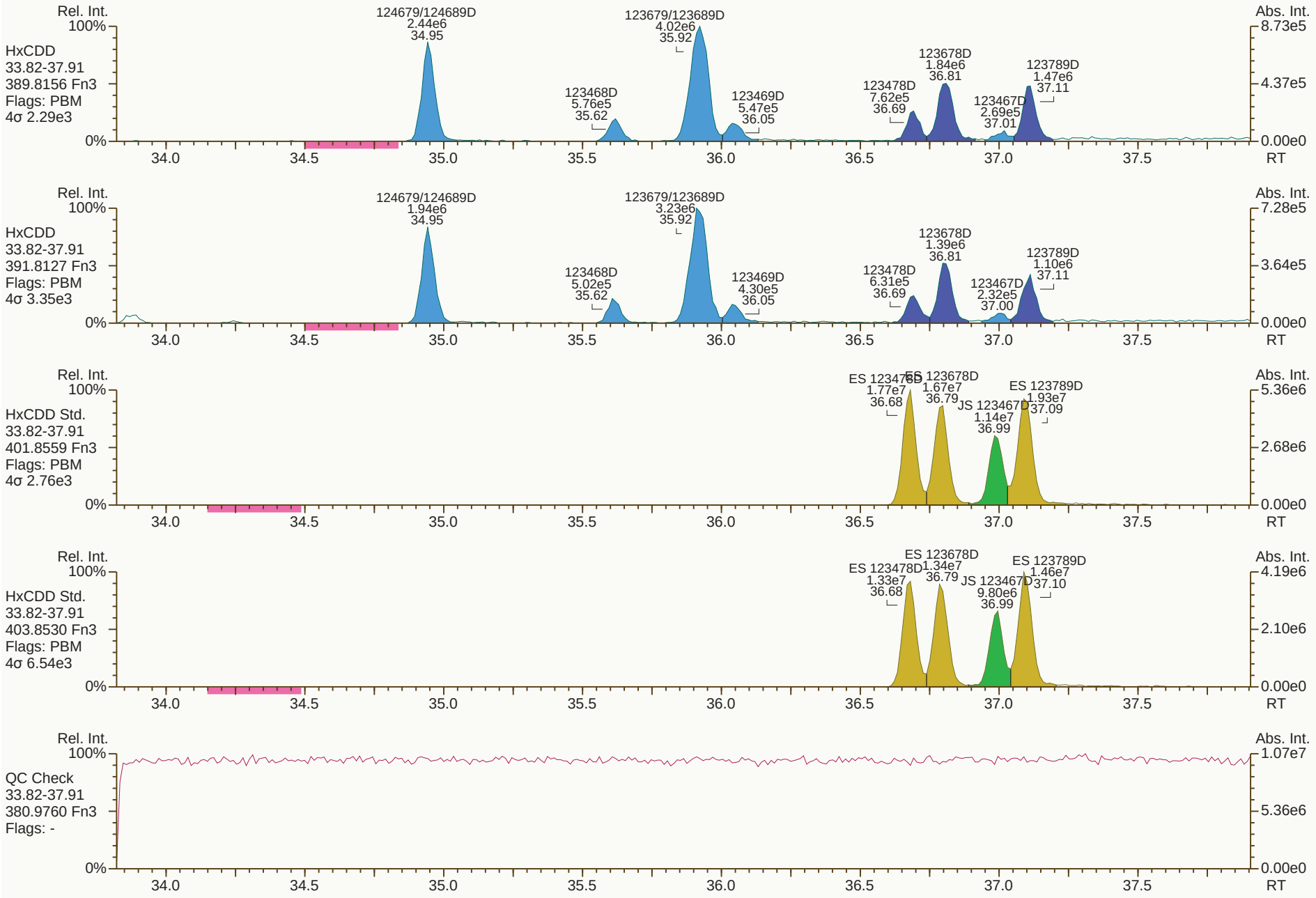
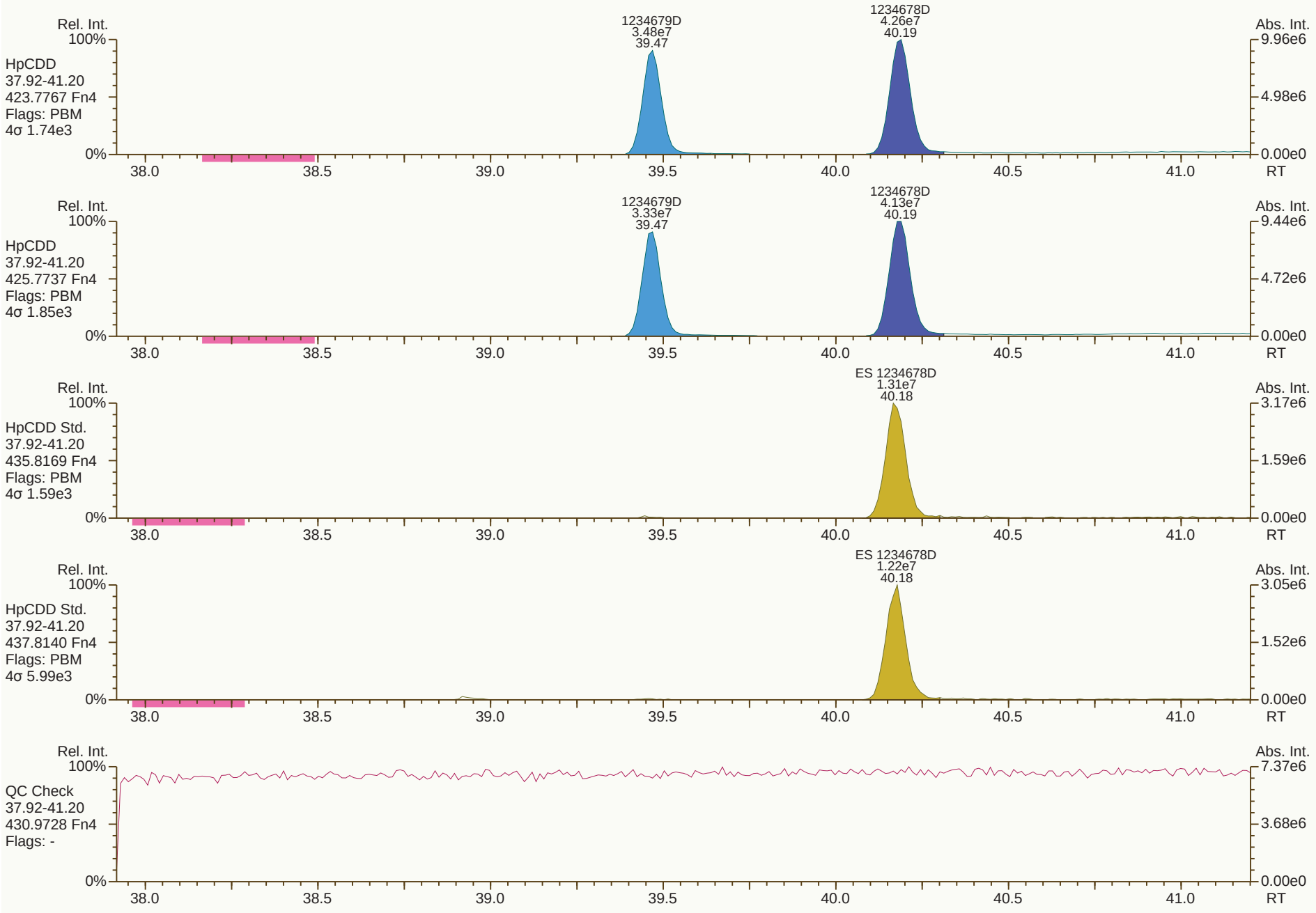
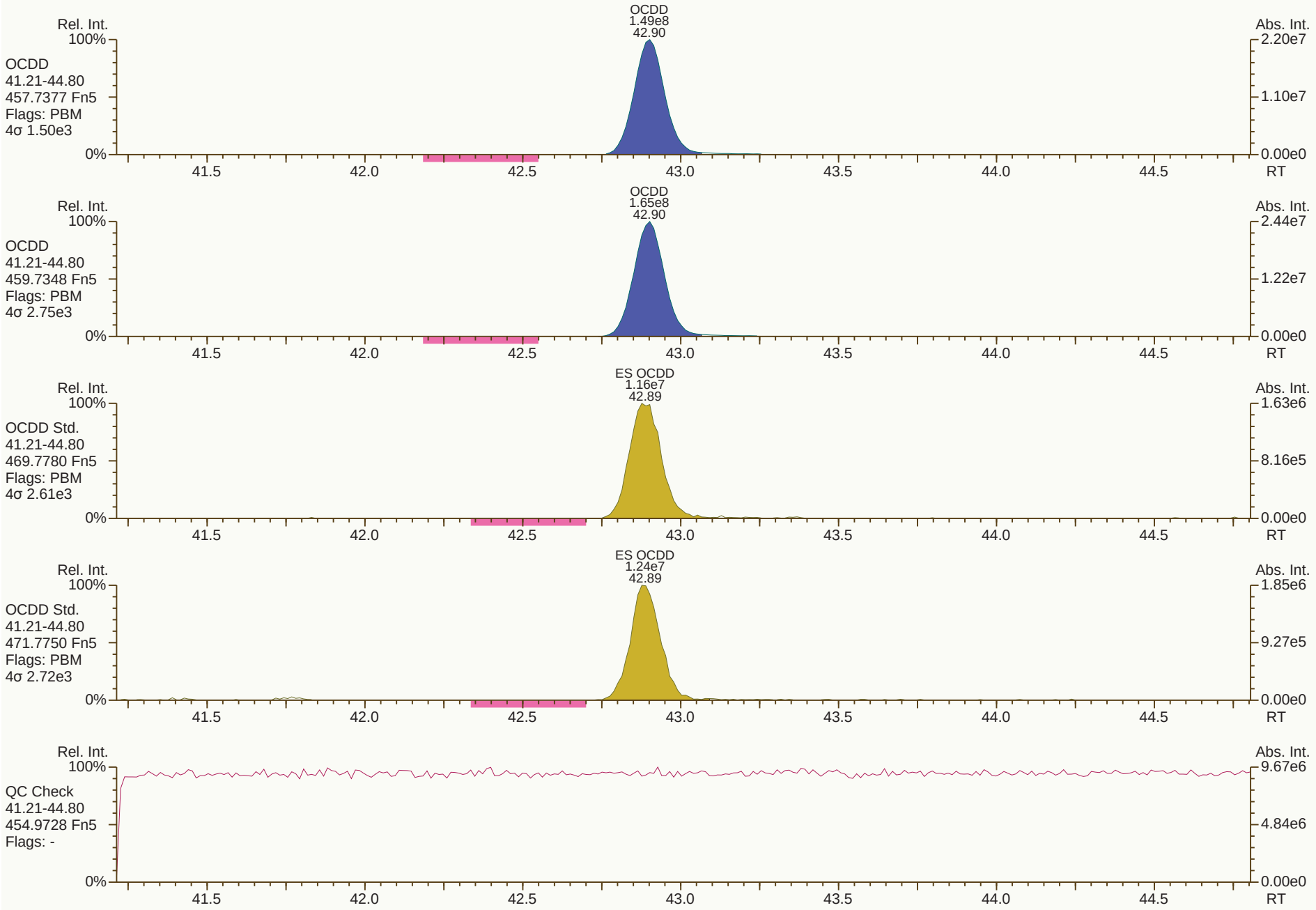
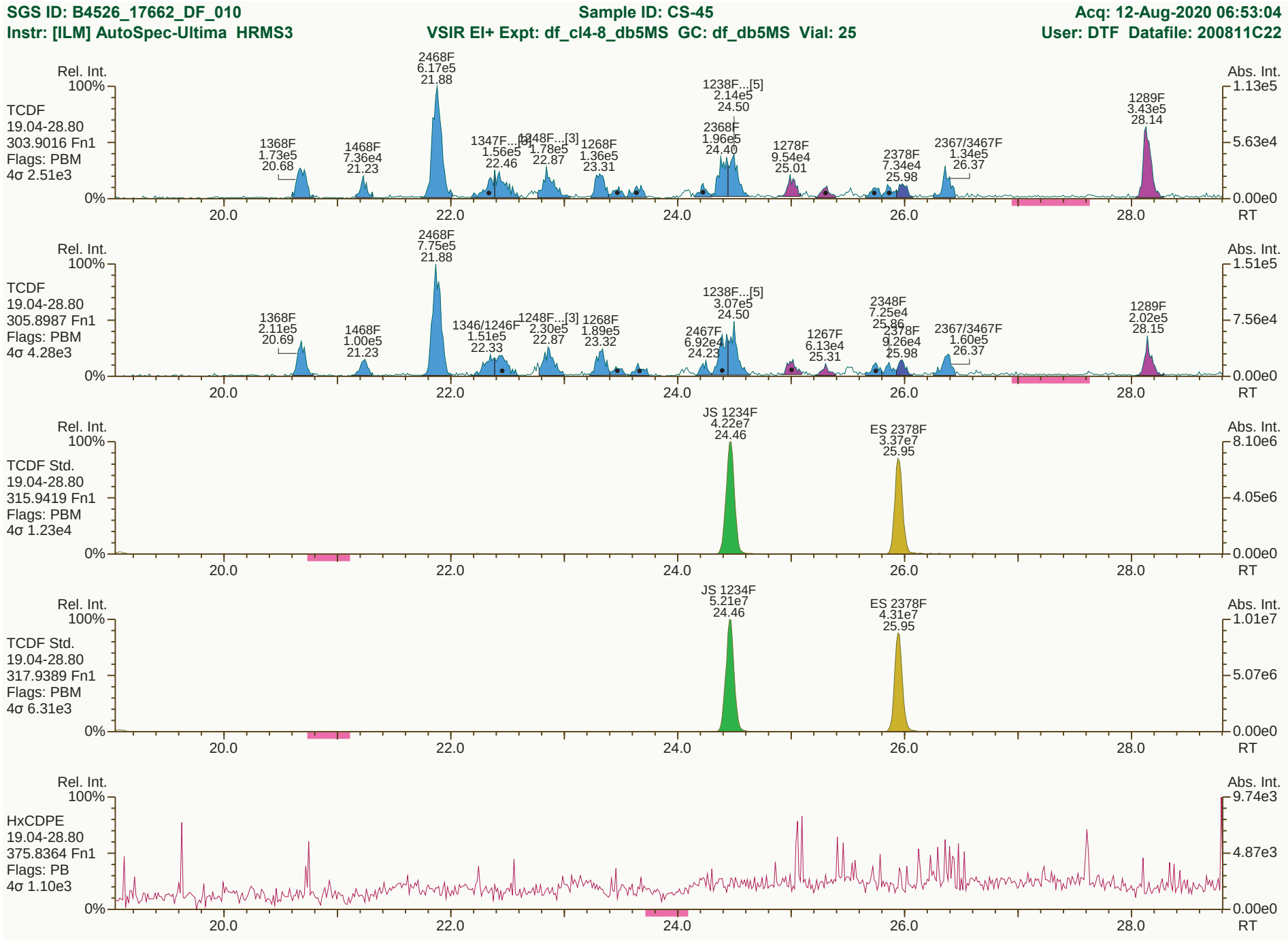
12479/12468D 3.73e5 30.02
12469D 1.62e5 30.58
12368D 1.40e5 31.17
12478D 1.79e5 31.36
12379D 1.13e5 31.47
12369D...[3] 1.48e5 31.73
12346/12347D 1.54e5 32.13
12378D 2.52e5 32.64
12389D 7.52e4 33.10
PeCDD
28.82-33.81
357.8517 Fn2
Flags: PBM
4σ 1.74e3
12479/12468D 2.29e5 30.02
12469D 1.03e5 30.58
12368D 9.58e4 31.16
12478D 1.31e5 31.37
12379D 5.92e4 31.47
12369D...[3] 9.70e4 31.74
12346/12347D 8.89e4 32.13
12378D 1.37e5 32.64
12389D 4.65e4 33.10
PeCDD Std.
28.82-33.81
367.8949 Fn2
Flags: PBM
4σ 3.38e3
CS 12347D 2.72e7 32.10
ES 12378D 2.61e7 32.62
PeCDD Std.
28.82-33.81
369.8919 Fn2
Flags: PBM
4σ 1.54e3
CS 12347D 1.76e7 32.10
ES 12378D 1.69e7 32.62
QC Check
28.82-33.81
366.9792 Fn2
Flags: -
RT
Results: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\B4526_17662_DF_010.utp_res, saved 12-Aug-2020 15:18 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 9988, 0127 scc: 659-912
Revised: 12-Aug-2020 14:31 (DTF) Printed: 12-Aug-2020 15:38 Page 3 of 12

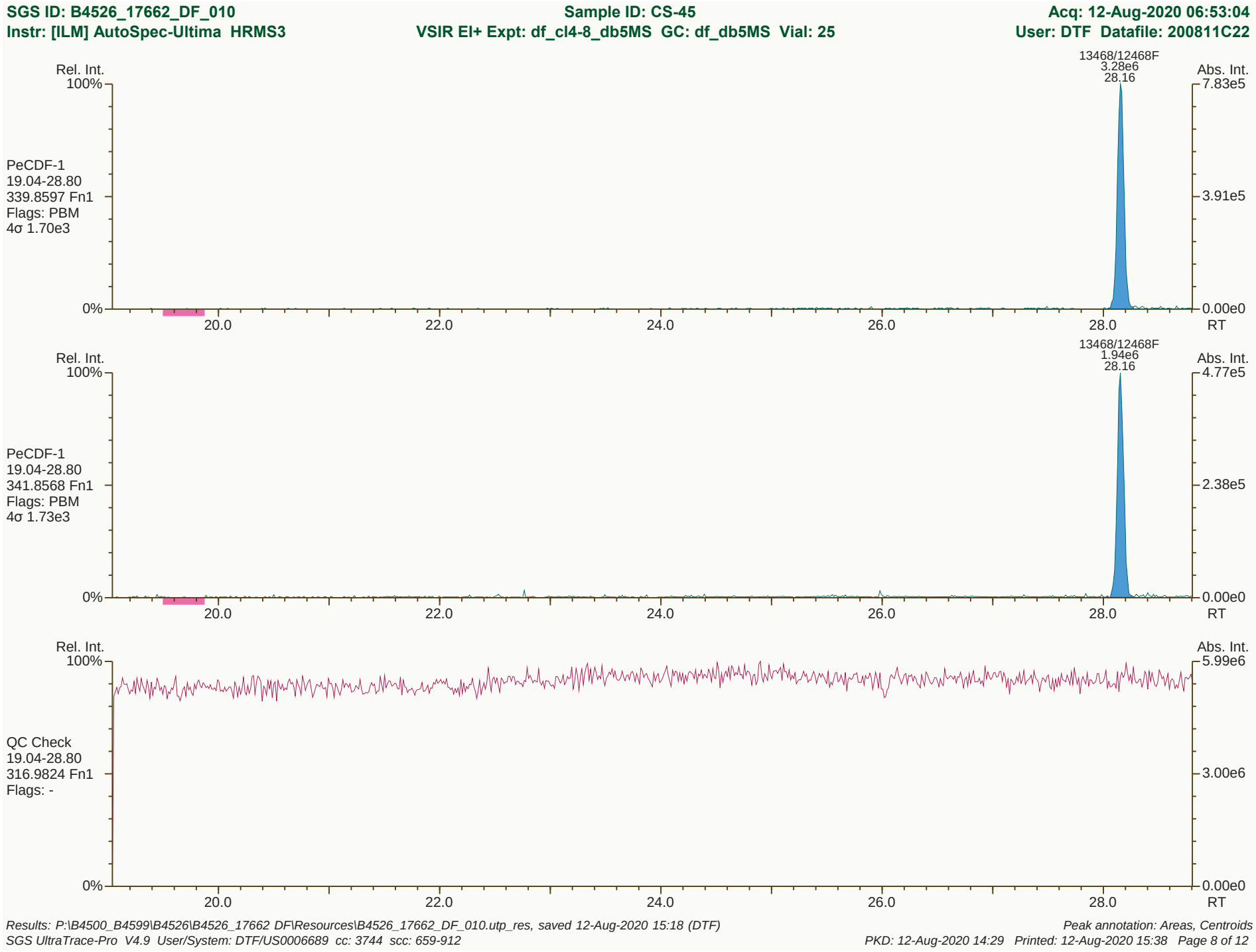

Rel. Int.
100%
HxCDD
33.82-37.91
389.8156 Fn3
Flags: PBM
4σ 2.29e3
124679/124689D
2.44e6
34.95
123679/123689D
4.02e6
35.92
123468D
5.76e5
35.62
123469D
5.47e5
36.05
123478D
7.62e5
36.69
123678D
1.84e6
36.81
123467D
2.69e5
37.01
123789D
1.47e6
37.11
Abs. Int.
8.73e5
4.37e5
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD
33.82-37.91
391.8127 Fn3
Flags: PBM
4σ 3.35e3
124679/124689D
1.94e6
34.95
123679/123689D
3.23e6
35.92
123468D
5.02e5
35.62
123469D
4.30e5
36.05
123478D
6.31e5
36.69
123678D
1.39e6
36.81
123467D
2.32e5
37.00
123789D
1.10e6
37.11
Abs. Int.
7.28e5
3.64e5
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.82-37.91
401.8559 Fn3
Flags: PBM
4σ 2.76e3
ES 123478D
1.77e7
36.68
ES 123678D
1.67e7
36.79
JS 123467D
1.14e7
36.99
ES 123789D
1.93e7
37.09
Abs. Int.
5.36e6
2.68e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.82-37.91
403.8530 Fn3
Flags: PBM
4σ 6.54e3
ES 123678D
1.34e7
36.79
ES 123478D
1.33e7
36.68
JS 123467D
9.80e6
36.99
ES 123789D
1.46e7
37.10
Abs. Int.
4.19e6
2.10e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
QC Check
33.82-37.91
380.9760 Fn3
Flags: -
Abs. Int.
1.07e7
5.36e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT


Rel. Int.
100%
HpCDD
37.92-41.20
423.7767 Fn4
Flags: PBM
4σ 1.74e3
0%
1234679D
3.48e7
39.47
1234678D
4.26e7
40.19
Abs. Int.
9.96e6
4.98e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD
37.92-41.20
425.7737 Fn4
Flags: PBM
4σ 1.85e3
0%
1234679D
3.33e7
39.47
1234678D
4.13e7
40.19
Abs. Int.
9.44e6
4.72e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.92-41.20
435.8169 Fn4
Flags: PBM
4σ 1.59e3
0%
ES 1234678D
1.31e7
40.18
Abs. Int.
3.17e6
1.59e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.92-41.20
437.8140 Fn4
Flags: PBM
4σ 5.99e3
0%
ES 1234678D
1.22e7
40.18
Abs. Int.
3.05e6
1.52e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
QC Check
37.92-41.20
430.9728 Fn4
Flags: -
0%
Abs. Int.
7.37e6
3.68e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT

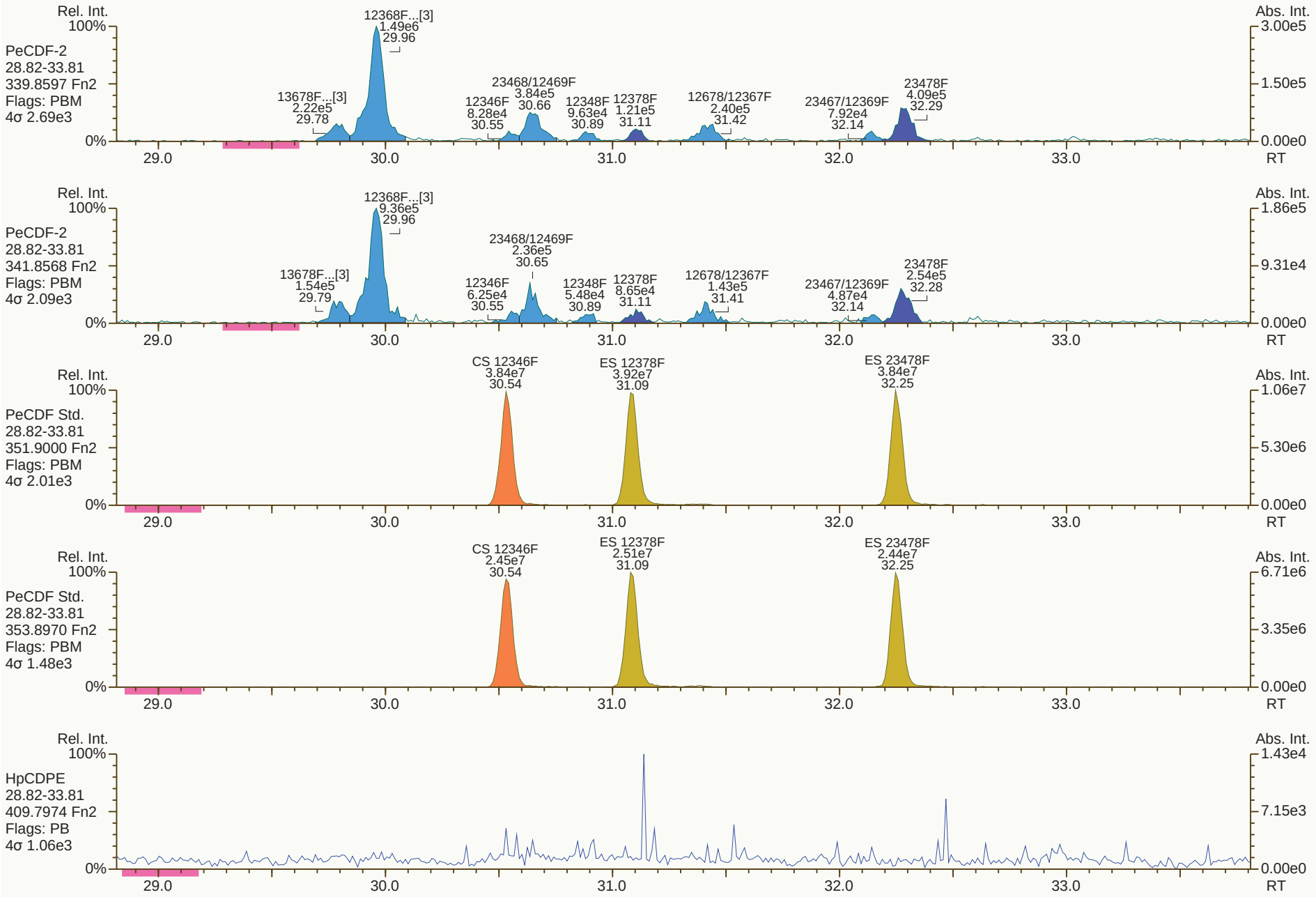

OCDD
1.49e8
42.90
Rel. Int.
100%
OCDD
41.21-44.80
457.7377 Fn5
Flags: PBM
4σ 1.50e3
0%
Abs. Int.
2.20e7
1.10e7
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
OCDD
1.65e8
42.90
Rel. Int.
100%
OCDD
41.21-44.80
459.7348 Fn5
Flags: PBM
4σ 2.75e3
0%
Abs. Int.
2.44e7
1.22e7
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDD
1.16e7
42.89
Rel. Int.
100%
OCDD Std.
41.21-44.80
469.7780 Fn5
Flags: PBM
4σ 2.61e3
0%
Abs. Int.
1.63e6
8.16e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDD
1.24e7
42.89
Rel. Int.
100%
OCDD Std.
41.21-44.80
471.7750 Fn5
Flags: PBM
4σ 2.72e3
0%
Abs. Int.
1.85e6
9.27e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
QC Check
41.21-44.80
454.9728 Fn5
Flags: -
0%
Abs. Int.
9.67e6
4.84e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT


SGS ID: B4526_17662_DF_010
Sample ID: CS-45
Acq: 12-Aug-2020 06:53:04
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 25
User: DTF Datafile: 200811C22
Rel. Int.
Abs. Int.
TCDF
19.04-28.80
303.9016 Fn1
Flags: PBM
4σ 2.51e3
1368F 1.73e5 20.68
1468F 7.36e4 21.23
2468F 6.17e5 21.88
1347F...[4] 1.56e5 22.46
1248F...[3] 1.78e5 22.87
1268F 1.36e5 23.31
1238F...[5] 2.14e5 24.50
2368F 1.96e5 24.40
1278F 9.54e4 25.01
2378F 7.34e4 25.98
2367/3467F 1.34e5 26.37
1289F 3.43e5 28.14
TCDF
19.04-28.80
305.8987 Fn1
Flags: PBM
4σ 4.28e3
1368F 2.11e5 20.69
1468F 1.00e5 21.23
2468F 7.75e5 21.88
1346/1246F 1.51e5 22.33
1248F...[3] 2.30e5 22.87
1268F 1.89e5 23.32
1238F...[5] 3.07e5 24.50
2467F 6.92e4 24.23
1267F 6.13e4 25.31
2348F 7.25e4 25.86
2378F 9.26e4 25.98
2367/3467F 1.60e5 26.37
1289F 2.02e5 28.15
TCDF Std.
19.04-28.80
315.9419 Fn1
Flags: PBM
4σ 1.23e4
JS 1234F 4.22e7 24.46
ES 2378F 3.37e7 25.95
TCDF Std.
19.04-28.80
317.9389 Fn1
Flags: PBM
4σ 6.31e3
JS 1234F 5.21e7 24.46
ES 2378F 4.31e7 25.95
HxCDPE
19.04-28.80
375.8364 Fn1
Flags: PB
4σ 1.10e3
100%
0%
20.0
22.0
24.0
26.0
28.0
RT
1.13e5
5.63e4
0.00e0
1.51e5
7.56e4
8.10e6
4.05e6
1.01e7
5.07e6
9.74e3
4.87e3
Results: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\B4526_17662_DF_010.utp_res, saved 12-Aug-2020 15:18 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 3724, 3914, 8803 scc: 659-912
Revised: 12-Aug-2020 14:34 (DTF) Printed: 12-Aug-2020 15:38 Page 7 of 12

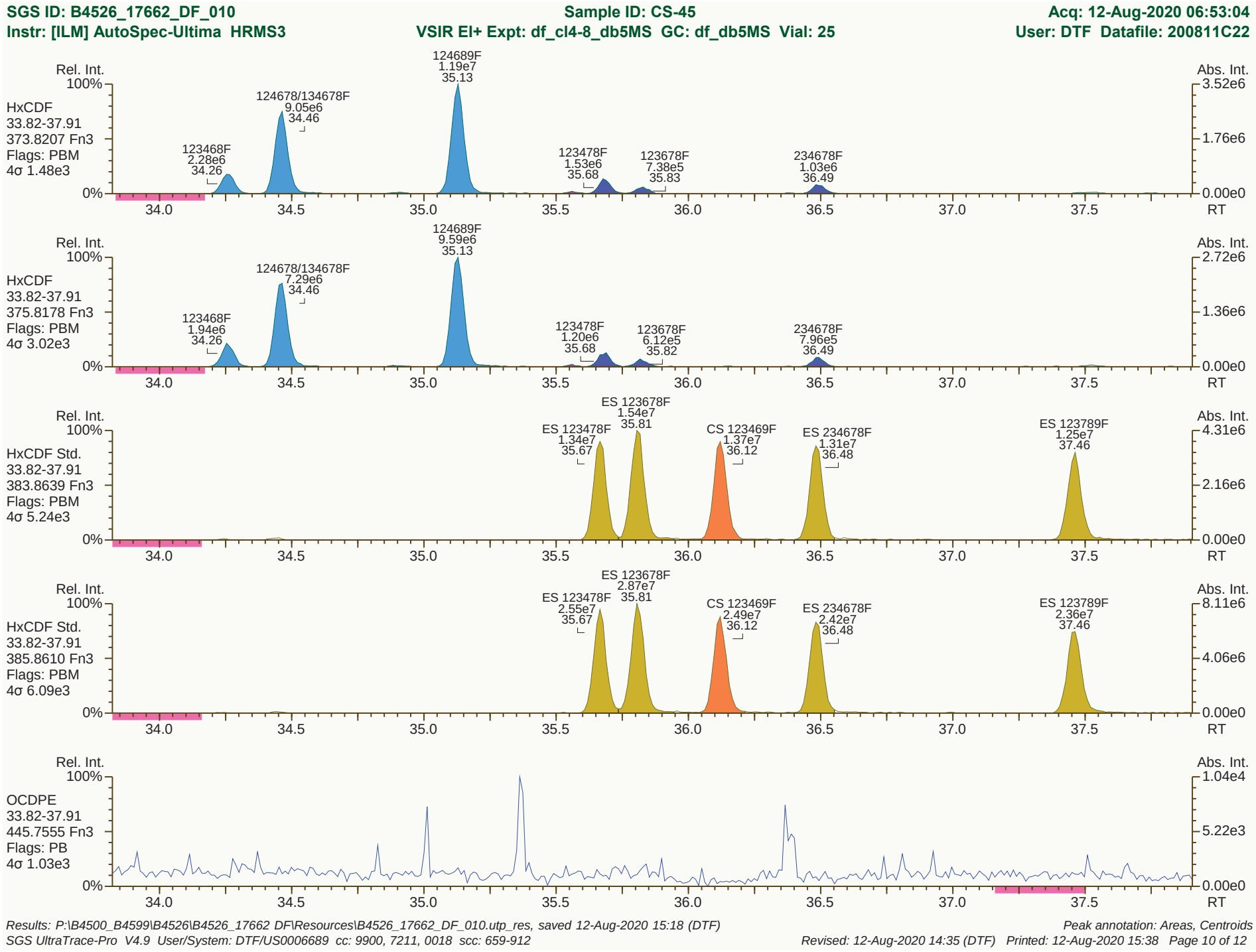
SGS ID: B4526_17662_DF_010 | Sample ID: CS-45 | Acq: 12-Aug-2020 06:53:04
Instr: [ILM] AutoSpec-Ultima HRMS3 | VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 25 | User: DTF Datafile: 200811C22

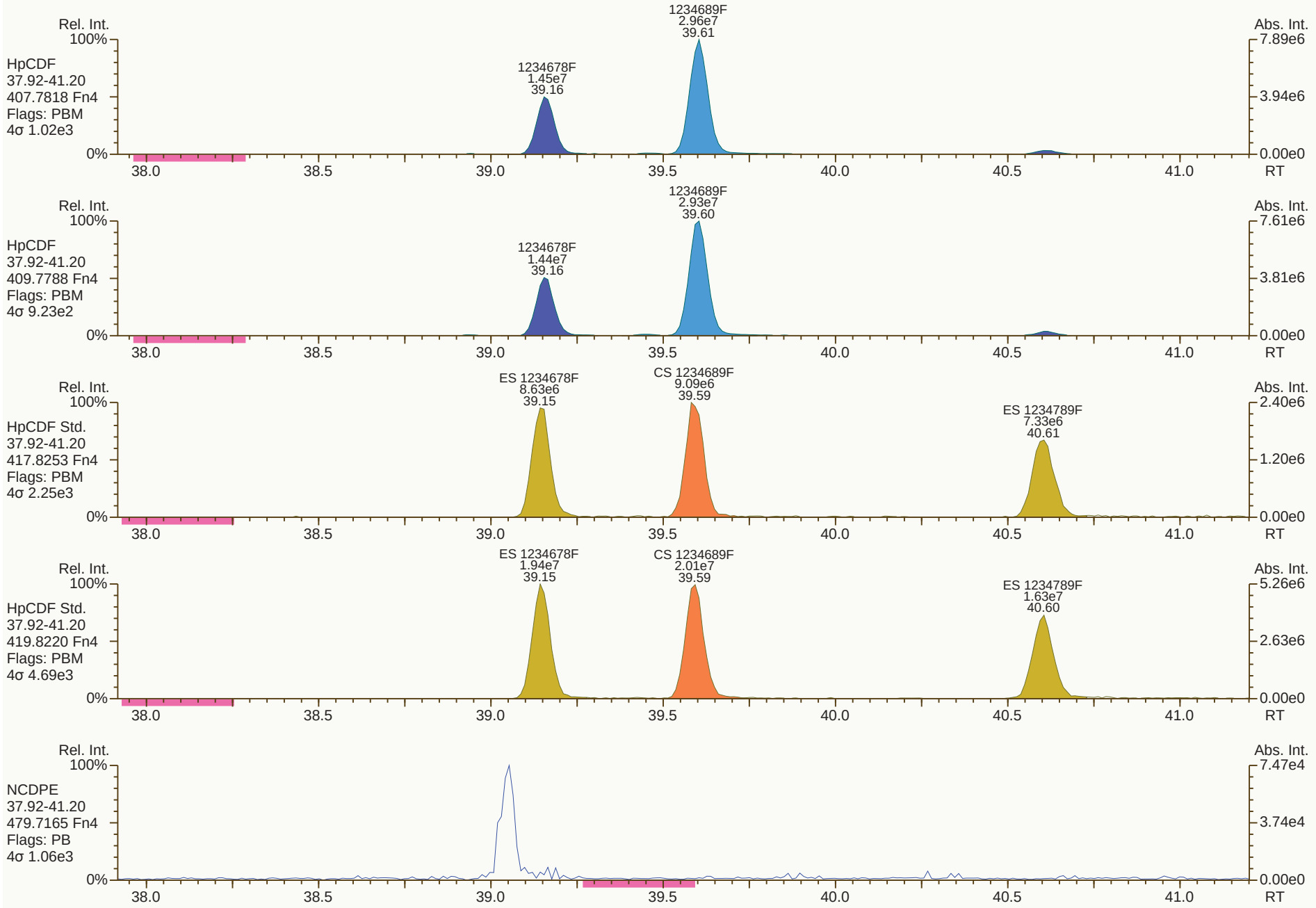


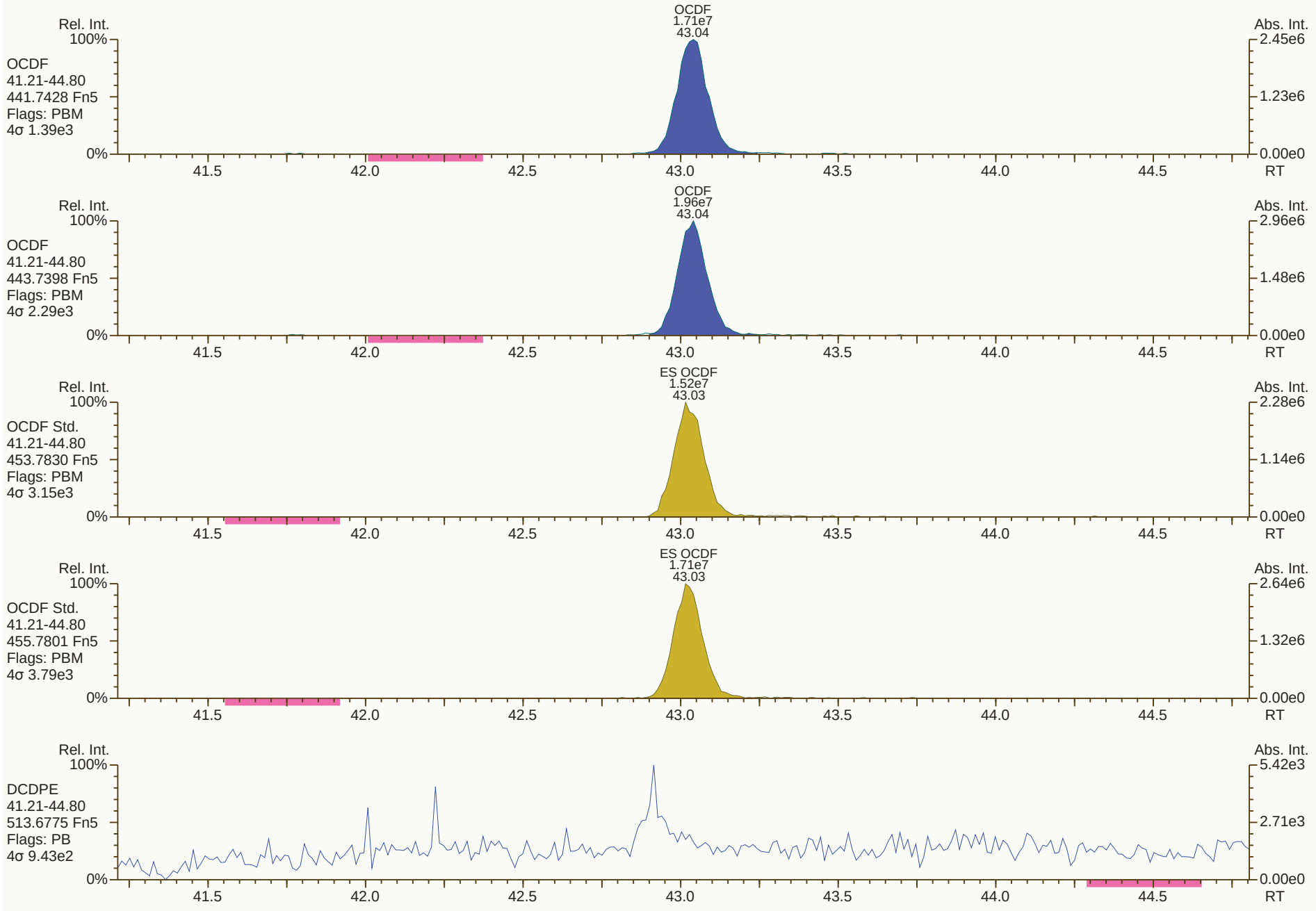
Results: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\B4526_17662_DF_010.utp_res, saved 12-Aug-2020 15:18 (DTF) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 3744 scc: 659-912 *PKD: 12-Aug-2020 14:29 Printed: 12-Aug-2020 15:38 Page 8 of 12*


Rel. Int.
100%
PeCDF-2
28.82-33.81
339.8597 Fn2
Flags: PBM
4σ 2.69e3
12368F...[3] 1.49e6 29.96
13678F...[3] 2.22e5 29.78
23468/12469F 3.84e5 30.66
12346F 8.28e4 30.55
12348F 9.63e4 30.89
12378F 1.21e5 31.11
12678/12367F 2.40e5 31.42
23467/12369F 7.92e4 32.14
23478F 4.09e5 32.29
Abs. Int.
3.00e5
1.50e5
0.00e0
0%
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF-2
28.82-33.81
341.8568 Fn2
Flags: PBM
4σ 2.09e3
12368F...[3] 9.36e5 29.96
13678F...[3] 1.54e5 29.79
23468/12469F 2.36e5 30.65
12346F 6.25e4 30.55
12348F 5.48e4 30.89
12378F 8.65e4 31.11
12678/12367F 1.43e5 31.41
23467/12369F 4.87e4 32.14
23478F 2.54e5 32.28
Abs. Int.
1.86e5
9.31e4
0.00e0
0%
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.82-33.81
351.9000 Fn2
Flags: PBM
4σ 2.01e3
CS 12346F 3.84e7 30.54
ES 12378F 3.92e7 31.09
ES 23478F 3.84e7 32.25
Abs. Int.
1.06e7
5.30e6
0.00e0
0%
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.82-33.81
353.8970 Fn2
Flags: PBM
4σ 1.48e3
CS 12346F 2.45e7 30.54
ES 12378F 2.51e7 31.09
ES 23478F 2.44e7 32.25
Abs. Int.
6.71e6
3.35e6
0.00e0
0%
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
HpCDPE
28.82-33.81
409.7974 Fn2
Flags: PB
4σ 1.06e3
Abs. Int.
1.43e4
7.15e3
0.00e0
0%
29.0
30.0
31.0
32.0
33.0
RT

SGS ID: B4526_17662_DF_010 Sample ID: CS-45 Acq: 12-Aug-2020 06:53:04
Instr: [ILM] AutoSpec-Ultima HRMS3 VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 25 User: DTF Datafile: 200811C22




Rel. Int.
100%
HpCDF
37.92-41.20
407.7818 Fn4
Flags: PBM
4σ 1.02e3
1234678F
1.45e7
39.16
1234689F
2.96e7
39.61
Abs. Int.
7.89e6
3.94e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF
37.92-41.20
409.7788 Fn4
Flags: PBM
4σ 9.23e2
1234678F
1.44e7
39.16
1234689F
2.93e7
39.60
Abs. Int.
7.61e6
3.81e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.92-41.20
417.8253 Fn4
Flags: PBM
4σ 2.25e3
ES 1234678F
8.63e6
39.15
CS 1234689F
9.09e6
39.59
ES 1234789F
7.33e6
40.61
Abs. Int.
2.40e6
1.20e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.92-41.20
419.8220 Fn4
Flags: PBM
4σ 4.69e3
ES 1234678F
1.94e7
39.15
CS 1234689F
2.01e7
39.59
ES 1234789F
1.63e7
40.60
Abs. Int.
5.26e6
2.63e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
NCDPE
37.92-41.20
479.7165 Fn4
Flags: PB
4σ 1.06e3
Abs. Int.
7.47e4
3.74e4
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT



Results: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\B4526_17662_DF_010.utp_res, saved 12-Aug-2020 15:18 (DTF) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 4705, 5723, 7021 scc: 659-912 *Revised: 12-Aug-2020 14:36 (DTF) Printed: 12-Aug-2020 15:39 Page 12 of 12*

Lab ID: B4526_17662_DF_011 **Acq'd:** 12 Aug 2020 07:39 DTF **Wt/Vol:** 9.11 g **ICAL:** HRMS3_DF_10122018_28AUG2019

Client ID: CS-54 **UTP:** 12-Aug-2020 15:18:41 DTF **J-level:** 0.549 pg/g **Split:** 1 **Checkcode:** 657-818-YGM

Datafile: 200811C23 **Report:** 12 Aug 2020 15:23 TF **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	NotFnd		1.0008	-		-	-	-	1.19	-	3983	0.143
12378-PeCDD	NotFnd		1.0006	-		-	-	-	0.98	-	5680	0.233
123478-HxCDD	NotFnd		1.0004	-		-	-	-	1.02	-	7741	0.395
123678-HxCDD	36.81	J	1.0036	1.0035	-0.2	9.02E+04	1.31	Y	1.09	0.521	7741	0.407
123789-HxCDD	37.11	J	1.0118	1.0118	0	1.14E+05	1.28	Y	0.97	0.654	7741	0.416
1234678-HpCDD	40.19		1.0003	1.0003	0	1.71E+06	0.97	Y	0.98	13.1	3818	0.316
OCDD	42.91		1.0003	1.0003	0	8.93E+06	0.89	Y	1.07	132	4312	1.07
2378-TCDF	25.97	J EMPC	1.0009	1.0003	-0.9	1.40E+05	0.61	N	1.01	0.342	7109	0.207
12378-PeCDF	31.10	J EMPC	1.0006	1.0004	-0.4	7.03E+04	1.13	N	0.96	0.218	3177	0.0932
23478-PeCDF	32.29	J EMPC	1.0005	1.0010	+1.0	1.04E+05	1.20	N	0.99	0.319	3177	0.0915
123478-HxCDF	35.69	J	1.0005	1.0004	-0.2	8.42E+04	1.16	Y	1.21	0.344	3501	0.119
123678-HxCDF	35.83	J	1.0005	1.0004	-0.2	4.97E+04	1.31	Y	1.11	0.19	3501	0.122
234678-HxCDF	36.50	J EMPC	1.0004	1.0002	-0.4	6.25E+04	2.29	N	1.12	0.274	3501	0.144
123789-HxCDF	37.49	J	1.0005	1.0006	+0.2	1.07E+05	1.36	Y	1.11	0.505	3501	0.164
1234678-HpCDF	39.17		1.0003	1.0003	0	9.59E+05	0.97	Y	1.32	4.54	3331	0.147
1234789-HpCDF	NotFnd		1.0003	-		-	-	-	1.26	-	3331	0.229
OCDF	43.05		1.0003	1.0002	-0.3	5.33E+05	0.78	Y	1.03	6.14	2818	0.538

Name	Act RT	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	26.91	1.0266	1.0267	+0.2	5.90E+07	0.80	Y	0.99	86.4
ES 12378-PeCDD	32.62	1.2430	1.2447	+3.3	4.88E+07	1.57	Y	0.83	85.2
ES 123478-HxCDD	36.68	0.9916	0.9916	0	3.62E+07	1.25	Y	0.95	80.7
ES 123678-HxCDD	36.79	0.9947	0.9947	0	3.50E+07	1.21	Y	0.98	75.8
ES 123789-HxCDD	37.10	1.0029	1.0029	0	3.95E+07	1.30	Y	1.14	73.2
ES 1234678-HpCDD	40.18	1.0851	1.0862	+2.7	2.93E+07	1.11	Y	0.90	68.8
ES OCDD	42.90	1.1584	1.1596	+3.1	2.78E+07	0.92	Y	0.63	46.8
ES 2378-TCDF	25.96	1.0602	1.0607	+0.8	8.91E+07	0.79	Y	1.00	88.3
ES 12378-PeCDF	31.09	1.2683	1.2703	+3.7	7.34E+07	1.54	Y	0.83	87.2
ES 23478-PeCDF	32.26	1.3156	1.3180	+4.6	7.22E+07	1.59	Y	0.81	88.4
ES 123478-HxCDF	35.67	0.9644	0.9642	-0.4	4.45E+07	0.53	Y	1.12	83.6
ES 123678-HxCDF	35.81	0.9682	0.9681	-0.2	5.19E+07	0.52	Y	1.33	82.2
ES 234678-HxCDF	36.49	0.9864	0.9864	0	4.49E+07	0.53	Y	1.21	78.3
ES 123789-HxCDF	37.47	1.0128	1.0128	0	4.20E+07	0.53	Y	1.12	79.2
ES 1234678-HpCDF	39.15	1.0578	1.0584	+1.4	3.50E+07	0.47	Y	0.92	79.8
ES 1234789-HpCDF	40.61	1.0967	1.0977	+2.4	2.67E+07	0.46	Y	0.82	68.7
ES OCDF	43.04	1.1623	1.1634	+2.8	3.70E+07	0.91	Y	0.78	50

Lab ID: B4526_17662_DF_011 | Acq'd: 12 Aug 2020 07:39 DTF | Wt/Vol: 9.11 g | ICAL: HRMS3_DF_10122018_28AUG2019

Client ID: CS-54 | UTP: 12-Aug-2020 15:18:41 DTF | J-level: 0.549 pg/g | Split: 1 | Checkcode: 657-818-YGM

Datafile: 200811C23 | Report: 12 Aug 2020 15:23 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %	
JS 1234-TCDD	26.21		-	-	-	6.90E+07	0.82	Y	-	-	
JS 1234-TCDF	24.47		-	-	-	1.01E+08	0.79	Y	-	-	
JS 123467-HxCDD	36.99		-	-	-	2.37E+07	1.27	Y	-	-	
CS 37Cl-2378-TCDD	26.93		1.0276	1.0276	0	2.65E+07	n/a	-	1.12	85.7	
CS 12347-PeCDD	32.10		1.2233	1.2249	+3.1	5.05E+07	1.60	Y	0.71	103	
CS 12346-PeCDF	30.54		1.2459	1.2478	+3.5	7.23E+07	1.58	Y	0.81	88.1	
CS 123469-HxCDF	36.13		0.9767	0.9766	-0.2	4.61E+07	0.53	Y	1.12	86.5	
CS 1234689-HpCDF	39.60		1.0696	1.0704	+1.9	3.40E+07	0.46	Y	0.90	79.8	
~~SS 37Cl-2378-TCDD~~	~~26.93~~		~~1.0276~~	~~1.0276~~	~~0~~	~~2.65E+07~~	~~n/a~~		~~1.14~~	~~98.~~3	Not used in this project.
~~SS 12347-PeCDD~~	~~32.10~~		~~1.2233~~	~~1.2249~~	~~+3.1~~	~~5.05E+07~~	~~1.60~~	~~Y~~	~~0.86~~	~~120~~	CL 13Aug20
~~SS 12346-PeCDF~~	~~30.54~~		~~1.2459~~	~~1.2478~~	~~+3.5~~	~~7.23E+07~~	~~1.58~~	~~Y~~	~~0.98~~	~~101~~	
~~SS 123469-HxCDF~~	~~36.13~~		~~0.9767~~	~~0.9766~~	~~-0.2~~	~~4.61E+07~~	~~0.53~~	~~Y~~	~~0.85~~	~~105~~	
~~SS 1234689-HpCDF~~	~~39.60~~		~~1.0696~~	~~1.0704~~	~~+1.9~~	~~3.40E+07~~	~~0.46~~	~~Y~~	~~0.97~~	~~99.~~6	

Totals	Conc	EMPC
Total TCDD	6.65	6.65
Total PeCDD	0.717	4.31
Total HxCDD	11.8	11.8
Total HpCDD	36.6	36.6
Total Tetra-Octa Dioxins	187	191
Total TCDF	11.3	13.1
Total PeCDF	2.98	4.48
Total HxCDF	4.96	5.24
Total HpCDF	8.79	8.79
Total Tetra-Octa Furans	34.2	37.8
Total Tetra-Octa Dioxins & Furans	222	229

Lab ID: B4526_17662_DF_011 | Acq'd: 12 Aug 2020 07:39 DTF | Wt/Vol: 9.11 g | ICAL: HRMS3_DF_10122018_28AUG2019

Client ID: CS-54 | UTP: 12-Aug-2020 15:18:41 DTF | J-level: 0.549 pg/g | Split: 1 | Checkcode: 657-818-YGM

Datafile: 200811C23 | Report: 12 Aug 2020 15:23 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1368-TCDD	22.91		0.8523	0.8514	-1.2	5.91E+05	0.76	Y	1.19	1.85	3983	0.143
1379-TCDD	23.32		0.8682	0.8665	-2.4	4.56E+05	0.86	Y	1.19	1.43	3983	0.143
1369-TCDD	NotFnd		0.8858						1.19		3983	0.143
1469-TCDD	24.67		0.9177	0.9168	-1.3	3.24E+05	0.78	Y	1.19	1.01	3983	0.143
1247/1246/1248/1249-TCDD	24.92		0.9274	0.9261	-1.9	7.54E+05	0.82	Y	1.19	2.36	3983	0.143
1378-TCDD	NotFnd		0.9349						1.19		3983	0.143
1268-TCDD	NotFnd		0.9430						1.19		3983	0.143
1478-TCDD	NotFnd		0.9529						1.19		3983	0.143
1279-TCDD	NotFnd		0.9597						1.19		3983	0.143
1234/1269-TCDD	NotFnd		0.9739						1.19		3983	0.143
1236-TCDD	NotFnd		0.9794						1.19		3983	0.143
1237/1238-TCDD	NotFnd		0.9895						1.19		3983	0.143
1239-TCDD	NotFnd		0.9950						1.19		3983	0.143
2378-TCDD	**NotFnd**		**1.0008**						**1.19**		**3983**	**0.143**
1278-TCDD	NotFnd		1.0139						1.19		3983	0.143
1267-TCDD	NotFnd		1.0194						1.19		3983	0.143
1289-TCDD	NotFnd		1.0397						1.19		3983	0.143
12479/12468-PeCDD	30.02	J EMPC	0.9209	0.9201	-1.4	4.10E+05	1.25	N	0.98	1.87	5680	0.233
12469-PeCDD	30.58	J EMPC	0.9382	0.9373	-1.7	1.79E+05	1.95	N	0.98	0.818	5680	0.233
12368-PeCDD	31.17	J EMPC	0.9557	0.9555	-0.4	1.12E+05	1.92	N	0.98	0.511	5680	0.233
12478-PeCDD	NotFnd		0.9617						0.98		5680	0.233
12379-PeCDD	31.47	J EMPC	0.9649	0.9648	-0.2	8.53E+04	1.27	N	0.98	0.39	5680	0.233
12369/12467/12489-PeCDD	NotFnd		0.9732						0.98		5680	0.233
12346/12347-PeCDD	32.13	J	0.9850	0.9848	-0.4	1.57E+05	1.54	Y	0.98	0.717	5680	0.233
12378-PeCDD	NotFnd		**1.0006**						**0.98**		**5680**	**0.233**
12367-PeCDD	NotFnd		1.0038						0.98		5680	0.233
12389-PeCDD	NotFnd		1.0146						0.98		5680	0.233
124679/124689-HxCDD	34.95		0.9530	0.9529	-0.2	1.16E+06	1.24	Y	1.03	6.71	7741	0.405
123468-HxCDD	35.62	J	0.9715	0.9711	-0.9	3.03E+05	1.18	Y	1.03	1.75	7741	0.405
123679/123689-HxCDD	35.92	J	0.9795	0.9793	-0.4	3.65E+05	1.25	Y	1.03	2.11	7741	0.405
123469-HxCDD	NotFnd		0.9832						1.03		7741	0.405
123478-HxCDD	NotFnd		**1.0004**						1.02		**7741**	**0.395**
123678-HxCDD	36.81	J	**1.0036**	**1.0035**	**-0.2**	**9.02E+04**	**1.31**	**Y**	1.09	**0.521**	**7741**	**0.407**
123467-HxCDD	NotFnd		1.0089						1.03		7741	0.405
123789-HxCDD	37.11	J	**1.0118**	**1.0118**	**0**	**1.14E+05**	**1.28**	**Y**	0.97	**0.654**	**7741**	**0.416**

Lab ID: B4526_17662_DF_011 | Acq'd: 12 Aug 2020 07:39 DTF | Wt/Vol: 9.11 g | ICAL: HRMS3_DF_10122018_28AUG2019

Client ID: CS-54 | UTP: 12-Aug-2020 15:18:41 DTF | J-level: 0.549 pg/g | Split: 1 | Checkcode: 657-818-YGM

Datafile: 200811C23 | Report: 12 Aug 2020 15:23 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1234679-HpCDD	39.47		0.9826	0.9824	-0.5	3.06E+06	1.04	Y	0.98	23.5	3818	0.316
1234678-HpCDD	**40.19**		**1.0003**	**1.0003**	**0**	**1.71E+06**	**0.97**	**Y**	**0.98**	**13.1**	**3818**	**0.316**
OCDD	**42.91**		**1.0003**	**1.0003**	**0**	**8.93E+06**	**0.89**	**Y**	**1.07**	**132**	**4312**	**1.07**
OCDD-a	42.94	**#VALUE!**	1.0002	1.0010	+2.1	2.83E+05	2.36	Y	-	#VALUE!	5710	#VALUE!
1368-TCDF	20.70		0.7980	0.7973	-0.9	1.01E+06	0.71	Y	1.01	2.45	7109	0.207
1468-TCDF	NotFnd		0.8204						1.01		7109	0.207
2468-TCDF	21.90		0.8443	0.8435	-1.1	2.91E+06	0.77	Y	1.01	7.09	7109	0.207
1346/1246-TCDF	NotFnd		0.8597						1.01		7109	0.207
1347/1378/1247-TCDF	22.44		0.8665	0.8645	-2.7	2.62E+05	0.79	Y	1.01	0.639	7109	0.207
1348-TCDF	NotFnd		0.8785						1.01		7109	0.207
1248/1367/1379-TCDF	22.92	J	0.8840	0.8830	-1.4	1.53E+05	0.73	Y	1.01	0.373	7109	0.207
1268-TCDF	23.34	J	0.9004	0.8990	-2.0	1.61E+05	0.87	Y	1.01	0.393	7109	0.207
1467-TCDF	NotFnd		0.9060						1.01		7109	0.207
1478-TCDF	NotFnd		0.9132						1.01		7109	0.207
1369/1237-TCDF	NotFnd		0.9287						1.01		7109	0.207
2467-TCDF	24.24	J	0.9345	0.9338	-1.0	1.51E+05	0.84	Y	1.01	0.368	7109	0.207
2368-TCDF	24.40	EMPC	0.9409	0.9398	-1.6	2.55E+05	0.62	N	1.01	0.622	7109	0.207
1238/1234/1678/1469/1236-TCDF	NotFnd		0.9450						1.01		7109	0.207
1278-TCDF	NotFnd		0.9638						1.01		7109	0.207
1349-TCDF	NotFnd		0.9685						1.01		7109	0.207
1267-TCDF	NotFnd		0.9751						1.01		7109	0.207
2346/1249-TCDF	NotFnd		0.9831						1.01		7109	0.207
2347/1279-TCDF	NotFnd		0.9920						1.01		7109	0.207
2348-TCDF	NotFnd		0.9964						1.01		7109	0.207
2378-TCDF	**25.97**	J EMPC	**1.0009**	**1.0003**	**-0.9**	**1.40E+05**	**0.61**	**N**	**1.01**	**0.342**	**7109**	**0.207**
2367/3467-TCDF	26.39	J EMPC	1.0164	1.0166	+0.3	1.02E+05	1.02	N	1.01	0.248	7109	0.207
1269-TCDF	NotFnd		1.0259						1.01		7109	0.207
1239-TCDF	NotFnd		1.0373						1.01		7109	0.207
1289-TCDF	28.15	EMPC	1.0838	1.0844	+1.0	2.52E+05	1.65	N	1.01	0.614	7109	0.207
13468/12468-PeCDF	28.16	J	0.9052	0.9057	+0.8	4.75E+05	1.50	Y	0.98	1.47	3226	0.0938
13678/13467/12467-PeCDF	29.78	J EMPC	0.9582	0.9578	-0.7	9.79E+04	1.12	N	0.98	0.303	3177	0.0924
12368/13478/12478-PeCDF	29.95	J	0.9634	0.9633	-0.2	4.05E+05	1.39	Y	0.98	1.25	3177	0.0924
14678-PeCDF	NotFnd		0.9668						0.98		3177	0.0924
13479-PeCDF	NotFnd		0.9700						0.98		3177	0.0924
13469/12479-PeCDF	NotFnd		0.9781						0.98		3177	0.0924
12346-PeCDF	NotFnd		0.9829						0.98		3177	0.0924

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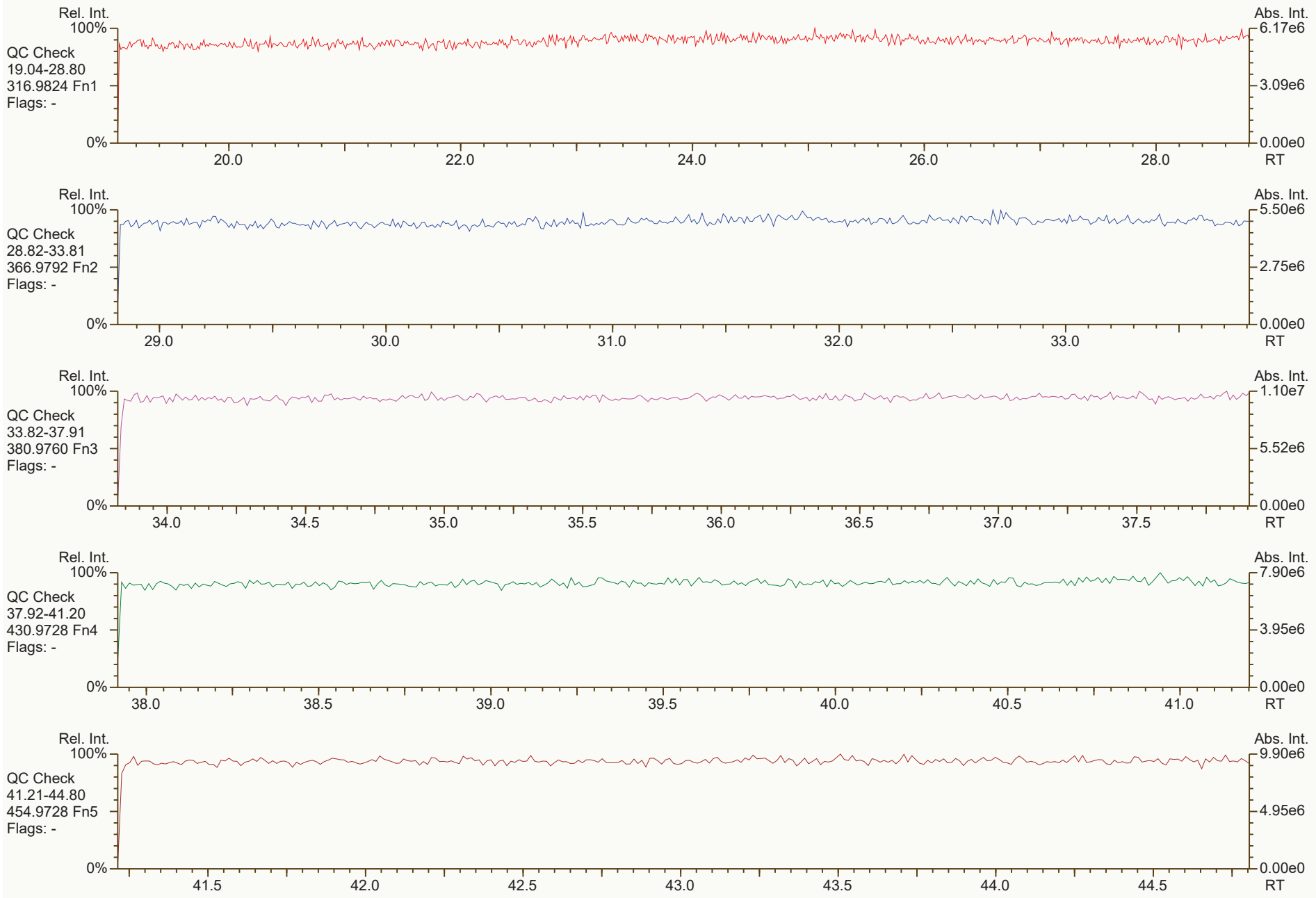
Datafile: 200811C23 | Report: 12 Aug 2020 15:23 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
23468/12469-PeCDF	30.66	J EMPC	0.9859	0.9861	+0.4	1.71E+05	1.23	N	0.98	0.53	3177	0.0924
12347-PeCDF	NotFnd		0.9884						0.98		3177	0.0924
12348-PeCDF	NotFnd		0.9937						0.98		3177	0.0924
12378-PeCDF	**31.10**	J EMPC	**1.0006**	**1.0004**	**-0.4**	**7.03E+04**	**1.13**	**N**	**0.96**	**0.218**	**3177**	**0.0932**
12678/12367-PeCDF	31.40	J	1.0097	1.0098	+0.2	8.23E+04	1.33	Y	0.98	0.254	3177	0.0924
12379-PeCDF	NotFnd		1.0152						0.98		3177	0.0924
12679-PeCDF	NotFnd		0.9923						0.98		3177	0.0924
23467/12369-PeCDF	32.15	J EMPC	0.9966	0.9966	0	4.43E+04	1.07	N	0.98	0.137	3177	0.0924
23478-PeCDF	**32.29**	J EMPC	**1.0005**	**1.0010**	**+1.0**	**1.04E+05**	**1.20**	**N**	**0.99**	**0.319**	**3177**	**0.0915**
23478/12489-PeCDF	NotFnd		0.0000						0.99			
12489-PeCDF	NotFnd		1.0043						0.98		3177	0.0924
12349-PeCDF	NotFnd		1.0107						0.98		3177	0.0924
12389-PeCDF	NotFnd		1.0349						0.98		3177	0.0924
123468-HxCDF	34.27	J	0.9607	0.9606	-0.2	1.40E+05	1.11	Y	1.13	0.59	3501	0.136
124678/134678-HxCDF	34.47	J	0.9666	0.9663	-0.6	4.54E+05	1.20	Y	1.13	1.92	3501	0.136
134679-HxCDF	NotFnd		0.9730						1.13		3501	0.136
124679-HxCDF	NotFnd		0.9787						1.13		3501	0.136
124689-HxCDF	35.13	J	0.9850	0.9850	0	3.35E+05	1.20	Y	1.13	1.42	3501	0.136
123467-HxCDF	NotFnd		0.9971						1.13		3501	0.136
123478-HxCDF	**35.69**	J	**1.0005**	**1.0004**	**-0.2**	**8.42E+04**	**1.16**	**Y**	**1.21**	**0.344**	**3501**	**0.119**
123678-HxCDF	**35.83**	J	**1.0005**	**1.0004**	**-0.2**	**4.97E+04**	**1.31**	**Y**	**1.11**	**0.19**	**3501**	**0.122**
123479-HxCDF	NotFnd		1.0049						1.13		3501	0.136
123469-HxCDF	NotFnd		1.0090						1.13		3501	0.136
123679-HxCDF	NotFnd		0.9941						1.13		3501	0.136
234678-HxCDF	**36.50**	J EMPC	**1.0004**	**1.0002**	**-0.4**	**6.25E+04**	**2.29**	**N**	**1.12**	**0.274**	**3501**	**0.144**
234678/123689-HxCDF	NotFnd		0.0000						1.12			
123689-HxCDF	NotFnd		1.0041						1.13		3501	0.136
123789-HxCDF	**37.49**	J	**1.0005**	**1.0006**	**+0.2**	**1.07E+05**	**1.36**	**Y**	**1.11**	**0.505**	**3501**	**0.164**
123789/123489-HxCDF	NotFnd		0.0000						1.11			
123489-HxCDF	NotFnd		1.0009						1.13		3501	0.136
1234678-HpCDF	**39.17**		**1.0003**	**1.0003**	**0**	**9.59E+05**	**0.97**	**Y**	**1.32**	**4.54**	**3331**	**0.147**
1234679-HpCDF	NotFnd		1.0075						1.29		3331	0.182
1234689-HpCDF	39.61		1.0112	1.0116	+1.0	7.69E+05	0.98	Y	1.29	4.25	3331	0.182
1234789-HpCDF	**NotFnd**		**1.0003**						**1.26**		**3331**	**0.229**
OCDF	**43.05**		**1.0003**	**1.0002**	**-0.3**	**5.33E+05**	**0.78**	**Y**	**1.03**	**6.14**	**2818**	**0.538**
OCDF-a	NotFnd	**#VALUE!**	1.0002						-		3891	#VALUE!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RT
Rel. Int.
100%
QC Check
28.82-33.81
366.9792 Fn2
Flags: -
0%
29.0
30.0
31.0
32.0
33.0
Abs. Int.
5.50e6
2.75e6
0.00e0
RT
Rel. Int.
100%
QC Check
33.82-37.91
380.9760 Fn3
Flags: -
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
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RT
Rel. Int.
100%
QC Check
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430.9728 Fn4
Flags: -
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
Abs. Int.
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3.95e6
0.00e0
RT
Rel. Int.
100%
QC Check
41.21-44.80
454.9728 Fn5
Flags: -
0%
41.5
42.0
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44.5
Abs. Int.
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4.95e6
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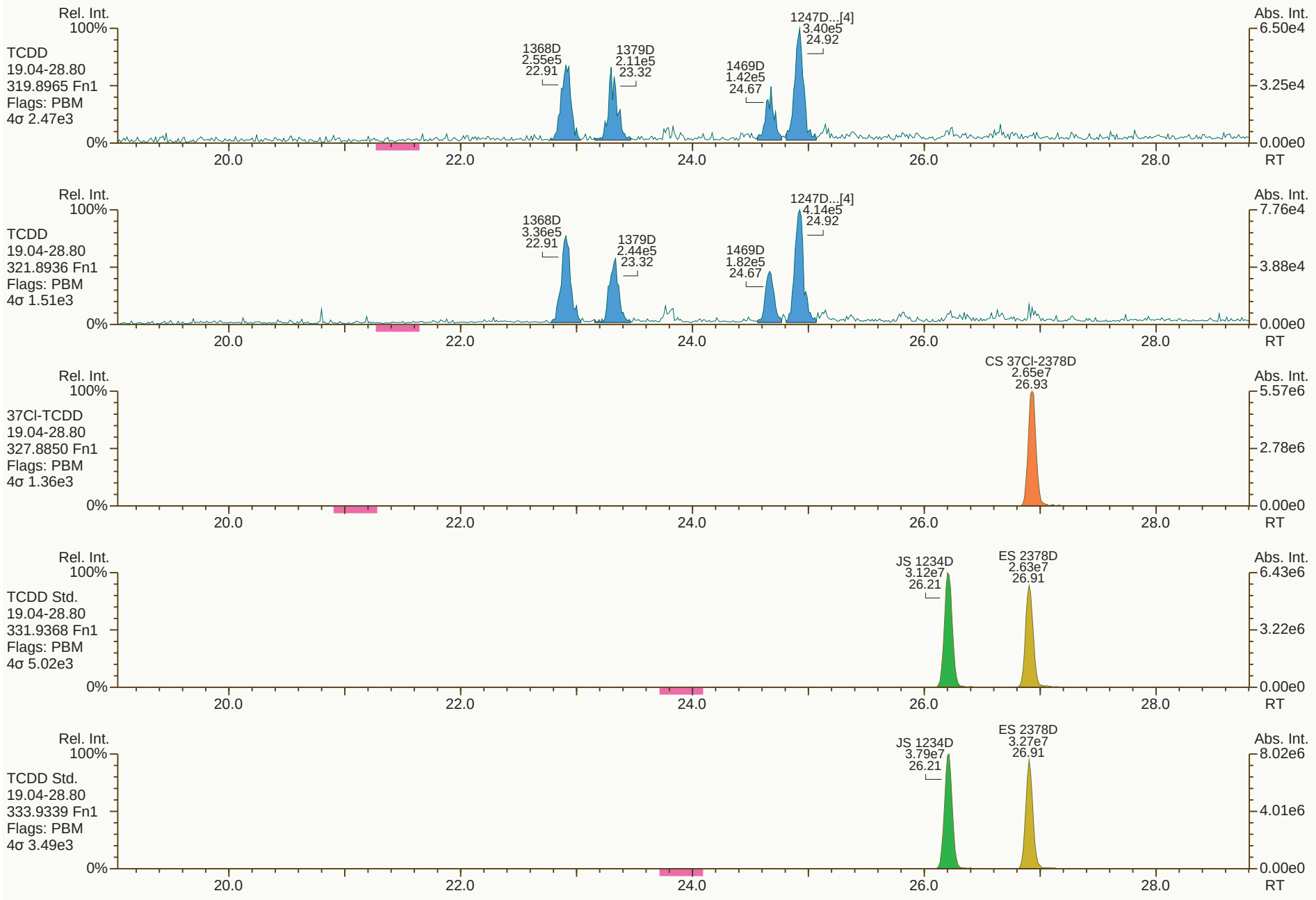
RT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19.04-28.80
319.8965 Fn1
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0%
1368D
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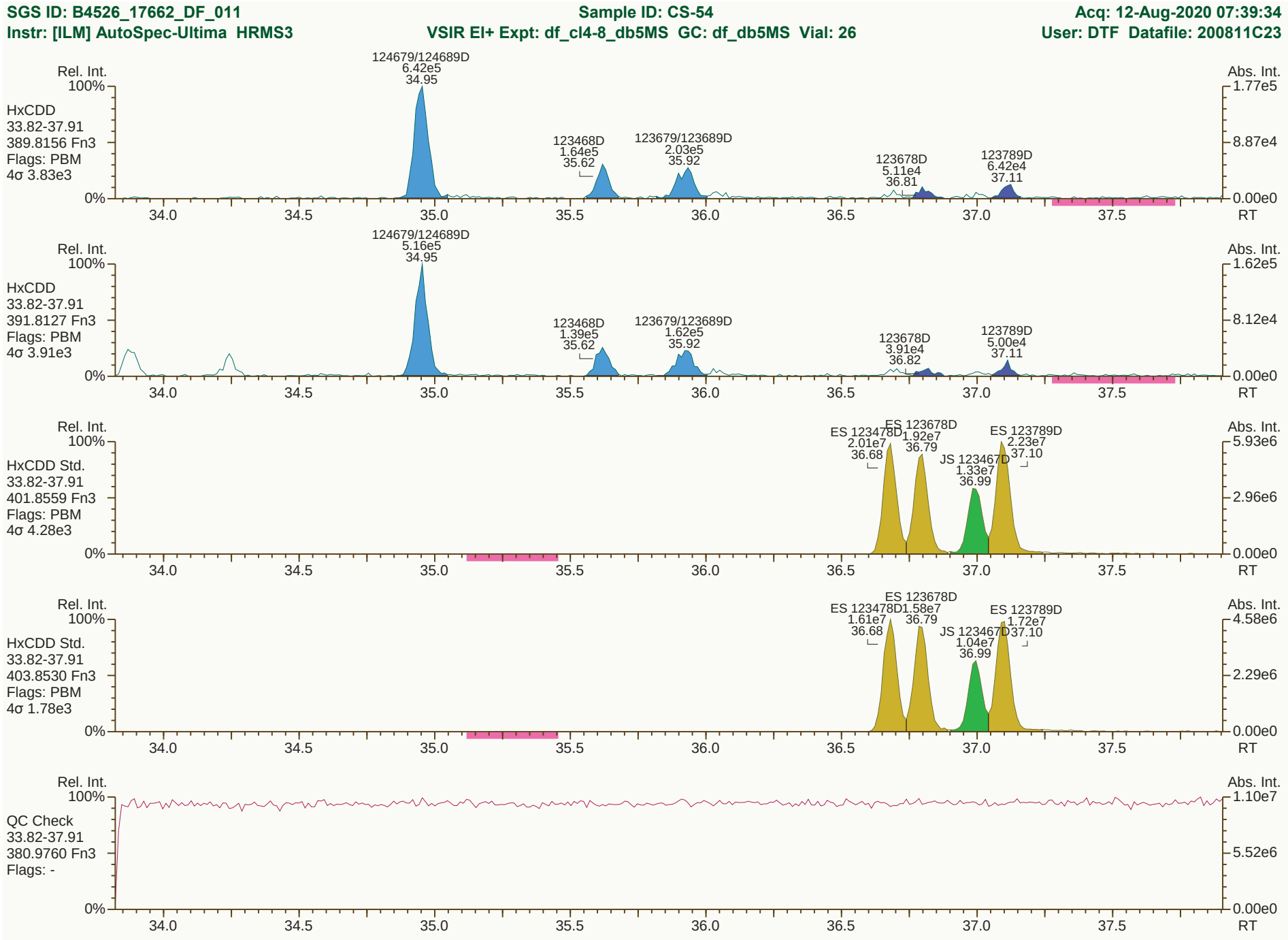
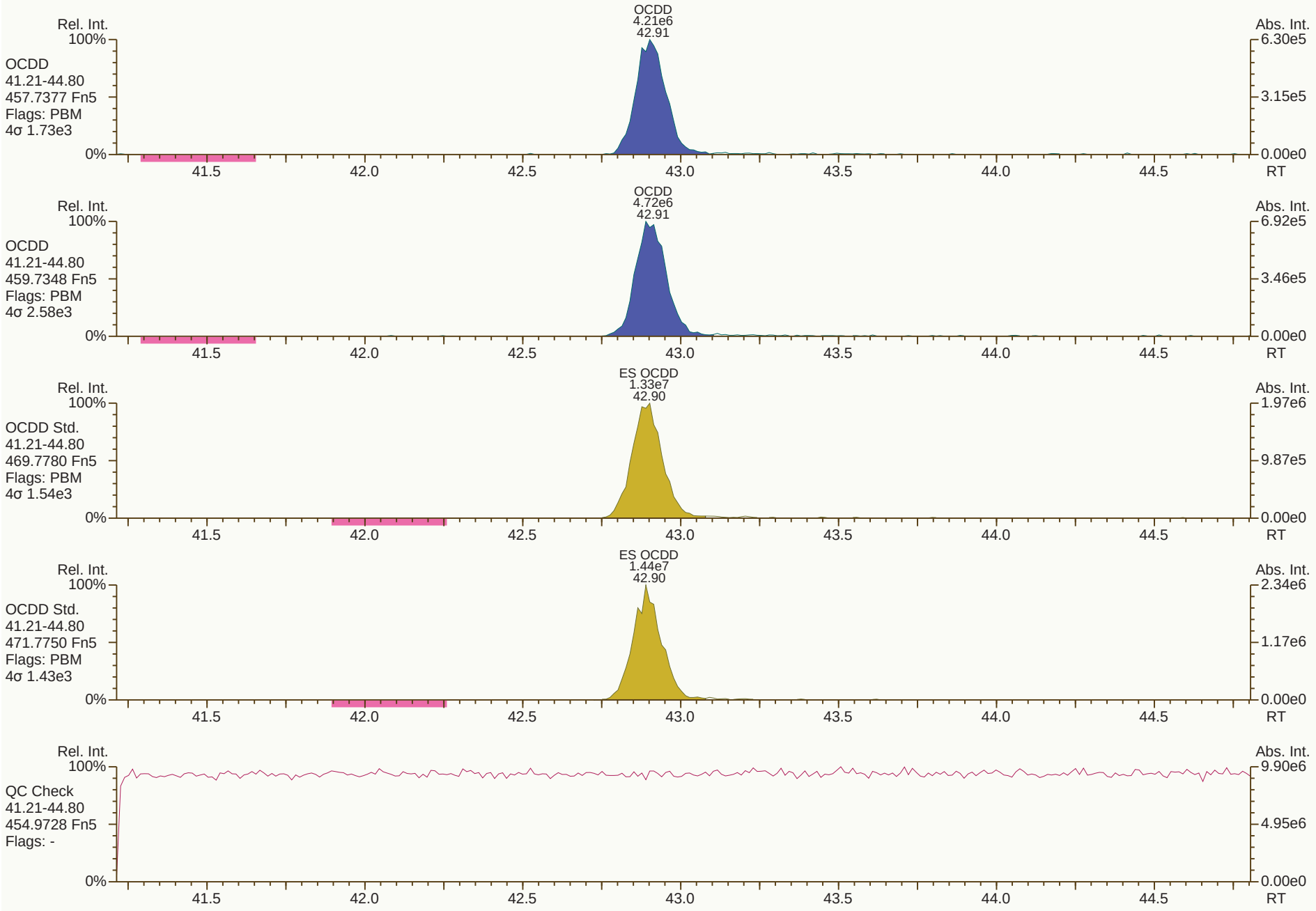
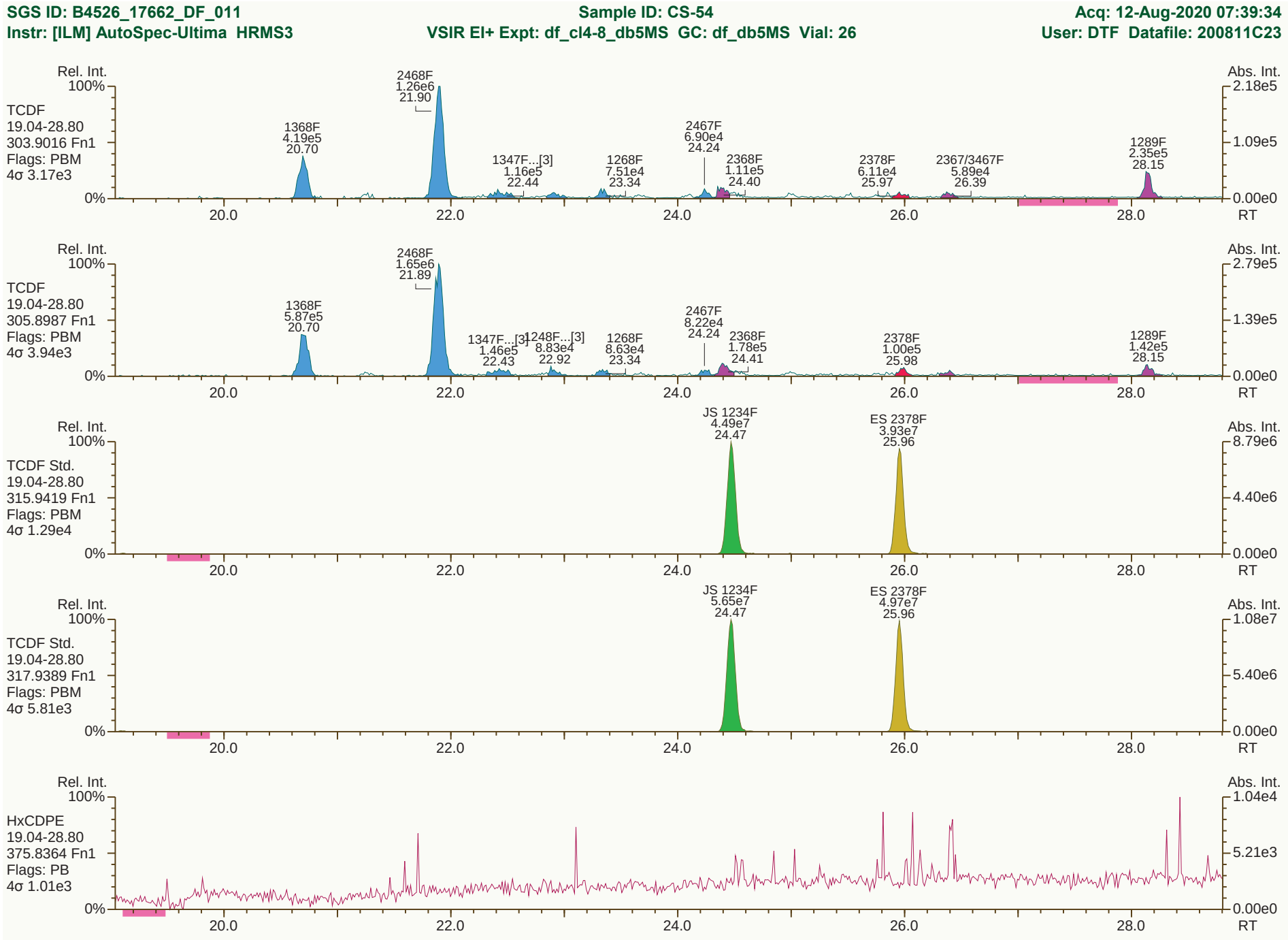
22.91
1379D
2.11e5
23.32
1469D
1.42e5
24.67
1247D...[4]
3.40e5
24.92
Abs. Int.
6.50e4
3.25e4
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD
19.04-28.80
321.8936 Fn1
Flags: PBM
4σ 1.51e3
0%
1368D
3.36e5
22.91
1379D
2.44e5
23.32
1469D
1.82e5
24.67
1247D...[4]
4.14e5
24.92
Abs. Int.
7.76e4
3.88e4
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
37Cl-TCDD
19.04-28.80
327.8850 Fn1
Flags: PBM
4σ 1.36e3
0%
CS 37Cl-2378D
2.65e7
26.93
Abs. Int.
5.57e6
2.78e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.80
331.9368 Fn1
Flags: PBM
4σ 5.02e3
0%
JS 1234D
3.12e7
26.21
ES 2378D
2.63e7
26.91
Abs. Int.
6.43e6
3.22e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.80
333.9339 Fn1
Flags: PBM
4σ 3.49e3
0%
JS 1234D
3.79e7
26.21
ES 2378D
3.27e7
26.91
Abs. Int.
8.02e6
4.01e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT


Rel. Int.
100%
PeCDD
28.82-33.81
355.8546 Fn2
Flags: PBM
4σ 2.73e3
12479/12468D
2.49e5
30.02
12469D
1.37e5
30.58
12368D
8.41e4
31.17
12379D
5.19e4
31.47
12346/12347D
9.52e4
32.13
Abs. Int.
5.27e4
2.63e4
0.00e0
0%
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD
28.82-33.81
357.8517 Fn2
Flags: PBM
4σ 2.95e3
12479/12468D
1.99e5
30.02
12469D
7.02e4
30.58
12368D
4.38e4
31.16
12379D
4.10e4
31.47
12346/12347D
6.17e4
32.12
Abs. Int.
4.47e4
2.24e4
0.00e0
0%
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.82-33.81
367.8949 Fn2
Flags: PBM
4σ 2.05e3
CS 12347D
3.11e7
32.10
ES 12378D
2.98e7
32.62
Abs. Int.
8.45e6
4.23e6
0.00e0
0%
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.82-33.81
369.8919 Fn2
Flags: PBM
4σ 1.48e3
CS 12347D
1.94e7
32.10
ES 12378D
1.90e7
32.62
Abs. Int.
5.38e6
2.69e6
0.00e0
0%
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
QC Check
28.82-33.81
366.9792 Fn2
Flags: -
Abs. Int.
5.50e6
2.75e6
0.00e0
0%
29.0
30.0
31.0
32.0
33.0
RT


SGS ID: B4526_17662_DF_011
Sample ID: CS-54
Acq: 12-Aug-2020 07:39:34
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 26
User: DTF Datafile: 200811C23
Rel. Int.
Abs. Int.
HxCDD
33.82-37.91
389.8156 Fn3
Flags: PBM
4σ 3.83e3
124679/124689D
6.42e5
34.95
123468D
1.64e5
35.62
123679/123689D
2.03e5
35.92
123678D
5.11e4
36.81
123789D
6.42e4
37.11
1.77e5
8.87e4
0.00e0
RT
HxCDD
33.82-37.91
391.8127 Fn3
Flags: PBM
4σ 3.91e3
124679/124689D
5.16e5
34.95
123468D
1.39e5
35.62
123679/123689D
1.62e5
35.92
123678D
3.91e4
36.82
123789D
5.00e4
37.11
1.62e5
8.12e4
HxCDD Std.
33.82-37.91
401.8559 Fn3
Flags: PBM
4σ 4.28e3
ES 123478D
2.01e7
36.68
ES 123678D
1.92e7
36.79
JS 123467D
1.33e7
36.99
ES 123789D
2.23e7
37.10
5.93e6
2.96e6
HxCDD Std.
33.82-37.91
403.8530 Fn3
Flags: PBM
4σ 1.78e3
ES 123478D
1.61e7
36.68
ES 123678D
1.58e7
36.79
JS 123467D
1.04e7
36.99
ES 123789D
1.72e7
37.10
4.58e6
2.29e6
QC Check
33.82-37.91
380.9760 Fn3
Flags: -
1.10e7
5.52e6
0%
100%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
Results: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\B4526_17662_DF_011.utp_res, saved 12-Aug-2020 15:18 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 7962, 7676 scc: 657-818
Revised: 12-Aug-2020 14:37 (DTF) Printed: 12-Aug-2020 15:39 Page 4 of 12


Rel. Int.
100%
HpCDD
37.92-41.20
423.7767 Fn4
Flags: PBM
4σ 2.77e3
1234679D
1.56e6
39.47
1234678D
8.42e5
40.19
Abs. Int.
4.00e5
2.00e5
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD
37.92-41.20
425.7737 Fn4
Flags: PBM
4σ 1.05e3
1234679D
1.50e6
39.47
1234678D
8.69e5
40.19
Abs. Int.
3.81e5
1.91e5
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.92-41.20
435.8169 Fn4
Flags: PBM
4σ 1.44e3
ES 1234678D
1.54e7
40.18
Abs. Int.
3.57e6
1.79e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.92-41.20
437.8140 Fn4
Flags: PBM
4σ 1.31e3
ES 1234678D
1.39e7
40.18
Abs. Int.
3.33e6
1.66e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
QC Check
37.92-41.20
430.9728 Fn4
Flags: -
Abs. Int.
7.90e6
3.95e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT


OCDD
4.21e6
42.91
Rel. Int.
100%
OCDD
41.21-44.80
457.7377 Fn5
Flags: PBM
4σ 1.73e3
0%
Abs. Int.
6.30e5
3.15e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
OCDD
4.72e6
42.91
Rel. Int.
100%
OCDD
41.21-44.80
459.7348 Fn5
Flags: PBM
4σ 2.58e3
0%
Abs. Int.
6.92e5
3.46e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDD
1.33e7
42.90
Rel. Int.
100%
OCDD Std.
41.21-44.80
469.7780 Fn5
Flags: PBM
4σ 1.54e3
0%
Abs. Int.
1.97e6
9.87e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDD
1.44e7
42.90
Rel. Int.
100%
OCDD Std.
41.21-44.80
471.7750 Fn5
Flags: PBM
4σ 1.43e3
0%
Abs. Int.
2.34e6
1.17e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
QC Check
41.21-44.80
454.9728 Fn5
Flags: -
0%
Abs. Int.
9.90e6
4.95e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT

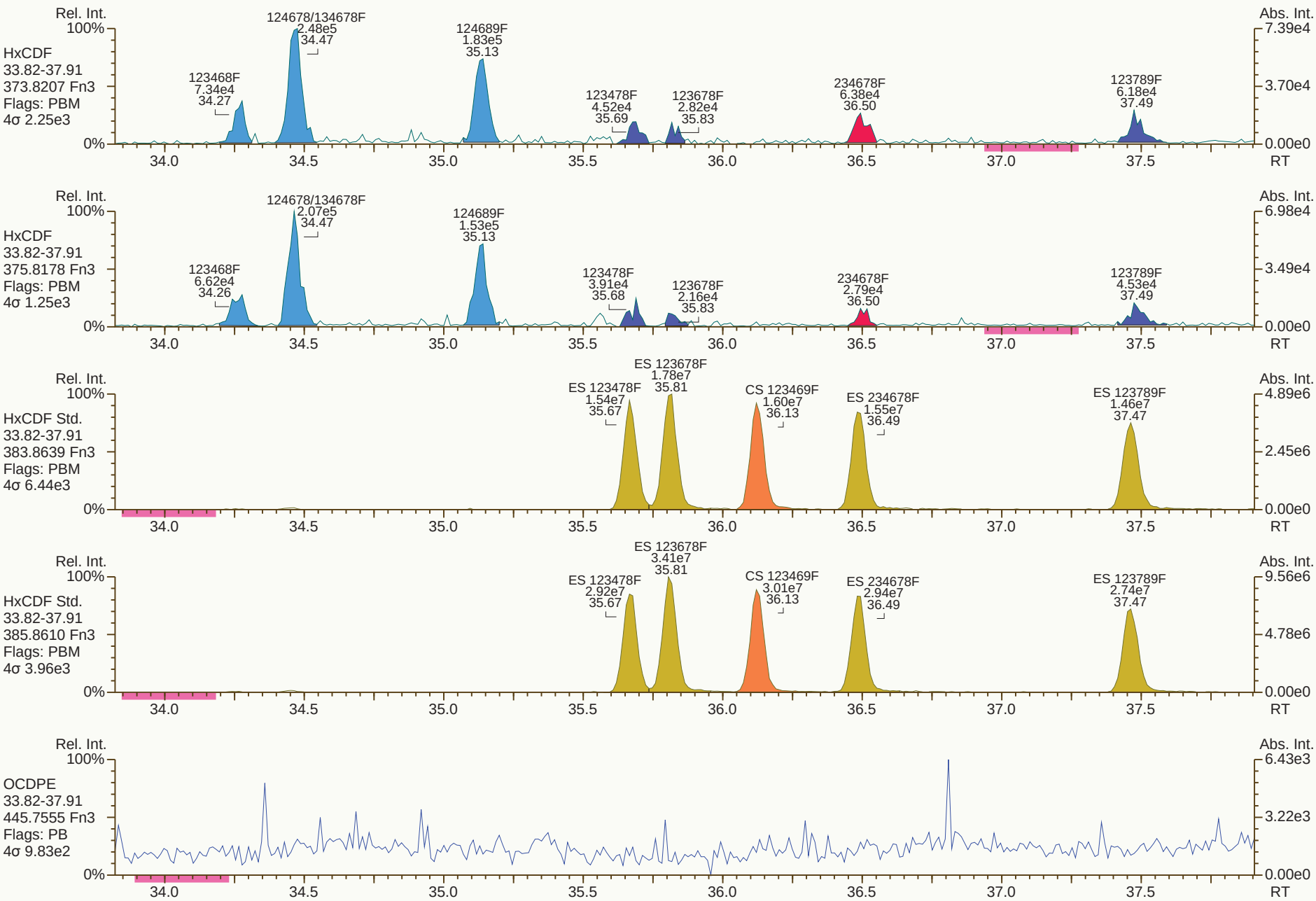


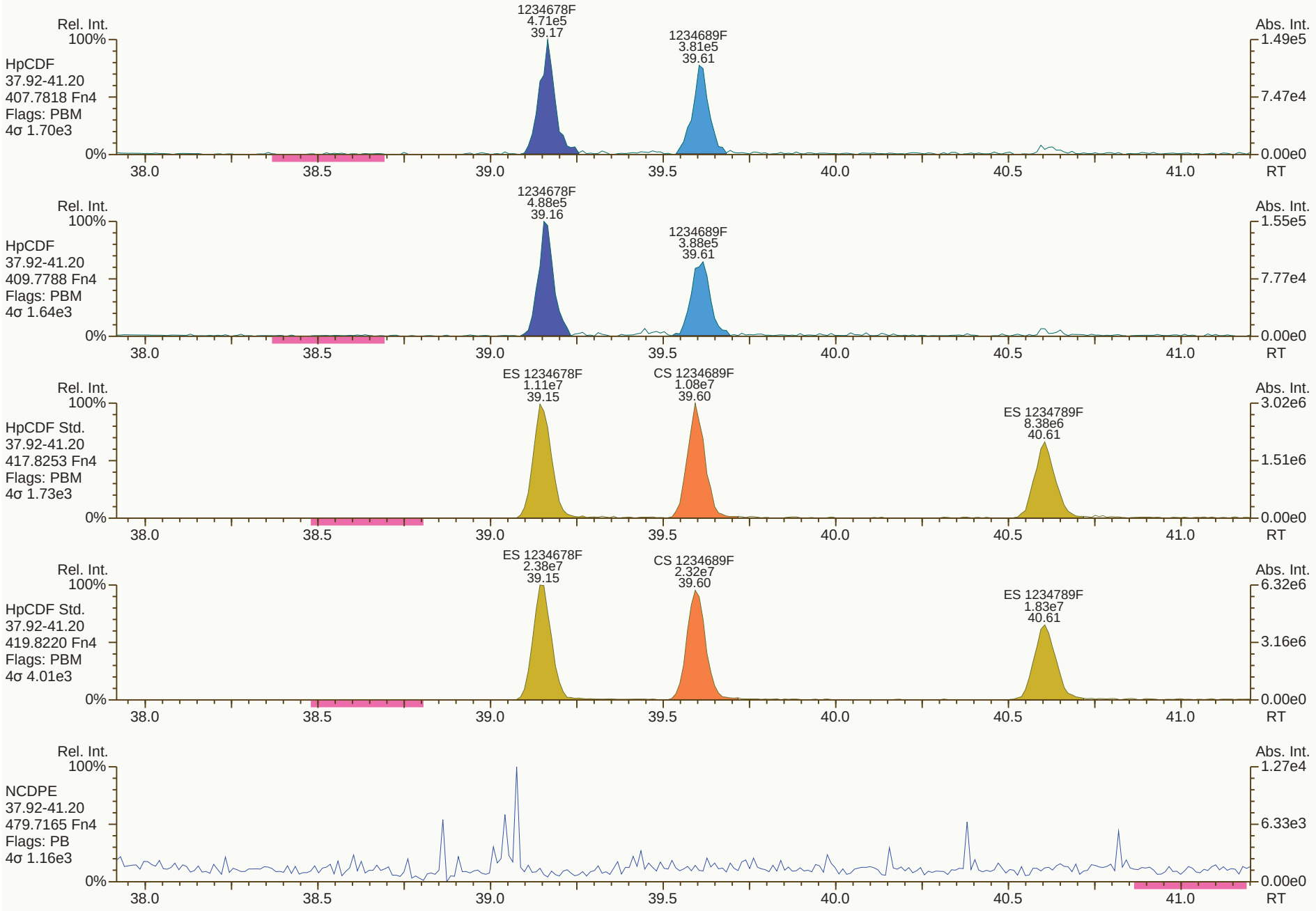
Results: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\B4526_17662_DF_011.utp_res, saved 12-Aug-2020 15:18 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 6324, 6024, 0382 scc: 657-818
PKD: 12-Aug-2020 14:43 Printed: 12-Aug-2020 15:39 Page 7 of 12


Rel. Int.
100%
0%
PeCDF-1
19.04-28.80
339.8597 Fn1
Flags: PBM
4σ 1.53e3
13468/12468F
2.85e5
28.16
Abs. Int.
8.00e4
4.00e4
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
0%
PeCDF-1
19.04-28.80
341.8568 Fn1
Flags: PBM
4σ 1.70e3
13468/12468F
1.90e5
28.16
Abs. Int.
5.01e4
2.50e4
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
0%
QC Check
19.04-28.80
316.9824 Fn1
Flags: -
Abs. Int.
6.17e6
3.09e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT


Rel. Int.
100%
PeCDF-2
28.82-33.81
339.8597 Fn2
Flags: PBM
4σ 1.09e3
13678F...[3] 5.95e4 29.78
12368F...[3] 2.35e5 29.95
23468/12469F 1.04e5 30.66
12378F 4.27e4 31.10
12678/12367F 4.69e4 31.40
23467/12369F 2.69e4 32.15
23478F 6.29e4 32.29
Abs. Int.
4.95e4
2.48e4
0.00e0
0%
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF-2
28.82-33.81
341.8568 Fn2
Flags: PBM
4σ 2.09e3
13678F...[3] 5.30e4 29.78
12368F...[3] 1.70e5 29.95
23468/12469F 8.45e4 30.65
12378F 3.76e4 31.11
12678/12367F 3.54e4 31.40
23467/12369F 2.53e4 32.14
23478F 5.22e4 32.29
Abs. Int.
2.92e4
1.46e4
0.00e0
0%
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.82-33.81
351.9000 Fn2
Flags: PBM
4σ 1.21e3
CS 12346F 4.42e7 30.54
ES 12378F 4.45e7 31.09
ES 23478F 4.43e7 32.26
Abs. Int.
1.19e7
5.93e6
0.00e0
0%
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.82-33.81
353.8970 Fn2
Flags: PBM
4σ 2.07e3
CS 12346F 2.80e7 30.54
ES 12378F 2.89e7 31.09
ES 23478F 2.79e7 32.26
Abs. Int.
7.92e6
3.96e6
0.00e0
0%
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
HpCDPE
28.82-33.81
409.7974 Fn2
Flags: PB
4σ 1.06e3
Abs. Int.
8.14e3
4.07e3
0.00e0
0%
29.0
30.0
31.0
32.0
33.0
RT

SGS ID: B4526_17662_DF_011 Sample ID: CS-54 Acq: 12-Aug-2020 07:39:34
Instr: [ILM] AutoSpec-Ultima HRMS3 VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 26 User: DTF Datafile: 200811C23




Rel. Int.
100%
HpCDF
37.92-41.20
407.7818 Fn4
Flags: PBM
4σ 1.70e3
1234678F
4.71e5
39.17
1234689F
3.81e5
39.61
Abs. Int.
1.49e5
7.47e4
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF
37.92-41.20
409.7788 Fn4
Flags: PBM
4σ 1.64e3
1234678F
4.88e5
39.16
1234689F
3.88e5
39.61
Abs. Int.
1.55e5
7.77e4
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.92-41.20
417.8253 Fn4
Flags: PBM
4σ 1.73e3
ES 1234678F
1.11e7
39.15
CS 1234689F
1.08e7
39.60
ES 1234789F
8.38e6
40.61
Abs. Int.
3.02e6
1.51e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.92-41.20
419.8220 Fn4
Flags: PBM
4σ 4.01e3
ES 1234678F
2.38e7
39.15
CS 1234689F
2.32e7
39.60
ES 1234789F
1.83e7
40.61
Abs. Int.
6.32e6
3.16e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
NCDPE
37.92-41.20
479.7165 Fn4
Flags: PB
4σ 1.16e3
Abs. Int.
1.27e4
6.33e3
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT


Rel. Int.
100%
OCDF
41.21-44.80
441.7428 Fn5
Flags: PBM
4σ 1.15e3
0%
OCDF
2.33e5
43.05
Abs. Int.
3.70e4
1.85e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDF
41.21-44.80
443.7398 Fn5
Flags: PBM
4σ 1.67e3
0%
OCDF
3.00e5
43.04
Abs. Int.
5.00e4
2.50e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDF Std.
41.21-44.80
453.7830 Fn5
Flags: PBM
4σ 1.21e3
0%
ES OCDF
1.76e7
43.04
Abs. Int.
2.66e6
1.33e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDF Std.
41.21-44.80
455.7801 Fn5
Flags: PBM
4σ 1.91e3
0%
ES OCDF
1.93e7
43.03
Abs. Int.
3.04e6
1.52e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
DCDPE
41.21-44.80
513.6775 Fn5
Flags: PB
4σ 9.87e2
0%
Abs. Int.
4.97e3
2.49e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT

Lab ID: B4526_17662_DF_012 | Acq'd: 12 Aug 2020 08:26 DTF | Wt/Vol: 8.86 g | ICAL: HRMS3_DF_10122018_28AUG2019

Client ID: CS-46 | UTP: 12-Aug-2020 15:18:42 DTF | J-level: 0.564 pg/g | Split: 1 | Checkcode: 313-403-MPJ

Datafile: 200811C24 | Report: 12 Aug 2020 15:23 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	NotFnd		1.0008	-		-	-	-	1.19	-	4241	0.171
12378-PeCDD	32.63	J	1.0006	1.0005	-0.2	2.88E+05	1.55	Y	0.98	1.6	5096	0.264
123478-HxCDD	36.68		1.0004	1.0003	-0.2	9.27E+05	1.19	Y	1.02	6.86	5175	0.322
123678-HxCDD	36.80		1.0036	1.0035	-0.2	2.17E+06	1.17	Y	1.09	15	5175	0.317
123789-HxCDD	37.10		1.0118	1.0118	0	1.80E+06	1.23	Y	0.97	12.9	5175	0.338
1234678-HpCDD	40.18		1.0003	1.0004	+0.2	5.85E+07	1.03	Y	0.98	510	3264	0.306
OCDD	42.90		1.0003	1.0003	0	2.23E+08	0.89	Y	1.07	3,690	4328	1.21
2378-TCDF	25.96	J EMPC	1.0009	1.0008	-0.2	1.40E+05	0.92	N	1.01	0.399	8142	0.29
12378-PeCDF	31.10	J EMPC	1.0006	1.0006	0	1.69E+05	1.24	N	0.96	0.644	5267	0.195
23478-PeCDF	32.28	J EMPC	1.0005	1.0011	+1.2	3.74E+05	1.29	N	0.99	1.4	5267	0.19
123478-HxCDF	35.67		1.0005	1.0005	0	1.87E+06	1.27	Y	1.21	9.24	3989	0.169
123678-HxCDF	35.81		1.0005	1.0003	-0.4	9.61E+05	1.26	Y	1.11	4.41	3989	0.172
234678-HxCDF	36.49		1.0004	1.0002	-0.4	1.24E+06	1.24	Y	1.12	6.65	3989	0.183
123789-HxCDF	NotFnd		1.0005	-		-	-	-	1.11	-	3989	0.224
1234678-HpCDF	39.15		1.0003	1.0003	0	1.97E+07	1.03	Y	1.32	118	2650	0.147
1234789-HpCDF	40.61		1.0003	1.0003	0	1.69E+06	1.05	Y	1.26	13.3	2650	0.227
OCDF	43.03		1.0003	1.0002	-0.3	2.77E+07	0.88	Y	1.03	354	4029	0.832

Name	Act RT	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	26.90	1.0266	1.0269	+0.5	5.18E+07	0.81	Y	0.99	81.3
ES 12378-PeCDD	32.61	1.2430	1.2451	+4.1	4.13E+07	1.56	Y	0.83	77.3
ES 123478-HxCDD	36.67	0.9916	0.9915	-0.2	2.97E+07	1.29	Y	0.95	74.5
ES 123678-HxCDD	36.78	0.9947	0.9946	-0.2	3.01E+07	1.24	Y	0.98	73.3
ES 123789-HxCDD	37.09	1.0029	1.0028	-0.2	3.25E+07	1.29	Y	1.14	67.8
ES 1234678-HpCDD	40.17	1.0851	1.0862	+2.7	2.65E+07	1.05	Y	0.90	70.1
ES OCDD	42.89	1.1584	1.1596	+3.1	2.54E+07	0.91	Y	0.63	48.1
ES 2378-TCDF	25.94	1.0602	1.0608	+0.9	7.80E+07	0.81	Y	1.00	83.6
ES 12378-PeCDF	31.08	1.2683	1.2710	+5.0	6.13E+07	1.55	Y	0.83	78.7
ES 23478-PeCDF	32.24	1.3156	1.3186	+5.8	6.09E+07	1.53	Y	0.81	80.5
ES 123478-HxCDF	35.66	0.9644	0.9642	-0.4	3.78E+07	0.54	Y	1.12	80
ES 123678-HxCDF	35.80	0.9682	0.9681	-0.2	4.45E+07	0.54	Y	1.33	79.3
ES 234678-HxCDF	36.48	0.9864	0.9863	-0.2	3.77E+07	0.54	Y	1.21	74.1
ES 123789-HxCDF	37.46	1.0128	1.0128	0	3.53E+07	0.56	Y	1.12	75
ES 1234678-HpCDF	39.14	1.0578	1.0583	+1.2	2.85E+07	0.45	Y	0.92	73.2
ES 1234789-HpCDF	40.60	1.0967	1.0978	+2.7	2.29E+07	0.46	Y	0.82	66.3
ES OCDF	43.02	1.1623	1.1634	+2.8	3.42E+07	0.92	Y	0.78	52.1

Lab ID: B4526_17662_DF_012 | Acq'd: 12 Aug 2020 08:26 DTF | Wt/Vol: 8.86 g | ICAL: HRMS3_DF_10122018_28AUG2019

Client ID: CS-46 | UTP: 12-Aug-2020 15:18:42 DTF | J-level: 0.564 pg/g | Split: 1 | Checkcode: 313-403-MPJ

Datafile: 200811C24 | Report: 12 Aug 2020 15:23 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %	
JS 1234-TCDD	26.19		-	-	-	6.44E+07	0.81	Y	-	-	
JS 1234-TCDF	24.45		-	-	-	9.38E+07	0.80	Y	-	-	
JS 123467-HxCDD	36.98		-	-	-	2.11E+07	1.23	Y	-	-	
CS 37Cl-2378-TCDD	26.92		1.0276	1.0277	+0.2	2.47E+07	n/a	-	1.12	85.6	
CS 12347-PeCDD	32.09		1.2233	1.2253	+3.9	4.35E+07	1.62	Y	0.71	94.6	
CS 12346-PeCDF	30.53		1.2459	1.2484	+4.6	6.37E+07	1.58	Y	0.81	84	
CS 123469-HxCDF	36.11		0.9767	0.9765	-0.4	4.09E+07	0.54	Y	1.12	86.4	
CS 1234689-HpCDF	39.58		1.0696	1.0704	+1.9	3.02E+07	0.47	Y	0.90	80	
~~SS 37Cl-2378-TCDD~~	~~26.92~~		~~1.0276~~	~~1.0277~~	~~+0.2~~	~~2.47E+07~~	~~n/a~~		~~1.14~~	~~104~~	Not used in this project.
~~SS 12347-PeCDD~~	~~32.09~~		~~1.2233~~	~~1.2253~~	~~+3.9~~	~~4.35E+07~~	~~1.62~~	~~Y~~	~~0.86~~	~~122~~	CL 13Aug20
~~SS 12346-PeCDF~~	~~30.53~~		~~1.2459~~	~~1.2484~~	~~+4.6~~	~~6.37E+07~~	~~1.58~~	~~Y~~	~~0.98~~	~~106~~	
~~SS 123469-HxCDF~~	~~36.11~~		~~0.9767~~	~~0.9765~~	~~-0.4~~	~~4.09E+07~~	~~0.54~~	~~Y~~	~~0.85~~	~~109~~	
~~SS 1234689-HpCDF~~	~~39.58~~		~~1.0696~~	~~1.0704~~	~~+1.9~~	~~3.02E+07~~	~~0.47~~	~~Y~~	~~0.97~~	~~109~~	

Totals	Conc	EMPC
Total TCDD	5.59	5.59
Total PeCDD	7.32	10.3
Total HxCDD	102	104
Total HpCDD	925	925
Total Tetra-Octa Dioxins	4730	4740
Total TCDF	12.5	16
Total PeCDF	21	25.7
Total HxCDF	162	162
Total HpCDF	409	409
Total Tetra-Octa Furans	958	967
Total Tetra-Octa Dioxins & Furans	5690	5700

Lab ID: B4526_17662_DF_012 | Acq'd: 12 Aug 2020 08:26 DTF | Wt/Vol: 8.86 g | ICAL: HRMS3_DF_10122018_28AUG2019

Client ID: CS-46 | UTP: 12-Aug-2020 15:18:42 DTF | J-level: 0.564 pg/g | Split: 1 | Checkcode: 313-403-MPJ

Datafile: 200811C24 | Report: 12 Aug 2020 15:23 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1368-TCDD	22.89		0.8523	0.8509	-1.9	5.52E+05	0.71	Y	1.19	2.02	4241	0.171
1379-TCDD	23.29		0.8682	0.8658	-3.4	3.23E+05	0.87	Y	1.19	1.18	4241	0.171
1369-TCDD	NotFnd		0.8858						1.19		4241	0.171
1469-TCDD	NotFnd		0.9177						1.19		4241	0.171
1247/1246/1248/1249-TCDD	24.90		0.9274	0.9259	-2.2	4.39E+05	0.74	Y	1.19	1.61	4241	0.171
1378-TCDD	NotFnd		0.9349						1.19		4241	0.171
1268-TCDD	NotFnd		0.9430						1.19		4241	0.171
1478-TCDD	NotFnd		0.9529						1.19		4241	0.171
1279-TCDD	NotFnd		0.9597						1.19		4241	0.171
1234/1269-TCDD	26.21		0.9739	0.9746	+1.1	2.12E+05	0.80	Y	1.19	0.778	4241	0.171
1236-TCDD	NotFnd		0.9794						1.19		4241	0.171
1237/1238-TCDD	NotFnd		0.9895						1.19		4241	0.171
1239-TCDD	NotFnd		0.9950						1.19		4241	0.171
2378-TCDD	**NotFnd**		**1.0008**						**1.19**		**4241**	**0.171**
1278-TCDD	NotFnd		1.0139						1.19		4241	0.171
1267-TCDD	NotFnd		1.0194						1.19		4241	0.171
1289-TCDD	NotFnd		1.0397						1.19		4241	0.171
12479/12468-PeCDD	30.01		0.9209	0.9202	-1.3	5.37E+05	1.53	Y	0.98	2.98	5096	0.264
12469-PeCDD	30.57	J EMPC	0.9382	0.9374	-1.5	1.55E+05	1.81	N	0.98	0.861	5096	0.264
12368-PeCDD	31.16	J EMPC	0.9557	0.9554	-0.6	1.86E+05	1.80	N	0.98	1.03	5096	0.264
12478-PeCDD	31.36	J EMPC	0.9617	0.9615	-0.4	1.96E+05	1.82	N	0.98	1.09	5096	0.264
12379-PeCDD	31.46	J	0.9649	0.9646	-0.6	1.46E+05	1.48	Y	0.98	0.813	5096	0.264
12369/12467/12489-PeCDD	31.73	J	0.9732	0.9730	-0.4	1.55E+05	1.67	Y	0.98	0.86	5096	0.264
12346/12347-PeCDD	32.12	J	0.9850	0.9848	-0.4	1.93E+05	1.49	Y	0.98	1.07	5096	0.264
12378-PeCDD	32.63	J	**1.0006**	**1.0005**	**-0.2**	**2.88E+05**	**1.55**	**Y**	**0.98**	**1.6**	**5096**	**0.264**
12367-PeCDD	NotFnd		1.0038						0.98		5096	0.264
12389-PeCDD	NotFnd		1.0146						0.98		5096	0.264
124679/124689-HxCDD	34.94		0.9530	0.9528	-0.4	2.97E+06	1.26	Y	1.03	21.2	5175	0.325
123468-HxCDD	35.61		0.9715	0.9712	-0.6	8.81E+05	1.32	Y	1.03	6.29	5175	0.325
123679/123689-HxCDD	35.91		0.9795	0.9794	-0.2	4.87E+06	1.31	Y	1.03	34.8	5175	0.325
123469-HxCDD	36.04		0.9832	0.9829	-0.6	6.50E+05	1.29	Y	1.03	4.64	5175	0.325
123478-HxCDD	36.68		**1.0004**	**1.0003**	**-0.2**	**9.27E+05**	**1.19**	**Y**	1.02	**6.86**	**5175**	**0.322**
123678-HxCDD	36.80		**1.0036**	**1.0035**	**-0.2**	**2.17E+06**	**1.17**	**Y**	1.09	**15**	**5175**	**0.317**
123467-HxCDD	36.99	J EMPC	1.0089	1.0088	-0.2	3.15E+05	1.01	N	1.03	2.25	5175	0.325
123789-HxCDD	37.10		**1.0118**	**1.0118**	**0**	**1.80E+06**	**1.23**	**Y**	0.97	**12.9**	**5175**	**0.338**

Lab ID: B4526_17662_DF_012 **Acq'd:** 12 Aug 2020 08:26 DTF **Wt/Vol:** 8.86 g **ICAL:** HRMS3_DF_10122018_28AUG2019

Client ID: CS-46 **UTP:** 12-Aug-2020 15:18:42 DTF **J-level:** 0.564 pg/g **Split:** 1 **Checkcode:** 313-403-MPJ

Datafile: 200811C24 **Report:** 12 Aug 2020 15:23 TF **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

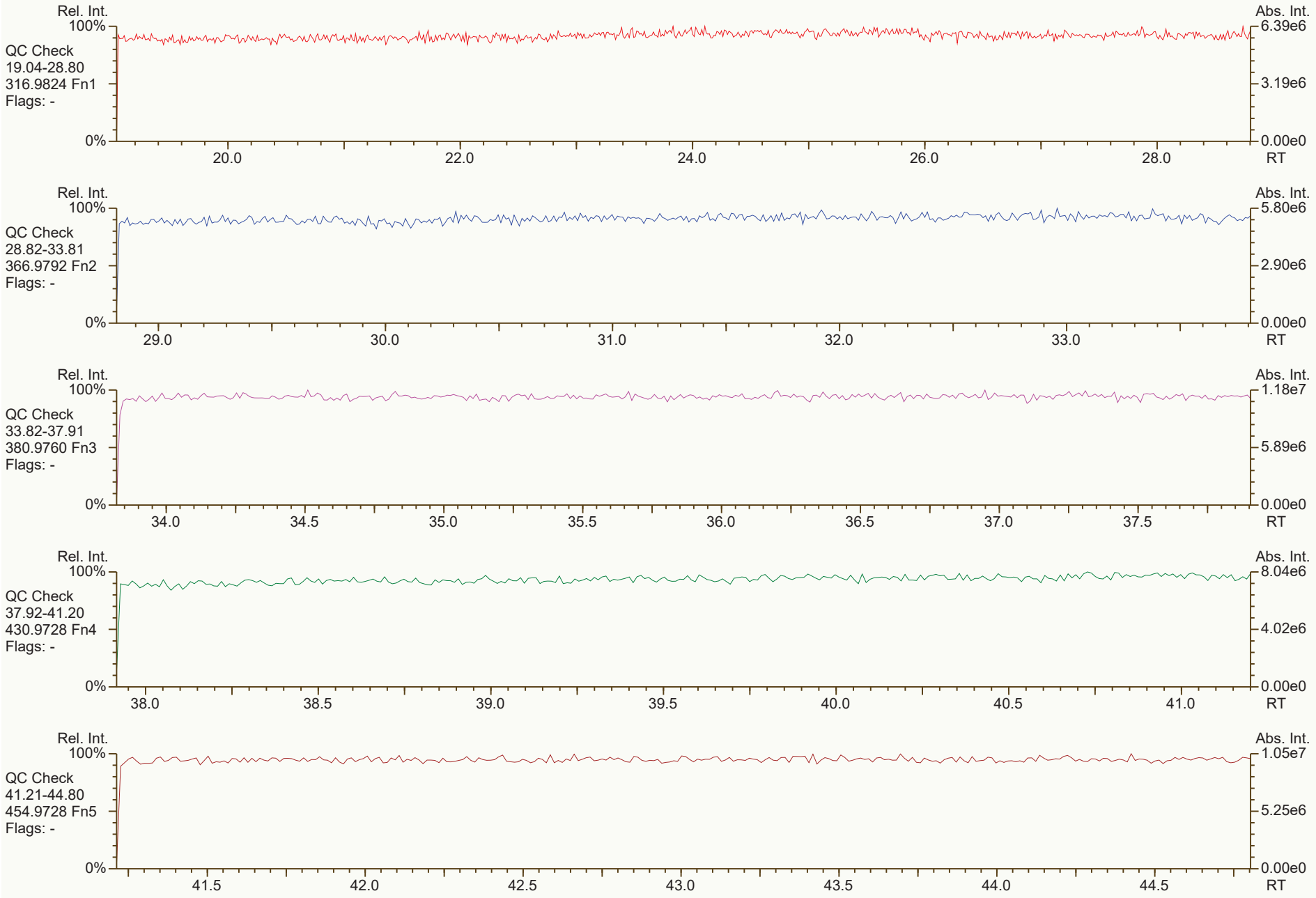
Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1234679-HpCDD	39.46		0.9826	0.9824	-0.5	4.76E+07	1.03	Y	0.98	415	3264	0.306
1234678-HpCDD	**40.18**		**1.0003**	**1.0004**	**+0.2**	**5.85E+07**	**1.03**	**Y**	**0.98**	**510**	**3264**	**0.306**
OCDD	**42.90**		**1.0003**	**1.0003**	**0**	**2.23E+08**	**0.89**	**Y**	**1.07**	**3,690**	**4328**	**1.21**
OCDD-a	42.89	**#VALUE!**	1.0002	1.0002	0	1.43E+07	2.50	Y	-	#VALUE!	8252	#VALUE!
1368-TCDF	20.67		0.7980	0.7968	-1.5	6.75E+05	0.79	Y	1.01	1.93	8142	0.29
1468-TCDF	21.23	J EMPC	0.8204	0.8183	-2.7	1.47E+05	1.00	N	1.01	0.419	8142	0.29
2468-TCDF	21.87		0.8443	0.8431	-1.6	1.80E+06	0.78	Y	1.01	5.14	8142	0.29
1346/1246-TCDF	22.29	J EMPC	0.8597	0.8593	-0.5	1.13E+05	0.60	N	1.01	0.324	8142	0.29
1347/1378/1247-TCDF	22.43		0.8665	0.8647	-2.4	3.35E+05	0.74	Y	1.01	0.957	8142	0.29
1348-TCDF	NotFnd		0.8785						1.01		8142	0.29
1248/1367/1379-TCDF	22.87		0.8840	0.8816	-3.3	2.76E+05	0.72	Y	1.01	0.789	8142	0.29
1268-TCDF	23.31		0.9004	0.8986	-2.5	2.20E+05	0.84	Y	1.01	0.63	8142	0.29
1467-TCDF	23.46	J	0.9060	0.9044	-2.3	9.28E+04	0.80	Y	1.01	0.265	8142	0.29
1478-TCDF	23.65	J	0.9132	0.9116	-2.3	1.23E+05	0.87	Y	1.01	0.351	8142	0.29
1369/1237-TCDF	NotFnd		0.9287						1.01		8142	0.29
2467-TCDF	24.22	J EMPC	0.9345	0.9335	-1.5	1.13E+05	0.57	N	1.01	0.324	8142	0.29
2368-TCDF	24.40		0.9409	0.9404	-0.7	3.69E+05	0.73	Y	1.01	1.05	8142	0.29
1238/1234/1678/1469/1236-TCDF	24.49		0.9450	0.9442	-1.2	4.02E+05	0.77	Y	1.01	1.15	8142	0.29
1278-TCDF	24.98	J EMPC	0.9638	0.9630	-1.2	1.59E+05	1.06	N	1.01	0.455	8142	0.29
1349-TCDF	NotFnd		0.9685						1.01		8142	0.29
1267-TCDF	NotFnd		0.9751						1.01		8142	0.29
2346/1249-TCDF	NotFnd		0.9831						1.01		8142	0.29
2347/1279-TCDF	25.72	J	0.9920	0.9915	-0.8	8.44E+04	0.84	Y	1.01	0.241	8142	0.29
2348-TCDF	NotFnd		0.9964						1.01		8142	0.29
2378-TCDF	**25.96**	J EMPC	**1.0009**	**1.0008**	**-0.2**	**1.40E+05**	**0.92**	**N**	**1.01**	**0.399**	**8142**	**0.29**
2367/3467-TCDF	26.37	EMPC	1.0164	1.0166	+0.3	2.23E+05	0.93	N	1.01	0.638	8142	0.29
1269-TCDF	NotFnd		1.0259						1.01		8142	0.29
1239-TCDF	NotFnd		1.0373						1.01		8142	0.29
1289-TCDF	28.13	EMPC	1.0838	1.0845	+1.2	3.18E+05	1.50	N	1.01	0.909	8142	0.29
13468/12468-PeCDF	28.15		0.9052	0.9057	+0.8	3.44E+06	1.54	Y	0.98	13	2098	0.0767
13678/13467/12467-PeCDF	29.77	J EMPC	0.9582	0.9580	-0.4	2.38E+05	1.31	N	0.98	0.903	5267	0.192
12368/13478/12478-PeCDF	29.95		0.9634	0.9636	+0.4	1.50E+06	1.52	Y	0.98	5.69	5267	0.192
14678-PeCDF	NotFnd		0.9668						0.98		5267	0.192
13479-PeCDF	NotFnd		0.9700						0.98		5267	0.192
13469/12479-PeCDF	NotFnd		0.9781						0.98		5267	0.192
12346-PeCDF	30.54	J	0.9829	0.9825	-0.7	9.02E+04	1.33	Y	0.98	0.341	5267	0.192

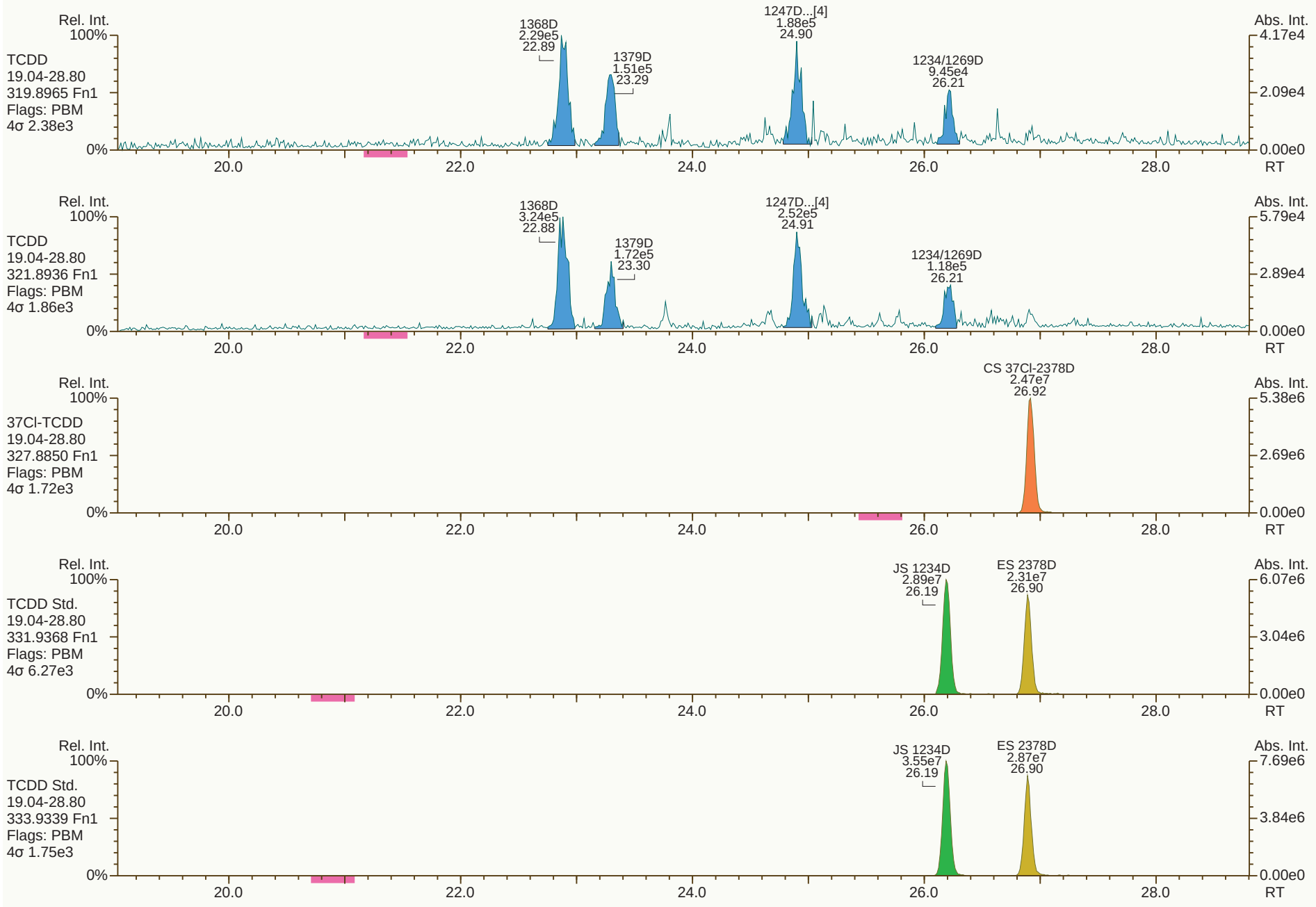
Lab ID: B4526_17662_DF_012 | Acq'd: 12 Aug 2020 08:26 DTF | Wt/Vol: 8.86 g | ICAL: HRMS3_DF_10122018_28AUG2019

Client ID: CS-46 | UTP: 12-Aug-2020 15:18:42 DTF | J-level: 0.564 pg/g | Split: 1 | Checkcode: 313-403-MPJ

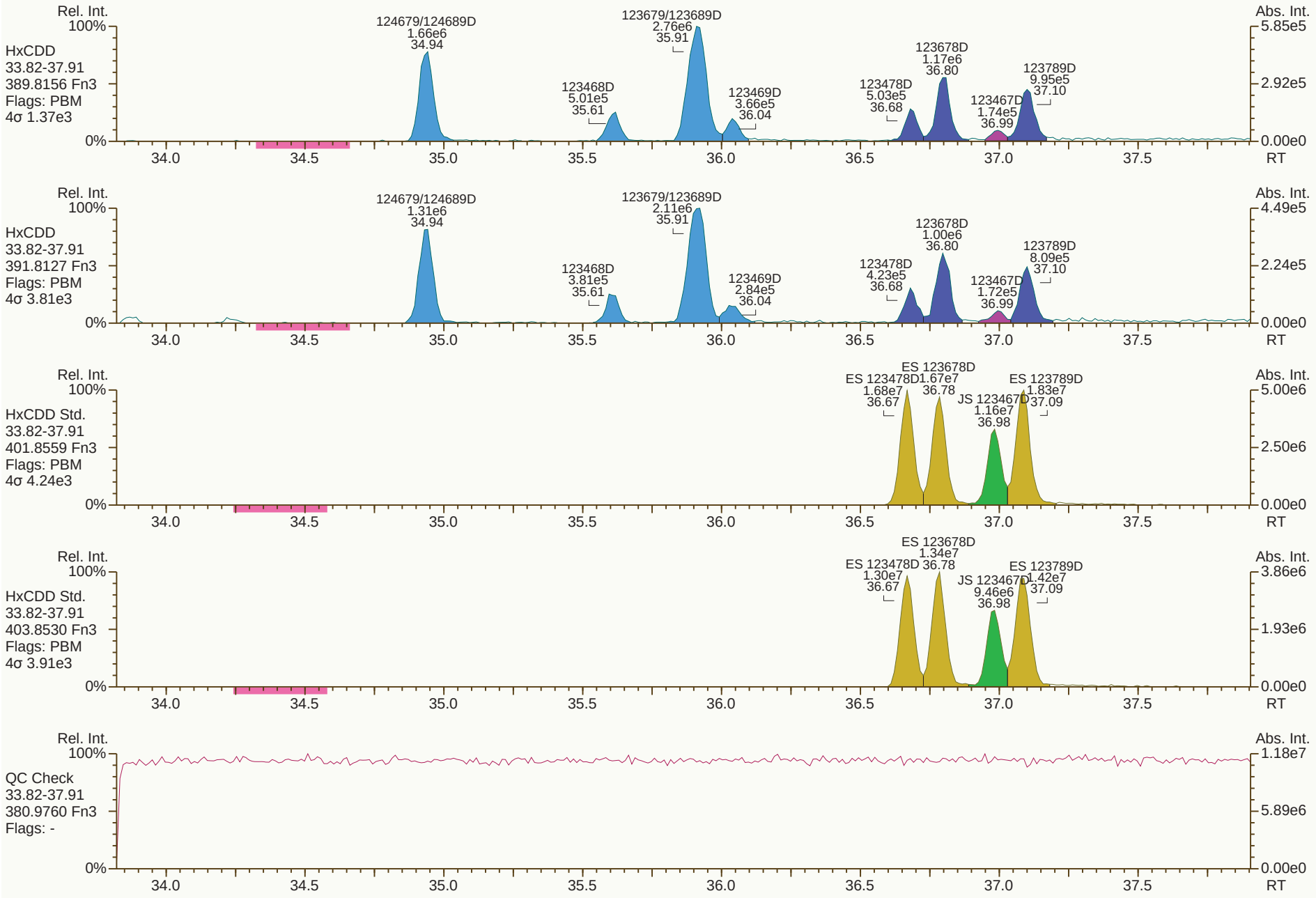
Datafile: 200811C24 | Report: 12 Aug 2020 15:23 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

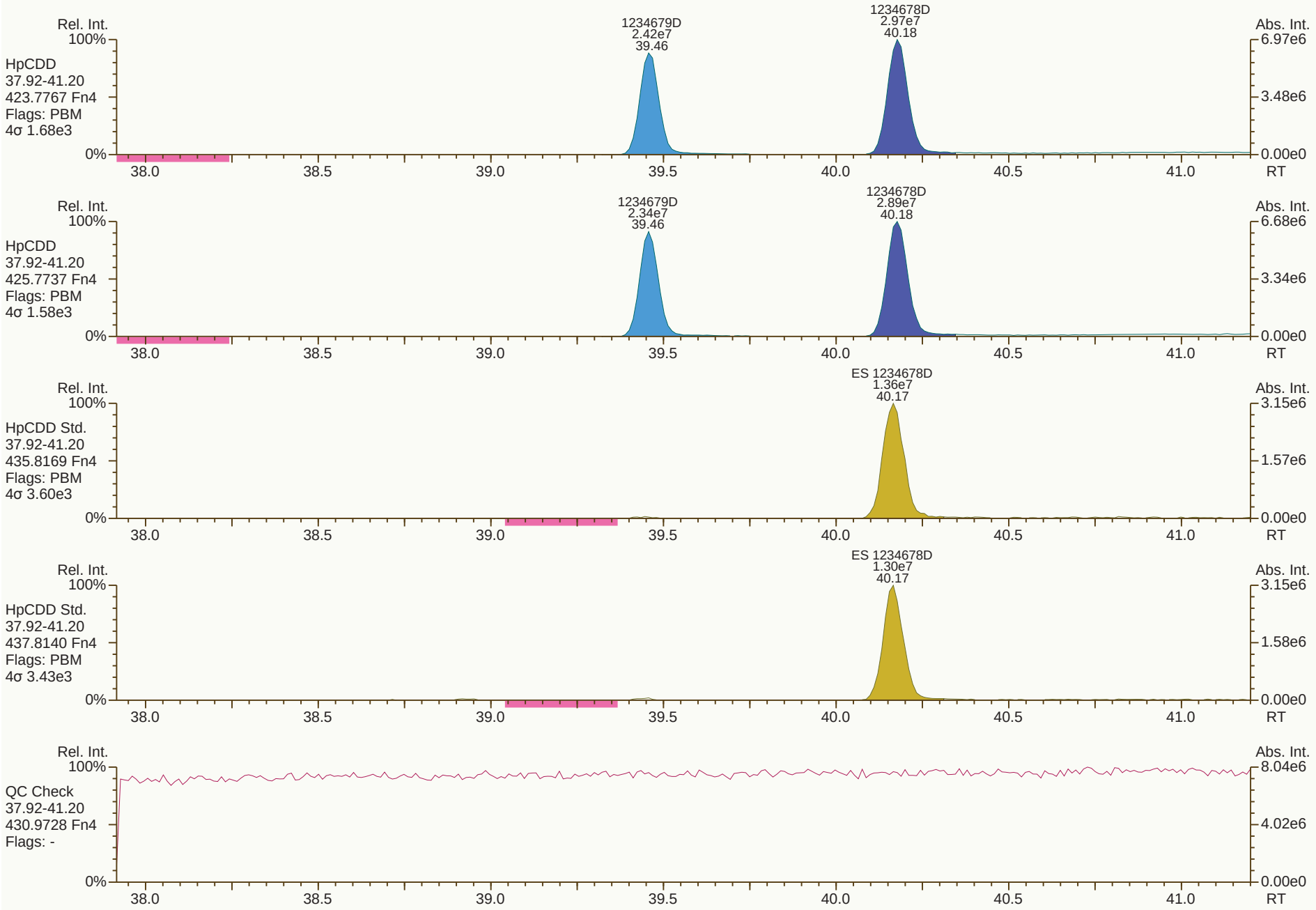
Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
23468/12469-PeCDF	30.64	J EMPC	0.9859	0.9858	-0.2	3.54E+05	1.81	N	0.98	1.34	5267	0.192
12347-PeCDF	30.72	J	0.9884	0.9886	+0.4	7.98E+04	1.56	Y	0.98	0.302	5267	0.192
12348-PeCDF	30.88	J	0.9937	0.9936	-0.2	1.14E+05	1.52	Y	0.98	0.431	5267	0.192
12378-PeCDF	**31.10**	J EMPC	**1.0006**	**1.0006**	**0**	**1.69E+05**	**1.24**	**N**	**0.96**	**0.644**	**5267**	**0.195**
12678/12367-PeCDF	31.41	J	1.0097	1.0106	+1.7	3.18E+05	1.52	Y	0.98	1.2	5267	0.192
12379-PeCDF	NotFnd		1.0152						0.98		5267	0.192
12679-PeCDF	NotFnd		0.9923						0.98		5267	0.192
23467/12369-PeCDF	32.14	J EMPC	0.9966	0.9966	0	1.12E+05	1.92	N	0.98	0.423	5267	0.192
23478-PeCDF	**32.28**	J EMPC	**1.0005**	**1.0011**	**+1.2**	**3.74E+05**	**1.29**	**N**	**0.99**	**1.4**	**5267**	**0.19**
23478/12489-PeCDF	NotFnd		0.0000						0.99			
12489-PeCDF	NotFnd		1.0043						0.98		5267	0.192
12349-PeCDF	NotFnd		1.0107						0.98		5267	0.192
12389-PeCDF	NotFnd		1.0349						0.98		5267	0.192
123468-HxCDF	34.25		0.9607	0.9606	-0.2	2.83E+06	1.22	Y	1.13	14.5	3989	0.185
124678/134678-HxCDF	34.45		0.9666	0.9662	-0.8	1.10E+07	1.23	Y	1.13	56.3	3989	0.185
134679-HxCDF	NotFnd		0.9730						1.13		3989	0.185
124679-HxCDF	34.89	J	0.9787	0.9785	-0.4	2.34E+05	1.14	Y	1.13	1.2	3989	0.185
124689-HxCDF	35.12		0.9850	0.9850	0	1.34E+07	1.22	Y	1.13	68.5	3989	0.185
123467-HxCDF	35.55	J	0.9971	0.9969	-0.4	2.16E+05	1.28	Y	1.13	1.1	3989	0.185
123478-HxCDF	**35.67**		**1.0005**	**1.0005**	**0**	**1.87E+06**	**1.27**	**Y**	**1.21**	**9.24**	**3989**	**0.169**
123678-HxCDF	**35.81**		**1.0005**	**1.0003**	**-0.4**	**9.61E+05**	**1.26**	**Y**	**1.11**	**4.41**	**3989**	**0.172**
123479-HxCDF	NotFnd		1.0049						1.13		3989	0.185
123469-HxCDF	NotFnd		1.0090						1.13		3989	0.185
123679-HxCDF	NotFnd		0.9941						1.13		3989	0.185
234678-HxCDF	**36.49**		**1.0004**	**1.0002**	**-0.4**	**1.24E+06**	**1.24**	**Y**	**1.12**	**6.65**	**3989**	**0.183**
234678/123689-HxCDF	NotFnd		0.0000						1.12			
123689-HxCDF	NotFnd		1.0041						1.13		3989	0.185
123789-HxCDF	**NotFnd**		**1.0005**						**1.11**		**3989**	**0.224**
123789/123489-HxCDF	NotFnd		0.0000						1.11			
123489-HxCDF	NotFnd		1.0009						1.13		3989	0.185
1234678-HpCDF	**39.15**		**1.0003**	**1.0003**	**0**	**1.97E+07**	**1.03**	**Y**	**1.32**	**118**	**2650**	**0.147**
1234679-HpCDF	39.44		1.0075	1.0078	+0.7	5.81E+05	1.04	Y	1.29	3.95	2650	0.182
1234689-HpCDF	39.60		1.0112	1.0117	+1.2	4.02E+07	1.04	Y	1.29	274	2650	0.182
1234789-HpCDF	**40.61**		**1.0003**	**1.0003**	**0**	**1.69E+06**	**1.05**	**Y**	**1.26**	**13.3**	**2650**	**0.227**
OCDF	**43.03**		**1.0003**	**1.0002**	**-0.3**	**2.77E+07**	**0.88**	**Y**	**1.03**	**354**	**4029**	**0.832**
OCDF-a	43.03	**#VALUE!**	1.0002	1.0000	-0.5	1.58E+06	1.98	N	-	#VALUE!	4736	#VALUE!

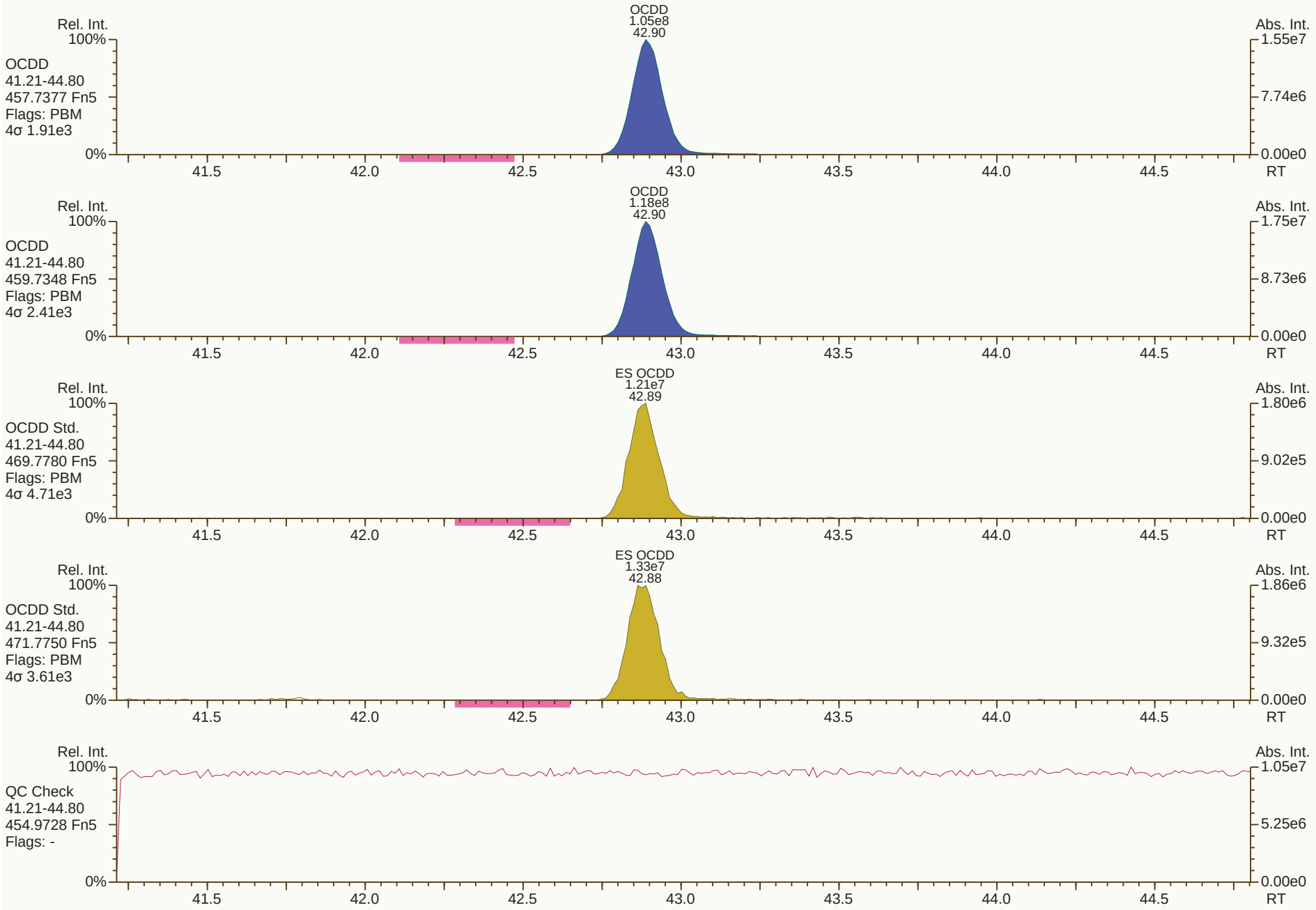

Rel. Int.
100%
QC Check
19.04-28.80
316.9824 Fn1
Flags: -
0%
20.0
22.0
24.0
26.0
28.0
Abs. Int.
6.39e6
3.19e6
0.00e0
RT
Rel. Int.
100%
QC Check
28.82-33.81
366.9792 Fn2
Flags: -
0%
29.0
30.0
31.0
32.0
33.0
Abs. Int.
5.80e6
2.90e6
0.00e0
RT
Rel. Int.
100%
QC Check
33.82-37.91
380.9760 Fn3
Flags: -
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
Abs. Int.
1.18e7
5.89e6
0.00e0
RT
Rel. Int.
100%
QC Check
37.92-41.20
430.9728 Fn4
Flags: -
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
Abs. Int.
8.04e6
4.02e6
0.00e0
RT
Rel. Int.
100%
QC Check
41.21-44.80
454.9728 Fn5
Flags: -
0%
41.5
42.0
42.5
43.0
43.5
44.0
44.5
Abs. Int.
1.05e7
5.25e6
0.00e0
RT

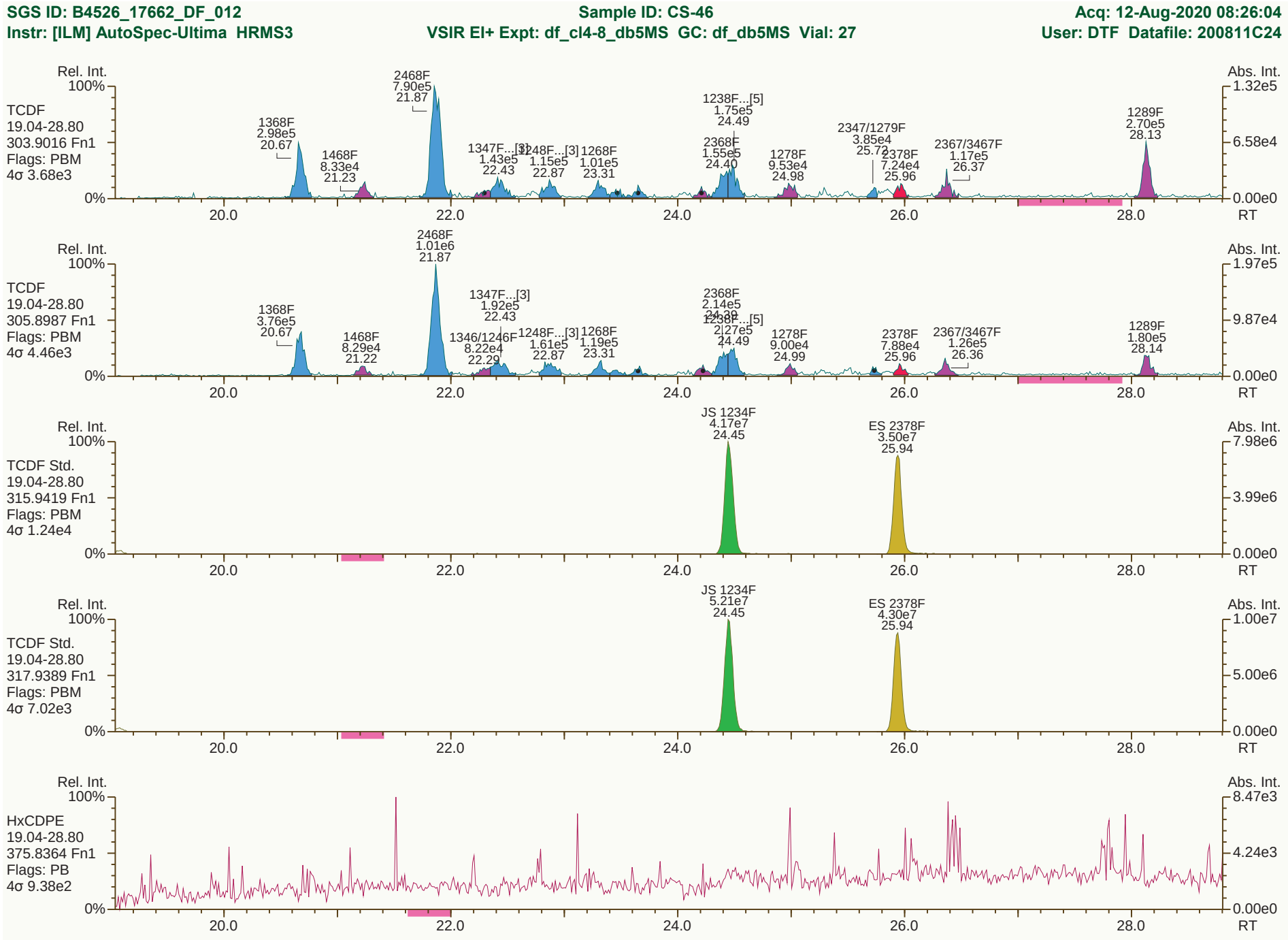

Rel. Int.
100%
TCDD
19.04-28.80
319.8965 Fn1
Flags: PBM
4σ 2.38e3
0%
1368D
2.29e5
22.89
1379D
1.51e5
23.29
1247D...[4]
1.88e5
24.90
1234/1269D
9.45e4
26.21
Abs. Int.
4.17e4
2.09e4
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD
19.04-28.80
321.8936 Fn1
Flags: PBM
4σ 1.86e3
0%
1368D
3.24e5
22.88
1379D
1.72e5
23.30
1247D...[4]
2.52e5
24.91
1234/1269D
1.18e5
26.21
Abs. Int.
5.79e4
2.89e4
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
37Cl-TCDD
19.04-28.80
327.8850 Fn1
Flags: PBM
4σ 1.72e3
0%
CS 37Cl-2378D
2.47e7
26.92
Abs. Int.
5.38e6
2.69e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.80
331.9368 Fn1
Flags: PBM
4σ 6.27e3
0%
JS 1234D
2.89e7
26.19
ES 2378D
2.31e7
26.90
Abs. Int.
6.07e6
3.04e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.80
333.9339 Fn1
Flags: PBM
4σ 1.75e3
0%
JS 1234D
3.55e7
26.19
ES 2378D
2.87e7
26.90
Abs. Int.
7.69e6
3.84e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT


Rel. Int.
100%
PeCDD
28.82-33.81
355.8546 Fn2
Flags: PBM
4σ 2.67e3
12479/12468D
3.25e5
30.01
12469D
1.10e5
30.57
12368D
1.31e5
31.16
12478D
1.39e5
31.36
12369D...[3]
9.70e4
31.73
12346/12347D
1.15e5
32.12
12378D
1.75e5
32.63
Abs. Int.
6.01e4
3.01e4
0.00e0
0%
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD
28.82-33.81
357.8517 Fn2
Flags: PBM
4σ 2.43e3
12479/12468D
2.12e5
30.01
12469D
6.08e4
30.57
12368D
7.30e4
31.15
12478D
7.68e4
31.35
12369D...[3]
5.80e4
31.72
12346/12347D
7.74e4
32.12
12378D
1.13e5
32.63
Abs. Int.
4.62e4
2.31e4
0.00e0
0%
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.82-33.81
367.8949 Fn2
Flags: PBM
4σ 1.40e3
CS 12347D
2.69e7
32.09
ES 12378D
2.51e7
32.61
Abs. Int.
7.27e6
3.64e6
0.00e0
0%
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.82-33.81
369.8919 Fn2
Flags: PBM
4σ 1.59e3
CS 12347D
1.66e7
32.09
ES 12378D
1.62e7
32.61
Abs. Int.
4.60e6
2.30e6
0.00e0
0%
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
QC Check
28.82-33.81
366.9792 Fn2
Flags: -
Abs. Int.
5.80e6
2.90e6
0.00e0
0%
29.0
30.0
31.0
32.0
33.0
RT


Rel. Int.
100%
HxCDD
33.82-37.91
389.8156 Fn3
Flags: PBM
4σ 1.37e3
124679/124689D
1.66e6
34.94
123679/123689D
2.76e6
35.91
123468D
5.01e5
35.61
123469D
3.66e5
36.04
123478D
5.03e5
36.68
123678D
1.17e6
36.80
123467D
1.74e5
36.99
123789D
9.95e5
37.10
Abs. Int.
5.85e5
2.92e5
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD
33.82-37.91
391.8127 Fn3
Flags: PBM
4σ 3.81e3
124679/124689D
1.31e6
34.94
123679/123689D
2.11e6
35.91
123468D
3.81e5
35.61
123469D
2.84e5
36.04
123478D
4.23e5
36.68
123678D
1.00e6
36.80
123467D
1.72e5
36.99
123789D
8.09e5
37.10
Abs. Int.
4.49e5
2.24e5
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.82-37.91
401.8559 Fn3
Flags: PBM
4σ 4.24e3
ES 123678D
ES 123478D 1.67e7
1.68e7 36.78
36.67
JS 123467D
1.16e7
36.98
ES 123789D
1.83e7
37.09
Abs. Int.
5.00e6
2.50e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.82-37.91
403.8530 Fn3
Flags: PBM
4σ 3.91e3
ES 123678D
1.34e7
ES 123478D 36.78
1.30e7
36.67
JS 123467D
9.46e6
36.98
ES 123789D
1.42e7
37.09
Abs. Int.
3.86e6
1.93e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
QC Check
33.82-37.91
380.9760 Fn3
Flags: -
Abs. Int.
1.18e7
5.89e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT

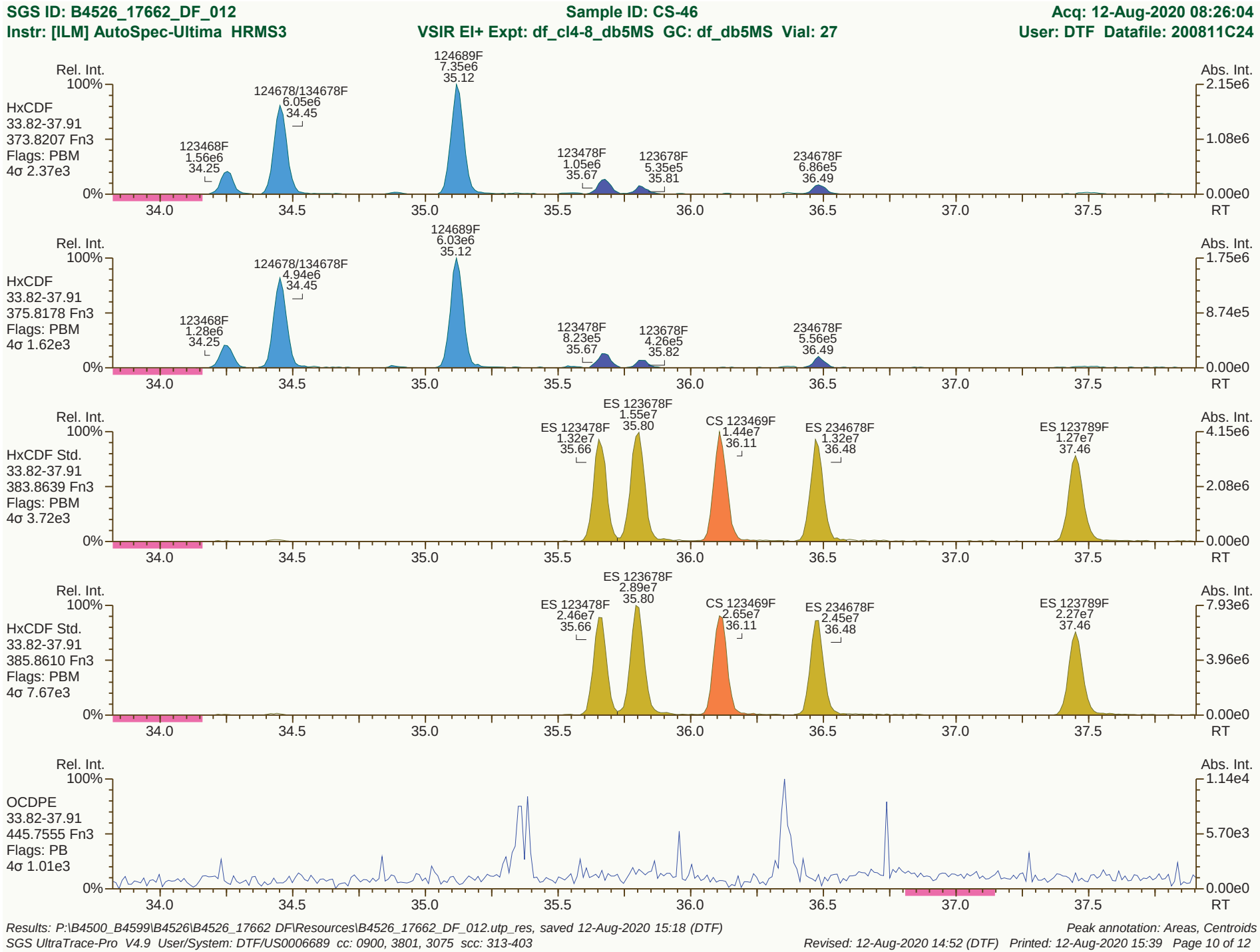

Rel. Int.
100%
HpCDD
37.92-41.20
423.7767 Fn4
Flags: PBM
4σ 1.68e3
0%
1234679D
2.42e7
39.46
1234678D
2.97e7
40.18
Abs. Int.
6.97e6
3.48e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD
37.92-41.20
425.7737 Fn4
Flags: PBM
4σ 1.58e3
0%
1234679D
2.34e7
39.46
1234678D
2.89e7
40.18
Abs. Int.
6.68e6
3.34e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.92-41.20
435.8169 Fn4
Flags: PBM
4σ 3.60e3
0%
ES 1234678D
1.36e7
40.17
Abs. Int.
3.15e6
1.57e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.92-41.20
437.8140 Fn4
Flags: PBM
4σ 3.43e3
0%
ES 1234678D
1.30e7
40.17
Abs. Int.
3.15e6
1.58e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
QC Check
37.92-41.20
430.9728 Fn4
Flags: -
0%
Abs. Int.
8.04e6
4.02e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT

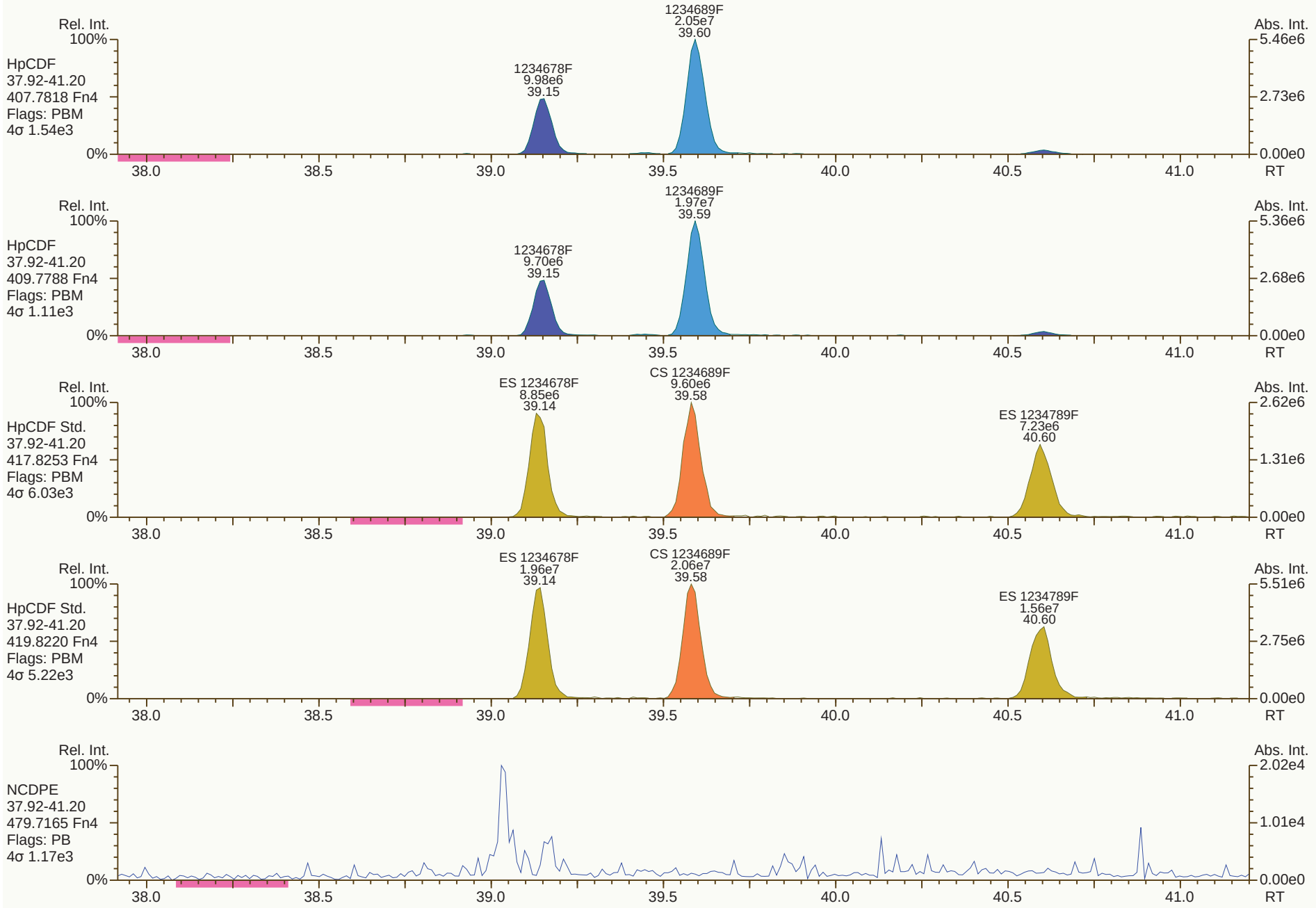

OCDD
1.05e8
42.90
Rel. Int.
100%
OCDD
41.21-44.80
457.7377 Fn5
Flags: PBM
4σ 1.91e3
0%
Abs. Int.
1.55e7
7.74e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
OCDD
1.18e8
42.90
Rel. Int.
100%
OCDD
41.21-44.80
459.7348 Fn5
Flags: PBM
4σ 2.41e3
0%
Abs. Int.
1.75e7
8.73e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDD
1.21e7
42.89
Rel. Int.
100%
OCDD Std.
41.21-44.80
469.7780 Fn5
Flags: PBM
4σ 4.71e3
0%
Abs. Int.
1.80e6
9.02e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDD
1.33e7
42.88
Rel. Int.
100%
OCDD Std.
41.21-44.80
471.7750 Fn5
Flags: PBM
4σ 3.61e3
0%
Abs. Int.
1.86e6
9.32e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
QC Check
41.21-44.80
454.9728 Fn5
Flags: -
0%
Abs. Int.
1.05e7
5.25e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT

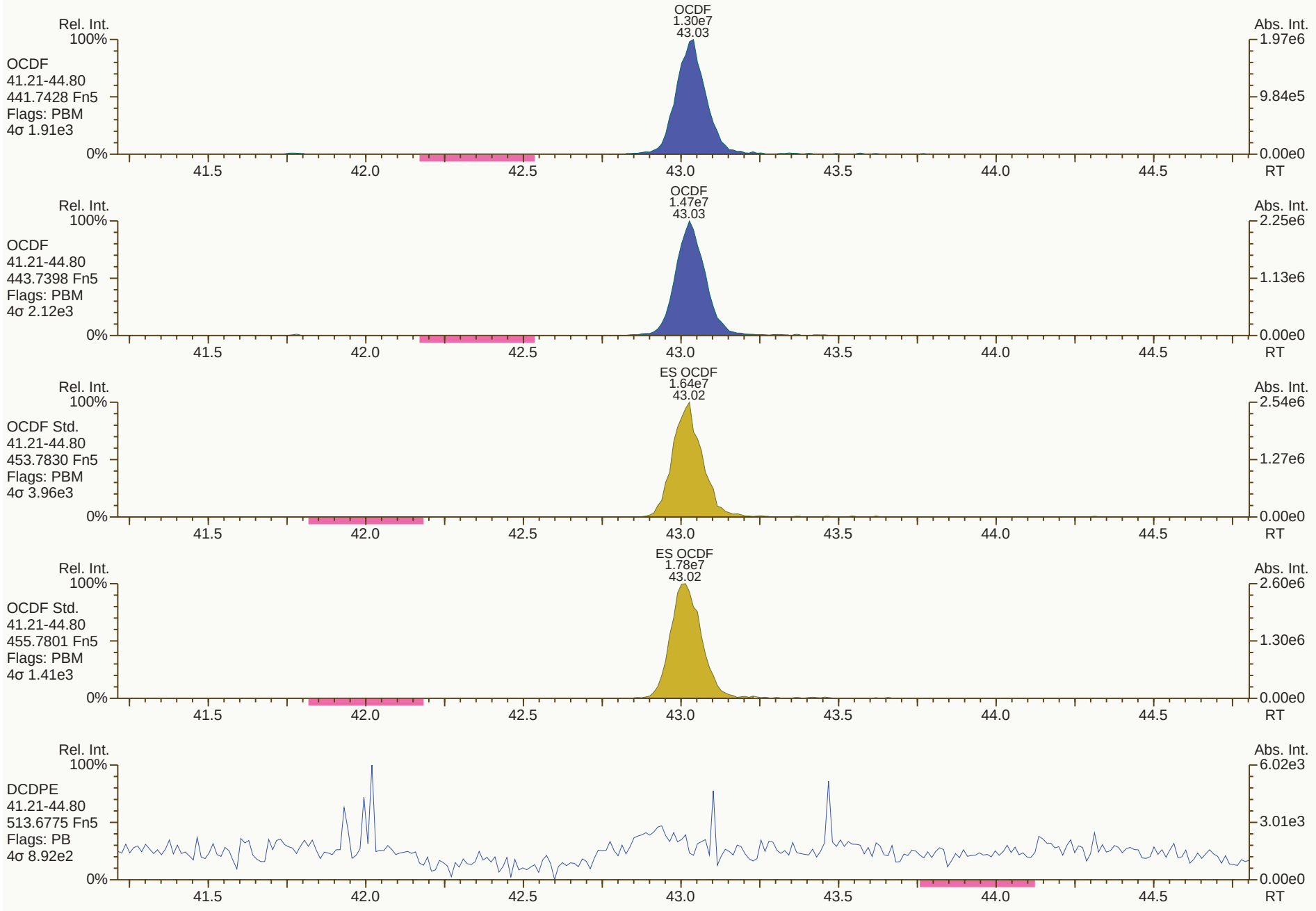

SGS ID: B4526_17662_DF_012
Sample ID: CS-46
Acq: 12-Aug-2020 08:26:04
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 27
User: DTF Datafile: 200811C24
TCDF
19.04-28.80
303.9016 Fn1
Flags: PBM
4σ 3.68e3
1368F 2.98e5 20.67
1468F 8.33e4 21.23
2468F 7.90e5 21.87
1347F...[3] 1.43e5 22.43
1248F...[3] 1.15e5 22.87
1268F 1.01e5 23.31
1238F...[5] 1.75e5 24.49
2368F 1.55e5 24.40
1278F 9.53e4 24.98
2347/1279F 3.85e4 25.72
2378F 7.24e4 25.96
2367/3467F 1.17e5 26.37
1289F 2.70e5 28.13
TCDF
19.04-28.80
305.8987 Fn1
Flags: PBM
4σ 4.46e3
1368F 3.76e5 20.67
1468F 8.29e4 21.22
2468F 1.01e6 21.87
1347F...[3] 1.92e5 22.43
1346/1246F 8.22e4 22.29
1248F...[3] 1.61e5 22.87
1268F 1.19e5 23.31
2368F 2.14e5 24.39
1238F...[5] 2.27e5 24.49
1278F 9.00e4 24.99
2378F 7.88e4 25.96
2367/3467F 1.26e5 26.36
1289F 1.80e5 28.14
TCDF Std.
19.04-28.80
315.9419 Fn1
Flags: PBM
4σ 1.24e4
JS 1234F 4.17e7 24.45
ES 2378F 3.50e7 25.94
TCDF Std.
19.04-28.80
317.9389 Fn1
Flags: PBM
4σ 7.02e3
JS 1234F 5.21e7 24.45
ES 2378F 4.30e7 25.94
HxCDPE
19.04-28.80
375.8364 Fn1
Flags: PB
4σ 9.38e2
Rel. Int.
Abs. Int.
RT
20.0
22.0
24.0
26.0
28.0
Results: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\B4526_17662_DF_012.utp_res, saved 12-Aug-2020 15:18 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 2154, 0522, 3681 scc: 313-403
Revised: 12-Aug-2020 14:50 (DTF) Printed: 12-Aug-2020 15:39 Page 7 of 12


Rel. Int.
100%
0%
Abs. Int.
5.32e5
2.66e5
0.00e0
RT
20.0
22.0
24.0
26.0
28.0
PeCDF-1
19.04-28.80
339.8597 Fn1
Flags: PBM
4σ 9.30e2
13468/12468F
2.09e6
28.15
PeCDF-1
19.04-28.80
341.8568 Fn1
Flags: PBM
4σ 1.17e3
13468/12468F
1.35e6
28.15
3.19e5
1.59e5
QC Check
19.04-28.80
316.9824 Fn1
Flags: -
6.39e6
3.19e6


Rel. Int.
100%
PeCDF-2
28.82-33.81
339.8597 Fn2
Flags: PBM
4σ 2.87e3
0%
12368F...[3]
9.07e5
29.95
13678F...[3]
1.45e5
29.77
12346F
5.14e4
30.54
23468/12469F
2.51e5
30.64
12348F
6.87e4
30.88
12378F
1.03e5
31.10
12678/12367F
1.92e5
31.41
23467/12369F
8.42e4
32.14
23478F
2.27e5
32.28
Abs. Int.
1.96e5
9.80e4
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF-2
28.82-33.81
341.8568 Fn2
Flags: PBM
4σ 2.40e3
0%
12368F...[3]
5.96e5
29.95
13678F...[3]
1.11e5
29.77
12346F
3.87e4
30.54
23468/12469F
1.39e5
30.64
12348F
4.52e4
30.88
12378F
8.25e4
31.10
12678/12367F
1.26e5
31.40
23467/12369F
4.38e4
32.14
23478F
1.76e5
32.28
Abs. Int.
1.14e5
5.71e4
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.82-33.81
351.9000 Fn2
Flags: PBM
4σ 4.06e3
0%
CS 12346F
3.90e7
30.53
ES 12378F
3.73e7
31.08
ES 23478F
3.68e7
32.24
Abs. Int.
1.01e7
5.07e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.82-33.81
353.8970 Fn2
Flags: PBM
4σ 2.58e3
0%
CS 12346F
2.47e7
30.53
ES 12378F
2.41e7
31.08
ES 23478F
2.40e7
32.24
Abs. Int.
6.43e6
3.22e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
HpCDPE
28.82-33.81
409.7974 Fn2
Flags: PB
4σ 1.07e3
0%
Abs. Int.
1.10e4
5.50e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT


SGS ID: B4526_17662_DF_012
Sample ID: CS-46
Acq: 12-Aug-2020 08:26:04
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 27
User: DTF Datafile: 200811C24
Rel. Int.
Abs. Int.
HxCDF
33.82-37.91
373.8207 Fn3
Flags: PBM
4σ 2.37e3
123468F 1.56e6 34.25
124678/134678F 6.05e6 34.45
124689F 7.35e6 35.12
123478F 1.05e6 35.67
123678F 5.35e5 35.81
234678F 6.86e5 36.49
HxCDF
33.82-37.91
375.8178 Fn3
Flags: PBM
4σ 1.62e3
123468F 1.28e6 34.25
124678/134678F 4.94e6 34.45
124689F 6.03e6 35.12
123478F 8.23e5 35.67
123678F 4.26e5 35.82
234678F 5.56e5 36.49
HxCDF Std.
33.82-37.91
383.8639 Fn3
Flags: PBM
4σ 3.72e3
ES 123478F 1.32e7 35.66
ES 123678F 1.55e7 35.80
CS 123469F 1.44e7 36.11
ES 234678F 1.32e7 36.48
ES 123789F 1.27e7 37.46
HxCDF Std.
33.82-37.91
385.8610 Fn3
Flags: PBM
4σ 7.67e3
ES 123478F 2.46e7 35.66
ES 123678F 2.89e7 35.80
CS 123469F 2.65e7 36.11
ES 234678F 2.45e7 36.48
ES 123789F 2.27e7 37.46
OCDPE
33.82-37.91
445.7555 Fn3
Flags: PB
4σ 1.01e3
RT


Rel. Int.
100%
0%
Abs. Int.
RT
38.0
38.5
39.0
39.5
40.0
40.5
41.0
HpCDF
37.92-41.20
407.7818 Fn4
Flags: PBM
4σ 1.54e3
1234678F
9.98e6
39.15
1234689F
2.05e7
39.60
5.46e6
2.73e6
0.00e0
HpCDF
37.92-41.20
409.7788 Fn4
Flags: PBM
4σ 1.11e3
1234678F
9.70e6
39.15
1234689F
1.97e7
39.59
5.36e6
2.68e6
0.00e0
HpCDF Std.
37.92-41.20
417.8253 Fn4
Flags: PBM
4σ 6.03e3
ES 1234678F
8.85e6
39.14
CS 1234689F
9.60e6
39.58
ES 1234789F
7.23e6
40.60
2.62e6
1.31e6
0.00e0
HpCDF Std.
37.92-41.20
419.8220 Fn4
Flags: PBM
4σ 5.22e3
ES 1234678F
1.96e7
39.14
CS 1234689F
2.06e7
39.58
ES 1234789F
1.56e7
40.60
5.51e6
2.75e6
0.00e0
NCDPE
37.92-41.20
479.7165 Fn4
Flags: PB
4σ 1.17e3
2.02e4
1.01e4
0.00e0


OCDF
1.30e7
43.03
Rel. Int.
100%
OCDF
41.21-44.80
441.7428 Fn5
Flags: PBM
4σ 1.91e3
0%
Abs. Int.
1.97e6
9.84e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
OCDF
1.47e7
43.03
Rel. Int.
100%
OCDF
41.21-44.80
443.7398 Fn5
Flags: PBM
4σ 2.12e3
0%
Abs. Int.
2.25e6
1.13e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDF
1.64e7
43.02
Rel. Int.
100%
OCDF Std.
41.21-44.80
453.7830 Fn5
Flags: PBM
4σ 3.96e3
0%
Abs. Int.
2.54e6
1.27e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDF
1.78e7
43.02
Rel. Int.
100%
OCDF Std.
41.21-44.80
455.7801 Fn5
Flags: PBM
4σ 1.41e3
0%
Abs. Int.
2.60e6
1.30e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
DCDPE
41.21-44.80
513.6775 Fn5
Flags: PB
4σ 8.92e2
0%
Abs. Int.
6.02e3
3.01e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT

Lab ID: B4526_17662_DF_013 **Acq'd:** 12 Aug 2020 09:12 DTF **Wt/Vol:** 8.43 g **ICAL:** HRMS3_DF_10122018_28AUG2019

Client ID: CS-47 **UTP:** 12-Aug-2020 15:18:43 DTF **J-level:** 0.593 pg/g **Split:** 1 **Checkcode:** 033-297-JVV

Datafile: 200811C25 **Report:** 12 Aug 2020 15:23 TF **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	NotFnd		1.0008	-		-	-	-	1.19	-	5632	0.206
12378-PeCDD	32.64	J	1.0006	1.0006	0	7.32E+04	1.45	Y	0.98	0.361	4984	0.223
123478-HxCDD	36.69	J	1.0004	1.0004	0	8.22E+04	1.24	Y	1.02	0.532	3396	0.185
123678-HxCDD	36.80	J	1.0036	1.0035	-0.2	1.90E+05	1.16	Y	1.09	1.18	3396	0.2
123789-HxCDD	37.11	J	1.0118	1.0118	0	1.55E+05	1.21	Y	0.97	0.981	3396	0.203
1234678-HpCDD	40.18		1.0003	1.0003	0	3.39E+06	1.05	Y	0.98	28.1	4906	0.443
OCDD	42.91		1.0003	1.0002	-0.3	1.46E+07	0.88	Y	1.07	245	4892	1.46
2378-TCDF	25.97	J EMPC	1.0009	1.0005	-0.6	1.31E+05	0.64	N	1.01	0.34	3535	0.111
12378-PeCDF	31.10	J	1.0006	1.0006	0	1.20E+05	1.32	Y	0.96	0.404	3789	0.124
23478-PeCDF	32.28	J	1.0005	1.0010	+1.0	2.25E+05	1.34	Y	0.99	0.741	3789	0.114
123478-HxCDF	35.69	J EMPC	1.0005	1.0006	+0.2	1.33E+05	1.66	N	1.21	0.568	4158	0.164
123678-HxCDF	35.82	J	1.0005	1.0004	-0.2	1.42E+05	1.41	Y	1.11	0.592	4158	0.157
234678-HxCDF	36.49	J	1.0004	1.0003	-0.2	1.71E+05	1.23	Y	1.12	0.797	4158	0.173
123789-HxCDF	NotFnd		1.0005	-		-	-	-	1.11	-	4158	0.198
1234678-HpCDF	39.16		1.0003	1.0003	0	1.58E+06	1.01	Y	1.32	8.56	3243	0.161
1234789-HpCDF	NotFnd		1.0003	-		-	-	-	1.26	-	3243	0.267
OCDF	43.05		1.0003	1.0003	0	8.83E+05	0.82	Y	1.03	11.7	3943	0.888

Name	Act RT		Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	26.90		1.0266	1.0267	+0.2	5.98E+07	0.80	Y	0.99	83.7
ES 12378-PeCDD	32.62		1.2430	1.2447	+3.3	4.88E+07	1.55	Y	0.83	81.5
ES 123478-HxCDD	36.67		0.9916	0.9916	0	3.58E+07	1.26	Y	0.95	79.8
ES 123678-HxCDD	36.79		0.9947	0.9947	0	3.53E+07	1.26	Y	0.98	76.5
ES 123789-HxCDD	37.09		1.0029	1.0028	-0.2	3.85E+07	1.36	Y	1.14	71.5
ES 1234678-HpCDD	40.17		1.0851	1.0862	+2.7	2.93E+07	1.05	Y	0.90	68.9
ES OCDD	42.90		1.1584	1.1598	+3.6	2.64E+07	0.92	Y	0.63	44.5
ES 2378-TCDF	25.96		1.0602	1.0607	+0.8	9.03E+07	0.81	Y	1.00	83.5
ES 12378-PeCDF	31.09		1.2683	1.2703	+3.7	7.33E+07	1.59	Y	0.83	81.2
ES 23478-PeCDF	32.25		1.3156	1.3180	+4.6	7.30E+07	1.54	Y	0.81	83.3
ES 123478-HxCDF	35.66		0.9644	0.9643	-0.2	4.60E+07	0.55	Y	1.12	86.4
ES 123678-HxCDF	35.81		0.9682	0.9681	-0.2	5.15E+07	0.53	Y	1.33	81.7
ES 234678-HxCDF	36.48		0.9864	0.9864	0	4.56E+07	0.53	Y	1.21	79.6
ES 123789-HxCDF	37.46		1.0128	1.0128	0	4.22E+07	0.53	Y	1.12	79.6
ES 1234678-HpCDF	39.14		1.0578	1.0583	+1.2	3.31E+07	0.44	Y	0.92	75.6
ES 1234789-HpCDF	40.60		1.0967	1.0978	+2.7	2.59E+07	0.48	Y	0.82	66.8
ES OCDF	43.04		1.1623	1.1636	+3.4	3.49E+07	0.91	Y	0.78	47.2

Lab ID: B4526_17662_DF_013 | Acq'd: 12 Aug 2020 09:12 DTF | Wt/Vol: 8.43 g | ICAL: HRMS3_DF_10122018_28AUG2019

Client ID: CS-47 | UTP: 12-Aug-2020 15:18:43 DTF | J-level: 0.593 pg/g | Split: 1 | Checkcode: 033-297-JVV

Datafile: 200811C25 | Report: 12 Aug 2020 15:23 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %	
JS 1234-TCDD	26.21		-	-	-	7.22E+07	0.81	Y	-	-	
JS 1234-TCDF	24.47		-	-	-	1.09E+08	0.79	Y	-	-	
JS 123467-HxCDD	36.99		-	-	-	2.37E+07	1.19	Y	-	-	
CS 37Cl-2378-TCDD	26.93		1.0276	1.0277	+0.2	2.71E+07	n/a	-	1.12	83.7	
CS 12347-PeCDD	32.10		1.2233	1.2249	+3.1	5.01E+07	1.58	Y	0.71	97.4	
CS 12346-PeCDF	30.53		1.2459	1.2478	+3.5	7.02E+07	1.60	Y	0.81	79.8	
CS 123469-HxCDF	36.12		0.9767	0.9766	-0.2	4.59E+07	0.55	Y	1.12	86.3	
CS 1234689-HpCDF	39.59		1.0696	1.0704	+1.9	3.36E+07	0.47	Y	0.90	79	
~~SS 37Cl-2378-TCDD~~	~~26.93~~		~~1.0276~~	~~1.0277~~	~~+0.2~~	~~2.71E+07~~	~~n/a~~		~~1.14~~	~~99.1~~	Not used in this project.
~~SS 12347-PeCDD~~	~~32.10~~		~~1.2233~~	~~1.2249~~	~~+3.1~~	~~5.01E+07~~	~~1.58~~	~~Y~~	~~0.86~~	~~119~~	CL 13Aug20
~~SS 12346-PeCDF~~	~~30.53~~		~~1.2459~~	~~1.2478~~	~~+3.5~~	~~7.02E+07~~	~~1.60~~	~~Y~~	~~0.98~~	~~98~~	
~~SS 123469-HxCDF~~	~~36.12~~		~~0.9767~~	~~0.9766~~	~~-0.2~~	~~4.59E+07~~	~~0.55~~	~~Y~~	~~0.85~~	~~105~~	
~~SS 1234689-HpCDF~~	~~39.59~~		~~1.0696~~	~~1.0704~~	~~+1.9~~	~~3.36E+07~~	~~0.47~~	~~Y~~	~~0.97~~	~~104~~	

Totals	Conc	EMPC
Total TCDD	4.95	4.95
Total PeCDD	5.02	7.65
Total HxCDD	20.1	21.1
Total HpCDD	116	116
Total Tetra-Octa Dioxins	391	395
Total TCDF	8.23	12.5
Total PeCDF	7.81	9.15
Total HxCDF	9.25	10.2
Total HpCDF	16.5	16.5
Total Tetra-Octa Furans	53.5	60
Total Tetra-Octa Dioxins & Furans	445	455

Lab ID: B4526_17662_DF_013 | Acq'd: 12 Aug 2020 09:12 DTF | Wt/Vol: 8.43 g | ICAL: HRMS3_DF_10122018_28AUG2019

Client ID: CS-47 | UTP: 12-Aug-2020 15:18:43 DTF | J-level: 0.593 pg/g | Split: 1 | Checkcode: 033-297-JVV

Datafile: 200811C25 | Report: 12 Aug 2020 15:23 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1368-TCDD	22.91		0.8523	0.8515	-1.1	5.35E+05	0.81	Y	1.19	1.79	5632	0.206
1379-TCDD	23.32		0.8682	0.8666	-2.2	3.58E+05	0.79	Y	1.19	1.19	5632	0.206
1369-TCDD	NotFnd		0.8858						1.19		5632	0.206
1469-TCDD	24.67		0.9177	0.9169	-1.2	2.59E+05	0.70	Y	1.19	0.866	5632	0.206
1247/1246/1248/1249-TCDD	24.92		0.9274	0.9263	-1.6	3.30E+05	0.74	Y	1.19	1.1	5632	0.206
1378-TCDD	NotFnd		0.9349						1.19		5632	0.206
1268-TCDD	NotFnd		0.9430						1.19		5632	0.206
1478-TCDD	NotFnd		0.9529						1.19		5632	0.206
1279-TCDD	NotFnd		0.9597						1.19		5632	0.206
1234/1269-TCDD	NotFnd		0.9739						1.19		5632	0.206
1236-TCDD	NotFnd		0.9794						1.19		5632	0.206
1237/1238-TCDD	NotFnd		0.9895						1.19		5632	0.206
1239-TCDD	NotFnd		0.9950						1.19		5632	0.206
2378-TCDD	**NotFnd**		**1.0008**						**1.19**		**5632**	**0.206**
1278-TCDD	NotFnd		1.0139						1.19		5632	0.206
1267-TCDD	NotFnd		1.0194						1.19		5632	0.206
1289-TCDD	NotFnd		1.0397						1.19		5632	0.206
12479/12468-PeCDD	30.01	J	0.9209	0.9202	-1.3	5.85E+05	1.52	Y	0.98	2.89	4984	0.223
12469-PeCDD	30.57	J EMPC	0.9382	0.9373	-1.7	1.59E+05	1.97	N	0.98	0.783	4984	0.223
12368-PeCDD	31.16	J	0.9557	0.9553	-0.7	2.15E+05	1.67	Y	0.98	1.06	4984	0.223
12478-PeCDD	31.36	J EMPC	0.9617	0.9614	-0.6	8.01E+04	0.98	N	0.98	0.395	4984	0.223
12379-PeCDD	31.47	J EMPC	0.9649	0.9647	-0.4	1.19E+05	2.13	N	0.98	0.589	4984	0.223
12369/12467/12489-PeCDD	31.75	J	0.9732	0.9733	+0.2	1.44E+05	1.41	Y	0.98	0.709	4984	0.223
12346/12347-PeCDD	32.13	J EMPC	0.9850	0.9850	0	1.76E+05	1.87	N	0.98	0.869	4984	0.223
12378-PeCDD	32.64	J	**1.0006**	**1.0006**	**0**	**7.32E+04**	**1.45**	**Y**	**0.98**	**0.361**	**4984**	**0.223**
12367-PeCDD	NotFnd		1.0038						0.98		4984	0.223
12389-PeCDD	NotFnd		1.0146						0.98		4984	0.223
124679/124689-HxCDD	34.95		0.9530	0.9529	-0.2	1.31E+06	1.27	Y	1.03	8.29	3396	0.196
123468-HxCDD	35.62		0.9715	0.9711	-0.9	5.19E+05	1.33	Y	1.03	3.28	3396	0.196
123679/123689-HxCDD	35.92		0.9795	0.9794	-0.2	8.48E+05	1.24	Y	1.03	5.37	3396	0.196
123469-HxCDD	36.05	J EMPC	0.9832	0.9828	-0.9	1.63E+05	1.45	N	1.03	1.03	3396	0.196
123478-HxCDD	36.69	J	**1.0004**	**1.0004**	**0**	**8.22E+04**	**1.24**	**Y**	1.02	**0.532**	**3396**	**0.185**
123678-HxCDD	36.80	J	**1.0036**	**1.0035**	**-0.2**	**1.90E+05**	**1.16**	**Y**	1.09	**1.18**	**3396**	**0.2**
123467-HxCDD	37.00	J	1.0089	1.0089	0	7.43E+04	1.42	Y	1.03	0.47	3396	0.196
123789-HxCDD	37.11	J	**1.0118**	**1.0118**	**0**	**1.55E+05**	**1.21**	**Y**	0.97	**0.981**	**3396**	**0.203**

Lab ID: B4526_17662_DF_013 | Acq'd: 12 Aug 2020 09:12 DTF | Wt/Vol: 8.43 g | ICAL: HRMS3_DF_10122018_28AUG2019

Client ID: CS-47 | UTP: 12-Aug-2020 15:18:43 DTF | J-level: 0.593 pg/g | Split: 1 | Checkcode: 033-297-JVV

Datafile: 200811C25 | Report: 12 Aug 2020 15:23 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1234679-HpCDD	39.47		0.9826	0.9824	-0.5	1.06E+07	1.03	Y	0.98	87.7	4906	0.443
1234678-HpCDD	**40.18**		**1.0003**	**1.0003**	**0**	**3.39E+06**	**1.05**	**Y**	**0.98**	**28.1**	**4906**	**0.443**
OCDD	**42.91**		**1.0003**	**1.0002**	**-0.3**	**1.46E+07**	**0.88**	**Y**	**1.07**	**245**	**4892**	**1.46**
OCDD-a	42.92	**#VALUE!**	1.0002	1.0006	+1.0	6.45E+05	2.52	Y	-	#VALUE!	7191	#VALUE!
1368-TCDF	20.70		0.7980	0.7973	-0.9	4.17E+05	0.76	Y	1.01	1.08	3535	0.111
1468-TCDF	21.25	J	0.8204	0.8186	-2.3	9.48E+04	0.70	Y	1.01	0.246	3535	0.111
2468-TCDF	21.89		0.8443	0.8434	-1.2	1.28E+06	0.77	Y	1.01	3.32	3535	0.111
1346/1246-TCDF	22.32	J EMPC	0.8597	0.8599	+0.3	9.36E+04	0.61	N	1.01	0.243	3535	0.111
1347/1378/1247-TCDF	22.46	EMPC	0.8665	0.8655	-1.3	3.63E+05	0.93	N	1.01	0.942	3535	0.111
1348-TCDF	NotFnd		0.8785						1.01		3535	0.111
1248/1367/1379-TCDF	22.90	EMPC	0.8840	0.8822	-2.5	2.55E+05	0.94	N	1.01	0.661	3535	0.111
1268-TCDF	23.34	J	0.9004	0.8993	-1.5	2.15E+05	0.76	Y	1.01	0.557	3535	0.111
1467-TCDF	23.49	J EMPC	0.9060	0.9050	-1.4	7.83E+04	0.62	N	1.01	0.203	3535	0.111
1478-TCDF	23.67	J	0.9132	0.9121	-1.6	1.33E+05	0.87	Y	1.01	0.345	3535	0.111
1369/1237-TCDF	24.09	J EMPC	0.9287	0.9283	-0.6	9.25E+04	0.64	N	1.01	0.24	3535	0.111
2467-TCDF	24.24	J	0.9345	0.9338	-1.0	1.80E+05	0.75	Y	1.01	0.466	3535	0.111
2368-TCDF	24.40		0.9409	0.9402	-1.0	3.36E+05	0.70	Y	1.01	0.872	3535	0.111
1238/1234/1678/1469/1236-TCDF	24.51	J	0.9450	0.9442	-1.2	2.28E+05	0.85	Y	1.01	0.592	3535	0.111
1278-TCDF	25.00	J EMPC	0.9638	0.9634	-0.6	1.48E+05	0.96	N	1.01	0.383	3535	0.111
1349-TCDF	NotFnd		0.9685						1.01		3535	0.111
1267-TCDF	25.31	J	0.9751	0.9751	0	8.89E+04	0.74	Y	1.01	0.231	3535	0.111
2346/1249-TCDF	25.51	J EMPC	0.9831	0.9829	-0.3	8.60E+04	1.14	N	1.01	0.223	3535	0.111
2347/1279-TCDF	25.75	J	0.9920	0.9920	0	1.30E+05	0.86	Y	1.01	0.339	3535	0.111
2348-TCDF	25.87	J	0.9964	0.9967	+0.5	6.64E+04	0.81	Y	1.01	0.172	3535	0.111
2378-TCDF	**25.97**	J EMPC	**1.0009**	**1.0005**	**-0.6**	**1.31E+05**	**0.64**	**N**	**1.01**	**0.34**	**3535**	**0.111**
2367/3467-TCDF	26.37	EMPC	1.0164	1.0159	-0.8	2.37E+05	0.92	N	1.01	0.616	3535	0.111
1269-TCDF	NotFnd		1.0259						1.01		3535	0.111
1239-TCDF	NotFnd		1.0373						1.01		3535	0.111
1289-TCDF	28.14	J EMPC	1.0838	1.0841	+0.5	1.45E+05	1.55	N	1.01	0.376	3535	0.111
13468/12468-PeCDF	28.16	J	0.9052	0.9058	+1.0	8.08E+05	1.34	Y	0.98	2.69	2990	0.0939
13678/13467/12467-PeCDF	29.78	J	0.9582	0.9580	-0.4	3.08E+05	1.64	Y	0.98	1.03	3789	0.119
12368/13478/12478-PeCDF	29.95	J	0.9634	0.9633	-0.2	7.05E+05	1.46	Y	0.98	2.34	3789	0.119
14678-PeCDF	NotFnd		0.9668						0.98		3789	0.119
13479-PeCDF	NotFnd		0.9700						0.98		3789	0.119
13469/12479-PeCDF	NotFnd		0.9781						0.98		3789	0.119
12346-PeCDF	NotFnd		0.9829						0.98		3789	0.119

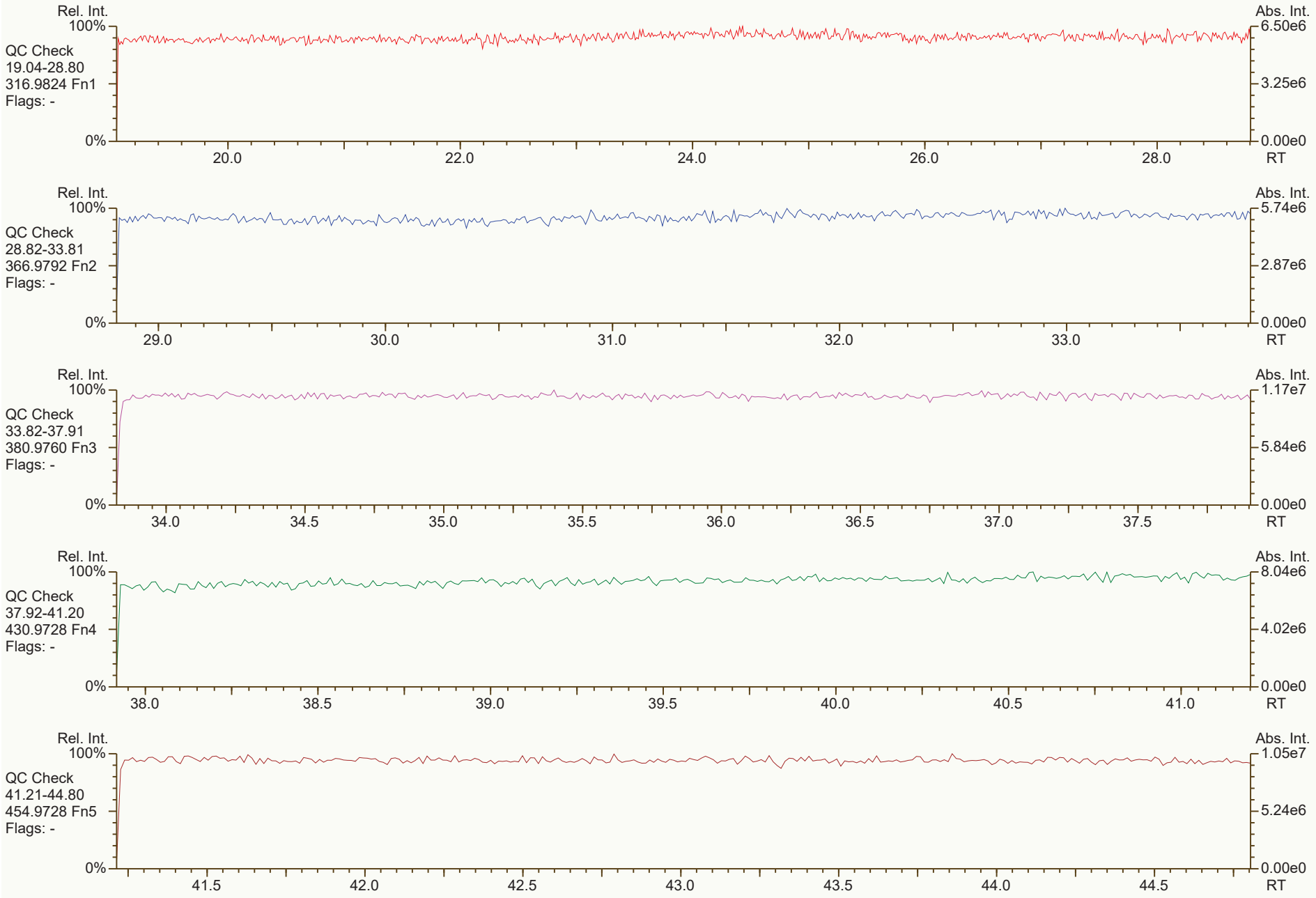
Lab ID: B4526_17662_DF_013 | Acq'd: 12 Aug 2020 09:12 DTF | Wt/Vol: 8.43 g | ICAL: HRMS3_DF_10122018_28AUG2019

Client ID: CS-47 | UTP: 12-Aug-2020 15:18:43 DTF | J-level: 0.593 pg/g | Split: 1 | Checkcode: 033-297-JVV

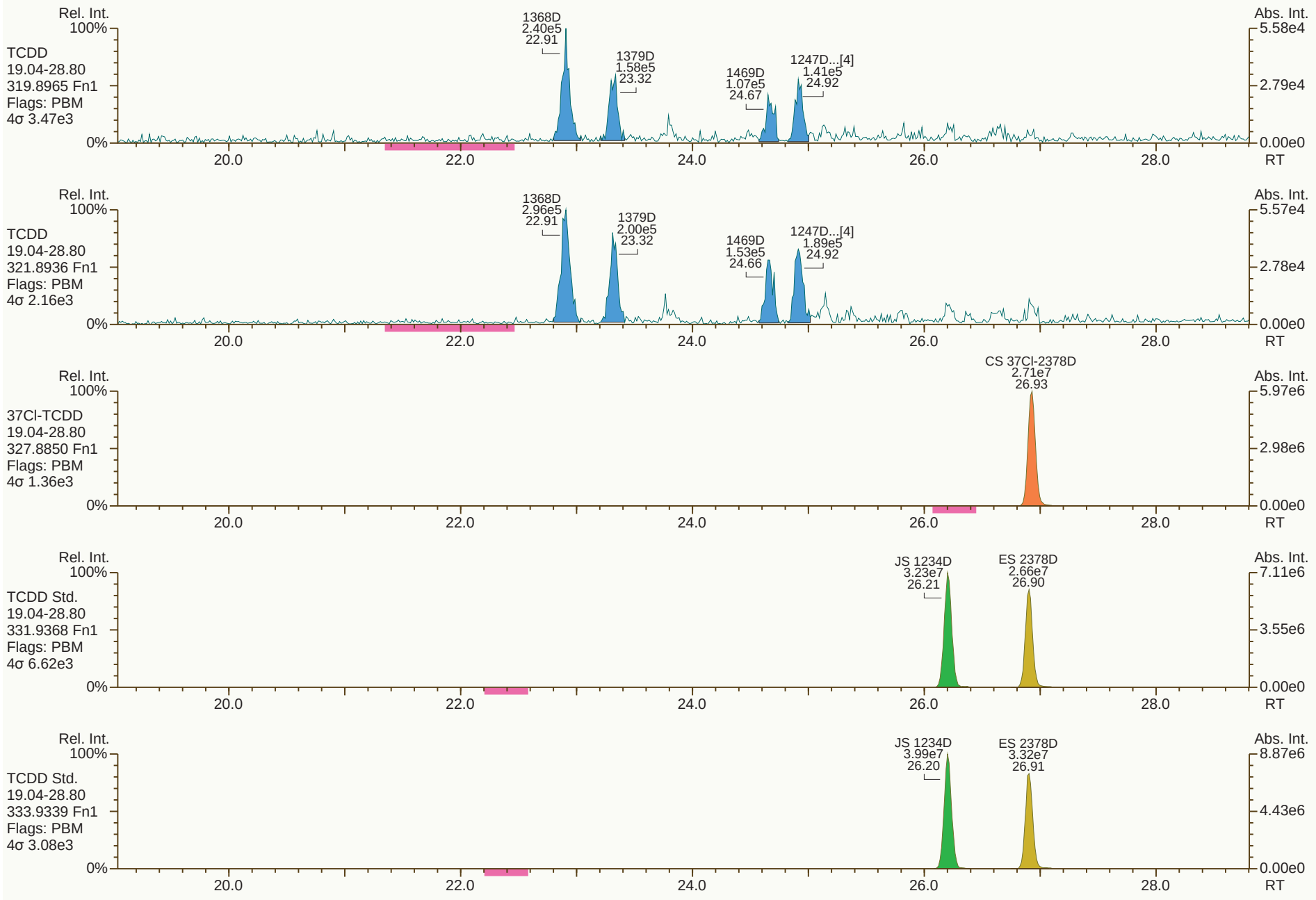
Datafile: 200811C25 | Report: 12 Aug 2020 15:23 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

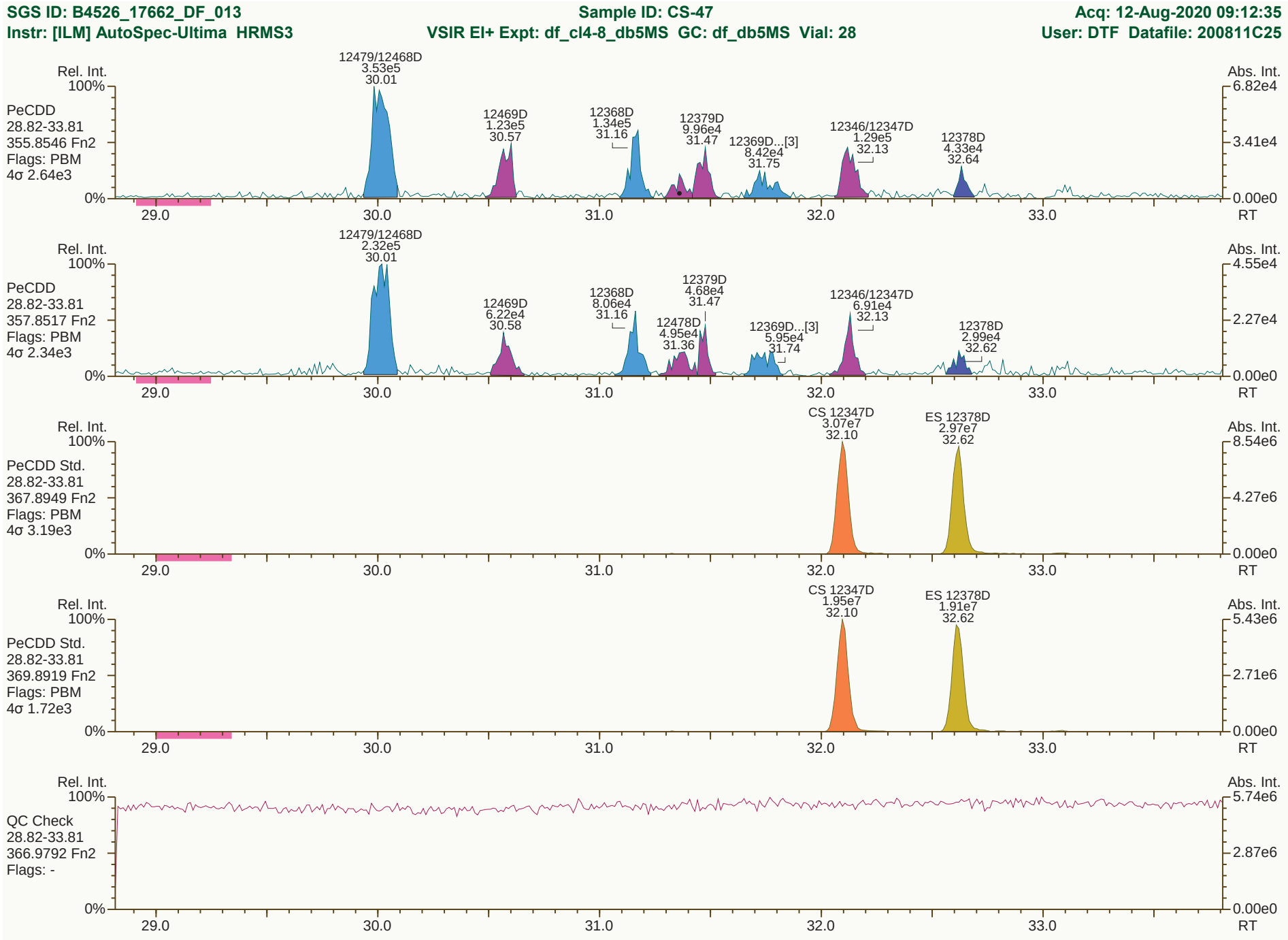
Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
23468/12469-PeCDF	30.64	J EMPC	0.9859	0.9856	-0.6	2.30E+05	1.28	N	0.98	0.766	3789	0.119
12347-PeCDF	NotFnd		0.9884						0.98		3789	0.119
12348-PeCDF	NotFnd		0.9937						0.98		3789	0.119
12378-PeCDF	**31.10**	J	**1.0006**	**1.0006**	**0**	**1.20E+05**	**1.32**	**Y**	**0.96**	**0.404**	**3789**	**0.124**
12678/12367-PeCDF	31.40	J	1.0097	1.0100	+0.6	1.83E+05	1.52	Y	0.98	0.608	3789	0.119
12379-PeCDF	NotFnd		1.0152						0.98		3789	0.119
12679-PeCDF	NotFnd		0.9923						0.98		3789	0.119
23467/12369-PeCDF	32.15	J EMPC	0.9966	0.9967	+0.2	1.72E+05	1.30	N	0.98	0.573	3789	0.119
23478-PeCDF	**32.28**	J	**1.0005**	**1.0010**	**+1.0**	**2.25E+05**	**1.34**	**Y**	**0.99**	**0.741**	**3789**	**0.114**
23478/12489-PeCDF	NotFnd		0.0000						0.99			
12489-PeCDF	NotFnd		1.0043						0.98		3789	0.119
12349-PeCDF	NotFnd		1.0107						0.98		3789	0.119
12389-PeCDF	NotFnd		1.0349						0.98		3789	0.119
123468-HxCDF	34.26	J	0.9607	0.9607	0	2.46E+05	1.37	Y	1.13	1.11	4158	0.172
124678/134678-HxCDF	34.46		0.9666	0.9664	-0.4	9.01E+05	1.21	Y	1.13	4.07	4158	0.172
134679-HxCDF	NotFnd		0.9730						1.13		4158	0.172
124679-HxCDF	NotFnd		0.9787						1.13		4158	0.172
124689-HxCDF	35.13	J	0.9850	0.9850	0	5.37E+05	1.08	Y	1.13	2.42	4158	0.172
123467-HxCDF	35.56	J EMPC	0.9971	0.9971	0	8.04E+04	0.85	N	1.13	0.363	4158	0.172
123478-HxCDF	**35.69**	J EMPC	**1.0005**	**1.0006**	**+0.2**	**1.33E+05**	**1.66**	**N**	**1.21**	**0.568**	**4158**	**0.164**
123678-HxCDF	**35.82**	J	**1.0005**	**1.0004**	**-0.2**	**1.42E+05**	**1.41**	**Y**	**1.11**	**0.592**	**4158**	**0.157**
123479-HxCDF	NotFnd		1.0049						1.13		4158	0.172
123469-HxCDF	NotFnd		1.0090						1.13		4158	0.172
123679-HxCDF	NotFnd		0.9941						1.13		4158	0.172
234678-HxCDF	**36.49**	J	**1.0004**	**1.0003**	**-0.2**	**1.71E+05**	**1.23**	**Y**	**1.12**	**0.797**	**4158**	**0.173**
234678/123689-HxCDF	NotFnd		0.0000						1.12			
123689-HxCDF	NotFnd		1.0041						1.13		4158	0.172
123789-HxCDF	**NotFnd**		**1.0005**						**1.11**		**4158**	**0.198**
123789/123489-HxCDF	NotFnd		0.0000						1.11			
123489-HxCDF	37.48	J	1.0009	1.0005	-0.9	5.70E+04	1.31	Y	1.13	0.258	4158	0.172
1234678-HpCDF	**39.16**		**1.0003**	**1.0003**	**0**	**1.58E+06**	**1.01**	**Y**	**1.32**	**8.56**	**3243**	**0.161**
1234679-HpCDF	NotFnd		1.0075						1.29		3243	0.207
1234689-HpCDF	39.60		1.0112	1.0117	+1.2	1.28E+06	1.00	Y	1.29	7.98	3243	0.207
1234789-HpCDF	**NotFnd**		**1.0003**						**1.26**		**3243**	**0.267**
OCDF	**43.05**		**1.0003**	**1.0003**	**0**	**8.83E+05**	**0.82**	**Y**	**1.03**	**11.7**	**3943**	**0.888**
OCDF-a	NotFnd	**#VALUE!**	1.0002						-		3741	#VALUE!

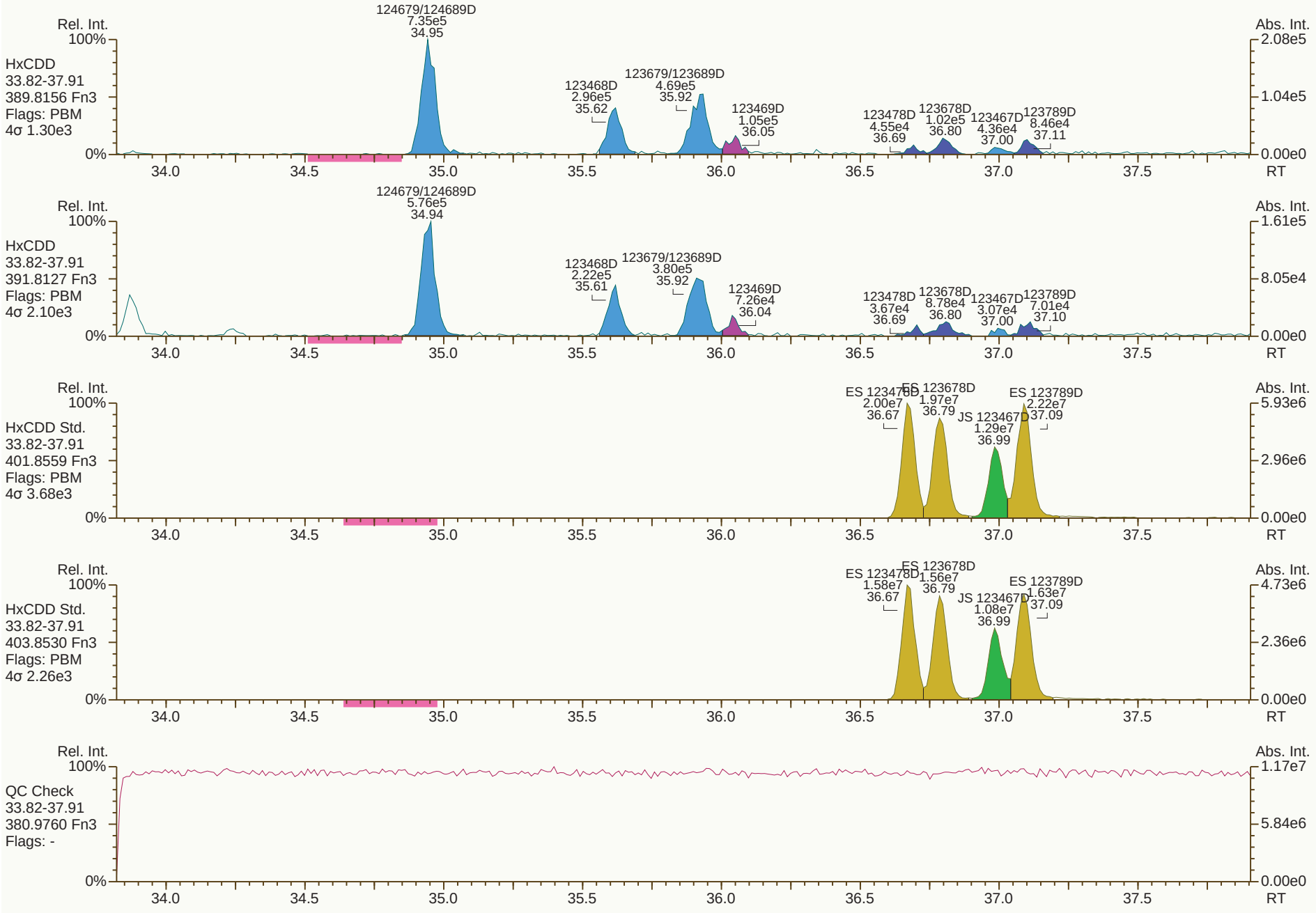
SGS ID: B4526_17662_DF_013 **Sample ID: CS-47** **Acq: 12-Aug-2020 09:12:35**
Instr: [ILM] AutoSpec-Ultima HRMS3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 28** **User: DTF Datafile: 200811C25**



Results: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\B4526_17662_DF_013.utp_res, saved 12-Aug-2020 15:18 (DTF) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 scc: 033-297 *PKD: n/a Printed: 12-Aug-2020 15:39 Page 1 of 12*


Rel. Int.
100%
TCDD
19.04-28.80
319.8965 Fn1
Flags: PBM
4σ 3.47e3
0%
1368D
2.40e5
22.91
1379D
1.58e5
23.32
1469D
1.07e5
24.67
1247D...[4]
1.41e5
24.92
Abs. Int.
5.58e4
2.79e4
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD
19.04-28.80
321.8936 Fn1
Flags: PBM
4σ 2.16e3
0%
1368D
2.96e5
22.91
1379D
2.00e5
23.32
1469D
1.53e5
24.66
1247D...[4]
1.89e5
24.92
Abs. Int.
5.57e4
2.78e4
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
37Cl-TCDD
19.04-28.80
327.8850 Fn1
Flags: PBM
4σ 1.36e3
0%
CS 37Cl-2378D
2.71e7
26.93
Abs. Int.
5.97e6
2.98e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.80
331.9368 Fn1
Flags: PBM
4σ 6.62e3
0%
JS 1234D
3.23e7
26.21
ES 2378D
2.66e7
26.90
Abs. Int.
7.11e6
3.55e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.80
333.9339 Fn1
Flags: PBM
4σ 3.08e3
0%
JS 1234D
3.99e7
26.20
ES 2378D
3.32e7
26.91
Abs. Int.
8.87e6
4.43e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT


SGS ID: B4526_17662_DF_013
Sample ID: CS-47
Acq: 12-Aug-2020 09:12:35
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 28
User: DTF Datafile: 200811C25
PeCDD
28.82-33.81
355.8546 Fn2
Flags: PBM
4σ 2.64e3
12479/12468D
3.53e5
30.01
12469D
1.23e5
30.57
12368D
1.34e5
31.16
12379D
9.96e4
31.47
12369D...[3]
8.42e4
31.75
12346/12347D
1.29e5
32.13
12378D
4.33e4
32.64
PeCDD
28.82-33.81
357.8517 Fn2
Flags: PBM
4σ 2.34e3
12479/12468D
2.32e5
30.01
12469D
6.22e4
30.58
12368D
8.06e4
31.16
12379D
4.68e4
31.47
12478D
4.95e4
31.36
12369D...[3]
5.95e4
31.74
12346/12347D
6.91e4
32.13
12378D
2.99e4
32.62
PeCDD Std.
28.82-33.81
367.8949 Fn2
Flags: PBM
4σ 3.19e3
CS 12347D
3.07e7
32.10
ES 12378D
2.97e7
32.62
PeCDD Std.
28.82-33.81
369.8919 Fn2
Flags: PBM
4σ 1.72e3
CS 12347D
1.95e7
32.10
ES 12378D
1.91e7
32.62
QC Check
28.82-33.81
366.9792 Fn2
Flags: -
Rel. Int.
Abs. Int.
RT
29.0
30.0
31.0
32.0
33.0
Results: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\B4526_17662_DF_013.utp_res, saved 12-Aug-2020 15:18 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 2245, 3806 scc: 033-297
Revised: 12-Aug-2020 15:09 (DTF) Printed: 12-Aug-2020 15:39 Page 3 of 12


Rel. Int.
100%
HxCDD
33.82-37.91
389.8156 Fn3
Flags: PBM
4σ 1.30e3
124679/124689D
7.35e5
34.95
123468D
2.96e5
35.62
123679/123689D
4.69e5
35.92
123469D
1.05e5
36.05
123478D
4.55e4
36.69
123678D
1.02e5
36.80
123467D
4.36e4
37.00
123789D
8.46e4
37.11
Abs. Int.
2.08e5
1.04e5
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD
33.82-37.91
391.8127 Fn3
Flags: PBM
4σ 2.10e3
124679/124689D
5.76e5
34.94
123468D
2.22e5
35.61
123679/123689D
3.80e5
35.92
123469D
7.26e4
36.04
123478D
3.67e4
36.69
123678D
8.78e4
36.80
123467D
3.07e4
37.00
123789D
7.01e4
37.10
Abs. Int.
1.61e5
8.05e4
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.82-37.91
401.8559 Fn3
Flags: PBM
4σ 3.68e3
ES 123478D
2.00e7
36.67
ES 123678D
1.97e7
36.79
JS 123467D
1.29e7
36.99
ES 123789D
2.22e7
37.09
Abs. Int.
5.93e6
2.96e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.82-37.91
403.8530 Fn3
Flags: PBM
4σ 2.26e3
ES 123478D
1.58e7
36.67
ES 123678D
1.56e7
36.79
JS 123467D
1.08e7
36.99
ES 123789D
1.63e7
37.09
Abs. Int.
4.73e6
2.36e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
QC Check
33.82-37.91
380.9760 Fn3
Flags: -
Abs. Int.
1.17e7
5.84e6
0.00e0
0%
34.0
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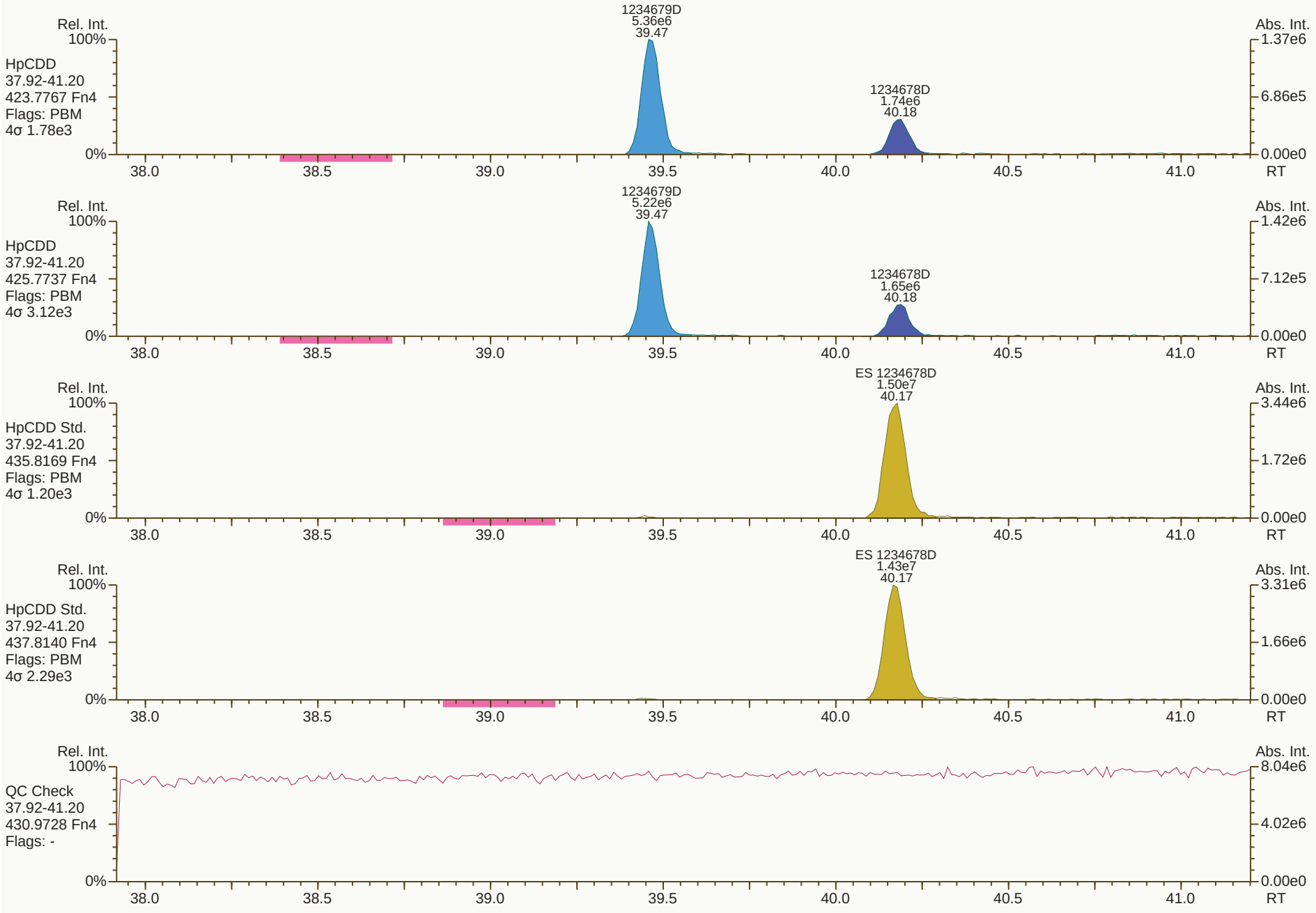
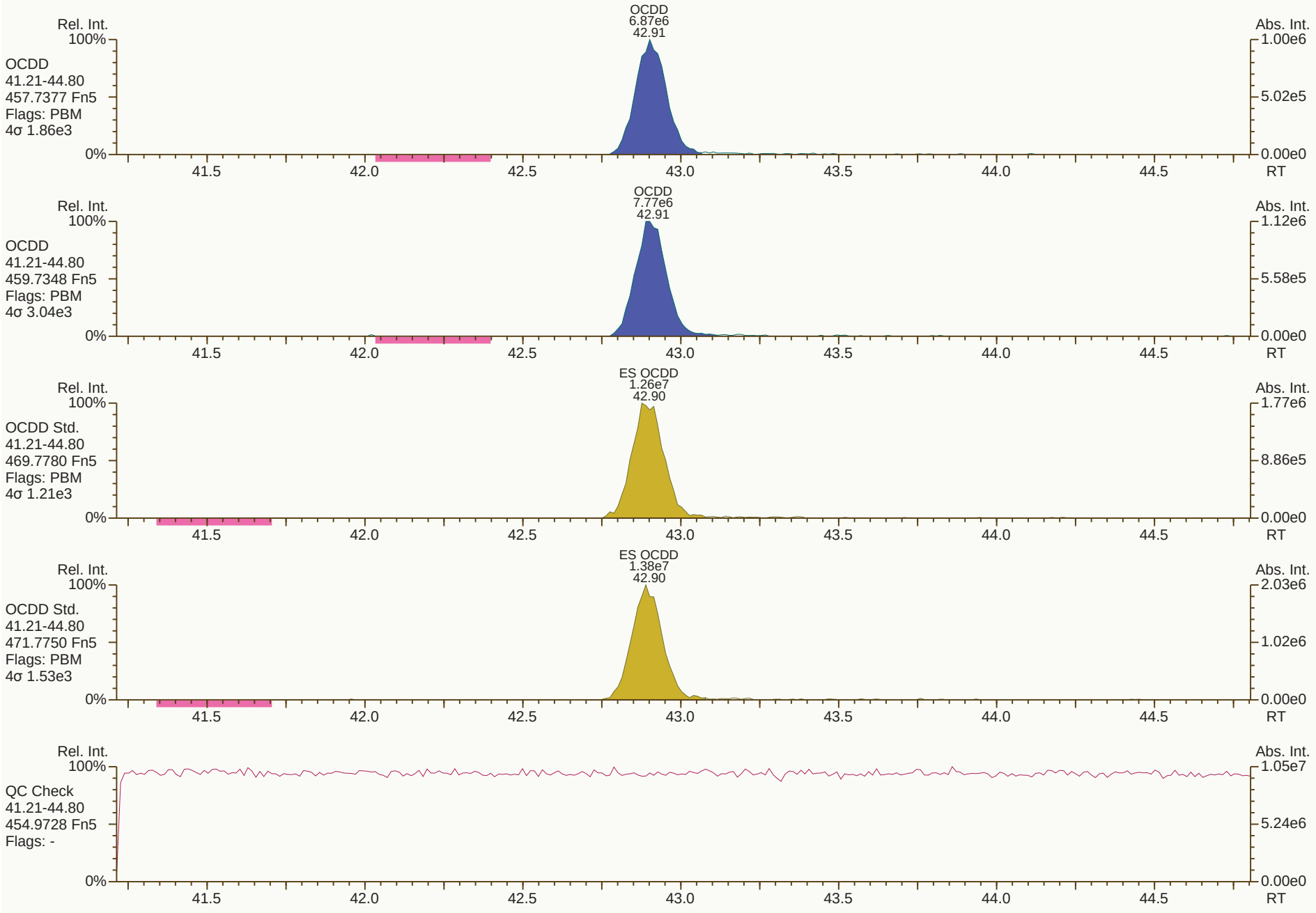
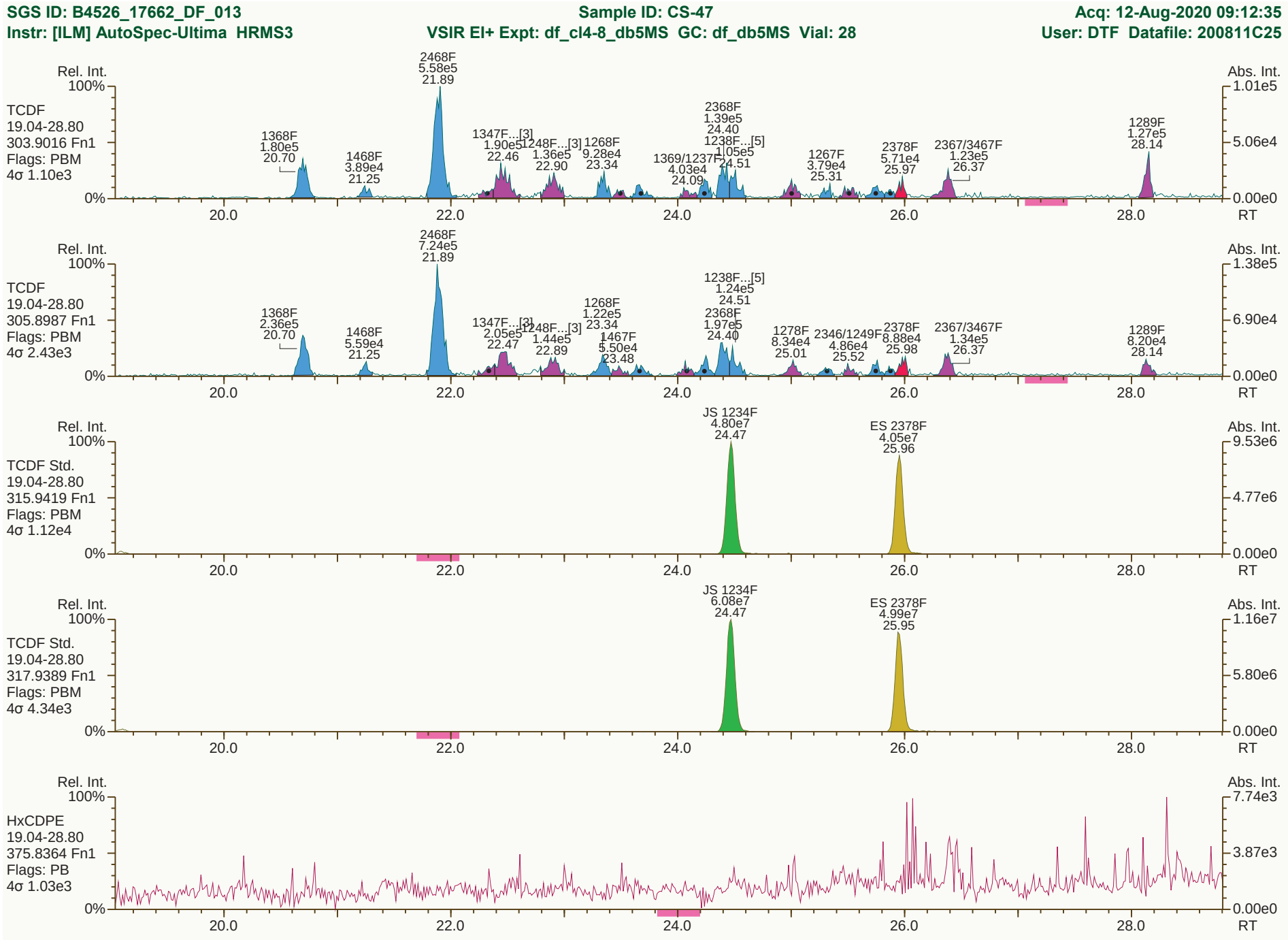
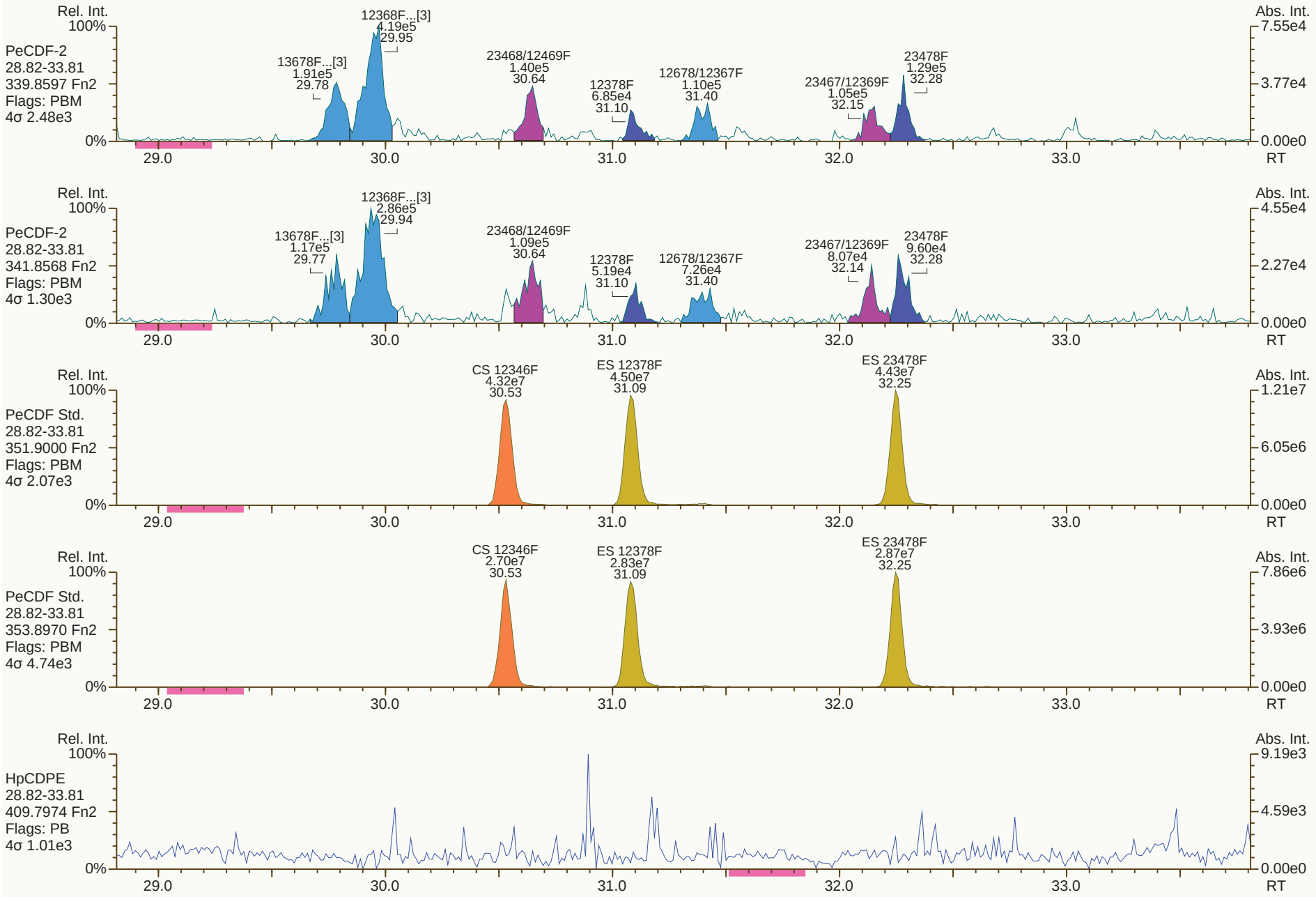
35.0
35.5
36.0
36.5
37.0
37.5
RT

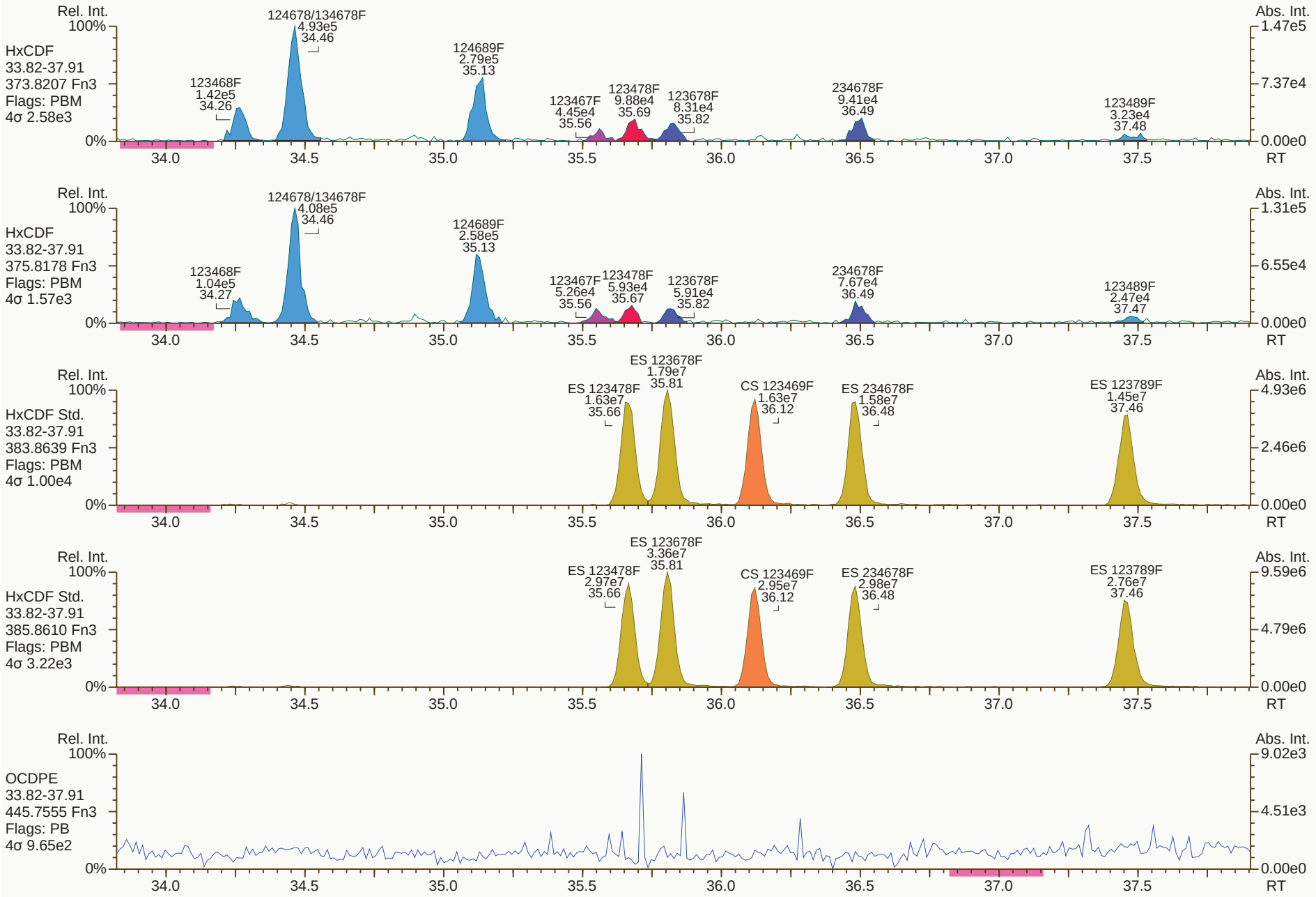

Rel. Int.
100%
HpCDD
37.92-41.20
423.7767 Fn4
Flags: PBM
4σ 1.78e3
1234679D
5.36e6
39.47
1234678D
1.74e6
40.18
Abs. Int.
1.37e6
6.86e5
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD
37.92-41.20
425.7737 Fn4
Flags: PBM
4σ 3.12e3
1234679D
5.22e6
39.47
1234678D
1.65e6
40.18
Abs. Int.
1.42e6
7.12e5
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.92-41.20
435.8169 Fn4
Flags: PBM
4σ 1.20e3
ES 1234678D
1.50e7
40.17
Abs. Int.
3.44e6
1.72e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.92-41.20
437.8140 Fn4
Flags: PBM
4σ 2.29e3
ES 1234678D
1.43e7
40.17
Abs. Int.
3.31e6
1.66e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
QC Check
37.92-41.20
430.9728 Fn4
Flags: -
Abs. Int.
8.04e6
4.02e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT


OCDD
6.87e6
42.91
Rel. Int.
100%
OCDD
41.21-44.80
457.7377 Fn5
Flags: PBM
4σ 1.86e3
0%
Abs. Int.
1.00e6
5.02e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
OCDD
7.77e6
42.91
Rel. Int.
100%
OCDD
41.21-44.80
459.7348 Fn5
Flags: PBM
4σ 3.04e3
0%
Abs. Int.
1.12e6
5.58e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDD
1.26e7
42.90
Rel. Int.
100%
OCDD Std.
41.21-44.80
469.7780 Fn5
Flags: PBM
4σ 1.21e3
0%
Abs. Int.
1.77e6
8.86e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDD
1.38e7
42.90
Rel. Int.
100%
OCDD Std.
41.21-44.80
471.7750 Fn5
Flags: PBM
4σ 1.53e3
0%
Abs. Int.
2.03e6
1.02e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
QC Check
41.21-44.80
454.9728 Fn5
Flags: -
0%
Abs. Int.
1.05e7
5.24e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT


SGS ID: B4526_17662_DF_013
Sample ID: CS-47
Acq: 12-Aug-2020 09:12:35
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 28
User: DTF Datafile: 200811C25
TCDF
19.04-28.80
303.9016 Fn1
Flags: PBM
4σ 1.10e3
1368F 1.80e5 20.70
1468F 3.89e4 21.25
2468F 5.58e5 21.89
1347F...[3] 1.90e5 22.46
1248F...[3] 1.36e5 22.90
1268F 9.28e4 23.34
1369/1237F 4.03e4 24.09
2368F 1.39e5 24.40
1238F...[5] 1.05e5 24.51
1267F 3.79e4 25.31
2378F 5.71e4 25.97
2367/3467F 1.23e5 26.37
1289F 1.27e5 28.14
TCDF
19.04-28.80
305.8987 Fn1
Flags: PBM
4σ 2.43e3
1368F 2.36e5 20.70
1468F 5.59e4 21.25
2468F 7.24e5 21.89
1347F...[3] 2.05e5 22.47
1248F...[3] 1.44e5 22.89
1268F 1.22e5 23.34
1467F 5.50e4 23.48
1238F...[5] 1.24e5 24.51
2368F 1.97e5 24.40
1278F 8.34e4 25.01
2346/1249F 4.86e4 25.52
2378F 8.88e4 25.98
2367/3467F 1.34e5 26.37
1289F 8.20e4 28.14
TCDF Std.
19.04-28.80
315.9419 Fn1
Flags: PBM
4σ 1.12e4
JS 1234F 4.80e7 24.47
ES 2378F 4.05e7 25.96
TCDF Std.
19.04-28.80
317.9389 Fn1
Flags: PBM
4σ 4.34e3
JS 1234F 6.08e7 24.47
ES 2378F 4.99e7 25.95
HxCDPE
19.04-28.80
375.8364 Fn1
Flags: PB
4σ 1.03e3
Rel. Int.
Abs. Int.
RT
20.0
22.0
24.0
26.0
28.0
Results: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\B4526_17662_DF_013.utp_res, saved 12-Aug-2020 15:18 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 5438, 2988, 6397 scc: 033-297
Revised: 12-Aug-2020 15:13 (DTF) Printed: 12-Aug-2020 15:39 Page 7 of 12

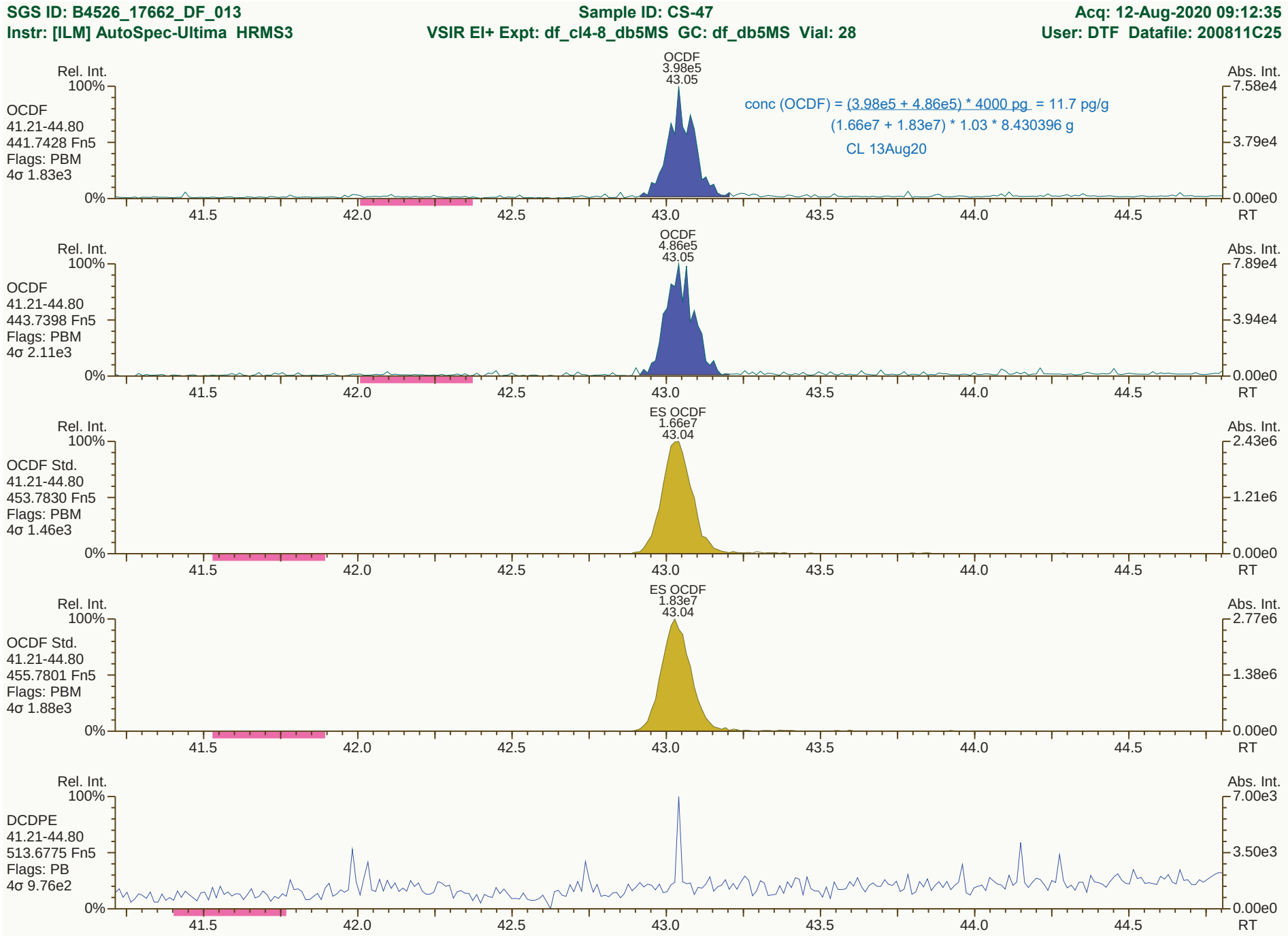

13468/12468F
4.62e5
28.16
Rel. Int.
100%
Abs. Int.
1.07e5
PeCDF-1
19.04-28.80
339.8597 Fn1
Flags: PBM
4σ 1.43e3
5.37e4
0%
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
13468/12468F
3.46e5
28.15
Rel. Int.
100%
Abs. Int.
7.35e4
PeCDF-1
19.04-28.80
341.8568 Fn1
Flags: PBM
4σ 1.56e3
3.67e4
0%
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
Abs. Int.
6.50e6
QC Check
19.04-28.80
316.9824 Fn1
Flags: -
3.25e6
0%
0.00e0
20.0
22.0
24.0
26.0
28.0
RT


Rel. Int.
100%
PeCDF-2
28.82-33.81
339.8597 Fn2
Flags: PBM
4σ 2.48e3
0%
13678F...[3]
1.91e5
29.78
12368F...[3]
4.19e5
29.95
23468/12469F
1.40e5
30.64
12378F
6.85e4
31.10
12678/12367F
1.10e5
31.40
23467/12369F
1.05e5
32.15
23478F
1.29e5
32.28
Abs. Int.
7.55e4
3.77e4
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF-2
28.82-33.81
341.8568 Fn2
Flags: PBM
4σ 1.30e3
0%
13678F...[3]
1.17e5
29.77
12368F...[3]
2.86e5
29.94
23468/12469F
1.09e5
30.64
12378F
5.19e4
31.10
12678/12367F
7.26e4
31.40
23467/12369F
8.07e4
32.14
23478F
9.60e4
32.28
Abs. Int.
4.55e4
2.27e4
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.82-33.81
351.9000 Fn2
Flags: PBM
4σ 2.07e3
0%
CS 12346F
4.32e7
30.53
ES 12378F
4.50e7
31.09
ES 23478F
4.43e7
32.25
Abs. Int.
1.21e7
6.05e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.82-33.81
353.8970 Fn2
Flags: PBM
4σ 4.74e3
0%
CS 12346F
2.70e7
30.53
ES 12378F
2.83e7
31.09
ES 23478F
2.87e7
32.25
Abs. Int.
7.86e6
3.93e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
HpCDPE
28.82-33.81
409.7974 Fn2
Flags: PB
4σ 1.01e3
0%
Abs. Int.
9.19e3
4.59e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT


Rel. Int.
100%
HxCDF
33.82-37.91
373.8207 Fn3
Flags: PBM
4σ 2.58e3
123468F 1.42e5 34.26
124678/134678F 4.93e5 34.46
124689F 2.79e5 35.13
123467F 4.45e4 35.56
123478F 9.88e4 35.69
123678F 8.31e4 35.82
234678F 9.41e4 36.49
123489F 3.23e4 37.48
Abs. Int.
1.47e5
7.37e4
0.00e0
0%
34.0 34.5 35.0 35.5 36.0 36.5 37.0 37.5
RT
HxCDF
33.82-37.91
375.8178 Fn3
Flags: PBM
4σ 1.57e3
123468F 1.04e5 34.27
124678/134678F 4.08e5 34.46
124689F 2.58e5 35.13
123467F 5.26e4 35.56
123478F 5.93e4 35.67
123678F 5.91e4 35.82
234678F 7.67e4 36.49
123489F 2.47e4 37.47
1.31e5
6.55e4
HxCDF Std.
33.82-37.91
383.8639 Fn3
Flags: PBM
4σ 1.00e4
ES 123478F 1.63e7 35.66
ES 123678F 1.79e7 35.81
CS 123469F 1.63e7 36.12
ES 234678F 1.58e7 36.48
ES 123789F 1.45e7 37.46
4.93e6
2.46e6
HxCDF Std.
33.82-37.91
385.8610 Fn3
Flags: PBM
4σ 3.22e3
ES 123478F 2.97e7 35.66
ES 123678F 3.36e7 35.81
CS 123469F 2.95e7 36.12
ES 234678F 2.98e7 36.48
ES 123789F 2.76e7 37.46
9.59e6
4.79e6
OCDPE
33.82-37.91
445.7555 Fn3
Flags: PB
4σ 9.65e2
9.02e3
4.51e3


Rel. Int.
100%
HpCDF
37.92-41.20
407.7818 Fn4
Flags: PBM
4σ 1.93e3
1234678F
7.95e5
39.16
1234689F
6.42e5
39.60
Abs. Int.
2.23e5
1.11e5
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF
37.92-41.20
409.7788 Fn4
Flags: PBM
4σ 1.32e3
1234678F
7.87e5
39.16
1234689F
6.39e5
39.60
Abs. Int.
2.06e5
1.03e5
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.92-41.20
417.8253 Fn4
Flags: PBM
4σ 3.07e3
ES 1234678F
1.02e7
39.14
CS 1234689F
1.08e7
39.59
ES 1234789F
8.47e6
40.60
Abs. Int.
2.97e6
1.48e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.92-41.20
419.8220 Fn4
Flags: PBM
4σ 3.93e3
ES 1234678F
2.29e7
39.14
CS 1234689F
2.28e7
39.59
ES 1234789F
1.75e7
40.60
Abs. Int.
6.42e6
3.21e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
NCDPE
37.92-41.20
479.7165 Fn4
Flags: PB
4σ 1.11e3
Abs. Int.
1.79e4
8.93e3
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT

SGS ID: B4526_17662_DF_013 Sample ID: CS-47 Acq: 12-Aug-2020 09:12:35
Instr: [ILM] AutoSpec-Ultima HRMS3 VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 28 User: DTF Datafile: 200811C25



Instrument: HRMS3 (AutoSpec-Ultima) MS Experiment: df_cl4-8_db5MS GC Program: df_db5MS

#	Datafile	Vial#	Lab ID	Wt/Vol	Client/Sample ID	Analyst(s)	Checkcode	Acq Date	Acq Time
1	200811C01	3	CS3_200811_DF_CA	1.00	20-449-3	DTF	192-644	11-Aug-2020	14:07:14
3	200811C03	13	OPR1_17662_DF	1.00	0_17662_OPR001	DTF	588-924	11-Aug-2020	16:01:53
4	200811C04	2	SBS_200811_DF_CA	1.00	20-61-1	DTF	763-428	11-Aug-2020	16:47:59
5	200811C05	12	MB1_17662_DF_SDS	10.00	Method Blank	DTF	538-153	11-Aug-2020	17:34:32
6	200811C06	14	B4526_17662_DF_001	9.61	CS-29	DTF	961-528	11-Aug-2020	18:21:06
7	200811C07	15	B4526_17662_DF_002	9.57	CS-30	DTF	142-051	11-Aug-2020	19:07:39
8	200811C08	16	B4526_17662_DF_003	9.31	CS-31	DTF	967-394	11-Aug-2020	19:54:13
9	200811C09	17	B4526_17662_DF_004	9.59	DUP-01	DTF	789-289	11-Aug-2020	20:40:40
10	200811C10	18	B4526_17662_DF_005	9.37	CS-40	DTF	675-832	11-Aug-2020	21:27:12
12	200811C12	2	SBS_200811_DF_CB	1.00	20-61-1	DTF	635-275	11-Aug-2020	23:00:18
13	200811C13	3	CS3_200811_DF_CB	1.00	20-449-3 CL 13Aug20	DTF	691-754	11-Aug-2020	23:46:51
14	200811C14	13	OPR1_17662_DF-RJ	1.00	0_17662_OPR001 CPSM only	DTF	590-786	12-Aug-2020	00:41:26
15	200811C15	2	SBS_200811_DF_CC	1.00	20-61-1	DTF	428-898	12-Aug-2020	01:27:28
16	200811C16	19	B4526_17662_DF_006	9.19	CS-41	DTF	379-455	12-Aug-2020	02:13:58
17	200811C17	20	B4526_17662_DF_006MS	9.01	CS-41-MS	DTF	194-587	12-Aug-2020	03:00:28
18	200811C18	21	B4526_17662_DF_006MSD	9.18	CS-41-MSD	DTF	184-857	12-Aug-2020	03:46:59
19	200811C19	22	B4526_17662_DF_007	8.60	CS-42	DTF	726-292	12-Aug-2020	04:33:31
20	200811C20	23	B4526_17662_DF_008	9.26	CS-43	DTF	877-121	12-Aug-2020	05:20:01
21	200811C21	24	B4526_17662_DF_009	9.27	CS-44	DTF	738-667	12-Aug-2020	06:06:32
22	200811C22	25	B4526_17662_DF_010	9.18	CS-45	DTF	659-912	12-Aug-2020	06:53:04
23	200811C23	26	B4526_17662_DF_011	9.11	CS-54	DTF	657-818	12-Aug-2020	07:39:34
24	200811C24	27	B4526_17662_DF_012	8.86	CS-46	DTF	313-403	12-Aug-2020	08:26:04
25	200811C25	28	B4526_17662_DF_013	8.43	CS-47	DTF	033-297	12-Aug-2020	09:12:35
26	200811C26	2	SBS_200811_DF_CD	1.00	20-61-1	DTF	057-830	12-Aug-2020	09:59:05
27	200811C27	3	CS3_200811_DF_CC	1.00	20-449-3	DTF	593-054	12-Aug-2020	10:45:34

APPROVED
Carla_Lyon , 09:55:22, 08/13/2020

REVIEWED
By Tyler_Fritz at 3:54 pm, Aug 12, 2020

Project file: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\B4526_17662_DF.utp_prj, saved 12-Aug-2020 15:50
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689

Printed: 12-Aug-2020 15:51

Dioxin/Furan QC Summary		Acq'd: 11 Aug 2020 14:07 DTF				ICAL: HRMS3_DF_10122018_28AUG2019	
Lab ID: CS3_200811_DF_CA		UTP: 12-Aug-2020 15:18:27 DTF				Checkcode: 192-644-JLB	
Sample ID: 20-449-3		Report: 12 Aug 2020 15:19 TF				Datafile: 200811C01	
Name	**RT**	**Response**	**RA**	**OK**	**Ref. RRFs**	**Calc. RRFs**	**Dev'n**
2378-TCDD	26.92	5.09E+06	0.81	Y	1.19	1.23	4%
12378-PeCDD	32.62	1.81E+07	1.55	Y	0.98	1.05	7%
123478-HxCDD	36.67	1.70E+07	1.22	Y	1.02	1.09	7%
123678-HxCDD	36.79	1.80E+07	1.27	Y	1.09	1.18	9%
123789-HxCDD	37.09	1.79E+07	1.25	Y	0.97	1.06	9%
1234678-HpCDD	40.16	1.43E+07	1.05	Y	0.98	1.04	7%
OCDD	42.85	1.94E+07	0.89	Y	1.07	1.14	6%
2378-TCDF	25.96	7.69E+06	0.79	Y	1.01	1.15	14%
12378-PeCDF	31.09	2.96E+07	1.53	Y	0.96	1.02	6%
23478-PeCDF	32.25	2.75E+07	1.51	Y	0.99	1.01	2%
123478-HxCDF	35.66	2.58E+07	1.22	Y	1.21	1.28	6%
123678-HxCDF	35.81	2.70E+07	1.22	Y	1.11	1.16	5%
234678-HxCDF	36.49	2.51E+07	1.22	Y	1.12	1.16	4%
123789-HxCDF	37.46	2.11E+07	1.20	Y	1.11	1.16	5%
1234678-HpCDF	39.14	2.23E+07	1.00	Y	1.32	1.32	0%
1234789-HpCDF	40.59	1.62E+07	1.00	Y	1.26	1.32	5%
OCDF	43.00	2.30E+07	0.90	Y	1.03	1.08	4%
ES 2378-TCDD	26.89	4.13E+07	0.82	Y	0.99	0.95	-4%
ES 12378-PeCDD	32.6	3.46E+07	1.59	Y	0.83	0.80	-4%
ES 123478-HxCDD	36.66	3.12E+07	1.23	Y	0.95	0.96	1%
ES 123678-HxCDD	36.77	3.05E+07	1.26	Y	0.98	0.94	-4%
ES 123789-HxCDD	37.08	3.39E+07	1.19	Y	1.14	1.04	-8%
ES 1234678-HpCDD	40.15	2.75E+07	1.04	Y	0.90	0.85	-6%
ES OCDD	42.84	3.41E+07	0.92	Y	0.63	0.52	-16%
ES 2378-TCDF	25.94	6.68E+07	0.82	Y	1.00	0.90	-9%
ES 12378-PeCDF	31.07	5.81E+07	1.57	Y	0.83	0.79	-5%
ES 23478-PeCDF	32.24	5.47E+07	1.56	Y	0.81	0.74	-8%
ES 123478-HxCDF	35.65	4.02E+07	0.54	Y	1.12	1.24	10%
ES 123678-HxCDF	35.79	4.65E+07	0.55	Y	1.33	1.43	7%
ES 234678-HxCDF	36.47	4.33E+07	0.54	Y	1.21	1.33	10%
ES 123789-HxCDF	37.44	3.63E+07	0.54	Y	1.12	1.12	0%
ES 1234678-HpCDF	39.13	3.38E+07	0.46	Y	0.92	1.04	12%
ES 1234789-HpCDF	40.57	2.46E+07	0.48	Y	0.82	0.76	-8%
ES OCDF	42.98	4.27E+07	0.90	Y	0.78	0.66	-16%

Dioxin/Furan QC Summary	Acq'd: 11 Aug 2020 14:07 DTF	ICAL: HRMS3_DF_10122018_28AUG2019
Lab ID: CS3_200811_DF_CA	UTP: 12-Aug-2020 15:18:27 DTF	Checkcode: 192-644-JLB
Sample ID: 20-449-3	Report: 12 Aug 2020 15:19 TF	Datafile: 200811C01

Name	RT	Response	RA	OK	Ref. RRFs	Calc. RRFs	Dev'n
JS 1234-TCDD	26.19	4.33E+07	0.81	Y	-	-	-
JS 1234-TCDF	24.45	7.39E+07	0.81	Y	-	-	-
JS 123467-HxCDD	36.97	1.63E+07	1.21	Y	-	-	-
CS 37Cl-2378-TCDD	26.92	5.01E+06	n/a	-	1.12	1.16	3%
CS 12347-PeCDD	32.08	3.16E+07	1.57	Y	0.71	0.73	2%
CS 12346-PeCDF	30.52	6.02E+07	1.55	Y	0.81	0.81	1%
CS 123469-HxCDF	36.10	4.25E+07	0.55	Y	1.12	1.31	16%
CS 1234689-HpCDF	39.57	3.11E+07	0.46	Y	0.90	0.96	7%
~~SS 37Cl-2378-TCDD~~	~~26.92~~	~~5.01E+06~~	~~n/a~~	~~-~~	~~1.14~~	~~1.22~~	~~6%~~
~~SS 12347-PeCDD~~	~~32.08~~	~~3.16E+07~~	~~1.57~~	~~Y~~	~~0.86~~	~~0.91~~	~~6%~~
~~SS 12346-PeCDF~~	~~30.52~~	~~6.02E+07~~	~~1.55~~	~~Y~~	~~0.98~~	~~1.04~~	~~6%~~
~~SS 123469-HxCDF~~	~~36.10~~	~~4.25E+07~~	~~0.55~~	~~Y~~	~~0.85~~	~~0.91~~	~~8%~~
~~SS 1234689-HpCDF~~	~~39.57~~	~~3.11E+07~~	~~0.46~~	~~Y~~	~~0.97~~	~~0.92~~	~~-6%~~
Not used in this project.							
CL 13Aug20							
~~OCDD-a~~	~~0.00~~	~~0.00E+00~~	~~0.00~~	~~0~~		~~0.00~~	~~#VALUE!~~
~~OCDF-a~~	~~42.96~~	~~7.35E+05~~	~~2.38~~	~~Y~~		~~0.03~~	~~#VALUE!~~

METHOD 8290A **PCDD/F CALIBRATION VERIFICATION** **FORM 4A**

Lab Name: SGS North America

Initial Calibration: ICAL: HRMS3_DF_10122018_28AUG2019

Instrument ID: HRMS3 GC Column ID: ZB-5ms

VER Data Filename: 200811C01 Analysis Date: 11-AUG-2020 14:07:14

NATIVE ANALYTES	M/Z's FORMING RATIO	ION ABUND. RATIO	QC LIMITS			OK	CONC. FOUND	RANGE (ng/mL)			OK
2,3,7,8-TCDD	M/M+2	0.81	0.65	-	0.89	Y	10.4	8	-	12	Y
1,2,3,7,8-PeCDD	M+2/M+4	1.55	1.32	-	1.78	Y	53.3	40	-	60	Y
1,2,3,4,7,8-HxCDD	M+2/M+4	1.22	1.05	-	1.43	Y	53.4	40	-	60	Y
1,2,3,6,7,8-HxCDD	M+2/M+4	1.27	1.05	-	1.43	Y	54.3	40	-	60	Y
1,2,3,7,8,9-HxCDD	M+2/M+4	1.25	1.05	-	1.43	Y	54.4	40	-	60	Y
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.05	0.88	-	1.20	Y	53.3	40	-	60	Y
OCDD	M+2/M+4	0.89	0.76	-	1.02	Y	106	80	-	120	Y
2,3,7,8-TCDF	M/M+2	0.79	0.65	-	0.89	Y	11.4	8	-	12	Y
1,2,3,7,8-PeCDF	M+2/M+4	1.53	1.32	-	1.78	Y	52.8	40	-	60	Y
2,3,4,7,8-PeCDF	M+2/M+4	1.51	1.32	-	1.78	Y	51	40	-	60	Y
1,2,3,4,7,8-HxCDF	M+2/M+4	1.22	1.05	-	1.43	Y	53.1	40	-	60	Y
1,2,3,6,7,8-HxCDF	M+2/M+4	1.22	1.05	-	1.43	Y	52.6	40	-	60	Y
2,3,4,6,7,8-HxCDF	M+2/M+4	1.22	1.05	-	1.43	Y	51.9	40	-	60	Y
1,2,3,7,8,9-HxCDF	M+2/M+4	1.20	1.05	-	1.43	Y	52.4	40	-	60	Y
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.00	0.88	-	1.20	Y	49.9	40	-	60	Y
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.00	0.88	-	1.20	Y	52.4	40	-	60	Y
OCDF	M+2/M+4	0.90	0.76	-	1.02	Y	104	80	-	120	Y

Processed: 12 Aug 2020 15:20 Analyst: TF

METHOD 8290A **PCDD/F CALIBRATION VERIFICATION** **FORM 4B**

Lab Name: SGS North America

Initial Calibration: ICAL: HRMS3_DF_10122018_28AUG2019

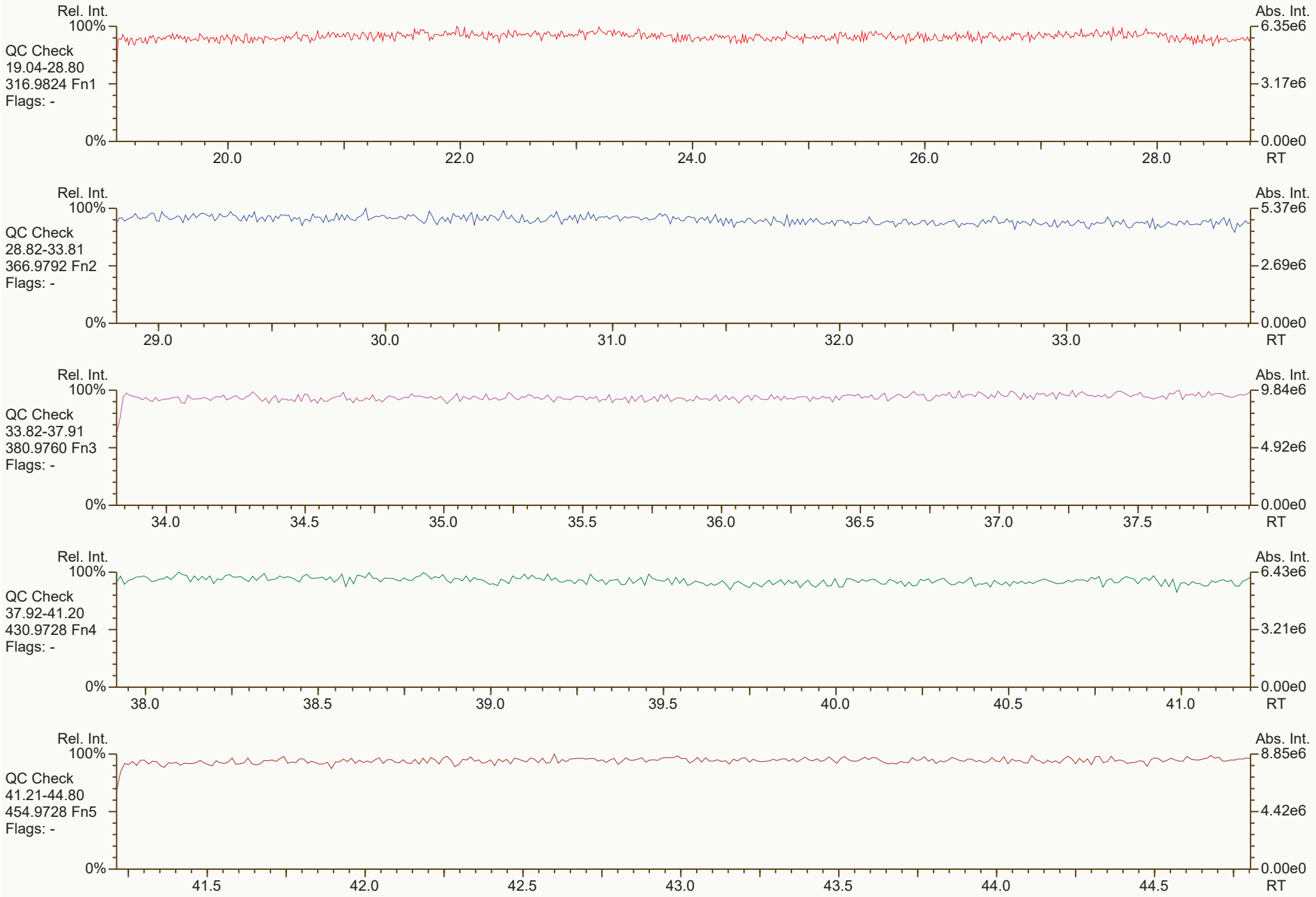
Instrument ID: HRMS3 GC Column ID: ZB-5ms

VER Data Filename: 200811C01 Analysis Date: 11-AUG-2020 14:07:14

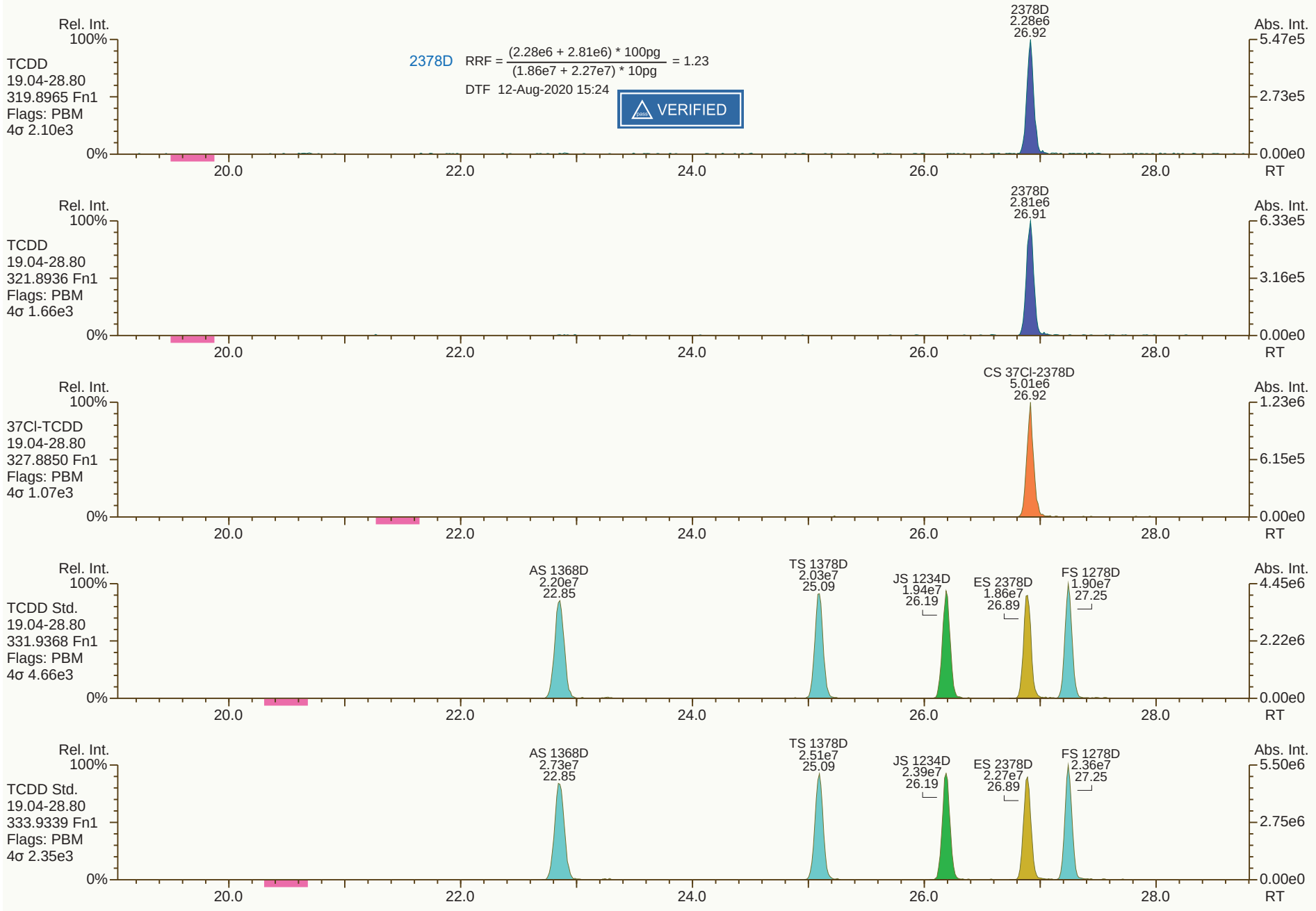
LABELED ANALYTES	M/Z's FORMING RATIO	ION ABUND. RATIO	QC LIMITS			OK	CONC. FOUND	RANGE (ng/mL)			OK
13C-2,3,7,8-TCDD	M/M+2	0.82	0.65	-	0.89	Y	96.4	70	-	130	Y
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.59	1.32	-	1.78	Y	96.3	70	-	130	Y
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.23	1.05	-	1.43	Y	101	70	-	130	Y
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.26	1.05	-	1.43	Y	96	70	-	130	Y
13C-1,2,3,7,8,9-HxCDD	M+2/M+4	1.19	1.05	-	1.43	Y	91.8	70	-	130	Y
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	0.88	-	1.20	Y	94.3	70	-	130	Y
13C-OCDD	M+2/M+4	0.92	0.76	-	1.02	Y	167	140	-	260	Y
13C-2,3,7,8-TCDF	M/M+2	0.82	0.65	-	0.89	Y	90.8	70	-	130	Y
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.57	1.32	-	1.78	Y	94.5	70	-	130	Y
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.56	1.32	-	1.78	Y	91.8	70	-	130	Y
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.54	0.43	-	0.59	Y	110	70	-	130	Y
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.55	0.43	-	0.59	Y	107	70	-	130	Y
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.54	0.43	-	0.59	Y	110	70	-	130	Y
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.54	0.43	-	0.59	Y	99.8	70	-	130	Y
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.46	0.37	-	0.51	Y	112	70	-	130	Y
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.48	0.37	-	0.51	Y	92.4	70	-	130	Y
13C-OCDF	M+2/M+4	0.90	0.76	-	1.02	Y	168	140	-	260	Y
CLEANUP STANDARDS											
37Cl-2,3,7,8-TCDD	n/a						10.3	7.9	-	12.7	Y
13C-1,2,3,4,7-PeCDD	M+2/M+4	1.57	1.32	-	1.78	Y	102	70	-	130	Y
13C-1,2,3,4,6-PeCDF	M+2/M+4	1.55	1.32	-	1.78	Y	101	70	-	130	Y
13C-1,2,3,4,6,9-HxCDF	M/M+2	0.55	0.43	-	0.59	Y	116	70	-	130	Y
13C-1,2,3,4,6,8,9-HpCDF	M/M+2	0.46	0.37	-	0.51	Y	107	70	-	130	Y

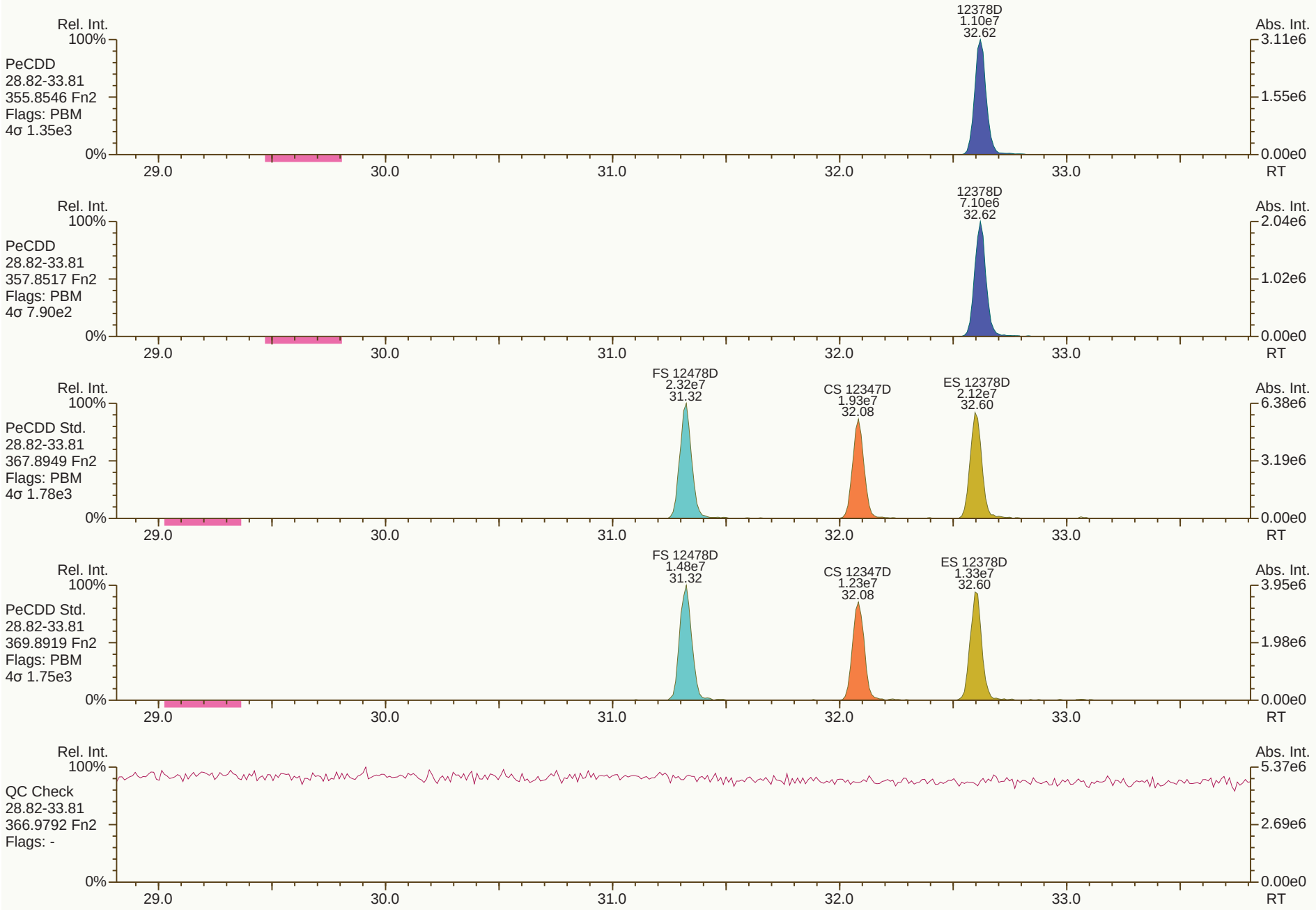
Processed: 12 Aug 2020 15:20 Analyst: TF

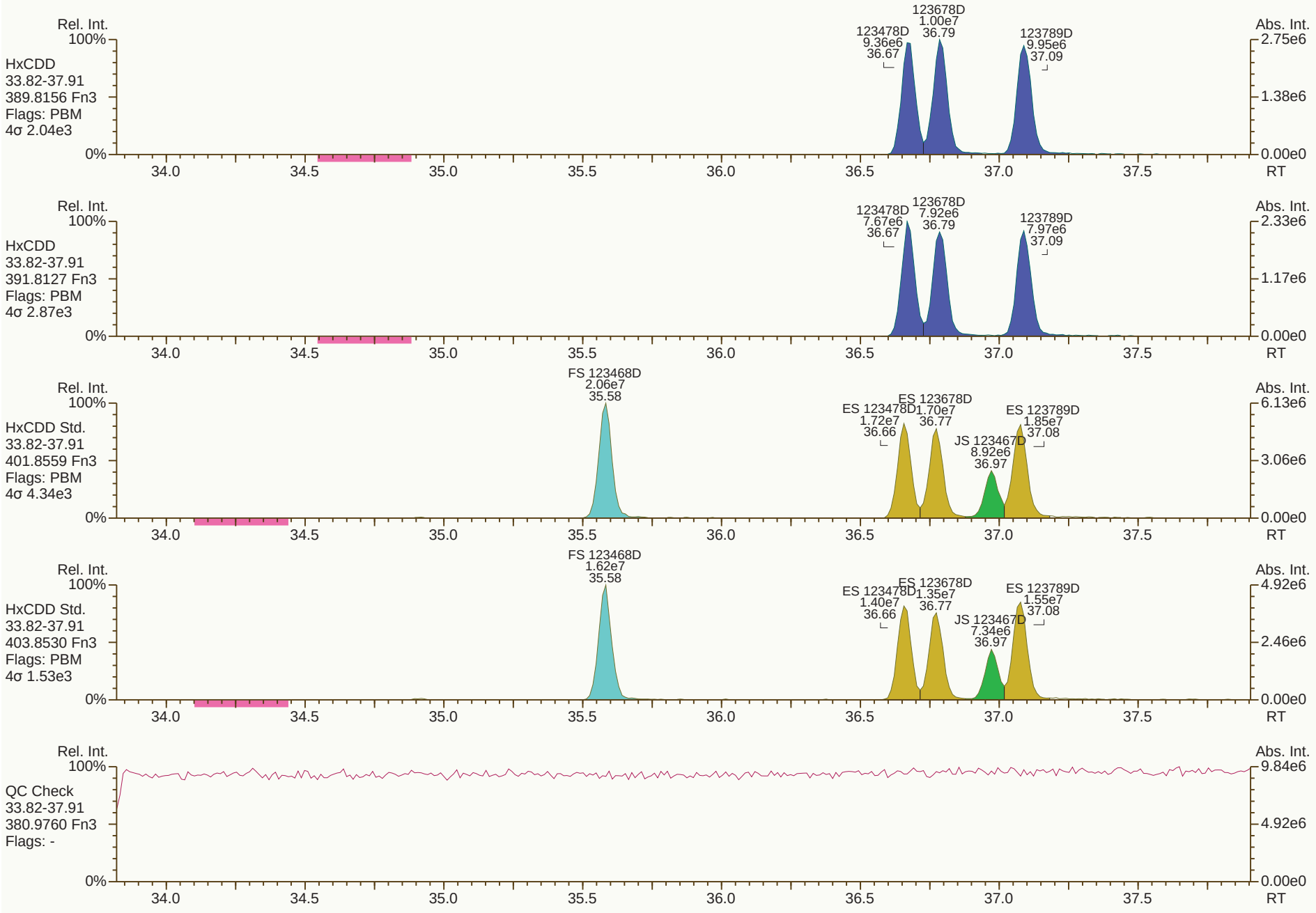
SGS ID: CS3_200811_DF_CA **Sample ID: 20-449-3** **Acq: 11-Aug-2020 14:07:14**
Instr: [ILM] AutoSpec-Ultima HRMS3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 3** **User: DTF Datafile: 200811C01**

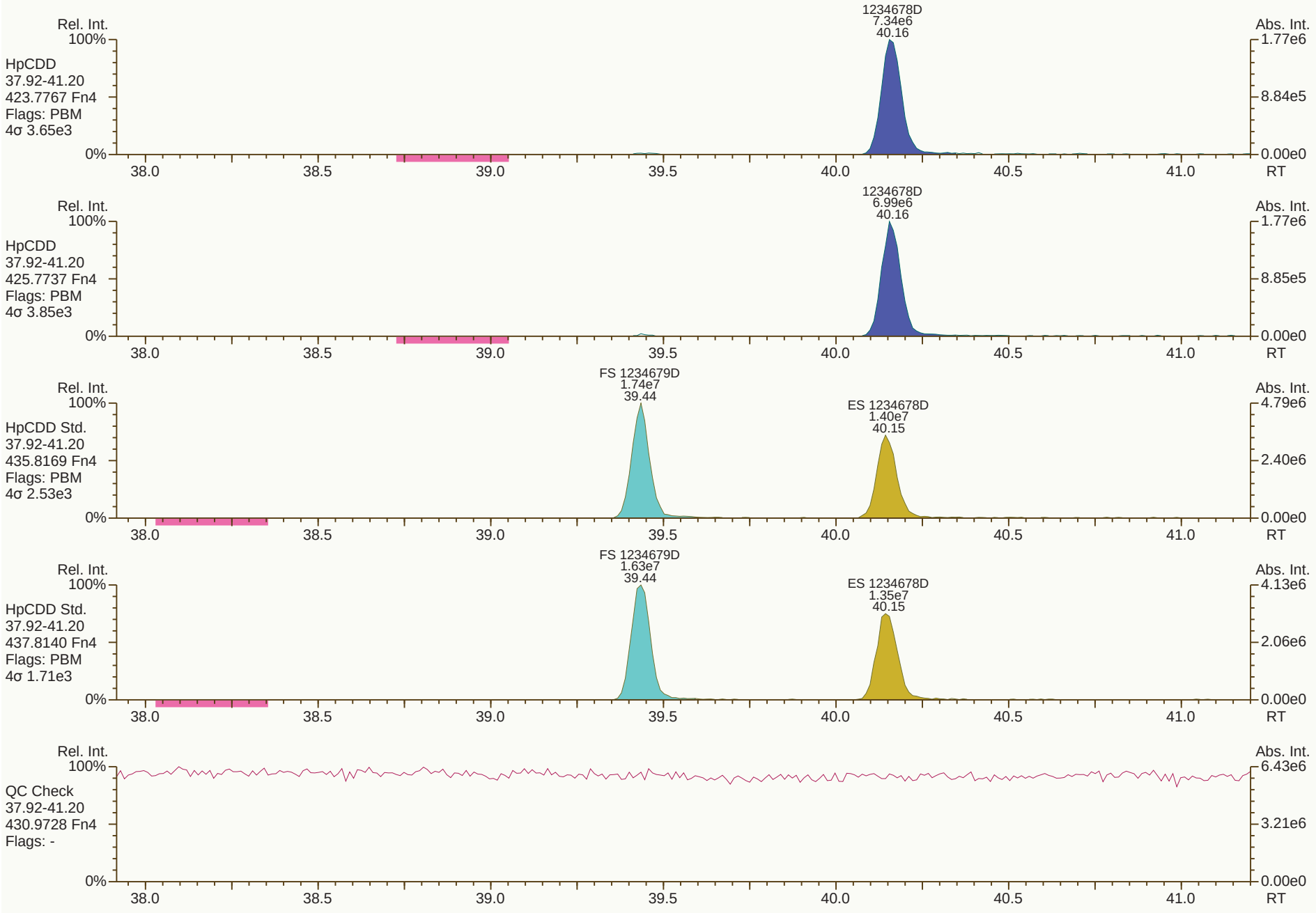


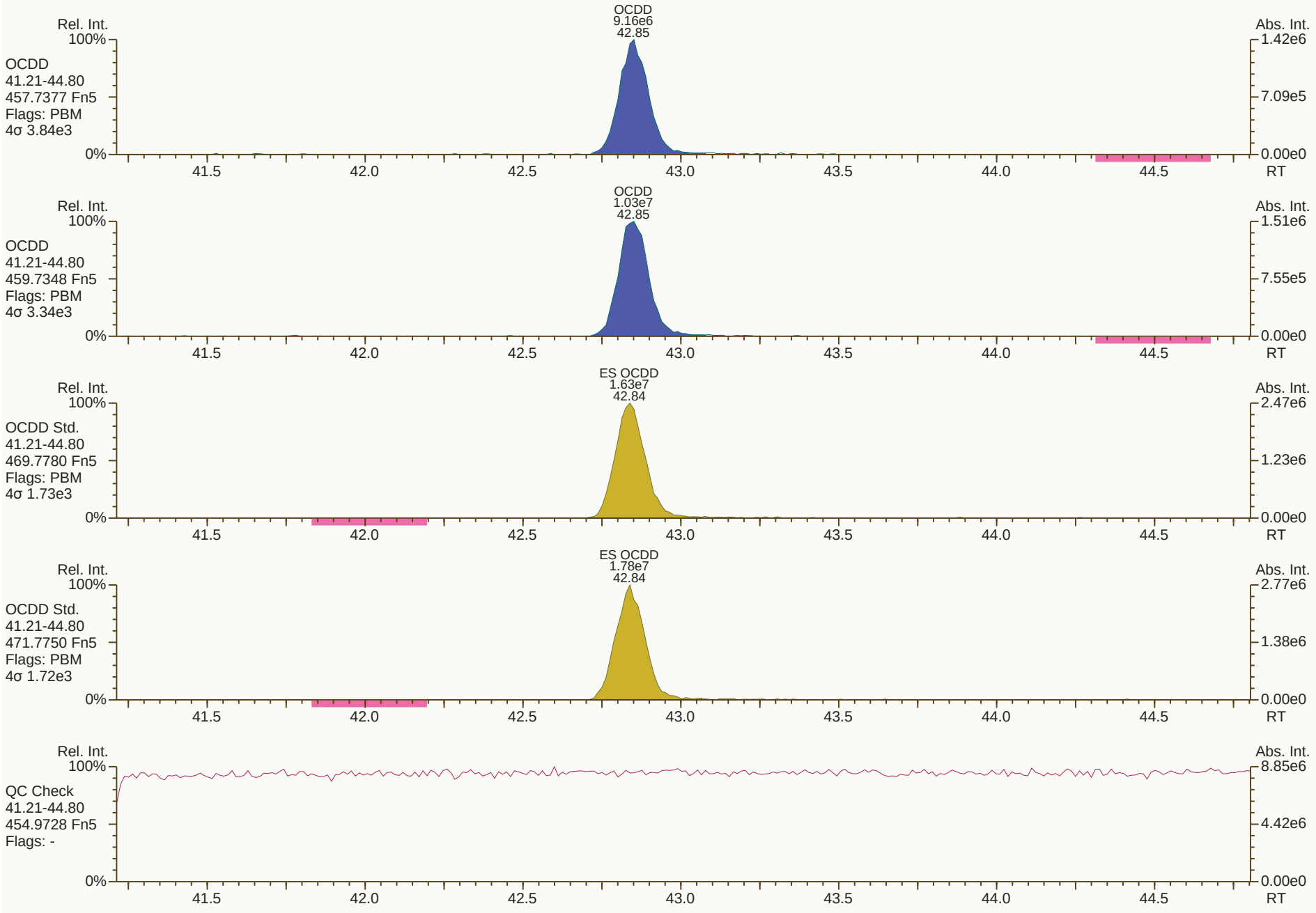
Results: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\CS3_200811_DF_CA.utp_res, saved 12-Aug-2020 15:24 (DTF) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 scc: 192-644 *PKD: n/a Printed: 12-Aug-2020 15:31 Page 1 of 12*


Rel. Int.
100%
TCDD
19.04-28.80
319.8965 Fn1
Flags: PBM
4σ 2.10e3
0%
2378D 2.28e6 26.92
Abs. Int.
5.47e5
2.73e5
0.00e0
RT
2378D RRF = (2.28e6 + 2.81e6) * 100pg / (1.86e7 + 2.27e7) * 10pg = 1.23
DTF 12-Aug-2020 15:24
VERIFIED
TCDD
19.04-28.80
321.8936 Fn1
Flags: PBM
4σ 1.66e3
2378D 2.81e6 26.91
6.33e5
3.16e5
37Cl-TCDD
19.04-28.80
327.8850 Fn1
Flags: PBM
4σ 1.07e3
CS 37Cl-2378D 5.01e6 26.92
1.23e6
6.15e5
TCDD Std.
19.04-28.80
331.9368 Fn1
Flags: PBM
4σ 4.66e3
AS 1368D 2.20e7 22.85
TS 1378D 2.03e7 25.09
JS 1234D 1.94e7 26.19
ES 2378D 1.86e7 26.89
FS 1278D 1.90e7 27.25
4.45e6
2.22e6
TCDD Std.
19.04-28.80
333.9339 Fn1
Flags: PBM
4σ 2.35e3
AS 1368D 2.73e7 22.85
TS 1378D 2.51e7 25.09
JS 1234D 2.39e7 26.19
ES 2378D 2.27e7 26.89
FS 1278D 2.36e7 27.25
5.50e6
2.75e6
20.0
22.0
24.0
26.0
28.0


Rel. Int.
100%
PeCDD
28.82-33.81
355.8546 Fn2
Flags: PBM
4σ 1.35e3
0%
12378D
1.10e7
32.62
Abs. Int.
3.11e6
1.55e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD
28.82-33.81
357.8517 Fn2
Flags: PBM
4σ 7.90e2
0%
12378D
7.10e6
32.62
Abs. Int.
2.04e6
1.02e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.82-33.81
367.8949 Fn2
Flags: PBM
4σ 1.78e3
0%
FS 12478D
2.32e7
31.32
CS 12347D
1.93e7
32.08
ES 12378D
2.12e7
32.60
Abs. Int.
6.38e6
3.19e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.82-33.81
369.8919 Fn2
Flags: PBM
4σ 1.75e3
0%
FS 12478D
1.48e7
31.32
CS 12347D
1.23e7
32.08
ES 12378D
1.33e7
32.60
Abs. Int.
3.95e6
1.98e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
QC Check
28.82-33.81
366.9792 Fn2
Flags: -
0%
Abs. Int.
5.37e6
2.69e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT

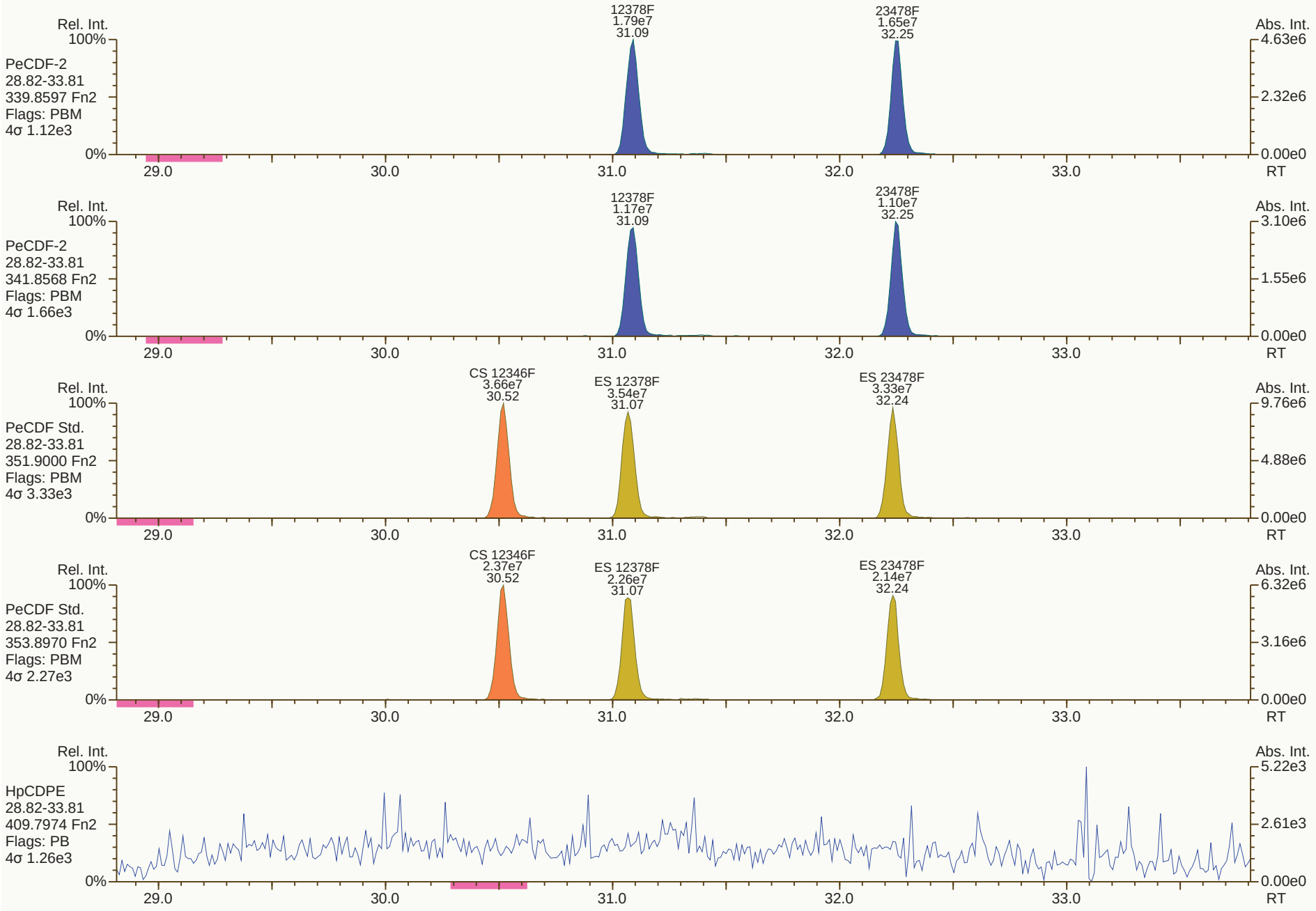

Rel. Int.
100%
HxCDD
33.82-37.91
389.8156 Fn3
Flags: PBM
4σ 2.04e3
123478D
9.36e6
36.67
123678D
1.00e7
36.79
123789D
9.95e6
37.09
Abs. Int.
2.75e6
1.38e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD
33.82-37.91
391.8127 Fn3
Flags: PBM
4σ 2.87e3
123478D
7.67e6
36.67
123678D
7.92e6
36.79
123789D
7.97e6
37.09
Abs. Int.
2.33e6
1.17e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.82-37.91
401.8559 Fn3
Flags: PBM
4σ 4.34e3
FS 123468D
2.06e7
35.58
ES 123478D
1.72e7
36.66
ES 123678D
1.70e7
36.77
JS 123467D
8.92e6
36.97
ES 123789D
1.85e7
37.08
Abs. Int.
6.13e6
3.06e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.82-37.91
403.8530 Fn3
Flags: PBM
4σ 1.53e3
FS 123468D
1.62e7
35.58
ES 123478D
1.40e7
36.66
ES 123678D
1.35e7
36.77
JS 123467D
7.34e6
36.97
ES 123789D
1.55e7
37.08
Abs. Int.
4.92e6
2.46e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
QC Check
33.82-37.91
380.9760 Fn3
Flags: -
Abs. Int.
9.84e6
4.92e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT

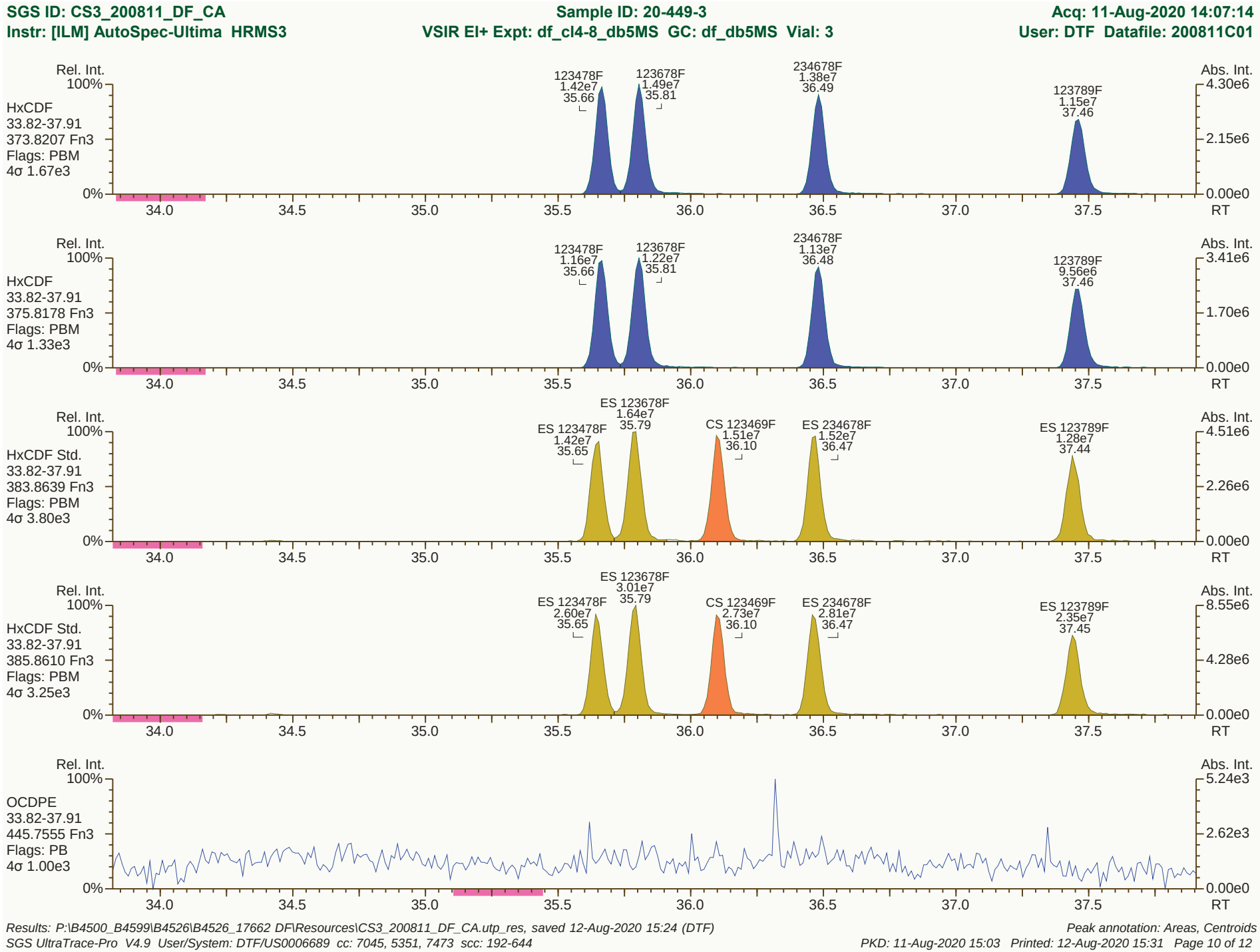

Rel. Int.
100%
HpCDD
37.92-41.20
423.7767 Fn4
Flags: PBM
4σ 3.65e3
0%
1234678D
7.34e6
40.16
Abs. Int.
1.77e6
8.84e5
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD
37.92-41.20
425.7737 Fn4
Flags: PBM
4σ 3.85e3
0%
1234678D
6.99e6
40.16
Abs. Int.
1.77e6
8.85e5
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.92-41.20
435.8169 Fn4
Flags: PBM
4σ 2.53e3
0%
FS 1234679D
1.74e7
39.44
ES 1234678D
1.40e7
40.15
Abs. Int.
4.79e6
2.40e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.92-41.20
437.8140 Fn4
Flags: PBM
4σ 1.71e3
0%
FS 1234679D
1.63e7
39.44
ES 1234678D
1.35e7
40.15
Abs. Int.
4.13e6
2.06e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
QC Check
37.92-41.20
430.9728 Fn4
Flags: -
0%
Abs. Int.
6.43e6
3.21e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT


OCDD
9.16e6
42.85
Rel. Int.
Abs. Int.
OCDD
41.21-44.80
457.7377 Fn5
Flags: PBM
4σ 3.84e3
OCDD
1.03e7
42.85
OCDD
41.21-44.80
459.7348 Fn5
Flags: PBM
4σ 3.34e3
ES OCDD
1.63e7
42.84
OCDD Std.
41.21-44.80
469.7780 Fn5
Flags: PBM
4σ 1.73e3
ES OCDD
1.78e7
42.84
OCDD Std.
41.21-44.80
471.7750 Fn5
Flags: PBM
4σ 1.72e3
QC Check
41.21-44.80
454.9728 Fn5
Flags: -
RT

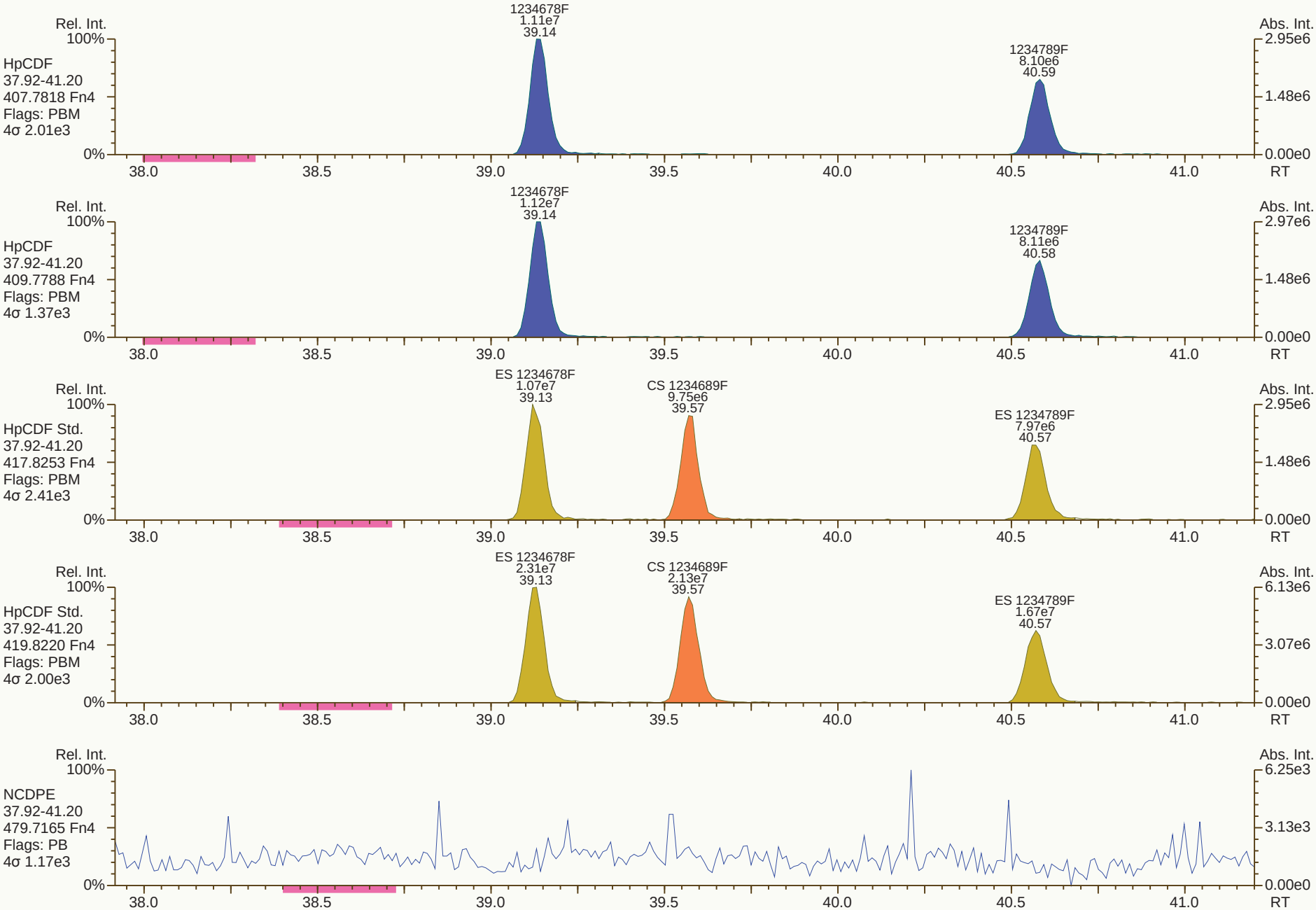

Rel. Int.
100%
TCDF
19.04-28.80
303.9016 Fn1
Flags: PBM
4σ 1.10e3
0%
2378F
3.38e6
25.96
Abs. Int.
7.36e5
3.68e5
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDF
19.04-28.80
305.8987 Fn1
Flags: PBM
4σ 1.93e3
0%
2378F
4.30e6
25.96
Abs. Int.
9.02e5
4.51e5
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDF Std.
19.04-28.80
315.9419 Fn1
Flags: PBM
4σ 1.20e4
0%
AS 1368F
3.81e7
20.65
JS 1234F
3.31e7
24.45
ES 2378F
3.01e7
25.94
Abs. Int.
7.12e6
3.56e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDF Std.
19.04-28.80
317.9389 Fn1
Flags: PBM
4σ 7.44e3
0%
AS 1368F
4.70e7
20.65
JS 1234F
4.09e7
24.45
ES 2378F
3.67e7
25.94
Abs. Int.
9.18e6
4.59e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
HxCDPE
19.04-28.80
375.8364 Fn1
Flags: PB
4σ 1.22e3
0%
Abs. Int.
6.10e3
3.05e3
0.00e0
20.0
22.0
24.0
26.0
28.0
RT


Rel. Int.
100%
0%
Abs. Int.
9.96e3
4.98e3
0.00e0
PeCDF-1
19.04-28.80
339.8597 Fn1
Flags: PB
4σ 1.42e3
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
0%
Abs. Int.
1.32e4
6.61e3
0.00e0
PeCDF-1
19.04-28.80
341.8568 Fn1
Flags: PB
4σ 1.36e3
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
0%
Abs. Int.
6.35e6
3.17e6
0.00e0
QC Check
19.04-28.80
316.9824 Fn1
Flags: -
20.0
22.0
24.0
26.0
28.0
RT


Rel. Int.
100%
PeCDF-2
28.82-33.81
339.8597 Fn2
Flags: PBM
4σ 1.12e3
0%
12378F
1.79e7
31.09
23478F
1.65e7
32.25
Abs. Int.
4.63e6
2.32e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF-2
28.82-33.81
341.8568 Fn2
Flags: PBM
4σ 1.66e3
0%
12378F
1.17e7
31.09
23478F
1.10e7
32.25
Abs. Int.
3.10e6
1.55e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.82-33.81
351.9000 Fn2
Flags: PBM
4σ 3.33e3
0%
CS 12346F
3.66e7
30.52
ES 12378F
3.54e7
31.07
ES 23478F
3.33e7
32.24
Abs. Int.
9.76e6
4.88e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.82-33.81
353.8970 Fn2
Flags: PBM
4σ 2.27e3
0%
CS 12346F
2.37e7
30.52
ES 12378F
2.26e7
31.07
ES 23478F
2.14e7
32.24
Abs. Int.
6.32e6
3.16e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
HpCDPE
28.82-33.81
409.7974 Fn2
Flags: PB
4σ 1.26e3
0%
Abs. Int.
5.22e3
2.61e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT


SGS ID: CS3_200811_DF_CA
Sample ID: 20-449-3
Acq: 11-Aug-2020 14:07:14
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 3
User: DTF Datafile: 200811C01
Rel. Int.
Abs. Int.
HxCDF
33.82-37.91
373.8207 Fn3
Flags: PBM
4σ 1.67e3
123478F 1.42e7 35.66
123678F 1.49e7 35.81
234678F 1.38e7 36.49
123789F 1.15e7 37.46
4.30e6
2.15e6
0.00e0
HxCDF
33.82-37.91
375.8178 Fn3
Flags: PBM
4σ 1.33e3
123478F 1.16e7 35.66
123678F 1.22e7 35.81
234678F 1.13e7 36.48
123789F 9.56e6 37.46
3.41e6
1.70e6
0.00e0
HxCDF Std.
33.82-37.91
383.8639 Fn3
Flags: PBM
4σ 3.80e3
ES 123478F 1.42e7 35.65
ES 123678F 1.64e7 35.79
CS 123469F 1.51e7 36.10
ES 234678F 1.52e7 36.47
ES 123789F 1.28e7 37.44
4.51e6
2.26e6
0.00e0
HxCDF Std.
33.82-37.91
385.8610 Fn3
Flags: PBM
4σ 3.25e3
ES 123478F 2.60e7 35.65
ES 123678F 3.01e7 35.79
CS 123469F 2.73e7 36.10
ES 234678F 2.81e7 36.47
ES 123789F 2.35e7 37.45
8.55e6
4.28e6
0.00e0
OCDPE
33.82-37.91
445.7555 Fn3
Flags: PB
4σ 1.00e3
5.24e3
2.62e3
0.00e0
100%
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Results: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\CS3_200811_DF_CA.utp_res, saved 12-Aug-2020 15:24 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 7045, 5351, 7473 scc: 192-644
PKD: 11-Aug-2020 15:03 Printed: 12-Aug-2020 15:31 Page 10 of 12

SGS ID: CS3_200811_DF_CA
Instr: [ILM] AutoSpec-Ultima HRMS3
Sample ID: 20-449-3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 3
Acq: 11-Aug-2020 14:07:14
User: DTF Datafile: 200811C01




OCDF
1.09e7
43.00
Rel. Int.
100%
OCDF
41.21-44.80
441.7428 Fn5
Flags: PBM
4σ 1.20e3
0%
Abs. Int.
1.70e6
8.51e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
OCDF
1.21e7
43.00
Rel. Int.
100%
OCDF
41.21-44.80
443.7398 Fn5
Flags: PBM
4σ 2.26e3
0%
Abs. Int.
1.89e6
9.44e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDF
2.02e7
42.98
Rel. Int.
100%
OCDF Std.
41.21-44.80
453.7830 Fn5
Flags: PBM
4σ 2.96e3
0%
Abs. Int.
3.17e6
1.59e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDF
2.25e7
42.98
Rel. Int.
100%
OCDF Std.
41.21-44.80
455.7801 Fn5
Flags: PBM
4σ 1.90e3
0%
Abs. Int.
3.56e6
1.78e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
DCDPE
41.21-44.80
513.6775 Fn5
Flags: PB
4σ 1.00e3
0%
Abs. Int.
4.09e3
2.04e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT

Dioxin/Furan QC Summary		Acq'd: 11 Aug 2020 23:46 DTF				ICAL: HRMS3_DF_10122018_28AUG2019	
Lab ID: CS3_200811_DF_CB		UTP: 12-Aug-2020 15:18:33 DTF				Checkcode: 691-754-FSR	
Sample ID: 20-449-3		Report: 12 Aug 2020 15:19 TF				Datafile: 200811C13	
Name	**RT**	**Response**	**RA**	**OK**	**Ref. RRFs**	**Calc. RRFs**	**Dev'n**
2378-TCDD	26.93	9.59E+06	0.80	Y	1.19	1.21	2%
12378-PeCDD	32.64	3.27E+07	1.56	Y	0.98	1.02	3%
123478-HxCDD	36.69	2.99E+07	1.27	Y	1.02	1.11	8%
123678-HxCDD	36.81	3.01E+07	1.25	Y	1.09	1.11	2%
123789-HxCDD	37.11	3.14E+07	1.23	Y	0.97	1.03	6%
1234678-HpCDD	40.17	2.28E+07	1.07	Y	0.98	1.04	7%
OCDD	42.88	3.22E+07	0.88	Y	1.07	1.14	6%
2378-TCDF	25.98	1.31E+07	0.79	Y	1.01	1.12	10%
12378-PeCDF	31.10	4.83E+07	1.53	Y	0.96	1.01	5%
23478-PeCDF	32.27	4.68E+07	1.50	Y	0.99	1.00	1%
123478-HxCDF	35.68	4.28E+07	1.24	Y	1.21	1.24	3%
123678-HxCDF	35.82	4.53E+07	1.22	Y	1.11	1.13	2%
234678-HxCDF	36.50	4.23E+07	1.22	Y	1.12	1.17	5%
123789-HxCDF	37.48	3.65E+07	1.22	Y	1.11	1.15	4%
1234678-HpCDF	39.15	3.37E+07	1.01	Y	1.32	1.33	0%
1234789-HpCDF	40.60	2.61E+07	1.03	Y	1.26	1.30	3%
OCDF	43.03	3.82E+07	0.91	Y	1.03	1.09	6%
ES 2378-TCDD	26.91	7.90E+07	0.78	Y	0.99	0.99	0%
ES 12378-PeCDD	32.62	6.43E+07	1.58	Y	0.83	0.80	-3%
ES 123478-HxCDD	36.67	5.39E+07	1.25	Y	0.95	0.97	2%
ES 123678-HxCDD	36.79	5.43E+07	1.24	Y	0.98	0.98	0%
ES 123789-HxCDD	37.09	6.12E+07	1.25	Y	1.14	1.10	-3%
ES 1234678-HpCDD	40.16	4.38E+07	1.04	Y	0.90	0.79	-12%
ES OCDD	42.87	5.65E+07	0.91	Y	0.63	0.51	-19%
ES 2378-TCDF	25.96	1.17E+08	0.80	Y	1.00	0.95	-5%
ES 12378-PeCDF	31.09	9.58E+07	1.56	Y	0.83	0.78	-6%
ES 23478-PeCDF	32.25	9.39E+07	1.58	Y	0.81	0.76	-5%
ES 123478-HxCDF	35.66	6.91E+07	0.52	Y	1.12	1.24	11%
ES 123678-HxCDF	35.81	8.05E+07	0.53	Y	1.33	1.45	9%
ES 234678-HxCDF	36.48	7.21E+07	0.53	Y	1.21	1.30	7%
ES 123789-HxCDF	37.46	6.35E+07	0.53	Y	1.12	1.14	2%
ES 1234678-HpCDF	39.14	5.08E+07	0.45	Y	0.92	0.91	-1%
ES 1234789-HpCDF	40.59	4.01E+07	0.47	Y	0.82	0.72	-12%
ES OCDF	43.01	7.00E+07	0.92	Y	0.78	0.63	-19%

Dioxin/Furan QC Summary		Acq'd: 11 Aug 2020 23:46 DTF				ICAL: HRMS3_DF_10122018_28AUG2019	
Lab ID: CS3_200811_DF_CB		UTP: 12-Aug-2020 15:18:33 DTF				Checkcode: 691-754-FSR	
Sample ID: 20-449-3		Report: 12 Aug 2020 15:19 TF				Datafile: 200811C13	
Name	**RT**	**Response**	**RA**	**OK**	**Ref. RRFs**	**Calc. RRFs**	**Dev'n**
JS 1234-TCDD	26.21	7.99E+07	0.80	Y	-	-	-
JS 1234-TCDF	24.47	1.23E+08	0.80	Y	-	-	-
JS 123467-HxCDD	36.99	2.78E+07	1.25	Y	-	-	-
CS 37Cl-2378-TCDD	26.93	9.43E+06	n/a	-	1.12	1.18	5%
CS 12347-PeCDD	32.10	5.80E+07	1.57	Y	0.71	0.73	2%
CS 12346-PeCDF	30.54	9.84E+07	1.57	Y	0.81	0.80	-1%
CS 123469-HxCDF	36.12	7.23E+07	0.54	Y	1.12	1.30	16%
CS 1234689-HpCDF	39.58	4.84E+07	0.45	Y	0.90	0.87	-3%
~~SS 37Cl-2378-TCDD~~	~~26.93~~	~~9.43E+06~~	~~n/a~~	~~-~~	~~1.14~~	~~1.19~~	~~4%~~
~~SS 12347-PeCDD~~	~~32.10~~	~~5.80E+07~~	~~1.57~~	~~Y~~	~~0.86~~	~~0.90~~	~~5%~~
~~SS 12346-PeCDF~~	~~30.54~~	~~9.84E+07~~	~~1.57~~	~~Y~~	~~0.98~~	~~1.03~~	~~5%~~
~~SS 123469-HxCDF~~	~~36.12~~	~~7.23E+07~~	~~0.54~~	~~Y~~	~~0.85~~	~~0.90~~	~~6%~~
~~SS 1234689-HpCDF~~	~~39.58~~	~~4.84E+07~~	~~0.45~~	~~Y~~	~~0.97~~	~~0.95~~	~~-2%~~
Not used in this project.							
CL 13Aug20							
~~OCDD-a~~	~~42.88~~	~~2.12E+06~~	~~2.41~~	~~Y~~		~~0.08~~	~~#VALUE!~~
~~OCDF-a~~	~~43.02~~	~~2.04E+06~~	~~2.05~~	~~N~~		~~0.06~~	~~#VALUE!~~

METHOD 8290A **PCDD/F CALIBRATION VERIFICATION** **FORM 4A**

Lab Name: SGS North America

Initial Calibration: ICAL: HRMS3_DF_10122018_28AUG2019

Instrument ID: HRMS3 GC Column ID: ZB-5ms

VER Data Filename: 200811C13 Analysis Date: 11-AUG-2020 23:46:51

NATIVE ANALYTES	M/Z's FORMING RATIO	ION ABUND. RATIO	QC LIMITS			OK	CONC. FOUND	RANGE (ng/mL)			OK
2,3,7,8-TCDD	M/M+2	0.80	0.65	-	0.89	Y	10.2	8	-	12	Y
1,2,3,7,8-PeCDD	M+2/M+4	1.56	1.32	-	1.78	Y	51.7	40	-	60	Y
1,2,3,4,7,8-HxCDD	M+2/M+4	1.27	1.05	-	1.43	Y	54.1	40	-	60	Y
1,2,3,6,7,8-HxCDD	M+2/M+4	1.25	1.05	-	1.43	Y	51.1	40	-	60	Y
1,2,3,7,8,9-HxCDD	M+2/M+4	1.23	1.05	-	1.43	Y	52.8	40	-	60	Y
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.07	0.88	-	1.20	Y	53.3	40	-	60	Y
OCDD	M+2/M+4	0.88	0.76	-	1.02	Y	106	80	-	120	Y
2,3,7,8-TCDF	M/M+2	0.79	0.65	-	0.89	Y	11	8	-	12	Y
1,2,3,7,8-PeCDF	M+2/M+4	1.53	1.32	-	1.78	Y	52.3	40	-	60	Y
2,3,4,7,8-PeCDF	M+2/M+4	1.50	1.32	-	1.78	Y	50.5	40	-	60	Y
1,2,3,4,7,8-HxCDF	M+2/M+4	1.24	1.05	-	1.43	Y	51.3	40	-	60	Y
1,2,3,6,7,8-HxCDF	M+2/M+4	1.22	1.05	-	1.43	Y	50.9	40	-	60	Y
2,3,4,6,7,8-HxCDF	M+2/M+4	1.22	1.05	-	1.43	Y	52.6	40	-	60	Y
1,2,3,7,8,9-HxCDF	M+2/M+4	1.22	1.05	-	1.43	Y	51.9	40	-	60	Y
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.01	0.88	-	1.20	Y	50.1	40	-	60	Y
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.03	0.88	-	1.20	Y	51.7	40	-	60	Y
OCDF	M+2/M+4	0.91	0.76	-	1.02	Y	106	80	-	120	Y

Processed: 12 Aug 2020 15:20 Analyst: TF

METHOD 8290A **PCDD/F CALIBRATION VERIFICATION** **FORM 4B**

Lab Name: SGS North America

Initial Calibration: ICAL: HRMS3_DF_10122018_28AUG2019

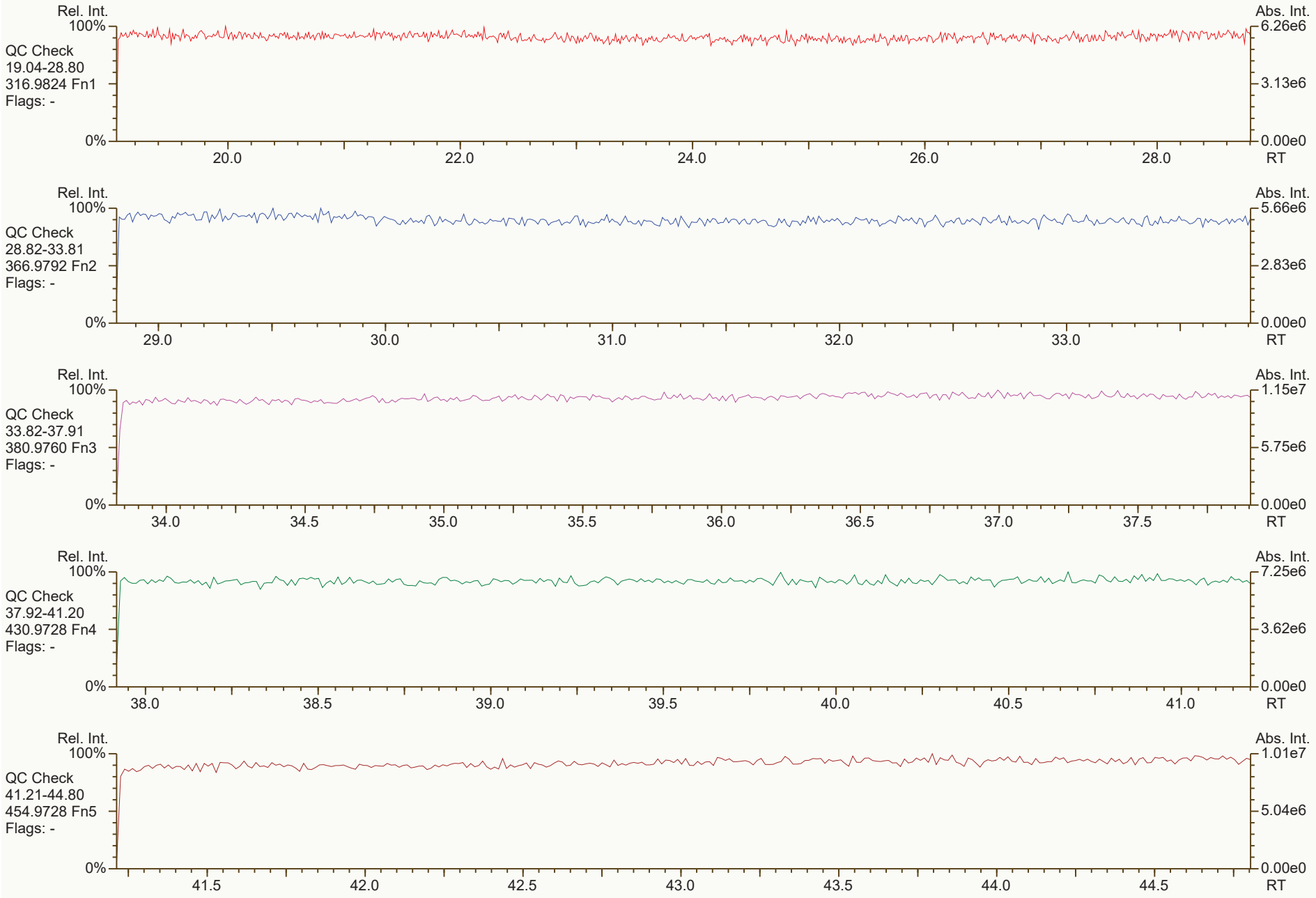
Instrument ID: HRMS3 GC Column ID: ZB-5ms

VER Data Filename: 200811C13 Analysis Date: 11-AUG-2020 23:46:51

LABELED ANALYTES	M/Z's FORMING RATIO	ION ABUND. RATIO	QC LIMITS			OK	CONC. FOUND	RANGE (ng/mL)			OK
13C-2,3,7,8-TCDD	M/M+2	0.78	0.65	-	0.89	Y	99.9	70	-	130	Y
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.58	1.32	-	1.78	Y	96.9	70	-	130	Y
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.25	1.05	-	1.43	Y	102	70	-	130	Y
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.24	1.05	-	1.43	Y	100	70	-	130	Y
13C-1,2,3,7,8,9-HxCDD	M+2/M+4	1.25	1.05	-	1.43	Y	96.9	70	-	130	Y
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	0.88	-	1.20	Y	87.9	70	-	130	Y
13C-OCDD	M+2/M+4	0.91	0.76	-	1.02	Y	162	140	-	260	Y
13C-2,3,7,8-TCDF	M/M+2	0.80	0.65	-	0.89	Y	95.5	70	-	130	Y
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.56	1.32	-	1.78	Y	93.6	70	-	130	Y
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.58	1.32	-	1.78	Y	94.6	70	-	130	Y
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	111	70	-	130	Y
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.53	0.43	-	0.59	Y	109	70	-	130	Y
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.53	0.43	-	0.59	Y	107	70	-	130	Y
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.53	0.43	-	0.59	Y	102	70	-	130	Y
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.45	0.37	-	0.51	Y	98.8	70	-	130	Y
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.47	0.37	-	0.51	Y	88.2	70	-	130	Y
13C-OCDF	M+2/M+4	0.92	0.76	-	1.02	Y	162	140	-	260	Y
CLEANUP STANDARDS											
37Cl-2,3,7,8-TCDD	n/a						10.5	7.9	-	12.7	Y
13C-1,2,3,4,7-PeCDD	M+2/M+4	1.57	1.32	-	1.78	Y	102	70	-	130	Y
13C-1,2,3,4,6-PeCDF	M+2/M+4	1.57	1.32	-	1.78	Y	98.8	70	-	130	Y
13C-1,2,3,4,6,9-HxCDF	M/M+2	0.54	0.43	-	0.59	Y	116	70	-	130	Y
13C-1,2,3,4,6,8,9-HpCDF	M/M+2	0.45	0.37	-	0.51	Y	97.2	70	-	130	Y

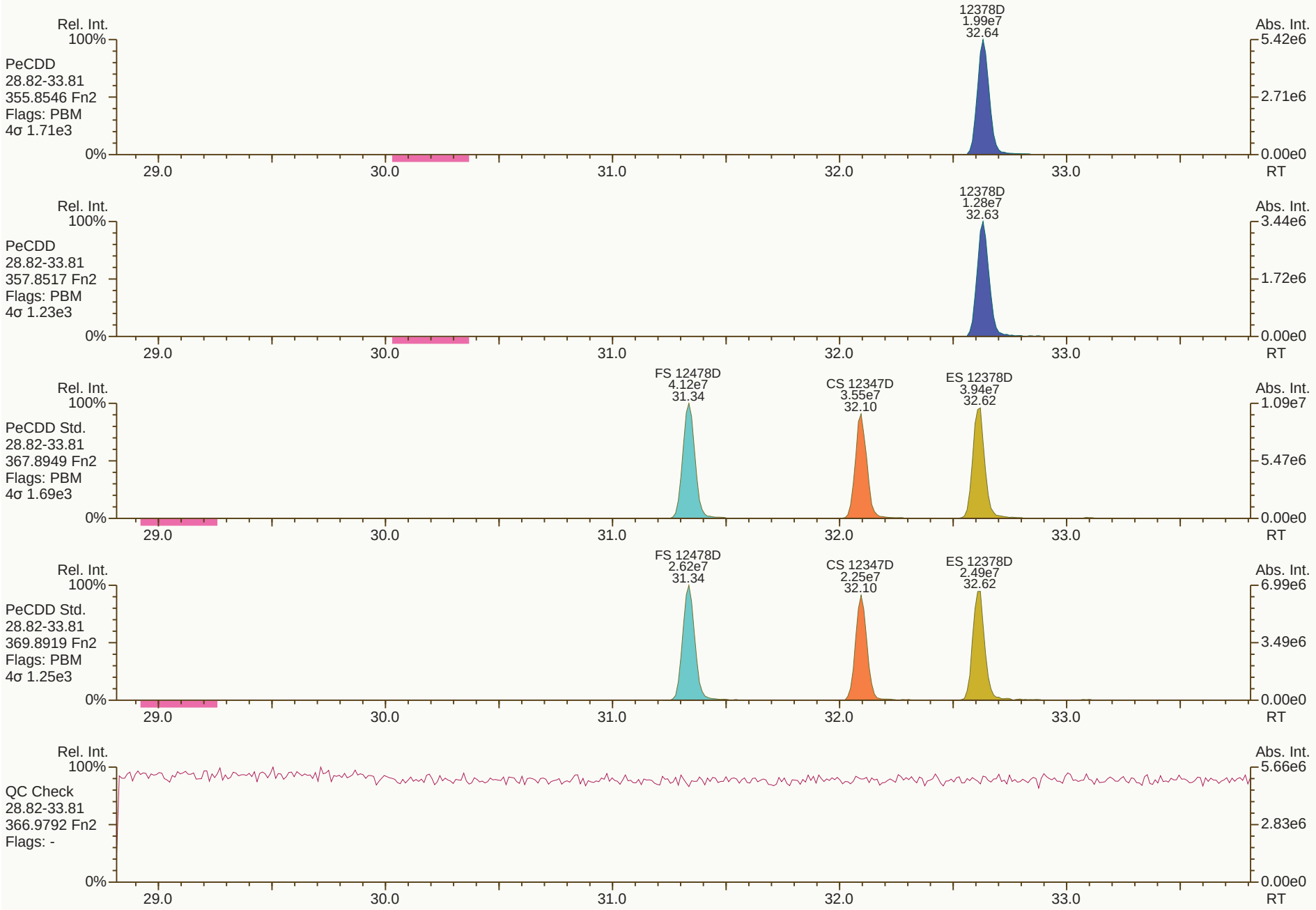
Processed: 12 Aug 2020 15:20 Analyst: TF

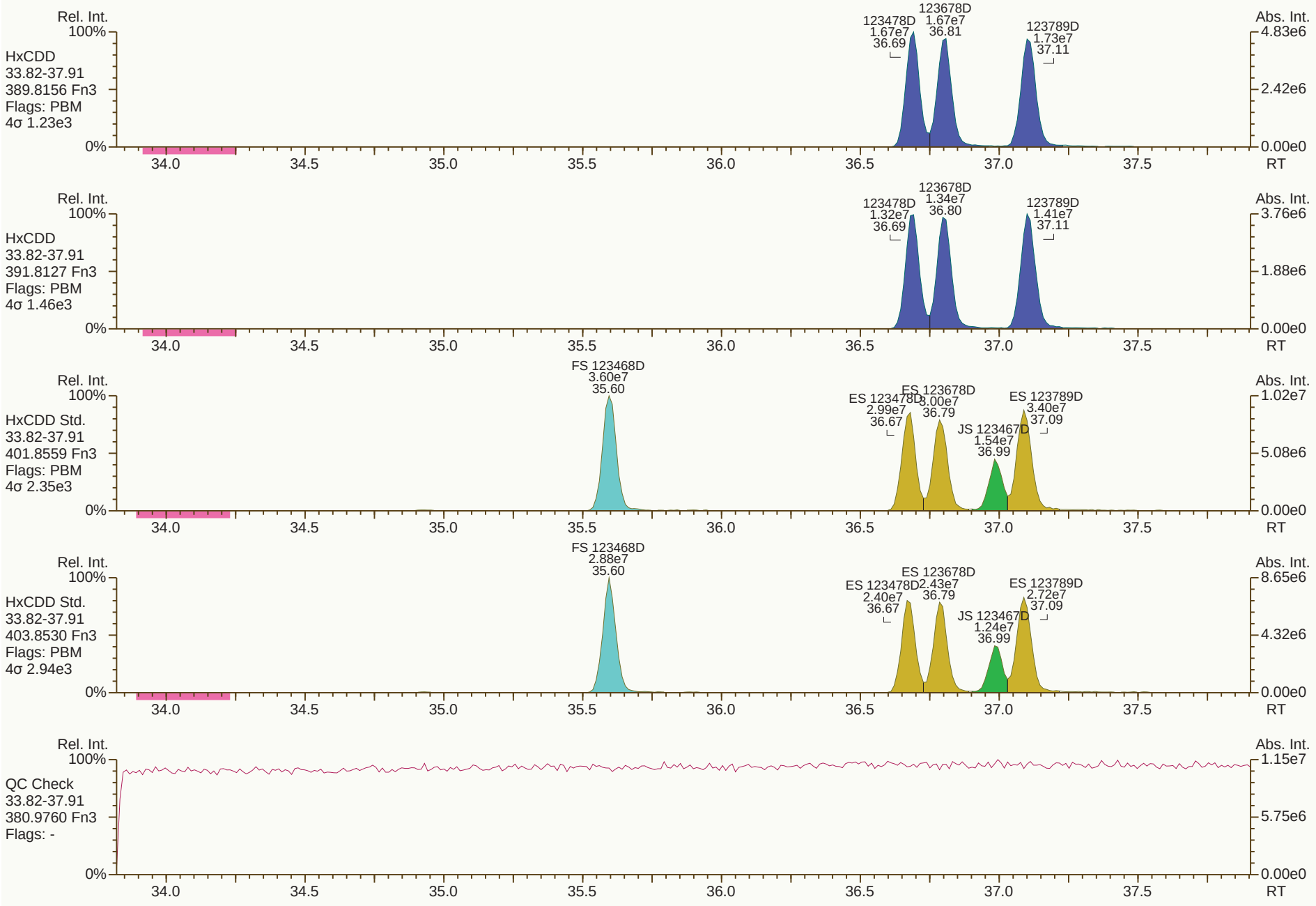
SGS ID: CS3_200811_DF_CB **Sample ID: 20-449-3** **Acq: 11-Aug-2020 23:46:51**
Instr: [ILM] AutoSpec-Ultima HRMS3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 3** **User: DTF Datafile: 200811C13**

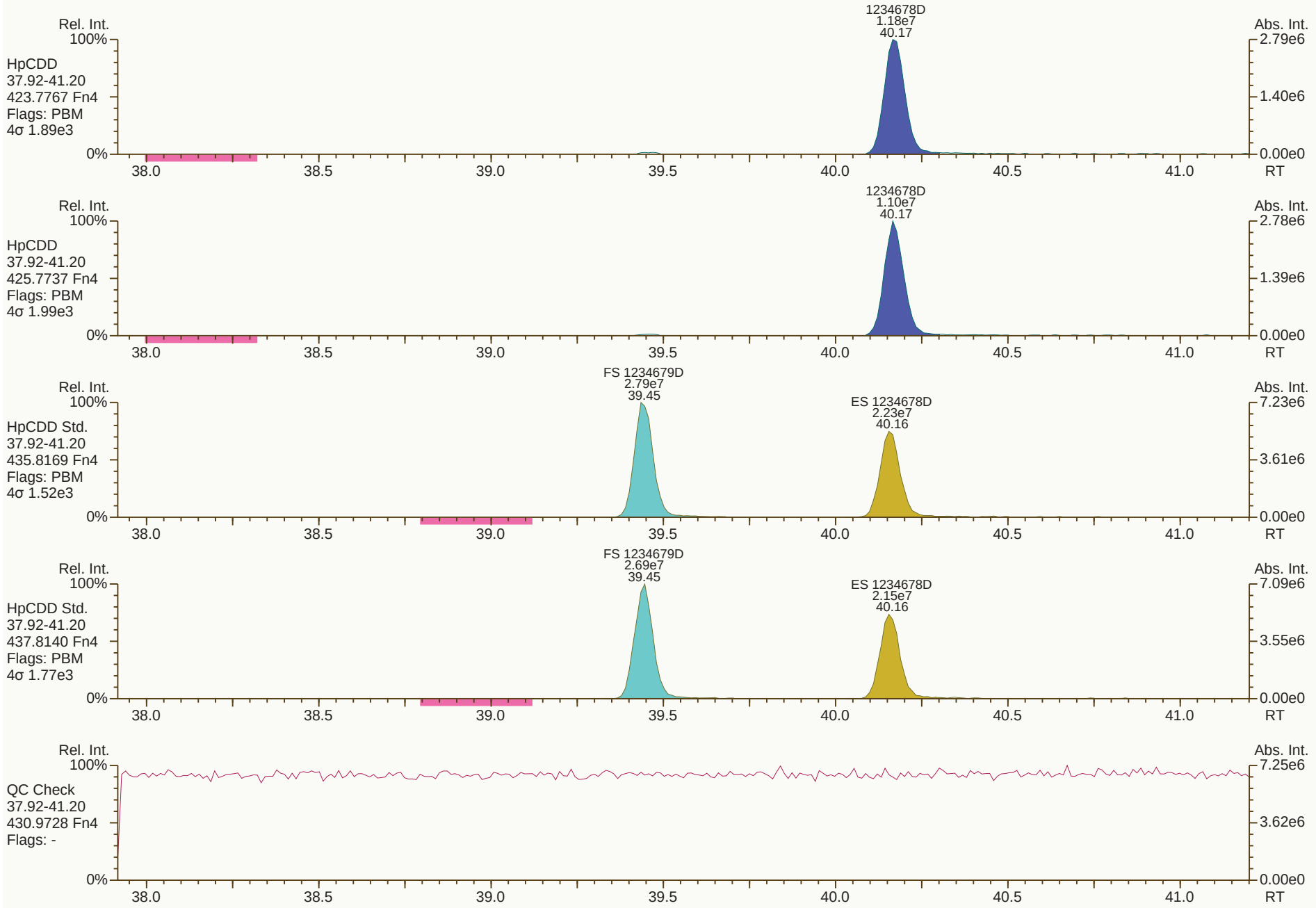


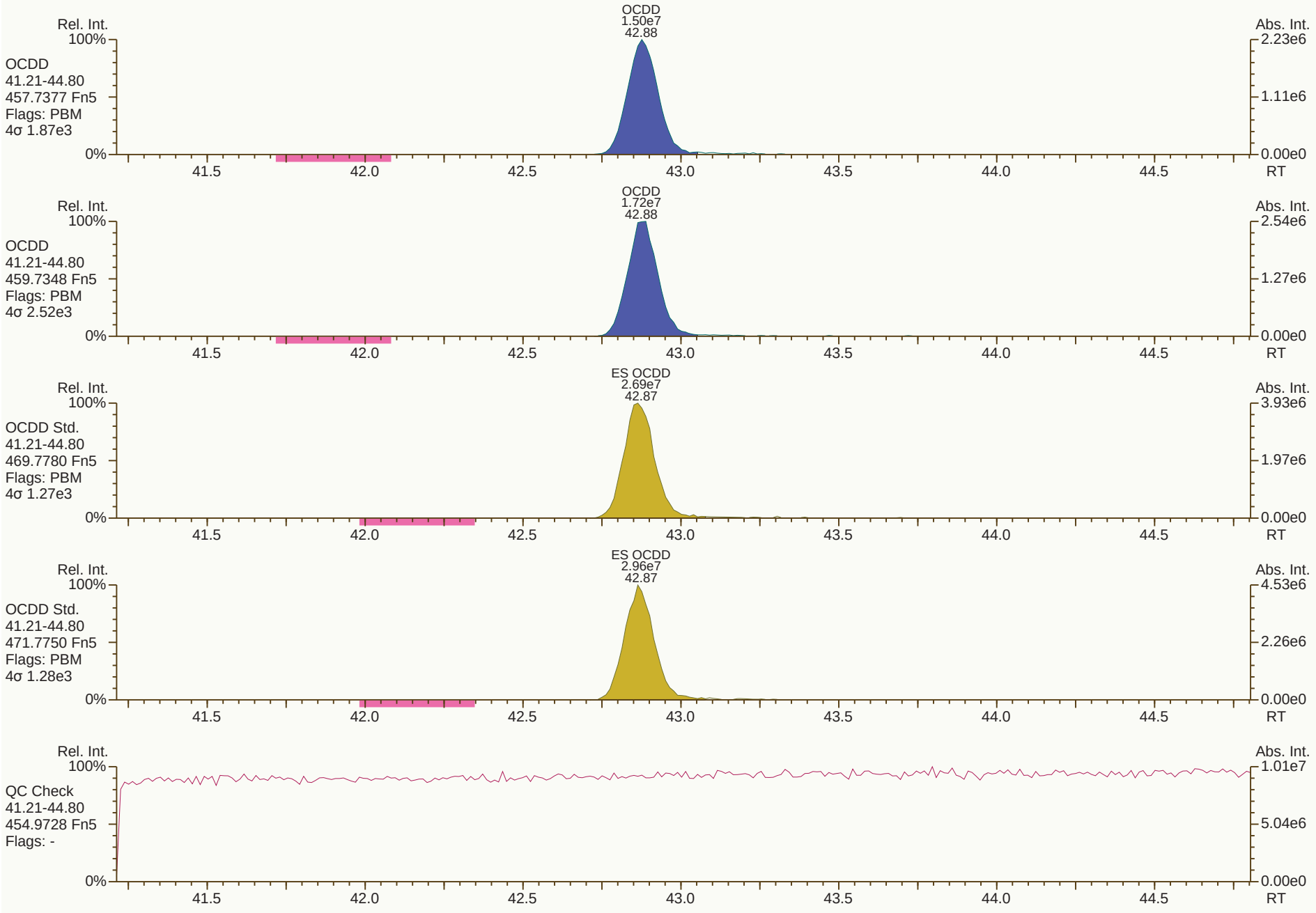
Results: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\CS3_200811_DF_CB.utp_res, saved 12-Aug-2020 15:18 (DTF) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 scc: 691-754 *PKD: n/a Printed: 12-Aug-2020 15:35 Page 1 of 12*


Rel. Int.
100%
TCDD
19.04-28.80
319.8965 Fn1
Flags: PBM
4σ 2.08e3
0%
2378D
4.25e6
26.93
Abs. Int.
9.63e5
4.82e5
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD
19.04-28.80
321.8936 Fn1
Flags: PBM
4σ 1.07e3
0%
2378D
5.33e6
26.93
Abs. Int.
1.12e6
5.62e5
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
37Cl-TCDD
19.04-28.80
327.8850 Fn1
Flags: PBM
4σ 1.29e3
0%
CS 37Cl-2378D
9.43e6
26.93
Abs. Int.
2.05e6
1.02e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.80
331.9368 Fn1
Flags: PBM
4σ 6.40e3
0%
AS 1368D
3.93e7
22.87
TS 1378D
3.88e7
25.11
JS 1234D
3.55e7
26.21
ES 2378D
3.46e7
26.91
FS 1278D
3.68e7
27.26
Abs. Int.
8.21e6
4.10e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.80
333.9339 Fn1
Flags: PBM
4σ 1.38e3
0%
AS 1368D
4.95e7
22.87
TS 1378D
4.91e7
25.11
JS 1234D
4.44e7
26.21
ES 2378D
4.44e7
26.91
FS 1278D
4.60e7
27.26
Abs. Int.
1.03e7
5.16e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT


Rel. Int.
100%
PeCDD
28.82-33.81
355.8546 Fn2
Flags: PBM
4σ 1.71e3
0%
12378D
1.99e7
32.64
Abs. Int.
5.42e6
2.71e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD
28.82-33.81
357.8517 Fn2
Flags: PBM
4σ 1.23e3
0%
12378D
1.28e7
32.63
Abs. Int.
3.44e6
1.72e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.82-33.81
367.8949 Fn2
Flags: PBM
4σ 1.69e3
0%
FS 12478D
4.12e7
31.34
CS 12347D
3.55e7
32.10
ES 12378D
3.94e7
32.62
Abs. Int.
1.09e7
5.47e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.82-33.81
369.8919 Fn2
Flags: PBM
4σ 1.25e3
0%
FS 12478D
2.62e7
31.34
CS 12347D
2.25e7
32.10
ES 12378D
2.49e7
32.62
Abs. Int.
6.99e6
3.49e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
QC Check
28.82-33.81
366.9792 Fn2
Flags: -
0%
Abs. Int.
5.66e6
2.83e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT

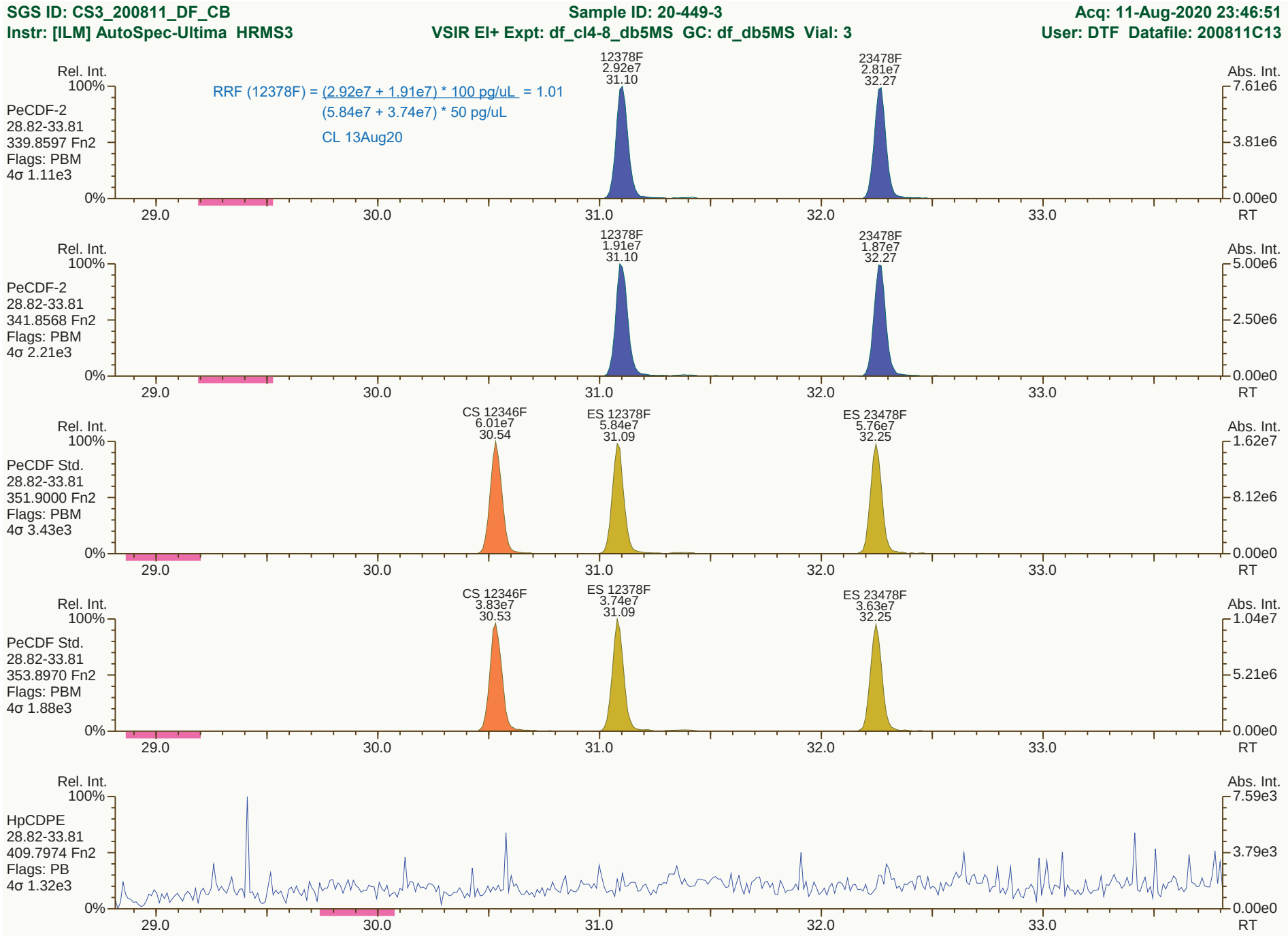

Rel. Int.
100%
HxCDD
33.82-37.91
389.8156 Fn3
Flags: PBM
4σ 1.23e3
123478D
1.67e7
36.69
123678D
1.67e7
36.81
123789D
1.73e7
37.11
Abs. Int.
4.83e6
2.42e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD
33.82-37.91
391.8127 Fn3
Flags: PBM
4σ 1.46e3
123478D
1.32e7
36.69
123678D
1.34e7
36.80
123789D
1.41e7
37.11
Abs. Int.
3.76e6
1.88e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.82-37.91
401.8559 Fn3
Flags: PBM
4σ 2.35e3
FS 123468D
3.60e7
35.60
ES 123478D
2.99e7
36.67
ES 123678D
3.00e7
36.79
JS 123467D
1.54e7
36.99
ES 123789D
3.40e7
37.09
Abs. Int.
1.02e7
5.08e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.82-37.91
403.8530 Fn3
Flags: PBM
4σ 2.94e3
FS 123468D
2.88e7
35.60
ES 123478D
2.40e7
36.67
ES 123678D
2.43e7
36.79
JS 123467D
1.24e7
36.99
ES 123789D
2.72e7
37.09
Abs. Int.
8.65e6
4.32e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
QC Check
33.82-37.91
380.9760 Fn3
Flags: -
Abs. Int.
1.15e7
5.75e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT

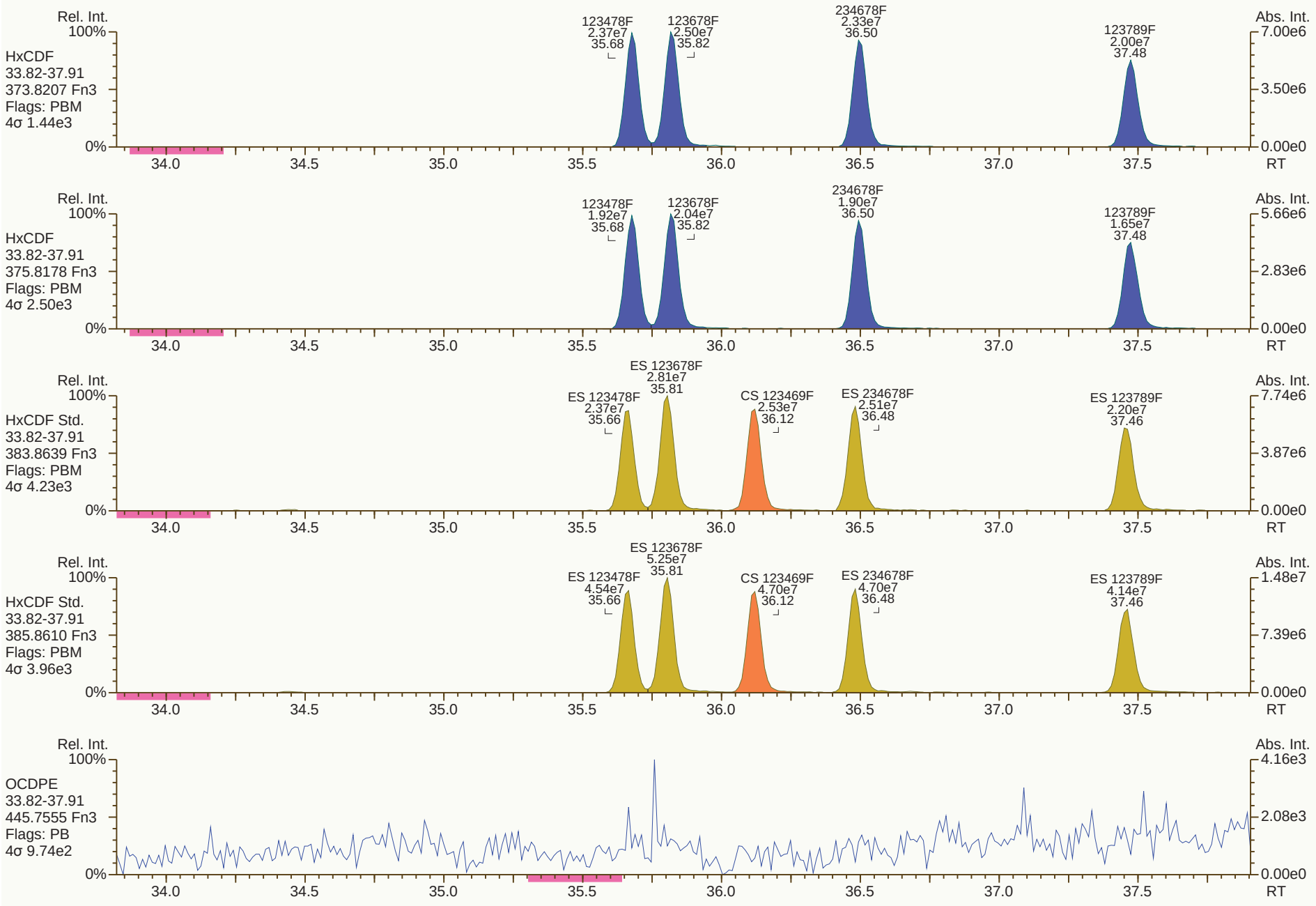

Rel. Int.
100%
HpCDD
37.92-41.20
423.7767 Fn4
Flags: PBM
4σ 1.89e3
0%
1234678D
1.18e7
40.17
Abs. Int.
2.79e6
1.40e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD
37.92-41.20
425.7737 Fn4
Flags: PBM
4σ 1.99e3
0%
1234678D
1.10e7
40.17
Abs. Int.
2.78e6
1.39e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.92-41.20
435.8169 Fn4
Flags: PBM
4σ 1.52e3
0%
FS 1234679D
2.79e7
39.45
ES 1234678D
2.23e7
40.16
Abs. Int.
7.23e6
3.61e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.92-41.20
437.8140 Fn4
Flags: PBM
4σ 1.77e3
0%
FS 1234679D
2.69e7
39.45
ES 1234678D
2.15e7
40.16
Abs. Int.
7.09e6
3.55e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
QC Check
37.92-41.20
430.9728 Fn4
Flags: -
0%
Abs. Int.
7.25e6
3.62e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT


Rel. Int.
100%
OCDD
41.21-44.80
457.7377 Fn5
Flags: PBM
4σ 1.87e3
0%
OCDD
1.50e7
42.88
Abs. Int.
2.23e6
1.11e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDD
41.21-44.80
459.7348 Fn5
Flags: PBM
4σ 2.52e3
0%
OCDD
1.72e7
42.88
Abs. Int.
2.54e6
1.27e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDD Std.
41.21-44.80
469.7780 Fn5
Flags: PBM
4σ 1.27e3
0%
ES OCDD
2.69e7
42.87
Abs. Int.
3.93e6
1.97e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDD Std.
41.21-44.80
471.7750 Fn5
Flags: PBM
4σ 1.28e3
0%
ES OCDD
2.96e7
42.87
Abs. Int.
4.53e6
2.26e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
QC Check
41.21-44.80
454.9728 Fn5
Flags: -
0%
Abs. Int.
1.01e7
5.04e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT

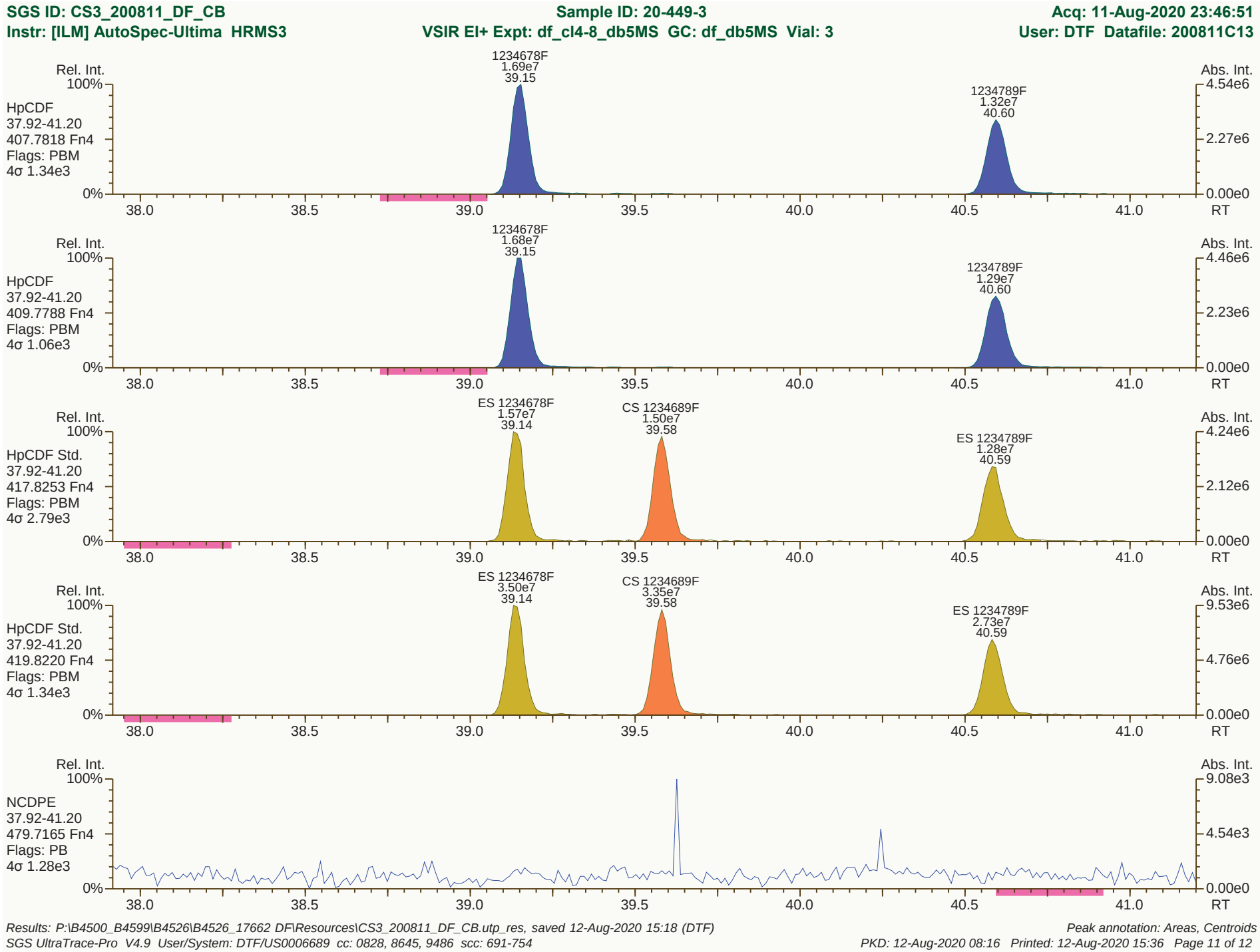

Rel. Int.
100%
TCDF
19.04-28.80
303.9016 Fn1
Flags: PBM
4σ 1.18e3
0%
2378F
5.79e6
25.98
Abs. Int.
1.21e6
6.07e5
0.00e0
RT
20.0
22.0
24.0
26.0
28.0
Rel. Int.
100%
TCDF
19.04-28.80
305.8987 Fn1
Flags: PBM
4σ 1.04e3
0%
2378F
7.30e6
25.98
Abs. Int.
1.51e6
7.56e5
0.00e0
RT
20.0
22.0
24.0
26.0
28.0
Rel. Int.
100%
TCDF Std.
19.04-28.80
315.9419 Fn1
Flags: PBM
4σ 1.48e4
0%
AS 1368F
6.47e7
20.67
JS 1234F
5.48e7
24.47
ES 2378F
5.19e7
25.96
Abs. Int.
1.19e7
5.96e6
0.00e0
RT
20.0
22.0
24.0
26.0
28.0
Rel. Int.
100%
TCDF Std.
19.04-28.80
317.9389 Fn1
Flags: PBM
4σ 4.45e3
0%
AS 1368F
8.15e7
20.67
JS 1234F
6.84e7
24.47
ES 2378F
6.52e7
25.95
Abs. Int.
1.50e7
7.51e6
0.00e0
RT
20.0
22.0
24.0
26.0
28.0
Rel. Int.
100%
HxCDPE
19.04-28.80
375.8364 Fn1
Flags: PB
4σ 9.79e2
0%
Abs. Int.
6.63e3
3.32e3
0.00e0
RT
20.0
22.0
24.0
26.0
28.0


Rel. Int.
100%
0%
Abs. Int.
6.94e3
3.47e3
0.00e0
PeCDF-1
19.04-28.80
339.8597 Fn1
Flags: PB
4σ 1.24e3
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
0%
Abs. Int.
7.71e3
3.85e3
0.00e0
PeCDF-1
19.04-28.80
341.8568 Fn1
Flags: PB
4σ 1.33e3
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
0%
Abs. Int.
6.26e6
3.13e6
0.00e0
QC Check
19.04-28.80
316.9824 Fn1
Flags: -
20.0
22.0
24.0
26.0
28.0
RT


SGS ID: CS3_200811_DF_CB
Sample ID: 20-449-3
Acq: 11-Aug-2020 23:46:51
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 3
User: DTF Datafile: 200811C13
Rel. Int.
Abs. Int.
PeCDF-2
28.82-33.81
339.8597 Fn2
Flags: PBM
4σ 1.11e3
12378F
2.92e7
31.10
23478F
2.81e7
32.27
RRF (12378F) = (2.92e7 + 1.91e7) * 100 pg/uL = 1.01
(5.84e7 + 3.74e7) * 50 pg/uL
CL 13Aug20
7.61e6
3.81e6
0.00e0
PeCDF-2
28.82-33.81
341.8568 Fn2
Flags: PBM
4σ 2.21e3
12378F
1.91e7
31.10
23478F
1.87e7
32.27
5.00e6
2.50e6
PeCDF Std.
28.82-33.81
351.9000 Fn2
Flags: PBM
4σ 3.43e3
CS 12346F
6.01e7
30.54
ES 12378F
5.84e7
31.09
ES 23478F
5.76e7
32.25
1.62e7
8.12e6
PeCDF Std.
28.82-33.81
353.8970 Fn2
Flags: PBM
4σ 1.88e3
CS 12346F
3.83e7
30.53
ES 12378F
3.74e7
31.09
ES 23478F
3.63e7
32.25
1.04e7
5.21e6
HpCDPE
28.82-33.81
409.7974 Fn2
Flags: PB
4σ 1.32e3
7.59e3
3.79e3
100%
0%
29.0
30.0
31.0
32.0
33.0
RT
Results: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\CS3_200811_DF_CB.utp_res, saved 12-Aug-2020 15:18 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 5104, 2709, 9167 scc: 691-754
PKD: 12-Aug-2020 08:16 Printed: 12-Aug-2020 15:36 Page 9 of 12


Rel. Int.
100%
HxCDF
33.82-37.91
373.8207 Fn3
Flags: PBM
4σ 1.44e3
0%
123478F
2.37e7
35.68
123678F
2.50e7
35.82
234678F
2.33e7
36.50
123789F
2.00e7
37.48
Abs. Int.
7.00e6
3.50e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF
33.82-37.91
375.8178 Fn3
Flags: PBM
4σ 2.50e3
0%
123478F
1.92e7
35.68
123678F
2.04e7
35.82
234678F
1.90e7
36.50
123789F
1.65e7
37.48
Abs. Int.
5.66e6
2.83e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF Std.
33.82-37.91
383.8639 Fn3
Flags: PBM
4σ 4.23e3
0%
ES 123678F
2.81e7
35.81
ES 123478F
2.37e7
35.66
CS 123469F
2.53e7
36.12
ES 234678F
2.51e7
36.48
ES 123789F
2.20e7
37.46
Abs. Int.
7.74e6
3.87e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF Std.
33.82-37.91
385.8610 Fn3
Flags: PBM
4σ 3.96e3
0%
ES 123678F
5.25e7
35.81
ES 123478F
4.54e7
35.66
CS 123469F
4.70e7
36.12
ES 234678F
4.70e7
36.48
ES 123789F
4.14e7
37.46
Abs. Int.
1.48e7
7.39e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
OCDPE
33.82-37.91
445.7555 Fn3
Flags: PB
4σ 9.74e2
0%
Abs. Int.
4.16e3
2.08e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT

SGS ID: CS3_200811_DF_CB
Instr: [ILM] AutoSpec-Ultima HRMS3
Sample ID: 20-449-3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 3
Acq: 11-Aug-2020 23:46:51
User: DTF Datafile: 200811C13




OCDF
1.82e7
43.03
Rel. Int.
100%
OCDF
41.21-44.80
441.7428 Fn5
Flags: PBM
4σ 1.13e3
0%
Abs. Int.
2.65e6
1.33e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
OCDF
2.00e7
43.03
Rel. Int.
100%
OCDF
41.21-44.80
443.7398 Fn5
Flags: PBM
4σ 1.52e3
0%
Abs. Int.
2.95e6
1.48e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDF
3.35e7
43.01
Rel. Int.
100%
OCDF Std.
41.21-44.80
453.7830 Fn5
Flags: PBM
4σ 1.12e3
0%
Abs. Int.
5.10e6
2.55e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDF
3.65e7
43.01
Rel. Int.
100%
OCDF Std.
41.21-44.80
455.7801 Fn5
Flags: PBM
4σ 1.54e3
0%
Abs. Int.
5.48e6
2.74e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
DCDPE
41.21-44.80
513.6775 Fn5
Flags: PB
4σ 9.38e2
0%
Abs. Int.
3.97e3
1.99e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT

Dioxin/Furan QC Summary	Acq'd: 12 Aug 2020 10:45 DTF	ICAL: HRMS3_DF_10122018_28AUG2019
Lab ID: CS3_200811_DF_CC	UTP: 12-Aug-2020 15:18:44 DTF	Checkcode: 593-054-PKF
Sample ID: 20-449-3	Report: 12 Aug 2020 15:19 TF	Datafile: 200811C27

Name	RT	Response	RA	OK	Ref. RRFs	Calc. RRFs	Dev'n
2378-TCDD	26.92	1.09E+07	0.80	Y	1.19	1.23	3%
12378-PeCDD	32.63	3.81E+07	1.55	Y	0.98	1.06	7%
123478-HxCDD	36.68	3.21E+07	1.26	Y	1.02	1.09	7%
123678-HxCDD	36.80	3.30E+07	1.28	Y	1.09	1.14	5%
123789-HxCDD	37.10	3.37E+07	1.24	Y	0.97	1.06	9%
1234678-HpCDD	40.17	2.66E+07	1.05	Y	0.98	1.04	7%
OCDD	42.89	3.64E+07	0.91	Y	1.07	1.15	7%
2378-TCDF	25.96	1.54E+07	0.78	Y	1.01	1.12	11%
12378-PeCDF	31.09	5.36E+07	1.54	Y	0.96	1.02	5%
23478-PeCDF	32.26	5.43E+07	1.53	Y	0.99	0.99	1%
123478-HxCDF	35.67	4.73E+07	1.23	Y	1.21	1.26	4%
123678-HxCDF	35.82	5.00E+07	1.23	Y	1.11	1.15	4%
234678-HxCDF	36.49	4.57E+07	1.22	Y	1.12	1.16	4%
123789-HxCDF	37.47	3.95E+07	1.23	Y	1.11	1.16	4%
1234678-HpCDF	39.15	3.70E+07	1.02	Y	1.32	1.34	1%
1234789-HpCDF	40.60	3.06E+07	1.01	Y	1.26	1.28	2%
OCDF	43.03	4.37E+07	0.89	Y	1.03	1.07	4%
ES 2378-TCDD	26.89	8.88E+07	0.80	Y	0.99	0.96	-3%
ES 12378-PeCDD	32.61	7.20E+07	1.60	Y	0.83	0.78	-6%
ES 123478-HxCDD	36.67	5.87E+07	1.26	Y	0.95	0.93	-2%
ES 123678-HxCDD	36.78	5.77E+07	1.26	Y	0.98	0.91	-6%
ES 123789-HxCDD	37.08	6.36E+07	1.26	Y	1.14	1.01	-11%
ES 1234678-HpCDD	40.16	5.12E+07	1.06	Y	0.90	0.81	-9%
ES OCDD	42.88	6.36E+07	0.90	Y	0.63	0.50	-19%
ES 2378-TCDF	25.94	1.37E+08	0.79	Y	1.00	1.00	0%
ES 12378-PeCDF	31.07	1.06E+08	1.53	Y	0.83	0.77	-7%
ES 23478-PeCDF	32.24	1.09E+08	1.58	Y	0.81	0.80	-1%
ES 123478-HxCDF	35.66	7.54E+07	0.54	Y	1.12	1.20	7%
ES 123678-HxCDF	35.8	8.69E+07	0.52	Y	1.33	1.38	4%
ES 234678-HxCDF	36.47	7.89E+07	0.53	Y	1.21	1.25	4%
ES 123789-HxCDF	37.45	6.82E+07	0.53	Y	1.12	1.08	-3%
ES 1234678-HpCDF	39.13	5.54E+07	0.46	Y	0.92	0.88	-5%
ES 1234789-HpCDF	40.59	4.79E+07	0.46	Y	0.82	0.76	-7%
ES OCDF	43.02	8.17E+07	0.90	Y	0.78	0.65	-17%

Dioxin/Furan QC Summary	Acq'd: 12 Aug 2020 10:45 DTF	ICAL: HRMS3_DF_10122018_28AUG2019
Lab ID: CS3_200811_DF_CC	UTP: 12-Aug-2020 15:18:44 DTF	Checkcode: 593-054-PKF
Sample ID: 20-449-3	Report: 12 Aug 2020 15:19 TF	Datafile: 200811C27

Name	RT	Response	RA	OK	Ref. RRFs	Calc. RRFs	Dev'n
JS 1234-TCDD	26.19	9.26E+07	0.80	Y	-	-	-
JS 1234-TCDF	24.45	1.37E+08	0.79	Y	-	-	-
JS 123467-HxCDD	36.98	3.15E+07	1.22	Y	-	-	-
CS 37Cl-2378-TCDD	26.92	1.04E+07	n/a	-	1.12	1.12	0%
CS 12347-PeCDD	32.09	6.40E+07	1.59	Y	0.71	0.69	-3%
CS 12346-PeCDF	30.52	1.06E+08	1.56	Y	0.81	0.77	-5%
CS 123469-HxCDF	36.11	7.69E+07	0.53	Y	1.12	1.22	9%
CS 1234689-HpCDF	39.58	5.47E+07	0.47	Y	0.90	0.87	-3%
~~SS 37Cl-2378-TCDD~~	~~26.92~~	~~1.04E+07~~	~~n/a~~	~~-~~	~~1.14~~	~~1.17~~	~~2%~~
~~SS 12347-PeCDD~~	~~32.09~~	~~6.40E+07~~	~~1.59~~	~~Y~~	~~0.86~~	~~0.89~~	~~3%~~
~~SS 12346-PeCDF~~	~~30.52~~	~~1.06E+08~~	~~1.56~~	~~Y~~	~~0.98~~	~~1.00~~	~~2%~~
~~SS 123469-HxCDF~~	~~36.11~~	~~7.69E+07~~	~~0.53~~	~~Y~~	~~0.85~~	~~0.89~~	~~5%~~
~~SS 1234689-HpCDF~~	~~39.58~~	~~5.47E+07~~	~~0.47~~	~~Y~~	~~0.97~~	~~0.99~~	~~1%~~
Not used in this project.							
CL 13Aug20							
~~OCDD-a~~	~~42.88~~	~~1.71E+06~~	~~2.40~~	~~Y~~		~~0.05~~	~~#VALUE!~~
~~OCDF-a~~	~~43.00~~	~~1.56E+06~~	~~2.12~~	~~Y~~		~~0.04~~	~~#VALUE!~~

METHOD 8290A **PCDD/F CALIBRATION VERIFICATION** **FORM 4A**

Lab Name: SGS North America

Initial Calibration: ICAL: HRMS3_DF_10122018_28AUG2019

Instrument ID: HRMS3 GC Column ID: ZB-5ms

VER Data Filename: 200811C27 Analysis Date: 12-AUG-2020 10:45:34

NATIVE ANALYTES	M/Z's FORMING RATIO	ION ABUND. RATIO	QC LIMITS			OK	CONC. FOUND	RANGE (ng/mL)			OK
2,3,7,8-TCDD	M/M+2	0.80	0.65	-	0.89	Y	10.3	8	-	12	Y
1,2,3,7,8-PeCDD	M+2/M+4	1.55	1.32	-	1.78	Y	53.7	40	-	60	Y
1,2,3,4,7,8-HxCDD	M+2/M+4	1.26	1.05	-	1.43	Y	53.4	40	-	60	Y
1,2,3,6,7,8-HxCDD	M+2/M+4	1.28	1.05	-	1.43	Y	52.7	40	-	60	Y
1,2,3,7,8,9-HxCDD	M+2/M+4	1.24	1.05	-	1.43	Y	54.6	40	-	60	Y
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.05	0.88	-	1.20	Y	53.3	40	-	60	Y
OCDD	M+2/M+4	0.91	0.76	-	1.02	Y	107	80	-	120	Y
2,3,7,8-TCDF	M/M+2	0.78	0.65	-	0.89	Y	11.1	8	-	12	Y
1,2,3,7,8-PeCDF	M+2/M+4	1.54	1.32	-	1.78	Y	52.6	40	-	60	Y
2,3,4,7,8-PeCDF	M+2/M+4	1.53	1.32	-	1.78	Y	50.4	40	-	60	Y
1,2,3,4,7,8-HxCDF	M+2/M+4	1.23	1.05	-	1.43	Y	52	40	-	60	Y
1,2,3,6,7,8-HxCDF	M+2/M+4	1.23	1.05	-	1.43	Y	52.1	40	-	60	Y
2,3,4,6,7,8-HxCDF	M+2/M+4	1.22	1.05	-	1.43	Y	51.9	40	-	60	Y
1,2,3,7,8,9-HxCDF	M+2/M+4	1.23	1.05	-	1.43	Y	52.2	40	-	60	Y
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.02	0.88	-	1.20	Y	50.4	40	-	60	Y
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.01	0.88	-	1.20	Y	50.9	40	-	60	Y
OCDF	M+2/M+4	0.89	0.76	-	1.02	Y	104	80	-	120	Y

Processed: 12 Aug 2020 15:19 Analyst: TF

METHOD 8290A **PCDD/F CALIBRATION VERIFICATION** **FORM 4B**

Lab Name: SGS North America

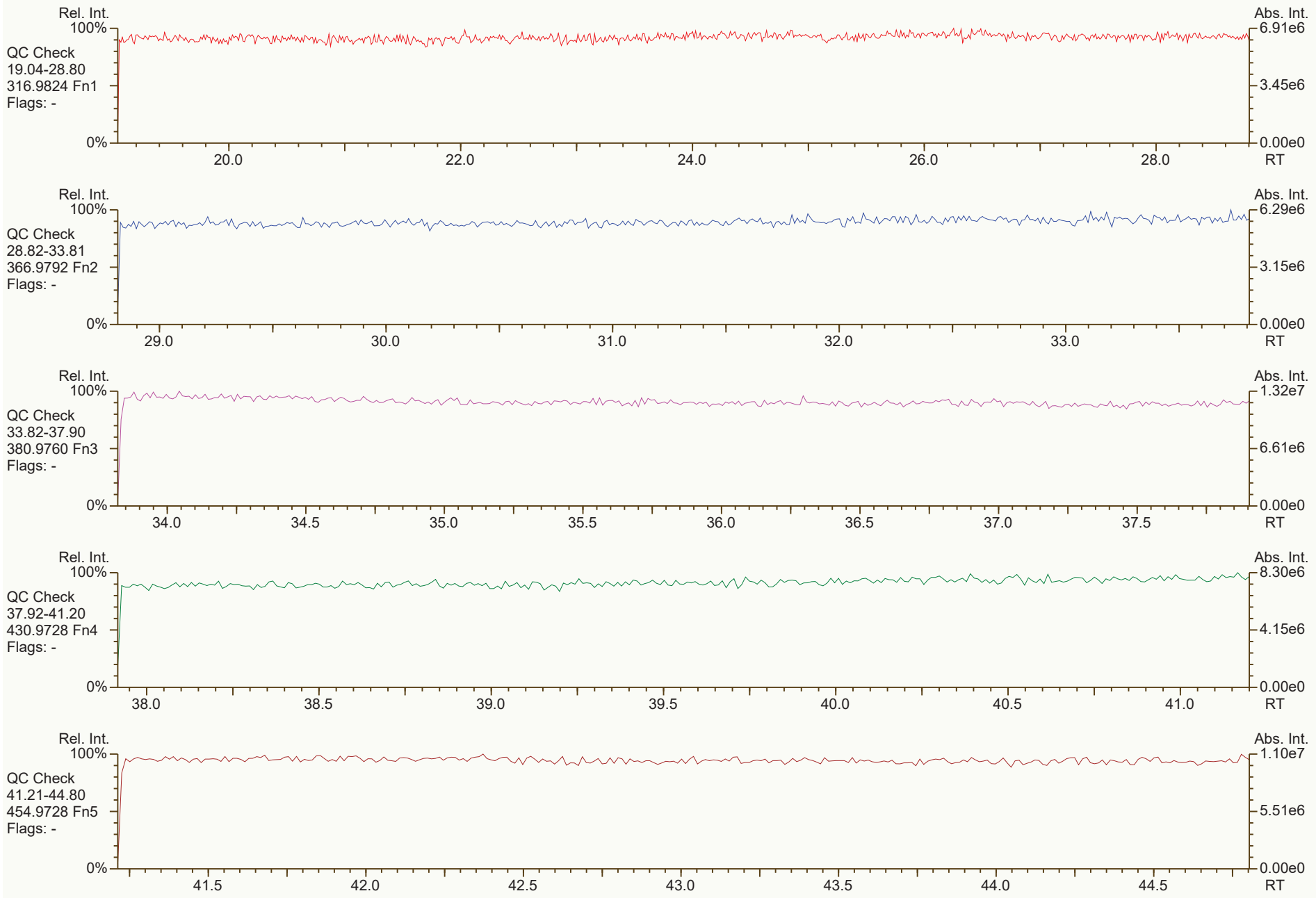
Initial Calibration: ICAL: HRMS3_DF_10122018_28AUG2019

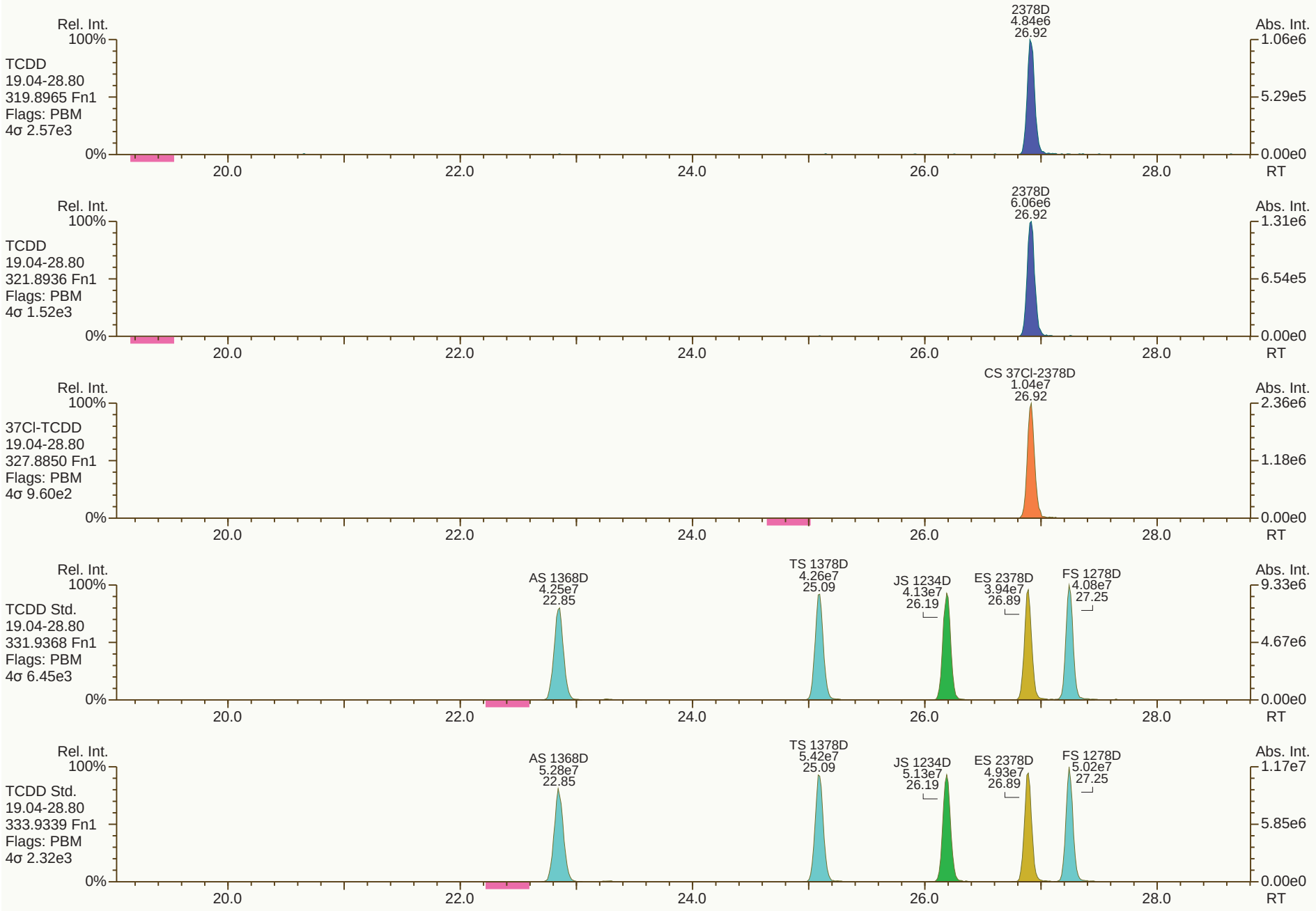
Instrument ID: HRMS3 GC Column ID: ZB-5ms

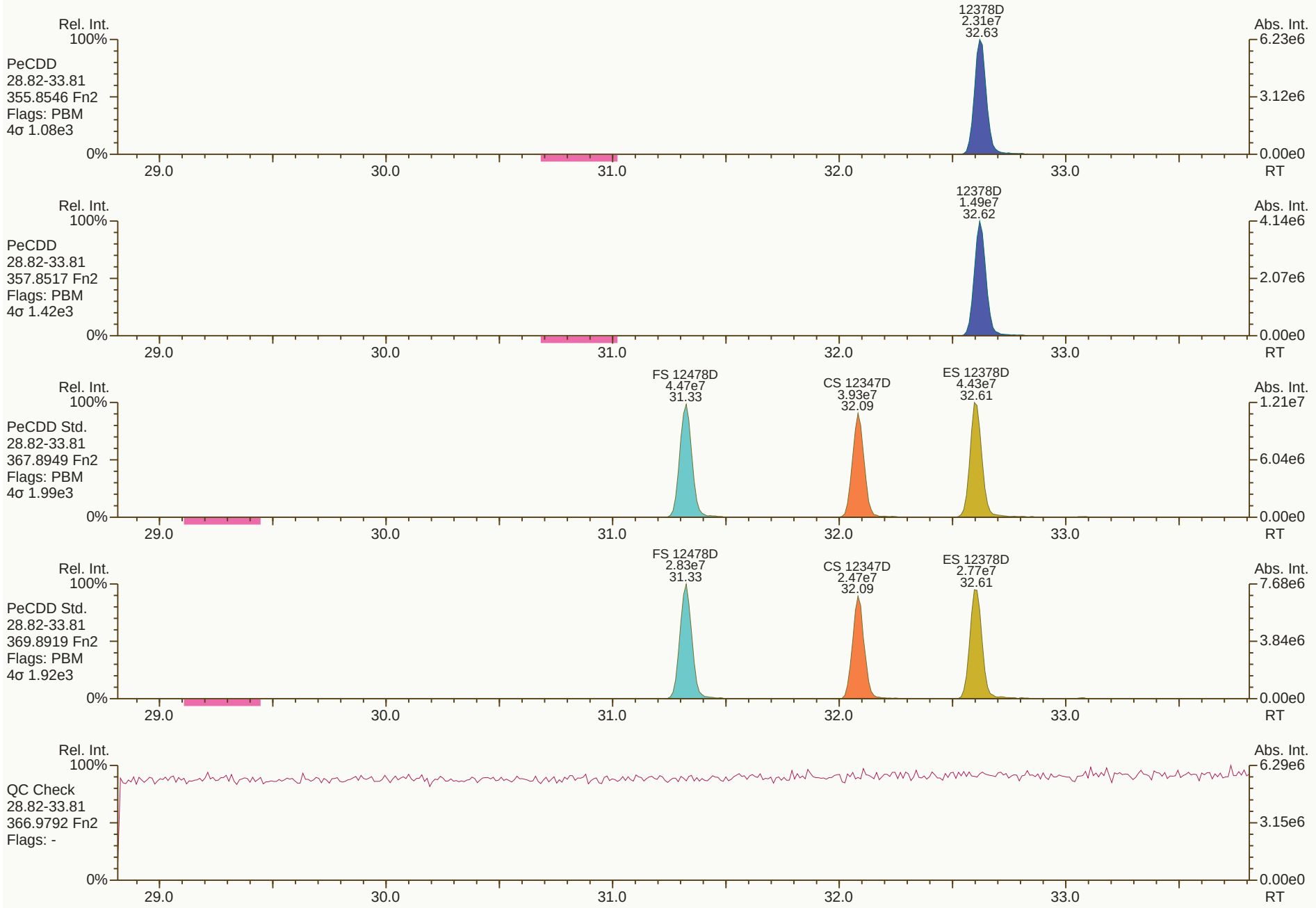
VER Data Filename: 200811C27 Analysis Date: 12-AUG-2020 10:45:34

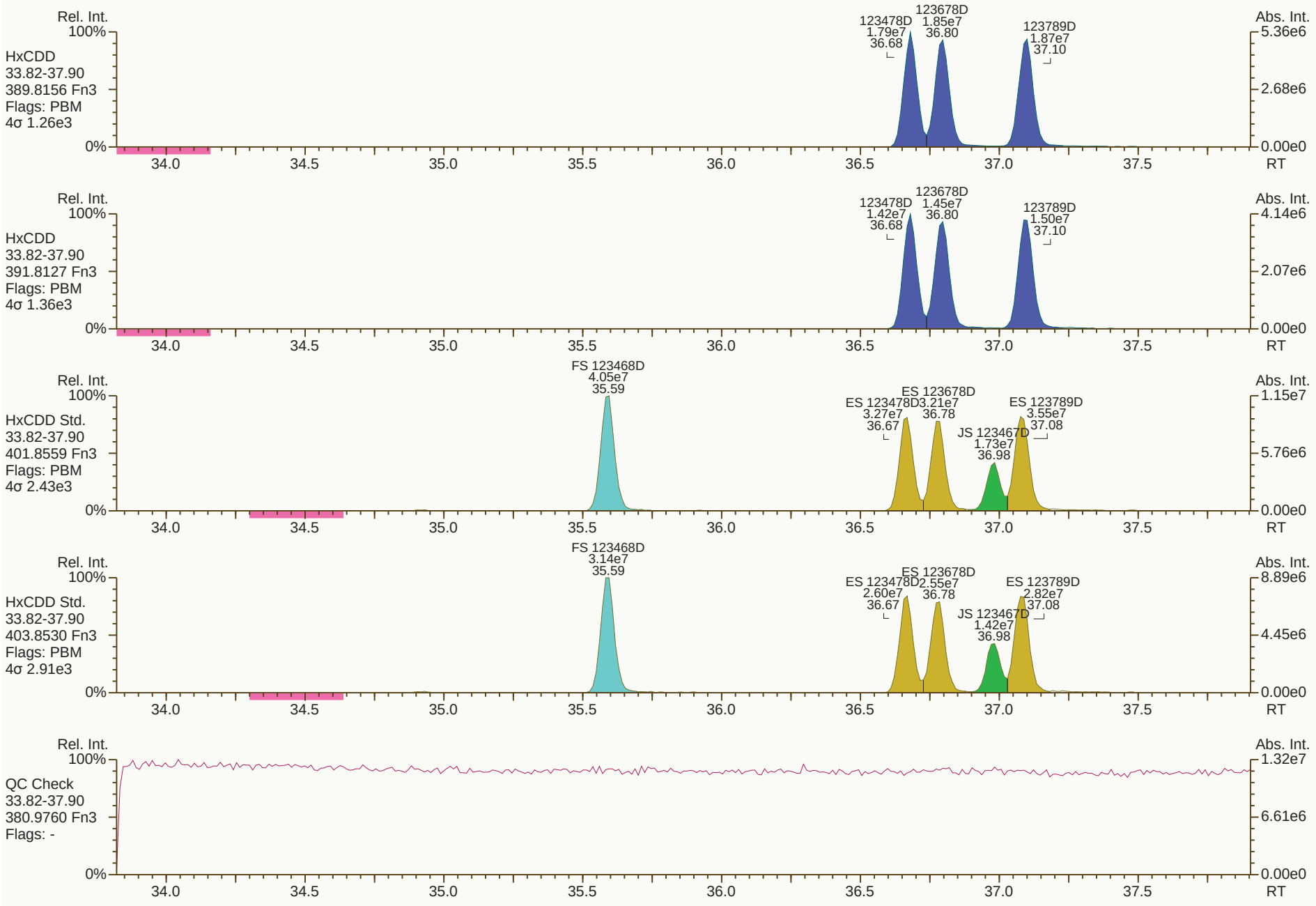
LABELED ANALYTES	M/Z's FORMING RATIO	ION ABUND. RATIO	QC LIMITS			OK	CONC. FOUND	RANGE (ng/mL)			OK
13C-2,3,7,8-TCDD	M/M+2	0.80	0.65	-	0.89	Y	96.9	70	-	130	Y
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.60	1.32	-	1.78	Y	93.7	70	-	130	Y
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.26	1.05	-	1.43	Y	98.4	70	-	130	Y
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.26	1.05	-	1.43	Y	93.8	70	-	130	Y
13C-1,2,3,7,8,9-HxCDD	M+2/M+4	1.26	1.05	-	1.43	Y	88.9	70	-	130	Y
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.06	0.88	-	1.20	Y	90.5	70	-	130	Y
13C-OCDD	M+2/M+4	0.90	0.76	-	1.02	Y	161	140	-	260	Y
13C-2,3,7,8-TCDF	M/M+2	0.79	0.65	-	0.89	Y	100	70	-	130	Y
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.53	1.32	-	1.78	Y	92.7	70	-	130	Y
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.58	1.32	-	1.78	Y	98.8	70	-	130	Y
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.54	0.43	-	0.59	Y	107	70	-	130	Y
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	104	70	-	130	Y
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.53	0.43	-	0.59	Y	104	70	-	130	Y
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.53	0.43	-	0.59	Y	96.9	70	-	130	Y
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.46	0.37	-	0.51	Y	95.1	70	-	130	Y
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.46	0.37	-	0.51	Y	92.7	70	-	130	Y
13C-OCDF	M+2/M+4	0.90	0.76	-	1.02	Y	166	140	-	260	Y
CLEANUP STANDARDS											
37Cl-2,3,7,8-TCDD	n/a						10	7.9	-	12.7	Y
13C-1,2,3,4,7-PeCDD	M+2/M+4	1.59	1.32	-	1.78	Y	96.8	70	-	130	Y
13C-1,2,3,4,6-PeCDF	M+2/M+4	1.56	1.32	-	1.78	Y	95.2	70	-	130	Y
13C-1,2,3,4,6,9-HxCDF	M/M+2	0.53	0.43	-	0.59	Y	109	70	-	130	Y
13C-1,2,3,4,6,8,9-HpCDF	M/M+2	0.47	0.37	-	0.51	Y	96.9	70	-	130	Y

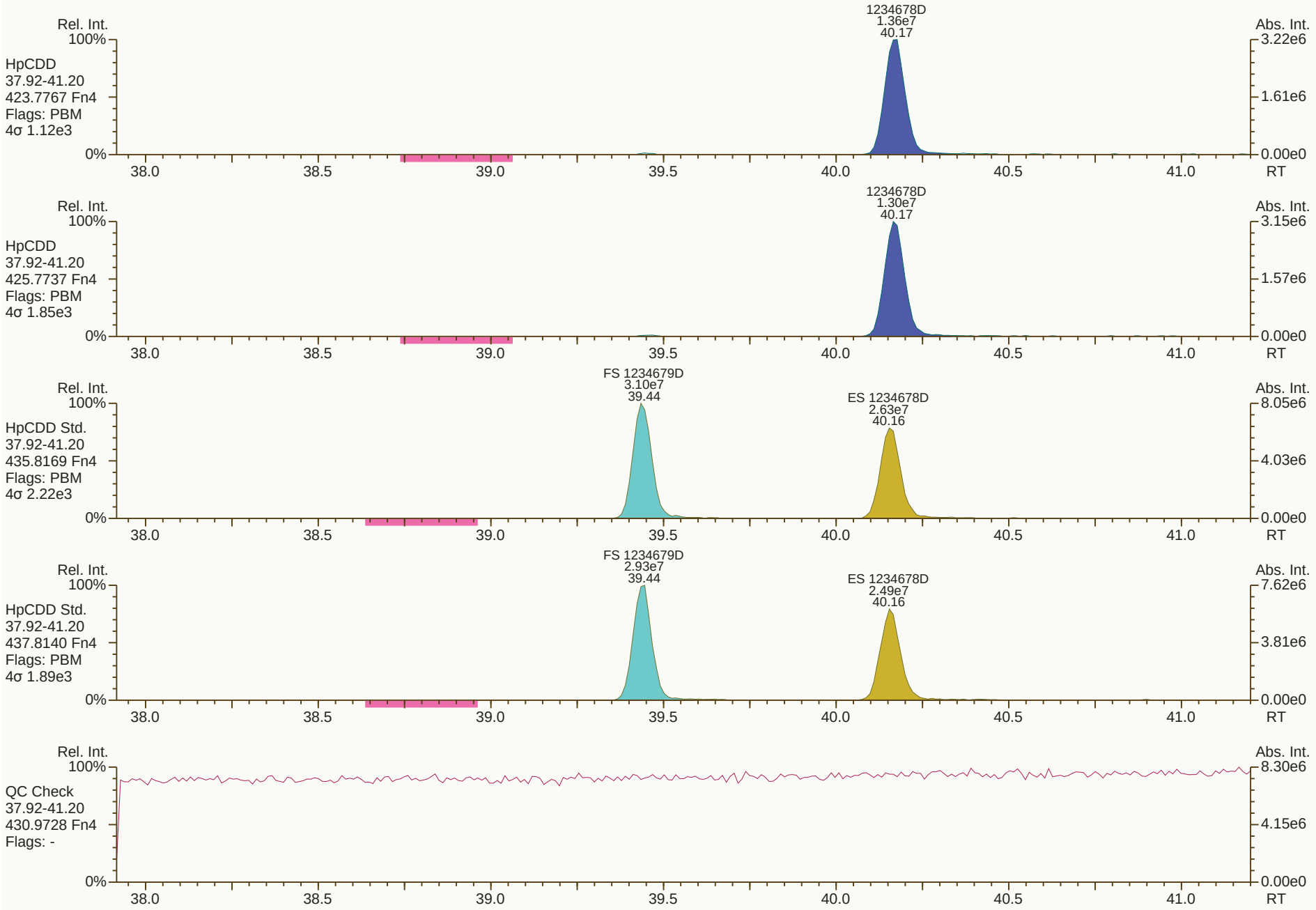
Processed: 12 Aug 2020 15:19 Analyst: TF

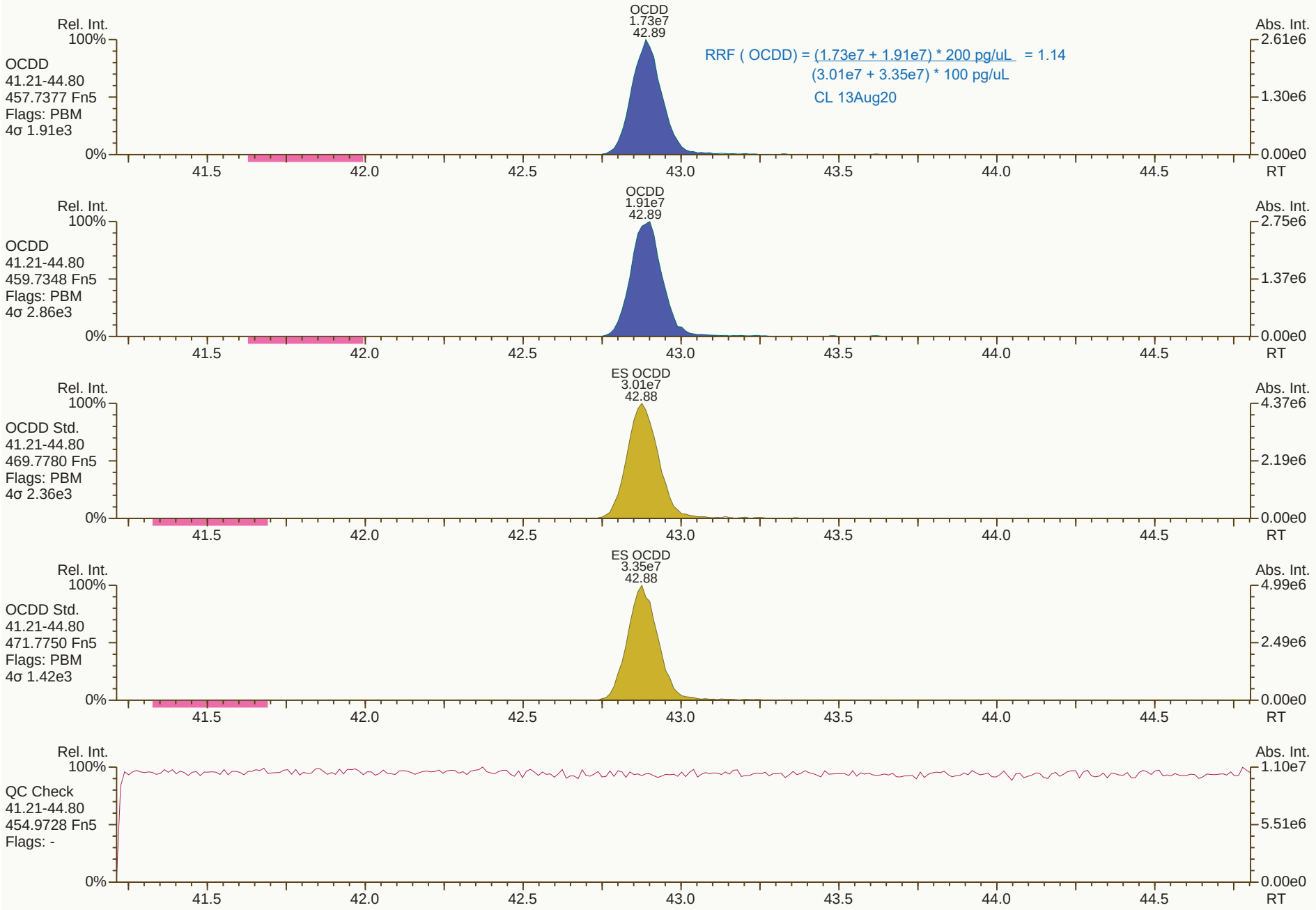

Rel. Int.
100%
0%
Abs. Int.
6.91e6
3.45e6
0.00e0
RT
QC Check
19.04-28.80
316.9824 Fn1
Flags: -
20.0
22.0
24.0
26.0
28.0
Rel. Int.
100%
0%
Abs. Int.
6.29e6
3.15e6
0.00e0
RT
QC Check
28.82-33.81
366.9792 Fn2
Flags: -
29.0
30.0
31.0
32.0
33.0
Rel. Int.
100%
0%
Abs. Int.
1.32e7
6.61e6
0.00e0
RT
QC Check
33.82-37.90
380.9760 Fn3
Flags: -
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
Rel. Int.
100%
0%
Abs. Int.
8.30e6
4.15e6
0.00e0
RT
QC Check
37.92-41.20
430.9728 Fn4
Flags: -
38.0
38.5
39.0
39.5
40.0
40.5
41.0
Rel. Int.
100%
0%
Abs. Int.
1.10e7
5.51e6
0.00e0
RT
QC Check
41.21-44.80
454.9728 Fn5
Flags: -
41.5
42.0
42.5
43.0
43.5
44.0
44.5


Rel. Int.
100%
TCDD
19.04-28.80
319.8965 Fn1
Flags: PBM
4σ 2.57e3
0%
2378D
4.84e6
26.92
Abs. Int.
1.06e6
5.29e5
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD
19.04-28.80
321.8936 Fn1
Flags: PBM
4σ 1.52e3
0%
2378D
6.06e6
26.92
Abs. Int.
1.31e6
6.54e5
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
37Cl-TCDD
19.04-28.80
327.8850 Fn1
Flags: PBM
4σ 9.60e2
0%
CS 37Cl-2378D
1.04e7
26.92
Abs. Int.
2.36e6
1.18e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.80
331.9368 Fn1
Flags: PBM
4σ 6.45e3
0%
AS 1368D
4.25e7
22.85
TS 1378D
4.26e7
25.09
JS 1234D
4.13e7
26.19
ES 2378D
3.94e7
26.89
FS 1278D
4.08e7
27.25
Abs. Int.
9.33e6
4.67e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.80
333.9339 Fn1
Flags: PBM
4σ 2.32e3
0%
AS 1368D
5.28e7
22.85
TS 1378D
5.42e7
25.09
JS 1234D
5.13e7
26.19
ES 2378D
4.93e7
26.89
FS 1278D
5.02e7
27.25
Abs. Int.
1.17e7
5.85e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT


Rel. Int.
100%
PeCDD
28.82-33.81
355.8546 Fn2
Flags: PBM
4σ 1.08e3
0%
12378D
2.31e7
32.63
Abs. Int.
6.23e6
3.12e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD
28.82-33.81
357.8517 Fn2
Flags: PBM
4σ 1.42e3
0%
12378D
1.49e7
32.62
Abs. Int.
4.14e6
2.07e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.82-33.81
367.8949 Fn2
Flags: PBM
4σ 1.99e3
0%
FS 12478D
4.47e7
31.33
CS 12347D
3.93e7
32.09
ES 12378D
4.43e7
32.61
Abs. Int.
1.21e7
6.04e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.82-33.81
369.8919 Fn2
Flags: PBM
4σ 1.92e3
0%
FS 12478D
2.83e7
31.33
CS 12347D
2.47e7
32.09
ES 12378D
2.77e7
32.61
Abs. Int.
7.68e6
3.84e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
QC Check
28.82-33.81
366.9792 Fn2
Flags: -
0%
Abs. Int.
6.29e6
3.15e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT

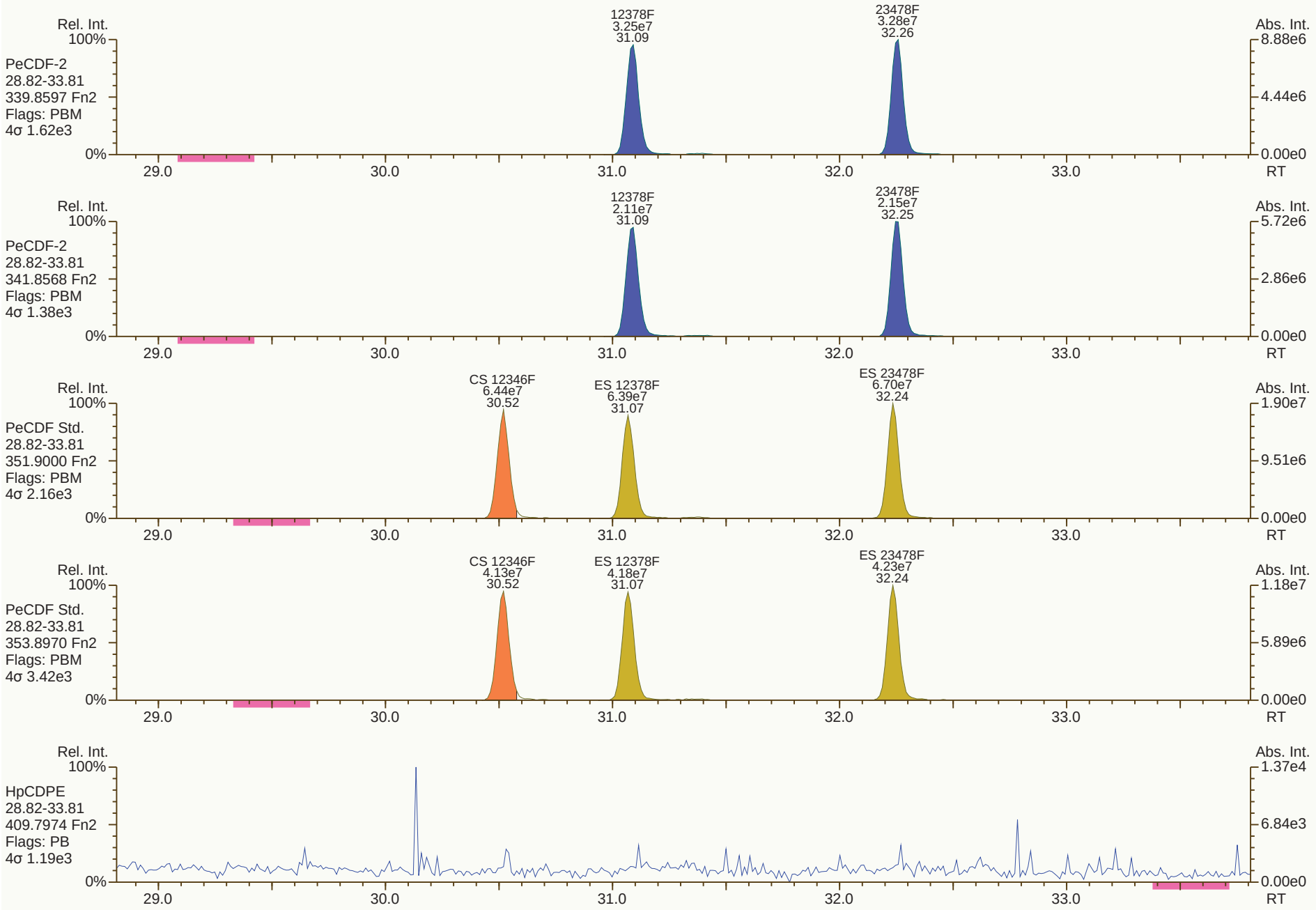

Rel. Int.
100%
HxCDD
33.82-37.90
389.8156 Fn3
Flags: PBM
4σ 1.26e3
123478D 1.79e7 36.68
123678D 1.85e7 36.80
123789D 1.87e7 37.10
Abs. Int.
5.36e6
2.68e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD
33.82-37.90
391.8127 Fn3
Flags: PBM
4σ 1.36e3
123478D 1.42e7 36.68
123678D 1.45e7 36.80
123789D 1.50e7 37.10
Abs. Int.
4.14e6
2.07e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.82-37.90
401.8559 Fn3
Flags: PBM
4σ 2.43e3
FS 123468D 4.05e7 35.59
ES 123478D 3.27e7 36.67
ES 123678D 3.21e7 36.78
JS 123467D 1.73e7 36.98
ES 123789D 3.55e7 37.08
Abs. Int.
1.15e7
5.76e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.82-37.90
403.8530 Fn3
Flags: PBM
4σ 2.91e3
FS 123468D 3.14e7 35.59
ES 123478D 2.60e7 36.67
ES 123678D 2.55e7 36.78
JS 123467D 1.42e7 36.98
ES 123789D 2.82e7 37.08
Abs. Int.
8.89e6
4.45e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
QC Check
33.82-37.90
380.9760 Fn3
Flags: -
Abs. Int.
1.32e7
6.61e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT

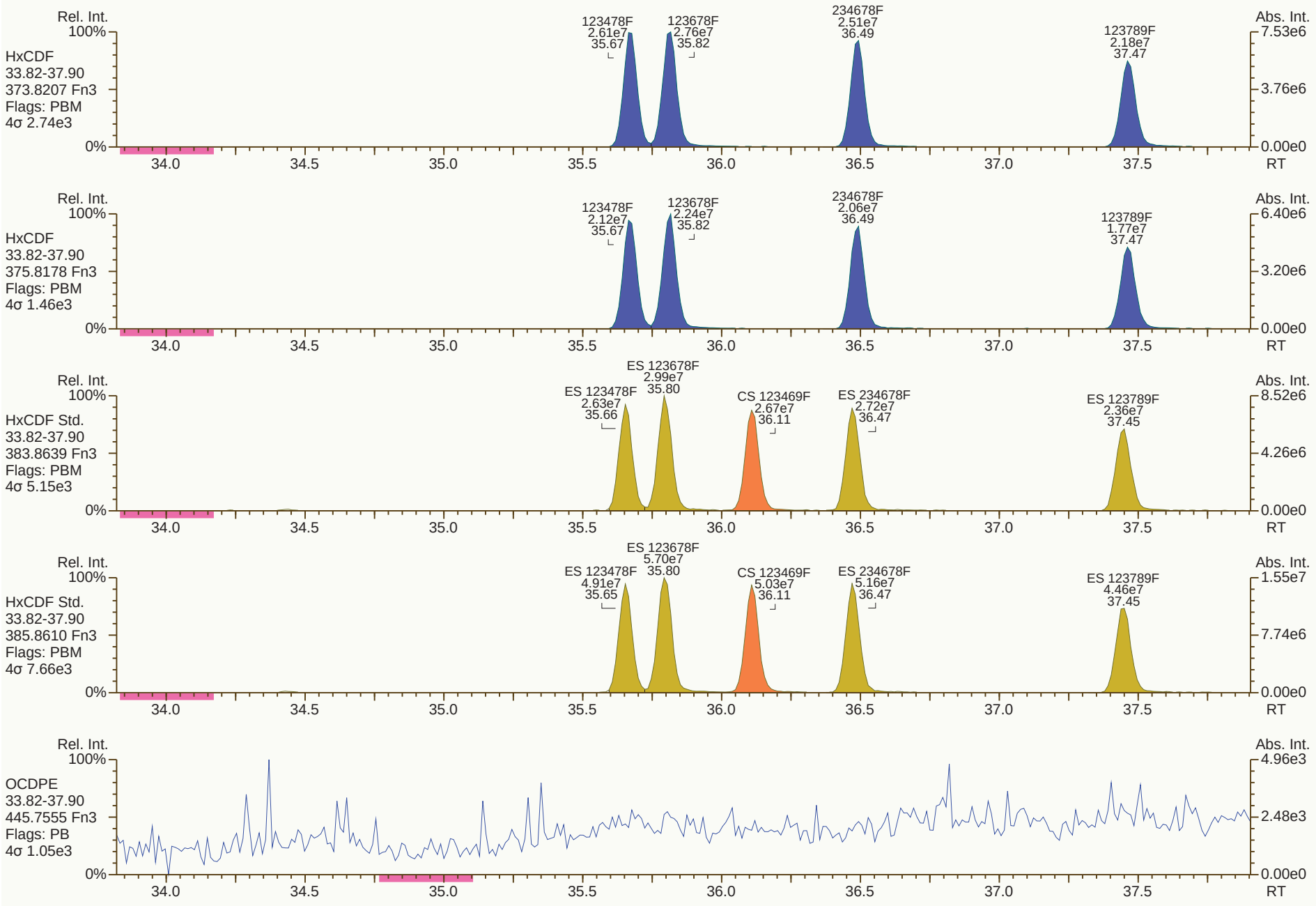

Rel. Int.
100%
HpCDD
37.92-41.20
423.7767 Fn4
Flags: PBM
4σ 1.12e3
0%
1234678D
1.36e7
40.17
Abs. Int.
3.22e6
1.61e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD
37.92-41.20
425.7737 Fn4
Flags: PBM
4σ 1.85e3
0%
1234678D
1.30e7
40.17
Abs. Int.
3.15e6
1.57e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.92-41.20
435.8169 Fn4
Flags: PBM
4σ 2.22e3
0%
FS 1234679D
3.10e7
39.44
ES 1234678D
2.63e7
40.16
Abs. Int.
8.05e6
4.03e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.92-41.20
437.8140 Fn4
Flags: PBM
4σ 1.89e3
0%
FS 1234679D
2.93e7
39.44
ES 1234678D
2.49e7
40.16
Abs. Int.
7.62e6
3.81e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
QC Check
37.92-41.20
430.9728 Fn4
Flags: -
0%
Abs. Int.
8.30e6
4.15e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT

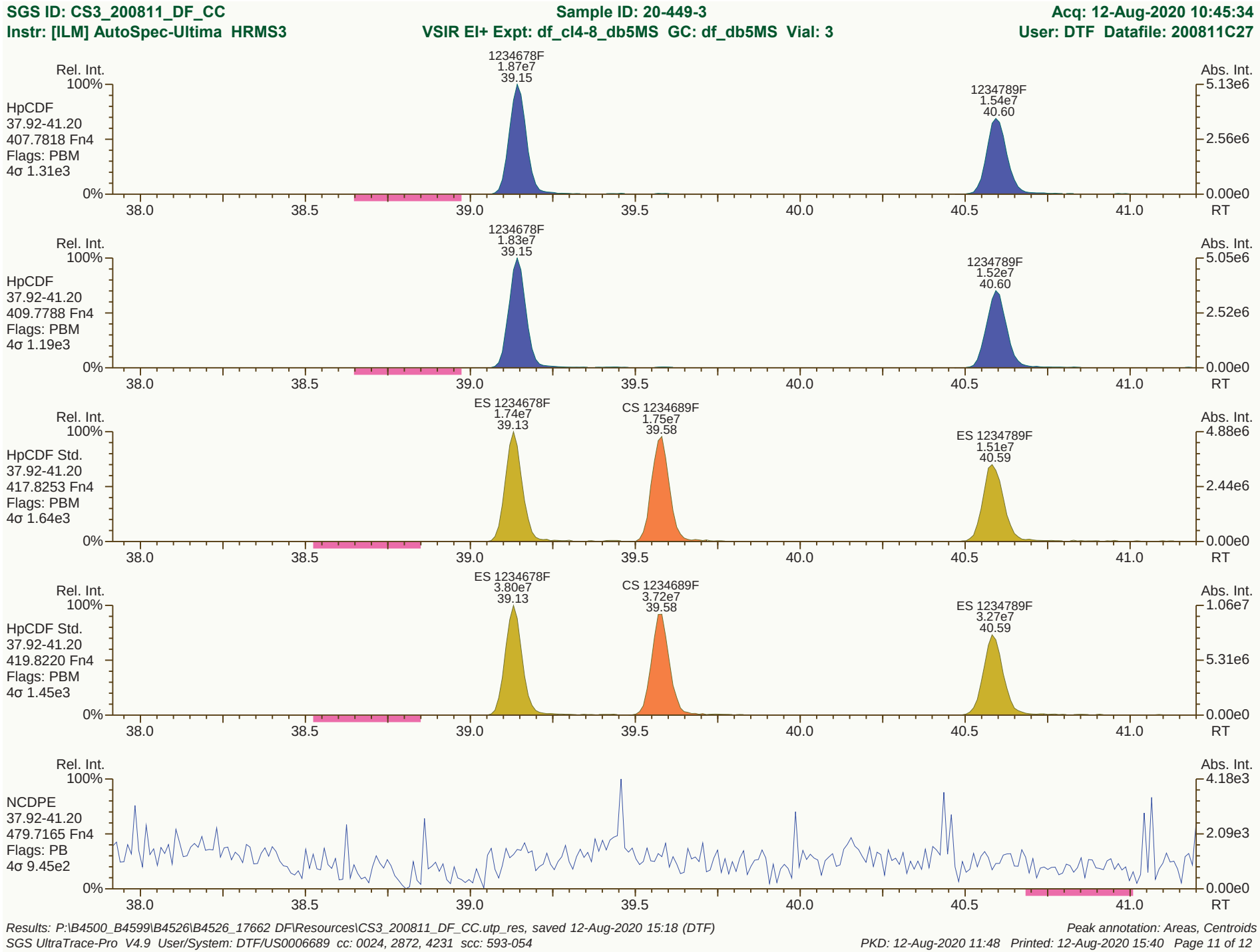

OCDD
1.73e7
42.89
RRF (OCDD) = (1.73e7 + 1.91e7) * 200 pg/uL = 1.14
(3.01e7 + 3.35e7) * 100 pg/uL
CL 13Aug20
Rel. Int.
Abs. Int.
OCDD
41.21-44.80
457.7377 Fn5
Flags: PBM
4σ 1.91e3
OCDD
1.91e7
42.89
OCDD
41.21-44.80
459.7348 Fn5
Flags: PBM
4σ 2.86e3
ES OCDD
3.01e7
42.88
OCDD Std.
41.21-44.80
469.7780 Fn5
Flags: PBM
4σ 2.36e3
ES OCDD
3.35e7
42.88
OCDD Std.
41.21-44.80
471.7750 Fn5
Flags: PBM
4σ 1.42e3
QC Check
41.21-44.80
454.9728 Fn5
Flags: -
RT


Rel. Int.
100%
TCDF
19.04-28.80
303.9016 Fn1
Flags: PBM
4σ 9.89e2
0%
2378F
6.71e6
25.96
Abs. Int.
1.38e6
6.90e5
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDF
19.04-28.80
305.8987 Fn1
Flags: PBM
4σ 1.41e3
0%
2378F
8.65e6
25.96
Abs. Int.
1.83e6
9.15e5
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDF Std.
19.04-28.80
315.9419 Fn1
Flags: PBM
4σ 1.25e4
0%
AS 1368F
6.93e7
20.64
JS 1234F
6.04e7
24.45
ES 2378F
6.04e7
25.94
Abs. Int.
1.35e7
6.73e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDF Std.
19.04-28.80
317.9389 Fn1
Flags: PBM
4σ 6.61e3
0%
AS 1368F
8.77e7
20.64
JS 1234F
7.69e7
24.45
ES 2378F
7.65e7
25.94
Abs. Int.
1.63e7
8.13e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
HxCDPE
19.04-28.80
375.8364 Fn1
Flags: PB
4σ 1.14e3
0%
Abs. Int.
9.27e3
4.64e3
0.00e0
20.0
22.0
24.0
26.0
28.0
RT

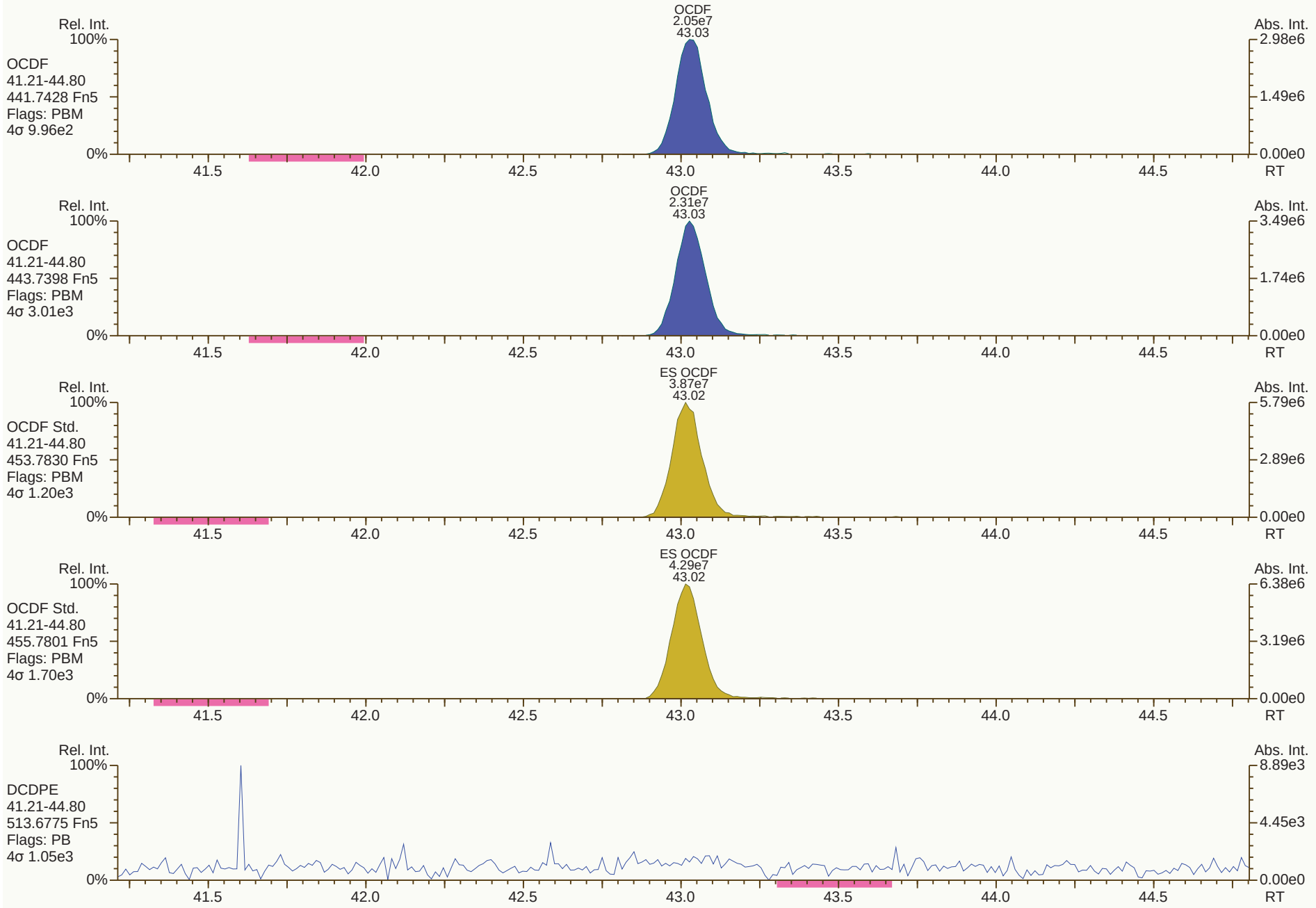

Rel. Int.
100%
0%
Abs. Int.
5.88e3
2.94e3
0.00e0
PeCDF-1
19.04-28.80
339.8597 Fn1
Flags: PB
4σ 1.30e3
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
0%
Abs. Int.
2.08e4
1.04e4
0.00e0
PeCDF-1
19.04-28.80
341.8568 Fn1
Flags: PB
4σ 9.67e2
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
0%
Abs. Int.
6.91e6
3.45e6
0.00e0
QC Check
19.04-28.80
316.9824 Fn1
Flags: -
20.0
22.0
24.0
26.0
28.0
RT

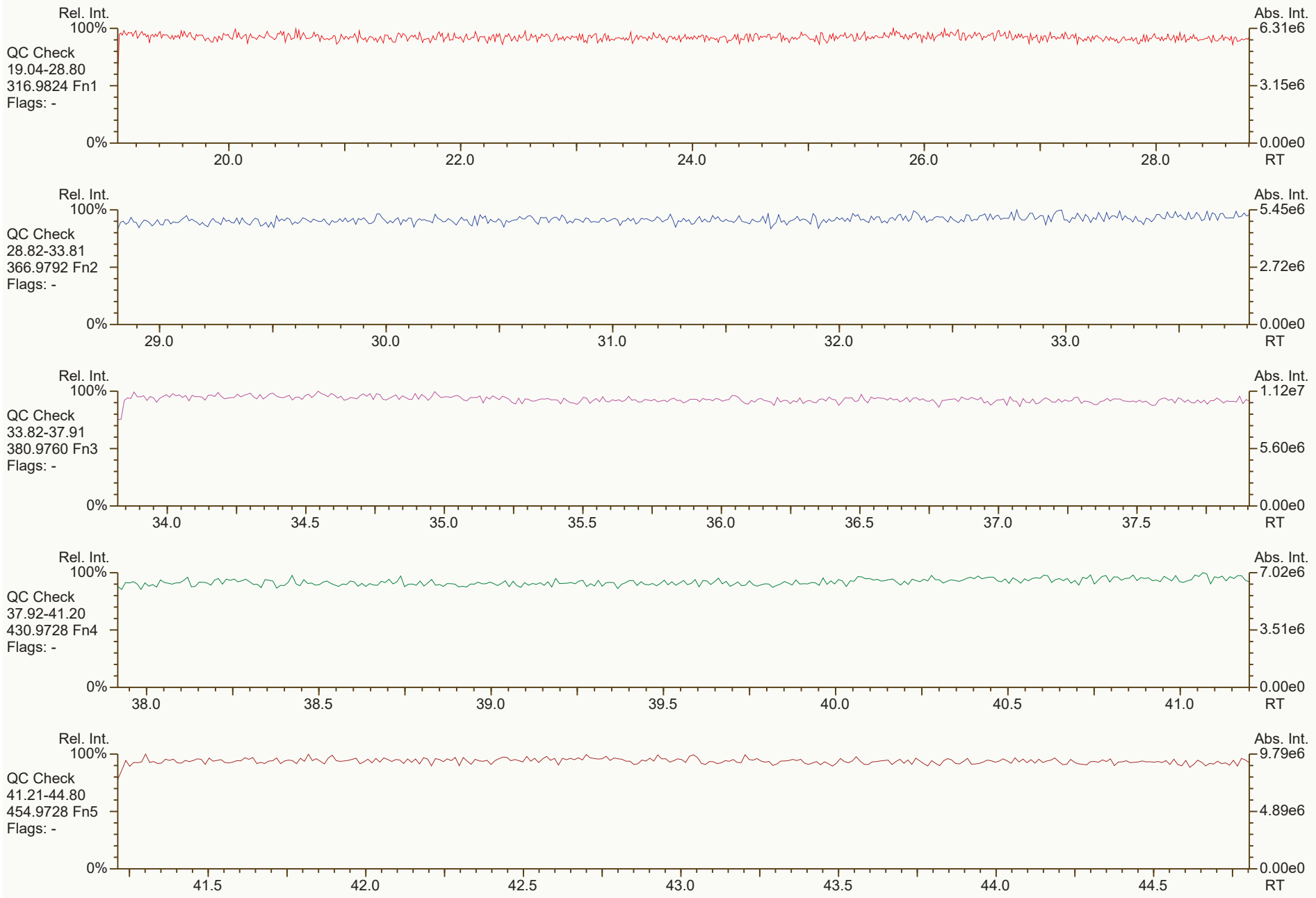

Rel. Int.
100%
PeCDF-2
28.82-33.81
339.8597 Fn2
Flags: PBM
4σ 1.62e3
0%
12378F
3.25e7
31.09
23478F
3.28e7
32.26
Abs. Int.
8.88e6
4.44e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF-2
28.82-33.81
341.8568 Fn2
Flags: PBM
4σ 1.38e3
0%
12378F
2.11e7
31.09
23478F
2.15e7
32.25
Abs. Int.
5.72e6
2.86e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.82-33.81
351.9000 Fn2
Flags: PBM
4σ 2.16e3
0%
CS 12346F
6.44e7
30.52
ES 12378F
6.39e7
31.07
ES 23478F
6.70e7
32.24
Abs. Int.
1.90e7
9.51e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.82-33.81
353.8970 Fn2
Flags: PBM
4σ 3.42e3
0%
CS 12346F
4.13e7
30.52
ES 12378F
4.18e7
31.07
ES 23478F
4.23e7
32.24
Abs. Int.
1.18e7
5.89e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
HpCDPE
28.82-33.81
409.7974 Fn2
Flags: PB
4σ 1.19e3
0%
Abs. Int.
1.37e4
6.84e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT


Rel. Int.
100%
HxCDF
33.82-37.90
373.8207 Fn3
Flags: PBM
4σ 2.74e3
0%
123478F
2.61e7
35.67
123678F
2.76e7
35.82
234678F
2.51e7
36.49
123789F
2.18e7
37.47
Abs. Int.
7.53e6
3.76e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF
33.82-37.90
375.8178 Fn3
Flags: PBM
4σ 1.46e3
0%
123478F
2.12e7
35.67
123678F
2.24e7
35.82
234678F
2.06e7
36.49
123789F
1.77e7
37.47
Abs. Int.
6.40e6
3.20e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF Std.
33.82-37.90
383.8639 Fn3
Flags: PBM
4σ 5.15e3
0%
ES 123678F
2.99e7
35.80
ES 123478F
2.63e7
35.66
CS 123469F
2.67e7
36.11
ES 234678F
2.72e7
36.47
ES 123789F
2.36e7
37.45
Abs. Int.
8.52e6
4.26e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF Std.
33.82-37.90
385.8610 Fn3
Flags: PBM
4σ 7.66e3
0%
ES 123678F
5.70e7
35.80
ES 123478F
4.91e7
35.65
CS 123469F
5.03e7
36.11
ES 234678F
5.16e7
36.47
ES 123789F
4.46e7
37.45
Abs. Int.
1.55e7
7.74e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
OCDPE
33.82-37.90
445.7555 Fn3
Flags: PB
4σ 1.05e3
0%
Abs. Int.
4.96e3
2.48e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT



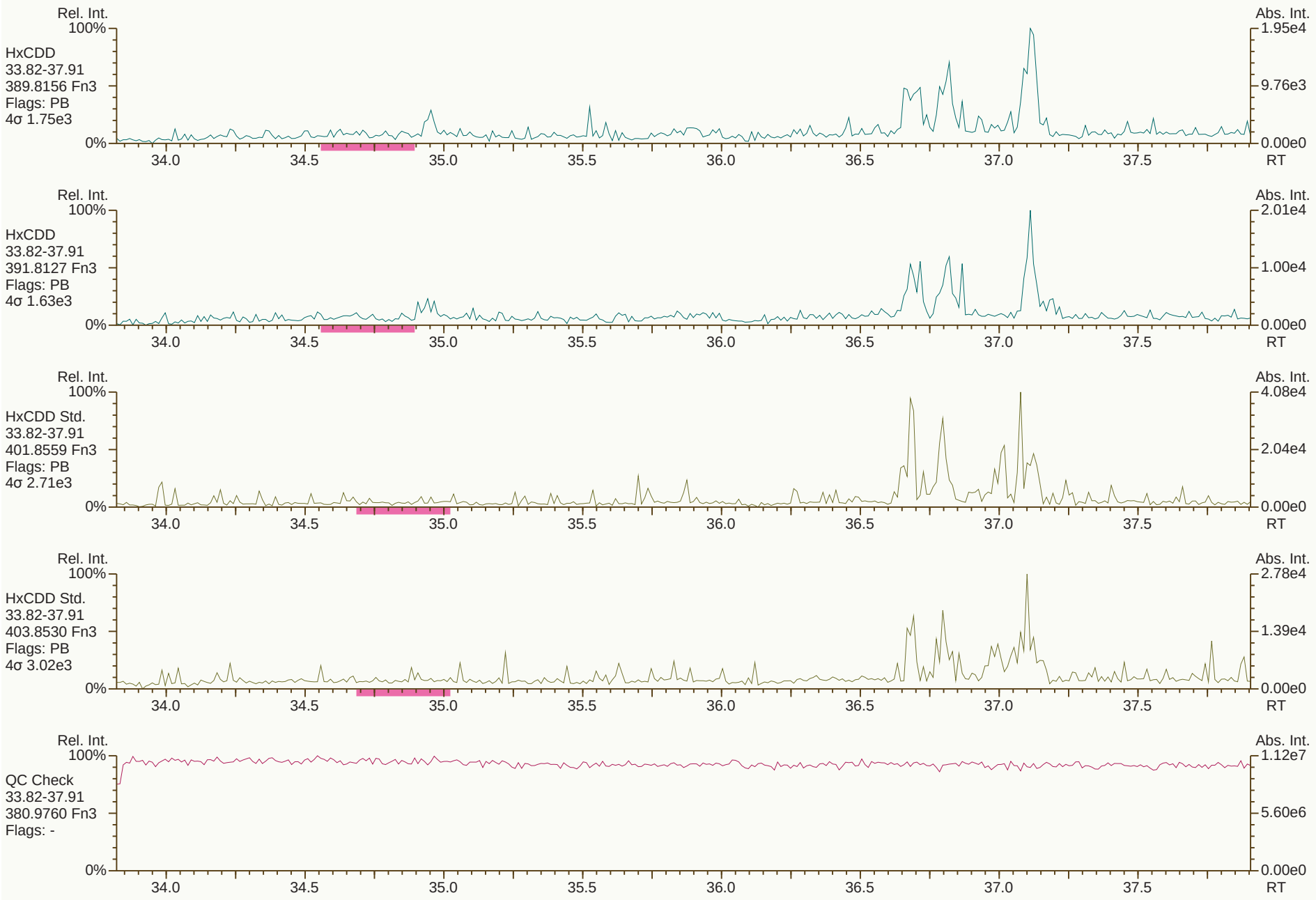
Results: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\CS3_200811_DF_CC.utp_res, saved 12-Aug-2020 15:18 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 0024, 2872, 4231 scc: 593-054
PKD: 12-Aug-2020 11:48 Printed: 12-Aug-2020 15:40 Page 11 of 12


Rel. Int.
100%
OCDF
41.21-44.80
441.7428 Fn5
Flags: PBM
4σ 9.96e2
0%
OCDF
2.05e7
43.03
Abs. Int.
2.98e6
1.49e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDF
41.21-44.80
443.7398 Fn5
Flags: PBM
4σ 3.01e3
0%
OCDF
2.31e7
43.03
Abs. Int.
3.49e6
1.74e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDF Std.
41.21-44.80
453.7830 Fn5
Flags: PBM
4σ 1.20e3
0%
ES OCDF
3.87e7
43.02
Abs. Int.
5.79e6
2.89e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDF Std.
41.21-44.80
455.7801 Fn5
Flags: PBM
4σ 1.70e3
0%
ES OCDF
4.29e7
43.02
Abs. Int.
6.38e6
3.19e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
DCDPE
41.21-44.80
513.6775 Fn5
Flags: PB
4σ 1.05e3
0%
Abs. Int.
8.89e3
4.45e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT


Rel. Int.
100%
0%
Abs. Int.
6.31e6
3.15e6
0.00e0
RT
QC Check
19.04-28.80
316.9824 Fn1
Flags: -
20.0
22.0
24.0
26.0
28.0
Rel. Int.
100%
0%
Abs. Int.
5.45e6
2.72e6
0.00e0
RT
QC Check
28.82-33.81
366.9792 Fn2
Flags: -
29.0
30.0
31.0
32.0
33.0
Rel. Int.
100%
0%
Abs. Int.
1.12e7
5.60e6
0.00e0
RT
QC Check
33.82-37.91
380.9760 Fn3
Flags: -
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
Rel. Int.
100%
0%
Abs. Int.
7.02e6
3.51e6
0.00e0
RT
QC Check
37.92-41.20
430.9728 Fn4
Flags: -
38.0
38.5
39.0
39.5
40.0
40.5
41.0
Rel. Int.
100%
0%
Abs. Int.
9.79e6
4.89e6
0.00e0
RT
QC Check
41.21-44.80
454.9728 Fn5
Flags: -
41.5
42.0
42.5
43.0
43.5
44.0
44.5


Rel. Int.
100%
TCDD
19.04-28.80
319.8965 Fn1
Flags: PB
4σ 2.20e3
0%
Abs. Int.
7.01e3
3.50e3
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD
19.04-28.80
321.8936 Fn1
Flags: PB
4σ 1.71e3
0%
Abs. Int.
9.98e3
4.99e3
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
37Cl-TCDD
19.04-28.80
327.8850 Fn1
Flags: PB
4σ 1.39e3
0%
Abs. Int.
1.29e4
6.46e3
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.80
331.9368 Fn1
Flags: PB
4σ 5.60e3
0%
Abs. Int.
2.49e4
1.25e4
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.80
333.9339 Fn1
Flags: PB
4σ 1.11e3
0%
Abs. Int.
2.01e4
1.00e4
0.00e0
20.0
22.0
24.0
26.0
28.0
RT


Rel. Int.
100%
PeCDD
28.82-33.81
355.8546 Fn2
Flags: PB
4σ 1.54e3
0%
Abs. Int.
1.82e4
9.12e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD
28.82-33.81
357.8517 Fn2
Flags: PB
4σ 1.20e3
0%
Abs. Int.
1.09e4
5.46e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.82-33.81
367.8949 Fn2
Flags: PB
4σ 1.72e3
0%
Abs. Int.
4.65e4
2.33e4
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.82-33.81
369.8919 Fn2
Flags: PB
4σ 1.41e3
0%
Abs. Int.
2.38e4
1.19e4
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
QC Check
28.82-33.81
366.9792 Fn2
Flags: -
0%
Abs. Int.
5.45e6
2.72e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT


Rel. Int.
100%
HxCDD
33.82-37.91
389.8156 Fn3
Flags: PB
4σ 1.75e3
0%
Abs. Int.
1.95e4
9.76e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD
33.82-37.91
391.8127 Fn3
Flags: PB
4σ 1.63e3
0%
Abs. Int.
2.01e4
1.00e4
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.82-37.91
401.8559 Fn3
Flags: PB
4σ 2.71e3
0%
Abs. Int.
4.08e4
2.04e4
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.82-37.91
403.8530 Fn3
Flags: PB
4σ 3.02e3
0%
Abs. Int.
2.78e4
1.39e4
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
QC Check
33.82-37.91
380.9760 Fn3
Flags: -
0%
Abs. Int.
1.12e7
5.60e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT

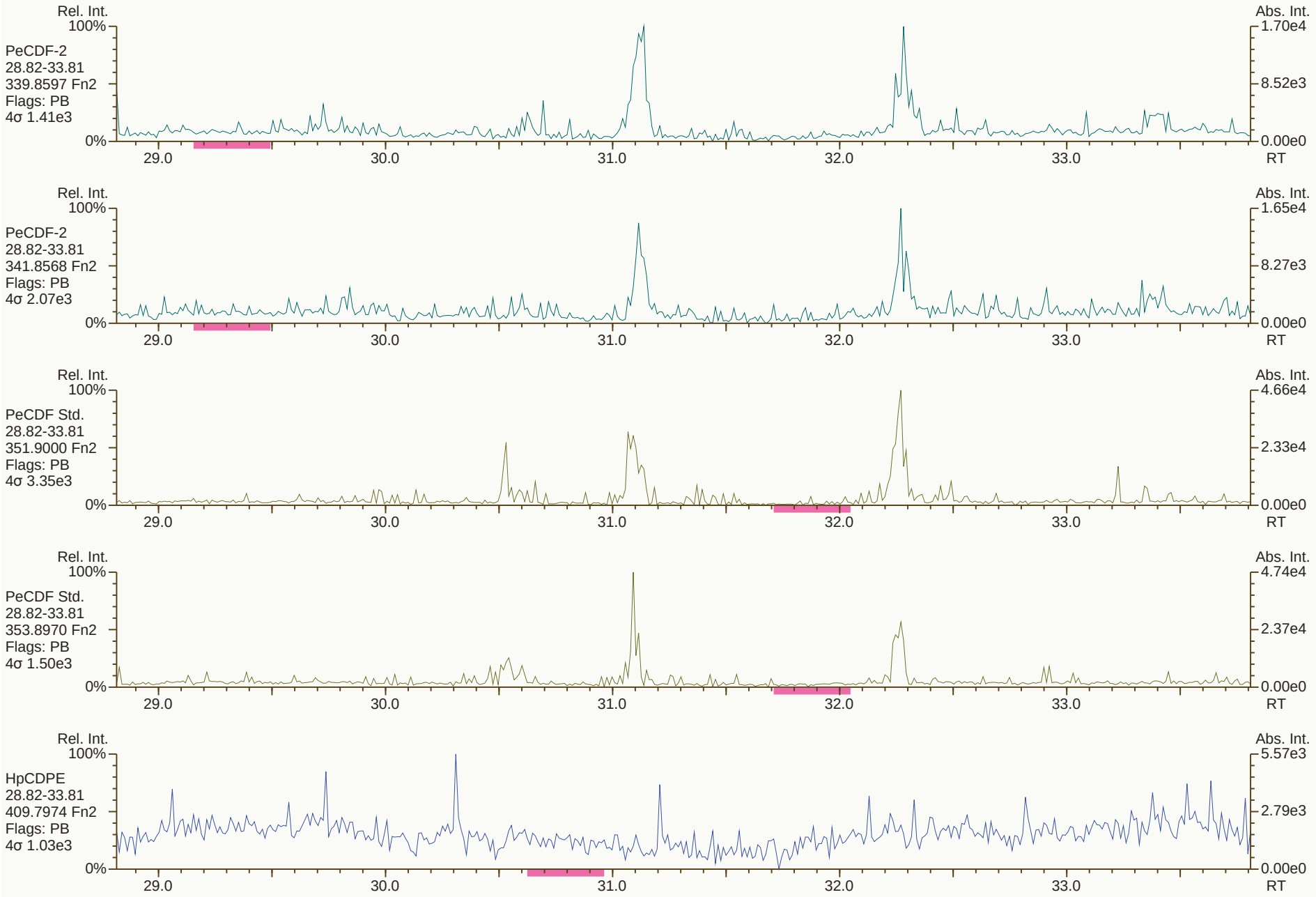


Results: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\SBS_200811_DF_CA.utp_res, saved 12-Aug-2020 10:28 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 7657, 6515 scc: 763-428
PKD: 12-Aug-2020 10:28 Printed: 12-Aug-2020 15:32 Page 5 of 12

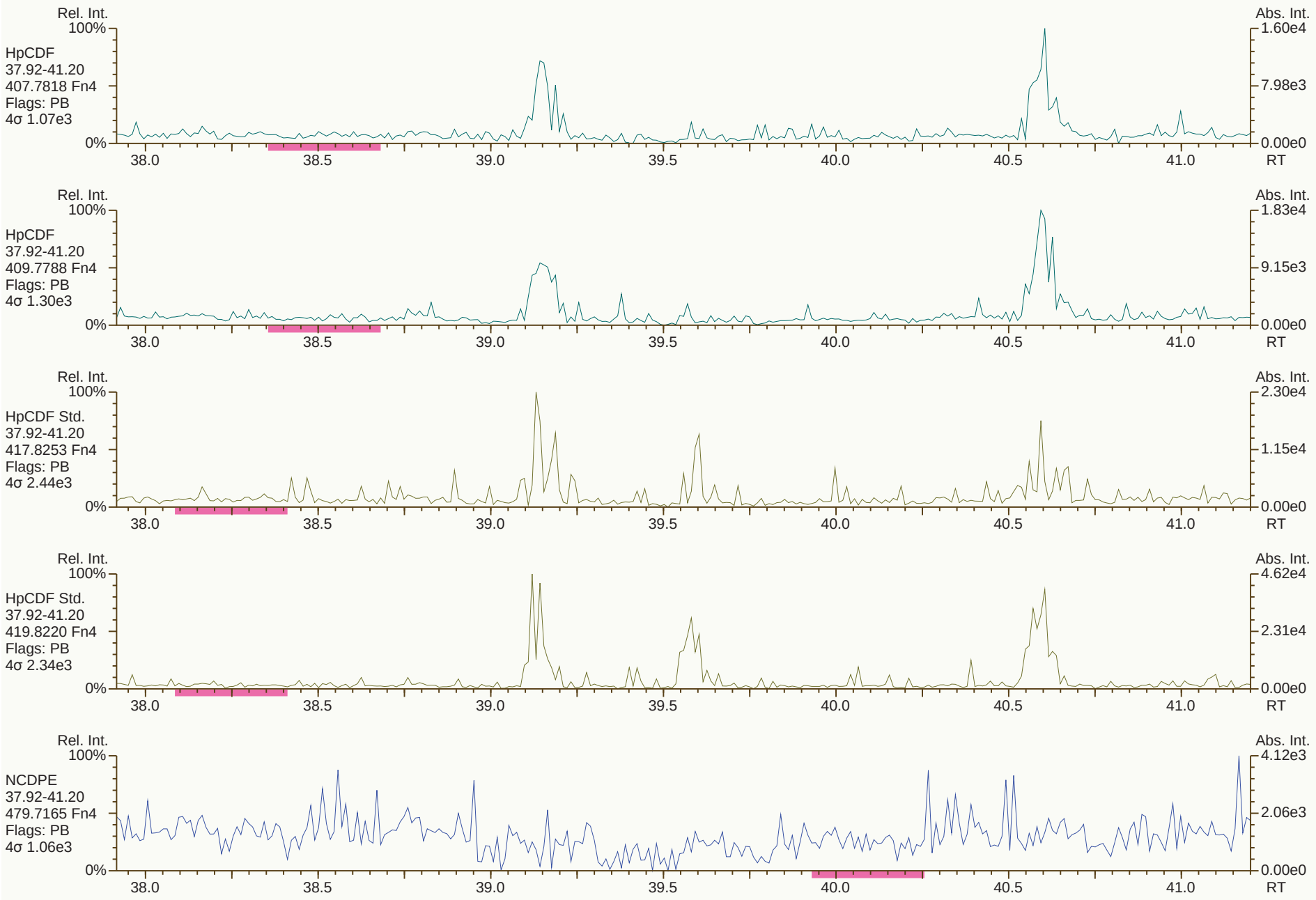

Rel. Int.
100%
OCDD
41.21-44.80
457.7377 Fn5
Flags: PB
4σ 1.94e3
0%
Abs. Int.
2.19e4
1.10e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDD
41.21-44.80
459.7348 Fn5
Flags: PB
4σ 1.79e3
0%
Abs. Int.
1.88e4
9.42e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDD Std.
41.21-44.80
469.7780 Fn5
Flags: PB
4σ 1.61e3
0%
Abs. Int.
2.42e4
1.21e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDD Std.
41.21-44.80
471.7750 Fn5
Flags: PB
4σ 1.74e3
0%
Abs. Int.
5.43e4
2.72e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
QC Check
41.21-44.80
454.9728 Fn5
Flags: -
0%
Abs. Int.
9.79e6
4.89e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT


Rel. Int.
100%
TCDF
19.04-28.80
303.9016 Fn1
Flags: PBM
4σ 1.35e3
2468F
6.76e5
21.89
SBS
Abs. Int.
1.11e5
5.53e4
0.00e0
0%
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDF
19.04-28.80
305.8987 Fn1
Flags: PBM
4σ 2.03e3
2468F
8.65e5
21.89
Abs. Int.
1.53e5
7.65e4
0.00e0
0%
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDF Std.
19.04-28.80
315.9419 Fn1
Flags: PB
4σ 8.24e3
Abs. Int.
3.67e4
1.83e4
0.00e0
0%
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDF Std.
19.04-28.80
317.9389 Fn1
Flags: PB
4σ 6.22e3
Abs. Int.
3.82e4
1.91e4
0.00e0
0%
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
HxCDPE
19.04-28.80
375.8364 Fn1
Flags: PB
4σ 1.09e3
Abs. Int.
8.15e3
4.07e3
0.00e0
0%
20.0
22.0
24.0
26.0
28.0
RT

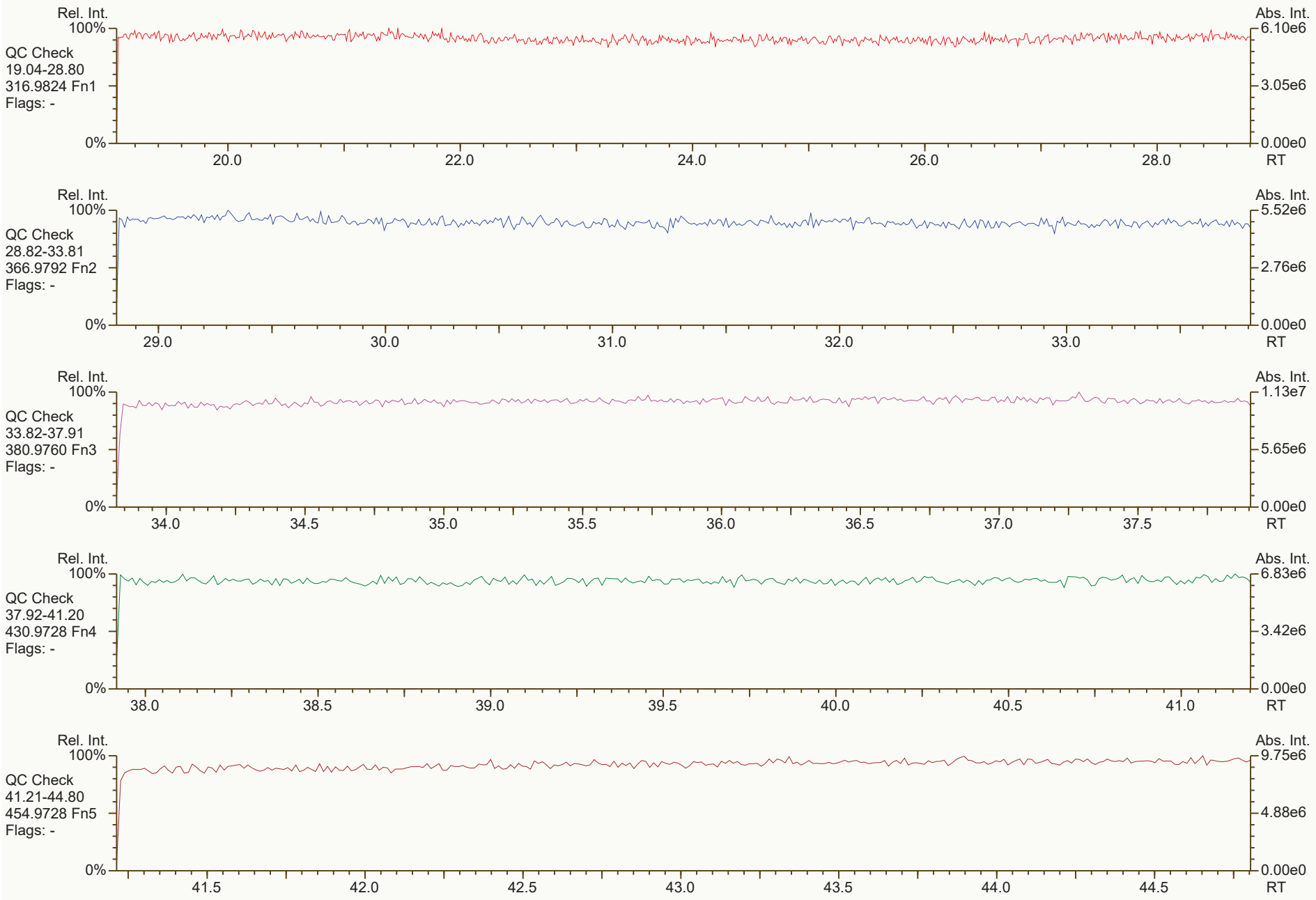

Rel. Int.
100%
0%
Abs. Int.
9.04e3
4.52e3
0.00e0
PeCDF-1
19.04-28.80
339.8597 Fn1
Flags: PB
4σ 1.12e3
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
0%
Abs. Int.
1.07e4
5.33e3
0.00e0
PeCDF-1
19.04-28.80
341.8568 Fn1
Flags: PB
4σ 1.34e3
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
0%
Abs. Int.
6.31e6
3.15e6
0.00e0
QC Check
19.04-28.80
316.9824 Fn1
Flags: -
20.0
22.0
24.0
26.0
28.0
RT


Rel. Int.
100%
PeCDF-2
28.82-33.81
339.8597 Fn2
Flags: PB
4σ 1.41e3
0%
Abs. Int.
1.70e4
8.52e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF-2
28.82-33.81
341.8568 Fn2
Flags: PB
4σ 2.07e3
0%
Abs. Int.
1.65e4
8.27e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.82-33.81
351.9000 Fn2
Flags: PB
4σ 3.35e3
0%
Abs. Int.
4.66e4
2.33e4
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.82-33.81
353.8970 Fn2
Flags: PB
4σ 1.50e3
0%
Abs. Int.
4.74e4
2.37e4
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
HpCDPE
28.82-33.81
409.7974 Fn2
Flags: PB
4σ 1.03e3
0%
Abs. Int.
5.57e3
2.79e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT


Rel. Int.
100%
HxCDF
33.82-37.91
373.8207 Fn3
Flags: PB
4σ 1.31e3
0%
Abs. Int.
2.33e4
1.17e4
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF
33.82-37.91
375.8178 Fn3
Flags: PB
4σ 1.35e3
0%
Abs. Int.
1.98e4
9.88e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF Std.
33.82-37.91
383.8639 Fn3
Flags: PB
4σ 1.73e3
0%
Abs. Int.
4.15e4
2.07e4
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF Std.
33.82-37.91
385.8610 Fn3
Flags: PB
4σ 3.71e3
0%
Abs. Int.
4.74e4
2.37e4
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
OCDPE
33.82-37.91
445.7555 Fn3
Flags: PB
4σ 1.12e3
0%
Abs. Int.
4.64e3
2.32e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT


Rel. Int.
100%
HpCDF
37.92-41.20
407.7818 Fn4
Flags: PB
4σ 1.07e3
0%
Abs. Int.
1.60e4
7.98e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF
37.92-41.20
409.7788 Fn4
Flags: PB
4σ 1.30e3
0%
Abs. Int.
1.83e4
9.15e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.92-41.20
417.8253 Fn4
Flags: PB
4σ 2.44e3
0%
Abs. Int.
2.30e4
1.15e4
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.92-41.20
419.8220 Fn4
Flags: PB
4σ 2.34e3
0%
Abs. Int.
4.62e4
2.31e4
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
NCDPE
37.92-41.20
479.7165 Fn4
Flags: PB
4σ 1.06e3
0%
Abs. Int.
4.12e3
2.06e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT


Rel. Int.
100%
OCDF
41.21-44.80
441.7428 Fn5
Flags: PB
4σ 1.67e3
0%
Abs. Int.
1.17e4
5.84e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDF
41.21-44.80
443.7398 Fn5
Flags: PB
4σ 1.52e3
0%
Abs. Int.
1.89e4
9.43e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDF Std.
41.21-44.80
453.7830 Fn5
Flags: PB
4σ 1.79e3
0%
Abs. Int.
3.51e4
1.75e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDF Std.
41.21-44.80
455.7801 Fn5
Flags: PB
4σ 2.47e3
0%
Abs. Int.
4.85e4
2.43e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
DCDPE
41.21-44.80
513.6775 Fn5
Flags: PB
4σ 1.17e3
0%
Abs. Int.
2.86e3
1.43e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT

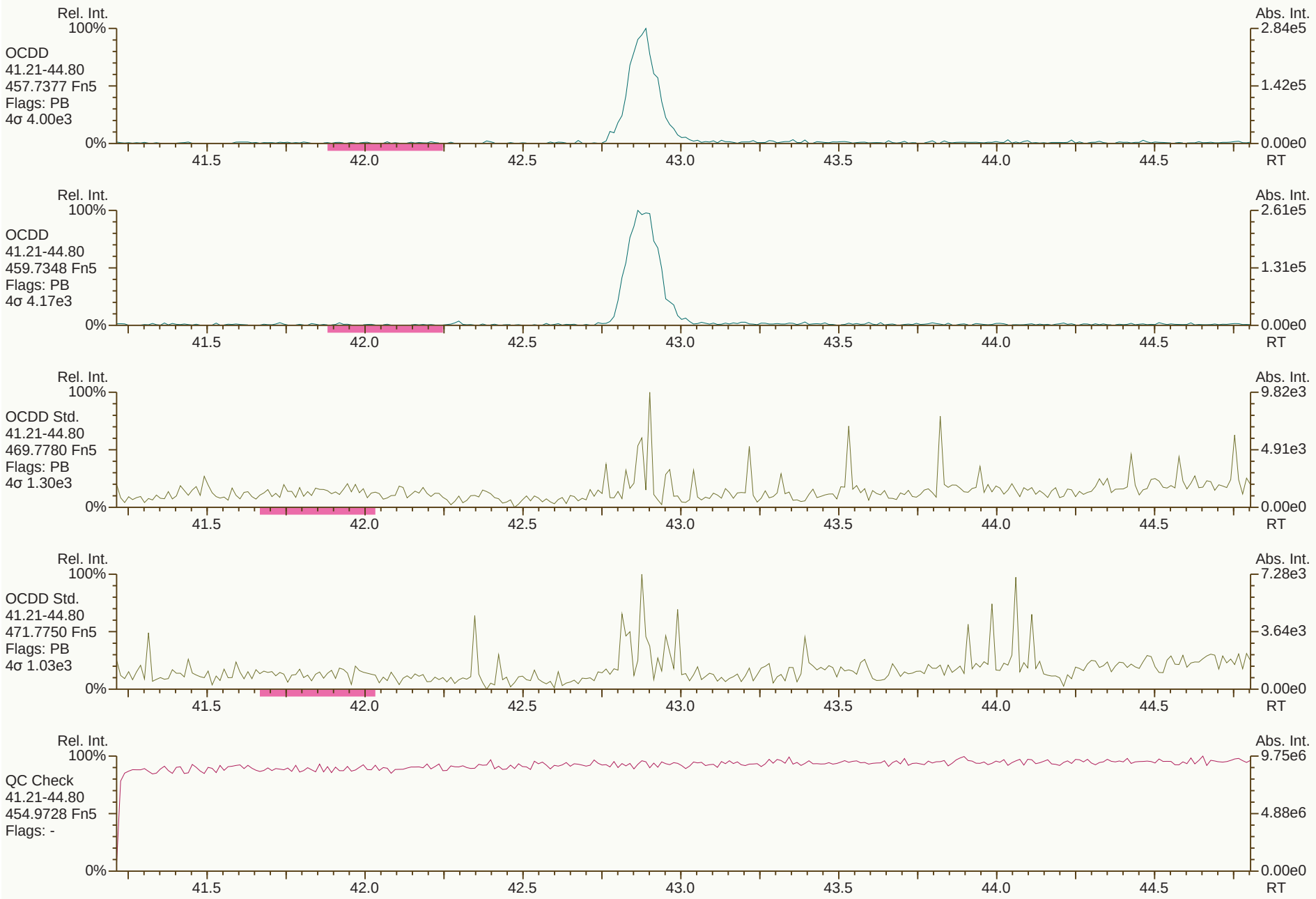

Rel. Int.
100%
QC Check
19.04-28.80
316.9824 Fn1
Flags: -
0%
20.0
22.0
24.0
26.0
28.0
Abs. Int.
6.10e6
3.05e6
0.00e0
RT
Rel. Int.
100%
QC Check
28.82-33.81
366.9792 Fn2
Flags: -
0%
29.0
30.0
31.0
32.0
33.0
Abs. Int.
5.52e6
2.76e6
0.00e0
RT
Rel. Int.
100%
QC Check
33.82-37.91
380.9760 Fn3
Flags: -
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
Abs. Int.
1.13e7
5.65e6
0.00e0
RT
Rel. Int.
100%
QC Check
37.92-41.20
430.9728 Fn4
Flags: -
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
Abs. Int.
6.83e6
3.42e6
0.00e0
RT
Rel. Int.
100%
QC Check
41.21-44.80
454.9728 Fn5
Flags: -
0%
41.5
42.0
42.5
43.0
43.5
44.0
44.5
Abs. Int.
9.75e6
4.88e6
0.00e0
RT


Rel. Int.
100%
TCDD
19.04-28.80
319.8965 Fn1
Flags: PB
4σ 2.36e3
0%
Abs. Int.
6.66e3
3.33e3
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD
19.04-28.80
321.8936 Fn1
Flags: PB
4σ 1.27e3
0%
Abs. Int.
7.75e3
3.87e3
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
37Cl-TCDD
19.04-28.80
327.8850 Fn1
Flags: PB
4σ 1.01e3
0%
Abs. Int.
1.25e4
6.27e3
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.80
331.9368 Fn1
Flags: PB
4σ 4.05e3
0%
Abs. Int.
2.22e4
1.11e4
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.80
333.9339 Fn1
Flags: PB
4σ 3.26e3
0%
Abs. Int.
2.56e4
1.28e4
0.00e0
20.0
22.0
24.0
26.0
28.0
RT


Rel. Int.
100%
PeCDD
28.82-33.81
355.8546 Fn2
Flags: PB
4σ 1.58e3
0%
Abs. Int.
5.79e3
2.89e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD
28.82-33.81
357.8517 Fn2
Flags: PB
4σ 1.31e3
0%
Abs. Int.
5.38e3
2.69e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.82-33.81
367.8949 Fn2
Flags: PB
4σ 1.47e3
0%
Abs. Int.
1.65e4
8.26e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.82-33.81
369.8919 Fn2
Flags: PB
4σ 1.32e3
0%
Abs. Int.
4.22e4
2.11e4
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
QC Check
28.82-33.81
366.9792 Fn2
Flags: -
0%
Abs. Int.
5.52e6
2.76e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT


Rel. Int.
100%
HxCDD
33.82-37.91
389.8156 Fn3
Flags: PB
4σ 2.82e3
0%
Abs. Int.
1.20e4
6.01e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD
33.82-37.91
391.8127 Fn3
Flags: PB
4σ 1.24e3
0%
Abs. Int.
8.60e3
4.30e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.82-37.91
401.8559 Fn3
Flags: PB
4σ 2.93e3
0%
Abs. Int.
1.34e4
6.72e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.82-37.91
403.8530 Fn3
Flags: PB
4σ 1.96e3
0%
Abs. Int.
1.63e4
8.16e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
QC Check
33.82-37.91
380.9760 Fn3
Flags: -
0%
Abs. Int.
1.13e7
5.65e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT


Rel. Int.
100%
HpCDD
37.92-41.20
423.7767 Fn4
Flags: PB
4σ 1.90e3
0%
Abs. Int.
7.18e4
3.59e4
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD
37.92-41.20
425.7737 Fn4
Flags: PB
4σ 3.15e3
0%
Abs. Int.
6.24e4
3.12e4
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.92-41.20
435.8169 Fn4
Flags: PB
4σ 1.49e3
0%
Abs. Int.
8.59e3
4.29e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.92-41.20
437.8140 Fn4
Flags: PB
4σ 1.08e3
0%
Abs. Int.
1.53e4
7.67e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
QC Check
37.92-41.20
430.9728 Fn4
Flags: -
0%
Abs. Int.
6.83e6
3.42e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT


Rel. Int.
100%
OCDD
41.21-44.80
457.7377 Fn5
Flags: PB
4σ 4.00e3
0%
Abs. Int.
2.84e5
1.42e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDD
41.21-44.80
459.7348 Fn5
Flags: PB
4σ 4.17e3
0%
Abs. Int.
2.61e5
1.31e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDD Std.
41.21-44.80
469.7780 Fn5
Flags: PB
4σ 1.30e3
0%
Abs. Int.
9.82e3
4.91e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDD Std.
41.21-44.80
471.7750 Fn5
Flags: PB
4σ 1.03e3
0%
Abs. Int.
7.28e3
3.64e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
QC Check
41.21-44.80
454.9728 Fn5
Flags: -
0%
Abs. Int.
9.75e6
4.88e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT


2468F
7.47e5
21.88
SBS
Rel. Int.
100%
TCDF
19.04-28.80
303.9016 Fn1
Flags: PBM
4σ 7.64e2
0%
Abs. Int.
1.35e5
6.73e4
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
2468F
9.80e5
21.88
TCDF
19.04-28.80
305.8987 Fn1
Flags: PBM
4σ 1.37e3
1.62e5
8.12e4
TCDF Std.
19.04-28.80
315.9419 Fn1
Flags: PB
4σ 1.13e4
2.88e4
1.44e4
TCDF Std.
19.04-28.80
317.9389 Fn1
Flags: PB
4σ 4.93e3
2.83e4
1.41e4
HxCDPE
19.04-28.80
375.8364 Fn1
Flags: PB
4σ 9.23e2
5.46e3
2.73e3


Rel. Int.
100%
0%
Abs. Int.
7.31e3
3.66e3
0.00e0
PeCDF-1
19.04-28.80
339.8597 Fn1
Flags: PB
4σ 1.33e3
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
0%
Abs. Int.
7.18e3
3.59e3
0.00e0
PeCDF-1
19.04-28.80
341.8568 Fn1
Flags: PB
4σ 1.40e3
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
0%
Abs. Int.
6.10e6
3.05e6
0.00e0
QC Check
19.04-28.80
316.9824 Fn1
Flags: -
20.0
22.0
24.0
26.0
28.0
RT

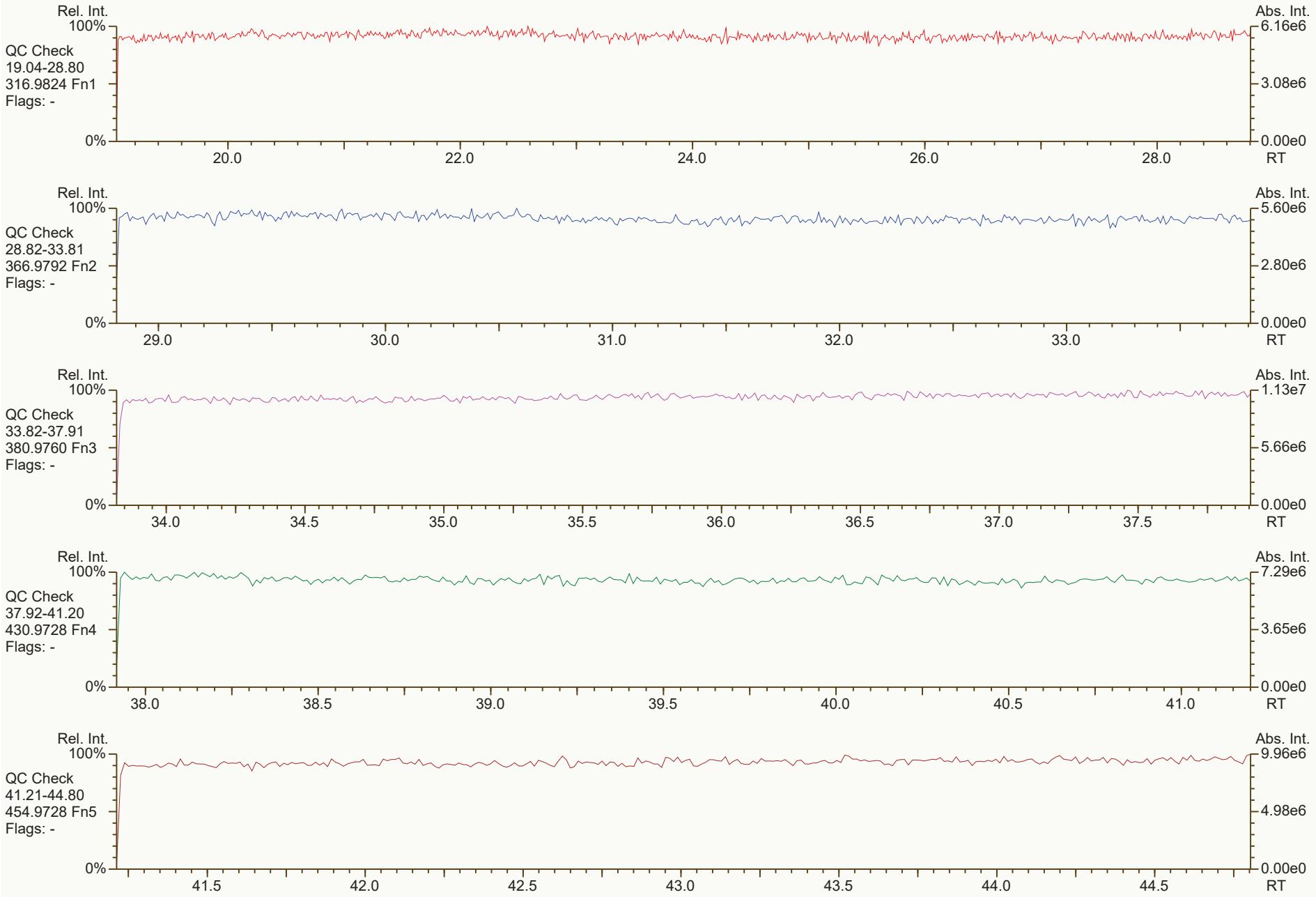

Rel. Int.
100%
PeCDF-2
28.82-33.81
339.8597 Fn2
Flags: PB
4σ 1.43e3
0%
Abs. Int.
4.74e3
2.37e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF-2
28.82-33.81
341.8568 Fn2
Flags: PB
4σ 1.39e3
0%
Abs. Int.
6.10e3
3.05e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.82-33.81
351.9000 Fn2
Flags: PB
4σ 1.81e3
0%
Abs. Int.
1.72e4
8.60e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.82-33.81
353.8970 Fn2
Flags: PB
4σ 1.83e3
0%
Abs. Int.
2.27e4
1.13e4
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
HpCDPE
28.82-33.81
409.7974 Fn2
Flags: PB
4σ 1.10e3
0%
Abs. Int.
7.45e3
3.72e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT


Rel. Int.
100%
HxCDF
33.82-37.91
373.8207 Fn3
Flags: PB
4σ 1.74e3
0%
Abs. Int.
5.32e3
2.66e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF
33.82-37.91
375.8178 Fn3
Flags: PB
4σ 9.92e2
0%
Abs. Int.
5.16e3
2.58e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF Std.
33.82-37.91
383.8639 Fn3
Flags: PB
4σ 2.93e3
0%
Abs. Int.
1.33e4
6.65e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF Std.
33.82-37.91
385.8610 Fn3
Flags: PB
4σ 1.68e3
0%
Abs. Int.
3.66e4
1.83e4
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
OCDPE
33.82-37.91
445.7555 Fn3
Flags: PB
4σ 9.29e2
0%
Abs. Int.
6.72e3
3.36e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT

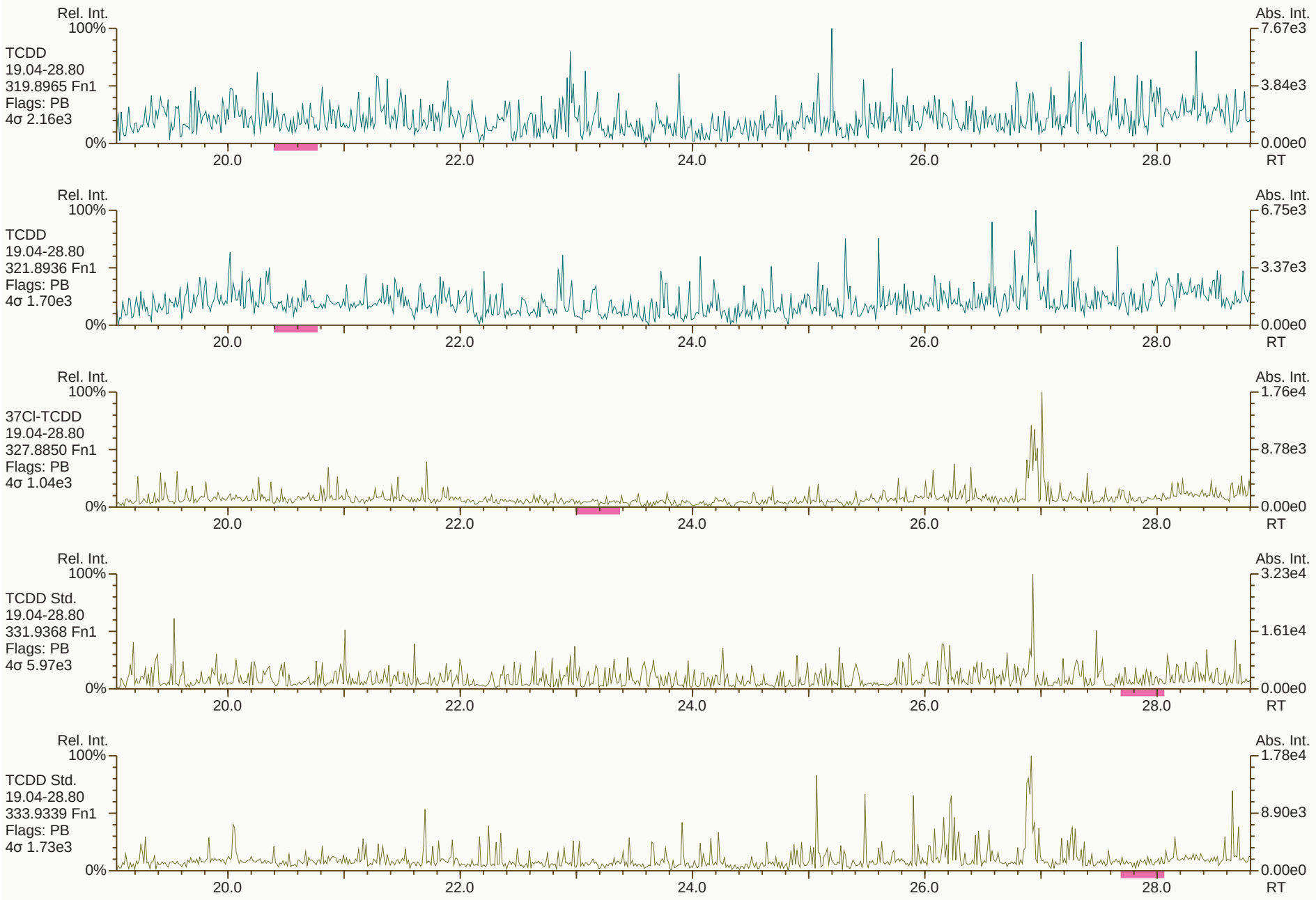

Rel. Int.
100%
HpCDF
37.92-41.20
407.7818 Fn4
Flags: PB
4σ 1.59e3
0%
Abs. Int.
1.65e4
8.24e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF
37.92-41.20
409.7788 Fn4
Flags: PB
4σ 1.92e3
0%
Abs. Int.
1.61e4
8.07e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.92-41.20
417.8253 Fn4
Flags: PB
4σ 2.14e3
0%
Abs. Int.
1.13e4
5.66e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.92-41.20
419.8220 Fn4
Flags: PB
4σ 1.47e3
0%
Abs. Int.
1.76e4
8.81e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
NCDPE
37.92-41.20
479.7165 Fn4
Flags: PB
4σ 1.03e3
0%
Abs. Int.
4.21e3
2.10e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT


Rel. Int.
100%
OCDF
41.21-44.80
441.7428 Fn5
Flags: PB
4σ 1.14e3
0%
Abs. Int.
2.31e4
1.16e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDF
41.21-44.80
443.7398 Fn5
Flags: PB
4σ 1.07e3
0%
Abs. Int.
1.55e4
7.76e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDF Std.
41.21-44.80
453.7830 Fn5
Flags: PB
4σ 1.74e3
0%
Abs. Int.
1.26e4
6.32e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDF Std.
41.21-44.80
455.7801 Fn5
Flags: PB
4σ 1.62e3
0%
Abs. Int.
2.18e4
1.09e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
DCDPE
41.21-44.80
513.6775 Fn5
Flags: PB
4σ 9.88e2
0%
Abs. Int.
2.87e3
1.43e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT

SGS ID: SBS_200811_DF_CC **Sample ID: 20-61-1** **Acq: 12-Aug-2020 01:27:28**
Instr: [ILM] AutoSpec-Ultima HRMS3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 2** **User: DTF Datafile: 200811C15**



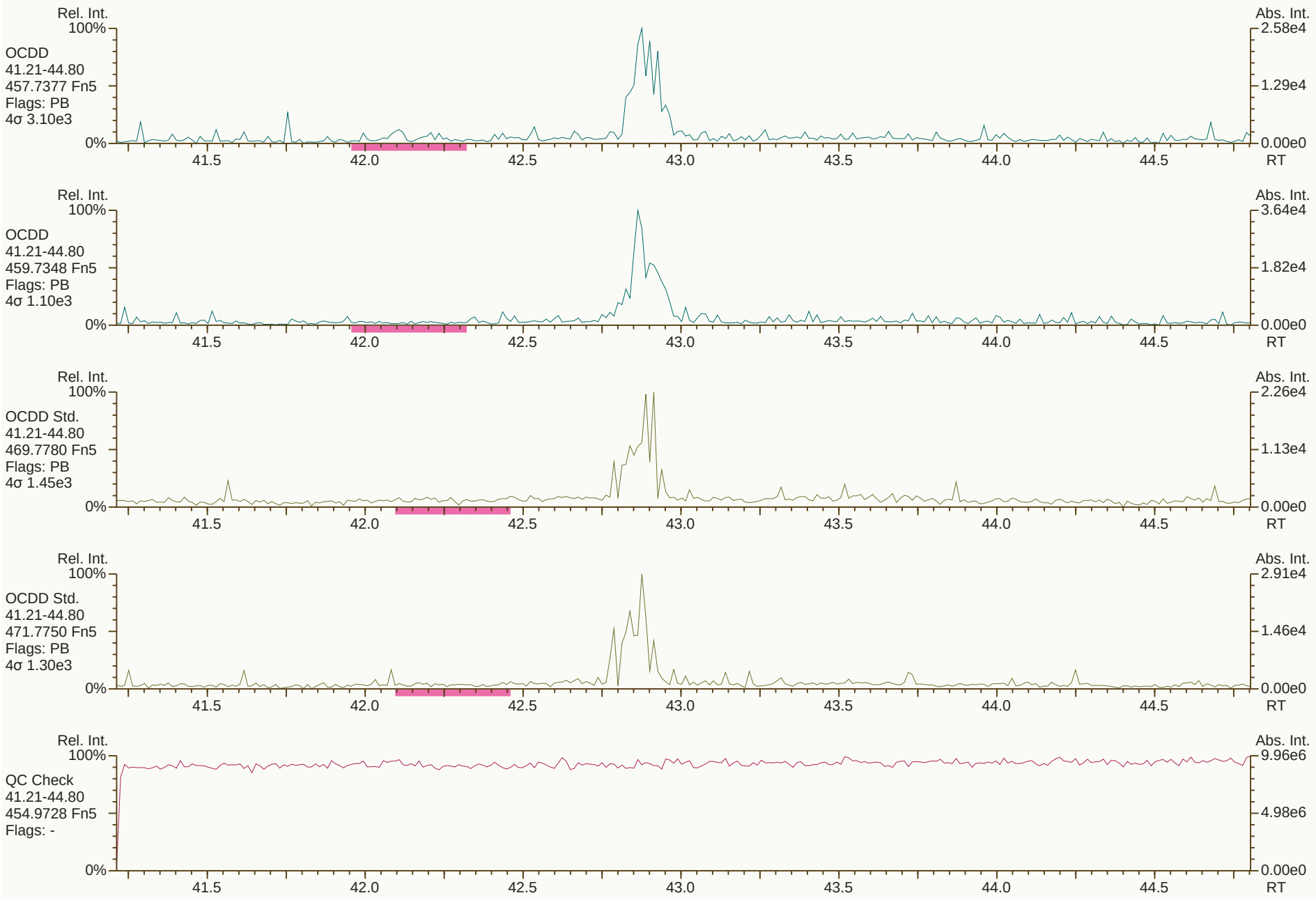
Results: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\SBS_200811_DF_CC.utp_res, saved 12-Aug-2020 11:14 (DTF) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 scc: 428-898 *PKD: n/a Printed: 12-Aug-2020 15:36 Page 1 of 12*


Rel. Int.
100%
TCDD
19.04-28.80
319.8965 Fn1
Flags: PB
4σ 2.16e3
0%
Abs. Int.
7.67e3
3.84e3
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD
19.04-28.80
321.8936 Fn1
Flags: PB
4σ 1.70e3
0%
Abs. Int.
6.75e3
3.37e3
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
37Cl-TCDD
19.04-28.80
327.8850 Fn1
Flags: PB
4σ 1.04e3
0%
Abs. Int.
1.76e4
8.78e3
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.80
331.9368 Fn1
Flags: PB
4σ 5.97e3
0%
Abs. Int.
3.23e4
1.61e4
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.80
333.9339 Fn1
Flags: PB
4σ 1.73e3
0%
Abs. Int.
1.78e4
8.90e3
0.00e0
20.0
22.0
24.0
26.0
28.0
RT


Rel. Int.
100%
PeCDD
28.82-33.81
355.8546 Fn2
Flags: PB
4σ 1.23e3
0%
Abs. Int.
1.34e4
6.71e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD
28.82-33.81
357.8517 Fn2
Flags: PB
4σ 1.04e3
0%
Abs. Int.
9.25e3
4.62e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.82-33.81
367.8949 Fn2
Flags: PB
4σ 1.71e3
0%
Abs. Int.
3.59e4
1.80e4
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.82-33.81
369.8919 Fn2
Flags: PB
4σ 2.06e3
0%
Abs. Int.
3.41e4
1.70e4
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
QC Check
28.82-33.81
366.9792 Fn2
Flags: -
0%
Abs. Int.
5.60e6
2.80e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT

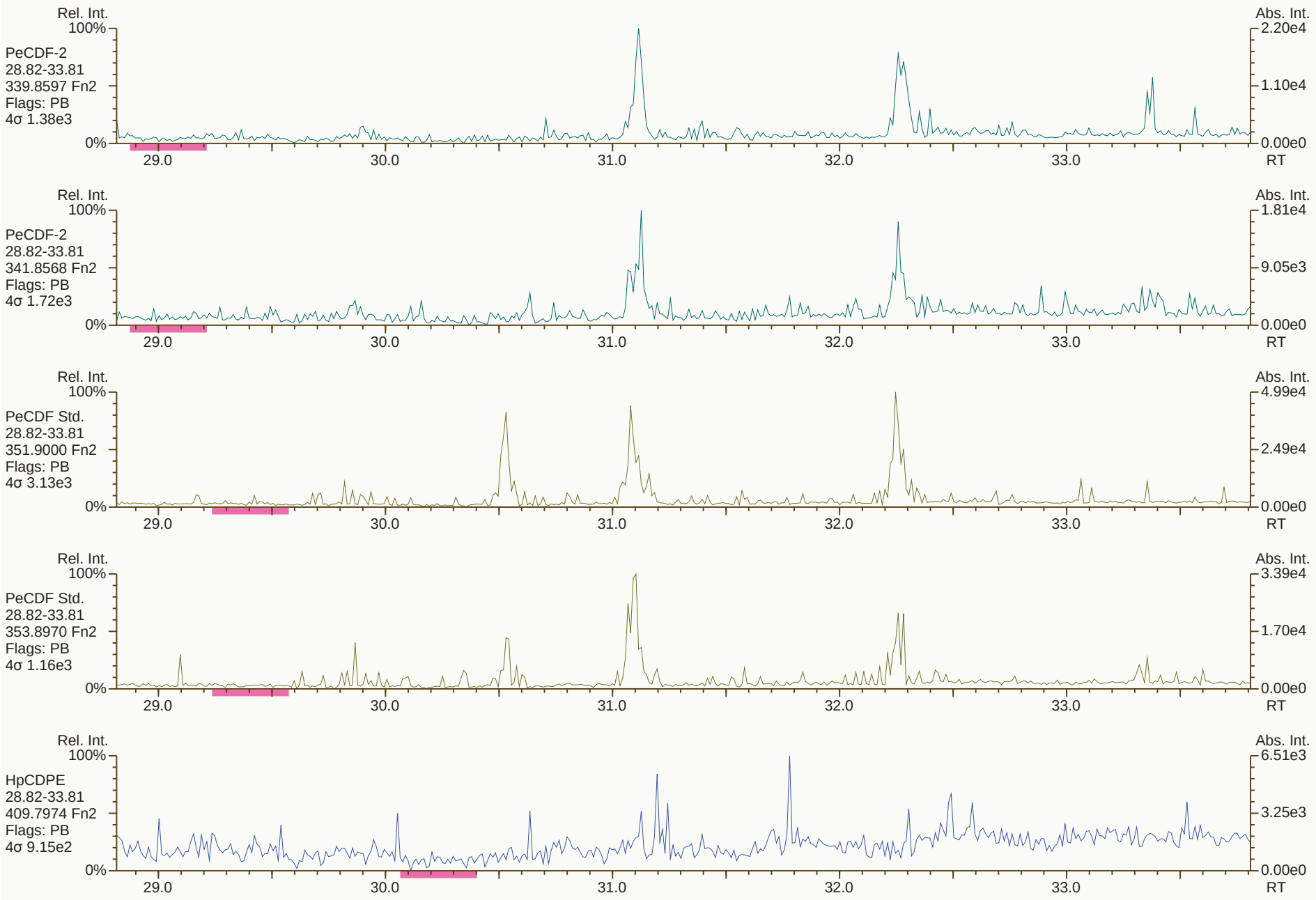

Rel. Int.
100%
HxCDD
33.82-37.91
389.8156 Fn3
Flags: PB
4σ 1.28e3
0%
Abs. Int.
1.65e4
8.24e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD
33.82-37.91
391.8127 Fn3
Flags: PB
4σ 1.81e3
0%
Abs. Int.
1.34e4
6.68e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.82-37.91
401.8559 Fn3
Flags: PB
4σ 1.79e3
0%
Abs. Int.
3.96e4
1.98e4
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.82-37.91
403.8530 Fn3
Flags: PB
4σ 3.31e3
0%
Abs. Int.
3.41e4
1.70e4
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
QC Check
33.82-37.91
380.9760 Fn3
Flags: -
0%
Abs. Int.
1.13e7
5.66e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT


Rel. Int.
100%
HpCDD
37.92-41.20
423.7767 Fn4
Flags: PB
4σ 8.88e2
0%
Abs. Int.
1.92e4
9.58e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD
37.92-41.20
425.7737 Fn4
Flags: PB
4σ 2.21e3
0%
Abs. Int.
1.72e4
8.59e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.92-41.20
435.8169 Fn4
Flags: PB
4σ 1.61e3
0%
Abs. Int.
2.80e4
1.40e4
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.92-41.20
437.8140 Fn4
Flags: PB
4σ 1.54e3
0%
Abs. Int.
2.16e4
1.08e4
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
QC Check
37.92-41.20
430.9728 Fn4
Flags: -
0%
Abs. Int.
7.29e6
3.65e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT


Rel. Int.
100%
OCDD
41.21-44.80
457.7377 Fn5
Flags: PB
4σ 3.10e3
0%
Abs. Int.
2.58e4
1.29e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDD
41.21-44.80
459.7348 Fn5
Flags: PB
4σ 1.10e3
0%
Abs. Int.
3.64e4
1.82e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDD Std.
41.21-44.80
469.7780 Fn5
Flags: PB
4σ 1.45e3
0%
Abs. Int.
2.26e4
1.13e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDD Std.
41.21-44.80
471.7750 Fn5
Flags: PB
4σ 1.30e3
0%
Abs. Int.
2.91e4
1.46e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
QC Check
41.21-44.80
454.9728 Fn5
Flags: -
0%
Abs. Int.
9.96e6
4.98e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT


SGS ID: SBS_200811_DF_CC
Sample ID: 20-61-1
Acq: 12-Aug-2020 01:27:28
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 2
User: DTF Datafile: 200811C15
2468F
8.60e5
21.88
SBS
Rel. Int.
Abs. Int.
TCDF
19.04-28.80
303.9016 Fn1
Flags: PBM
4σ 9.69e2
2468F
1.08e6
21.88
TCDF
19.04-28.80
305.8987 Fn1
Flags: PBM
4σ 1.56e3
TCDF Std.
19.04-28.80
315.9419 Fn1
Flags: PB
4σ 1.34e4
TCDF Std.
19.04-28.80
317.9389 Fn1
Flags: PB
4σ 2.87e3
HxCDPE
19.04-28.80
375.8364 Fn1
Flags: PB
4σ 1.19e3
RT
Results: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\SBS_200811_DF_CC.utp_res, saved 12-Aug-2020 11:14 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 2992, 4690, 2798 scc: 428-898
Revised: 12-Aug-2020 11:13 (DTF) Printed: 12-Aug-2020 15:36 Page 7 of 12

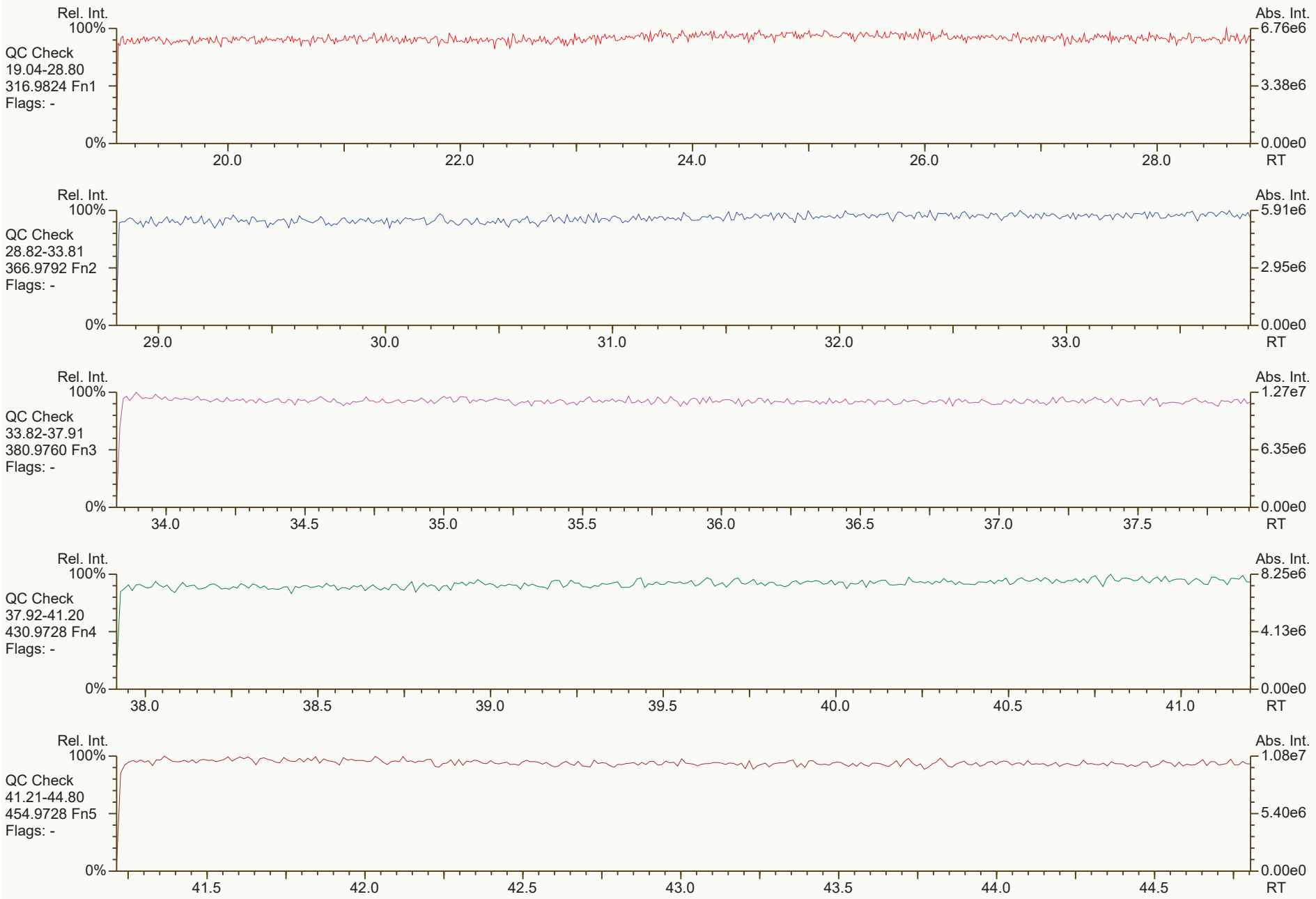

Rel. Int.
100%
0%
Abs. Int.
8.26e3
4.13e3
0.00e0
PeCDF-1
19.04-28.80
339.8597 Fn1
Flags: PB
4σ 1.44e3
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
0%
Abs. Int.
9.40e3
4.70e3
0.00e0
PeCDF-1
19.04-28.80
341.8568 Fn1
Flags: PB
4σ 1.08e3
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
0%
Abs. Int.
6.16e6
3.08e6
0.00e0
QC Check
19.04-28.80
316.9824 Fn1
Flags: -
20.0
22.0
24.0
26.0
28.0
RT


Rel. Int.
100%
PeCDF-2
28.82-33.81
339.8597 Fn2
Flags: PB
4σ 1.38e3
0%
Abs. Int.
2.20e4
1.10e4
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF-2
28.82-33.81
341.8568 Fn2
Flags: PB
4σ 1.72e3
0%
Abs. Int.
1.81e4
9.05e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.82-33.81
351.9000 Fn2
Flags: PB
4σ 3.13e3
0%
Abs. Int.
4.99e4
2.49e4
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.82-33.81
353.8970 Fn2
Flags: PB
4σ 1.16e3
0%
Abs. Int.
3.39e4
1.70e4
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
HpCDPE
28.82-33.81
409.7974 Fn2
Flags: PB
4σ 9.15e2
0%
Abs. Int.
6.51e3
3.25e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT


Rel. Int.
100%
HxCDF
33.82-37.91
373.8207 Fn3
Flags: PB
4σ 1.79e3
0%
Abs. Int.
2.01e4
1.00e4
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF
33.82-37.91
375.8178 Fn3
Flags: PB
4σ 1.23e3
0%
Abs. Int.
2.11e4
1.06e4
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF Std.
33.82-37.91
383.8639 Fn3
Flags: PB
4σ 2.18e3
0%
Abs. Int.
3.98e4
1.99e4
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF Std.
33.82-37.91
385.8610 Fn3
Flags: PB
4σ 2.01e3
0%
Abs. Int.
5.15e4
2.58e4
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
OCDPE
33.82-37.91
445.7555 Fn3
Flags: PB
4σ 1.08e3
0%
Abs. Int.
4.11e3
2.06e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT

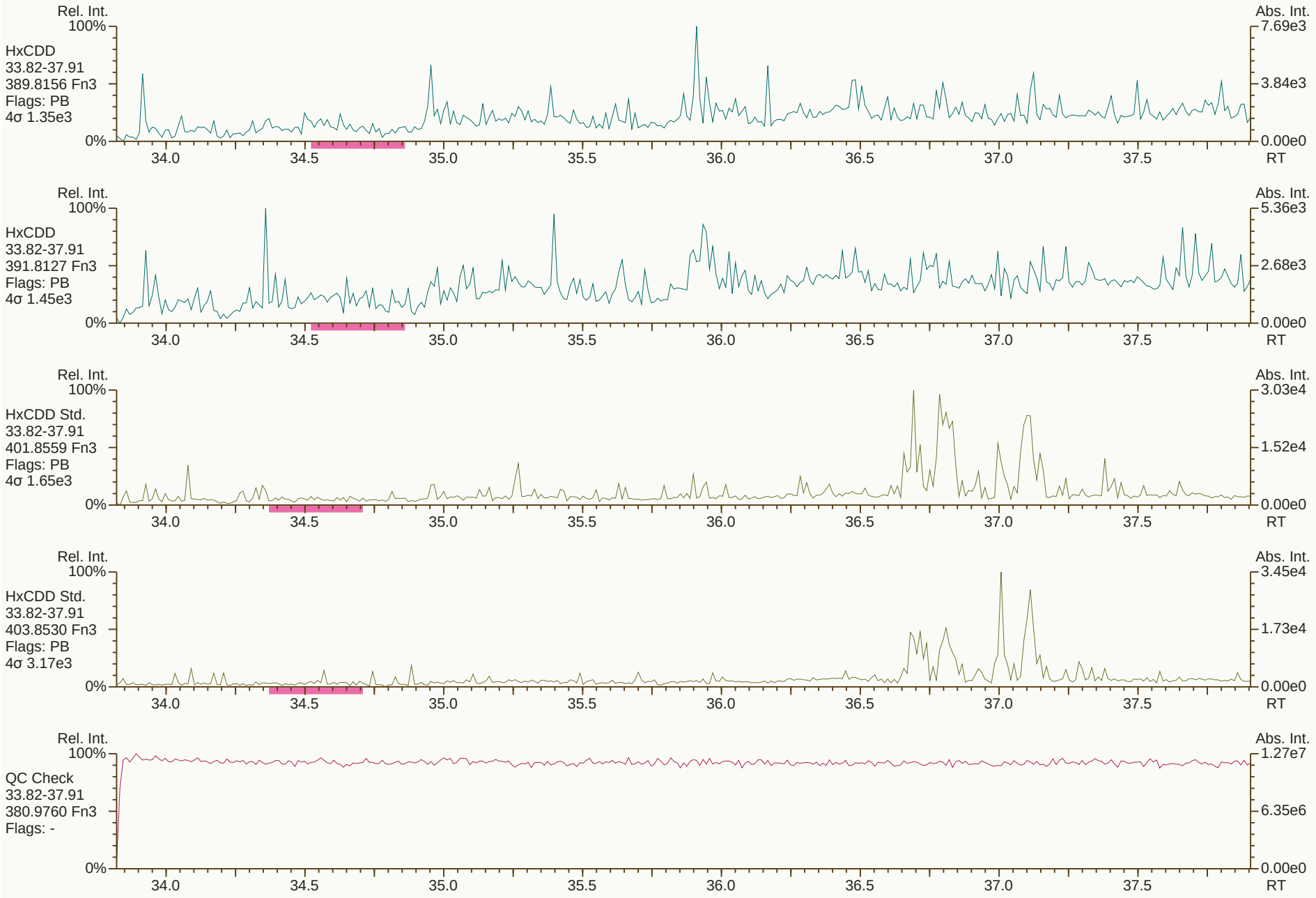

Rel. Int.
100%
HpCDF
37.92-41.20
407.7818 Fn4
Flags: PB
4σ 1.32e3
0%
Abs. Int.
1.96e4
9.79e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF
37.92-41.20
409.7788 Fn4
Flags: PB
4σ 1.33e3
0%
Abs. Int.
2.39e4
1.19e4
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.92-41.20
417.8253 Fn4
Flags: PB
4σ 2.37e3
0%
Abs. Int.
1.69e4
8.44e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.92-41.20
419.8220 Fn4
Flags: PB
4σ 2.06e3
0%
Abs. Int.
6.66e4
3.33e4
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
NCDPE
37.92-41.20
479.7165 Fn4
Flags: PB
4σ 1.23e3
0%
Abs. Int.
8.20e3
4.10e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT


Rel. Int.
100%
OCDF
41.21-44.80
441.7428 Fn5
Flags: PB
4σ 1.18e3
0%
Abs. Int.
1.15e4
5.75e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDF
41.21-44.80
443.7398 Fn5
Flags: PB
4σ 2.12e3
0%
Abs. Int.
1.50e4
7.49e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDF Std.
41.21-44.80
453.7830 Fn5
Flags: PB
4σ 1.08e3
0%
Abs. Int.
3.31e4
1.65e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDF Std.
41.21-44.80
455.7801 Fn5
Flags: PB
4σ 1.46e3
0%
Abs. Int.
1.71e4
8.55e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
DCDPE
41.21-44.80
513.6775 Fn5
Flags: PB
4σ 1.04e3
0%
Abs. Int.
3.36e3
1.68e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT

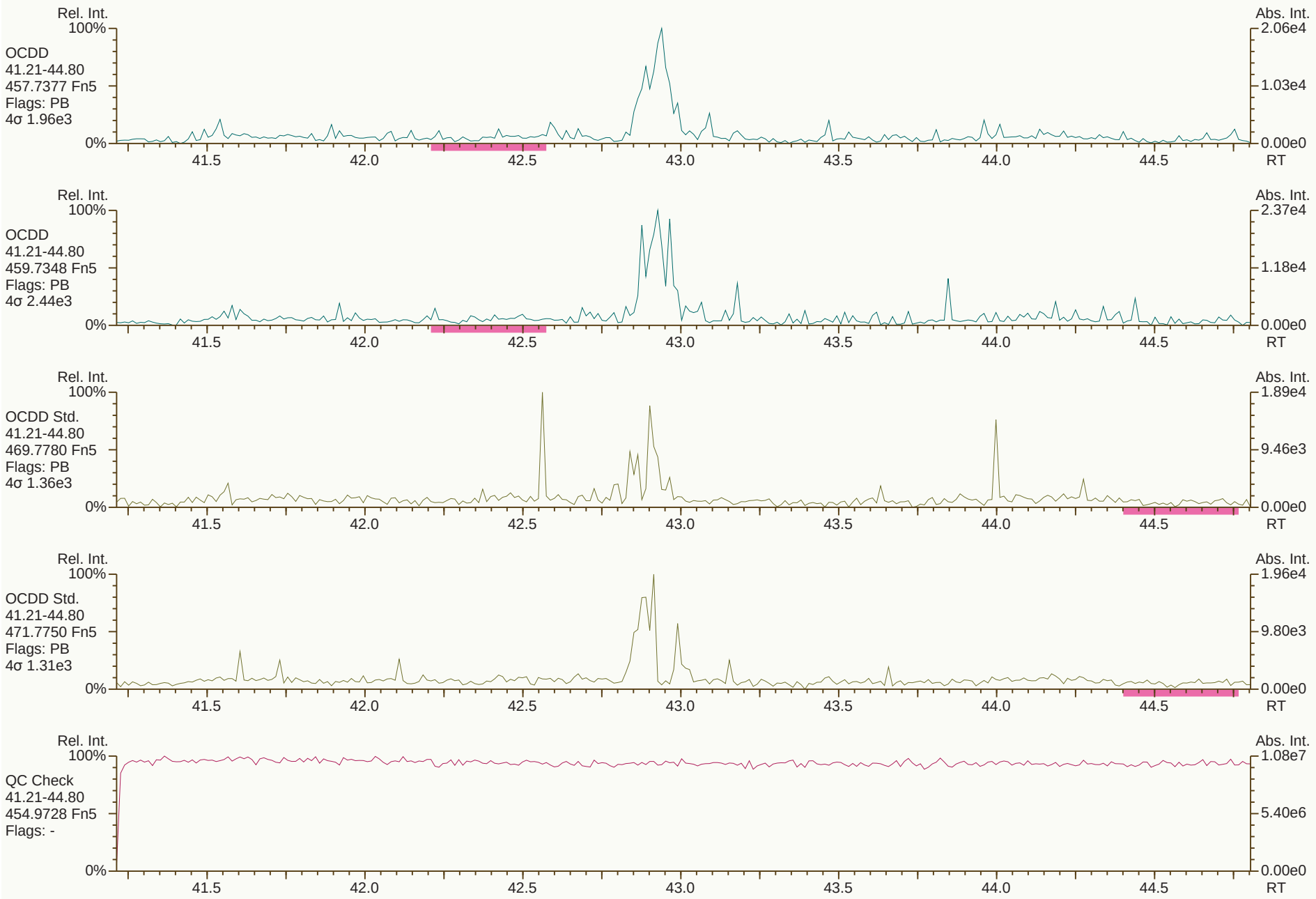

Rel. Int.
100%
0%
Abs. Int.
6.76e6
3.38e6
0.00e0
RT
QC Check
19.04-28.80
316.9824 Fn1
Flags: -
20.0
22.0
24.0
26.0
28.0
Rel. Int.
100%
0%
Abs. Int.
5.91e6
2.95e6
0.00e0
RT
QC Check
28.82-33.81
366.9792 Fn2
Flags: -
29.0
30.0
31.0
32.0
33.0
Rel. Int.
100%
0%
Abs. Int.
1.27e7
6.35e6
0.00e0
RT
QC Check
33.82-37.91
380.9760 Fn3
Flags: -
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
Rel. Int.
100%
0%
Abs. Int.
8.25e6
4.13e6
0.00e0
RT
QC Check
37.92-41.20
430.9728 Fn4
Flags: -
38.0
38.5
39.0
39.5
40.0
40.5
41.0
Rel. Int.
100%
0%
Abs. Int.
1.08e7
5.40e6
0.00e0
RT
QC Check
41.21-44.80
454.9728 Fn5
Flags: -
41.5
42.0
42.5
43.0
43.5
44.0
44.5


Rel. Int.
100%
TCDD
19.04-28.80
319.8965 Fn1
Flags: PB
4σ 2.71e3
0%
Abs. Int.
5.53e3
2.76e3
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD
19.04-28.80
321.8936 Fn1
Flags: PB
4σ 1.67e3
0%
Abs. Int.
6.73e3
3.37e3
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
37Cl-TCDD
19.04-28.80
327.8850 Fn1
Flags: PB
4σ 1.13e3
0%
Abs. Int.
1.28e4
6.40e3
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.80
331.9368 Fn1
Flags: PB
4σ 6.75e3
0%
Abs. Int.
2.44e4
1.22e4
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.80
333.9339 Fn1
Flags: PB
4σ 1.90e3
0%
Abs. Int.
1.90e4
9.52e3
0.00e0
20.0
22.0
24.0
26.0
28.0
RT


Rel. Int.
100%
PeCDD
28.82-33.81
355.8546 Fn2
Flags: PB
4σ 1.93e3
0%
Abs. Int.
5.34e3
2.67e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD
28.82-33.81
357.8517 Fn2
Flags: PB
4σ 1.02e3
0%
Abs. Int.
5.84e3
2.92e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.82-33.81
367.8949 Fn2
Flags: PB
4σ 1.25e3
0%
Abs. Int.
3.08e4
1.54e4
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.82-33.81
369.8919 Fn2
Flags: PB
4σ 2.84e3
0%
Abs. Int.
2.38e4
1.19e4
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
QC Check
28.82-33.81
366.9792 Fn2
Flags: -
0%
Abs. Int.
5.91e6
2.95e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT

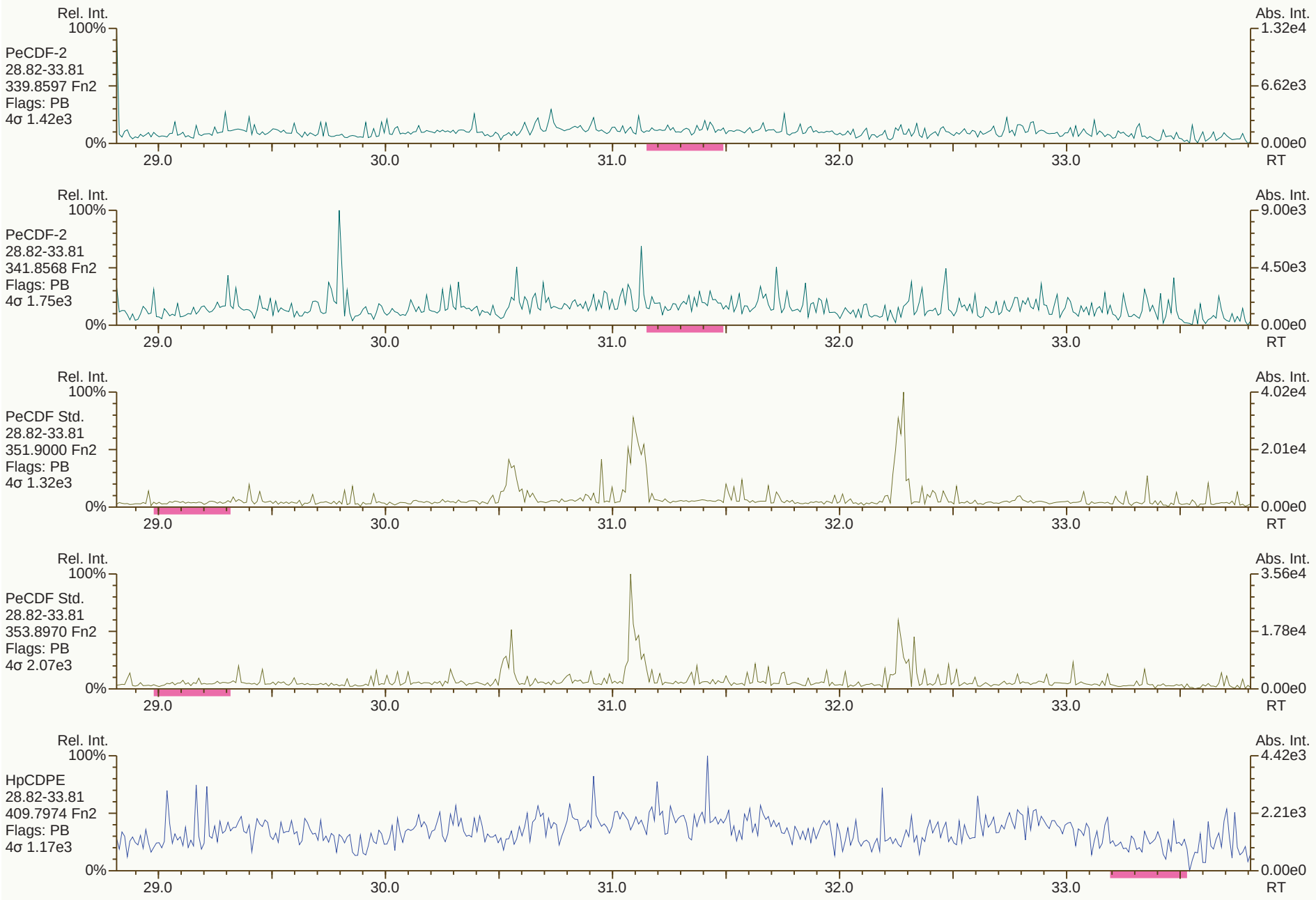

Rel. Int.
100%
HxCDD
33.82-37.91
389.8156 Fn3
Flags: PB
4σ 1.35e3
0%
Abs. Int.
7.69e3
3.84e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD
33.82-37.91
391.8127 Fn3
Flags: PB
4σ 1.45e3
0%
Abs. Int.
5.36e3
2.68e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.82-37.91
401.8559 Fn3
Flags: PB
4σ 1.65e3
0%
Abs. Int.
3.03e4
1.52e4
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.82-37.91
403.8530 Fn3
Flags: PB
4σ 3.17e3
0%
Abs. Int.
3.45e4
1.73e4
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
QC Check
33.82-37.91
380.9760 Fn3
Flags: -
0%
Abs. Int.
1.27e7
6.35e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT

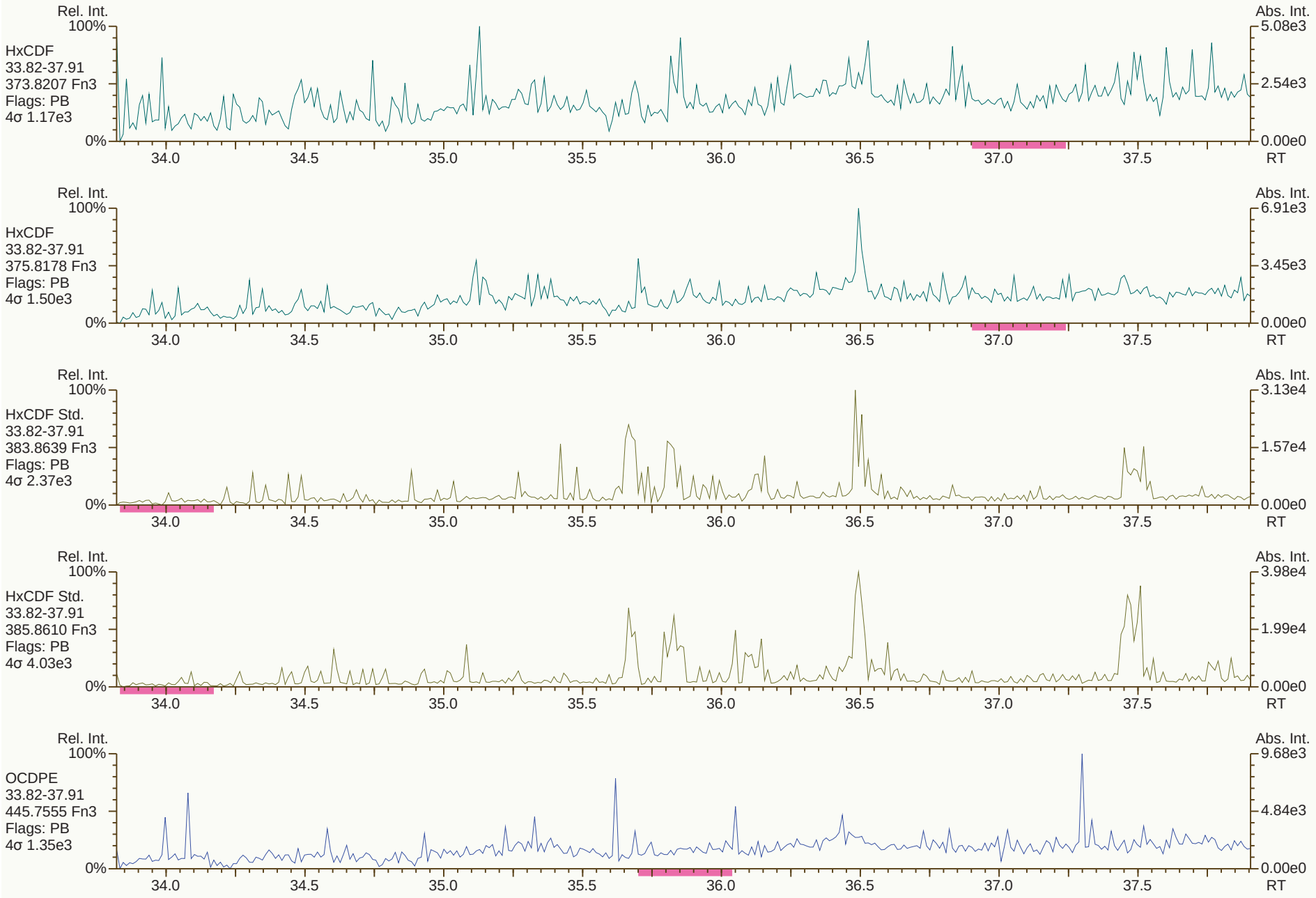

Rel. Int.
100%
HpCDD
37.92-41.20
423.7767 Fn4
Flags: PB
4σ 1.47e3
0%
Abs. Int.
1.33e4
6.65e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD
37.92-41.20
425.7737 Fn4
Flags: PB
4σ 1.45e3
0%
Abs. Int.
1.16e4
5.80e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.92-41.20
435.8169 Fn4
Flags: PB
4σ 1.08e3
0%
Abs. Int.
2.67e4
1.34e4
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.92-41.20
437.8140 Fn4
Flags: PB
4σ 1.35e3
0%
Abs. Int.
3.32e4
1.66e4
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
QC Check
37.92-41.20
430.9728 Fn4
Flags: -
0%
Abs. Int.
8.25e6
4.13e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT


Rel. Int.
100%
OCDD
41.21-44.80
457.7377 Fn5
Flags: PB
4σ 1.96e3
0%
Abs. Int.
2.06e4
1.03e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDD
41.21-44.80
459.7348 Fn5
Flags: PB
4σ 2.44e3
0%
Abs. Int.
2.37e4
1.18e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDD Std.
41.21-44.80
469.7780 Fn5
Flags: PB
4σ 1.36e3
0%
Abs. Int.
1.89e4
9.46e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDD Std.
41.21-44.80
471.7750 Fn5
Flags: PB
4σ 1.31e3
0%
Abs. Int.
1.96e4
9.80e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
QC Check
41.21-44.80
454.9728 Fn5
Flags: -
0%
Abs. Int.
1.08e7
5.40e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT


SGS ID: SBS_200811_DF_CD
Sample ID: 20-61-1
Acq: 12-Aug-2020 09:59:05
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 2
User: DTF Datafile: 200811C26
Rel. Int.
Abs. Int.
100%
0%
TCDF
19.04-28.80
303.9016 Fn1
Flags: PBM
4σ 1.07e3
2468F
7.89e5
21.89
SBS
1.25e5
6.24e4
0.00e0
TCDF
19.04-28.80
305.8987 Fn1
Flags: PBM
4σ 1.85e3
2468F
1.06e6
21.89
1.82e5
9.10e4
0.00e0
TCDF Std.
19.04-28.80
315.9419 Fn1
Flags: PB
4σ 1.36e4
3.09e4
1.55e4
0.00e0
TCDF Std.
19.04-28.80
317.9389 Fn1
Flags: PB
4σ 5.74e3
2.46e4
1.23e4
0.00e0
HxCDPE
19.04-28.80
375.8364 Fn1
Flags: PB
4σ 1.27e3
6.30e3
3.15e3
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Results: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\SBS_200811_DF_CD.utp_res, saved 12-Aug-2020 11:14 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 8889, 0648, 9904 scc: 057-830
Revised: 12-Aug-2020 11:14 (DTF) Printed: 12-Aug-2020 15:40 Page 7 of 12

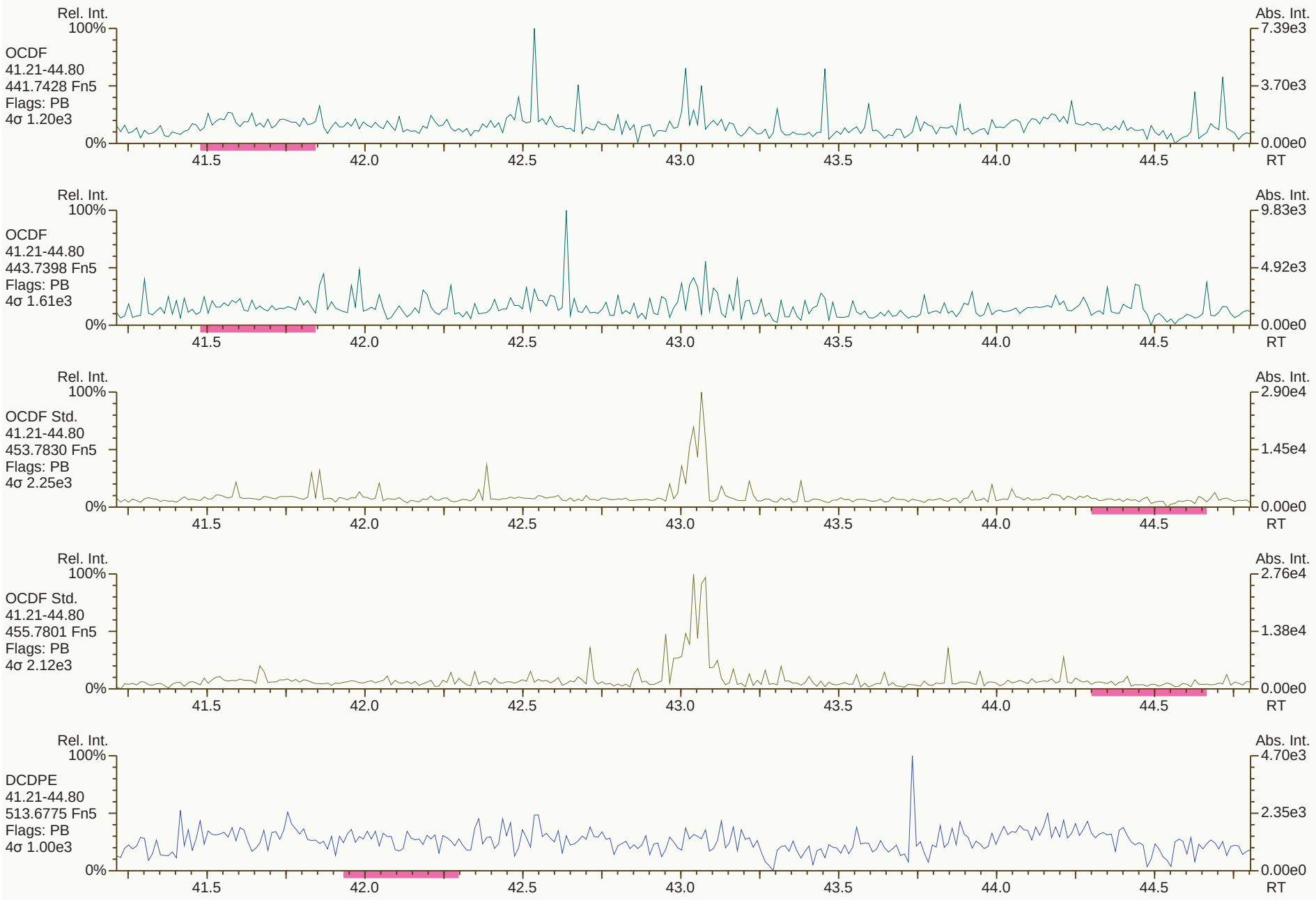

Rel. Int.
100%
0%
Abs. Int.
8.00e3
4.00e3
0.00e0
PeCDF-1
19.04-28.80
339.8597 Fn1
Flags: PB
4σ 9.83e2
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
0%
Abs. Int.
6.85e3
3.43e3
0.00e0
PeCDF-1
19.04-28.80
341.8568 Fn1
Flags: PB
4σ 2.25e3
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
0%
Abs. Int.
6.76e6
3.38e6
0.00e0
QC Check
19.04-28.80
316.9824 Fn1
Flags: -
20.0
22.0
24.0
26.0
28.0
RT


Rel. Int.
100%
PeCDF-2
28.82-33.81
339.8597 Fn2
Flags: PB
4σ 1.42e3
0%
Abs. Int.
1.32e4
6.62e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF-2
28.82-33.81
341.8568 Fn2
Flags: PB
4σ 1.75e3
0%
Abs. Int.
9.00e3
4.50e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.82-33.81
351.9000 Fn2
Flags: PB
4σ 1.32e3
0%
Abs. Int.
4.02e4
2.01e4
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.82-33.81
353.8970 Fn2
Flags: PB
4σ 2.07e3
0%
Abs. Int.
3.56e4
1.78e4
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
HpCDPE
28.82-33.81
409.7974 Fn2
Flags: PB
4σ 1.17e3
0%
Abs. Int.
4.42e3
2.21e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT


Rel. Int.
100%
HxCDF
33.82-37.91
373.8207 Fn3
Flags: PB
4σ 1.17e3
0%
Abs. Int.
5.08e3
2.54e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF
33.82-37.91
375.8178 Fn3
Flags: PB
4σ 1.50e3
0%
Abs. Int.
6.91e3
3.45e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF Std.
33.82-37.91
383.8639 Fn3
Flags: PB
4σ 2.37e3
0%
Abs. Int.
3.13e4
1.57e4
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF Std.
33.82-37.91
385.8610 Fn3
Flags: PB
4σ 4.03e3
0%
Abs. Int.
3.98e4
1.99e4
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
OCDPE
33.82-37.91
445.7555 Fn3
Flags: PB
4σ 1.35e3
0%
Abs. Int.
9.68e3
4.84e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT



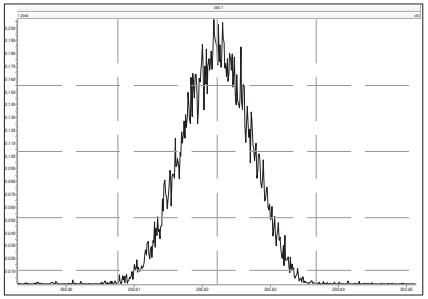
Results: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\SBS_200811_DF_CD.utp_res, saved 12-Aug-2020 11:14 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 5951, 6967, 7456 scc: 057-830
PKD: 12-Aug-2020 11:14 Printed: 12-Aug-2020 15:40 Page 11 of 12


Rel. Int.
100%
OCDF
41.21-44.80
441.7428 Fn5
Flags: PB
4σ 1.20e3
0%
Abs. Int.
7.39e3
3.70e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDF
41.21-44.80
443.7398 Fn5
Flags: PB
4σ 1.61e3
0%
Abs. Int.
9.83e3
4.92e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDF Std.
41.21-44.80
453.7830 Fn5
Flags: PB
4σ 2.25e3
0%
Abs. Int.
2.90e4
1.45e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDF Std.
41.21-44.80
455.7801 Fn5
Flags: PB
4σ 2.12e3
0%
Abs. Int.
2.76e4
1.38e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
DCDPE
41.21-44.80
513.6775 Fn5
Flags: PB
4σ 1.00e3
0%
Abs. Int.
4.70e3
2.35e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT

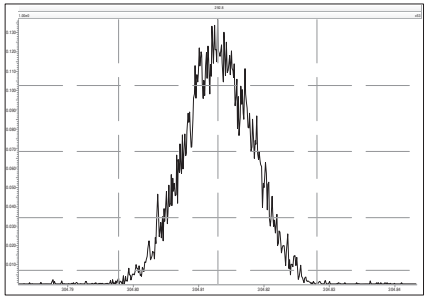
File: Experiment: df_cl4-8_db5MS.exp Reference: DF.ref Function: 1 @ 200 (ppm)

Printed: Tuesday, August 11, 2020 14:05:46 Eastern Daylight Time

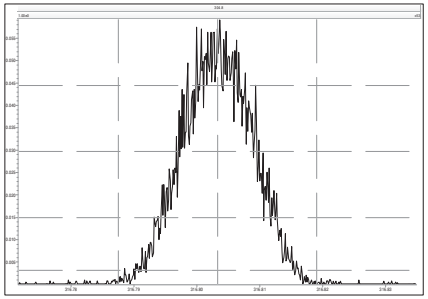
M 292.9824 R 12820



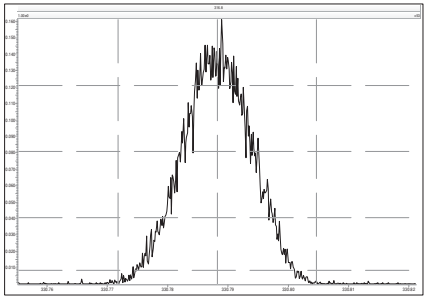
M 304.9824 R 13438



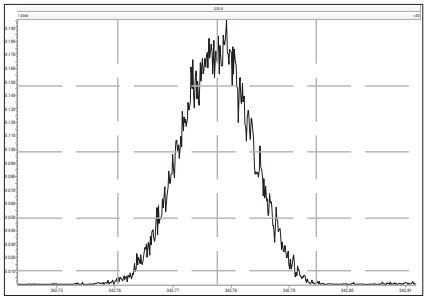
M 316.9824 R 13435



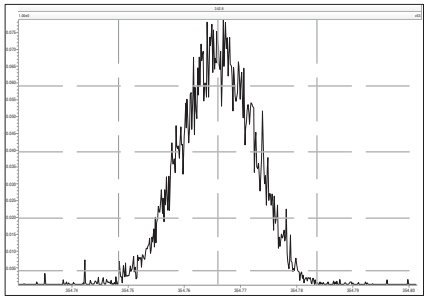
M 330.9792 R 12442



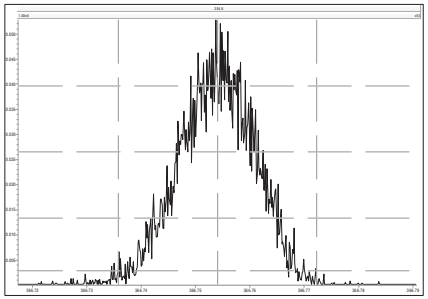
M 342.9792 R 12373



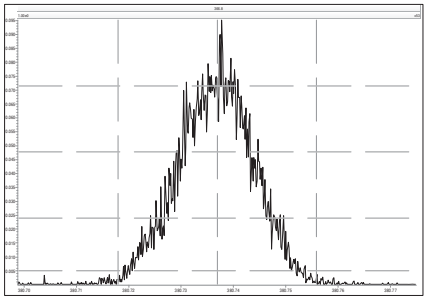
M 354.9792 R 12254



M 366.9792 R 12565



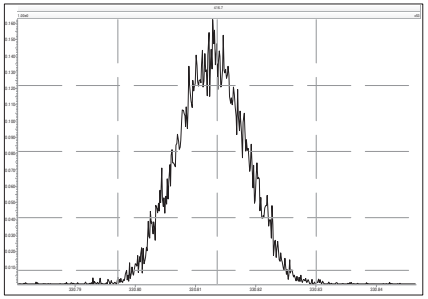
M 380.9760 R 11733



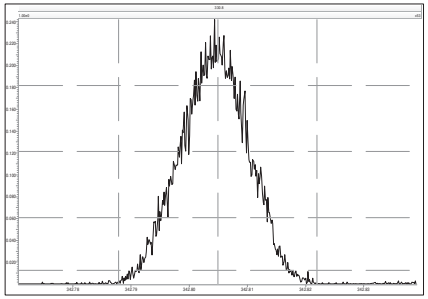
File: Experiment: df_cl4-8_db5MS.exp Reference: DF.ref Function: 2 @ 200 (ppm)

Printed: Tuesday, August 11, 2020 14:06:03 Eastern Daylight Time

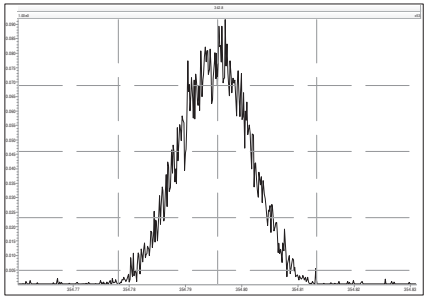
M 330.9792 R 13888



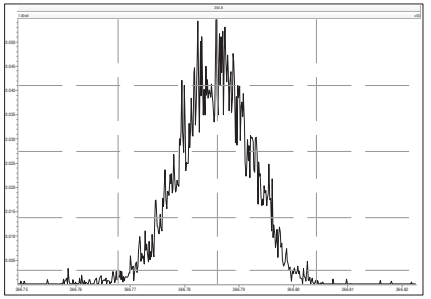
M 342.9792 R 13372



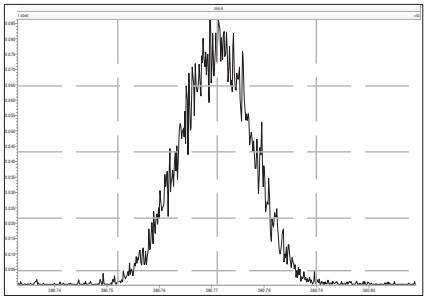
M 354.9792 R 13588



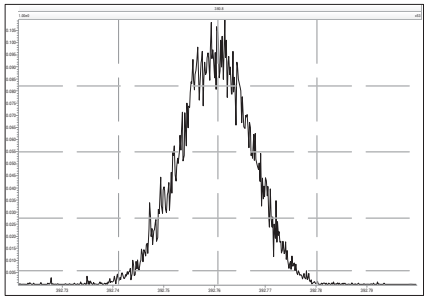
M 366.9792 R 12952



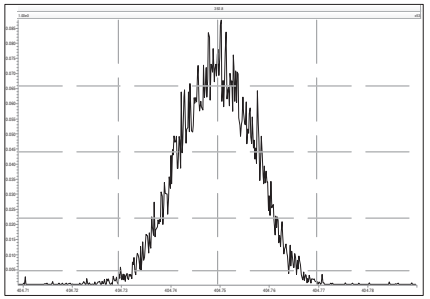
M 380.9760 R 12256



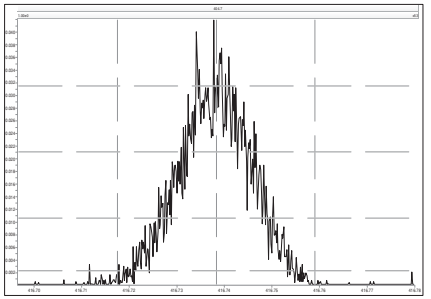
M 392.9760 R 12315



M 404.9760 R 12075



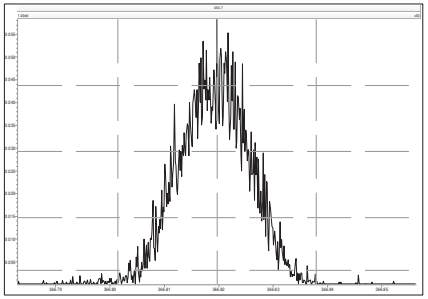
M 416.9760 R 12953



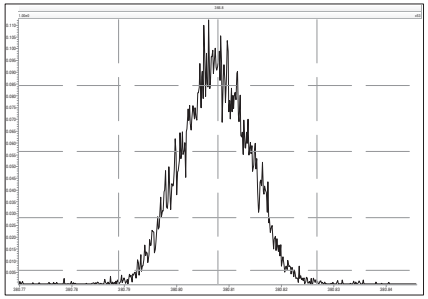
File: Experiment: df_cl4-8_db5MS.exp Reference: DF.ref Function: 3 @ 200 (ppm)

Printed: Tuesday, August 11, 2020 14:06:20 Eastern Daylight Time

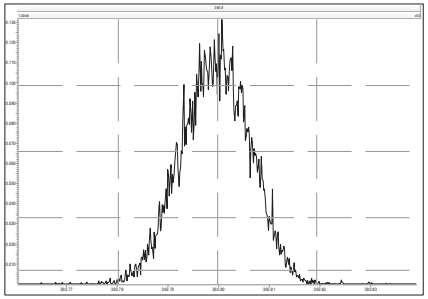
M 366.9792 R 13368



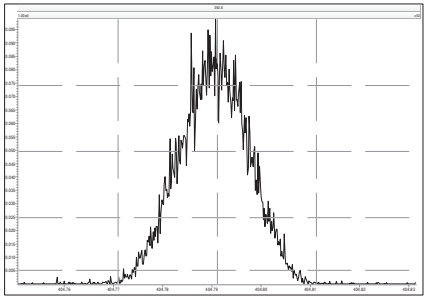
M 380.9760 R 13161



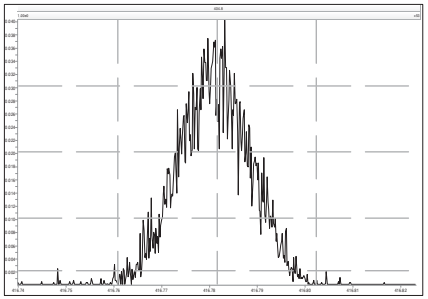
M 392.9760 R 13154



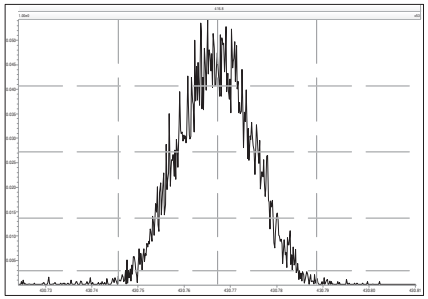
M 404.9760 R 12689



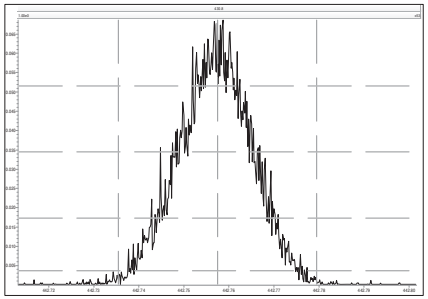
M 416.9760 R 13437



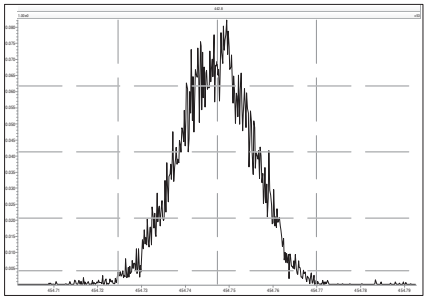
M 430.9728 R 12376



M 442.9728 R 11630



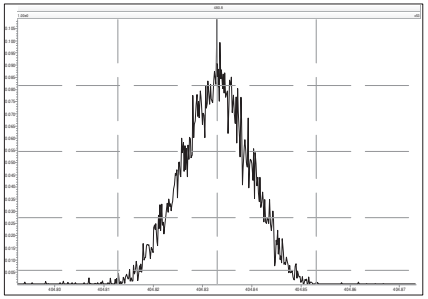
M 454.9728 R 13370



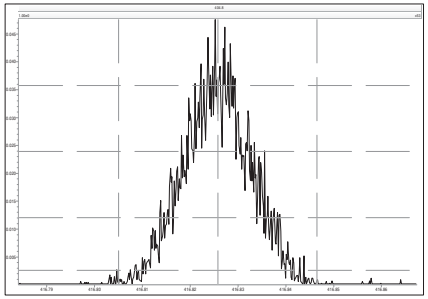
File: Experiment: df_cl4-8_db5MS.exp Reference: DF.ref Function: 4 @ 200 (ppm)

Printed: Tuesday, August 11, 2020 14:06:35 Eastern Daylight Time

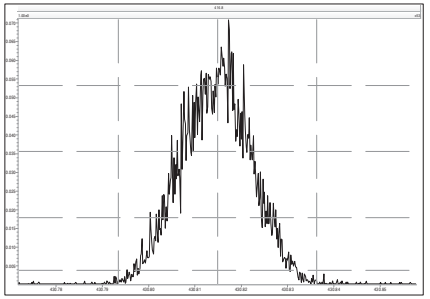
M 404.9760 R 12953



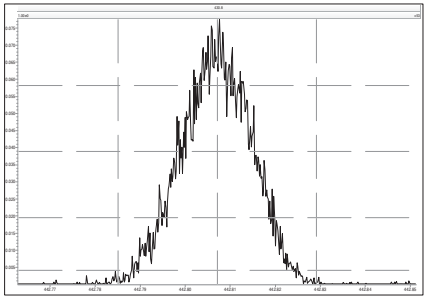
M 416.9760 R 13887



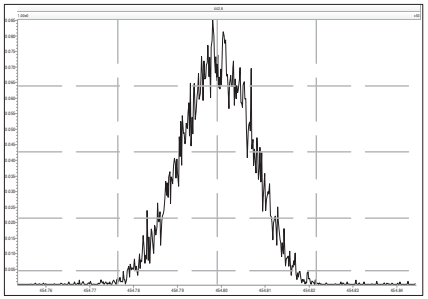
M 430.9728 R 12137



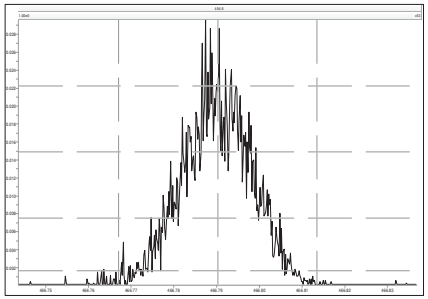
M 442.9728 R 12315



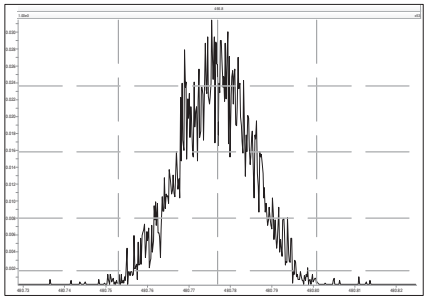
M 454.9728 R 11963



M 466.9728 R 12019



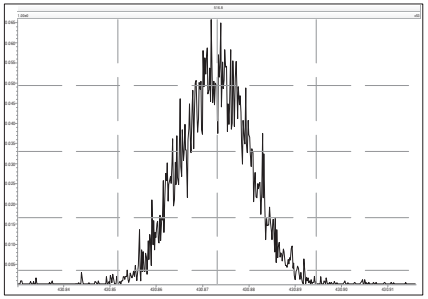
M 480.9696 R 12885



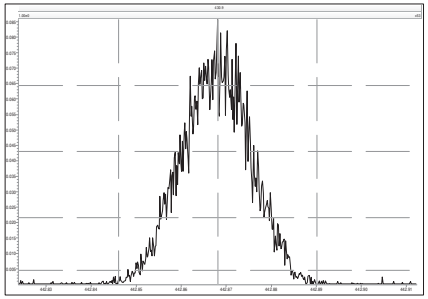
File: Experiment: df_cl4-8_db5MS.exp Reference: DF.ref Function: 5 @ 200 (ppm)

Printed: Tuesday, August 11, 2020 14:06:55 Eastern Daylight Time

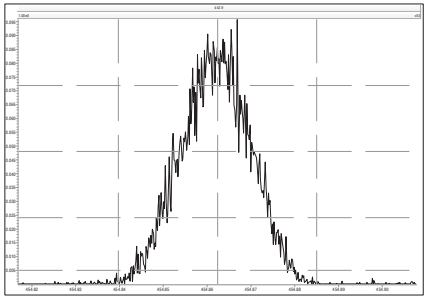
M 430.9728 R 12952



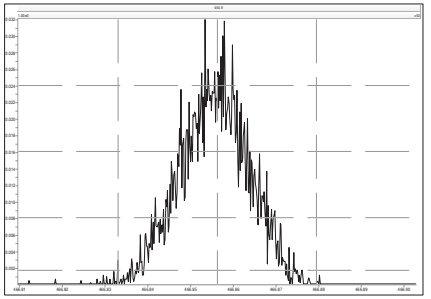
M 442.9728 R 13229



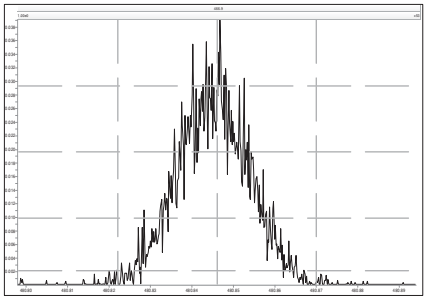
M 454.9728 R 12886



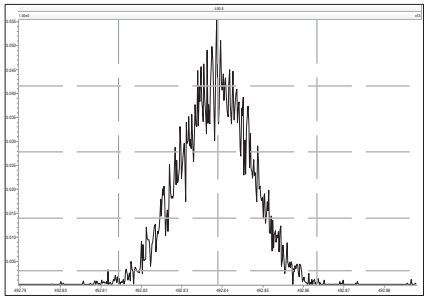
M 466.9728 R 13230



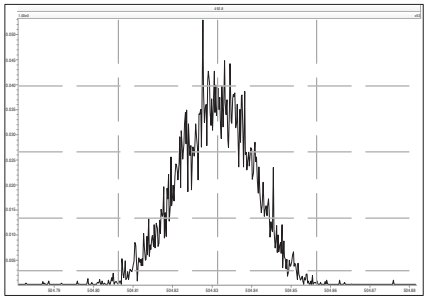
M 480.9696 R 12691



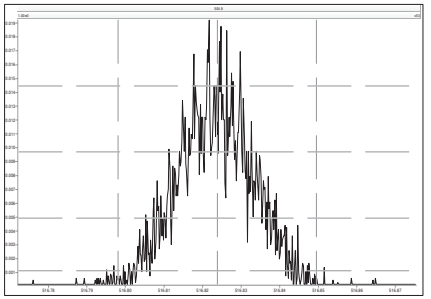
M 492.9696 R 13226



M 504.9696 R 12501



M 516.9697 R 12816



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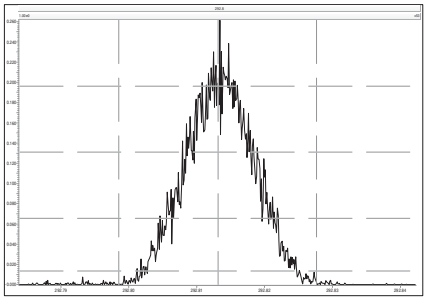
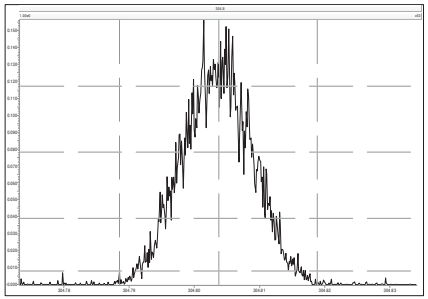
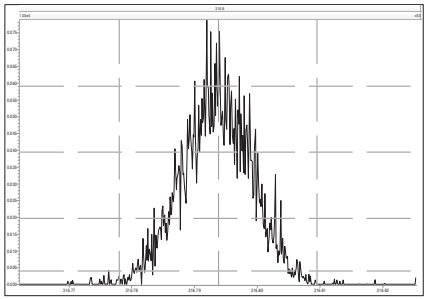
M 292.9824 R 13227



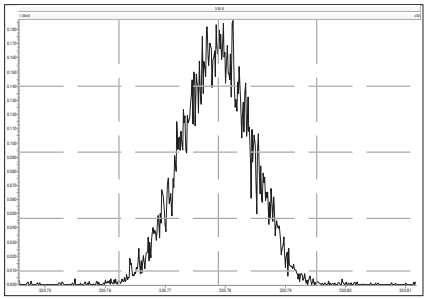
M 304.9824 R 12821



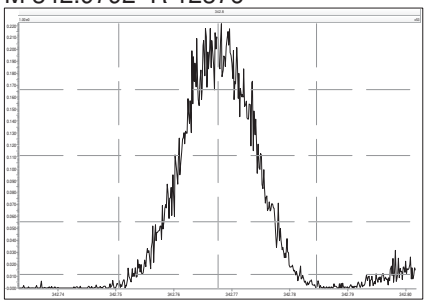
M 316.9824 R 14127



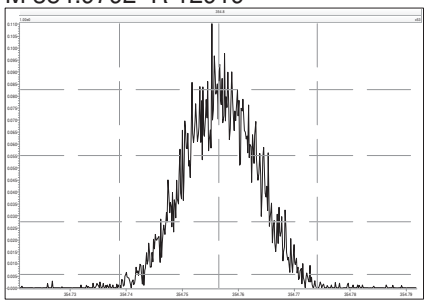
M 330.9792 R 13813



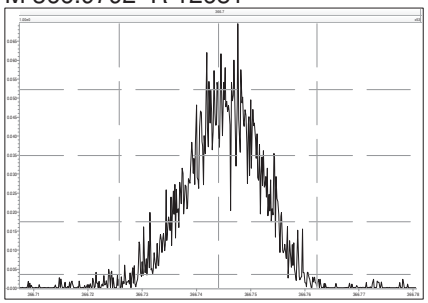
M 342.9792 R 12376



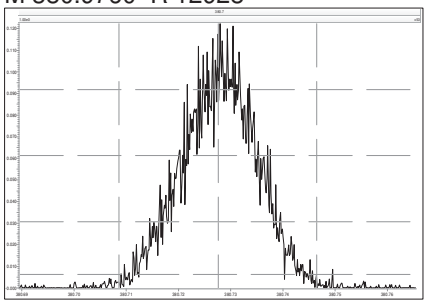
M 354.9792 R 12919



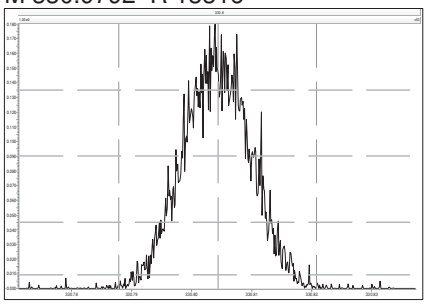
M 366.9792 R 12681



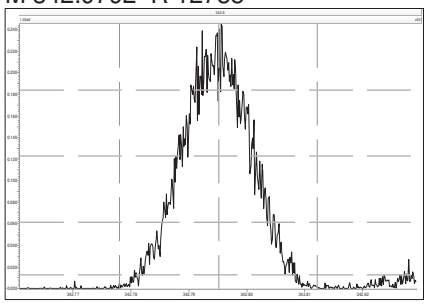
M 380.9760 R 12928



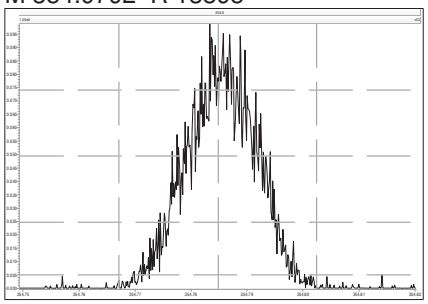
M 330.9792 R 13316



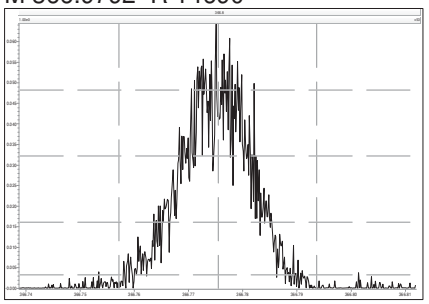
M 342.9792 R 12755



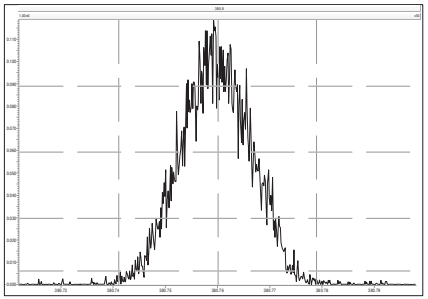
M 354.9792 R 13895



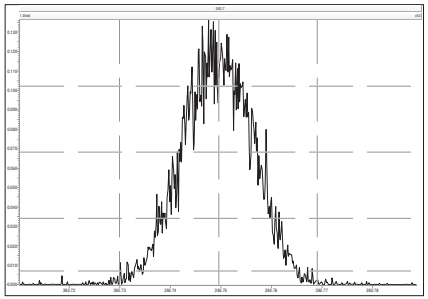
M 366.9792 R 14690



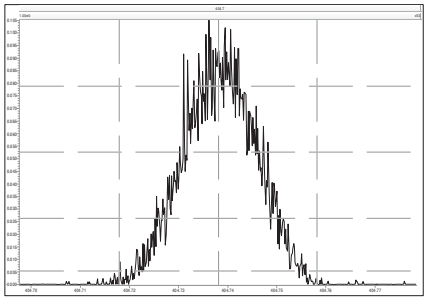
M 380.9760 R 13739



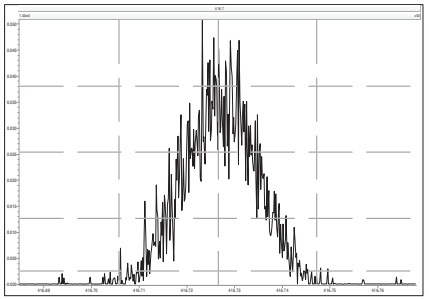
M 392.9760 R 12255



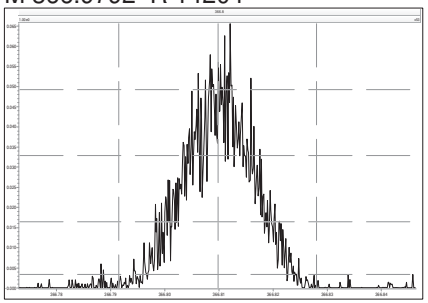
M 404.9760 R 12695



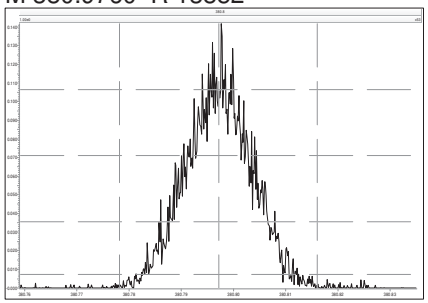
M 416.9760 R 14127



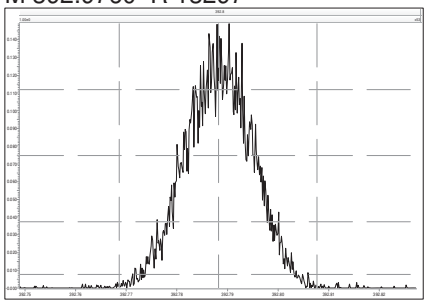
M 366.9792 R 14204



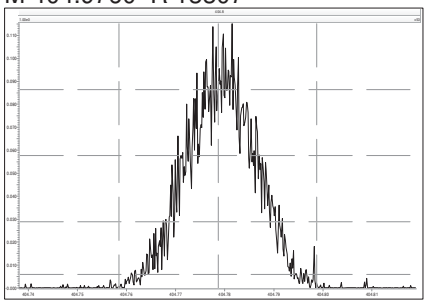
M 380.9760 R 13852



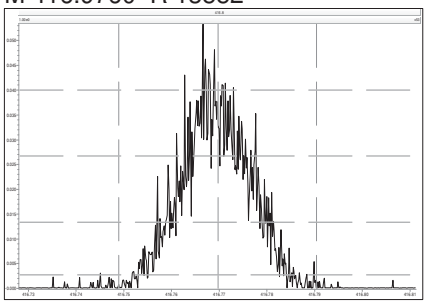
M 392.9760 R 13297



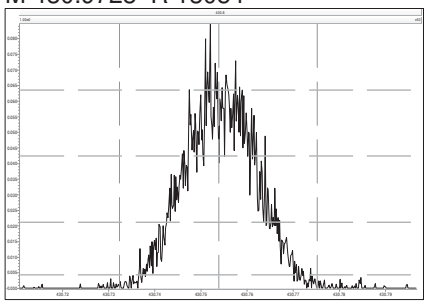
M 404.9760 R 13307



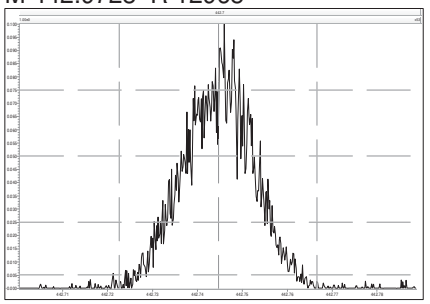
M 416.9760 R 13552



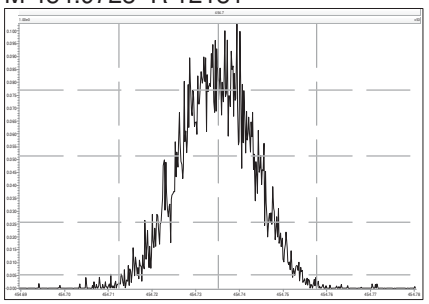
M 430.9728 R 13054



M 442.9728 R 12965



M 454.9728 R 12181



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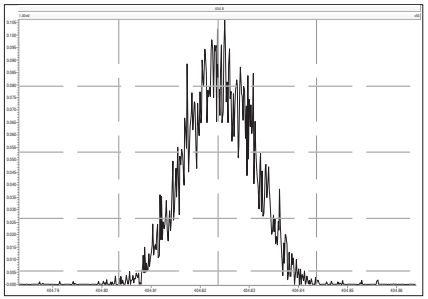
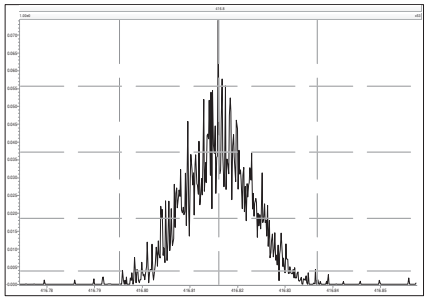
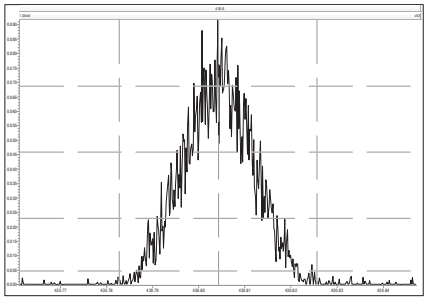
M 404.9760 R 13815



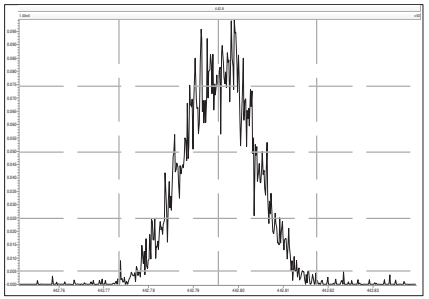
M 416.9760 R 15357



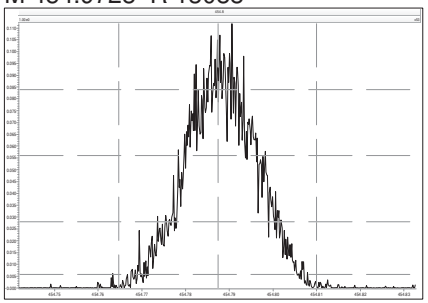
M 430.9728 R 13266



M 442.9728 R 13405



M 454.9728 R 13088



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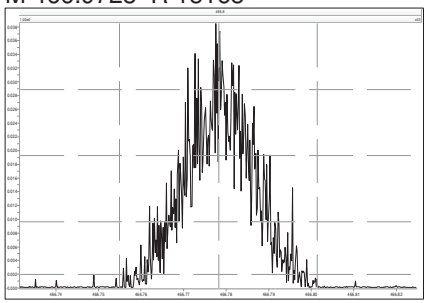
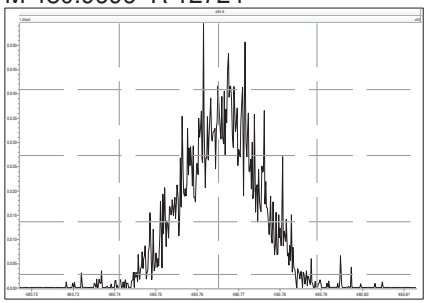


M 480.9696 R 12724



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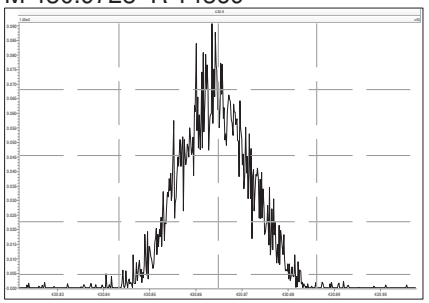

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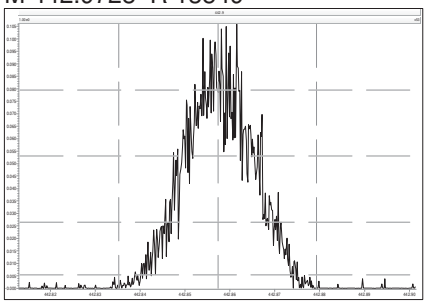

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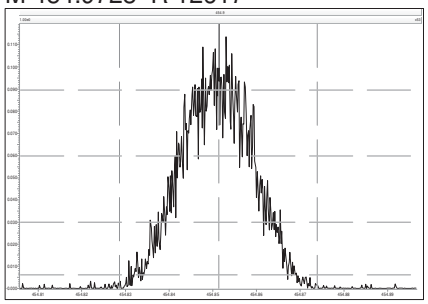

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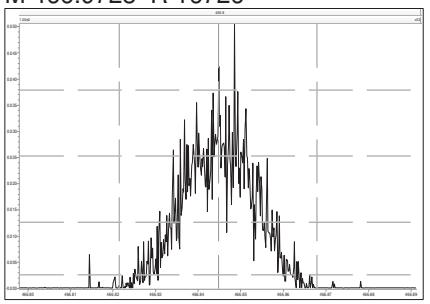

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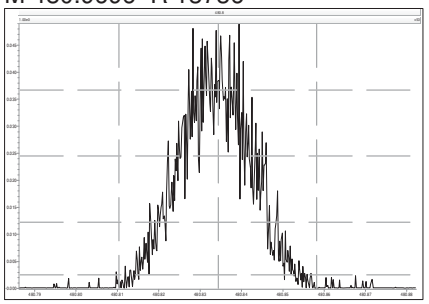
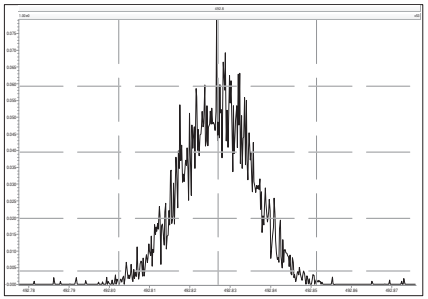
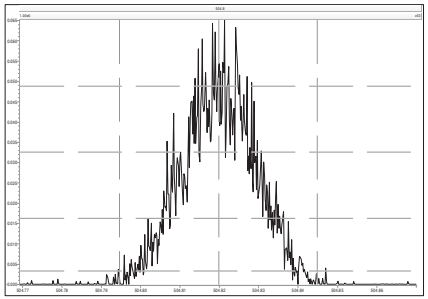


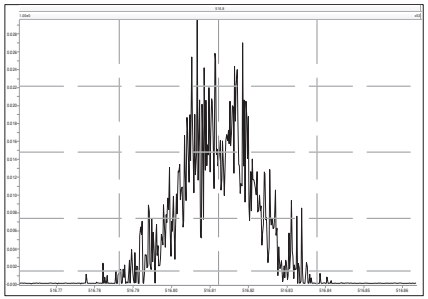
M 492.9696 R 13166



M 504.9696 R 12722



M 516.9697 R 15122



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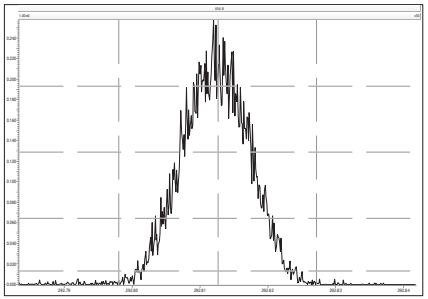
M 292.9824 R 13311



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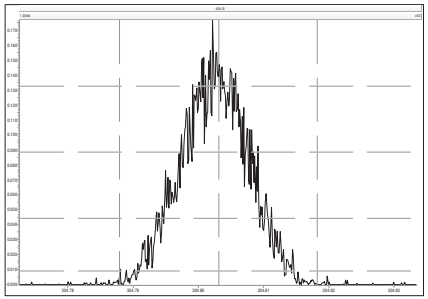

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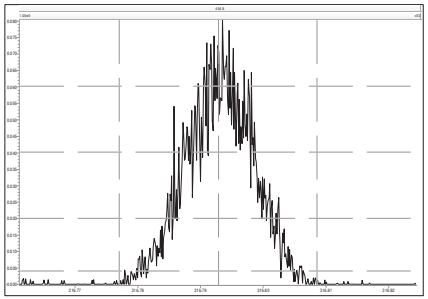

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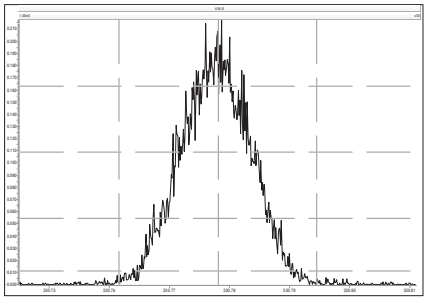

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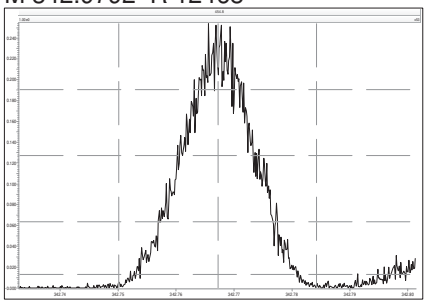

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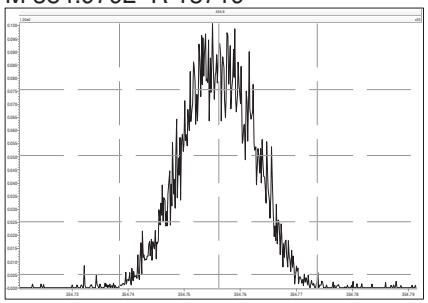

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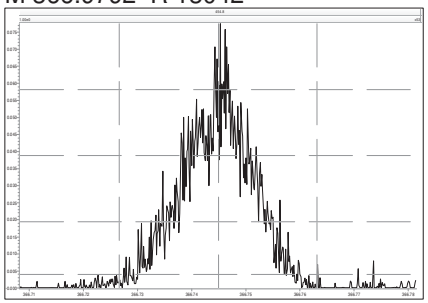

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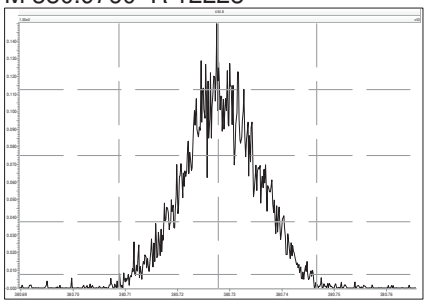

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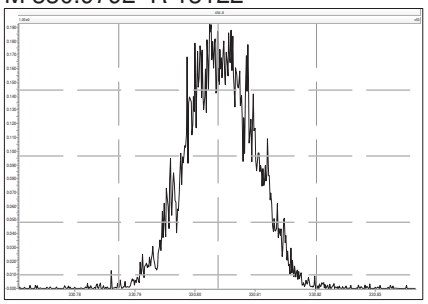

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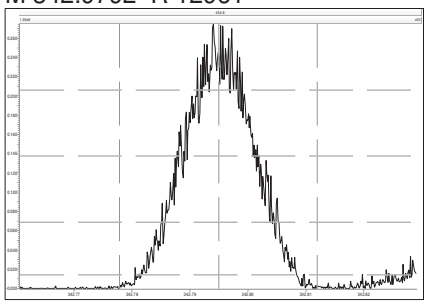

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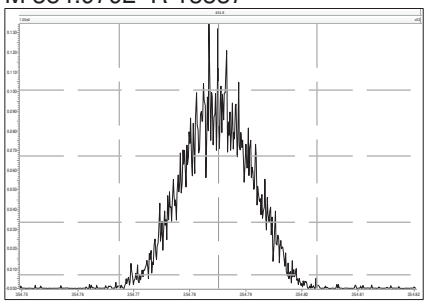

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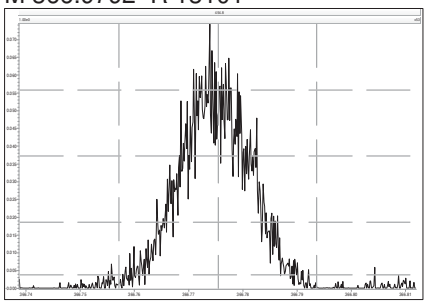

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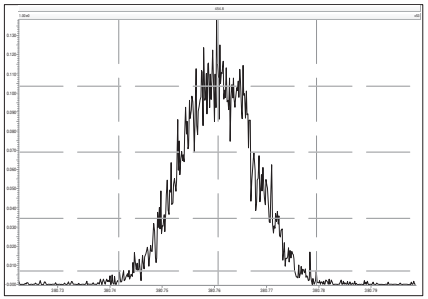

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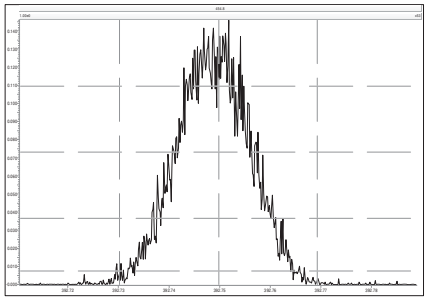

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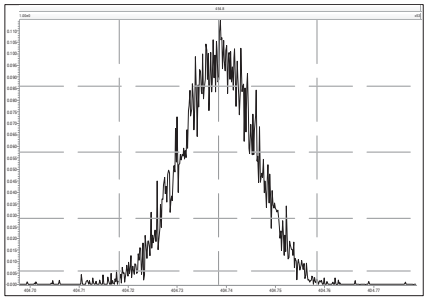

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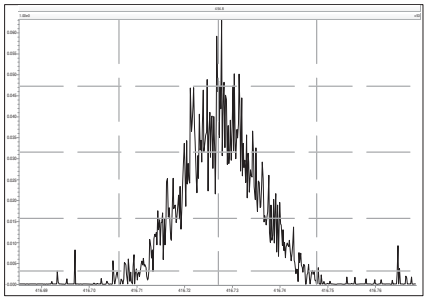

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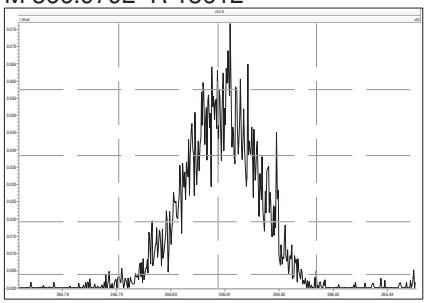

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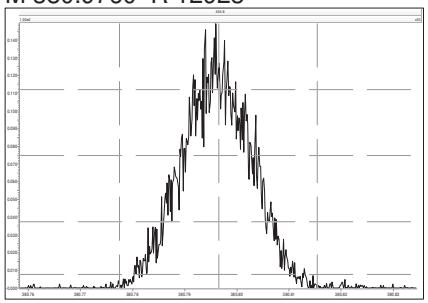

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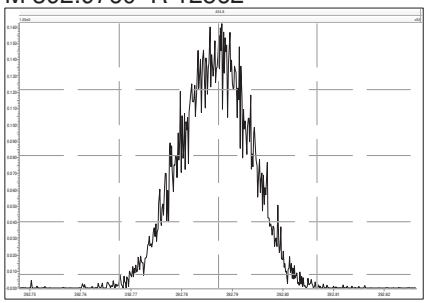

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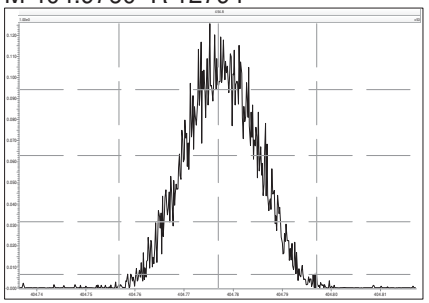
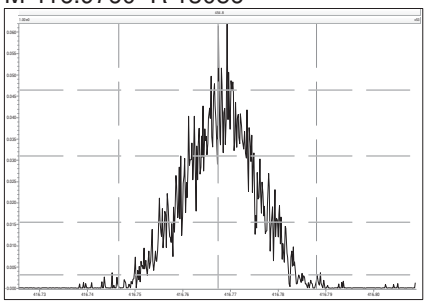
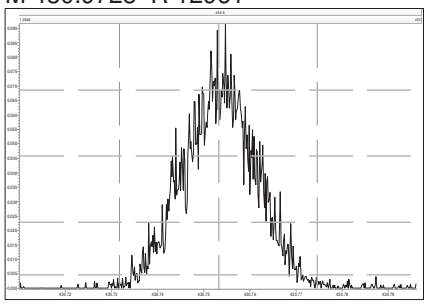


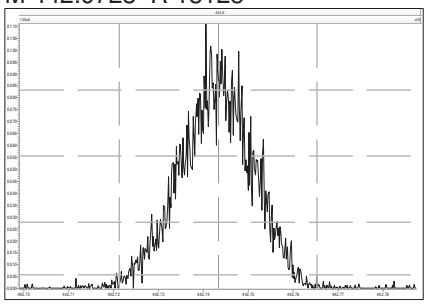
M 416.9760 R 13056



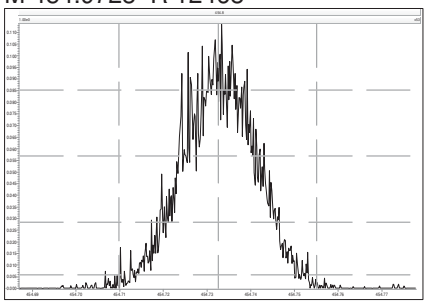
M 430.9728 R 12961



M 442.9728 R 13125



M 454.9728 R 12468



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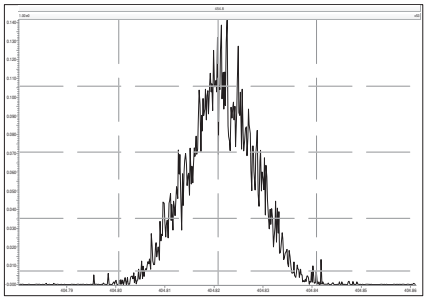

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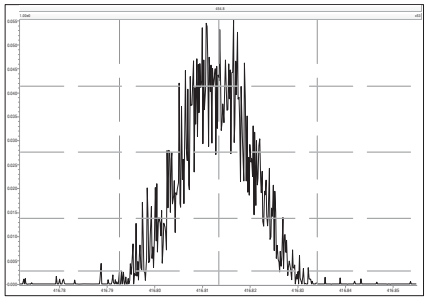

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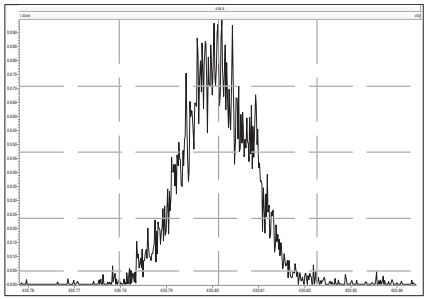
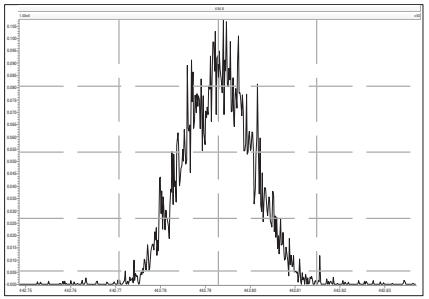


M 442.9728 R 13549



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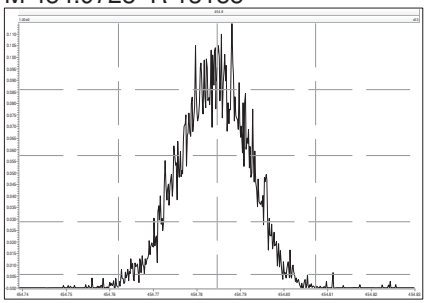

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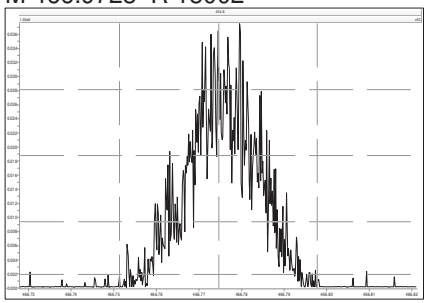

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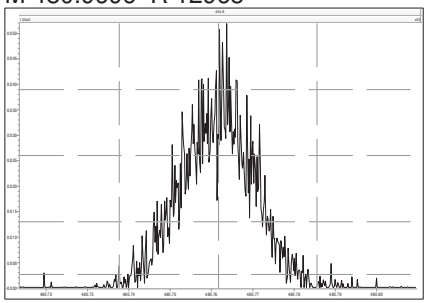

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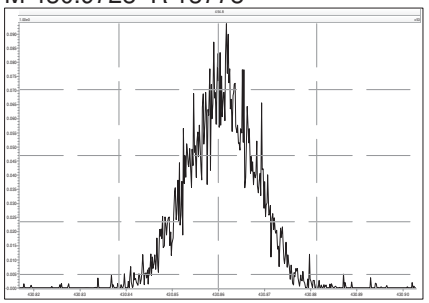

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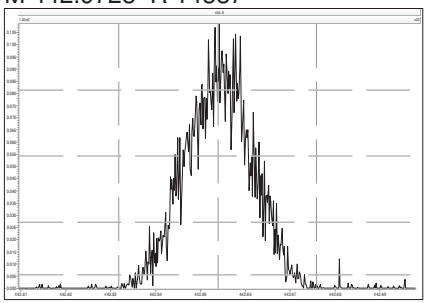

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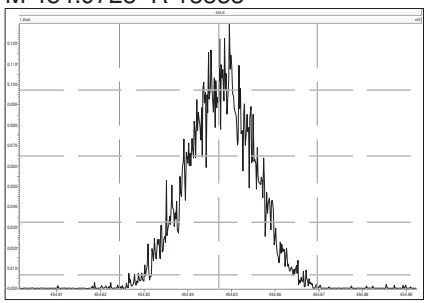
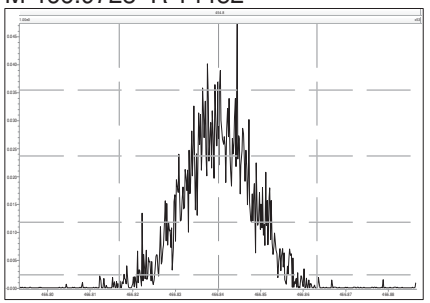
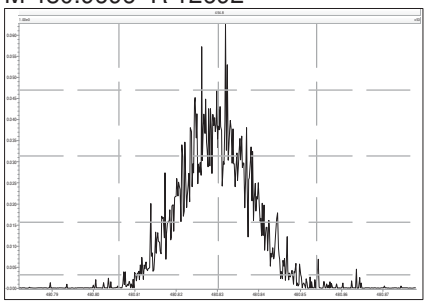


M 466.9728 R 14452



M 480.9696 R 12692



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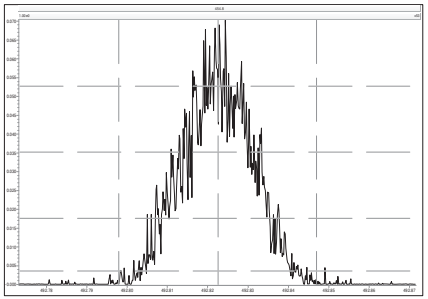
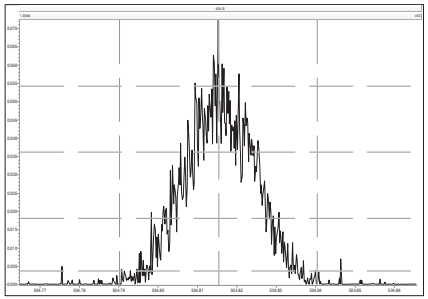
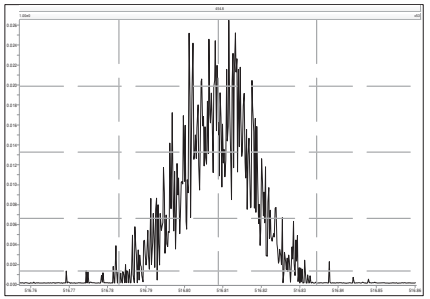


M 504.9696 R 13545



M 516.9697 R 15351



Dioxin/Furan ICAL Summary — SGS North America — Processed: 29 Aug 2019 16:21

ICAL: HRMS3_DF_10122018_28AUG2019
Data Acquired: 28-Aug-2019

Name	Mean	% RSD	190828C06 0.25 pg/uL CS0	190828C07 0.5 pg/uL CS1	190828C08 2 pg/uL CS2	190828C10 10 pg/uL CS3	190828C11 40 pg/uL CS4	190828C12 200 pg/uL CS5	190828C13 500 pg/uL CS6
2378-TCDD	1.19	5.5%	1.29	1.27	1.16	1.18	1.14	1.14	1.14
12378-PeCDD	0.98	5.6%	0.87	1.01	1.04	1.00	0.97	1.00	1.00
123478-HxCDD	1.02	3.6%	0.97	1.00	1.02	1.08	1.01	1.05	1.03
123678-HxCDD	1.09	4.2%	1.01	1.14	1.14	1.08	1.09	1.06	1.08
123789-HxCDD	0.97	1.8%	0.97	0.96	0.98	1.00	0.97	0.96	0.95
1234678-HpCDD	0.98	5.1%	0.92	0.94	1.03	1.05	0.93	0.99	0.98
OCDD	1.07	3.7%	1.16	1.07	1.05	1.06	1.05	1.06	1.05
2378-TCDF	1.01	2.2%	0.99	1.00	1.02	1.05	1.01	0.99	1.02
12378-PeCDF	0.96	1.7%	0.98	0.94	0.99	0.95	0.95	0.96	0.97
23478-PeCDF	0.99	1.5%	0.99	0.97	1.01	0.98	0.97	0.98	1.00
123478-HxCDF	1.21	1.9%	1.17	1.19	1.23	1.22	1.22	1.21	1.22
123678-HxCDF	1.11	1.2%	1.09	1.09	1.13	1.12	1.10	1.11	1.11
234678-HxCDF	1.12	3.7%	1.12	1.05	1.18	1.16	1.11	1.11	1.08
123789-HxCDF	1.11	4.3%	1.10	1.02	1.10	1.17	1.10	1.12	1.15
1234678-HpCDF	1.32	3.8%	1.37	1.40	1.33	1.35	1.27	1.27	1.28
1234789-HpCDF	1.26	1.0%	1.25	1.26	1.27	1.26	1.26	1.25	1.23
OCDF	1.03	2.4%	1.05	1.02	1.07	1.05	1.01	1.01	1.02
ES 2378-TCDD	0.99	2.5%	1.00	0.95	0.96	0.98	1.00	1.01	1.02
ES 12378-PeCDD	0.83	7.0%	0.82	0.75	0.80	0.81	0.83	0.86	0.94
ES 123478-HxCDD	0.95	7.9%	0.93	0.90	0.90	0.89	0.92	0.99	1.10
ES 123678-HxCDD	0.98	7.9%	0.95	0.93	0.91	0.94	0.94	1.04	1.12
ES 123789-HxCDD	1.14	8.5%	1.10	1.09	1.06	1.08	1.10	1.20	1.33
ES 1234678-HpCDD	0.90	7.3%	0.89	0.86	0.85	0.83	0.91	0.92	1.02
ES OCDD	0.63	7.7%	0.63	0.61	0.61	0.57	0.60	0.64	0.72
ES 2378-TCDF	1.00	3.3%	1.00	0.99	0.98	0.94	0.98	1.03	1.04
ES 12378-PeCDF	0.83	6.6%	0.82	0.78	0.80	0.79	0.81	0.87	0.93
ES 23478-PeCDF	0.81	6.4%	0.81	0.77	0.76	0.76	0.79	0.84	0.90
ES 123478-HxCDF	1.12	7.8%	1.09	1.08	1.09	1.07	1.06	1.16	1.31
ES 123678-HxCDF	1.33	8.0%	1.27	1.26	1.29	1.28	1.28	1.38	1.56
ES 234678-HxCDF	1.21	8.4%	1.17	1.16	1.13	1.15	1.18	1.25	1.42
ES 123789-HxCDF	1.12	8.8%	1.10	1.04	1.05	1.03	1.11	1.19	1.30
ES 1234678-HpCDF	0.92	9.5%	0.90	0.87	0.87	0.86	0.91	0.97	1.10
ES 1234789-HpCDF	0.82	8.1%	0.80	0.77	0.78	0.78	0.81	0.85	0.96
ES OCDF	0.78	9.1%	0.76	0.76	0.75	0.70	0.75	0.81	0.92

Dioxin/Furan ICAL Summary — SGS North America — Processed: 29 Aug 2019 16:21

ICAL: HRMS3_DF_10122018_28AUG2019
Data Acquired: 28-Aug-2019

Name	Mean	% RSD	190828C06 0.25 pg/uL CS0	190828C07 0.5 pg/uL CS1	190828C08 2 pg/uL CS2	190828C10 10 pg/uL CS3	190828C11 40 pg/uL CS4	190828C12 200 pg/uL CS5	190828C13 500 pg/uL CS6
CS 37Cl-2378-TCDD	1.12	3.1%	-	1.17	1.11	1.08	1.11	1.13	-
CS 12347-PeCDD	0.71	2.7%	0.73	0.68	0.71	0.70	0.72	0.71	0.74
CS 12346-PeCDF	0.81	1.7%	0.83	0.80	0.81	0.79	0.81	0.80	0.82
CS 123469-HxCDF	1.12	3.1%	1.12	1.12	1.15	1.08	1.09	1.11	1.19
CS 1234689-HpCDF	0.90	4.0%	0.88	0.89	0.90	0.85	0.89	0.89	0.97
SS 37Cl-2378-TCDD	1.14	4.7%	-	1.23	1.15	1.09	1.11	1.12	-
SS 12347-PeCDD	0.86	4.9%	0.89	0.90	0.89	0.87	0.87	0.82	0.79
SS 12346-PeCDF	0.98	5.8%	1.01	1.02	1.02	1.00	0.99	0.91	0.88
SS 123469-HxCDF	0.85	5.5%	0.88	0.89	0.89	0.85	0.85	0.81	0.76
SS 1234689-HpCDF	0.97	6.0%	0.98	1.03	1.04	0.99	0.99	0.91	0.88
AS 1368-TCDD	1.12	2.1%	1.11	1.11	1.11	1.17	1.11	1.10	1.13
AS 1368-TCDF	1.19	1.6%	1.18	1.21	1.20	1.22	1.19	1.17	1.17
OCDD-a			-	-	-	-	-	-	-
OCDF-a			-	-	-	-	-	-	-
Totals									
Total TCDD	1.19	5.5%	1.29	1.27	1.16	1.18	1.14	1.14	1.14
Total PeCDD	0.98	5.6%	0.87	1.01	1.04	1.00	0.97	1.00	1.00
Total HxCDD	1.03	2.2%	0.98	1.04	1.05	1.05	1.02	1.02	1.02
Total HpCDD	0.98	5.1%	0.92	0.94	1.03	1.05	0.93	0.99	0.98
Total TCDF	1.01	2.2%	0.99	1.00	1.02	1.05	1.01	0.99	1.02
Total PeCDF	0.98	1.5%	0.98	0.96	1.00	0.97	0.96	0.97	0.98
Total HxCDF	1.13	2.2%	1.12	1.09	1.16	1.17	1.13	1.14	1.14
Total HpCDF	1.29	2.2%	1.31	1.33	1.30	1.30	1.26	1.26	1.26
FS 1278-TCDD	1.02	1.1%	1.03	1.02	1.03	1.03	1.03	1.00	1.01
FS 12478-PeCDD	0.98	5.4%	1.01	1.03	1.02	1.00	1.01	0.93	0.89
FS 123468-HxCDD	1.17	5.9%	1.20	1.23	1.19	1.23	1.16	1.12	1.04
FS 1234679-HpCDD	1.14	3.5%	1.16	1.17	1.16	1.18	1.13	1.11	1.07
TS 1378-TCDD	1.09	2.7%	1.08	1.12	1.11	1.13	1.08	1.07	1.06

Instrument: HRMS3 (AutoSpec-Ultima) MS Experiment: df_cl4-8_db5 GC Program: df_db5

#	Datafile	Vial#	Lab ID	Wt/Vol	Client/Sample ID	Analyst(s)	Checkcode	Acq Date	Acq Time
3	190828C03	3	SBS_190828_DF_CA	1.00	20-61-1	PSW	563-064	28-Aug-2019	11:02:02
6	190828C06	5	CS0_190828_DF_CB	1.00	20-282-3	PSW	949-819	28-Aug-2019	13:26:42
7	190828C07	6	CS1_190828_DF_CB	1.00	20-282-2	PSW	130-956	28-Aug-2019	14:16:56
8	190828C08	7	CS2_190828_DF_CA	1.00	20-282-1	PSW	378-487	28-Aug-2019	15:06:37
10	190828C10	1	CS3_190828_DF_CB	1.00	20-449-3	PSW	536-910	28-Aug-2019	17:00:21
11	190828C11	8	CS4_190828_DF_CA	1.00	20-281-2	PSW	139-753	28-Aug-2019	17:47:40
12	190828C12	9	CS5_190828_DF_CA	1.00	20-281-1	PSW	752-004	28-Aug-2019	18:35:01
13	190828C13	10	CS6_190828_DF_CA	1.00	20-280-4	PSW	807-000	28-Aug-2019	19:22:22
1	190829C01	1	CS3_190829_DF_CA	1.00	20-449-3	PSW	845-140	29-Aug-2019	08:53:00
3	190829C03	12	OPR1_190829_DF-RJ	1.00	ICV SIL# 22-5-12	PSW	573-892	29-Aug-2019	10:35:56

alternate OCTA not calibrated

REVIEWED
By Paul Walton at 4:33 pm, Aug 29, 2019

APPROVED
Carla_Lyon , 13:58:03, 09/03/2019

Dioxin/Furan ICAL Concentrations	SGS Environmental Services							
	Concentration							
Individual Native Standards	CS0 pg/uL	CS1 pg/uL	CS2 pg/uL	CS3 pg/uL	CS4 pg/uL	CS5 pg/uL	CS6 pg/uL	Working Standards pg/uL
2378-TCDD	0.25	0.5	2	10	40	200	500	1
12378-PeCDD	1.25	2.5	10	50	200	1000	2500	1
123478-HxCDD	1.25	2.5	10	50	200	200	2500	1
123678-HxCDD	1.25	2.5	10	50	200	200	2500	1
123789-HxCDD	1.25	2.5	10	50	200	200	2500	1
1234678-HpCDD	1.25	2.5	10	50	200	200	2500	1
OCDD	2.5	5	20	100	400	2000	5000	1
2378-TCDF	0.25	0.5	2	10	40	200	500	1
12378-PeCDF	1.25	2.5	10	50	200	1000	2500	1
23478-PeCDF	1.25	2.5	10	50	200	200	2500	1
123478-HxCDF	1.25	2.5	10	50	200	200	2500	1
123678-HxCDF	1.25	2.5	10	50	200	200	2500	1
234678-HxCDF	1.25	2.5	10	50	200	200	2500	1
123789-HxCDF	1.25	2.5	10	50	200	200	2500	1
1234678-HpCDF	1.25	2.5	10	50	200	200	2500	1
1234789-HpCDF	1.25	2.5	10	50	200	200	2500	1
OCDF	2.5	5	20	100	400	2000	5000	1
Extraction Standards								
ES 2378-TCDD	100	100	100	100	100	100	100	10
ES 12378-PeCDD	100	100	100	100	100	100	100	10
ES 123478-HxCDD	100	100	100	100	100	100	100	10
ES 123678-HxCDD	100	100	100	100	100	100	100	10
ES 123789-HxCDD	100	100	100	100	100	100	100	10
ES 1234678-HpCDD	100	100	100	100	100	100	100	10
ES OCDD	200	200	200	200	200	200	200	10
ES 2378-TCDF	100	100	100	100	100	100	100	10
ES 12378-PeCDF	100	100	100	100	100	100	100	10
ES 23478-PeCDF	100	100	100	100	100	100	100	10
ES 123478-HxCDF	100	100	100	100	100	100	100	10
ES 123678-HxCDF	100	100	100	100	100	100	100	10
ES 234678-HxCDF	100	100	100	100	100	100	100	10
ES 123789-HxCDF	100	100	100	100	100	100	100	10
ES 1234678-HpCDF	100	100	100	100	100	100	100	10
ES 1234789-HpCDF	100	100	100	100	100	100	100	10
ES OCDF	200	200	200	200	200	200	200	10
Cleanup/Sampling Standards								
CS 37Cl-2378-TCDD	-	0.5	2	10	40	200	-	4
CS 12347-PeCDD	100	100	100	100	100	100	100	10
CS 12346-PeCDF	100	100	100	100	100	100	100	10
CS 123469-HxCDF	100	100	100	100	100	100	100	10
CS 1234689-HpCDF	100	100	100	100	100	100	100	10
Alternate Standards								
AS 1368-TCDD	100	100	100	100	100	100	100	10
AS 1368-TCDF	100	100	100	100	100	100	100	10
Shipping Standards								
FS 1278-TCDD	100	100	100	100	100	100	100	100
FS 12478-PeCDD	100	100	100	100	100	100	100	100
FS 123468-HxCDD	100	100	100	100	100	100	100	100
FS 1234679-HpCDD	100	100	100	100	100	100	100	100
TS 1378-TCDD	100	100	100	100	100	100	100	100
Injection Standards								
1234 TCDD 13C12	100	100	100	100	100	100	100	10
1234 TCDF 13C12	100	100	100	100	100	100	100	10
123467 HxCDD 13C12	50	50	50	50	50	50	50	5

Dioxin/Furan STD Association	SGS Environmental Services

Individual Native Standards

2378-TCDD	ES 2378-TCDD
12378-PeCDD	ES 12378-PeCDD
123478-HxCDD	ES 123478-HxCDD
123678-HxCDD	ES 123678-HxCDD
123789-HxCDD	ES 123789-HxCDD
1234678-HpCDD	ES 1234678-HpCDD
OCDD	ES OCDD
2378-TCDF	ES 2378-TCDF
12378-PeCDF	ES 12378-PeCDF
23478-PeCDF	ES 23478-PeCDF
123478-HxCDF	ES 123478-HxCDF
123678-HxCDF	ES 123678-HxCDF
234678-HxCDF	ES 234678-HxCDF
123789-HxCDF	ES 123789-HxCDF
1234678-HpCDF	ES 1234678-HpCDF
1234789-HpCDF	ES 1234789-HpCDF
OCDF	ES OCDF

Cleanup/Sampling Standards

CS 37Cl-2378-TCDD	1234 TCDD 13C12
CS 12347-PeCDD	1234 TCDD 13C12
CS 12346-PeCDF	1234 TCDF 13C12
CS 123469-HxCDF	123467 HxCDD 13C12
CS 1234689-HpCDF	123467 HxCDD 13C12

Alternate Standards

AS 1368-TCDD	1234 TCDD 13C12
AS 1368-TCDF	1234 TCDF 13C12

Shipping Standards

FS 1278-TCDD	ES 2378-TCDD
FS 12478-PeCDD	ES 12378-PeCDD
FS 123468-HxCDD	ES 123478-HxCDD
FS 1234679-HpCDD	ES 1234678-HpCDD
TS 1378-TCDD	ES 2378-TCDD

Extraction Standards

ES 2378-TCDD	1234 TCDD 13C12
ES 12378-PeCDD	1234 TCDD 13C12
ES 123478-HxCDD	123467 HxCDD 13C12
ES 123678-HxCDD	123467 HxCDD 13C12
ES 123789-HxCDD	123467 HxCDD 13C12
ES 1234678-HpCDD	123467 HxCDD 13C12
ES OCDD	123467 HxCDD 13C12
ES 2378-TCDF	1234 TCDF 13C12
ES 12378-PeCDF	1234 TCDF 13C12
ES 23478-PeCDF	1234 TCDF 13C12
ES 123478-HxCDF	123467 HxCDD 13C12
ES 123678-HxCDF	123467 HxCDD 13C12
ES 234678-HxCDF	123467 HxCDD 13C12
ES 123789-HxCDF	123467 HxCDD 13C12
ES 1234678-HpCDF	123467 HxCDD 13C12
ES 1234789-HpCDF	123467 HxCDD 13C12
ES OCDF	123467 HxCDD 13C12

Injection Standards

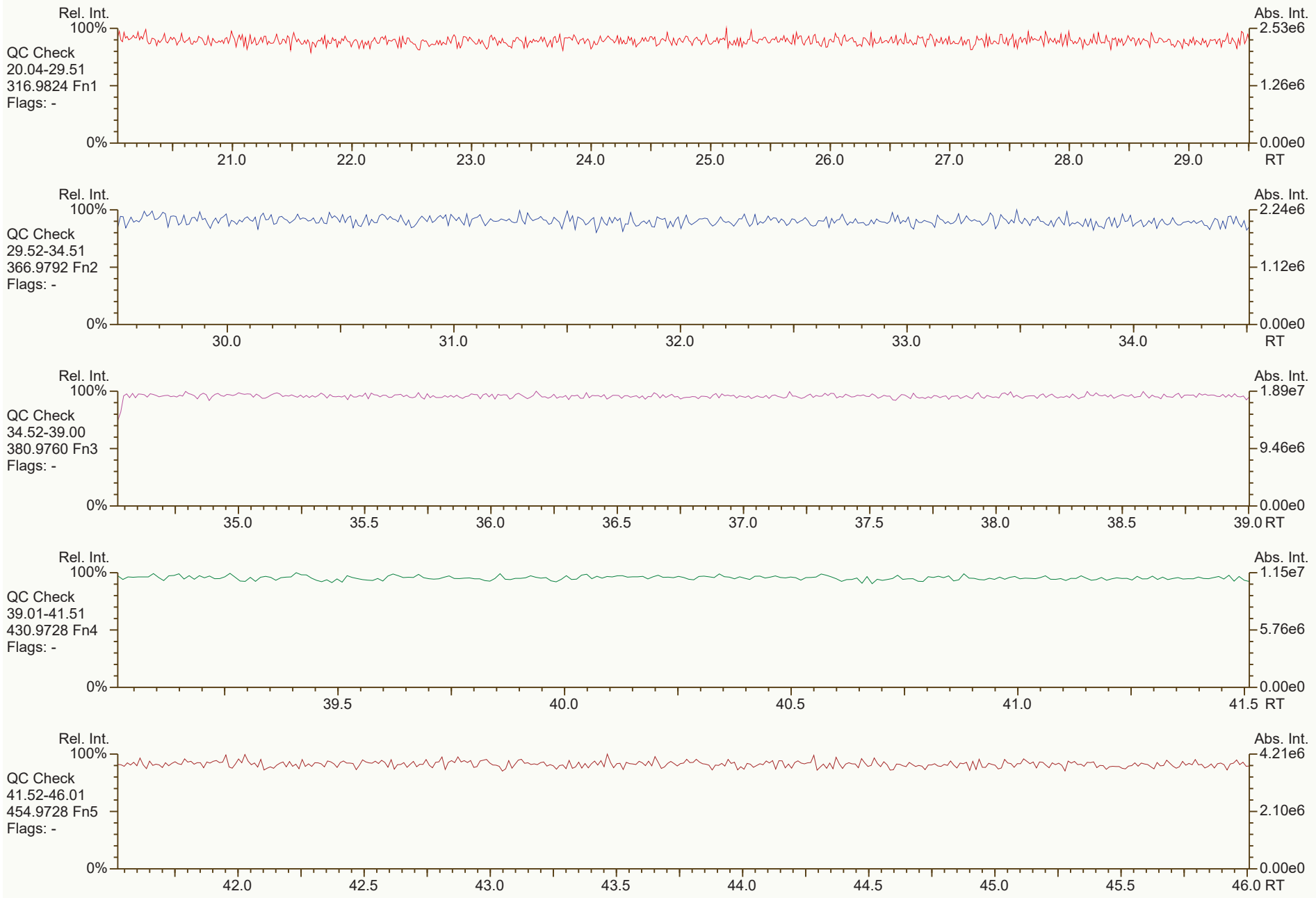
1234 TCDD 13C12
1234 TCDF 13C12
123467 HxCDD 13C12

Dioxin/Furan QC Summary	Acq'd: 28 Aug 2019 13:26 PSW	ICAL: HRMS3_DF_10122018_28AUG2019
Lab ID: CS0_190828_DF_CB	UTP: 29-Aug-2019 16:20:40 PSW	Checkcode: 949-819-RXT
Sample ID: 20-282-3	Report: 29 Aug 2019 16:28 pw	Datafile: 190828C06

Name	RT	Response	RA	OK	Ref. RRFs	Calc. RRFs	Dev'n
2378-TCDD	27.73	1.94E+05	0.87	Y	1.19	1.29	9%
12378-PeCDD	33.24	5.30E+05	1.44	Y	0.98	0.87	-12%
123478-HxCDD	37.22	4.95E+05	1.13	Y	1.02	0.97	-6%
123678-HxCDD	37.34	5.34E+05	1.09	Y	1.09	1.01	-7%
123789-HxCDD	37.66	5.94E+05	1.27	Y	0.97	0.97	0%
1234678-HpCDD	40.57	4.53E+05	1.05	Y	0.98	0.92	-6%
OCDD	43.35	8.06E+05	0.85	Y	1.07	1.16	8%
2378-TCDF	26.83	2.04E+05	0.67	Y	1.01	0.99	-2%
12378-PeCDF	31.75	8.29E+05	1.51	Y	0.96	0.98	1%
23478-PeCDF	32.88	8.22E+05	1.77	Y	0.99	0.99	0%
123478-HxCDF	36.22	7.05E+05	1.24	Y	1.21	1.17	-3%
123678-HxCDF	36.36	7.66E+05	1.17	Y	1.11	1.09	-2%
234678-HxCDF	37.03	7.25E+05	1.13	Y	1.12	1.12	0%
123789-HxCDF	38.03	6.68E+05	1.23	Y	1.11	1.10	-1%
1234678-HpCDF	39.58	6.84E+05	1.13	Y	1.32	1.37	4%
1234789-HpCDF	41.01	5.58E+05	0.93	Y	1.26	1.25	0%
OCDF	43.50	8.88E+05	0.93	Y	1.03	1.05	2%
ES 2378-TCDD	27.71	5.98E+07	0.79	Y	0.99	1.00	1%
ES 12378-PeCDD	33.22	4.89E+07	1.56	Y	0.83	0.82	-1%
ES 123478-HxCDD	37.21	4.10E+07	1.24	Y	0.95	0.93	-2%
ES 123678-HxCDD	37.33	4.22E+07	1.25	Y	0.98	0.95	-2%
ES 123789-HxCDD	37.64	4.88E+07	1.26	Y	1.14	1.10	-3%
ES 1234678-HpCDD	40.56	3.96E+07	1.06	Y	0.90	0.89	0%
ES OCDD	43.34	5.56E+07	0.93	Y	0.63	0.63	0%
ES 2378-TCDF	26.8	8.23E+07	0.80	Y	1.00	1.00	1%
ES 12378-PeCDF	31.73	6.78E+07	1.53	Y	0.83	0.82	-1%
ES 23478-PeCDF	32.86	6.67E+07	1.52	Y	0.81	0.81	1%
ES 123478-HxCDF	36.2	4.84E+07	0.53	Y	1.12	1.09	-3%
ES 123678-HxCDF	36.35	5.64E+07	0.53	Y	1.33	1.27	-4%
ES 234678-HxCDF	37.01	5.17E+07	0.53	Y	1.21	1.17	-3%
ES 123789-HxCDF	38.02	4.85E+07	0.53	Y	1.12	1.10	-2%
ES 1234678-HpCDF	39.57	3.99E+07	0.46	Y	0.92	0.90	-3%
ES 1234789-HpCDF	41	3.56E+07	0.46	Y	0.82	0.80	-2%
ES OCDF	43.49	6.77E+07	0.89	Y	0.78	0.76	-2%

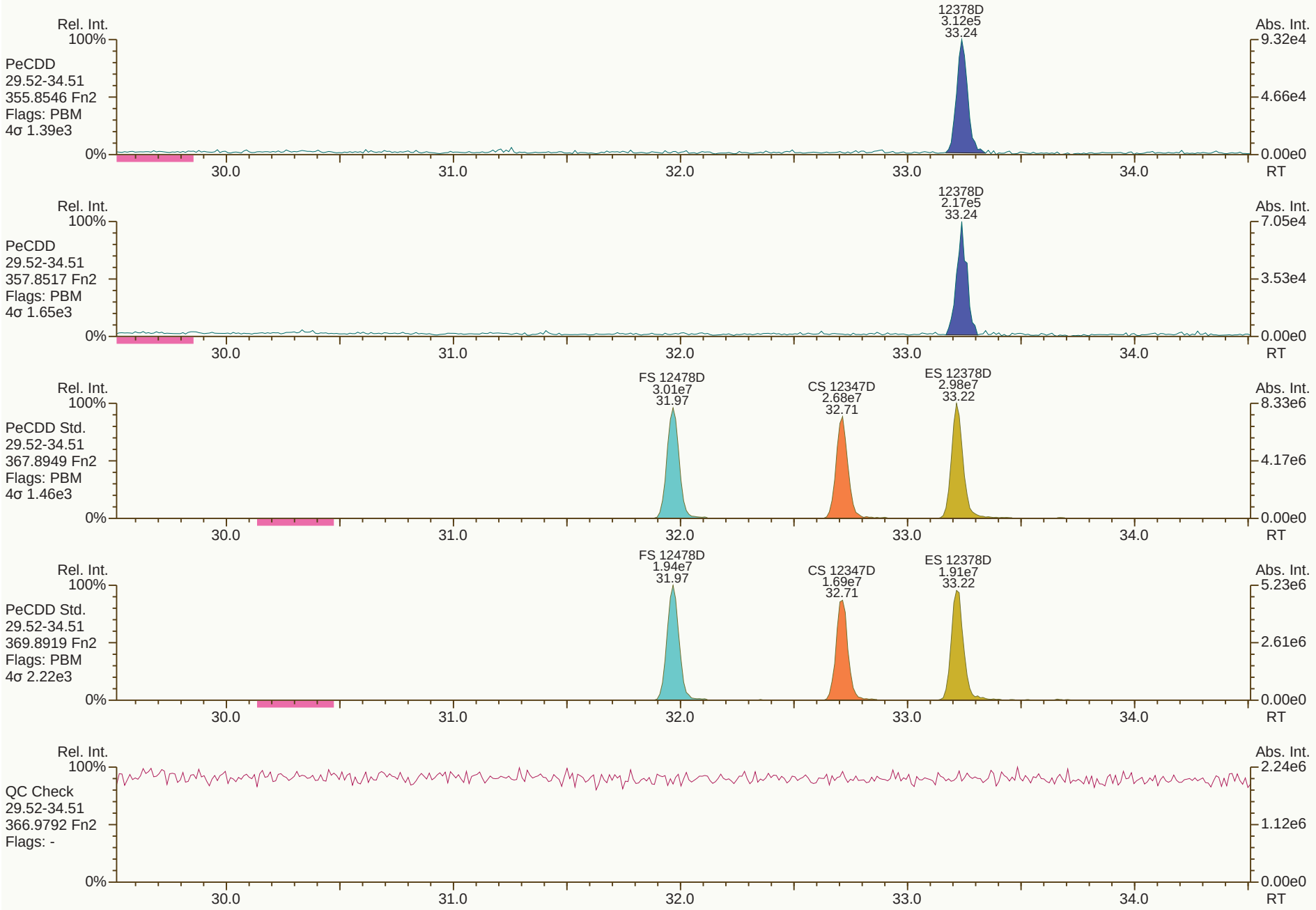
Dioxin/Furan QC Summary		Acq'd: 28 Aug 2019 13:26 PSW				ICAL: HRMS3_DF_10122018_28AUG2019	
Lab ID: CS0_190828_DF_CB		UTP: 29-Aug-2019 16:20:40 PSW				Checkcode: 949-819-RXT	
Sample ID: 20-282-3		Report: 29 Aug 2019 16:28 pw				Datafile: 190828C06	
Name	**RT**	**Response**	**RA**	**OK**	**Ref. RRFs**	**Calc. RRFs**	**Dev'n**
JS 1234-TCDD	27.04	5.98E+07	0.80	Y	-	-	-
JS 1234-TCDF	25.39	8.22E+07	0.79	Y	-	-	-
JS 123467-HxCDD	37.53	2.21E+07	1.26	Y	-	-	-
CS 37Cl-2378-TCDD	NotFnd		n/a	-	1.12		
CS 12347-PeCDD	32.71	4.37E+07	1.59	Y	0.71	0.73	3%
CS 12346-PeCDF	31.19	6.81E+07	1.60	Y	0.81	0.83	2%
CS 123469-HxCDF	36.66	4.96E+07	0.54	Y	1.12	1.12	0%
CS 1234689-HpCDF	39.99	3.91E+07	0.45	Y	0.90	0.88	-1%
SS 37Cl-2378-TCDD	NotFnd		n/a	-	1.14		
SS 12347-PeCDD	32.71	4.37E+07	1.59	Y	0.86	0.89	4%
SS 12346-PeCDF	31.19	6.81E+07	1.60	Y	0.98	1.01	3%
SS 123469-HxCDF	36.66	4.96E+07	0.54	Y	0.85	0.88	4%
SS 1234689-HpCDF	39.99	3.91E+07	0.45	Y	0.97	0.98	1%
AS 1368-TCDD	23.89	6.61E+07	0.78	Y	1.12	1.11	-1%
AS 1368-TCDF	21.67	9.68E+07	0.80	Y	1.19	1.18	-1%
FS 1278-TCDD	28.05	6.16E+07	0.81	Y	1.02	1.03	1%
FS 12478-PeCDD	31.97	4.95E+07	1.55	Y	0.98	1.01	3%
FS 123468-HxCDD	36.13	4.92E+07	1.29	Y	1.17	1.20	3%
FS 1234679-HpCDD	39.86	4.60E+07	1.07	Y	1.14	1.16	2%
TS 1378-TCDD	25.99	6.48E+07	0.79	Y	1.09	1.08	-1%
~~OCDD-a~~	~~NotFnd~~						
~~OCDF-a~~	~~NotFnd~~						

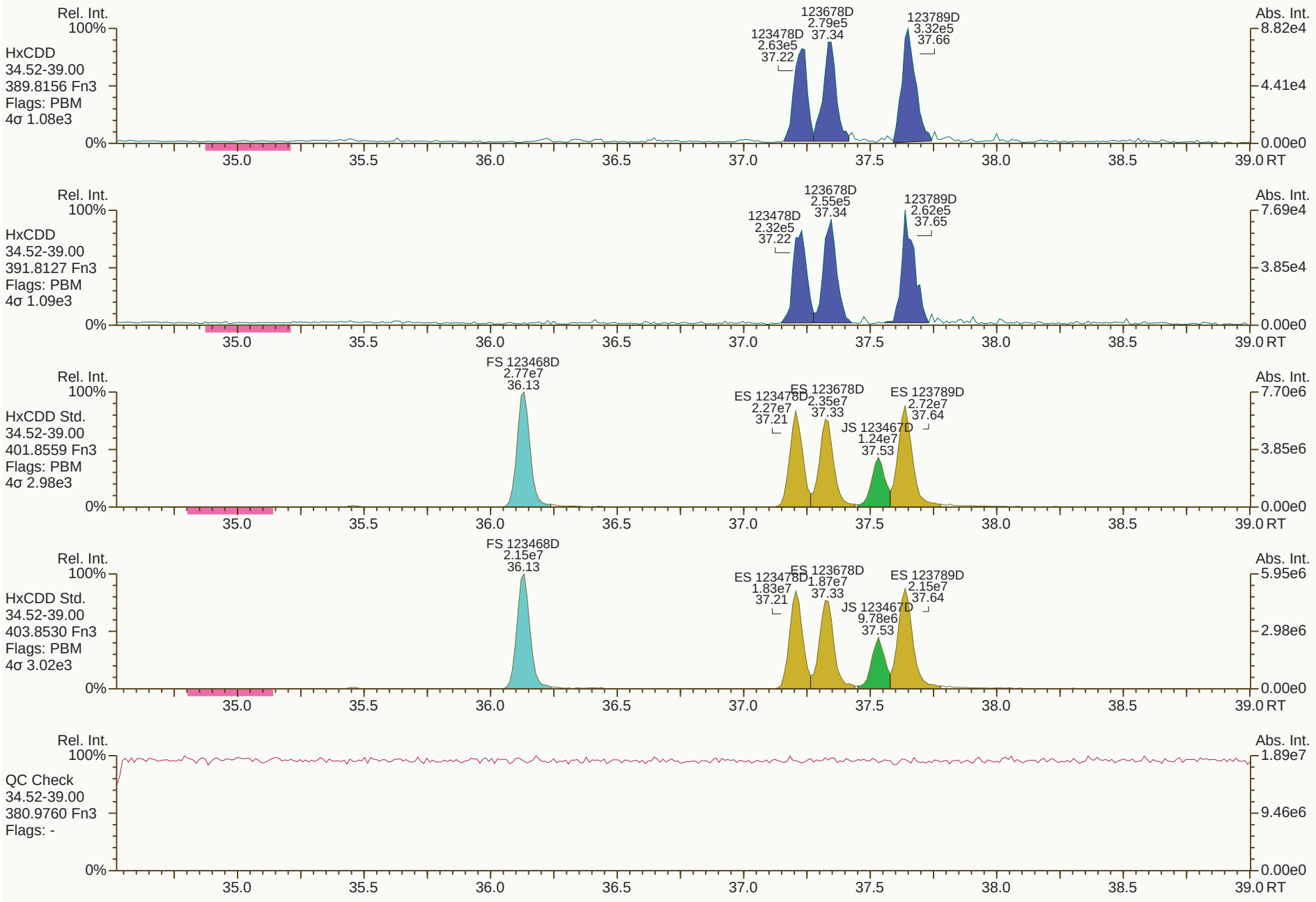
SGS ID: CS0_190828_DF_CB **Sample ID: 20-282-3** **Acq: 28-Aug-2019 13:26:42**
Instr: [ILM] AutoSpec-Ultima HRMS3 **VSIR EI+ Expt: df_cl4-8_db5 GC: df_db5 Vial: 5** **User: PSW Datafile: 190828C06**

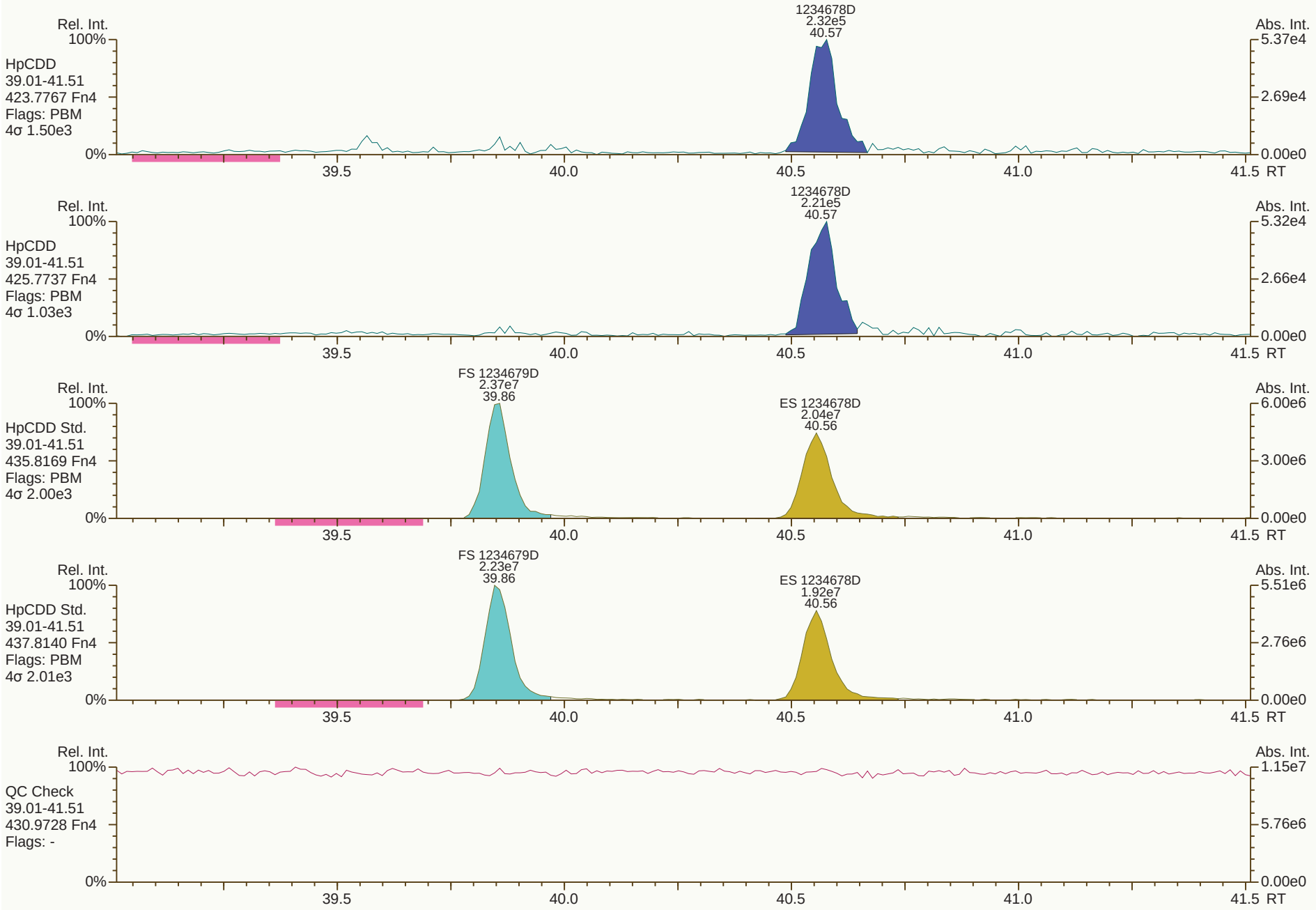


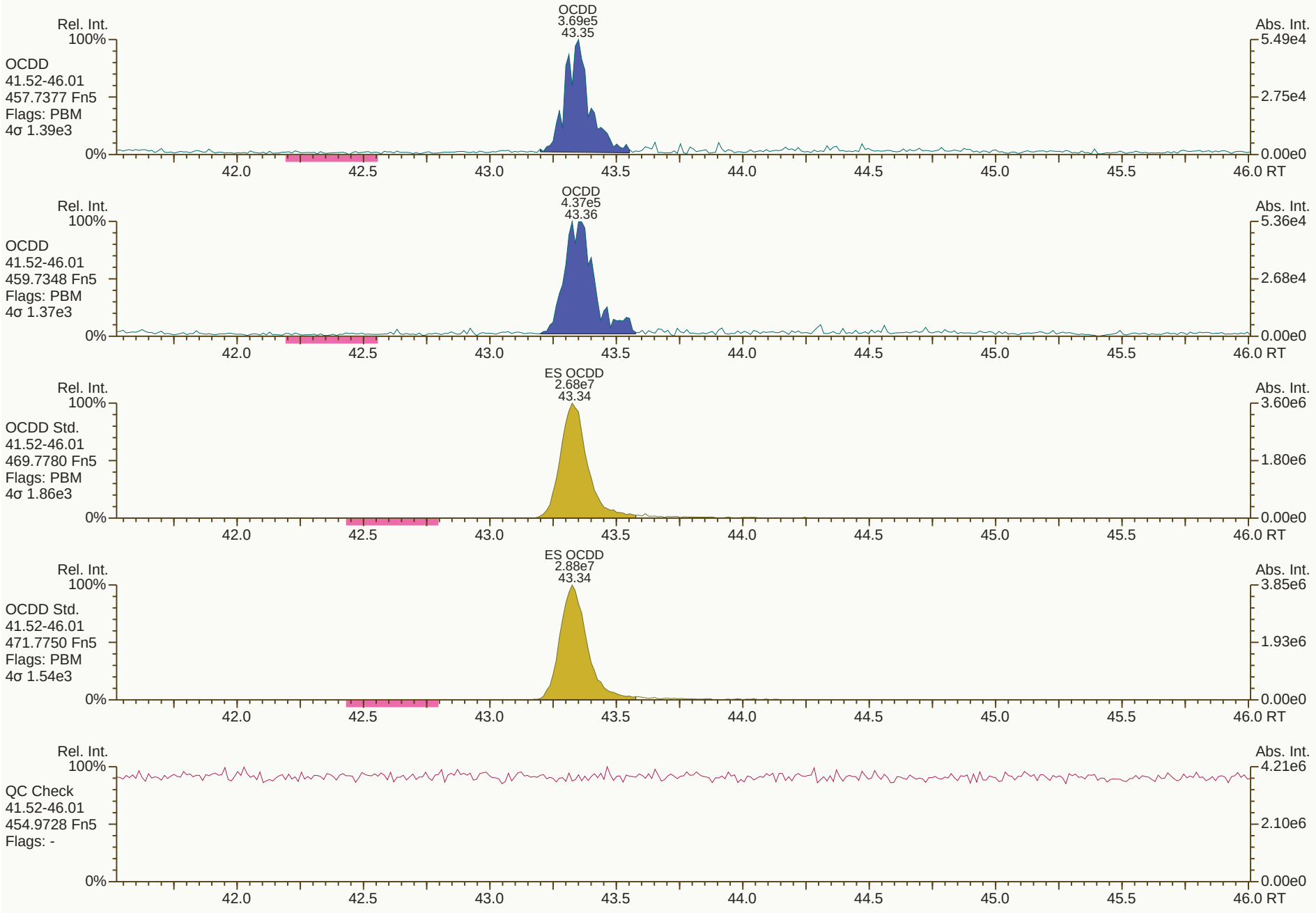
Results: T:\UltraTracePro\ICAL results\HRMS3\HRMS3_DF_10122018_28AUG2019\Resources\CS0_190828_DF_CB.utp_res, saved 29-Aug-2019 16:20 (PSW) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 scc: 949-819 *PKD: n/a Printed: 29-Aug-2019 16:29 Page 1 of 12*


Rel. Int.
100%
TCDD
20.04-29.51
319.8965 Fn1
Flags: PBM
4σ 1.96e3
0%
2378D
8.99e4
27.73
Abs. Int.
2.75e4
1.37e4
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD
20.04-29.51
321.8936 Fn1
Flags: PBM
4σ 1.48e3
RRF(2378D) = (8.99e4 + 1.04e5) * 100pg / (2.64e7 + 3.34e7) * 0.25pg * 1 = 1.3
PSW 29-Aug-2019 09:53
VERIFIED
2378D
1.04e5
27.72
Abs. Int.
2.90e4
1.45e4
0.00e0
Rel. Int.
100%
37Cl-TCDD
20.04-29.51
327.8850 Fn1
Flags: PB
4σ 1.09e3
Abs. Int.
8.60e3
4.30e3
0.00e0
Rel. Int.
100%
TCDD Std.
20.04-29.51
331.9368 Fn1
Flags: PBM
4σ 6.20e3
AS 1368D
2.90e7
23.89
TS 1378D
2.87e7
25.99
JS 1234D
2.67e7
27.04
ES 2378D
2.64e7
27.71
FS 1278D
2.75e7
28.05
Abs. Int.
6.18e6
3.09e6
0.00e0
Rel. Int.
100%
TCDD Std.
20.04-29.51
333.9339 Fn1
Flags: PBM
4σ 4.53e3
AS 1368D
3.71e7
23.89
TS 1378D
3.61e7
25.99
JS 1234D
3.31e7
27.04
ES 2378D
3.34e7
27.71
FS 1278D
3.41e7
28.05
Abs. Int.
7.95e6
3.97e6
0.00e0


Rel. Int.
100%
PeCDD
29.52-34.51
355.8546 Fn2
Flags: PBM
4σ 1.39e3
12378D
3.12e5
33.24
Abs. Int.
9.32e4
4.66e4
0.00e0
0%
30.0
31.0
32.0
33.0
34.0
RT
PeCDD
29.52-34.51
357.8517 Fn2
Flags: PBM
4σ 1.65e3
12378D
2.17e5
33.24
7.05e4
3.53e4
PeCDD Std.
29.52-34.51
367.8949 Fn2
Flags: PBM
4σ 1.46e3
FS 12478D
3.01e7
31.97
CS 12347D
2.68e7
32.71
ES 12378D
2.98e7
33.22
8.33e6
4.17e6
PeCDD Std.
29.52-34.51
369.8919 Fn2
Flags: PBM
4σ 2.22e3
FS 12478D
1.94e7
31.97
CS 12347D
1.69e7
32.71
ES 12378D
1.91e7
33.22
5.23e6
2.61e6
QC Check
29.52-34.51
366.9792 Fn2
Flags: -
2.24e6
1.12e6


Rel. Int.
100%
HxCDD
34.52-39.00
389.8156 Fn3
Flags: PBM
4σ 1.08e3
123478D
2.63e5
37.22
123678D
2.79e5
37.34
123789D
3.32e5
37.66
Abs. Int.
8.82e4
4.41e4
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
HxCDD
34.52-39.00
391.8127 Fn3
Flags: PBM
4σ 1.09e3
123478D
2.32e5
37.22
123678D
2.55e5
37.34
123789D
2.62e5
37.65
Abs. Int.
7.69e4
3.85e4
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
HxCDD Std.
34.52-39.00
401.8559 Fn3
Flags: PBM
4σ 2.98e3
FS 123468D
2.77e7
36.13
ES 123478D
2.27e7
37.21
ES 123678D
2.35e7
37.33
JS 123467D
1.24e7
37.53
ES 123789D
2.72e7
37.64
Abs. Int.
7.70e6
3.85e6
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
HxCDD Std.
34.52-39.00
403.8530 Fn3
Flags: PBM
4σ 3.02e3
FS 123468D
2.15e7
36.13
ES 123478D
1.83e7
37.21
ES 123678D
1.87e7
37.33
JS 123467D
9.78e6
37.53
ES 123789D
2.15e7
37.64
Abs. Int.
5.95e6
2.98e6
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
QC Check
34.52-39.00
380.9760 Fn3
Flags: -
Abs. Int.
1.89e7
9.46e6
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT

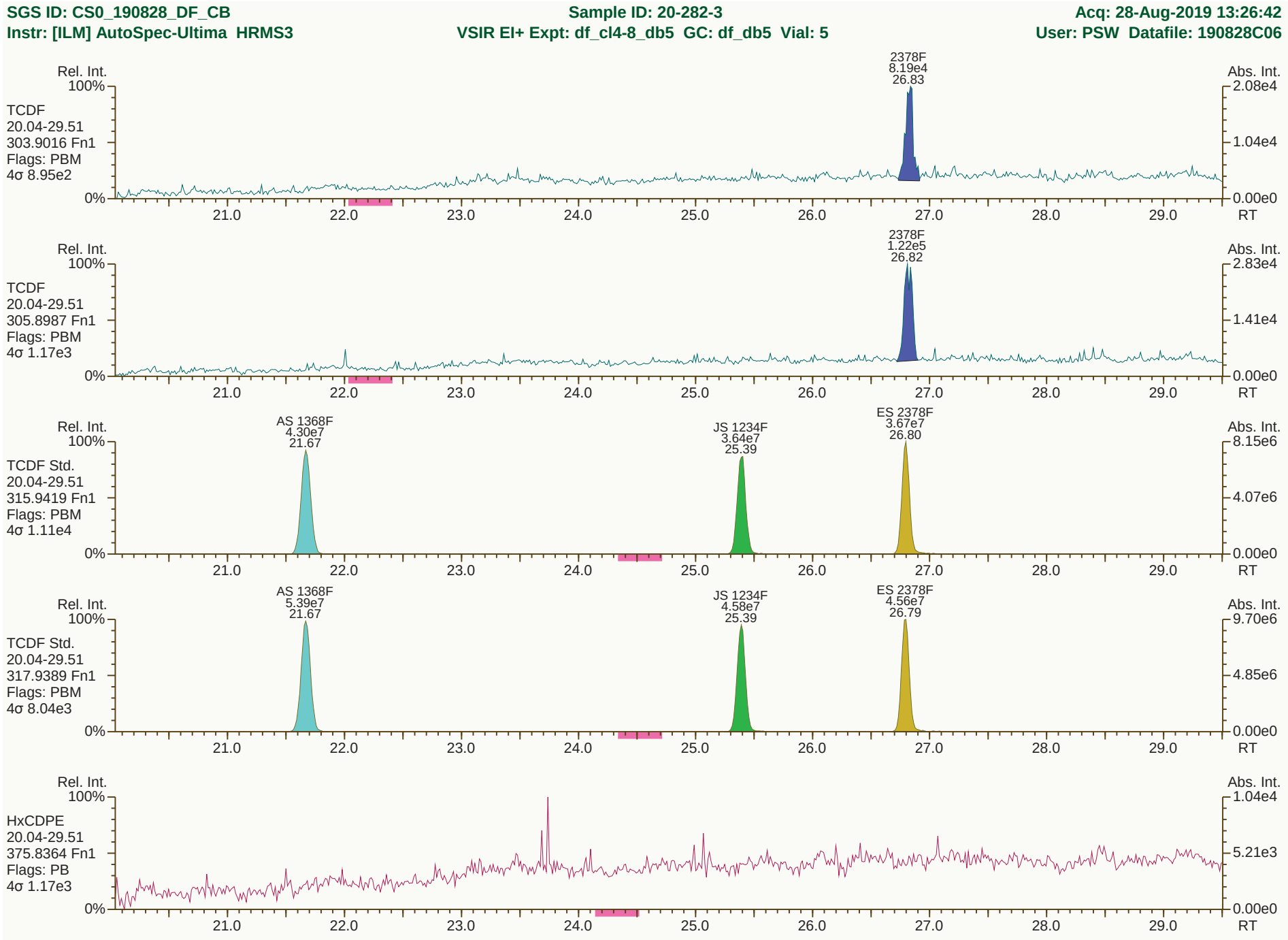

Rel. Int.
100%
HpCDD
39.01-41.51
423.7767 Fn4
Flags: PBM
4σ 1.50e3
1234678D
2.32e5
40.57
Abs. Int.
5.37e4
2.69e4
0.00e0
0%
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
HpCDD
39.01-41.51
425.7737 Fn4
Flags: PBM
4σ 1.03e3
1234678D
2.21e5
40.57
Abs. Int.
5.32e4
2.66e4
0.00e0
0%
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
HpCDD Std.
39.01-41.51
435.8169 Fn4
Flags: PBM
4σ 2.00e3
FS 1234679D
2.37e7
39.86
ES 1234678D
2.04e7
40.56
Abs. Int.
6.00e6
3.00e6
0.00e0
0%
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
HpCDD Std.
39.01-41.51
437.8140 Fn4
Flags: PBM
4σ 2.01e3
FS 1234679D
2.23e7
39.86
ES 1234678D
1.92e7
40.56
Abs. Int.
5.51e6
2.76e6
0.00e0
0%
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
QC Check
39.01-41.51
430.9728 Fn4
Flags: -
Abs. Int.
1.15e7
5.76e6
0.00e0
0%
39.5
40.0
40.5
41.0
41.5 RT


OCDD
3.69e5
43.35
Rel. Int.
100%
OCDD
41.52-46.01
457.7377 Fn5
Flags: PBM
4σ 1.39e3
0%
Abs. Int.
5.49e4
2.75e4
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
OCDD
4.37e5
43.36
Rel. Int.
100%
OCDD
41.52-46.01
459.7348 Fn5
Flags: PBM
4σ 1.37e3
0%
Abs. Int.
5.36e4
2.68e4
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
ES OCDD
2.68e7
43.34
Rel. Int.
100%
OCDD Std.
41.52-46.01
469.7780 Fn5
Flags: PBM
4σ 1.86e3
0%
Abs. Int.
3.60e6
1.80e6
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
ES OCDD
2.88e7
43.34
Rel. Int.
100%
OCDD Std.
41.52-46.01
471.7750 Fn5
Flags: PBM
4σ 1.54e3
0%
Abs. Int.
3.85e6
1.93e6
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
Rel. Int.
100%
QC Check
41.52-46.01
454.9728 Fn5
Flags: -
0%
Abs. Int.
4.21e6
2.10e6
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT

SGS ID: CS0_190828_DF_CB
Instr: [ILM] AutoSpec-Ultima HRMS3

Sample ID: 20-282-3
VSIR EI+ Expt: df_cl4-8_db5 GC: df_db5 Vial: 5

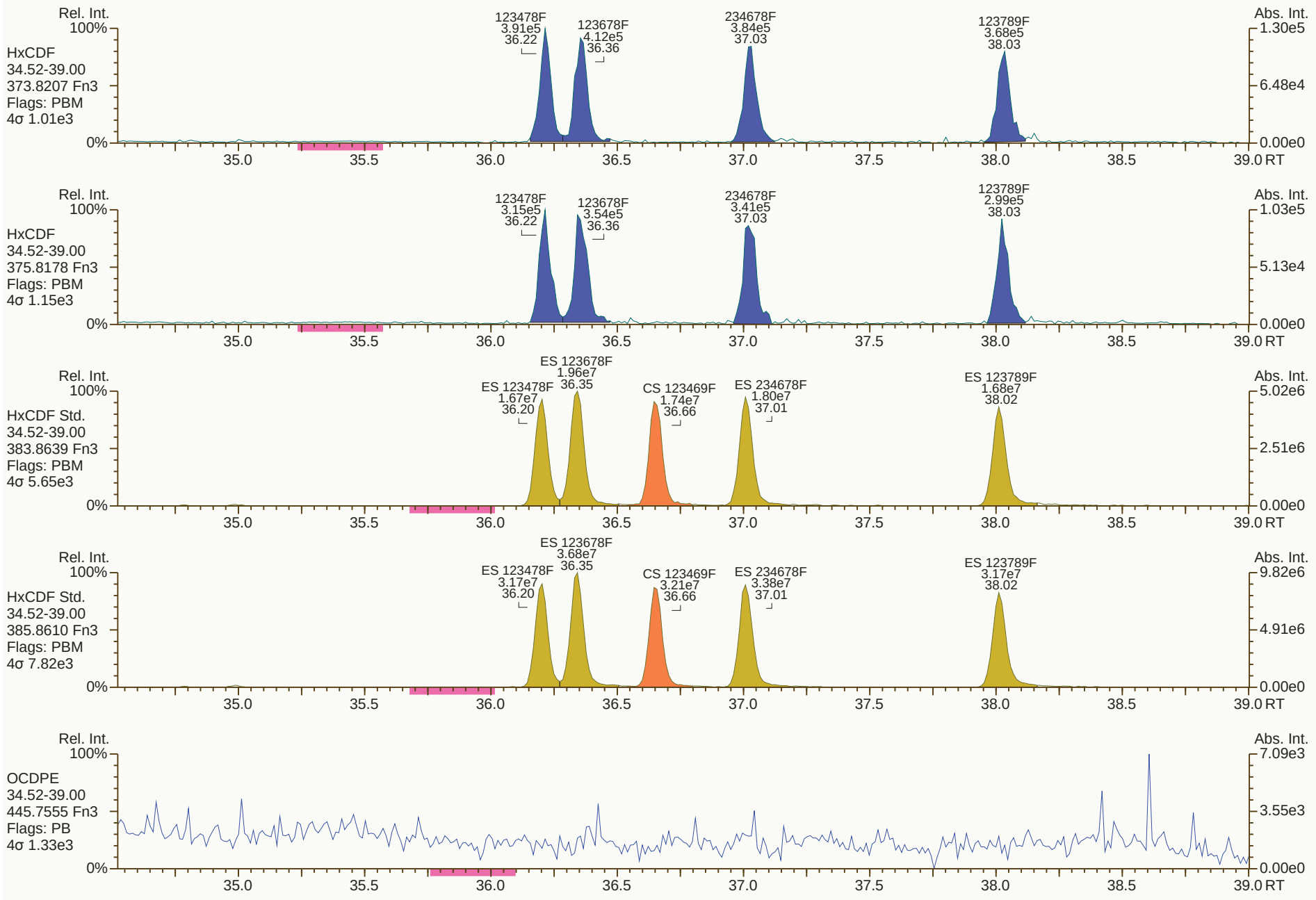
Acq: 28-Aug-2019 13:26:42
User: PSW Datafile: 190828C06

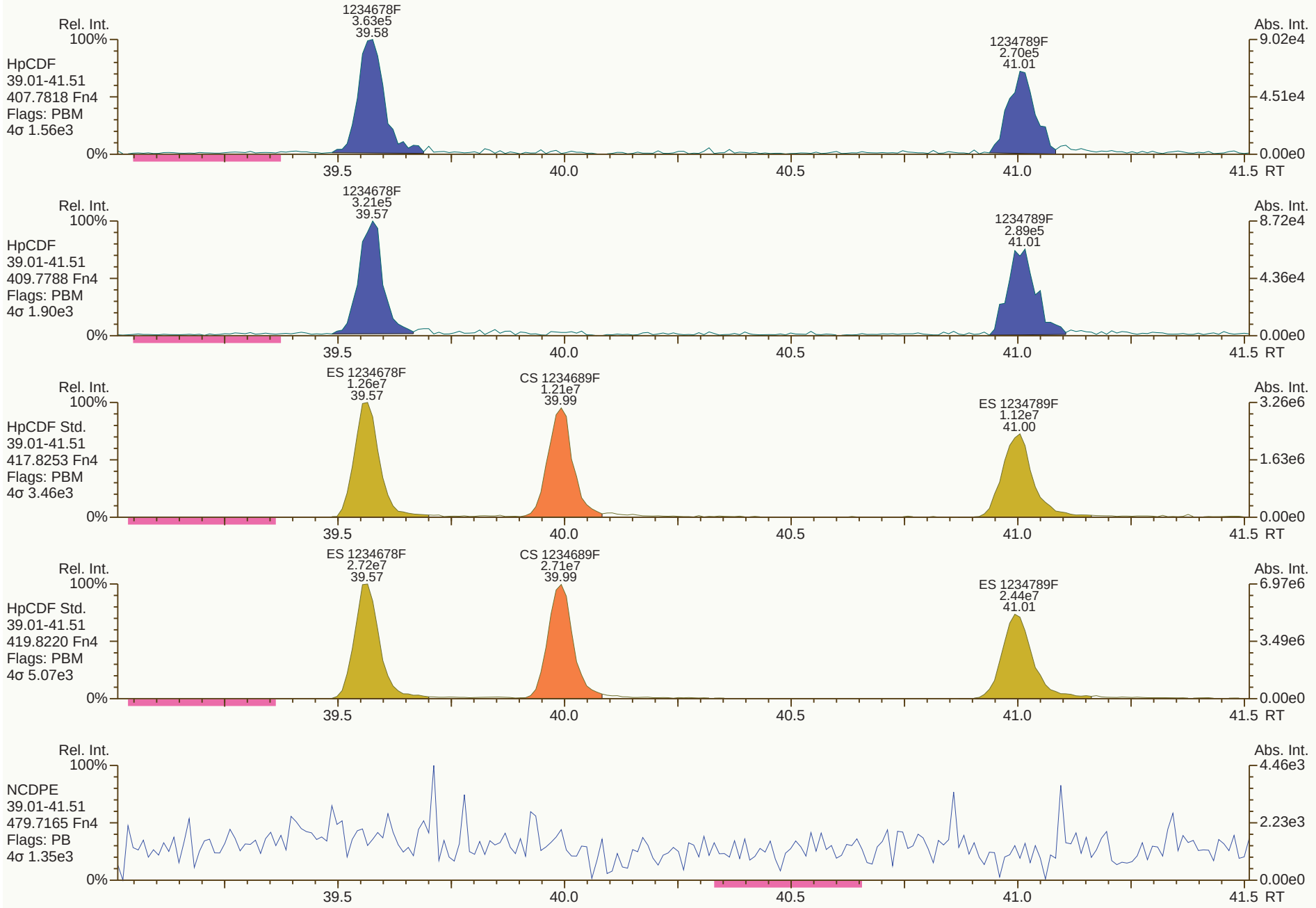


Results: T:\UltraTracePro\ICAL results\HRMS3\HRMS3_DF_10122018_28AUG2019\Resources\CS0_190828_DF_CB.utp_res, saved 29-Aug-2019 16:20 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 6544, 0950, 4101 scc: 949-819
Revised: 29-Aug-2019 16:19 (PSW) Printed: 29-Aug-2019 16:29 Page 7 of 12


Rel. Int.
100%
0%
Abs. Int.
6.87e3
3.44e3
0.00e0
PeCDF-1
20.04-29.51
339.8597 Fn1
Flags: PB
4σ 1.34e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
0%
Abs. Int.
1.03e4
5.17e3
0.00e0
PeCDF-1
20.04-29.51
341.8568 Fn1
Flags: PB
4σ 1.39e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
0%
Abs. Int.
2.53e6
1.26e6
0.00e0
QC Check
20.04-29.51
316.9824 Fn1
Flags: -
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
PeCDF-2
29.52-34.51
339.8597 Fn2
Flags: PBM
4σ 1.10e3
0%
12378F
5.00e5
31.75
23478F
5.25e5
32.88
Abs. Int.
1.50e5
7.48e4
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDF-2
29.52-34.51
341.8568 Fn2
Flags: PBM
4σ 1.32e3
0%
12378F
3.30e5
31.75
23478F
2.96e5
32.88
Abs. Int.
8.53e4
4.26e4
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDF Std.
29.52-34.51
351.9000 Fn2
Flags: PBM
4σ 1.67e3
0%
CS 12346F
4.19e7
31.19
ES 12378F
4.10e7
31.73
ES 23478F
4.02e7
32.86
Abs. Int.
1.08e7
5.40e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDF Std.
29.52-34.51
353.8970 Fn2
Flags: PBM
4σ 1.60e3
0%
CS 12346F
2.62e7
31.19
ES 12378F
2.68e7
31.73
ES 23478F
2.65e7
32.86
Abs. Int.
7.18e6
3.59e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
HpCDPE
29.52-34.51
409.7974 Fn2
Flags: PB
4σ 1.27e3
0%
Abs. Int.
6.40e3
3.20e3
0.00e0
30.0
31.0
32.0
33.0
34.0
RT


Rel. Int.
100%
HxCDF
34.52-39.00
373.8207 Fn3
Flags: PBM
4σ 1.01e3
0%
123478F
3.91e5
36.22
123678F
4.12e5
36.36
234678F
3.84e5
37.03
123789F
3.68e5
38.03
Abs. Int.
1.30e5
6.48e4
0.00e0
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
HxCDF
34.52-39.00
375.8178 Fn3
Flags: PBM
4σ 1.15e3
0%
123478F
3.15e5
36.22
123678F
3.54e5
36.36
234678F
3.41e5
37.03
123789F
2.99e5
38.03
Abs. Int.
1.03e5
5.13e4
0.00e0
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
HxCDF Std.
34.52-39.00
383.8639 Fn3
Flags: PBM
4σ 5.65e3
0%
ES 123678F
1.96e7
36.35
ES 123478F
1.67e7
36.20
CS 123469F
1.74e7
36.66
ES 234678F
1.80e7
37.01
ES 123789F
1.68e7
38.02
Abs. Int.
5.02e6
2.51e6
0.00e0
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
HxCDF Std.
34.52-39.00
385.8610 Fn3
Flags: PBM
4σ 7.82e3
0%
ES 123678F
3.68e7
36.35
ES 123478F
3.17e7
36.20
CS 123469F
3.21e7
36.66
ES 234678F
3.38e7
37.01
ES 123789F
3.17e7
38.02
Abs. Int.
9.82e6
4.91e6
0.00e0
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
OCDPE
34.52-39.00
445.7555 Fn3
Flags: PB
4σ 1.33e3
0%
Abs. Int.
7.09e3
3.55e3
0.00e0
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT

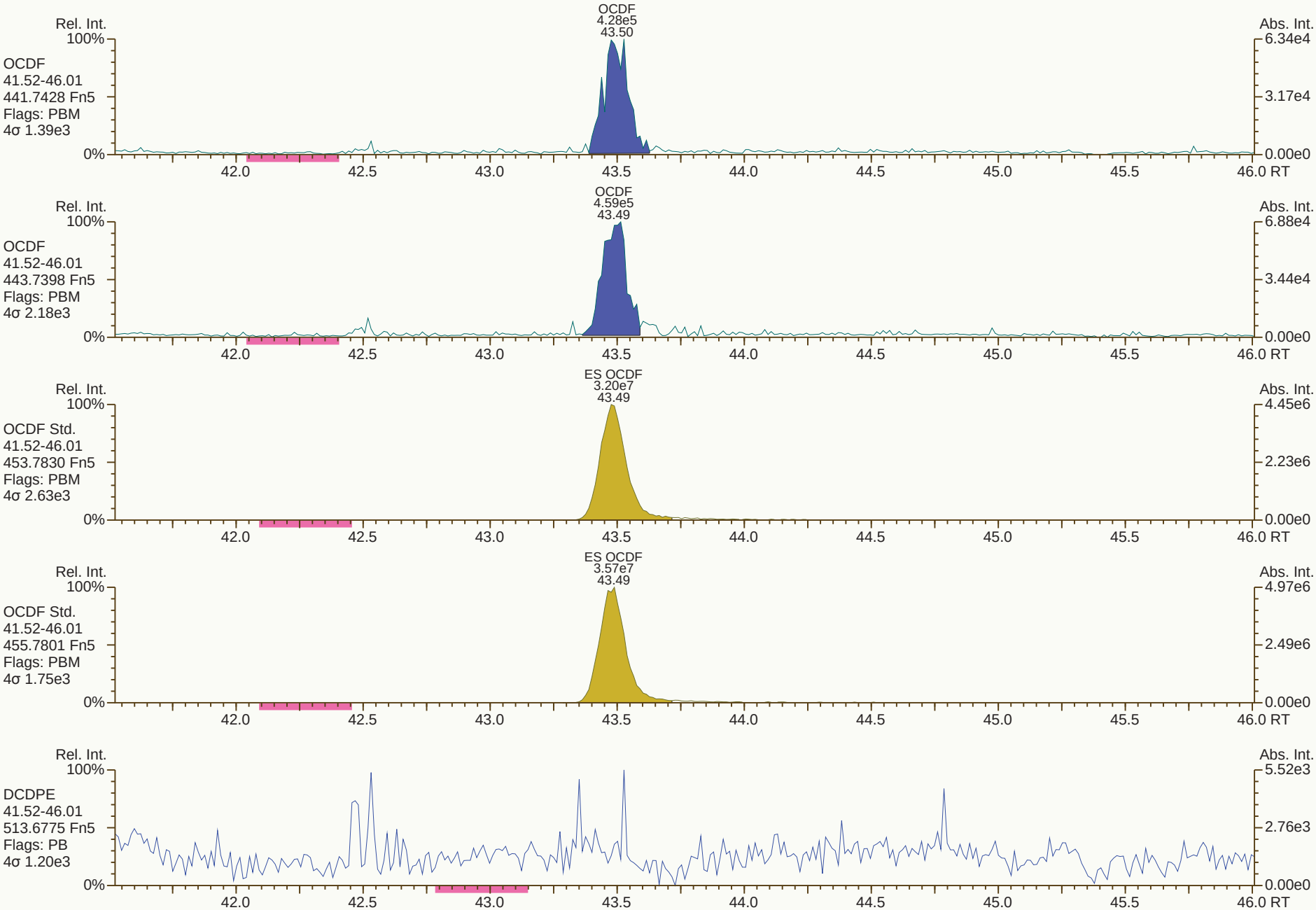


Results: T:\UltraTracePro\ICAL results\HRMS3\HRMS3_DF_10122018_28AUG2019\Resources\CS0_190828_DF_CB.utp_res, saved 29-Aug-2019 16:20 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 5678, 9516, 2502 scc: 949-819
Revised: 28-Aug-2019 14:23 (PSW) Printed: 29-Aug-2019 16:29 Page 11 of 12

SGS ID: CS0_190828_DF_CB
Instr: [ILM] AutoSpec-Ultima HRMS3

Sample ID: 20-282-3
VSIR EI+ Expt: df_cl4-8_db5 GC: df_db5 Vial: 5

Acq: 28-Aug-2019 13:26:42
User: PSW Datafile: 190828C06

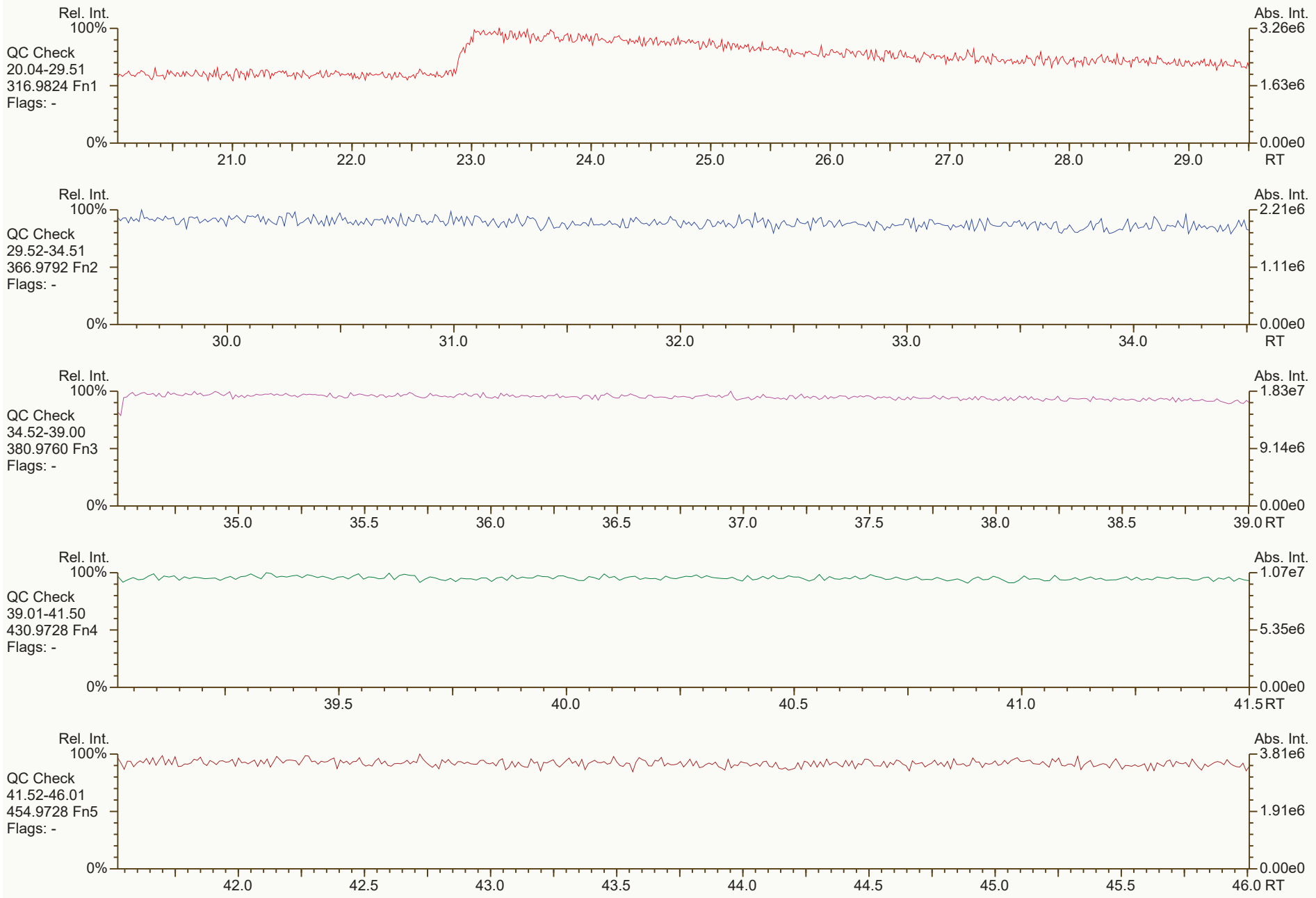


Results: T:\UltraTracePro\ICAL results\HRMS3\HRMS3_DF_10122018_28AUG2019\Resources\CS0_190828_DF_CB.utp_res, saved 29-Aug-2019 16:20 (PSW) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 3464, 6224, 8129 scc: 949-819 *PKD: 28-Aug-2019 14:24 Printed: 29-Aug-2019 16:30 Page 12 of 12*

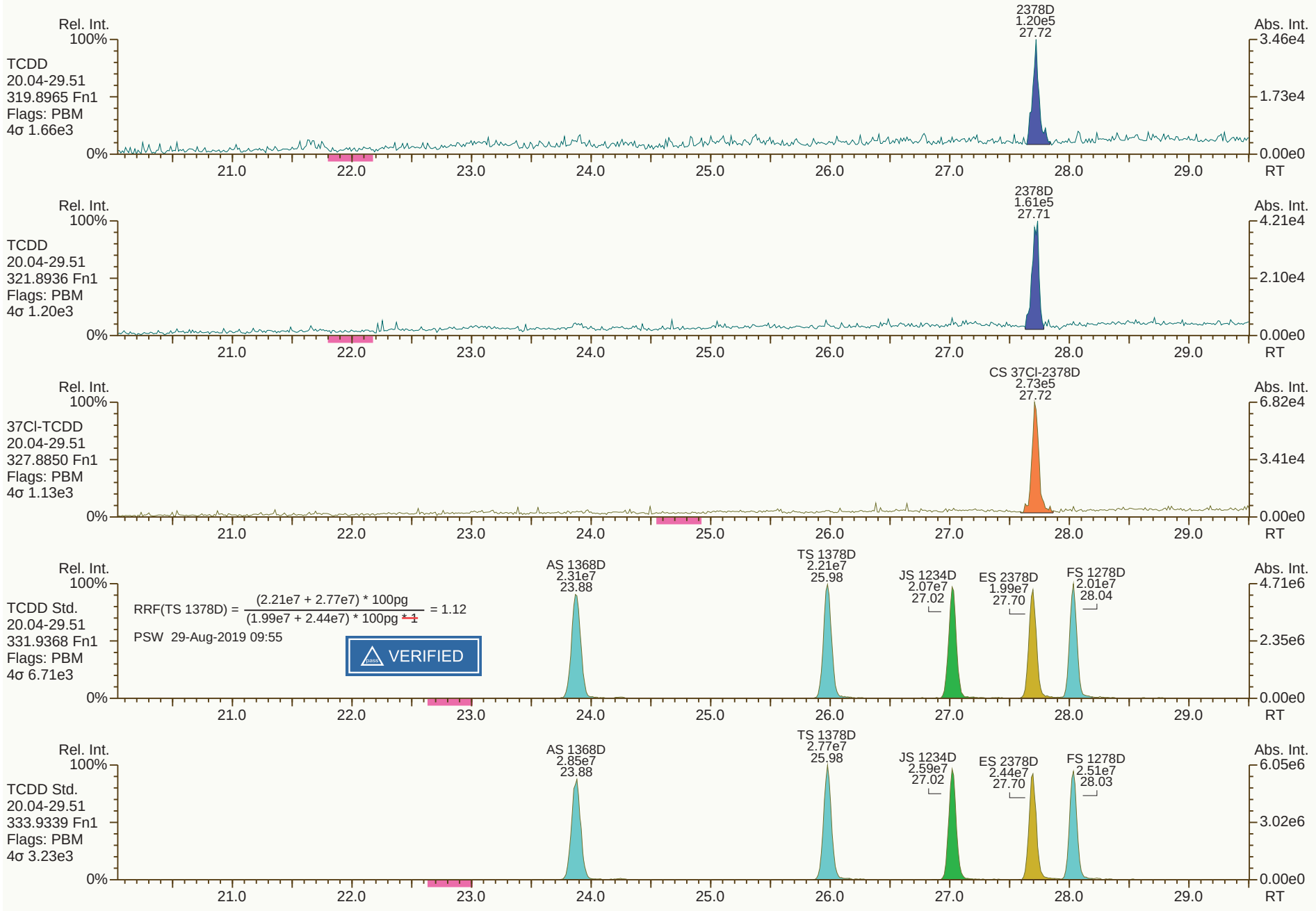
Dioxin/Furan QC Summary		Acq'd: 28 Aug 2019 14:16 PSW				ICAL: HRMS3_DF_10122018_28AUG2019	
Lab ID: CS1_190828_DF_CB		UTP: 29-Aug-2019 16:20:59 PSW				Checkcode: 130-956-BVQ	
Sample ID: 20-282-2		Report: 29 Aug 2019 16:28 pw				Datafile: 190828C07	
Name	**RT**	**Response**	**RA**	**OK**	**Ref. RRFs**	**Calc. RRFs**	**Dev'n**
2378-TCDD	27.72	2.81E+05	0.75	Y	1.19	1.27	7%
12378-PeCDD	33.23	8.85E+05	1.59	Y	0.98	1.01	2%
123478-HxCDD	37.21	7.30E+05	1.27	Y	1.02	1.00	-2%
123678-HxCDD	37.33	8.51E+05	1.21	Y	1.09	1.14	5%
123789-HxCDD	37.65	8.40E+05	1.23	Y	0.97	0.96	-1%
1234678-HpCDD	40.56	6.53E+05	1.02	Y	0.98	0.94	-3%
OCDD	43.33	1.06E+06	0.89	Y	1.07	1.07	0%
2378-TCDF	26.80	3.14E+05	0.73	Y	1.01	1.00	-1%
12378-PeCDF	31.74	1.16E+06	1.45	Y	0.96	0.94	-2%
23478-PeCDF	32.87	1.19E+06	1.52	Y	0.99	0.97	-1%
123478-HxCDF	36.21	1.03E+06	1.19	Y	1.21	1.19	-2%
123678-HxCDF	36.35	1.11E+06	1.19	Y	1.11	1.09	-1%
234678-HxCDF	37.02	9.82E+05	1.20	Y	1.12	1.05	-6%
123789-HxCDF	38.02	8.55E+05	1.22	Y	1.11	1.02	-8%
1234678-HpCDF	39.57	9.75E+05	1.05	Y	1.32	1.40	6%
1234789-HpCDF	40.99	7.78E+05	1.00	Y	1.26	1.26	0%
OCDF	43.48	1.25E+06	0.94	Y	1.03	1.02	-1%
ES 2378-TCDD	27.70	4.43E+07	0.81	Y	0.99	0.95	-4%
ES 12378-PeCDD	33.21	3.52E+07	1.52	Y	0.83	0.75	-9%
ES 123478-HxCDD	37.2	2.91E+07	1.24	Y	0.95	0.90	-5%
ES 123678-HxCDD	37.32	2.98E+07	1.23	Y	0.98	0.93	-5%
ES 123789-HxCDD	37.63	3.50E+07	1.27	Y	1.14	1.09	-4%
ES 1234678-HpCDD	40.54	2.77E+07	1.04	Y	0.90	0.86	-4%
ES OCDD	43.32	3.95E+07	0.90	Y	0.63	0.61	-2%
ES 2378-TCDF	26.78	6.28E+07	0.81	Y	1.00	0.99	0%
ES 12378-PeCDF	31.72	4.94E+07	1.52	Y	0.83	0.78	-6%
ES 23478-PeCDF	32.86	4.89E+07	1.55	Y	0.81	0.77	-4%
ES 123478-HxCDF	36.19	3.47E+07	0.52	Y	1.12	1.08	-4%
ES 123678-HxCDF	36.33	4.06E+07	0.54	Y	1.33	1.26	-5%
ES 234678-HxCDF	37	3.73E+07	0.53	Y	1.21	1.16	-4%
ES 123789-HxCDF	38.01	3.35E+07	0.52	Y	1.12	1.04	-7%
ES 1234678-HpCDF	39.55	2.79E+07	0.46	Y	0.92	0.87	-6%
ES 1234789-HpCDF	40.98	2.48E+07	0.46	Y	0.82	0.77	-6%
ES OCDF	43.47	4.91E+07	0.91	Y	0.78	0.76	-2%

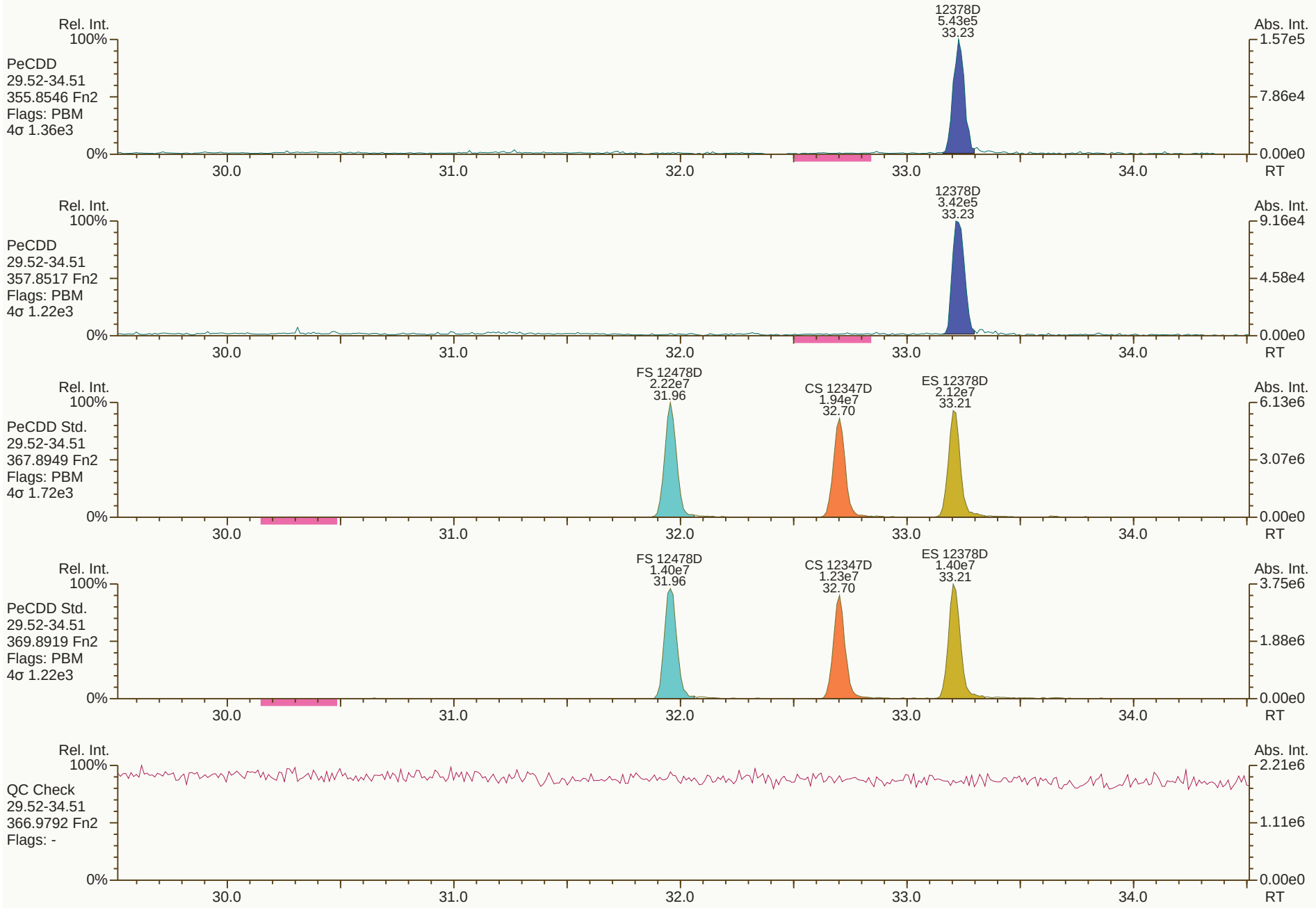
Dioxin/Furan QC Summary		Acq'd: 28 Aug 2019 14:16 PSW				ICAL: HRMS3_DF_10122018_28AUG2019	
Lab ID: CS1_190828_DF_CB		UTP: 29-Aug-2019 16:20:59 PSW				Checkcode: 130-956-BVQ	
Sample ID: 20-282-2		Report: 29 Aug 2019 16:28 pw				Datafile: 190828C07	
Name	**RT**	**Response**	**RA**	**OK**	**Ref. RRFs**	**Calc. RRFs**	**Dev'n**
JS 1234-TCDD	27.02	4.66E+07	0.80	Y	-	-	-
JS 1234-TCDF	25.38	6.32E+07	0.77	Y	-	-	-
JS 123467-HxCDD	37.52	1.61E+07	1.20	Y	-	-	-
CS 37Cl-2378-TCDD	27.72	2.73E+05	n/a	-	1.12	1.17	4%
CS 12347-PeCDD	32.70	3.17E+07	1.57	Y	0.71	0.68	-5%
CS 12346-PeCDF	31.19	5.06E+07	1.57	Y	0.81	0.80	-1%
CS 123469-HxCDF	36.64	3.62E+07	0.53	Y	1.12	1.12	0%
CS 1234689-HpCDF	39.98	2.88E+07	0.46	Y	0.90	0.89	0%
SS 37Cl-2378-TCDD	27.72	2.73E+05	n/a	-	1.14	1.23	8%
SS 12347-PeCDD	32.70	3.17E+07	1.57	Y	0.86	0.90	5%
SS 12346-PeCDF	31.19	5.06E+07	1.57	Y	0.98	1.02	5%
SS 123469-HxCDF	36.64	3.62E+07	0.53	Y	0.85	0.89	5%
SS 1234689-HpCDF	39.98	2.88E+07	0.46	Y	0.97	1.03	6%
AS 1368-TCDD	23.88	5.15E+07	0.81	Y	1.12	1.11	-1%
AS 1368-TCDF	21.65	7.63E+07	0.78	Y	1.19	1.21	1%
FS 1278-TCDD	28.04	4.52E+07	0.80	Y	1.02	1.02	0%
FS 12478-PeCDD	31.96	3.62E+07	1.59	Y	0.98	1.03	5%
FS 123468-HxCDD	36.12	3.59E+07	1.27	Y	1.17	1.23	6%
FS 1234679-HpCDD	39.84	3.23E+07	1.03	Y	1.14	1.17	2%
TS 1378-TCDD	25.98	4.98E+07	0.80	Y	1.09	1.12	3%
~~OCDD-a~~	~~NotFnd~~						
~~OCDF-a~~	~~NotFnd~~						

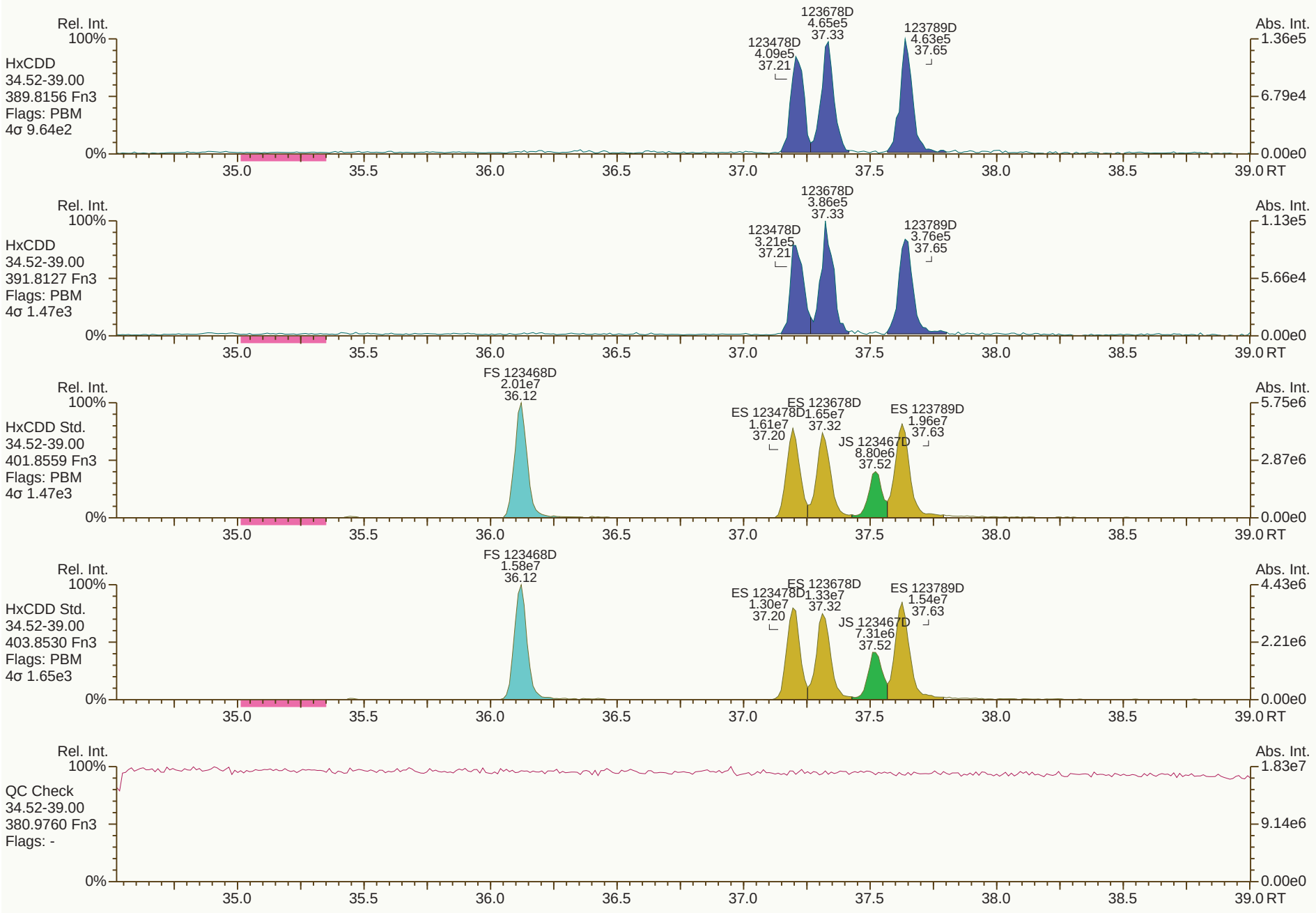
SGS ID: CS1_190828_DF_CB **Sample ID: 20-282-2** **Acq: 28-Aug-2019 14:16:56**
Instr: [ILM] AutoSpec-Ultima HRMS3 **VSIR EI+ Expt: df_cl4-8_db5 GC: df_db5 Vial: 6** **User: PSW Datafile: 190828C07**

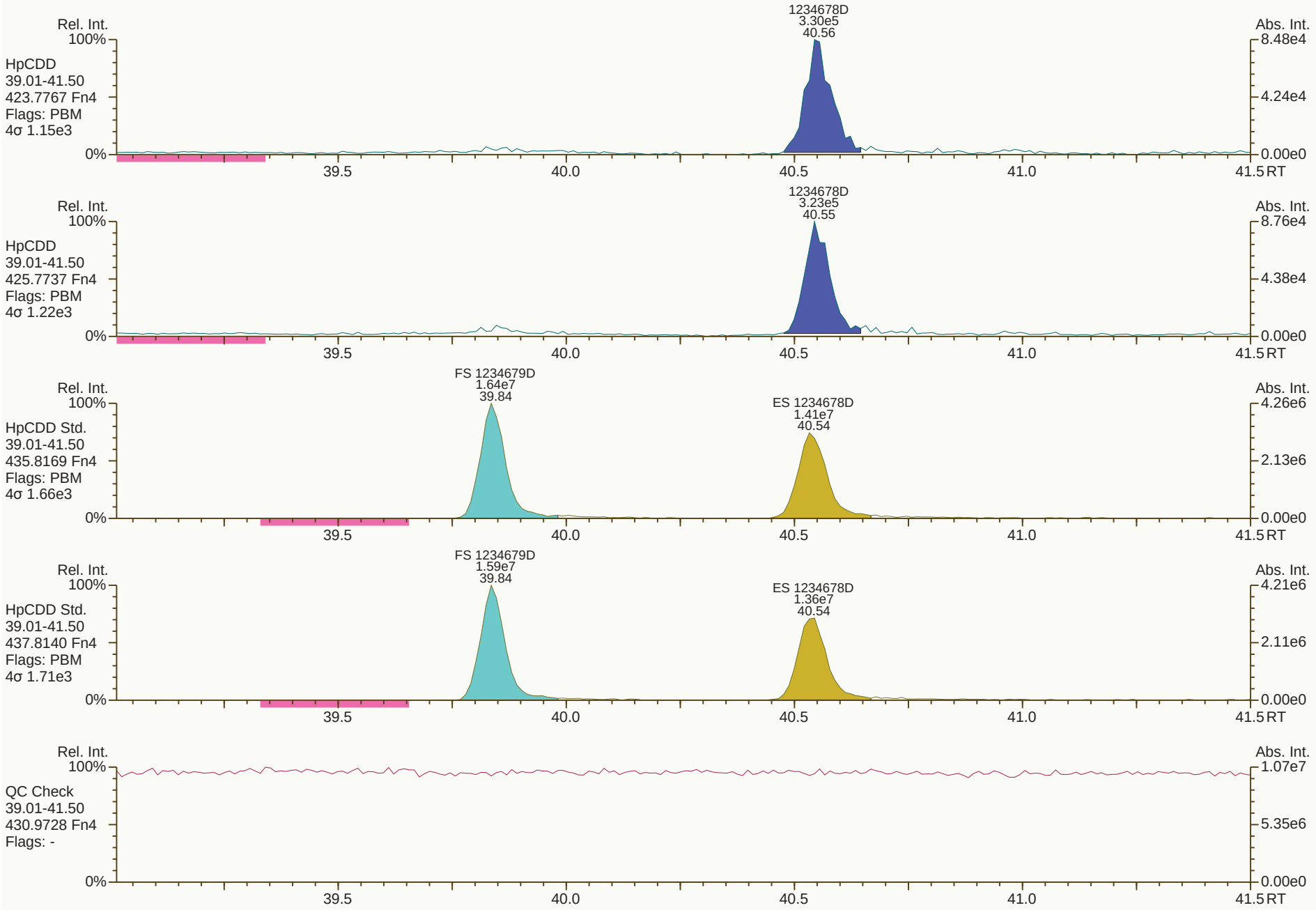


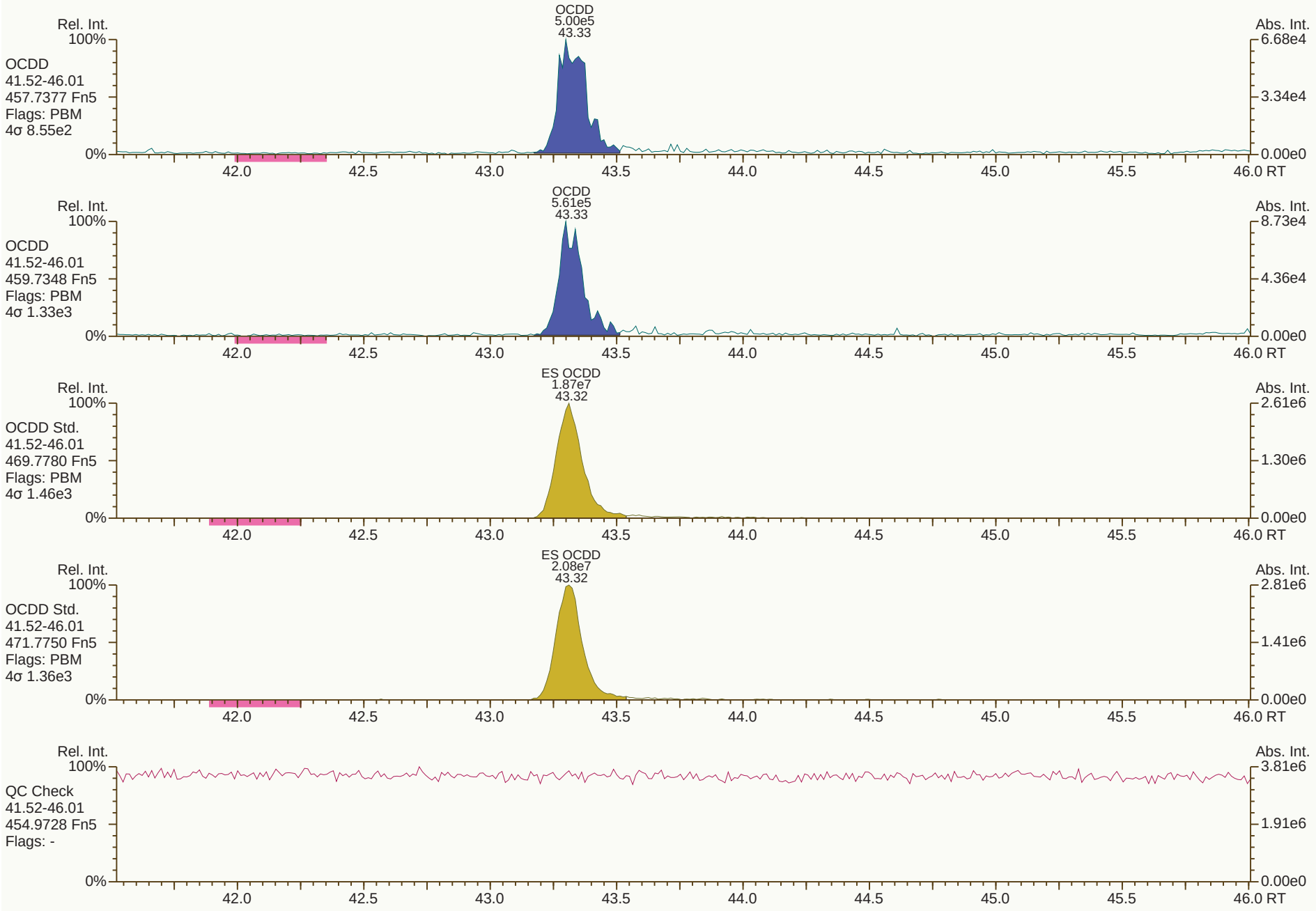
Results: T:\UltraTracePro\ICAL results\HRMS3\HRMS3_DF_10122018_28AUG2019\Resources\CS1_190828_DF_CB.utp_res, saved 29-Aug-2019 16:25 (PSW) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 scc: 130-956 *PKD: n/a Printed: 29-Aug-2019 16:31 Page 1 of 12*


Rel. Int.
100%
TCDD
20.04-29.51
319.8965 Fn1
Flags: PBM
4σ 1.66e3
0%
2378D
1.20e5
27.72
Abs. Int.
3.46e4
1.73e4
0.00e0
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
TCDD
20.04-29.51
321.8936 Fn1
Flags: PBM
4σ 1.20e3
0%
2378D
1.61e5
27.71
Abs. Int.
4.21e4
2.10e4
0.00e0
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
37Cl-TCDD
20.04-29.51
327.8850 Fn1
Flags: PBM
4σ 1.13e3
0%
CS 37Cl-2378D
2.73e5
27.72
Abs. Int.
6.82e4
3.41e4
0.00e0
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
TCDD Std.
20.04-29.51
331.9368 Fn1
Flags: PBM
4σ 6.71e3
0%
RRF(TS 1378D) = (2.21e7 + 2.77e7) * 100pg / (1.99e7 + 2.44e7) * 100pg * 1 = 1.12
PSW 29-Aug-2019 09:55
VERIFIED
AS 1368D
2.31e7
23.88
TS 1378D
2.21e7
25.98
JS 1234D
2.07e7
27.02
ES 2378D
1.99e7
27.70
FS 1278D
2.01e7
28.04
Abs. Int.
4.71e6
2.35e6
0.00e0
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
TCDD Std.
20.04-29.51
333.9339 Fn1
Flags: PBM
4σ 3.23e3
0%
AS 1368D
2.85e7
23.88
TS 1378D
2.77e7
25.98
JS 1234D
2.59e7
27.02
ES 2378D
2.44e7
27.70
FS 1278D
2.51e7
28.03
Abs. Int.
6.05e6
3.02e6
0.00e0
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT


Rel. Int.
100%
PeCDD
29.52-34.51
355.8546 Fn2
Flags: PBM
4σ 1.36e3
0%
12378D
5.43e5
33.23
Abs. Int.
1.57e5
7.86e4
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDD
29.52-34.51
357.8517 Fn2
Flags: PBM
4σ 1.22e3
0%
12378D
3.42e5
33.23
Abs. Int.
9.16e4
4.58e4
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDD Std.
29.52-34.51
367.8949 Fn2
Flags: PBM
4σ 1.72e3
0%
FS 12478D
2.22e7
31.96
CS 12347D
1.94e7
32.70
ES 12378D
2.12e7
33.21
Abs. Int.
6.13e6
3.07e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDD Std.
29.52-34.51
369.8919 Fn2
Flags: PBM
4σ 1.22e3
0%
FS 12478D
1.40e7
31.96
CS 12347D
1.23e7
32.70
ES 12378D
1.40e7
33.21
Abs. Int.
3.75e6
1.88e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
QC Check
29.52-34.51
366.9792 Fn2
Flags: -
0%
Abs. Int.
2.21e6
1.11e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT


Rel. Int.
Abs. Int.
HxCDD
34.52-39.00
389.8156 Fn3
Flags: PBM
4σ 9.64e2
123478D 4.09e5 37.21
123678D 4.65e5 37.33
123789D 4.63e5 37.65
1.36e5
6.79e4
0.00e0
HxCDD
34.52-39.00
391.8127 Fn3
Flags: PBM
4σ 1.47e3
123478D 3.21e5 37.21
123678D 3.86e5 37.33
123789D 3.76e5 37.65
1.13e5
5.66e4
0.00e0
HxCDD Std.
34.52-39.00
401.8559 Fn3
Flags: PBM
4σ 1.47e3
FS 123468D 2.01e7 36.12
ES 123478D 1.61e7 37.20
ES 123678D 1.65e7 37.32
JS 123467D 8.80e6 37.52
ES 123789D 1.96e7 37.63
5.75e6
2.87e6
0.00e0
HxCDD Std.
34.52-39.00
403.8530 Fn3
Flags: PBM
4σ 1.65e3
FS 123468D 1.58e7 36.12
ES 123478D 1.30e7 37.20
ES 123678D 1.33e7 37.32
JS 123467D 7.31e6 37.52
ES 123789D 1.54e7 37.63
4.43e6
2.21e6
0.00e0
QC Check
34.52-39.00
380.9760 Fn3
Flags: -
1.83e7
9.14e6
0.00e0
100%
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT


Rel. Int.
100%
HpCDD
39.01-41.50
423.7767 Fn4
Flags: PBM
4σ 1.15e3
0%
1234678D
3.30e5
40.56
Abs. Int.
8.48e4
4.24e4
0.00e0
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
HpCDD
39.01-41.50
425.7737 Fn4
Flags: PBM
4σ 1.22e3
0%
1234678D
3.23e5
40.55
Abs. Int.
8.76e4
4.38e4
0.00e0
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
HpCDD Std.
39.01-41.50
435.8169 Fn4
Flags: PBM
4σ 1.66e3
0%
FS 1234679D
1.64e7
39.84
ES 1234678D
1.41e7
40.54
Abs. Int.
4.26e6
2.13e6
0.00e0
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
HpCDD Std.
39.01-41.50
437.8140 Fn4
Flags: PBM
4σ 1.71e3
0%
FS 1234679D
1.59e7
39.84
ES 1234678D
1.36e7
40.54
Abs. Int.
4.21e6
2.11e6
0.00e0
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
QC Check
39.01-41.50
430.9728 Fn4
Flags: -
0%
Abs. Int.
1.07e7
5.35e6
0.00e0
39.5
40.0
40.5
41.0
41.5 RT


OCDD
5.00e5
43.33
Rel. Int.
100%
Abs. Int.
6.68e4
OCDD
41.52-46.01
457.7377 Fn5
Flags: PBM
4σ 8.55e2
3.34e4
0%
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
OCDD
5.61e5
43.33
Rel. Int.
100%
Abs. Int.
8.73e4
OCDD
41.52-46.01
459.7348 Fn5
Flags: PBM
4σ 1.33e3
4.36e4
0%
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
ES OCDD
1.87e7
43.32
Rel. Int.
100%
Abs. Int.
2.61e6
OCDD Std.
41.52-46.01
469.7780 Fn5
Flags: PBM
4σ 1.46e3
1.30e6
0%
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
ES OCDD
2.08e7
43.32
Rel. Int.
100%
Abs. Int.
2.81e6
OCDD Std.
41.52-46.01
471.7750 Fn5
Flags: PBM
4σ 1.36e3
1.41e6
0%
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
Rel. Int.
100%
Abs. Int.
3.81e6
QC Check
41.52-46.01
454.9728 Fn5
Flags: -
1.91e6
0%
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT


Rel. Int.
100%
TCDF
20.04-29.51
303.9016 Fn1
Flags: PBM
4σ 1.03e3
0%
2378F
1.33e5
26.80
Abs. Int.
3.18e4
1.59e4
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF
20.04-29.51
305.8987 Fn1
Flags: PBM
4σ 1.21e3
0%
2378F
1.81e5
26.81
RRF(2378F) = (1.33e5 + 1.81e5) * 100pg / (2.80e7 + 3.47e7) * 0.5pg * 1 = 1
PSW 29-Aug-2019 16:25
VERIFIED
Abs. Int.
5.30e4
2.65e4
0.00e0
Rel. Int.
100%
TCDF Std.
20.04-29.51
315.9419 Fn1
Flags: PBM
4σ 1.06e4
0%
AS 1368F
3.34e7
21.65
JS 1234F
2.76e7
25.38
ES 2378F
2.80e7
26.78
Abs. Int.
6.21e6
3.10e6
0.00e0
Rel. Int.
100%
TCDF Std.
20.04-29.51
317.9389 Fn1
Flags: PBM
4σ 5.68e3
0%
AS 1368F
4.29e7
21.65
JS 1234F
3.56e7
25.38
ES 2378F
3.47e7
26.78
Abs. Int.
7.63e6
3.81e6
0.00e0
Rel. Int.
100%
HxCDPE
20.04-29.51
375.8364 Fn1
Flags: PB
4σ 1.34e3
0%
Abs. Int.
1.57e4
7.86e3
0.00e0

SGS ID: CS1_190828_DF_CB **Sample ID: 20-282-2** **Acq: 28-Aug-2019 14:16:56**

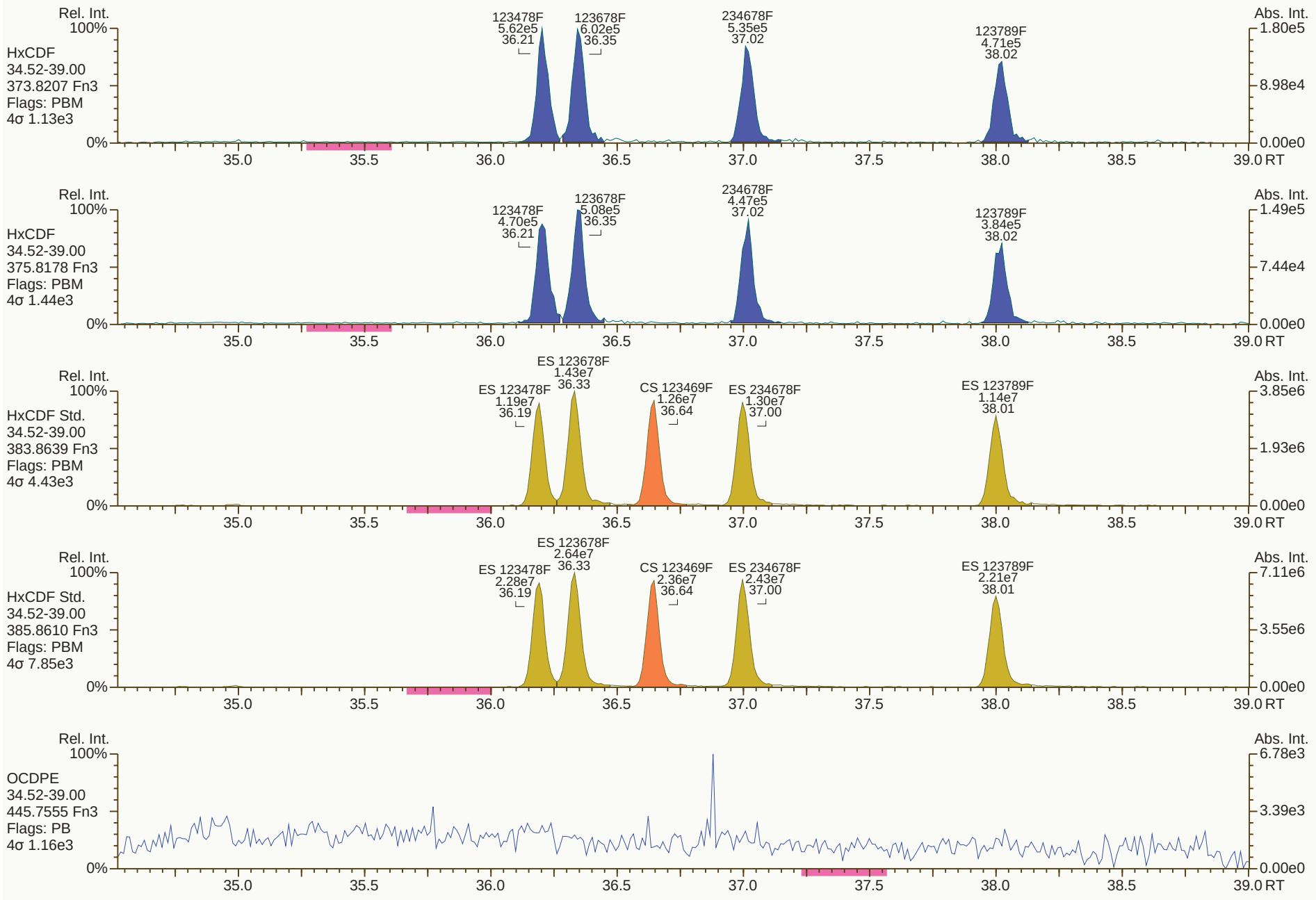
Instr: [ILM] AutoSpec-Ultima HRMS3 **VSIR EI+ Expt: df_cl4-8_db5 GC: df_db5 Vial: 6** **User: PSW Datafile: 190828C07**

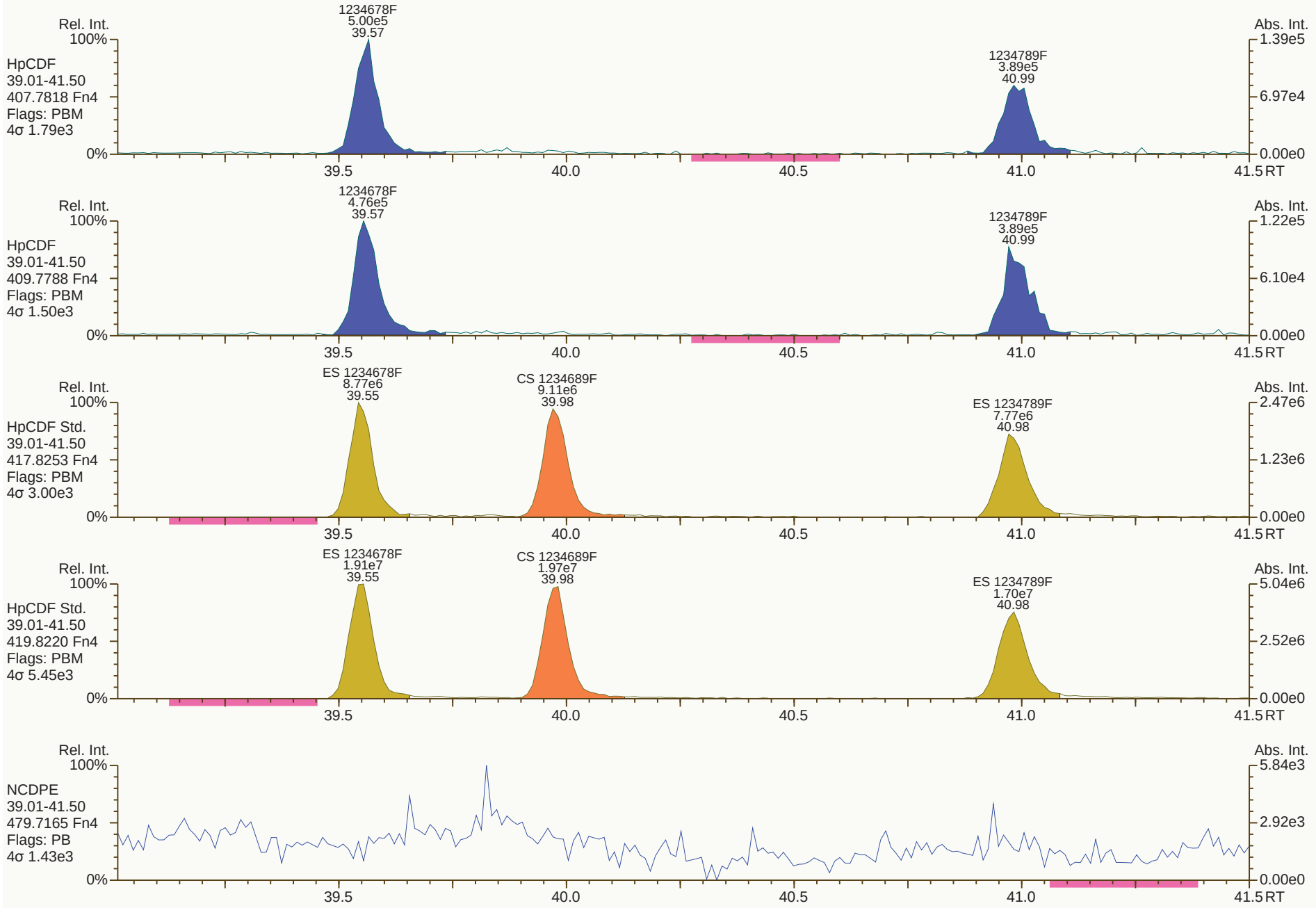


Results: T:\UltraTracePro\ICAL results\HRMS3\HRMS3_DF_10122018_28AUG2019\Resources\CS1_190828_DF_CB.utp_res, saved 29-Aug-2019 16:25 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 9244 scc: 130-956 *Revised: 28-Aug-2019 15:04 (PSW) Printed: 29-Aug-2019 16:31 Page 8 of 12*


Rel. Int.
100%
PeCDF-2
29.52-34.51
339.8597 Fn2
Flags: PBM
4σ 8.50e2
0%
12378F
6.89e5
31.74
23478F
7.20e5
32.87
Abs. Int.
1.95e5
9.73e4
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDF-2
29.52-34.51
341.8568 Fn2
Flags: PBM
4σ 1.99e3
0%
12378F
4.74e5
31.74
23478F
4.73e5
32.87
Abs. Int.
1.39e5
6.93e4
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDF Std.
29.52-34.51
351.9000 Fn2
Flags: PBM
4σ 2.71e3
0%
CS 12346F
3.09e7
31.19
ES 12378F
2.98e7
31.72
ES 23478F
2.98e7
32.86
Abs. Int.
8.35e6
4.18e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDF Std.
29.52-34.51
353.8970 Fn2
Flags: PBM
4σ 1.73e3
0%
CS 12346F
1.97e7
31.18
ES 12378F
1.96e7
31.72
ES 23478F
1.92e7
32.86
Abs. Int.
5.34e6
2.67e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
HpCDPE
29.52-34.51
409.7974 Fn2
Flags: PB
4σ 1.14e3
0%
Abs. Int.
3.79e3
1.89e3
0.00e0
30.0
31.0
32.0
33.0
34.0
RT


Rel. Int.
100%
HxCDF
34.52-39.00
373.8207 Fn3
Flags: PBM
4σ 1.13e3
0%
123478F
5.62e5
36.21
123678F
6.02e5
36.35
234678F
5.35e5
37.02
123789F
4.71e5
38.02
Abs. Int.
1.80e5
8.98e4
0.00e0
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
HxCDF
34.52-39.00
375.8178 Fn3
Flags: PBM
4σ 1.44e3
0%
123478F
4.70e5
36.21
123678F
5.08e5
36.35
234678F
4.47e5
37.02
123789F
3.84e5
38.02
Abs. Int.
1.49e5
7.44e4
0.00e0
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
HxCDF Std.
34.52-39.00
383.8639 Fn3
Flags: PBM
4σ 4.43e3
0%
ES 123478F
1.19e7
36.19
ES 123678F
1.43e7
36.33
CS 123469F
1.26e7
36.64
ES 234678F
1.30e7
37.00
ES 123789F
1.14e7
38.01
Abs. Int.
3.85e6
1.93e6
0.00e0
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
HxCDF Std.
34.52-39.00
385.8610 Fn3
Flags: PBM
4σ 7.85e3
0%
ES 123478F
2.28e7
36.19
ES 123678F
2.64e7
36.33
CS 123469F
2.36e7
36.64
ES 234678F
2.43e7
37.00
ES 123789F
2.21e7
38.01
Abs. Int.
7.11e6
3.55e6
0.00e0
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
OCDPE
34.52-39.00
445.7555 Fn3
Flags: PB
4σ 1.16e3
0%
Abs. Int.
6.78e3
3.39e3
0.00e0
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT

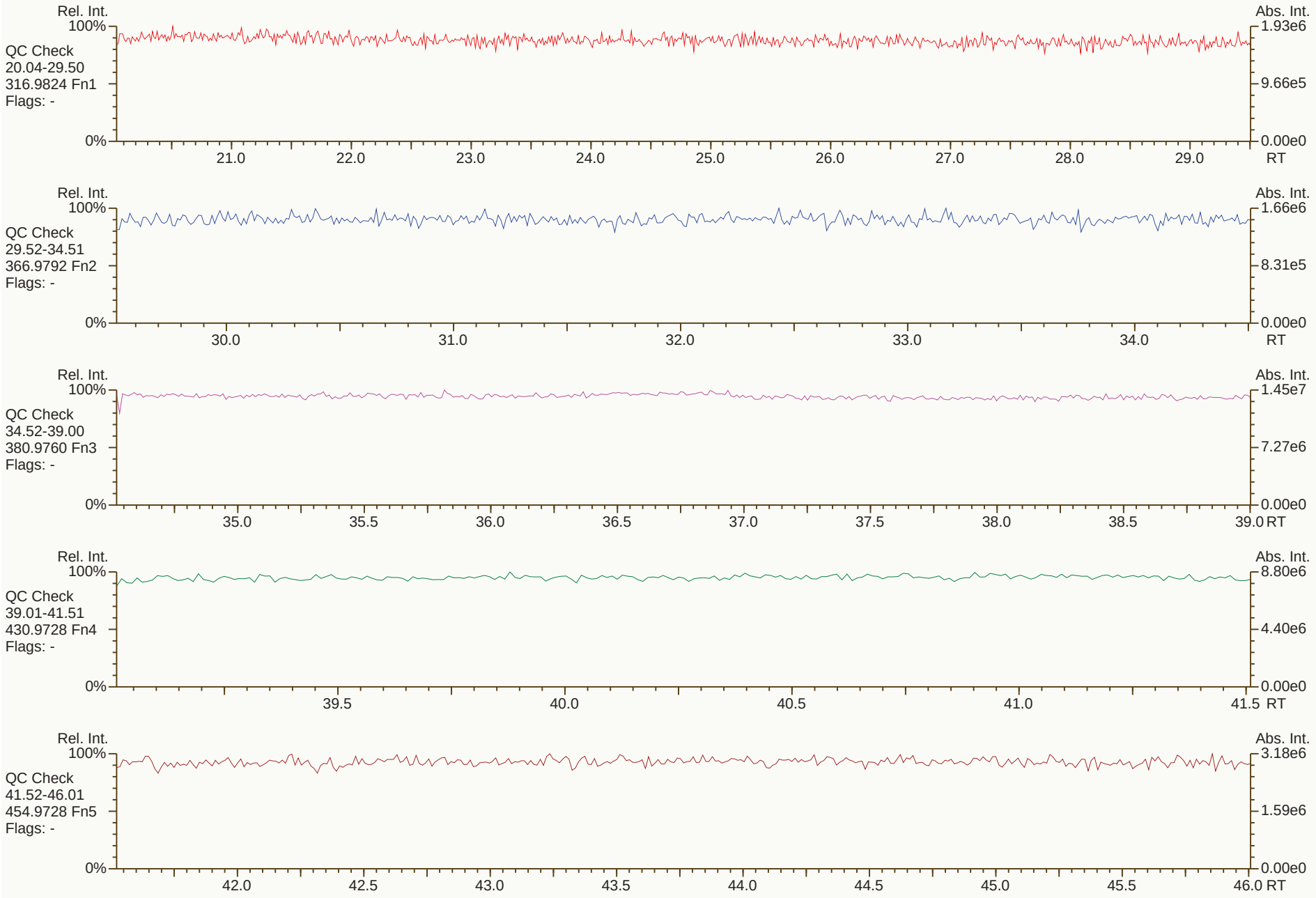

Rel. Int.
100%
HpCDF
39.01-41.50
407.7818 Fn4
Flags: PBM
4σ 1.79e3
1234678F
5.00e5
39.57
1234789F
3.89e5
40.99
Abs. Int.
1.39e5
6.97e4
0.00e0
0%
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
HpCDF
39.01-41.50
409.7788 Fn4
Flags: PBM
4σ 1.50e3
1234678F
4.76e5
39.57
1234789F
3.89e5
40.99
Abs. Int.
1.22e5
6.10e4
0.00e0
0%
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
HpCDF Std.
39.01-41.50
417.8253 Fn4
Flags: PBM
4σ 3.00e3
ES 1234678F
8.77e6
39.55
CS 1234689F
9.11e6
39.98
ES 1234789F
7.77e6
40.98
Abs. Int.
2.47e6
1.23e6
0.00e0
0%
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
HpCDF Std.
39.01-41.50
419.8220 Fn4
Flags: PBM
4σ 5.45e3
ES 1234678F
1.91e7
39.55
CS 1234689F
1.97e7
39.98
ES 1234789F
1.70e7
40.98
Abs. Int.
5.04e6
2.52e6
0.00e0
0%
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
NCDPE
39.01-41.50
479.7165 Fn4
Flags: PB
4σ 1.43e3
Abs. Int.
5.84e3
2.92e3
0.00e0
0%
39.5
40.0
40.5
41.0
41.5 RT

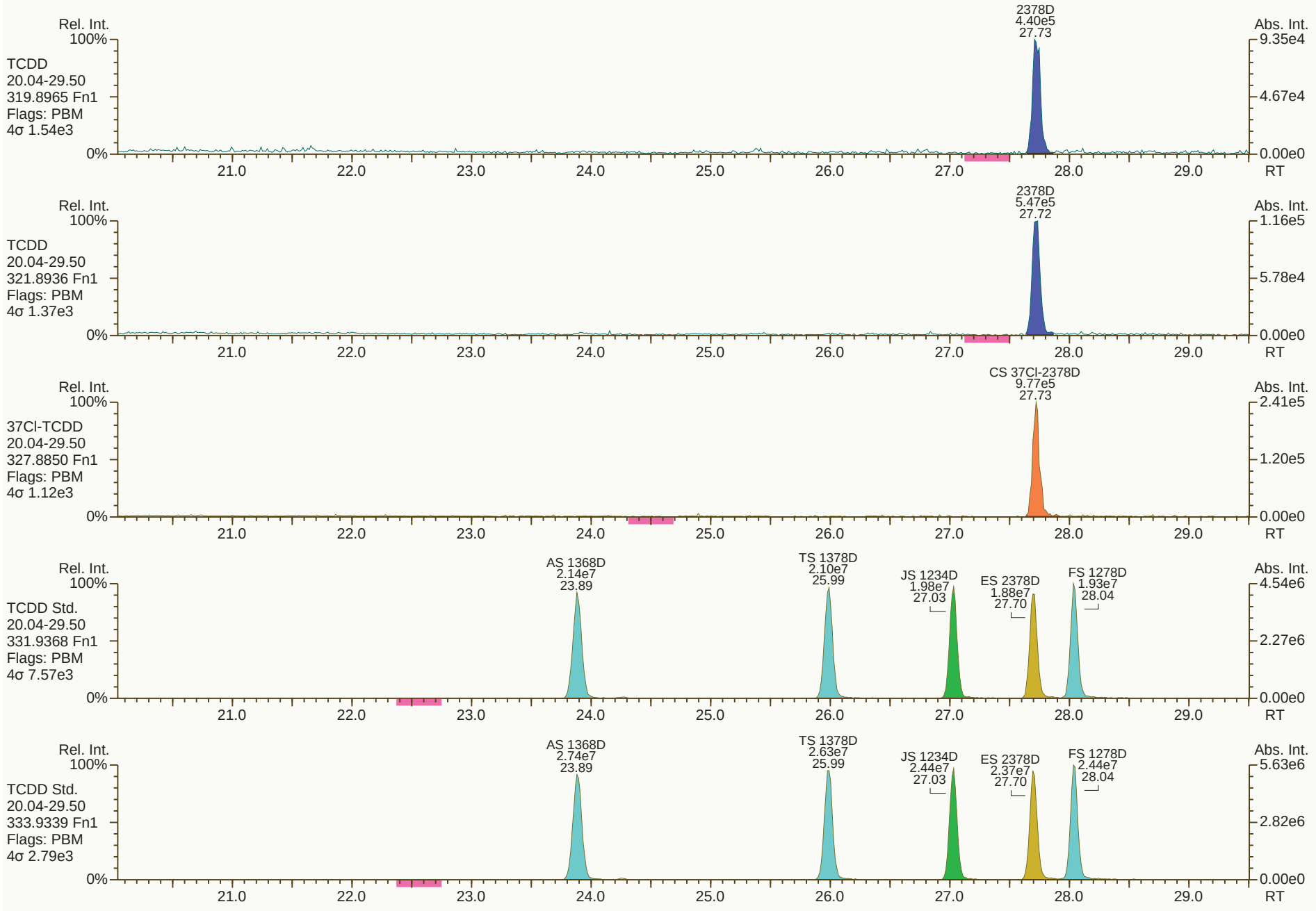

OCDF
6.04e5
43.48
Rel. Int.
100%
OCDF
41.52-46.01
441.7428 Fn5
Flags: PBM
4σ 1.60e3
0%
Abs. Int.
8.90e4
4.45e4
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
OCDF
6.43e5
43.48
Rel. Int.
100%
OCDF
41.52-46.01
443.7398 Fn5
Flags: PBM
4σ 1.14e3
0%
Abs. Int.
8.94e4
4.47e4
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
ES OCDF
2.33e7
43.47
Rel. Int.
100%
OCDF Std.
41.52-46.01
453.7830 Fn5
Flags: PBM
4σ 1.58e3
0%
Abs. Int.
3.41e6
1.70e6
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
ES OCDF
2.57e7
43.47
Rel. Int.
100%
OCDF Std.
41.52-46.01
455.7801 Fn5
Flags: PBM
4σ 1.52e3
0%
Abs. Int.
3.67e6
1.83e6
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
Rel. Int.
100%
DCDPE
41.52-46.01
513.6775 Fn5
Flags: PB
4σ 1.09e3
0%
Abs. Int.
4.10e3
2.05e3
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT

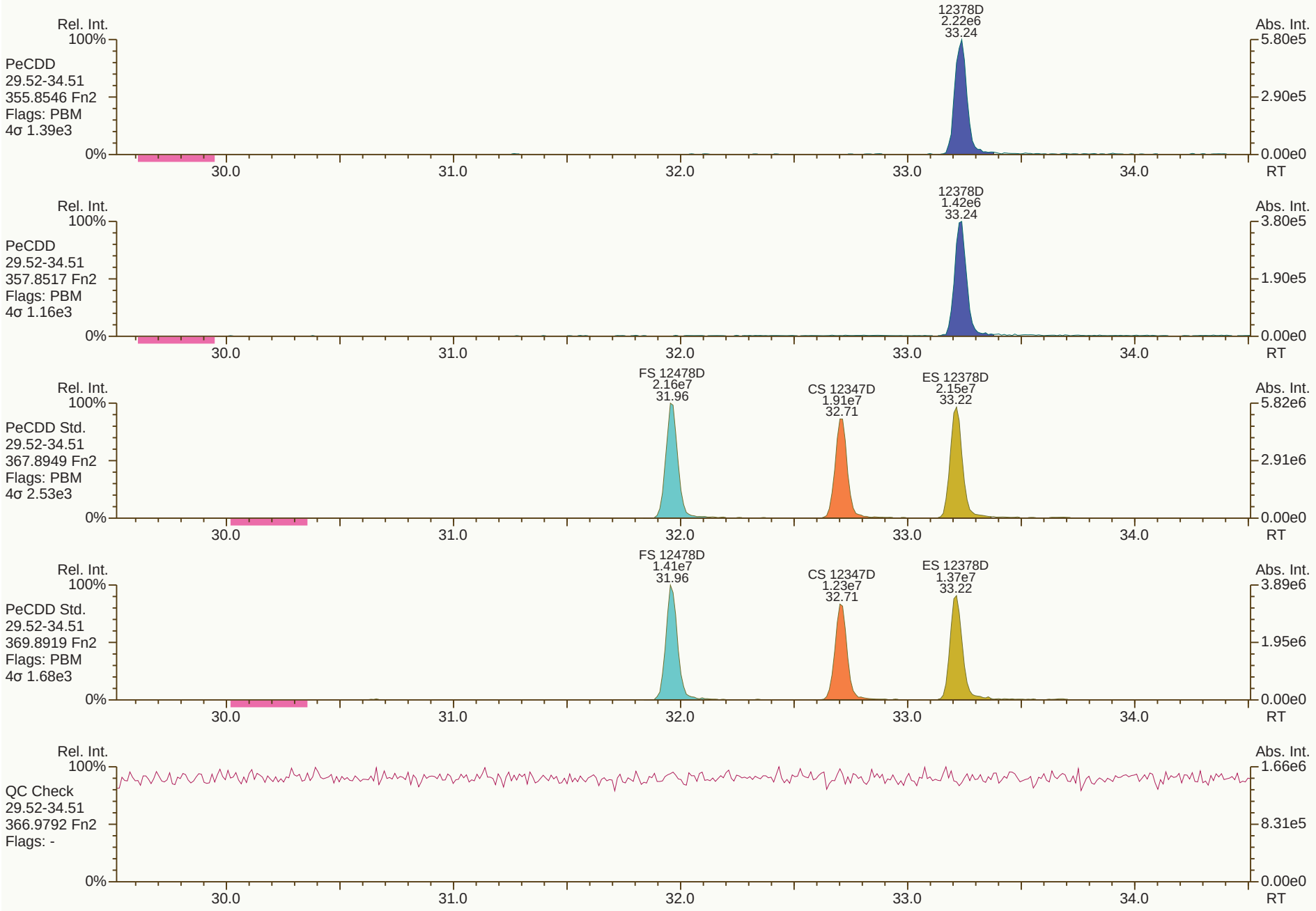
Dioxin/Furan QC Summary	Acq'd: 28 Aug 2019 15:06 PSW	ICAL: HRMS3_DF_10122018_28AUG2019
Lab ID: CS2_190828_DF_CA	UTP: 29-Aug-2019 08:38:05 PSW	Checkcode: 378-487-YRV
Sample ID: 20-282-1	Report: 29 Aug 2019 09:56 pw	Datafile: 190828C08

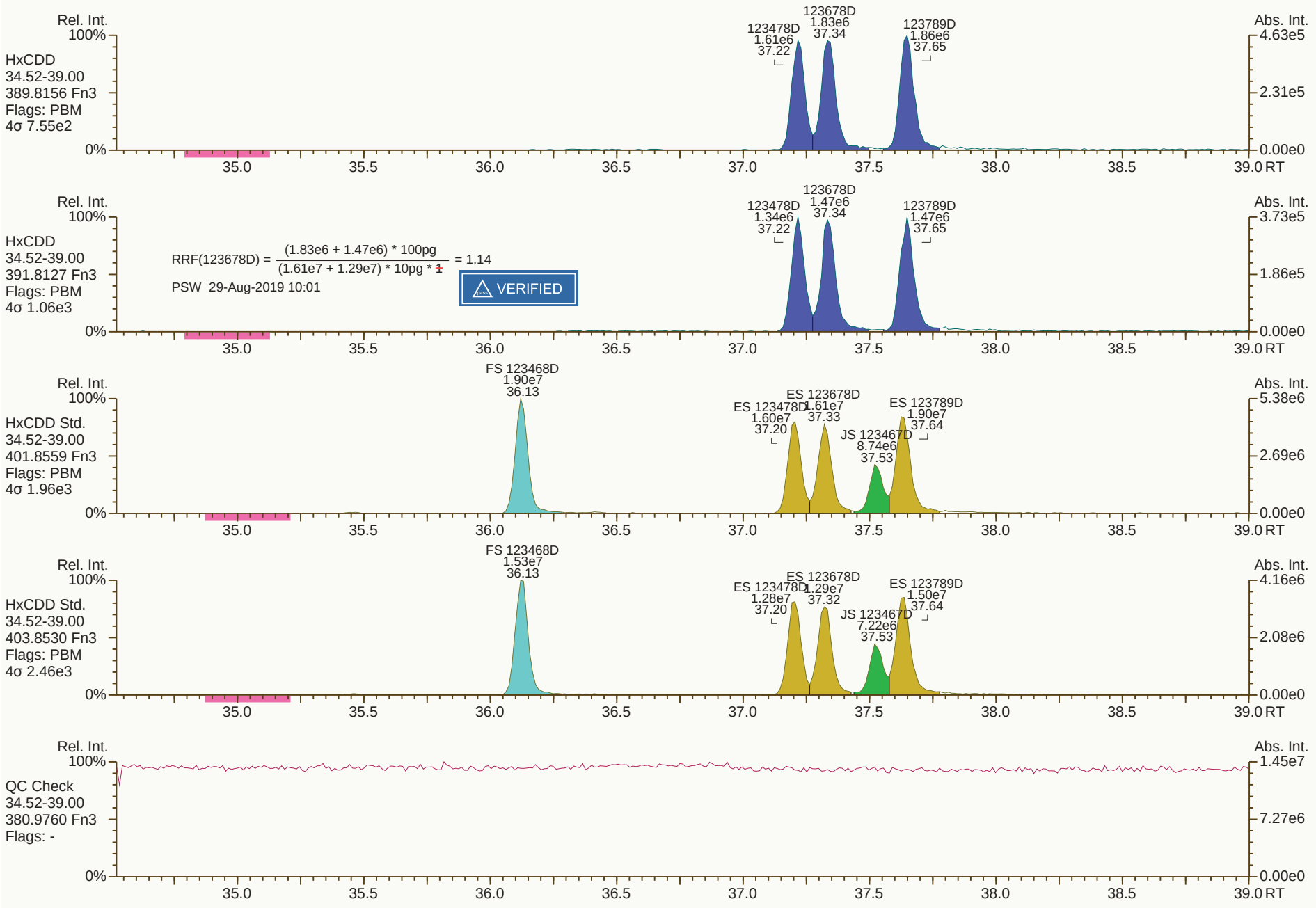
Name	RT	Response	RA	OK	Ref. RRFs	Calc. RRFs	Dev'n
2378-TCDD	27.73	9.87E+05	0.80	Y	1.19	1.16	-2%
12378-PeCDD	33.24	3.64E+06	1.56	Y	0.98	1.04	5%
123478-HxCDD	37.22	2.95E+06	1.20	Y	1.02	1.02	0%
123678-HxCDD	37.34	3.31E+06	1.24	Y	1.09	1.14	5%
123789-HxCDD	37.65	3.33E+06	1.26	Y	0.97	0.98	1%
1234678-HpCDD	40.56	2.78E+06	1.03	Y	0.98	1.03	5%
OCDD	43.34	4.10E+06	0.87	Y	1.07	1.05	-2%
2378-TCDF	26.81	1.25E+06	0.79	Y	1.05	1.02	-2%
12378-PeCDF	31.74	4.91E+06	1.59	Y	0.96	0.99	2%
23478-PeCDF	32.88	4.83E+06	1.55	Y	0.99	1.01	3%
123478-HxCDF	36.21	4.28E+06	1.21	Y	1.21	1.23	2%
123678-HxCDF	36.36	4.65E+06	1.23	Y	1.11	1.13	2%
234678-HxCDF	37.03	4.24E+06	1.24	Y	1.12	1.18	5%
123789-HxCDF	38.03	3.69E+06	1.24	Y	1.11	1.10	-1%
1234678-HpCDF	39.57	3.68E+06	1.00	Y	1.32	1.33	0%
1234789-HpCDF	41.00	3.15E+06	1.10	Y	1.26	1.27	1%
OCDF	43.50	5.11E+06	0.85	Y	1.03	1.07	4%
ES 2378-TCDD	27.70	4.25E+07	0.79	Y	0.99	0.96	-3%
ES 12378-PeCDD	33.22	3.52E+07	1.57	Y	0.83	0.80	-4%
ES 123478-HxCDD	37.2	2.88E+07	1.25	Y	0.95	0.90	-5%
ES 123678-HxCDD	37.33	2.90E+07	1.25	Y	0.98	0.91	-7%
ES 123789-HxCDD	37.64	3.39E+07	1.27	Y	1.14	1.06	-6%
ES 1234678-HpCDD	40.55	2.71E+07	1.04	Y	0.90	0.85	-5%
ES OCDD	43.33	3.90E+07	0.91	Y	0.63	0.61	-3%
ES 2378-TCDF	26.79	6.10E+07	0.80	Y	1.00	0.98	-2%
ES 12378-PeCDF	31.73	4.97E+07	1.54	Y	0.83	0.80	-4%
ES 23478-PeCDF	32.86	4.76E+07	1.57	Y	0.81	0.76	-5%
ES 123478-HxCDF	36.19	3.48E+07	0.53	Y	1.12	1.09	-3%
ES 123678-HxCDF	36.34	4.13E+07	0.54	Y	1.33	1.29	-3%
ES 234678-HxCDF	37.01	3.60E+07	0.52	Y	1.21	1.13	-6%
ES 123789-HxCDF	38.02	3.36E+07	0.52	Y	1.12	1.05	-6%
ES 1234678-HpCDF	39.56	2.77E+07	0.46	Y	0.92	0.87	-6%
ES 1234789-HpCDF	40.99	2.47E+07	0.46	Y	0.82	0.78	-5%
ES OCDF	43.48	4.77E+07	0.90	Y	0.78	0.75	-4%

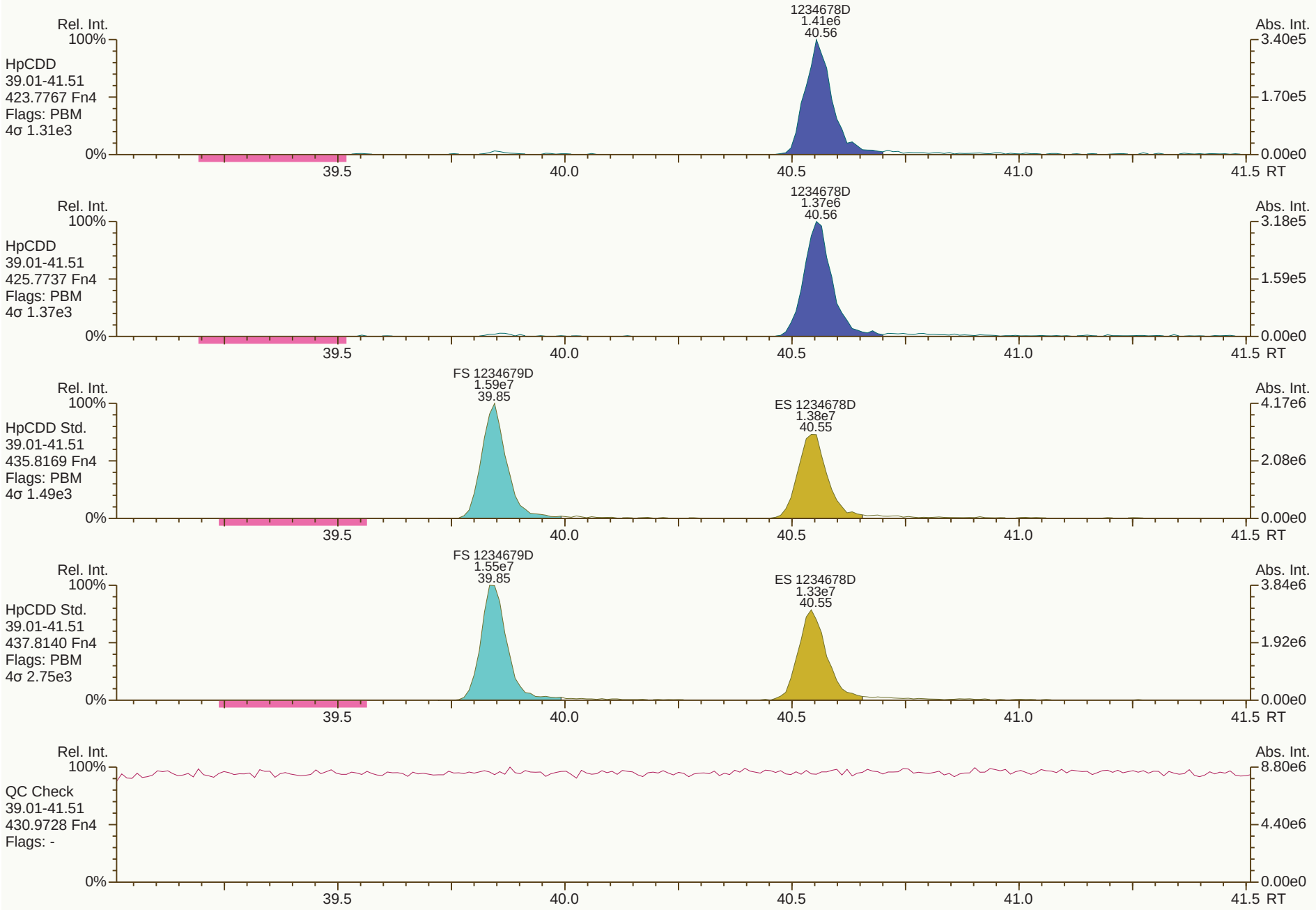
Dioxin/Furan QC Summary		Acq'd: 28 Aug 2019 15:06 PSW				ICAL: HRMS3_DF_10122018_28AUG2019	
Lab ID: CS2_190828_DF_CA		UTP: 29-Aug-2019 08:38:05 PSW				Checkcode: 378-487-YRV	
Sample ID: 20-282-1		Report: 29 Aug 2019 09:56 pw				Datafile: 190828C08	
Name	**RT**	**Response**	**RA**	**OK**	**Ref. RRFs**	**Calc. RRFs**	**Dev'n**
JS 1234-TCDD	27.03	4.42E+07	0.81	Y	-	-	-
JS 1234-TCDF	25.39	6.24E+07	0.78	Y	-	-	-
JS 123467-HxCDD	37.53	1.60E+07	1.21	Y	-	-	-
CS 37Cl-2378-TCDD	27.73	9.77E+05	n/a	-	1.12	1.11	-1%
CS 12347-PeCDD	32.71	3.14E+07	1.56	Y	0.71	0.71	0%
CS 12346-PeCDF	31.19	5.08E+07	1.56	Y	0.81	0.81	1%
CS 123469-HxCDF	36.65	3.65E+07	0.53	Y	1.12	1.15	2%
CS 1234689-HpCDF	39.99	2.87E+07	0.45	Y	0.90	0.90	0%
SS 37Cl-2378-TCDD	27.73	9.77E+05	n/a	-	1.14	1.15	1%
SS 12347-PeCDD	32.71	3.14E+07	1.56	Y	0.86	0.89	4%
SS 12346-PeCDF	31.19	5.08E+07	1.56	Y	0.98	1.02	5%
SS 123469-HxCDF	36.65	3.65E+07	0.53	Y	0.85	0.89	5%
SS 1234689-HpCDF	39.99	2.87E+07	0.45	Y	0.97	1.04	6%
AS 1368-TCDD	23.89	4.88E+07	0.78	Y	1.12	1.11	-1%
AS 1368-TCDF	21.67	7.47E+07	0.79	Y	1.19	1.20	1%
FS 1278-TCDD	28.04	4.38E+07	0.79	Y	1.02	1.03	1%
FS 12478-PeCDD	31.96	3.57E+07	1.53	Y	0.98	1.02	3%
FS 123468-HxCDD	36.13	3.42E+07	1.24	Y	1.17	1.19	2%
FS 1234679-HpCDD	39.85	3.14E+07	1.03	Y	1.14	1.16	2%
TS 1378-TCDD	25.99	4.73E+07	0.80	Y	1.09	1.11	2%
~~OCDD-a~~	~~NotFnd~~						
~~OCDF-a~~	~~NotFnd~~						

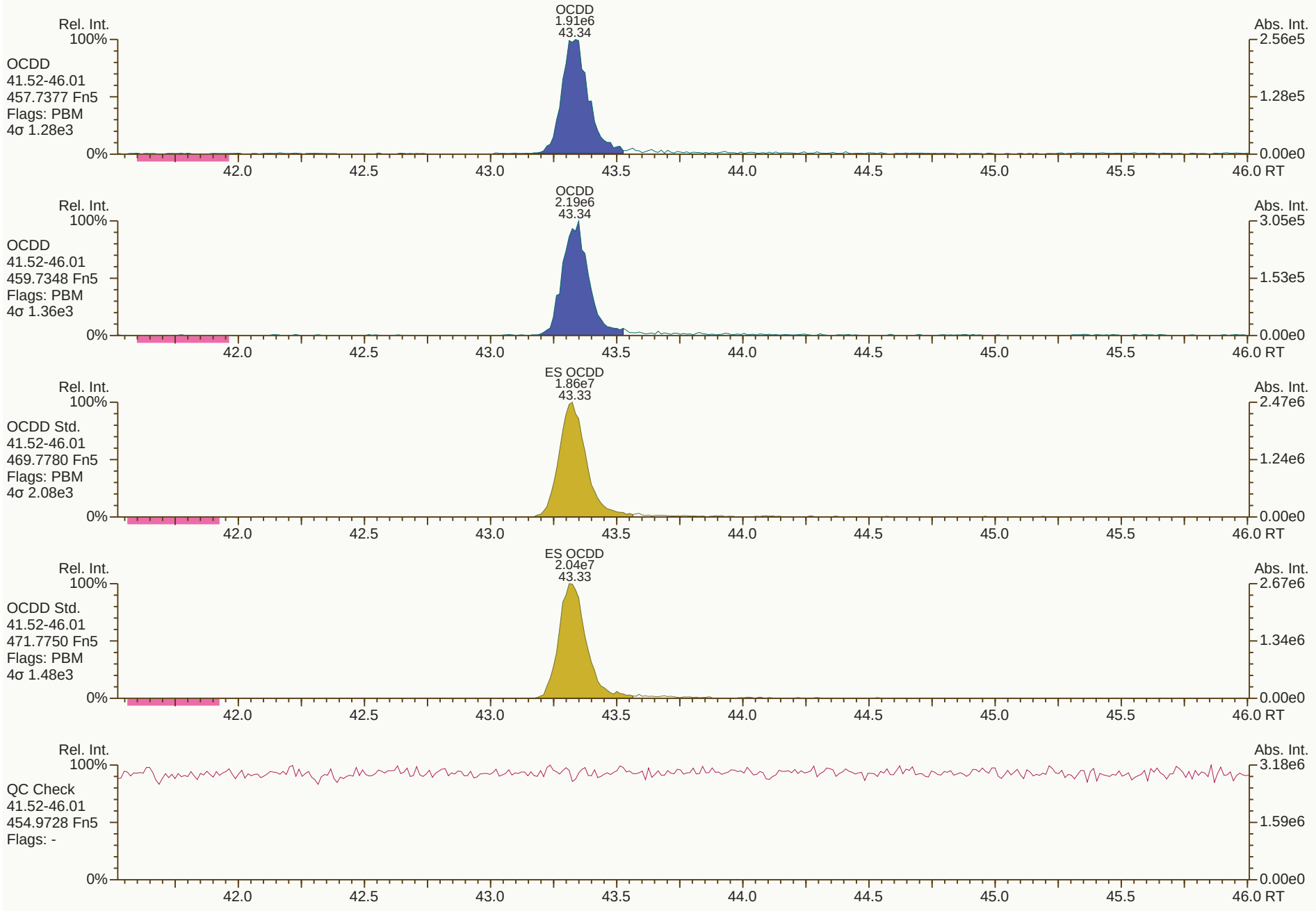

Rel. Int.
100%
QC Check
20.04-29.50
316.9824 Fn1
Flags: -
0%
Abs. Int.
1.93e6
9.66e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
QC Check
29.52-34.51
366.9792 Fn2
Flags: -
0%
Abs. Int.
1.66e6
8.31e5
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
QC Check
34.52-39.00
380.9760 Fn3
Flags: -
0%
Abs. Int.
1.45e7
7.27e6
0.00e0
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0
RT
Rel. Int.
100%
QC Check
39.01-41.51
430.9728 Fn4
Flags: -
0%
Abs. Int.
8.80e6
4.40e6
0.00e0
39.5
40.0
40.5
41.0
41.5
RT
Rel. Int.
100%
QC Check
41.52-46.01
454.9728 Fn5
Flags: -
0%
Abs. Int.
3.18e6
1.59e6
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0
RT


Rel. Int.
100%
TCDD
20.04-29.50
319.8965 Fn1
Flags: PBM
4σ 1.54e3
0%
2378D
4.40e5
27.73
Abs. Int.
9.35e4
4.67e4
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD
20.04-29.50
321.8936 Fn1
Flags: PBM
4σ 1.37e3
0%
2378D
5.47e5
27.72
Abs. Int.
1.16e5
5.78e4
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
37Cl-TCDD
20.04-29.50
327.8850 Fn1
Flags: PBM
4σ 1.12e3
0%
CS 37Cl-2378D
9.77e5
27.73
Abs. Int.
2.41e5
1.20e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.04-29.50
331.9368 Fn1
Flags: PBM
4σ 7.57e3
0%
AS 1368D
2.14e7
23.89
TS 1378D
2.10e7
25.99
JS 1234D
1.98e7
27.03
ES 2378D
1.88e7
27.70
FS 1278D
1.93e7
28.04
Abs. Int.
4.54e6
2.27e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.04-29.50
333.9339 Fn1
Flags: PBM
4σ 2.79e3
0%
AS 1368D
2.74e7
23.89
TS 1378D
2.63e7
25.99
JS 1234D
2.44e7
27.03
ES 2378D
2.37e7
27.70
FS 1278D
2.44e7
28.04
Abs. Int.
5.63e6
2.82e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
PeCDD
29.52-34.51
355.8546 Fn2
Flags: PBM
4σ 1.39e3
0%
12378D
2.22e6
33.24
Abs. Int.
5.80e5
2.90e5
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDD
29.52-34.51
357.8517 Fn2
Flags: PBM
4σ 1.16e3
0%
12378D
1.42e6
33.24
Abs. Int.
3.80e5
1.90e5
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDD Std.
29.52-34.51
367.8949 Fn2
Flags: PBM
4σ 2.53e3
0%
FS 12478D
2.16e7
31.96
CS 12347D
1.91e7
32.71
ES 12378D
2.15e7
33.22
Abs. Int.
5.82e6
2.91e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDD Std.
29.52-34.51
369.8919 Fn2
Flags: PBM
4σ 1.68e3
0%
FS 12478D
1.41e7
31.96
CS 12347D
1.23e7
32.71
ES 12378D
1.37e7
33.22
Abs. Int.
3.89e6
1.95e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
QC Check
29.52-34.51
366.9792 Fn2
Flags: -
0%
Abs. Int.
1.66e6
8.31e5
0.00e0
30.0
31.0
32.0
33.0
34.0
RT


Rel. Int.
100%
HxCDD
34.52-39.00
389.8156 Fn3
Flags: PBM
4σ 7.55e2
123478D
1.61e6
37.22
123678D
1.83e6
37.34
123789D
1.86e6
37.65
Abs. Int.
4.63e5
2.31e5
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
HxCDD
34.52-39.00
391.8127 Fn3
Flags: PBM
4σ 1.06e3
RRF(123678D) = (1.83e6 + 1.47e6) * 100pg / (1.61e7 + 1.29e7) * 10pg * 1 = 1.14
PSW 29-Aug-2019 10:01
VERIFIED
123478D
1.34e6
37.22
123678D
1.47e6
37.34
123789D
1.47e6
37.65
Abs. Int.
3.73e5
1.86e5
0.00e0
Rel. Int.
100%
HxCDD Std.
34.52-39.00
401.8559 Fn3
Flags: PBM
4σ 1.96e3
FS 123468D
1.90e7
36.13
ES 123478D
1.60e7
37.20
ES 123678D
1.61e7
37.33
JS 123467D
8.74e6
37.53
ES 123789D
1.90e7
37.64
Abs. Int.
5.38e6
2.69e6
0.00e0
Rel. Int.
100%
HxCDD Std.
34.52-39.00
403.8530 Fn3
Flags: PBM
4σ 2.46e3
FS 123468D
1.53e7
36.13
ES 123478D
1.28e7
37.20
ES 123678D
1.29e7
37.32
JS 123467D
7.22e6
37.53
ES 123789D
1.50e7
37.64
Abs. Int.
4.16e6
2.08e6
0.00e0
Rel. Int.
100%
QC Check
34.52-39.00
380.9760 Fn3
Flags: -
Abs. Int.
1.45e7
7.27e6
0.00e0

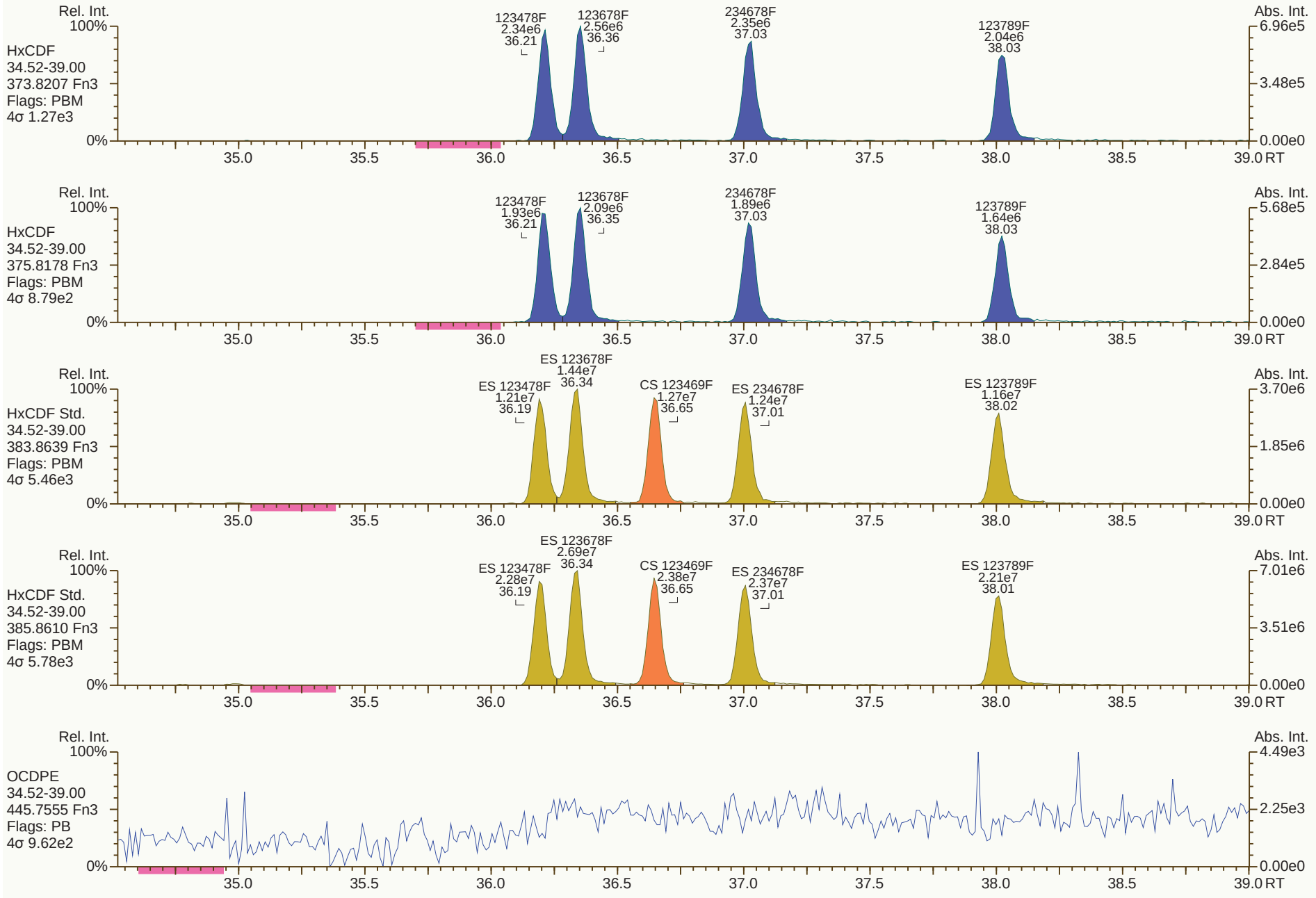

Rel. Int.
100%
HpCDD
39.01-41.51
423.7767 Fn4
Flags: PBM
4σ 1.31e3
1234678D
1.41e6
40.56
Abs. Int.
3.40e5
1.70e5
0.00e0
0%
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
HpCDD
39.01-41.51
425.7737 Fn4
Flags: PBM
4σ 1.37e3
1234678D
1.37e6
40.56
Abs. Int.
3.18e5
1.59e5
0.00e0
0%
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
HpCDD Std.
39.01-41.51
435.8169 Fn4
Flags: PBM
4σ 1.49e3
FS 1234679D
1.59e7
39.85
ES 1234678D
1.38e7
40.55
Abs. Int.
4.17e6
2.08e6
0.00e0
0%
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
HpCDD Std.
39.01-41.51
437.8140 Fn4
Flags: PBM
4σ 2.75e3
FS 1234679D
1.55e7
39.85
ES 1234678D
1.33e7
40.55
Abs. Int.
3.84e6
1.92e6
0.00e0
0%
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
QC Check
39.01-41.51
430.9728 Fn4
Flags: -
Abs. Int.
8.80e6
4.40e6
0.00e0
0%
39.5
40.0
40.5
41.0
41.5 RT

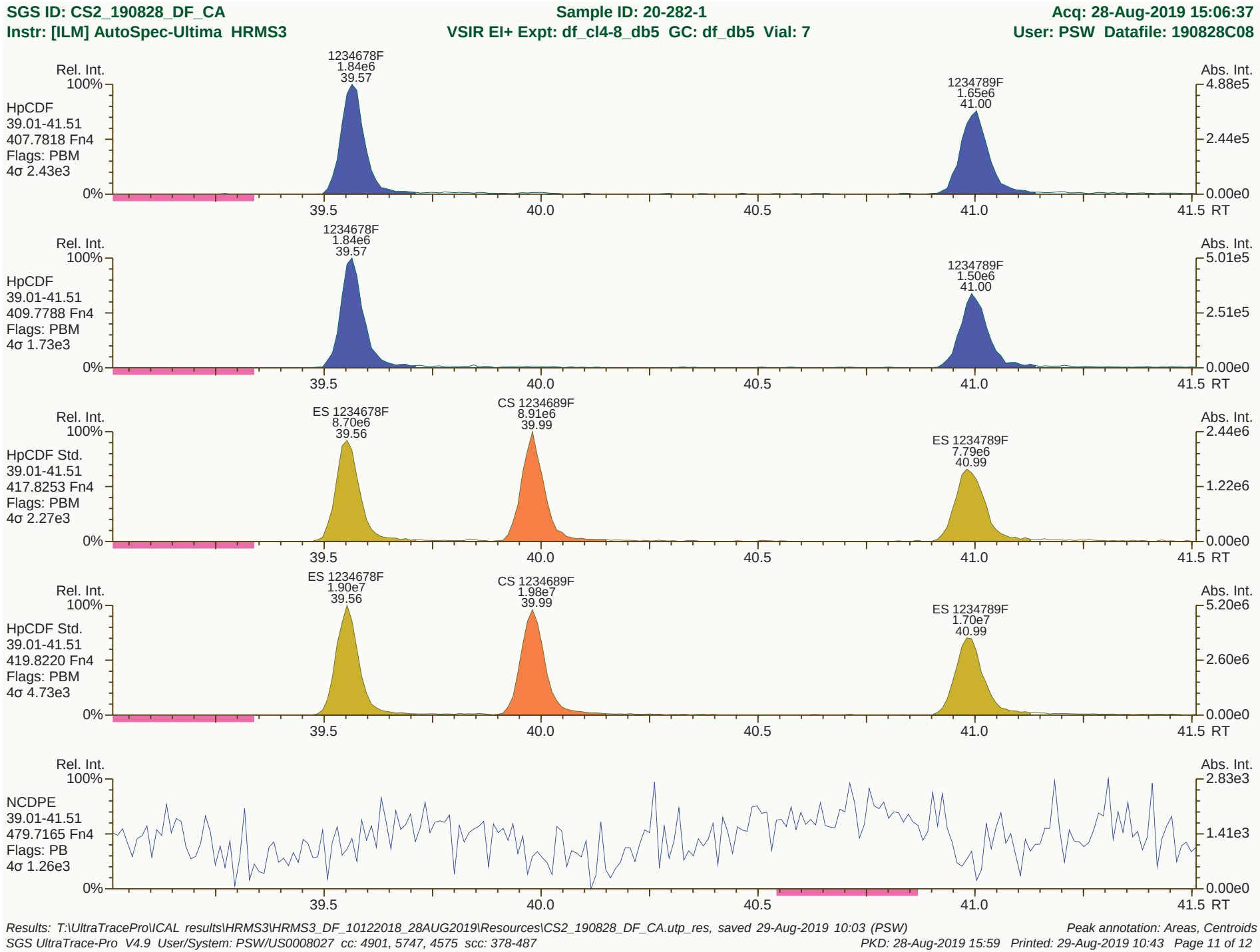

OCDD
1.91e6
43.34
Rel. Int.
100%
OCDD
41.52-46.01
457.7377 Fn5
Flags: PBM
4σ 1.28e3
0%
Abs. Int.
2.56e5
1.28e5
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
OCDD
2.19e6
43.34
Rel. Int.
100%
OCDD
41.52-46.01
459.7348 Fn5
Flags: PBM
4σ 1.36e3
0%
Abs. Int.
3.05e5
1.53e5
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
ES OCDD
1.86e7
43.33
Rel. Int.
100%
OCDD Std.
41.52-46.01
469.7780 Fn5
Flags: PBM
4σ 2.08e3
0%
Abs. Int.
2.47e6
1.24e6
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
ES OCDD
2.04e7
43.33
Rel. Int.
100%
OCDD Std.
41.52-46.01
471.7750 Fn5
Flags: PBM
4σ 1.48e3
0%
Abs. Int.
2.67e6
1.34e6
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
Rel. Int.
100%
QC Check
41.52-46.01
454.9728 Fn5
Flags: -
0%
Abs. Int.
3.18e6
1.59e6
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT


Rel. Int.
100%
TCDF
20.04-29.50
303.9016 Fn1
Flags: PBM
4σ 9.32e2
0%
2378F
5.51e5
26.81
Abs. Int.
1.36e5
6.80e4
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF
20.04-29.50
305.8987 Fn1
Flags: PBM
4σ 1.36e3
0%
2378F
6.95e5
26.81
Abs. Int.
1.52e5
7.61e4
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.04-29.50
315.9419 Fn1
Flags: PBM
4σ 9.69e3
0%
AS 1368F
3.30e7
21.67
JS 1234F
2.73e7
25.39
ES 2378F
2.70e7
26.79
RRF(ES 2378F) = (2.70e7 + 3.39e7) * 100pg / (2.73e7 + 3.51e7) * 100pg = 0.976
PSW 29-Aug-2019 10:03
VERIFIED
Abs. Int.
6.18e6
3.09e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.04-29.50
317.9389 Fn1
Flags: PBM
4σ 7.29e3
0%
AS 1368F
4.17e7
21.66
JS 1234F
3.51e7
25.39
ES 2378F
3.39e7
26.79
Abs. Int.
7.49e6
3.75e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
HxCDPE
20.04-29.50
375.8364 Fn1
Flags: PB
4σ 9.76e2
0%
Abs. Int.
5.14e3
2.57e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
0%
Abs. Int.
6.68e3
3.34e3
0.00e0
PeCDF-1
20.04-29.50
339.8597 Fn1
Flags: PB
4σ 1.57e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
0%
Abs. Int.
7.81e3
3.90e3
0.00e0
PeCDF-1
20.04-29.50
341.8568 Fn1
Flags: PB
4σ 1.21e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
0%
Abs. Int.
1.93e6
9.66e5
0.00e0
QC Check
20.04-29.50
316.9824 Fn1
Flags: -
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
PeCDF-2
29.52-34.51
339.8597 Fn2
Flags: PBM
4σ 1.21e3
0%
12378F
3.01e6
31.74
23478F
2.94e6
32.88
Abs. Int.
8.19e5
4.10e5
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDF-2
29.52-34.51
341.8568 Fn2
Flags: PBM
4σ 1.01e3
0%
12378F
1.90e6
31.74
23478F
1.89e6
32.88
Abs. Int.
5.29e5
2.65e5
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDF Std.
29.52-34.51
351.9000 Fn2
Flags: PBM
4σ 1.98e3
0%
CS 12346F
3.09e7
31.19
ES 12378F
3.01e7
31.73
ES 23478F
2.91e7
32.86
Abs. Int.
8.07e6
4.04e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDF Std.
29.52-34.51
353.8970 Fn2
Flags: PBM
4σ 1.59e3
0%
CS 12346F
1.99e7
31.19
ES 12378F
1.96e7
31.73
ES 23478F
1.85e7
32.86
Abs. Int.
5.21e6
2.61e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
HpCDPE
29.52-34.51
409.7974 Fn2
Flags: PB
4σ 1.28e3
0%
Abs. Int.
6.28e3
3.14e3
0.00e0
30.0
31.0
32.0
33.0
34.0
RT


Rel. Int.
100%
HxCDF
34.52-39.00
373.8207 Fn3
Flags: PBM
4σ 1.27e3
123478F 2.34e6 36.21
123678F 2.56e6 36.36
234678F 2.35e6 37.03
123789F 2.04e6 38.03
Abs. Int.
6.96e5
3.48e5
0.00e0
0%
35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 39.0 RT
Rel. Int.
100%
HxCDF
34.52-39.00
375.8178 Fn3
Flags: PBM
4σ 8.79e2
123478F 1.93e6 36.21
123678F 2.09e6 36.35
234678F 1.89e6 37.03
123789F 1.64e6 38.03
Abs. Int.
5.68e5
2.84e5
0.00e0
0%
35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 39.0 RT
Rel. Int.
100%
HxCDF Std.
34.52-39.00
383.8639 Fn3
Flags: PBM
4σ 5.46e3
ES 123678F 1.44e7 36.34
ES 123478F 1.21e7 36.19
CS 123469F 1.27e7 36.65
ES 234678F 1.24e7 37.01
ES 123789F 1.16e7 38.02
Abs. Int.
3.70e6
1.85e6
0.00e0
0%
35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 39.0 RT
Rel. Int.
100%
HxCDF Std.
34.52-39.00
385.8610 Fn3
Flags: PBM
4σ 5.78e3
ES 123678F 2.69e7 36.34
ES 123478F 2.28e7 36.19
CS 123469F 2.38e7 36.65
ES 234678F 2.37e7 37.01
ES 123789F 2.21e7 38.01
Abs. Int.
7.01e6
3.51e6
0.00e0
0%
35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 39.0 RT
Rel. Int.
100%
OCDPE
34.52-39.00
445.7555 Fn3
Flags: PB
4σ 9.62e2
Abs. Int.
4.49e3
2.25e3
0.00e0
0%
35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 39.0 RT


SGS ID: CS2_190828_DF_CA
Sample ID: 20-282-1
Acq: 28-Aug-2019 15:06:37
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5 GC: df_db5 Vial: 7
User: PSW Datafile: 190828C08
Rel. Int.
Abs. Int.
HpCDF
39.01-41.51
407.7818 Fn4
Flags: PBM
4σ 2.43e3
1234678F
1.84e6
39.57
1234789F
1.65e6
41.00
4.88e5
2.44e5
0.00e0
HpCDF
39.01-41.51
409.7788 Fn4
Flags: PBM
4σ 1.73e3
1234678F
1.84e6
39.57
1234789F
1.50e6
41.00
5.01e5
2.51e5
0.00e0
HpCDF Std.
39.01-41.51
417.8253 Fn4
Flags: PBM
4σ 2.27e3
ES 1234678F
8.70e6
39.56
CS 1234689F
8.91e6
39.99
ES 1234789F
7.79e6
40.99
2.44e6
1.22e6
0.00e0
HpCDF Std.
39.01-41.51
419.8220 Fn4
Flags: PBM
4σ 4.73e3
ES 1234678F
1.90e7
39.56
CS 1234689F
1.98e7
39.99
ES 1234789F
1.70e7
40.99
5.20e6
2.60e6
0.00e0
NCDPE
39.01-41.51
479.7165 Fn4
Flags: PB
4σ 1.26e3
2.83e3
1.41e3
0.00e0
100%
0%
39.5
40.0
40.5
41.0
41.5 RT

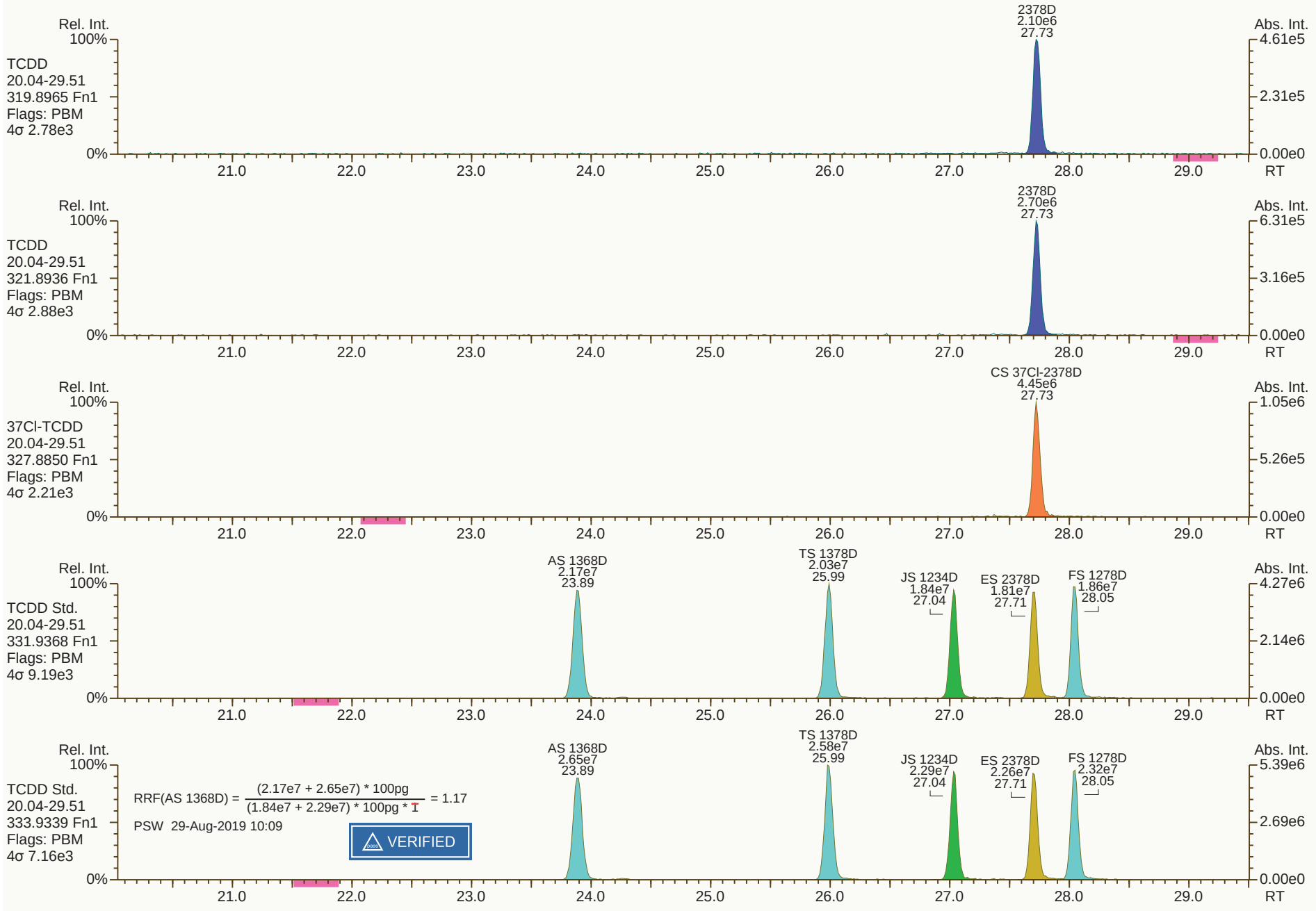

OCDF
2.34e6
43.50
Rel. Int.
100%
Abs. Int.
3.11e5
1.56e5
0.00e0
0%
OCDF
41.52-46.01
441.7428 Fn5
Flags: PBM
4σ 9.75e2
OCDF
2.77e6
43.49
OCDF
41.52-46.01
443.7398 Fn5
Flags: PBM
4σ 1.84e3
3.90e5
1.95e5
ES OCDF
2.26e7
43.48
OCDF Std.
41.52-46.01
453.7830 Fn5
Flags: PBM
4σ 1.64e3
3.10e6
1.55e6
ES OCDF
2.51e7
43.48
OCDF Std.
41.52-46.01
455.7801 Fn5
Flags: PBM
4σ 2.39e3
3.46e6
1.73e6
DCDPE
41.52-46.01
513.6775 Fn5
Flags: PB
4σ 1.22e3
4.20e3
2.10e3
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT

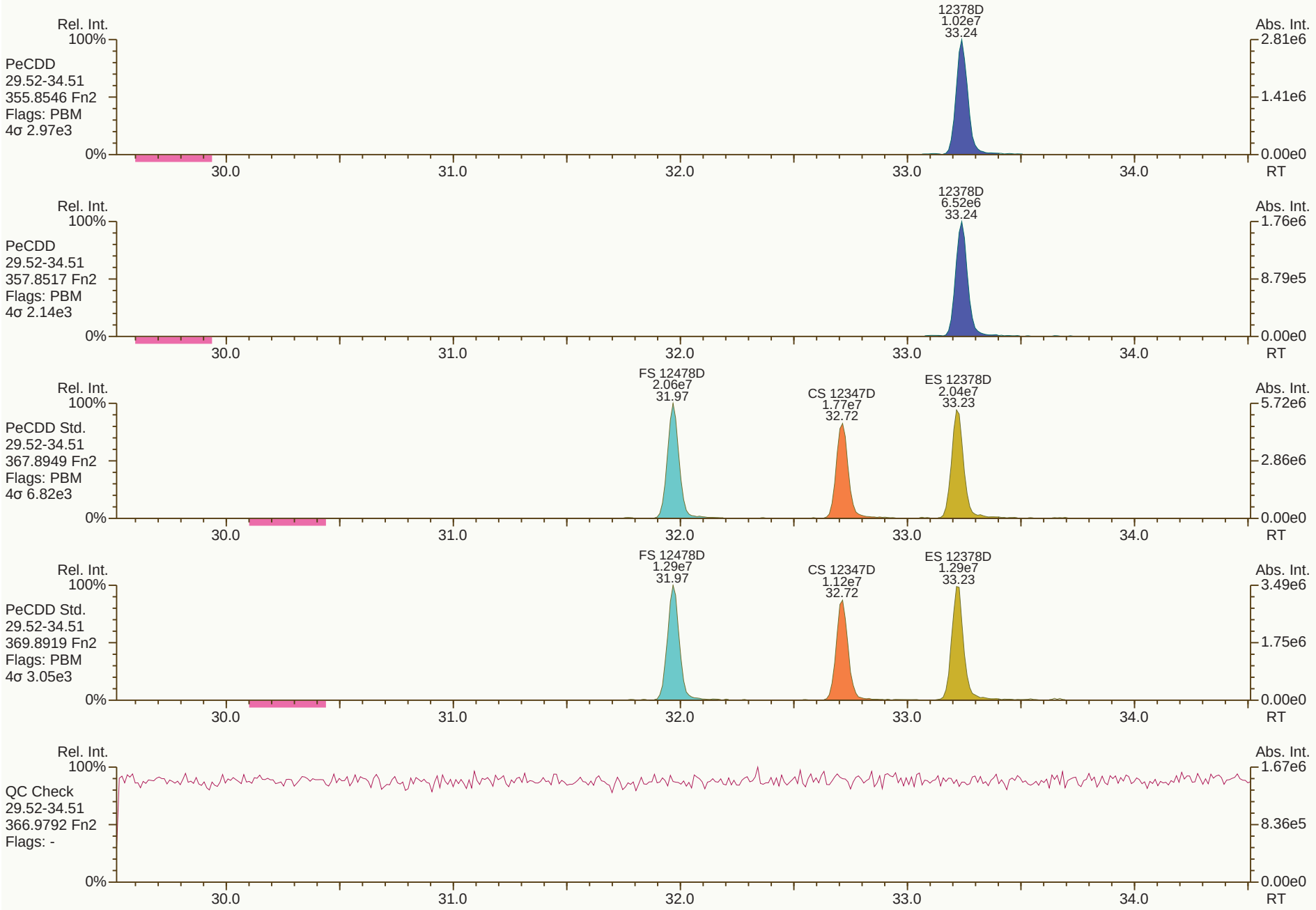
Dioxin/Furan QC Summary		Acq'd: 28 Aug 2019 17:00 PSW				ICAL: HRMS3_DF_10122018_28AUG2019	
Lab ID: CS3_190828_DF_CB		UTP: 29-Aug-2019 09:14:28 PSW				Checkcode: 536-910-YJN	
Sample ID: 20-449-3		Report: 29 Aug 2019 09:56 pw				Datafile: 190828C10	
Name	**RT**	**Response**	**RA**	**OK**	**Ref. RRFs**	**Calc. RRFs**	**Dev'n**
2378-TCDD	27.73	4.80E+06	0.78	Y	1.19	1.18	-1%
12378-PeCDD	33.24	1.67E+07	1.57	Y	0.98	1.00	2%
123478-HxCDD	37.23	1.52E+07	1.26	Y	1.02	1.08	6%
123678-HxCDD	37.35	1.59E+07	1.23	Y	1.09	1.08	-1%
123789-HxCDD	37.66	1.71E+07	1.24	Y	0.97	1.00	3%
1234678-HpCDD	40.57	1.36E+07	1.02	Y	0.98	1.05	7%
OCDD	43.35	1.92E+07	0.88	Y	1.07	1.06	-1%
2378-TCDF	26.82	5.90E+06	0.79	Y	1.05	1.05	1%
12378-PeCDF	31.75	2.24E+07	1.55	Y	0.96	0.95	-1%
23478-PeCDF	32.88	2.22E+07	1.53	Y	0.99	0.98	0%
123478-HxCDF	36.22	2.06E+07	1.23	Y	1.21	1.22	1%
123678-HxCDF	36.36	2.24E+07	1.24	Y	1.11	1.12	1%
234678-HxCDF	37.03	2.09E+07	1.22	Y	1.12	1.16	4%
123789-HxCDF	38.04	1.90E+07	1.25	Y	1.11	1.17	5%
1234678-HpCDF	39.58	1.81E+07	1.02	Y	1.32	1.35	2%
1234789-HpCDF	41.01	1.54E+07	1.00	Y	1.26	1.26	1%
OCDF	43.51	2.32E+07	0.89	Y	1.03	1.05	2%
ES 2378-TCDD	27.71	4.07E+07	0.80	Y	0.99	0.98	-1%
ES 12378-PeCDD	33.23	3.34E+07	1.58	Y	0.83	0.81	-3%
ES 123478-HxCDD	37.21	2.81E+07	1.27	Y	0.95	0.89	-6%
ES 123678-HxCDD	37.33	2.96E+07	1.28	Y	0.98	0.94	-4%
ES 123789-HxCDD	37.65	3.40E+07	1.23	Y	1.14	1.08	-5%
ES 1234678-HpCDD	40.55	2.60E+07	1.08	Y	0.90	0.83	-8%
ES OCDD	43.35	3.62E+07	0.92	Y	0.63	0.57	-8%
ES 2378-TCDF	26.8	5.60E+07	0.79	Y	1.00	0.94	-5%
ES 12378-PeCDF	31.73	4.69E+07	1.56	Y	0.83	0.79	-5%
ES 23478-PeCDF	32.87	4.52E+07	1.60	Y	0.81	0.76	-6%
ES 123478-HxCDF	36.2	3.37E+07	0.53	Y	1.12	1.07	-5%
ES 123678-HxCDF	36.35	4.02E+07	0.53	Y	1.33	1.28	-4%
ES 234678-HxCDF	37.02	3.62E+07	0.53	Y	1.21	1.15	-5%
ES 123789-HxCDF	38.02	3.25E+07	0.54	Y	1.12	1.03	-8%
ES 1234678-HpCDF	39.56	2.70E+07	0.46	Y	0.92	0.86	-7%
ES 1234789-HpCDF	41	2.44E+07	0.46	Y	0.82	0.78	-5%
ES OCDF	43.49	4.43E+07	0.89	Y	0.78	0.70	-10%

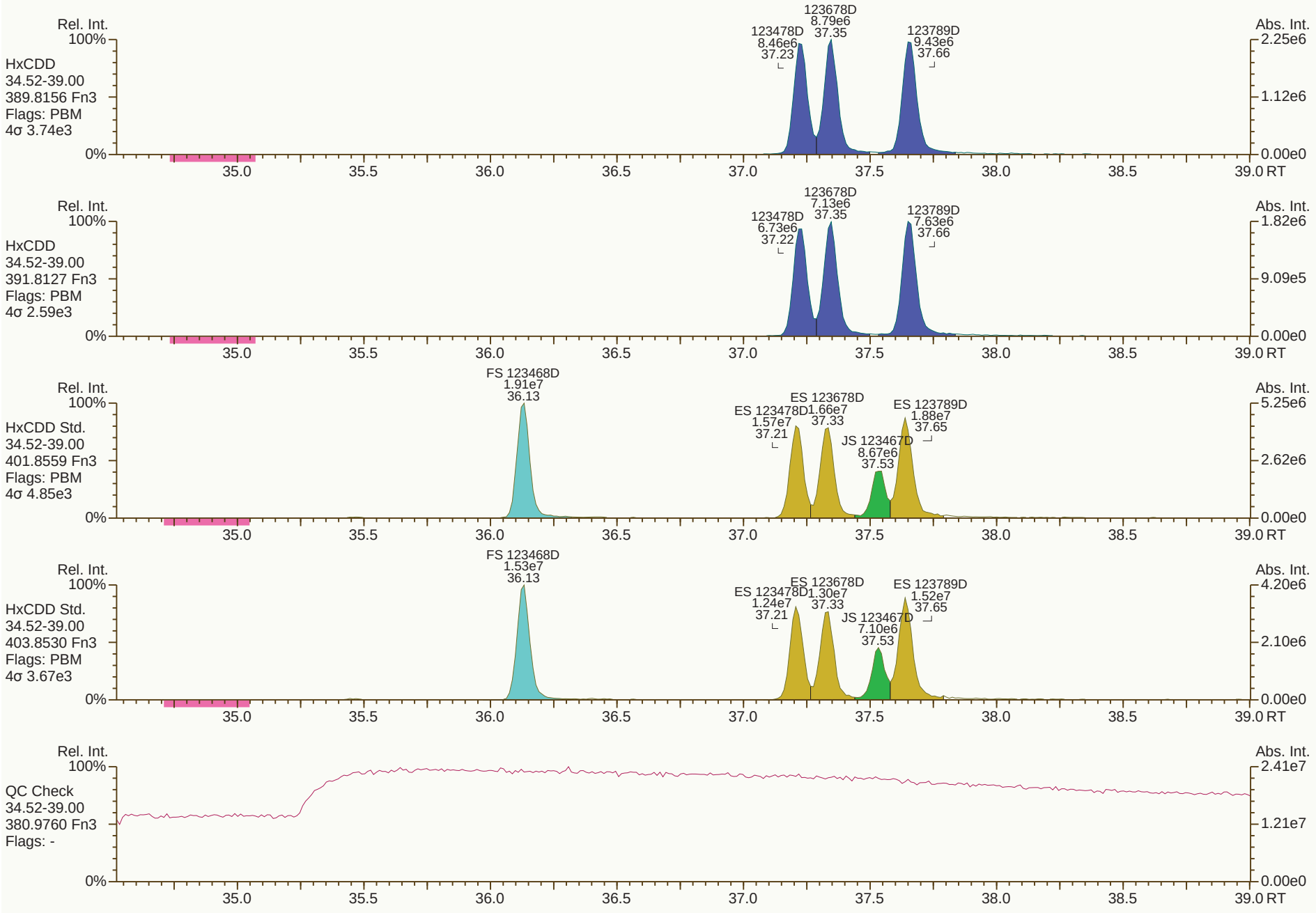
Dioxin/Furan QC Summary		Acq'd: 28 Aug 2019 17:00 PSW				ICAL: HRMS3_DF_10122018_28AUG2019	
Lab ID: CS3_190828_DF_CB		UTP: 29-Aug-2019 09:14:28 PSW				Checkcode: 536-910-YJN	
Sample ID: 20-449-3		Report: 29 Aug 2019 09:56 pw				Datafile: 190828C10	
Name	**RT**	**Response**	**RA**	**OK**	**Ref. RRFs**	**Calc. RRFs**	**Dev'n**
JS 1234-TCDD	27.04	4.13E+07	0.80	Y	-	-	-
JS 1234-TCDF	25.39	5.94E+07	0.79	Y	-	-	-
JS 123467-HxCDD	37.53	1.58E+07	1.22	Y	-	-	-
CS 37Cl-2378-TCDD	27.73	4.45E+06	n/a	-	1.12	1.08	-4%
CS 12347-PeCDD	32.72	2.90E+07	1.57	Y	0.71	0.70	-2%
CS 12346-PeCDF	31.20	4.68E+07	1.53	Y	0.81	0.79	-3%
CS 123469-HxCDF	36.66	3.41E+07	0.53	Y	1.12	1.08	-4%
CS 1234689-HpCDF	39.99	2.68E+07	0.46	Y	0.90	0.85	-5%
SS 37Cl-2378-TCDD	27.73	4.45E+06	n/a	-	1.14	1.09	-4%
SS 12347-PeCDD	32.72	2.90E+07	1.57	Y	0.86	0.87	1%
SS 12346-PeCDF	31.20	4.68E+07	1.53	Y	0.98	1.00	2%
SS 123469-HxCDF	36.66	3.41E+07	0.53	Y	0.85	0.85	0%
SS 1234689-HpCDF	39.99	2.68E+07	0.46	Y	0.97	0.99	2%
AS 1368-TCDD	23.89	4.82E+07	0.82	Y	1.12	1.17	4%
AS 1368-TCDF	21.67	7.22E+07	0.78	Y	1.19	1.22	2%
FS 1278-TCDD	28.05	4.18E+07	0.80	Y	1.02	1.03	1%
FS 12478-PeCDD	31.97	3.34E+07	1.60	Y	0.98	1.00	2%
FS 123468-HxCDD	36.13	3.45E+07	1.25	Y	1.17	1.23	5%
FS 1234679-HpCDD	39.86	3.07E+07	1.07	Y	1.14	1.18	4%
TS 1378-TCDD	25.99	4.61E+07	0.78	Y	1.09	1.13	4%
~~OCDD-a~~	~~NotFnd~~						
~~OCDF-a~~	~~NotFnd~~						

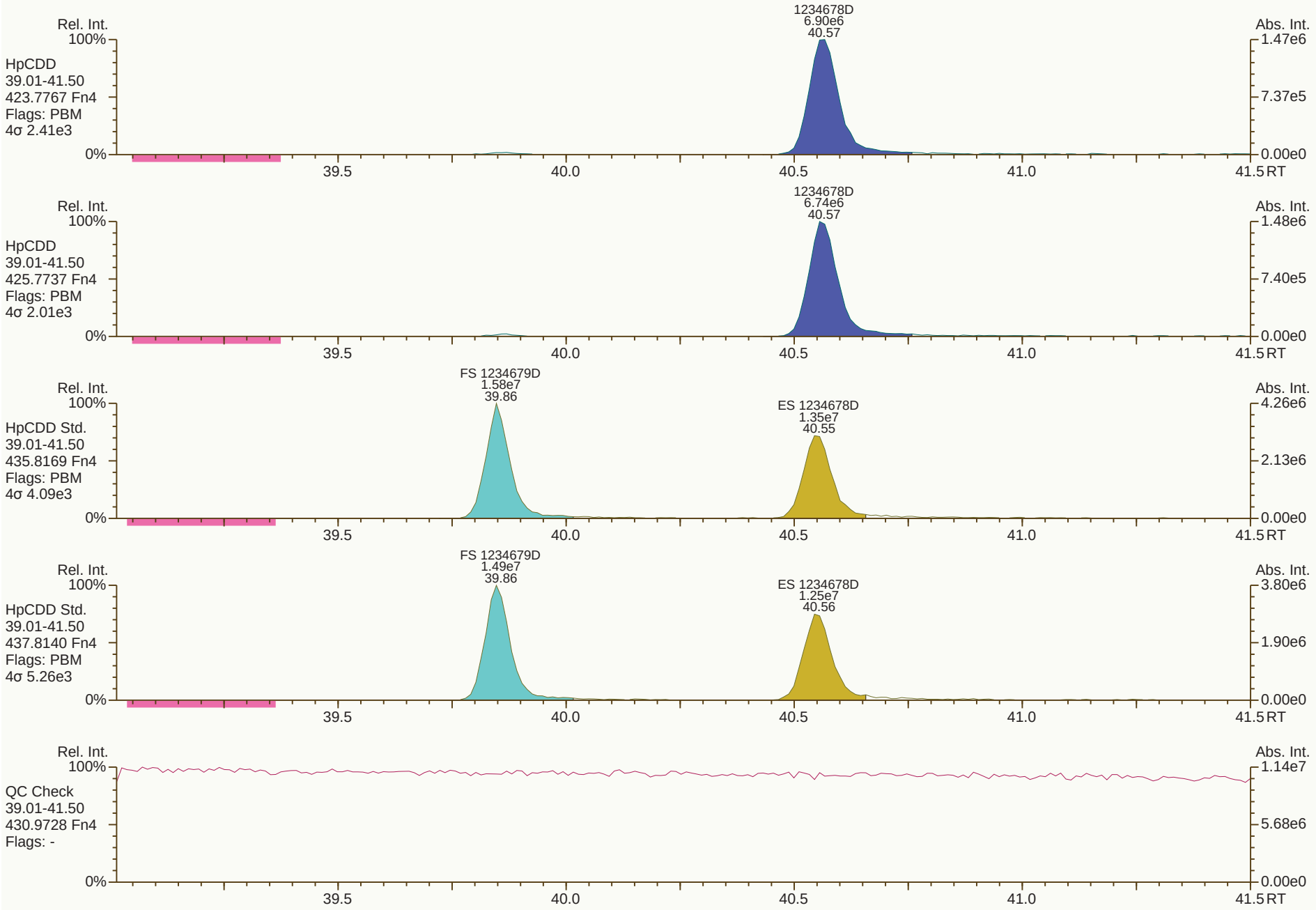


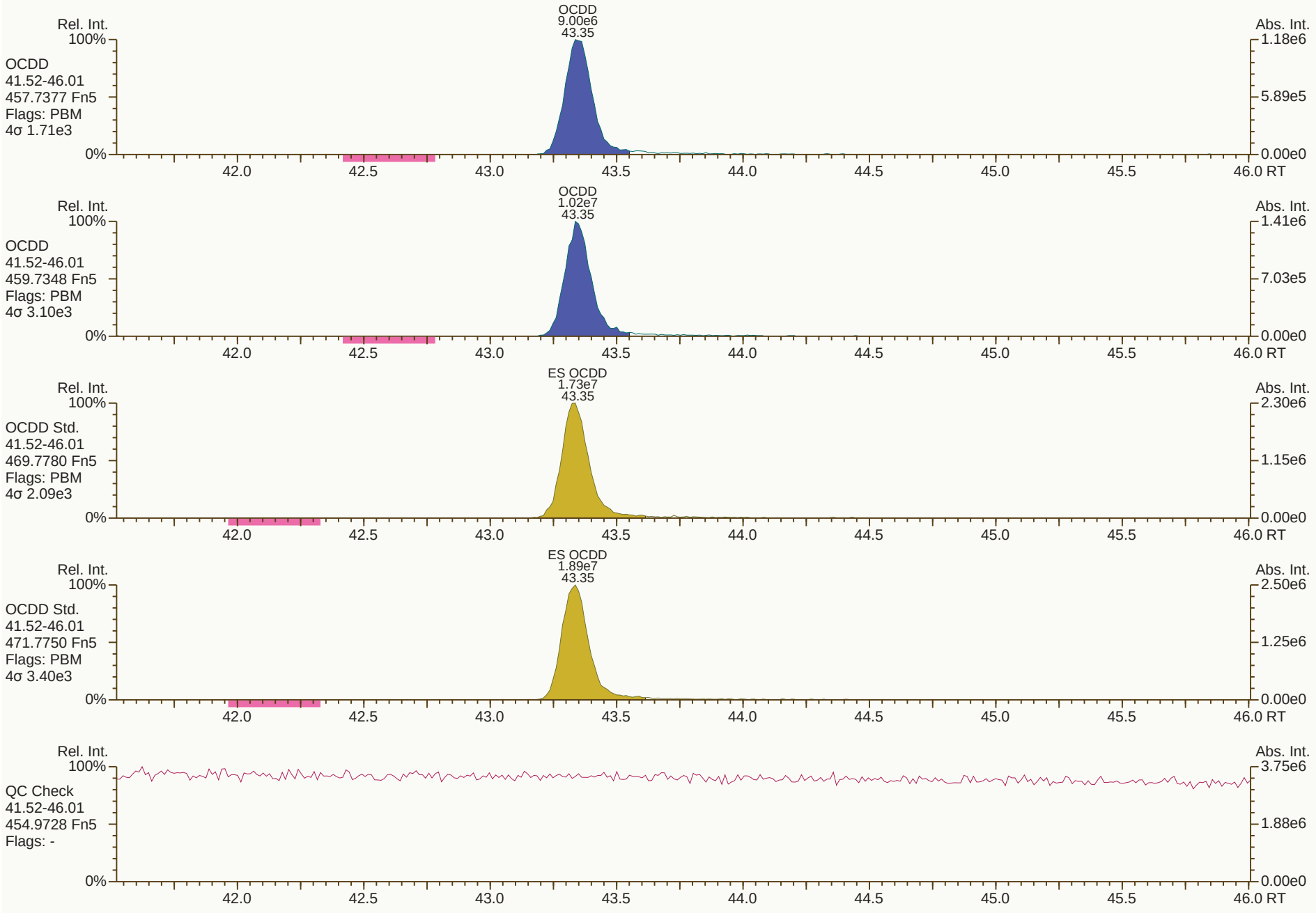
Results: T:\UltraTracePro\ICAL results\HRMS3\HRMS3_DF_10122018_28AUG2019\Resources\CS3_190828_DF_CB.utp_res, saved 29-Aug-2019 10:09 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 scc: 536-910
PKD: n/a Printed: 29-Aug-2019 10:44 Page 1 of 12


Rel. Int.
100%
TCDD
20.04-29.51
319.8965 Fn1
Flags: PBM
4σ 2.78e3
0%
2378D
2.10e6
27.73
Abs. Int.
4.61e5
2.31e5
0.00e0
RT
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
TCDD
20.04-29.51
321.8936 Fn1
Flags: PBM
4σ 2.88e3
2378D
2.70e6
27.73
6.31e5
3.16e5
37Cl-TCDD
20.04-29.51
327.8850 Fn1
Flags: PBM
4σ 2.21e3
CS 37Cl-2378D
4.45e6
27.73
1.05e6
5.26e5
TCDD Std.
20.04-29.51
331.9368 Fn1
Flags: PBM
4σ 9.19e3
AS 1368D
2.17e7
23.89
TS 1378D
2.03e7
25.99
JS 1234D
1.84e7
27.04
ES 2378D
1.81e7
27.71
FS 1278D
1.86e7
28.05
4.27e6
2.14e6
TCDD Std.
20.04-29.51
333.9339 Fn1
Flags: PBM
4σ 7.16e3
AS 1368D
2.65e7
23.89
TS 1378D
2.58e7
25.99
JS 1234D
2.29e7
27.04
ES 2378D
2.26e7
27.71
FS 1278D
2.32e7
28.05
5.39e6
2.69e6
RRF(AS 1368D) = (2.17e7 + 2.65e7) * 100pg / (1.84e7 + 2.29e7) * 100pg * 1 = 1.17
PSW 29-Aug-2019 10:09
VERIFIED


Rel. Int.
100%
PeCDD
29.52-34.51
355.8546 Fn2
Flags: PBM
4σ 2.97e3
0%
12378D
1.02e7
33.24
Abs. Int.
2.81e6
1.41e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDD
29.52-34.51
357.8517 Fn2
Flags: PBM
4σ 2.14e3
0%
12378D
6.52e6
33.24
Abs. Int.
1.76e6
8.79e5
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDD Std.
29.52-34.51
367.8949 Fn2
Flags: PBM
4σ 6.82e3
0%
FS 12478D
2.06e7
31.97
CS 12347D
1.77e7
32.72
ES 12378D
2.04e7
33.23
Abs. Int.
5.72e6
2.86e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDD Std.
29.52-34.51
369.8919 Fn2
Flags: PBM
4σ 3.05e3
0%
FS 12478D
1.29e7
31.97
CS 12347D
1.12e7
32.72
ES 12378D
1.29e7
33.23
Abs. Int.
3.49e6
1.75e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
QC Check
29.52-34.51
366.9792 Fn2
Flags: -
0%
Abs. Int.
1.67e6
8.36e5
0.00e0
30.0
31.0
32.0
33.0
34.0
RT


Rel. Int.
100%
HxCDD
34.52-39.00
389.8156 Fn3
Flags: PBM
4σ 3.74e3
0%
123678D
8.79e6
37.35
123478D
8.46e6
37.23
123789D
9.43e6
37.66
Abs. Int.
2.25e6
1.12e6
0.00e0
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
HxCDD
34.52-39.00
391.8127 Fn3
Flags: PBM
4σ 2.59e3
0%
123678D
7.13e6
37.35
123478D
6.73e6
37.22
123789D
7.63e6
37.66
Abs. Int.
1.82e6
9.09e5
0.00e0
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
HxCDD Std.
34.52-39.00
401.8559 Fn3
Flags: PBM
4σ 4.85e3
0%
FS 123468D
1.91e7
36.13
ES 123678D
1.66e7
37.33
ES 123478D
1.57e7
37.21
ES 123789D
1.88e7
37.65
JS 123467D
8.67e6
37.53
Abs. Int.
5.25e6
2.62e6
0.00e0
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
HxCDD Std.
34.52-39.00
403.8530 Fn3
Flags: PBM
4σ 3.67e3
0%
FS 123468D
1.53e7
36.13
ES 123678D
1.30e7
37.33
ES 123478D
1.24e7
37.21
ES 123789D
1.52e7
37.65
JS 123467D
7.10e6
37.53
Abs. Int.
4.20e6
2.10e6
0.00e0
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
QC Check
34.52-39.00
380.9760 Fn3
Flags: -
0%
Abs. Int.
2.41e7
1.21e7
0.00e0
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT


Rel. Int.
100%
HpCDD
39.01-41.50
423.7767 Fn4
Flags: PBM
4σ 2.41e3
1234678D
6.90e6
40.57
Abs. Int.
1.47e6
7.37e5
0.00e0
0%
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
HpCDD
39.01-41.50
425.7737 Fn4
Flags: PBM
4σ 2.01e3
1234678D
6.74e6
40.57
Abs. Int.
1.48e6
7.40e5
0.00e0
0%
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
HpCDD Std.
39.01-41.50
435.8169 Fn4
Flags: PBM
4σ 4.09e3
FS 1234679D
1.58e7
39.86
ES 1234678D
1.35e7
40.55
Abs. Int.
4.26e6
2.13e6
0.00e0
0%
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
HpCDD Std.
39.01-41.50
437.8140 Fn4
Flags: PBM
4σ 5.26e3
FS 1234679D
1.49e7
39.86
ES 1234678D
1.25e7
40.56
Abs. Int.
3.80e6
1.90e6
0.00e0
0%
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
QC Check
39.01-41.50
430.9728 Fn4
Flags: -
Abs. Int.
1.14e7
5.68e6
0.00e0
0%
39.5
40.0
40.5
41.0
41.5 RT

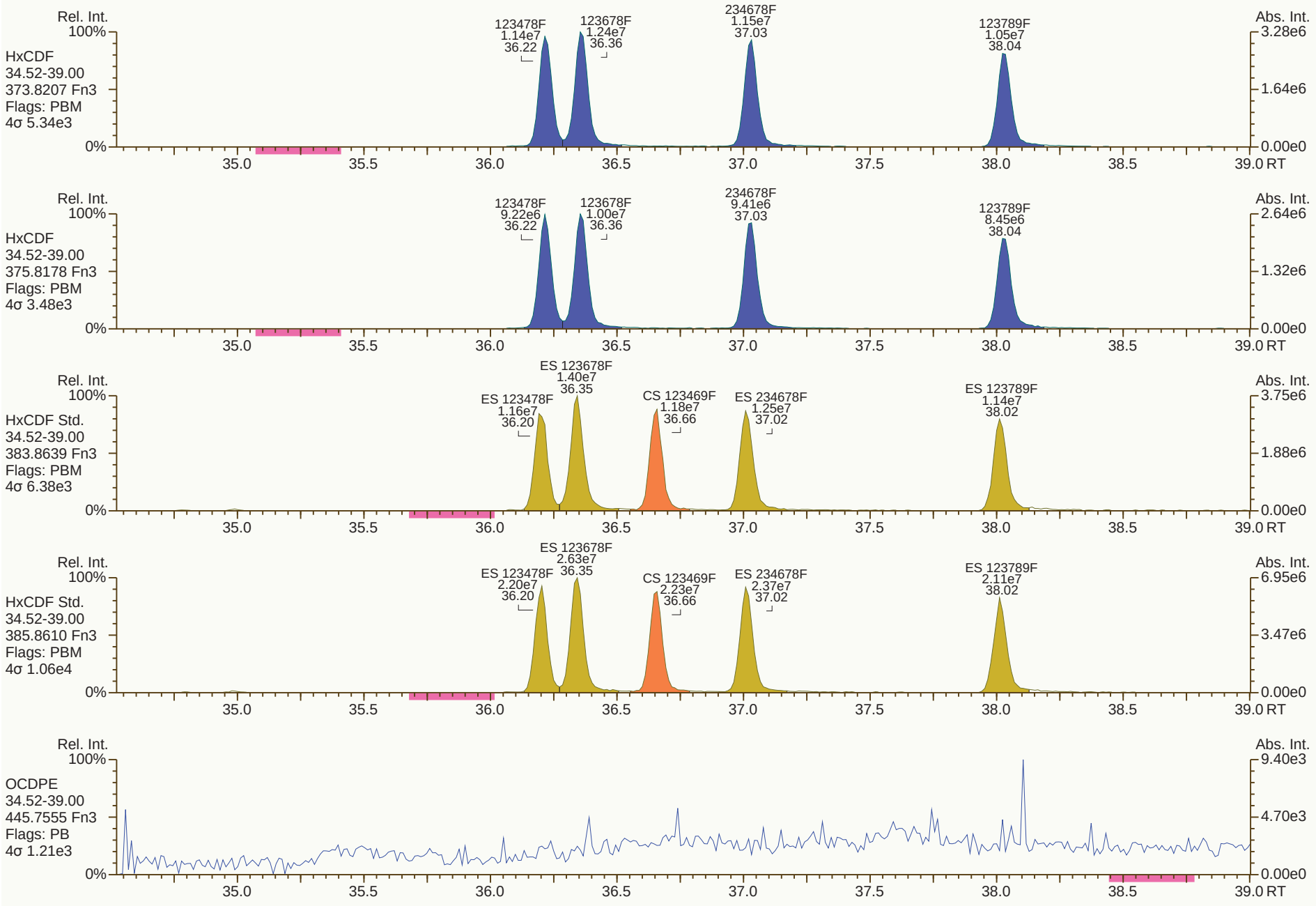

OCDD
9.00e6
43.35
Rel. Int.
100%
OCDD
41.52-46.01
457.7377 Fn5
Flags: PBM
4σ 1.71e3
0%
Abs. Int.
1.18e6
5.89e5
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
OCDD
1.02e7
43.35
Rel. Int.
100%
OCDD
41.52-46.01
459.7348 Fn5
Flags: PBM
4σ 3.10e3
0%
Abs. Int.
1.41e6
7.03e5
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
ES OCDD
1.73e7
43.35
Rel. Int.
100%
OCDD Std.
41.52-46.01
469.7780 Fn5
Flags: PBM
4σ 2.09e3
0%
Abs. Int.
2.30e6
1.15e6
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
ES OCDD
1.89e7
43.35
Rel. Int.
100%
OCDD Std.
41.52-46.01
471.7750 Fn5
Flags: PBM
4σ 3.40e3
0%
Abs. Int.
2.50e6
1.25e6
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
Rel. Int.
100%
QC Check
41.52-46.01
454.9728 Fn5
Flags: -
0%
Abs. Int.
3.75e6
1.88e6
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT

SGS ID: CS3_190828_DF_CB
Instr: [ILM] AutoSpec-Ultima HRMS3
Sample ID: 20-449-3
VSIR EI+ Expt: df_cl4-8_db5 GC: df_db5 Vial: 1
Acq: 28-Aug-2019 17:00:21
User: PSW Datafile: 190828C10

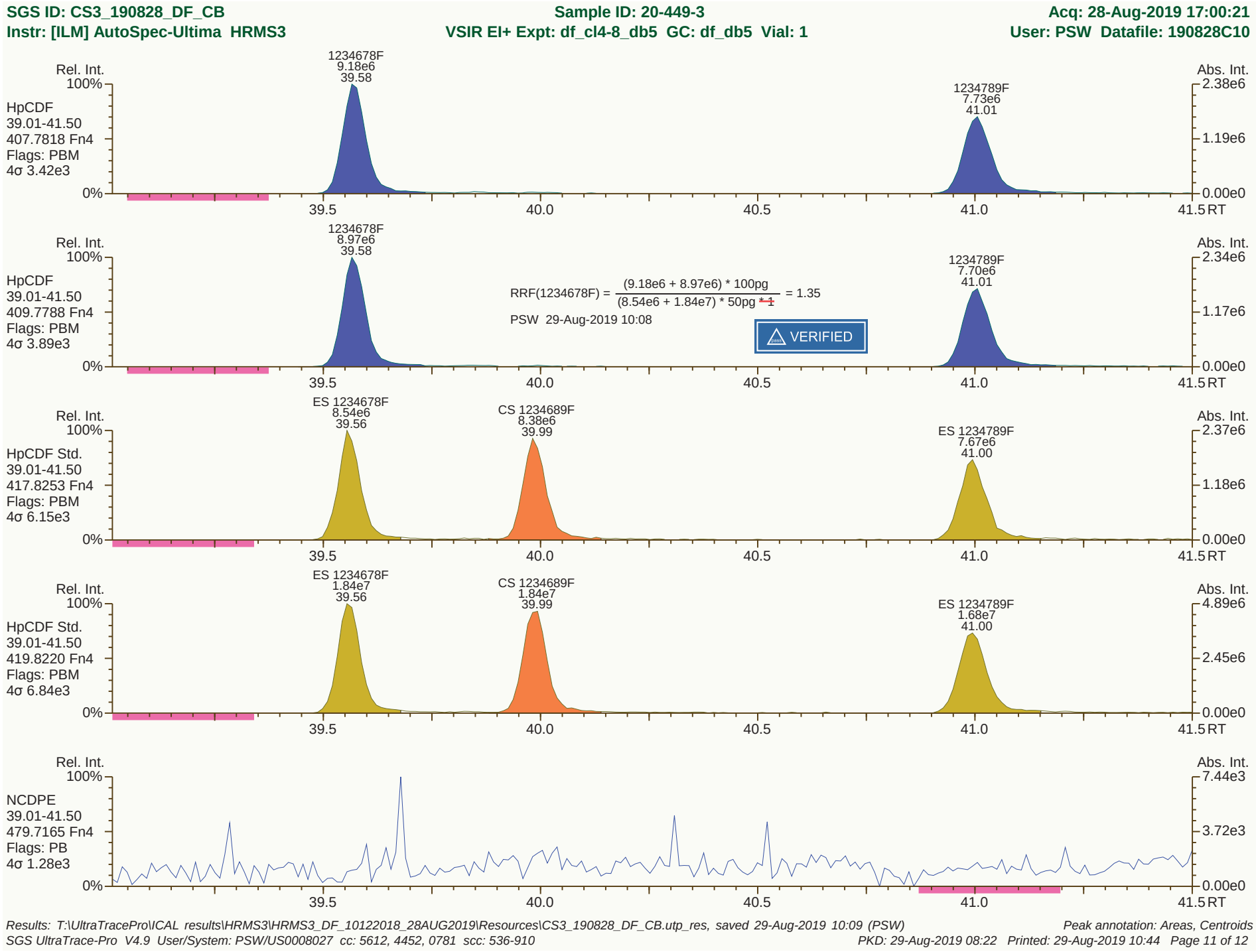



Rel. Int.
100%
0%
Abs. Int.
1.52e4
7.62e3
0.00e0
PeCDF-1
20.04-29.51
339.8597 Fn1
Flags: PB
4σ 4.54e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
0%
Abs. Int.
1.20e4
6.02e3
0.00e0
PeCDF-1
20.04-29.51
341.8568 Fn1
Flags: PB
4σ 4.31e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
0%
Abs. Int.
1.90e6
9.51e5
0.00e0
QC Check
20.04-29.51
316.9824 Fn1
Flags: -
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
PeCDF-2
29.52-34.51
339.8597 Fn2
Flags: PBM
4σ 3.53e3
0%
12378F
1.36e7
31.75
23478F
1.34e7
32.88
Abs. Int.
3.66e6
1.83e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDF-2
29.52-34.51
341.8568 Fn2
Flags: PBM
4σ 2.75e3
0%
12378F
8.78e6
31.75
23478F
8.78e6
32.88
Abs. Int.
2.41e6
1.20e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDF Std.
29.52-34.51
351.9000 Fn2
Flags: PBM
4σ 6.83e3
0%
CS 12346F
2.83e7
31.20
ES 12378F
2.86e7
31.73
ES 23478F
2.78e7
32.87
Abs. Int.
7.60e6
3.80e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDF Std.
29.52-34.51
353.8970 Fn2
Flags: PBM
4σ 5.45e3
0%
CS 12346F
1.85e7
31.20
ES 12378F
1.84e7
31.73
ES 23478F
1.74e7
32.87
Abs. Int.
4.67e6
2.34e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
HpCDPE
29.52-34.51
409.7974 Fn2
Flags: PB
4σ 1.20e3
0%
Abs. Int.
5.21e3
2.60e3
0.00e0
30.0
31.0
32.0
33.0
34.0
RT


Rel. Int.
100%
HxCDF
34.52-39.00
373.8207 Fn3
Flags: PBM
4σ 5.34e3
123478F 1.14e7 36.22
123678F 1.24e7 36.36
234678F 1.15e7 37.03
123789F 1.05e7 38.04
Abs. Int.
3.28e6
1.64e6
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
HxCDF
34.52-39.00
375.8178 Fn3
Flags: PBM
4σ 3.48e3
123478F 9.22e6 36.22
123678F 1.00e7 36.36
234678F 9.41e6 37.03
123789F 8.45e6 38.04
Abs. Int.
2.64e6
1.32e6
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
HxCDF Std.
34.52-39.00
383.8639 Fn3
Flags: PBM
4σ 6.38e3
ES 123678F 1.40e7 36.35
ES 123478F 1.16e7 36.20
CS 123469F 1.18e7 36.66
ES 234678F 1.25e7 37.02
ES 123789F 1.14e7 38.02
Abs. Int.
3.75e6
1.88e6
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
HxCDF Std.
34.52-39.00
385.8610 Fn3
Flags: PBM
4σ 1.06e4
ES 123678F 2.63e7 36.35
ES 123478F 2.20e7 36.20
CS 123469F 2.23e7 36.66
ES 234678F 2.37e7 37.02
ES 123789F 2.11e7 38.02
Abs. Int.
6.95e6
3.47e6
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
OCDPE
34.52-39.00
445.7555 Fn3
Flags: PB
4σ 1.21e3
Abs. Int.
9.40e3
4.70e3
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT

SGS ID: CS3_190828_DF_CB | **Sample ID: 20-449-3** | **Acq: 28-Aug-2019 17:00:21**
Instr: [ILM] AutoSpec-Ultima HRMS3 | **VSIR EI+ Expt: df_cl4-8_db5 GC: df_db5 Vial: 1** | **User: PSW Datafile: 190828C10**



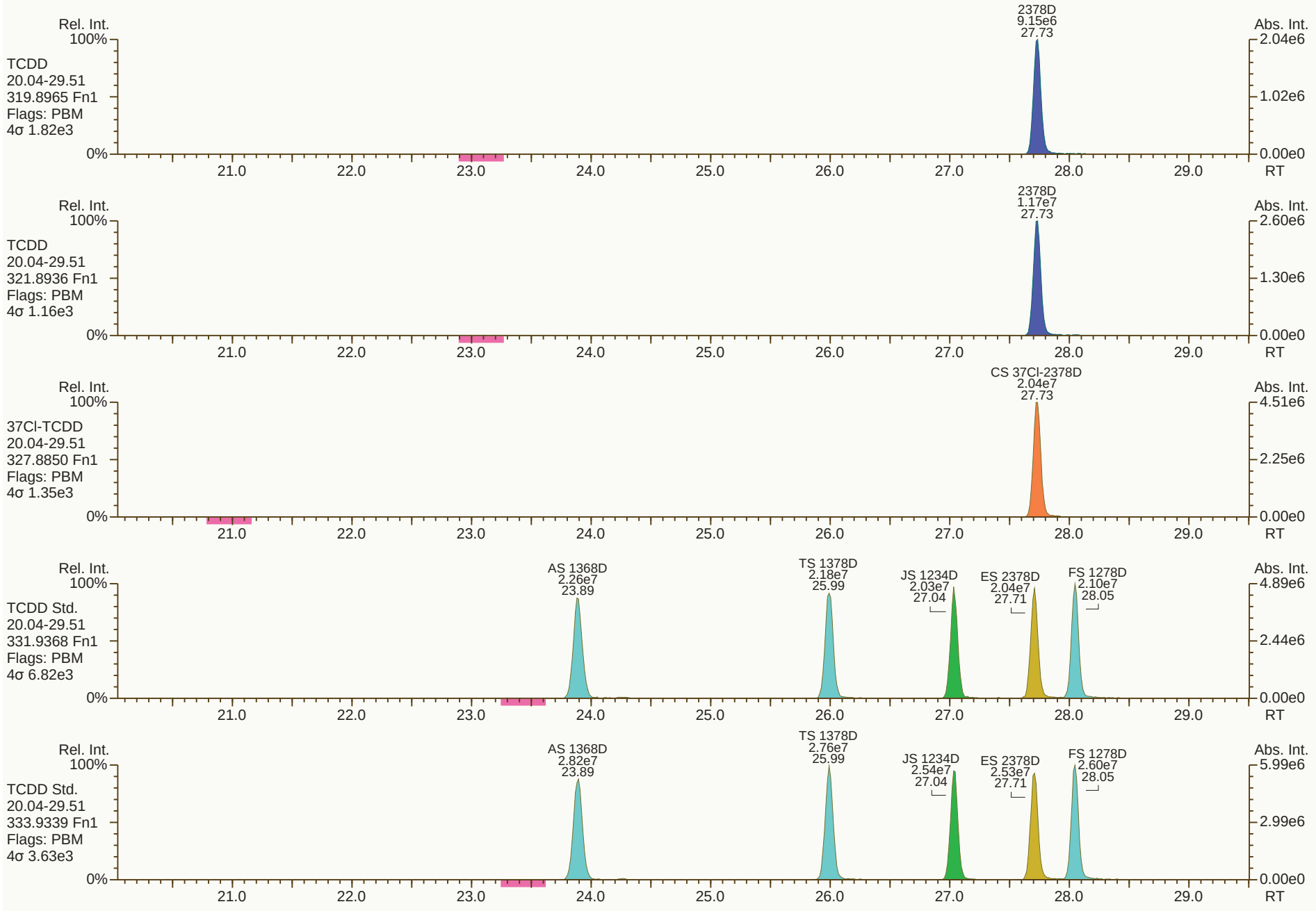
Results: T:\UltraTracePro\ICAL results\HRMS3\HRMS3_DF_10122018_28AUG2019\Resources\CS3_190828_DF_CB.utp_res, saved 29-Aug-2019 10:09 (PSW) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 5612, 4452, 0781 scc: 536-910 *PKD: 29-Aug-2019 08:22 Printed: 29-Aug-2019 10:44 Page 11 of 12*

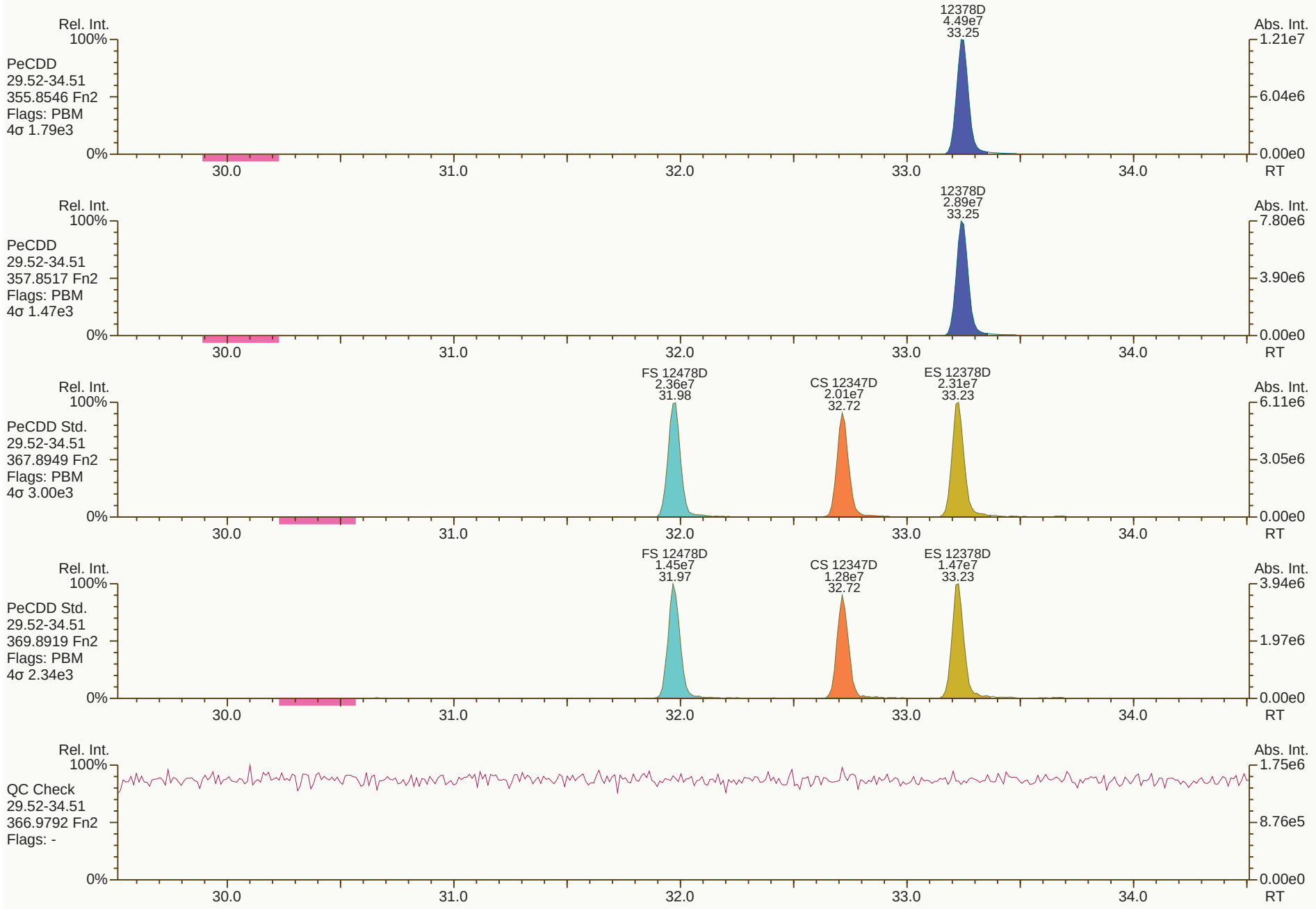

OCDF
1.09e7
43.51
Rel. Int.
Abs. Int.
OCDF
41.52-46.01
441.7428 Fn5
Flags: PBM
4σ 2.19e3
OCDF
1.23e7
43.50
OCDF
41.52-46.01
443.7398 Fn5
Flags: PBM
4σ 3.32e3
ES OCDF
2.08e7
43.49
OCDF Std.
41.52-46.01
453.7830 Fn5
Flags: PBM
4σ 3.24e3
ES OCDF
2.35e7
43.49
OCDF Std.
41.52-46.01
455.7801 Fn5
Flags: PBM
4σ 2.54e3
DCDPE
41.52-46.01
513.6775 Fn5
Flags: PB
4σ 1.15e3
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT

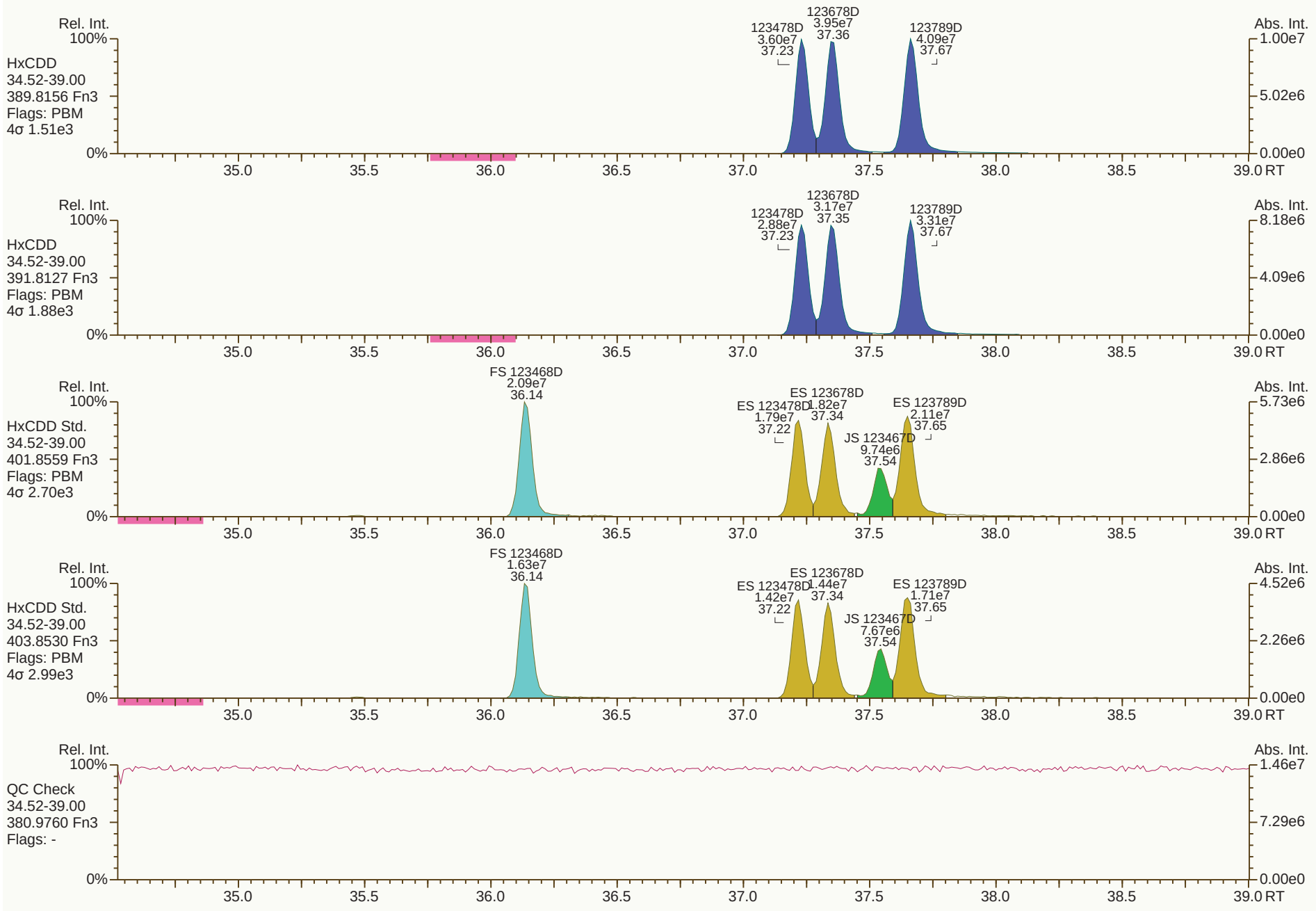
Dioxin/Furan QC Summary		Acq'd: 28 Aug 2019 17:47 PSW				ICAL: HRMS3_DF_10122018_28AUG2019	
Lab ID: CS4_190828_DF_CA		UTP: 29-Aug-2019 08:38:39 PSW				Checkcode: 139-753-GRB	
Sample ID: 20-281-2		Report: 29 Aug 2019 09:56 pw				Datafile: 190828C11	
Name	**RT**	**Response**	**RA**	**OK**	**Ref. RRFs**	**Calc. RRFs**	**Dev'n**
2378-TCDD	27.73	2.08E+07	0.78	Y	1.19	1.14	-4%
12378-PeCDD	33.25	7.38E+07	1.55	Y	0.98	0.97	-1%
123478-HxCDD	37.23	6.48E+07	1.25	Y	1.02	1.01	-1%
123678-HxCDD	37.36	7.12E+07	1.25	Y	1.09	1.09	1%
123789-HxCDD	37.67	7.40E+07	1.24	Y	0.97	0.97	0%
1234678-HpCDD	40.59	5.91E+07	1.04	Y	0.98	0.93	-5%
OCDD	43.38	8.69E+07	0.89	Y	1.07	1.05	-2%
2378-TCDF	26.82	2.62E+07	0.78	Y	1.05	1.01	-3%
12378-PeCDF	31.75	1.02E+08	1.54	Y	0.96	0.95	-1%
23478-PeCDF	32.89	1.00E+08	1.53	Y	0.99	0.97	-2%
123478-HxCDF	36.23	9.05E+07	1.23	Y	1.21	1.22	1%
123678-HxCDF	36.37	9.80E+07	1.23	Y	1.11	1.10	-1%
234678-HxCDF	37.04	9.17E+07	1.23	Y	1.12	1.11	0%
123789-HxCDF	38.05	8.54E+07	1.23	Y	1.11	1.10	0%
1234678-HpCDF	39.59	8.02E+07	1.02	Y	1.32	1.27	-4%
1234789-HpCDF	41.03	7.06E+07	1.02	Y	1.26	1.26	0%
OCDF	43.53	1.05E+08	0.90	Y	1.03	1.01	-2%
ES 2378-TCDD	27.71	4.57E+07	0.81	Y	0.99	1.00	1%
ES 12378-PeCDD	33.23	3.79E+07	1.57	Y	0.83	0.83	0%
ES 123478-HxCDD	37.22	3.20E+07	1.26	Y	0.95	0.92	-3%
ES 123678-HxCDD	37.34	3.26E+07	1.26	Y	0.98	0.94	-4%
ES 123789-HxCDD	37.65	3.82E+07	1.23	Y	1.14	1.10	-4%
ES 1234678-HpCDD	40.58	3.17E+07	1.06	Y	0.90	0.91	2%
ES OCDD	43.37	4.15E+07	0.90	Y	0.63	0.60	-5%
ES 2378-TCDF	26.8	6.47E+07	0.80	Y	1.00	0.98	-1%
ES 12378-PeCDF	31.74	5.36E+07	1.54	Y	0.83	0.81	-2%
ES 23478-PeCDF	32.87	5.19E+07	1.56	Y	0.81	0.79	-2%
ES 123478-HxCDF	36.21	3.70E+07	0.52	Y	1.12	1.06	-5%
ES 123678-HxCDF	36.35	4.46E+07	0.53	Y	1.33	1.28	-4%
ES 234678-HxCDF	37.02	4.11E+07	0.53	Y	1.21	1.18	-2%
ES 123789-HxCDF	38.03	3.87E+07	0.54	Y	1.12	1.11	-1%
ES 1234678-HpCDF	39.58	3.15E+07	0.45	Y	0.92	0.91	-2%
ES 1234789-HpCDF	41.02	2.81E+07	0.45	Y	0.82	0.81	-2%
ES OCDF	43.52	5.20E+07	0.90	Y	0.78	0.75	-4%

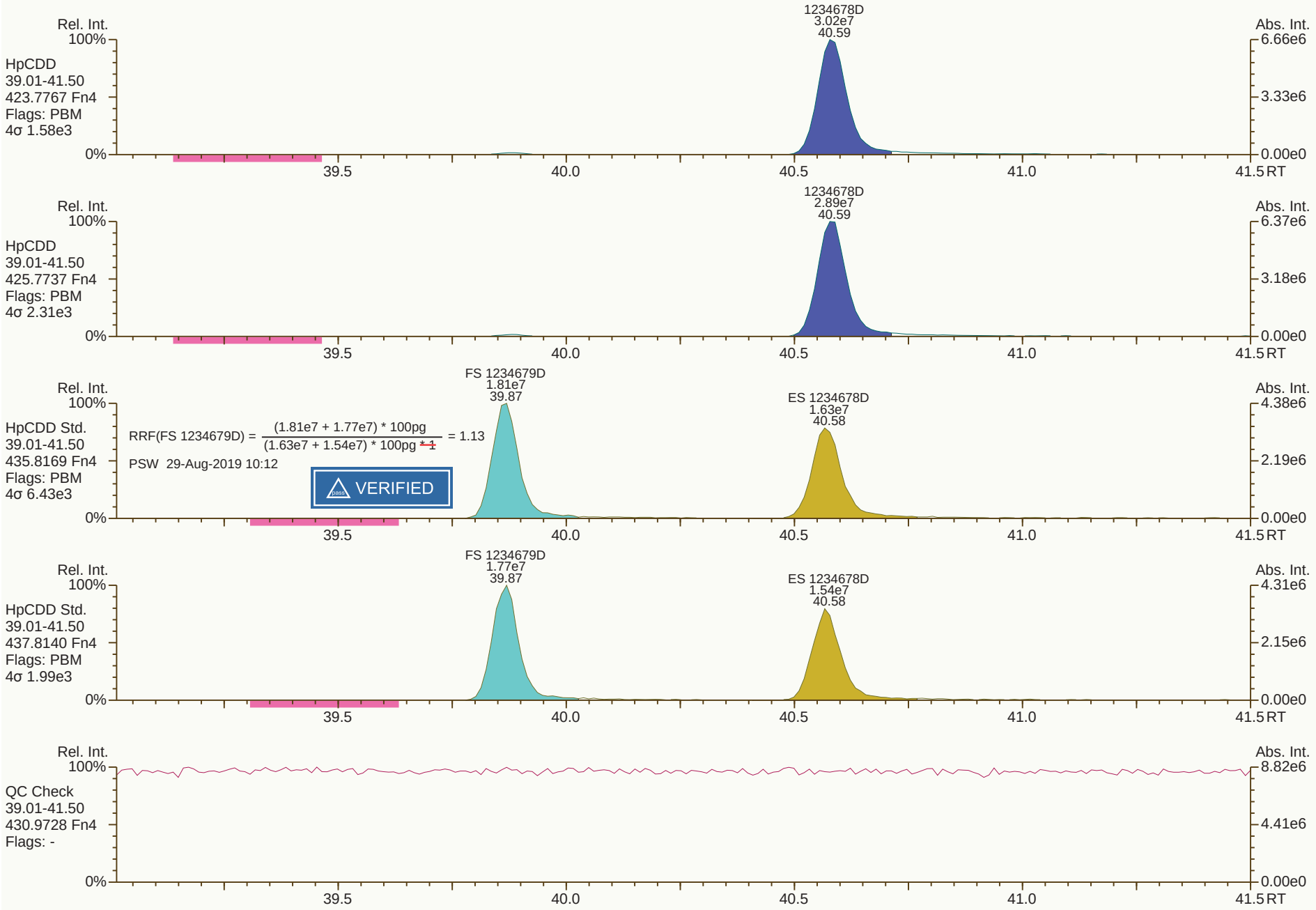
Dioxin/Furan QC Summary		Acq'd: 28 Aug 2019 17:47 PSW				ICAL: HRMS3_DF_10122018_28AUG2019	
Lab ID: CS4_190828_DF_CA		UTP: 29-Aug-2019 08:38:39 PSW				Checkcode: 139-753-GRB	
Sample ID: 20-281-2		Report: 29 Aug 2019 09:56 pw				Datafile: 190828C11	
Name	**RT**	**Response**	**RA**	**OK**	**Ref. RRFs**	**Calc. RRFs**	**Dev'n**
JS 1234-TCDD	27.04	4.57E+07	0.80	Y	-	-	-
JS 1234-TCDF	25.40	6.58E+07	0.79	Y	-	-	-
JS 123467-HxCDD	37.54	1.74E+07	1.27	Y	-	-	-
CS 37Cl-2378-TCDD	27.73	2.04E+07	n/a	-	1.12	1.11	-1%
CS 12347-PeCDD	32.72	3.29E+07	1.58	Y	0.71	0.72	1%
CS 12346-PeCDF	31.20	5.33E+07	1.53	Y	0.81	0.81	0%
CS 123469-HxCDF	36.66	3.80E+07	0.53	Y	1.12	1.09	-3%
CS 1234689-HpCDF	40.01	3.12E+07	0.46	Y	0.90	0.89	0%
SS 37Cl-2378-TCDD	27.73	2.04E+07	n/a	-	1.14	1.11	-2%
SS 12347-PeCDD	32.72	3.29E+07	1.58	Y	0.86	0.87	1%
SS 12346-PeCDF	31.20	5.33E+07	1.53	Y	0.98	0.99	2%
SS 123469-HxCDF	36.66	3.80E+07	0.53	Y	0.85	0.85	1%
SS 1234689-HpCDF	40.01	3.12E+07	0.46	Y	0.97	0.99	1%
AS 1368-TCDD	23.89	5.08E+07	0.80	Y	1.12	1.11	-1%
AS 1368-TCDF	21.67	7.84E+07	0.79	Y	1.19	1.19	0%
FS 1278-TCDD	28.05	4.69E+07	0.81	Y	1.02	1.03	1%
FS 12478-PeCDD	31.98	3.81E+07	1.62	Y	0.98	1.01	2%
FS 123468-HxCDD	36.14	3.72E+07	1.28	Y	1.17	1.16	0%
FS 1234679-HpCDD	39.87	3.58E+07	1.02	Y	1.14	1.13	-1%
TS 1378-TCDD	25.99	4.94E+07	0.79	Y	1.09	1.08	-1%
~~OCDD-a~~	~~NotFnd~~						
~~OCDF-a~~	~~NotFnd~~						

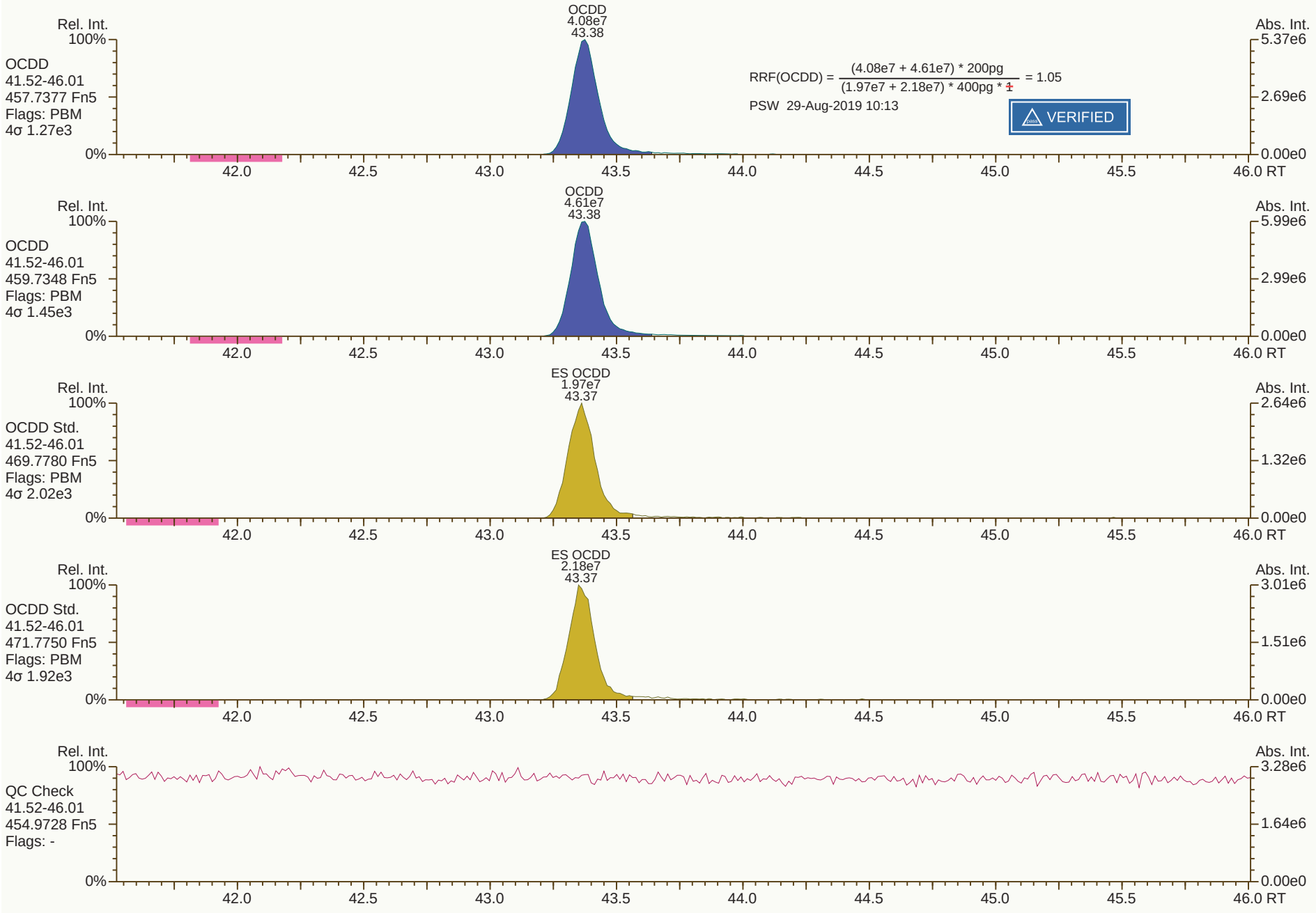

Rel. Int.
100%
QC Check
20.04-29.51
316.9824 Fn1
Flags: -
0%
Abs. Int.
1.97e6
9.83e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
QC Check
29.52-34.51
366.9792 Fn2
Flags: -
0%
Abs. Int.
1.75e6
8.76e5
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
QC Check
34.52-39.00
380.9760 Fn3
Flags: -
0%
Abs. Int.
1.46e7
7.29e6
0.00e0
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0
RT
Rel. Int.
100%
QC Check
39.01-41.50
430.9728 Fn4
Flags: -
0%
Abs. Int.
8.82e6
4.41e6
0.00e0
39.5
40.0
40.5
41.0
41.5
RT
Rel. Int.
100%
QC Check
41.52-46.01
454.9728 Fn5
Flags: -
0%
Abs. Int.
3.28e6
1.64e6
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0
RT


Rel. Int.
100%
TCDD
20.04-29.51
319.8965 Fn1
Flags: PBM
4σ 1.82e3
0%
2378D
9.15e6
27.73
Abs. Int.
2.04e6
1.02e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD
20.04-29.51
321.8936 Fn1
Flags: PBM
4σ 1.16e3
0%
2378D
1.17e7
27.73
Abs. Int.
2.60e6
1.30e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
37Cl-TCDD
20.04-29.51
327.8850 Fn1
Flags: PBM
4σ 1.35e3
0%
CS 37Cl-2378D
2.04e7
27.73
Abs. Int.
4.51e6
2.25e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.04-29.51
331.9368 Fn1
Flags: PBM
4σ 6.82e3
0%
AS 1368D
2.26e7
23.89
TS 1378D
2.18e7
25.99
JS 1234D
2.03e7
27.04
ES 2378D
2.04e7
27.71
FS 1278D
2.10e7
28.05
Abs. Int.
4.89e6
2.44e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.04-29.51
333.9339 Fn1
Flags: PBM
4σ 3.63e3
0%
AS 1368D
2.82e7
23.89
TS 1378D
2.76e7
25.99
JS 1234D
2.54e7
27.04
ES 2378D
2.53e7
27.71
FS 1278D
2.60e7
28.05
Abs. Int.
5.99e6
2.99e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
PeCDD
29.52-34.51
355.8546 Fn2
Flags: PBM
4σ 1.79e3
0%
12378D
4.49e7
33.25
Abs. Int.
1.21e7
6.04e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDD
29.52-34.51
357.8517 Fn2
Flags: PBM
4σ 1.47e3
0%
12378D
2.89e7
33.25
Abs. Int.
7.80e6
3.90e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDD Std.
29.52-34.51
367.8949 Fn2
Flags: PBM
4σ 3.00e3
0%
FS 12478D
2.36e7
31.98
CS 12347D
2.01e7
32.72
ES 12378D
2.31e7
33.23
Abs. Int.
6.11e6
3.05e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDD Std.
29.52-34.51
369.8919 Fn2
Flags: PBM
4σ 2.34e3
0%
FS 12478D
1.45e7
31.97
CS 12347D
1.28e7
32.72
ES 12378D
1.47e7
33.23
Abs. Int.
3.94e6
1.97e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
QC Check
29.52-34.51
366.9792 Fn2
Flags: -
0%
Abs. Int.
1.75e6
8.76e5
0.00e0
30.0
31.0
32.0
33.0
34.0
RT


Rel. Int.
100%
HxCDD
34.52-39.00
389.8156 Fn3
Flags: PBM
4σ 1.51e3
123478D
3.60e7
37.23
123678D
3.95e7
37.36
123789D
4.09e7
37.67
Abs. Int.
1.00e7
5.02e6
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
HxCDD
34.52-39.00
391.8127 Fn3
Flags: PBM
4σ 1.88e3
123478D
2.88e7
37.23
123678D
3.17e7
37.35
123789D
3.31e7
37.67
Abs. Int.
8.18e6
4.09e6
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
HxCDD Std.
34.52-39.00
401.8559 Fn3
Flags: PBM
4σ 2.70e3
FS 123468D
2.09e7
36.14
ES 123478D
1.79e7
37.22
ES 123678D
1.82e7
37.34
JS 123467D
9.74e6
37.54
ES 123789D
2.11e7
37.65
Abs. Int.
5.73e6
2.86e6
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
HxCDD Std.
34.52-39.00
403.8530 Fn3
Flags: PBM
4σ 2.99e3
FS 123468D
1.63e7
36.14
ES 123478D
1.42e7
37.22
ES 123678D
1.44e7
37.34
JS 123467D
7.67e6
37.54
ES 123789D
1.71e7
37.65
Abs. Int.
4.52e6
2.26e6
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
QC Check
34.52-39.00
380.9760 Fn3
Flags: -
Abs. Int.
1.46e7
7.29e6
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT

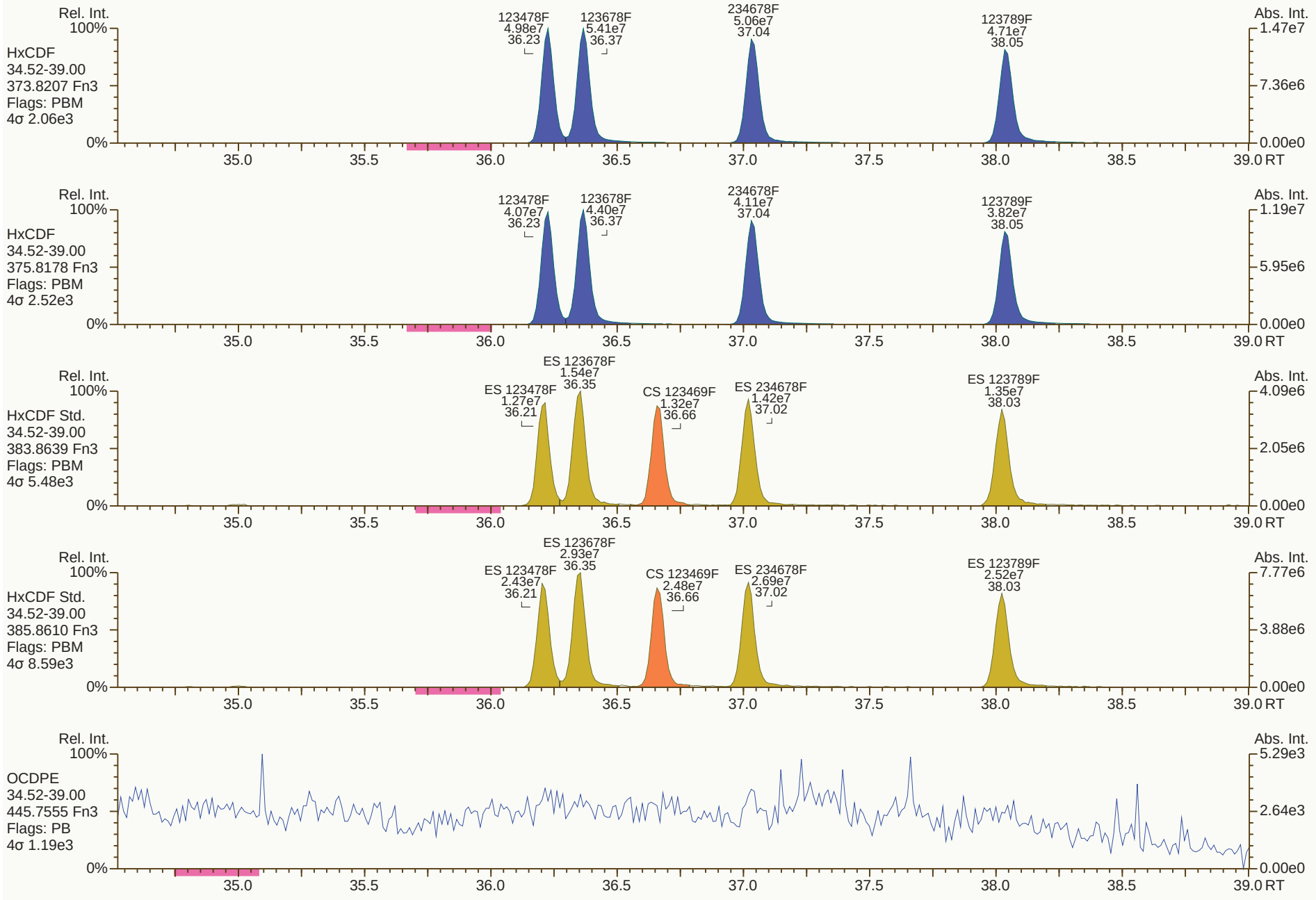

Rel. Int.
100%
HpCDD
39.01-41.50
423.7767 Fn4
Flags: PBM
4σ 1.58e3
0%
1234678D
3.02e7
40.59
Abs. Int.
6.66e6
3.33e6
0.00e0
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
HpCDD
39.01-41.50
425.7737 Fn4
Flags: PBM
4σ 2.31e3
0%
1234678D
2.89e7
40.59
Abs. Int.
6.37e6
3.18e6
0.00e0
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
HpCDD Std.
39.01-41.50
435.8169 Fn4
Flags: PBM
4σ 6.43e3
0%
RRF(FS 1234679D) = (1.81e7 + 1.77e7) * 100pg / (1.63e7 + 1.54e7) * 100pg * 1 = 1.13
PSW 29-Aug-2019 10:12
VERIFIED
FS 1234679D
1.81e7
39.87
ES 1234678D
1.63e7
40.58
Abs. Int.
4.38e6
2.19e6
0.00e0
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
HpCDD Std.
39.01-41.50
437.8140 Fn4
Flags: PBM
4σ 1.99e3
0%
FS 1234679D
1.77e7
39.87
ES 1234678D
1.54e7
40.58
Abs. Int.
4.31e6
2.15e6
0.00e0
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
QC Check
39.01-41.50
430.9728 Fn4
Flags: -
0%
Abs. Int.
8.82e6
4.41e6
0.00e0
39.5
40.0
40.5
41.0
41.5 RT


Rel. Int.
100%
OCDD
41.52-46.01
457.7377 Fn5
Flags: PBM
4σ 1.27e3
0%
OCDD
4.08e7
43.38
Abs. Int.
5.37e6
2.69e6
0.00e0
RRF(OCDD) = (4.08e7 + 4.61e7) * 200pg / (1.97e7 + 2.18e7) * 400pg * 1 = 1.05
PSW 29-Aug-2019 10:13
VERIFIED
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
Rel. Int.
100%
OCDD
41.52-46.01
459.7348 Fn5
Flags: PBM
4σ 1.45e3
0%
OCDD
4.61e7
43.38
Abs. Int.
5.99e6
2.99e6
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
Rel. Int.
100%
OCDD Std.
41.52-46.01
469.7780 Fn5
Flags: PBM
4σ 2.02e3
0%
ES OCDD
1.97e7
43.37
Abs. Int.
2.64e6
1.32e6
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
Rel. Int.
100%
OCDD Std.
41.52-46.01
471.7750 Fn5
Flags: PBM
4σ 1.92e3
0%
ES OCDD
2.18e7
43.37
Abs. Int.
3.01e6
1.51e6
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
Rel. Int.
100%
QC Check
41.52-46.01
454.9728 Fn5
Flags: -
0%
Abs. Int.
3.28e6
1.64e6
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT


Rel. Int.
100%
TCDF
20.04-29.51
303.9016 Fn1
Flags: PBM
4σ 9.81e2
0%
2378F
1.15e7
26.82
Abs. Int.
2.47e6
1.24e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF
20.04-29.51
305.8987 Fn1
Flags: PBM
4σ 1.63e3
0%
2378F
1.47e7
26.82
Abs. Int.
3.23e6
1.62e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.04-29.51
315.9419 Fn1
Flags: PBM
4σ 9.88e3
0%
AS 1368F
3.45e7
21.67
JS 1234F
2.90e7
25.40
ES 2378F
2.86e7
26.80
Abs. Int.
6.09e6
3.04e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.04-29.51
317.9389 Fn1
Flags: PBM
4σ 6.33e3
0%
AS 1368F
4.39e7
21.67
JS 1234F
3.68e7
25.39
ES 2378F
3.60e7
26.80
Abs. Int.
7.89e6
3.94e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
HxCDPE
20.04-29.51
375.8364 Fn1
Flags: PB
4σ 1.14e3
0%
Abs. Int.
7.79e3
3.90e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
0%
Abs. Int.
7.54e3
3.77e3
0.00e0
RT
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
PeCDF-1
20.04-29.51
339.8597 Fn1
Flags: PB
4σ 1.37e3
PeCDF-1
20.04-29.51
341.8568 Fn1
Flags: PB
4σ 1.82e3
1.07e4
5.35e3
QC Check
20.04-29.51
316.9824 Fn1
Flags: -
1.97e6
9.83e5

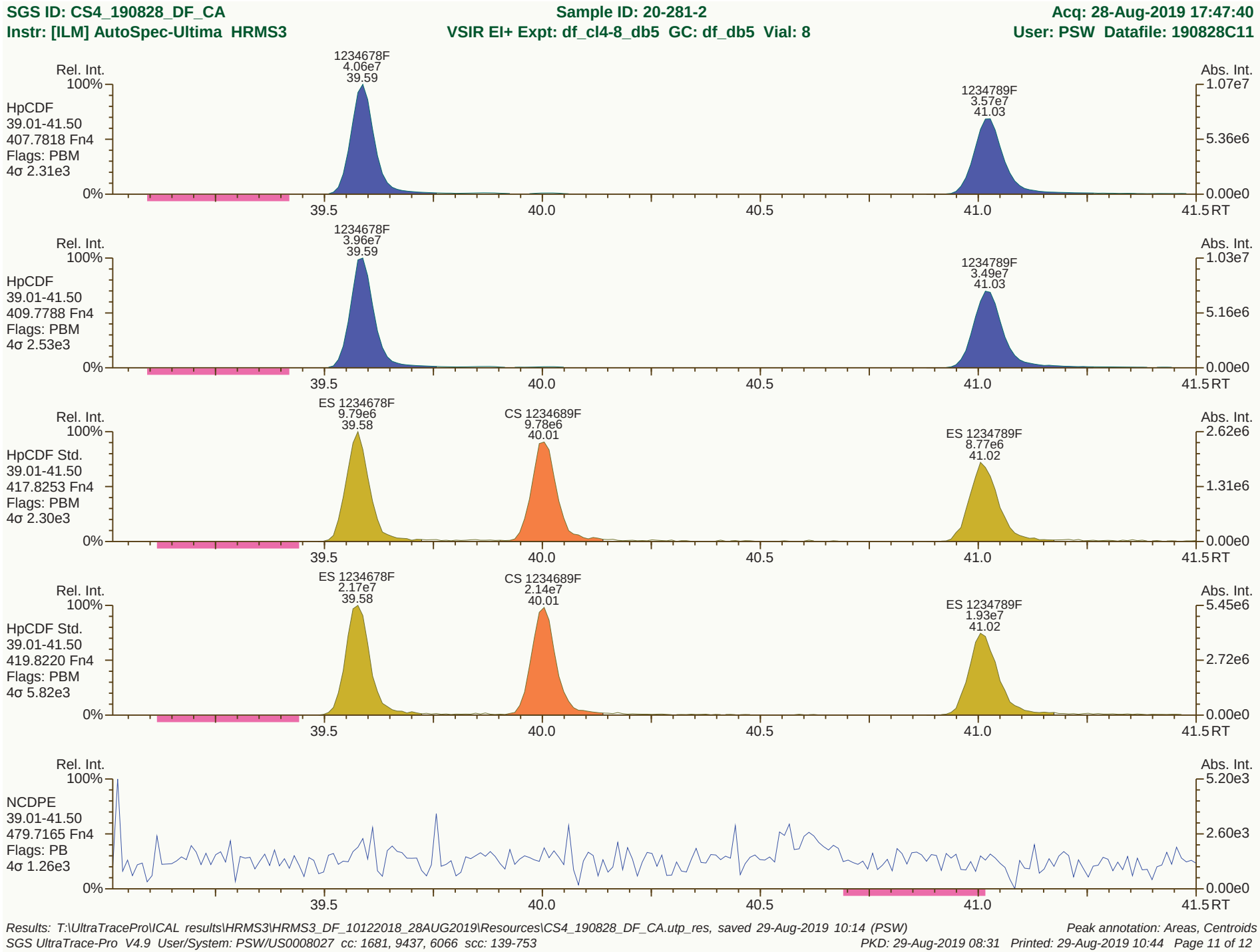

Rel. Int.
100%
PeCDF-2
29.52-34.51
339.8597 Fn2
Flags: PBM
4σ 1.89e3
0%
12378F
6.20e7
31.75
23478F
6.07e7
32.89
Abs. Int.
1.67e7
8.34e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDF-2
29.52-34.51
341.8568 Fn2
Flags: PBM
4σ 1.48e3
0%
12378F
4.03e7
31.75
23478F
3.97e7
32.89
Abs. Int.
1.08e7
5.42e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDF Std.
29.52-34.51
351.9000 Fn2
Flags: PBM
4σ 2.08e3
0%
CS 12346F
3.23e7
31.20
ES 12378F
3.24e7
31.74
ES 23478F
3.16e7
32.87
Abs. Int.
8.75e6
4.37e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDF Std.
29.52-34.51
353.8970 Fn2
Flags: PBM
4σ 2.96e3
0%
CS 12346F
2.10e7
31.20
ES 12378F
2.11e7
31.74
ES 23478F
2.03e7
32.87
Abs. Int.
5.61e6
2.81e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
HpCDPE
29.52-34.51
409.7974 Fn2
Flags: PB
4σ 1.22e3
0%
Abs. Int.
6.94e3
3.47e3
0.00e0
30.0
31.0
32.0
33.0
34.0
RT


Rel. Int.
100%
HxCDF
34.52-39.00
373.8207 Fn3
Flags: PBM
4σ 2.06e3
123478F
4.98e7
36.23
123678F
5.41e7
36.37
234678F
5.06e7
37.04
123789F
4.71e7
38.05
Abs. Int.
1.47e7
7.36e6
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
HxCDF
34.52-39.00
375.8178 Fn3
Flags: PBM
4σ 2.52e3
123478F
4.07e7
36.23
123678F
4.40e7
36.37
234678F
4.11e7
37.04
123789F
3.82e7
38.05
Abs. Int.
1.19e7
5.95e6
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
HxCDF Std.
34.52-39.00
383.8639 Fn3
Flags: PBM
4σ 5.48e3
ES 123678F
1.54e7
36.35
ES 123478F
1.27e7
36.21
CS 123469F
1.32e7
36.66
ES 234678F
1.42e7
37.02
ES 123789F
1.35e7
38.03
Abs. Int.
4.09e6
2.05e6
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
HxCDF Std.
34.52-39.00
385.8610 Fn3
Flags: PBM
4σ 8.59e3
ES 123678F
2.93e7
36.35
ES 123478F
2.43e7
36.21
CS 123469F
2.48e7
36.66
ES 234678F
2.69e7
37.02
ES 123789F
2.52e7
38.03
Abs. Int.
7.77e6
3.88e6
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
OCDPE
34.52-39.00
445.7555 Fn3
Flags: PB
4σ 1.19e3
Abs. Int.
5.29e3
2.64e3
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT

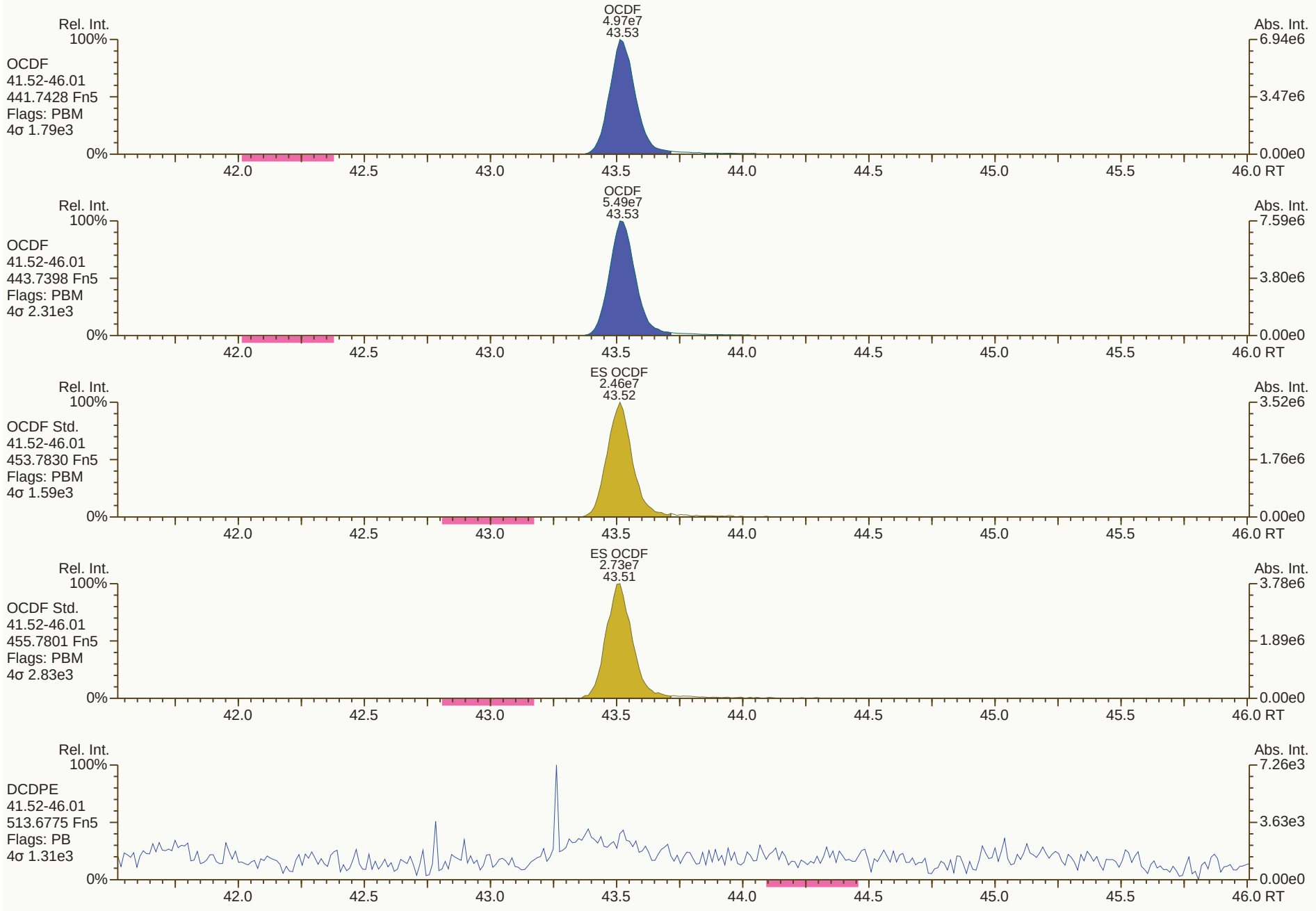
SGS ID: CS4_190828_DF_CA
Instr: [ILM] AutoSpec-Ultima HRMS3

Sample ID: 20-281-2
VSIR EI+ Expt: df_cl4-8_db5 GC: df_db5 Vial: 8

Acq: 28-Aug-2019 17:47:40
User: PSW Datafile: 190828C11



Results: T:\UltraTracePro\ICAL results\HRMS3\HRMS3_DF_10122018_28AUG2019\Resources\CS4_190828_DF_CA.utp_res, saved 29-Aug-2019 10:14 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 1681, 9437, 6066 scc: 139-753
PKD: 29-Aug-2019 08:31 Printed: 29-Aug-2019 10:44 Page 11 of 12

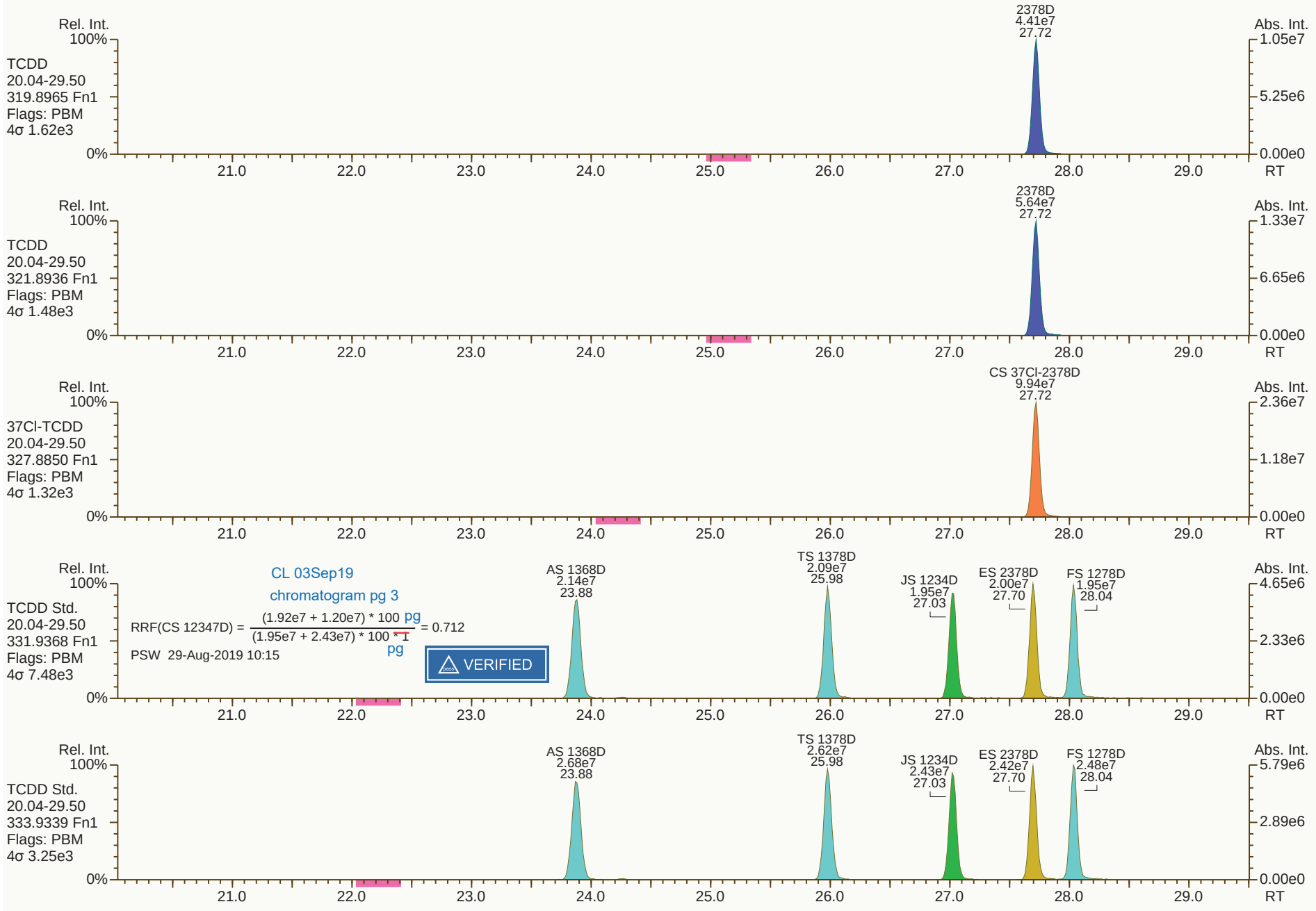

OCDF
4.97e7
43.53
Rel. Int.
100%
0%
Abs. Int.
6.94e6
3.47e6
0.00e0
OCDF
41.52-46.01
441.7428 Fn5
Flags: PBM
4σ 1.79e3
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
OCDF
5.49e7
43.53
Rel. Int.
100%
0%
Abs. Int.
7.59e6
3.80e6
0.00e0
OCDF
41.52-46.01
443.7398 Fn5
Flags: PBM
4σ 2.31e3
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
ES OCDF
2.46e7
43.52
Rel. Int.
100%
0%
Abs. Int.
3.52e6
1.76e6
0.00e0
OCDF Std.
41.52-46.01
453.7830 Fn5
Flags: PBM
4σ 1.59e3
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
ES OCDF
2.73e7
43.51
Rel. Int.
100%
0%
Abs. Int.
3.78e6
1.89e6
0.00e0
OCDF Std.
41.52-46.01
455.7801 Fn5
Flags: PBM
4σ 2.83e3
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
Rel. Int.
100%
0%
Abs. Int.
7.26e3
3.63e3
0.00e0
DCDPE
41.52-46.01
513.6775 Fn5
Flags: PB
4σ 1.31e3
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT

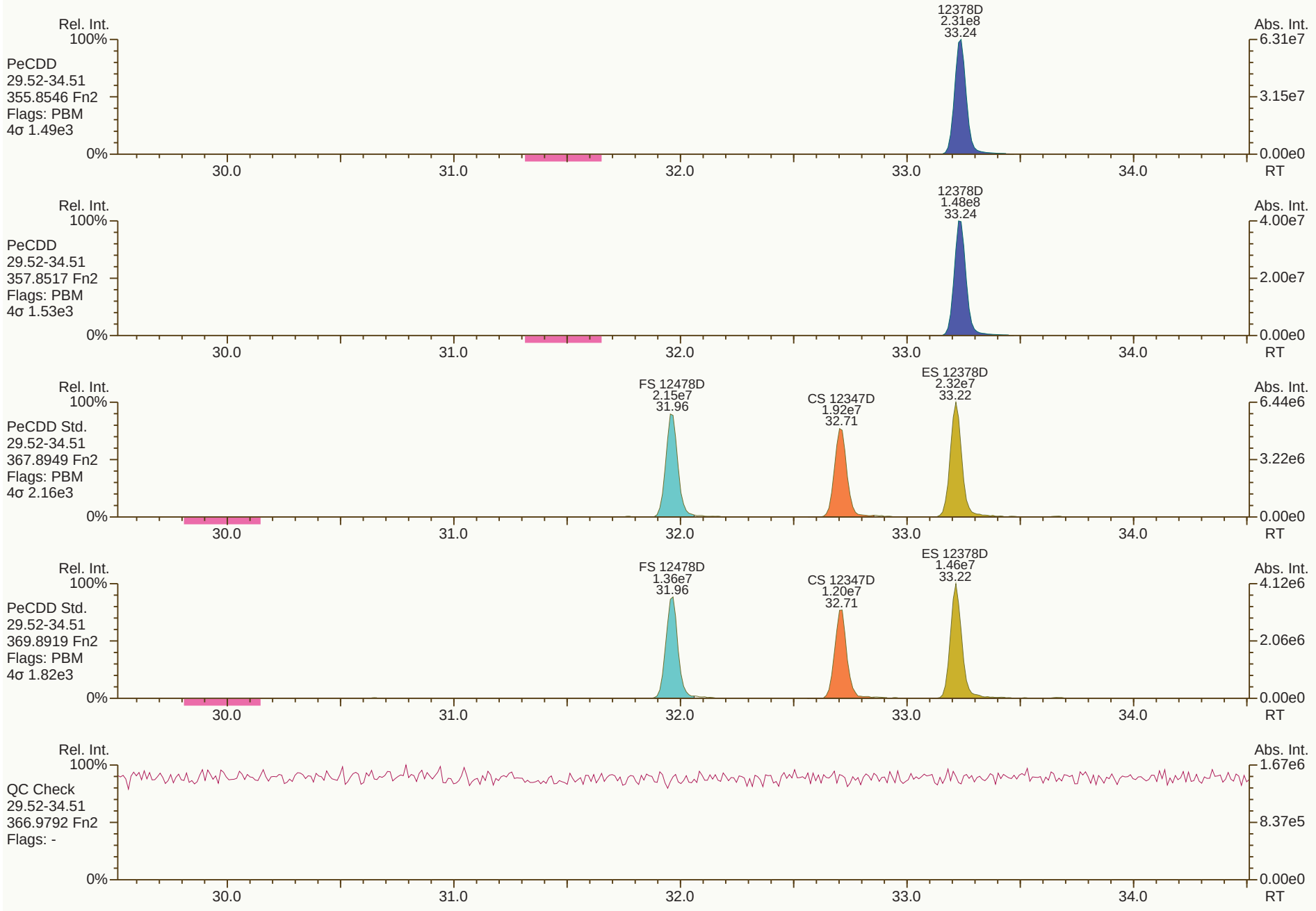
Dioxin/Furan QC Summary		Acq'd: 28 Aug 2019 18:35 PSW				ICAL: HRMS3_DF_10122018_28AUG2019	
Lab ID: CS5_190828_DF_CA		UTP: 29-Aug-2019 08:39:02 PSW				Checkcode: 752-004-GNN	
Sample ID: 20-281-1		Report: 29 Aug 2019 09:56 pw				Datafile: 190828C12	
Name	**RT**	**Response**	**RA**	**OK**	**Ref. RRFs**	**Calc. RRFs**	**Dev'n**
2378-TCDD	27.72	1.01E+08	0.78	Y	1.19	1.14	-4%
12378-PeCDD	33.24	3.80E+08	1.56	Y	0.98	1.00	2%
123478-HxCDD	37.23	3.41E+08	1.25	Y	1.02	1.05	3%
123678-HxCDD	37.35	3.60E+08	1.25	Y	1.09	1.06	-3%
123789-HxCDD	37.66	3.78E+08	1.25	Y	0.97	0.96	-1%
1234678-HpCDD	40.58	2.97E+08	1.04	Y	0.98	0.99	2%
OCDD	43.38	4.42E+08	0.89	Y	1.07	1.06	-1%
2378-TCDF	26.81	1.26E+08	0.78	Y	1.05	0.99	-5%
12378-PeCDF	31.74	5.17E+08	1.55	Y	0.96	0.96	0%
23478-PeCDF	32.88	5.08E+08	1.54	Y	0.99	0.98	0%
123478-HxCDF	36.22	4.57E+08	1.23	Y	1.21	1.21	0%
123678-HxCDF	36.36	4.99E+08	1.23	Y	1.11	1.11	0%
234678-HxCDF	37.03	4.54E+08	1.23	Y	1.12	1.11	-1%
123789-HxCDF	38.04	4.35E+08	1.24	Y	1.11	1.12	1%
1234678-HpCDF	39.58	4.04E+08	1.02	Y	1.32	1.27	-4%
1234789-HpCDF	41.02	3.47E+08	1.03	Y	1.26	1.25	0%
OCDF	43.52	5.36E+08	0.90	Y	1.03	1.01	-2%
ES 2378-TCDD	27.70	4.42E+07	0.82	Y	0.99	1.01	2%
ES 12378-PeCDD	33.22	3.78E+07	1.59	Y	0.83	0.86	4%
ES 123478-HxCDD	37.21	3.24E+07	1.24	Y	0.95	0.99	5%
ES 123678-HxCDD	37.33	3.40E+07	1.27	Y	0.98	1.04	7%
ES 123789-HxCDD	37.65	3.92E+07	1.26	Y	1.14	1.20	5%
ES 1234678-HpCDD	40.56	2.99E+07	1.06	Y	0.90	0.92	2%
ES OCDD	43.36	4.17E+07	0.93	Y	0.63	0.64	2%
ES 2378-TCDF	26.79	6.35E+07	0.78	Y	1.00	1.03	3%
ES 12378-PeCDF	31.73	5.38E+07	1.56	Y	0.83	0.87	5%
ES 23478-PeCDF	32.86	5.16E+07	1.58	Y	0.81	0.84	4%
ES 123478-HxCDF	36.2	3.79E+07	0.54	Y	1.12	1.16	3%
ES 123678-HxCDF	36.34	4.50E+07	0.53	Y	1.33	1.38	3%
ES 234678-HxCDF	37.01	4.10E+07	0.51	Y	1.21	1.25	4%
ES 123789-HxCDF	38.02	3.89E+07	0.52	Y	1.12	1.19	6%
ES 1234678-HpCDF	39.57	3.17E+07	0.45	Y	0.92	0.97	5%
ES 1234789-HpCDF	41	2.77E+07	0.46	Y	0.82	0.85	3%
ES OCDF	43.51	5.31E+07	0.89	Y	0.78	0.81	4%

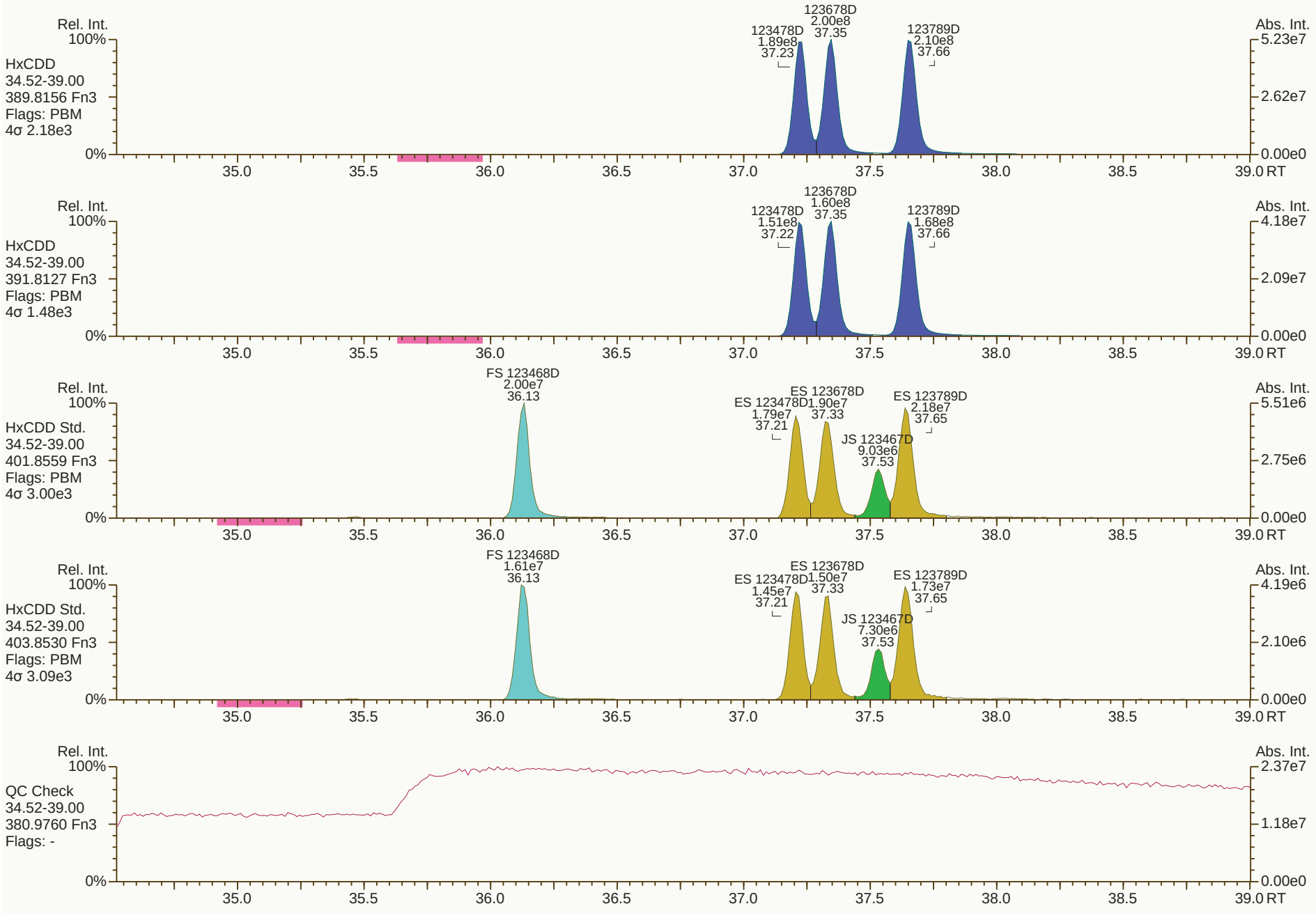
Dioxin/Furan QC Summary		Acq'd: 28 Aug 2019 18:35 PSW				ICAL: HRMS3_DF_10122018_28AUG2019	
Lab ID: CS5_190828_DF_CA		UTP: 29-Aug-2019 08:39:02 PSW				Checkcode: 752-004-GNN	
Sample ID: 20-281-1		Report: 29 Aug 2019 09:56 pw				Datafile: 190828C12	
Name	**RT**	**Response**	**RA**	**OK**	**Ref. RRFs**	**Calc. RRFs**	**Dev'n**
JS 1234-TCDD	27.03	4.38E+07	0.80	Y	-	-	-
JS 1234-TCDF	25.38	6.16E+07	0.79	Y	-	-	-
JS 123467-HxCDD	37.53	1.63E+07	1.24	Y	-	-	-
CS 37Cl-2378-TCDD	27.72	9.94E+07	n/a	-	1.12	1.13	1%
CS 12347-PeCDD	32.71	3.12E+07	1.59	Y	0.71	0.71	0%
CS 12346-PeCDF	31.19	4.92E+07	1.55	Y	0.81	0.80	-1%
CS 123469-HxCDF	36.65	3.63E+07	0.54	Y	1.12	1.11	-1%
CS 1234689-HpCDF	39.99	2.90E+07	0.47	Y	0.90	0.89	-1%
SS 37Cl-2378-TCDD	27.72	9.94E+07	n/a	-	1.14	1.12	-2%
SS 12347-PeCDD	32.71	3.12E+07	1.59	Y	0.86	0.82	-4%
SS 12346-PeCDF	31.19	4.92E+07	1.55	Y	0.98	0.91	-6%
SS 123469-HxCDF	36.65	3.63E+07	0.54	Y	0.85	0.81	-5%
SS 1234689-HpCDF	39.99	2.90E+07	0.47	Y	0.97	0.91	-6%
AS 1368-TCDD	23.88	4.82E+07	0.80	Y	1.12	1.10	-1%
AS 1368-TCDF	21.66	7.19E+07	0.79	Y	1.19	1.17	-2%
FS 1278-TCDD	28.04	4.43E+07	0.79	Y	1.02	1.00	-2%
FS 12478-PeCDD	31.96	3.50E+07	1.58	Y	0.98	0.93	-6%
FS 123468-HxCDD	36.13	3.61E+07	1.24	Y	1.17	1.12	-4%
FS 1234679-HpCDD	39.86	3.33E+07	1.02	Y	1.14	1.11	-2%
TS 1378-TCDD	25.98	4.71E+07	0.80	Y	1.09	1.07	-3%
~~OCDD-a~~	~~NotFnd~~						
~~OCDF-a~~	~~NotFnd~~						

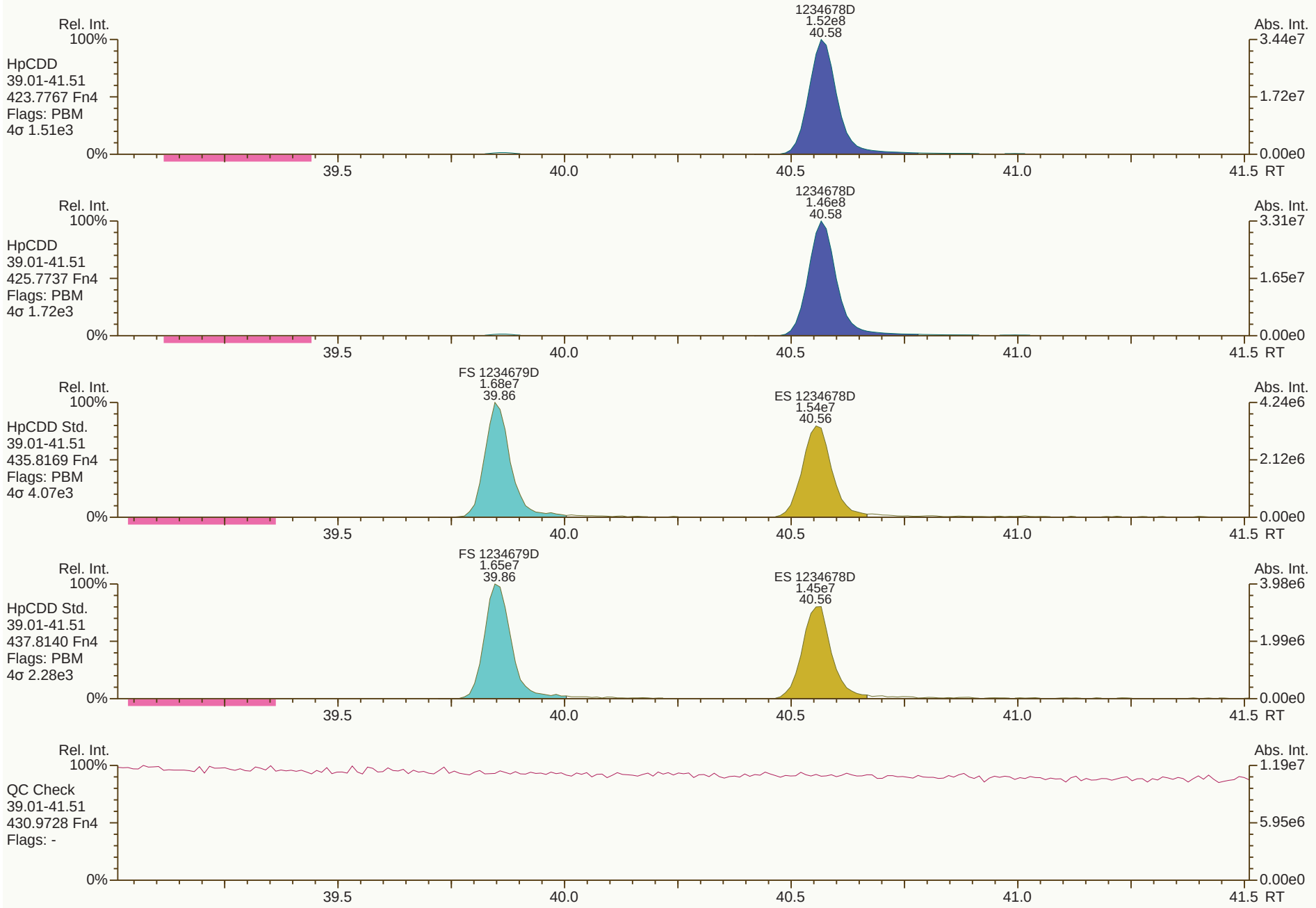


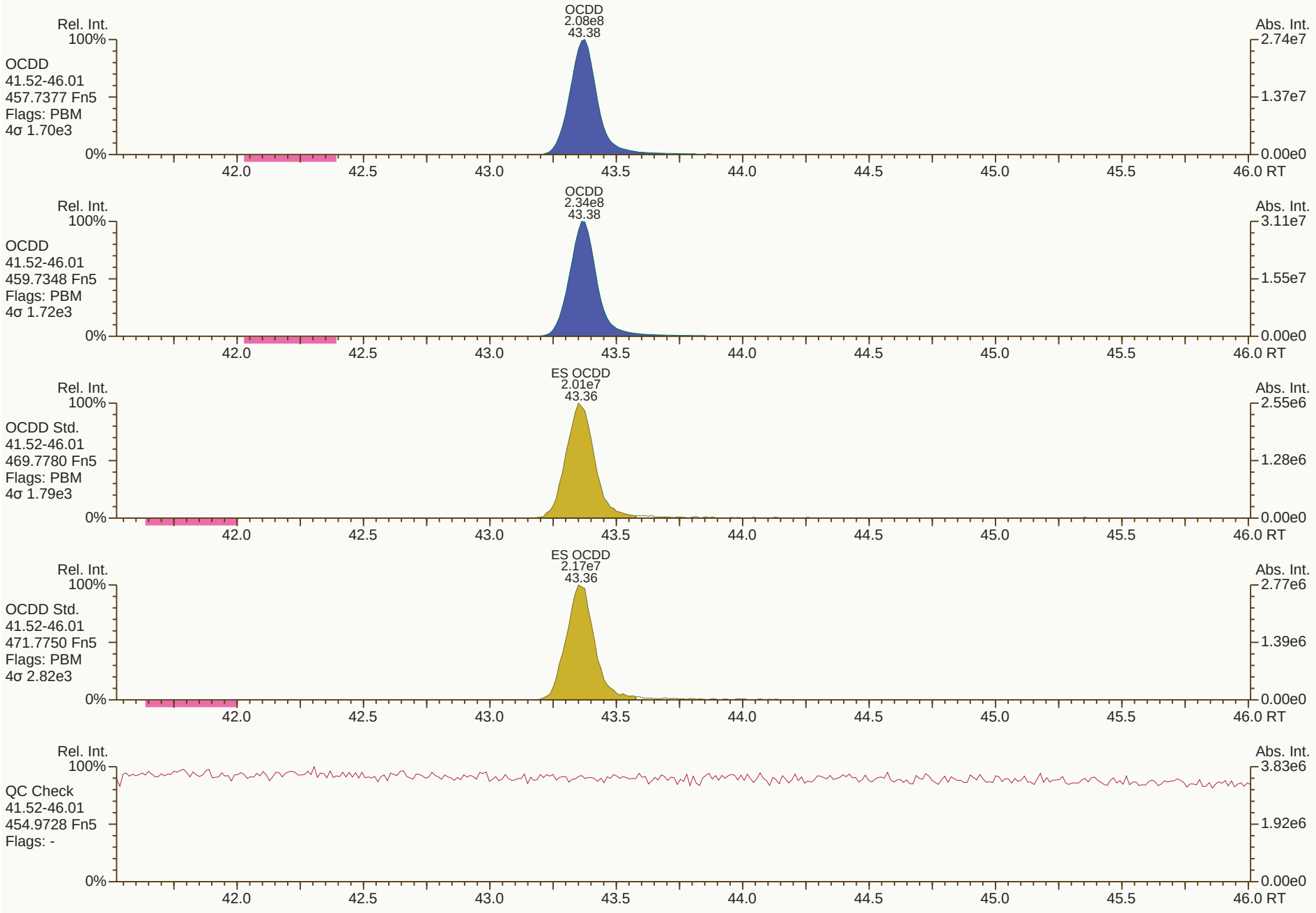
Results: T:\UltraTracePro\ICAL results\HRMS3\HRMS3_DF_10122018_28AUG2019\Resources\CS5_190828_DF_CA.utp_res, saved 29-Aug-2019 10:18 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 scc: 752-004
PKD: n/a Printed: 29-Aug-2019 10:44 Page 1 of 12


Rel. Int.
100%
TCDD
20.04-29.50
319.8965 Fn1
Flags: PBM
4σ 1.62e3
0%
2378D
4.41e7
27.72
Abs. Int.
1.05e7
5.25e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD
20.04-29.50
321.8936 Fn1
Flags: PBM
4σ 1.48e3
0%
2378D
5.64e7
27.72
Abs. Int.
1.33e7
6.65e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
37Cl-TCDD
20.04-29.50
327.8850 Fn1
Flags: PBM
4σ 1.32e3
0%
CS 37Cl-2378D
9.94e7
27.72
Abs. Int.
2.36e7
1.18e7
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.04-29.50
331.9368 Fn1
Flags: PBM
4σ 7.48e3
0%
CL 03Sep19
chromatogram pg 3
RRF(CS 12347D) = (1.92e7 + 1.20e7) * 100 pg / (1.95e7 + 2.43e7) * 100 * 1 pg = 0.712
PSW 29-Aug-2019 10:15
VERIFIED
AS 1368D
2.14e7
23.88
TS 1378D
2.09e7
25.98
JS 1234D
1.95e7
27.03
ES 2378D
2.00e7
27.70
FS 1278D
1.95e7
28.04
Abs. Int.
4.65e6
2.33e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.04-29.50
333.9339 Fn1
Flags: PBM
4σ 3.25e3
0%
AS 1368D
2.68e7
23.88
TS 1378D
2.62e7
25.98
JS 1234D
2.43e7
27.03
ES 2378D
2.42e7
27.70
FS 1278D
2.48e7
28.04
Abs. Int.
5.79e6
2.89e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
PeCDD
29.52-34.51
355.8546 Fn2
Flags: PBM
4σ 1.49e3
0%
12378D
2.31e8
33.24
Abs. Int.
6.31e7
3.15e7
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDD
29.52-34.51
357.8517 Fn2
Flags: PBM
4σ 1.53e3
0%
12378D
1.48e8
33.24
Abs. Int.
4.00e7
2.00e7
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDD Std.
29.52-34.51
367.8949 Fn2
Flags: PBM
4σ 2.16e3
0%
FS 12478D
2.15e7
31.96
CS 12347D
1.92e7
32.71
ES 12378D
2.32e7
33.22
Abs. Int.
6.44e6
3.22e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDD Std.
29.52-34.51
369.8919 Fn2
Flags: PBM
4σ 1.82e3
0%
FS 12478D
1.36e7
31.96
CS 12347D
1.20e7
32.71
ES 12378D
1.46e7
33.22
Abs. Int.
4.12e6
2.06e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
QC Check
29.52-34.51
366.9792 Fn2
Flags: -
0%
Abs. Int.
1.67e6
8.37e5
0.00e0
30.0
31.0
32.0
33.0
34.0
RT

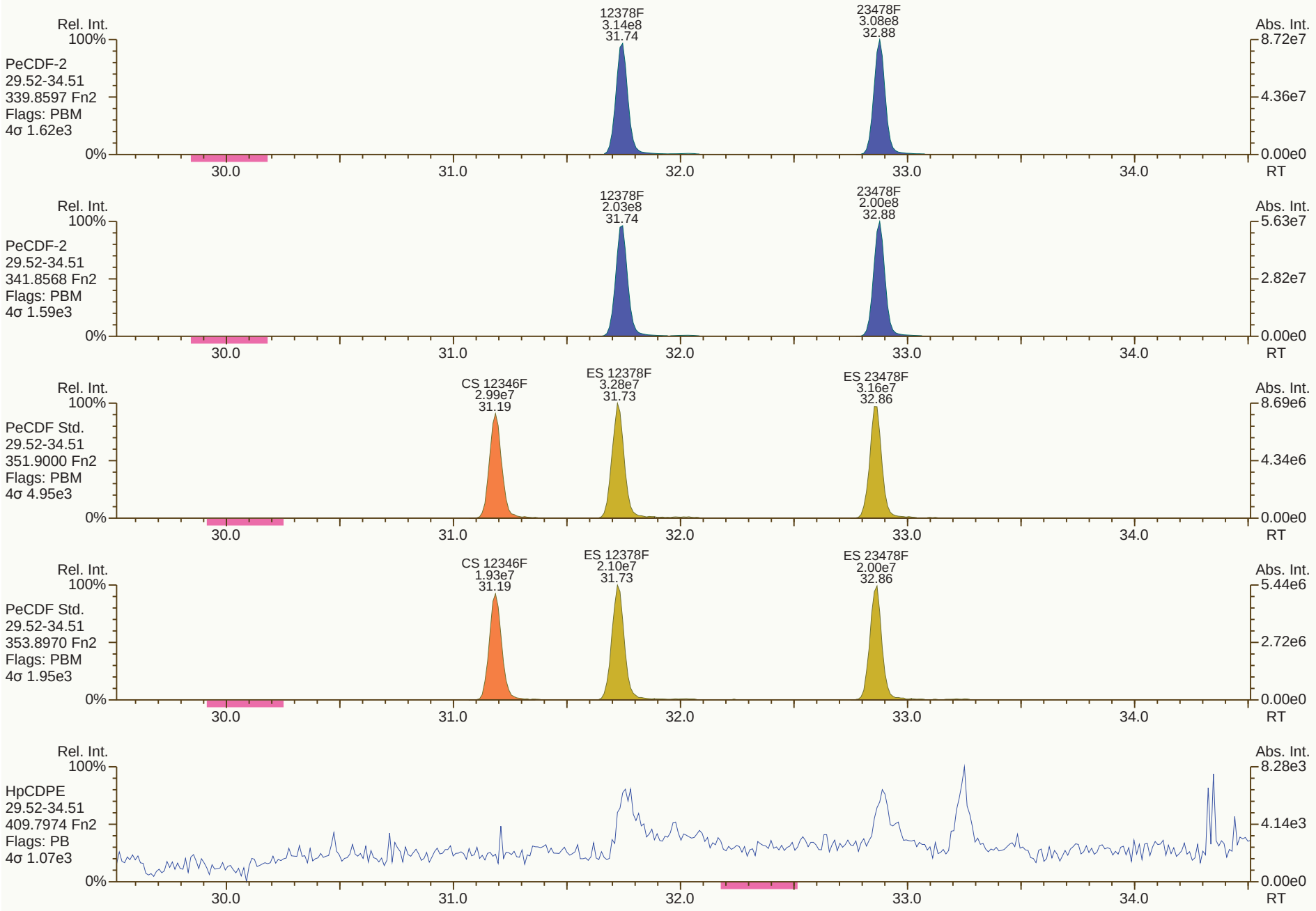

Rel. Int.
100%
HxCDD
34.52-39.00
389.8156 Fn3
Flags: PBM
4σ 2.18e3
123478D
1.89e8
37.23
123678D
2.00e8
37.35
123789D
2.10e8
37.66
Abs. Int.
5.23e7
2.62e7
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
HxCDD
34.52-39.00
391.8127 Fn3
Flags: PBM
4σ 1.48e3
123478D
1.51e8
37.22
123678D
1.60e8
37.35
123789D
1.68e8
37.66
Abs. Int.
4.18e7
2.09e7
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
HxCDD Std.
34.52-39.00
401.8559 Fn3
Flags: PBM
4σ 3.00e3
FS 123468D
2.00e7
36.13
ES 123478D
1.79e7
37.21
ES 123678D
1.90e7
37.33
JS 123467D
9.03e6
37.53
ES 123789D
2.18e7
37.65
Abs. Int.
5.51e6
2.75e6
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
HxCDD Std.
34.52-39.00
403.8530 Fn3
Flags: PBM
4σ 3.09e3
FS 123468D
1.61e7
36.13
ES 123478D
1.45e7
37.21
ES 123678D
1.50e7
37.33
JS 123467D
7.30e6
37.53
ES 123789D
1.73e7
37.65
Abs. Int.
4.19e6
2.10e6
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
QC Check
34.52-39.00
380.9760 Fn3
Flags: -
Abs. Int.
2.37e7
1.18e7
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT


Rel. Int.
100%
HpCDD
39.01-41.51
423.7767 Fn4
Flags: PBM
4σ 1.51e3
1234678D
1.52e8
40.58
Abs. Int.
3.44e7
1.72e7
0.00e0
0%
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
HpCDD
39.01-41.51
425.7737 Fn4
Flags: PBM
4σ 1.72e3
1234678D
1.46e8
40.58
Abs. Int.
3.31e7
1.65e7
0.00e0
0%
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
HpCDD Std.
39.01-41.51
435.8169 Fn4
Flags: PBM
4σ 4.07e3
FS 1234679D
1.68e7
39.86
ES 1234678D
1.54e7
40.56
Abs. Int.
4.24e6
2.12e6
0.00e0
0%
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
HpCDD Std.
39.01-41.51
437.8140 Fn4
Flags: PBM
4σ 2.28e3
FS 1234679D
1.65e7
39.86
ES 1234678D
1.45e7
40.56
Abs. Int.
3.98e6
1.99e6
0.00e0
0%
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
QC Check
39.01-41.51
430.9728 Fn4
Flags: -
Abs. Int.
1.19e7
5.95e6
0.00e0
0%
39.5
40.0
40.5
41.0
41.5 RT


OCDD
2.08e8
43.38
Rel. Int.
100%
OCDD
41.52-46.01
457.7377 Fn5
Flags: PBM
4σ 1.70e3
0%
Abs. Int.
2.74e7
1.37e7
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
OCDD
2.34e8
43.38
Rel. Int.
100%
OCDD
41.52-46.01
459.7348 Fn5
Flags: PBM
4σ 1.72e3
0%
Abs. Int.
3.11e7
1.55e7
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
ES OCDD
2.01e7
43.36
Rel. Int.
100%
OCDD Std.
41.52-46.01
469.7780 Fn5
Flags: PBM
4σ 1.79e3
0%
Abs. Int.
2.55e6
1.28e6
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
ES OCDD
2.17e7
43.36
Rel. Int.
100%
OCDD Std.
41.52-46.01
471.7750 Fn5
Flags: PBM
4σ 2.82e3
0%
Abs. Int.
2.77e6
1.39e6
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
Rel. Int.
100%
QC Check
41.52-46.01
454.9728 Fn5
Flags: -
0%
Abs. Int.
3.83e6
1.92e6
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT


Rel. Int.
100%
TCDF
20.04-29.50
303.9016 Fn1
Flags: PBM
4σ 1.04e3
0%
2378F
5.51e7
26.81
Abs. Int.
1.20e7
5.98e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF
20.04-29.50
305.8987 Fn1
Flags: PBM
4σ 1.34e3
0%
2378F
7.06e7
26.81
Abs. Int.
1.52e7
7.61e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.04-29.50
315.9419 Fn1
Flags: PBM
4σ 9.56e3
0%
AS 1368F
3.17e7
21.66
JS 1234F
2.71e7
25.38
ES 2378F
2.79e7
26.79
Abs. Int.
6.07e6
3.04e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.04-29.50
317.9389 Fn1
Flags: PBM
4σ 4.74e3
0%
AS 1368F
4.03e7
21.65
JS 1234F
3.45e7
25.38
ES 2378F
3.56e7
26.79
Abs. Int.
7.69e6
3.84e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
HxCDPE
20.04-29.50
375.8364 Fn1
Flags: PB
4σ 1.07e3
0%
Abs. Int.
8.68e3
4.34e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT

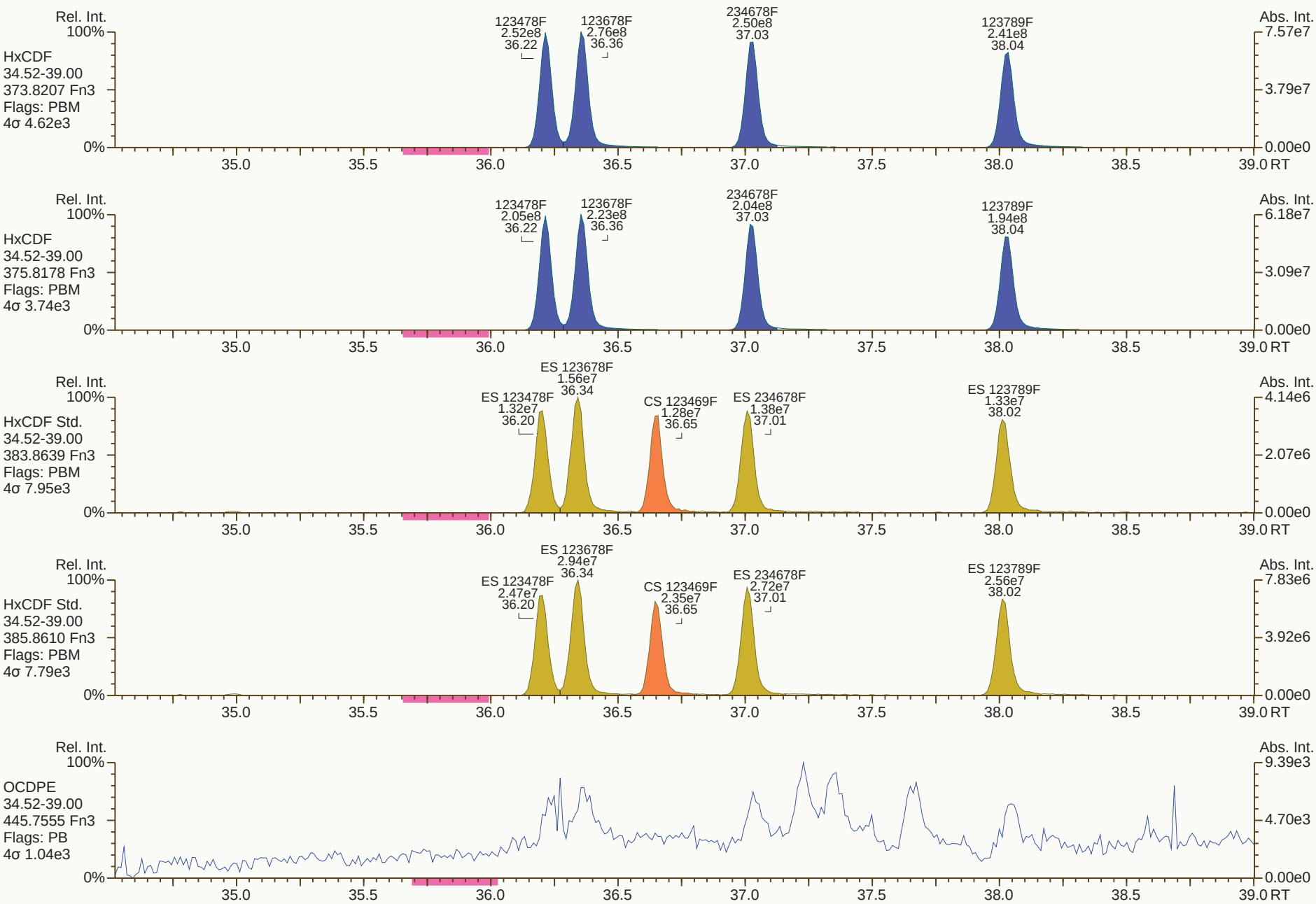

Rel. Int.
100%
0%
Abs. Int.
1.00e4
5.01e3
0.00e0
RT
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
PeCDF-1
20.04-29.50
339.8597 Fn1
Flags: PB
4σ 1.52e3
PeCDF-1
20.04-29.50
341.8568 Fn1
Flags: PB
4σ 2.19e3
8.48e3
4.24e3
QC Check
20.04-29.50
316.9824 Fn1
Flags: -
1.91e6
9.55e5


Rel. Int.
100%
PeCDF-2
29.52-34.51
339.8597 Fn2
Flags: PBM
4σ 1.62e3
0%
12378F
3.14e8
31.74
23478F
3.08e8
32.88
Abs. Int.
8.72e7
4.36e7
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDF-2
29.52-34.51
341.8568 Fn2
Flags: PBM
4σ 1.59e3
0%
12378F
2.03e8
31.74
23478F
2.00e8
32.88
Abs. Int.
5.63e7
2.82e7
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDF Std.
29.52-34.51
351.9000 Fn2
Flags: PBM
4σ 4.95e3
0%
CS 12346F
2.99e7
31.19
ES 12378F
3.28e7
31.73
ES 23478F
3.16e7
32.86
Abs. Int.
8.69e6
4.34e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDF Std.
29.52-34.51
353.8970 Fn2
Flags: PBM
4σ 1.95e3
0%
CS 12346F
1.93e7
31.19
ES 12378F
2.10e7
31.73
ES 23478F
2.00e7
32.86
Abs. Int.
5.44e6
2.72e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
HpCDPE
29.52-34.51
409.7974 Fn2
Flags: PB
4σ 1.07e3
0%
Abs. Int.
8.28e3
4.14e3
0.00e0
30.0
31.0
32.0
33.0
34.0
RT

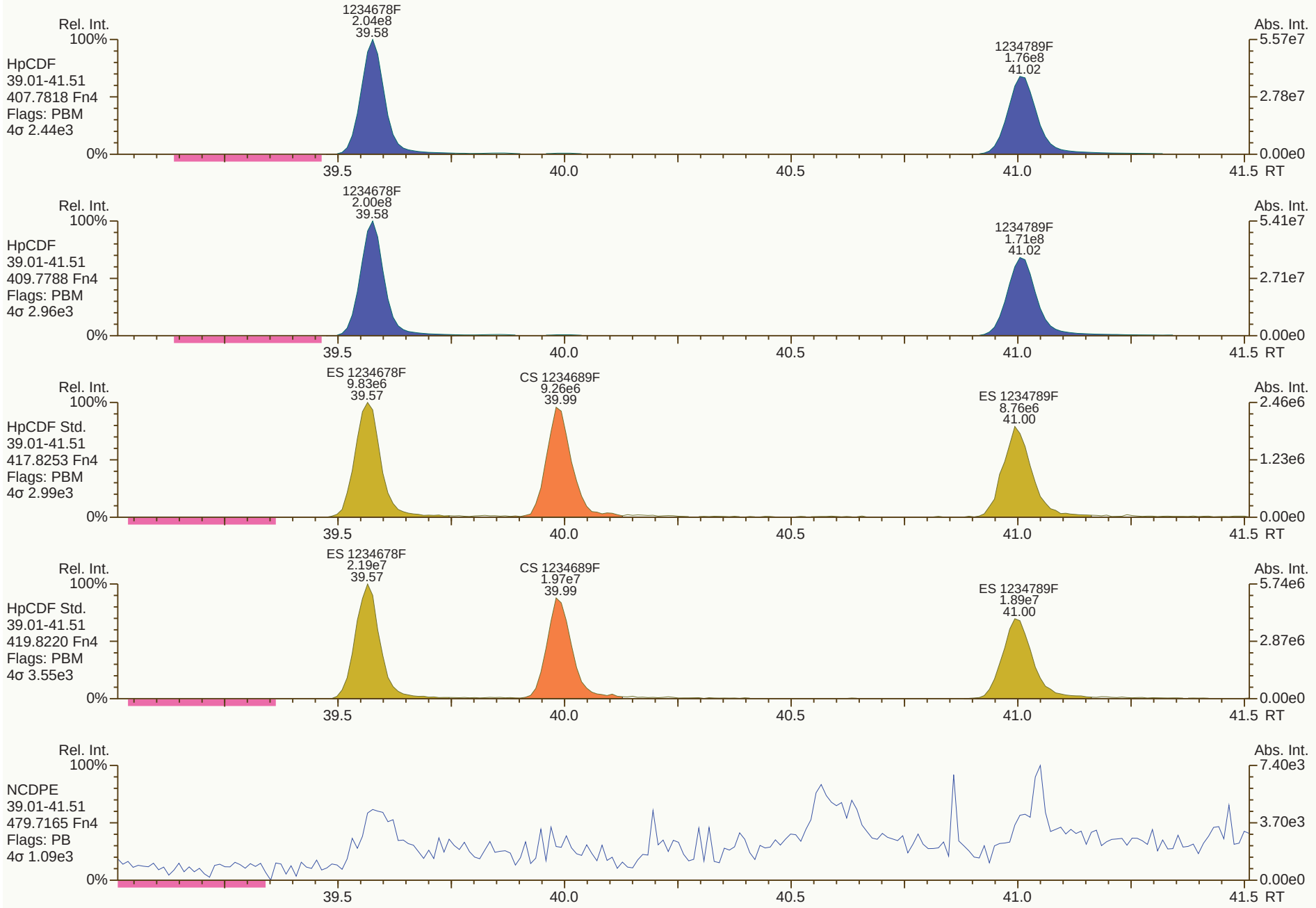
SGS ID: CS5_190828_DF_CA
Instr: [ILM] AutoSpec-Ultima HRMS3

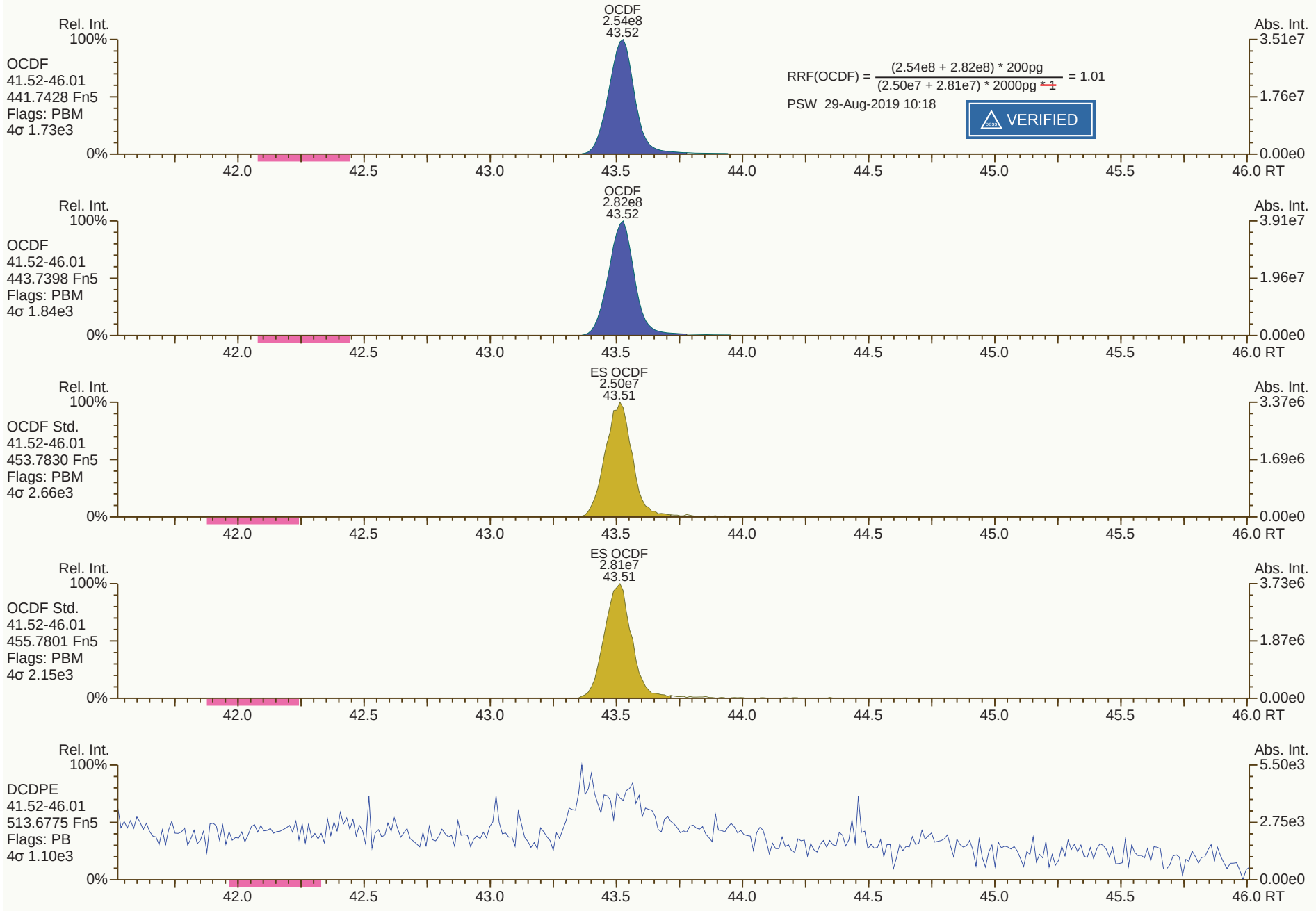
Sample ID: 20-281-1
VSIR EI+ Expt: df_cl4-8_db5 GC: df_db5 Vial: 9

Acq: 28-Aug-2019 18:35:01
User: PSW Datafile: 190828C12



Results: T:\UltraTracePro\ICAL results\HRMS3\HRMS3_DF_10122018_28AUG2019\Resources\CS5_190828_DF_CA.utp_res, saved 29-Aug-2019 10:18 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 3468, 1853, 0296 scc: 752-004
PKD: 29-Aug-2019 08:33 Printed: 29-Aug-2019 10:45 Page 10 of 12


Rel. Int.
100%
HpCDF
39.01-41.51
407.7818 Fn4
Flags: PBM
4σ 2.44e3
0%
1234678F
2.04e8
39.58
1234789F
1.76e8
41.02
Abs. Int.
5.57e7
2.78e7
0.00e0
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
HpCDF
39.01-41.51
409.7788 Fn4
Flags: PBM
4σ 2.96e3
0%
1234678F
2.00e8
39.58
1234789F
1.71e8
41.02
Abs. Int.
5.41e7
2.71e7
0.00e0
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
HpCDF Std.
39.01-41.51
417.8253 Fn4
Flags: PBM
4σ 2.99e3
0%
ES 1234678F
9.83e6
39.57
CS 1234689F
9.26e6
39.99
ES 1234789F
8.76e6
41.00
Abs. Int.
2.46e6
1.23e6
0.00e0
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
HpCDF Std.
39.01-41.51
419.8220 Fn4
Flags: PBM
4σ 3.55e3
0%
ES 1234678F
2.19e7
39.57
CS 1234689F
1.97e7
39.99
ES 1234789F
1.89e7
41.00
Abs. Int.
5.74e6
2.87e6
0.00e0
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
NCDPE
39.01-41.51
479.7165 Fn4
Flags: PB
4σ 1.09e3
0%
Abs. Int.
7.40e3
3.70e3
0.00e0
39.5
40.0
40.5
41.0
41.5 RT

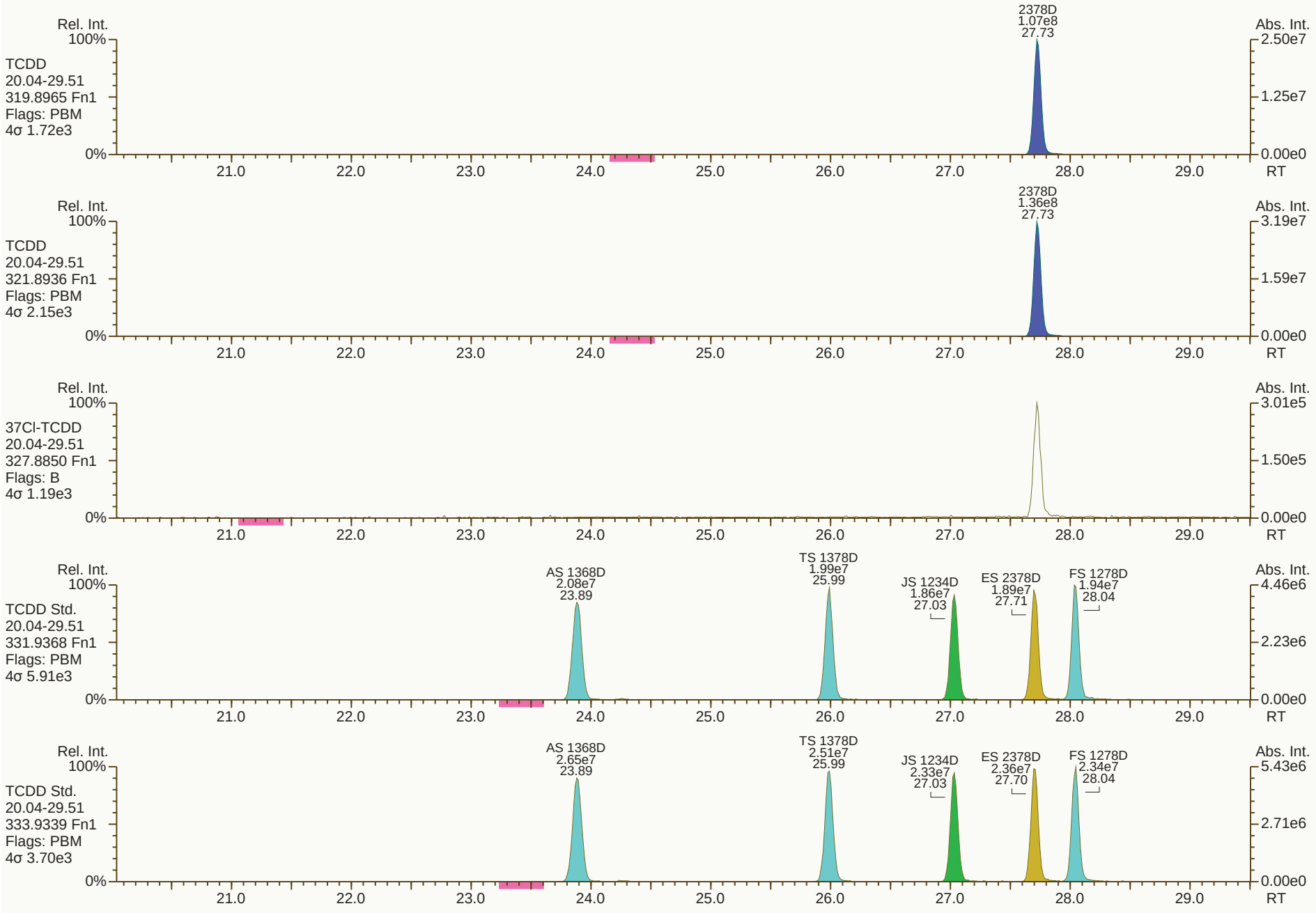

OCDF
2.54e8
43.52
Rel. Int.
100%
OCDF
41.52-46.01
441.7428 Fn5
Flags: PBM
4σ 1.73e3
0%
Abs. Int.
3.51e7
1.76e7
0.00e0
RRF(OCDF) = (2.54e8 + 2.82e8) * 200pg / (2.50e7 + 2.81e7) * 2000pg * 1 = 1.01
PSW 29-Aug-2019 10:18
VERIFIED
OCDF
2.82e8
43.52
OCDF
41.52-46.01
443.7398 Fn5
Flags: PBM
4σ 1.84e3
3.91e7
1.96e7
ES OCDF
2.50e7
43.51
OCDF Std.
41.52-46.01
453.7830 Fn5
Flags: PBM
4σ 2.66e3
3.37e6
1.69e6
ES OCDF
2.81e7
43.51
OCDF Std.
41.52-46.01
455.7801 Fn5
Flags: PBM
4σ 2.15e3
3.73e6
1.87e6
DCDPE
41.52-46.01
513.6775 Fn5
Flags: PB
4σ 1.10e3
5.50e3
2.75e3
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT

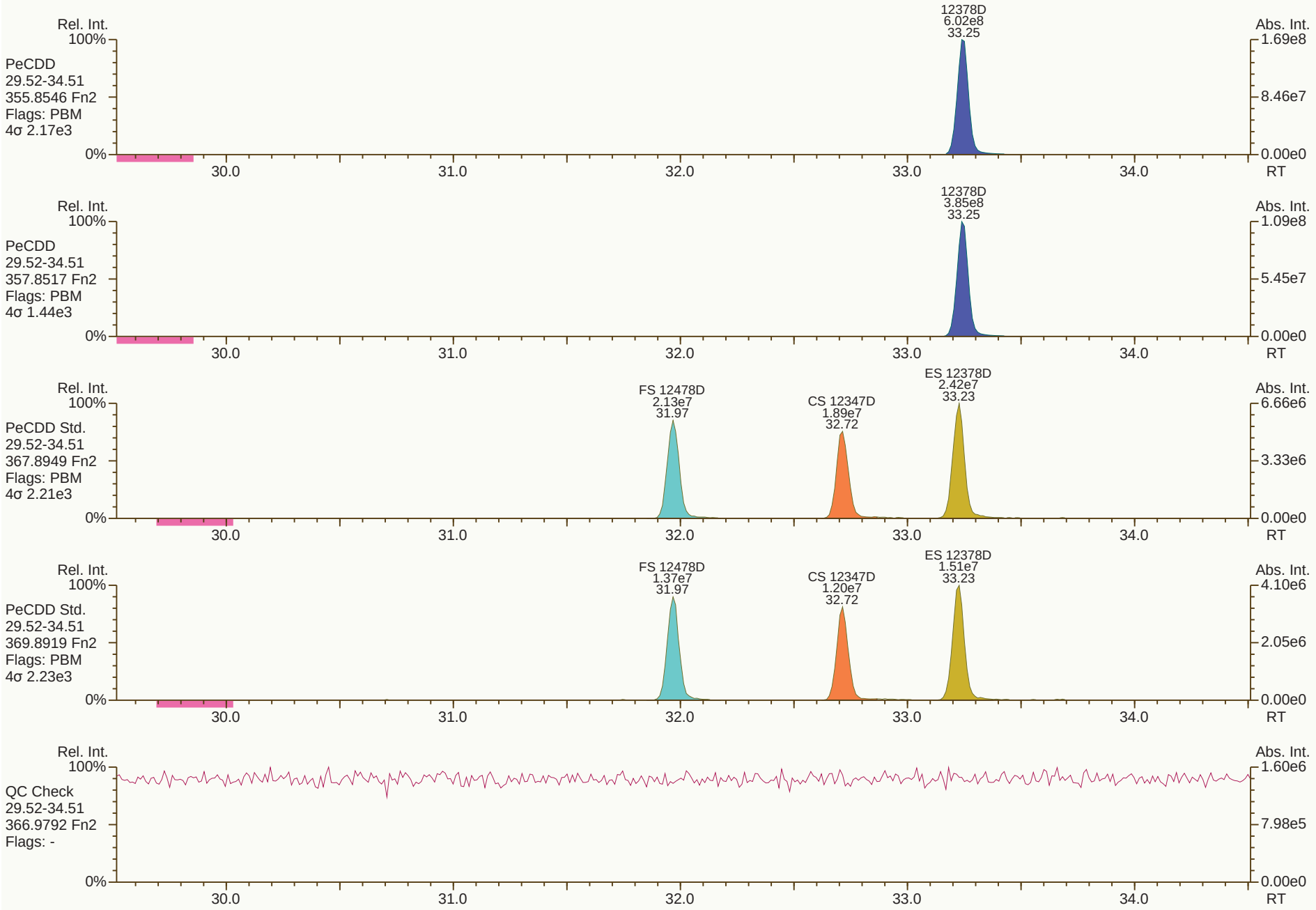
Dioxin/Furan QC Summary		Acq'd: 28 Aug 2019 19:22 PSW				ICAL: HRMS3_DF_10122018_28AUG2019	
Lab ID: CS6_190828_DF_CA		UTP: 29-Aug-2019 08:39:26 PSW				Checkcode: 807-000-LSM	
Sample ID: 20-280-4		Report: 29 Aug 2019 09:56 pw				Datafile: 190828C13	
Name	**RT**	**Response**	**RA**	**OK**	**Ref. RRFs**	**Calc. RRFs**	**Dev'n**
2378-TCDD	27.73	2.42E+08	0.79	Y	1.19	1.14	-4%
12378-PeCDD	33.25	9.87E+08	1.57	Y	0.98	1.00	2%
123478-HxCDD	37.23	8.48E+08	1.25	Y	1.02	1.03	0%
123678-HxCDD	37.35	9.12E+08	1.25	Y	1.09	1.08	0%
123789-HxCDD	37.67	9.48E+08	1.25	Y	0.97	0.95	-2%
1234678-HpCDD	40.59	7.56E+08	1.04	Y	0.98	0.98	1%
OCDD	43.40	1.15E+09	0.89	Y	1.07	1.05	-2%
2378-TCDF	26.82	3.13E+08	0.78	Y	1.05	1.02	-2%
12378-PeCDF	31.75	1.34E+09	1.55	Y	0.96	0.97	1%
23478-PeCDF	32.89	1.33E+09	1.54	Y	0.99	1.00	1%
123478-HxCDF	36.23	1.19E+09	1.24	Y	1.21	1.22	1%
123678-HxCDF	36.37	1.30E+09	1.23	Y	1.11	1.11	0%
234678-HxCDF	37.04	1.15E+09	1.23	Y	1.12	1.08	-3%
123789-HxCDF	38.04	1.13E+09	1.24	Y	1.11	1.15	4%
1234678-HpCDF	39.59	1.06E+09	1.03	Y	1.32	1.28	-3%
1234789-HpCDF	41.03	8.85E+08	1.03	Y	1.26	1.23	-2%
OCDF	43.55	1.41E+09	0.90	Y	1.03	1.02	-1%
ES 2378-TCDD	27.71	4.26E+07	0.80	Y	0.99	1.02	3%
ES 12378-PeCDD	33.23	3.93E+07	1.61	Y	0.83	0.94	13%
ES 123478-HxCDD	37.22	3.30E+07	1.28	Y	0.95	1.10	16%
ES 123678-HxCDD	37.34	3.37E+07	1.25	Y	0.98	1.12	15%
ES 123789-HxCDD	37.65	4.00E+07	1.26	Y	1.14	1.33	17%
ES 1234678-HpCDD	40.57	3.08E+07	1.08	Y	0.90	1.02	14%
ES OCDD	43.39	4.35E+07	0.90	Y	0.63	0.72	16%
ES 2378-TCDF	26.79	6.13E+07	0.81	Y	1.00	1.04	4%
ES 12378-PeCDF	31.73	5.51E+07	1.53	Y	0.83	0.93	12%
ES 23478-PeCDF	32.87	5.33E+07	1.58	Y	0.81	0.90	12%
ES 123478-HxCDF	36.21	3.92E+07	0.53	Y	1.12	1.31	16%
ES 123678-HxCDF	36.35	4.67E+07	0.54	Y	1.33	1.56	17%
ES 234678-HxCDF	37.02	4.27E+07	0.53	Y	1.21	1.42	18%
ES 123789-HxCDF	38.02	3.92E+07	0.55	Y	1.12	1.30	17%
ES 1234678-HpCDF	39.58	3.31E+07	0.46	Y	0.92	1.10	19%
ES 1234789-HpCDF	41.02	2.87E+07	0.47	Y	0.82	0.96	17%
ES OCDF	43.54	5.54E+07	0.89	Y	0.78	0.92	18%

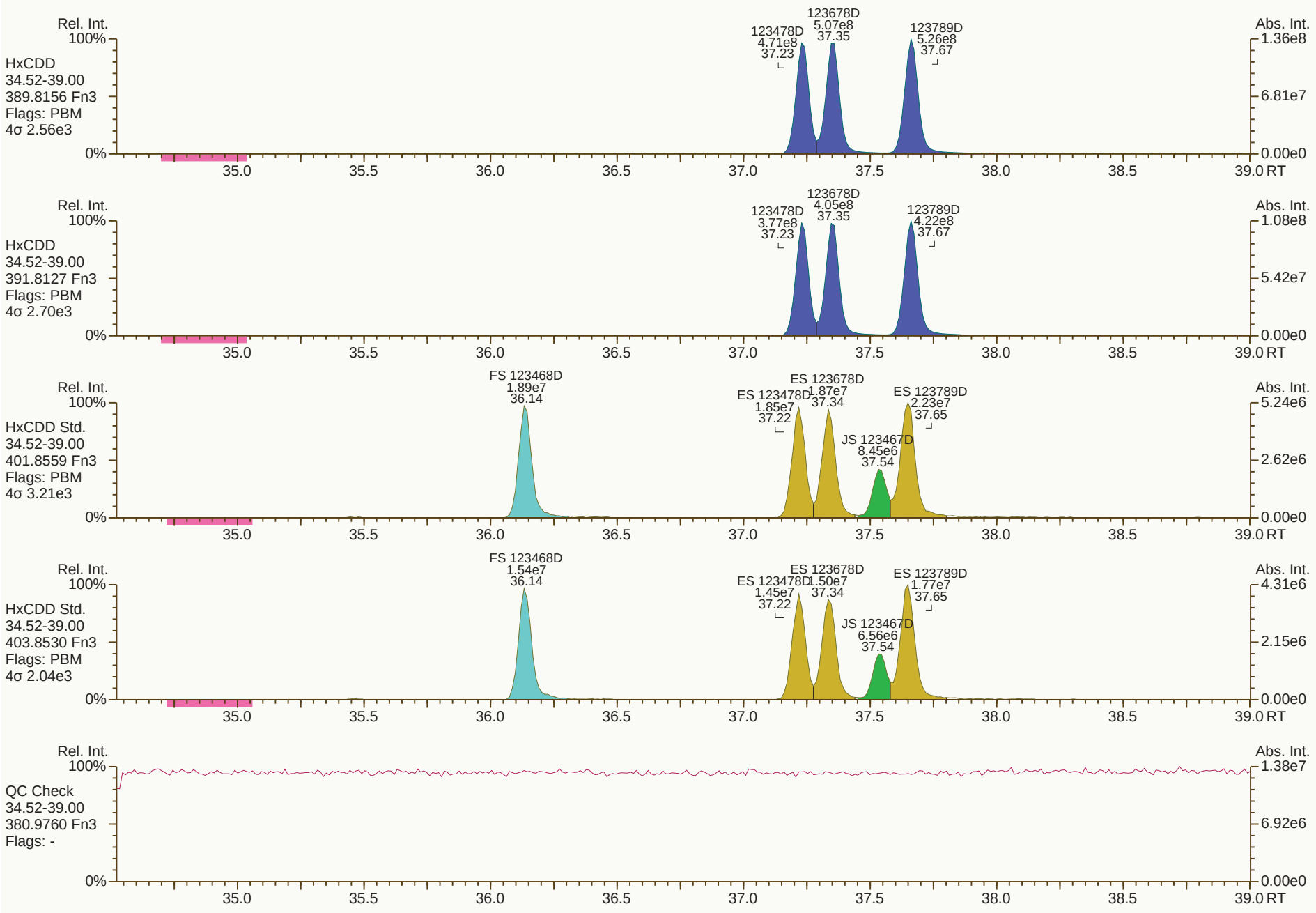
Dioxin/Furan QC Summary		Acq'd: 28 Aug 2019 19:22 PSW				ICAL: HRMS3_DF_10122018_28AUG2019	
Lab ID: CS6_190828_DF_CA		UTP: 29-Aug-2019 08:39:26 PSW				Checkcode: 807-000-LSM	
Sample ID: 20-280-4		Report: 29 Aug 2019 09:56 pw				Datafile: 190828C13	
Name	**RT**	**Response**	**RA**	**OK**	**Ref. RRFs**	**Calc. RRFs**	**Dev'n**
JS 1234-TCDD	27.03	4.19E+07	0.79	Y	-	-	-
JS 1234-TCDF	25.39	5.90E+07	0.79	Y	-	-	-
JS 123467-HxCDD	37.54	1.50E+07	1.29	Y	-	-	-
CS 37Cl-2378-TCDD	NotFnd		n/a	-	1.12		
CS 12347-PeCDD	32.72	3.09E+07	1.57	Y	0.71	0.74	3%
CS 12346-PeCDF	31.19	4.84E+07	1.57	Y	0.81	0.82	1%
CS 123469-HxCDF	36.66	3.56E+07	0.55	Y	1.12	1.19	6%
CS 1234689-HpCDF	40.00	2.91E+07	0.44	Y	0.90	0.97	8%
SS 37Cl-2378-TCDD	NotFnd		n/a	-	1.14		
SS 12347-PeCDD	32.72	3.09E+07	1.57	Y	0.86	0.79	-9%
SS 12346-PeCDF	31.19	4.84E+07	1.57	Y	0.98	0.88	-10%
SS 123469-HxCDF	36.66	3.56E+07	0.55	Y	0.85	0.76	-10%
SS 1234689-HpCDF	40.00	2.91E+07	0.44	Y	0.97	0.88	-10%
AS 1368-TCDD	23.89	4.73E+07	0.79	Y	1.12	1.13	1%
AS 1368-TCDF	21.67	6.89E+07	0.78	Y	1.19	1.17	-2%
FS 1278-TCDD	28.04	4.29E+07	0.83	Y	1.02	1.01	-1%
FS 12478-PeCDD	31.97	3.49E+07	1.55	Y	0.98	0.89	-10%
FS 123468-HxCDD	36.14	3.43E+07	1.22	Y	1.17	1.04	-11%
FS 1234679-HpCDD	39.87	3.28E+07	1.06	Y	1.14	1.07	-6%
TS 1378-TCDD	25.99	4.50E+07	0.79	Y	1.09	1.06	-3%
~~OCDD-a~~	~~NotFnd~~						
~~OCDF-a~~	~~NotFnd~~						

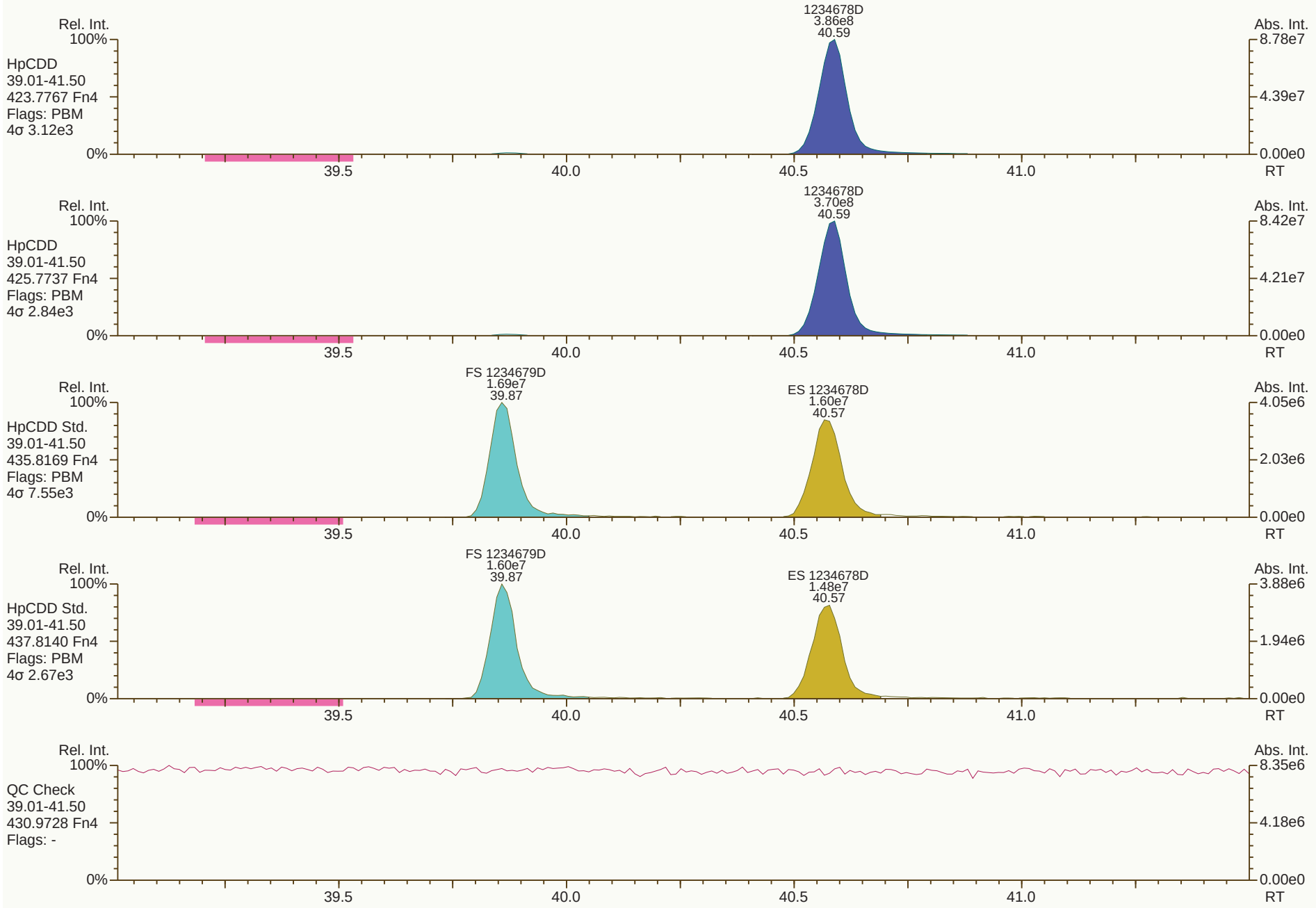


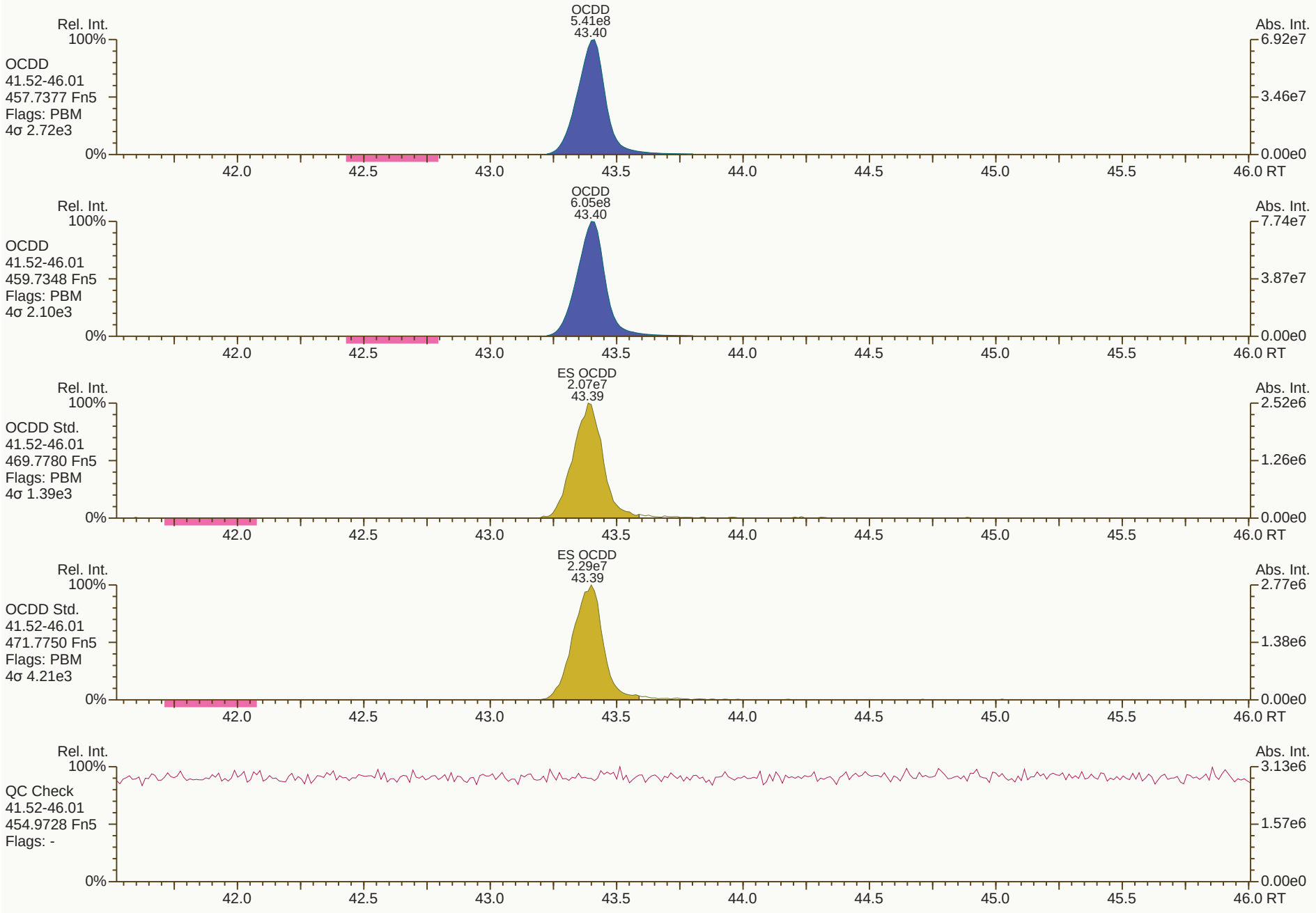
Results: T:\UltraTracePro\ICAL results\HRMS3\HRMS3_DF_10122018_28AUG2019\Resources\CS6_190828_DF_CA.utp_res, saved 29-Aug-2019 10:22 (PSW) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 scc: 807-000 *PKD: n/a Printed: 29-Aug-2019 10:45 Page 1 of 12*


Rel. Int.
100%
TCDD
20.04-29.51
319.8965 Fn1
Flags: PBM
4σ 1.72e3
0%
2378D
1.07e8
27.73
Abs. Int.
2.50e7
1.25e7
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD
20.04-29.51
321.8936 Fn1
Flags: PBM
4σ 2.15e3
0%
2378D
1.36e8
27.73
Abs. Int.
3.19e7
1.59e7
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
37Cl-TCDD
20.04-29.51
327.8850 Fn1
Flags: B
4σ 1.19e3
0%
Abs. Int.
3.01e5
1.50e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.04-29.51
331.9368 Fn1
Flags: PBM
4σ 5.91e3
0%
AS 1368D
2.08e7
23.89
TS 1378D
1.99e7
25.99
JS 1234D
1.86e7
27.03
ES 2378D
1.89e7
27.71
FS 1278D
1.94e7
28.04
Abs. Int.
4.46e6
2.23e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.04-29.51
333.9339 Fn1
Flags: PBM
4σ 3.70e3
0%
AS 1368D
2.65e7
23.89
TS 1378D
2.51e7
25.99
JS 1234D
2.33e7
27.03
ES 2378D
2.36e7
27.70
FS 1278D
2.34e7
28.04
Abs. Int.
5.43e6
2.71e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
PeCDD
29.52-34.51
355.8546 Fn2
Flags: PBM
4σ 2.17e3
0%
12378D
6.02e8
33.25
Abs. Int.
1.69e8
8.46e7
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDD
29.52-34.51
357.8517 Fn2
Flags: PBM
4σ 1.44e3
0%
12378D
3.85e8
33.25
Abs. Int.
1.09e8
5.45e7
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDD Std.
29.52-34.51
367.8949 Fn2
Flags: PBM
4σ 2.21e3
0%
FS 12478D
2.13e7
31.97
CS 12347D
1.89e7
32.72
ES 12378D
2.42e7
33.23
Abs. Int.
6.66e6
3.33e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDD Std.
29.52-34.51
369.8919 Fn2
Flags: PBM
4σ 2.23e3
0%
FS 12478D
1.37e7
31.97
CS 12347D
1.20e7
32.72
ES 12378D
1.51e7
33.23
Abs. Int.
4.10e6
2.05e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
QC Check
29.52-34.51
366.9792 Fn2
Flags: -
0%
Abs. Int.
1.60e6
7.98e5
0.00e0
30.0
31.0
32.0
33.0
34.0
RT

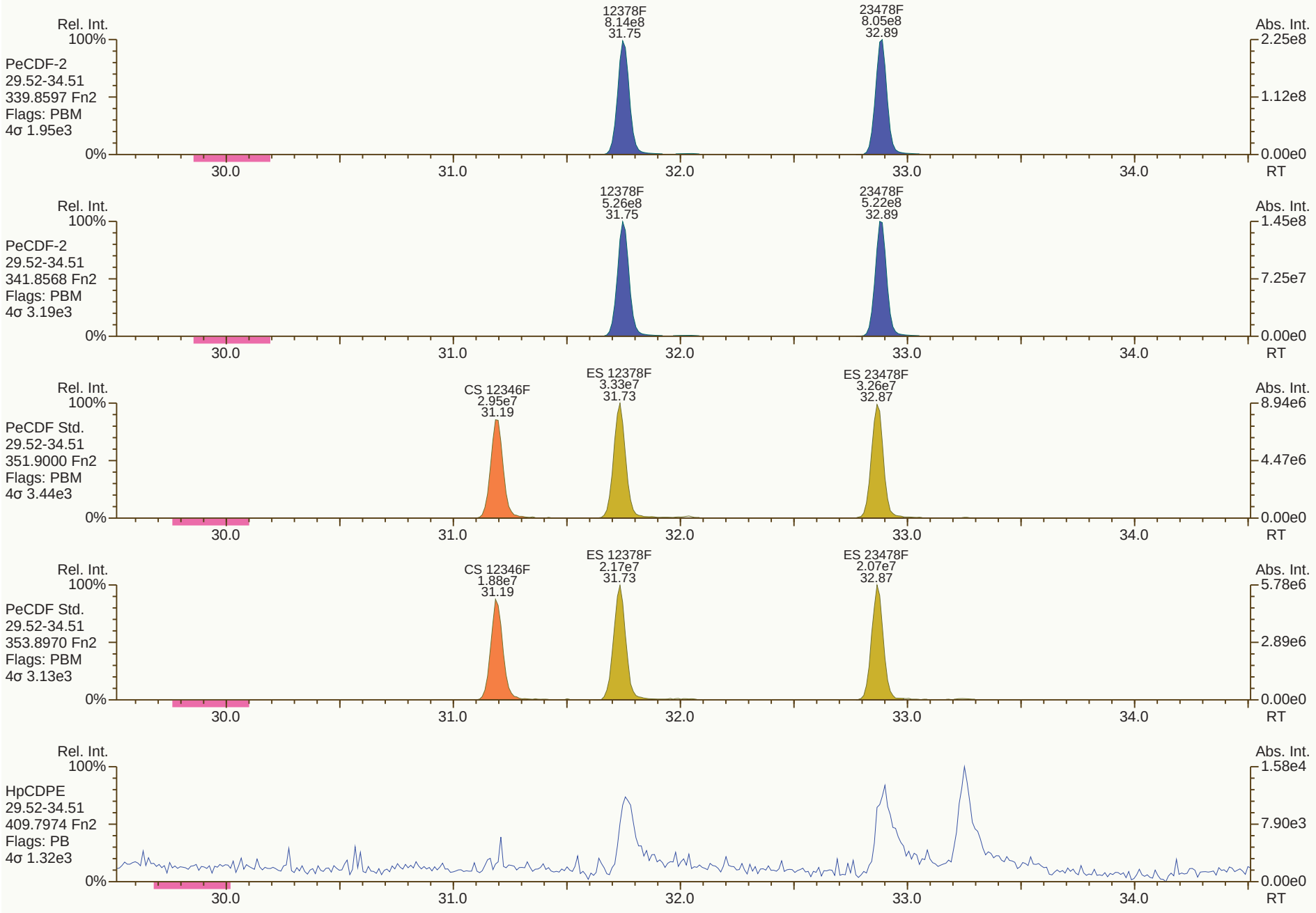

Rel. Int.
100%
HxCDD
34.52-39.00
389.8156 Fn3
Flags: PBM
4σ 2.56e3
123478D
4.71e8
37.23
123678D
5.07e8
37.35
123789D
5.26e8
37.67
Abs. Int.
1.36e8
6.81e7
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
HxCDD
34.52-39.00
391.8127 Fn3
Flags: PBM
4σ 2.70e3
123478D
3.77e8
37.23
123678D
4.05e8
37.35
123789D
4.22e8
37.67
Abs. Int.
1.08e8
5.42e7
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
HxCDD Std.
34.52-39.00
401.8559 Fn3
Flags: PBM
4σ 3.21e3
FS 123468D
1.89e7
36.14
ES 123478D
1.85e7
37.22
ES 123678D
1.87e7
37.34
JS 123467D
8.45e6
37.54
ES 123789D
2.23e7
37.65
Abs. Int.
5.24e6
2.62e6
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
HxCDD Std.
34.52-39.00
403.8530 Fn3
Flags: PBM
4σ 2.04e3
FS 123468D
1.54e7
36.14
ES 123478D
1.45e7
37.22
ES 123678D
1.50e7
37.34
JS 123467D
6.56e6
37.54
ES 123789D
1.77e7
37.65
Abs. Int.
4.31e6
2.15e6
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
QC Check
34.52-39.00
380.9760 Fn3
Flags: -
Abs. Int.
1.38e7
6.92e6
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT

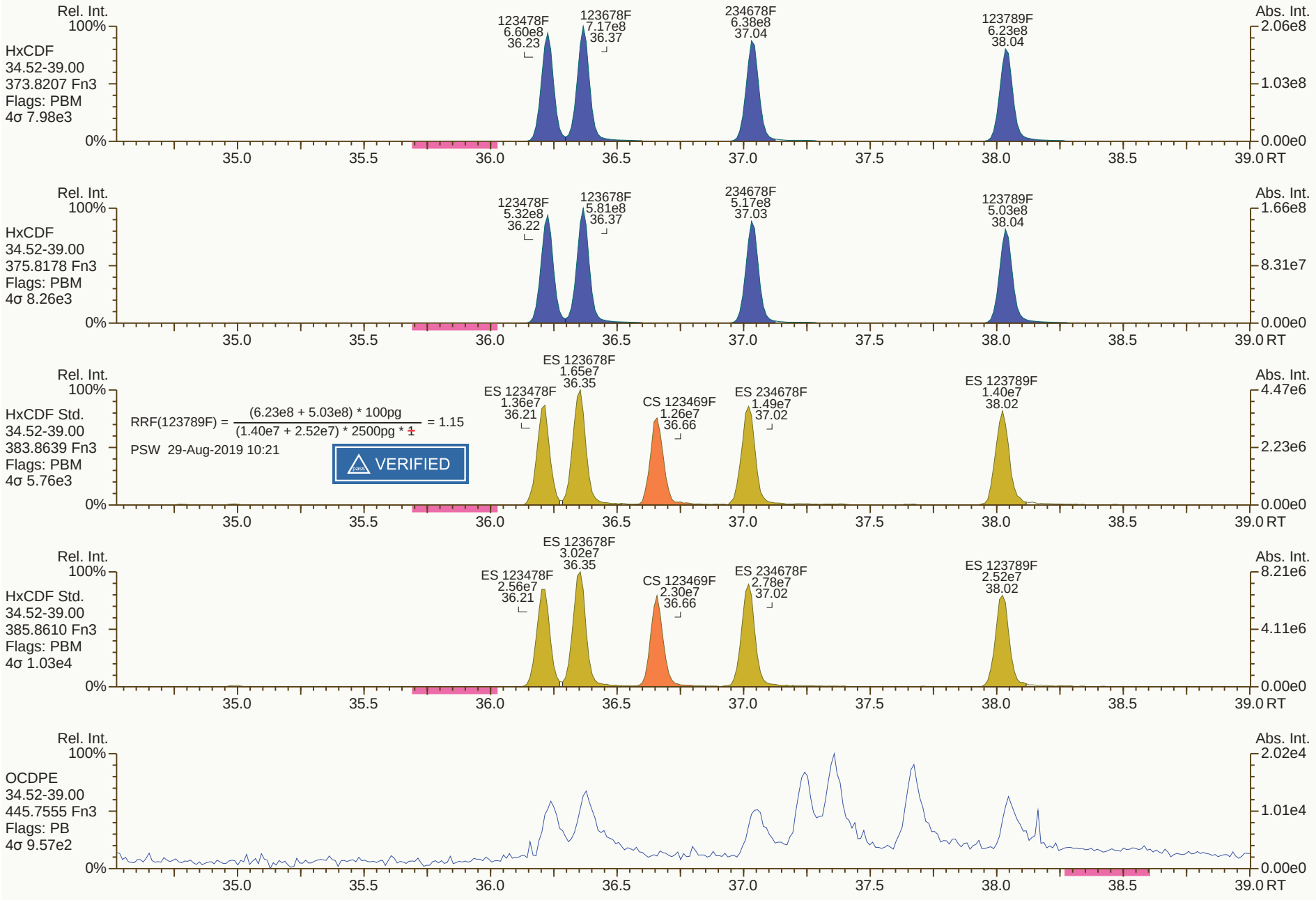

Rel. Int.
100%
HpCDD
39.01-41.50
423.7767 Fn4
Flags: PBM
4σ 3.12e3
0%
1234678D
3.86e8
40.59
Abs. Int.
8.78e7
4.39e7
0.00e0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD
39.01-41.50
425.7737 Fn4
Flags: PBM
4σ 2.84e3
0%
1234678D
3.70e8
40.59
Abs. Int.
8.42e7
4.21e7
0.00e0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
39.01-41.50
435.8169 Fn4
Flags: PBM
4σ 7.55e3
0%
FS 1234679D
1.69e7
39.87
ES 1234678D
1.60e7
40.57
Abs. Int.
4.05e6
2.03e6
0.00e0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
39.01-41.50
437.8140 Fn4
Flags: PBM
4σ 2.67e3
0%
FS 1234679D
1.60e7
39.87
ES 1234678D
1.48e7
40.57
Abs. Int.
3.88e6
1.94e6
0.00e0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
QC Check
39.01-41.50
430.9728 Fn4
Flags: -
0%
Abs. Int.
8.35e6
4.18e6
0.00e0
39.5
40.0
40.5
41.0
RT


OCDD
5.41e8
43.40
Rel. Int.
100%
Abs. Int.
6.92e7
3.46e7
0.00e0
0%
OCDD
41.52-46.01
457.7377 Fn5
Flags: PBM
4σ 2.72e3
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
OCDD
6.05e8
43.40
Rel. Int.
100%
Abs. Int.
7.74e7
3.87e7
0.00e0
0%
OCDD
41.52-46.01
459.7348 Fn5
Flags: PBM
4σ 2.10e3
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
ES OCDD
2.07e7
43.39
Rel. Int.
100%
Abs. Int.
2.52e6
1.26e6
0.00e0
0%
OCDD Std.
41.52-46.01
469.7780 Fn5
Flags: PBM
4σ 1.39e3
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
ES OCDD
2.29e7
43.39
Rel. Int.
100%
Abs. Int.
2.77e6
1.38e6
0.00e0
0%
OCDD Std.
41.52-46.01
471.7750 Fn5
Flags: PBM
4σ 4.21e3
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
Rel. Int.
100%
Abs. Int.
3.13e6
1.57e6
0.00e0
0%
QC Check
41.52-46.01
454.9728 Fn5
Flags: -
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT

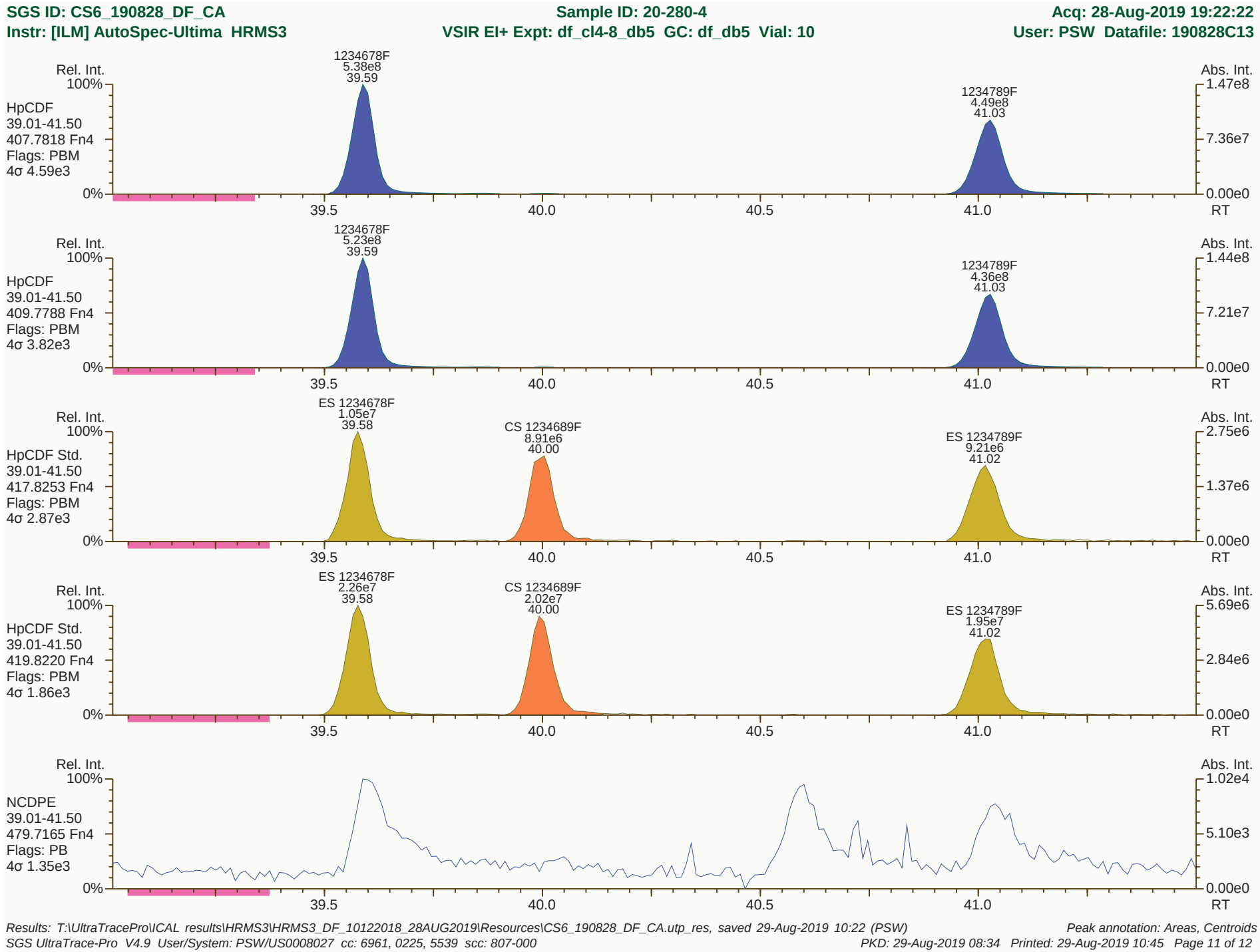

Rel. Int.
100%
0%
Abs. Int.
TCDF
20.04-29.51
303.9016 Fn1
Flags: PBM
4σ 1.14e3
2378F
1.37e8
26.82
3.08e7
1.54e7
0.00e0
TCDF
20.04-29.51
305.8987 Fn1
Flags: PBM
4σ 2.26e3
2378F
1.76e8
26.82
3.94e7
1.97e7
TCDF Std.
20.04-29.51
315.9419 Fn1
Flags: PBM
4σ 8.15e3
AS 1368F
3.02e7
21.67
JS 1234F
2.60e7
25.39
ES 2378F
2.73e7
26.79
5.83e6
2.91e6
TCDF Std.
20.04-29.51
317.9389 Fn1
Flags: PBM
4σ 6.58e3
AS 1368F
3.86e7
21.66
JS 1234F
3.30e7
25.39
ES 2378F
3.39e7
26.79
7.42e6
3.71e6
HxCDPE
20.04-29.51
375.8364 Fn1
Flags: PB
4σ 1.22e3
1.02e4
5.12e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT

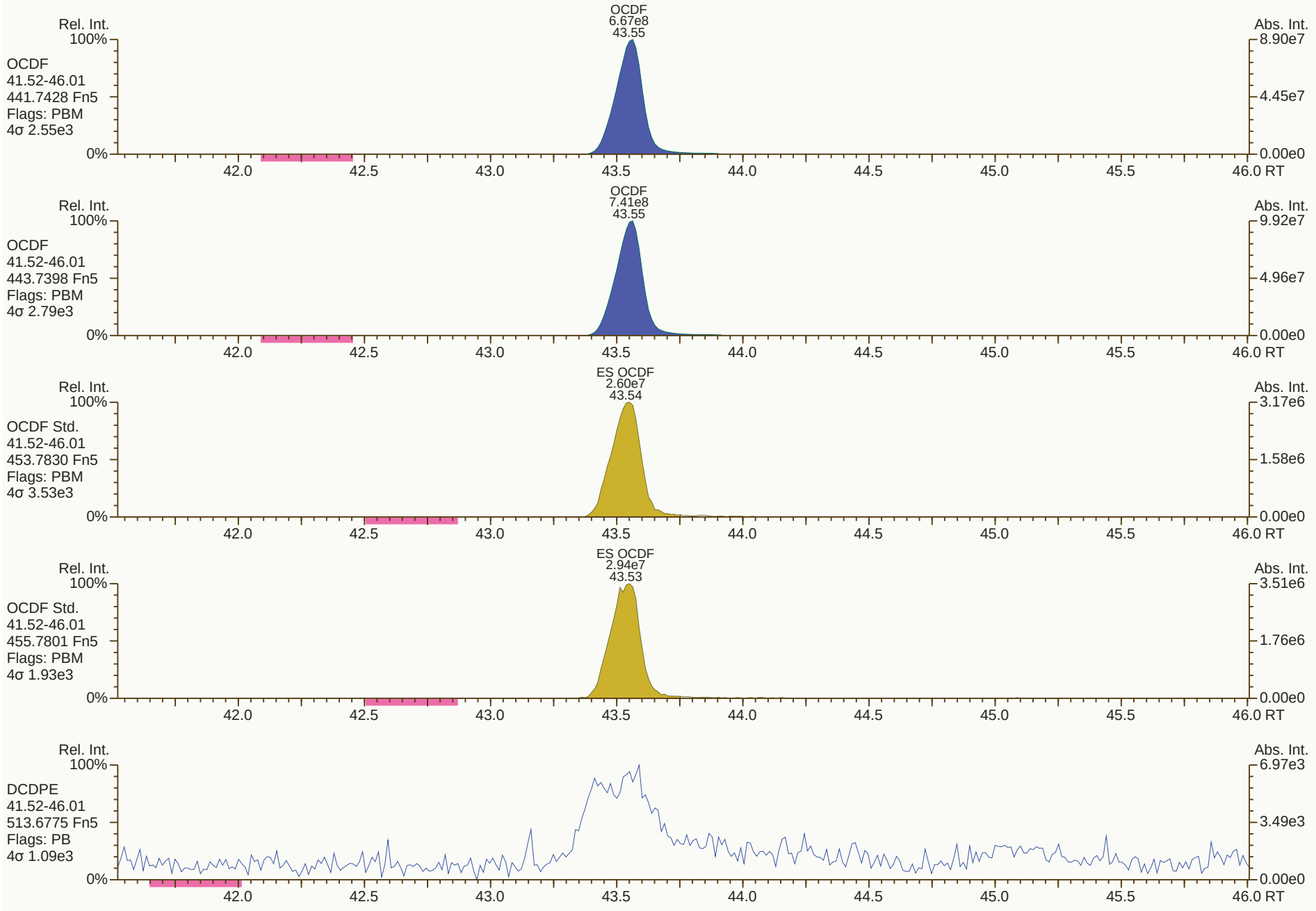

Rel. Int.
100%
0%
Abs. Int.
1.23e4
6.13e3
0.00e0
PeCDF-1
20.04-29.51
339.8597 Fn1
Flags: PB
4σ 3.50e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
0%
Abs. Int.
1.31e4
6.55e3
0.00e0
PeCDF-1
20.04-29.51
341.8568 Fn1
Flags: PB
4σ 3.25e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
0%
Abs. Int.
1.78e6
8.91e5
0.00e0
QC Check
20.04-29.51
316.9824 Fn1
Flags: -
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
PeCDF-2
29.52-34.51
339.8597 Fn2
Flags: PBM
4σ 1.95e3
0%
12378F
8.14e8
31.75
23478F
8.05e8
32.89
Abs. Int.
2.25e8
1.12e8
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDF-2
29.52-34.51
341.8568 Fn2
Flags: PBM
4σ 3.19e3
0%
12378F
5.26e8
31.75
23478F
5.22e8
32.89
Abs. Int.
1.45e8
7.25e7
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDF Std.
29.52-34.51
351.9000 Fn2
Flags: PBM
4σ 3.44e3
0%
CS 12346F
2.95e7
31.19
ES 12378F
3.33e7
31.73
ES 23478F
3.26e7
32.87
Abs. Int.
8.94e6
4.47e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDF Std.
29.52-34.51
353.8970 Fn2
Flags: PBM
4σ 3.13e3
0%
CS 12346F
1.88e7
31.19
ES 12378F
2.17e7
31.73
ES 23478F
2.07e7
32.87
Abs. Int.
5.78e6
2.89e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
HpCDPE
29.52-34.51
409.7974 Fn2
Flags: PB
4σ 1.32e3
0%
Abs. Int.
1.58e4
7.90e3
0.00e0
30.0
31.0
32.0
33.0
34.0
RT


Rel. Int.
100%
HxCDF
34.52-39.00
373.8207 Fn3
Flags: PBM
4σ 7.98e3
123478F
6.60e8
36.23
123678F
7.17e8
36.37
234678F
6.38e8
37.04
123789F
6.23e8
38.04
Abs. Int.
2.06e8
1.03e8
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
HxCDF
34.52-39.00
375.8178 Fn3
Flags: PBM
4σ 8.26e3
123478F
5.32e8
36.22
123678F
5.81e8
36.37
234678F
5.17e8
37.03
123789F
5.03e8
38.04
Abs. Int.
1.66e8
8.31e7
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
HxCDF Std.
34.52-39.00
383.8639 Fn3
Flags: PBM
4σ 5.76e3
RRF(123789F) = (6.23e8 + 5.03e8) * 100pg / (1.40e7 + 2.52e7) * 2500pg * 1 = 1.15
PSW 29-Aug-2019 10:21
VERIFIED
ES 123678F
1.65e7
36.35
ES 123478F
1.36e7
36.21
CS 123469F
1.26e7
36.66
ES 234678F
1.49e7
37.02
ES 123789F
1.40e7
38.02
Abs. Int.
4.47e6
2.23e6
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
HxCDF Std.
34.52-39.00
385.8610 Fn3
Flags: PBM
4σ 1.03e4
ES 123678F
3.02e7
36.35
ES 123478F
2.56e7
36.21
CS 123469F
2.30e7
36.66
ES 234678F
2.78e7
37.02
ES 123789F
2.52e7
38.02
Abs. Int.
8.21e6
4.11e6
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
OCDPE
34.52-39.00
445.7555 Fn3
Flags: PB
4σ 9.57e2
Abs. Int.
2.02e4
1.01e4
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT

SGS ID: CS6_190828_DF_CA
Instr: [ILM] AutoSpec-Ultima HRMS3
Sample ID: 20-280-4
VSIR EI+ Expt: df_cl4-8_db5 GC: df_db5 Vial: 10
Acq: 28-Aug-2019 19:22:22
User: PSW Datafile: 190828C13




Rel. Int.
100%
OCDF
41.52-46.01
441.7428 Fn5
Flags: PBM
4σ 2.55e3
0%
OCDF
6.67e8
43.55
Abs. Int.
8.90e7
4.45e7
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
Rel. Int.
100%
OCDF
41.52-46.01
443.7398 Fn5
Flags: PBM
4σ 2.79e3
0%
OCDF
7.41e8
43.55
Abs. Int.
9.92e7
4.96e7
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
Rel. Int.
100%
OCDF Std.
41.52-46.01
453.7830 Fn5
Flags: PBM
4σ 3.53e3
0%
ES OCDF
2.60e7
43.54
Abs. Int.
3.17e6
1.58e6
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
Rel. Int.
100%
OCDF Std.
41.52-46.01
455.7801 Fn5
Flags: PBM
4σ 1.93e3
0%
ES OCDF
2.94e7
43.53
Abs. Int.
3.51e6
1.76e6
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
Rel. Int.
100%
DCDPE
41.52-46.01
513.6775 Fn5
Flags: PB
4σ 1.09e3
0%
Abs. Int.
6.97e3
3.49e3
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT

Dioxin/Furan QC Summary		Acq'd: 29 Aug 2019 08:53 PSW				ICAL: HRMS3_DF_10122018_28AUG2019	
Lab ID: CS3_190829_DF_CA		UTP: 29-Aug-2019 09:46:51 PSW				Checkcode: 845-140-VTR	
Sample ID: 20-449-3		Report: 29 Aug 2019 11:26 pw				Datafile: 190829C01	
Name	**RT**	**Response**	**RA**	**OK**	**Ref. RRFs**	**Calc. RRFs**	**Dev'n**
2378-TCDD	27.71	5.89E+06	0.77	Y	1.19	1.16	-2%
12378-PeCDD	33.23	2.16E+07	1.55	Y	0.98	0.99	0%
123478-HxCDD	37.22	2.00E+07	1.23	Y	1.02	1.03	1%
123678-HxCDD	37.34	2.17E+07	1.25	Y	1.09	1.11	2%
123789-HxCDD	37.65	2.23E+07	1.24	Y	0.97	0.98	1%
1234678-HpCDD	40.57	1.94E+07	1.05	Y	0.98	1.01	4%
OCDD	43.38	2.95E+07	0.90	Y	1.07	1.08	0%
2378-TCDF	26.80	7.55E+06	0.78	Y	1.05	1.06	1%
12378-PeCDF	31.74	2.92E+07	1.51	Y	0.96	0.97	0%
23478-PeCDF	32.87	2.90E+07	1.53	Y	0.99	0.97	-2%
123478-HxCDF	36.21	2.75E+07	1.22	Y	1.21	1.25	3%
123678-HxCDF	36.36	2.98E+07	1.22	Y	1.11	1.14	3%
234678-HxCDF	37.02	2.73E+07	1.19	Y	1.12	1.15	3%
123789-HxCDF	38.03	2.54E+07	1.21	Y	1.11	1.12	1%
1234678-HpCDF	39.57	2.50E+07	1.02	Y	1.32	1.30	-2%
1234789-HpCDF	41.01	2.21E+07	1.03	Y	1.26	1.29	3%
OCDF	43.53	3.47E+07	0.90	Y	1.03	1.04	1%
ES 2378-TCDD	27.69	5.07E+07	0.79	Y	0.99	0.97	-2%
ES 12378-PeCDD	33.21	4.37E+07	1.54	Y	0.83	0.84	1%
ES 123478-HxCDD	37.2	3.86E+07	1.26	Y	0.95	0.97	2%
ES 123678-HxCDD	37.32	3.90E+07	1.25	Y	0.98	0.98	0%
ES 123789-HxCDD	37.64	4.56E+07	1.23	Y	1.14	1.14	1%
ES 1234678-HpCDD	40.56	3.82E+07	1.07	Y	0.90	0.96	7%
ES OCDD	43.36	5.48E+07	0.89	Y	0.63	0.69	10%
ES 2378-TCDF	26.78	7.16E+07	0.80	Y	1.00	0.98	-2%
ES 12378-PeCDF	31.72	6.02E+07	1.57	Y	0.83	0.82	-1%
ES 23478-PeCDF	32.85	5.98E+07	1.55	Y	0.81	0.82	1%
ES 123478-HxCDF	36.19	4.42E+07	0.53	Y	1.12	1.11	-1%
ES 123678-HxCDF	36.34	5.25E+07	0.52	Y	1.33	1.32	-1%
ES 234678-HxCDF	37.01	4.76E+07	0.53	Y	1.21	1.19	-1%
ES 123789-HxCDF	38.01	4.53E+07	0.54	Y	1.12	1.13	2%
ES 1234678-HpCDF	39.57	3.86E+07	0.46	Y	0.92	0.97	5%
ES 1234789-HpCDF	41	3.43E+07	0.47	Y	0.82	0.86	5%
ES OCDF	43.51	6.68E+07	0.89	Y	0.78	0.84	7%

Dioxin/Furan QC Summary		Acq'd: 29 Aug 2019 08:53 PSW				ICAL: HRMS3_DF_10122018_28AUG2019	
Lab ID: CS3_190829_DF_CA		UTP: 29-Aug-2019 09:46:51 PSW				Checkcode: 845-140-VTR	
Sample ID: 20-449-3		Report: 29 Aug 2019 11:26 pw				Datafile: 190829C01	
Name	**RT**	**Response**	**RA**	**OK**	**Ref. RRFs**	**Calc. RRFs**	**Dev'n**
JS 1234-TCDD	27.02	5.22E+07	0.81	Y	-	-	-
JS 1234-TCDF	25.37	7.32E+07	0.79	Y	-	-	-
JS 123467-HxCDD	37.52	1.99E+07	1.23	Y	-	-	-
CS 37Cl-2378-TCDD	27.71	5.74E+06	n/a	-	1.12	1.10	-2%
CS 12347-PeCDD	32.70	3.84E+07	1.59	Y	0.71	0.74	3%
CS 12346-PeCDF	31.18	5.89E+07	1.54	Y	0.81	0.80	-1%
CS 123469-HxCDF	36.65	4.50E+07	0.55	Y	1.12	1.13	1%
CS 1234689-HpCDF	39.99	3.83E+07	0.47	Y	0.90	0.96	7%
SS 37Cl-2378-TCDD	27.71	5.74E+06	n/a	-	1.14	1.13	-1%
SS 12347-PeCDD	32.70	3.84E+07	1.59	Y	0.86	0.88	2%
SS 12346-PeCDF	31.18	5.89E+07	1.54	Y	0.98	0.98	0%
SS 123469-HxCDF	36.65	4.50E+07	0.55	Y	0.85	0.86	1%
SS 1234689-HpCDF	39.99	3.83E+07	0.47	Y	0.97	0.99	2%
~~OCDD-a~~	~~43.37~~	~~1.86E+06~~	~~2.56~~	~~Y~~		~~0.07~~	~~#VALUE!~~
~~OCDF-a~~	~~43.52~~	~~2.26E+05~~	~~2.65~~	~~Y~~		~~0.01~~	~~#VALUE~~!

METHOD 1613B **PCDD/F CALIBRATION VERIFICATION** **FORM 4A**

Lab Name: SGS North America

Initial Calibration: ICAL: HRMS3_DF_10122018_28AUG2019

Instrument ID: HRMS3 GC Column ID: ZB-5ms

VER Data Filename: 190829C01 Analysis Date: 29-AUG-2019 08:53:00

NATIVE ANALYTES	M/Z's FORMING RATIO	ION ABUND. RATIO	QC LIMITS	OK	CONC. FOUND	RANGE (ng/mL)	OK
2,3,7,8-TCDD	M/M+2	0.77	0.65 - 0.89	Y	9.77	7.8 - 12.9	Y
1,2,3,7,8-PeCDD	M+2/M+4	1.55	1.32 - 1.78	Y	50.1	39 - 65	Y
1,2,3,4,7,8-HxCDD	M+2/M+4	1.23	1.05 - 1.43	Y	50.5	39 - 64	Y
1,2,3,6,7,8-HxCDD	M+2/M+4	1.25	1.05 - 1.43	Y	51.2	39 - 64	Y
1,2,3,7,8,9-HxCDD	M+2/M+4	1.24	1.05 - 1.43	Y	50.4	41 - 61	Y
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.05	0.88 - 1.20	Y	51.9	43 - 58	Y
OCDD	M+2/M+4	0.90	0.76 - 1.02	Y	100	79 - 126	Y
2,3,7,8-TCDF	M/M+2	0.78	0.65 - 0.89	Y	10.1	8.4 - 12	Y
1,2,3,7,8-PeCDF	M+2/M+4	1.51	1.32 - 1.78	Y	50.2	41 - 60	Y
2,3,4,7,8-PeCDF	M+2/M+4	1.53	1.32 - 1.78	Y	49.2	41 - 61	Y
1,2,3,4,7,8-HxCDF	M+2/M+4	1.22	1.05 - 1.43	Y	51.6	45 - 56	Y
1,2,3,6,7,8-HxCDF	M+2/M+4	1.22	1.05 - 1.43	Y	51.4	44 - 57	Y
2,3,4,6,7,8-HxCDF	M+2/M+4	1.19	1.05 - 1.43	Y	51.4	44 - 57	Y
1,2,3,7,8,9-HxCDF	M+2/M+4	1.21	1.05 - 1.43	Y	50.5	45 - 56	Y
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.02	0.88 - 1.20	Y	48.9	45 - 55	Y
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.03	0.88 - 1.20	Y	51.3	43 - 58	Y
OCDF	M+2/M+4	0.90	0.76 - 1.02	Y	101	63 - 159	Y

See Table 9, Method 1613, for m/z specifications.

Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

Contract-required concentration range as specified in Table 6, Method 1613.

Processed: 29 Aug 2019 11:26 Analyst: pw

METHOD 1613B **PCDD/F CALIBRATION VERIFICATION** **FORM 4B**

Lab Name: SGS North America

Initial Calibration: ICAL: HRMS3_DF_10122018_28AUG2019

Instrument ID: HRMS3 GC Column ID: ZB-5ms

VER Data Filename: 190829C01 Analysis Date: 29-AUG-2019 08:53:00

LABELED ANALYTES	M/Z's FORMING RATIO	ION ABUND. RATIO	QC LIMITS			OK	CONC. FOUND	RANGE (ng/mL)			OK
13C-2,3,7,8-TCDD	M/M+2	0.79	0.65	-	0.89	Y	98.2	82	-	121	Y
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.54	1.32	-	1.78	Y	101	62	-	160	Y
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.26	1.05	-	1.43	Y	102	85	-	117	Y
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.25	1.05	-	1.43	Y	100	85	-	118	Y
13C-1,2,3,7,8,9-HxCDD	M+2/M+4	1.23	1.05	-	1.43	Y	101	85	-	118	Y
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.07	0.88	-	1.20	Y	107	72	-	138	Y
13C-OCDD	M+2/M+4	0.89	0.76	-	1.02	Y	219	96	-	415	Y
13C-2,3,7,8-TCDF	M/M+2	0.80	0.65	-	0.89	Y	98.2	71	-	140	Y
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.57	1.32	-	1.78	Y	99	76	-	130	Y
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.55	1.32	-	1.78	Y	101	77	-	130	Y
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.53	0.43	-	0.59	Y	98.6	76	-	131	Y
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	98.9	70	-	143	Y
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.53	0.43	-	0.59	Y	98.8	73	-	137	Y
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.54	0.43	-	0.59	Y	102	74	-	135	Y
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.46	0.37	-	0.51	Y	105	78	-	129	Y
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.47	0.37	-	0.51	Y	105	77	-	129	Y
13C-OCDF	M+2/M+4	0.89	0.76	-	1.02	Y	215	96	-	415	Y
CLEANUP STANDARDS											
37Cl-2,3,7,8-TCDD	n/a						9.81	7.9	-	12.7	Y
13C-1,2,3,4,7-PeCDD	M+2/M+4	1.59	1.32	-	1.78	Y	103	70	-	130	Y
13C-1,2,3,4,6-PeCDF	M+2/M+4	1.54	1.32	-	1.78	Y	99.5	70	-	130	Y
13C-1,2,3,4,6,9-HxCDF	M/M+2	0.55	0.43	-	0.59	Y	101	70	-	130	Y
13C-1,2,3,4,6,8,9-HpCDF	M/M+2	0.47	0.37	-	0.51	Y	107	70	-	130	Y

Processed: 29 Aug 2019 11:26 Analyst: pw

METHOD 8290A **PCDD/F CALIBRATION VERIFICATION** **FORM 4A**

Lab Name: SGS North America

Initial Calibration: ICAL: HRMS3_DF_10122018_28AUG2019

Instrument ID: HRMS3 GC Column ID: ZB-5ms

VER Data Filename: 190829C01 Analysis Date: 29-AUG-2019 08:53:00

NATIVE ANALYTES	M/Z's FORMING RATIO	ION ABUND. RATIO	QC LIMITS			OK	CONC. FOUND	RANGE (ng/mL)			OK
2,3,7,8-TCDD	M/M+2	0.77	0.65	-	0.89	Y	9.77	8	-	12	Y
1,2,3,7,8-PeCDD	M+2/M+4	1.55	1.32	-	1.78	Y	50.1	40	-	60	Y
1,2,3,4,7,8-HxCDD	M+2/M+4	1.23	1.05	-	1.43	Y	50.5	40	-	60	Y
1,2,3,6,7,8-HxCDD	M+2/M+4	1.25	1.05	-	1.43	Y	51.2	40	-	60	Y
1,2,3,7,8,9-HxCDD	M+2/M+4	1.24	1.05	-	1.43	Y	50.4	40	-	60	Y
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.05	0.88	-	1.20	Y	51.9	40	-	60	Y
OCDD	M+2/M+4	0.90	0.76	-	1.02	Y	100	80	-	120	Y
2,3,7,8-TCDF	M/M+2	0.78	0.65	-	0.89	Y	10.1	8	-	12	Y
1,2,3,7,8-PeCDF	M+2/M+4	1.51	1.32	-	1.78	Y	50.2	40	-	60	Y
2,3,4,7,8-PeCDF	M+2/M+4	1.53	1.32	-	1.78	Y	49.2	40	-	60	Y
1,2,3,4,7,8-HxCDF	M+2/M+4	1.22	1.05	-	1.43	Y	51.6	40	-	60	Y
1,2,3,6,7,8-HxCDF	M+2/M+4	1.22	1.05	-	1.43	Y	51.4	40	-	60	Y
2,3,4,6,7,8-HxCDF	M+2/M+4	1.19	1.05	-	1.43	Y	51.4	40	-	60	Y
1,2,3,7,8,9-HxCDF	M+2/M+4	1.21	1.05	-	1.43	Y	50.5	40	-	60	Y
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.02	0.88	-	1.20	Y	48.9	40	-	60	Y
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.03	0.88	-	1.20	Y	51.3	40	-	60	Y
OCDF	M+2/M+4	0.90	0.76	-	1.02	Y	101	80	-	120	Y

Processed: 29 Aug 2019 11:27 Analyst: pw

METHOD 8290A **PCDD/F CALIBRATION VERIFICATION** **FORM 4B**

Lab Name: SGS North America

Initial Calibration: ICAL: HRMS3_DF_10122018_28AUG2019

Instrument ID: HRMS3 GC Column ID: ZB-5ms

VER Data Filename: 190829C01 Analysis Date: 29-AUG-2019 08:53:00

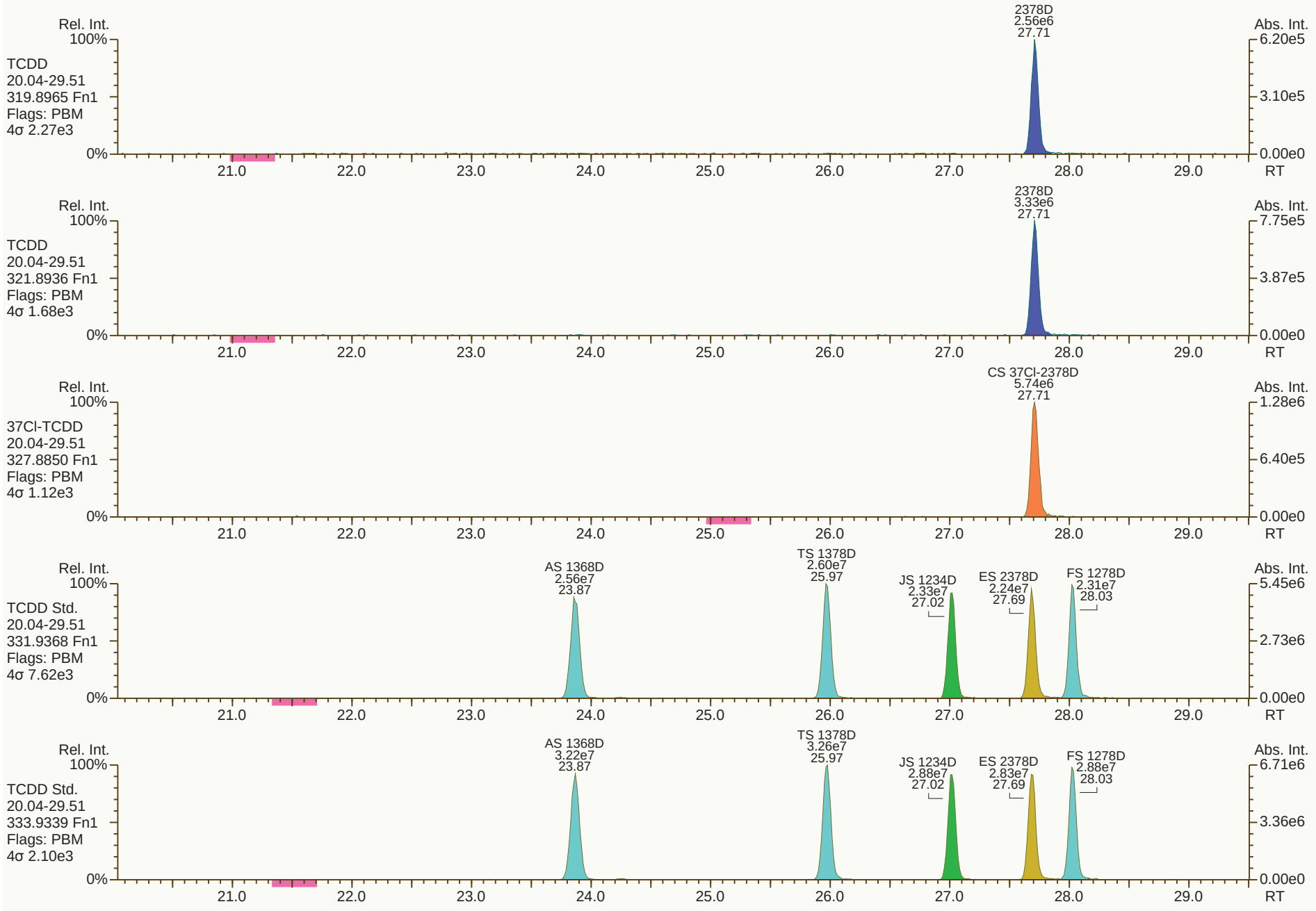
LABELED ANALYTES	M/Z's FORMING RATIO	ION ABUND. RATIO	QC LIMITS			OK	CONC. FOUND	RANGE (ng/mL)			OK
13C-2,3,7,8-TCDD	M/M+2	0.79	0.65	-	0.89	Y	98.2	70	-	130	Y
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.54	1.32	-	1.78	Y	101	70	-	130	Y
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.26	1.05	-	1.43	Y	102	70	-	130	Y
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.25	1.05	-	1.43	Y	100	70	-	130	Y
13C-1,2,3,7,8,9-HxCDD	M+2/M+4	1.23	1.05	-	1.43	Y	101	70	-	130	Y
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.07	0.88	-	1.20	Y	107	70	-	130	Y
13C-OCDD	M+2/M+4	0.89	0.76	-	1.02	Y	219	140	-	260	Y
13C-2,3,7,8-TCDF	M/M+2	0.80	0.65	-	0.89	Y	98.2	70	-	130	Y
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.57	1.32	-	1.78	Y	99	70	-	130	Y
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.55	1.32	-	1.78	Y	101	70	-	130	Y
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.53	0.43	-	0.59	Y	98.6	70	-	130	Y
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	98.9	70	-	130	Y
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.53	0.43	-	0.59	Y	98.8	70	-	130	Y
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.54	0.43	-	0.59	Y	102	70	-	130	Y
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.46	0.37	-	0.51	Y	105	70	-	130	Y
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.47	0.37	-	0.51	Y	105	70	-	130	Y
13C-OCDF	M+2/M+4	0.89	0.76	-	1.02	Y	215	140	-	260	Y
CLEANUP STANDARDS											
37Cl-2,3,7,8-TCDD	n/a						9.81	7.9	-	12.7	Y
13C-1,2,3,4,7-PeCDD	M+2/M+4	1.59	1.32	-	1.78	Y	103	70	-	130	Y
13C-1,2,3,4,6-PeCDF	M+2/M+4	1.54	1.32	-	1.78	Y	99.5	70	-	130	Y
13C-1,2,3,4,6,9-HxCDF	M/M+2	0.55	0.43	-	0.59	Y	101	70	-	130	Y
13C-1,2,3,4,6,8,9-HpCDF	M/M+2	0.47	0.37	-	0.51	Y	107	70	-	130	Y

Processed: 29 Aug 2019 11:27 Analyst: pw

SGS ID: CS3_190829_DF_CA **Sample ID: 20-449-3** **Acq: 29-Aug-2019 08:53:00**
Instr: [ILM] AutoSpec-Ultima HRMS3 **VSIR EI+ Expt: df_cl4-8_db5 GC: df_db5 Vial: 1** **User: PSW Datafile: 190829C01**



Results: T:\UltraTracePro\ICAL results\HRMS3\HRMS3_DF_10122018_28AUG2019\Resources\CS3_190829_DF_CA.utp_res, saved 29-Aug-2019 09:46 (PSW) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 scc: 845-140 *PKD: n/a Printed: 29-Aug-2019 11:30 Page 1 of 12*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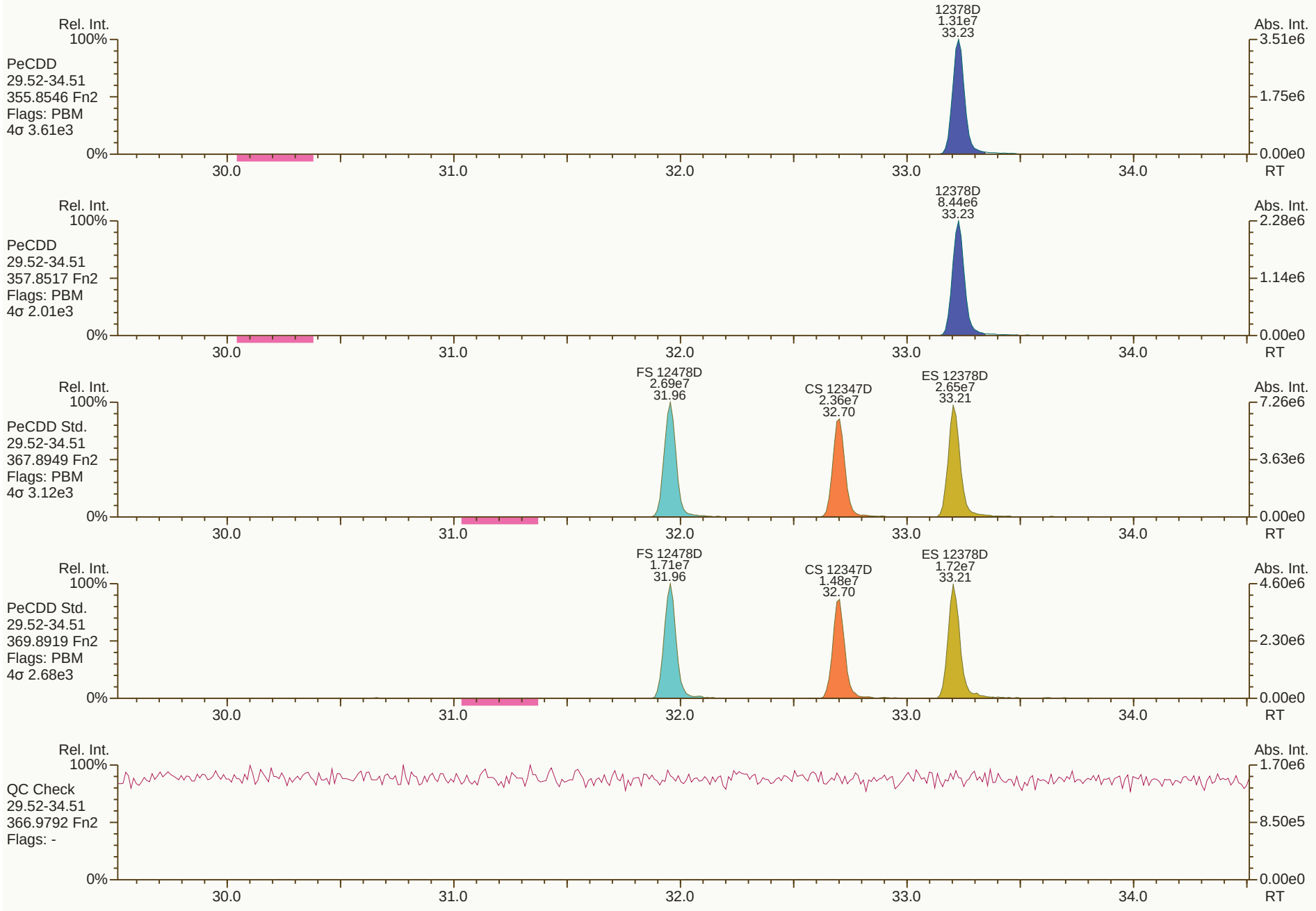
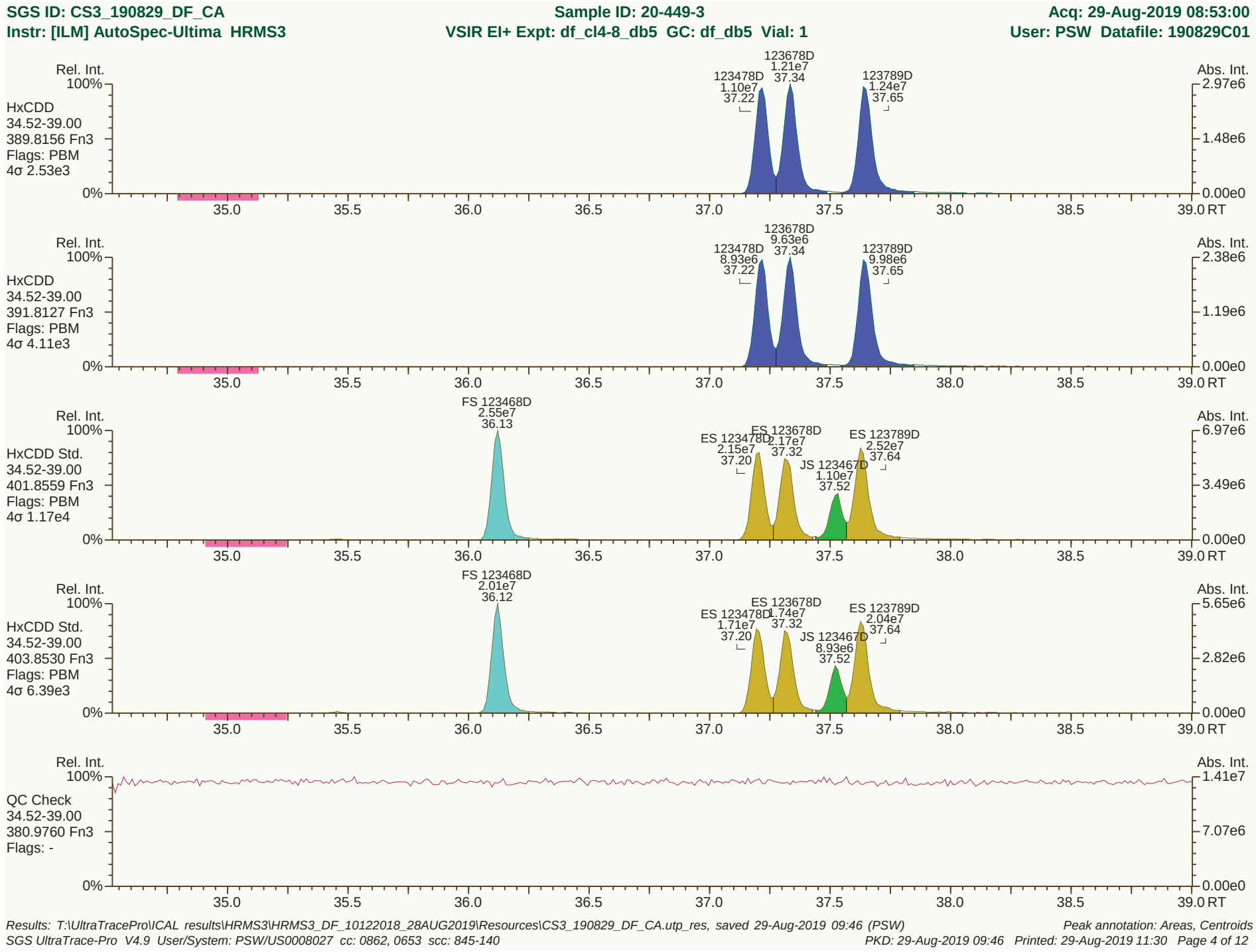
100%
TCDD
20.04-29.51
319.8965 Fn1
Flags: PBM
4σ 2.27e3
0%
2378D
2.56e6
27.71
Abs. Int.
6.20e5
3.10e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD
20.04-29.51
321.8936 Fn1
Flags: PBM
4σ 1.68e3
0%
2378D
3.33e6
27.71
Abs. Int.
7.75e5
3.87e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
37Cl-TCDD
20.04-29.51
327.8850 Fn1
Flags: PBM
4σ 1.12e3
0%
CS 37Cl-2378D
5.74e6
27.71
Abs. Int.
1.28e6
6.40e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.04-29.51
331.9368 Fn1
Flags: PBM
4σ 7.62e3
0%
AS 1368D
2.56e7
23.87
TS 1378D
2.60e7
25.97
JS 1234D
2.33e7
27.02
ES 2378D
2.24e7
27.69
FS 1278D
2.31e7
28.03
Abs. Int.
5.45e6
2.73e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.04-29.51
333.9339 Fn1
Flags: PBM
4σ 2.10e3
0%
AS 1368D
3.22e7
23.87
TS 1378D
3.26e7
25.97
JS 1234D
2.88e7
27.02
ES 2378D
2.83e7
27.69
FS 1278D
2.88e7
28.03
Abs. Int.
6.71e6
3.36e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
PeCDD
29.52-34.51
355.8546 Fn2
Flags: PBM
4σ 3.61e3
0%
12378D
1.31e7
33.23
Abs. Int.
3.51e6
1.75e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDD
29.52-34.51
357.8517 Fn2
Flags: PBM
4σ 2.01e3
0%
12378D
8.44e6
33.23
Abs. Int.
2.28e6
1.14e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDD Std.
29.52-34.51
367.8949 Fn2
Flags: PBM
4σ 3.12e3
0%
FS 12478D
2.69e7
31.96
CS 12347D
2.36e7
32.70
ES 12378D
2.65e7
33.21
Abs. Int.
7.26e6
3.63e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDD Std.
29.52-34.51
369.8919 Fn2
Flags: PBM
4σ 2.68e3
0%
FS 12478D
1.71e7
31.96
CS 12347D
1.48e7
32.70
ES 12378D
1.72e7
33.21
Abs. Int.
4.60e6
2.30e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
QC Check
29.52-34.51
366.9792 Fn2
Flags: -
0%
Abs. Int.
1.70e6
8.50e5
0.00e0
30.0
31.0
32.0
33.0
34.0
RT

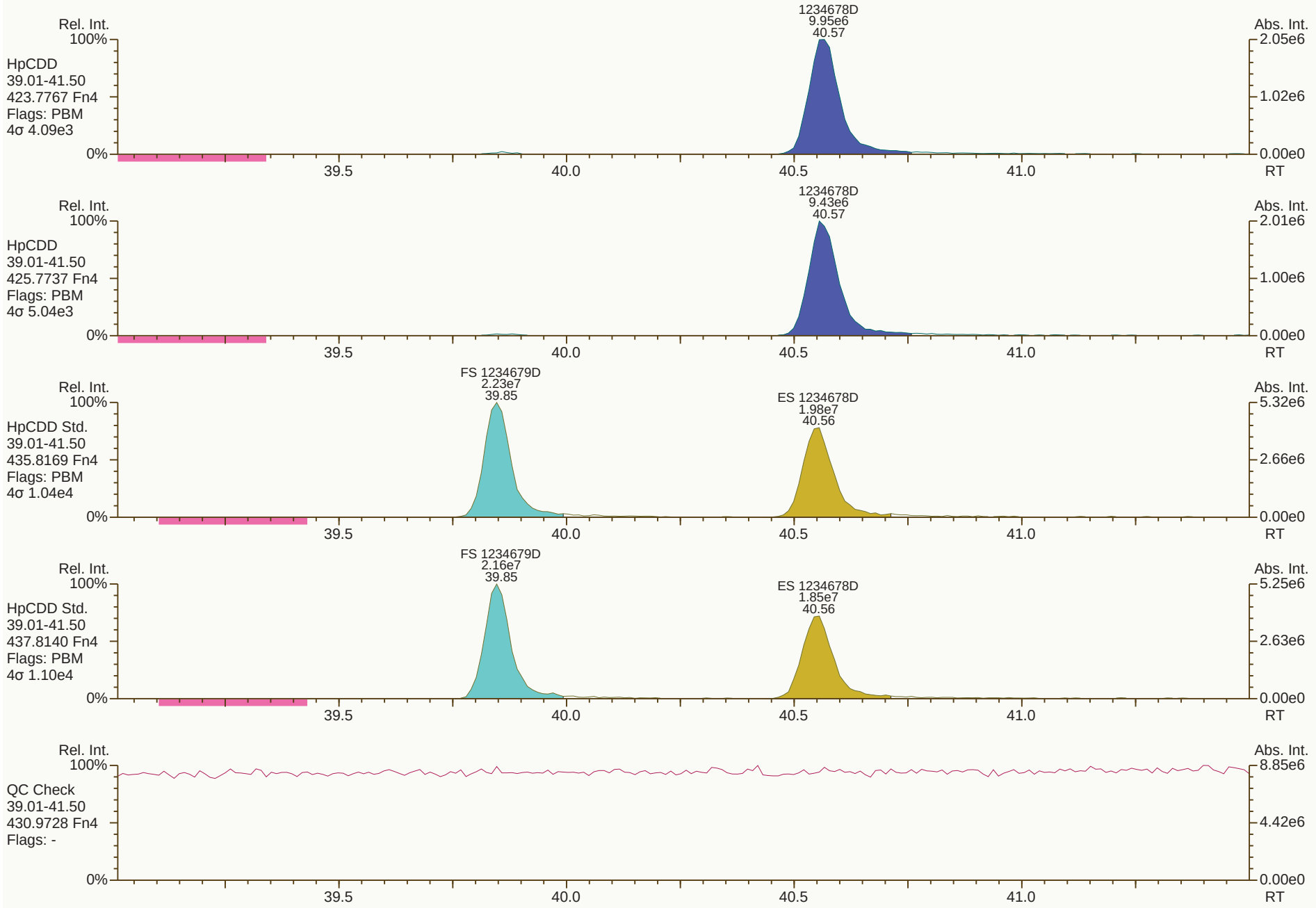
SGS ID: CS3_190829_DF_CA
Instr: [ILM] AutoSpec-Ultima HRMS3

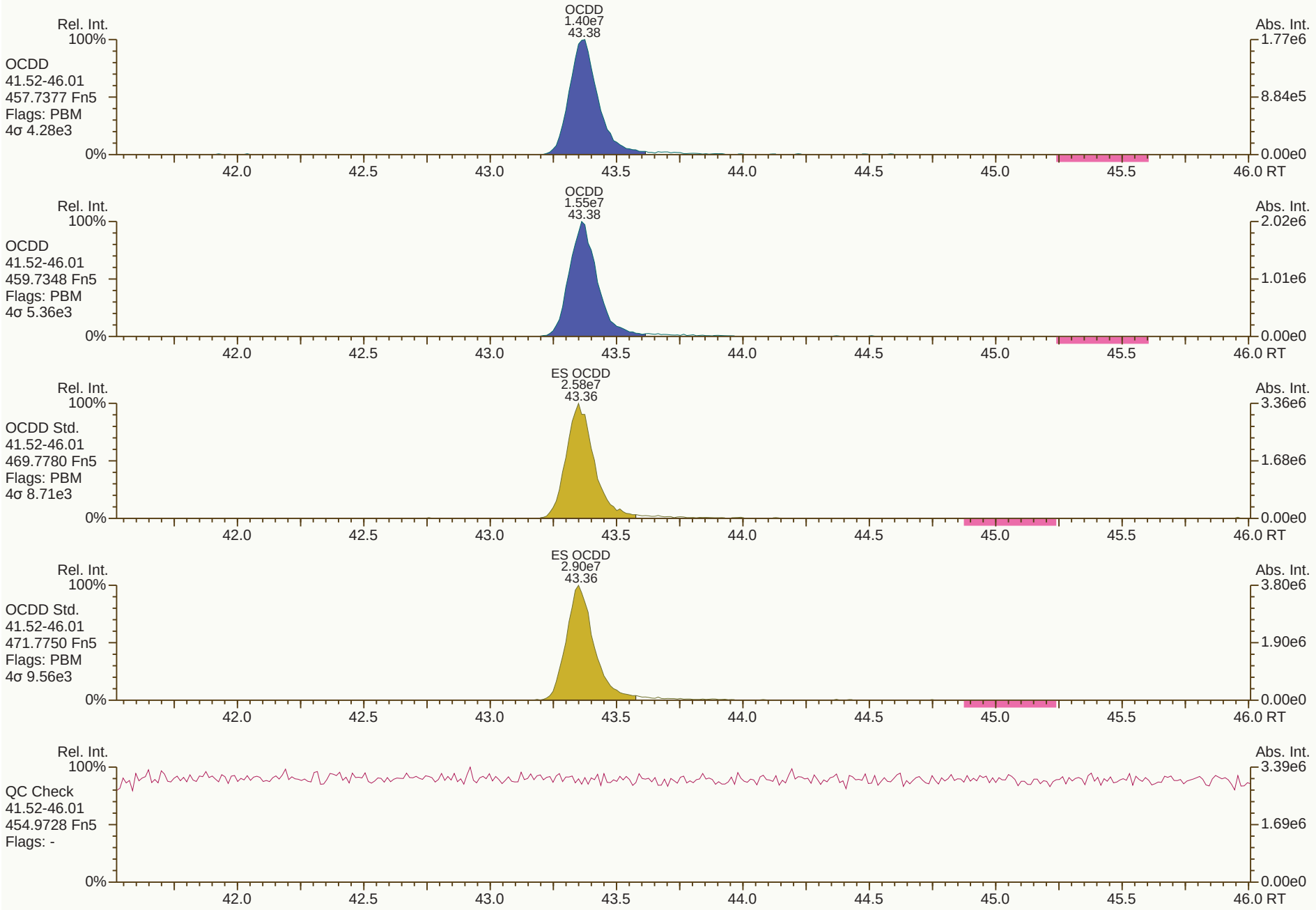
Sample ID: 20-449-3
VSIR EI+ Expt: df_cl4-8_db5 GC: df_db5 Vial: 1

Acq: 29-Aug-2019 08:53:00
User: PSW Datafile: 190829C01

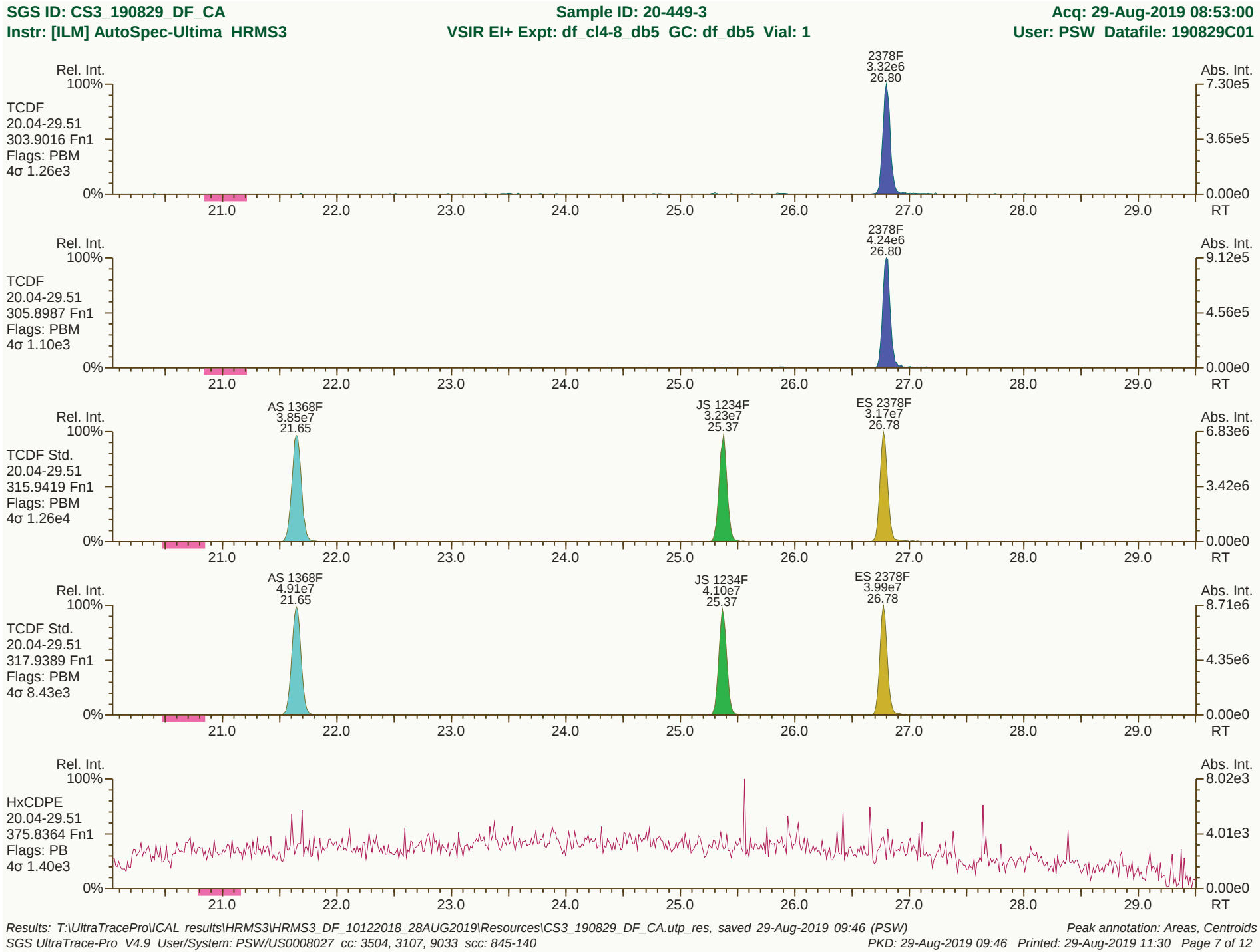


Results: T:\UltraTracePro\ICAL results\HRMS3\HRMS3_DF_10122018_28AUG2019\Resources\CS3_190829_DF_CA.utp_res, saved 29-Aug-2019 09:46 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 0862, 0653 scc: 845-140
PKD: 29-Aug-2019 09:46 Printed: 29-Aug-2019 11:30 Page 4 of 12


Rel. Int.
100%
HpCDD
39.01-41.50
423.7767 Fn4
Flags: PBM
4σ 4.09e3
1234678D
9.95e6
40.57
Abs. Int.
2.05e6
1.02e6
0.00e0
0%
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD
39.01-41.50
425.7737 Fn4
Flags: PBM
4σ 5.04e3
1234678D
9.43e6
40.57
Abs. Int.
2.01e6
1.00e6
0.00e0
0%
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
39.01-41.50
435.8169 Fn4
Flags: PBM
4σ 1.04e4
FS 1234679D
2.23e7
39.85
ES 1234678D
1.98e7
40.56
Abs. Int.
5.32e6
2.66e6
0.00e0
0%
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
39.01-41.50
437.8140 Fn4
Flags: PBM
4σ 1.10e4
FS 1234679D
2.16e7
39.85
ES 1234678D
1.85e7
40.56
Abs. Int.
5.25e6
2.63e6
0.00e0
0%
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
QC Check
39.01-41.50
430.9728 Fn4
Flags: -
Abs. Int.
8.85e6
4.42e6
0.00e0
0%
39.5
40.0
40.5
41.0
RT


OCDD
1.40e7
43.38
Rel. Int.
Abs. Int.
OCDD
41.52-46.01
457.7377 Fn5
Flags: PBM
4σ 4.28e3
OCDD
1.55e7
43.38
OCDD
41.52-46.01
459.7348 Fn5
Flags: PBM
4σ 5.36e3
ES OCDD
2.58e7
43.36
OCDD Std.
41.52-46.01
469.7780 Fn5
Flags: PBM
4σ 8.71e3
ES OCDD
2.90e7
43.36
OCDD Std.
41.52-46.01
471.7750 Fn5
Flags: PBM
4σ 9.56e3
QC Check
41.52-46.01
454.9728 Fn5
Flags: -
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT

SGS ID: CS3_190829_DF_CA
Instr: [ILM] AutoSpec-Ultima HRMS3
Sample ID: 20-449-3
VSIR EI+ Expt: df_cl4-8_db5 GC: df_db5 Vial: 1
Acq: 29-Aug-2019 08:53:00
User: PSW Datafile: 190829C01



SGS ID: CS3_190829_DF_CA | **Sample ID: 20-449-3** | **Acq: 29-Aug-2019 08:53:00**

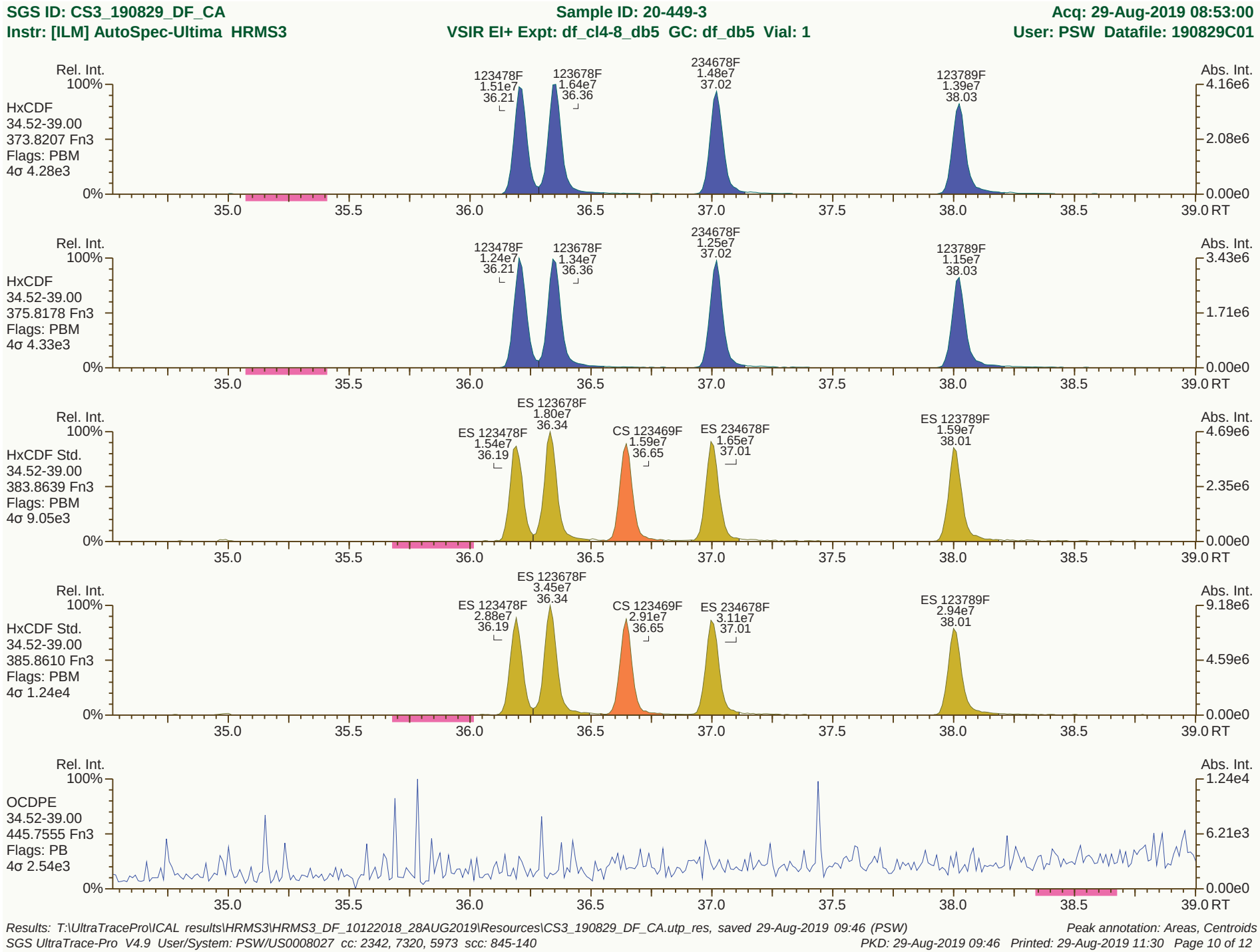
Instr: [ILM] AutoSpec-Ultima HRMS3 | **VSIR EI+ Expt: df_cl4-8_db5 GC: df_db5 Vial: 1** | **User: PSW Datafile: 190829C01**

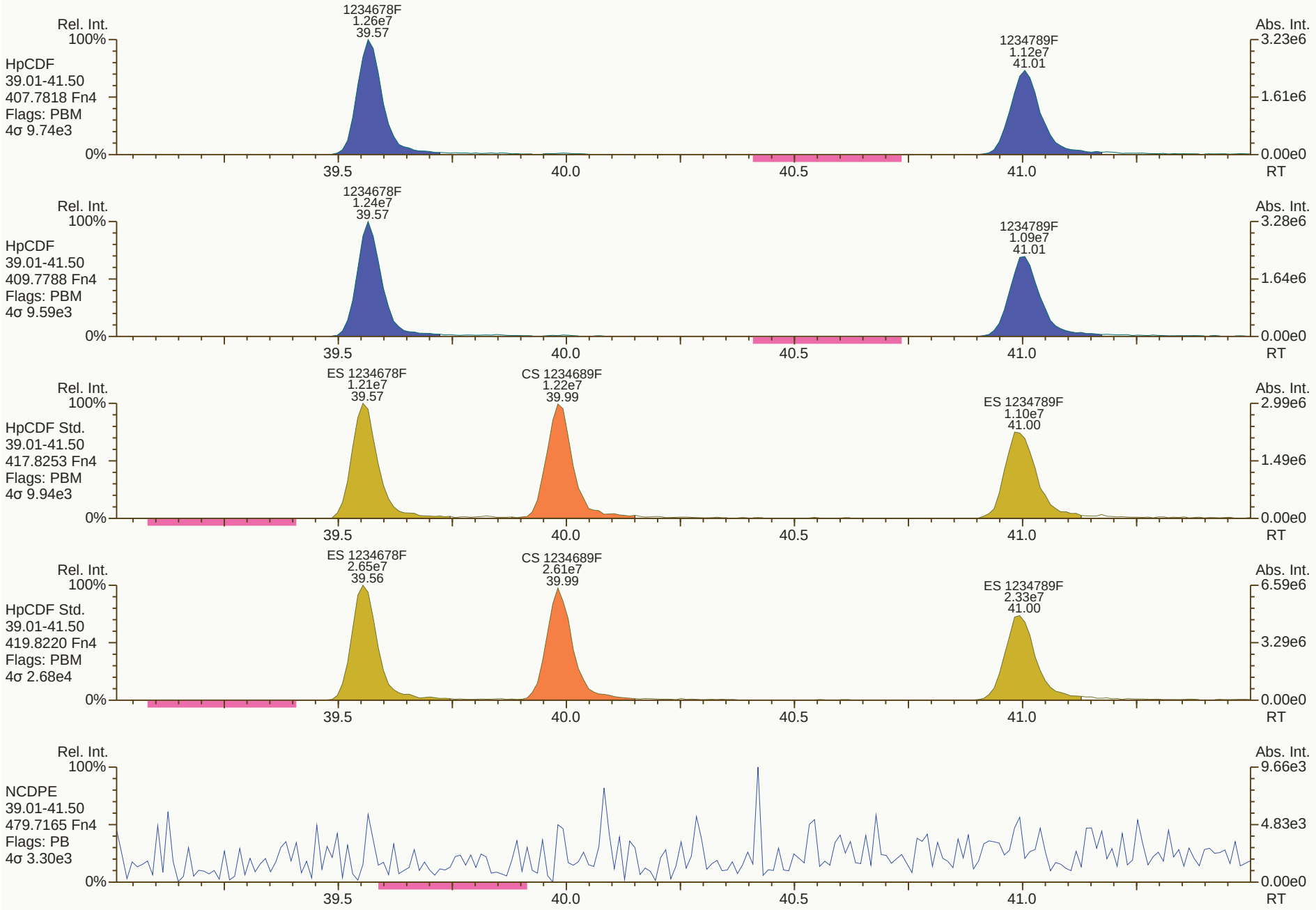


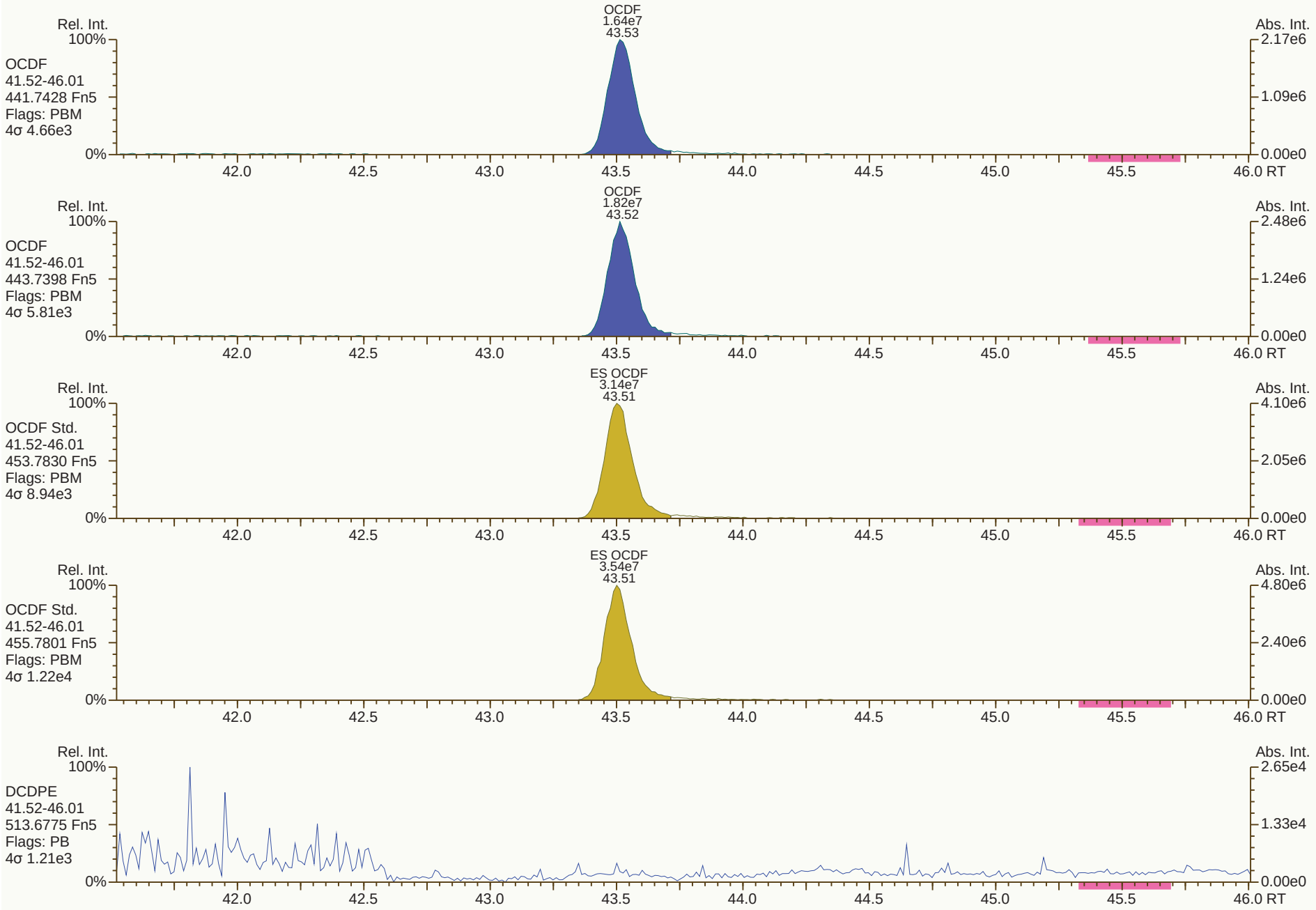
Results: T:\UltraTracePro\ICAL results\HRMS3\HRMS3_DF_10122018_28AUG2019\Resources\CS3_190829_DF_CA.utp_res, saved 29-Aug-2019 09:46 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 1582 scc: 845-140 *PKD: 29-Aug-2019 09:46 Printed: 29-Aug-2019 11:30 Page 8 of 12*


Rel. Int.
100%
PeCDF-2
29.52-34.51
339.8597 Fn2
Flags: PBM
4σ 2.71e3
0%
12378F
1.75e7
31.74
23478F
1.76e7
32.87
Abs. Int.
4.78e6
2.39e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDF-2
29.52-34.51
341.8568 Fn2
Flags: PBM
4σ 2.58e3
0%
12378F
1.16e7
31.74
23478F
1.15e7
32.87
Abs. Int.
3.11e6
1.55e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDF Std.
29.52-34.51
351.9000 Fn2
Flags: PBM
4σ 4.29e3
0%
CS 12346F
3.57e7
31.18
ES 12378F
3.68e7
31.72
ES 23478F
3.64e7
32.85
Abs. Int.
9.73e6
4.86e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDF Std.
29.52-34.51
353.8970 Fn2
Flags: PBM
4σ 3.11e3
0%
CS 12346F
2.32e7
31.18
ES 12378F
2.35e7
31.72
ES 23478F
2.34e7
32.85
Abs. Int.
6.23e6
3.11e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
HpCDPE
29.52-34.51
409.7974 Fn2
Flags: PB
4σ 1.62e3
0%
Abs. Int.
7.21e3
3.60e3
0.00e0
30.0
31.0
32.0
33.0
34.0
RT


SGS ID: CS3_190829_DF_CA
Sample ID: 20-449-3
Acq: 29-Aug-2019 08:53:00
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5 GC: df_db5 Vial: 1
User: PSW Datafile: 190829C01
Rel. Int.
Abs. Int.
HxCDF
34.52-39.00
373.8207 Fn3
Flags: PBM
4σ 4.28e3
123478F 1.51e7 36.21
123678F 1.64e7 36.36
234678F 1.48e7 37.02
123789F 1.39e7 38.03
4.16e6
2.08e6
0.00e0
HxCDF
34.52-39.00
375.8178 Fn3
Flags: PBM
4σ 4.33e3
123478F 1.24e7 36.21
123678F 1.34e7 36.36
234678F 1.25e7 37.02
123789F 1.15e7 38.03
3.43e6
1.71e6
0.00e0
HxCDF Std.
34.52-39.00
383.8639 Fn3
Flags: PBM
4σ 9.05e3
ES 123478F 1.54e7 36.19
ES 123678F 1.80e7 36.34
CS 123469F 1.59e7 36.65
ES 234678F 1.65e7 37.01
ES 123789F 1.59e7 38.01
4.69e6
2.35e6
0.00e0
HxCDF Std.
34.52-39.00
385.8610 Fn3
Flags: PBM
4σ 1.24e4
ES 123478F 2.88e7 36.19
ES 123678F 3.45e7 36.34
CS 123469F 2.91e7 36.65
ES 234678F 3.11e7 37.01
ES 123789F 2.94e7 38.01
9.18e6
4.59e6
0.00e0
OCDPE
34.52-39.00
445.7555 Fn3
Flags: PB
4σ 2.54e3
1.24e4
6.21e3
0.00e0
100%
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Results: T:\UltraTracePro\ICAL results\HRMS3\HRMS3_DF_10122018_28AUG2019\Resources\CS3_190829_DF_CA.utp_res, saved 29-Aug-2019 09:46 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 2342, 7320, 5973 scc: 845-140
PKD: 29-Aug-2019 09:46 Printed: 29-Aug-2019 11:30 Page 10 of 12


Rel. Int.
100%
HpCDF
39.01-41.50
407.7818 Fn4
Flags: PBM
4σ 9.74e3
0%
1234678F
1.26e7
39.57
1234789F
1.12e7
41.01
Abs. Int.
3.23e6
1.61e6
0.00e0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF
39.01-41.50
409.7788 Fn4
Flags: PBM
4σ 9.59e3
0%
1234678F
1.24e7
39.57
1234789F
1.09e7
41.01
Abs. Int.
3.28e6
1.64e6
0.00e0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
39.01-41.50
417.8253 Fn4
Flags: PBM
4σ 9.94e3
0%
ES 1234678F
1.21e7
39.57
CS 1234689F
1.22e7
39.99
ES 1234789F
1.10e7
41.00
Abs. Int.
2.99e6
1.49e6
0.00e0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
39.01-41.50
419.8220 Fn4
Flags: PBM
4σ 2.68e4
0%
ES 1234678F
2.65e7
39.56
CS 1234689F
2.61e7
39.99
ES 1234789F
2.33e7
41.00
Abs. Int.
6.59e6
3.29e6
0.00e0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
NCDPE
39.01-41.50
479.7165 Fn4
Flags: PB
4σ 3.30e3
0%
Abs. Int.
9.66e3
4.83e3
0.00e0
39.5
40.0
40.5
41.0
RT


OCDF
1.64e7
43.53
Rel. Int.
100%
OCDF
41.52-46.01
441.7428 Fn5
Flags: PBM
4σ 4.66e3
0%
Abs. Int.
2.17e6
1.09e6
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
OCDF
1.82e7
43.52
Rel. Int.
100%
OCDF
41.52-46.01
443.7398 Fn5
Flags: PBM
4σ 5.81e3
0%
Abs. Int.
2.48e6
1.24e6
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
ES OCDF
3.14e7
43.51
Rel. Int.
100%
OCDF Std.
41.52-46.01
453.7830 Fn5
Flags: PBM
4σ 8.94e3
0%
Abs. Int.
4.10e6
2.05e6
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
ES OCDF
3.54e7
43.51
Rel. Int.
100%
OCDF Std.
41.52-46.01
455.7801 Fn5
Flags: PBM
4σ 1.22e4
0%
Abs. Int.
4.80e6
2.40e6
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
Rel. Int.
100%
DCDPE
41.52-46.01
513.6775 Fn5
Flags: PB
4σ 1.21e3
0%
Abs. Int.
2.65e4
1.33e4
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT

Lab ID: OPR1_190829_DF-RJ **Acq'd:** 29 Aug 2019 10:35 PSW **Wt/Vol:** 1 uL **ICAL:** HRMS3_DF_10122018_28AUG2019

Client ID: ICV SIL# 22-5-12 **UTP:** 29-Aug-2019 11:24:17 PSW **J-level:** 0.25 pg/uL **Split:** 1 **Checkcode:** 573-892-NXW

Datafile: 190829C03 **Report:** 29 Aug 2019 11:24 pw **Stds (pg):** JS: 100 ES: 100 CS/SS: 100, 40 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	27.74		1.0008	1.0008	0	7.24E+06	0.81	Y	1.19	9.53	4566	0.0691
12378-PeCDD	33.24		1.0004	1.0006	+0.4	2.39E+07	1.54	Y	0.98	47.4	3646	0.07
123478-HxCDD	37.23		1.0003	1.0005	+0.4	2.14E+07	1.23	Y	1.02	53	4861	0.111
123678-HxCDD	37.35		1.0036	1.0038	+0.4	2.39E+07	1.27	Y	1.09	51.3	4861	0.11
123789-HxCDD	37.66		1.0120	1.0122	+0.5	2.33E+07	1.23	Y	0.97	49.6	4861	0.113
1234678-HpCDD	40.58		1.0003	1.0003	0	1.79E+07	1.04	Y	0.98	52.1	3005	0.108
OCDD	43.38		1.0003	1.0003	0	2.00E+07	0.90	Y	1.07	103	4085	0.402
2378-TCDF	26.83		1.0008	1.0008	0	9.49E+06	0.76	Y	1.05	10.6	3977	0.0517
12378-PeCDF	31.75		1.0005	1.0005	0	3.26E+07	1.55	Y	0.96	48.8	6019	0.0902
23478-PeCDF	32.88		1.0006	1.0005	-0.2	3.57E+07	1.53	Y	0.99	53.2	6019	0.0865
123478-HxCDF	36.22		1.0004	1.0005	+0.2	2.93E+07	1.22	Y	1.21	50.2	11242	0.177
123678-HxCDF	36.37		1.0004	1.0005	+0.2	3.29E+07	1.22	Y	1.11	51.3	11242	0.17
234678-HxCDF	37.03		1.0004	1.0004	0	2.94E+07	1.23	Y	1.12	51.5	11242	0.19
123789-HxCDF	38.04		1.0003	1.0005	+0.5	2.51E+07	1.25	Y	1.11	51.2	11242	0.232
1234678-HpCDF	39.58		1.0002	1.0003	+0.2	2.42E+07	1.01	Y	1.32	49.3	6866	0.143
1234789-HpCDF	41.02		1.0002	1.0004	+0.5	1.96E+07	1.03	Y	1.26	52.5	6866	0.217
OCDF	43.53		1.0003	1.0003	0	2.48E+07	0.90	Y	1.03	99.9	3821	0.296

Name	Act RT	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	27.72	1.0248	1.0248	0	6.39E+07	0.81	Y	0.99	98.5
ES 12378-PeCDD	33.22	1.2288	1.2281	-1.4	5.11E+07	1.59	Y	0.83	93.9
ES 123478-HxCDD	37.21	0.9915	0.9914	-0.2	3.95E+07	1.27	Y	0.95	94.4
ES 123678-HxCDD	37.33	0.9947	0.9947	0	4.29E+07	1.27	Y	0.98	99.6
ES 123789-HxCDD	37.65	1.0030	1.0030	0	4.83E+07	1.27	Y	1.14	96.1
ES 1234678-HpCDD	40.57	1.0809	1.0810	+0.2	3.52E+07	1.06	Y	0.90	88.8
ES OCDD	43.37	1.1556	1.1555	-0.3	3.62E+07	0.90	Y	0.63	65.3
ES 2378-TCDF	26.81	1.0552	1.0549	-0.5	8.58E+07	0.79	Y	1.00	103
ES 12378-PeCDF	31.73	1.2493	1.2486	-1.3	6.93E+07	1.55	Y	0.83	100
ES 23478-PeCDF	32.86	1.2940	1.2931	-1.8	6.80E+07	1.55	Y	0.81	101
ES 123478-HxCDF	36.20	0.9645	0.9646	+0.2	4.83E+07	0.53	Y	1.12	97.3
ES 123678-HxCDF	36.35	0.9684	0.9684	0	5.80E+07	0.53	Y	1.33	98.6
ES 234678-HxCDF	37.02	0.9862	0.9863	+0.2	5.12E+07	0.52	Y	1.21	95.9
ES 123789-HxCDF	38.02	1.0130	1.0130	0	4.43E+07	0.53	Y	1.12	89.7
ES 1234678-HpCDF	39.57	1.0544	1.0544	0	3.70E+07	0.44	Y	0.92	90.6
ES 1234789-HpCDF	41.01	1.0926	1.0926	0	2.98E+07	0.47	Y	0.82	82.3
ES OCDF	43.52	1.1594	1.1595	+0.3	4.81E+07	0.90	Y	0.78	69.8

Lab ID: OPR1_190829_DF-RJ **Acq'd:** 29 Aug 2019 10:35 PSW **Wt/Vol:** 1 uL **ICAL:** HRMS3_DF_10122018_28AUG2019

Client ID: ICV SIL# 22-5-12 **UTP:** 29-Aug-2019 11:24:17 PSW **J-level:** 0.25 pg/uL **Split:** 1 **Checkcode:** 573-892-NXW

Datafile: 190829C03 **Report:** 29 Aug 2019 11:24 pw **Stds (pg):** JS: 100 ES: 100 CS/SS: 100, 40 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
JS 1234-TCDD	27.05		-	-	-	6.56E+07	0.80	Y	-	-
JS 1234-TCDF	25.42		-	-	-	8.33E+07	0.79	Y	-	-
JS 123467-HxCDD	37.53		-	-	-	2.21E+07	1.26	Y	-	-
CS 37Cl-2378-TCDD	27.74		1.0257	1.0256	-0.2	2.78E+07	n/a	-	1.12	94.7
CS 12347-PeCDD	32.71		1.2099	1.2093	-1.2	4.53E+07	1.61	Y	0.71	96.9
CS 12346-PeCDF	31.20		1.2282	1.2275	-1.3	6.77E+07	1.55	Y	0.81	100
CS 123469-HxCDF	36.66		0.9767	0.9767	0	4.86E+07	0.52	Y	1.12	97.9
CS 1234689-HpCDF	40.00		1.0657	1.0657	0	3.50E+07	0.46	Y	0.90	88.4
SS 37Cl-2378-TCDD	27.74		1.0257	1.0256	-0.2	2.78E+07	n/a	-	1.14	95.3
SS 12347-PeCDD	32.71		1.2099	1.2093	-1.2	4.53E+07	1.61	Y	0.86	103
SS 12346-PeCDF	31.20		1.2282	1.2275	-1.3	6.77E+07	1.55	Y	0.98	99.9
SS 123469-HxCDF	36.66		0.9767	0.9767	0	4.86E+07	0.52	Y	0.85	99
SS 1234689-HpCDF	40.00		1.0657	1.0657	0	3.50E+07	0.46	Y	0.97	97.1

Totals	Conc	EMPC
Total TCDD	41.9	41.9
Total PeCDD	70.2	70.2
Total HxCDD	167	167
Total HpCDD	64.7	64.7
Total Tetra-Octa Dioxins	447	447
Total TCDF	50.4	50.4
Total PeCDF	125	125
Total HxCDF	216	216
Total HpCDF	102	102
Total Tetra-Octa Furans	593	593
Total Tetra-Octa Dioxins & Furans	1040	1040

* 37Cl correction has been applied to 2378-TCDD

	Original Values	Corrected Values
Ratio	0.8	0.81
Response	7.25E+06	7.24E+06

Lab ID: OPR1_190829_DF-RJ | **Acq'd: 29 Aug 2019 10:35 PSW** | **Wt/Vol: 1 uL** | **ICAL: HRMS3_DF_10122018_28AUG2019**

Client ID: ICV SIL# 22-5-12 | **UTP: 29-Aug-2019 11:24:17 PSW** | **J-level: 0.25 pg/uL** | **Split: 1** | **Checkcode: 573-892-NXW**

Datafile: 190829C03 | **Report: 29 Aug 2019 11:24 pw** | **Stds (pg): JS: 100 ES: 100 CS/SS: 100, 40 (37Cl)**

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1368-TCDD	23.95		0.8634	0.8639	+0.7	8.61E+06	0.77	Y	1.19	11.3	4566	0.0691
1379-TCDD	NotFnd		0.8770						1.19		4566	0.0691
1369-TCDD	NotFnd		0.8933						1.19		4566	0.0691
1469-TCDD	NotFnd		0.9223						1.19		4566	0.0691
1247/1246/1248/1249-TCDD	NotFnd		0.9317						1.19		4566	0.0691
1378-TCDD	NotFnd		0.9390						1.19		4566	0.0691
1268-TCDD	NotFnd		0.9464						1.19		4566	0.0691
1478-TCDD	NotFnd		0.9555						1.19		4566	0.0691
1279-TCDD	NotFnd		0.9621						1.19		4566	0.0691
1234/1269-TCDD	NotFnd		0.9757						1.19		4566	0.0691
1236-TCDD	NotFnd		0.9808						1.19		4566	0.0691
1237/1238-TCDD	NotFnd		0.9900						1.19		4566	0.0691
1239-TCDD	27.58		0.9953	0.9950	-0.5	6.64E+06	0.80	Y	1.19	8.74	4566	0.0691
2378-TCDD	**27.74**		**1.0008**	1.0008	**0**	7.24E+06	0.81	Y	**1.19**	**9.53**	**4566**	**0.0691**
1278-TCDD	NotFnd		1.0130						1.19		4566	0.0691
1267-TCDD	NotFnd		1.0180						1.19		4566	0.0691
1289-TCDD	28.75		1.0369	1.0370	+0.2	9.35E+06	0.80	Y	1.19	12.3	4566	0.0691
12479/12468-PeCDD	30.69		0.9236	0.9238	+0.4	5.66E+06	1.55	Y	0.98	11.3	3646	0.07
12469-PeCDD	NotFnd		0.9400						0.98		3646	0.07
12368-PeCDD	NotFnd		0.9569						0.98		3646	0.07
12478-PeCDD	NotFnd		0.9626						0.98		3646	0.07
12379-PeCDD	NotFnd		0.9658						0.98		3646	0.07
12369/12467/12489-PeCDD	NotFnd		0.9737						0.98		3646	0.07
12346/12347-PeCDD	NotFnd		0.9854						0.98		3646	0.07
12378-PeCDD	33.24		**1.0004**	**1.0006**	**+0.4**	**2.39E+07**	**1.54**	**Y**	**0.98**	**47.4**	**3646**	**0.07**
12367-PeCDD	NotFnd		1.0034						0.98		3646	0.07
12389-PeCDD	33.69		1.0139	1.0140	+0.2	5.78E+06	1.53	Y	0.98	11.5	3646	0.07
124679/124689-HxCDD	35.48		0.9534	0.9535	+0.2	5.82E+06	1.23	Y	1.03	13	4861	0.111
123468-HxCDD	NotFnd		0.9714						1.03		4861	0.111
123679/123689-HxCDD	NotFnd		0.9793						1.03		4861	0.111
123469-HxCDD	NotFnd		0.9828						1.03		4861	0.111
123478-HxCDD	37.23		**1.0003**	**1.0005**	**+0.4**	**2.14E+07**	**1.23**	**Y**	1.02	**53**	**4861**	**0.111**
123678-HxCDD	37.35		**1.0036**	**1.0038**	**+0.4**	**2.39E+07**	**1.27**	**Y**	1.09	**51.3**	**4861**	**0.11**
123467-HxCDD	NotFnd		1.0091						1.03		4861	0.111
123789-HxCDD	37.66		**1.0120**	**1.0122**	**+0.5**	**2.33E+07**	**1.23**	**Y**	0.97	**49.6**	**4861**	**0.113**

Lab ID: OPR1_190829_DF-RJ **Acq'd:** 29 Aug 2019 10:35 PSW **Wt/Vol:** 1 uL **ICAL:** HRMS3_DF_10122018_28AUG2019

Client ID: ICV SIL# 22-5-12 **UTP:** 29-Aug-2019 11:24:17 PSW **J-level:** 0.25 pg/uL **Split:** 1 **Checkcode:** 573-892-NXW

Datafile: 190829C03 **Report:** 29 Aug 2019 11:24 pw **Stds (pg):** JS: 100 ES: 100 CS/SS: 100, 40 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1234679-HpCDD	39.87		0.9830	0.9828	-0.5	4.33E+06	1.03	Y	0.98	12.6	3005	0.108
1234678-HpCDD	**40.58**		**1.0003**	**1.0003**	**0**	**1.79E+07**	**1.04**	**Y**	**0.98**	**52.1**	**3005**	**0.108**
OCDD	**43.38**		**1.0003**	**1.0003**	**0**	**2.00E+07**	**0.90**	**Y**	**1.07**	**103**	**4085**	**0.402**
OCDD-a	43.34	**#VALUE!**	1.0001	0.9994	-1.8	7.26E+05	2.25	Y	-	#VALUE!	4818	#VALUE!
1368-TCDF	21.74		0.8103	0.8109	+0.8	1.15E+07	0.77	Y	1.05	12.8	3977	0.0517
1468-TCDF	NotFnd		0.8319						1.05		3977	0.0517
2468-TCDF	22.99		0.8567	0.8573	+0.8	2.85E+06	0.76	Y	1.05	3.18	3977	0.0517
1346/1246-TCDF	NotFnd		0.8708						1.05		3977	0.0517
1347/1378/1247-TCDF	NotFnd		0.8769						1.05		3977	0.0517
1348-TCDF	NotFnd		0.8875						1.05		3977	0.0517
1248/1367/1379-TCDF	NotFnd		0.8926						1.05		3977	0.0517
1268-TCDF	NotFnd		0.9075						1.05		3977	0.0517
1467-TCDF	NotFnd		0.9128						1.05		3977	0.0517
1478-TCDF	NotFnd		0.9195						1.05		3977	0.0517
1369/1237-TCDF	NotFnd		0.9337						1.05		3977	0.0517
2467-TCDF	NotFnd		0.9390						1.05		3977	0.0517
2368-TCDF	NotFnd		0.9447						1.05		3977	0.0517
1238/1234/1678/1469/1236-TCDF	NotFnd		0.9489						1.05		3977	0.0517
1278-TCDF	NotFnd		0.9662						1.05		3977	0.0517
1349-TCDF	NotFnd		0.9706						1.05		3977	0.0517
1267-TCDF	NotFnd		0.9769						1.05		3977	0.0517
2346/1249-TCDF	NotFnd		0.9845						1.05		3977	0.0517
2347/1279-TCDF	NotFnd		0.9923						1.05		3977	0.0517
2348-TCDF	26.72		0.9966	0.9966	0	1.01E+07	0.76	Y	1.05	11.3	3977	0.0517
2378-TCDF	**26.83**		**1.0008**	**1.0008**	**0**	**9.49E+06**	**0.76**	**Y**	**1.05**	**10.6**	**3977**	**0.0517**
2367/3467-TCDF	NotFnd		1.0150						1.05		3977	0.0517
1269-TCDF	NotFnd		1.0242						1.05		3977	0.0517
1239-TCDF	NotFnd		1.0350						1.05		3977	0.0517
1289-TCDF	28.91		1.0782	1.0782	0	1.13E+07	0.80	Y	1.05	12.6	3977	0.0517
13468/12468-PeCDF	28.86		0.9098	0.9095	-0.5	8.08E+06	1.45	Y	0.98	12.1	3866	0.0567
13678/13467/12467-PeCDF	NotFnd		0.9597						0.98		6019	0.0883
12368/13478/12478-PeCDF	NotFnd		0.9647						0.98		6019	0.0883
14678-PeCDF	NotFnd		0.9680						0.98		6019	0.0883
13479-PeCDF	NotFnd		0.9711						0.98		6019	0.0883
13469/12479-PeCDF	NotFnd		0.9788						0.98		6019	0.0883
12346-PeCDF	NotFnd		0.9834						0.98		6019	0.0883

Lab ID: OPR1_190829_DF-RJ | **Acq'd:** 29 Aug 2019 10:35 PSW | **Wt/Vol:** 1 uL | **ICAL:** HRMS3_DF_10122018_28AUG2019

Client ID: ICV SIL# 22-5-12 | **UTP:** 29-Aug-2019 11:24:17 PSW | **J-level:** 0.25 pg/uL | **Split:** 1 | **Checkcode:** 573-892-NXW

Datafile: 190829C03 | **Report:** 29 Aug 2019 11:24 pw | **Stds (pg):** JS: 100 ES: 100 CS/SS: 100, 40 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
23468/12469-PeCDF	NotFnd		0.9862						0.98		6019	0.0883
12347-PeCDF	NotFnd		0.9888						0.98		6019	0.0883
12348-PeCDF	NotFnd		0.9937						0.98		6019	0.0883
12378-PeCDF	**31.75**		**1.0005**	**1.0005**	**0**	**3.26E+07**	**1.55**	**Y**	**0.96**	**48.8**	**6019**	**0.0902**
12678/12367-PeCDF	NotFnd		1.0093						0.98		6019	0.0883
12379-PeCDF	NotFnd		1.0147						0.98		6019	0.0883
12679-PeCDF	NotFnd		0.9926						0.98		6019	0.0883
23467/12369-PeCDF	NotFnd		0.9967						0.98		6019	0.0883
23478-PeCDF	**32.88**		**1.0006**	**1.0005**	**-0.2**	**3.57E+07**	**1.53**	**Y**	**0.99**	**53.2**	**6019**	**0.0865**
23478/12489-PeCDF	NotFnd		0.0000						0.99			
12489-PeCDF	NotFnd		1.0046						0.98		6019	0.0883
12349-PeCDF	NotFnd		1.0105						0.98		6019	0.0883
12389-PeCDF	33.98		1.0338	1.0338	0	7.13E+06	1.51	Y	0.98	10.6	6019	0.0883
123468-HxCDF	34.81		0.9615	0.9615	0	6.70E+06	1.21	Y	1.13	11.7	11242	0.19
124678/134678-HxCDF	NotFnd		0.9672						1.13		11242	0.19
134679-HxCDF	NotFnd		0.9735						1.13		11242	0.19
124679-HxCDF	NotFnd		0.9789						1.13		11242	0.19
124689-HxCDF	NotFnd		0.9852						1.13		11242	0.19
123467-HxCDF	NotFnd		0.9971						1.13		11242	0.19
123478-HxCDF	**36.22**		**1.0004**	**1.0005**	**+0.2**	**2.93E+07**	**1.22**	**Y**	**1.21**	**50.2**	**11242**	**0.177**
123678-HxCDF	**36.37**		**1.0004**	**1.0005**	**+0.2**	**3.29E+07**	**1.22**	**Y**	**1.11**	**51.3**	**11242**	**0.17**
123479-HxCDF	NotFnd		1.0048						1.13		11242	0.19
123469-HxCDF	NotFnd		1.0088						1.13		11242	0.19
123679-HxCDF	NotFnd		0.9941						1.13		11242	0.19
234678-HxCDF	**37.03**		**1.0004**	**1.0004**	**0**	**2.94E+07**	**1.23**	**Y**	**1.12**	**51.5**	**11242**	**0.19**
234678/123689-HxCDF	NotFnd		0.0000						1.12			
123689-HxCDF	NotFnd		1.0041						1.13		11242	0.19
123789-HxCDF	**38.04**		**1.0003**	**1.0005**	**+0.5**	**2.51E+07**	**1.25**	**Y**	**1.11**	**51.2**	**11242**	**0.232**
123789/123489-HxCDF	NotFnd		0.0000						1.11			
123489-HxCDF	NotFnd		1.0017						1.13		11242	0.19
1234678-HpCDF	**39.58**		**1.0002**	**1.0003**	**+0.2**	**2.42E+07**	**1.01**	**Y**	**1.32**	**49.3**	**6866**	**0.143**
1234679-HpCDF	NotFnd		1.0072						1.29		6866	0.176
1234689-HpCDF	NotFnd		1.0109						1.29		6866	0.176
1234789-HpCDF	**41.02**		**1.0002**	**1.0004**	**+0.5**	**1.96E+07**	**1.03**	**Y**	**1.26**	**52.5**	**6866**	**0.217**
OCDF	**43.53**		**1.0003**	**1.0003**	**0**	**2.48E+07**	**0.90**	**Y**	**1.03**	**99.9**	**3821**	**0.296**
OCDF-a	43.51	**#VALUE!**	1.0001	0.9999	-0.5	1.11E+06	1.95	N	-	#VALUE!	4159	#VALUE!

METHOD 1613B **PCDD/F ONGOING PRECISION AND RECOVERY (OPR)** **FORM 8A**

Lab Name:	SGS North America		
Initial Calibration:	ICAL: HRMS3_DF_10122018_28AUG2019		
Instrument ID:	HRMS3	GC Column ID:	ZB-5ms
VER Data Filename:	190829C03	Analysis Date:	29-AUG-2019 10:35:56
Lab ID:	OPR1_190829_DF-RJ		

NATIVE ANALYTES	SPIKE CONC.	CONC. FOUND	RANGE (ng/mL)			OK
2,3,7,8-TCDD	10	9.53	6.7	-	15.8	Y
1,2,3,7,8-PeCDD	50	47.4	35	-	71	Y
1,2,3,4,7,8-HxCDD	50	53	35	-	82	Y
1,2,3,6,7,8-HxCDD	50	51.3	38	-	67	Y
1,2,3,7,8,9-HxCDD	50	49.6	32	-	81	Y
1,2,3,4,6,7,8-HpCDD	50	52.1	35	-	70	Y
OCDD	100	103	78	-	144	Y
2,3,7,8-TCDF	10	10.6	7.5	-	15.8	Y
1,2,3,7,8-PeCDF	50	48.8	40	-	67	Y
2,3,4,7,8-PeCDF	50	53.2	34	-	80	Y
1,2,3,4,7,8-HxCDF	50	50.2	36	-	67	Y
1,2,3,6,7,8-HxCDF	50	51.3	42	-	65	Y
2,3,4,6,7,8-HxCDF	50	51.5	35	-	78	Y
1,2,3,7,8,9-HxCDF	50	51.2	39	-	65	Y
1,2,3,4,6,7,8-HpCDF	50	49.3	41	-	61	Y
1,2,3,4,7,8,9-HpCDF	50	52.5	39	-	69	Y
OCDF	100	99.9	63	-	170	Y

Contract-required concentration limits for OPR as specified in Table 6,
Method 1613. 10/94

Processed: 29 Aug 2019 11:24 Analyst: pw

METHOD 1613B **PCDD/F ONGOING PRECISION AND RECOVERY (OPR)** **FORM 8B**

Lab Name: SGS North America
Initial Calibration: ICAL: HRMS3_DF_10122018_28AUG2019
Instrument ID: HRMS3 GC Column ID: ZB-5ms
VER Data Filename: 190829C03 Analysis Date: 29-AUG-2019 10:35:56
Lab ID: OPR1_190829_DF-RJ

LABELED ANALYTES	SPIKE CONC.	CONC. FOUND	RANGE (ng/mL)			OK
13C-2,3,7,8-TCDD	100	98.5	20	-	175	Y
13C-1,2,3,7,8-PeCDD	100	93.9	21	-	227	Y
13C-1,2,3,4,7,8-HxCDD	100	94.4	21	-	193	Y
13C-1,2,3,6,7,8-HxCDD	100	99.6	25	-	163	Y
13C-1,2,3,7,8,9-HxCDD	100	96.1	26	-	166	Y
13C-1,2,3,4,6,7,8-HpCDD	100	88.8	26	-	166	Y
13C-OCDD	200	131	26	-	397	Y
13C-2,3,7,8-TCDF	100	103	22	-	152	Y
13C-1,2,3,7,8-PeCDF	100	100	21	-	192	Y
13C-2,3,4,7,8-PeCDF	100	101	13	-	328	Y
13C-1,2,3,4,7,8-HxCDF	100	97.3	19	-	202	Y
13C-1,2,3,6,7,8-HxCDF	100	98.6	21	-	159	Y
13C-2,3,4,6,7,8-HxCDF	100	95.9	22	-	176	Y
13C-1,2,3,7,8,9-HxCDF	100	89.7	17	-	205	Y
13C-1,2,3,4,6,7,8-HpCDF	100	90.6	21	-	158	Y
13C-1,2,3,4,7,8,9-HpCDF	100	82.3	20	-	186	Y
13C-OCDF	200	140	26	-	397	Y
CLEANUP STANDARD						
37Cl-2,3,7,8-TCDD	40	37.9	12.4	-	76.4	Y

Contract-required concentration limits for OPR as specified in Table 6, Method 1613. 10/94

Processed: 29 Aug 2019 11:24 Analyst: pw

METHOD 8290A **PCDD/F ONGOING PRECISION AND RECOVERY (OPR)** **FORM 8A**

Lab Name:	SGS North America		
Initial Calibration:	ICAL: HRMS3_DF_10122018_28AUG2019		
Instrument ID:	HRMS3	GC Column ID:	ZB-5ms
VER Data Filename:	190829C03	Analysis Date:	29-AUG-2019 10:35:56
Lab ID:	OPR1_190829_DF-RJ		

NATIVE ANALYTES	SPIKE CONC.	CONC. FOUND	RANGE (ng/mL)			OK
2,3,7,8-TCDD	10	9.53	6.7	-	15.8	Y
1,2,3,7,8-PeCDD	50	47.4	35	-	71	Y
1,2,3,4,7,8-HxCDD	50	53	35	-	82	Y
1,2,3,6,7,8-HxCDD	50	51.3	38	-	67	Y
1,2,3,7,8,9-HxCDD	50	49.6	32	-	81	Y
1,2,3,4,6,7,8-HpCDD	50	52.1	35	-	70	Y
OCDD	100	103	78	-	144	Y
2,3,7,8-TCDF	10	10.6	7.5	-	15.8	Y
1,2,3,7,8-PeCDF	50	48.8	40	-	67	Y
2,3,4,7,8-PeCDF	50	53.2	34	-	80	Y
1,2,3,4,7,8-HxCDF	50	50.2	36	-	67	Y
1,2,3,6,7,8-HxCDF	50	51.3	42	-	65	Y
2,3,4,6,7,8-HxCDF	50	51.5	35	-	78	Y
1,2,3,7,8,9-HxCDF	50	51.2	39	-	65	Y
1,2,3,4,6,7,8-HpCDF	50	49.3	41	-	61	Y
1,2,3,4,7,8,9-HpCDF	50	52.5	39	-	69	Y
OCDF	100	99.9	63	-	170	Y

Contract-required concentration limits for OPR as specified in Table 6,
Method 1613. 10/94

Processed: 29 Aug 2019 11:25 Analyst: pw

METHOD 8290A **PCDD/F ONGOING PRECISION AND RECOVERY (OPR)** **FORM 8B**

Lab Name: SGS North America
Initial Calibration: ICAL: HRMS3_DF_10122018_28AUG2019
Instrument ID: HRMS3 GC Column ID: ZB-5ms
VER Data Filename: 190829C03 Analysis Date: 29-AUG-2019 10:35:56
Lab ID: OPR1_190829_DF-RJ

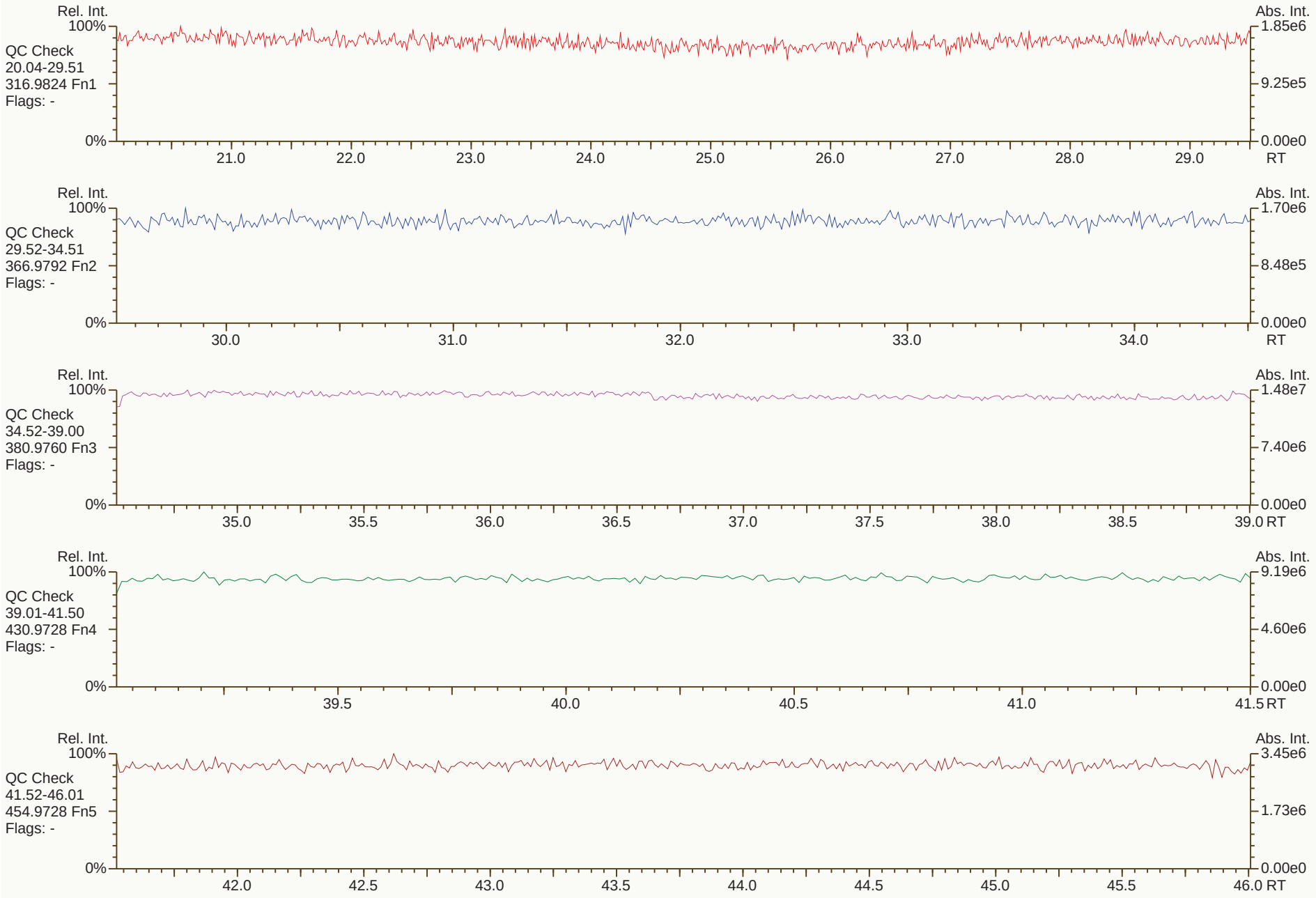
LABELED ANALYTES	SPIKE CONC.	CONC. FOUND	RANGE (ng/mL)			OK
13C-2,3,7,8-TCDD	100	98.5	20	-	175	Y
13C-1,2,3,7,8-PeCDD	100	93.9	21	-	227	Y
13C-1,2,3,4,7,8-HxCDD	100	94.4	21	-	193	Y
13C-1,2,3,6,7,8-HxCDD	100	99.6	25	-	163	Y
13C-1,2,3,7,8,9-HxCDD	100	96.1	26	-	166	Y
13C-1,2,3,4,6,7,8-HpCDD	100	88.8	26	-	166	Y
13C-OCDD	200	131	26	-	397	Y
13C-2,3,7,8-TCDF	100	103	22	-	152	Y
13C-1,2,3,7,8-PeCDF	100	100	21	-	192	Y
13C-2,3,4,7,8-PeCDF	100	101	13	-	328	Y
13C-1,2,3,4,7,8-HxCDF	100	97.3	19	-	202	Y
13C-1,2,3,6,7,8-HxCDF	100	98.6	21	-	159	Y
13C-2,3,4,6,7,8-HxCDF	100	95.9	22	-	176	Y
13C-1,2,3,7,8,9-HxCDF	100	89.7	17	-	205	Y
13C-1,2,3,4,6,7,8-HpCDF	100	90.6	21	-	158	Y
13C-1,2,3,4,7,8,9-HpCDF	100	82.3	20	-	186	Y
13C-OCDF	200	140	26	-	397	Y
CLEANUP STANDARD						
37Cl-2,3,7,8-TCDD	40	37.9	12.4	-	76.4	Y

Contract-required concentration limits for OPR as specified in Table 6, Method 1613. 10/94

Processed: 29 Aug 2019 11:25 Analyst: pw

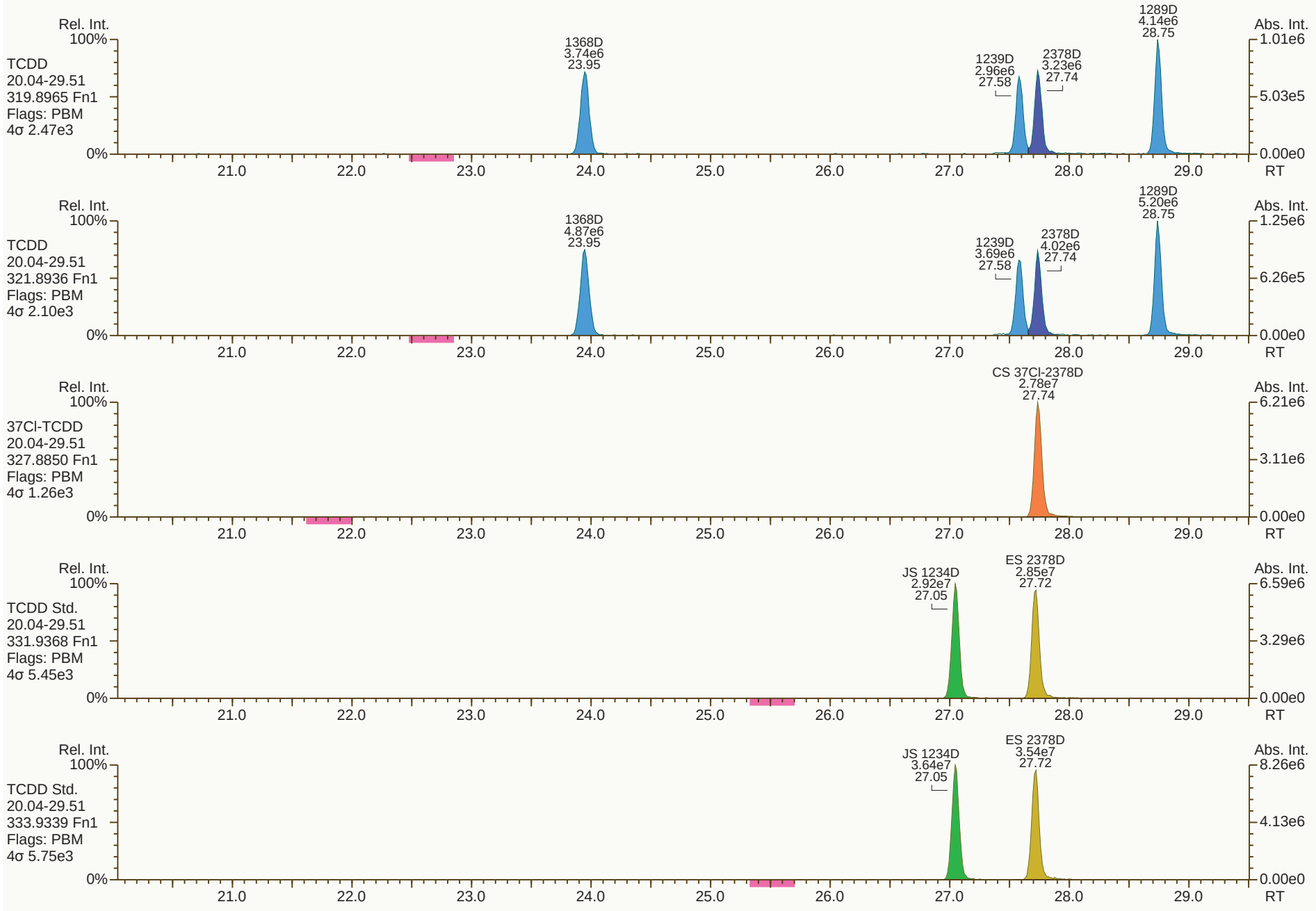
SGS ID: OPR1_190829_DF-RJ | **Sample ID: ICV SIL# 22-5-12** | **Acq: 29-Aug-2019 10:35:56**

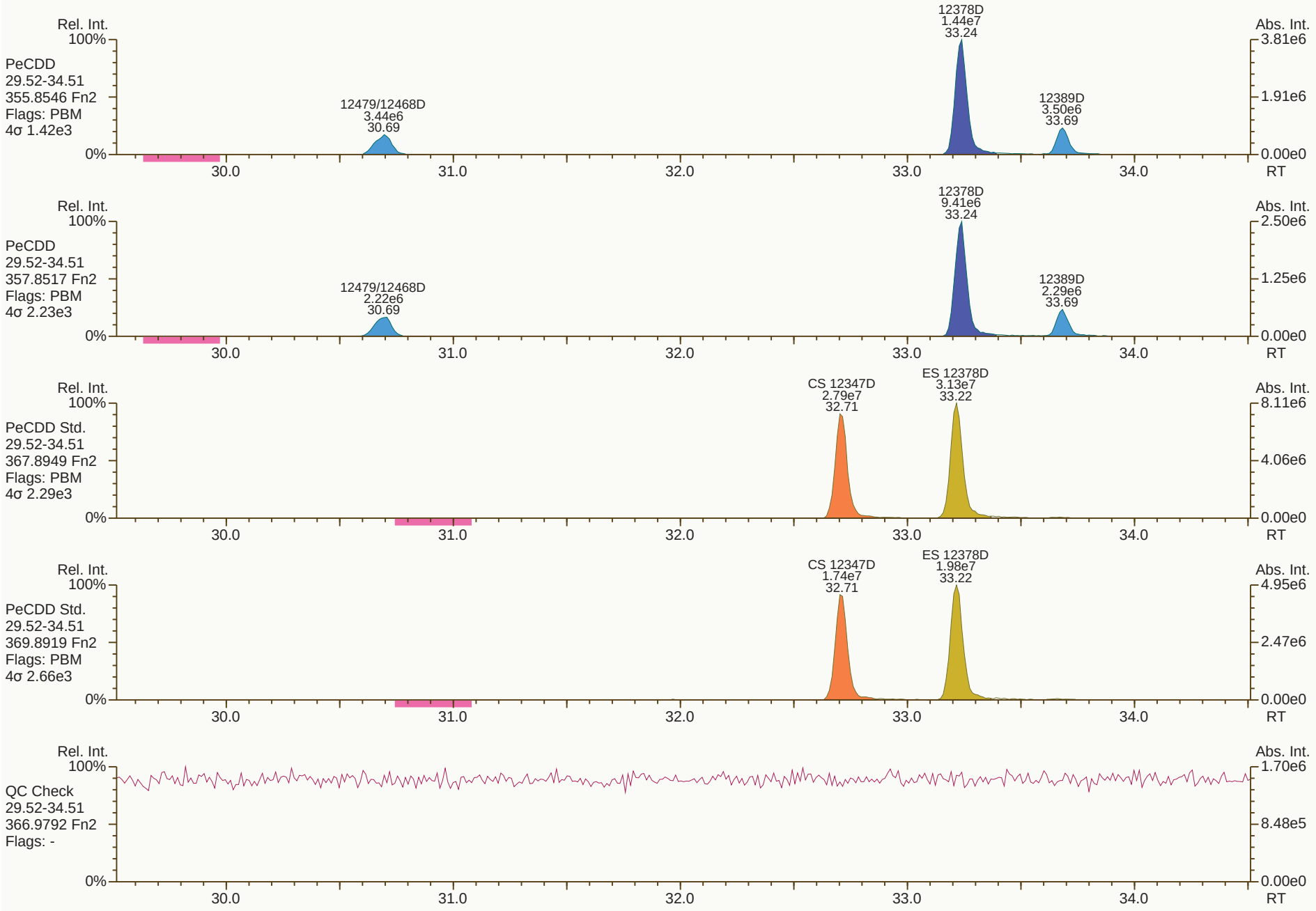
Instr: [ILM] AutoSpec-Ultima HRMS3 | **VSIR EI+ Expt: df_cl4-8_db5 GC: df_db5 Vial: 12** | **User: PSW Datafile: 190829C03**

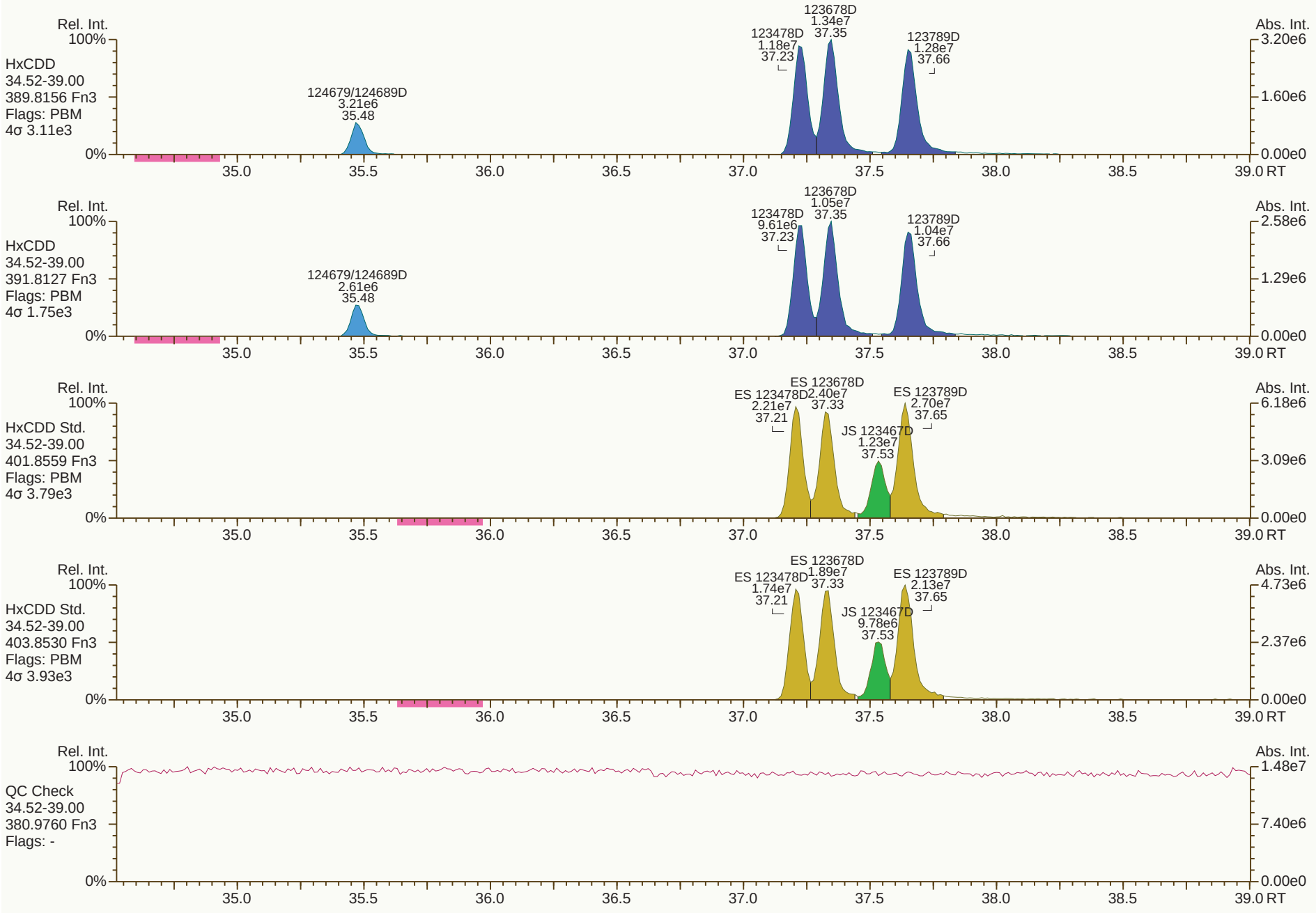


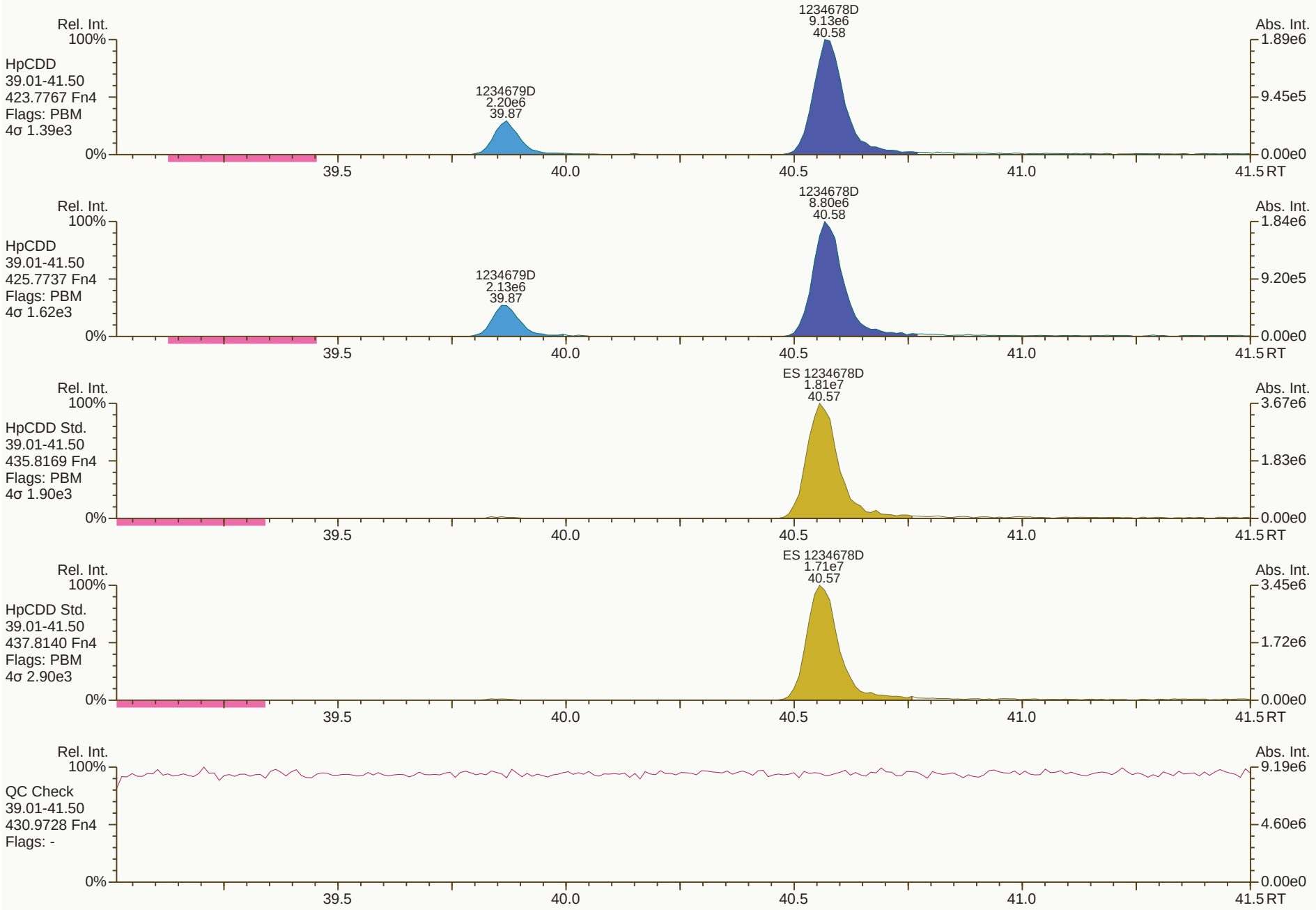
Results: T:\UltraTracePro\ICAL results\HRMS3\HRMS3_DF_10122018_28AUG2019\Resources\OPR1_190829_DF-RJ.utp_res, saved 29-Aug-2019 11:24 (PSW) *Peak annotation: Areas, Centroids*

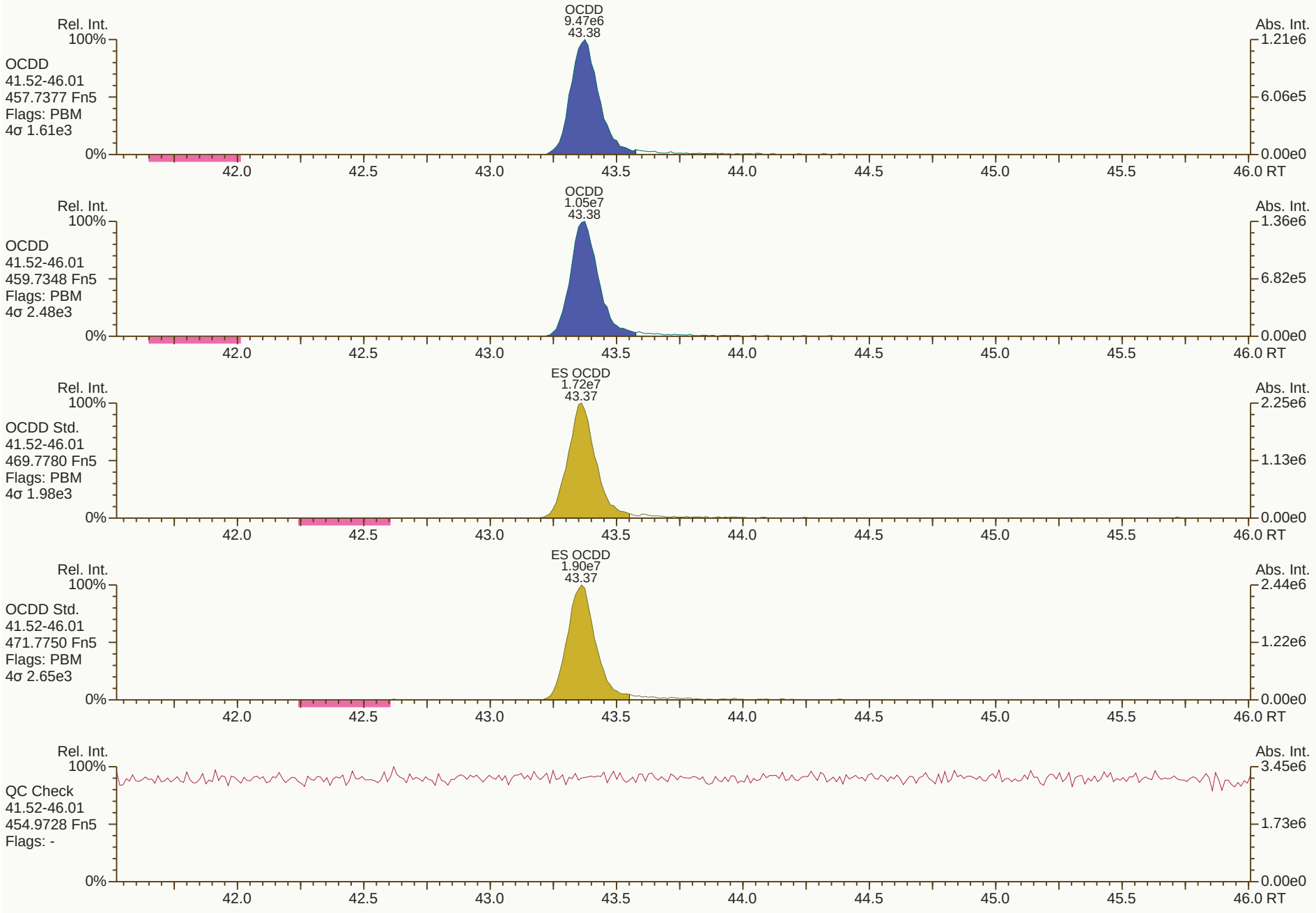
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 scc: 573-892 *PKD: n/a Printed: 29-Aug-2019 11:30 Page 1 of 12*


Rel. Int.
100%
TCDD
20.04-29.51
319.8965 Fn1
Flags: PBM
4σ 2.47e3
1368D
3.74e6
23.95
1239D
2.96e6
27.58
2378D
3.23e6
27.74
1289D
4.14e6
28.75
Abs. Int.
1.01e6
5.03e5
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD
20.04-29.51
321.8936 Fn1
Flags: PBM
4σ 2.10e3
1368D
4.87e6
23.95
1239D
3.69e6
27.58
2378D
4.02e6
27.74
1289D
5.20e6
28.75
Abs. Int.
1.25e6
6.26e5
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
37Cl-TCDD
20.04-29.51
327.8850 Fn1
Flags: PBM
4σ 1.26e3
CS 37Cl-2378D
2.78e7
27.74
Abs. Int.
6.21e6
3.11e6
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.04-29.51
331.9368 Fn1
Flags: PBM
4σ 5.45e3
JS 1234D
2.92e7
27.05
ES 2378D
2.85e7
27.72
Abs. Int.
6.59e6
3.29e6
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.04-29.51
333.9339 Fn1
Flags: PBM
4σ 5.75e3
JS 1234D
3.64e7
27.05
ES 2378D
3.54e7
27.72
Abs. Int.
8.26e6
4.13e6
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
PeCDD
29.52-34.51
355.8546 Fn2
Flags: PBM
4σ 1.42e3
12479/12468D
3.44e6
30.69
12378D
1.44e7
33.24
12389D
3.50e6
33.69
Abs. Int.
3.81e6
1.91e6
0.00e0
0%
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDD
29.52-34.51
357.8517 Fn2
Flags: PBM
4σ 2.23e3
12479/12468D
2.22e6
30.69
12378D
9.41e6
33.24
12389D
2.29e6
33.69
Abs. Int.
2.50e6
1.25e6
0.00e0
0%
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDD Std.
29.52-34.51
367.8949 Fn2
Flags: PBM
4σ 2.29e3
CS 12347D
2.79e7
32.71
ES 12378D
3.13e7
33.22
Abs. Int.
8.11e6
4.06e6
0.00e0
0%
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDD Std.
29.52-34.51
369.8919 Fn2
Flags: PBM
4σ 2.66e3
CS 12347D
1.74e7
32.71
ES 12378D
1.98e7
33.22
Abs. Int.
4.95e6
2.47e6
0.00e0
0%
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
QC Check
29.52-34.51
366.9792 Fn2
Flags: -
Abs. Int.
1.70e6
8.48e5
0.00e0
0%
30.0
31.0
32.0
33.0
34.0
RT


Rel. Int.
Abs. Int.
HxCDD
34.52-39.00
389.8156 Fn3
Flags: PBM
4σ 3.11e3
124679/124689D
3.21e6
35.48
123478D
1.18e7
37.23
123678D
1.34e7
37.35
123789D
1.28e7
37.66
3.20e6
1.60e6
0.00e0
HxCDD
34.52-39.00
391.8127 Fn3
Flags: PBM
4σ 1.75e3
124679/124689D
2.61e6
35.48
123478D
9.61e6
37.23
123678D
1.05e7
37.35
123789D
1.04e7
37.66
2.58e6
1.29e6
0.00e0
HxCDD Std.
34.52-39.00
401.8559 Fn3
Flags: PBM
4σ 3.79e3
ES 123478D
2.21e7
37.21
ES 123678D
2.40e7
37.33
JS 123467D
1.23e7
37.53
ES 123789D
2.70e7
37.65
6.18e6
3.09e6
0.00e0
HxCDD Std.
34.52-39.00
403.8530 Fn3
Flags: PBM
4σ 3.93e3
ES 123478D
1.74e7
37.21
ES 123678D
1.89e7
37.33
JS 123467D
9.78e6
37.53
ES 123789D
2.13e7
37.65
4.73e6
2.37e6
0.00e0
QC Check
34.52-39.00
380.9760 Fn3
Flags: -
1.48e7
7.40e6
0.00e0
100%
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT


Rel. Int.
100%
HpCDD
39.01-41.50
423.7767 Fn4
Flags: PBM
4σ 1.39e3
0%
1234678D
9.13e6
40.58
1234679D
2.20e6
39.87
Abs. Int.
1.89e6
9.45e5
0.00e0
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
HpCDD
39.01-41.50
425.7737 Fn4
Flags: PBM
4σ 1.62e3
0%
1234678D
8.80e6
40.58
1234679D
2.13e6
39.87
Abs. Int.
1.84e6
9.20e5
0.00e0
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
HpCDD Std.
39.01-41.50
435.8169 Fn4
Flags: PBM
4σ 1.90e3
0%
ES 1234678D
1.81e7
40.57
Abs. Int.
3.67e6
1.83e6
0.00e0
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
HpCDD Std.
39.01-41.50
437.8140 Fn4
Flags: PBM
4σ 2.90e3
0%
ES 1234678D
1.71e7
40.57
Abs. Int.
3.45e6
1.72e6
0.00e0
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
QC Check
39.01-41.50
430.9728 Fn4
Flags: -
0%
Abs. Int.
9.19e6
4.60e6
0.00e0
39.5
40.0
40.5
41.0
41.5 RT


OCDD
9.47e6
43.38
Rel. Int.
Abs. Int.
OCDD
41.52-46.01
457.7377 Fn5
Flags: PBM
4σ 1.61e3
OCDD
1.05e7
43.38
OCDD
41.52-46.01
459.7348 Fn5
Flags: PBM
4σ 2.48e3
ES OCDD
1.72e7
43.37
OCDD Std.
41.52-46.01
469.7780 Fn5
Flags: PBM
4σ 1.98e3
ES OCDD
1.90e7
43.37
OCDD Std.
41.52-46.01
471.7750 Fn5
Flags: PBM
4σ 2.65e3
QC Check
41.52-46.01
454.9728 Fn5
Flags: -
42.0
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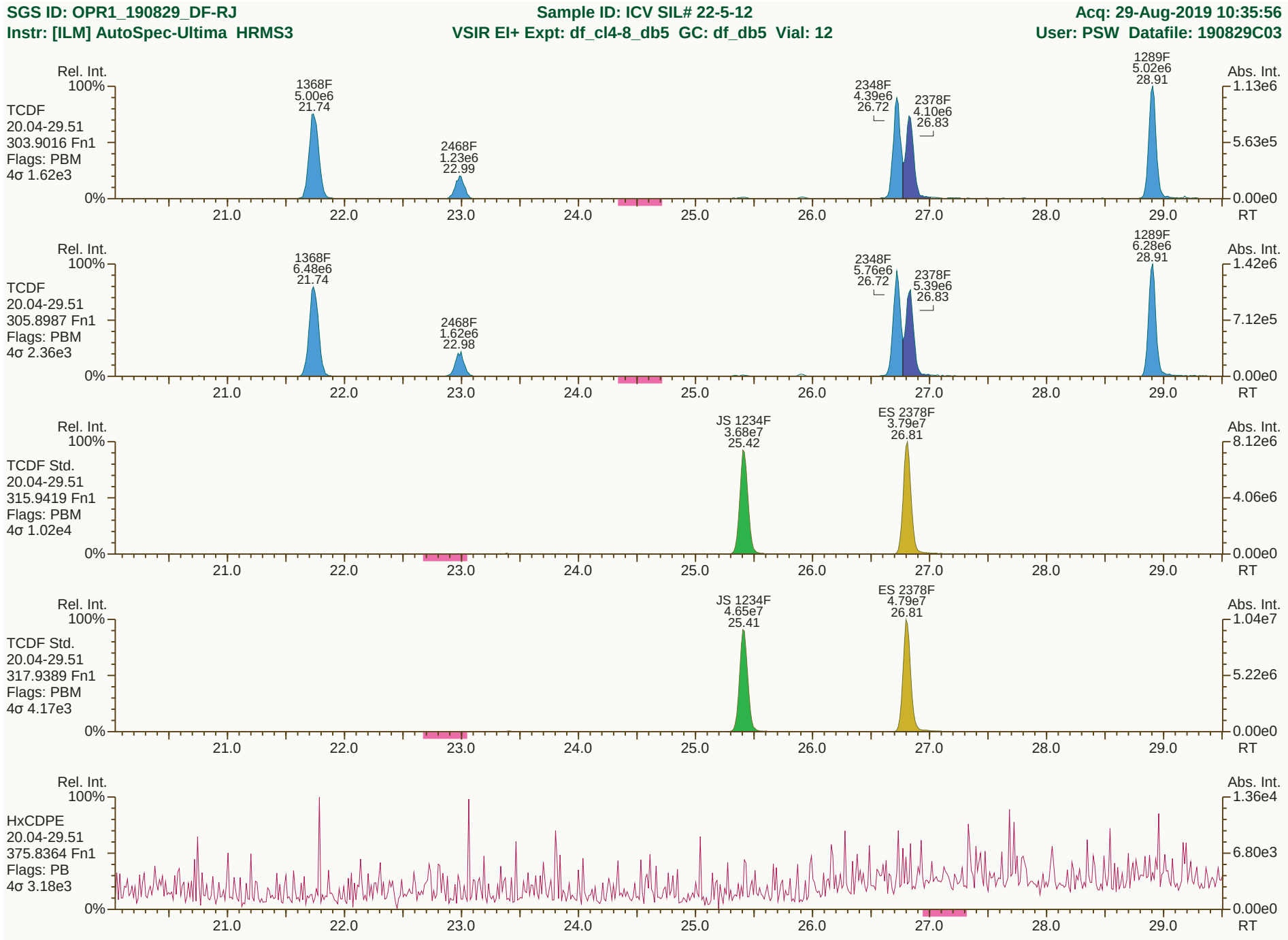
43.5
44.0
44.5
45.0
45.5
46.0 RT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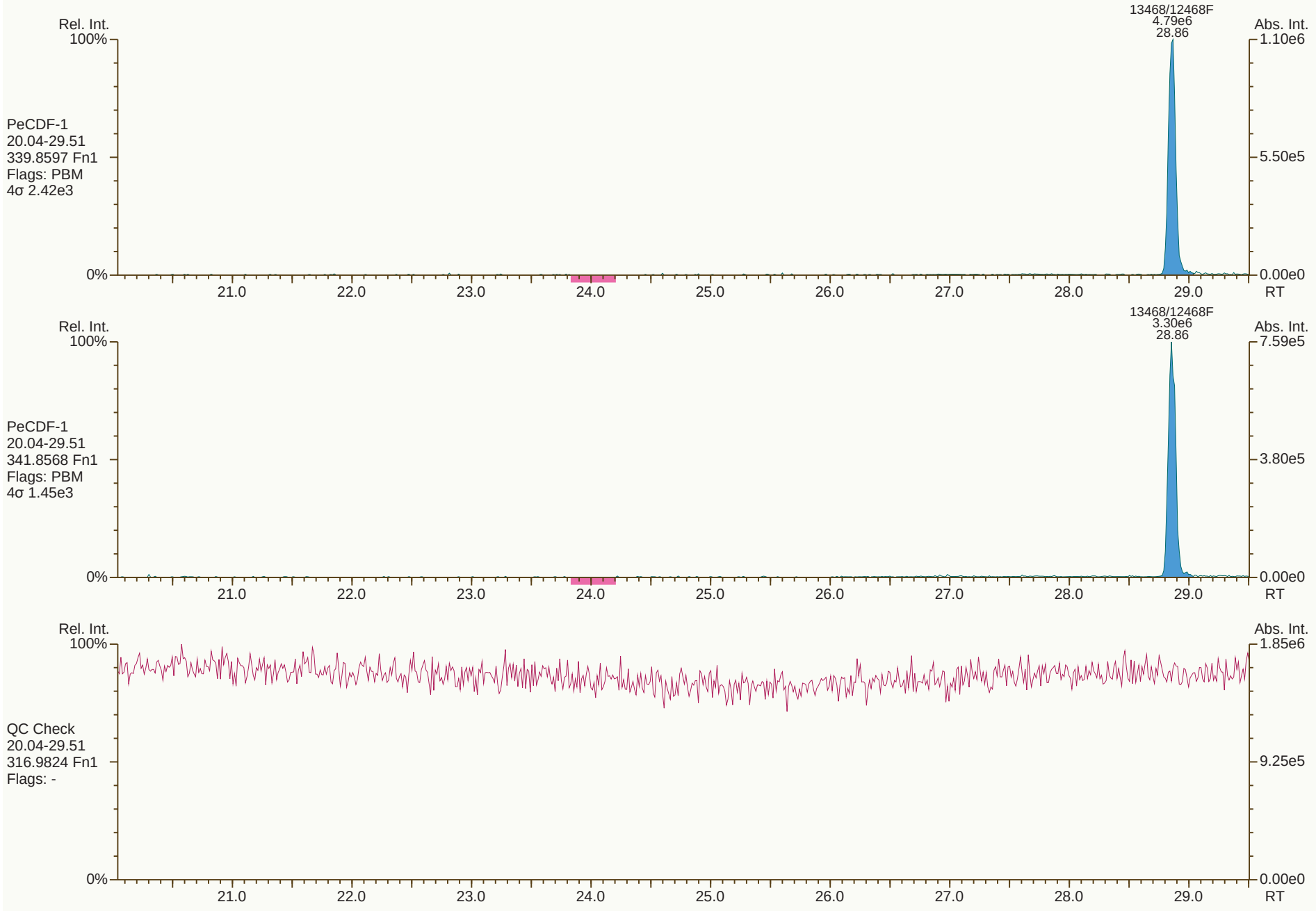
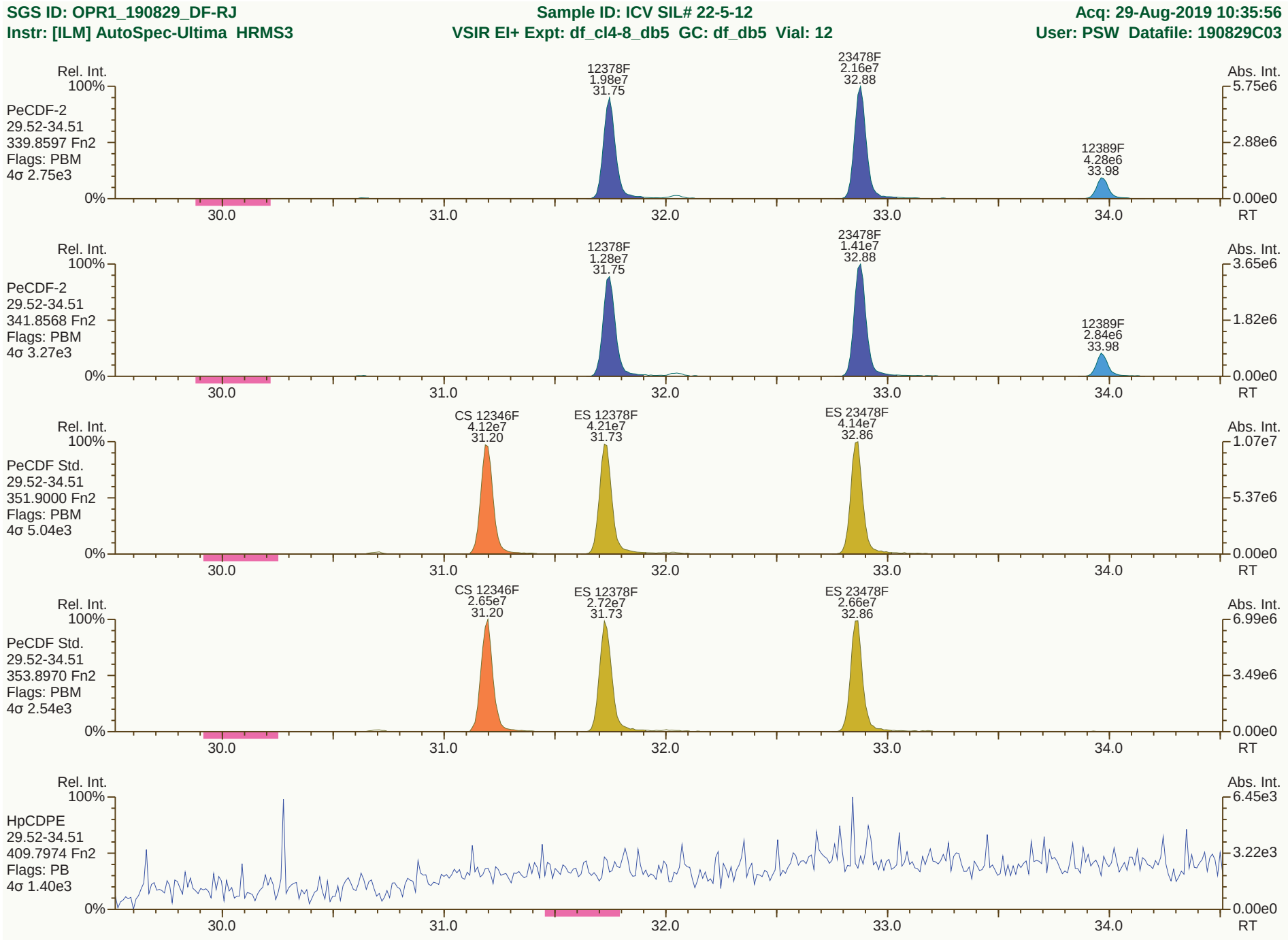
Sample ID: ICV SIL# 22-5-12
Acq: 29-Aug-2019 10:35:56
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5 GC: df_db5 Vial: 12
User: PSW Datafile: 190829C03
Rel. Int.
Abs. Int.
TCDF
20.04-29.51
303.9016 Fn1
Flags: PBM
4σ 1.62e3
1368F 5.00e6 21.74
2468F 1.23e6 22.99
2348F 4.39e6 26.72
2378F 4.10e6 26.83
1289F 5.02e6 28.91
1.13e6
5.63e5
0.00e0
TCDF
20.04-29.51
305.8987 Fn1
Flags: PBM
4σ 2.36e3
1368F 6.48e6 21.74
2468F 1.62e6 22.98
2348F 5.76e6 26.72
2378F 5.39e6 26.83
1289F 6.28e6 28.91
1.42e6
7.12e5
0.00e0
TCDF Std.
20.04-29.51
315.9419 Fn1
Flags: PBM
4σ 1.02e4
JS 1234F 3.68e7 25.42
ES 2378F 3.79e7 26.81
8.12e6
4.06e6
0.00e0
TCDF Std.
20.04-29.51
317.9389 Fn1
Flags: PBM
4σ 4.17e3
JS 1234F 4.65e7 25.41
ES 2378F 4.79e7 26.81
1.04e7
5.22e6
0.00e0
HxCDPE
20.04-29.51
375.8364 Fn1
Flags: PB
4σ 3.18e3
1.36e4
6.80e3
0.00e0
100%
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Results: T:\UltraTracePro\ICAL results\HRMS3\HRMS3_DF_10122018_28AUG2019\Resources\OPR1_190829_DF-RJ.utp_res, saved 29-Aug-2019 11:24 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 2762, 7941, 2091 scc: 573-892
PKD: 29-Aug-2019 11:24 Printed: 29-Aug-2019 11:30 Page 7 of 12


Rel. Int.
100%
0%
PeCDF-1
20.04-29.51
339.8597 Fn1
Flags: PBM
4σ 2.42e3
13468/12468F
4.79e6
28.86
Abs. Int.
1.10e6
5.50e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
0%
PeCDF-1
20.04-29.51
341.8568 Fn1
Flags: PBM
4σ 1.45e3
13468/12468F
3.30e6
28.86
Abs. Int.
7.59e5
3.80e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
0%
QC Check
20.04-29.51
316.9824 Fn1
Flags: -
Abs. Int.
1.85e6
9.25e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT

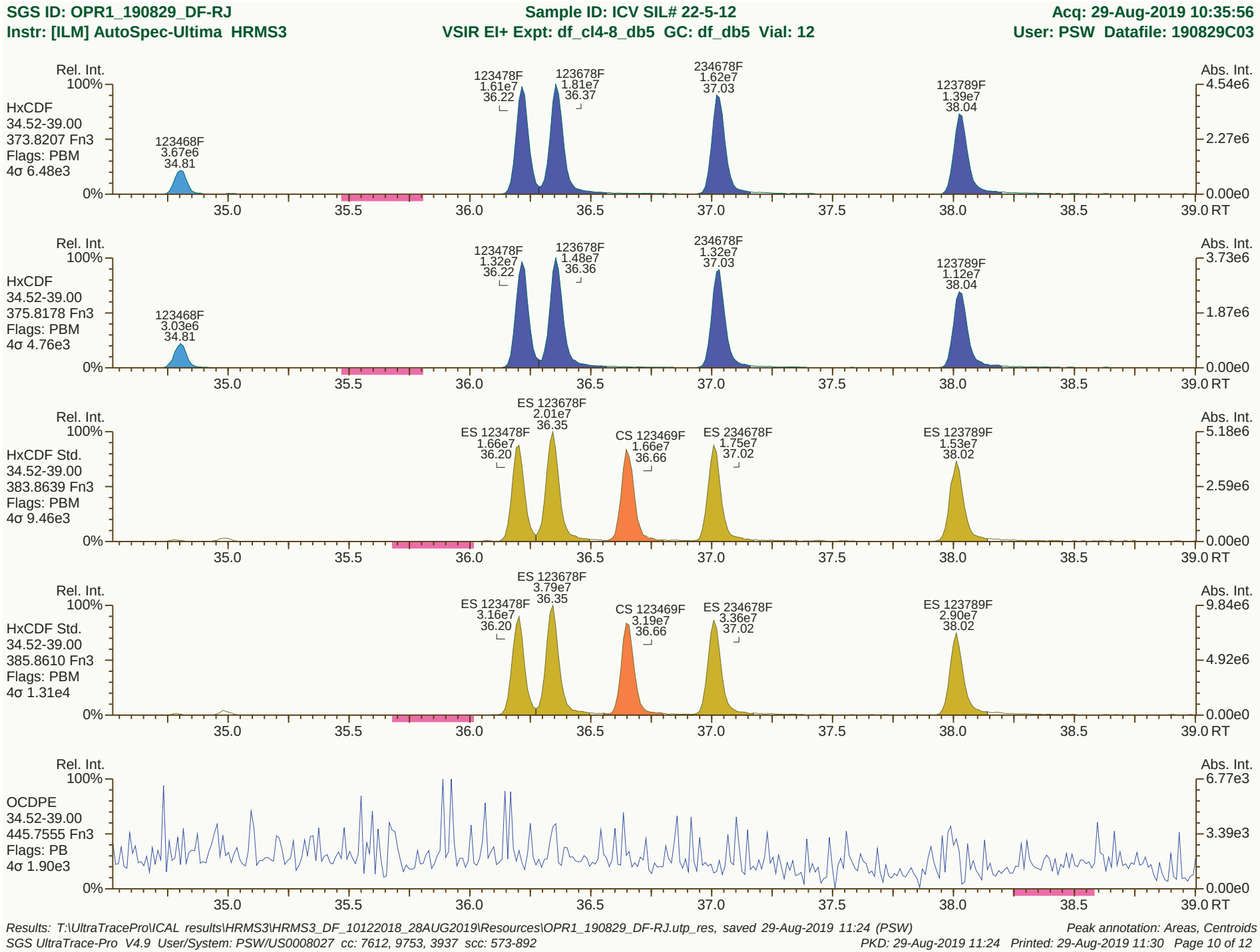
SGS ID: OPR1_190829_DF-RJ
Instr: [ILM] AutoSpec-Ultima HRMS3

Sample ID: ICV SIL# 22-5-12
VSIR EI+ Expt: df_cl4-8_db5 GC: df_db5 Vial: 12

Acq: 29-Aug-2019 10:35:56
User: PSW Datafile: 190829C03

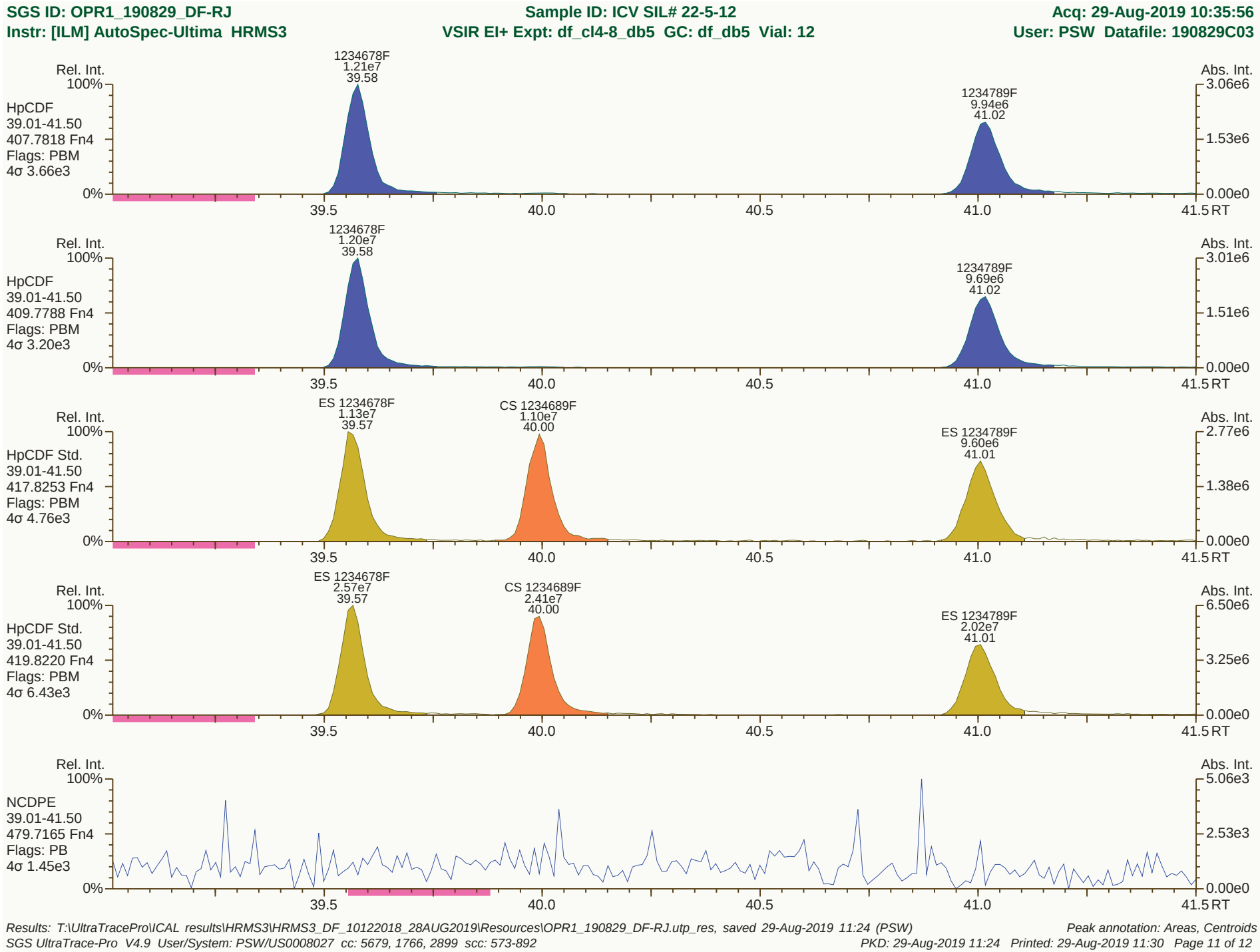


Results: T:\UltraTracePro\ICAL results\HRMS3\HRMS3_DF_10122018_28AUG2019\Resources\OPR1_190829_DF-RJ.utp_res, saved 29-Aug-2019 11:24 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 0029, 2416, 8330 scc: 573-892
PKD: 29-Aug-2019 11:24 Printed: 29-Aug-2019 11:30 Page 9 of 12



Results: T:\UltraTracePro\ICAL results\HRMS3\HRMS3_DF_10122018_28AUG2019\Resources\OPR1_190829_DF-RJ.utp_res, saved 29-Aug-2019 11:24 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 7612, 9753, 3937 scc: 573-892 *PKD: 29-Aug-2019 11:24 Printed: 29-Aug-2019 11:30 Page 10 of 12*


SGS ID: OPR1_190829_DF-RJ
Sample ID: ICV SIL# 22-5-12
Acq: 29-Aug-2019 10:35:56
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5 GC: df_db5 Vial: 12
User: PSW Datafile: 190829C03
Rel. Int.
Abs. Int.
HpCDF
39.01-41.50
407.7818 Fn4
Flags: PBM
4σ 3.66e3
1234678F
1.21e7
39.58
1234789F
9.94e6
41.02
3.06e6
1.53e6
0.00e0
HpCDF
39.01-41.50
409.7788 Fn4
Flags: PBM
4σ 3.20e3
1234678F
1.20e7
39.58
1234789F
9.69e6
41.02
3.01e6
1.51e6
0.00e0
HpCDF Std.
39.01-41.50
417.8253 Fn4
Flags: PBM
4σ 4.76e3
ES 1234678F
1.13e7
39.57
CS 1234689F
1.10e7
40.00
ES 1234789F
9.60e6
41.01
2.77e6
1.38e6
0.00e0
HpCDF Std.
39.01-41.50
419.8220 Fn4
Flags: PBM
4σ 6.43e3
ES 1234678F
2.57e7
39.57
CS 1234689F
2.41e7
40.00
ES 1234789F
2.02e7
41.01
6.50e6
3.25e6
0.00e0
NCDPE
39.01-41.50
479.7165 Fn4
Flags: PB
4σ 1.45e3
5.06e3
2.53e3
0.00e0
100%
0%
39.5
40.0
40.5
41.0
41.5 RT
Results: T:\UltraTracePro\ICAL results\HRMS3\HRMS3_DF_10122018_28AUG2019\Resources\OPR1_190829_DF-RJ.utp_res, saved 29-Aug-2019 11:24 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 5679, 1766, 2899 scc: 573-892
PKD: 29-Aug-2019 11:24 Printed: 29-Aug-2019 11:30 Page 11 of 12

SGS ID: OPR1_190829_DF-RJ **Sample ID: ICV SIL# 22-5-12** **Acq: 29-Aug-2019 10:35:56**
Instr: [ILM] AutoSpec-Ultima HRMS3 **VSIR EI+ Expt: df_cl4-8_db5 GC: df_db5 Vial: 12** **User: PSW Datafile: 190829C03**



Results: T:\UltraTracePro\ICAL results\HRMS3\HRMS3_DF_10122018_28AUG2019\Resources\OPR1_190829_DF-RJ.utp_res, saved 29-Aug-2019 11:24 (PSW) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 6737, 8469, 7011 scc: 573-892 *PKD: 29-Aug-2019 11:24 Printed: 29-Aug-2019 11:30 Page 12 of 12*

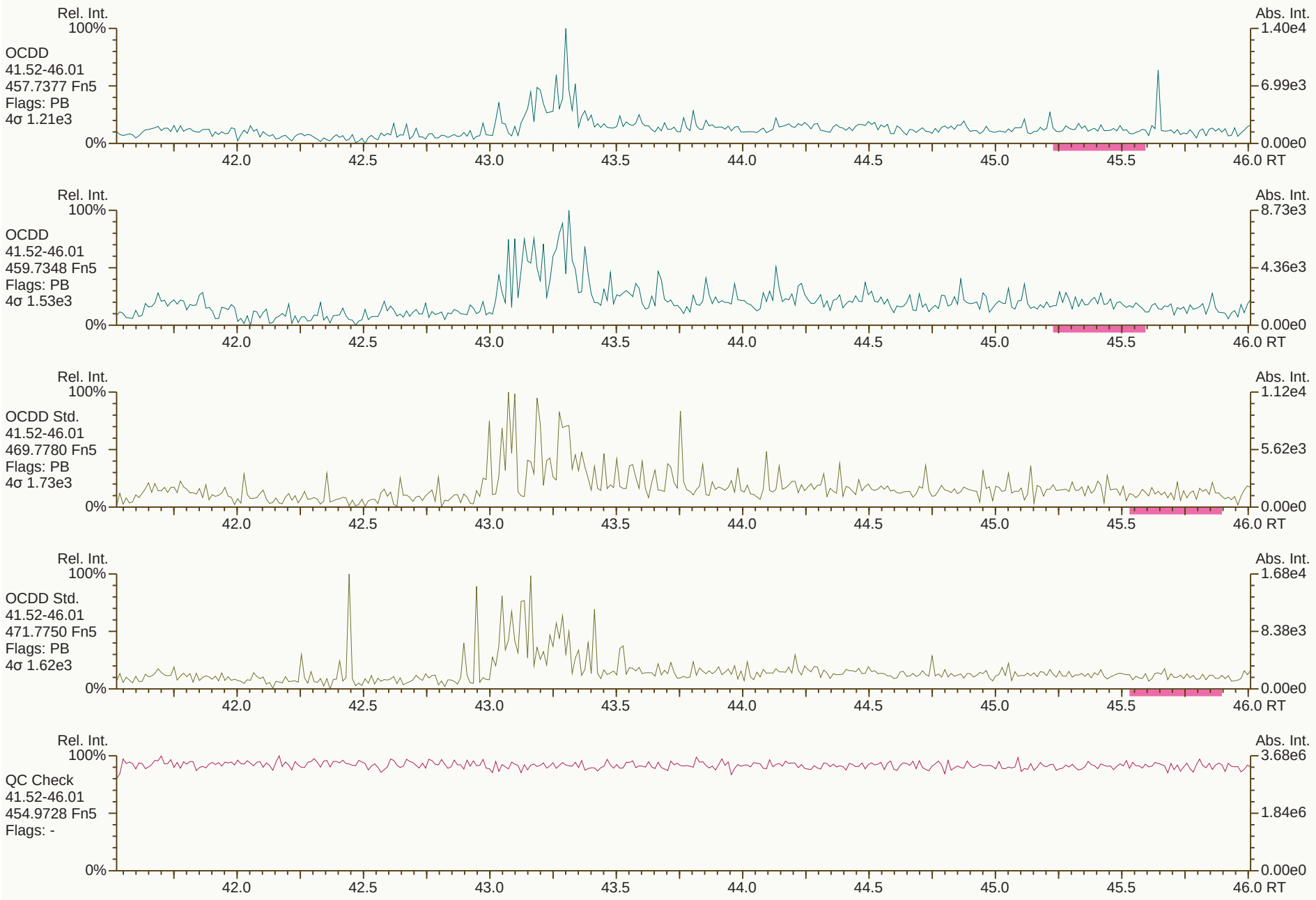

Rel. Int.
100%
0%
Abs. Int.
2.21e6
1.11e6
0.00e0
QC Check
20.04-29.51
316.9824 Fn1
Flags: -
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
0%
Abs. Int.
2.00e6
9.98e5
0.00e0
QC Check
29.52-34.51
366.9792 Fn2
Flags: -
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
0%
Abs. Int.
1.66e7
8.31e6
0.00e0
QC Check
34.52-39.00
380.9760 Fn3
Flags: -
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0
RT
Rel. Int.
100%
0%
Abs. Int.
1.01e7
5.04e6
0.00e0
QC Check
39.01-41.51
430.9728 Fn4
Flags: -
39.5
40.0
40.5
41.0
41.5
RT
Rel. Int.
100%
0%
Abs. Int.
3.68e6
1.84e6
0.00e0
QC Check
41.52-46.01
454.9728 Fn5
Flags: -
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0
RT


Rel. Int.
100%
TCDD
20.04-29.51
319.8965 Fn1
Flags: PB
4σ 1.47e3
0%
Abs. Int.
8.33e3
4.16e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD
20.04-29.51
321.8936 Fn1
Flags: PB
4σ 1.13e3
0%
Abs. Int.
7.74e3
3.87e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
37Cl-TCDD
20.04-29.51
327.8850 Fn1
Flags: PB
4σ 1.21e3
0%
Abs. Int.
1.15e4
5.75e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.04-29.51
331.9368 Fn1
Flags: PB
4σ 5.45e3
0%
Abs. Int.
4.55e4
2.27e4
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.04-29.51
333.9339 Fn1
Flags: PB
4σ 2.67e3
0%
Abs. Int.
1.86e4
9.31e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
PeCDD
29.52-34.51
355.8546 Fn2
Flags: PB
4σ 1.03e3
0%
Abs. Int.
6.38e3
3.19e3
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDD
29.52-34.51
357.8517 Fn2
Flags: PB
4σ 1.59e3
0%
Abs. Int.
3.61e3
1.81e3
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDD Std.
29.52-34.51
367.8949 Fn2
Flags: PB
4σ 1.62e3
0%
Abs. Int.
1.00e4
5.02e3
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDD Std.
29.52-34.51
369.8919 Fn2
Flags: PB
4σ 2.02e3
0%
Abs. Int.
1.46e4
7.32e3
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
QC Check
29.52-34.51
366.9792 Fn2
Flags: -
0%
Abs. Int.
2.00e6
9.98e5
0.00e0
30.0
31.0
32.0
33.0
34.0
RT


Rel. Int.
100%
HxCDD
34.52-39.00
389.8156 Fn3
Flags: PB
4σ 1.19e3
0%
Abs. Int.
5.20e3
2.60e3
0.00e0
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
HxCDD
34.52-39.00
391.8127 Fn3
Flags: PB
4σ 1.58e3
0%
Abs. Int.
5.10e3
2.55e3
0.00e0
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
HxCDD Std.
34.52-39.00
401.8559 Fn3
Flags: PB
4σ 1.30e3
0%
Abs. Int.
1.88e4
9.41e3
0.00e0
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
HxCDD Std.
34.52-39.00
403.8530 Fn3
Flags: PB
4σ 3.06e3
0%
Abs. Int.
1.94e4
9.72e3
0.00e0
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
QC Check
34.52-39.00
380.9760 Fn3
Flags: -
0%
Abs. Int.
1.66e7
8.31e6
0.00e0
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT

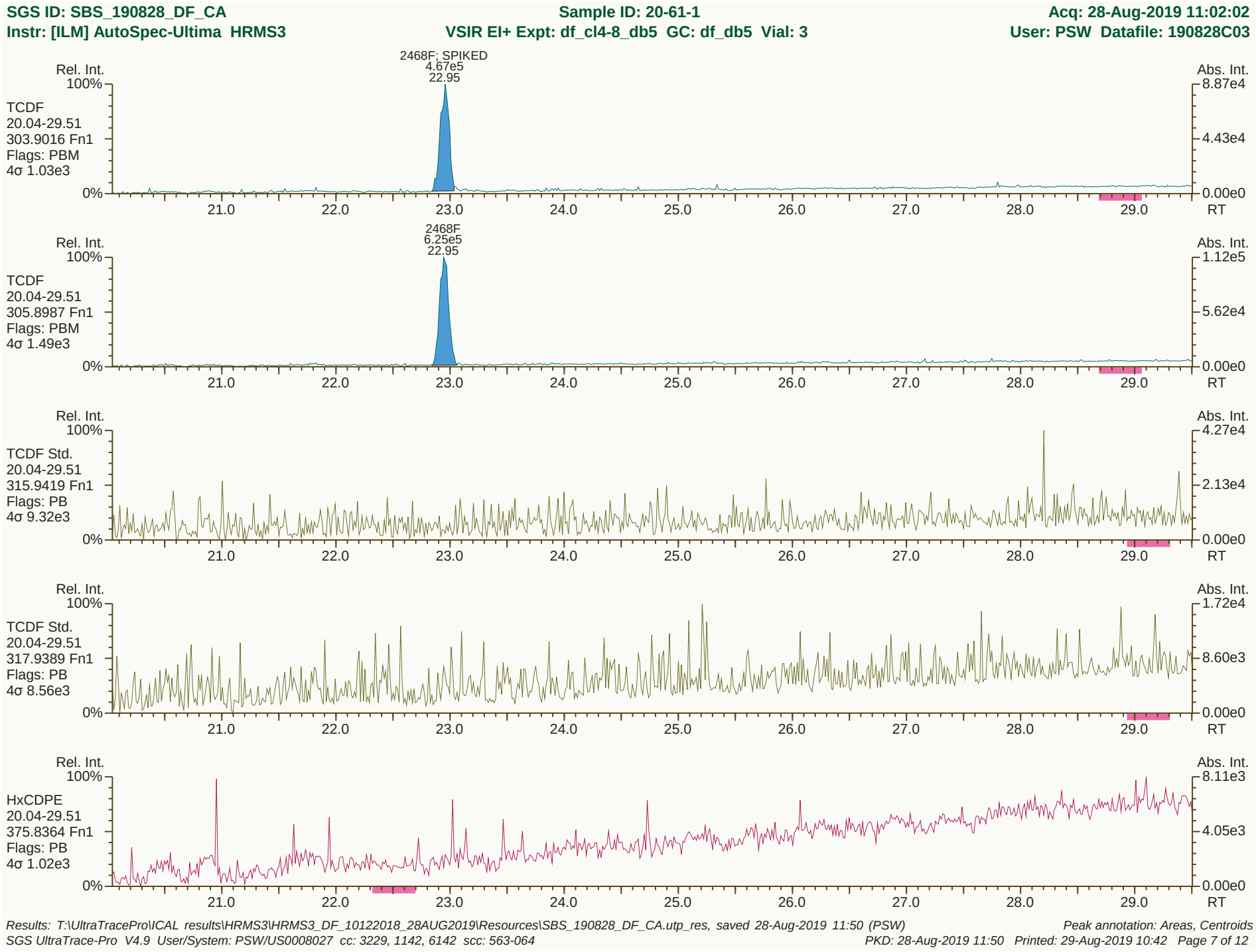

Rel. Int.
100%
HpCDD
39.01-41.51
423.7767 Fn4
Flags: PB
4σ 1.52e3
0%
Abs. Int.
5.70e3
2.85e3
0.00e0
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
HpCDD
39.01-41.51
425.7737 Fn4
Flags: PB
4σ 1.59e3
0%
Abs. Int.
9.66e3
4.83e3
0.00e0
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
HpCDD Std.
39.01-41.51
435.8169 Fn4
Flags: PB
4σ 2.99e3
0%
Abs. Int.
2.30e4
1.15e4
0.00e0
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
HpCDD Std.
39.01-41.51
437.8140 Fn4
Flags: PB
4σ 3.11e3
0%
Abs. Int.
1.54e4
7.70e3
0.00e0
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
QC Check
39.01-41.51
430.9728 Fn4
Flags: -
0%
Abs. Int.
1.01e7
5.04e6
0.00e0
39.5
40.0
40.5
41.0
41.5 RT


Rel. Int.
100%
OCDD
41.52-46.01
457.7377 Fn5
Flags: PB
4σ 1.21e3
0%
Abs. Int.
1.40e4
6.99e3
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
Rel. Int.
100%
OCDD
41.52-46.01
459.7348 Fn5
Flags: PB
4σ 1.53e3
0%
Abs. Int.
8.73e3
4.36e3
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
Rel. Int.
100%
OCDD Std.
41.52-46.01
469.7780 Fn5
Flags: PB
4σ 1.73e3
0%
Abs. Int.
1.12e4
5.62e3
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
Rel. Int.
100%
OCDD Std.
41.52-46.01
471.7750 Fn5
Flags: PB
4σ 1.62e3
0%
Abs. Int.
1.68e4
8.38e3
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
Rel. Int.
100%
QC Check
41.52-46.01
454.9728 Fn5
Flags: -
0%
Abs. Int.
3.68e6
1.84e6
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT

SGS ID: SBS_190828_DF_CA
Instr: [ILM] AutoSpec-Ultima HRMS3

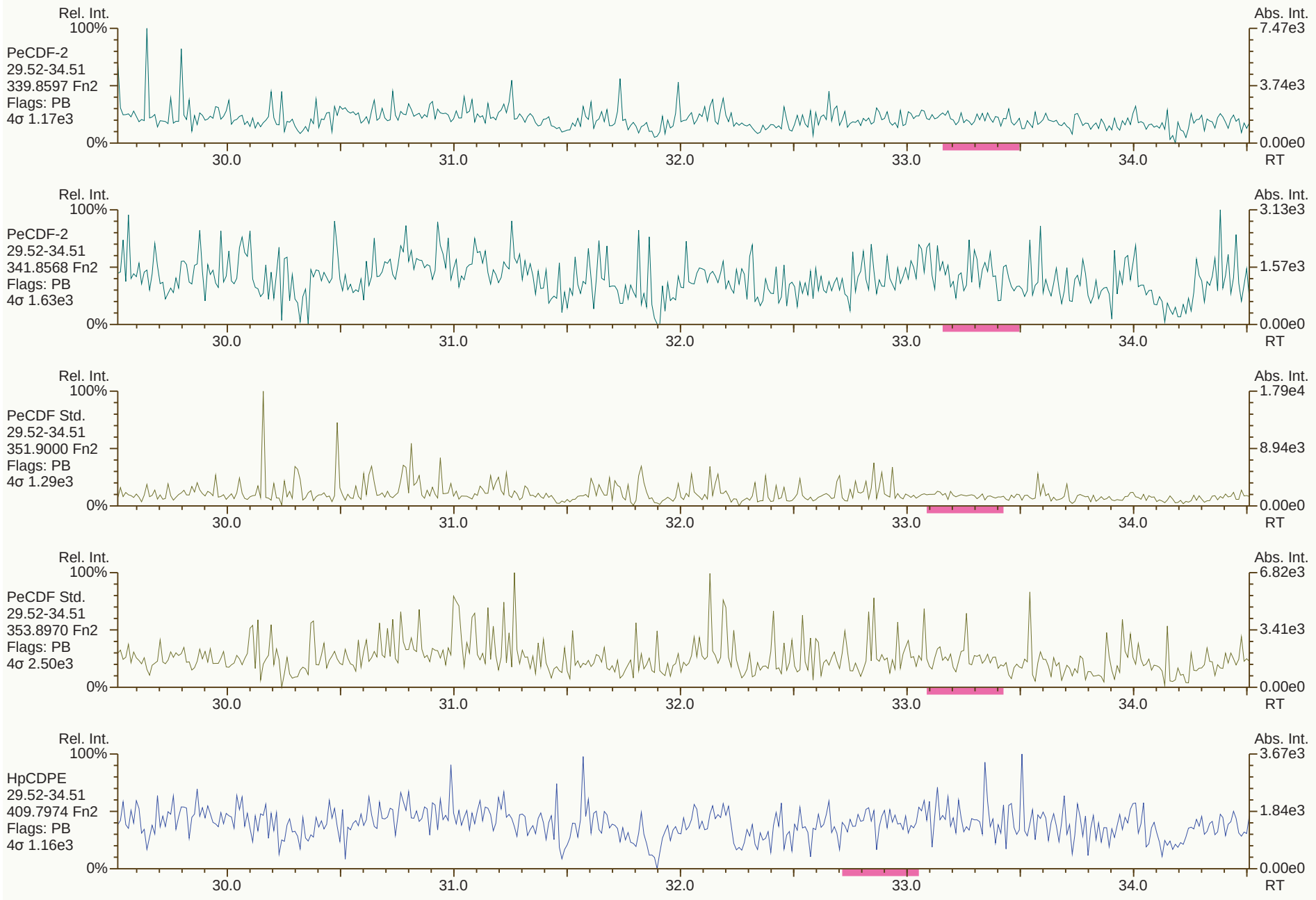
Sample ID: 20-61-1
VSIR EI+ Expt: df_cl4-8_db5 GC: df_db5 Vial: 3

Acq: 28-Aug-2019 11:02:02
User: PSW Datafile: 190828C03



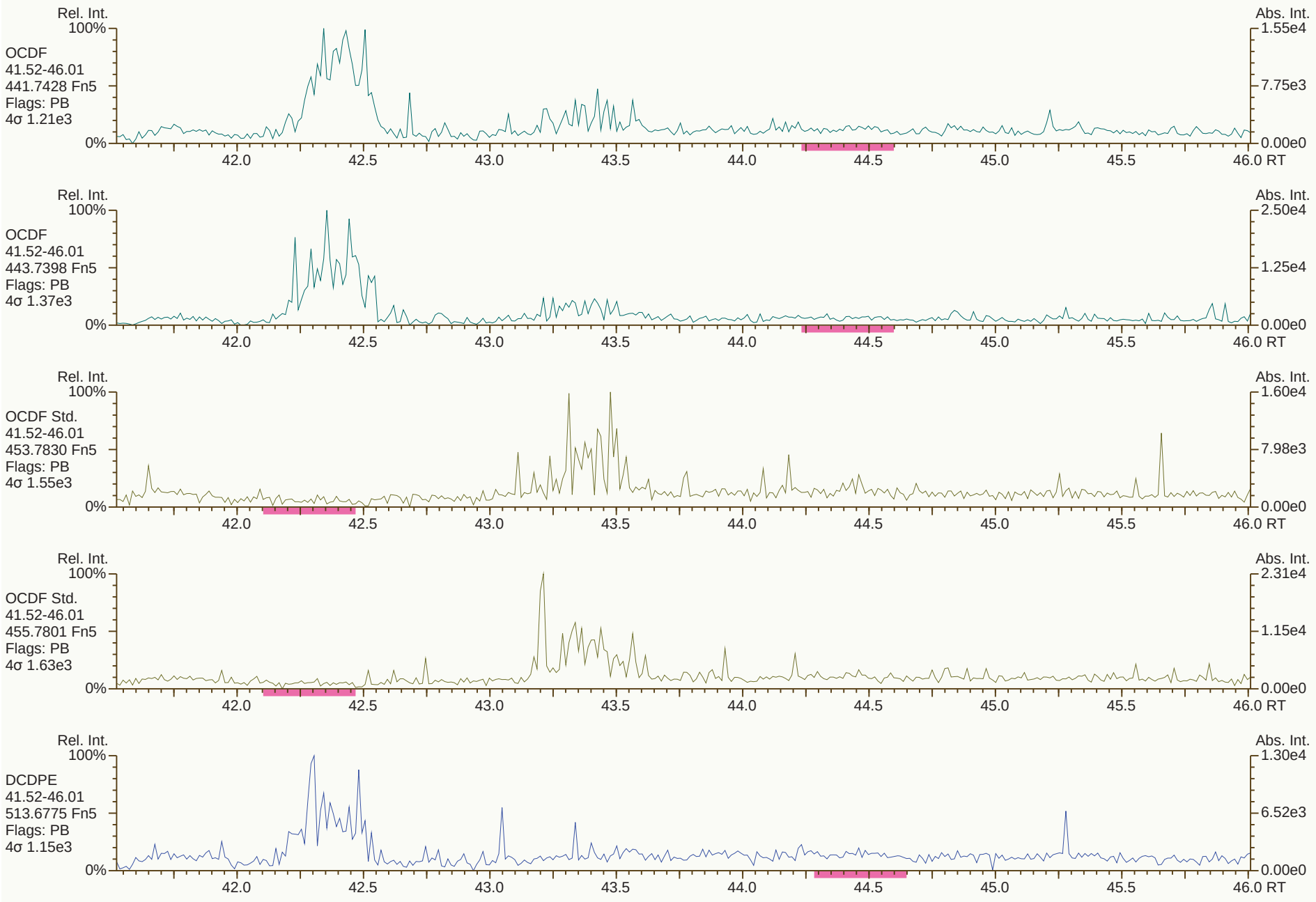
Results: T:\UltraTracePro\ICAL results\HRMS3\HRMS3_DF_10122018_28AUG2019\Resources\SBS_190828_DF_CA.utp_res, saved 28-Aug-2019 11:50 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 3229, 1142, 6142 scc: 563-064
PKD: 28-Aug-2019 11:50 Printed: 29-Aug-2019 10:42 Page 7 of 12


Rel. Int.
100%
0%
Abs. Int.
1.09e4
5.44e3
0.00e0
PeCDF-1
20.04-29.51
339.8597 Fn1
Flags: PB
4σ 1.83e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
0%
Abs. Int.
1.00e4
5.01e3
0.00e0
PeCDF-1
20.04-29.51
341.8568 Fn1
Flags: PB
4σ 1.53e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
0%
Abs. Int.
2.21e6
1.11e6
0.00e0
QC Check
20.04-29.51
316.9824 Fn1
Flags: -
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
PeCDF-2
29.52-34.51
339.8597 Fn2
Flags: PB
4σ 1.17e3
0%
Abs. Int.
7.47e3
3.74e3
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDF-2
29.52-34.51
341.8568 Fn2
Flags: PB
4σ 1.63e3
0%
Abs. Int.
3.13e3
1.57e3
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDF Std.
29.52-34.51
351.9000 Fn2
Flags: PB
4σ 1.29e3
0%
Abs. Int.
1.79e4
8.94e3
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDF Std.
29.52-34.51
353.8970 Fn2
Flags: PB
4σ 2.50e3
0%
Abs. Int.
6.82e3
3.41e3
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
HpCDPE
29.52-34.51
409.7974 Fn2
Flags: PB
4σ 1.16e3
0%
Abs. Int.
3.67e3
1.84e3
0.00e0
30.0
31.0
32.0
33.0
34.0
RT


Rel. Int.
100%
HxCDF
34.52-39.00
373.8207 Fn3
Flags: PB
4σ 1.64e3
0%
Abs. Int.
6.59e3
3.29e3
0.00e0
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
HxCDF
34.52-39.00
375.8178 Fn3
Flags: PB
4σ 1.27e3
0%
Abs. Int.
5.49e3
2.75e3
0.00e0
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
HxCDF Std.
34.52-39.00
383.8639 Fn3
Flags: PB
4σ 3.67e3
0%
Abs. Int.
1.45e4
7.25e3
0.00e0
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
HxCDF Std.
34.52-39.00
385.8610 Fn3
Flags: PB
4σ 2.99e3
0%
Abs. Int.
2.35e4
1.18e4
0.00e0
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
OCDPE
34.52-39.00
445.7555 Fn3
Flags: PB
4σ 8.90e2
0%
Abs. Int.
4.63e3
2.31e3
0.00e0
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT

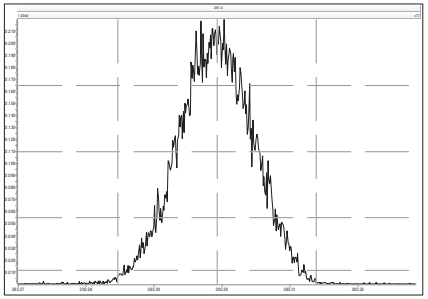

Rel. Int.
100%
HpCDF
39.01-41.51
407.7818 Fn4
Flags: PB
4σ 1.38e3
0%
Abs. Int.
1.17e4
5.86e3
0.00e0
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
HpCDF
39.01-41.51
409.7788 Fn4
Flags: PB
4σ 2.19e3
0%
Abs. Int.
1.15e4
5.75e3
0.00e0
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
HpCDF Std.
39.01-41.51
417.8253 Fn4
Flags: PB
4σ 3.82e3
0%
Abs. Int.
1.98e4
9.92e3
0.00e0
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
HpCDF Std.
39.01-41.51
419.8220 Fn4
Flags: PB
4σ 3.97e3
0%
Abs. Int.
2.68e4
1.34e4
0.00e0
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
NCDPE
39.01-41.51
479.7165 Fn4
Flags: PB
4σ 1.35e3
0%
Abs. Int.
4.52e3
2.26e3
0.00e0
39.5
40.0
40.5
41.0
41.5 RT


Rel. Int.
100%
OCDF
41.52-46.01
441.7428 Fn5
Flags: PB
4σ 1.21e3
0%
Abs. Int.
1.55e4
7.75e3
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
Rel. Int.
100%
OCDF
41.52-46.01
443.7398 Fn5
Flags: PB
4σ 1.37e3
0%
Abs. Int.
2.50e4
1.25e4
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
Rel. Int.
100%
OCDF Std.
41.52-46.01
453.7830 Fn5
Flags: PB
4σ 1.55e3
0%
Abs. Int.
1.60e4
7.98e3
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
Rel. Int.
100%
OCDF Std.
41.52-46.01
455.7801 Fn5
Flags: PB
4σ 1.63e3
0%
Abs. Int.
2.31e4
1.15e4
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
Rel. Int.
100%
DCDPE
41.52-46.01
513.6775 Fn5
Flags: PB
4σ 1.15e3
0%
Abs. Int.
1.30e4
6.52e3
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT

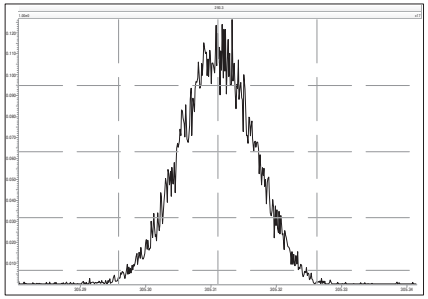
File: Experiment: df_cl4-8_db5.exp Reference: DF.ref Function: 1 @ 200 (ppm)

Printed: Wednesday, August 28, 2019 10:59:57 Eastern Daylight Time

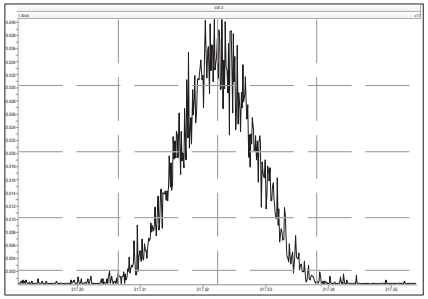
M 292.9824 R 11738



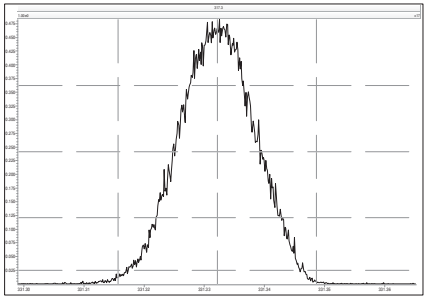
M 304.9824 R 11467



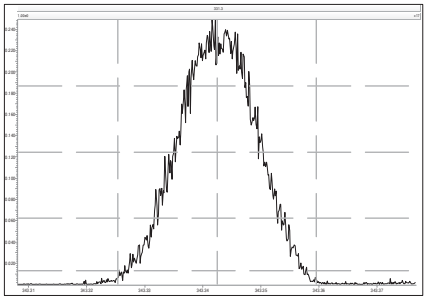
M 316.9824 R 11846



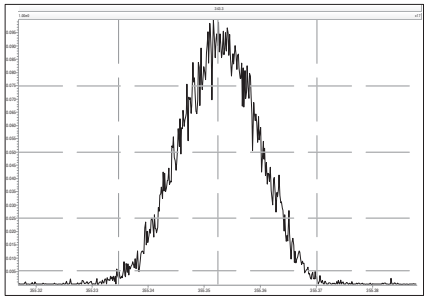
M 330.9792 R 11570



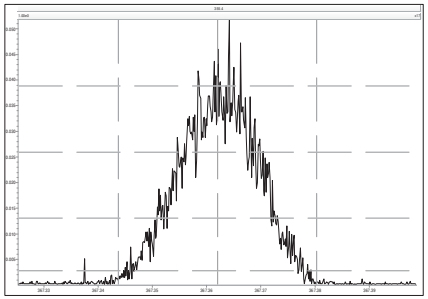
M 342.9792 R 11364



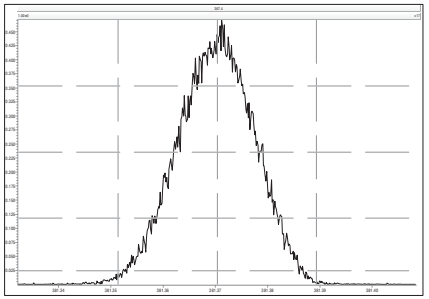
M 354.9792 R 11110



M 366.9792 R 11630



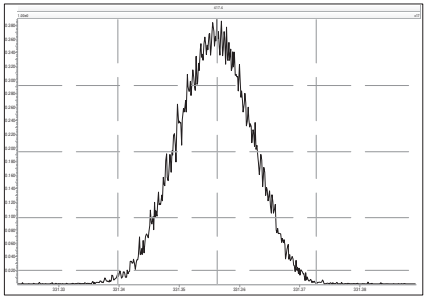
M 380.9760 R 11262



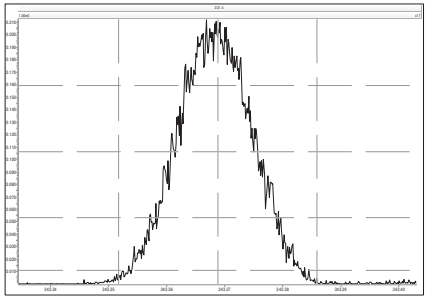
File: Experiment: df_cl4-8_db5.exp Reference: DF.ref Function: 2 @ 200 (ppm)

Printed: Wednesday, August 28, 2019 11:00:18 Eastern Daylight Time

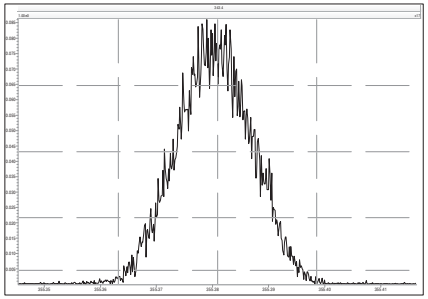
M 330.9792 R 11740



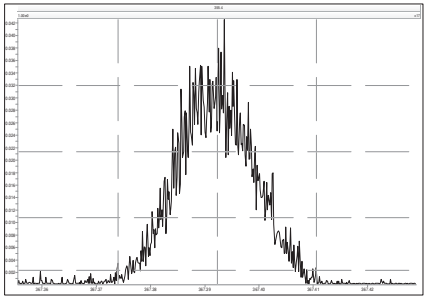
M 342.9792 R 11678



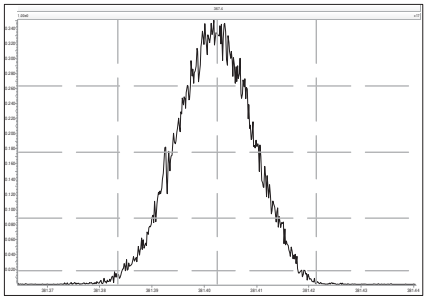
M 354.9792 R 12315



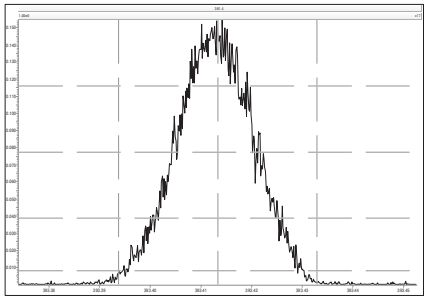
M 366.9792 R 11572



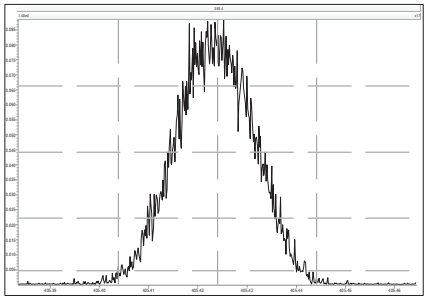
M 380.9760 R 11263



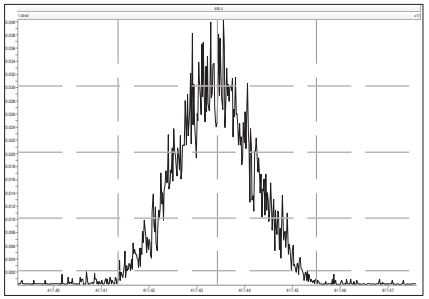
M 392.9760 R 11629



M 404.9760 R 11160



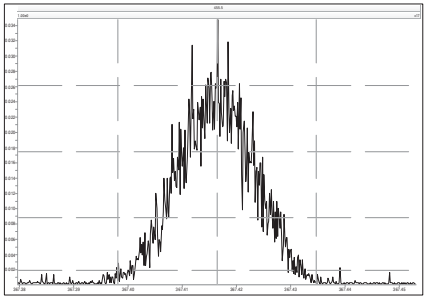
M 416.9760 R 11213



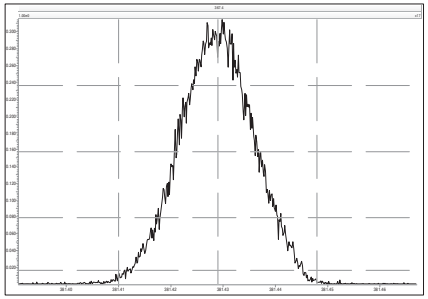
File: Experiment: df_cl4-8_db5.exp Reference: DF.ref Function: 3 @ 200 (ppm)

Printed: Wednesday, August 28, 2019 11:00:39 Eastern Daylight Time

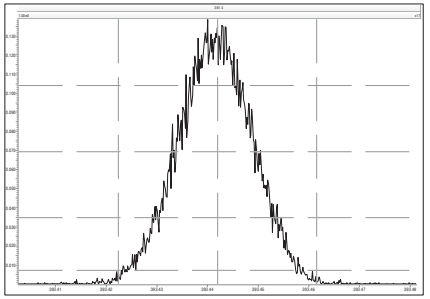
M 366.9792 R 12076



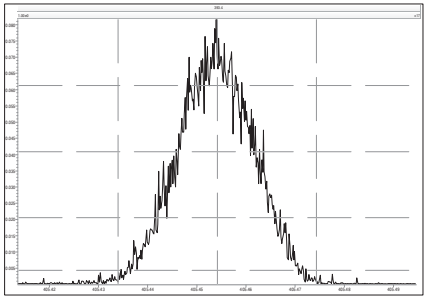
M 380.9760 R 11626



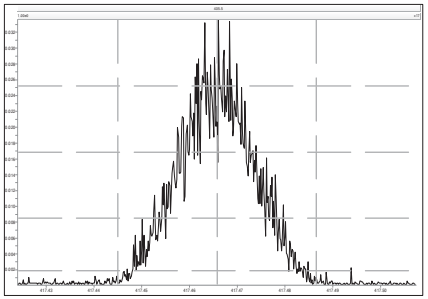
M 392.9760 R 11679



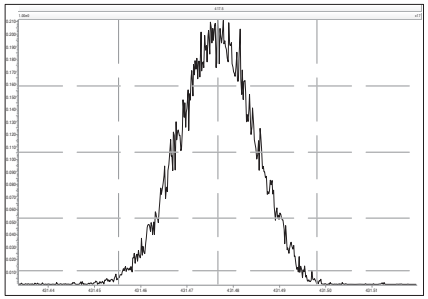
M 404.9760 R 11901



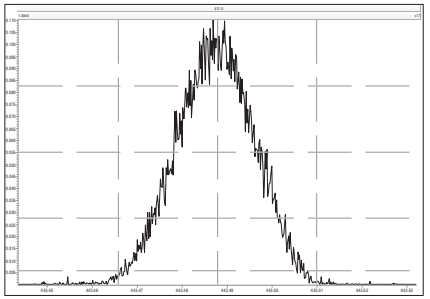
M 416.9760 R 11363



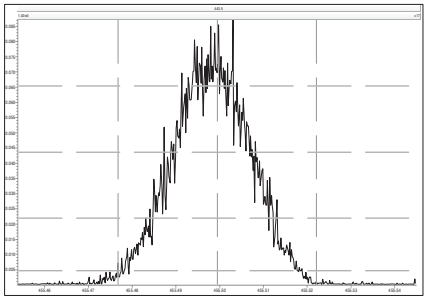
M 430.9728 R 11064



M 442.9728 R 11794



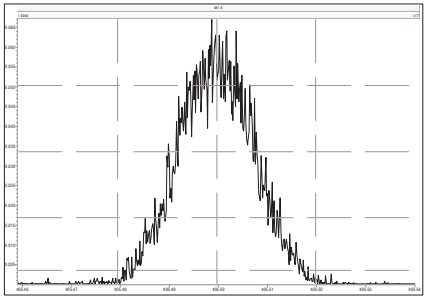
M 454.9728 R 10917



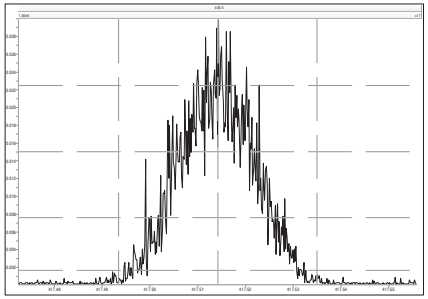
File: Experiment: df_cl4-8_db5.exp Reference: DF.ref Function: 4 @ 200 (ppm)

Printed: Wednesday, August 28, 2019 11:01:01 Eastern Daylight Time

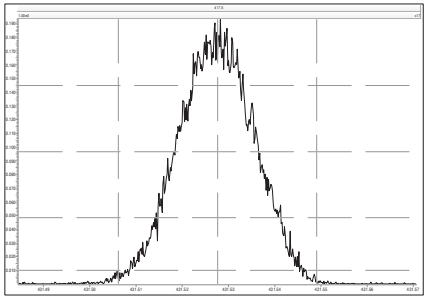
M 404.9760 R 11963



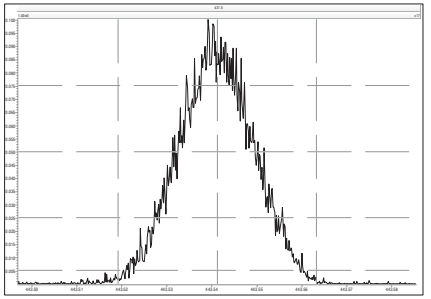
M 416.9760 R 12136



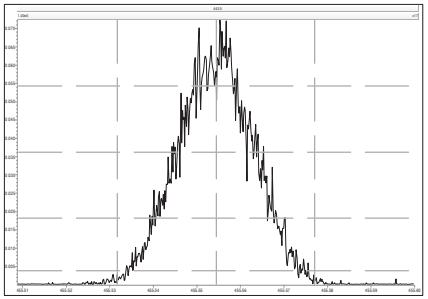
M 430.9728 R 11468



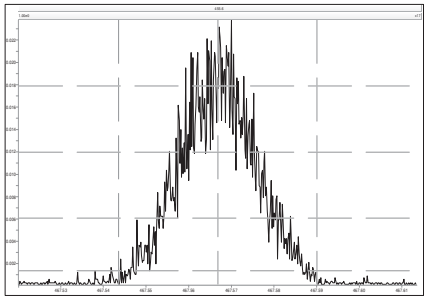
M 442.9728 R 11315



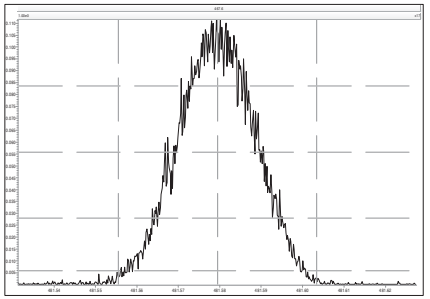
M 454.9728 R 11680



M 466.9728 R 11309



M 480.9696 R 11628



File: Experiment: df_cl4-8_db5.exp Reference: DF.ref Function: 5 @ 200 (ppm)

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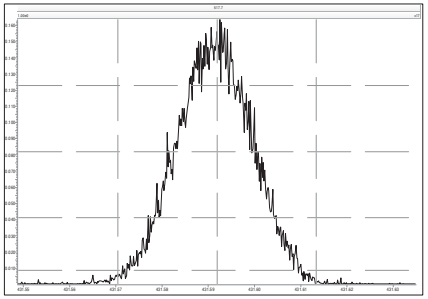
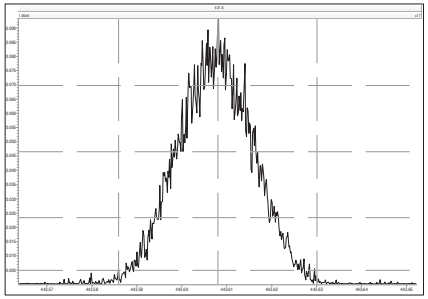
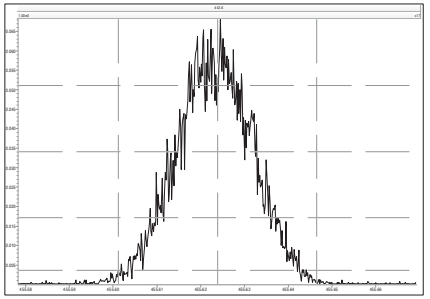
M 430.9728 R 11629



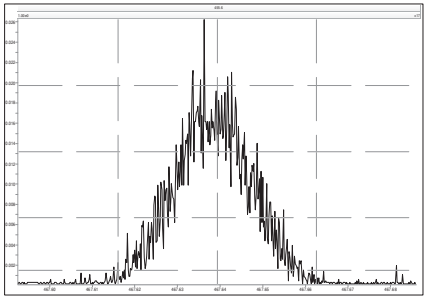
M 442.9728 R 11161



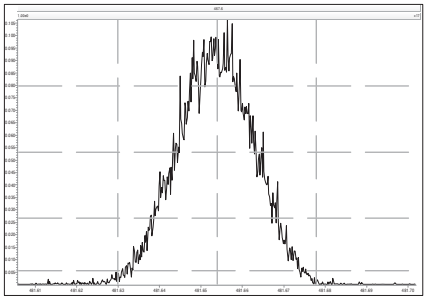
M 454.9728 R 11848



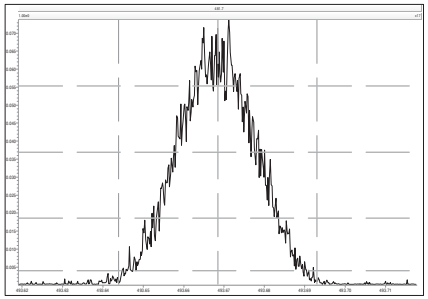
M 466.9728 R 12253



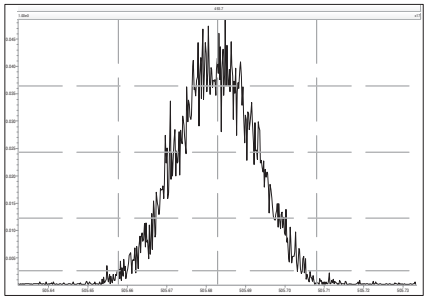
M 480.9696 R 11794



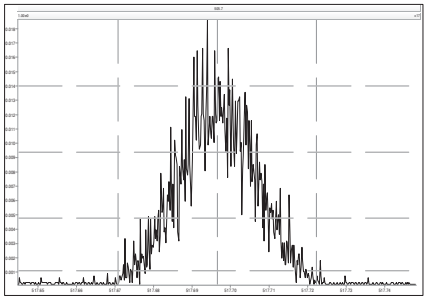
M 492.9696 R 11208



M 504.9696 R 11111



M 516.9697 R 12758



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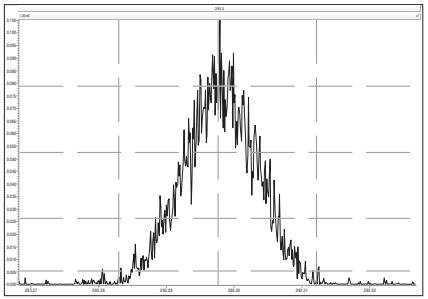
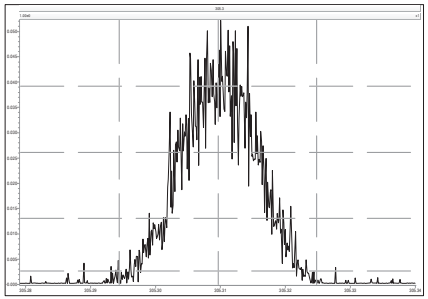
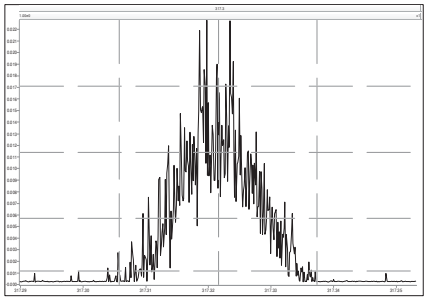
M 292.9824 R 12325



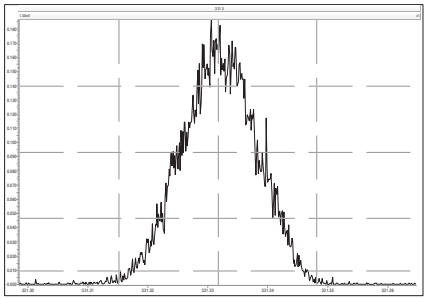
M 304.9824 R 13037



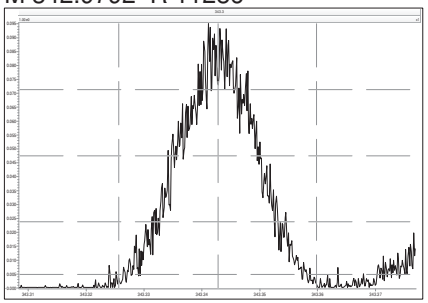
M 316.9824 R 16181



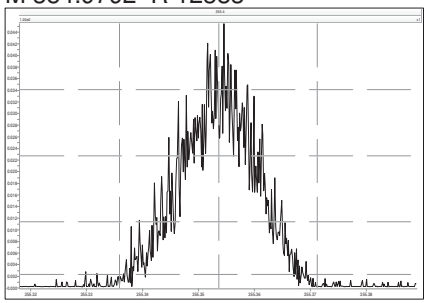
M 330.9792 R 11522



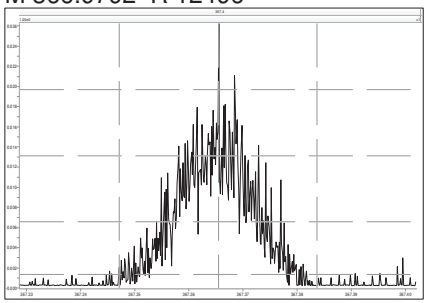
M 342.9792 R 11286



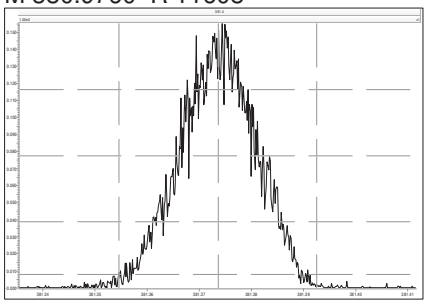
M 354.9792 R 12383



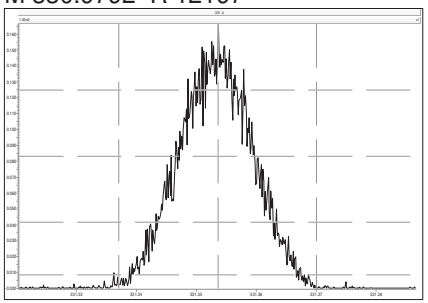
M 366.9792 R 12496



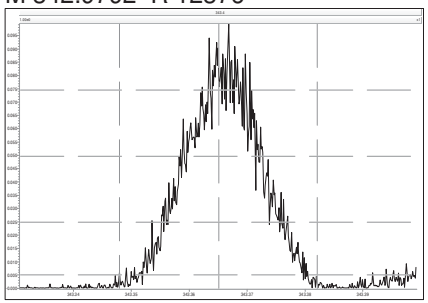
M 380.9760 R 11608



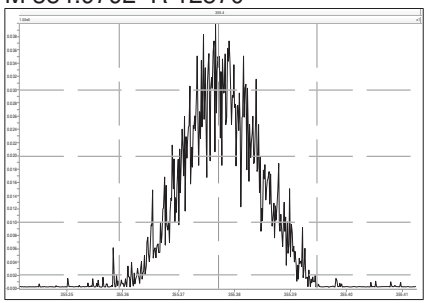
M 330.9792 R 12197



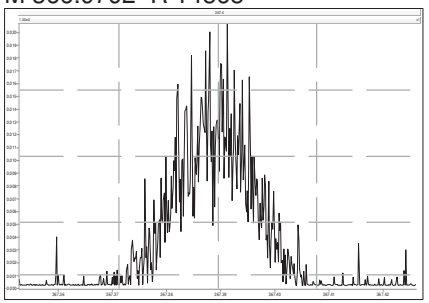
M 342.9792 R 12376



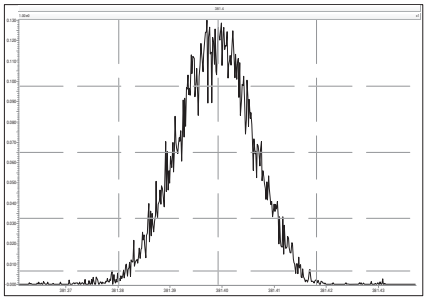
M 354.9792 R 12570



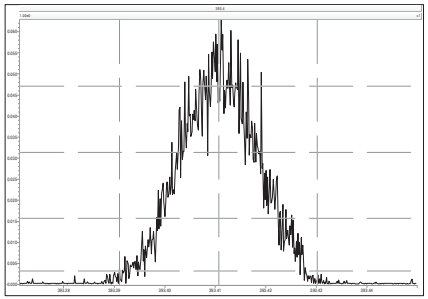
M 366.9792 R 14565



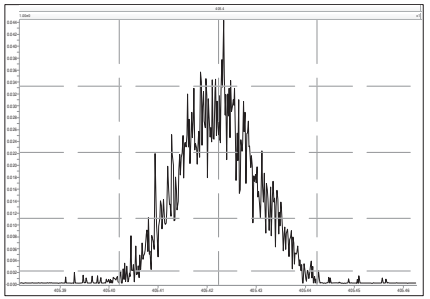
M 380.9760 R 11879



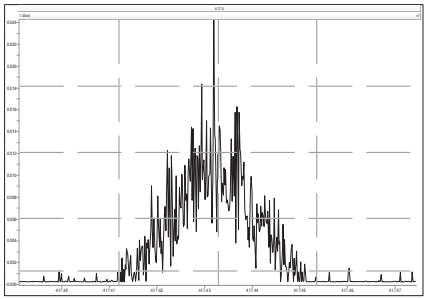
M 392.9760 R 13043



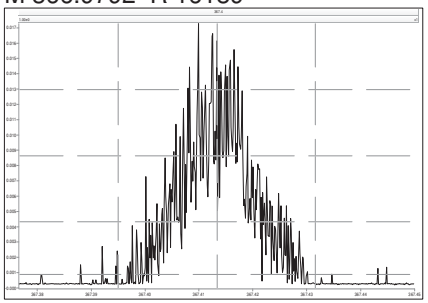
M 404.9760 R 11779



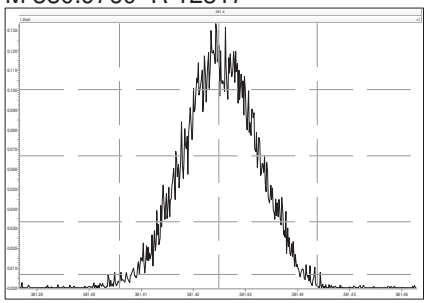
M 416.9760 R 14379



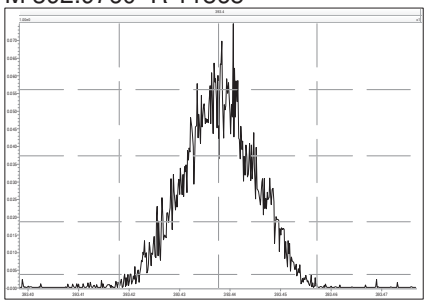
M 366.9792 R 16189



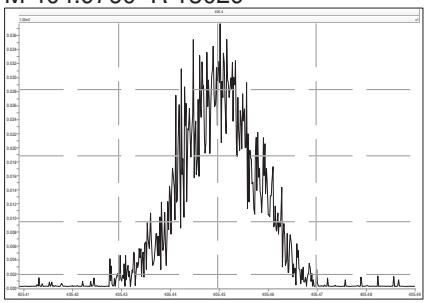
M 380.9760 R 12317



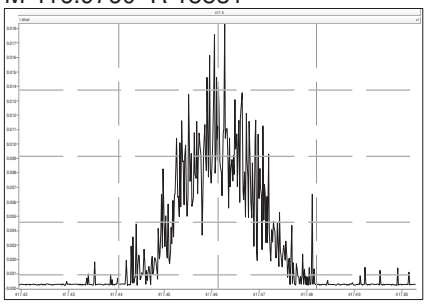
M 392.9760 R 11865



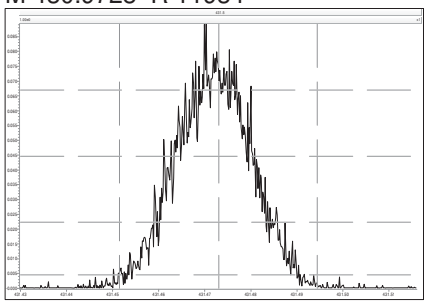
M 404.9760 R 13029



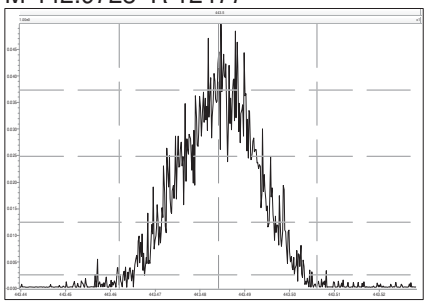
M 416.9760 R 15531



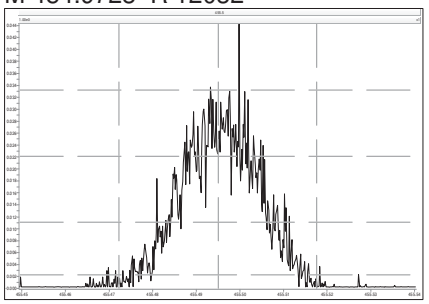
M 430.9728 R 11934



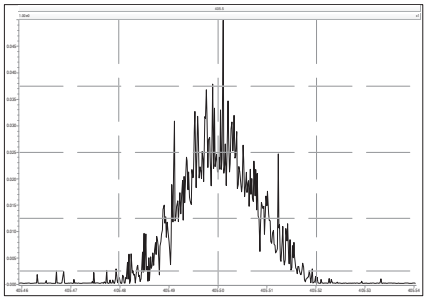
M 442.9728 R 12477



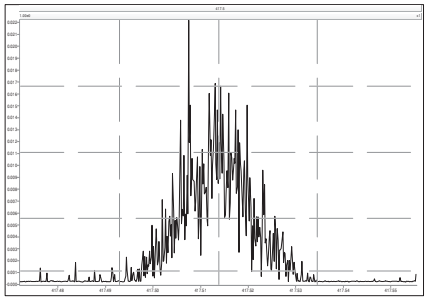
M 454.9728 R 12032



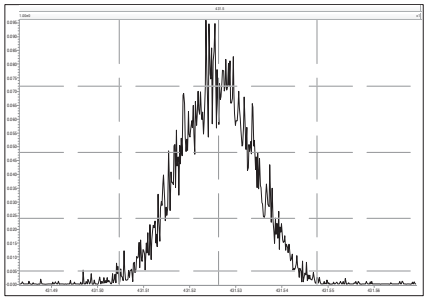
M 404.9760 R 12953



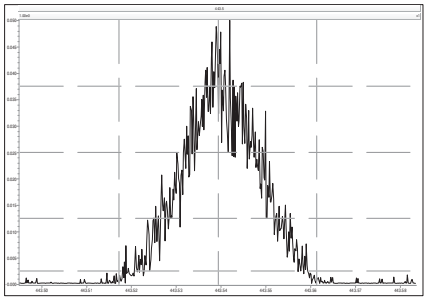
M 416.9760 R 17187



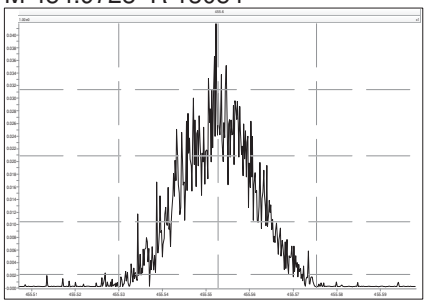
M 430.9728 R 11876



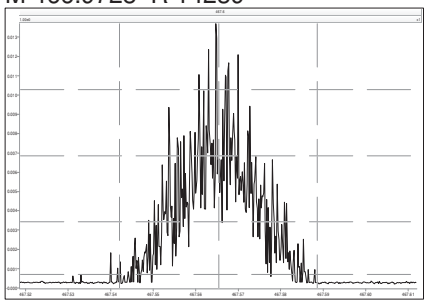
M 442.9728 R 12048



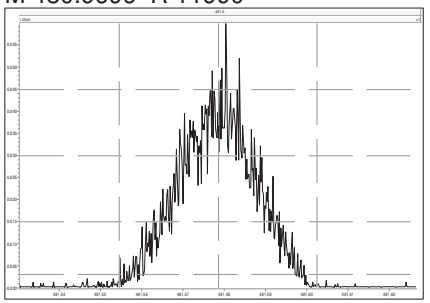
M 454.9728 R 13054



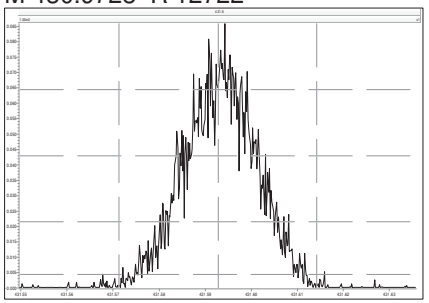
M 466.9728 R 14239



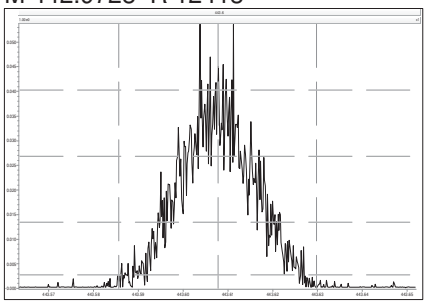
M 480.9696 R 11990



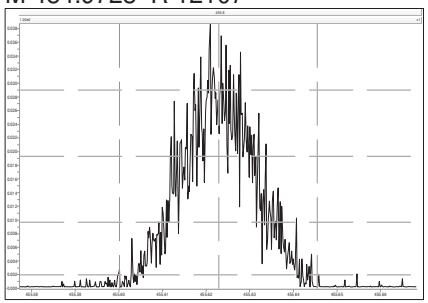
M 430.9728 R 12722



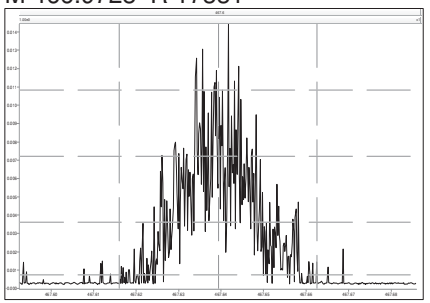
M 442.9728 R 12413



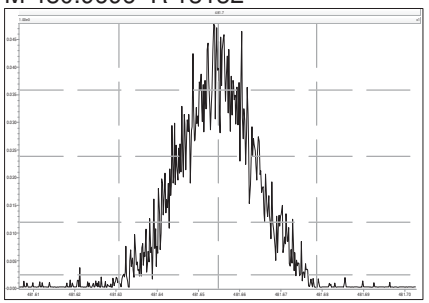
M 454.9728 R 12107



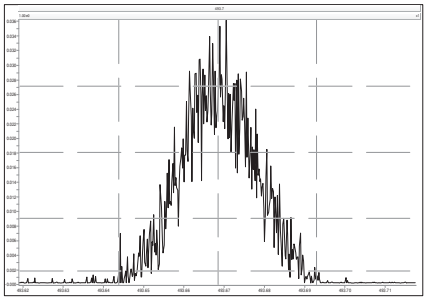
M 466.9728 R 17331



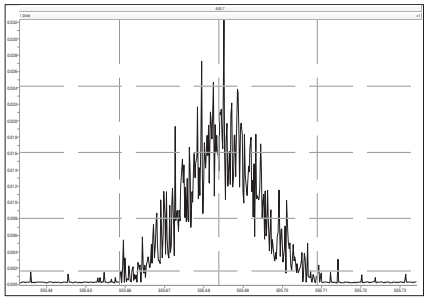
M 480.9696 R 13132



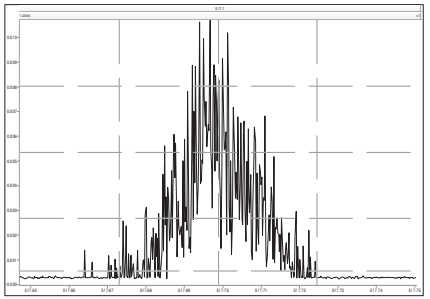
M 492.9696 R 13230



M 504.9696 R 12533



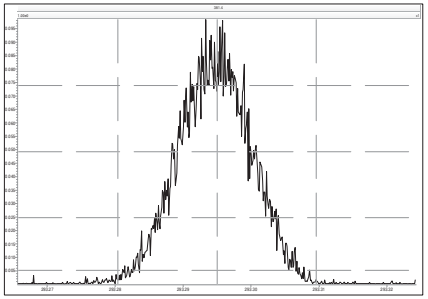
M 516.9697 R 12541



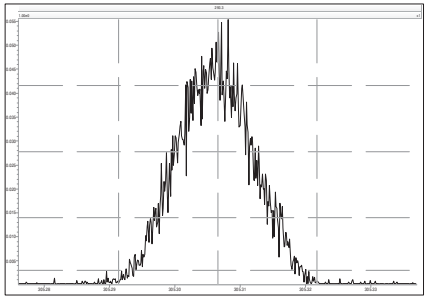
File: Experiment: df_cl4-8_db5.exp Reference: DF.ref Function: 1 @ 200 (ppm)

Printed: Thursday, August 29, 2019 08:50:48 Eastern Daylight Time

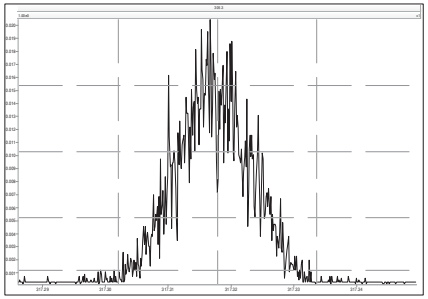
M 292.9824 R 11731



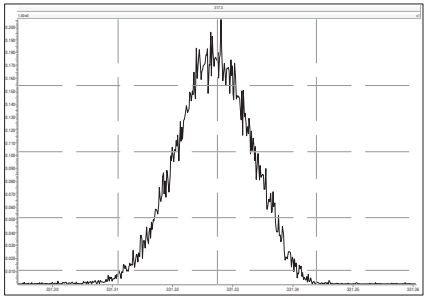
M 304.9824 R 12076



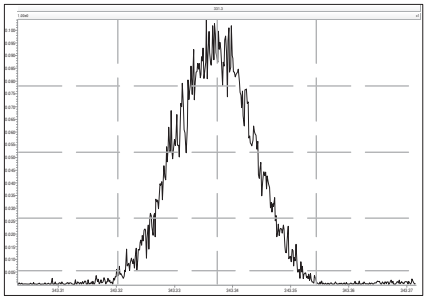
M 316.9824 R 13815



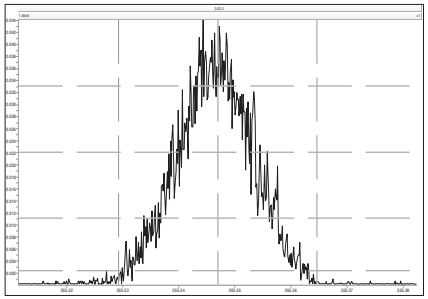
M 330.9792 R 11360



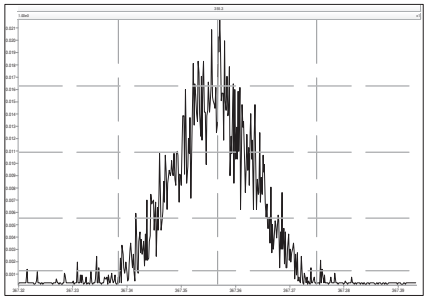
M 342.9792 R 11364



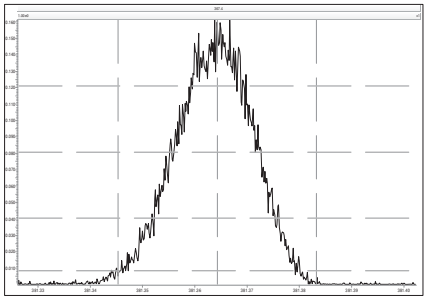
M 354.9792 R 11847



M 366.9792 R 12497



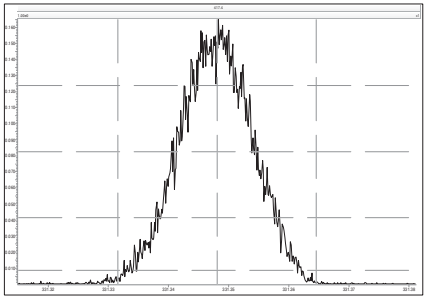
M 380.9760 R 11258



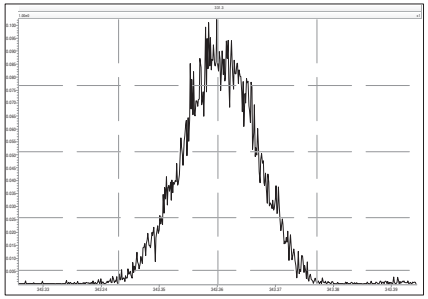
File: Experiment: df_cl4-8_db5.exp Reference: DF.ref Function: 2 @ 200 (ppm)

Printed: Thursday, August 29, 2019 08:51:09 Eastern Daylight Time

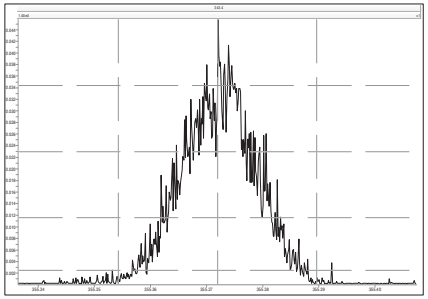
M 330.9792 R 11309



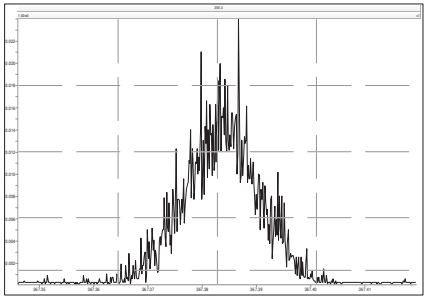
M 342.9792 R 12131



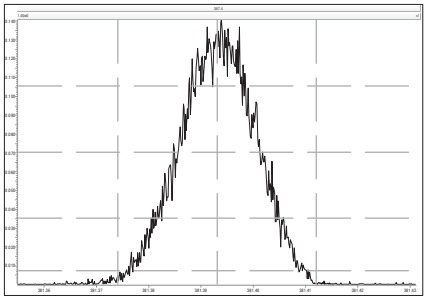
M 354.9792 R 11848



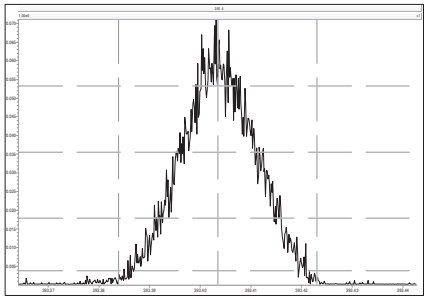
M 366.9792 R 12957



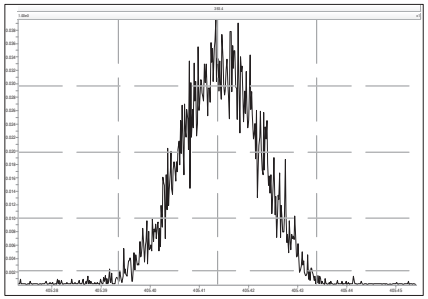
M 380.9760 R 11259



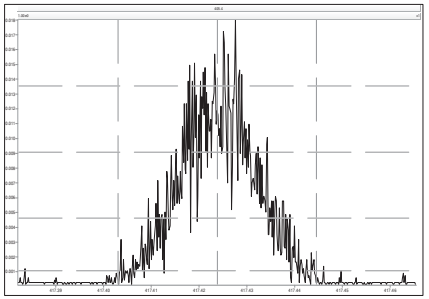
M 392.9760 R 11962



M 404.9760 R 11363



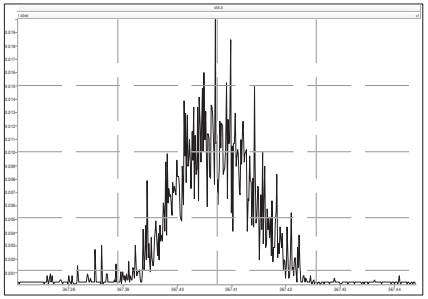
M 416.9760 R 12498



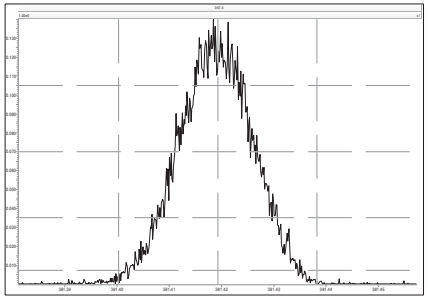
File: Experiment: df_cl4-8_db5.exp Reference: DF.ref Function: 3 @ 200 (ppm)

Printed: Thursday, August 29, 2019 08:51:30 Eastern Daylight Time

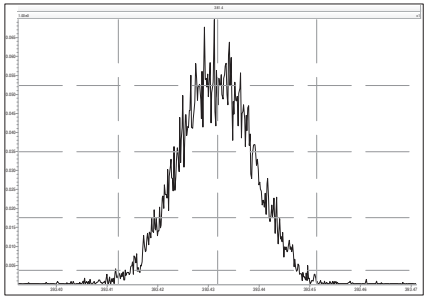
M 366.9792 R 12885



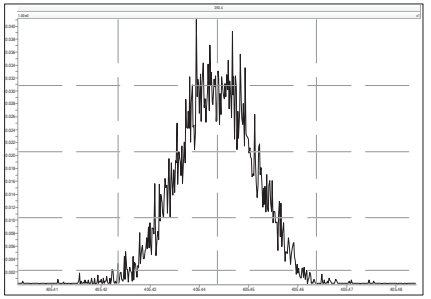
M 380.9760 R 11795



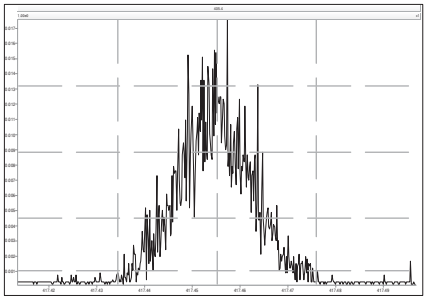
M 392.9760 R 11258



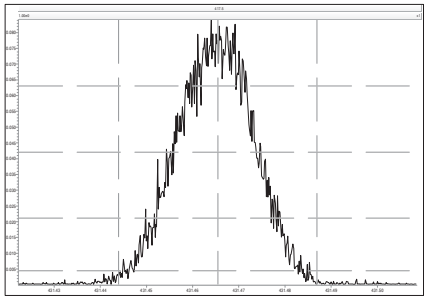
M 404.9760 R 12195



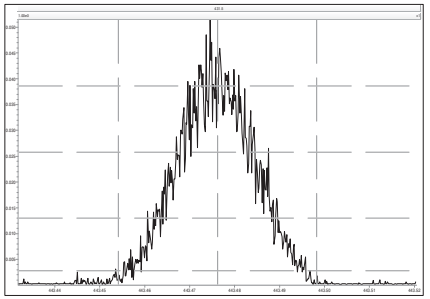
M 416.9760 R 12562



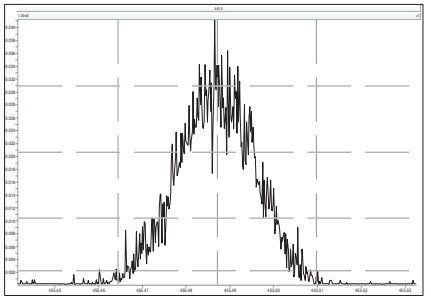
M 430.9728 R 11362



M 442.9728 R 11575



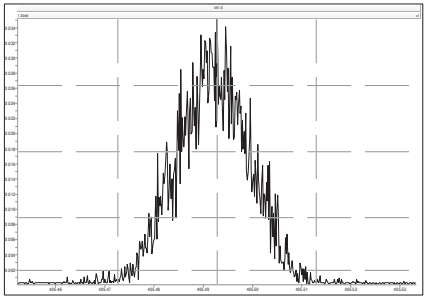
M 454.9728 R 12195



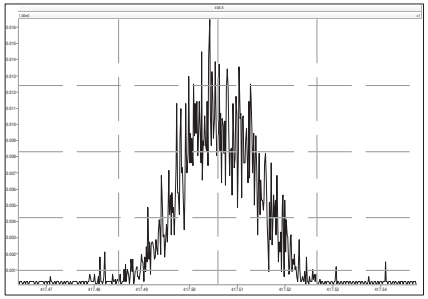
File: Experiment: df_cl4-8_db5.exp Reference: DF.ref Function: 4 @ 200 (ppm)

Printed: Thursday, August 29, 2019 08:51:49 Eastern Daylight Time

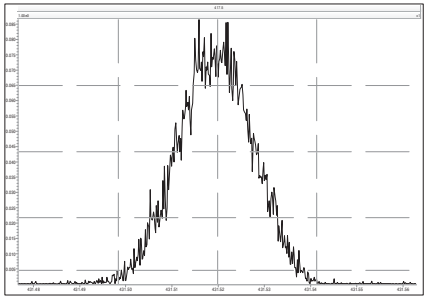
M 404.9760 R 12822



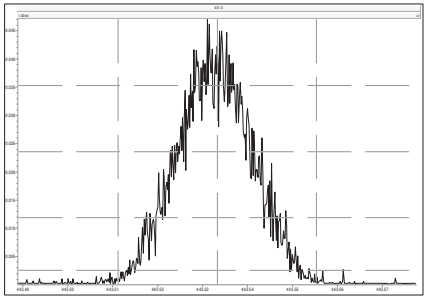
M 416.9760 R 13021



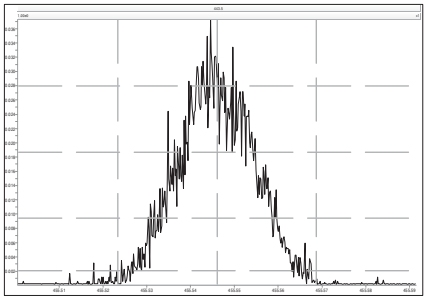
M 430.9728 R 11737



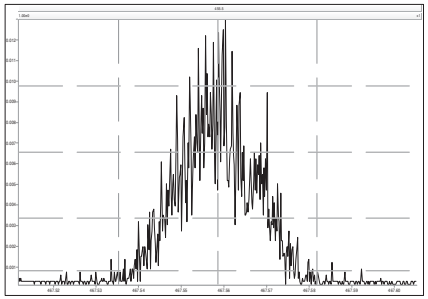
M 442.9728 R 11681



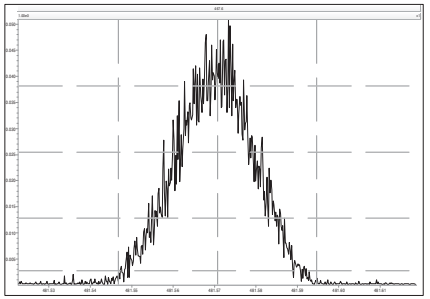
M 454.9728 R 12256



M 466.9728 R 13732



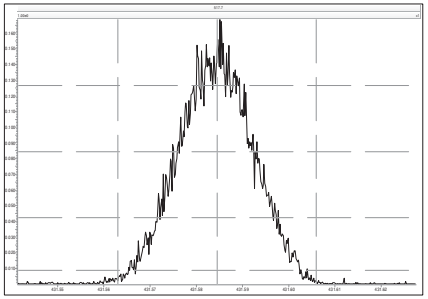
M 480.9696 R 12195



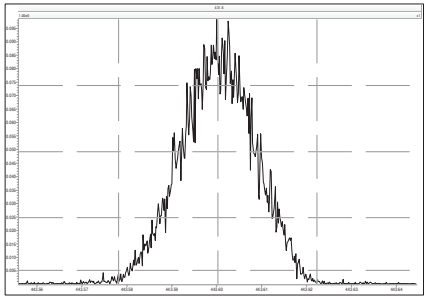
File: Experiment: df_cl4-8_db5.exp Reference: DF.ref Function: 5 @ 200 (ppm)

Printed: Thursday, August 29, 2019 08:52:26 Eastern Daylight Time

M 430.9728 R 12137



M 442.9728 R 11962



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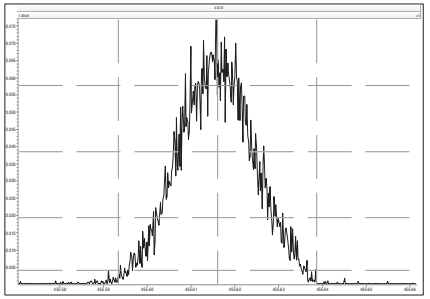

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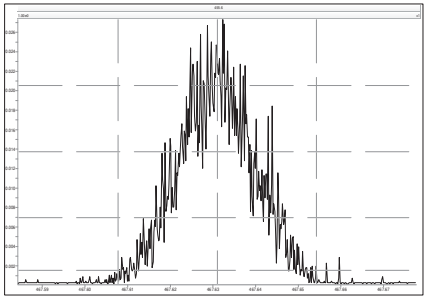

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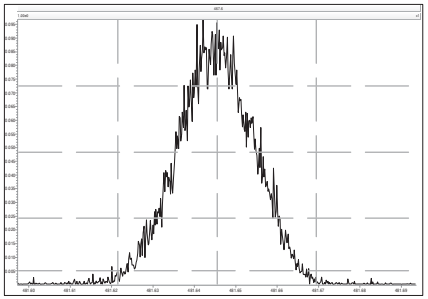

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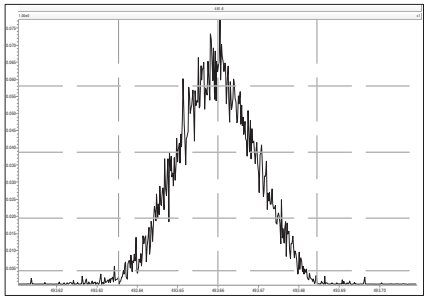

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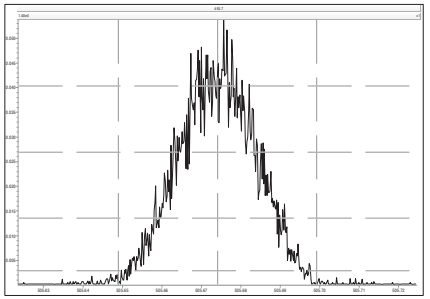

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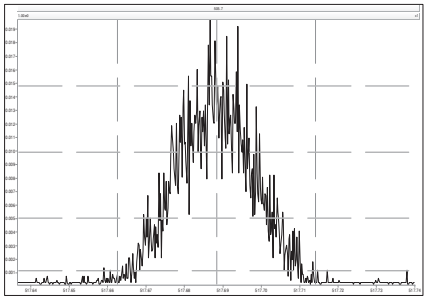

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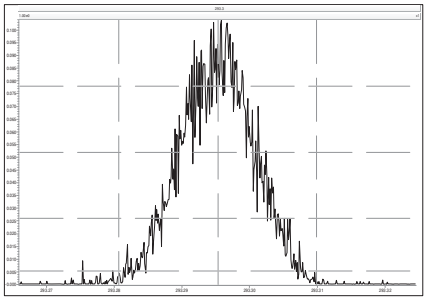

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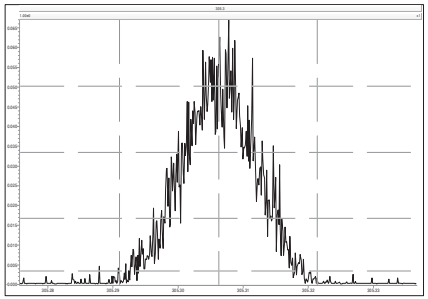

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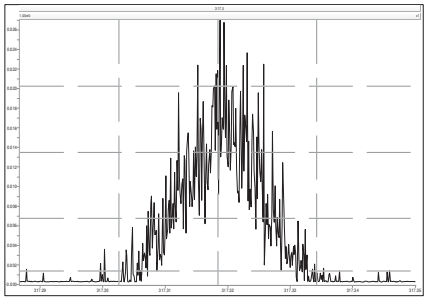

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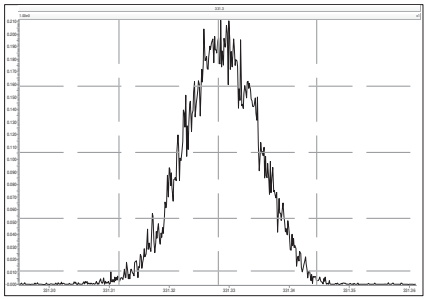

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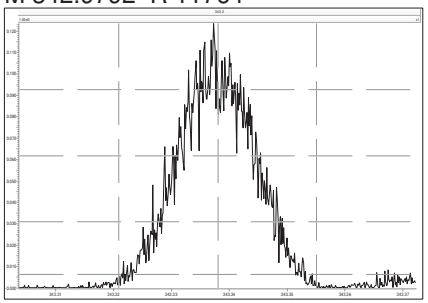

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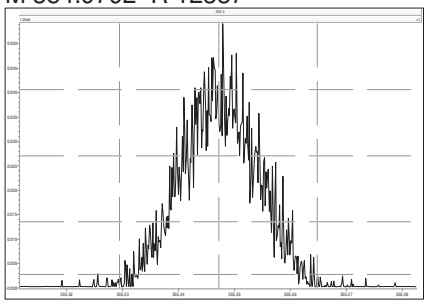

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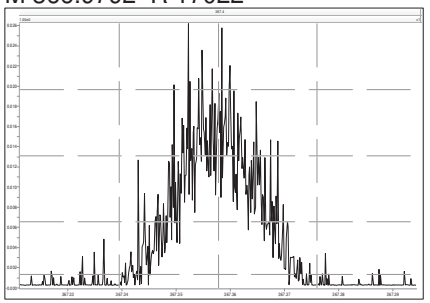

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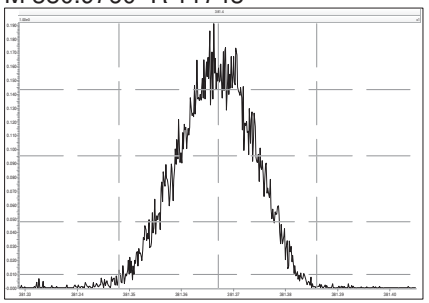

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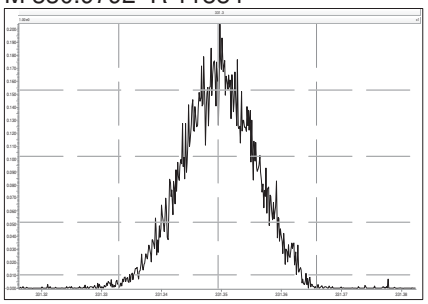

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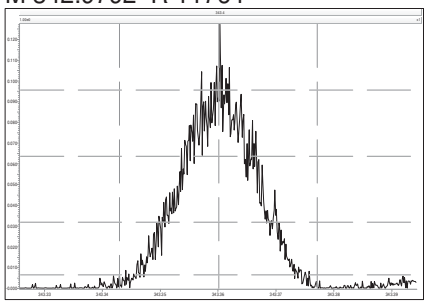

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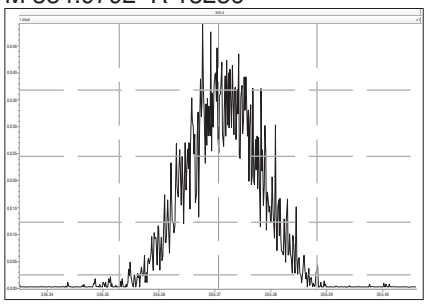

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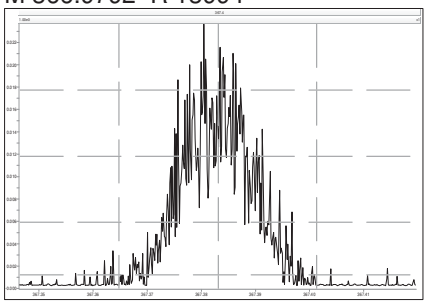

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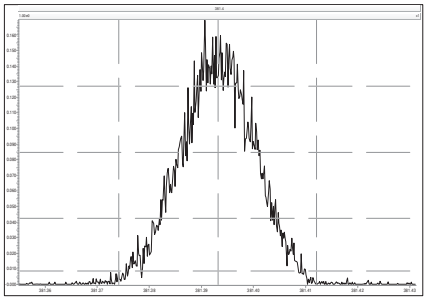

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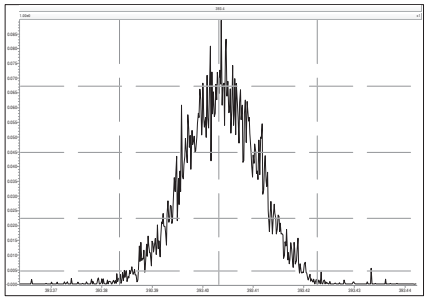

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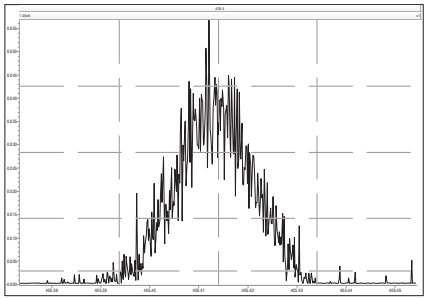

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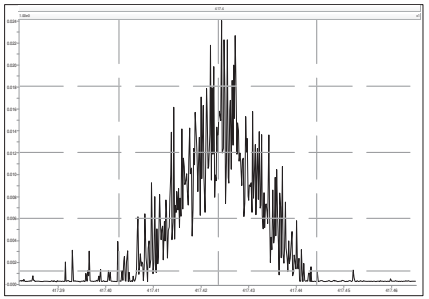

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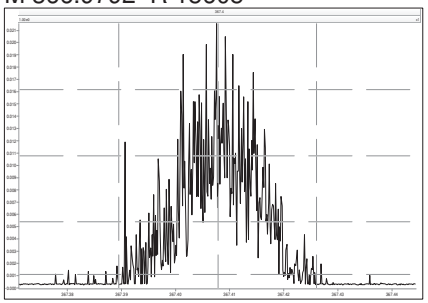

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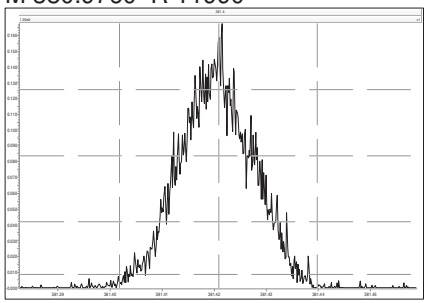

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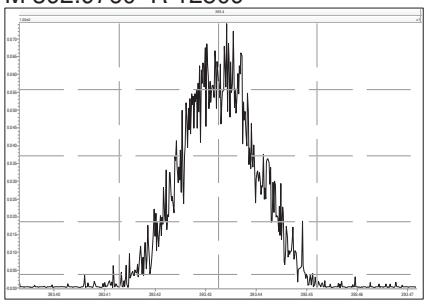

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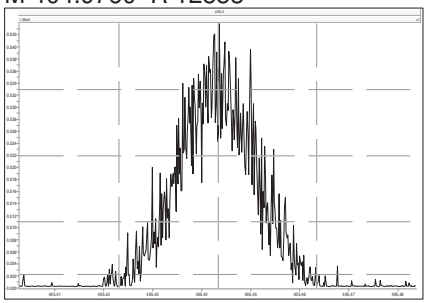

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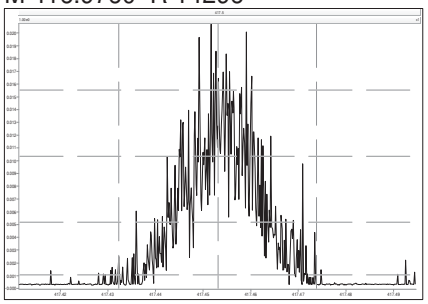

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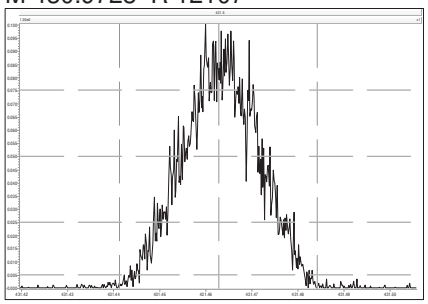

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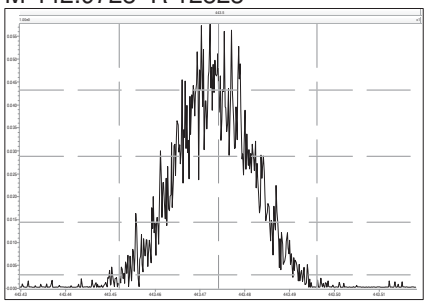

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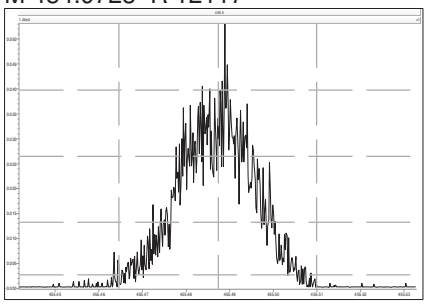

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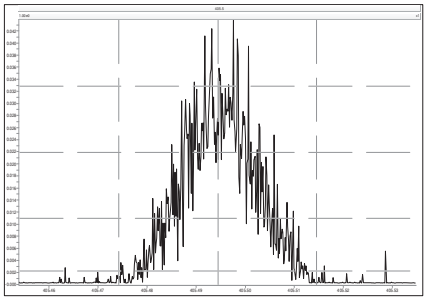

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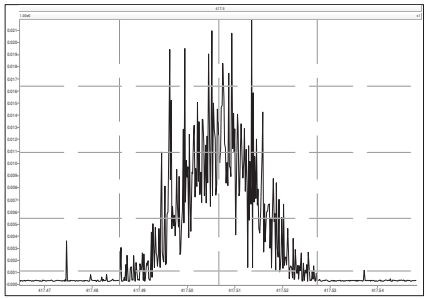

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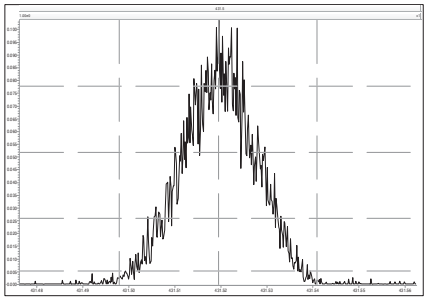

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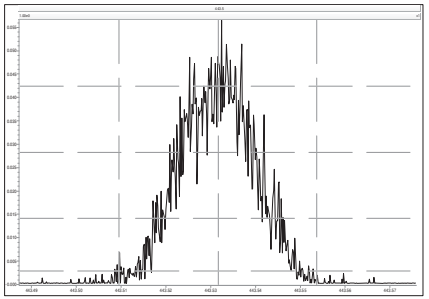

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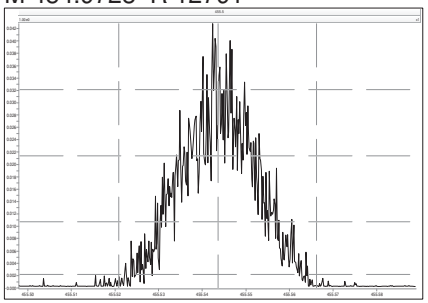

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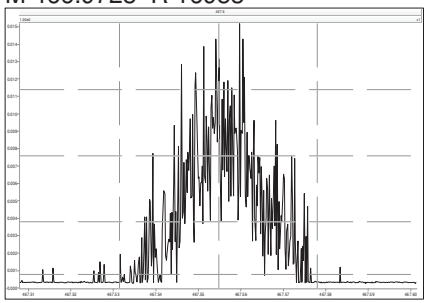

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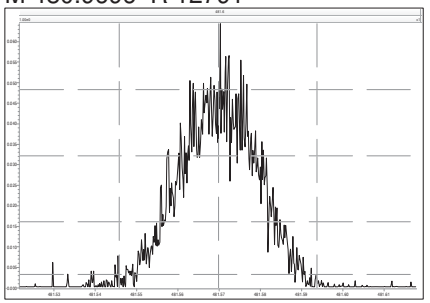

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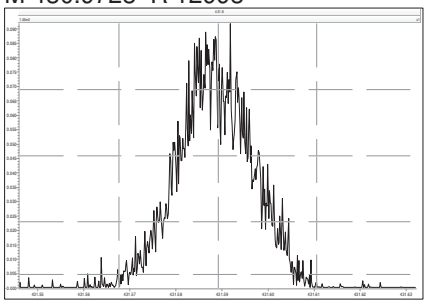

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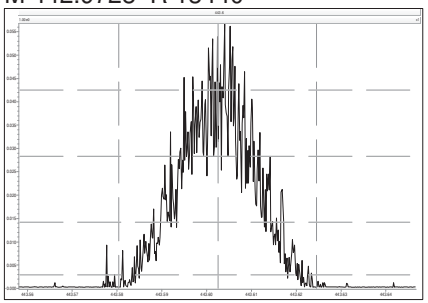

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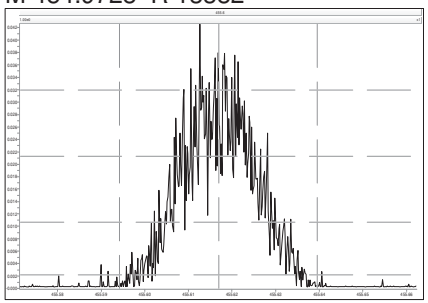

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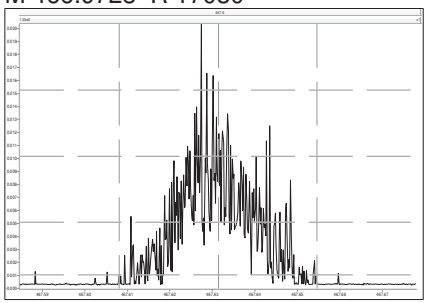

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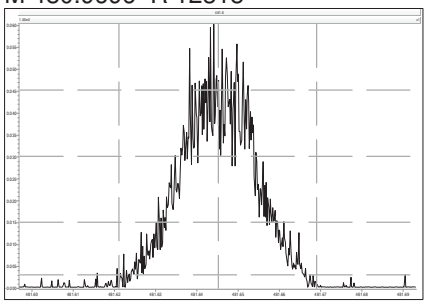

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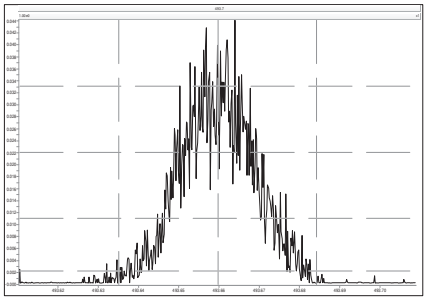

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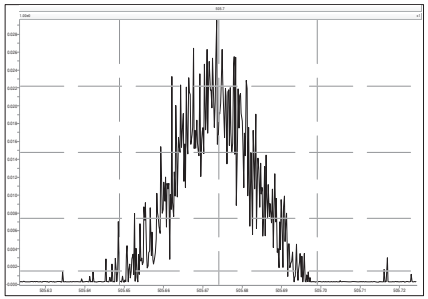

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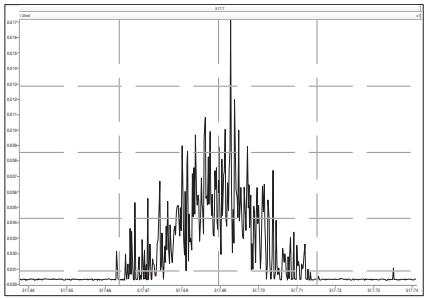

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APPROVED
Carla_Lyon , 10:06:55, 08/13/2020

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Stds (pg): JS: 100 ES: 100 CS/SS: 100, 40 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	26.92		1.0008	1.0009	+0.2	5.46E+06	0.79	Y	1.19	9.92	4077	0.0851
12378-PeCDD	32.63		1.0006	1.0006	0	1.83E+07	1.55	Y	0.98	50.6	2978	0.076
123478-HxCDD	36.68		1.0004	1.0004	0	1.63E+07	1.24	Y	1.02	57.5	3332	0.0979
123678-HxCDD	36.79		1.0036	1.0035	-0.2	1.68E+07	1.24	Y	1.09	54.8	3332	0.0975
123789-HxCDD	37.10		1.0118	1.0118	0	1.60E+07	1.26	Y	0.97	55	3332	0.0989
1234678-HpCDD	40.16		1.0003	1.0003	0	1.25E+07	1.04	Y	0.98	54	2907	0.128
OCDD	42.88		1.0003	1.0002	-0.3	1.44E+07	0.89	Y	1.07	108	3247	0.417
2378-TCDF	25.97		1.0009	1.0010	+0.2	8.88E+06	0.72	Y	1.01	11.9	3323	0.0536
12378-PeCDF	31.10		1.0006	1.0006	0	2.71E+07	1.48	Y	0.96	50.7	4331	0.0797
23478-PeCDF	32.26		1.0005	1.0005	0	3.07E+07	1.55	Y	0.99	56.2	4331	0.0732
123478-HxCDF	35.67		1.0005	1.0005	0	2.40E+07	1.24	Y	1.21	53.6	6003	0.113
123678-HxCDF	35.82		1.0005	1.0005	0	2.46E+07	1.19	Y	1.11	51.9	6003	0.11
234678-HxCDF	36.49		1.0004	1.0005	+0.2	2.33E+07	1.22	Y	1.12	55.6	6003	0.124
123789-HxCDF	37.47		1.0005	1.0004	-0.2	1.94E+07	1.24	Y	1.11	52.7	6003	0.155
1234678-HpCDF	39.14		1.0003	1.0003	0	1.92E+07	1.02	Y	1.32	52.5	2729	0.0658
1234789-HpCDF	40.59		1.0003	1.0003	0	1.40E+07	1.01	Y	1.26	51.8	2729	0.104
OCDF	43.02		1.0003	1.0003	0	1.71E+07	0.89	Y	1.03	107	3008	0.317

Name	Act RT	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	26.90	1.0266	1.0267	+0.2	4.63E+07	0.81	Y	0.99	94.1
ES 12378-PeCDD	32.61	1.2430	1.2448	+3.5	3.69E+07	1.58	Y	0.83	89.3
ES 123478-HxCDD	36.66	0.9916	0.9915	-0.2	2.77E+07	1.27	Y	0.95	86.9
ES 123678-HxCDD	36.78	0.9947	0.9946	-0.2	2.82E+07	1.22	Y	0.98	86.1
ES 123789-HxCDD	37.08	1.0029	1.0028	-0.2	3.00E+07	1.20	Y	1.14	78.6
ES 1234678-HpCDD	40.15	1.0851	1.0857	+1.4	2.38E+07	1.04	Y	0.90	78.9
ES OCDD	42.87	1.1584	1.1593	+2.3	2.49E+07	0.92	Y	0.63	59.1
ES 2378-TCDF	25.95	1.0602	1.0608	+0.9	7.35E+07	0.80	Y	1.00	96
ES 12378-PeCDF	31.08	1.2683	1.2707	+4.5	5.55E+07	1.55	Y	0.83	86.8
ES 23478-PeCDF	32.24	1.3156	1.3183	+5.2	5.53E+07	1.59	Y	0.81	89.2
ES 123478-HxCDF	35.65	0.9644	0.9642	-0.4	3.71E+07	0.53	Y	1.12	98.3
ES 123678-HxCDF	35.80	0.9682	0.9681	-0.2	4.28E+07	0.54	Y	1.33	95.6
ES 234678-HxCDF	36.47	0.9864	0.9864	0	3.76E+07	0.55	Y	1.21	92.6
ES 123789-HxCDF	37.45	1.0128	1.0128	0	3.32E+07	0.53	Y	1.12	88.2
ES 1234678-HpCDF	39.13	1.0578	1.0581	+0.7	2.76E+07	0.47	Y	0.92	88.9
ES 1234789-HpCDF	40.58	1.0967	1.0973	+1.5	2.15E+07	0.43	Y	0.82	78
ES OCDF	43.01	1.1623	1.1630	+1.8	3.12E+07	0.91	Y	0.78	59.5

Lab ID: OPR1_17662_DF | Acq'd: 11 Aug 2020 16:01 DTF | Wt/Vol: 1 uL | ICAL: HRMS3_DF_10122018_28AUG2019

Client ID: 0_17662_OPR001 | UTP: 12-Aug-2020 15:18:28 DTF | J-level: 0.25 pg/uL | Split: 1 | Checkcode: 588-924-DMB

Datafile: 200811C03 | Report: 12 Aug 2020 15:21 TF | Stds (pg): JS: 100 ES: 100 CS/SS: 100, 40 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %	
JS 1234-TCDD	26.20		-	-	-	4.97E+07	0.81	Y	-	-	
JS 1234-TCDF	24.46		-	-	-	7.70E+07	0.80	Y	-	-	
JS 123467-HxCDD	36.98		-	-	-	1.68E+07	1.36	Y	-	-	
CS 37Cl-2378-TCDD	26.92		1.0276	1.0277	+0.2	1.89E+07	n/a	-	1.12	84.9	
CS 12347-PeCDD	32.09		1.2233	1.2249	+3.1	3.52E+07	1.61	Y	0.71	99.3	
CS 12346-PeCDF	30.53		1.2459	1.2481	+4.0	5.26E+07	1.57	Y	0.81	84.5	
CS 123469-HxCDF	36.11		0.9767	0.9765	-0.4	3.39E+07	0.55	Y	1.12	90	
CS 1234689-HpCDF	39.57		1.0696	1.0701	+1.2	2.51E+07	0.44	Y	0.90	83.4	
~~SS 37Cl-2378-TCDD~~	~~26.92~~		~~1.0276~~	~~1.0277~~	~~+0.2~~	~~1.89E+07~~	~~n/a~~		~~1.14~~	~~89.5~~	Not used in this project.
~~SS 12347-PeCDD~~	~~32.09~~		~~1.2233~~	~~1.2249~~	~~+3.1~~	~~3.52E+07~~	~~1.61~~	~~Y~~	~~0.86~~	~~111~~	CL 13Aug20
~~SS 12346-PeCDF~~	~~30.53~~		~~1.2459~~	~~1.2481~~	~~+4.0~~	~~5.26E+07~~	~~1.57~~	~~Y~~	~~0.98~~	~~97.1~~	
~~SS 123469-HxCDF~~	~~36.11~~		~~0.9767~~	~~0.9765~~	~~-0.4~~	~~3.39E+07~~	~~0.55~~	~~Y~~	~~0.85~~	~~93.7~~	
~~SS 1234689-HpCDF~~	~~39.57~~		~~1.0696~~	~~1.0701~~	~~+1.2~~	~~2.51E+07~~	~~0.44~~	~~Y~~	~~0.97~~	~~93.4~~	

Totals	Conc	EMPC
Total TCDD	46	46
Total PeCDD	77.5	77.5
Total HxCDD	183	183
Total HpCDD	67.9	67.9
Total Tetra-Octa Dioxins	482	482
Total TCDF	57.3	57.3
Total PeCDF	130	130
Total HxCDF	229	229
Total HpCDF	104	104
Total Tetra-Octa Furans	626	626
Total Tetra-Octa Dioxins & Furans	1110	1110

* 37Cl correction has been applied to 2378-TCDD

	Original Values	Corrected Values
Ratio	0.79	0.79
Response	5.47E+06	5.46E+06

METHOD 8290A **PCDD/F ONGOING PRECISION AND RECOVERY (OPR)** **FORM 8A**

Lab Name:	SGS North America		
Initial Calibration:	ICAL: HRMS3_DF_10122018_28AUG2019		
Instrument ID:	HRMS3	GC Column ID:	ZB-5ms
VER Data Filename:	200811C03	Analysis Date:	11-AUG-2020 16:01:53
Lab ID:	OPR1_17662_DF		

NATIVE ANALYTES	SPIKE CONC.	CONC. FOUND	RANGE (ng/mL)			OK
2,3,7,8-TCDD	10	9.92	6.7	-	15.8	Y
1,2,3,7,8-PeCDD	50	50.6	35	-	71	Y
1,2,3,4,7,8-HxCDD	50	57.5	35	-	82	Y
1,2,3,6,7,8-HxCDD	50	54.8	38	-	67	Y
1,2,3,7,8,9-HxCDD	50	55	32	-	81	Y
1,2,3,4,6,7,8-HpCDD	50	54	35	-	70	Y
OCDD	100	108	78	-	144	Y
2,3,7,8-TCDF	10	11.9	7.5	-	15.8	Y
1,2,3,7,8-PeCDF	50	50.7	40	-	67	Y
2,3,4,7,8-PeCDF	50	56.2	34	-	80	Y
1,2,3,4,7,8-HxCDF	50	53.6	36	-	67	Y
1,2,3,6,7,8-HxCDF	50	51.9	42	-	65	Y
2,3,4,6,7,8-HxCDF	50	55.6	35	-	78	Y
1,2,3,7,8,9-HxCDF	50	52.7	39	-	65	Y
1,2,3,4,6,7,8-HpCDF	50	52.5	41	-	61	Y
1,2,3,4,7,8,9-HpCDF	50	51.8	39	-	69	Y
OCDF	100	107	63	-	170	Y

Contract-required concentration limits for OPR as specified in Table 6,
Method 1613. 10/94

Processed: 12 Aug 2020 15:21 Analyst: TF

METHOD 8290A **PCDD/F ONGOING PRECISION AND RECOVERY (OPR)** **FORM 8B**

Lab Name: SGS North America

Initial Calibration: ICAL: HRMS3_DF_10122018_28AUG2019

Instrument ID: HRMS3 GC Column ID: ZB-5ms

VER Data Filename: 200811C03 Analysis Date: 11-AUG-2020 16:01:53

Lab ID: OPR1_17662_DF

LABELED ANALYTES	SPIKE CONC.	CONC. FOUND	RANGE (ng/mL)			OK
13C-2,3,7,8-TCDD	100	94.1	20	-	175	Y
13C-1,2,3,7,8-PeCDD	100	89.3	21	-	227	Y
13C-1,2,3,4,7,8-HxCDD	100	86.9	21	-	193	Y
13C-1,2,3,6,7,8-HxCDD	100	86.1	25	-	163	Y
13C-1,2,3,7,8,9-HxCDD	100	78.6	26	-	166	Y
13C-1,2,3,4,6,7,8-HpCDD	100	78.9	26	-	166	Y
13C-OCDD	200	118	26	-	397	Y
13C-2,3,7,8-TCDF	100	96	22	-	152	Y
13C-1,2,3,7,8-PeCDF	100	86.8	21	-	192	Y
13C-2,3,4,7,8-PeCDF	100	89.2	13	-	328	Y
13C-1,2,3,4,7,8-HxCDF	100	98.3	19	-	202	Y
13C-1,2,3,6,7,8-HxCDF	100	95.6	21	-	159	Y
13C-2,3,4,6,7,8-HxCDF	100	92.6	22	-	176	Y
13C-1,2,3,7,8,9-HxCDF	100	88.2	17	-	205	Y
13C-1,2,3,4,6,7,8-HpCDF	100	88.9	21	-	158	Y
13C-1,2,3,4,7,8,9-HpCDF	100	78	20	-	186	Y
13C-OCDF	200	119	26	-	397	Y
CLEANUP STANDARD						
37Cl-2,3,7,8-TCDD	40	34	12.4	-	76.4	Y

Contract-required concentration limits for OPR as specified in Table 6, Method 1613. 10/94

Processed: 12 Aug 2020 15:21 Analyst: TF

METHOD 8290A **COLUMN PERFORMANCE AND RETENTION TIME WINDOWS** **FORM CPSM**

Lab Name:	SGS North America		
Initial Calibration:	ICAL: HRMS3_DF_10122018_28AUG2019		
Instrument ID:	HRMS3	GC Column ID:	ZB-5ms
CPSM Data Filename:	200811C03	Analysis Date:	11-AUG-2020 16:01:53
Lab ID:	OPR1_17662_DF		

Window Defining Standards Results

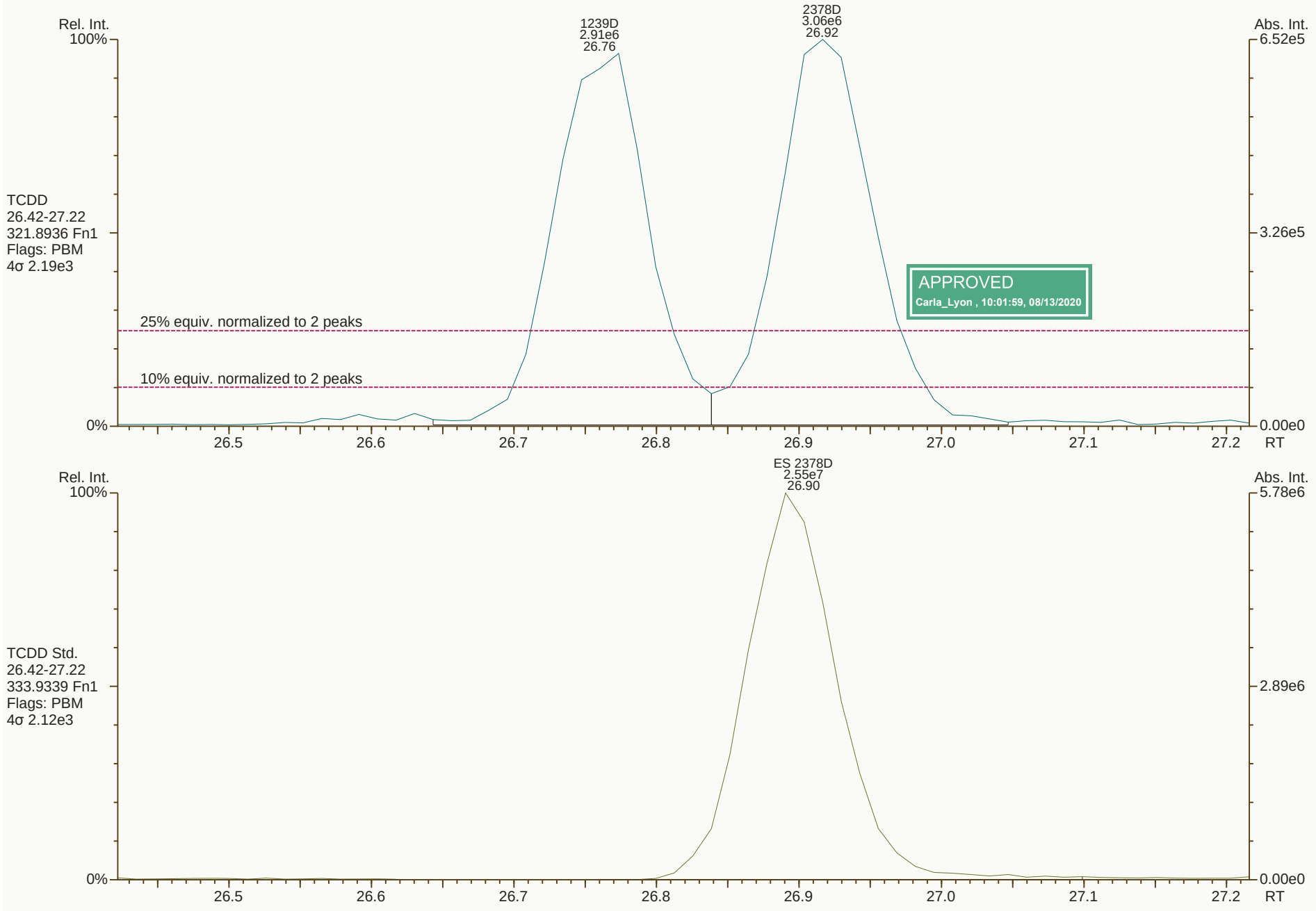
First Eluting Isomer	RT	Last Eluting Isomer	RT
1368-TCDD	22.89	1289-TCDD	27.97
12479/12468-PeCDD	30.02	12389-PeCDD	33.09
124679/124689-HxCDD	34.94	123789-HxCDD	37.10
1234679-HpCDD	39.45	1234678-HpCDD	40.16
1368-TCDF	20.68	1289-TCDF	28.14
13468/12468-PeCDF	28.12	12389-PeCDF	33.37
123468-HxCDF	34.25	123789-HxCDF	37.47
1234678-HpCDF	39.14	1234789-HpCDF	40.59

Isomer Specificity Test Standard Results

Closest Eluting Isomer	RT	2378 Specific Isomer	RT
1239-TCDD	26.76	2378-TCDD	26.92
2348-TCDF	25.85	2378-TCDF	25.97

Processed: 12 Aug 2020 15:21 Analyst: TF

SGS ID: OPR1_17662_DF
Sample ID: 0_17662_OPR001
Acq: 11-Aug-2020 16:01:53
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 13
User: DTF Datafile: 200811C03



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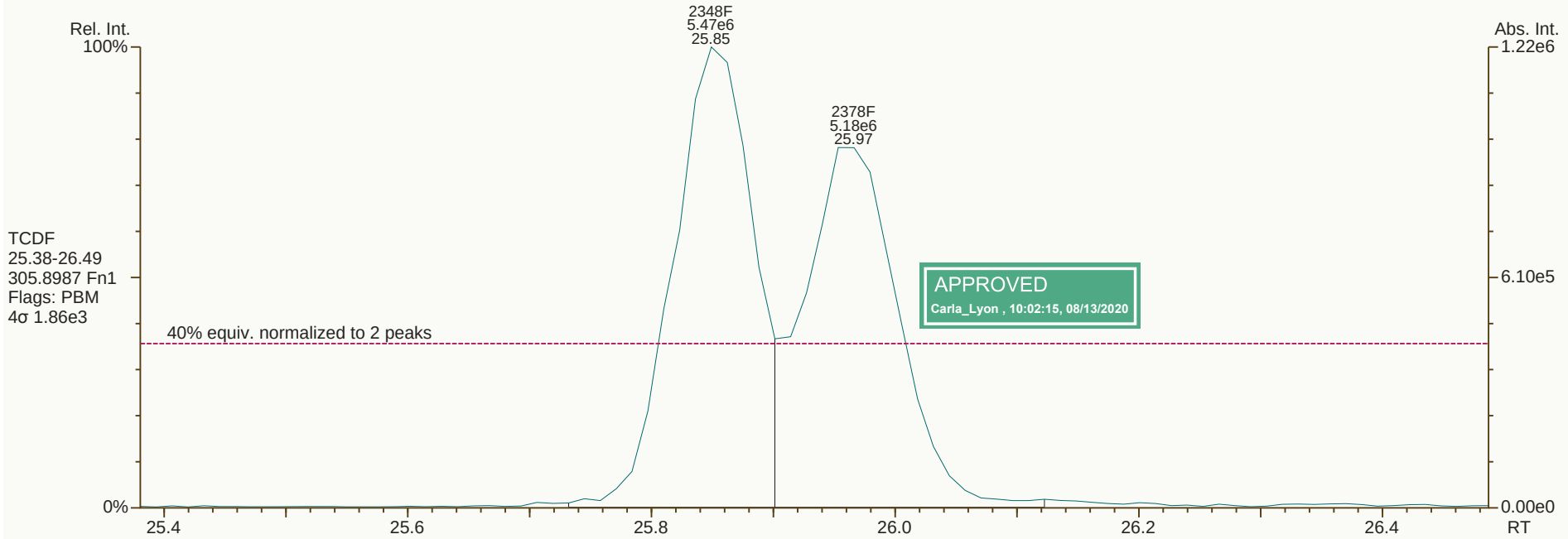
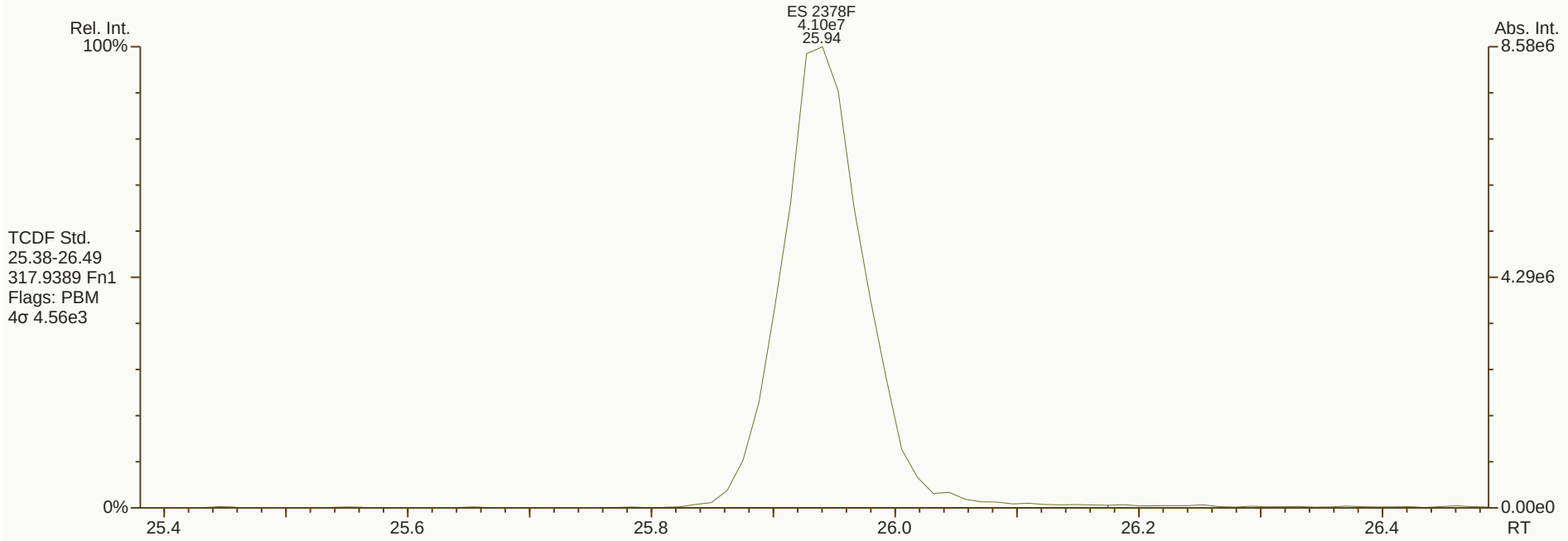
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689
Revised: 12-Aug-2020 10:27 (DTF) Printed: 12-Aug-2020 15:29

SGS ID: OPR1_17662_DF
Sample ID: 0_17662_OPR001
Acq: 11-Aug-2020 16:01:53
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 13
User: DTF Datafile: 200811C03





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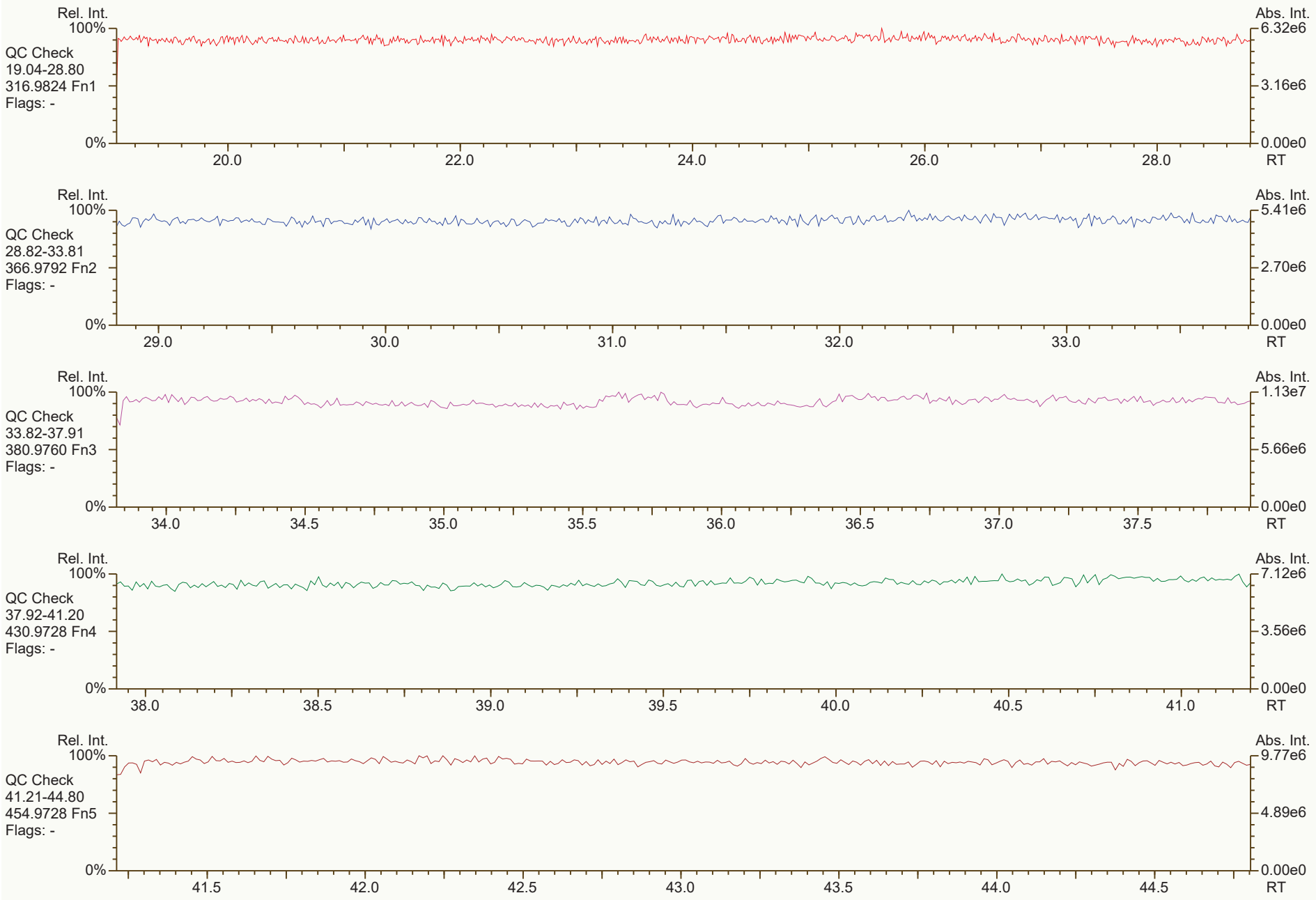
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689
Revised: 12-Aug-2020 10:28 (DTF) Printed: 12-Aug-2020 15:29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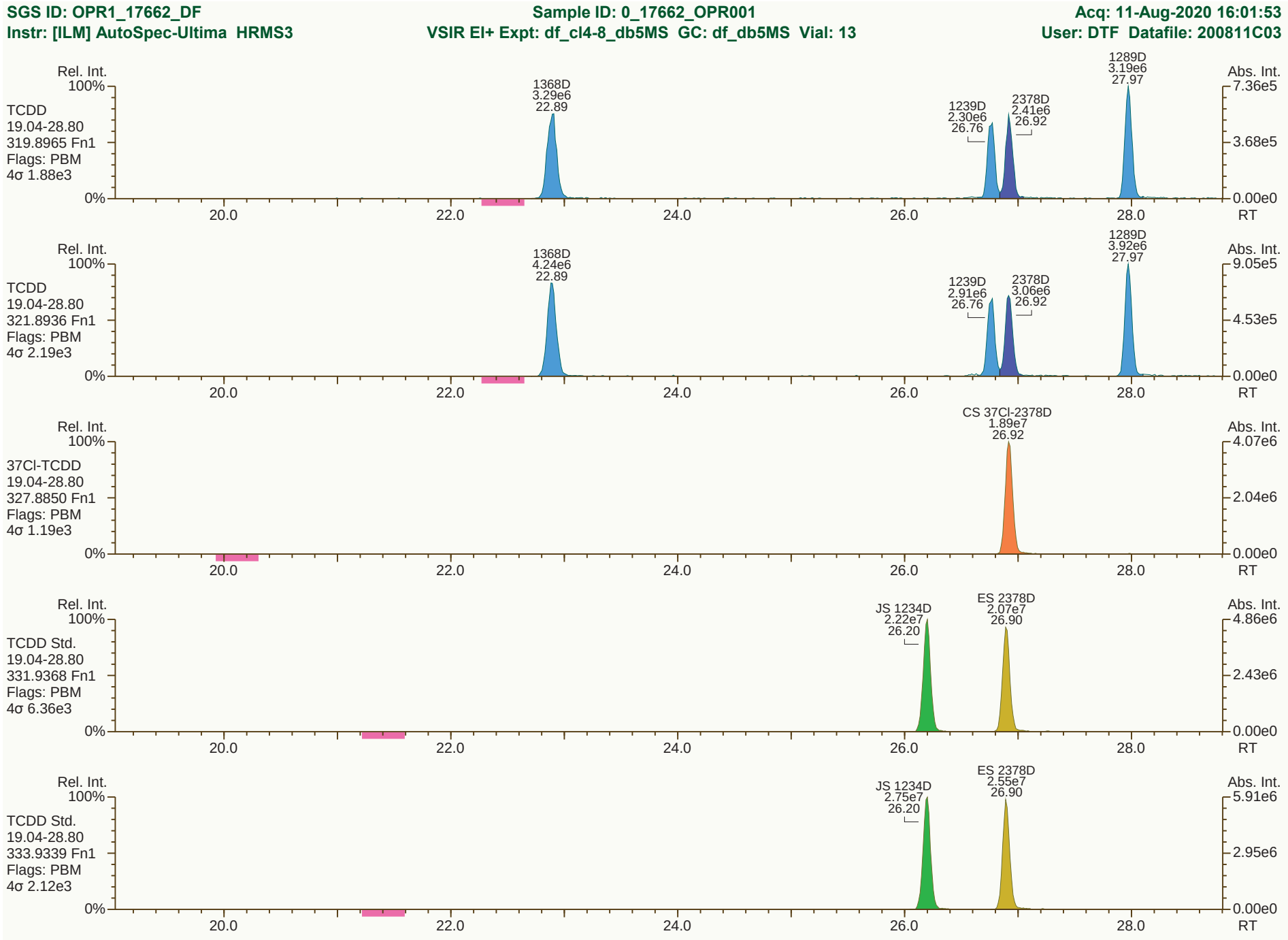
24.0
26.0
28.0
RT
Abs. Int.
6.32e6
3.16e6
0.00e0
Rel. Int.
100%
QC Check
28.82-33.81
366.9792 Fn2
Flags: -
0%
29.0
30.0
31.0
32.0
33.0
RT
Abs. Int.
5.41e6
2.70e6
0.00e0
Rel. Int.
100%
QC Check
33.82-37.91
380.9760 Fn3
Flags: -
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Abs. Int.
1.13e7
5.66e6
0.00e0
Rel. Int.
100%
QC Check
37.92-41.20
430.9728 Fn4
Flags: -
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Abs. Int.
7.12e6
3.56e6
0.00e0
Rel. Int.
100%
QC Check
41.21-44.80
454.9728 Fn5
Flags: -
0%
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Abs. Int.
9.77e6
4.89e6
0.00e0

SGS ID: OPR1_17662_DF
Instr: [ILM] AutoSpec-Ultima HRMS3

Sample ID: 0_17662_OPR001
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 13

Acq: 11-Aug-2020 16:01:53
User: DTF Datafile: 200811C03



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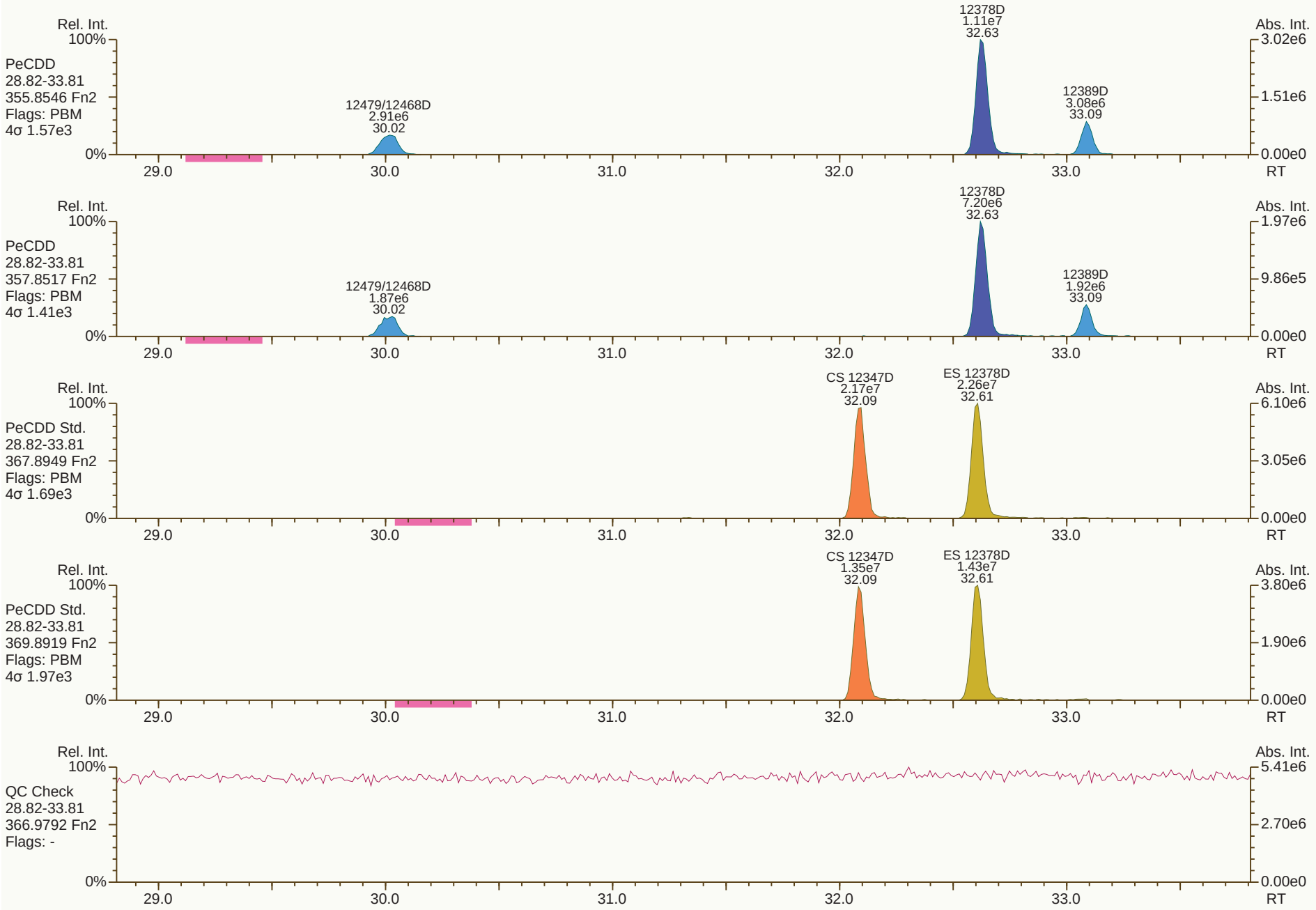
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 8460, 4796, 6155 scc: 588-924

Peak annotation: Areas, Centroids
Revised: 12-Aug-2020 10:27 (DTF) Printed: 12-Aug-2020 15:32 Page 2 of 12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0%
12479/12468D
2.91e6
30.02
12378D
1.11e7
32.63
12389D
3.08e6
33.09
Abs. Int.
3.02e6
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29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD
28.82-33.81
357.8517 Fn2
Flags: PBM
4σ 1.41e3
0%
12479/12468D
1.87e6
30.02
12378D
7.20e6
32.63
12389D
1.92e6
33.09
Abs. Int.
1.97e6
9.86e5
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.82-33.81
367.8949 Fn2
Flags: PBM
4σ 1.69e3
0%
CS 12347D
2.17e7
32.09
ES 12378D
2.26e7
32.61
Abs. Int.
6.10e6
3.05e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.82-33.81
369.8919 Fn2
Flags: PBM
4σ 1.97e3
0%
CS 12347D
1.35e7
32.09
ES 12378D
1.43e7
32.61
Abs. Int.
3.80e6
1.90e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
QC Check
28.82-33.81
366.9792 Fn2
Flags: -
0%
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2.70e6
0.00e0
29.0
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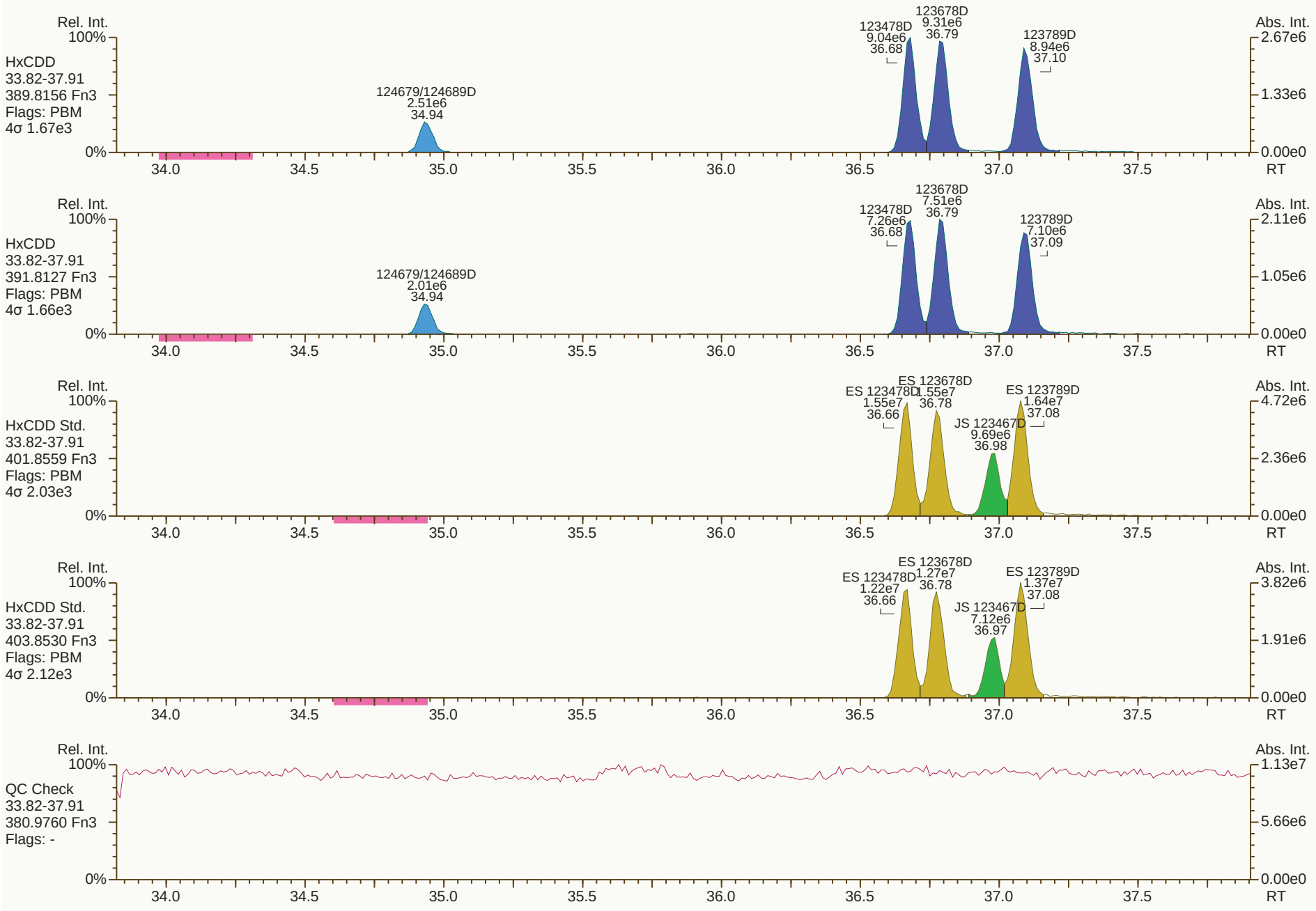
31.0
32.0
33.0
RT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100%
HxCDD
33.82-37.91
389.8156 Fn3
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124679/124689D
2.51e6
34.94
123478D
9.04e6
36.68
123678D
9.31e6
36.79
123789D
8.94e6
37.10
Abs. Int.
2.67e6
1.33e6
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34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD
33.82-37.91
391.8127 Fn3
Flags: PBM
4σ 1.66e3
0%
124679/124689D
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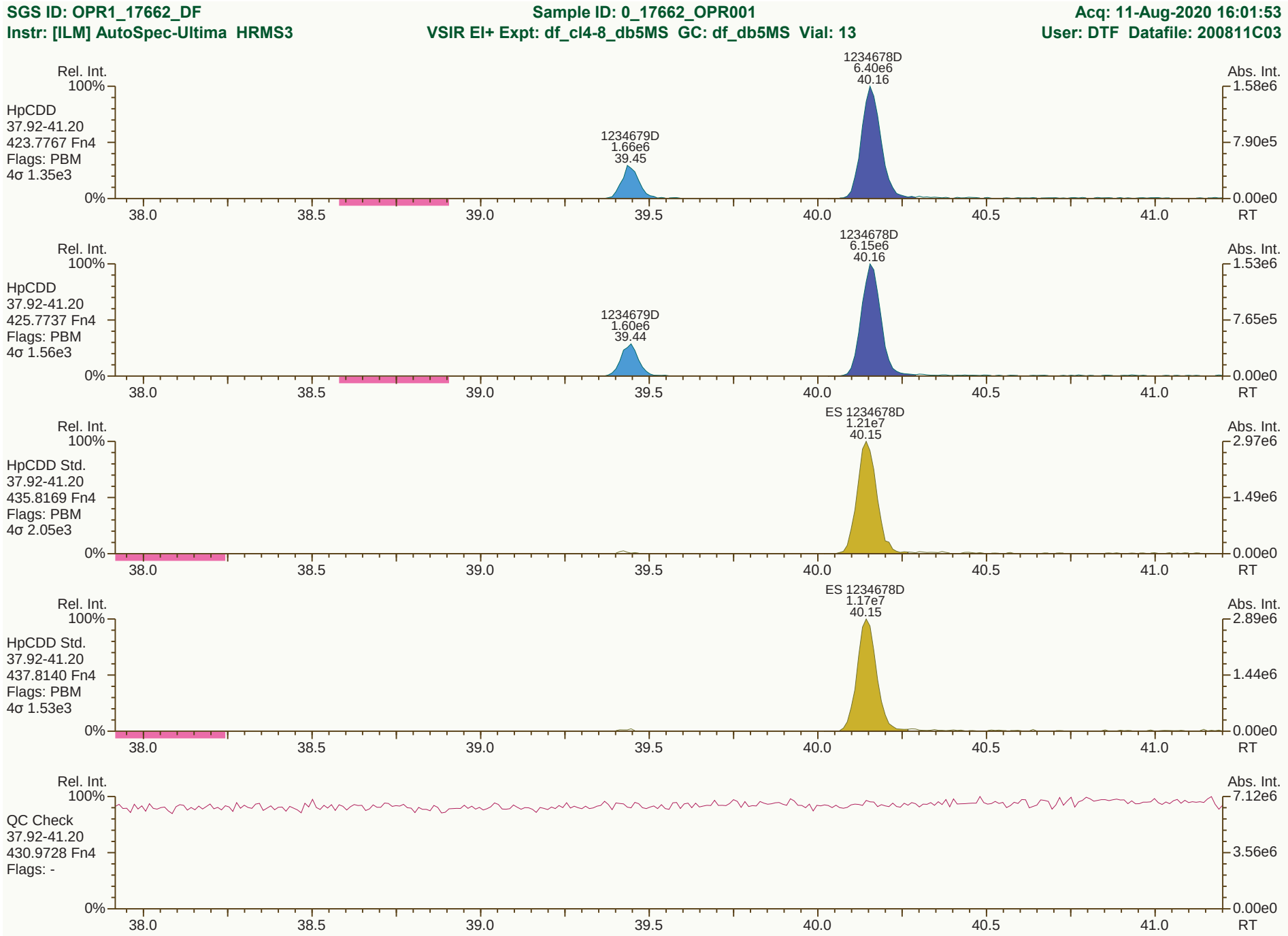
34.94
123478D
7.26e6
36.68
123678D
7.51e6
36.79
123789D
7.10e6
37.09
Abs. Int.
2.11e6
1.05e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.82-37.91
401.8559 Fn3
Flags: PBM
4σ 2.03e3
0%
ES 123478D
1.55e7
36.66
ES 123678D
1.55e7
36.78
JS 123467D
9.69e6
36.98
ES 123789D
1.64e7
37.08
Abs. Int.
4.72e6
2.36e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.82-37.91
403.8530 Fn3
Flags: PBM
4σ 2.12e3
0%
ES 123478D
1.22e7
36.66
ES 123678D
1.27e7
36.78
JS 123467D
7.12e6
36.97
ES 123789D
1.37e7
37.08
Abs. Int.
3.82e6
1.91e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
QC Check
33.82-37.91
380.9760 Fn3
Flags: -
0%
Abs. Int.
1.13e7
5.66e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT

SGS ID: OPR1_17662_DF
Instr: [ILM] AutoSpec-Ultima HRMS3

Sample ID: 0_17662_OPR001
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 13

Acq: 11-Aug-2020 16:01:53
User: DTF Datafile: 200811C03



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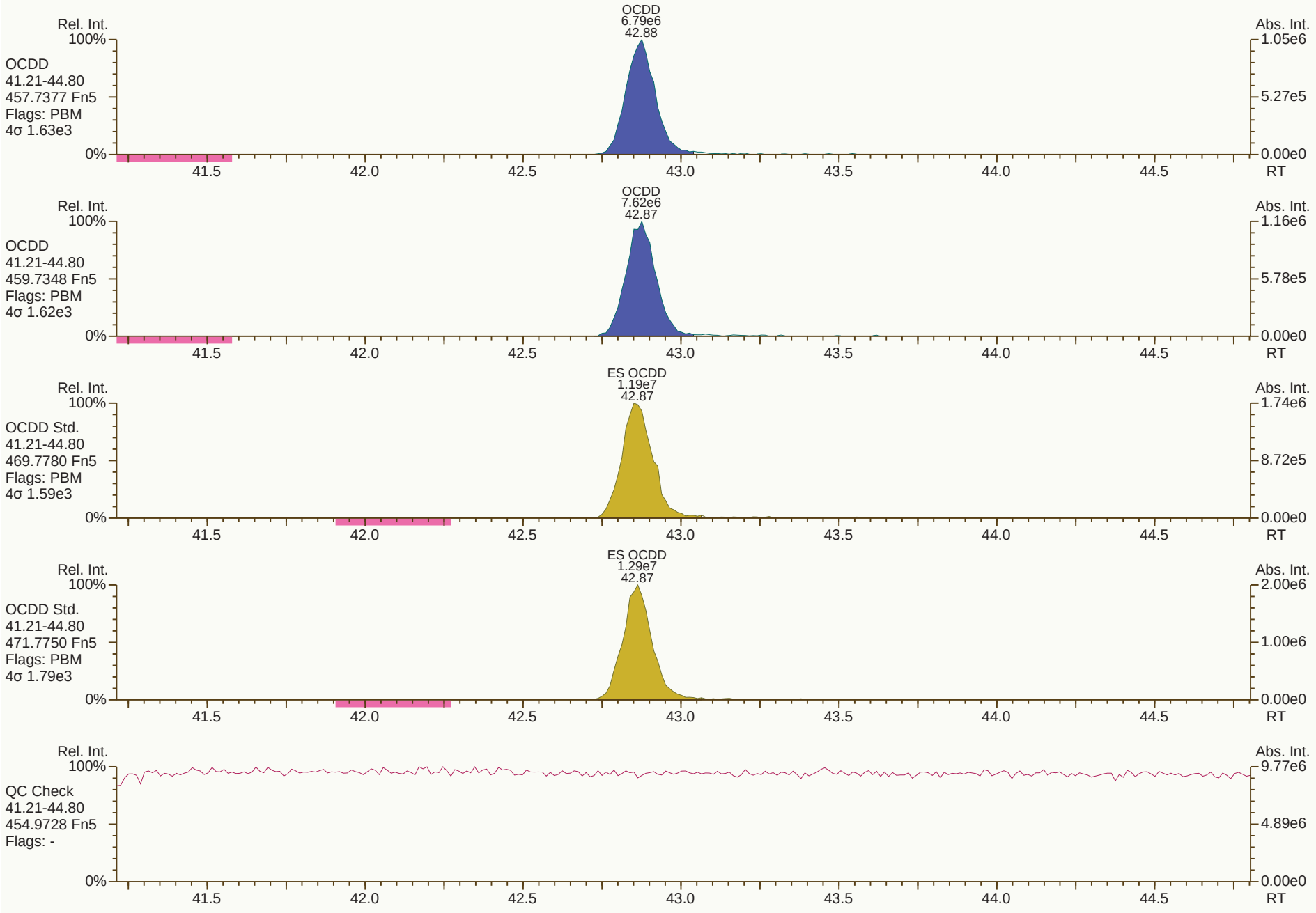
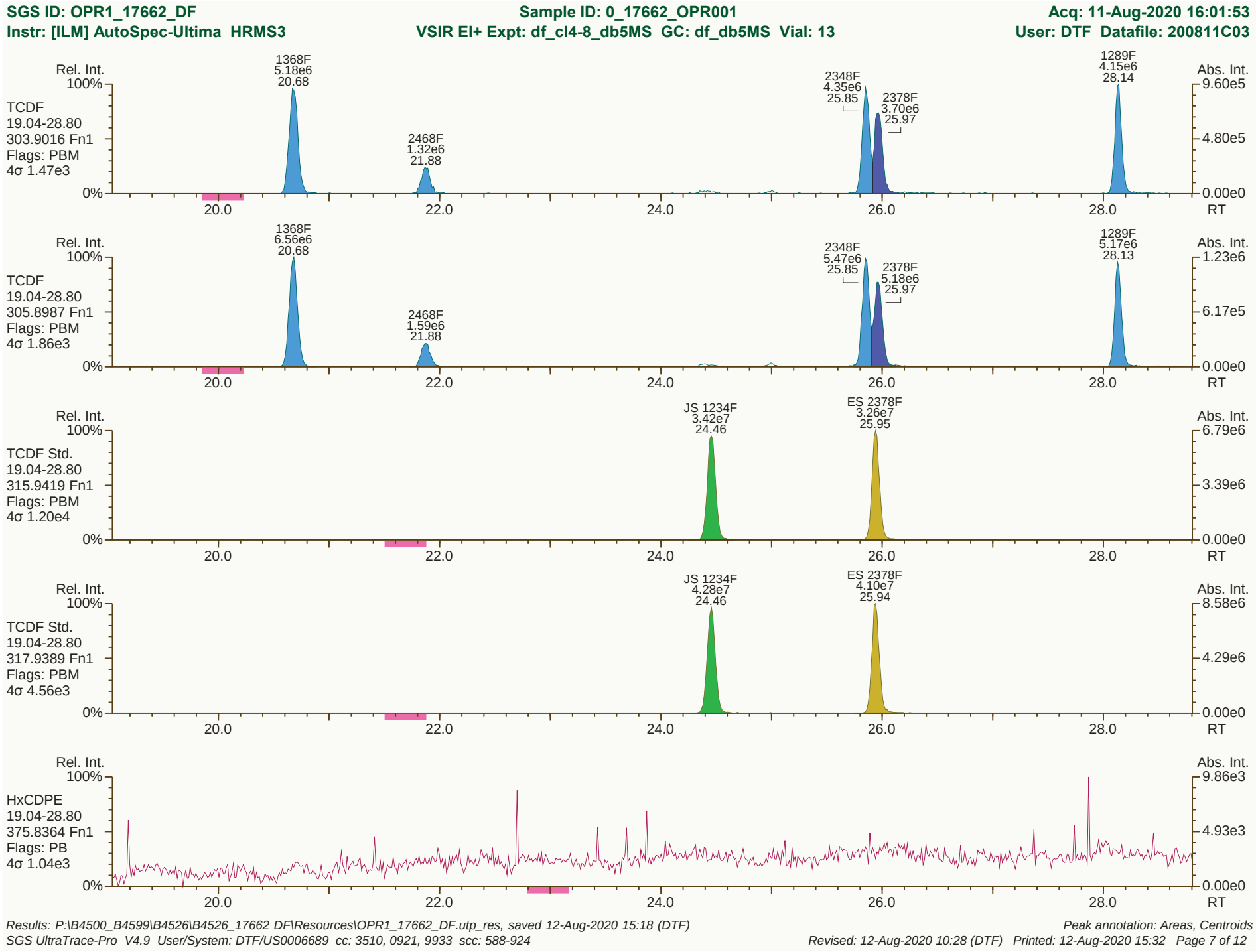
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 3873, 0275 scc: 588-924

Peak annotation: Areas, Centroids
Revised: 12-Aug-2020 10:27 (DTF) Printed: 12-Aug-2020 15:32 Page 5 of 12


OCDD
6.79e6
42.88
Rel. Int.
Abs. Int.
OCDD
41.21-44.80
457.7377 Fn5
Flags: PBM
4σ 1.63e3
OCDD
7.62e6
42.87
OCDD
41.21-44.80
459.7348 Fn5
Flags: PBM
4σ 1.62e3
ES OCDD
1.19e7
42.87
OCDD Std.
41.21-44.80
469.7780 Fn5
Flags: PBM
4σ 1.59e3
ES OCDD
1.29e7
42.87
OCDD Std.
41.21-44.80
471.7750 Fn5
Flags: PBM
4σ 1.79e3
QC Check
41.21-44.80
454.9728 Fn5
Flags: -
RT


SGS ID: OPR1_17662_DF
Sample ID: 0_17662_OPR001
Acq: 11-Aug-2020 16:01:53
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 13
User: DTF Datafile: 200811C03
Rel. Int.
Abs. Int.
TCDF
19.04-28.80
303.9016 Fn1
Flags: PBM
4σ 1.47e3
1368F 5.18e6 20.68
2468F 1.32e6 21.88
2348F 4.35e6 25.85
2378F 3.70e6 25.97
1289F 4.15e6 28.14
9.60e5
4.80e5
0.00e0
TCDF
19.04-28.80
305.8987 Fn1
Flags: PBM
4σ 1.86e3
1368F 6.56e6 20.68
2468F 1.59e6 21.88
2348F 5.47e6 25.85
2378F 5.18e6 25.97
1289F 5.17e6 28.13
1.23e6
6.17e5
0.00e0
TCDF Std.
19.04-28.80
315.9419 Fn1
Flags: PBM
4σ 1.20e4
JS 1234F 3.42e7 24.46
ES 2378F 3.26e7 25.95
6.79e6
3.39e6
0.00e0
TCDF Std.
19.04-28.80
317.9389 Fn1
Flags: PBM
4σ 4.56e3
JS 1234F 4.28e7 24.46
ES 2378F 4.10e7 25.94
8.58e6
4.29e6
0.00e0
HxCDPE
19.04-28.80
375.8364 Fn1
Flags: PB
4σ 1.04e3
9.86e3
4.93e3
0.00e0
100%
0%
20.0
22.0
24.0
26.0
28.0
RT
Results: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\OPR1_17662_DF.utp_res, saved 12-Aug-2020 15:18 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 3510, 0921, 9933 scc: 588-924
Revised: 12-Aug-2020 10:28 (DTF) Printed: 12-Aug-2020 15:32 Page 7 of 12

SGS ID: OPR1_17662_DF
Sample ID: 0_17662_OPR001
Acq: 11-Aug-2020 16:01:53
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 13
User: DTF Datafile: 200811C03



Results: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\OPR1_17662_DF.utp_res, saved 12-Aug-2020 15:18 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 7514 scc: 588-924
PKD: 12-Aug-2020 10:26 Printed: 12-Aug-2020 15:32 Page 8 of 12

SGS ID: OPR1_17662_DF
Instr: [ILM] AutoSpec-Ultima HRMS3

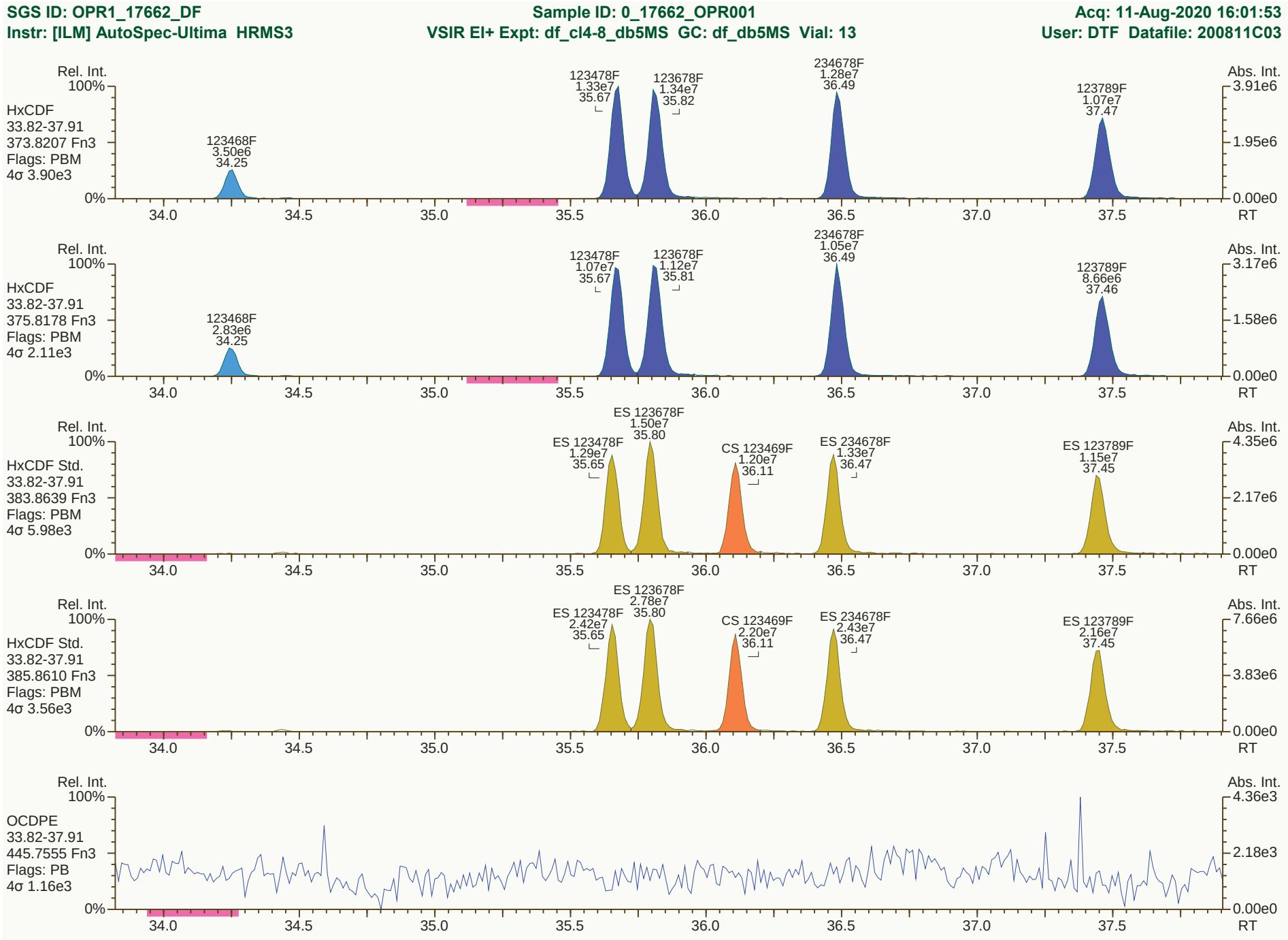
Sample ID: 0_17662_OPR001
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 13

Acq: 11-Aug-2020 16:01:53
User: DTF Datafile: 200811C03



Results: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\OPR1_17662_DF.utp_res, saved 12-Aug-2020 15:18 (DTF)
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 6570, 4667, 4632 scc: 588-924

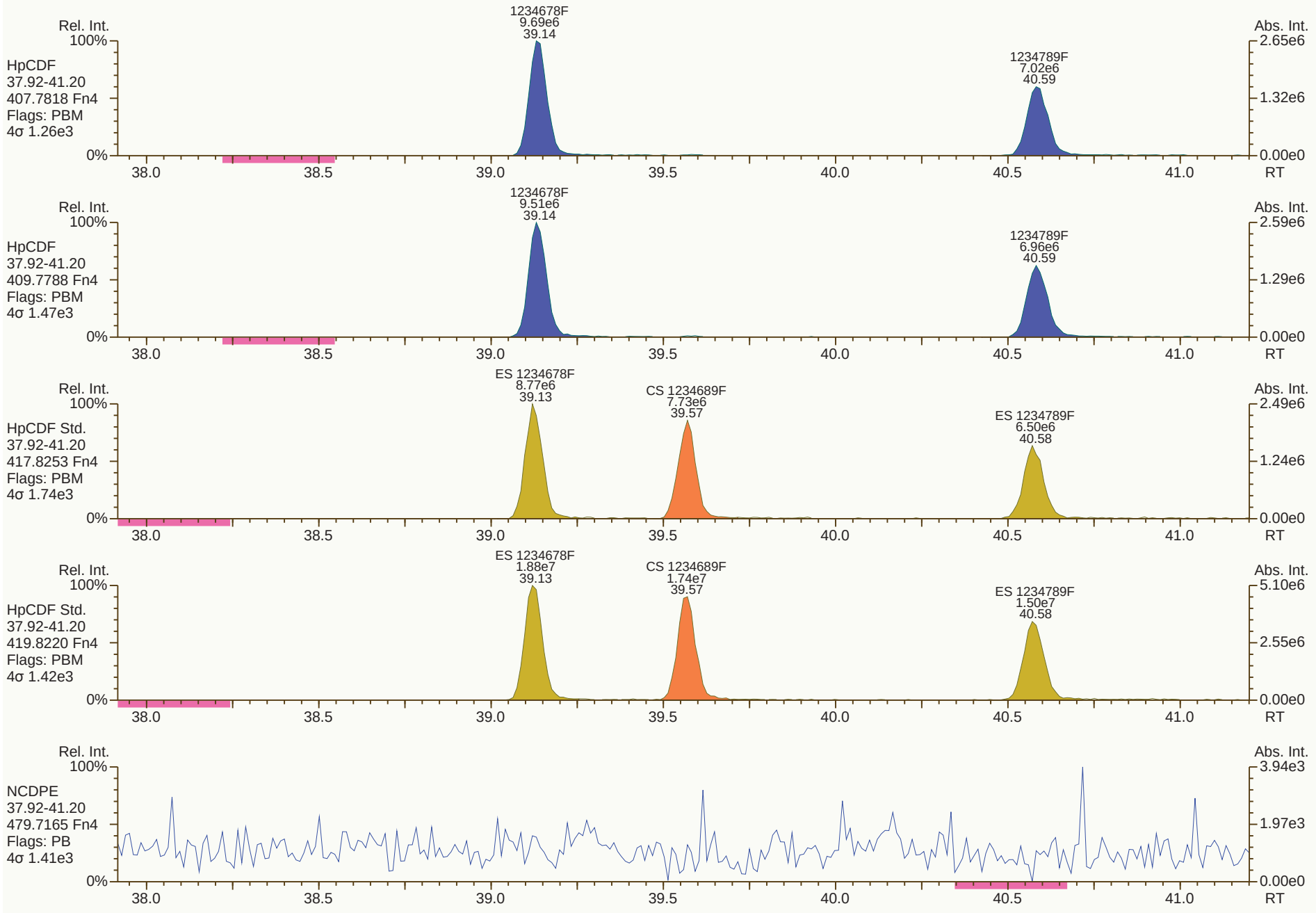
Peak annotation: Areas, Centroids
PKD: 12-Aug-2020 10:28 Printed: 12-Aug-2020 15:32 Page 9 of 12



Results: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\OPR1_17662_DF.utp_res, saved 12-Aug-2020 15:18 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 5135, 3234, 6187 scc: 588-924
Revised: 12-Aug-2020 10:27 (DTF) Printed: 12-Aug-2020 15:32 Page 10 of 12

SGS ID: OPR1_17662_DF | Sample ID: 0_17662_OPR001 | Acq: 11-Aug-2020 16:01:53

Instr: [ILM] AutoSpec-Ultima HRMS3 | VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 13 | User: DTF Datafile: 200811C03



Results: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\OPR1_17662_DF.utp_res, saved 12-Aug-2020 15:18 (DTF)

Peak annotation: Areas, Centroids

SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 8054, 0525, 7115 scc: 588-924

PKD: 12-Aug-2020 10:26 Printed: 12-Aug-2020 15:32 Page 11 of 12

SGS ID: OPR1_17662_DF | Sample ID: 0_17662_OPR001 | Acq: 11-Aug-2020 16:01:53

Instr: [ILM] AutoSpec-Ultima HRMS3 | VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 13 | User: DTF Datafile: 200811C03



Results: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\OPR1_17662_DF.utp_res, saved 12-Aug-2020 15:18 (DTF) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 4946, 0126, 5446 scc: 588-924 *Revised: 12-Aug-2020 10:28 (DTF) Printed: 12-Aug-2020 15:32 Page 12 of 12*

CPSM only

METHOD 8290A **COLUMN PERFORMANCE AND RETENTION TIME WINDOWS** **FORM CPSM**

Lab Name:	SGS North America		
Initial Calibration:	ICAL: HRMS3_DF_10122018_28AUG2019		
Instrument ID:	HRMS3	GC Column ID:	ZB-5ms
CPSM Data Filename:	200811C14	Analysis Date:	12-AUG-2020 00:41:26
Lab ID:	OPR1_17662_DF-RJ		

Window Defining Standards Results

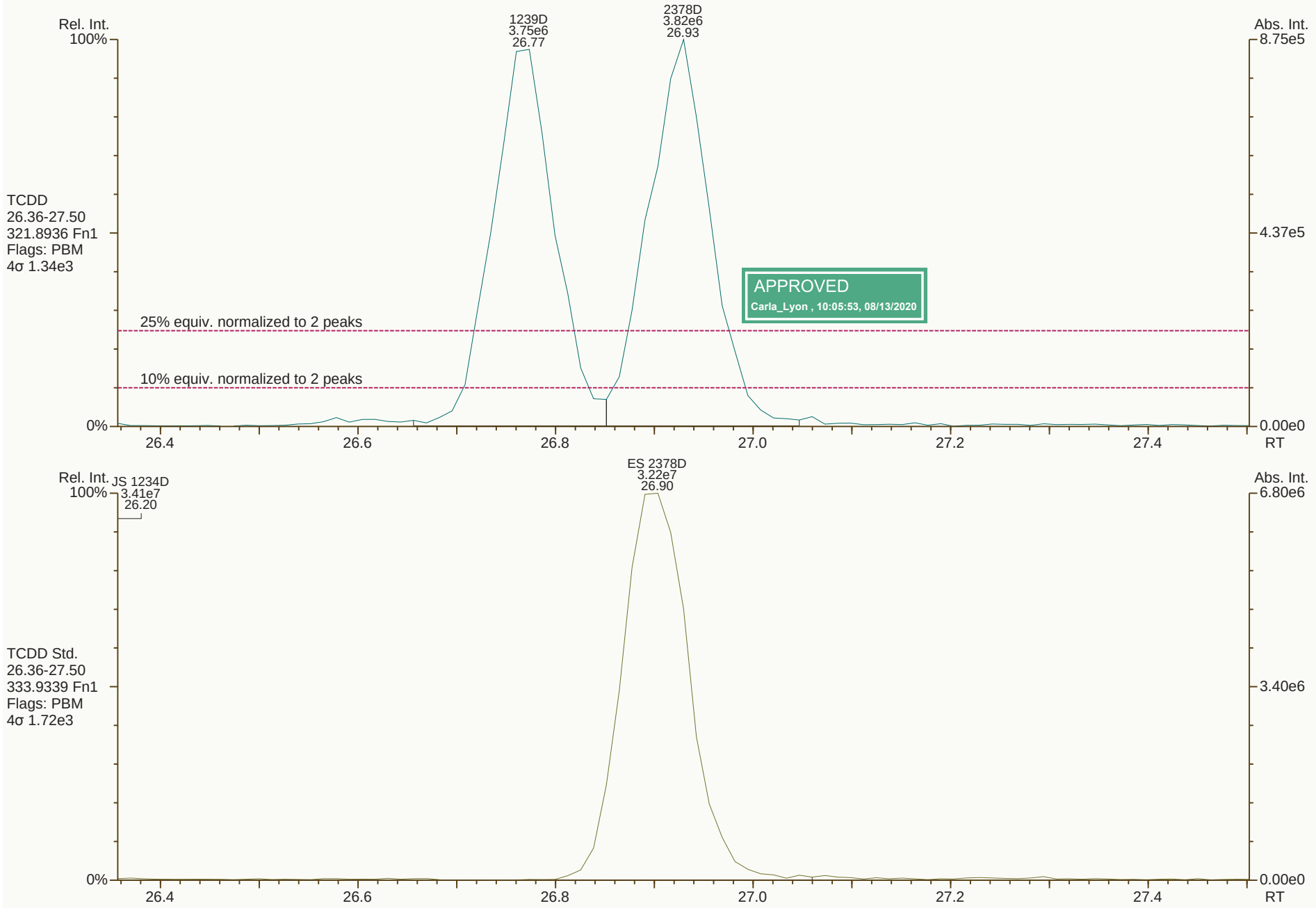
First Eluting Isomer	RT	Last Eluting Isomer	RT
1368-TCDD	22.90	1289-TCDD	27.98
12479/12468-PeCDD	30.03	12389-PeCDD	33.10
124679/124689-HxCDD	34.94	123789-HxCDD	37.11
1234679-HpCDD	39.47	1234678-HpCDD	40.18
1368-TCDF	20.69	1289-TCDF	28.14
13468/12468-PeCDF	28.12	12389-PeCDF	33.38
123468-HxCDF	34.26	123789-HxCDF	37.48
1234678-HpCDF	39.16	1234789-HpCDF	40.61

Isomer Specificity Test Standard Results

Closest Eluting Isomer	RT	2378 Specific Isomer	RT
1239-TCDD	26.77	2378-TCDD	26.93
2348-TCDF	25.86	2378-TCDF	25.97

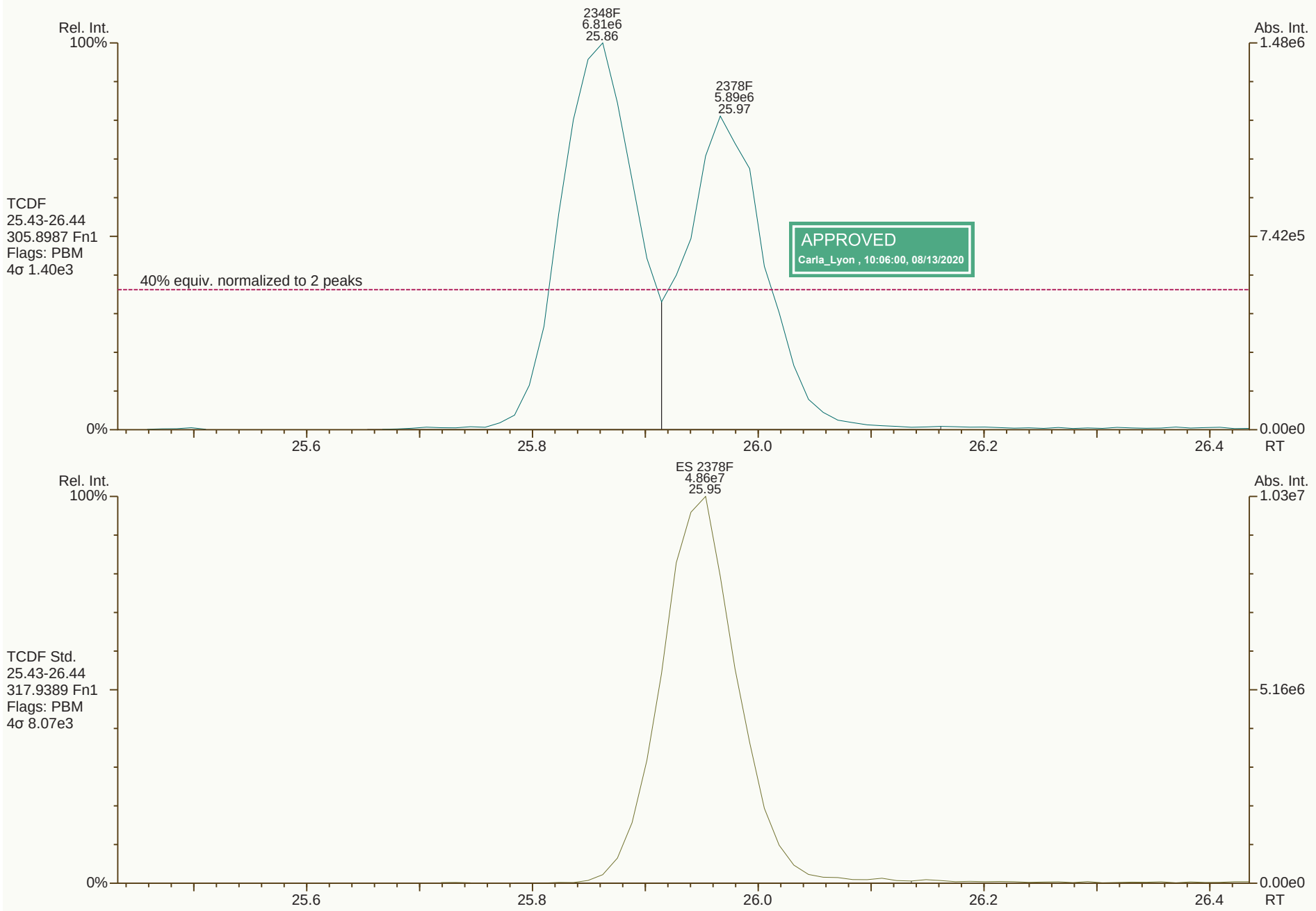
Processed: 12 Aug 2020 15:21 Analyst: TF

SGS ID: OPR1_17662_DF-RJ
Sample ID: 0_17662_OPR001
Acq: 12-Aug-2020 00:41:26
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 13
User: DTF Datafile: 200811C14



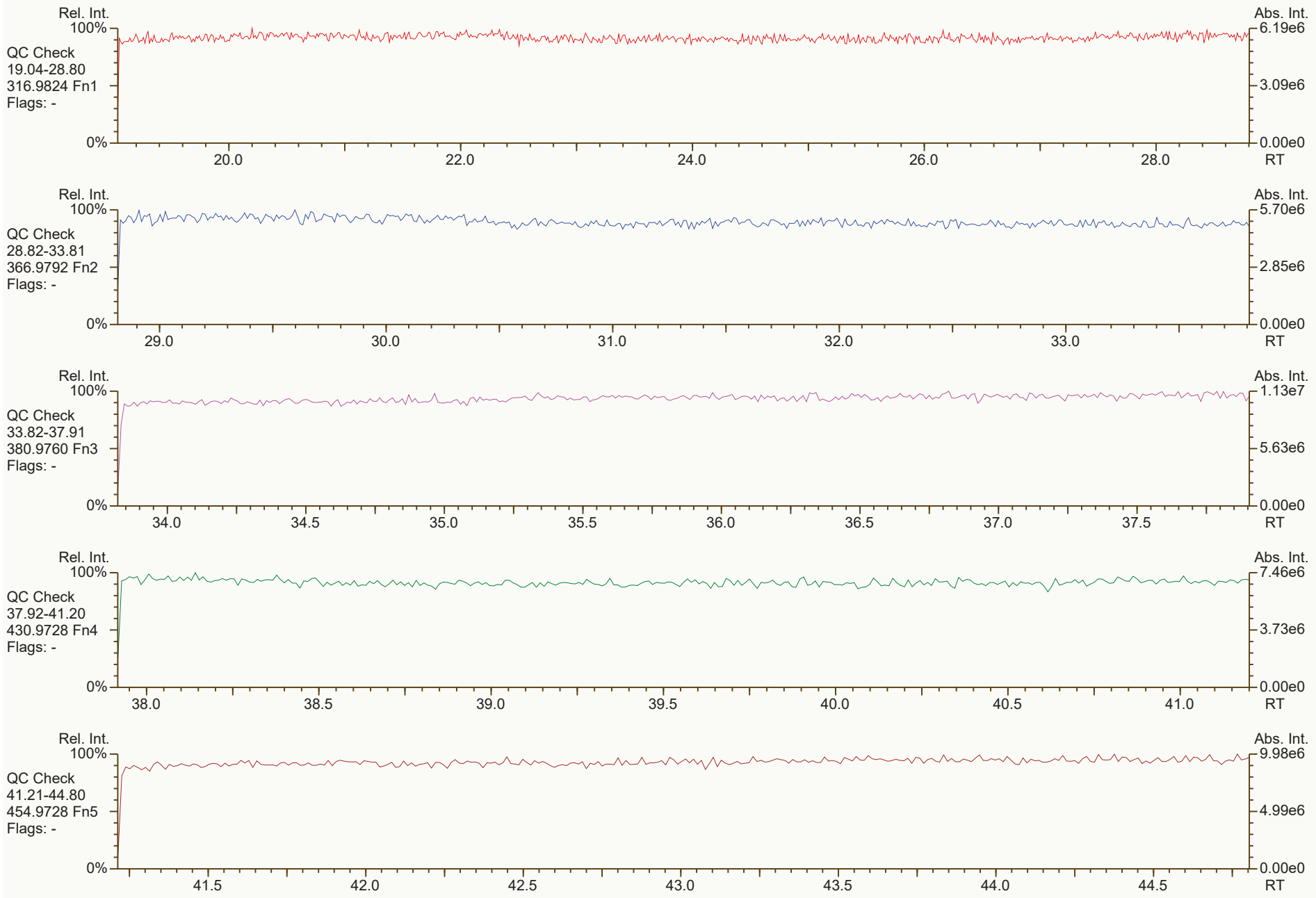
Results: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\OPR1_17662_DF-RJ.utp_res, saved 12-Aug-2020 15:18 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689
PKD: 12-Aug-2020 11:12 Printed: 12-Aug-2020 15:29

SGS ID: OPR1_17662_DF-RJ
Sample ID: 0_17662_OPR001
Acq: 12-Aug-2020 00:41:26
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 13
User: DTF Datafile: 200811C14

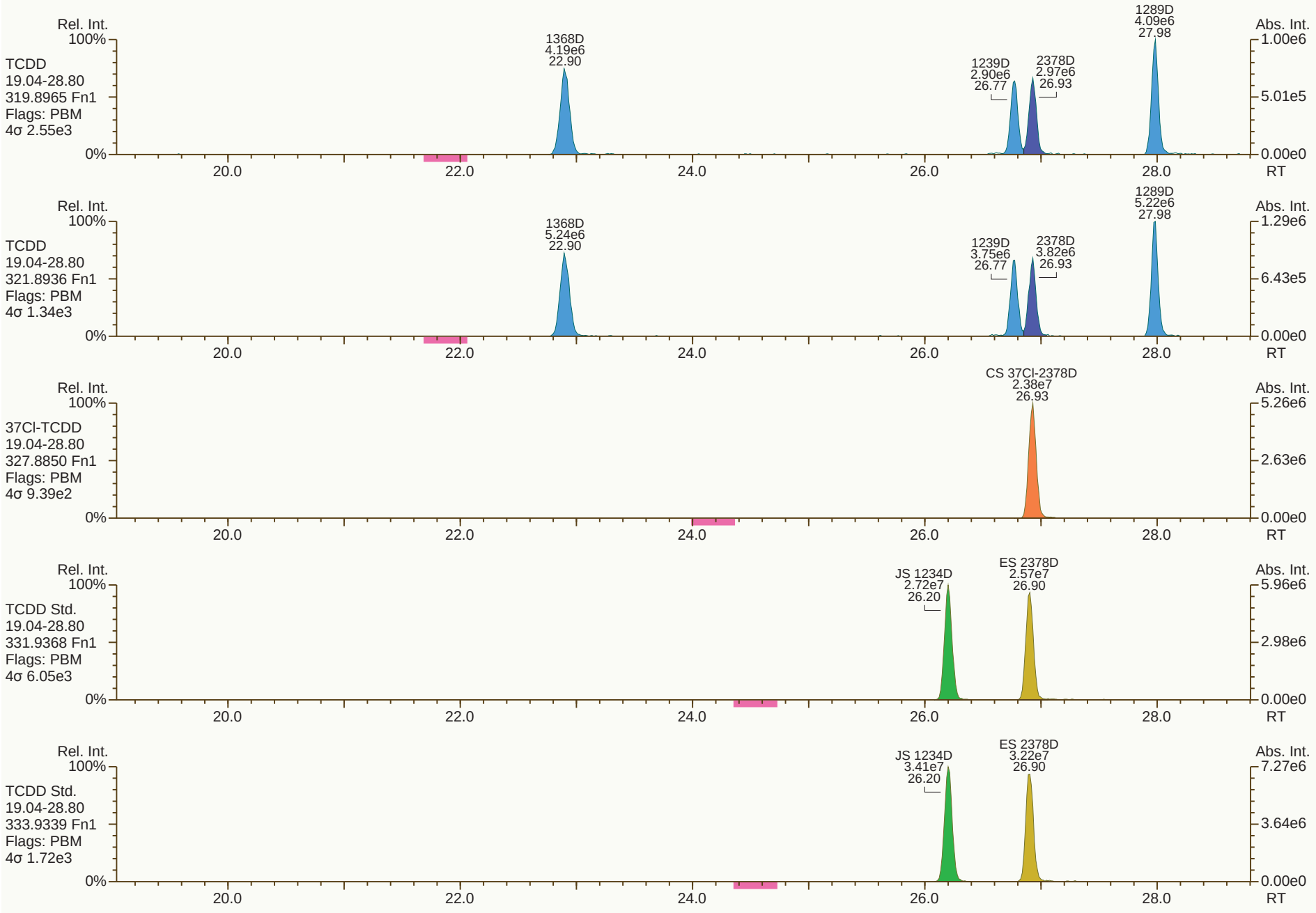


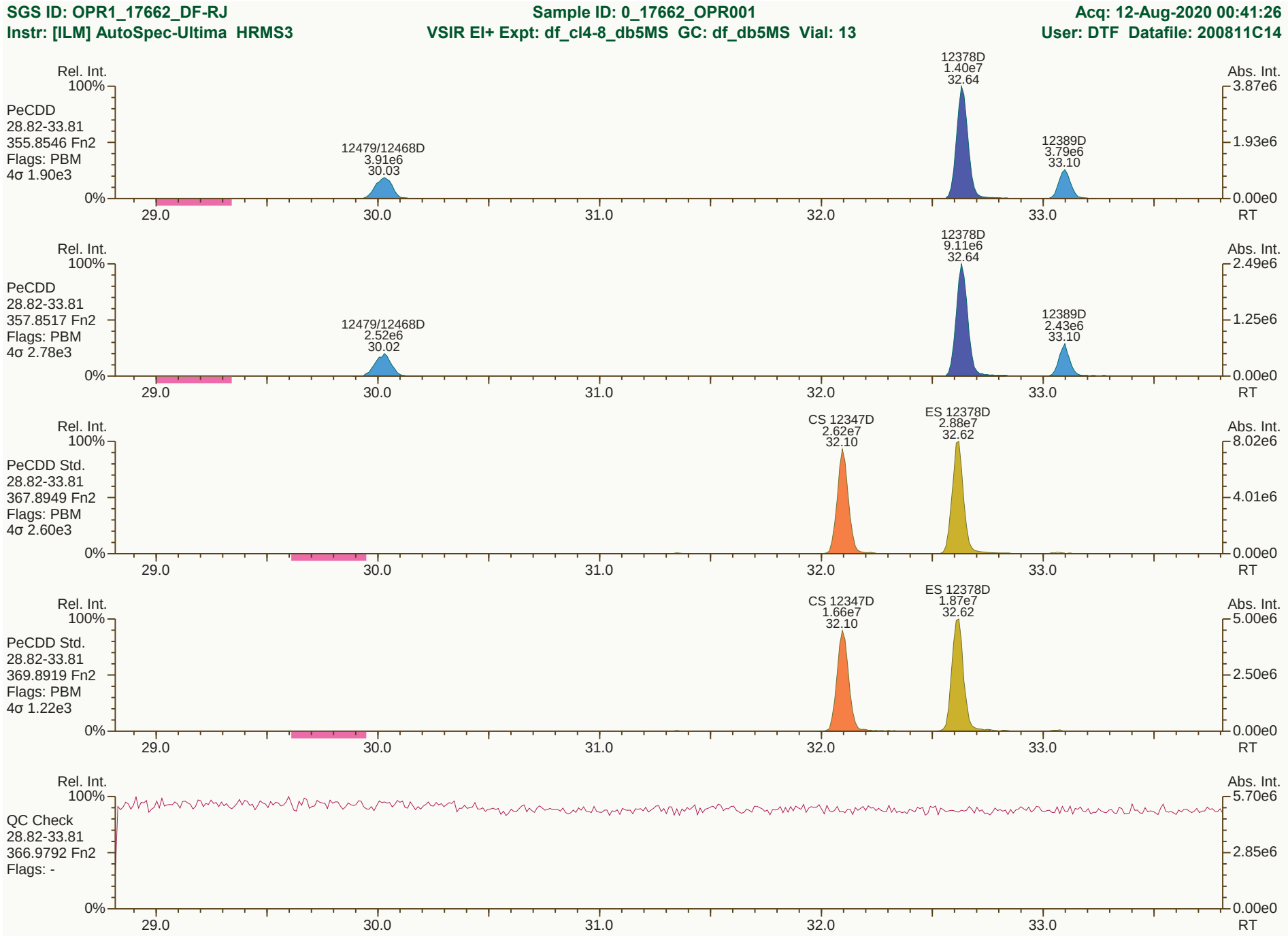
Results: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\OPR1_17662_DF-RJ.utp_res, saved 12-Aug-2020 15:18 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689
PKD: 12-Aug-2020 11:12 Printed: 12-Aug-2020 15:29

SGS ID: OPR1_17662_DF-RJ **Sample ID: 0_17662_OPR001** **Acq: 12-Aug-2020 00:41:26**
Instr: [ILM] AutoSpec-Ultima HRMS3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 13** **User: DTF Datafile: 200811C14**

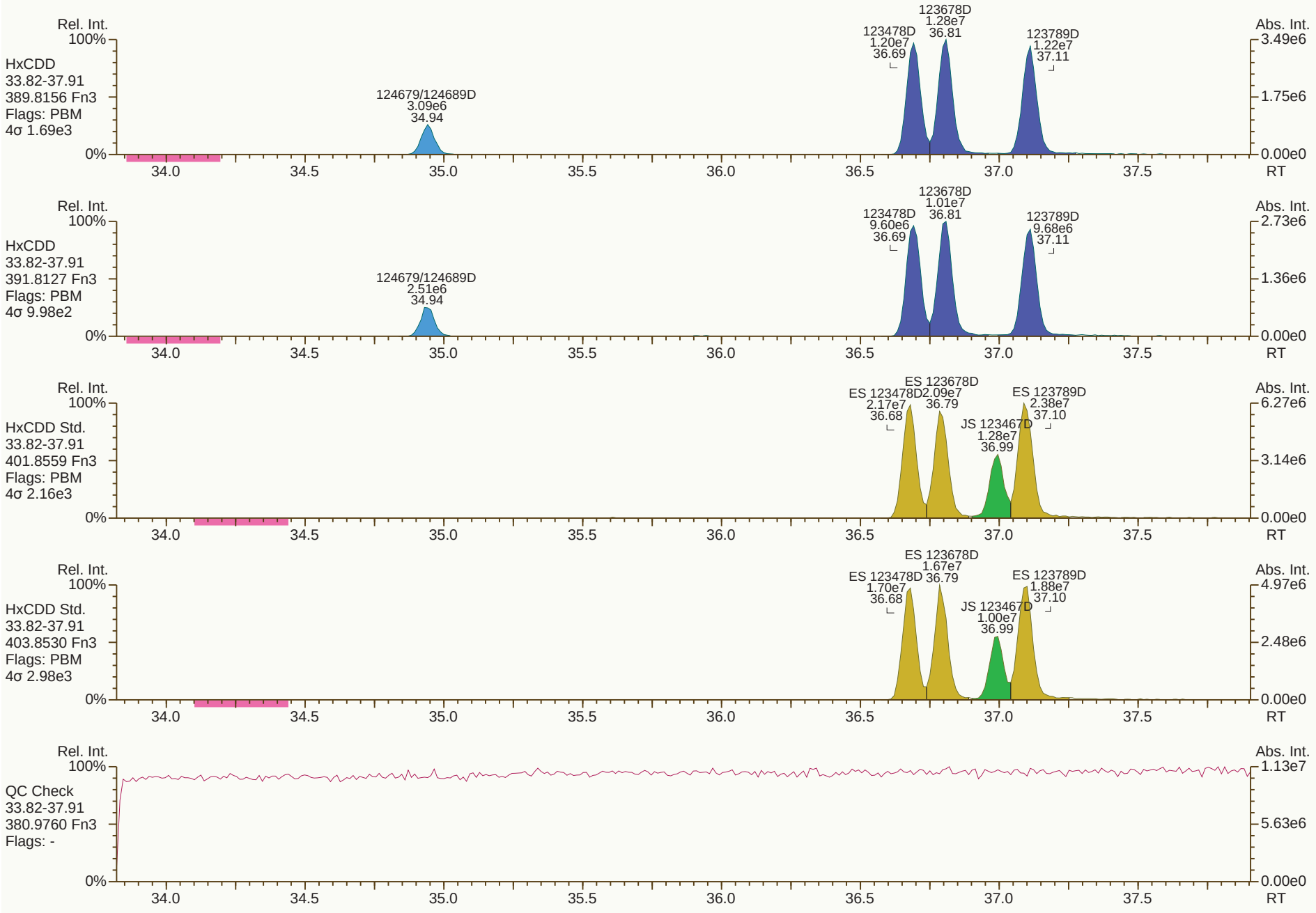


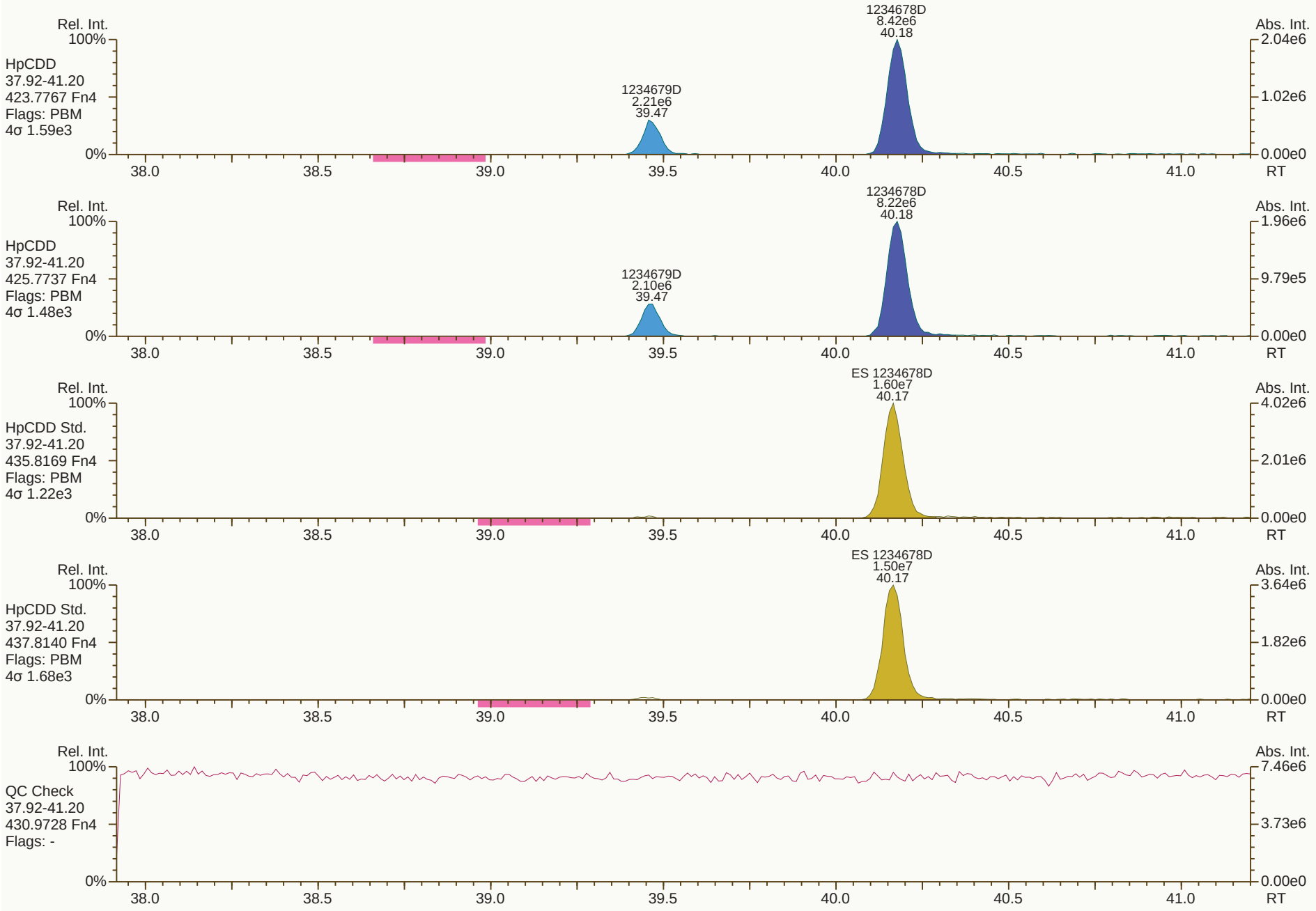
Results: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\OPR1_17662_DF-RJ.utp_res, saved 12-Aug-2020 15:18 (DTF) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 scc: 590-786 *PKD: n/a Printed: 12-Aug-2020 15:36 Page 1 of 12*


Rel. Int.
100%
TCDD
19.04-28.80
319.8965 Fn1
Flags: PBM
4σ 2.55e3
0%
1368D
4.19e6
22.90
1239D
2.90e6
26.77
2378D
2.97e6
26.93
1289D
4.09e6
27.98
Abs. Int.
1.00e6
5.01e5
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD
19.04-28.80
321.8936 Fn1
Flags: PBM
4σ 1.34e3
0%
1368D
5.24e6
22.90
1239D
3.75e6
26.77
2378D
3.82e6
26.93
1289D
5.22e6
27.98
Abs. Int.
1.29e6
6.43e5
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
37Cl-TCDD
19.04-28.80
327.8850 Fn1
Flags: PBM
4σ 9.39e2
0%
CS 37Cl-2378D
2.38e7
26.93
Abs. Int.
5.26e6
2.63e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.80
331.9368 Fn1
Flags: PBM
4σ 6.05e3
0%
JS 1234D
2.72e7
26.20
ES 2378D
2.57e7
26.90
Abs. Int.
5.96e6
2.98e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.80
333.9339 Fn1
Flags: PBM
4σ 1.72e3
0%
JS 1234D
3.41e7
26.20
ES 2378D
3.22e7
26.90
Abs. Int.
7.27e6
3.64e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT



Results: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\OPR1_17662_DF-RJ.utp_res, saved 12-Aug-2020 15:18 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 4827, 0456 scc: 590-786
Revised: 12-Aug-2020 11:12 (DTF) Printed: 12-Aug-2020 15:36 Page 3 of 12


Rel. Int.
100%
HxCDD
33.82-37.91
389.8156 Fn3
Flags: PBM
4σ 1.69e3
124679/124689D
3.09e6
34.94
123478D
1.20e7
36.69
123678D
1.28e7
36.81
123789D
1.22e7
37.11
Abs. Int.
3.49e6
1.75e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD
33.82-37.91
391.8127 Fn3
Flags: PBM
4σ 9.98e2
124679/124689D
2.51e6
34.94
123478D
9.60e6
36.69
123678D
1.01e7
36.81
123789D
9.68e6
37.11
Abs. Int.
2.73e6
1.36e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.82-37.91
401.8559 Fn3
Flags: PBM
4σ 2.16e3
ES 123478D
2.17e7
36.68
ES 123678D
2.09e7
36.79
JS 123467D
1.28e7
36.99
ES 123789D
2.38e7
37.10
Abs. Int.
6.27e6
3.14e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.82-37.91
403.8530 Fn3
Flags: PBM
4σ 2.98e3
ES 123478D
1.70e7
36.68
ES 123678D
1.67e7
36.79
JS 123467D
1.00e7
36.99
ES 123789D
1.88e7
37.10
Abs. Int.
4.97e6
2.48e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
QC Check
33.82-37.91
380.9760 Fn3
Flags: -
Abs. Int.
1.13e7
5.63e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT


Rel. Int.
100%
HpCDD
37.92-41.20
423.7767 Fn4
Flags: PBM
4σ 1.59e3
1234678D
8.42e6
40.18
1234679D
2.21e6
39.47
Abs. Int.
2.04e6
1.02e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD
37.92-41.20
425.7737 Fn4
Flags: PBM
4σ 1.48e3
1234678D
8.22e6
40.18
1234679D
2.10e6
39.47
Abs. Int.
1.96e6
9.79e5
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.92-41.20
435.8169 Fn4
Flags: PBM
4σ 1.22e3
ES 1234678D
1.60e7
40.17
Abs. Int.
4.02e6
2.01e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.92-41.20
437.8140 Fn4
Flags: PBM
4σ 1.68e3
ES 1234678D
1.50e7
40.17
Abs. Int.
3.64e6
1.82e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
QC Check
37.92-41.20
430.9728 Fn4
Flags: -
Abs. Int.
7.46e6
3.73e6
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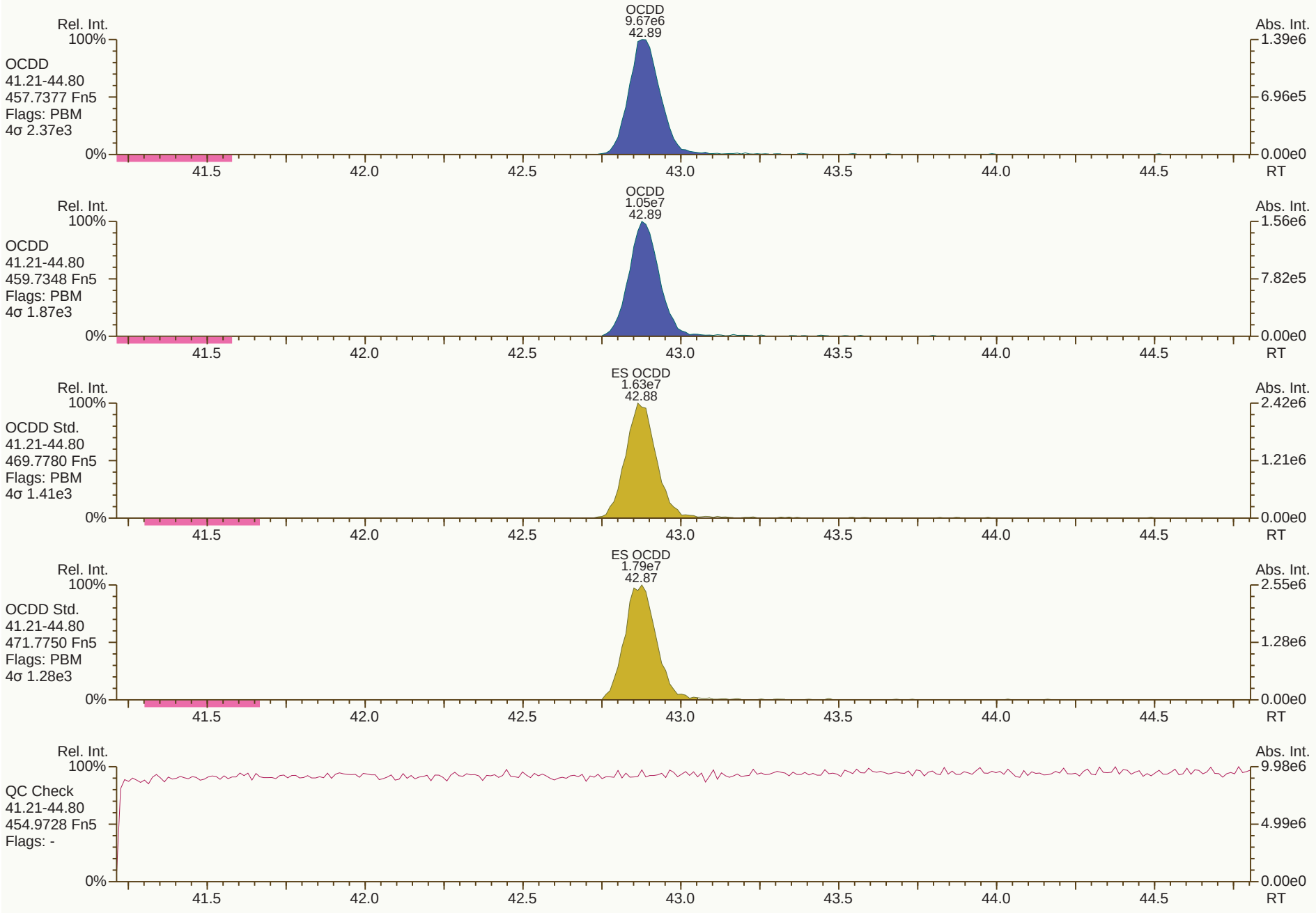
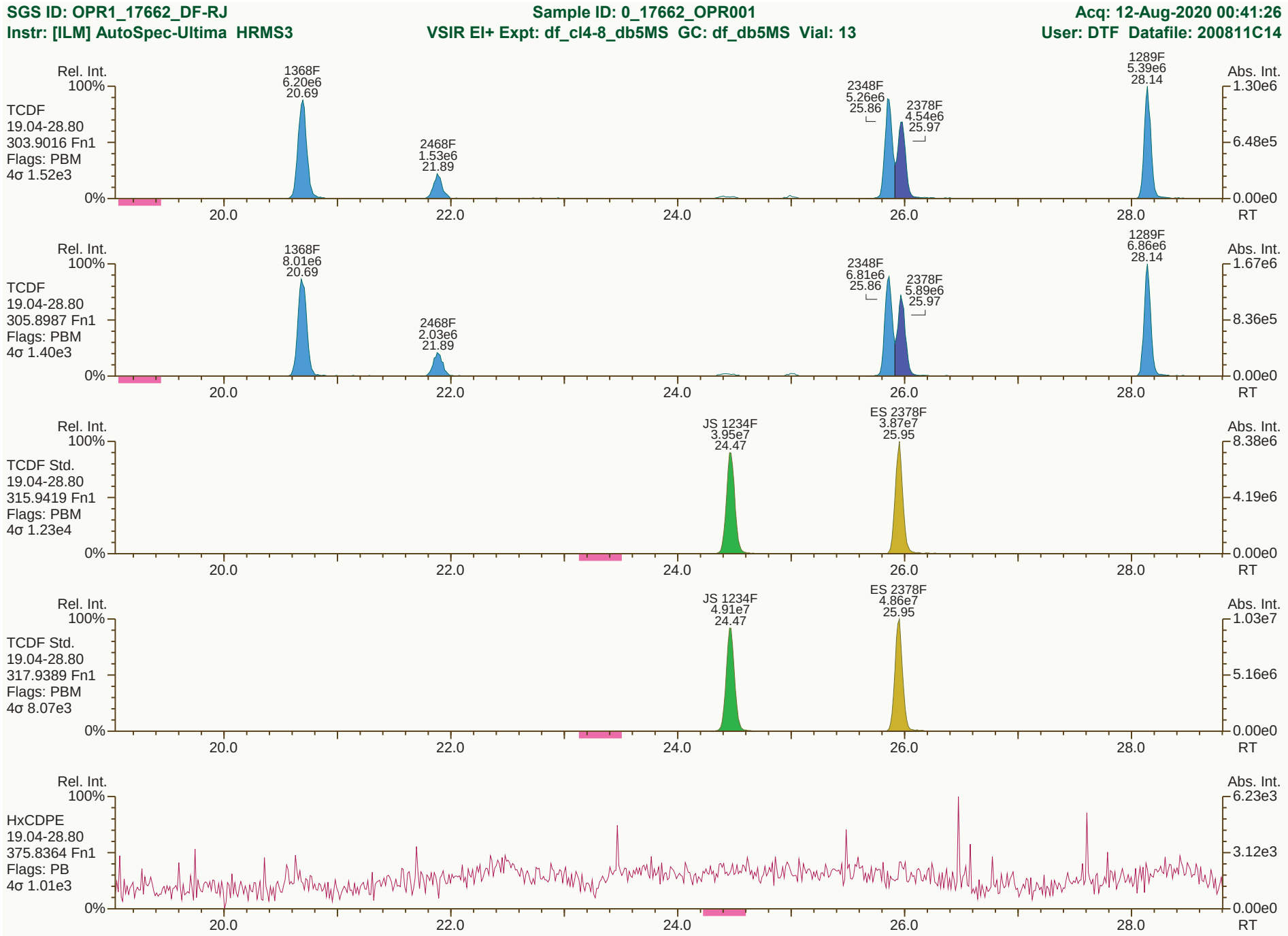
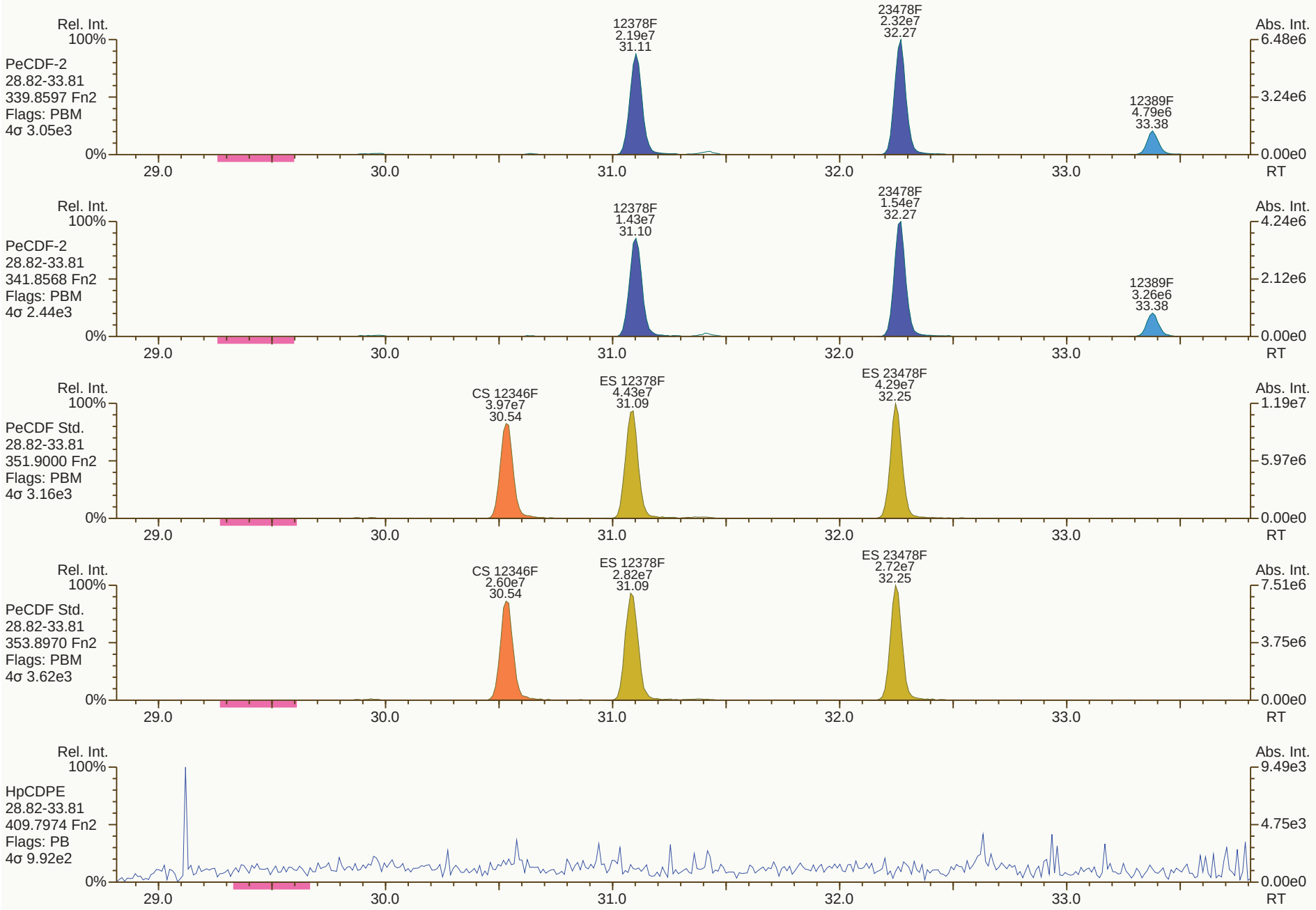
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT


OCDD
9.67e6
42.89
Rel. Int.
Abs. Int.
OCDD
41.21-44.80
457.7377 Fn5
Flags: PBM
4σ 2.37e3
OCDD
1.05e7
42.89
OCDD
41.21-44.80
459.7348 Fn5
Flags: PBM
4σ 1.87e3
ES OCDD
1.63e7
42.88
OCDD Std.
41.21-44.80
469.7780 Fn5
Flags: PBM
4σ 1.41e3
ES OCDD
1.79e7
42.87
OCDD Std.
41.21-44.80
471.7750 Fn5
Flags: PBM
4σ 1.28e3
QC Check
41.21-44.80
454.9728 Fn5
Flags: -
RT


SGS ID: OPR1_17662_DF-RJ
Sample ID: 0_17662_OPR001
Acq: 12-Aug-2020 00:41:26
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 13
User: DTF Datafile: 200811C14
Rel. Int.
Abs. Int.
TCDF
19.04-28.80
303.9016 Fn1
Flags: PBM
4σ 1.52e3
1368F 6.20e6 20.69
2468F 1.53e6 21.89
2348F 5.26e6 25.86
2378F 4.54e6 25.97
1289F 5.39e6 28.14
TCDF
19.04-28.80
305.8987 Fn1
Flags: PBM
4σ 1.40e3
1368F 8.01e6 20.69
2468F 2.03e6 21.89
2348F 6.81e6 25.86
2378F 5.89e6 25.97
1289F 6.86e6 28.14
TCDF Std.
19.04-28.80
315.9419 Fn1
Flags: PBM
4σ 1.23e4
JS 1234F 3.95e7 24.47
ES 2378F 3.87e7 25.95
TCDF Std.
19.04-28.80
317.9389 Fn1
Flags: PBM
4σ 8.07e3
JS 1234F 4.91e7 24.47
ES 2378F 4.86e7 25.95
HxCDPE
19.04-28.80
375.8364 Fn1
Flags: PB
4σ 1.01e3
100%
0%
20.0
22.0
24.0
26.0
28.0
RT
1.30e6
6.48e5
0.00e0
1.67e6
8.36e5
8.38e6
4.19e6
1.03e7
5.16e6
6.23e3
3.12e3
Results: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\OPR1_17662_DF-RJ.utp_res, saved 12-Aug-2020 15:18 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 7776, 4081, 5100 scc: 590-786
PKD: 12-Aug-2020 11:12 Printed: 12-Aug-2020 15:36 Page 7 of 12

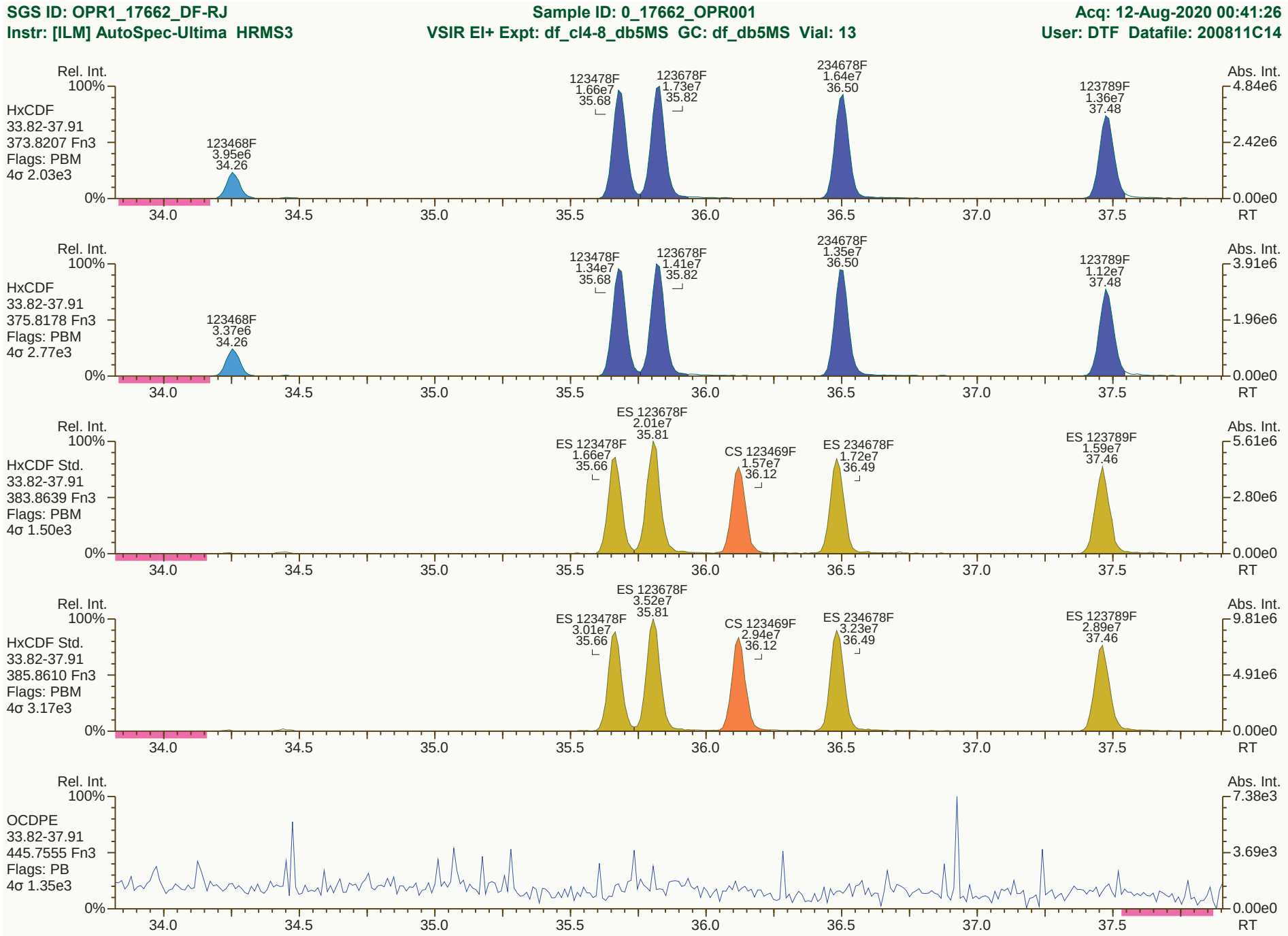

Rel. Int.
100%
0%
PeCDF-1
19.04-28.80
339.8597 Fn1
Flags: PBM
4σ 1.45e3
13468/12468F
4.78e6
28.12
Abs. Int.
1.13e6
5.67e5
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
0%
PeCDF-1
19.04-28.80
341.8568 Fn1
Flags: PBM
4σ 1.46e3
13468/12468F
2.87e6
28.13
Abs. Int.
6.94e5
3.47e5
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
0%
QC Check
19.04-28.80
316.9824 Fn1
Flags: -
Abs. Int.
6.19e6
3.09e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT


Rel. Int.
100%
PeCDF-2
28.82-33.81
339.8597 Fn2
Flags: PBM
4σ 3.05e3
0%
12378F
2.19e7
31.11
23478F
2.32e7
32.27
12389F
4.79e6
33.38
Abs. Int.
6.48e6
3.24e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF-2
28.82-33.81
341.8568 Fn2
Flags: PBM
4σ 2.44e3
0%
12378F
1.43e7
31.10
23478F
1.54e7
32.27
12389F
3.26e6
33.38
Abs. Int.
4.24e6
2.12e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.82-33.81
351.9000 Fn2
Flags: PBM
4σ 3.16e3
0%
CS 12346F
3.97e7
30.54
ES 12378F
4.43e7
31.09
ES 23478F
4.29e7
32.25
Abs. Int.
1.19e7
5.97e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.82-33.81
353.8970 Fn2
Flags: PBM
4σ 3.62e3
0%
CS 12346F
2.60e7
30.54
ES 12378F
2.82e7
31.09
ES 23478F
2.72e7
32.25
Abs. Int.
7.51e6
3.75e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
HpCDPE
28.82-33.81
409.7974 Fn2
Flags: PB
4σ 9.92e2
0%
Abs. Int.
9.49e3
4.75e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT

SGS ID: OPR1_17662_DF-RJ
Instr: [ILM] AutoSpec-Ultima HRMS3

Sample ID: 0_17662_OPR001
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 13

Acq: 12-Aug-2020 00:41:26
User: DTF Datafile: 200811C14



Results: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\OPR1_17662_DF-RJ.utp_res, saved 12-Aug-2020 15:18 (DTF)
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 0577, 0649, 8833 scc: 590-786

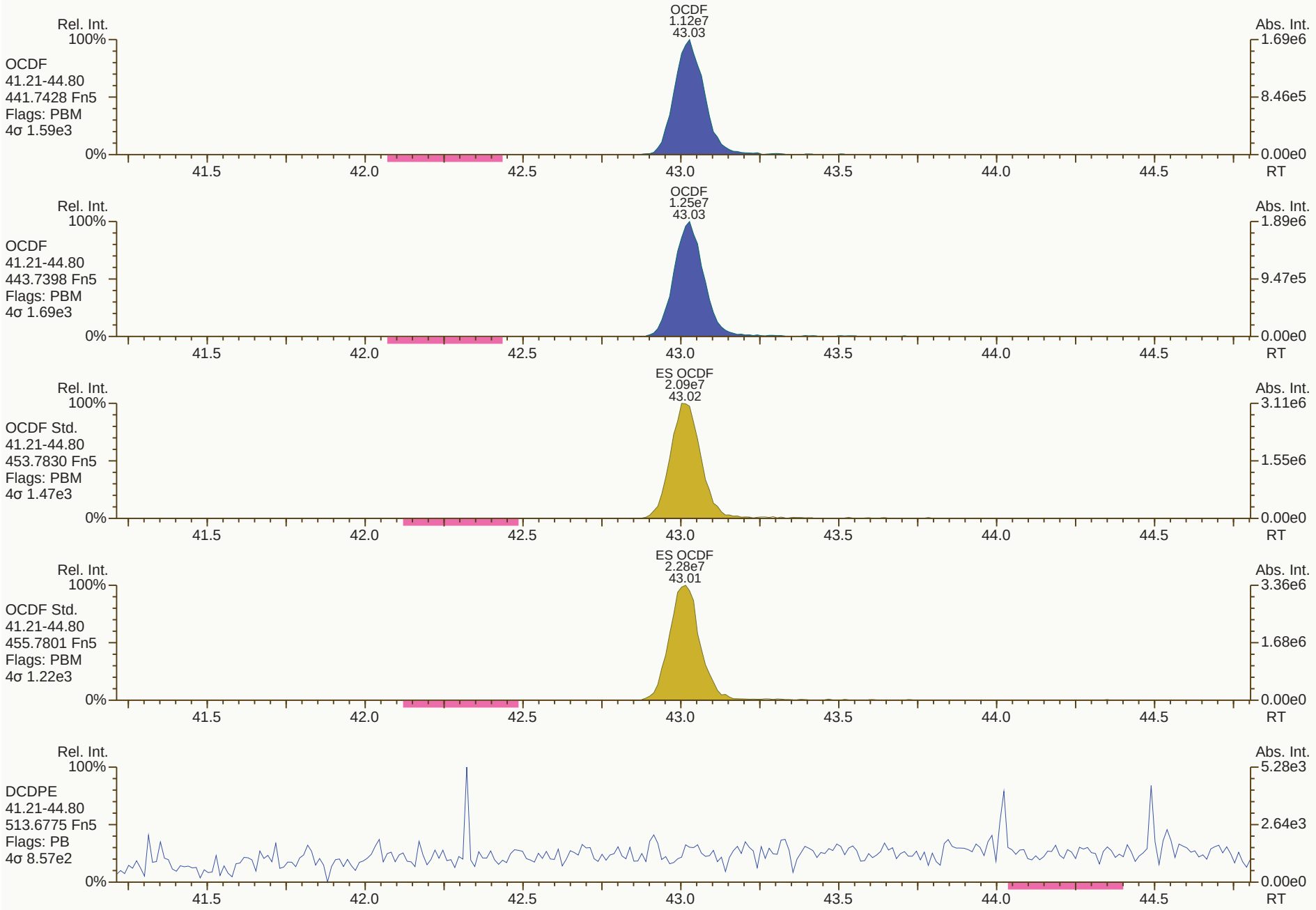
Peak annotation: Areas, Centroids
PKD: 12-Aug-2020 11:12 Printed: 12-Aug-2020 15:36 Page 10 of 12



Results: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\OPR1_17662_DF-RJ.utp_res, saved 12-Aug-2020 15:18 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 7460, 7820, 5532 scc: 590-786
PKD: 12-Aug-2020 11:12 Printed: 12-Aug-2020 15:36 Page 11 of 12

SGS ID: OPR1_17662_DF-RJ | Sample ID: 0_17662_OPR001 | Acq: 12-Aug-2020 00:41:26

Instr: [ILM] AutoSpec-Ultima HRMS3 | VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 13 | User: DTF Datafile: 200811C14



Results: P:\B4500_B4599\B4526\B4526_17662 DF\Resources\OPR1_17662_DF-RJ.utp_res, saved 12-Aug-2020 15:18 (DTF) | *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 7843, 5873, 2917 scc: 590-786 | *PKD: 12-Aug-2020 11:12 Printed: 12-Aug-2020 15:36 Page 12 of 12*



FINAL LAB REPORT

KMCC Navassa

B4527

14-Aug-2020

Prepared by

SGS NORTH AMERICA

Prepared for

EarthCon

Mary Brookshire

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This report is approved by

Tamara Burkamper
C=US, OU=EHS, O=SGS North America Inc.,
CN=Tamara Burkamper,
E=tamara.morgan@sgs.com
I have reviewed this document
2020-08-14 09:40:47

Tamara Burkamper

Senior Project Manager

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Results reported relate only to the items tested.

PROJECT INFORMATION SUMMARY *(When applicable, see QC Annotations for details)*

Client Project	KMCC Navassa
SGS Project #	B4527
Analytical Protocol(s)	8290A
No. Samples Submitted	7
Additional QC Sample(s)	0
No. Laboratory Method Blanks	1
No. OPRs / Batch CS3	1
Date Received	08-Aug-20
Condition Received	Good
Temperature upon Receipt (ºC)	0.2, 1.7
Extraction within Holding Time	Yes
Analysis within Holding Time	Yes

QC ANNOTATIONS:

1. Please see Appendices attached for data qualifier/attribute and lab identifier descriptions which may be contained in the project.

MB1_17665 shows minor contamination (below the J-Level) for 1,2,3,4,6,7,8-HpCDD and OCDD. Associated compounds in affected samples are qualified “B”.

APPENDIX A: GENERAL DATA QUALIFIERS / DATA ATTRIBUTES

B	The analyte was found in the method blank, at a concentration that was at least 10% of the concentration in the sample.
C	Two or more congeners co-elute. In EDDs, C denotes the lowest IUPAC congener in a co-elution group and additional co-eluters for the group are shown with the number of the lowest IUPAC co-eluter.
E	The reported concentration exceeds the calibration range (upper point of the calibration curve) and is an estimated value.
EMPC	Represents an Estimated Maximum Possible Concentration. EMPCs arise in cases where the signal/noise ratio is not sufficient for peak identification (the determined ion-abundance ratio is outside the allowed theoretical range), or where there is a co-eluting interference.
H/h	If the standard recovery is below the method or SOP specified value “H” is assigned. If the obtained value is less than half the specified value “h” is assigned.
J	Indicates that an analyte has a concentration below the reporting limit (lowest point of the calibration curve) and is an estimated value.
ND	Indicates a non-detect.
NR or R	Indicates a value that is not reportable.
PR	Due to interference, the associated congener is poorly resolved.
QI	Indicates the presence of a quantitative interference.
SI	Denotes “Single Ion Mode” and is utilized for PCBs where the secondary ion trace has a significantly elevated noise level due to background PFK. Responses for such peaks are calculated using an EMPC approach based solely on the primary ion area(s) and may be considered estimates.
U	The analyte was not detected. The estimated detection limit (EDL) may be reported for this analyte.
V	The labeled standard recovery was found to be outside of the method control limits.

APPENDIX B: DRBC/TMDL SPECIFIC DATA QUALIFIERS / DATA ATTRIBUTES

J	The reported result is an estimate. The value is less than the minimum calibration level but greater than the estimated detection limit (EDL).
U	The analyte was not detected in the sample at the estimated detection limit (EDL).
E	The reported concentration is an estimate. The value exceeds the upper calibration range (upper point of the calibration curve).
D	Dilution Data. Result was obtained from the analysis of a dilution.
B	Analyte found in the sample and associated method blank.
C	Co-eluting congener
Cxx	Co-elutes with the indicated congener, data is reported under the lowest IUPAC congener. 'Xx' denotes the IUPAC number with the lowest numerical designated congener.
NR	Analyte is not reportable because of problems in sample preparation or analysis.
V	Labeled standard recovery is not within method control limits.
X	Results from re-injection/repeat/second-column analysis.
EMPC	Estimated maximum possible concentration. Indicates that a peak is identified but did not meet the method specified ion-abundance ratio.

APPENDIX C: LAB IDENTIFIERS

AR	Indicates use of the archived portion of the sample extract.
CU	Indicates a sample that required additional clean-up prior to MS injection/processing.
D	Indicates a dilution of the sample extract. The number that follows the "D" indicates the dilution factor.
DE	Indicates a dilution performed with the addition of ES (extraction standard) solution.
DUP	Designation for a duplicate sample.
MS	Designation for a matrix spike.
MSD	Designation for a matrix spike duplicate.
RJ	Indicates a reinjection of the sample extract.
S	Indicates a sample split. The number that follows the "S" indicates the split factor.

SGS CERTIFICATIONS

Alaska	17-012
Arkansas	88-0682
California (ELAP)	ELAP Cert #2914
CLIA	34D1013708
Connecticut	PH-0258
USDA Soil Permit	P330-20-00103
American Association for Laboratory Accreditation (A2LA)	2726.01 (ISO 17025:2005, 2009 TNI, DoD ELAP QSM 5.1)
Florida DOH	E87634
Louisiana DEQ	4115
Louisiana DOH	LA031
Maine	2018018
Massachusetts	M-NC919
Minnesota (Primary NELAP For Method 23)	037-999-459
Montana	0106
New Hampshire (Primary NELAP)	2085
New Hampshire (Secondary NELAP)	2083
New Jersey	NC100
New York	11685
North Carolina DEQ	481
North Dakota	R-197
Oregon	NC200002
Pennsylvania	68-03675
South Carolina	99029002
Texas	T104704260
US Coast Guard	16714/159.317/SGS
Vermont	VT-87634
Virginia	460214
Washington	C913

Rev. 13-Apr-2020

Sample ID: FB-01

Method 8290A

Client Data		Sample Data		Laboratory Data			
Name:	EarthCon	Matrix:	Aqueous	Lab Project ID:	B4527	Date Received:	08-Aug-2020
Project ID:	KMCC Navassa	Weight/Volume:	0.97 L	Lab Sample ID	B4527_17665_DF_001	Date Extracted:	11-Aug-2020
Date Collected:	08-Aug-2020	pH:	5	QC Batch No:	17665	Date Analyzed:	13-Aug-2020
		Split:	-	Dilution:	-	Time Analyzed:	7:28:26

Analyte	Conc. (pg/L)	DL (pg/L)	EMPC (pg/L)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	1.23			ES 2378-TCDD	101	
12378-PeCDD	ND	1.11			ES 12378-PeCDD	94.2	
123478-HxCDD	ND	1.32			ES 123478-HxCDD	94.6	
123678-HxCDD	ND	1.31			ES 123678-HxCDD	91	
123789-HxCDD	ND	1.33			ES 123789-HxCDD	86.7	
1234678-HpCDD	EMPC		4.96	J B	ES 1234678-HpCDD	79.5	
OCDD	24.7			J B	ES OCDD	56.5	
2378-TCDF	ND	0.598			ES 2378-TCDF	108	
12378-PeCDF	ND	0.786			ES 12378-PeCDF	98.9	
23478-PeCDF	ND	0.782			ES 23478-PeCDF	98.9	
123478-HxCDF	ND	0.728			ES 123478-HxCDF	101	
123678-HxCDF	ND	0.71			ES 123678-HxCDF	98.4	
234678-HxCDF	ND	0.751			ES 234678-HxCDF	98.5	
123789-HxCDF	ND	0.905			ES 123789-HxCDF	97.8	
1234678-HpCDF	ND	0.924			ES 1234678-HpCDF	90.4	
1234789-HpCDF	ND	1.44			ES 1234789-HpCDF	79.8	
OCDF	ND	4.16			ES OCDF	62	
Totals					**Standard**	**CS Recoveries**	
					CS 37Cl-2378-TCDD	105	
Total TCDD	ND	1.23	ND		CS 12347-PeCDD	109	
Total PeCDD	ND	1.11	ND		CS 12346-PeCDF	102	
Total HxCDD	ND	1.32	ND		CS 123469-HxCDF	104	
Total HpCDD	ND		9.24		CS 1234689-HpCDF	93.7	
Total TCDF	ND	0.598	ND				
Total PeCDF	ND	0.784	ND				
Total HxCDF	ND	0.768	ND				
Total HpCDF	ND	1.15	ND				
Total PCDD/Fs	**24.7**		**34**				
ITEF TEQs							
TEQ: ND=0	0.0247		0.0744				
TEQ: ND=DL/2	1.53	1.53	1.58				
TEQ: ND=DL	3.03	3.05	3.08				

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Sample ID: FB-01 — TEQ Summary — Method 8290A

Client Project Name:	EarthCon	Matrix:	Aqueous	Lab Sample ID:	B4527_17665_DF_001
Cliend Project ID:	KMCC Navassa	Weight/Volume:	0.97 L	QC Batch No.:	17665
Date Collected:	08-Aug-2020	Split:	-	Date Extracted:	11-Aug-2020
Date Received:	08-Aug-2020	Dilution:	-	Date Analyzed:	13-Aug-2020 07:28
Lab Project No:	B4527	Units	pg/L		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	(1.23)		1.23	(1.23)	(1.23)	(1.23)
12378-PeCDD	(1.11)		1.11	(0.557)	(1.11)	(1.11)
123478-HxCDD	(1.32)		1.32	(0.132)	(0.132)	(0.132)
123678-HxCDD	(1.31)		1.31	(0.131)	(0.131)	(0.131)
123789-HxCDD	(1.33)		1.33	(0.133)	(0.133)	(0.133)
1234678-HpCDD	[4.96]	J B	3.85	[0.0496]	[0.0496]	[0.0496]
OCDD	24.7	J B	8.31	0.0247	0.00247	0.00742
2378-TCDF	(0.598)		0.598	(0.0598)	(0.0598)	(0.0598)
12378-PeCDF	(0.786)		0.786	(0.0393)	(0.0393)	(0.0236)
23478-PeCDF	(0.782)		0.782	(0.391)	(0.391)	(0.235)
123478-HxCDF	(0.728)		0.728	(0.0728)	(0.0728)	(0.0728)
123678-HxCDF	(0.71)		0.71	(0.071)	(0.071)	(0.071)
234678-HxCDF	(0.751)		0.751	(0.0751)	(0.0751)	(0.0751)
123789-HxCDF	(0.905)		0.905	(0.0905)	(0.0905)	(0.0905)
1234678-HpCDF	(0.924)		0.924	(0.00924)	(0.00924)	(0.00924)
1234789-HpCDF	(1.44)		1.44	(0.0144)	(0.0144)	(0.0144)
OCDF	(4.16)		4.16	(0.00416)	(0.000416)	(0.00125)

TEQ Summaries			
EMPC = 0, ND = 0	0.0247	0.00247	0.00742
EMPC = 0, ND = DL / 2	1.53	1.78	1.7
EMPC = 0, ND = DL	3.03	3.56	3.4
EMPC = 0, < J-level = 0	0	0	0
EMPC = EMPC, ND = 0	0.0744	0.0521	0.057
EMPC = EMPC, ND = DL / 2	1.58	1.83	1.75
EMPC = EMPC, ND = DL	3.08	3.61	3.45
EMPC = EMPC, < J-level = 0	0	0	0

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Checkcode: 072-886-BZF

Sample ID: EB-01

Method 8290A

Client Data		Sample Data		Laboratory Data			
Name:	EarthCon	Matrix:	Aqueous	Lab Project ID:	B4527	Date Received:	08-Aug-2020
Project ID:	KMCC Navassa	Weight/Volume:	0.94 L	Lab Sample ID	B4527_17665_DF_002	Date Extracted:	11-Aug-2020
Date Collected:	08-Aug-2020	pH:	5	QC Batch No:	17665	Date Analyzed:	13-Aug-2020
		Split:	-	Dilution:	-	Time Analyzed:	8:14:56

Analyte	Conc. (pg/L)	DL (pg/L)	EMPC (pg/L)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	1.39			ES 2378-TCDD	102	
12378-PeCDD	ND	1.68			ES 12378-PeCDD	95.4	
123478-HxCDD	ND	1.15			ES 123478-HxCDD	92.3	
123678-HxCDD	ND	1.13			ES 123678-HxCDD	87.2	
123789-HxCDD	ND	1.17			ES 123789-HxCDD	84.6	
1234678-HpCDD	ND	5.24			ES 1234678-HpCDD	76.8	
OCDD	27.4			J B	ES OCDD	55.1	
2378-TCDF	ND	0.726			ES 2378-TCDF	107	
12378-PeCDF	ND	1			ES 12378-PeCDF	104	
23478-PeCDF	ND	1			ES 23478-PeCDF	101	
123478-HxCDF	ND	0.889			ES 123478-HxCDF	96.8	
123678-HxCDF	ND	0.907			ES 123678-HxCDF	95.2	
234678-HxCDF	ND	0.938			ES 234678-HxCDF	95.5	
123789-HxCDF	ND	1.13			ES 123789-HxCDF	95.8	
1234678-HpCDF	ND	0.935			ES 1234678-HpCDF	88.6	
1234789-HpCDF	ND	1.4			ES 1234789-HpCDF	77.2	
OCDF	ND	4.59			ES OCDF	59	
Totals					**Standard**	**CS Recoveries**	
					CS 37Cl-2378-TCDD	104	
Total TCDD	ND	1.39	ND		CS 12347-PeCDD	109	
Total PeCDD	ND	1.68	ND		CS 12346-PeCDF	108	
Total HxCDD	ND	1.15	ND		CS 123469-HxCDF	102	
Total HpCDD	ND	5.24	ND		CS 1234689-HpCDF	90.7	
Total TCDF	ND	0.726	ND				
Total PeCDF	ND	1	ND				
Total HxCDF	ND	0.96	ND				
Total HpCDF	ND	1.13	ND				
Total PCDD/Fs	**27.4**		**27.4**				
ITEF TEQs							
TEQ: ND=0	0.0274		0.0274				
TEQ: ND=DL/2	1.86	1.84	1.86				
TEQ: ND=DL	3.69	3.67	3.69				

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Sample ID: EB-01 — TEQ Summary — Method 8290A

Client Project Name:	EarthCon	Matrix:	Aqueous	Lab Sample ID:	B4527_17665_DF_002
Cliend Project ID:	KMCC Navassa	Weight/Volume:	0.94 L	QC Batch No.:	17665
Date Collected:	08-Aug-2020	Split:	-	Date Extracted:	11-Aug-2020
Date Received:	08-Aug-2020	Dilution:	-	Date Analyzed:	13-Aug-2020 08:14
Lab Project No:	B4527	Units	pg/L		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	(1.39)		1.39	(1.39)	(1.39)	(1.39)
12378-PeCDD	(1.68)		1.68	(0.842)	(1.68)	(1.68)
123478-HxCDD	(1.15)		1.15	(0.115)	(0.115)	(0.115)
123678-HxCDD	(1.13)		1.13	(0.113)	(0.113)	(0.113)
123789-HxCDD	(1.17)		1.17	(0.117)	(0.117)	(0.117)
1234678-HpCDD	(5.24)		5.24	(0.0524)	(0.0524)	(0.0524)
OCDD	27.4	J B	7.06	0.0274	0.00274	0.00822
2378-TCDF	(0.726)		0.726	(0.0726)	(0.0726)	(0.0726)
12378-PeCDF	(1)		1	(0.05)	(0.05)	(0.03)
23478-PeCDF	(1)		1	(0.5)	(0.5)	(0.3)
123478-HxCDF	(0.889)		0.889	(0.0889)	(0.0889)	(0.0889)
123678-HxCDF	(0.907)		0.907	(0.0907)	(0.0907)	(0.0907)
234678-HxCDF	(0.938)		0.938	(0.0938)	(0.0938)	(0.0938)
123789-HxCDF	(1.13)		1.13	(0.113)	(0.113)	(0.113)
1234678-HpCDF	(0.935)		0.935	(0.00935)	(0.00935)	(0.00935)
1234789-HpCDF	(1.4)		1.4	(0.014)	(0.014)	(0.014)
OCDF	(4.59)		4.59	(0.00459)	(0.000459)	(0.00138)

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TEQ Summaries			
EMPC = 0, ND = 0	0.0274	0.00274	0.00822
EMPC = 0, ND = DL / 2	1.86	2.25	2.15
EMPC = 0, ND = DL	3.69	4.51	4.29
EMPC = 0, < J-level = 0	0	0	0
EMPC = EMPC, ND = 0	0.0274	0.00274	0.00822
EMPC = EMPC, ND = DL / 2	1.86	2.25	2.15
EMPC = EMPC, ND = DL	3.69	4.51	4.29
EMPC = EMPC, < J-level = 0	0	0	0

Checkcode: 845-465-DQL

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Sample ID: FB-02

Method 8290A

Client Data		Sample Data		Laboratory Data			
Name:	EarthCon	Matrix:	Aqueous	Lab Project ID:	B4527	Date Received:	08-Aug-2020
Project ID:	KMCC Navassa	Weight/Volume:	1.01 L	Lab Sample ID	B4527_17665_DF_003	Date Extracted:	11-Aug-2020
Date Collected:	08-Aug-2020	pH:	5	QC Batch No:	17665	Date Analyzed:	13-Aug-2020
		Split:	-	Dilution:	-	Time Analyzed:	9:01:25

Analyte	Conc. (pg/L)	DL (pg/L)	EMPC (pg/L)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	0.991			ES 2378-TCDD	99.8	
12378-PeCDD	ND	1.45			ES 12378-PeCDD	94.1	
123478-HxCDD	ND	1.12			ES 123478-HxCDD	93	
123678-HxCDD	ND	1.14			ES 123678-HxCDD	87.8	
123789-HxCDD	ND	1.18			ES 123789-HxCDD	86	
1234678-HpCDD	ND	1.74			ES 1234678-HpCDD	79.4	
OCDD	ND	7.33			ES OCDD	53.7	
2378-TCDF	ND	0.609			ES 2378-TCDF	101	
12378-PeCDF	ND	0.69			ES 12378-PeCDF	99.5	
23478-PeCDF	ND	0.671			ES 23478-PeCDF	97.7	
123478-HxCDF	ND	0.698			ES 123478-HxCDF	98.8	
123678-HxCDF	ND	0.712			ES 123678-HxCDF	98.1	
234678-HxCDF	ND	0.788			ES 234678-HxCDF	96.5	
123789-HxCDF	ND	0.923			ES 123789-HxCDF	97.9	
1234678-HpCDF	ND	0.922			ES 1234678-HpCDF	93.3	
1234789-HpCDF	ND	1.53			ES 1234789-HpCDF	78.5	
OCDF	ND	4.21			ES OCDF	57.7	
Totals					**Standard**	**CS Recoveries**	
					CS 37Cl-2378-TCDD	103	
Total TCDD	ND	0.991	ND		CS 12347-PeCDD	113	
Total PeCDD	ND	1.45	ND		CS 12346-PeCDF	105	
Total HxCDD	ND	1.14	ND		CS 123469-HxCDF	107	
Total HpCDD	ND	1.74	ND		CS 1234689-HpCDF	102	
Total TCDF	ND	0.609	ND				
Total PeCDF	ND	0.68	ND				
Total HxCDF	ND	0.775	ND				
Total HpCDF	ND	1.18	ND				
Total PCDD/Fs	**ND**		**ND**				
ITEF TEQs							
TEQ: ND=0	0		0				
TEQ: ND=DL/2	1.43	1.43	1.43				
TEQ: ND=DL	2.86	2.86	2.86				

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Sample ID: FB-02 — TEQ Summary — Method 8290A

Client Project Name:	EarthCon	Matrix:	Aqueous	Lab Sample ID:	B4527_17665_DF_003
Cliend Project ID:	KMCC Navassa	Weight/Volume:	1.01 L	QC Batch No.:	17665
Date Collected:	08-Aug-2020	Split:	-	Date Extracted:	11-Aug-2020
Date Received:	08-Aug-2020	Dilution:	-	Date Analyzed:	13-Aug-2020 09:01
Lab Project No:	B4527	Units	pg/L		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	(0.991)		0.991	(0.991)	(0.991)	(0.991)
12378-PeCDD	(1.45)		1.45	(0.727)	(1.45)	(1.45)
123478-HxCDD	(1.12)		1.12	(0.112)	(0.112)	(0.112)
123678-HxCDD	(1.14)		1.14	(0.114)	(0.114)	(0.114)
123789-HxCDD	(1.18)		1.18	(0.118)	(0.118)	(0.118)
1234678-HpCDD	(1.74)		1.74	(0.0174)	(0.0174)	(0.0174)
OCDD	(7.33)		7.33	(0.00733)	(0.000733)	(0.0022)
2378-TCDF	(0.609)		0.609	(0.0609)	(0.0609)	(0.0609)
12378-PeCDF	(0.69)		0.69	(0.0345)	(0.0345)	(0.0207)
23478-PeCDF	(0.671)		0.671	(0.335)	(0.335)	(0.201)
123478-HxCDF	(0.698)		0.698	(0.0698)	(0.0698)	(0.0698)
123678-HxCDF	(0.712)		0.712	(0.0712)	(0.0712)	(0.0712)
234678-HxCDF	(0.788)		0.788	(0.0788)	(0.0788)	(0.0788)
123789-HxCDF	(0.923)		0.923	(0.0923)	(0.0923)	(0.0923)
1234678-HpCDF	(0.922)		0.922	(0.00922)	(0.00922)	(0.00922)
1234789-HpCDF	(1.53)		1.53	(0.0153)	(0.0153)	(0.0153)
OCDF	(4.21)		4.21	(0.00421)	(0.000421)	(0.00126)

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TEQ Summaries			
EMPC = 0, ND = 0	0	0	0
EMPC = 0, ND = DL / 2	1.43	1.79	1.72
EMPC = 0, ND = DL	2.86	3.58	3.43
EMPC = 0, < J-level = 0	0	0	0
EMPC = EMPC, ND = 0	0	0	0
EMPC = EMPC, ND = DL / 2	1.43	1.79	1.72
EMPC = EMPC, ND = DL	2.86	3.58	3.43
EMPC = EMPC, < J-level = 0	0	0	0

Checkcode: 458-339-MDG

Sample ID: EB-02

Method 8290A

Client Data		Sample Data		Laboratory Data			
Name:	EarthCon	Matrix:	Aqueous	Lab Project ID:	B4527	Date Received:	08-Aug-2020
Project ID:	KMCC Navassa	Weight/Volume:	0.99 L	Lab Sample ID	B4527_17665_DF_004	Date Extracted:	11-Aug-2020
Date Collected:	08-Aug-2020	pH:	5	QC Batch No:	17665	Date Analyzed:	13-Aug-2020
		Split:	-	Dilution:	-	Time Analyzed:	9:47:57

Analyte	Conc. (pg/L)	DL (pg/L)	EMPC (pg/L)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	1.16			ES 2378-TCDD	101	
12378-PeCDD	ND	1.32			ES 12378-PeCDD	92.8	
123478-HxCDD	ND	1.07			ES 123478-HxCDD	92.3	
123678-HxCDD	ND	1.02			ES 123678-HxCDD	90.7	
123789-HxCDD	ND	1.07			ES 123789-HxCDD	88.6	
1234678-HpCDD	ND	1.85			ES 1234678-HpCDD	85.3	
OCDD	EMPC		12.6	J B	ES OCDD	65.5	
2378-TCDF	ND	0.535			ES 2378-TCDF	102	
12378-PeCDF	ND	0.729			ES 12378-PeCDF	101	
23478-PeCDF	ND	0.71			ES 23478-PeCDF	99.8	
123478-HxCDF	ND	0.788			ES 123478-HxCDF	101	
123678-HxCDF	ND	0.765			ES 123678-HxCDF	96	
234678-HxCDF	ND	0.809			ES 234678-HxCDF	97.5	
123789-HxCDF	ND	0.978			ES 123789-HxCDF	102	
1234678-HpCDF	ND	0.781			ES 1234678-HpCDF	98.9	
1234789-HpCDF	ND	1.26			ES 1234789-HpCDF	87.8	
OCDF	ND	4.39			ES OCDF	70.1	
Totals					**Standard**	**CS Recoveries**	
					CS 37Cl-2378-TCDD	106	
Total TCDD	ND	1.16	ND		CS 12347-PeCDD	109	
Total PeCDD	ND	1.32	ND		CS 12346-PeCDF	103	
Total HxCDD	ND	1.05	ND		CS 123469-HxCDF	105	
Total HpCDD	ND	1.85	ND		CS 1234689-HpCDF	106	
Total TCDF	ND	0.535	ND				
Total PeCDF	ND	0.719	ND				
Total HxCDF	ND	0.831	ND				
Total HpCDF	ND	0.988	ND				
Total PCDD/Fs	**ND**		**12.6**				
ITEF TEQs							
TEQ: ND=0	0		0.0126				
TEQ: ND=DL/2	1.48	1.49	1.49				
TEQ: ND=DL	2.96	2.97	2.98				

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Sample ID: EB-02 — TEQ Summary — Method 8290A

Client Project Name:	EarthCon	Matrix:	Aqueous	Lab Sample ID:	B4527_17665_DF_004
Cliend Project ID:	KMCC Navassa	Weight/Volume:	0.99 L	QC Batch No.:	17665
Date Collected:	08-Aug-2020	Split:	-	Date Extracted:	11-Aug-2020
Date Received:	08-Aug-2020	Dilution:	-	Date Analyzed:	13-Aug-2020 09:47
Lab Project No:	B4527	Units	pg/L		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	(1.16)		1.16	(1.16)	(1.16)	(1.16)
12378-PeCDD	(1.32)		1.32	(0.662)	(1.32)	(1.32)
123478-HxCDD	(1.07)		1.07	(0.107)	(0.107)	(0.107)
123678-HxCDD	(1.02)		1.02	(0.102)	(0.102)	(0.102)
123789-HxCDD	(1.07)		1.07	(0.107)	(0.107)	(0.107)
1234678-HpCDD	(1.85)		1.85	(0.0185)	(0.0185)	(0.0185)
OCDD	[12.6]	J B	9.69	[0.0126]	[0.00126]	[0.00379]
2378-TCDF	(0.535)		0.535	(0.0535)	(0.0535)	(0.0535)
12378-PeCDF	(0.729)		0.729	(0.0365)	(0.0365)	(0.0219)
23478-PeCDF	(0.71)		0.71	(0.355)	(0.355)	(0.213)
123478-HxCDF	(0.788)		0.788	(0.0788)	(0.0788)	(0.0788)
123678-HxCDF	(0.765)		0.765	(0.0765)	(0.0765)	(0.0765)
234678-HxCDF	(0.809)		0.809	(0.0809)	(0.0809)	(0.0809)
123789-HxCDF	(0.978)		0.978	(0.0978)	(0.0978)	(0.0978)
1234678-HpCDF	(0.781)		0.781	(0.00781)	(0.00781)	(0.00781)
1234789-HpCDF	(1.26)		1.26	(0.0126)	(0.0126)	(0.0126)
OCDF	(4.39)		4.39	(0.00439)	(0.000439)	(0.00132)

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TEQ Summaries			
EMPC = 0, ND = 0	0	0	0
EMPC = 0, ND = DL / 2	1.48	1.81	1.73
EMPC = 0, ND = DL	2.96	3.62	3.47
EMPC = 0, < J-level = 0	0	0	0
EMPC = EMPC, ND = 0	0.0126	0.00126	0.00379
EMPC = EMPC, ND = DL / 2	1.49	1.81	1.74
EMPC = EMPC, ND = DL	2.98	3.62	3.47
EMPC = EMPC, < J-level = 0	0	0	0

Checkcode: 901-073-KTB

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Sample ID: EB-03

Method 8290A

Client Data		Sample Data		Laboratory Data			
Name:	EarthCon	Matrix:	Aqueous	Lab Project ID:	B4527	Date Received:	08-Aug-2020
Project ID:	KMCC Navassa	Weight/Volume:	1.00 L	Lab Sample ID	B4527_17665_DF_005	Date Extracted:	11-Aug-2020
Date Collected:	08-Aug-2020	pH:	5	QC Batch No:	17665	Date Analyzed:	13-Aug-2020
		Split:	-	Dilution:	-	Time Analyzed:	10:34:28

Analyte	Conc. (pg/L)	DL (pg/L)	EMPC (pg/L)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	1.43			ES 2378-TCDD	102	
12378-PeCDD	ND	1.42			ES 12378-PeCDD	93.2	
123478-HxCDD	ND	1.27			ES 123478-HxCDD	95.8	
123678-HxCDD	ND	1.25			ES 123678-HxCDD	93.5	
123789-HxCDD	ND	1.3			ES 123789-HxCDD	90.6	
1234678-HpCDD	ND	3.16			ES 1234678-HpCDD	79	
OCDD	ND	7.78			ES OCDD	57.6	
2378-TCDF	ND	0.647			ES 2378-TCDF	102	
12378-PeCDF	ND	0.999			ES 12378-PeCDF	97.1	
23478-PeCDF	ND	0.892			ES 23478-PeCDF	98.7	
123478-HxCDF	ND	0.855			ES 123478-HxCDF	103	
123678-HxCDF	ND	0.793			ES 123678-HxCDF	100	
234678-HxCDF	ND	0.871			ES 234678-HxCDF	102	
123789-HxCDF	ND	1.07			ES 123789-HxCDF	99.6	
1234678-HpCDF	ND	0.92			ES 1234678-HpCDF	90.8	
1234789-HpCDF	ND	1.38			ES 1234789-HpCDF	80.7	
OCDF	ND	3.89			ES OCDF	62.5	
Totals					**Standard**	**CS Recoveries**	
					CS 37Cl-2378-TCDD	103	
Total TCDD	ND	1.43	ND		CS 12347-PeCDD	115	
Total PeCDD	ND	1.42	ND		CS 12346-PeCDF	99	
Total HxCDD	ND	1.27	ND		CS 123469-HxCDF	108	
Total HpCDD	ND		3.33		CS 1234689-HpCDF	95	
Total TCDF	ND	0.647	ND				
Total PeCDF	ND	0.945	ND				
Total HxCDF	ND	0.89	ND				
Total HpCDF	ND	1.12	ND				
Total PCDD/Fs	**ND**		**3.33**				
ITEF TEQs							
TEQ: ND=0	0		0				
TEQ: ND=DL/2	1.76	1.76	1.76				
TEQ: ND=DL	3.51	3.51	3.51				

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Sample ID: EB-03 — TEQ Summary — Method 8290A

Client Project Name:	EarthCon	Matrix:	Aqueous	Lab Sample ID:	B4527_17665_DF_005
Cliend Project ID:	KMCC Navassa	Weight/Volume:	1.00 L	QC Batch No.:	17665
Date Collected:	08-Aug-2020	Split:	-	Date Extracted:	11-Aug-2020
Date Received:	08-Aug-2020	Dilution:	-	Date Analyzed:	13-Aug-2020 10:34
Lab Project No:	B4527	Units	pg/L		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	(1.43)		1.43	(1.43)	(1.43)	(1.43)
12378-PeCDD	(1.42)		1.42	(0.708)	(1.42)	(1.42)
123478-HxCDD	(1.27)		1.27	(0.127)	(0.127)	(0.127)
123678-HxCDD	(1.25)		1.25	(0.125)	(0.125)	(0.125)
123789-HxCDD	(1.3)		1.3	(0.13)	(0.13)	(0.13)
1234678-HpCDD	(3.16)		3.16	(0.0316)	(0.0316)	(0.0316)
OCDD	(7.78)		7.78	(0.00778)	(0.000778)	(0.00233)
2378-TCDF	(0.647)		0.647	(0.0647)	(0.0647)	(0.0647)
12378-PeCDF	(0.999)		0.999	(0.05)	(0.05)	(0.03)
23478-PeCDF	(0.892)		0.892	(0.446)	(0.446)	(0.268)
123478-HxCDF	(0.855)		0.855	(0.0855)	(0.0855)	(0.0855)
123678-HxCDF	(0.793)		0.793	(0.0793)	(0.0793)	(0.0793)
234678-HxCDF	(0.871)		0.871	(0.0871)	(0.0871)	(0.0871)
123789-HxCDF	(1.07)		1.07	(0.107)	(0.107)	(0.107)
1234678-HpCDF	(0.92)		0.92	(0.0092)	(0.0092)	(0.0092)
1234789-HpCDF	(1.38)		1.38	(0.0138)	(0.0138)	(0.0138)
OCDF	(3.89)		3.89	(0.00389)	(0.000389)	(0.00117)

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TEQ Summaries			
EMPC = 0, ND = 0	0	0	0
EMPC = 0, ND = DL / 2	1.76	2.1	2.01
EMPC = 0, ND = DL	3.51	4.21	4.01
EMPC = 0, < J-level = 0	0	0	0
EMPC = EMPC, ND = 0	0	0	0
EMPC = EMPC, ND = DL / 2	1.76	2.1	2.01
EMPC = EMPC, ND = DL	3.51	4.21	4.01
EMPC = EMPC, < J-level = 0	0	0	0

Checkcode: 116-900-HQD

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Sample ID: EB-04

Method 8290A

Client Data		Sample Data		Laboratory Data			
Name:	EarthCon	Matrix:	Aqueous	Lab Project ID:	B4527	Date Received:	08-Aug-2020
Project ID:	KMCC Navassa	Weight/Volume:	1.00 L	Lab Sample ID	B4527_17665_DF_006	Date Extracted:	11-Aug-2020
Date Collected:	08-Aug-2020	pH:	5	QC Batch No:	17665	Date Analyzed:	13-Aug-2020
		Split:	-	Dilution:	-	Time Analyzed:	11:20:58

Analyte	Conc. (pg/L)	DL (pg/L)	EMPC (pg/L)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	3.43			ES 2378-TCDD	107	
12378-PeCDD	ND	4.81			ES 12378-PeCDD	107	
123478-HxCDD	ND	2.05			ES 123478-HxCDD	101	
123678-HxCDD	ND	1.95			ES 123678-HxCDD	101	
123789-HxCDD	ND	2.14			ES 123789-HxCDD	94	
1234678-HpCDD	ND	2.65			ES 1234678-HpCDD	81.2	
OCDD	ND	7.73			ES OCDD	51.7	
2378-TCDF	ND	1.24			ES 2378-TCDF	111	
12378-PeCDF	ND	0.883			ES 12378-PeCDF	113	
23478-PeCDF	ND	0.905			ES 23478-PeCDF	115	
123478-HxCDF	ND	0.893			ES 123478-HxCDF	104	
123678-HxCDF	ND	0.882			ES 123678-HxCDF	101	
234678-HxCDF	ND	0.918			ES 234678-HxCDF	106	
123789-HxCDF	ND	1.11			ES 123789-HxCDF	100	
1234678-HpCDF	ND	1.01			ES 1234678-HpCDF	92.5	
1234789-HpCDF	ND	1.63			ES 1234789-HpCDF	81.3	
OCDF	ND	3.66			ES OCDF	56.2	
Totals					**Standard**	**CS Recoveries**	
					CS 37Cl-2378-TCDD	105	
Total TCDD	ND	3.43	ND		CS 12347-PeCDD	116	
Total PeCDD	ND	4.81	ND		CS 12346-PeCDF	112	
Total HxCDD	ND	2.04	ND		CS 123469-HxCDF	106	
Total HpCDD	ND	2.65	ND		CS 1234689-HpCDF	95.9	
Total TCDF	ND	1.24	ND				
Total PeCDF	ND	0.894	ND				
Total HxCDF	ND	0.943	ND				
Total HpCDF	ND	1.28	ND				
Total PCDD/Fs	**ND**		**ND**				
ITEF TEQs							
TEQ: ND=0	0		0				
TEQ: ND=DL/2	3.76	3.76	3.76				
TEQ: ND=DL	7.51	7.51	7.51				

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Sample ID: EB-04 — TEQ Summary — Method 8290A

Client Project Name:	EarthCon	Matrix:	Aqueous	Lab Sample ID:	B4527_17665_DF_006
Cliend Project ID:	KMCC Navassa	Weight/Volume:	1.00 L	QC Batch No.:	17665
Date Collected:	08-Aug-2020	Split:	-	Date Extracted:	11-Aug-2020
Date Received:	08-Aug-2020	Dilution:	-	Date Analyzed:	13-Aug-2020 11:20
Lab Project No:	B4527	Units	pg/L		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	(3.43)		3.43	(3.43)	(3.43)	(3.43)
12378-PeCDD	(4.81)		4.81	(2.41)	(4.81)	(4.81)
123478-HxCDD	(2.05)		2.05	(0.205)	(0.205)	(0.205)
123678-HxCDD	(1.95)		1.95	(0.195)	(0.195)	(0.195)
123789-HxCDD	(2.14)		2.14	(0.214)	(0.214)	(0.214)
1234678-HpCDD	(2.65)		2.65	(0.0265)	(0.0265)	(0.0265)
OCDD	(7.73)		7.73	(0.00773)	(0.000773)	(0.00232)
2378-TCDF	(1.24)		1.24	(0.124)	(0.124)	(0.124)
12378-PeCDF	(0.883)		0.883	(0.0442)	(0.0442)	(0.0265)
23478-PeCDF	(0.905)		0.905	(0.452)	(0.452)	(0.271)
123478-HxCDF	(0.893)		0.893	(0.0893)	(0.0893)	(0.0893)
123678-HxCDF	(0.882)		0.882	(0.0882)	(0.0882)	(0.0882)
234678-HxCDF	(0.918)		0.918	(0.0918)	(0.0918)	(0.0918)
123789-HxCDF	(1.11)		1.11	(0.111)	(0.111)	(0.111)
1234678-HpCDF	(1.01)		1.01	(0.0101)	(0.0101)	(0.0101)
1234789-HpCDF	(1.63)		1.63	(0.0163)	(0.0163)	(0.0163)
OCDF	(3.66)		3.66	(0.00366)	(0.000366)	(0.0011)

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TEQ Summaries			
EMPC = 0, ND = 0	0	0	0
EMPC = 0, ND = DL / 2	3.76	4.96	4.86
EMPC = 0, ND = DL	7.51	9.91	9.71
EMPC = 0, < J-level = 0	0	0	0
EMPC = EMPC, ND = 0	0	0	0
EMPC = EMPC, ND = DL / 2	3.76	4.96	4.86
EMPC = EMPC, ND = DL	7.51	9.91	9.71
EMPC = EMPC, < J-level = 0	0	0	0

Checkcode: 971-505-XFG

Sample ID: EB-07

Method 8290A

Client Data		Sample Data		Laboratory Data			
Name:	EarthCon	Matrix:	Aqueous	Lab Project ID:	B4527	Date Received:	08-Aug-2020
Project ID:	KMCC Navassa	Weight/Volume:	0.99 L	Lab Sample ID	B4527_17665_DF_007	Date Extracted:	11-Aug-2020
Date Collected:	08-Aug-2020	pH:	5	QC Batch No:	17665	Date Analyzed:	13-Aug-2020
		Split:	-	Dilution:	-	Time Analyzed:	12:07:29

Analyte	Conc. (pg/L)	DL (pg/L)	EMPC (pg/L)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	1.35			ES 2378-TCDD	102	
12378-PeCDD	ND	1.29			ES 12378-PeCDD	92.1	
123478-HxCDD	ND	0.772			ES 123478-HxCDD	92.4	
123678-HxCDD	ND	0.77			ES 123678-HxCDD	88.5	
123789-HxCDD	ND	0.797			ES 123789-HxCDD	82.2	
1234678-HpCDD	ND	3.77			ES 1234678-HpCDD	79.4	
OCDD	ND	6.07			ES OCDD	60.5	
2378-TCDF	ND	0.77			ES 2378-TCDF	101	
12378-PeCDF	ND	0.758			ES 12378-PeCDF	93.5	
23478-PeCDF	ND	0.719			ES 23478-PeCDF	97.2	
123478-HxCDF	ND	0.712			ES 123478-HxCDF	101	
123678-HxCDF	ND	0.68			ES 123678-HxCDF	98.5	
234678-HxCDF	ND	0.764			ES 234678-HxCDF	98.9	
123789-HxCDF	ND	1			ES 123789-HxCDF	92.2	
1234678-HpCDF	ND	0.747			ES 1234678-HpCDF	88.1	
1234789-HpCDF	ND	1.21			ES 1234789-HpCDF	79	
OCDF	ND	4.52			ES OCDF	65.1	
Totals					**Standard**	**CS Recoveries**	
					CS 37Cl-2378-TCDD	101	
Total TCDD	ND	1.35	ND		CS 12347-PeCDD	102	
Total PeCDD	ND	1.29	ND		CS 12346-PeCDF	95.7	
Total HxCDD	ND	0.778	ND		CS 123469-HxCDF	99.2	
Total HpCDD	ND	3.77	ND		CS 1234689-HpCDF	90.9	
Total TCDF	ND	0.77	ND				
Total PeCDF	ND	0.738	ND				
Total HxCDF	ND	0.778	ND				
Total HpCDF	ND	0.947	ND				
Total PCDD/Fs	**ND**		**ND**				
ITEF TEQs							
TEQ: ND=0	0		0				
TEQ: ND=DL/2	1.55	1.55	1.55				
TEQ: ND=DL	3.09	3.09	3.09				

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Sample ID: EB-07 — TEQ Summary — Method 8290A

Client Project Name:	EarthCon	Matrix:	Aqueous	Lab Sample ID:	B4527_17665_DF_007
Cliend Project ID:	KMCC Navassa	Weight/Volume:	0.99 L	QC Batch No.:	17665
Date Collected:	08-Aug-2020	Split:	-	Date Extracted:	11-Aug-2020
Date Received:	08-Aug-2020	Dilution:	-	Date Analyzed:	13-Aug-2020 12:07
Lab Project No:	B4527	Units	pg/L		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	(1.35)		1.35	(1.35)	(1.35)	(1.35)
12378-PeCDD	(1.29)		1.29	(0.647)	(1.29)	(1.29)
123478-HxCDD	(0.772)		0.772	(0.0772)	(0.0772)	(0.0772)
123678-HxCDD	(0.77)		0.77	(0.077)	(0.077)	(0.077)
123789-HxCDD	(0.797)		0.797	(0.0797)	(0.0797)	(0.0797)
1234678-HpCDD	(3.77)		3.77	(0.0377)	(0.0377)	(0.0377)
OCDD	(6.07)		6.07	(0.00607)	(0.000607)	(0.00182)
2378-TCDF	(0.77)		0.77	(0.077)	(0.077)	(0.077)
12378-PeCDF	(0.758)		0.758	(0.0379)	(0.0379)	(0.0227)
23478-PeCDF	(0.719)		0.719	(0.359)	(0.359)	(0.216)
123478-HxCDF	(0.712)		0.712	(0.0712)	(0.0712)	(0.0712)
123678-HxCDF	(0.68)		0.68	(0.068)	(0.068)	(0.068)
234678-HxCDF	(0.764)		0.764	(0.0764)	(0.0764)	(0.0764)
123789-HxCDF	(1)		1	(0.1)	(0.1)	(0.1)
1234678-HpCDF	(0.747)		0.747	(0.00747)	(0.00747)	(0.00747)
1234789-HpCDF	(1.21)		1.21	(0.0121)	(0.0121)	(0.0121)
OCDF	(4.52)		4.52	(0.00452)	(0.000452)	(0.00135)

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TEQ Summaries			
EMPC = 0, ND = 0	0	0	0
EMPC = 0, ND = DL / 2	1.55	1.86	1.79
EMPC = 0, ND = DL	3.09	3.73	3.57
EMPC = 0, < J-level = 0	0	0	0
EMPC = EMPC, ND = 0	0	0	0
EMPC = EMPC, ND = DL / 2	1.55	1.86	1.79
EMPC = EMPC, ND = DL	3.09	3.73	3.57
EMPC = EMPC, < J-level = 0	0	0	0

Checkcode: 786-390-DFC

Sample ID: Method Blank B4527_17665 — Method 8290A

Client Data		Sample Data		Laboratory Data			
Name:	EarthCon	Matrix:	Aqueous	Lab Project ID:	B4527	Date Received:	n/a
Project ID:	KMCC Navassa	Weight/Volume:	1.00 L	Lab Sample ID	MB1_17665_DF_TLX	Date Extracted:	11-Aug-2020
Date Collected:	n/a	pH:	n/a	QC Batch No:	17665	Date Analyzed:	13-Aug-2020
		Split:	-	Dilution:	-	Time Analyzed:	6:41:57

Analyte	Conc. (pg/L)	DL (pg/L)	EMPC (pg/L)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	1.03			ES 2378-TCDD	103	
12378-PeCDD	ND	1.45			ES 12378-PeCDD	93.8	
123478-HxCDD	ND	1.38			ES 123478-HxCDD	92.5	
123678-HxCDD	ND	1.38			ES 123678-HxCDD	90.1	
123789-HxCDD	ND	1.43			ES 123789-HxCDD	85.5	
1234678-HpCDD	8.52			J	ES 1234678-HpCDD	73	
OCDD	41.6			J	ES OCDD	53.7	
2378-TCDF	ND	0.672			ES 2378-TCDF	103	
12378-PeCDF	ND	1.01			ES 12378-PeCDF	98.5	
23478-PeCDF	ND	0.975			ES 23478-PeCDF	99.1	
123478-HxCDF	ND	0.904			ES 123478-HxCDF	99.3	
123678-HxCDF	ND	0.884			ES 123678-HxCDF	98.7	
234678-HxCDF	ND	0.936			ES 234678-HxCDF	99.7	
123789-HxCDF	ND	1.2			ES 123789-HxCDF	92.7	
1234678-HpCDF	ND	1.08			ES 1234678-HpCDF	84.4	
1234789-HpCDF	ND	1.75			ES 1234789-HpCDF	74.4	
OCDF	ND	3.55			ES OCDF	57	
Totals					**Standard**	**CS Recoveries**	
					CS 37Cl-2378-TCDD	101	
Total TCDD	ND	1.03	ND		CS 12347-PeCDD	109	
Total PeCDD	ND	1.45	ND		CS 12346-PeCDF	102	
Total HxCDD	ND	1.39	ND		CS 123469-HxCDF	107	
Total HpCDD	15.8		15.8		CS 1234689-HpCDF	90.1	
Total TCDF	ND	0.672	ND				
Total PeCDF	ND	0.991	ND				
Total HxCDF	ND	0.969	ND				
Total HpCDF	ND	1.37	ND				
Total PCDD/Fs	**57.4**		**57.4**				
ITEF TEQs							
TEQ: ND=0	0.127		0.127				
TEQ: ND=DL/2	1.73	1.62	1.73				
TEQ: ND=DL	3.33	3.24	3.33				

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Sample ID: Method Blank B4527_17665 — TEQ Summary — Method 8290A

Client Project Name:	EarthCon	Matrix:	Aqueous	Lab Sample ID:	MB1_17665_DF_TLX
Cliend Project ID:	KMCC Navassa	Weight/Volume:	1.00 L	QC Batch No.:	17665
Date Collected:	n/a	Split:	-	Date Extracted:	11-Aug-2020
Date Received:	n/a	Dilution:	-	Date Analyzed:	13-Aug-2020 06:41
Lab Project No:	B4527	Units	pg/L		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	(1.03)		1.03	(1.03)	(1.03)	(1.03)
12378-PeCDD	(1.45)		1.45	(0.723)	(1.45)	(1.45)
123478-HxCDD	(1.38)		1.38	(0.138)	(0.138)	(0.138)
123678-HxCDD	(1.38)		1.38	(0.138)	(0.138)	(0.138)
123789-HxCDD	(1.43)		1.43	(0.143)	(0.143)	(0.143)
1234678-HpCDD	8.52	J	2.72	0.0852	0.0852	0.0852
OCDD	41.6	J	9.57	0.0416	0.00416	0.0125
2378-TCDF	(0.672)		0.672	(0.0672)	(0.0672)	(0.0672)
12378-PeCDF	(1.01)		1.01	(0.0503)	(0.0503)	(0.0302)
23478-PeCDF	(0.975)		0.975	(0.487)	(0.487)	(0.292)
123478-HxCDF	(0.904)		0.904	(0.0904)	(0.0904)	(0.0904)
123678-HxCDF	(0.884)		0.884	(0.0884)	(0.0884)	(0.0884)
234678-HxCDF	(0.936)		0.936	(0.0936)	(0.0936)	(0.0936)
123789-HxCDF	(1.2)		1.2	(0.12)	(0.12)	(0.12)
1234678-HpCDF	(1.08)		1.08	(0.0108)	(0.0108)	(0.0108)
1234789-HpCDF	(1.75)		1.75	(0.0175)	(0.0175)	(0.0175)
OCDF	(3.55)		3.55	(0.00355)	(0.000355)	(0.00107)

TEQ Summaries			
EMPC = 0, ND = 0	0.127	0.0894	0.0977
EMPC = 0, ND = DL / 2	1.73	2.05	1.95
EMPC = 0, ND = DL	3.33	4.01	3.81
EMPC = 0, < J-level = 0	0	0	0
EMPC = EMPC, ND = 0	0.127	0.0894	0.0977
EMPC = EMPC, ND = DL / 2	1.73	2.05	1.95
EMPC = EMPC, ND = DL	3.33	4.01	3.81
EMPC = EMPC, < J-level = 0	0	0	0

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Checkcode: 927-055-PQH

METHOD 8290A **PCDD/F ONGOING PRECISION AND RECOVERY (OPR)** **FORM 8A**

Lab Name: SGS North America
Initial Calibration: ICAL: HRMS3_DF_10122018_28AUG2019
Instrument ID: HRMS3 GC Column ID: ZB-5ms
VER Data Filename: 200812C23 Analysis Date: 13-AUG-2020 05:09:21
Lab ID: OPR1_17665_DF

NATIVE ANALYTES	SPIKE CONC.	CONC. FOUND	RANGE (ng/mL)			OK
2,3,7,8-TCDD	10	10.2	6.7	-	15.8	Y
1,2,3,7,8-PeCDD	50	51	35	-	71	Y
1,2,3,4,7,8-HxCDD	50	57.1	35	-	82	Y
1,2,3,6,7,8-HxCDD	50	55.1	38	-	67	Y
1,2,3,7,8,9-HxCDD	50	55.4	32	-	81	Y
1,2,3,4,6,7,8-HpCDD	50	55.3	35	-	70	Y
OCDD	100	115	78	-	144	Y
2,3,7,8-TCDF	10	11.5	7.5	-	15.8	Y
1,2,3,7,8-PeCDF	50	51.7	40	-	67	Y
2,3,4,7,8-PeCDF	50	57.5	34	-	80	Y
1,2,3,4,7,8-HxCDF	50	52.6	36	-	67	Y
1,2,3,6,7,8-HxCDF	50	51.1	42	-	65	Y
2,3,4,6,7,8-HxCDF	50	55.4	35	-	78	Y
1,2,3,7,8,9-HxCDF	50	51.5	39	-	65	Y
1,2,3,4,6,7,8-HpCDF	50	51.5	41	-	61	Y
1,2,3,4,7,8,9-HpCDF	50	49.4	39	-	69	Y
OCDF	100	104	63	-	170	Y

Contract-required concentration limits for OPR as specified in Table 6,
Method 1613. 10/94

Processed: 13 Aug 2020 15:16 Analyst: TF

METHOD 8290A **PCDD/F ONGOING PRECISION AND RECOVERY (OPR)** **FORM 8B**

Lab Name: SGS North America
Initial Calibration: ICAL: HRMS3_DF_10122018_28AUG2019
Instrument ID: HRMS3 GC Column ID: ZB-5ms
VER Data Filename: 200812C23 Analysis Date: 13-AUG-2020 05:09:21
Lab ID: OPR1_17665_DF

LABELED ANALYTES	SPIKE CONC.	CONC. FOUND	RANGE (ng/mL)			OK
13C-2,3,7,8-TCDD	100	99.8	20	-	175	Y
13C-1,2,3,7,8-PeCDD	100	92.6	21	-	227	Y
13C-1,2,3,4,7,8-HxCDD	100	88.7	21	-	193	Y
13C-1,2,3,6,7,8-HxCDD	100	88.1	25	-	163	Y
13C-1,2,3,7,8,9-HxCDD	100	82.7	26	-	166	Y
13C-1,2,3,4,6,7,8-HpCDD	100	79.4	26	-	166	Y
13C-OCDD	200	127	26	-	397	Y
13C-2,3,7,8-TCDF	100	102	22	-	152	Y
13C-1,2,3,7,8-PeCDF	100	95.3	21	-	192	Y
13C-2,3,4,7,8-PeCDF	100	95.1	13	-	328	Y
13C-1,2,3,4,7,8-HxCDF	100	100	19	-	202	Y
13C-1,2,3,6,7,8-HxCDF	100	96.2	21	-	159	Y
13C-2,3,4,6,7,8-HxCDF	100	94.4	22	-	176	Y
13C-1,2,3,7,8,9-HxCDF	100	98.1	17	-	205	Y
13C-1,2,3,4,6,7,8-HpCDF	100	87.2	21	-	158	Y
13C-1,2,3,4,7,8,9-HpCDF	100	84.8	20	-	186	Y
13C-OCDF	200	136	26	-	397	Y
CLEANUP STANDARD						
37Cl-2,3,7,8-TCDD	40	42.2	12.4	-	76.4	Y

Contract-required concentration limits for OPR as specified in Table 6,
Method 1613. 10/94

Processed: 13 Aug 2020 15:16 Analyst: TF

Sample Receipt Notification

5500 Business Drive
Wilmington, NC 28405 USA
Tel: 910 794-1613
Toll Free: 866 846-8290
Fax: 910 794-3919

Project Manager:	*Tamara Burkamper*
Receipt Date & Time:	*08-Aug-20 at 17:00*
AP Project name:	*B4527*
Requested TAT:	*3 business days*
Projected due date:	*14-Aug-20*
Matrix:	*Aqueous*
Phone#:	*910-794-1613*
Email Address:	*Tamara.Morgan@sgs.com*

Company Contact:	*Mary Brookshire*
Company:	*EarthCon*
Project Name & Site:	*KMCC Navassa*
Project PO#:	*02.20200007.00*
QAAP/Contract #:	*on file*
Requested Analysis:	*SW-846 Method 8290A*
Phone#:	*404-317-7748*
Email Address:	*mbrookshire@earthcon.com*

Client Smp ID	AP Smp ID	Sample Condition & Notes	Quantity	Size	Sampling Date	Sampling Time	Received Temp (°C)	Container #	Shipping #
FB-01	B4527_001	AQ	1	1 L Amber	08-Aug-20	08:30	0.2	1	n/a
EB-01	B4527_002	AQ	1	1 L Amber	08-Aug-20	08:45	0.2	1	n/a
FB-02	B4527_003	AQ	1	1 L Amber	08-Aug-20	08:30	1.7	2	n/a
EB-02	B4527_004	AQ	1	1 L Amber	08-Aug-20	09:20	1.7	2	n/a
EB-03	B4527_005	AQ	1	1 L Amber	08-Aug-20	08:35	1.7	2	n/a
EB-04	B4527_006	AQ	1	1 L Amber	08-Aug-20	08:45	1.7	2	n/a
EB-07	B4527_007	AQ	1	1 L Amber	08-Aug-20	14:30	1.7	2	n/a

Preservation Type: **Sample Seals:** No

Notes/Comments:

Samples received intact

Any un-extracted sample will be stored for 90 days from reporting date. Additional storage fees may apply for any samples stored longer than 90 days.

Received by: Jeannie Milholland *Logged in by: Tamara Burkamper* *QC'ed by:* AK 10 Aug 20

All services are rendered in accordance with the applicable SGS General Conditions of Service accessible via: http://www.sgs.com/terms_and_conditions.htm

B4527 1/2

Rush - 3 day TAT
002

SGS North America Inc - Orlando

Chain of Custody

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SGS - ~~ORLANDO~~ JOB # :

PAGE 1 OF 2

SGS - ORLANDO Quote #

SKIFF #

Client / Reporting Information

Company Name: EarthCon
Address: 1880 W. Oak PKwy
City: Marietta State: GA Zip: 30062
Project Contact: M Brookshire Email: mbrookshire@earthcon.com
Phone #: 404-317-7748
Sampler(s) Name(s) (Printed)
Sampler 1: D. Fulton Sampler 2: S. Tyler

Project Information

Project Name: KMCC Navassa
Street 120 Quality Dr
City Navassa State NC
Project # 02.20200007.00
Fax #
Client Purchase Order #

Analytical Information

Dioxins/Furans (8290)

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid

SGS ~~Orlando~~ Sample #	Field ID / Point of Collection	COLLECTION DATE	TIME	SAMPLED BY:	CONTAINER INFORMATION MATRIX	TOTAL # OF BOTTLES	OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NAOH+ZNA	DI WATER	MEOH	Dioxins/Furans (8290)	LAB USE ONLY
	CS-TWSB27	8/7/20	1510	DF	SO	1		1								1	
	CS-56	8/7/20	1530	ST	SO	1		1								1	
* 001	FB-01	8/8/20	0830	CT	AQ	1		1								1	
* 002	EB-01	8/8/20	0845	CT	AQ	1		1								1	
	CS-60	8/8/20	1015	ST	SO	1		1								1	
	CS-60 MS	8/8/20	1015	ST	SO	1		1								1	
	CS-60 MSD	8/8/20	1015	ST	SO	1		1								1	
	CS-61	8/8/20	1030	ST	SO	1		1								1	
	CS-62	8/8/20	1050	ST	SO	1		1								1	
	CS-64	8/8/20	1140	ST	SO	1		1								1	
	CS-63	8/8/20	1120	ST	SO	1		1								1	
	DUP-05	8/8/20	-	ST	SO	1		1								1	

Turnaround Time (Business days)

10 Day (Business) Approved By: / Date:
7 Day
5 Day
3 Day *RUSH*
2 Day *RUSH*
1 Day *RUSH*
Other
Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- [ ] COMMERCIAL "A" (RESULTS ONLY)
- [ ] COMMERCIAL "B" (RESULTS PLUS QC)
- [ ] REDT1 (EPA LEVEL 3)
- [ ] FULLT1 (EPA LEVEL 4)
- [ ] EDD'S

Comments / Remarks

RUSH - 3 DAY TAT

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
1		8/8/20 1700	2	3		4
5	Relinquished by/Affiliation	Date Time:	6 Received By/Affiliation	7 Relinquished By/Affiliation	Date Time:	8 Received By/Affiliation

Lab Use Only : Cooler Temperature (s) Celsius (corrected): 0.2°C

* Samples in this SDG FB 8/10/2020

B4527 2/2 Rush - 3 day TAT OUI

SGS North America Inc - Orlando
Chain of Custody

SGS

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 FAX: 407-425-0707
www.sgs.com

SGS - ~~ORLANDO~~ JOB # : ~~PAGE 1 OF 1~~

SGS - ORLANDO Quote # | SKIFF #

Client / Reporting Information

Company Name: EarthCon
Address: 1880 W. Oak Pkwy
City: Marietta State: GA Zip: 30062
Project Contact: M. Brookshire Email: mbrookshire@earthcon.com
Phone #: 404-317-7748
Sampler(s) Name(s) (Printed)
Sampler 1: Sampler 2:

Project Information

Project Name: KMCC Navassa
Street: 120 Quality Dr
City: Navassa State: NC
Project #: 02.20200007.00
Fax #:
Client Purchase Order #:

Analytical Information: Dioxins/Furans (8290)

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL - Sludge; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid

SGS ~~Orlando~~ Sample #	Field ID / Point of Collection	COLLECTION DATE	TIME	SAMPLED BY:	MATRIX	TOTAL # OF BOTTLES	OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NAOH+ZNA	DI WATER	MEOH	Dioxins/Furans (8290)	LAB USE ONLY
	CS-55	8/7/20	1502	ST	SO	1	X	1								1	
	CS-50	8/7/20	1715	ST	SO	1		1								1	
	CS-51	8/7/20	1705	DF	SO	1		1								1	
* 003	EB-02	8/8/20	0830	DF	AQ	1		1								1	
* 004	EB-02	8/8/20	0920	CT	AQ	1		1								1	
* 005	EB-03	8/8/20	0835	DF	AQ	1		1								1	
* 006	EB-04	8/8/20	0845	DF	AQ	1		1								1	
	CS-48	8/8/20	0900	ST	SO	1		1								1	
	CS-52	8/8/20	0930	DF	SO	1		1								1	
	DUP-03	8/8/20	—	ST	SO	1		1								1	
	CS-49	8/8/20	0840	ST	SO	1		1								1	
* 007	EB-07	8/8/20	1430	CT	~~SO~~ AQ	1		1								1	

Turnaround Time (Business days)

10 Day (Business) Approved By: / Date:
7 Day
5 Day
3 Day *RUSH* (circled)
2 Day *RUSH*
1 Day *RUSH*
Other

Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- ☐ COMMERCIAL "A" (RESULTS ONLY)
- ☐ COMMERCIAL "B" (RESULTS PLUS QC)
- ☐ REDT1 (EPA LEVEL 3)
- ☐ FULLT1 (EPA LEVEL 4)
- ☐ EDD'S

Comments / Remarks

Rush TAT - 3 days

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
1 [signature]	8/8/20 1700	2 Jeannie Milhollan	3		4
Relinquished by/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
5		6	7		8

Lab Use Only : Cooler Temperature (s) Celsius (corrected): 15.0 → received packed on ice, temp blank @ 1.7°C http://www.sgs.com/en/terms-and-conditions

* Samples in this SDG TB 8/10/20

ORLD-SMT-0001-03-FORM-COC (4).xls Rev 031318

Project Initiation Form

Project Number:	B4527	Initiation Date:	10-Aug-20
Client Name:	EarthCon	Sample Matrix:	Aqueous
Analysis Method:	8290 PCDD/F	TAT:	3 days
		Project Manager:	Tamara

Special Instructions

M8290A w/OPR

1L extraction

Reporting Instructions

M8290A w/OPR

~~Basic Report~~ Full Report TBS 8/18/20 20

EQUIS4 file with headers and w/o VVL validation

EPA Region 4 Equis

PM Initials: akornegay Date: 10-Aug-20

SGS

Methods: PCB PAH | (PCDD/F) WHO-2 | QUANTICS USV PEST | Extraction Type: SDS (CLL) TALEX Carbon SPE | Aqueous | Final Volume: 20uL

Batch# 17665 | Split: ~~1/2~~ ~~1/4~~ | Extract Initial/Date: AM 8/11/2020 | Clean-up Initial/Date: RBS 8/12/2020 | Transfer Init/Date: RBS 8/12/2020

Lab Sample ID	Extraction Position / Solvent: DCM	Extraction Weight/Volume g	mL	(Td)	ASECS #	pH	Cl⁻	Observations
B4527_17665_001	3	971.4				5	ø	Clear
B4527_17665_002	4	935.3				5	ø	Clear
B4527_17665_003	5	1011.8				5	ø	Clear
B4527_17665_004	6	992.3				5	ø	Clear
B4527_17665_005	7	998.2				5	ø	Clear
B4527_17665_006	8	995.6				5	ø	clear
B4527_17665_007	9	987.6				5	ø	Clear
MB1_17665	1	1000				5	ø	DISTILLED H_2O
OPR1_17665	2	1000				5	ø	DISTILLED H_2O

RBS 8/12/2020

Supply IDs

Toluene	N/A
MeCHL	STL13-8
Florisil	SPL4-289B
Hexane	STL13-7
Silica	SPL4-277B
S Nitrate	N/A
Base Silica	N/A
HydroMatrix	N/A
Tetradecane	SPL4-277A
H_2SO_4	N/A
A Silica	SPL4-287
Sodium Sulfate	SPL4-264A

Additional Cleanup

Acid Partition Date/Initial:	
Mini-Acid Date/Initial:	
Carbon Column Date/Initial:	TB 08/13/2020
GPC Date/Initial:	
Bond-Elute Date/Initial:	

Cycle Time

TOL	Start:
	Stop:
HEX	Start:
	Stop:
DCM	Start: 12:15 pm
	Stop: 0745

SGS

Methods: PCB PCDD/F QUANTICS PAH WHO-2 USV PEST

Aqueous

Batch# 17665

Inter-Department Communication Sheet

TB 08/13/2020

SGS

Methods: PCB / PAH — PCDD/F / WHO-2 — QUANTICS / USV — PEST

Aqueous

Batch # 17665

Spiker Initials/Date:	AH 8/11/20	AH 8/11/20	AH 8/11/20	8/12/2020	8/12/2020		
Lab Sample ID	D/F Ax-A Amount: 20µL Observer Initials	D/F Ax-B Amount: 20µL Observer Initials	D/F ES Amount: 20µL Observer Initials	D/F CS Amount: 20µL Observer Initials	D/F JS Amount: 20µL Observer Initials	Amount: Observer Initials	Amount: Observer Initials
B4527_17665_001	–	–					
B4527_17665_002	–	–					
B4527_17665_003	–	–					
B4527_17665_004	–	–					
B4527_17665_005	–	–					
B4527_17665_006	–	–					
B4527_17665_007	–	–					
MB1_17665	–	–					
OPR1_17665							
	8/11/2020	8/11/2020	8/11/2020	8/12/20	8/12/20		

8/12/2020

Standard Information							
Spike ID	D/F Ax-A	D/F Ax-B	D/F ES	D/F CS	D/F JS		
SIL #	23-12-15	20-638-2	24-2-1	23-441-1	23-441-2		
Concentration	10 ng/mL	10 pg/uL	100 pg/uL	100 pg/µL	100 pg/µL		
Expiration Date	4/7/25	6/17/21	8/2028	5/21/21	5/21/21		

Instrument: HRMS3 (AutoSpec-Ultima) MS Experiment: df_cl4-8_db5MS GC Program: df_db5MS

#	Datafile	Vial#	Lab ID	Wt/Vol	Client/Sample ID	Analyst(s)	Checkcode	Acq Date	Acq Time
22	200812C22	3	CS3_200812_DF_CB	1.00	20-449-3	DTF	592-361	13-Aug-2020	04:14:45
23	200812C23	16	OPR1_17665_DF	1.00	0_17665_OPR001	DTF	127-038	13-Aug-2020	05:09:21
24	200812C24	2	SBS_200812_DF_CE	1.00	20-61-1	DTF	573-669	13-Aug-2020	05:55:28
25	200812C25	15	MB1_17665_DF_TLX	1.00	Method Blank	DTF	927-055	13-Aug-2020	06:41:57
26	200812C26	17	B4527_17665_DF_001	0.97	FB-01	DTF	072-886	13-Aug-2020	07:28:26
27	200812C27	18	B4527_17665_DF_002	0.94	EB-01	DTF	845-465	13-Aug-2020	08:14:56
28	200812C28	19	B4527_17665_DF_003	1.01	FB-02	DTF	458-339	13-Aug-2020	09:01:25
29	200812C29	20	B4527_17665_DF_004	0.99	EB-02	DTF	901-073	13-Aug-2020	09:47:57
30	200812C30	21	B4527_17665_DF_005	1.00	EB-03	DTF	116-900	13-Aug-2020	10:34:28
31	200812C31	22	B4527_17665_DF_006	1.00	EB-04	DTF	971-505	13-Aug-2020	11:20:58
32	200812C32	23	B4527_17665_DF_007	0.99	EB-07	DTF	786-390	13-Aug-2020	12:07:29
33	200812C33	2	SBS_200812_DF_CF	1.00	20-61-1	DTF	699-822	13-Aug-2020	12:54:00
34	200812C34	3	CS3_200812_DF_CC	1.00	20-449-3	DTF	047-105	13-Aug-2020	13:40:25

REVIEWED
Amber_Kornegay , 16:33:10, 08/13/2020

REVIEWED
By Tyler_Fritz at 3:43 pm, Aug 13, 2020

Lab ID: MB1_17665_DF_TLX **Acq'd:** 13 Aug 2020 06:41 DTF **Wt/Vol:** 1.00 L **ICAL:** HRMS3_DF_10122018_28AUG2019

Client ID: Method Blank B4527_17665 **UTP:** 13-Aug-2020 15:11:52 DTF **J-level:** 5 pg/L **Split:** 1 **Checkcode:** 927-055-PQH

Datafile: 200812C25 **Report:** 13 Aug 2020 15:16 TF **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	NotFnd		1.0008	-		-	-	-	1.19	-	3677	1.03
12378-PeCDD	NotFnd		1.0006	-		-	-	-	0.98	-	4238	1.45
123478-HxCDD	NotFnd		1.0004	-		-	-	-	1.02	-	3407	1.38
123678-HxCDD	NotFnd		1.0036	-		-	-	-	1.09	-	3407	1.38
123789-HxCDD	NotFnd		1.0118	-		-	-	-	0.97	-	3407	1.43
1234678-HpCDD	40.19	J	1.0003	1.0003	0	1.30E+05	1.17	Y	0.98	8.52	3868	2.72
OCDD	42.93	J	1.0003	1.0004	+0.3	3.57E+05	0.98	Y	1.07	41.6	4503	9.57
2378-TCDF	NotFnd		1.0009	-		-	-	-	1.01	-	2995	0.672
12378-PeCDF	NotFnd		1.0006	-		-	-	-	0.96	-	4204	1.01
23478-PeCDF	NotFnd		1.0005	-		-	-	-	0.99	-	4204	0.975
123478-HxCDF	NotFnd		1.0005	-		-	-	-	1.21	-	3346	0.904
123678-HxCDF	NotFnd		1.0005	-		-	-	-	1.11	-	3346	0.884
234678-HxCDF	NotFnd		1.0004	-		-	-	-	1.12	-	3346	0.936
123789-HxCDF	NotFnd		1.0005	-		-	-	-	1.11	-	3346	1.2
1234678-HpCDF	NotFnd		1.0003	-		-	-	-	1.32	-	2810	1.08
1234789-HpCDF	NotFnd		1.0003	-		-	-	-	1.26	-	2810	1.75
OCDF	NotFnd		1.0003	-		-	-	-	1.03	-	2348	3.55

Name	Act RT	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	26.90	1.0266	1.0269	+0.5	6.93E+07	0.81	Y	0.99	103
ES 12378-PeCDD	32.62	1.2430	1.2452	+4.3	5.29E+07	1.57	Y	0.83	93.8
ES 123478-HxCDD	36.68	0.9916	0.9916	0	4.16E+07	1.28	Y	0.95	92.5
ES 123678-HxCDD	36.80	0.9947	0.9946	-0.2	4.17E+07	1.24	Y	0.98	90.1
ES 123789-HxCDD	37.10	1.0029	1.0028	-0.2	4.61E+07	1.25	Y	1.14	85.5
ES 1234678-HpCDD	40.18	1.0851	1.0860	+2.2	3.11E+07	1.07	Y	0.90	73
ES OCDD	42.91	1.1584	1.1599	+3.9	3.20E+07	0.92	Y	0.63	53.7
ES 2378-TCDF	25.94	1.0602	1.0609	+1.1	1.01E+08	0.81	Y	1.00	103
ES 12378-PeCDF	31.08	1.2683	1.2711	+5.2	8.12E+07	1.56	Y	0.83	98.5
ES 23478-PeCDF	32.25	1.3156	1.3187	+6.0	7.93E+07	1.55	Y	0.81	99.1
ES 123478-HxCDF	35.67	0.9644	0.9641	-0.6	5.29E+07	0.52	Y	1.12	99.3
ES 123678-HxCDF	35.81	0.9682	0.9680	-0.4	6.23E+07	0.53	Y	1.33	98.7
ES 234678-HxCDF	36.49	0.9864	0.9864	0	5.71E+07	0.53	Y	1.21	99.7
ES 123789-HxCDF	37.47	1.0128	1.0128	0	4.92E+07	0.55	Y	1.12	92.7
ES 1234678-HpCDF	39.15	1.0578	1.0583	+1.2	3.70E+07	0.46	Y	0.92	84.4
ES 1234789-HpCDF	40.61	1.0967	1.0977	+2.4	2.89E+07	0.47	Y	0.82	74.4
ES OCDF	43.05	1.1623	1.1637	+3.6	4.21E+07	0.92	Y	0.78	57

Lab ID: MB1_17665_DF_TLX | Acq'd: 13 Aug 2020 06:41 DTF | Wt/Vol: 1.00 L | ICAL: HRMS3_DF_10122018_28AUG2019

Client ID: Method Blank B4527_17665 | UTP: 13-Aug-2020 15:11:52 DTF | J-level: 5 pg/L | Split: 1 | Checkcode: 927-055-PQH

Datafile: 200812C25 | Report: 13 Aug 2020 15:16 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
JS 1234-TCDD	26.19		-	-	-	6.80E+07	0.80	Y	-	-
JS 1234-TCDF	24.45		-	-	-	9.93E+07	0.79	Y	-	-
JS 123467-HxCDD	37.00		-	-	-	2.37E+07	1.22	Y	-	-
CS 37Cl-2378-TCDD	26.92		1.0276	1.0277	+0.2	3.09E+07	n/a	-	1.12	101
CS 12347-PeCDD	32.10		1.2233	1.2254	+4.0	5.27E+07	1.55	Y	0.71	109
CS 12346-PeCDF	30.53		1.2459	1.2485	+4.8	8.19E+07	1.54	Y	0.81	102
CS 123469-HxCDF	36.13		0.9767	0.9765	-0.4	5.70E+07	0.54	Y	1.12	107
CS 1234689-HpCDF	39.60		1.0696	1.0703	+1.7	3.83E+07	0.45	Y	0.90	90.1
~~SS 37Cl-2378-TCDD~~	~~26.92~~		~~1.0276~~	~~1.0277~~	~~+0.2~~	~~3.09E+07~~	~~n/a~~		~~1.14~~	~~97.5~~
~~SS 12347-PeCDD~~	~~32.10~~		~~1.2233~~	~~1.2254~~	~~+4.0~~	~~5.27E+07~~	~~1.55~~	~~Y~~	~~0.86~~	~~116~~
~~SS 12346-PeCDF~~	~~30.53~~		~~1.2459~~	~~1.2485~~	~~+4.8~~	~~8.19E+07~~	~~1.54~~	~~Y~~	~~0.98~~	~~103~~
~~SS 123469-HxCDF~~	~~36.13~~		~~0.9767~~	~~0.9765~~	~~-0.4~~	~~5.70E+07~~	~~0.54~~	~~Y~~	~~0.85~~	~~108~~
~~SS 1234689-HpCDF~~	~~39.60~~		~~1.0696~~	~~1.0703~~	~~+1.7~~	~~3.83E+07~~	~~0.45~~	~~Y~~	~~0.97~~	~~106~~

Totals	Conc	EMPC
Total TCDD	0	0
Total PeCDD	0	0
Total HxCDD	0	0
Total HpCDD	15.8	15.8
Total Tetra-Octa Dioxins	57.4	57.4
Total TCDF	0	0
Total PeCDF	0	0
Total HxCDF	0	0
Total HpCDF	0	0
Total Tetra-Octa Furans	0	0
Total Tetra-Octa Dioxins & Furans	57.4	57.4

Lab ID: MB1_17665_DF_TLX **Acq'd:** 13 Aug 2020 06:41 DTF **Wt/Vol:** 1.00 L **ICAL:** HRMS3_DF_10122018_28AUG2019

Client ID: Method Blank B4527_17665 **UTP:** 13-Aug-2020 15:11:52 DTF **J-level:** 5 pg/L **Split:** 1 **Checkcode:** 927-055-PQH

Datafile: 200812C25 **Report:** 13 Aug 2020 15:16 TF **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1368-TCDD	NotFnd		0.8523						1.19		3677	1.03
1379-TCDD	NotFnd		0.8682						1.19		3677	1.03
1369-TCDD	NotFnd		0.8858						1.19		3677	1.03
1469-TCDD	NotFnd		0.9177						1.19		3677	1.03
1247/1246/1248/1249-TCDD	NotFnd		0.9274						1.19		3677	1.03
1378-TCDD	NotFnd		0.9349						1.19		3677	1.03
1268-TCDD	NotFnd		0.9430						1.19		3677	1.03
1478-TCDD	NotFnd		0.9529						1.19		3677	1.03
1279-TCDD	NotFnd		0.9597						1.19		3677	1.03
1234/1269-TCDD	NotFnd		0.9739						1.19		3677	1.03
1236-TCDD	NotFnd		0.9794						1.19		3677	1.03
1237/1238-TCDD	NotFnd		0.9895						1.19		3677	1.03
1239-TCDD	NotFnd		0.9950						1.19		3677	1.03
2378-TCDD	**NotFnd**		**1.0008**						**1.19**		**3677**	**1.03**
1278-TCDD	NotFnd		1.0139						1.19		3677	1.03
1267-TCDD	NotFnd		1.0194						1.19		3677	1.03
1289-TCDD	NotFnd		1.0397						1.19		3677	1.03
12479/12468-PeCDD	NotFnd		0.9209						0.98		4238	1.45
12469-PeCDD	NotFnd		0.9382						0.98		4238	1.45
12368-PeCDD	NotFnd		0.9557						0.98		4238	1.45
12478-PeCDD	NotFnd		0.9617						0.98		4238	1.45
12379-PeCDD	NotFnd		0.9649						0.98		4238	1.45
12369/12467/12489-PeCDD	NotFnd		0.9732						0.98		4238	1.45
12346/12347-PeCDD	NotFnd		0.9850						0.98		4238	1.45
12378-PeCDD	NotFnd		**1.0006**						**0.98**		**4238**	**1.45**
12367-PeCDD	NotFnd		1.0038						0.98		4238	1.45
12389-PeCDD	NotFnd		1.0146						0.98		4238	1.45
124679/124689-HxCDD	NotFnd		0.9530						1.03		3407	1.39
123468-HxCDD	NotFnd		0.9715						1.03		3407	1.39
123679/123689-HxCDD	NotFnd		0.9795						1.03		3407	1.39
123469-HxCDD	NotFnd		0.9832						1.03		3407	1.39
123478-HxCDD	NotFnd		**1.0004**						1.02		**3407**	**1.38**
123678-HxCDD	NotFnd		**1.0036**						1.09		**3407**	**1.38**
123467-HxCDD	NotFnd		1.0089						1.03		3407	1.39
123789-HxCDD	NotFnd		**1.0118**						0.97		**3407**	**1.43**

Lab ID: MB1_17665_DF_TLX **Acq'd:** 13 Aug 2020 06:41 DTF **Wt/Vol:** 1.00 L **ICAL:** HRMS3_DF_10122018_28AUG2019

Client ID: Method Blank B4527_17665 **UTP:** 13-Aug-2020 15:11:52 DTF **J-level:** 5 pg/L **Split:** 1 **Checkcode:** 927-055-PQH

Datafile: 200812C25 **Report:** 13 Aug 2020 15:16 TF **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

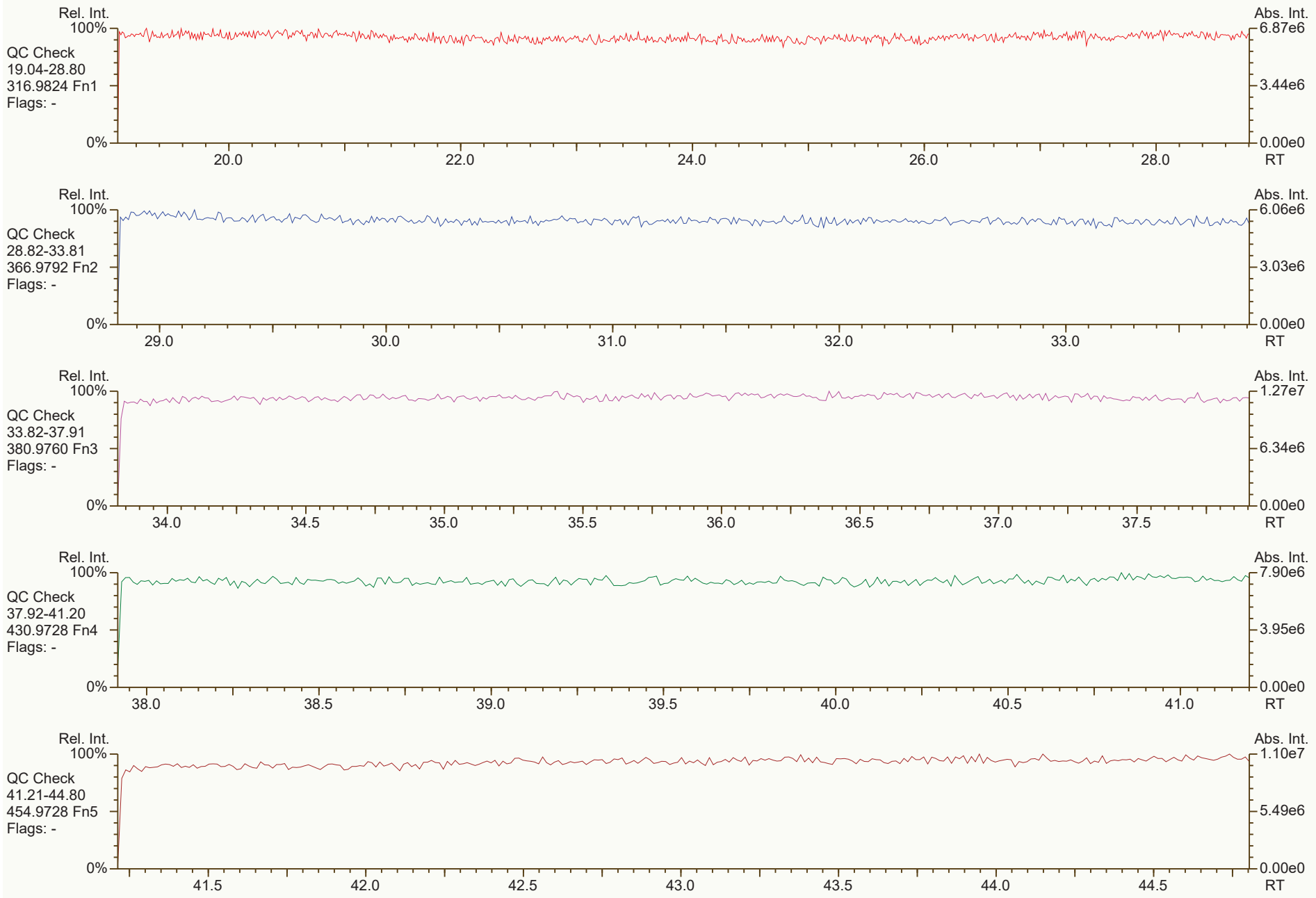
Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1234679-HpCDD	39.47	J	0.9826	0.9824	-0.5	1.10E+05	1.03	Y	0.98	7.23	3868	2.72
1234678-HpCDD	**40.19**	J	**1.0003**	**1.0003**	**0**	**1.30E+05**	**1.17**	**Y**	**0.98**	**8.52**	**3868**	**2.72**
OCDD	**42.93**	**J**	**1.0003**	**1.0004**	**+0.3**	**3.57E+05**	**0.98**	**Y**	**1.07**	**41.6**	**4503**	**9.57**
OCDD-a	NotFnd	**#VALUE!**	1.0002						-		5091	#VALUE!
1368-TCDF	NotFnd		0.7980						1.01		2995	0.672
1468-TCDF	NotFnd		0.8204						1.01		2995	0.672
2468-TCDF	NotFnd		0.8443						1.01		2995	0.672
1346/1246-TCDF	NotFnd		0.8597						1.01		2995	0.672
1347/1378/1247-TCDF	NotFnd		0.8665						1.01		2995	0.672
1348-TCDF	NotFnd		0.8785						1.01		2995	0.672
1248/1367/1379-TCDF	NotFnd		0.8840						1.01		2995	0.672
1268-TCDF	NotFnd		0.9004						1.01		2995	0.672
1467-TCDF	NotFnd		0.9060						1.01		2995	0.672
1478-TCDF	NotFnd		0.9132						1.01		2995	0.672
1369/1237-TCDF	NotFnd		0.9287						1.01		2995	0.672
2467-TCDF	NotFnd		0.9345						1.01		2995	0.672
2368-TCDF	NotFnd		0.9409						1.01		2995	0.672
1238/1234/1678/1469/1236-TCDF	NotFnd		0.9450						1.01		2995	0.672
1278-TCDF	NotFnd		0.9638						1.01		2995	0.672
1349-TCDF	NotFnd		0.9685						1.01		2995	0.672
1267-TCDF	NotFnd		0.9751						1.01		2995	0.672
2346/1249-TCDF	NotFnd		0.9831						1.01		2995	0.672
2347/1279-TCDF	NotFnd		0.9920						1.01		2995	0.672
2348-TCDF	NotFnd		0.9964						1.01		2995	0.672
2378-TCDF	**NotFnd**		**1.0009**						**1.01**		**2995**	**0.672**
2367/3467-TCDF	NotFnd		1.0164						1.01		2995	0.672
1269-TCDF	NotFnd		1.0259						1.01		2995	0.672
1239-TCDF	NotFnd		1.0373						1.01		2995	0.672
1289-TCDF	NotFnd		1.0838						1.01		2995	0.672
13468/12468-PeCDF	NotFnd		0.9052						0.98		3943	0.929
13678/13467/12467-PeCDF	NotFnd		0.9582						0.98		4204	0.991
12368/13478/12478-PeCDF	NotFnd		0.9634						0.98		4204	0.991
14678-PeCDF	NotFnd		0.9668						0.98		4204	0.991
13479-PeCDF	NotFnd		0.9700						0.98		4204	0.991
13469/12479-PeCDF	NotFnd		0.9781						0.98		4204	0.991
12346-PeCDF	NotFnd		0.9829						0.98		4204	0.991

Lab ID: MB1_17665_DF_TLX | Acq'd: 13 Aug 2020 06:41 DTF | Wt/Vol: 1.00 L | ICAL: HRMS3_DF_10122018_28AUG2019

Client ID: Method Blank B4527_17665 | UTP: 13-Aug-2020 15:11:52 DTF | J-level: 5 pg/L | Split: 1 | Checkcode: 927-055-PQH

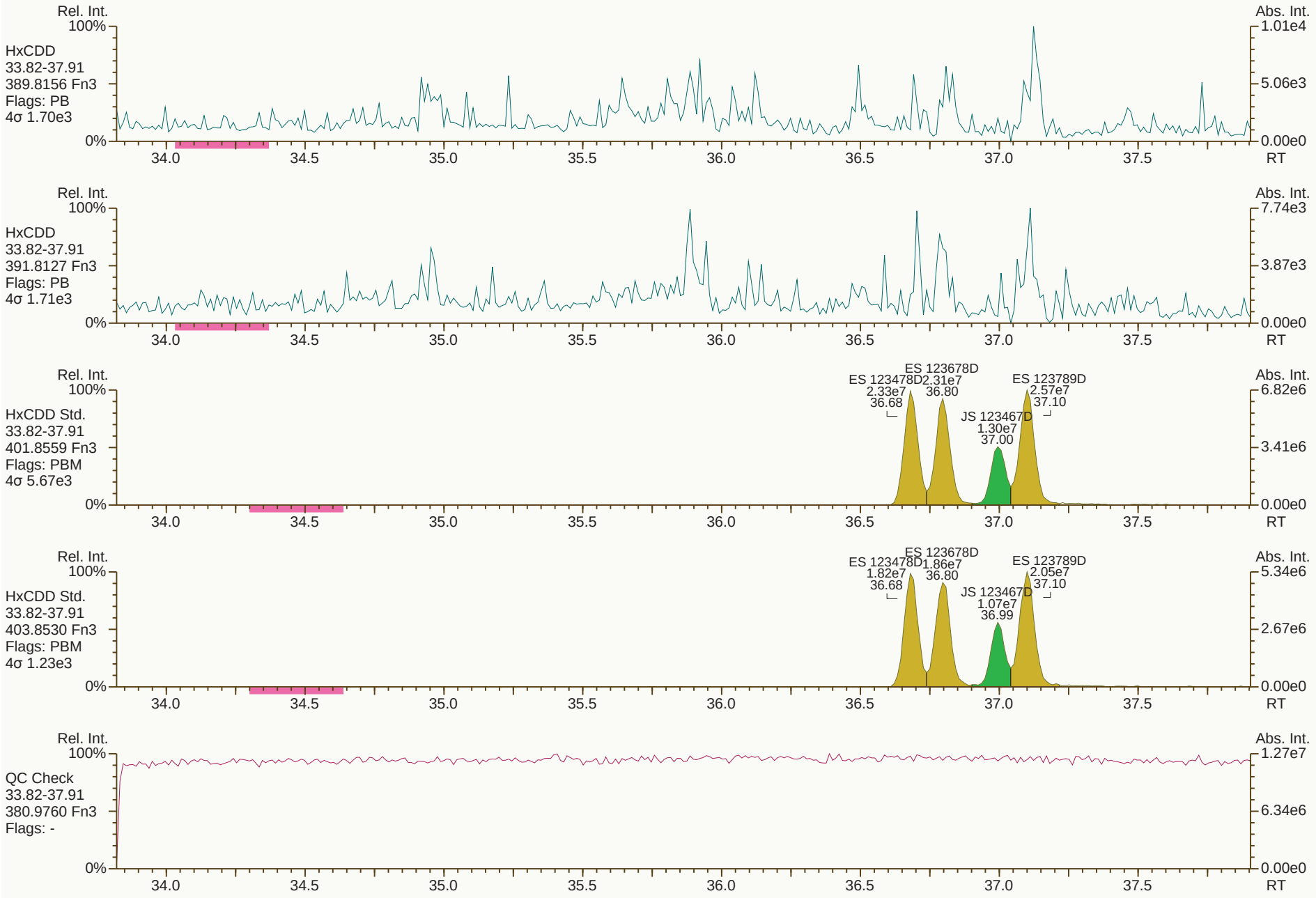
Datafile: 200812C25 | Report: 13 Aug 2020 15:16 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
23468/12469-PeCDF	NotFnd		0.9859						0.98		4204	0.991
12347-PeCDF	NotFnd		0.9884						0.98		4204	0.991
12348-PeCDF	NotFnd		0.9937						0.98		4204	0.991
12378-PeCDF	**NotFnd**		**1.0006**						**0.96**		**4204**	**1.01**
12678/12367-PeCDF	NotFnd		1.0097						0.98		4204	0.991
12379-PeCDF	NotFnd		1.0152						0.98		4204	0.991
12679-PeCDF	NotFnd		0.9923						0.98		4204	0.991
23467/12369-PeCDF	NotFnd		0.9966						0.98		4204	0.991
23478-PeCDF	**NotFnd**		**1.0005**						**0.99**		**4204**	**0.975**
23478/12489-PeCDF	NotFnd		0.0000						0.99			
12489-PeCDF	NotFnd		1.0043						0.98		4204	0.991
12349-PeCDF	NotFnd		1.0107						0.98		4204	0.991
12389-PeCDF	NotFnd		1.0349						0.98		4204	0.991
123468-HxCDF	NotFnd		0.9607						1.13		3346	0.969
124678/134678-HxCDF	NotFnd		0.9666						1.13		3346	0.969
134679-HxCDF	NotFnd		0.9730						1.13		3346	0.969
124679-HxCDF	NotFnd		0.9787						1.13		3346	0.969
124689-HxCDF	NotFnd		0.9850						1.13		3346	0.969
123467-HxCDF	NotFnd		0.9971						1.13		3346	0.969
123478-HxCDF	**NotFnd**		**1.0005**						**1.21**		**3346**	**0.904**
123678-HxCDF	**NotFnd**		**1.0005**						**1.11**		**3346**	**0.884**
123479-HxCDF	NotFnd		1.0049						1.13		3346	0.969
123469-HxCDF	NotFnd		1.0090						1.13		3346	0.969
123679-HxCDF	NotFnd		0.9941						1.13		3346	0.969
234678-HxCDF	**NotFnd**		**1.0004**						**1.12**		**3346**	**0.936**
234678/123689-HxCDF	NotFnd		0.0000						1.12			
123689-HxCDF	NotFnd		1.0041						1.13		3346	0.969
123789-HxCDF	**NotFnd**		**1.0005**						**1.11**		**3346**	**1.2**
123789/123489-HxCDF	NotFnd		0.0000						1.11			
123489-HxCDF	NotFnd		1.0009						1.13		3346	0.969
1234678-HpCDF	**NotFnd**		**1.0003**						**1.32**		**2810**	**1.08**
1234679-HpCDF	NotFnd		1.0075						1.29		2810	1.37
1234689-HpCDF	NotFnd		1.0112						1.29		2810	1.37
1234789-HpCDF	**NotFnd**		**1.0003**						**1.26**		**2810**	**1.75**
OCDF	**NotFnd**		**1.0003**						**1.03**		**2348**	**3.55**
OCDF-a	NotFnd	**#VALUE!**	1.0002						-		3121	#VALUE!


Rel. Int.
100%
QC Check
19.04-28.80
316.9824 Fn1
Flags: -
0%
Abs. Int.
6.87e6
3.44e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
QC Check
28.82-33.81
366.9792 Fn2
Flags: -
0%
Abs. Int.
6.06e6
3.03e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
QC Check
33.82-37.91
380.9760 Fn3
Flags: -
0%
Abs. Int.
1.27e7
6.34e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
QC Check
37.92-41.20
430.9728 Fn4
Flags: -
0%
Abs. Int.
7.90e6
3.95e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
QC Check
41.21-44.80
454.9728 Fn5
Flags: -
0%
Abs. Int.
1.10e7
5.49e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT

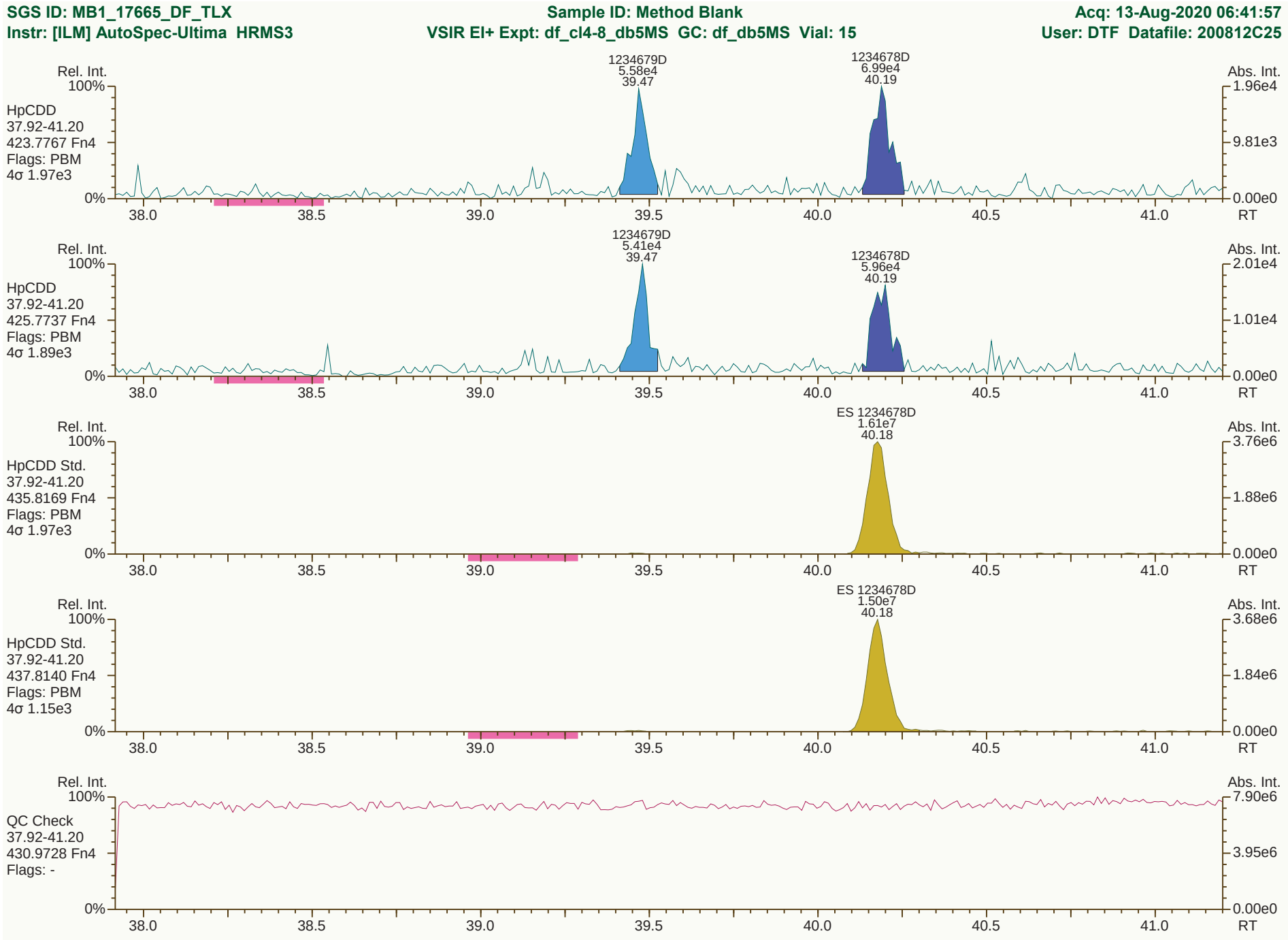

Rel. Int.
100%
TCDD
19.04-28.80
319.8965 Fn1
Flags: PB
4σ 1.95e3
0%
Abs. Int.
1.01e4
5.07e3
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD
19.04-28.80
321.8936 Fn1
Flags: PB
4σ 1.73e3
0%
Abs. Int.
9.11e3
4.55e3
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
37Cl-TCDD
19.04-28.80
327.8850 Fn1
Flags: PBM
4σ 1.96e3
0%
CS 37Cl-2378D
3.09e7
26.92
Abs. Int.
6.87e6
3.43e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.80
331.9368 Fn1
Flags: PBM
4σ 6.43e3
0%
JS 1234D
3.03e7
26.19
ES 2378D
3.11e7
26.90
Abs. Int.
6.74e6
3.37e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.80
333.9339 Fn1
Flags: PBM
4σ 3.43e3
0%
JS 1234D
3.77e7
26.19
ES 2378D
3.82e7
26.90
Abs. Int.
8.45e6
4.23e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT


Rel. Int.
100%
PeCDD
28.82-33.81
355.8546 Fn2
Flags: PB
4σ 2.54e3
0%
Abs. Int.
1.26e4
6.32e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD
28.82-33.81
357.8517 Fn2
Flags: PB
4σ 1.70e3
0%
Abs. Int.
9.54e3
4.77e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.82-33.81
367.8949 Fn2
Flags: PBM
4σ 3.60e3
0%
CS 12347D
3.20e7
32.10
ES 12378D
3.23e7
32.62
Abs. Int.
9.09e6
4.54e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.82-33.81
369.8919 Fn2
Flags: PBM
4σ 1.69e3
0%
CS 12347D
2.06e7
32.10
ES 12378D
2.06e7
32.62
Abs. Int.
5.99e6
3.00e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
QC Check
28.82-33.81
366.9792 Fn2
Flags: -
0%
Abs. Int.
6.06e6
3.03e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT

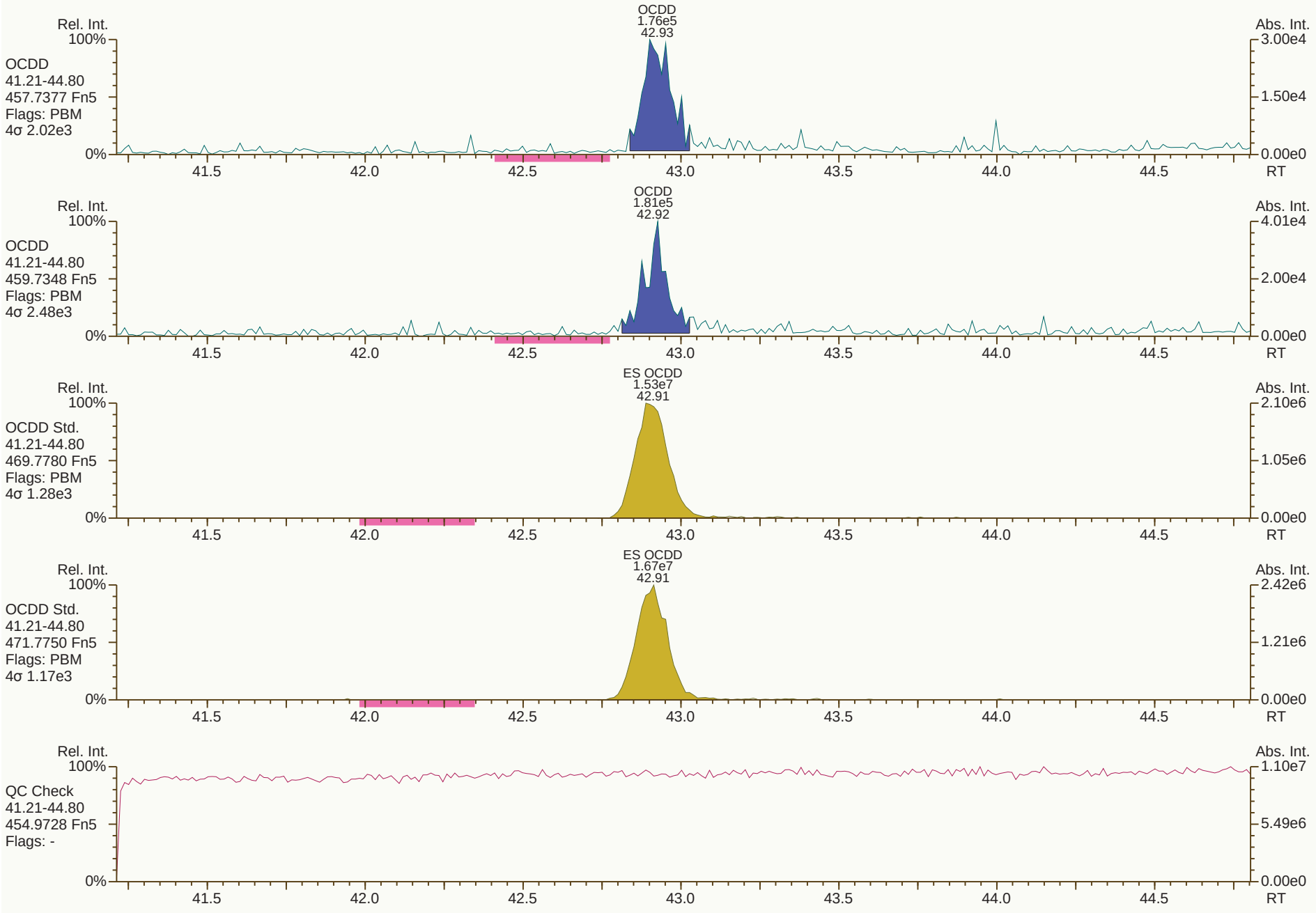


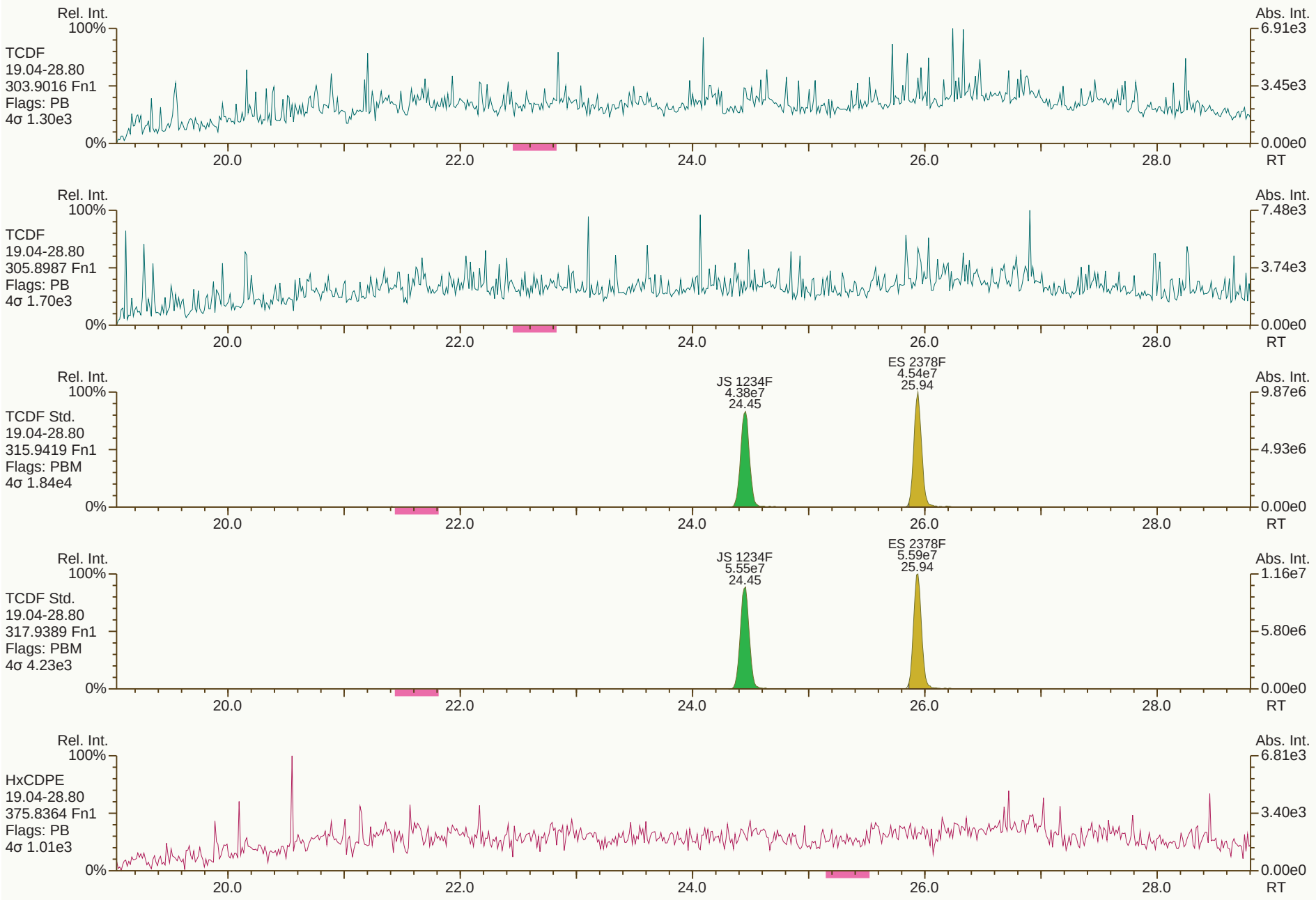
Results: P:\B4500_B4599\B4527\B4527_17665 DF\Resources\MB1_17665_DF_TLX.utp_res, saved 13-Aug-2020 15:11 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 6472, 5827 scc: 927-055
PKD: 13-Aug-2020 15:03 Printed: 13-Aug-2020 15:20 Page 4 of 12

SGS ID: MB1_17665_DF_TLX **Sample ID: Method Blank** **Acq: 13-Aug-2020 06:41:57**
Instr: [ILM] AutoSpec-Ultima HRMS3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 15** **User: DTF Datafile: 200812C25**

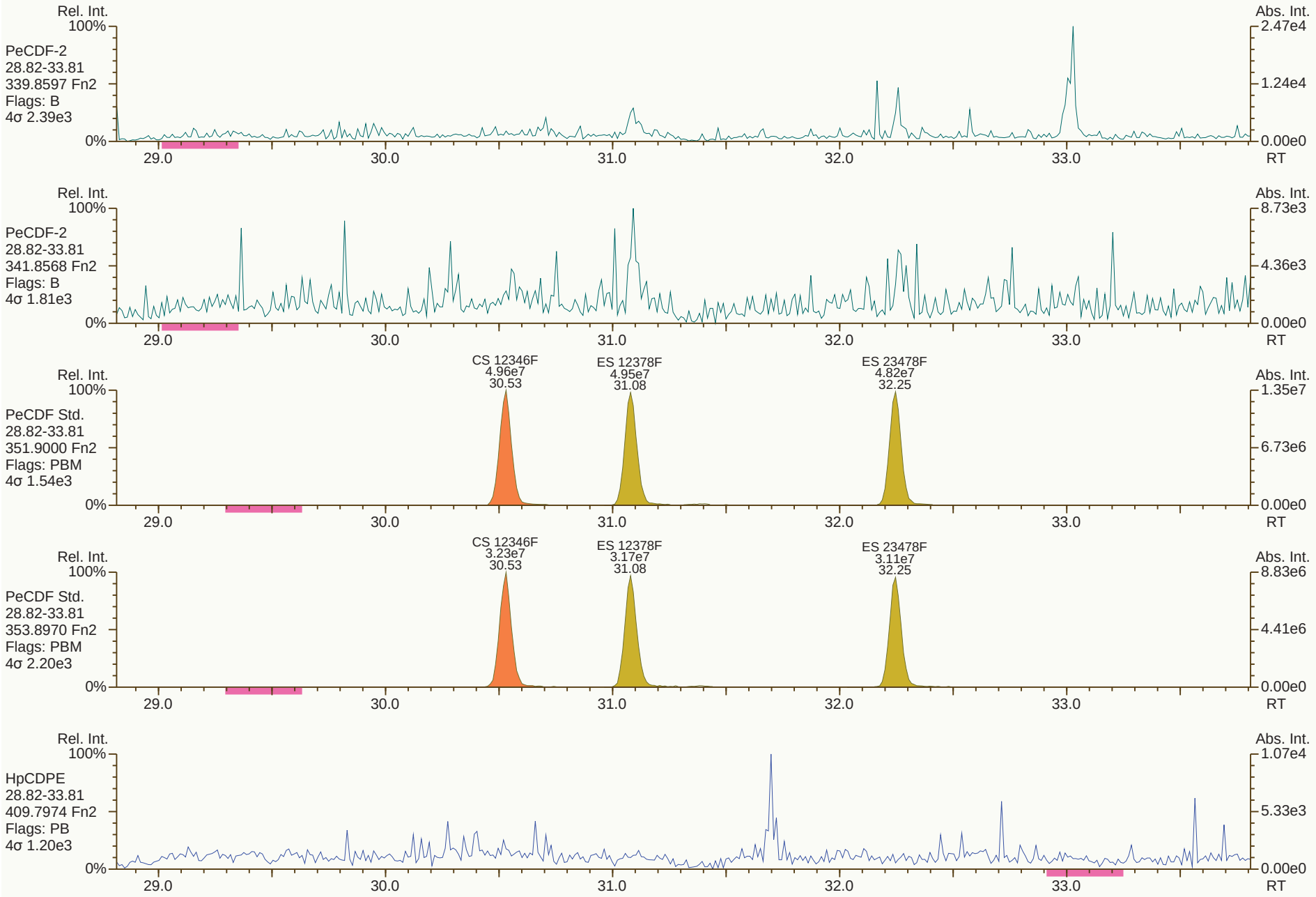


Results: P:\B4500_B4599\B4527\B4527_17665 DF\Resources\MB1_17665_DF_TLX.utp_res, saved 13-Aug-2020 15:11 (DTF) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 1374, 6906 scc: 927-055 *PKD: 13-Aug-2020 15:03 Printed: 13-Aug-2020 15:20 Page 5 of 12*

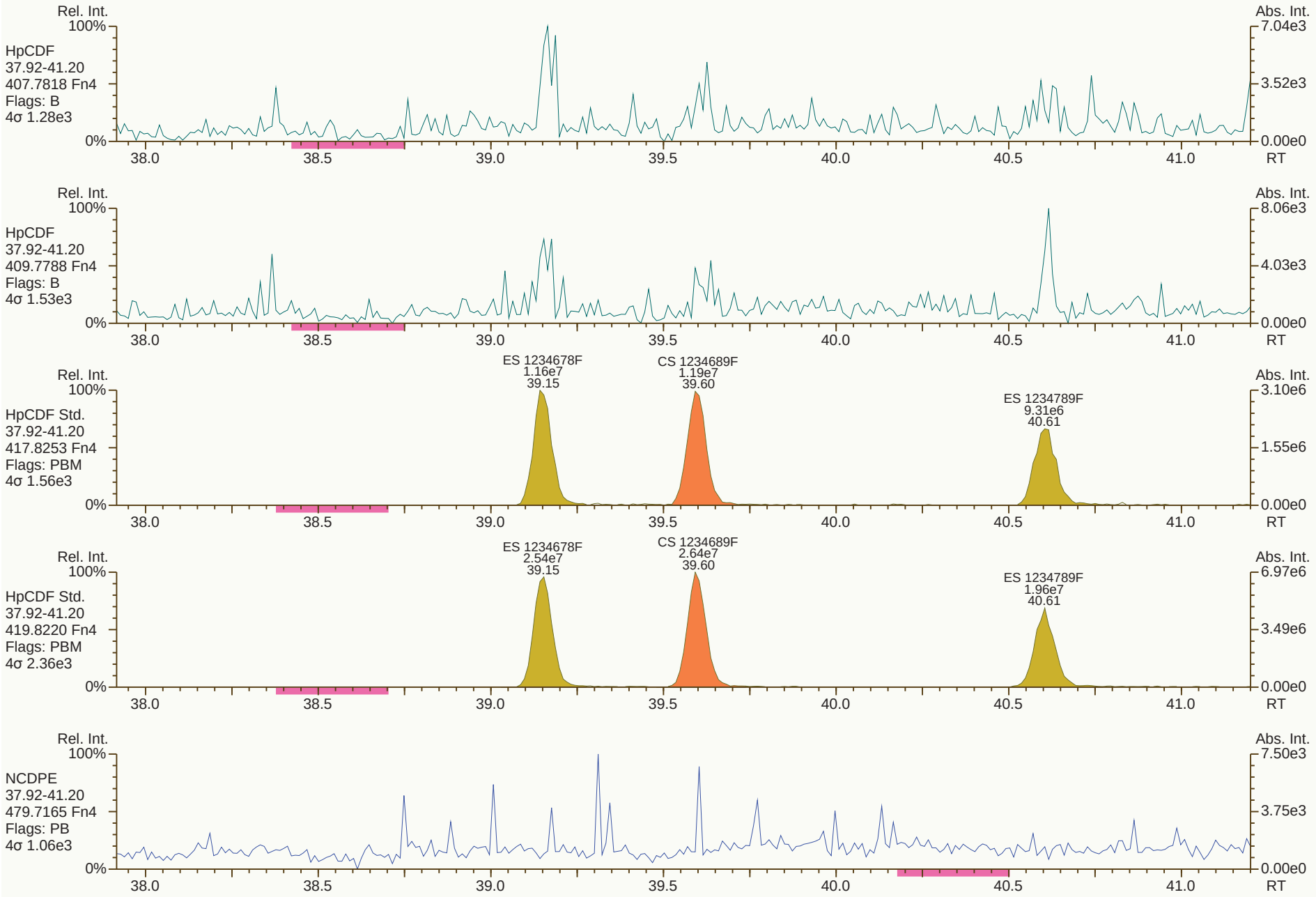

OCDD
1.76e5
42.93
Rel. Int.
100%
OCDD
41.21-44.80
457.7377 Fn5
Flags: PBM
4σ 2.02e3
0%
Abs. Int.
3.00e4
1.50e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
OCDD
1.81e5
42.92
Rel. Int.
100%
OCDD
41.21-44.80
459.7348 Fn5
Flags: PBM
4σ 2.48e3
0%
Abs. Int.
4.01e4
2.00e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDD
1.53e7
42.91
Rel. Int.
100%
OCDD Std.
41.21-44.80
469.7780 Fn5
Flags: PBM
4σ 1.28e3
0%
Abs. Int.
2.10e6
1.05e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDD
1.67e7
42.91
Rel. Int.
100%
OCDD Std.
41.21-44.80
471.7750 Fn5
Flags: PBM
4σ 1.17e3
0%
Abs. Int.
2.42e6
1.21e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
QC Check
41.21-44.80
454.9728 Fn5
Flags: -
0%
Abs. Int.
1.10e7
5.49e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT

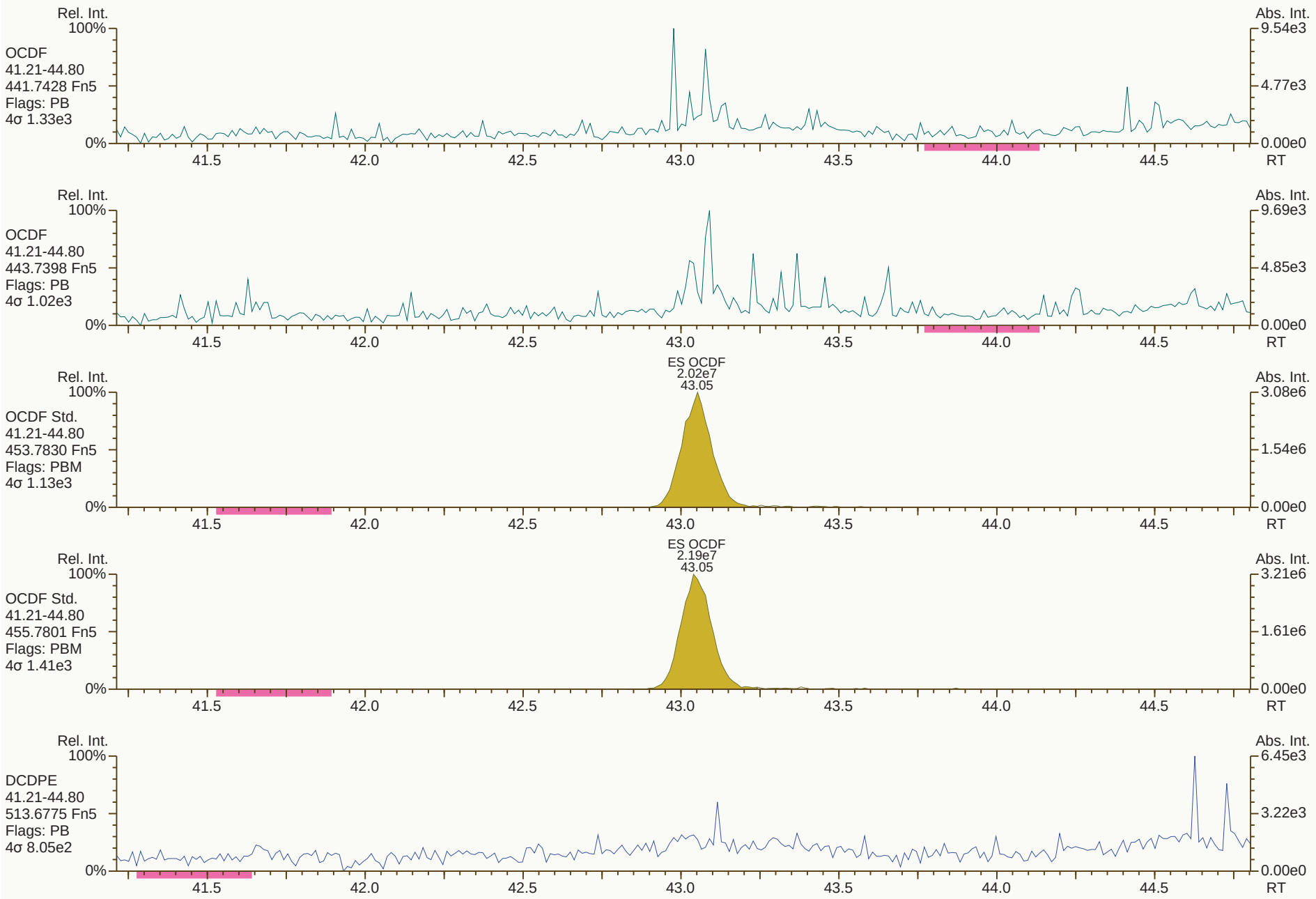

Rel. Int.
100%
TCDF
19.04-28.80
303.9016 Fn1
Flags: PB
4σ 1.30e3
0%
Abs. Int.
6.91e3
3.45e3
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDF
19.04-28.80
305.8987 Fn1
Flags: PB
4σ 1.70e3
0%
Abs. Int.
7.48e3
3.74e3
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDF Std.
19.04-28.80
315.9419 Fn1
Flags: PBM
4σ 1.84e4
0%
JS 1234F
4.38e7
24.45
ES 2378F
4.54e7
25.94
Abs. Int.
9.87e6
4.93e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDF Std.
19.04-28.80
317.9389 Fn1
Flags: PBM
4σ 4.23e3
0%
JS 1234F
5.55e7
24.45
ES 2378F
5.59e7
25.94
Abs. Int.
1.16e7
5.80e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
HxCDPE
19.04-28.80
375.8364 Fn1
Flags: PB
4σ 1.01e3
0%
Abs. Int.
6.81e3
3.40e3
0.00e0
20.0
22.0
24.0
26.0
28.0
RT


Rel. Int.
100%
0%
Abs. Int.
1.11e4
5.54e3
0.00e0
PeCDF-1
19.04-28.80
339.8597 Fn1
Flags: PB
4σ 1.37e3
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
0%
Abs. Int.
1.13e4
5.63e3
0.00e0
PeCDF-1
19.04-28.80
341.8568 Fn1
Flags: PB
4σ 2.57e3
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
0%
Abs. Int.
6.87e6
3.44e6
0.00e0
QC Check
19.04-28.80
316.9824 Fn1
Flags: -
20.0
22.0
24.0
26.0
28.0
RT


Rel. Int.
100%
PeCDF-2
28.82-33.81
339.8597 Fn2
Flags: B
4σ 2.39e3
0%
Abs. Int.
2.47e4
1.24e4
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF-2
28.82-33.81
341.8568 Fn2
Flags: B
4σ 1.81e3
0%
Abs. Int.
8.73e3
4.36e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.82-33.81
351.9000 Fn2
Flags: PBM
4σ 1.54e3
0%
CS 12346F
4.96e7
30.53
ES 12378F
4.95e7
31.08
ES 23478F
4.82e7
32.25
Abs. Int.
1.35e7
6.73e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.82-33.81
353.8970 Fn2
Flags: PBM
4σ 2.20e3
0%
CS 12346F
3.23e7
30.53
ES 12378F
3.17e7
31.08
ES 23478F
3.11e7
32.25
Abs. Int.
8.83e6
4.41e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
HpCDPE
28.82-33.81
409.7974 Fn2
Flags: PB
4σ 1.20e3
0%
Abs. Int.
1.07e4
5.33e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT


Rel. Int.
100%
HxCDF
33.82-37.91
373.8207 Fn3
Flags: B
4σ 2.09e3
0%
Abs. Int.
8.49e3
4.24e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF
33.82-37.91
375.8178 Fn3
Flags: B
4σ 1.26e3
0%
Abs. Int.
9.07e3
4.54e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF Std.
33.82-37.91
383.8639 Fn3
Flags: PBM
4σ 2.69e3
0%
ES 123478F
1.82e7
35.67
ES 123678F
2.17e7
35.81
CS 123469F
2.00e7
36.13
ES 234678F
1.97e7
36.49
ES 123789F
1.75e7
37.47
Abs. Int.
5.95e6
2.98e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF Std.
33.82-37.91
385.8610 Fn3
Flags: PBM
4σ 1.07e4
0%
ES 123478F
3.47e7
35.67
ES 123678F
4.07e7
35.81
CS 123469F
3.70e7
36.13
ES 234678F
3.74e7
36.49
ES 123789F
3.17e7
37.47
Abs. Int.
1.15e7
5.73e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
OCDPE
33.82-37.91
445.7555 Fn3
Flags: PB
4σ 9.16e2
0%
Abs. Int.
5.52e3
2.76e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT


Rel. Int.
100%
HpCDF
37.92-41.20
407.7818 Fn4
Flags: B
4σ 1.28e3
0%
Abs. Int.
7.04e3
3.52e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF
37.92-41.20
409.7788 Fn4
Flags: B
4σ 1.53e3
0%
Abs. Int.
8.06e3
4.03e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.92-41.20
417.8253 Fn4
Flags: PBM
4σ 1.56e3
0%
ES 1234678F
1.16e7
39.15
CS 1234689F
1.19e7
39.60
ES 1234789F
9.31e6
40.61
Abs. Int.
3.10e6
1.55e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.92-41.20
419.8220 Fn4
Flags: PBM
4σ 2.36e3
0%
ES 1234678F
2.54e7
39.15
CS 1234689F
2.64e7
39.60
ES 1234789F
1.96e7
40.61
Abs. Int.
6.97e6
3.49e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
NCDPE
37.92-41.20
479.7165 Fn4
Flags: PB
4σ 1.06e3
0%
Abs. Int.
7.50e3
3.75e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT


Rel. Int.
100%
OCDF
41.21-44.80
441.7428 Fn5
Flags: PB
4σ 1.33e3
0%
Abs. Int.
9.54e3
4.77e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDF
41.21-44.80
443.7398 Fn5
Flags: PB
4σ 1.02e3
0%
Abs. Int.
9.69e3
4.85e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDF
2.02e7
43.05
Rel. Int.
100%
OCDF Std.
41.21-44.80
453.7830 Fn5
Flags: PBM
4σ 1.13e3
0%
Abs. Int.
3.08e6
1.54e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDF
2.19e7
43.05
Rel. Int.
100%
OCDF Std.
41.21-44.80
455.7801 Fn5
Flags: PBM
4σ 1.41e3
0%
Abs. Int.
3.21e6
1.61e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
DCDPE
41.21-44.80
513.6775 Fn5
Flags: PB
4σ 8.05e2
0%
Abs. Int.
6.45e3
3.22e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT

Lab ID: B4527_17665_DF_001 | Acq'd: 13 Aug 2020 07:28 DTF | Wt/Vol: 0.97 L | ICAL: HRMS3_DF_10122018_28AUG2019

Client ID: FB-01 | UTP: 13-Aug-2020 15:11:53 DTF | J-level: 5.15 pg/L | Split: 1 | Checkcode: 072-886-BZF

Datafile: 200812C26 | Report: 13 Aug 2020 15:16 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	NotFnd		1.0008	-		-	-	-	1.19	-	4381	1.23
12378-PeCDD	NotFnd		1.0006	-		-	-	-	0.98	-	3408	1.11
123478-HxCDD	NotFnd		1.0004	-		-	-	-	1.02	-	3271	1.32
123678-HxCDD	NotFnd		1.0036	-		-	-	-	1.09	-	3271	1.31
123789-HxCDD	NotFnd		1.0118	-		-	-	-	0.97	-	3271	1.33
1234678-HpCDD	40.17	J B EMPC	1.0003	1.0003	0	8.33E+04	0.79	N	0.98	4.96	6135	3.85
OCDD	42.88	J B	1.0003	1.0001	-0.5	2.26E+05	0.85	Y	1.07	24.7	4249	8.31
2378-TCDF	NotFnd		1.0009	-		-	-	-	1.01	-	2831	0.598
12378-PeCDF	NotFnd		1.0006	-		-	-	-	0.96	-	3433	0.786
23478-PeCDF	NotFnd		1.0005	-		-	-	-	0.99	-	3433	0.782
123478-HxCDF	NotFnd		1.0005	-		-	-	-	1.21	-	2709	0.728
123678-HxCDF	NotFnd		1.0005	-		-	-	-	1.11	-	2709	0.71
234678-HxCDF	NotFnd		1.0004	-		-	-	-	1.12	-	2709	0.751
123789-HxCDF	NotFnd		1.0005	-		-	-	-	1.11	-	2709	0.905
1234678-HpCDF	NotFnd		1.0003	-		-	-	-	1.32	-	2709	0.924
1234789-HpCDF	NotFnd		1.0003	-		-	-	-	1.26	-	2709	1.44
OCDF	NotFnd		1.0003	-		-	-	-	1.03	-	3012	4.16

Name	Act RT	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	26.88	1.0266	1.0268	+0.3	7.06E+07	0.80	Y	0.99	101
ES 12378-PeCDD	32.60	1.2430	1.2452	+4.3	5.50E+07	1.59	Y	0.83	94.2
ES 123478-HxCDD	36.67	0.9916	0.9915	-0.2	4.44E+07	1.24	Y	0.95	94.6
ES 123678-HxCDD	36.78	0.9947	0.9946	-0.2	4.40E+07	1.26	Y	0.98	91
ES 123789-HxCDD	37.09	1.0029	1.0028	-0.2	4.89E+07	1.28	Y	1.14	86.7
ES 1234678-HpCDD	40.16	1.0851	1.0860	+2.2	3.54E+07	1.06	Y	0.90	79.5
ES OCDD	42.88	1.1584	1.1594	+2.6	3.51E+07	0.90	Y	0.63	56.5
ES 2378-TCDF	25.93	1.0602	1.0609	+1.1	1.12E+08	0.79	Y	1.00	108
ES 12378-PeCDF	31.07	1.2683	1.2710	+5.0	8.52E+07	1.55	Y	0.83	98.9
ES 23478-PeCDF	32.24	1.3156	1.3187	+6.0	8.27E+07	1.57	Y	0.81	98.9
ES 123478-HxCDF	35.65	0.9644	0.9640	-0.9	5.62E+07	0.54	Y	1.12	101
ES 123678-HxCDF	35.80	0.9682	0.9679	-0.6	6.50E+07	0.52	Y	1.33	98.4
ES 234678-HxCDF	36.48	0.9864	0.9863	-0.2	5.91E+07	0.52	Y	1.21	98.5
ES 123789-HxCDF	37.45	1.0128	1.0128	0	5.42E+07	0.53	Y	1.12	97.8
ES 1234678-HpCDF	39.14	1.0578	1.0584	+1.4	4.14E+07	0.47	Y	0.92	90.4
ES 1234789-HpCDF	40.59	1.0967	1.0975	+1.9	3.24E+07	0.47	Y	0.82	79.8
ES OCDF	43.02	1.1623	1.1632	+2.3	4.80E+07	0.90	Y	0.78	62

Lab ID: B4527_17665_DF_001 | Acq'd: 13 Aug 2020 07:28 DTF | Wt/Vol: 0.97 L | ICAL: HRMS3_DF_10122018_28AUG2019

Client ID: FB-01 | UTP: 13-Aug-2020 15:11:53 DTF | J-level: 5.15 pg/L | Split: 1 | Checkcode: 072-886-BZF

Datafile: 200812C26 | Report: 13 Aug 2020 15:16 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
JS 1234-TCDD	26.18		-	-	-	7.04E+07	0.80	Y	-	-
JS 1234-TCDF	24.45		-	-	-	1.04E+08	0.81	Y	-	-
JS 123467-HxCDD	36.98		-	-	-	2.48E+07	1.23	Y	-	-
CS 37Cl-2378-TCDD	26.91		1.0276	1.0277	+0.2	3.30E+07	n/a	-	1.12	105
CS 12347-PeCDD	32.08		1.2233	1.2253	+3.8	5.46E+07	1.59	Y	0.71	109
CS 12346-PeCDF	30.52		1.2459	1.2484	+4.6	8.57E+07	1.58	Y	0.81	102
CS 123469-HxCDF	36.11		0.9767	0.9764	-0.6	5.80E+07	0.54	Y	1.12	104
CS 1234689-HpCDF	39.58		1.0696	1.0703	+1.7	4.17E+07	0.46	Y	0.90	93.7
~~SS 37Cl-2378-TCDD~~	~~26.91~~		~~1.0276~~	~~1.0277~~	~~+0.2~~	~~3.30E+07~~	~~n/a~~		~~1.14~~	~~102~~
~~SS 12347-PeCDD~~	~~32.08~~		~~1.2233~~	~~1.2253~~	~~+3.8~~	~~5.46E+07~~	~~1.59~~	~~Y~~	~~0.86~~	~~115~~
~~SS 12346-PeCDF~~	~~30.52~~		~~1.2459~~	~~1.2484~~	~~+4.6~~	~~8.57E+07~~	~~1.58~~	~~Y~~	~~0.98~~	~~103~~
~~SS 123469-HxCDF~~	~~36.11~~		~~0.9767~~	~~0.9764~~	~~-0.6~~	~~5.80E+07~~	~~0.54~~	~~Y~~	~~0.85~~	~~105~~
~~SS 1234689-HpCDF~~	~~39.58~~		~~1.0696~~	~~1.0703~~	~~+1.7~~	~~4.17E+07~~	~~0.46~~	~~Y~~	~~0.97~~	~~103~~

Totals	Conc	EMPC
Total TCDD	0	0
Total PeCDD	0	0
Total HxCDD	0	0
Total HpCDD	0	9.24
Total Tetra-Octa Dioxins	24.7	34
Total TCDF	0	0
Total PeCDF	0	0
Total HxCDF	0	0
Total HpCDF	0	0
Total Tetra-Octa Furans	0	0
Total Tetra-Octa Dioxins & Furans	24.7	34

Lab ID: B4527_17665_DF_001 **Acq'd: 13 Aug 2020 07:28 DTF** **Wt/Vol: 0.97 L** **ICAL: HRMS3_DF_10122018_28AUG2019**

Client ID: FB-01 **UTP: 13-Aug-2020 15:11:53 DTF** **J-level: 5.15 pg/L** **Split: 1** **Checkcode: 072-886-BZF**

Datafile: 200812C26 **Report: 13 Aug 2020 15:16 TF** **Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)**

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1368-TCDD	NotFnd		0.8523						1.19		4381	1.23
1379-TCDD	NotFnd		0.8682						1.19		4381	1.23
1369-TCDD	NotFnd		0.8858						1.19		4381	1.23
1469-TCDD	NotFnd		0.9177						1.19		4381	1.23
1247/1246/1248/1249-TCDD	NotFnd		0.9274						1.19		4381	1.23
1378-TCDD	NotFnd		0.9349						1.19		4381	1.23
1268-TCDD	NotFnd		0.9430						1.19		4381	1.23
1478-TCDD	NotFnd		0.9529						1.19		4381	1.23
1279-TCDD	NotFnd		0.9597						1.19		4381	1.23
1234/1269-TCDD	NotFnd		0.9739						1.19		4381	1.23
1236-TCDD	NotFnd		0.9794						1.19		4381	1.23
1237/1238-TCDD	NotFnd		0.9895						1.19		4381	1.23
1239-TCDD	NotFnd		0.9950						1.19		4381	1.23
2378-TCDD	**NotFnd**		**1.0008**						**1.19**		**4381**	**1.23**
1278-TCDD	NotFnd		1.0139						1.19		4381	1.23
1267-TCDD	NotFnd		1.0194						1.19		4381	1.23
1289-TCDD	NotFnd		1.0397						1.19		4381	1.23
12479/12468-PeCDD	NotFnd		0.9209						0.98		3408	1.11
12469-PeCDD	NotFnd		0.9382						0.98		3408	1.11
12368-PeCDD	NotFnd		0.9557						0.98		3408	1.11
12478-PeCDD	NotFnd		0.9617						0.98		3408	1.11
12379-PeCDD	NotFnd		0.9649						0.98		3408	1.11
12369/12467/12489-PeCDD	NotFnd		0.9732						0.98		3408	1.11
12346/12347-PeCDD	NotFnd		0.9850						0.98		3408	1.11
12378-PeCDD	NotFnd		**1.0006**						**0.98**		**3408**	**1.11**
12367-PeCDD	NotFnd		1.0038						0.98		3408	1.11
12389-PeCDD	NotFnd		1.0146						0.98		3408	1.11
124679/124689-HxCDD	NotFnd		0.9530						1.03		3271	1.32
123468-HxCDD	NotFnd		0.9715						1.03		3271	1.32
123679/123689-HxCDD	NotFnd		0.9795						1.03		3271	1.32
123469-HxCDD	NotFnd		0.9832						1.03		3271	1.32
123478-HxCDD	NotFnd		**1.0004**						1.02		**3271**	**1.32**
123678-HxCDD	NotFnd		**1.0036**						1.09		**3271**	**1.31**
123467-HxCDD	NotFnd		1.0089						1.03		3271	1.32
123789-HxCDD	NotFnd		**1.0118**						0.97		**3271**	**1.33**

Lab ID: B4527_17665_DF_001 | Acq'd: 13 Aug 2020 07:28 DTF | Wt/Vol: 0.97 L | ICAL: HRMS3_DF_10122018_28AUG2019

Client ID: FB-01 | UTP: 13-Aug-2020 15:11:53 DTF | J-level: 5.15 pg/L | Split: 1 | Checkcode: 072-886-BZF

Datafile: 200812C26 | Report: 13 Aug 2020 15:16 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

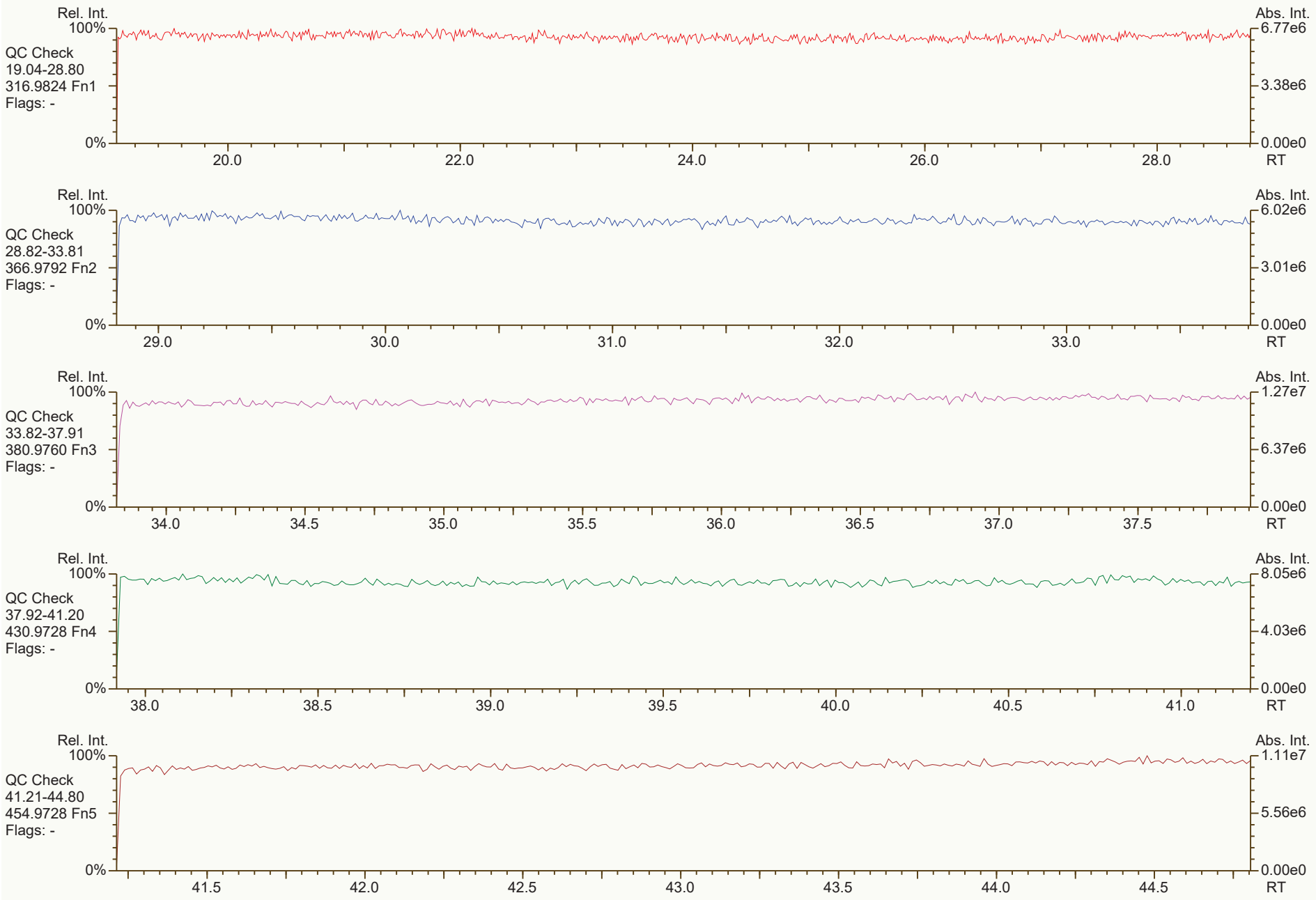
Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1234679-HpCDD	39.46	J B EMPC	0.9826	0.9825	-0.2	7.18E+04	1.47	N	0.98	4.27	6135	3.85
1234678-HpCDD	**40.17**	J B EMPC	**1.0003**	**1.0003**	**0**	**8.33E+04**	**0.79**	**N**	**0.98**	**4.96**	**6135**	**3.85**
OCDD	**42.88**	**J B**	**1.0003**	**1.0001**	**-0.5**	**2.26E+05**	**0.85**	**Y**	**1.07**	**24.7**	**4249**	**8.31**
OCDD-a	NotFnd	**#VALUE!**	1.0002						-		3045	#VALUE!
1368-TCDF	NotFnd		0.7980						1.01		2831	0.598
1468-TCDF	NotFnd		0.8204						1.01		2831	0.598
2468-TCDF	NotFnd		0.8443						1.01		2831	0.598
1346/1246-TCDF	NotFnd		0.8597						1.01		2831	0.598
1347/1378/1247-TCDF	NotFnd		0.8665						1.01		2831	0.598
1348-TCDF	NotFnd		0.8785						1.01		2831	0.598
1248/1367/1379-TCDF	NotFnd		0.8840						1.01		2831	0.598
1268-TCDF	NotFnd		0.9004						1.01		2831	0.598
1467-TCDF	NotFnd		0.9060						1.01		2831	0.598
1478-TCDF	NotFnd		0.9132						1.01		2831	0.598
1369/1237-TCDF	NotFnd		0.9287						1.01		2831	0.598
2467-TCDF	NotFnd		0.9345						1.01		2831	0.598
2368-TCDF	NotFnd		0.9409						1.01		2831	0.598
1238/1234/1678/1469/1236-TCDF	NotFnd		0.9450						1.01		2831	0.598
1278-TCDF	NotFnd		0.9638						1.01		2831	0.598
1349-TCDF	NotFnd		0.9685						1.01		2831	0.598
1267-TCDF	NotFnd		0.9751						1.01		2831	0.598
2346/1249-TCDF	NotFnd		0.9831						1.01		2831	0.598
2347/1279-TCDF	NotFnd		0.9920						1.01		2831	0.598
2348-TCDF	NotFnd		0.9964						1.01		2831	0.598
2378-TCDF	**NotFnd**		**1.0009**						**1.01**		**2831**	**0.598**
2367/3467-TCDF	NotFnd		1.0164						1.01		2831	0.598
1269-TCDF	NotFnd		1.0259						1.01		2831	0.598
1239-TCDF	NotFnd		1.0373						1.01		2831	0.598
1289-TCDF	NotFnd		1.0838						1.01		2831	0.598
13468/12468-PeCDF	NotFnd		0.9052						0.98		2912	0.665
13678/13467/12467-PeCDF	NotFnd		0.9582						0.98		3433	0.784
12368/13478/12478-PeCDF	NotFnd		0.9634						0.98		3433	0.784
14678-PeCDF	NotFnd		0.9668						0.98		3433	0.784
13479-PeCDF	NotFnd		0.9700						0.98		3433	0.784
13469/12479-PeCDF	NotFnd		0.9781						0.98		3433	0.784
12346-PeCDF	NotFnd		0.9829						0.98		3433	0.784

Lab ID: B4527_17665_DF_001 **Acq'd:** 13 Aug 2020 07:28 DTF **Wt/Vol:** 0.97 L **ICAL:** HRMS3_DF_10122018_28AUG2019

Client ID: FB-01 **UTP:** 13-Aug-2020 15:11:53 DTF **J-level:** 5.15 pg/L **Split:** 1 **Checkcode:** 072-886-BZF

Datafile: 200812C26 **Report:** 13 Aug 2020 15:16 TF **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
23468/12469-PeCDF	NotFnd		0.9859						0.98		3433	0.784
12347-PeCDF	NotFnd		0.9884						0.98		3433	0.784
12348-PeCDF	NotFnd		0.9937						0.98		3433	0.784
12378-PeCDF	**NotFnd**		**1.0006**						**0.96**		**3433**	**0.786**
12678/12367-PeCDF	NotFnd		1.0097						0.98		3433	0.784
12379-PeCDF	NotFnd		1.0152						0.98		3433	0.784
12679-PeCDF	NotFnd		0.9923						0.98		3433	0.784
23467/12369-PeCDF	NotFnd		0.9966						0.98		3433	0.784
23478-PeCDF	**NotFnd**		**1.0005**						**0.99**		**3433**	**0.782**
23478/12489-PeCDF	NotFnd		0.0000						0.99			
12489-PeCDF	NotFnd		1.0043						0.98		3433	0.784
12349-PeCDF	NotFnd		1.0107						0.98		3433	0.784
12389-PeCDF	NotFnd		1.0349						0.98		3433	0.784
123468-HxCDF	NotFnd		0.9607						1.13		2709	0.768
124678/134678-HxCDF	NotFnd		0.9666						1.13		2709	0.768
134679-HxCDF	NotFnd		0.9730						1.13		2709	0.768
124679-HxCDF	NotFnd		0.9787						1.13		2709	0.768
124689-HxCDF	NotFnd		0.9850						1.13		2709	0.768
123467-HxCDF	NotFnd		0.9971						1.13		2709	0.768
123478-HxCDF	**NotFnd**		**1.0005**						**1.21**		**2709**	**0.728**
123678-HxCDF	**NotFnd**		**1.0005**						**1.11**		**2709**	**0.71**
123479-HxCDF	NotFnd		1.0049						1.13		2709	0.768
123469-HxCDF	NotFnd		1.0090						1.13		2709	0.768
123679-HxCDF	NotFnd		0.9941						1.13		2709	0.768
234678-HxCDF	**NotFnd**		**1.0004**						**1.12**		**2709**	**0.751**
234678/123689-HxCDF	NotFnd		0.0000						1.12			
123689-HxCDF	NotFnd		1.0041						1.13		2709	0.768
123789-HxCDF	**NotFnd**		**1.0005**						**1.11**		**2709**	**0.905**
123789/123489-HxCDF	NotFnd		0.0000						1.11			
123489-HxCDF	NotFnd		1.0009						1.13		2709	0.768
1234678-HpCDF	**NotFnd**		**1.0003**						**1.32**		**2709**	**0.924**
1234679-HpCDF	NotFnd		1.0075						1.29		2709	1.15
1234689-HpCDF	NotFnd		1.0112						1.29		2709	1.15
1234789-HpCDF	**NotFnd**		**1.0003**						**1.26**		**2709**	**1.44**
OCDF	**NotFnd**		**1.0003**						**1.03**		**3012**	**4.16**
OCDF-a	NotFnd	**#VALUE!**	1.0002						-		2622	#VALUE!

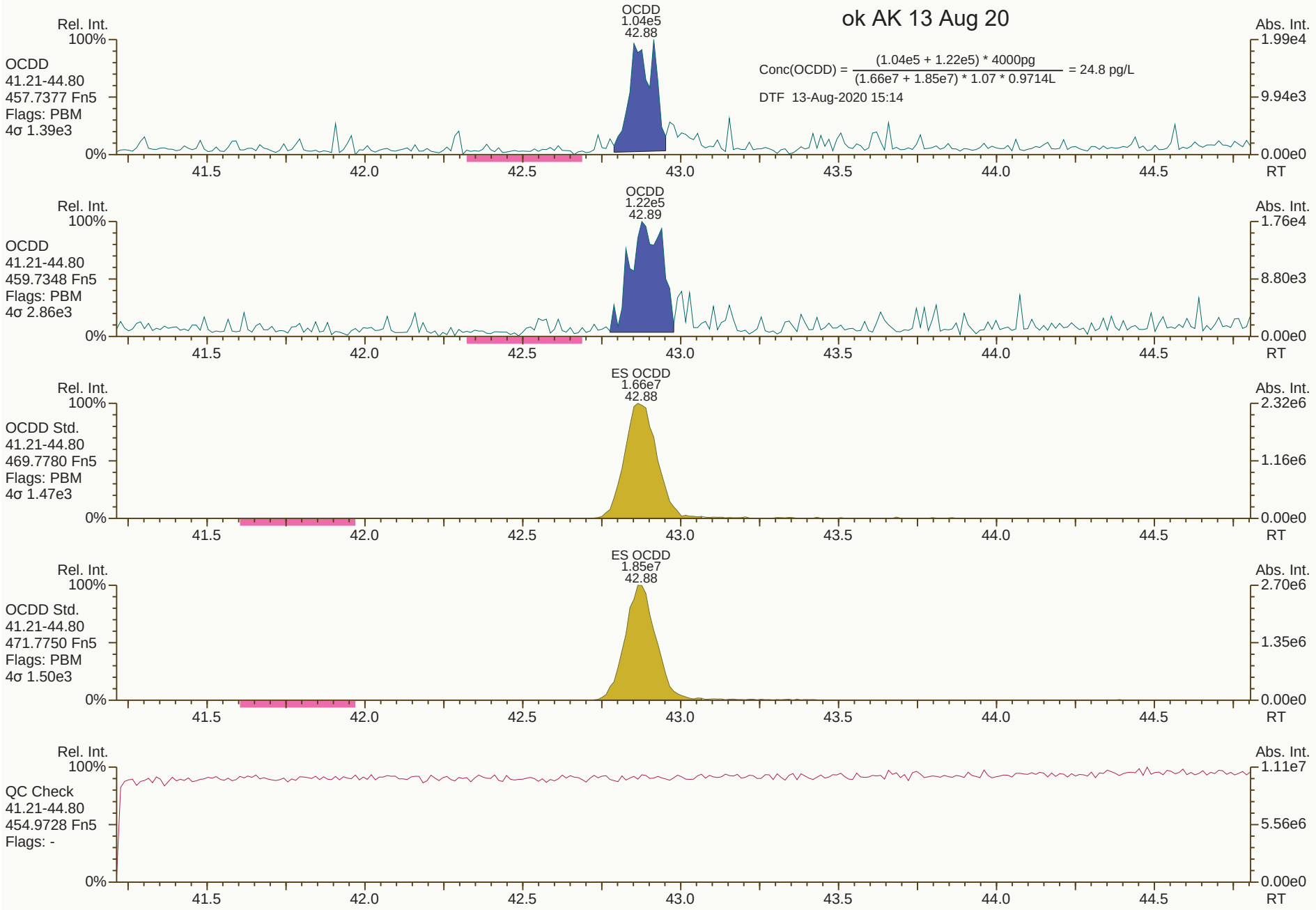

Rel. Int.
100%
QC Check
19.04-28.80
316.9824 Fn1
Flags: -
0%
20.0
22.0
24.0
26.0
28.0
RT
Abs. Int.
6.77e6
3.38e6
0.00e0
Rel. Int.
100%
QC Check
28.82-33.81
366.9792 Fn2
Flags: -
0%
29.0
30.0
31.0
32.0
33.0
RT
Abs. Int.
6.02e6
3.01e6
0.00e0
Rel. Int.
100%
QC Check
33.82-37.91
380.9760 Fn3
Flags: -
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Abs. Int.
1.27e7
6.37e6
0.00e0
Rel. Int.
100%
QC Check
37.92-41.20
430.9728 Fn4
Flags: -
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Abs. Int.
8.05e6
4.03e6
0.00e0
Rel. Int.
100%
QC Check
41.21-44.80
454.9728 Fn5
Flags: -
0%
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Abs. Int.
1.11e7
5.56e6
0.00e0


Rel. Int.
100%
TCDD
19.04-28.80
319.8965 Fn1
Flags: PB
4σ 2.44e3
0%
Abs. Int.
7.05e3
3.52e3
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD
19.04-28.80
321.8936 Fn1
Flags: PB
4σ 1.94e3
0%
Abs. Int.
1.02e4
5.08e3
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
CS 37Cl-2378D
3.30e7
26.91
Rel. Int.
100%
37Cl-TCDD
19.04-28.80
327.8850 Fn1
Flags: PBM
4σ 1.89e3
0%
Abs. Int.
7.24e6
3.62e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
ES 2378D
3.14e7
26.88
JS 1234D
3.13e7
26.18
Rel. Int.
100%
TCDD Std.
19.04-28.80
331.9368 Fn1
Flags: PBM
4σ 7.44e3
0%
Abs. Int.
6.89e6
3.44e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
ES 2378D
3.92e7
26.88
JS 1234D
3.91e7
26.18
Rel. Int.
100%
TCDD Std.
19.04-28.80
333.9339 Fn1
Flags: PBM
4σ 1.51e3
0%
Abs. Int.
8.75e6
4.38e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT


Rel. Int.
100%
PeCDD
28.82-33.81
355.8546 Fn2
Flags: PB
4σ 1.94e3
0%
Abs. Int.
7.63e3
3.81e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD
28.82-33.81
357.8517 Fn2
Flags: PB
4σ 1.47e3
0%
Abs. Int.
5.82e3
2.91e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.82-33.81
367.8949 Fn2
Flags: PBM
4σ 1.66e3
0%
CS 12347D
3.35e7
32.08
ES 12378D
3.37e7
32.60
Abs. Int.
9.80e6
4.90e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.82-33.81
369.8919 Fn2
Flags: PBM
4σ 1.51e3
0%
CS 12347D
2.11e7
32.08
ES 12378D
2.13e7
32.60
Abs. Int.
6.11e6
3.06e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
QC Check
28.82-33.81
366.9792 Fn2
Flags: -
0%
Abs. Int.
6.02e6
3.01e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT

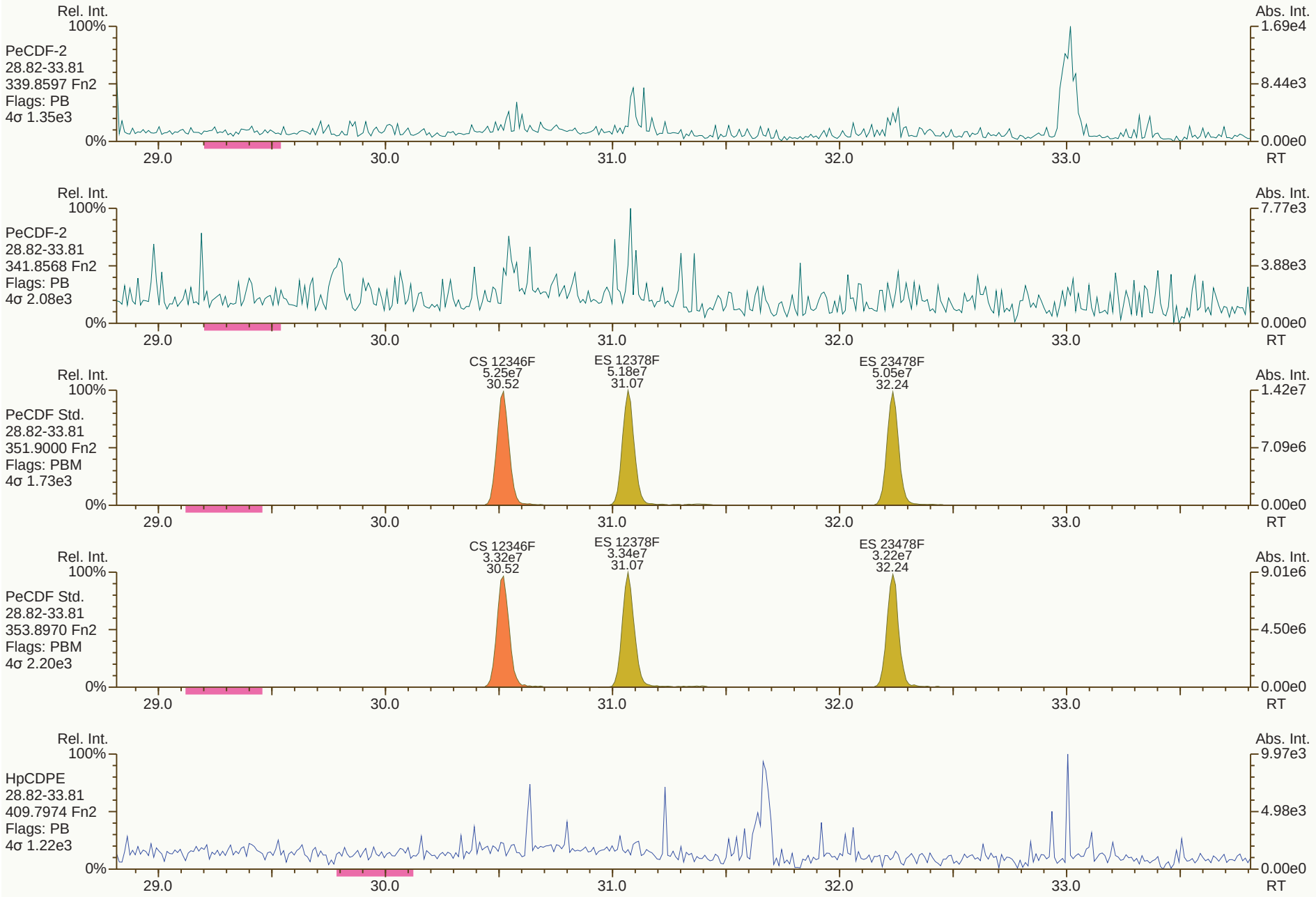

Rel. Int.
100%
HxCDD
33.82-37.91
389.8156 Fn3
Flags: B
4σ 1.72e3
0%
Abs. Int.
7.47e3
3.74e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD
33.82-37.91
391.8127 Fn3
Flags: B
4σ 1.55e3
0%
Abs. Int.
6.72e3
3.36e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.82-37.91
401.8559 Fn3
Flags: PBM
4σ 4.70e3
0%
ES 123478D
2.46e7
36.67
ES 123678D
2.46e7
36.78
JS 123467D
1.37e7
36.98
ES 123789D
2.74e7
37.09
Abs. Int.
7.32e6
3.66e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.82-37.91
403.8530 Fn3
Flags: PBM
4σ 1.84e3
0%
ES 123478D
1.98e7
36.67
ES 123678D
1.94e7
36.78
JS 123467D
1.11e7
36.98
ES 123789D
2.15e7
37.09
Abs. Int.
5.66e6
2.83e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
QC Check
33.82-37.91
380.9760 Fn3
Flags: -
0%
Abs. Int.
1.27e7
6.37e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT

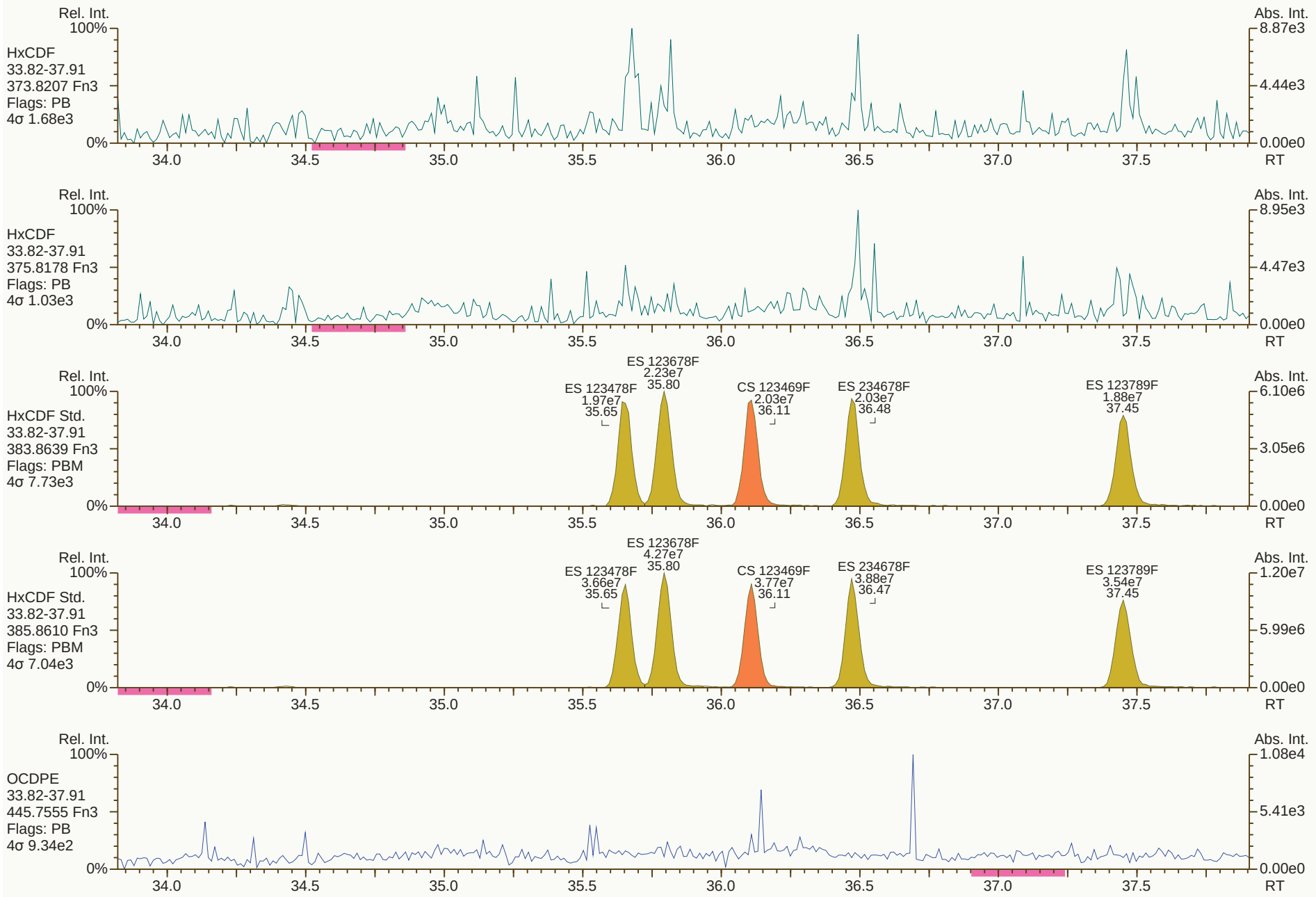

Rel. Int.
100%
HpCDD
37.92-41.20
423.7767 Fn4
Flags: PBM
4σ 3.34e3
1234679D
5.17e4
39.46
1234678D
4.25e4
40.17
Abs. Int.
1.78e4
8.90e3
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD
37.92-41.20
425.7737 Fn4
Flags: PBM
4σ 2.79e3
1234679D
3.52e4
39.46
1234678D
5.36e4
40.17
Abs. Int.
1.47e4
7.35e3
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.92-41.20
435.8169 Fn4
Flags: PBM
4σ 2.55e3
ES 1234678D
1.82e7
40.16
Abs. Int.
4.31e6
2.16e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.92-41.20
437.8140 Fn4
Flags: PBM
4σ 1.57e3
ES 1234678D
1.72e7
40.16
Abs. Int.
4.00e6
2.00e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
QC Check
37.92-41.20
430.9728 Fn4
Flags: -
Abs. Int.
8.05e6
4.03e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT

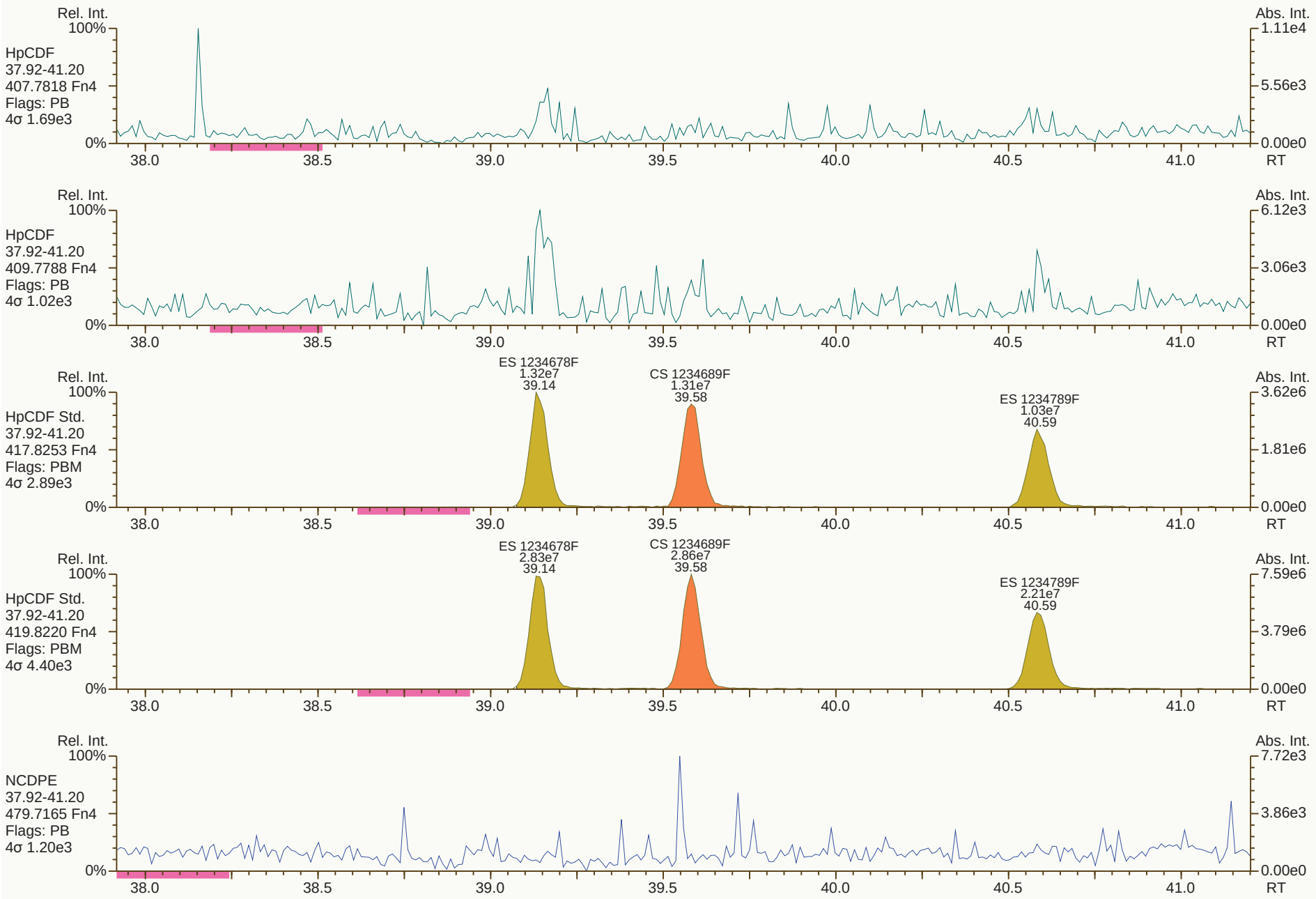

ok AK 13 Aug 20
Conc(OCDD) = (1.04e5 + 1.22e5) * 4000pg / (1.66e7 + 1.85e7) * 1.07 * 0.9714L = 24.8 pg/L
DTF 13-Aug-2020 15:14
OCDD
1.04e5
42.88
OCDD
41.21-44.80
457.7377 Fn5
Flags: PBM
4σ 1.39e3
OCDD
1.22e5
42.89
OCDD
41.21-44.80
459.7348 Fn5
Flags: PBM
4σ 2.86e3
ES OCDD
1.66e7
42.88
OCDD Std.
41.21-44.80
469.7780 Fn5
Flags: PBM
4σ 1.47e3
ES OCDD
1.85e7
42.88
OCDD Std.
41.21-44.80
471.7750 Fn5
Flags: PBM
4σ 1.50e3
QC Check
41.21-44.80
454.9728 Fn5
Flags: -
Rel. Int.
Abs. Int.
RT
41.5
42.0
42.5
43.0
43.5
44.0
44.5

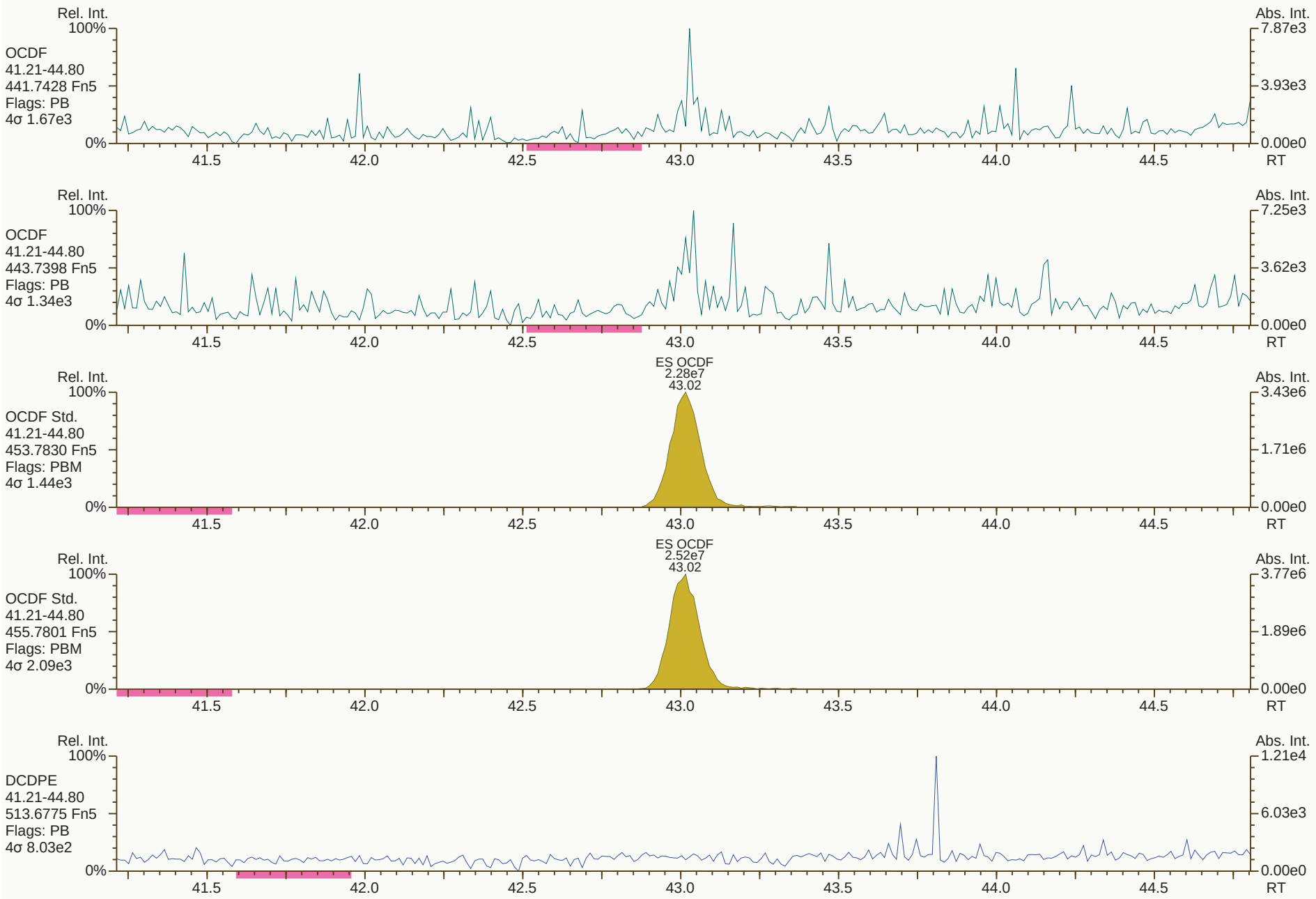

Rel. Int.
100%
TCDF
19.04-28.80
303.9016 Fn1
Flags: PB
4σ 1.07e3
0%
Abs. Int.
4.46e3
2.23e3
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDF
19.04-28.80
305.8987 Fn1
Flags: PB
4σ 1.76e3
0%
Abs. Int.
7.39e3
3.70e3
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDF Std.
19.04-28.80
315.9419 Fn1
Flags: PBM
4σ 1.49e4
0%
JS 1234F
4.64e7
24.45
ES 2378F
4.92e7
25.93
Abs. Int.
1.06e7
5.30e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDF Std.
19.04-28.80
317.9389 Fn1
Flags: PBM
4σ 6.16e3
0%
JS 1234F
5.73e7
24.44
ES 2378F
6.25e7
25.93
Abs. Int.
1.35e7
6.74e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
HxCDPE
19.04-28.80
375.8364 Fn1
Flags: PB
4σ 1.08e3
0%
Abs. Int.
1.14e4
5.70e3
0.00e0
20.0
22.0
24.0
26.0
28.0
RT


Rel. Int.
100%
0%
Abs. Int.
7.94e3
3.97e3
0.00e0
PeCDF-1
19.04-28.80
339.8597 Fn1
Flags: PB
4σ 1.02e3
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
0%
Abs. Int.
1.04e4
5.21e3
0.00e0
PeCDF-1
19.04-28.80
341.8568 Fn1
Flags: PB
4σ 1.89e3
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
0%
Abs. Int.
6.77e6
3.38e6
0.00e0
QC Check
19.04-28.80
316.9824 Fn1
Flags: -
20.0
22.0
24.0
26.0
28.0
RT


Rel. Int.
100%
PeCDF-2
28.82-33.81
339.8597 Fn2
Flags: PB
4σ 1.35e3
0%
Abs. Int.
1.69e4
8.44e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF-2
28.82-33.81
341.8568 Fn2
Flags: PB
4σ 2.08e3
0%
Abs. Int.
7.77e3
3.88e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.82-33.81
351.9000 Fn2
Flags: PBM
4σ 1.73e3
0%
CS 12346F
5.25e7
30.52
ES 12378F
5.18e7
31.07
ES 23478F
5.05e7
32.24
Abs. Int.
1.42e7
7.09e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.82-33.81
353.8970 Fn2
Flags: PBM
4σ 2.20e3
0%
CS 12346F
3.32e7
30.52
ES 12378F
3.34e7
31.07
ES 23478F
3.22e7
32.24
Abs. Int.
9.01e6
4.50e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
HpCDPE
28.82-33.81
409.7974 Fn2
Flags: PB
4σ 1.22e3
0%
Abs. Int.
9.97e3
4.98e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT


Rel. Int.
100%
HxCDF
33.82-37.91
373.8207 Fn3
Flags: PB
4σ 1.68e3
0%
Abs. Int.
8.87e3
4.44e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF
33.82-37.91
375.8178 Fn3
Flags: PB
4σ 1.03e3
0%
Abs. Int.
8.95e3
4.47e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF Std.
33.82-37.91
383.8639 Fn3
Flags: PBM
4σ 7.73e3
0%
ES 123478F
1.97e7
35.65
ES 123678F
2.23e7
35.80
CS 123469F
2.03e7
36.11
ES 234678F
2.03e7
36.48
ES 123789F
1.88e7
37.45
Abs. Int.
6.10e6
3.05e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF Std.
33.82-37.91
385.8610 Fn3
Flags: PBM
4σ 7.04e3
0%
ES 123478F
3.66e7
35.65
ES 123678F
4.27e7
35.80
CS 123469F
3.77e7
36.11
ES 234678F
3.88e7
36.47
ES 123789F
3.54e7
37.45
Abs. Int.
1.20e7
5.99e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
OCDPE
33.82-37.91
445.7555 Fn3
Flags: PB
4σ 9.34e2
0%
Abs. Int.
1.08e4
5.41e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT


Rel. Int.
100%
HpCDF
37.92-41.20
407.7818 Fn4
Flags: PB
4σ 1.69e3
0%
Abs. Int.
1.11e4
5.56e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF
37.92-41.20
409.7788 Fn4
Flags: PB
4σ 1.02e3
0%
Abs. Int.
6.12e3
3.06e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.92-41.20
417.8253 Fn4
Flags: PBM
4σ 2.89e3
0%
ES 1234678F
1.32e7
39.14
CS 1234689F
1.31e7
39.58
ES 1234789F
1.03e7
40.59
Abs. Int.
3.62e6
1.81e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.92-41.20
419.8220 Fn4
Flags: PBM
4σ 4.40e3
0%
ES 1234678F
2.83e7
39.14
CS 1234689F
2.86e7
39.58
ES 1234789F
2.21e7
40.59
Abs. Int.
7.59e6
3.79e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
NCDPE
37.92-41.20
479.7165 Fn4
Flags: PB
4σ 1.20e3
0%
Abs. Int.
7.72e3
3.86e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT


Rel. Int.
100%
OCDF
41.21-44.80
441.7428 Fn5
Flags: PB
4σ 1.67e3
0%
Abs. Int.
7.87e3
3.93e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDF
41.21-44.80
443.7398 Fn5
Flags: PB
4σ 1.34e3
0%
Abs. Int.
7.25e3
3.62e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDF
2.28e7
43.02
Rel. Int.
100%
OCDF Std.
41.21-44.80
453.7830 Fn5
Flags: PBM
4σ 1.44e3
0%
Abs. Int.
3.43e6
1.71e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDF
2.52e7
43.02
Rel. Int.
100%
OCDF Std.
41.21-44.80
455.7801 Fn5
Flags: PBM
4σ 2.09e3
0%
Abs. Int.
3.77e6
1.89e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
DCDPE
41.21-44.80
513.6775 Fn5
Flags: PB
4σ 8.03e2
0%
Abs. Int.
1.21e4
6.03e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT

Lab ID: B4527_17665_DF_002 **Acq'd:** 13 Aug 2020 08:14 DTF **Wt/Vol:** 0.94 L **ICAL:** HRMS3_DF_10122018_28AUG2019

Client ID: EB-01 **UTP:** 13-Aug-2020 15:11:53 DTF **J-level:** 5.35 pg/L **Split:** 1 **Checkcode:** 845-465-DQL

Datafile: 200812C27 **Report:** 13 Aug 2020 15:16 TF **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	NotFnd		1.0008	-		-	-	-	1.19	-	4105	1.39
12378-PeCDD	NotFnd		1.0006	-		-	-	-	0.98	-	4105	1.68
123478-HxCDD	NotFnd		1.0004	-		-	-	-	1.02	-	2387	1.15
123678-HxCDD	NotFnd		1.0036	-		-	-	-	1.09	-	2387	1.13
123789-HxCDD	NotFnd		1.0118	-		-	-	-	0.97	-	2387	1.17
1234678-HpCDD	NotFnd		1.0003	-		-	-	-	0.98	-	6640	5.24
OCDD	42.88	J B	1.0003	0.9999	-1.0	2.06E+05	0.82	Y	1.07	27.4	3243	7.06
2378-TCDF	NotFnd		1.0009	-		-	-	-	1.01	-	2717	0.726
12378-PeCDF	NotFnd		1.0006	-		-	-	-	0.96	-	3639	1
23478-PeCDF	NotFnd		1.0005	-		-	-	-	0.99	-	3639	1
123478-HxCDF	NotFnd		1.0005	-		-	-	-	1.21	-	2750	0.889
123678-HxCDF	NotFnd		1.0005	-		-	-	-	1.11	-	2750	0.907
234678-HxCDF	NotFnd		1.0004	-		-	-	-	1.12	-	2750	0.938
123789-HxCDF	NotFnd		1.0005	-		-	-	-	1.11	-	2750	1.13
1234678-HpCDF	NotFnd		1.0003	-		-	-	-	1.32	-	2180	0.935
1234789-HpCDF	NotFnd		1.0003	-		-	-	-	1.26	-	2180	1.4
OCDF	NotFnd		1.0003	-		-	-	-	1.03	-	2577	4.59

Name	Act RT	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	26.89	1.0266	1.0268	+0.3	6.15E+07	0.81	Y	0.99	102
ES 12378-PeCDD	32.61	1.2430	1.2453	+4.5	4.83E+07	1.61	Y	0.83	95.4
ES 123478-HxCDD	36.67	0.9916	0.9916	0	3.80E+07	1.25	Y	0.95	92.3
ES 123678-HxCDD	36.78	0.9947	0.9946	-0.2	3.70E+07	1.25	Y	0.98	87.2
ES 123789-HxCDD	37.09	1.0029	1.0029	0	4.18E+07	1.24	Y	1.14	84.6
ES 1234678-HpCDD	40.17	1.0851	1.0863	+2.9	3.00E+07	1.06	Y	0.90	76.8
ES OCDD	42.89	1.1584	1.1596	+3.1	3.00E+07	0.91	Y	0.63	55.1
ES 2378-TCDF	25.94	1.0602	1.0610	+1.2	9.49E+07	0.81	Y	1.00	107
ES 12378-PeCDF	31.08	1.2683	1.2714	+5.8	7.72E+07	1.57	Y	0.83	104
ES 23478-PeCDF	32.24	1.3156	1.3190	+6.6	7.24E+07	1.57	Y	0.81	101
ES 123478-HxCDF	35.66	0.9644	0.9641	-0.6	4.73E+07	0.53	Y	1.12	96.8
ES 123678-HxCDF	35.80	0.9682	0.9680	-0.4	5.51E+07	0.55	Y	1.33	95.2
ES 234678-HxCDF	36.48	0.9864	0.9863	-0.2	5.02E+07	0.54	Y	1.21	95.5
ES 123789-HxCDF	37.46	1.0128	1.0128	0	4.66E+07	0.54	Y	1.12	95.8
ES 1234678-HpCDF	39.15	1.0578	1.0586	+1.9	3.56E+07	0.45	Y	0.92	88.6
ES 1234789-HpCDF	40.60	1.0967	1.0978	+2.7	2.75E+07	0.45	Y	0.82	77.2
ES OCDF	43.03	1.1623	1.1635	+3.1	4.00E+07	0.92	Y	0.78	59

Lab ID: B4527_17665_DF_002 | Acq'd: 13 Aug 2020 08:14 DTF | Wt/Vol: 0.94 L | ICAL: HRMS3_DF_10122018_28AUG2019

Client ID: EB-01 | UTP: 13-Aug-2020 15:11:53 DTF | J-level: 5.35 pg/L | Split: 1 | Checkcode: 845-465-DQL

Datafile: 200812C27 | Report: 13 Aug 2020 15:16 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
JS 1234-TCDD	26.19		-	-	-	6.10E+07	0.82	Y	-	-
JS 1234-TCDF	24.44		-	-	-	8.94E+07	0.80	Y	-	-
JS 123467-HxCDD	36.98		-	-	-	2.18E+07	1.26	Y	-	-
CS 37Cl-2378-TCDD	26.91		1.0276	1.0277	+0.2	2.83E+07	n/a	-	1.12	104
CS 12347-PeCDD	32.09		1.2233	1.2254	+4.0	4.74E+07	1.58	Y	0.71	109
CS 12346-PeCDF	30.52		1.2459	1.2487	+5.1	7.78E+07	1.54	Y	0.81	108
CS 123469-HxCDF	36.11		0.9767	0.9765	-0.4	5.00E+07	0.54	Y	1.12	102
CS 1234689-HpCDF	39.60		1.0696	1.0707	+2.6	3.54E+07	0.47	Y	0.90	90.7
~~SS 37Cl-2378-TCDD~~	~~26.91~~		~~1.0276~~	~~1.0277~~	~~+0.2~~	~~2.83E+07~~	~~n/a~~		~~1.14~~	~~101~~
~~SS 12347-PeCDD~~	~~32.09~~		~~1.2233~~	~~1.2254~~	~~+4.0~~	~~4.74E+07~~	~~1.58~~	~~Y~~	~~0.86~~	~~114~~
~~SS 12346-PeCDF~~	~~30.52~~		~~1.2459~~	~~1.2487~~	~~+5.1~~	~~7.78E+07~~	~~1.54~~	~~Y~~	~~0.98~~	~~103~~
~~SS 123469-HxCDF~~	~~36.11~~		~~0.9767~~	~~0.9765~~	~~-0.4~~	~~5.00E+07~~	~~0.54~~	~~Y~~	~~0.85~~	~~107~~
~~SS 1234689-HpCDF~~	~~39.60~~		~~1.0696~~	~~1.0707~~	~~+2.6~~	~~3.54E+07~~	~~0.47~~	~~Y~~	~~0.97~~	~~102~~

Totals	Conc	EMPC
Total TCDD	0	0
Total PeCDD	0	0
Total HxCDD	0	0
Total HpCDD	0	0
Total Tetra-Octa Dioxins	27.4	27.4
Total TCDF	0	0
Total PeCDF	0	0
Total HxCDF	0	0
Total HpCDF	0	0
Total Tetra-Octa Furans	0	0
Total Tetra-Octa Dioxins & Furans	27.4	27.4

Lab ID: B4527_17665_DF_002 **Acq'd:** 13 Aug 2020 08:14 DTF **Wt/Vol:** 0.94 L **ICAL:** HRMS3_DF_10122018_28AUG2019

Client ID: EB-01 **UTP:** 13-Aug-2020 15:11:53 DTF **J-level:** 5.35 pg/L **Split:** 1 **Checkcode:** 845-465-DQL

Datafile: 200812C27 **Report:** 13 Aug 2020 15:16 TF **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1368-TCDD	NotFnd		0.8523						1.19		4105	1.39
1379-TCDD	NotFnd		0.8682						1.19		4105	1.39
1369-TCDD	NotFnd		0.8858						1.19		4105	1.39
1469-TCDD	NotFnd		0.9177						1.19		4105	1.39
1247/1246/1248/1249-TCDD	NotFnd		0.9274						1.19		4105	1.39
1378-TCDD	NotFnd		0.9349						1.19		4105	1.39
1268-TCDD	NotFnd		0.9430						1.19		4105	1.39
1478-TCDD	NotFnd		0.9529						1.19		4105	1.39
1279-TCDD	NotFnd		0.9597						1.19		4105	1.39
1234/1269-TCDD	NotFnd		0.9739						1.19		4105	1.39
1236-TCDD	NotFnd		0.9794						1.19		4105	1.39
1237/1238-TCDD	NotFnd		0.9895						1.19		4105	1.39
1239-TCDD	NotFnd		0.9950						1.19		4105	1.39
2378-TCDD	**NotFnd**		**1.0008**						**1.19**		**4105**	**1.39**
1278-TCDD	NotFnd		1.0139						1.19		4105	1.39
1267-TCDD	NotFnd		1.0194						1.19		4105	1.39
1289-TCDD	NotFnd		1.0397						1.19		4105	1.39
12479/12468-PeCDD	NotFnd		0.9209						0.98		4105	1.68
12469-PeCDD	NotFnd		0.9382						0.98		4105	1.68
12368-PeCDD	NotFnd		0.9557						0.98		4105	1.68
12478-PeCDD	NotFnd		0.9617						0.98		4105	1.68
12379-PeCDD	NotFnd		0.9649						0.98		4105	1.68
12369/12467/12489-PeCDD	NotFnd		0.9732						0.98		4105	1.68
12346/12347-PeCDD	NotFnd		0.9850						0.98		4105	1.68
12378-PeCDD	NotFnd		**1.0006**						**0.98**		**4105**	**1.68**
12367-PeCDD	NotFnd		1.0038						0.98		4105	1.68
12389-PeCDD	NotFnd		1.0146						0.98		4105	1.68
124679/124689-HxCDD	NotFnd		0.9530						1.03		2387	1.15
123468-HxCDD	NotFnd		0.9715						1.03		2387	1.15
123679/123689-HxCDD	NotFnd		0.9795						1.03		2387	1.15
123469-HxCDD	NotFnd		0.9832						1.03		2387	1.15
123478-HxCDD	NotFnd		**1.0004**						1.02		**2387**	**1.15**
123678-HxCDD	NotFnd		**1.0036**						1.09		**2387**	**1.13**
123467-HxCDD	NotFnd		1.0089						1.03		2387	1.15
123789-HxCDD	NotFnd		**1.0118**						0.97		**2387**	**1.17**

Lab ID: B4527_17665_DF_002 | Acq'd: 13 Aug 2020 08:14 DTF | Wt/Vol: 0.94 L | ICAL: HRMS3_DF_10122018_28AUG2019

Client ID: EB-01 | UTP: 13-Aug-2020 15:11:53 DTF | J-level: 5.35 pg/L | Split: 1 | Checkcode: 845-465-DQL

Datafile: 200812C27 | Report: 13 Aug 2020 15:16 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

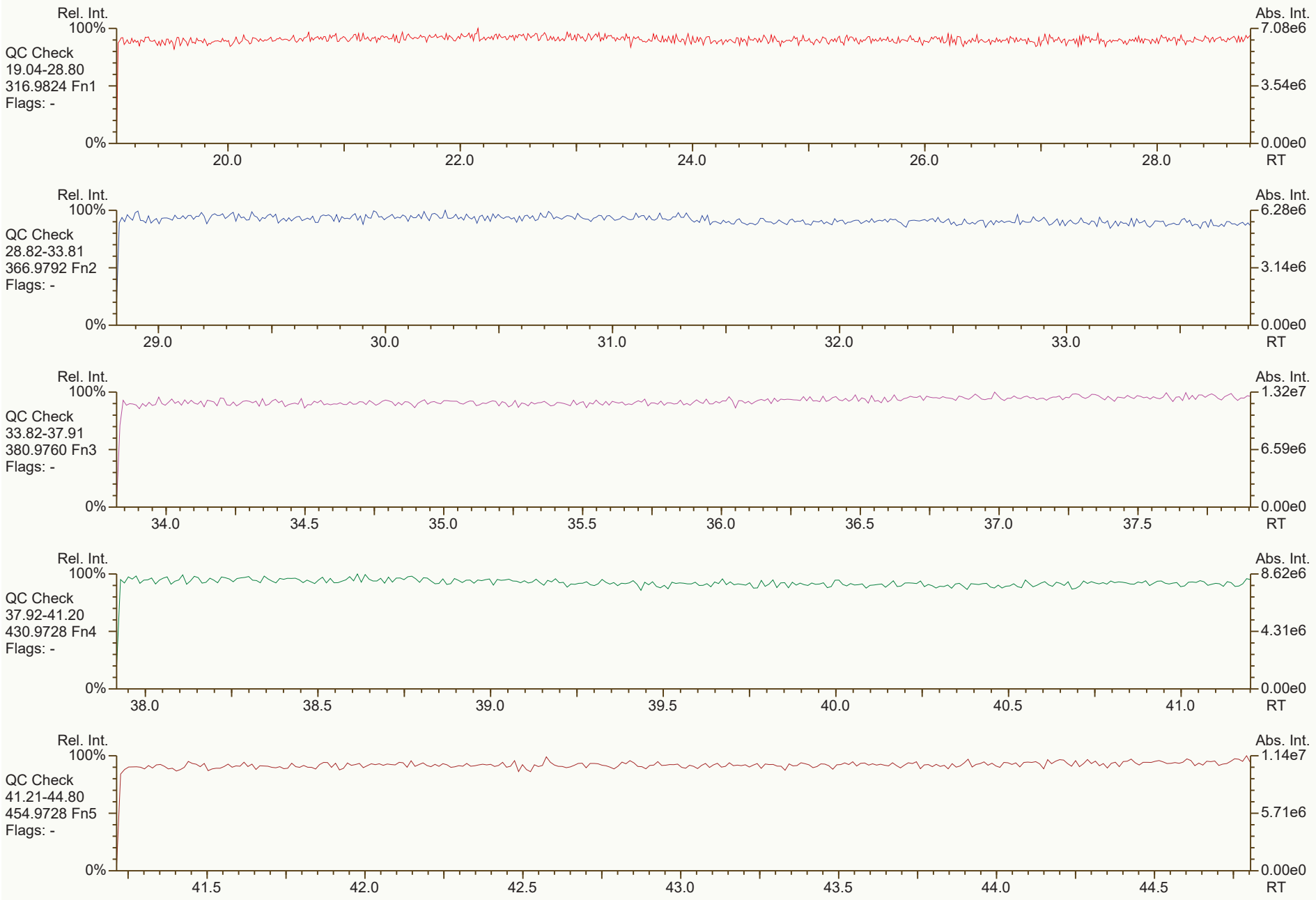
Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1234679-HpCDD	NotFnd		0.9826						0.98		6640	5.24
1234678-HpCDD	**NotFnd**		**1.0003**						**0.98**		**6640**	**5.24**
OCDD	**42.88**	**J B**	**1.0003**	**0.9999**	**-1.0**	**2.06E+05**	**0.82**	**Y**	**1.07**	**27.4**	**3243**	**7.06**
OCDD-a	NotFnd	**#VALUE!**	1.0002						-		3186	#VALUE!
1368-TCDF	NotFnd		0.7980						1.01		2717	0.726
1468-TCDF	NotFnd		0.8204						1.01		2717	0.726
2468-TCDF	NotFnd		0.8443						1.01		2717	0.726
1346/1246-TCDF	NotFnd		0.8597						1.01		2717	0.726
1347/1378/1247-TCDF	NotFnd		0.8665						1.01		2717	0.726
1348-TCDF	NotFnd		0.8785						1.01		2717	0.726
1248/1367/1379-TCDF	NotFnd		0.8840						1.01		2717	0.726
1268-TCDF	NotFnd		0.9004						1.01		2717	0.726
1467-TCDF	NotFnd		0.9060						1.01		2717	0.726
1478-TCDF	NotFnd		0.9132						1.01		2717	0.726
1369/1237-TCDF	NotFnd		0.9287						1.01		2717	0.726
2467-TCDF	NotFnd		0.9345						1.01		2717	0.726
2368-TCDF	NotFnd		0.9409						1.01		2717	0.726
1238/1234/1678/1469/1236-TCDF	NotFnd		0.9450						1.01		2717	0.726
1278-TCDF	NotFnd		0.9638						1.01		2717	0.726
1349-TCDF	NotFnd		0.9685						1.01		2717	0.726
1267-TCDF	NotFnd		0.9751						1.01		2717	0.726
2346/1249-TCDF	NotFnd		0.9831						1.01		2717	0.726
2347/1279-TCDF	NotFnd		0.9920						1.01		2717	0.726
2348-TCDF	NotFnd		0.9964						1.01		2717	0.726
2378-TCDF	**NotFnd**		**1.0009**						**1.01**		**2717**	**0.726**
2367/3467-TCDF	NotFnd		1.0164						1.01		2717	0.726
1269-TCDF	NotFnd		1.0259						1.01		2717	0.726
1239-TCDF	NotFnd		1.0373						1.01		2717	0.726
1289-TCDF	NotFnd		1.0838						1.01		2717	0.726
13468/12468-PeCDF	NotFnd		0.9052						0.98		3482	0.957
13678/13467/12467-PeCDF	NotFnd		0.9582						0.98		3639	1
12368/13478/12478-PeCDF	NotFnd		0.9634						0.98		3639	1
14678-PeCDF	NotFnd		0.9668						0.98		3639	1
13479-PeCDF	NotFnd		0.9700						0.98		3639	1
13469/12479-PeCDF	NotFnd		0.9781						0.98		3639	1
12346-PeCDF	NotFnd		0.9829						0.98		3639	1

Lab ID: B4527_17665_DF_002 | Acq'd: 13 Aug 2020 08:14 DTF | Wt/Vol: 0.94 L | ICAL: HRMS3_DF_10122018_28AUG2019

Client ID: EB-01 | UTP: 13-Aug-2020 15:11:53 DTF | J-level: 5.35 pg/L | Split: 1 | Checkcode: 845-465-DQL

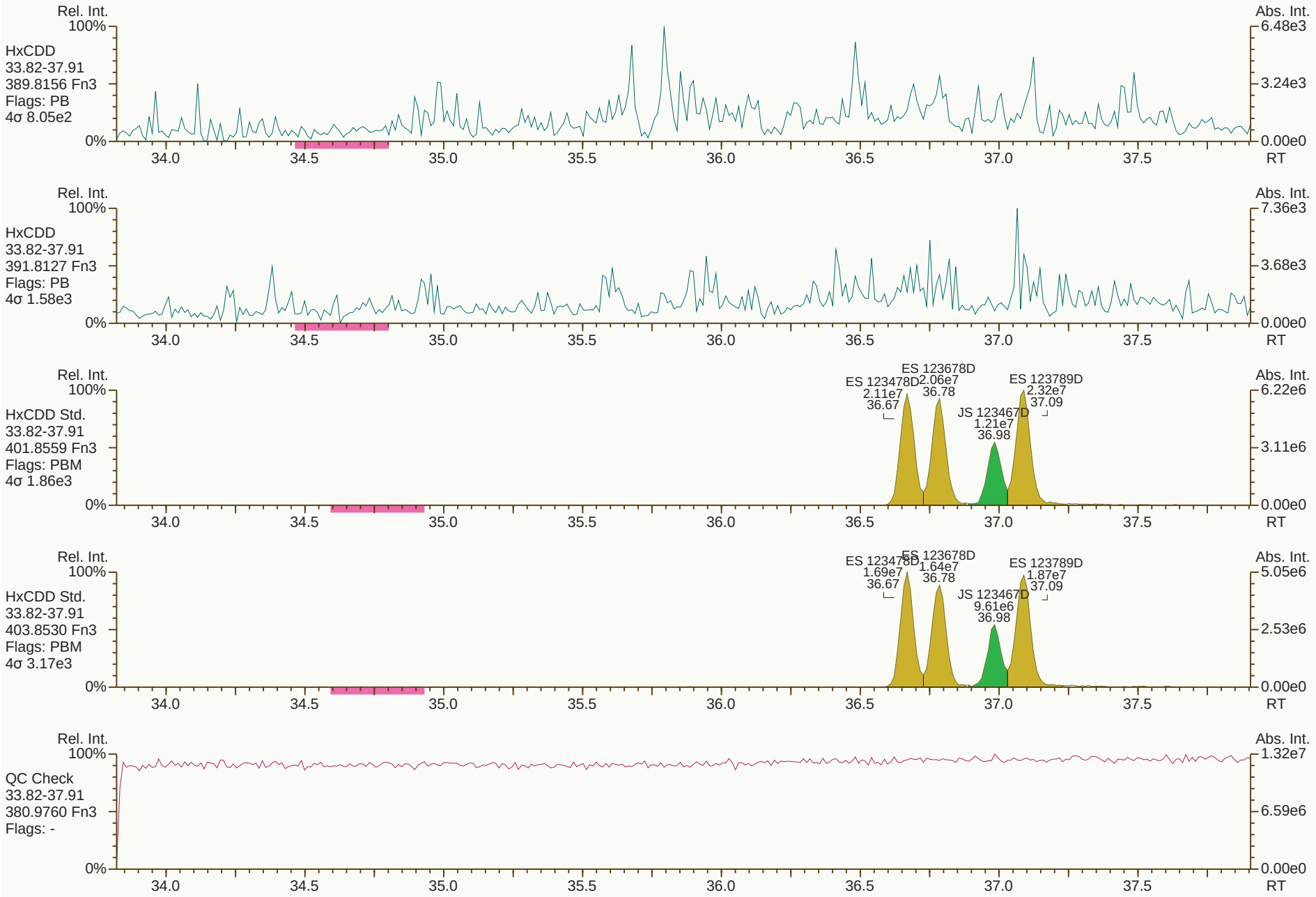
Datafile: 200812C27 | Report: 13 Aug 2020 15:16 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
23468/12469-PeCDF	NotFnd		0.9859						0.98		3639	1
12347-PeCDF	NotFnd		0.9884						0.98		3639	1
12348-PeCDF	NotFnd		0.9937						0.98		3639	1
12378-PeCDF	**NotFnd**		**1.0006**						**0.96**		**3639**	**1**
12678/12367-PeCDF	NotFnd		1.0097						0.98		3639	1
12379-PeCDF	NotFnd		1.0152						0.98		3639	1
12679-PeCDF	NotFnd		0.9923						0.98		3639	1
23467/12369-PeCDF	NotFnd		0.9966						0.98		3639	1
23478-PeCDF	**NotFnd**		**1.0005**						**0.99**		**3639**	**1**
23478/12489-PeCDF	NotFnd		0.0000						0.99			
12489-PeCDF	NotFnd		1.0043						0.98		3639	1
12349-PeCDF	NotFnd		1.0107						0.98		3639	1
12389-PeCDF	NotFnd		1.0349						0.98		3639	1
123468-HxCDF	NotFnd		0.9607						1.13		2750	0.96
124678/134678-HxCDF	NotFnd		0.9666						1.13		2750	0.96
134679-HxCDF	NotFnd		0.9730						1.13		2750	0.96
124679-HxCDF	NotFnd		0.9787						1.13		2750	0.96
124689-HxCDF	NotFnd		0.9850						1.13		2750	0.96
123467-HxCDF	NotFnd		0.9971						1.13		2750	0.96
123478-HxCDF	**NotFnd**		**1.0005**						**1.21**		**2750**	**0.889**
123678-HxCDF	**NotFnd**		**1.0005**						**1.11**		**2750**	**0.907**
123479-HxCDF	NotFnd		1.0049						1.13		2750	0.96
123469-HxCDF	NotFnd		1.0090						1.13		2750	0.96
123679-HxCDF	NotFnd		0.9941						1.13		2750	0.96
234678-HxCDF	**NotFnd**		**1.0004**						**1.12**		**2750**	**0.938**
234678/123689-HxCDF	NotFnd		0.0000						1.12			
123689-HxCDF	NotFnd		1.0041						1.13		2750	0.96
123789-HxCDF	**NotFnd**		**1.0005**						**1.11**		**2750**	**1.13**
123789/123489-HxCDF	NotFnd		0.0000						1.11			
123489-HxCDF	NotFnd		1.0009						1.13		2750	0.96
1234678-HpCDF	**NotFnd**		**1.0003**						**1.32**		**2180**	**0.935**
1234679-HpCDF	NotFnd		1.0075						1.29		2180	1.13
1234689-HpCDF	NotFnd		1.0112						1.29		2180	1.13
1234789-HpCDF	**NotFnd**		**1.0003**						**1.26**		**2180**	**1.4**
OCDF	**NotFnd**		**1.0003**						**1.03**		**2577**	**4.59**
OCDF-a	NotFnd	**#VALUE!**	1.0002						-		3049	#VALUE!

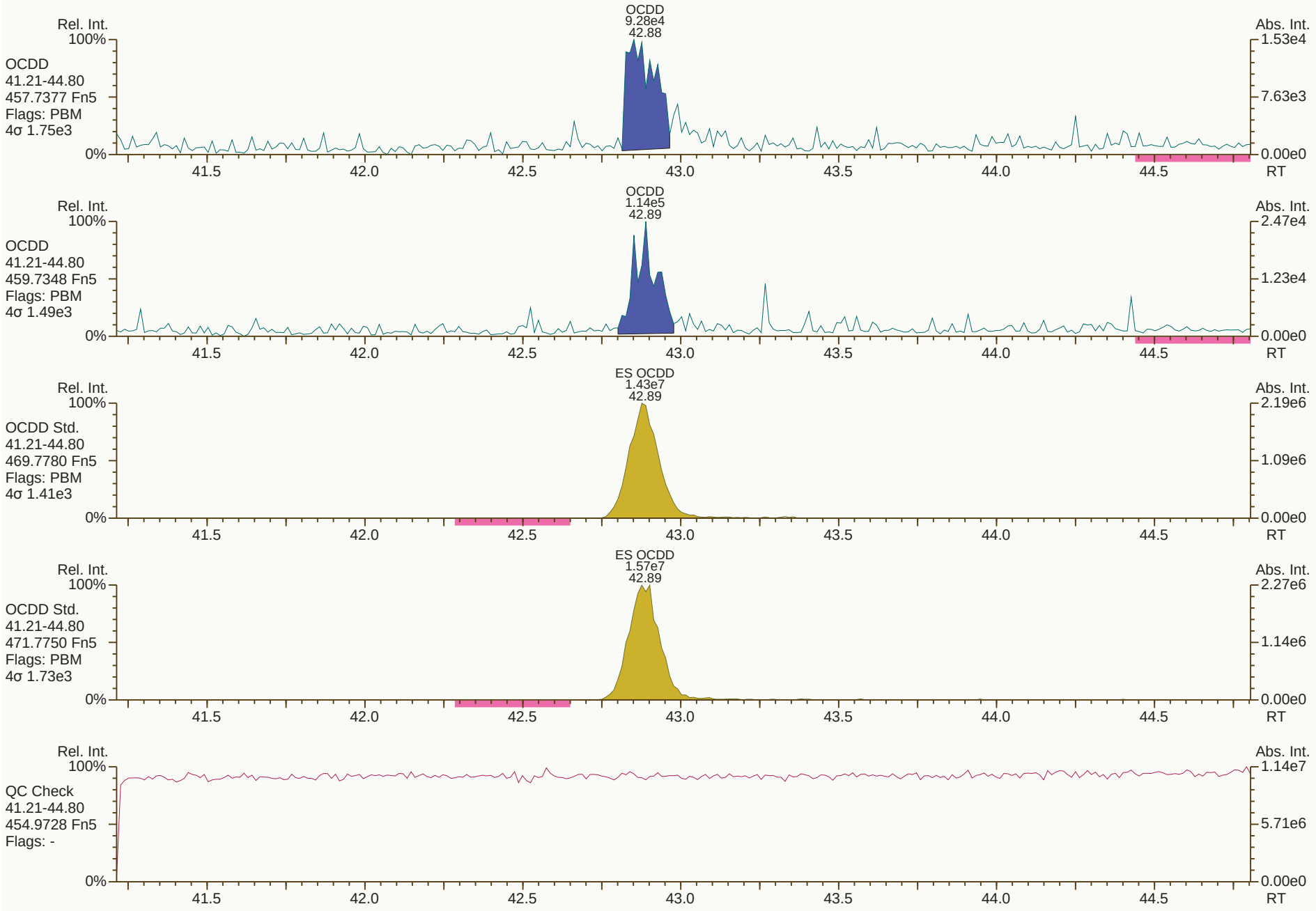

Rel. Int.
100%
QC Check
19.04-28.80
316.9824 Fn1
Flags: -
0%
20.0
22.0
24.0
26.0
28.0
Abs. Int.
7.08e6
3.54e6
0.00e0
RT
Rel. Int.
100%
QC Check
28.82-33.81
366.9792 Fn2
Flags: -
0%
29.0
30.0
31.0
32.0
33.0
Abs. Int.
6.28e6
3.14e6
0.00e0
RT
Rel. Int.
100%
QC Check
33.82-37.91
380.9760 Fn3
Flags: -
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
Abs. Int.
1.32e7
6.59e6
0.00e0
RT
Rel. Int.
100%
QC Check
37.92-41.20
430.9728 Fn4
Flags: -
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
Abs. Int.
8.62e6
4.31e6
0.00e0
RT
Rel. Int.
100%
QC Check
41.21-44.80
454.9728 Fn5
Flags: -
0%
41.5
42.0
42.5
43.0
43.5
44.0
44.5
Abs. Int.
1.14e7
5.71e6
0.00e0
RT


Rel. Int.
100%
TCDD
19.04-28.80
319.8965 Fn1
Flags: PB
4σ 2.49e3
0%
Abs. Int.
7.09e3
3.55e3
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD
19.04-28.80
321.8936 Fn1
Flags: PB
4σ 1.62e3
0%
Abs. Int.
9.74e3
4.87e3
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
37Cl-TCDD
19.04-28.80
327.8850 Fn1
Flags: PBM
4σ 1.51e3
0%
CS 37Cl-2378D
2.83e7
26.91
Abs. Int.
6.20e6
3.10e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.80
331.9368 Fn1
Flags: PBM
4σ 5.28e3
0%
JS 1234D
2.76e7
26.19
ES 2378D
2.75e7
26.89
Abs. Int.
5.96e6
2.98e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.80
333.9339 Fn1
Flags: PBM
4σ 4.06e3
0%
JS 1234D
3.34e7
26.19
ES 2378D
3.40e7
26.89
Abs. Int.
7.40e6
3.70e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT


Rel. Int.
100%
PeCDD
28.82-33.81
355.8546 Fn2
Flags: PB
4σ 2.36e3
0%
Abs. Int.
9.40e3
4.70e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD
28.82-33.81
357.8517 Fn2
Flags: PB
4σ 1.75e3
0%
Abs. Int.
9.69e3
4.85e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.82-33.81
367.8949 Fn2
Flags: PBM
4σ 4.02e3
0%
CS 12347D
2.90e7
32.09
ES 12378D
2.98e7
32.61
Abs. Int.
8.17e6
4.08e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.82-33.81
369.8919 Fn2
Flags: PBM
4σ 1.42e3
0%
CS 12347D
1.83e7
32.09
ES 12378D
1.85e7
32.61
Abs. Int.
5.08e6
2.54e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
QC Check
28.82-33.81
366.9792 Fn2
Flags: -
0%
Abs. Int.
6.28e6
3.14e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT

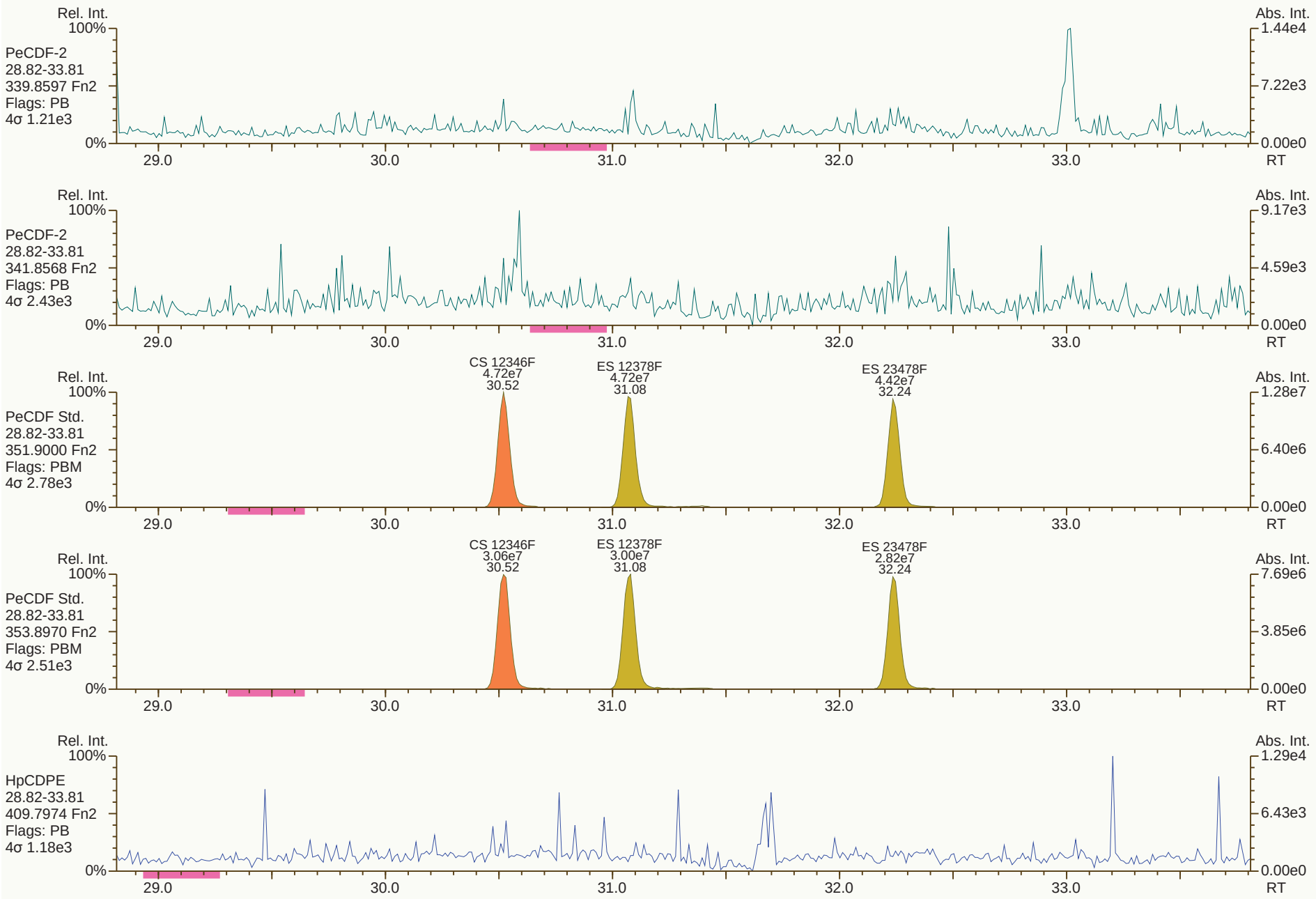

Rel. Int.
100%
HxCDD
33.82-37.91
389.8156 Fn3
Flags: PB
4σ 8.05e2
0%
Abs. Int.
6.48e3
3.24e3
0.00e0
RT
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
HxCDD
33.82-37.91
391.8127 Fn3
Flags: PB
4σ 1.58e3
7.36e3
3.68e3
HxCDD Std.
33.82-37.91
401.8559 Fn3
Flags: PBM
4σ 1.86e3
ES 123678D
2.06e7
36.78
ES 123478D
2.11e7
36.67
ES 123789D
2.32e7
37.09
JS 123467D
1.21e7
36.98
6.22e6
3.11e6
HxCDD Std.
33.82-37.91
403.8530 Fn3
Flags: PBM
4σ 3.17e3
ES 123678D
1.64e7
36.78
ES 123478D
1.69e7
36.67
ES 123789D
1.87e7
37.09
JS 123467D
9.61e6
36.98
5.05e6
2.53e6
QC Check
33.82-37.91
380.9760 Fn3
Flags: -
1.32e7
6.59e6


Rel. Int.
100%
HpCDD
37.92-41.20
423.7767 Fn4
Flags: B
4σ 3.09e3
0%
Abs. Int.
1.57e4
7.84e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD
37.92-41.20
425.7737 Fn4
Flags: B
4σ 3.55e3
0%
Abs. Int.
1.18e4
5.91e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
ES 1234678D
1.54e7
40.17
Rel. Int.
100%
HpCDD Std.
37.92-41.20
435.8169 Fn4
Flags: PBM
4σ 2.36e3
0%
Abs. Int.
3.57e6
1.78e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
ES 1234678D
1.46e7
40.18
Rel. Int.
100%
HpCDD Std.
37.92-41.20
437.8140 Fn4
Flags: PBM
4σ 4.45e3
0%
Abs. Int.
3.39e6
1.70e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
QC Check
37.92-41.20
430.9728 Fn4
Flags: -
0%
Abs. Int.
8.62e6
4.31e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT


OCDD
9.28e4
42.88
Rel. Int.
100%
OCDD
41.21-44.80
457.7377 Fn5
Flags: PBM
4σ 1.75e3
0%
Abs. Int.
1.53e4
7.63e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
OCDD
1.14e5
42.89
Rel. Int.
100%
OCDD
41.21-44.80
459.7348 Fn5
Flags: PBM
4σ 1.49e3
0%
Abs. Int.
2.47e4
1.23e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDD
1.43e7
42.89
Rel. Int.
100%
OCDD Std.
41.21-44.80
469.7780 Fn5
Flags: PBM
4σ 1.41e3
0%
Abs. Int.
2.19e6
1.09e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDD
1.57e7
42.89
Rel. Int.
100%
OCDD Std.
41.21-44.80
471.7750 Fn5
Flags: PBM
4σ 1.73e3
0%
Abs. Int.
2.27e6
1.14e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
QC Check
41.21-44.80
454.9728 Fn5
Flags: -
0%
Abs. Int.
1.14e7
5.71e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT

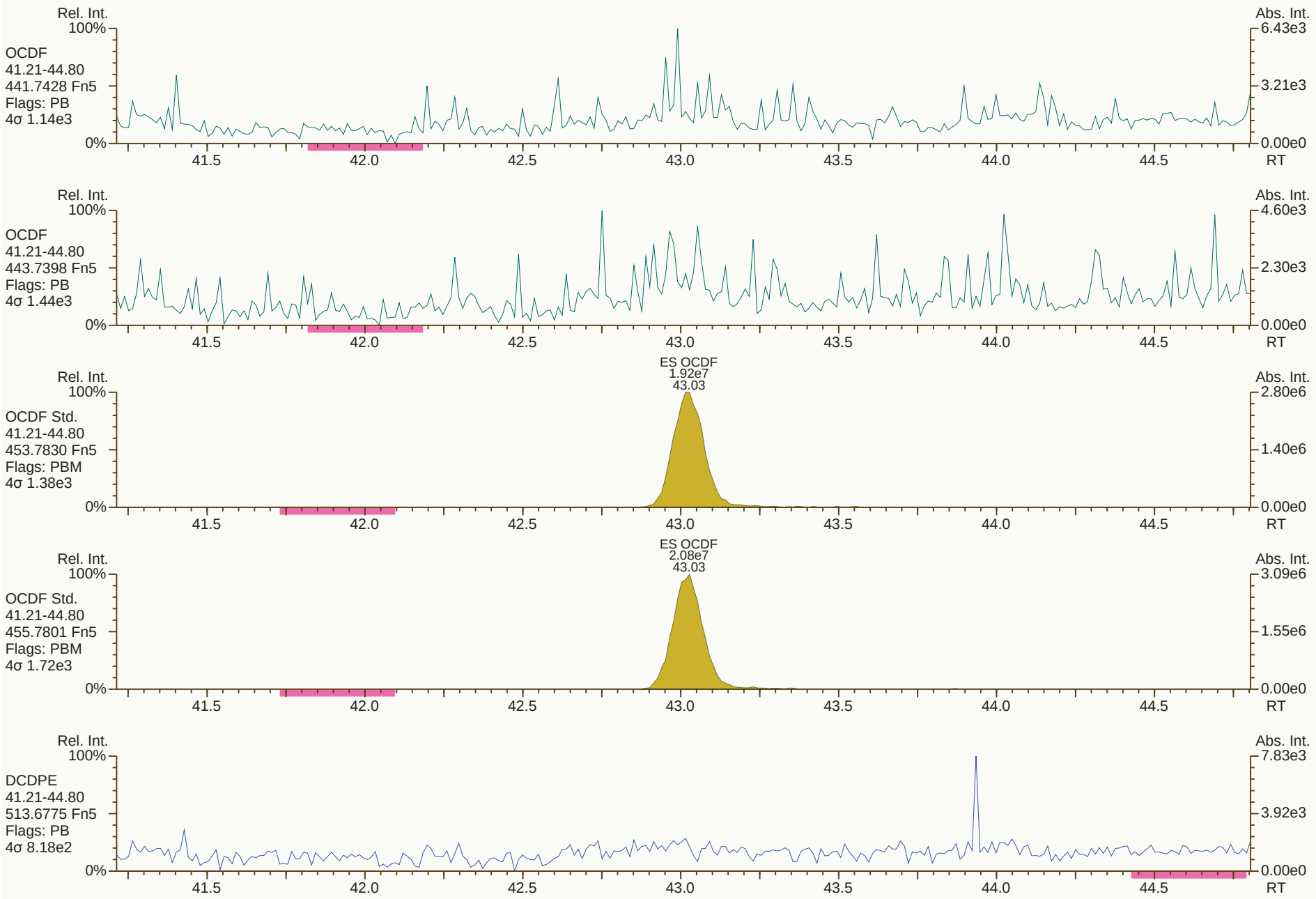

Rel. Int.
100%
TCDF
19.04-28.80
303.9016 Fn1
Flags: PB
4σ 1.31e3
0%
Abs. Int.
6.37e3
3.18e3
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDF
19.04-28.80
305.8987 Fn1
Flags: PB
4σ 1.41e3
0%
Abs. Int.
6.23e3
3.11e3
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDF Std.
19.04-28.80
315.9419 Fn1
Flags: PBM
4σ 1.17e4
0%
JS 1234F
3.96e7
24.44
ES 2378F
4.25e7
25.94
Abs. Int.
8.85e6
4.43e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDF Std.
19.04-28.80
317.9389 Fn1
Flags: PBM
4σ 7.04e3
0%
JS 1234F
4.98e7
24.44
ES 2378F
5.24e7
25.93
Abs. Int.
1.08e7
5.41e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
HxCDPE
19.04-28.80
375.8364 Fn1
Flags: PB
4σ 9.60e2
0%
Abs. Int.
6.23e3
3.11e3
0.00e0
20.0
22.0
24.0
26.0
28.0
RT


Rel. Int.
100%
0%
Abs. Int.
1.16e4
5.79e3
0.00e0
PeCDF-1
19.04-28.80
339.8597 Fn1
Flags: PB
4σ 8.67e2
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
0%
Abs. Int.
1.78e4
8.92e3
0.00e0
PeCDF-1
19.04-28.80
341.8568 Fn1
Flags: PB
4σ 2.61e3
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
0%
Abs. Int.
7.08e6
3.54e6
0.00e0
QC Check
19.04-28.80
316.9824 Fn1
Flags: -
20.0
22.0
24.0
26.0
28.0
RT


Rel. Int.
100%
PeCDF-2
28.82-33.81
339.8597 Fn2
Flags: PB
4σ 1.21e3
0%
Abs. Int.
1.44e4
7.22e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF-2
28.82-33.81
341.8568 Fn2
Flags: PB
4σ 2.43e3
0%
Abs. Int.
9.17e3
4.59e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.82-33.81
351.9000 Fn2
Flags: PBM
4σ 2.78e3
0%
CS 12346F
4.72e7
30.52
ES 12378F
4.72e7
31.08
ES 23478F
4.42e7
32.24
Abs. Int.
1.28e7
6.40e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.82-33.81
353.8970 Fn2
Flags: PBM
4σ 2.51e3
0%
CS 12346F
3.06e7
30.52
ES 12378F
3.00e7
31.08
ES 23478F
2.82e7
32.24
Abs. Int.
7.69e6
3.85e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
HpCDPE
28.82-33.81
409.7974 Fn2
Flags: PB
4σ 1.18e3
0%
Abs. Int.
1.29e4
6.43e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT


Rel. Int.
100%
HxCDF
33.82-37.91
373.8207 Fn3
Flags: PB
4σ 1.39e3
0%
Abs. Int.
6.89e3
3.45e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
HxCDF
33.82-37.91
375.8178 Fn3
Flags: PB
4σ 1.36e3
6.31e3
3.15e3
HxCDF Std.
33.82-37.91
383.8639 Fn3
Flags: PBM
4σ 3.99e3
ES 123678F
1.95e7
35.80
ES 123478F
1.64e7
35.66
CS 123469F
1.76e7
36.11
ES 234678F
1.77e7
36.48
ES 123789F
1.63e7
37.46
5.17e6
2.59e6
HxCDF Std.
33.82-37.91
385.8610 Fn3
Flags: PBM
4σ 1.18e4
ES 123678F
3.57e7
35.80
ES 123478F
3.09e7
35.66
CS 123469F
3.24e7
36.11
ES 234678F
3.25e7
36.48
ES 123789F
3.03e7
37.46
9.86e6
4.93e6
OCDPE
33.82-37.91
445.7555 Fn3
Flags: PB
4σ 9.56e2
4.31e3
2.15e3


Rel. Int.
100%
HpCDF
37.92-41.20
407.7818 Fn4
Flags: B
4σ 9.36e2
0%
Abs. Int.
8.34e3
4.17e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF
37.92-41.20
409.7788 Fn4
Flags: B
4σ 1.24e3
0%
Abs. Int.
9.85e3
4.92e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.92-41.20
417.8253 Fn4
Flags: PBM
4σ 2.15e3
0%
ES 1234678F
1.11e7
39.15
CS 1234689F
1.12e7
39.60
ES 1234789F
8.48e6
40.60
Abs. Int.
2.93e6
1.46e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.92-41.20
419.8220 Fn4
Flags: PBM
4σ 3.87e3
0%
ES 1234678F
2.46e7
39.15
CS 1234689F
2.41e7
39.60
ES 1234789F
1.90e7
40.60
Abs. Int.
6.56e6
3.28e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
NCDPE
37.92-41.20
479.7165 Fn4
Flags: PB
4σ 1.09e3
0%
Abs. Int.
1.49e4
7.47e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT


Rel. Int.
100%
OCDF
41.21-44.80
441.7428 Fn5
Flags: PB
4σ 1.14e3
0%
Abs. Int.
6.43e3
3.21e3
0.00e0
RT
41.5
42.0
42.5
43.0
43.5
44.0
44.5
OCDF
41.21-44.80
443.7398 Fn5
Flags: PB
4σ 1.44e3
4.60e3
2.30e3
ES OCDF
1.92e7
43.03
OCDF Std.
41.21-44.80
453.7830 Fn5
Flags: PBM
4σ 1.38e3
2.80e6
1.40e6
ES OCDF
2.08e7
43.03
OCDF Std.
41.21-44.80
455.7801 Fn5
Flags: PBM
4σ 1.72e3
3.09e6
1.55e6
DCDPE
41.21-44.80
513.6775 Fn5
Flags: PB
4σ 8.18e2
7.83e3
3.92e3

Lab ID: B4527_17665_DF_003 | Acq'd: 13 Aug 2020 09:01 DTF | Wt/Vol: 1.01 L | ICAL: HRMS3_DF_10122018_28AUG2019

Client ID: FB-02 | UTP: 13-Aug-2020 15:11:54 DTF | J-level: 4.94 pg/L | Split: 1 | Checkcode: 458-339-MDG

Datafile: 200812C28 | Report: 13 Aug 2020 15:17 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	NotFnd		1.0008	-		-	-	-	1.19	-	3677	0.991
12378-PeCDD	NotFnd		1.0006	-		-	-	-	0.98	-	4471	1.45
123478-HxCDD	NotFnd		1.0004	-		-	-	-	1.02	-	2870	1.12
123678-HxCDD	NotFnd		1.0036	-		-	-	-	1.09	-	2870	1.14
123789-HxCDD	NotFnd		1.0118	-		-	-	-	0.97	-	2870	1.18
1234678-HpCDD	NotFnd		1.0003	-		-	-	-	0.98	-	2794	1.74
OCDD	NotFnd		1.0003	-		-	-	-	1.07	-	3636	7.33
2378-TCDF	NotFnd		1.0009	-		-	-	-	1.01	-	2792	0.609
12378-PeCDF	NotFnd		1.0006	-		-	-	-	0.96	-	3091	0.69
23478-PeCDF	NotFnd		1.0005	-		-	-	-	0.99	-	3091	0.671
123478-HxCDF	NotFnd		1.0005	-		-	-	-	1.21	-	2726	0.698
123678-HxCDF	NotFnd		1.0005	-		-	-	-	1.11	-	2726	0.712
234678-HxCDF	NotFnd		1.0004	-		-	-	-	1.12	-	2726	0.788
123789-HxCDF	NotFnd		1.0005	-		-	-	-	1.11	-	2726	0.923
1234678-HpCDF	NotFnd		1.0003	-		-	-	-	1.32	-	2736	0.922
1234789-HpCDF	NotFnd		1.0003	-		-	-	-	1.26	-	2736	1.53
OCDF	NotFnd		1.0003	-		-	-	-	1.03	-	2780	4.21

Name	Act RT	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	26.88	1.0266	1.0268	+0.3	7.12E+07	0.79	Y	0.99	99.8
ES 12378-PeCDD	32.60	1.2430	1.2454	+4.7	5.63E+07	1.57	Y	0.83	94.1
ES 123478-HxCDD	36.66	0.9916	0.9915	-0.2	4.23E+07	1.26	Y	0.95	93
ES 123678-HxCDD	36.77	0.9947	0.9946	-0.2	4.11E+07	1.30	Y	0.98	87.8
ES 123789-HxCDD	37.08	1.0029	1.0029	0	4.69E+07	1.26	Y	1.14	86
ES 1234678-HpCDD	40.17	1.0851	1.0865	+3.4	3.42E+07	1.04	Y	0.90	79.4
ES OCDD	42.87	1.1584	1.1595	+2.8	3.23E+07	0.90	Y	0.63	53.7
ES 2378-TCDF	25.93	1.0602	1.0608	+0.9	1.08E+08	0.81	Y	1.00	101
ES 12378-PeCDF	31.07	1.2683	1.2712	+5.4	8.89E+07	1.60	Y	0.83	99.5
ES 23478-PeCDF	32.23	1.3156	1.3189	+6.4	8.47E+07	1.58	Y	0.81	97.7
ES 123478-HxCDF	35.65	0.9644	0.9642	-0.4	5.33E+07	0.54	Y	1.12	98.8
ES 123678-HxCDF	35.79	0.9682	0.9680	-0.4	6.27E+07	0.53	Y	1.33	98.1
ES 234678-HxCDF	36.47	0.9864	0.9864	0	5.60E+07	0.54	Y	1.21	96.5
ES 123789-HxCDF	37.44	1.0128	1.0128	0	5.26E+07	0.53	Y	1.12	97.9
ES 1234678-HpCDF	39.14	1.0578	1.0586	+1.9	4.14E+07	0.47	Y	0.92	93.3
ES 1234789-HpCDF	40.59	1.0967	1.0980	+3.2	3.09E+07	0.45	Y	0.82	78.5
ES OCDF	43.01	1.1623	1.1633	+2.6	4.32E+07	0.92	Y	0.78	57.7

Lab ID: B4527_17665_DF_003 | Acq'd: 13 Aug 2020 09:01 DTF | Wt/Vol: 1.01 L | ICAL: HRMS3_DF_10122018_28AUG2019

Client ID: FB-02 | UTP: 13-Aug-2020 15:11:54 DTF | J-level: 4.94 pg/L | Split: 1 | Checkcode: 458-339-MDG

Datafile: 200812C28 | Report: 13 Aug 2020 15:17 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
JS 1234-TCDD	26.18		-	-	-	7.21E+07	0.81	Y	-	-
JS 1234-TCDF	24.44		-	-	-	1.08E+08	0.82	Y	-	-
JS 123467-HxCDD	36.97		-	-	-	2.40E+07	1.30	Y	-	-
CS 37Cl-2378-TCDD	26.90		1.0276	1.0277	+0.2	3.34E+07	n/a	-	1.12	103
CS 12347-PeCDD	32.08		1.2233	1.2255	+4.2	5.80E+07	1.61	Y	0.71	113
CS 12346-PeCDF	30.51		1.2459	1.2486	+4.9	9.10E+07	1.55	Y	0.81	105
CS 123469-HxCDF	36.10		0.9767	0.9765	-0.4	5.75E+07	0.53	Y	1.12	107
CS 1234689-HpCDF	39.58		1.0696	1.0707	+2.6	4.40E+07	0.46	Y	0.90	102
~~SS 37Cl-2378-TCDD~~	~~26.90~~		~~1.0276~~	~~1.0277~~	~~+0.2~~	~~3.34E+07~~	~~n/a~~		~~1.14~~	~~103~~
~~SS 12347-PeCDD~~	~~32.08~~		~~1.2233~~	~~1.2255~~	~~+4.2~~	~~5.80E+07~~	~~1.61~~	~~Y~~	~~0.86~~	~~119~~
~~SS 12346-PeCDF~~	~~30.51~~		~~1.2459~~	~~1.2486~~	~~+4.9~~	~~9.10E+07~~	~~1.55~~	~~Y~~	~~0.98~~	~~105~~
~~SS 123469-HxCDF~~	~~36.10~~		~~0.9767~~	~~0.9765~~	~~-0.4~~	~~5.75E+07~~	~~0.53~~	~~Y~~	~~0.85~~	~~108~~
~~SS 1234689-HpCDF~~	~~39.58~~		~~1.0696~~	~~1.0707~~	~~+2.6~~	~~4.40E+07~~	~~0.46~~	~~Y~~	~~0.97~~	~~109~~

Totals	Conc	EMPC
Total TCDD	0	0
Total PeCDD	0	0
Total HxCDD	0	0
Total HpCDD	0	0
Total Tetra-Octa Dioxins	0	0
Total TCDF	0	0
Total PeCDF	0	0
Total HxCDF	0	0
Total HpCDF	0	0
Total Tetra-Octa Furans	0	0
Total Tetra-Octa Dioxins & Furans	0	0

Lab ID: B4527_17665_DF_003 **Acq'd:** 13 Aug 2020 09:01 DTF **Wt/Vol:** 1.01 L **ICAL:** HRMS3_DF_10122018_28AUG2019

Client ID: FB-02 **UTP:** 13-Aug-2020 15:11:54 DTF **J-level:** 4.94 pg/L **Split:** 1 **Checkcode:** 458-339-MDG

Datafile: 200812C28 **Report:** 13 Aug 2020 15:17 TF **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1368-TCDD	NotFnd		0.8523						1.19		3677	0.991
1379-TCDD	NotFnd		0.8682						1.19		3677	0.991
1369-TCDD	NotFnd		0.8858						1.19		3677	0.991
1469-TCDD	NotFnd		0.9177						1.19		3677	0.991
1247/1246/1248/1249-TCDD	NotFnd		0.9274						1.19		3677	0.991
1378-TCDD	NotFnd		0.9349						1.19		3677	0.991
1268-TCDD	NotFnd		0.9430						1.19		3677	0.991
1478-TCDD	NotFnd		0.9529						1.19		3677	0.991
1279-TCDD	NotFnd		0.9597						1.19		3677	0.991
1234/1269-TCDD	NotFnd		0.9739						1.19		3677	0.991
1236-TCDD	NotFnd		0.9794						1.19		3677	0.991
1237/1238-TCDD	NotFnd		0.9895						1.19		3677	0.991
1239-TCDD	NotFnd		0.9950						1.19		3677	0.991
2378-TCDD	**NotFnd**		**1.0008**						**1.19**		**3677**	**0.991**
1278-TCDD	NotFnd		1.0139						1.19		3677	0.991
1267-TCDD	NotFnd		1.0194						1.19		3677	0.991
1289-TCDD	NotFnd		1.0397						1.19		3677	0.991
12479/12468-PeCDD	NotFnd		0.9209						0.98		4471	1.45
12469-PeCDD	NotFnd		0.9382						0.98		4471	1.45
12368-PeCDD	NotFnd		0.9557						0.98		4471	1.45
12478-PeCDD	NotFnd		0.9617						0.98		4471	1.45
12379-PeCDD	NotFnd		0.9649						0.98		4471	1.45
12369/12467/12489-PeCDD	NotFnd		0.9732						0.98		4471	1.45
12346/12347-PeCDD	NotFnd		0.9850						0.98		4471	1.45
12378-PeCDD	NotFnd		**1.0006**						**0.98**		**4471**	**1.45**
12367-PeCDD	NotFnd		1.0038						0.98		4471	1.45
12389-PeCDD	NotFnd		1.0146						0.98		4471	1.45
124679/124689-HxCDD	NotFnd		0.9530						1.03		2870	1.14
123468-HxCDD	NotFnd		0.9715						1.03		2870	1.14
123679/123689-HxCDD	NotFnd		0.9795						1.03		2870	1.14
123469-HxCDD	NotFnd		0.9832						1.03		2870	1.14
123478-HxCDD	NotFnd		**1.0004**						1.02		**2870**	**1.12**
123678-HxCDD	NotFnd		**1.0036**						1.09		**2870**	**1.14**
123467-HxCDD	NotFnd		1.0089						1.03		2870	1.14
123789-HxCDD	NotFnd		**1.0118**						0.97		**2870**	**1.18**

Lab ID: B4527_17665_DF_003 | Acq'd: 13 Aug 2020 09:01 DTF | Wt/Vol: 1.01 L | ICAL: HRMS3_DF_10122018_28AUG2019

Client ID: FB-02 | UTP: 13-Aug-2020 15:11:54 DTF | J-level: 4.94 pg/L | Split: 1 | Checkcode: 458-339-MDG

Datafile: 200812C28 | Report: 13 Aug 2020 15:17 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

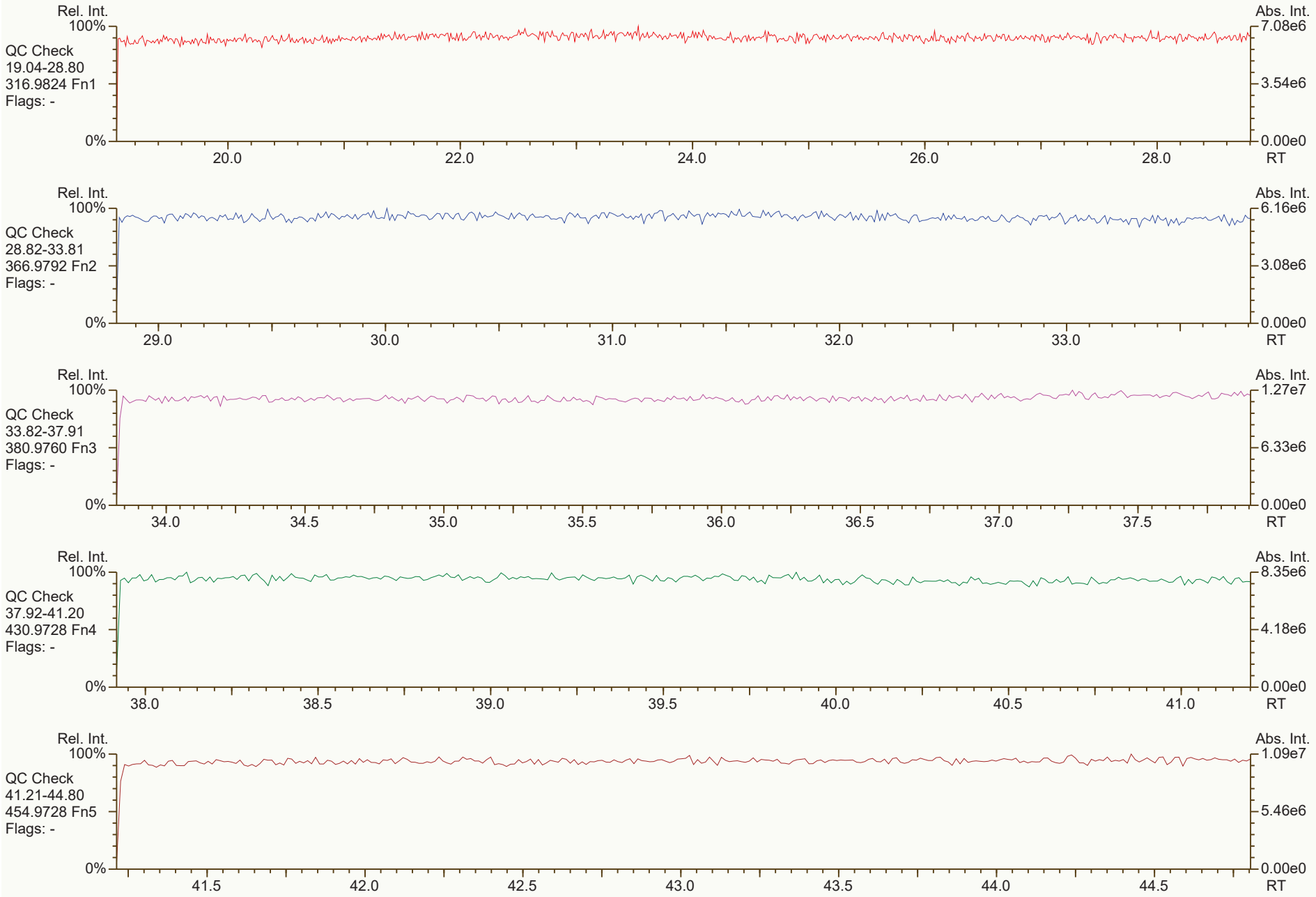
Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1234679-HpCDD	NotFnd		0.9826						0.98		2794	1.74
1234678-HpCDD	**NotFnd**		**1.0003**						**0.98**		**2794**	**1.74**
OCDD	**NotFnd**		**1.0003**						**1.07**		**3636**	**7.33**
OCDD-a	NotFnd	**#VALUE!**	1.0002						-		3705	#VALUE!
1368-TCDF	NotFnd		0.7980						1.01		2792	0.609
1468-TCDF	NotFnd		0.8204						1.01		2792	0.609
2468-TCDF	NotFnd		0.8443						1.01		2792	0.609
1346/1246-TCDF	NotFnd		0.8597						1.01		2792	0.609
1347/1378/1247-TCDF	NotFnd		0.8665						1.01		2792	0.609
1348-TCDF	NotFnd		0.8785						1.01		2792	0.609
1248/1367/1379-TCDF	NotFnd		0.8840						1.01		2792	0.609
1268-TCDF	NotFnd		0.9004						1.01		2792	0.609
1467-TCDF	NotFnd		0.9060						1.01		2792	0.609
1478-TCDF	NotFnd		0.9132						1.01		2792	0.609
1369/1237-TCDF	NotFnd		0.9287						1.01		2792	0.609
2467-TCDF	NotFnd		0.9345						1.01		2792	0.609
2368-TCDF	NotFnd		0.9409						1.01		2792	0.609
1238/1234/1678/1469/1236-TCDF	NotFnd		0.9450						1.01		2792	0.609
1278-TCDF	NotFnd		0.9638						1.01		2792	0.609
1349-TCDF	NotFnd		0.9685						1.01		2792	0.609
1267-TCDF	NotFnd		0.9751						1.01		2792	0.609
2346/1249-TCDF	NotFnd		0.9831						1.01		2792	0.609
2347/1279-TCDF	NotFnd		0.9920						1.01		2792	0.609
2348-TCDF	NotFnd		0.9964						1.01		2792	0.609
2378-TCDF	**NotFnd**		**1.0009**						**1.01**		**2792**	**0.609**
2367/3467-TCDF	NotFnd		1.0164						1.01		2792	0.609
1269-TCDF	NotFnd		1.0259						1.01		2792	0.609
1239-TCDF	NotFnd		1.0373						1.01		2792	0.609
1289-TCDF	NotFnd		1.0838						1.01		2792	0.609
13468/12468-PeCDF	NotFnd		0.9052						0.98		3263	0.718
13678/13467/12467-PeCDF	NotFnd		0.9582						0.98		3091	0.68
12368/13478/12478-PeCDF	NotFnd		0.9634						0.98		3091	0.68
14678-PeCDF	NotFnd		0.9668						0.98		3091	0.68
13479-PeCDF	NotFnd		0.9700						0.98		3091	0.68
13469/12479-PeCDF	NotFnd		0.9781						0.98		3091	0.68
12346-PeCDF	NotFnd		0.9829						0.98		3091	0.68

Lab ID: B4527_17665_DF_003 **Acq'd:** 13 Aug 2020 09:01 DTF **Wt/Vol:** 1.01 L **ICAL:** HRMS3_DF_10122018_28AUG2019

Client ID: FB-02 **UTP:** 13-Aug-2020 15:11:54 DTF **J-level:** 4.94 pg/L **Split:** 1 **Checkcode:** 458-339-MDG

Datafile: 200812C28 **Report:** 13 Aug 2020 15:17 TF **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
23468/12469-PeCDF	NotFnd		0.9859						0.98		3091	0.68
12347-PeCDF	NotFnd		0.9884						0.98		3091	0.68
12348-PeCDF	NotFnd		0.9937						0.98		3091	0.68
12378-PeCDF	**NotFnd**		**1.0006**						**0.96**		**3091**	**0.69**
12678/12367-PeCDF	NotFnd		1.0097						0.98		3091	0.68
12379-PeCDF	NotFnd		1.0152						0.98		3091	0.68
12679-PeCDF	NotFnd		0.9923						0.98		3091	0.68
23467/12369-PeCDF	NotFnd		0.9966						0.98		3091	0.68
23478-PeCDF	**NotFnd**		**1.0005**						**0.99**		**3091**	**0.671**
23478/12489-PeCDF	NotFnd		0.0000						0.99			
12489-PeCDF	NotFnd		1.0043						0.98		3091	0.68
12349-PeCDF	NotFnd		1.0107						0.98		3091	0.68
12389-PeCDF	NotFnd		1.0349						0.98		3091	0.68
123468-HxCDF	NotFnd		0.9607						1.13		2726	0.775
124678/134678-HxCDF	NotFnd		0.9666						1.13		2726	0.775
134679-HxCDF	NotFnd		0.9730						1.13		2726	0.775
124679-HxCDF	NotFnd		0.9787						1.13		2726	0.775
124689-HxCDF	NotFnd		0.9850						1.13		2726	0.775
123467-HxCDF	NotFnd		0.9971						1.13		2726	0.775
123478-HxCDF	**NotFnd**		**1.0005**						**1.21**		**2726**	**0.698**
123678-HxCDF	**NotFnd**		**1.0005**						**1.11**		**2726**	**0.712**
123479-HxCDF	NotFnd		1.0049						1.13		2726	0.775
123469-HxCDF	NotFnd		1.0090						1.13		2726	0.775
123679-HxCDF	NotFnd		0.9941						1.13		2726	0.775
234678-HxCDF	**NotFnd**		**1.0004**						**1.12**		**2726**	**0.788**
234678/123689-HxCDF	NotFnd		0.0000						1.12			
123689-HxCDF	NotFnd		1.0041						1.13		2726	0.775
123789-HxCDF	**NotFnd**		**1.0005**						**1.11**		**2726**	**0.923**
123789/123489-HxCDF	NotFnd		0.0000						1.11			
123489-HxCDF	NotFnd		1.0009						1.13		2726	0.775
1234678-HpCDF	**NotFnd**		**1.0003**						**1.32**		**2736**	**0.922**
1234679-HpCDF	NotFnd		1.0075						1.29		2736	1.18
1234689-HpCDF	NotFnd		1.0112						1.29		2736	1.18
1234789-HpCDF	**NotFnd**		**1.0003**						**1.26**		**2736**	**1.53**
OCDF	**NotFnd**		**1.0003**						**1.03**		**2780**	**4.21**
OCDF-a	NotFnd	**#VALUE!**	1.0002						-		3547	#VALUE!


Rel. Int.
100%
QC Check
19.04-28.80
316.9824 Fn1
Flags: -
0%
20.0
22.0
24.0
26.0
28.0
RT
Abs. Int.
7.08e6
3.54e6
0.00e0
Rel. Int.
100%
QC Check
28.82-33.81
366.9792 Fn2
Flags: -
0%
29.0
30.0
31.0
32.0
33.0
RT
Abs. Int.
6.16e6
3.08e6
0.00e0
Rel. Int.
100%
QC Check
33.82-37.91
380.9760 Fn3
Flags: -
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Abs. Int.
1.27e7
6.33e6
0.00e0
Rel. Int.
100%
QC Check
37.92-41.20
430.9728 Fn4
Flags: -
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Abs. Int.
8.35e6
4.18e6
0.00e0
Rel. Int.
100%
QC Check
41.21-44.80
454.9728 Fn5
Flags: -
0%
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Abs. Int.
1.09e7
5.46e6
0.00e0


Rel. Int.
100%
TCDD
19.04-28.80
319.8965 Fn1
Flags: PB
4σ 2.24e3
0%
Abs. Int.
8.48e3
4.24e3
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD
19.04-28.80
321.8936 Fn1
Flags: PB
4σ 1.44e3
0%
Abs. Int.
1.18e4
5.90e3
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
37Cl-TCDD
19.04-28.80
327.8850 Fn1
Flags: PBM
4σ 1.09e3
0%
CS 37Cl-2378D
3.34e7
26.90
Abs. Int.
7.28e6
3.64e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.80
331.9368 Fn1
Flags: PBM
4σ 5.44e3
0%
JS 1234D
3.23e7
26.18
ES 2378D
3.14e7
26.88
Abs. Int.
7.03e6
3.52e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.80
333.9339 Fn1
Flags: PBM
4σ 1.44e3
0%
JS 1234D
3.98e7
26.18
ES 2378D
3.97e7
26.88
Abs. Int.
8.81e6
4.40e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT


Rel. Int.
100%
PeCDD
28.82-33.81
355.8546 Fn2
Flags: PB
4σ 3.14e3
0%
Abs. Int.
1.44e4
7.20e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD
28.82-33.81
357.8517 Fn2
Flags: PB
4σ 1.33e3
0%
Abs. Int.
9.76e3
4.88e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.82-33.81
367.8949 Fn2
Flags: PBM
4σ 1.83e3
0%
CS 12347D
3.58e7
32.08
ES 12378D
3.44e7
32.60
Abs. Int.
9.74e6
4.87e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.82-33.81
369.8919 Fn2
Flags: PBM
4σ 1.88e3
0%
CS 12347D
2.22e7
32.08
ES 12378D
2.19e7
32.60
Abs. Int.
6.04e6
3.02e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
QC Check
28.82-33.81
366.9792 Fn2
Flags: -
0%
Abs. Int.
6.16e6
3.08e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT


Rel. Int.
100%
HxCDD
33.82-37.91
389.8156 Fn3
Flags: PB
4σ 1.65e3
0%
Abs. Int.
6.82e3
3.41e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD
33.82-37.91
391.8127 Fn3
Flags: PB
4σ 1.22e3
0%
Abs. Int.
1.03e4
5.17e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.82-37.91
401.8559 Fn3
Flags: PBM
4σ 5.10e3
0%
ES 123678D
ES 123478D 2.32e7
2.36e7 36.77
36.66
ES 123789D
2.62e7
37.08
JS 123467D
1.36e7
36.97
Abs. Int.
6.93e6
3.47e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.82-37.91
403.8530 Fn3
Flags: PBM
4σ 1.64e3
0%
ES 123678D
ES 123478D 1.79e7
1.87e7 36.77
36.66
ES 123789D
2.07e7
37.08
JS 123467D
1.04e7
36.97
Abs. Int.
5.47e6
2.73e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
QC Check
33.82-37.91
380.9760 Fn3
Flags: -
0%
Abs. Int.
1.27e7
6.33e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT

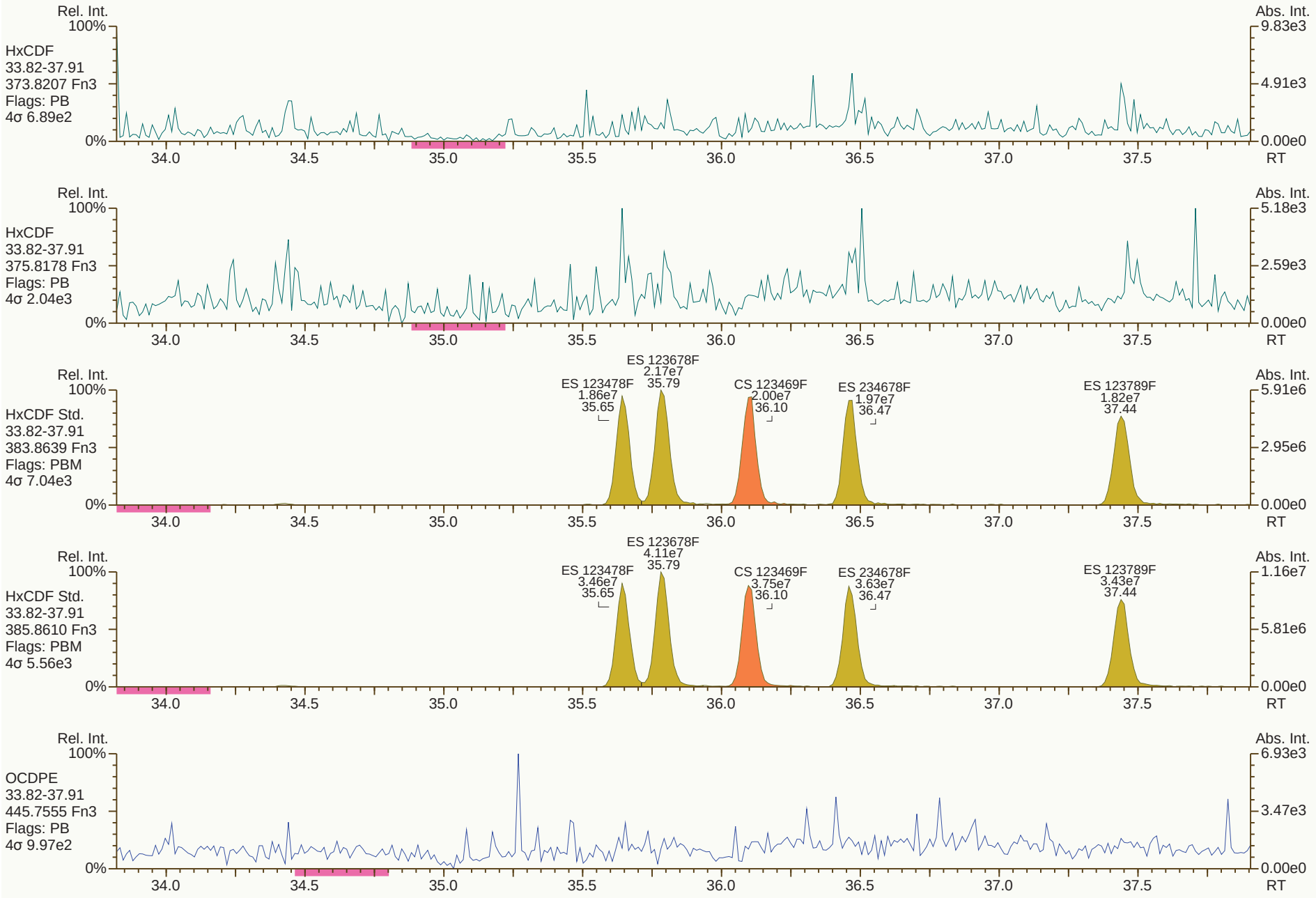

Rel. Int.
100%
HpCDD
37.92-41.20
423.7767 Fn4
Flags: PB
4σ 1.77e3
0%
Abs. Int.
1.42e4
7.09e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD
37.92-41.20
425.7737 Fn4
Flags: PB
4σ 1.02e3
0%
Abs. Int.
1.12e4
5.60e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
ES 1234678D
1.74e7
40.17
Rel. Int.
100%
HpCDD Std.
37.92-41.20
435.8169 Fn4
Flags: PBM
4σ 2.41e3
0%
Abs. Int.
4.14e6
2.07e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
ES 1234678D
1.68e7
40.17
Rel. Int.
100%
HpCDD Std.
37.92-41.20
437.8140 Fn4
Flags: PBM
4σ 2.06e3
0%
Abs. Int.
3.93e6
1.96e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
QC Check
37.92-41.20
430.9728 Fn4
Flags: -
0%
Abs. Int.
8.35e6
4.18e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT


Rel. Int.
100%
OCDD
41.21-44.80
457.7377 Fn5
Flags: PB
4σ 1.81e3
0%
Abs. Int.
1.91e4
9.57e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDD
41.21-44.80
459.7348 Fn5
Flags: PB
4σ 1.82e3
0%
Abs. Int.
3.00e4
1.50e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDD
1.53e7
42.87
Rel. Int.
100%
OCDD Std.
41.21-44.80
469.7780 Fn5
Flags: PBM
4σ 1.60e3
0%
Abs. Int.
2.16e6
1.08e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDD
1.71e7
42.87
Rel. Int.
100%
OCDD Std.
41.21-44.80
471.7750 Fn5
Flags: PBM
4σ 1.45e3
0%
Abs. Int.
2.49e6
1.24e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
QC Check
41.21-44.80
454.9728 Fn5
Flags: -
0%
Abs. Int.
1.09e7
5.46e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT

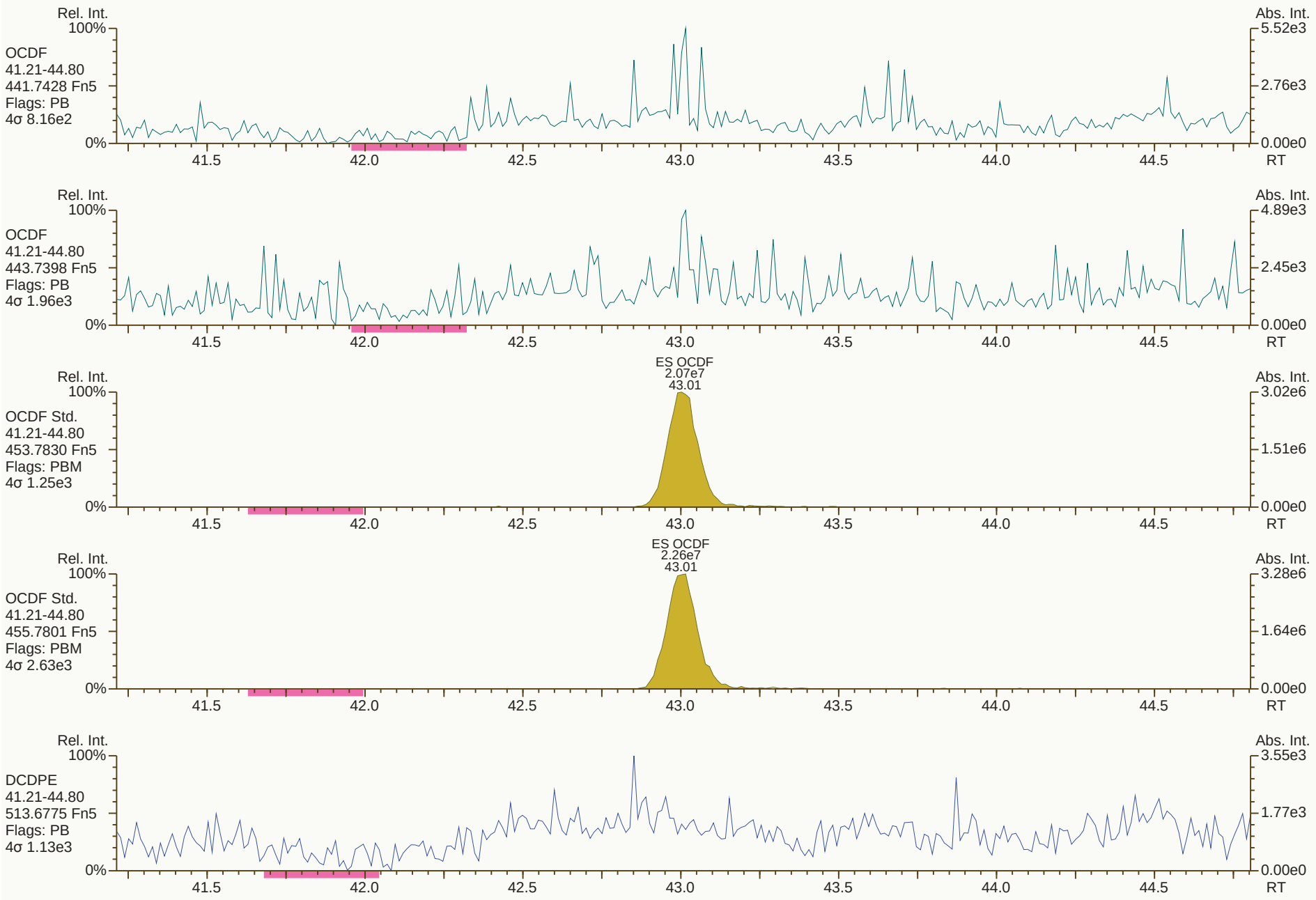

Rel. Int.
100%
TCDF
19.04-28.80
303.9016 Fn1
Flags: PB
4σ 9.48e2
0%
Abs. Int.
7.53e3
3.76e3
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDF
19.04-28.80
305.8987 Fn1
Flags: PB
4σ 1.84e3
0%
Abs. Int.
8.01e3
4.01e3
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDF Std.
19.04-28.80
315.9419 Fn1
Flags: PBM
4σ 1.41e4
0%
JS 1234F
4.83e7
24.44
ES 2378F
4.83e7
25.93
Abs. Int.
1.00e7
5.01e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDF Std.
19.04-28.80
317.9389 Fn1
Flags: PBM
4σ 8.43e3
0%
JS 1234F
5.92e7
24.44
ES 2378F
5.97e7
25.92
Abs. Int.
1.23e7
6.16e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
HxCDPE
19.04-28.80
375.8364 Fn1
Flags: PB
4σ 9.76e2
0%
Abs. Int.
5.71e3
2.85e3
0.00e0
20.0
22.0
24.0
26.0
28.0
RT


Rel. Int.
100%
0%
Abs. Int.
1.60e4
7.99e3
0.00e0
PeCDF-1
19.04-28.80
339.8597 Fn1
Flags: PB
4σ 1.84e3
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
0%
Abs. Int.
1.03e4
5.13e3
0.00e0
PeCDF-1
19.04-28.80
341.8568 Fn1
Flags: PB
4σ 1.43e3
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
0%
Abs. Int.
7.08e6
3.54e6
0.00e0
QC Check
19.04-28.80
316.9824 Fn1
Flags: -
20.0
22.0
24.0
26.0
28.0
RT


Rel. Int.
100%
PeCDF-2
28.82-33.81
339.8597 Fn2
Flags: PB
4σ 1.51e3
0%
Abs. Int.
1.70e4
8.49e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF-2
28.82-33.81
341.8568 Fn2
Flags: PB
4σ 1.58e3
0%
Abs. Int.
6.03e3
3.02e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.82-33.81
351.9000 Fn2
Flags: PBM
4σ 3.02e3
0%
CS 12346F
5.53e7
30.51
ES 12378F
5.47e7
31.07
ES 23478F
5.19e7
32.23
Abs. Int.
1.42e7
7.10e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.82-33.81
353.8970 Fn2
Flags: PBM
4σ 2.30e3
0%
CS 12346F
3.57e7
30.51
ES 12378F
3.42e7
31.07
ES 23478F
3.28e7
32.23
Abs. Int.
9.34e6
4.67e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
HpCDPE
28.82-33.81
409.7974 Fn2
Flags: PB
4σ 1.22e3
0%
Abs. Int.
9.57e3
4.78e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT


Rel. Int.
100%
HxCDF
33.82-37.91
373.8207 Fn3
Flags: PB
4σ 6.89e2
0%
Abs. Int.
9.83e3
4.91e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF
33.82-37.91
375.8178 Fn3
Flags: PB
4σ 2.04e3
0%
Abs. Int.
5.18e3
2.59e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF Std.
33.82-37.91
383.8639 Fn3
Flags: PBM
4σ 7.04e3
0%
ES 123478F
1.86e7
35.65
ES 123678F
2.17e7
35.79
CS 123469F
2.00e7
36.10
ES 234678F
1.97e7
36.47
ES 123789F
1.82e7
37.44
Abs. Int.
5.91e6
2.95e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF Std.
33.82-37.91
385.8610 Fn3
Flags: PBM
4σ 5.56e3
0%
ES 123478F
3.46e7
35.65
ES 123678F
4.11e7
35.79
CS 123469F
3.75e7
36.10
ES 234678F
3.63e7
36.47
ES 123789F
3.43e7
37.44
Abs. Int.
1.16e7
5.81e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
OCDPE
33.82-37.91
445.7555 Fn3
Flags: PB
4σ 9.97e2
0%
Abs. Int.
6.93e3
3.47e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT


Rel. Int.
100%
HpCDF
37.92-41.20
407.7818 Fn4
Flags: PB
4σ 1.60e3
0%
Abs. Int.
1.40e4
6.99e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF
37.92-41.20
409.7788 Fn4
Flags: PB
4σ 1.14e3
0%
Abs. Int.
5.92e3
2.96e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.92-41.20
417.8253 Fn4
Flags: PBM
4σ 2.24e3
0%
ES 1234678F
1.31e7
39.14
CS 1234689F
1.39e7
39.58
ES 1234789F
9.52e6
40.59
Abs. Int.
3.63e6
1.82e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.92-41.20
419.8220 Fn4
Flags: PBM
4σ 1.30e3
0%
ES 1234678F
2.83e7
39.14
CS 1234689F
3.00e7
39.58
ES 1234789F
2.13e7
40.59
Abs. Int.
7.72e6
3.86e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
NCDPE
37.92-41.20
479.7165 Fn4
Flags: PB
4σ 1.21e3
0%
Abs. Int.
7.17e3
3.59e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT


Rel. Int.
100%
OCDF
41.21-44.80
441.7428 Fn5
Flags: PB
4σ 8.16e2
0%
Abs. Int.
5.52e3
2.76e3
0.00e0
RT
41.5
42.0
42.5
43.0
43.5
44.0
44.5
Rel. Int.
100%
OCDF
41.21-44.80
443.7398 Fn5
Flags: PB
4σ 1.96e3
0%
Abs. Int.
4.89e3
2.45e3
0.00e0
RT
ES OCDF
2.07e7
43.01
Rel. Int.
100%
OCDF Std.
41.21-44.80
453.7830 Fn5
Flags: PBM
4σ 1.25e3
0%
Abs. Int.
3.02e6
1.51e6
0.00e0
RT
ES OCDF
2.26e7
43.01
Rel. Int.
100%
OCDF Std.
41.21-44.80
455.7801 Fn5
Flags: PBM
4σ 2.63e3
0%
Abs. Int.
3.28e6
1.64e6
0.00e0
RT
Rel. Int.
100%
DCDPE
41.21-44.80
513.6775 Fn5
Flags: PB
4σ 1.13e3
0%
Abs. Int.
3.55e3
1.77e3
0.00e0
RT

Lab ID: B4527_17665_DF_004 | Acq'd: 13 Aug 2020 09:47 DTF | Wt/Vol: 0.99 L | ICAL: HRMS3_DF_10122018_28AUG2019

Client ID: EB-02 | UTP: 13-Aug-2020 15:11:55 DTF | J-level: 5.04 pg/L | Split: 1 | Checkcode: 901-073-KTB

Datafile: 200812C29 | Report: 13 Aug 2020 15:17 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	NotFnd		1.0008	-		-	-	-	1.19	-	4451	1.16
12378-PeCDD	NotFnd		1.0006	-		-	-	-	0.98	-	4027	1.32
123478-HxCDD	NotFnd		1.0004	-		-	-	-	1.02	-	2807	1.07
123678-HxCDD	NotFnd		1.0036	-		-	-	-	1.09	-	2807	1.02
123789-HxCDD	NotFnd		1.0118	-		-	-	-	0.97	-	2807	1.07
1234678-HpCDD	NotFnd		1.0003	-		-	-	-	0.98	-	3497	1.85
OCDD	42.92	J B EMPC	1.0003	1.0004	+0.3	1.40E+05	0.67	N	1.07	12.6	6411	9.69
2378-TCDF	NotFnd		1.0009	-		-	-	-	1.01	-	2608	0.535
12378-PeCDF	NotFnd		1.0006	-		-	-	-	0.96	-	3322	0.729
23478-PeCDF	NotFnd		1.0005	-		-	-	-	0.99	-	3322	0.71
123478-HxCDF	NotFnd		1.0005	-		-	-	-	1.21	-	3084	0.788
123678-HxCDF	NotFnd		1.0005	-		-	-	-	1.11	-	3084	0.765
234678-HxCDF	NotFnd		1.0004	-		-	-	-	1.12	-	3084	0.809
123789-HxCDF	NotFnd		1.0005	-		-	-	-	1.11	-	3084	0.978
1234678-HpCDF	NotFnd		1.0003	-		-	-	-	1.32	-	2476	0.781
1234789-HpCDF	NotFnd		1.0003	-		-	-	-	1.26	-	2476	1.26
OCDF	NotFnd		1.0003	-		-	-	-	1.03	-	3725	4.39

Name	Act RT	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	26.88	1.0266	1.0268	+0.3	7.29E+07	0.81	Y	0.99	101
ES 12378-PeCDD	32.60	1.2430	1.2452	+4.3	5.62E+07	1.56	Y	0.83	92.8
ES 123478-HxCDD	36.66	0.9916	0.9916	0	4.44E+07	1.24	Y	0.95	92.3
ES 123678-HxCDD	36.78	0.9947	0.9946	-0.2	4.50E+07	1.27	Y	0.98	90.7
ES 123789-HxCDD	37.08	1.0029	1.0029	0	5.12E+07	1.29	Y	1.14	88.6
ES 1234678-HpCDD	40.17	1.0851	1.0865	+3.4	3.89E+07	1.06	Y	0.90	85.3
ES OCDD	42.90	1.1584	1.1603	+4.9	4.17E+07	0.91	Y	0.63	65.5
ES 2378-TCDF	25.93	1.0602	1.0608	+0.9	1.10E+08	0.78	Y	1.00	102
ES 12378-PeCDF	31.07	1.2683	1.2709	+4.8	9.14E+07	1.55	Y	0.83	101
ES 23478-PeCDF	32.24	1.3156	1.3188	+6.2	8.73E+07	1.59	Y	0.81	99.8
ES 123478-HxCDF	35.65	0.9644	0.9642	-0.4	5.75E+07	0.52	Y	1.12	101
ES 123678-HxCDF	35.79	0.9682	0.9680	-0.4	6.50E+07	0.53	Y	1.33	96
ES 234678-HxCDF	36.47	0.9864	0.9864	0	5.99E+07	0.53	Y	1.21	97.5
ES 123789-HxCDF	37.45	1.0128	1.0128	0	5.82E+07	0.54	Y	1.12	102
ES 1234678-HpCDF	39.14	1.0578	1.0587	+2.1	4.65E+07	0.47	Y	0.92	98.9
ES 1234789-HpCDF	40.60	1.0967	1.0980	+3.2	3.66E+07	0.45	Y	0.82	87.8
ES OCDF	43.04	1.1623	1.1641	+4.6	5.56E+07	0.88	Y	0.78	70.1

Lab ID: B4527_17665_DF_004 | Acq'd: 13 Aug 2020 09:47 DTF | Wt/Vol: 0.99 L | ICAL: HRMS3_DF_10122018_28AUG2019

Client ID: EB-02 | UTP: 13-Aug-2020 15:11:55 DTF | J-level: 5.04 pg/L | Split: 1 | Checkcode: 901-073-KTB

Datafile: 200812C29 | Report: 13 Aug 2020 15:17 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
JS 1234-TCDD	26.18		-	-	-	7.29E+07	0.81	Y	-	-
JS 1234-TCDF	24.45		-	-	-	1.09E+08	0.80	Y	-	-
JS 123467-HxCDD	36.97		-	-	-	2.54E+07	1.23	Y	-	-
CS 37Cl-2378-TCDD	26.91		1.0276	1.0277	+0.2	3.48E+07	n/a	-	1.12	106
CS 12347-PeCDD	32.08		1.2233	1.2254	+4.0	5.65E+07	1.61	Y	0.71	109
CS 12346-PeCDF	30.52		1.2459	1.2483	+4.4	9.07E+07	1.59	Y	0.81	103
CS 123469-HxCDF	36.11		0.9767	0.9765	-0.4	6.00E+07	0.53	Y	1.12	105
CS 1234689-HpCDF	39.59		1.0696	1.0707	+2.6	4.82E+07	0.47	Y	0.90	106
~~SS 37Cl-2378-TCDD~~	~~26.91~~		~~1.0276~~	~~1.0277~~	~~+0.2~~	~~3.48E+07~~	~~n/a~~		~~1.14~~	~~104~~
~~SS 12347-PeCDD~~	~~32.08~~		~~1.2233~~	~~1.2254~~	~~+4.0~~	~~5.65E+07~~	~~1.61~~	~~Y~~	~~0.86~~	~~117~~
~~SS 12346-PeCDF~~	~~30.52~~		~~1.2459~~	~~1.2483~~	~~+4.4~~	~~9.07E+07~~	~~1.59~~	~~Y~~	~~0.98~~	~~102~~
~~SS 123469-HxCDF~~	~~36.11~~		~~0.9767~~	~~0.9765~~	~~-0.4~~	~~6.00E+07~~	~~0.53~~	~~Y~~	~~0.85~~	~~109~~
~~SS 1234689-HpCDF~~	~~39.59~~		~~1.0696~~	~~1.0707~~	~~+2.6~~	~~4.82E+07~~	~~0.47~~	~~Y~~	~~0.97~~	~~106~~

Totals	Conc	EMPC
Total TCDD	0	0
Total PeCDD	0	0
Total HxCDD	0	0
Total HpCDD	0	0
Total Tetra-Octa Dioxins	0	12.6
Total TCDF	0	0
Total PeCDF	0	0
Total HxCDF	0	0
Total HpCDF	0	0
Total Tetra-Octa Furans	0	0
Total Tetra-Octa Dioxins & Furans	0	12.6

Lab ID: B4527_17665_DF_004 **Acq'd:** 13 Aug 2020 09:47 DTF **Wt/Vol:** 0.99 L **ICAL:** HRMS3_DF_10122018_28AUG2019

Client ID: EB-02 **UTP:** 13-Aug-2020 15:11:55 DTF **J-level:** 5.04 pg/L **Split:** 1 **Checkcode:** 901-073-KTB

Datafile: 200812C29 **Report:** 13 Aug 2020 15:17 TF **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1368-TCDD	NotFnd		0.8523						1.19		4451	1.16
1379-TCDD	NotFnd		0.8682						1.19		4451	1.16
1369-TCDD	NotFnd		0.8858						1.19		4451	1.16
1469-TCDD	NotFnd		0.9177						1.19		4451	1.16
1247/1246/1248/1249-TCDD	NotFnd		0.9274						1.19		4451	1.16
1378-TCDD	NotFnd		0.9349						1.19		4451	1.16
1268-TCDD	NotFnd		0.9430						1.19		4451	1.16
1478-TCDD	NotFnd		0.9529						1.19		4451	1.16
1279-TCDD	NotFnd		0.9597						1.19		4451	1.16
1234/1269-TCDD	NotFnd		0.9739						1.19		4451	1.16
1236-TCDD	NotFnd		0.9794						1.19		4451	1.16
1237/1238-TCDD	NotFnd		0.9895						1.19		4451	1.16
1239-TCDD	NotFnd		0.9950						1.19		4451	1.16
2378-TCDD	**NotFnd**		**1.0008**						**1.19**		**4451**	**1.16**
1278-TCDD	NotFnd		1.0139						1.19		4451	1.16
1267-TCDD	NotFnd		1.0194						1.19		4451	1.16
1289-TCDD	NotFnd		1.0397						1.19		4451	1.16
12479/12468-PeCDD	NotFnd		0.9209						0.98		4027	1.32
12469-PeCDD	NotFnd		0.9382						0.98		4027	1.32
12368-PeCDD	NotFnd		0.9557						0.98		4027	1.32
12478-PeCDD	NotFnd		0.9617						0.98		4027	1.32
12379-PeCDD	NotFnd		0.9649						0.98		4027	1.32
12369/12467/12489-PeCDD	NotFnd		0.9732						0.98		4027	1.32
12346/12347-PeCDD	NotFnd		0.9850						0.98		4027	1.32
12378-PeCDD	NotFnd		**1.0006**						**0.98**		**4027**	**1.32**
12367-PeCDD	NotFnd		1.0038						0.98		4027	1.32
12389-PeCDD	NotFnd		1.0146						0.98		4027	1.32
124679/124689-HxCDD	NotFnd		0.9530						1.03		2807	1.05
123468-HxCDD	NotFnd		0.9715						1.03		2807	1.05
123679/123689-HxCDD	NotFnd		0.9795						1.03		2807	1.05
123469-HxCDD	NotFnd		0.9832						1.03		2807	1.05
123478-HxCDD	NotFnd		**1.0004**						1.02		**2807**	**1.07**
123678-HxCDD	NotFnd		**1.0036**						1.09		**2807**	**1.02**
123467-HxCDD	NotFnd		1.0089						1.03		2807	1.05
123789-HxCDD	NotFnd		**1.0118**						0.97		**2807**	**1.07**

Lab ID: B4527_17665_DF_004 | Acq'd: 13 Aug 2020 09:47 DTF | Wt/Vol: 0.99 L | ICAL: HRMS3_DF_10122018_28AUG2019

Client ID: EB-02 | UTP: 13-Aug-2020 15:11:55 DTF | J-level: 5.04 pg/L | Split: 1 | Checkcode: 901-073-KTB

Datafile: 200812C29 | Report: 13 Aug 2020 15:17 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

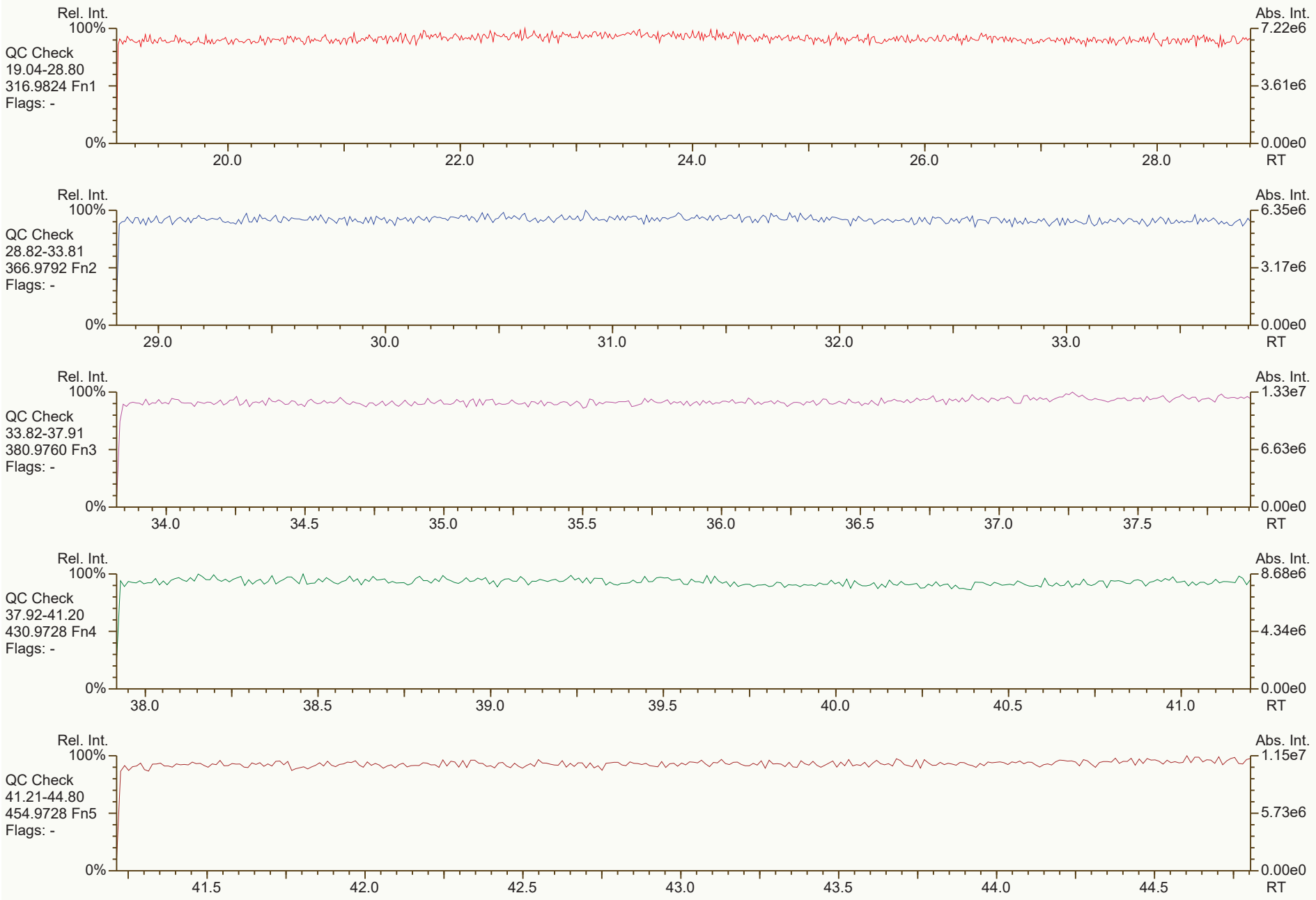
Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1234679-HpCDD	NotFnd		0.9826						0.98		3497	1.85
1234678-HpCDD	**NotFnd**		**1.0003**						**0.98**		**3497**	**1.85**
OCDD	**42.92**	**J B EMPC**	**1.0003**	**1.0004**	**+0.3**	**1.40E+05**	**0.67**	**N**	**1.07**	**12.6**	**6411**	**9.69**
OCDD-a	NotFnd	**#VALUE!**	1.0002						-		3775	#VALUE!
1368-TCDF	NotFnd		0.7980						1.01		2608	0.535
1468-TCDF	NotFnd		0.8204						1.01		2608	0.535
2468-TCDF	NotFnd		0.8443						1.01		2608	0.535
1346/1246-TCDF	NotFnd		0.8597						1.01		2608	0.535
1347/1378/1247-TCDF	NotFnd		0.8665						1.01		2608	0.535
1348-TCDF	NotFnd		0.8785						1.01		2608	0.535
1248/1367/1379-TCDF	NotFnd		0.8840						1.01		2608	0.535
1268-TCDF	NotFnd		0.9004						1.01		2608	0.535
1467-TCDF	NotFnd		0.9060						1.01		2608	0.535
1478-TCDF	NotFnd		0.9132						1.01		2608	0.535
1369/1237-TCDF	NotFnd		0.9287						1.01		2608	0.535
2467-TCDF	NotFnd		0.9345						1.01		2608	0.535
2368-TCDF	NotFnd		0.9409						1.01		2608	0.535
1238/1234/1678/1469/1236-TCDF	NotFnd		0.9450						1.01		2608	0.535
1278-TCDF	NotFnd		0.9638						1.01		2608	0.535
1349-TCDF	NotFnd		0.9685						1.01		2608	0.535
1267-TCDF	NotFnd		0.9751						1.01		2608	0.535
2346/1249-TCDF	NotFnd		0.9831						1.01		2608	0.535
2347/1279-TCDF	NotFnd		0.9920						1.01		2608	0.535
2348-TCDF	NotFnd		0.9964						1.01		2608	0.535
2378-TCDF	**NotFnd**		**1.0009**						**1.01**		**2608**	**0.535**
2367/3467-TCDF	NotFnd		1.0164						1.01		2608	0.535
1269-TCDF	NotFnd		1.0259						1.01		2608	0.535
1239-TCDF	NotFnd		1.0373						1.01		2608	0.535
1289-TCDF	NotFnd		1.0838						1.01		2608	0.535
13468/12468-PeCDF	NotFnd		0.9052						0.98		4541	0.983
13678/13467/12467-PeCDF	NotFnd		0.9582						0.98		3322	0.719
12368/13478/12478-PeCDF	NotFnd		0.9634						0.98		3322	0.719
14678-PeCDF	NotFnd		0.9668						0.98		3322	0.719
13479-PeCDF	NotFnd		0.9700						0.98		3322	0.719
13469/12479-PeCDF	NotFnd		0.9781						0.98		3322	0.719
12346-PeCDF	NotFnd		0.9829						0.98		3322	0.719

Lab ID: B4527_17665_DF_004 | Acq'd: 13 Aug 2020 09:47 DTF | Wt/Vol: 0.99 L | ICAL: HRMS3_DF_10122018_28AUG2019

Client ID: EB-02 | UTP: 13-Aug-2020 15:11:55 DTF | J-level: 5.04 pg/L | Split: 1 | Checkcode: 901-073-KTB

Datafile: 200812C29 | Report: 13 Aug 2020 15:17 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
23468/12469-PeCDF	NotFnd		0.9859						0.98		3322	0.719
12347-PeCDF	NotFnd		0.9884						0.98		3322	0.719
12348-PeCDF	NotFnd		0.9937						0.98		3322	0.719
12378-PeCDF	**NotFnd**		**1.0006**						**0.96**		**3322**	**0.729**
12678/12367-PeCDF	NotFnd		1.0097						0.98		3322	0.719
12379-PeCDF	NotFnd		1.0152						0.98		3322	0.719
12679-PeCDF	NotFnd		0.9923						0.98		3322	0.719
23467/12369-PeCDF	NotFnd		0.9966						0.98		3322	0.719
23478-PeCDF	**NotFnd**		**1.0005**						**0.99**		**3322**	**0.71**
23478/12489-PeCDF	NotFnd		0.0000						0.99			
12489-PeCDF	NotFnd		1.0043						0.98		3322	0.719
12349-PeCDF	NotFnd		1.0107						0.98		3322	0.719
12389-PeCDF	NotFnd		1.0349						0.98		3322	0.719
123468-HxCDF	NotFnd		0.9607						1.13		3084	0.831
124678/134678-HxCDF	NotFnd		0.9666						1.13		3084	0.831
134679-HxCDF	NotFnd		0.9730						1.13		3084	0.831
124679-HxCDF	NotFnd		0.9787						1.13		3084	0.831
124689-HxCDF	NotFnd		0.9850						1.13		3084	0.831
123467-HxCDF	NotFnd		0.9971						1.13		3084	0.831
123478-HxCDF	**NotFnd**		**1.0005**						**1.21**		**3084**	**0.788**
123678-HxCDF	**NotFnd**		**1.0005**						**1.11**		**3084**	**0.765**
123479-HxCDF	NotFnd		1.0049						1.13		3084	0.831
123469-HxCDF	NotFnd		1.0090						1.13		3084	0.831
123679-HxCDF	NotFnd		0.9941						1.13		3084	0.831
234678-HxCDF	**NotFnd**		**1.0004**						**1.12**		**3084**	**0.809**
234678/123689-HxCDF	NotFnd		0.0000						1.12			
123689-HxCDF	NotFnd		1.0041						1.13		3084	0.831
123789-HxCDF	**NotFnd**		**1.0005**						**1.11**		**3084**	**0.978**
123789/123489-HxCDF	NotFnd		0.0000						1.11			
123489-HxCDF	NotFnd		1.0009						1.13		3084	0.831
1234678-HpCDF	**NotFnd**		**1.0003**						**1.32**		**2476**	**0.781**
1234679-HpCDF	NotFnd		1.0075						1.29		2476	0.988
1234689-HpCDF	NotFnd		1.0112						1.29		2476	0.988
1234789-HpCDF	**NotFnd**		**1.0003**						**1.26**		**2476**	**1.26**
OCDF	**NotFnd**		**1.0003**						**1.03**		**3725**	**4.39**
OCDF-a	NotFnd	**#VALUE!**	1.0002						-		3434	#VALUE!

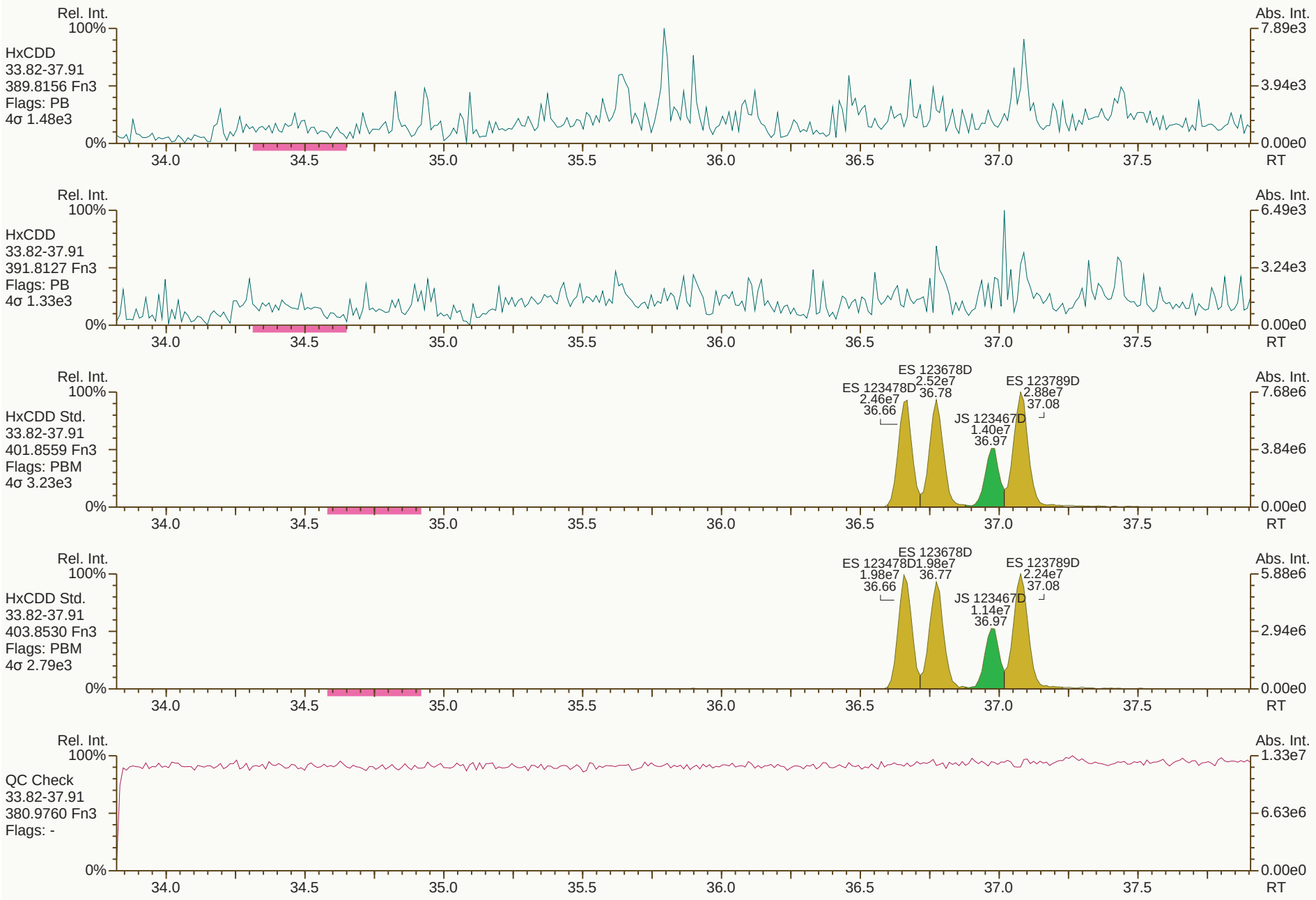

Rel. Int.
100%
QC Check
19.04-28.80
316.9824 Fn1
Flags: -
0%
20.0
22.0
24.0
26.0
28.0
RT
Abs. Int.
7.22e6
3.61e6
0.00e0
Rel. Int.
100%
QC Check
28.82-33.81
366.9792 Fn2
Flags: -
0%
29.0
30.0
31.0
32.0
33.0
RT
Abs. Int.
6.35e6
3.17e6
0.00e0
Rel. Int.
100%
QC Check
33.82-37.91
380.9760 Fn3
Flags: -
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Abs. Int.
1.33e7
6.63e6
0.00e0
Rel. Int.
100%
QC Check
37.92-41.20
430.9728 Fn4
Flags: -
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Abs. Int.
8.68e6
4.34e6
0.00e0
Rel. Int.
100%
QC Check
41.21-44.80
454.9728 Fn5
Flags: -
0%
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Abs. Int.
1.15e7
5.73e6
0.00e0

SGS ID: B4527_17665_DF_004 | Sample ID: EB-02 | Acq: 13-Aug-2020 09:47:57
Instr: [ILM] AutoSpec-Ultima HRMS3 | VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 20 | User: DTF Datafile: 200812C29



Results: P:\B4500_B4599\B4527\B4527_17665 DF\Resources\B4527_17665_DF_004.utp_res, saved 13-Aug-2020 15:11 (DTF) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 6129, 0843, 3207 scc: 901-073 *PKD: 13-Aug-2020 15:07 Printed: 13-Aug-2020 15:22 Page 2 of 12*


Rel. Int.
100%
PeCDD
28.82-33.81
355.8546 Fn2
Flags: PB
4σ 2.06e3
0%
Abs. Int.
9.43e3
4.71e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD
28.82-33.81
357.8517 Fn2
Flags: PB
4σ 1.96e3
0%
Abs. Int.
5.20e3
2.60e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.82-33.81
367.8949 Fn2
Flags: PBM
4σ 1.57e3
0%
CS 12347D
3.49e7
32.08
ES 12378D
3.43e7
32.60
Abs. Int.
1.00e7
5.00e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.82-33.81
369.8919 Fn2
Flags: PBM
4σ 1.75e3
0%
CS 12347D
2.17e7
32.08
ES 12378D
2.19e7
32.60
Abs. Int.
6.19e6
3.09e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
QC Check
28.82-33.81
366.9792 Fn2
Flags: -
0%
Abs. Int.
6.35e6
3.17e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT


Rel. Int.
100%
HxCDD
33.82-37.91
389.8156 Fn3
Flags: PB
4σ 1.48e3
0%
Abs. Int.
7.89e3
3.94e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD
33.82-37.91
391.8127 Fn3
Flags: PB
4σ 1.33e3
0%
Abs. Int.
6.49e3
3.24e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.82-37.91
401.8559 Fn3
Flags: PBM
4σ 3.23e3
0%
ES 123678D
2.52e7
36.78
ES 123478D
2.46e7
36.66
ES 123789D
2.88e7
37.08
JS 123467D
1.40e7
36.97
Abs. Int.
7.68e6
3.84e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.82-37.91
403.8530 Fn3
Flags: PBM
4σ 2.79e3
0%
ES 123678D
1.98e7
36.77
ES 123478D
1.98e7
36.66
ES 123789D
2.24e7
37.08
JS 123467D
1.14e7
36.97
Abs. Int.
5.88e6
2.94e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
QC Check
33.82-37.91
380.9760 Fn3
Flags: -
0%
Abs. Int.
1.33e7
6.63e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT

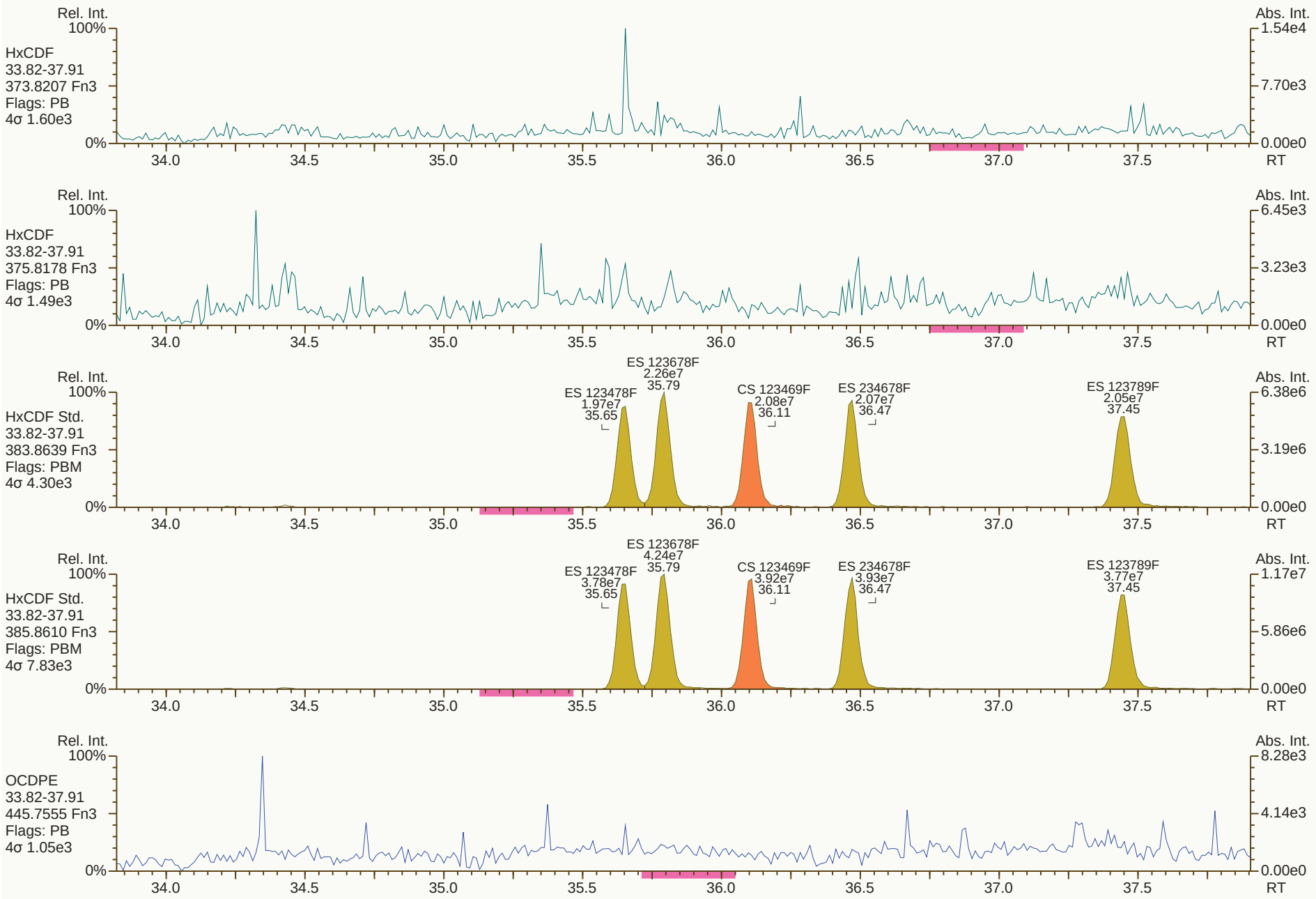

Rel. Int.
100%
HpCDD
37.92-41.20
423.7767 Fn4
Flags: B
4σ 2.11e3
0%
Abs. Int.
1.52e4
7.58e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD
37.92-41.20
425.7737 Fn4
Flags: B
4σ 1.38e3
0%
Abs. Int.
1.20e4
6.02e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
ES 1234678D
2.00e7
40.17
Rel. Int.
100%
HpCDD Std.
37.92-41.20
435.8169 Fn4
Flags: PBM
4σ 1.41e3
0%
Abs. Int.
5.01e6
2.51e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
ES 1234678D
1.89e7
40.17
Rel. Int.
100%
HpCDD Std.
37.92-41.20
437.8140 Fn4
Flags: PBM
4σ 1.89e3
0%
Abs. Int.
4.47e6
2.24e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
QC Check
37.92-41.20
430.9728 Fn4
Flags: -
0%
Abs. Int.
8.68e6
4.34e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT

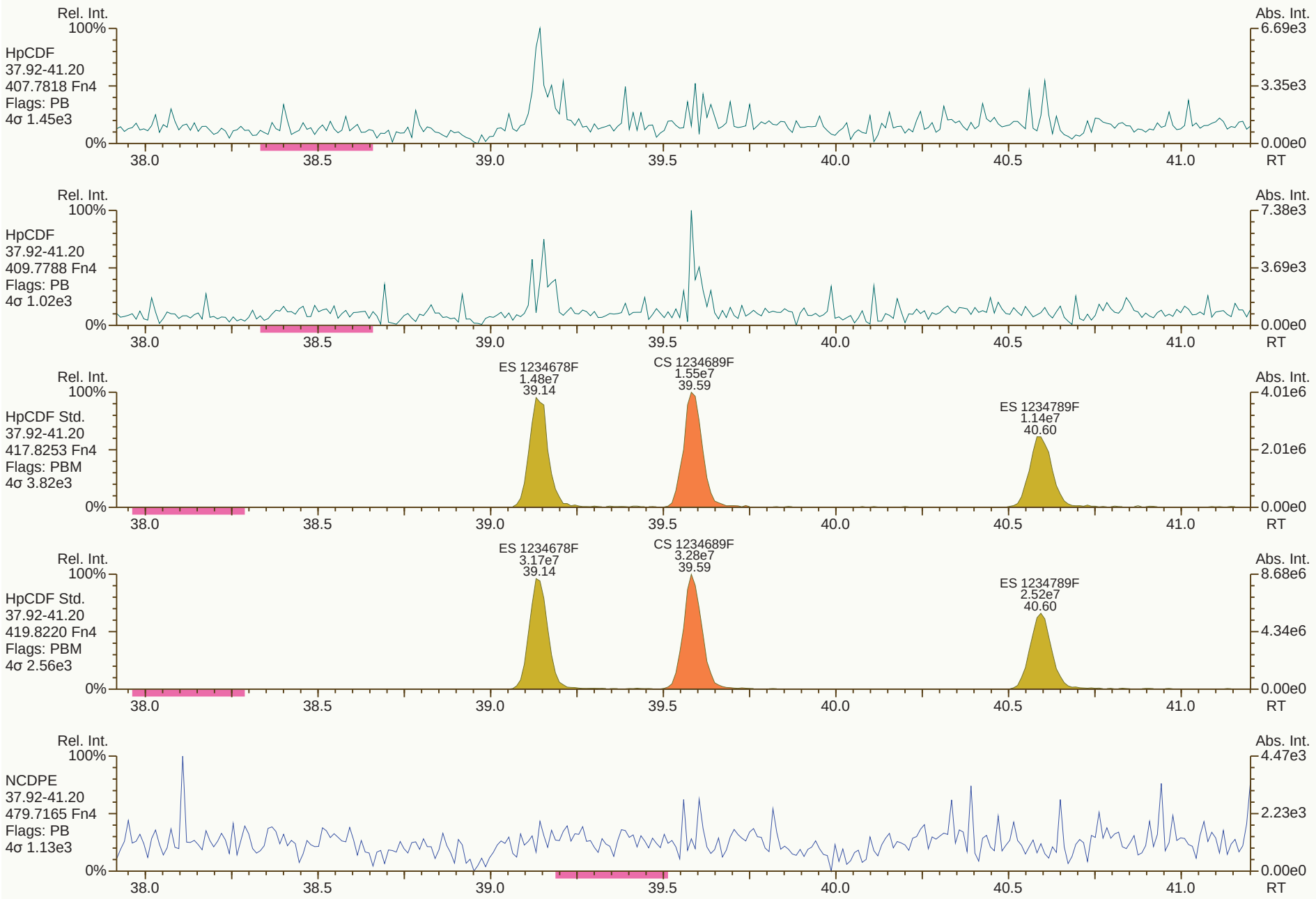

OCDD
6.61e4
42.92
Rel. Int.
100%
OCDD
41.21-44.80
457.7377 Fn5
Flags: PBM
4σ 3.33e3
0%
Abs. Int.
1.36e4
6.82e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
OCDD
9.84e4
42.90
Rel. Int.
100%
OCDD
41.21-44.80
459.7348 Fn5
Flags: PBM
4σ 3.08e3
0%
Abs. Int.
1.56e4
7.78e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDD
1.99e7
42.90
Rel. Int.
100%
OCDD Std.
41.21-44.80
469.7780 Fn5
Flags: PBM
4σ 1.28e3
0%
Abs. Int.
2.97e6
1.48e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDD
2.18e7
42.90
Rel. Int.
100%
OCDD Std.
41.21-44.80
471.7750 Fn5
Flags: PBM
4σ 1.33e3
0%
Abs. Int.
3.21e6
1.61e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
QC Check
41.21-44.80
454.9728 Fn5
Flags: -
0%
Abs. Int.
1.15e7
5.73e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT

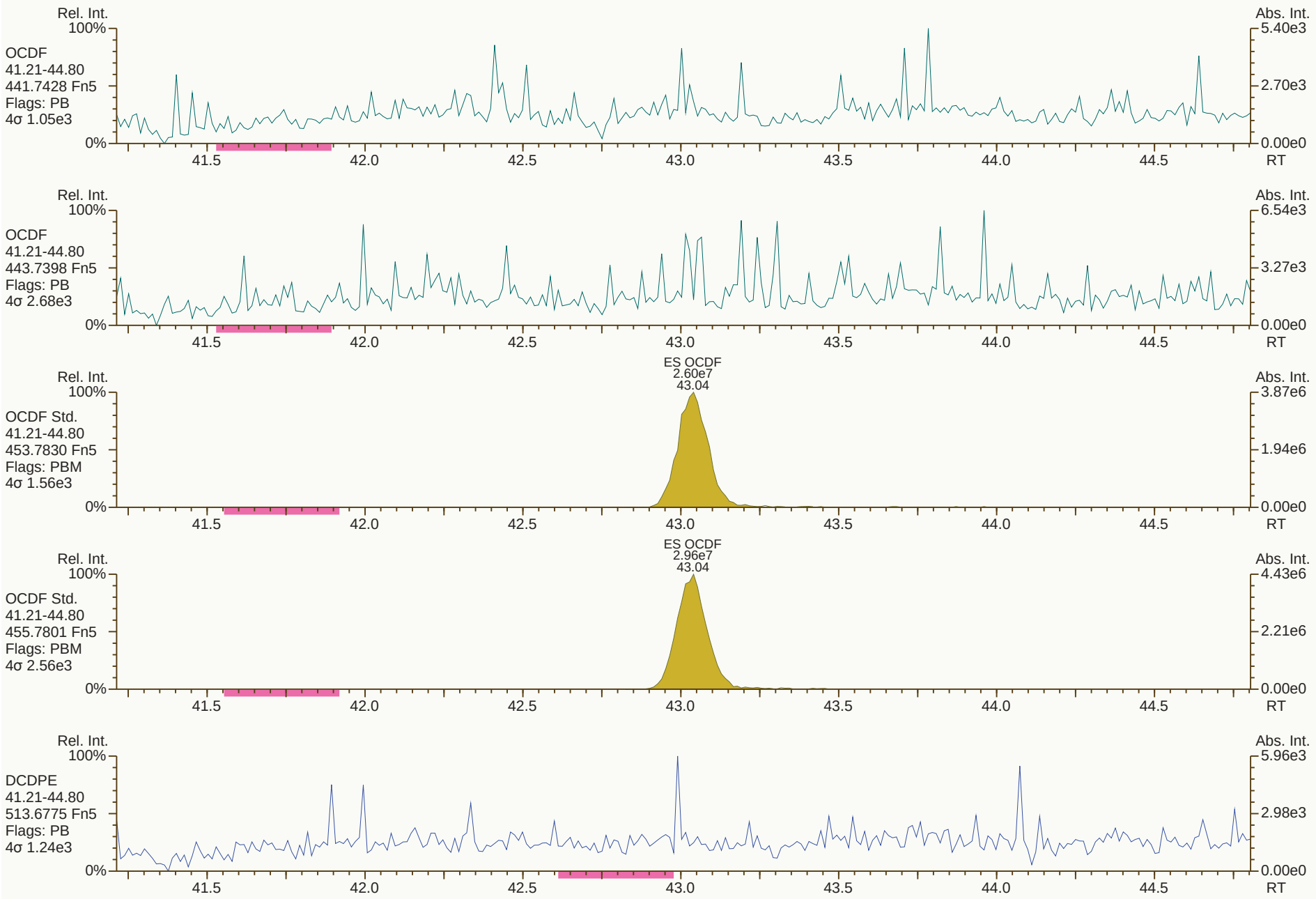

Rel. Int.
100%
TCDF
19.04-28.80
303.9016 Fn1
Flags: PB
4σ 1.24e3
0%
Abs. Int.
8.68e3
4.34e3
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDF
19.04-28.80
305.8987 Fn1
Flags: PB
4σ 1.37e3
0%
Abs. Int.
7.29e3
3.65e3
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDF Std.
19.04-28.80
315.9419 Fn1
Flags: PBM
4σ 1.13e4
0%
JS 1234F
4.82e7
24.45
ES 2378F
4.83e7
25.93
Abs. Int.
1.07e7
5.33e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDF Std.
19.04-28.80
317.9389 Fn1
Flags: PBM
4σ 8.25e3
0%
JS 1234F
6.03e7
24.44
ES 2378F
6.16e7
25.93
Abs. Int.
1.32e7
6.61e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
HxCDPE
19.04-28.80
375.8364 Fn1
Flags: PB
4σ 1.11e3
0%
Abs. Int.
7.50e3
3.75e3
0.00e0
20.0
22.0
24.0
26.0
28.0
RT


Rel. Int.
100%
0%
Abs. Int.
1.32e4
6.58e3
0.00e0
PeCDF-1
19.04-28.80
339.8597 Fn1
Flags: PB
4σ 1.27e3
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
0%
Abs. Int.
1.68e4
8.39e3
0.00e0
PeCDF-1
19.04-28.80
341.8568 Fn1
Flags: PB
4σ 3.27e3
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
0%
Abs. Int.
7.22e6
3.61e6
0.00e0
QC Check
19.04-28.80
316.9824 Fn1
Flags: -
20.0
22.0
24.0
26.0
28.0
RT


Rel. Int.
100%
PeCDF-2
28.82-33.81
339.8597 Fn2
Flags: PB
4σ 1.33e3
0%
Abs. Int.
2.01e4
1.01e4
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF-2
28.82-33.81
341.8568 Fn2
Flags: PB
4σ 1.99e3
0%
Abs. Int.
1.02e4
5.11e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.82-33.81
351.9000 Fn2
Flags: PBM
4σ 3.74e3
0%
CS 12346F
5.57e7
30.52
ES 12378F
5.56e7
31.07
ES 23478F
5.35e7
32.24
Abs. Int.
1.47e7
7.33e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.82-33.81
353.8970 Fn2
Flags: PBM
4σ 1.15e3
0%
CS 12346F
3.50e7
30.52
ES 12378F
3.58e7
31.07
ES 23478F
3.37e7
32.24
Abs. Int.
9.21e6
4.60e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
HpCDPE
28.82-33.81
409.7974 Fn2
Flags: PB
4σ 1.34e3
0%
Abs. Int.
7.90e3
3.95e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT


Rel. Int.
100%
HxCDF
33.82-37.91
373.8207 Fn3
Flags: PB
4σ 1.60e3
0%
Abs. Int.
1.54e4
7.70e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF
33.82-37.91
375.8178 Fn3
Flags: PB
4σ 1.49e3
0%
Abs. Int.
6.45e3
3.23e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF Std.
33.82-37.91
383.8639 Fn3
Flags: PBM
4σ 4.30e3
0%
ES 123678F
2.26e7
35.79
ES 123478F
1.97e7
35.65
CS 123469F
2.08e7
36.11
ES 234678F
2.07e7
36.47
ES 123789F
2.05e7
37.45
Abs. Int.
6.38e6
3.19e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF Std.
33.82-37.91
385.8610 Fn3
Flags: PBM
4σ 7.83e3
0%
ES 123678F
4.24e7
35.79
ES 123478F
3.78e7
35.65
CS 123469F
3.92e7
36.11
ES 234678F
3.93e7
36.47
ES 123789F
3.77e7
37.45
Abs. Int.
1.17e7
5.86e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
OCDPE
33.82-37.91
445.7555 Fn3
Flags: PB
4σ 1.05e3
0%
Abs. Int.
8.28e3
4.14e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT


Rel. Int.
100%
HpCDF
37.92-41.20
407.7818 Fn4
Flags: PB
4σ 1.45e3
0%
Abs. Int.
6.69e3
3.35e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF
37.92-41.20
409.7788 Fn4
Flags: PB
4σ 1.02e3
0%
Abs. Int.
7.38e3
3.69e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.92-41.20
417.8253 Fn4
Flags: PBM
4σ 3.82e3
0%
ES 1234678F
1.48e7
39.14
CS 1234689F
1.55e7
39.59
ES 1234789F
1.14e7
40.60
Abs. Int.
4.01e6
2.01e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.92-41.20
419.8220 Fn4
Flags: PBM
4σ 2.56e3
0%
ES 1234678F
3.17e7
39.14
CS 1234689F
3.28e7
39.59
ES 1234789F
2.52e7
40.60
Abs. Int.
8.68e6
4.34e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
NCDPE
37.92-41.20
479.7165 Fn4
Flags: PB
4σ 1.13e3
0%
Abs. Int.
4.47e3
2.23e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT


Rel. Int.
100%
OCDF
41.21-44.80
441.7428 Fn5
Flags: PB
4σ 1.05e3
0%
Abs. Int.
5.40e3
2.70e3
0.00e0
RT
41.5
42.0
42.5
43.0
43.5
44.0
44.5
Rel. Int.
100%
OCDF
41.21-44.80
443.7398 Fn5
Flags: PB
4σ 2.68e3
0%
Abs. Int.
6.54e3
3.27e3
0.00e0
RT
ES OCDF
2.60e7
43.04
Rel. Int.
100%
OCDF Std.
41.21-44.80
453.7830 Fn5
Flags: PBM
4σ 1.56e3
0%
Abs. Int.
3.87e6
1.94e6
0.00e0
RT
ES OCDF
2.96e7
43.04
Rel. Int.
100%
OCDF Std.
41.21-44.80
455.7801 Fn5
Flags: PBM
4σ 2.56e3
0%
Abs. Int.
4.43e6
2.21e6
0.00e0
RT
Rel. Int.
100%
DCDPE
41.21-44.80
513.6775 Fn5
Flags: PB
4σ 1.24e3
0%
Abs. Int.
5.96e3
2.98e3
0.00e0
RT

Lab ID: B4527_17665_DF_005 **Acq'd:** 13 Aug 2020 10:34 DTF **Wt/Vol:** 1.00 L **ICAL:** HRMS3_DF_10122018_28AUG2019

Client ID: EB-03 **UTP:** 13-Aug-2020 15:11:56 DTF **J-level:** 5.01 pg/L **Split:** 1 **Checkcode:** 116-900-HQD

Datafile: 200812C30 **Report:** 13 Aug 2020 15:17 TF **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	NotFnd		1.0008	-		-	-	-	1.19	-	5031	1.43
12378-PeCDD	NotFnd		1.0006	-		-	-	-	0.98	-	4224	1.42
123478-HxCDD	NotFnd		1.0004	-		-	-	-	1.02	-	3201	1.27
123678-HxCDD	NotFnd		1.0036	-		-	-	-	1.09	-	3201	1.25
123789-HxCDD	NotFnd		1.0118	-		-	-	-	0.97	-	3201	1.3
1234678-HpCDD	NotFnd		1.0003	-		-	-	-	0.98	-	4784	3.16
OCDD	NotFnd		1.0003	-		-	-	-	1.07	-	4092	7.78
2378-TCDF	NotFnd		1.0009	-		-	-	-	1.01	-	2794	0.647
12378-PeCDF	NotFnd		1.0006	-		-	-	-	0.96	-	3868	0.999
23478-PeCDF	NotFnd		1.0005	-		-	-	-	0.99	-	3868	0.892
123478-HxCDF	NotFnd		1.0005	-		-	-	-	1.21	-	3183	0.855
123678-HxCDF	NotFnd		1.0005	-		-	-	-	1.11	-	3183	0.793
234678-HxCDF	NotFnd		1.0004	-		-	-	-	1.12	-	3183	0.871
123789-HxCDF	NotFnd		1.0005	-		-	-	-	1.11	-	3183	1.07
1234678-HpCDF	NotFnd		1.0003	-		-	-	-	1.32	-	2552	0.92
1234789-HpCDF	NotFnd		1.0003	-		-	-	-	1.26	-	2552	1.38
OCDF	NotFnd		1.0003	-		-	-	-	1.03	-	2676	3.89

Name	Act RT	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	26.89	1.0266	1.0268	+0.3	6.76E+07	0.81	Y	0.99	102
ES 12378-PeCDD	32.61	1.2430	1.2453	+4.5	5.18E+07	1.58	Y	0.83	93.2
ES 123478-HxCDD	36.67	0.9916	0.9916	0	4.28E+07	1.30	Y	0.95	95.8
ES 123678-HxCDD	36.79	0.9947	0.9946	-0.2	4.30E+07	1.29	Y	0.98	93.5
ES 123789-HxCDD	37.09	1.0029	1.0029	0	4.86E+07	1.28	Y	1.14	90.6
ES 1234678-HpCDD	40.18	1.0851	1.0862	+2.7	3.35E+07	1.06	Y	0.90	79
ES OCDD	42.90	1.1584	1.1600	+4.1	3.41E+07	0.90	Y	0.63	57.6
ES 2378-TCDF	25.93	1.0602	1.0609	+1.1	1.02E+08	0.81	Y	1.00	102
ES 12378-PeCDF	31.08	1.2683	1.2714	+5.8	8.13E+07	1.57	Y	0.83	97.1
ES 23478-PeCDF	32.24	1.3156	1.3190	+6.6	8.01E+07	1.55	Y	0.81	98.7
ES 123478-HxCDF	35.66	0.9644	0.9642	-0.4	5.48E+07	0.54	Y	1.12	103
ES 123678-HxCDF	35.80	0.9682	0.9680	-0.4	6.29E+07	0.53	Y	1.33	100
ES 234678-HxCDF	36.48	0.9864	0.9864	0	5.79E+07	0.53	Y	1.21	102
ES 123789-HxCDF	37.46	1.0128	1.0129	+0.2	5.26E+07	0.52	Y	1.12	99.6
ES 1234678-HpCDF	39.15	1.0578	1.0585	+1.6	3.96E+07	0.46	Y	0.92	90.8
ES 1234789-HpCDF	40.60	1.0967	1.0977	+2.4	3.12E+07	0.44	Y	0.82	80.7
ES OCDF	43.04	1.1623	1.1638	+3.9	4.60E+07	0.90	Y	0.78	62.5

Lab ID: B4527_17665_DF_005 | Acq'd: 13 Aug 2020 10:34 DTF | Wt/Vol: 1.00 L | ICAL: HRMS3_DF_10122018_28AUG2019

Client ID: EB-03 | UTP: 13-Aug-2020 15:11:56 DTF | J-level: 5.01 pg/L | Split: 1 | Checkcode: 116-900-HQD

Datafile: 200812C30 | Report: 13 Aug 2020 15:17 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
JS 1234-TCDD	26.19		-	-	-	6.69E+07	0.83	Y	-	-
JS 1234-TCDF	24.44		-	-	-	1.01E+08	0.79	Y	-	-
JS 123467-HxCDD	36.99		-	-	-	2.36E+07	1.28	Y	-	-
CS 37Cl-2378-TCDD	26.91		1.0276	1.0277	+0.2	3.08E+07	n/a	-	1.12	103
CS 12347-PeCDD	32.09		1.2233	1.2255	+4.2	5.49E+07	1.59	Y	0.71	115
CS 12346-PeCDF	30.53		1.2459	1.2488	+5.3	8.07E+07	1.58	Y	0.81	99
CS 123469-HxCDF	36.12		0.9767	0.9765	-0.4	5.71E+07	0.53	Y	1.12	108
CS 1234689-HpCDF	39.59		1.0696	1.0705	+2.1	4.02E+07	0.45	Y	0.90	95
~~SS 37Cl-2378-TCDD~~	~~26.91~~		~~1.0276~~	~~1.0277~~	~~+0.2~~	~~3.08E+07~~	~~n/a~~		~~1.14~~	~~99.5~~
~~SS 12347-PeCDD~~	~~32.09~~		~~1.2233~~	~~1.2255~~	~~+4.2~~	~~5.49E+07~~	~~1.59~~	~~Y~~	~~0.86~~	~~123~~
~~SS 12346-PeCDF~~	~~30.53~~		~~1.2459~~	~~1.2488~~	~~+5.3~~	~~8.07E+07~~	~~1.58~~	~~Y~~	~~0.98~~	~~102~~
~~SS 123469-HxCDF~~	~~36.12~~		~~0.9767~~	~~0.9765~~	~~-0.4~~	~~5.71E+07~~	~~0.53~~	~~Y~~	~~0.85~~	~~107~~
~~SS 1234689-HpCDF~~	~~39.59~~		~~1.0696~~	~~1.0705~~	~~+2.1~~	~~4.02E+07~~	~~0.45~~	~~Y~~	~~0.97~~	~~104~~

Totals	Conc	EMPC
Total TCDD	0	0
Total PeCDD	0	0
Total HxCDD	0	0
Total HpCDD	0	3.33
Total Tetra-Octa Dioxins	0	3.33
Total TCDF	0	0
Total PeCDF	0	0
Total HxCDF	0	0
Total HpCDF	0	0
Total Tetra-Octa Furans	0	0
Total Tetra-Octa Dioxins & Furans	0	3.33

Lab ID: B4527_17665_DF_005 **Acq'd:** 13 Aug 2020 10:34 DTF **Wt/Vol:** 1.00 L **ICAL:** HRMS3_DF_10122018_28AUG2019

Client ID: EB-03 **UTP:** 13-Aug-2020 15:11:56 DTF **J-level:** 5.01 pg/L **Split:** 1 **Checkcode:** 116-900-HQD

Datafile: 200812C30 **Report:** 13 Aug 2020 15:17 TF **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1368-TCDD	NotFnd		0.8523						1.19		5031	1.43
1379-TCDD	NotFnd		0.8682						1.19		5031	1.43
1369-TCDD	NotFnd		0.8858						1.19		5031	1.43
1469-TCDD	NotFnd		0.9177						1.19		5031	1.43
1247/1246/1248/1249-TCDD	NotFnd		0.9274						1.19		5031	1.43
1378-TCDD	NotFnd		0.9349						1.19		5031	1.43
1268-TCDD	NotFnd		0.9430						1.19		5031	1.43
1478-TCDD	NotFnd		0.9529						1.19		5031	1.43
1279-TCDD	NotFnd		0.9597						1.19		5031	1.43
1234/1269-TCDD	NotFnd		0.9739						1.19		5031	1.43
1236-TCDD	NotFnd		0.9794						1.19		5031	1.43
1237/1238-TCDD	NotFnd		0.9895						1.19		5031	1.43
1239-TCDD	NotFnd		0.9950						1.19		5031	1.43
2378-TCDD	**NotFnd**		**1.0008**						**1.19**		**5031**	**1.43**
1278-TCDD	NotFnd		1.0139						1.19		5031	1.43
1267-TCDD	NotFnd		1.0194						1.19		5031	1.43
1289-TCDD	NotFnd		1.0397						1.19		5031	1.43
12479/12468-PeCDD	NotFnd		0.9209						0.98		4224	1.42
12469-PeCDD	NotFnd		0.9382						0.98		4224	1.42
12368-PeCDD	NotFnd		0.9557						0.98		4224	1.42
12478-PeCDD	NotFnd		0.9617						0.98		4224	1.42
12379-PeCDD	NotFnd		0.9649						0.98		4224	1.42
12369/12467/12489-PeCDD	NotFnd		0.9732						0.98		4224	1.42
12346/12347-PeCDD	NotFnd		0.9850						0.98		4224	1.42
12378-PeCDD	NotFnd		**1.0006**						**0.98**		**4224**	**1.42**
12367-PeCDD	NotFnd		1.0038						0.98		4224	1.42
12389-PeCDD	NotFnd		1.0146						0.98		4224	1.42
124679/124689-HxCDD	NotFnd		0.9530						1.03		3201	1.27
123468-HxCDD	NotFnd		0.9715						1.03		3201	1.27
123679/123689-HxCDD	NotFnd		0.9795						1.03		3201	1.27
123469-HxCDD	NotFnd		0.9832						1.03		3201	1.27
123478-HxCDD	NotFnd		**1.0004**						1.02		**3201**	**1.27**
123678-HxCDD	NotFnd		**1.0036**						1.09		**3201**	**1.25**
123467-HxCDD	NotFnd		1.0089						1.03		3201	1.27
123789-HxCDD	NotFnd		**1.0118**						0.97		**3201**	**1.3**

Lab ID: B4527_17665_DF_005 **Acq'd:** 13 Aug 2020 10:34 DTF **Wt/Vol:** 1.00 L **ICAL:** HRMS3_DF_10122018_28AUG2019

Client ID: EB-03 **UTP:** 13-Aug-2020 15:11:56 DTF **J-level:** 5.01 pg/L **Split:** 1 **Checkcode:** 116-900-HQD

Datafile: 200812C30 **Report:** 13 Aug 2020 15:17 TF **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

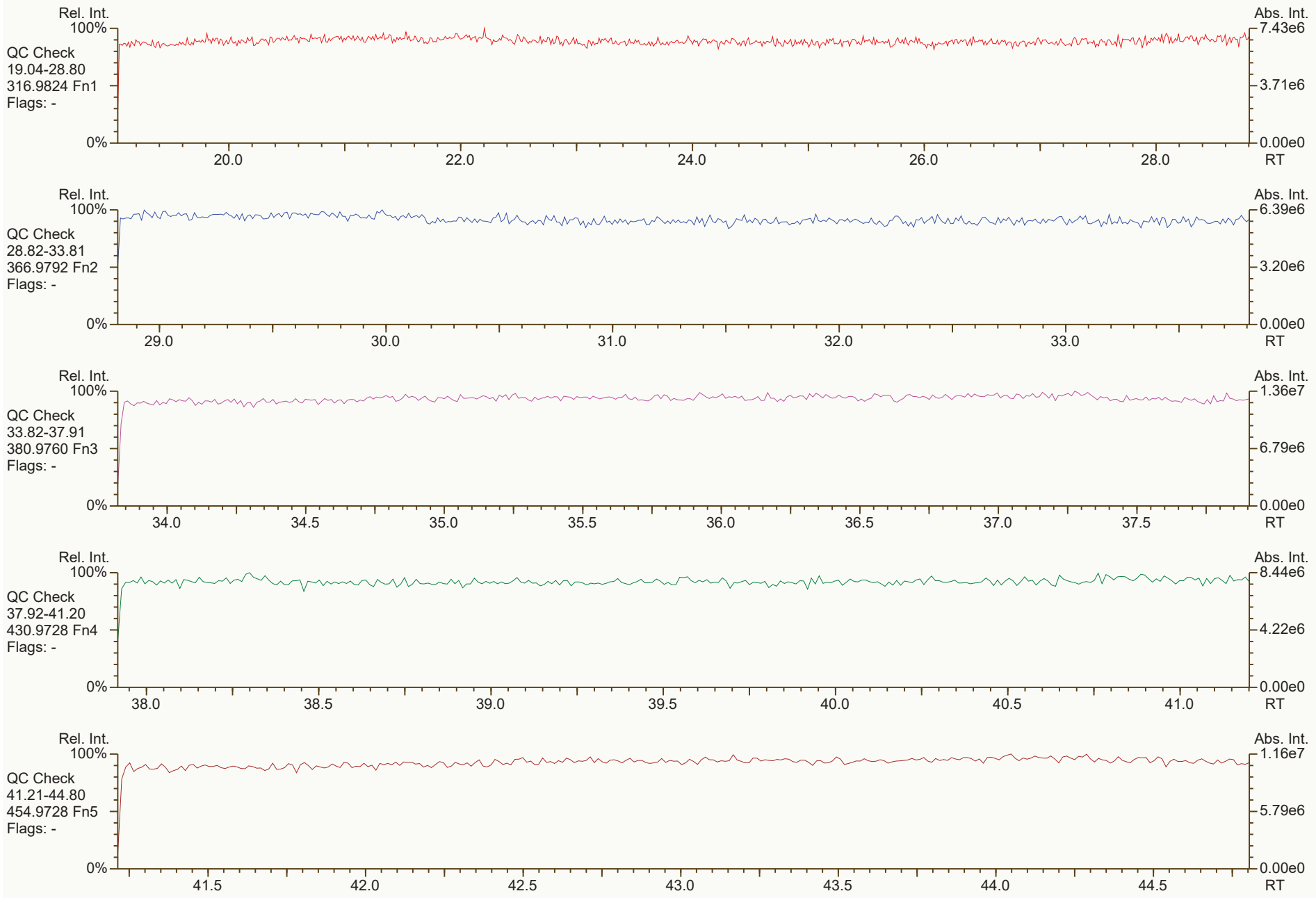
Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1234679-HpCDD	39.47	J B EMPC	0.9826	0.9824	-0.5	5.43E+04	0.79	N	0.98	3.33	4784	3.16
1234678-HpCDD	**NotFnd**		**1.0003**						**0.98**		**4784**	**3.16**
OCDD	**NotFnd**		**1.0003**						**1.07**		**4092**	**7.78**
OCDD-a	NotFnd	**#VALUE!**	1.0002						-		5233	#VALUE!
1368-TCDF	NotFnd		0.7980						1.01		2794	0.647
1468-TCDF	NotFnd		0.8204						1.01		2794	0.647
2468-TCDF	NotFnd		0.8443						1.01		2794	0.647
1346/1246-TCDF	NotFnd		0.8597						1.01		2794	0.647
1347/1378/1247-TCDF	NotFnd		0.8665						1.01		2794	0.647
1348-TCDF	NotFnd		0.8785						1.01		2794	0.647
1248/1367/1379-TCDF	NotFnd		0.8840						1.01		2794	0.647
1268-TCDF	NotFnd		0.9004						1.01		2794	0.647
1467-TCDF	NotFnd		0.9060						1.01		2794	0.647
1478-TCDF	NotFnd		0.9132						1.01		2794	0.647
1369/1237-TCDF	NotFnd		0.9287						1.01		2794	0.647
2467-TCDF	NotFnd		0.9345						1.01		2794	0.647
2368-TCDF	NotFnd		0.9409						1.01		2794	0.647
1238/1234/1678/1469/1236-TCDF	NotFnd		0.9450						1.01		2794	0.647
1278-TCDF	NotFnd		0.9638						1.01		2794	0.647
1349-TCDF	NotFnd		0.9685						1.01		2794	0.647
1267-TCDF	NotFnd		0.9751						1.01		2794	0.647
2346/1249-TCDF	NotFnd		0.9831						1.01		2794	0.647
2347/1279-TCDF	NotFnd		0.9920						1.01		2794	0.647
2348-TCDF	NotFnd		0.9964						1.01		2794	0.647
2378-TCDF	**NotFnd**		**1.0009**						**1.01**		**2794**	**0.647**
2367/3467-TCDF	NotFnd		1.0164						1.01		2794	0.647
1269-TCDF	NotFnd		1.0259						1.01		2794	0.647
1239-TCDF	NotFnd		1.0373						1.01		2794	0.647
1289-TCDF	NotFnd		1.0838						1.01		2794	0.647
13468/12468-PeCDF	NotFnd		0.9052						0.98		3244	0.793
13678/13467/12467-PeCDF	NotFnd		0.9582						0.98		3868	0.945
12368/13478/12478-PeCDF	NotFnd		0.9634						0.98		3868	0.945
14678-PeCDF	NotFnd		0.9668						0.98		3868	0.945
13479-PeCDF	NotFnd		0.9700						0.98		3868	0.945
13469/12479-PeCDF	NotFnd		0.9781						0.98		3868	0.945
12346-PeCDF	NotFnd		0.9829						0.98		3868	0.945

Lab ID: B4527_17665_DF_005 **Acq'd:** 13 Aug 2020 10:34 DTF **Wt/Vol:** 1.00 L **ICAL:** HRMS3_DF_10122018_28AUG2019

Client ID: EB-03 **UTP:** 13-Aug-2020 15:11:56 DTF **J-level:** 5.01 pg/L **Split:** 1 **Checkcode:** 116-900-HQD

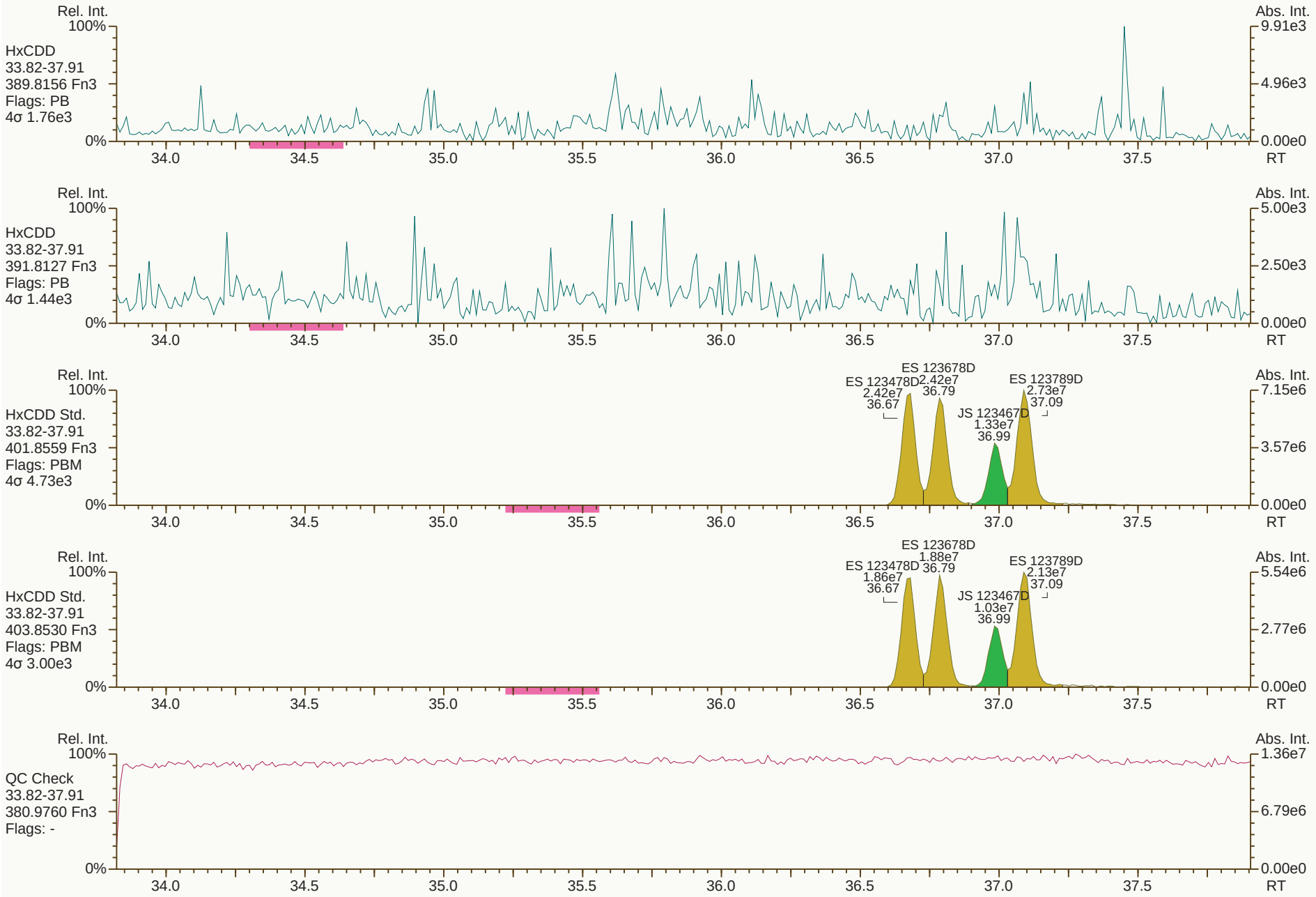
Datafile: 200812C30 **Report:** 13 Aug 2020 15:17 TF **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
23468/12469-PeCDF	NotFnd		0.9859						0.98		3868	0.945
12347-PeCDF	NotFnd		0.9884						0.98		3868	0.945
12348-PeCDF	NotFnd		0.9937						0.98		3868	0.945
12378-PeCDF	**NotFnd**		**1.0006**						**0.96**		**3868**	**0.999**
12678/12367-PeCDF	NotFnd		1.0097						0.98		3868	0.945
12379-PeCDF	NotFnd		1.0152						0.98		3868	0.945
12679-PeCDF	NotFnd		0.9923						0.98		3868	0.945
23467/12369-PeCDF	NotFnd		0.9966						0.98		3868	0.945
23478-PeCDF	**NotFnd**		**1.0005**						**0.99**		**3868**	**0.892**
23478/12489-PeCDF	NotFnd		0.0000						0.99			
12489-PeCDF	NotFnd		1.0043						0.98		3868	0.945
12349-PeCDF	NotFnd		1.0107						0.98		3868	0.945
12389-PeCDF	NotFnd		1.0349						0.98		3868	0.945
123468-HxCDF	NotFnd		0.9607						1.13		3183	0.89
124678/134678-HxCDF	NotFnd		0.9666						1.13		3183	0.89
134679-HxCDF	NotFnd		0.9730						1.13		3183	0.89
124679-HxCDF	NotFnd		0.9787						1.13		3183	0.89
124689-HxCDF	NotFnd		0.9850						1.13		3183	0.89
123467-HxCDF	NotFnd		0.9971						1.13		3183	0.89
123478-HxCDF	**NotFnd**		**1.0005**						**1.21**		**3183**	**0.855**
123678-HxCDF	**NotFnd**		**1.0005**						**1.11**		**3183**	**0.793**
123479-HxCDF	NotFnd		1.0049						1.13		3183	0.89
123469-HxCDF	NotFnd		1.0090						1.13		3183	0.89
123679-HxCDF	NotFnd		0.9941						1.13		3183	0.89
234678-HxCDF	**NotFnd**		**1.0004**						**1.12**		**3183**	**0.871**
234678/123689-HxCDF	NotFnd		0.0000						1.12			
123689-HxCDF	NotFnd		1.0041						1.13		3183	0.89
123789-HxCDF	**NotFnd**		**1.0005**						**1.11**		**3183**	**1.07**
123789/123489-HxCDF	NotFnd		0.0000						1.11			
123489-HxCDF	NotFnd		1.0009						1.13		3183	0.89
1234678-HpCDF	**NotFnd**		**1.0003**						**1.32**		**2552**	**0.92**
1234679-HpCDF	NotFnd		1.0075						1.29		2552	1.12
1234689-HpCDF	NotFnd		1.0112						1.29		2552	1.12
1234789-HpCDF	**NotFnd**		**1.0003**						**1.26**		**2552**	**1.38**
OCDF	**NotFnd**		**1.0003**						**1.03**		**2676**	**3.89**
OCDF-a	NotFnd	**#VALUE!**	1.0002						-		3075	#VALUE!


Rel. Int.
100%
QC Check
19.04-28.80
316.9824 Fn1
Flags: -
0%
20.0
22.0
24.0
26.0
28.0
Abs. Int.
7.43e6
3.71e6
0.00e0
RT
Rel. Int.
100%
QC Check
28.82-33.81
366.9792 Fn2
Flags: -
0%
29.0
30.0
31.0
32.0
33.0
Abs. Int.
6.39e6
3.20e6
0.00e0
RT
Rel. Int.
100%
QC Check
33.82-37.91
380.9760 Fn3
Flags: -
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
Abs. Int.
1.36e7
6.79e6
0.00e0
RT
Rel. Int.
100%
QC Check
37.92-41.20
430.9728 Fn4
Flags: -
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
Abs. Int.
8.44e6
4.22e6
0.00e0
RT
Rel. Int.
100%
QC Check
41.21-44.80
454.9728 Fn5
Flags: -
0%
41.5
42.0
42.5
43.0
43.5
44.0
44.5
Abs. Int.
1.16e7
5.79e6
0.00e0
RT


Rel. Int.
100%
TCDD
19.04-28.80
319.8965 Fn1
Flags: PB
4σ 2.86e3
0%
Abs. Int.
1.15e4
5.74e3
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD
19.04-28.80
321.8936 Fn1
Flags: PB
4σ 2.17e3
0%
Abs. Int.
1.07e4
5.34e3
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
37Cl-TCDD
19.04-28.80
327.8850 Fn1
Flags: PBM
4σ 1.72e3
0%
CS 37Cl-2378D
3.08e7
26.91
Abs. Int.
6.72e6
3.36e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.80
331.9368 Fn1
Flags: PBM
4σ 8.39e3
0%
JS 1234D
3.03e7
26.19
ES 2378D
3.02e7
26.89
Abs. Int.
6.61e6
3.30e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.80
333.9339 Fn1
Flags: PBM
4σ 2.16e3
0%
JS 1234D
3.67e7
26.18
ES 2378D
3.74e7
26.89
Abs. Int.
8.08e6
4.04e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT


Rel. Int.
100%
PeCDD
28.82-33.81
355.8546 Fn2
Flags: PB
4σ 2.28e3
0%
Abs. Int.
1.11e4
5.53e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD
28.82-33.81
357.8517 Fn2
Flags: PB
4σ 1.94e3
0%
Abs. Int.
8.51e3
4.25e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.82-33.81
367.8949 Fn2
Flags: PBM
4σ 2.35e3
0%
CS 12347D
3.37e7
32.09
ES 12378D
3.17e7
32.61
Abs. Int.
9.30e6
4.65e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.82-33.81
369.8919 Fn2
Flags: PBM
4σ 1.71e3
0%
CS 12347D
2.12e7
32.09
ES 12378D
2.01e7
32.61
Abs. Int.
5.88e6
2.94e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
QC Check
28.82-33.81
366.9792 Fn2
Flags: -
0%
Abs. Int.
6.39e6
3.20e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT

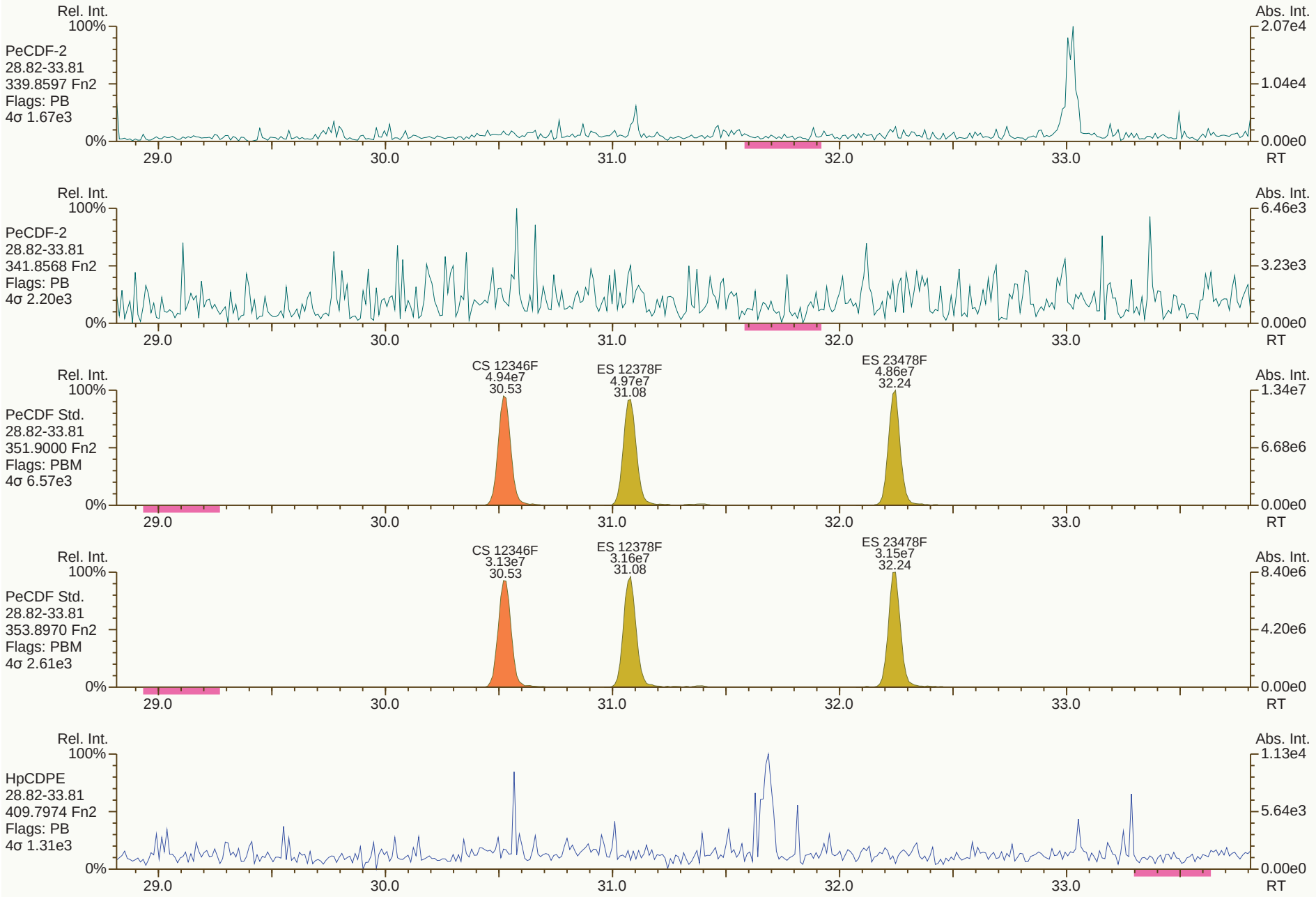

Rel. Int.
100%
HxCDD
33.82-37.91
389.8156 Fn3
Flags: PB
4σ 1.76e3
0%
Abs. Int.
9.91e3
4.96e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD
33.82-37.91
391.8127 Fn3
Flags: PB
4σ 1.44e3
0%
Abs. Int.
5.00e3
2.50e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.82-37.91
401.8559 Fn3
Flags: PBM
4σ 4.73e3
0%
ES 123678D
2.42e7
36.79
ES 123478D
2.42e7
36.67
ES 123789D
2.73e7
37.09
JS 123467D
1.33e7
36.99
Abs. Int.
7.15e6
3.57e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.82-37.91
403.8530 Fn3
Flags: PBM
4σ 3.00e3
0%
ES 123678D
1.88e7
36.79
ES 123478D
1.86e7
36.67
ES 123789D
2.13e7
37.09
JS 123467D
1.03e7
36.99
Abs. Int.
5.54e6
2.77e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
QC Check
33.82-37.91
380.9760 Fn3
Flags: -
0%
Abs. Int.
1.36e7
6.79e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT


1234679D
2.77e4
39.47
Rel. Int.
100%
HpCDD
37.92-41.20
423.7767 Fn4
Flags: PBM
4σ 2.42e3
0%
Abs. Int.
1.03e4
5.13e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
1234679D
3.52e4
39.46
Rel. Int.
100%
HpCDD
37.92-41.20
425.7737 Fn4
Flags: PBM
4σ 2.36e3
0%
Abs. Int.
1.07e4
5.34e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
ES 1234678D
1.72e7
40.18
Rel. Int.
100%
HpCDD Std.
37.92-41.20
435.8169 Fn4
Flags: PBM
4σ 1.29e3
0%
Abs. Int.
4.00e6
2.00e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
ES 1234678D
1.62e7
40.18
Rel. Int.
100%
HpCDD Std.
37.92-41.20
437.8140 Fn4
Flags: PBM
4σ 2.73e3
0%
Abs. Int.
3.78e6
1.89e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
QC Check
37.92-41.20
430.9728 Fn4
Flags: -
0%
Abs. Int.
8.44e6
4.22e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT

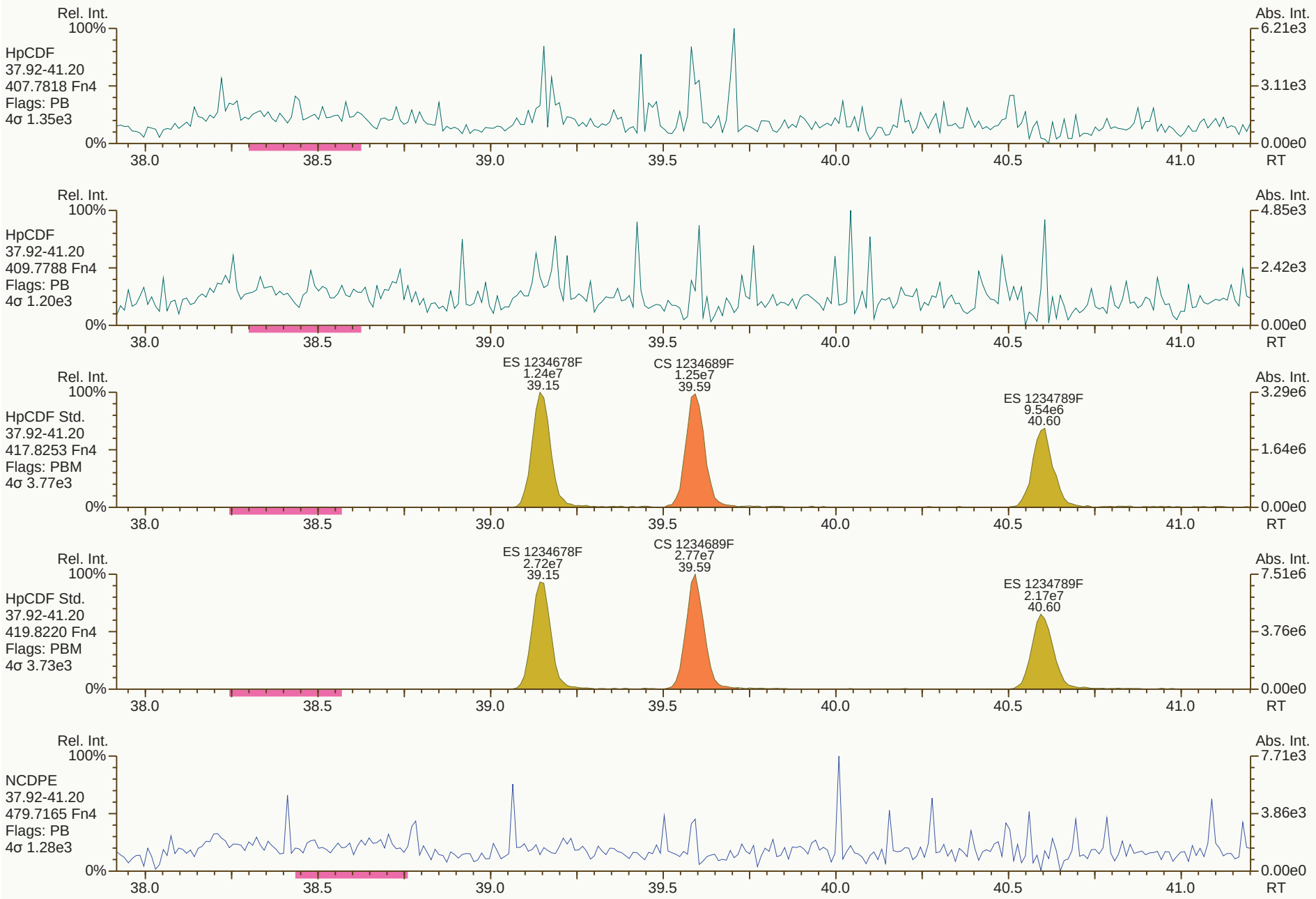

Rel. Int.
100%
OCDD
41.21-44.80
457.7377 Fn5
Flags: B
4σ 1.57e3
0%
Abs. Int.
1.41e4
7.05e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDD
41.21-44.80
459.7348 Fn5
Flags: B
4σ 2.53e3
0%
Abs. Int.
1.13e4
5.66e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDD
1.61e7
42.90
Rel. Int.
100%
OCDD Std.
41.21-44.80
469.7780 Fn5
Flags: PBM
4σ 1.76e3
0%
Abs. Int.
2.33e6
1.16e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDD
1.79e7
42.90
Rel. Int.
100%
OCDD Std.
41.21-44.80
471.7750 Fn5
Flags: PBM
4σ 1.26e3
0%
Abs. Int.
2.59e6
1.29e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
QC Check
41.21-44.80
454.9728 Fn5
Flags: -
0%
Abs. Int.
1.16e7
5.79e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT


Rel. Int.
100%
TCDF
19.04-28.80
303.9016 Fn1
Flags: PB
4σ 1.28e3
0%
Abs. Int.
6.70e3
3.35e3
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDF
19.04-28.80
305.8987 Fn1
Flags: PB
4σ 1.51e3
0%
Abs. Int.
8.58e3
4.29e3
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDF Std.
19.04-28.80
315.9419 Fn1
Flags: PBM
4σ 1.44e4
0%
JS 1234F
4.46e7
24.44
ES 2378F
4.56e7
25.93
Abs. Int.
9.54e6
4.77e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDF Std.
19.04-28.80
317.9389 Fn1
Flags: PBM
4σ 5.27e3
0%
JS 1234F
5.62e7
24.44
ES 2378F
5.66e7
25.93
Abs. Int.
1.18e7
5.88e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
HxCDPE
19.04-28.80
375.8364 Fn1
Flags: PB
4σ 1.22e3
0%
Abs. Int.
1.75e4
8.75e3
0.00e0
20.0
22.0
24.0
26.0
28.0
RT


Rel. Int.
100%
0%
Abs. Int.
1.08e4
5.41e3
0.00e0
PeCDF-1
19.04-28.80
339.8597 Fn1
Flags: PB
4σ 1.73e3
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
0%
Abs. Int.
2.02e4
1.01e4
0.00e0
PeCDF-1
19.04-28.80
341.8568 Fn1
Flags: PB
4σ 1.51e3
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
0%
Abs. Int.
7.43e6
3.71e6
0.00e0
QC Check
19.04-28.80
316.9824 Fn1
Flags: -
20.0
22.0
24.0
26.0
28.0
RT


Rel. Int.
100%
PeCDF-2
28.82-33.81
339.8597 Fn2
Flags: PB
4σ 1.67e3
0%
Abs. Int.
2.07e4
1.04e4
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF-2
28.82-33.81
341.8568 Fn2
Flags: PB
4σ 2.20e3
0%
Abs. Int.
6.46e3
3.23e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.82-33.81
351.9000 Fn2
Flags: PBM
4σ 6.57e3
0%
CS 12346F
4.94e7
30.53
ES 12378F
4.97e7
31.08
ES 23478F
4.86e7
32.24
Abs. Int.
1.34e7
6.68e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.82-33.81
353.8970 Fn2
Flags: PBM
4σ 2.61e3
0%
CS 12346F
3.13e7
30.53
ES 12378F
3.16e7
31.08
ES 23478F
3.15e7
32.24
Abs. Int.
8.40e6
4.20e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
HpCDPE
28.82-33.81
409.7974 Fn2
Flags: PB
4σ 1.31e3
0%
Abs. Int.
1.13e4
5.64e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT


Rel. Int.
100%
HxCDF
33.82-37.91
373.8207 Fn3
Flags: PB
4σ 1.89e3
0%
Abs. Int.
6.00e3
3.00e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF
33.82-37.91
375.8178 Fn3
Flags: PB
4σ 1.29e3
0%
Abs. Int.
4.34e3
2.17e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF Std.
33.82-37.91
383.8639 Fn3
Flags: PBM
4σ 5.53e3
0%
ES 123678F
2.18e7
35.80
ES 123478F
1.93e7
35.66
CS 123469F
1.98e7
36.12
ES 234678F
2.00e7
36.48
ES 123789F
1.80e7
37.46
Abs. Int.
6.30e6
3.15e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF Std.
33.82-37.91
385.8610 Fn3
Flags: PBM
4σ 5.32e3
0%
ES 123678F
4.12e7
35.80
ES 123478F
3.55e7
35.66
CS 123469F
3.73e7
36.12
ES 234678F
3.79e7
36.48
ES 123789F
3.46e7
37.46
Abs. Int.
1.16e7
5.81e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
OCDPE
33.82-37.91
445.7555 Fn3
Flags: PB
4σ 1.26e3
0%
Abs. Int.
8.56e3
4.28e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT


Rel. Int.
100%
HpCDF
37.92-41.20
407.7818 Fn4
Flags: PB
4σ 1.35e3
0%
Abs. Int.
6.21e3
3.11e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF
37.92-41.20
409.7788 Fn4
Flags: PB
4σ 1.20e3
0%
Abs. Int.
4.85e3
2.42e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.92-41.20
417.8253 Fn4
Flags: PBM
4σ 3.77e3
0%
ES 1234678F
1.24e7
39.15
CS 1234689F
1.25e7
39.59
ES 1234789F
9.54e6
40.60
Abs. Int.
3.29e6
1.64e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.92-41.20
419.8220 Fn4
Flags: PBM
4σ 3.73e3
0%
ES 1234678F
2.72e7
39.15
CS 1234689F
2.77e7
39.59
ES 1234789F
2.17e7
40.60
Abs. Int.
7.51e6
3.76e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
NCDPE
37.92-41.20
479.7165 Fn4
Flags: PB
4σ 1.28e3
0%
Abs. Int.
7.71e3
3.86e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT


Rel. Int.
100%
OCDF
41.21-44.80
441.7428 Fn5
Flags: PB
4σ 1.48e3
0%
Abs. Int.
5.66e3
2.83e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDF
41.21-44.80
443.7398 Fn5
Flags: PB
4σ 1.20e3
0%
Abs. Int.
9.33e3
4.66e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDF
2.18e7
43.04
Rel. Int.
100%
OCDF Std.
41.21-44.80
453.7830 Fn5
Flags: PBM
4σ 1.33e3
0%
Abs. Int.
3.17e6
1.59e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDF
2.42e7
43.04
Rel. Int.
100%
OCDF Std.
41.21-44.80
455.7801 Fn5
Flags: PBM
4σ 3.06e3
0%
Abs. Int.
3.59e6
1.79e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
DCDPE
41.21-44.80
513.6775 Fn5
Flags: PB
4σ 9.09e2
0%
Abs. Int.
2.53e3
1.27e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT

Lab ID: B4527_17665_DF_006 | Acq'd: 13 Aug 2020 11:20 DTF | Wt/Vol: 1.00 L | ICAL: HRMS3_DF_10122018_28AUG2019

Client ID: EB-04 | UTP: 13-Aug-2020 15:11:57 DTF | J-level: 5.02 pg/L | Split: 1 | Checkcode: 971-505-XFG

Datafile: 200812C31 | Report: 13 Aug 2020 15:17 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	NotFnd		1.0008	-		-	-	-	1.19	-	13982	3.43
12378-PeCDD	NotFnd		1.0006	-		-	-	-	0.98	-	13188	4.81
123478-HxCDD	NotFnd		1.0004	-		-	-	-	1.02	-	6695	2.05
123678-HxCDD	NotFnd		1.0036	-		-	-	-	1.09	-	6695	1.95
123789-HxCDD	NotFnd		1.0118	-		-	-	-	0.97	-	6695	2.14
1234678-HpCDD	NotFnd		1.0003	-		-	-	-	0.98	-	5483	2.65
OCDD	NotFnd		1.0003	-		-	-	-	1.07	-	4578	7.73
2378-TCDF	NotFnd		1.0009	-		-	-	-	1.01	-	5845	1.24
12378-PeCDF	NotFnd		1.0006	-		-	-	-	0.96	-	4393	0.883
23478-PeCDF	NotFnd		1.0005	-		-	-	-	0.99	-	4393	0.905
123478-HxCDF	NotFnd		1.0005	-		-	-	-	1.21	-	4245	0.893
123678-HxCDF	NotFnd		1.0005	-		-	-	-	1.11	-	4245	0.882
234678-HxCDF	NotFnd		1.0004	-		-	-	-	1.12	-	4245	0.918
123789-HxCDF	NotFnd		1.0005	-		-	-	-	1.11	-	4245	1.11
1234678-HpCDF	NotFnd		1.0003	-		-	-	-	1.32	-	3464	1.01
1234789-HpCDF	NotFnd		1.0003	-		-	-	-	1.26	-	3464	1.63
OCDF	NotFnd		1.0003	-		-	-	-	1.03	-	2876	3.66

Name	Act RT	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	26.88	1.0266	1.0268	+0.3	7.63E+07	0.81	Y	0.99	107
ES 12378-PeCDD	32.63	1.2430	1.2463	+6.5	6.42E+07	1.60	Y	0.83	107
ES 123478-HxCDD	36.67	0.9916	0.9915	-0.2	5.59E+07	1.27	Y	0.95	101
ES 123678-HxCDD	36.79	0.9947	0.9947	0	5.74E+07	1.26	Y	0.98	101
ES 123789-HxCDD	37.09	1.0029	1.0029	0	6.23E+07	1.25	Y	1.14	94
ES 1234678-HpCDD	40.16	1.0851	1.0860	+2.2	4.25E+07	1.05	Y	0.90	81.2
ES OCDD	42.89	1.1584	1.1598	+3.6	3.78E+07	0.89	Y	0.63	51.7
ES 2378-TCDF	25.93	1.0602	1.0610	+1.2	1.13E+08	0.80	Y	1.00	111
ES 12378-PeCDF	31.07	1.2683	1.2714	+5.8	9.51E+07	1.55	Y	0.83	113
ES 23478-PeCDF	32.25	1.3156	1.3194	+7.4	9.45E+07	1.54	Y	0.81	115
ES 123478-HxCDF	35.66	0.9644	0.9641	-0.6	6.78E+07	0.53	Y	1.12	104
ES 123678-HxCDF	35.80	0.9682	0.9680	-0.4	7.83E+07	0.54	Y	1.33	101
ES 234678-HxCDF	36.48	0.9864	0.9863	-0.2	7.48E+07	0.53	Y	1.21	106
ES 123789-HxCDF	37.45	1.0128	1.0128	0	6.54E+07	0.54	Y	1.12	100
ES 1234678-HpCDF	39.14	1.0578	1.0584	+1.4	4.99E+07	0.47	Y	0.92	92.5
ES 1234789-HpCDF	40.59	1.0967	1.0976	+2.2	3.89E+07	0.46	Y	0.82	81.3
ES OCDF	43.03	1.1623	1.1636	+3.4	5.11E+07	0.91	Y	0.78	56.2

Lab ID: B4527_17665_DF_006 | Acq'd: 13 Aug 2020 11:20 DTF | Wt/Vol: 1.00 L | ICAL: HRMS3_DF_10122018_28AUG2019

Client ID: EB-04 | UTP: 13-Aug-2020 15:11:57 DTF | J-level: 5.02 pg/L | Split: 1 | Checkcode: 971-505-XFG

Datafile: 200812C31 | Report: 13 Aug 2020 15:17 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
JS 1234-TCDD	26.18		-	-	-	7.24E+07	0.81	Y	-	-
JS 1234-TCDF	24.44		-	-	-	1.02E+08	0.82	Y	-	-
JS 123467-HxCDD	36.98		-	-	-	2.92E+07	1.26	Y	-	-
CS 37Cl-2378-TCDD	26.91		1.0276	1.0277	+0.2	3.42E+07	n/a	-	1.12	105
CS 12347-PeCDD	32.09		1.2233	1.2256	+4.4	6.01E+07	1.63	Y	0.71	116
CS 12346-PeCDF	30.52		1.2459	1.2487	+5.1	9.22E+07	1.58	Y	0.81	112
CS 123469-HxCDF	36.11		0.9767	0.9765	-0.4	6.96E+07	0.55	Y	1.12	106
CS 1234689-HpCDF	39.58		1.0696	1.0704	+1.9	5.02E+07	0.46	Y	0.90	95.9
~~SS 37Cl-2378-TCDD~~	~~26.91~~		~~1.0276~~	~~1.0277~~	~~+0.2~~	~~3.42E+07~~	~~n/a~~		~~1.14~~	~~97.9~~
~~SS 12347-PeCDD~~	~~32.09~~		~~1.2233~~	~~1.2256~~	~~+4.4~~	~~6.01E+07~~	~~1.63~~	~~Y~~	~~0.86~~	~~109~~
~~SS 12346-PeCDF~~	~~30.52~~		~~1.2459~~	~~1.2487~~	~~+5.1~~	~~9.22E+07~~	~~1.58~~	~~Y~~	~~0.98~~	~~99.2~~
~~SS 123469-HxCDF~~	~~36.11~~		~~0.9767~~	~~0.9765~~	~~-0.4~~	~~6.96E+07~~	~~0.55~~	~~Y~~	~~0.85~~	~~105~~
~~SS 1234689-HpCDF~~	~~39.58~~		~~1.0696~~	~~1.0704~~	~~+1.9~~	~~5.02E+07~~	~~0.46~~	~~Y~~	~~0.97~~	~~103~~

Totals	Conc	EMPC
Total TCDD	0	0
Total PeCDD	0	0
Total HxCDD	0	0
Total HpCDD	0	0
Total Tetra-Octa Dioxins	0	0
Total TCDF	0	0
Total PeCDF	0	0
Total HxCDF	0	0
Total HpCDF	0	0
Total Tetra-Octa Furans	0	0
Total Tetra-Octa Dioxins & Furans	0	0

Lab ID: B4527_17665_DF_006 **Acq'd:** 13 Aug 2020 11:20 DTF **Wt/Vol:** 1.00 L **ICAL:** HRMS3_DF_10122018_28AUG2019

Client ID: EB-04 **UTP:** 13-Aug-2020 15:11:57 DTF **J-level:** 5.02 pg/L **Split:** 1 **Checkcode:** 971-505-XFG

Datafile: 200812C31 **Report:** 13 Aug 2020 15:17 TF **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1368-TCDD	NotFnd		0.8523						1.19		13982	3.43
1379-TCDD	NotFnd		0.8682						1.19		13982	3.43
1369-TCDD	NotFnd		0.8858						1.19		13982	3.43
1469-TCDD	NotFnd		0.9177						1.19		13982	3.43
1247/1246/1248/1249-TCDD	NotFnd		0.9274						1.19		13982	3.43
1378-TCDD	NotFnd		0.9349						1.19		13982	3.43
1268-TCDD	NotFnd		0.9430						1.19		13982	3.43
1478-TCDD	NotFnd		0.9529						1.19		13982	3.43
1279-TCDD	NotFnd		0.9597						1.19		13982	3.43
1234/1269-TCDD	NotFnd		0.9739						1.19		13982	3.43
1236-TCDD	NotFnd		0.9794						1.19		13982	3.43
1237/1238-TCDD	NotFnd		0.9895						1.19		13982	3.43
1239-TCDD	NotFnd		0.9950						1.19		13982	3.43
2378-TCDD	**NotFnd**		**1.0008**						**1.19**		**13982**	**3.43**
1278-TCDD	NotFnd		1.0139						1.19		13982	3.43
1267-TCDD	NotFnd		1.0194						1.19		13982	3.43
1289-TCDD	NotFnd		1.0397						1.19		13982	3.43
12479/12468-PeCDD	NotFnd		0.9209						0.98		13188	4.81
12469-PeCDD	NotFnd		0.9382						0.98		13188	4.81
12368-PeCDD	NotFnd		0.9557						0.98		13188	4.81
12478-PeCDD	NotFnd		0.9617						0.98		13188	4.81
12379-PeCDD	NotFnd		0.9649						0.98		13188	4.81
12369/12467/12489-PeCDD	NotFnd		0.9732						0.98		13188	4.81
12346/12347-PeCDD	NotFnd		0.9850						0.98		13188	4.81
12378-PeCDD	NotFnd		**1.0006**						**0.98**		**13188**	**4.81**
12367-PeCDD	NotFnd		1.0038						0.98		13188	4.81
12389-PeCDD	NotFnd		1.0146						0.98		13188	4.81
124679/124689-HxCDD	NotFnd		0.9530						1.03		6695	2.04
123468-HxCDD	NotFnd		0.9715						1.03		6695	2.04
123679/123689-HxCDD	NotFnd		0.9795						1.03		6695	2.04
123469-HxCDD	NotFnd		0.9832						1.03		6695	2.04
123478-HxCDD	NotFnd		**1.0004**						1.02		**6695**	**2.05**
123678-HxCDD	NotFnd		**1.0036**						1.09		**6695**	**1.95**
123467-HxCDD	NotFnd		1.0089						1.03		6695	2.04
123789-HxCDD	NotFnd		**1.0118**						0.97		**6695**	**2.14**

Lab ID: B4527_17665_DF_006 | Acq'd: 13 Aug 2020 11:20 DTF | Wt/Vol: 1.00 L | ICAL: HRMS3_DF_10122018_28AUG2019

Client ID: EB-04 | UTP: 13-Aug-2020 15:11:57 DTF | J-level: 5.02 pg/L | Split: 1 | Checkcode: 971-505-XFG

Datafile: 200812C31 | Report: 13 Aug 2020 15:17 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1234679-HpCDD	NotFnd		0.9826						0.98		5483	2.65
1234678-HpCDD	**NotFnd**		**1.0003**						**0.98**		**5483**	**2.65**
OCDD	**NotFnd**		**1.0003**						**1.07**		**4578**	**7.73**
OCDD-a	NotFnd	**#VALUE!**	1.0002						-		6461	#VALUE!
1368-TCDF	NotFnd		0.7980						1.01		5845	1.24
1468-TCDF	NotFnd		0.8204						1.01		5845	1.24
2468-TCDF	NotFnd		0.8443						1.01		5845	1.24
1346/1246-TCDF	NotFnd		0.8597						1.01		5845	1.24
1347/1378/1247-TCDF	NotFnd		0.8665						1.01		5845	1.24
1348-TCDF	NotFnd		0.8785						1.01		5845	1.24
1248/1367/1379-TCDF	NotFnd		0.8840						1.01		5845	1.24
1268-TCDF	NotFnd		0.9004						1.01		5845	1.24
1467-TCDF	NotFnd		0.9060						1.01		5845	1.24
1478-TCDF	NotFnd		0.9132						1.01		5845	1.24
1369/1237-TCDF	NotFnd		0.9287						1.01		5845	1.24
2467-TCDF	NotFnd		0.9345						1.01		5845	1.24
2368-TCDF	NotFnd		0.9409						1.01		5845	1.24
1238/1234/1678/1469/1236-TCDF	NotFnd		0.9450						1.01		5845	1.24
1278-TCDF	NotFnd		0.9638						1.01		5845	1.24
1349-TCDF	NotFnd		0.9685						1.01		5845	1.24
1267-TCDF	NotFnd		0.9751						1.01		5845	1.24
2346/1249-TCDF	NotFnd		0.9831						1.01		5845	1.24
2347/1279-TCDF	NotFnd		0.9920						1.01		5845	1.24
2348-TCDF	NotFnd		0.9964						1.01		5845	1.24
2378-TCDF	**NotFnd**		**1.0009**						**1.01**		**5845**	**1.24**
2367/3467-TCDF	NotFnd		1.0164						1.01		5845	1.24
1269-TCDF	NotFnd		1.0259						1.01		5845	1.24
1239-TCDF	NotFnd		1.0373						1.01		5845	1.24
1289-TCDF	NotFnd		1.0838						1.01		5845	1.24
13468/12468-PeCDF	NotFnd		0.9052						0.98		4677	0.952
13678/13467/12467-PeCDF	NotFnd		0.9582						0.98		4393	0.894
12368/13478/12478-PeCDF	NotFnd		0.9634						0.98		4393	0.894
14678-PeCDF	NotFnd		0.9668						0.98		4393	0.894
13479-PeCDF	NotFnd		0.9700						0.98		4393	0.894
13469/12479-PeCDF	NotFnd		0.9781						0.98		4393	0.894
12346-PeCDF	NotFnd		0.9829						0.98		4393	0.894

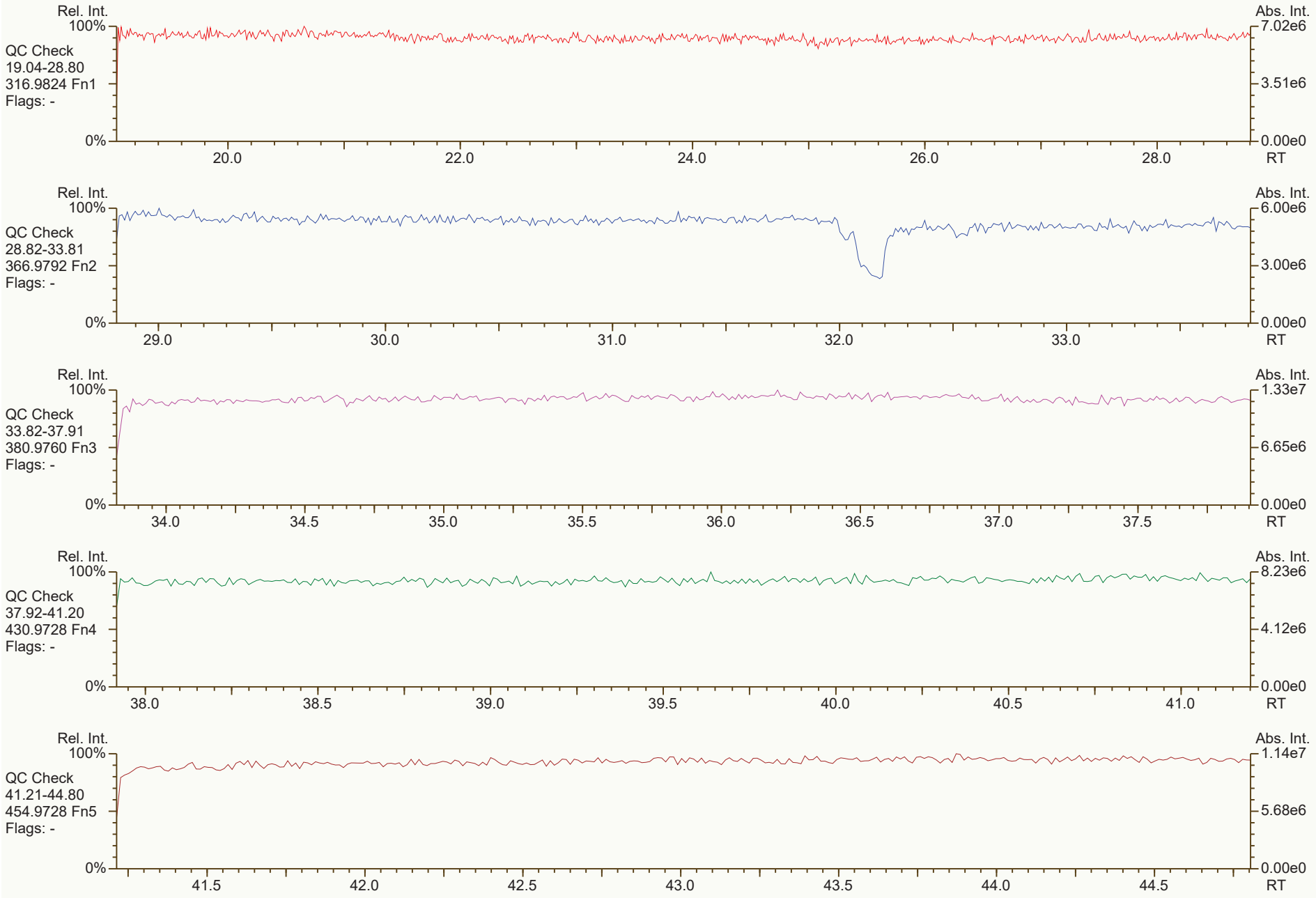
Lab ID: B4527_17665_DF_006 | Acq'd: 13 Aug 2020 11:20 DTF | Wt/Vol: 1.00 L | ICAL: HRMS3_DF_10122018_28AUG2019

Client ID: EB-04 | UTP: 13-Aug-2020 15:11:57 DTF | J-level: 5.02 pg/L | Split: 1 | Checkcode: 971-505-XFG

Datafile: 200812C31 | Report: 13 Aug 2020 15:17 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
23468/12469-PeCDF	NotFnd		0.9859						0.98		4393	0.894
12347-PeCDF	NotFnd		0.9884						0.98		4393	0.894
12348-PeCDF	NotFnd		0.9937						0.98		4393	0.894
12378-PeCDF	**NotFnd**		**1.0006**						**0.96**		**4393**	**0.883**
12678/12367-PeCDF	NotFnd		1.0097						0.98		4393	0.894
12379-PeCDF	NotFnd		1.0152						0.98		4393	0.894
12679-PeCDF	NotFnd		0.9923						0.98		4393	0.894
23467/12369-PeCDF	NotFnd		0.9966						0.98		4393	0.894
23478-PeCDF	**NotFnd**		**1.0005**						**0.99**		**4393**	**0.905**
23478/12489-PeCDF	NotFnd		0.0000						0.99			
12489-PeCDF	NotFnd		1.0043						0.98		4393	0.894
12349-PeCDF	NotFnd		1.0107						0.98		4393	0.894
12389-PeCDF	NotFnd		1.0349						0.98		4393	0.894
123468-HxCDF	NotFnd		0.9607						1.13		4245	0.943
124678/134678-HxCDF	NotFnd		0.9666						1.13		4245	0.943
134679-HxCDF	NotFnd		0.9730						1.13		4245	0.943
124679-HxCDF	NotFnd		0.9787						1.13		4245	0.943
124689-HxCDF	NotFnd		0.9850						1.13		4245	0.943
123467-HxCDF	NotFnd		0.9971						1.13		4245	0.943
123478-HxCDF	**NotFnd**		**1.0005**						**1.21**		**4245**	**0.893**
123678-HxCDF	**NotFnd**		**1.0005**						**1.11**		**4245**	**0.882**
123479-HxCDF	NotFnd		1.0049						1.13		4245	0.943
123469-HxCDF	NotFnd		1.0090						1.13		4245	0.943
123679-HxCDF	NotFnd		0.9941						1.13		4245	0.943
234678-HxCDF	**NotFnd**		**1.0004**						**1.12**		**4245**	**0.918**
234678/123689-HxCDF	NotFnd		0.0000						1.12			
123689-HxCDF	NotFnd		1.0041						1.13		4245	0.943
123789-HxCDF	**NotFnd**		**1.0005**						**1.11**		**4245**	**1.11**
123789/123489-HxCDF	NotFnd		0.0000						1.11			
123489-HxCDF	NotFnd		1.0009						1.13		4245	0.943
1234678-HpCDF	**NotFnd**		**1.0003**						**1.32**		**3464**	**1.01**
1234679-HpCDF	NotFnd		1.0075						1.29		3464	1.28
1234689-HpCDF	NotFnd		1.0112						1.29		3464	1.28
1234789-HpCDF	**NotFnd**		**1.0003**						**1.26**		**3464**	**1.63**
OCDF	**NotFnd**		**1.0003**						**1.03**		**2876**	**3.66**
OCDF-a	NotFnd	**#VALUE!**	1.0002						-		4222	#VALUE!

SGS ID: B4527_17665_DF_006 **Sample ID: EB-04** **Acq: 13-Aug-2020 11:20:58**
Instr: [ILM] AutoSpec-Ultima HRMS3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 22** **User: DTF Datafile: 200812C31**



Results: P:\B4500_B4599\B4527\B4527_17665 DF\Resources\B4527_17665_DF_006.utp_res, saved 13-Aug-2020 15:11 (DTF) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 scc: 971-505 *PKD: n/a Printed: 13-Aug-2020 15:22 Page 1 of 12*

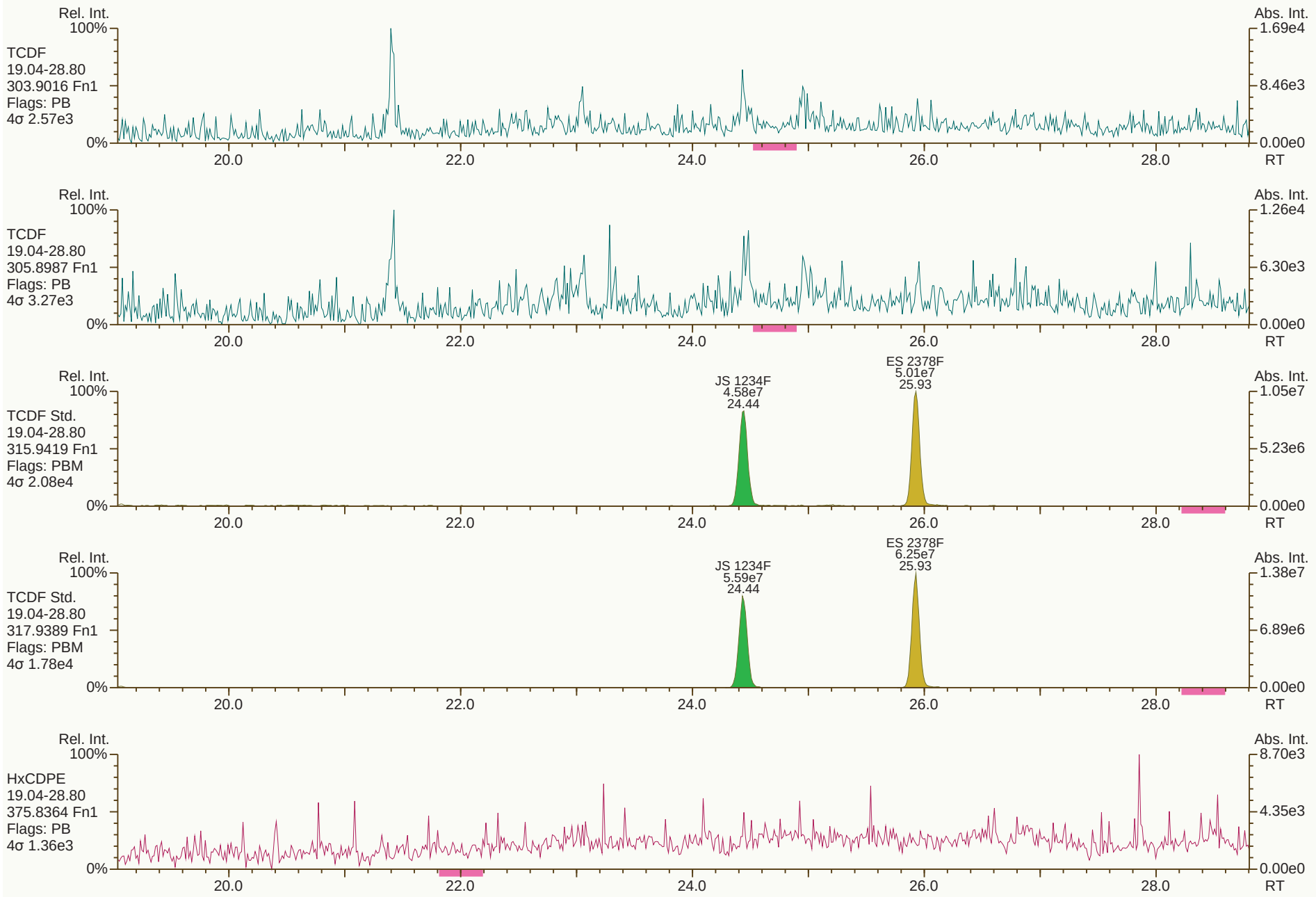

Rel. Int.
100%
TCDD
19.04-28.80
319.8965 Fn1
Flags: B
4σ 7.81e3
0%
Abs. Int.
7.44e4
3.72e4
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD
19.04-28.80
321.8936 Fn1
Flags: B
4σ 6.17e3
0%
Abs. Int.
3.46e4
1.73e4
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
37Cl-TCDD
19.04-28.80
327.8850 Fn1
Flags: PBM
4σ 6.14e3
0%
CS 37Cl-2378D
3.42e7
26.91
Abs. Int.
7.69e6
3.85e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.80
331.9368 Fn1
Flags: PBM
4σ 8.49e3
0%
JS 1234D
3.24e7
26.18
ES 2378D
3.40e7
26.88
Abs. Int.
7.69e6
3.84e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.80
333.9339 Fn1
Flags: PBM
4σ 5.50e3
0%
JS 1234D
4.01e7
26.18
ES 2378D
4.23e7
26.88
Abs. Int.
9.58e6
4.79e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT


Rel. Int.
100%
PeCDD
28.82-33.81
355.8546 Fn2
Flags: PB
4σ 7.94e3
0%
Abs. Int.
2.33e4
1.16e4
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD
28.82-33.81
357.8517 Fn2
Flags: PB
4σ 5.25e3
0%
Abs. Int.
2.32e4
1.16e4
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.82-33.81
367.8949 Fn2
Flags: PBM
4σ 5.97e3
0%
CS 12347D
3.72e7
32.09
ES 12378D
3.95e7
32.63
Abs. Int.
9.25e6
4.62e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.82-33.81
369.8919 Fn2
Flags: PBM
4σ 4.35e3
0%
CS 12347D
2.29e7
32.09
ES 12378D
2.47e7
32.63
Abs. Int.
5.66e6
2.83e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
QC Check
28.82-33.81
366.9792 Fn2
Flags: -
0%
Abs. Int.
6.00e6
3.00e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT


Rel. Int.
100%
HxCDD
33.82-37.91
389.8156 Fn3
Flags: PB
4σ 4.10e3
0%
Abs. Int.
2.00e4
1.00e4
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD
33.82-37.91
391.8127 Fn3
Flags: PB
4σ 2.60e3
0%
Abs. Int.
1.98e4
9.90e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.82-37.91
401.8559 Fn3
Flags: PBM
4σ 5.93e3
0%
ES 123678D
3.21e7
36.79
ES 123478D
3.13e7
36.67
ES 123789D
3.47e7
37.09
JS 123467D
1.63e7
36.98
Abs. Int.
9.01e6
4.50e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.82-37.91
403.8530 Fn3
Flags: PBM
4σ 4.07e3
0%
ES 123678D
2.54e7
36.78
ES 123478D
2.46e7
36.67
ES 123789D
2.77e7
37.09
JS 123467D
1.29e7
36.98
Abs. Int.
7.18e6
3.59e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
QC Check
33.82-37.91
380.9760 Fn3
Flags: -
0%
Abs. Int.
1.33e7
6.65e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT


Rel. Int.
100%
HpCDD
37.92-41.20
423.7767 Fn4
Flags: B
4σ 2.53e3
0%
Abs. Int.
1.13e4
5.64e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD
37.92-41.20
425.7737 Fn4
Flags: B
4σ 2.95e3
0%
Abs. Int.
1.17e4
5.84e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
ES 1234678D
2.18e7
40.16
Rel. Int.
100%
HpCDD Std.
37.92-41.20
435.8169 Fn4
Flags: PBM
4σ 2.08e3
0%
Abs. Int.
5.46e6
2.73e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
ES 1234678D
2.07e7
40.16
Rel. Int.
100%
HpCDD Std.
37.92-41.20
437.8140 Fn4
Flags: PBM
4σ 2.40e3
0%
Abs. Int.
4.98e6
2.49e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
QC Check
37.92-41.20
430.9728 Fn4
Flags: -
0%
Abs. Int.
8.23e6
4.12e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT


Rel. Int.
100%
OCDD
41.21-44.80
457.7377 Fn5
Flags: PB
4σ 1.52e3
0%
Abs. Int.
1.42e4
7.12e3
0.00e0
RT
41.5
42.0
42.5
43.0
43.5
44.0
44.5
Rel. Int.
100%
OCDD
41.21-44.80
459.7348 Fn5
Flags: PB
4σ 3.06e3
0%
Abs. Int.
1.47e4
7.36e3
0.00e0
RT
ES OCDD
1.78e7
42.89
Rel. Int.
100%
OCDD Std.
41.21-44.80
469.7780 Fn5
Flags: PBM
4σ 2.46e3
0%
Abs. Int.
2.62e6
1.31e6
0.00e0
RT
ES OCDD
2.00e7
42.89
Rel. Int.
100%
OCDD Std.
41.21-44.80
471.7750 Fn5
Flags: PBM
4σ 1.79e3
0%
Abs. Int.
2.86e6
1.43e6
0.00e0
RT
Rel. Int.
100%
QC Check
41.21-44.80
454.9728 Fn5
Flags: -
0%
Abs. Int.
1.14e7
5.68e6
0.00e0
RT

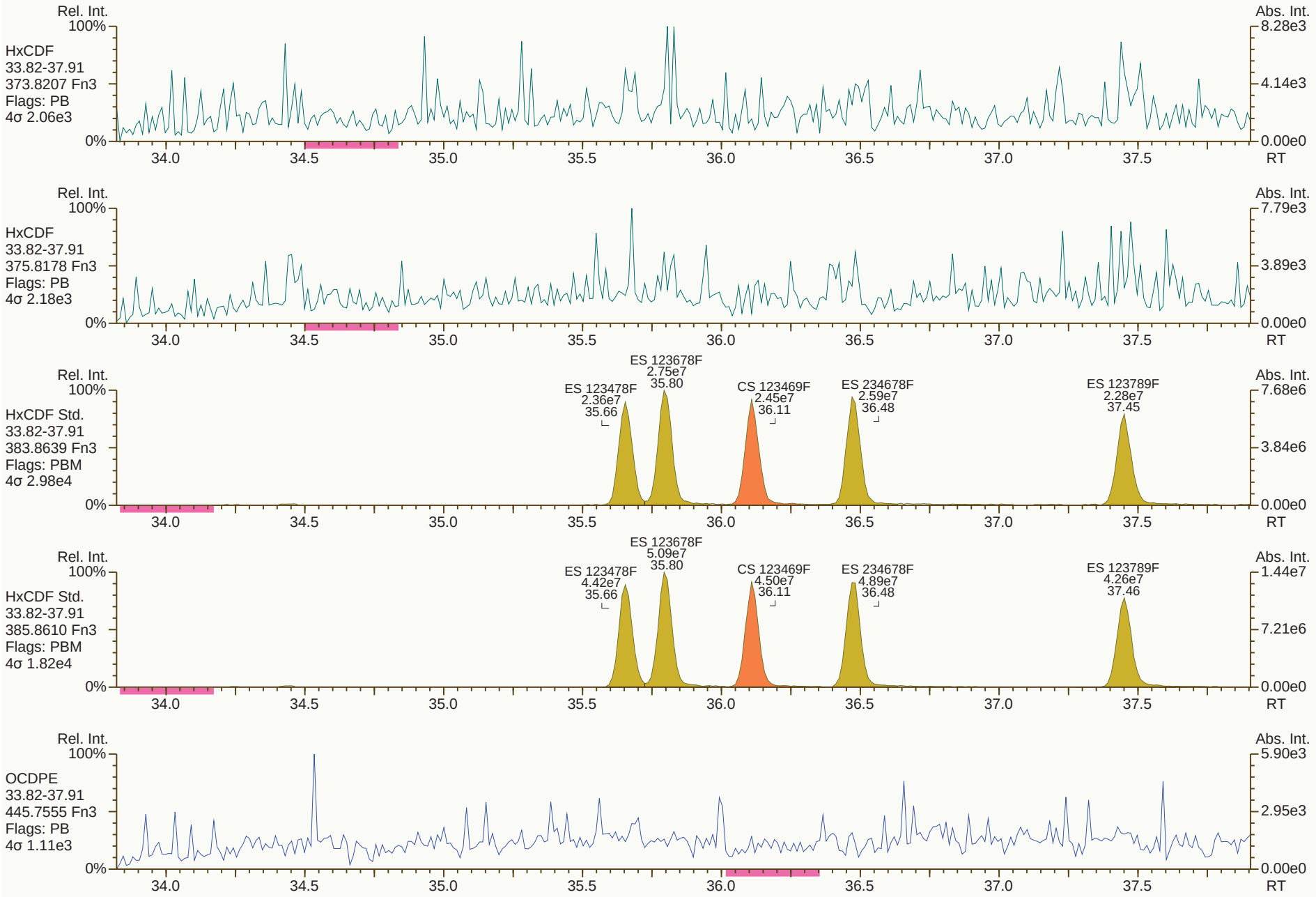

Rel. Int.
100%
TCDF
19.04-28.80
303.9016 Fn1
Flags: PB
4σ 2.57e3
0%
Abs. Int.
1.69e4
8.46e3
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDF
19.04-28.80
305.8987 Fn1
Flags: PB
4σ 3.27e3
0%
Abs. Int.
1.26e4
6.30e3
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDF Std.
19.04-28.80
315.9419 Fn1
Flags: PBM
4σ 2.08e4
0%
JS 1234F
4.58e7
24.44
ES 2378F
5.01e7
25.93
Abs. Int.
1.05e7
5.23e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDF Std.
19.04-28.80
317.9389 Fn1
Flags: PBM
4σ 1.78e4
0%
JS 1234F
5.59e7
24.44
ES 2378F
6.25e7
25.93
Abs. Int.
1.38e7
6.89e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
HxCDPE
19.04-28.80
375.8364 Fn1
Flags: PB
4σ 1.36e3
0%
Abs. Int.
8.70e3
4.35e3
0.00e0
20.0
22.0
24.0
26.0
28.0
RT

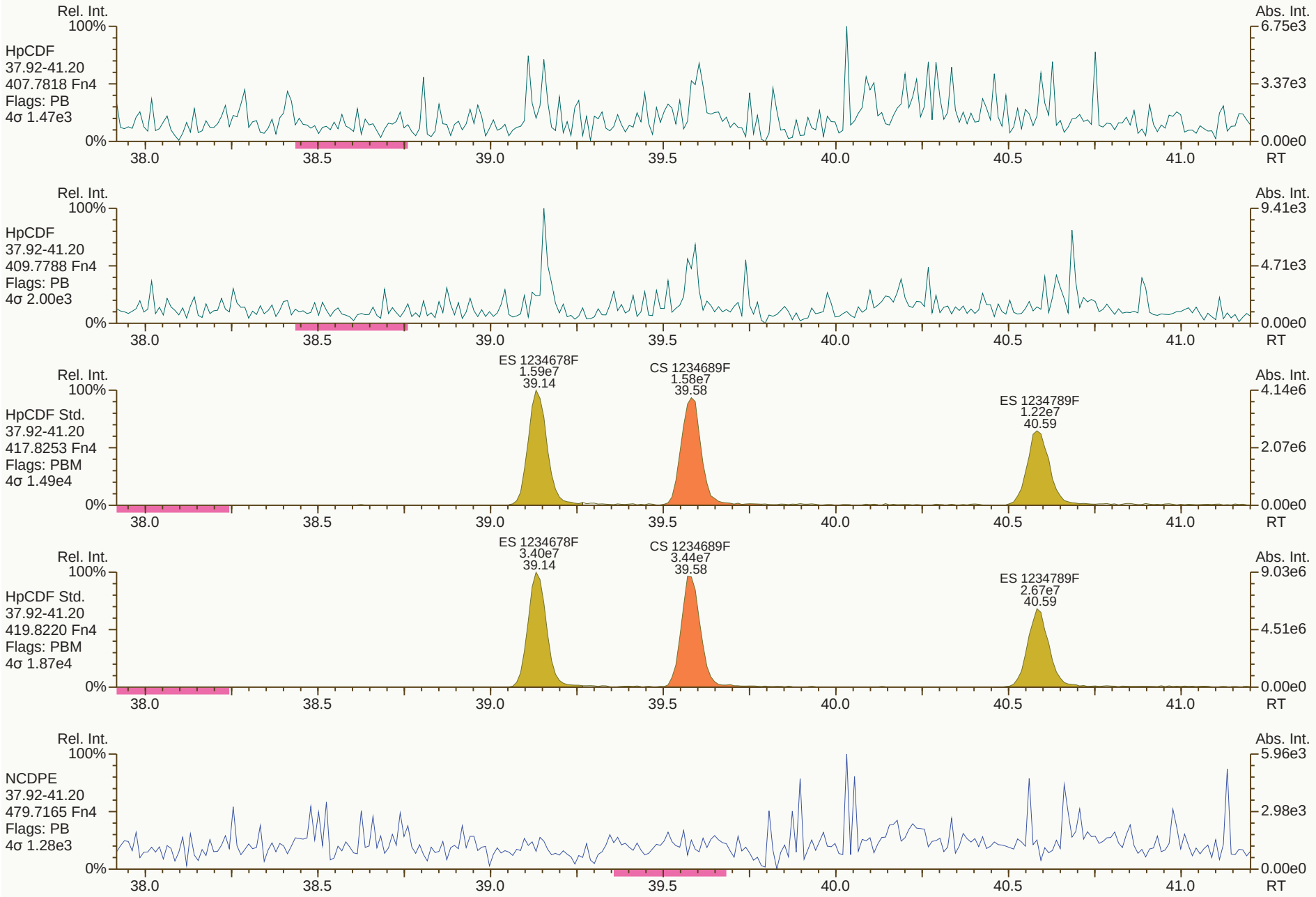
SGS ID: B4527_17665_DF_006 **Sample ID: EB-04** **Acq: 13-Aug-2020 11:20:58**
Instr: [ILM] AutoSpec-Ultima HRMS3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 22** **User: DTF Datafile: 200812C31**



Results: P:\B4500_B4599\B4527\B4527_17665 DF\Resources\B4527_17665_DF_006.utp_res, saved 13-Aug-2020 15:11 (DTF) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 7579 scc: 971-505 *PKD: 13-Aug-2020 15:09 Printed: 13-Aug-2020 15:23 Page 8 of 12*


Rel. Int.
100%
PeCDF-2
28.82-33.81
339.8597 Fn2
Flags: PB
4σ 1.92e3
0%
Abs. Int.
1.60e4
7.99e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF-2
28.82-33.81
341.8568 Fn2
Flags: PB
4σ 2.47e3
0%
Abs. Int.
8.55e3
4.28e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.82-33.81
351.9000 Fn2
Flags: PBM
4σ 2.15e4
0%
CS 12346F
5.65e7
30.52
ES 12378F
5.79e7
31.07
ES 23478F
5.72e7
32.25
Abs. Int.
1.58e7
7.88e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.82-33.81
353.8970 Fn2
Flags: PBM
4σ 9.66e3
0%
CS 12346F
3.57e7
30.52
ES 12378F
3.72e7
31.07
ES 23478F
3.73e7
32.25
Abs. Int.
9.80e6
4.90e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
HpCDPE
28.82-33.81
409.7974 Fn2
Flags: PB
4σ 1.31e3
0%
Abs. Int.
1.20e4
6.00e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT


Rel. Int.
100%
HxCDF
33.82-37.91
373.8207 Fn3
Flags: PB
4σ 2.06e3
0%
Abs. Int.
8.28e3
4.14e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF
33.82-37.91
375.8178 Fn3
Flags: PB
4σ 2.18e3
0%
Abs. Int.
7.79e3
3.89e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF Std.
33.82-37.91
383.8639 Fn3
Flags: PBM
4σ 2.98e4
0%
ES 123478F
2.36e7
35.66
ES 123678F
2.75e7
35.80
CS 123469F
2.45e7
36.11
ES 234678F
2.59e7
36.48
ES 123789F
2.28e7
37.45
Abs. Int.
7.68e6
3.84e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF Std.
33.82-37.91
385.8610 Fn3
Flags: PBM
4σ 1.82e4
0%
ES 123478F
4.42e7
35.66
ES 123678F
5.09e7
35.80
CS 123469F
4.50e7
36.11
ES 234678F
4.89e7
36.48
ES 123789F
4.26e7
37.46
Abs. Int.
1.44e7
7.21e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
OCDPE
33.82-37.91
445.7555 Fn3
Flags: PB
4σ 1.11e3
0%
Abs. Int.
5.90e3
2.95e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT


Rel. Int.
100%
HpCDF
37.92-41.20
407.7818 Fn4
Flags: PB
4σ 1.47e3
0%
Abs. Int.
6.75e3
3.37e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF
37.92-41.20
409.7788 Fn4
Flags: PB
4σ 2.00e3
0%
Abs. Int.
9.41e3
4.71e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.92-41.20
417.8253 Fn4
Flags: PBM
4σ 1.49e4
0%
ES 1234678F
1.59e7
39.14
CS 1234689F
1.58e7
39.58
ES 1234789F
1.22e7
40.59
Abs. Int.
4.14e6
2.07e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.92-41.20
419.8220 Fn4
Flags: PBM
4σ 1.87e4
0%
ES 1234678F
3.40e7
39.14
CS 1234689F
3.44e7
39.58
ES 1234789F
2.67e7
40.59
Abs. Int.
9.03e6
4.51e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
NCDPE
37.92-41.20
479.7165 Fn4
Flags: PB
4σ 1.28e3
0%
Abs. Int.
5.96e3
2.98e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT


Rel. Int.
100%
OCDF
41.21-44.80
441.7428 Fn5
Flags: PB
4σ 1.03e3
0%
Abs. Int.
8.53e3
4.26e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDF
41.21-44.80
443.7398 Fn5
Flags: PB
4σ 1.85e3
0%
Abs. Int.
7.23e3
3.61e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDF
2.43e7
43.03
Rel. Int.
100%
OCDF Std.
41.21-44.80
453.7830 Fn5
Flags: PBM
4σ 3.49e3
0%
Abs. Int.
3.64e6
1.82e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDF
2.68e7
43.03
Rel. Int.
100%
OCDF Std.
41.21-44.80
455.7801 Fn5
Flags: PBM
4σ 6.18e3
0%
Abs. Int.
3.79e6
1.89e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
DCDPE
41.21-44.80
513.6775 Fn5
Flags: PB
4σ 1.02e3
0%
Abs. Int.
5.28e3
2.64e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT

Lab ID: B4527_17665_DF_007 **Acq'd:** 13 Aug 2020 12:07 DTF **Wt/Vol:** 0.99 L **ICAL:** HRMS3_DF_10122018_28AUG2019

Client ID: EB-07 **UTP:** 13-Aug-2020 15:11:57 DTF **J-level:** 5.06 pg/L **Split:** 1 **Checkcode:** 786-390-DFC

Datafile: 200812C32 **Report:** 13 Aug 2020 15:17 TF **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	NotFnd		1.0008	-		-	-	-	1.19	-	4881	1.35
12378-PeCDD	NotFnd		1.0006	-		-	-	-	0.98	-	3771	1.29
123478-HxCDD	NotFnd		1.0004	-		-	-	-	1.02	-	1884	0.772
123678-HxCDD	NotFnd		1.0036	-		-	-	-	1.09	-	1884	0.77
123789-HxCDD	NotFnd		1.0118	-		-	-	-	0.97	-	1884	0.797
1234678-HpCDD	NotFnd		1.0003	-		-	-	-	0.98	-	6273	3.77
OCDD	NotFnd		1.0003	-		-	-	-	1.07	-	3578	6.07
2378-TCDF	NotFnd		1.0009	-		-	-	-	1.01	-	3340	0.77
12378-PeCDF	NotFnd		1.0006	-		-	-	-	0.96	-	3071	0.758
23478-PeCDF	NotFnd		1.0005	-		-	-	-	0.99	-	3071	0.719
123478-HxCDF	NotFnd		1.0005	-		-	-	-	1.21	-	2738	0.712
123678-HxCDF	NotFnd		1.0005	-		-	-	-	1.11	-	2738	0.68
234678-HxCDF	NotFnd		1.0004	-		-	-	-	1.12	-	2738	0.764
123789-HxCDF	NotFnd		1.0005	-		-	-	-	1.11	-	2738	1
1234678-HpCDF	NotFnd		1.0003	-		-	-	-	1.32	-	2221	0.747
1234789-HpCDF	NotFnd		1.0003	-		-	-	-	1.26	-	2221	1.21
OCDF	NotFnd		1.0003	-		-	-	-	1.03	-	3315	4.52

Name	Act RT	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	26.88	1.0266	1.0268	+0.3	7.07E+07	0.82	Y	0.99	102
ES 12378-PeCDD	32.60	1.2430	1.2454	+4.7	5.33E+07	1.55	Y	0.83	92.1
ES 123478-HxCDD	36.67	0.9916	0.9915	-0.2	4.31E+07	1.30	Y	0.95	92.4
ES 123678-HxCDD	36.78	0.9947	0.9946	-0.2	4.25E+07	1.29	Y	0.98	88.5
ES 123789-HxCDD	37.08	1.0029	1.0028	-0.2	4.60E+07	1.25	Y	1.14	82.2
ES 1234678-HpCDD	40.16	1.0851	1.0861	+2.4	3.51E+07	1.07	Y	0.90	79.4
ES OCDD	42.89	1.1584	1.1598	+3.6	3.73E+07	0.94	Y	0.63	60.5
ES 2378-TCDF	25.93	1.0602	1.0609	+1.1	1.02E+08	0.81	Y	1.00	101
ES 12378-PeCDF	31.07	1.2683	1.2713	+5.6	7.87E+07	1.56	Y	0.83	93.5
ES 23478-PeCDF	32.23	1.3156	1.3191	+6.8	7.93E+07	1.59	Y	0.81	97.2
ES 123478-HxCDF	35.65	0.9644	0.9641	-0.6	5.56E+07	0.53	Y	1.12	101
ES 123678-HxCDF	35.80	0.9682	0.9680	-0.4	6.46E+07	0.53	Y	1.33	98.5
ES 234678-HxCDF	36.48	0.9864	0.9863	-0.2	5.89E+07	0.53	Y	1.21	98.9
ES 123789-HxCDF	37.45	1.0128	1.0127	-0.2	5.07E+07	0.54	Y	1.12	92.2
ES 1234678-HpCDF	39.14	1.0578	1.0583	+1.2	4.01E+07	0.46	Y	0.92	88.1
ES 1234789-HpCDF	40.59	1.0967	1.0976	+2.2	3.19E+07	0.46	Y	0.82	79
ES OCDF	43.03	1.1623	1.1636	+3.4	5.00E+07	0.94	Y	0.78	65.1

Lab ID: B4527_17665_DF_007 | Acq'd: 13 Aug 2020 12:07 DTF | Wt/Vol: 0.99 L | ICAL: HRMS3_DF_10122018_28AUG2019

Client ID: EB-07 | UTP: 13-Aug-2020 15:11:57 DTF | J-level: 5.06 pg/L | Split: 1 | Checkcode: 786-390-DFC

Datafile: 200812C32 | Report: 13 Aug 2020 15:17 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
JS 1234-TCDD	26.18		-	-	-	6.98E+07	0.83	Y	-	-
JS 1234-TCDF	24.44		-	-	-	1.01E+08	0.80	Y	-	-
JS 123467-HxCDD	36.98		-	-	-	2.46E+07	1.28	Y	-	-
CS 37Cl-2378-TCDD	26.90		1.0276	1.0277	+0.2	3.16E+07	n/a	-	1.12	101
CS 12347-PeCDD	32.08		1.2233	1.2255	+4.2	5.06E+07	1.62	Y	0.71	102
CS 12346-PeCDF	30.51		1.2459	1.2488	+5.3	7.84E+07	1.58	Y	0.81	95.7
CS 123469-HxCDF	36.11		0.9767	0.9764	-0.6	5.48E+07	0.53	Y	1.12	99.2
CS 1234689-HpCDF	39.58		1.0696	1.0703	+1.7	4.01E+07	0.47	Y	0.90	90.9
~~SS 37Cl-2378-TCDD~~	~~26.90~~		~~1.0276~~	~~1.0277~~	~~+0.2~~	~~3.16E+07~~	~~n/a~~		~~1.14~~	~~97.6~~
~~SS 12347-PeCDD~~	~~32.08~~		~~1.2233~~	~~1.2255~~	~~+4.2~~	~~5.06E+07~~	~~1.62~~	~~Y~~	~~0.86~~	~~110~~
~~SS 12346-PeCDF~~	~~30.51~~		~~1.2459~~	~~1.2488~~	~~+5.3~~	~~7.84E+07~~	~~1.58~~	~~Y~~	~~0.98~~	~~102~~
~~SS 123469-HxCDF~~	~~36.11~~		~~0.9767~~	~~0.9764~~	~~-0.6~~	~~5.48E+07~~	~~0.53~~	~~Y~~	~~0.85~~	~~100~~
~~SS 1234689-HpCDF~~	~~39.58~~		~~1.0696~~	~~1.0703~~	~~+1.7~~	~~4.01E+07~~	~~0.47~~	~~Y~~	~~0.97~~	~~103~~

Totals	Conc	EMPC
Total TCDD	0	0
Total PeCDD	0	0
Total HxCDD	0	0
Total HpCDD	0	0
Total Tetra-Octa Dioxins	0	0
Total TCDF	0	0
Total PeCDF	0	0
Total HxCDF	0	0
Total HpCDF	0	0
Total Tetra-Octa Furans	0	0
Total Tetra-Octa Dioxins & Furans	0	0

Lab ID: B4527_17665_DF_007 **Acq'd:** 13 Aug 2020 12:07 DTF **Wt/Vol:** 0.99 L **ICAL:** HRMS3_DF_10122018_28AUG2019

Client ID: EB-07 **UTP:** 13-Aug-2020 15:11:57 DTF **J-level:** 5.06 pg/L **Split:** 1 **Checkcode:** 786-390-DFC

Datafile: 200812C32 **Report:** 13 Aug 2020 15:17 TF **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1368-TCDD	NotFnd		0.8523						1.19		4881	1.35
1379-TCDD	NotFnd		0.8682						1.19		4881	1.35
1369-TCDD	NotFnd		0.8858						1.19		4881	1.35
1469-TCDD	NotFnd		0.9177						1.19		4881	1.35
1247/1246/1248/1249-TCDD	NotFnd		0.9274						1.19		4881	1.35
1378-TCDD	NotFnd		0.9349						1.19		4881	1.35
1268-TCDD	NotFnd		0.9430						1.19		4881	1.35
1478-TCDD	NotFnd		0.9529						1.19		4881	1.35
1279-TCDD	NotFnd		0.9597						1.19		4881	1.35
1234/1269-TCDD	NotFnd		0.9739						1.19		4881	1.35
1236-TCDD	NotFnd		0.9794						1.19		4881	1.35
1237/1238-TCDD	NotFnd		0.9895						1.19		4881	1.35
1239-TCDD	NotFnd		0.9950						1.19		4881	1.35
2378-TCDD	**NotFnd**		**1.0008**						**1.19**		**4881**	**1.35**
1278-TCDD	NotFnd		1.0139						1.19		4881	1.35
1267-TCDD	NotFnd		1.0194						1.19		4881	1.35
1289-TCDD	NotFnd		1.0397						1.19		4881	1.35
12479/12468-PeCDD	NotFnd		0.9209						0.98		3771	1.29
12469-PeCDD	NotFnd		0.9382						0.98		3771	1.29
12368-PeCDD	NotFnd		0.9557						0.98		3771	1.29
12478-PeCDD	NotFnd		0.9617						0.98		3771	1.29
12379-PeCDD	NotFnd		0.9649						0.98		3771	1.29
12369/12467/12489-PeCDD	NotFnd		0.9732						0.98		3771	1.29
12346/12347-PeCDD	NotFnd		0.9850						0.98		3771	1.29
12378-PeCDD	NotFnd		**1.0006**						**0.98**		**3771**	**1.29**
12367-PeCDD	NotFnd		1.0038						0.98		3771	1.29
12389-PeCDD	NotFnd		1.0146						0.98		3771	1.29
124679/124689-HxCDD	NotFnd		0.9530						1.03		1884	0.778
123468-HxCDD	NotFnd		0.9715						1.03		1884	0.778
123679/123689-HxCDD	NotFnd		0.9795						1.03		1884	0.778
123469-HxCDD	NotFnd		0.9832						1.03		1884	0.778
123478-HxCDD	NotFnd		**1.0004**						1.02		**1884**	**0.772**
123678-HxCDD	NotFnd		**1.0036**						1.09		**1884**	**0.77**
123467-HxCDD	NotFnd		1.0089						1.03		1884	0.778
123789-HxCDD	NotFnd		**1.0118**						0.97		**1884**	**0.797**

Lab ID: B4527_17665_DF_007 | Acq'd: 13 Aug 2020 12:07 DTF | Wt/Vol: 0.99 L | ICAL: HRMS3_DF_10122018_28AUG2019

Client ID: EB-07 | UTP: 13-Aug-2020 15:11:57 DTF | J-level: 5.06 pg/L | Split: 1 | Checkcode: 786-390-DFC

Datafile: 200812C32 | Report: 13 Aug 2020 15:17 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

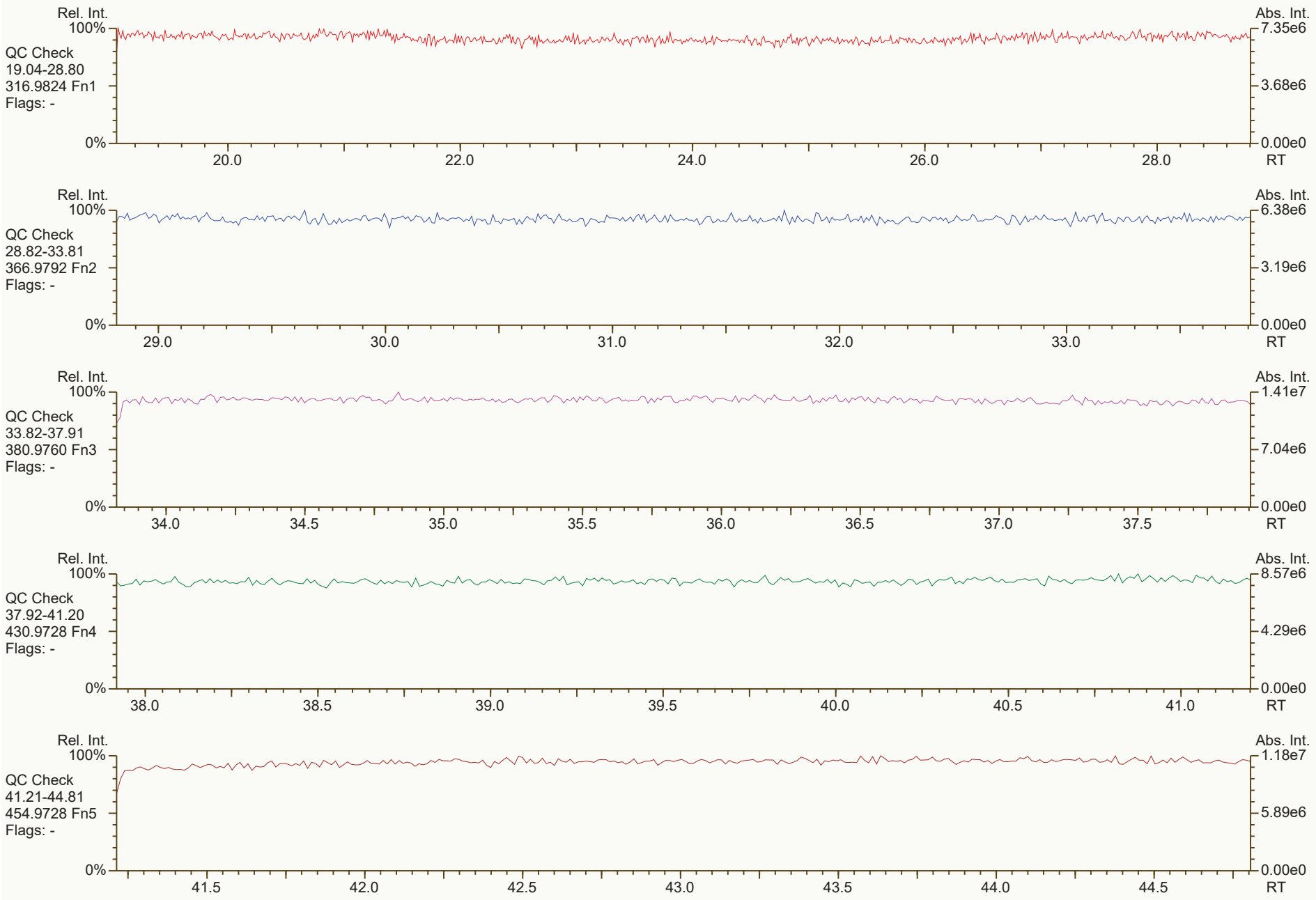
Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1234679-HpCDD	NotFnd		0.9826						0.98		6273	3.77
1234678-HpCDD	**NotFnd**		**1.0003**						**0.98**		**6273**	**3.77**
OCDD	**NotFnd**		**1.0003**						**1.07**		**3578**	**6.07**
OCDD-a	NotFnd	**#VALUE!**	1.0002						-		4901	#VALUE!
1368-TCDF	NotFnd		0.7980						1.01		3340	0.77
1468-TCDF	NotFnd		0.8204						1.01		3340	0.77
2468-TCDF	NotFnd		0.8443						1.01		3340	0.77
1346/1246-TCDF	NotFnd		0.8597						1.01		3340	0.77
1347/1378/1247-TCDF	NotFnd		0.8665						1.01		3340	0.77
1348-TCDF	NotFnd		0.8785						1.01		3340	0.77
1248/1367/1379-TCDF	NotFnd		0.8840						1.01		3340	0.77
1268-TCDF	NotFnd		0.9004						1.01		3340	0.77
1467-TCDF	NotFnd		0.9060						1.01		3340	0.77
1478-TCDF	NotFnd		0.9132						1.01		3340	0.77
1369/1237-TCDF	NotFnd		0.9287						1.01		3340	0.77
2467-TCDF	NotFnd		0.9345						1.01		3340	0.77
2368-TCDF	NotFnd		0.9409						1.01		3340	0.77
1238/1234/1678/1469/1236-TCDF	NotFnd		0.9450						1.01		3340	0.77
1278-TCDF	NotFnd		0.9638						1.01		3340	0.77
1349-TCDF	NotFnd		0.9685						1.01		3340	0.77
1267-TCDF	NotFnd		0.9751						1.01		3340	0.77
2346/1249-TCDF	NotFnd		0.9831						1.01		3340	0.77
2347/1279-TCDF	NotFnd		0.9920						1.01		3340	0.77
2348-TCDF	NotFnd		0.9964						1.01		3340	0.77
2378-TCDF	**NotFnd**		**1.0009**						**1.01**		**3340**	**0.77**
2367/3467-TCDF	NotFnd		1.0164						1.01		3340	0.77
1269-TCDF	NotFnd		1.0259						1.01		3340	0.77
1239-TCDF	NotFnd		1.0373						1.01		3340	0.77
1289-TCDF	NotFnd		1.0838						1.01		3340	0.77
13468/12468-PeCDF	NotFnd		0.9052						0.98		3760	0.904
13678/13467/12467-PeCDF	NotFnd		0.9582						0.98		3071	0.738
12368/13478/12478-PeCDF	NotFnd		0.9634						0.98		3071	0.738
14678-PeCDF	NotFnd		0.9668						0.98		3071	0.738
13479-PeCDF	NotFnd		0.9700						0.98		3071	0.738
13469/12479-PeCDF	NotFnd		0.9781						0.98		3071	0.738
12346-PeCDF	NotFnd		0.9829						0.98		3071	0.738

Lab ID: B4527_17665_DF_007 | Acq'd: 13 Aug 2020 12:07 DTF | Wt/Vol: 0.99 L | ICAL: HRMS3_DF_10122018_28AUG2019

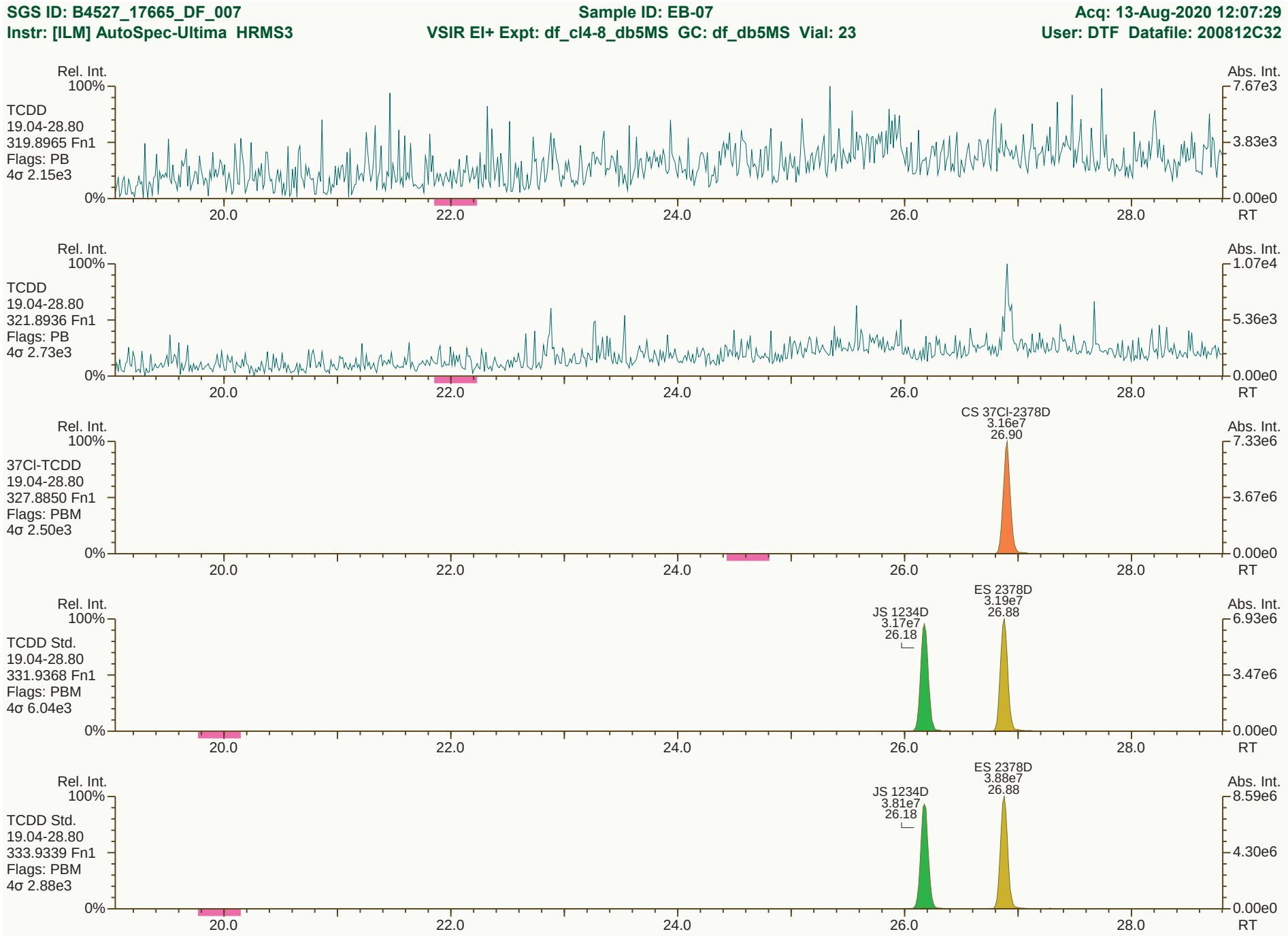
Client ID: EB-07 | UTP: 13-Aug-2020 15:11:57 DTF | J-level: 5.06 pg/L | Split: 1 | Checkcode: 786-390-DFC

Datafile: 200812C32 | Report: 13 Aug 2020 15:17 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
23468/12469-PeCDF	NotFnd		0.9859						0.98		3071	0.738
12347-PeCDF	NotFnd		0.9884						0.98		3071	0.738
12348-PeCDF	NotFnd		0.9937						0.98		3071	0.738
12378-PeCDF	**NotFnd**		**1.0006**						**0.96**		**3071**	**0.758**
12678/12367-PeCDF	NotFnd		1.0097						0.98		3071	0.738
12379-PeCDF	NotFnd		1.0152						0.98		3071	0.738
12679-PeCDF	NotFnd		0.9923						0.98		3071	0.738
23467/12369-PeCDF	NotFnd		0.9966						0.98		3071	0.738
23478-PeCDF	**NotFnd**		**1.0005**						**0.99**		**3071**	**0.719**
23478/12489-PeCDF	NotFnd		0.0000						0.99			
12489-PeCDF	NotFnd		1.0043						0.98		3071	0.738
12349-PeCDF	NotFnd		1.0107						0.98		3071	0.738
12389-PeCDF	NotFnd		1.0349						0.98		3071	0.738
123468-HxCDF	NotFnd		0.9607						1.13		2738	0.778
124678/134678-HxCDF	NotFnd		0.9666						1.13		2738	0.778
134679-HxCDF	NotFnd		0.9730						1.13		2738	0.778
124679-HxCDF	NotFnd		0.9787						1.13		2738	0.778
124689-HxCDF	NotFnd		0.9850						1.13		2738	0.778
123467-HxCDF	NotFnd		0.9971						1.13		2738	0.778
123478-HxCDF	**NotFnd**		**1.0005**						**1.21**		**2738**	**0.712**
123678-HxCDF	**NotFnd**		**1.0005**						**1.11**		**2738**	**0.68**
123479-HxCDF	NotFnd		1.0049						1.13		2738	0.778
123469-HxCDF	NotFnd		1.0090						1.13		2738	0.778
123679-HxCDF	NotFnd		0.9941						1.13		2738	0.778
234678-HxCDF	**NotFnd**		**1.0004**						**1.12**		**2738**	**0.764**
234678/123689-HxCDF	NotFnd		0.0000						1.12			
123689-HxCDF	NotFnd		1.0041						1.13		2738	0.778
123789-HxCDF	**NotFnd**		**1.0005**						**1.11**		**2738**	**1**
123789/123489-HxCDF	NotFnd		0.0000						1.11			
123489-HxCDF	NotFnd		1.0009						1.13		2738	0.778
1234678-HpCDF	**NotFnd**		**1.0003**						**1.32**		**2221**	**0.747**
1234679-HpCDF	NotFnd		1.0075						1.29		2221	0.947
1234689-HpCDF	NotFnd		1.0112						1.29		2221	0.947
1234789-HpCDF	**NotFnd**		**1.0003**						**1.26**		**2221**	**1.21**
OCDF	**NotFnd**		**1.0003**						**1.03**		**3315**	**4.52**
OCDF-a	NotFnd	**#VALUE!**	1.0002						-		3241	#VALUE!

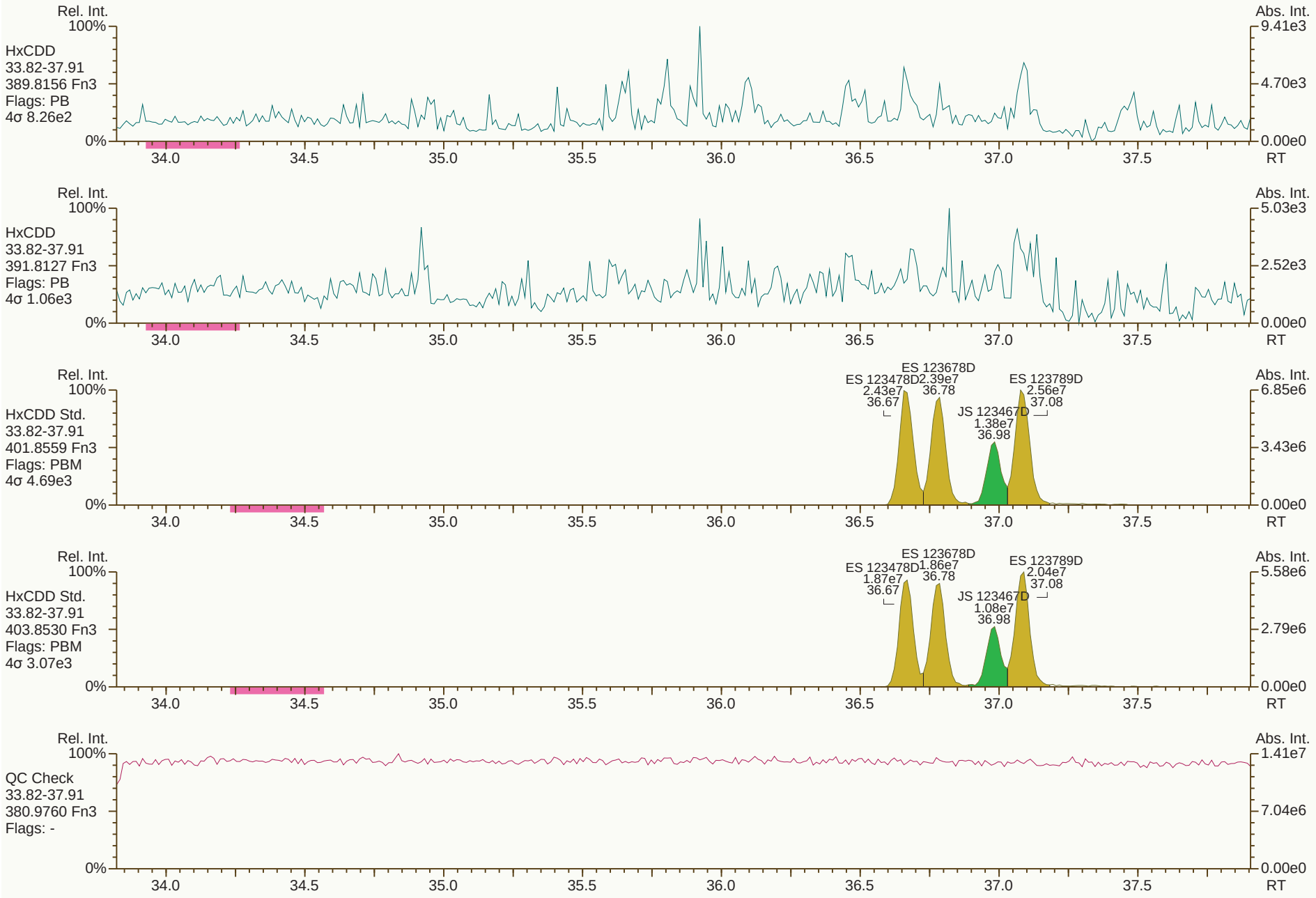

Rel. Int.
100%
QC Check
19.04-28.80
316.9824 Fn1
Flags: -
0%
20.0
22.0
24.0
26.0
28.0
RT
Abs. Int.
7.35e6
3.68e6
0.00e0
Rel. Int.
100%
QC Check
28.82-33.81
366.9792 Fn2
Flags: -
0%
29.0
30.0
31.0
32.0
33.0
RT
Abs. Int.
6.38e6
3.19e6
0.00e0
Rel. Int.
100%
QC Check
33.82-37.91
380.9760 Fn3
Flags: -
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Abs. Int.
1.41e7
7.04e6
0.00e0
Rel. Int.
100%
QC Check
37.92-41.20
430.9728 Fn4
Flags: -
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Abs. Int.
8.57e6
4.29e6
0.00e0
Rel. Int.
100%
QC Check
41.21-44.81
454.9728 Fn5
Flags: -
0%
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Abs. Int.
1.18e7
5.89e6
0.00e0

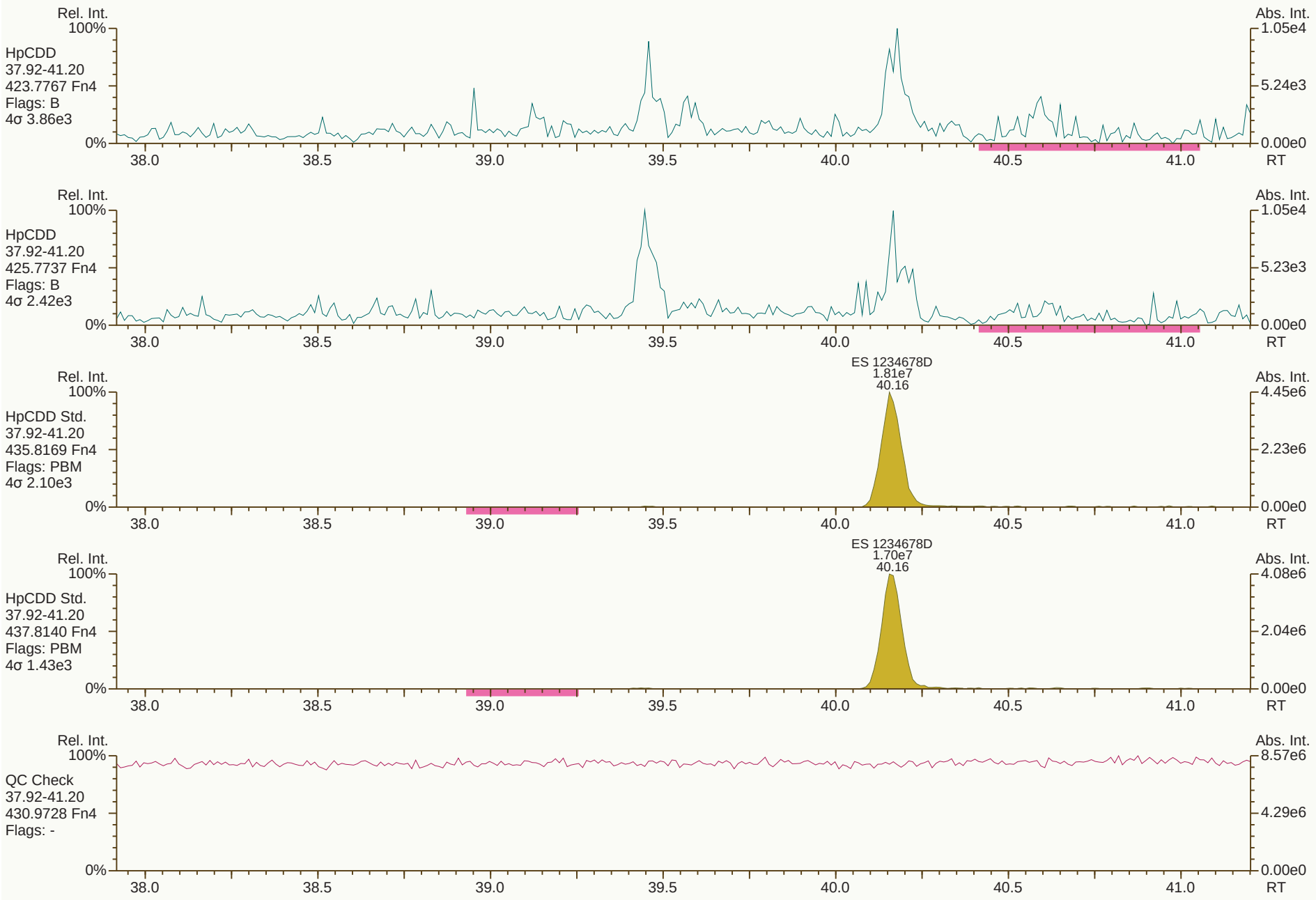
SGS ID: B4527_17665_DF_007 | Sample ID: EB-07 | Acq: 13-Aug-2020 12:07:29
Instr: [ILM] AutoSpec-Ultima HRMS3 | VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 23 | User: DTF Datafile: 200812C32



Results: P:\B4500_B4599\B4527\B4527_17665 DF\Resources\B4527_17665_DF_007.utp_res, saved 13-Aug-2020 15:11 (DTF) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 0797, 9457, 2254 scc: 786-390 *PKD: 13-Aug-2020 15:10 Printed: 13-Aug-2020 15:23 Page 2 of 12*


Rel. Int.
100%
PeCDD
28.82-33.81
355.8546 Fn2
Flags: PB
4σ 2.42e3
0%
Abs. Int.
1.07e4
5.37e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD
28.82-33.81
357.8517 Fn2
Flags: PB
4σ 1.35e3
0%
Abs. Int.
6.42e3
3.21e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.82-33.81
367.8949 Fn2
Flags: PBM
4σ 2.81e3
0%
CS 12347D
3.13e7
32.08
ES 12378D
3.24e7
32.60
Abs. Int.
9.11e6
4.55e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.82-33.81
369.8919 Fn2
Flags: PBM
4σ 1.61e3
0%
CS 12347D
1.93e7
32.08
ES 12378D
2.09e7
32.60
Abs. Int.
5.86e6
2.93e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
QC Check
28.82-33.81
366.9792 Fn2
Flags: -
0%
Abs. Int.
6.38e6
3.19e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT


Rel. Int.
100%
HxCDD
33.82-37.91
389.8156 Fn3
Flags: PB
4σ 8.26e2
0%
Abs. Int.
9.41e3
4.70e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD
33.82-37.91
391.8127 Fn3
Flags: PB
4σ 1.06e3
0%
Abs. Int.
5.03e3
2.52e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.82-37.91
401.8559 Fn3
Flags: PBM
4σ 4.69e3
0%
ES 123678D
2.39e7
36.78
ES 123478D
2.43e7
36.67
ES 123789D
2.56e7
37.08
JS 123467D
1.38e7
36.98
Abs. Int.
6.85e6
3.43e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.82-37.91
403.8530 Fn3
Flags: PBM
4σ 3.07e3
0%
ES 123678D
1.86e7
36.78
ES 123478D
1.87e7
36.67
ES 123789D
2.04e7
37.08
JS 123467D
1.08e7
36.98
Abs. Int.
5.58e6
2.79e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
QC Check
33.82-37.91
380.9760 Fn3
Flags: -
0%
Abs. Int.
1.41e7
7.04e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT

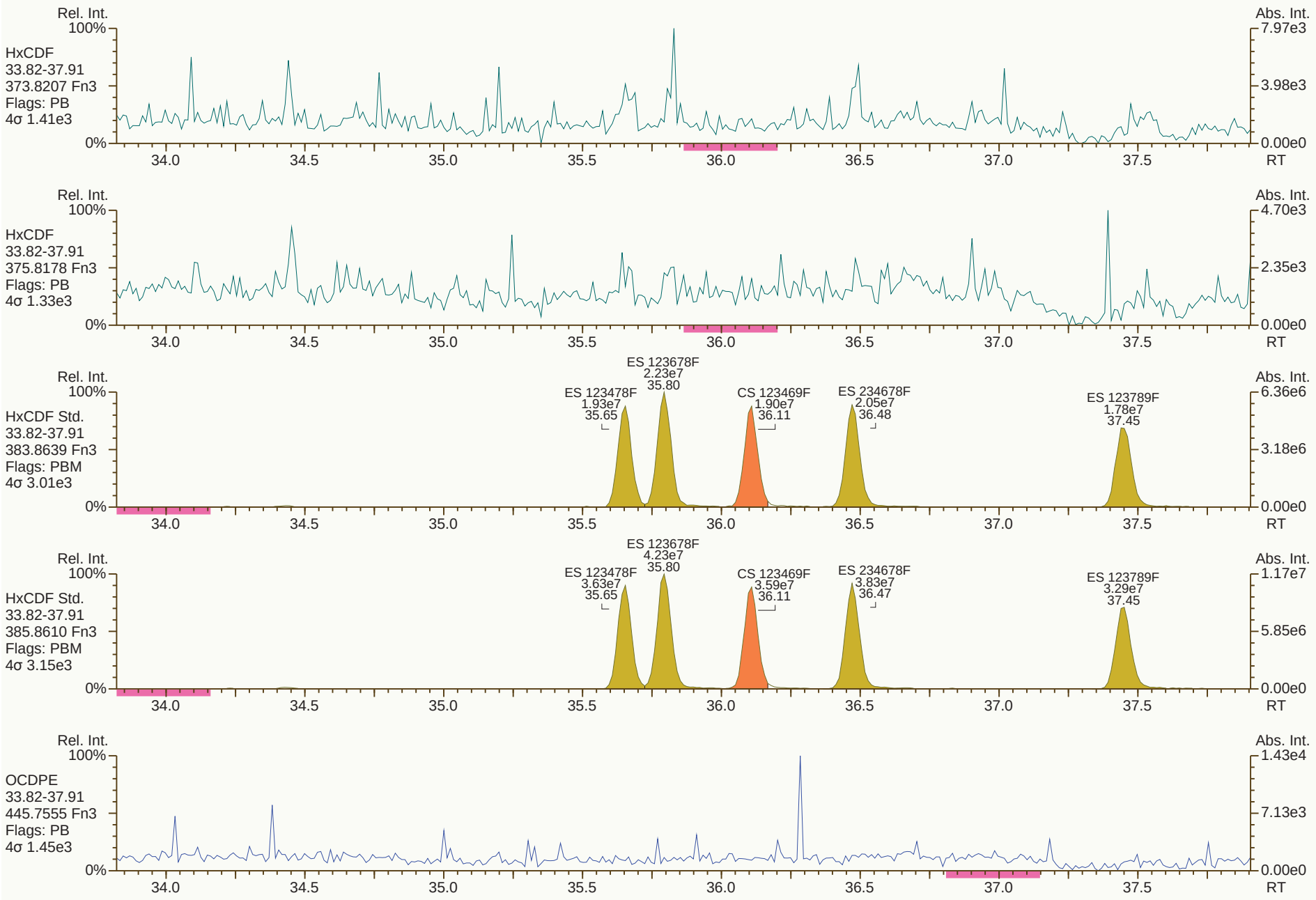

Rel. Int.
100%
HpCDD
37.92-41.20
423.7767 Fn4
Flags: B
4σ 3.86e3
0%
Abs. Int.
1.05e4
5.24e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD
37.92-41.20
425.7737 Fn4
Flags: B
4σ 2.42e3
0%
Abs. Int.
1.05e4
5.23e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
ES 1234678D
1.81e7
40.16
Rel. Int.
100%
HpCDD Std.
37.92-41.20
435.8169 Fn4
Flags: PBM
4σ 2.10e3
0%
Abs. Int.
4.45e6
2.23e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
ES 1234678D
1.70e7
40.16
Rel. Int.
100%
HpCDD Std.
37.92-41.20
437.8140 Fn4
Flags: PBM
4σ 1.43e3
0%
Abs. Int.
4.08e6
2.04e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
QC Check
37.92-41.20
430.9728 Fn4
Flags: -
0%
Abs. Int.
8.57e6
4.29e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT


Rel. Int.
100%
OCDD
41.21-44.81
457.7377 Fn5
Flags: PB
4σ 1.65e3
0%
Abs. Int.
1.13e4
5.65e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDD
41.21-44.81
459.7348 Fn5
Flags: PB
4σ 1.93e3
0%
Abs. Int.
1.48e4
7.39e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDD
1.81e7
42.89
Rel. Int.
100%
OCDD Std.
41.21-44.81
469.7780 Fn5
Flags: PBM
4σ 1.81e3
0%
Abs. Int.
2.70e6
1.35e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDD
1.92e7
42.89
Rel. Int.
100%
OCDD Std.
41.21-44.81
471.7750 Fn5
Flags: PBM
4σ 1.43e3
0%
Abs. Int.
2.79e6
1.40e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
QC Check
41.21-44.81
454.9728 Fn5
Flags: -
0%
Abs. Int.
1.18e7
5.89e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT

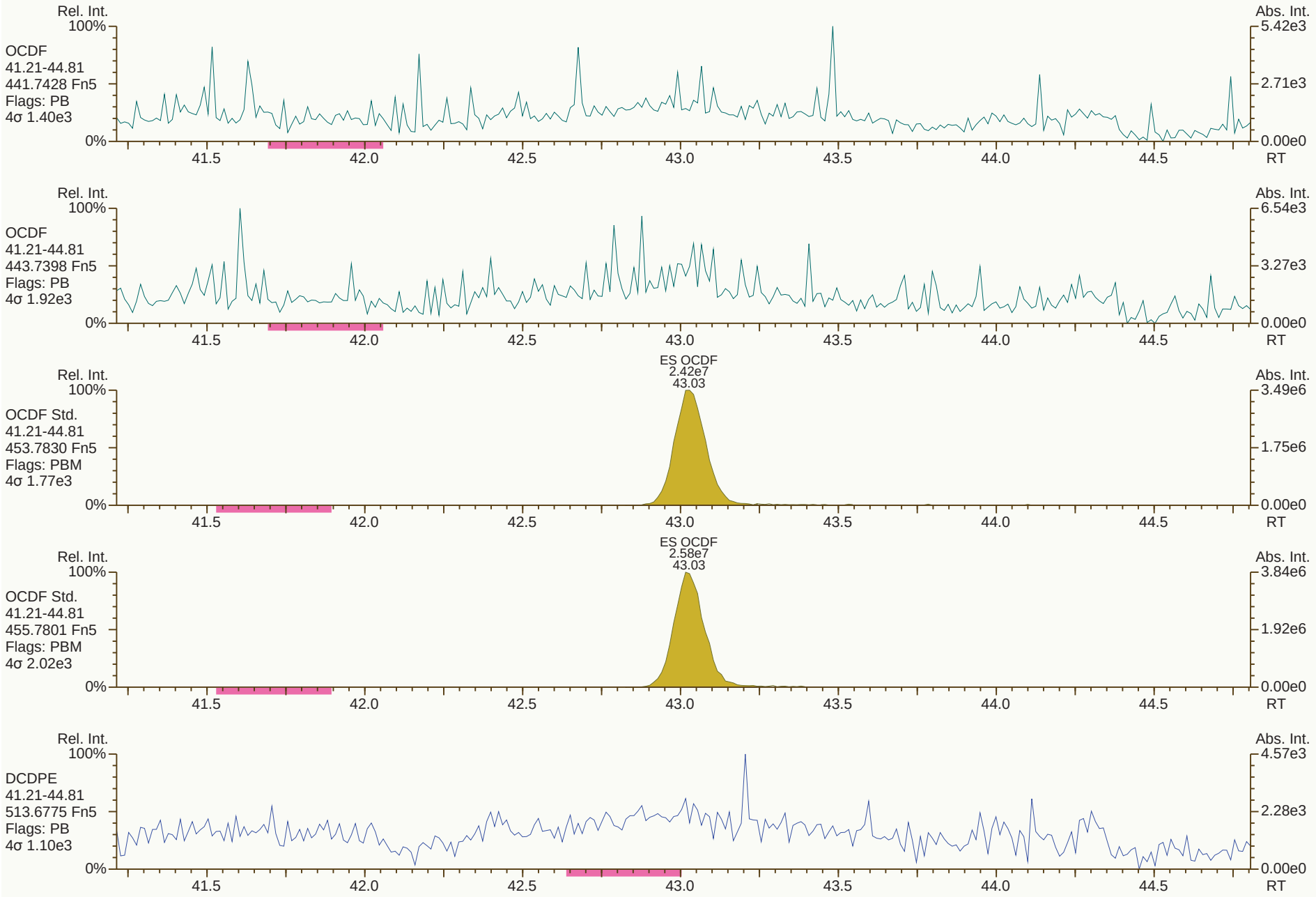

Rel. Int.
100%
TCDF
19.04-28.80
303.9016 Fn1
Flags: PB
4σ 1.54e3
0%
Abs. Int.
7.92e3
3.96e3
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDF
19.04-28.80
305.8987 Fn1
Flags: PB
4σ 1.80e3
0%
Abs. Int.
7.73e3
3.86e3
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDF Std.
19.04-28.80
315.9419 Fn1
Flags: PBM
4σ 1.28e4
0%
JS 1234F
4.49e7
24.44
ES 2378F
4.58e7
25.93
Abs. Int.
9.72e6
4.86e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDF Std.
19.04-28.80
317.9389 Fn1
Flags: PBM
4σ 1.22e4
0%
JS 1234F
5.64e7
24.43
ES 2378F
5.64e7
25.92
Abs. Int.
1.18e7
5.90e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
HxCDPE
19.04-28.80
375.8364 Fn1
Flags: PB
4σ 1.11e3
0%
Abs. Int.
1.96e4
9.81e3
0.00e0
20.0
22.0
24.0
26.0
28.0
RT


Rel. Int.
100%
0%
Abs. Int.
8.64e3
4.32e3
0.00e0
PeCDF-1
19.04-28.80
339.8597 Fn1
Flags: PB
4σ 2.04e3
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
0%
Abs. Int.
1.06e4
5.32e3
0.00e0
PeCDF-1
19.04-28.80
341.8568 Fn1
Flags: PB
4σ 1.72e3
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
0%
Abs. Int.
7.35e6
3.68e6
0.00e0
QC Check
19.04-28.80
316.9824 Fn1
Flags: -
20.0
22.0
24.0
26.0
28.0
RT


Rel. Int.
100%
PeCDF-2
28.82-33.81
339.8597 Fn2
Flags: PB
4σ 1.48e3
0%
Abs. Int.
1.97e4
9.86e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF-2
28.82-33.81
341.8568 Fn2
Flags: PB
4σ 1.59e3
0%
Abs. Int.
7.91e3
3.96e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.82-33.81
351.9000 Fn2
Flags: PBM
4σ 4.15e3
0%
CS 12346F
4.80e7
30.51
ES 12378F
4.80e7
31.07
ES 23478F
4.87e7
32.23
Abs. Int.
1.35e7
6.73e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.82-33.81
353.8970 Fn2
Flags: PBM
4σ 2.52e3
0%
CS 12346F
3.04e7
30.51
ES 12378F
3.07e7
31.06
ES 23478F
3.07e7
32.23
Abs. Int.
8.21e6
4.10e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
HpCDPE
28.82-33.81
409.7974 Fn2
Flags: PB
4σ 1.36e3
0%
Abs. Int.
1.45e4
7.27e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT


Rel. Int.
100%
HxCDF
33.82-37.91
373.8207 Fn3
Flags: PB
4σ 1.41e3
0%
Abs. Int.
7.97e3
3.98e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF
33.82-37.91
375.8178 Fn3
Flags: PB
4σ 1.33e3
0%
Abs. Int.
4.70e3
2.35e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF Std.
33.82-37.91
383.8639 Fn3
Flags: PBM
4σ 3.01e3
0%
ES 123478F
1.93e7
35.65
ES 123678F
2.23e7
35.80
CS 123469F
1.90e7
36.11
ES 234678F
2.05e7
36.48
ES 123789F
1.78e7
37.45
Abs. Int.
6.36e6
3.18e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF Std.
33.82-37.91
385.8610 Fn3
Flags: PBM
4σ 3.15e3
0%
ES 123478F
3.63e7
35.65
ES 123678F
4.23e7
35.80
CS 123469F
3.59e7
36.11
ES 234678F
3.83e7
36.47
ES 123789F
3.29e7
37.45
Abs. Int.
1.17e7
5.85e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
OCDPE
33.82-37.91
445.7555 Fn3
Flags: PB
4σ 1.45e3
0%
Abs. Int.
1.43e4
7.13e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT


Rel. Int.
100%
HpCDF
37.92-41.20
407.7818 Fn4
Flags: PB
4σ 8.03e2
0%
Abs. Int.
4.10e3
2.05e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF
37.92-41.20
409.7788 Fn4
Flags: PB
4σ 1.42e3
0%
Abs. Int.
4.34e3
2.17e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.92-41.20
417.8253 Fn4
Flags: PBM
4σ 5.35e3
0%
ES 1234678F
1.27e7
39.14
CS 1234689F
1.28e7
39.58
ES 1234789F
1.01e7
40.59
Abs. Int.
3.61e6
1.80e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.92-41.20
419.8220 Fn4
Flags: PBM
4σ 2.39e3
0%
ES 1234678F
2.74e7
39.14
CS 1234689F
2.73e7
39.58
ES 1234789F
2.18e7
40.59
Abs. Int.
7.30e6
3.65e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
NCDPE
37.92-41.20
479.7165 Fn4
Flags: PB
4σ 1.13e3
0%
Abs. Int.
4.42e3
2.21e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT


Rel. Int.
100%
OCDF
41.21-44.81
441.7428 Fn5
Flags: PB
4σ 1.40e3
0%
Abs. Int.
5.42e3
2.71e3
0.00e0
RT
41.5
42.0
42.5
43.0
43.5
44.0
44.5
OCDF
41.21-44.81
443.7398 Fn5
Flags: PB
4σ 1.92e3
6.54e3
3.27e3
ES OCDF
2.42e7
43.03
OCDF Std.
41.21-44.81
453.7830 Fn5
Flags: PBM
4σ 1.77e3
3.49e6
1.75e6
ES OCDF
2.58e7
43.03
OCDF Std.
41.21-44.81
455.7801 Fn5
Flags: PBM
4σ 2.02e3
3.84e6
1.92e6
DCDPE
41.21-44.81
513.6775 Fn5
Flags: PB
4σ 1.10e3
4.57e3
2.28e3

Instrument: HRMS3 (AutoSpec-Ultima) MS Experiment: df_cl4-8_db5MS GC Program: df_db5MS

#	Datafile	Vial#		Lab ID	Wt/Vol	Client/Sample ID	Analyst(s)	Checkcode	Acq Date	Acq Time
22	200812C22	3	*	CS3_200812_DF_CB	1.00	20-449-3	DTF	592-361	13-Aug-2020	04:14:45
23	200812C23	16		OPR1_17665_DF	1.00	0_17665_OPR001	DTF	127-038	13-Aug-2020	05:09:21
24	200812C24	2	*	SBS_200812_DF_CE	1.00	20-61-1	DTF	573-669	13-Aug-2020	05:55:28
25	200812C25	15		MB1_17665_DF_TLX	1.00	Method Blank	DTF	927-055	13-Aug-2020	06:41:57
26	200812C26	17		B4527_17665_DF_001	0.97	FB-01	DTF	072-886	13-Aug-2020	07:28:26
27	200812C27	18		B4527_17665_DF_002	0.94	EB-01	DTF	845-465	13-Aug-2020	08:14:56
28	200812C28	19		B4527_17665_DF_003	1.01	FB-02	DTF	458-339	13-Aug-2020	09:01:25
29	200812C29	20		B4527_17665_DF_004	0.99	EB-02	DTF	901-073	13-Aug-2020	09:47:57
30	200812C30	21		B4527_17665_DF_005	1.00	EB-03	DTF	116-900	13-Aug-2020	10:34:28
31	200812C31	22		B4527_17665_DF_006	1.00	EB-04	DTF	971-505	13-Aug-2020	11:20:58
32	200812C32	23		B4527_17665_DF_007	0.99	EB-07	DTF	786-390	13-Aug-2020	12:07:29
33	200812C33	2	*	SBS_200812_DF_CF	1.00	20-61-1	DTF	699-822	13-Aug-2020	12:54:00
34	200812C34	3	*	CS3_200812_DF_CC	1.00	20-449-3	DTF	047-105	13-Aug-2020	13:40:25

*acquired 08/13
AK 13 Aug 20

REVIEWED
Amber_Kornegay , 16:08:54, 08/13/2020

REVIEWED
By Tyler_Fritz at 3:43 pm, Aug 13, 2020

Project file: P:\B4500_B4599\B4527\B4527_17665 DF\Resources\B4527_17665_DF.utp_prj, saved 13-Aug-2020 15:42
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689

Printed: 13-Aug-2020 15:42

Dioxin/Furan QC Summary		Acq'd: 13 Aug 2020 04:14 DTF				ICAL: HRMS3_DF_10122018_28AUG2019	
Lab ID: CS3_200812_DF_CB		UTP: 13-Aug-2020 15:11:51 DTF				Checkcode: 592-361-MVF	
Sample ID: 20-449-3		Report: 13 Aug 2020 15:15 TF				Datafile: 200812C22	
Name	**RT**	**Response**	**RA**	**OK**	**Ref. RRFs**	**Calc. RRFs**	**Dev'n**
2378-TCDD	26.92	1.15E+07	0.77	Y	1.19	1.24	4%
12378-PeCDD	32.63	3.95E+07	1.54	Y	0.98	1.05	6%
123478-HxCDD	36.69	3.31E+07	1.26	Y	1.02	1.09	6%
123678-HxCDD	36.81	3.38E+07	1.29	Y	1.09	1.14	5%
123789-HxCDD	37.11	3.55E+07	1.27	Y	0.97	1.06	9%
1234678-HpCDD	40.19	2.77E+07	1.04	Y	0.98	1.08	10%
OCDD	42.93	3.72E+07	0.91	Y	1.07	1.18	10%
2378-TCDF	25.97	1.60E+07	0.79	Y	1.01	1.11	10%
12378-PeCDF	31.10	5.60E+07	1.53	Y	0.96	1.01	4%
23478-PeCDF	32.26	5.65E+07	1.54	Y	0.99	1.01	2%
123478-HxCDF	35.68	4.95E+07	1.22	Y	1.21	1.25	4%
123678-HxCDF	35.83	5.13E+07	1.24	Y	1.11	1.13	2%
234678-HxCDF	36.50	4.76E+07	1.24	Y	1.12	1.16	4%
123789-HxCDF	37.48	4.18E+07	1.24	Y	1.11	1.17	5%
1234678-HpCDF	39.16	3.81E+07	1.02	Y	1.32	1.33	1%
1234789-HpCDF	40.61	3.00E+07	1.02	Y	1.26	1.24	-1%
OCDF	43.07	4.26E+07	0.92	Y	1.03	1.07	4%
ES 2378-TCDD	26.90	9.28E+07	0.81	Y	0.99	0.97	-2%
ES 12378-PeCDD	32.61	7.55E+07	1.56	Y	0.83	0.79	-5%
ES 123478-HxCDD	36.68	6.09E+07	1.29	Y	0.95	0.94	-1%
ES 123678-HxCDD	36.79	5.93E+07	1.28	Y	0.98	0.91	-6%
ES 123789-HxCDD	37.1	6.67E+07	1.26	Y	1.14	1.03	-9%
ES 1234678-HpCDD	40.18	5.13E+07	1.07	Y	0.90	0.79	-12%
ES OCDD	42.92	6.32E+07	0.90	Y	0.63	0.49	-22%
ES 2378-TCDF	25.95	1.44E+08	0.82	Y	1.00	1.00	0%
ES 12378-PeCDF	31.08	1.11E+08	1.56	Y	0.83	0.77	-7%
ES 23478-PeCDF	32.25	1.12E+08	1.57	Y	0.81	0.78	-3%
ES 123478-HxCDF	35.67	7.91E+07	0.55	Y	1.12	1.22	9%
ES 123678-HxCDF	35.81	9.05E+07	0.53	Y	1.33	1.40	5%
ES 234678-HxCDF	36.49	8.18E+07	0.53	Y	1.21	1.26	4%
ES 123789-HxCDF	37.46	7.15E+07	0.53	Y	1.12	1.10	-1%
ES 1234678-HpCDF	39.15	5.72E+07	0.46	Y	0.92	0.88	-5%
ES 1234789-HpCDF	40.61	4.83E+07	0.47	Y	0.82	0.74	-9%
ES OCDF	43.06	7.97E+07	0.90	Y	0.78	0.61	-21%

Dioxin/Furan QC Summary		Acq'd: 13 Aug 2020 04:14 DTF				ICAL: HRMS3_DF_10122018_28AUG2019	
Lab ID: CS3_200812_DF_CB		UTP: 13-Aug-2020 15:11:51 DTF				Checkcode: 592-361-MVF	
Sample ID: 20-449-3		Report: 13 Aug 2020 15:15 TF				Datafile: 200812C22	
Name	**RT**	**Response**	**RA**	**OK**	**Ref. RRFs**	**Calc. RRFs**	**Dev'n**
JS 1234-TCDD	26.20	9.57E+07	0.81	Y	-	-	-
JS 1234-TCDF	24.46	1.44E+08	0.79	Y	-	-	-
JS 123467-HxCDD	36.99	3.24E+07	1.29	Y	-	-	-
CS 37Cl-2378-TCDD	26.92	1.08E+07	n/a	-	1.12	1.13	1%
CS 12347-PeCDD	32.09	6.68E+07	1.60	Y	0.71	0.70	-2%
CS 12346-PeCDF	30.53	1.10E+08	1.58	Y	0.81	0.76	-6%
CS 123469-HxCDF	36.12	8.05E+07	0.53	Y	1.12	1.24	11%
CS 1234689-HpCDF	39.59	5.67E+07	0.45	Y	0.90	0.87	-3%
~~SS 37Cl-2378-TCDD~~	~~26.92~~	~~1.08E+07~~	~~n/a~~	~~-~~	~~1.14~~	~~1.16~~	~~2%~~
~~SS 12347-PeCDD~~	~~32.09~~	~~6.68E+07~~	~~1.60~~	~~Y~~	~~0.86~~	~~0.88~~	~~3%~~
~~SS 12346-PeCDF~~	~~30.53~~	~~1.10E+08~~	~~1.58~~	~~Y~~	~~0.98~~	~~0.99~~	~~1%~~
~~SS 123469-HxCDF~~	~~36.12~~	~~8.05E+07~~	~~0.53~~	~~Y~~	~~0.85~~	~~0.89~~	~~5%~~
~~SS 1234689-HpCDF~~	~~39.59~~	~~5.67E+07~~	~~0.45~~	~~Y~~	~~0.97~~	~~0.99~~	~~2%~~
~~OCDD-a~~	~~42.92~~	~~2.30E+06~~	~~2.52~~	~~Y~~		~~0.07~~	~~#VALUE!~~
~~OCDF-a~~	~~43.06~~	~~2.74E+06~~	~~2.38~~	~~Y~~		~~0.07~~	~~#VALUE!~~

METHOD 8290A **PCDD/F CALIBRATION VERIFICATION** **FORM 4A**

Lab Name: SGS North America

Initial Calibration: ICAL: HRMS3_DF_10122018_28AUG2019

Instrument ID: HRMS3 GC Column ID: ZB-5ms

VER Data Filename: 200812C22 Analysis Date: 13-AUG-2020 04:14:45

NATIVE ANALYTES	M/Z's FORMING RATIO	ION ABUND. RATIO	QC LIMITS			OK	CONC. FOUND	RANGE (ng/mL)			OK
2,3,7,8-TCDD	M/M+2	0.77	0.65	-	0.89	Y	10.4	8	-	12	Y
1,2,3,7,8-PeCDD	M+2/M+4	1.54	1.32	-	1.78	Y	53.1	40	-	60	Y
1,2,3,4,7,8-HxCDD	M+2/M+4	1.26	1.05	-	1.43	Y	53.1	40	-	60	Y
1,2,3,6,7,8-HxCDD	M+2/M+4	1.29	1.05	-	1.43	Y	52.5	40	-	60	Y
1,2,3,7,8,9-HxCDD	M+2/M+4	1.27	1.05	-	1.43	Y	54.7	40	-	60	Y
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	0.88	-	1.20	Y	55.1	40	-	60	Y
OCDD	M+2/M+4	0.91	0.76	-	1.02	Y	110	80	-	120	Y
2,3,7,8-TCDF	M/M+2	0.79	0.65	-	0.89	Y	11	8	-	12	Y
1,2,3,7,8-PeCDF	M+2/M+4	1.53	1.32	-	1.78	Y	52.2	40	-	60	Y
2,3,4,7,8-PeCDF	M+2/M+4	1.54	1.32	-	1.78	Y	51	40	-	60	Y
1,2,3,4,7,8-HxCDF	M+2/M+4	1.22	1.05	-	1.43	Y	51.8	40	-	60	Y
1,2,3,6,7,8-HxCDF	M+2/M+4	1.24	1.05	-	1.43	Y	51.2	40	-	60	Y
2,3,4,6,7,8-HxCDF	M+2/M+4	1.24	1.05	-	1.43	Y	52.2	40	-	60	Y
1,2,3,7,8,9-HxCDF	M+2/M+4	1.24	1.05	-	1.43	Y	52.7	40	-	60	Y
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.02	0.88	-	1.20	Y	50.3	40	-	60	Y
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.02	0.88	-	1.20	Y	49.4	40	-	60	Y
OCDF	M+2/M+4	0.92	0.76	-	1.02	Y	104	80	-	120	Y

Processed: 13 Aug 2020 15:16 Analyst: TF

METHOD 8290A **PCDD/F CALIBRATION VERIFICATION** **FORM 4B**

Lab Name: SGS North America

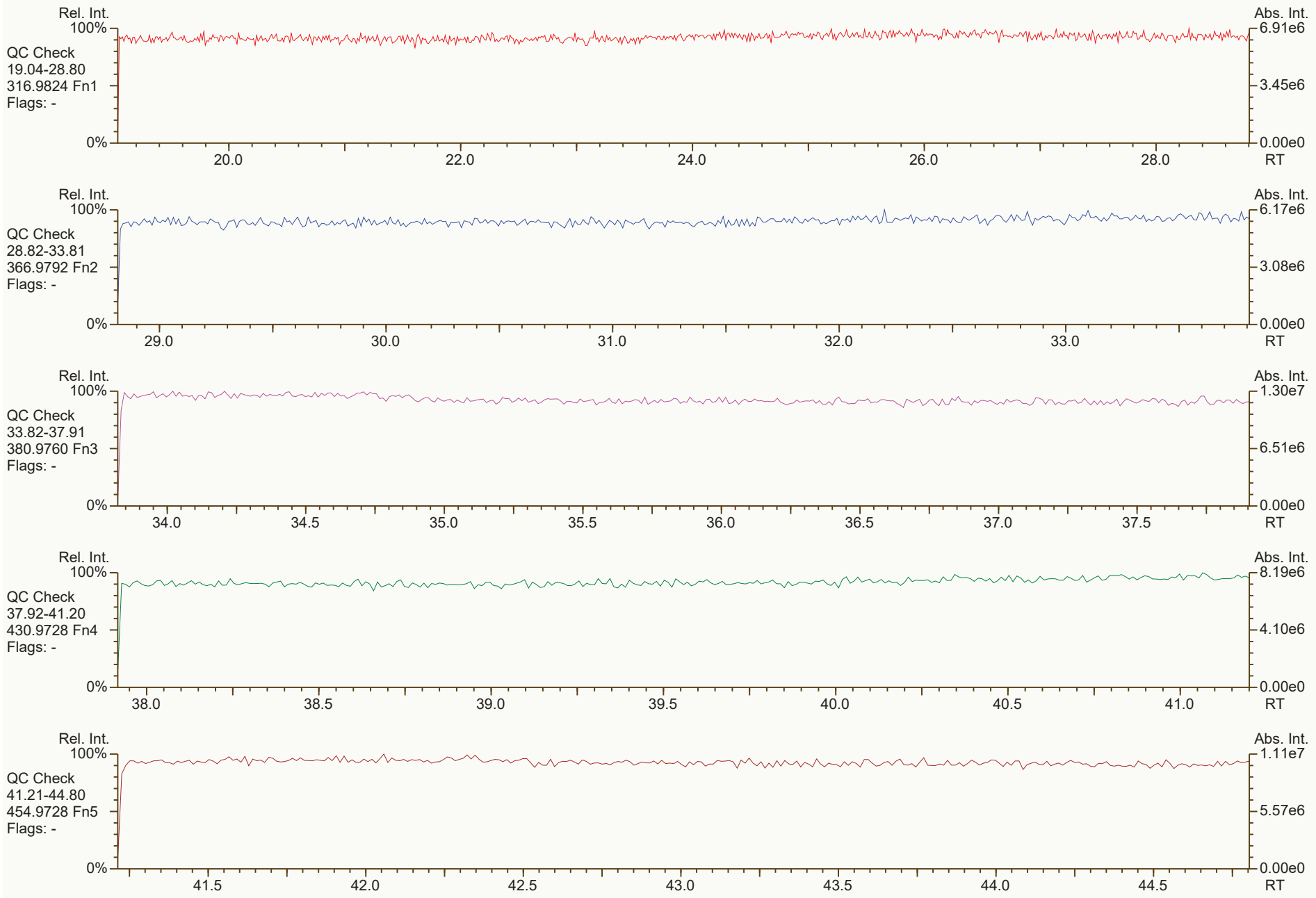
Initial Calibration: ICAL: HRMS3_DF_10122018_28AUG2019

Instrument ID: HRMS3 GC Column ID: ZB-5ms

VER Data Filename: 200812C22 Analysis Date: 13-AUG-2020 04:14:45

LABELED ANALYTES	M/Z's FORMING RATIO	ION ABUND. RATIO	QC LIMITS			OK	CONC. FOUND	RANGE (ng/mL)			OK
13C-2,3,7,8-TCDD	M/M+2	0.81	0.65	-	0.89	Y	98.1	70	-	130	Y
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.56	1.32	-	1.78	Y	95.1	70	-	130	Y
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.29	1.05	-	1.43	Y	99.3	70	-	130	Y
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.28	1.05	-	1.43	Y	93.7	70	-	130	Y
13C-1,2,3,7,8,9-HxCDD	M+2/M+4	1.26	1.05	-	1.43	Y	90.6	70	-	130	Y
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.07	0.88	-	1.20	Y	88.3	70	-	130	Y
13C-OCDD	M+2/M+4	0.90	0.76	-	1.02	Y	156	140	-	260	Y
13C-2,3,7,8-TCDF	M/M+2	0.82	0.65	-	0.89	Y	100	70	-	130	Y
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.56	1.32	-	1.78	Y	93.1	70	-	130	Y
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.57	1.32	-	1.78	Y	96.9	70	-	130	Y
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.55	0.43	-	0.59	Y	109	70	-	130	Y
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.53	0.43	-	0.59	Y	105	70	-	130	Y
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.53	0.43	-	0.59	Y	104	70	-	130	Y
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.53	0.43	-	0.59	Y	98.7	70	-	130	Y
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.46	0.37	-	0.51	Y	95.5	70	-	130	Y
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.47	0.37	-	0.51	Y	90.9	70	-	130	Y
13C-OCDF	M+2/M+4	0.90	0.76	-	1.02	Y	158	140	-	260	Y
CLEANUP STANDARDS											
37Cl-2,3,7,8-TCDD	n/a						10.1	7.9	-	12.7	Y
13C-1,2,3,4,7-PeCDD	M+2/M+4	1.60	1.32	-	1.78	Y	97.9	70	-	130	Y
13C-1,2,3,4,6-PeCDF	M+2/M+4	1.58	1.32	-	1.78	Y	94.5	70	-	130	Y
13C-1,2,3,4,6,9-HxCDF	M/M+2	0.53	0.43	-	0.59	Y	111	70	-	130	Y
13C-1,2,3,4,6,8,9-HpCDF	M/M+2	0.45	0.37	-	0.51	Y	97.5	70	-	130	Y

Processed: 13 Aug 2020 15:16 Analyst: TF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22.0
24.0
26.0
28.0
Abs. Int.
6.91e6
3.45e6
0.00e0
RT
Rel. Int.
100%
QC Check
28.82-33.81
366.9792 Fn2
Flags: -
0%
29.0
30.0
31.0
32.0
33.0
Abs. Int.
6.17e6
3.08e6
0.00e0
RT
Rel. Int.
100%
QC Check
33.82-37.91
380.9760 Fn3
Flags: -
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
Abs. Int.
1.30e7
6.51e6
0.00e0
RT
Rel. Int.
100%
QC Check
37.92-41.20
430.9728 Fn4
Flags: -
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
Abs. Int.
8.19e6
4.10e6
0.00e0
RT
Rel. Int.
100%
QC Check
41.21-44.80
454.9728 Fn5
Flags: -
0%
41.5
42.0
42.5
43.0
43.5
44.0
44.5
Abs. Int.
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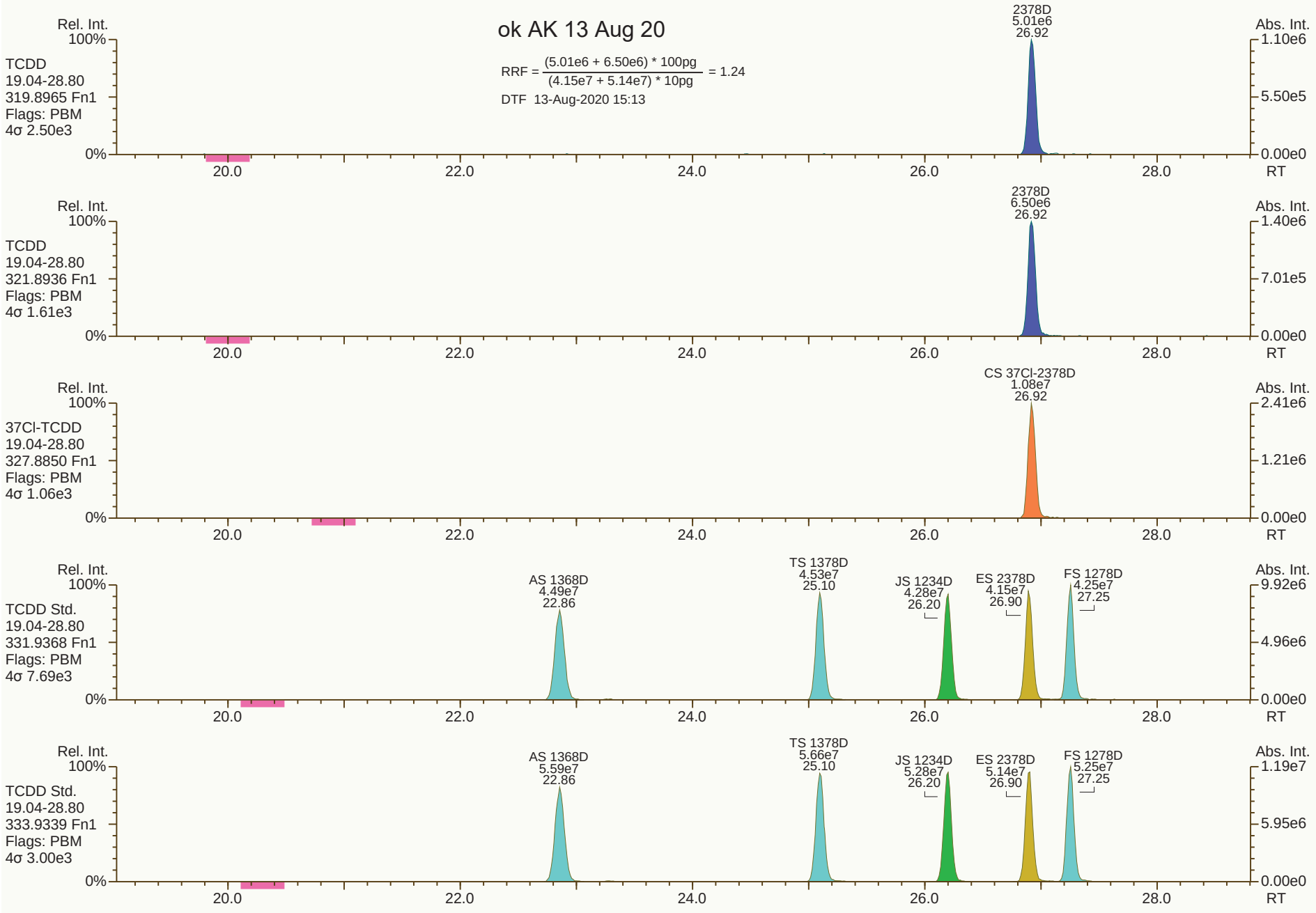
0.00e0
RT


ok AK 13 Aug 20
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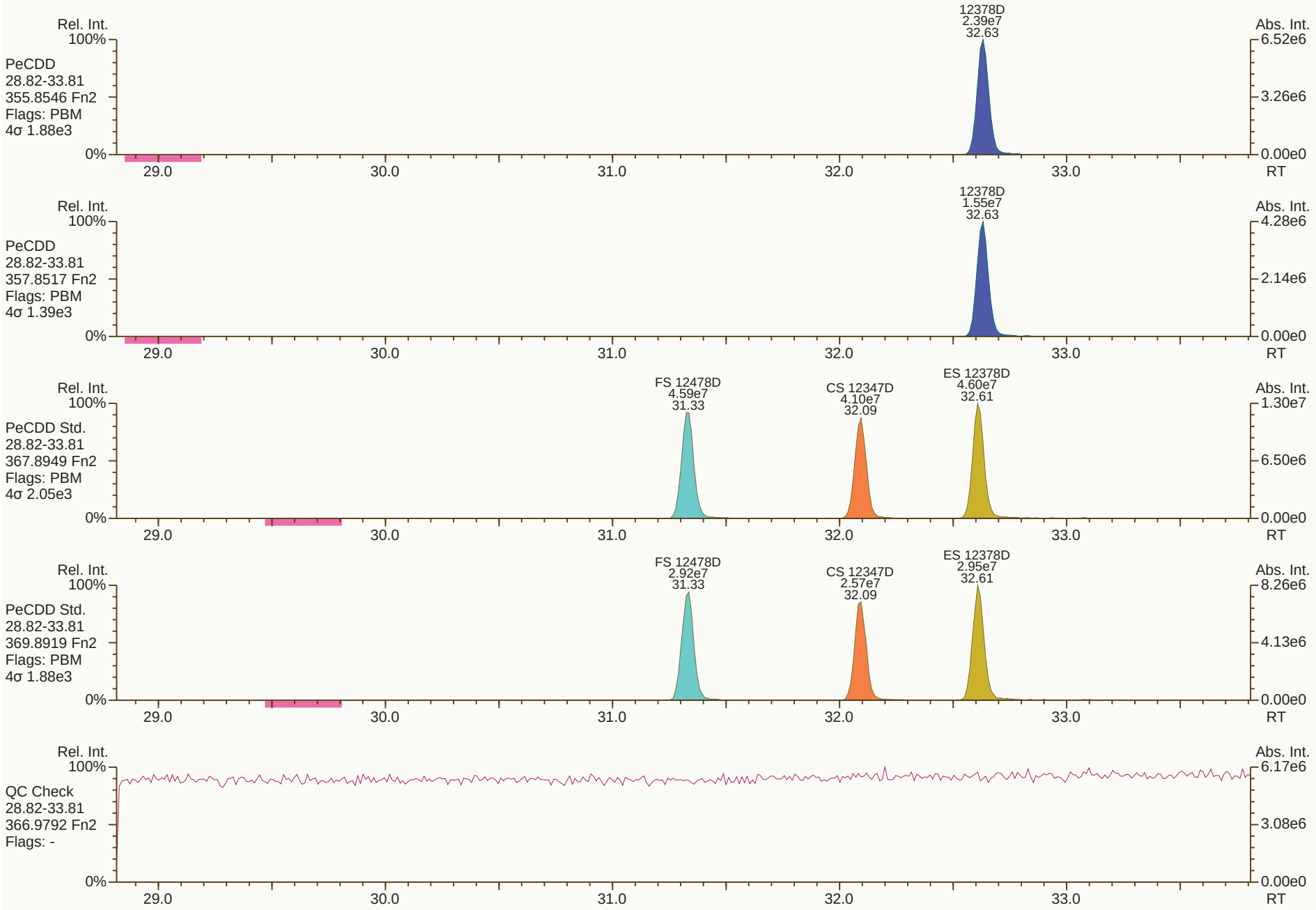
DTF 13-Aug-2020 15:13
Rel. Int.
Abs. Int.
RT
TCDD
19.04-28.80
319.8965 Fn1
Flags: PBM
4σ 2.50e3
2378D
5.01e6
26.92
TCDD
19.04-28.80
321.8936 Fn1
Flags: PBM
4σ 1.61e3
2378D
6.50e6
26.92
37Cl-TCDD
19.04-28.80
327.8850 Fn1
Flags: PBM
4σ 1.06e3
CS 37Cl-2378D
1.08e7
26.92
TCDD Std.
19.04-28.80
331.9368 Fn1
Flags: PBM
4σ 7.69e3
AS 1368D
4.49e7
22.86
TS 1378D
4.53e7
25.10
JS 1234D
4.28e7
26.20
ES 2378D
4.15e7
26.90
FS 1278D
4.25e7
27.25
TCDD Std.
19.04-28.80
333.9339 Fn1
Flags: PBM
4σ 3.00e3
AS 1368D
5.59e7
22.86
TS 1378D
5.66e7
25.10
JS 1234D
5.28e7
26.20
ES 2378D
5.14e7
26.90
FS 1278D
5.25e7
27.25


Rel. Int.
100%
PeCDD
28.82-33.81
355.8546 Fn2
Flags: PBM
4σ 1.88e3
0%
12378D
2.39e7
32.63
Abs. Int.
6.52e6
3.26e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD
28.82-33.81
357.8517 Fn2
Flags: PBM
4σ 1.39e3
0%
12378D
1.55e7
32.63
Abs. Int.
4.28e6
2.14e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.82-33.81
367.8949 Fn2
Flags: PBM
4σ 2.05e3
0%
FS 12478D
4.59e7
31.33
CS 12347D
4.10e7
32.09
ES 12378D
4.60e7
32.61
Abs. Int.
1.30e7
6.50e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.82-33.81
369.8919 Fn2
Flags: PBM
4σ 1.88e3
0%
FS 12478D
2.92e7
31.33
CS 12347D
2.57e7
32.09
ES 12378D
2.95e7
32.61
Abs. Int.
8.26e6
4.13e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
QC Check
28.82-33.81
366.9792 Fn2
Flags: -
0%
Abs. Int.
6.17e6
3.08e6
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29.0
30.0
31.0
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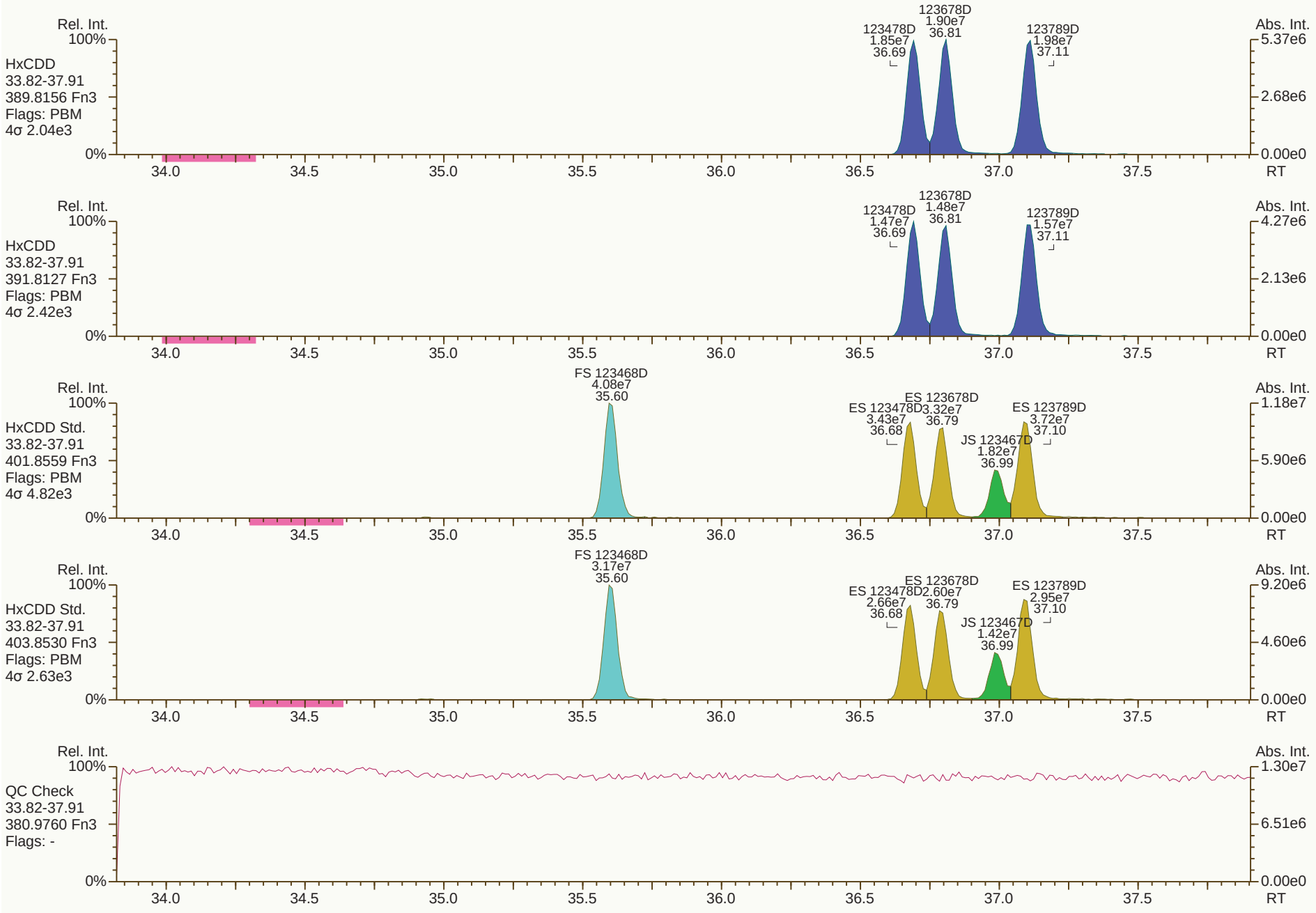
33.0
RT


Rel. Int.
100%
HxCDD
33.82-37.91
389.8156 Fn3
Flags: PBM
4σ 2.04e3
0%
123478D
1.85e7
36.69
123678D
1.90e7
36.81
123789D
1.98e7
37.11
Abs. Int.
5.37e6
2.68e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD
33.82-37.91
391.8127 Fn3
Flags: PBM
4σ 2.42e3
0%
123478D
1.47e7
36.69
123678D
1.48e7
36.81
123789D
1.57e7
37.11
Abs. Int.
4.27e6
2.13e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.82-37.91
401.8559 Fn3
Flags: PBM
4σ 4.82e3
0%
FS 123468D
4.08e7
35.60
ES 123478D
3.43e7
36.68
ES 123678D
3.32e7
36.79
JS 123467D
1.82e7
36.99
ES 123789D
3.72e7
37.10
Abs. Int.
1.18e7
5.90e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.82-37.91
403.8530 Fn3
Flags: PBM
4σ 2.63e3
0%
FS 123468D
3.17e7
35.60
ES 123478D
2.66e7
36.68
ES 123678D
2.60e7
36.79
JS 123467D
1.42e7
36.99
ES 123789D
2.95e7
37.10
Abs. Int.
9.20e6
4.60e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
QC Check
33.82-37.91
380.9760 Fn3
Flags: -
0%
Abs. Int.
1.30e7
6.51e6
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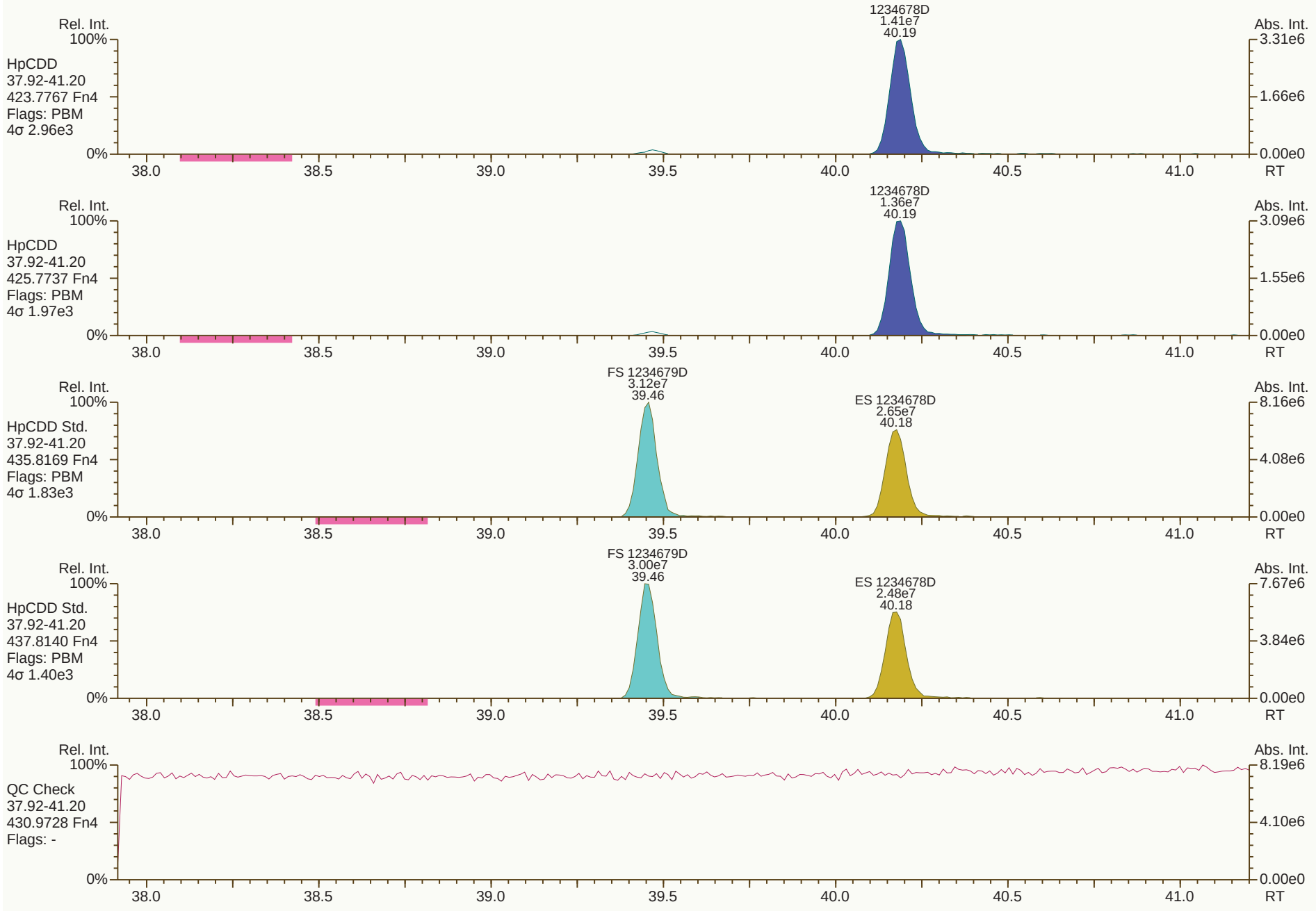
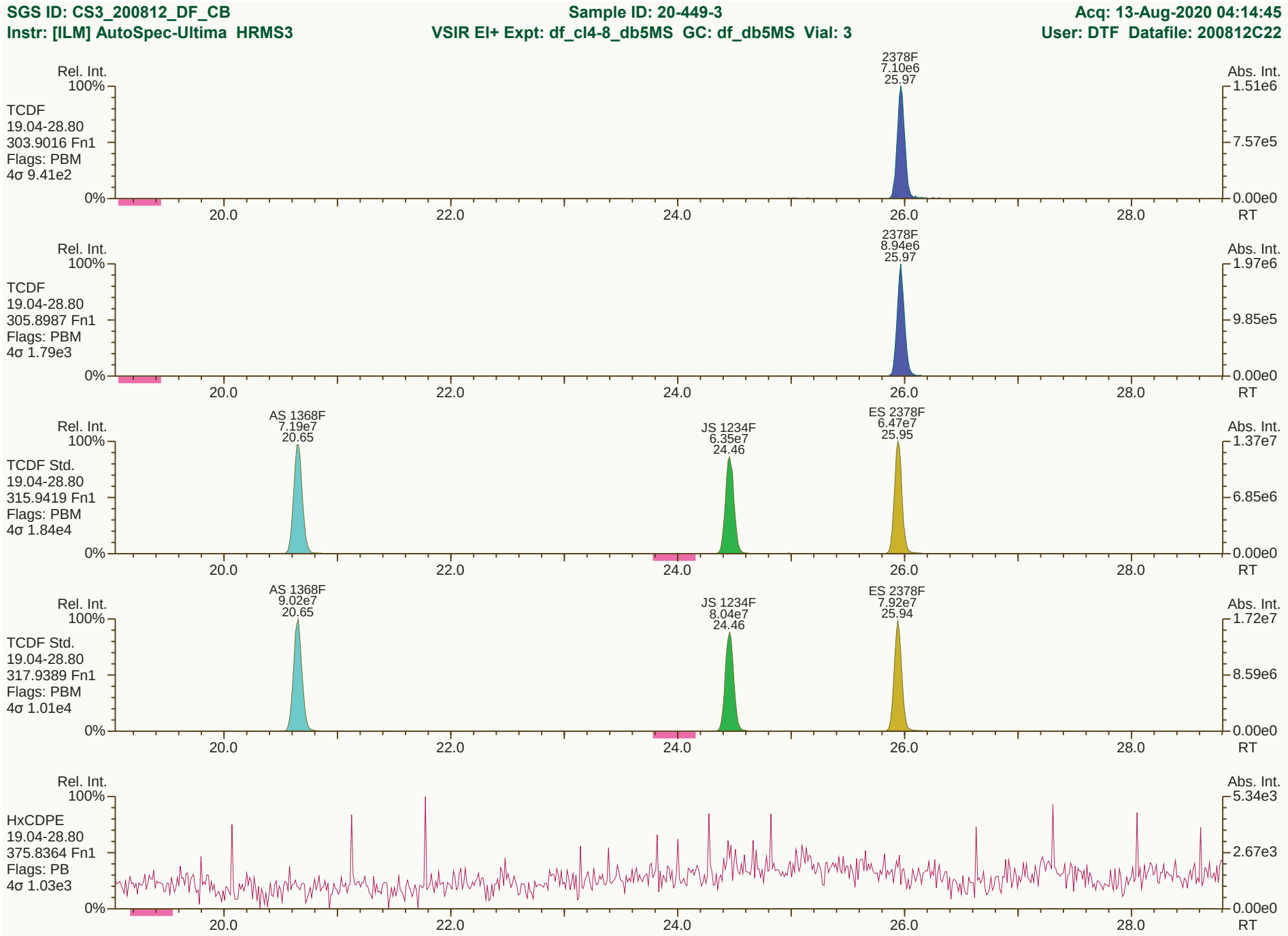
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT

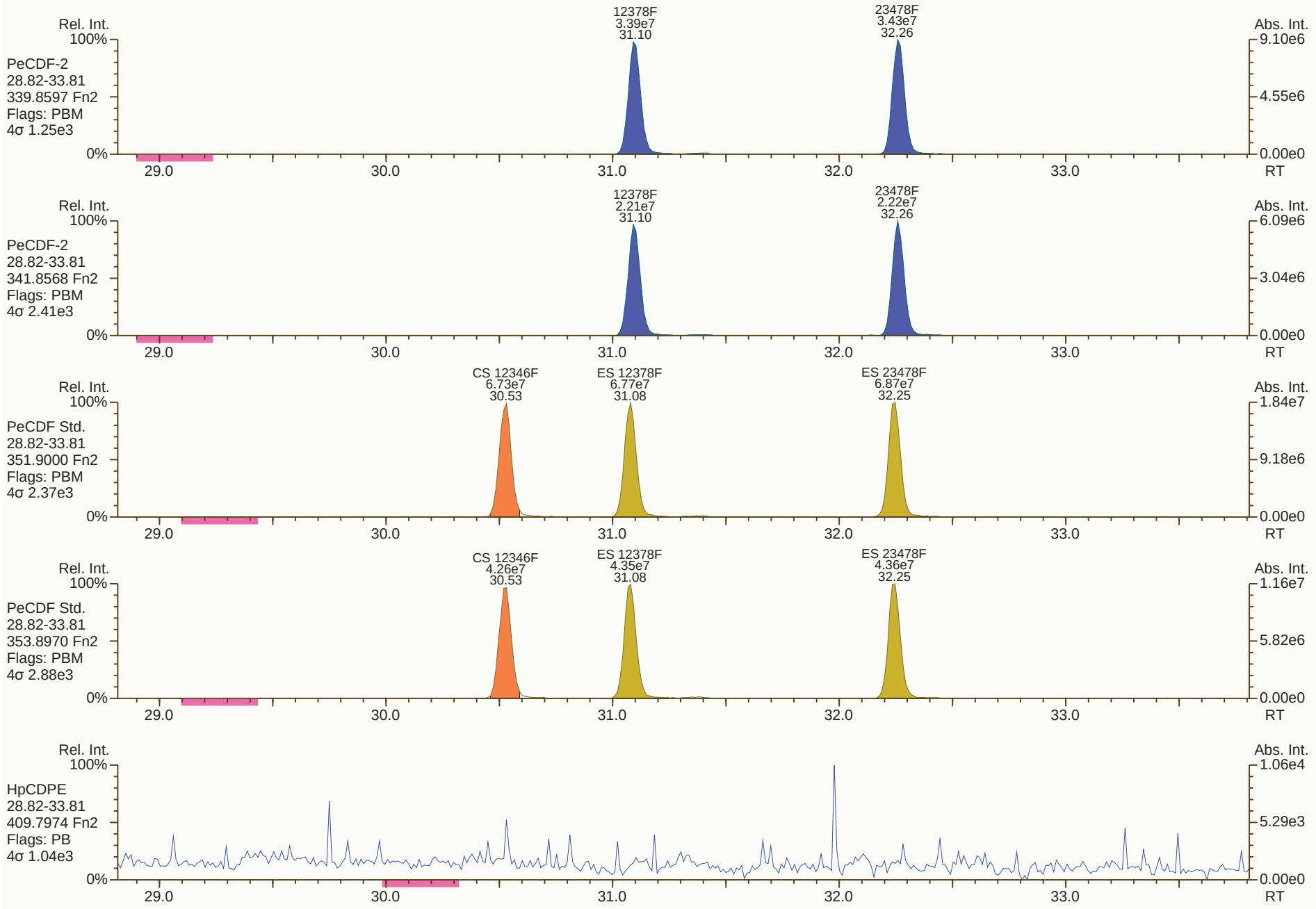

Rel. Int.
100%
HpCDD
37.92-41.20
423.7767 Fn4
Flags: PBM
4σ 2.96e3
0%
1234678D
1.41e7
40.19
Abs. Int.
3.31e6
1.66e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD
37.92-41.20
425.7737 Fn4
Flags: PBM
4σ 1.97e3
0%
1234678D
1.36e7
40.19
Abs. Int.
3.09e6
1.55e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.92-41.20
435.8169 Fn4
Flags: PBM
4σ 1.83e3
0%
FS 1234679D
3.12e7
39.46
ES 1234678D
2.65e7
40.18
Abs. Int.
8.16e6
4.08e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.92-41.20
437.8140 Fn4
Flags: PBM
4σ 1.40e3
0%
FS 1234679D
3.00e7
39.46
ES 1234678D
2.48e7
40.18
Abs. Int.
7.67e6
3.84e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
QC Check
37.92-41.20
430.9728 Fn4
Flags: -
0%
Abs. Int.
8.19e6
4.10e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT

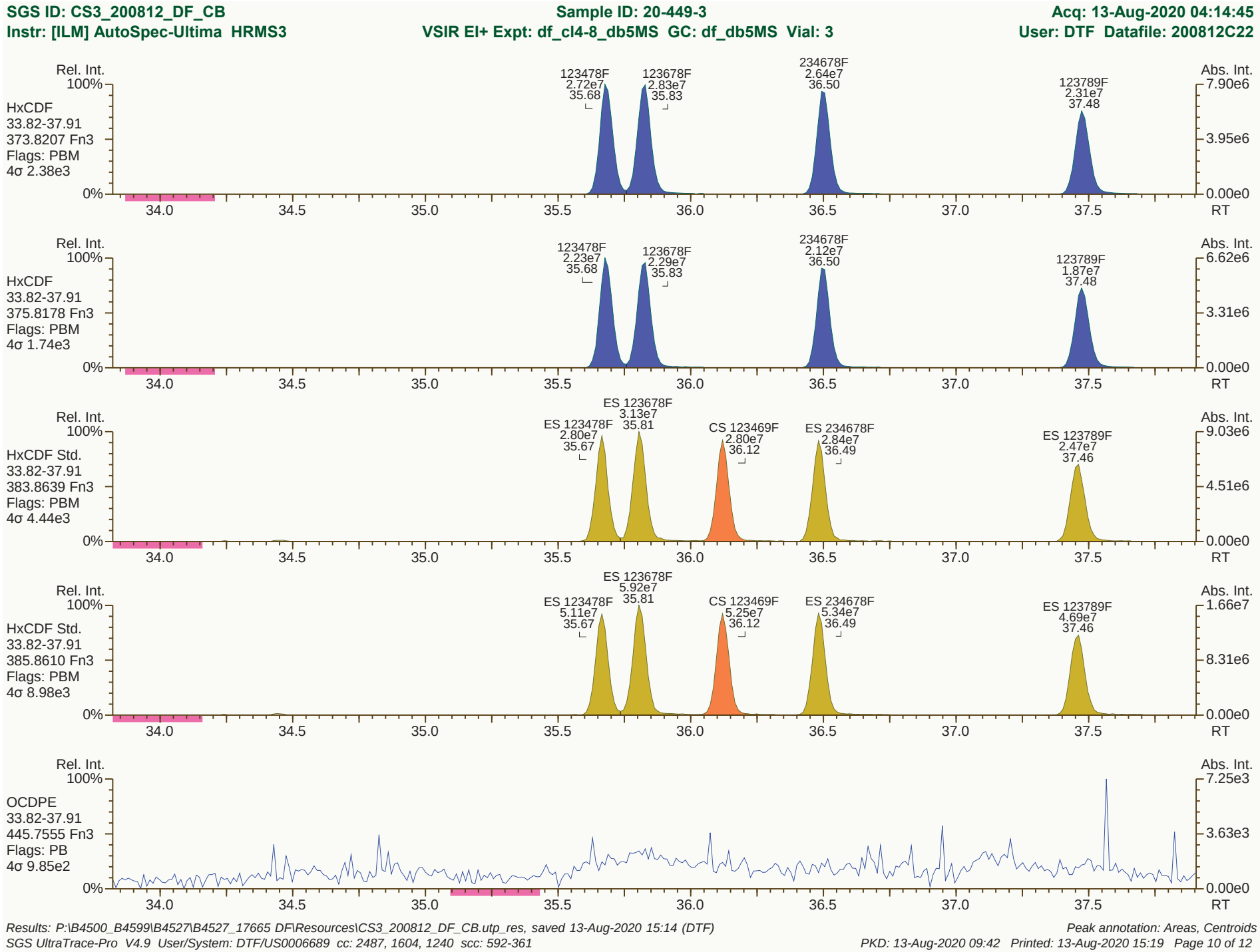

OCDD
1.78e7
42.93
Rel. Int.
Abs. Int.
OCDD
41.21-44.80
457.7377 Fn5
Flags: PBM
4σ 2.94e3
OCDD
1.94e7
42.93
OCDD
41.21-44.80
459.7348 Fn5
Flags: PBM
4σ 3.77e3
ES OCDD
2.99e7
42.92
OCDD Std.
41.21-44.80
469.7780 Fn5
Flags: PBM
4σ 1.18e3
ES OCDD
3.34e7
42.92
OCDD Std.
41.21-44.80
471.7750 Fn5
Flags: PBM
4σ 1.11e3
QC Check
41.21-44.80
454.9728 Fn5
Flags: -
RT



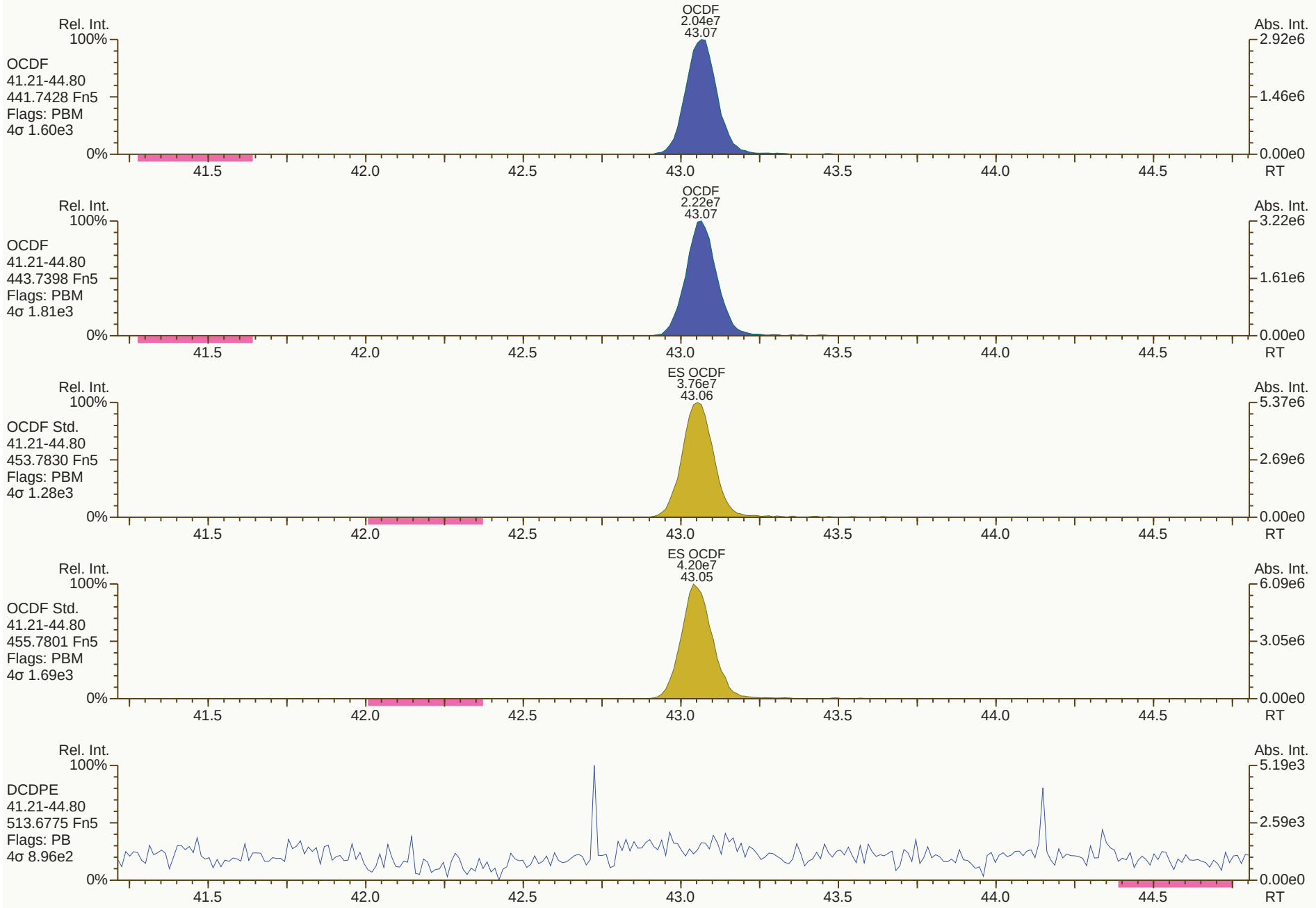
Results: P:\B4500_B4599\B4527\B4527_17665 DF\Resources\CS3_200812_DF_CB.utp_res, saved 13-Aug-2020 15:14 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 1457, 9858, 1619 scc: 592-361
PKD: 13-Aug-2020 09:42 Printed: 13-Aug-2020 15:19 Page 7 of 12


Rel. Int.
100%
0%
Abs. Int.
7.00e3
3.50e3
0.00e0
PeCDF-1
19.04-28.80
339.8597 Fn1
Flags: PB
4σ 1.38e3
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
0%
Abs. Int.
2.54e4
1.27e4
0.00e0
PeCDF-1
19.04-28.80
341.8568 Fn1
Flags: PB
4σ 2.42e3
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
0%
Abs. Int.
6.91e6
3.45e6
0.00e0
QC Check
19.04-28.80
316.9824 Fn1
Flags: -
20.0
22.0
24.0
26.0
28.0
RT


Rel. Int.
100%
PeCDF-2
28.82-33.81
339.8597 Fn2
Flags: PBM
4σ 1.25e3
0%
12378F
3.39e7
31.10
23478F
3.43e7
32.26
Abs. Int.
9.10e6
4.55e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF-2
28.82-33.81
341.8568 Fn2
Flags: PBM
4σ 2.41e3
0%
12378F
2.21e7
31.10
23478F
2.22e7
32.26
Abs. Int.
6.09e6
3.04e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.82-33.81
351.9000 Fn2
Flags: PBM
4σ 2.37e3
0%
CS 12346F
6.73e7
30.53
ES 12378F
6.77e7
31.08
ES 23478F
6.87e7
32.25
Abs. Int.
1.84e7
9.18e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.82-33.81
353.8970 Fn2
Flags: PBM
4σ 2.88e3
0%
CS 12346F
4.26e7
30.53
ES 12378F
4.35e7
31.08
ES 23478F
4.36e7
32.25
Abs. Int.
1.16e7
5.82e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
HpCDPE
28.82-33.81
409.7974 Fn2
Flags: PB
4σ 1.04e3
0%
Abs. Int.
1.06e4
5.29e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT


SGS ID: CS3_200812_DF_CB
Sample ID: 20-449-3
Acq: 13-Aug-2020 04:14:45
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 3
User: DTF Datafile: 200812C22
Rel. Int.
Abs. Int.
HxCDF
33.82-37.91
373.8207 Fn3
Flags: PBM
4σ 2.38e3
123478F 2.72e7 35.68
123678F 2.83e7 35.83
234678F 2.64e7 36.50
123789F 2.31e7 37.48
7.90e6
3.95e6
0.00e0
HxCDF
33.82-37.91
375.8178 Fn3
Flags: PBM
4σ 1.74e3
123478F 2.23e7 35.68
123678F 2.29e7 35.83
234678F 2.12e7 36.50
123789F 1.87e7 37.48
6.62e6
3.31e6
0.00e0
HxCDF Std.
33.82-37.91
383.8639 Fn3
Flags: PBM
4σ 4.44e3
ES 123478F 2.80e7 35.67
ES 123678F 3.13e7 35.81
CS 123469F 2.80e7 36.12
ES 234678F 2.84e7 36.49
ES 123789F 2.47e7 37.46
9.03e6
4.51e6
0.00e0
HxCDF Std.
33.82-37.91
385.8610 Fn3
Flags: PBM
4σ 8.98e3
ES 123478F 5.11e7 35.67
ES 123678F 5.92e7 35.81
CS 123469F 5.25e7 36.12
ES 234678F 5.34e7 36.49
ES 123789F 4.69e7 37.46
1.66e7
8.31e6
0.00e0
OCDPE
33.82-37.91
445.7555 Fn3
Flags: PB
4σ 9.85e2
7.25e3
3.63e3
0.00e0
100%
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT


Rel. Int.
100%
0%
Abs. Int.
HpCDF
37.92-41.20
407.7818 Fn4
Flags: PBM
4σ 2.65e3
1234678F
1.92e7
39.16
1234789F
1.51e7
40.61
5.15e6
2.58e6
0.00e0
HpCDF
37.92-41.20
409.7788 Fn4
Flags: PBM
4σ 1.66e3
1234678F
1.89e7
39.16
1234789F
1.48e7
40.61
5.05e6
2.52e6
0.00e0
HpCDF Std.
37.92-41.20
417.8253 Fn4
Flags: PBM
4σ 2.77e3
ES 1234678F
1.80e7
39.15
CS 1234689F
1.75e7
39.59
ES 1234789F
1.54e7
40.61
5.01e6
2.51e6
0.00e0
HpCDF Std.
37.92-41.20
419.8220 Fn4
Flags: PBM
4σ 2.46e3
ES 1234678F
3.92e7
39.15
CS 1234689F
3.92e7
39.59
ES 1234789F
3.29e7
40.61
1.04e7
5.19e6
0.00e0
NCDPE
37.92-41.20
479.7165 Fn4
Flags: PB
4σ 1.14e3
6.28e3
3.14e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT


Rel. Int.
100%
OCDF
41.21-44.80
441.7428 Fn5
Flags: PBM
4σ 1.60e3
0%
OCDF
2.04e7
43.07
Abs. Int.
2.92e6
1.46e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDF
41.21-44.80
443.7398 Fn5
Flags: PBM
4σ 1.81e3
0%
OCDF
2.22e7
43.07
Abs. Int.
3.22e6
1.61e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDF Std.
41.21-44.80
453.7830 Fn5
Flags: PBM
4σ 1.28e3
0%
ES OCDF
3.76e7
43.06
Abs. Int.
5.37e6
2.69e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDF Std.
41.21-44.80
455.7801 Fn5
Flags: PBM
4σ 1.69e3
0%
ES OCDF
4.20e7
43.05
Abs. Int.
6.09e6
3.05e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
DCDPE
41.21-44.80
513.6775 Fn5
Flags: PB
4σ 8.96e2
0%
Abs. Int.
5.19e3
2.59e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT

Dioxin/Furan QC Summary		Acq'd: 13 Aug 2020 13:40 DTF				ICAL: HRMS3_DF_10122018_28AUG2019	
Lab ID: CS3_200812_DF_CC		UTP: 13-Aug-2020 15:11:58 DTF				Checkcode: 047-105-QKQ	
Sample ID: 20-449-3		Report: 13 Aug 2020 15:16 TF				Datafile: 200812C34	
Name	**RT**	**Response**	**RA**	**OK**	**Ref. RRFs**	**Calc. RRFs**	**Dev'n**
2378-TCDD	26.92	1.22E+07	0.78	Y	1.19	1.25	5%
12378-PeCDD	32.63	4.07E+07	1.57	Y	0.98	1.04	6%
123478-HxCDD	36.69	3.57E+07	1.27	Y	1.02	1.11	8%
123678-HxCDD	36.81	3.60E+07	1.26	Y	1.09	1.13	4%
123789-HxCDD	37.11	3.74E+07	1.27	Y	0.97	1.02	5%
1234678-HpCDD	40.19	2.77E+07	1.03	Y	0.98	1.07	9%
OCDD	42.92	3.84E+07	0.89	Y	1.07	1.13	6%
2378-TCDF	25.96	1.68E+07	0.78	Y	1.01	1.14	13%
12378-PeCDF	31.09	5.94E+07	1.54	Y	0.96	1.00	4%
23478-PeCDF	32.26	5.80E+07	1.53	Y	0.99	1.00	2%
123478-HxCDF	35.68	5.33E+07	1.23	Y	1.21	1.24	2%
123678-HxCDF	35.82	5.58E+07	1.23	Y	1.11	1.14	3%
234678-HxCDF	36.50	5.21E+07	1.23	Y	1.12	1.18	6%
123789-HxCDF	37.48	4.40E+07	1.23	Y	1.11	1.16	5%
1234678-HpCDF	39.16	4.01E+07	1.02	Y	1.32	1.30	-2%
1234789-HpCDF	40.62	3.18E+07	1.03	Y	1.26	1.27	1%
OCDF	43.06	4.64E+07	0.91	Y	1.03	1.08	5%
ES 2378-TCDD	26.89	9.74E+07	0.81	Y	0.99	1.00	2%
ES 12378-PeCDD	32.61	7.81E+07	1.60	Y	0.83	0.80	-3%
ES 123478-HxCDD	36.68	6.42E+07	1.27	Y	0.95	0.96	2%
ES 123678-HxCDD	36.79	6.38E+07	1.25	Y	0.98	0.96	-2%
ES 123789-HxCDD	37.09	7.29E+07	1.27	Y	1.14	1.10	-4%
ES 1234678-HpCDD	40.18	5.19E+07	1.07	Y	0.90	0.78	-13%
ES OCDD	42.91	6.77E+07	0.91	Y	0.63	0.51	-19%
ES 2378-TCDF	25.94	1.47E+08	0.80	Y	1.00	0.99	0%
ES 12378-PeCDF	31.08	1.18E+08	1.59	Y	0.83	0.80	-4%
ES 23478-PeCDF	32.24	1.16E+08	1.59	Y	0.81	0.78	-3%
ES 123478-HxCDF	35.66	8.63E+07	0.54	Y	1.12	1.30	16%
ES 123678-HxCDF	35.81	9.77E+07	0.54	Y	1.33	1.47	10%
ES 234678-HxCDF	36.48	8.82E+07	0.53	Y	1.21	1.32	10%
ES 123789-HxCDF	37.46	7.58E+07	0.54	Y	1.12	1.14	2%
ES 1234678-HpCDF	39.15	6.15E+07	0.46	Y	0.92	0.92	0%
ES 1234789-HpCDF	40.61	5.00E+07	0.46	Y	0.82	0.75	-8%
ES OCDF	43.05	8.59E+07	0.91	Y	0.78	0.65	-17%

Dioxin/Furan QC Summary	Acq'd: 13 Aug 2020 13:40 DTF	ICAL: HRMS3_DF_10122018_28AUG2019
Lab ID: CS3_200812_DF_CC	UTP: 13-Aug-2020 15:11:58 DTF	Checkcode: 047-105-QKQ
Sample ID: 20-449-3	Report: 13 Aug 2020 15:16 TF	Datafile: 200812C34

Name	RT	Response	RA	OK	Ref. RRFs	Calc. RRFs	Dev'n
JS 1234-TCDD	26.19	9.70E+07	0.80	Y	-	-	-
JS 1234-TCDF	24.45	1.48E+08	0.79	Y	-	-	-
JS 123467-HxCDD	36.99	3.33E+07	1.31	Y	-	-	-
CS 37Cl-2378-TCDD	26.91	1.14E+07	n/a	-	1.12	1.18	5%
CS 12347-PeCDD	32.09	6.85E+07	1.61	Y	0.71	0.71	-1%
CS 12346-PeCDF	30.52	1.21E+08	1.57	Y	0.81	0.81	1%
CS 123469-HxCDF	36.12	8.69E+07	0.53	Y	1.12	1.31	16%
CS 1234689-HpCDF	39.59	5.84E+07	0.45	Y	0.90	0.88	-2%
~~SS 37Cl-2378-TCDD~~	~~26.91~~	~~1.14E+07~~	~~n/a~~	~~-~~	~~1.14~~	~~1.17~~	~~3%~~
~~SS 12347-PeCDD~~	~~32.09~~	~~6.85E+07~~	~~1.61~~	~~Y~~	~~0.86~~	~~0.88~~	~~2%~~
~~SS 12346-PeCDF~~	~~30.52~~	~~1.21E+08~~	~~1.57~~	~~Y~~	~~0.98~~	~~1.02~~	~~4%~~
~~SS 123469-HxCDF~~	~~36.12~~	~~8.69E+07~~	~~0.53~~	~~Y~~	~~0.85~~	~~0.89~~	~~5%~~
~~SS 1234689-HpCDF~~	~~39.59~~	~~5.84E+07~~	~~0.45~~	~~Y~~	~~0.97~~	~~0.95~~	~~-3%~~
~~OCDD-a~~	~~42.91~~	~~2.40E+06~~	~~2.64~~	~~Y~~		~~0.07~~	~~#VALUE!~~
~~OCDF-a~~	~~43.03~~	~~1.67E+06~~	~~2.57~~	~~Y~~		~~0.04~~	~~#VALUE!~~

METHOD 8290A **PCDD/F CALIBRATION VERIFICATION** **FORM 4A**

Lab Name: SGS North America

Initial Calibration: ICAL: HRMS3_DF_10122018_28AUG2019

Instrument ID: HRMS3 GC Column ID: ZB-5ms

VER Data Filename: 200812C34 Analysis Date: 13-AUG-2020 13:40:25

NATIVE ANALYTES	M/Z's FORMING RATIO	ION ABUND. RATIO	QC LIMITS			OK	CONC. FOUND	RANGE (ng/mL)			OK
2,3,7,8-TCDD	M/M+2	0.78	0.65	-	0.89	Y	10.5	8	-	12	Y
1,2,3,7,8-PeCDD	M+2/M+4	1.57	1.32	-	1.78	Y	53	40	-	60	Y
1,2,3,4,7,8-HxCDD	M+2/M+4	1.27	1.05	-	1.43	Y	54.2	40	-	60	Y
1,2,3,6,7,8-HxCDD	M+2/M+4	1.26	1.05	-	1.43	Y	51.9	40	-	60	Y
1,2,3,7,8,9-HxCDD	M+2/M+4	1.27	1.05	-	1.43	Y	52.7	40	-	60	Y
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.03	0.88	-	1.20	Y	54.6	40	-	60	Y
OCDD	M+2/M+4	0.89	0.76	-	1.02	Y	106	80	-	120	Y
2,3,7,8-TCDF	M/M+2	0.78	0.65	-	0.89	Y	11.3	8	-	12	Y
1,2,3,7,8-PeCDF	M+2/M+4	1.54	1.32	-	1.78	Y	51.9	40	-	60	Y
2,3,4,7,8-PeCDF	M+2/M+4	1.53	1.32	-	1.78	Y	50.9	40	-	60	Y
1,2,3,4,7,8-HxCDF	M+2/M+4	1.23	1.05	-	1.43	Y	51.2	40	-	60	Y
1,2,3,6,7,8-HxCDF	M+2/M+4	1.23	1.05	-	1.43	Y	51.7	40	-	60	Y
2,3,4,6,7,8-HxCDF	M+2/M+4	1.23	1.05	-	1.43	Y	52.9	40	-	60	Y
1,2,3,7,8,9-HxCDF	M+2/M+4	1.23	1.05	-	1.43	Y	52.4	40	-	60	Y
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.02	0.88	-	1.20	Y	49.2	40	-	60	Y
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.03	0.88	-	1.20	Y	50.7	40	-	60	Y
OCDF	M+2/M+4	0.91	0.76	-	1.02	Y	105	80	-	120	Y

Processed: 13 Aug 2020 15:16 Analyst: TF

METHOD 8290A **PCDD/F CALIBRATION VERIFICATION** **FORM 4B**

Lab Name: SGS North America

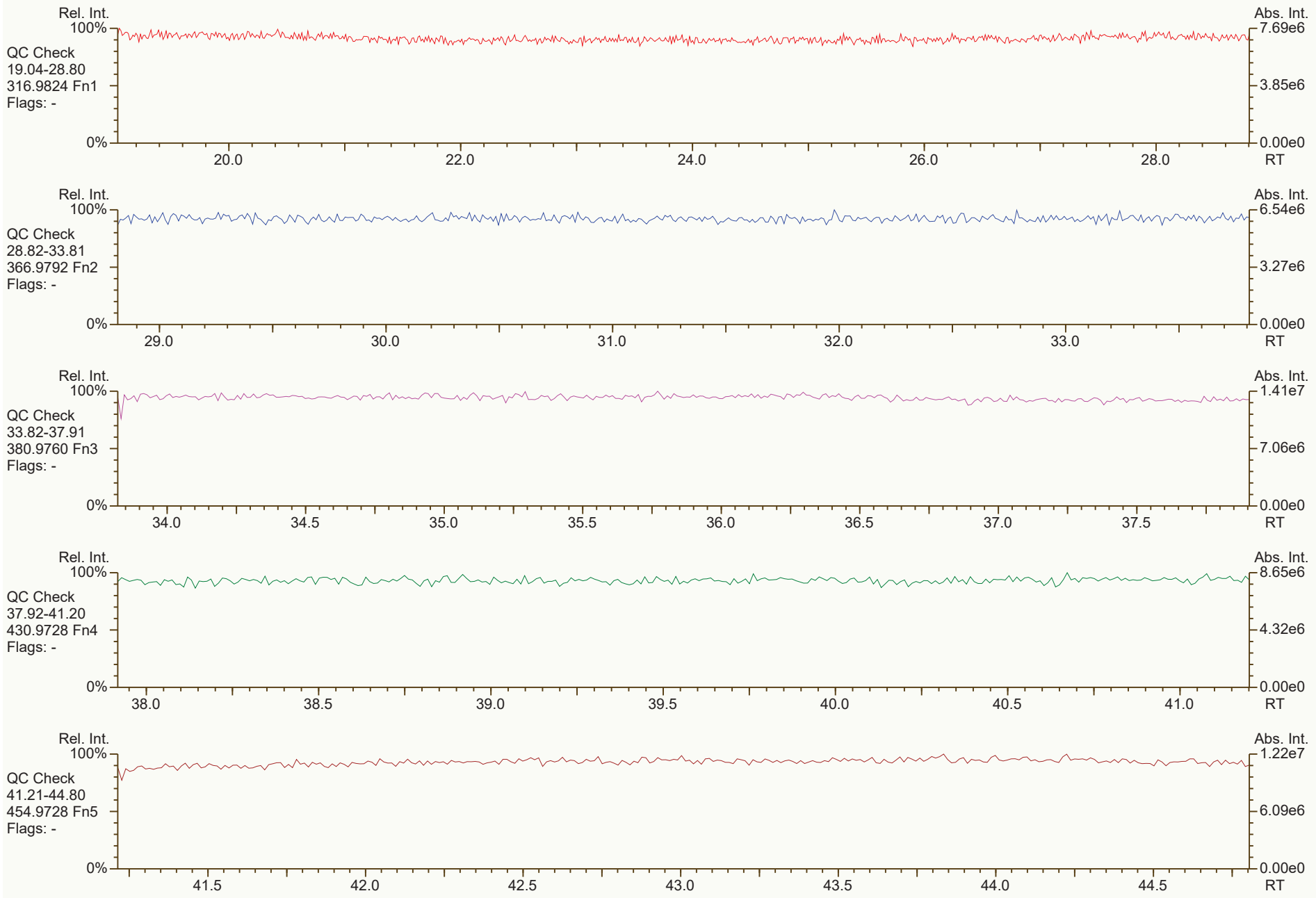
Initial Calibration: ICAL: HRMS3_DF_10122018_28AUG2019

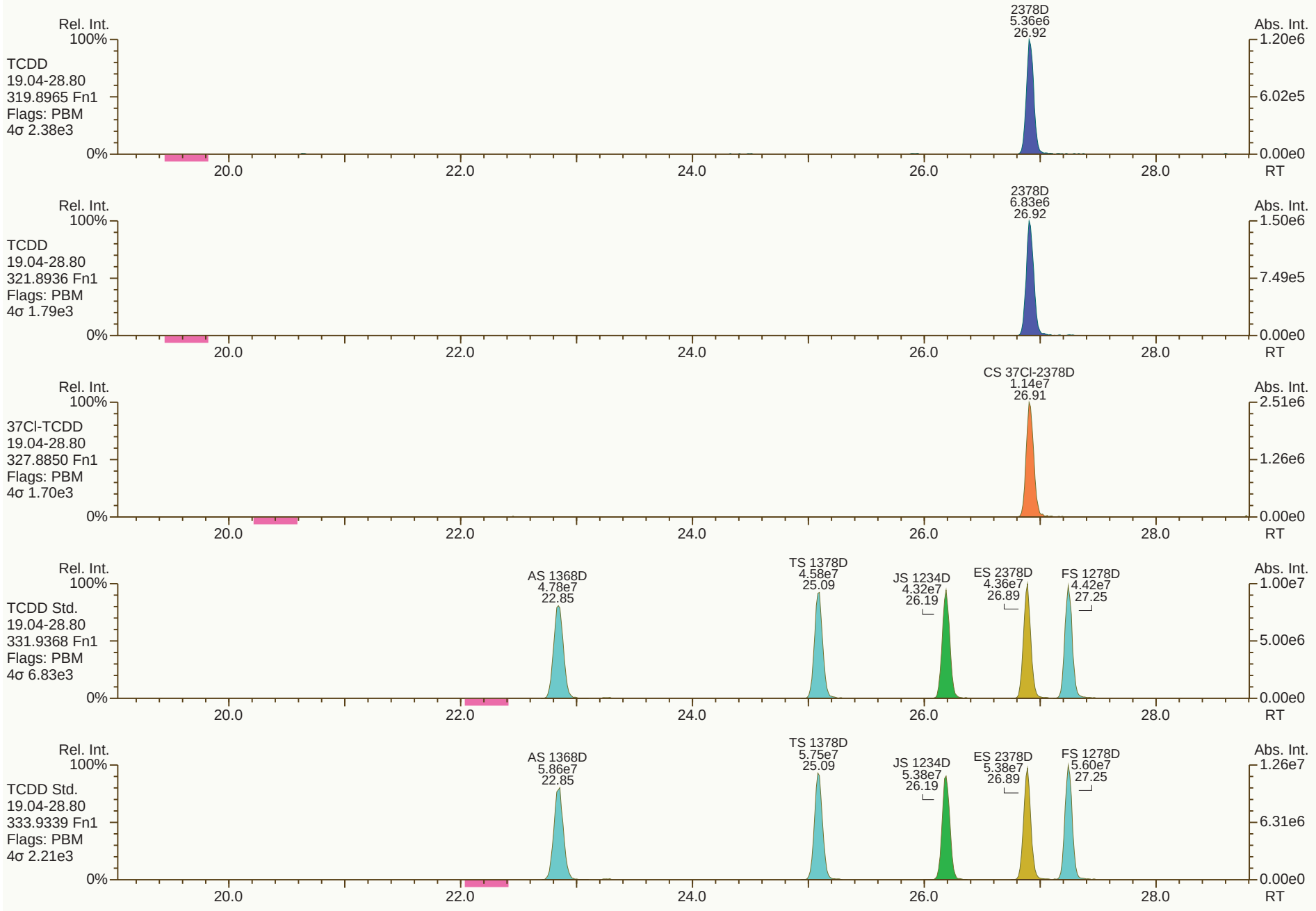
Instrument ID: HRMS3 GC Column ID: ZB-5ms

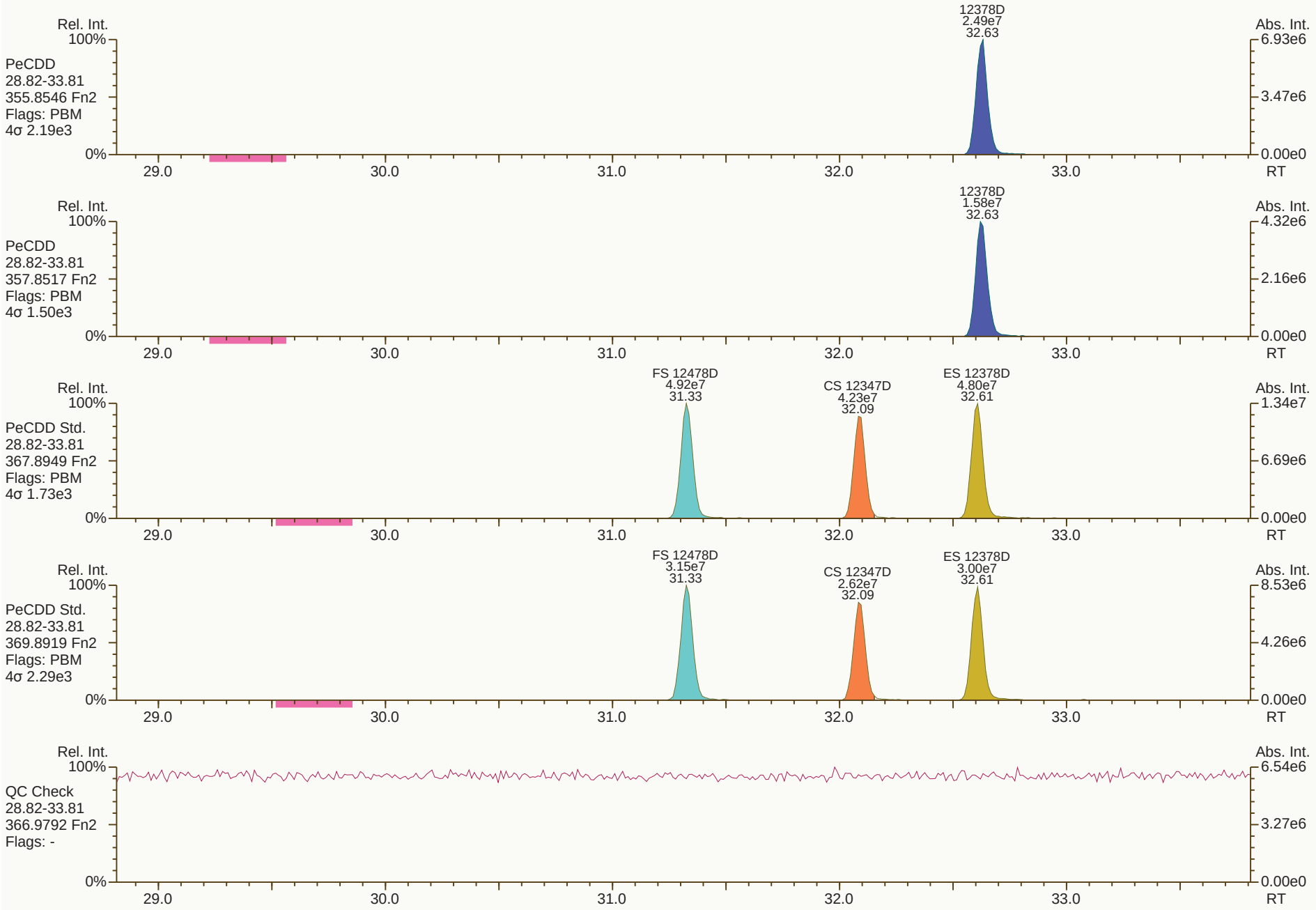
VER Data Filename: 200812C34 Analysis Date: 13-AUG-2020 13:40:25

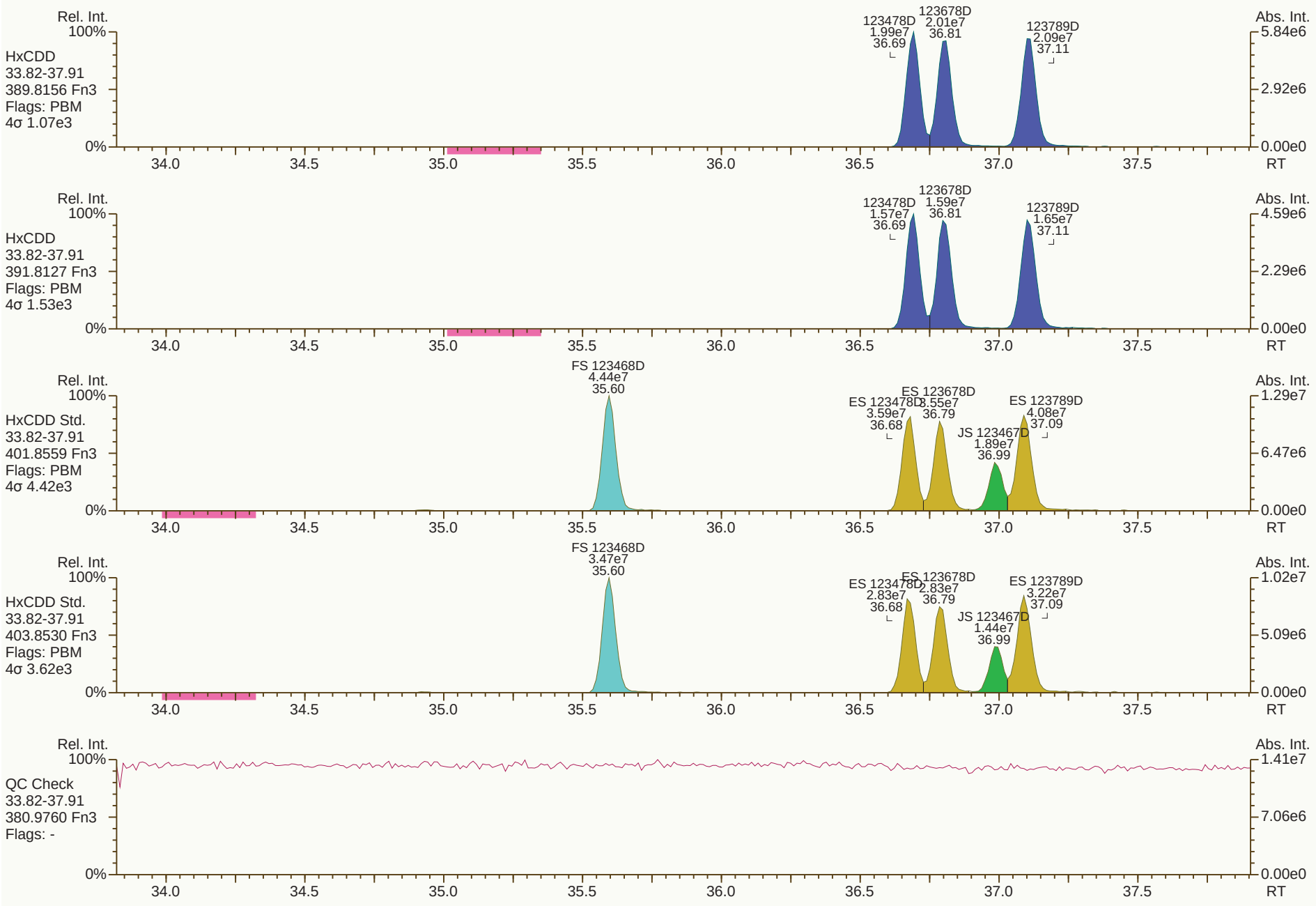
LABELED ANALYTES	M/Z's FORMING RATIO	ION ABUND. RATIO	QC LIMITS	OK	CONC. FOUND	RANGE (ng/mL)	OK
13C-2,3,7,8-TCDD	M/M+2	0.81	0.65 - 0.89	Y	102	70 - 130	Y
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.60	1.32 - 1.78	Y	97	70 - 130	Y
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.27	1.05 - 1.43	Y	102	70 - 130	Y
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.25	1.05 - 1.43	Y	98.3	70 - 130	Y
13C-1,2,3,7,8,9-HxCDD	M+2/M+4	1.27	1.05 - 1.43	Y	96.4	70 - 130	Y
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.07	0.88 - 1.20	Y	86.9	70 - 130	Y
13C-OCDD	M+2/M+4	0.91	0.76 - 1.02	Y	162	140 - 260	Y
13C-2,3,7,8-TCDF	M/M+2	0.80	0.65 - 0.89	Y	99.5	70 - 130	Y
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.59	1.32 - 1.78	Y	96.2	70 - 130	Y
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.59	1.32 - 1.78	Y	96.7	70 - 130	Y
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.54	0.43 - 0.59	Y	116	70 - 130	Y
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.54	0.43 - 0.59	Y	110	70 - 130	Y
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.53	0.43 - 0.59	Y	110	70 - 130	Y
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.54	0.43 - 0.59	Y	102	70 - 130	Y
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.46	0.37 - 0.51	Y	100	70 - 130	Y
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.46	0.37 - 0.51	Y	91.8	70 - 130	Y
13C-OCDF	M+2/M+4	0.91	0.76 - 1.02	Y	166	140 - 260	Y
CLEANUP STANDARDS							
37Cl-2,3,7,8-TCDD	n/a				10.5	7.9 - 12.7	Y
13C-1,2,3,4,7-PeCDD	M+2/M+4	1.61	1.32 - 1.78	Y	99	70 - 130	Y
13C-1,2,3,4,6-PeCDF	M+2/M+4	1.57	1.32 - 1.78	Y	101	70 - 130	Y
13C-1,2,3,4,6,9-HxCDF	M/M+2	0.53	0.43 - 0.59	Y	116	70 - 130	Y
13C-1,2,3,4,6,8,9-HpCDF	M/M+2	0.45	0.37 - 0.51	Y	97.9	70 - 130	Y

Processed: 13 Aug 2020 15:16 Analyst: TF

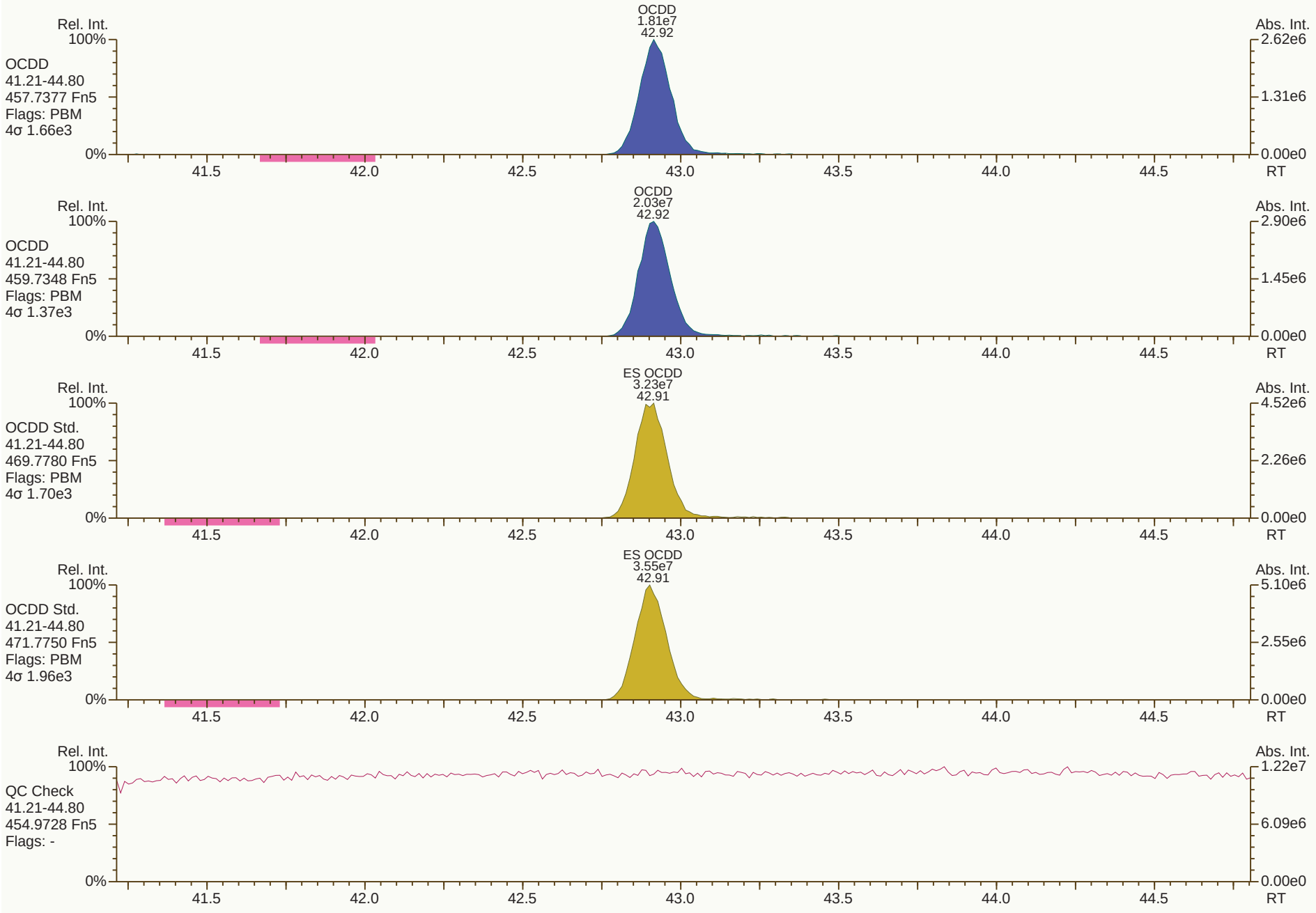

Rel. Int.
100%
0%
Abs. Int.
7.69e6
3.85e6
0.00e0
RT
QC Check
19.04-28.80
316.9824 Fn1
Flags: -
20.0
22.0
24.0
26.0
28.0
Rel. Int.
100%
0%
Abs. Int.
6.54e6
3.27e6
0.00e0
RT
QC Check
28.82-33.81
366.9792 Fn2
Flags: -
29.0
30.0
31.0
32.0
33.0
Rel. Int.
100%
0%
Abs. Int.
1.41e7
7.06e6
0.00e0
RT
QC Check
33.82-37.91
380.9760 Fn3
Flags: -
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
Rel. Int.
100%
0%
Abs. Int.
8.65e6
4.32e6
0.00e0
RT
QC Check
37.92-41.20
430.9728 Fn4
Flags: -
38.0
38.5
39.0
39.5
40.0
40.5
41.0
Rel. Int.
100%
0%
Abs. Int.
1.22e7
6.09e6
0.00e0
RT
QC Check
41.21-44.80
454.9728 Fn5
Flags: -
41.5
42.0
42.5
43.0
43.5
44.0
44.5

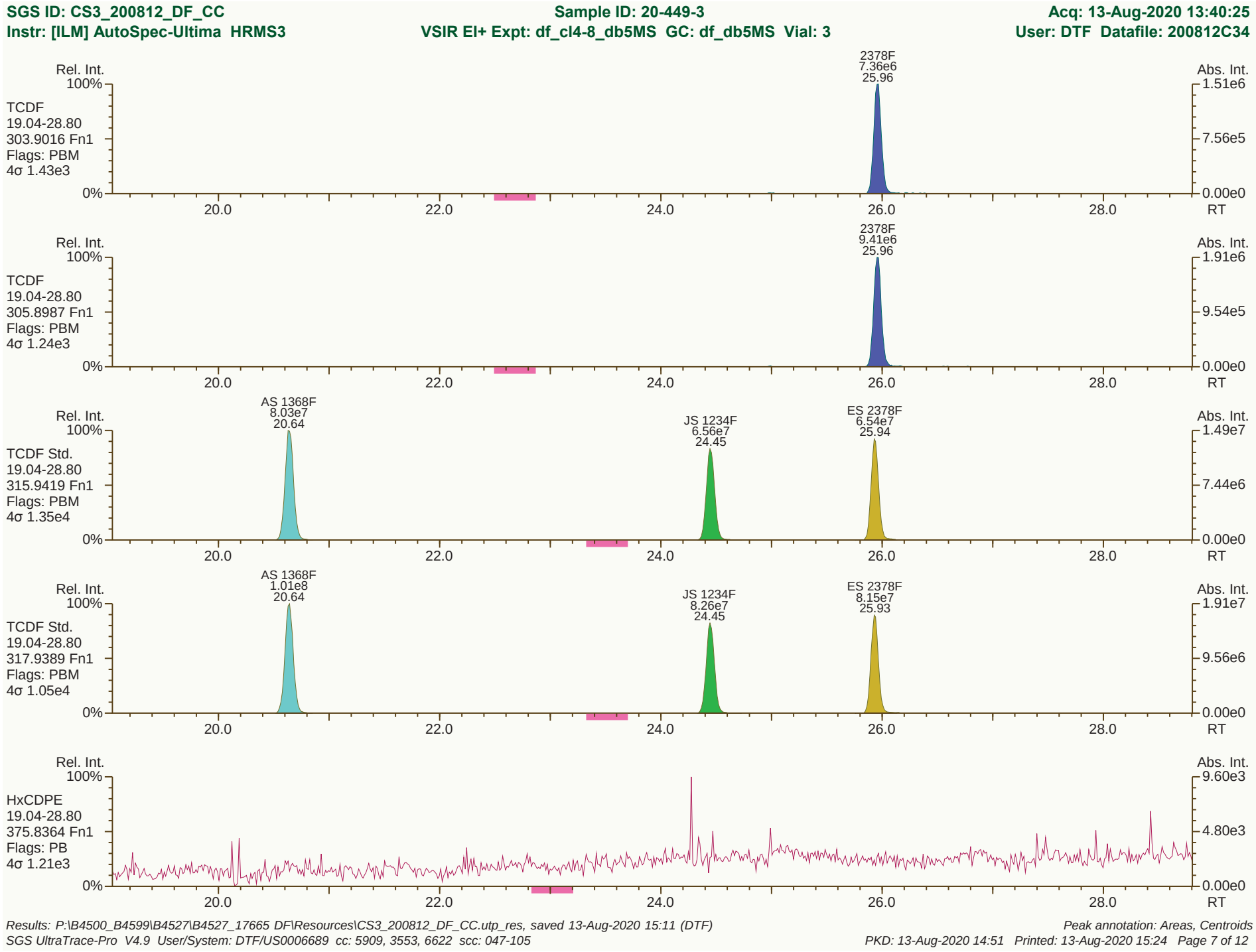

Rel. Int.
100%
TCDD
19.04-28.80
319.8965 Fn1
Flags: PBM
4σ 2.38e3
0%
2378D
5.36e6
26.92
Abs. Int.
1.20e6
6.02e5
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD
19.04-28.80
321.8936 Fn1
Flags: PBM
4σ 1.79e3
0%
2378D
6.83e6
26.92
Abs. Int.
1.50e6
7.49e5
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
37Cl-TCDD
19.04-28.80
327.8850 Fn1
Flags: PBM
4σ 1.70e3
0%
CS 37Cl-2378D
1.14e7
26.91
Abs. Int.
2.51e6
1.26e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.80
331.9368 Fn1
Flags: PBM
4σ 6.83e3
0%
AS 1368D
4.78e7
22.85
TS 1378D
4.58e7
25.09
JS 1234D
4.32e7
26.19
ES 2378D
4.36e7
26.89
FS 1278D
4.42e7
27.25
Abs. Int.
1.00e7
5.00e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.80
333.9339 Fn1
Flags: PBM
4σ 2.21e3
0%
AS 1368D
5.86e7
22.85
TS 1378D
5.75e7
25.09
JS 1234D
5.38e7
26.19
ES 2378D
5.38e7
26.89
FS 1278D
5.60e7
27.25
Abs. Int.
1.26e7
6.31e6
0.00e0
20.0
22.0
24.0
26.0
28.0
RT


Rel. Int.
100%
PeCDD
28.82-33.81
355.8546 Fn2
Flags: PBM
4σ 2.19e3
0%
12378D
2.49e7
32.63
Abs. Int.
6.93e6
3.47e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD
28.82-33.81
357.8517 Fn2
Flags: PBM
4σ 1.50e3
0%
12378D
1.58e7
32.63
Abs. Int.
4.32e6
2.16e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.82-33.81
367.8949 Fn2
Flags: PBM
4σ 1.73e3
0%
FS 12478D
4.92e7
31.33
CS 12347D
4.23e7
32.09
ES 12378D
4.80e7
32.61
Abs. Int.
1.34e7
6.69e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.82-33.81
369.8919 Fn2
Flags: PBM
4σ 2.29e3
0%
FS 12478D
3.15e7
31.33
CS 12347D
2.62e7
32.09
ES 12378D
3.00e7
32.61
Abs. Int.
8.53e6
4.26e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
QC Check
28.82-33.81
366.9792 Fn2
Flags: -
0%
Abs. Int.
6.54e6
3.27e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT

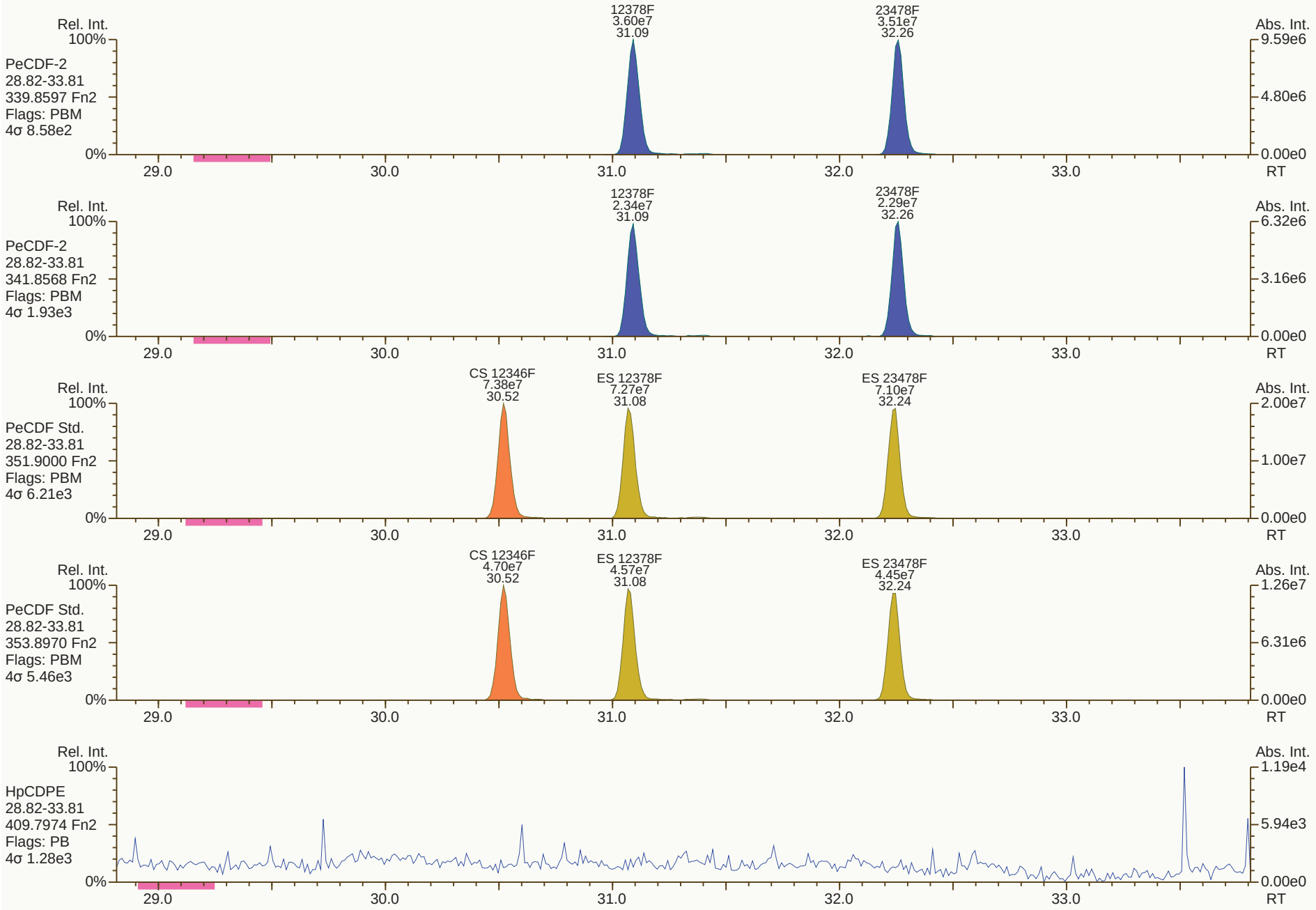

Rel. Int.
100%
HxCDD
33.82-37.91
389.8156 Fn3
Flags: PBM
4σ 1.07e3
123478D 1.99e7 36.69
123678D 2.01e7 36.81
123789D 2.09e7 37.11
Abs. Int.
5.84e6
2.92e6
0.00e0
0%
34.0 34.5 35.0 35.5 36.0 36.5 37.0 37.5 RT
Rel. Int.
100%
HxCDD
33.82-37.91
391.8127 Fn3
Flags: PBM
4σ 1.53e3
123478D 1.57e7 36.69
123678D 1.59e7 36.81
123789D 1.65e7 37.11
Abs. Int.
4.59e6
2.29e6
0.00e0
0%
34.0 34.5 35.0 35.5 36.0 36.5 37.0 37.5 RT
Rel. Int.
100%
HxCDD Std.
33.82-37.91
401.8559 Fn3
Flags: PBM
4σ 4.42e3
FS 123468D 4.44e7 35.60
ES 123478D 3.59e7 36.68
ES 123678D 3.55e7 36.79
JS 123467D 1.89e7 36.99
ES 123789D 4.08e7 37.09
Abs. Int.
1.29e7
6.47e6
0.00e0
0%
34.0 34.5 35.0 35.5 36.0 36.5 37.0 37.5 RT
Rel. Int.
100%
HxCDD Std.
33.82-37.91
403.8530 Fn3
Flags: PBM
4σ 3.62e3
FS 123468D 3.47e7 35.60
ES 123478D 2.83e7 36.68
ES 123678D 2.83e7 36.79
JS 123467D 1.44e7 36.99
ES 123789D 3.22e7 37.09
Abs. Int.
1.02e7
5.09e6
0.00e0
0%
34.0 34.5 35.0 35.5 36.0 36.5 37.0 37.5 RT
Rel. Int.
100%
QC Check
33.82-37.91
380.9760 Fn3
Flags: -
Abs. Int.
1.41e7
7.06e6
0.00e0
0%
34.0 34.5 35.0 35.5 36.0 36.5 37.0 37.5 RT

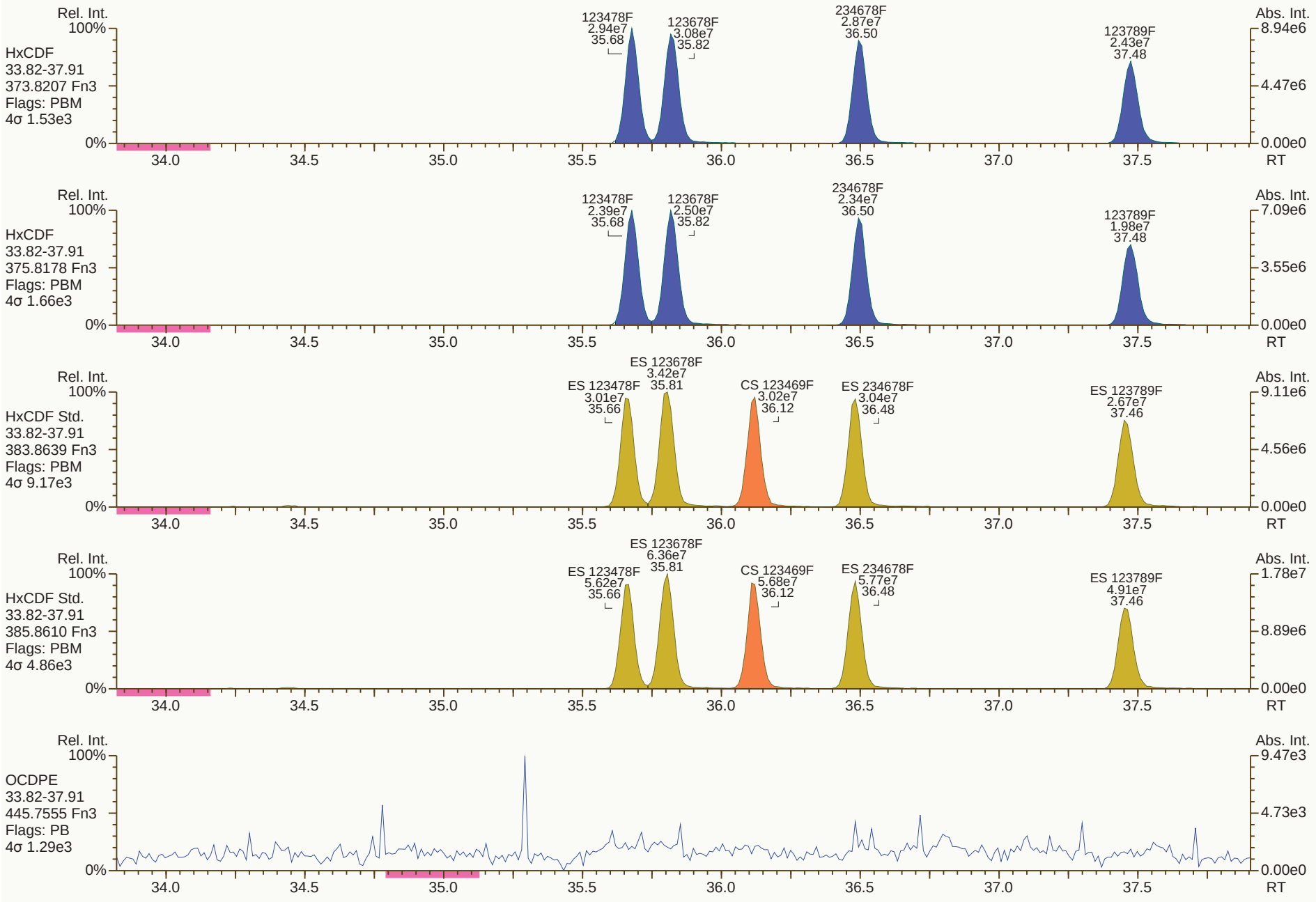

Rel. Int.
100%
HpCDD
37.92-41.20
423.7767 Fn4
Flags: PBM
4σ 1.22e3
0%
1234678D
1.41e7
40.19
Abs. Int.
3.43e6
1.72e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD
37.92-41.20
425.7737 Fn4
Flags: PBM
4σ 1.33e3
0%
1234678D
1.36e7
40.19
Abs. Int.
3.29e6
1.65e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.92-41.20
435.8169 Fn4
Flags: PBM
4σ 1.40e3
0%
FS 1234679D
3.31e7
39.46
ES 1234678D
2.68e7
40.18
Abs. Int.
8.99e6
4.49e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.92-41.20
437.8140 Fn4
Flags: PBM
4σ 1.75e3
0%
FS 1234679D
3.12e7
39.46
ES 1234678D
2.51e7
40.18
Abs. Int.
8.56e6
4.28e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
QC Check
37.92-41.20
430.9728 Fn4
Flags: -
0%
Abs. Int.
8.65e6
4.32e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT

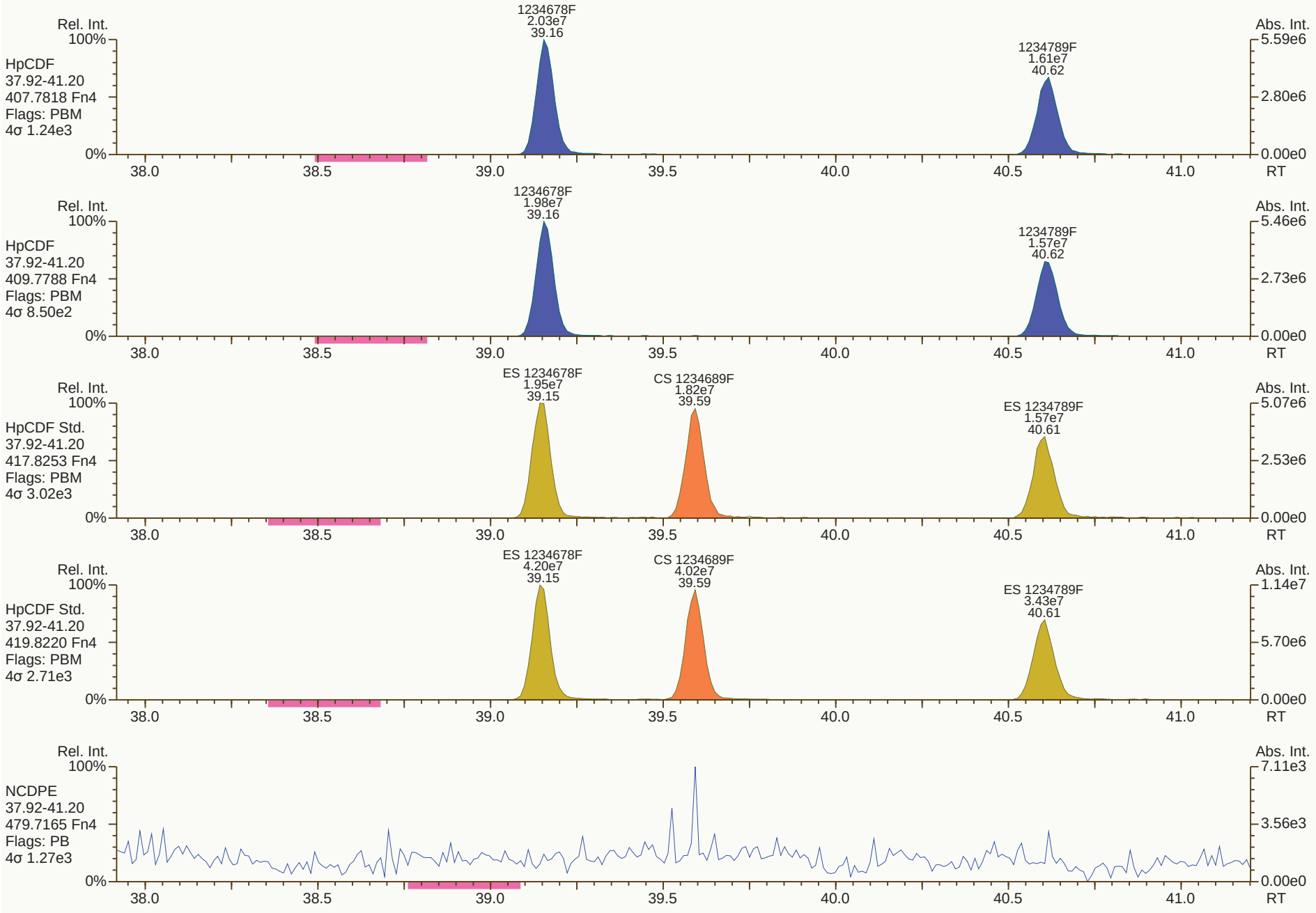

OCDD
1.81e7
42.92
Rel. Int.
Abs. Int.
OCDD
41.21-44.80
457.7377 Fn5
Flags: PBM
4σ 1.66e3
OCDD
2.03e7
42.92
OCDD
41.21-44.80
459.7348 Fn5
Flags: PBM
4σ 1.37e3
ES OCDD
3.23e7
42.91
OCDD Std.
41.21-44.80
469.7780 Fn5
Flags: PBM
4σ 1.70e3
ES OCDD
3.55e7
42.91
OCDD Std.
41.21-44.80
471.7750 Fn5
Flags: PBM
4σ 1.96e3
QC Check
41.21-44.80
454.9728 Fn5
Flags: -
100%
0%
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT


SGS ID: CS3_200812_DF_CC
Sample ID: 20-449-3
Acq: 13-Aug-2020 13:40:25
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 3
User: DTF Datafile: 200812C34
Rel. Int.
Abs. Int.
TCDF
19.04-28.80
303.9016 Fn1
Flags: PBM
4σ 1.43e3
2378F
7.36e6
25.96
1.51e6
7.56e5
0.00e0
TCDF
19.04-28.80
305.8987 Fn1
Flags: PBM
4σ 1.24e3
2378F
9.41e6
25.96
1.91e6
9.54e5
TCDF Std.
19.04-28.80
315.9419 Fn1
Flags: PBM
4σ 1.35e4
AS 1368F
8.03e7
20.64
JS 1234F
6.56e7
24.45
ES 2378F
6.54e7
25.94
1.49e7
7.44e6
TCDF Std.
19.04-28.80
317.9389 Fn1
Flags: PBM
4σ 1.05e4
AS 1368F
1.01e8
20.64
JS 1234F
8.26e7
24.45
ES 2378F
8.15e7
25.93
1.91e7
9.56e6
HxCDPE
19.04-28.80
375.8364 Fn1
Flags: PB
4σ 1.21e3
9.60e3
4.80e3
100%
0%
20.0
22.0
24.0
26.0
28.0
RT
Results: P:\B4500_B4599\B4527\B4527_17665 DF\Resources\CS3_200812_DF_CC.utp_res, saved 13-Aug-2020 15:11 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 5909, 3553, 6622 scc: 047-105
PKD: 13-Aug-2020 14:51 Printed: 13-Aug-2020 15:24 Page 7 of 12

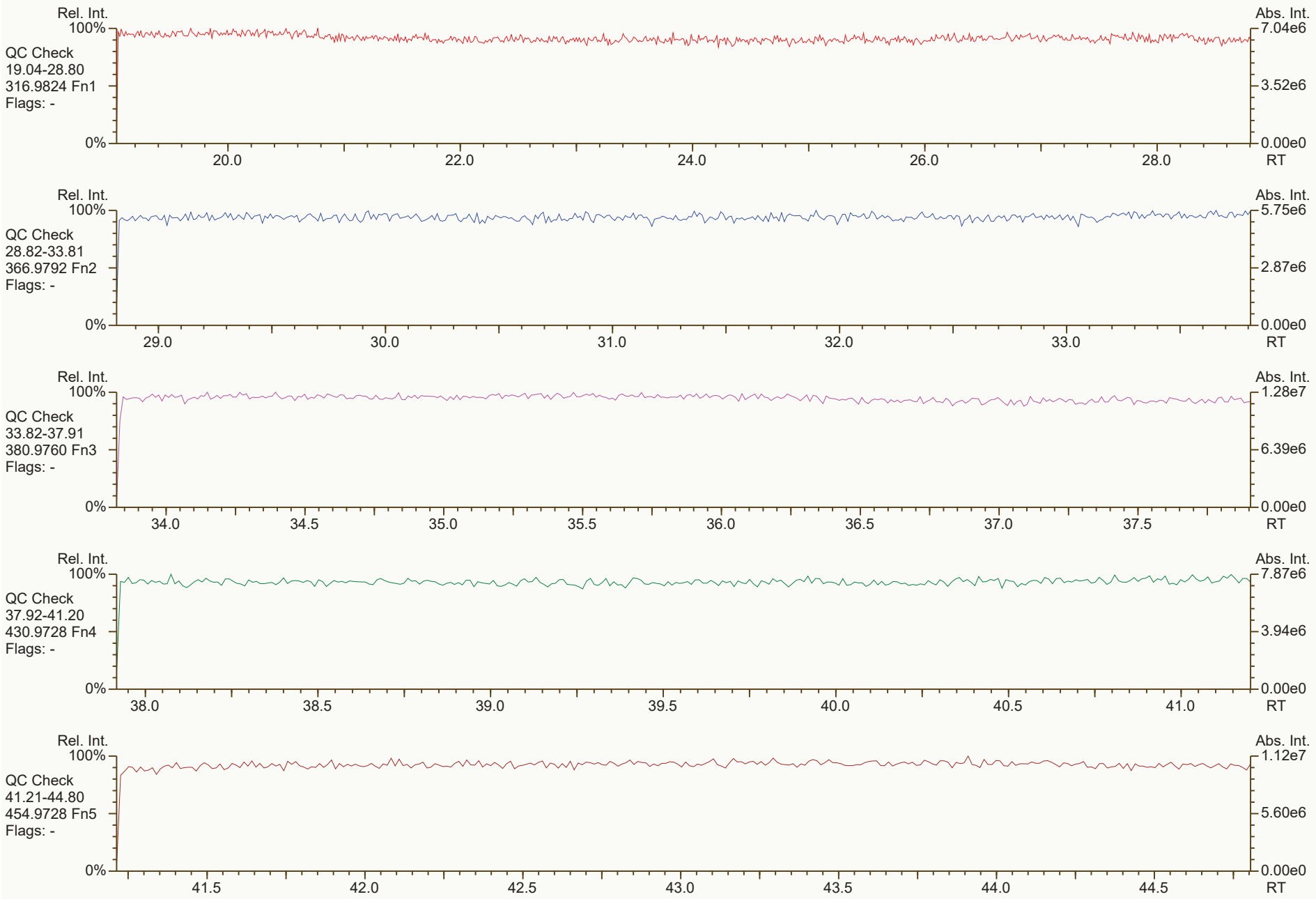

Rel. Int.
100%
0%
Abs. Int.
7.51e3
3.76e3
0.00e0
PeCDF-1
19.04-28.80
339.8597 Fn1
Flags: PB
4σ 1.36e3
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
0%
Abs. Int.
1.52e4
7.61e3
0.00e0
PeCDF-1
19.04-28.80
341.8568 Fn1
Flags: PB
4σ 1.66e3
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
0%
Abs. Int.
7.69e6
3.85e6
0.00e0
QC Check
19.04-28.80
316.9824 Fn1
Flags: -
20.0
22.0
24.0
26.0
28.0
RT


Rel. Int.
100%
PeCDF-2
28.82-33.81
339.8597 Fn2
Flags: PBM
4σ 8.58e2
0%
12378F
3.60e7
31.09
23478F
3.51e7
32.26
Abs. Int.
9.59e6
4.80e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF-2
28.82-33.81
341.8568 Fn2
Flags: PBM
4σ 1.93e3
0%
12378F
2.34e7
31.09
23478F
2.29e7
32.26
Abs. Int.
6.32e6
3.16e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.82-33.81
351.9000 Fn2
Flags: PBM
4σ 6.21e3
0%
CS 12346F
7.38e7
30.52
ES 12378F
7.27e7
31.08
ES 23478F
7.10e7
32.24
Abs. Int.
2.00e7
1.00e7
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.82-33.81
353.8970 Fn2
Flags: PBM
4σ 5.46e3
0%
CS 12346F
4.70e7
30.52
ES 12378F
4.57e7
31.08
ES 23478F
4.45e7
32.24
Abs. Int.
1.26e7
6.31e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
HpCDPE
28.82-33.81
409.7974 Fn2
Flags: PB
4σ 1.28e3
0%
Abs. Int.
1.19e4
5.94e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT


Rel. Int.
100%
HxCDF
33.82-37.91
373.8207 Fn3
Flags: PBM
4σ 1.53e3
0%
123478F
2.94e7
35.68
123678F
3.08e7
35.82
234678F
2.87e7
36.50
123789F
2.43e7
37.48
Abs. Int.
8.94e6
4.47e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF
33.82-37.91
375.8178 Fn3
Flags: PBM
4σ 1.66e3
0%
123478F
2.39e7
35.68
123678F
2.50e7
35.82
234678F
2.34e7
36.50
123789F
1.98e7
37.48
Abs. Int.
7.09e6
3.55e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF Std.
33.82-37.91
383.8639 Fn3
Flags: PBM
4σ 9.17e3
0%
ES 123678F
3.42e7
35.81
ES 123478F
3.01e7
35.66
CS 123469F
3.02e7
36.12
ES 234678F
3.04e7
36.48
ES 123789F
2.67e7
37.46
Abs. Int.
9.11e6
4.56e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF Std.
33.82-37.91
385.8610 Fn3
Flags: PBM
4σ 4.86e3
0%
ES 123678F
6.36e7
35.81
ES 123478F
5.62e7
35.66
CS 123469F
5.68e7
36.12
ES 234678F
5.77e7
36.48
ES 123789F
4.91e7
37.46
Abs. Int.
1.78e7
8.89e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
OCDPE
33.82-37.91
445.7555 Fn3
Flags: PB
4σ 1.29e3
0%
Abs. Int.
9.47e3
4.73e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT


Rel. Int.
100%
0%
Abs. Int.
HpCDF
37.92-41.20
407.7818 Fn4
Flags: PBM
4σ 1.24e3
1234678F
2.03e7
39.16
1234789F
1.61e7
40.62
5.59e6
2.80e6
0.00e0
HpCDF
37.92-41.20
409.7788 Fn4
Flags: PBM
4σ 8.50e2
1234678F
1.98e7
39.16
1234789F
1.57e7
40.62
5.46e6
2.73e6
HpCDF Std.
37.92-41.20
417.8253 Fn4
Flags: PBM
4σ 3.02e3
ES 1234678F
1.95e7
39.15
CS 1234689F
1.82e7
39.59
ES 1234789F
1.57e7
40.61
5.07e6
2.53e6
HpCDF Std.
37.92-41.20
419.8220 Fn4
Flags: PBM
4σ 2.71e3
ES 1234678F
4.20e7
39.15
CS 1234689F
4.02e7
39.59
ES 1234789F
3.43e7
40.61
1.14e7
5.70e6
NCDPE
37.92-41.20
479.7165 Fn4
Flags: PB
4σ 1.27e3
7.11e3
3.56e3
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT


Rel. Int.
100%
OCDF
41.21-44.80
441.7428 Fn5
Flags: PBM
4σ 2.40e3
0%
OCDF
2.21e7
43.06
Abs. Int.
3.14e6
1.57e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDF
41.21-44.80
443.7398 Fn5
Flags: PBM
4σ 2.03e3
0%
OCDF
2.42e7
43.06
Abs. Int.
3.48e6
1.74e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDF Std.
41.21-44.80
453.7830 Fn5
Flags: PBM
4σ 1.41e3
0%
ES OCDF
4.10e7
43.05
Abs. Int.
5.93e6
2.96e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDF Std.
41.21-44.80
455.7801 Fn5
Flags: PBM
4σ 3.14e3
0%
ES OCDF
4.49e7
43.05
Abs. Int.
6.49e6
3.25e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
DCDPE
41.21-44.80
513.6775 Fn5
Flags: PB
4σ 9.85e2
0%
Abs. Int.
3.39e3
1.70e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT



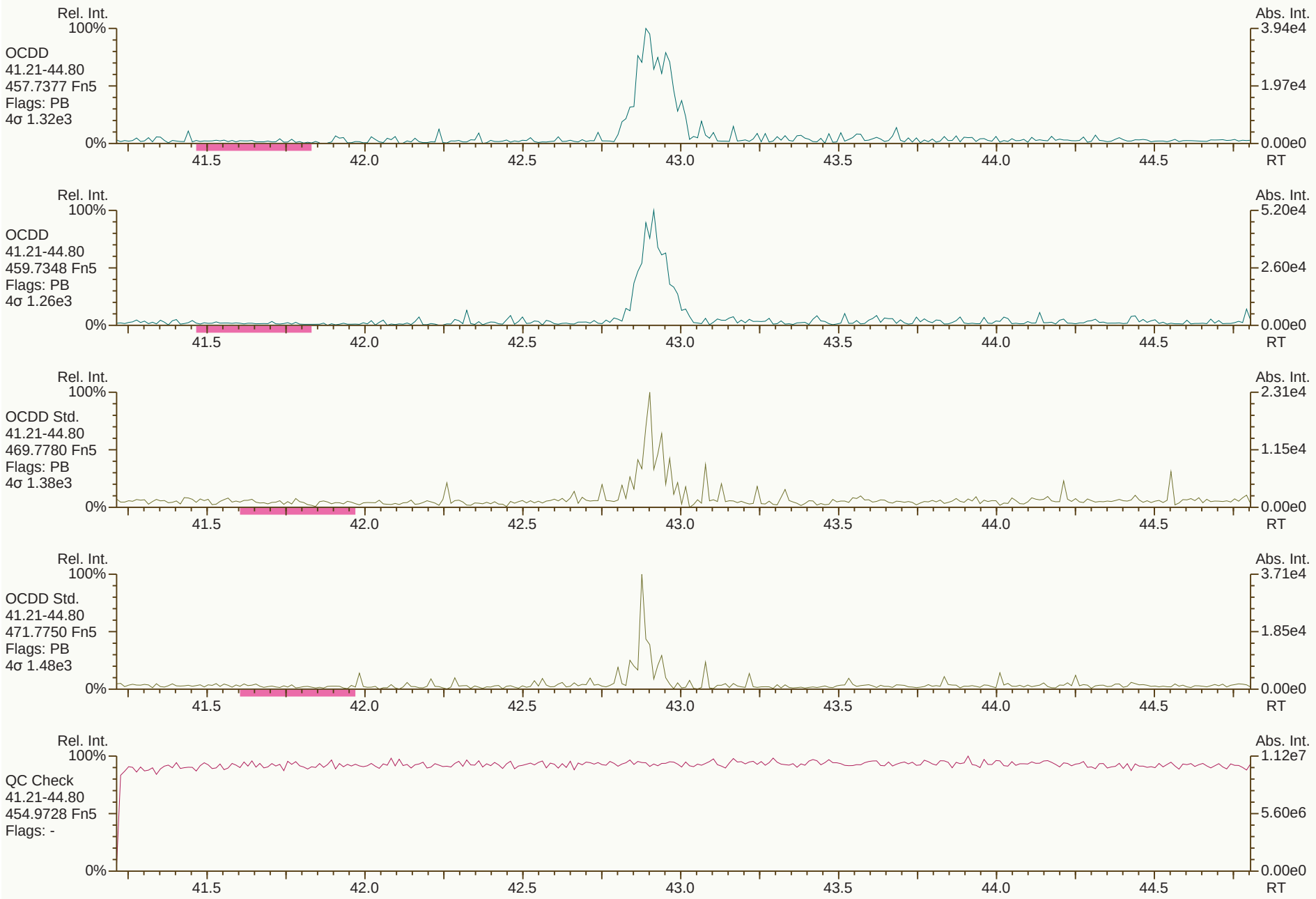
Results: P:\B4500_B4599\B4527\B4527_17665 DF\Resources\SBS_200812_DF_CE.utp_res, saved 13-Aug-2020 15:03 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 scc: 573-669
PKD: n/a Printed: 13-Aug-2020 15:20 Page 1 of 12


Rel. Int.
100%
0%
Abs. Int.
TCDD
19.04-28.80
319.8965 Fn1
Flags: PB
4σ 2.33e3
8.03e3
4.01e3
0.00e0
TCDD
19.04-28.80
321.8936 Fn1
Flags: PB
4σ 1.62e3
5.59e3
2.79e3
37Cl-TCDD
19.04-28.80
327.8850 Fn1
Flags: PB
4σ 1.14e3
1.19e4
5.93e3
TCDD Std.
19.04-28.80
331.9368 Fn1
Flags: PB
4σ 7.13e3
2.19e4
1.10e4
TCDD Std.
19.04-28.80
333.9339 Fn1
Flags: PB
4σ 1.77e3
2.22e4
1.11e4
20.0
22.0
24.0
26.0
28.0
RT


Rel. Int.
100%
PeCDD
28.82-33.81
355.8546 Fn2
Flags: PB
4σ 1.98e3
0%
Abs. Int.
1.15e4
5.75e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD
28.82-33.81
357.8517 Fn2
Flags: PB
4σ 1.55e3
0%
Abs. Int.
1.42e4
7.11e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.82-33.81
367.8949 Fn2
Flags: PB
4σ 1.59e3
0%
Abs. Int.
1.90e4
9.50e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.82-33.81
369.8919 Fn2
Flags: PB
4σ 1.18e3
0%
Abs. Int.
2.22e4
1.11e4
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
QC Check
28.82-33.81
366.9792 Fn2
Flags: -
0%
Abs. Int.
5.75e6
2.87e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT

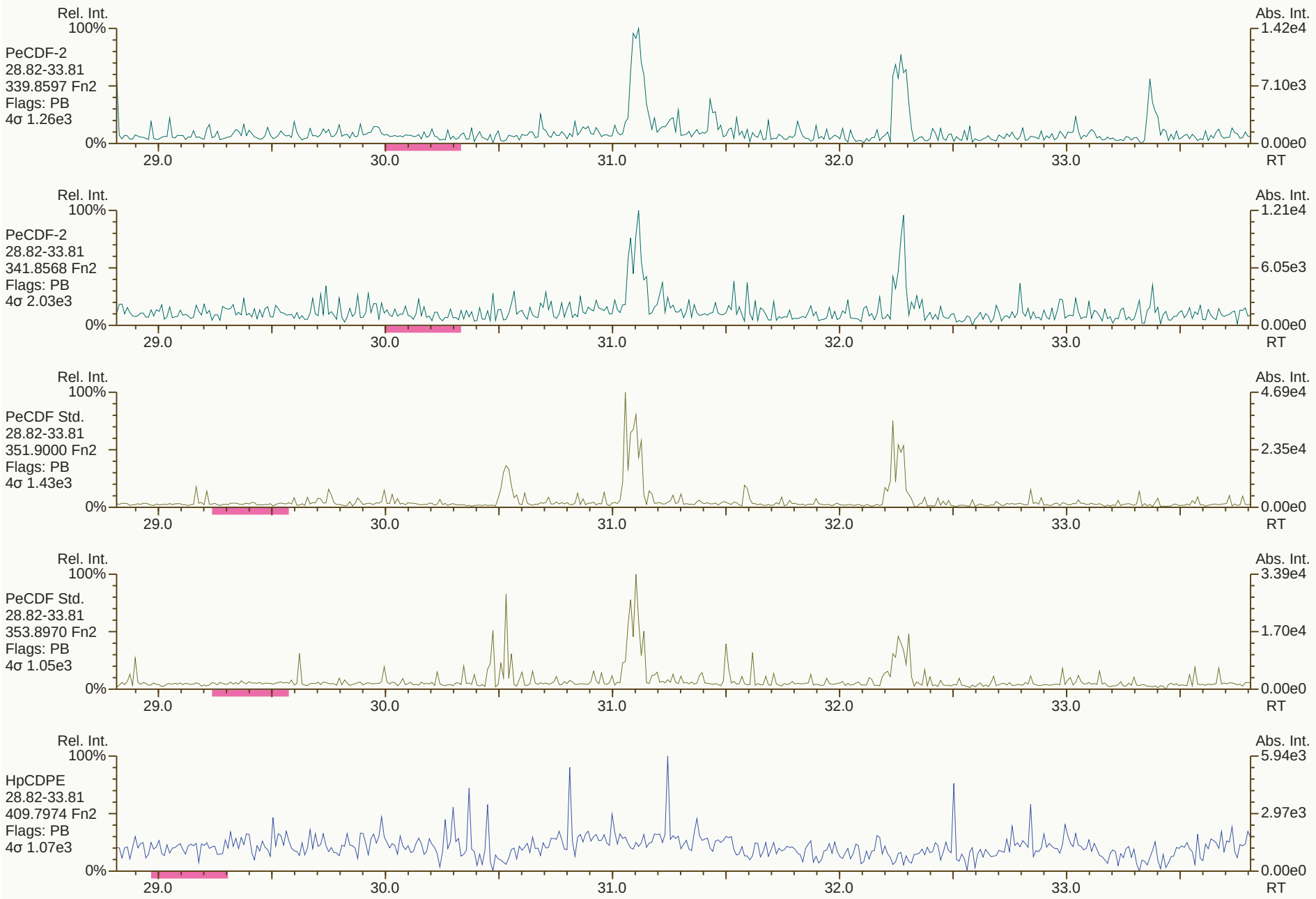

Rel. Int.
100%
HxCDD
33.82-37.91
389.8156 Fn3
Flags: PB
4σ 2.15e3
0%
Abs. Int.
1.92e4
9.60e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD
33.82-37.91
391.8127 Fn3
Flags: PB
4σ 1.13e3
0%
Abs. Int.
1.34e4
6.71e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.82-37.91
401.8559 Fn3
Flags: PB
4σ 4.89e3
0%
Abs. Int.
4.74e4
2.37e4
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.82-37.91
403.8530 Fn3
Flags: PB
4σ 1.75e3
0%
Abs. Int.
2.80e4
1.40e4
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
QC Check
33.82-37.91
380.9760 Fn3
Flags: -
0%
Abs. Int.
1.28e7
6.39e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT


Rel. Int.
100%
HpCDD
37.92-41.20
423.7767 Fn4
Flags: PB
4σ 2.17e3
0%
Abs. Int.
2.25e4
1.13e4
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD
37.92-41.20
425.7737 Fn4
Flags: PB
4σ 3.19e3
0%
Abs. Int.
2.76e4
1.38e4
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.92-41.20
435.8169 Fn4
Flags: PB
4σ 1.47e3
0%
Abs. Int.
1.66e4
8.31e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.92-41.20
437.8140 Fn4
Flags: PB
4σ 1.66e3
0%
Abs. Int.
2.76e4
1.38e4
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
QC Check
37.92-41.20
430.9728 Fn4
Flags: -
0%
Abs. Int.
7.87e6
3.94e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT


Rel. Int.
100%
OCDD
41.21-44.80
457.7377 Fn5
Flags: PB
4σ 1.32e3
0%
Abs. Int.
3.94e4
1.97e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDD
41.21-44.80
459.7348 Fn5
Flags: PB
4σ 1.26e3
0%
Abs. Int.
5.20e4
2.60e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDD Std.
41.21-44.80
469.7780 Fn5
Flags: PB
4σ 1.38e3
0%
Abs. Int.
2.31e4
1.15e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDD Std.
41.21-44.80
471.7750 Fn5
Flags: PB
4σ 1.48e3
0%
Abs. Int.
3.71e4
1.85e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
QC Check
41.21-44.80
454.9728 Fn5
Flags: -
0%
Abs. Int.
1.12e7
5.60e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT


SGS ID: SBS_200812_DF_CE
Sample ID: 20-61-1
Acq: 13-Aug-2020 05:55:28
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 2
User: DTF Datafile: 200812C24
2468F
9.70e5
21.88
Rel. Int.
Abs. Int.
100%
1.77e5
TCDF
19.04-28.80
303.9016 Fn1
Flags: PBM
4σ 1.10e3
8.84e4
0%
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
2468F
1.23e6
21.88
2.06e5
TCDF
19.04-28.80
305.8987 Fn1
Flags: PBM
4σ 1.72e3
1.03e5
TCDF Std.
19.04-28.80
315.9419 Fn1
Flags: PB
4σ 1.49e4
3.81e4
1.91e4
TCDF Std.
19.04-28.80
317.9389 Fn1
Flags: PB
4σ 8.53e3
3.40e4
1.70e4
HxCDPE
19.04-28.80
375.8364 Fn1
Flags: PB
4σ 9.51e2
4.46e3
2.23e3
Results: P:\B4500_B4599\B4527\B4527_17665 DF\Resources\SBS_200812_DF_CE.utp_res, saved 13-Aug-2020 15:03 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 1621, 1196, 6020 scc: 573-669
Revised: 13-Aug-2020 15:03 (DTF) Printed: 13-Aug-2020 15:20 Page 7 of 12

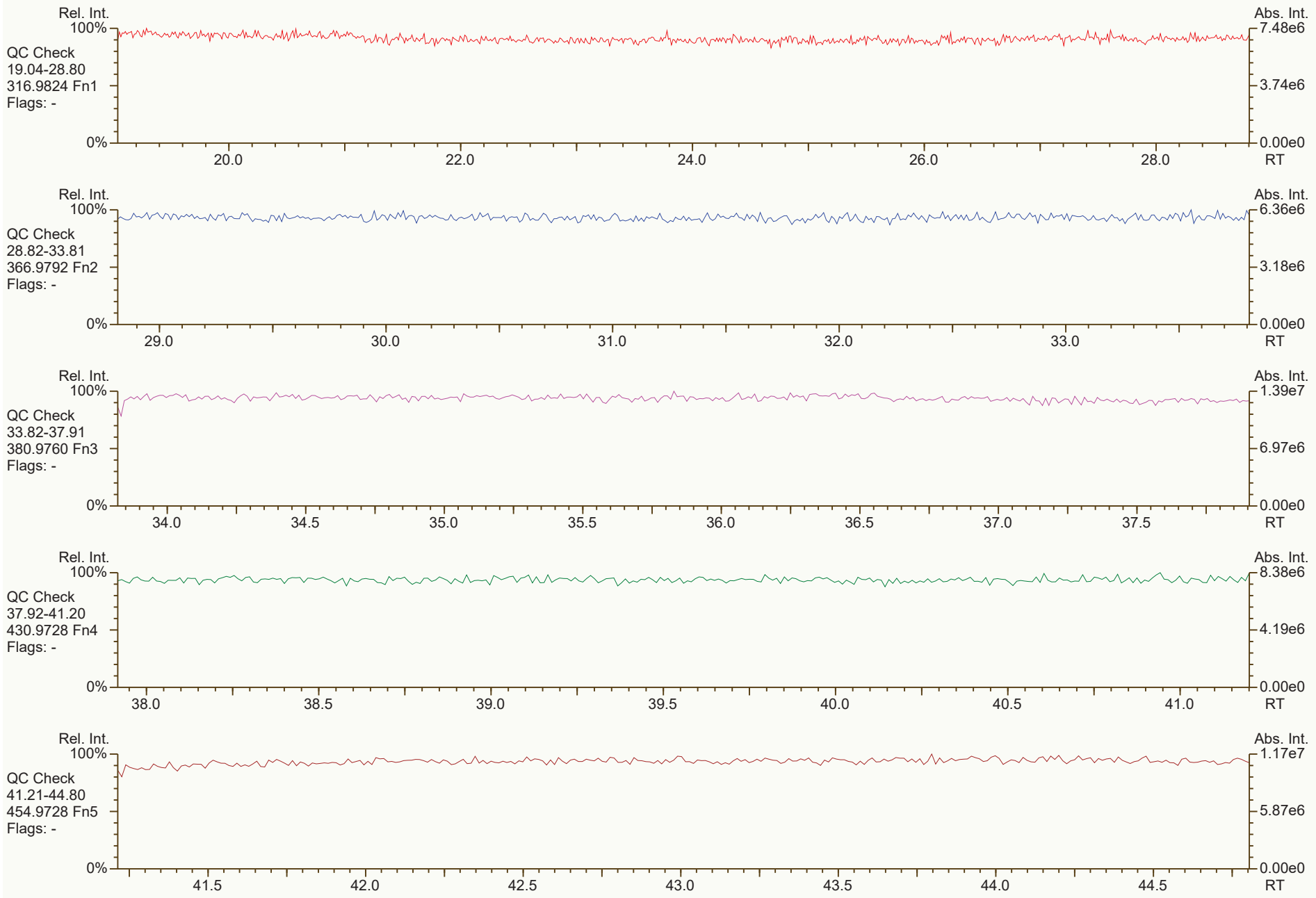

Rel. Int.
100%
0%
Abs. Int.
8.22e3
4.11e3
0.00e0
PeCDF-1
19.04-28.80
339.8597 Fn1
Flags: PB
4σ 1.35e3
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
0%
Abs. Int.
1.04e4
5.19e3
0.00e0
PeCDF-1
19.04-28.80
341.8568 Fn1
Flags: PB
4σ 2.63e3
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
0%
Abs. Int.
7.04e6
3.52e6
0.00e0
QC Check
19.04-28.80
316.9824 Fn1
Flags: -
20.0
22.0
24.0
26.0
28.0
RT


Rel. Int.
100%
PeCDF-2
28.82-33.81
339.8597 Fn2
Flags: PB
4σ 1.26e3
0%
Abs. Int.
1.42e4
7.10e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF-2
28.82-33.81
341.8568 Fn2
Flags: PB
4σ 2.03e3
0%
Abs. Int.
1.21e4
6.05e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.82-33.81
351.9000 Fn2
Flags: PB
4σ 1.43e3
0%
Abs. Int.
4.69e4
2.35e4
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.82-33.81
353.8970 Fn2
Flags: PB
4σ 1.05e3
0%
Abs. Int.
3.39e4
1.70e4
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
HpCDPE
28.82-33.81
409.7974 Fn2
Flags: PB
4σ 1.07e3
0%
Abs. Int.
5.94e3
2.97e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT


Rel. Int.
100%
HxCDF
33.82-37.91
373.8207 Fn3
Flags: PB
4σ 1.73e3
0%
Abs. Int.
1.76e4
8.81e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF
33.82-37.91
375.8178 Fn3
Flags: PB
4σ 2.02e3
0%
Abs. Int.
1.82e4
9.10e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF Std.
33.82-37.91
383.8639 Fn3
Flags: PB
4σ 4.06e3
0%
Abs. Int.
3.33e4
1.66e4
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF Std.
33.82-37.91
385.8610 Fn3
Flags: PB
4σ 1.70e3
0%
Abs. Int.
5.26e4
2.63e4
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
OCDPE
33.82-37.91
445.7555 Fn3
Flags: PB
4σ 9.90e2
0%
Abs. Int.
8.15e3
4.08e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT


Rel. Int.
100%
HpCDF
37.92-41.20
407.7818 Fn4
Flags: PB
4σ 1.96e3
0%
Abs. Int.
1.43e4
7.17e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF
37.92-41.20
409.7788 Fn4
Flags: PB
4σ 1.60e3
0%
Abs. Int.
1.33e4
6.67e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.92-41.20
417.8253 Fn4
Flags: PB
4σ 1.19e3
0%
Abs. Int.
1.83e4
9.13e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.92-41.20
419.8220 Fn4
Flags: PB
4σ 3.13e3
0%
Abs. Int.
3.89e4
1.94e4
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
NCDPE
37.92-41.20
479.7165 Fn4
Flags: PB
4σ 1.01e3
0%
Abs. Int.
3.68e3
1.84e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT

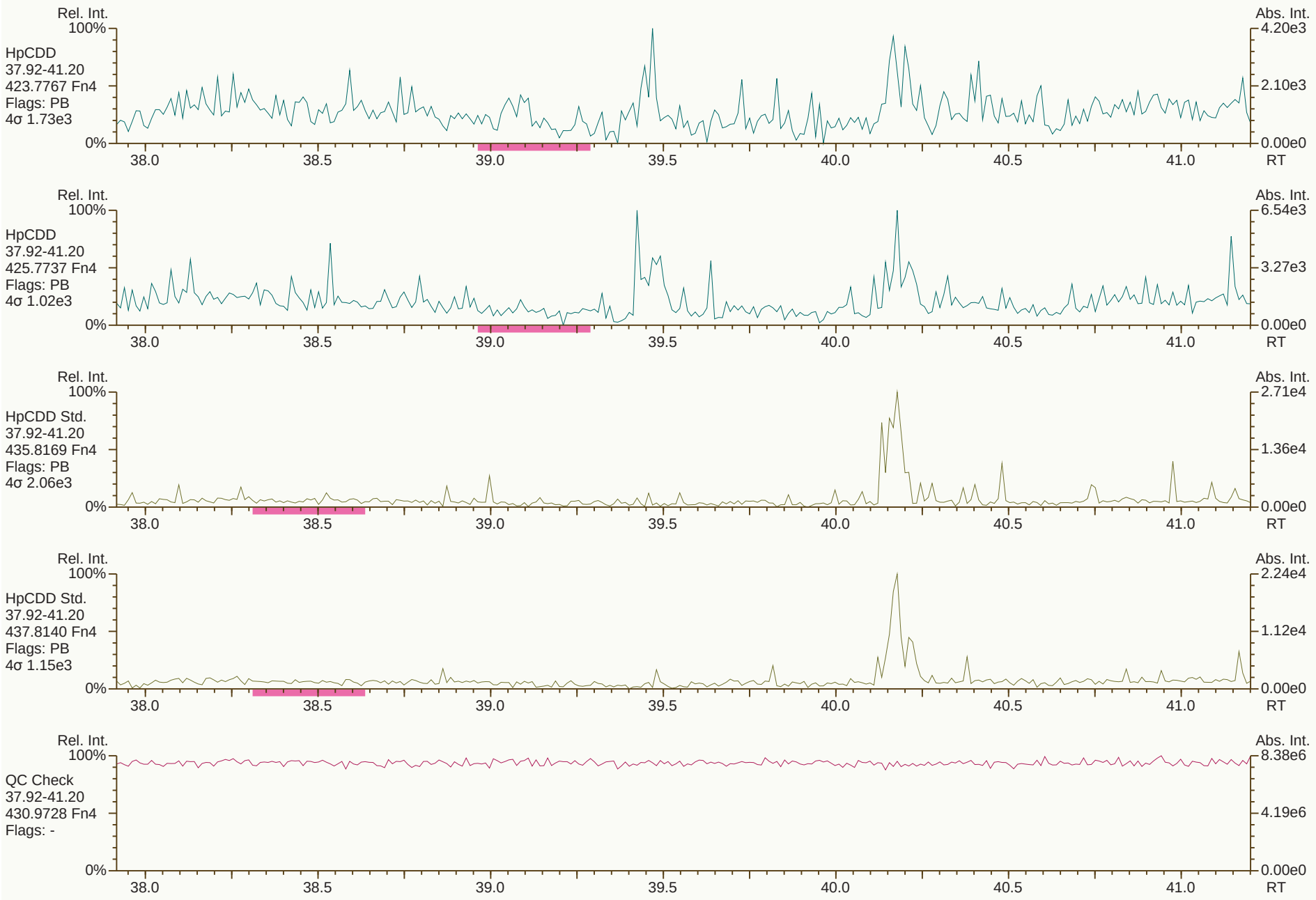

Rel. Int.
100%
OCDF
41.21-44.80
441.7428 Fn5
Flags: PB
4σ 8.99e2
0%
Abs. Int.
1.47e4
7.33e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDF
41.21-44.80
443.7398 Fn5
Flags: PB
4σ 1.54e3
0%
Abs. Int.
2.53e4
1.27e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDF Std.
41.21-44.80
453.7830 Fn5
Flags: PB
4σ 3.31e3
0%
Abs. Int.
2.06e4
1.03e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDF Std.
41.21-44.80
455.7801 Fn5
Flags: PB
4σ 1.46e3
0%
Abs. Int.
2.84e4
1.42e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
DCDPE
41.21-44.80
513.6775 Fn5
Flags: PB
4σ 9.69e2
0%
Abs. Int.
3.42e3
1.71e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT


Rel. Int.
100%
0%
Abs. Int.
7.48e6
3.74e6
0.00e0
RT
QC Check
19.04-28.80
316.9824 Fn1
Flags: -
20.0
22.0
24.0
26.0
28.0
Rel. Int.
100%
0%
Abs. Int.
6.36e6
3.18e6
0.00e0
RT
QC Check
28.82-33.81
366.9792 Fn2
Flags: -
29.0
30.0
31.0
32.0
33.0
Rel. Int.
100%
0%
Abs. Int.
1.39e7
6.97e6
0.00e0
RT
QC Check
33.82-37.91
380.9760 Fn3
Flags: -
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
Rel. Int.
100%
0%
Abs. Int.
8.38e6
4.19e6
0.00e0
RT
QC Check
37.92-41.20
430.9728 Fn4
Flags: -
38.0
38.5
39.0
39.5
40.0
40.5
41.0
Rel. Int.
100%
0%
Abs. Int.
1.17e7
5.87e6
0.00e0
RT
QC Check
41.21-44.80
454.9728 Fn5
Flags: -
41.5
42.0
42.5
43.0
43.5
44.0
44.5


Rel. Int.
100%
0%
Abs. Int.
TCDD
19.04-28.80
319.8965 Fn1
Flags: PB
4σ 2.70e3
7.07e3
3.54e3
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
TCDD
19.04-28.80
321.8936 Fn1
Flags: PB
4σ 1.73e3
6.75e3
3.37e3
37Cl-TCDD
19.04-28.80
327.8850 Fn1
Flags: PB
4σ 1.77e3
1.75e4
8.76e3
TCDD Std.
19.04-28.80
331.9368 Fn1
Flags: PB
4σ 6.61e3
2.42e4
1.21e4
TCDD Std.
19.04-28.80
333.9339 Fn1
Flags: PB
4σ 2.53e3
1.86e4
9.29e3


Rel. Int.
100%
PeCDD
28.82-33.81
355.8546 Fn2
Flags: PB
4σ 2.22e3
0%
Abs. Int.
6.48e3
3.24e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD
28.82-33.81
357.8517 Fn2
Flags: PB
4σ 1.41e3
0%
Abs. Int.
9.54e3
4.77e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.82-33.81
367.8949 Fn2
Flags: PB
4σ 2.13e3
0%
Abs. Int.
4.80e4
2.40e4
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.82-33.81
369.8919 Fn2
Flags: PB
4σ 1.34e3
0%
Abs. Int.
3.06e4
1.53e4
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
QC Check
28.82-33.81
366.9792 Fn2
Flags: -
0%
Abs. Int.
6.36e6
3.18e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT


Rel. Int.
100%
HxCDD
33.82-37.91
389.8156 Fn3
Flags: PB
4σ 1.78e3
0%
Abs. Int.
6.67e3
3.34e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD
33.82-37.91
391.8127 Fn3
Flags: PB
4σ 1.13e3
0%
Abs. Int.
5.74e3
2.87e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.82-37.91
401.8559 Fn3
Flags: PB
4σ 4.81e3
0%
Abs. Int.
5.36e4
2.68e4
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.82-37.91
403.8530 Fn3
Flags: PB
4σ 2.39e3
0%
Abs. Int.
2.37e4
1.19e4
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
QC Check
33.82-37.91
380.9760 Fn3
Flags: -
0%
Abs. Int.
1.39e7
6.97e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT


Rel. Int.
100%
HpCDD
37.92-41.20
423.7767 Fn4
Flags: PB
4σ 1.73e3
0%
Abs. Int.
4.20e3
2.10e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD
37.92-41.20
425.7737 Fn4
Flags: PB
4σ 1.02e3
0%
Abs. Int.
6.54e3
3.27e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.92-41.20
435.8169 Fn4
Flags: PB
4σ 2.06e3
0%
Abs. Int.
2.71e4
1.36e4
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.92-41.20
437.8140 Fn4
Flags: PB
4σ 1.15e3
0%
Abs. Int.
2.24e4
1.12e4
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
QC Check
37.92-41.20
430.9728 Fn4
Flags: -
0%
Abs. Int.
8.38e6
4.19e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT

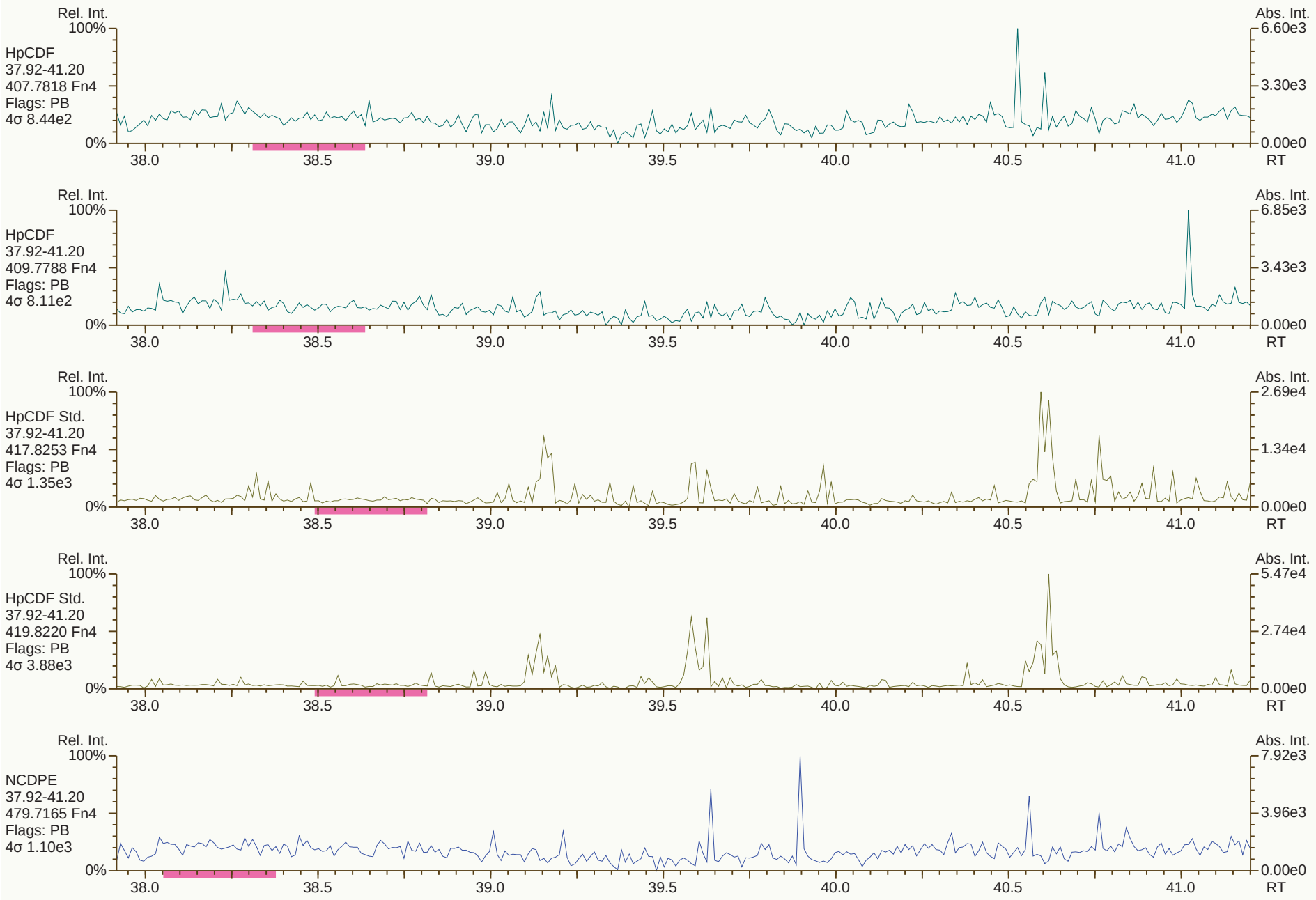

Rel. Int.
100%
OCDD
41.21-44.80
457.7377 Fn5
Flags: PB
4σ 1.27e3
0%
Abs. Int.
8.03e3
4.01e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDD
41.21-44.80
459.7348 Fn5
Flags: PB
4σ 3.56e3
0%
Abs. Int.
1.35e4
6.77e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDD Std.
41.21-44.80
469.7780 Fn5
Flags: PB
4σ 1.39e3
0%
Abs. Int.
2.04e4
1.02e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDD Std.
41.21-44.80
471.7750 Fn5
Flags: PB
4σ 1.65e3
0%
Abs. Int.
3.08e4
1.54e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
QC Check
41.21-44.80
454.9728 Fn5
Flags: -
0%
Abs. Int.
1.17e7
5.87e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT


2468F
9.58e5
21.87
Rel. Int.
100%
TCDF
19.04-28.80
303.9016 Fn1
Flags: PBM
4σ 1.16e3
0%
Abs. Int.
1.71e5
8.53e4
0.00e0
20.0
22.0
24.0
26.0
28.0
RT
2468F
1.26e6
21.87
TCDF
19.04-28.80
305.8987 Fn1
Flags: PBM
4σ 1.33e3
2.26e5
1.13e5
TCDF Std.
19.04-28.80
315.9419 Fn1
Flags: PB
4σ 1.53e4
4.64e4
2.32e4
TCDF Std.
19.04-28.80
317.9389 Fn1
Flags: PB
4σ 7.91e3
4.50e4
2.25e4
HxCDPE
19.04-28.80
375.8364 Fn1
Flags: PB
4σ 1.19e3
8.21e3
4.10e3


Rel. Int.
100%
0%
Abs. Int.
1.52e4
7.61e3
0.00e0
PeCDF-1
19.04-28.80
339.8597 Fn1
Flags: PB
4σ 1.72e3
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
0%
Abs. Int.
1.72e4
8.59e3
0.00e0
PeCDF-1
19.04-28.80
341.8568 Fn1
Flags: PB
4σ 1.18e3
20.0
22.0
24.0
26.0
28.0
RT
Rel. Int.
100%
0%
Abs. Int.
7.48e6
3.74e6
0.00e0
QC Check
19.04-28.80
316.9824 Fn1
Flags: -
20.0
22.0
24.0
26.0
28.0
RT


Rel. Int.
100%
PeCDF-2
28.82-33.81
339.8597 Fn2
Flags: PB
4σ 2.00e3
0%
Abs. Int.
1.20e4
6.02e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF-2
28.82-33.81
341.8568 Fn2
Flags: PB
4σ 1.92e3
0%
Abs. Int.
9.69e3
4.85e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.82-33.81
351.9000 Fn2
Flags: PB
4σ 1.65e3
0%
Abs. Int.
3.40e4
1.70e4
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.82-33.81
353.8970 Fn2
Flags: PB
4σ 6.40e3
0%
Abs. Int.
2.72e4
1.36e4
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
HpCDPE
28.82-33.81
409.7974 Fn2
Flags: PB
4σ 1.05e3
0%
Abs. Int.
7.42e3
3.71e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT

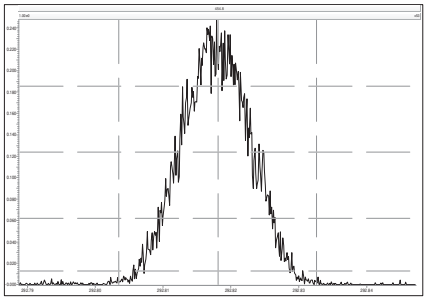

Rel. Int.
100%
HxCDF
33.82-37.91
373.8207 Fn3
Flags: PB
4σ 1.47e3
0%
Abs. Int.
1.08e4
5.39e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF
33.82-37.91
375.8178 Fn3
Flags: PB
4σ 8.42e2
0%
Abs. Int.
5.59e3
2.79e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF Std.
33.82-37.91
383.8639 Fn3
Flags: PB
4σ 2.15e3
0%
Abs. Int.
4.22e4
2.11e4
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF Std.
33.82-37.91
385.8610 Fn3
Flags: PB
4σ 3.77e3
0%
Abs. Int.
5.95e4
2.98e4
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
OCDPE
33.82-37.91
445.7555 Fn3
Flags: PB
4σ 1.18e3
0%
Abs. Int.
4.37e3
2.19e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT


Rel. Int.
100%
HpCDF
37.92-41.20
407.7818 Fn4
Flags: PB
4σ 8.44e2
0%
Abs. Int.
6.60e3
3.30e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF
37.92-41.20
409.7788 Fn4
Flags: PB
4σ 8.11e2
0%
Abs. Int.
6.85e3
3.43e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.92-41.20
417.8253 Fn4
Flags: PB
4σ 1.35e3
0%
Abs. Int.
2.69e4
1.34e4
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.92-41.20
419.8220 Fn4
Flags: PB
4σ 3.88e3
0%
Abs. Int.
5.47e4
2.74e4
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
NCDPE
37.92-41.20
479.7165 Fn4
Flags: PB
4σ 1.10e3
0%
Abs. Int.
7.92e3
3.96e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT

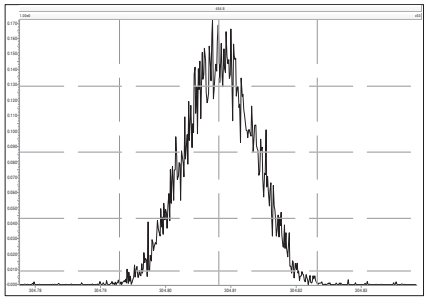

Rel. Int.
100%
OCDF
41.21-44.80
441.7428 Fn5
Flags: PB
4σ 1.24e3
0%
Abs. Int.
1.00e4
5.00e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDF
41.21-44.80
443.7398 Fn5
Flags: PB
4σ 2.02e3
0%
Abs. Int.
7.94e3
3.97e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDF Std.
41.21-44.80
453.7830 Fn5
Flags: PB
4σ 1.61e3
0%
Abs. Int.
3.37e4
1.68e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDF Std.
41.21-44.80
455.7801 Fn5
Flags: PB
4σ 3.01e3
0%
Abs. Int.
3.47e4
1.74e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
DCDPE
41.21-44.80
513.6775 Fn5
Flags: PB
4σ 1.02e3
0%
Abs. Int.
5.36e3
2.68e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT

Printed: Wednesday, August 12, 2020 18:57:00 Eastern Daylight Time

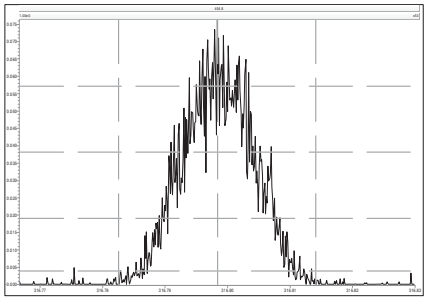
M 292.9824 R 12594



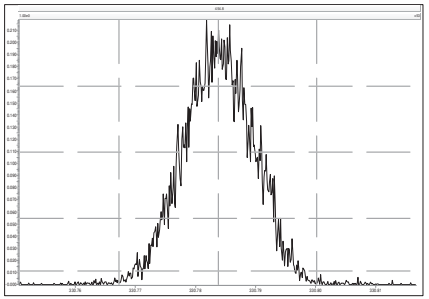
M 304.9824 R 13699



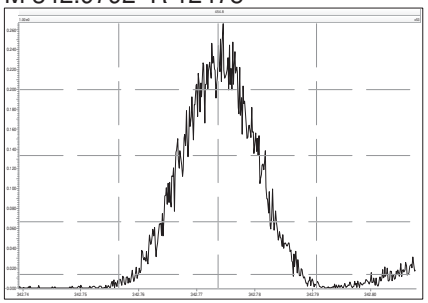
M 316.9824 R 13378



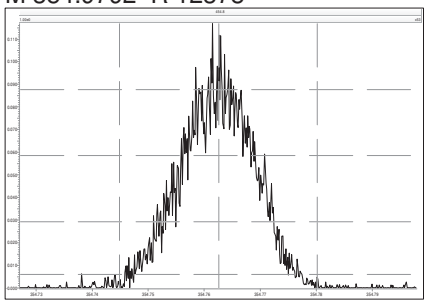
M 330.9792 R 12695



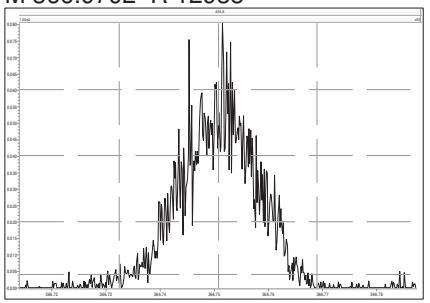
M 342.9792 R 12475



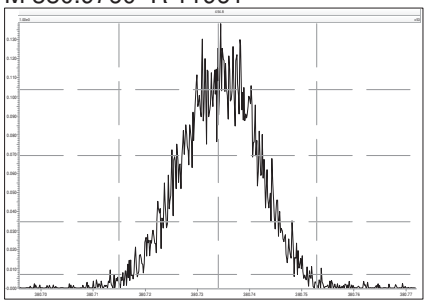
M 354.9792 R 12378



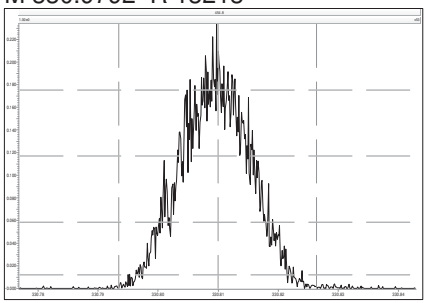
M 366.9792 R 12935



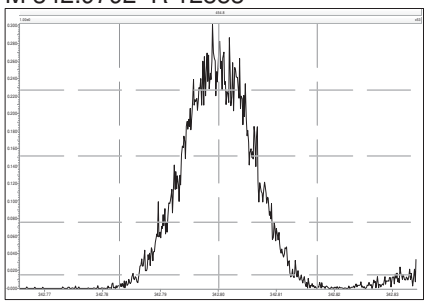
M 380.9760 R 11961



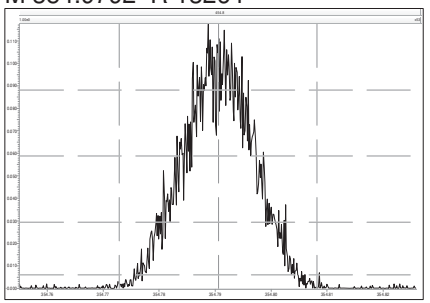
M 330.9792 R 13213



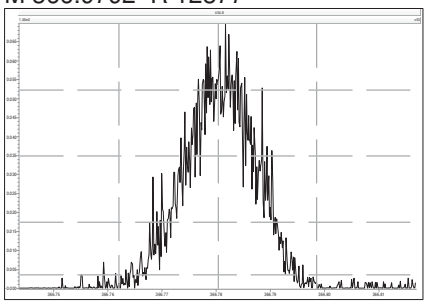
M 342.9792 R 12853



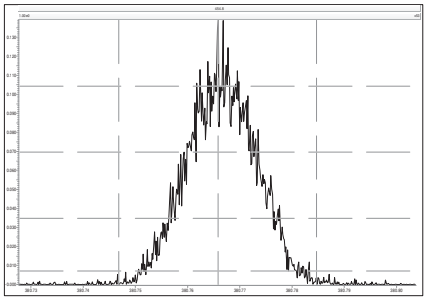
M 354.9792 R 13264



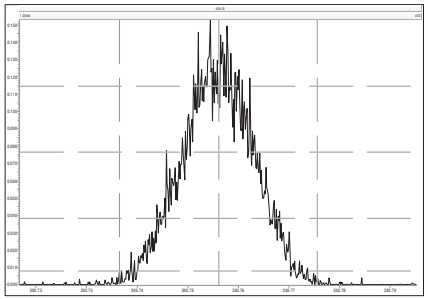
M 366.9792 R 12877



M 380.9760 R 12563



M 392.9760 R 12693



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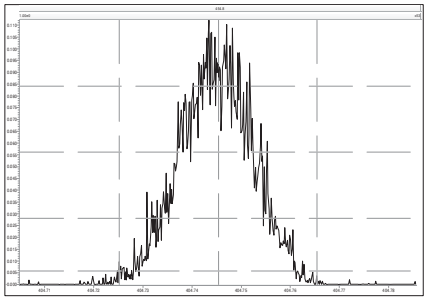

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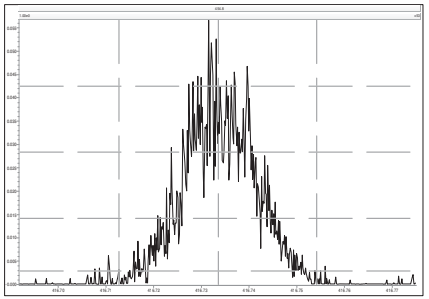

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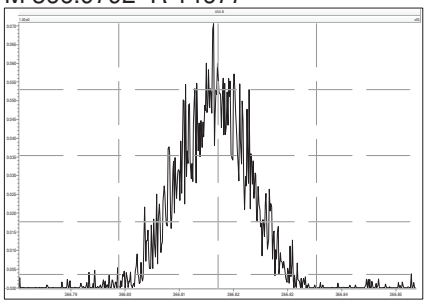

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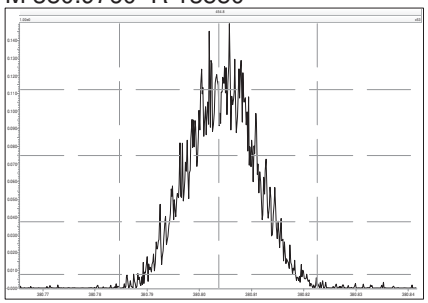

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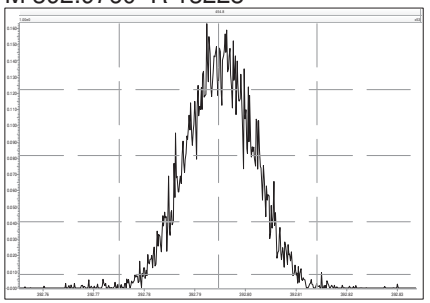

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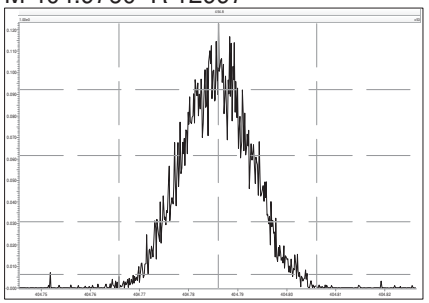

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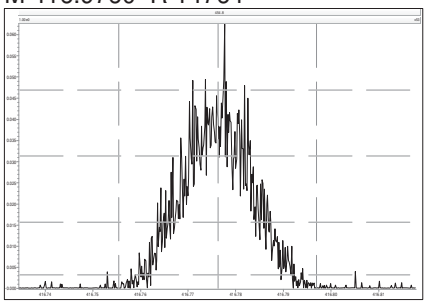
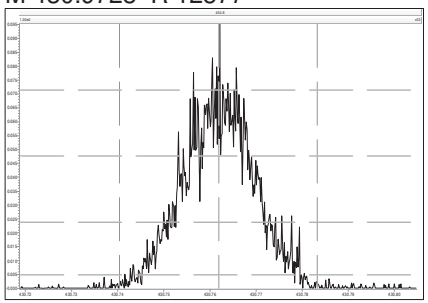
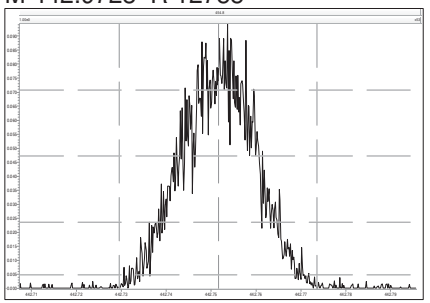


M 430.9728 R 12577



M 442.9728 R 12755



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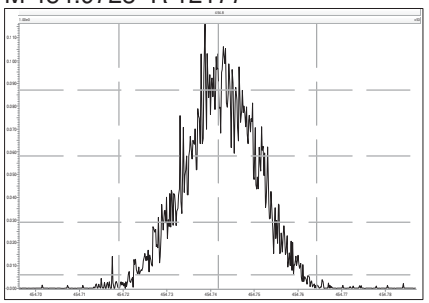

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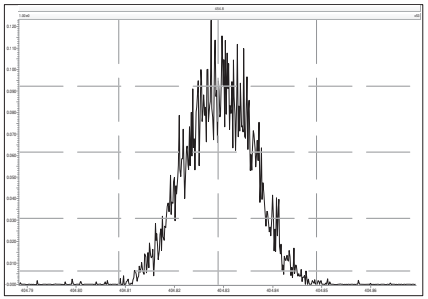

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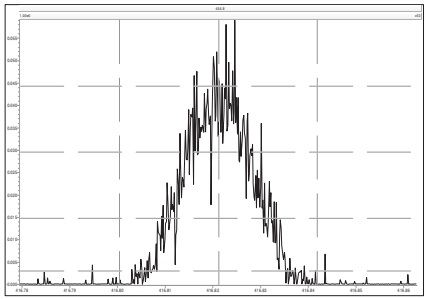

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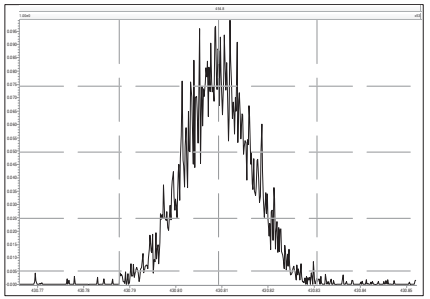

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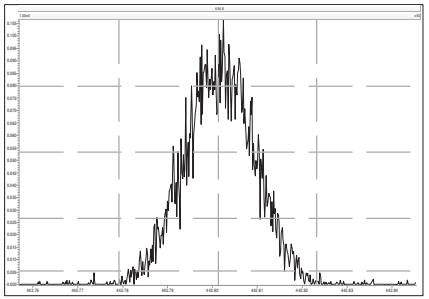
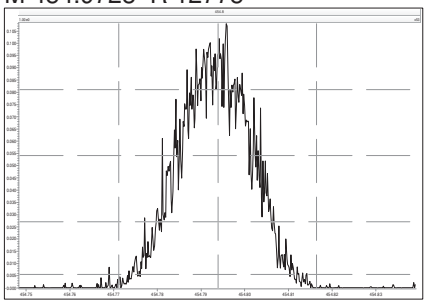


M 454.9728 R 12775



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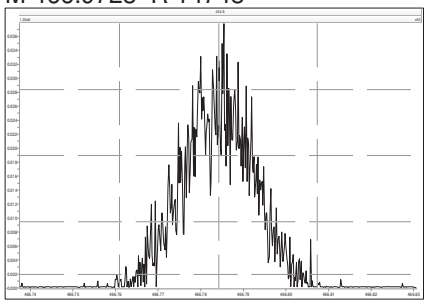

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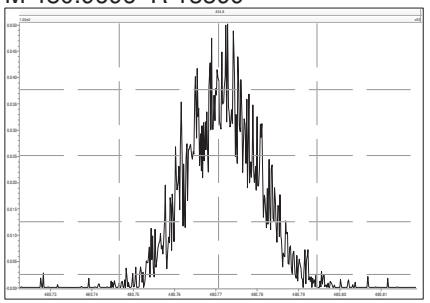

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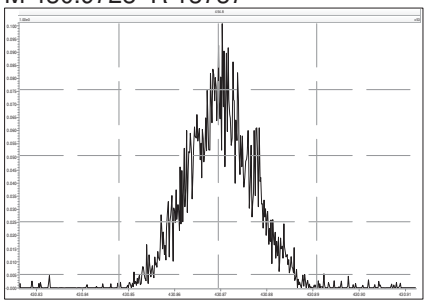

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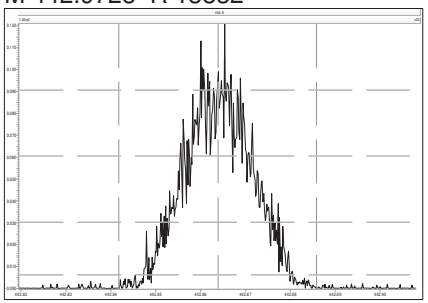

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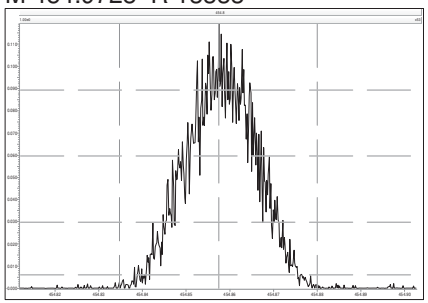

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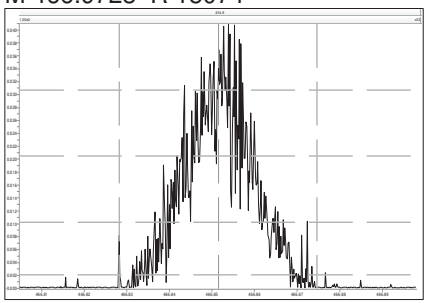

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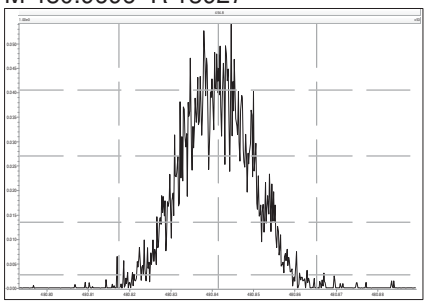

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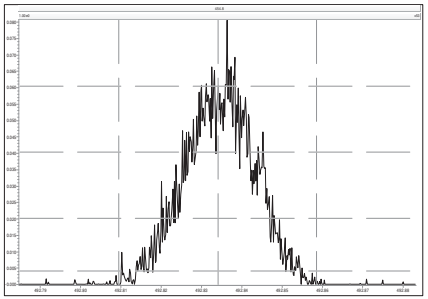

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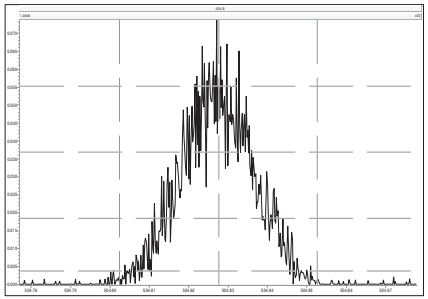

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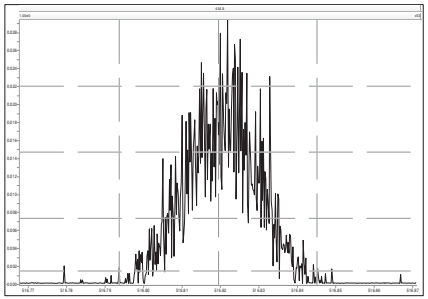

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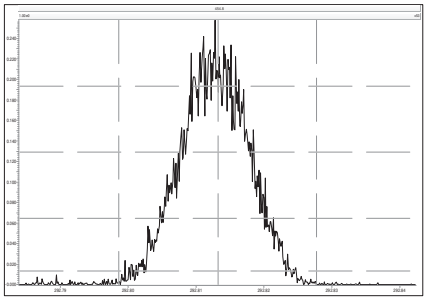

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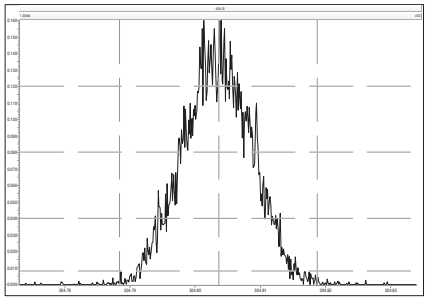

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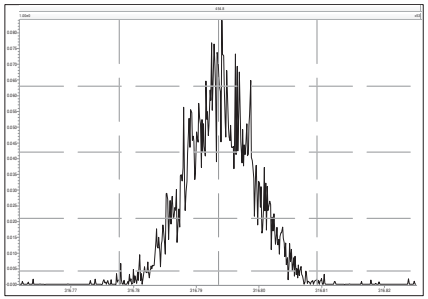

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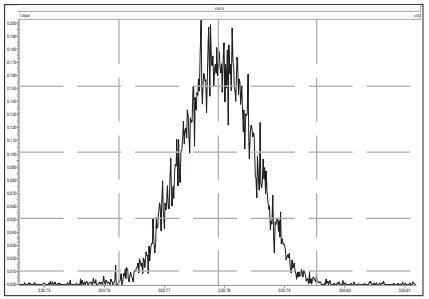

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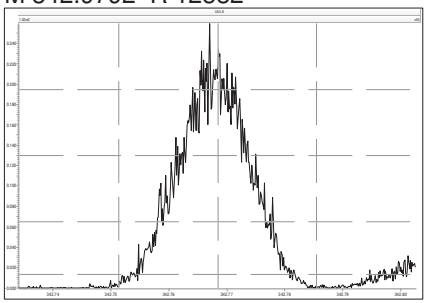
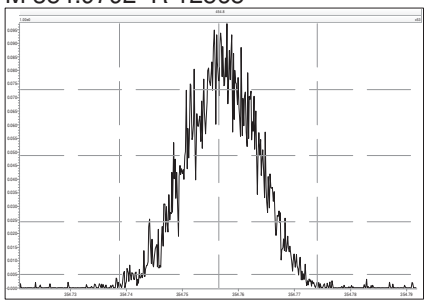


M 354.9792 R 12565



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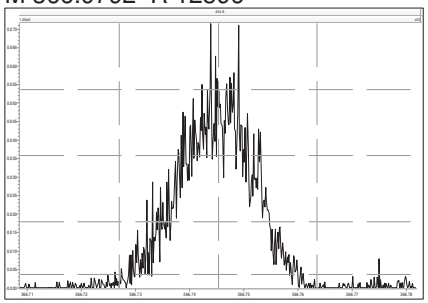

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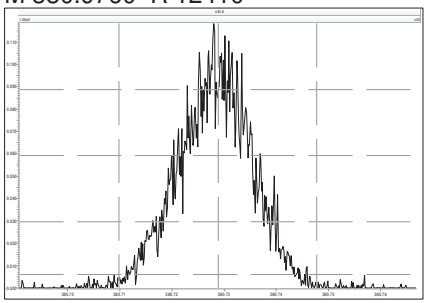

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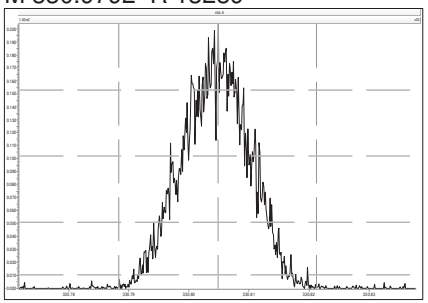

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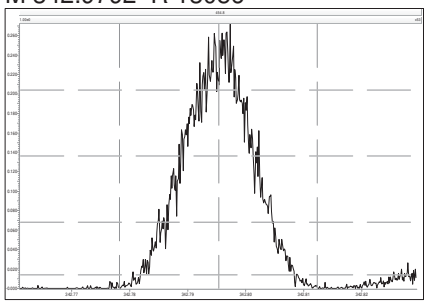
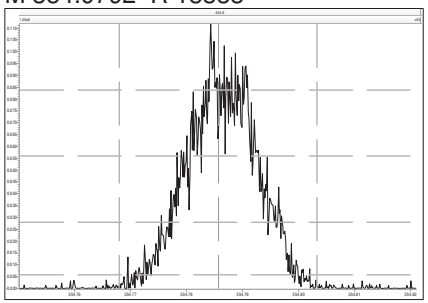


M 354.9792 R 13333



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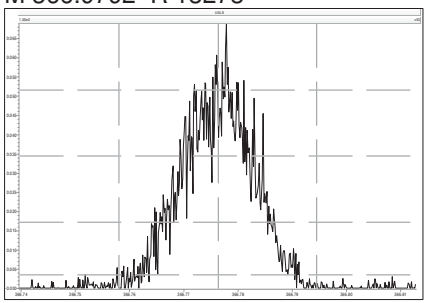

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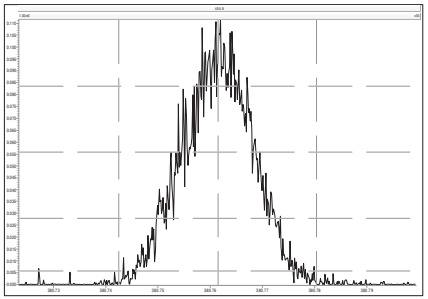

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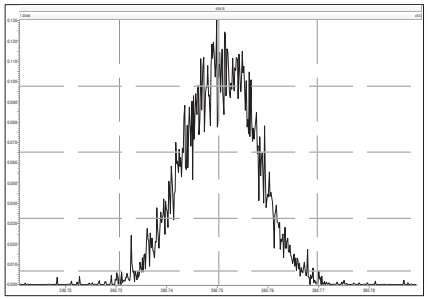

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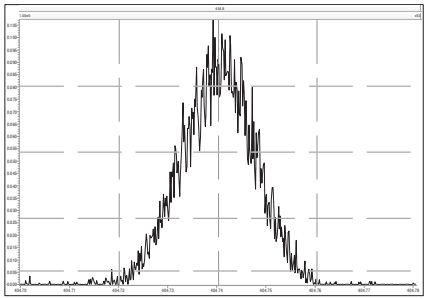

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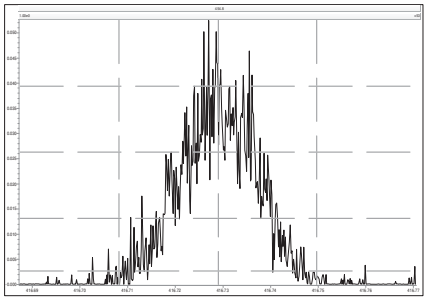

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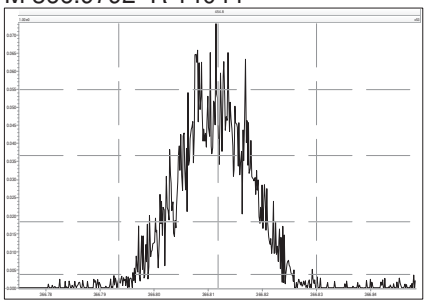

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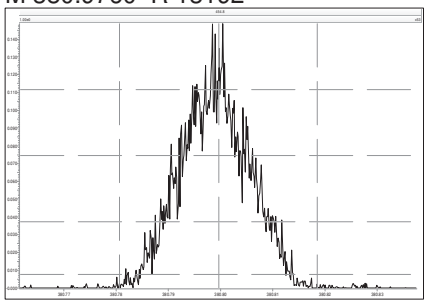

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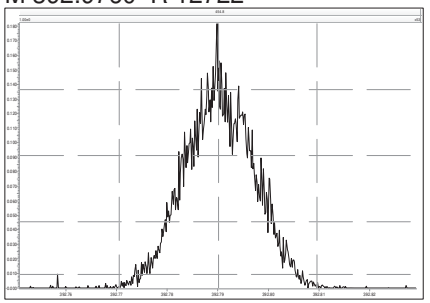

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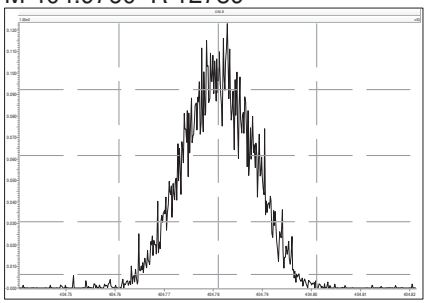

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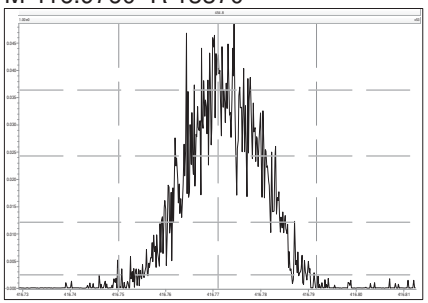

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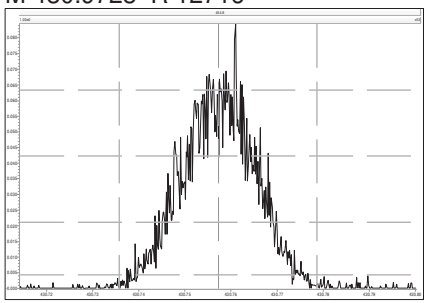

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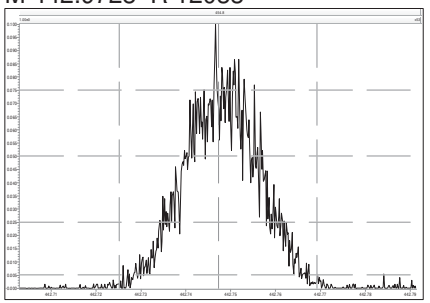

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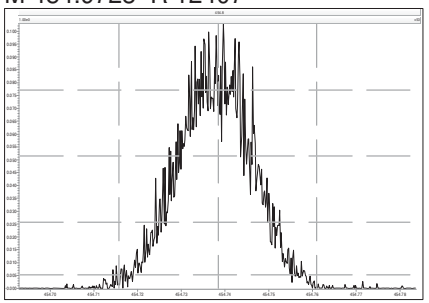

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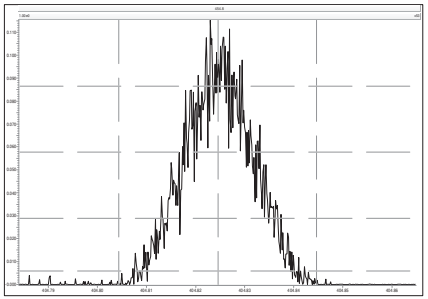

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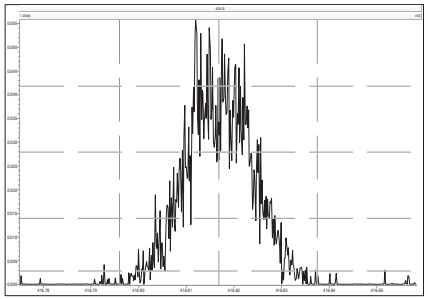

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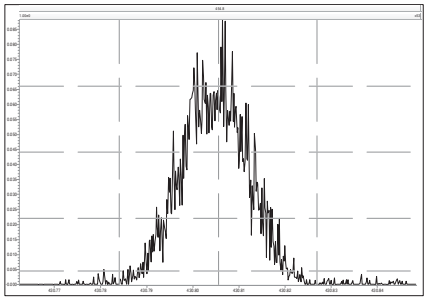

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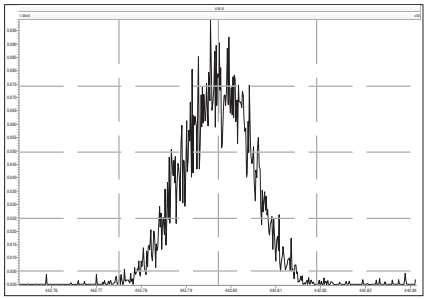

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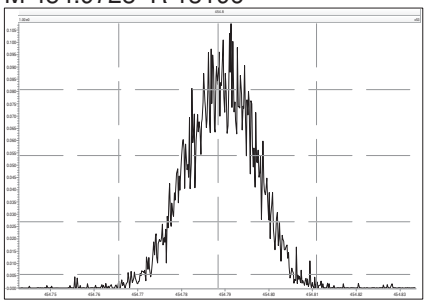

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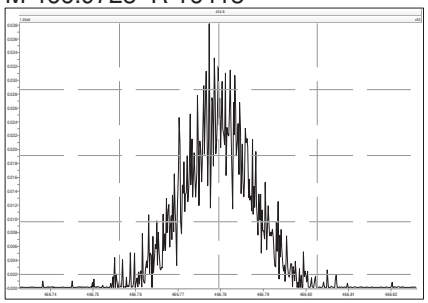

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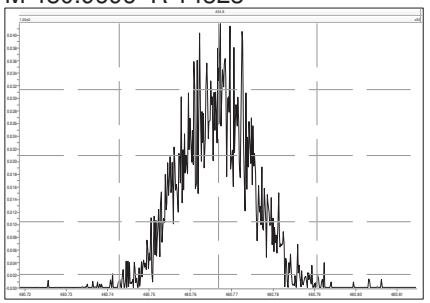

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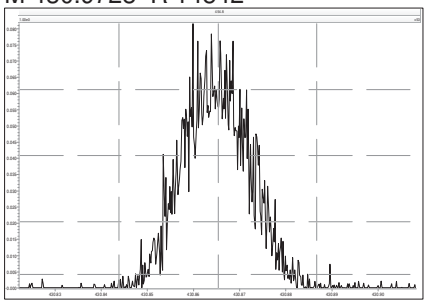

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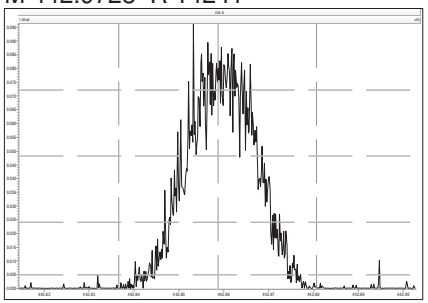

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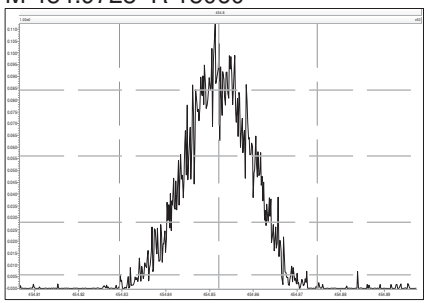

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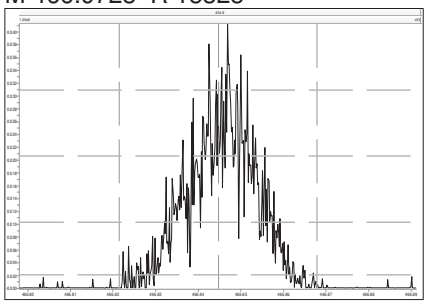

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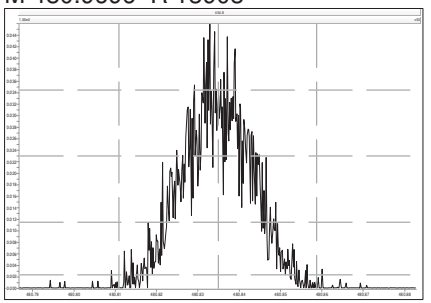

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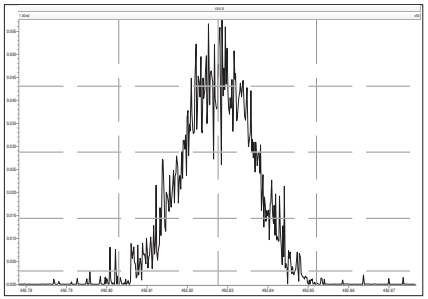

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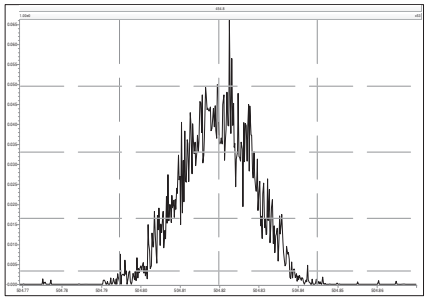

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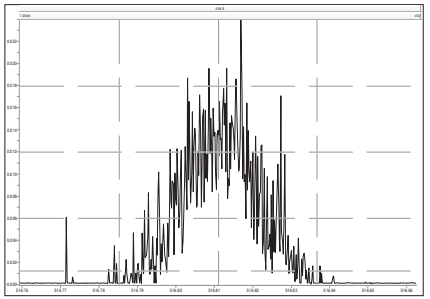

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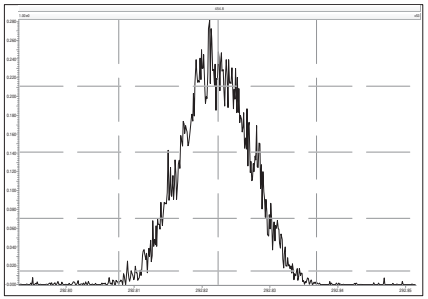

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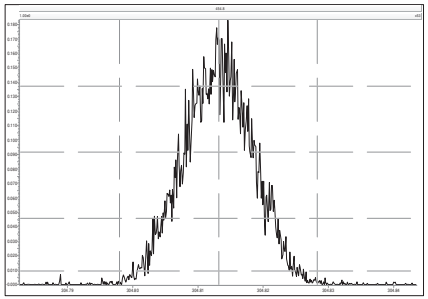

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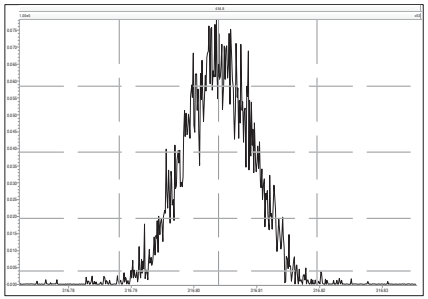

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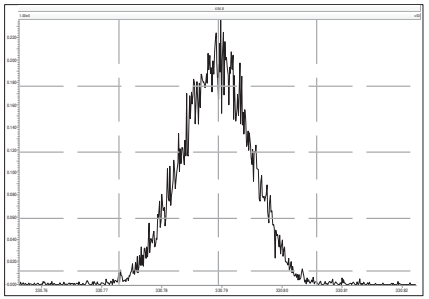

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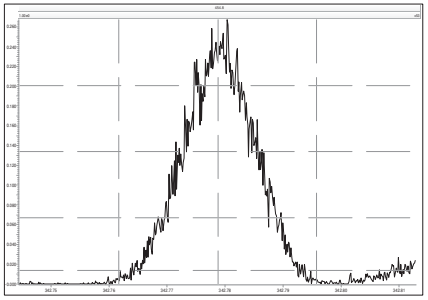

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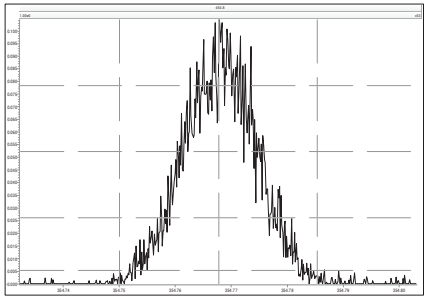

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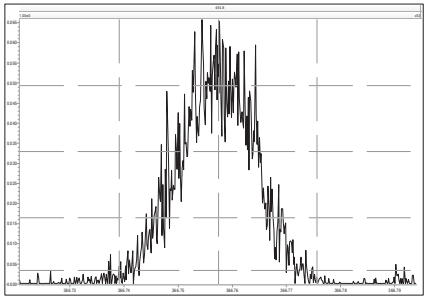

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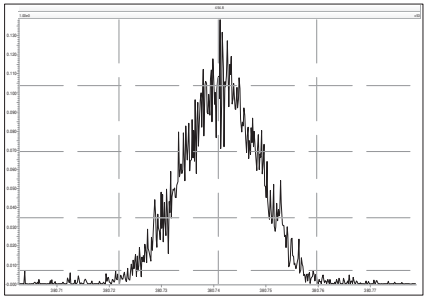

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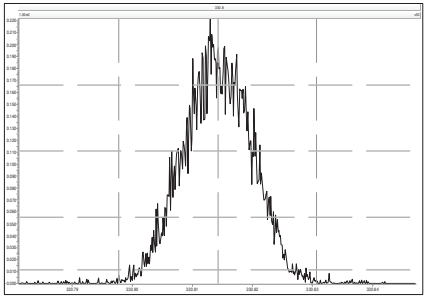

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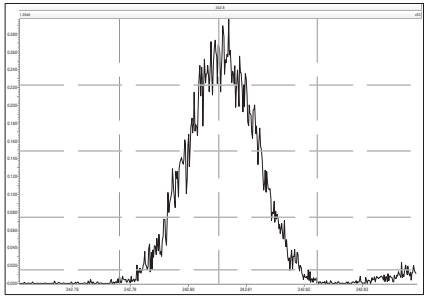

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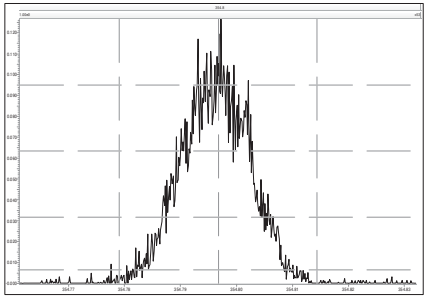

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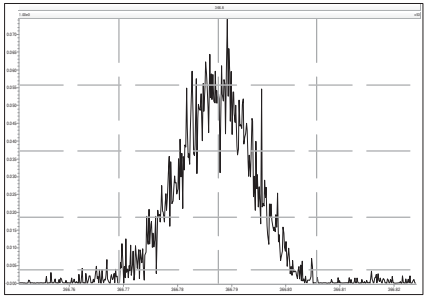

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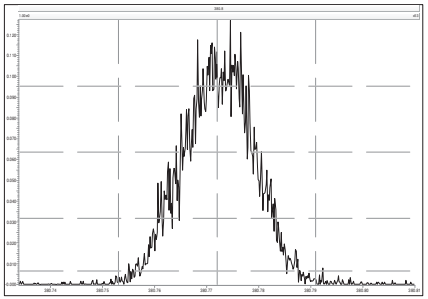

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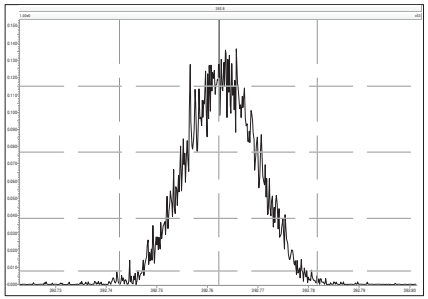

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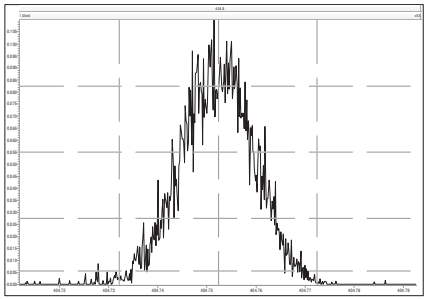

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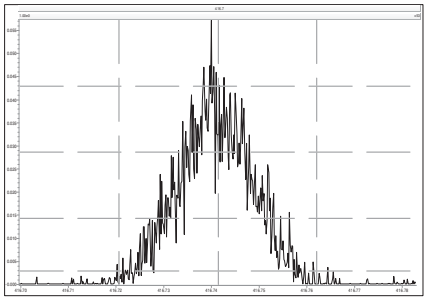

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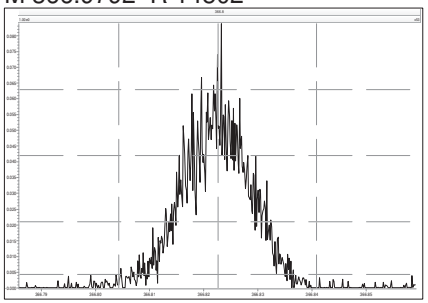

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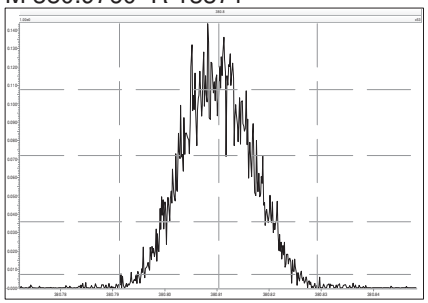

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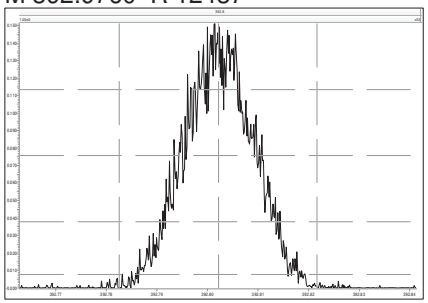

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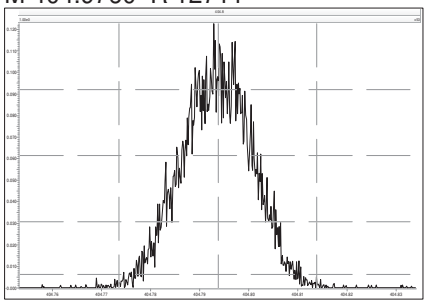

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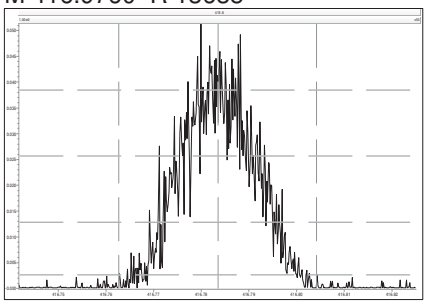

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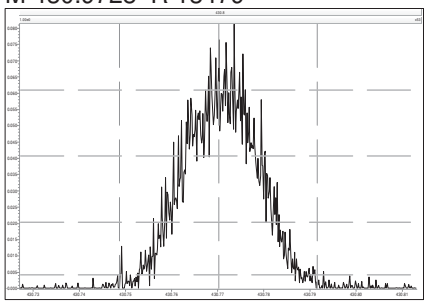

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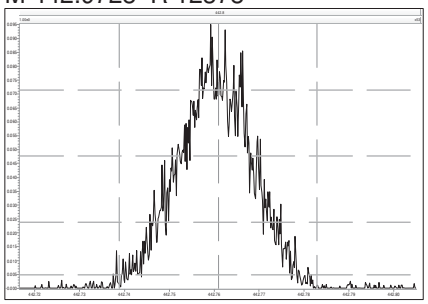

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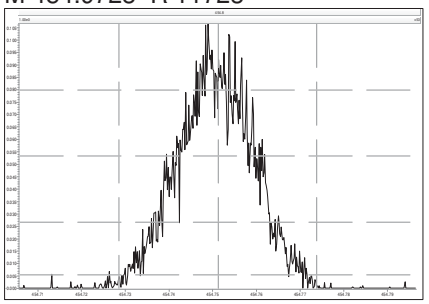

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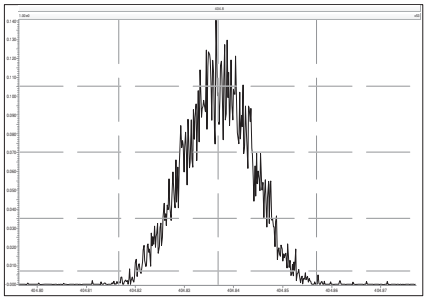

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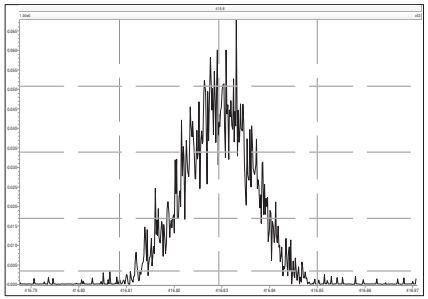

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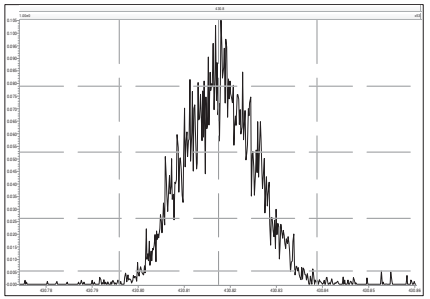

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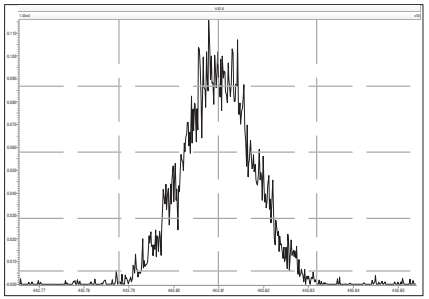

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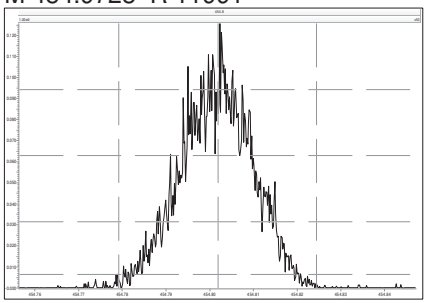

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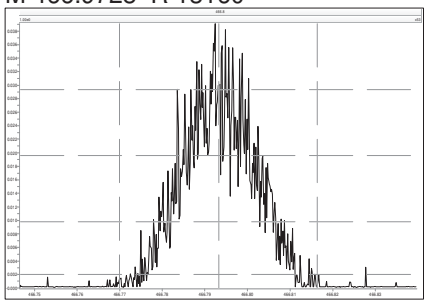

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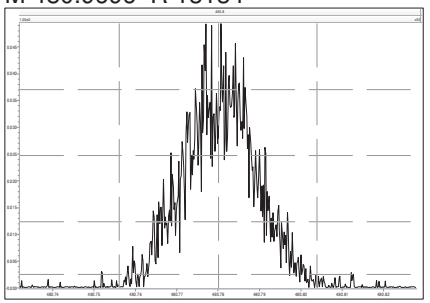

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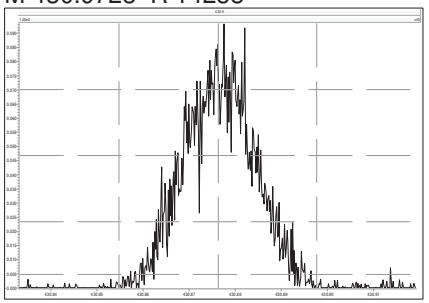

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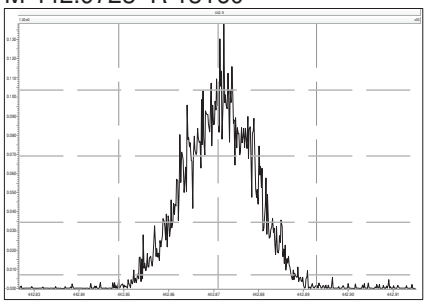

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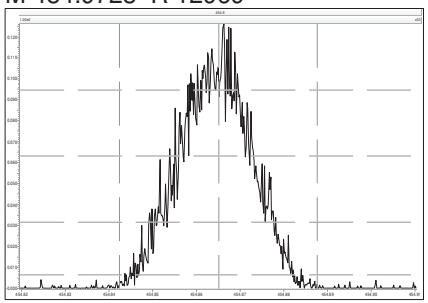

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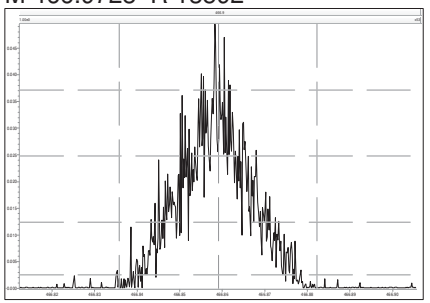

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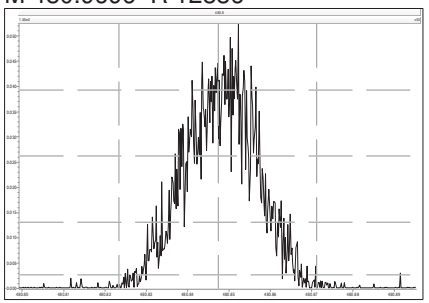

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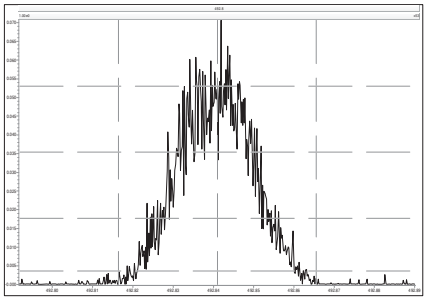

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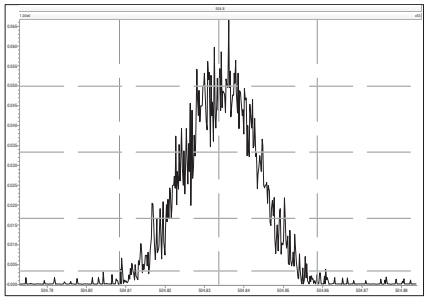

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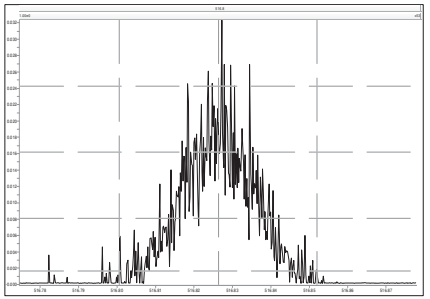


Dioxin/Furan ICAL Summary — SGS North America — Processed: 29 Aug 2019 16:21

ICAL: HRMS3_DF_10122018_28AUG2019
Data Acquired: 28-Aug-2019

Name	Mean	% RSD	190828C06 0.25 pg/uL CS0	190828C07 0.5 pg/uL CS1	190828C08 2 pg/uL CS2	190828C10 10 pg/uL CS3	190828C11 40 pg/uL CS4	190828C12 200 pg/uL CS5	190828C13 500 pg/uL CS6
2378-TCDD	1.19	5.5%	1.29	1.27	1.16	1.18	1.14	1.14	1.14
12378-PeCDD	0.98	5.6%	0.87	1.01	1.04	1.00	0.97	1.00	1.00
123478-HxCDD	1.02	3.6%	0.97	1.00	1.02	1.08	1.01	1.05	1.03
123678-HxCDD	1.09	4.2%	1.01	1.14	1.14	1.08	1.09	1.06	1.08
123789-HxCDD	0.97	1.8%	0.97	0.96	0.98	1.00	0.97	0.96	0.95
1234678-HpCDD	0.98	5.1%	0.92	0.94	1.03	1.05	0.93	0.99	0.98
OCDD	1.07	3.7%	1.16	1.07	1.05	1.06	1.05	1.06	1.05
2378-TCDF	1.01	2.2%	0.99	1.00	1.02	1.05	1.01	0.99	1.02
12378-PeCDF	0.96	1.7%	0.98	0.94	0.99	0.95	0.95	0.96	0.97
23478-PeCDF	0.99	1.5%	0.99	0.97	1.01	0.98	0.97	0.98	1.00
123478-HxCDF	1.21	1.9%	1.17	1.19	1.23	1.22	1.22	1.21	1.22
123678-HxCDF	1.11	1.2%	1.09	1.09	1.13	1.12	1.10	1.11	1.11
234678-HxCDF	1.12	3.7%	1.12	1.05	1.18	1.16	1.11	1.11	1.08
123789-HxCDF	1.11	4.3%	1.10	1.02	1.10	1.17	1.10	1.12	1.15
1234678-HpCDF	1.32	3.8%	1.37	1.40	1.33	1.35	1.27	1.27	1.28
1234789-HpCDF	1.26	1.0%	1.25	1.26	1.27	1.26	1.26	1.25	1.23
OCDF	1.03	2.4%	1.05	1.02	1.07	1.05	1.01	1.01	1.02
ES 2378-TCDD	0.99	2.5%	1.00	0.95	0.96	0.98	1.00	1.01	1.02
ES 12378-PeCDD	0.83	7.0%	0.82	0.75	0.80	0.81	0.83	0.86	0.94
ES 123478-HxCDD	0.95	7.9%	0.93	0.90	0.90	0.89	0.92	0.99	1.10
ES 123678-HxCDD	0.98	7.9%	0.95	0.93	0.91	0.94	0.94	1.04	1.12
ES 123789-HxCDD	1.14	8.5%	1.10	1.09	1.06	1.08	1.10	1.20	1.33
ES 1234678-HpCDD	0.90	7.3%	0.89	0.86	0.85	0.83	0.91	0.92	1.02
ES OCDD	0.63	7.7%	0.63	0.61	0.61	0.57	0.60	0.64	0.72
ES 2378-TCDF	1.00	3.3%	1.00	0.99	0.98	0.94	0.98	1.03	1.04
ES 12378-PeCDF	0.83	6.6%	0.82	0.78	0.80	0.79	0.81	0.87	0.93
ES 23478-PeCDF	0.81	6.4%	0.81	0.77	0.76	0.76	0.79	0.84	0.90
ES 123478-HxCDF	1.12	7.8%	1.09	1.08	1.09	1.07	1.06	1.16	1.31
ES 123678-HxCDF	1.33	8.0%	1.27	1.26	1.29	1.28	1.28	1.38	1.56
ES 234678-HxCDF	1.21	8.4%	1.17	1.16	1.13	1.15	1.18	1.25	1.42
ES 123789-HxCDF	1.12	8.8%	1.10	1.04	1.05	1.03	1.11	1.19	1.30
ES 1234678-HpCDF	0.92	9.5%	0.90	0.87	0.87	0.86	0.91	0.97	1.10
ES 1234789-HpCDF	0.82	8.1%	0.80	0.77	0.78	0.78	0.81	0.85	0.96
ES OCDF	0.78	9.1%	0.76	0.76	0.75	0.70	0.75	0.81	0.92

ICAL: HRMS3_DF_10122018_28AUG2019
Data Acquired: 28-Aug-2019

Name	Mean	% RSD	190828C06 0.25 pg/uL CS0	190828C07 0.5 pg/uL CS1	190828C08 2 pg/uL CS2	190828C10 10 pg/uL CS3	190828C11 40 pg/uL CS4	190828C12 200 pg/uL CS5	190828C13 500 pg/uL CS6
CS 37Cl-2378-TCDD	1.12	3.1%	-	1.17	1.11	1.08	1.11	1.13	-
CS 12347-PeCDD	0.71	2.7%	0.73	0.68	0.71	0.70	0.72	0.71	0.74
CS 12346-PeCDF	0.81	1.7%	0.83	0.80	0.81	0.79	0.81	0.80	0.82
CS 123469-HxCDF	1.12	3.1%	1.12	1.12	1.15	1.08	1.09	1.11	1.19
CS 1234689-HpCDF	0.90	4.0%	0.88	0.89	0.90	0.85	0.89	0.89	0.97
SS 37Cl-2378-TCDD	1.14	4.7%	-	1.23	1.15	1.09	1.11	1.12	-
SS 12347-PeCDD	0.86	4.9%	0.89	0.90	0.89	0.87	0.87	0.82	0.79
SS 12346-PeCDF	0.98	5.8%	1.01	1.02	1.02	1.00	0.99	0.91	0.88
SS 123469-HxCDF	0.85	5.5%	0.88	0.89	0.89	0.85	0.85	0.81	0.76
SS 1234689-HpCDF	0.97	6.0%	0.98	1.03	1.04	0.99	0.99	0.91	0.88
AS 1368-TCDD	1.12	2.1%	1.11	1.11	1.11	1.17	1.11	1.10	1.13
AS 1368-TCDF	1.19	1.6%	1.18	1.21	1.20	1.22	1.19	1.17	1.17
OCDD-a			-	-	-	-	-	-	-
OCDF-a			-	-	-	-	-	-	-
Totals									
Total TCDD	1.19	5.5%	1.29	1.27	1.16	1.18	1.14	1.14	1.14
Total PeCDD	0.98	5.6%	0.87	1.01	1.04	1.00	0.97	1.00	1.00
Total HxCDD	1.03	2.2%	0.98	1.04	1.05	1.05	1.02	1.02	1.02
Total HpCDD	0.98	5.1%	0.92	0.94	1.03	1.05	0.93	0.99	0.98
Total TCDF	1.01	2.2%	0.99	1.00	1.02	1.05	1.01	0.99	1.02
Total PeCDF	0.98	1.5%	0.98	0.96	1.00	0.97	0.96	0.97	0.98
Total HxCDF	1.13	2.2%	1.12	1.09	1.16	1.17	1.13	1.14	1.14
Total HpCDF	1.29	2.2%	1.31	1.33	1.30	1.30	1.26	1.26	1.26
FS 1278-TCDD	1.02	1.1%	1.03	1.02	1.03	1.03	1.03	1.00	1.01
FS 12478-PeCDD	0.98	5.4%	1.01	1.03	1.02	1.00	1.01	0.93	0.89
FS 123468-HxCDD	1.17	5.9%	1.20	1.23	1.19	1.23	1.16	1.12	1.04
FS 1234679-HpCDD	1.14	3.5%	1.16	1.17	1.16	1.18	1.13	1.11	1.07
TS 1378-TCDD	1.09	2.7%	1.08	1.12	1.11	1.13	1.08	1.07	1.06

Instrument: HRMS3 (AutoSpec-Ultima) MS Experiment: df_cl4-8_db5 GC Program: df_db5

#	Datafile	Vial#	Lab ID	Wt/Vol	Client/Sample ID	Analyst(s)	Checkcode	Acq Date	Acq Time
3	190828C03	3	SBS_190828_DF_CA	1.00	20-61-1	PSW	563-064	28-Aug-2019	11:02:02
6	190828C06	5	CS0_190828_DF_CB	1.00	20-282-3	PSW	949-819	28-Aug-2019	13:26:42
7	190828C07	6	CS1_190828_DF_CB	1.00	20-282-2	PSW	130-956	28-Aug-2019	14:16:56
8	190828C08	7	CS2_190828_DF_CA	1.00	20-282-1	PSW	378-487	28-Aug-2019	15:06:37
10	190828C10	1	CS3_190828_DF_CB	1.00	20-449-3	PSW	536-910	28-Aug-2019	17:00:21
11	190828C11	8	CS4_190828_DF_CA	1.00	20-281-2	PSW	139-753	28-Aug-2019	17:47:40
12	190828C12	9	CS5_190828_DF_CA	1.00	20-281-1	PSW	752-004	28-Aug-2019	18:35:01
13	190828C13	10	CS6_190828_DF_CA	1.00	20-280-4	PSW	807-000	28-Aug-2019	19:22:22
1	190829C01	1	CS3_190829_DF_CA	1.00	20-449-3	PSW	845-140	29-Aug-2019	08:53:00
3	190829C03	12	OPR1_190829_DF-RJ	1.00	ICV SIL# 22-5-12	PSW	573-892	29-Aug-2019	10:35:56

alternate OCTA not calibrated

REVIEWED
By Paul Walton at 4:33 pm, Aug 29, 2019

APPROVED
Carla_Lyon , 13:58:03, 09/03/2019

Dioxin/Furan ICAL Concentrations	SGS Environmental Services							
	Concentration							
Individual Native Standards	CS0 pg/uL	CS1 pg/uL	CS2 pg/uL	CS3 pg/uL	CS4 pg/uL	CS5 pg/uL	CS6 pg/uL	Working Standards pg/uL
2378-TCDD	0.25	0.5	2	10	40	200	500	1
12378-PeCDD	1.25	2.5	10	50	200	1000	2500	1
123478-HxCDD	1.25	2.5	10	50	200	200	2500	1
123678-HxCDD	1.25	2.5	10	50	200	200	2500	1
123789-HxCDD	1.25	2.5	10	50	200	200	2500	1
1234678-HpCDD	1.25	2.5	10	50	200	200	2500	1
OCDD	2.5	5	20	100	400	2000	5000	1
2378-TCDF	0.25	0.5	2	10	40	200	500	1
12378-PeCDF	1.25	2.5	10	50	200	1000	2500	1
23478-PeCDF	1.25	2.5	10	50	200	200	2500	1
123478-HxCDF	1.25	2.5	10	50	200	200	2500	1
123678-HxCDF	1.25	2.5	10	50	200	200	2500	1
234678-HxCDF	1.25	2.5	10	50	200	200	2500	1
123789-HxCDF	1.25	2.5	10	50	200	200	2500	1
1234678-HpCDF	1.25	2.5	10	50	200	200	2500	1
1234789-HpCDF	1.25	2.5	10	50	200	200	2500	1
OCDF	2.5	5	20	100	400	2000	5000	1
Extraction Standards								
ES 2378-TCDD	100	100	100	100	100	100	100	10
ES 12378-PeCDD	100	100	100	100	100	100	100	10
ES 123478-HxCDD	100	100	100	100	100	100	100	10
ES 123678-HxCDD	100	100	100	100	100	100	100	10
ES 123789-HxCDD	100	100	100	100	100	100	100	10
ES 1234678-HpCDD	100	100	100	100	100	100	100	10
ES OCDD	200	200	200	200	200	200	200	10
ES 2378-TCDF	100	100	100	100	100	100	100	10
ES 12378-PeCDF	100	100	100	100	100	100	100	10
ES 23478-PeCDF	100	100	100	100	100	100	100	10
ES 123478-HxCDF	100	100	100	100	100	100	100	10
ES 123678-HxCDF	100	100	100	100	100	100	100	10
ES 234678-HxCDF	100	100	100	100	100	100	100	10
ES 123789-HxCDF	100	100	100	100	100	100	100	10
ES 1234678-HpCDF	100	100	100	100	100	100	100	10
ES 1234789-HpCDF	100	100	100	100	100	100	100	10
ES OCDF	200	200	200	200	200	200	200	10
Cleanup/Sampling Standards								
CS 37Cl-2378-TCDD	-	0.5	2	10	40	200	-	4
CS 12347-PeCDD	100	100	100	100	100	100	100	10
CS 12346-PeCDF	100	100	100	100	100	100	100	10
CS 123469-HxCDF	100	100	100	100	100	100	100	10
CS 1234689-HpCDF	100	100	100	100	100	100	100	10
Alternate Standards								
AS 1368-TCDD	100	100	100	100	100	100	100	10
AS 1368-TCDF	100	100	100	100	100	100	100	10
Shipping Standards								
FS 1278-TCDD	100	100	100	100	100	100	100	100
FS 12478-PeCDD	100	100	100	100	100	100	100	100
FS 123468-HxCDD	100	100	100	100	100	100	100	100
FS 1234679-HpCDD	100	100	100	100	100	100	100	100
TS 1378-TCDD	100	100	100	100	100	100	100	100
Injection Standards								
1234 TCDD 13C12	100	100	100	100	100	100	100	10
1234 TCDF 13C12	100	100	100	100	100	100	100	10
123467 HxCDD 13C12	50	50	50	50	50	50	50	5

Dioxin/Furan STD Association	SGS Environmental Services

Individual Native Standards

2378-TCDD	ES 2378-TCDD
12378-PeCDD	ES 12378-PeCDD
123478-HxCDD	ES 123478-HxCDD
123678-HxCDD	ES 123678-HxCDD
123789-HxCDD	ES 123789-HxCDD
1234678-HpCDD	ES 1234678-HpCDD
OCDD	ES OCDD
2378-TCDF	ES 2378-TCDF
12378-PeCDF	ES 12378-PeCDF
23478-PeCDF	ES 23478-PeCDF
123478-HxCDF	ES 123478-HxCDF
123678-HxCDF	ES 123678-HxCDF
234678-HxCDF	ES 234678-HxCDF
123789-HxCDF	ES 123789-HxCDF
1234678-HpCDF	ES 1234678-HpCDF
1234789-HpCDF	ES 1234789-HpCDF
OCDF	ES OCDF

Cleanup/Sampling Standards

CS 37Cl-2378-TCDD	1234 TCDD 13C12
CS 12347-PeCDD	1234 TCDD 13C12
CS 12346-PeCDF	1234 TCDF 13C12
CS 123469-HxCDF	123467 HxCDD 13C12
CS 1234689-HpCDF	123467 HxCDD 13C12

Alternate Standards

AS 1368-TCDD	1234 TCDD 13C12
AS 1368-TCDF	1234 TCDF 13C12

Shipping Standards

FS 1278-TCDD	ES 2378-TCDD
FS 12478-PeCDD	ES 12378-PeCDD
FS 123468-HxCDD	ES 123478-HxCDD
FS 1234679-HpCDD	ES 1234678-HpCDD
TS 1378-TCDD	ES 2378-TCDD

Extraction Standards

ES 2378-TCDD	1234 TCDD 13C12
ES 12378-PeCDD	1234 TCDD 13C12
ES 123478-HxCDD	123467 HxCDD 13C12
ES 123678-HxCDD	123467 HxCDD 13C12
ES 123789-HxCDD	123467 HxCDD 13C12
ES 1234678-HpCDD	123467 HxCDD 13C12
ES OCDD	123467 HxCDD 13C12
ES 2378-TCDF	1234 TCDF 13C12
ES 12378-PeCDF	1234 TCDF 13C12
ES 23478-PeCDF	1234 TCDF 13C12
ES 123478-HxCDF	123467 HxCDD 13C12
ES 123678-HxCDF	123467 HxCDD 13C12
ES 234678-HxCDF	123467 HxCDD 13C12
ES 123789-HxCDF	123467 HxCDD 13C12
ES 1234678-HpCDF	123467 HxCDD 13C12
ES 1234789-HpCDF	123467 HxCDD 13C12
ES OCDF	123467 HxCDD 13C12

Injection Standards

1234 TCDD 13C12
1234 TCDF 13C12
123467 HxCDD 13C12

Dioxin/Furan QC Summary		Acq'd: 28 Aug 2019 13:26 PSW				ICAL: HRMS3_DF_10122018_28AUG2019	
Lab ID: CS0_190828_DF_CB		UTP: 29-Aug-2019 16:20:40 PSW				Checkcode: 949-819-RXT	
Sample ID: 20-282-3		Report: 29 Aug 2019 16:28 pw				Datafile: 190828C06	
Name	**RT**	**Response**	**RA**	**OK**	**Ref. RRFs**	**Calc. RRFs**	**Dev'n**
2378-TCDD	27.73	1.94E+05	0.87	Y	1.19	1.29	9%
12378-PeCDD	33.24	5.30E+05	1.44	Y	0.98	0.87	-12%
123478-HxCDD	37.22	4.95E+05	1.13	Y	1.02	0.97	-6%
123678-HxCDD	37.34	5.34E+05	1.09	Y	1.09	1.01	-7%
123789-HxCDD	37.66	5.94E+05	1.27	Y	0.97	0.97	0%
1234678-HpCDD	40.57	4.53E+05	1.05	Y	0.98	0.92	-6%
OCDD	43.35	8.06E+05	0.85	Y	1.07	1.16	8%
2378-TCDF	26.83	2.04E+05	0.67	Y	1.01	0.99	-2%
12378-PeCDF	31.75	8.29E+05	1.51	Y	0.96	0.98	1%
23478-PeCDF	32.88	8.22E+05	1.77	Y	0.99	0.99	0%
123478-HxCDF	36.22	7.05E+05	1.24	Y	1.21	1.17	-3%
123678-HxCDF	36.36	7.66E+05	1.17	Y	1.11	1.09	-2%
234678-HxCDF	37.03	7.25E+05	1.13	Y	1.12	1.12	0%
123789-HxCDF	38.03	6.68E+05	1.23	Y	1.11	1.10	-1%
1234678-HpCDF	39.58	6.84E+05	1.13	Y	1.32	1.37	4%
1234789-HpCDF	41.01	5.58E+05	0.93	Y	1.26	1.25	0%
OCDF	43.50	8.88E+05	0.93	Y	1.03	1.05	2%
ES 2378-TCDD	27.71	5.98E+07	0.79	Y	0.99	1.00	1%
ES 12378-PeCDD	33.22	4.89E+07	1.56	Y	0.83	0.82	-1%
ES 123478-HxCDD	37.21	4.10E+07	1.24	Y	0.95	0.93	-2%
ES 123678-HxCDD	37.33	4.22E+07	1.25	Y	0.98	0.95	-2%
ES 123789-HxCDD	37.64	4.88E+07	1.26	Y	1.14	1.10	-3%
ES 1234678-HpCDD	40.56	3.96E+07	1.06	Y	0.90	0.89	0%
ES OCDD	43.34	5.56E+07	0.93	Y	0.63	0.63	0%
ES 2378-TCDF	26.8	8.23E+07	0.80	Y	1.00	1.00	1%
ES 12378-PeCDF	31.73	6.78E+07	1.53	Y	0.83	0.82	-1%
ES 23478-PeCDF	32.86	6.67E+07	1.52	Y	0.81	0.81	1%
ES 123478-HxCDF	36.2	4.84E+07	0.53	Y	1.12	1.09	-3%
ES 123678-HxCDF	36.35	5.64E+07	0.53	Y	1.33	1.27	-4%
ES 234678-HxCDF	37.01	5.17E+07	0.53	Y	1.21	1.17	-3%
ES 123789-HxCDF	38.02	4.85E+07	0.53	Y	1.12	1.10	-2%
ES 1234678-HpCDF	39.57	3.99E+07	0.46	Y	0.92	0.90	-3%
ES 1234789-HpCDF	41	3.56E+07	0.46	Y	0.82	0.80	-2%
ES OCDF	43.49	6.77E+07	0.89	Y	0.78	0.76	-2%

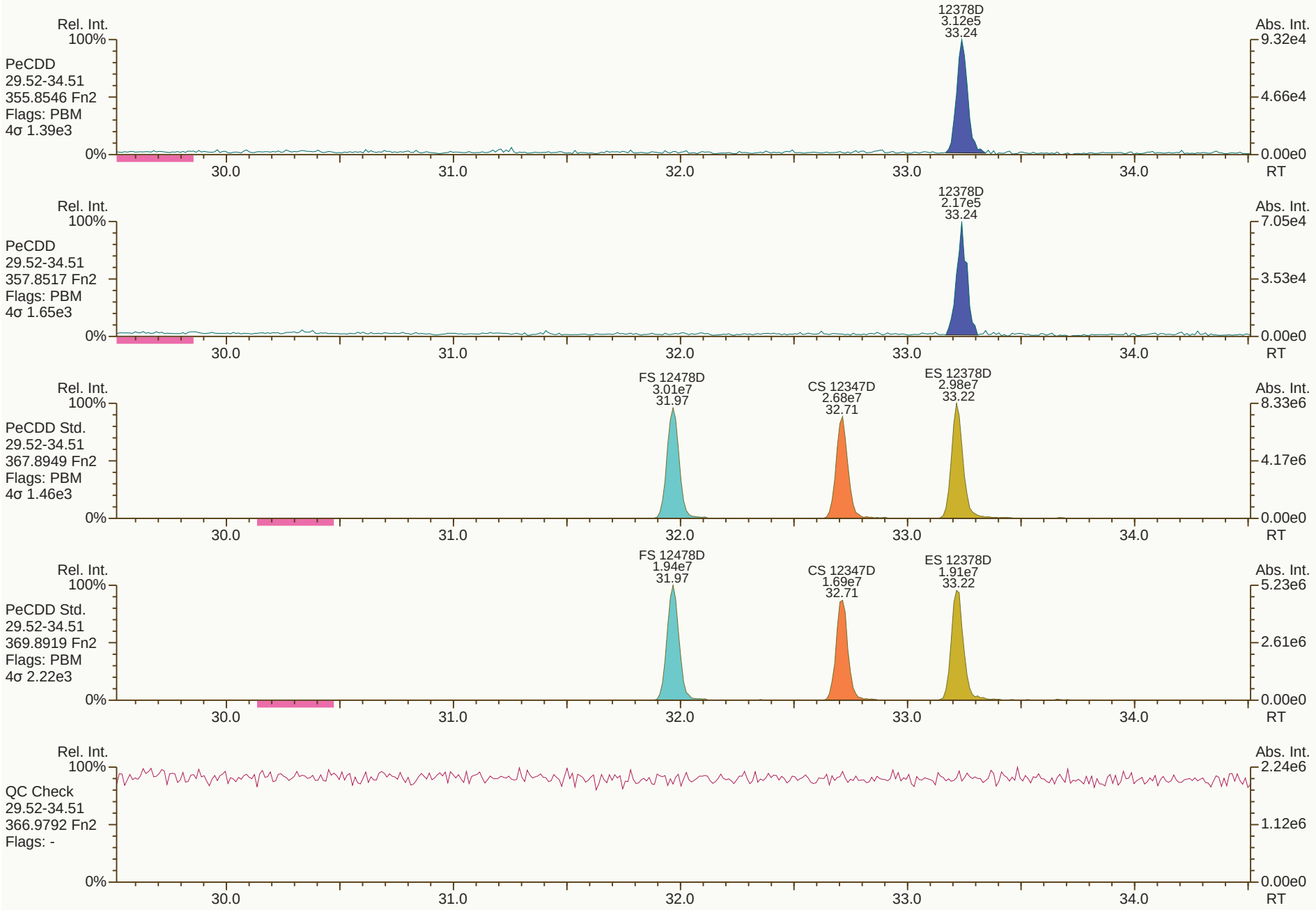
Dioxin/Furan QC Summary		Acq'd: 28 Aug 2019 13:26 PSW				ICAL: HRMS3_DF_10122018_28AUG2019	
Lab ID: CS0_190828_DF_CB		UTP: 29-Aug-2019 16:20:40 PSW				Checkcode: 949-819-RXT	
Sample ID: 20-282-3		Report: 29 Aug 2019 16:28 pw				Datafile: 190828C06	
Name	**RT**	**Response**	**RA**	**OK**	**Ref. RRFs**	**Calc. RRFs**	**Dev'n**
JS 1234-TCDD	27.04	5.98E+07	0.80	Y	-	-	-
JS 1234-TCDF	25.39	8.22E+07	0.79	Y	-	-	-
JS 123467-HxCDD	37.53	2.21E+07	1.26	Y	-	-	-
CS 37Cl-2378-TCDD	NotFnd		n/a	-	1.12		
CS 12347-PeCDD	32.71	4.37E+07	1.59	Y	0.71	0.73	3%
CS 12346-PeCDF	31.19	6.81E+07	1.60	Y	0.81	0.83	2%
CS 123469-HxCDF	36.66	4.96E+07	0.54	Y	1.12	1.12	0%
CS 1234689-HpCDF	39.99	3.91E+07	0.45	Y	0.90	0.88	-1%
SS 37Cl-2378-TCDD	NotFnd		n/a	-	1.14		
SS 12347-PeCDD	32.71	4.37E+07	1.59	Y	0.86	0.89	4%
SS 12346-PeCDF	31.19	6.81E+07	1.60	Y	0.98	1.01	3%
SS 123469-HxCDF	36.66	4.96E+07	0.54	Y	0.85	0.88	4%
SS 1234689-HpCDF	39.99	3.91E+07	0.45	Y	0.97	0.98	1%
AS 1368-TCDD	23.89	6.61E+07	0.78	Y	1.12	1.11	-1%
AS 1368-TCDF	21.67	9.68E+07	0.80	Y	1.19	1.18	-1%
FS 1278-TCDD	28.05	6.16E+07	0.81	Y	1.02	1.03	1%
FS 12478-PeCDD	31.97	4.95E+07	1.55	Y	0.98	1.01	3%
FS 123468-HxCDD	36.13	4.92E+07	1.29	Y	1.17	1.20	3%
FS 1234679-HpCDD	39.86	4.60E+07	1.07	Y	1.14	1.16	2%
TS 1378-TCDD	25.99	6.48E+07	0.79	Y	1.09	1.08	-1%
~~OCDD-a~~	~~NotFnd~~						
~~OCDF-a~~	~~NotFnd~~						

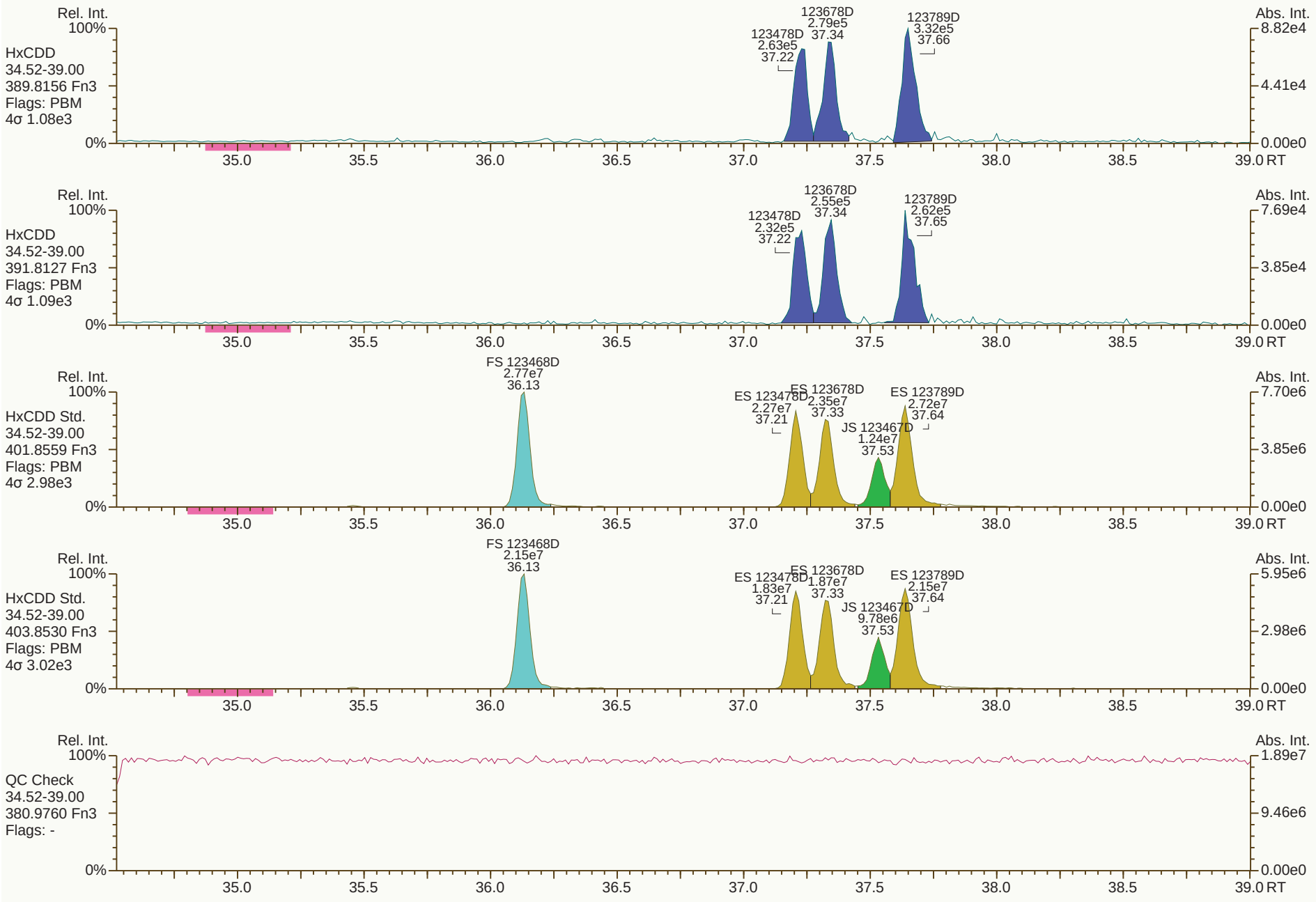
SGS ID: CS0_190828_DF_CB **Sample ID: 20-282-3** **Acq: 28-Aug-2019 13:26:42**
Instr: [ILM] AutoSpec-Ultima HRMS3 **VSIR EI+ Expt: df_cl4-8_db5 GC: df_db5 Vial: 5** **User: PSW Datafile: 190828C06**

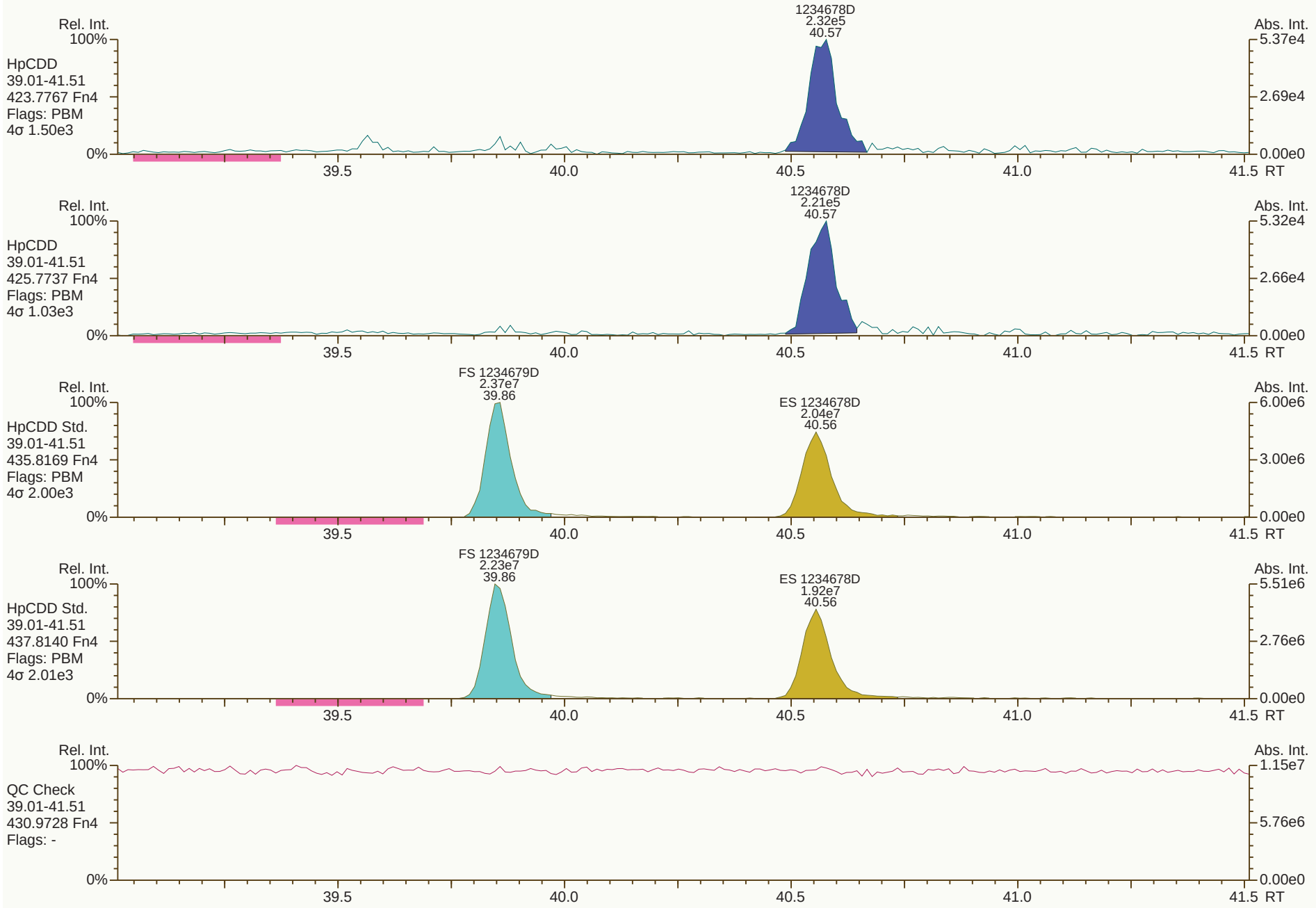


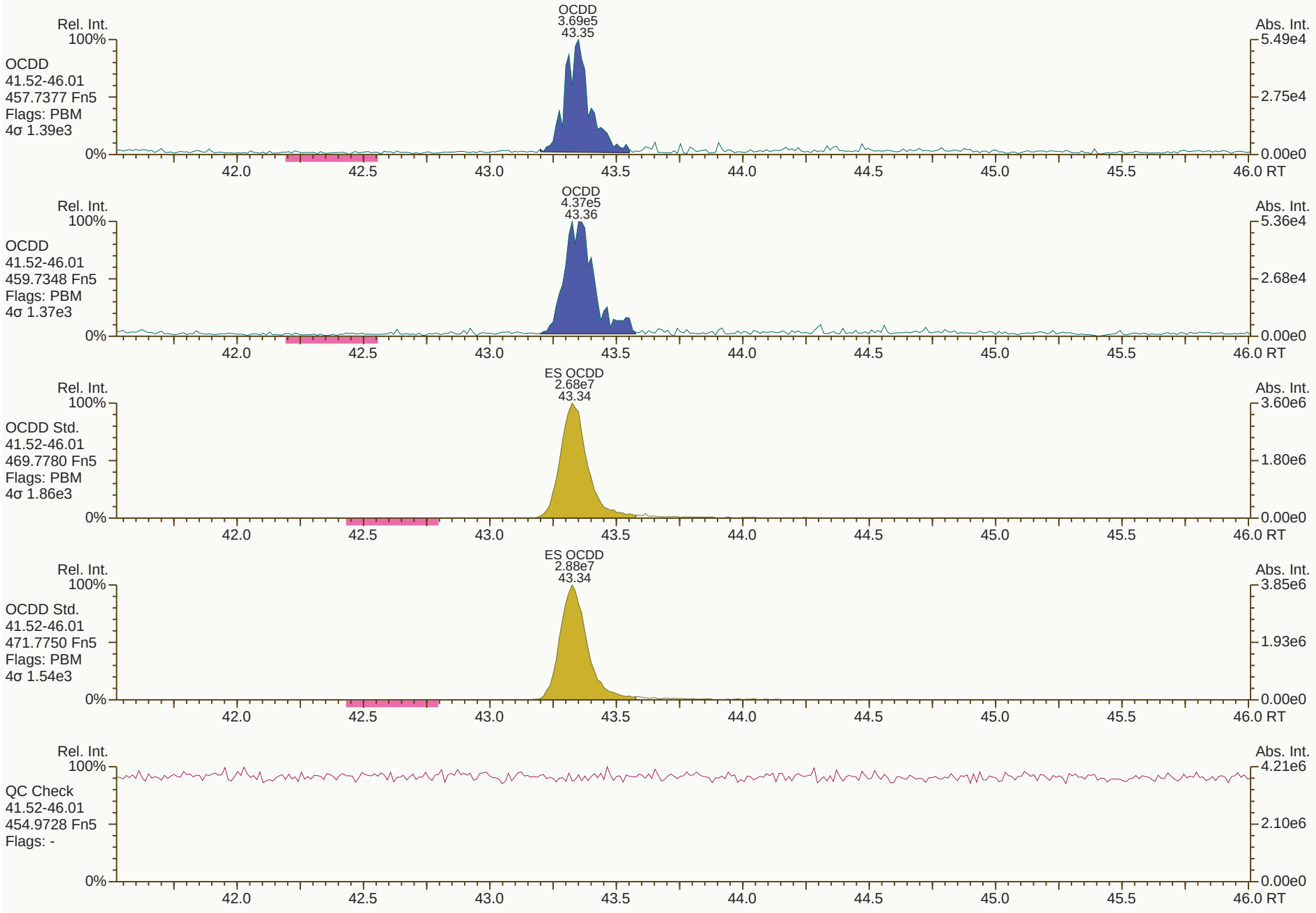
Results: T:\UltraTracePro\ICAL results\HRMS3\HRMS3_DF_10122018_28AUG2019\Resources\CS0_190828_DF_CB.utp_res, saved 29-Aug-2019 16:20 (PSW) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 scc: 949-819 *PKD: n/a Printed: 29-Aug-2019 16:29 Page 1 of 12*

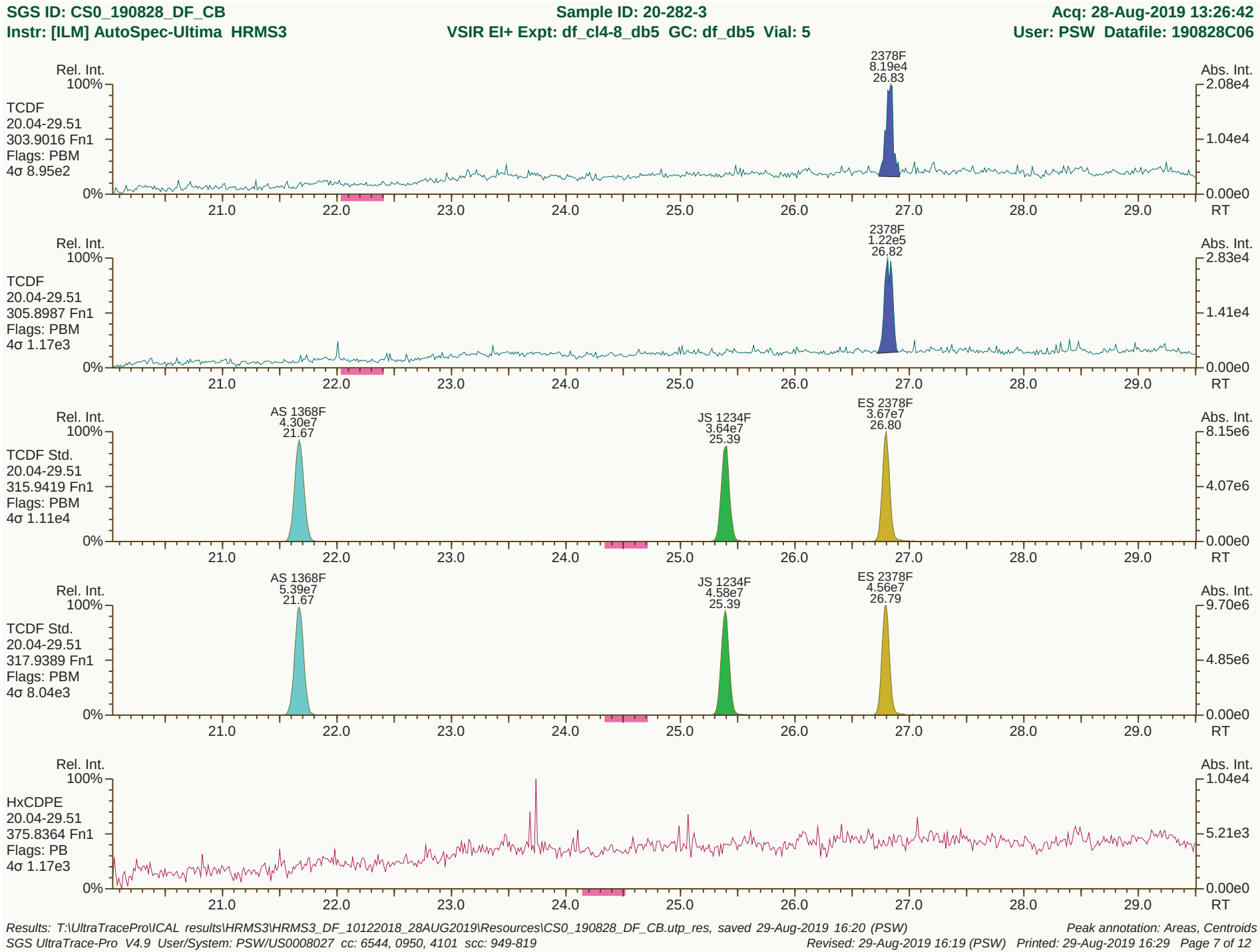

Rel. Int.
100%
TCDD
20.04-29.51
319.8965 Fn1
Flags: PBM
4σ 1.96e3
0%
2378D
8.99e4
27.73
Abs. Int.
2.75e4
1.37e4
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD
20.04-29.51
321.8936 Fn1
Flags: PBM
4σ 1.48e3
0%
RRF(2378D) = (8.99e4 + 1.04e5) * 100pg / (2.64e7 + 3.34e7) * 0.25pg * 1 = 1.3
PSW 29-Aug-2019 09:53
VERIFIED
2378D
1.04e5
27.72
Abs. Int.
2.90e4
1.45e4
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
37Cl-TCDD
20.04-29.51
327.8850 Fn1
Flags: PB
4σ 1.09e3
0%
Abs. Int.
8.60e3
4.30e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.04-29.51
331.9368 Fn1
Flags: PBM
4σ 6.20e3
0%
AS 1368D
2.90e7
23.89
TS 1378D
2.87e7
25.99
JS 1234D
2.67e7
27.04
ES 2378D
2.64e7
27.71
FS 1278D
2.75e7
28.05
Abs. Int.
6.18e6
3.09e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.04-29.51
333.9339 Fn1
Flags: PBM
4σ 4.53e3
0%
AS 1368D
3.71e7
23.89
TS 1378D
3.61e7
25.99
JS 1234D
3.31e7
27.04
ES 2378D
3.34e7
27.71
FS 1278D
3.41e7
28.05
Abs. Int.
7.95e6
3.97e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
PeCDD
29.52-34.51
355.8546 Fn2
Flags: PBM
4σ 1.39e3
12378D
3.12e5
33.24
Abs. Int.
9.32e4
4.66e4
0.00e0
0%
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDD
29.52-34.51
357.8517 Fn2
Flags: PBM
4σ 1.65e3
12378D
2.17e5
33.24
Abs. Int.
7.05e4
3.53e4
0.00e0
0%
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDD Std.
29.52-34.51
367.8949 Fn2
Flags: PBM
4σ 1.46e3
FS 12478D
3.01e7
31.97
CS 12347D
2.68e7
32.71
ES 12378D
2.98e7
33.22
Abs. Int.
8.33e6
4.17e6
0.00e0
0%
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDD Std.
29.52-34.51
369.8919 Fn2
Flags: PBM
4σ 2.22e3
FS 12478D
1.94e7
31.97
CS 12347D
1.69e7
32.71
ES 12378D
1.91e7
33.22
Abs. Int.
5.23e6
2.61e6
0.00e0
0%
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
QC Check
29.52-34.51
366.9792 Fn2
Flags: -
Abs. Int.
2.24e6
1.12e6
0.00e0
0%
30.0
31.0
32.0
33.0
34.0
RT

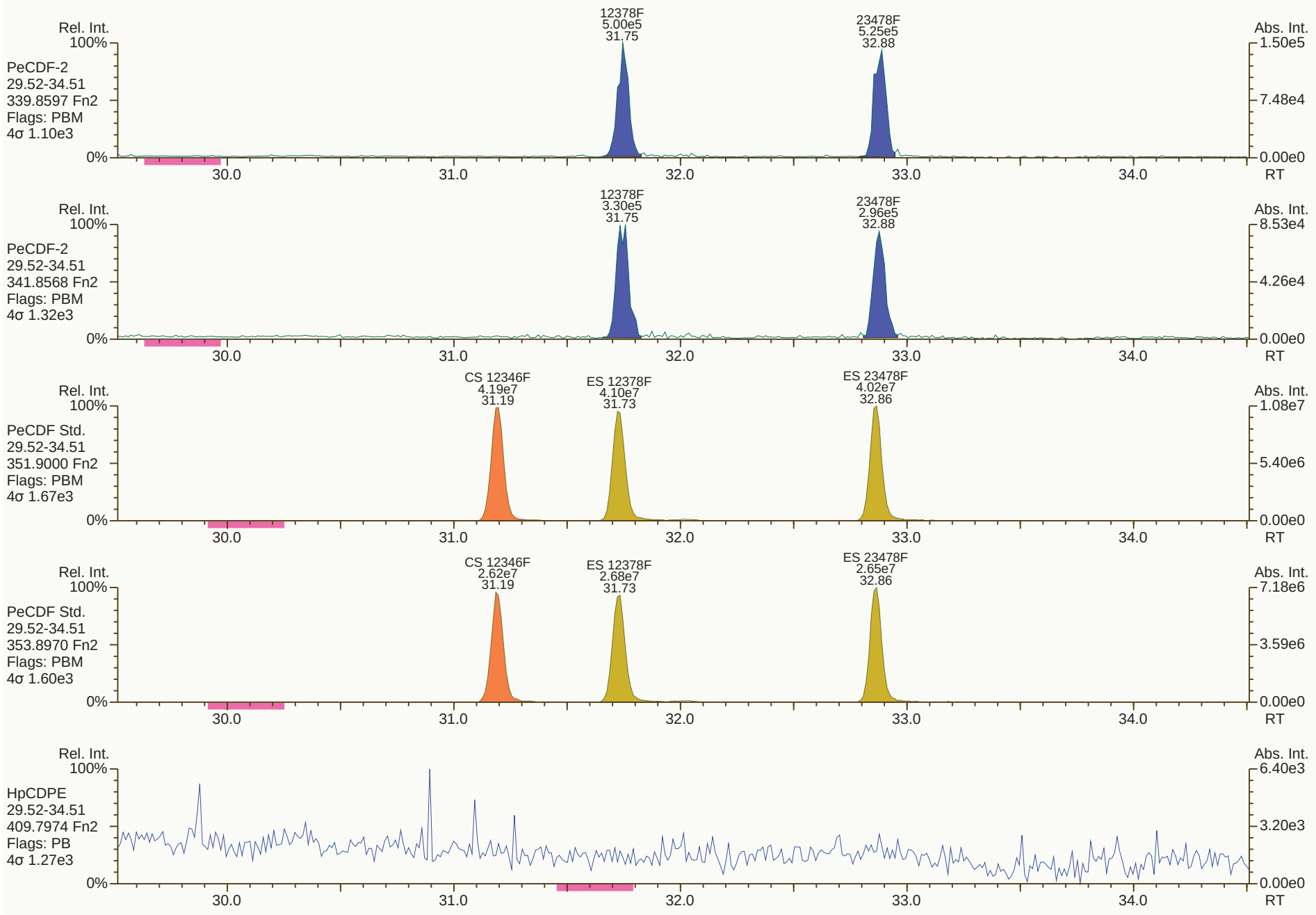

Rel. Int.
100%
HxCDD
34.52-39.00
389.8156 Fn3
Flags: PBM
4σ 1.08e3
123678D
2.79e5
37.34
123478D
2.63e5
37.22
123789D
3.32e5
37.66
Abs. Int.
8.82e4
4.41e4
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
HxCDD
34.52-39.00
391.8127 Fn3
Flags: PBM
4σ 1.09e3
123678D
2.55e5
37.34
123478D
2.32e5
37.22
123789D
2.62e5
37.65
Abs. Int.
7.69e4
3.85e4
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
HxCDD Std.
34.52-39.00
401.8559 Fn3
Flags: PBM
4σ 2.98e3
FS 123468D
2.77e7
36.13
ES 123478D
2.27e7
37.21
ES 123678D
2.35e7
37.33
JS 123467D
1.24e7
37.53
ES 123789D
2.72e7
37.64
Abs. Int.
7.70e6
3.85e6
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
HxCDD Std.
34.52-39.00
403.8530 Fn3
Flags: PBM
4σ 3.02e3
FS 123468D
2.15e7
36.13
ES 123478D
1.83e7
37.21
ES 123678D
1.87e7
37.33
JS 123467D
9.78e6
37.53
ES 123789D
2.15e7
37.64
Abs. Int.
5.95e6
2.98e6
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
QC Check
34.52-39.00
380.9760 Fn3
Flags: -
Abs. Int.
1.89e7
9.46e6
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT

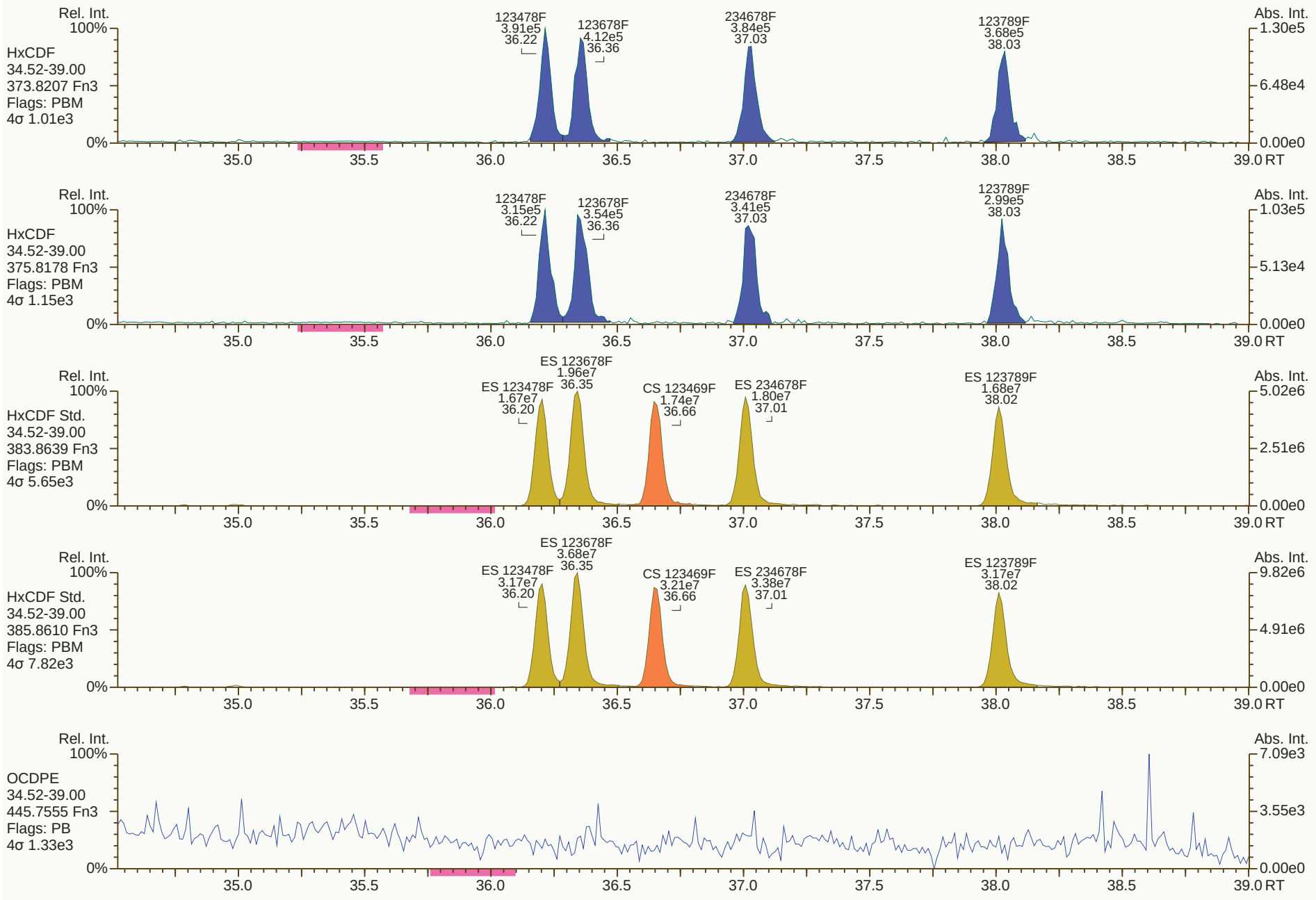

Rel. Int.
100%
HpCDD
39.01-41.51
423.7767 Fn4
Flags: PBM
4σ 1.50e3
1234678D
2.32e5
40.57
Abs. Int.
5.37e4
2.69e4
0.00e0
0%
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
HpCDD
39.01-41.51
425.7737 Fn4
Flags: PBM
4σ 1.03e3
1234678D
2.21e5
40.57
Abs. Int.
5.32e4
2.66e4
0.00e0
0%
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
HpCDD Std.
39.01-41.51
435.8169 Fn4
Flags: PBM
4σ 2.00e3
FS 1234679D
2.37e7
39.86
ES 1234678D
2.04e7
40.56
Abs. Int.
6.00e6
3.00e6
0.00e0
0%
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
HpCDD Std.
39.01-41.51
437.8140 Fn4
Flags: PBM
4σ 2.01e3
FS 1234679D
2.23e7
39.86
ES 1234678D
1.92e7
40.56
Abs. Int.
5.51e6
2.76e6
0.00e0
0%
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
QC Check
39.01-41.51
430.9728 Fn4
Flags: -
Abs. Int.
1.15e7
5.76e6
0.00e0
0%
39.5
40.0
40.5
41.0
41.5 RT


OCDD
3.69e5
43.35
Rel. Int.
100%
OCDD
41.52-46.01
457.7377 Fn5
Flags: PBM
4σ 1.39e3
0%
Abs. Int.
5.49e4
2.75e4
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
OCDD
4.37e5
43.36
Rel. Int.
100%
OCDD
41.52-46.01
459.7348 Fn5
Flags: PBM
4σ 1.37e3
0%
Abs. Int.
5.36e4
2.68e4
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
ES OCDD
2.68e7
43.34
Rel. Int.
100%
OCDD Std.
41.52-46.01
469.7780 Fn5
Flags: PBM
4σ 1.86e3
0%
Abs. Int.
3.60e6
1.80e6
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
ES OCDD
2.88e7
43.34
Rel. Int.
100%
OCDD Std.
41.52-46.01
471.7750 Fn5
Flags: PBM
4σ 1.54e3
0%
Abs. Int.
3.85e6
1.93e6
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
Rel. Int.
100%
QC Check
41.52-46.01
454.9728 Fn5
Flags: -
0%
Abs. Int.
4.21e6
2.10e6
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT

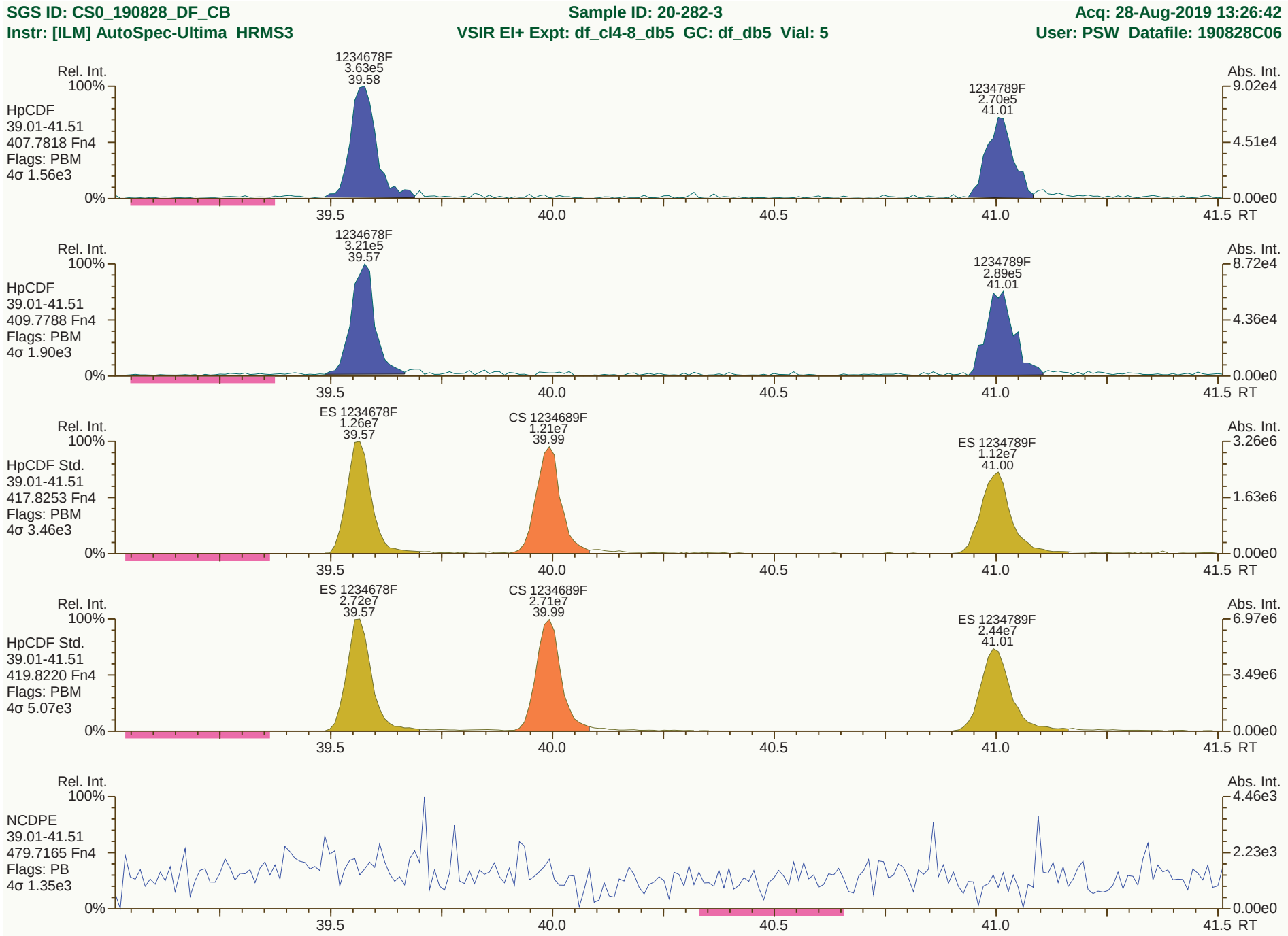

SGS ID: CS0_190828_DF_CB
Instr: [ILM] AutoSpec-Ultima HRMS3
Sample ID: 20-282-3
VSIR EI+ Expt: df_cl4-8_db5 GC: df_db5 Vial: 5
Acq: 28-Aug-2019 13:26:42
User: PSW Datafile: 190828C06
Rel. Int.
100%
0%
TCDF
20.04-29.51
303.9016 Fn1
Flags: PBM
4σ 8.95e2
2378F
8.19e4
26.83
Abs. Int.
2.08e4
1.04e4
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
TCDF
20.04-29.51
305.8987 Fn1
Flags: PBM
4σ 1.17e3
2378F
1.22e5
26.82
2.83e4
1.41e4
TCDF Std.
20.04-29.51
315.9419 Fn1
Flags: PBM
4σ 1.11e4
AS 1368F
4.30e7
21.67
JS 1234F
3.64e7
25.39
ES 2378F
3.67e7
26.80
8.15e6
4.07e6
TCDF Std.
20.04-29.51
317.9389 Fn1
Flags: PBM
4σ 8.04e3
AS 1368F
5.39e7
21.67
JS 1234F
4.58e7
25.39
ES 2378F
4.56e7
26.79
9.70e6
4.85e6
HxCDPE
20.04-29.51
375.8364 Fn1
Flags: PB
4σ 1.17e3
1.04e4
5.21e3
Results: T:\UltraTracePro\ICAL results\HRMS3\HRMS3_DF_10122018_28AUG2019\Resources\CS0_190828_DF_CB.utp_res, saved 29-Aug-2019 16:20 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 6544, 0950, 4101 scc: 949-819
Revised: 29-Aug-2019 16:19 (PSW) Printed: 29-Aug-2019 16:29 Page 7 of 12

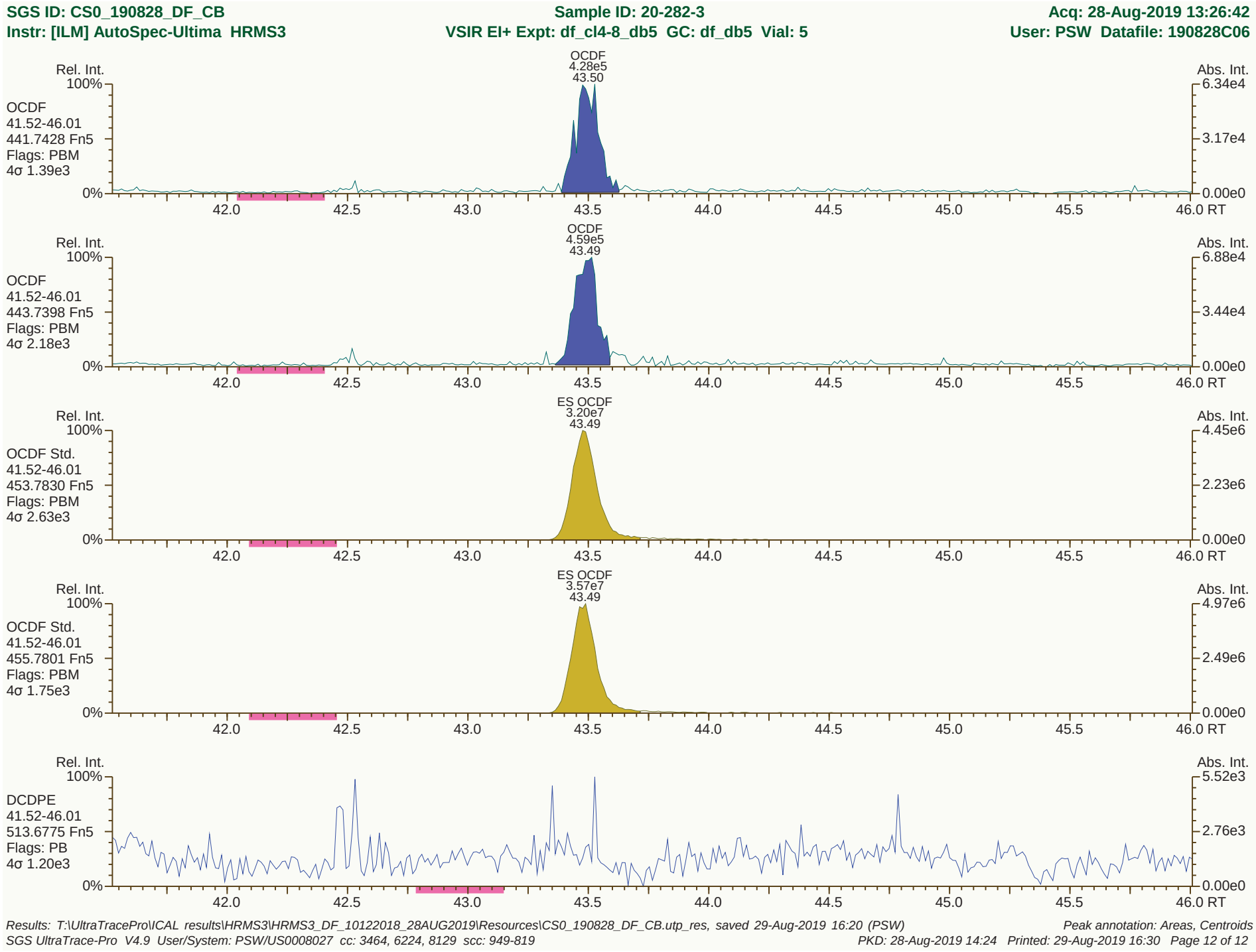

Rel. Int.
100%
0%
Abs. Int.
6.87e3
3.44e3
0.00e0
PeCDF-1
20.04-29.51
339.8597 Fn1
Flags: PB
4σ 1.34e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
0%
Abs. Int.
1.03e4
5.17e3
0.00e0
PeCDF-1
20.04-29.51
341.8568 Fn1
Flags: PB
4σ 1.39e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
0%
Abs. Int.
2.53e6
1.26e6
0.00e0
QC Check
20.04-29.51
316.9824 Fn1
Flags: -
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
PeCDF-2
29.52-34.51
339.8597 Fn2
Flags: PBM
4σ 1.10e3
0%
12378F
5.00e5
31.75
23478F
5.25e5
32.88
Abs. Int.
1.50e5
7.48e4
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDF-2
29.52-34.51
341.8568 Fn2
Flags: PBM
4σ 1.32e3
0%
12378F
3.30e5
31.75
23478F
2.96e5
32.88
Abs. Int.
8.53e4
4.26e4
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDF Std.
29.52-34.51
351.9000 Fn2
Flags: PBM
4σ 1.67e3
0%
CS 12346F
4.19e7
31.19
ES 12378F
4.10e7
31.73
ES 23478F
4.02e7
32.86
Abs. Int.
1.08e7
5.40e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDF Std.
29.52-34.51
353.8970 Fn2
Flags: PBM
4σ 1.60e3
0%
CS 12346F
2.62e7
31.19
ES 12378F
2.68e7
31.73
ES 23478F
2.65e7
32.86
Abs. Int.
7.18e6
3.59e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
HpCDPE
29.52-34.51
409.7974 Fn2
Flags: PB
4σ 1.27e3
0%
Abs. Int.
6.40e3
3.20e3
0.00e0
30.0
31.0
32.0
33.0
34.0
RT


Rel. Int.
100%
HxCDF
34.52-39.00
373.8207 Fn3
Flags: PBM
4σ 1.01e3
123478F
3.91e5
36.22
123678F
4.12e5
36.36
234678F
3.84e5
37.03
123789F
3.68e5
38.03
Abs. Int.
1.30e5
6.48e4
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
HxCDF
34.52-39.00
375.8178 Fn3
Flags: PBM
4σ 1.15e3
123478F
3.15e5
36.22
123678F
3.54e5
36.36
234678F
3.41e5
37.03
123789F
2.99e5
38.03
Abs. Int.
1.03e5
5.13e4
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
HxCDF Std.
34.52-39.00
383.8639 Fn3
Flags: PBM
4σ 5.65e3
ES 123678F
1.96e7
36.35
ES 123478F
1.67e7
36.20
CS 123469F
1.74e7
36.66
ES 234678F
1.80e7
37.01
ES 123789F
1.68e7
38.02
Abs. Int.
5.02e6
2.51e6
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
HxCDF Std.
34.52-39.00
385.8610 Fn3
Flags: PBM
4σ 7.82e3
ES 123678F
3.68e7
36.35
ES 123478F
3.17e7
36.20
CS 123469F
3.21e7
36.66
ES 234678F
3.38e7
37.01
ES 123789F
3.17e7
38.02
Abs. Int.
9.82e6
4.91e6
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
OCDPE
34.52-39.00
445.7555 Fn3
Flags: PB
4σ 1.33e3
Abs. Int.
7.09e3
3.55e3
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT

SGS ID: CS0_190828_DF_CB
Instr: [ILM] AutoSpec-Ultima HRMS3
Sample ID: 20-282-3
VSIR EI+ Expt: df_cl4-8_db5 GC: df_db5 Vial: 5
Acq: 28-Aug-2019 13:26:42
User: PSW Datafile: 190828C06

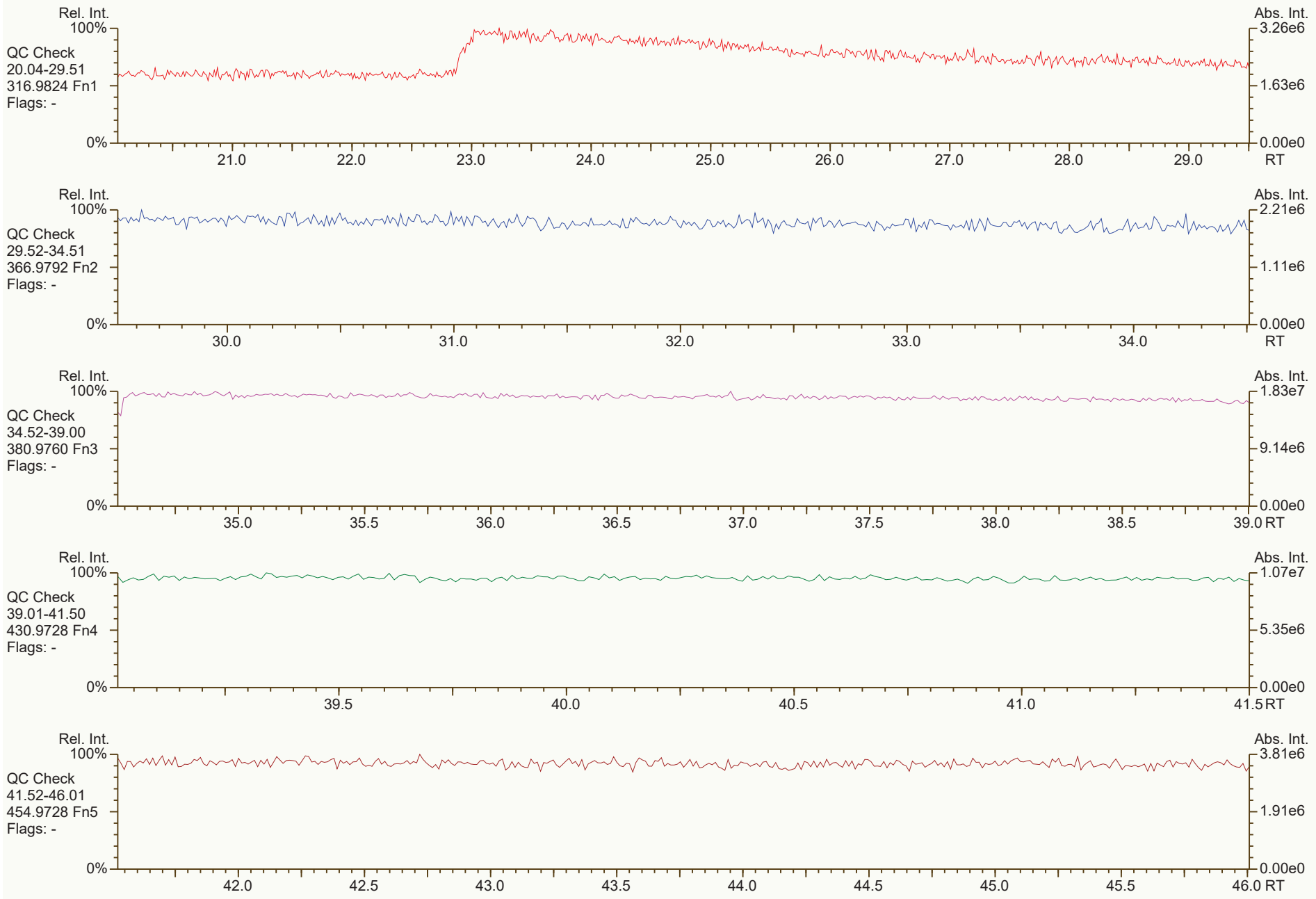



SGS ID: CS0_190828_DF_CB
Sample ID: 20-282-3
Acq: 28-Aug-2019 13:26:42
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5 GC: df_db5 Vial: 5
User: PSW Datafile: 190828C06
OCDF
4.28e5
43.50
Rel. Int.
100%
OCDF
41.52-46.01
441.7428 Fn5
Flags: PBM
4σ 1.39e3
0%
Abs. Int.
6.34e4
3.17e4
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
OCDF
4.59e5
43.49
Rel. Int.
100%
OCDF
41.52-46.01
443.7398 Fn5
Flags: PBM
4σ 2.18e3
0%
Abs. Int.
6.88e4
3.44e4
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
ES OCDF
3.20e7
43.49
Rel. Int.
100%
OCDF Std.
41.52-46.01
453.7830 Fn5
Flags: PBM
4σ 2.63e3
0%
Abs. Int.
4.45e6
2.23e6
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
ES OCDF
3.57e7
43.49
Rel. Int.
100%
OCDF Std.
41.52-46.01
455.7801 Fn5
Flags: PBM
4σ 1.75e3
0%
Abs. Int.
4.97e6
2.49e6
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
Rel. Int.
100%
DCDPE
41.52-46.01
513.6775 Fn5
Flags: PB
4σ 1.20e3
0%
Abs. Int.
5.52e3
2.76e3
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
Results: T:\UltraTracePro\ICAL results\HRMS3\HRMS3_DF_10122018_28AUG2019\Resources\CS0_190828_DF_CB.utp_res, saved 29-Aug-2019 16:20 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 3464, 6224, 8129 scc: 949-819
PKD: 28-Aug-2019 14:24 Printed: 29-Aug-2019 16:30 Page 12 of 12

Dioxin/Furan QC Summary		Acq'd: 28 Aug 2019 14:16 PSW				ICAL: HRMS3_DF_10122018_28AUG2019	
Lab ID: CS1_190828_DF_CB		UTP: 29-Aug-2019 16:20:59 PSW				Checkcode: 130-956-BVQ	
Sample ID: 20-282-2		Report: 29 Aug 2019 16:28 pw				Datafile: 190828C07	
Name	**RT**	**Response**	**RA**	**OK**	**Ref. RRFs**	**Calc. RRFs**	**Dev'n**
2378-TCDD	27.72	2.81E+05	0.75	Y	1.19	1.27	7%
12378-PeCDD	33.23	8.85E+05	1.59	Y	0.98	1.01	2%
123478-HxCDD	37.21	7.30E+05	1.27	Y	1.02	1.00	-2%
123678-HxCDD	37.33	8.51E+05	1.21	Y	1.09	1.14	5%
123789-HxCDD	37.65	8.40E+05	1.23	Y	0.97	0.96	-1%
1234678-HpCDD	40.56	6.53E+05	1.02	Y	0.98	0.94	-3%
OCDD	43.33	1.06E+06	0.89	Y	1.07	1.07	0%
2378-TCDF	26.80	3.14E+05	0.73	Y	1.01	1.00	-1%
12378-PeCDF	31.74	1.16E+06	1.45	Y	0.96	0.94	-2%
23478-PeCDF	32.87	1.19E+06	1.52	Y	0.99	0.97	-1%
123478-HxCDF	36.21	1.03E+06	1.19	Y	1.21	1.19	-2%
123678-HxCDF	36.35	1.11E+06	1.19	Y	1.11	1.09	-1%
234678-HxCDF	37.02	9.82E+05	1.20	Y	1.12	1.05	-6%
123789-HxCDF	38.02	8.55E+05	1.22	Y	1.11	1.02	-8%
1234678-HpCDF	39.57	9.75E+05	1.05	Y	1.32	1.40	6%
1234789-HpCDF	40.99	7.78E+05	1.00	Y	1.26	1.26	0%
OCDF	43.48	1.25E+06	0.94	Y	1.03	1.02	-1%
ES 2378-TCDD	27.70	4.43E+07	0.81	Y	0.99	0.95	-4%
ES 12378-PeCDD	33.21	3.52E+07	1.52	Y	0.83	0.75	-9%
ES 123478-HxCDD	37.2	2.91E+07	1.24	Y	0.95	0.90	-5%
ES 123678-HxCDD	37.32	2.98E+07	1.23	Y	0.98	0.93	-5%
ES 123789-HxCDD	37.63	3.50E+07	1.27	Y	1.14	1.09	-4%
ES 1234678-HpCDD	40.54	2.77E+07	1.04	Y	0.90	0.86	-4%
ES OCDD	43.32	3.95E+07	0.90	Y	0.63	0.61	-2%
ES 2378-TCDF	26.78	6.28E+07	0.81	Y	1.00	0.99	0%
ES 12378-PeCDF	31.72	4.94E+07	1.52	Y	0.83	0.78	-6%
ES 23478-PeCDF	32.86	4.89E+07	1.55	Y	0.81	0.77	-4%
ES 123478-HxCDF	36.19	3.47E+07	0.52	Y	1.12	1.08	-4%
ES 123678-HxCDF	36.33	4.06E+07	0.54	Y	1.33	1.26	-5%
ES 234678-HxCDF	37	3.73E+07	0.53	Y	1.21	1.16	-4%
ES 123789-HxCDF	38.01	3.35E+07	0.52	Y	1.12	1.04	-7%
ES 1234678-HpCDF	39.55	2.79E+07	0.46	Y	0.92	0.87	-6%
ES 1234789-HpCDF	40.98	2.48E+07	0.46	Y	0.82	0.77	-6%
ES OCDF	43.47	4.91E+07	0.91	Y	0.78	0.76	-2%

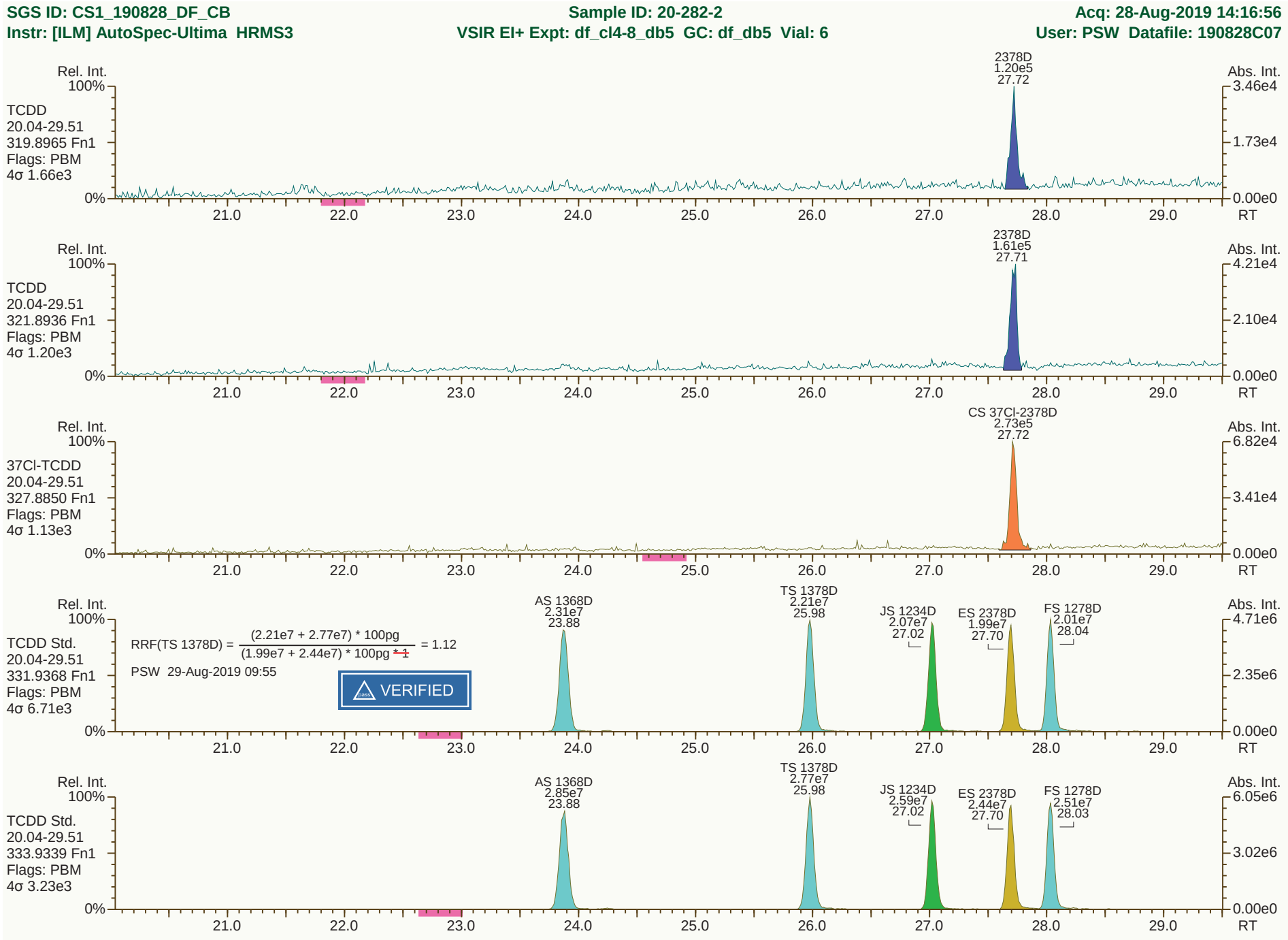
Dioxin/Furan QC Summary		Acq'd: 28 Aug 2019 14:16 PSW				ICAL: HRMS3_DF_10122018_28AUG2019	
Lab ID: CS1_190828_DF_CB		UTP: 29-Aug-2019 16:20:59 PSW				Checkcode: 130-956-BVQ	
Sample ID: 20-282-2		Report: 29 Aug 2019 16:28 pw				Datafile: 190828C07	
Name	**RT**	**Response**	**RA**	**OK**	**Ref. RRFs**	**Calc. RRFs**	**Dev'n**
JS 1234-TCDD	27.02	4.66E+07	0.80	Y	-	-	-
JS 1234-TCDF	25.38	6.32E+07	0.77	Y	-	-	-
JS 123467-HxCDD	37.52	1.61E+07	1.20	Y	-	-	-
CS 37Cl-2378-TCDD	27.72	2.73E+05	n/a	-	1.12	1.17	4%
CS 12347-PeCDD	32.70	3.17E+07	1.57	Y	0.71	0.68	-5%
CS 12346-PeCDF	31.19	5.06E+07	1.57	Y	0.81	0.80	-1%
CS 123469-HxCDF	36.64	3.62E+07	0.53	Y	1.12	1.12	0%
CS 1234689-HpCDF	39.98	2.88E+07	0.46	Y	0.90	0.89	0%
SS 37Cl-2378-TCDD	27.72	2.73E+05	n/a	-	1.14	1.23	8%
SS 12347-PeCDD	32.70	3.17E+07	1.57	Y	0.86	0.90	5%
SS 12346-PeCDF	31.19	5.06E+07	1.57	Y	0.98	1.02	5%
SS 123469-HxCDF	36.64	3.62E+07	0.53	Y	0.85	0.89	5%
SS 1234689-HpCDF	39.98	2.88E+07	0.46	Y	0.97	1.03	6%
AS 1368-TCDD	23.88	5.15E+07	0.81	Y	1.12	1.11	-1%
AS 1368-TCDF	21.65	7.63E+07	0.78	Y	1.19	1.21	1%
FS 1278-TCDD	28.04	4.52E+07	0.80	Y	1.02	1.02	0%
FS 12478-PeCDD	31.96	3.62E+07	1.59	Y	0.98	1.03	5%
FS 123468-HxCDD	36.12	3.59E+07	1.27	Y	1.17	1.23	6%
FS 1234679-HpCDD	39.84	3.23E+07	1.03	Y	1.14	1.17	2%
TS 1378-TCDD	25.98	4.98E+07	0.80	Y	1.09	1.12	3%
~~OCDD-a~~	~~NotFnd~~						
~~OCDF-a~~	~~NotFnd~~						

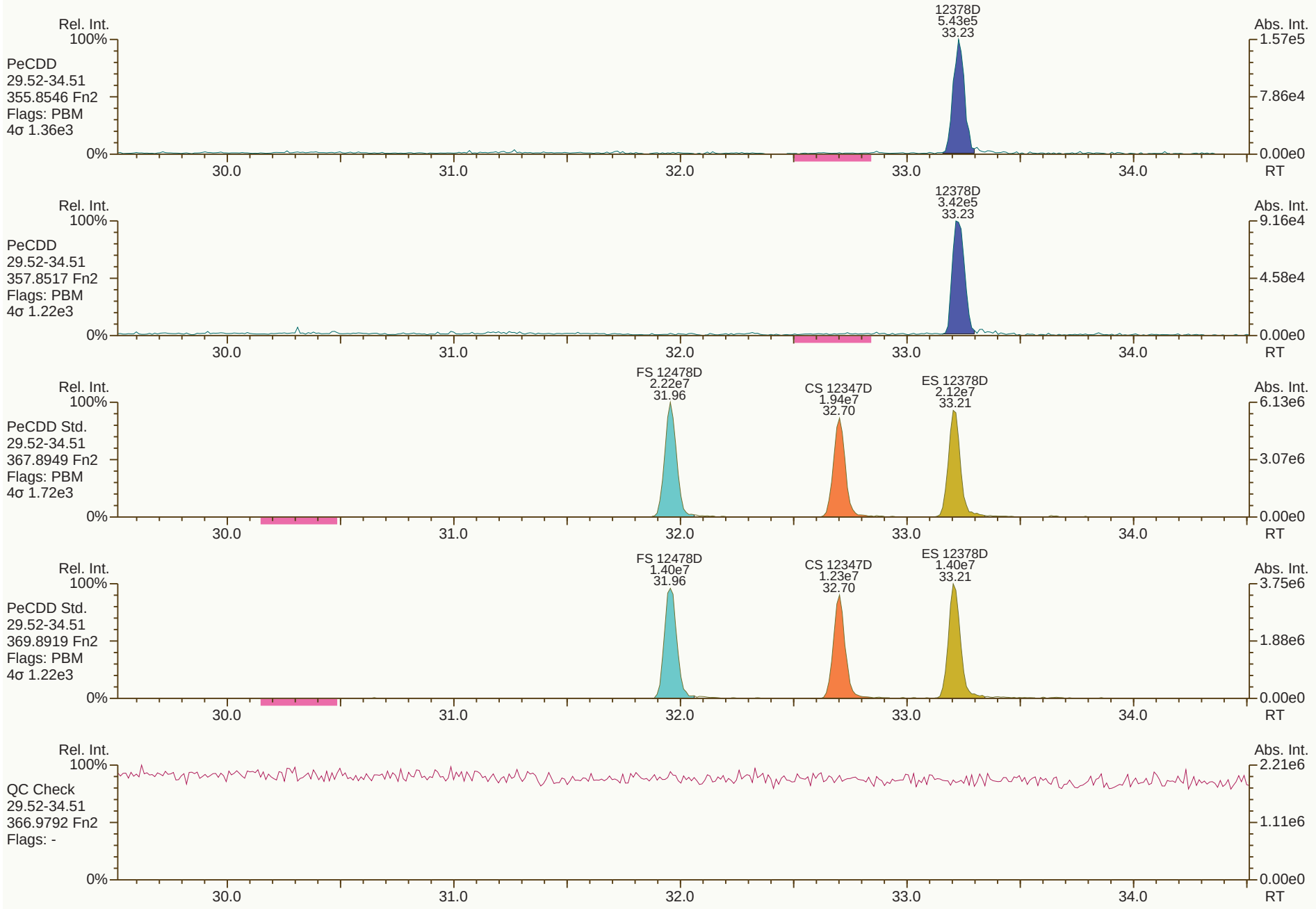
SGS ID: CS1_190828_DF_CB **Sample ID: 20-282-2** **Acq: 28-Aug-2019 14:16:56**
Instr: [ILM] AutoSpec-Ultima HRMS3 **VSIR EI+ Expt: df_cl4-8_db5 GC: df_db5 Vial: 6** **User: PSW Datafile: 190828C07**

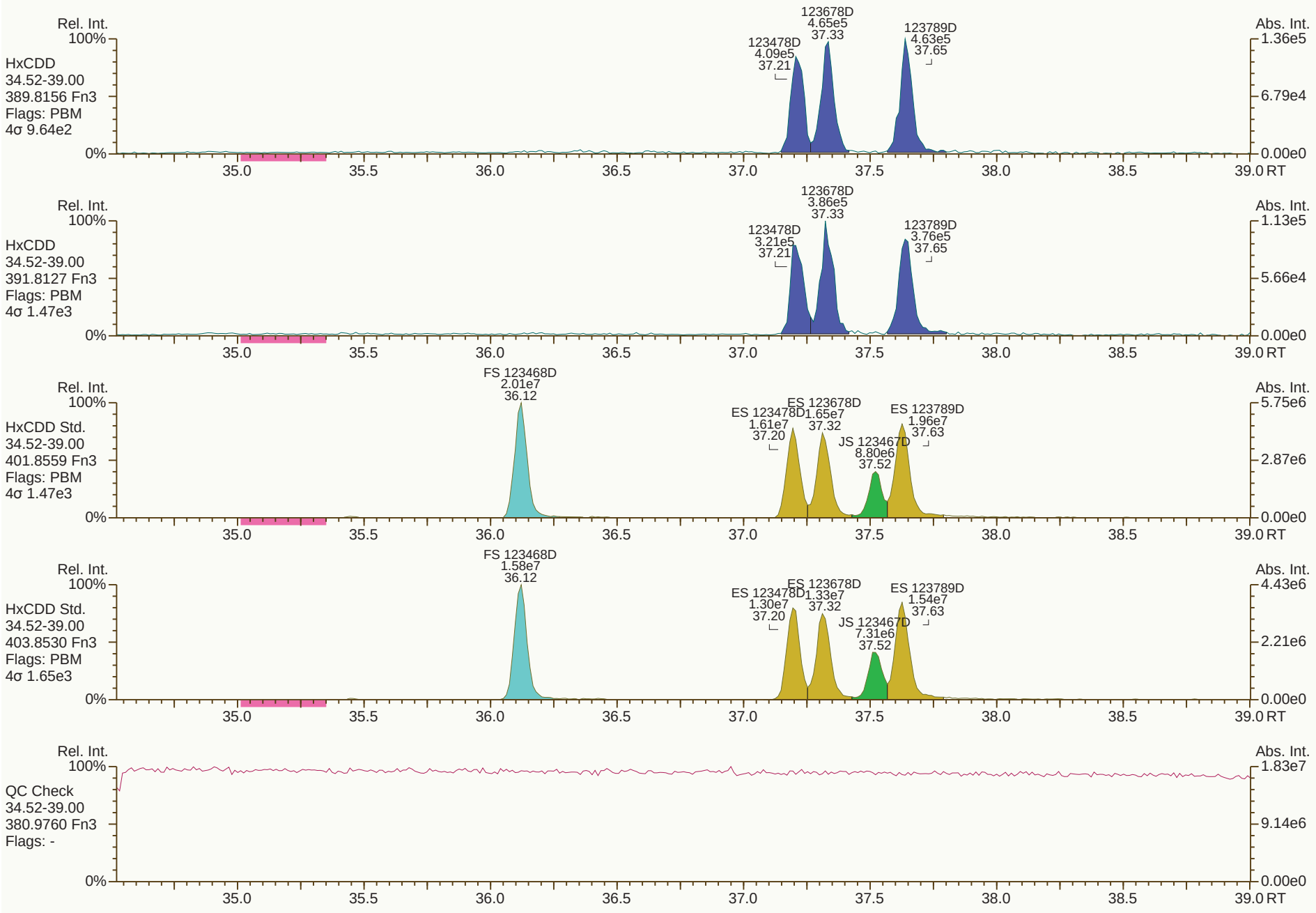


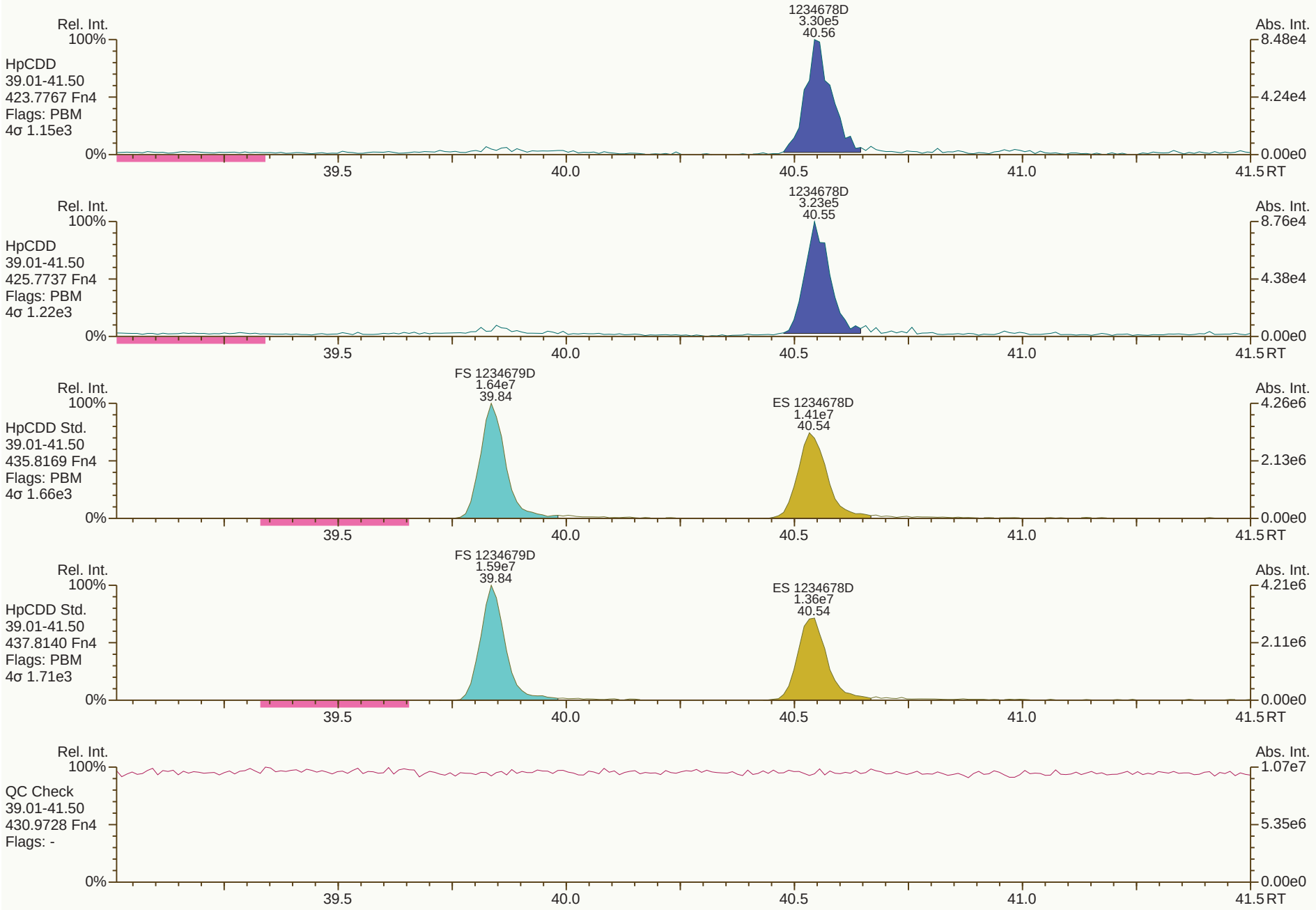
Results: T:\UltraTracePro\ICAL results\HRMS3\HRMS3_DF_10122018_28AUG2019\Resources\CS1_190828_DF_CB.utp_res, saved 29-Aug-2019 16:25 (PSW) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 scc: 130-956 *PKD: n/a Printed: 29-Aug-2019 16:31 Page 1 of 12*

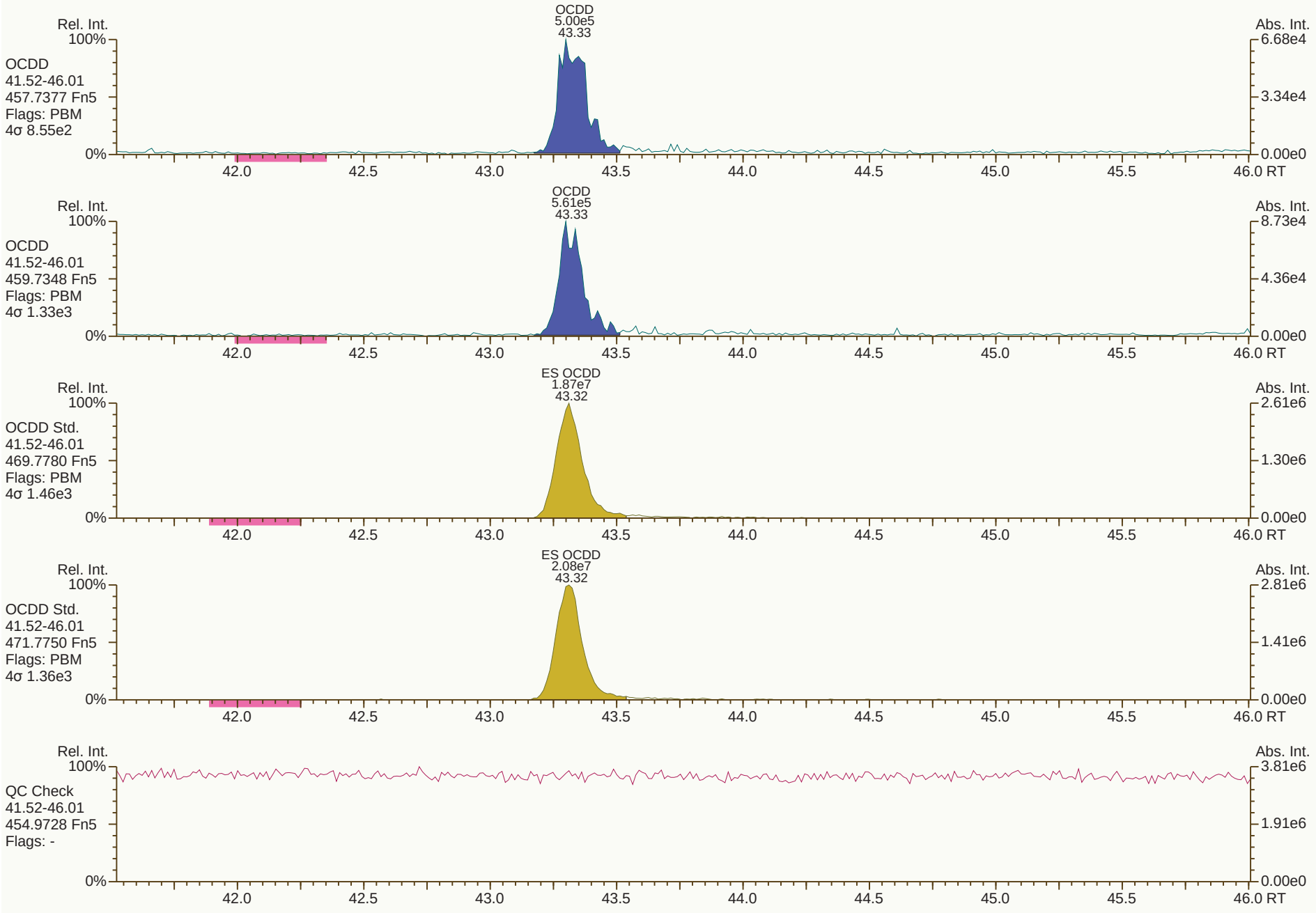
SGS ID: CS1_190828_DF_CB
Instr: [ILM] AutoSpec-Ultima HRMS3
Sample ID: 20-282-2
VSIR EI+ Expt: df_cl4-8_db5 GC: df_db5 Vial: 6
Acq: 28-Aug-2019 14:16:56
User: PSW Datafile: 190828C07




Rel. Int.
100%
PeCDD
29.52-34.51
355.8546 Fn2
Flags: PBM
4σ 1.36e3
0%
12378D
5.43e5
33.23
Abs. Int.
1.57e5
7.86e4
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDD
29.52-34.51
357.8517 Fn2
Flags: PBM
4σ 1.22e3
0%
12378D
3.42e5
33.23
Abs. Int.
9.16e4
4.58e4
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDD Std.
29.52-34.51
367.8949 Fn2
Flags: PBM
4σ 1.72e3
0%
FS 12478D
2.22e7
31.96
CS 12347D
1.94e7
32.70
ES 12378D
2.12e7
33.21
Abs. Int.
6.13e6
3.07e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDD Std.
29.52-34.51
369.8919 Fn2
Flags: PBM
4σ 1.22e3
0%
FS 12478D
1.40e7
31.96
CS 12347D
1.23e7
32.70
ES 12378D
1.40e7
33.21
Abs. Int.
3.75e6
1.88e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
QC Check
29.52-34.51
366.9792 Fn2
Flags: -
0%
Abs. Int.
2.21e6
1.11e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT


Rel. Int.
100%
HxCDD
34.52-39.00
389.8156 Fn3
Flags: PBM
4σ 9.64e2
123678D
4.65e5
37.33
123478D
4.09e5
37.21
123789D
4.63e5
37.65
Abs. Int.
1.36e5
6.79e4
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
HxCDD
34.52-39.00
391.8127 Fn3
Flags: PBM
4σ 1.47e3
123678D
3.86e5
37.33
123478D
3.21e5
37.21
123789D
3.76e5
37.65
Abs. Int.
1.13e5
5.66e4
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
HxCDD Std.
34.52-39.00
401.8559 Fn3
Flags: PBM
4σ 1.47e3
FS 123468D
2.01e7
36.12
ES 123678D
1.65e7
37.32
ES 123478D
1.61e7
37.20
ES 123789D
1.96e7
37.63
JS 123467D
8.80e6
37.52
Abs. Int.
5.75e6
2.87e6
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
HxCDD Std.
34.52-39.00
403.8530 Fn3
Flags: PBM
4σ 1.65e3
FS 123468D
1.58e7
36.12
ES 123678D
1.33e7
37.32
ES 123478D
1.30e7
37.20
ES 123789D
1.54e7
37.63
JS 123467D
7.31e6
37.52
Abs. Int.
4.43e6
2.21e6
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
QC Check
34.52-39.00
380.9760 Fn3
Flags: -
Abs. Int.
1.83e7
9.14e6
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT


Rel. Int.
100%
HpCDD
39.01-41.50
423.7767 Fn4
Flags: PBM
4σ 1.15e3
0%
1234678D
3.30e5
40.56
Abs. Int.
8.48e4
4.24e4
0.00e0
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
HpCDD
39.01-41.50
425.7737 Fn4
Flags: PBM
4σ 1.22e3
0%
1234678D
3.23e5
40.55
Abs. Int.
8.76e4
4.38e4
0.00e0
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
HpCDD Std.
39.01-41.50
435.8169 Fn4
Flags: PBM
4σ 1.66e3
0%
FS 1234679D
1.64e7
39.84
ES 1234678D
1.41e7
40.54
Abs. Int.
4.26e6
2.13e6
0.00e0
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
HpCDD Std.
39.01-41.50
437.8140 Fn4
Flags: PBM
4σ 1.71e3
0%
FS 1234679D
1.59e7
39.84
ES 1234678D
1.36e7
40.54
Abs. Int.
4.21e6
2.11e6
0.00e0
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
QC Check
39.01-41.50
430.9728 Fn4
Flags: -
0%
Abs. Int.
1.07e7
5.35e6
0.00e0
39.5
40.0
40.5
41.0
41.5 RT


OCDD
5.00e5
43.33
Rel. Int.
100%
OCDD
41.52-46.01
457.7377 Fn5
Flags: PBM
4σ 8.55e2
0%
Abs. Int.
6.68e4
3.34e4
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
OCDD
5.61e5
43.33
Rel. Int.
100%
OCDD
41.52-46.01
459.7348 Fn5
Flags: PBM
4σ 1.33e3
0%
Abs. Int.
8.73e4
4.36e4
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
ES OCDD
1.87e7
43.32
Rel. Int.
100%
OCDD Std.
41.52-46.01
469.7780 Fn5
Flags: PBM
4σ 1.46e3
0%
Abs. Int.
2.61e6
1.30e6
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
ES OCDD
2.08e7
43.32
Rel. Int.
100%
OCDD Std.
41.52-46.01
471.7750 Fn5
Flags: PBM
4σ 1.36e3
0%
Abs. Int.
2.81e6
1.41e6
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
Rel. Int.
100%
QC Check
41.52-46.01
454.9728 Fn5
Flags: -
0%
Abs. Int.
3.81e6
1.91e6
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT

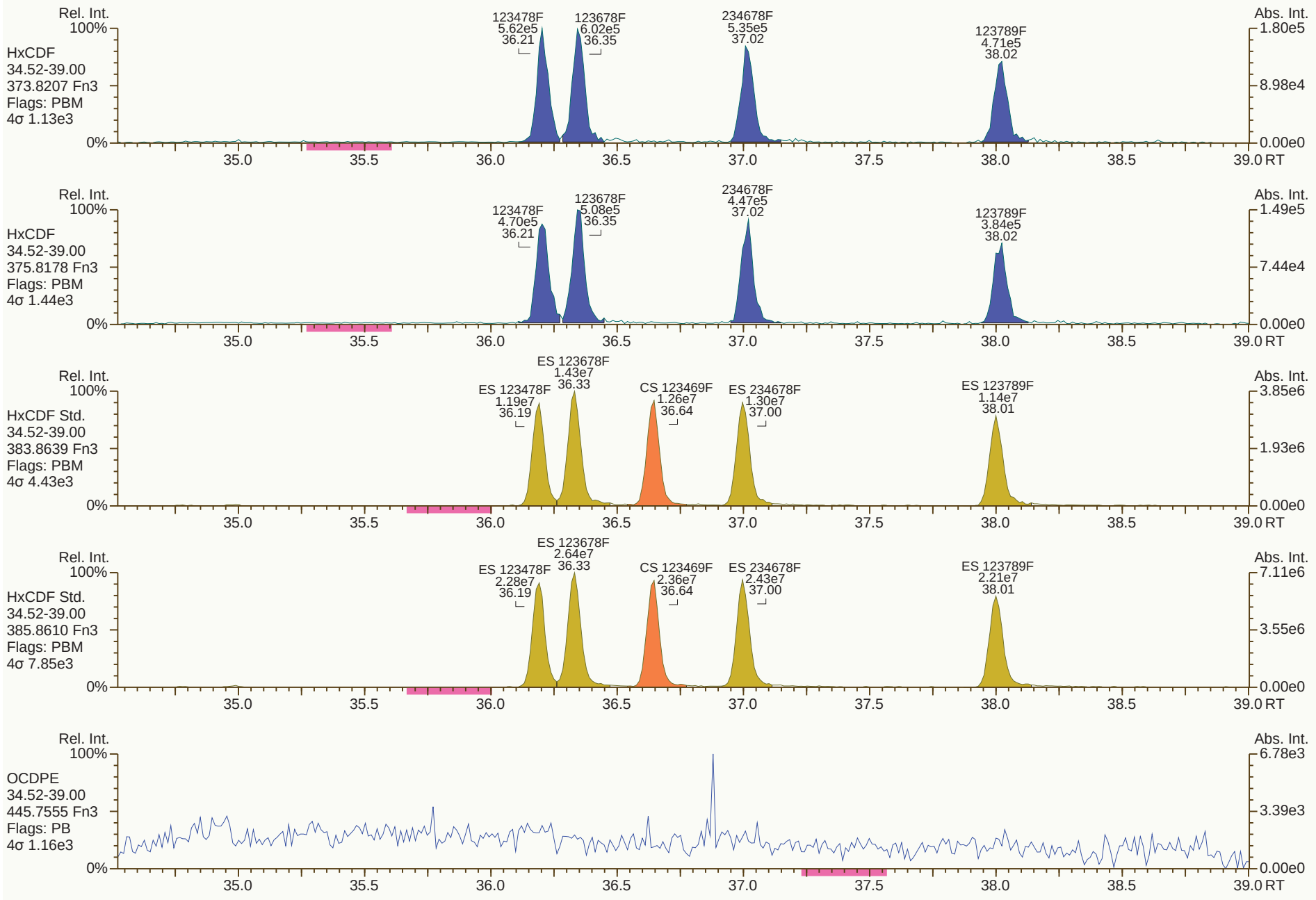

Rel. Int.
100%
TCDF
20.04-29.51
303.9016 Fn1
Flags: PBM
4σ 1.03e3
0%
2378F
1.33e5
26.80
Abs. Int.
3.18e4
1.59e4
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF
20.04-29.51
305.8987 Fn1
Flags: PBM
4σ 1.21e3
0%
2378F
1.81e5
26.81
RRF(2378F) = (1.33e5 + 1.81e5) * 100pg / (2.80e7 + 3.47e7) * 0.5pg * 1 = 1
PSW 29-Aug-2019 16:25
VERIFIED
Abs. Int.
5.30e4
2.65e4
0.00e0
Rel. Int.
100%
TCDF Std.
20.04-29.51
315.9419 Fn1
Flags: PBM
4σ 1.06e4
0%
AS 1368F
3.34e7
21.65
JS 1234F
2.76e7
25.38
ES 2378F
2.80e7
26.78
Abs. Int.
6.21e6
3.10e6
0.00e0
Rel. Int.
100%
TCDF Std.
20.04-29.51
317.9389 Fn1
Flags: PBM
4σ 5.68e3
0%
AS 1368F
4.29e7
21.65
JS 1234F
3.56e7
25.38
ES 2378F
3.47e7
26.78
Abs. Int.
7.63e6
3.81e6
0.00e0
Rel. Int.
100%
HxCDPE
20.04-29.51
375.8364 Fn1
Flags: PB
4σ 1.34e3
0%
Abs. Int.
1.57e4
7.86e3
0.00e0

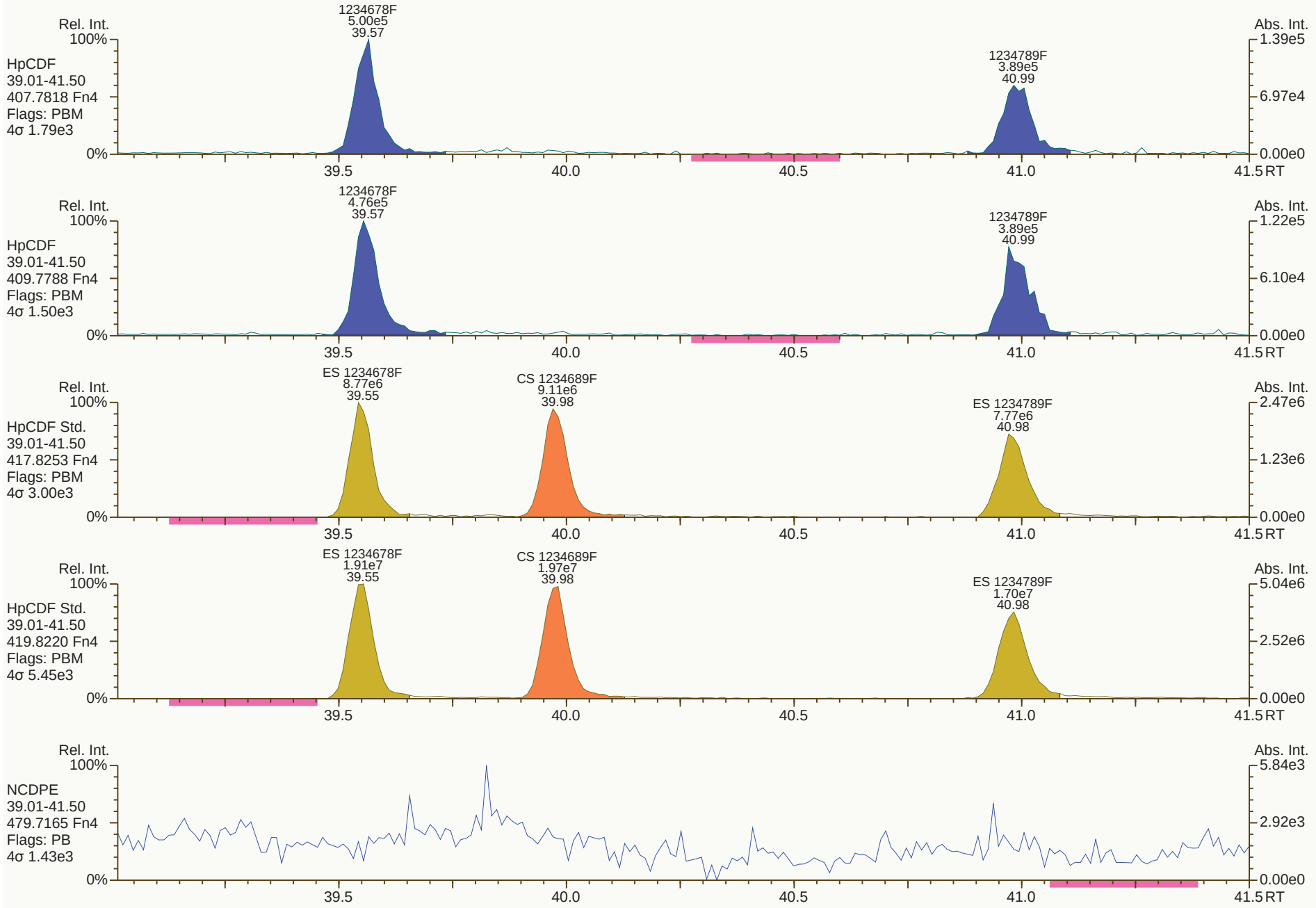
SGS ID: CS1_190828_DF_CB **Sample ID: 20-282-2** **Acq: 28-Aug-2019 14:16:56**
Instr: [ILM] AutoSpec-Ultima HRMS3 **VSIR EI+ Expt: df_cl4-8_db5 GC: df_db5 Vial: 6** **User: PSW Datafile: 190828C07**

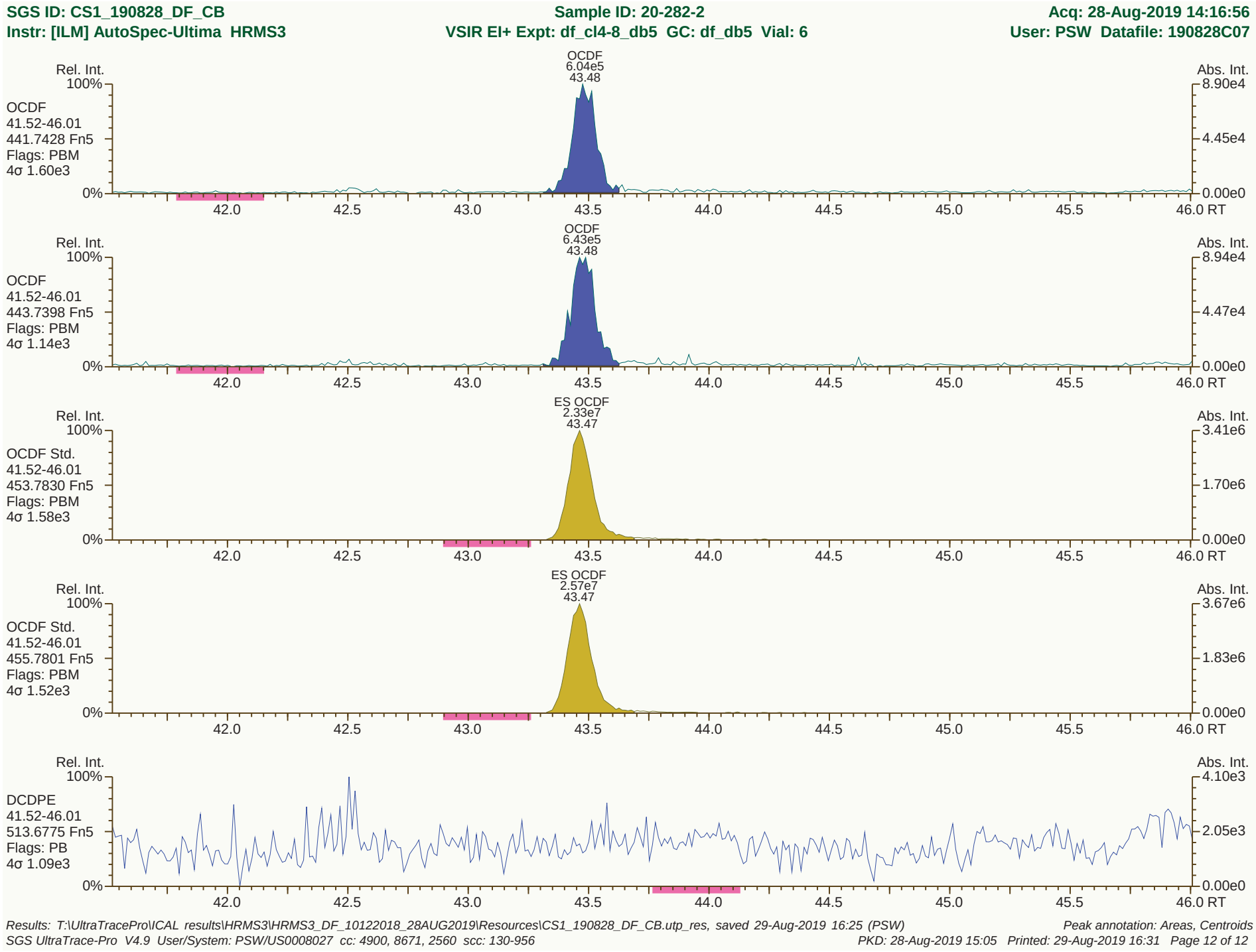


Results: T:\UltraTracePro\ICAL results\HRMS3\HRMS3_DF_10122018_28AUG2019\Resources\CS1_190828_DF_CB.utp_res, saved 29-Aug-2019 16:25 (PSW) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 9244 scc: 130-956 *Revised: 28-Aug-2019 15:04 (PSW) Printed: 29-Aug-2019 16:31 Page 8 of 12*


Rel. Int.
100%
PeCDF-2
29.52-34.51
339.8597 Fn2
Flags: PBM
4σ 8.50e2
0%
12378F
6.89e5
31.74
23478F
7.20e5
32.87
Abs. Int.
1.95e5
9.73e4
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDF-2
29.52-34.51
341.8568 Fn2
Flags: PBM
4σ 1.99e3
0%
12378F
4.74e5
31.74
23478F
4.73e5
32.87
Abs. Int.
1.39e5
6.93e4
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDF Std.
29.52-34.51
351.9000 Fn2
Flags: PBM
4σ 2.71e3
0%
CS 12346F
3.09e7
31.19
ES 12378F
2.98e7
31.72
ES 23478F
2.98e7
32.86
Abs. Int.
8.35e6
4.18e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDF Std.
29.52-34.51
353.8970 Fn2
Flags: PBM
4σ 1.73e3
0%
CS 12346F
1.97e7
31.18
ES 12378F
1.96e7
31.72
ES 23478F
1.92e7
32.86
Abs. Int.
5.34e6
2.67e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
HpCDPE
29.52-34.51
409.7974 Fn2
Flags: PB
4σ 1.14e3
0%
Abs. Int.
3.79e3
1.89e3
0.00e0
30.0
31.0
32.0
33.0
34.0
RT

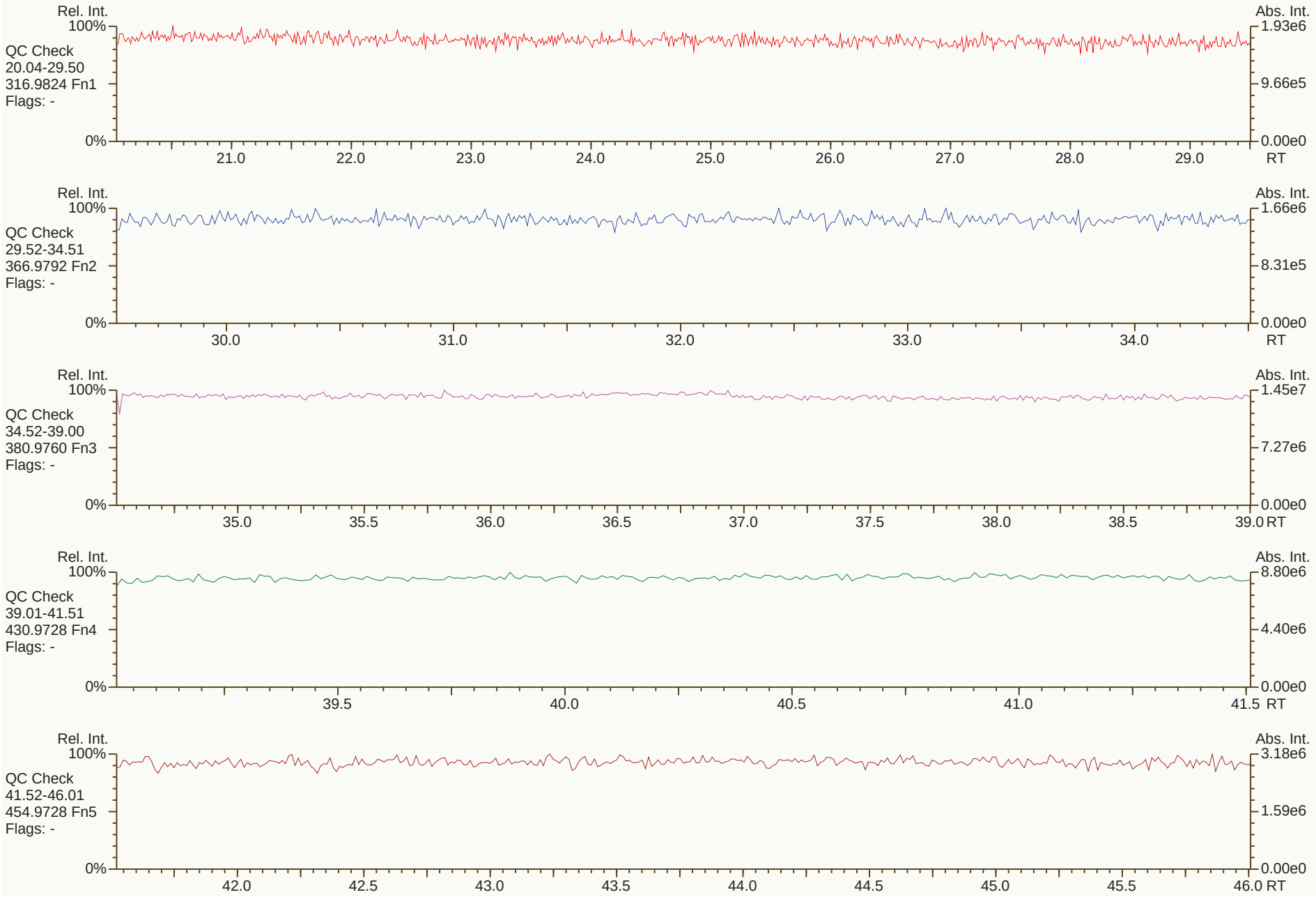

Rel. Int.
100%
HxCDF
34.52-39.00
373.8207 Fn3
Flags: PBM
4σ 1.13e3
0%
123478F
5.62e5
36.21
123678F
6.02e5
36.35
234678F
5.35e5
37.02
123789F
4.71e5
38.02
Abs. Int.
1.80e5
8.98e4
0.00e0
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
HxCDF
34.52-39.00
375.8178 Fn3
Flags: PBM
4σ 1.44e3
0%
123478F
4.70e5
36.21
123678F
5.08e5
36.35
234678F
4.47e5
37.02
123789F
3.84e5
38.02
Abs. Int.
1.49e5
7.44e4
0.00e0
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
HxCDF Std.
34.52-39.00
383.8639 Fn3
Flags: PBM
4σ 4.43e3
0%
ES 123478F
1.19e7
36.19
ES 123678F
1.43e7
36.33
CS 123469F
1.26e7
36.64
ES 234678F
1.30e7
37.00
ES 123789F
1.14e7
38.01
Abs. Int.
3.85e6
1.93e6
0.00e0
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
HxCDF Std.
34.52-39.00
385.8610 Fn3
Flags: PBM
4σ 7.85e3
0%
ES 123478F
2.28e7
36.19
ES 123678F
2.64e7
36.33
CS 123469F
2.36e7
36.64
ES 234678F
2.43e7
37.00
ES 123789F
2.21e7
38.01
Abs. Int.
7.11e6
3.55e6
0.00e0
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
OCDPE
34.52-39.00
445.7555 Fn3
Flags: PB
4σ 1.16e3
0%
Abs. Int.
6.78e3
3.39e3
0.00e0
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT

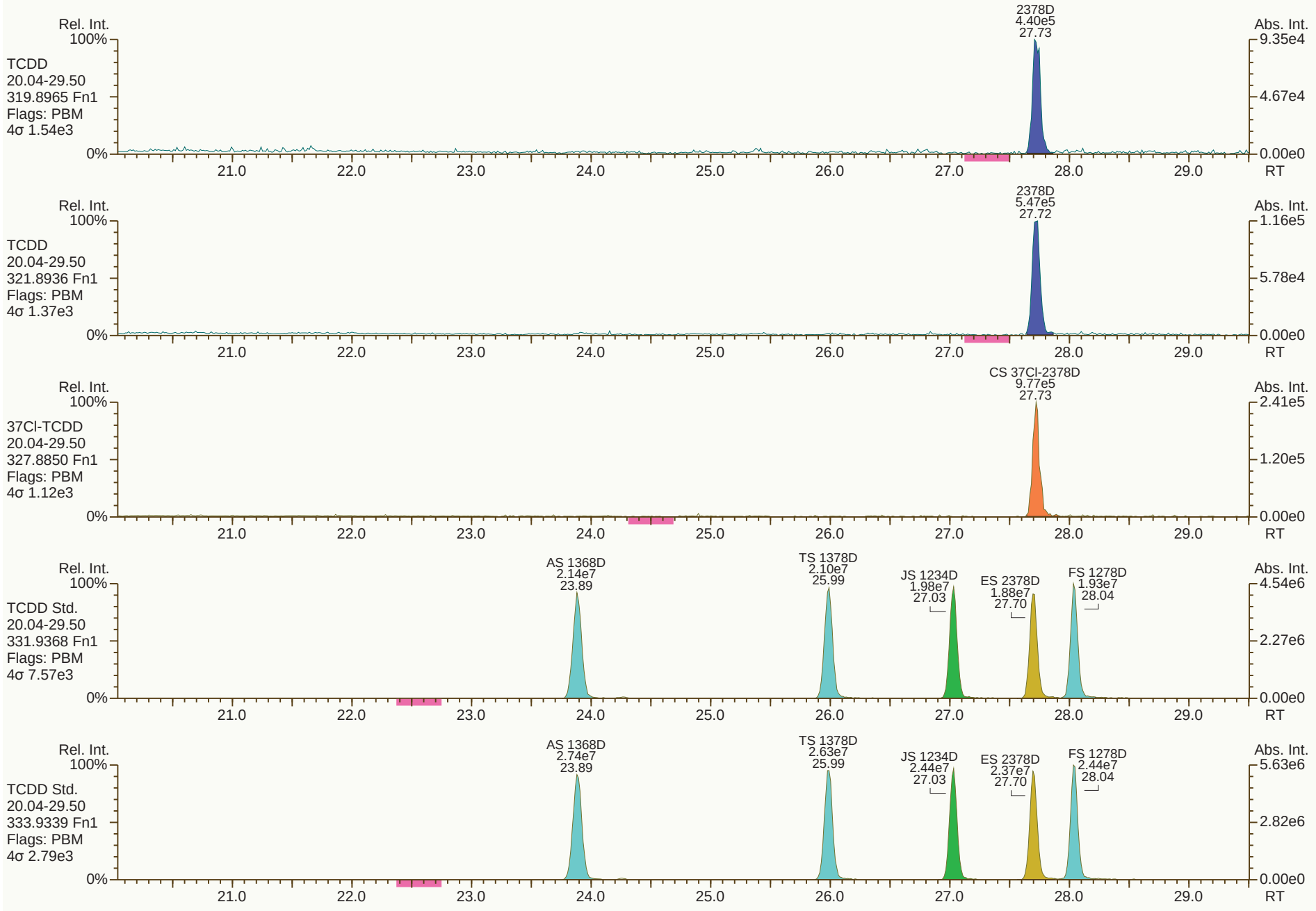

Rel. Int.
100%
HpCDF
39.01-41.50
407.7818 Fn4
Flags: PBM
4σ 1.79e3
1234678F
5.00e5
39.57
1234789F
3.89e5
40.99
Abs. Int.
1.39e5
6.97e4
0.00e0
0%
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
HpCDF
39.01-41.50
409.7788 Fn4
Flags: PBM
4σ 1.50e3
1234678F
4.76e5
39.57
1234789F
3.89e5
40.99
Abs. Int.
1.22e5
6.10e4
0.00e0
0%
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
HpCDF Std.
39.01-41.50
417.8253 Fn4
Flags: PBM
4σ 3.00e3
ES 1234678F
8.77e6
39.55
CS 1234689F
9.11e6
39.98
ES 1234789F
7.77e6
40.98
Abs. Int.
2.47e6
1.23e6
0.00e0
0%
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
HpCDF Std.
39.01-41.50
419.8220 Fn4
Flags: PBM
4σ 5.45e3
ES 1234678F
1.91e7
39.55
CS 1234689F
1.97e7
39.98
ES 1234789F
1.70e7
40.98
Abs. Int.
5.04e6
2.52e6
0.00e0
0%
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
NCDPE
39.01-41.50
479.7165 Fn4
Flags: PB
4σ 1.43e3
Abs. Int.
5.84e3
2.92e3
0.00e0
0%
39.5
40.0
40.5
41.0
41.5 RT

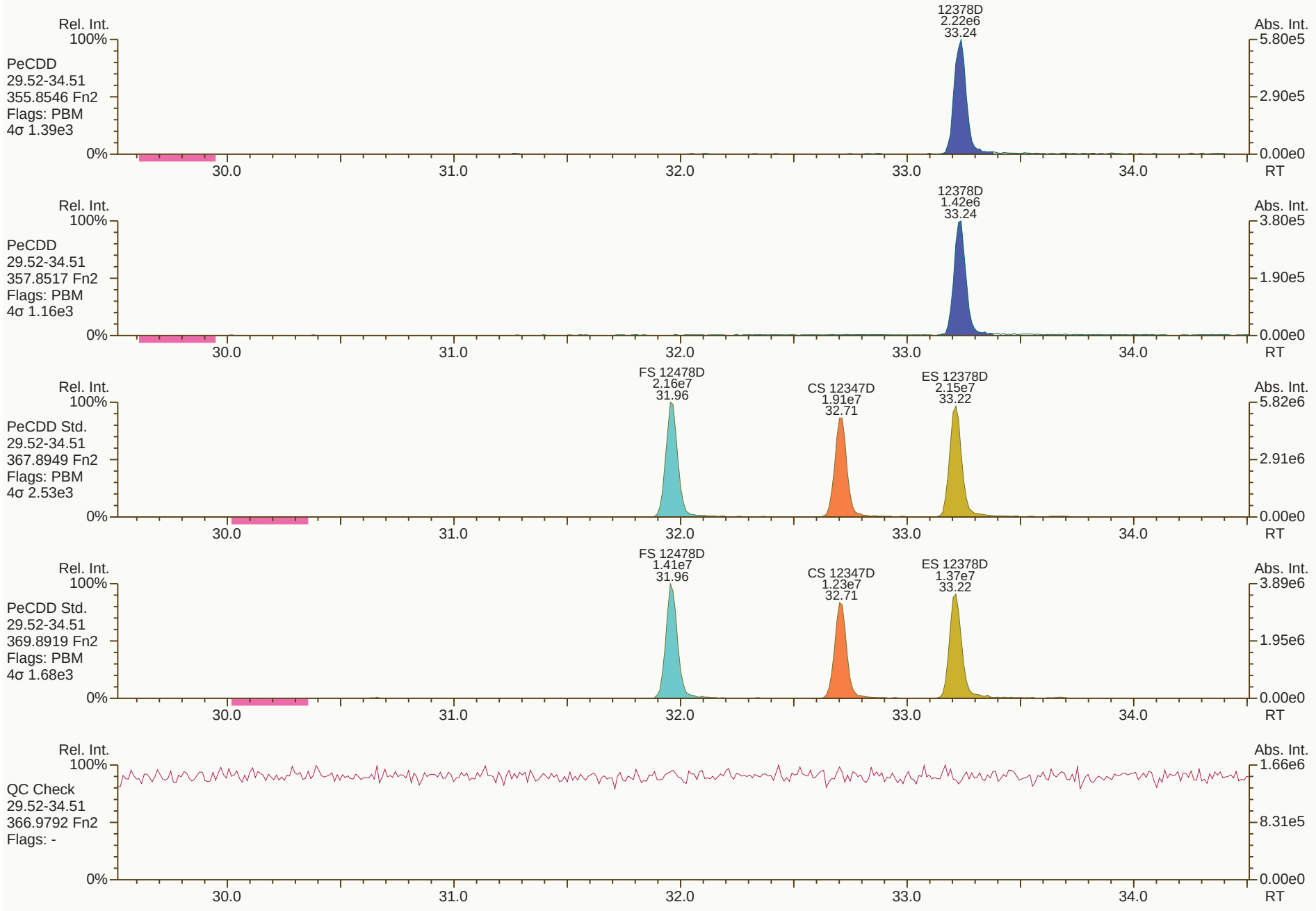

SGS ID: CS1_190828_DF_CB
Sample ID: 20-282-2
Acq: 28-Aug-2019 14:16:56
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5 GC: df_db5 Vial: 6
User: PSW Datafile: 190828C07
OCDF
6.04e5
43.48
Rel. Int.
Abs. Int.
OCDF
41.52-46.01
441.7428 Fn5
Flags: PBM
4σ 1.60e3
OCDF
6.43e5
43.48
OCDF
41.52-46.01
443.7398 Fn5
Flags: PBM
4σ 1.14e3
ES OCDF
2.33e7
43.47
OCDF Std.
41.52-46.01
453.7830 Fn5
Flags: PBM
4σ 1.58e3
ES OCDF
2.57e7
43.47
OCDF Std.
41.52-46.01
455.7801 Fn5
Flags: PBM
4σ 1.52e3
DCDPE
41.52-46.01
513.6775 Fn5
Flags: PB
4σ 1.09e3
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
Results: T:\UltraTracePro\ICAL results\HRMS3\HRMS3_DF_10122018_28AUG2019\Resources\CS1_190828_DF_CB.utp_res, saved 29-Aug-2019 16:25 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 4900, 8671, 2560 scc: 130-956
PKD: 28-Aug-2019 15:05 Printed: 29-Aug-2019 16:31 Page 12 of 12

Dioxin/Furan QC Summary		Acq'd: 28 Aug 2019 15:06 PSW				ICAL: HRMS3_DF_10122018_28AUG2019	
Lab ID: CS2_190828_DF_CA		UTP: 29-Aug-2019 08:38:05 PSW				Checkcode: 378-487-YRV	
Sample ID: 20-282-1		Report: 29 Aug 2019 09:56 pw				Datafile: 190828C08	
Name	**RT**	**Response**	**RA**	**OK**	**Ref. RRFs**	**Calc. RRFs**	**Dev'n**
2378-TCDD	27.73	9.87E+05	0.80	Y	1.19	1.16	-2%
12378-PeCDD	33.24	3.64E+06	1.56	Y	0.98	1.04	5%
123478-HxCDD	37.22	2.95E+06	1.20	Y	1.02	1.02	0%
123678-HxCDD	37.34	3.31E+06	1.24	Y	1.09	1.14	5%
123789-HxCDD	37.65	3.33E+06	1.26	Y	0.97	0.98	1%
1234678-HpCDD	40.56	2.78E+06	1.03	Y	0.98	1.03	5%
OCDD	43.34	4.10E+06	0.87	Y	1.07	1.05	-2%
2378-TCDF	26.81	1.25E+06	0.79	Y	1.05	1.02	-2%
12378-PeCDF	31.74	4.91E+06	1.59	Y	0.96	0.99	2%
23478-PeCDF	32.88	4.83E+06	1.55	Y	0.99	1.01	3%
123478-HxCDF	36.21	4.28E+06	1.21	Y	1.21	1.23	2%
123678-HxCDF	36.36	4.65E+06	1.23	Y	1.11	1.13	2%
234678-HxCDF	37.03	4.24E+06	1.24	Y	1.12	1.18	5%
123789-HxCDF	38.03	3.69E+06	1.24	Y	1.11	1.10	-1%
1234678-HpCDF	39.57	3.68E+06	1.00	Y	1.32	1.33	0%
1234789-HpCDF	41.00	3.15E+06	1.10	Y	1.26	1.27	1%
OCDF	43.50	5.11E+06	0.85	Y	1.03	1.07	4%
ES 2378-TCDD	27.70	4.25E+07	0.79	Y	0.99	0.96	-3%
ES 12378-PeCDD	33.22	3.52E+07	1.57	Y	0.83	0.80	-4%
ES 123478-HxCDD	37.2	2.88E+07	1.25	Y	0.95	0.90	-5%
ES 123678-HxCDD	37.33	2.90E+07	1.25	Y	0.98	0.91	-7%
ES 123789-HxCDD	37.64	3.39E+07	1.27	Y	1.14	1.06	-6%
ES 1234678-HpCDD	40.55	2.71E+07	1.04	Y	0.90	0.85	-5%
ES OCDD	43.33	3.90E+07	0.91	Y	0.63	0.61	-3%
ES 2378-TCDF	26.79	6.10E+07	0.80	Y	1.00	0.98	-2%
ES 12378-PeCDF	31.73	4.97E+07	1.54	Y	0.83	0.80	-4%
ES 23478-PeCDF	32.86	4.76E+07	1.57	Y	0.81	0.76	-5%
ES 123478-HxCDF	36.19	3.48E+07	0.53	Y	1.12	1.09	-3%
ES 123678-HxCDF	36.34	4.13E+07	0.54	Y	1.33	1.29	-3%
ES 234678-HxCDF	37.01	3.60E+07	0.52	Y	1.21	1.13	-6%
ES 123789-HxCDF	38.02	3.36E+07	0.52	Y	1.12	1.05	-6%
ES 1234678-HpCDF	39.56	2.77E+07	0.46	Y	0.92	0.87	-6%
ES 1234789-HpCDF	40.99	2.47E+07	0.46	Y	0.82	0.78	-5%
ES OCDF	43.48	4.77E+07	0.90	Y	0.78	0.75	-4%

Dioxin/Furan QC Summary		Acq'd: 28 Aug 2019 15:06 PSW				ICAL: HRMS3_DF_10122018_28AUG2019	
Lab ID: CS2_190828_DF_CA		UTP: 29-Aug-2019 08:38:05 PSW				Checkcode: 378-487-YRV	
Sample ID: 20-282-1		Report: 29 Aug 2019 09:56 pw				Datafile: 190828C08	
Name	**RT**	**Response**	**RA**	**OK**	**Ref. RRFs**	**Calc. RRFs**	**Dev'n**
JS 1234-TCDD	27.03	4.42E+07	0.81	Y	-	-	-
JS 1234-TCDF	25.39	6.24E+07	0.78	Y	-	-	-
JS 123467-HxCDD	37.53	1.60E+07	1.21	Y	-	-	-
CS 37Cl-2378-TCDD	27.73	9.77E+05	n/a	-	1.12	1.11	-1%
CS 12347-PeCDD	32.71	3.14E+07	1.56	Y	0.71	0.71	0%
CS 12346-PeCDF	31.19	5.08E+07	1.56	Y	0.81	0.81	1%
CS 123469-HxCDF	36.65	3.65E+07	0.53	Y	1.12	1.15	2%
CS 1234689-HpCDF	39.99	2.87E+07	0.45	Y	0.90	0.90	0%
SS 37Cl-2378-TCDD	27.73	9.77E+05	n/a	-	1.14	1.15	1%
SS 12347-PeCDD	32.71	3.14E+07	1.56	Y	0.86	0.89	4%
SS 12346-PeCDF	31.19	5.08E+07	1.56	Y	0.98	1.02	5%
SS 123469-HxCDF	36.65	3.65E+07	0.53	Y	0.85	0.89	5%
SS 1234689-HpCDF	39.99	2.87E+07	0.45	Y	0.97	1.04	6%
AS 1368-TCDD	23.89	4.88E+07	0.78	Y	1.12	1.11	-1%
AS 1368-TCDF	21.67	7.47E+07	0.79	Y	1.19	1.20	1%
FS 1278-TCDD	28.04	4.38E+07	0.79	Y	1.02	1.03	1%
FS 12478-PeCDD	31.96	3.57E+07	1.53	Y	0.98	1.02	3%
FS 123468-HxCDD	36.13	3.42E+07	1.24	Y	1.17	1.19	2%
FS 1234679-HpCDD	39.85	3.14E+07	1.03	Y	1.14	1.16	2%
TS 1378-TCDD	25.99	4.73E+07	0.80	Y	1.09	1.11	2%
~~OCDD-a~~	~~NotFnd~~						
~~OCDF-a~~	~~NotFnd~~						


Rel. Int.
100%
QC Check
20.04-29.50
316.9824 Fn1
Flags: -
0%
Abs. Int.
1.93e6
9.66e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
QC Check
29.52-34.51
366.9792 Fn2
Flags: -
0%
Abs. Int.
1.66e6
8.31e5
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
QC Check
34.52-39.00
380.9760 Fn3
Flags: -
0%
Abs. Int.
1.45e7
7.27e6
0.00e0
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0
RT
Rel. Int.
100%
QC Check
39.01-41.51
430.9728 Fn4
Flags: -
0%
Abs. Int.
8.80e6
4.40e6
0.00e0
39.5
40.0
40.5
41.0
41.5
RT
Rel. Int.
100%
QC Check
41.52-46.01
454.9728 Fn5
Flags: -
0%
Abs. Int.
3.18e6
1.59e6
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0
RT


Rel. Int.
100%
TCDD
20.04-29.50
319.8965 Fn1
Flags: PBM
4σ 1.54e3
0%
2378D
4.40e5
27.73
Abs. Int.
9.35e4
4.67e4
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD
20.04-29.50
321.8936 Fn1
Flags: PBM
4σ 1.37e3
0%
2378D
5.47e5
27.72
Abs. Int.
1.16e5
5.78e4
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
37Cl-TCDD
20.04-29.50
327.8850 Fn1
Flags: PBM
4σ 1.12e3
0%
CS 37Cl-2378D
9.77e5
27.73
Abs. Int.
2.41e5
1.20e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.04-29.50
331.9368 Fn1
Flags: PBM
4σ 7.57e3
0%
AS 1368D
2.14e7
23.89
TS 1378D
2.10e7
25.99
JS 1234D
1.98e7
27.03
ES 2378D
1.88e7
27.70
FS 1278D
1.93e7
28.04
Abs. Int.
4.54e6
2.27e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.04-29.50
333.9339 Fn1
Flags: PBM
4σ 2.79e3
0%
AS 1368D
2.74e7
23.89
TS 1378D
2.63e7
25.99
JS 1234D
2.44e7
27.03
ES 2378D
2.37e7
27.70
FS 1278D
2.44e7
28.04
Abs. Int.
5.63e6
2.82e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
PeCDD
29.52-34.51
355.8546 Fn2
Flags: PBM
4σ 1.39e3
0%
12378D
2.22e6
33.24
Abs. Int.
5.80e5
2.90e5
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDD
29.52-34.51
357.8517 Fn2
Flags: PBM
4σ 1.16e3
0%
12378D
1.42e6
33.24
Abs. Int.
3.80e5
1.90e5
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDD Std.
29.52-34.51
367.8949 Fn2
Flags: PBM
4σ 2.53e3
0%
FS 12478D
2.16e7
31.96
CS 12347D
1.91e7
32.71
ES 12378D
2.15e7
33.22
Abs. Int.
5.82e6
2.91e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDD Std.
29.52-34.51
369.8919 Fn2
Flags: PBM
4σ 1.68e3
0%
FS 12478D
1.41e7
31.96
CS 12347D
1.23e7
32.71
ES 12378D
1.37e7
33.22
Abs. Int.
3.89e6
1.95e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
QC Check
29.52-34.51
366.9792 Fn2
Flags: -
0%
Abs. Int.
1.66e6
8.31e5
0.00e0
30.0
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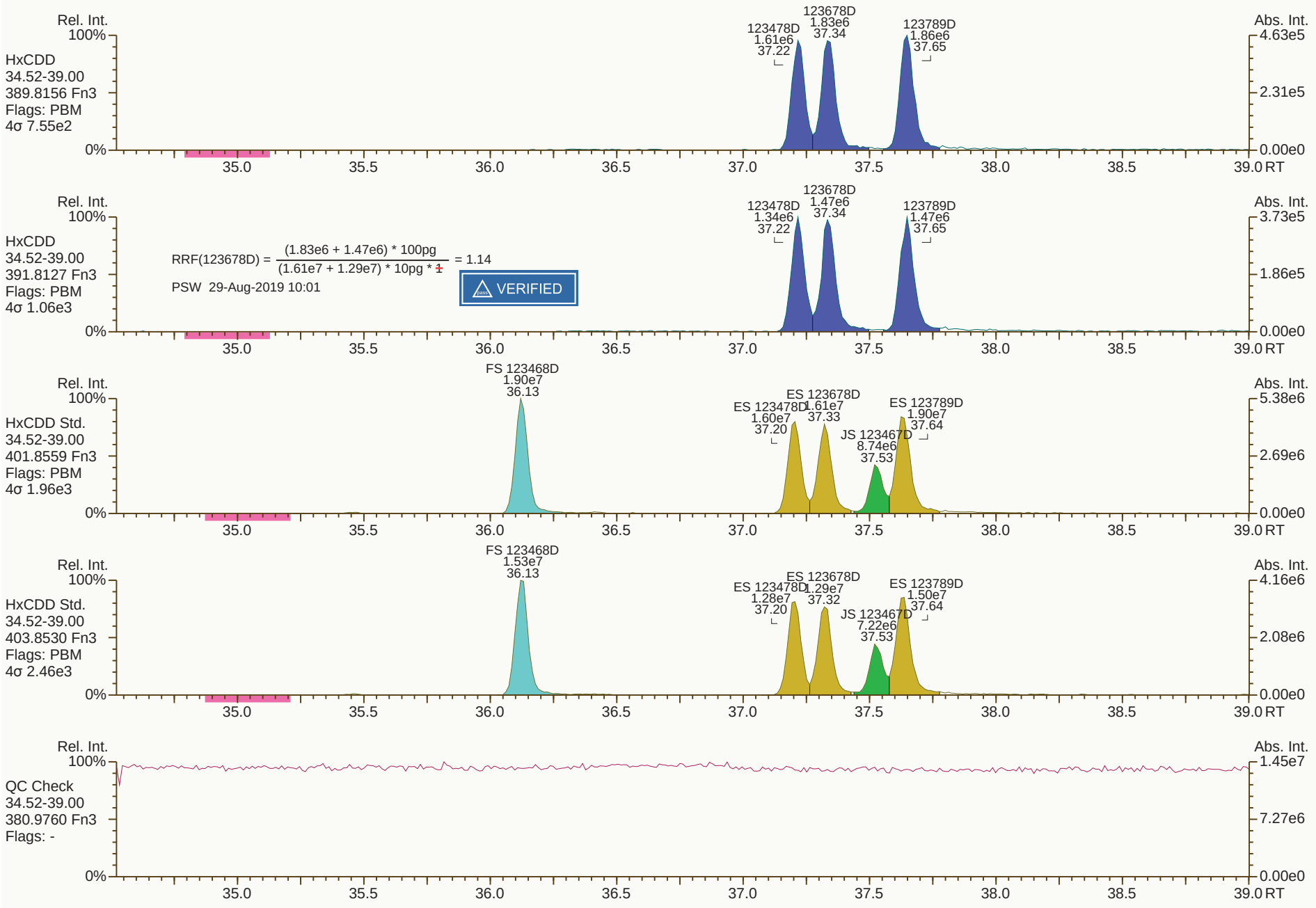
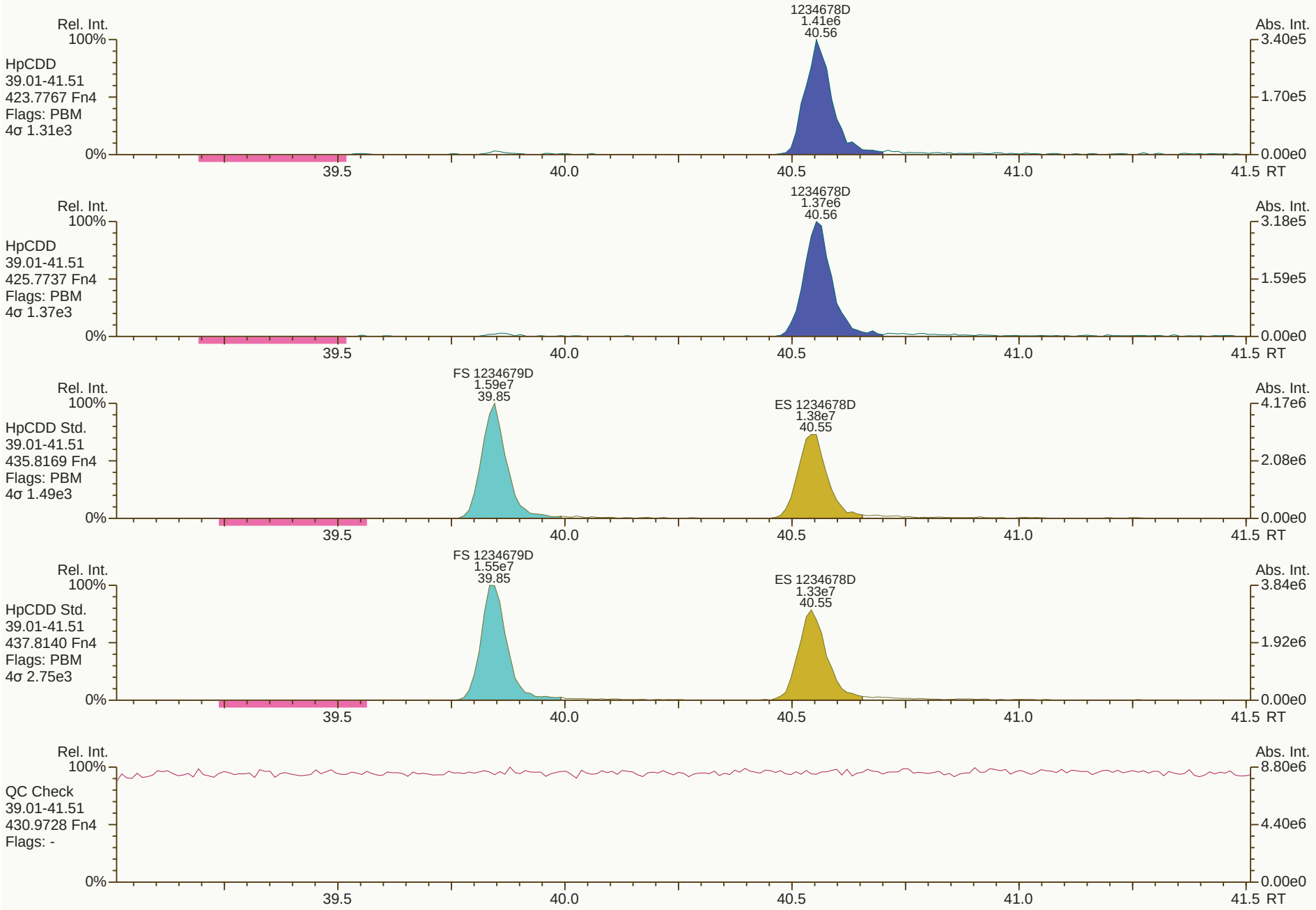
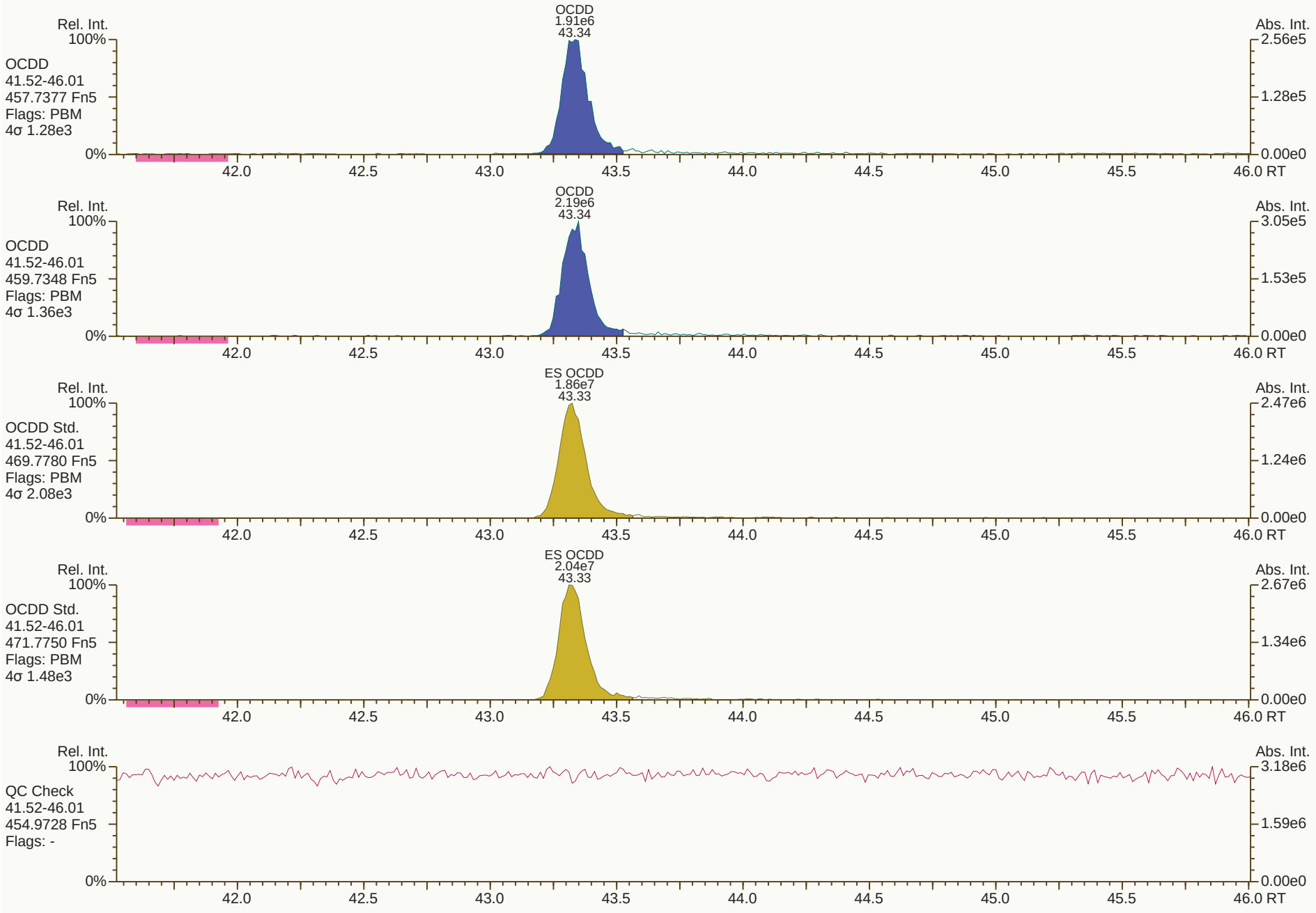
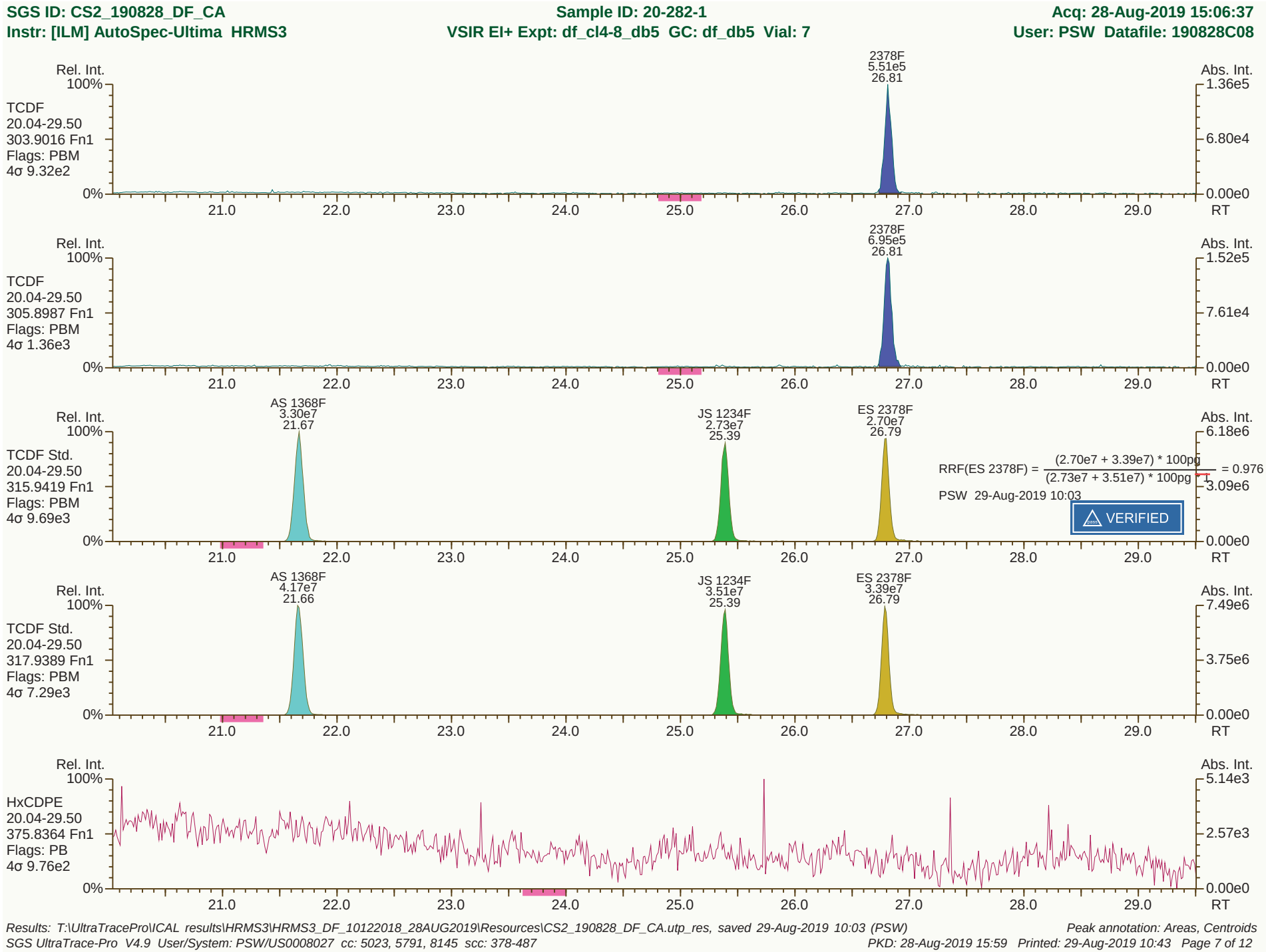
32.0
33.0
34.0
RT


Rel. Int.
100%
HxCDD
34.52-39.00
389.8156 Fn3
Flags: PBM
4σ 7.55e2
123478D
1.61e6
37.22
123678D
1.83e6
37.34
123789D
1.86e6
37.65
Abs. Int.
4.63e5
2.31e5
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
HxCDD
34.52-39.00
391.8127 Fn3
Flags: PBM
4σ 1.06e3
RRF(123678D) = (1.83e6 + 1.47e6) * 100pg / (1.61e7 + 1.29e7) * 10pg * 1 = 1.14
PSW 29-Aug-2019 10:01
VERIFIED
123478D
1.34e6
37.22
123678D
1.47e6
37.34
123789D
1.47e6
37.65
Abs. Int.
3.73e5
1.86e5
0.00e0
Rel. Int.
100%
HxCDD Std.
34.52-39.00
401.8559 Fn3
Flags: PBM
4σ 1.96e3
FS 123468D
1.90e7
36.13
ES 123478D
1.60e7
37.20
ES 123678D
1.61e7
37.33
JS 123467D
8.74e6
37.53
ES 123789D
1.90e7
37.64
Abs. Int.
5.38e6
2.69e6
0.00e0
Rel. Int.
100%
HxCDD Std.
34.52-39.00
403.8530 Fn3
Flags: PBM
4σ 2.46e3
FS 123468D
1.53e7
36.13
ES 123478D
1.28e7
37.20
ES 123678D
1.29e7
37.32
JS 123467D
7.22e6
37.53
ES 123789D
1.50e7
37.64
Abs. Int.
4.16e6
2.08e6
0.00e0
Rel. Int.
100%
QC Check
34.52-39.00
380.9760 Fn3
Flags: -
Abs. Int.
1.45e7
7.27e6
0.00e0

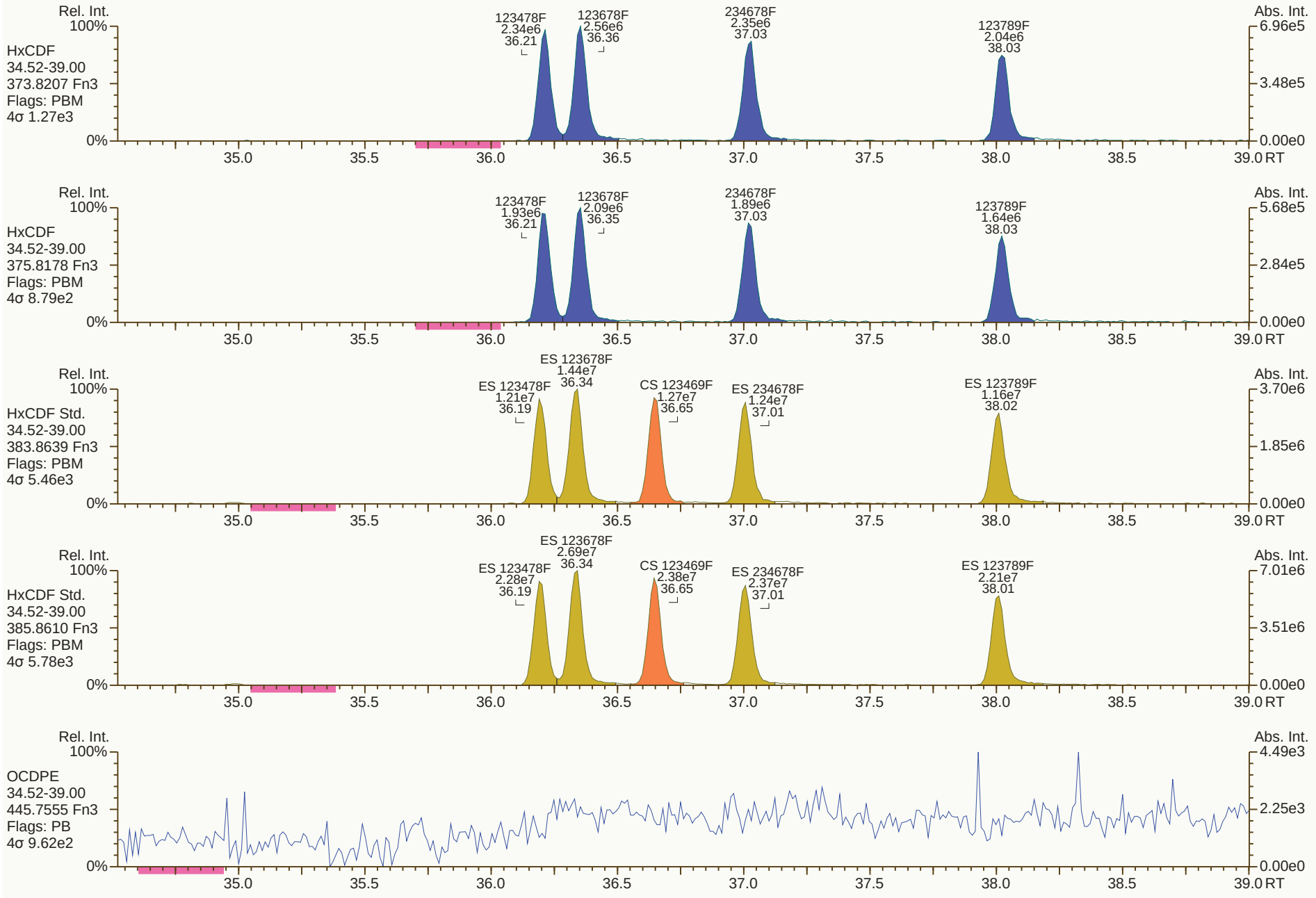

Rel. Int.
100%
HpCDD
39.01-41.51
423.7767 Fn4
Flags: PBM
4σ 1.31e3
1234678D
1.41e6
40.56
Abs. Int.
3.40e5
1.70e5
0.00e0
0%
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
HpCDD
39.01-41.51
425.7737 Fn4
Flags: PBM
4σ 1.37e3
1234678D
1.37e6
40.56
Abs. Int.
3.18e5
1.59e5
0.00e0
0%
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
HpCDD Std.
39.01-41.51
435.8169 Fn4
Flags: PBM
4σ 1.49e3
FS 1234679D
1.59e7
39.85
ES 1234678D
1.38e7
40.55
Abs. Int.
4.17e6
2.08e6
0.00e0
0%
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
HpCDD Std.
39.01-41.51
437.8140 Fn4
Flags: PBM
4σ 2.75e3
FS 1234679D
1.55e7
39.85
ES 1234678D
1.33e7
40.55
Abs. Int.
3.84e6
1.92e6
0.00e0
0%
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
QC Check
39.01-41.51
430.9728 Fn4
Flags: -
Abs. Int.
8.80e6
4.40e6
0.00e0
0%
39.5
40.0
40.5
41.0
41.5 RT


OCDD
1.91e6
43.34
Rel. Int.
Abs. Int.
OCDD
41.52-46.01
457.7377 Fn5
Flags: PBM
4σ 1.28e3
OCDD
2.19e6
43.34
OCDD
41.52-46.01
459.7348 Fn5
Flags: PBM
4σ 1.36e3
ES OCDD
1.86e7
43.33
OCDD Std.
41.52-46.01
469.7780 Fn5
Flags: PBM
4σ 2.08e3
ES OCDD
2.04e7
43.33
OCDD Std.
41.52-46.01
471.7750 Fn5
Flags: PBM
4σ 1.48e3
QC Check
41.52-46.01
454.9728 Fn5
Flags: -
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT

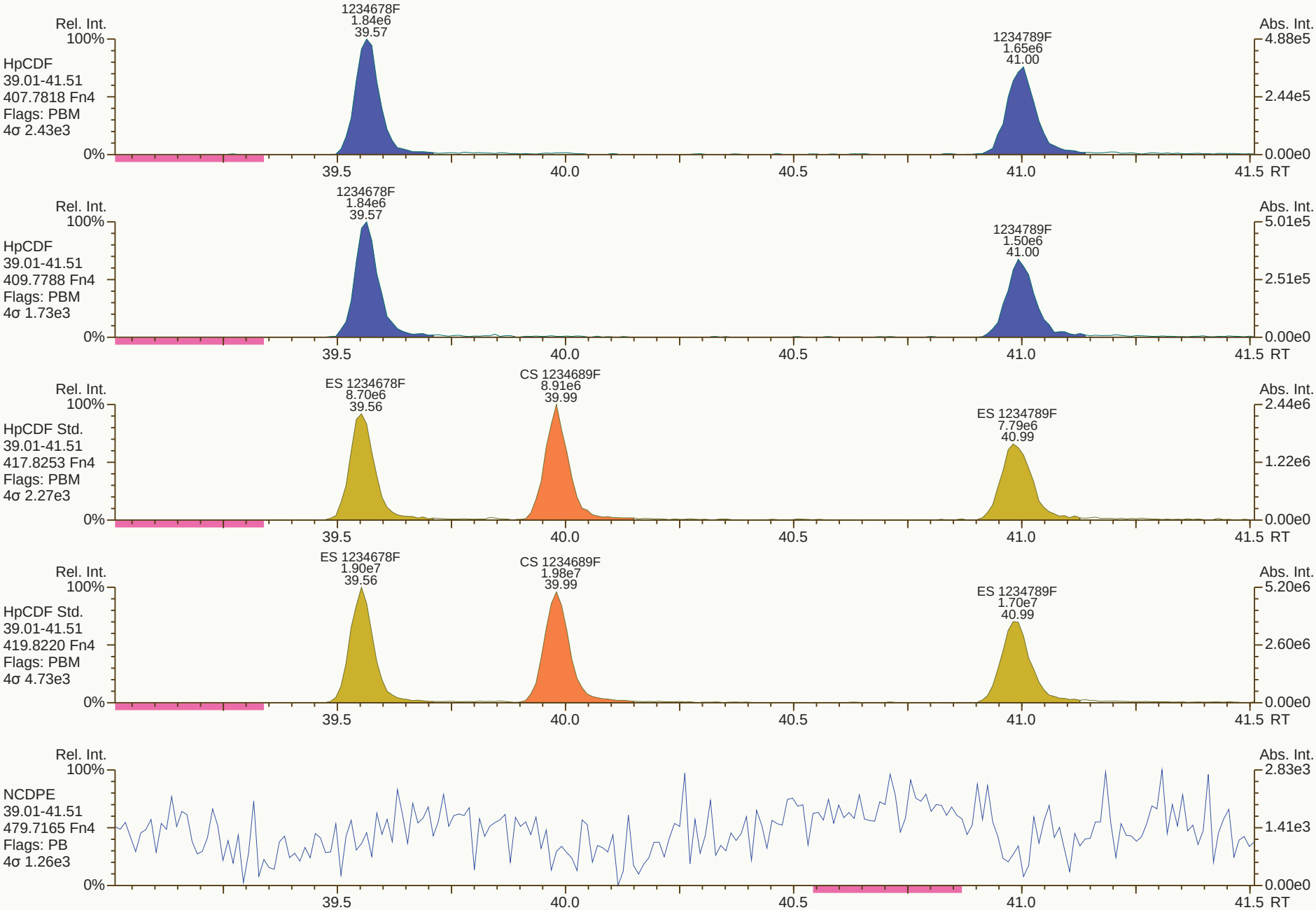

SGS ID: CS2_190828_DF_CA
Sample ID: 20-282-1
Acq: 28-Aug-2019 15:06:37
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5 GC: df_db5 Vial: 7
User: PSW Datafile: 190828C08
Rel. Int.
Abs. Int.
TCDF
20.04-29.50
303.9016 Fn1
Flags: PBM
4σ 9.32e2
2378F
5.51e5
26.81
1.36e5
6.80e4
0.00e0
TCDF
20.04-29.50
305.8987 Fn1
Flags: PBM
4σ 1.36e3
2378F
6.95e5
26.81
1.52e5
7.61e4
TCDF Std.
20.04-29.50
315.9419 Fn1
Flags: PBM
4σ 9.69e3
AS 1368F
3.30e7
21.67
JS 1234F
2.73e7
25.39
ES 2378F
2.70e7
26.79
6.18e6
3.09e6
RRF(ES 2378F) = (2.70e7 + 3.39e7) * 100pg / (2.73e7 + 3.51e7) * 100pg = 0.976
PSW 29-Aug-2019 10:03
VERIFIED
TCDF Std.
20.04-29.50
317.9389 Fn1
Flags: PBM
4σ 7.29e3
AS 1368F
4.17e7
21.66
JS 1234F
3.51e7
25.39
ES 2378F
3.39e7
26.79
7.49e6
3.75e6
HxCDPE
20.04-29.50
375.8364 Fn1
Flags: PB
4σ 9.76e2
5.14e3
2.57e3
100%
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Results: T:\UltraTracePro\ICAL results\HRMS3\HRMS3_DF_10122018_28AUG2019\Resources\CS2_190828_DF_CA.utp_res, saved 29-Aug-2019 10:03 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 5023, 5791, 8145 scc: 378-487
PKD: 28-Aug-2019 15:59 Printed: 29-Aug-2019 10:43 Page 7 of 12


Rel. Int.
100%
0%
Abs. Int.
6.68e3
3.34e3
0.00e0
PeCDF-1
20.04-29.50
339.8597 Fn1
Flags: PB
4σ 1.57e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
0%
Abs. Int.
7.81e3
3.90e3
0.00e0
PeCDF-1
20.04-29.50
341.8568 Fn1
Flags: PB
4σ 1.21e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
0%
Abs. Int.
1.93e6
9.66e5
0.00e0
QC Check
20.04-29.50
316.9824 Fn1
Flags: -
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
PeCDF-2
29.52-34.51
339.8597 Fn2
Flags: PBM
4σ 1.21e3
0%
12378F
3.01e6
31.74
23478F
2.94e6
32.88
Abs. Int.
8.19e5
4.10e5
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDF-2
29.52-34.51
341.8568 Fn2
Flags: PBM
4σ 1.01e3
0%
12378F
1.90e6
31.74
23478F
1.89e6
32.88
Abs. Int.
5.29e5
2.65e5
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDF Std.
29.52-34.51
351.9000 Fn2
Flags: PBM
4σ 1.98e3
0%
CS 12346F
3.09e7
31.19
ES 12378F
3.01e7
31.73
ES 23478F
2.91e7
32.86
Abs. Int.
8.07e6
4.04e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDF Std.
29.52-34.51
353.8970 Fn2
Flags: PBM
4σ 1.59e3
0%
CS 12346F
1.99e7
31.19
ES 12378F
1.96e7
31.73
ES 23478F
1.85e7
32.86
Abs. Int.
5.21e6
2.61e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
HpCDPE
29.52-34.51
409.7974 Fn2
Flags: PB
4σ 1.28e3
0%
Abs. Int.
6.28e3
3.14e3
0.00e0
30.0
31.0
32.0
33.0
34.0
RT


Rel. Int.
100%
HxCDF
34.52-39.00
373.8207 Fn3
Flags: PBM
4σ 1.27e3
123478F
2.34e6
36.21
123678F
2.56e6
36.36
234678F
2.35e6
37.03
123789F
2.04e6
38.03
Abs. Int.
6.96e5
3.48e5
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
HxCDF
34.52-39.00
375.8178 Fn3
Flags: PBM
4σ 8.79e2
123478F
1.93e6
36.21
123678F
2.09e6
36.35
234678F
1.89e6
37.03
123789F
1.64e6
38.03
Abs. Int.
5.68e5
2.84e5
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
HxCDF Std.
34.52-39.00
383.8639 Fn3
Flags: PBM
4σ 5.46e3
ES 123678F
1.44e7
36.34
ES 123478F
1.21e7
36.19
CS 123469F
1.27e7
36.65
ES 234678F
1.24e7
37.01
ES 123789F
1.16e7
38.02
Abs. Int.
3.70e6
1.85e6
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
HxCDF Std.
34.52-39.00
385.8610 Fn3
Flags: PBM
4σ 5.78e3
ES 123678F
2.69e7
36.34
ES 123478F
2.28e7
36.19
CS 123469F
2.38e7
36.65
ES 234678F
2.37e7
37.01
ES 123789F
2.21e7
38.01
Abs. Int.
7.01e6
3.51e6
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
OCDPE
34.52-39.00
445.7555 Fn3
Flags: PB
4σ 9.62e2
Abs. Int.
4.49e3
2.25e3
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT

SGS ID: CS2_190828_DF_CA
Instr: [ILM] AutoSpec-Ultima HRMS3
Sample ID: 20-282-1
VSIR EI+ Expt: df_cl4-8_db5 GC: df_db5 Vial: 7
Acq: 28-Aug-2019 15:06:37
User: PSW Datafile: 190828C08



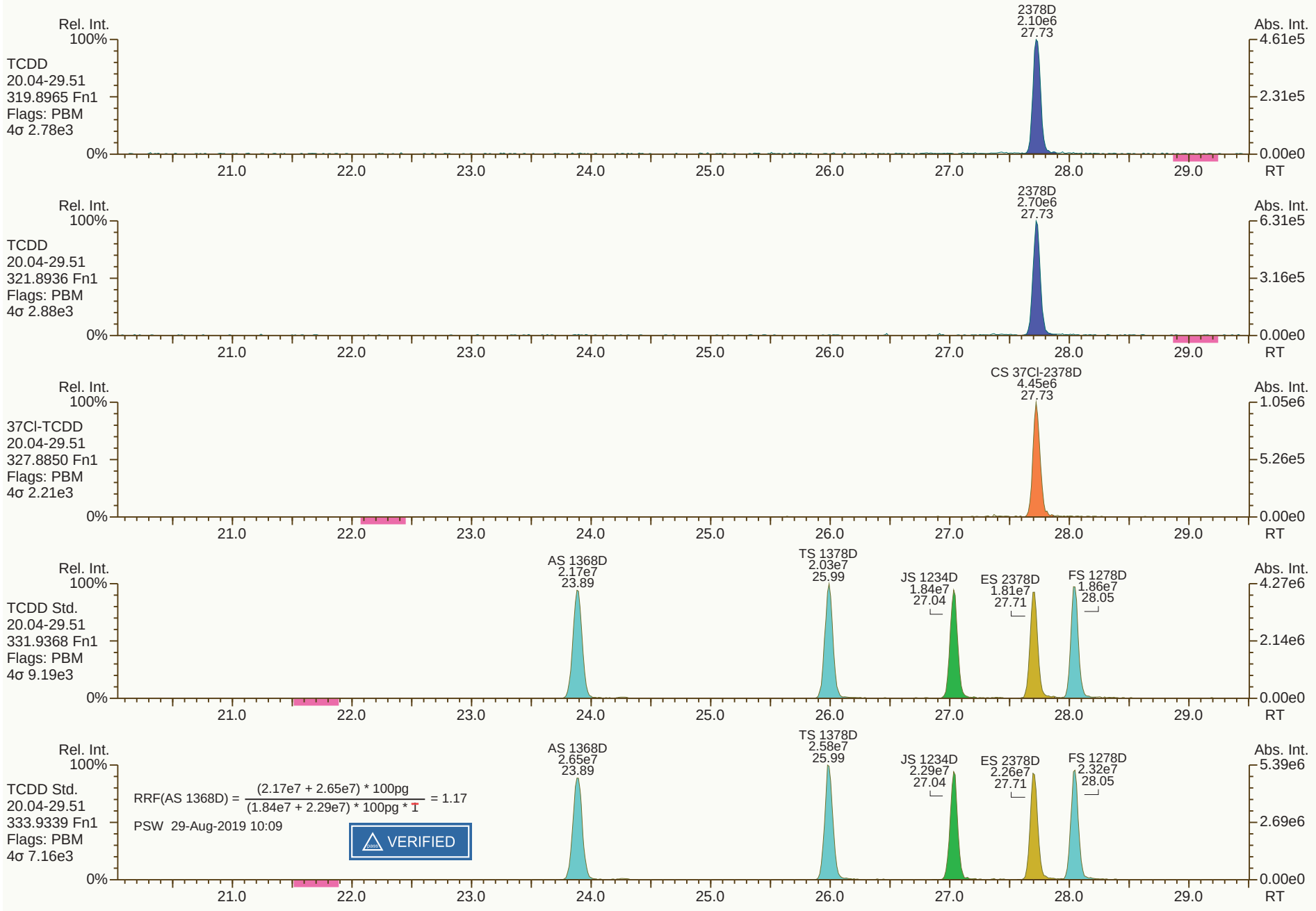

OCDF
2.34e6
43.50
Rel. Int.
100%
Abs. Int.
3.11e5
1.56e5
0.00e0
0%
OCDF
41.52-46.01
441.7428 Fn5
Flags: PBM
4σ 9.75e2
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
OCDF
2.77e6
43.49
Rel. Int.
100%
Abs. Int.
3.90e5
1.95e5
0.00e0
0%
OCDF
41.52-46.01
443.7398 Fn5
Flags: PBM
4σ 1.84e3
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
ES OCDF
2.26e7
43.48
Rel. Int.
100%
Abs. Int.
3.10e6
1.55e6
0.00e0
0%
OCDF Std.
41.52-46.01
453.7830 Fn5
Flags: PBM
4σ 1.64e3
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
ES OCDF
2.51e7
43.48
Rel. Int.
100%
Abs. Int.
3.46e6
1.73e6
0.00e0
0%
OCDF Std.
41.52-46.01
455.7801 Fn5
Flags: PBM
4σ 2.39e3
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
Rel. Int.
100%
Abs. Int.
4.20e3
2.10e3
0.00e0
0%
DCDPE
41.52-46.01
513.6775 Fn5
Flags: PB
4σ 1.22e3
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT

Dioxin/Furan QC Summary		Acq'd: 28 Aug 2019 17:00 PSW				ICAL: HRMS3_DF_10122018_28AUG2019	
Lab ID: CS3_190828_DF_CB		UTP: 29-Aug-2019 09:14:28 PSW				Checkcode: 536-910-YJN	
Sample ID: 20-449-3		Report: 29 Aug 2019 09:56 pw				Datafile: 190828C10	
Name	**RT**	**Response**	**RA**	**OK**	**Ref. RRFs**	**Calc. RRFs**	**Dev'n**
2378-TCDD	27.73	4.80E+06	0.78	Y	1.19	1.18	-1%
12378-PeCDD	33.24	1.67E+07	1.57	Y	0.98	1.00	2%
123478-HxCDD	37.23	1.52E+07	1.26	Y	1.02	1.08	6%
123678-HxCDD	37.35	1.59E+07	1.23	Y	1.09	1.08	-1%
123789-HxCDD	37.66	1.71E+07	1.24	Y	0.97	1.00	3%
1234678-HpCDD	40.57	1.36E+07	1.02	Y	0.98	1.05	7%
OCDD	43.35	1.92E+07	0.88	Y	1.07	1.06	-1%
2378-TCDF	26.82	5.90E+06	0.79	Y	1.05	1.05	1%
12378-PeCDF	31.75	2.24E+07	1.55	Y	0.96	0.95	-1%
23478-PeCDF	32.88	2.22E+07	1.53	Y	0.99	0.98	0%
123478-HxCDF	36.22	2.06E+07	1.23	Y	1.21	1.22	1%
123678-HxCDF	36.36	2.24E+07	1.24	Y	1.11	1.12	1%
234678-HxCDF	37.03	2.09E+07	1.22	Y	1.12	1.16	4%
123789-HxCDF	38.04	1.90E+07	1.25	Y	1.11	1.17	5%
1234678-HpCDF	39.58	1.81E+07	1.02	Y	1.32	1.35	2%
1234789-HpCDF	41.01	1.54E+07	1.00	Y	1.26	1.26	1%
OCDF	43.51	2.32E+07	0.89	Y	1.03	1.05	2%
ES 2378-TCDD	27.71	4.07E+07	0.80	Y	0.99	0.98	-1%
ES 12378-PeCDD	33.23	3.34E+07	1.58	Y	0.83	0.81	-3%
ES 123478-HxCDD	37.21	2.81E+07	1.27	Y	0.95	0.89	-6%
ES 123678-HxCDD	37.33	2.96E+07	1.28	Y	0.98	0.94	-4%
ES 123789-HxCDD	37.65	3.40E+07	1.23	Y	1.14	1.08	-5%
ES 1234678-HpCDD	40.55	2.60E+07	1.08	Y	0.90	0.83	-8%
ES OCDD	43.35	3.62E+07	0.92	Y	0.63	0.57	-8%
ES 2378-TCDF	26.8	5.60E+07	0.79	Y	1.00	0.94	-5%
ES 12378-PeCDF	31.73	4.69E+07	1.56	Y	0.83	0.79	-5%
ES 23478-PeCDF	32.87	4.52E+07	1.60	Y	0.81	0.76	-6%
ES 123478-HxCDF	36.2	3.37E+07	0.53	Y	1.12	1.07	-5%
ES 123678-HxCDF	36.35	4.02E+07	0.53	Y	1.33	1.28	-4%
ES 234678-HxCDF	37.02	3.62E+07	0.53	Y	1.21	1.15	-5%
ES 123789-HxCDF	38.02	3.25E+07	0.54	Y	1.12	1.03	-8%
ES 1234678-HpCDF	39.56	2.70E+07	0.46	Y	0.92	0.86	-7%
ES 1234789-HpCDF	41	2.44E+07	0.46	Y	0.82	0.78	-5%
ES OCDF	43.49	4.43E+07	0.89	Y	0.78	0.70	-10%

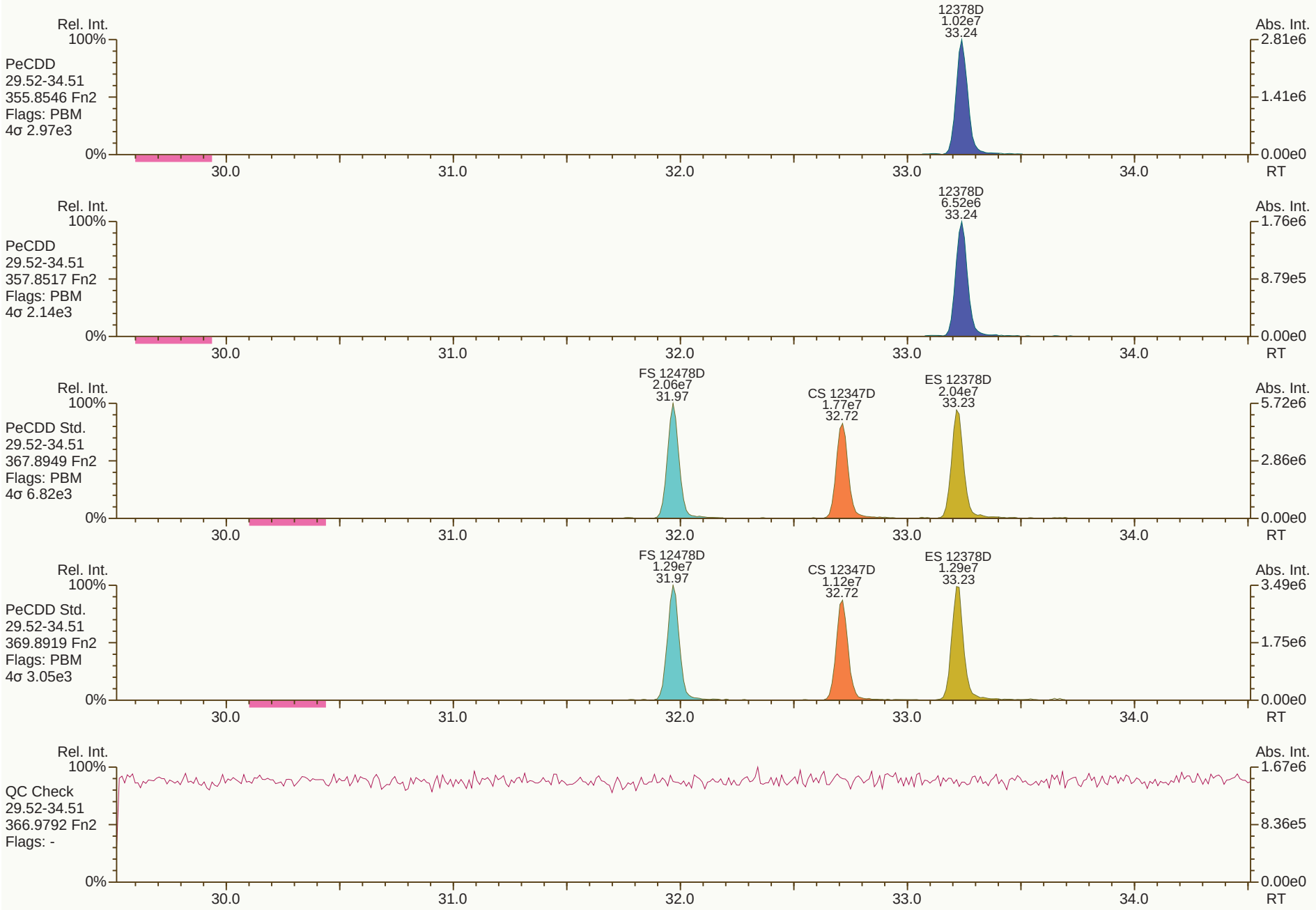
Dioxin/Furan QC Summary		Acq'd: 28 Aug 2019 17:00 PSW				ICAL: HRMS3_DF_10122018_28AUG2019	
Lab ID: CS3_190828_DF_CB		UTP: 29-Aug-2019 09:14:28 PSW				Checkcode: 536-910-YJN	
Sample ID: 20-449-3		Report: 29 Aug 2019 09:56 pw				Datafile: 190828C10	
Name	**RT**	**Response**	**RA**	**OK**	**Ref. RRFs**	**Calc. RRFs**	**Dev'n**
JS 1234-TCDD	27.04	4.13E+07	0.80	Y	-	-	-
JS 1234-TCDF	25.39	5.94E+07	0.79	Y	-	-	-
JS 123467-HxCDD	37.53	1.58E+07	1.22	Y	-	-	-
CS 37Cl-2378-TCDD	27.73	4.45E+06	n/a	-	1.12	1.08	-4%
CS 12347-PeCDD	32.72	2.90E+07	1.57	Y	0.71	0.70	-2%
CS 12346-PeCDF	31.20	4.68E+07	1.53	Y	0.81	0.79	-3%
CS 123469-HxCDF	36.66	3.41E+07	0.53	Y	1.12	1.08	-4%
CS 1234689-HpCDF	39.99	2.68E+07	0.46	Y	0.90	0.85	-5%
SS 37Cl-2378-TCDD	27.73	4.45E+06	n/a	-	1.14	1.09	-4%
SS 12347-PeCDD	32.72	2.90E+07	1.57	Y	0.86	0.87	1%
SS 12346-PeCDF	31.20	4.68E+07	1.53	Y	0.98	1.00	2%
SS 123469-HxCDF	36.66	3.41E+07	0.53	Y	0.85	0.85	0%
SS 1234689-HpCDF	39.99	2.68E+07	0.46	Y	0.97	0.99	2%
AS 1368-TCDD	23.89	4.82E+07	0.82	Y	1.12	1.17	4%
AS 1368-TCDF	21.67	7.22E+07	0.78	Y	1.19	1.22	2%
FS 1278-TCDD	28.05	4.18E+07	0.80	Y	1.02	1.03	1%
FS 12478-PeCDD	31.97	3.34E+07	1.60	Y	0.98	1.00	2%
FS 123468-HxCDD	36.13	3.45E+07	1.25	Y	1.17	1.23	5%
FS 1234679-HpCDD	39.86	3.07E+07	1.07	Y	1.14	1.18	4%
TS 1378-TCDD	25.99	4.61E+07	0.78	Y	1.09	1.13	4%
~~OCDD-a~~	~~NotFnd~~						
~~OCDF-a~~	~~NotFnd~~						



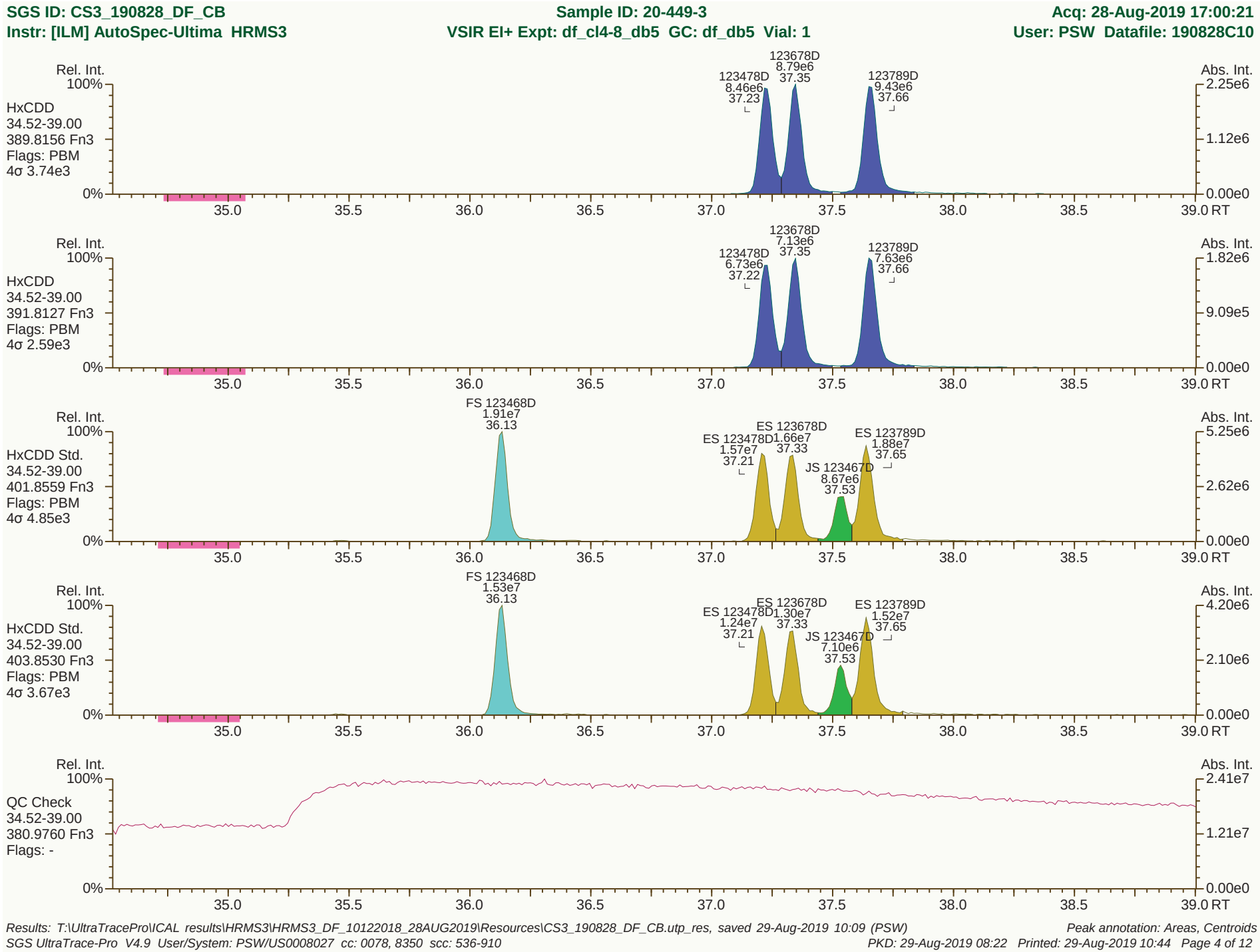
Results: T:\UltraTracePro\ICAL results\HRMS3\HRMS3_DF_10122018_28AUG2019\Resources\CS3_190828_DF_CB.utp_res, saved 29-Aug-2019 10:09 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 scc: 536-910
PKD: n/a Printed: 29-Aug-2019 10:44 Page 1 of 12



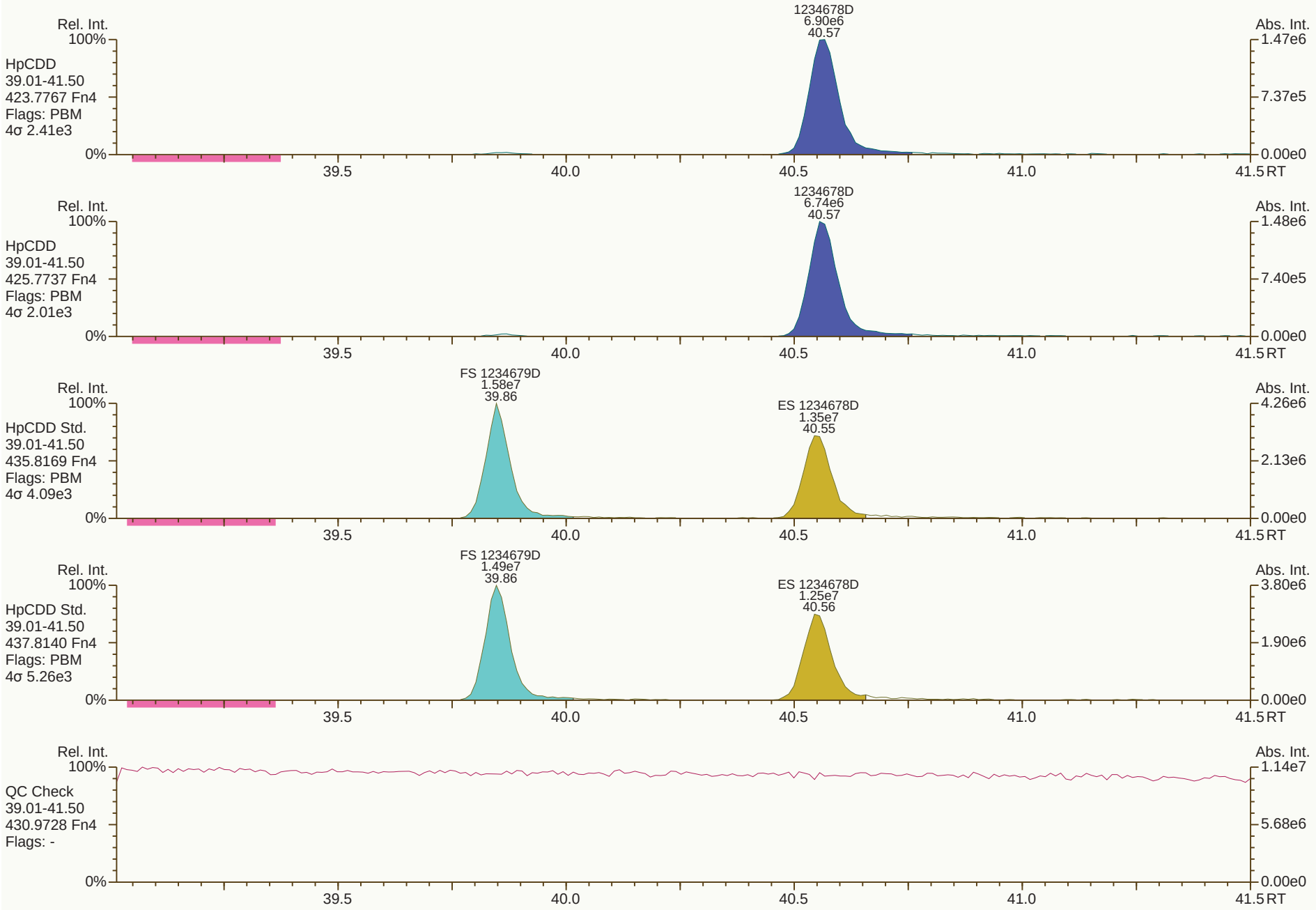
Results: T:\UltraTracePro\ICAL results\HRMS3\HRMS3_DF_10122018_28AUG2019\Resources\CS3_190828_DF_CB.utp_res, saved 29-Aug-2019 10:09 (PSW)
Peak annotation: Areas, Centroids

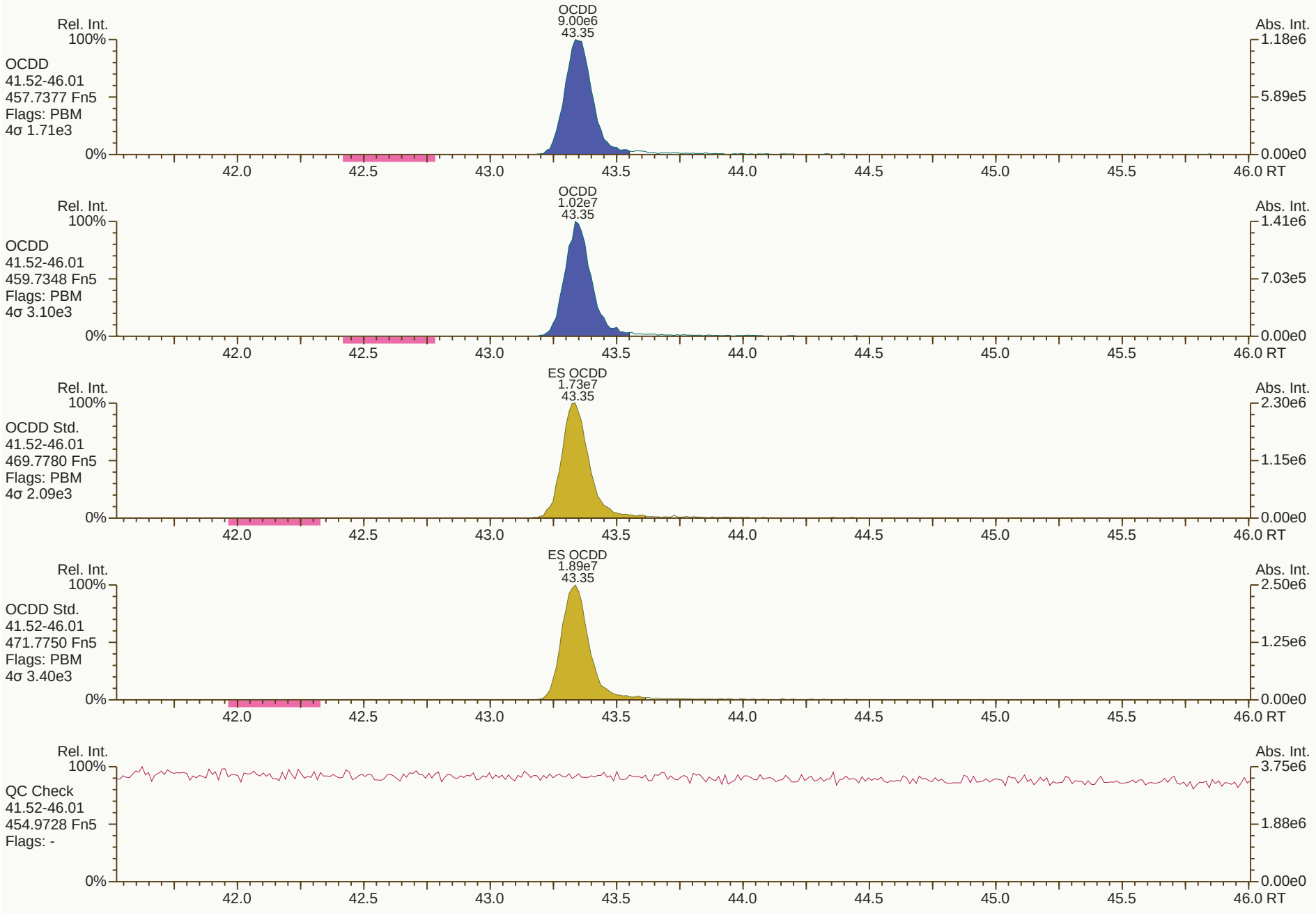

Rel. Int.
100%
PeCDD
29.52-34.51
355.8546 Fn2
Flags: PBM
4σ 2.97e3
0%
12378D
1.02e7
33.24
Abs. Int.
2.81e6
1.41e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDD
29.52-34.51
357.8517 Fn2
Flags: PBM
4σ 2.14e3
0%
12378D
6.52e6
33.24
Abs. Int.
1.76e6
8.79e5
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDD Std.
29.52-34.51
367.8949 Fn2
Flags: PBM
4σ 6.82e3
0%
FS 12478D
2.06e7
31.97
CS 12347D
1.77e7
32.72
ES 12378D
2.04e7
33.23
Abs. Int.
5.72e6
2.86e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDD Std.
29.52-34.51
369.8919 Fn2
Flags: PBM
4σ 3.05e3
0%
FS 12478D
1.29e7
31.97
CS 12347D
1.12e7
32.72
ES 12378D
1.29e7
33.23
Abs. Int.
3.49e6
1.75e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
QC Check
29.52-34.51
366.9792 Fn2
Flags: -
0%
Abs. Int.
1.67e6
8.36e5
0.00e0
30.0
31.0
32.0
33.0
34.0
RT

SGS ID: CS3_190828_DF_CB **Sample ID: 20-449-3** **Acq: 28-Aug-2019 17:00:21**
Instr: [ILM] AutoSpec-Ultima HRMS3 **VSIR EI+ Expt: df_cl4-8_db5 GC: df_db5 Vial: 1** **User: PSW Datafile: 190828C10**



Results: T:\UltraTracePro\ICAL results\HRMS3\HRMS3_DF_10122018_28AUG2019\Resources\CS3_190828_DF_CB.utp_res, saved 29-Aug-2019 10:09 (PSW) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 0078, 8350 scc: 536-910 *PKD: 29-Aug-2019 08:22 Printed: 29-Aug-2019 10:44 Page 4 of 12*


Rel. Int.
100%
HpCDD
39.01-41.50
423.7767 Fn4
Flags: PBM
4σ 2.41e3
1234678D
6.90e6
40.57
Abs. Int.
1.47e6
7.37e5
0.00e0
0%
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
HpCDD
39.01-41.50
425.7737 Fn4
Flags: PBM
4σ 2.01e3
1234678D
6.74e6
40.57
Abs. Int.
1.48e6
7.40e5
0.00e0
0%
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
HpCDD Std.
39.01-41.50
435.8169 Fn4
Flags: PBM
4σ 4.09e3
FS 1234679D
1.58e7
39.86
ES 1234678D
1.35e7
40.55
Abs. Int.
4.26e6
2.13e6
0.00e0
0%
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
HpCDD Std.
39.01-41.50
437.8140 Fn4
Flags: PBM
4σ 5.26e3
FS 1234679D
1.49e7
39.86
ES 1234678D
1.25e7
40.56
Abs. Int.
3.80e6
1.90e6
0.00e0
0%
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
QC Check
39.01-41.50
430.9728 Fn4
Flags: -
Abs. Int.
1.14e7
5.68e6
0.00e0
0%
39.5
40.0
40.5
41.0
41.5 RT


OCDD
9.00e6
43.35
Rel. Int.
100%
OCDD
41.52-46.01
457.7377 Fn5
Flags: PBM
4σ 1.71e3
0%
Abs. Int.
1.18e6
5.89e5
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
OCDD
1.02e7
43.35
Rel. Int.
100%
OCDD
41.52-46.01
459.7348 Fn5
Flags: PBM
4σ 3.10e3
0%
Abs. Int.
1.41e6
7.03e5
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
ES OCDD
1.73e7
43.35
Rel. Int.
100%
OCDD Std.
41.52-46.01
469.7780 Fn5
Flags: PBM
4σ 2.09e3
0%
Abs. Int.
2.30e6
1.15e6
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
ES OCDD
1.89e7
43.35
Rel. Int.
100%
OCDD Std.
41.52-46.01
471.7750 Fn5
Flags: PBM
4σ 3.40e3
0%
Abs. Int.
2.50e6
1.25e6
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
Rel. Int.
100%
QC Check
41.52-46.01
454.9728 Fn5
Flags: -
0%
Abs. Int.
3.75e6
1.88e6
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT


Rel. Int.
100%
TCDF
20.04-29.51
303.9016 Fn1
Flags: PBM
4σ 2.00e3
0%
2378F
2.60e6
26.82
Abs. Int.
5.48e5
2.74e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF
20.04-29.51
305.8987 Fn1
Flags: PBM
4σ 2.22e3
0%
2378F
3.30e6
26.82
Abs. Int.
7.26e5
3.63e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.04-29.51
315.9419 Fn1
Flags: PBM
4σ 1.25e4
0%
AS 1368F
3.15e7
21.67
JS 1234F
2.61e7
25.39
ES 2378F
2.47e7
26.80
Abs. Int.
5.47e6
2.73e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.04-29.51
317.9389 Fn1
Flags: PBM
4σ 1.13e4
0%
AS 1368F
4.07e7
21.67
JS 1234F
3.32e7
25.39
ES 2378F
3.13e7
26.79
Abs. Int.
7.04e6
3.52e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
HxCDPE
20.04-29.51
375.8364 Fn1
Flags: PB
4σ 1.48e3
0%
Abs. Int.
1.63e4
8.16e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT

SGS ID: CS3_190828_DF_CB **Sample ID: 20-449-3** **Acq: 28-Aug-2019 17:00:21**
Instr: [ILM] AutoSpec-Ultima HRMS3 **VSIR EI+ Expt: df_cl4-8_db5 GC: df_db5 Vial: 1** **User: PSW Datafile: 190828C10**



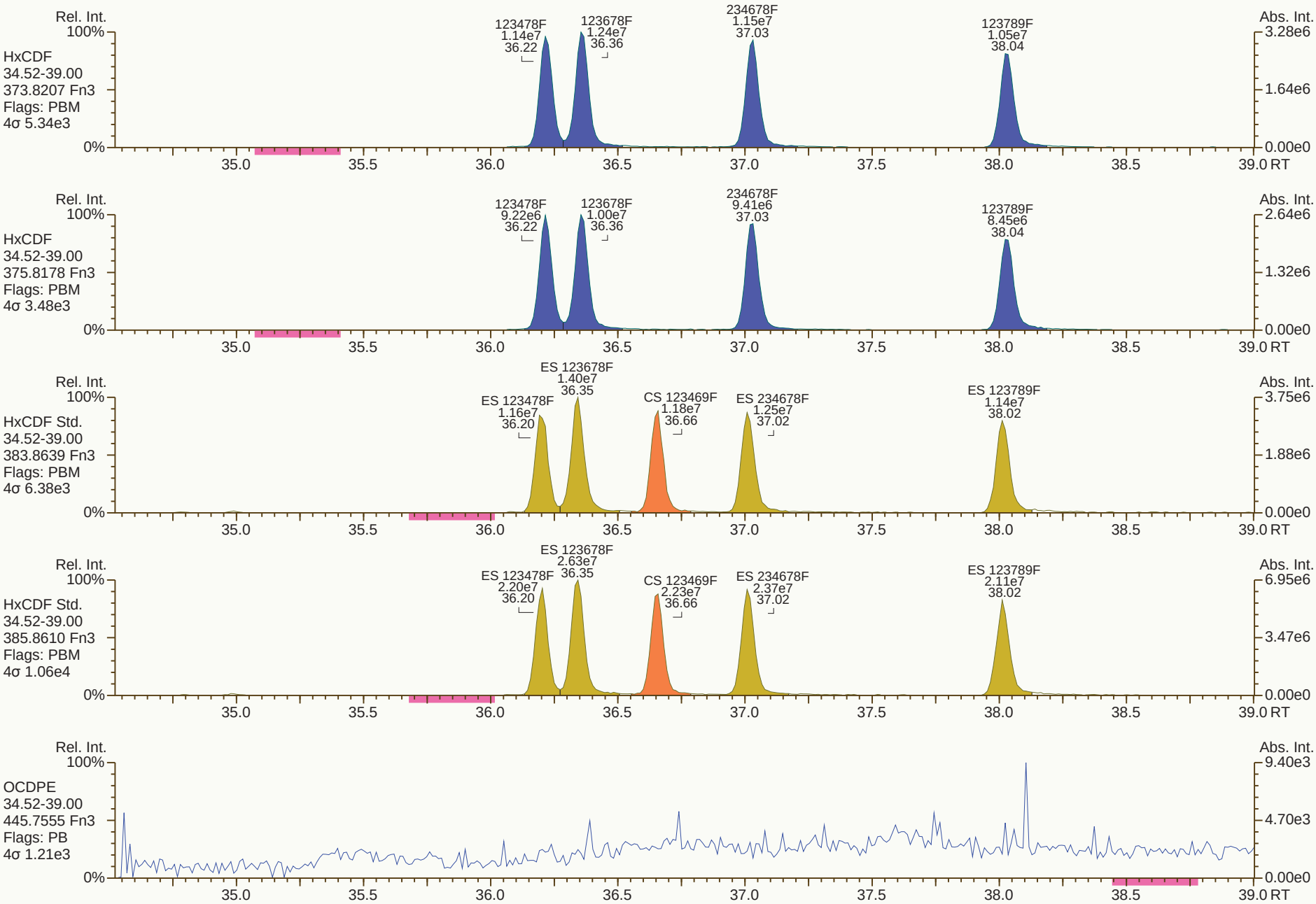
Results: T:\UltraTracePro\ICAL results\HRMS3\HRMS3_DF_10122018_28AUG2019\Resources\CS3_190828_DF_CB.utp_res, saved 29-Aug-2019 10:09 (PSW) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 0250 scc: 536-910 *PKD: 29-Aug-2019 08:22 Printed: 29-Aug-2019 10:44 Page 8 of 12*


Rel. Int.
100%
PeCDF-2
29.52-34.51
339.8597 Fn2
Flags: PBM
4σ 3.53e3
0%
12378F
1.36e7
31.75
23478F
1.34e7
32.88
Abs. Int.
3.66e6
1.83e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDF-2
29.52-34.51
341.8568 Fn2
Flags: PBM
4σ 2.75e3
0%
12378F
8.78e6
31.75
23478F
8.78e6
32.88
Abs. Int.
2.41e6
1.20e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDF Std.
29.52-34.51
351.9000 Fn2
Flags: PBM
4σ 6.83e3
0%
CS 12346F
2.83e7
31.20
ES 12378F
2.86e7
31.73
ES 23478F
2.78e7
32.87
Abs. Int.
7.60e6
3.80e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDF Std.
29.52-34.51
353.8970 Fn2
Flags: PBM
4σ 5.45e3
0%
CS 12346F
1.85e7
31.20
ES 12378F
1.84e7
31.73
ES 23478F
1.74e7
32.87
Abs. Int.
4.67e6
2.34e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
HpCDPE
29.52-34.51
409.7974 Fn2
Flags: PB
4σ 1.20e3
0%
Abs. Int.
5.21e3
2.60e3
0.00e0
30.0
31.0
32.0
33.0
34.0
RT

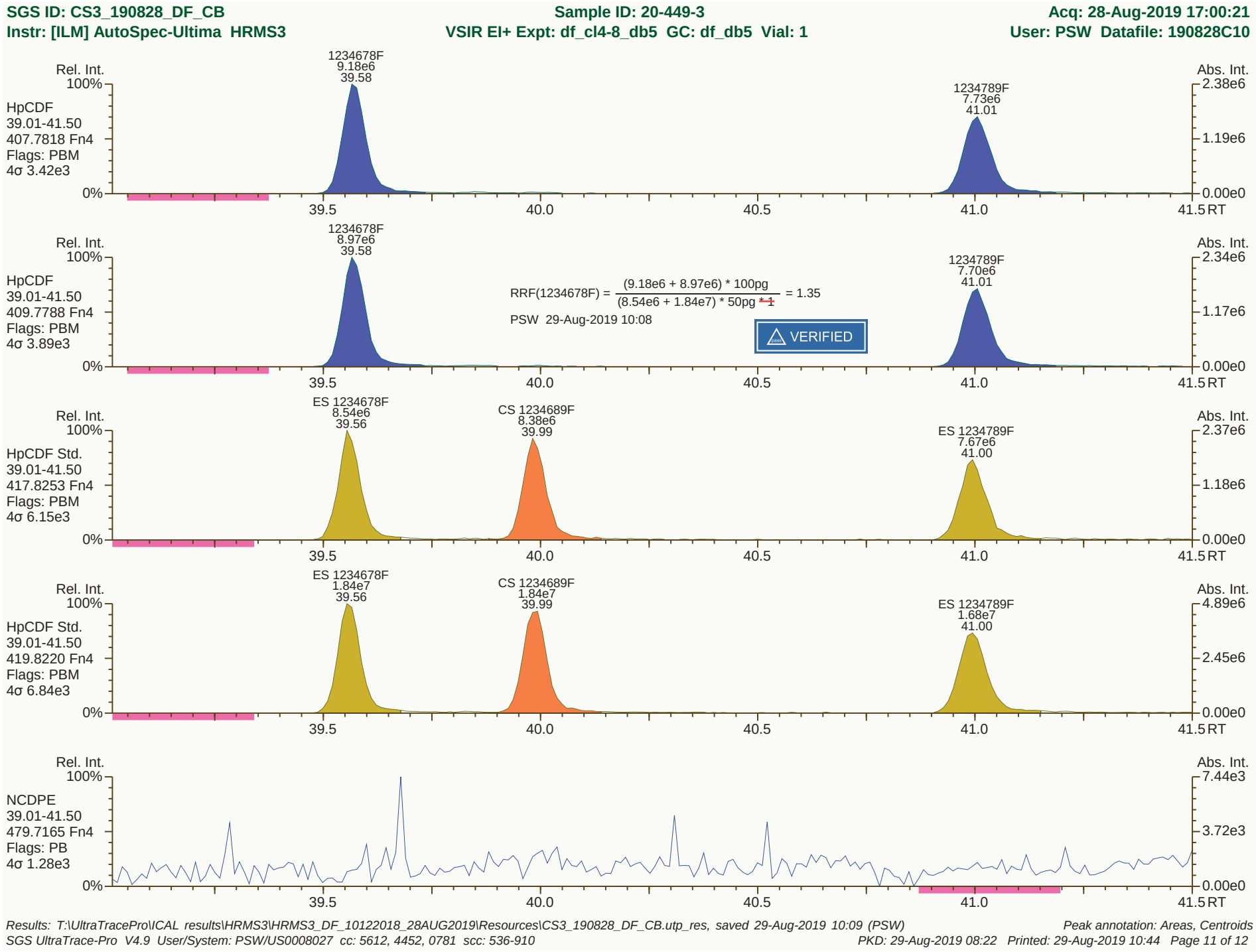
SGS ID: CS3_190828_DF_CB
Instr: [ILM] AutoSpec-Ultima HRMS3

Sample ID: 20-449-3
VSIR EI+ Expt: df_cl4-8_db5 GC: df_db5 Vial: 1

Acq: 28-Aug-2019 17:00:21
User: PSW Datafile: 190828C10



Results: T:\UltraTracePro\ICAL results\HRMS3\HRMS3_DF_10122018_28AUG2019\Resources\CS3_190828_DF_CB.utp_res, saved 29-Aug-2019 10:09 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 2862, 4019, 5386 scc: 536-910
PKD: 29-Aug-2019 08:22 Printed: 29-Aug-2019 10:44 Page 10 of 12



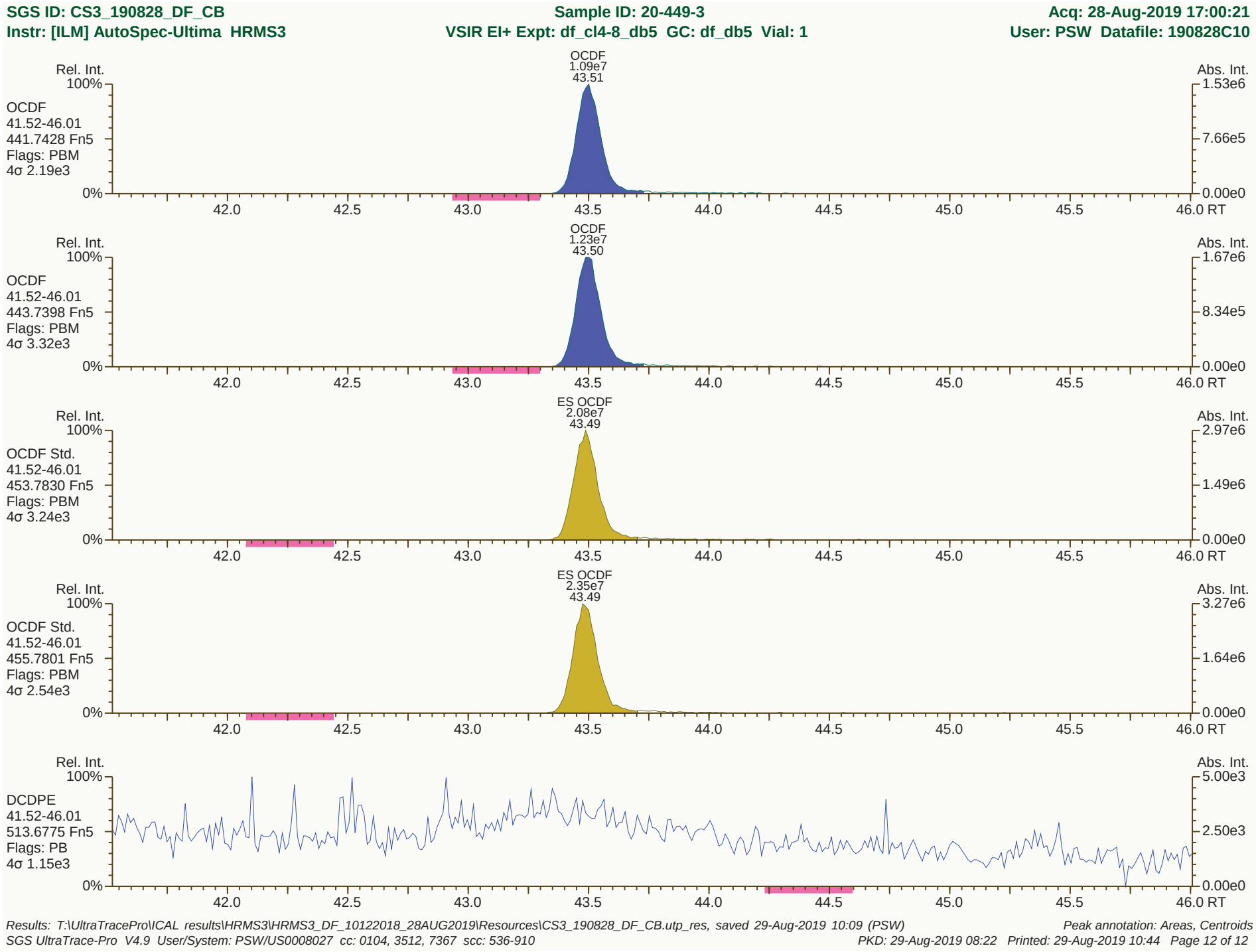
Results: T:\UltraTracePro\ICAL results\HRMS3\HRMS3_DF_10122018_28AUG2019\Resources\CS3_190828_DF_CB.utp_res, saved 29-Aug-2019 10:09 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 5612, 4452, 0781 scc: 536-910 *PKD: 29-Aug-2019 08:22 Printed: 29-Aug-2019 10:44 Page 11 of 12*

SGS ID: CS3_190828_DF_CB
Instr: [ILM] AutoSpec-Ultima HRMS3

Sample ID: 20-449-3
VSIR EI+ Expt: df_cl4-8_db5 GC: df_db5 Vial: 1

Acq: 28-Aug-2019 17:00:21
User: PSW Datafile: 190828C10

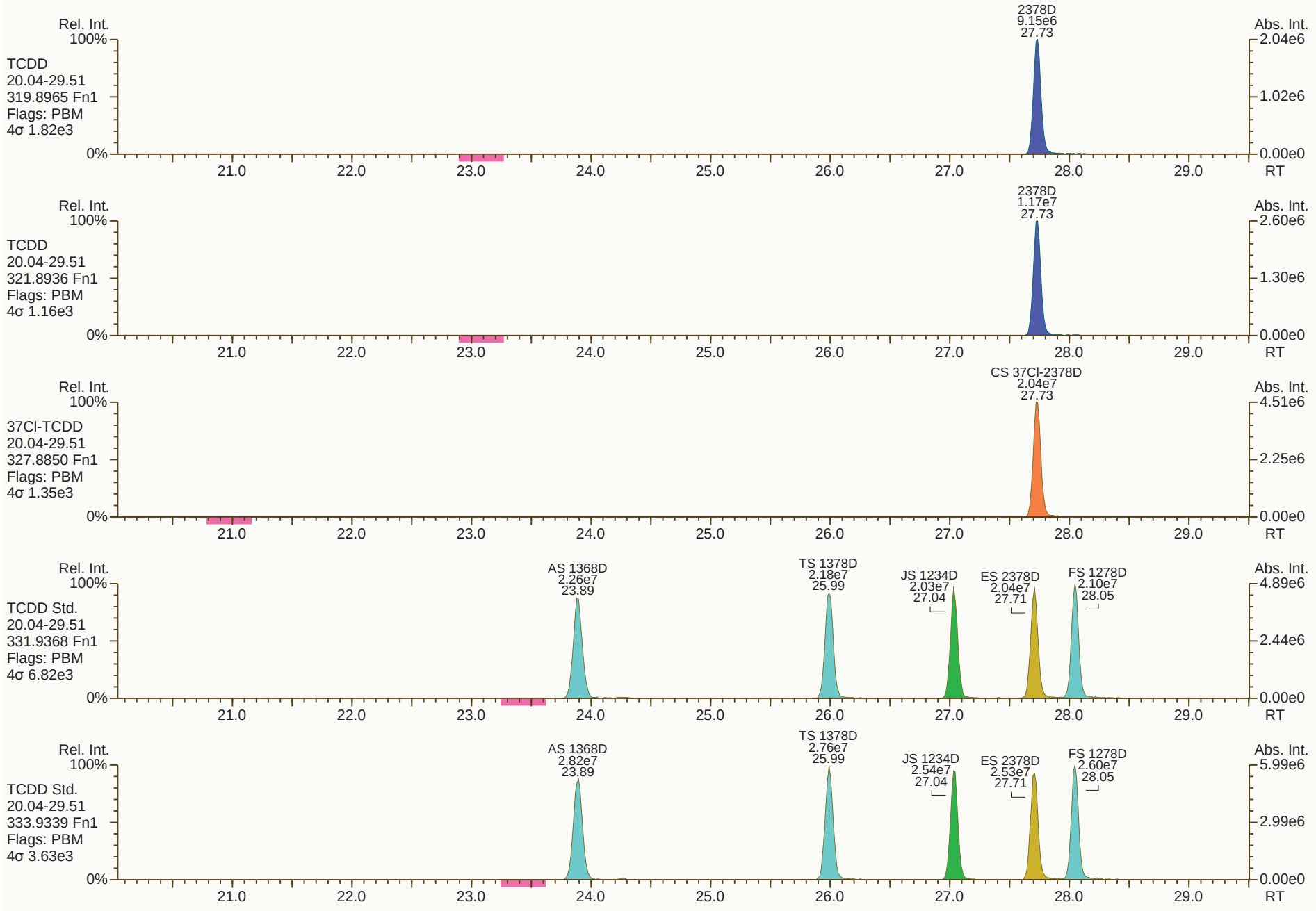


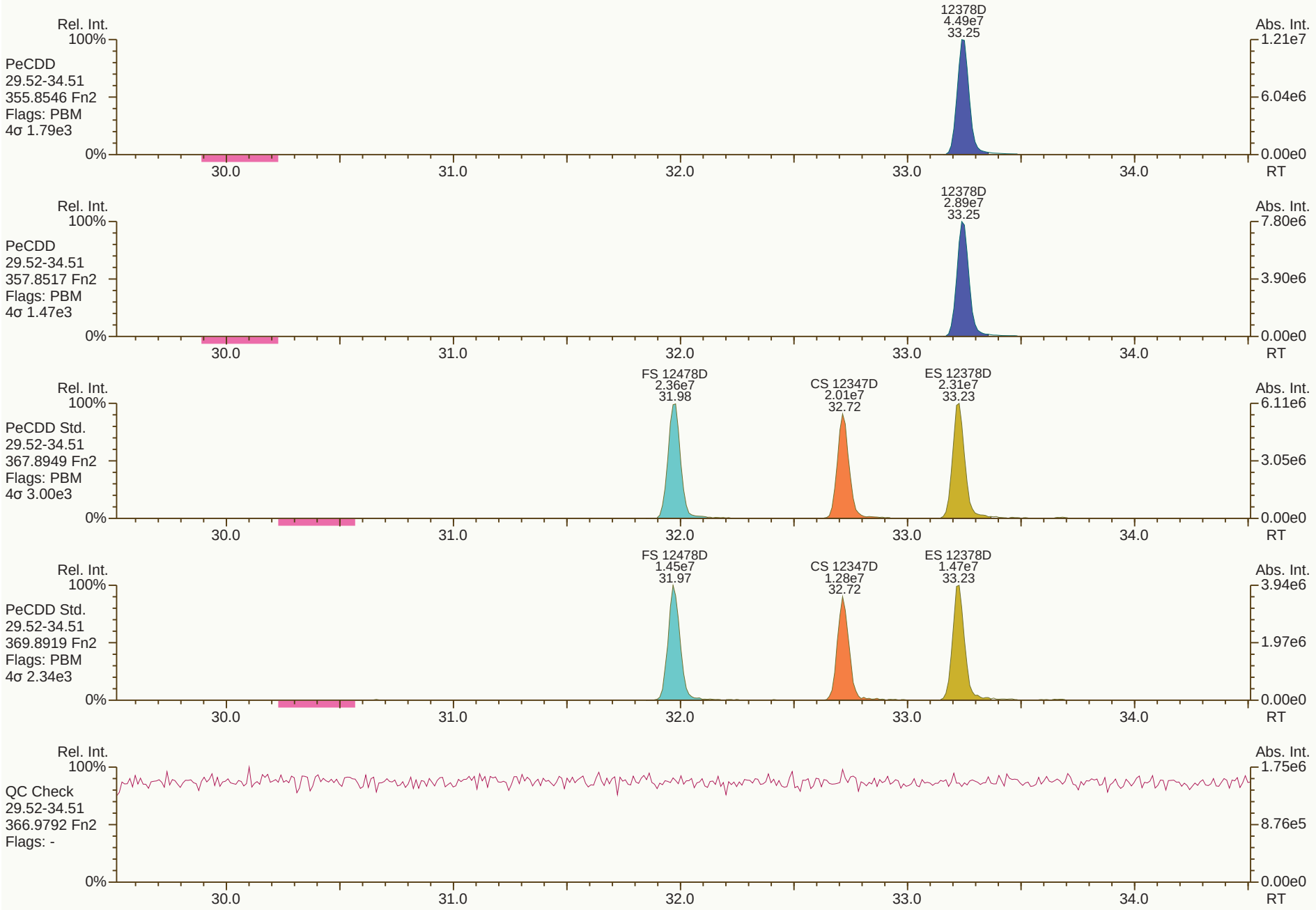
Results: T:\UltraTracePro\ICAL results\HRMS3\HRMS3_DF_10122018_28AUG2019\Resources\CS3_190828_DF_CB.utp_res, saved 29-Aug-2019 10:09 (PSW) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 0104, 3512, 7367 scc: 536-910 *PKD: 29-Aug-2019 08:22 Printed: 29-Aug-2019 10:44 Page 12 of 12*

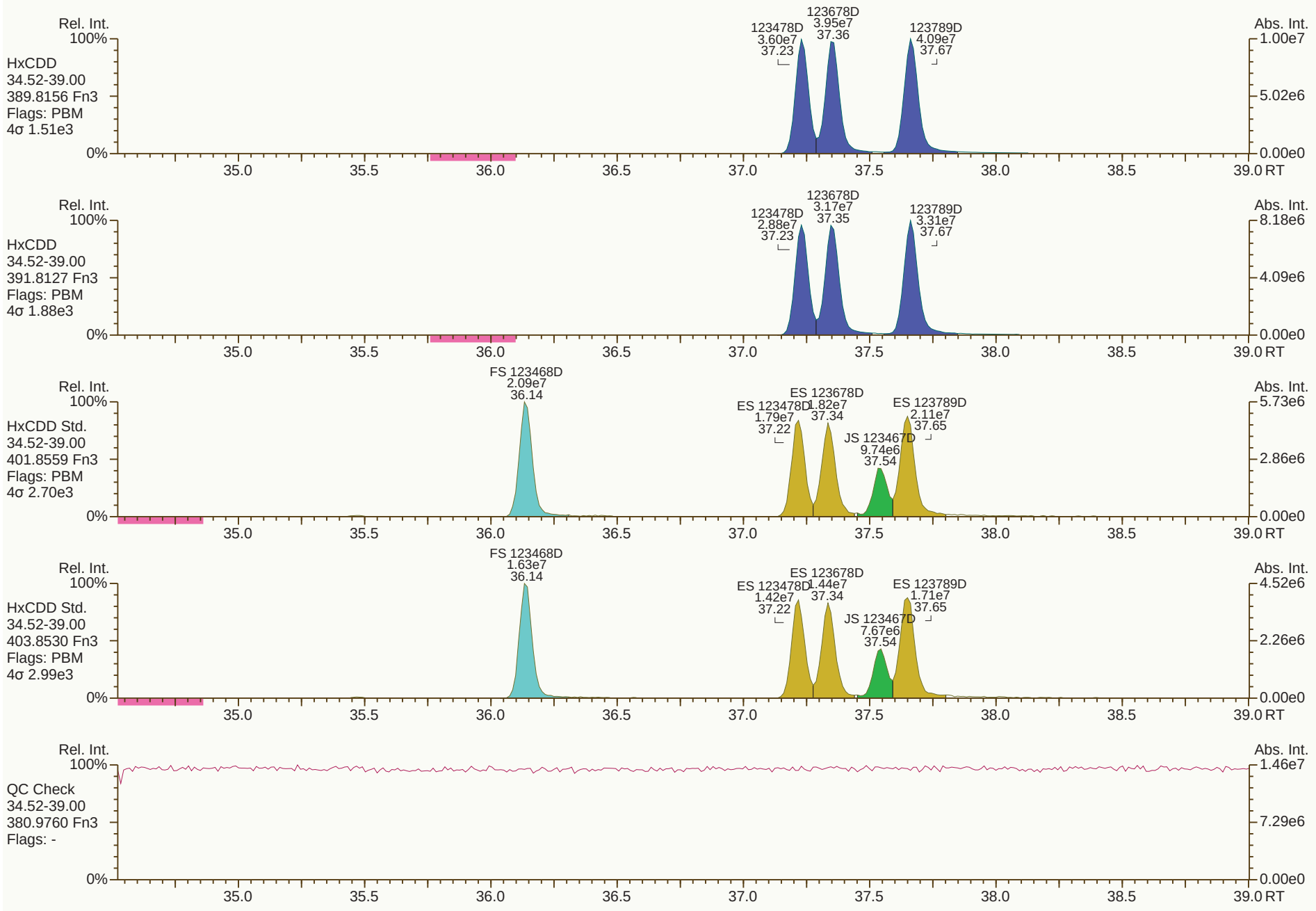
Dioxin/Furan QC Summary		Acq'd: 28 Aug 2019 17:47 PSW				ICAL: HRMS3_DF_10122018_28AUG2019	
Lab ID: CS4_190828_DF_CA		UTP: 29-Aug-2019 08:38:39 PSW				Checkcode: 139-753-GRB	
Sample ID: 20-281-2		Report: 29 Aug 2019 09:56 pw				Datafile: 190828C11	
Name	**RT**	**Response**	**RA**	**OK**	**Ref. RRFs**	**Calc. RRFs**	**Dev'n**
2378-TCDD	27.73	2.08E+07	0.78	Y	1.19	1.14	-4%
12378-PeCDD	33.25	7.38E+07	1.55	Y	0.98	0.97	-1%
123478-HxCDD	37.23	6.48E+07	1.25	Y	1.02	1.01	-1%
123678-HxCDD	37.36	7.12E+07	1.25	Y	1.09	1.09	1%
123789-HxCDD	37.67	7.40E+07	1.24	Y	0.97	0.97	0%
1234678-HpCDD	40.59	5.91E+07	1.04	Y	0.98	0.93	-5%
OCDD	43.38	8.69E+07	0.89	Y	1.07	1.05	-2%
2378-TCDF	26.82	2.62E+07	0.78	Y	1.05	1.01	-3%
12378-PeCDF	31.75	1.02E+08	1.54	Y	0.96	0.95	-1%
23478-PeCDF	32.89	1.00E+08	1.53	Y	0.99	0.97	-2%
123478-HxCDF	36.23	9.05E+07	1.23	Y	1.21	1.22	1%
123678-HxCDF	36.37	9.80E+07	1.23	Y	1.11	1.10	-1%
234678-HxCDF	37.04	9.17E+07	1.23	Y	1.12	1.11	0%
123789-HxCDF	38.05	8.54E+07	1.23	Y	1.11	1.10	0%
1234678-HpCDF	39.59	8.02E+07	1.02	Y	1.32	1.27	-4%
1234789-HpCDF	41.03	7.06E+07	1.02	Y	1.26	1.26	0%
OCDF	43.53	1.05E+08	0.90	Y	1.03	1.01	-2%
ES 2378-TCDD	27.71	4.57E+07	0.81	Y	0.99	1.00	1%
ES 12378-PeCDD	33.23	3.79E+07	1.57	Y	0.83	0.83	0%
ES 123478-HxCDD	37.22	3.20E+07	1.26	Y	0.95	0.92	-3%
ES 123678-HxCDD	37.34	3.26E+07	1.26	Y	0.98	0.94	-4%
ES 123789-HxCDD	37.65	3.82E+07	1.23	Y	1.14	1.10	-4%
ES 1234678-HpCDD	40.58	3.17E+07	1.06	Y	0.90	0.91	2%
ES OCDD	43.37	4.15E+07	0.90	Y	0.63	0.60	-5%
ES 2378-TCDF	26.8	6.47E+07	0.80	Y	1.00	0.98	-1%
ES 12378-PeCDF	31.74	5.36E+07	1.54	Y	0.83	0.81	-2%
ES 23478-PeCDF	32.87	5.19E+07	1.56	Y	0.81	0.79	-2%
ES 123478-HxCDF	36.21	3.70E+07	0.52	Y	1.12	1.06	-5%
ES 123678-HxCDF	36.35	4.46E+07	0.53	Y	1.33	1.28	-4%
ES 234678-HxCDF	37.02	4.11E+07	0.53	Y	1.21	1.18	-2%
ES 123789-HxCDF	38.03	3.87E+07	0.54	Y	1.12	1.11	-1%
ES 1234678-HpCDF	39.58	3.15E+07	0.45	Y	0.92	0.91	-2%
ES 1234789-HpCDF	41.02	2.81E+07	0.45	Y	0.82	0.81	-2%
ES OCDF	43.52	5.20E+07	0.90	Y	0.78	0.75	-4%

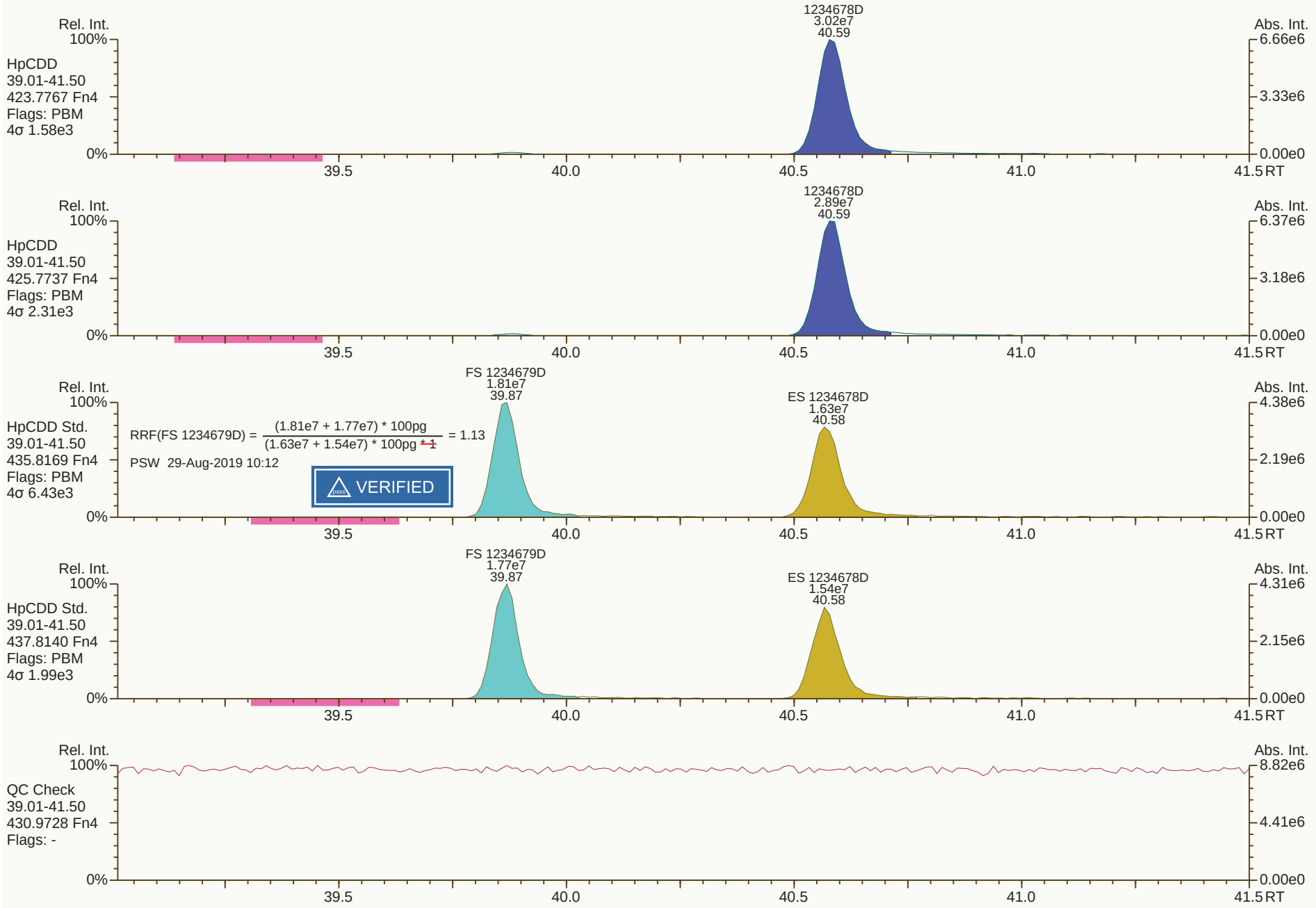
Dioxin/Furan QC Summary		Acq'd: 28 Aug 2019 17:47 PSW				ICAL: HRMS3_DF_10122018_28AUG2019	
Lab ID: CS4_190828_DF_CA		UTP: 29-Aug-2019 08:38:39 PSW				Checkcode: 139-753-GRB	
Sample ID: 20-281-2		Report: 29 Aug 2019 09:56 pw				Datafile: 190828C11	
Name	**RT**	**Response**	**RA**	**OK**	**Ref. RRFs**	**Calc. RRFs**	**Dev'n**
JS 1234-TCDD	27.04	4.57E+07	0.80	Y	-	-	-
JS 1234-TCDF	25.40	6.58E+07	0.79	Y	-	-	-
JS 123467-HxCDD	37.54	1.74E+07	1.27	Y	-	-	-
CS 37Cl-2378-TCDD	27.73	2.04E+07	n/a	-	1.12	1.11	-1%
CS 12347-PeCDD	32.72	3.29E+07	1.58	Y	0.71	0.72	1%
CS 12346-PeCDF	31.20	5.33E+07	1.53	Y	0.81	0.81	0%
CS 123469-HxCDF	36.66	3.80E+07	0.53	Y	1.12	1.09	-3%
CS 1234689-HpCDF	40.01	3.12E+07	0.46	Y	0.90	0.89	0%
SS 37Cl-2378-TCDD	27.73	2.04E+07	n/a	-	1.14	1.11	-2%
SS 12347-PeCDD	32.72	3.29E+07	1.58	Y	0.86	0.87	1%
SS 12346-PeCDF	31.20	5.33E+07	1.53	Y	0.98	0.99	2%
SS 123469-HxCDF	36.66	3.80E+07	0.53	Y	0.85	0.85	1%
SS 1234689-HpCDF	40.01	3.12E+07	0.46	Y	0.97	0.99	1%
AS 1368-TCDD	23.89	5.08E+07	0.80	Y	1.12	1.11	-1%
AS 1368-TCDF	21.67	7.84E+07	0.79	Y	1.19	1.19	0%
FS 1278-TCDD	28.05	4.69E+07	0.81	Y	1.02	1.03	1%
FS 12478-PeCDD	31.98	3.81E+07	1.62	Y	0.98	1.01	2%
FS 123468-HxCDD	36.14	3.72E+07	1.28	Y	1.17	1.16	0%
FS 1234679-HpCDD	39.87	3.58E+07	1.02	Y	1.14	1.13	-1%
TS 1378-TCDD	25.99	4.94E+07	0.79	Y	1.09	1.08	-1%
~~OCDD-a~~	~~NotFnd~~						
~~OCDF-a~~	~~NotFnd~~						

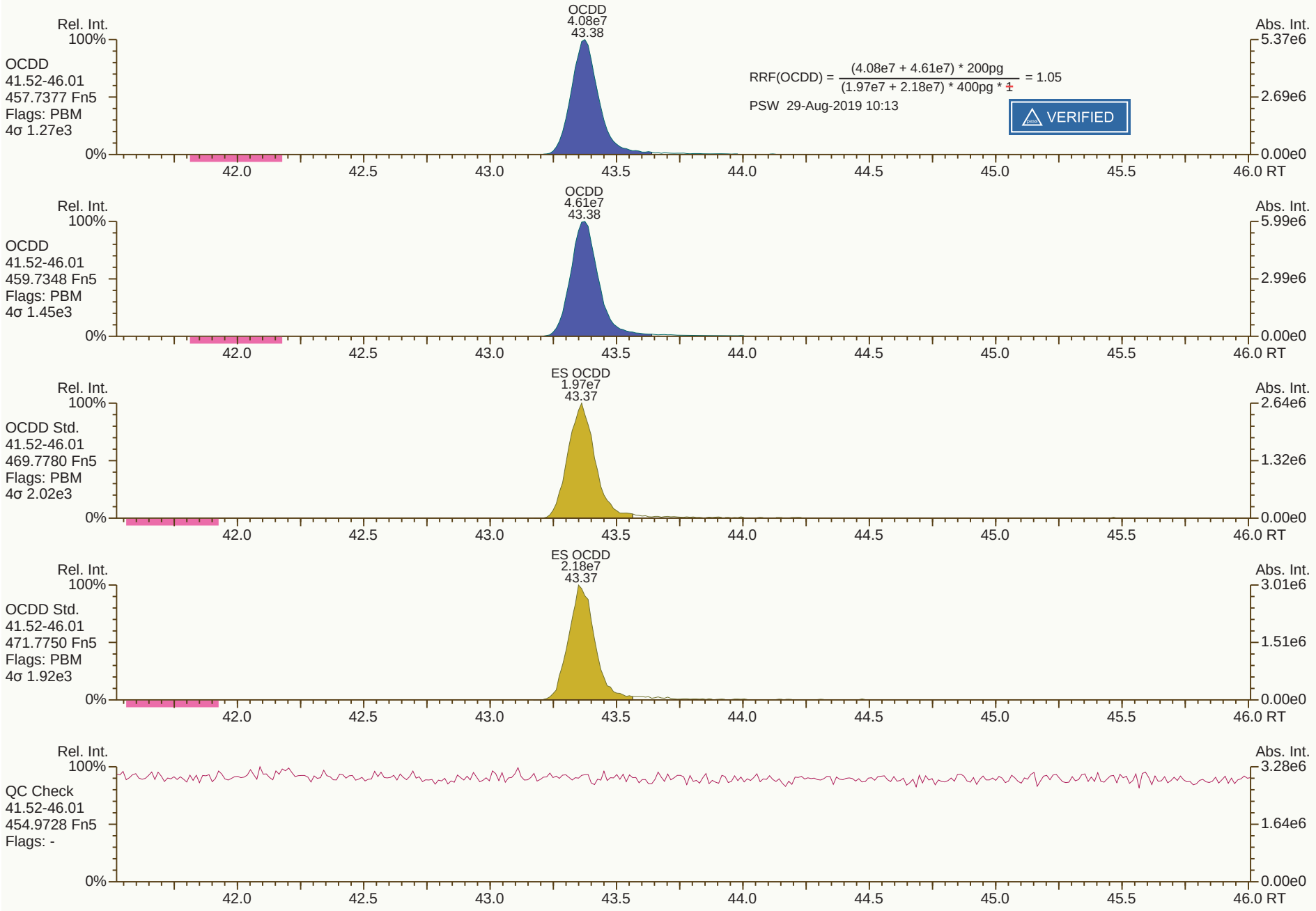

Rel. Int.
100%
QC Check
20.04-29.51
316.9824 Fn1
Flags: -
0%
Abs. Int.
1.97e6
9.83e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
QC Check
29.52-34.51
366.9792 Fn2
Flags: -
0%
Abs. Int.
1.75e6
8.76e5
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
QC Check
34.52-39.00
380.9760 Fn3
Flags: -
0%
Abs. Int.
1.46e7
7.29e6
0.00e0
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0
RT
Rel. Int.
100%
QC Check
39.01-41.50
430.9728 Fn4
Flags: -
0%
Abs. Int.
8.82e6
4.41e6
0.00e0
39.5
40.0
40.5
41.0
41.5
RT
Rel. Int.
100%
QC Check
41.52-46.01
454.9728 Fn5
Flags: -
0%
Abs. Int.
3.28e6
1.64e6
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0
RT


Rel. Int.
100%
TCDD
20.04-29.51
319.8965 Fn1
Flags: PBM
4σ 1.82e3
0%
2378D
9.15e6
27.73
Abs. Int.
2.04e6
1.02e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD
20.04-29.51
321.8936 Fn1
Flags: PBM
4σ 1.16e3
0%
2378D
1.17e7
27.73
Abs. Int.
2.60e6
1.30e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
37Cl-TCDD
20.04-29.51
327.8850 Fn1
Flags: PBM
4σ 1.35e3
0%
CS 37Cl-2378D
2.04e7
27.73
Abs. Int.
4.51e6
2.25e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.04-29.51
331.9368 Fn1
Flags: PBM
4σ 6.82e3
0%
AS 1368D
2.26e7
23.89
TS 1378D
2.18e7
25.99
JS 1234D
2.03e7
27.04
ES 2378D
2.04e7
27.71
FS 1278D
2.10e7
28.05
Abs. Int.
4.89e6
2.44e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.04-29.51
333.9339 Fn1
Flags: PBM
4σ 3.63e3
0%
AS 1368D
2.82e7
23.89
TS 1378D
2.76e7
25.99
JS 1234D
2.54e7
27.04
ES 2378D
2.53e7
27.71
FS 1278D
2.60e7
28.05
Abs. Int.
5.99e6
2.99e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
PeCDD
29.52-34.51
355.8546 Fn2
Flags: PBM
4σ 1.79e3
0%
12378D
4.49e7
33.25
Abs. Int.
1.21e7
6.04e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDD
29.52-34.51
357.8517 Fn2
Flags: PBM
4σ 1.47e3
0%
12378D
2.89e7
33.25
Abs. Int.
7.80e6
3.90e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDD Std.
29.52-34.51
367.8949 Fn2
Flags: PBM
4σ 3.00e3
0%
FS 12478D
2.36e7
31.98
CS 12347D
2.01e7
32.72
ES 12378D
2.31e7
33.23
Abs. Int.
6.11e6
3.05e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDD Std.
29.52-34.51
369.8919 Fn2
Flags: PBM
4σ 2.34e3
0%
FS 12478D
1.45e7
31.97
CS 12347D
1.28e7
32.72
ES 12378D
1.47e7
33.23
Abs. Int.
3.94e6
1.97e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
QC Check
29.52-34.51
366.9792 Fn2
Flags: -
0%
Abs. Int.
1.75e6
8.76e5
0.00e0
30.0
31.0
32.0
33.0
34.0
RT


Rel. Int.
100%
HxCDD
34.52-39.00
389.8156 Fn3
Flags: PBM
4σ 1.51e3
123478D
3.60e7
37.23
123678D
3.95e7
37.36
123789D
4.09e7
37.67
Abs. Int.
1.00e7
5.02e6
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
HxCDD
34.52-39.00
391.8127 Fn3
Flags: PBM
4σ 1.88e3
123478D
2.88e7
37.23
123678D
3.17e7
37.35
123789D
3.31e7
37.67
Abs. Int.
8.18e6
4.09e6
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
HxCDD Std.
34.52-39.00
401.8559 Fn3
Flags: PBM
4σ 2.70e3
FS 123468D
2.09e7
36.14
ES 123478D
1.79e7
37.22
ES 123678D
1.82e7
37.34
JS 123467D
9.74e6
37.54
ES 123789D
2.11e7
37.65
Abs. Int.
5.73e6
2.86e6
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
HxCDD Std.
34.52-39.00
403.8530 Fn3
Flags: PBM
4σ 2.99e3
FS 123468D
1.63e7
36.14
ES 123478D
1.42e7
37.22
ES 123678D
1.44e7
37.34
JS 123467D
7.67e6
37.54
ES 123789D
1.71e7
37.65
Abs. Int.
4.52e6
2.26e6
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
QC Check
34.52-39.00
380.9760 Fn3
Flags: -
Abs. Int.
1.46e7
7.29e6
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT

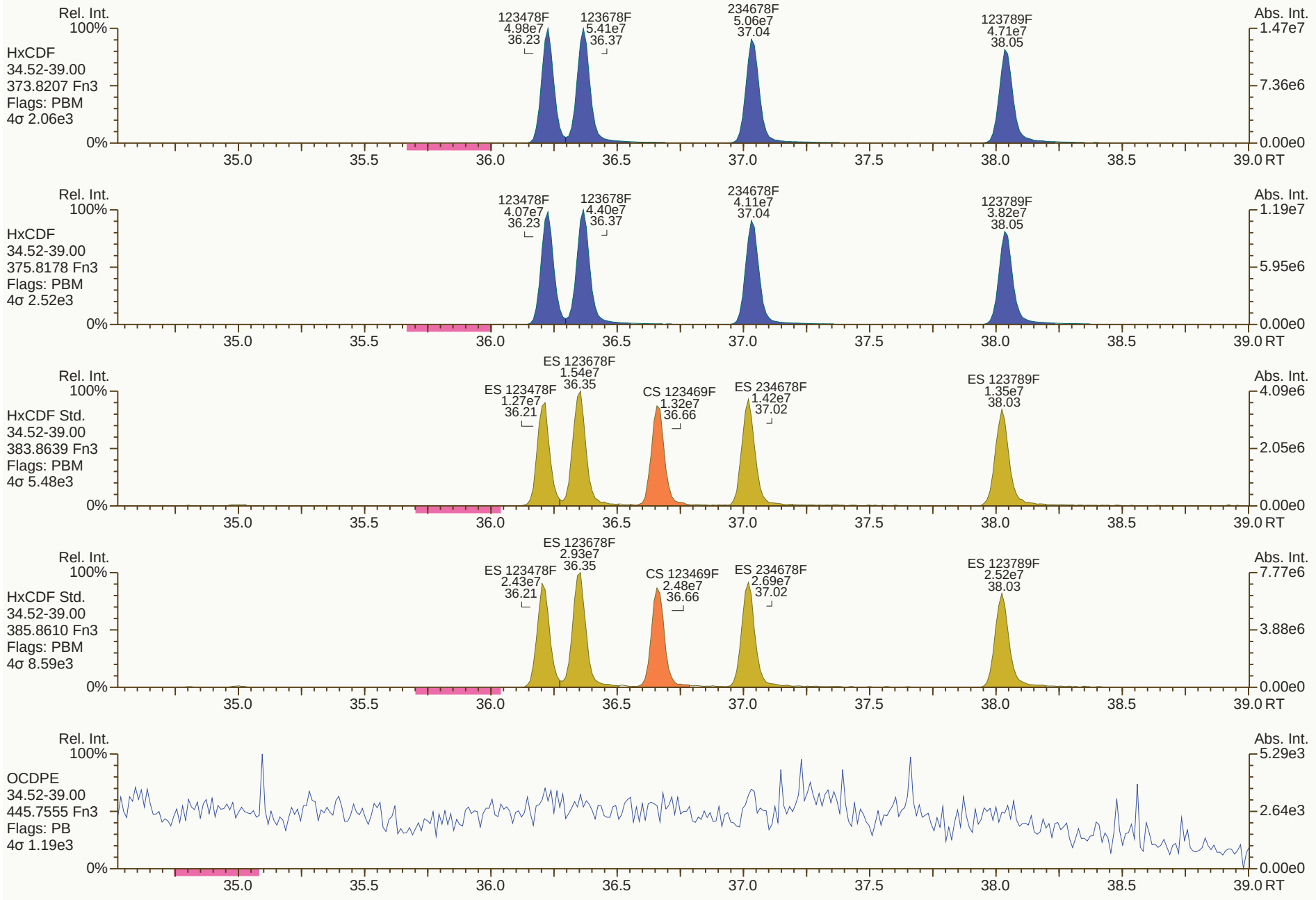

Rel. Int.
100%
HpCDD
39.01-41.50
423.7767 Fn4
Flags: PBM
4σ 1.58e3
0%
1234678D
3.02e7
40.59
Abs. Int.
6.66e6
3.33e6
0.00e0
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
HpCDD
39.01-41.50
425.7737 Fn4
Flags: PBM
4σ 2.31e3
0%
1234678D
2.89e7
40.59
Abs. Int.
6.37e6
3.18e6
0.00e0
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
HpCDD Std.
39.01-41.50
435.8169 Fn4
Flags: PBM
4σ 6.43e3
0%
RRF(FS 1234679D) = (1.81e7 + 1.77e7) * 100pg / (1.63e7 + 1.54e7) * 100pg * 1 = 1.13
PSW 29-Aug-2019 10:12
VERIFIED
FS 1234679D
1.81e7
39.87
ES 1234678D
1.63e7
40.58
Abs. Int.
4.38e6
2.19e6
0.00e0
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
HpCDD Std.
39.01-41.50
437.8140 Fn4
Flags: PBM
4σ 1.99e3
0%
FS 1234679D
1.77e7
39.87
ES 1234678D
1.54e7
40.58
Abs. Int.
4.31e6
2.15e6
0.00e0
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
QC Check
39.01-41.50
430.9728 Fn4
Flags: -
0%
Abs. Int.
8.82e6
4.41e6
0.00e0
39.5
40.0
40.5
41.0
41.5 RT

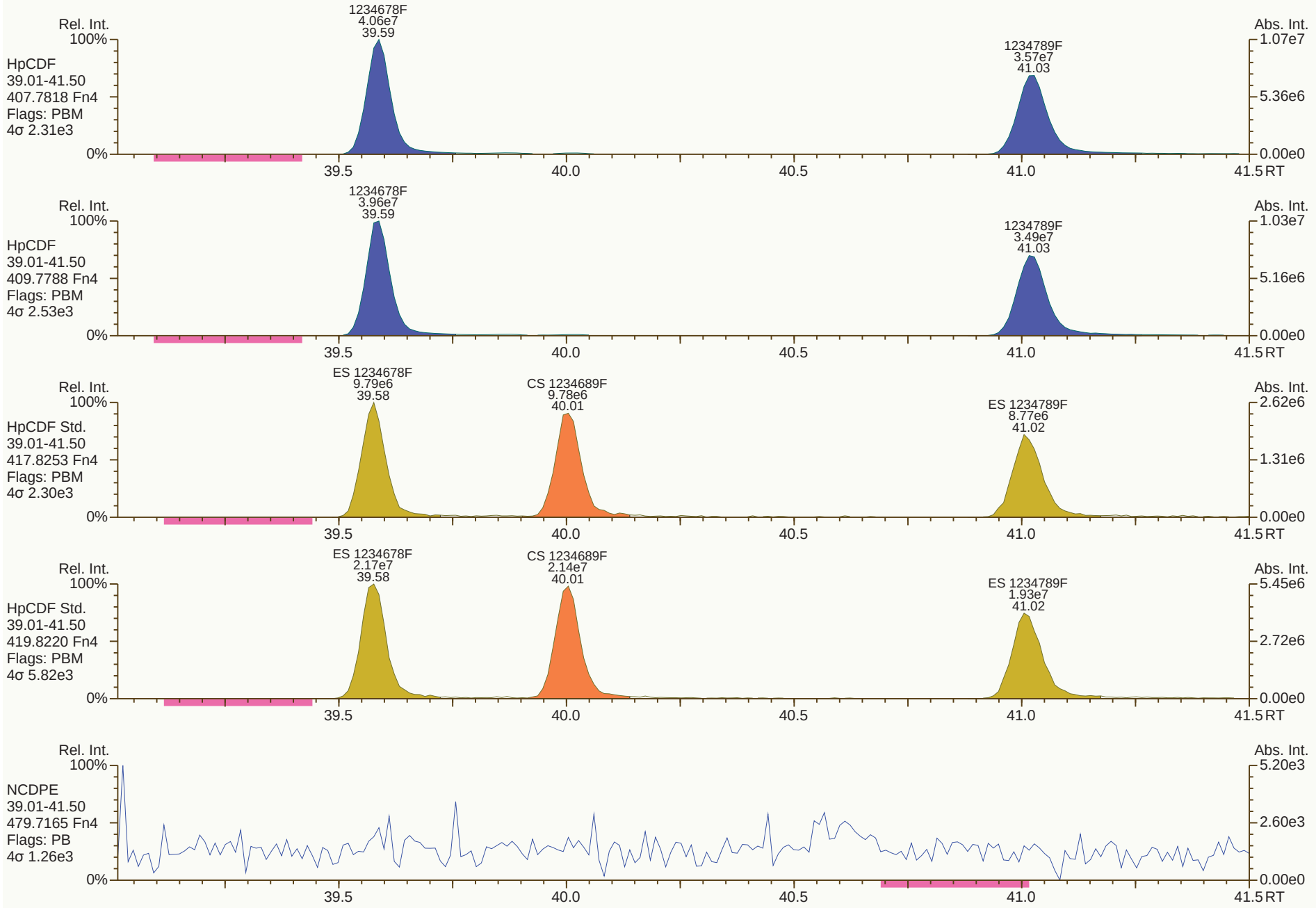

OCDD
4.08e7
43.38
Rel. Int.
100%
OCDD
41.52-46.01
457.7377 Fn5
Flags: PBM
4σ 1.27e3
0%
Abs. Int.
5.37e6
2.69e6
0.00e0
RRF(OCDD) = (4.08e7 + 4.61e7) * 200pg / (1.97e7 + 2.18e7) * 400pg * 1 = 1.05
PSW 29-Aug-2019 10:13
VERIFIED
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
OCDD
4.61e7
43.38
Rel. Int.
100%
OCDD
41.52-46.01
459.7348 Fn5
Flags: PBM
4σ 1.45e3
0%
Abs. Int.
5.99e6
2.99e6
0.00e0
ES OCDD
1.97e7
43.37
Rel. Int.
100%
OCDD Std.
41.52-46.01
469.7780 Fn5
Flags: PBM
4σ 2.02e3
0%
Abs. Int.
2.64e6
1.32e6
0.00e0
ES OCDD
2.18e7
43.37
Rel. Int.
100%
OCDD Std.
41.52-46.01
471.7750 Fn5
Flags: PBM
4σ 1.92e3
0%
Abs. Int.
3.01e6
1.51e6
0.00e0
Rel. Int.
100%
QC Check
41.52-46.01
454.9728 Fn5
Flags: -
0%
Abs. Int.
3.28e6
1.64e6
0.00e0

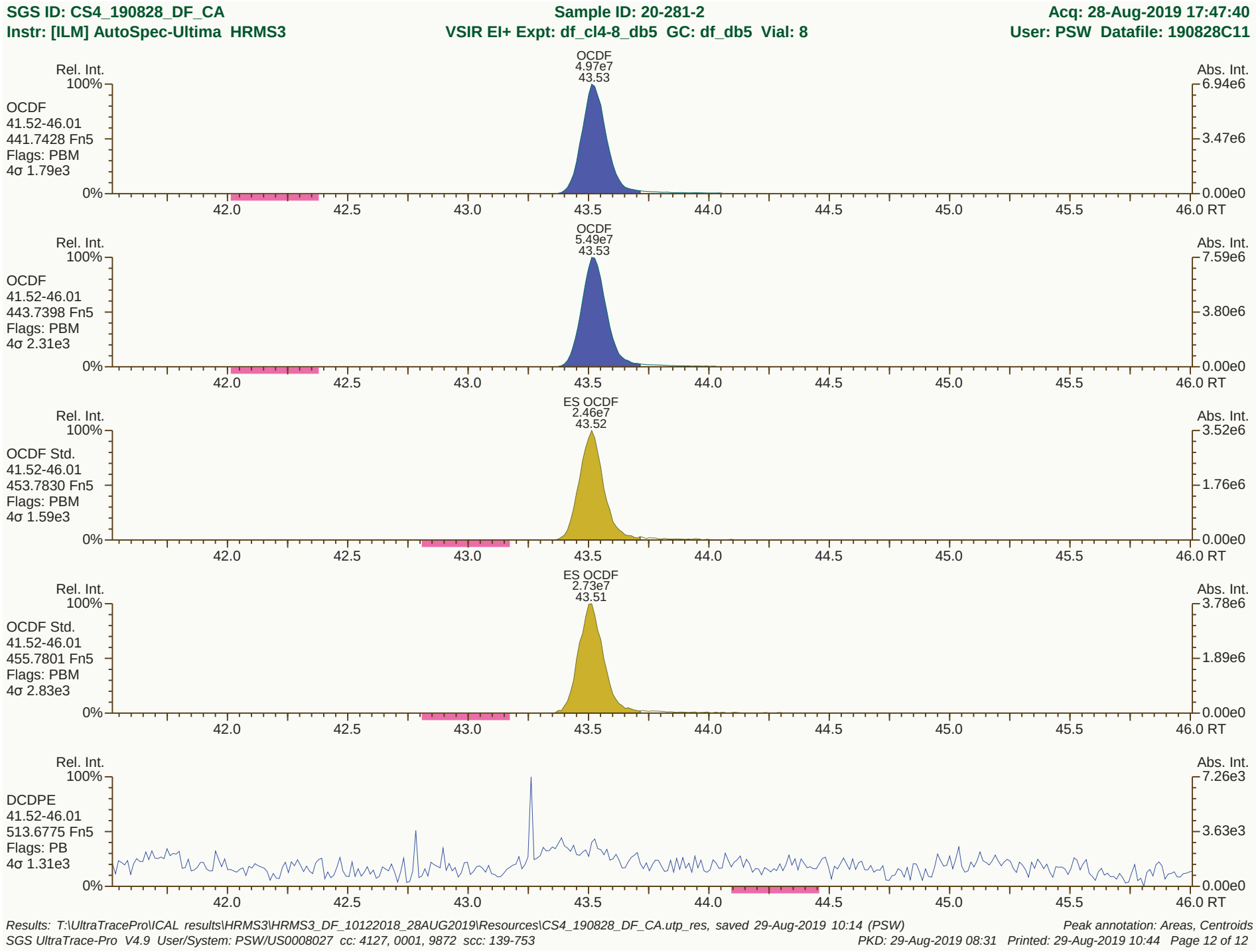

Rel. Int.
100%
TCDF
20.04-29.51
303.9016 Fn1
Flags: PBM
4σ 9.81e2
0%
2378F
1.15e7
26.82
Abs. Int.
2.47e6
1.24e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF
20.04-29.51
305.8987 Fn1
Flags: PBM
4σ 1.63e3
0%
2378F
1.47e7
26.82
Abs. Int.
3.23e6
1.62e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.04-29.51
315.9419 Fn1
Flags: PBM
4σ 9.88e3
0%
AS 1368F
3.45e7
21.67
JS 1234F
2.90e7
25.40
ES 2378F
2.86e7
26.80
Abs. Int.
6.09e6
3.04e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.04-29.51
317.9389 Fn1
Flags: PBM
4σ 6.33e3
0%
AS 1368F
4.39e7
21.67
JS 1234F
3.68e7
25.39
ES 2378F
3.60e7
26.80
Abs. Int.
7.89e6
3.94e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
HxCDPE
20.04-29.51
375.8364 Fn1
Flags: PB
4σ 1.14e3
0%
Abs. Int.
7.79e3
3.90e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
0%
Abs. Int.
7.54e3
3.77e3
0.00e0
RT
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
PeCDF-1
20.04-29.51
339.8597 Fn1
Flags: PB
4σ 1.37e3
PeCDF-1
20.04-29.51
341.8568 Fn1
Flags: PB
4σ 1.82e3
1.07e4
5.35e3
QC Check
20.04-29.51
316.9824 Fn1
Flags: -
1.97e6
9.83e5


Rel. Int.
100%
PeCDF-2
29.52-34.51
339.8597 Fn2
Flags: PBM
4σ 1.89e3
0%
12378F
6.20e7
31.75
23478F
6.07e7
32.89
Abs. Int.
1.67e7
8.34e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDF-2
29.52-34.51
341.8568 Fn2
Flags: PBM
4σ 1.48e3
0%
12378F
4.03e7
31.75
23478F
3.97e7
32.89
Abs. Int.
1.08e7
5.42e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDF Std.
29.52-34.51
351.9000 Fn2
Flags: PBM
4σ 2.08e3
0%
CS 12346F
3.23e7
31.20
ES 12378F
3.24e7
31.74
ES 23478F
3.16e7
32.87
Abs. Int.
8.75e6
4.37e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDF Std.
29.52-34.51
353.8970 Fn2
Flags: PBM
4σ 2.96e3
0%
CS 12346F
2.10e7
31.20
ES 12378F
2.11e7
31.74
ES 23478F
2.03e7
32.87
Abs. Int.
5.61e6
2.81e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
HpCDPE
29.52-34.51
409.7974 Fn2
Flags: PB
4σ 1.22e3
0%
Abs. Int.
6.94e3
3.47e3
0.00e0
30.0
31.0
32.0
33.0
34.0
RT


Rel. Int.
100%
HxCDF
34.52-39.00
373.8207 Fn3
Flags: PBM
4σ 2.06e3
123478F
4.98e7
36.23
123678F
5.41e7
36.37
234678F
5.06e7
37.04
123789F
4.71e7
38.05
Abs. Int.
1.47e7
7.36e6
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
HxCDF
34.52-39.00
375.8178 Fn3
Flags: PBM
4σ 2.52e3
123478F
4.07e7
36.23
123678F
4.40e7
36.37
234678F
4.11e7
37.04
123789F
3.82e7
38.05
Abs. Int.
1.19e7
5.95e6
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
HxCDF Std.
34.52-39.00
383.8639 Fn3
Flags: PBM
4σ 5.48e3
ES 123678F
1.54e7
36.35
ES 123478F
1.27e7
36.21
CS 123469F
1.32e7
36.66
ES 234678F
1.42e7
37.02
ES 123789F
1.35e7
38.03
Abs. Int.
4.09e6
2.05e6
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
HxCDF Std.
34.52-39.00
385.8610 Fn3
Flags: PBM
4σ 8.59e3
ES 123678F
2.93e7
36.35
ES 123478F
2.43e7
36.21
CS 123469F
2.48e7
36.66
ES 234678F
2.69e7
37.02
ES 123789F
2.52e7
38.03
Abs. Int.
7.77e6
3.88e6
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
OCDPE
34.52-39.00
445.7555 Fn3
Flags: PB
4σ 1.19e3
Abs. Int.
5.29e3
2.64e3
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT


Rel. Int.
100%
HpCDF
39.01-41.50
407.7818 Fn4
Flags: PBM
4σ 2.31e3
1234678F
4.06e7
39.59
1234789F
3.57e7
41.03
Abs. Int.
1.07e7
5.36e6
0.00e0
0%
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
HpCDF
39.01-41.50
409.7788 Fn4
Flags: PBM
4σ 2.53e3
1234678F
3.96e7
39.59
1234789F
3.49e7
41.03
Abs. Int.
1.03e7
5.16e6
0.00e0
0%
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
HpCDF Std.
39.01-41.50
417.8253 Fn4
Flags: PBM
4σ 2.30e3
ES 1234678F
9.79e6
39.58
CS 1234689F
9.78e6
40.01
ES 1234789F
8.77e6
41.02
Abs. Int.
2.62e6
1.31e6
0.00e0
0%
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
HpCDF Std.
39.01-41.50
419.8220 Fn4
Flags: PBM
4σ 5.82e3
ES 1234678F
2.17e7
39.58
CS 1234689F
2.14e7
40.01
ES 1234789F
1.93e7
41.02
Abs. Int.
5.45e6
2.72e6
0.00e0
0%
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
NCDPE
39.01-41.50
479.7165 Fn4
Flags: PB
4σ 1.26e3
Abs. Int.
5.20e3
2.60e3
0.00e0
0%
39.5
40.0
40.5
41.0
41.5 RT



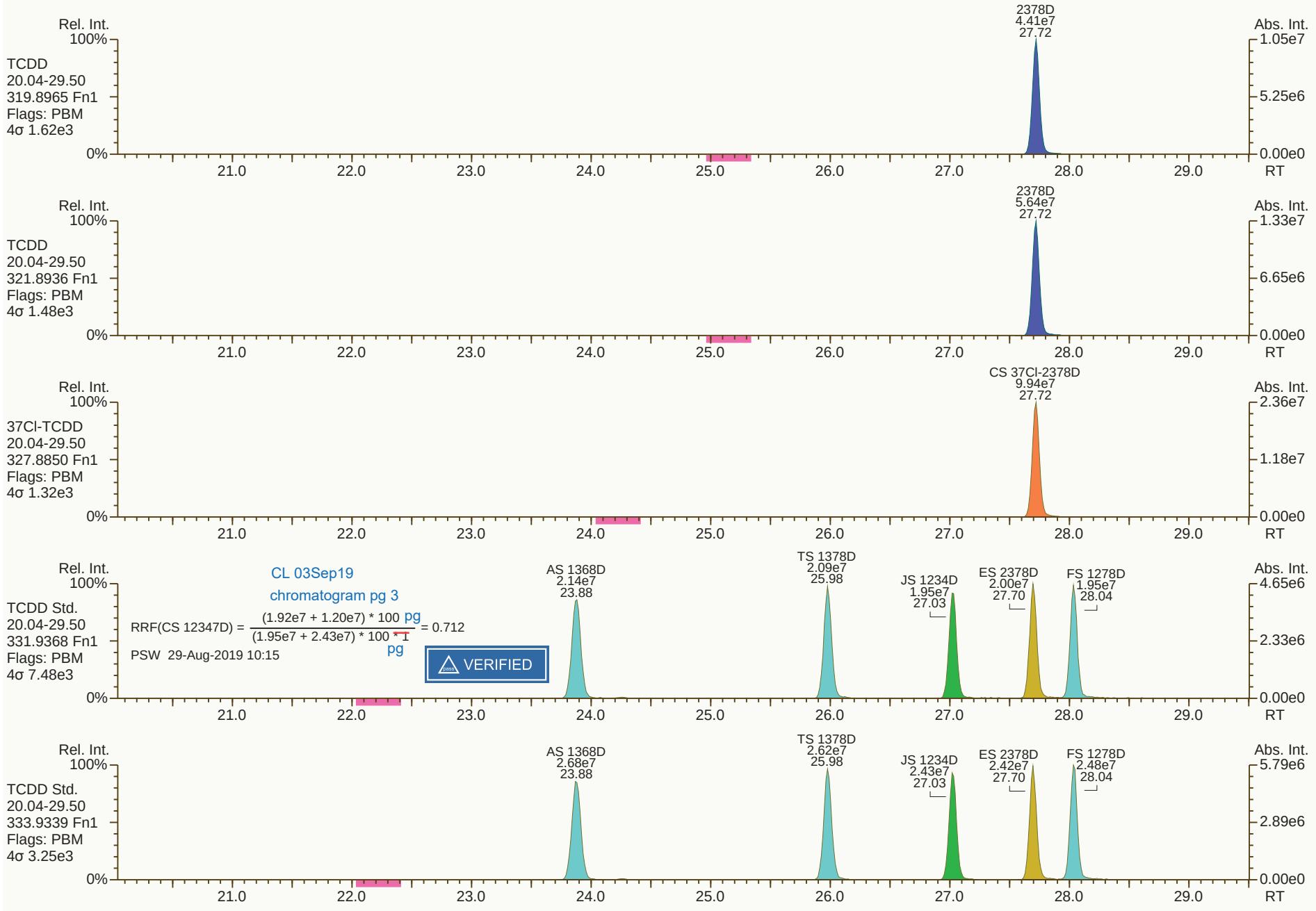
Results: T:\UltraTracePro\ICAL results\HRMS3\HRMS3_DF_10122018_28AUG2019\Resources\CS4_190828_DF_CA.utp_res, saved 29-Aug-2019 10:14 (PSW) *Peak annotation: Areas, Centroids*

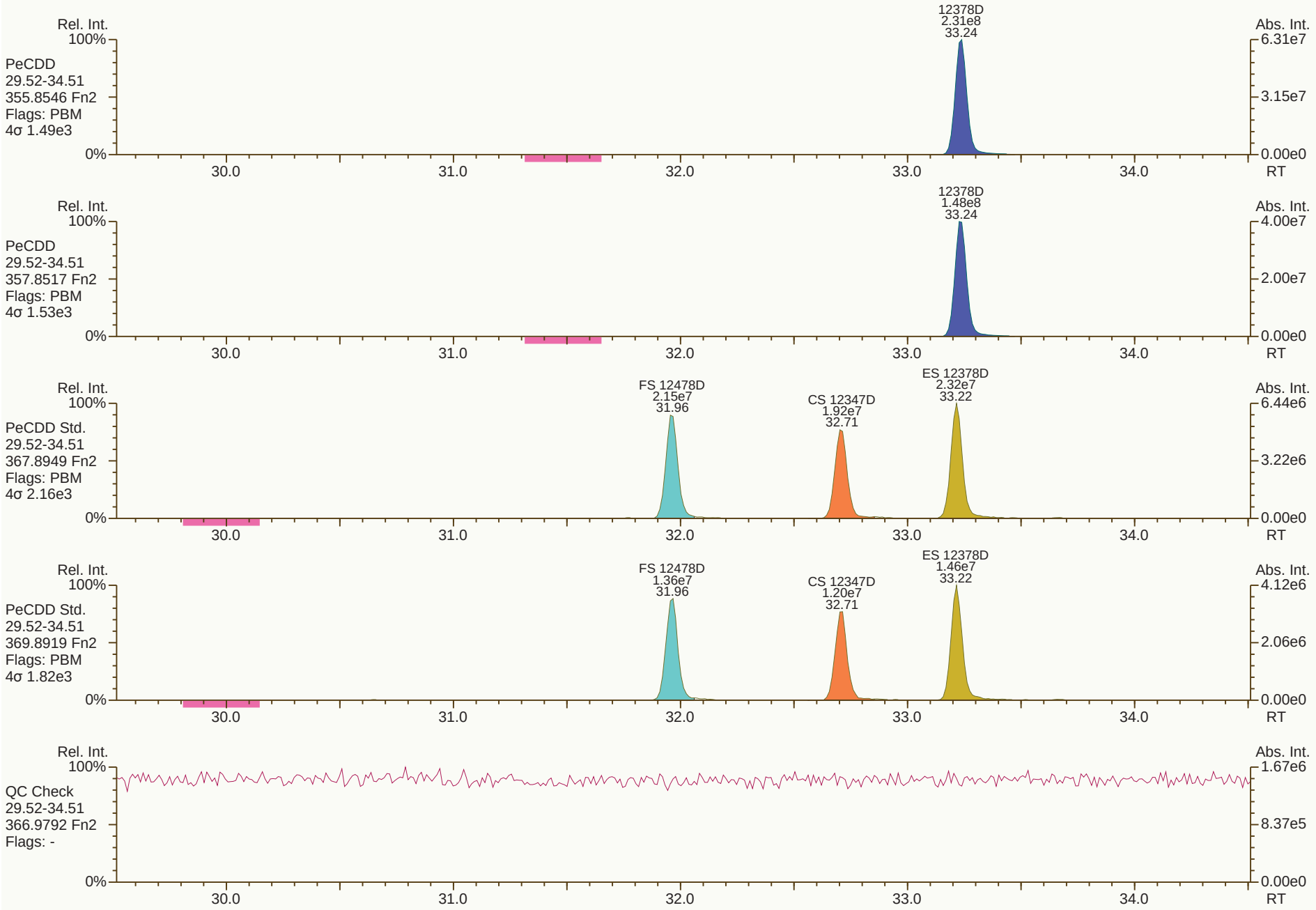
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 4127, 0001, 9872 scc: 139-753 *PKD: 29-Aug-2019 08:31 Printed: 29-Aug-2019 10:44 Page 12 of 12*

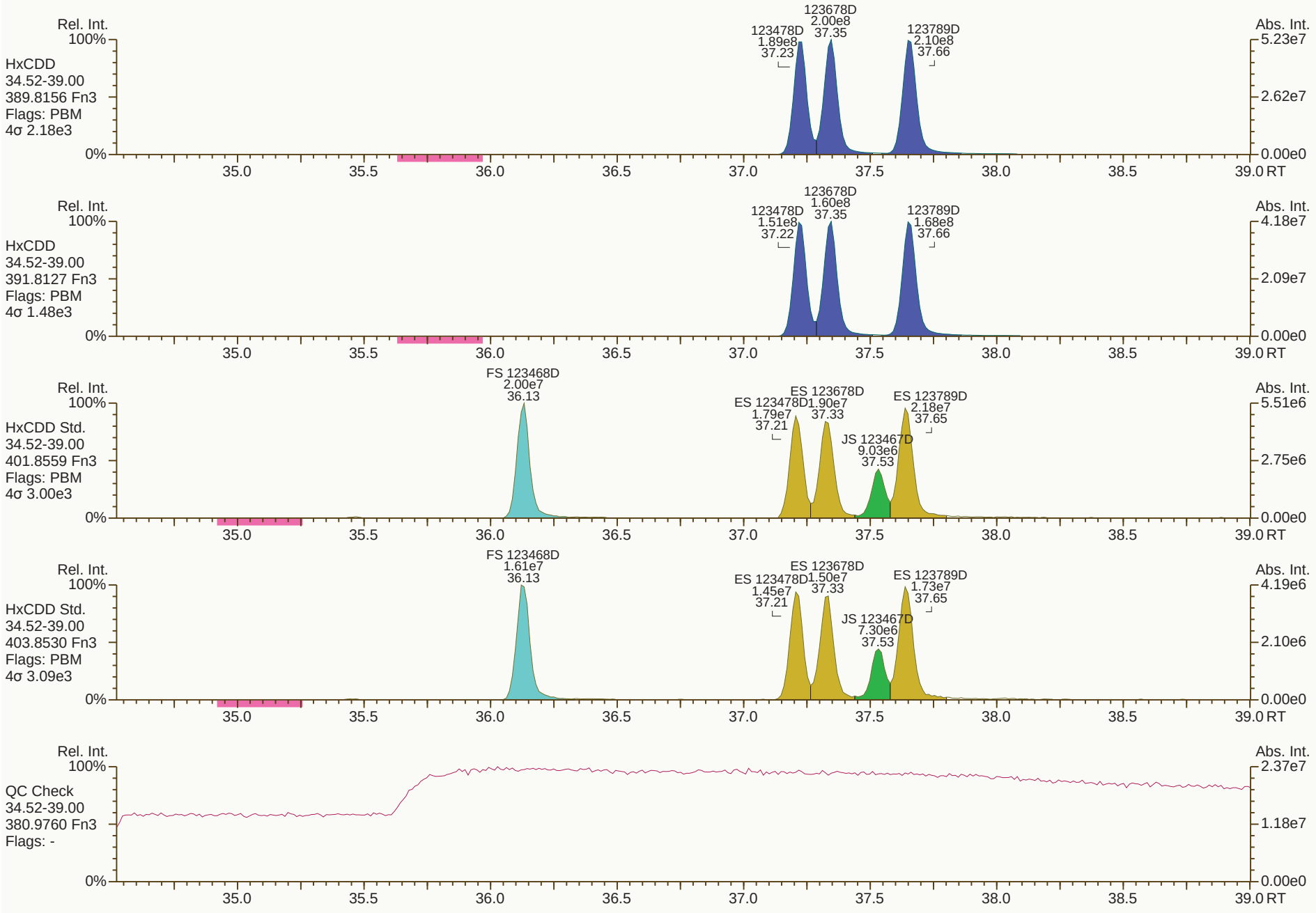
Dioxin/Furan QC Summary		Acq'd: 28 Aug 2019 18:35 PSW				ICAL: HRMS3_DF_10122018_28AUG2019	
Lab ID: CS5_190828_DF_CA		UTP: 29-Aug-2019 08:39:02 PSW				Checkcode: 752-004-GNN	
Sample ID: 20-281-1		Report: 29 Aug 2019 09:56 pw				Datafile: 190828C12	
Name	**RT**	**Response**	**RA**	**OK**	**Ref. RRFs**	**Calc. RRFs**	**Dev'n**
2378-TCDD	27.72	1.01E+08	0.78	Y	1.19	1.14	-4%
12378-PeCDD	33.24	3.80E+08	1.56	Y	0.98	1.00	2%
123478-HxCDD	37.23	3.41E+08	1.25	Y	1.02	1.05	3%
123678-HxCDD	37.35	3.60E+08	1.25	Y	1.09	1.06	-3%
123789-HxCDD	37.66	3.78E+08	1.25	Y	0.97	0.96	-1%
1234678-HpCDD	40.58	2.97E+08	1.04	Y	0.98	0.99	2%
OCDD	43.38	4.42E+08	0.89	Y	1.07	1.06	-1%
2378-TCDF	26.81	1.26E+08	0.78	Y	1.05	0.99	-5%
12378-PeCDF	31.74	5.17E+08	1.55	Y	0.96	0.96	0%
23478-PeCDF	32.88	5.08E+08	1.54	Y	0.99	0.98	0%
123478-HxCDF	36.22	4.57E+08	1.23	Y	1.21	1.21	0%
123678-HxCDF	36.36	4.99E+08	1.23	Y	1.11	1.11	0%
234678-HxCDF	37.03	4.54E+08	1.23	Y	1.12	1.11	-1%
123789-HxCDF	38.04	4.35E+08	1.24	Y	1.11	1.12	1%
1234678-HpCDF	39.58	4.04E+08	1.02	Y	1.32	1.27	-4%
1234789-HpCDF	41.02	3.47E+08	1.03	Y	1.26	1.25	0%
OCDF	43.52	5.36E+08	0.90	Y	1.03	1.01	-2%
ES 2378-TCDD	27.70	4.42E+07	0.82	Y	0.99	1.01	2%
ES 12378-PeCDD	33.22	3.78E+07	1.59	Y	0.83	0.86	4%
ES 123478-HxCDD	37.21	3.24E+07	1.24	Y	0.95	0.99	5%
ES 123678-HxCDD	37.33	3.40E+07	1.27	Y	0.98	1.04	7%
ES 123789-HxCDD	37.65	3.92E+07	1.26	Y	1.14	1.20	5%
ES 1234678-HpCDD	40.56	2.99E+07	1.06	Y	0.90	0.92	2%
ES OCDD	43.36	4.17E+07	0.93	Y	0.63	0.64	2%
ES 2378-TCDF	26.79	6.35E+07	0.78	Y	1.00	1.03	3%
ES 12378-PeCDF	31.73	5.38E+07	1.56	Y	0.83	0.87	5%
ES 23478-PeCDF	32.86	5.16E+07	1.58	Y	0.81	0.84	4%
ES 123478-HxCDF	36.2	3.79E+07	0.54	Y	1.12	1.16	3%
ES 123678-HxCDF	36.34	4.50E+07	0.53	Y	1.33	1.38	3%
ES 234678-HxCDF	37.01	4.10E+07	0.51	Y	1.21	1.25	4%
ES 123789-HxCDF	38.02	3.89E+07	0.52	Y	1.12	1.19	6%
ES 1234678-HpCDF	39.57	3.17E+07	0.45	Y	0.92	0.97	5%
ES 1234789-HpCDF	41	2.77E+07	0.46	Y	0.82	0.85	3%
ES OCDF	43.51	5.31E+07	0.89	Y	0.78	0.81	4%

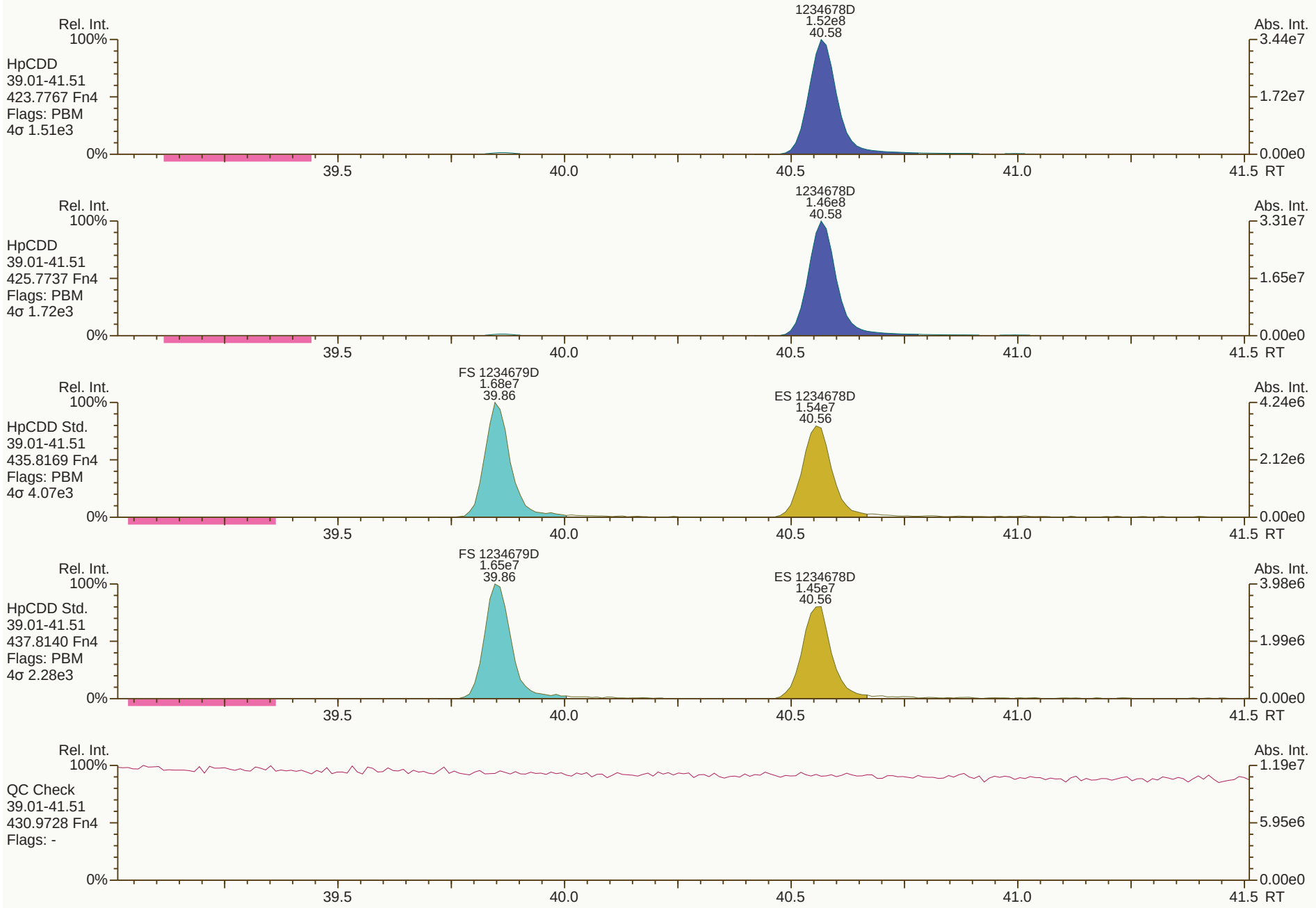
Dioxin/Furan QC Summary		Acq'd: 28 Aug 2019 18:35 PSW				ICAL: HRMS3_DF_10122018_28AUG2019	
Lab ID: CS5_190828_DF_CA		UTP: 29-Aug-2019 08:39:02 PSW				Checkcode: 752-004-GNN	
Sample ID: 20-281-1		Report: 29 Aug 2019 09:56 pw				Datafile: 190828C12	
Name	**RT**	**Response**	**RA**	**OK**	**Ref. RRFs**	**Calc. RRFs**	**Dev'n**
JS 1234-TCDD	27.03	4.38E+07	0.80	Y	-	-	-
JS 1234-TCDF	25.38	6.16E+07	0.79	Y	-	-	-
JS 123467-HxCDD	37.53	1.63E+07	1.24	Y	-	-	-
CS 37Cl-2378-TCDD	27.72	9.94E+07	n/a	-	1.12	1.13	1%
CS 12347-PeCDD	32.71	3.12E+07	1.59	Y	0.71	0.71	0%
CS 12346-PeCDF	31.19	4.92E+07	1.55	Y	0.81	0.80	-1%
CS 123469-HxCDF	36.65	3.63E+07	0.54	Y	1.12	1.11	-1%
CS 1234689-HpCDF	39.99	2.90E+07	0.47	Y	0.90	0.89	-1%
SS 37Cl-2378-TCDD	27.72	9.94E+07	n/a	-	1.14	1.12	-2%
SS 12347-PeCDD	32.71	3.12E+07	1.59	Y	0.86	0.82	-4%
SS 12346-PeCDF	31.19	4.92E+07	1.55	Y	0.98	0.91	-6%
SS 123469-HxCDF	36.65	3.63E+07	0.54	Y	0.85	0.81	-5%
SS 1234689-HpCDF	39.99	2.90E+07	0.47	Y	0.97	0.91	-6%
AS 1368-TCDD	23.88	4.82E+07	0.80	Y	1.12	1.10	-1%
AS 1368-TCDF	21.66	7.19E+07	0.79	Y	1.19	1.17	-2%
FS 1278-TCDD	28.04	4.43E+07	0.79	Y	1.02	1.00	-2%
FS 12478-PeCDD	31.96	3.50E+07	1.58	Y	0.98	0.93	-6%
FS 123468-HxCDD	36.13	3.61E+07	1.24	Y	1.17	1.12	-4%
FS 1234679-HpCDD	39.86	3.33E+07	1.02	Y	1.14	1.11	-2%
TS 1378-TCDD	25.98	4.71E+07	0.80	Y	1.09	1.07	-3%
~~OCDD-a~~	~~NotFnd~~						
~~OCDF-a~~	~~NotFnd~~						

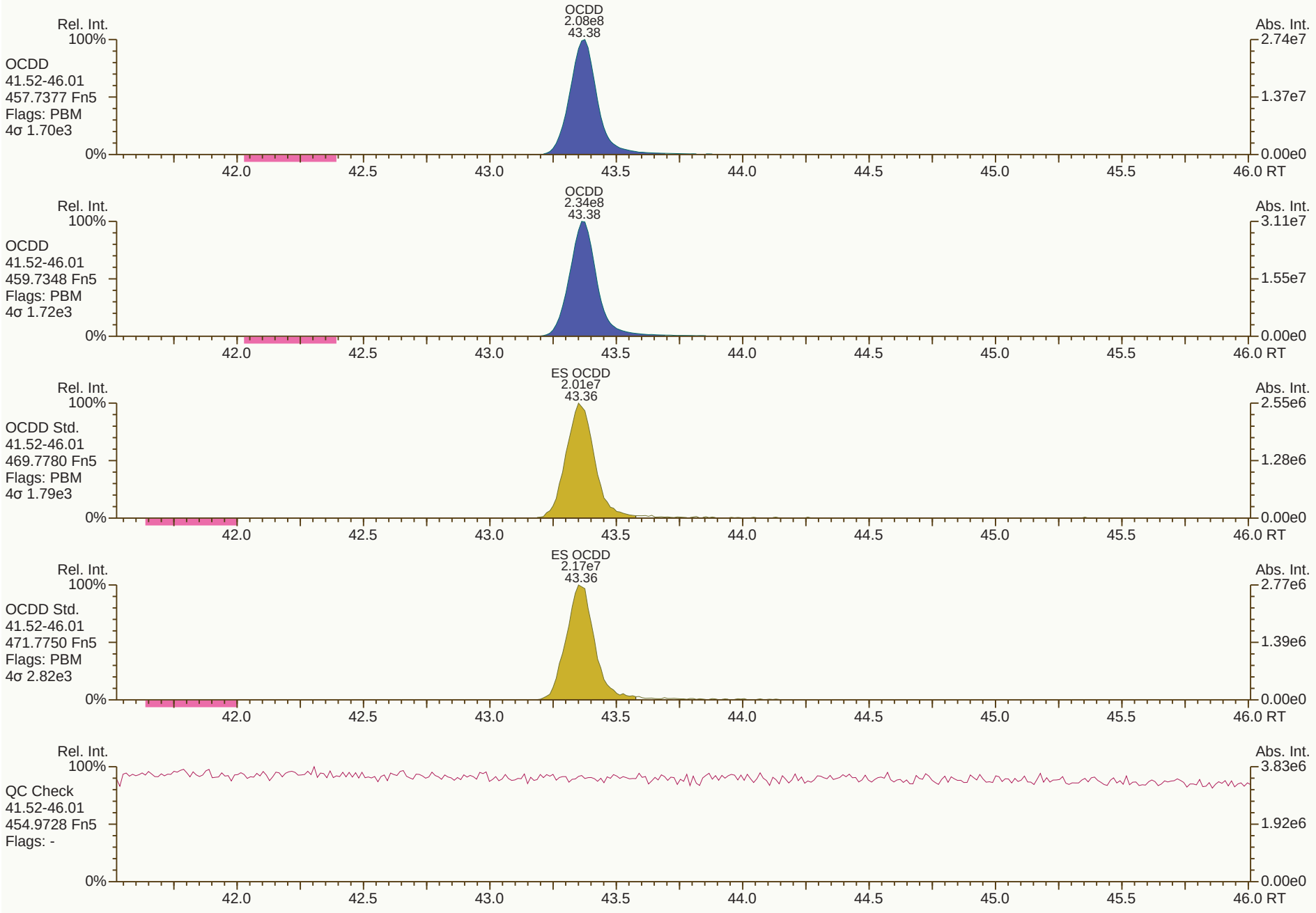

Rel. Int.
100%
QC Check
20.04-29.50
316.9824 Fn1
Flags: -
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Abs. Int.
1.91e6
9.55e5
0.00e0
Rel. Int.
100%
QC Check
29.52-34.51
366.9792 Fn2
Flags: -
0%
30.0
31.0
32.0
33.0
34.0
RT
Abs. Int.
1.67e6
8.37e5
0.00e0
Rel. Int.
100%
QC Check
34.52-39.00
380.9760 Fn3
Flags: -
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Abs. Int.
2.37e7
1.18e7
0.00e0
Rel. Int.
100%
QC Check
39.01-41.51
430.9728 Fn4
Flags: -
0%
39.5
40.0
40.5
41.0
41.5 RT
Abs. Int.
1.19e7
5.95e6
0.00e0
Rel. Int.
100%
QC Check
41.52-46.01
454.9728 Fn5
Flags: -
0%
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
Abs. Int.
3.83e6
1.92e6
0.00e0


Rel. Int.
100%
TCDD
20.04-29.50
319.8965 Fn1
Flags: PBM
4σ 1.62e3
0%
2378D
4.41e7
27.72
Abs. Int.
1.05e7
5.25e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD
20.04-29.50
321.8936 Fn1
Flags: PBM
4σ 1.48e3
0%
2378D
5.64e7
27.72
Abs. Int.
1.33e7
6.65e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
37Cl-TCDD
20.04-29.50
327.8850 Fn1
Flags: PBM
4σ 1.32e3
0%
CS 37Cl-2378D
9.94e7
27.72
Abs. Int.
2.36e7
1.18e7
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.04-29.50
331.9368 Fn1
Flags: PBM
4σ 7.48e3
0%
CL 03Sep19
chromatogram pg 3
RRF(CS 12347D) = (1.92e7 + 1.20e7) * 100 pg / (1.95e7 + 2.43e7) * 100 * 1 pg = 0.712
PSW 29-Aug-2019 10:15
VERIFIED
AS 1368D
2.14e7
23.88
TS 1378D
2.09e7
25.98
JS 1234D
1.95e7
27.03
ES 2378D
2.00e7
27.70
FS 1278D
1.95e7
28.04
Abs. Int.
4.65e6
2.33e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.04-29.50
333.9339 Fn1
Flags: PBM
4σ 3.25e3
0%
AS 1368D
2.68e7
23.88
TS 1378D
2.62e7
25.98
JS 1234D
2.43e7
27.03
ES 2378D
2.42e7
27.70
FS 1278D
2.48e7
28.04
Abs. Int.
5.79e6
2.89e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
PeCDD
29.52-34.51
355.8546 Fn2
Flags: PBM
4σ 1.49e3
12378D
2.31e8
33.24
Abs. Int.
6.31e7
3.15e7
0.00e0
0%
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDD
29.52-34.51
357.8517 Fn2
Flags: PBM
4σ 1.53e3
12378D
1.48e8
33.24
Abs. Int.
4.00e7
2.00e7
0.00e0
0%
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDD Std.
29.52-34.51
367.8949 Fn2
Flags: PBM
4σ 2.16e3
FS 12478D
2.15e7
31.96
CS 12347D
1.92e7
32.71
ES 12378D
2.32e7
33.22
Abs. Int.
6.44e6
3.22e6
0.00e0
0%
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDD Std.
29.52-34.51
369.8919 Fn2
Flags: PBM
4σ 1.82e3
FS 12478D
1.36e7
31.96
CS 12347D
1.20e7
32.71
ES 12378D
1.46e7
33.22
Abs. Int.
4.12e6
2.06e6
0.00e0
0%
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
QC Check
29.52-34.51
366.9792 Fn2
Flags: -
Abs. Int.
1.67e6
8.37e5
0.00e0
0%
30.0
31.0
32.0
33.0
34.0
RT

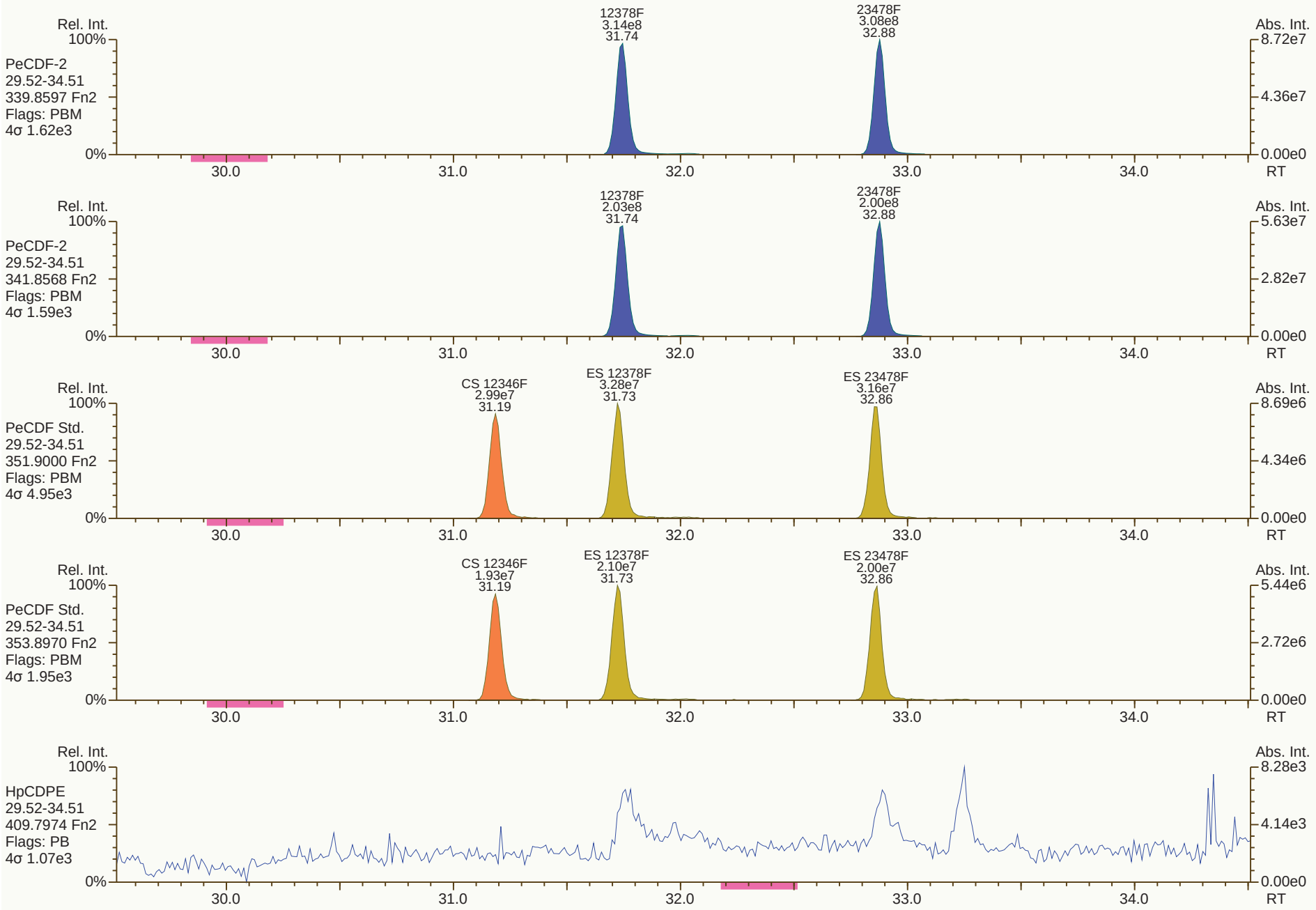

Rel. Int.
100%
HxCDD
34.52-39.00
389.8156 Fn3
Flags: PBM
4σ 2.18e3
123478D
1.89e8
37.23
123678D
2.00e8
37.35
123789D
2.10e8
37.66
Abs. Int.
5.23e7
2.62e7
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
HxCDD
34.52-39.00
391.8127 Fn3
Flags: PBM
4σ 1.48e3
123478D
1.51e8
37.22
123678D
1.60e8
37.35
123789D
1.68e8
37.66
Abs. Int.
4.18e7
2.09e7
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
HxCDD Std.
34.52-39.00
401.8559 Fn3
Flags: PBM
4σ 3.00e3
FS 123468D
2.00e7
36.13
ES 123478D
1.79e7
37.21
ES 123678D
1.90e7
37.33
JS 123467D
9.03e6
37.53
ES 123789D
2.18e7
37.65
Abs. Int.
5.51e6
2.75e6
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
HxCDD Std.
34.52-39.00
403.8530 Fn3
Flags: PBM
4σ 3.09e3
FS 123468D
1.61e7
36.13
ES 123478D
1.45e7
37.21
ES 123678D
1.50e7
37.33
JS 123467D
7.30e6
37.53
ES 123789D
1.73e7
37.65
Abs. Int.
4.19e6
2.10e6
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
QC Check
34.52-39.00
380.9760 Fn3
Flags: -
Abs. Int.
2.37e7
1.18e7
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT

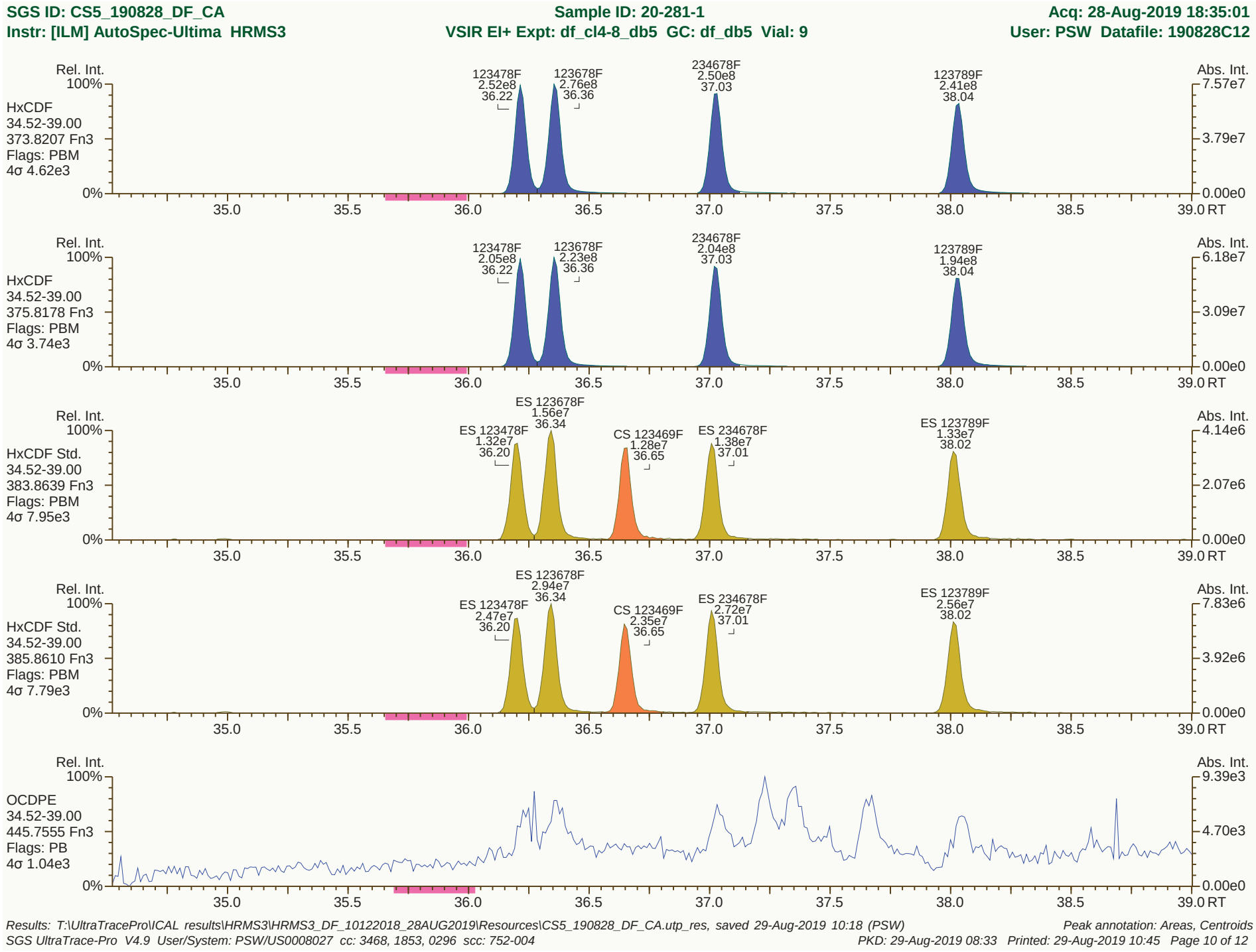

Rel. Int.
100%
HpCDD
39.01-41.51
423.7767 Fn4
Flags: PBM
4σ 1.51e3
1234678D
1.52e8
40.58
Abs. Int.
3.44e7
1.72e7
0.00e0
0%
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
HpCDD
39.01-41.51
425.7737 Fn4
Flags: PBM
4σ 1.72e3
1234678D
1.46e8
40.58
Abs. Int.
3.31e7
1.65e7
0.00e0
0%
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
HpCDD Std.
39.01-41.51
435.8169 Fn4
Flags: PBM
4σ 4.07e3
FS 1234679D
1.68e7
39.86
ES 1234678D
1.54e7
40.56
Abs. Int.
4.24e6
2.12e6
0.00e0
0%
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
HpCDD Std.
39.01-41.51
437.8140 Fn4
Flags: PBM
4σ 2.28e3
FS 1234679D
1.65e7
39.86
ES 1234678D
1.45e7
40.56
Abs. Int.
3.98e6
1.99e6
0.00e0
0%
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
QC Check
39.01-41.51
430.9728 Fn4
Flags: -
Abs. Int.
1.19e7
5.95e6
0.00e0
0%
39.5
40.0
40.5
41.0
41.5 RT

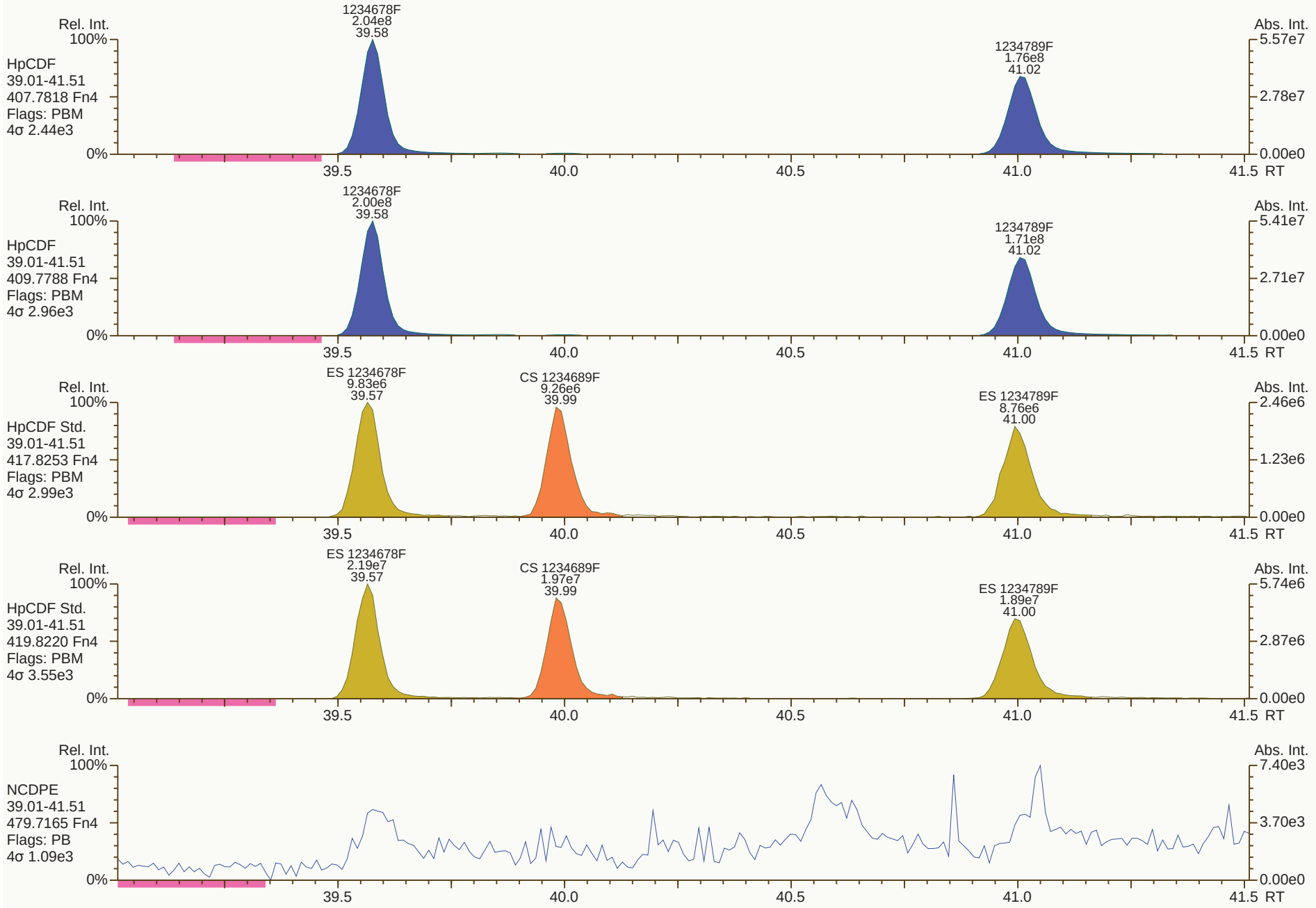

OCDD
2.08e8
43.38
Rel. Int.
100%
OCDD
41.52-46.01
457.7377 Fn5
Flags: PBM
4σ 1.70e3
0%
Abs. Int.
2.74e7
1.37e7
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
OCDD
2.34e8
43.38
Rel. Int.
100%
OCDD
41.52-46.01
459.7348 Fn5
Flags: PBM
4σ 1.72e3
0%
Abs. Int.
3.11e7
1.55e7
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
ES OCDD
2.01e7
43.36
Rel. Int.
100%
OCDD Std.
41.52-46.01
469.7780 Fn5
Flags: PBM
4σ 1.79e3
0%
Abs. Int.
2.55e6
1.28e6
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
ES OCDD
2.17e7
43.36
Rel. Int.
100%
OCDD Std.
41.52-46.01
471.7750 Fn5
Flags: PBM
4σ 2.82e3
0%
Abs. Int.
2.77e6
1.39e6
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
Rel. Int.
100%
QC Check
41.52-46.01
454.9728 Fn5
Flags: -
0%
Abs. Int.
3.83e6
1.92e6
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT


Rel. Int.
100%
TCDF
20.04-29.50
303.9016 Fn1
Flags: PBM
4σ 1.04e3
0%
2378F
5.51e7
26.81
Abs. Int.
1.20e7
5.98e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF
20.04-29.50
305.8987 Fn1
Flags: PBM
4σ 1.34e3
0%
2378F
7.06e7
26.81
Abs. Int.
1.52e7
7.61e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.04-29.50
315.9419 Fn1
Flags: PBM
4σ 9.56e3
0%
AS 1368F
3.17e7
21.66
JS 1234F
2.71e7
25.38
ES 2378F
2.79e7
26.79
Abs. Int.
6.07e6
3.04e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.04-29.50
317.9389 Fn1
Flags: PBM
4σ 4.74e3
0%
AS 1368F
4.03e7
21.65
JS 1234F
3.45e7
25.38
ES 2378F
3.56e7
26.79
Abs. Int.
7.69e6
3.84e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
HxCDPE
20.04-29.50
375.8364 Fn1
Flags: PB
4σ 1.07e3
0%
Abs. Int.
8.68e3
4.34e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
0%
Abs. Int.
1.00e4
5.01e3
0.00e0
PeCDF-1
20.04-29.50
339.8597 Fn1
Flags: PB
4σ 1.52e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
0%
Abs. Int.
8.48e3
4.24e3
0.00e0
PeCDF-1
20.04-29.50
341.8568 Fn1
Flags: PB
4σ 2.19e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
0%
Abs. Int.
1.91e6
9.55e5
0.00e0
QC Check
20.04-29.50
316.9824 Fn1
Flags: -
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
PeCDF-2
29.52-34.51
339.8597 Fn2
Flags: PBM
4σ 1.62e3
0%
12378F
3.14e8
31.74
23478F
3.08e8
32.88
Abs. Int.
8.72e7
4.36e7
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDF-2
29.52-34.51
341.8568 Fn2
Flags: PBM
4σ 1.59e3
0%
12378F
2.03e8
31.74
23478F
2.00e8
32.88
Abs. Int.
5.63e7
2.82e7
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDF Std.
29.52-34.51
351.9000 Fn2
Flags: PBM
4σ 4.95e3
0%
CS 12346F
2.99e7
31.19
ES 12378F
3.28e7
31.73
ES 23478F
3.16e7
32.86
Abs. Int.
8.69e6
4.34e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDF Std.
29.52-34.51
353.8970 Fn2
Flags: PBM
4σ 1.95e3
0%
CS 12346F
1.93e7
31.19
ES 12378F
2.10e7
31.73
ES 23478F
2.00e7
32.86
Abs. Int.
5.44e6
2.72e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
HpCDPE
29.52-34.51
409.7974 Fn2
Flags: PB
4σ 1.07e3
0%
Abs. Int.
8.28e3
4.14e3
0.00e0
30.0
31.0
32.0
33.0
34.0
RT

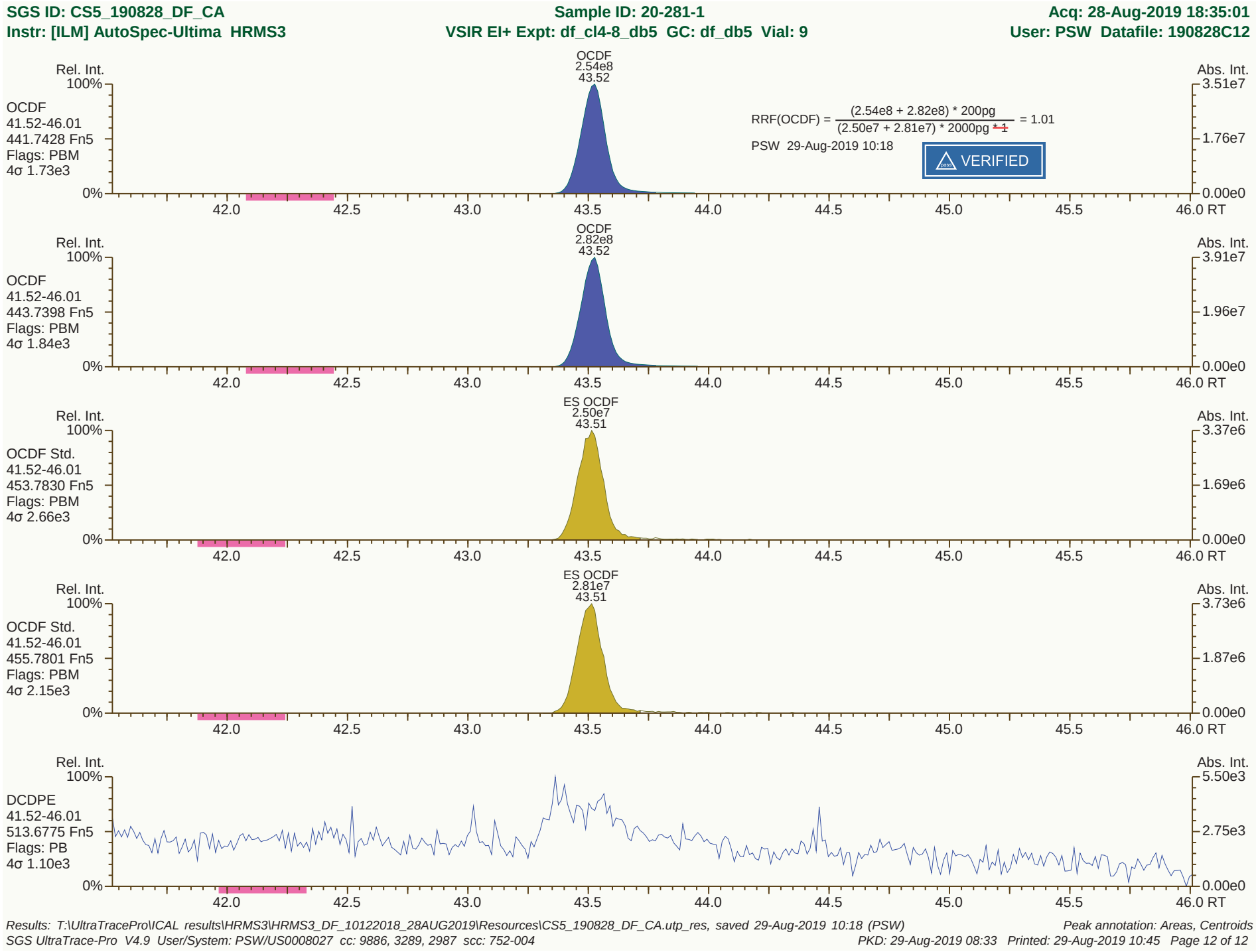

SGS ID: CS5_190828_DF_CA
Instr: [ILM] AutoSpec-Ultima HRMS3
Sample ID: 20-281-1
VSIR EI+ Expt: df_cl4-8_db5 GC: df_db5 Vial: 9
Acq: 28-Aug-2019 18:35:01
User: PSW Datafile: 190828C12
Rel. Int.
100%
0%
Abs. Int.
HxCDF
34.52-39.00
373.8207 Fn3
Flags: PBM
4σ 4.62e3
123478F 2.52e8 36.22
123678F 2.76e8 36.36
234678F 2.50e8 37.03
123789F 2.41e8 38.04
7.57e7
3.79e7
0.00e0
HxCDF
34.52-39.00
375.8178 Fn3
Flags: PBM
4σ 3.74e3
123478F 2.05e8 36.22
123678F 2.23e8 36.36
234678F 2.04e8 37.03
123789F 1.94e8 38.04
6.18e7
3.09e7
0.00e0
HxCDF Std.
34.52-39.00
383.8639 Fn3
Flags: PBM
4σ 7.95e3
ES 123478F 1.32e7 36.20
ES 123678F 1.56e7 36.34
CS 123469F 1.28e7 36.65
ES 234678F 1.38e7 37.01
ES 123789F 1.33e7 38.02
4.14e6
2.07e6
0.00e0
HxCDF Std.
34.52-39.00
385.8610 Fn3
Flags: PBM
4σ 7.79e3
ES 123478F 2.47e7 36.20
ES 123678F 2.94e7 36.34
CS 123469F 2.35e7 36.65
ES 234678F 2.72e7 37.01
ES 123789F 2.56e7 38.02
7.83e6
3.92e6
0.00e0
OCDPE
34.52-39.00
445.7555 Fn3
Flags: PB
4σ 1.04e3
9.39e3
4.70e3
0.00e0
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Results: T:\UltraTracePro\ICAL results\HRMS3\HRMS3_DF_10122018_28AUG2019\Resources\CS5_190828_DF_CA.utp_res, saved 29-Aug-2019 10:18 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 3468, 1853, 0296 scc: 752-004
PKD: 29-Aug-2019 08:33 Printed: 29-Aug-2019 10:45 Page 10 of 12


Rel. Int.
100%
HpCDF
39.01-41.51
407.7818 Fn4
Flags: PBM
4σ 2.44e3
0%
1234678F
2.04e8
39.58
1234789F
1.76e8
41.02
Abs. Int.
5.57e7
2.78e7
0.00e0
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
HpCDF
39.01-41.51
409.7788 Fn4
Flags: PBM
4σ 2.96e3
0%
1234678F
2.00e8
39.58
1234789F
1.71e8
41.02
Abs. Int.
5.41e7
2.71e7
0.00e0
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
HpCDF Std.
39.01-41.51
417.8253 Fn4
Flags: PBM
4σ 2.99e3
0%
ES 1234678F
9.83e6
39.57
CS 1234689F
9.26e6
39.99
ES 1234789F
8.76e6
41.00
Abs. Int.
2.46e6
1.23e6
0.00e0
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
HpCDF Std.
39.01-41.51
419.8220 Fn4
Flags: PBM
4σ 3.55e3
0%
ES 1234678F
2.19e7
39.57
CS 1234689F
1.97e7
39.99
ES 1234789F
1.89e7
41.00
Abs. Int.
5.74e6
2.87e6
0.00e0
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
NCDPE
39.01-41.51
479.7165 Fn4
Flags: PB
4σ 1.09e3
0%
Abs. Int.
7.40e3
3.70e3
0.00e0
39.5
40.0
40.5
41.0
41.5 RT

SGS ID: CS5_190828_DF_CA
Instr: [ILM] AutoSpec-Ultima HRMS3

Sample ID: 20-281-1
VSIR EI+ Expt: df_cl4-8_db5 GC: df_db5 Vial: 9

Acq: 28-Aug-2019 18:35:01
User: PSW Datafile: 190828C12

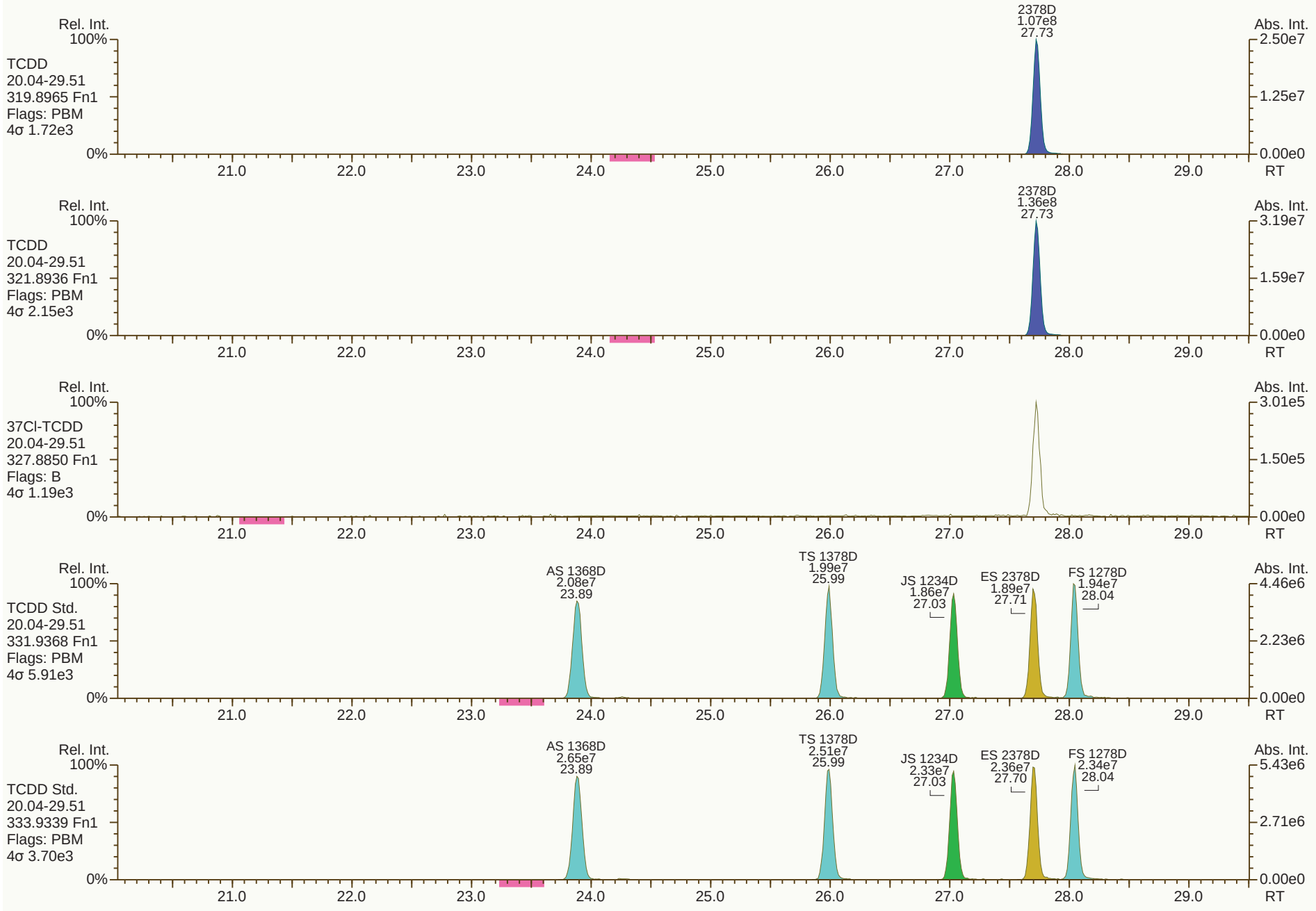


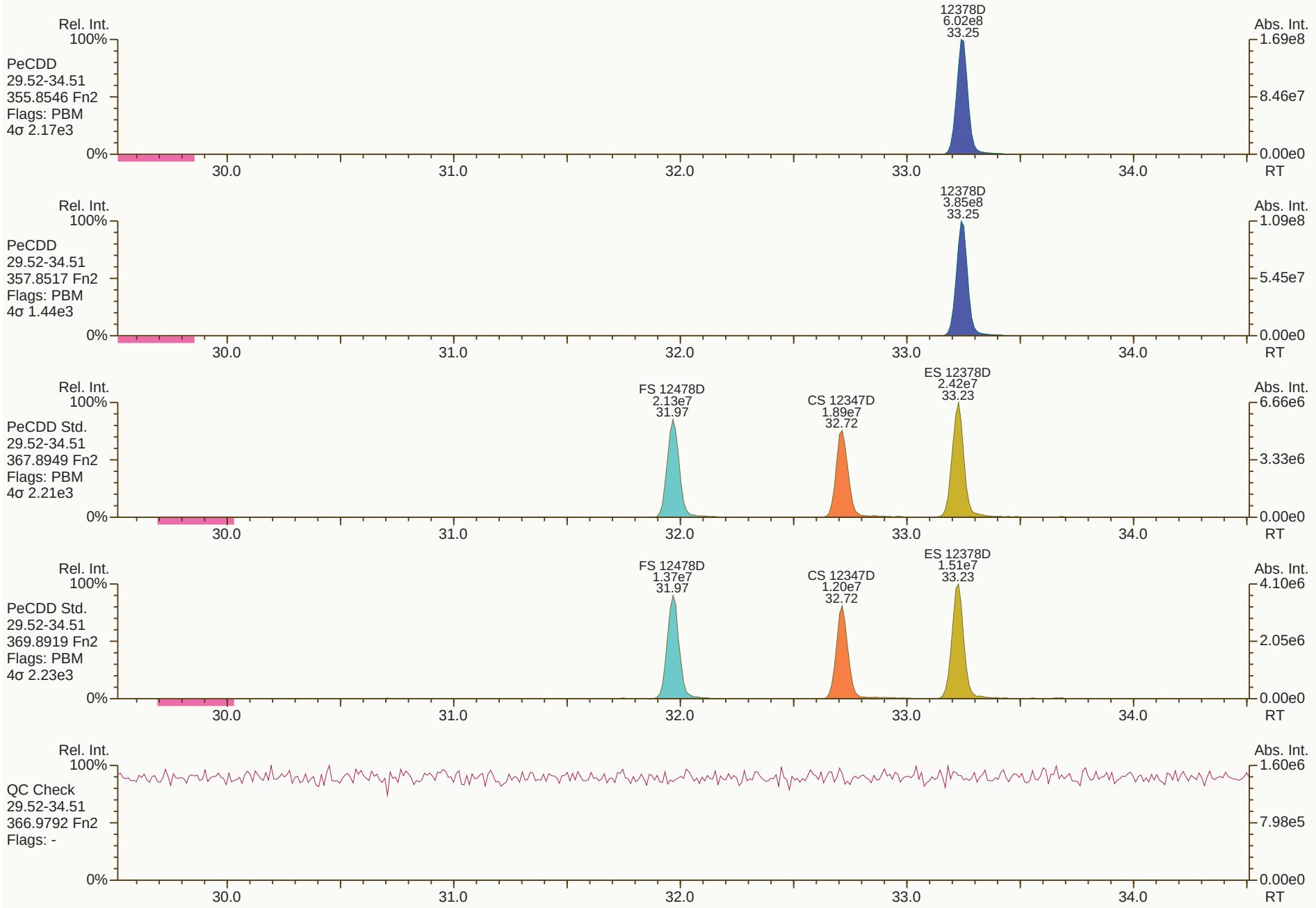
Results: T:\UltraTracePro\ICAL results\HRMS3\HRMS3_DF_10122018_28AUG2019\Resources\CS5_190828_DF_CA.utp_res, saved 29-Aug-2019 10:18 (PSW) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 9886, 3289, 2987 scc: 752-004 *PKD: 29-Aug-2019 08:33 Printed: 29-Aug-2019 10:45 Page 12 of 12*

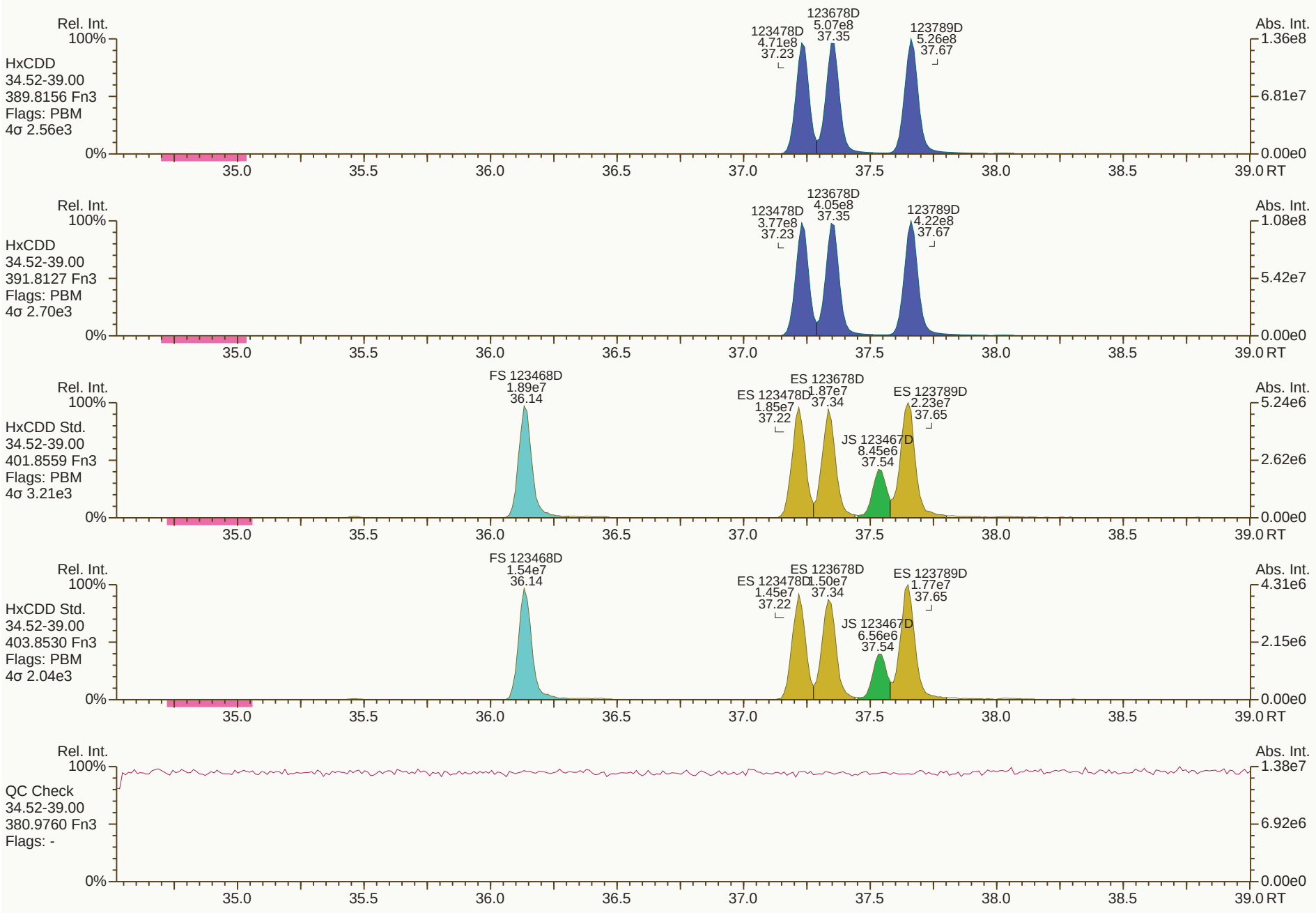
Dioxin/Furan QC Summary		Acq'd: 28 Aug 2019 19:22 PSW				ICAL: HRMS3_DF_10122018_28AUG2019	
Lab ID: CS6_190828_DF_CA		UTP: 29-Aug-2019 08:39:26 PSW				Checkcode: 807-000-LSM	
Sample ID: 20-280-4		Report: 29 Aug 2019 09:56 pw				Datafile: 190828C13	
Name	**RT**	**Response**	**RA**	**OK**	**Ref. RRFs**	**Calc. RRFs**	**Dev'n**
2378-TCDD	27.73	2.42E+08	0.79	Y	1.19	1.14	-4%
12378-PeCDD	33.25	9.87E+08	1.57	Y	0.98	1.00	2%
123478-HxCDD	37.23	8.48E+08	1.25	Y	1.02	1.03	0%
123678-HxCDD	37.35	9.12E+08	1.25	Y	1.09	1.08	0%
123789-HxCDD	37.67	9.48E+08	1.25	Y	0.97	0.95	-2%
1234678-HpCDD	40.59	7.56E+08	1.04	Y	0.98	0.98	1%
OCDD	43.40	1.15E+09	0.89	Y	1.07	1.05	-2%
2378-TCDF	26.82	3.13E+08	0.78	Y	1.05	1.02	-2%
12378-PeCDF	31.75	1.34E+09	1.55	Y	0.96	0.97	1%
23478-PeCDF	32.89	1.33E+09	1.54	Y	0.99	1.00	1%
123478-HxCDF	36.23	1.19E+09	1.24	Y	1.21	1.22	1%
123678-HxCDF	36.37	1.30E+09	1.23	Y	1.11	1.11	0%
234678-HxCDF	37.04	1.15E+09	1.23	Y	1.12	1.08	-3%
123789-HxCDF	38.04	1.13E+09	1.24	Y	1.11	1.15	4%
1234678-HpCDF	39.59	1.06E+09	1.03	Y	1.32	1.28	-3%
1234789-HpCDF	41.03	8.85E+08	1.03	Y	1.26	1.23	-2%
OCDF	43.55	1.41E+09	0.90	Y	1.03	1.02	-1%
ES 2378-TCDD	27.71	4.26E+07	0.80	Y	0.99	1.02	3%
ES 12378-PeCDD	33.23	3.93E+07	1.61	Y	0.83	0.94	13%
ES 123478-HxCDD	37.22	3.30E+07	1.28	Y	0.95	1.10	16%
ES 123678-HxCDD	37.34	3.37E+07	1.25	Y	0.98	1.12	15%
ES 123789-HxCDD	37.65	4.00E+07	1.26	Y	1.14	1.33	17%
ES 1234678-HpCDD	40.57	3.08E+07	1.08	Y	0.90	1.02	14%
ES OCDD	43.39	4.35E+07	0.90	Y	0.63	0.72	16%
ES 2378-TCDF	26.79	6.13E+07	0.81	Y	1.00	1.04	4%
ES 12378-PeCDF	31.73	5.51E+07	1.53	Y	0.83	0.93	12%
ES 23478-PeCDF	32.87	5.33E+07	1.58	Y	0.81	0.90	12%
ES 123478-HxCDF	36.21	3.92E+07	0.53	Y	1.12	1.31	16%
ES 123678-HxCDF	36.35	4.67E+07	0.54	Y	1.33	1.56	17%
ES 234678-HxCDF	37.02	4.27E+07	0.53	Y	1.21	1.42	18%
ES 123789-HxCDF	38.02	3.92E+07	0.55	Y	1.12	1.30	17%
ES 1234678-HpCDF	39.58	3.31E+07	0.46	Y	0.92	1.10	19%
ES 1234789-HpCDF	41.02	2.87E+07	0.47	Y	0.82	0.96	17%
ES OCDF	43.54	5.54E+07	0.89	Y	0.78	0.92	18%

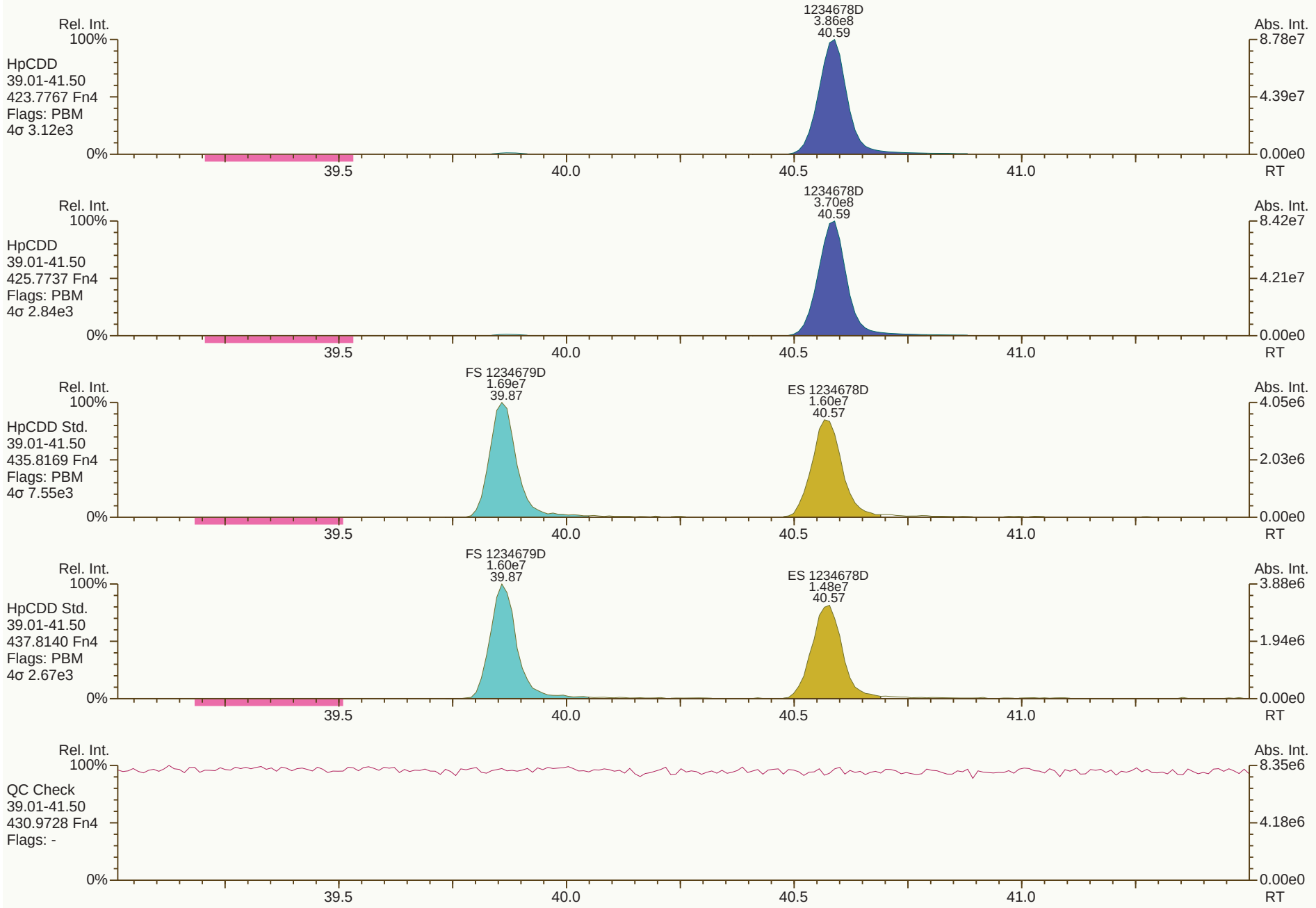
Dioxin/Furan QC Summary		Acq'd: 28 Aug 2019 19:22 PSW				ICAL: HRMS3_DF_10122018_28AUG2019	
Lab ID: CS6_190828_DF_CA		UTP: 29-Aug-2019 08:39:26 PSW				Checkcode: 807-000-LSM	
Sample ID: 20-280-4		Report: 29 Aug 2019 09:56 pw				Datafile: 190828C13	
Name	**RT**	**Response**	**RA**	**OK**	**Ref. RRFs**	**Calc. RRFs**	**Dev'n**
JS 1234-TCDD	27.03	4.19E+07	0.79	Y	-	-	-
JS 1234-TCDF	25.39	5.90E+07	0.79	Y	-	-	-
JS 123467-HxCDD	37.54	1.50E+07	1.29	Y	-	-	-
CS 37Cl-2378-TCDD	NotFnd		n/a	-	1.12		
CS 12347-PeCDD	32.72	3.09E+07	1.57	Y	0.71	0.74	3%
CS 12346-PeCDF	31.19	4.84E+07	1.57	Y	0.81	0.82	1%
CS 123469-HxCDF	36.66	3.56E+07	0.55	Y	1.12	1.19	6%
CS 1234689-HpCDF	40.00	2.91E+07	0.44	Y	0.90	0.97	8%
SS 37Cl-2378-TCDD	NotFnd		n/a	-	1.14		
SS 12347-PeCDD	32.72	3.09E+07	1.57	Y	0.86	0.79	-9%
SS 12346-PeCDF	31.19	4.84E+07	1.57	Y	0.98	0.88	-10%
SS 123469-HxCDF	36.66	3.56E+07	0.55	Y	0.85	0.76	-10%
SS 1234689-HpCDF	40.00	2.91E+07	0.44	Y	0.97	0.88	-10%
AS 1368-TCDD	23.89	4.73E+07	0.79	Y	1.12	1.13	1%
AS 1368-TCDF	21.67	6.89E+07	0.78	Y	1.19	1.17	-2%
FS 1278-TCDD	28.04	4.29E+07	0.83	Y	1.02	1.01	-1%
FS 12478-PeCDD	31.97	3.49E+07	1.55	Y	0.98	0.89	-10%
FS 123468-HxCDD	36.14	3.43E+07	1.22	Y	1.17	1.04	-11%
FS 1234679-HpCDD	39.87	3.28E+07	1.06	Y	1.14	1.07	-6%
TS 1378-TCDD	25.99	4.50E+07	0.79	Y	1.09	1.06	-3%
~~OCDD-a~~	~~NotFnd~~						
~~OCDF-a~~	~~NotFnd~~						

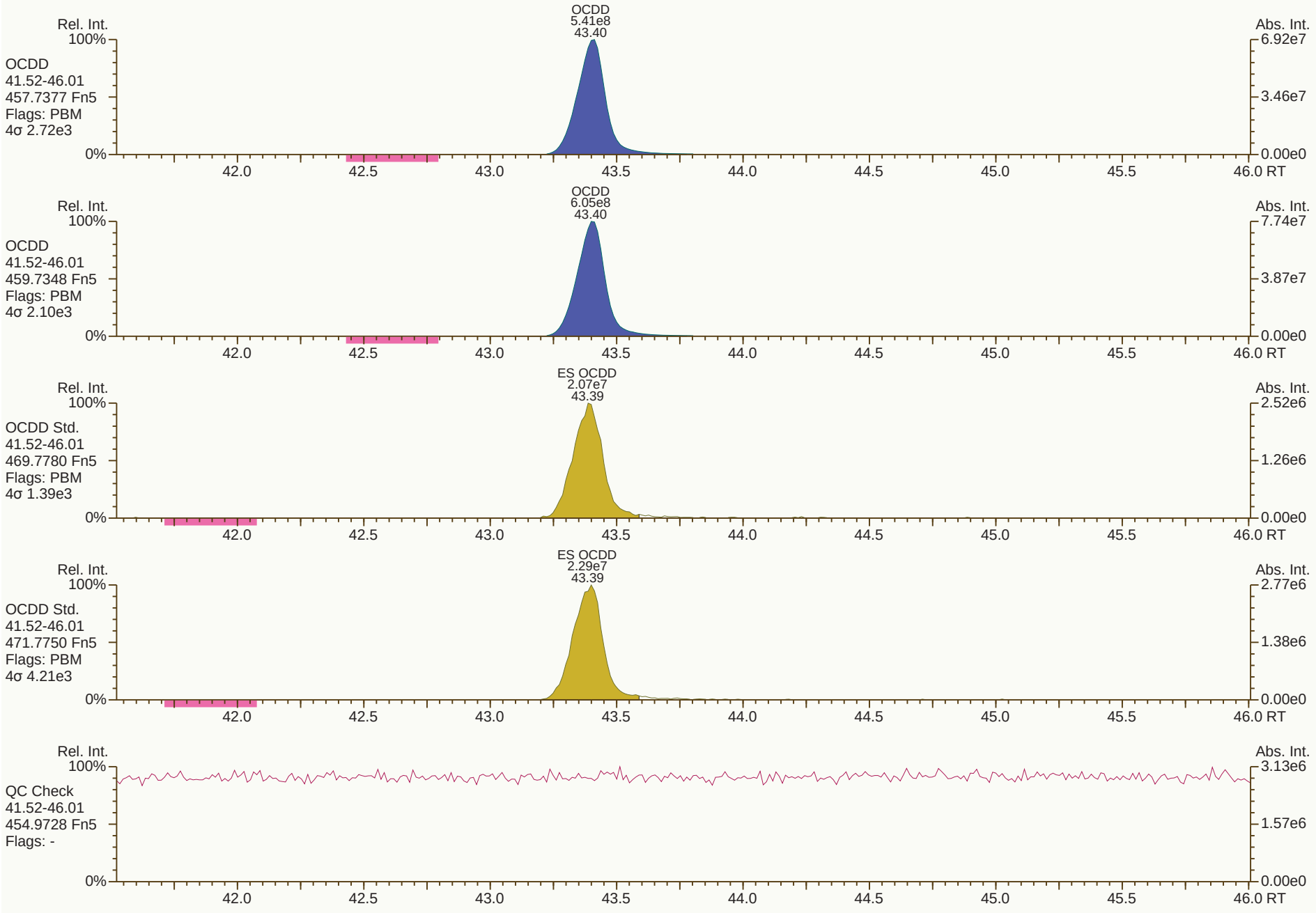

Rel. Int.
100%
0%
Abs. Int.
1.78e6
8.91e5
0.00e0
QC Check
20.04-29.51
316.9824 Fn1
Flags: -
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
0%
Abs. Int.
1.60e6
7.98e5
0.00e0
QC Check
29.52-34.51
366.9792 Fn2
Flags: -
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
0%
Abs. Int.
1.38e7
6.92e6
0.00e0
QC Check
34.52-39.00
380.9760 Fn3
Flags: -
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0
RT
Rel. Int.
100%
0%
Abs. Int.
8.35e6
4.18e6
0.00e0
QC Check
39.01-41.50
430.9728 Fn4
Flags: -
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
0%
Abs. Int.
3.13e6
1.57e6
0.00e0
QC Check
41.52-46.01
454.9728 Fn5
Flags: -
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0
RT


Rel. Int.
100%
TCDD
20.04-29.51
319.8965 Fn1
Flags: PBM
4σ 1.72e3
0%
2378D
1.07e8
27.73
Abs. Int.
2.50e7
1.25e7
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD
20.04-29.51
321.8936 Fn1
Flags: PBM
4σ 2.15e3
0%
2378D
1.36e8
27.73
Abs. Int.
3.19e7
1.59e7
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
37Cl-TCDD
20.04-29.51
327.8850 Fn1
Flags: B
4σ 1.19e3
0%
Abs. Int.
3.01e5
1.50e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.04-29.51
331.9368 Fn1
Flags: PBM
4σ 5.91e3
0%
AS 1368D
2.08e7
23.89
TS 1378D
1.99e7
25.99
JS 1234D
1.86e7
27.03
ES 2378D
1.89e7
27.71
FS 1278D
1.94e7
28.04
Abs. Int.
4.46e6
2.23e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.04-29.51
333.9339 Fn1
Flags: PBM
4σ 3.70e3
0%
AS 1368D
2.65e7
23.89
TS 1378D
2.51e7
25.99
JS 1234D
2.33e7
27.03
ES 2378D
2.36e7
27.70
FS 1278D
2.34e7
28.04
Abs. Int.
5.43e6
2.71e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
PeCDD
29.52-34.51
355.8546 Fn2
Flags: PBM
4σ 2.17e3
0%
12378D
6.02e8
33.25
Abs. Int.
1.69e8
8.46e7
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDD
29.52-34.51
357.8517 Fn2
Flags: PBM
4σ 1.44e3
0%
12378D
3.85e8
33.25
Abs. Int.
1.09e8
5.45e7
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDD Std.
29.52-34.51
367.8949 Fn2
Flags: PBM
4σ 2.21e3
0%
FS 12478D
2.13e7
31.97
CS 12347D
1.89e7
32.72
ES 12378D
2.42e7
33.23
Abs. Int.
6.66e6
3.33e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDD Std.
29.52-34.51
369.8919 Fn2
Flags: PBM
4σ 2.23e3
0%
FS 12478D
1.37e7
31.97
CS 12347D
1.20e7
32.72
ES 12378D
1.51e7
33.23
Abs. Int.
4.10e6
2.05e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
QC Check
29.52-34.51
366.9792 Fn2
Flags: -
0%
Abs. Int.
1.60e6
7.98e5
0.00e0
30.0
31.0
32.0
33.0
34.0
RT

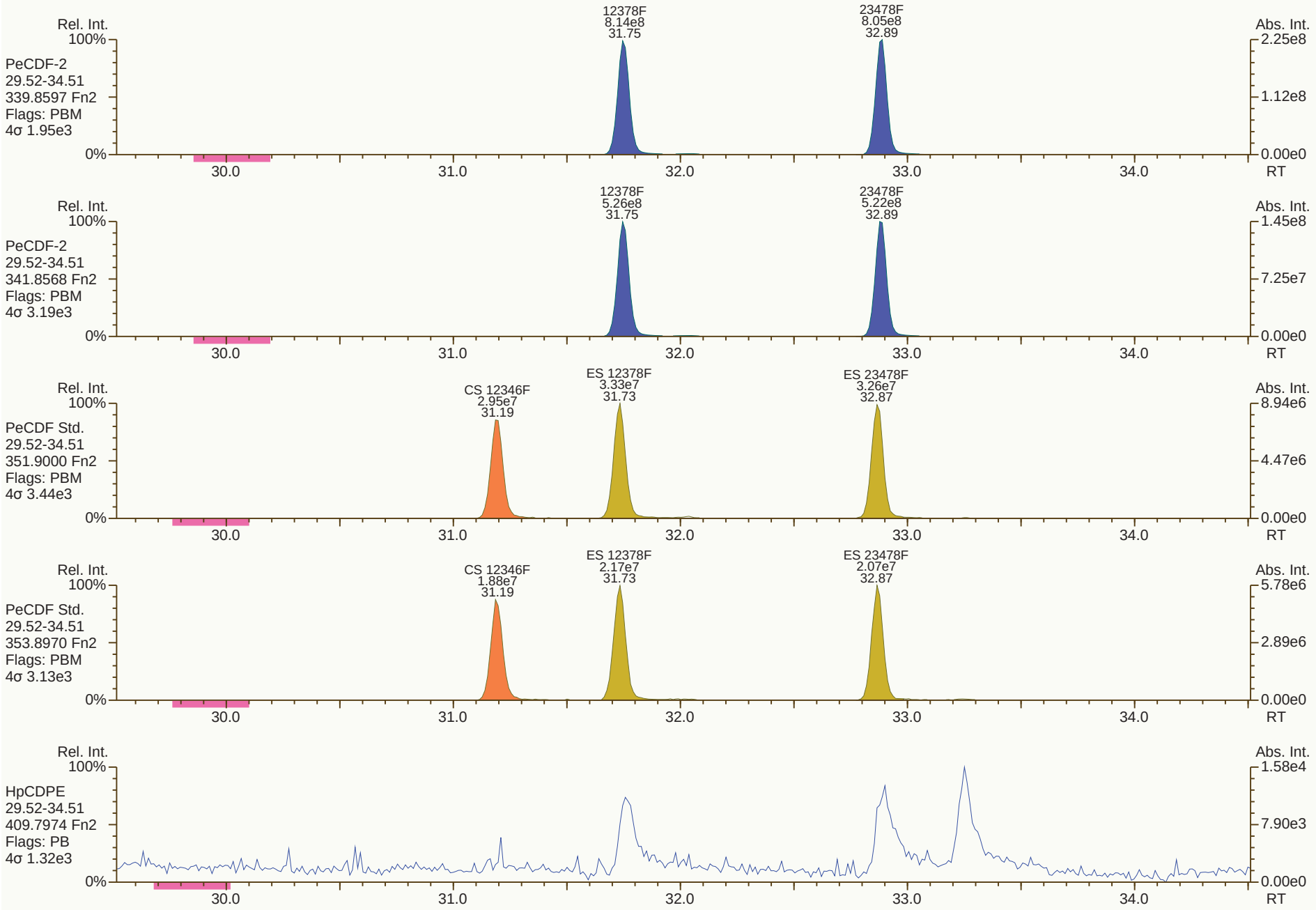

Rel. Int.
100%
HxCDD
34.52-39.00
389.8156 Fn3
Flags: PBM
4σ 2.56e3
123478D
4.71e8
37.23
123678D
5.07e8
37.35
123789D
5.26e8
37.67
Abs. Int.
1.36e8
6.81e7
0.00e0
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
HxCDD
34.52-39.00
391.8127 Fn3
Flags: PBM
4σ 2.70e3
123478D
3.77e8
37.23
123678D
4.05e8
37.35
123789D
4.22e8
37.67
1.08e8
5.42e7
HxCDD Std.
34.52-39.00
401.8559 Fn3
Flags: PBM
4σ 3.21e3
FS 123468D
1.89e7
36.14
ES 123478D
1.85e7
37.22
ES 123678D
1.87e7
37.34
JS 123467D
8.45e6
37.54
ES 123789D
2.23e7
37.65
5.24e6
2.62e6
HxCDD Std.
34.52-39.00
403.8530 Fn3
Flags: PBM
4σ 2.04e3
FS 123468D
1.54e7
36.14
ES 123478D
1.45e7
37.22
ES 123678D
1.50e7
37.34
JS 123467D
6.56e6
37.54
ES 123789D
1.77e7
37.65
4.31e6
2.15e6
QC Check
34.52-39.00
380.9760 Fn3
Flags: -
1.38e7
6.92e6

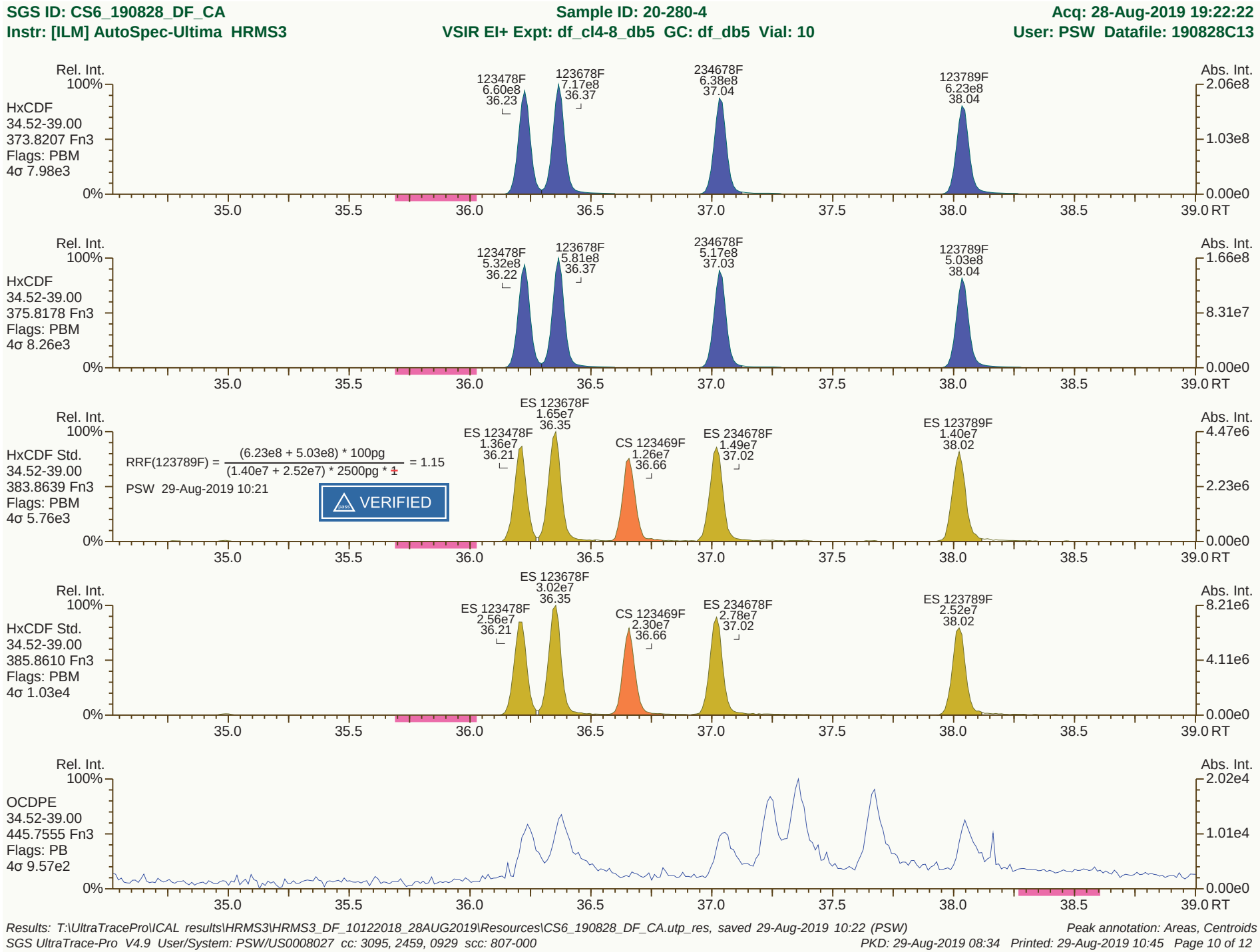

Rel. Int.
100%
HpCDD
39.01-41.50
423.7767 Fn4
Flags: PBM
4σ 3.12e3
1234678D
3.86e8
40.59
Abs. Int.
8.78e7
4.39e7
0.00e0
0%
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD
39.01-41.50
425.7737 Fn4
Flags: PBM
4σ 2.84e3
1234678D
3.70e8
40.59
Abs. Int.
8.42e7
4.21e7
0.00e0
0%
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
39.01-41.50
435.8169 Fn4
Flags: PBM
4σ 7.55e3
FS 1234679D
1.69e7
39.87
ES 1234678D
1.60e7
40.57
Abs. Int.
4.05e6
2.03e6
0.00e0
0%
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
39.01-41.50
437.8140 Fn4
Flags: PBM
4σ 2.67e3
FS 1234679D
1.60e7
39.87
ES 1234678D
1.48e7
40.57
Abs. Int.
3.88e6
1.94e6
0.00e0
0%
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
QC Check
39.01-41.50
430.9728 Fn4
Flags: -
Abs. Int.
8.35e6
4.18e6
0.00e0
0%
39.5
40.0
40.5
41.0
RT

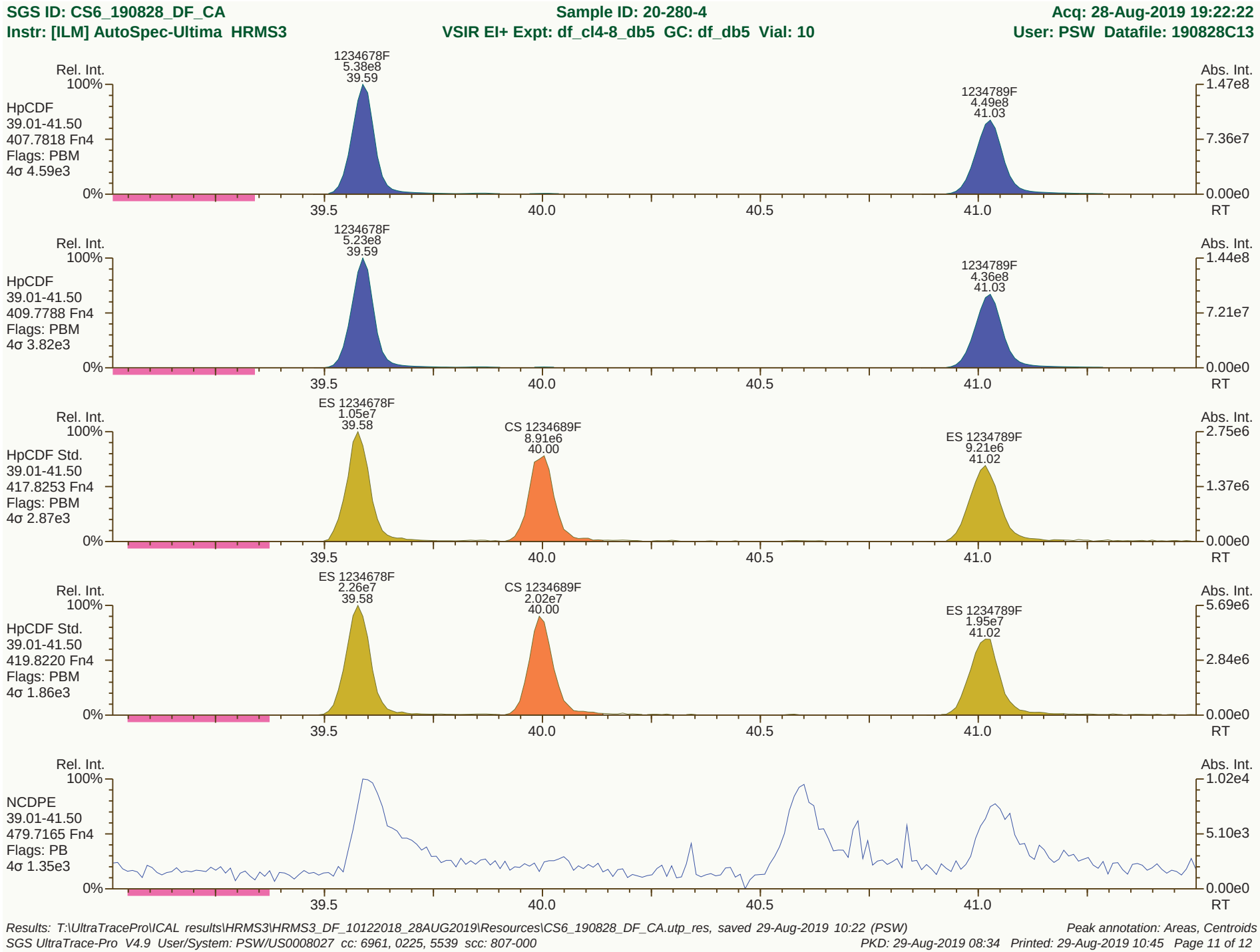

OCDD
5.41e8
43.40
Rel. Int.
100%
Abs. Int.
6.92e7
3.46e7
0.00e0
0%
OCDD
41.52-46.01
457.7377 Fn5
Flags: PBM
4σ 2.72e3
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
OCDD
6.05e8
43.40
Rel. Int.
100%
Abs. Int.
7.74e7
3.87e7
0.00e0
0%
OCDD
41.52-46.01
459.7348 Fn5
Flags: PBM
4σ 2.10e3
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
ES OCDD
2.07e7
43.39
Rel. Int.
100%
Abs. Int.
2.52e6
1.26e6
0.00e0
0%
OCDD Std.
41.52-46.01
469.7780 Fn5
Flags: PBM
4σ 1.39e3
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
ES OCDD
2.29e7
43.39
Rel. Int.
100%
Abs. Int.
2.77e6
1.38e6
0.00e0
0%
OCDD Std.
41.52-46.01
471.7750 Fn5
Flags: PBM
4σ 4.21e3
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
Rel. Int.
100%
Abs. Int.
3.13e6
1.57e6
0.00e0
0%
QC Check
41.52-46.01
454.9728 Fn5
Flags: -
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT


Rel. Int.
100%
0%
Abs. Int.
TCDF
20.04-29.51
303.9016 Fn1
Flags: PBM
4σ 1.14e3
2378F
1.37e8
26.82
3.08e7
1.54e7
0.00e0
TCDF
20.04-29.51
305.8987 Fn1
Flags: PBM
4σ 2.26e3
2378F
1.76e8
26.82
3.94e7
1.97e7
TCDF Std.
20.04-29.51
315.9419 Fn1
Flags: PBM
4σ 8.15e3
AS 1368F
3.02e7
21.67
JS 1234F
2.60e7
25.39
ES 2378F
2.73e7
26.79
5.83e6
2.91e6
TCDF Std.
20.04-29.51
317.9389 Fn1
Flags: PBM
4σ 6.58e3
AS 1368F
3.86e7
21.66
JS 1234F
3.30e7
25.39
ES 2378F
3.39e7
26.79
7.42e6
3.71e6
HxCDPE
20.04-29.51
375.8364 Fn1
Flags: PB
4σ 1.22e3
1.02e4
5.12e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
0%
Abs. Int.
1.23e4
6.13e3
0.00e0
RT
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
PeCDF-1
20.04-29.51
339.8597 Fn1
Flags: PB
4σ 3.50e3
Rel. Int.
100%
0%
Abs. Int.
1.31e4
6.55e3
0.00e0
RT
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
PeCDF-1
20.04-29.51
341.8568 Fn1
Flags: PB
4σ 3.25e3
Rel. Int.
100%
0%
Abs. Int.
1.78e6
8.91e5
0.00e0
RT
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
QC Check
20.04-29.51
316.9824 Fn1
Flags: -

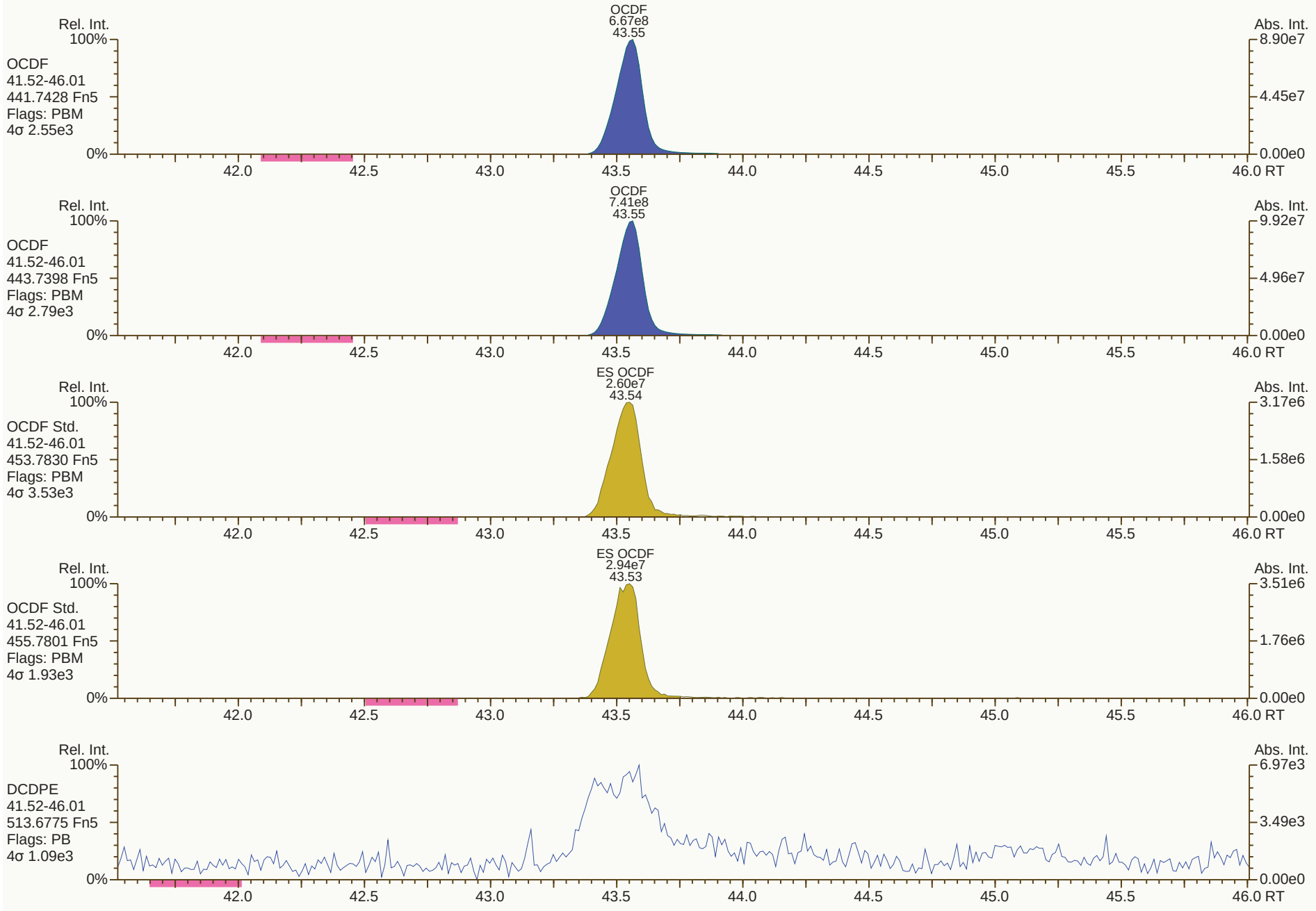

Rel. Int.
100%
PeCDF-2
29.52-34.51
339.8597 Fn2
Flags: PBM
4σ 1.95e3
0%
12378F
8.14e8
31.75
23478F
8.05e8
32.89
Abs. Int.
2.25e8
1.12e8
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDF-2
29.52-34.51
341.8568 Fn2
Flags: PBM
4σ 3.19e3
0%
12378F
5.26e8
31.75
23478F
5.22e8
32.89
Abs. Int.
1.45e8
7.25e7
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDF Std.
29.52-34.51
351.9000 Fn2
Flags: PBM
4σ 3.44e3
0%
CS 12346F
2.95e7
31.19
ES 12378F
3.33e7
31.73
ES 23478F
3.26e7
32.87
Abs. Int.
8.94e6
4.47e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDF Std.
29.52-34.51
353.8970 Fn2
Flags: PBM
4σ 3.13e3
0%
CS 12346F
1.88e7
31.19
ES 12378F
2.17e7
31.73
ES 23478F
2.07e7
32.87
Abs. Int.
5.78e6
2.89e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
HpCDPE
29.52-34.51
409.7974 Fn2
Flags: PB
4σ 1.32e3
0%
Abs. Int.
1.58e4
7.90e3
0.00e0
30.0
31.0
32.0
33.0
34.0
RT


SGS ID: CS6_190828_DF_CA
Instr: [ILM] AutoSpec-Ultima HRMS3
Sample ID: 20-280-4
VSIR EI+ Expt: df_cl4-8_db5 GC: df_db5 Vial: 10
Acq: 28-Aug-2019 19:22:22
User: PSW Datafile: 190828C13
Rel. Int.
Abs. Int.
HxCDF
34.52-39.00
373.8207 Fn3
Flags: PBM
4σ 7.98e3
123478F 6.60e8 36.23
123678F 7.17e8 36.37
234678F 6.38e8 37.04
123789F 6.23e8 38.04
HxCDF
34.52-39.00
375.8178 Fn3
Flags: PBM
4σ 8.26e3
123478F 5.32e8 36.22
123678F 5.81e8 36.37
234678F 5.17e8 37.03
123789F 5.03e8 38.04
HxCDF Std.
34.52-39.00
383.8639 Fn3
Flags: PBM
4σ 5.76e3
RRF(123789F) = (6.23e8 + 5.03e8) * 100pg / (1.40e7 + 2.52e7) * 2500pg * 1 = 1.15
PSW 29-Aug-2019 10:21
VERIFIED
ES 123478F 1.36e7 36.21
ES 123678F 1.65e7 36.35
CS 123469F 1.26e7 36.66
ES 234678F 1.49e7 37.02
ES 123789F 1.40e7 38.02
HxCDF Std.
34.52-39.00
385.8610 Fn3
Flags: PBM
4σ 1.03e4
ES 123478F 2.56e7 36.21
ES 123678F 3.02e7 36.35
CS 123469F 2.30e7 36.66
ES 234678F 2.78e7 37.02
ES 123789F 2.52e7 38.02
OCDPE
34.52-39.00
445.7555 Fn3
Flags: PB
4σ 9.57e2
RT
Results: T:\UltraTracePro\ICAL results\HRMS3\HRMS3_DF_10122018_28AUG2019\Resources\CS6_190828_DF_CA.utp_res, saved 29-Aug-2019 10:22 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 3095, 2459, 0929 scc: 807-000
PKD: 29-Aug-2019 08:34 Printed: 29-Aug-2019 10:45 Page 10 of 12



Results: T:\UltraTracePro\ICAL results\HRMS3\HRMS3_DF_10122018_28AUG2019\Resources\CS6_190828_DF_CA.utp_res, saved 29-Aug-2019 10:22 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 6961, 0225, 5539 scc: 807-000 *PKD: 29-Aug-2019 08:34 Printed: 29-Aug-2019 10:45 Page 11 of 12*


OCDF
6.67e8
43.55
Rel. Int.
100%
0%
Abs. Int.
8.90e7
4.45e7
0.00e0
OCDF
41.52-46.01
441.7428 Fn5
Flags: PBM
4σ 2.55e3
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
OCDF
7.41e8
43.55
Rel. Int.
100%
0%
Abs. Int.
9.92e7
4.96e7
0.00e0
OCDF
41.52-46.01
443.7398 Fn5
Flags: PBM
4σ 2.79e3
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
ES OCDF
2.60e7
43.54
Rel. Int.
100%
0%
Abs. Int.
3.17e6
1.58e6
0.00e0
OCDF Std.
41.52-46.01
453.7830 Fn5
Flags: PBM
4σ 3.53e3
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
ES OCDF
2.94e7
43.53
Rel. Int.
100%
0%
Abs. Int.
3.51e6
1.76e6
0.00e0
OCDF Std.
41.52-46.01
455.7801 Fn5
Flags: PBM
4σ 1.93e3
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
Rel. Int.
100%
0%
Abs. Int.
6.97e3
3.49e3
0.00e0
DCDPE
41.52-46.01
513.6775 Fn5
Flags: PB
4σ 1.09e3
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT

Dioxin/Furan QC Summary		Acq'd: 29 Aug 2019 08:53 PSW				ICAL: HRMS3_DF_10122018_28AUG2019	
Lab ID: CS3_190829_DF_CA		UTP: 29-Aug-2019 09:46:51 PSW				Checkcode: 845-140-VTR	
Sample ID: 20-449-3		Report: 29 Aug 2019 11:26 pw				Datafile: 190829C01	
Name	**RT**	**Response**	**RA**	**OK**	**Ref. RRFs**	**Calc. RRFs**	**Dev'n**
2378-TCDD	27.71	5.89E+06	0.77	Y	1.19	1.16	-2%
12378-PeCDD	33.23	2.16E+07	1.55	Y	0.98	0.99	0%
123478-HxCDD	37.22	2.00E+07	1.23	Y	1.02	1.03	1%
123678-HxCDD	37.34	2.17E+07	1.25	Y	1.09	1.11	2%
123789-HxCDD	37.65	2.23E+07	1.24	Y	0.97	0.98	1%
1234678-HpCDD	40.57	1.94E+07	1.05	Y	0.98	1.01	4%
OCDD	43.38	2.95E+07	0.90	Y	1.07	1.08	0%
2378-TCDF	26.80	7.55E+06	0.78	Y	1.05	1.06	1%
12378-PeCDF	31.74	2.92E+07	1.51	Y	0.96	0.97	0%
23478-PeCDF	32.87	2.90E+07	1.53	Y	0.99	0.97	-2%
123478-HxCDF	36.21	2.75E+07	1.22	Y	1.21	1.25	3%
123678-HxCDF	36.36	2.98E+07	1.22	Y	1.11	1.14	3%
234678-HxCDF	37.02	2.73E+07	1.19	Y	1.12	1.15	3%
123789-HxCDF	38.03	2.54E+07	1.21	Y	1.11	1.12	1%
1234678-HpCDF	39.57	2.50E+07	1.02	Y	1.32	1.30	-2%
1234789-HpCDF	41.01	2.21E+07	1.03	Y	1.26	1.29	3%
OCDF	43.53	3.47E+07	0.90	Y	1.03	1.04	1%
ES 2378-TCDD	27.69	5.07E+07	0.79	Y	0.99	0.97	-2%
ES 12378-PeCDD	33.21	4.37E+07	1.54	Y	0.83	0.84	1%
ES 123478-HxCDD	37.2	3.86E+07	1.26	Y	0.95	0.97	2%
ES 123678-HxCDD	37.32	3.90E+07	1.25	Y	0.98	0.98	0%
ES 123789-HxCDD	37.64	4.56E+07	1.23	Y	1.14	1.14	1%
ES 1234678-HpCDD	40.56	3.82E+07	1.07	Y	0.90	0.96	7%
ES OCDD	43.36	5.48E+07	0.89	Y	0.63	0.69	10%
ES 2378-TCDF	26.78	7.16E+07	0.80	Y	1.00	0.98	-2%
ES 12378-PeCDF	31.72	6.02E+07	1.57	Y	0.83	0.82	-1%
ES 23478-PeCDF	32.85	5.98E+07	1.55	Y	0.81	0.82	1%
ES 123478-HxCDF	36.19	4.42E+07	0.53	Y	1.12	1.11	-1%
ES 123678-HxCDF	36.34	5.25E+07	0.52	Y	1.33	1.32	-1%
ES 234678-HxCDF	37.01	4.76E+07	0.53	Y	1.21	1.19	-1%
ES 123789-HxCDF	38.01	4.53E+07	0.54	Y	1.12	1.13	2%
ES 1234678-HpCDF	39.57	3.86E+07	0.46	Y	0.92	0.97	5%
ES 1234789-HpCDF	41	3.43E+07	0.47	Y	0.82	0.86	5%
ES OCDF	43.51	6.68E+07	0.89	Y	0.78	0.84	7%

Dioxin/Furan QC Summary	Acq'd: 29 Aug 2019 08:53 PSW	ICAL: HRMS3_DF_10122018_28AUG2019
Lab ID: CS3_190829_DF_CA	UTP: 29-Aug-2019 09:46:51 PSW	Checkcode: 845-140-VTR
Sample ID: 20-449-3	Report: 29 Aug 2019 11:26 pw	Datafile: 190829C01

Name	RT	Response	RA	OK	Ref. RRFs	Calc. RRFs	Dev'n
JS 1234-TCDD	27.02	5.22E+07	0.81	Y	-	-	-
JS 1234-TCDF	25.37	7.32E+07	0.79	Y	-	-	-
JS 123467-HxCDD	37.52	1.99E+07	1.23	Y	-	-	-
CS 37Cl-2378-TCDD	27.71	5.74E+06	n/a	-	1.12	1.10	-2%
CS 12347-PeCDD	32.70	3.84E+07	1.59	Y	0.71	0.74	3%
CS 12346-PeCDF	31.18	5.89E+07	1.54	Y	0.81	0.80	-1%
CS 123469-HxCDF	36.65	4.50E+07	0.55	Y	1.12	1.13	1%
CS 1234689-HpCDF	39.99	3.83E+07	0.47	Y	0.90	0.96	7%
SS 37Cl-2378-TCDD	27.71	5.74E+06	n/a	-	1.14	1.13	-1%
SS 12347-PeCDD	32.70	3.84E+07	1.59	Y	0.86	0.88	2%
SS 12346-PeCDF	31.18	5.89E+07	1.54	Y	0.98	0.98	0%
SS 123469-HxCDF	36.65	4.50E+07	0.55	Y	0.85	0.86	1%
SS 1234689-HpCDF	39.99	3.83E+07	0.47	Y	0.97	0.99	2%
~~OCDD-a~~	~~43.37~~	~~1.86E+06~~	~~2.56~~	~~Y~~		~~0.07~~	~~#VALUE!~~
~~OCDF-a~~	~~43.52~~	~~2.26E+05~~	~~2.65~~	~~Y~~		~~0.01~~	~~#VALUE~~!

METHOD 1613B **PCDD/F CALIBRATION VERIFICATION** **FORM 4A**

Lab Name: SGS North America

Initial Calibration: ICAL: HRMS3_DF_10122018_28AUG2019

Instrument ID: HRMS3 GC Column ID: ZB-5ms

VER Data Filename: 190829C01 Analysis Date: 29-AUG-2019 08:53:00

NATIVE ANALYTES	M/Z's FORMING RATIO	ION ABUND. RATIO	QC LIMITS	OK	CONC. FOUND	RANGE (ng/mL)	OK
2,3,7,8-TCDD	M/M+2	0.77	0.65 - 0.89	Y	9.77	7.8 - 12.9	Y
1,2,3,7,8-PeCDD	M+2/M+4	1.55	1.32 - 1.78	Y	50.1	39 - 65	Y
1,2,3,4,7,8-HxCDD	M+2/M+4	1.23	1.05 - 1.43	Y	50.5	39 - 64	Y
1,2,3,6,7,8-HxCDD	M+2/M+4	1.25	1.05 - 1.43	Y	51.2	39 - 64	Y
1,2,3,7,8,9-HxCDD	M+2/M+4	1.24	1.05 - 1.43	Y	50.4	41 - 61	Y
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.05	0.88 - 1.20	Y	51.9	43 - 58	Y
OCDD	M+2/M+4	0.90	0.76 - 1.02	Y	100	79 - 126	Y
2,3,7,8-TCDF	M/M+2	0.78	0.65 - 0.89	Y	10.1	8.4 - 12	Y
1,2,3,7,8-PeCDF	M+2/M+4	1.51	1.32 - 1.78	Y	50.2	41 - 60	Y
2,3,4,7,8-PeCDF	M+2/M+4	1.53	1.32 - 1.78	Y	49.2	41 - 61	Y
1,2,3,4,7,8-HxCDF	M+2/M+4	1.22	1.05 - 1.43	Y	51.6	45 - 56	Y
1,2,3,6,7,8-HxCDF	M+2/M+4	1.22	1.05 - 1.43	Y	51.4	44 - 57	Y
2,3,4,6,7,8-HxCDF	M+2/M+4	1.19	1.05 - 1.43	Y	51.4	44 - 57	Y
1,2,3,7,8,9-HxCDF	M+2/M+4	1.21	1.05 - 1.43	Y	50.5	45 - 56	Y
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.02	0.88 - 1.20	Y	48.9	45 - 55	Y
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.03	0.88 - 1.20	Y	51.3	43 - 58	Y
OCDF	M+2/M+4	0.90	0.76 - 1.02	Y	101	63 - 159	Y

See Table 9, Method 1613, for m/z specifications.

Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

Contract-required concentration range as specified in Table 6, Method 1613.

Processed: 29 Aug 2019 11:26 Analyst: pw

METHOD 1613B **PCDD/F CALIBRATION VERIFICATION** **FORM 4B**

Lab Name: SGS North America

Initial Calibration: ICAL: HRMS3_DF_10122018_28AUG2019

Instrument ID: HRMS3 GC Column ID: ZB-5ms

VER Data Filename: 190829C01 Analysis Date: 29-AUG-2019 08:53:00

LABELED ANALYTES	M/Z's FORMING RATIO	ION ABUND. RATIO	QC LIMITS			OK	CONC. FOUND	RANGE (ng/mL)			OK
13C-2,3,7,8-TCDD	M/M+2	0.79	0.65	-	0.89	Y	98.2	82	-	121	Y
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.54	1.32	-	1.78	Y	101	62	-	160	Y
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.26	1.05	-	1.43	Y	102	85	-	117	Y
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.25	1.05	-	1.43	Y	100	85	-	118	Y
13C-1,2,3,7,8,9-HxCDD	M+2/M+4	1.23	1.05	-	1.43	Y	101	85	-	118	Y
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.07	0.88	-	1.20	Y	107	72	-	138	Y
13C-OCDD	M+2/M+4	0.89	0.76	-	1.02	Y	219	96	-	415	Y
13C-2,3,7,8-TCDF	M/M+2	0.80	0.65	-	0.89	Y	98.2	71	-	140	Y
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.57	1.32	-	1.78	Y	99	76	-	130	Y
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.55	1.32	-	1.78	Y	101	77	-	130	Y
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.53	0.43	-	0.59	Y	98.6	76	-	131	Y
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	98.9	70	-	143	Y
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.53	0.43	-	0.59	Y	98.8	73	-	137	Y
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.54	0.43	-	0.59	Y	102	74	-	135	Y
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.46	0.37	-	0.51	Y	105	78	-	129	Y
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.47	0.37	-	0.51	Y	105	77	-	129	Y
13C-OCDF	M+2/M+4	0.89	0.76	-	1.02	Y	215	96	-	415	Y
CLEANUP STANDARDS											
37Cl-2,3,7,8-TCDD	n/a						9.81	7.9	-	12.7	Y
13C-1,2,3,4,7-PeCDD	M+2/M+4	1.59	1.32	-	1.78	Y	103	70	-	130	Y
13C-1,2,3,4,6-PeCDF	M+2/M+4	1.54	1.32	-	1.78	Y	99.5	70	-	130	Y
13C-1,2,3,4,6,9-HxCDF	M/M+2	0.55	0.43	-	0.59	Y	101	70	-	130	Y
13C-1,2,3,4,6,8,9-HpCDF	M/M+2	0.47	0.37	-	0.51	Y	107	70	-	130	Y

Processed: 29 Aug 2019 11:26 Analyst: pw

METHOD 8290A **PCDD/F CALIBRATION VERIFICATION** **FORM 4A**

Lab Name: SGS North America

Initial Calibration: ICAL: HRMS3_DF_10122018_28AUG2019

Instrument ID: HRMS3 GC Column ID: ZB-5ms

VER Data Filename: 190829C01 Analysis Date: 29-AUG-2019 08:53:00

NATIVE ANALYTES	M/Z's FORMING RATIO	ION ABUND. RATIO	QC LIMITS			OK	CONC. FOUND	RANGE (ng/mL)			OK
2,3,7,8-TCDD	M/M+2	0.77	0.65	-	0.89	Y	9.77	8	-	12	Y
1,2,3,7,8-PeCDD	M+2/M+4	1.55	1.32	-	1.78	Y	50.1	40	-	60	Y
1,2,3,4,7,8-HxCDD	M+2/M+4	1.23	1.05	-	1.43	Y	50.5	40	-	60	Y
1,2,3,6,7,8-HxCDD	M+2/M+4	1.25	1.05	-	1.43	Y	51.2	40	-	60	Y
1,2,3,7,8,9-HxCDD	M+2/M+4	1.24	1.05	-	1.43	Y	50.4	40	-	60	Y
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.05	0.88	-	1.20	Y	51.9	40	-	60	Y
OCDD	M+2/M+4	0.90	0.76	-	1.02	Y	100	80	-	120	Y
2,3,7,8-TCDF	M/M+2	0.78	0.65	-	0.89	Y	10.1	8	-	12	Y
1,2,3,7,8-PeCDF	M+2/M+4	1.51	1.32	-	1.78	Y	50.2	40	-	60	Y
2,3,4,7,8-PeCDF	M+2/M+4	1.53	1.32	-	1.78	Y	49.2	40	-	60	Y
1,2,3,4,7,8-HxCDF	M+2/M+4	1.22	1.05	-	1.43	Y	51.6	40	-	60	Y
1,2,3,6,7,8-HxCDF	M+2/M+4	1.22	1.05	-	1.43	Y	51.4	40	-	60	Y
2,3,4,6,7,8-HxCDF	M+2/M+4	1.19	1.05	-	1.43	Y	51.4	40	-	60	Y
1,2,3,7,8,9-HxCDF	M+2/M+4	1.21	1.05	-	1.43	Y	50.5	40	-	60	Y
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.02	0.88	-	1.20	Y	48.9	40	-	60	Y
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.03	0.88	-	1.20	Y	51.3	40	-	60	Y
OCDF	M+2/M+4	0.90	0.76	-	1.02	Y	101	80	-	120	Y

Processed: 29 Aug 2019 11:27 Analyst: pw

METHOD 8290A **PCDD/F CALIBRATION VERIFICATION** **FORM 4B**

Lab Name: SGS North America

Initial Calibration: ICAL: HRMS3_DF_10122018_28AUG2019

Instrument ID: HRMS3 GC Column ID: ZB-5ms

VER Data Filename: 190829C01 Analysis Date: 29-AUG-2019 08:53:00

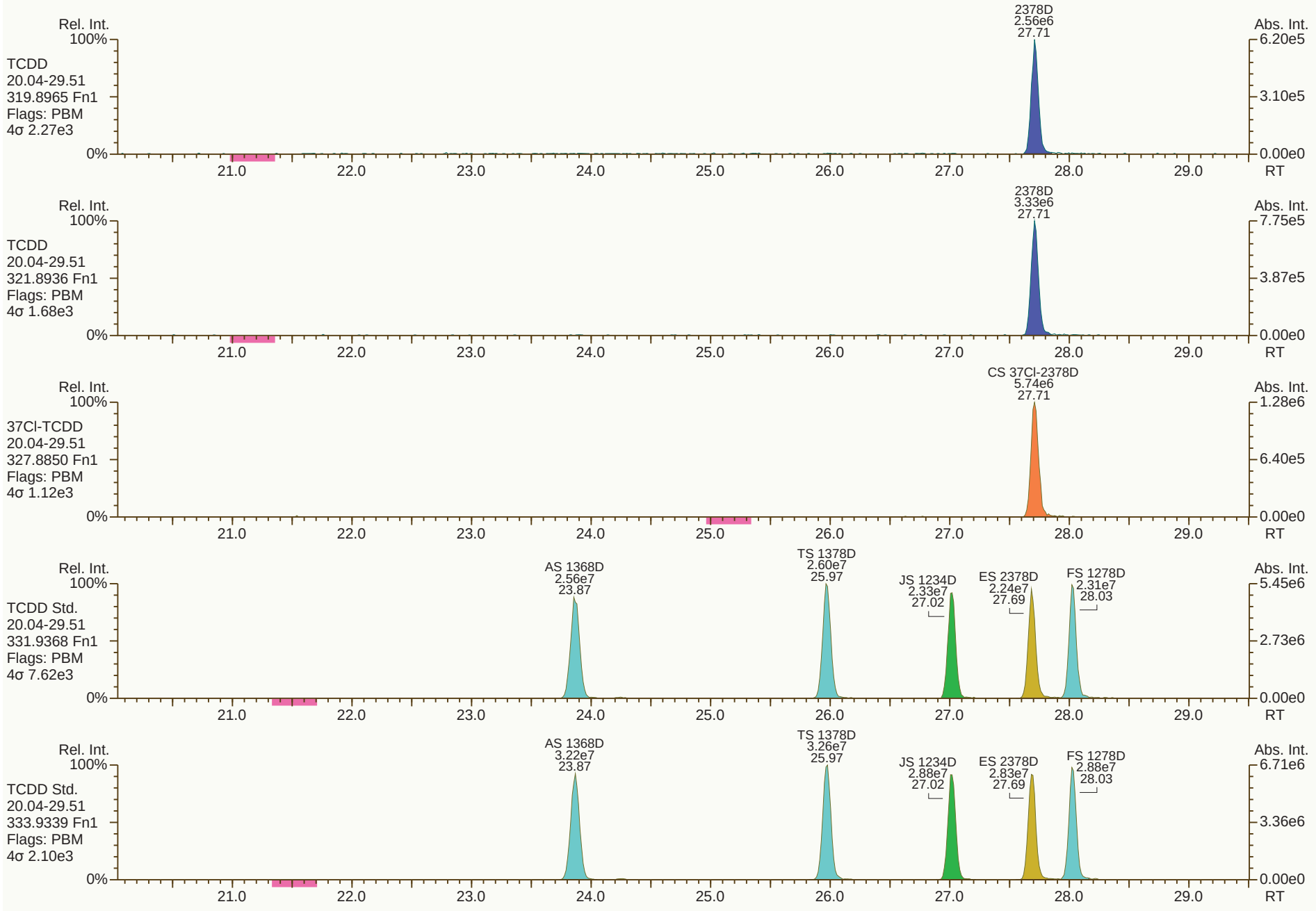
LABELED ANALYTES	M/Z's FORMING RATIO	ION ABUND. RATIO	QC LIMITS			OK	CONC. FOUND	RANGE (ng/mL)			OK
13C-2,3,7,8-TCDD	M/M+2	0.79	0.65	-	0.89	Y	98.2	70	-	130	Y
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.54	1.32	-	1.78	Y	101	70	-	130	Y
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.26	1.05	-	1.43	Y	102	70	-	130	Y
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.25	1.05	-	1.43	Y	100	70	-	130	Y
13C-1,2,3,7,8,9-HxCDD	M+2/M+4	1.23	1.05	-	1.43	Y	101	70	-	130	Y
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.07	0.88	-	1.20	Y	107	70	-	130	Y
13C-OCDD	M+2/M+4	0.89	0.76	-	1.02	Y	219	140	-	260	Y
13C-2,3,7,8-TCDF	M/M+2	0.80	0.65	-	0.89	Y	98.2	70	-	130	Y
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.57	1.32	-	1.78	Y	99	70	-	130	Y
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.55	1.32	-	1.78	Y	101	70	-	130	Y
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.53	0.43	-	0.59	Y	98.6	70	-	130	Y
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	98.9	70	-	130	Y
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.53	0.43	-	0.59	Y	98.8	70	-	130	Y
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.54	0.43	-	0.59	Y	102	70	-	130	Y
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.46	0.37	-	0.51	Y	105	70	-	130	Y
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.47	0.37	-	0.51	Y	105	70	-	130	Y
13C-OCDF	M+2/M+4	0.89	0.76	-	1.02	Y	215	140	-	260	Y
CLEANUP STANDARDS											
37Cl-2,3,7,8-TCDD	n/a						9.81	7.9	-	12.7	Y
13C-1,2,3,4,7-PeCDD	M+2/M+4	1.59	1.32	-	1.78	Y	103	70	-	130	Y
13C-1,2,3,4,6-PeCDF	M+2/M+4	1.54	1.32	-	1.78	Y	99.5	70	-	130	Y
13C-1,2,3,4,6,9-HxCDF	M/M+2	0.55	0.43	-	0.59	Y	101	70	-	130	Y
13C-1,2,3,4,6,8,9-HpCDF	M/M+2	0.47	0.37	-	0.51	Y	107	70	-	130	Y

Processed: 29 Aug 2019 11:27 Analyst: pw

SGS ID: CS3_190829_DF_CA **Sample ID: 20-449-3** **Acq: 29-Aug-2019 08:53:00**
Instr: [ILM] AutoSpec-Ultima HRMS3 **VSIR EI+ Expt: df_cl4-8_db5 GC: df_db5 Vial: 1** **User: PSW Datafile: 190829C01**



Results: T:\UltraTracePro\ICAL results\HRMS3\HRMS3_DF_10122018_28AUG2019\Resources\CS3_190829_DF_CA.utp_res, saved 29-Aug-2019 09:46 (PSW) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 scc: 845-140 *PKD: n/a Printed: 29-Aug-2019 11:30 Page 1 of 12*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100%
TCDD
20.04-29.51
319.8965 Fn1
Flags: PBM
4σ 2.27e3
0%
2378D
2.56e6
27.71
Abs. Int.
6.20e5
3.10e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD
20.04-29.51
321.8936 Fn1
Flags: PBM
4σ 1.68e3
0%
2378D
3.33e6
27.71
Abs. Int.
7.75e5
3.87e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
37Cl-TCDD
20.04-29.51
327.8850 Fn1
Flags: PBM
4σ 1.12e3
0%
CS 37Cl-2378D
5.74e6
27.71
Abs. Int.
1.28e6
6.40e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.04-29.51
331.9368 Fn1
Flags: PBM
4σ 7.62e3
0%
AS 1368D
2.56e7
23.87
TS 1378D
2.60e7
25.97
JS 1234D
2.33e7
27.02
ES 2378D
2.24e7
27.69
FS 1278D
2.31e7
28.03
Abs. Int.
5.45e6
2.73e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.04-29.51
333.9339 Fn1
Flags: PBM
4σ 2.10e3
0%
AS 1368D
3.22e7
23.87
TS 1378D
3.26e7
25.97
JS 1234D
2.88e7
27.02
ES 2378D
2.83e7
27.69
FS 1278D
2.88e7
28.03
Abs. Int.
6.71e6
3.36e6
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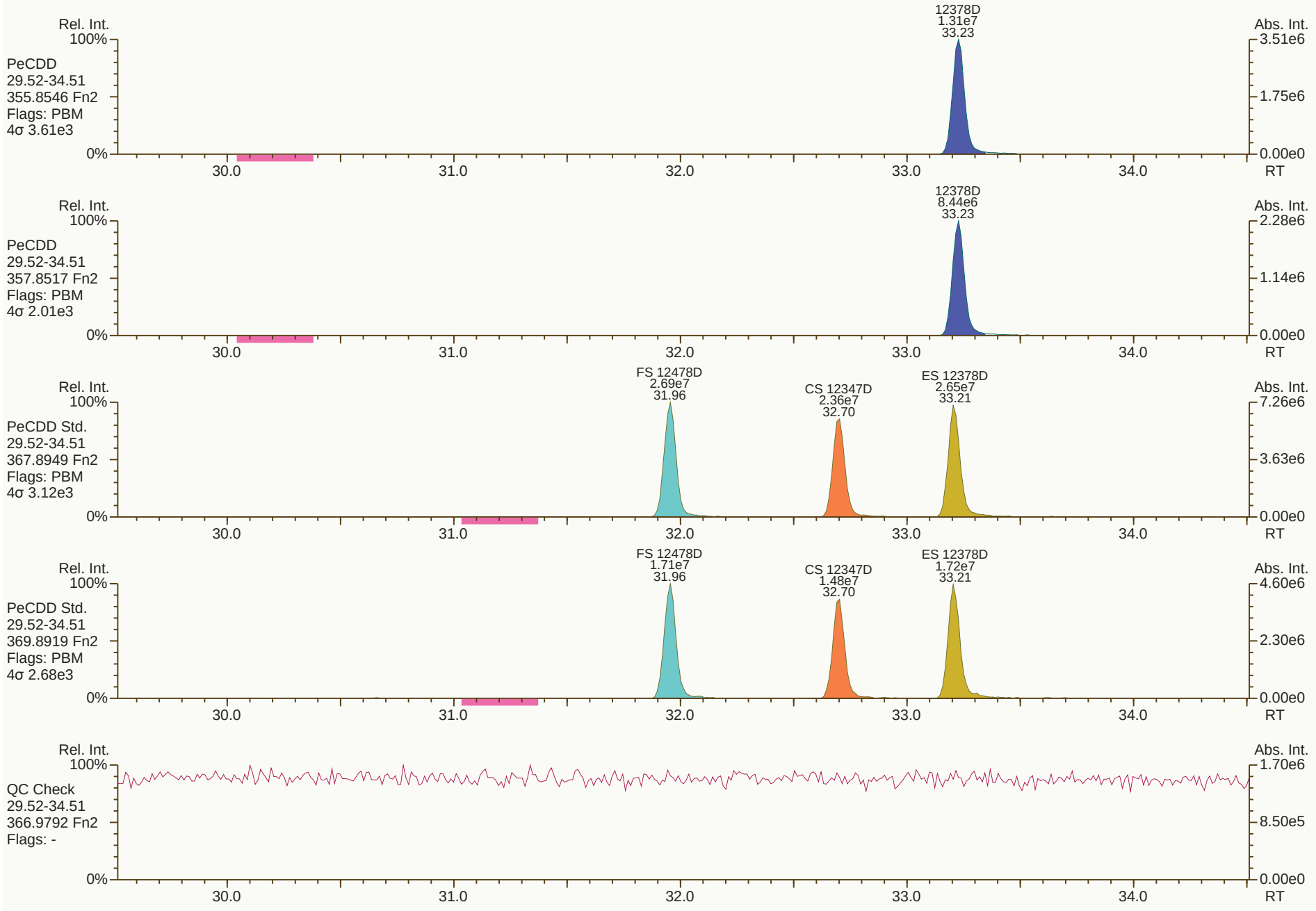
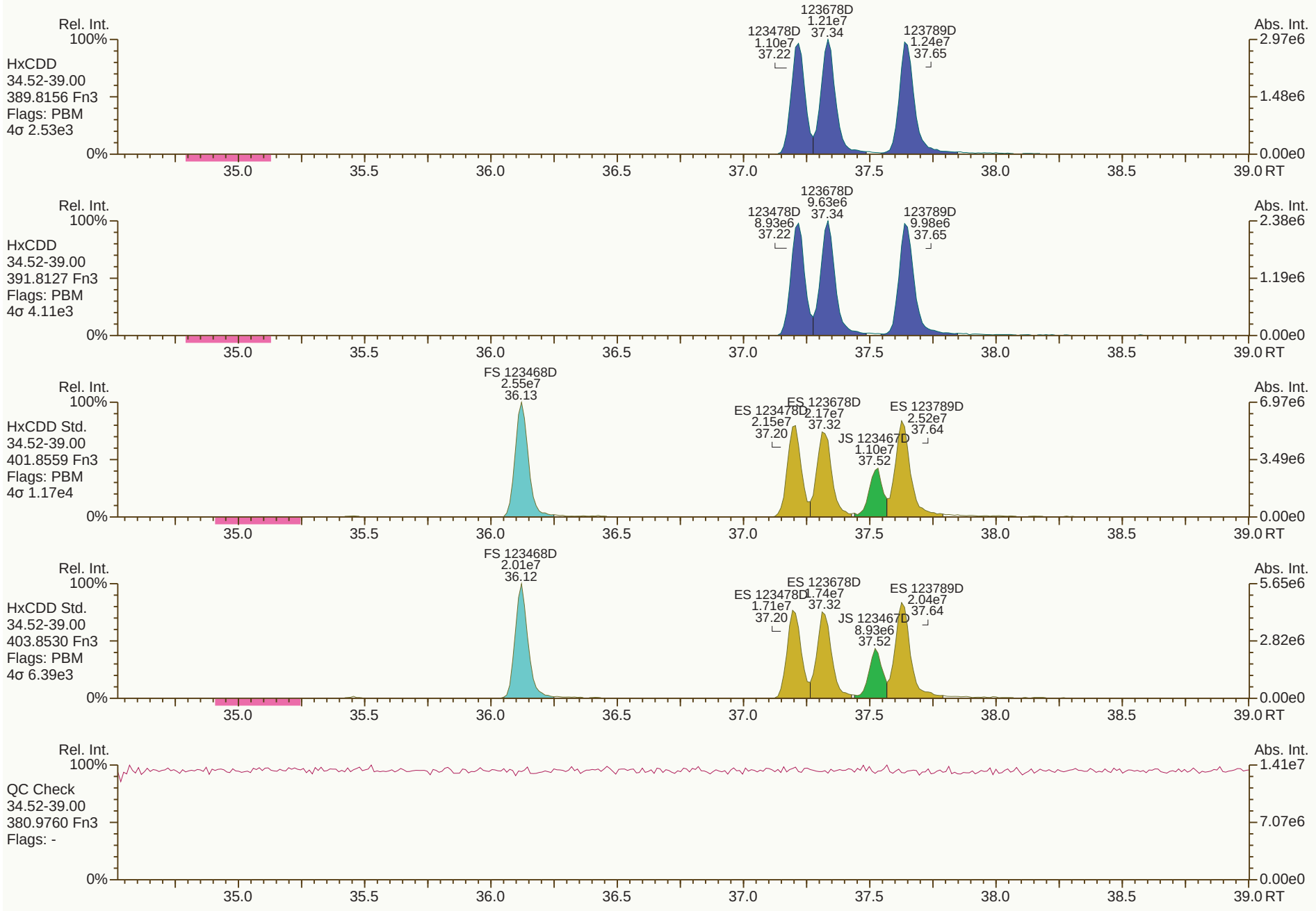
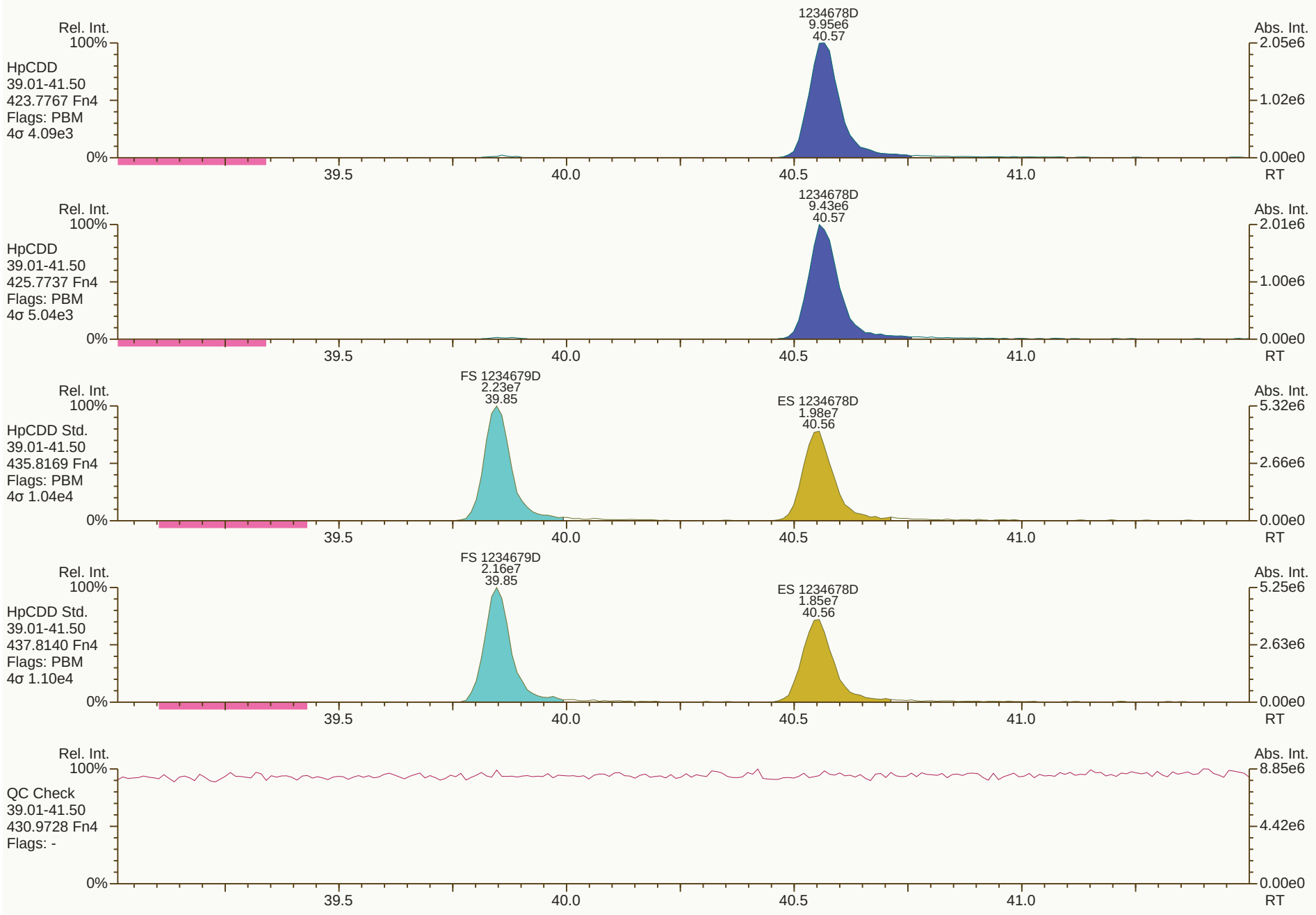
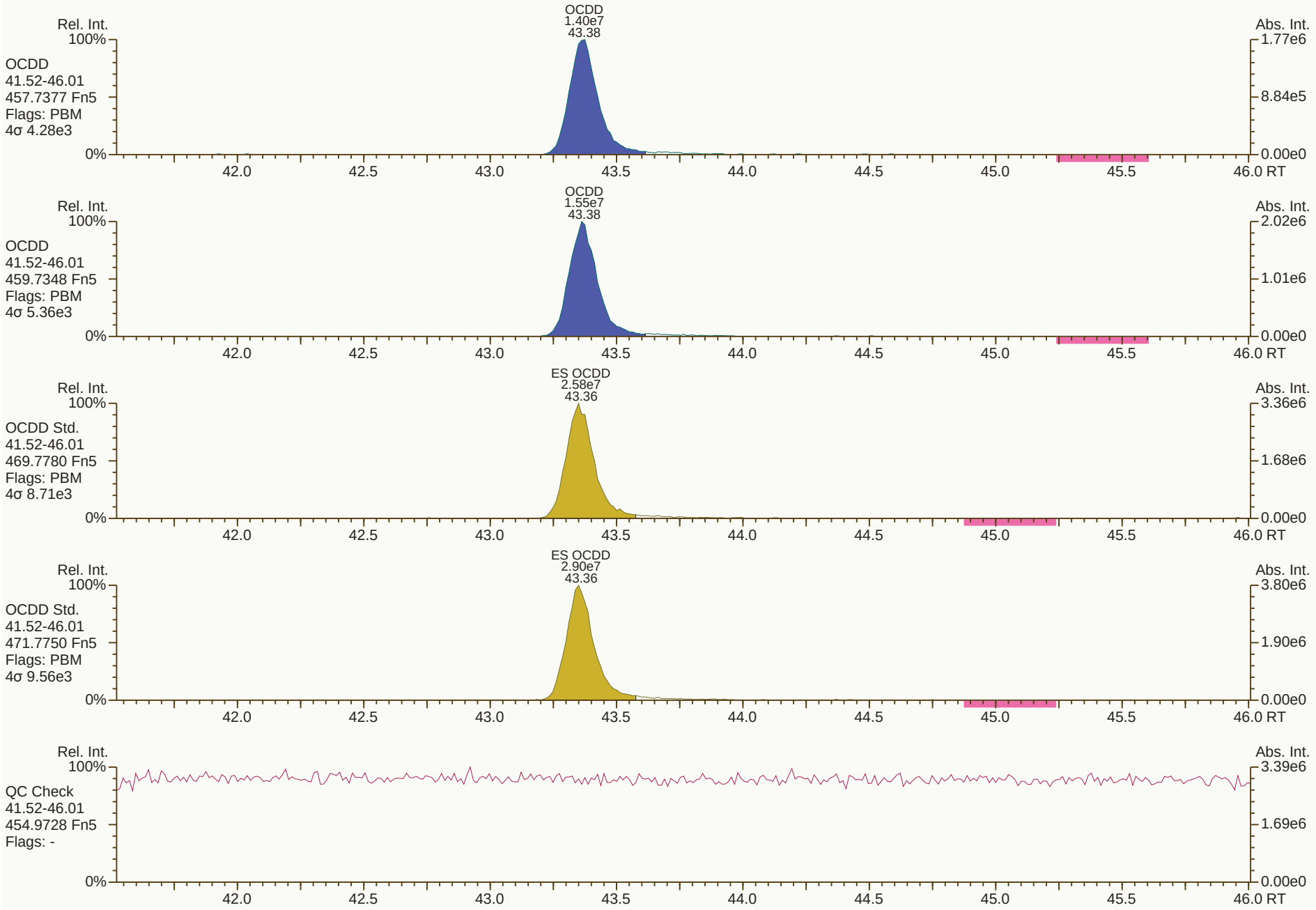
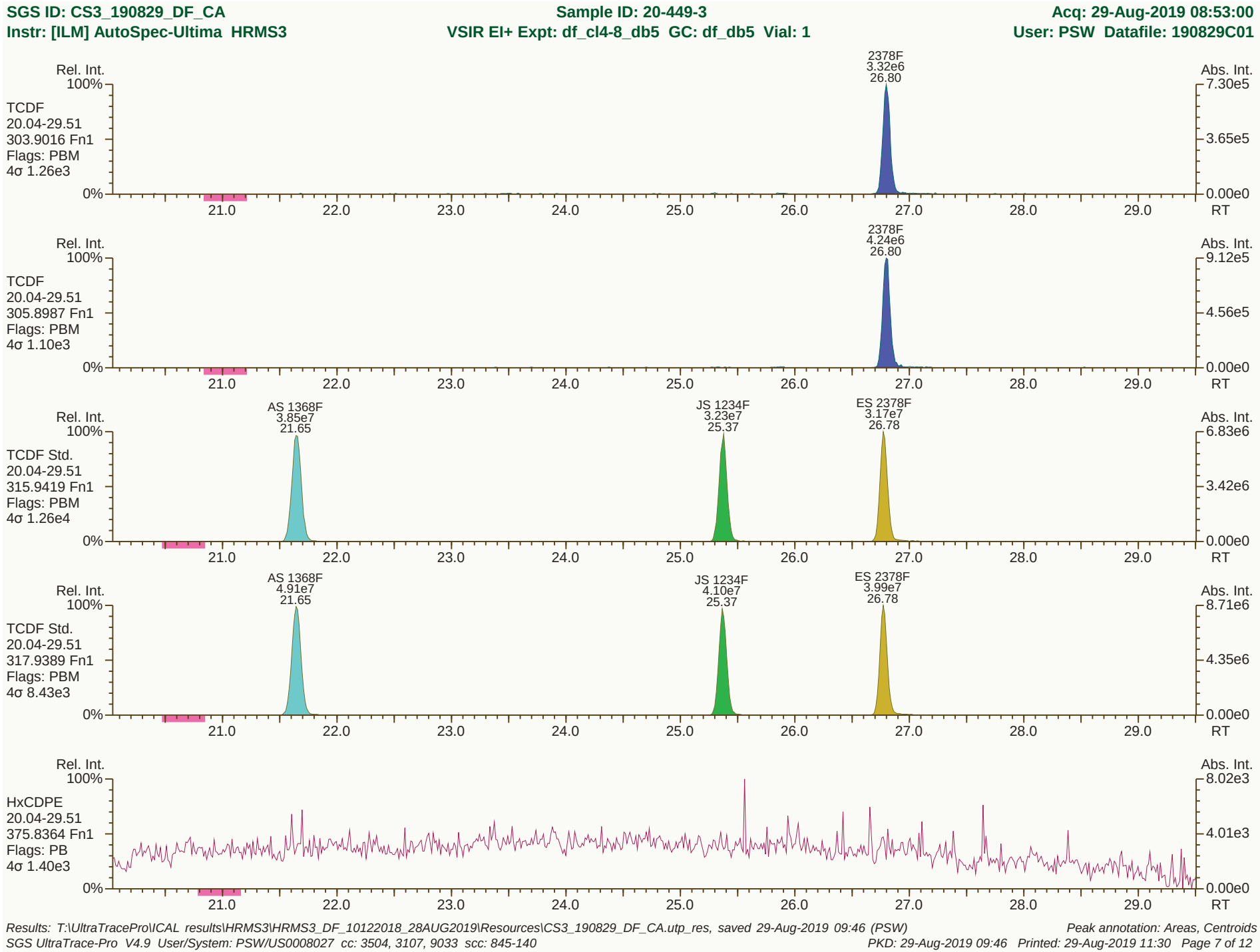
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
PeCDD
29.52-34.51
355.8546 Fn2
Flags: PBM
4σ 3.61e3
0%
12378D
1.31e7
33.23
Abs. Int.
3.51e6
1.75e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDD
29.52-34.51
357.8517 Fn2
Flags: PBM
4σ 2.01e3
0%
12378D
8.44e6
33.23
Abs. Int.
2.28e6
1.14e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDD Std.
29.52-34.51
367.8949 Fn2
Flags: PBM
4σ 3.12e3
0%
FS 12478D
2.69e7
31.96
CS 12347D
2.36e7
32.70
ES 12378D
2.65e7
33.21
Abs. Int.
7.26e6
3.63e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDD Std.
29.52-34.51
369.8919 Fn2
Flags: PBM
4σ 2.68e3
0%
FS 12478D
1.71e7
31.96
CS 12347D
1.48e7
32.70
ES 12378D
1.72e7
33.21
Abs. Int.
4.60e6
2.30e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
QC Check
29.52-34.51
366.9792 Fn2
Flags: -
0%
Abs. Int.
1.70e6
8.50e5
0.00e0
30.0
31.0
32.0
33.0
34.0
RT


Rel. Int.
Abs. Int.
HxCDD
34.52-39.00
389.8156 Fn3
Flags: PBM
4σ 2.53e3
123678D 1.21e7 37.34
123478D 1.10e7 37.22
123789D 1.24e7 37.65
2.97e6
1.48e6
0.00e0
HxCDD
34.52-39.00
391.8127 Fn3
Flags: PBM
4σ 4.11e3
123678D 9.63e6 37.34
123478D 8.93e6 37.22
123789D 9.98e6 37.65
2.38e6
1.19e6
0.00e0
HxCDD Std.
34.52-39.00
401.8559 Fn3
Flags: PBM
4σ 1.17e4
FS 123468D 2.55e7 36.13
ES 123478D 2.15e7 37.20
FS 123678D 2.17e7 37.32
JS 123467D 1.10e7 37.52
ES 123789D 2.52e7 37.64
6.97e6
3.49e6
0.00e0
HxCDD Std.
34.52-39.00
403.8530 Fn3
Flags: PBM
4σ 6.39e3
FS 123468D 2.01e7 36.12
ES 123478D 1.71e7 37.20
ES 123678D 1.74e7 37.32
JS 123467D 8.93e6 37.52
ES 123789D 2.04e7 37.64
5.65e6
2.82e6
0.00e0
QC Check
34.52-39.00
380.9760 Fn3
Flags: -
1.41e7
7.07e6
0.00e0
100%
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT

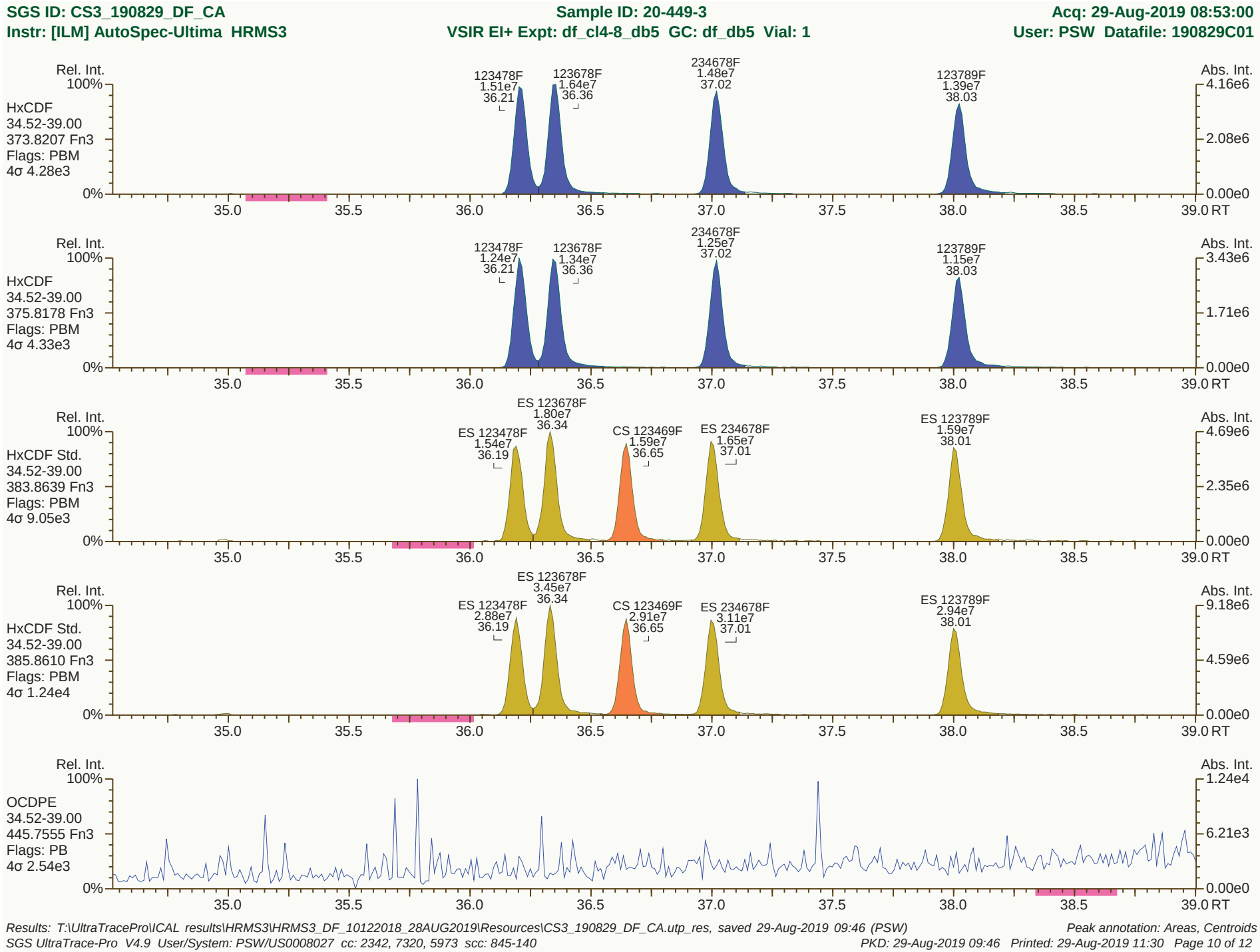

Rel. Int.
100%
HpCDD
39.01-41.50
423.7767 Fn4
Flags: PBM
4σ 4.09e3
1234678D
9.95e6
40.57
Abs. Int.
2.05e6
1.02e6
0.00e0
0%
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD
39.01-41.50
425.7737 Fn4
Flags: PBM
4σ 5.04e3
1234678D
9.43e6
40.57
Abs. Int.
2.01e6
1.00e6
0.00e0
0%
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
39.01-41.50
435.8169 Fn4
Flags: PBM
4σ 1.04e4
FS 1234679D
2.23e7
39.85
ES 1234678D
1.98e7
40.56
Abs. Int.
5.32e6
2.66e6
0.00e0
0%
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
39.01-41.50
437.8140 Fn4
Flags: PBM
4σ 1.10e4
FS 1234679D
2.16e7
39.85
ES 1234678D
1.85e7
40.56
Abs. Int.
5.25e6
2.63e6
0.00e0
0%
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
QC Check
39.01-41.50
430.9728 Fn4
Flags: -
Abs. Int.
8.85e6
4.42e6
0.00e0
0%
39.5
40.0
40.5
41.0
RT

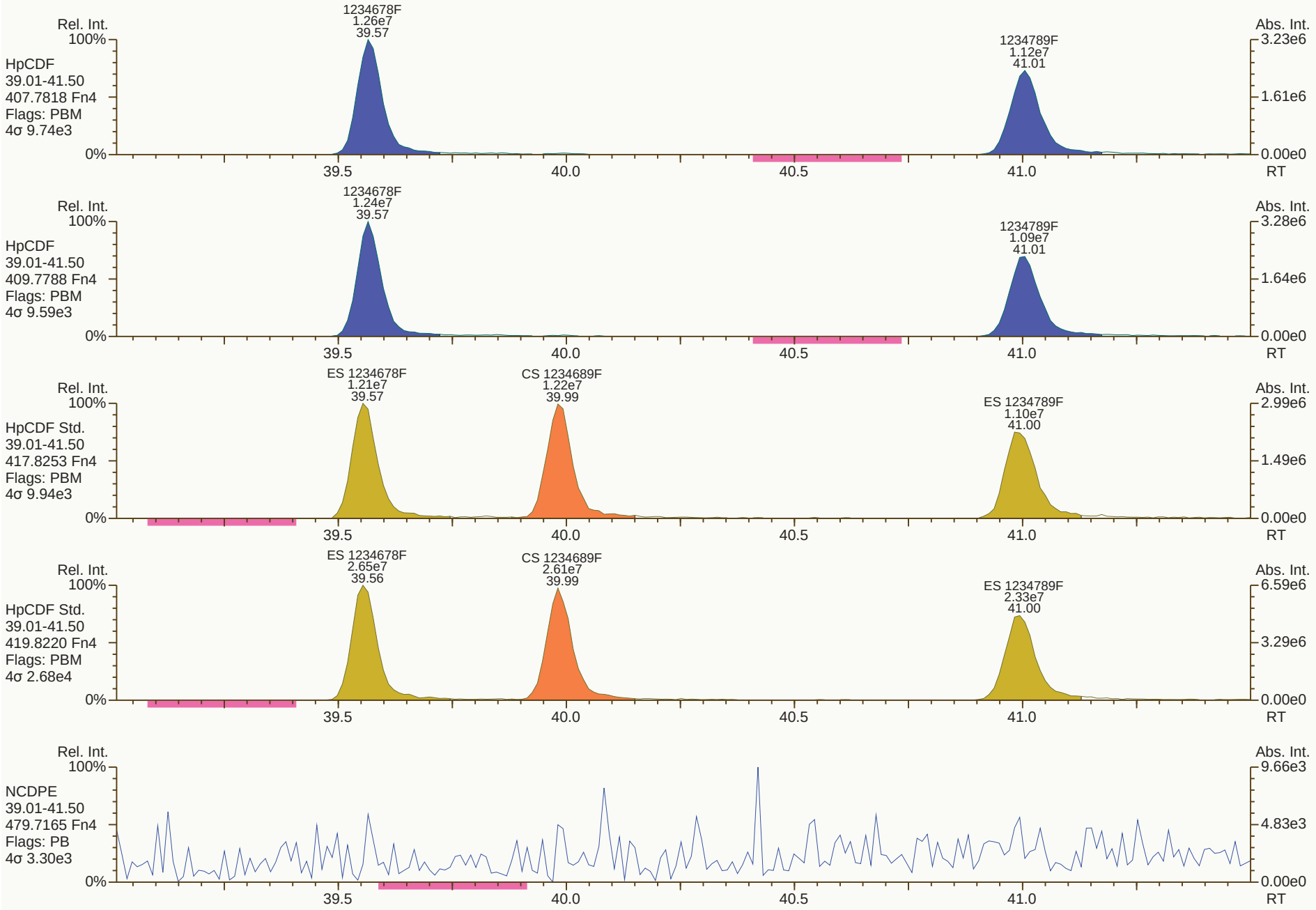

OCDD
1.40e7
43.38
Rel. Int.
Abs. Int.
OCDD
41.52-46.01
457.7377 Fn5
Flags: PBM
4σ 4.28e3
OCDD
1.55e7
43.38
OCDD
41.52-46.01
459.7348 Fn5
Flags: PBM
4σ 5.36e3
ES OCDD
2.58e7
43.36
OCDD Std.
41.52-46.01
469.7780 Fn5
Flags: PBM
4σ 8.71e3
ES OCDD
2.90e7
43.36
OCDD Std.
41.52-46.01
471.7750 Fn5
Flags: PBM
4σ 9.56e3
QC Check
41.52-46.01
454.9728 Fn5
Flags: -
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT

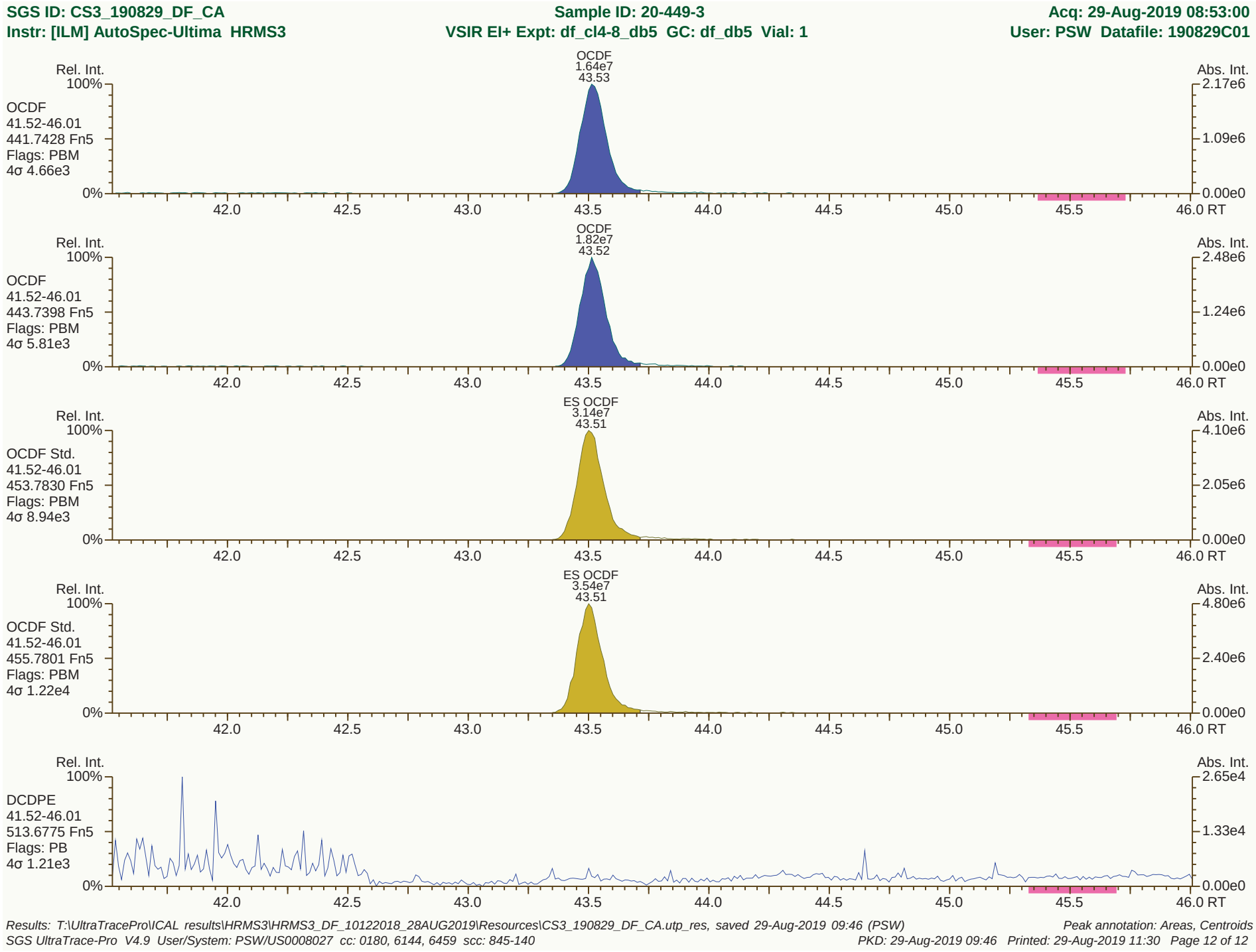

SGS ID: CS3_190829_DF_CA
Sample ID: 20-449-3
Acq: 29-Aug-2019 08:53:00
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5 GC: df_db5 Vial: 1
User: PSW Datafile: 190829C01
Rel. Int.
Abs. Int.
TCDF
20.04-29.51
303.9016 Fn1
Flags: PBM
4σ 1.26e3
2378F
3.32e6
26.80
7.30e5
3.65e5
0.00e0
TCDF
20.04-29.51
305.8987 Fn1
Flags: PBM
4σ 1.10e3
2378F
4.24e6
26.80
9.12e5
4.56e5
TCDF Std.
20.04-29.51
315.9419 Fn1
Flags: PBM
4σ 1.26e4
AS 1368F
3.85e7
21.65
JS 1234F
3.23e7
25.37
ES 2378F
3.17e7
26.78
6.83e6
3.42e6
TCDF Std.
20.04-29.51
317.9389 Fn1
Flags: PBM
4σ 8.43e3
AS 1368F
4.91e7
21.65
JS 1234F
4.10e7
25.37
ES 2378F
3.99e7
26.78
8.71e6
4.35e6
HxCDPE
20.04-29.51
375.8364 Fn1
Flags: PB
4σ 1.40e3
8.02e3
4.01e3
0%
100%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Results: T:\UltraTracePro\ICAL results\HRMS3\HRMS3_DF_10122018_28AUG2019\Resources\CS3_190829_DF_CA.utp_res, saved 29-Aug-2019 09:46 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 3504, 3107, 9033 scc: 845-140
PKD: 29-Aug-2019 09:46 Printed: 29-Aug-2019 11:30 Page 7 of 12


Rel. Int.
100%
0%
Abs. Int.
1.21e4
6.06e3
0.00e0
PeCDF-1
20.04-29.51
339.8597 Fn1
Flags: PB
4σ 1.92e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
0%
Abs. Int.
1.27e4
6.36e3
0.00e0
PeCDF-1
20.04-29.51
341.8568 Fn1
Flags: PB
4σ 1.72e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
0%
Abs. Int.
1.98e6
9.92e5
0.00e0
QC Check
20.04-29.51
316.9824 Fn1
Flags: -
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
PeCDF-2
29.52-34.51
339.8597 Fn2
Flags: PBM
4σ 2.71e3
0%
12378F
1.75e7
31.74
23478F
1.76e7
32.87
Abs. Int.
4.78e6
2.39e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDF-2
29.52-34.51
341.8568 Fn2
Flags: PBM
4σ 2.58e3
0%
12378F
1.16e7
31.74
23478F
1.15e7
32.87
Abs. Int.
3.11e6
1.55e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDF Std.
29.52-34.51
351.9000 Fn2
Flags: PBM
4σ 4.29e3
0%
CS 12346F
3.57e7
31.18
ES 12378F
3.68e7
31.72
ES 23478F
3.64e7
32.85
Abs. Int.
9.73e6
4.86e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDF Std.
29.52-34.51
353.8970 Fn2
Flags: PBM
4σ 3.11e3
0%
CS 12346F
2.32e7
31.18
ES 12378F
2.35e7
31.72
ES 23478F
2.34e7
32.85
Abs. Int.
6.23e6
3.11e6
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
HpCDPE
29.52-34.51
409.7974 Fn2
Flags: PB
4σ 1.62e3
0%
Abs. Int.
7.21e3
3.60e3
0.00e0
30.0
31.0
32.0
33.0
34.0
RT


SGS ID: CS3_190829_DF_CA
Sample ID: 20-449-3
Acq: 29-Aug-2019 08:53:00
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5 GC: df_db5 Vial: 1
User: PSW Datafile: 190829C01
Rel. Int.
Abs. Int.
HxCDF
34.52-39.00
373.8207 Fn3
Flags: PBM
4σ 4.28e3
123478F 1.51e7 36.21
123678F 1.64e7 36.36
234678F 1.48e7 37.02
123789F 1.39e7 38.03
4.16e6
2.08e6
0.00e0
HxCDF
34.52-39.00
375.8178 Fn3
Flags: PBM
4σ 4.33e3
123478F 1.24e7 36.21
123678F 1.34e7 36.36
234678F 1.25e7 37.02
123789F 1.15e7 38.03
3.43e6
1.71e6
0.00e0
HxCDF Std.
34.52-39.00
383.8639 Fn3
Flags: PBM
4σ 9.05e3
ES 123478F 1.54e7 36.19
ES 123678F 1.80e7 36.34
CS 123469F 1.59e7 36.65
ES 234678F 1.65e7 37.01
ES 123789F 1.59e7 38.01
4.69e6
2.35e6
0.00e0
HxCDF Std.
34.52-39.00
385.8610 Fn3
Flags: PBM
4σ 1.24e4
ES 123478F 2.88e7 36.19
ES 123678F 3.45e7 36.34
CS 123469F 2.91e7 36.65
ES 234678F 3.11e7 37.01
ES 123789F 2.94e7 38.01
9.18e6
4.59e6
0.00e0
OCDPE
34.52-39.00
445.7555 Fn3
Flags: PB
4σ 2.54e3
1.24e4
6.21e3
0.00e0
100%
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Results: T:\UltraTracePro\ICAL results\HRMS3\HRMS3_DF_10122018_28AUG2019\Resources\CS3_190829_DF_CA.utp_res, saved 29-Aug-2019 09:46 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 2342, 7320, 5973 scc: 845-140
PKD: 29-Aug-2019 09:46 Printed: 29-Aug-2019 11:30 Page 10 of 12


Rel. Int.
100%
HpCDF
39.01-41.50
407.7818 Fn4
Flags: PBM
4σ 9.74e3
0%
1234678F
1.26e7
39.57
1234789F
1.12e7
41.01
Abs. Int.
3.23e6
1.61e6
0.00e0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF
39.01-41.50
409.7788 Fn4
Flags: PBM
4σ 9.59e3
0%
1234678F
1.24e7
39.57
1234789F
1.09e7
41.01
Abs. Int.
3.28e6
1.64e6
0.00e0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
39.01-41.50
417.8253 Fn4
Flags: PBM
4σ 9.94e3
0%
ES 1234678F
1.21e7
39.57
CS 1234689F
1.22e7
39.99
ES 1234789F
1.10e7
41.00
Abs. Int.
2.99e6
1.49e6
0.00e0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
39.01-41.50
419.8220 Fn4
Flags: PBM
4σ 2.68e4
0%
ES 1234678F
2.65e7
39.56
CS 1234689F
2.61e7
39.99
ES 1234789F
2.33e7
41.00
Abs. Int.
6.59e6
3.29e6
0.00e0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
NCDPE
39.01-41.50
479.7165 Fn4
Flags: PB
4σ 3.30e3
0%
Abs. Int.
9.66e3
4.83e3
0.00e0
39.5
40.0
40.5
41.0
RT


SGS ID: CS3_190829_DF_CA
Sample ID: 20-449-3
Acq: 29-Aug-2019 08:53:00
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5 GC: df_db5 Vial: 1
User: PSW Datafile: 190829C01
OCDF
1.64e7
43.53
Rel. Int.
Abs. Int.
OCDF
41.52-46.01
441.7428 Fn5
Flags: PBM
4σ 4.66e3
OCDF
1.82e7
43.52
OCDF
41.52-46.01
443.7398 Fn5
Flags: PBM
4σ 5.81e3
ES OCDF
3.14e7
43.51
OCDF Std.
41.52-46.01
453.7830 Fn5
Flags: PBM
4σ 8.94e3
ES OCDF
3.54e7
43.51
OCDF Std.
41.52-46.01
455.7801 Fn5
Flags: PBM
4σ 1.22e4
DCDPE
41.52-46.01
513.6775 Fn5
Flags: PB
4σ 1.21e3
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
Results: T:\UltraTracePro\ICAL results\HRMS3\HRMS3_DF_10122018_28AUG2019\Resources\CS3_190829_DF_CA.utp_res, saved 29-Aug-2019 09:46 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 0180, 6144, 6459 scc: 845-140
PKD: 29-Aug-2019 09:46 Printed: 29-Aug-2019 11:30 Page 12 of 12

Lab ID: OPR1_190829_DF-RJ **Acq'd:** 29 Aug 2019 10:35 PSW **Wt/Vol:** 1 uL **ICAL:** HRMS3_DF_10122018_28AUG2019

Client ID: ICV SIL# 22-5-12 **UTP:** 29-Aug-2019 11:24:17 PSW **J-level:** 0.25 pg/uL **Split:** 1 **Checkcode:** 573-892-NXW

Datafile: 190829C03 **Report:** 29 Aug 2019 11:24 pw **Stds (pg):** JS: 100 ES: 100 CS/SS: 100, 40 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	27.74		1.0008	1.0008	0	7.24E+06	0.81	Y	1.19	9.53	4566	0.0691
12378-PeCDD	33.24		1.0004	1.0006	+0.4	2.39E+07	1.54	Y	0.98	47.4	3646	0.07
123478-HxCDD	37.23		1.0003	1.0005	+0.4	2.14E+07	1.23	Y	1.02	53	4861	0.111
123678-HxCDD	37.35		1.0036	1.0038	+0.4	2.39E+07	1.27	Y	1.09	51.3	4861	0.11
123789-HxCDD	37.66		1.0120	1.0122	+0.5	2.33E+07	1.23	Y	0.97	49.6	4861	0.113
1234678-HpCDD	40.58		1.0003	1.0003	0	1.79E+07	1.04	Y	0.98	52.1	3005	0.108
OCDD	43.38		1.0003	1.0003	0	2.00E+07	0.90	Y	1.07	103	4085	0.402
2378-TCDF	26.83		1.0008	1.0008	0	9.49E+06	0.76	Y	1.05	10.6	3977	0.0517
12378-PeCDF	31.75		1.0005	1.0005	0	3.26E+07	1.55	Y	0.96	48.8	6019	0.0902
23478-PeCDF	32.88		1.0006	1.0005	-0.2	3.57E+07	1.53	Y	0.99	53.2	6019	0.0865
123478-HxCDF	36.22		1.0004	1.0005	+0.2	2.93E+07	1.22	Y	1.21	50.2	11242	0.177
123678-HxCDF	36.37		1.0004	1.0005	+0.2	3.29E+07	1.22	Y	1.11	51.3	11242	0.17
234678-HxCDF	37.03		1.0004	1.0004	0	2.94E+07	1.23	Y	1.12	51.5	11242	0.19
123789-HxCDF	38.04		1.0003	1.0005	+0.5	2.51E+07	1.25	Y	1.11	51.2	11242	0.232
1234678-HpCDF	39.58		1.0002	1.0003	+0.2	2.42E+07	1.01	Y	1.32	49.3	6866	0.143
1234789-HpCDF	41.02		1.0002	1.0004	+0.5	1.96E+07	1.03	Y	1.26	52.5	6866	0.217
OCDF	43.53		1.0003	1.0003	0	2.48E+07	0.90	Y	1.03	99.9	3821	0.296

Name	Act RT	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	27.72	1.0248	1.0248	0	6.39E+07	0.81	Y	0.99	98.5
ES 12378-PeCDD	33.22	1.2288	1.2281	-1.4	5.11E+07	1.59	Y	0.83	93.9
ES 123478-HxCDD	37.21	0.9915	0.9914	-0.2	3.95E+07	1.27	Y	0.95	94.4
ES 123678-HxCDD	37.33	0.9947	0.9947	0	4.29E+07	1.27	Y	0.98	99.6
ES 123789-HxCDD	37.65	1.0030	1.0030	0	4.83E+07	1.27	Y	1.14	96.1
ES 1234678-HpCDD	40.57	1.0809	1.0810	+0.2	3.52E+07	1.06	Y	0.90	88.8
ES OCDD	43.37	1.1556	1.1555	-0.3	3.62E+07	0.90	Y	0.63	65.3
ES 2378-TCDF	26.81	1.0552	1.0549	-0.5	8.58E+07	0.79	Y	1.00	103
ES 12378-PeCDF	31.73	1.2493	1.2486	-1.3	6.93E+07	1.55	Y	0.83	100
ES 23478-PeCDF	32.86	1.2940	1.2931	-1.8	6.80E+07	1.55	Y	0.81	101
ES 123478-HxCDF	36.20	0.9645	0.9646	+0.2	4.83E+07	0.53	Y	1.12	97.3
ES 123678-HxCDF	36.35	0.9684	0.9684	0	5.80E+07	0.53	Y	1.33	98.6
ES 234678-HxCDF	37.02	0.9862	0.9863	+0.2	5.12E+07	0.52	Y	1.21	95.9
ES 123789-HxCDF	38.02	1.0130	1.0130	0	4.43E+07	0.53	Y	1.12	89.7
ES 1234678-HpCDF	39.57	1.0544	1.0544	0	3.70E+07	0.44	Y	0.92	90.6
ES 1234789-HpCDF	41.01	1.0926	1.0926	0	2.98E+07	0.47	Y	0.82	82.3
ES OCDF	43.52	1.1594	1.1595	+0.3	4.81E+07	0.90	Y	0.78	69.8

Lab ID: OPR1_190829_DF-RJ **Acq'd:** 29 Aug 2019 10:35 PSW **Wt/Vol:** 1 uL **ICAL:** HRMS3_DF_10122018_28AUG2019

Client ID: ICV SIL# 22-5-12 **UTP:** 29-Aug-2019 11:24:17 PSW **J-level:** 0.25 pg/uL **Split:** 1 **Checkcode:** 573-892-NXW

Datafile: 190829C03 **Report:** 29 Aug 2019 11:24 pw **Stds (pg):** JS: 100 ES: 100 CS/SS: 100, 40 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
JS 1234-TCDD	27.05		-	-	-	6.56E+07	0.80	Y	-	-
JS 1234-TCDF	25.42		-	-	-	8.33E+07	0.79	Y	-	-
JS 123467-HxCDD	37.53		-	-	-	2.21E+07	1.26	Y	-	-
CS 37Cl-2378-TCDD	27.74		1.0257	1.0256	-0.2	2.78E+07	n/a	-	1.12	94.7
CS 12347-PeCDD	32.71		1.2099	1.2093	-1.2	4.53E+07	1.61	Y	0.71	96.9
CS 12346-PeCDF	31.20		1.2282	1.2275	-1.3	6.77E+07	1.55	Y	0.81	100
CS 123469-HxCDF	36.66		0.9767	0.9767	0	4.86E+07	0.52	Y	1.12	97.9
CS 1234689-HpCDF	40.00		1.0657	1.0657	0	3.50E+07	0.46	Y	0.90	88.4
SS 37Cl-2378-TCDD	27.74		1.0257	1.0256	-0.2	2.78E+07	n/a	-	1.14	95.3
SS 12347-PeCDD	32.71		1.2099	1.2093	-1.2	4.53E+07	1.61	Y	0.86	103
SS 12346-PeCDF	31.20		1.2282	1.2275	-1.3	6.77E+07	1.55	Y	0.98	99.9
SS 123469-HxCDF	36.66		0.9767	0.9767	0	4.86E+07	0.52	Y	0.85	99
SS 1234689-HpCDF	40.00		1.0657	1.0657	0	3.50E+07	0.46	Y	0.97	97.1

Totals	Conc	EMPC
Total TCDD	41.9	41.9
Total PeCDD	70.2	70.2
Total HxCDD	167	167
Total HpCDD	64.7	64.7
Total Tetra-Octa Dioxins	447	447
Total TCDF	50.4	50.4
Total PeCDF	125	125
Total HxCDF	216	216
Total HpCDF	102	102
Total Tetra-Octa Furans	593	593
Total Tetra-Octa Dioxins & Furans	1040	1040

* 37Cl correction has been applied to 2378-TCDD

	Original Values	Corrected Values
Ratio	0.8	0.81
Response	7.25E+06	7.24E+06

Lab ID: OPR1_190829_DF-RJ | **Acq'd: 29 Aug 2019 10:35 PSW** | **Wt/Vol: 1 uL** | **ICAL: HRMS3_DF_10122018_28AUG2019**

Client ID: ICV SIL# 22-5-12 | **UTP: 29-Aug-2019 11:24:17 PSW** | **J-level: 0.25 pg/uL** | **Split: 1** | **Checkcode: 573-892-NXW**

Datafile: 190829C03 | **Report: 29 Aug 2019 11:24 pw** | **Stds (pg): JS: 100 ES: 100 CS/SS: 100, 40 (37Cl)**

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1368-TCDD	23.95		0.8634	0.8639	+0.7	8.61E+06	0.77	Y	1.19	11.3	4566	0.0691
1379-TCDD	NotFnd		0.8770						1.19		4566	0.0691
1369-TCDD	NotFnd		0.8933						1.19		4566	0.0691
1469-TCDD	NotFnd		0.9223						1.19		4566	0.0691
1247/1246/1248/1249-TCDD	NotFnd		0.9317						1.19		4566	0.0691
1378-TCDD	NotFnd		0.9390						1.19		4566	0.0691
1268-TCDD	NotFnd		0.9464						1.19		4566	0.0691
1478-TCDD	NotFnd		0.9555						1.19		4566	0.0691
1279-TCDD	NotFnd		0.9621						1.19		4566	0.0691
1234/1269-TCDD	NotFnd		0.9757						1.19		4566	0.0691
1236-TCDD	NotFnd		0.9808						1.19		4566	0.0691
1237/1238-TCDD	NotFnd		0.9900						1.19		4566	0.0691
1239-TCDD	27.58		0.9953	0.9950	-0.5	6.64E+06	0.80	Y	1.19	8.74	4566	0.0691
2378-TCDD	**27.74**		**1.0008**	1.0008	**0**	7.24E+06	0.81	Y	**1.19**	**9.53**	**4566**	**0.0691**
1278-TCDD	NotFnd		1.0130						1.19		4566	0.0691
1267-TCDD	NotFnd		1.0180						1.19		4566	0.0691
1289-TCDD	28.75		1.0369	1.0370	+0.2	9.35E+06	0.80	Y	1.19	12.3	4566	0.0691
12479/12468-PeCDD	30.69		0.9236	0.9238	+0.4	5.66E+06	1.55	Y	0.98	11.3	3646	0.07
12469-PeCDD	NotFnd		0.9400						0.98		3646	0.07
12368-PeCDD	NotFnd		0.9569						0.98		3646	0.07
12478-PeCDD	NotFnd		0.9626						0.98		3646	0.07
12379-PeCDD	NotFnd		0.9658						0.98		3646	0.07
12369/12467/12489-PeCDD	NotFnd		0.9737						0.98		3646	0.07
12346/12347-PeCDD	NotFnd		0.9854						0.98		3646	0.07
12378-PeCDD	33.24		**1.0004**	**1.0006**	**+0.4**	**2.39E+07**	**1.54**	**Y**	**0.98**	**47.4**	**3646**	**0.07**
12367-PeCDD	NotFnd		1.0034						0.98		3646	0.07
12389-PeCDD	33.69		1.0139	1.0140	+0.2	5.78E+06	1.53	Y	0.98	11.5	3646	0.07
124679/124689-HxCDD	35.48		0.9534	0.9535	+0.2	5.82E+06	1.23	Y	1.03	13	4861	0.111
123468-HxCDD	NotFnd		0.9714						1.03		4861	0.111
123679/123689-HxCDD	NotFnd		0.9793						1.03		4861	0.111
123469-HxCDD	NotFnd		0.9828						1.03		4861	0.111
123478-HxCDD	37.23		**1.0003**	**1.0005**	**+0.4**	**2.14E+07**	**1.23**	**Y**	1.02	**53**	**4861**	**0.111**
123678-HxCDD	37.35		**1.0036**	**1.0038**	**+0.4**	**2.39E+07**	**1.27**	**Y**	1.09	**51.3**	**4861**	**0.11**
123467-HxCDD	NotFnd		1.0091						1.03		4861	0.111
123789-HxCDD	37.66		**1.0120**	**1.0122**	**+0.5**	**2.33E+07**	**1.23**	**Y**	0.97	**49.6**	**4861**	**0.113**

Lab ID: OPR1_190829_DF-RJ **Acq'd:** 29 Aug 2019 10:35 PSW **Wt/Vol:** 1 uL **ICAL:** HRMS3_DF_10122018_28AUG2019

Client ID: ICV SIL# 22-5-12 **UTP:** 29-Aug-2019 11:24:17 PSW **J-level:** 0.25 pg/uL **Split:** 1 **Checkcode:** 573-892-NXW

Datafile: 190829C03 **Report:** 29 Aug 2019 11:24 pw **Stds (pg):** JS: 100 ES: 100 CS/SS: 100, 40 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1234679-HpCDD	39.87		0.9830	0.9828	-0.5	4.33E+06	1.03	Y	0.98	12.6	3005	0.108
1234678-HpCDD	**40.58**		**1.0003**	**1.0003**	**0**	**1.79E+07**	**1.04**	**Y**	**0.98**	**52.1**	**3005**	**0.108**
OCDD	**43.38**		**1.0003**	**1.0003**	**0**	**2.00E+07**	**0.90**	**Y**	**1.07**	**103**	**4085**	**0.402**
OCDD-a	43.34	**#VALUE!**	1.0001	0.9994	-1.8	7.26E+05	2.25	Y	-	#VALUE!	4818	#VALUE!
1368-TCDF	21.74		0.8103	0.8109	+0.8	1.15E+07	0.77	Y	1.05	12.8	3977	0.0517
1468-TCDF	NotFnd		0.8319						1.05		3977	0.0517
2468-TCDF	22.99		0.8567	0.8573	+0.8	2.85E+06	0.76	Y	1.05	3.18	3977	0.0517
1346/1246-TCDF	NotFnd		0.8708						1.05		3977	0.0517
1347/1378/1247-TCDF	NotFnd		0.8769						1.05		3977	0.0517
1348-TCDF	NotFnd		0.8875						1.05		3977	0.0517
1248/1367/1379-TCDF	NotFnd		0.8926						1.05		3977	0.0517
1268-TCDF	NotFnd		0.9075						1.05		3977	0.0517
1467-TCDF	NotFnd		0.9128						1.05		3977	0.0517
1478-TCDF	NotFnd		0.9195						1.05		3977	0.0517
1369/1237-TCDF	NotFnd		0.9337						1.05		3977	0.0517
2467-TCDF	NotFnd		0.9390						1.05		3977	0.0517
2368-TCDF	NotFnd		0.9447						1.05		3977	0.0517
1238/1234/1678/1469/1236-TCDF	NotFnd		0.9489						1.05		3977	0.0517
1278-TCDF	NotFnd		0.9662						1.05		3977	0.0517
1349-TCDF	NotFnd		0.9706						1.05		3977	0.0517
1267-TCDF	NotFnd		0.9769						1.05		3977	0.0517
2346/1249-TCDF	NotFnd		0.9845						1.05		3977	0.0517
2347/1279-TCDF	NotFnd		0.9923						1.05		3977	0.0517
2348-TCDF	26.72		0.9966	0.9966	0	1.01E+07	0.76	Y	1.05	11.3	3977	0.0517
2378-TCDF	**26.83**		**1.0008**	**1.0008**	**0**	**9.49E+06**	**0.76**	**Y**	**1.05**	**10.6**	**3977**	**0.0517**
2367/3467-TCDF	NotFnd		1.0150						1.05		3977	0.0517
1269-TCDF	NotFnd		1.0242						1.05		3977	0.0517
1239-TCDF	NotFnd		1.0350						1.05		3977	0.0517
1289-TCDF	28.91		1.0782	1.0782	0	1.13E+07	0.80	Y	1.05	12.6	3977	0.0517
13468/12468-PeCDF	28.86		0.9098	0.9095	-0.5	8.08E+06	1.45	Y	0.98	12.1	3866	0.0567
13678/13467/12467-PeCDF	NotFnd		0.9597						0.98		6019	0.0883
12368/13478/12478-PeCDF	NotFnd		0.9647						0.98		6019	0.0883
14678-PeCDF	NotFnd		0.9680						0.98		6019	0.0883
13479-PeCDF	NotFnd		0.9711						0.98		6019	0.0883
13469/12479-PeCDF	NotFnd		0.9788						0.98		6019	0.0883
12346-PeCDF	NotFnd		0.9834						0.98		6019	0.0883

Lab ID: OPR1_190829_DF-RJ **Acq'd: 29 Aug 2019 10:35 PSW** **Wt/Vol: 1 uL** **ICAL: HRMS3_DF_10122018_28AUG2019**

Client ID: ICV SIL# 22-5-12 **UTP: 29-Aug-2019 11:24:17 PSW** **J-level: 0.25 pg/uL** **Split: 1** **Checkcode: 573-892-NXW**

Datafile: 190829C03 **Report: 29 Aug 2019 11:24 pw** **Stds (pg): JS: 100 ES: 100 CS/SS: 100, 40 (37Cl)**

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
23468/12469-PeCDF	NotFnd		0.9862						0.98		6019	0.0883
12347-PeCDF	NotFnd		0.9888						0.98		6019	0.0883
12348-PeCDF	NotFnd		0.9937						0.98		6019	0.0883
12378-PeCDF	**31.75**		**1.0005**	**1.0005**	**0**	**3.26E+07**	**1.55**	**Y**	**0.96**	**48.8**	**6019**	**0.0902**
12678/12367-PeCDF	NotFnd		1.0093						0.98		6019	0.0883
12379-PeCDF	NotFnd		1.0147						0.98		6019	0.0883
12679-PeCDF	NotFnd		0.9926						0.98		6019	0.0883
23467/12369-PeCDF	NotFnd		0.9967						0.98		6019	0.0883
23478-PeCDF	**32.88**		**1.0006**	**1.0005**	**-0.2**	**3.57E+07**	**1.53**	**Y**	**0.99**	**53.2**	**6019**	**0.0865**
23478/12489-PeCDF	NotFnd		0.0000						0.99			
12489-PeCDF	NotFnd		1.0046						0.98		6019	0.0883
12349-PeCDF	NotFnd		1.0105						0.98		6019	0.0883
12389-PeCDF	33.98		1.0338	1.0338	0	7.13E+06	1.51	Y	0.98	10.6	6019	0.0883
123468-HxCDF	34.81		0.9615	0.9615	0	6.70E+06	1.21	Y	1.13	11.7	11242	0.19
124678/134678-HxCDF	NotFnd		0.9672						1.13		11242	0.19
134679-HxCDF	NotFnd		0.9735						1.13		11242	0.19
124679-HxCDF	NotFnd		0.9789						1.13		11242	0.19
124689-HxCDF	NotFnd		0.9852						1.13		11242	0.19
123467-HxCDF	NotFnd		0.9971						1.13		11242	0.19
123478-HxCDF	**36.22**		**1.0004**	**1.0005**	**+0.2**	**2.93E+07**	**1.22**	**Y**	**1.21**	**50.2**	**11242**	**0.177**
123678-HxCDF	**36.37**		**1.0004**	**1.0005**	**+0.2**	**3.29E+07**	**1.22**	**Y**	**1.11**	**51.3**	**11242**	**0.17**
123479-HxCDF	NotFnd		1.0048						1.13		11242	0.19
123469-HxCDF	NotFnd		1.0088						1.13		11242	0.19
123679-HxCDF	NotFnd		0.9941						1.13		11242	0.19
234678-HxCDF	**37.03**		**1.0004**	**1.0004**	**0**	**2.94E+07**	**1.23**	**Y**	**1.12**	**51.5**	**11242**	**0.19**
234678/123689-HxCDF	NotFnd		0.0000						1.12			
123689-HxCDF	NotFnd		1.0041						1.13		11242	0.19
123789-HxCDF	**38.04**		**1.0003**	**1.0005**	**+0.5**	**2.51E+07**	**1.25**	**Y**	**1.11**	**51.2**	**11242**	**0.232**
123789/123489-HxCDF	NotFnd		0.0000						1.11			
123489-HxCDF	NotFnd		1.0017						1.13		11242	0.19
1234678-HpCDF	**39.58**		**1.0002**	**1.0003**	**+0.2**	**2.42E+07**	**1.01**	**Y**	**1.32**	**49.3**	**6866**	**0.143**
1234679-HpCDF	NotFnd		1.0072						1.29		6866	0.176
1234689-HpCDF	NotFnd		1.0109						1.29		6866	0.176
1234789-HpCDF	**41.02**		**1.0002**	**1.0004**	**+0.5**	**1.96E+07**	**1.03**	**Y**	**1.26**	**52.5**	**6866**	**0.217**
OCDF	**43.53**		**1.0003**	**1.0003**	**0**	**2.48E+07**	**0.90**	**Y**	**1.03**	**99.9**	**3821**	**0.296**
OCDF-a	43.51	**#VALUE!**	1.0001	0.9999	-0.5	1.11E+06	1.95	N	-	#VALUE!	4159	#VALUE!

METHOD 1613B **PCDD/F ONGOING PRECISION AND RECOVERY (OPR)** **FORM 8A**

Lab Name:	SGS North America		
Initial Calibration:	ICAL: HRMS3_DF_10122018_28AUG2019		
Instrument ID:	HRMS3	GC Column ID:	ZB-5ms
VER Data Filename:	190829C03	Analysis Date:	29-AUG-2019 10:35:56
Lab ID:	OPR1_190829_DF-RJ		

NATIVE ANALYTES	SPIKE CONC.	CONC. FOUND	RANGE (ng/mL)			OK
2,3,7,8-TCDD	10	9.53	6.7	-	15.8	Y
1,2,3,7,8-PeCDD	50	47.4	35	-	71	Y
1,2,3,4,7,8-HxCDD	50	53	35	-	82	Y
1,2,3,6,7,8-HxCDD	50	51.3	38	-	67	Y
1,2,3,7,8,9-HxCDD	50	49.6	32	-	81	Y
1,2,3,4,6,7,8-HpCDD	50	52.1	35	-	70	Y
OCDD	100	103	78	-	144	Y
2,3,7,8-TCDF	10	10.6	7.5	-	15.8	Y
1,2,3,7,8-PeCDF	50	48.8	40	-	67	Y
2,3,4,7,8-PeCDF	50	53.2	34	-	80	Y
1,2,3,4,7,8-HxCDF	50	50.2	36	-	67	Y
1,2,3,6,7,8-HxCDF	50	51.3	42	-	65	Y
2,3,4,6,7,8-HxCDF	50	51.5	35	-	78	Y
1,2,3,7,8,9-HxCDF	50	51.2	39	-	65	Y
1,2,3,4,6,7,8-HpCDF	50	49.3	41	-	61	Y
1,2,3,4,7,8,9-HpCDF	50	52.5	39	-	69	Y
OCDF	100	99.9	63	-	170	Y

Contract-required concentration limits for OPR as specified in Table 6,
Method 1613. 10/94

Processed: 29 Aug 2019 11:24 Analyst: pw

METHOD 1613B **PCDD/F ONGOING PRECISION AND RECOVERY (OPR)** **FORM 8B**

Lab Name: SGS North America
Initial Calibration: ICAL: HRMS3_DF_10122018_28AUG2019
Instrument ID: HRMS3 GC Column ID: ZB-5ms
VER Data Filename: 190829C03 Analysis Date: 29-AUG-2019 10:35:56
Lab ID: OPR1_190829_DF-RJ

LABELED ANALYTES	SPIKE CONC.	CONC. FOUND	RANGE (ng/mL)			OK
13C-2,3,7,8-TCDD	100	98.5	20	-	175	Y
13C-1,2,3,7,8-PeCDD	100	93.9	21	-	227	Y
13C-1,2,3,4,7,8-HxCDD	100	94.4	21	-	193	Y
13C-1,2,3,6,7,8-HxCDD	100	99.6	25	-	163	Y
13C-1,2,3,7,8,9-HxCDD	100	96.1	26	-	166	Y
13C-1,2,3,4,6,7,8-HpCDD	100	88.8	26	-	166	Y
13C-OCDD	200	131	26	-	397	Y
13C-2,3,7,8-TCDF	100	103	22	-	152	Y
13C-1,2,3,7,8-PeCDF	100	100	21	-	192	Y
13C-2,3,4,7,8-PeCDF	100	101	13	-	328	Y
13C-1,2,3,4,7,8-HxCDF	100	97.3	19	-	202	Y
13C-1,2,3,6,7,8-HxCDF	100	98.6	21	-	159	Y
13C-2,3,4,6,7,8-HxCDF	100	95.9	22	-	176	Y
13C-1,2,3,7,8,9-HxCDF	100	89.7	17	-	205	Y
13C-1,2,3,4,6,7,8-HpCDF	100	90.6	21	-	158	Y
13C-1,2,3,4,7,8,9-HpCDF	100	82.3	20	-	186	Y
13C-OCDF	200	140	26	-	397	Y
CLEANUP STANDARD						
37Cl-2,3,7,8-TCDD	40	37.9	12.4	-	76.4	Y

Contract-required concentration limits for OPR as specified in Table 6, Method 1613. 10/94

Processed: 29 Aug 2019 11:24 Analyst: pw

METHOD 8290A **PCDD/F ONGOING PRECISION AND RECOVERY (OPR)** **FORM 8A**

Lab Name:	SGS North America		
Initial Calibration:	ICAL: HRMS3_DF_10122018_28AUG2019		
Instrument ID:	HRMS3	GC Column ID:	ZB-5ms
VER Data Filename:	190829C03	Analysis Date:	29-AUG-2019 10:35:56
Lab ID:	OPR1_190829_DF-RJ		

NATIVE ANALYTES	SPIKE CONC.	CONC. FOUND	RANGE (ng/mL)			OK
2,3,7,8-TCDD	10	9.53	6.7	-	15.8	Y
1,2,3,7,8-PeCDD	50	47.4	35	-	71	Y
1,2,3,4,7,8-HxCDD	50	53	35	-	82	Y
1,2,3,6,7,8-HxCDD	50	51.3	38	-	67	Y
1,2,3,7,8,9-HxCDD	50	49.6	32	-	81	Y
1,2,3,4,6,7,8-HpCDD	50	52.1	35	-	70	Y
OCDD	100	103	78	-	144	Y
2,3,7,8-TCDF	10	10.6	7.5	-	15.8	Y
1,2,3,7,8-PeCDF	50	48.8	40	-	67	Y
2,3,4,7,8-PeCDF	50	53.2	34	-	80	Y
1,2,3,4,7,8-HxCDF	50	50.2	36	-	67	Y
1,2,3,6,7,8-HxCDF	50	51.3	42	-	65	Y
2,3,4,6,7,8-HxCDF	50	51.5	35	-	78	Y
1,2,3,7,8,9-HxCDF	50	51.2	39	-	65	Y
1,2,3,4,6,7,8-HpCDF	50	49.3	41	-	61	Y
1,2,3,4,7,8,9-HpCDF	50	52.5	39	-	69	Y
OCDF	100	99.9	63	-	170	Y

Contract-required concentration limits for OPR as specified in Table 6,
Method 1613. 10/94

Processed: 29 Aug 2019 11:25 Analyst: pw

METHOD 8290A **PCDD/F ONGOING PRECISION AND RECOVERY (OPR)** **FORM 8B**

Lab Name: SGS North America

Initial Calibration: ICAL: HRMS3_DF_10122018_28AUG2019

Instrument ID: HRMS3 GC Column ID: ZB-5ms

VER Data Filename: 190829C03 Analysis Date: 29-AUG-2019 10:35:56

Lab ID: OPR1_190829_DF-RJ

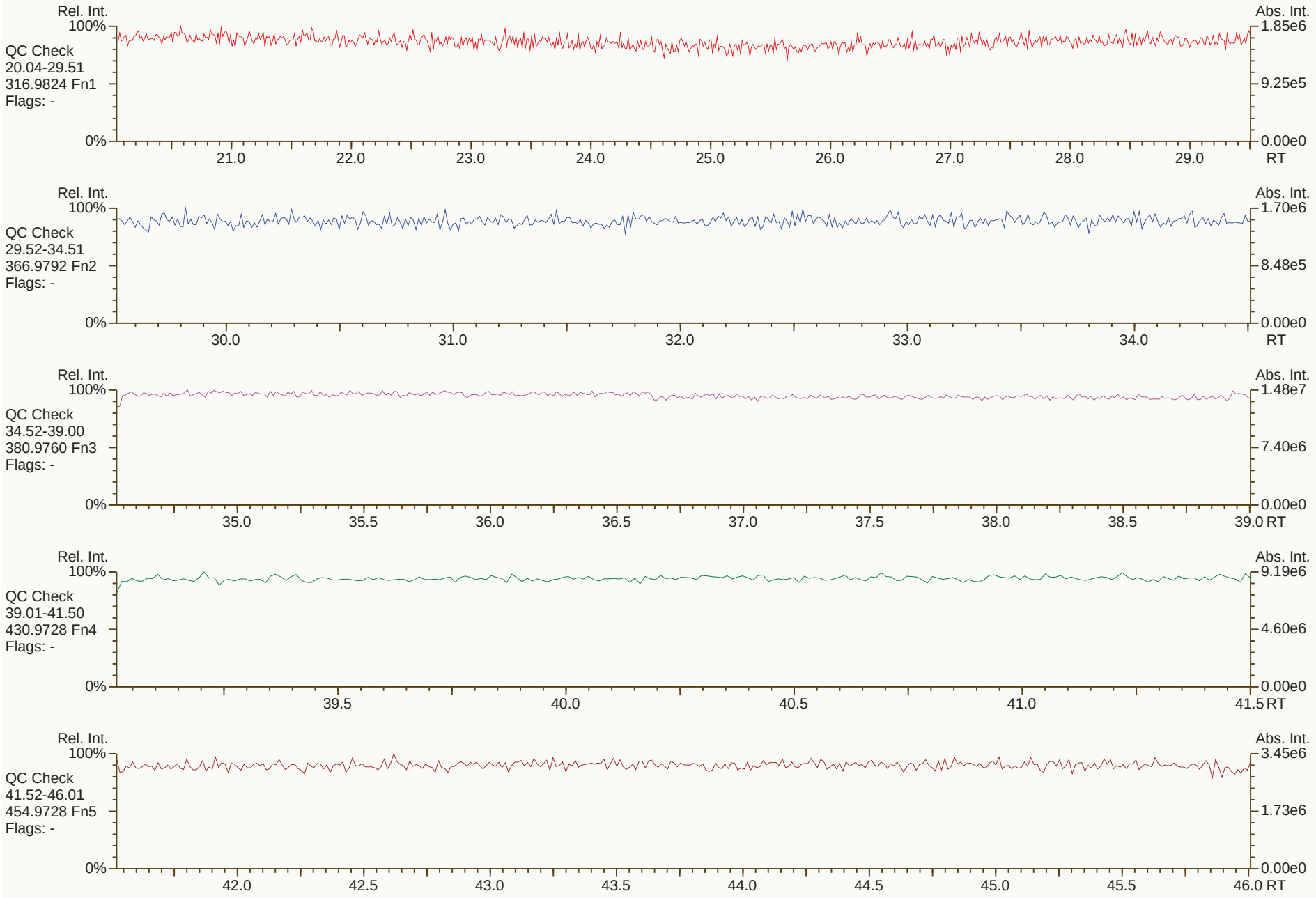
LABELED ANALYTES	SPIKE CONC.	CONC. FOUND	RANGE (ng/mL)			OK
13C-2,3,7,8-TCDD	100	98.5	20	-	175	Y
13C-1,2,3,7,8-PeCDD	100	93.9	21	-	227	Y
13C-1,2,3,4,7,8-HxCDD	100	94.4	21	-	193	Y
13C-1,2,3,6,7,8-HxCDD	100	99.6	25	-	163	Y
13C-1,2,3,7,8,9-HxCDD	100	96.1	26	-	166	Y
13C-1,2,3,4,6,7,8-HpCDD	100	88.8	26	-	166	Y
13C-OCDD	200	131	26	-	397	Y
13C-2,3,7,8-TCDF	100	103	22	-	152	Y
13C-1,2,3,7,8-PeCDF	100	100	21	-	192	Y
13C-2,3,4,7,8-PeCDF	100	101	13	-	328	Y
13C-1,2,3,4,7,8-HxCDF	100	97.3	19	-	202	Y
13C-1,2,3,6,7,8-HxCDF	100	98.6	21	-	159	Y
13C-2,3,4,6,7,8-HxCDF	100	95.9	22	-	176	Y
13C-1,2,3,7,8,9-HxCDF	100	89.7	17	-	205	Y
13C-1,2,3,4,6,7,8-HpCDF	100	90.6	21	-	158	Y
13C-1,2,3,4,7,8,9-HpCDF	100	82.3	20	-	186	Y
13C-OCDF	200	140	26	-	397	Y
CLEANUP STANDARD						
37Cl-2,3,7,8-TCDD	40	37.9	12.4	-	76.4	Y

Contract-required concentration limits for OPR as specified in Table 6, Method 1613. 10/94

Processed: 29 Aug 2019 11:25 Analyst: pw

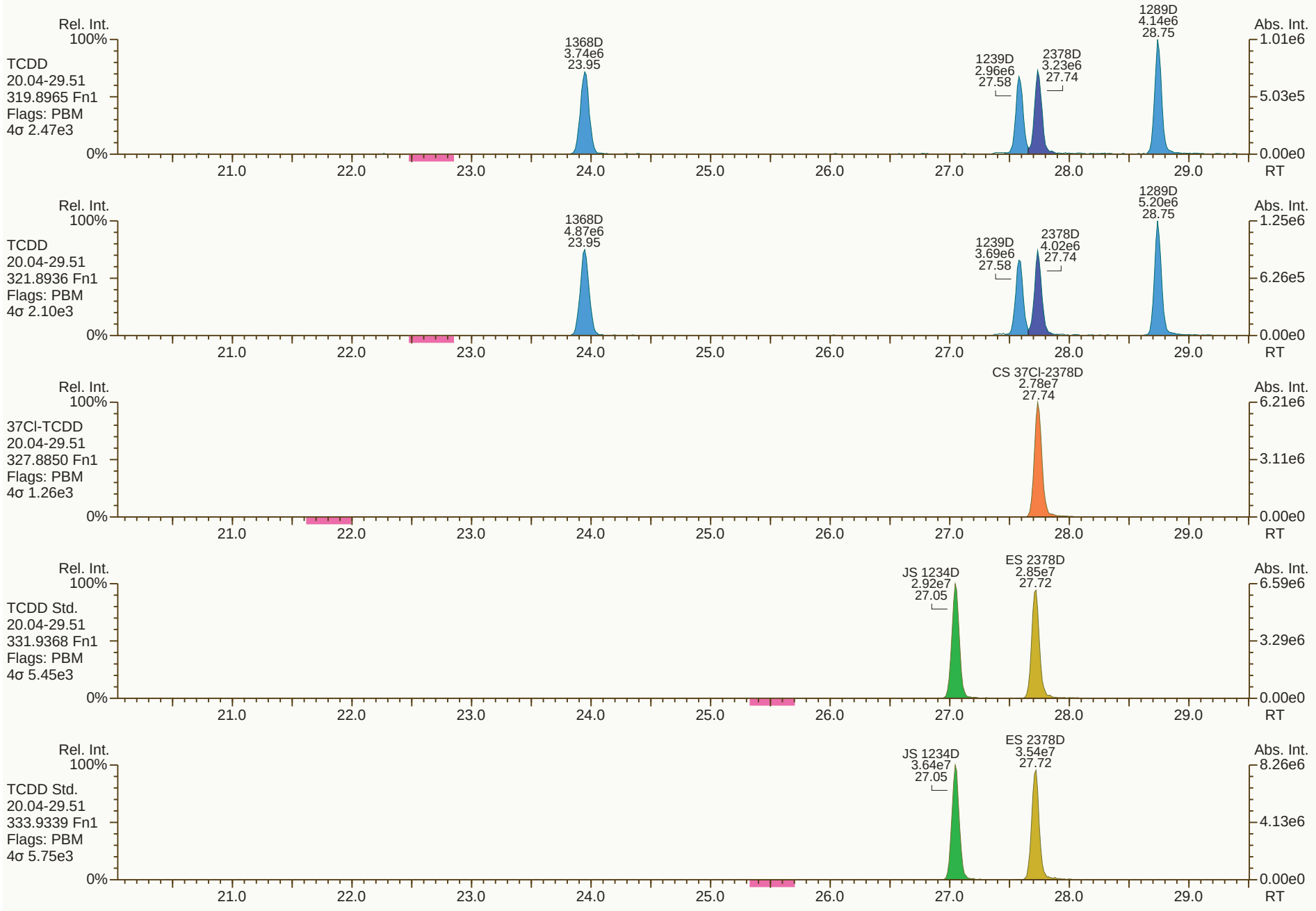
SGS ID: OPR1_190829_DF-RJ | **Sample ID: ICV SIL# 22-5-12** | **Acq: 29-Aug-2019 10:35:56**

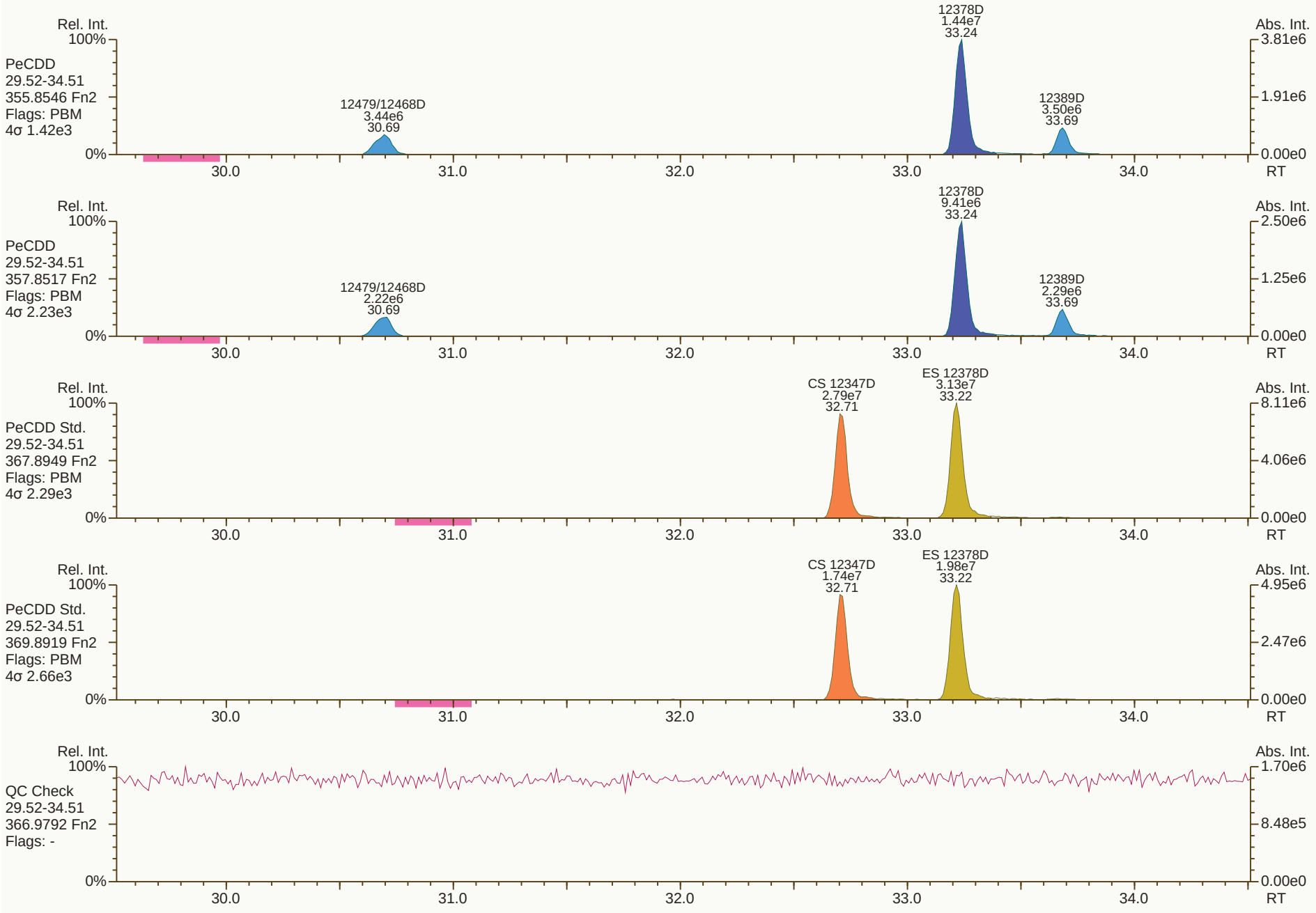
Instr: [ILM] AutoSpec-Ultima HRMS3 | **VSIR EI+ Expt: df_cl4-8_db5 GC: df_db5 Vial: 12** | **User: PSW Datafile: 190829C03**

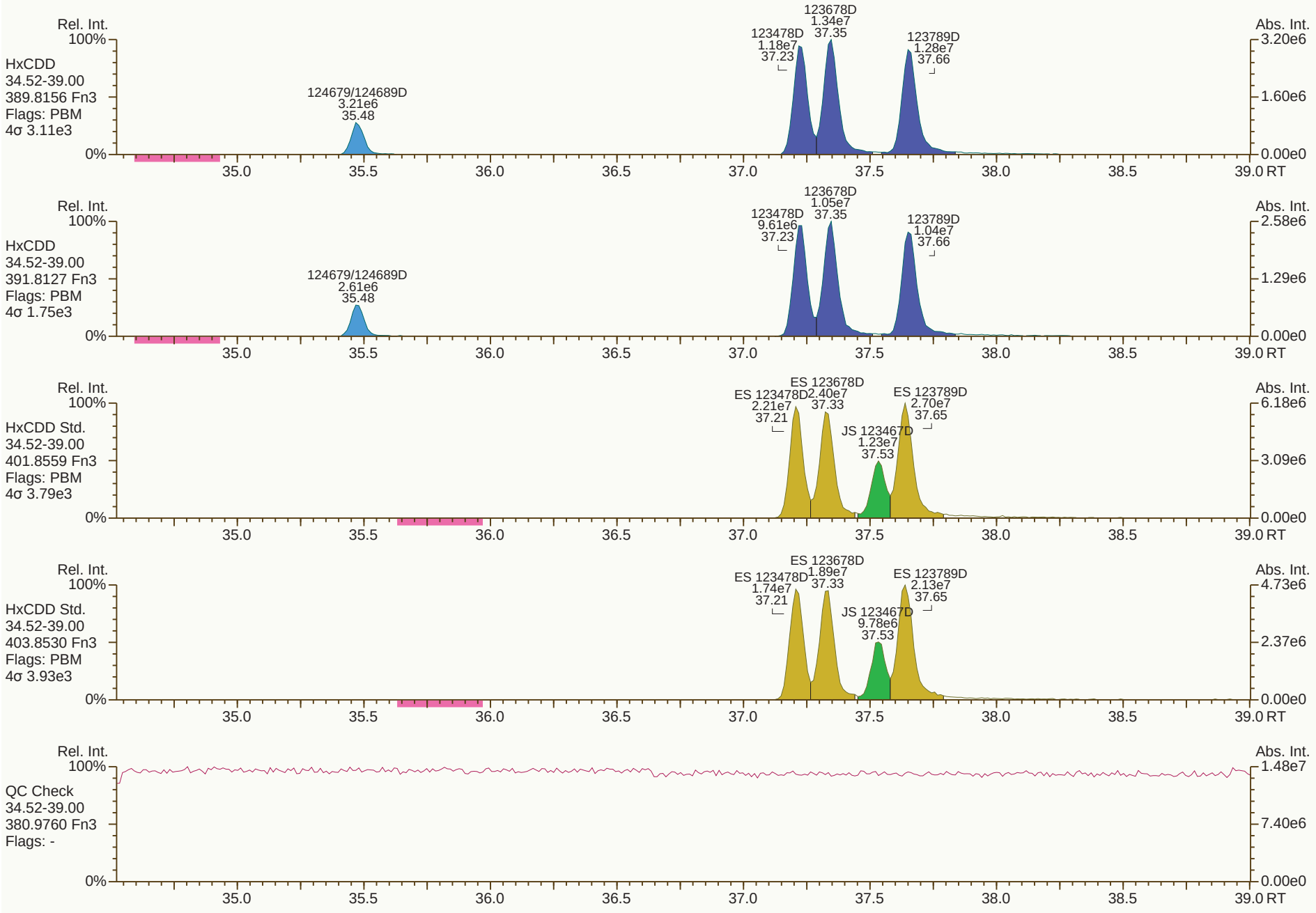


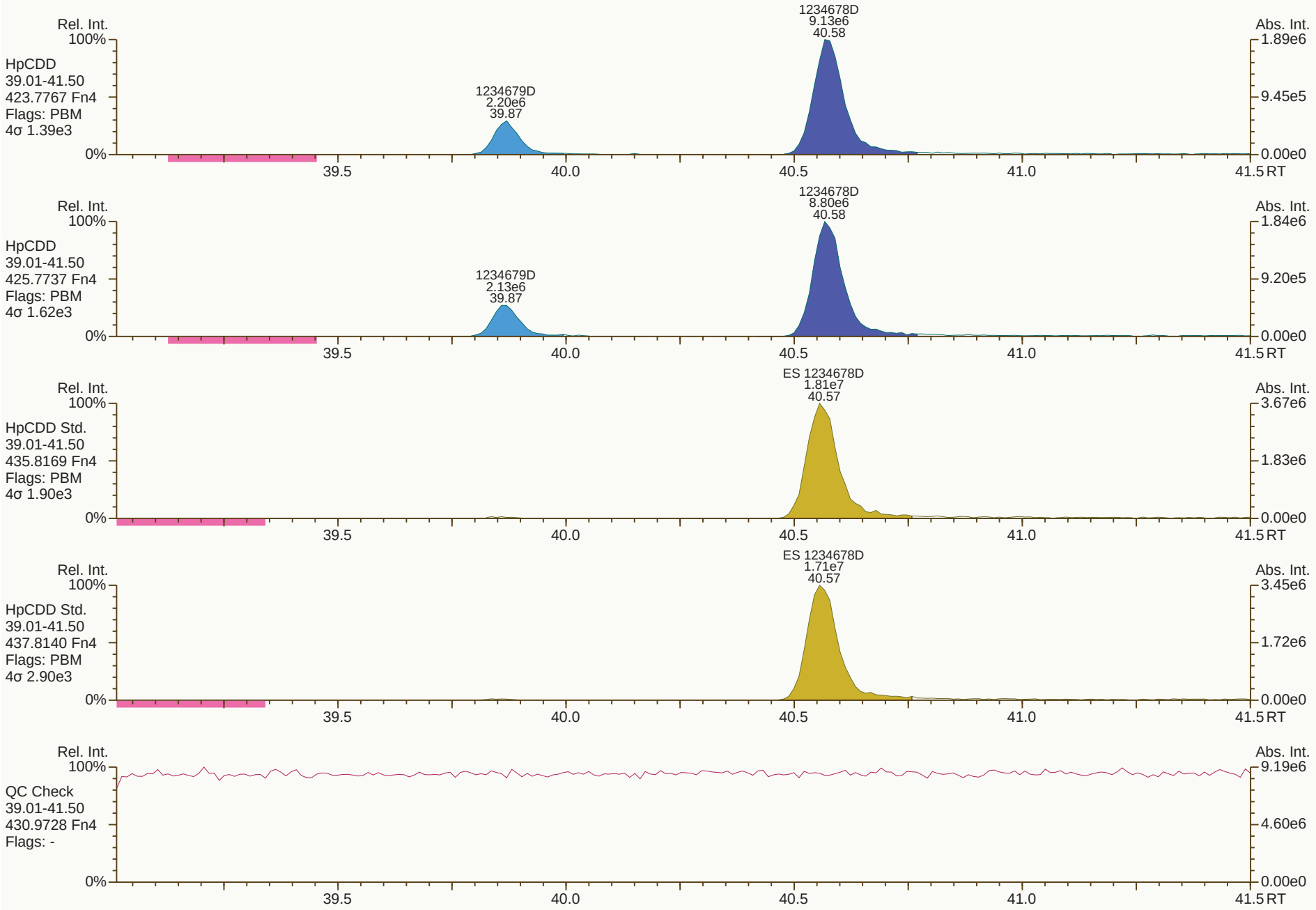
Results: T:\UltraTracePro\ICAL results\HRMS3\HRMS3_DF_10122018_28AUG2019\Resources\OPR1_190829_DF-RJ.utp_res, saved 29-Aug-2019 11:24 (PSW) *Peak annotation: Areas, Centroids*

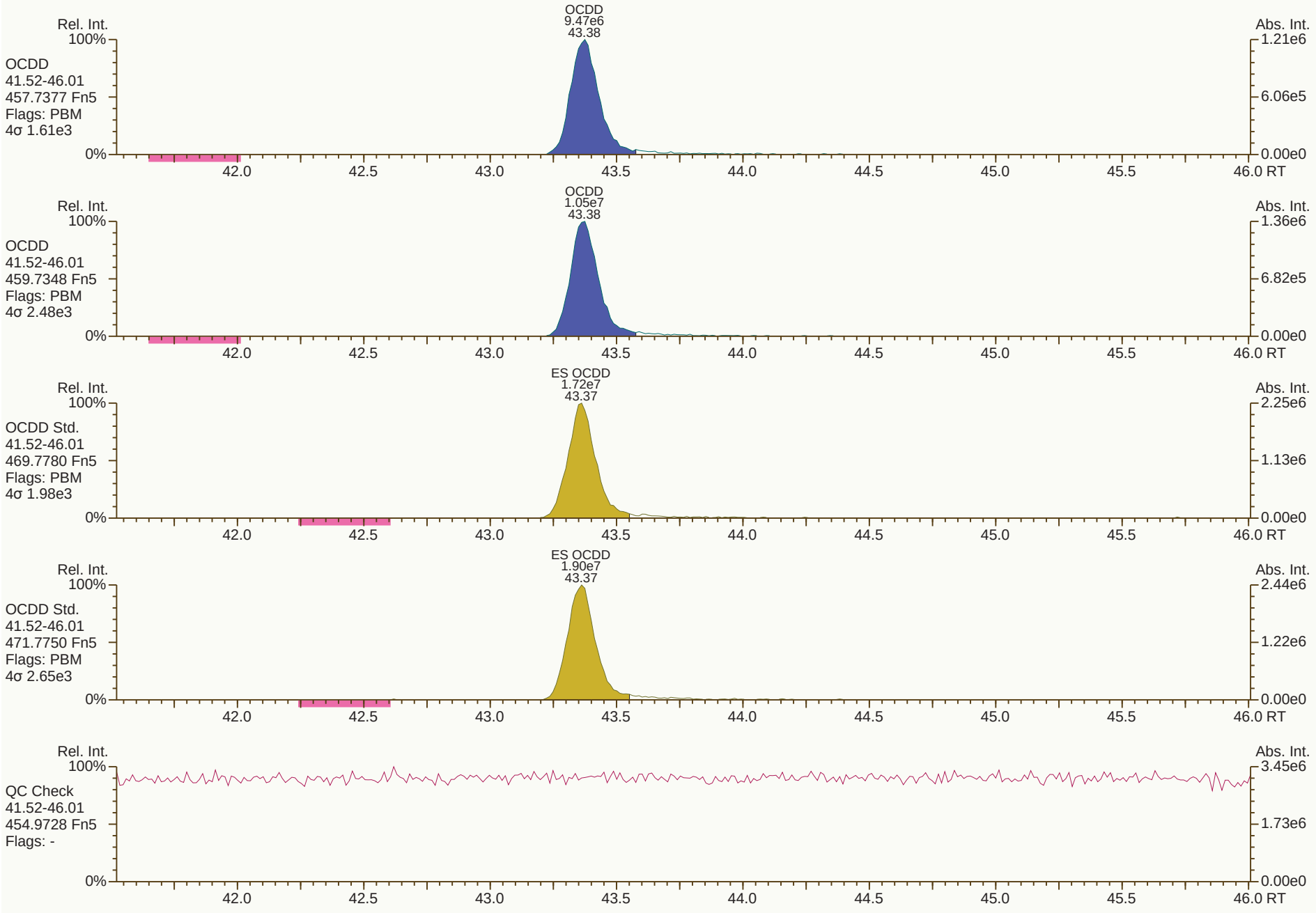
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 scc: 573-892 *PKD: n/a Printed: 29-Aug-2019 11:30 Page 1 of 12*

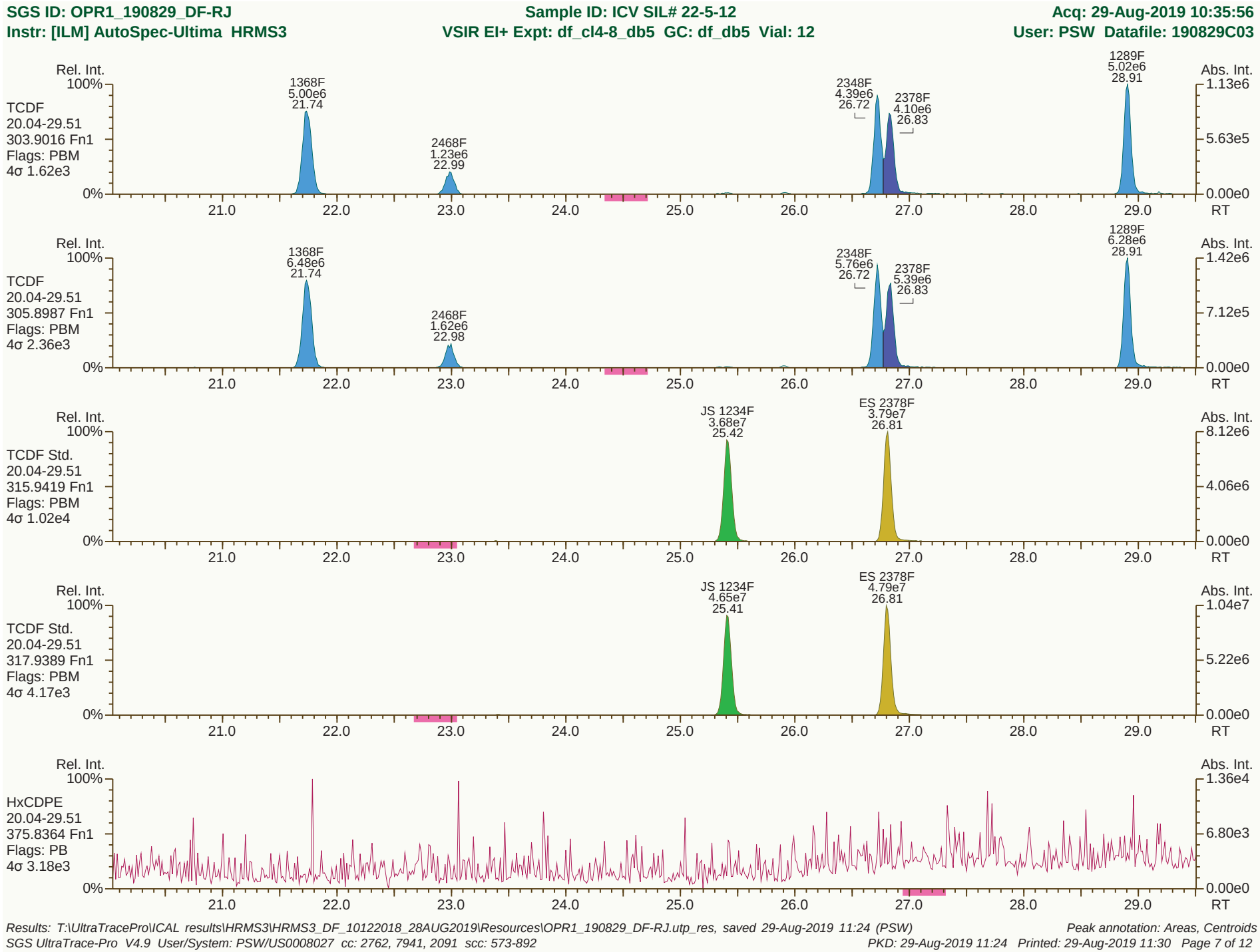

Rel. Int.
100%
TCDD
20.04-29.51
319.8965 Fn1
Flags: PBM
4σ 2.47e3
1368D
3.74e6
23.95
1239D
2.96e6
27.58
2378D
3.23e6
27.74
1289D
4.14e6
28.75
Abs. Int.
1.01e6
5.03e5
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD
20.04-29.51
321.8936 Fn1
Flags: PBM
4σ 2.10e3
1368D
4.87e6
23.95
1239D
3.69e6
27.58
2378D
4.02e6
27.74
1289D
5.20e6
28.75
Abs. Int.
1.25e6
6.26e5
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
37Cl-TCDD
20.04-29.51
327.8850 Fn1
Flags: PBM
4σ 1.26e3
CS 37Cl-2378D
2.78e7
27.74
Abs. Int.
6.21e6
3.11e6
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.04-29.51
331.9368 Fn1
Flags: PBM
4σ 5.45e3
JS 1234D
2.92e7
27.05
ES 2378D
2.85e7
27.72
Abs. Int.
6.59e6
3.29e6
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.04-29.51
333.9339 Fn1
Flags: PBM
4σ 5.75e3
JS 1234D
3.64e7
27.05
ES 2378D
3.54e7
27.72
Abs. Int.
8.26e6
4.13e6
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
PeCDD
29.52-34.51
355.8546 Fn2
Flags: PBM
4σ 1.42e3
12479/12468D
3.44e6
30.69
12378D
1.44e7
33.24
12389D
3.50e6
33.69
Abs. Int.
3.81e6
1.91e6
0.00e0
0%
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDD
29.52-34.51
357.8517 Fn2
Flags: PBM
4σ 2.23e3
12479/12468D
2.22e6
30.69
12378D
9.41e6
33.24
12389D
2.29e6
33.69
Abs. Int.
2.50e6
1.25e6
0.00e0
0%
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDD Std.
29.52-34.51
367.8949 Fn2
Flags: PBM
4σ 2.29e3
CS 12347D
2.79e7
32.71
ES 12378D
3.13e7
33.22
Abs. Int.
8.11e6
4.06e6
0.00e0
0%
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDD Std.
29.52-34.51
369.8919 Fn2
Flags: PBM
4σ 2.66e3
CS 12347D
1.74e7
32.71
ES 12378D
1.98e7
33.22
Abs. Int.
4.95e6
2.47e6
0.00e0
0%
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
QC Check
29.52-34.51
366.9792 Fn2
Flags: -
Abs. Int.
1.70e6
8.48e5
0.00e0
0%
30.0
31.0
32.0
33.0
34.0
RT


Rel. Int.
Abs. Int.
HxCDD
34.52-39.00
389.8156 Fn3
Flags: PBM
4σ 3.11e3
124679/124689D
3.21e6
35.48
123478D
1.18e7
37.23
123678D
1.34e7
37.35
123789D
1.28e7
37.66
3.20e6
1.60e6
0.00e0
HxCDD
34.52-39.00
391.8127 Fn3
Flags: PBM
4σ 1.75e3
124679/124689D
2.61e6
35.48
123478D
9.61e6
37.23
123678D
1.05e7
37.35
123789D
1.04e7
37.66
2.58e6
1.29e6
0.00e0
HxCDD Std.
34.52-39.00
401.8559 Fn3
Flags: PBM
4σ 3.79e3
ES 123478D
2.21e7
37.21
ES 123678D
2.40e7
37.33
JS 123467D
1.23e7
37.53
ES 123789D
2.70e7
37.65
6.18e6
3.09e6
0.00e0
HxCDD Std.
34.52-39.00
403.8530 Fn3
Flags: PBM
4σ 3.93e3
ES 123478D
1.74e7
37.21
ES 123678D
1.89e7
37.33
JS 123467D
9.78e6
37.53
ES 123789D
2.13e7
37.65
4.73e6
2.37e6
0.00e0
QC Check
34.52-39.00
380.9760 Fn3
Flags: -
1.48e7
7.40e6
0.00e0
100%
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT


Rel. Int.
100%
HpCDD
39.01-41.50
423.7767 Fn4
Flags: PBM
4σ 1.39e3
0%
1234678D
9.13e6
40.58
1234679D
2.20e6
39.87
Abs. Int.
1.89e6
9.45e5
0.00e0
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
HpCDD
39.01-41.50
425.7737 Fn4
Flags: PBM
4σ 1.62e3
0%
1234678D
8.80e6
40.58
1234679D
2.13e6
39.87
Abs. Int.
1.84e6
9.20e5
0.00e0
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
HpCDD Std.
39.01-41.50
435.8169 Fn4
Flags: PBM
4σ 1.90e3
0%
ES 1234678D
1.81e7
40.57
Abs. Int.
3.67e6
1.83e6
0.00e0
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
HpCDD Std.
39.01-41.50
437.8140 Fn4
Flags: PBM
4σ 2.90e3
0%
ES 1234678D
1.71e7
40.57
Abs. Int.
3.45e6
1.72e6
0.00e0
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
QC Check
39.01-41.50
430.9728 Fn4
Flags: -
0%
Abs. Int.
9.19e6
4.60e6
0.00e0
39.5
40.0
40.5
41.0
41.5 RT


OCDD
9.47e6
43.38
Rel. Int.
Abs. Int.
OCDD
41.52-46.01
457.7377 Fn5
Flags: PBM
4σ 1.61e3
OCDD
1.05e7
43.38
OCDD
41.52-46.01
459.7348 Fn5
Flags: PBM
4σ 2.48e3
ES OCDD
1.72e7
43.37
OCDD Std.
41.52-46.01
469.7780 Fn5
Flags: PBM
4σ 1.98e3
ES OCDD
1.90e7
43.37
OCDD Std.
41.52-46.01
471.7750 Fn5
Flags: PBM
4σ 2.65e3
QC Check
41.52-46.01
454.9728 Fn5
Flags: -
100%
0%
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT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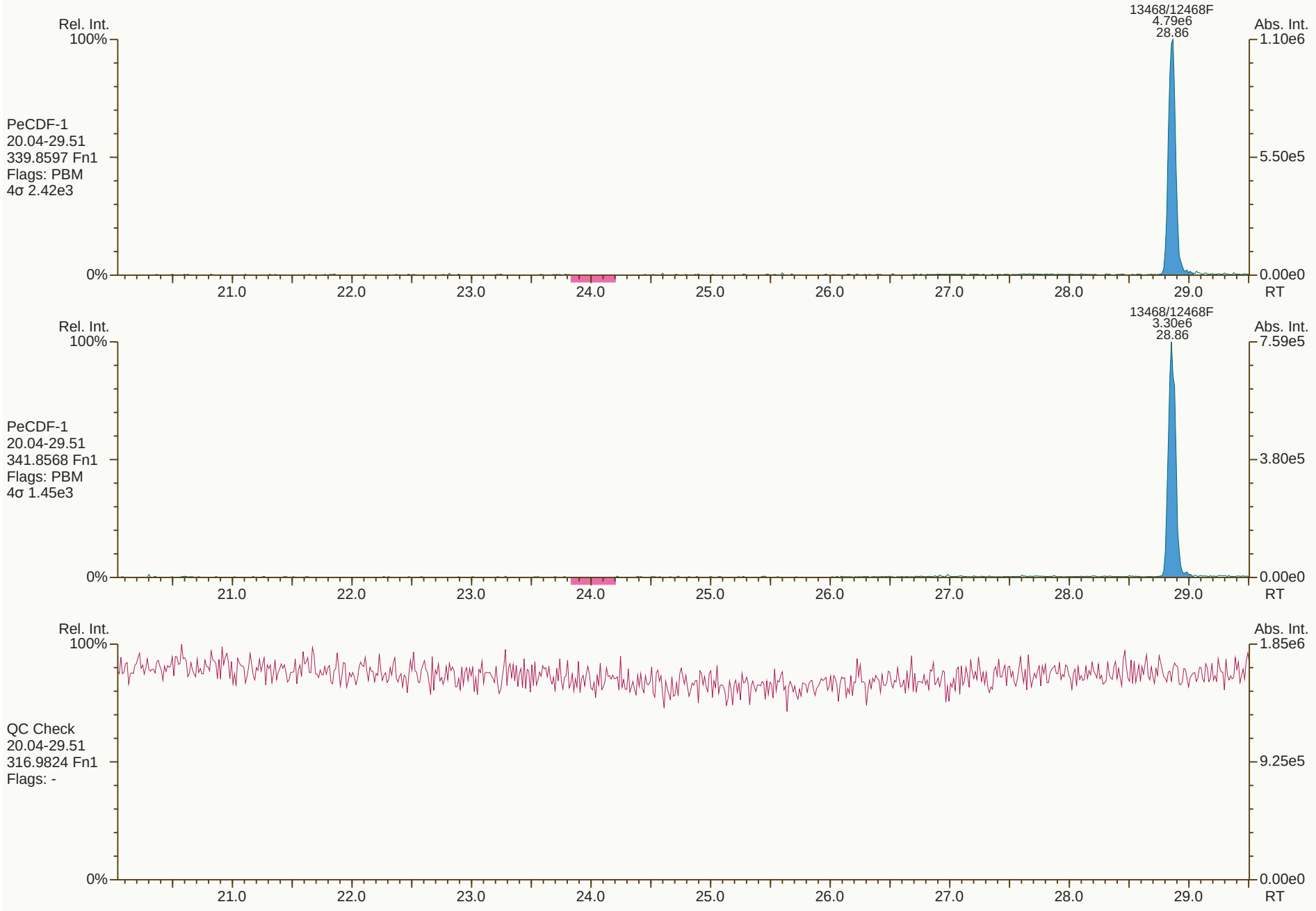
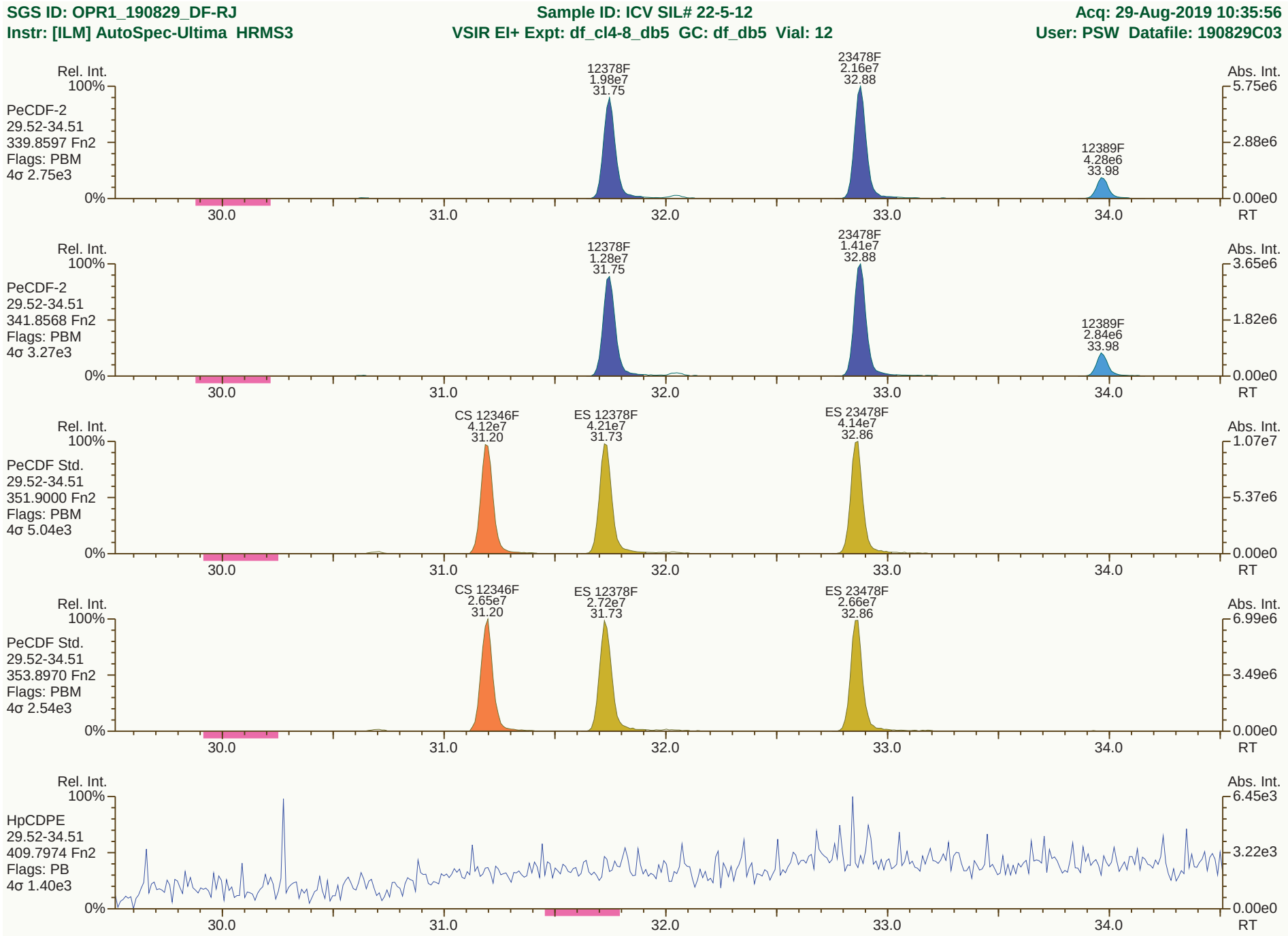
Acq: 29-Aug-2019 10:35:56
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5 GC: df_db5 Vial: 12
User: PSW Datafile: 190829C03
Rel. Int.
Abs. Int.
TCDF
20.04-29.51
303.9016 Fn1
Flags: PBM
4σ 1.62e3
1368F 5.00e6 21.74
2468F 1.23e6 22.99
2348F 4.39e6 26.72
2378F 4.10e6 26.83
1289F 5.02e6 28.91
1.13e6
5.63e5
0.00e0
TCDF
20.04-29.51
305.8987 Fn1
Flags: PBM
4σ 2.36e3
1368F 6.48e6 21.74
2468F 1.62e6 22.98
2348F 5.76e6 26.72
2378F 5.39e6 26.83
1289F 6.28e6 28.91
1.42e6
7.12e5
0.00e0
TCDF Std.
20.04-29.51
315.9419 Fn1
Flags: PBM
4σ 1.02e4
JS 1234F 3.68e7 25.42
ES 2378F 3.79e7 26.81
8.12e6
4.06e6
0.00e0
TCDF Std.
20.04-29.51
317.9389 Fn1
Flags: PBM
4σ 4.17e3
JS 1234F 4.65e7 25.41
ES 2378F 4.79e7 26.81
1.04e7
5.22e6
0.00e0
HxCDPE
20.04-29.51
375.8364 Fn1
Flags: PB
4σ 3.18e3
1.36e4
6.80e3
0.00e0
100%
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Results: T:\UltraTracePro\ICAL results\HRMS3\HRMS3_DF_10122018_28AUG2019\Resources\OPR1_190829_DF-RJ.utp_res, saved 29-Aug-2019 11:24 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 2762, 7941, 2091 scc: 573-892
PKD: 29-Aug-2019 11:24 Printed: 29-Aug-2019 11:30 Page 7 of 12


13468/12468F
4.79e6
28.86
Rel. Int.
100%
0%
Abs. Int.
1.10e6
5.50e5
0.00e0
PeCDF-1
20.04-29.51
339.8597 Fn1
Flags: PBM
4σ 2.42e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
13468/12468F
3.30e6
28.86
Rel. Int.
100%
0%
Abs. Int.
7.59e5
3.80e5
0.00e0
PeCDF-1
20.04-29.51
341.8568 Fn1
Flags: PBM
4σ 1.45e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
0%
Abs. Int.
1.85e6
9.25e5
0.00e0
QC Check
20.04-29.51
316.9824 Fn1
Flags: -
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT

SGS ID: OPR1_190829_DF-RJ
Instr: [ILM] AutoSpec-Ultima HRMS3

Sample ID: ICV SIL# 22-5-12
VSIR EI+ Expt: df_cl4-8_db5 GC: df_db5 Vial: 12

Acq: 29-Aug-2019 10:35:56
User: PSW Datafile: 190829C03



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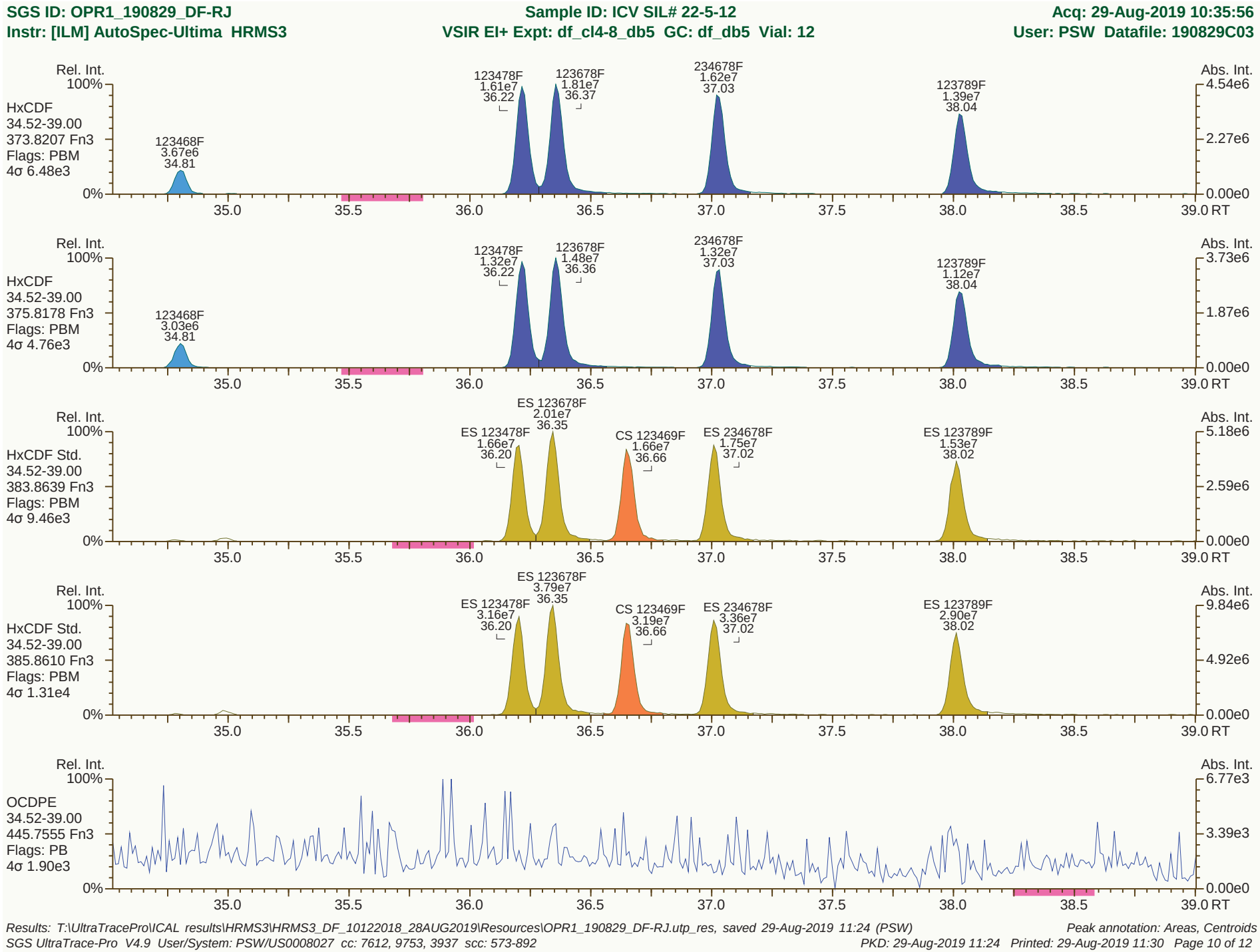
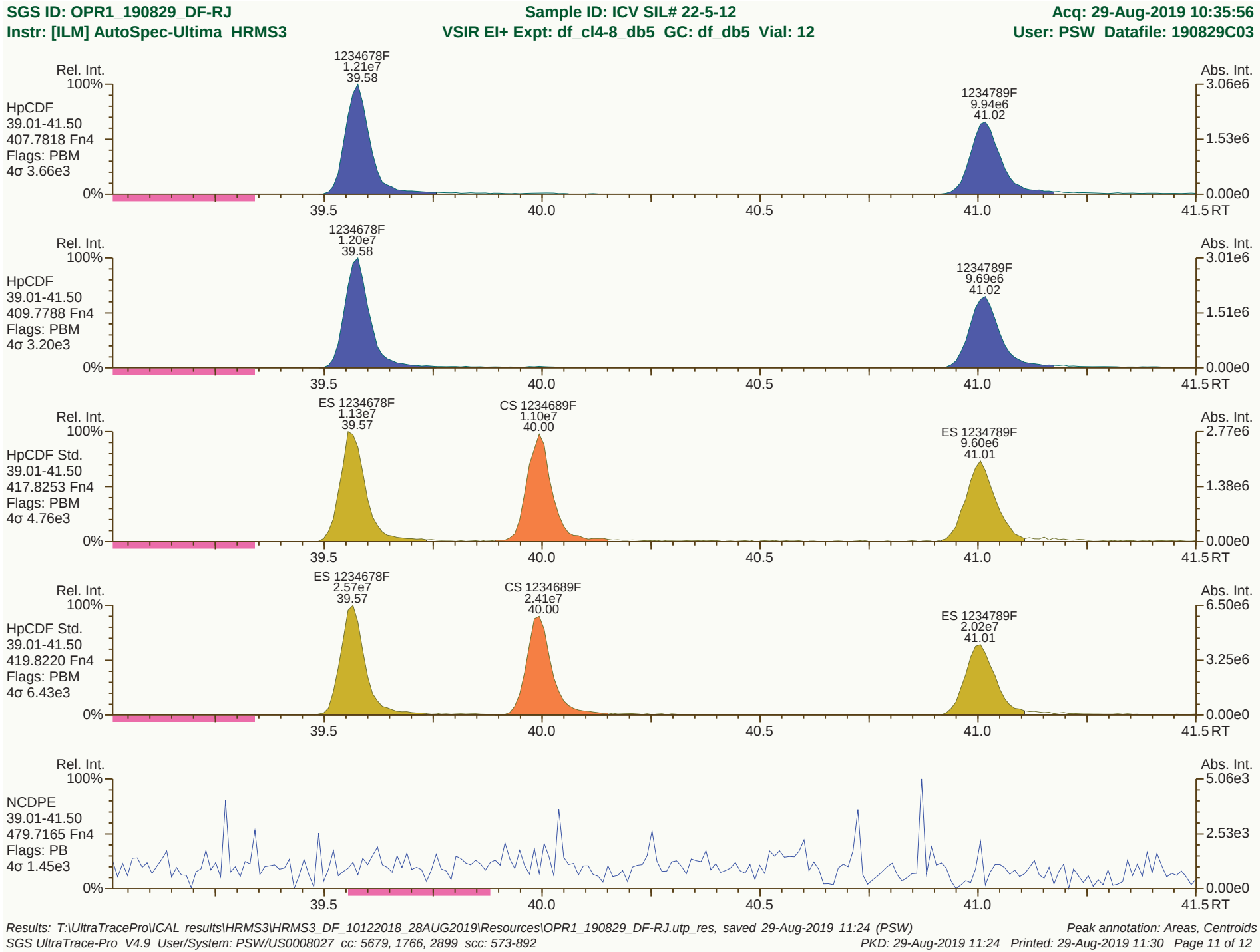
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 0029, 2416, 8330 scc: 573-892
PKD: 29-Aug-2019 11:24 Printed: 29-Aug-2019 11:30 Page 9 of 12


SGS ID: OPR1_190829_DF-RJ
Sample ID: ICV SIL# 22-5-12
Acq: 29-Aug-2019 10:35:56
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5 GC: df_db5 Vial: 12
User: PSW Datafile: 190829C03
Rel. Int.
Abs. Int.
HxCDF
34.52-39.00
373.8207 Fn3
Flags: PBM
4σ 6.48e3
123468F 3.67e6 34.81
123478F 1.61e7 36.22
123678F 1.81e7 36.37
234678F 1.62e7 37.03
123789F 1.39e7 38.04
HxCDF
34.52-39.00
375.8178 Fn3
Flags: PBM
4σ 4.76e3
123468F 3.03e6 34.81
123478F 1.32e7 36.22
123678F 1.48e7 36.36
234678F 1.32e7 37.03
123789F 1.12e7 38.04
HxCDF Std.
34.52-39.00
383.8639 Fn3
Flags: PBM
4σ 9.46e3
ES 123478F 1.66e7 36.20
ES 123678F 2.01e7 36.35
CS 123469F 1.66e7 36.66
ES 234678F 1.75e7 37.02
ES 123789F 1.53e7 38.02
HxCDF Std.
34.52-39.00
385.8610 Fn3
Flags: PBM
4σ 1.31e4
ES 123478F 3.16e7 36.20
ES 123678F 3.79e7 36.35
CS 123469F 3.19e7 36.66
ES 234678F 3.36e7 37.02
ES 123789F 2.90e7 38.02
OCDPE
34.52-39.00
445.7555 Fn3
Flags: PB
4σ 1.90e3
100%
0%
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
4.54e6
2.27e6
0.00e0
3.73e6
1.87e6
5.18e6
2.59e6
9.84e6
4.92e6
6.77e3
3.39e3
Results: T:\UltraTracePro\ICAL results\HRMS3\HRMS3_DF_10122018_28AUG2019\Resources\OPR1_190829_DF-RJ.utp_res, saved 29-Aug-2019 11:24 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 7612, 9753, 3937 scc: 573-892
PKD: 29-Aug-2019 11:24 Printed: 29-Aug-2019 11:30 Page 10 of 12

SGS ID: OPR1_190829_DF-RJ
Instr: [ILM] AutoSpec-Ultima HRMS3

Sample ID: ICV SIL# 22-5-12
VSIR EI+ Expt: df_cl4-8_db5 GC: df_db5 Vial: 12

Acq: 29-Aug-2019 10:35:56
User: PSW Datafile: 190829C03



Results: T:\UltraTracePro\ICAL results\HRMS3\HRMS3_DF_10122018_28AUG2019\Resources\OPR1_190829_DF-RJ.utp_res, saved 29-Aug-2019 11:24 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 5679, 1766, 2899 scc: 573-892
PKD: 29-Aug-2019 11:24 Printed: 29-Aug-2019 11:30 Page 11 of 12

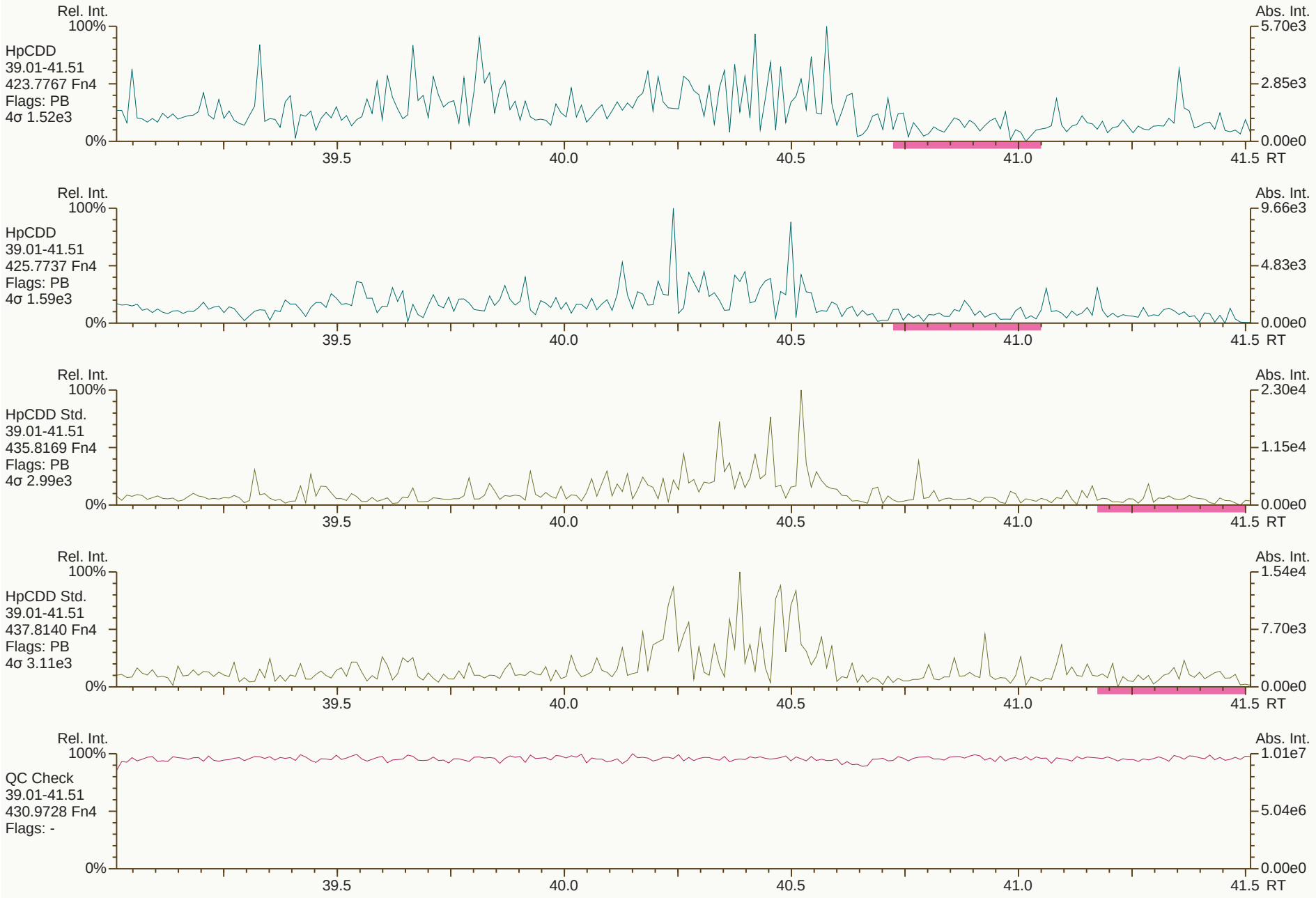

OCDF
1.17e7
43.53
Rel. Int.
Abs. Int.
OCDF
41.52-46.01
441.7428 Fn5
Flags: PBM
4σ 1.89e3
OCDF
1.31e7
43.53
OCDF
41.52-46.01
443.7398 Fn5
Flags: PBM
4σ 1.93e3
ES OCDF
2.27e7
43.52
OCDF Std.
41.52-46.01
453.7830 Fn5
Flags: PBM
4σ 1.83e3
ES OCDF
2.54e7
43.52
OCDF Std.
41.52-46.01
455.7801 Fn5
Flags: PBM
4σ 1.79e3
DCDPE
41.52-46.01
513.6775 Fn5
Flags: PB
4σ 9.30e2
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT

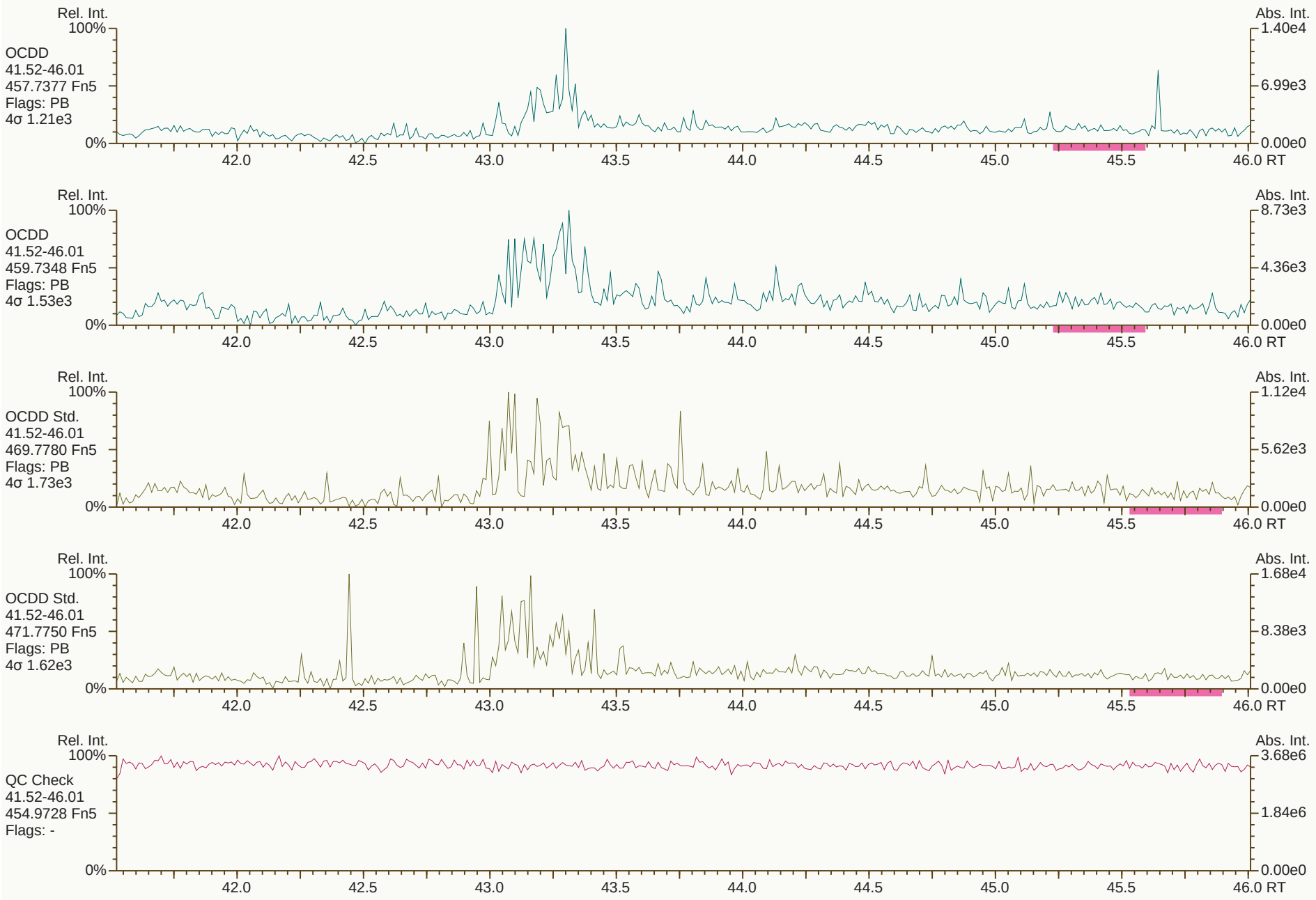

Rel. Int.
100%
0%
Abs. Int.
2.21e6
1.11e6
0.00e0
QC Check
20.04-29.51
316.9824 Fn1
Flags: -
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
0%
Abs. Int.
2.00e6
9.98e5
0.00e0
QC Check
29.52-34.51
366.9792 Fn2
Flags: -
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
0%
Abs. Int.
1.66e7
8.31e6
0.00e0
QC Check
34.52-39.00
380.9760 Fn3
Flags: -
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0
RT
Rel. Int.
100%
0%
Abs. Int.
1.01e7
5.04e6
0.00e0
QC Check
39.01-41.51
430.9728 Fn4
Flags: -
39.5
40.0
40.5
41.0
41.5
RT
Rel. Int.
100%
0%
Abs. Int.
3.68e6
1.84e6
0.00e0
QC Check
41.52-46.01
454.9728 Fn5
Flags: -
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0
RT

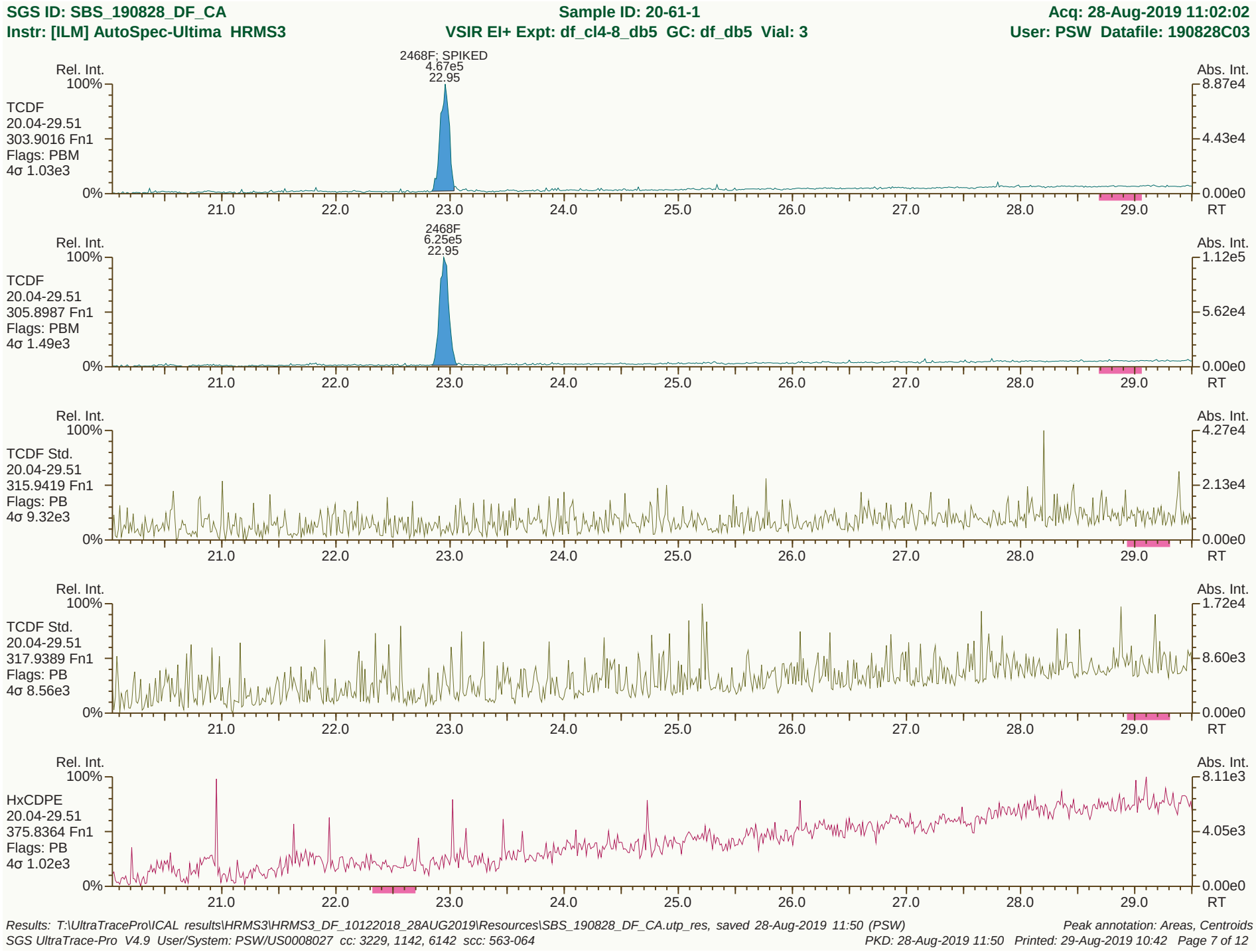

Rel. Int.
100%
TCDD
20.04-29.51
319.8965 Fn1
Flags: PB
4σ 1.47e3
0%
Abs. Int.
8.33e3
4.16e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD
20.04-29.51
321.8936 Fn1
Flags: PB
4σ 1.13e3
0%
Abs. Int.
7.74e3
3.87e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
37Cl-TCDD
20.04-29.51
327.8850 Fn1
Flags: PB
4σ 1.21e3
0%
Abs. Int.
1.15e4
5.75e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.04-29.51
331.9368 Fn1
Flags: PB
4σ 5.45e3
0%
Abs. Int.
4.55e4
2.27e4
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.04-29.51
333.9339 Fn1
Flags: PB
4σ 2.67e3
0%
Abs. Int.
1.86e4
9.31e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
PeCDD
29.52-34.51
355.8546 Fn2
Flags: PB
4σ 1.03e3
0%
Abs. Int.
6.38e3
3.19e3
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDD
29.52-34.51
357.8517 Fn2
Flags: PB
4σ 1.59e3
0%
Abs. Int.
3.61e3
1.81e3
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDD Std.
29.52-34.51
367.8949 Fn2
Flags: PB
4σ 1.62e3
0%
Abs. Int.
1.00e4
5.02e3
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDD Std.
29.52-34.51
369.8919 Fn2
Flags: PB
4σ 2.02e3
0%
Abs. Int.
1.46e4
7.32e3
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
QC Check
29.52-34.51
366.9792 Fn2
Flags: -
0%
Abs. Int.
2.00e6
9.98e5
0.00e0
30.0
31.0
32.0
33.0
34.0
RT

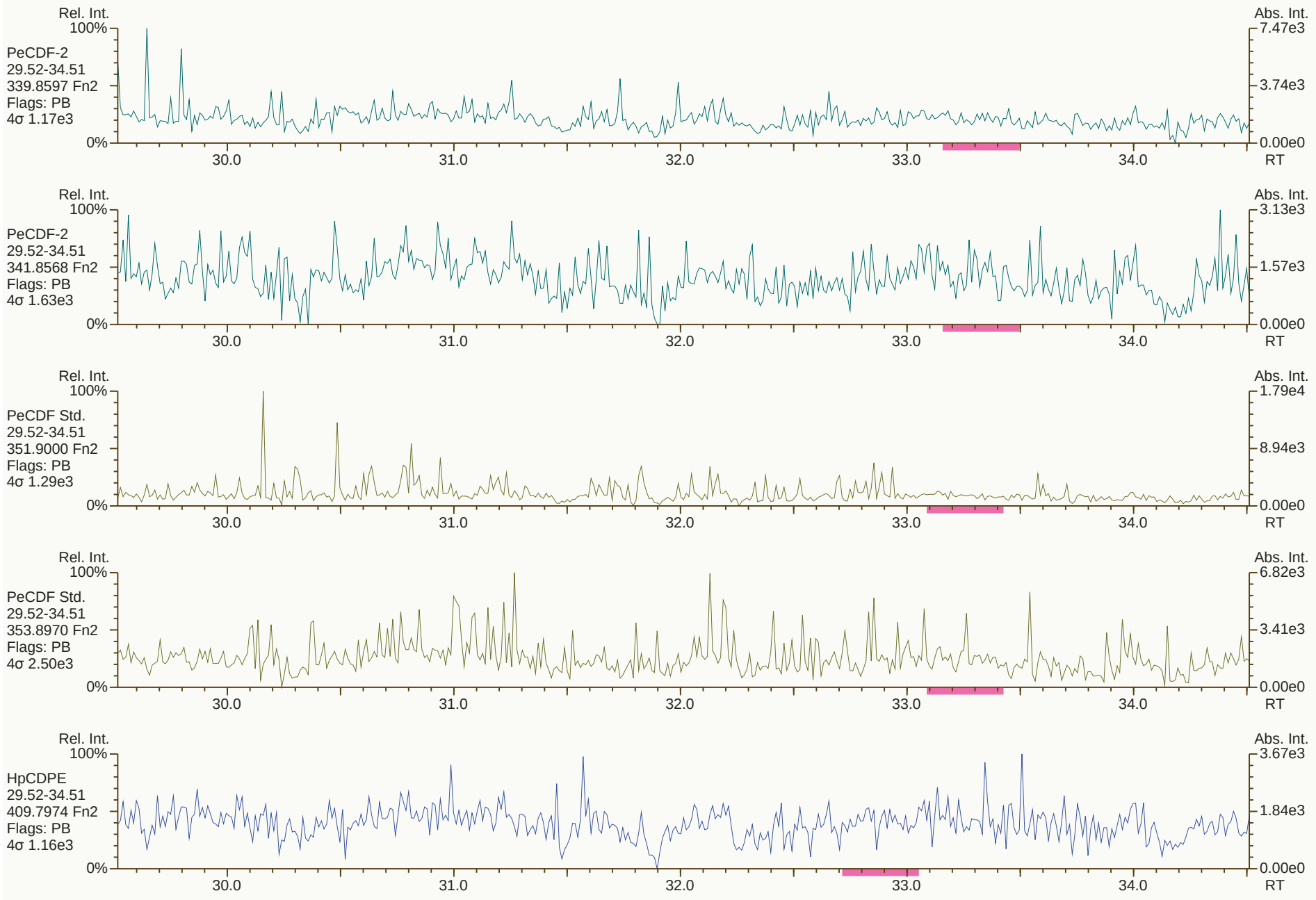

Rel. Int.
100%
HxCDD
34.52-39.00
389.8156 Fn3
Flags: PB
4σ 1.19e3
0%
Abs. Int.
5.20e3
2.60e3
0.00e0
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
HxCDD
34.52-39.00
391.8127 Fn3
Flags: PB
4σ 1.58e3
0%
Abs. Int.
5.10e3
2.55e3
0.00e0
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
HxCDD Std.
34.52-39.00
401.8559 Fn3
Flags: PB
4σ 1.30e3
0%
Abs. Int.
1.88e4
9.41e3
0.00e0
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
HxCDD Std.
34.52-39.00
403.8530 Fn3
Flags: PB
4σ 3.06e3
0%
Abs. Int.
1.94e4
9.72e3
0.00e0
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
QC Check
34.52-39.00
380.9760 Fn3
Flags: -
0%
Abs. Int.
1.66e7
8.31e6
0.00e0
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT


Rel. Int.
100%
HpCDD
39.01-41.51
423.7767 Fn4
Flags: PB
4σ 1.52e3
0%
Abs. Int.
5.70e3
2.85e3
0.00e0
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
HpCDD
39.01-41.51
425.7737 Fn4
Flags: PB
4σ 1.59e3
0%
Abs. Int.
9.66e3
4.83e3
0.00e0
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
HpCDD Std.
39.01-41.51
435.8169 Fn4
Flags: PB
4σ 2.99e3
0%
Abs. Int.
2.30e4
1.15e4
0.00e0
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
HpCDD Std.
39.01-41.51
437.8140 Fn4
Flags: PB
4σ 3.11e3
0%
Abs. Int.
1.54e4
7.70e3
0.00e0
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
QC Check
39.01-41.51
430.9728 Fn4
Flags: -
0%
Abs. Int.
1.01e7
5.04e6
0.00e0
39.5
40.0
40.5
41.0
41.5 RT


Rel. Int.
100%
OCDD
41.52-46.01
457.7377 Fn5
Flags: PB
4σ 1.21e3
0%
Abs. Int.
1.40e4
6.99e3
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
Rel. Int.
100%
OCDD
41.52-46.01
459.7348 Fn5
Flags: PB
4σ 1.53e3
0%
Abs. Int.
8.73e3
4.36e3
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
Rel. Int.
100%
OCDD Std.
41.52-46.01
469.7780 Fn5
Flags: PB
4σ 1.73e3
0%
Abs. Int.
1.12e4
5.62e3
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
Rel. Int.
100%
OCDD Std.
41.52-46.01
471.7750 Fn5
Flags: PB
4σ 1.62e3
0%
Abs. Int.
1.68e4
8.38e3
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
Rel. Int.
100%
QC Check
41.52-46.01
454.9728 Fn5
Flags: -
0%
Abs. Int.
3.68e6
1.84e6
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT

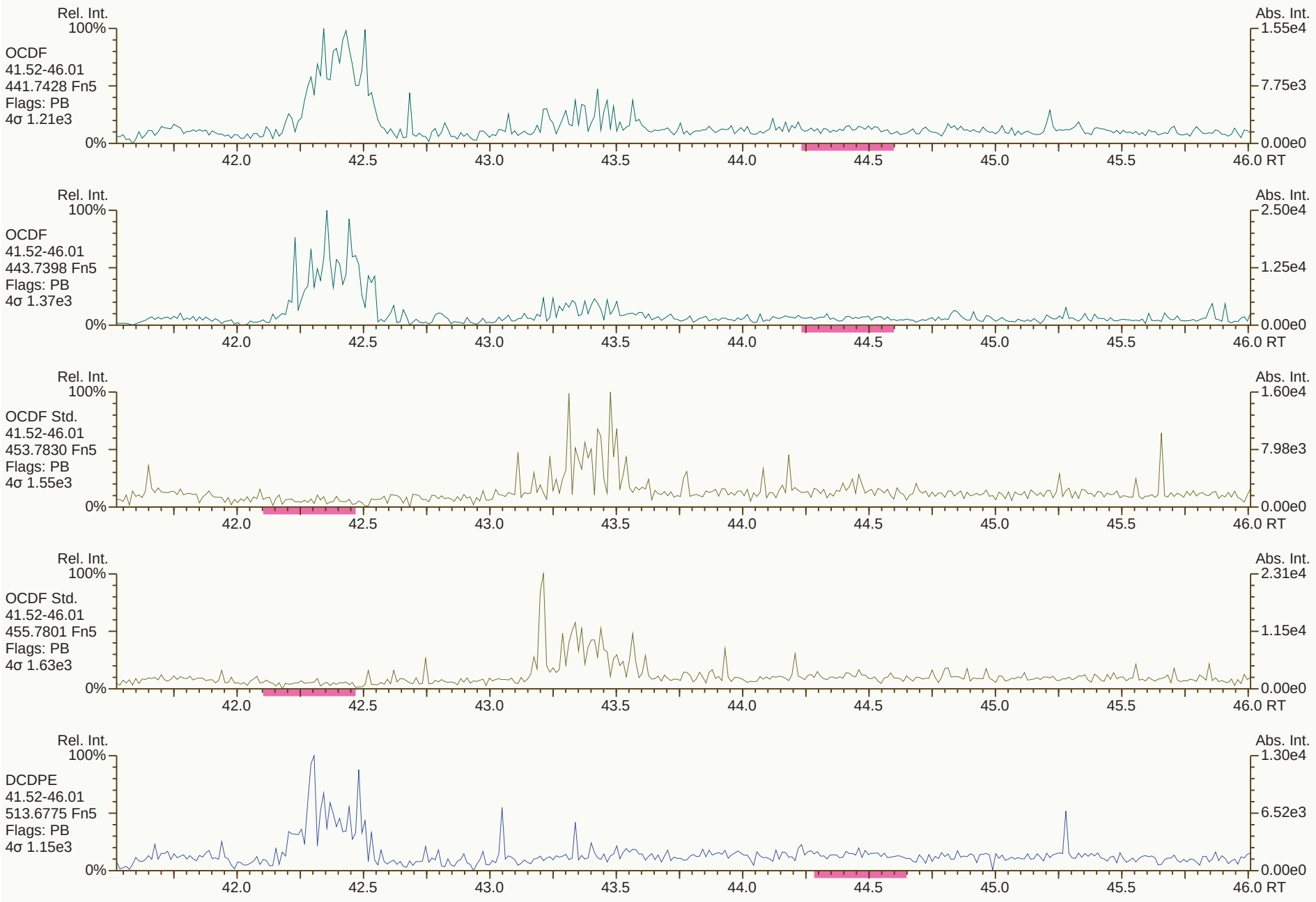

SGS ID: SBS_190828_DF_CA
Sample ID: 20-61-1
Acq: 28-Aug-2019 11:02:02
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5 GC: df_db5 Vial: 3
User: PSW Datafile: 190828C03
2468F: SPIKED
4.67e5
22.95
Rel. Int.
Abs. Int.
100%
0%
TCDF
20.04-29.51
303.9016 Fn1
Flags: PBM
4σ 1.03e3
8.87e4
4.43e4
0.00e0
2468F
6.25e5
22.95
TCDF
20.04-29.51
305.8987 Fn1
Flags: PBM
4σ 1.49e3
1.12e5
5.62e4
TCDF Std.
20.04-29.51
315.9419 Fn1
Flags: PB
4σ 9.32e3
4.27e4
2.13e4
TCDF Std.
20.04-29.51
317.9389 Fn1
Flags: PB
4σ 8.56e3
1.72e4
8.60e3
HxCDPE
20.04-29.51
375.8364 Fn1
Flags: PB
4σ 1.02e3
8.11e3
4.05e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
0%
Abs. Int.
1.09e4
5.44e3
0.00e0
PeCDF-1
20.04-29.51
339.8597 Fn1
Flags: PB
4σ 1.83e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
0%
Abs. Int.
1.00e4
5.01e3
0.00e0
PeCDF-1
20.04-29.51
341.8568 Fn1
Flags: PB
4σ 1.53e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
0%
Abs. Int.
2.21e6
1.11e6
0.00e0
QC Check
20.04-29.51
316.9824 Fn1
Flags: -
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
PeCDF-2
29.52-34.51
339.8597 Fn2
Flags: PB
4σ 1.17e3
0%
Abs. Int.
7.47e3
3.74e3
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDF-2
29.52-34.51
341.8568 Fn2
Flags: PB
4σ 1.63e3
0%
Abs. Int.
3.13e3
1.57e3
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDF Std.
29.52-34.51
351.9000 Fn2
Flags: PB
4σ 1.29e3
0%
Abs. Int.
1.79e4
8.94e3
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
PeCDF Std.
29.52-34.51
353.8970 Fn2
Flags: PB
4σ 2.50e3
0%
Abs. Int.
6.82e3
3.41e3
0.00e0
30.0
31.0
32.0
33.0
34.0
RT
Rel. Int.
100%
HpCDPE
29.52-34.51
409.7974 Fn2
Flags: PB
4σ 1.16e3
0%
Abs. Int.
3.67e3
1.84e3
0.00e0
30.0
31.0
32.0
33.0
34.0
RT


Rel. Int.
100%
HxCDF
34.52-39.00
373.8207 Fn3
Flags: PB
4σ 1.64e3
0%
Abs. Int.
6.59e3
3.29e3
0.00e0
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
HxCDF
34.52-39.00
375.8178 Fn3
Flags: PB
4σ 1.27e3
0%
Abs. Int.
5.49e3
2.75e3
0.00e0
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
HxCDF Std.
34.52-39.00
383.8639 Fn3
Flags: PB
4σ 3.67e3
0%
Abs. Int.
1.45e4
7.25e3
0.00e0
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
HxCDF Std.
34.52-39.00
385.8610 Fn3
Flags: PB
4σ 2.99e3
0%
Abs. Int.
2.35e4
1.18e4
0.00e0
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT
Rel. Int.
100%
OCDPE
34.52-39.00
445.7555 Fn3
Flags: PB
4σ 8.90e2
0%
Abs. Int.
4.63e3
2.31e3
0.00e0
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5
39.0 RT

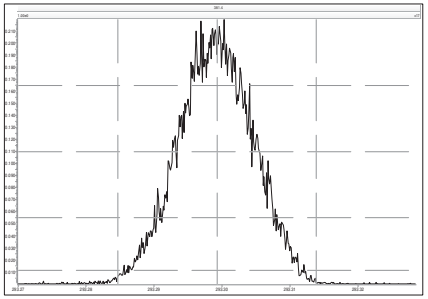

Rel. Int.
100%
HpCDF
39.01-41.51
407.7818 Fn4
Flags: PB
4σ 1.38e3
0%
Abs. Int.
1.17e4
5.86e3
0.00e0
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
HpCDF
39.01-41.51
409.7788 Fn4
Flags: PB
4σ 2.19e3
0%
Abs. Int.
1.15e4
5.75e3
0.00e0
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
HpCDF Std.
39.01-41.51
417.8253 Fn4
Flags: PB
4σ 3.82e3
0%
Abs. Int.
1.98e4
9.92e3
0.00e0
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
HpCDF Std.
39.01-41.51
419.8220 Fn4
Flags: PB
4σ 3.97e3
0%
Abs. Int.
2.68e4
1.34e4
0.00e0
39.5
40.0
40.5
41.0
41.5 RT
Rel. Int.
100%
NCDPE
39.01-41.51
479.7165 Fn4
Flags: PB
4σ 1.35e3
0%
Abs. Int.
4.52e3
2.26e3
0.00e0
39.5
40.0
40.5
41.0
41.5 RT


Rel. Int.
100%
OCDF
41.52-46.01
441.7428 Fn5
Flags: PB
4σ 1.21e3
0%
Abs. Int.
1.55e4
7.75e3
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
Rel. Int.
100%
OCDF
41.52-46.01
443.7398 Fn5
Flags: PB
4σ 1.37e3
0%
Abs. Int.
2.50e4
1.25e4
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
Rel. Int.
100%
OCDF Std.
41.52-46.01
453.7830 Fn5
Flags: PB
4σ 1.55e3
0%
Abs. Int.
1.60e4
7.98e3
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
Rel. Int.
100%
OCDF Std.
41.52-46.01
455.7801 Fn5
Flags: PB
4σ 1.63e3
0%
Abs. Int.
2.31e4
1.15e4
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT
Rel. Int.
100%
DCDPE
41.52-46.01
513.6775 Fn5
Flags: PB
4σ 1.15e3
0%
Abs. Int.
1.30e4
6.52e3
0.00e0
42.0
42.5
43.0
43.5
44.0
44.5
45.0
45.5
46.0 RT

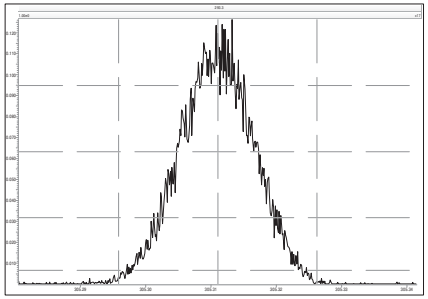
File: Experiment: df_cl4-8_db5.exp Reference: DF.ref Function: 1 @ 200 (ppm)

Printed: Wednesday, August 28, 2019 10:59:57 Eastern Daylight Time

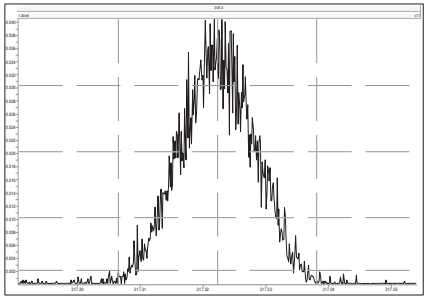
M 292.9824 R 11738



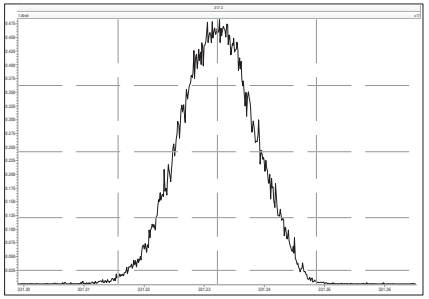
M 304.9824 R 11467



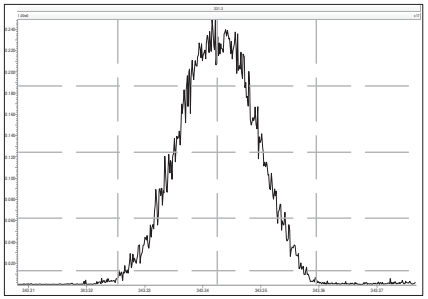
M 316.9824 R 11846



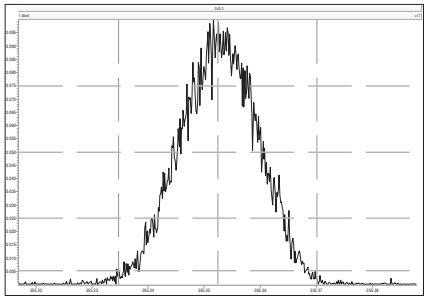
M 330.9792 R 11570



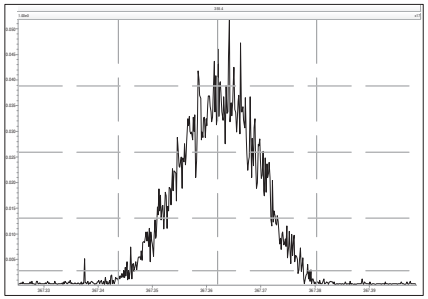
M 342.9792 R 11364



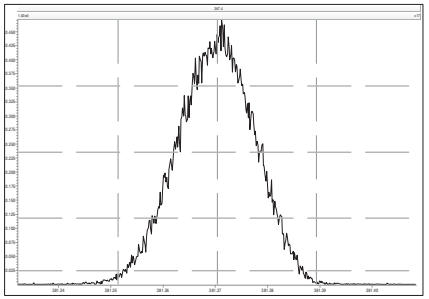
M 354.9792 R 11110



M 366.9792 R 11630



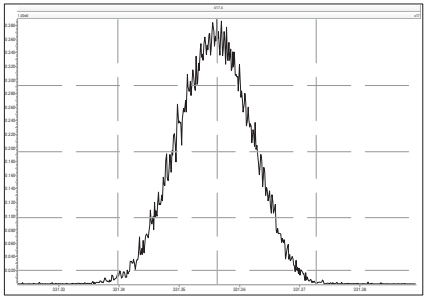
M 380.9760 R 11262



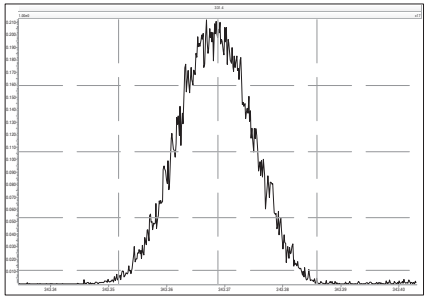
File: Experiment: df_cl4-8_db5.exp Reference: DF.ref Function: 2 @ 200 (ppm)

Printed: Wednesday, August 28, 2019 11:00:18 Eastern Daylight Time

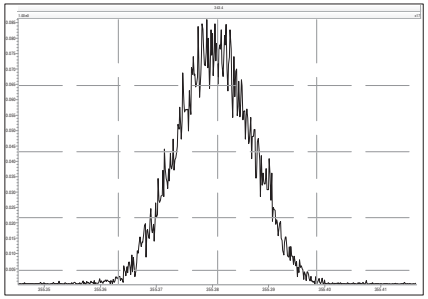
M 330.9792 R 11740



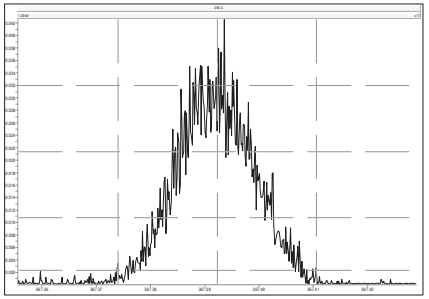
M 342.9792 R 11678



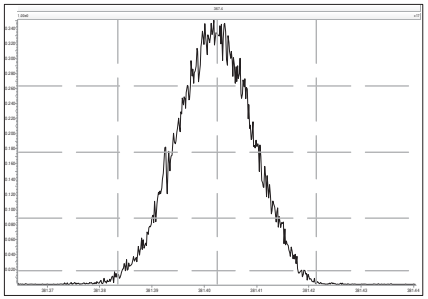
M 354.9792 R 12315



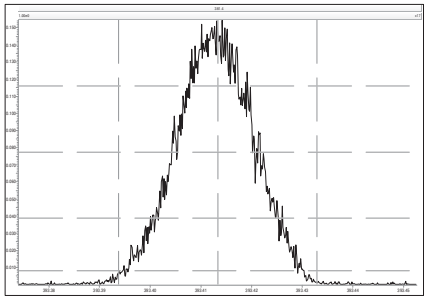
M 366.9792 R 11572



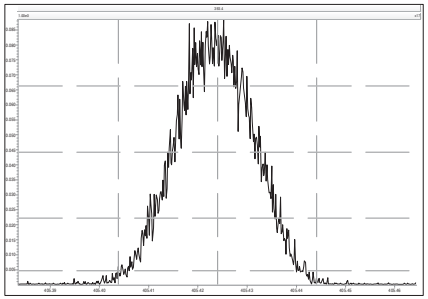
M 380.9760 R 11263



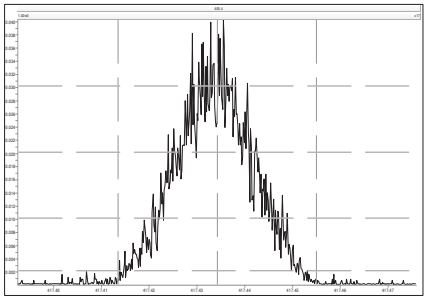
M 392.9760 R 11629



M 404.9760 R 11160



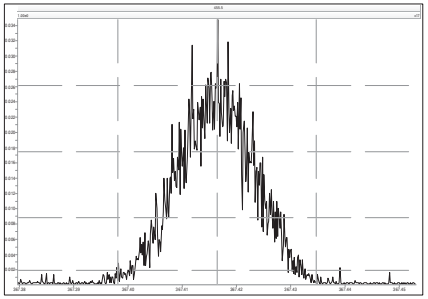
M 416.9760 R 11213



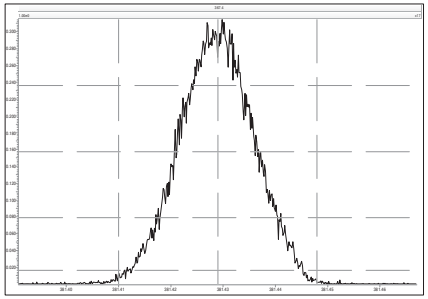
File: Experiment: df_cl4-8_db5.exp Reference: DF.ref Function: 3 @ 200 (ppm)

Printed: Wednesday, August 28, 2019 11:00:39 Eastern Daylight Time

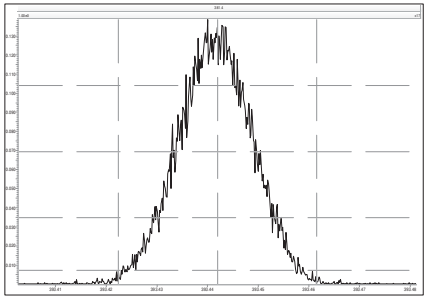
M 366.9792 R 12076



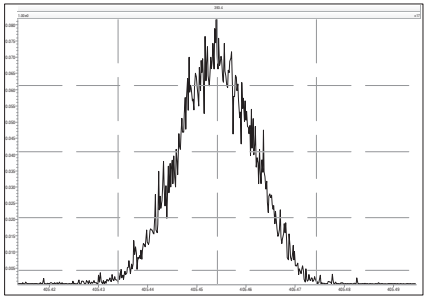
M 380.9760 R 11626



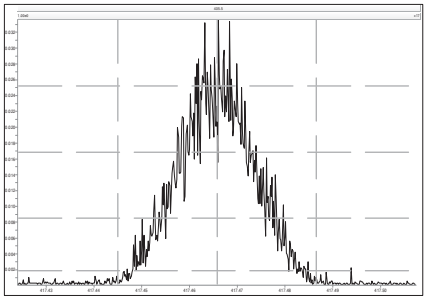
M 392.9760 R 11679



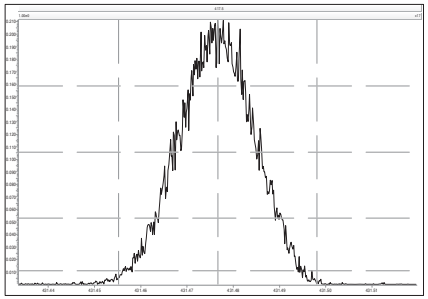
M 404.9760 R 11901



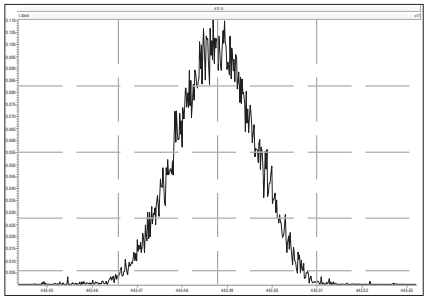
M 416.9760 R 11363



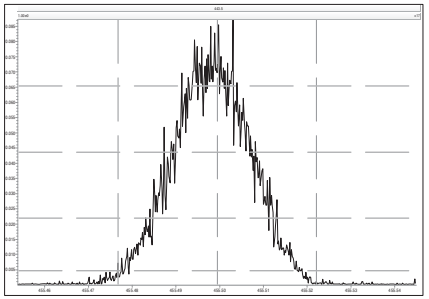
M 430.9728 R 11064



M 442.9728 R 11794



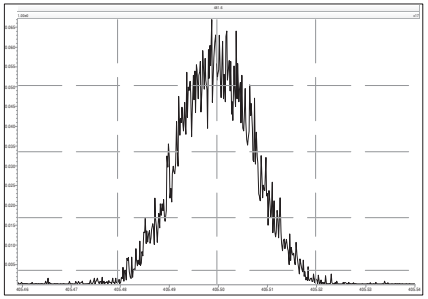
M 454.9728 R 10917



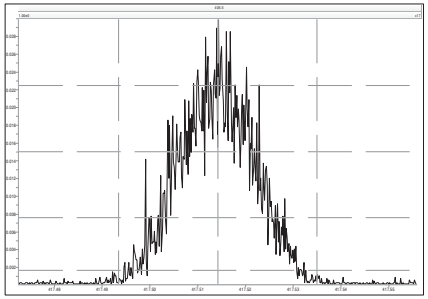
File: Experiment: df_cl4-8_db5.exp Reference: DF.ref Function: 4 @ 200 (ppm)

Printed: Wednesday, August 28, 2019 11:01:01 Eastern Daylight Time

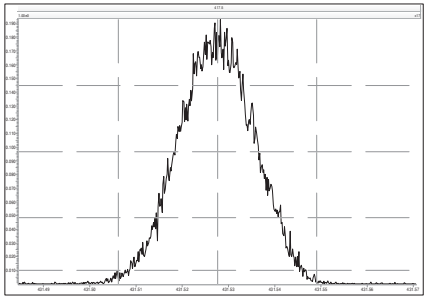
M 404.9760 R 11963



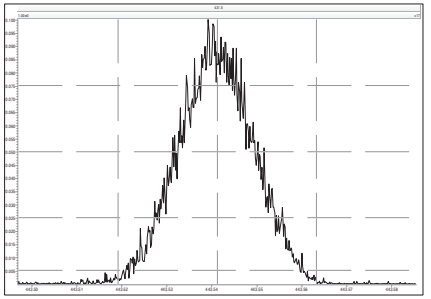
M 416.9760 R 12136



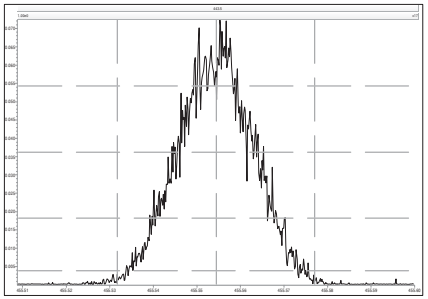
M 430.9728 R 11468



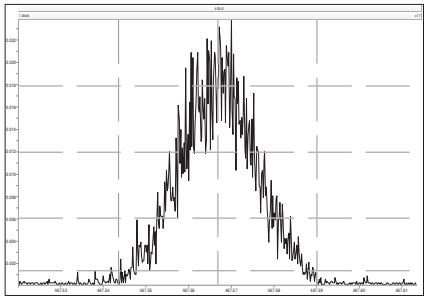
M 442.9728 R 11315



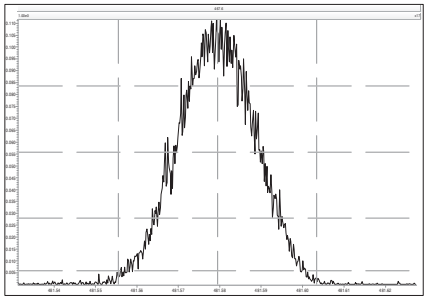
M 454.9728 R 11680



M 466.9728 R 11309



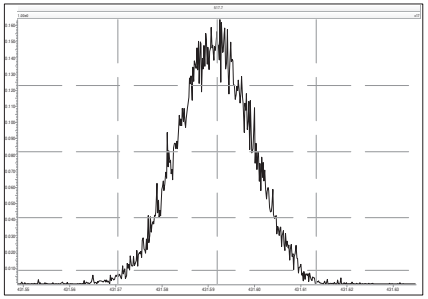
M 480.9696 R 11628



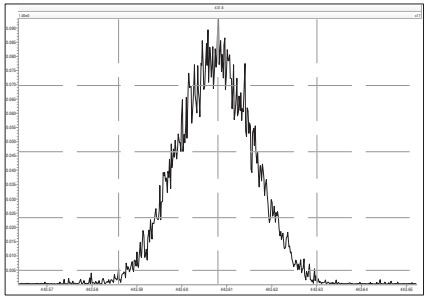
File: Experiment: df_cl4-8_db5.exp Reference: DF.ref Function: 5 @ 200 (ppm)

Printed: Wednesday, August 28, 2019 11:01:22 Eastern Daylight Time

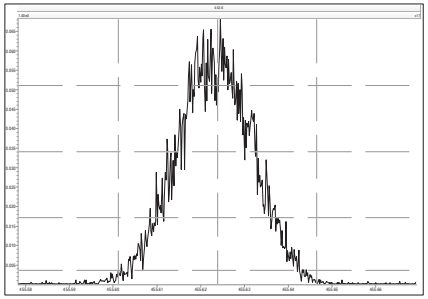
M 430.9728 R 11629



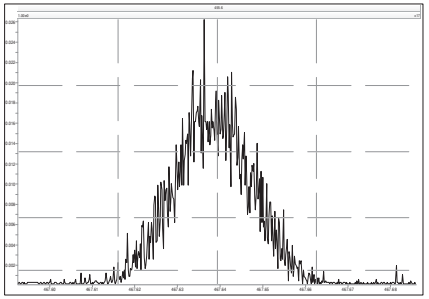
M 442.9728 R 11161



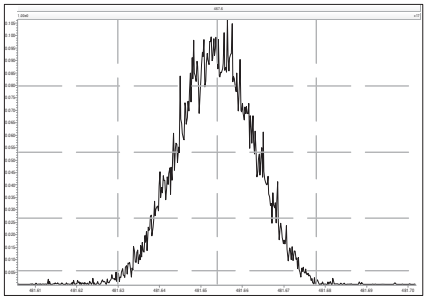
M 454.9728 R 11848



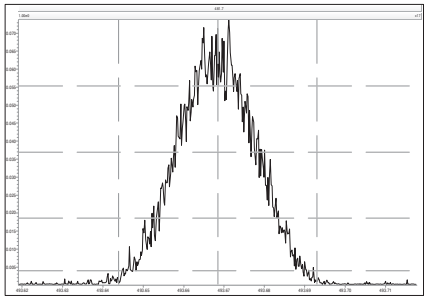
M 466.9728 R 12253



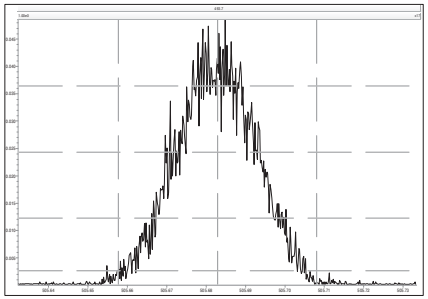
M 480.9696 R 11794



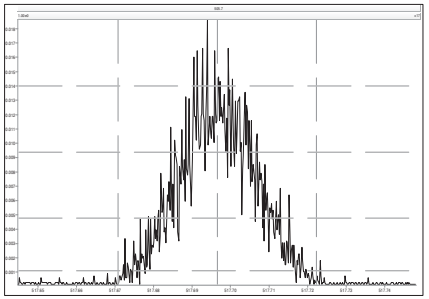
M 492.9696 R 11208



M 504.9696 R 11111

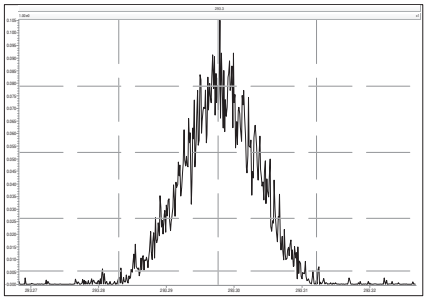


M 516.9697 R 12758

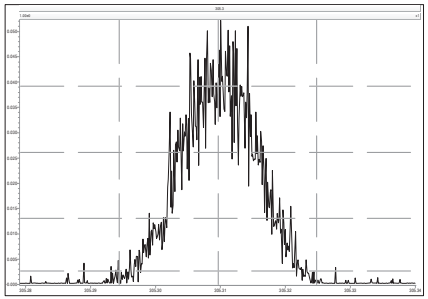


Printed: Wednesday, August 28, 2019 22:00:22 Eastern Daylight Time

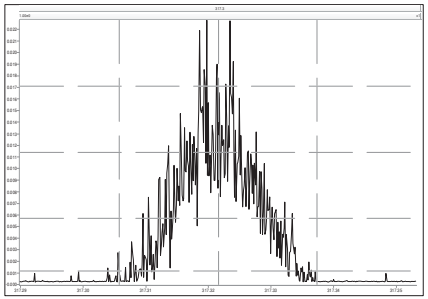
M 292.9824 R 12325



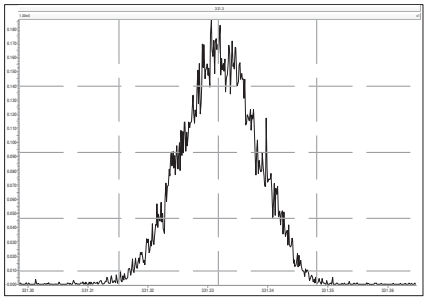
M 304.9824 R 13037



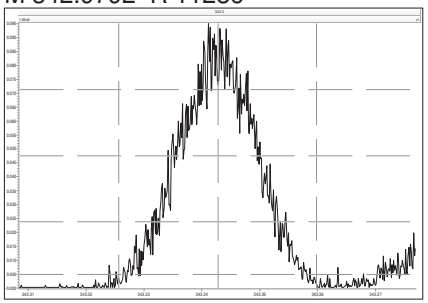
M 316.9824 R 16181



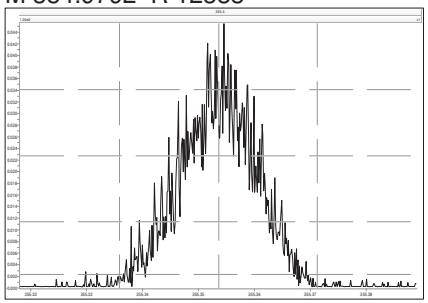
M 330.9792 R 11522



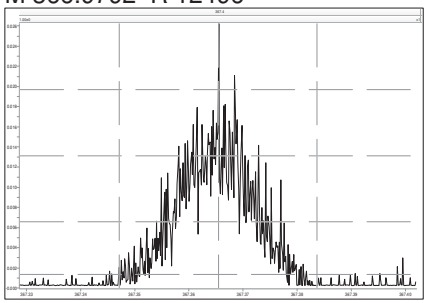
M 342.9792 R 11286



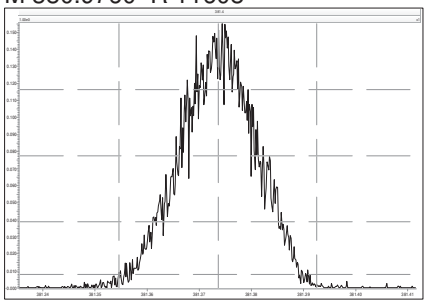
M 354.9792 R 12383



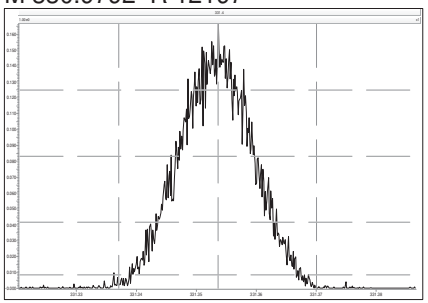
M 366.9792 R 12496



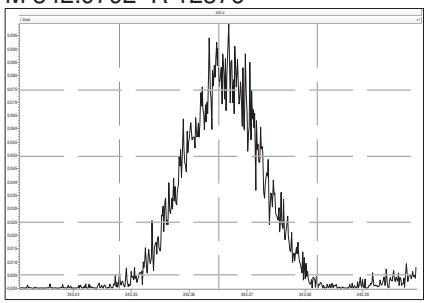
M 380.9760 R 11608



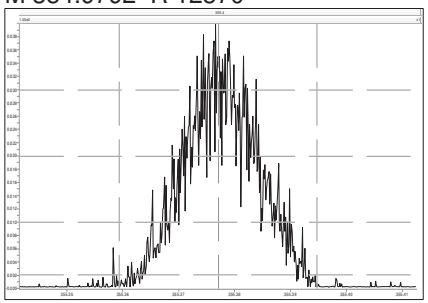
M 330.9792 R 12197



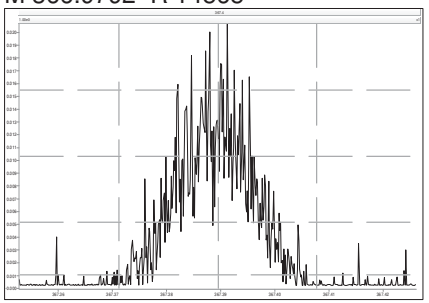
M 342.9792 R 12376



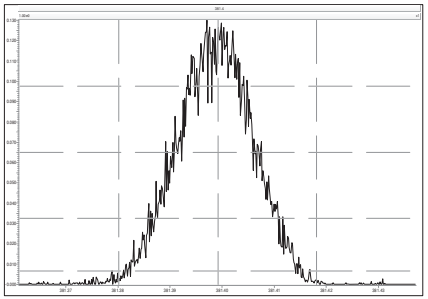
M 354.9792 R 12570



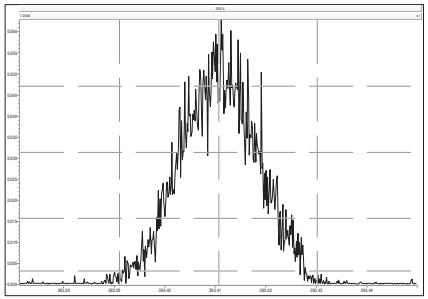
M 366.9792 R 14565



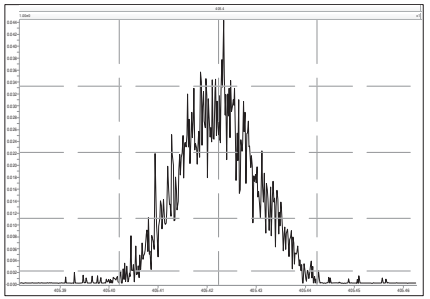
M 380.9760 R 11879



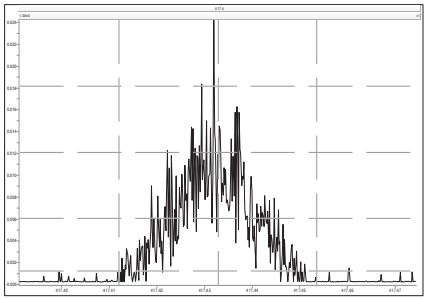
M 392.9760 R 13043



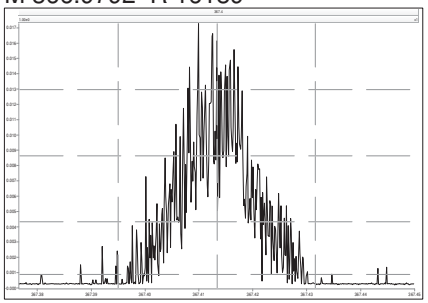
M 404.9760 R 11779



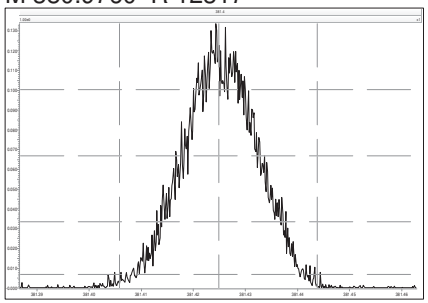
M 416.9760 R 14379



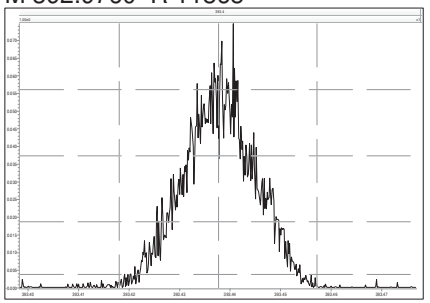
M 366.9792 R 16189



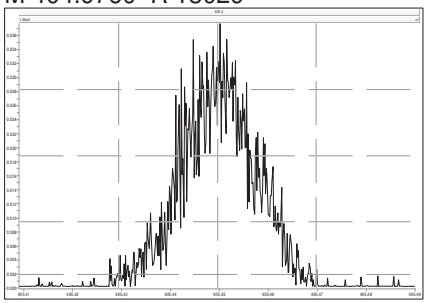
M 380.9760 R 12317



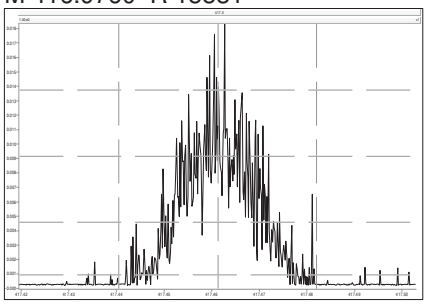
M 392.9760 R 11865



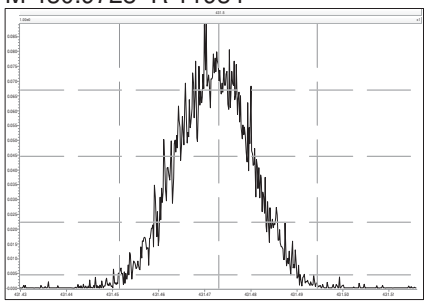
M 404.9760 R 13029



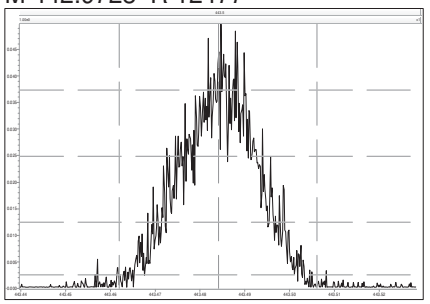
M 416.9760 R 15531



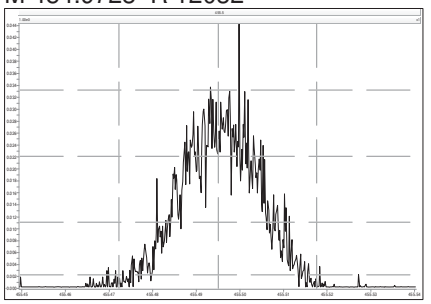
M 430.9728 R 11934



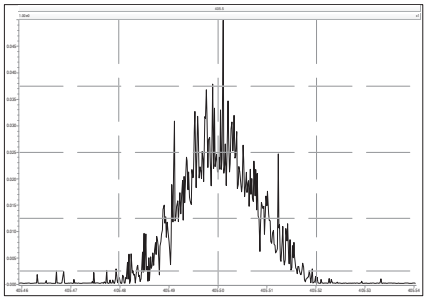
M 442.9728 R 12477



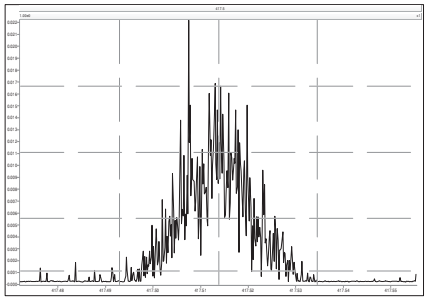
M 454.9728 R 12032



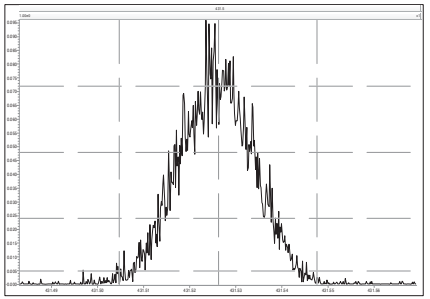
M 404.9760 R 12953



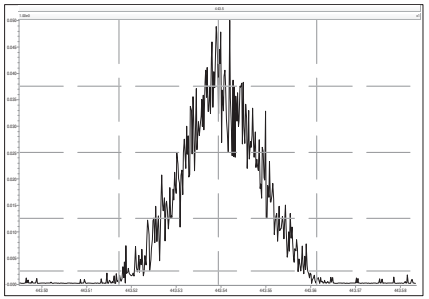
M 416.9760 R 17187



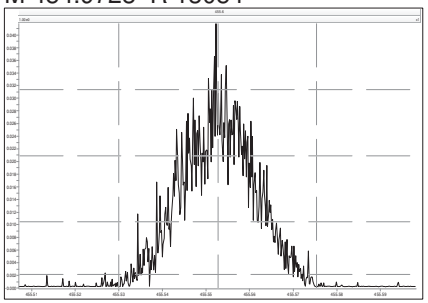
M 430.9728 R 11876



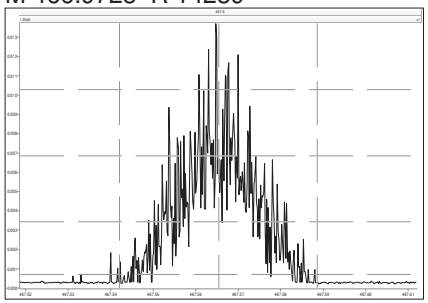
M 442.9728 R 12048



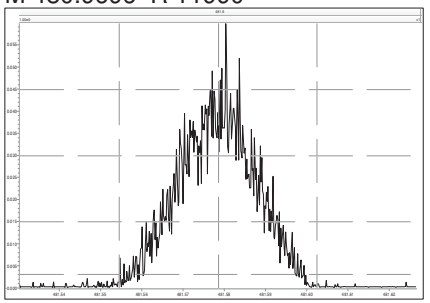
M 454.9728 R 13054



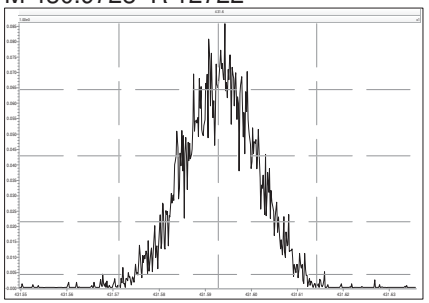
M 466.9728 R 14239



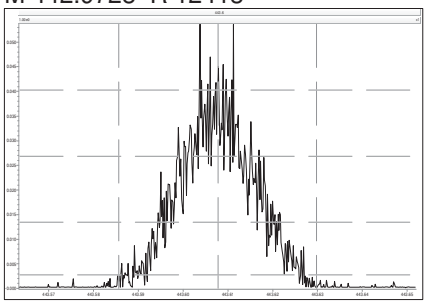
M 480.9696 R 11990



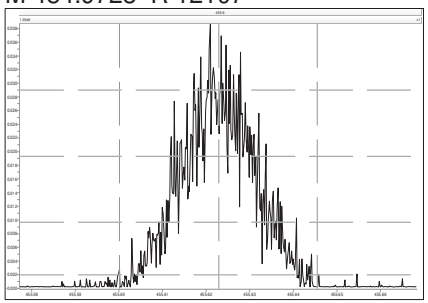
M 430.9728 R 12722



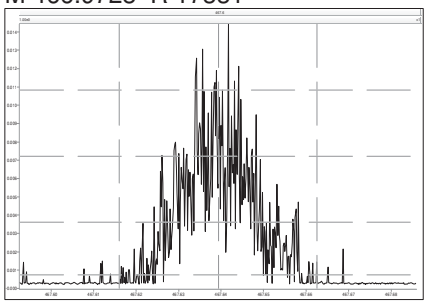
M 442.9728 R 12413



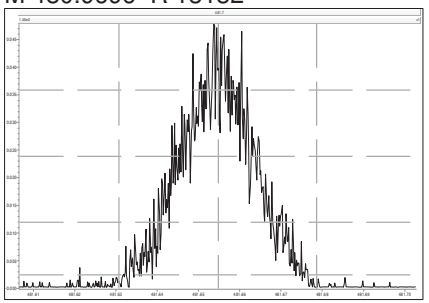
M 454.9728 R 12107



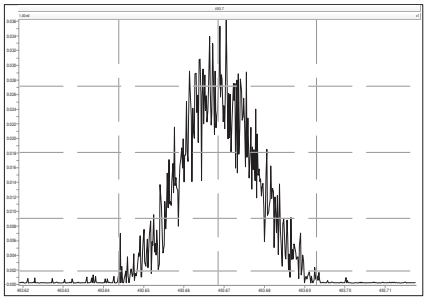
M 466.9728 R 17331



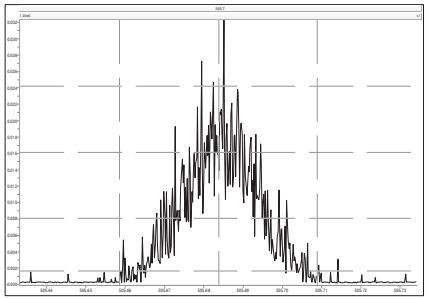
M 480.9696 R 13132



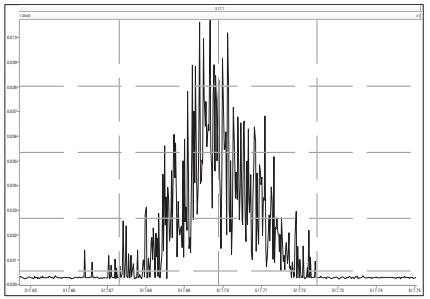
M 492.9696 R 13230



M 504.9696 R 12533



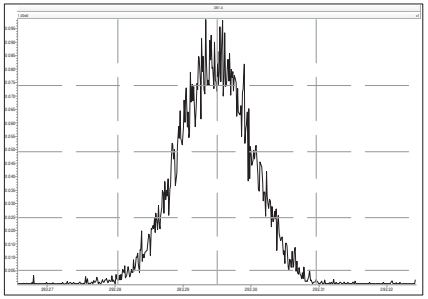
M 516.9697 R 12541



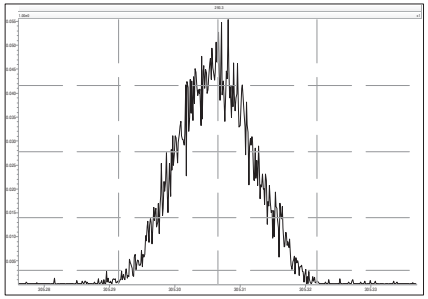
File: Experiment: df_cl4-8_db5.exp Reference: DF.ref Function: 1 @ 200 (ppm)

Printed: Thursday, August 29, 2019 08:50:48 Eastern Daylight Time

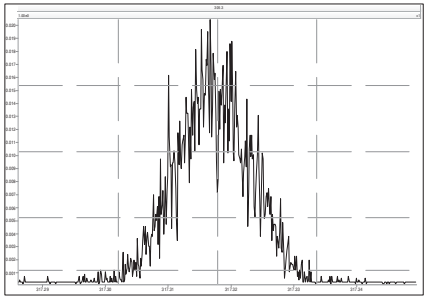
M 292.9824 R 11731



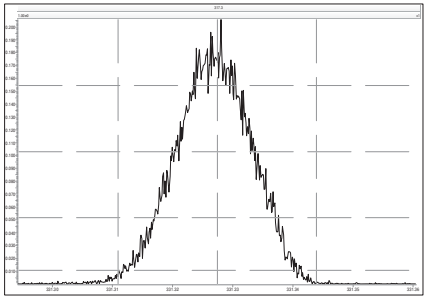
M 304.9824 R 12076



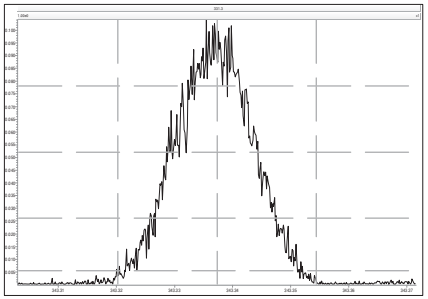
M 316.9824 R 13815



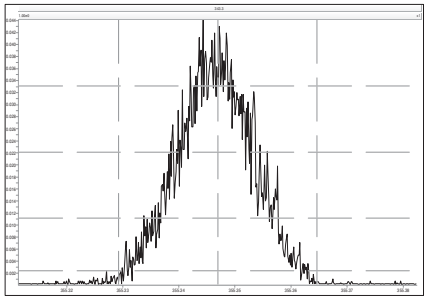
M 330.9792 R 11360



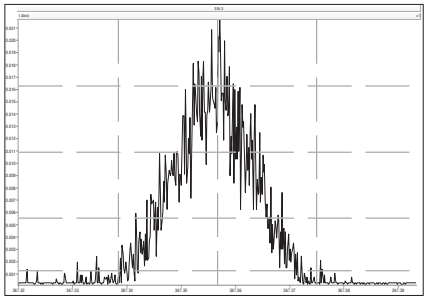
M 342.9792 R 11364



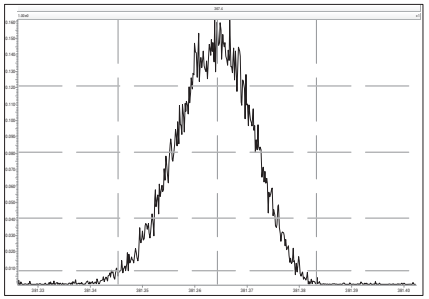
M 354.9792 R 11847



M 366.9792 R 12497



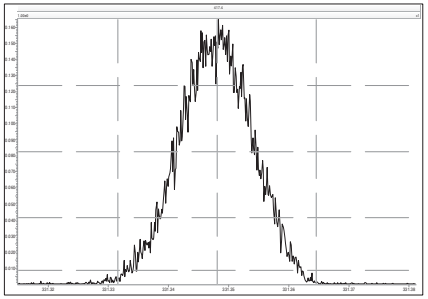
M 380.9760 R 11258



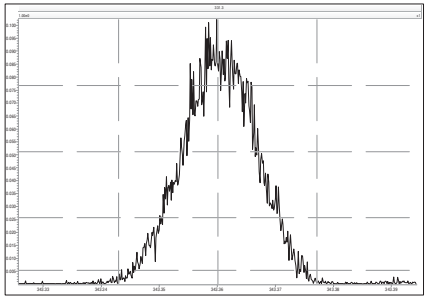
File: Experiment: df_cl4-8_db5.exp Reference: DF.ref Function: 2 @ 200 (ppm)

Printed: Thursday, August 29, 2019 08:51:09 Eastern Daylight Time

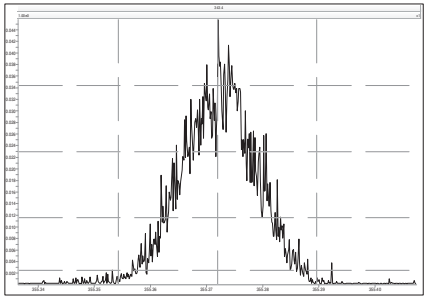
M 330.9792 R 11309



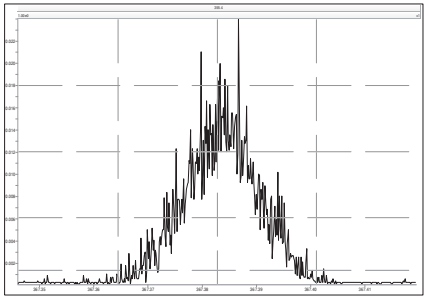
M 342.9792 R 12131



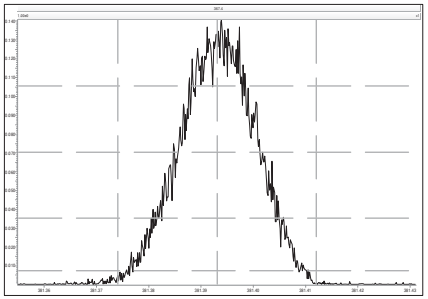
M 354.9792 R 11848



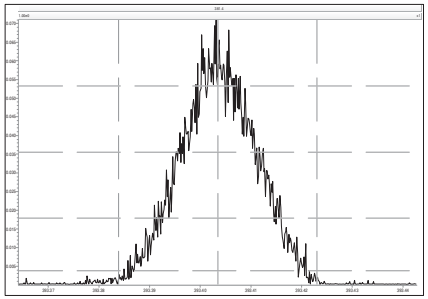
M 366.9792 R 12957



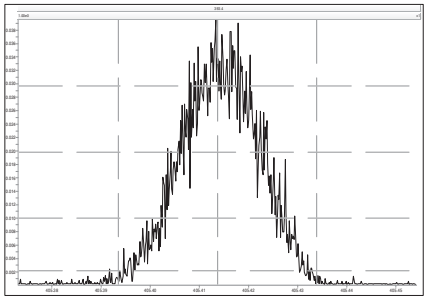
M 380.9760 R 11259



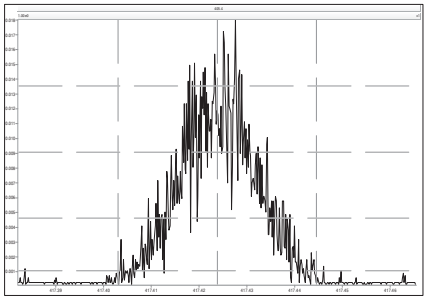
M 392.9760 R 11962



M 404.9760 R 11363



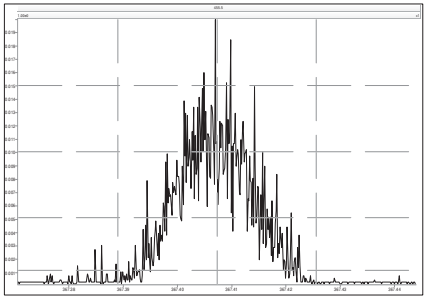
M 416.9760 R 12498



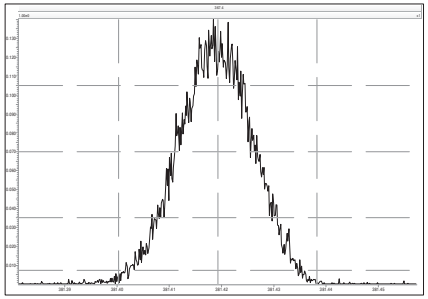
File: Experiment: df_cl4-8_db5.exp Reference: DF.ref Function: 3 @ 200 (ppm)

Printed: Thursday, August 29, 2019 08:51:30 Eastern Daylight Time

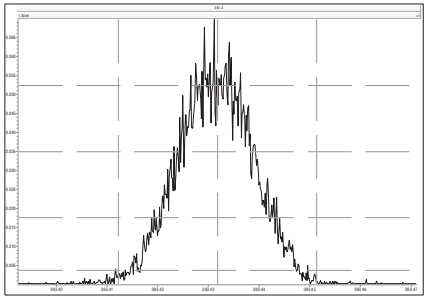
M 366.9792 R 12885



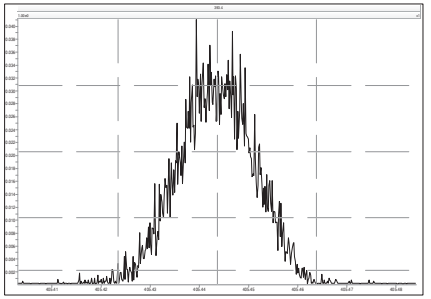
M 380.9760 R 11795



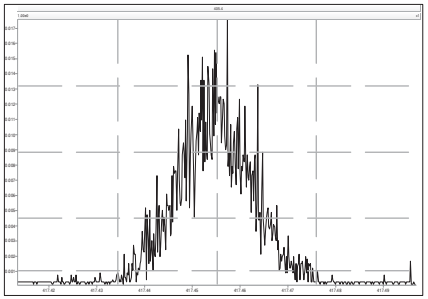
M 392.9760 R 11258



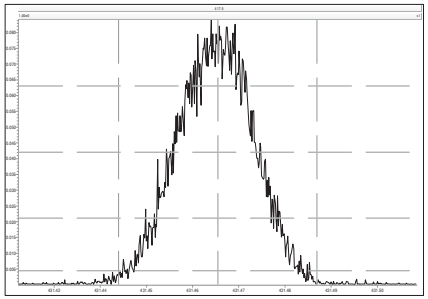
M 404.9760 R 12195



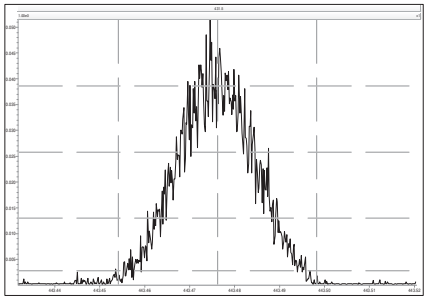
M 416.9760 R 12562



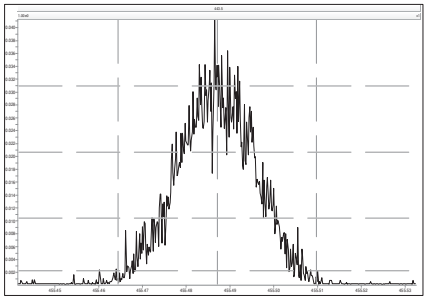
M 430.9728 R 11362



M 442.9728 R 11575



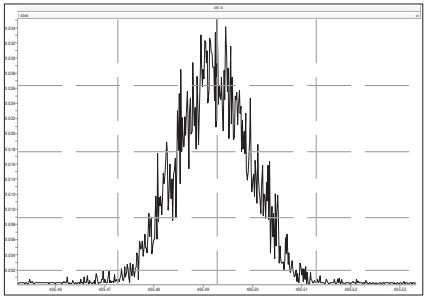
M 454.9728 R 12195



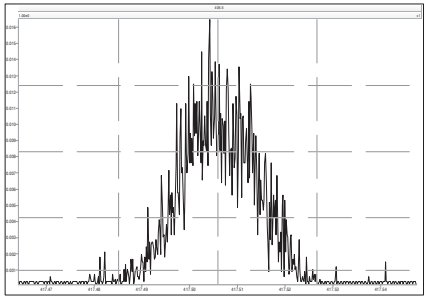
File: Experiment: df_cl4-8_db5.exp Reference: DF.ref Function: 4 @ 200 (ppm)

Printed: Thursday, August 29, 2019 08:51:49 Eastern Daylight Time

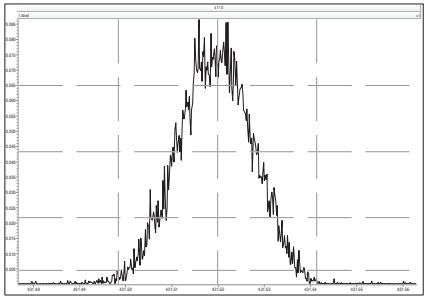
M 404.9760 R 12822



M 416.9760 R 13021



M 430.9728 R 11737



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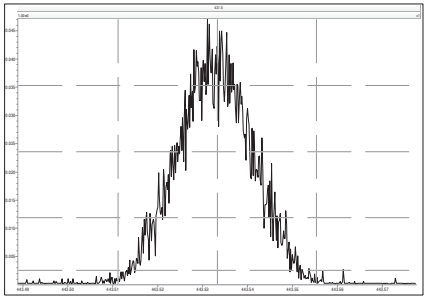

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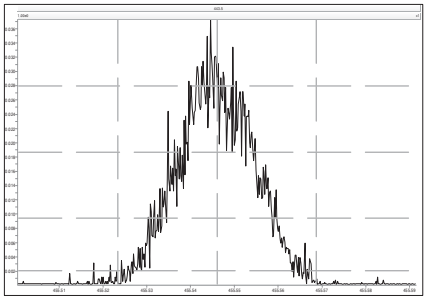

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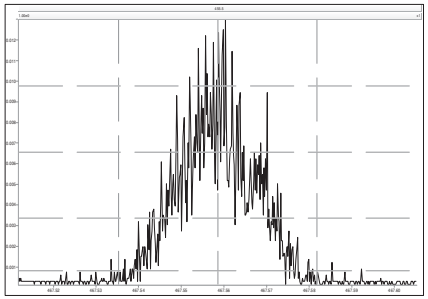

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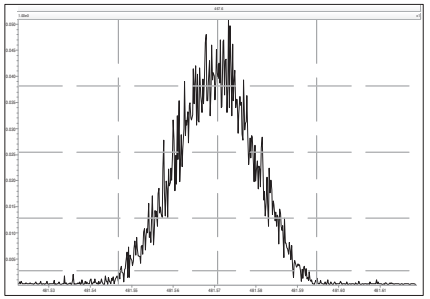

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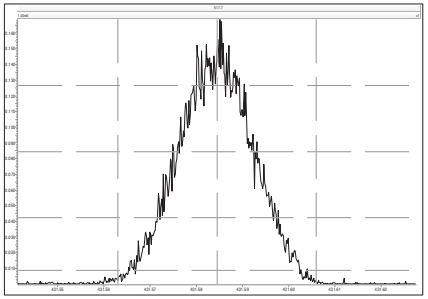

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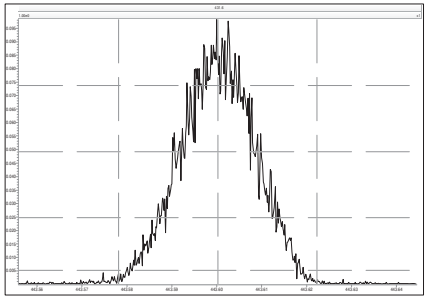

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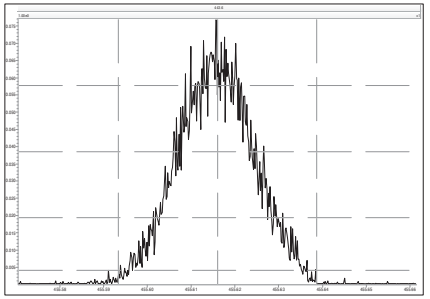

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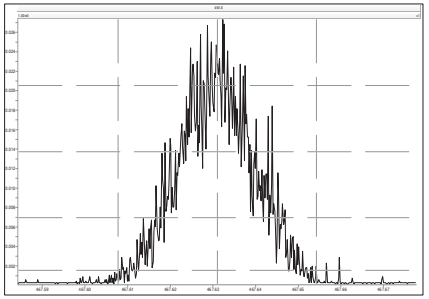

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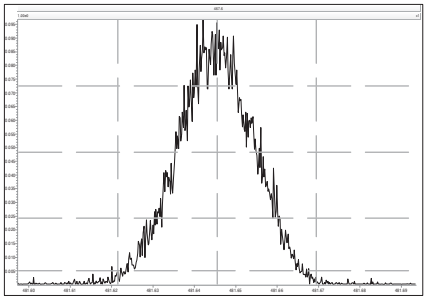

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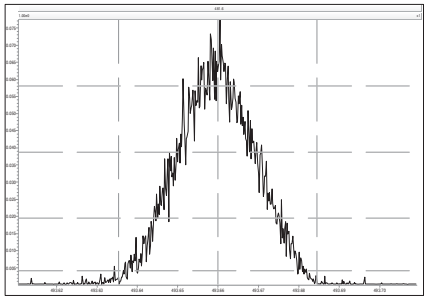

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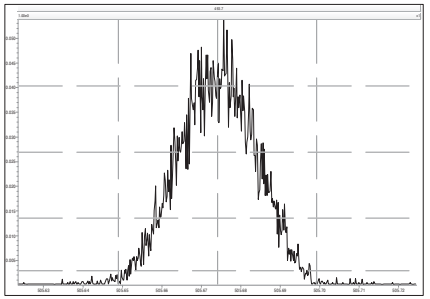

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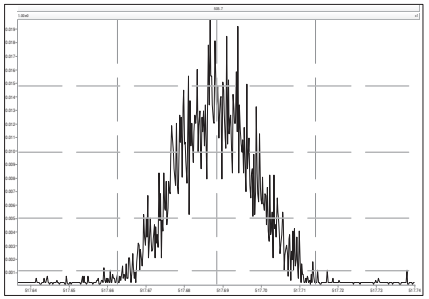

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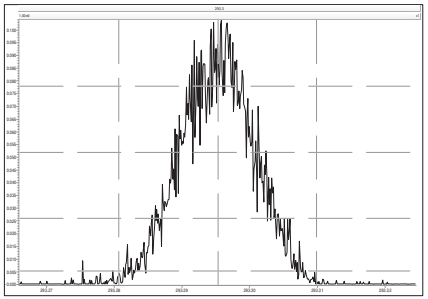

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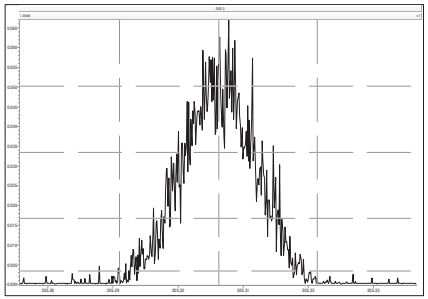

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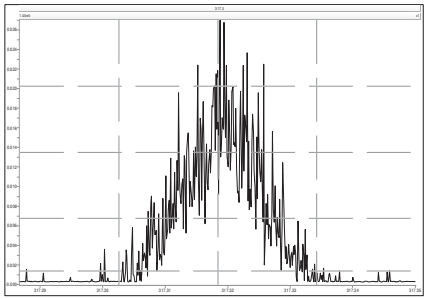

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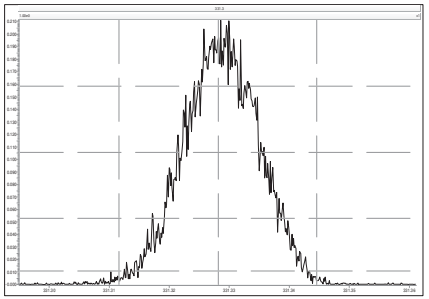

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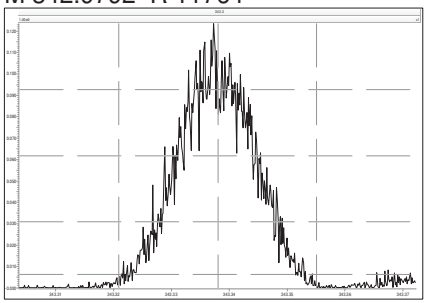

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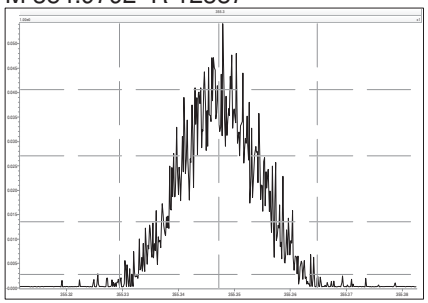

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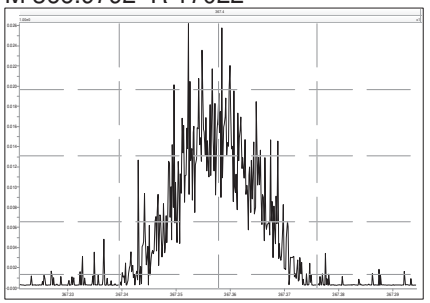

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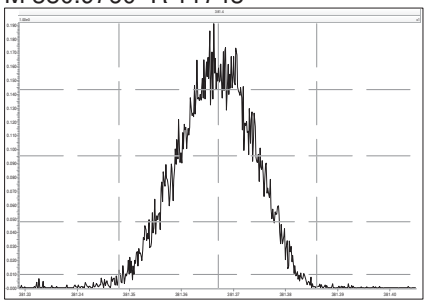

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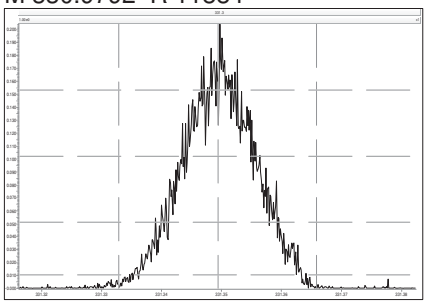

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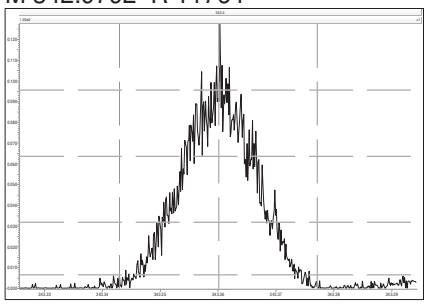

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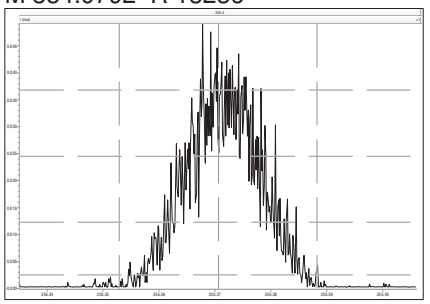

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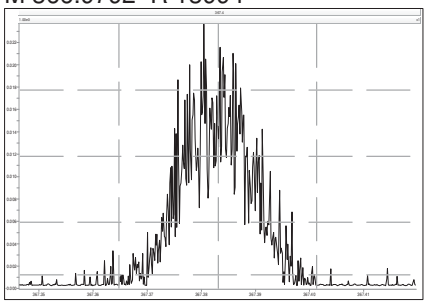

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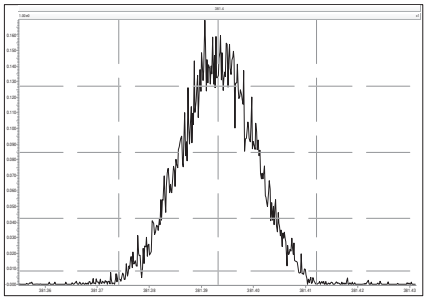

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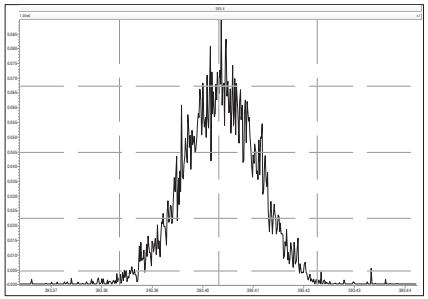

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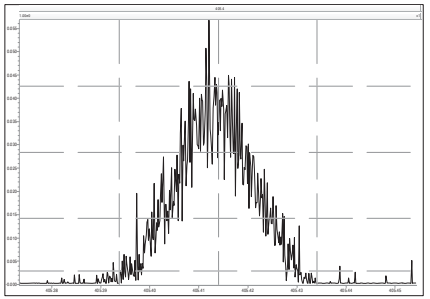

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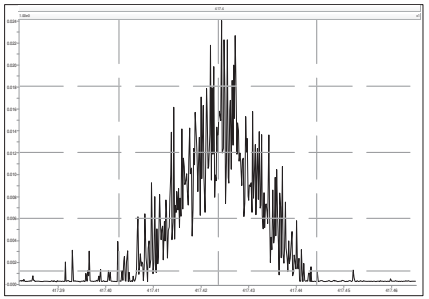

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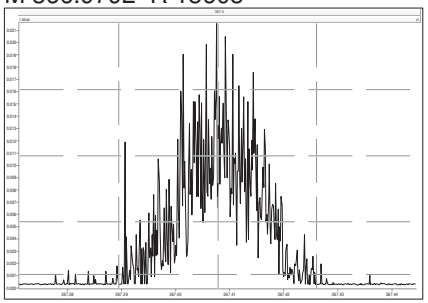

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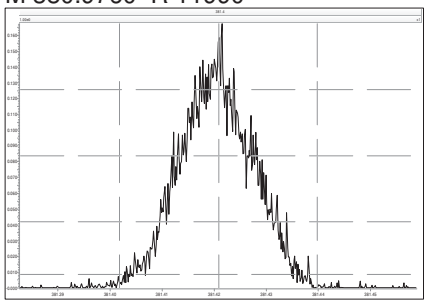

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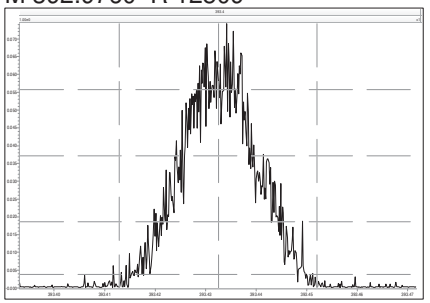

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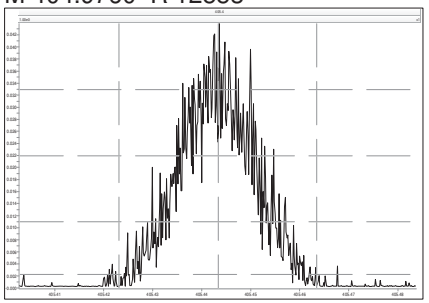

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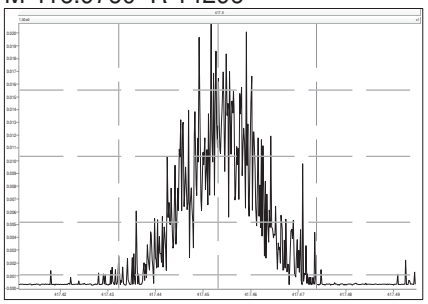

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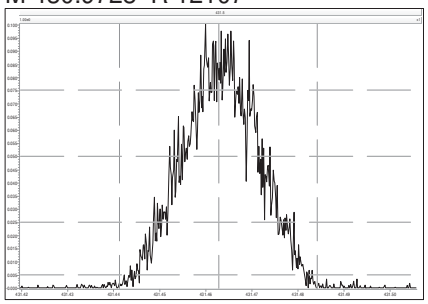

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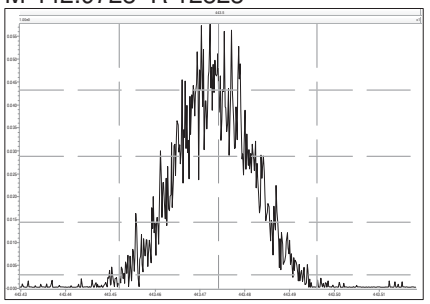

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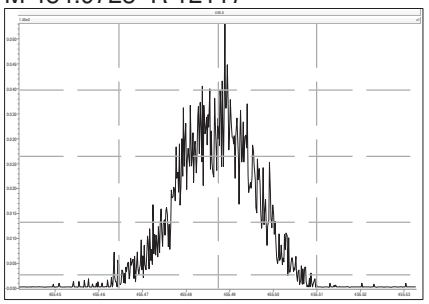

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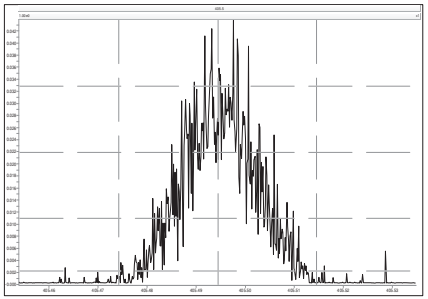

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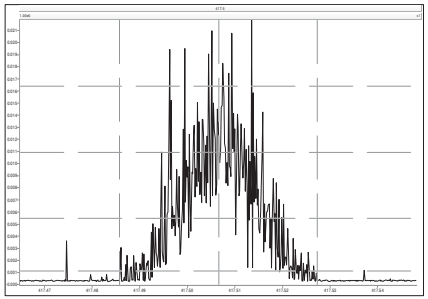

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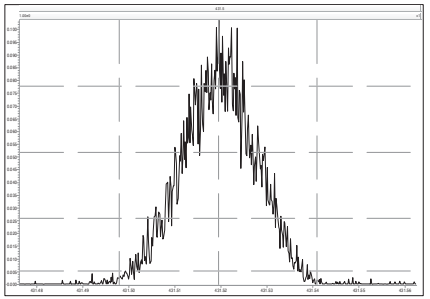

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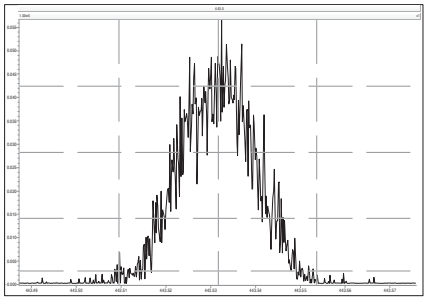

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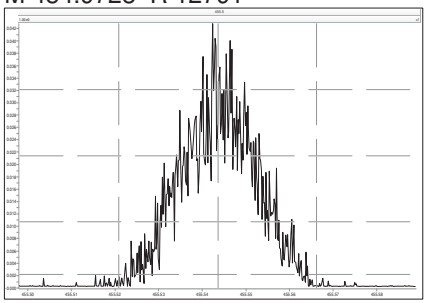

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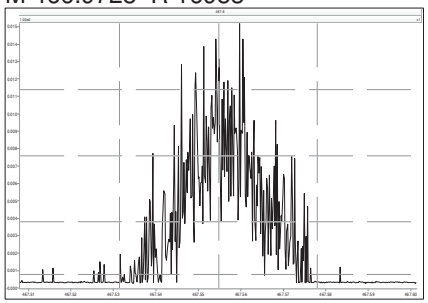

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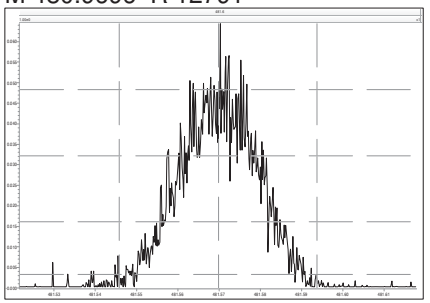

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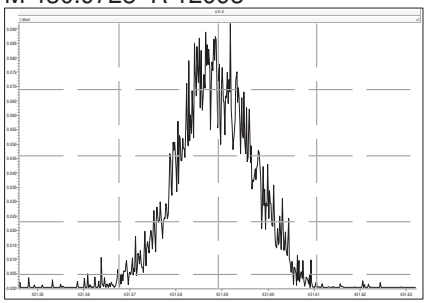

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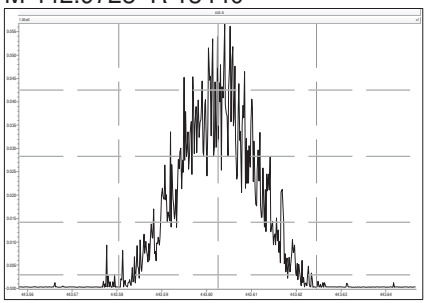

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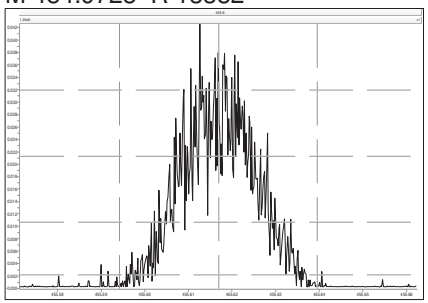

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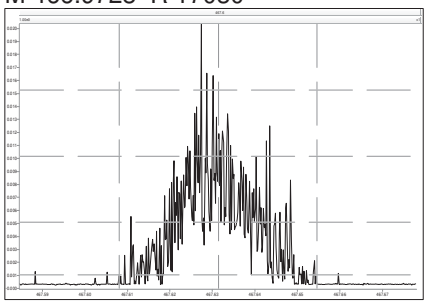

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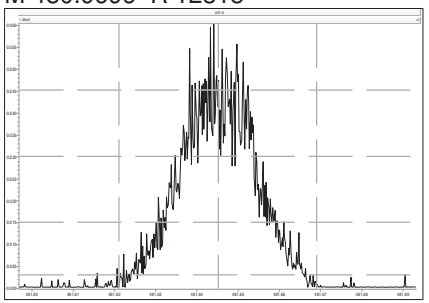

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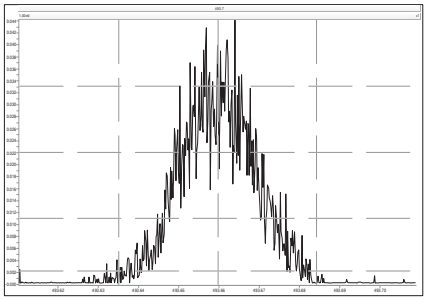

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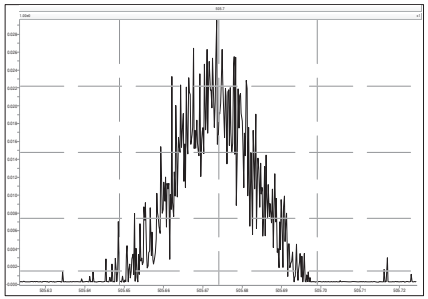

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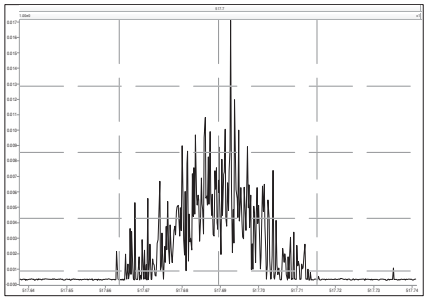


REVIEWED
Amber_Kornegay , 16:13:26, 08/13/2020

Lab ID: OPR1_17665_DF **Acq'd:** 13 Aug 2020 05:09 DTF **Wt/Vol:** 1 uL **ICAL:** HRMS3_DF_10122018_28AUG2019

Client ID: 0_17665_OPR001 **UTP:** 13-Aug-2020 15:11:51 DTF **J-level:** 0.25 pg/uL **Split:** 1 **Checkcode:** 127-038-HJG

Datafile: 200812C23 **Report:** 13 Aug 2020 15:16 TF **Stds (pg):** JS: 100 ES: 100 CS/SS: 100, 40 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	26.90		1.0008	1.0009	+0.2	8.35E+06	0.80	Y	1.19	10.2	4559	0.0605
12378-PeCDD	32.62		1.0006	1.0006	0	2.70E+07	1.54	Y	0.98	51	4268	0.0704
123478-HxCDD	36.68		1.0004	1.0004	0	2.47E+07	1.24	Y	1.02	57.1	4595	0.0886
123678-HxCDD	36.80		1.0036	1.0036	0	2.59E+07	1.26	Y	1.09	55.1	4595	0.0878
123789-HxCDD	37.10		1.0118	1.0118	0	2.55E+07	1.24	Y	0.97	55.4	4595	0.0937
1234678-HpCDD	40.17		1.0003	1.0003	0	1.94E+07	1.04	Y	0.98	55.3	5358	0.159
OCDD	42.92		1.0003	1.0003	0	2.47E+07	0.91	Y	1.07	115	5647	0.445
2378-TCDF	25.95		1.0009	1.0010	+0.2	1.22E+07	0.73	Y	1.01	11.5	3449	0.0375
12378-PeCDF	31.08		1.0006	1.0006	0	4.08E+07	1.51	Y	0.96	51.7	5419	0.0643
23478-PeCDF	32.25		1.0005	1.0005	0	4.49E+07	1.54	Y	0.99	57.5	5419	0.0631
123478-HxCDF	35.67		1.0005	1.0005	0	3.60E+07	1.24	Y	1.21	52.6	6538	0.0812
123678-HxCDF	35.81		1.0005	1.0004	-0.2	3.65E+07	1.25	Y	1.11	51.1	6538	0.0845
234678-HxCDF	36.49		1.0004	1.0005	+0.2	3.55E+07	1.24	Y	1.12	55.4	6538	0.0881
123789-HxCDF	37.47		1.0005	1.0005	0	3.15E+07	1.23	Y	1.11	51.5	6538	0.102
1234678-HpCDF	39.15		1.0003	1.0003	0	2.77E+07	1.00	Y	1.32	51.5	3060	0.0548
1234789-HpCDF	40.60		1.0003	1.0002	-0.2	2.17E+07	1.02	Y	1.26	49.4	3060	0.0767
OCDF	43.06		1.0003	1.0002	-0.3	2.88E+07	0.88	Y	1.03	104	3443	0.209

Name	Act RT	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	26.88	1.0266	1.0268	+0.3	6.91E+07	0.81	Y	0.99	99.8
ES 12378-PeCDD	32.60	1.2430	1.2452	+4.3	5.38E+07	1.54	Y	0.83	92.6
ES 123478-HxCDD	36.67	0.9916	0.9915	-0.2	4.23E+07	1.28	Y	0.95	88.7
ES 123678-HxCDD	36.78	0.9947	0.9945	-0.4	4.33E+07	1.27	Y	0.98	88.1
ES 123789-HxCDD	37.08	1.0029	1.0028	-0.2	4.74E+07	1.24	Y	1.14	82.7
ES 1234678-HpCDD	40.16	1.0851	1.0861	+2.4	3.59E+07	1.08	Y	0.90	79.4
ES OCDD	42.90	1.1584	1.1602	+4.6	4.01E+07	0.90	Y	0.63	63.5
ES 2378-TCDF	25.93	1.0602	1.0608	+0.9	1.05E+08	0.80	Y	1.00	102
ES 12378-PeCDF	31.07	1.2683	1.2710	+5.0	8.18E+07	1.61	Y	0.83	95.3
ES 23478-PeCDF	32.23	1.3156	1.3188	+6.2	7.92E+07	1.58	Y	0.81	95.1
ES 123478-HxCDF	35.65	0.9644	0.9642	-0.4	5.66E+07	0.53	Y	1.12	100
ES 123678-HxCDF	35.80	0.9682	0.9681	-0.2	6.45E+07	0.53	Y	1.33	96.2
ES 234678-HxCDF	36.47	0.9864	0.9863	-0.2	5.74E+07	0.52	Y	1.21	94.4
ES 123789-HxCDF	37.45	1.0128	1.0127	-0.2	5.53E+07	0.52	Y	1.12	98.1
ES 1234678-HpCDF	39.14	1.0578	1.0583	+1.2	4.06E+07	0.45	Y	0.92	87.2
ES 1234789-HpCDF	40.59	1.0967	1.0976	+2.2	3.50E+07	0.46	Y	0.82	84.8
ES OCDF	43.05	1.1623	1.1640	+4.4	5.36E+07	0.93	Y	0.78	68.2

Lab ID: OPR1_17665_DF | Acq'd: 13 Aug 2020 05:09 DTF | Wt/Vol: 1 uL | ICAL: HRMS3_DF_10122018_28AUG2019

Client ID: 0_17665_OPR001 | UTP: 13-Aug-2020 15:11:51 DTF | J-level: 0.25 pg/uL | Split: 1 | Checkcode: 127-038-HJG

Datafile: 200812C23 | Report: 13 Aug 2020 15:16 TF | Stds (pg): JS: 100 ES: 100 CS/SS: 100, 40 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
JS 1234-TCDD	26.18		-	-	-	7.00E+07	0.82	Y	-	-
JS 1234-TCDF	24.44		-	-	-	1.03E+08	0.78	Y	-	-
JS 123467-HxCDD	36.98		-	-	-	2.52E+07	1.25	Y	-	-
CS 37Cl-2378-TCDD	26.91		1.0276	1.0277	+0.2	3.31E+07	n/a	-	1.12	106
CS 12347-PeCDD	32.08		1.2233	1.2254	+4.0	5.36E+07	1.63	Y	0.71	107
CS 12346-PeCDF	30.51		1.2459	1.2484	+4.6	8.26E+07	1.57	Y	0.81	98.8
CS 123469-HxCDF	36.11		0.9767	0.9765	-0.4	5.85E+07	0.53	Y	1.12	103
CS 1234689-HpCDF	39.58		1.0696	1.0704	+1.9	4.31E+07	0.45	Y	0.90	95.5
~~SS 37Cl-2378-TCDD~~	~~26.91~~		~~1.0276~~	~~1.0277~~	~~+0.2~~	~~3.31E+07~~	~~n/a~~		~~1.14~~	~~105~~
~~SS 12347-PeCDD~~	~~32.08~~		~~1.2233~~	~~1.2254~~	~~+4.0~~	~~5.36E+07~~	~~1.63~~	~~Y~~	~~0.86~~	~~116~~
~~SS 12346-PeCDF~~	~~30.51~~		~~1.2459~~	~~1.2484~~	~~+4.6~~	~~8.26E+07~~	~~1.57~~	~~Y~~	~~0.98~~	~~103~~
~~SS 123469-HxCDF~~	~~36.11~~		~~0.9767~~	~~0.9765~~	~~-0.4~~	~~5.85E+07~~	~~0.53~~	~~Y~~	~~0.85~~	~~107~~
~~SS 1234689-HpCDF~~	~~39.58~~		~~1.0696~~	~~1.0704~~	~~+1.9~~	~~4.31E+07~~	~~0.45~~	~~Y~~	~~0.97~~	~~109~~

Totals	Conc	EMPC
Total TCDD	46.6	46.6
Total PeCDD	77.3	77.3
Total HxCDD	183	183
Total HpCDD	69.6	69.6
Total Tetra-Octa Dioxins	491	491
Total TCDF	58.1	58.1
Total PeCDF	132	132
Total HxCDF	224	224
Total HpCDF	101	101
Total Tetra-Octa Furans	619	619
Total Tetra-Octa Dioxins & Furans	1110	1110

* 37Cl correction has been applied to 2378-TCDD

	Original Values	Corrected Values
Ratio	0.79	0.80
Response	8.37E+06	8.35E+06

METHOD 8290A **PCDD/F ONGOING PRECISION AND RECOVERY (OPR)** **FORM 8A**

Lab Name: SGS North America
Initial Calibration: ICAL: HRMS3_DF_10122018_28AUG2019
Instrument ID: HRMS3 GC Column ID: ZB-5ms
VER Data Filename: 200812C23 Analysis Date: 13-AUG-2020 05:09:21
Lab ID: OPR1_17665_DF

NATIVE ANALYTES	SPIKE CONC.	CONC. FOUND	RANGE (ng/mL)			OK
2,3,7,8-TCDD	10	10.2	6.7	-	15.8	Y
1,2,3,7,8-PeCDD	50	51	35	-	71	Y
1,2,3,4,7,8-HxCDD	50	57.1	35	-	82	Y
1,2,3,6,7,8-HxCDD	50	55.1	38	-	67	Y
1,2,3,7,8,9-HxCDD	50	55.4	32	-	81	Y
1,2,3,4,6,7,8-HpCDD	50	55.3	35	-	70	Y
OCDD	100	115	78	-	144	Y
2,3,7,8-TCDF	10	11.5	7.5	-	15.8	Y
1,2,3,7,8-PeCDF	50	51.7	40	-	67	Y
2,3,4,7,8-PeCDF	50	57.5	34	-	80	Y
1,2,3,4,7,8-HxCDF	50	52.6	36	-	67	Y
1,2,3,6,7,8-HxCDF	50	51.1	42	-	65	Y
2,3,4,6,7,8-HxCDF	50	55.4	35	-	78	Y
1,2,3,7,8,9-HxCDF	50	51.5	39	-	65	Y
1,2,3,4,6,7,8-HpCDF	50	51.5	41	-	61	Y
1,2,3,4,7,8,9-HpCDF	50	49.4	39	-	69	Y
OCDF	100	104	63	-	170	Y

Contract-required concentration limits for OPR as specified in Table 6,
Method 1613. 10/94

Processed: 13 Aug 2020 15:16 Analyst: TF

METHOD 8290A **PCDD/F ONGOING PRECISION AND RECOVERY (OPR)** **FORM 8B**

Lab Name: SGS North America

Initial Calibration: ICAL: HRMS3_DF_10122018_28AUG2019

Instrument ID: HRMS3 GC Column ID: ZB-5ms

VER Data Filename: 200812C23 Analysis Date: 13-AUG-2020 05:09:21

Lab ID: OPR1_17665_DF

LABELED ANALYTES	SPIKE CONC.	CONC. FOUND	RANGE (ng/mL)			OK
13C-2,3,7,8-TCDD	100	99.8	20	-	175	Y
13C-1,2,3,7,8-PeCDD	100	92.6	21	-	227	Y
13C-1,2,3,4,7,8-HxCDD	100	88.7	21	-	193	Y
13C-1,2,3,6,7,8-HxCDD	100	88.1	25	-	163	Y
13C-1,2,3,7,8,9-HxCDD	100	82.7	26	-	166	Y
13C-1,2,3,4,6,7,8-HpCDD	100	79.4	26	-	166	Y
13C-OCDD	200	127	26	-	397	Y
13C-2,3,7,8-TCDF	100	102	22	-	152	Y
13C-1,2,3,7,8-PeCDF	100	95.3	21	-	192	Y
13C-2,3,4,7,8-PeCDF	100	95.1	13	-	328	Y
13C-1,2,3,4,7,8-HxCDF	100	100	19	-	202	Y
13C-1,2,3,6,7,8-HxCDF	100	96.2	21	-	159	Y
13C-2,3,4,6,7,8-HxCDF	100	94.4	22	-	176	Y
13C-1,2,3,7,8,9-HxCDF	100	98.1	17	-	205	Y
13C-1,2,3,4,6,7,8-HpCDF	100	87.2	21	-	158	Y
13C-1,2,3,4,7,8,9-HpCDF	100	84.8	20	-	186	Y
13C-OCDF	200	136	26	-	397	Y
CLEANUP STANDARD						
37Cl-2,3,7,8-TCDD	40	42.2	12.4	-	76.4	Y

Contract-required concentration limits for OPR as specified in Table 6, Method 1613. 10/94

Processed: 13 Aug 2020 15:16 Analyst: TF

METHOD 8290A **COLUMN PERFORMANCE AND RETENTION TIME WINDOWS** **FORM CPSM**

Lab Name:	SGS North America		
Initial Calibration:	ICAL: HRMS3_DF_10122018_28AUG2019		
Instrument ID:	HRMS3	GC Column ID:	ZB-5ms
CPSM Data Filename:	200812C23	Analysis Date:	13-AUG-2020 05:09:21
Lab ID:	OPR1_17665_DF		

Window Defining Standards Results

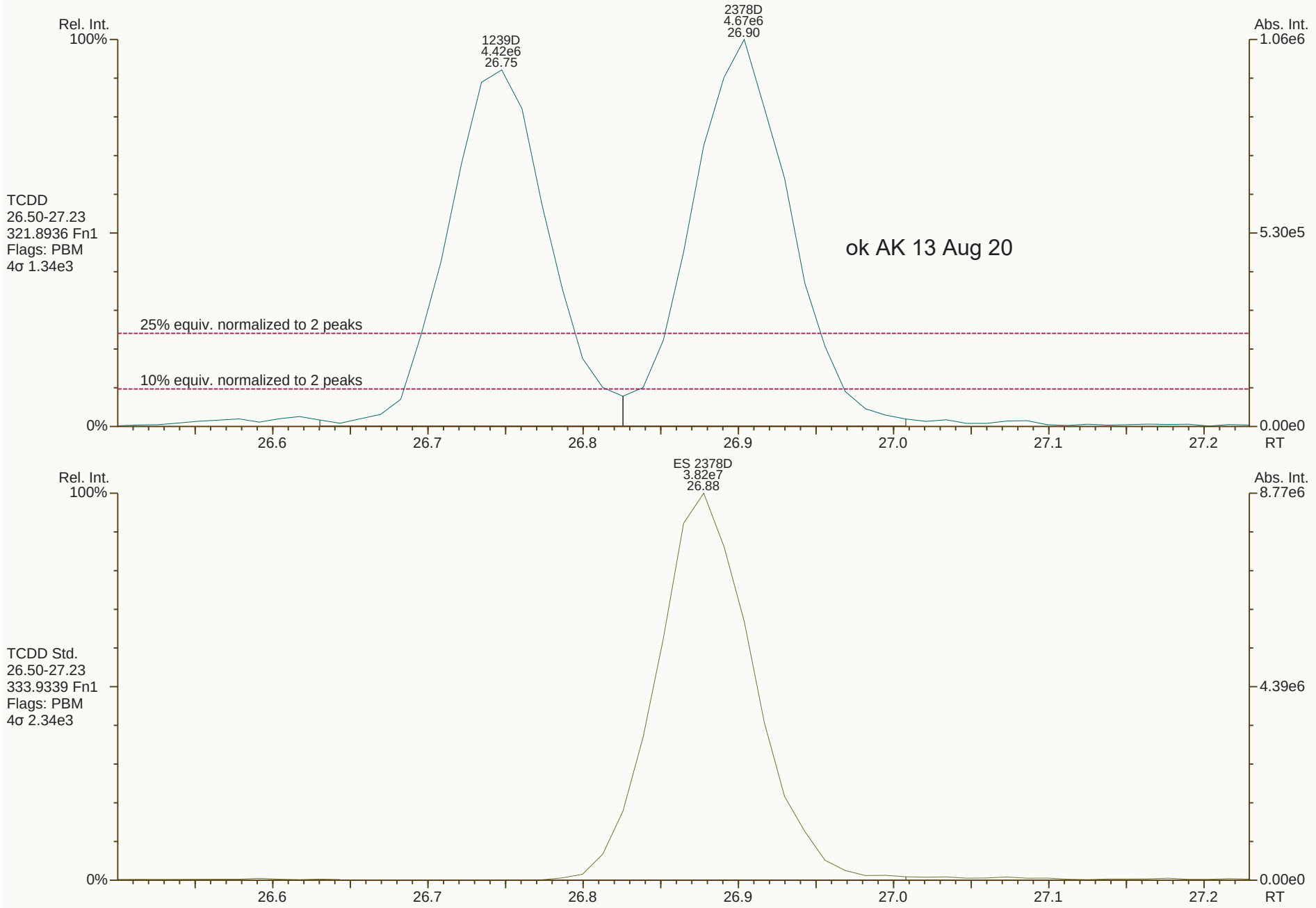
First Eluting Isomer	RT	Last Eluting Isomer	RT
1368-TCDD	22.88	1289-TCDD	27.96
12479/12468-PeCDD	30.01	12389-PeCDD	33.08
124679/124689-HxCDD	34.93	123789-HxCDD	37.10
1234679-HpCDD	39.46	1234678-HpCDD	40.17
1368-TCDF	20.67	1289-TCDF	28.12
13468/12468-PeCDF	28.10	12389-PeCDF	33.37
123468-HxCDF	34.25	123789-HxCDF	37.47
1234678-HpCDF	39.15	1234789-HpCDF	40.60

Isomer Specificity Test Standard Results

Closest Eluting Isomer	RT	2378 Specific Isomer	RT
1239-TCDD	26.75	2378-TCDD	26.90
2348-TCDF	25.84	2378-TCDF	25.95

Processed: 13 Aug 2020 15:16 Analyst: TF

SGS ID: OPR1_17665_DF
Sample ID: 0_17665_OPR001
Acq: 13-Aug-2020 05:09:21
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 16
User: DTF Datafile: 200812C23



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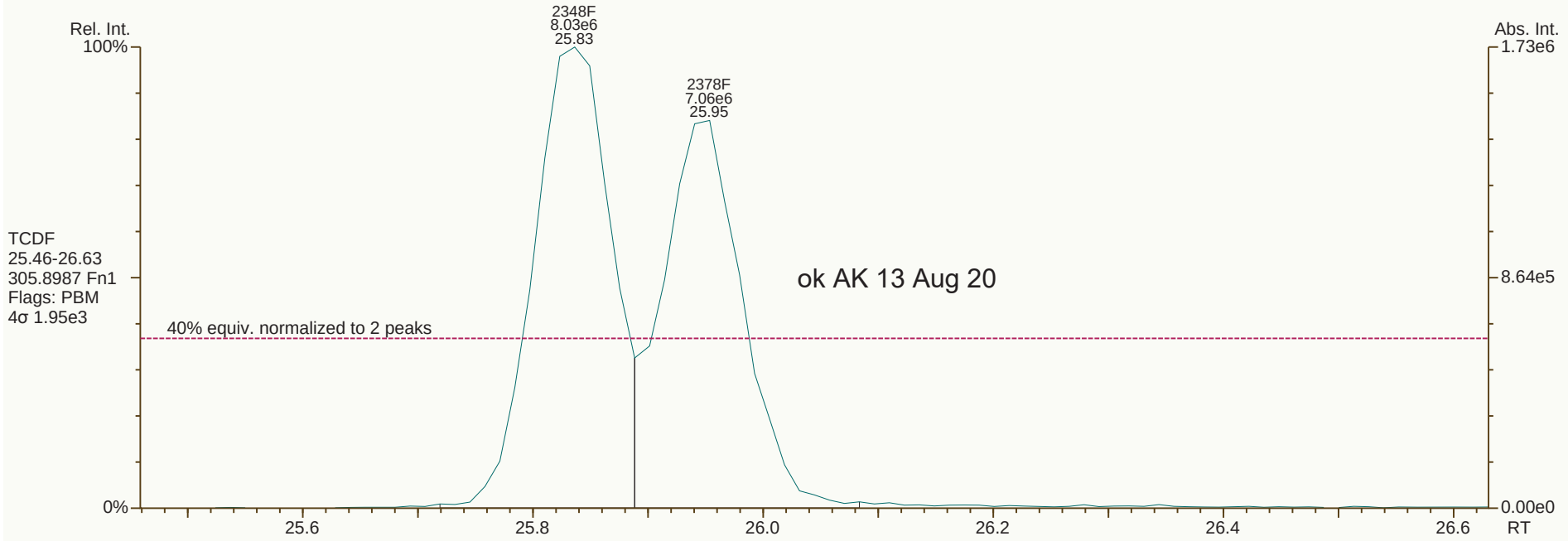
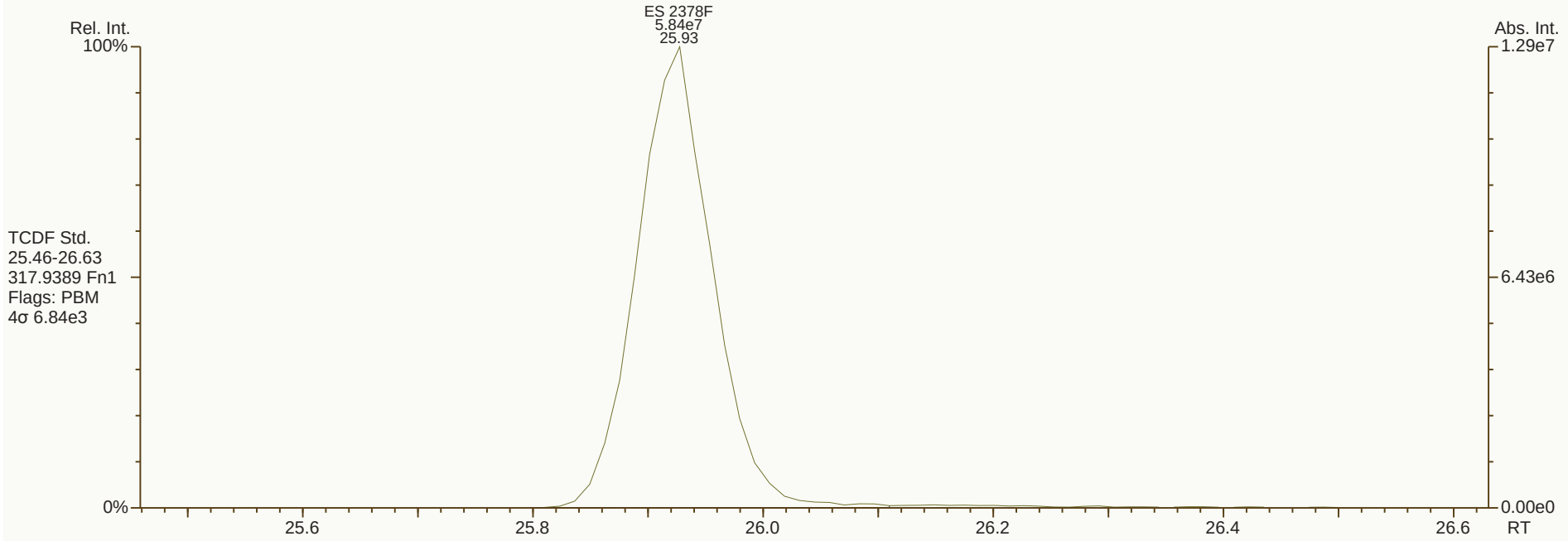
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689
Revised: 13-Aug-2020 15:01 (DTF) Printed: 13-Aug-2020 15:18

SGS ID: OPR1_17665_DF
Sample ID: 0_17665_OPR001
Acq: 13-Aug-2020 05:09:21
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 16
User: DTF Datafile: 200812C23





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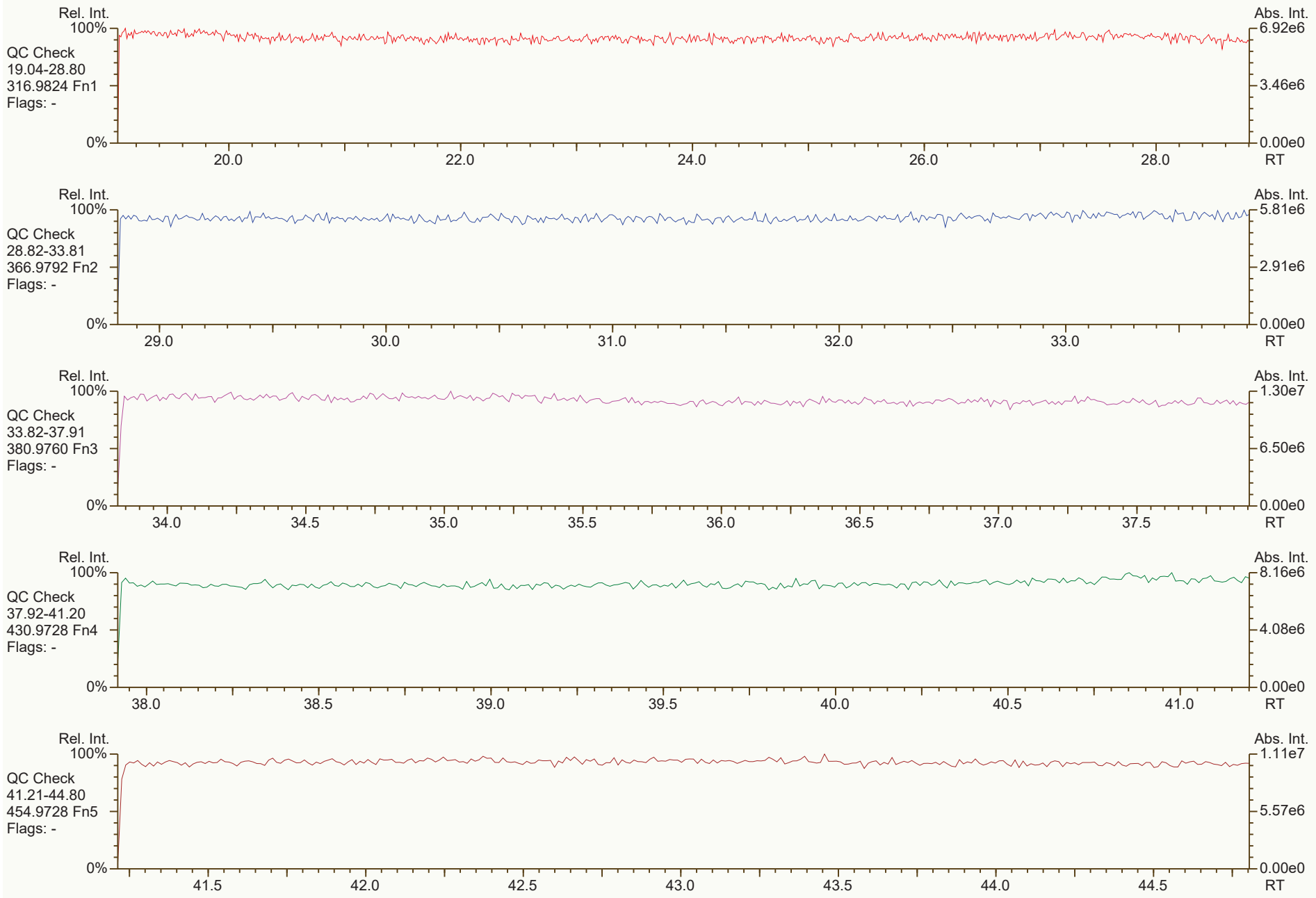
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689
PKD: 13-Aug-2020 15:02 Printed: 13-Aug-2020 15:18


Rel. Int.
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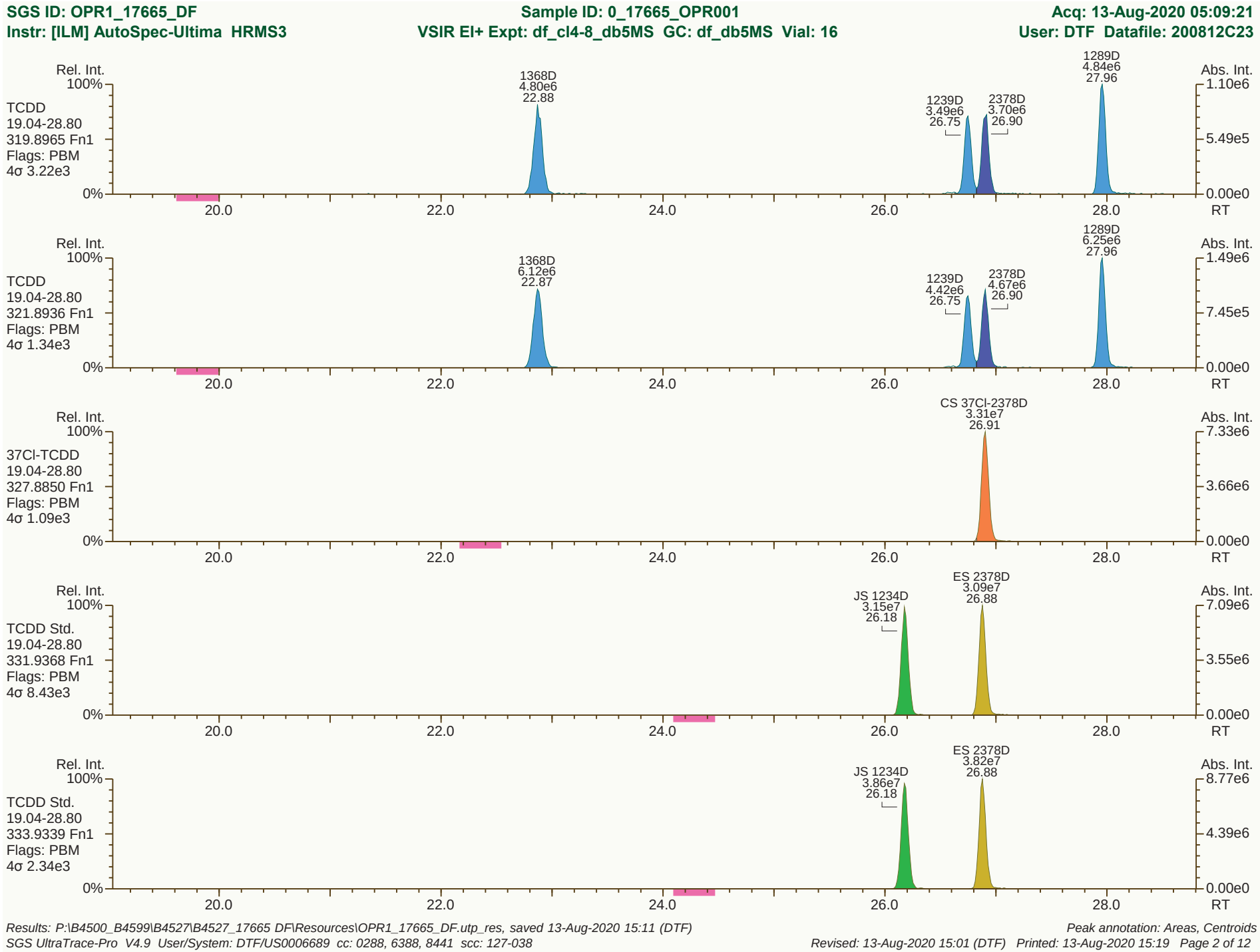
0%
Abs. Int.
6.92e6
3.46e6
0.00e0
RT
QC Check
19.04-28.80
316.9824 Fn1
Flags: -
20.0
22.0
24.0
26.0
28.0
Rel. Int.
100%
0%
Abs. Int.
5.81e6
2.91e6
0.00e0
RT
QC Check
28.82-33.81
366.9792 Fn2
Flags: -
29.0
30.0
31.0
32.0
33.0
Rel. Int.
100%
0%
Abs. Int.
1.30e7
6.50e6
0.00e0
RT
QC Check
33.82-37.91
380.9760 Fn3
Flags: -
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
Rel. Int.
100%
0%
Abs. Int.
8.16e6
4.08e6
0.00e0
RT
QC Check
37.92-41.20
430.9728 Fn4
Flags: -
38.0
38.5
39.0
39.5
40.0
40.5
41.0
Rel. Int.
100%
0%
Abs. Int.
1.11e7
5.57e6
0.00e0
RT
QC Check
41.21-44.80
454.9728 Fn5
Flags: -
41.5
42.0
42.5
43.0
43.5
44.0
44.5

SGS ID: OPR1_17665_DF
Instr: [ILM] AutoSpec-Ultima HRMS3

Sample ID: 0_17665_OPR001
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 16

Acq: 13-Aug-2020 05:09:21
User: DTF Datafile: 200812C23



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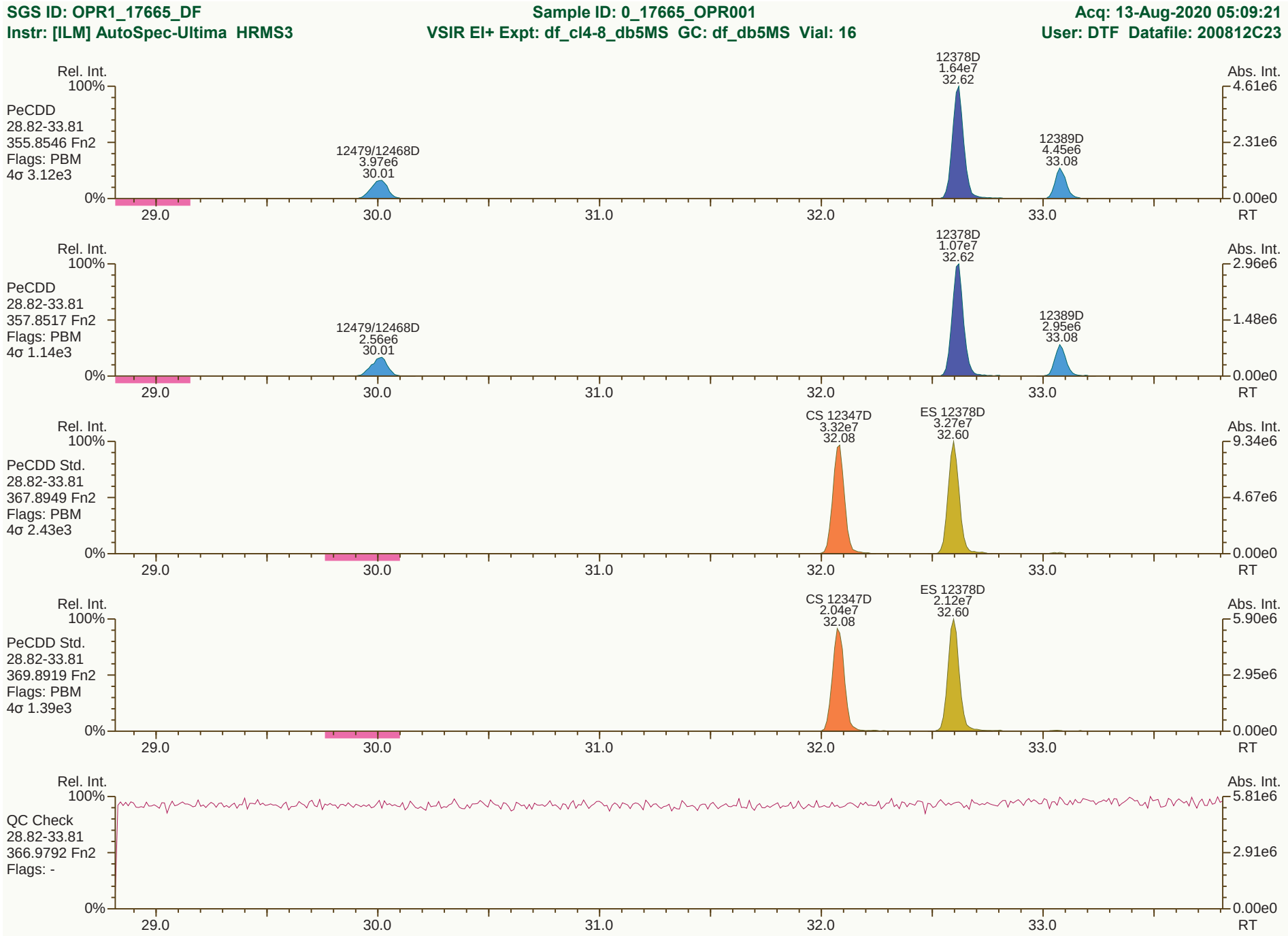
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 0288, 6388, 8441 scc: 127-038

Peak annotation: Areas, Centroids
Revised: 13-Aug-2020 15:01 (DTF) Printed: 13-Aug-2020 15:19 Page 2 of 12



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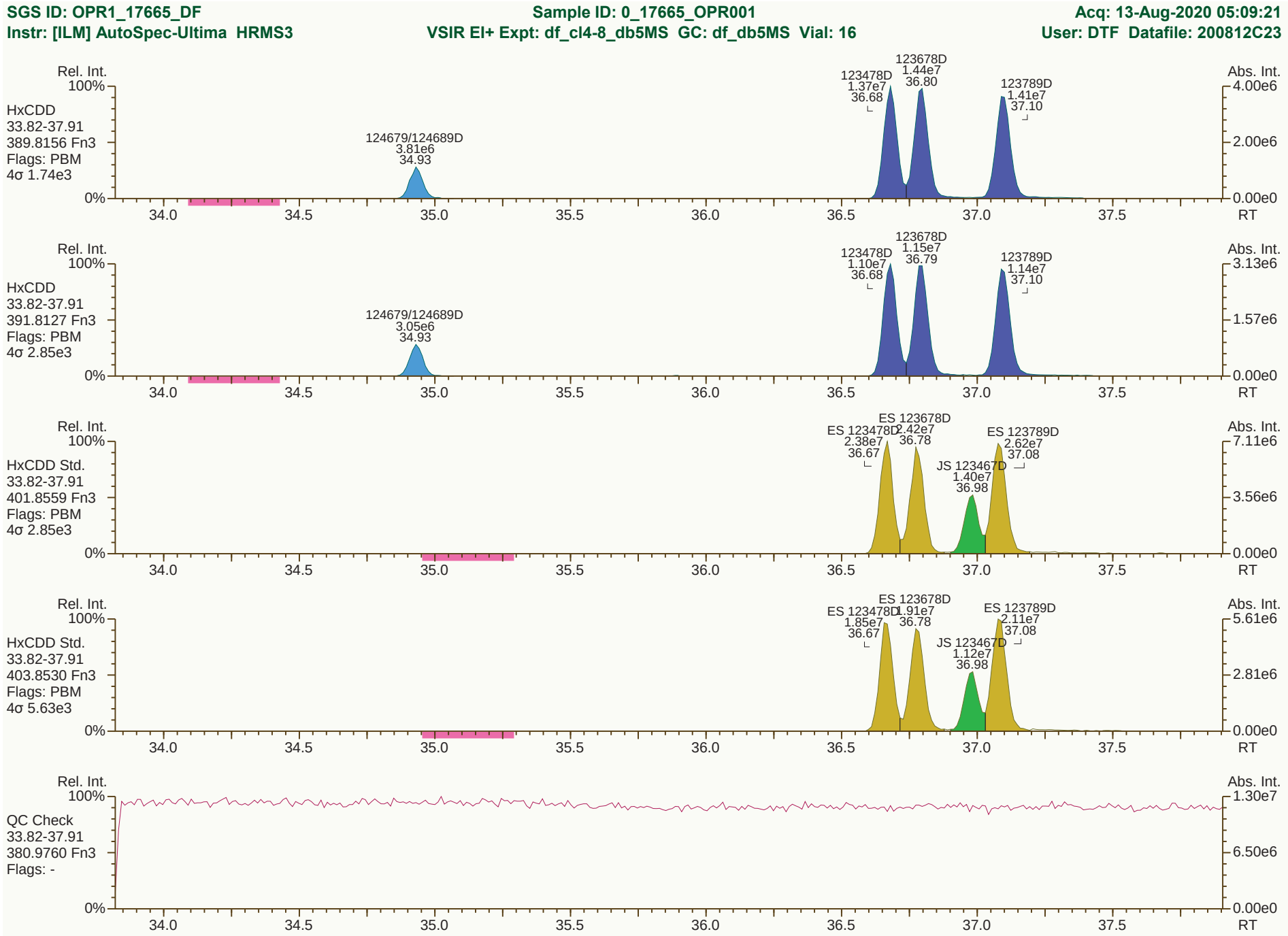
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 2123, 1276 scc: 127-038
PKD: 13-Aug-2020 15:02 Printed: 13-Aug-2020 15:19 Page 3 of 12



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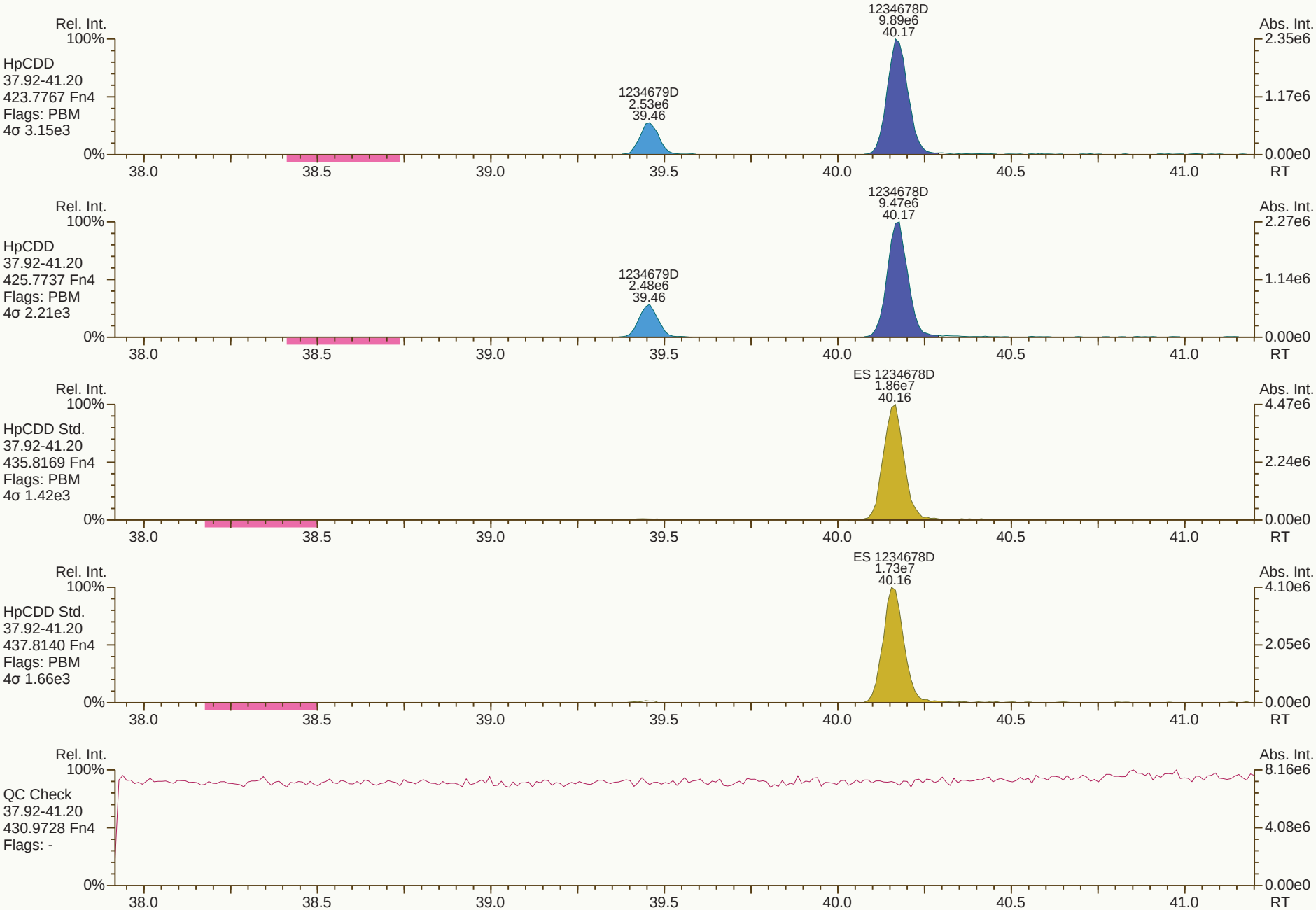
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 1801, 6919 scc: 127-038
PKD: 13-Aug-2020 15:02 Printed: 13-Aug-2020 15:19 Page 4 of 12

SGS ID: OPR1_17665_DF
Instr: [ILM] AutoSpec-Ultima HRMS3

Sample ID: 0_17665_OPR001
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 16

Acq: 13-Aug-2020 05:09:21
User: DTF Datafile: 200812C23



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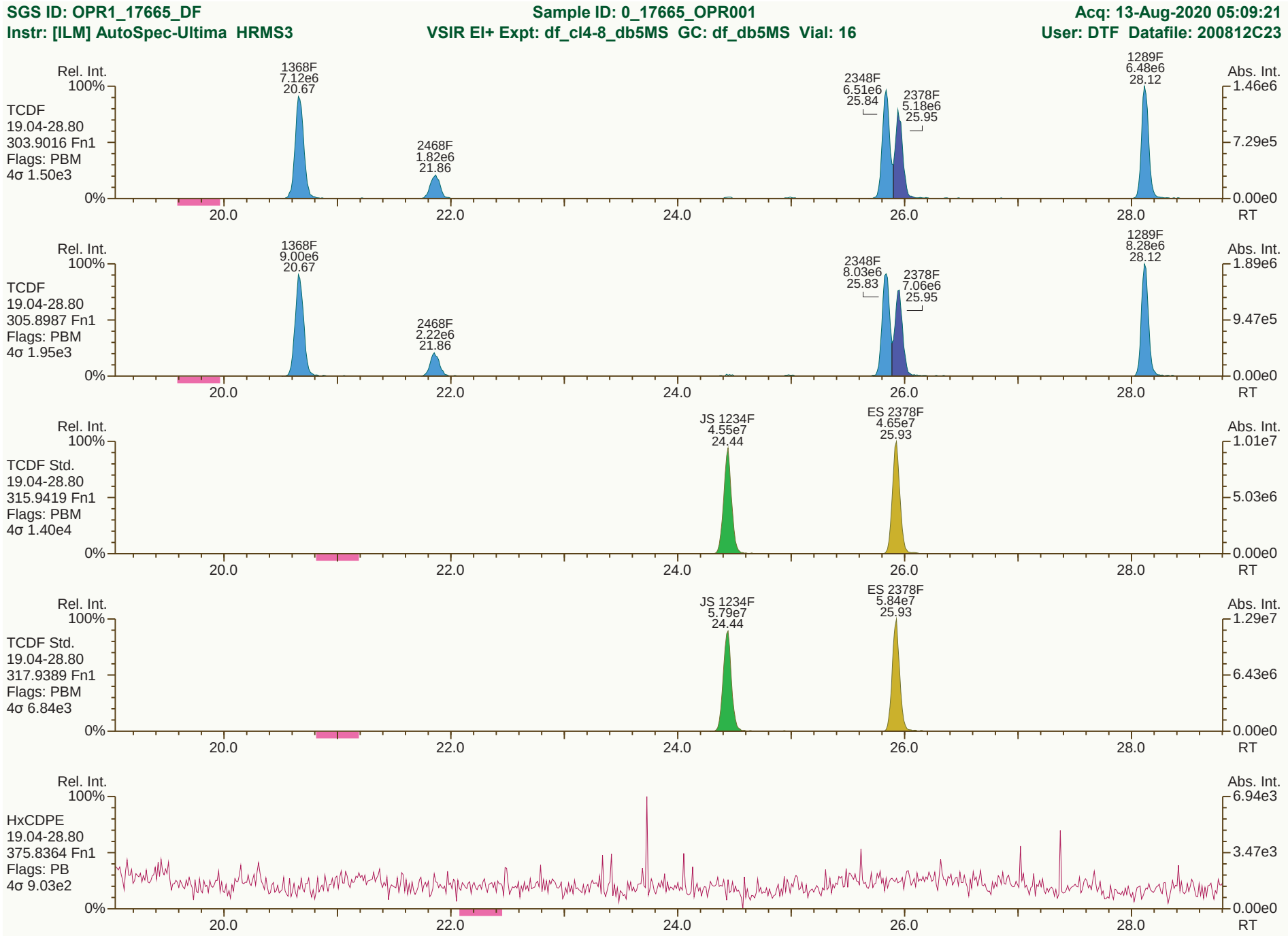
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 6846, 5987 scc: 127-038

Peak annotation: Areas, Centroids
Revised: 13-Aug-2020 15:02 (DTF) Printed: 13-Aug-2020 15:19 Page 5 of 12


OCDD
1.18e7
42.92
Rel. Int.
Abs. Int.
OCDD
41.21-44.80
457.7377 Fn5
Flags: PBM
4σ 2.77e3
OCDD
1.29e7
42.91
OCDD
41.21-44.80
459.7348 Fn5
Flags: PBM
4σ 2.87e3
ES OCDD
1.90e7
42.90
OCDD Std.
41.21-44.80
469.7780 Fn5
Flags: PBM
4σ 1.88e3
ES OCDD
2.10e7
42.90
OCDD Std.
41.21-44.80
471.7750 Fn5
Flags: PBM
4σ 1.74e3
QC Check
41.21-44.80
454.9728 Fn5
Flags: -
RT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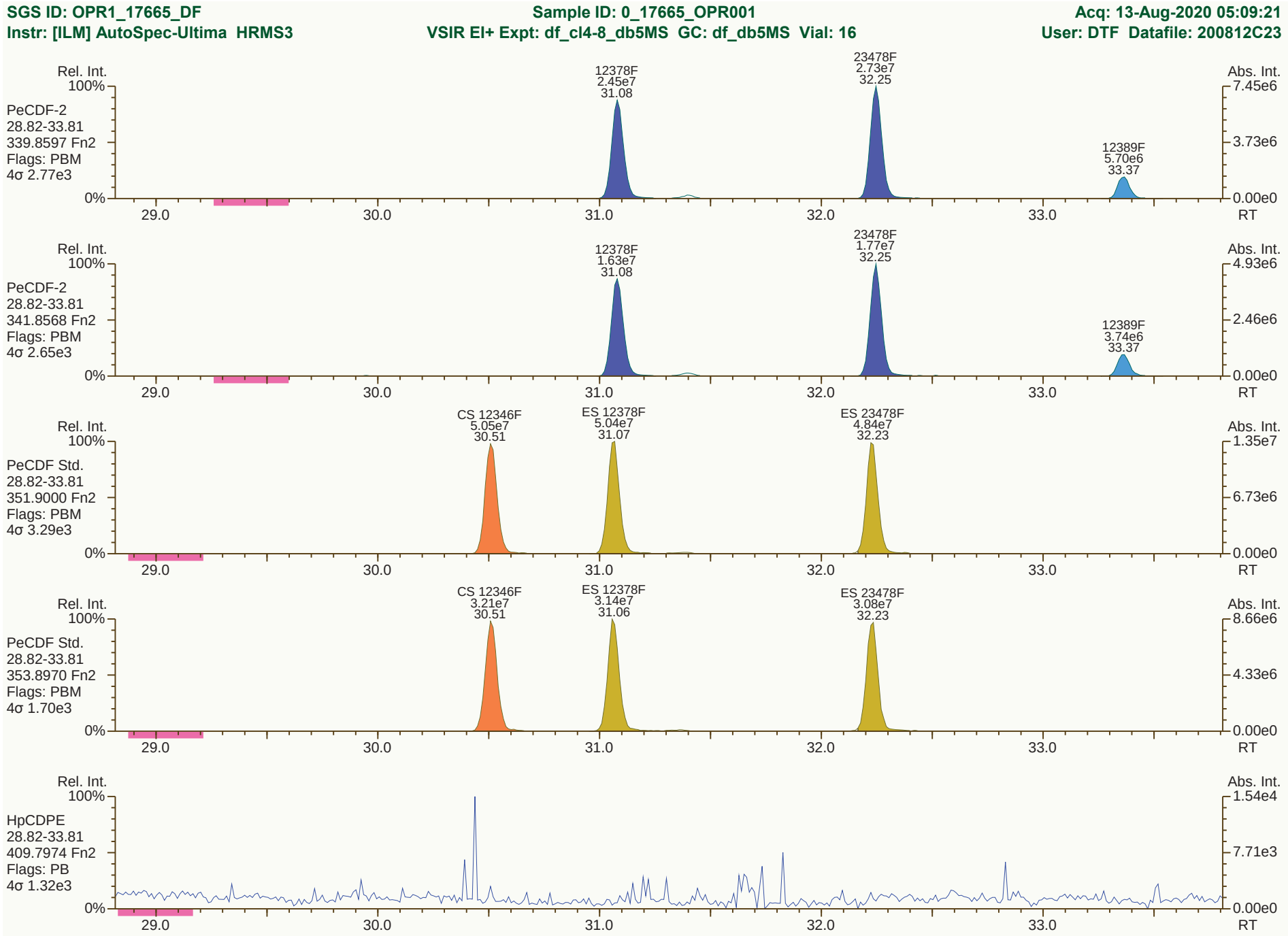
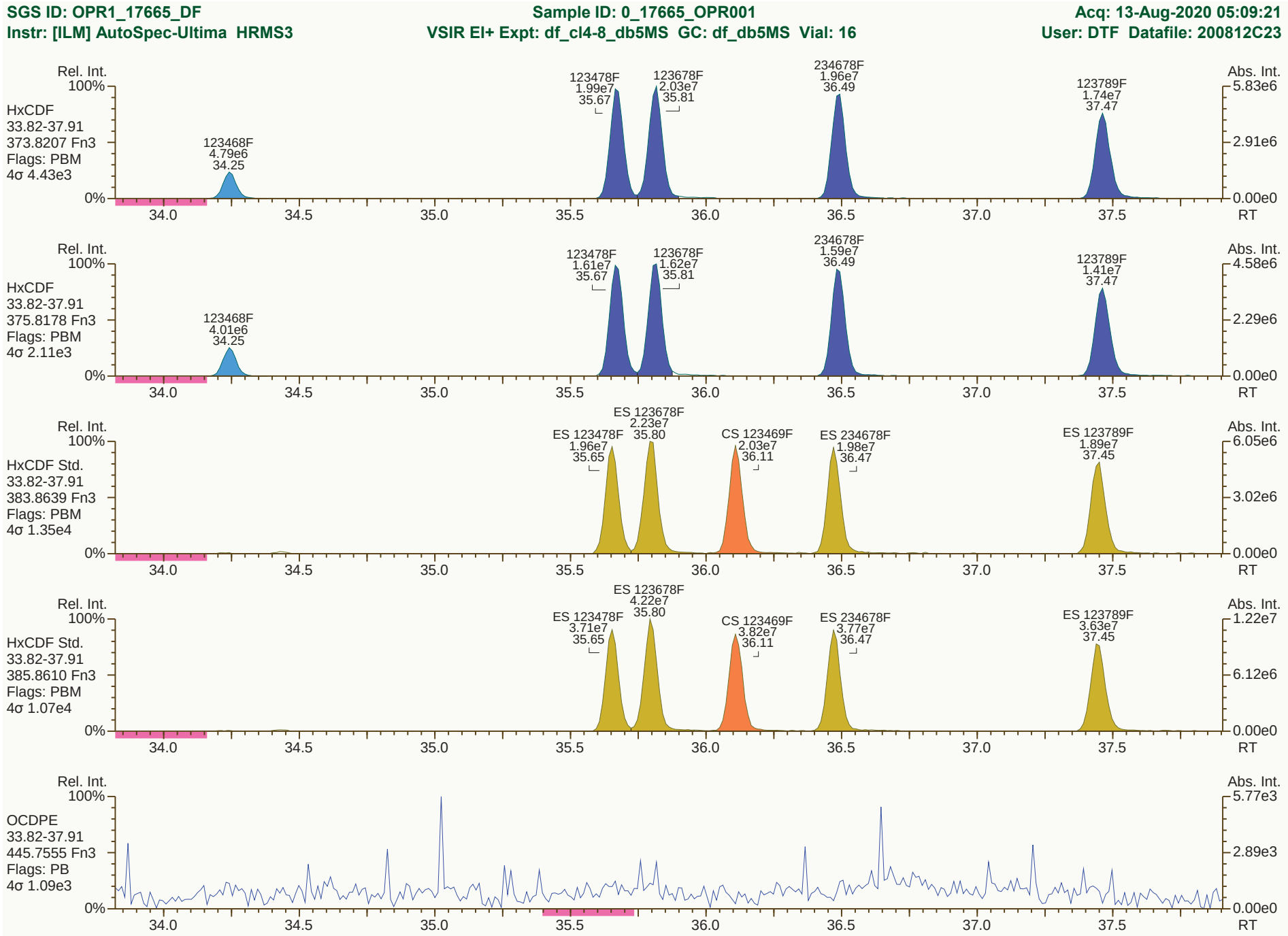
Sample ID: 0_17665_OPR001
Acq: 13-Aug-2020 05:09:21
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 16
User: DTF Datafile: 200812C23
Rel. Int.
Abs. Int.
TCDF
19.04-28.80
303.9016 Fn1
Flags: PBM
4σ 1.50e3
1368F 7.12e6 20.67
2468F 1.82e6 21.86
2348F 6.51e6 25.84
2378F 5.18e6 25.95
1289F 6.48e6 28.12
1.46e6
7.29e5
0.00e0
TCDF
19.04-28.80
305.8987 Fn1
Flags: PBM
4σ 1.95e3
1368F 9.00e6 20.67
2468F 2.22e6 21.86
2348F 8.03e6 25.83
2378F 7.06e6 25.95
1289F 8.28e6 28.12
1.89e6
9.47e5
0.00e0
TCDF Std.
19.04-28.80
315.9419 Fn1
Flags: PBM
4σ 1.40e4
JS 1234F 4.55e7 24.44
ES 2378F 4.65e7 25.93
1.01e7
5.03e6
0.00e0
TCDF Std.
19.04-28.80
317.9389 Fn1
Flags: PBM
4σ 6.84e3
JS 1234F 5.79e7 24.44
ES 2378F 5.84e7 25.93
1.29e7
6.43e6
0.00e0
HxCDPE
19.04-28.80
375.8364 Fn1
Flags: PB
4σ 9.03e2
6.94e3
3.47e3
0.00e0
100%
0%
20.0
22.0
24.0
26.0
28.0
RT
Results: P:\B4500_B4599\B4527\B4527_17665 DF\Resources\OPR1_17665_DF.utp_res, saved 13-Aug-2020 15:11 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 1052, 0178, 2350 scc: 127-038
PKD: 13-Aug-2020 15:02 Printed: 13-Aug-2020 15:19 Page 7 of 12

SGS ID: OPR1_17665_DF
Sample ID: 0_17665_OPR001
Acq: 13-Aug-2020 05:09:21
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 16
User: DTF Datafile: 200812C23



Results: P:\B4500_B4599\B4527\B4527_17665 DF\Resources\OPR1_17665_DF.utp_res, saved 13-Aug-2020 15:11 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 2835 scc: 127-038
PKD: 13-Aug-2020 15:01 Printed: 13-Aug-2020 15:19 Page 8 of 12


SGS ID: OPR1_17665_DF
Instr: [ILM] AutoSpec-Ultima HRMS3
Sample ID: 0_17665_OPR001
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 16
Acq: 13-Aug-2020 05:09:21
User: DTF Datafile: 200812C23
Rel. Int.
100%
0%
PeCDF-2
28.82-33.81
339.8597 Fn2
Flags: PBM
4σ 2.77e3
12378F
2.45e7
31.08
23478F
2.73e7
32.25
12389F
5.70e6
33.37
Abs. Int.
7.45e6
3.73e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
PeCDF-2
28.82-33.81
341.8568 Fn2
Flags: PBM
4σ 2.65e3
12378F
1.63e7
31.08
23478F
1.77e7
32.25
12389F
3.74e6
33.37
4.93e6
2.46e6
PeCDF Std.
28.82-33.81
351.9000 Fn2
Flags: PBM
4σ 3.29e3
CS 12346F
5.05e7
30.51
ES 12378F
5.04e7
31.07
ES 23478F
4.84e7
32.23
1.35e7
6.73e6
PeCDF Std.
28.82-33.81
353.8970 Fn2
Flags: PBM
4σ 1.70e3
CS 12346F
3.21e7
30.51
ES 12378F
3.14e7
31.06
ES 23478F
3.08e7
32.23
8.66e6
4.33e6
HpCDPE
28.82-33.81
409.7974 Fn2
Flags: PB
4σ 1.32e3
1.54e4
7.71e3
Results: P:\B4500_B4599\B4527\B4527_17665 DF\Resources\OPR1_17665_DF.utp_res, saved 13-Aug-2020 15:11 (DTF)
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 7635, 8805, 2673 scc: 127-038
Peak annotation: Areas, Centroids
PKD: 13-Aug-2020 15:02 Printed: 13-Aug-2020 15:19 Page 9 of 12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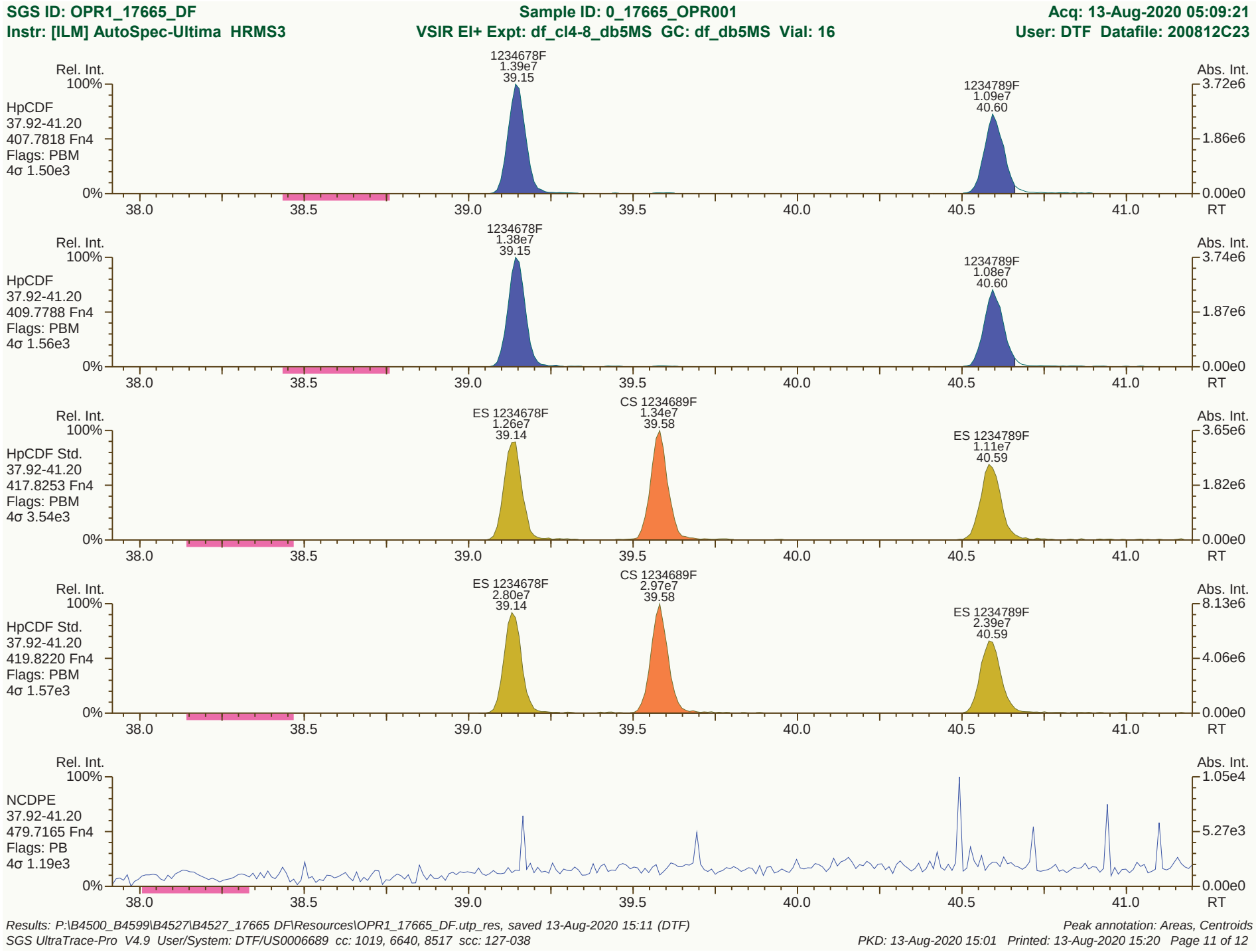
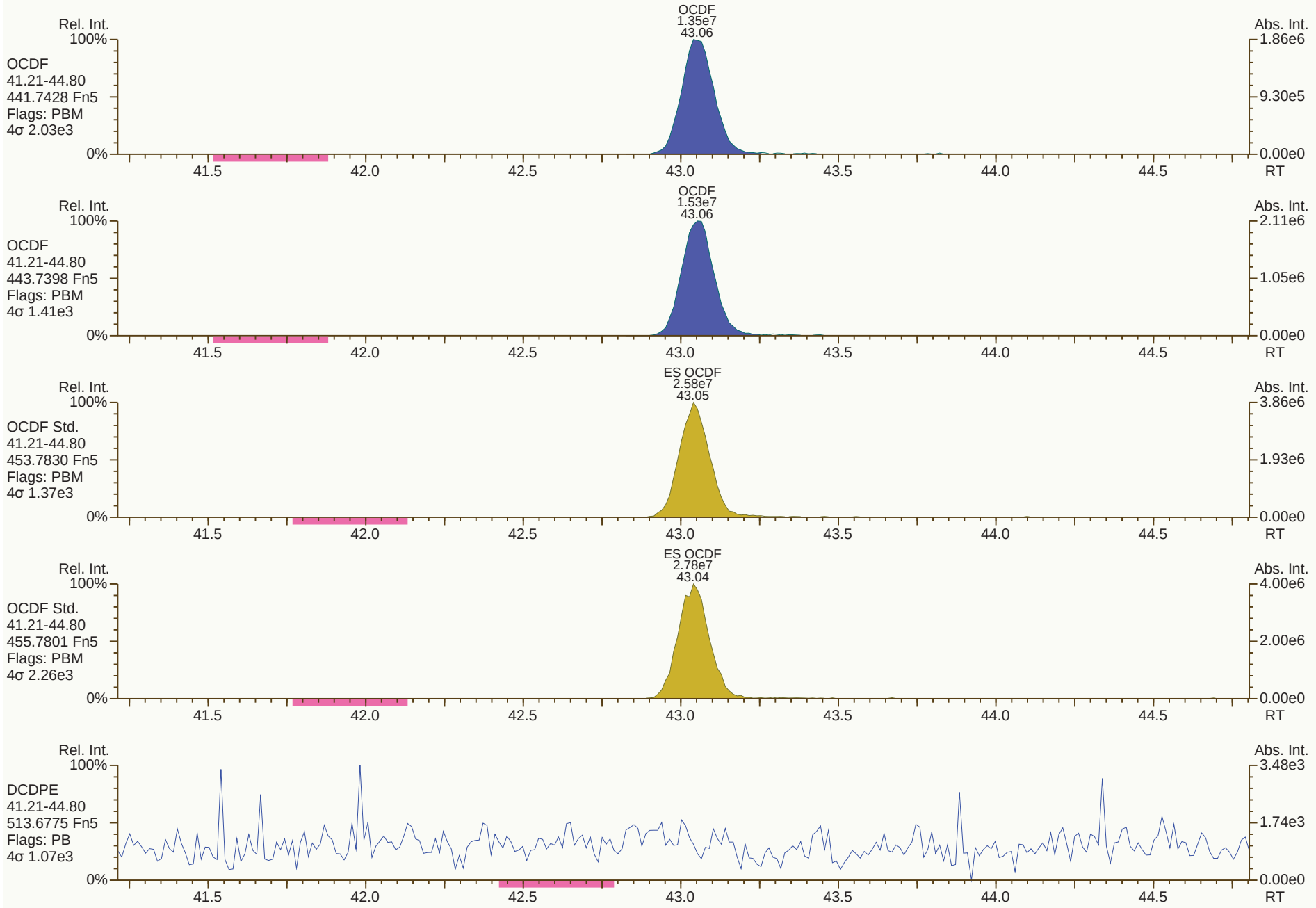
Sample ID: 0_17665_OPR001
Acq: 13-Aug-2020 05:09:21
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 16
User: DTF Datafile: 200812C23
Rel. Int.
Abs. Int.
HxCDF
33.82-37.91
373.8207 Fn3
Flags: PBM
4σ 4.43e3
123468F 4.79e6 34.25
123478F 1.99e7 35.67
123678F 2.03e7 35.81
234678F 1.96e7 36.49
123789F 1.74e7 37.47
HxCDF
33.82-37.91
375.8178 Fn3
Flags: PBM
4σ 2.11e3
123468F 4.01e6 34.25
123478F 1.61e7 35.67
123678F 1.62e7 35.81
234678F 1.59e7 36.49
123789F 1.41e7 37.47
HxCDF Std.
33.82-37.91
383.8639 Fn3
Flags: PBM
4σ 1.35e4
ES 123478F 1.96e7 35.65
ES 123678F 2.23e7 35.80
CS 123469F 2.03e7 36.11
ES 234678F 1.98e7 36.47
ES 123789F 1.89e7 37.45
HxCDF Std.
33.82-37.91
385.8610 Fn3
Flags: PBM
4σ 1.07e4
ES 123478F 3.71e7 35.65
ES 123678F 4.22e7 35.80
CS 123469F 3.82e7 36.11
ES 234678F 3.77e7 36.47
ES 123789F 3.63e7 37.45
OCDPE
33.82-37.91
445.7555 Fn3
Flags: PB
4σ 1.09e3
100%
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
5.83e6
2.91e6
0.00e0
4.58e6
2.29e6
6.05e6
3.02e6
1.22e7
6.12e6
5.77e3
2.89e3
Results: P:\B4500_B4599\B4527\B4527_17665 DF\Resources\OPR1_17665_DF.utp_res, saved 13-Aug-2020 15:11 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 6694, 6470, 1827 scc: 127-038
PKD: 13-Aug-2020 15:02 Printed: 13-Aug-2020 15:19 Page 10 of 12


SGS ID: OPR1_17665_DF
Sample ID: 0_17665_OPR001
Acq: 13-Aug-2020 05:09:21
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 16
User: DTF Datafile: 200812C23
Rel. Int.
Abs. Int.
HpCDF
37.92-41.20
407.7818 Fn4
Flags: PBM
4σ 1.50e3
1234678F
1.39e7
39.15
1234789F
1.09e7
40.60
3.72e6
1.86e6
0.00e0
HpCDF
37.92-41.20
409.7788 Fn4
Flags: PBM
4σ 1.56e3
1234678F
1.38e7
39.15
1234789F
1.08e7
40.60
3.74e6
1.87e6
0.00e0
HpCDF Std.
37.92-41.20
417.8253 Fn4
Flags: PBM
4σ 3.54e3
ES 1234678F
1.26e7
39.14
CS 1234689F
1.34e7
39.58
ES 1234789F
1.11e7
40.59
3.65e6
1.82e6
0.00e0
HpCDF Std.
37.92-41.20
419.8220 Fn4
Flags: PBM
4σ 1.57e3
ES 1234678F
2.80e7
39.14
CS 1234689F
2.97e7
39.58
ES 1234789F
2.39e7
40.59
8.13e6
4.06e6
0.00e0
NCDPE
37.92-41.20
479.7165 Fn4
Flags: PB
4σ 1.19e3
1.05e4
5.27e3
0.00e0
100%
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Results: P:\B4500_B4599\B4527\B4527_17665 DF\Resources\OPR1_17665_DF.utp_res, saved 13-Aug-2020 15:11 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 1019, 6640, 8517 scc: 127-038
PKD: 13-Aug-2020 15:01 Printed: 13-Aug-2020 15:20 Page 11 of 12

SGS ID: OPR1_17665_DF | **Sample ID: 0_17665_OPR001** | **Acq: 13-Aug-2020 05:09:21**

Instr: [ILM] AutoSpec-Ultima HRMS3 | **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 16** | **User: DTF Datafile: 200812C23**



Results: P:\B4500_B4599\B4527\B4527_17665 DF\Resources\OPR1_17665_DF.utp_res, saved 13-Aug-2020 15:11 (DTF)

Peak annotation: Areas, Centroids

SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 2110, 6921, 0241 scc: 127-038

PKD: 13-Aug-2020 15:01 Printed: 13-Aug-2020 15:20 Page 12 of 12



FINAL LAB REPORT

KMCC Navassa

B4528

13-Aug-2020

Prepared by

SGS NORTH AMERICA

Prepared for

EarthCon

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Email: mbrookshire@earthcon.com

This report is approved by

Tamara Burkamper
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E=tamara.morgan@sgs.com
I have reviewed this document
2020-08-13 12:13:50

Tamara Burkamper

Senior Project Manager

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Results reported relate only to the items tested.

PROJECT INFORMATION SUMMARY *(When applicable, see QC Annotations for details)*

Client Project	KMCC Navassa
SGS Project #	B4528
Analytical Protocol(s)	8290A
No. Samples Submitted	7
Additional QC Sample(s)	0
No. Laboratory Method Blanks	1
No. OPRs / Batch CS3	1
Date Received	08-Aug-20
Condition Received	Good
Temperature upon Receipt (ºC)	1.7
Extraction within Holding Time	Yes
Analysis within Holding Time	Yes

QC ANNOTATIONS:

1. Please see Appendices attached for data qualifier/attribute and lab identifier descriptions which may be contained in the project.

No difficulties were encountered during processing of the samples.

APPENDIX A: GENERAL DATA QUALIFIERS / DATA ATTRIBUTES

B	The analyte was found in the method blank, at a concentration that was at least 10% of the concentration in the sample.
C	Two or more congeners co-elute. In EDDs, C denotes the lowest IUPAC congener in a co-elution group and additional co-eluters for the group are shown with the number of the lowest IUPAC co-eluter.
E	The reported concentration exceeds the calibration range (upper point of the calibration curve) and is an estimated value.
EMPC	Represents an Estimated Maximum Possible Concentration. EMPCs arise in cases where the signal/noise ratio is not sufficient for peak identification (the determined ion-abundance ratio is outside the allowed theoretical range), or where there is a co-eluting interference.
H/h	If the standard recovery is below the method or SOP specified value “H” is assigned. If the obtained value is less than half the specified value “h” is assigned.
J	Indicates that an analyte has a concentration below the reporting limit (lowest point of the calibration curve) and is an estimated value.
ND	Indicates a non-detect.
NR or R	Indicates a value that is not reportable.
PR	Due to interference, the associated congener is poorly resolved.
QI	Indicates the presence of a quantitative interference.
SI	Denotes “Single Ion Mode” and is utilized for PCBs where the secondary ion trace has a significantly elevated noise level due to background PFK. Responses for such peaks are calculated using an EMPC approach based solely on the primary ion area(s) and may be considered estimates.
U	The analyte was not detected. The estimated detection limit (EDL) may be reported for this analyte.
V	The labeled standard recovery was found to be outside of the method control limits.

APPENDIX B: DRBC/TMDL SPECIFIC DATA QUALIFIERS / DATA ATTRIBUTES

J	The reported result is an estimate. The value is less than the minimum calibration level but greater than the estimated detection limit (EDL).
U	The analyte was not detected in the sample at the estimated detection limit (EDL).
E	The reported concentration is an estimate. The value exceeds the upper calibration range (upper point of the calibration curve).
D	Dilution Data. Result was obtained from the analysis of a dilution.
B	Analyte found in the sample and associated method blank.
C	Co-eluting congener
Cxx	Co-elutes with the indicated congener, data is reported under the lowest IUPAC congener. 'Xx' denotes the IUPAC number with the lowest numerical designated congener.
NR	Analyte is not reportable because of problems in sample preparation or analysis.
V	Labeled standard recovery is not within method control limits.
X	Results from re-injection/repeat/second-column analysis.
EMPC	Estimated maximum possible concentration. Indicates that a peak is identified but did not meet the method specified ion-abundance ratio.

APPENDIX C: LAB IDENTIFIERS

AR	Indicates use of the archived portion of the sample extract.
CU	Indicates a sample that required additional clean-up prior to MS injection/processing.
D	Indicates a dilution of the sample extract. The number that follows the "D" indicates the dilution factor.
DE	Indicates a dilution performed with the addition of ES (extraction standard) solution.
DUP	Designation for a duplicate sample.
MS	Designation for a matrix spike.
MSD	Designation for a matrix spike duplicate.
RJ	Indicates a reinjection of the sample extract.
S	Indicates a sample split. The number that follows the "S" indicates the split factor.

SGS CERTIFICATIONS

Alaska	17-012
Arkansas	88-0682
California (ELAP)	ELAP Cert #2914
CLIA	34D1013708
Connecticut	PH-0258
USDA Soil Permit	P330-20-00103
American Association for Laboratory Accreditation (A2LA)	2726.01 (ISO 17025:2005, 2009 TNI, DoD ELAP QSM 5.1)
Florida DOH	E87634
Louisiana DEQ	4115
Louisiana DOH	LA031
Maine	2018018
Massachusetts	M-NC919
Minnesota (Primary NELAP For Method 23)	037-999-459
Montana	0106
New Hampshire (Primary NELAP)	2085
New Hampshire (Secondary NELAP)	2083
New Jersey	NC100
New York	11685
North Carolina DEQ	481
North Dakota	R-197
Oregon	NC200002
Pennsylvania	68-03675
South Carolina	99029002
Texas	T104704260
US Coast Guard	16714/159.317/SGS
Vermont	VT-87634
Virginia	460214
Washington	C913

Rev. 13-Apr-2020

Sample ID: CS-55

Method 8290A

Client Data		Sample Data		Laboratory Data			
Name:	EarthCon	Matrix:	Soil	Lab Project ID:	B4528	Date Received:	08-Aug-2020
Project ID:	KMCC Navassa	Weight/Volume:	8.62 g	Lab Sample ID	B4528_17661_DF_001	Date Extracted:	10-Aug-2020
Date Collected:	07-Aug-2020	% Solid:	84.8 %	QC Batch No:	17661	Date Analyzed:	12-Aug-2020
		Split:	-	Dilution:	-	Time Analyzed:	5:53:54

Analyte	Conc. (pg/g)	DL (pg/g)	EMPC (pg/g)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	0.35			ES 2378-TCDD	81.4	
12378-PeCDD	ND	0.173			ES 12378-PeCDD	79.5	
123478-HxCDD	0.453			J	ES 123478-HxCDD	68.1	
123678-HxCDD	EMPC		0.616	J	ES 123678-HxCDD	69.5	
123789-HxCDD	0.831			J	ES 123789-HxCDD	73	
1234678-HpCDD	18.3				ES 1234678-HpCDD	65.6	
OCDD	162				ES OCDD	48.8	
2378-TCDF	0.304			J	ES 2378-TCDF	84.3	
12378-PeCDF	0.404			J	ES 12378-PeCDF	83.4	
23478-PeCDF	0.618			J	ES 23478-PeCDF	79.7	
123478-HxCDF	0.537			J	ES 123478-HxCDF	71.6	
123678-HxCDF	EMPC		0.351	J	ES 123678-HxCDF	71.6	
234678-HxCDF	EMPC		0.578	J	ES 234678-HxCDF	68.1	
123789-HxCDF	ND	0.184			ES 123789-HxCDF	66.7	
1234678-HpCDF	8.73				ES 1234678-HpCDF	70.3	
1234789-HpCDF	ND	0.218			ES 1234789-HpCDF	63.5	
OCDF	EMPC		7.75		ES OCDF	49.1	
Totals					**Standard**	**CS Recoveries**	
					CS 37Cl-2378-TCDD	93.3	
Total TCDD	4.03		5.57		CS 12347-PeCDD	97.2	
Total PeCDD	5.03		6.01		CS 12346-PeCDF	87	
Total HxCDD	12.9		13.5		CS 123469-HxCDF	77.5	
Total HpCDD	53.5		53.5		CS 1234689-HpCDF	79	
Total TCDF	6.42		9.73				
Total PeCDF	4.41		7.65				
Total HxCDF	6.36		8.55				
Total HpCDF	16.1		16.1				
Total PCDD/Fs	**270**		**290**				
ITEF TEQs							
TEQ: ND=0	0.974		1.14				
TEQ: ND=DL/2	1.2	0.34	1.36				
TEQ: ND=DL	1.43	0.68	1.59				

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Sample ID: CS-55 — TEQ Summary — Method 8290A

Client Project Name:	EarthCon	Matrix:	Soil	Lab Sample ID:	B4528_17661_DF_001
Cliend Project ID:	KMCC Navassa	Weight/Volume:	8.62 g	QC Batch No.:	17661
Date Collected:	07-Aug-2020	Split:	-	Date Extracted:	10-Aug-2020
Date Received:	08-Aug-2020	Dilution:	-	Date Analyzed:	12-Aug-2020 05:53
Lab Project No:	B4528	Units	pg/g		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	(0.35)		0.35	(0.35)	(0.35)	(0.35)
12378-PeCDD	(0.173)		0.173	(0.0865)	(0.173)	(0.173)
123478-HxCDD	0.453	J	0.18	0.0453	0.0453	0.0453
123678-HxCDD	[0.616]	J	0.177	[0.0616]	[0.0616]	[0.0616]
123789-HxCDD	0.831	J	0.164	0.0831	0.0831	0.0831
1234678-HpCDD	18.3		0.128	0.183	0.183	0.183
OCDD	162		0.482	0.162	0.0162	0.0485
2378-TCDF	0.304	J	0.293	0.0304	0.0304	0.0304
12378-PeCDF	0.404	J	0.176	0.0202	0.0202	0.0121
23478-PeCDF	0.618	J	0.175	0.309	0.309	0.185
123478-HxCDF	0.537	J	0.134	0.0537	0.0537	0.0537
123678-HxCDF	[0.351]	J	0.137	[0.0351]	[0.0351]	[0.0351]
234678-HxCDF	[0.578]	J	0.142	[0.0578]	[0.0578]	[0.0578]
123789-HxCDF	(0.184)		0.184	(0.0184)	(0.0184)	(0.0184)
1234678-HpCDF	8.73		0.177	0.0873	0.0873	0.0873
1234789-HpCDF	(0.218)		0.218	(0.00218)	(0.00218)	(0.00218)
OCDF	[7.75]		0.268	[0.00775]	[0.000775]	[0.00233]

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TEQ Summaries			
EMPC = 0, ND = 0	0.974	0.828	0.729
EMPC = 0, ND = DL / 2	1.2	1.1	1
EMPC = 0, ND = DL	1.43	1.37	1.27
EMPC = 0, < J-level = 0	0.432	0.286	0.319
EMPC = EMPC, ND = 0	1.14	0.983	0.886
EMPC = EMPC, ND = DL / 2	1.36	1.26	1.16
EMPC = EMPC, ND = DL	1.59	1.53	1.43
EMPC = EMPC, < J-level = 0	0.44	0.287	0.321

Checkcode: 830-980-KWZ

SGS North America - DF v0.7

Sample ID: CS-50

Method 8290A

Client Data		Sample Data		Laboratory Data			
Name:	EarthCon	Matrix:	Soil	Lab Project ID:	B4528	Date Received:	08-Aug-2020
Project ID:	KMCC Navassa	Weight/Volume:	9.58 g	Lab Sample ID	B4528_17661_DF_002	Date Extracted:	10-Aug-2020
Date Collected:	07-Aug-2020	% Solid:	89.4 %	QC Batch No:	17661	Date Analyzed:	12-Aug-2020
		Split:	-	Dilution:	-	Time Analyzed:	13:19:10

Analyte	Conc. (pg/g)	DL (pg/g)	EMPC (pg/g)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	0.232			ES 2378-TCDD	81.3	
12378-PeCDD	0.367			J	ES 12378-PeCDD	88.7	
123478-HxCDD	EMPC		0.492	J	ES 123478-HxCDD	67.6	
123678-HxCDD	0.808			J	ES 123678-HxCDD	68.3	
123789-HxCDD	EMPC		0.739	J	ES 123789-HxCDD	72.1	
1234678-HpCDD	20.7				ES 1234678-HpCDD	74.5	
OCDD	274				ES OCDD	65	
2378-TCDF	EMPC		0.439	J	ES 2378-TCDF	83.6	
12378-PeCDF	0.427			J	ES 12378-PeCDF	86.9	
23478-PeCDF	0.677			J	ES 23478-PeCDF	89.6	
123478-HxCDF	0.627			J	ES 123478-HxCDF	64.9	
123678-HxCDF	0.502			J	ES 123678-HxCDF	66.6	
234678-HxCDF	0.482			J	ES 234678-HxCDF	65.8	
123789-HxCDF	ND	0.132			ES 123789-HxCDF	72.2	
1234678-HpCDF	4.98				ES 1234678-HpCDF	70.3	
1234789-HpCDF	0.338			J	ES 1234789-HpCDF	79.4	
OCDF	6.08				ES OCDF	69.4	
Totals					**Standard**	**CS Recoveries**	
					CS 37Cl-2378-TCDD	94.4	
Total TCDD	2.77		3.19		CS 12347-PeCDD	102	
Total PeCDD	5		6.35		CS 12346-PeCDF	91.3	
Total HxCDD	12.4		14.4		CS 123469-HxCDF	70.7	
Total HpCDD	54.8		54.8		CS 1234689-HpCDF	78.5	
Total TCDF	3.03		5.36				
Total PeCDF	4.73		6.57				
Total HxCDF	5.08		6.21				
Total HpCDF	9.24		9.52				
Total PCDD/Fs	**377**		**387**				
ITEF TEQs							
TEQ: ND=0	1.33		1.49				
TEQ: ND=DL/2	1.45	0.262	1.62				
TEQ: ND=DL	1.57	0.523	1.74				

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Sample ID: CS-50 — TEQ Summary — Method 8290A

Client Project Name:	EarthCon	Matrix:	Soil	Lab Sample ID:	B4528_17661_DF_002
Cliend Project ID:	KMCC Navassa	Weight/Volume:	9.58 g	QC Batch No.:	17661
Date Collected:	07-Aug-2020	Split:	-	Date Extracted:	10-Aug-2020
Date Received:	08-Aug-2020	Dilution:	-	Date Analyzed:	12-Aug-2020 13:19
Lab Project No:	B4528	Units	pg/g		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	(0.232)		0.232	(0.232)	(0.232)	(0.232)
12378-PeCDD	0.367	J	0.13	0.184	0.367	0.367
123478-HxCDD	[0.492]	J	0.179	[0.0492]	[0.0492]	[0.0492]
123678-HxCDD	0.808	J	0.188	0.0808	0.0808	0.0808
123789-HxCDD	[0.739]	J	0.175	[0.0739]	[0.0739]	[0.0739]
1234678-HpCDD	20.7		0.0716	0.207	0.207	0.207
OCDD	274		0.241	0.274	0.0274	0.0822
2378-TCDF	[0.439]	J	0.222	[0.0439]	[0.0439]	[0.0439]
12378-PeCDF	0.427	J	0.198	0.0213	0.0213	0.0128
23478-PeCDF	0.677	J	0.179	0.339	0.339	0.203
123478-HxCDF	0.627	J	0.114	0.0627	0.0627	0.0627
123678-HxCDF	0.502	J	0.111	0.0502	0.0502	0.0502
234678-HxCDF	0.482	J	0.123	0.0482	0.0482	0.0482
123789-HxCDF	(0.132)		0.132	(0.0132)	(0.0132)	(0.0132)
1234678-HpCDF	4.98		0.0609	0.0498	0.0498	0.0498
1234789-HpCDF	0.338	J	0.062	0.00338	0.00338	0.00338
OCDF	6.08		0.188	0.00608	0.000608	0.00182

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TEQ Summaries			
EMPC = 0, ND = 0	1.33	1.26	1.17
EMPC = 0, ND = DL / 2	1.45	1.38	1.29
EMPC = 0, ND = DL	1.57	1.5	1.42
EMPC = 0, < J-level = 0	0.537	0.285	0.341
EMPC = EMPC, ND = 0	1.49	1.42	1.34
EMPC = EMPC, ND = DL / 2	1.62	1.55	1.46
EMPC = EMPC, ND = DL	1.74	1.67	1.58
EMPC = EMPC, < J-level = 0	0.537	0.285	0.341

Checkcode: 713-211-YLG

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Sample ID: CS-51

Method 8290A

Client Data		Sample Data		Laboratory Data			
Name:	EarthCon	Matrix:	Soil	Lab Project ID:	B4528	Date Received:	08-Aug-2020
Project ID:	KMCC Navassa	Weight/Volume:	4.72 g	Lab Sample ID	B4528_17661_DF_003	Date Extracted:	10-Aug-2020
Date Collected:	07-Aug-2020	% Solid:	36.2 %	QC Batch No:	17661	Date Analyzed:	12-Aug-2020
		Split:	-	Dilution:	-	Time Analyzed:	14:06:43

Analyte	Conc. (pg/g)	DL (pg/g)	EMPC (pg/g)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	0.432			ES 2378-TCDD	75.7	
12378-PeCDD	EMPC		0.487	J	ES 12378-PeCDD	72.5	
123478-HxCDD	0.738			J	ES 123478-HxCDD	62.3	
123678-HxCDD	EMPC		1.47	J	ES 123678-HxCDD	62.3	
123789-HxCDD	EMPC		0.783	J	ES 123789-HxCDD	62.4	
1234678-HpCDD	32.4				ES 1234678-HpCDD	67.1	
OCDD	270				ES OCDD	57.9	
2378-TCDF	EMPC		0.307	J	ES 2378-TCDF	76.2	
12378-PeCDF	0.646			J	ES 12378-PeCDF	75.7	
23478-PeCDF	EMPC		0.721	J	ES 23478-PeCDF	73.6	
123478-HxCDF	1.02			J	ES 123478-HxCDF	60.5	
123678-HxCDF	0.85			J	ES 123678-HxCDF	58.7	
234678-HxCDF	EMPC		0.502	J	ES 234678-HxCDF	58.8	
123789-HxCDF	ND	0.177			ES 123789-HxCDF	64.1	
1234678-HpCDF	7.61				ES 1234678-HpCDF	59.6	
1234789-HpCDF	0.595			J	ES 1234789-HpCDF	75.9	
OCDF	11.1				ES OCDF	62	
Totals					**Standard**	**CS Recoveries**	
					CS 37Cl-2378-TCDD	92.7	
Total TCDD	4.07		4.07		CS 12347-PeCDD	91.8	
Total PeCDD	5		10.4		CS 12346-PeCDF	83.1	
Total HxCDD	18.2		21		CS 123469-HxCDF	68.8	
Total HpCDD	86		86		CS 1234689-HpCDF	75.7	
Total TCDF	5.19		9.42				
Total PeCDF	7.55		10.6				
Total HxCDF	6.03		9.69				
Total HpCDF	15.2		15.7				
Total PCDD/Fs	**429**		**448**				
ITEF TEQs							
TEQ: ND=0	0.981		1.89				
TEQ: ND=DL/2	1.21	0.475	2.12				
TEQ: ND=DL	1.43	0.949	2.34				

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Sample ID: CS-51 — TEQ Summary — Method 8290A

Client Project Name:	EarthCon	Matrix:	Soil	Lab Sample ID:	B4528_17661_DF_003
Cliend Project ID:	KMCC Navassa	Weight/Volume:	4.72 g	QC Batch No.:	17661
Date Collected:	07-Aug-2020	Split:	-	Date Extracted:	10-Aug-2020
Date Received:	08-Aug-2020	Dilution:	-	Date Analyzed:	12-Aug-2020 14:06
Lab Project No:	B4528	Units	pg/g		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	(0.432)		0.432	(0.432)	(0.432)	(0.432)
12378-PeCDD	[0.487]	J	0.347	[0.244]	[0.487]	[0.487]
123478-HxCDD	0.738	J	0.294	0.0738	0.0738	0.0738
123678-HxCDD	[1.47]	J	0.312	[0.147]	[0.147]	[0.147]
123789-HxCDD	[0.783]	J	0.294	[0.0783]	[0.0783]	[0.0783]
1234678-HpCDD	32.4		0.205	0.324	0.324	0.324
OCDD	270		0.471	0.27	0.027	0.0811
2378-TCDF	[0.307]	J	0.281	[0.0307]	[0.0307]	[0.0307]
12378-PeCDF	0.646	J	0.299	0.0323	0.0323	0.0194
23478-PeCDF	[0.721]	J	0.282	[0.36]	[0.36]	[0.216]
123478-HxCDF	1.02	J	0.151	0.102	0.102	0.102
123678-HxCDF	0.85	J	0.152	0.085	0.085	0.085
234678-HxCDF	[0.502]	J	0.159	[0.0502]	[0.0502]	[0.0502]
123789-HxCDF	(0.177)		0.177	(0.0177)	(0.0177)	(0.0177)
1234678-HpCDF	7.61		0.141	0.0761	0.0761	0.0761
1234789-HpCDF	0.595	J	0.139	0.00595	0.00595	0.00595
OCDF	11.1		0.303	0.0111	0.00111	0.00332

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TEQ Summaries			
EMPC = 0, ND = 0	0.981	0.728	0.771
EMPC = 0, ND = DL / 2	1.21	0.952	0.996
EMPC = 0, ND = DL	1.43	1.18	1.22
EMPC = 0, < J-level = 0	0.682	0.428	0.485
EMPC = EMPC, ND = 0	1.89	1.88	1.78
EMPC = EMPC, ND = DL / 2	2.12	2.11	2.01
EMPC = EMPC, ND = DL	2.34	2.33	2.23
EMPC = EMPC, < J-level = 0	0.682	0.428	0.485

Checkcode: 604-577-JRK

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Sample ID: CS-48

Method 8290A

Client Data		Sample Data		Laboratory Data			
Name:	EarthCon	Matrix:	Soil	Lab Project ID:	B4528	Date Received:	08-Aug-2020
Project ID:	KMCC Navassa	Weight/Volume:	7.86 g	Lab Sample ID	B4528_17661_DF_004	Date Extracted:	10-Aug-2020
Date Collected:	08-Aug-2020	% Solid:	75.4 %	QC Batch No:	17661	Date Analyzed:	12-Aug-2020
		Split:	-	Dilution:	-	Time Analyzed:	14:54:11

Analyte	Conc. (pg/g)	DL (pg/g)	EMPC (pg/g)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	0.222			ES 2378-TCDD	81.2	
12378-PeCDD	ND	0.276			ES 12378-PeCDD	81.4	
123478-HxCDD	EMPC		0.501	J	ES 123478-HxCDD	65.5	
123678-HxCDD	EMPC		0.849	J	ES 123678-HxCDD	65.5	
123789-HxCDD	EMPC		0.825	J	ES 123789-HxCDD	66	
1234678-HpCDD	42.8				ES 1234678-HpCDD	72.8	
OCDD	280				ES OCDD	56.3	
2378-TCDF	ND	0.252			ES 2378-TCDF	80.2	
12378-PeCDF	ND	0.293			ES 12378-PeCDF	80.7	
23478-PeCDF	ND	0.285			ES 23478-PeCDF	81.7	
123478-HxCDF	0.292			J	ES 123478-HxCDF	64.1	
123678-HxCDF	0.246			J	ES 123678-HxCDF	62.8	
234678-HxCDF	0.501			J	ES 234678-HxCDF	62.1	
123789-HxCDF	ND	0.247			ES 123789-HxCDF	67.7	
1234678-HpCDF	5.58				ES 1234678-HpCDF	66.3	
1234789-HpCDF	0.543			J	ES 1234789-HpCDF	79.9	
OCDF	18				ES OCDF	59.8	
Totals					**Standard**	**CS Recoveries**	
					CS 37Cl-2378-TCDD	93.5	
Total TCDD	1.61		2.6		CS 12347-PeCDD	97	
Total PeCDD	ND		2.36		CS 12346-PeCDF	84	
Total HxCDD	25		28.1		CS 123469-HxCDF	72.3	
Total HpCDD	208		208		CS 1234689-HpCDF	77	
Total TCDF	2.48		3.92				
Total PeCDF	0.655		2.04				
Total HxCDF	4.26		6.4				
Total HpCDF	16.9		16.9				
Total PCDD/Fs	**557**		**568**				
ITEF TEQs							
TEQ: ND=0	0.891		1.11				
TEQ: ND=DL/2	1.17	0.339	1.39				
TEQ: ND=DL	1.46	0.678	1.68				

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Sample ID: CS-48 — TEQ Summary — Method 8290A

Client Project Name:	EarthCon	Matrix:	Soil	Lab Sample ID:	B4528_17661_DF_004
Cliend Project ID:	KMCC Navassa	Weight/Volume:	7.86 g	QC Batch No.:	17661
Date Collected:	08-Aug-2020	Split:	-	Date Extracted:	10-Aug-2020
Date Received:	08-Aug-2020	Dilution:	-	Date Analyzed:	12-Aug-2020 14:54
Lab Project No:	B4528	Units	pg/g		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	(0.222)		0.222	(0.222)	(0.222)	(0.222)
12378-PeCDD	(0.276)		0.276	(0.138)	(0.276)	(0.276)
123478-HxCDD	[0.501]	J	0.158	[0.0501]	[0.0501]	[0.0501]
123678-HxCDD	[0.849]	J	0.158	[0.0849]	[0.0849]	[0.0849]
123789-HxCDD	[0.825]	J	0.158	[0.0825]	[0.0825]	[0.0825]
1234678-HpCDD	42.8		0.138	0.428	0.428	0.428
OCDD	280		0.557	0.28	0.028	0.0839
2378-TCDF	(0.252)		0.252	(0.0252)	(0.0252)	(0.0252)
12378-PeCDF	(0.293)		0.293	(0.0146)	(0.0146)	(0.00879)
23478-PeCDF	(0.285)		0.285	(0.143)	(0.143)	(0.0855)
123478-HxCDF	0.292	J	0.195	0.0292	0.0292	0.0292
123678-HxCDF	0.246	J	0.197	0.0246	0.0246	0.0246
234678-HxCDF	0.501	J	0.2	0.0501	0.0501	0.0501
123789-HxCDF	(0.247)		0.247	(0.0247)	(0.0247)	(0.0247)
1234678-HpCDF	5.58		0.0899	0.0558	0.0558	0.0558
1234789-HpCDF	0.543	J	0.0852	0.00543	0.00543	0.00543
OCDF	18		0.22	0.018	0.0018	0.00541

TEQ Summaries			
EMPC = 0, ND = 0	0.891	0.623	0.682
EMPC = 0, ND = DL / 2	1.17	0.976	1
EMPC = 0, ND = DL	1.46	1.33	1.33
EMPC = 0, < J-level = 0	0.781	0.514	0.573
EMPC = EMPC, ND = 0	1.11	0.841	0.9
EMPC = EMPC, ND = DL / 2	1.39	1.19	1.22
EMPC = EMPC, ND = DL	1.68	1.55	1.54
EMPC = EMPC, < J-level = 0	0.781	0.514	0.573

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Checkcode: 652-437-DJP

Sample ID: CS-52

Method 8290A

Client Data		Sample Data		Laboratory Data			
Name:	EarthCon	Matrix:	Soil	Lab Project ID:	B4528	Date Received:	08-Aug-2020
Project ID:	KMCC Navassa	Weight/Volume:	8.83 g	Lab Sample ID	B4528_17661_DF_005	Date Extracted:	10-Aug-2020
Date Collected:	08-Aug-2020	% Solid:	83.8 %	QC Batch No:	17661	Date Analyzed:	12-Aug-2020
		Split:	-	Dilution:	-	Time Analyzed:	15:44:02

Analyte	Conc. (pg/g)	DL (pg/g)	EMPC (pg/g)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	0.155			ES 2378-TCDD	83.7	
12378-PeCDD	0.875			J	ES 12378-PeCDD	84.2	
123478-HxCDD	5.66				ES 123478-HxCDD	67.4	
123678-HxCDD	14.2				ES 123678-HxCDD	67.6	
123789-HxCDD	9.59				ES 123789-HxCDD	67.9	
1234678-HpCDD	787				ES 1234678-HpCDD	71.5	
OCDD	8,650				ES OCDD	60.7	
2378-TCDF	EMPC		0.296	J	ES 2378-TCDF	86.3	
12378-PeCDF	0.285			J	ES 12378-PeCDF	85.4	
23478-PeCDF	1.71			J	ES 23478-PeCDF	87.1	
123478-HxCDF	3.91				ES 123478-HxCDF	65.7	
123678-HxCDF	1.87			J	ES 123678-HxCDF	65.4	
234678-HxCDF	4.31				ES 234678-HxCDF	64	
123789-HxCDF	ND	0.62			ES 123789-HxCDF	70.6	
1234678-HpCDF	104				ES 1234678-HpCDF	66.8	
1234789-HpCDF	10.4				ES 1234789-HpCDF	79.4	
OCDF	498				ES OCDF	63.4	
Totals					**Standard**	**CS Recoveries**	
					CS 37Cl-2378-TCDD	92.5	
Total TCDD	ND		1.97		CS 12347-PeCDD	95.7	
Total PeCDD	9.87		10.9		CS 12346-PeCDF	85.4	
Total HxCDD	173		173		CS 123469-HxCDF	67.6	
Total HpCDD	2,110		2,110		CS 1234689-HpCDF	77.4	
Total TCDF	3.7		5.7				
Total PeCDF	16.2		18.2				
Total HxCDF	91.6		91.6				
Total HpCDF	398		398				
Total PCDD/Fs	**12,000**		**12,000**				
ITEF TEQs							
TEQ: ND=0	23.4		23.4				
TEQ: ND=DL/2	23.5	0.332	23.6				
TEQ: ND=DL	23.6	0.664	23.7				

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Sample ID: CS-52 — TEQ Summary — Method 8290A

Client Project Name:	EarthCon	Matrix:	Soil	Lab Sample ID:	B4528_17661_DF_005
Cliend Project ID:	KMCC Navassa	Weight/Volume:	8.83 g	QC Batch No.:	17661
Date Collected:	08-Aug-2020	Split:	-	Date Extracted:	10-Aug-2020
Date Received:	08-Aug-2020	Dilution:	-	Date Analyzed:	12-Aug-2020 15:44
Lab Project No:	B4528	Units	pg/g		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	(0.155)		0.155	(0.155)	(0.155)	(0.155)
12378-PeCDD	0.875	J	0.156	0.437	0.875	0.875
123478-HxCDD	5.66		0.356	0.566	0.566	0.566
123678-HxCDD	14.2		0.347	1.42	1.42	1.42
123789-HxCDD	9.59		0.325	0.959	0.959	0.959
1234678-HpCDD	787		0.112	7.87	7.87	7.87
OCDD	8650		0.372	8.65	0.865	2.6
2378-TCDF	[0.296]	J	0.191	[0.0296]	[0.0296]	[0.0296]
12378-PeCDF	0.285	J	0.175	0.0143	0.0143	0.00856
23478-PeCDF	1.71	J	0.166	0.856	0.856	0.514
123478-HxCDF	3.91		0.513	0.391	0.391	0.391
123678-HxCDF	1.87	J	0.464	0.187	0.187	0.187
234678-HxCDF	4.31		0.534	0.431	0.431	0.431
123789-HxCDF	(0.62)		0.62	(0.062)	(0.062)	(0.062)
1234678-HpCDF	104		0.1	1.04	1.04	1.04
1234789-HpCDF	10.4		0.0964	0.104	0.104	0.104
OCDF	498		0.187	0.498	0.0498	0.149

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TEQ Summaries			
EMPC = 0, ND = 0	23.4	15.6	17.1
EMPC = 0, ND = DL / 2	23.5	15.7	17.2
EMPC = 0, ND = DL	23.6	15.8	17.3
EMPC = 0, < J-level = 0	21.9	13.7	15.5
EMPC = EMPC, ND = 0	23.4	15.7	17.1
EMPC = EMPC, ND = DL / 2	23.6	15.8	17.2
EMPC = EMPC, ND = DL	23.7	15.9	17.4
EMPC = EMPC, < J-level = 0	21.9	13.7	15.5

Checkcode: 292-335-CQQ

Sample ID: DUP-03

Method 8290A

Client Data		Sample Data		Laboratory Data			
Name:	EarthCon	Matrix:	Soil	Lab Project ID:	B4528	Date Received:	08-Aug-2020
Project ID:	KMCC Navassa	Weight/Volume:	8.24 g	Lab Sample ID	B4528_17661_DF_006	Date Extracted:	10-Aug-2020
Date Collected:	08-Aug-2020	% Solid:	81.7 %	QC Batch No:	17661	Date Analyzed:	12-Aug-2020
		Split:	-	Dilution:	-	Time Analyzed:	16:30:46

Analyte	Conc. (pg/g)	DL (pg/g)	EMPC (pg/g)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	0.142			ES 2378-TCDD	88.4	
12378-PeCDD	ND	0.204			ES 12378-PeCDD	90	
123478-HxCDD	EMPC		0.255	J	ES 123478-HxCDD	72.7	
123678-HxCDD	EMPC		0.553	J	ES 123678-HxCDD	72.2	
123789-HxCDD	EMPC		0.591	J	ES 123789-HxCDD	75.3	
1234678-HpCDD	23.9				ES 1234678-HpCDD	81	
OCDD	164				ES OCDD	62.5	
2378-TCDF	ND	0.126			ES 2378-TCDF	85.6	
12378-PeCDF	ND	0.128			ES 12378-PeCDF	85.7	
23478-PeCDF	ND	0.124			ES 23478-PeCDF	85.7	
123478-HxCDF	ND	0.126			ES 123478-HxCDF	70.6	
123678-HxCDF	ND	0.126			ES 123678-HxCDF	70.6	
234678-HxCDF	ND	0.129			ES 234678-HxCDF	68.5	
123789-HxCDF	ND	0.155			ES 123789-HxCDF	74.5	
1234678-HpCDF	3.65				ES 1234678-HpCDF	71.8	
1234789-HpCDF	EMPC		0.319	J	ES 1234789-HpCDF	87.3	
OCDF	11.8				ES OCDF	65.8	
Totals					**Standard**	**CS Recoveries**	
					CS 37Cl-2378-TCDD	93.1	
Total TCDD	0.761		0.761		CS 12347-PeCDD	96.5	
Total PeCDD	0.645		0.864		CS 12346-PeCDF	83.7	
Total HxCDD	11.6		13.6		CS 123469-HxCDF	72.9	
Total HpCDD	100		100		CS 1234689-HpCDF	78.6	
Total TCDF	0.415		1.52				
Total PeCDF	ND	0.126	ND				
Total HxCDF	1.82		2.99				
Total HpCDF	10.3		10.8				
Total PCDD/Fs	**301**		**306**				
ITEF TEQs							
TEQ: ND=0	0.451		0.594				
TEQ: ND=DL/2	0.64	0.222	0.783				
TEQ: ND=DL	0.83	0.443	0.973				

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Sample ID: DUP-03 — TEQ Summary — Method 8290A

Client Project Name:	EarthCon	Matrix:	Soil	Lab Sample ID:	B4528_17661_DF_006
Cliend Project ID:	KMCC Navassa	Weight/Volume:	8.24 g	QC Batch No.:	17661
Date Collected:	08-Aug-2020	Split:	-	Date Extracted:	10-Aug-2020
Date Received:	08-Aug-2020	Dilution:	-	Date Analyzed:	12-Aug-2020 16:30
Lab Project No:	B4528	Units	pg/g		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	(0.142)		0.142	(0.142)	(0.142)	(0.142)
12378-PeCDD	(0.204)		0.204	(0.102)	(0.204)	(0.204)
123478-HxCDD	[0.255]	J	0.205	[0.0255]	[0.0255]	[0.0255]
123678-HxCDD	[0.553]	J	0.204	[0.0553]	[0.0553]	[0.0553]
123789-HxCDD	[0.591]	J	0.197	[0.0591]	[0.0591]	[0.0591]
1234678-HpCDD	23.9		0.189	0.239	0.239	0.239
OCDD	164		0.341	0.164	0.0164	0.0491
2378-TCDF	(0.126)		0.126	(0.0126)	(0.0126)	(0.0126)
12378-PeCDF	(0.128)		0.128	(0.00638)	(0.00638)	(0.00383)
23478-PeCDF	(0.124)		0.124	(0.062)	(0.062)	(0.0372)
123478-HxCDF	(0.126)		0.126	(0.0126)	(0.0126)	(0.0126)
123678-HxCDF	(0.126)		0.126	(0.0126)	(0.0126)	(0.0126)
234678-HxCDF	(0.129)		0.129	(0.0129)	(0.0129)	(0.0129)
123789-HxCDF	(0.155)		0.155	(0.0155)	(0.0155)	(0.0155)
1234678-HpCDF	3.65		0.075	0.0365	0.0365	0.0365
1234789-HpCDF	[0.319]	J	0.0716	[0.00319]	[0.00319]	[0.00319]
OCDF	11.8		0.143	0.0118	0.00118	0.00355

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TEQ Summaries			
EMPC = 0, ND = 0	0.451	0.293	0.328
EMPC = 0, ND = DL / 2	0.64	0.533	0.555
EMPC = 0, ND = DL	0.83	0.774	0.781
EMPC = 0, < J-level = 0	0.451	0.293	0.328
EMPC = EMPC, ND = 0	0.594	0.436	0.471
EMPC = EMPC, ND = DL / 2	0.783	0.676	0.698
EMPC = EMPC, ND = DL	0.973	0.917	0.924
EMPC = EMPC, < J-level = 0	0.451	0.293	0.328

Checkcode: 975-622-TPY

SGS North America - DF v0.7

Sample ID: CS-49

Method 8290A

Client Data		Sample Data		Laboratory Data			
Name:	EarthCon	Matrix:	Soil	Lab Project ID:	B4528	Date Received:	08-Aug-2020
Project ID:	KMCC Navassa	Weight/Volume:	8.42 g	Lab Sample ID	B4528_17661_DF_007	Date Extracted:	10-Aug-2020
Date Collected:	08-Aug-2020	% Solid:	79.4 %	QC Batch No:	17661	Date Analyzed:	12-Aug-2020
		Split:	-	Dilution:	-	Time Analyzed:	17:18:14

Analyte	Conc. (pg/g)	DL (pg/g)	EMPC (pg/g)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	0.146			ES 2378-TCDD	85.8	
12378-PeCDD	ND	0.193			ES 12378-PeCDD	87.9	
123478-HxCDD	EMPC		0.259	J	ES 123478-HxCDD	70.1	
123678-HxCDD	EMPC		0.344	J	ES 123678-HxCDD	71.4	
123789-HxCDD	0.509			J	ES 123789-HxCDD	72.7	
1234678-HpCDD	12.7				ES 1234678-HpCDD	77.2	
OCDD	150				ES OCDD	61.1	
2378-TCDF	ND	0.182			ES 2378-TCDF	85	
12378-PeCDF	ND	0.132			ES 12378-PeCDF	83	
23478-PeCDF	ND	0.137			ES 23478-PeCDF	84.9	
123478-HxCDF	EMPC		0.364	J	ES 123478-HxCDF	66.2	
123678-HxCDF	EMPC		0.201	J	ES 123678-HxCDF	68.7	
234678-HxCDF	0.267			J	ES 234678-HxCDF	68.8	
123789-HxCDF	ND	0.106			ES 123789-HxCDF	73.3	
1234678-HpCDF	1.56			J	ES 1234678-HpCDF	74.3	
1234789-HpCDF	ND	0.0714			ES 1234789-HpCDF	83.9	
OCDF	2.46			J	ES OCDF	63.4	
Totals					**Standard**	**CS Recoveries**	
					CS 37Cl-2378-TCDD	94.3	
Total TCDD	2.02		2.02		CS 12347-PeCDD	100	
Total PeCDD	1.23		3.42		CS 12346-PeCDF	84.6	
Total HxCDD	7.6		8.84		CS 123469-HxCDF	72.5	
Total HpCDD	38.1		38.1		CS 1234689-HpCDF	77.3	
Total TCDF	0.257		1.12				
Total PeCDF	0.369		1.67				
Total HxCDF	1.02		2.63				
Total HpCDF	3.23		3.23				
Total PCDD/Fs	**206**		**213**				
ITEF TEQs							
TEQ: ND=0	0.372		0.489				
TEQ: ND=DL/2	0.546	0.211	0.663				
TEQ: ND=DL	0.719	0.422	0.836				

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Sample ID: CS-49 — TEQ Summary — Method 8290A

Client Project Name:	EarthCon	Matrix:	Soil	Lab Sample ID:	B4528_17661_DF_007
Cliend Project ID:	KMCC Navassa	Weight/Volume:	8.42 g	QC Batch No.:	17661
Date Collected:	08-Aug-2020	Split:	-	Date Extracted:	10-Aug-2020
Date Received:	08-Aug-2020	Dilution:	-	Date Analyzed:	12-Aug-2020 17:18
Lab Project No:	B4528	Units	pg/g		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	(0.146)		0.146	(0.146)	(0.146)	(0.146)
12378-PeCDD	(0.193)		0.193	(0.0964)	(0.193)	(0.193)
123478-HxCDD	[0.259]	J	0.156	[0.0259]	[0.0259]	[0.0259]
123678-HxCDD	[0.344]	J	0.15	[0.0344]	[0.0344]	[0.0344]
123789-HxCDD	0.509	J	0.156	0.0509	0.0509	0.0509
1234678-HpCDD	12.7		0.108	0.127	0.127	0.127
OCDD	150		0.392	0.15	0.015	0.0449
2378-TCDF	(0.182)		0.182	(0.0182)	(0.0182)	(0.0182)
12378-PeCDF	(0.132)		0.132	(0.0066)	(0.0066)	(0.00396)
23478-PeCDF	(0.137)		0.137	(0.0685)	(0.0685)	(0.0411)
123478-HxCDF	[0.364]	J	0.0919	[0.0364]	[0.0364]	[0.0364]
123678-HxCDF	[0.201]	J	0.0858	[0.0201]	[0.0201]	[0.0201]
234678-HxCDF	0.267	J	0.0883	0.0267	0.0267	0.0267
123789-HxCDF	(0.106)		0.106	(0.0106)	(0.0106)	(0.0106)
1234678-HpCDF	1.56	J	0.0744	0.0156	0.0156	0.0156
1234789-HpCDF	(0.0714)		0.0714	(0.000714)	(0.000714)	(0.000714)
OCDF	2.46	J	0.186	0.00246	0.000246	0.000738

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TEQ Summaries			
EMPC = 0, ND = 0	0.372	0.235	0.266
EMPC = 0, ND = DL / 2	0.546	0.457	0.472
EMPC = 0, ND = DL	0.719	0.679	0.679
EMPC = 0, < J-level = 0	0.277	0.142	0.172
EMPC = EMPC, ND = 0	0.489	0.352	0.383
EMPC = EMPC, ND = DL / 2	0.663	0.574	0.589
EMPC = EMPC, ND = DL	0.836	0.796	0.796
EMPC = EMPC, < J-level = 0	0.277	0.142	0.172

Checkcode: 033-721-QCN

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Sample ID: Method Blank B4528_17661 — Method 8290A

Client Data		Sample Data		Laboratory Data			
Name:	EarthCon	Matrix:	Soil	Lab Project ID:	B4528	Date Received:	n/a
Project ID:	KMCC Navassa	Weight/Volume:	10.00 g	Lab Sample ID	MB1_17661_DF_SDS	Date Extracted:	10-Aug-2020
Date Collected:	n/a	% Solid:	n/a	QC Batch No:	17661	Date Analyzed:	12-Aug-2020
		Split:	-	Dilution:	-	Time Analyzed:	2:43:51

Analyte	Conc. (pg/g)	DL (pg/g)	EMPC (pg/g)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	0.138			ES 2378-TCDD	89.1	
12378-PeCDD	ND	0.125			ES 12378-PeCDD	87.6	
123478-HxCDD	ND	0.084			ES 123478-HxCDD	72.6	
123678-HxCDD	ND	0.0936			ES 123678-HxCDD	76.3	
123789-HxCDD	ND	0.079			ES 123789-HxCDD	81.8	
1234678-HpCDD	ND	0.0976			ES 1234678-HpCDD	73.8	
OCDD	ND	0.166			ES OCDD	61.8	
2378-TCDF	ND	0.0771			ES 2378-TCDF	90.9	
12378-PeCDF	ND	0.0802			ES 12378-PeCDF	90.9	
23478-PeCDF	ND	0.0794			ES 23478-PeCDF	86.6	
123478-HxCDF	ND	0.0614			ES 123478-HxCDF	75	
123678-HxCDF	ND	0.0577			ES 123678-HxCDF	78.5	
234678-HxCDF	ND	0.0661			ES 234678-HxCDF	76.5	
123789-HxCDF	ND	0.0823			ES 123789-HxCDF	73.2	
1234678-HpCDF	ND	0.0522			ES 1234678-HpCDF	77.1	
1234789-HpCDF	ND	0.0611			ES 1234789-HpCDF	70.7	
OCDF	ND	0.158			ES OCDF	58.8	
Totals					**Standard**	**CS Recoveries**	
					CS 37Cl-2378-TCDD	100	
Total TCDD	ND	0.138	ND		CS 12347-PeCDD	104	
Total PeCDD	ND	0.125	ND		CS 12346-PeCDF	93.9	
Total HxCDD	ND	0.085	ND		CS 123469-HxCDF	84.2	
Total HpCDD	ND	0.0976	ND		CS 1234689-HpCDF	82.2	
Total TCDF	ND	0.0771	ND				
Total PeCDF	ND	0.0798	ND				
Total HxCDF	ND	0.0658	ND				
Total HpCDF	ND	0.0559	ND				
Total PCDD/Fs	**ND**		**ND**				
ITEF TEQs							
TEQ: ND=0	0		0				
TEQ: ND=DL/2	0.153	0.153	0.153				
TEQ: ND=DL	0.306	0.306	0.306				

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Sample ID: Method Blank B4528_17661 — TEQ Summary — Method 8290A

Client Project Name:	EarthCon	Matrix:	Soil	Lab Sample ID:	MB1_17661_DF_SDS
Cliend Project ID:	KMCC Navassa	Weight/Volume:	10.00 g	QC Batch No.:	17661
Date Collected:	n/a	Split:	-	Date Extracted:	10-Aug-2020
Date Received:	n/a	Dilution:	-	Date Analyzed:	12-Aug-2020 02:43
Lab Project No:	B4528	Units	pg/g		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	(0.138)		0.138	(0.138)	(0.138)	(0.138)
12378-PeCDD	(0.125)		0.125	(0.0623)	(0.125)	(0.125)
123478-HxCDD	(0.084)		0.084	(0.0084)	(0.0084)	(0.0084)
123678-HxCDD	(0.0936)		0.0936	(0.00936)	(0.00936)	(0.00936)
123789-HxCDD	(0.079)		0.079	(0.0079)	(0.0079)	(0.0079)
1234678-HpCDD	(0.0976)		0.0976	(0.000976)	(0.000976)	(0.000976)
OCDD	(0.166)		0.166	(0.000166)	(0.0000166)	(0.0000497)
2378-TCDF	(0.0771)		0.0771	(0.00771)	(0.00771)	(0.00771)
12378-PeCDF	(0.0802)		0.0802	(0.00401)	(0.00401)	(0.00241)
23478-PeCDF	(0.0794)		0.0794	(0.0397)	(0.0397)	(0.0238)
123478-HxCDF	(0.0614)		0.0614	(0.00614)	(0.00614)	(0.00614)
123678-HxCDF	(0.0577)		0.0577	(0.00577)	(0.00577)	(0.00577)
234678-HxCDF	(0.0661)		0.0661	(0.00661)	(0.00661)	(0.00661)
123789-HxCDF	(0.0823)		0.0823	(0.00823)	(0.00823)	(0.00823)
1234678-HpCDF	(0.0522)		0.0522	(0.000522)	(0.000522)	(0.000522)
1234789-HpCDF	(0.0611)		0.0611	(0.000611)	(0.000611)	(0.000611)
OCDF	(0.158)		0.158	(0.000158)	(0.0000158)	(0.0000475)

TEQ Summaries			
EMPC = 0, ND = 0	0	0	0
EMPC = 0, ND = DL / 2	0.153	0.184	0.175
EMPC = 0, ND = DL	0.306	0.368	0.351
EMPC = 0, < J-level = 0	0	0	0
EMPC = EMPC, ND = 0	0	0	0
EMPC = EMPC, ND = DL / 2	0.153	0.184	0.175
EMPC = EMPC, ND = DL	0.306	0.368	0.351
EMPC = EMPC, < J-level = 0	0	0	0

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Checkcode: 154-981-DMK

METHOD 8290A **PCDD/F ONGOING PRECISION AND RECOVERY (OPR)** **FORM 8A**

Lab Name:	SGS North America		
Initial Calibration:	ICAL: MM3_DF_10012020_12JUN2020		
Instrument ID:	MM3	GC Column ID:	ZB-5ms
VER Data Filename:	200811R16	Analysis Date:	12-AUG-2020 01:08:48
Lab ID:	OPR1_17661_DF		

NATIVE ANALYTES	SPIKE CONC.	CONC. FOUND	RANGE (ng/mL)			OK
2,3,7,8-TCDD	10	10.7	6.7	-	15.8	Y
1,2,3,7,8-PeCDD	50	48.9	35	-	71	Y
1,2,3,4,7,8-HxCDD	50	53.2	35	-	82	Y
1,2,3,6,7,8-HxCDD	50	55.8	38	-	67	Y
1,2,3,7,8,9-HxCDD	50	51.2	32	-	81	Y
1,2,3,4,6,7,8-HpCDD	50	55.4	35	-	70	Y
OCDD	100	109	78	-	144	Y
2,3,7,8-TCDF	10	11.2	7.5	-	15.8	Y
1,2,3,7,8-PeCDF	50	52.4	40	-	67	Y
2,3,4,7,8-PeCDF	50	59.2	34	-	80	Y
1,2,3,4,7,8-HxCDF	50	52.9	36	-	67	Y
1,2,3,6,7,8-HxCDF	50	55.1	42	-	65	Y
2,3,4,6,7,8-HxCDF	50	54.7	35	-	78	Y
1,2,3,7,8,9-HxCDF	50	53.8	39	-	65	Y
1,2,3,4,6,7,8-HpCDF	50	54.8	41	-	61	Y
1,2,3,4,7,8,9-HpCDF	50	54.4	39	-	69	Y
OCDF	100	107	63	-	170	Y

Contract-required concentration limits for OPR as specified in Table 6,
Method 1613. 10/94

Processed: 13 Aug 2020 08:33 Analyst: TF

METHOD 8290A **PCDD/F ONGOING PRECISION AND RECOVERY (OPR)** **FORM 8B**

Lab Name: SGS North America

Initial Calibration: ICAL: MM3_DF_10012020_12JUN2020

Instrument ID: MM3 GC Column ID: ZB-5ms

VER Data Filename: 200811R16 Analysis Date: 12-AUG-2020 01:08:48

Lab ID: OPR1_17661_DF

LABELED ANALYTES	SPIKE CONC.	CONC. FOUND	RANGE (ng/mL)			OK
13C-2,3,7,8-TCDD	100	93.9	20	-	175	Y
13C-1,2,3,7,8-PeCDD	100	95.6	21	-	227	Y
13C-1,2,3,4,7,8-HxCDD	100	81.7	21	-	193	Y
13C-1,2,3,6,7,8-HxCDD	100	79.8	25	-	163	Y
13C-1,2,3,7,8,9-HxCDD	100	86.7	26	-	166	Y
13C-1,2,3,4,6,7,8-HpCDD	100	78.1	26	-	166	Y
13C-OCDD	200	121	26	-	397	Y
13C-2,3,7,8-TCDF	100	93.8	22	-	152	Y
13C-1,2,3,7,8-PeCDF	100	95.3	21	-	192	Y
13C-2,3,4,7,8-PeCDF	100	92.1	13	-	328	Y
13C-1,2,3,4,7,8-HxCDF	100	82.2	19	-	202	Y
13C-1,2,3,6,7,8-HxCDF	100	82.1	21	-	159	Y
13C-2,3,4,6,7,8-HxCDF	100	81.5	22	-	176	Y
13C-1,2,3,7,8,9-HxCDF	100	74.8	17	-	205	Y
13C-1,2,3,4,6,7,8-HpCDF	100	84.5	21	-	158	Y
13C-1,2,3,4,7,8,9-HpCDF	100	73.9	20	-	186	Y
13C-OCDF	200	119	26	-	397	Y
CLEANUP STANDARD						
37Cl-2,3,7,8-TCDD	40	40.1	12.4	-	76.4	Y

Contract-required concentration limits for OPR as specified in Table 6, Method 1613. 10/94

Processed: 13 Aug 2020 08:33 Analyst: TF

Sample Receipt Notification

5500 Business Drive
Wilmington, NC 28405 USA
Tel: 910 794-1613
Toll Free: 866 846-8290
Fax: 910 794-3919

Project Manager:	*Tamara Burkamper*
Receipt Date & Time:	*08-Aug-20 at 17:00*
AP Project name:	*B4528*
Requested TAT:	*3 business days*
Projected due date:	*13-Aug-20*
Matrix:	*Soil*
Phone#:	*910-794-1613*
Email Address:	*Tamara.Morgan@sgs.com*

Company Contact:	*Mary Brookshire*
Company:	*EarthCon*
Project Name & Site:	*KMCC Navassa*
Project PO#:	*02.20200007.00*
QAAP/Contract #:	*on file*
Requested Analysis:	*SW-846 Method 8290A*
Phone#:	*404-317-7748*
Email Address:	*mbrookshire@earthcon.com*

Client Smp ID	AP Smp ID	Sample Condition & Notes	Quantity	Size	Sampling Date	Sampling Time	Received Temp (°C)	Container #	Shipping #
CS-55	B4528_001	SO	1	4 oz. Amber	07-Aug-20	15:02	1.7	1	n/a
CS-50	B4528_002	SO	1	4 oz. Amber	07-Aug-20	17:15	1.7	1	n/a
CS-51	B4528_003	SO	1	4 oz. Amber	07-Aug-20	17:05	1.7	1	n/a
CS-48	B4528_004	SO	1	4 oz. Amber	08-Aug-20	09:00	1.7	1	n/a
CS-52	B4528_005	SO	1	4 oz. Amber	08-Aug-20	09:30	1.7	1	n/a
DUP-03	B4528_006	SO	1	4 oz. Amber	08-Aug-20	00:00	1.7	1	n/a
CS-49	B4528_007	SO	1	4 oz. Amber	08-Aug-20	08:40	1.7	1	n/a

Preservation Type: **Sample Seals:** No

Notes/Comments:

Samples received intact
Samples in cooler 2 contained a TB measuring 1.7 degrees C; one of the samples was measured to be 15.0 degrees C as it was sampled that day and still coming to temp at drop off

Any un-extracted sample will be stored for 90 days from reporting date. Additional storage fees may apply for any samples stored longer than 90 days.

Received by: Jeannie Milholland *Logged in by: Tamara Burkamper* *QC'ed by:* AK 10 Aug 20

All services are rendered in accordance with the applicable SGS General Conditions of Service accessible via: http://www.sgs.com/terms_and_conditions.htm

Rush - 3 day TAT
out

SGS North America Inc - Orlando
Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 FAX: 407-425-0707
www.sgs.com

B4528

SGS - ~~ORLANDO~~ JOB # : PAGE 1 OF 1

SGS - ORLANDO Quote # | SKIFF #

Client / Reporting Information

Company Name: EarthCon
Address: 1880 W. Oak Pkwy
City: Marietta State: GA Zip: 30062
Project Contact: M. Brookshire Email: mbrookshire@earthcon.com
Phone #: 404-317-7748
Sampler(s) Name(s) (Printed)
Sampler 1: Sampler 2:

Project Information

Project Name: KMCC Navassa
Street: 120 Quality Dr
City: Navassa State: NC
Project #: 02.20200007.00
Fax #:
Client Purchase Order #:

Analytical Information

Dioxins/Furans (8290)

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid

~~SGS Orlando~~ Sample #	Field ID / Point of Collection	COLLECTION DATE	TIME	SAMPLED BY:	MATRIX	CONTAINER INFORMATION TOTAL # OF BOTTLES	OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NAOH+ZNAC	DI WATER	MEOH	LAB USE ONLY
☆ 001	CS-55	8/7/20	1502	ST	SO	1	X								1	
☆ 002	CS-50	8/7/20	1715	ST	SO	1		1							1	
☆ 003	CS-51	8/7/20	1705	DF	SO	1		1							1	
	FB-02	8/8/20	0830	DF	AQ	1		1							1	
	EB-02	8/8/20	0920	CT	AQ	1		1							1	
	EB-03	8/8/20	0835	DF	AQ	1		1							1	
	EB-04	8/8/20	0845	DF	AQ	1		1							1	
☆ 004	CS-48	8/8/20	0900	ST	SO	1		1							1	
☆ 005	CS-52	8/8/20	0930	DF	SO	1		1							1	
☆ 006	DUP-03	8/8/20	—	ST	SO	1		1							1	
☆ 007	CS-49	8/8/20	0840	ST	SO	1		1							1	
	EB-07	8/8/20	1430	CT	~~SOAQ~~ AQ	1		1							1	

Turnaround Time (Business days)

10 Day (Business) Approved By: / Date:
7 Day
5 Day
3 Day *RUSH*
2 Day *RUSH*
1 Day *RUSH*
Other
Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- ☐ COMMERCIAL "A" (RESULTS ONLY)
- ☐ COMMERCIAL "B" (RESULTS PLUS QC)
- ☐ REDT1 (EPA LEVEL 3)
- ☐ FULLT1 (EPA LEVEL 4)
- ☐ EDD'S

Comments / Remarks

Rush TAT - 3 days

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
1	8/8/20 1720	2	3		4
Relinquished by/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
5		6	7		8

Lab Use Only : Cooler Temperature (s) Celsius (corrected): 15.0 → received packed on ice, temp blank @ 1.7°C http://www.sgs.com/en/terms-and-conditions

*samples in this SDG 48810/2020

Project Initiation Form

Project Number: B4528

Initiation Date: 10-Aug-20

Client Name: EarthCon

Sample Matrix: Soil

Analysis Method: 8290 PCDD/F

TAT: 3 days

Project Manager: Tamara

Special Instructions

M8290A w/OPR

10 g DWE extraction

May contain high levels

Reporting Instructions

M8290A w/OPR

~~Basic Report~~ Full Report TB 8/12/2020

May contain high levels

EQUIS4 file with headers and w/o VVL validation

EPA Region 4 Equis

PM Initials: akornegay Date: 10-Aug-20

SGS

Methods: PCB PAH (PCDD/F) WHO-2 QUANTICS USV PEST

Extraction Type: (SDS) CLL TALEX Carbon SPE

Solid

Final Volume: 20 mL

Batch# 17661

Split: ~~1/2~~ ~~1/4~~

Extract Initial/Date: JZ 8/10/2020

Clean-up Initial/Date: ~~RBS~~ 8/11/2020

Transfer Init/Date: ~~RBS~~ 8/11/2020

Lab Sample ID	Extraction Position / Solvent: TOL	Extraction Weight/Volume g	mL	(Td)	ASECS #	Observations
B4525_17661_001	3	10.58				Black, moist, sandy
B4525_17661_002	4	10.06				See 001
B4525_17661_003	5	10.07				See 001
B4528_17661_001	6	10.16				Dark, moist, sandy
B4528_17661_002	7	10.72				Dark, moist, sandy, orange clumps
B4528_17661_003	8	13.04				Brown, wet, rocks, sand, OM
B4528_17661_004	9	10.42				Dark, moist, sandy
B4528_17661_005	10	10.54				Black, clumpy, moist, white specs
B4528_17661_006	11	10.09				Dark, moist, sandy
B4528_17661_007	12	10.60				grey, moist, sandy
MB1_17661	1	10.00				Sodium Sulfate
OPR1_17661	2	10.00				Sodium Sulfate

JZ 8/10/2020

Supply IDs

Toluene	STL 13-5
MeCHL	STL13-8
Florisil	SPL4-289B
Hexane	STL13-7
Silica	SPL4-277B
S Nitrate	SPL4-290
Base Silica	SPL4-291
HydroMatrix	N/A
Tetradecane	SPL4-277A
H_2SO_4	N/A
A Silica	SPL4-287
Sodium Sulfate	SPL4-264A

Additional Cleanup

Acid Partition Date/Initial:	
Mini-Acid Date/Initial:	
Carbon Column Date/Initial:	TB 8/13/2020
GPC Date/Initial:	
Bond-Elute Date/Initial:	

Cycle Time

TOL	Start: 1600
	Stop: 0815
HEX	Start:
	Stop:
DCM	Start:
	Stop:

SGS

Methods: PCB PCDD/F QUANTICS
PAH WHO-2 USV PEST

Solid

Batch# 17661

Inter-Department Communication Sheet

TB 8/13/2020

SGS

Wt. Volume Results

Batch #: 17661

Comments:

Lab Sample ID	Boat WT.	Sample Wt. + Boat Wt.	Dried Sample + Boat Wt.	% Solid	Average % Solid	RSD	Qtest Ratio (if Applicable)	Dry Wt. Equiv.	Extracted Wt.	Final Wt.
B4525_001	0.81	4.02	3.47	82.87%	82.87%			12.07	10.58	8.77
B4525_002	0.79	3.63	3.03	78.87%	78.87%			12.68	10.06	7.93
B4525_003	0.79	3.24	2.59	73.47%	73.47%			13.61	10.07	7.4
B4528_001	0.79	3.82	3.36	84.82%	84.82%			11.79	10.16	8.62
B4528_002	0.79	3.33	3.06	89.37%	89.37%			11.19	10.72	9.58
B4528_003	0.79	3.47	1.76	36.19%	36.19%			27.63	13.04	4.72
B4528_004	0.78	3.3	2.68	75.40%	75.40%			13.26	10.42	7.86
B4528_005	0.79	3.56	3.11	83.75%	83.75%			11.94	10.54	8.83
B4528_006	0.8	3.31	2.85	81.67%	81.67%			12.24	10.09	8.24
B4528_007	0.79	4.43	3.68	79.40%	79.40%			12.6	10.6	8.42

TB 8/13/2020

% Solid Determination WorkSheet

SGS

Batch: 17661

Lab Sample ID	Boat Wt.	Sample Wt. + Boat Wt.	Dried Sample + Boat Wt.	Comments
B4525_17661_001	0.81	4.02	3.47	
B4525_17661_002	0.79	3.63	3.03	
B4525_17661_003	0.79	3.24	2.59	
B4528_17661_001	0.79	3.82	3.36	
B4528_17661_002	0.79	3.33	3.06	
B4528_17661_003	0.79	3.47	1.76	
B4528_17661_004	0.78	3.30	2.68	
B4528_17661_005	0.79	3.56	3.11	
B4528_17661_006	0.80	3.31	2.85	
B4528_17661_007	0.79	4.43	3.68	
Date/Initials:		TB 8/10/2020	TB 8/11/20	

SGS

Methods: PCB / PAH — PCDD/F / WHO-2 — QUANTICS / USV — PEST

Solid

Batch # 17661

Spiker Initials/Date:	8/10/20	8/10/20	8/10/20	8/11/2020	8/11/2020		
Lab Sample ID	D/F Ax-A Amount: 20µL Observer Initials	D/F Ax-B Amount: 20µL Observer Initials	D/F ES Amount: 20µL Observer Initials	D/F CS Amount: 20µL Observer Initials	D/F JS Amount: 20µL Observer Initials	Amount: Observer Initials	Amount: Observer Initials
B4525_17661_001	—	—	AH	2	2		
B4525_17661_002	—	—	AH	2	2		
B4525_17661_003	—	—	AH	2	2		
B4528_17661_001	—	—	AH	2	2		
B4528_17661_002	—	—	AH	2	2		
B4528_17661_003	—	—	AH	2	2		
B4528_17661_004	—	—	AH	2	2		
B4528_17661_005	—	—	AH	2	2		
B4528_17661_006	—	—	AH	2	2		
B4528_17661_007	—	—	AH	2	2		
MB1_17661	—	—	AH	2	2		
OPR1_17661	AH	AH	AH	2	2		
	8/10/20	8/10/20	8/10/20	8/11/20	8/11/20		

8/11/2020

Standard Information

Spike ID	DF Ax-A	DF Ax-B	DF ES	D/F CS	D/F JS		
SIL #	23-12-15	20-1638-2	24-2-1	23-441-1	23-441-2		
Concentration	10 ng/mL	10 pg/µL	100 pg/µL	100 pg/µL	100 pg/µL		
Expiration Date	4-7-25	6-17-21	8/2028	5/21/21	5/21/21		

Instrument: MM3 (AutoSpec-Ultima) MS Experiment: df_cl4-8_db5MS GC Program: df_db5MS

#	Datafile	Vial#	Lab ID	Wt/Vol	Client/Sample ID	Analyst(s)	Checkcode	Acq Date	Acq Time
15	200811R15	3	CS3_200811_DF_RB	1.00	SIL 20-449-3	PSW, DTF	477-642	12-Aug-2020	00:22:05
16	200811R16	50	OPR1_17661_DF	1.00	0_17661_OPR001	PSW, DTF	728-067	12-Aug-2020	01:08:48
17	200811R17	2	SBS_200811_DF_RB	1.00	SIL 20-61-1	PSW	928-044	12-Aug-2020	01:56:18
18	200811R18	49	MB1_17661_DF_SDS	10.00	Method Blank	PSW, DTF	154-981	12-Aug-2020	02:43:51
22	200811R22	54	B4528_17661_DF_001	8.62	CS-55	PSW, DTF	830-980	12-Aug-2020	05:53:54
23	200811R23	3	CS3_200811_DF_RC	1.00	SIL 20-449-3	PSW, DTF	207-132	12-Aug-2020	08:09:16
2	200812R02	3	CS3_200812_DF_RA	1.00	SIL 20-449-3	PSW, DTF	500-345	12-Aug-2020	10:55:51
3	200812R03	50	OPR1_17661_DF-RJ CPSM only	1.00	0_17661_OPR001	PSW, DTF	373-223	12-Aug-2020	11:44:55
4	200812R04	2	SBS_200812_DF_RA	1.00	SIL 20-61-1	PSW	435-906	12-Aug-2020	12:31:37
5	200812R05	55	B4528_17661_DF_002	9.58	CS-50	PSW, DTF	713-211	12-Aug-2020	13:19:10
6	200812R06	56	B4528_17661_DF_003	4.72	CS-51	PSW, DTF	604-577	12-Aug-2020	14:06:43
7	200812R07	57	B4528_17661_DF_004	7.86	CS-48	PSW, DTF	652-437	12-Aug-2020	14:54:11
8	200812R08	58	B4528_17661_DF_005	8.83	CS-52	PSW, DTF	292-335	12-Aug-2020	15:44:02
9	200812R09	59	B4528_17661_DF_006	8.24	DUP-03	PSW, DTF	975-622	12-Aug-2020	16:30:46
10	200812R10	60	B4528_17661_DF_007	8.42	CS-49	PSW, DTF	033-721	12-Aug-2020	17:18:14
11	200812R11	3	CS3_200812_DF_RB	1.00	SIL 20-449-3	PSW, DTF	878-506	12-Aug-2020	18:05:42

REVIEWED
Amber_Kornegay , 10:31:27, 08/13/2020

REVIEWED
By Tyler_Fritz at 8:51 am, Aug 13, 2020

Lab ID: MB1_17661_DF_SDS | **Acq'd:** 12 Aug 2020 02:43 PSW | **Wt/Vol:** 10.00 g | **ICAL:** MM3_DF_10012020_12JUN2020

Client ID: Method Blank B4528_17661 | **UTP:** 13-Aug-2020 08:31:20 DTF | **J-level:** 0.5 pg/g | **Split:** 1 | **Checkcode:** 154-981-DMK

Datafile: 200811R18 | **Report:** 13 Aug 2020 08:33 TF | **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	NotFnd		1.0009	-		-	-	-	1.18	-	4536	0.138
12378-PeCDD	NotFnd		1.0006	-		-	-	-	1.14	-	3860	0.125
123478-HxCDD	NotFnd		1.0004	-		-	-	-	1.09	-	2813	0.084
123678-HxCDD	NotFnd		1.0035	-		-	-	-	1.13	-	2813	0.0936
123789-HxCDD	NotFnd		1.0116	-		-	-	-	1.05	-	2813	0.079
1234678-HpCDD	NotFnd		1.0003	-		-	-	-	0.98	-	3482	0.0976
OCDD	NotFnd		1.0003	-		-	-	-	1.08	-	3200	0.166
2378-TCDF	NotFnd		1.0006	-		-	-	-	0.98	-	3370	0.0771
12378-PeCDF	NotFnd		1.0006	-		-	-	-	0.95	-	3550	0.0802
23478-PeCDF	NotFnd		1.0005	-		-	-	-	0.95	-	3550	0.0794
123478-HxCDF	NotFnd		1.0005	-		-	-	-	1.20	-	2838	0.0614
123678-HxCDF	NotFnd		1.0004	-		-	-	-	1.07	-	2838	0.0577
234678-HxCDF	NotFnd		1.0005	-		-	-	-	1.10	-	2838	0.0661
123789-HxCDF	NotFnd		1.0004	-		-	-	-	1.09	-	2838	0.0823
1234678-HpCDF	NotFnd		1.0003	-		-	-	-	1.28	-	2503	0.0522
1234789-HpCDF	NotFnd		1.0002	-		-	-	-	1.27	-	2503	0.0611
OCDF	NotFnd		1.0003	-		-	-	-	1.01	-	3323	0.158

Name	Act RT	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	27.25	1.0255	1.0257	+0.3	6.06E+07	0.78	Y	1.01	89.1
ES 12378-PeCDD	32.80	1.2330	1.2345	+3.0	5.15E+07	1.66	Y	0.87	87.6
ES 123478-HxCDD	36.72	0.9917	0.9916	-0.2	4.65E+07	1.29	Y	1.10	72.6
ES 123678-HxCDD	36.83	0.9947	0.9946	-0.2	4.73E+07	1.32	Y	1.06	76.3
ES 123789-HxCDD	37.13	1.0028	1.0027	-0.2	5.82E+07	1.27	Y	1.22	81.8
ES 1234678-HpCDD	39.95	1.0785	1.0789	+1.0	4.28E+07	1.11	Y	0.99	73.8
ES OCDD	42.37	1.1439	1.1443	+1.0	4.83E+07	0.88	Y	0.67	61.8
ES 2378-TCDF	26.33	1.0572	1.0577	+0.8	1.04E+08	0.80	Y	1.01	90.9
ES 12378-PeCDF	31.31	1.2558	1.2579	+3.9	9.23E+07	1.58	Y	0.90	90.9
ES 23478-PeCDF	32.44	1.3012	1.3035	+4.5	8.69E+07	1.59	Y	0.89	86.6
ES 123478-HxCDF	35.75	0.9655	0.9654	-0.2	6.27E+07	0.52	Y	1.43	75
ES 123678-HxCDF	35.88	0.9693	0.9691	-0.4	7.48E+07	0.54	Y	1.63	78.5
ES 234678-HxCDF	36.53	0.9867	0.9866	-0.2	6.60E+07	0.54	Y	1.48	76.5
ES 123789-HxCDF	37.51	1.0130	1.0129	-0.2	5.52E+07	0.52	Y	1.29	73.2
ES 1234678-HpCDF	39.04	1.0540	1.0543	+0.7	5.16E+07	0.47	Y	1.15	77.1
ES 1234789-HpCDF	40.36	1.0898	1.0901	+0.7	3.74E+07	0.45	Y	0.91	70.7
ES OCDF	42.54	1.1484	1.1488	+1.0	5.69E+07	0.88	Y	0.83	58.8

Lab ID: MB1_17661_DF_SDS | Acq'd: 12 Aug 2020 02:43 PSW | Wt/Vol: 10.00 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: Method Blank B4528_17661 | UTP: 13-Aug-2020 08:31:20 DTF | J-level: 0.5 pg/g | Split: 1 | Checkcode: 154-981-DMK

Datafile: 200811R18 | Report: 13 Aug 2020 08:33 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
JS 1234-TCDD	26.57		-	-	-	6.76E+07	0.76	Y	-	-
JS 1234-TCDF	24.89		-	-	-	1.13E+08	0.82	Y	-	-
JS 123467-HxCDD	37.03		-	-	-	2.92E+07	1.21	Y	-	-
CS 37Cl-2378-TCDD	27.27		1.0265	1.0266	+0.2	2.80E+07	n/a	-	1.04	100
CS 12347-PeCDD	32.29		1.2141	1.2154	+2.5	5.17E+07	1.69	Y	0.74	104
CS 12346-PeCDF	30.77		1.2343	1.2363	+3.7	9.11E+07	1.57	Y	0.86	93.9
CS 123469-HxCDF	36.19		0.9776	0.9775	-0.2	6.67E+07	0.53	Y	1.36	84.2
CS 1234689-HpCDF	39.45		1.0650	1.0653	+0.7	5.06E+07	0.46	Y	1.05	82.2
~~SS 37Cl-2378-TCDD~~	~~27.27~~		~~1.0265~~	~~1.0266~~	~~+0.2~~	~~2.80E+07~~	~~n/a~~		~~1.04~~	~~111~~
~~SS 12347-PeCDD~~	~~32.29~~		~~1.2141~~	~~1.2154~~	~~+2.5~~	~~5.17E+07~~	~~1.69~~	~~Y~~	~~0.86~~	~~117~~
~~SS 12346-PeCDF~~	~~30.77~~		~~1.2343~~	~~1.2363~~	~~+3.7~~	~~9.11E+07~~	~~1.57~~	~~Y~~	~~0.96~~	~~103~~
~~SS 123469-HxCDF~~	~~36.19~~		~~0.9776~~	~~0.9775~~	~~-0.2~~	~~6.67E+07~~	~~0.53~~	~~Y~~	~~0.83~~	~~107~~
~~SS 1234689-HpCDF~~	~~39.45~~		~~1.0650~~	~~1.0653~~	~~+0.7~~	~~5.06E+07~~	~~0.46~~	~~Y~~	~~0.92~~	~~106~~

Totals	Conc	EMPC
Total TCDD	0	0
Total PeCDD	0	0
Total HxCDD	0	0
Total HpCDD	0	0
Total Tetra-Octa Dioxins	0	0
Total TCDF	0	0
Total PeCDF	0	0
Total HxCDF	0	0
Total HpCDF	0	0
Total Tetra-Octa Furans	0	0
Total Tetra-Octa Dioxins & Furans	0	0

Lab ID: MB1_17661_DF_SDS | Acq'd: 12 Aug 2020 02:43 PSW | Wt/Vol: 10.00 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: Method Blank B4528_17661 | UTP: 13-Aug-2020 08:31:20 DTF | J-level: 0.5 pg/g | Split: 1 | Checkcode: 154-981-DMK

Datafile: 200811R18 | Report: 13 Aug 2020 08:33 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1368-TCDD	NotFnd		0.8591						1.18		4536	0.138
1379-TCDD	NotFnd		0.8732						1.18		4536	0.138
1369-TCDD	NotFnd		0.8901						1.18		4536	0.138
1469-TCDD	NotFnd		0.9205						1.18		4536	0.138
1247/1246/1248/1249-TCDD	NotFnd		0.9301						1.18		4536	0.138
1378-TCDD	NotFnd		0.9374						1.18		4536	0.138
1268-TCDD	NotFnd		0.9449						1.18		4536	0.138
1478-TCDD	NotFnd		0.9544						1.18		4536	0.138
1279-TCDD	NotFnd		0.9610						1.18		4536	0.138
1234/1269-TCDD	NotFnd		0.9746						1.18		4536	0.138
1236-TCDD	NotFnd		0.9802						1.18		4536	0.138
1237/1238-TCDD	NotFnd		0.9898						1.18		4536	0.138
1239-TCDD	NotFnd		0.9950						1.18		4536	0.138
2378-TCDD	**NotFnd**		**1.0009**						**1.18**		**4536**	**0.138**
1278-TCDD	NotFnd		1.0133						1.18		4536	0.138
1267-TCDD	NotFnd		1.0185						1.18		4536	0.138
1289-TCDD	NotFnd		1.0379						1.18		4536	0.138
12479/12468-PeCDD	NotFnd		0.9229						1.14		3860	0.125
12469-PeCDD	NotFnd		0.9396						1.14		3860	0.125
12368-PeCDD	NotFnd		0.9568						1.14		3860	0.125
12478-PeCDD	NotFnd		0.9626						1.14		3860	0.125
12379-PeCDD	NotFnd		0.9657						1.14		3860	0.125
12369/12467/12489-PeCDD	NotFnd		0.9738						1.14		3860	0.125
12346/12347-PeCDD	NotFnd		0.9853						1.14		3860	0.125
12378-PeCDD	NotFnd		**1.0006**						**1.14**		**3860**	**0.125**
12367-PeCDD	NotFnd		1.0034						1.14		3860	0.125
12389-PeCDD	NotFnd		1.0141						1.14		3860	0.125
124679/124689-HxCDD	NotFnd		0.9542						1.09		2813	0.085
123468-HxCDD	NotFnd		0.9721						1.09		2813	0.085
123679/123689-HxCDD	NotFnd		0.9799						1.09		2813	0.085
123469-HxCDD	NotFnd		0.9835						1.09		2813	0.085
123478-HxCDD	NotFnd		**1.0004**						1.09		**2813**	**0.084**
123678-HxCDD	NotFnd		**1.0035**						1.13		**2813**	**0.0936**
123467-HxCDD	NotFnd		1.0088						1.09		2813	0.085
123789-HxCDD	NotFnd		**1.0116**						1.05		**2813**	**0.079**

Lab ID: MB1_17661_DF_SDS | Acq'd: 12 Aug 2020 02:43 PSW | Wt/Vol: 10.00 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: Method Blank B4528_17661 | UTP: 13-Aug-2020 08:31:20 DTF | J-level: 0.5 pg/g | Split: 1 | Checkcode: 154-981-DMK

Datafile: 200811R18 | Report: 13 Aug 2020 08:33 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

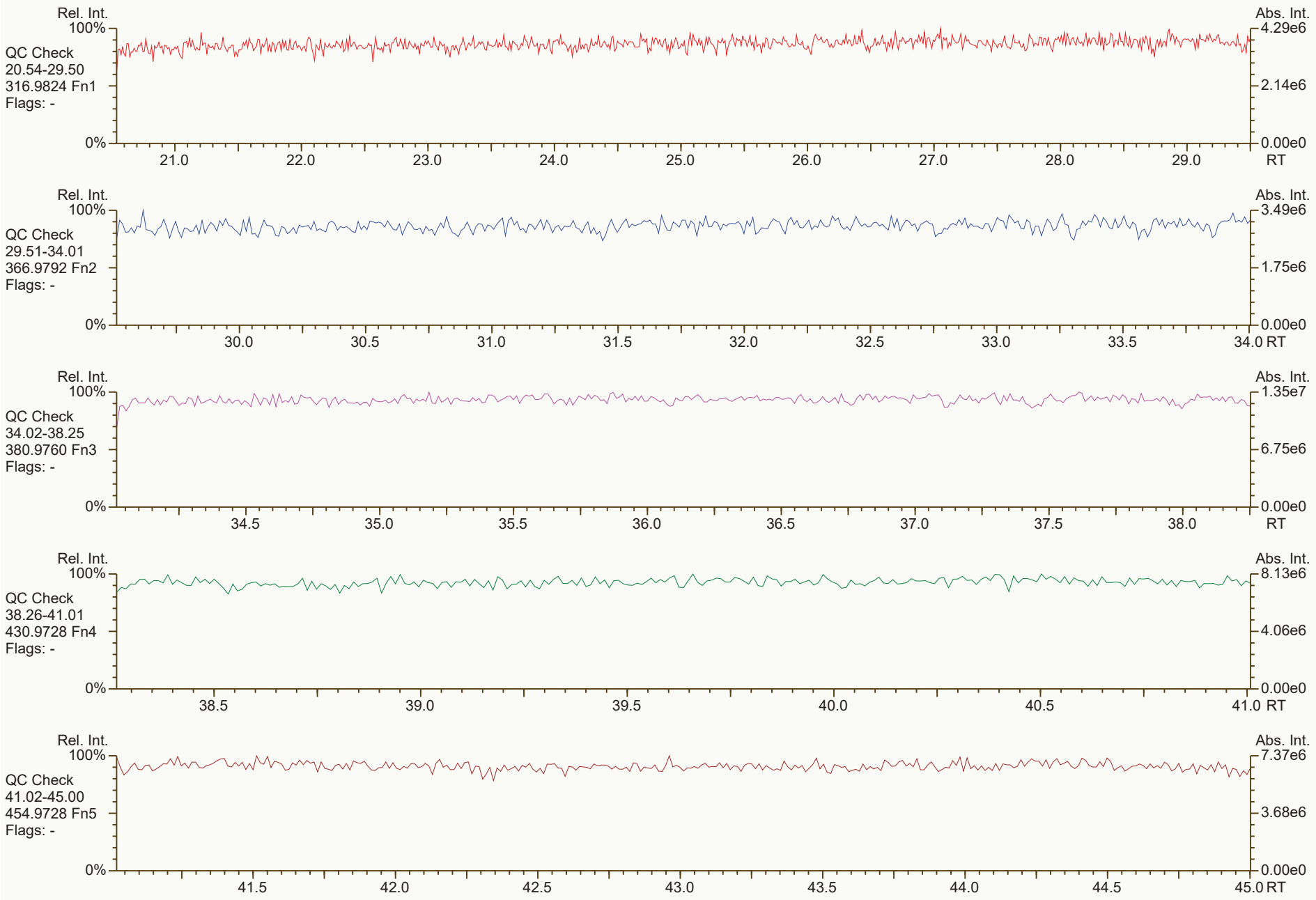
Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1234679-HpCDD	NotFnd		0.9843						0.98		3482	0.0976
1234678-HpCDD	**NotFnd**		**1.0003**						**0.98**		**3482**	**0.0976**
OCDD	**NotFnd**		**1.0003**						**1.08**		**3200**	**0.166**
OCDD-a	NotFnd		1.0002						0.07		4653	3.91
1368-TCDF	NotFnd		0.8044						0.98		3370	0.0771
1468-TCDF	NotFnd		0.8261						0.98		3370	0.0771
2468-TCDF	NotFnd		0.8511						0.98		3370	0.0771
1346/1246-TCDF	NotFnd		0.8665						0.98		3370	0.0771
1347/1378/1247-TCDF	NotFnd		0.8723						0.98		3370	0.0771
1348-TCDF	NotFnd		0.8835						0.98		3370	0.0771
1248/1367/1379-TCDF	NotFnd		0.8888						0.98		3370	0.0771
1268-TCDF	NotFnd		0.9044						0.98		3370	0.0771
1467-TCDF	NotFnd		0.9098						0.98		3370	0.0771
1478-TCDF	NotFnd		0.9167						0.98		3370	0.0771
1369/1237-TCDF	NotFnd		0.9316						0.98		3370	0.0771
2467-TCDF	NotFnd		0.9369						0.98		3370	0.0771
2368-TCDF	NotFnd		0.9430						0.98		3370	0.0771
1238/1234/1678/1469/1236-TCDF	NotFnd		0.9468						0.98		3370	0.0771
1278-TCDF	NotFnd		0.9651						0.98		3370	0.0771
1349-TCDF	NotFnd		0.9704						0.98		3370	0.0771
1267-TCDF	NotFnd		0.9761						0.98		3370	0.0771
2346/1249-TCDF	NotFnd		0.9834						0.98		3370	0.0771
2347/1279-TCDF	NotFnd		0.9921						0.98		3370	0.0771
2348-TCDF	NotFnd		0.9964						0.98		3370	0.0771
2378-TCDF	**NotFnd**		**1.0006**						**0.98**		**3370**	**0.0771**
2367/3467-TCDF	NotFnd		1.0156						0.98		3370	0.0771
1269-TCDF	NotFnd		1.0249						0.98		3370	0.0771
1239-TCDF	NotFnd		1.0357						0.98		3370	0.0771
1289-TCDF	NotFnd		1.0799						0.98		3370	0.0771
13468/12468-PeCDF	NotFnd		0.9084						0.95		3935	0.0885
13678/13467/12467-PeCDF	NotFnd		0.9591						0.95		3550	0.0798
12368/13478/12478-PeCDF	NotFnd		0.9642						0.95		3550	0.0798
14678-PeCDF	NotFnd		0.9675						0.95		3550	0.0798
13479-PeCDF	NotFnd		0.9706						0.95		3550	0.0798
13469/12479-PeCDF	NotFnd		0.9787						0.95		3550	0.0798
12346-PeCDF	NotFnd		0.9833						0.95		3550	0.0798

Lab ID: MB1_17661_DF_SDS | Acq'd: 12 Aug 2020 02:43 PSW | Wt/Vol: 10.00 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: Method Blank B4528_17661 | UTP: 13-Aug-2020 08:31:20 DTF | J-level: 0.5 pg/g | Split: 1 | Checkcode: 154-981-DMK

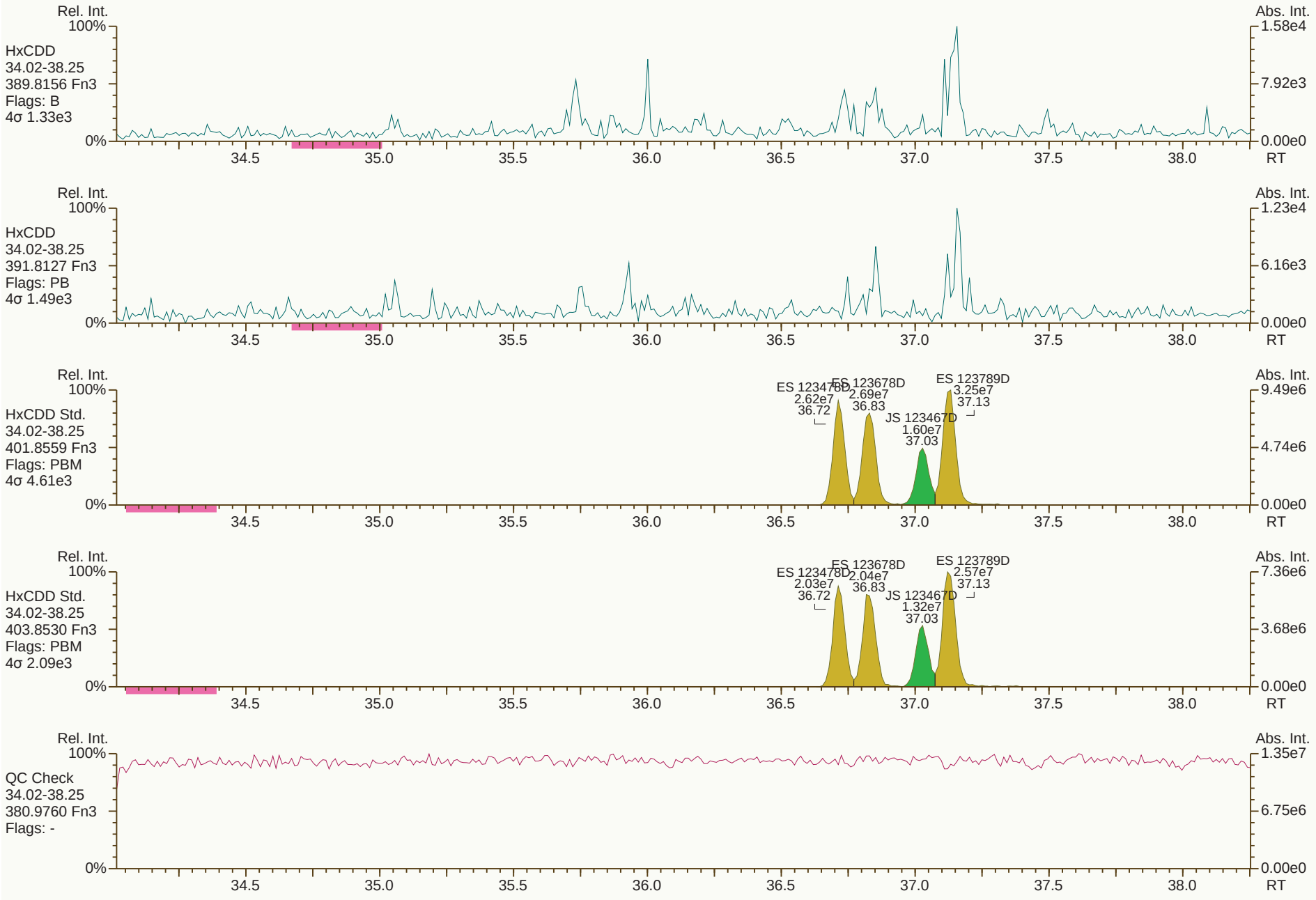
Datafile: 200811R18 | Report: 13 Aug 2020 08:33 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
23468/12469-PeCDF	NotFnd		0.9861						0.95		3550	0.0798
12347-PeCDF	NotFnd		0.9887						0.95		3550	0.0798
12348-PeCDF	NotFnd		0.9938						0.95		3550	0.0798
12378-PeCDF	**NotFnd**		**1.0006**						**0.95**		**3550**	**0.0802**
12678/12367-PeCDF	NotFnd		1.0095						0.95		3550	0.0798
12379-PeCDF	NotFnd		1.0150						0.95		3550	0.0798
12679-PeCDF	NotFnd		0.9926						0.95		3550	0.0798
23467/12369-PeCDF	NotFnd		0.9966						0.95		3550	0.0798
23478-PeCDF	**NotFnd**		**1.0005**						**0.95**		**3550**	**0.0794**
23478/12489-PeCDF	NotFnd		0.0000						0.95			
12489-PeCDF	NotFnd		1.0047						0.95		3550	0.0798
12349-PeCDF	NotFnd		1.0107						0.95		3550	0.0798
12389-PeCDF	NotFnd		1.0339						0.95		3550	0.0798
123468-HxCDF	NotFnd		0.9617						1.11		2838	0.0658
124678/134678-HxCDF	NotFnd		0.9673						1.11		2838	0.0658
134679-HxCDF	NotFnd		0.9737						1.11		2838	0.0658
124679-HxCDF	NotFnd		0.9792						1.11		2838	0.0658
124689-HxCDF	NotFnd		0.9854						1.11		2838	0.0658
123467-HxCDF	NotFnd		0.9972						1.11		2838	0.0658
123478-HxCDF	**NotFnd**		**1.0005**						**1.20**		**2838**	**0.0614**
123678-HxCDF	**NotFnd**		**1.0004**						**1.07**		**2838**	**0.0577**
123479-HxCDF	NotFnd		1.0049						1.11		2838	0.0658
123469-HxCDF	NotFnd		1.0089						1.11		2838	0.0658
123679-HxCDF	NotFnd		0.9945						1.11		2838	0.0658
234678-HxCDF	**NotFnd**		**1.0005**						**1.10**		**2838**	**0.0661**
234678/123689-HxCDF	NotFnd		0.0000						1.10			
123689-HxCDF	NotFnd		1.0054						1.11		2838	0.0658
123789-HxCDF	**NotFnd**		**1.0004**						**1.09**		**2838**	**0.0823**
123789/123489-HxCDF	NotFnd		0.0000						1.09			
123489-HxCDF	NotFnd		1.0008						1.11		2838	0.0658
1234678-HpCDF	**NotFnd**		**1.0003**						**1.28**		**2503**	**0.0522**
1234679-HpCDF	NotFnd		1.0072						1.27		2503	0.0559
1234689-HpCDF	NotFnd		1.0107						1.27		2503	0.0559
1234789-HpCDF	**NotFnd**		**1.0002**						**1.27**		**2503**	**0.0611**
OCDF	**NotFnd**		**1.0003**						**1.01**		**3323**	**0.158**
OCDF-a	NotFnd		1.0002						0.06		4476	3.41


Rel. Int.
100%
QC Check
20.54-29.50
316.9824 Fn1
Flags: -
0%
Abs. Int.
4.29e6
2.14e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
QC Check
29.51-34.01
366.9792 Fn2
Flags: -
0%
Abs. Int.
3.49e6
1.75e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
0%
Abs. Int.
1.35e7
6.75e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
QC Check
38.26-41.01
430.9728 Fn4
Flags: -
0%
Abs. Int.
8.13e6
4.06e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
7.37e6
3.68e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

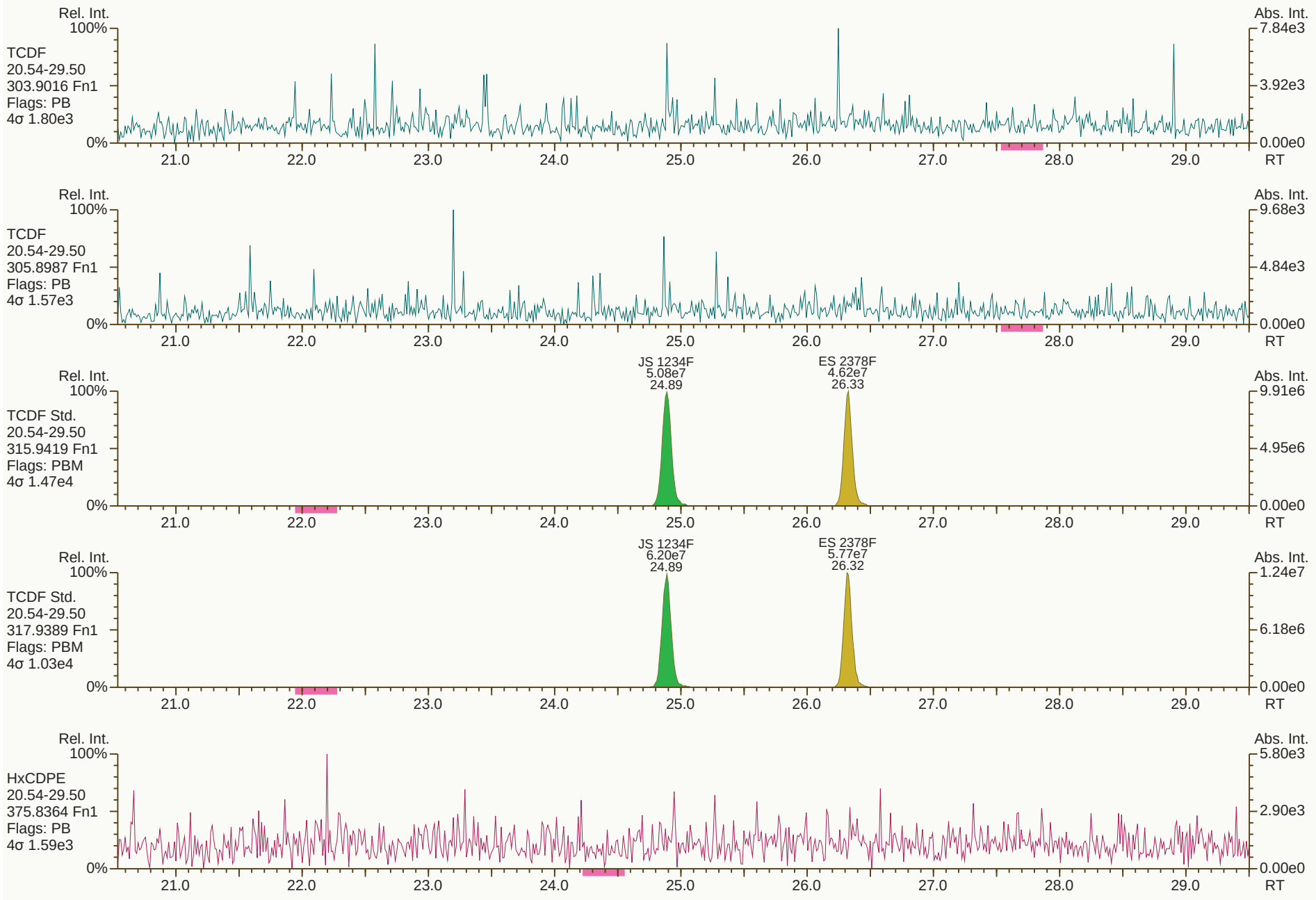

Rel. Int.
100%
TCDD
20.54-29.50
319.8965 Fn1
Flags: PB
4σ 2.60e3
0%
Abs. Int.
1.18e4
5.92e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD
20.54-29.50
321.8936 Fn1
Flags: PB
4σ 1.93e3
0%
Abs. Int.
1.25e4
6.25e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
37Cl-TCDD
20.54-29.50
327.8850 Fn1
Flags: PBM
4σ 1.39e3
0%
CS 37Cl-2378D
2.80e7
27.27
Abs. Int.
6.52e6
3.26e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
331.9368 Fn1
Flags: PBM
4σ 7.03e3
0%
JS 1234D
2.92e7
26.57
ES 2378D
2.66e7
27.25
Abs. Int.
6.62e6
3.31e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
333.9339 Fn1
Flags: PBM
4σ 1.78e3
0%
JS 1234D
3.83e7
26.57
ES 2378D
3.40e7
27.25
Abs. Int.
8.85e6
4.43e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
PeCDD
29.51-34.01
355.8546 Fn2
Flags: PB
4σ 2.43e3
0%
Abs. Int.
1.03e4
5.15e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD
29.51-34.01
357.8517 Fn2
Flags: PB
4σ 1.43e3
0%
Abs. Int.
6.98e3
3.49e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
367.8949 Fn2
Flags: PBM
4σ 1.74e3
0%
CS 12347D
3.25e7
32.29
ES 12378D
3.22e7
32.80
Abs. Int.
8.69e6
4.35e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
369.8919 Fn2
Flags: PBM
4σ 2.88e3
0%
CS 12347D
1.92e7
32.29
ES 12378D
1.94e7
32.80
Abs. Int.
5.28e6
2.64e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
QC Check
29.51-34.01
366.9792 Fn2
Flags: -
0%
Abs. Int.
3.49e6
1.75e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT


Rel. Int.
100%
HxCDD
34.02-38.25
389.8156 Fn3
Flags: B
4σ 1.33e3
0%
Abs. Int.
1.58e4
7.92e3
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD
34.02-38.25
391.8127 Fn3
Flags: PB
4σ 1.49e3
0%
Abs. Int.
1.23e4
6.16e3
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
401.8559 Fn3
Flags: PBM
4σ 4.61e3
0%
ES 123478D
2.62e7
36.72
ES 123678D
2.69e7
36.83
JS 123467D
1.60e7
37.03
ES 123789D
3.25e7
37.13
Abs. Int.
9.49e6
4.74e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
403.8530 Fn3
Flags: PBM
4σ 2.09e3
0%
ES 123478D
2.03e7
36.72
ES 123678D
2.04e7
36.83
JS 123467D
1.32e7
37.03
ES 123789D
2.57e7
37.13
Abs. Int.
7.36e6
3.68e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
0%
Abs. Int.
1.35e7
6.75e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT


Rel. Int.
100%
HpCDD
38.26-41.01
423.7767 Fn4
Flags: B
4σ 1.58e3
0%
Abs. Int.
1.65e4
8.24e3
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.26-41.01
425.7737 Fn4
Flags: B
4σ 1.90e3
0%
Abs. Int.
8.65e3
4.32e3
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
ES 1234678D
2.25e7
39.95
Rel. Int.
100%
HpCDD Std.
38.26-41.01
435.8169 Fn4
Flags: PBM
4σ 2.11e3
0%
Abs. Int.
9.56e6
4.78e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
ES 1234678D
2.02e7
39.95
Rel. Int.
100%
HpCDD Std.
38.26-41.01
437.8140 Fn4
Flags: PBM
4σ 1.86e3
0%
Abs. Int.
8.91e6
4.46e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.26-41.01
430.9728 Fn4
Flags: -
0%
Abs. Int.
8.13e6
4.06e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT


Rel. Int.
100%
OCDD
41.02-45.00
457.7377 Fn5
Flags: B
4σ 2.06e3
0%
Abs. Int.
1.57e4
7.83e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDD
41.02-45.00
459.7348 Fn5
Flags: B
4σ 1.14e3
0%
Abs. Int.
2.12e4
1.06e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
2.26e7
42.37
Rel. Int.
100%
OCDD Std.
41.02-45.00
469.7780 Fn5
Flags: PBM
4σ 2.94e3
0%
Abs. Int.
8.43e6
4.22e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
2.57e7
42.37
Rel. Int.
100%
OCDD Std.
41.02-45.00
471.7750 Fn5
Flags: PBM
4σ 2.38e3
0%
Abs. Int.
9.34e6
4.67e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
7.37e6
3.68e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT


Rel. Int.
100%
TCDF
20.54-29.50
303.9016 Fn1
Flags: PB
4σ 1.80e3
0%
Abs. Int.
7.84e3
3.92e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF
20.54-29.50
305.8987 Fn1
Flags: PB
4σ 1.57e3
0%
Abs. Int.
9.68e3
4.84e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
315.9419 Fn1
Flags: PBM
4σ 1.47e4
JS 1234F
5.08e7
24.89
ES 2378F
4.62e7
26.33
0%
Abs. Int.
9.91e6
4.95e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
317.9389 Fn1
Flags: PBM
4σ 1.03e4
JS 1234F
6.20e7
24.89
ES 2378F
5.77e7
26.32
0%
Abs. Int.
1.24e7
6.18e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
HxCDPE
20.54-29.50
375.8364 Fn1
Flags: PB
4σ 1.59e3
0%
Abs. Int.
5.80e3
2.90e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT

SGS ID: MB1_17661_DF_SDS | **Sample ID: Method Blank** | **Acq: 12-Aug-2020 02:43:51**

Instr: [ILM] AutoSpec-Ultima MM3 | **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 49** | **User: PSW Datafile: 200811R18**

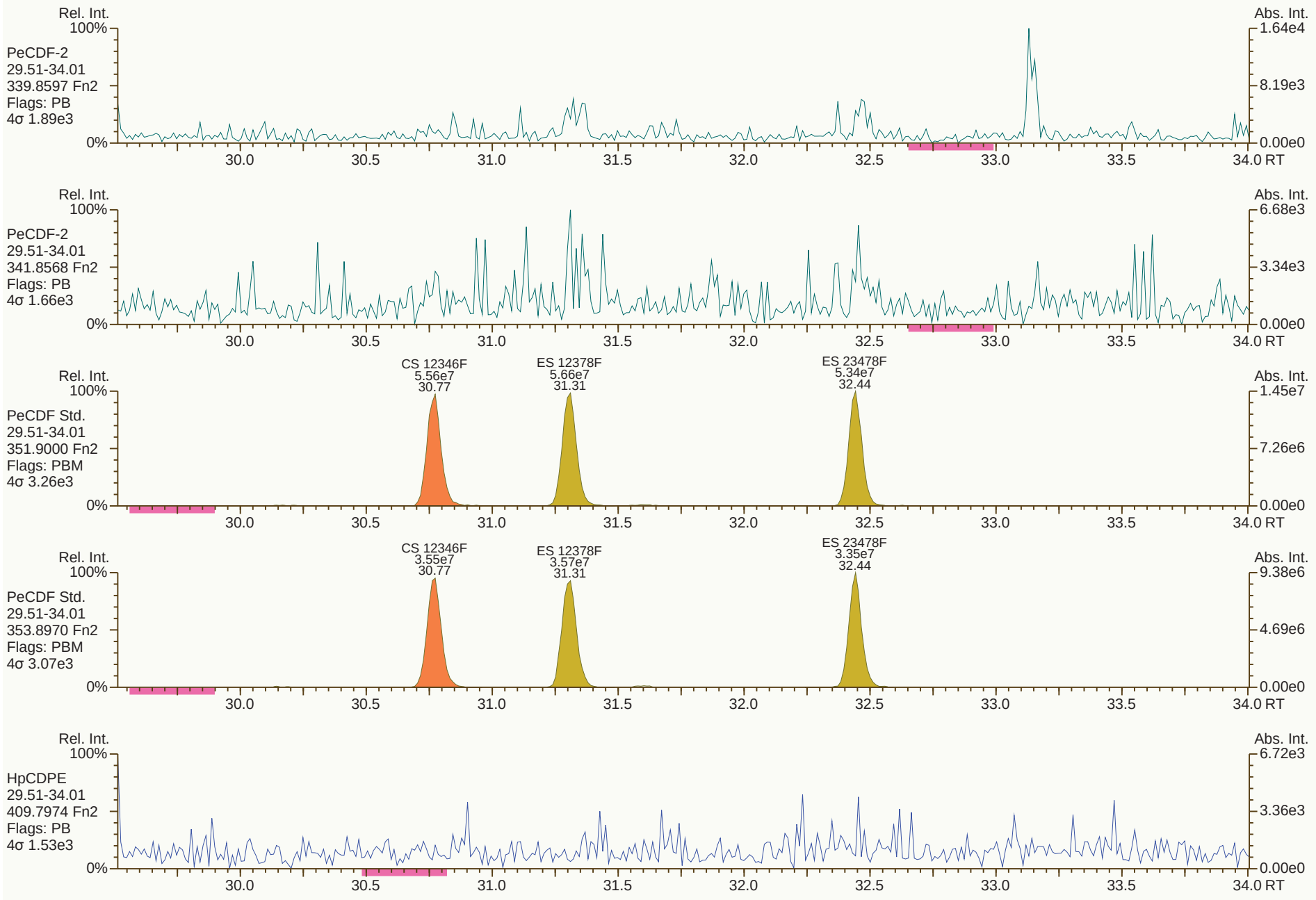


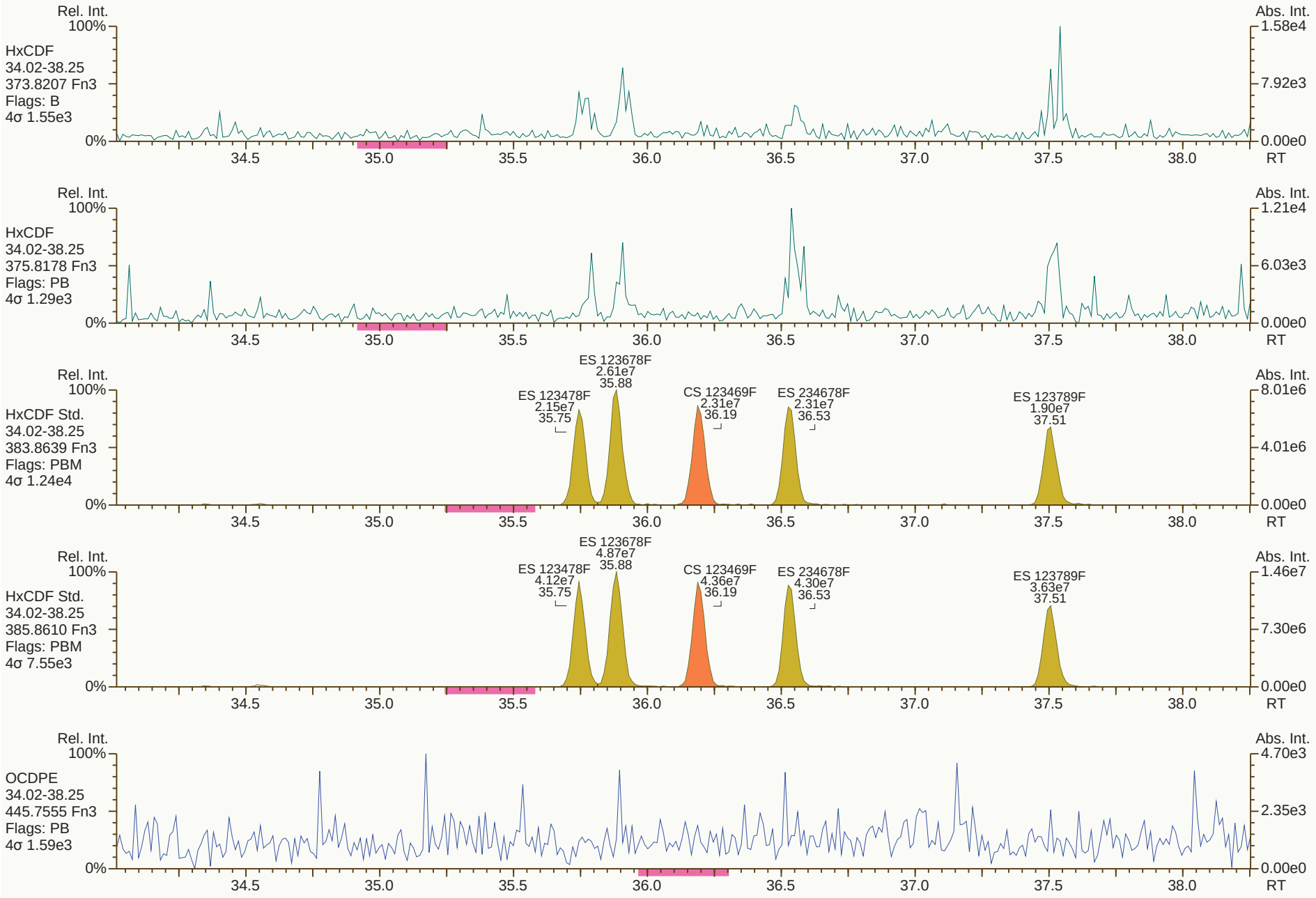
Results: P:\B4500_B4599\B4528\B4528_17661 DF\Resources\MB1_17661_DF_SDS.utp_res, saved 13-Aug-2020 08:31 (DTF)

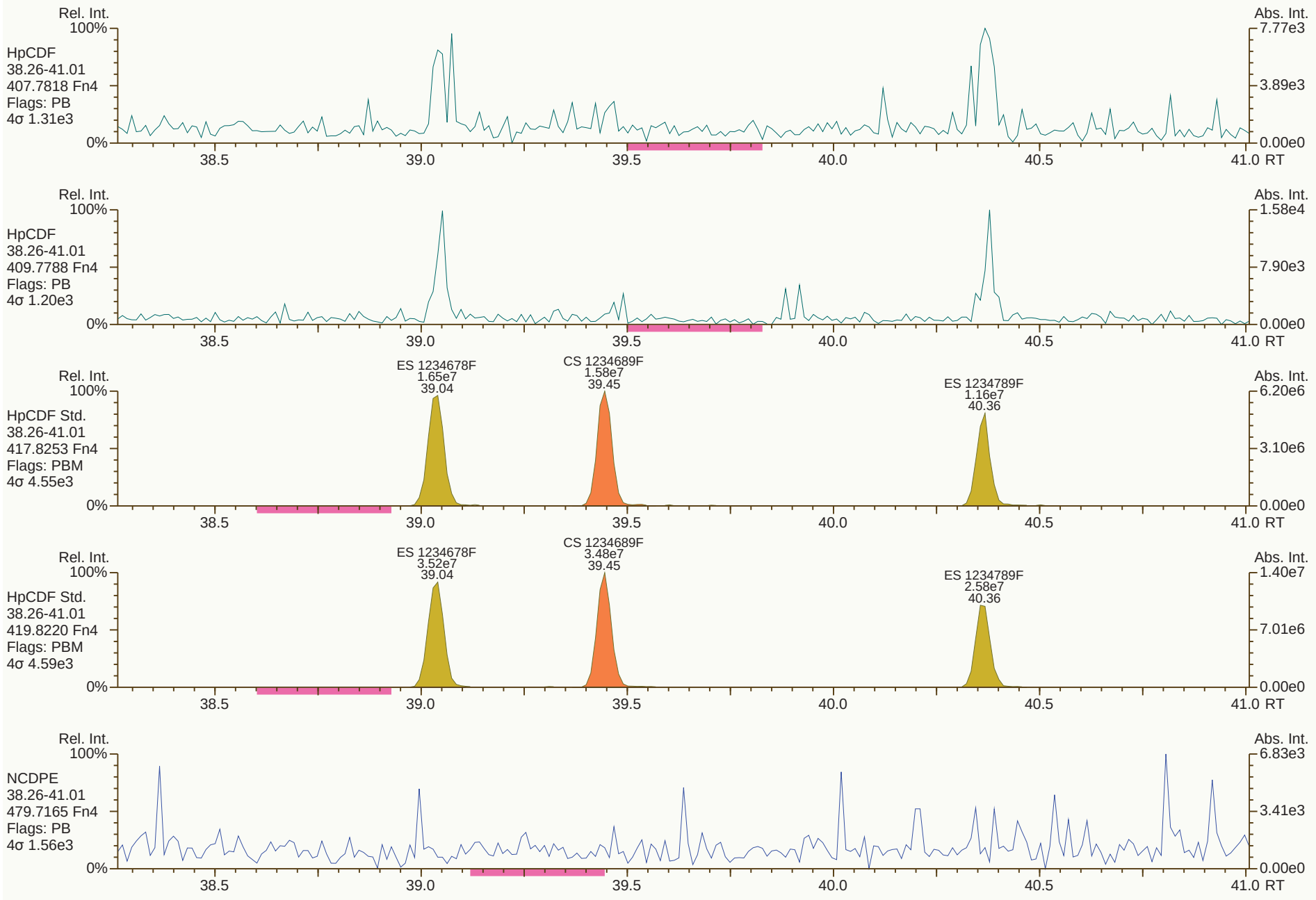
Peak annotation: Areas, Centroids

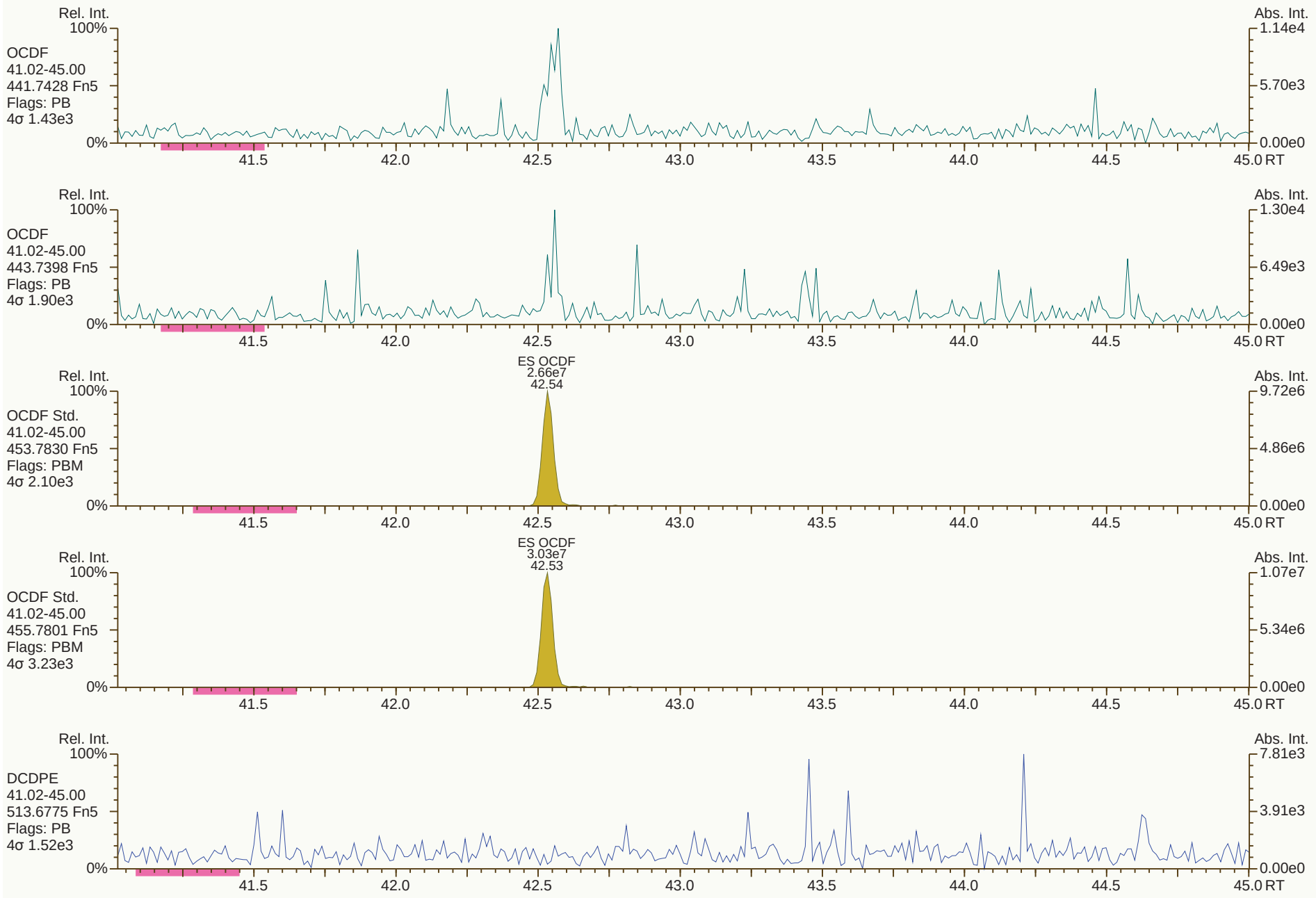
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 4095 scc: 154-981

PKD: 12-Aug-2020 08:23 Printed: 13-Aug-2020 08:40 Page 8 of 12


Rel. Int.
100%
PeCDF-2
29.51-34.01
339.8597 Fn2
Flags: PB
4σ 1.89e3
0%
Abs. Int.
1.64e4
8.19e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF-2
29.51-34.01
341.8568 Fn2
Flags: PB
4σ 1.66e3
0%
Abs. Int.
6.68e3
3.34e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
351.9000 Fn2
Flags: PBM
4σ 3.26e3
0%
CS 12346F
5.56e7
30.77
ES 12378F
5.66e7
31.31
ES 23478F
5.34e7
32.44
Abs. Int.
1.45e7
7.26e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
353.8970 Fn2
Flags: PBM
4σ 3.07e3
0%
CS 12346F
3.55e7
30.77
ES 12378F
3.57e7
31.31
ES 23478F
3.35e7
32.44
Abs. Int.
9.38e6
4.69e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
HpCDPE
29.51-34.01
409.7974 Fn2
Flags: PB
4σ 1.53e3
0%
Abs. Int.
6.72e3
3.36e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT


Rel. Int.
100%
HxCDF
34.02-38.25
373.8207 Fn3
Flags: B
4σ 1.55e3
0%
Abs. Int.
1.58e4
7.92e3
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDF
34.02-38.25
375.8178 Fn3
Flags: PB
4σ 1.29e3
0%
Abs. Int.
1.21e4
6.03e3
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDF Std.
34.02-38.25
383.8639 Fn3
Flags: PBM
4σ 1.24e4
0%
ES 123678F
2.61e7
35.88
ES 123478F
2.15e7
35.75
CS 123469F
2.31e7
36.19
ES 234678F
2.31e7
36.53
ES 123789F
1.90e7
37.51
Abs. Int.
8.01e6
4.01e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDF Std.
34.02-38.25
385.8610 Fn3
Flags: PBM
4σ 7.55e3
0%
ES 123678F
4.87e7
35.88
ES 123478F
4.12e7
35.75
CS 123469F
4.36e7
36.19
ES 234678F
4.30e7
36.53
ES 123789F
3.63e7
37.51
Abs. Int.
1.46e7
7.30e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
OCDPE
34.02-38.25
445.7555 Fn3
Flags: PB
4σ 1.59e3
0%
Abs. Int.
4.70e3
2.35e3
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT


Rel. Int.
100%
HpCDF
38.26-41.01
407.7818 Fn4
Flags: PB
4σ 1.31e3
0%
Abs. Int.
7.77e3
3.89e3
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF
38.26-41.01
409.7788 Fn4
Flags: PB
4σ 1.20e3
0%
Abs. Int.
1.58e4
7.90e3
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.26-41.01
417.8253 Fn4
Flags: PBM
4σ 4.55e3
0%
ES 1234678F
1.65e7
39.04
CS 1234689F
1.58e7
39.45
ES 1234789F
1.16e7
40.36
Abs. Int.
6.20e6
3.10e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.26-41.01
419.8220 Fn4
Flags: PBM
4σ 4.59e3
0%
ES 1234678F
3.52e7
39.04
CS 1234689F
3.48e7
39.45
ES 1234789F
2.58e7
40.36
Abs. Int.
1.40e7
7.01e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
NCDPE
38.26-41.01
479.7165 Fn4
Flags: PB
4σ 1.56e3
0%
Abs. Int.
6.83e3
3.41e3
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT


Rel. Int.
100%
OCDF
41.02-45.00
441.7428 Fn5
Flags: PB
4σ 1.43e3
0%
Abs. Int.
1.14e4
5.70e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF
41.02-45.00
443.7398 Fn5
Flags: PB
4σ 1.90e3
0%
Abs. Int.
1.30e4
6.49e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDF
2.66e7
42.54
Rel. Int.
100%
OCDF Std.
41.02-45.00
453.7830 Fn5
Flags: PBM
4σ 2.10e3
0%
Abs. Int.
9.72e6
4.86e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDF
3.03e7
42.53
Rel. Int.
100%
OCDF Std.
41.02-45.00
455.7801 Fn5
Flags: PBM
4σ 3.23e3
0%
Abs. Int.
1.07e7
5.34e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
DCDPE
41.02-45.00
513.6775 Fn5
Flags: PB
4σ 1.52e3
0%
Abs. Int.
7.81e3
3.91e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

Lab ID: B4528_17661_DF_001 **Acq'd:** 12 Aug 2020 05:53 PSW **Wt/Vol:** 8.62 g **ICAL:** MM3_DF_10012020_12JUN2020

Client ID: CS-55 **UTP:** 13-Aug-2020 08:31:21 DTF **J-level:** 0.58 pg/g **Split:** 1 **Checkcode:** 830-980-KWZ

Datafile: 200811R22 **Report:** 13 Aug 2020 08:33 TF **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	NotFnd		1.0009	-		-	-	-	1.18	-	7636	0.35
12378-PeCDD	NotFnd		1.0006	-		-	-	-	1.14	-	4117	0.173
123478-HxCDD	36.72	J	1.0004	1.0004	0	8.05E+04	1.08	Y	1.09	0.453	3979	0.18
123678-HxCDD	36.84	J EMPC	1.0035	1.0036	+0.2	1.12E+05	0.99	N	1.13	0.616	3979	0.177
123789-HxCDD	37.13	J	1.0116	1.0114	-0.4	1.69E+05	1.25	Y	1.05	0.831	3979	0.164
1234678-HpCDD	39.95		1.0003	1.0003	0	2.55E+06	1.10	Y	0.98	18.3	2953	0.128
OCDD	42.37		1.0003	1.0002	-0.3	1.24E+07	0.88	Y	1.08	162	5515	0.482
2378-TCDF	26.34	J	1.0006	1.0009	+0.5	1.10E+05	0.77	Y	0.98	0.304	9172	0.293
12378-PeCDF	31.32	J	1.0006	1.0006	0	1.24E+05	1.69	Y	0.95	0.404	5480	0.176
23478-PeCDF	32.46	J	1.0005	1.0008	+0.6	1.79E+05	1.58	Y	0.95	0.618	5480	0.175
123478-HxCDF	35.75	J	1.0005	1.0005	0	1.43E+05	1.08	Y	1.20	0.537	4335	0.134
123678-HxCDF	35.88	J EMPC	1.0004	1.0002	-0.4	9.59E+04	0.95	N	1.07	0.351	4335	0.137
234678-HxCDF	36.54	J EMPC	1.0005	1.0006	+0.2	1.39E+05	1.01	N	1.10	0.578	4335	0.142
123789-HxCDF	NotFnd		1.0004	-		-	-	-	1.09	-	4335	0.184
1234678-HpCDF	39.04		1.0003	1.0002	-0.2	1.97E+06	1.06	Y	1.28	8.73	6127	0.177
1234789-HpCDF	NotFnd		1.0002	-		-	-	-	1.27	-	6127	0.218
OCDF	42.53	EMPC	1.0003	1.0002	-0.3	6.95E+05	1.07	N	1.01	7.75	3307	0.268

Name	Act RT		Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	27.24		1.0255	1.0257	+0.3	4.96E+07	0.76	Y	1.01	81.4
ES 12378-PeCDD	32.79		1.2330	1.2345	+3.0	4.20E+07	1.66	Y	0.87	79.5
ES 123478-HxCDD	36.71		0.9917	0.9916	-0.2	3.78E+07	1.28	Y	1.10	68.1
ES 123678-HxCDD	36.82		0.9947	0.9947	0	3.73E+07	1.31	Y	1.06	69.5
ES 123789-HxCDD	37.12		1.0028	1.0028	0	4.50E+07	1.26	Y	1.22	73
ES 1234678-HpCDD	39.94		1.0785	1.0790	+1.2	3.30E+07	1.07	Y	0.99	65.6
ES OCDD	42.36		1.1439	1.1444	+1.3	3.31E+07	0.96	Y	0.67	48.8
ES 2378-TCDF	26.32		1.0572	1.0577	+0.8	8.57E+07	0.81	Y	1.01	84.3
ES 12378-PeCDF	31.30		1.2558	1.2578	+3.8	7.53E+07	1.61	Y	0.90	83.4
ES 23478-PeCDF	32.43		1.3012	1.3034	+4.3	7.12E+07	1.57	Y	0.89	79.7
ES 123478-HxCDF	35.74		0.9655	0.9655	0	5.18E+07	0.52	Y	1.43	71.6
ES 123678-HxCDF	35.88		0.9693	0.9692	-0.2	5.92E+07	0.53	Y	1.63	71.6
ES 234678-HxCDF	36.52		0.9867	0.9866	-0.2	5.10E+07	0.53	Y	1.48	68.1
ES 123789-HxCDF	37.50		1.0130	1.0130	0	4.36E+07	0.54	Y	1.29	66.7
ES 1234678-HpCDF	39.03		1.0540	1.0544	+0.9	4.08E+07	0.43	Y	1.15	70.3
ES 1234789-HpCDF	40.36		1.0898	1.0902	+1.0	2.91E+07	0.45	Y	0.91	63.5
ES OCDF	42.52		1.1484	1.1488	+1.0	4.12E+07	0.89	Y	0.83	49.1

Lab ID: B4528_17661_DF_001 | Acq'd: 12 Aug 2020 05:53 PSW | Wt/Vol: 8.62 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-55 | UTP: 13-Aug-2020 08:31:21 DTF | J-level: 0.58 pg/g | Split: 1 | Checkcode: 830-980-KWZ

Datafile: 200811R22 | Report: 13 Aug 2020 08:33 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
JS 1234-TCDD	26.56		-	-	-	6.06E+07	0.76	Y	-	-
JS 1234-TCDF	24.88		-	-	-	1.00E+08	0.78	Y	-	-
JS 123467-HxCDD	37.02		-	-	-	2.53E+07	1.32	Y	-	-
CS 37Cl-2378-TCDD	27.26		1.0265	1.0266	+0.2	2.35E+07	n/a	-	1.04	93.3
CS 12347-PeCDD	32.28		1.2141	1.2154	+2.5	4.36E+07	1.71	Y	0.74	97.2
CS 12346-PeCDF	30.76		1.2343	1.2362	+3.5	7.50E+07	1.57	Y	0.86	87
CS 123469-HxCDF	36.18		0.9776	0.9775	-0.2	5.32E+07	0.51	Y	1.36	77.5
CS 1234689-HpCDF	39.44		1.0650	1.0654	+0.9	4.22E+07	0.45	Y	1.05	79
~~SS 37Cl-2378-TCDD~~	~~27.26~~		~~1.0265~~	~~1.0266~~	~~+0.2~~	~~2.35E+07~~	~~n/a~~		~~1.04~~	~~114~~
~~SS 12347-PeCDD~~	~~32.28~~		~~1.2141~~	~~1.2154~~	~~+2.5~~	~~4.36E+07~~	~~1.71~~	~~Y~~	~~0.86~~	~~121~~
~~SS 12346-PeCDF~~	~~30.76~~		~~1.2343~~	~~1.2362~~	~~+3.5~~	~~7.50E+07~~	~~1.57~~	~~Y~~	~~0.96~~	~~104~~
~~SS 123469-HxCDF~~	~~36.18~~		~~0.9776~~	~~0.9775~~	~~-0.2~~	~~5.32E+07~~	~~0.51~~	~~Y~~	~~0.83~~	~~108~~
~~SS 1234689-HpCDF~~	~~39.44~~		~~1.0650~~	~~1.0654~~	~~+0.9~~	~~4.22E+07~~	~~0.45~~	~~Y~~	~~0.92~~	~~112~~

Totals	Conc	EMPC
Total TCDD	4.03	5.57
Total PeCDD	5.03	6.01
Total HxCDD	12.9	13.5
Total HpCDD	53.5	53.5
Total Tetra-Octa Dioxins	237	240
Total TCDF	6.42	9.73
Total PeCDF	4.41	7.65
Total HxCDF	6.36	8.55
Total HpCDF	16.1	16.1
Total Tetra-Octa Furans	33.3	49.8
Total Tetra-Octa Dioxins & Furans	270	290

Lab ID: B4528_17661_DF_001 | Acq'd: 12 Aug 2020 05:53 PSW | Wt/Vol: 8.62 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-55 | UTP: 13-Aug-2020 08:31:21 DTF | J-level: 0.58 pg/g | Split: 1 | Checkcode: 830-980-KWZ

Datafile: 200811R22 | Report: 13 Aug 2020 08:33 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1368-TCDD	23.38		0.8591	0.8581	-1.4	5.42E+05	0.69	Y	1.18	2.15	7636	0.35
1379-TCDD	23.76	EMPC	0.8732	0.8721	-1.6	3.89E+05	1.00	N	1.18	1.54	7636	0.35
1369-TCDD	NotFnd		0.8901						1.18		7636	0.35
1469-TCDD	NotFnd		0.9205						1.18		7636	0.35
1247/1246/1248/1249-TCDD	25.31		0.9301	0.9292	-1.4	4.72E+05	0.85	Y	1.18	1.87	7636	0.35
1378-TCDD	NotFnd		0.9374						1.18		7636	0.35
1268-TCDD	NotFnd		0.9449						1.18		7636	0.35
1478-TCDD	NotFnd		0.9544						1.18		7636	0.35
1279-TCDD	NotFnd		0.9610						1.18		7636	0.35
1234/1269-TCDD	NotFnd		0.9746						1.18		7636	0.35
1236-TCDD	NotFnd		0.9802						1.18		7636	0.35
1237/1238-TCDD	NotFnd		0.9898						1.18		7636	0.35
1239-TCDD	NotFnd		0.9950						1.18		7636	0.35
2378-TCDD	**NotFnd**		**1.0009**						**1.18**		**7636**	**0.35**
1278-TCDD	NotFnd		1.0133						1.18		7636	0.35
1267-TCDD	NotFnd		1.0185						1.18		7636	0.35
1289-TCDD	NotFnd		1.0379						1.18		7636	0.35
12479/12468-PeCDD	30.24	J	0.9229	0.9224	-0.9	5.77E+05	1.76	Y	1.14	2.81	4117	0.173
12469-PeCDD	30.78	J	0.9396	0.9389	-1.3	1.20E+05	1.44	Y	1.14	0.587	4117	0.173
12368-PeCDD	31.36	J	0.9568	0.9566	-0.4	1.31E+05	1.46	Y	1.14	0.639	4117	0.173
12478-PeCDD	31.56	J EMPC	0.9626	0.9625	-0.2	4.84E+04	1.98	N	1.14	0.236	4117	0.173
12379-PeCDD	31.65	J	0.9657	0.9654	-0.6	1.09E+05	1.60	Y	1.14	0.533	4117	0.173
12369/12467/12489-PeCDD	31.93	J	0.9738	0.9739	+0.2	9.55E+04	1.40	Y	1.14	0.465	4117	0.173
12346/12347-PeCDD	32.32	J EMPC	0.9853	0.9856	+0.6	1.52E+05	2.09	N	1.14	0.74	4117	0.173
12378-PeCDD	NotFnd		**1.0006**						**1.14**		**4117**	**0.173**
12367-PeCDD	NotFnd		1.0034						1.14		4117	0.173
12389-PeCDD	NotFnd		1.0141						1.14		4117	0.173
124679/124689-HxCDD	35.02		0.9542	0.9541	-0.2	9.44E+05	1.24	Y	1.09	5.02	3979	0.173
123468-HxCDD	35.68	J	0.9721	0.9721	0	4.01E+05	1.38	Y	1.09	2.13	3979	0.173
123679/123689-HxCDD	35.97		0.9799	0.9798	-0.2	6.81E+05	1.19	Y	1.09	3.63	3979	0.173
123469-HxCDD	36.10	J	0.9835	0.9833	-0.4	1.10E+05	1.32	Y	1.09	0.585	3979	0.173
123478-HxCDD	36.72	J	**1.0004**	**1.0004**	**0**	**8.05E+04**	**1.08**	**Y**	1.09	**0.453**	**3979**	**0.18**
123678-HxCDD	36.84	J EMPC	**1.0035**	**1.0036**	**+0.2**	**1.12E+05**	**0.99**	**N**	1.13	**0.616**	**3979**	**0.177**
123467-HxCDD	37.03	J	1.0088	1.0088	0	4.09E+04	1.11	Y	1.09	0.218	3979	0.173
123789-HxCDD	37.13	J	**1.0116**	**1.0114**	**-0.4**	**1.69E+05**	**1.25**	**Y**	1.05	**0.831**	**3979**	**0.164**

Lab ID: B4528_17661_DF_001 | Acq'd: 12 Aug 2020 05:53 PSW | Wt/Vol: 8.62 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-55 | UTP: 13-Aug-2020 08:31:21 DTF | J-level: 0.58 pg/g | Split: 1 | Checkcode: 830-980-KWZ

Datafile: 200811R22 | Report: 13 Aug 2020 08:33 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

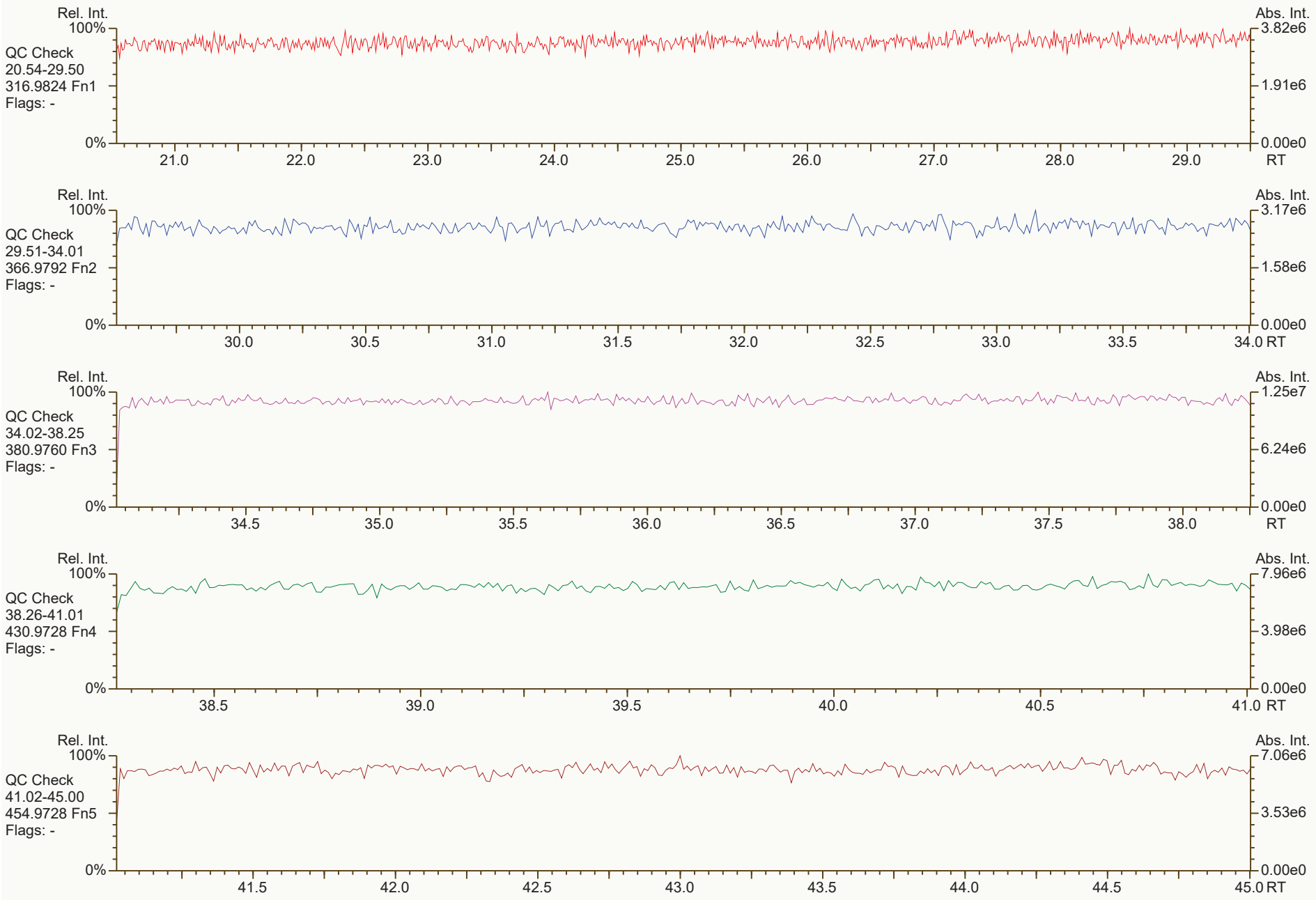
Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1234679-HpCDD	39.31		0.9843	0.9842	-0.2	4.92E+06	1.03	Y	0.98	35.2	2953	0.128
1234678-HpCDD	**39.95**		**1.0003**	**1.0003**	**0**	**2.55E+06**	**1.10**	**Y**	**0.98**	**18.3**	**2953**	**0.128**
OCDD	**42.37**		**1.0003**	**1.0002**	**-0.3**	**1.24E+07**	**0.88**	**Y**	**1.08**	**162**	**5515**	**0.482**
OCDD-a	42.37		1.0002	1.0002	0	7.91E+05	2.18	Y	0.07	168	4444	6.31
1368-TCDF	21.13	EMPC	0.8044	0.8031	-1.6	5.28E+05	0.89	N	0.98	1.46	9172	0.293
1468-TCDF	21.71	J	0.8261	0.8250	-1.4	1.14E+05	0.72	Y	0.98	0.315	9172	0.293
2468-TCDF	22.36		0.8511	0.8497	-1.9	1.52E+06	0.78	Y	0.98	4.2	9172	0.293
1346/1246-TCDF	NotFnd		0.8665						0.98		9172	0.293
1347/1378/1247-TCDF	22.92	EMPC	0.8723	0.8709	-1.9	3.01E+05	0.93	N	0.98	0.831	9172	0.293
1348-TCDF	NotFnd		0.8835						0.98		9172	0.293
1248/1367/1379-TCDF	23.36	EMPC	0.8888	0.8876	-1.7	2.13E+05	0.96	N	0.98	0.587	9172	0.293
1268-TCDF	NotFnd		0.9044						0.98		9172	0.293
1467-TCDF	NotFnd		0.9098						0.98		9172	0.293
1478-TCDF	NotFnd		0.9167						0.98		9172	0.293
1369/1237-TCDF	NotFnd		0.9316						0.98		9172	0.293
2467-TCDF	NotFnd		0.9369						0.98		9172	0.293
2368-TCDF	24.82		0.9430	0.9430	0	4.06E+05	0.70	Y	0.98	1.12	9172	0.293
1238/1234/1678/1469/1236-TCDF	24.94	J EMPC	0.9468	0.9475	+1.0	6.14E+04	0.50	N	0.98	0.169	9172	0.293
1278-TCDF	NotFnd		0.9651						0.98		9172	0.293
1349-TCDF	NotFnd		0.9704						0.98		9172	0.293
1267-TCDF	NotFnd		0.9761						0.98		9172	0.293
2346/1249-TCDF	NotFnd		0.9834						0.98		9172	0.293
2347/1279-TCDF	NotFnd		0.9921						0.98		9172	0.293
2348-TCDF	NotFnd		0.9964						0.98		9172	0.293
2378-TCDF	**26.34**	J	**1.0006**	**1.0009**	**+0.5**	**1.10E+05**	**0.77**	**Y**	**0.98**	**0.304**	**9172**	**0.293**
2367/3467-TCDF	26.74	J	1.0156	1.0159	+0.5	1.76E+05	0.82	Y	0.98	0.485	9172	0.293
1269-TCDF	NotFnd		1.0249						0.98		9172	0.293
1239-TCDF	NotFnd		1.0357						0.98		9172	0.293
1289-TCDF	28.43	J EMPC	1.0799	1.0804	+0.9	9.47E+04	1.54	N	0.98	0.261	9172	0.293
13468/12468-PeCDF	28.43	J EMPC	0.9084	0.9085	+0.2	6.41E+05	1.23	N	0.95	2.14	4244	0.136
13678/13467/12467-PeCDF	30.02	J	0.9591	0.9592	+0.2	2.43E+05	1.63	Y	0.95	0.814	5480	0.176
12368/13478/12478-PeCDF	30.17	J	0.9642	0.9640	-0.4	5.81E+05	1.50	Y	0.95	1.94	5480	0.176
14678-PeCDF	30.28	J EMPC	0.9675	0.9674	-0.2	5.06E+04	1.28	N	0.95	0.169	5480	0.176
13479-PeCDF	NotFnd		0.9706						0.95		5480	0.176
13469/12479-PeCDF	NotFnd		0.9787						0.95		5480	0.176
12346-PeCDF	30.79	J EMPC	0.9833	0.9837	+0.7	4.59E+04	1.21	N	0.95	0.154	5480	0.176

Lab ID: B4528_17661_DF_001 **Acq'd:** 12 Aug 2020 05:53 PSW **Wt/Vol:** 8.62 g **ICAL:** MM3_DF_10012020_12JUN2020

Client ID: CS-55 **UTP:** 13-Aug-2020 08:31:21 DTF **J-level:** 0.58 pg/g **Split:** 1 **Checkcode:** 830-980-KWZ

Datafile: 200811R22 **Report:** 13 Aug 2020 08:33 TF **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
23468/12469-PeCDF	30.86	J	0.9861	0.9861	0	1.88E+05	1.74	Y	0.95	0.628	5480	0.176
12347-PeCDF	NotFnd		0.9887						0.95		5480	0.176
12348-PeCDF	NotFnd		0.9938						0.95		5480	0.176
12378-PeCDF	**31.32**	J	**1.0006**	**1.0006**	**0**	**1.24E+05**	**1.69**	**Y**	**0.95**	**0.404**	**5480**	**0.176**
12678/12367-PeCDF	31.60	J EMPC	1.0095	1.0098	+0.6	1.26E+05	1.97	N	0.95	0.422	5480	0.176
12379-PeCDF	NotFnd		1.0150						0.95		5480	0.176
12679-PeCDF	NotFnd		0.9926						0.95		5480	0.176
23467/12369-PeCDF	32.32	J EMPC	0.9966	0.9965	-0.2	1.05E+05	1.21	N	0.95	0.352	5480	0.176
23478-PeCDF	**32.46**	J	**1.0005**	**1.0008**	**+0.6**	**1.79E+05**	**1.58**	**Y**	**0.95**	**0.618**	**5480**	**0.175**
23478/12489-PeCDF	NotFnd		0.0000						0.95			
12489-PeCDF	NotFnd		1.0047						0.95		5480	0.176
12349-PeCDF	NotFnd		1.0107						0.95		5480	0.176
12389-PeCDF	NotFnd		1.0339						0.95		5480	0.176
123468-HxCDF	34.36	J EMPC	0.9617	0.9615	-0.4	1.94E+05	1.51	N	1.11	0.788	4335	0.147
124678/134678-HxCDF	34.56		0.9673	0.9671	-0.4	8.82E+05	1.19	Y	1.11	3.58	4335	0.147
134679-HxCDF	NotFnd		0.9737						1.11		4335	0.147
124679-HxCDF	NotFnd		0.9792						1.11		4335	0.147
124689-HxCDF	35.22	J	0.9854	0.9854	0	5.55E+05	1.15	Y	1.11	2.25	4335	0.147
123467-HxCDF	35.64	J EMPC	0.9972	0.9972	0	6.15E+04	1.76	N	1.11	0.25	4335	0.147
123478-HxCDF	**35.75**	J	**1.0005**	**1.0005**	**0**	**1.43E+05**	**1.08**	**Y**	**1.20**	**0.537**	**4335**	**0.134**
123678-HxCDF	**35.88**	J EMPC	**1.0004**	**1.0002**	**-0.4**	**9.59E+04**	**0.95**	**N**	**1.07**	**0.351**	**4335**	**0.137**
123479-HxCDF	NotFnd		1.0049						1.11		4335	0.147
123469-HxCDF	NotFnd		1.0089						1.11		4335	0.147
123679-HxCDF	NotFnd		0.9945						1.11		4335	0.147
234678-HxCDF	**36.54**	J EMPC	**1.0005**	**1.0006**	**+0.2**	**1.39E+05**	**1.01**	**N**	**1.10**	**0.578**	**4335**	**0.142**
234678/123689-HxCDF	NotFnd		0.0000						1.10			
123689-HxCDF	NotFnd		1.0054						1.11		4335	0.147
123789-HxCDF	**NotFnd**		**1.0004**						**1.09**		**4335**	**0.184**
123789/123489-HxCDF	NotFnd		0.0000						1.09			
123489-HxCDF	37.53	J EMPC	1.0008	1.0009	+0.2	5.33E+04	0.92	N	1.11	0.216	4335	0.147
1234678-HpCDF	**39.04**		**1.0003**	**1.0002**	**-0.2**	**1.97E+06**	**1.06**	**Y**	**1.28**	**8.73**	**6127**	**0.177**
1234679-HpCDF	NotFnd		1.0072						1.27		6127	0.195
1234689-HpCDF	39.45		1.0107	1.0107	0	1.42E+06	1.04	Y	1.27	7.37	6127	0.195
1234789-HpCDF	**NotFnd**		**1.0002**						**1.27**		**6127**	**0.218**
OCDF	**42.53**	**EMPC**	**1.0003**	**1.0002**	**-0.3**	**6.95E+05**	**1.07**	**N**	**1.01**	**7.75**	**3307**	**0.268**
OCDF-a	NotFnd		1.0002						0.06		4130	5.35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1.91e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
QC Check
29.51-34.01
366.9792 Fn2
Flags: -
0%
Abs. Int.
3.17e6
1.58e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
0%
Abs. Int.
1.25e7
6.24e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
QC Check
38.26-41.01
430.9728 Fn4
Flags: -
0%
Abs. Int.
7.96e6
3.98e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
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0.00e0
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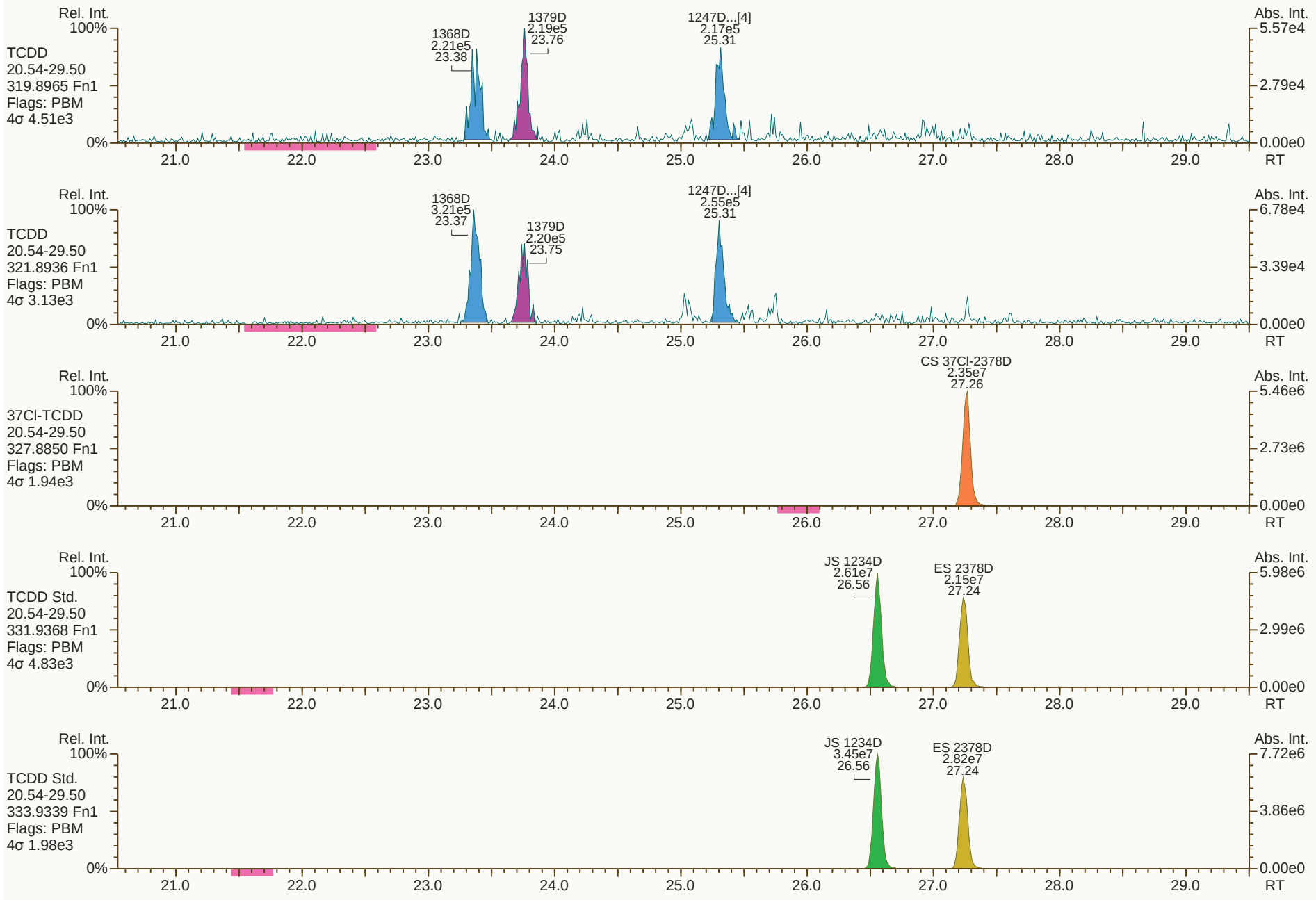
42.5
43.0
43.5
44.0
44.5
45.0 RT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TCDD
20.54-29.50
319.8965 Fn1
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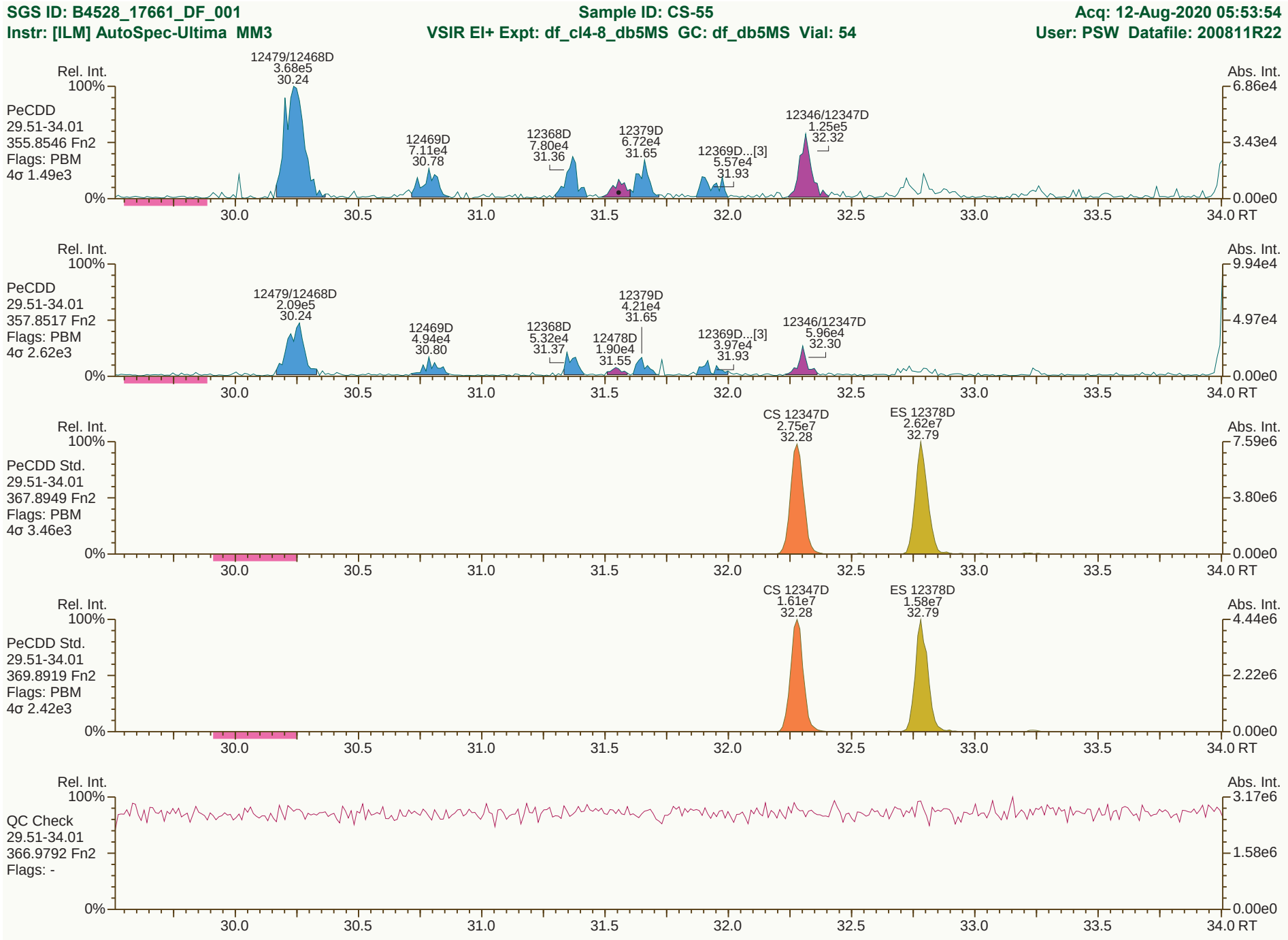
0%
1368D
2.21e5
23.38
1379D
2.19e5
23.76
1247D...[4]
2.17e5
25.31
Abs. Int.
5.57e4
2.79e4
0.00e0
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
TCDD
20.54-29.50
321.8936 Fn1
Flags: PBM
4σ 3.13e3
0%
1368D
3.21e5
23.37
1379D
2.20e5
23.75
1247D...[4]
2.55e5
25.31
Abs. Int.
6.78e4
3.39e4
0.00e0
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
37Cl-TCDD
20.54-29.50
327.8850 Fn1
Flags: PBM
4σ 1.94e3
0%
CS 37Cl-2378D
2.35e7
27.26
Abs. Int.
5.46e6
2.73e6
0.00e0
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
331.9368 Fn1
Flags: PBM
4σ 4.83e3
0%
JS 1234D
2.61e7
26.56
ES 2378D
2.15e7
27.24
Abs. Int.
5.98e6
2.99e6
0.00e0
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
333.9339 Fn1
Flags: PBM
4σ 1.98e3
0%
JS 1234D
3.45e7
26.56
ES 2378D
2.82e7
27.24
Abs. Int.
7.72e6
3.86e6
0.00e0
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT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Sample ID: CS-55
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Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 54
User: PSW Datafile: 200811R22
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Abs. Int.
PeCDD
29.51-34.01
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3.68e5
30.24
12469D
7.11e4
30.78
12368D
7.80e4
31.36
12379D
6.72e4
31.65
12369D...[3]
5.57e4
31.93
12346/12347D
1.25e5
32.32
PeCDD
29.51-34.01
357.8517 Fn2
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12479/12468D
2.09e5
30.24
12469D
4.94e4
30.80
12368D
5.32e4
31.37
12478D
1.90e4
31.55
12379D
4.21e4
31.65
12369D...[3]
3.97e4
31.93
12346/12347D
5.96e4
32.30
PeCDD Std.
29.51-34.01
367.8949 Fn2
Flags: PBM
4σ 3.46e3
CS 12347D
2.75e7
32.28
ES 12378D
2.62e7
32.79
PeCDD Std.
29.51-34.01
369.8919 Fn2
Flags: PBM
4σ 2.42e3
CS 12347D
1.61e7
32.28
ES 12378D
1.58e7
32.79
QC Check
29.51-34.01
366.9792 Fn2
Flags: -
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
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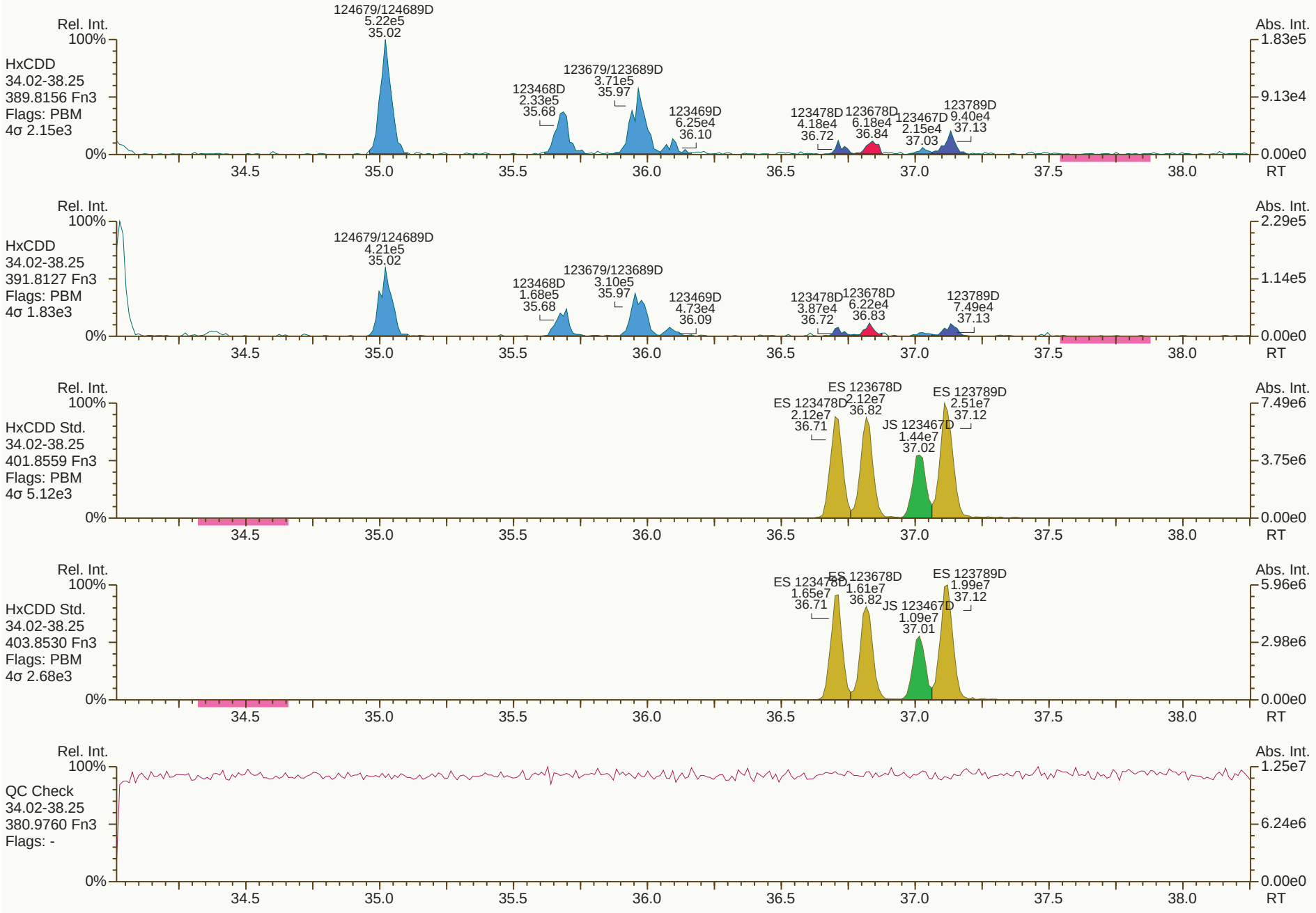
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 5014, 4175 scc: 830-980
PKD: 12-Aug-2020 08:45 Printed: 13-Aug-2020 08:40 Page 3 of 12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HxCDD
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389.8156 Fn3
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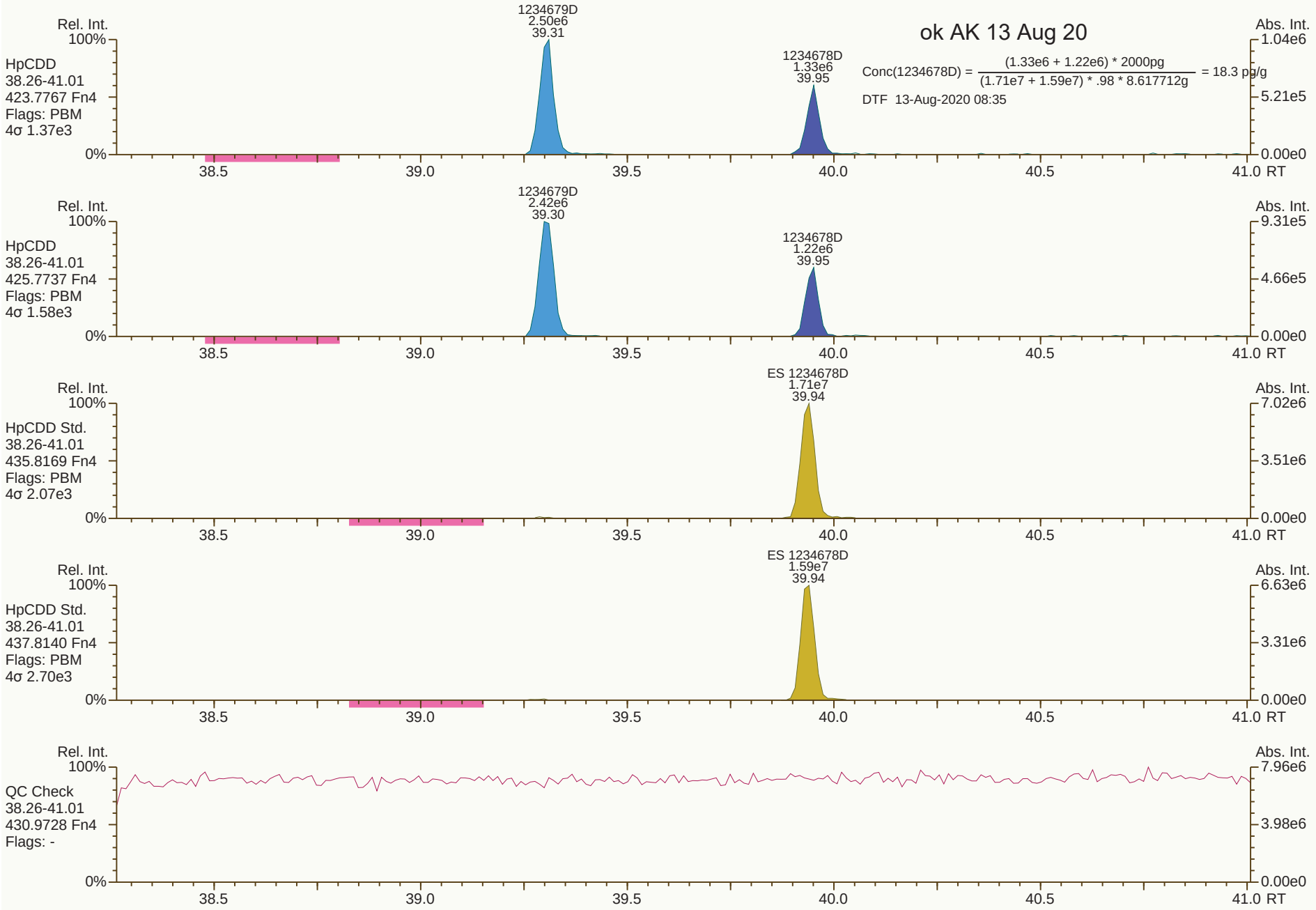
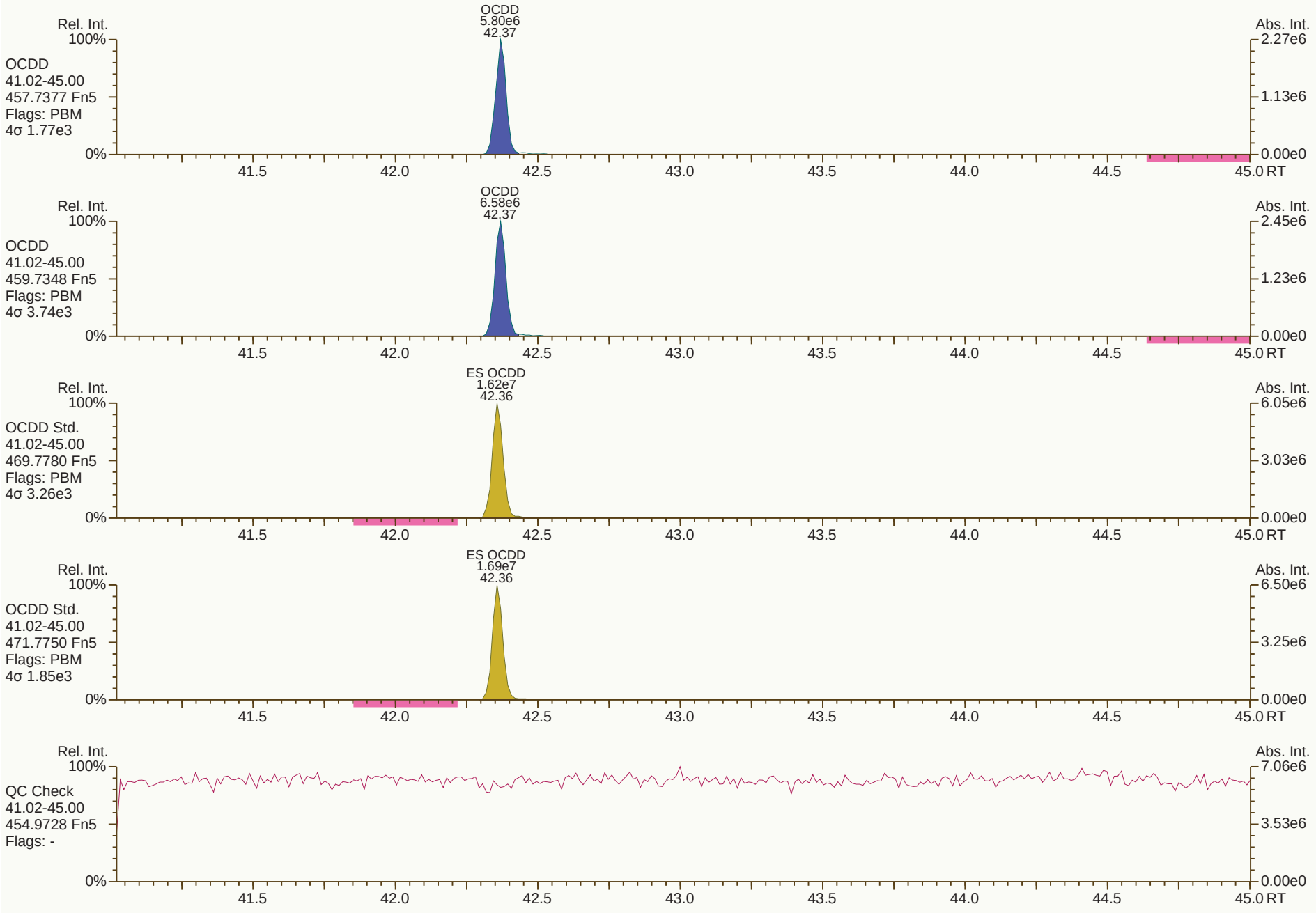
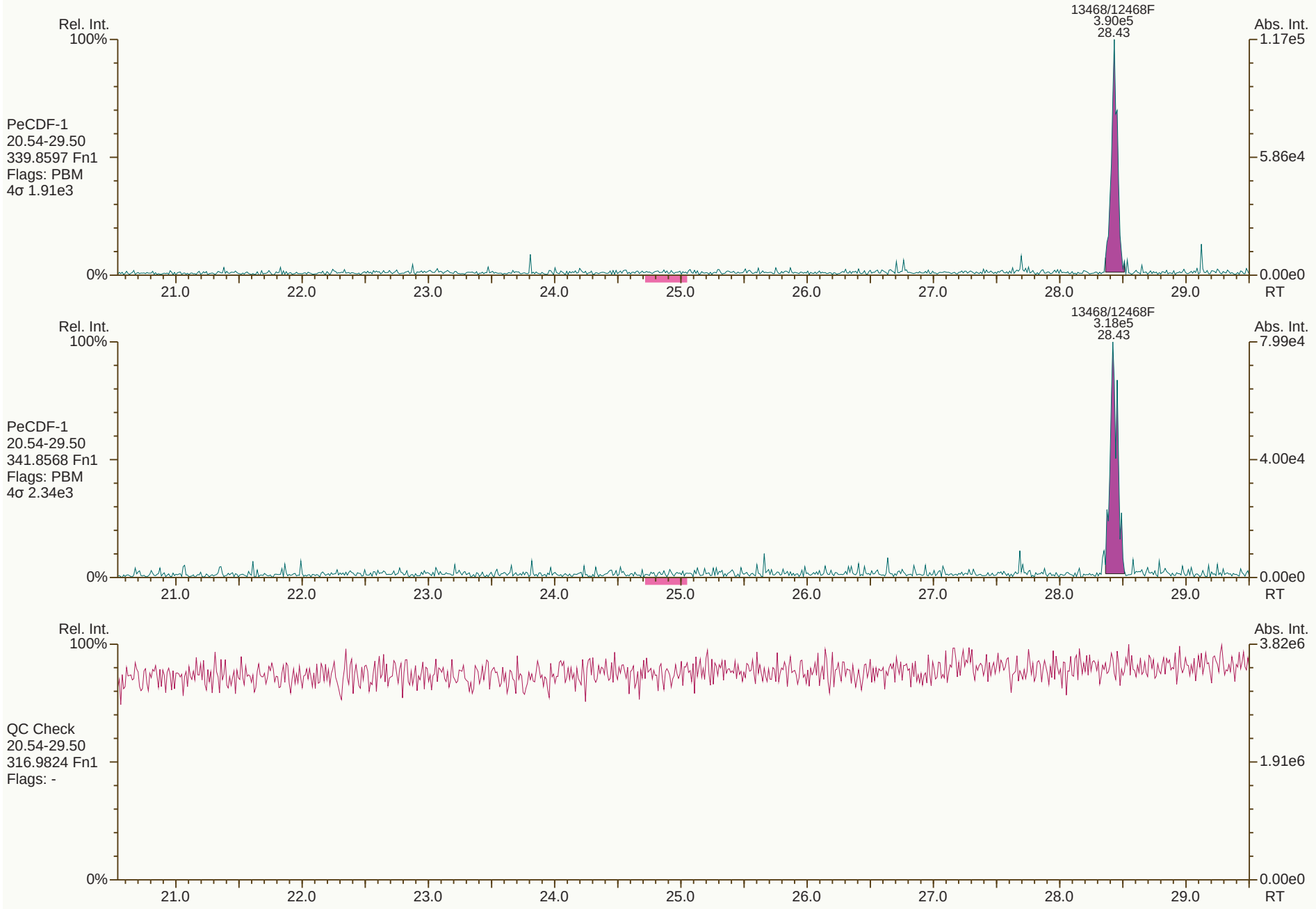
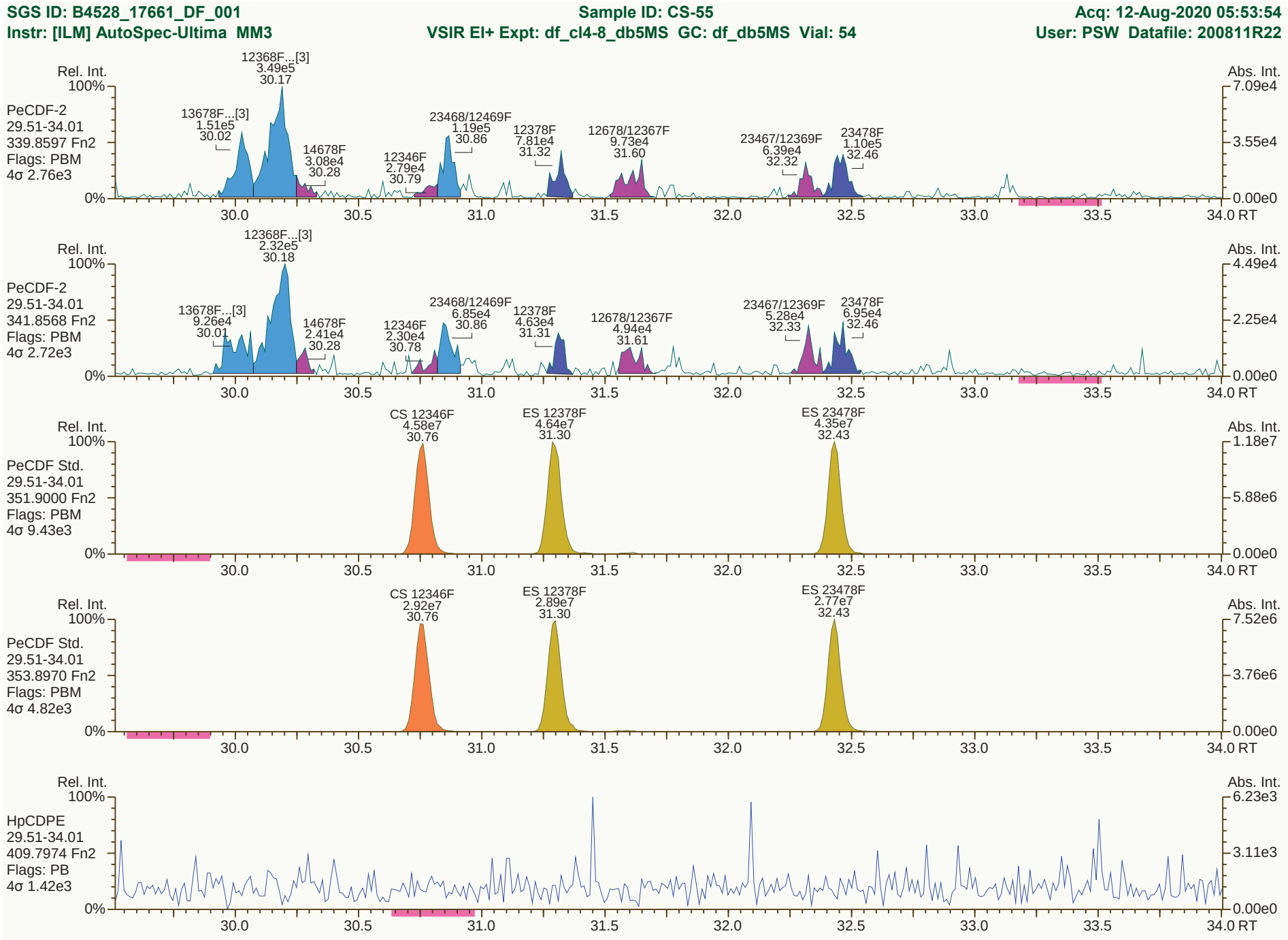
124679/124689D
5.22e5
35.02
123468D
2.33e5
35.68
123679/123689D
3.71e5
35.97
123469D
6.25e4
36.10
123478D
4.18e4
36.72
123678D
6.18e4
36.84
123467D
2.15e4
37.03
123789D
9.40e4
37.13
Abs. Int.
1.83e5
9.13e4
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD
34.02-38.25
391.8127 Fn3
Flags: PBM
4σ 1.83e3
124679/124689D
4.21e5
35.02
123468D
1.68e5
35.68
123679/123689D
3.10e5
35.97
123469D
4.73e4
36.09
123478D
3.87e4
36.72
123678D
6.22e4
36.83
123789D
7.49e4
37.13
Abs. Int.
2.29e5
1.14e5
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
401.8559 Fn3
Flags: PBM
4σ 5.12e3
ES 123478D
2.12e7
36.71
ES 123678D
2.12e7
36.82
JS 123467D
1.44e7
37.02
ES 123789D
2.51e7
37.12
Abs. Int.
7.49e6
3.75e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
403.8530 Fn3
Flags: PBM
4σ 2.68e3
ES 123478D
1.65e7
36.71
ES 123678D
1.61e7
36.82
JS 123467D
1.09e7
37.01
ES 123789D
1.99e7
37.12
Abs. Int.
5.96e6
2.98e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
Abs. Int.
1.25e7
6.24e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT

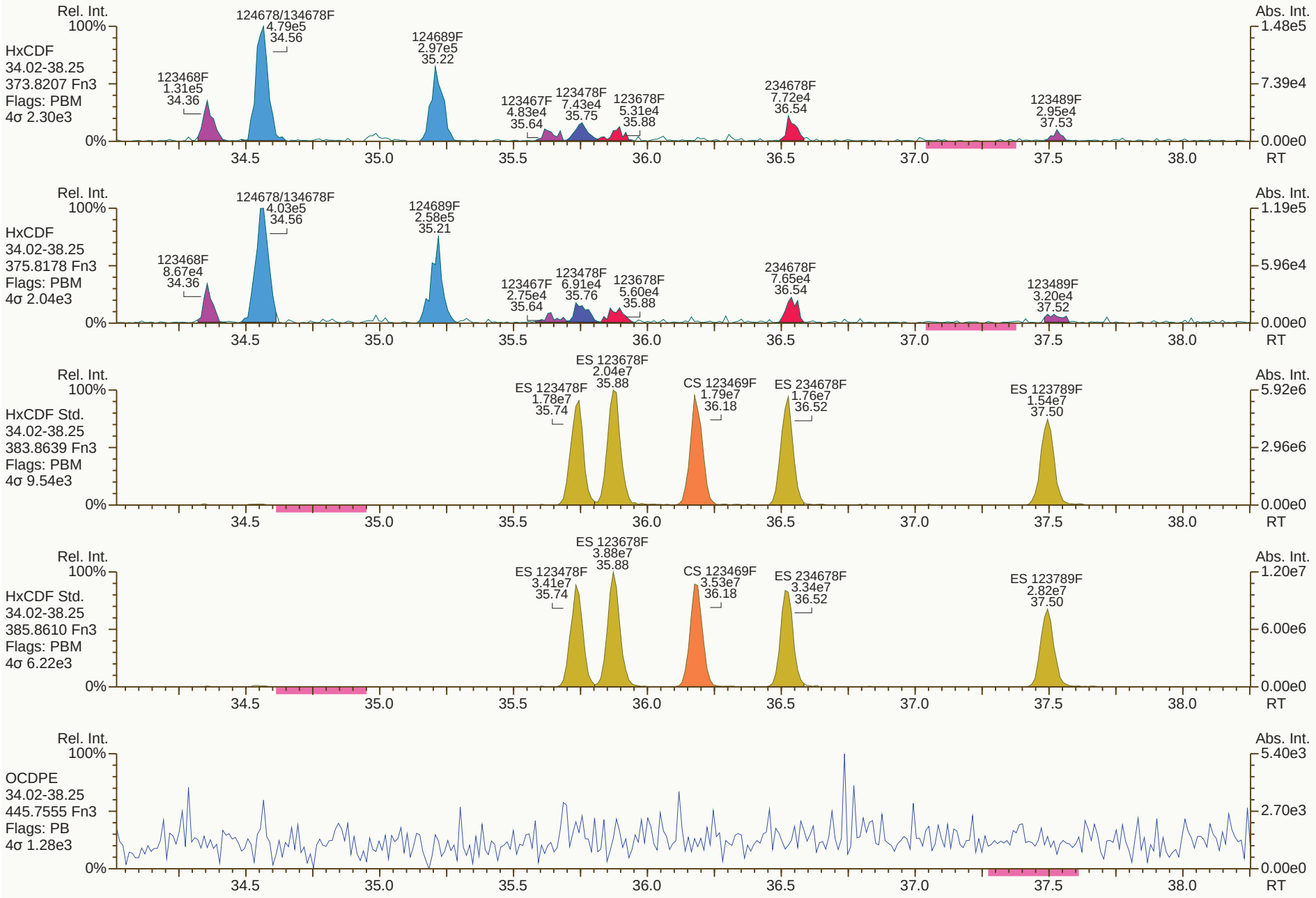

Rel. Int.
100%
HpCDD
38.26-41.01
423.7767 Fn4
Flags: PBM
4σ 1.37e3
0%
1234679D
2.50e6
39.31
1234678D
1.33e6
39.95
ok AK 13 Aug 20
Conc(1234678D) = (1.33e6 + 1.22e6) * 2000pg / (1.71e7 + 1.59e7) * .98 * 8.617712g = 18.3 pg/g
DTF 13-Aug-2020 08:35
Abs. Int.
1.04e6
5.21e5
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.26-41.01
425.7737 Fn4
Flags: PBM
4σ 1.58e3
0%
1234679D
2.42e6
39.30
1234678D
1.22e6
39.95
Abs. Int.
9.31e5
4.66e5
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
435.8169 Fn4
Flags: PBM
4σ 2.07e3
0%
ES 1234678D
1.71e7
39.94
Abs. Int.
7.02e6
3.51e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
437.8140 Fn4
Flags: PBM
4σ 2.70e3
0%
ES 1234678D
1.59e7
39.94
Abs. Int.
6.63e6
3.31e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.26-41.01
430.9728 Fn4
Flags: -
0%
Abs. Int.
7.96e6
3.98e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT

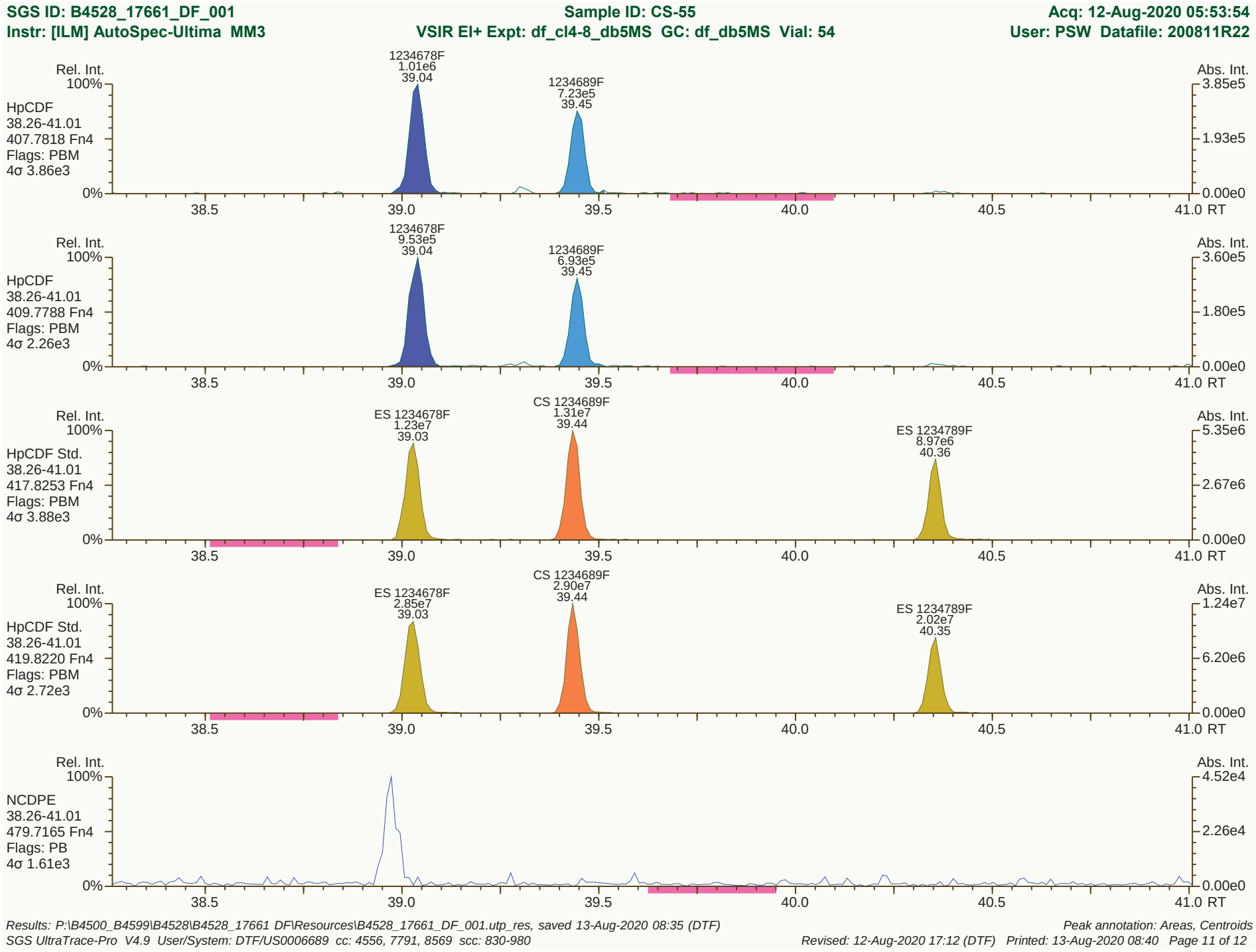

OCDD
5.80e6
42.37
Rel. Int.
Abs. Int.
OCDD
41.02-45.00
457.7377 Fn5
Flags: PBM
4σ 1.77e3
OCDD
6.58e6
42.37
OCDD
41.02-45.00
459.7348 Fn5
Flags: PBM
4σ 3.74e3
ES OCDD
1.62e7
42.36
OCDD Std.
41.02-45.00
469.7780 Fn5
Flags: PBM
4σ 3.26e3
ES OCDD
1.69e7
42.36
OCDD Std.
41.02-45.00
471.7750 Fn5
Flags: PBM
4σ 1.85e3
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
100%
0%
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT


Rel. Int.
100%
TCDF
20.54-29.50
303.9016 Fn1
Flags: PBM
4σ 3.82e3
1368F 2.66e5 21.13
1468F 4.78e4 21.71
2468F 6.68e5 22.36
1347F...[3] 1.59e5 22.92
1248F...[3] 1.15e5 23.36
2368F 1.67e5 24.82
1238F...[5] 2.67e4 24.94
2378F 4.81e4 26.34
2367/3467F 7.93e4 26.74
1289F 8.22e4 28.43
Abs. Int.
1.17e5
5.83e4
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
TCDF
20.54-29.50
305.8987 Fn1
Flags: PBM
4σ 5.35e3
1368F 2.98e5 21.13
1468F 6.63e4 21.69
2468F 8.52e5 22.36
1347F...[3] 1.70e5 22.92
1248F...[3] 1.20e5 23.35
2368F 2.39e5 24.82
1238F...[5] 5.33e4 24.94
2378F 6.21e4 26.35
2367/3467F 9.65e4 26.72
1289F 5.35e4 28.44
Abs. Int.
1.48e5
7.41e4
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
315.9419 Fn1
Flags: PBM
4σ 9.02e3
JS 1234F 4.40e7 24.88
ES 2378F 3.82e7 26.32
Abs. Int.
9.09e6
4.54e6
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
317.9389 Fn1
Flags: PBM
4σ 1.03e4
JS 1234F 5.63e7 24.88
ES 2378F 4.75e7 26.32
Abs. Int.
1.14e7
5.71e6
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
HxCDPE
20.54-29.50
375.8364 Fn1
Flags: PB
4σ 1.71e3
Abs. Int.
1.40e4
7.00e3
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT

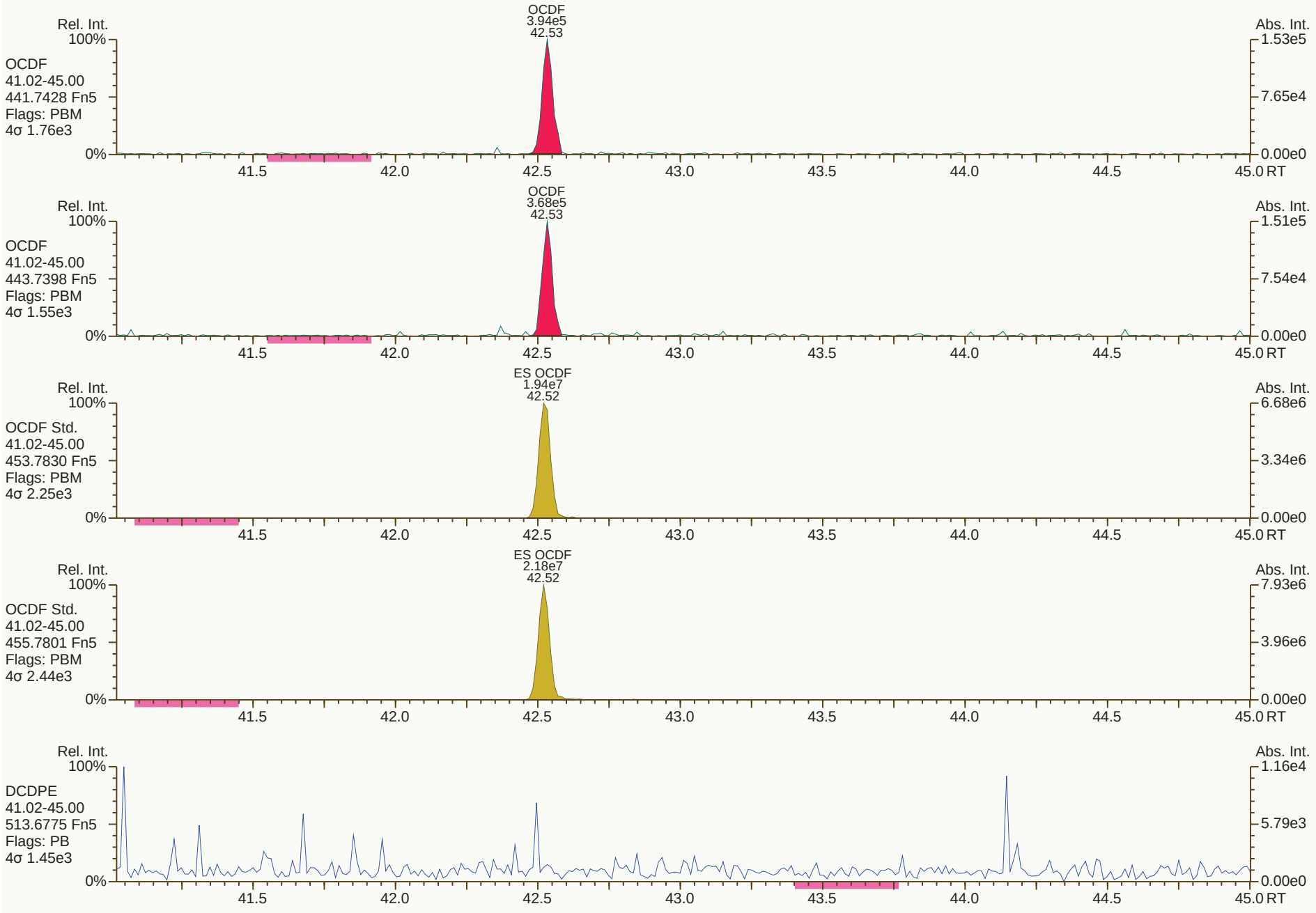

Rel. Int.
100%
0%
Abs. Int.
1.17e5
5.86e4
0.00e0
RT
13468/12468F
3.90e5
28.43
PeCDF-1
20.54-29.50
339.8597 Fn1
Flags: PBM
4σ 1.91e3
13468/12468F
3.18e5
28.43
PeCDF-1
20.54-29.50
341.8568 Fn1
Flags: PBM
4σ 2.34e3
7.99e4
4.00e4
QC Check
20.54-29.50
316.9824 Fn1
Flags: -
3.82e6
1.91e6
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0


SGS ID: B4528_17661_DF_001
Sample ID: CS-55
Acq: 12-Aug-2020 05:53:54
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 54
User: PSW Datafile: 200811R22
PeCDF-2
29.51-34.01
339.8597 Fn2
Flags: PBM
4σ 2.76e3
12368F...[3] 3.49e5 30.17
13678F...[3] 1.51e5 30.02
14678F 3.08e4 30.28
12346F 2.79e4 30.79
23468/12469F 1.19e5 30.86
12378F 7.81e4 31.32
12678/12367F 9.73e4 31.60
23467/12369F 6.39e4 32.32
23478F 1.10e5 32.46
PeCDF-2
29.51-34.01
341.8568 Fn2
Flags: PBM
4σ 2.72e3
12368F...[3] 2.32e5 30.18
13678F...[3] 9.26e4 30.01
14678F 2.41e4 30.28
12346F 2.30e4 30.78
23468/12469F 6.85e4 30.86
12378F 4.63e4 31.31
12678/12367F 4.94e4 31.61
23467/12369F 5.28e4 32.33
23478F 6.95e4 32.46
PeCDF Std.
29.51-34.01
351.9000 Fn2
Flags: PBM
4σ 9.43e3
CS 12346F 4.58e7 30.76
ES 12378F 4.64e7 31.30
ES 23478F 4.35e7 32.43
PeCDF Std.
29.51-34.01
353.8970 Fn2
Flags: PBM
4σ 4.82e3
CS 12346F 2.92e7 30.76
ES 12378F 2.89e7 31.30
ES 23478F 2.77e7 32.43
HpCDPE
29.51-34.01
409.7974 Fn2
Flags: PB
4σ 1.42e3
Rel. Int.
Abs. Int.
100%
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Results: P:\B4500_B4599\B4528\B4528_17661 DF\Resources\B4528_17661_DF_001.utp_res, saved 13-Aug-2020 08:35 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 2565, 8443, 3012 scc: 830-980
PKD: 12-Aug-2020 08:45 Printed: 13-Aug-2020 08:40 Page 9 of 12


Rel. Int.
100%
HxCDF
34.02-38.25
373.8207 Fn3
Flags: PBM
4σ 2.30e3
123468F 1.31e5 34.36
124678/134678F 4.79e5 34.56
124689F 2.97e5 35.22
123467F 4.83e4 35.64
123478F 7.43e4 35.75
123678F 5.31e4 35.88
234678F 7.72e4 36.54
123489F 2.95e4 37.53
Abs. Int.
1.48e5
7.39e4
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0
RT
Rel. Int.
100%
HxCDF
34.02-38.25
375.8178 Fn3
Flags: PBM
4σ 2.04e3
123468F 8.67e4 34.36
124678/134678F 4.03e5 34.56
124689F 2.58e5 35.21
123467F 2.75e4 35.64
123478F 6.91e4 35.76
123678F 5.60e4 35.88
234678F 7.65e4 36.54
123489F 3.20e4 37.52
Abs. Int.
1.19e5
5.96e4
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0
RT
Rel. Int.
100%
HxCDF Std.
34.02-38.25
383.8639 Fn3
Flags: PBM
4σ 9.54e3
ES 123478F 1.78e7 35.74
ES 123678F 2.04e7 35.88
CS 123469F 1.79e7 36.18
ES 234678F 1.76e7 36.52
ES 123789F 1.54e7 37.50
Abs. Int.
5.92e6
2.96e6
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0
RT
Rel. Int.
100%
HxCDF Std.
34.02-38.25
385.8610 Fn3
Flags: PBM
4σ 6.22e3
ES 123478F 3.41e7 35.74
ES 123678F 3.88e7 35.88
CS 123469F 3.53e7 36.18
ES 234678F 3.34e7 36.52
ES 123789F 2.82e7 37.50
Abs. Int.
1.20e7
6.00e6
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0
RT
Rel. Int.
100%
OCDPE
34.02-38.25
445.7555 Fn3
Flags: PB
4σ 1.28e3
Abs. Int.
5.40e3
2.70e3
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0
RT



Results: P:\B4500_B4599\B4528\B4528_17661 DF\Resources\B4528_17661_DF_001.utp_res, saved 13-Aug-2020 08:35 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 4556, 7791, 8569 scc: 830-980
Revised: 12-Aug-2020 17:12 (DTF) Printed: 13-Aug-2020 08:40 Page 11 of 12


Rel. Int.
100%
OCDF
41.02-45.00
441.7428 Fn5
Flags: PBM
4σ 1.76e3
0%
OCDF
3.94e5
42.53
Abs. Int.
1.53e5
7.65e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF
41.02-45.00
443.7398 Fn5
Flags: PBM
4σ 1.55e3
0%
OCDF
3.68e5
42.53
Abs. Int.
1.51e5
7.54e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF Std.
41.02-45.00
453.7830 Fn5
Flags: PBM
4σ 2.25e3
0%
ES OCDF
1.94e7
42.52
Abs. Int.
6.68e6
3.34e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF Std.
41.02-45.00
455.7801 Fn5
Flags: PBM
4σ 2.44e3
0%
ES OCDF
2.18e7
42.52
Abs. Int.
7.93e6
3.96e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
DCDPE
41.02-45.00
513.6775 Fn5
Flags: PB
4σ 1.45e3
0%
Abs. Int.
1.16e4
5.79e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

Lab ID: B4528_17661_DF_002 **Acq'd:** 12 Aug 2020 13:19 PSW **Wt/Vol:** 9.58 g **ICAL:** MM3_DF_10012020_12JUN2020

Client ID: CS-50 **UTP:** 13-Aug-2020 08:31:24 DTF **J-level:** 0.522 pg/g **Split:** 1 **Checkcode:** 713-211-YLG

Datafile: 200812R05 **Report:** 13 Aug 2020 08:34 TF **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	NotFnd		1.0008	-		-	-	-	1.18	-	6059	0.232
12378-PeCDD	32.50	J	1.0006	1.0007	+0.2	1.02E+05	1.36	Y	1.14	0.367	4042	0.13
123478-HxCDD	36.45	J EMPC	1.0004	1.0005	+0.2	1.17E+05	0.91	N	1.09	0.492	5507	0.179
123678-HxCDD	36.55	J	1.0034	1.0034	0	1.94E+05	1.15	Y	1.13	0.808	5507	0.188
123789-HxCDD	36.85	J EMPC	1.0114	1.0115	+0.2	2.00E+05	1.44	N	1.05	0.739	5507	0.175
1234678-HpCDD	39.75		1.0004	1.0003	-0.2	4.44E+06	0.99	Y	0.98	20.7	2632	0.0716
OCDD	42.14		1.0003	1.0003	0	3.78E+07	0.87	Y	1.08	274	4795	0.241
2378-TCDF	25.90	J EMPC	1.0008	1.0008	0	1.82E+05	0.55	N	0.98	0.439	7941	0.222
12378-PeCDF	30.97	J	1.0006	1.0003	-0.6	1.58E+05	1.57	Y	0.95	0.427	7357	0.198
23478-PeCDF	32.14	J	1.0005	1.0007	+0.4	2.55E+05	1.57	Y	0.95	0.677	7357	0.179
123478-HxCDF	35.47	J	1.0005	1.0006	+0.2	2.05E+05	1.27	Y	1.20	0.627	4808	0.114
123678-HxCDF	35.61	J	1.0004	1.0006	+0.4	1.72E+05	1.26	Y	1.07	0.502	4808	0.111
234678-HxCDF	36.26	J	1.0004	1.0004	0	1.51E+05	1.13	Y	1.10	0.482	4808	0.123
123789-HxCDF	NotFnd		1.0004	-		-	-	-	1.09	-	4808	0.132
1234678-HpCDF	38.81		1.0003	1.0003	0	1.51E+06	1.09	Y	1.28	4.98	2849	0.0609
1234789-HpCDF	40.16	J	1.0003	1.0002	-0.2	9.08E+04	1.03	Y	1.27	0.338	2849	0.062
OCDF	42.30		1.0003	1.0003	0	1.04E+06	1.01	Y	1.01	6.08	4568	0.188

Name	Act RT		Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	26.83		1.0267	1.0268	+0.2	5.42E+07	0.78	Y	1.01	81.3
ES 12378-PeCDD	32.47		1.2424	1.2428	+0.8	5.11E+07	1.64	Y	0.87	88.7
ES 123478-HxCDD	36.43		0.9918	0.9918	0	4.56E+07	1.26	Y	1.10	67.6
ES 123678-HxCDD	36.54		0.9948	0.9948	0	4.45E+07	1.29	Y	1.06	68.3
ES 123789-HxCDD	36.83		1.0027	1.0027	0	5.40E+07	1.29	Y	1.22	72.1
ES 1234678-HpCDD	39.74		1.0818	1.0820	+0.5	4.54E+07	1.07	Y	0.99	74.5
ES OCDD	42.13		1.1468	1.1469	+0.3	5.35E+07	0.92	Y	0.67	65
ES 2378-TCDF	25.88		1.0606	1.0609	+0.5	8.83E+07	0.80	Y	1.01	83.6
ES 12378-PeCDF	30.96		1.2684	1.2691	+1.3	8.15E+07	1.57	Y	0.90	86.9
ES 23478-PeCDF	32.11		1.3156	1.3164	+1.5	8.30E+07	1.60	Y	0.89	89.6
ES 123478-HxCDF	35.45		0.9651	0.9651	0	5.71E+07	0.53	Y	1.43	64.9
ES 123678-HxCDF	35.59		0.9690	0.9690	0	6.68E+07	0.52	Y	1.63	66.6
ES 234678-HxCDF	36.24		0.9867	0.9868	+0.2	5.98E+07	0.53	Y	1.48	65.8
ES 123789-HxCDF	37.20		1.0127	1.0127	0	5.73E+07	0.52	Y	1.29	72.2
ES 1234678-HpCDF	38.80		1.0562	1.0563	+0.2	4.96E+07	0.44	Y	1.15	70.3
ES 1234789-HpCDF	40.15		1.0929	1.0931	+0.5	4.42E+07	0.44	Y	0.91	79.4
ES OCDF	42.28		1.1511	1.1512	+0.3	7.07E+07	0.89	Y	0.83	69.4

Lab ID: B4528_17661_DF_002 | Acq'd: 12 Aug 2020 13:19 PSW | Wt/Vol: 9.58 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-50 | UTP: 13-Aug-2020 08:31:24 DTF | J-level: 0.522 pg/g | Split: 1 | Checkcode: 713-211-YLG

Datafile: 200812R05 | Report: 13 Aug 2020 08:34 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
JS 1234-TCDD	26.13		-	-	-	6.62E+07	0.77	Y	-	-
JS 1234-TCDF	24.40		-	-	-	1.04E+08	0.79	Y	-	-
JS 123467-HxCDD	36.73		-	-	-	3.08E+07	1.26	Y	-	-
CS 37Cl-2378-TCDD	26.85		1.0276	1.0277	+0.2	2.59E+07	n/a	-	1.04	94.4
CS 12347-PeCDD	31.96		1.2228	1.2232	+0.8	5.01E+07	1.69	Y	0.74	102
CS 12346-PeCDF	30.42		1.2462	1.2469	+1.3	8.18E+07	1.62	Y	0.86	91.3
CS 123469-HxCDF	35.90		0.9774	0.9774	0	5.90E+07	0.51	Y	1.36	70.7
CS 1234689-HpCDF	39.22		1.0678	1.0679	+0.2	5.09E+07	0.44	Y	1.05	78.5
~~SS 37Cl-2378-TCDD~~	~~26.85~~		~~1.0276~~	~~1.0277~~	~~+0.2~~	~~2.59E+07~~	~~n/a~~		~~1.04~~	~~115~~
~~SS 12347-PeCDD~~	~~31.96~~		~~1.2228~~	~~1.2232~~	~~+0.8~~	~~5.01E+07~~	~~1.69~~	~~Y~~	~~0.86~~	~~115~~
~~SS 12346-PeCDF~~	~~30.42~~		~~1.2462~~	~~1.2469~~	~~+1.3~~	~~8.18E+07~~	~~1.62~~	~~Y~~	~~0.96~~	~~105~~
~~SS 123469-HxCDF~~	~~35.90~~		~~0.9774~~	~~0.9774~~	~~0~~	~~5.90E+07~~	~~0.51~~	~~Y~~	~~0.83~~	~~106~~
~~SS 1234689-HpCDF~~	~~39.22~~		~~1.0678~~	~~1.0679~~	~~+0.2~~	~~5.09E+07~~	~~0.44~~	~~Y~~	~~0.92~~	~~111~~

Totals	Conc	EMPC
Total TCDD	2.77	3.19
Total PeCDD	5	6.35
Total HxCDD	12.4	14.4
Total HpCDD	54.8	54.8
Total Tetra-Octa Dioxins	349	353
Total TCDF	3.03	5.36
Total PeCDF	4.73	6.57
Total HxCDF	5.08	6.21
Total HpCDF	9.24	9.52
Total Tetra-Octa Furans	28.2	33.7
Total Tetra-Octa Dioxins & Furans	377	387

Lab ID: B4528_17661_DF_002 **Acq'd:** 12 Aug 2020 13:19 PSW **Wt/Vol:** 9.58 g **ICAL:** MM3_DF_10012020_12JUN2020

Client ID: CS-50 **UTP:** 13-Aug-2020 08:31:24 DTF **J-level:** 0.522 pg/g **Split:** 1 **Checkcode:** 713-211-YLG

Datafile: 200812R05 **Report:** 13 Aug 2020 08:34 TF **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1368-TCDD	22.82		0.8513	0.8505	-1.1	5.02E+05	0.69	Y	1.18	1.64	6059	0.232
1379-TCDD	23.23		0.8664	0.8659	-0.7	2.22E+05	0.71	Y	1.18	0.726	6059	0.232
1369-TCDD	NotFnd		0.8845						1.18		6059	0.232
1469-TCDD	NotFnd		0.9165						1.18		6059	0.232
1247/1246/1248/1249-TCDD	24.86	J EMPC	0.9266	0.9265	-0.1	1.28E+05	0.92	N	1.18	0.419	6059	0.232
1378-TCDD	25.06	J	0.9342	0.9340	-0.3	1.22E+05	0.79	Y	1.18	0.398	6059	0.232
1268-TCDD	NotFnd		0.9423						1.18		6059	0.232
1478-TCDD	NotFnd		0.9524						1.18		6059	0.232
1279-TCDD	NotFnd		0.9592						1.18		6059	0.232
1234/1269-TCDD	NotFnd		0.9734						1.18		6059	0.232
1236-TCDD	NotFnd		0.9791						1.18		6059	0.232
1237/1238-TCDD	NotFnd		0.9894						1.18		6059	0.232
1239-TCDD	NotFnd		0.9946						1.18		6059	0.232
2378-TCDD	**NotFnd**		**1.0008**						**1.18**		**6059**	**0.232**
1278-TCDD	NotFnd		1.0140						1.18		6059	0.232
1267-TCDD	NotFnd		1.0194						1.18		6059	0.232
1289-TCDD	NotFnd		1.0396						1.18		6059	0.232
12479/12468-PeCDD	29.91	J	0.9210	0.9210	0	5.54E+05	1.48	Y	1.14	1.99	4042	0.13
12469-PeCDD	30.45	J EMPC	0.9381	0.9376	-0.9	5.38E+04	2.44	N	1.14	0.194	4042	0.13
12368-PeCDD	31.04	J	0.9558	0.9558	0	3.36E+05	1.58	Y	1.14	1.21	4042	0.13
12478-PeCDD	31.23	J	0.9618	0.9616	-0.4	1.02E+05	1.56	Y	1.14	0.368	4042	0.13
12379-PeCDD	31.33	J EMPC	0.9649	0.9649	0	2.18E+05	1.97	N	1.14	0.786	4042	0.13
12369/12467/12489-PeCDD	31.60	J EMPC	0.9732	0.9730	-0.4	1.03E+05	1.31	N	1.14	0.369	4042	0.13
12346/12347-PeCDD	31.99	J	0.9850	0.9850	0	2.31E+05	1.54	Y	1.14	0.833	4042	0.13
12378-PeCDD	32.50	J	**1.0006**	**1.0007**	**+0.2**	**1.02E+05**	**1.36**	**Y**	**1.14**	**0.367**	**4042**	**0.13**
12367-PeCDD	NotFnd		1.0035						1.14		4042	0.13
12389-PeCDD	32.94	J	1.0144	1.0143	-0.2	6.36E+04	1.45	Y	1.14	0.229	4042	0.13
124679/124689-HxCDD	34.73		0.9535	0.9535	0	9.37E+05	1.19	Y	1.09	3.74	5507	0.18
123468-HxCDD	35.39		0.9716	0.9716	0	9.50E+05	1.40	Y	1.09	3.79	5507	0.18
123679/123689-HxCDD	35.68		0.9796	0.9795	-0.2	1.01E+06	1.22	Y	1.09	4.04	5507	0.18
123469-HxCDD	35.82	J EMPC	0.9832	0.9832	0	1.12E+05	1.54	N	1.09	0.447	5507	0.18
123478-HxCDD	36.45	J EMPC	**1.0004**	**1.0005**	**+0.2**	**1.17E+05**	**0.91**	**N**	1.09	**0.492**	**5507**	**0.179**
123678-HxCDD	36.55	J	**1.0034**	**1.0034**	**0**	**1.94E+05**	**1.15**	**Y**	1.13	**0.808**	**5507**	**0.188**
123467-HxCDD	36.75	J EMPC	1.0087	1.0089	+0.4	9.05E+04	1.79	N	1.09	0.361	5507	0.18
123789-HxCDD	36.85	J EMPC	**1.0114**	**1.0115**	**+0.2**	**2.00E+05**	**1.44**	**N**	1.05	**0.739**	**5507**	**0.175**

Lab ID: B4528_17661_DF_002 | Acq'd: 12 Aug 2020 13:19 PSW | Wt/Vol: 9.58 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-50 | UTP: 13-Aug-2020 08:31:24 DTF | J-level: 0.522 pg/g | Split: 1 | Checkcode: 713-211-YLG

Datafile: 200812R05 | Report: 13 Aug 2020 08:34 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

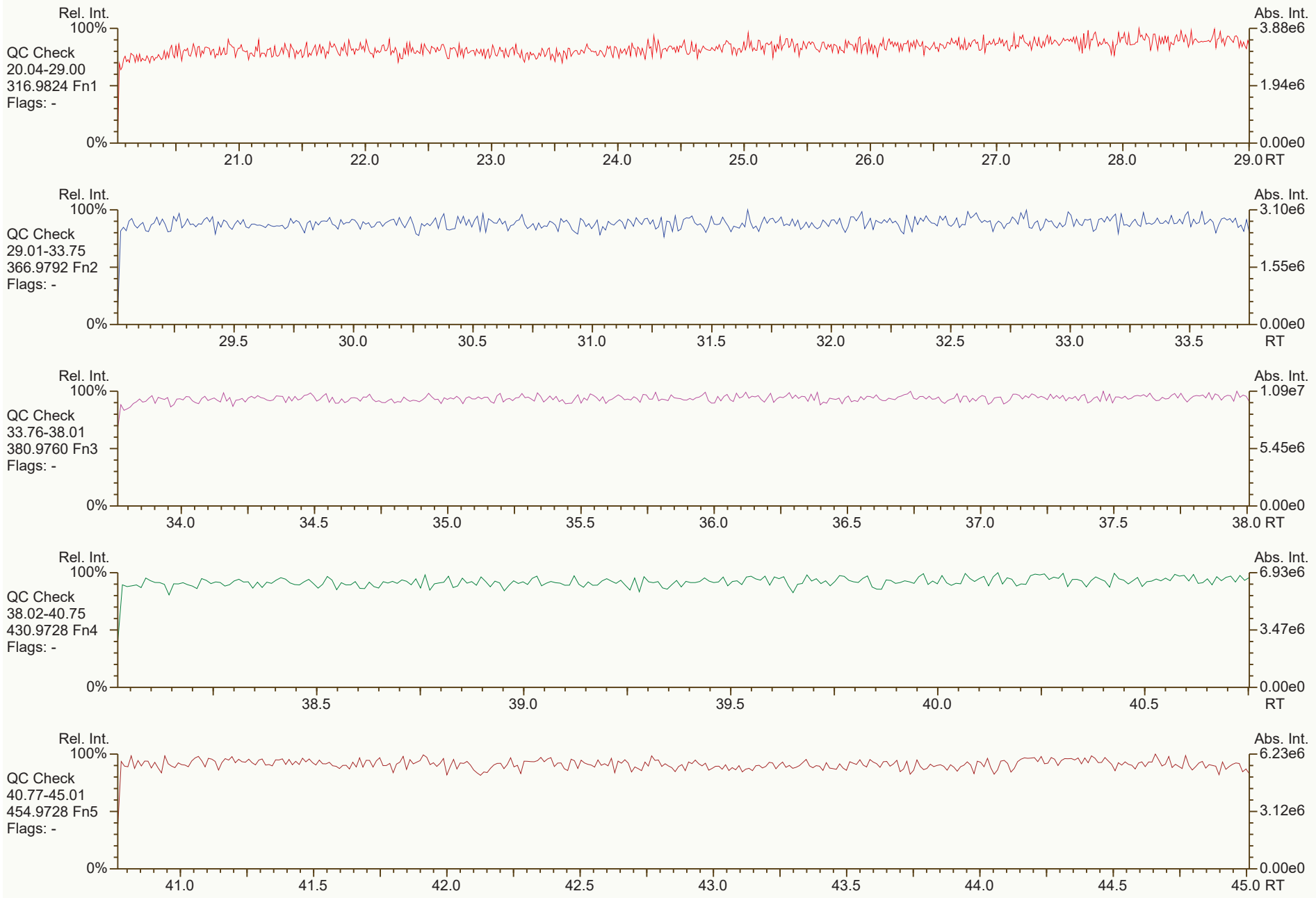
Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1234679-HpCDD	39.09		0.9837	0.9836	-0.2	7.29E+06	1.02	Y	0.98	34	2632	0.0716
1234678-HpCDD	**39.75**		**1.0004**	**1.0003**	**-0.2**	**4.44E+06**	**0.99**	**Y**	**0.98**	**20.7**	**2632**	**0.0716**
OCDD	**42.14**		**1.0003**	**1.0003**	**0**	**3.78E+07**	**0.87**	**Y**	**1.08**	**274**	**4795**	**0.241**
OCDD-a	42.13		1.0002	1.0001	-0.3	1.87E+06	2.34	Y	0.07	221	8233	6.73
1368-TCDF	20.60	J EMPC	0.7965	0.7959	-0.7	1.59E+05	0.64	N	0.98	0.383	7941	0.222
1468-TCDF	21.15	J EMPC	0.8181	0.8173	-1.0	1.17E+05	0.99	N	0.98	0.281	7941	0.222
2468-TCDF	21.80		0.8428	0.8422	-0.8	4.87E+05	0.85	Y	0.98	1.17	7941	0.222
1346/1246-TCDF	NotFnd		0.8580						0.98		7941	0.222
1347/1378/1247-TCDF	22.38	EMPC	0.8643	0.8646	+0.4	2.53E+05	0.59	N	0.98	0.609	7941	0.222
1348-TCDF	NotFnd		0.8764						0.98		7941	0.222
1248/1367/1379-TCDF	22.79		0.8821	0.8808	-1.8	2.28E+05	0.73	Y	0.98	0.549	7941	0.222
1268-TCDF	23.25	J EMPC	0.8987	0.8983	-0.6	1.11E+05	1.36	N	0.98	0.267	7941	0.222
1467-TCDF	NotFnd		0.9045						0.98		7941	0.222
1478-TCDF	NotFnd		0.9120						0.98		7941	0.222
1369/1237-TCDF	NotFnd		0.9279						0.98		7941	0.222
2467-TCDF	NotFnd		0.9335						0.98		7941	0.222
2368-TCDF	24.33		0.9400	0.9400	0	2.36E+05	0.88	Y	0.98	0.57	7941	0.222
1238/1234/1678/1469/1236-TCDF	24.44	J EMPC	0.9442	0.9443	+0.1	1.45E+05	0.55	N	0.98	0.349	7941	0.222
1278-TCDF	NotFnd		0.9632						0.98		7941	0.222
1349-TCDF	NotFnd		0.9681						0.98		7941	0.222
1267-TCDF	NotFnd		0.9747						0.98		7941	0.222
2346/1249-TCDF	NotFnd		0.9826						0.98		7941	0.222
2347/1279-TCDF	NotFnd		0.9917						0.98		7941	0.222
2348-TCDF	NotFnd		0.9963						0.98		7941	0.222
2378-TCDF	**25.90**	J EMPC	**1.0008**	**1.0008**	**0**	**1.82E+05**	**0.55**	**N**	**0.98**	**0.439**	**7941**	**0.222**
2367/3467-TCDF	26.30		1.0163	1.0160	-0.5	3.07E+05	0.81	Y	0.98	0.739	7941	0.222
1269-TCDF	NotFnd		1.0260						0.98		7941	0.222
1239-TCDF	NotFnd		1.0373						0.98		7941	0.222
1289-TCDF	NotFnd		1.0836						0.98		7941	0.222
13468/12468-PeCDF	28.05	J EMPC	0.9056	0.9059	+0.5	4.76E+05	1.97	N	0.95	1.27	4386	0.112
13678/13467/12467-PeCDF	29.67	J	0.9580	0.9584	+0.7	2.85E+05	1.67	Y	0.95	0.763	7357	0.188
12368/13478/12478-PeCDF	29.83	J	0.9632	0.9635	+0.5	4.95E+05	1.41	Y	0.95	1.32	7357	0.188
14678-PeCDF	29.93	J	0.9666	0.9668	+0.4	8.13E+04	1.62	Y	0.95	0.218	7357	0.188
13479-PeCDF	NotFnd		0.9698						0.95		7357	0.188
13469/12479-PeCDF	NotFnd		0.9782						0.95		7357	0.188
12346-PeCDF	30.43	J	0.9828	0.9829	+0.2	7.68E+04	1.36	Y	0.95	0.206	7357	0.188

Lab ID: B4528_17661_DF_002 | Acq'd: 12 Aug 2020 13:19 PSW | Wt/Vol: 9.58 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-50 | UTP: 13-Aug-2020 08:31:24 DTF | J-level: 0.522 pg/g | Split: 1 | Checkcode: 713-211-YLG

Datafile: 200812R05 | Report: 13 Aug 2020 08:34 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
23468/12469-PeCDF	30.52	J EMPC	0.9858	0.9857	-0.2	1.37E+05	2.33	N	0.95	0.366	7357	0.188
12347-PeCDF	30.60	J EMPC	0.9884	0.9883	-0.2	7.37E+04	2.13	N	0.95	0.197	7357	0.188
12348-PeCDF	NotFnd		0.9937						0.95		7357	0.188
12378-PeCDF	**30.97**	J	**1.0006**	**1.0003**	**-0.6**	**1.58E+05**	**1.57**	**Y**	**0.95**	**0.427**	**7357**	**0.198**
12678/12367-PeCDF	31.27	J	1.0098	1.0100	+0.4	2.54E+05	1.60	Y	0.95	0.681	7357	0.188
12379-PeCDF	NotFnd		1.0154						0.95		7357	0.188
12679-PeCDF	NotFnd		0.9923						0.95		7357	0.188
23467/12369-PeCDF	32.00	J	0.9964	0.9964	0	1.62E+05	1.58	Y	0.95	0.433	7357	0.188
23478-PeCDF	**32.14**	J	**1.0005**	**1.0007**	**+0.4**	**2.55E+05**	**1.57**	**Y**	**0.95**	**0.677**	**7357**	**0.179**
23478/12489-PeCDF	NotFnd		0.0000						0.95			
12489-PeCDF	NotFnd		1.0050						0.95		7357	0.188
12349-PeCDF	NotFnd		1.0109						0.95		7357	0.188
12389-PeCDF	NotFnd		1.0345						0.95		7357	0.188
123468-HxCDF	34.06	J EMPC	0.9610	0.9610	0	2.32E+05	1.51	N	1.11	0.723	4808	0.119
124678/134678-HxCDF	34.27	J	0.9667	0.9666	-0.2	7.32E+05	1.36	Y	1.11	2.28	4808	0.119
134679-HxCDF	NotFnd		0.9732						1.11		4808	0.119
124679-HxCDF	NotFnd		0.9788						1.11		4808	0.119
124689-HxCDF	34.92	J	0.9851	0.9852	+0.2	3.84E+05	1.42	Y	1.11	1.19	4808	0.119
123467-HxCDF	35.35	J EMPC	0.9971	0.9971	0	1.31E+05	0.80	N	1.11	0.407	4808	0.119
123478-HxCDF	**35.47**	J	**1.0005**	**1.0006**	**+0.2**	**2.05E+05**	**1.27**	**Y**	**1.20**	**0.627**	**4808**	**0.114**
123678-HxCDF	**35.61**	J	**1.0004**	**1.0006**	**+0.4**	**1.72E+05**	**1.26**	**Y**	**1.07**	**0.502**	**4808**	**0.111**
123479-HxCDF	NotFnd		1.0050						1.11		4808	0.119
123469-HxCDF	NotFnd		1.0091						1.11		4808	0.119
123679-HxCDF	NotFnd		0.9943						1.11		4808	0.119
234678-HxCDF	**36.26**	J	**1.0004**	**1.0004**	**0**	**1.51E+05**	**1.13**	**Y**	**1.10**	**0.482**	**4808**	**0.123**
234678/123689-HxCDF	NotFnd		0.0000						1.10			
123689-HxCDF	NotFnd		1.0054						1.11		4808	0.119
123789-HxCDF	**NotFnd**		**1.0004**						**1.09**		**4808**	**0.132**
123789/123489-HxCDF	NotFnd		0.0000						1.09			
123489-HxCDF	NotFnd		1.0008						1.11		4808	0.119
1234678-HpCDF	**38.81**		**1.0003**	**1.0003**	**0**	**1.51E+06**	**1.09**	**Y**	**1.28**	**4.98**	**2849**	**0.0609**
1234679-HpCDF	39.09	**J EMPC**	1.0075	1.0075	0	7.90E+04	1.43	N	1.27	0.276	2849	0.0614
1234689-HpCDF	39.23		1.0111	1.0112	+0.2	1.12E+06	1.01	Y	1.27	3.92	2849	0.0614
1234789-HpCDF	**40.16**	**J**	**1.0003**	**1.0002**	**-0.2**	**9.08E+04**	**1.03**	**Y**	**1.27**	**0.338**	**2849**	**0.062**
OCDF	**42.30**		**1.0003**	**1.0003**	**0**	**1.04E+06**	**1.01**	**Y**	**1.01**	**6.08**	**4568**	**0.188**
OCDF-a	42.31	**J EMPC**	1.0002	1.0006	+1.0	2.41E+04	0.60	N	0.06	2.25	6185	4.06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QC Check
20.04-29.00
316.9824 Fn1
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0%
Abs. Int.
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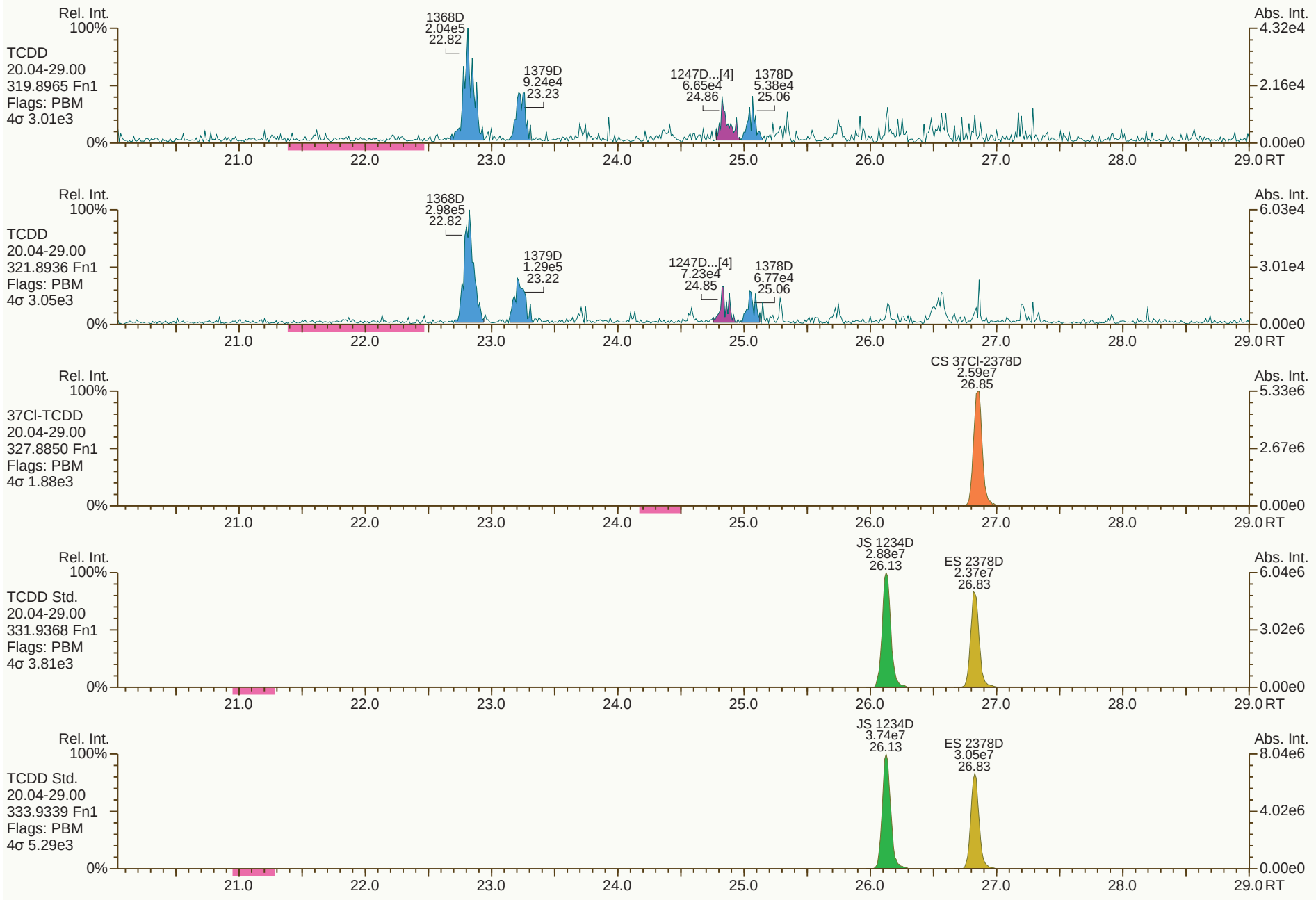
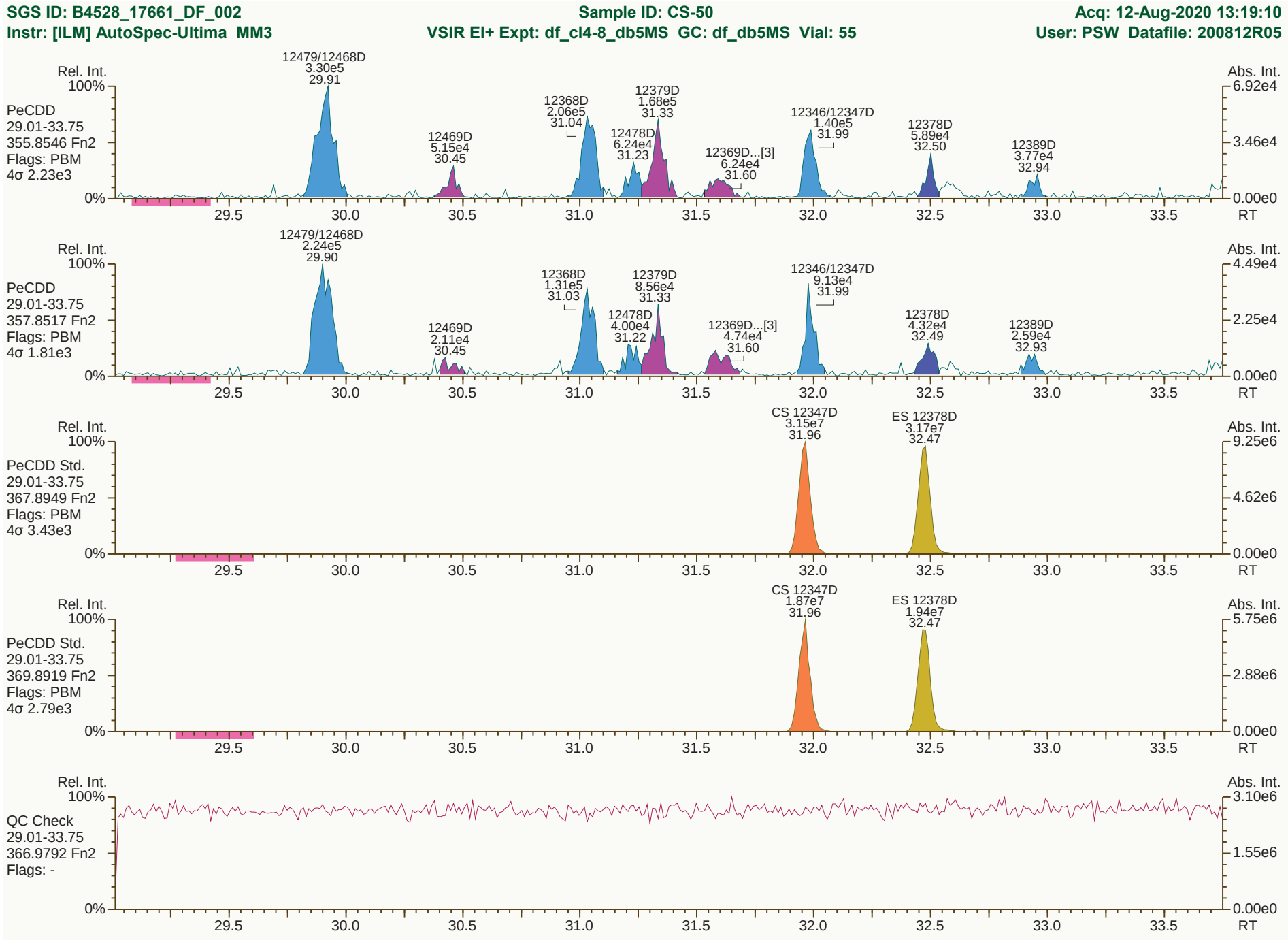
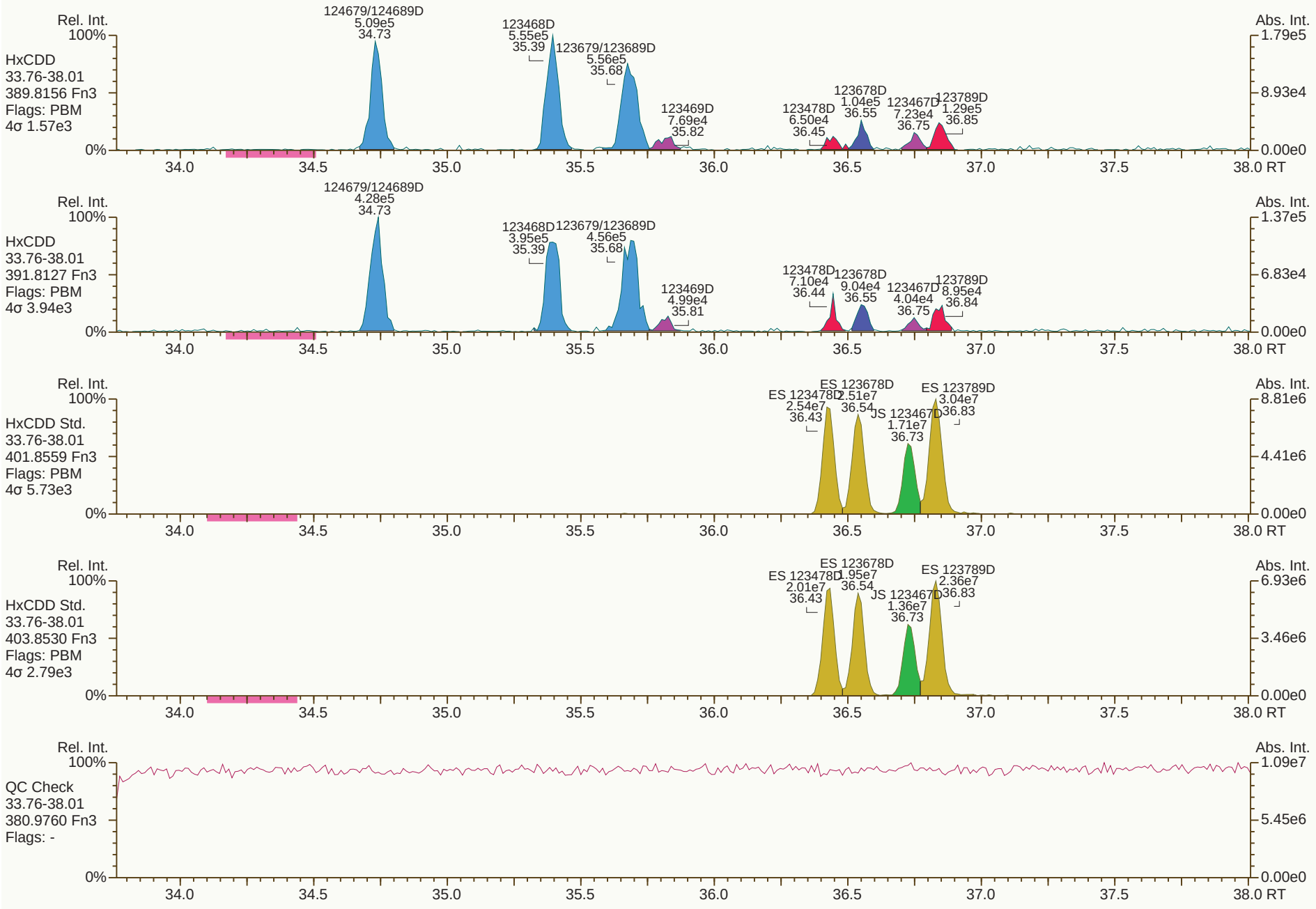
1.94e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT
Rel. Int.
100%
QC Check
29.01-33.75
366.9792 Fn2
Flags: -
0%
Abs. Int.
3.10e6
1.55e6
0.00e0
29.5
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
RT
Rel. Int.
100%
QC Check
33.76-38.01
380.9760 Fn3
Flags: -
0%
Abs. Int.
1.09e7
5.45e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0 RT
Rel. Int.
100%
QC Check
38.02-40.75
430.9728 Fn4
Flags: -
0%
Abs. Int.
6.93e6
3.47e6
0.00e0
38.5
39.0
39.5
40.0
40.5
RT
Rel. Int.
100%
QC Check
40.77-45.01
454.9728 Fn5
Flags: -
0%
Abs. Int.
6.23e6
3.12e6
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT


Rel. Int.
100%
TCDD
20.04-29.00
319.8965 Fn1
Flags: PBM
4σ 3.01e3
0%
1368D
2.04e5
22.82
1379D
9.24e4
23.23
1247D...[4]
6.65e4
24.86
1378D
5.38e4
25.06
Abs. Int.
4.32e4
2.16e4
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT
Rel. Int.
100%
TCDD
20.04-29.00
321.8936 Fn1
Flags: PBM
4σ 3.05e3
0%
1368D
2.98e5
22.82
1379D
1.29e5
23.22
1247D...[4]
7.23e4
24.85
1378D
6.77e4
25.06
Abs. Int.
6.03e4
3.01e4
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT
Rel. Int.
100%
37Cl-TCDD
20.04-29.00
327.8850 Fn1
Flags: PBM
4σ 1.88e3
0%
CS 37Cl-2378D
2.59e7
26.85
Abs. Int.
5.33e6
2.67e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT
Rel. Int.
100%
TCDD Std.
20.04-29.00
331.9368 Fn1
Flags: PBM
4σ 3.81e3
0%
JS 1234D
2.88e7
26.13
ES 2378D
2.37e7
26.83
Abs. Int.
6.04e6
3.02e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT
Rel. Int.
100%
TCDD Std.
20.04-29.00
333.9339 Fn1
Flags: PBM
4σ 5.29e3
0%
JS 1234D
3.74e7
26.13
ES 2378D
3.05e7
26.83
Abs. Int.
8.04e6
4.02e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT

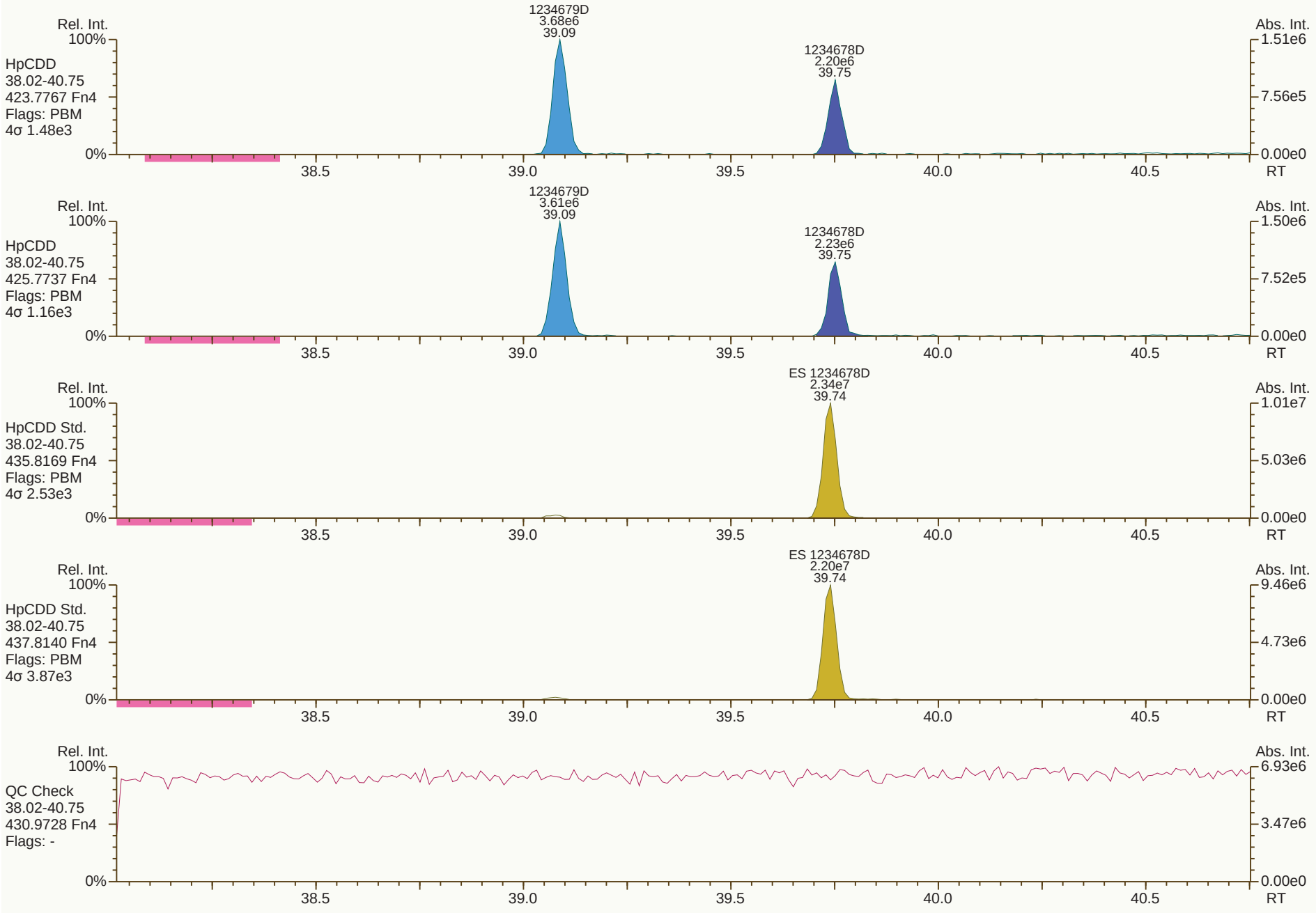
SGS ID: B4528_17661_DF_002 **Sample ID: CS-50** **Acq: 12-Aug-2020 13:19:10**
Instr: [ILM] AutoSpec-Ultima MM3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 55** **User: PSW Datafile: 200812R05**



Results: P:\B4500_B4599\B4528\B4528_17661 DF\Resources\B4528_17661_DF_002.utp_res, saved 13-Aug-2020 08:31 (DTF) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 1334, 3368 scc: 713-211 *PKD: 12-Aug-2020 14:13 Printed: 13-Aug-2020 08:42 Page 3 of 12*



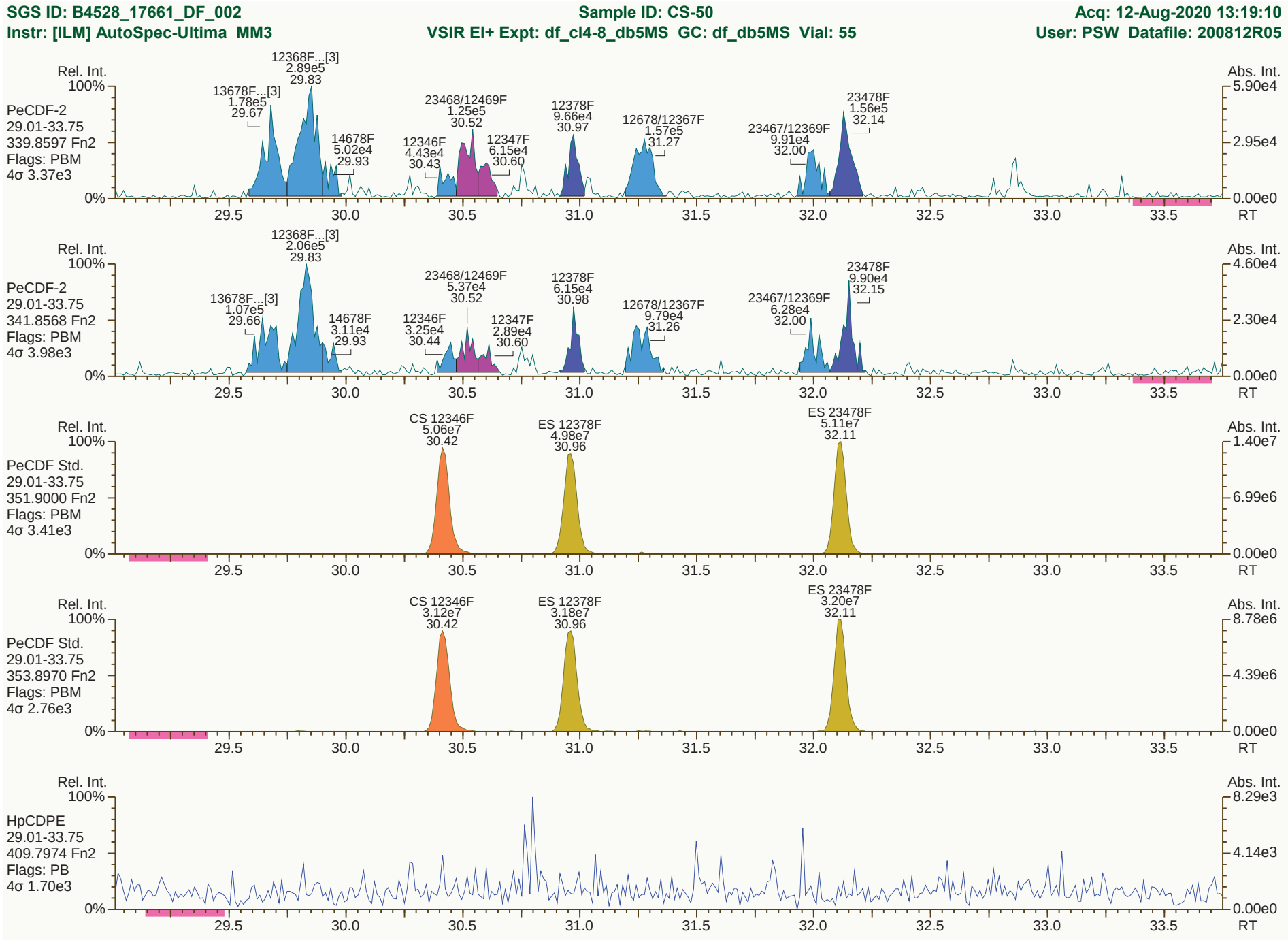
Results: P:\B4500_B4599\B4528\B4528_17661 DF\Resources\B4528_17661_DF_002.utp_res, saved 13-Aug-2020 08:31 (DTF) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 0069, 5304 scc: 713-211 *PKD: 12-Aug-2020 14:13 Printed: 13-Aug-2020 08:42 Page 4 of 12*

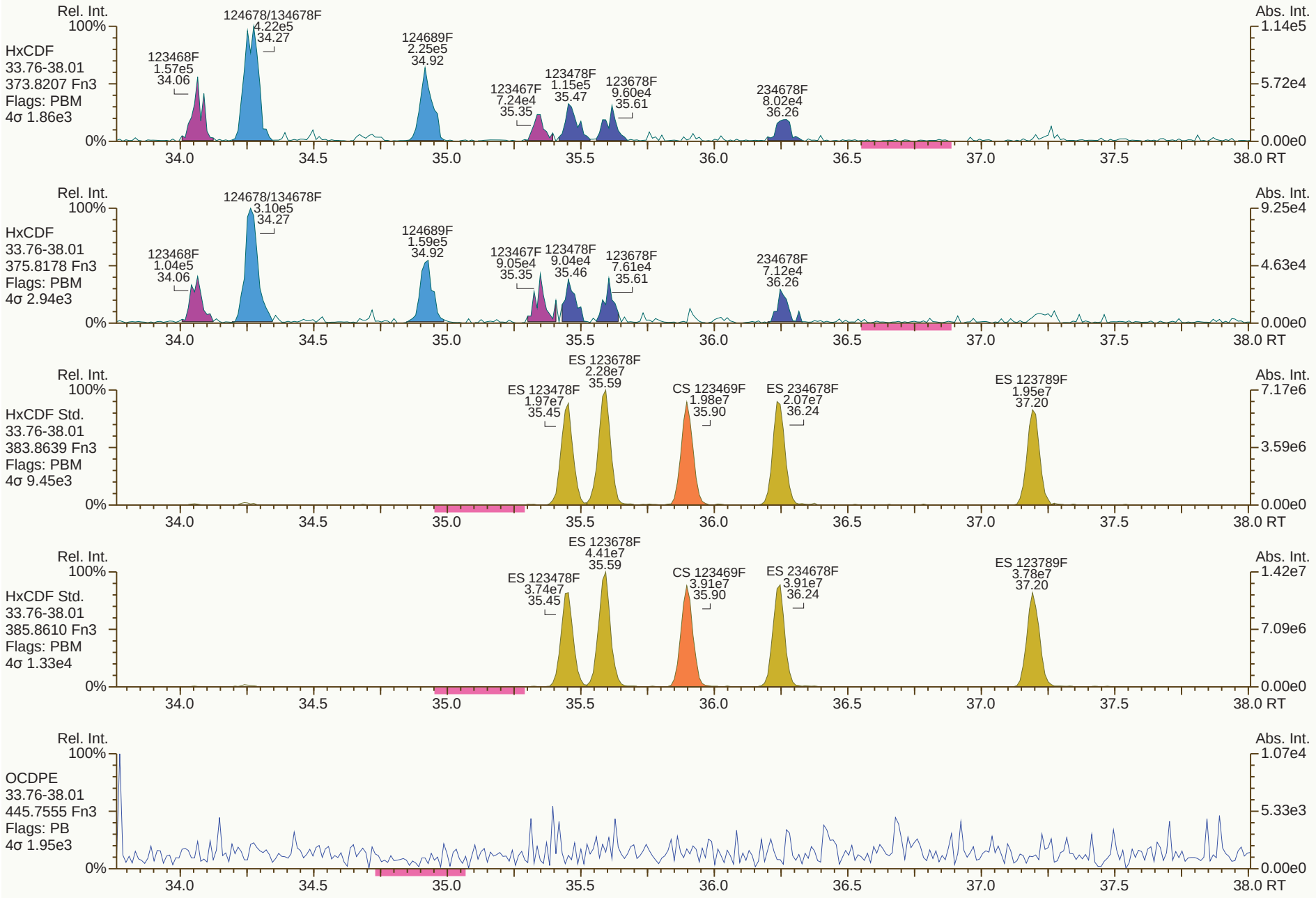

Rel. Int.
100%
HpCDD
38.02-40.75
423.7767 Fn4
Flags: PBM
4σ 1.48e3
0%
1234679D
3.68e6
39.09
1234678D
2.20e6
39.75
Abs. Int.
1.51e6
7.56e5
0.00e0
38.5
39.0
39.5
40.0
40.5
RT
Rel. Int.
100%
HpCDD
38.02-40.75
425.7737 Fn4
Flags: PBM
4σ 1.16e3
0%
1234679D
3.61e6
39.09
1234678D
2.23e6
39.75
Abs. Int.
1.50e6
7.52e5
0.00e0
38.5
39.0
39.5
40.0
40.5
RT
Rel. Int.
100%
HpCDD Std.
38.02-40.75
435.8169 Fn4
Flags: PBM
4σ 2.53e3
0%
ES 1234678D
2.34e7
39.74
Abs. Int.
1.01e7
5.03e6
0.00e0
38.5
39.0
39.5
40.0
40.5
RT
Rel. Int.
100%
HpCDD Std.
38.02-40.75
437.8140 Fn4
Flags: PBM
4σ 3.87e3
0%
ES 1234678D
2.20e7
39.74
Abs. Int.
9.46e6
4.73e6
0.00e0
38.5
39.0
39.5
40.0
40.5
RT
Rel. Int.
100%
QC Check
38.02-40.75
430.9728 Fn4
Flags: -
0%
Abs. Int.
6.93e6
3.47e6
0.00e0
38.5
39.0
39.5
40.0
40.5
RT

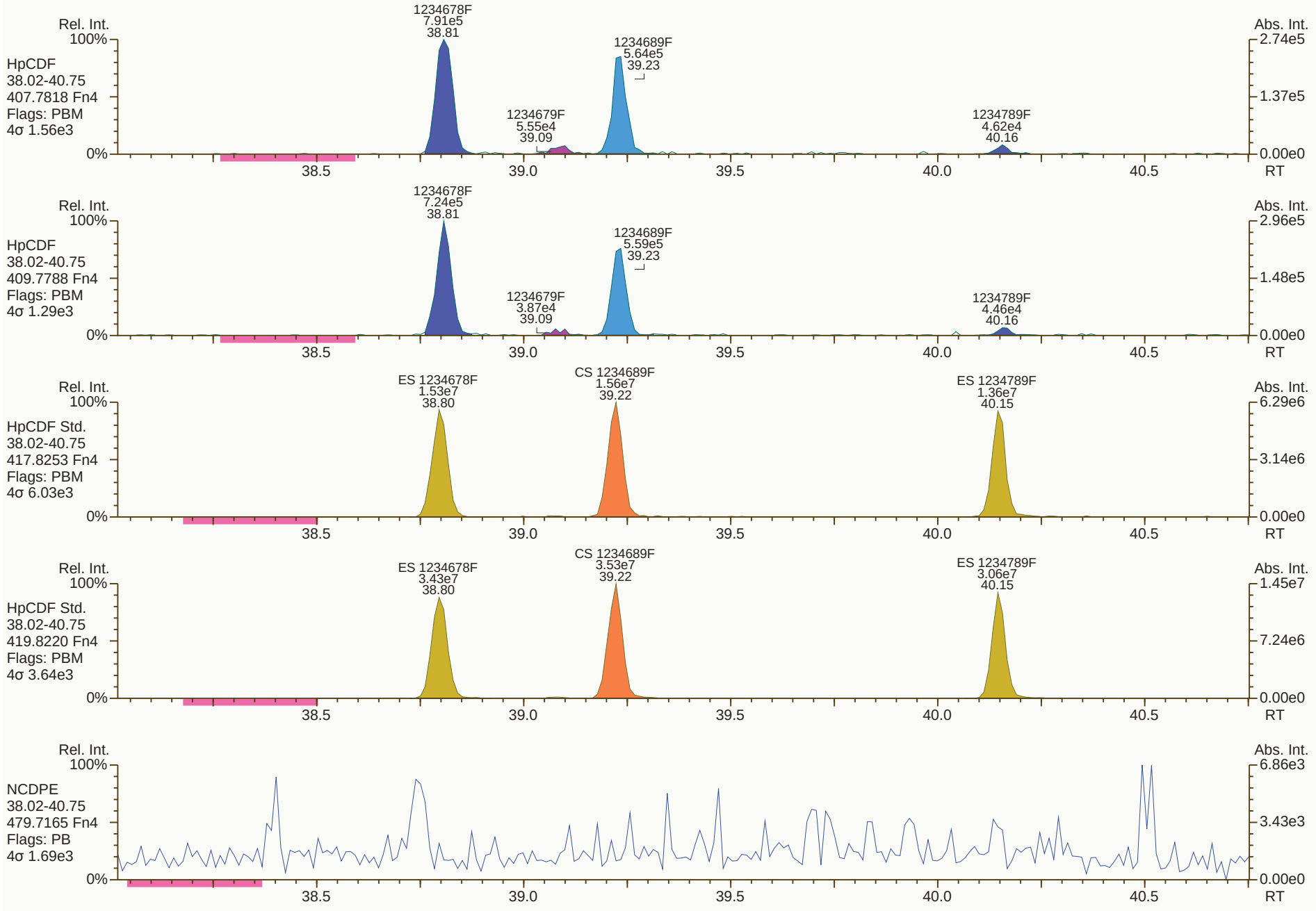

OCDD
1.76e7
42.14
Rel. Int.
100%
OCDD
40.77-45.01
457.7377 Fn5
Flags: PBM
4σ 1.96e3
0%
Abs. Int.
6.71e6
3.36e6
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDD
2.02e7
42.14
Rel. Int.
100%
OCDD
40.77-45.01
459.7348 Fn5
Flags: PBM
4σ 2.84e3
0%
Abs. Int.
7.42e6
3.71e6
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
2.56e7
42.13
Rel. Int.
100%
OCDD Std.
40.77-45.01
469.7780 Fn5
Flags: PBM
4σ 2.05e3
0%
Abs. Int.
9.23e6
4.61e6
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
2.79e7
42.12
Rel. Int.
100%
OCDD Std.
40.77-45.01
471.7750 Fn5
Flags: PBM
4σ 2.45e3
0%
Abs. Int.
1.03e7
5.15e6
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
QC Check
40.77-45.01
454.9728 Fn5
Flags: -
0%
Abs. Int.
6.23e6
3.12e6
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

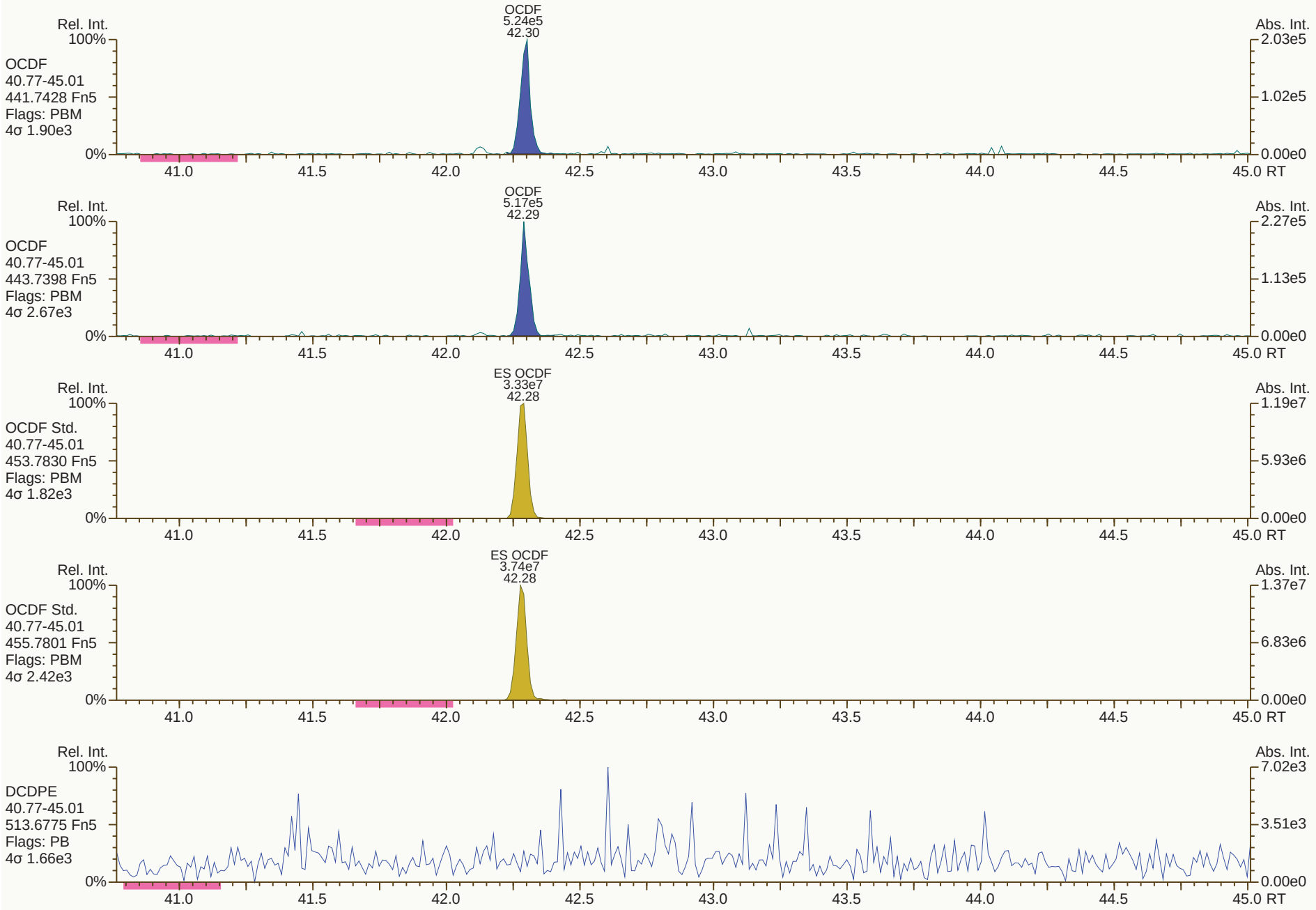

Rel. Int.
100%
TCDF
20.04-29.00
303.9016 Fn1
Flags: PBM
4σ 4.07e3
1368F 6.90e4 20.60
1468F 6.52e4 21.15
2468F 2.24e5 21.80
1347F...[3] 1.10e5 22.38
1248F...[3] 9.65e4 22.79
1268F 8.49e4 23.25
2368F 1.11e5 24.33
1238F...[5] 6.30e4 24.44
2378F 7.92e4 25.90
2367/3467F 1.37e5 26.30
Abs. Int.
3.95e4
1.97e4
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0 RT
Rel. Int.
100%
TCDF
20.04-29.00
305.8987 Fn1
Flags: PBM
4σ 3.88e3
1368F 1.07e5 20.60
1468F 6.59e4 21.14
2468F 2.63e5 21.79
1347F...[3] 1.87e5 22.37
1248F...[3] 1.31e5 22.80
1268F 6.26e4 23.26
2368F 1.26e5 24.33
1238F...[5] 1.16e5 24.43
2378F 1.44e5 25.89
2367/3467F 1.69e5 26.29
Abs. Int.
6.84e4
3.42e4
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0 RT
Rel. Int.
100%
TCDF Std.
20.04-29.00
315.9419 Fn1
Flags: PBM
4σ 9.68e3
JS 1234F 4.61e7 24.40
ES 2378F 3.92e7 25.88
Abs. Int.
8.45e6
4.22e6
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0 RT
Rel. Int.
100%
TCDF Std.
20.04-29.00
317.9389 Fn1
Flags: PBM
4σ 7.46e3
JS 1234F 5.81e7 24.39
ES 2378F 4.91e7 25.88
Abs. Int.
1.13e7
5.66e6
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0 RT
Rel. Int.
100%
HxCDPE
20.04-29.00
375.8364 Fn1
Flags: PB
4σ 1.59e3
Abs. Int.
1.20e4
6.01e3
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0 RT


Rel. Int.
100%
0%
Abs. Int.
1.09e5
5.46e4
0.00e0
13468/12468F
3.67e5
28.05
PeCDF-1
20.04-29.00
339.8597 Fn1
Flags: PBM
4σ 1.83e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT
Rel. Int.
100%
0%
Abs. Int.
4.69e4
2.34e4
0.00e0
13468/12468F
1.87e5
28.05
PeCDF-1
20.04-29.00
341.8568 Fn1
Flags: PBM
4σ 2.55e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT
Rel. Int.
100%
0%
Abs. Int.
3.88e6
1.94e6
0.00e0
QC Check
20.04-29.00
316.9824 Fn1
Flags: -
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT


SGS ID: B4528_17661_DF_002
Sample ID: CS-50
Acq: 12-Aug-2020 13:19:10
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 55
User: PSW Datafile: 200812R05
PeCDF-2
29.01-33.75
339.8597 Fn2
Flags: PBM
4σ 3.37e3
12368F...[3] 2.89e5 29.83
13678F...[3] 1.78e5 29.67
14678F 5.02e4 29.93
12346F 4.43e4 30.43
23468/12469F 1.25e5 30.52
12347F 6.15e4 30.60
12378F 9.66e4 30.97
12678/12367F 1.57e5 31.27
23467/12369F 9.91e4 32.00
23478F 1.56e5 32.14
PeCDF-2
29.01-33.75
341.8568 Fn2
Flags: PBM
4σ 3.98e3
12368F...[3] 2.06e5 29.83
13678F...[3] 1.07e5 29.66
14678F 3.11e4 29.93
12346F 3.25e4 30.44
23468/12469F 5.37e4 30.52
12347F 2.89e4 30.60
12378F 6.15e4 30.98
12678/12367F 9.79e4 31.26
23467/12369F 6.28e4 32.00
23478F 9.90e4 32.15
PeCDF Std.
29.01-33.75
351.9000 Fn2
Flags: PBM
4σ 3.41e3
CS 12346F 5.06e7 30.42
ES 12378F 4.98e7 30.96
ES 23478F 5.11e7 32.11
PeCDF Std.
29.01-33.75
353.8970 Fn2
Flags: PBM
4σ 2.76e3
CS 12346F 3.12e7 30.42
ES 12378F 3.18e7 30.96
ES 23478F 3.20e7 32.11
HpCDPE
29.01-33.75
409.7974 Fn2
Flags: PB
4σ 1.70e3
Rel. Int.
Abs. Int.
RT
Results: P:\B4500_B4599\B4528\B4528_17661 DF\Resources\B4528_17661_DF_002.utp_res, saved 13-Aug-2020 08:31 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 0072, 9998, 0147 scc: 713-211
PKD: 12-Aug-2020 14:13 Printed: 13-Aug-2020 08:42 Page 9 of 12


Rel. Int.
100%
HxCDF
33.76-38.01
373.8207 Fn3
Flags: PBM
4σ 1.86e3
123468F 1.57e5 34.06
124678/134678F 4.22e5 34.27
124689F 2.25e5 34.92
123467F 7.24e4 35.35
123478F 1.15e5 35.47
123678F 9.60e4 35.61
234678F 8.02e4 36.26
Abs. Int.
1.14e5
5.72e4
0.00e0
0%
34.0 34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 RT
HxCDF
33.76-38.01
375.8178 Fn3
Flags: PBM
4σ 2.94e3
123468F 1.04e5 34.06
124678/134678F 3.10e5 34.27
124689F 1.59e5 34.92
123467F 9.05e4 35.35
123478F 9.04e4 35.46
123678F 7.61e4 35.61
234678F 7.12e4 36.26
9.25e4
4.63e4
HxCDF Std.
33.76-38.01
383.8639 Fn3
Flags: PBM
4σ 9.45e3
ES 123478F 1.97e7 35.45
ES 123678F 2.28e7 35.59
CS 123469F 1.98e7 35.90
ES 234678F 2.07e7 36.24
ES 123789F 1.95e7 37.20
7.17e6
3.59e6
HxCDF Std.
33.76-38.01
385.8610 Fn3
Flags: PBM
4σ 1.33e4
ES 123478F 3.74e7 35.45
ES 123678F 4.41e7 35.59
CS 123469F 3.91e7 35.90
ES 234678F 3.91e7 36.24
ES 123789F 3.78e7 37.20
1.42e7
7.09e6
OCDPE
33.76-38.01
445.7555 Fn3
Flags: PB
4σ 1.95e3
1.07e4
5.33e3


Rel. Int.
100%
HpCDF
38.02-40.75
407.7818 Fn4
Flags: PBM
4σ 1.56e3
1234678F
7.91e5
38.81
1234689F
5.64e5
39.23
1234679F
5.55e4
39.09
1234789F
4.62e4
40.16
0%
38.5
39.0
39.5
40.0
40.5
RT
Abs. Int.
2.74e5
1.37e5
0.00e0
Rel. Int.
100%
HpCDF
38.02-40.75
409.7788 Fn4
Flags: PBM
4σ 1.29e3
1234678F
7.24e5
38.81
1234689F
5.59e5
39.23
1234679F
3.87e4
39.09
1234789F
4.46e4
40.16
0%
38.5
39.0
39.5
40.0
40.5
RT
Abs. Int.
2.96e5
1.48e5
0.00e0
Rel. Int.
100%
HpCDF Std.
38.02-40.75
417.8253 Fn4
Flags: PBM
4σ 6.03e3
ES 1234678F
1.53e7
38.80
CS 1234689F
1.56e7
39.22
ES 1234789F
1.36e7
40.15
0%
38.5
39.0
39.5
40.0
40.5
RT
Abs. Int.
6.29e6
3.14e6
0.00e0
Rel. Int.
100%
HpCDF Std.
38.02-40.75
419.8220 Fn4
Flags: PBM
4σ 3.64e3
ES 1234678F
3.43e7
38.80
CS 1234689F
3.53e7
39.22
ES 1234789F
3.06e7
40.15
0%
38.5
39.0
39.5
40.0
40.5
RT
Abs. Int.
1.45e7
7.24e6
0.00e0
Rel. Int.
100%
NCDPE
38.02-40.75
479.7165 Fn4
Flags: PB
4σ 1.69e3
0%
38.5
39.0
39.5
40.0
40.5
RT
Abs. Int.
6.86e3
3.43e3
0.00e0


OCDF
5.24e5
42.30
Rel. Int.
100%
OCDF
40.77-45.01
441.7428 Fn5
Flags: PBM
4σ 1.90e3
0%
Abs. Int.
2.03e5
1.02e5
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDF
5.17e5
42.29
Rel. Int.
100%
OCDF
40.77-45.01
443.7398 Fn5
Flags: PBM
4σ 2.67e3
0%
Abs. Int.
2.27e5
1.13e5
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDF
3.33e7
42.28
Rel. Int.
100%
OCDF Std.
40.77-45.01
453.7830 Fn5
Flags: PBM
4σ 1.82e3
0%
Abs. Int.
1.19e7
5.93e6
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDF
3.74e7
42.28
Rel. Int.
100%
OCDF Std.
40.77-45.01
455.7801 Fn5
Flags: PBM
4σ 2.42e3
0%
Abs. Int.
1.37e7
6.83e6
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
DCDPE
40.77-45.01
513.6775 Fn5
Flags: PB
4σ 1.66e3
0%
Abs. Int.
7.02e3
3.51e3
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

Lab ID: B4528_17661_DF_003 **Acq'd:** 12 Aug 2020 14:06 PSW **Wt/Vol:** 4.72 g **ICAL:** MM3_DF_10012020_12JUN2020

Client ID: CS-51 **UTP:** 13-Aug-2020 08:31:25 DTF **J-level:** 1.06 pg/g **Split:** 1 **Checkcode:** 604-577-JRK

Datafile: 200812R06 **Report:** 13 Aug 2020 08:34 TF **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	NotFnd		1.0008	-		-	-	-	1.18	-	5986	0.432
12378-PeCDD	32.49	J EMPC	1.0006	1.0004	-0.4	6.20E+04	1.98	N	1.14	0.487	4860	0.347
123478-HxCDD	36.44	J	1.0004	1.0003	-0.2	8.42E+04	1.15	Y	1.09	0.738	4334	0.294
123678-HxCDD	36.56	J EMPC	1.0034	1.0034	0	1.67E+05	1.03	N	1.13	1.47	4334	0.312
123789-HxCDD	36.84	J EMPC	1.0114	1.0112	-0.4	9.55E+04	2.09	N	1.05	0.783	4334	0.294
1234678-HpCDD	39.76		1.0004	1.0003	-0.2	3.25E+06	0.98	Y	0.98	32.4	3773	0.205
OCDD	42.14		1.0003	1.0003	0	1.72E+07	0.92	Y	1.08	270	4420	0.471
2378-TCDF	25.89	J EMPC	1.0008	1.0003	-0.8	6.37E+04	0.49	N	0.98	0.307	4754	0.281
12378-PeCDF	30.99	J	1.0006	1.0007	+0.2	1.14E+05	1.33	Y	0.95	0.646	5485	0.299
23478-PeCDF	32.14	J EMPC	1.0005	1.0007	+0.4	1.22E+05	2.05	N	0.95	0.721	5485	0.282
123478-HxCDF	35.47	J	1.0005	1.0004	-0.2	1.62E+05	1.19	Y	1.20	1.02	3028	0.151
123678-HxCDF	35.61	J	1.0004	1.0003	-0.2	1.33E+05	1.32	Y	1.07	0.85	3028	0.152
234678-HxCDF	36.26	J EMPC	1.0004	1.0005	+0.2	7.34E+04	1.87	N	1.10	0.502	3028	0.159
123789-HxCDF	NotFnd		1.0004	-		-	-	-	1.09	-	3028	0.177
1234678-HpCDF	38.81		1.0003	1.0003	0	1.02E+06	1.04	Y	1.28	7.61	3049	0.141
1234789-HpCDF	40.16	J	1.0003	1.0002	-0.2	7.95E+04	0.94	Y	1.27	0.595	3049	0.139
OCDF	42.30		1.0003	1.0003	0	8.79E+05	0.90	Y	1.01	11.1	3620	0.303

Name	Act RT		Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	26.84		1.0267	1.0268	+0.2	5.73E+07	0.76	Y	1.01	75.7
ES 12378-PeCDD	32.48		1.2424	1.2427	+0.6	4.74E+07	1.65	Y	0.87	72.5
ES 123478-HxCDD	36.43		0.9918	0.9918	0	4.43E+07	1.32	Y	1.10	62.3
ES 123678-HxCDD	36.54		0.9948	0.9948	0	4.29E+07	1.27	Y	1.06	62.3
ES 123789-HxCDD	36.84		1.0027	1.0027	0	4.93E+07	1.28	Y	1.22	62.4
ES 1234678-HpCDD	39.75		1.0818	1.0819	+0.2	4.32E+07	1.05	Y	0.99	67.1
ES OCDD	42.13		1.1468	1.1469	+0.3	5.03E+07	0.91	Y	0.67	57.9
ES 2378-TCDF	25.89		1.0606	1.0608	+0.3	8.96E+07	0.81	Y	1.01	76.2
ES 12378-PeCDF	30.97		1.2684	1.2690	+1.1	7.91E+07	1.59	Y	0.90	75.7
ES 23478-PeCDF	32.12		1.3156	1.3163	+1.3	7.59E+07	1.54	Y	0.89	73.6
ES 123478-HxCDF	35.45		0.9651	0.9651	0	5.61E+07	0.53	Y	1.43	60.5
ES 123678-HxCDF	35.59		0.9690	0.9689	-0.2	6.21E+07	0.53	Y	1.63	58.7
ES 234678-HxCDF	36.25		0.9867	0.9867	0	5.64E+07	0.53	Y	1.48	58.8
ES 123789-HxCDF	37.20		1.0127	1.0126	-0.2	5.37E+07	0.51	Y	1.29	64.1
ES 1234678-HpCDF	38.80		1.0562	1.0563	+0.2	4.43E+07	0.44	Y	1.15	59.6
ES 1234789-HpCDF	40.15		1.0929	1.0930	+0.2	4.46E+07	0.45	Y	0.91	75.9
ES OCDF	42.29		1.1511	1.1512	+0.3	6.67E+07	0.92	Y	0.83	62

Lab ID: B4528_17661_DF_003 | Acq'd: 12 Aug 2020 14:06 PSW | Wt/Vol: 4.72 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-51 | UTP: 13-Aug-2020 08:31:25 DTF | J-level: 1.06 pg/g | Split: 1 | Checkcode: 604-577-JRK

Datafile: 200812R06 | Report: 13 Aug 2020 08:34 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
JS 1234-TCDD	26.14		-	-	-	7.52E+07	0.76	Y	-	-
JS 1234-TCDF	24.40		-	-	-	1.16E+08	0.78	Y	-	-
JS 123467-HxCDD	36.74		-	-	-	3.25E+07	1.28	Y	-	-
CS 37Cl-2378-TCDD	26.86		1.0276	1.0277	+0.2	2.89E+07	n/a	-	1.04	92.7
CS 12347-PeCDD	31.97		1.2228	1.2231	+0.6	5.11E+07	1.71	Y	0.74	91.8
CS 12346-PeCDF	30.42		1.2462	1.2468	+1.1	8.28E+07	1.58	Y	0.86	83.1
CS 123469-HxCDF	35.90		0.9774	0.9774	0	6.06E+07	0.54	Y	1.36	68.8
CS 1234689-HpCDF	39.23		1.0678	1.0678	0	5.18E+07	0.44	Y	1.05	75.7
~~SS 37Cl-2378-TCDD~~	~~26.86~~		~~1.0276~~	~~1.0277~~	~~+0.2~~	~~2.89E+07~~	~~n/a~~		~~1.04~~	~~122~~
~~SS 12347-PeCDD~~	~~31.97~~		~~1.2228~~	~~1.2231~~	~~+0.6~~	~~5.11E+07~~	~~1.71~~	~~Y~~	~~0.86~~	~~126~~
~~SS 12346-PeCDF~~	~~30.42~~		~~1.2462~~	~~1.2468~~	~~+1.1~~	~~8.28E+07~~	~~1.58~~	~~Y~~	~~0.96~~	~~109~~
~~SS 123469-HxCDF~~	~~35.90~~		~~0.9774~~	~~0.9774~~	~~0~~	~~6.06E+07~~	~~0.54~~	~~Y~~	~~0.83~~	~~117~~
~~SS 1234689-HpCDF~~	~~39.23~~		~~1.0678~~	~~1.0678~~	~~0~~	~~5.18E+07~~	~~0.44~~	~~Y~~	~~0.92~~	~~126~~

Totals	Conc	EMPC
Total TCDD	4.07	4.07
Total PeCDD	5	10.4
Total HxCDD	18.2	21
Total HpCDD	86	86
Total Tetra-Octa Dioxins	384	392
Total TCDF	5.19	9.42
Total PeCDF	7.55	10.6
Total HxCDF	6.03	9.69
Total HpCDF	15.2	15.7
Total Tetra-Octa Furans	45.1	56.4
Total Tetra-Octa Dioxins & Furans	429	448

Lab ID: B4528_17661_DF_003 **Acq'd:** 12 Aug 2020 14:06 PSW **Wt/Vol:** 4.72 g **ICAL:** MM3_DF_10012020_12JUN2020

Client ID: CS-51 **UTP:** 13-Aug-2020 08:31:25 DTF **J-level:** 1.06 pg/g **Split:** 1 **Checkcode:** 604-577-JRK

Datafile: 200812R06 **Report:** 13 Aug 2020 08:34 TF **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1368-TCDD	22.83		0.8513	0.8506	-1.0	4.37E+05	0.86	Y	1.18	2.74	5986	0.432
1379-TCDD	23.23		0.8664	0.8657	-1.0	2.12E+05	0.73	Y	1.18	1.33	5986	0.432
1369-TCDD	NotFnd		0.8845						1.18		5986	0.432
1469-TCDD	NotFnd		0.9165						1.18		5986	0.432
1247/1246/1248/1249-TCDD	NotFnd		0.9266						1.18		5986	0.432
1378-TCDD	NotFnd		0.9342						1.18		5986	0.432
1268-TCDD	NotFnd		0.9423						1.18		5986	0.432
1478-TCDD	NotFnd		0.9524						1.18		5986	0.432
1279-TCDD	NotFnd		0.9592						1.18		5986	0.432
1234/1269-TCDD	NotFnd		0.9734						1.18		5986	0.432
1236-TCDD	NotFnd		0.9791						1.18		5986	0.432
1237/1238-TCDD	NotFnd		0.9894						1.18		5986	0.432
1239-TCDD	NotFnd		0.9946						1.18		5986	0.432
2378-TCDD	**NotFnd**		**1.0008**						**1.18**		**5986**	**0.432**
1278-TCDD	NotFnd		1.0140						1.18		5986	0.432
1267-TCDD	NotFnd		1.0194						1.18		5986	0.432
1289-TCDD	NotFnd		1.0396						1.18		5986	0.432
12479/12468-PeCDD	29.91	J	0.9210	0.9209	-0.2	4.14E+05	1.48	Y	1.14	3.26	4860	0.347
12469-PeCDD	30.46	J EMPC	0.9381	0.9379	-0.4	5.29E+04	2.39	N	1.14	0.416	4860	0.347
12368-PeCDD	31.04	J EMPC	0.9558	0.9558	0	2.94E+05	1.97	N	1.14	2.32	4860	0.347
12478-PeCDD	31.24	J EMPC	0.9618	0.9618	0	6.41E+04	1.24	N	1.14	0.504	4860	0.347
12379-PeCDD	31.34	J	0.9649	0.9650	+0.2	2.21E+05	1.73	Y	1.14	1.74	4860	0.347
12369/12467/12489-PeCDD	31.61	J EMPC	0.9732	0.9731	-0.2	5.81E+04	2.39	N	1.14	0.457	4860	0.347
12346/12347-PeCDD	31.99	J EMPC	0.9850	0.9849	-0.2	1.60E+05	1.80	N	1.14	1.26	4860	0.347
12378-PeCDD	32.49	J EMPC	**1.0006**	**1.0004**	**-0.4**	**6.20E+04**	**1.98**	**N**	**1.14**	**0.487**	**4860**	**0.347**
12367-PeCDD	NotFnd		1.0035						1.14		4860	0.347
12389-PeCDD	NotFnd		1.0144						1.14		4860	0.347
124679/124689-HxCDD	34.74	J	0.9535	0.9536	+0.2	5.83E+05	1.25	Y	1.09	4.98	4334	0.299
123468-HxCDD	35.40		0.9716	0.9716	0	6.81E+05	1.07	Y	1.09	5.82	4334	0.299
123679/123689-HxCDD	35.69		0.9796	0.9796	0	6.88E+05	1.19	Y	1.09	5.88	4334	0.299
123469-HxCDD	35.82	J EMPC	0.9832	0.9831	-0.2	5.95E+04	0.94	N	1.09	0.509	4334	0.299
123478-HxCDD	36.44	J	**1.0004**	**1.0003**	**-0.2**	**8.42E+04**	**1.15**	**Y**	1.09	**0.738**	**4334**	**0.294**
123678-HxCDD	36.56	J EMPC	**1.0034**	**1.0034**	**0**	**1.67E+05**	**1.03**	**N**	1.13	**1.47**	**4334**	**0.312**
123467-HxCDD	36.75	J	1.0087	1.0085	-0.4	9.00E+04	1.18	Y	1.09	0.769	4334	0.299
123789-HxCDD	36.84	J EMPC	**1.0114**	**1.0112**	**-0.4**	**9.55E+04**	**2.09**	**N**	1.05	**0.783**	**4334**	**0.294**

Lab ID: B4528_17661_DF_003 | Acq'd: 12 Aug 2020 14:06 PSW | Wt/Vol: 4.72 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-51 | UTP: 13-Aug-2020 08:31:25 DTF | J-level: 1.06 pg/g | Split: 1 | Checkcode: 604-577-JRK

Datafile: 200812R06 | Report: 13 Aug 2020 08:34 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1234679-HpCDD	39.09		0.9837	0.9836	-0.2	5.38E+06	1.00	Y	0.98	53.6	3773	0.205
1234678-HpCDD	**39.76**		**1.0004**	**1.0003**	**-0.2**	**3.25E+06**	**0.98**	**Y**	**0.98**	**32.4**	**3773**	**0.205**
OCDD	**42.14**		**1.0003**	**1.0003**	**0**	**1.72E+07**	**0.92**	**Y**	**1.08**	**270**	**4420**	**0.471**
OCDD-a	42.14		1.0002	1.0002	0	9.39E+05	2.43	Y	0.07	239	5935	10.3
1368-TCDF	20.61	J EMPC	0.7965	0.7963	-0.2	1.22E+05	1.05	N	0.98	0.59	4754	0.281
1468-TCDF	21.15	J EMPC	0.8181	0.8171	-1.3	7.19E+04	1.01	N	0.98	0.346	4754	0.281
2468-TCDF	21.80	EMPC	0.8428	0.8422	-0.8	2.63E+05	0.64	N	0.98	1.27	4754	0.281
1346/1246-TCDF	NotFnd		0.8580						0.98		4754	0.281
1347/1378/1247-TCDF	22.37		0.8643	0.8641	-0.3	2.74E+05	0.83	Y	0.98	1.32	4754	0.281
1348-TCDF	NotFnd		0.8764						0.98		4754	0.281
1248/1367/1379-TCDF	22.83	J	0.8821	0.8820	-0.1	1.40E+05	0.68	Y	0.98	0.676	4754	0.281
1268-TCDF	23.26	J EMPC	0.8987	0.8984	-0.4	9.65E+04	1.10	N	0.98	0.465	4754	0.281
1467-TCDF	23.38	J	0.9045	0.9033	-1.7	5.28E+04	0.78	Y	0.98	0.254	4754	0.281
1478-TCDF	NotFnd		0.9120						0.98		4754	0.281
1369/1237-TCDF	NotFnd		0.9279						0.98		4754	0.281
2467-TCDF	24.14	J	0.9335	0.9326	-1.3	6.57E+04	0.68	Y	0.98	0.317	4754	0.281
2368-TCDF	24.33	J	0.9400	0.9400	0	1.94E+05	0.74	Y	0.98	0.937	4754	0.281
1238/1234/1678/1469/1236-TCDF	24.41	J EMPC	0.9442	0.9429	-1.9	7.82E+04	1.13	N	0.98	0.377	4754	0.281
1278-TCDF	24.92	J EMPC	0.9632	0.9626	-0.9	9.74E+04	0.59	N	0.98	0.47	4754	0.281
1349-TCDF	NotFnd		0.9681						0.98		4754	0.281
1267-TCDF	25.22	J	0.9747	0.9741	-0.9	6.48E+04	0.79	Y	0.98	0.312	4754	0.281
2346/1249-TCDF	25.44	J	0.9826	0.9826	0	5.77E+04	0.81	Y	0.98	0.278	4754	0.281
2347/1279-TCDF	25.67	J EMPC	0.9917	0.9916	-0.2	8.40E+04	1.03	N	0.98	0.405	4754	0.281
2348-TCDF	NotFnd		0.9963						0.98		4754	0.281
2378-TCDF	**25.89**	J EMPC	**1.0008**	**1.0003**	**-0.8**	**6.37E+04**	**0.49**	**N**	**0.98**	**0.307**	**4754**	**0.281**
2367/3467-TCDF	26.31		1.0163	1.0165	+0.3	2.26E+05	0.74	Y	0.98	1.09	4754	0.281
1269-TCDF	NotFnd		1.0260						0.98		4754	0.281
1239-TCDF	NotFnd		1.0373						0.98		4754	0.281
1289-TCDF	NotFnd		1.0836						0.98		4754	0.281
13468/12468-PeCDF	28.05	J	0.9056	0.9058	+0.3	4.73E+05	1.44	Y	0.95	2.73	3545	0.188
13678/13467/12467-PeCDF	29.67	J	0.9580	0.9583	+0.5	2.19E+05	1.71	Y	0.95	1.26	5485	0.291
12368/13478/12478-PeCDF	29.82	J	0.9632	0.9630	-0.4	3.61E+05	1.73	Y	0.95	2.08	5485	0.291
14678-PeCDF	29.92	J	0.9666	0.9662	-0.7	1.01E+05	1.60	Y	0.95	0.583	5485	0.291
13479-PeCDF	NotFnd		0.9698						0.95		5485	0.291
13469/12479-PeCDF	NotFnd		0.9782						0.95		5485	0.291
12346-PeCDF	30.44	J	0.9828	0.9831	+0.5	4.27E+04	1.40	Y	0.95	0.247	5485	0.291

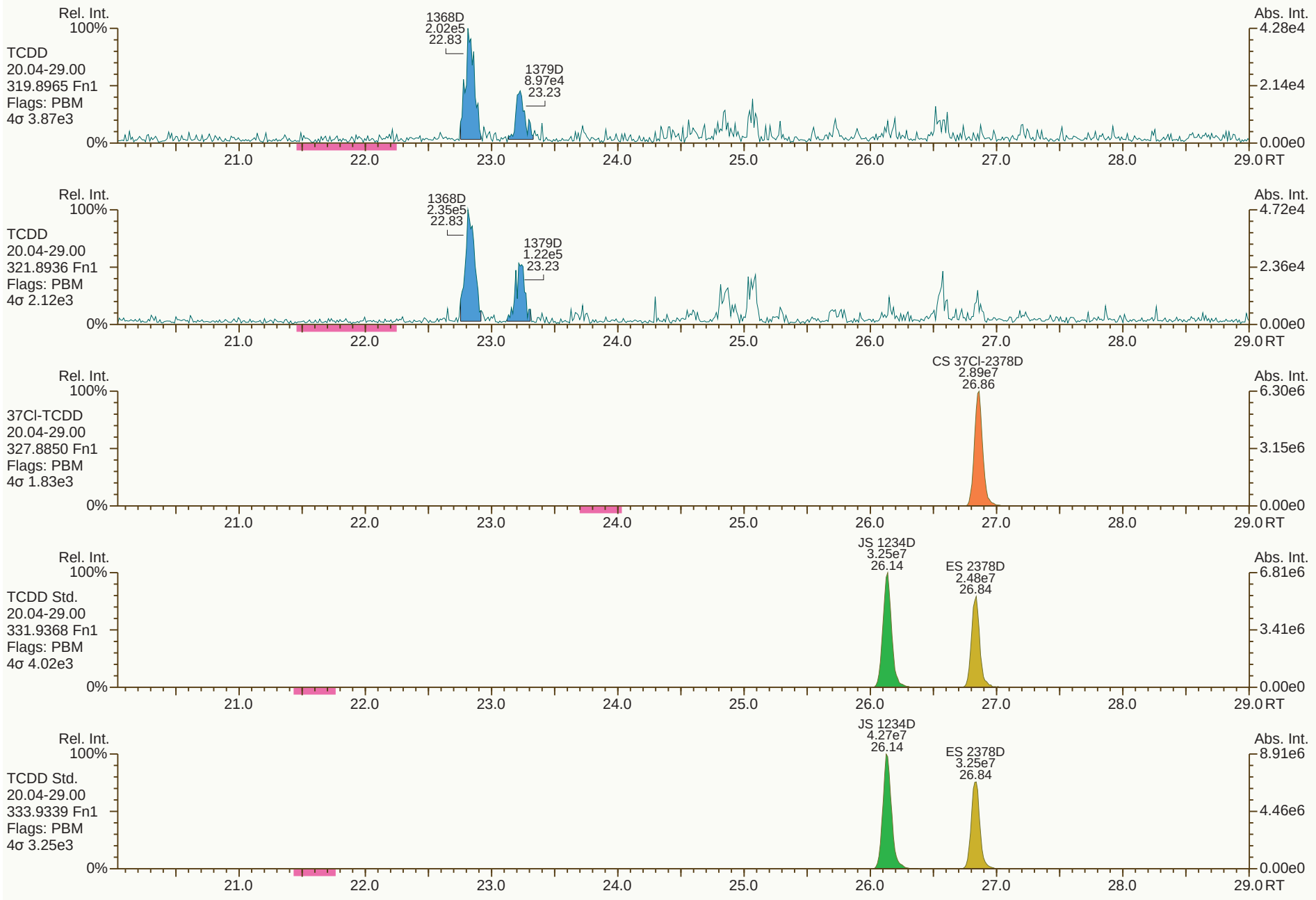
Lab ID: B4528_17661_DF_003 | Acq'd: 12 Aug 2020 14:06 PSW | Wt/Vol: 4.72 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-51 | UTP: 13-Aug-2020 08:31:25 DTF | J-level: 1.06 pg/g | Split: 1 | Checkcode: 604-577-JRK

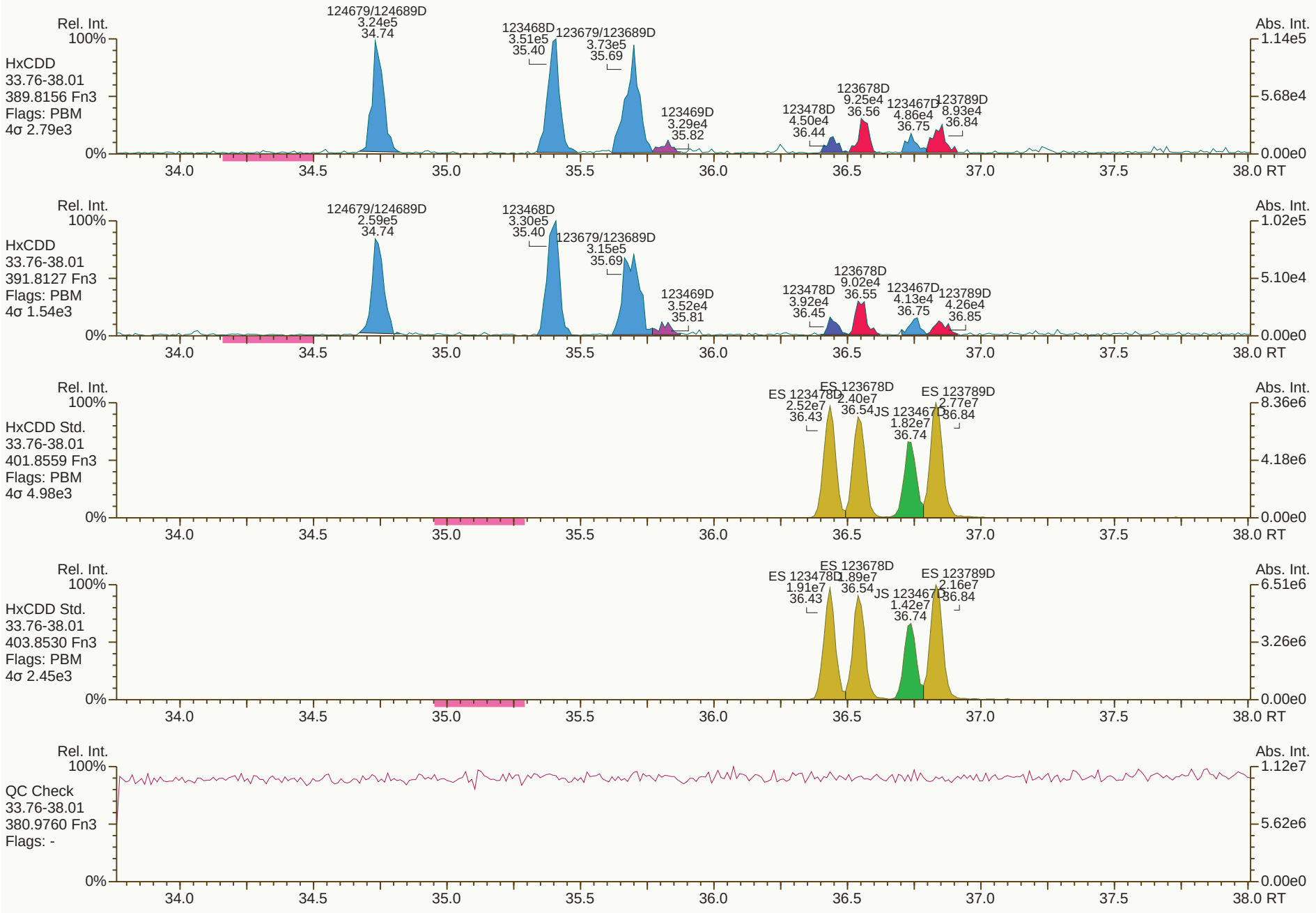
Datafile: 200812R06 | Report: 13 Aug 2020 08:34 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

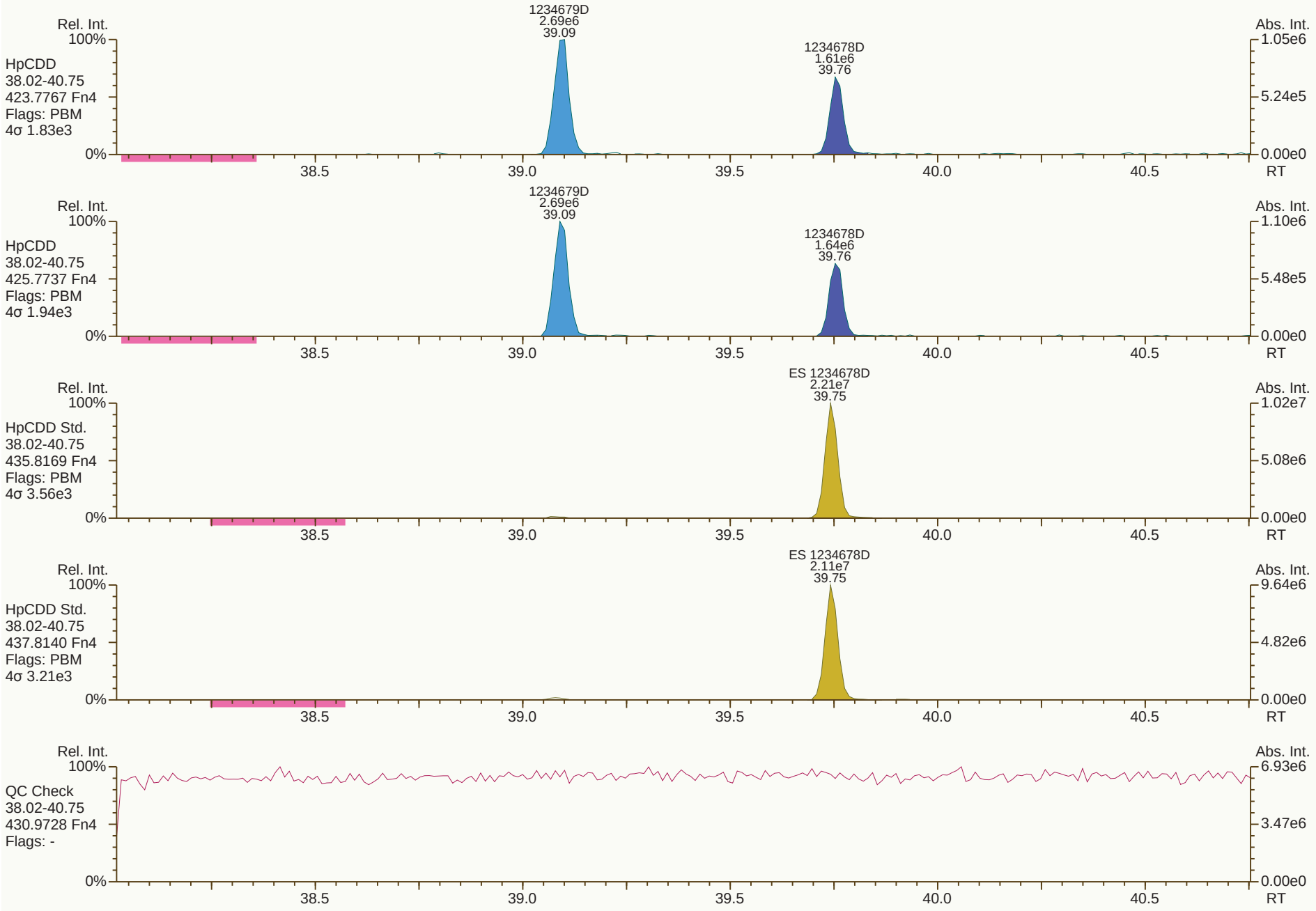
Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
23468/12469-PeCDF	30.53	J EMPC	0.9858	0.9857	-0.2	1.07E+05	2.05	N	0.95	0.618	5485	0.291
12347-PeCDF	30.60	J EMPC	0.9884	0.9881	-0.6	7.10E+04	1.79	N	0.95	0.41	5485	0.291
12348-PeCDF	NotFnd		0.9937						0.95		5485	0.291
12378-PeCDF	**30.99**	J	**1.0006**	**1.0007**	**+0.2**	**1.14E+05**	**1.33**	**Y**	**0.95**	**0.646**	**5485**	**0.299**
12678/12367-PeCDF	31.28	J EMPC	1.0098	1.0100	+0.4	1.21E+05	0.91	N	0.95	0.696	5485	0.291
12379-PeCDF	NotFnd		1.0154						0.95		5485	0.291
12679-PeCDF	NotFnd		0.9923						0.95		5485	0.291
23467/12369-PeCDF	32.01	J EMPC	0.9964	0.9964	0	9.71E+04	2.18	N	0.95	0.561	5485	0.291
23478-PeCDF	**32.14**	J EMPC	**1.0005**	**1.0007**	**+0.4**	**1.22E+05**	**2.05**	**N**	**0.95**	**0.721**	**5485**	**0.282**
23478/12489-PeCDF	NotFnd		0.0000						0.95			
12489-PeCDF	NotFnd		1.0050						0.95		5485	0.291
12349-PeCDF	NotFnd		1.0109						0.95		5485	0.291
12389-PeCDF	NotFnd		1.0345						0.95		5485	0.291
123468-HxCDF	34.07	J EMPC	0.9610	0.9610	0	1.99E+05	0.88	N	1.11	1.33	3028	0.159
124678/134678-HxCDF	34.27	J	0.9667	0.9667	0	4.92E+05	1.08	Y	1.11	3.28	3028	0.159
134679-HxCDF	NotFnd		0.9732						1.11		3028	0.159
124679-HxCDF	NotFnd		0.9788						1.11		3028	0.159
124689-HxCDF	34.93	J EMPC	0.9851	0.9851	0	2.75E+05	1.61	N	1.11	1.84	3028	0.159
123467-HxCDF	35.35	J	0.9971	0.9970	-0.2	1.31E+05	1.24	Y	1.11	0.874	3028	0.159
123478-HxCDF	**35.47**	J	**1.0005**	**1.0004**	**-0.2**	**1.62E+05**	**1.19**	**Y**	**1.20**	**1.02**	**3028**	**0.151**
123678-HxCDF	**35.61**	J	**1.0004**	**1.0003**	**-0.2**	**1.33E+05**	**1.32**	**Y**	**1.07**	**0.85**	**3028**	**0.152**
123479-HxCDF	NotFnd		1.0050						1.11		3028	0.159
123469-HxCDF	NotFnd		1.0091						1.11		3028	0.159
123679-HxCDF	NotFnd		0.9943						1.11		3028	0.159
234678-HxCDF	**36.26**	J EMPC	**1.0004**	**1.0005**	**+0.2**	**7.34E+04**	**1.87**	**N**	**1.10**	**0.502**	**3028**	**0.159**
234678/123689-HxCDF	NotFnd		0.0000						1.10			
123689-HxCDF	NotFnd		1.0054						1.11		3028	0.159
123789-HxCDF	**NotFnd**		**1.0004**						**1.09**		**3028**	**0.177**
123789/123489-HxCDF	NotFnd		0.0000						1.09			
123489-HxCDF	NotFnd		1.0008						1.11		3028	0.159
1234678-HpCDF	**38.81**		**1.0003**	**1.0003**	**0**	**1.02E+06**	**1.04**	**Y**	**1.28**	**7.61**	**3049**	**0.141**
1234679-HpCDF	39.10	**J EMPC**	1.0075	1.0075	0	5.96E+04	1.23	N	1.27	0.446	3049	0.14
1234689-HpCDF	39.24		1.0111	1.0113	+0.5	9.41E+05	1.04	Y	1.27	7.04	3049	0.14
1234789-HpCDF	**40.16**	**J**	**1.0003**	**1.0002**	**-0.2**	**7.95E+04**	**0.94**	**Y**	**1.27**	**0.595**	**3049**	**0.139**
OCDF	**42.30**		**1.0003**	**1.0003**	**0**	**8.79E+05**	**0.90**	**Y**	**1.01**	**11.1**	**3620**	**0.303**
OCDF-a	42.31	**J EMPC**	1.0002	1.0006	+1.0	3.96E+04	1.42	N	0.06	7.96	6355	8.51


Rel. Int.
100%
QC Check
20.04-29.00
316.9824 Fn1
Flags: -
0%
Abs. Int.
3.95e6
1.97e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT
Rel. Int.
100%
QC Check
29.01-33.75
366.9792 Fn2
Flags: -
0%
Abs. Int.
3.16e6
1.58e6
0.00e0
29.5
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
RT
Rel. Int.
100%
QC Check
33.76-38.01
380.9760 Fn3
Flags: -
0%
Abs. Int.
1.12e7
5.62e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0 RT
Rel. Int.
100%
QC Check
38.02-40.75
430.9728 Fn4
Flags: -
0%
Abs. Int.
6.93e6
3.47e6
0.00e0
38.5
39.0
39.5
40.0
40.5
RT
Rel. Int.
100%
QC Check
40.77-45.01
454.9728 Fn5
Flags: -
0%
Abs. Int.
6.35e6
3.17e6
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT


Rel. Int.
100%
TCDD
20.04-29.00
319.8965 Fn1
Flags: PBM
4σ 3.87e3
0%
1368D
2.02e5
22.83
1379D
8.97e4
23.23
Abs. Int.
4.28e4
2.14e4
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT
Rel. Int.
100%
TCDD
20.04-29.00
321.8936 Fn1
Flags: PBM
4σ 2.12e3
0%
1368D
2.35e5
22.83
1379D
1.22e5
23.23
Abs. Int.
4.72e4
2.36e4
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT
Rel. Int.
100%
37Cl-TCDD
20.04-29.00
327.8850 Fn1
Flags: PBM
4σ 1.83e3
0%
CS 37Cl-2378D
2.89e7
26.86
Abs. Int.
6.30e6
3.15e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT
Rel. Int.
100%
TCDD Std.
20.04-29.00
331.9368 Fn1
Flags: PBM
4σ 4.02e3
0%
JS 1234D
3.25e7
26.14
ES 2378D
2.48e7
26.84
Abs. Int.
6.81e6
3.41e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT
Rel. Int.
100%
TCDD Std.
20.04-29.00
333.9339 Fn1
Flags: PBM
4σ 3.25e3
0%
JS 1234D
4.27e7
26.14
ES 2378D
3.25e7
26.84
Abs. Int.
8.91e6
4.46e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT


Rel. Int.
100%
PeCDD
29.01-33.75
355.8546 Fn2
Flags: PBM
4σ 2.99e3
12479/12468D
2.47e5
29.91
12469D
4.95e4
30.46
12368D
2.27e5
31.04
12379D
1.40e5
31.34
12478D
3.90e4
31.24
12369D...[3]
5.45e4
31.61
12346/12347D
1.13e5
31.99
12378D
4.81e4
32.49
Abs. Int.
7.78e4
3.89e4
0.00e0
0%
29.5
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
RT
Rel. Int.
100%
PeCDD
29.01-33.75
357.8517 Fn2
Flags: PBM
4σ 1.87e3
12479/12468D
1.67e5
29.91
12469D
2.08e4
30.48
12368D
1.15e5
31.04
12379D
8.10e4
31.33
12478D
3.14e4
31.23
12369D...[3]
2.28e4
31.61
12346/12347D
6.28e4
31.99
12378D
2.43e4
32.49
Abs. Int.
3.94e4
1.97e4
0.00e0
0%
29.5
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
RT
Rel. Int.
100%
PeCDD Std.
29.01-33.75
367.8949 Fn2
Flags: PBM
4σ 3.32e3
CS 12347D
3.22e7
31.97
ES 12378D
2.95e7
32.48
Abs. Int.
8.89e6
4.45e6
0.00e0
0%
29.5
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
RT
Rel. Int.
100%
PeCDD Std.
29.01-33.75
369.8919 Fn2
Flags: PBM
4σ 2.40e3
CS 12347D
1.89e7
31.97
ES 12378D
1.79e7
32.48
Abs. Int.
5.19e6
2.60e6
0.00e0
0%
29.5
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
RT
Rel. Int.
100%
QC Check
29.01-33.75
366.9792 Fn2
Flags: -
Abs. Int.
3.16e6
1.58e6
0.00e0
0%
29.5
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
RT


Rel. Int.
100%
HxCDD
33.76-38.01
389.8156 Fn3
Flags: PBM
4σ 2.79e3
124679/124689D
3.24e5
34.74
123468D
3.51e5
35.40
123679/123689D
3.73e5
35.69
123469D
3.29e4
35.82
123478D
4.50e4
36.44
123678D
9.25e4
36.56
123467D
4.86e4
36.75
123789D
8.93e4
36.84
Abs. Int.
1.14e5
5.68e4
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0 RT
Rel. Int.
100%
HxCDD
33.76-38.01
391.8127 Fn3
Flags: PBM
4σ 1.54e3
124679/124689D
2.59e5
34.74
123468D
3.30e5
35.40
123679/123689D
3.15e5
35.69
123469D
3.52e4
35.81
123478D
3.92e4
36.45
123678D
9.02e4
36.55
123467D
4.13e4
36.75
123789D
4.26e4
36.85
Abs. Int.
1.02e5
5.10e4
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0 RT
Rel. Int.
100%
HxCDD Std.
33.76-38.01
401.8559 Fn3
Flags: PBM
4σ 4.98e3
ES 123478D
2.52e7
36.43
ES 123678D
2.40e7
36.54
JS 123467D
1.82e7
36.74
ES 123789D
2.77e7
36.84
Abs. Int.
8.36e6
4.18e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0 RT
Rel. Int.
100%
HxCDD Std.
33.76-38.01
403.8530 Fn3
Flags: PBM
4σ 2.45e3
ES 123478D
1.91e7
36.43
ES 123678D
1.89e7
36.54
JS 123467D
1.42e7
36.74
ES 123789D
2.16e7
36.84
Abs. Int.
6.51e6
3.26e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0 RT
Rel. Int.
100%
QC Check
33.76-38.01
380.9760 Fn3
Flags: -
Abs. Int.
1.12e7
5.62e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0 RT

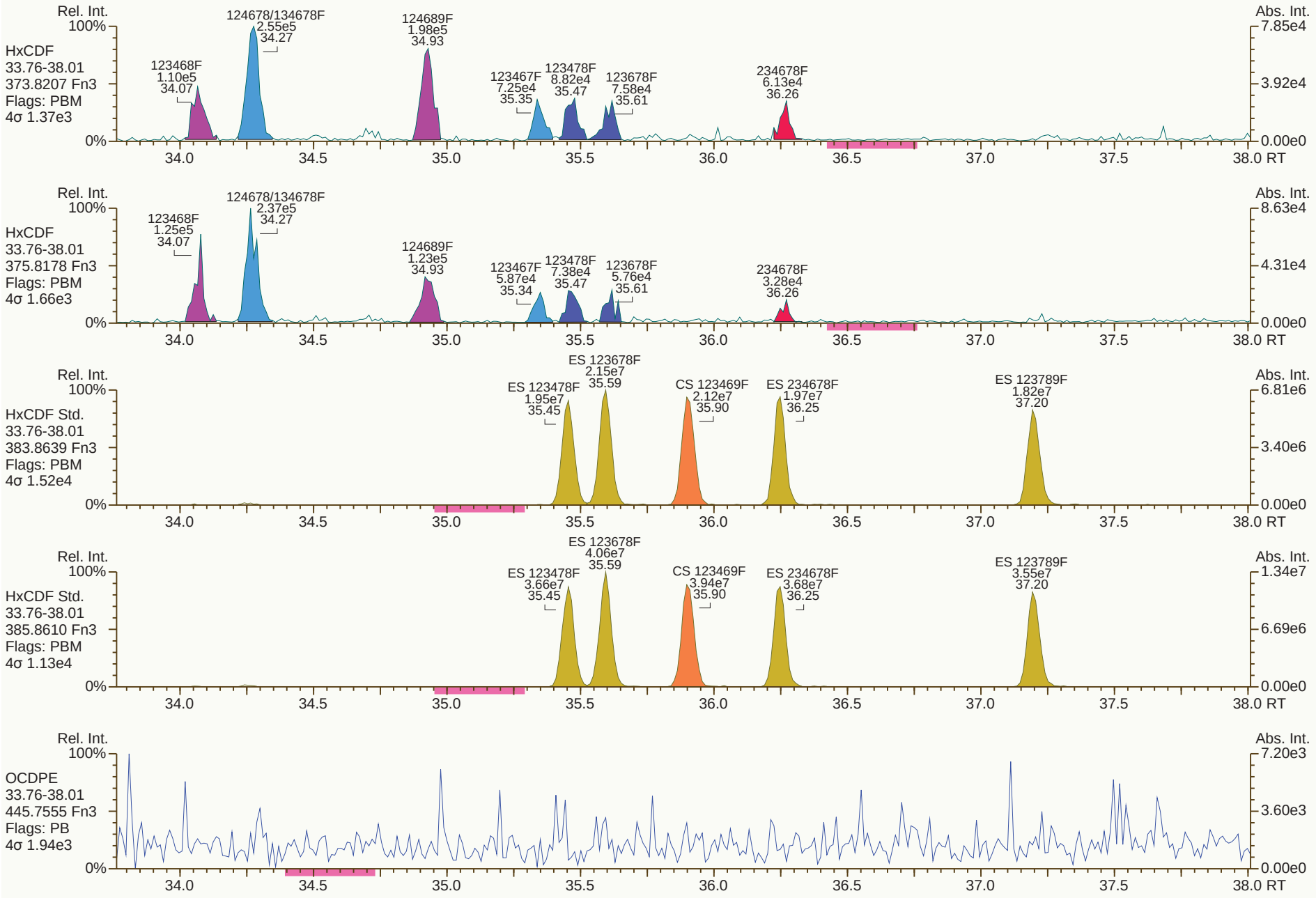

Rel. Int.
100%
HpCDD
38.02-40.75
423.7767 Fn4
Flags: PBM
4σ 1.83e3
0%
1234679D
2.69e6
39.09
1234678D
1.61e6
39.76
Abs. Int.
1.05e6
5.24e5
0.00e0
38.5
39.0
39.5
40.0
40.5
RT
Rel. Int.
100%
HpCDD
38.02-40.75
425.7737 Fn4
Flags: PBM
4σ 1.94e3
0%
1234679D
2.69e6
39.09
1234678D
1.64e6
39.76
Abs. Int.
1.10e6
5.48e5
0.00e0
38.5
39.0
39.5
40.0
40.5
RT
Rel. Int.
100%
HpCDD Std.
38.02-40.75
435.8169 Fn4
Flags: PBM
4σ 3.56e3
0%
ES 1234678D
2.21e7
39.75
Abs. Int.
1.02e7
5.08e6
0.00e0
38.5
39.0
39.5
40.0
40.5
RT
Rel. Int.
100%
HpCDD Std.
38.02-40.75
437.8140 Fn4
Flags: PBM
4σ 3.21e3
0%
ES 1234678D
2.11e7
39.75
Abs. Int.
9.64e6
4.82e6
0.00e0
38.5
39.0
39.5
40.0
40.5
RT
Rel. Int.
100%
QC Check
38.02-40.75
430.9728 Fn4
Flags: -
0%
Abs. Int.
6.93e6
3.47e6
0.00e0
38.5
39.0
39.5
40.0
40.5
RT

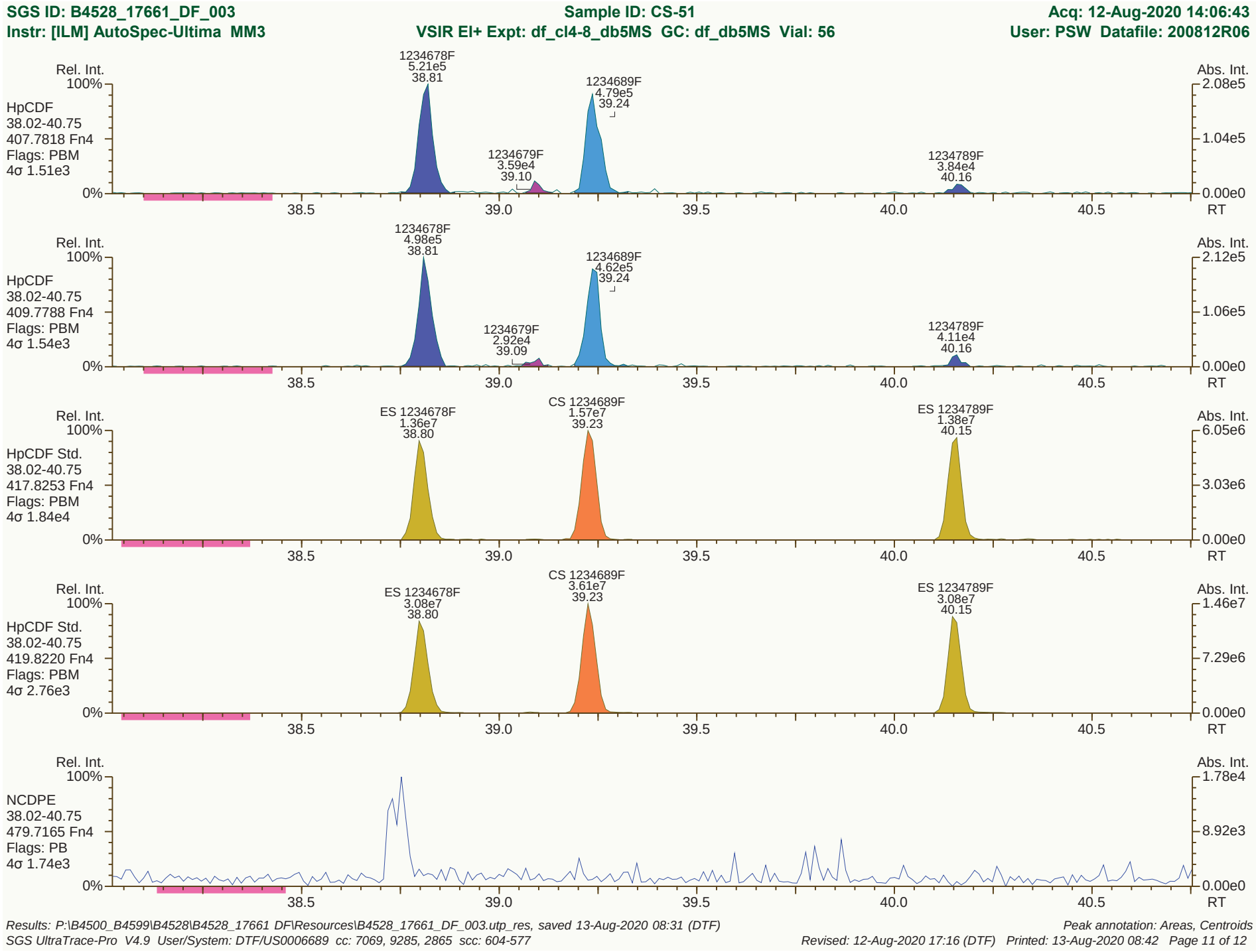

OCDD
8.28e6
42.14
Rel. Int.
100%
OCDD
40.77-45.01
457.7377 Fn5
Flags: PBM
4σ 1.75e3
0%
Abs. Int.
3.19e6
1.60e6
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDD
8.96e6
42.14
Rel. Int.
100%
OCDD
40.77-45.01
459.7348 Fn5
Flags: PBM
4σ 2.67e3
0%
Abs. Int.
3.38e6
1.69e6
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
2.39e7
42.13
Rel. Int.
100%
OCDD Std.
40.77-45.01
469.7780 Fn5
Flags: PBM
4σ 3.19e3
0%
Abs. Int.
8.79e6
4.39e6
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
2.64e7
42.13
Rel. Int.
100%
OCDD Std.
40.77-45.01
471.7750 Fn5
Flags: PBM
4σ 2.71e3
0%
Abs. Int.
1.02e7
5.11e6
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
QC Check
40.77-45.01
454.9728 Fn5
Flags: -
0%
Abs. Int.
6.35e6
3.17e6
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT


SGS ID: B4528_17661_DF_003
Sample ID: CS-51
Acq: 12-Aug-2020 14:06:43
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 56
User: PSW Datafile: 200812R06
Rel. Int.
Abs. Int.
TCDF
20.04-29.00
303.9016 Fn1
Flags: PBM
4σ 2.51e3
1368F 7.24e4 20.61
1468F 4.09e4 21.15
2468F 1.15e5 21.80
1347F...[3] 1.24e5 22.37
1248F...[3] 5.70e4 22.83
1268F 5.99e4 23.26
1467F 2.31e4 23.38
2368F 8.29e4 24.33
1278F 4.24e4 24.92
2346/1249F 2.59e4 25.44
2378F 2.77e4 25.89
2367/3467F 9.61e4 26.31
TCDF
20.04-29.00
305.8987 Fn1
Flags: PBM
4σ 2.25e3
1368F 6.91e4 20.61
1468F 4.06e4 21.14
2468F 1.78e5 21.80
1347F...[3] 1.50e5 22.35
1248F...[3] 8.32e4 22.82
1268F 5.45e4 23.25
1467F 2.97e4 23.39
2368F 1.11e5 24.32
2467F 3.91e4 24.14
1278F 7.15e4 24.93
2346/1249F 3.18e4 25.44
2378F 5.71e4 25.89
2367/3467F 1.30e5 26.29
TCDF Std.
20.04-29.00
315.9419 Fn1
Flags: PBM
4σ 1.39e4
JS 1234F 5.08e7 24.40
ES 2378F 4.01e7 25.89
TCDF Std.
20.04-29.00
317.9389 Fn1
Flags: PBM
4σ 7.05e3
JS 1234F 6.52e7 24.40
ES 2378F 4.96e7 25.88
HxCDPE
20.04-29.00
375.8364 Fn1
Flags: PB
4σ 1.45e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT
Results: P:\B4500_B4599\B4528\B4528_17661 DF\Resources\B4528_17661_DF_003.utp_res, saved 13-Aug-2020 08:31 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 8021, 0906, 2853 scc: 604-577
Revised: 12-Aug-2020 17:15 (DTF) Printed: 13-Aug-2020 08:42 Page 7 of 12


Rel. Int.
100%
0%
Abs. Int.
7.22e4
3.61e4
0.00e0
13468/12468F
2.79e5
28.05
PeCDF-1
20.04-29.00
339.8597 Fn1
Flags: PBM
4σ 1.27e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT
13468/12468F
1.94e5
28.05
5.90e4
2.95e4
PeCDF-1
20.04-29.00
341.8568 Fn1
Flags: PBM
4σ 2.28e3
3.95e6
1.97e6
QC Check
20.04-29.00
316.9824 Fn1
Flags: -


Rel. Int.
Abs. Int.
PeCDF-2
29.01-33.75
339.8597 Fn2
Flags: PBM
4σ 2.99e3
12368F...[3] 2.29e5 29.82
13678F...[3] 1.38e5 29.67
14678F 6.22e4 29.92
12346F 2.49e4 30.44
23468/12469F 8.60e4 30.53
12347F 4.98e4 30.60
12378F 6.52e4 30.99
12678/12367F 7.33e4 31.28
23467/12369F 8.29e4 32.01
23478F 9.85e4 32.14
3.95e4
1.97e4
0.00e0
PeCDF-2
29.01-33.75
341.8568 Fn2
Flags: PBM
4σ 2.49e3
12368F...[3] 1.32e5 29.82
13678F...[3] 8.07e4 29.67
14678F 3.88e4 29.91
12346F 1.78e4 30.43
23468/12469F 4.20e4 30.52
12347F 2.79e4 30.58
12378F 4.91e4 30.98
12678/12367F 8.04e4 31.28
23467/12369F 3.81e4 31.99
23478F 4.79e4 32.15
3.29e4
1.64e4
0.00e0
PeCDF Std.
29.01-33.75
351.9000 Fn2
Flags: PBM
4σ 2.82e3
CS 12346F 5.07e7 30.42
ES 12378F 4.86e7 30.97
ES 23478F 4.61e7 32.12
1.32e7
6.61e6
0.00e0
PeCDF Std.
29.01-33.75
353.8970 Fn2
Flags: PBM
4σ 3.58e3
CS 12346F 3.21e7 30.42
ES 12378F 3.05e7 30.97
ES 23478F 2.99e7 32.12
8.21e6
4.10e6
0.00e0
HpCDPE
29.01-33.75
409.7974 Fn2
Flags: PB
4σ 1.81e3
9.36e3
4.68e3
0.00e0
100%
0%
29.5
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
RT


Rel. Int.
100%
HxCDF
33.76-38.01
373.8207 Fn3
Flags: PBM
4σ 1.37e3
123468F 1.10e5 34.07
124678/134678F 2.55e5 34.27
124689F 1.98e5 34.93
123467F 7.25e4 35.35
123478F 8.82e4 35.47
123678F 7.58e4 35.61
234678F 6.13e4 36.26
Abs. Int.
7.85e4
3.92e4
0.00e0
0%
34.0 34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 RT
HxCDF
33.76-38.01
375.8178 Fn3
Flags: PBM
4σ 1.66e3
123468F 1.25e5 34.07
124678/134678F 2.37e5 34.27
124689F 1.23e5 34.93
123467F 5.87e4 35.34
123478F 7.38e4 35.47
123678F 5.76e4 35.61
234678F 3.28e4 36.26
8.63e4
4.31e4
HxCDF Std.
33.76-38.01
383.8639 Fn3
Flags: PBM
4σ 1.52e4
ES 123678F 2.15e7 35.59
ES 123478F 1.95e7 35.45
CS 123469F 2.12e7 35.90
ES 234678F 1.97e7 36.25
ES 123789F 1.82e7 37.20
6.81e6
3.40e6
HxCDF Std.
33.76-38.01
385.8610 Fn3
Flags: PBM
4σ 1.13e4
ES 123678F 4.06e7 35.59
ES 123478F 3.66e7 35.45
CS 123469F 3.94e7 35.90
ES 234678F 3.68e7 36.25
ES 123789F 3.55e7 37.20
1.34e7
6.69e6
OCDPE
33.76-38.01
445.7555 Fn3
Flags: PB
4σ 1.94e3
7.20e3
3.60e3


SGS ID: B4528_17661_DF_003
Sample ID: CS-51
Acq: 12-Aug-2020 14:06:43
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 56
User: PSW Datafile: 200812R06
Rel. Int.
Abs. Int.
HpCDF
38.02-40.75
407.7818 Fn4
Flags: PBM
4σ 1.51e3
1234678F
5.21e5
38.81
1234689F
4.79e5
39.24
1234679F
3.59e4
39.10
1234789F
3.84e4
40.16
2.08e5
1.04e5
0.00e0
RT
HpCDF
38.02-40.75
409.7788 Fn4
Flags: PBM
4σ 1.54e3
1234678F
4.98e5
38.81
1234689F
4.62e5
39.24
1234679F
2.92e4
39.09
1234789F
4.11e4
40.16
2.12e5
1.06e5
HpCDF Std.
38.02-40.75
417.8253 Fn4
Flags: PBM
4σ 1.84e4
ES 1234678F
1.36e7
38.80
CS 1234689F
1.57e7
39.23
ES 1234789F
1.38e7
40.15
6.05e6
3.03e6
HpCDF Std.
38.02-40.75
419.8220 Fn4
Flags: PBM
4σ 2.76e3
ES 1234678F
3.08e7
38.80
CS 1234689F
3.61e7
39.23
ES 1234789F
3.08e7
40.15
1.46e7
7.29e6
NCDPE
38.02-40.75
479.7165 Fn4
Flags: PB
4σ 1.74e3
1.78e4
8.92e3
100%
0%
38.5
39.0
39.5
40.0
40.5
Results: P:\B4500_B4599\B4528\B4528_17661 DF\Resources\B4528_17661_DF_003.utp_res, saved 13-Aug-2020 08:31 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 7069, 9285, 2865 scc: 604-577
Revised: 12-Aug-2020 17:16 (DTF) Printed: 13-Aug-2020 08:42 Page 11 of 12


OCDF
4.16e5
42.30
Rel. Int.
100%
OCDF
40.77-45.01
441.7428 Fn5
Flags: PBM
4σ 1.40e3
0%
Abs. Int.
1.94e5
9.68e4
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDF
4.63e5
42.30
Rel. Int.
100%
OCDF
40.77-45.01
443.7398 Fn5
Flags: PBM
4σ 2.22e3
0%
Abs. Int.
1.67e5
8.37e4
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDF
3.19e7
42.29
Rel. Int.
100%
OCDF Std.
40.77-45.01
453.7830 Fn5
Flags: PBM
4σ 3.86e3
0%
Abs. Int.
1.20e7
5.98e6
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDF
3.48e7
42.29
Rel. Int.
100%
OCDF Std.
40.77-45.01
455.7801 Fn5
Flags: PBM
4σ 3.22e3
0%
Abs. Int.
1.28e7
6.40e6
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
DCDPE
40.77-45.01
513.6775 Fn5
Flags: PB
4σ 1.96e3
0%
Abs. Int.
7.92e3
3.96e3
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

Lab ID: B4528_17661_DF_004 **Acq'd:** 12 Aug 2020 14:54 PSW **Wt/Vol:** 7.86 g **ICAL:** MM3_DF_10012020_12JUN2020

Client ID: CS-48 **UTP:** 13-Aug-2020 08:31:26 DTF **J-level:** 0.636 pg/g **Split:** 1 **Checkcode:** 652-437-DJP

Datafile: 200812R07 **Report:** 13 Aug 2020 08:34 TF **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	NotFnd		1.0008	-		-	-	-	1.18	-	4471	0.222
12378-PeCDD	NotFnd		1.0006	-		-	-	-	1.14	-	6040	0.276
123478-HxCDD	36.44	J EMPC	1.0004	1.0006	+0.4	8.26E+04	1.75	N	1.09	0.501	3363	0.158
123678-HxCDD	36.55	J EMPC	1.0034	1.0033	-0.2	1.40E+05	1.69	N	1.13	0.849	3363	0.158
123789-HxCDD	36.84	J EMPC	1.0114	1.0113	-0.2	1.46E+05	1.55	N	1.05	0.825	3363	0.158
1234678-HpCDD	39.75		1.0004	1.0003	-0.2	6.39E+06	1.04	Y	0.98	42.8	3515	0.138
OCDD	42.13		1.0003	1.0003	0	2.38E+07	0.89	Y	1.08	280	7359	0.557
2378-TCDF	NotFnd		1.0008	-		-	-	-	0.98	-	6244	0.252
12378-PeCDF	NotFnd		1.0006	-		-	-	-	0.95	-	8415	0.293
23478-PeCDF	NotFnd		1.0005	-		-	-	-	0.95	-	8415	0.285
123478-HxCDF	35.46	J	1.0005	1.0005	0	6.73E+04	1.09	Y	1.20	0.292	5641	0.195
123678-HxCDF	35.59	J	1.0004	1.0002	-0.4	5.68E+04	1.17	Y	1.07	0.246	5641	0.197
234678-HxCDF	36.25	J	1.0004	1.0005	+0.2	1.06E+05	1.11	Y	1.10	0.501	5641	0.2
123789-HxCDF	NotFnd		1.0004	-		-	-	-	1.09	-	5641	0.247
1234678-HpCDF	38.81		1.0003	1.0003	0	1.14E+06	1.11	Y	1.28	5.58	2704	0.0899
1234789-HpCDF	40.16	J	1.0003	1.0003	0	1.05E+05	1.15	Y	1.27	0.543	2704	0.0852
OCDF	42.29		1.0003	1.0002	-0.3	1.90E+06	0.85	Y	1.01	18	3569	0.22

Name	Act RT	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	26.83	1.0267	1.0268	+0.2	5.05E+07	0.79	Y	1.01	81.2
ES 12378-PeCDD	32.47	1.2424	1.2429	+1.0	4.38E+07	1.58	Y	0.87	81.4
ES 123478-HxCDD	36.42	0.9918	0.9918	0	3.84E+07	1.30	Y	1.10	65.5
ES 123678-HxCDD	36.53	0.9948	0.9948	0	3.72E+07	1.27	Y	1.06	65.5
ES 123789-HxCDD	36.82	1.0027	1.0027	0	4.30E+07	1.28	Y	1.22	66
ES 1234678-HpCDD	39.74	1.0818	1.0819	+0.2	3.87E+07	1.03	Y	0.99	72.8
ES OCDD	42.12	1.1468	1.1469	+0.3	4.04E+07	0.91	Y	0.67	56.3
ES 2378-TCDF	25.88	1.0606	1.0609	+0.5	7.89E+07	0.81	Y	1.01	80.2
ES 12378-PeCDF	30.96	1.2684	1.2693	+1.7	7.05E+07	1.58	Y	0.90	80.7
ES 23478-PeCDF	32.11	1.3156	1.3165	+1.7	7.05E+07	1.60	Y	0.89	81.7
ES 123478-HxCDF	35.44	0.9651	0.9651	0	4.91E+07	0.52	Y	1.43	64.1
ES 123678-HxCDF	35.58	0.9690	0.9689	-0.2	5.49E+07	0.52	Y	1.63	62.8
ES 234678-HxCDF	36.24	0.9867	0.9867	0	4.91E+07	0.52	Y	1.48	62.1
ES 123789-HxCDF	37.19	1.0127	1.0127	0	4.68E+07	0.52	Y	1.29	67.7
ES 1234678-HpCDF	38.79	1.0562	1.0563	+0.2	4.07E+07	0.45	Y	1.15	66.3
ES 1234789-HpCDF	40.14	1.0929	1.0931	+0.5	3.88E+07	0.42	Y	0.91	79.9
ES OCDF	42.28	1.1511	1.1512	+0.3	5.31E+07	0.89	Y	0.83	59.8

Lab ID: B4528_17661_DF_004 | Acq'd: 12 Aug 2020 14:54 PSW | Wt/Vol: 7.86 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-48 | UTP: 13-Aug-2020 08:31:26 DTF | J-level: 0.636 pg/g | Split: 1 | Checkcode: 652-437-DJP

Datafile: 200812R07 | Report: 13 Aug 2020 08:34 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
JS 1234-TCDD	26.13		-	-	-	6.18E+07	0.77	Y	-	-
JS 1234-TCDF	24.39		-	-	-	9.70E+07	0.80	Y	-	-
JS 123467-HxCDD	36.73		-	-	-	2.68E+07	1.26	Y	-	-
CS 37Cl-2378-TCDD	26.85		1.0276	1.0277	+0.2	2.40E+07	n/a	-	1.04	93.5
CS 12347-PeCDD	31.96		1.2228	1.2232	+0.8	4.43E+07	1.69	Y	0.74	97
CS 12346-PeCDF	30.41		1.2462	1.2470	+1.5	7.01E+07	1.55	Y	0.86	84
CS 123469-HxCDF	35.89		0.9774	0.9773	-0.2	5.26E+07	0.52	Y	1.36	72.3
CS 1234689-HpCDF	39.22		1.0678	1.0679	+0.2	4.35E+07	0.45	Y	1.05	77
~~SS 37Cl-2378-TCDD~~	~~26.85~~		~~1.0276~~	~~1.0277~~	~~+0.2~~	~~2.40E+07~~	~~n/a~~		~~1.04~~	~~114~~
~~SS 12347-PeCDD~~	~~31.96~~		~~1.2228~~	~~1.2232~~	~~+0.8~~	~~4.43E+07~~	~~1.69~~	~~Y~~	~~0.86~~	~~118~~
~~SS 12346-PeCDF~~	~~30.41~~		~~1.2462~~	~~1.2470~~	~~+1.5~~	~~7.01E+07~~	~~1.55~~	~~Y~~	~~0.96~~	~~104~~
~~SS 123469-HxCDF~~	~~35.89~~		~~0.9774~~	~~0.9773~~	~~-0.2~~	~~5.26E+07~~	~~0.52~~	~~Y~~	~~0.83~~	~~115~~
~~SS 1234689-HpCDF~~	~~39.22~~		~~1.0678~~	~~1.0679~~	~~+0.2~~	~~4.35E+07~~	~~0.45~~	~~Y~~	~~0.92~~	~~116~~

Totals	Conc	EMPC
Total TCDD	1.61	2.6
Total PeCDD	0	2.36
Total HxCDD	25	28.1
Total HpCDD	208	208
Total Tetra-Octa Dioxins	515	521
Total TCDF	2.48	3.92
Total PeCDF	0.655	2.04
Total HxCDF	4.26	6.4
Total HpCDF	16.9	16.9
Total Tetra-Octa Furans	42.4	47.3
Total Tetra-Octa Dioxins & Furans	557	568

Lab ID: B4528_17661_DF_004 | Acq'd: 12 Aug 2020 14:54 PSW | Wt/Vol: 7.86 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-48 | UTP: 13-Aug-2020 08:31:26 DTF | J-level: 0.636 pg/g | Split: 1 | Checkcode: 652-437-DJP

Datafile: 200812R07 | Report: 13 Aug 2020 08:34 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1368-TCDD	22.83		0.8513	0.8510	-0.4	3.76E+05	0.79	Y	1.18	1.61	4471	0.222
1379-TCDD	23.22	J EMPC	0.8664	0.8656	-1.1	1.44E+05	1.01	N	1.18	0.616	4471	0.222
1369-TCDD	NotFnd		0.8845						1.18		4471	0.222
1469-TCDD	NotFnd		0.9165						1.18		4471	0.222
1247/1246/1248/1249-TCDD	24.83	J EMPC	0.9266	0.9257	-1.3	8.70E+04	0.55	N	1.18	0.372	4471	0.222
1378-TCDD	NotFnd		0.9342						1.18		4471	0.222
1268-TCDD	NotFnd		0.9423						1.18		4471	0.222
1478-TCDD	NotFnd		0.9524						1.18		4471	0.222
1279-TCDD	NotFnd		0.9592						1.18		4471	0.222
1234/1269-TCDD	NotFnd		0.9734						1.18		4471	0.222
1236-TCDD	NotFnd		0.9791						1.18		4471	0.222
1237/1238-TCDD	NotFnd		0.9894						1.18		4471	0.222
1239-TCDD	NotFnd		0.9946						1.18		4471	0.222
2378-TCDD	**NotFnd**		**1.0008**						**1.18**		**4471**	**0.222**
1278-TCDD	NotFnd		1.0140						1.18		4471	0.222
1267-TCDD	NotFnd		1.0194						1.18		4471	0.222
1289-TCDD	NotFnd		1.0396						1.18		4471	0.222
12479/12468-PeCDD	29.90	J EMPC	0.9210	0.9208	-0.4	2.08E+05	1.85	N	1.14	1.06	6040	0.276
12469-PeCDD	30.45	J EMPC	0.9381	0.9377	-0.7	9.04E+04	1.88	N	1.14	0.463	6040	0.276
12368-PeCDD	31.04	J EMPC	0.9558	0.9559	+0.2	8.64E+04	1.28	N	1.14	0.442	6040	0.276
12478-PeCDD	NotFnd		0.9618						1.14		6040	0.276
12379-PeCDD	31.32	J EMPC	0.9649	0.9647	-0.4	7.62E+04	1.96	N	1.14	0.39	6040	0.276
12369/12467/12489-PeCDD	NotFnd		0.9732						1.14		6040	0.276
12346/12347-PeCDD	NotFnd		0.9850						1.14		6040	0.276
12378-PeCDD	NotFnd		**1.0006**						**1.14**		**6040**	**0.276**
12367-PeCDD	NotFnd		1.0035						1.14		6040	0.276
12389-PeCDD	NotFnd		1.0144						1.14		6040	0.276
124679/124689-HxCDD	34.73		0.9535	0.9534	-0.2	1.75E+06	1.23	Y	1.09	10.3	3363	0.158
123468-HxCDD	35.39		0.9716	0.9716	0	6.09E+05	1.15	Y	1.09	3.6	3363	0.158
123679/123689-HxCDD	35.68		0.9796	0.9796	0	1.13E+06	1.11	Y	1.09	6.67	3363	0.158
123469-HxCDD	35.81		0.9832	0.9831	-0.2	7.40E+05	1.11	Y	1.09	4.37	3363	0.158
123478-HxCDD	36.44	J EMPC	**1.0004**	**1.0006**	**+0.4**	**8.26E+04**	**1.75**	**N**	1.09	**0.501**	**3363**	**0.158**
123678-HxCDD	36.55	J EMPC	**1.0034**	**1.0033**	**-0.2**	**1.40E+05**	**1.69**	**N**	1.13	**0.849**	**3363**	**0.158**
123467-HxCDD	36.74	J EMPC	1.0087	1.0086	-0.2	1.70E+05	1.44	N	1.09	1	3363	0.158
123789-HxCDD	36.84	J EMPC	**1.0114**	**1.0113**	**-0.2**	**1.46E+05**	**1.55**	**N**	1.05	**0.825**	**3363**	**0.158**

Lab ID: B4528_17661_DF_004 | Acq'd: 12 Aug 2020 14:54 PSW | Wt/Vol: 7.86 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-48 | UTP: 13-Aug-2020 08:31:26 DTF | J-level: 0.636 pg/g | Split: 1 | Checkcode: 652-437-DJP

Datafile: 200812R07 | Report: 13 Aug 2020 08:34 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1234679-HpCDD	39.09		0.9837	0.9836	-0.2	2.47E+07	1.03	Y	0.98	166	3515	0.138
1234678-HpCDD	**39.75**		**1.0004**	**1.0003**	**-0.2**	**6.39E+06**	**1.04**	**Y**	**0.98**	**42.8**	**3515**	**0.138**
OCDD	**42.13**		**1.0003**	**1.0003**	**0**	**2.38E+07**	**0.89**	**Y**	**1.08**	**280**	**7359**	**0.557**
OCDD-a	42.13		1.0002	1.0001	-0.3	1.56E+06	2.69	Y	0.07	297	6013	7.39
1368-TCDF	20.60		0.7965	0.7962	-0.4	2.41E+05	0.81	Y	0.98	0.791	6244	0.252
1468-TCDF	NotFnd		0.8181						0.98		6244	0.252
2468-TCDF	21.78		0.8428	0.8418	-1.3	5.13E+05	0.76	Y	0.98	1.69	6244	0.252
1346/1246-TCDF	NotFnd		0.8580						0.98		6244	0.252
1347/1378/1247-TCDF	22.34	J EMPC	0.8643	0.8632	-1.5	1.52E+05	0.90	N	0.98	0.501	6244	0.252
1348-TCDF	NotFnd		0.8764						0.98		6244	0.252
1248/1367/1379-TCDF	NotFnd		0.8821						0.98		6244	0.252
1268-TCDF	NotFnd		0.8987						0.98		6244	0.252
1467-TCDF	NotFnd		0.9045						0.98		6244	0.252
1478-TCDF	NotFnd		0.9120						0.98		6244	0.252
1369/1237-TCDF	NotFnd		0.9279						0.98		6244	0.252
2467-TCDF	NotFnd		0.9335						0.98		6244	0.252
2368-TCDF	NotFnd		0.9400						0.98		6244	0.252
1238/1234/1678/1469/1236-TCDF	NotFnd		0.9442						0.98		6244	0.252
1278-TCDF	NotFnd		0.9632						0.98		6244	0.252
1349-TCDF	NotFnd		0.9681						0.98		6244	0.252
1267-TCDF	NotFnd		0.9747						0.98		6244	0.252
2346/1249-TCDF	NotFnd		0.9826						0.98		6244	0.252
2347/1279-TCDF	NotFnd		0.9917						0.98		6244	0.252
2348-TCDF	NotFnd		0.9963						0.98		6244	0.252
2378-TCDF	**NotFnd**		**1.0008**						**0.98**		**6244**	**0.252**
2367/3467-TCDF	NotFnd		1.0163						0.98		6244	0.252
1269-TCDF	NotFnd		1.0260						0.98		6244	0.252
1239-TCDF	NotFnd		1.0373						0.98		6244	0.252
1289-TCDF	28.05	EMPC	1.0836	1.0839	+0.5	2.86E+05	2.16	N	0.98	0.942	6244	0.252
13468/12468-PeCDF	28.05	J EMPC	0.9056	0.9059	+0.5	2.58E+05	1.16	N	0.95	0.983	4419	0.152
13678/13467/12467-PeCDF	29.66	J EMPC	0.9580	0.9581	+0.2	1.05E+05	1.07	N	0.95	0.399	8415	0.289
12368/13478/12478-PeCDF	29.83	J	0.9632	0.9637	+0.9	1.72E+05	1.37	Y	0.95	0.655	8415	0.289
14678-PeCDF	NotFnd		0.9666						0.95		8415	0.289
13479-PeCDF	NotFnd		0.9698						0.95		8415	0.289
13469/12479-PeCDF	NotFnd		0.9782						0.95		8415	0.289
12346-PeCDF	NotFnd		0.9828						0.95		8415	0.289

Lab ID: B4528_17661_DF_004 | Acq'd: 12 Aug 2020 14:54 PSW | Wt/Vol: 7.86 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-48 | UTP: 13-Aug-2020 08:31:26 DTF | J-level: 0.636 pg/g | Split: 1 | Checkcode: 652-437-DJP

Datafile: 200812R07 | Report: 13 Aug 2020 08:34 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

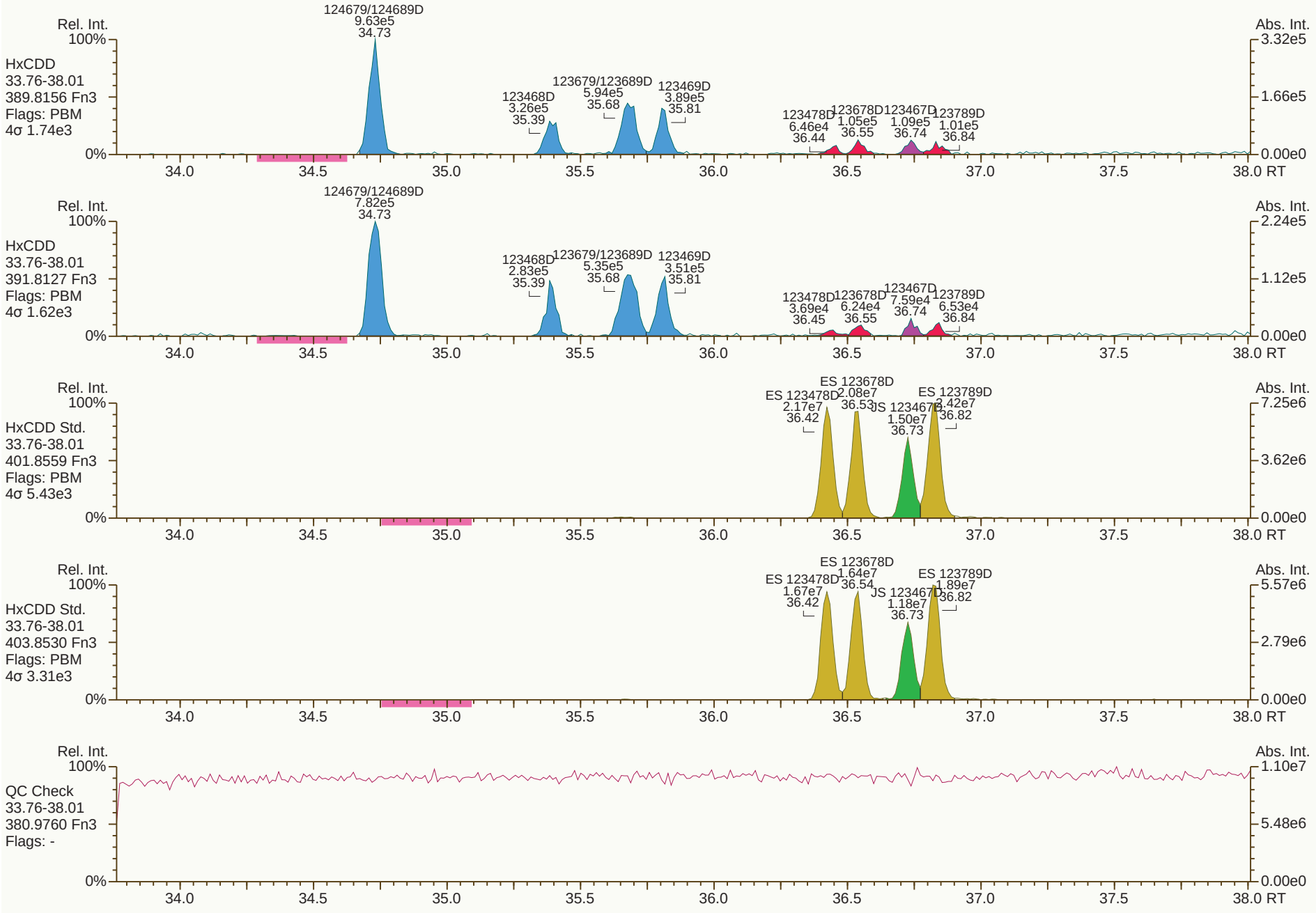
Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
23468/12469-PeCDF	NotFnd		0.9858						0.95		8415	0.289
12347-PeCDF	NotFnd		0.9884						0.95		8415	0.289
12348-PeCDF	NotFnd		0.9937						0.95		8415	0.289
12378-PeCDF	**NotFnd**		**1.0006**						**0.95**		**8415**	**0.293**
12678/12367-PeCDF	NotFnd		1.0098						0.95		8415	0.289
12379-PeCDF	NotFnd		1.0154						0.95		8415	0.289
12679-PeCDF	NotFnd		0.9923						0.95		8415	0.289
23467/12369-PeCDF	NotFnd		0.9964						0.95		8415	0.289
23478-PeCDF	**NotFnd**		**1.0005**						**0.95**		**8415**	**0.285**
23478/12489-PeCDF	NotFnd		0.0000						0.95			
12489-PeCDF	NotFnd		1.0050						0.95		8415	0.289
12349-PeCDF	NotFnd		1.0109						0.95		8415	0.289
12389-PeCDF	NotFnd		1.0345						0.95		8415	0.289
123468-HxCDF	34.06	J	0.9610	0.9610	0	1.45E+05	1.08	Y	1.11	0.661	5641	0.208
124678/134678-HxCDF	34.26	J	0.9667	0.9666	-0.2	5.59E+05	1.13	Y	1.11	2.56	5641	0.208
134679-HxCDF	NotFnd		0.9732						1.11		5641	0.208
124679-HxCDF	NotFnd		0.9788						1.11		5641	0.208
124689-HxCDF	34.92	J EMPC	0.9851	0.9852	+0.2	3.81E+05	1.02	N	1.11	1.74	5641	0.208
123467-HxCDF	35.35	J EMPC	0.9971	0.9972	+0.2	3.74E+04	1.02	N	1.11	0.171	5641	0.208
123478-HxCDF	**35.46**	J	**1.0005**	**1.0005**	**0**	**6.73E+04**	**1.09**	**Y**	**1.20**	**0.292**	**5641**	**0.195**
123678-HxCDF	**35.59**	J	**1.0004**	**1.0002**	**-0.4**	**5.68E+04**	**1.17**	**Y**	**1.07**	**0.246**	**5641**	**0.197**
123479-HxCDF	NotFnd		1.0050						1.11		5641	0.208
123469-HxCDF	NotFnd		1.0091						1.11		5641	0.208
123679-HxCDF	NotFnd		0.9943						1.11		5641	0.208
234678-HxCDF	**36.25**	J	**1.0004**	**1.0005**	**+0.2**	**1.06E+05**	**1.11**	**Y**	**1.10**	**0.501**	**5641**	**0.2**
234678/123689-HxCDF	NotFnd		0.0000						1.10			
123689-HxCDF	NotFnd		1.0054						1.11		5641	0.208
123789-HxCDF	**NotFnd**		**1.0004**						**1.09**		**5641**	**0.247**
123789/123489-HxCDF	NotFnd		0.0000						1.09			
123489-HxCDF	37.22	J EMPC	1.0008	1.0008	0	4.98E+04	1.48	N	1.11	0.228	5641	0.208
1234678-HpCDF	**38.81**		**1.0003**	**1.0003**	**0**	**1.14E+06**	**1.11**	**Y**	**1.28**	**5.58**	**2704**	**0.0899**
1234679-HpCDF	39.09	**J**	1.0075	1.0076	+0.2	9.43E+04	0.91	Y	1.27	0.474	2704	0.0877
1234689-HpCDF	39.23		1.0111	1.0112	+0.2	2.06E+06	1.03	Y	1.27	10.4	2704	0.0877
1234789-HpCDF	**40.16**	**J**	**1.0003**	**1.0003**	**0**	**1.05E+05**	**1.15**	**Y**	**1.27**	**0.543**	**2704**	**0.0852**
OCDF	**42.29**		**1.0003**	**1.0002**	**-0.3**	**1.90E+06**	**0.85**	**Y**	**1.01**	**18**	**3569**	**0.22**
OCDF-a	NotFnd		1.0002						0.06		7726	7.62


Rel. Int.
100%
QC Check
20.04-29.00
316.9824 Fn1
Flags: -
0%
Abs. Int.
3.69e6
1.84e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT
Rel. Int.
100%
QC Check
29.01-33.75
366.9792 Fn2
Flags: -
0%
Abs. Int.
2.92e6
1.46e6
0.00e0
29.5
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
RT
Rel. Int.
100%
QC Check
33.76-38.01
380.9760 Fn3
Flags: -
0%
Abs. Int.
1.10e7
5.48e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0 RT
Rel. Int.
100%
QC Check
38.02-40.75
430.9728 Fn4
Flags: -
0%
Abs. Int.
6.95e6
3.47e6
0.00e0
38.5
39.0
39.5
40.0
40.5
RT
Rel. Int.
100%
QC Check
40.77-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
6.18e6
3.09e6
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

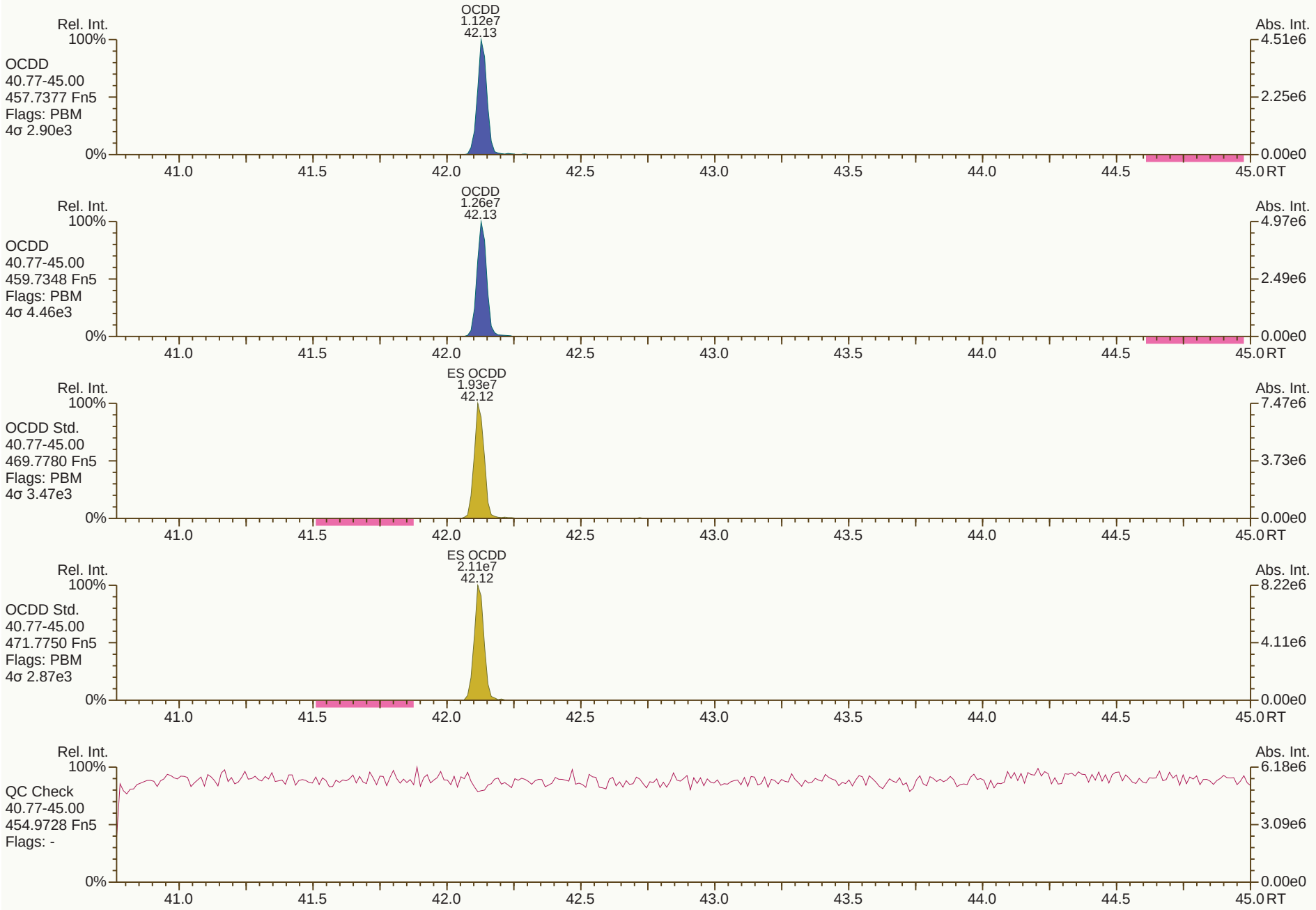

Rel. Int.
100%
TCDD
20.04-29.00
319.8965 Fn1
Flags: PBM
4σ 2.31e3
0%
1368D
1.66e5
22.83
1379D
8.23e4
23.22
1247D...[4]
3.78e4
24.83
Abs. Int.
3.43e4
1.72e4
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT
Rel. Int.
100%
TCDD
20.04-29.00
321.8936 Fn1
Flags: PBM
4σ 2.16e3
0%
1368D
2.10e5
22.82
1379D
8.13e4
23.22
1247D...[4]
6.88e4
24.84
Abs. Int.
4.99e4
2.49e4
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT
Rel. Int.
100%
37Cl-TCDD
20.04-29.00
327.8850 Fn1
Flags: PBM
4σ 1.82e3
0%
CS 37Cl-2378D
2.40e7
26.85
Abs. Int.
5.32e6
2.66e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT
Rel. Int.
100%
TCDD Std.
20.04-29.00
331.9368 Fn1
Flags: PBM
4σ 4.66e3
0%
JS 1234D
2.68e7
26.13
ES 2378D
2.23e7
26.83
Abs. Int.
5.89e6
2.95e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT
Rel. Int.
100%
TCDD Std.
20.04-29.00
333.9339 Fn1
Flags: PBM
4σ 2.60e3
0%
JS 1234D
3.49e7
26.13
ES 2378D
2.82e7
26.83
Abs. Int.
7.21e6
3.60e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT



Results: P:\B4500_B4599\B4528\B4528_17661 DF\Resources\B4528_17661_DF_004.utp_res, saved 13-Aug-2020 08:31 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 8924, 9466 scc: 652-437
Revised: 12-Aug-2020 17:16 (DTF) Printed: 13-Aug-2020 08:42 Page 3 of 12

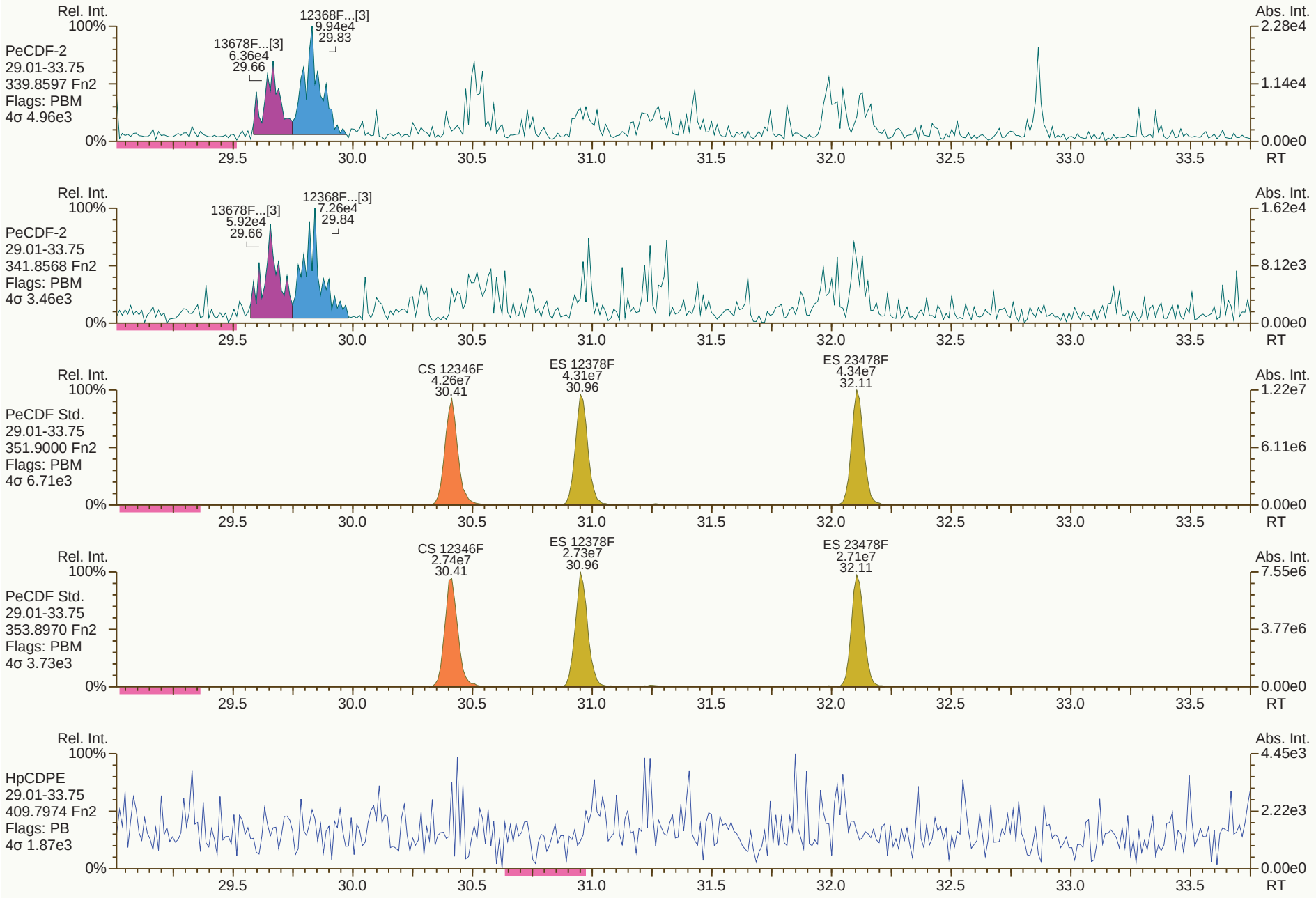

Rel. Int.
100%
HxCDD
33.76-38.01
389.8156 Fn3
Flags: PBM
4σ 1.74e3
124679/124689D
9.63e5
34.73
123468D
3.26e5
35.39
123679/123689D
5.94e5
35.68
123469D
3.89e5
35.81
123478D
6.46e4
36.44
123678D
1.05e5
36.55
123467D
1.09e5
36.74
123789D
1.01e5
36.84
Abs. Int.
3.32e5
1.66e5
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0 RT
Rel. Int.
100%
HxCDD
33.76-38.01
391.8127 Fn3
Flags: PBM
4σ 1.62e3
124679/124689D
7.82e5
34.73
123468D
2.83e5
35.39
123679/123689D
5.35e5
35.68
123469D
3.51e5
35.81
123478D
3.69e4
36.45
123678D
6.24e4
36.55
123467D
7.59e4
36.74
123789D
6.53e4
36.84
Abs. Int.
2.24e5
1.12e5
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0 RT
Rel. Int.
100%
HxCDD Std.
33.76-38.01
401.8559 Fn3
Flags: PBM
4σ 5.43e3
ES 123678D
2.08e7
36.53
ES 123478D
2.17e7
36.42
JS 123467D
1.50e7
36.73
ES 123789D
3.42e7
36.82
Abs. Int.
7.25e6
3.62e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0 RT
Rel. Int.
100%
HxCDD Std.
33.76-38.01
403.8530 Fn3
Flags: PBM
4σ 3.31e3
ES 123678D
1.64e7
36.54
ES 123478D
1.67e7
36.42
JS 123467D
1.18e7
36.73
ES 123789D
1.89e7
36.82
Abs. Int.
5.57e6
2.79e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0 RT
Rel. Int.
100%
QC Check
33.76-38.01
380.9760 Fn3
Flags: -
Abs. Int.
1.10e7
5.48e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0 RT


Rel. Int.
100%
HpCDD
38.02-40.75
423.7767 Fn4
Flags: PBM
4σ 2.30e3
0%
1234679D
1.26e7
39.09
1234678D
3.26e6
39.75
Abs. Int.
4.91e6
2.46e6
0.00e0
38.5
39.0
39.5
40.0
40.5
RT
Rel. Int.
100%
HpCDD
38.02-40.75
425.7737 Fn4
Flags: PBM
4σ 1.22e3
0%
1234679D
1.22e7
39.08
1234678D
3.13e6
39.75
Abs. Int.
4.73e6
2.37e6
0.00e0
38.5
39.0
39.5
40.0
40.5
RT
Rel. Int.
100%
HpCDD Std.
38.02-40.75
435.8169 Fn4
Flags: PBM
4σ 3.02e3
0%
ES 1234678D
1.96e7
39.74
Abs. Int.
8.38e6
4.19e6
0.00e0
38.5
39.0
39.5
40.0
40.5
RT
Rel. Int.
100%
HpCDD Std.
38.02-40.75
437.8140 Fn4
Flags: PBM
4σ 6.19e3
0%
ES 1234678D
1.91e7
39.74
Abs. Int.
8.07e6
4.04e6
0.00e0
38.5
39.0
39.5
40.0
40.5
RT
Rel. Int.
100%
QC Check
38.02-40.75
430.9728 Fn4
Flags: -
0%
Abs. Int.
6.95e6
3.47e6
0.00e0
38.5
39.0
39.5
40.0
40.5
RT

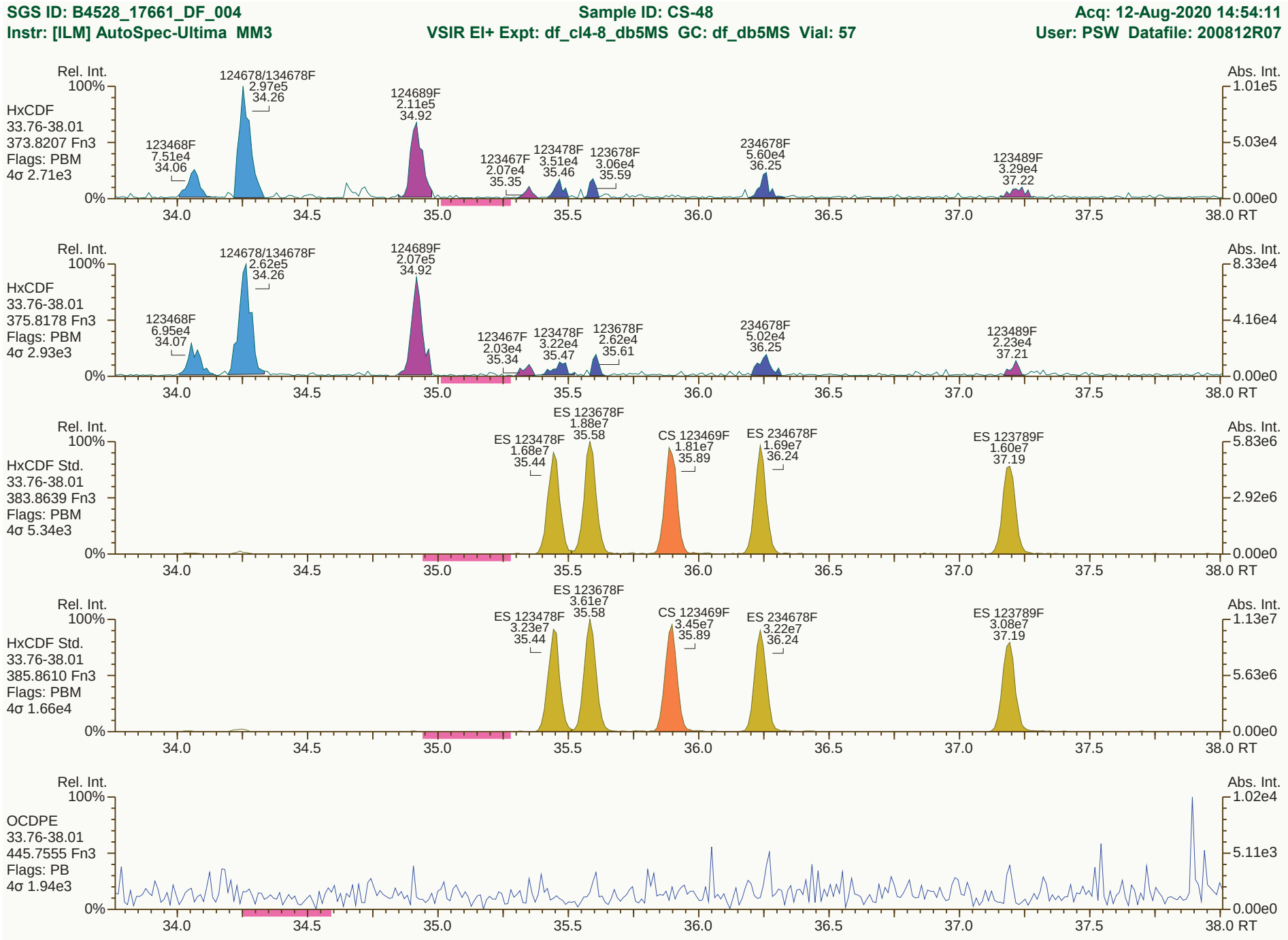

OCDD
1.12e7
42.13
Rel. Int.
100%
OCDD
40.77-45.00
457.7377 Fn5
Flags: PBM
4σ 2.90e3
0%
Abs. Int.
4.51e6
2.25e6
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDD
1.26e7
42.13
Rel. Int.
100%
OCDD
40.77-45.00
459.7348 Fn5
Flags: PBM
4σ 4.46e3
0%
Abs. Int.
4.97e6
2.49e6
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
1.93e7
42.12
Rel. Int.
100%
OCDD Std.
40.77-45.00
469.7780 Fn5
Flags: PBM
4σ 3.47e3
0%
Abs. Int.
7.47e6
3.73e6
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
2.11e7
42.12
Rel. Int.
100%
OCDD Std.
40.77-45.00
471.7750 Fn5
Flags: PBM
4σ 2.87e3
0%
Abs. Int.
8.22e6
4.11e6
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
QC Check
40.77-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
6.18e6
3.09e6
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

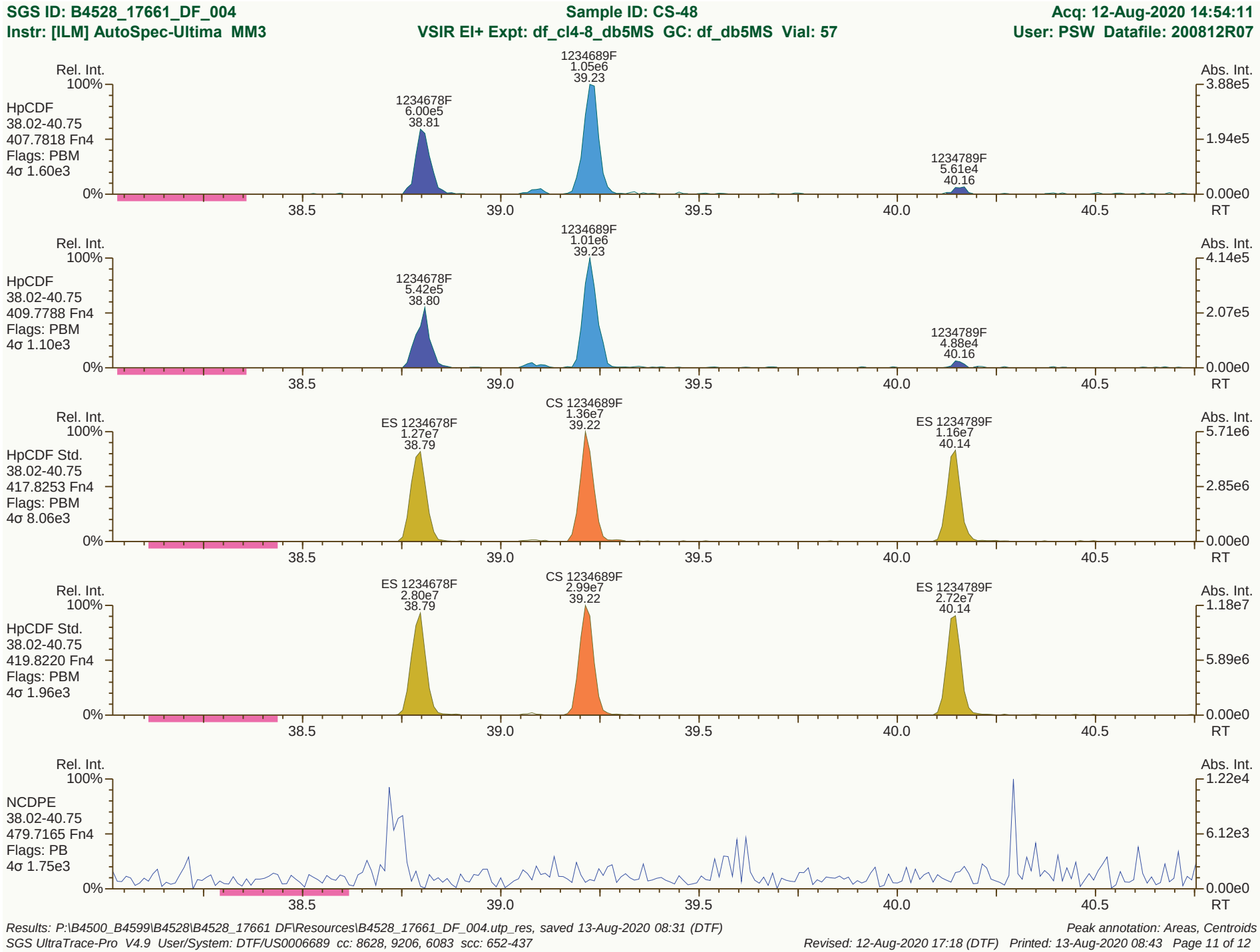

Rel. Int.
100%
TCDF
20.04-29.00
303.9016 Fn1
Flags: PBM
4σ 2.97e3
1368F
1.08e5
20.60
2468F
2.22e5
21.78
1347F...[3]
7.73e4
22.34
1289F
3.50e5
28.05
Abs. Int.
7.33e4
3.66e4
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT
Rel. Int.
100%
TCDF
20.04-29.00
305.8987 Fn1
Flags: PBM
4σ 3.27e3
1368F
1.33e5
20.59
2468F
2.92e5
21.78
1347F...[3]
8.60e4
22.35
1289F
1.62e5
28.05
Abs. Int.
7.82e4
3.91e4
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT
Rel. Int.
100%
TCDF Std.
20.04-29.00
315.9419 Fn1
Flags: PBM
4σ 1.12e4
JS 1234F
4.31e7
24.39
ES 2378F
3.52e7
25.88
Abs. Int.
8.28e6
4.14e6
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT
Rel. Int.
100%
TCDF Std.
20.04-29.00
317.9389 Fn1
Flags: PBM
4σ 4.70e3
JS 1234F
5.39e7
24.39
ES 2378F
4.37e7
25.87
Abs. Int.
9.71e6
4.85e6
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT
Rel. Int.
100%
HxCDPE
20.04-29.00
375.8364 Fn1
Flags: PB
4σ 2.14e3
Abs. Int.
7.91e3
3.96e3
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT

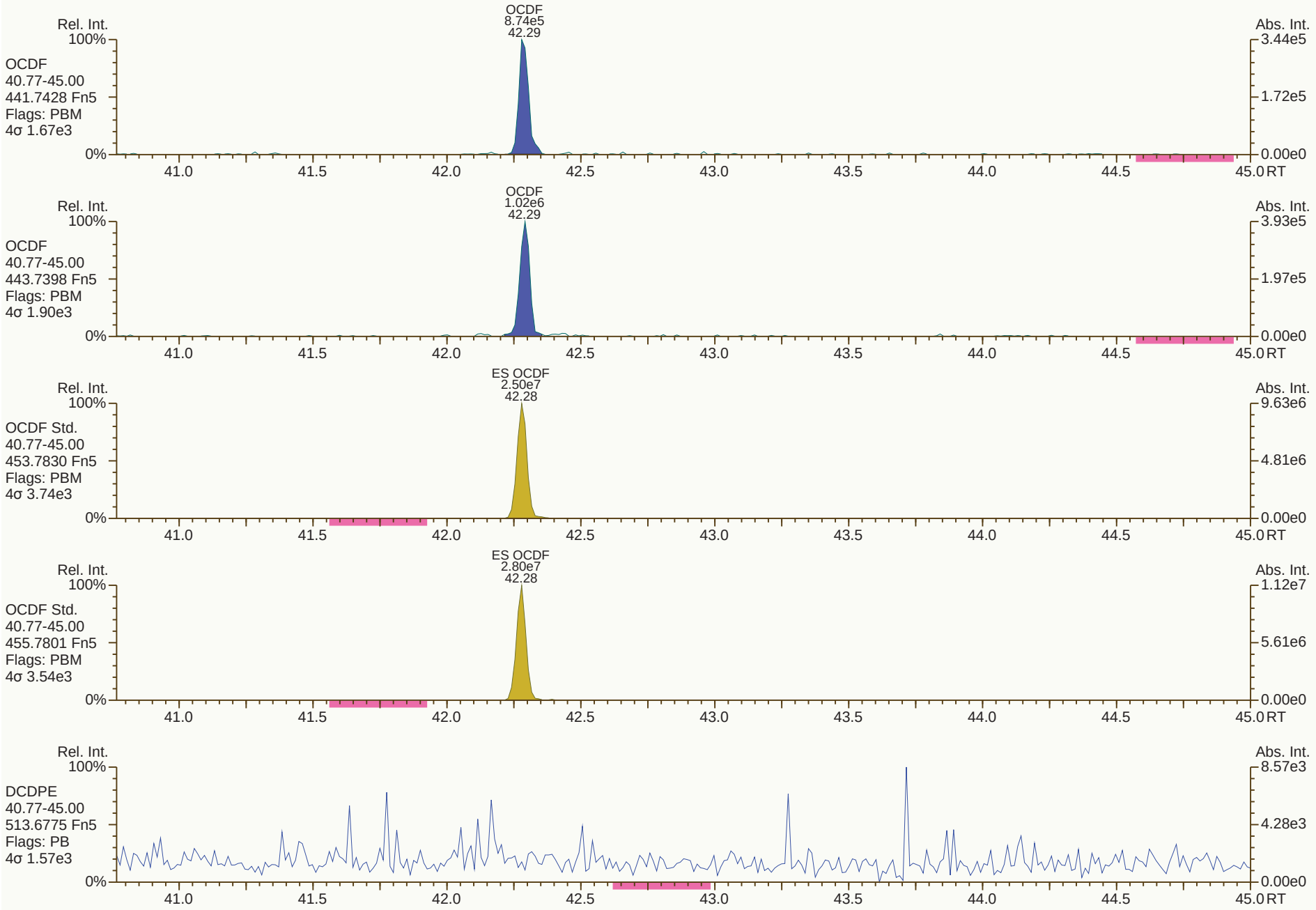

Rel. Int.
100%
0%
Abs. Int.
3.65e4
1.83e4
0.00e0
13468/12468F
1.57e5
28.05
PeCDF-1
20.04-29.00
339.8597 Fn1
Flags: PBM
4σ 1.69e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT
Rel. Int.
100%
0%
Abs. Int.
3.74e4
1.87e4
0.00e0
13468/12468F
1.35e5
28.05
PeCDF-1
20.04-29.00
341.8568 Fn1
Flags: PBM
4σ 2.73e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT
Rel. Int.
100%
0%
Abs. Int.
3.69e6
1.84e6
0.00e0
QC Check
20.04-29.00
316.9824 Fn1
Flags: -
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT


Rel. Int.
100%
PeCDF-2
29.01-33.75
339.8597 Fn2
Flags: PBM
4σ 4.96e3
13678F...[3]
6.36e4
29.66
12368F...[3]
9.94e4
29.83
Abs. Int.
2.28e4
1.14e4
0.00e0
0%
29.5
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
RT
Rel. Int.
100%
PeCDF-2
29.01-33.75
341.8568 Fn2
Flags: PBM
4σ 3.46e3
13678F...[3]
5.92e4
29.66
12368F...[3]
7.26e4
29.84
Abs. Int.
1.62e4
8.12e3
0.00e0
0%
29.5
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
RT
Rel. Int.
100%
PeCDF Std.
29.01-33.75
351.9000 Fn2
Flags: PBM
4σ 6.71e3
CS 12346F
4.26e7
30.41
ES 12378F
4.31e7
30.96
ES 23478F
4.34e7
32.11
Abs. Int.
1.22e7
6.11e6
0.00e0
0%
29.5
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
RT
Rel. Int.
100%
PeCDF Std.
29.01-33.75
353.8970 Fn2
Flags: PBM
4σ 3.73e3
CS 12346F
2.74e7
30.41
ES 12378F
2.73e7
30.96
ES 23478F
2.71e7
32.11
Abs. Int.
7.55e6
3.77e6
0.00e0
0%
29.5
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
RT
Rel. Int.
100%
HpCDPE
29.01-33.75
409.7974 Fn2
Flags: PB
4σ 1.87e3
Abs. Int.
4.45e3
2.22e3
0.00e0
0%
29.5
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
RT

SGS ID: B4528_17661_DF_004 Sample ID: CS-48 Acq: 12-Aug-2020 14:54:11
Instr: [ILM] AutoSpec-Ultima MM3 VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 57 User: PSW Datafile: 200812R07




SGS ID: B4528_17661_DF_004
Sample ID: CS-48
Acq: 12-Aug-2020 14:54:11
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 57
User: PSW Datafile: 200812R07
Rel. Int.
Abs. Int.
HpCDF
38.02-40.75
407.7818 Fn4
Flags: PBM
4σ 1.60e3
1234678F
6.00e5
38.81
1234689F
1.05e6
39.23
1234789F
5.61e4
40.16
3.88e5
1.94e5
0.00e0
RT
HpCDF
38.02-40.75
409.7788 Fn4
Flags: PBM
4σ 1.10e3
1234678F
5.42e5
38.80
1234689F
1.01e6
39.23
1234789F
4.88e4
40.16
4.14e5
2.07e5
HpCDF Std.
38.02-40.75
417.8253 Fn4
Flags: PBM
4σ 8.06e3
ES 1234678F
1.27e7
38.79
CS 1234689F
1.36e7
39.22
ES 1234789F
1.16e7
40.14
5.71e6
2.85e6
HpCDF Std.
38.02-40.75
419.8220 Fn4
Flags: PBM
4σ 1.96e3
ES 1234678F
2.80e7
38.79
CS 1234689F
2.99e7
39.22
ES 1234789F
2.72e7
40.14
1.18e7
5.89e6
NCDPE
38.02-40.75
479.7165 Fn4
Flags: PB
4σ 1.75e3
1.22e4
6.12e3
100%
0%
38.5
39.0
39.5
40.0
40.5
Results: P:\B4500_B4599\B4528\B4528_17661 DF\Resources\B4528_17661_DF_004.utp_res, saved 13-Aug-2020 08:31 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 8628, 9206, 6083 scc: 652-437
Revised: 12-Aug-2020 17:18 (DTF) Printed: 13-Aug-2020 08:43 Page 11 of 12


OCDF
8.74e5
42.29
Rel. Int.
100%
OCDF
40.77-45.00
441.7428 Fn5
Flags: PBM
4σ 1.67e3
0%
Abs. Int.
3.44e5
1.72e5
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDF
1.02e6
42.29
Rel. Int.
100%
OCDF
40.77-45.00
443.7398 Fn5
Flags: PBM
4σ 1.90e3
0%
Abs. Int.
3.93e5
1.97e5
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDF
2.50e7
42.28
Rel. Int.
100%
OCDF Std.
40.77-45.00
453.7830 Fn5
Flags: PBM
4σ 3.74e3
0%
Abs. Int.
9.63e6
4.81e6
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDF
2.80e7
42.28
Rel. Int.
100%
OCDF Std.
40.77-45.00
455.7801 Fn5
Flags: PBM
4σ 3.54e3
0%
Abs. Int.
1.12e7
5.61e6
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
DCDPE
40.77-45.00
513.6775 Fn5
Flags: PB
4σ 1.57e3
0%
Abs. Int.
8.57e3
4.28e3
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

Lab ID: B4528_17661_DF_005 **Acq'd:** 12 Aug 2020 15:44 PSW **Wt/Vol:** 8.83 g **ICAL:** MM3_DF_10012020_12JUN2020

Client ID: CS-52 **UTP:** 13-Aug-2020 08:31:26 DTF **J-level:** 0.566 pg/g **Split:** 1 **Checkcode:** 292-335-CQQ

Datafile: 200812R08 **Report:** 13 Aug 2020 08:34 TF **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	NotFnd		1.0008	-		-	-	-	1.18	-	4291	0.155
12378-PeCDD	32.49	J	1.0006	1.0005	-0.2	2.32E+05	1.44	Y	1.14	0.875	4723	0.156
123478-HxCDD	36.44		1.0004	1.0004	0	1.30E+06	1.30	Y	1.09	5.66	10226	0.356
123678-HxCDD	36.55		1.0034	1.0034	0	3.28E+06	1.30	Y	1.13	14.2	10226	0.347
123789-HxCDD	36.84		1.0114	1.0114	0	2.37E+06	1.23	Y	1.05	9.59	10226	0.325
1234678-HpCDD	39.75		1.0004	1.0003	-0.2	1.57E+08	1.04	Y	0.98	787	3537	0.112
OCDD	42.14		1.0003	1.0003	0	1.08E+09	0.89	Y	1.08	8,650	7211	0.372
2378-TCDF	25.90	J EMPC	1.0008	1.0007	-0.2	1.24E+05	0.95	N	0.98	0.296	6511	0.191
12378-PeCDF	30.97	J	1.0006	1.0004	-0.4	1.02E+05	1.46	Y	0.95	0.285	6696	0.175
23478-PeCDF	32.15	J	1.0005	1.0013	+1.5	6.14E+05	1.65	Y	0.95	1.71	6696	0.166
123478-HxCDF	35.46		1.0005	1.0005	0	1.25E+06	1.16	Y	1.20	3.91	19942	0.513
123678-HxCDF	35.60	J	1.0004	1.0006	+0.4	6.10E+05	1.25	Y	1.07	1.87	19942	0.464
234678-HxCDF	36.25		1.0004	1.0003	-0.2	1.28E+06	1.19	Y	1.10	4.31	19942	0.534
123789-HxCDF	NotFnd		1.0004	-		-	-	-	1.09	-	19942	0.62
1234678-HpCDF	38.81		1.0003	1.0003	0	2.90E+07	1.03	Y	1.28	104	4289	0.1
1234789-HpCDF	40.15		1.0003	1.0001	-0.5	2.72E+06	1.03	Y	1.27	10.4	4289	0.0964
OCDF	42.29		1.0003	1.0003	0	7.54E+07	0.89	Y	1.01	498	4337	0.187

Name	Act RT		Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	26.83		1.0267	1.0268	+0.2	6.09E+07	0.78	Y	1.01	83.7
ES 12378-PeCDD	32.47		1.2424	1.2427	+0.6	5.29E+07	1.64	Y	0.87	84.2
ES 123478-HxCDD	36.42		0.9918	0.9918	0	4.78E+07	1.27	Y	1.10	67.4
ES 123678-HxCDD	36.53		0.9948	0.9948	0	4.64E+07	1.30	Y	1.06	67.6
ES 123789-HxCDD	36.83		1.0027	1.0027	0	5.34E+07	1.31	Y	1.22	67.9
ES 1234678-HpCDD	39.74		1.0818	1.0820	+0.5	4.59E+07	1.04	Y	0.99	71.5
ES OCDD	42.12		1.1468	1.1470	+0.5	5.26E+07	0.91	Y	0.67	60.7
ES 2378-TCDF	25.88		1.0606	1.0608	+0.3	9.71E+07	0.81	Y	1.01	86.3
ES 12378-PeCDF	30.96		1.2684	1.2691	+1.3	8.53E+07	1.61	Y	0.90	85.4
ES 23478-PeCDF	32.11		1.3156	1.3164	+1.5	8.59E+07	1.64	Y	0.89	87.1
ES 123478-HxCDF	35.44		0.9651	0.9651	0	6.08E+07	0.52	Y	1.43	65.7
ES 123678-HxCDF	35.58		0.9690	0.9689	-0.2	6.90E+07	0.52	Y	1.63	65.4
ES 234678-HxCDF	36.24		0.9867	0.9867	0	6.12E+07	0.53	Y	1.48	64
ES 123789-HxCDF	37.19		1.0127	1.0126	-0.2	5.90E+07	0.51	Y	1.29	70.6
ES 1234678-HpCDF	38.80		1.0562	1.0563	+0.2	4.95E+07	0.43	Y	1.15	66.8
ES 1234789-HpCDF	40.15		1.0929	1.0931	+0.5	4.65E+07	0.45	Y	0.91	79.4
ES OCDF	42.28		1.1511	1.1513	+0.5	6.79E+07	0.88	Y	0.83	63.4

Lab ID: B4528_17661_DF_005 | Acq'd: 12 Aug 2020 15:44 PSW | Wt/Vol: 8.83 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-52 | UTP: 13-Aug-2020 08:31:26 DTF | J-level: 0.566 pg/g | Split: 1 | Checkcode: 292-335-CQQ

Datafile: 200812R08 | Report: 13 Aug 2020 08:34 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
JS 1234-TCDD	26.13		-	-	-	7.22E+07	0.77	Y	-	-
JS 1234-TCDF	24.39		-	-	-	1.11E+08	0.80	Y	-	-
JS 123467-HxCDD	36.73		-	-	-	3.24E+07	1.30	Y	-	-
CS 37Cl-2378-TCDD	26.85		1.0276	1.0277	+0.2	2.77E+07	n/a	-	1.04	92.5
CS 12347-PeCDD	31.96		1.2228	1.2231	+0.6	5.11E+07	1.66	Y	0.74	95.7
CS 12346-PeCDF	30.41		1.2462	1.2468	+1.1	8.14E+07	1.53	Y	0.86	85.4
CS 123469-HxCDF	35.89		0.9774	0.9773	-0.2	5.94E+07	0.54	Y	1.36	67.6
CS 1234689-HpCDF	39.22		1.0678	1.0679	+0.2	5.28E+07	0.44	Y	1.05	77.4
~~SS 37Cl-2378-TCDD~~	~~26.85~~		~~1.0276~~	~~1.0277~~	~~+0.2~~	~~2.77E+07~~	~~n/a~~		~~1.04~~	~~110~~
~~SS 12347-PeCDD~~	~~31.96~~		~~1.2228~~	~~1.2231~~	~~+0.6~~	~~5.11E+07~~	~~1.66~~	~~Y~~	~~0.86~~	~~113~~
~~SS 12346-PeCDF~~	~~30.41~~		~~1.2462~~	~~1.2468~~	~~+1.1~~	~~8.14E+07~~	~~1.53~~	~~Y~~	~~0.96~~	~~99.4~~
~~SS 123469-HxCDF~~	~~35.89~~		~~0.9774~~	~~0.9773~~	~~-0.2~~	~~5.94E+07~~	~~0.54~~	~~Y~~	~~0.83~~	~~103~~
~~SS 1234689-HpCDF~~	~~39.22~~		~~1.0678~~	~~1.0679~~	~~+0.2~~	~~5.28E+07~~	~~0.44~~	~~Y~~	~~0.92~~	~~115~~

Totals	Conc	EMPC
Total TCDD	0	1.97
Total PeCDD	9.87	10.9
Total HxCDD	173	173
Total HpCDD	2110	2110
Total Tetra-Octa Dioxins	10900	10900
Total TCDF	3.7	5.7
Total PeCDF	16.2	18.2
Total HxCDF	91.6	91.6
Total HpCDF	398	398
Total Tetra-Octa Furans	1,010	1010
Total Tetra-Octa Dioxins & Furans	12000	12000

Lab ID: B4528_17661_DF_005 | Acq'd: 12 Aug 2020 15:44 PSW | Wt/Vol: 8.83 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-52 | UTP: 13-Aug-2020 08:31:26 DTF | J-level: 0.566 pg/g | Split: 1 | Checkcode: 292-335-CQQ

Datafile: 200812R08 | Report: 13 Aug 2020 08:34 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1368-TCDD	22.83	EMPC	0.8513	0.8508	-0.7	2.32E+05	0.65	N	1.18	0.733	4291	0.155
1379-TCDD	23.24	J EMPC	0.8664	0.8661	-0.4	6.85E+04	0.62	N	1.18	0.217	4291	0.155
1369-TCDD	NotFnd		0.8845						1.18		4291	0.155
1469-TCDD	24.59	EMPC	0.9165	0.9164	-0.1	2.15E+05	0.89	N	1.18	0.678	4291	0.155
1247/1246/1248/1249-TCDD	24.84	J EMPC	0.9266	0.9257	-1.3	1.08E+05	0.94	N	1.18	0.342	4291	0.155
1378-TCDD	NotFnd		0.9342						1.18		4291	0.155
1268-TCDD	NotFnd		0.9423						1.18		4291	0.155
1478-TCDD	NotFnd		0.9524						1.18		4291	0.155
1279-TCDD	NotFnd		0.9592						1.18		4291	0.155
1234/1269-TCDD	NotFnd		0.9734						1.18		4291	0.155
1236-TCDD	NotFnd		0.9791						1.18		4291	0.155
1237/1238-TCDD	NotFnd		0.9894						1.18		4291	0.155
1239-TCDD	NotFnd		0.9946						1.18		4291	0.155
2378-TCDD	**NotFnd**		**1.0008**						**1.18**		**4291**	**0.155**
1278-TCDD	NotFnd		1.0140						1.18		4291	0.155
1267-TCDD	NotFnd		1.0194						1.18		4291	0.155
1289-TCDD	NotFnd		1.0396						1.18		4291	0.155
12479/12468-PeCDD	29.91	J	0.9210	0.9210	0	6.26E+05	1.53	Y	1.14	2.36	4723	0.156
12469-PeCDD	30.46	J	0.9381	0.9380	-0.2	5.34E+05	1.77	Y	1.14	2.01	4723	0.156
12368-PeCDD	31.03	J	0.9558	0.9557	-0.2	2.45E+05	1.68	Y	1.14	0.922	4723	0.156
12478-PeCDD	31.23	J EMPC	0.9618	0.9617	-0.2	2.80E+05	1.31	N	1.14	1.06	4723	0.156
12379-PeCDD	31.33	J	0.9649	0.9648	-0.2	1.82E+05	1.59	Y	1.14	0.686	4723	0.156
12369/12467/12489-PeCDD	31.60	J	0.9732	0.9732	0	3.97E+05	1.55	Y	1.14	1.49	4723	0.156
12346/12347-PeCDD	31.98	J	0.9850	0.9851	+0.2	1.83E+05	1.52	Y	1.14	0.691	4723	0.156
12378-PeCDD	32.49	J	**1.0006**	**1.0005**	**-0.2**	**2.32E+05**	**1.44**	**Y**	**1.14**	**0.875**	**4723**	**0.156**
12367-PeCDD	32.58	J	1.0035	1.0033	-0.4	9.91E+04	1.77	Y	1.14	0.374	4723	0.156
12389-PeCDD	32.93	J	1.0144	1.0142	-0.4	1.22E+05	1.68	Y	1.14	0.458	4723	0.156
124679/124689-HxCDD	34.73		0.9535	0.9535	0	1.36E+07	1.24	Y	1.09	57.6	10226	0.342
123468-HxCDD	35.39		0.9716	0.9716	0	2.83E+06	1.29	Y	1.09	12	10226	0.342
123679/123689-HxCDD	35.68		0.9796	0.9796	0	1.30E+07	1.30	Y	1.09	54.9	10226	0.342
123469-HxCDD	35.81		0.9832	0.9832	0	3.11E+06	1.16	Y	1.09	13.1	10226	0.342
123478-HxCDD	36.44		**1.0004**	**1.0004**	**0**	**1.30E+06**	**1.30**	**Y**	1.09	**5.66**	**10226**	**0.356**
123678-HxCDD	36.55		**1.0034**	**1.0034**	**0**	**3.28E+06**	**1.30**	**Y**	1.13	**14.2**	**10226**	**0.347**
123467-HxCDD	36.74		1.0087	1.0087	0	1.37E+06	1.21	Y	1.09	5.78	10226	0.342
123789-HxCDD	36.84		**1.0114**	**1.0114**	**0**	**2.37E+06**	**1.23**	**Y**	1.05	**9.59**	**10226**	**0.325**

Lab ID: B4528_17661_DF_005 | Acq'd: 12 Aug 2020 15:44 PSW | Wt/Vol: 8.83 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-52 | UTP: 13-Aug-2020 08:31:26 DTF | J-level: 0.566 pg/g | Split: 1 | Checkcode: 292-335-CQQ

Datafile: 200812R08 | Report: 13 Aug 2020 08:34 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1234679-HpCDD	39.09		0.9837	0.9836	-0.2	2.64E+08	1.04	Y	0.98	1,330	3537	0.112
1234678-HpCDD	**39.75**		**1.0004**	**1.0003**	**-0.2**	**1.57E+08**	**1.04**	**Y**	**0.98**	**787**	**3537**	**0.112**
OCDD	**42.14**		**1.0003**	**1.0003**	**0**	**1.08E+09**	**0.89**	**Y**	**1.08**	**8,650**	**7211**	**0.372**
OCDD-a	42.13		1.0002	1.0002	0	6.46E+07	2.55	Y	0.07	8,400	14607	12.2
1368-TCDF	20.58	J	0.7965	0.7955	-1.2	1.51E+05	0.78	Y	0.98	0.36	6511	0.191
1468-TCDF	21.15	J	0.8181	0.8174	-0.9	1.31E+05	0.78	Y	0.98	0.311	6511	0.191
2468-TCDF	21.79		0.8428	0.8421	-0.9	6.85E+05	0.76	Y	0.98	1.63	6511	0.191
1346/1246-TCDF	22.24	J EMPC	0.8580	0.8593	+1.7	1.06E+05	0.64	N	0.98	0.252	6511	0.191
1347/1378/1247-TCDF	22.35		0.8643	0.8639	-0.5	2.42E+05	0.71	Y	0.98	0.576	6511	0.191
1348-TCDF	NotFnd		0.8764						0.98		6511	0.191
1248/1367/1379-TCDF	22.80	J	0.8821	0.8811	-1.4	1.32E+05	0.81	Y	0.98	0.314	6511	0.191
1268-TCDF	23.24	J	0.8987	0.8982	-0.7	2.14E+05	0.72	Y	0.98	0.509	6511	0.191
1467-TCDF	NotFnd		0.9045						0.98		6511	0.191
1478-TCDF	NotFnd		0.9120						0.98		6511	0.191
1369/1237-TCDF	NotFnd		0.9279						0.98		6511	0.191
2467-TCDF	NotFnd		0.9335						0.98		6511	0.191
2368-TCDF	24.32	J EMPC	0.9400	0.9398	-0.3	2.07E+05	0.48	N	0.98	0.492	6511	0.191
1238/1234/1678/1469/1236-TCDF	24.42	J EMPC	0.9442	0.9437	-0.7	5.95E+04	1.51	N	0.98	0.142	6511	0.191
1278-TCDF	NotFnd		0.9632						0.98		6511	0.191
1349-TCDF	NotFnd		0.9681						0.98		6511	0.191
1267-TCDF	NotFnd		0.9747						0.98		6511	0.191
2346/1249-TCDF	NotFnd		0.9826						0.98		6511	0.191
2347/1279-TCDF	NotFnd		0.9917						0.98		6511	0.191
2348-TCDF	NotFnd		0.9963						0.98		6511	0.191
2378-TCDF	**25.90**	J EMPC	**1.0008**	**1.0007**	**-0.2**	**1.24E+05**	**0.95**	**N**	**0.98**	**0.296**	**6511**	**0.191**
2367/3467-TCDF	26.29	J EMPC	1.0163	1.0158	-0.8	1.45E+05	1.07	N	0.98	0.346	6511	0.191
1269-TCDF	NotFnd		1.0260						0.98		6511	0.191
1239-TCDF	NotFnd		1.0373						0.98		6511	0.191
1289-TCDF	28.05	J EMPC	1.0836	1.0841	+0.8	1.97E+05	1.13	N	0.98	0.469	6511	0.191
13468/12468-PeCDF	28.05		0.9056	0.9061	+0.8	3.34E+06	1.68	Y	0.95	9.33	4537	0.116
13678/13467/12467-PeCDF	29.66	J EMPC	0.9580	0.9582	+0.4	1.64E+05	2.05	N	0.95	0.457	6696	0.171
12368/13478/12478-PeCDF	29.83		0.9632	0.9636	+0.7	1.55E+06	1.49	Y	0.95	4.32	6696	0.171
14678-PeCDF	NotFnd		0.9666						0.95		6696	0.171
13479-PeCDF	NotFnd		0.9698						0.95		6696	0.171
13469/12479-PeCDF	NotFnd		0.9782						0.95		6696	0.171
12346-PeCDF	NotFnd		0.9828						0.95		6696	0.171

Lab ID: B4528_17661_DF_005 | Acq'd: 12 Aug 2020 15:44 PSW | Wt/Vol: 8.83 g | ICAL: MM3_DF_10012020_12JUN2020

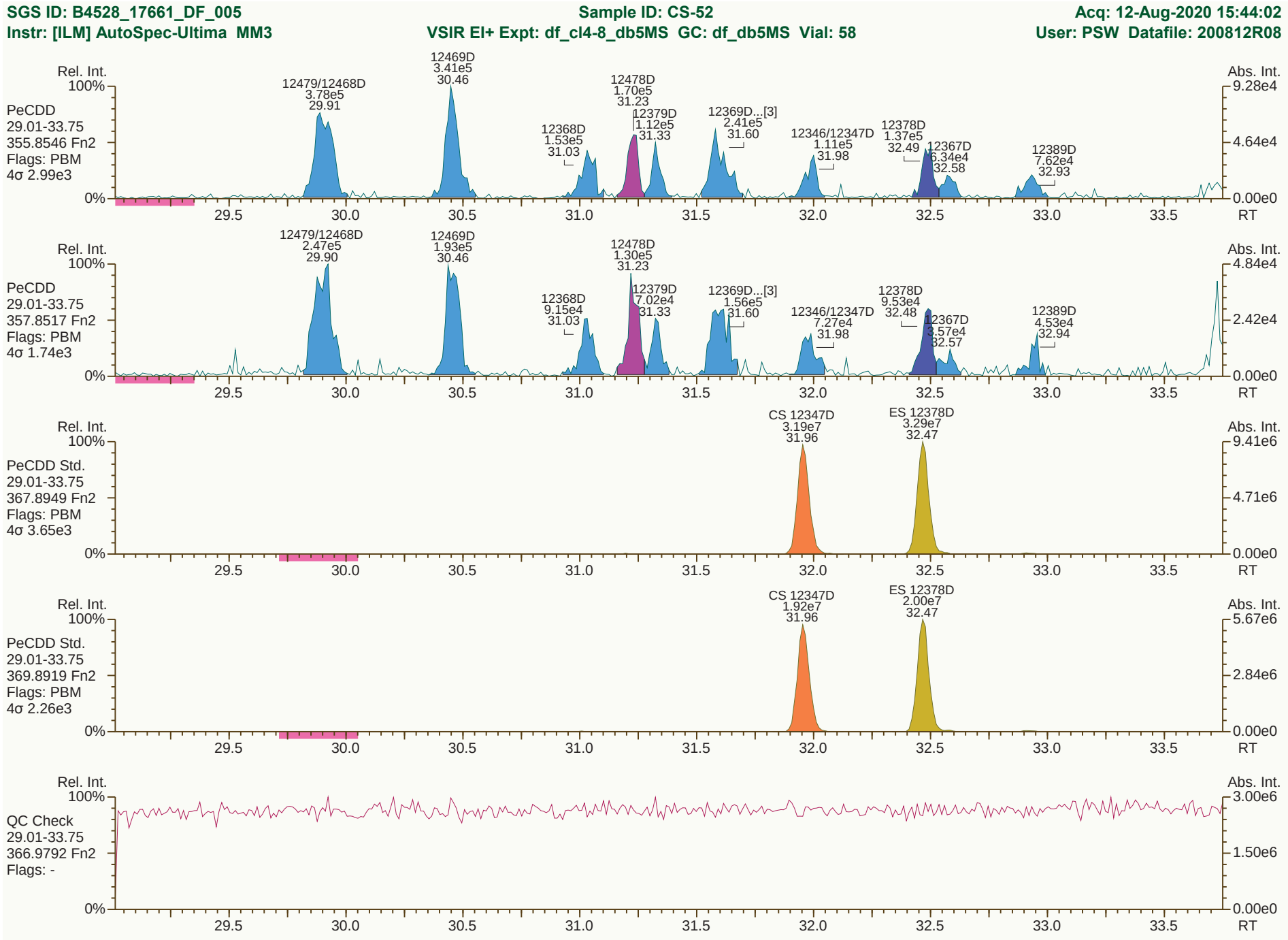
Client ID: CS-52 | UTP: 13-Aug-2020 08:31:26 DTF | J-level: 0.566 pg/g | Split: 1 | Checkcode: 292-335-CQQ

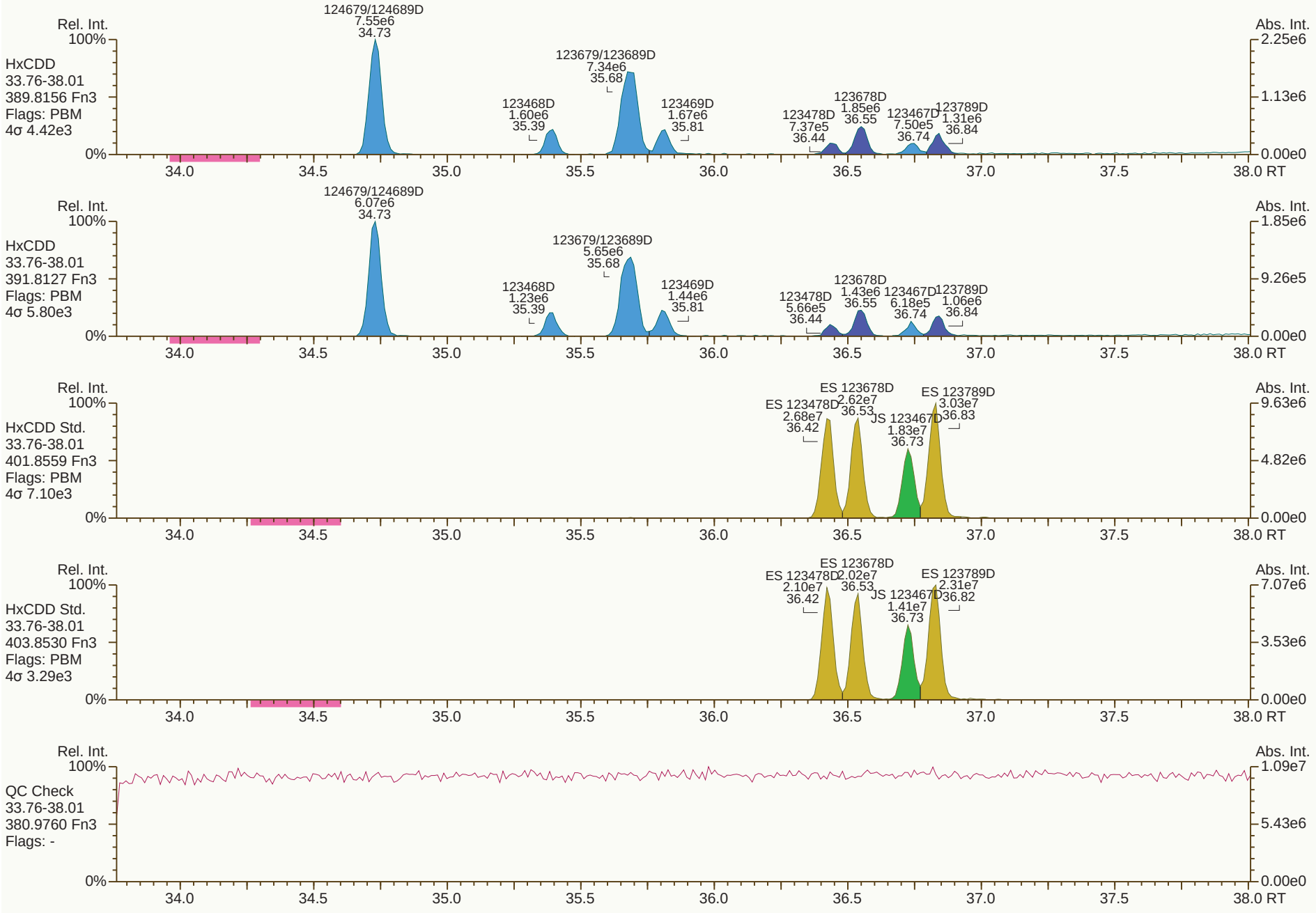
Datafile: 200812R08 | Report: 13 Aug 2020 08:34 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
23468/12469-PeCDF	30.51	J EMPC	0.9858	0.9857	-0.2	5.46E+05	1.21	N	0.95	1.52	6696	0.171
12347-PeCDF	NotFnd		0.9884						0.95		6696	0.171
12348-PeCDF	NotFnd		0.9937						0.95		6696	0.171
12378-PeCDF	**30.97**	J	**1.0006**	**1.0004**	**-0.4**	**1.02E+05**	**1.46**	**Y**	**0.95**	**0.285**	**6696**	**0.175**
12678/12367-PeCDF	31.28	J	1.0098	1.0103	+0.9	1.90E+05	1.65	Y	0.95	0.532	6696	0.171
12379-PeCDF	NotFnd		1.0154						0.95		6696	0.171
12679-PeCDF	NotFnd		0.9923						0.95		6696	0.171
23467/12369-PeCDF	NotFnd		0.9964						0.95		6696	0.171
23478-PeCDF	**32.15**	J	**1.0005**	**1.0013**	**+1.5**	**6.14E+05**	**1.65**	**Y**	**0.95**	**1.71**	**6696**	**0.166**
23478/12489-PeCDF	NotFnd		0.0000						0.95			
12489-PeCDF	NotFnd		1.0050						0.95		6696	0.171
12349-PeCDF	NotFnd		1.0109						0.95		6696	0.171
12389-PeCDF	NotFnd		1.0345						0.95		6696	0.171
123468-HxCDF	34.06		0.9610	0.9610	0	2.42E+06	1.16	Y	1.11	7.88	19942	0.529
124678/134678-HxCDF	34.26		0.9667	0.9666	-0.2	8.93E+06	1.24	Y	1.11	29.1	19942	0.529
134679-HxCDF	NotFnd		0.9732						1.11		19942	0.529
124679-HxCDF	34.69	J	0.9788	0.9788	0	3.18E+05	1.33	Y	1.11	1.04	19942	0.529
124689-HxCDF	34.92		0.9851	0.9852	+0.2	1.34E+07	1.24	Y	1.11	43.5	19942	0.529
123467-HxCDF	NotFnd		0.9971						1.11		19942	0.529
123478-HxCDF	**35.46**		**1.0005**	**1.0005**	**0**	**1.25E+06**	**1.16**	**Y**	**1.20**	**3.91**	**19942**	**0.513**
123678-HxCDF	**35.60**	J	**1.0004**	**1.0006**	**+0.4**	**6.10E+05**	**1.25**	**Y**	**1.07**	**1.87**	**19942**	**0.464**
123479-HxCDF	NotFnd		1.0050						1.11		19942	0.529
123469-HxCDF	NotFnd		1.0091						1.11		19942	0.529
123679-HxCDF	NotFnd		0.9943						1.11		19942	0.529
234678-HxCDF	**36.25**		**1.0004**	**1.0003**	**-0.2**	**1.28E+06**	**1.19**	**Y**	**1.10**	**4.31**	**19942**	**0.534**
234678/123689-HxCDF	NotFnd		0.0000						1.10			
123689-HxCDF	NotFnd		1.0054						1.11		19942	0.529
123789-HxCDF	**NotFnd**		**1.0004**						**1.09**		**19942**	**0.62**
123789/123489-HxCDF	NotFnd		0.0000						1.09			
123489-HxCDF	NotFnd		1.0008						1.11		19942	0.529
1234678-HpCDF	**38.81**		**1.0003**	**1.0003**	**0**	**2.90E+07**	**1.03**	**Y**	**1.28**	**104**	**4289**	**0.1**
1234679-HpCDF	39.09		1.0075	1.0075	0	1.52E+06	0.96	Y	1.27	5.64	4289	0.0984
1234689-HpCDF	39.23		1.0111	1.0112	+0.2	7.52E+07	1.04	Y	1.27	278	4289	0.0984
1234789-HpCDF	**40.15**		**1.0003**	**1.0001**	**-0.5**	**2.72E+06**	**1.03**	**Y**	**1.27**	**10.4**	**4289**	**0.0964**
OCDF	**42.29**		**1.0003**	**1.0003**	**0**	**7.54E+07**	**0.89**	**Y**	**1.01**	**498**	**4337**	**0.187**
OCDF-a	42.29		1.0002	1.0002	0	4.86E+06	2.43	Y	0.06	513	5212	3.6


Rel. Int.
100%
QC Check
20.04-29.00
316.9824 Fn1
Flags: -
0%
Abs. Int.
3.67e6
1.84e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT
Rel. Int.
100%
QC Check
29.01-33.75
366.9792 Fn2
Flags: -
0%
Abs. Int.
3.00e6
1.50e6
0.00e0
29.5
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
RT
Rel. Int.
100%
QC Check
33.76-38.01
380.9760 Fn3
Flags: -
0%
Abs. Int.
1.09e7
5.43e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0 RT
Rel. Int.
100%
QC Check
38.02-40.75
430.9728 Fn4
Flags: -
0%
Abs. Int.
7.05e6
3.53e6
0.00e0
38.5
39.0
39.5
40.0
40.5
RT
Rel. Int.
100%
QC Check
40.77-45.01
454.9728 Fn5
Flags: -
0%
Abs. Int.
6.29e6
3.14e6
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT


Rel. Int.
100%
TCDD
20.04-29.00
319.8965 Fn1
Flags: PBM
4σ 2.14e3
0%
1368D
1.01e5
22.83
1379D
2.98e4
23.24
1469D
1.08e5
24.59
1247D...[4]
5.71e4
24.84
Abs. Int.
3.79e4
1.89e4
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT
Rel. Int.
100%
TCDD
20.04-29.00
321.8936 Fn1
Flags: PBM
4σ 2.15e3
0%
1368D
1.54e5
22.83
1379D
4.84e4
23.22
1469D
1.21e5
24.59
1247D...[4]
6.11e4
24.84
Abs. Int.
3.53e4
1.76e4
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT
Rel. Int.
100%
37Cl-TCDD
20.04-29.00
327.8850 Fn1
Flags: PBM
4σ 1.97e3
0%
CS 37Cl-2378D
2.77e7
26.85
Abs. Int.
6.25e6
3.13e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT
Rel. Int.
100%
TCDD Std.
20.04-29.00
331.9368 Fn1
Flags: PBM
4σ 3.97e3
0%
JS 1234D
3.13e7
26.13
ES 2378D
2.66e7
26.83
Abs. Int.
6.70e6
3.35e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT
Rel. Int.
100%
TCDD Std.
20.04-29.00
333.9339 Fn1
Flags: PBM
4σ 3.98e3
0%
JS 1234D
4.09e7
26.13
ES 2378D
3.42e7
26.83
Abs. Int.
8.66e6
4.33e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT

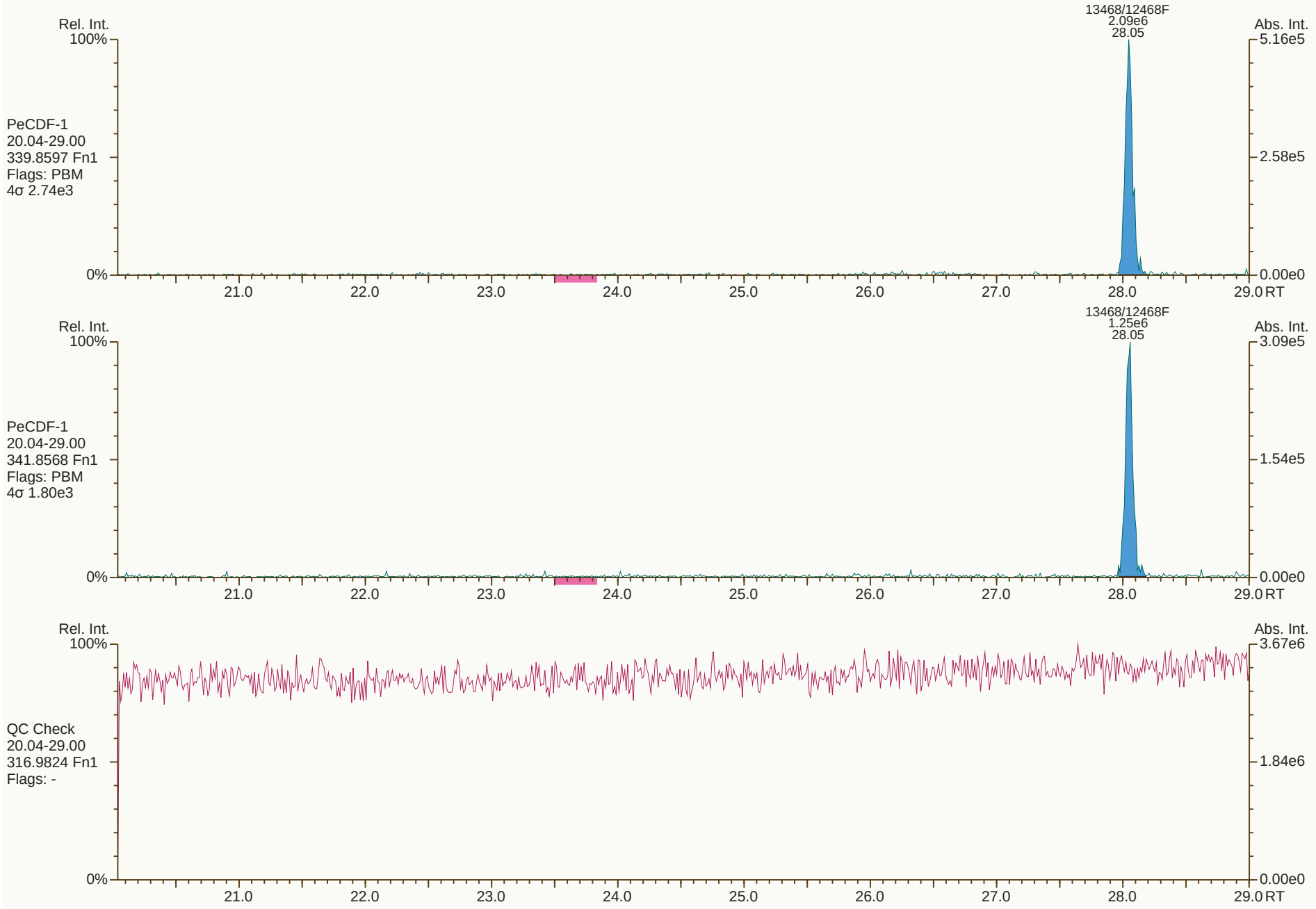

SGS ID: B4528_17661_DF_005
Sample ID: CS-52
Acq: 12-Aug-2020 15:44:02
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 58
User: PSW Datafile: 200812R08
PeCDD
29.01-33.75
355.8546 Fn2
Flags: PBM
4σ 2.99e3
12479/12468D 3.78e5 29.91
12469D 3.41e5 30.46
12368D 1.53e5 31.03
12478D 1.70e5 31.23
12379D 1.12e5 31.33
12369D...[3] 2.41e5 31.60
12346/12347D 1.11e5 31.98
12378D 1.37e5 32.49
12367D 6.34e4 32.58
12389D 7.62e4 32.93
PeCDD
29.01-33.75
357.8517 Fn2
Flags: PBM
4σ 1.74e3
12479/12468D 2.47e5 29.90
12469D 1.93e5 30.46
12368D 9.15e4 31.03
12478D 1.30e5 31.23
12379D 7.02e4 31.33
12369D...[3] 1.56e5 31.60
12346/12347D 7.27e4 31.98
12378D 9.53e4 32.48
12367D 3.57e4 32.57
12389D 4.53e4 32.94
PeCDD Std.
29.01-33.75
367.8949 Fn2
Flags: PBM
4σ 3.65e3
CS 12347D 3.19e7 31.96
ES 12378D 3.29e7 32.47
PeCDD Std.
29.01-33.75
369.8919 Fn2
Flags: PBM
4σ 2.26e3
CS 12347D 1.92e7 31.96
ES 12378D 2.00e7 32.47
QC Check
29.01-33.75
366.9792 Fn2
Flags: -
Rel. Int.
Abs. Int.
RT
Results: P:\B4500_B4599\B4528\B4528_17661 DF\Resources\B4528_17661_DF_005.utp_res, saved 13-Aug-2020 08:31 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 2405, 3354 scc: 292-335
Revised: 12-Aug-2020 17:18 (DTF) Printed: 13-Aug-2020 08:43 Page 3 of 12

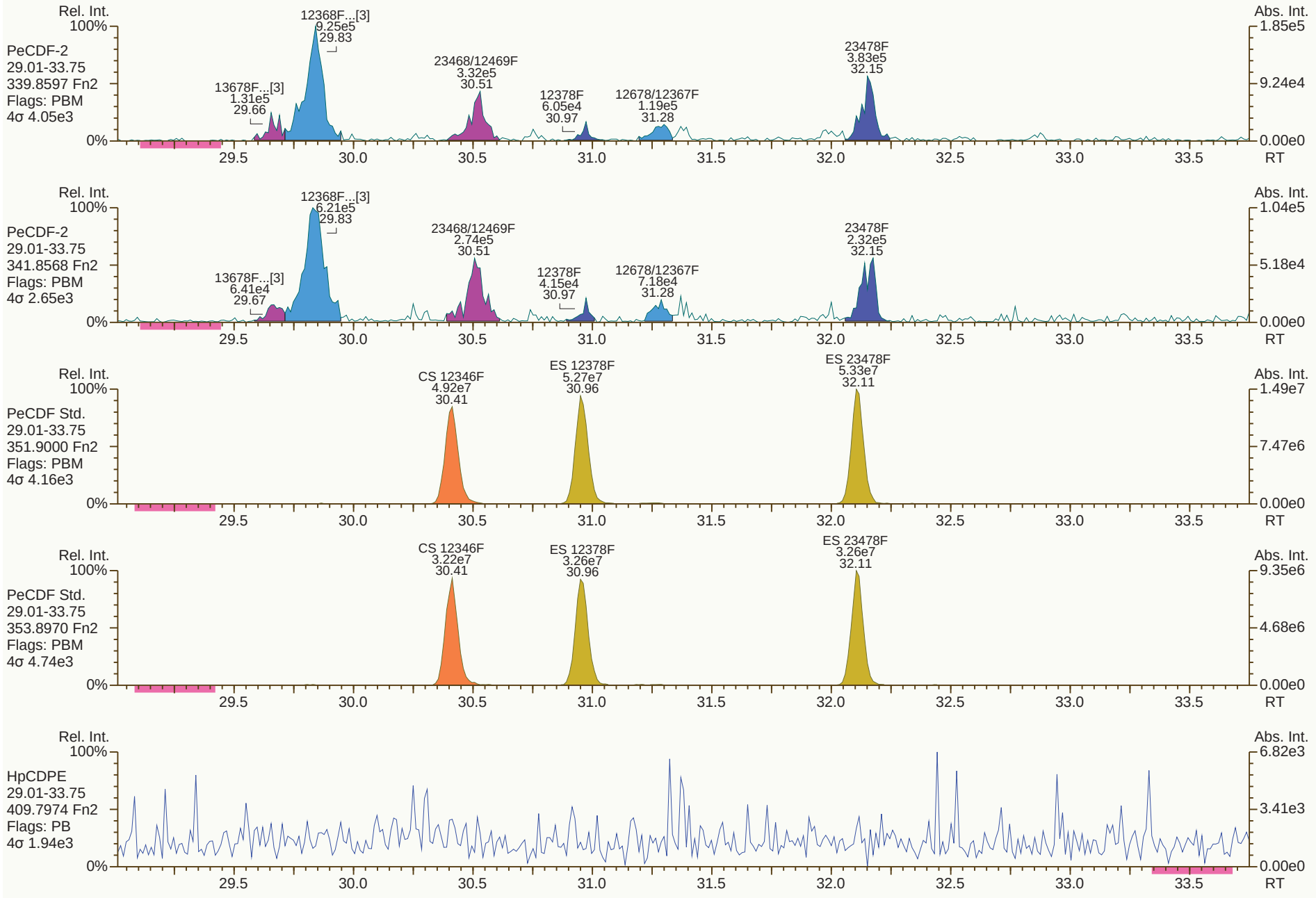

Rel. Int.
Abs. Int.
HxCDD
33.76-38.01
389.8156 Fn3
Flags: PBM
4σ 4.42e3
124679/124689D
7.55e6
34.73
123679/123689D
7.34e6
35.68
123468D
1.60e6
35.39
123469D
1.67e6
35.81
123478D
7.37e5
36.44
123678D
1.85e6
36.55
123467D
7.50e5
36.74
123789D
1.31e6
36.84
HxCDD
33.76-38.01
391.8127 Fn3
Flags: PBM
4σ 5.80e3
124679/124689D
6.07e6
34.73
123679/123689D
5.65e6
35.68
123468D
1.23e6
35.39
123469D
1.44e6
35.81
123478D
5.66e5
36.44
123678D
1.43e6
36.55
123467D
6.18e5
36.74
123789D
1.06e6
36.84
HxCDD Std.
33.76-38.01
401.8559 Fn3
Flags: PBM
4σ 7.10e3
ES 123678D
2.62e7
36.53
ES 123478D
2.68e7
36.42
JS 123467D
1.83e7
36.73
ES 123789D
3.03e7
36.83
HxCDD Std.
33.76-38.01
403.8530 Fn3
Flags: PBM
4σ 3.29e3
ES 123678D
2.02e7
36.53
ES 123478D
2.10e7
36.42
JS 123467D
1.41e7
36.73
ES 123789D
2.31e7
36.82
QC Check
33.76-38.01
380.9760 Fn3
Flags: -
100%
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0 RT
2.25e6
1.13e6
0.00e0
1.85e6
9.26e5
9.63e6
4.82e6
7.07e6
3.53e6
1.09e7
5.43e6

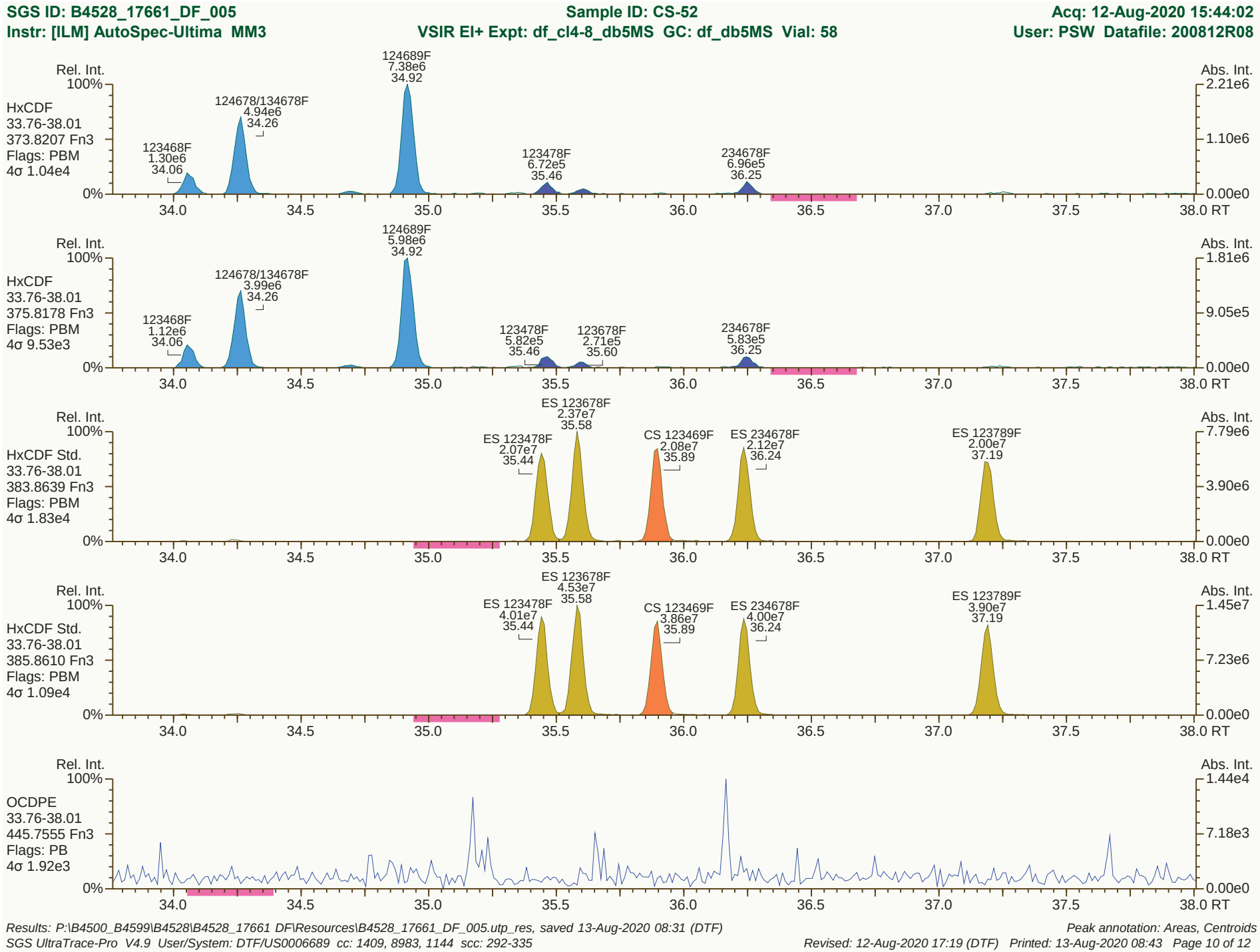

Rel. Int.
100%
HpCDD
38.02-40.75
423.7767 Fn4
Flags: PBM
4σ 1.85e3
0%
1234679D
1.35e8
39.09
1234678D
7.99e7
39.75
Abs. Int.
5.41e7
2.71e7
0.00e0
38.5
39.0
39.5
40.0
40.5
RT
Rel. Int.
100%
HpCDD
38.02-40.75
425.7737 Fn4
Flags: PBM
4σ 1.68e3
0%
1234679D
1.29e8
39.09
1234678D
7.68e7
39.75
Abs. Int.
5.17e7
2.58e7
0.00e0
38.5
39.0
39.5
40.0
40.5
RT
Rel. Int.
100%
HpCDD Std.
38.02-40.75
435.8169 Fn4
Flags: PBM
4σ 5.26e3
0%
ES 1234678D
2.34e7
39.74
Abs. Int.
9.29e6
4.65e6
0.00e0
38.5
39.0
39.5
40.0
40.5
RT
Rel. Int.
100%
HpCDD Std.
38.02-40.75
437.8140 Fn4
Flags: PBM
4σ 3.37e3
0%
ES 1234678D
2.25e7
39.74
Abs. Int.
9.19e6
4.60e6
0.00e0
38.5
39.0
39.5
40.0
40.5
RT
Rel. Int.
100%
QC Check
38.02-40.75
430.9728 Fn4
Flags: -
0%
Abs. Int.
7.05e6
3.53e6
0.00e0
38.5
39.0
39.5
40.0
40.5
RT


OCDD
5.09e8
42.14
Rel. Int.
100%
OCDD
40.77-45.01
457.7377 Fn5
Flags: PBM
4σ 2.55e3
0%
Abs. Int.
1.98e8
9.89e7
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDD
5.70e8
42.13
Rel. Int.
100%
OCDD
40.77-45.01
459.7348 Fn5
Flags: PBM
4σ 4.66e3
0%
Abs. Int.
2.16e8
1.08e8
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
2.50e7
42.12
Rel. Int.
100%
OCDD Std.
40.77-45.01
469.7780 Fn5
Flags: PBM
4σ 4.18e3
0%
Abs. Int.
9.73e6
4.86e6
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
2.76e7
42.12
Rel. Int.
100%
OCDD Std.
40.77-45.01
471.7750 Fn5
Flags: PBM
4σ 2.98e3
0%
Abs. Int.
1.06e7
5.29e6
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
QC Check
40.77-45.01
454.9728 Fn5
Flags: -
0%
Abs. Int.
6.29e6
3.14e6
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

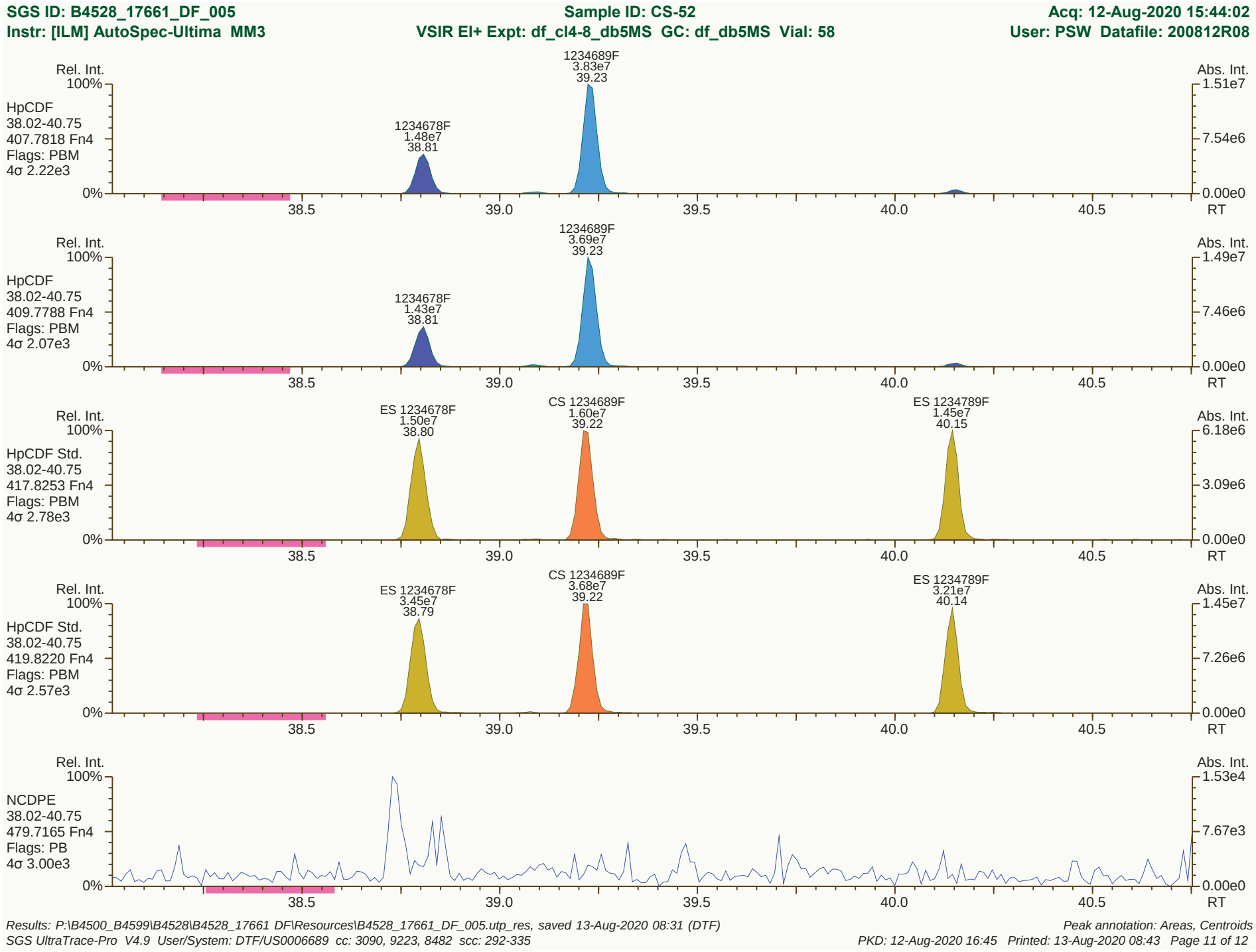

Rel. Int.
100%
TCDF
20.04-29.00
303.9016 Fn1
Flags: PBM
4σ 3.31e3
1368F 6.66e4 20.58
1468F 5.71e4 21.15
2468F 2.95e5 21.79
1347F...[3] 1.01e5 22.35
1248F...[3] 5.89e4 22.80
1268F 8.95e4 23.24
2368F 9.00e4 24.32
1238F...[5] 5.09e4 24.42
2378F 6.70e4 25.90
2367/3467F 8.79e4 26.29
1289F 1.25e5 28.05
Abs. Int.
6.35e4
3.17e4
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0 RT
Rel. Int.
100%
TCDF
20.04-29.00
305.8987 Fn1
Flags: PBM
4σ 3.20e3
1368F 8.48e4 20.60
1468F 7.34e4 21.15
2468F 3.90e5 21.79
1347F...[3] 1.41e5 22.36
1346/1246F 7.18e4 22.22
1248F...[3] 7.30e4 22.80
1268F 1.24e5 23.24
2368F 1.87e5 24.33
1238F...[5] 3.36e4 24.45
2378F 7.02e4 25.89
2367/3467F 8.20e4 26.28
1289F 1.11e5 28.05
Abs. Int.
7.74e4
3.87e4
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0 RT
Rel. Int.
100%
TCDF Std.
20.04-29.00
315.9419 Fn1
Flags: PBM
4σ 1.40e4
JS 1234F 4.92e7 24.39
ES 2378F 4.36e7 25.88
Abs. Int.
9.52e6
4.76e6
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0 RT
Rel. Int.
100%
TCDF Std.
20.04-29.00
317.9389 Fn1
Flags: PBM
4σ 7.95e3
JS 1234F 6.17e7 24.39
ES 2378F 5.35e7 25.88
Abs. Int.
1.17e7
5.86e6
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0 RT
Rel. Int.
100%
HxCDPE
20.04-29.00
375.8364 Fn1
Flags: PB
4σ 2.07e3
Abs. Int.
1.45e4
7.24e3
0.00e0
0%
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0 RT


Rel. Int.
100%
0%
Abs. Int.
5.16e5
2.58e5
0.00e0
13468/12468F
2.09e6
28.05
PeCDF-1
20.04-29.00
339.8597 Fn1
Flags: PBM
4σ 2.74e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT
Rel. Int.
100%
0%
Abs. Int.
3.09e5
1.54e5
0.00e0
13468/12468F
1.25e6
28.05
PeCDF-1
20.04-29.00
341.8568 Fn1
Flags: PBM
4σ 1.80e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT
Rel. Int.
100%
0%
Abs. Int.
3.67e6
1.84e6
0.00e0
QC Check
20.04-29.00
316.9824 Fn1
Flags: -
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT


Rel. Int.
100%
PeCDF-2
29.01-33.75
339.8597 Fn2
Flags: PBM
4σ 4.05e3
12368F...[3]
9.25e5
29.83
13678F...[3]
1.31e5
29.66
23468/12469F
3.32e5
30.51
12378F
6.05e4
30.97
12678/12367F
1.19e5
31.28
23478F
3.83e5
32.15
Abs. Int.
1.85e5
9.24e4
0.00e0
0%
29.5
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
RT
Rel. Int.
100%
PeCDF-2
29.01-33.75
341.8568 Fn2
Flags: PBM
4σ 2.65e3
12368F...[3]
6.21e5
29.83
13678F...[3]
6.41e4
29.67
23468/12469F
2.74e5
30.51
12378F
4.15e4
30.97
12678/12367F
7.18e4
31.28
23478F
2.32e5
32.15
Abs. Int.
1.04e5
5.18e4
0.00e0
0%
29.5
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
RT
Rel. Int.
100%
PeCDF Std.
29.01-33.75
351.9000 Fn2
Flags: PBM
4σ 4.16e3
CS 12346F
4.92e7
30.41
ES 12378F
5.27e7
30.96
ES 23478F
5.33e7
32.11
Abs. Int.
1.49e7
7.47e6
0.00e0
0%
29.5
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
RT
Rel. Int.
100%
PeCDF Std.
29.01-33.75
353.8970 Fn2
Flags: PBM
4σ 4.74e3
CS 12346F
3.22e7
30.41
ES 12378F
3.26e7
30.96
ES 23478F
3.26e7
32.11
Abs. Int.
9.35e6
4.68e6
0.00e0
0%
29.5
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
RT
Rel. Int.
100%
HpCDPE
29.01-33.75
409.7974 Fn2
Flags: PB
4σ 1.94e3
Abs. Int.
6.82e3
3.41e3
0.00e0
0%
29.5
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
RT



Results: P:\B4500_B4599\B4528\B4528_17661 DF\Resources\B4528_17661_DF_005.utp_res, saved 13-Aug-2020 08:31 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 1409, 8983, 1144 scc: 292-335
Revised: 12-Aug-2020 17:19 (DTF) Printed: 13-Aug-2020 08:43 Page 10 of 12


SGS ID: B4528_17661_DF_005
Sample ID: CS-52
Acq: 12-Aug-2020 15:44:02
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 58
User: PSW Datafile: 200812R08
Rel. Int.
Abs. Int.
HpCDF
38.02-40.75
407.7818 Fn4
Flags: PBM
4σ 2.22e3
1234678F
1.48e7
38.81
1234689F
3.83e7
39.23
1.51e7
7.54e6
0.00e0
HpCDF
38.02-40.75
409.7788 Fn4
Flags: PBM
4σ 2.07e3
1234678F
1.43e7
38.81
1234689F
3.69e7
39.23
1.49e7
7.46e6
0.00e0
HpCDF Std.
38.02-40.75
417.8253 Fn4
Flags: PBM
4σ 2.78e3
ES 1234678F
1.50e7
38.80
CS 1234689F
1.60e7
39.22
ES 1234789F
1.45e7
40.15
6.18e6
3.09e6
0.00e0
HpCDF Std.
38.02-40.75
419.8220 Fn4
Flags: PBM
4σ 2.57e3
ES 1234678F
3.45e7
38.79
CS 1234689F
3.68e7
39.22
ES 1234789F
3.21e7
40.14
1.45e7
7.26e6
0.00e0
NCDPE
38.02-40.75
479.7165 Fn4
Flags: PB
4σ 3.00e3
1.53e4
7.67e3
0.00e0
100%
0%
38.5
39.0
39.5
40.0
40.5
RT
Results: P:\B4500_B4599\B4528\B4528_17661 DF\Resources\B4528_17661_DF_005.utp_res, saved 13-Aug-2020 08:31 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 3090, 9223, 8482 scc: 292-335
PKD: 12-Aug-2020 16:45 Printed: 13-Aug-2020 08:43 Page 11 of 12

SGS ID: B4528_17661_DF_005 | Sample ID: CS-52 | Acq: 12-Aug-2020 15:44:02
Instr: [ILM] AutoSpec-Ultima MM3 | VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 58 | User: PSW Datafile: 200812R08



Results: P:\B4500_B4599\B4528\B4528_17661 DF\Resources\B4528_17661_DF_005.utp_res, saved 13-Aug-2020 08:31 (DTF) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 6401, 7997, 3001 scc: 292-335 *PKD: 12-Aug-2020 16:45 Printed: 13-Aug-2020 08:43 Page 12 of 12*

Lab ID: B4528_17661_DF_006 | Acq'd: 12 Aug 2020 16:30 PSW | Wt/Vol: 8.24 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: DUP-03 | UTP: 13-Aug-2020 08:31:27 DTF | J-level: 0.607 pg/g | Split: 1 | Checkcode: 975-622-TPY

Datafile: 200812R09 | Report: 13 Aug 2020 08:34 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	NotFnd		1.0008	-		-	-	-	1.18	-	4005	0.142
12378-PeCDD	NotFnd		1.0006	-		-	-	-	1.14	-	6044	0.204
123478-HxCDD	36.44	J EMPC	1.0004	1.0004	0	5.80E+04	1.05	N	1.09	0.255	6021	0.205
123678-HxCDD	36.56	J EMPC	1.0034	1.0035	+0.2	1.25E+05	1.01	N	1.13	0.553	6021	0.204
123789-HxCDD	36.85	J EMPC	1.0114	1.0115	+0.2	1.49E+05	1.54	N	1.05	0.591	6021	0.197
1234678-HpCDD	39.75		1.0004	1.0003	-0.2	4.95E+06	1.02	Y	0.98	23.9	6582	0.189
OCDD	42.14		1.0003	1.0003	0	1.92E+07	0.86	Y	1.08	164	6152	0.341
2378-TCDF	NotFnd		1.0008	-		-	-	-	0.98	-	4337	0.126
12378-PeCDF	NotFnd		1.0006	-		-	-	-	0.95	-	4688	0.128
23478-PeCDF	NotFnd		1.0005	-		-	-	-	0.95	-	4688	0.124
123478-HxCDF	NotFnd		1.0005	-		-	-	-	1.20	-	4760	0.126
123678-HxCDF	NotFnd		1.0004	-		-	-	-	1.07	-	4760	0.126
234678-HxCDF	NotFnd		1.0004	-		-	-	-	1.10	-	4760	0.129
123789-HxCDF	NotFnd		1.0004	-		-	-	-	1.09	-	4760	0.155
1234678-HpCDF	38.81		1.0003	1.0003	0	1.01E+06	0.94	Y	1.28	3.65	3189	0.075
1234789-HpCDF	40.15	J EMPC	1.0003	1.0000	-0.7	8.37E+04	1.26	N	1.27	0.319	3189	0.0716
OCDF	42.29		1.0003	1.0002	-0.3	1.70E+06	0.83	Y	1.01	11.8	3011	0.143

Name	Act RT		Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	26.83		1.0267	1.0268	+0.2	6.54E+07	0.77	Y	1.01	88.4
ES 12378-PeCDD	32.48		1.2424	1.2428	+0.8	5.76E+07	1.63	Y	0.87	90
ES 123478-HxCDD	36.43		0.9918	0.9918	0	5.06E+07	1.30	Y	1.10	72.7
ES 123678-HxCDD	36.54		0.9948	0.9948	0	4.86E+07	1.26	Y	1.06	72.2
ES 123789-HxCDD	36.83		1.0027	1.0027	0	5.83E+07	1.26	Y	1.22	75.3
ES 1234678-HpCDD	39.74		1.0818	1.0820	+0.5	5.11E+07	1.06	Y	0.99	81
ES OCDD	42.13		1.1468	1.1470	+0.5	5.31E+07	0.93	Y	0.67	62.5
ES 2378-TCDF	25.88		1.0606	1.0608	+0.3	1.02E+08	0.79	Y	1.01	85.6
ES 12378-PeCDF	30.96		1.2684	1.2691	+1.3	9.09E+07	1.61	Y	0.90	85.7
ES 23478-PeCDF	32.12		1.3156	1.3164	+1.5	8.98E+07	1.57	Y	0.89	85.7
ES 123478-HxCDF	35.45		0.9651	0.9651	0	6.42E+07	0.53	Y	1.43	70.6
ES 123678-HxCDF	35.59		0.9690	0.9689	-0.2	7.32E+07	0.52	Y	1.63	70.6
ES 234678-HxCDF	36.24		0.9867	0.9867	0	6.43E+07	0.52	Y	1.48	68.5
ES 123789-HxCDF	37.20		1.0127	1.0127	0	6.11E+07	0.52	Y	1.29	74.5
ES 1234678-HpCDF	38.80		1.0562	1.0563	+0.2	5.23E+07	0.45	Y	1.15	71.8
ES 1234789-HpCDF	40.15		1.0929	1.0931	+0.5	5.02E+07	0.44	Y	0.91	87.3
ES OCDF	42.29		1.1511	1.1513	+0.5	6.93E+07	0.88	Y	0.83	65.8

Lab ID: B4528_17661_DF_006 | Acq'd: 12 Aug 2020 16:30 PSW | Wt/Vol: 8.24 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: DUP-03 | UTP: 13-Aug-2020 08:31:27 DTF | J-level: 0.607 pg/g | Split: 1 | Checkcode: 975-622-TPY

Datafile: 200812R09 | Report: 13 Aug 2020 08:34 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
JS 1234-TCDD	26.13		-	-	-	7.36E+07	0.77	Y	-	-
JS 1234-TCDF	24.40		-	-	-	1.18E+08	0.78	Y	-	-
JS 123467-HxCDD	36.73		-	-	-	3.18E+07	1.27	Y	-	-
CS 37Cl-2378-TCDD	26.86		1.0276	1.0277	+0.2	2.84E+07	n/a	-	1.04	93.1
CS 12347-PeCDD	31.96		1.2228	1.2232	+0.8	5.25E+07	1.65	Y	0.74	96.5
CS 12346-PeCDF	30.42		1.2462	1.2468	+1.1	8.47E+07	1.58	Y	0.86	83.7
CS 123469-HxCDF	35.90		0.9774	0.9774	0	6.29E+07	0.52	Y	1.36	72.9
CS 1234689-HpCDF	39.22		1.0678	1.0679	+0.2	5.27E+07	0.45	Y	1.05	78.6
SS 37Cl-2378-TCDD	26.86		1.0276	1.0277	+0.2	2.84E+07	n/a		1.04	105
SS 12347-PeCDD	31.96		1.2228	1.2232	+0.8	5.25E+07	1.65	Y	0.86	107
SS 12346-PeCDF	30.42		1.2462	1.2468	+1.1	8.47E+07	1.58	Y	0.96	97.1
SS 123469-HxCDF	35.90		0.9774	0.9774	0	6.29E+07	0.52	Y	0.83	103
SS 1234689-HpCDF	39.22		1.0678	1.0679	+0.2	5.27E+07	0.45	Y	0.92	109

Totals	Conc	EMPC
Total TCDD	0.761	0.761
Total PeCDD	0.645	0.864
Total HxCDD	11.6	13.6
Total HpCDD	100	100
Total Tetra-Octa Dioxins	277	279
Total TCDF	0.415	1.52
Total PeCDF	0	0
Total HxCDF	1.82	2.99
Total HpCDF	10.3	10.8
Total Tetra-Octa Furans	24.4	27.1
Total Tetra-Octa Dioxins & Furans	301	306

Lab ID: B4528_17661_DF_006 **Acq'd:** 12 Aug 2020 16:30 PSW **Wt/Vol:** 8.24 g **ICAL:** MM3_DF_10012020_12JUN2020

Client ID: DUP-03 **UTP:** 13-Aug-2020 08:31:27 DTF **J-level:** 0.607 pg/g **Split:** 1 **Checkcode:** 975-622-TPY

Datafile: 200812R09 **Report:** 13 Aug 2020 08:34 TF **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1368-TCDD	22.82		0.8513	0.8506	-1.0	2.42E+05	0.76	Y	1.18	0.761	4005	0.142
1379-TCDD	NotFnd		0.8664						1.18		4005	0.142
1369-TCDD	NotFnd		0.8845						1.18		4005	0.142
1469-TCDD	NotFnd		0.9165						1.18		4005	0.142
1247/1246/1248/1249-TCDD	NotFnd		0.9266						1.18		4005	0.142
1378-TCDD	NotFnd		0.9342						1.18		4005	0.142
1268-TCDD	NotFnd		0.9423						1.18		4005	0.142
1478-TCDD	NotFnd		0.9524						1.18		4005	0.142
1279-TCDD	NotFnd		0.9592						1.18		4005	0.142
1234/1269-TCDD	NotFnd		0.9734						1.18		4005	0.142
1236-TCDD	NotFnd		0.9791						1.18		4005	0.142
1237/1238-TCDD	NotFnd		0.9894						1.18		4005	0.142
1239-TCDD	NotFnd		0.9946						1.18		4005	0.142
2378-TCDD	**NotFnd**		**1.0008**						**1.18**		**4005**	**0.142**
1278-TCDD	NotFnd		1.0140						1.18		4005	0.142
1267-TCDD	NotFnd		1.0194						1.18		4005	0.142
1289-TCDD	NotFnd		1.0396						1.18		4005	0.142
12479/12468-PeCDD	29.91	J	0.9210	0.9209	-0.2	1.74E+05	1.39	Y	1.14	0.645	6044	0.204
12469-PeCDD	NotFnd		0.9381						1.14		6044	0.204
12368-PeCDD	31.02	J EMPC	0.9558	0.9552	-1.1	5.89E+04	1.85	N	1.14	0.218	6044	0.204
12478-PeCDD	NotFnd		0.9618						1.14		6044	0.204
12379-PeCDD	NotFnd		0.9649						1.14		6044	0.204
12369/12467/12489-PeCDD	NotFnd		0.9732						1.14		6044	0.204
12346/12347-PeCDD	NotFnd		0.9850						1.14		6044	0.204
12378-PeCDD	NotFnd		**1.0006**						**1.14**		**6044**	**0.204**
12367-PeCDD	NotFnd		1.0035						1.14		6044	0.204
12389-PeCDD	NotFnd		1.0144						1.14		6044	0.204
124679/124689-HxCDD	34.74		0.9535	0.9535	0	1.16E+06	1.18	Y	1.09	4.91	6021	0.201
123468-HxCDD	35.40	J	0.9716	0.9717	+0.2	4.04E+05	1.30	Y	1.09	1.71	6021	0.201
123679/123689-HxCDD	35.69	J	0.9796	0.9796	0	7.12E+05	1.16	Y	1.09	3.02	6021	0.201
123469-HxCDD	35.82	J	0.9832	0.9832	0	4.61E+05	1.32	Y	1.09	1.96	6021	0.201
123478-HxCDD	36.44	J EMPC	**1.0004**	**1.0004**	**0**	**5.80E+04**	**1.05**	**N**	1.09	**0.255**	**6021**	**0.205**
123678-HxCDD	36.56	J EMPC	**1.0034**	**1.0035**	**+0.2**	**1.25E+05**	**1.01**	**N**	1.13	**0.553**	**6021**	**0.204**
123467-HxCDD	36.75	J EMPC	1.0087	1.0087	0	1.45E+05	1.58	N	1.09	0.617	6021	0.201
123789-HxCDD	36.85	J EMPC	**1.0114**	**1.0115**	**+0.2**	**1.49E+05**	**1.54**	**N**	1.05	**0.591**	**6021**	**0.197**

Lab ID: B4528_17661_DF_006 | Acq'd: 12 Aug 2020 16:30 PSW | Wt/Vol: 8.24 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: DUP-03 | UTP: 13-Aug-2020 08:31:27 DTF | J-level: 0.607 pg/g | Split: 1 | Checkcode: 975-622-TPY

Datafile: 200812R09 | Report: 13 Aug 2020 08:34 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1234679-HpCDD	39.09		0.9837	0.9836	-0.2	1.58E+07	1.04	Y	0.98	76.4	6582	0.189
1234678-HpCDD	**39.75**		**1.0004**	**1.0003**	**-0.2**	**4.95E+06**	**1.02**	**Y**	**0.98**	**23.9**	**6582**	**0.189**
OCDD	**42.14**		**1.0003**	**1.0003**	**0**	**1.92E+07**	**0.86**	**Y**	**1.08**	**164**	**6152**	**0.341**
OCDD-a	42.13		1.0002	1.0001	-0.3	1.18E+06	2.18	Y	0.07	163	6109	5.51
1368-TCDF	20.60	J	0.7965	0.7959	-0.7	1.71E+05	0.66	Y	0.98	0.415	4337	0.126
1468-TCDF	NotFnd		0.8181						0.98		4337	0.126
2468-TCDF	21.79	J EMPC	0.8428	0.8419	-1.2	2.43E+05	0.49	N	0.98	0.588	4337	0.126
1346/1246-TCDF	NotFnd		0.8580						0.98		4337	0.126
1347/1378/1247-TCDF	NotFnd		0.8643						0.98		4337	0.126
1348-TCDF	NotFnd		0.8764						0.98		4337	0.126
1248/1367/1379-TCDF	NotFnd		0.8821						0.98		4337	0.126
1268-TCDF	NotFnd		0.8987						0.98		4337	0.126
1467-TCDF	NotFnd		0.9045						0.98		4337	0.126
1478-TCDF	NotFnd		0.9120						0.98		4337	0.126
1369/1237-TCDF	NotFnd		0.9279						0.98		4337	0.126
2467-TCDF	NotFnd		0.9335						0.98		4337	0.126
2368-TCDF	NotFnd		0.9400						0.98		4337	0.126
1238/1234/1678/1469/1236-TCDF	NotFnd		0.9442						0.98		4337	0.126
1278-TCDF	NotFnd		0.9632						0.98		4337	0.126
1349-TCDF	NotFnd		0.9681						0.98		4337	0.126
1267-TCDF	NotFnd		0.9747						0.98		4337	0.126
2346/1249-TCDF	NotFnd		0.9826						0.98		4337	0.126
2347/1279-TCDF	NotFnd		0.9917						0.98		4337	0.126
2348-TCDF	NotFnd		0.9963						0.98		4337	0.126
2378-TCDF	**NotFnd**		**1.0008**						**0.98**		**4337**	**0.126**
2367/3467-TCDF	NotFnd		1.0163						0.98		4337	0.126
1269-TCDF	NotFnd		1.0260						0.98		4337	0.126
1239-TCDF	NotFnd		1.0373						0.98		4337	0.126
1289-TCDF	28.05	J EMPC	1.0836	1.0839	+0.5	2.12E+05	1.58	N	0.98	0.513	4337	0.126
13468/12468-PeCDF	NotFnd		0.9056						0.95		3759	0.101
13678/13467/12467-PeCDF	NotFnd		0.9580						0.95		4688	0.126
12368/13478/12478-PeCDF	NotFnd		0.9632						0.95		4688	0.126
14678-PeCDF	NotFnd		0.9666						0.95		4688	0.126
13479-PeCDF	NotFnd		0.9698						0.95		4688	0.126
13469/12479-PeCDF	NotFnd		0.9782						0.95		4688	0.126
12346-PeCDF	NotFnd		0.9828						0.95		4688	0.126

Lab ID: B4528_17661_DF_006 | Acq'd: 12 Aug 2020 16:30 PSW | Wt/Vol: 8.24 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: DUP-03 | UTP: 13-Aug-2020 08:31:27 DTF | J-level: 0.607 pg/g | Split: 1 | Checkcode: 975-622-TPY

Datafile: 200812R09 | Report: 13 Aug 2020 08:34 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

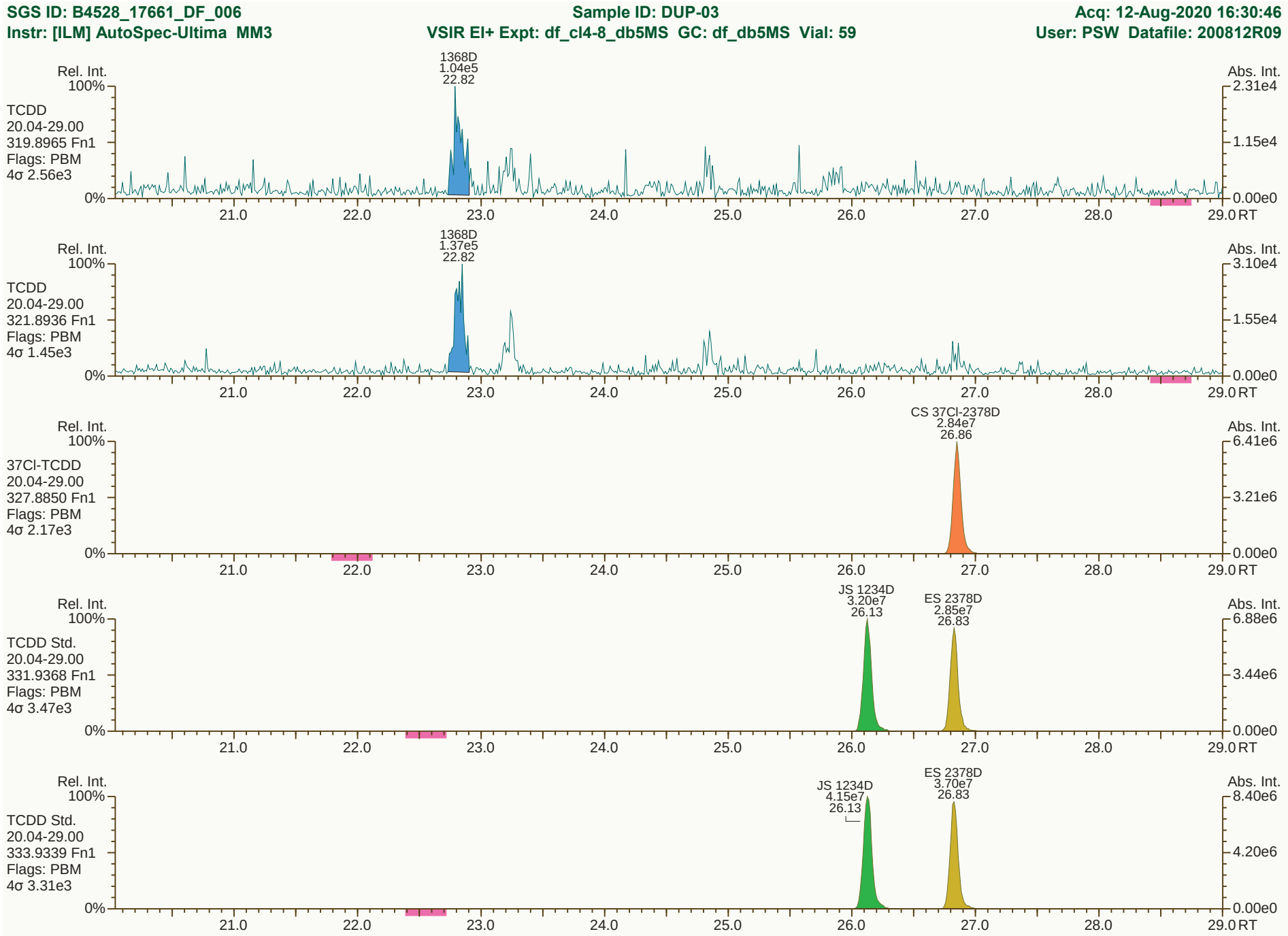
Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
23468/12469-PeCDF	NotFnd		0.9858						0.95		4688	0.126
12347-PeCDF	NotFnd		0.9884						0.95		4688	0.126
12348-PeCDF	NotFnd		0.9937						0.95		4688	0.126
12378-PeCDF	**NotFnd**		**1.0006**						**0.95**		**4688**	**0.128**
12678/12367-PeCDF	NotFnd		1.0098						0.95		4688	0.126
12379-PeCDF	NotFnd		1.0154						0.95		4688	0.126
12679-PeCDF	NotFnd		0.9923						0.95		4688	0.126
23467/12369-PeCDF	NotFnd		0.9964						0.95		4688	0.126
23478-PeCDF	**NotFnd**		**1.0005**						**0.95**		**4688**	**0.124**
23478/12489-PeCDF	NotFnd		0.0000						0.95			
12489-PeCDF	NotFnd		1.0050						0.95		4688	0.126
12349-PeCDF	NotFnd		1.0109						0.95		4688	0.126
12389-PeCDF	NotFnd		1.0345						0.95		4688	0.126
123468-HxCDF	34.07	J	0.9610	0.9611	+0.2	1.18E+05	1.15	Y	1.11	0.39	4760	0.133
124678/134678-HxCDF	34.27	J	0.9667	0.9667	0	4.32E+05	1.16	Y	1.11	1.43	4760	0.133
134679-HxCDF	NotFnd		0.9732						1.11		4760	0.133
124679-HxCDF	NotFnd		0.9788						1.11		4760	0.133
124689-HxCDF	34.92	J EMPC	0.9851	0.9852	+0.2	3.52E+05	1.61	N	1.11	1.17	4760	0.133
123467-HxCDF	NotFnd		0.9971						1.11		4760	0.133
123478-HxCDF	**NotFnd**		**1.0005**						**1.20**		**4760**	**0.126**
123678-HxCDF	**NotFnd**		**1.0004**						**1.07**		**4760**	**0.126**
123479-HxCDF	NotFnd		1.0050						1.11		4760	0.133
123469-HxCDF	NotFnd		1.0091						1.11		4760	0.133
123679-HxCDF	NotFnd		0.9943						1.11		4760	0.133
234678-HxCDF	**NotFnd**		**1.0004**						**1.10**		**4760**	**0.129**
234678/123689-HxCDF	NotFnd		0.0000						1.10			
123689-HxCDF	NotFnd		1.0054						1.11		4760	0.133
123789-HxCDF	**NotFnd**		**1.0004**						**1.09**		**4760**	**0.155**
123789/123489-HxCDF	NotFnd		0.0000						1.09			
123489-HxCDF	NotFnd		1.0008						1.11		4760	0.133
1234678-HpCDF	**38.81**		**1.0003**	**1.0003**	**0**	**1.01E+06**	**0.94**	**Y**	**1.28**	**3.65**	**3189**	**0.075**
1234679-HpCDF	39.09	**J EMPC**	1.0075	1.0076	+0.2	4.52E+04	2.06	N	1.27	0.168	3189	0.0734
1234689-HpCDF	39.23		1.0111	1.0112	+0.2	1.79E+06	1.03	Y	1.27	6.66	3189	0.0734
1234789-HpCDF	**40.15**	**J EMPC**	**1.0003**	**1.0000**	**-0.7**	**8.37E+04**	**1.26**	**N**	**1.27**	**0.319**	**3189**	**0.0716**
OCDF	**42.29**		**1.0003**	**1.0002**	**-0.3**	**1.70E+06**	**0.83**	**Y**	**1.01**	**11.8**	**3011**	**0.143**
OCDF-a	NotFnd		1.0002						0.06		4540	3.43

SGS ID: B4528_17661_DF_006 **Sample ID: DUP-03** **Acq: 12-Aug-2020 16:30:46**
Instr: [ILM] AutoSpec-Ultima MM3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 59** **User: PSW Datafile: 200812R09**

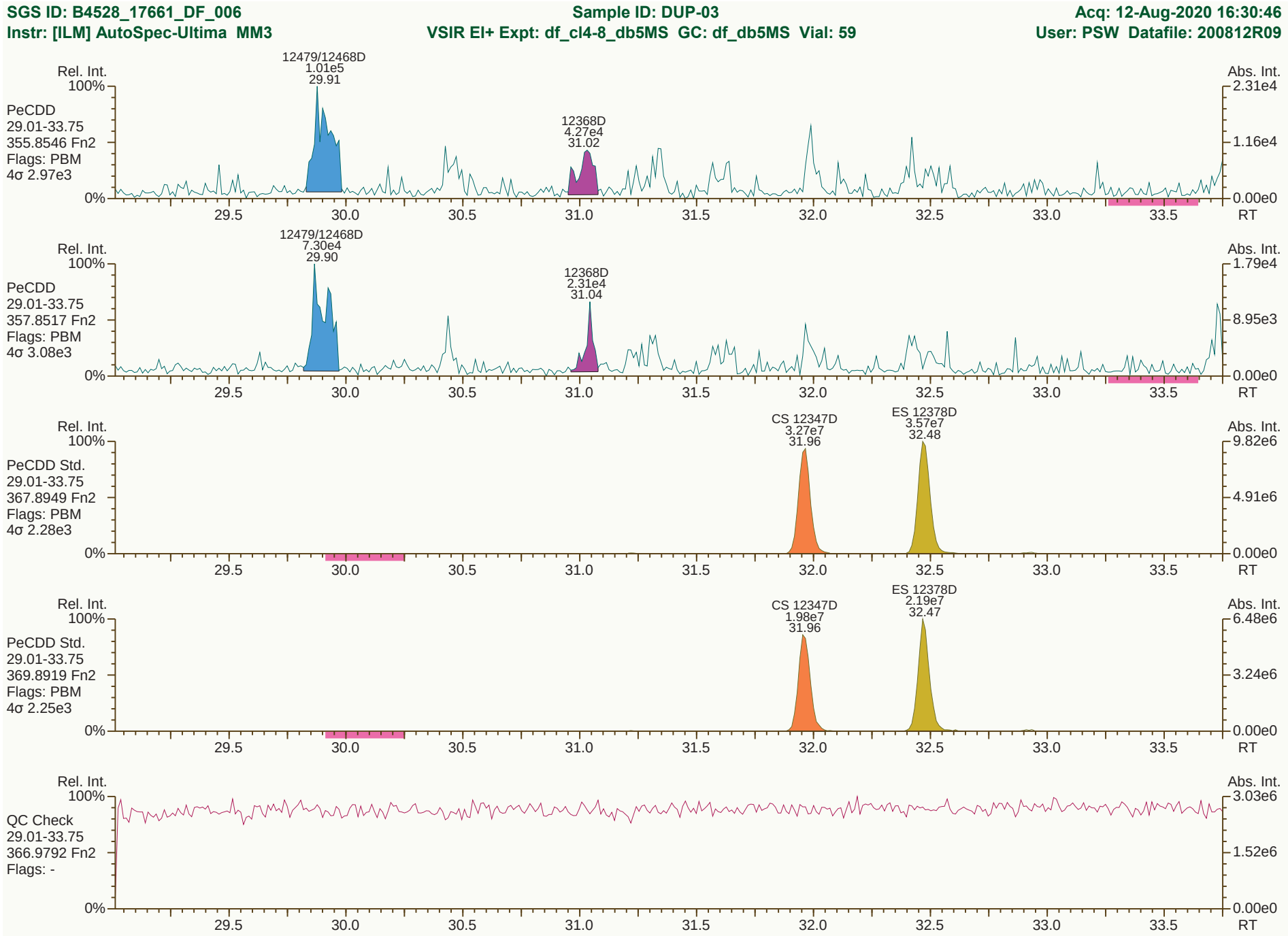


Results: P:\B4500_B4599\B4528\B4528_17661 DF\Resources\B4528_17661_DF_006.utp_res, saved 13-Aug-2020 08:31 (DTF) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 scc: 975-622 *PKD: n/a Printed: 13-Aug-2020 08:43 Page 1 of 12*

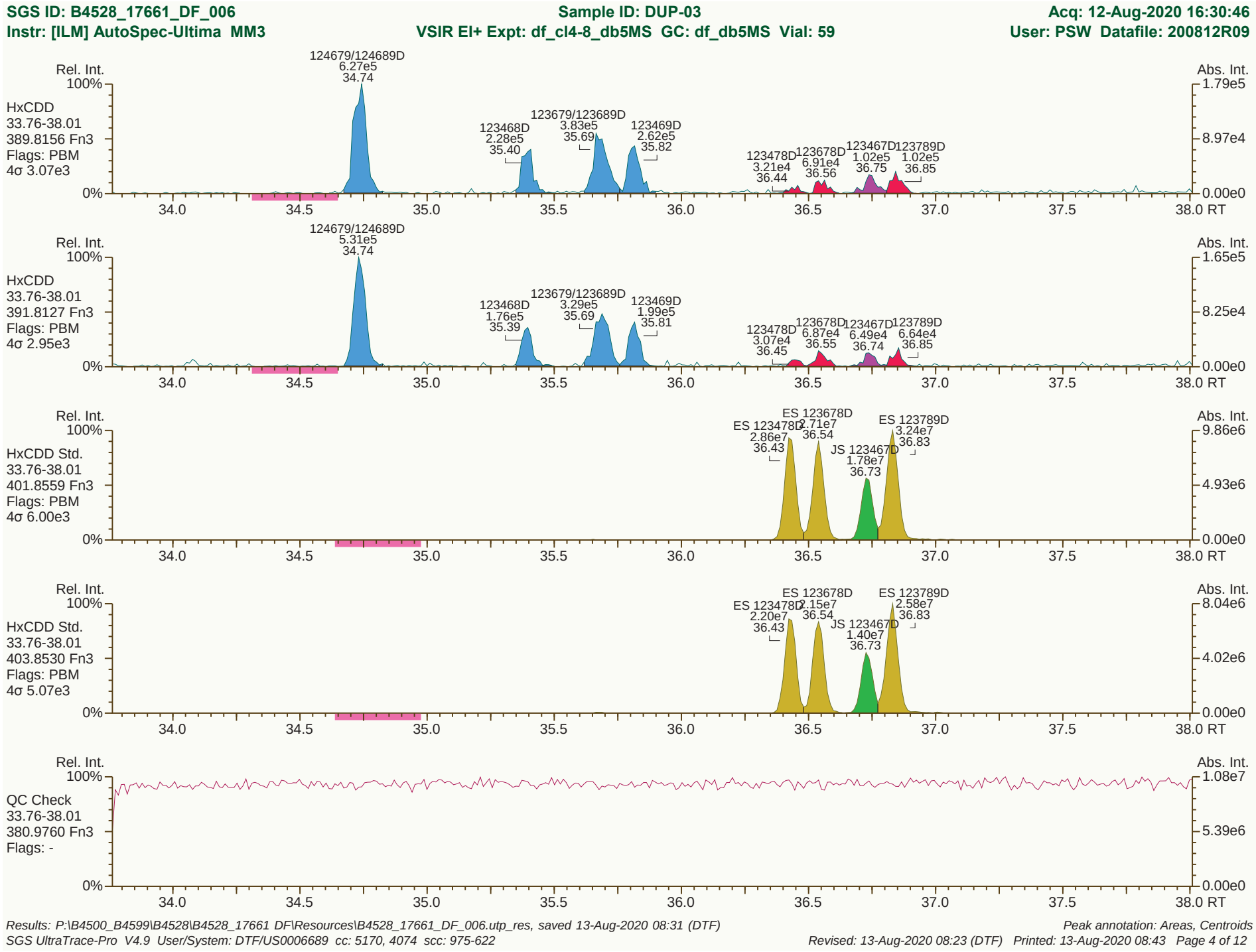
SGS ID: B4528_17661_DF_006 | Sample ID: DUP-03 | Acq: 12-Aug-2020 16:30:46
Instr: [ILM] AutoSpec-Ultima MM3 | VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 59 | User: PSW Datafile: 200812R09



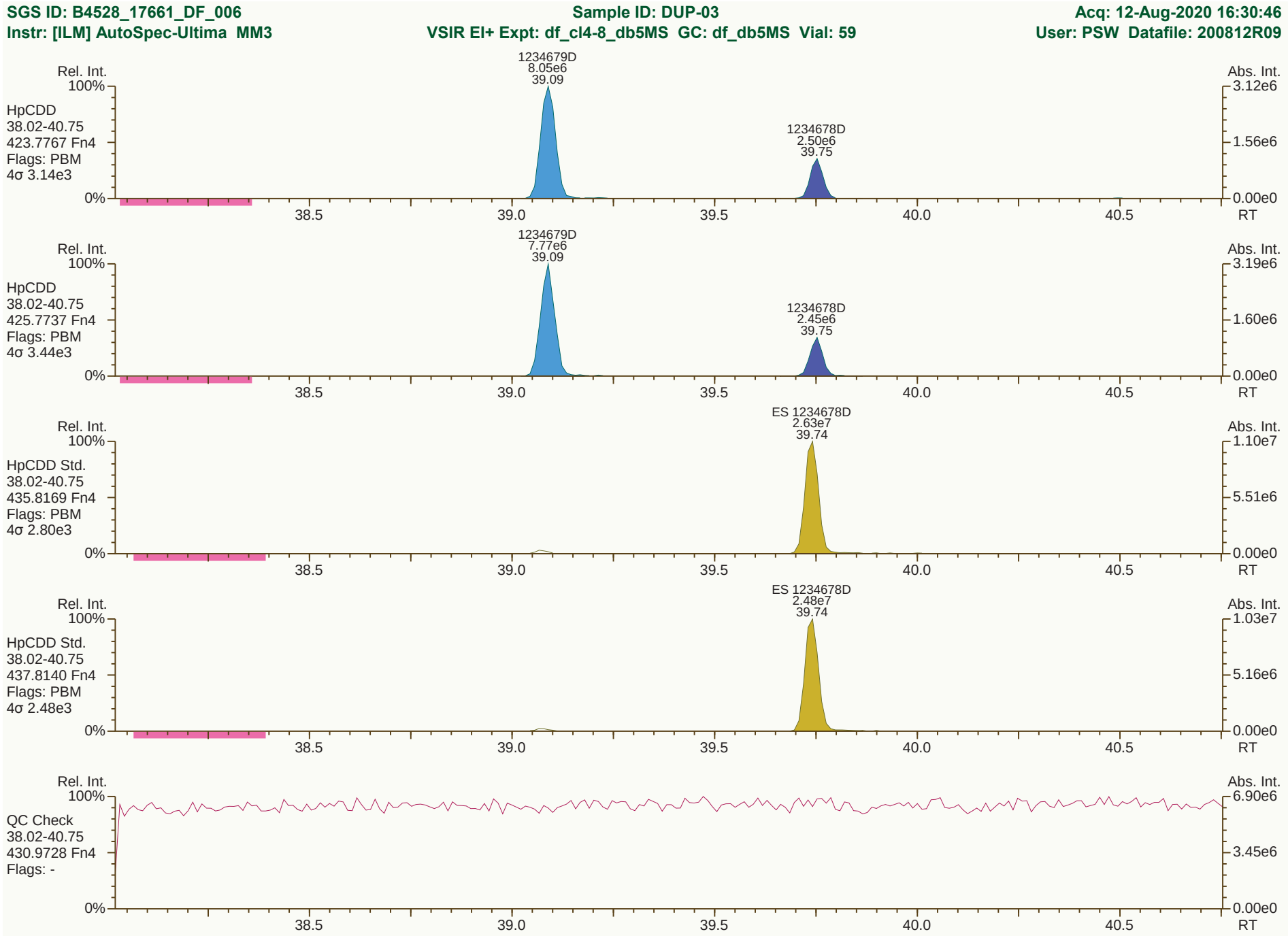
Results: P:\B4500_B4599\B4528\B4528_17661 DF\Resources\B4528_17661_DF_006.utp_res, saved 13-Aug-2020 08:31 (DTF) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 6733, 3587, 4386 scc: 975-622 *PKD: 13-Aug-2020 08:24 Printed: 13-Aug-2020 08:43 Page 2 of 12*


SGS ID: B4528_17661_DF_006
Sample ID: DUP-03
Acq: 12-Aug-2020 16:30:46
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 59
User: PSW Datafile: 200812R09
Rel. Int.
Abs. Int.
PeCDD
29.01-33.75
355.8546 Fn2
Flags: PBM
4σ 2.97e3
12479/12468D
1.01e5
29.91
12368D
4.27e4
31.02
2.31e4
1.16e4
0.00e0
PeCDD
29.01-33.75
357.8517 Fn2
Flags: PBM
4σ 3.08e3
12479/12468D
7.30e4
29.90
12368D
2.31e4
31.04
1.79e4
8.95e3
0.00e0
PeCDD Std.
29.01-33.75
367.8949 Fn2
Flags: PBM
4σ 2.28e3
CS 12347D
3.27e7
31.96
ES 12378D
3.57e7
32.48
9.82e6
4.91e6
0.00e0
PeCDD Std.
29.01-33.75
369.8919 Fn2
Flags: PBM
4σ 2.25e3
CS 12347D
1.98e7
31.96
ES 12378D
2.19e7
32.47
6.48e6
3.24e6
0.00e0
QC Check
29.01-33.75
366.9792 Fn2
Flags: -
3.03e6
1.52e6
0.00e0
100%
0%
29.5
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
RT
Results: P:\B4500_B4599\B4528\B4528_17661 DF\Resources\B4528_17661_DF_006.utp_res, saved 13-Aug-2020 08:31 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 7509, 2256 scc: 975-622
PKD: 13-Aug-2020 08:24 Printed: 13-Aug-2020 08:43 Page 3 of 12

SGS ID: B4528_17661_DF_006 Sample ID: DUP-03 Acq: 12-Aug-2020 16:30:46
Instr: [ILM] AutoSpec-Ultima MM3 VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 59 User: PSW Datafile: 200812R09



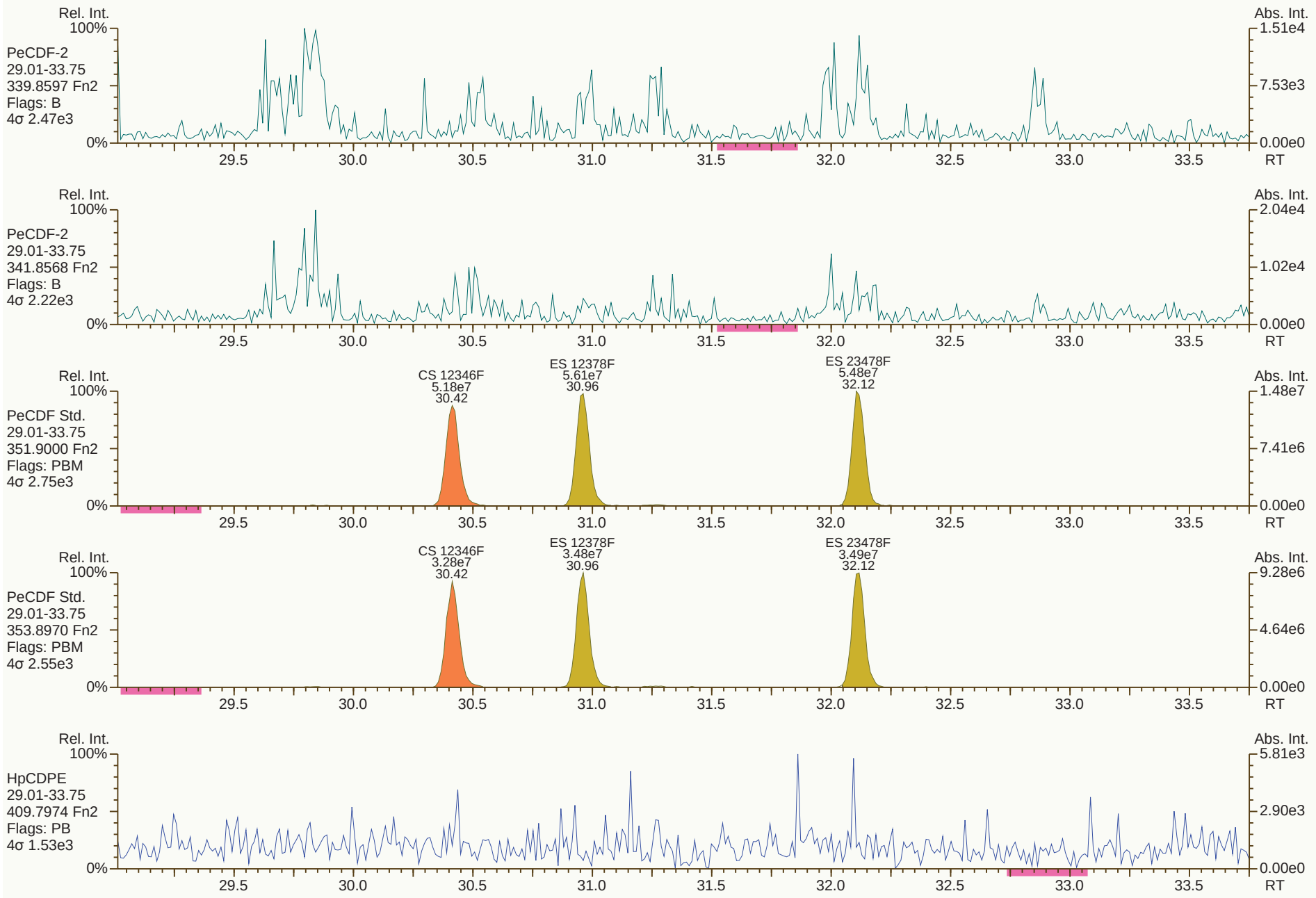
SGS ID: B4528_17661_DF_006 Sample ID: DUP-03 Acq: 12-Aug-2020 16:30:46
Instr: [ILM] AutoSpec-Ultima MM3 VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 59 User: PSW Datafile: 200812R09

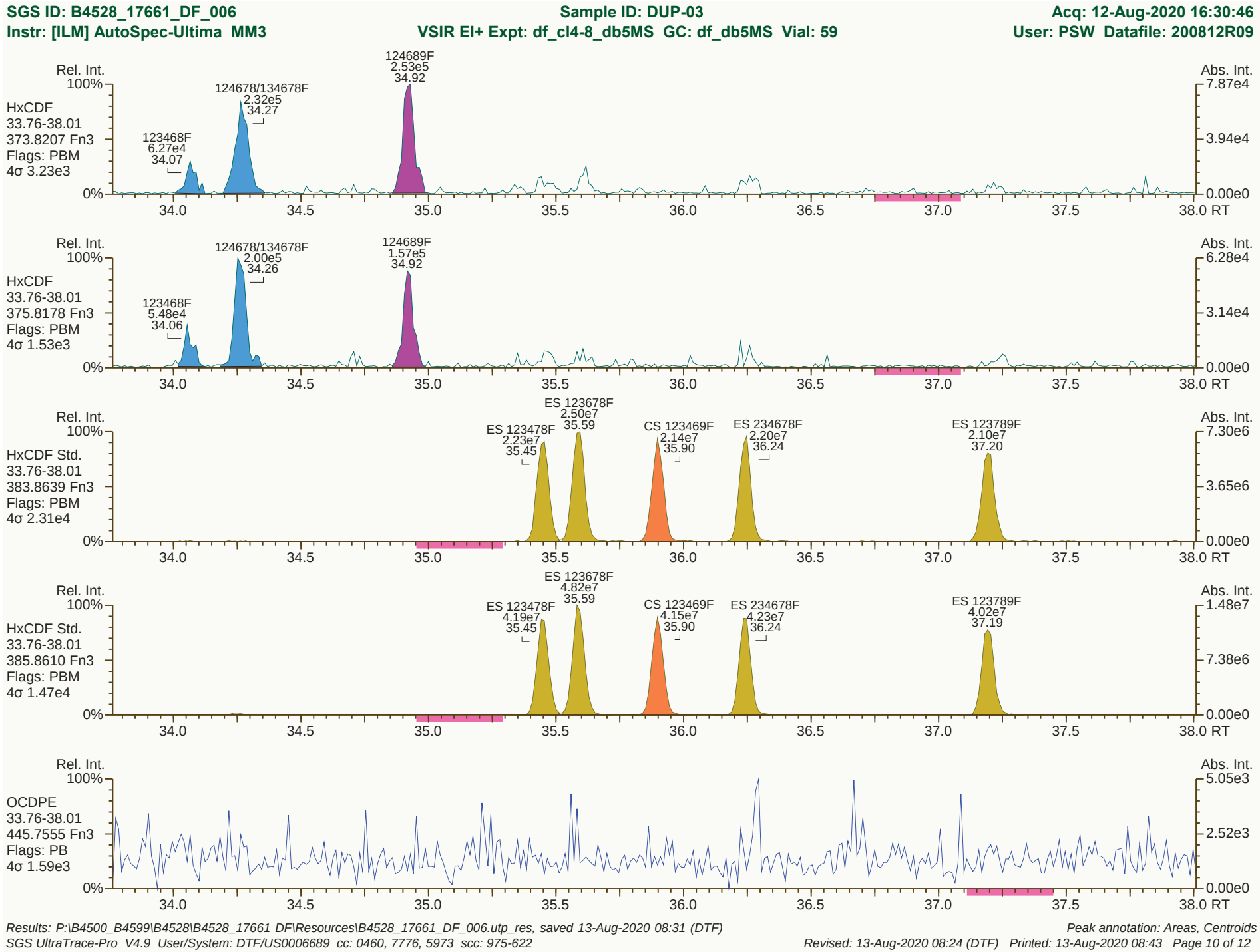



OCDD
8.89e6
42.14
Rel. Int.
100%
OCDD
40.77-45.01
457.7377 Fn5
Flags: PBM
4σ 2.82e3
0%
Abs. Int.
3.52e6
1.76e6
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDD
1.04e7
42.14
Rel. Int.
100%
OCDD
40.77-45.01
459.7348 Fn5
Flags: PBM
4σ 3.34e3
0%
Abs. Int.
4.02e6
2.01e6
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
2.57e7
42.13
Rel. Int.
100%
OCDD Std.
40.77-45.01
469.7780 Fn5
Flags: PBM
4σ 2.70e3
0%
Abs. Int.
9.83e6
4.91e6
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
2.75e7
42.13
Rel. Int.
100%
OCDD Std.
40.77-45.01
471.7750 Fn5
Flags: PBM
4σ 3.56e3
0%
Abs. Int.
1.06e7
5.32e6
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
QC Check
40.77-45.01
454.9728 Fn5
Flags: -
0%
Abs. Int.
6.33e6
3.17e6
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

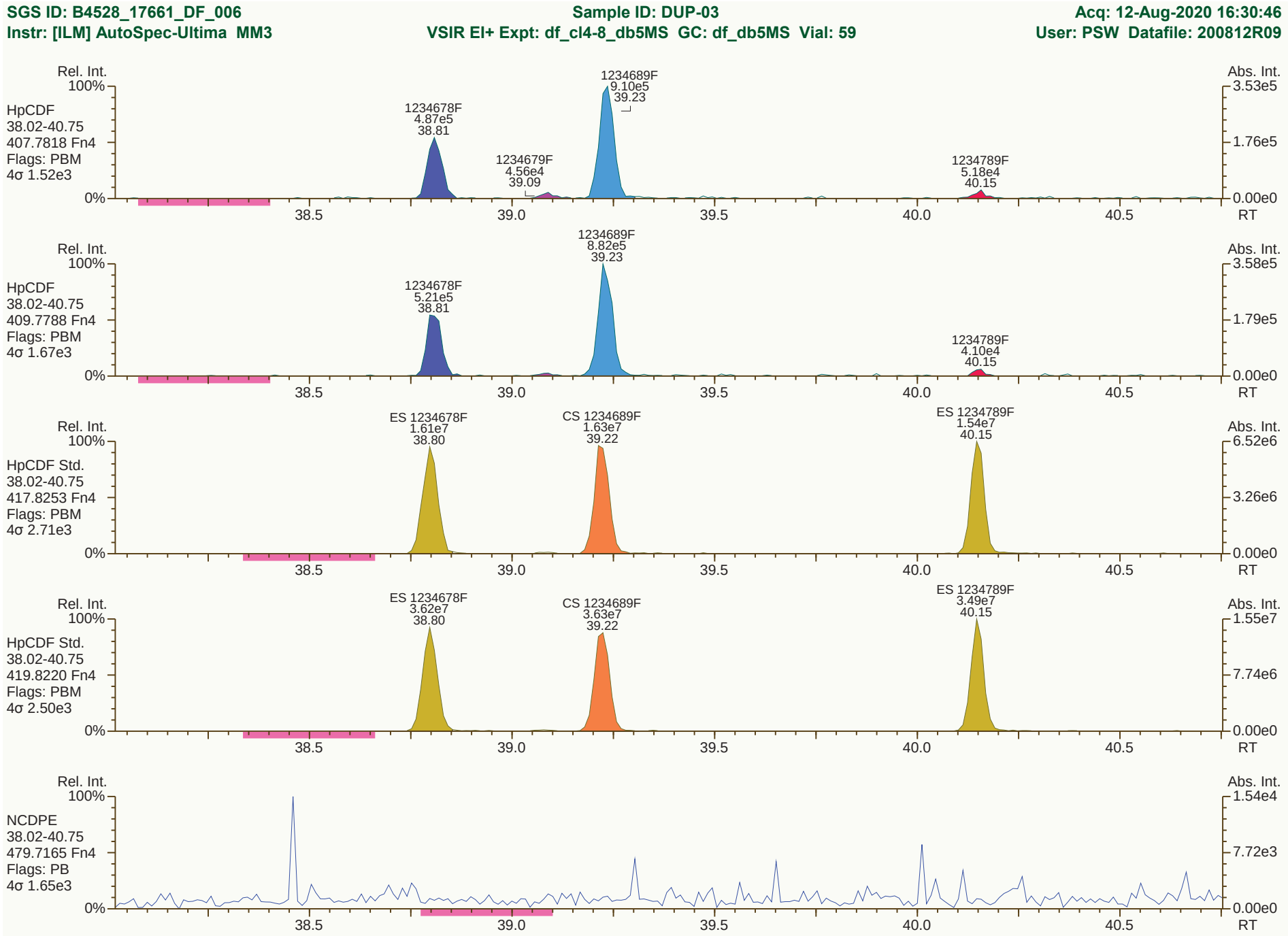

SGS ID: B4528_17661_DF_006
Sample ID: DUP-03
Acq: 12-Aug-2020 16:30:46
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 59
User: PSW Datafile: 200812R09
Rel. Int.
Abs. Int.
TCDF
20.04-29.00
303.9016 Fn1
Flags: PBM
4σ 2.11e3
1368F
6.81e4
20.60
2468F
1.06e5
21.79
1289F
1.89e5
28.05
5.02e4
2.51e4
0.00e0
TCDF
20.04-29.00
305.8987 Fn1
Flags: PBM
4σ 2.23e3
1368F
1.03e5
20.60
2468F
2.15e5
21.79
1289F
1.20e5
28.05
4.37e4
2.18e4
0.00e0
TCDF Std.
20.04-29.00
315.9419 Fn1
Flags: PBM
4σ 1.26e4
JS 1234F
5.17e7
24.40
ES 2378F
4.52e7
25.88
9.73e6
4.86e6
0.00e0
TCDF Std.
20.04-29.00
317.9389 Fn1
Flags: PBM
4σ 8.23e3
JS 1234F
6.60e7
24.40
ES 2378F
5.70e7
25.88
1.20e7
6.01e6
0.00e0
HxCDPE
20.04-29.00
375.8364 Fn1
Flags: PB
4σ 1.71e3
7.25e3
3.63e3
0.00e0
100%
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT
Results: P:\B4500_B4599\B4528\B4528_17661 DF\Resources\B4528_17661_DF_006.utp_res, saved 13-Aug-2020 08:31 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 7399, 7086, 5084 scc: 975-622
Revised: 13-Aug-2020 08:23 (DTF) Printed: 13-Aug-2020 08:43 Page 7 of 12


Rel. Int.
100%
0%
Abs. Int.
2.37e4
1.19e4
0.00e0
PeCDF-1
20.04-29.00
339.8597 Fn1
Flags: PB
4σ 2.02e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT
Rel. Int.
100%
0%
Abs. Int.
1.45e4
7.26e3
0.00e0
PeCDF-1
20.04-29.00
341.8568 Fn1
Flags: PB
4σ 1.74e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT
Rel. Int.
100%
0%
Abs. Int.
3.78e6
1.89e6
0.00e0
QC Check
20.04-29.00
316.9824 Fn1
Flags: -
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT

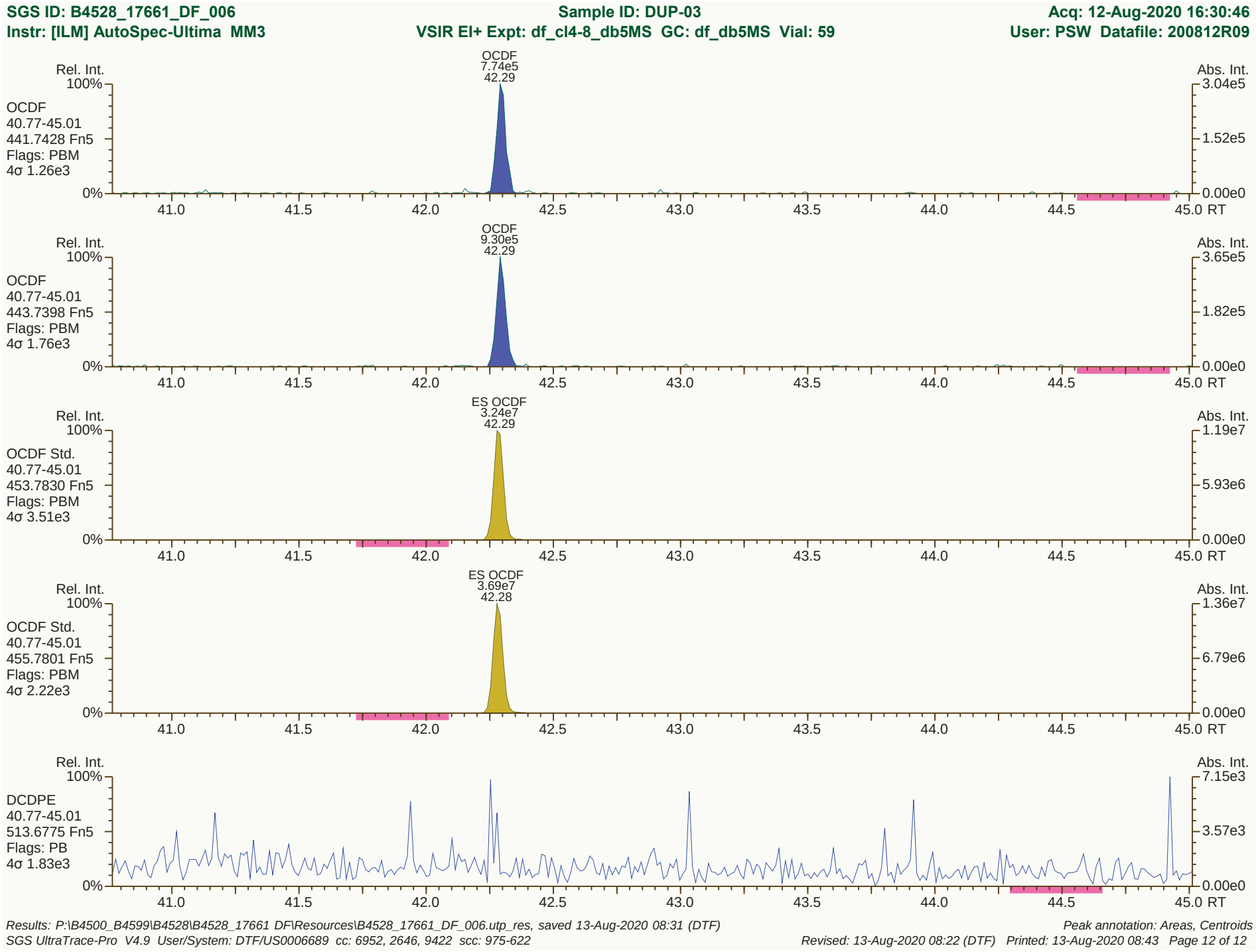

Rel. Int.
100%
PeCDF-2
29.01-33.75
339.8597 Fn2
Flags: B
4σ 2.47e3
0%
Abs. Int.
1.51e4
7.53e3
0.00e0
29.5 30.0 30.5 31.0 31.5 32.0 32.5 33.0 33.5
RT
Rel. Int.
100%
PeCDF-2
29.01-33.75
341.8568 Fn2
Flags: B
4σ 2.22e3
0%
Abs. Int.
2.04e4
1.02e4
0.00e0
29.5 30.0 30.5 31.0 31.5 32.0 32.5 33.0 33.5
RT
Rel. Int.
100%
PeCDF Std.
29.01-33.75
351.9000 Fn2
Flags: PBM
4σ 2.75e3
0%
CS 12346F
5.18e7
30.42
ES 12378F
5.61e7
30.96
ES 23478F
5.48e7
32.12
Abs. Int.
1.48e7
7.41e6
0.00e0
29.5 30.0 30.5 31.0 31.5 32.0 32.5 33.0 33.5
RT
Rel. Int.
100%
PeCDF Std.
29.01-33.75
353.8970 Fn2
Flags: PBM
4σ 2.55e3
0%
CS 12346F
3.28e7
30.42
ES 12378F
3.48e7
30.96
ES 23478F
3.49e7
32.12
Abs. Int.
9.28e6
4.64e6
0.00e0
29.5 30.0 30.5 31.0 31.5 32.0 32.5 33.0 33.5
RT
Rel. Int.
100%
HpCDPE
29.01-33.75
409.7974 Fn2
Flags: PB
4σ 1.53e3
0%
Abs. Int.
5.81e3
2.90e3
0.00e0
29.5 30.0 30.5 31.0 31.5 32.0 32.5 33.0 33.5
RT


SGS ID: B4528_17661_DF_006
Sample ID: DUP-03
Acq: 12-Aug-2020 16:30:46
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 59
User: PSW Datafile: 200812R09
Rel. Int.
Abs. Int.
HxCDF
33.76-38.01
373.8207 Fn3
Flags: PBM
4σ 3.23e3
123468F
6.27e4
34.07
124678/134678F
2.32e5
34.27
124689F
2.53e5
34.92
7.87e4
3.94e4
0.00e0
HxCDF
33.76-38.01
375.8178 Fn3
Flags: PBM
4σ 1.53e3
123468F
5.48e4
34.06
124678/134678F
2.00e5
34.26
124689F
1.57e5
34.92
6.28e4
3.14e4
0.00e0
HxCDF Std.
33.76-38.01
383.8639 Fn3
Flags: PBM
4σ 2.31e4
ES 123478F
2.23e7
35.45
ES 123678F
2.50e7
35.59
CS 123469F
2.14e7
35.90
ES 234678F
2.20e7
36.24
ES 123789F
2.10e7
37.20
7.30e6
3.65e6
0.00e0
HxCDF Std.
33.76-38.01
385.8610 Fn3
Flags: PBM
4σ 1.47e4
ES 123478F
4.19e7
35.45
ES 123678F
4.82e7
35.59
CS 123469F
4.15e7
35.90
ES 234678F
4.23e7
36.24
ES 123789F
4.02e7
37.19
1.48e7
7.38e6
0.00e0
OCDPE
33.76-38.01
445.7555 Fn3
Flags: PB
4σ 1.59e3
5.05e3
2.52e3
0.00e0
100%
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0 RT
Results: P:\B4500_B4599\B4528\B4528_17661 DF\Resources\B4528_17661_DF_006.utp_res, saved 13-Aug-2020 08:31 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 0460, 7776, 5973 scc: 975-622
Revised: 13-Aug-2020 08:24 (DTF) Printed: 13-Aug-2020 08:43 Page 10 of 12

SGS ID: B4528_17661_DF_006 | Sample ID: DUP-03 | Acq: 12-Aug-2020 16:30:46
Instr: [ILM] AutoSpec-Ultima MM3 | VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 59 | User: PSW Datafile: 200812R09



Results: P:\B4500_B4599\B4528\B4528_17661 DF\Resources\B4528_17661_DF_006.utp_res, saved 13-Aug-2020 08:31 (DTF) | Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 9081, 7196, 4271 scc: 975-622 | Revised: 13-Aug-2020 08:24 (DTF) Printed: 13-Aug-2020 08:43 Page 11 of 12


SGS ID: B4528_17661_DF_006
Sample ID: DUP-03
Acq: 12-Aug-2020 16:30:46
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 59
User: PSW Datafile: 200812R09
OCDF
7.74e5
42.29
Rel. Int.
Abs. Int.
OCDF
40.77-45.01
441.7428 Fn5
Flags: PBM
4σ 1.26e3
OCDF
9.30e5
42.29
OCDF
40.77-45.01
443.7398 Fn5
Flags: PBM
4σ 1.76e3
ES OCDF
3.24e7
42.29
OCDF Std.
40.77-45.01
453.7830 Fn5
Flags: PBM
4σ 3.51e3
ES OCDF
3.69e7
42.28
OCDF Std.
40.77-45.01
455.7801 Fn5
Flags: PBM
4σ 2.22e3
DCDPE
40.77-45.01
513.6775 Fn5
Flags: PB
4σ 1.83e3
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Results: P:\B4500_B4599\B4528\B4528_17661 DF\Resources\B4528_17661_DF_006.utp_res, saved 13-Aug-2020 08:31 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 6952, 2646, 9422 scc: 975-622
Revised: 13-Aug-2020 08:22 (DTF) Printed: 13-Aug-2020 08:43 Page 12 of 12

Lab ID: B4528_17661_DF_007 | Acq'd: 12 Aug 2020 17:18 PSW | Wt/Vol: 8.42 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-49 | UTP: 13-Aug-2020 08:31:28 DTF | J-level: 0.594 pg/g | Split: 1 | Checkcode: 033-721-QCN

Datafile: 200812R10 | Report: 13 Aug 2020 08:34 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	NotFnd		1.0008	-		-	-	-	1.18	-	3840	0.146
12378-PeCDD	NotFnd		1.0006	-		-	-	-	1.14	-	5660	0.193
123478-HxCDD	36.43	J EMPC	1.0004	1.0004	0	5.76E+04	1.91	N	1.09	0.259	4448	0.156
123678-HxCDD	36.54	J EMPC	1.0034	1.0033	-0.2	7.76E+04	1.48	N	1.13	0.344	4448	0.15
123789-HxCDD	36.83	J	1.0114	1.0114	0	1.25E+05	1.25	Y	1.05	0.509	4448	0.156
1234678-HpCDD	39.74		1.0004	1.0003	-0.2	2.53E+06	1.14	Y	0.98	12.7	3813	0.108
OCDD	42.13		1.0003	1.0002	-0.3	1.74E+07	0.89	Y	1.08	150	7227	0.392
2378-TCDF	NotFnd		1.0008	-		-	-	-	0.98	-	6309	0.182
12378-PeCDF	NotFnd		1.0006	-		-	-	-	0.95	-	4939	0.132
23478-PeCDF	NotFnd		1.0005	-		-	-	-	0.95	-	4939	0.137
123478-HxCDF	35.45	J EMPC	1.0005	1.0003	-0.4	1.09E+05	1.45	N	1.20	0.364	3421	0.0919
123678-HxCDF	35.59	J EMPC	1.0004	1.0003	-0.2	6.37E+04	0.98	N	1.07	0.201	3421	0.0858
234678-HxCDF	36.25	J	1.0004	1.0005	+0.2	7.88E+04	1.27	Y	1.10	0.267	3421	0.0883
123789-HxCDF	NotFnd		1.0004	-		-	-	-	1.09	-	3421	0.106
1234678-HpCDF	38.80	J	1.0003	1.0002	-0.2	4.51E+05	1.01	Y	1.28	1.56	3225	0.0744
1234789-HpCDF	NotFnd		1.0003	-		-	-	-	1.27	-	3225	0.0714
OCDF	42.29	J	1.0003	1.0002	-0.3	3.45E+05	0.98	Y	1.01	2.46	3940	0.186

Name	Act RT	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	26.82	1.0267	1.0268	+0.2	6.23E+07	0.76	Y	1.01	85.8
ES 12378-PeCDD	32.46	1.2424	1.2429	+1.0	5.52E+07	1.64	Y	0.87	87.9
ES 123478-HxCDD	36.42	0.9918	0.9918	0	4.83E+07	1.28	Y	1.10	70.1
ES 123678-HxCDD	36.53	0.9948	0.9948	0	4.76E+07	1.26	Y	1.06	71.4
ES 123789-HxCDD	36.82	1.0027	1.0027	0	5.57E+07	1.34	Y	1.22	72.7
ES 1234678-HpCDD	39.73	1.0818	1.0820	+0.5	4.82E+07	1.08	Y	0.99	77.2
ES OCDD	42.12	1.1468	1.1470	+0.5	5.14E+07	0.91	Y	0.67	61.1
ES 2378-TCDF	25.87	1.0606	1.0609	+0.5	9.96E+07	0.81	Y	1.01	85
ES 12378-PeCDF	30.95	1.2684	1.2692	+1.5	8.64E+07	1.62	Y	0.90	83
ES 23478-PeCDF	32.10	1.3156	1.3165	+1.7	8.73E+07	1.57	Y	0.89	84.9
ES 123478-HxCDF	35.44	0.9651	0.9651	0	5.95E+07	0.53	Y	1.43	66.2
ES 123678-HxCDF	35.58	0.9690	0.9689	-0.2	7.05E+07	0.51	Y	1.63	68.7
ES 234678-HxCDF	36.23	0.9867	0.9867	0	6.40E+07	0.52	Y	1.48	68.8
ES 123789-HxCDF	37.18	1.0127	1.0127	0	5.96E+07	0.52	Y	1.29	73.3
ES 1234678-HpCDF	38.79	1.0562	1.0563	+0.2	5.36E+07	0.45	Y	1.15	74.3
ES 1234789-HpCDF	40.14	1.0929	1.0931	+0.5	4.78E+07	0.44	Y	0.91	83.9
ES OCDF	42.28	1.1511	1.1513	+0.5	6.60E+07	0.91	Y	0.83	63.4

Lab ID: B4528_17661_DF_007 | Acq'd: 12 Aug 2020 17:18 PSW | Wt/Vol: 8.42 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-49 | UTP: 13-Aug-2020 08:31:28 DTF | J-level: 0.594 pg/g | Split: 1 | Checkcode: 033-721-QCN

Datafile: 200812R10 | Report: 13 Aug 2020 08:34 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
JS 1234-TCDD	26.12		-	-	-	7.21E+07	0.76	Y	-	-
JS 1234-TCDF	24.39		-	-	-	1.16E+08	0.80	Y	-	-
JS 123467-HxCDD	36.72		-	-	-	3.15E+07	1.29	Y	-	-
CS 37Cl-2378-TCDD	26.84		1.0276	1.0278	+0.3	2.82E+07	n/a	-	1.04	94.3
CS 12347-PeCDD	31.95		1.2228	1.2233	+1.0	5.36E+07	1.68	Y	0.74	100
CS 12346-PeCDF	30.41		1.2462	1.2469	+1.3	8.40E+07	1.59	Y	0.86	84.6
CS 123469-HxCDF	35.89		0.9774	0.9774	0	6.19E+07	0.53	Y	1.36	72.5
CS 1234689-HpCDF	39.21		1.0678	1.0679	+0.2	5.13E+07	0.46	Y	1.05	77.3
SS 37Cl-2378-TCDD	26.84		1.0276	1.0278	+0.3	2.82E+07	n/a		1.04	109
SS 12347-PeCDD	31.95		1.2228	1.2233	+1.0	5.36E+07	1.68	Y	0.86	114
SS 12346-PeCDF	30.41		1.2462	1.2469	+1.3	8.40E+07	1.59	Y	0.96	101
SS 123469-HxCDF	35.89		0.9774	0.9774	0	6.19E+07	0.53	Y	0.83	105
SS 1234689-HpCDF	39.21		1.0678	1.0679	+0.2	5.13E+07	0.46	Y	0.92	104

Totals	Conc	EMPC
Total TCDD	2.02	2.02
Total PeCDD	1.23	3.42
Total HxCDD	7.6	8.84
Total HpCDD	38.1	38.1
Total Tetra-Octa Dioxins	199	202
Total TCDF	0.257	1.12
Total PeCDF	0.369	1.67
Total HxCDF	1.02	2.63
Total HpCDF	3.23	3.23
Total Tetra-Octa Furans	7.34	11.1
Total Tetra-Octa Dioxins & Furans	206	213

Lab ID: B4528_17661_DF_007 | Acq'd: 12 Aug 2020 17:18 PSW | Wt/Vol: 8.42 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-49 | UTP: 13-Aug-2020 08:31:28 DTF | J-level: 0.594 pg/g | Split: 1 | Checkcode: 033-721-QCN

Datafile: 200812R10 | Report: 13 Aug 2020 08:34 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1368-TCDD	22.81		0.8513	0.8505	-1.1	4.02E+05	0.88	Y	1.18	1.3	3840	0.146
1379-TCDD	23.22		0.8664	0.8657	-1.0	2.21E+05	0.70	Y	1.18	0.715	3840	0.146
1369-TCDD	NotFnd		0.8845						1.18		3840	0.146
1469-TCDD	NotFnd		0.9165						1.18		3840	0.146
1247/1246/1248/1249-TCDD	NotFnd		0.9266						1.18		3840	0.146
1378-TCDD	NotFnd		0.9342						1.18		3840	0.146
1268-TCDD	NotFnd		0.9423						1.18		3840	0.146
1478-TCDD	NotFnd		0.9524						1.18		3840	0.146
1279-TCDD	NotFnd		0.9592						1.18		3840	0.146
1234/1269-TCDD	NotFnd		0.9734						1.18		3840	0.146
1236-TCDD	NotFnd		0.9791						1.18		3840	0.146
1237/1238-TCDD	NotFnd		0.9894						1.18		3840	0.146
1239-TCDD	NotFnd		0.9946						1.18		3840	0.146
2378-TCDD	**NotFnd**		**1.0008**						**1.18**		**3840**	**0.146**
1278-TCDD	NotFnd		1.0140						1.18		3840	0.146
1267-TCDD	NotFnd		1.0194						1.18		3840	0.146
1289-TCDD	NotFnd		1.0396						1.18		3840	0.146
12479/12468-PeCDD	29.90	J	0.9210	0.9209	-0.2	3.24E+05	1.32	Y	1.14	1.23	5660	0.193
12469-PeCDD	NotFnd		0.9381						1.14		5660	0.193
12368-PeCDD	31.03	J EMPC	0.9558	0.9557	-0.2	2.37E+05	1.88	N	1.14	0.896	5660	0.193
12478-PeCDD	NotFnd		0.9618						1.14		5660	0.193
12379-PeCDD	31.33	J EMPC	0.9649	0.9649	0	2.12E+05	1.21	N	1.14	0.803	5660	0.193
12369/12467/12489-PeCDD	NotFnd		0.9732						1.14		5660	0.193
12346/12347-PeCDD	31.97	J EMPC	0.9850	0.9848	-0.4	1.30E+05	1.85	N	1.14	0.492	5660	0.193
12378-PeCDD	NotFnd		**1.0006**						**1.14**		**5660**	**0.193**
12367-PeCDD	NotFnd		1.0035						1.14		5660	0.193
12389-PeCDD	NotFnd		1.0144						1.14		5660	0.193
124679/124689-HxCDD	34.72	J	0.9535	0.9535	0	5.62E+05	1.42	Y	1.09	2.43	4448	0.154
123468-HxCDD	35.39	J	0.9716	0.9716	0	6.19E+05	1.13	Y	1.09	2.67	4448	0.154
123679/123689-HxCDD	35.67	J	0.9796	0.9795	-0.2	4.61E+05	1.40	Y	1.09	1.99	4448	0.154
123469-HxCDD	35.80	J EMPC	0.9832	0.9831	-0.2	8.40E+04	2.02	N	1.09	0.363	4448	0.154
123478-HxCDD	36.43	J EMPC	**1.0004**	**1.0004**	**0**	**5.76E+04**	**1.91**	**N**	1.09	**0.259**	**4448**	**0.156**
123678-HxCDD	36.54	J EMPC	**1.0034**	**1.0033**	**-0.2**	**7.76E+04**	**1.48**	**N**	1.13	**0.344**	**4448**	**0.15**
123467-HxCDD	36.74	J EMPC	1.0087	1.0089	+0.4	6.26E+04	0.90	N	1.09	0.27	4448	0.154
123789-HxCDD	36.83	J	**1.0114**	**1.0114**	**0**	**1.25E+05**	**1.25**	**Y**	1.05	**0.509**	**4448**	**0.156**

Lab ID: B4528_17661_DF_007 | Acq'd: 12 Aug 2020 17:18 PSW | Wt/Vol: 8.42 g | ICAL: MM3_DF_10012020_12JUN2020

Client ID: CS-49 | UTP: 13-Aug-2020 08:31:28 DTF | J-level: 0.594 pg/g | Split: 1 | Checkcode: 033-721-QCN

Datafile: 200812R10 | Report: 13 Aug 2020 08:34 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

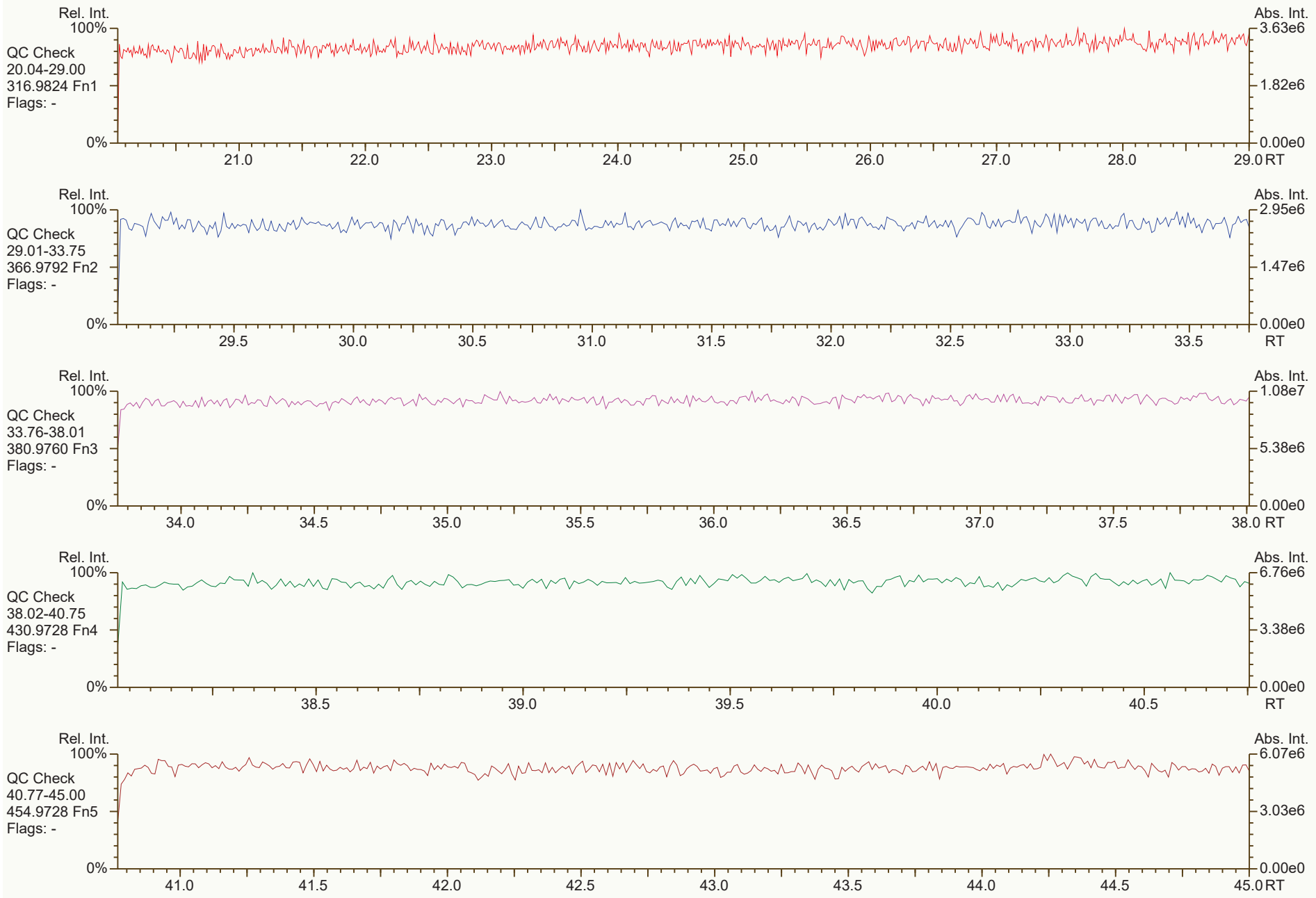
Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1234679-HpCDD	39.08		0.9837	0.9836	-0.2	5.08E+06	1.02	Y	0.98	25.4	3813	0.108
1234678-HpCDD	**39.74**		**1.0004**	**1.0003**	**-0.2**	**2.53E+06**	**1.14**	**Y**	**0.98**	**12.7**	**3813**	**0.108**
OCDD	**42.13**		**1.0003**	**1.0002**	**-0.3**	**1.74E+07**	**0.89**	**Y**	**1.08**	**150**	**7227**	**0.392**
OCDD-a	42.12		1.0002	1.0002	0	8.82E+05	2.78	Y	0.07	123	5777	5.08
1368-TCDF	20.58	J	0.7965	0.7956	-1.1	1.06E+05	0.72	Y	0.98	0.257	6309	0.182
1468-TCDF	NotFnd		0.8181						0.98		6309	0.182
2468-TCDF	21.78	EMPC	0.8428	0.8421	-0.9	3.11E+05	0.89	N	0.98	0.757	6309	0.182
1346/1246-TCDF	NotFnd		0.8580						0.98		6309	0.182
1347/1378/1247-TCDF	NotFnd		0.8643						0.98		6309	0.182
1348-TCDF	NotFnd		0.8764						0.98		6309	0.182
1248/1367/1379-TCDF	NotFnd		0.8821						0.98		6309	0.182
1268-TCDF	NotFnd		0.8987						0.98		6309	0.182
1467-TCDF	NotFnd		0.9045						0.98		6309	0.182
1478-TCDF	NotFnd		0.9120						0.98		6309	0.182
1369/1237-TCDF	NotFnd		0.9279						0.98		6309	0.182
2467-TCDF	NotFnd		0.9335						0.98		6309	0.182
2368-TCDF	NotFnd		0.9400						0.98		6309	0.182
1238/1234/1678/1469/1236-TCDF	NotFnd		0.9442						0.98		6309	0.182
1278-TCDF	NotFnd		0.9632						0.98		6309	0.182
1349-TCDF	NotFnd		0.9681						0.98		6309	0.182
1267-TCDF	NotFnd		0.9747						0.98		6309	0.182
2346/1249-TCDF	NotFnd		0.9826						0.98		6309	0.182
2347/1279-TCDF	NotFnd		0.9917						0.98		6309	0.182
2348-TCDF	NotFnd		0.9963						0.98		6309	0.182
2378-TCDF	**NotFnd**		**1.0008**						**0.98**		**6309**	**0.182**
2367/3467-TCDF	NotFnd		1.0163						0.98		6309	0.182
1269-TCDF	NotFnd		1.0260						0.98		6309	0.182
1239-TCDF	NotFnd		1.0373						0.98		6309	0.182
1289-TCDF	28.04	J EMPC	1.0836	1.0838	+0.3	4.43E+04	1.79	N	0.98	0.108	6309	0.182
13468/12468-PeCDF	28.03	J EMPC	0.9056	0.9056	0	2.16E+05	1.81	N	0.95	0.624	5707	0.155
13678/13467/12467-PeCDF	29.66	J	0.9580	0.9582	+0.4	1.28E+05	1.69	Y	0.95	0.369	4939	0.135
12368/13478/12478-PeCDF	29.82	J EMPC	0.9632	0.9634	+0.4	2.35E+05	1.86	N	0.95	0.678	4939	0.135
14678-PeCDF	NotFnd		0.9666						0.95		4939	0.135
13479-PeCDF	NotFnd		0.9698						0.95		4939	0.135
13469/12479-PeCDF	NotFnd		0.9782						0.95		4939	0.135
12346-PeCDF	NotFnd		0.9828						0.95		4939	0.135

Lab ID: B4528_17661_DF_007 | Acq'd: 12 Aug 2020 17:18 PSW | Wt/Vol: 8.42 g | ICAL: MM3_DF_10012020_12JUN2020

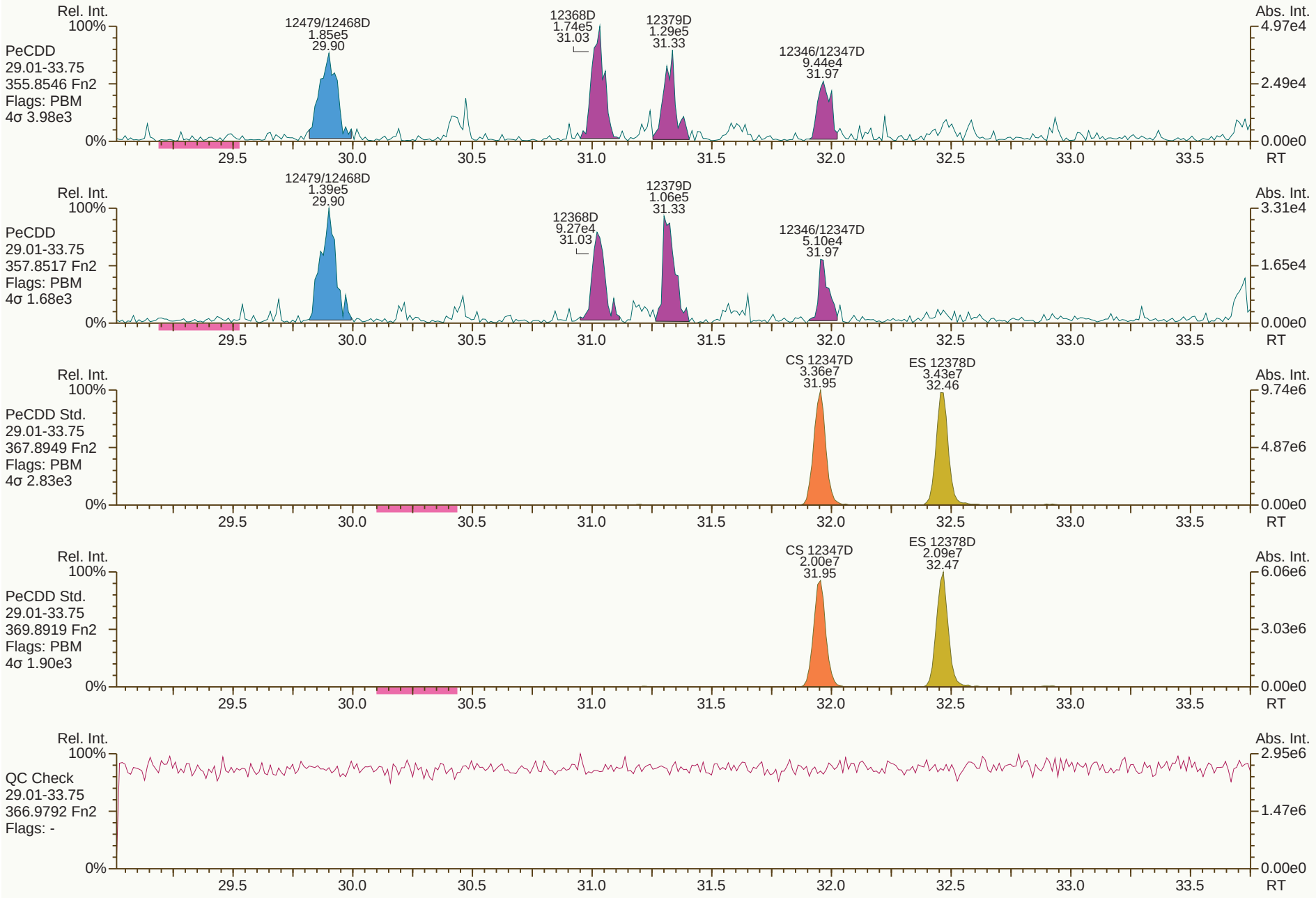
Client ID: CS-49 | UTP: 13-Aug-2020 08:31:28 DTF | J-level: 0.594 pg/g | Split: 1 | Checkcode: 033-721-QCN

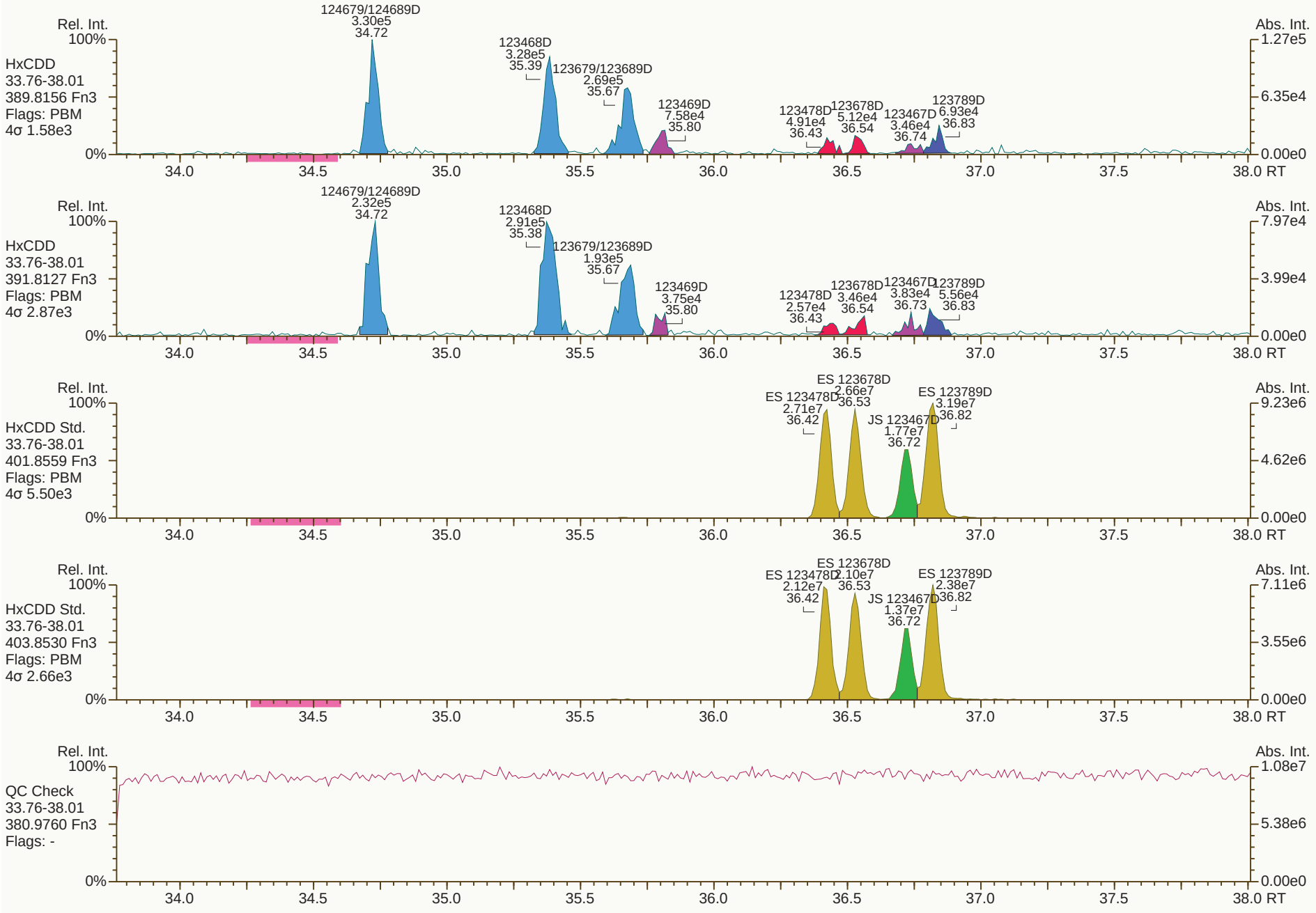
Datafile: 200812R10 | Report: 13 Aug 2020 08:34 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

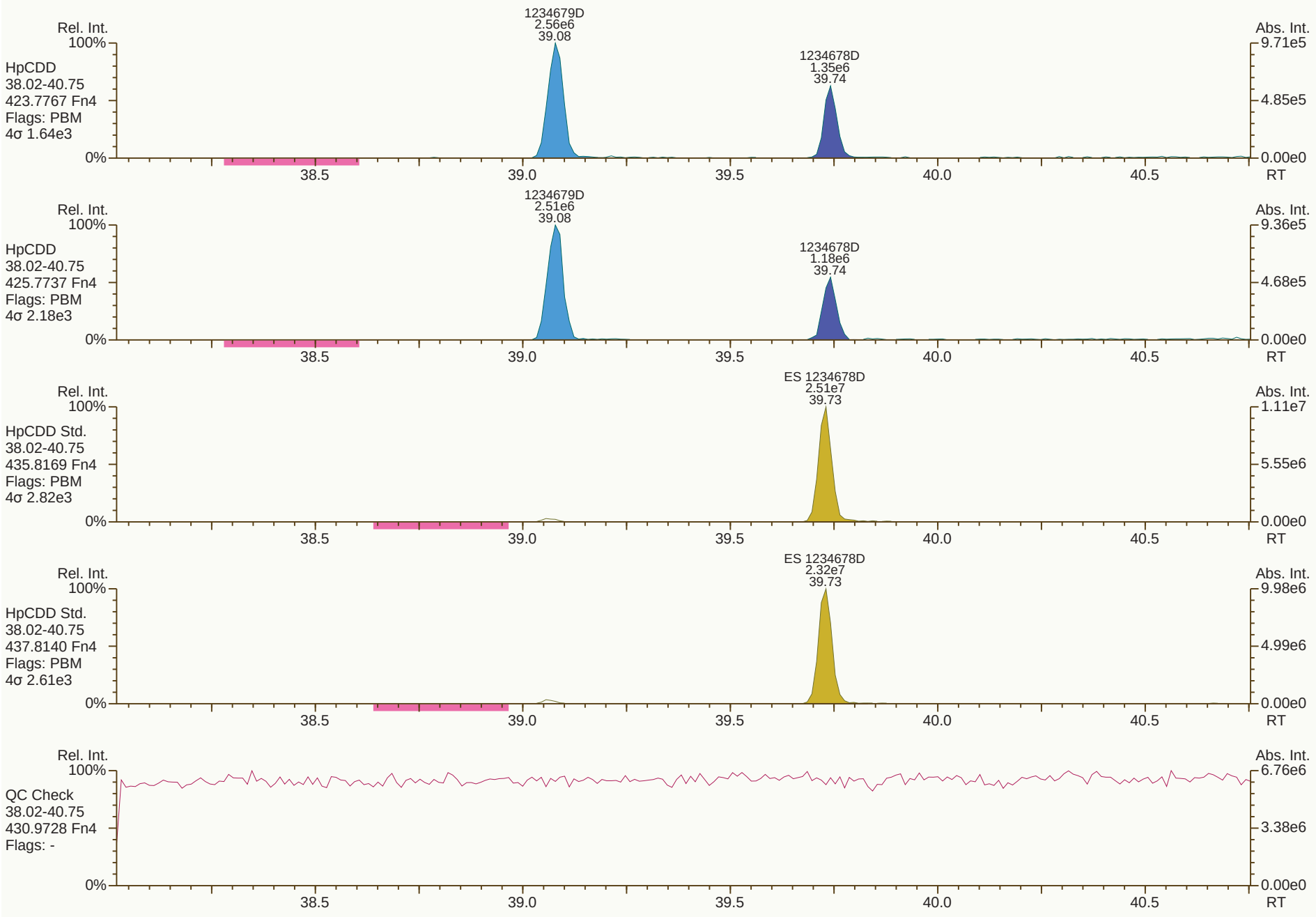
Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
23468/12469-PeCDF	NotFnd		0.9858						0.95		4939	0.135
12347-PeCDF	NotFnd		0.9884						0.95		4939	0.135
12348-PeCDF	NotFnd		0.9937						0.95		4939	0.135
12378-PeCDF	**NotFnd**		**1.0006**						**0.95**		**4939**	**0.132**
12678/12367-PeCDF	NotFnd		1.0098						0.95		4939	0.135
12379-PeCDF	NotFnd		1.0154						0.95		4939	0.135
12679-PeCDF	NotFnd		0.9923						0.95		4939	0.135
23467/12369-PeCDF	NotFnd		0.9964						0.95		4939	0.135
23478-PeCDF	**NotFnd**		**1.0005**						**0.95**		**4939**	**0.137**
23478/12489-PeCDF	NotFnd		0.0000						0.95			
12489-PeCDF	NotFnd		1.0050						0.95		4939	0.135
12349-PeCDF	NotFnd		1.0109						0.95		4939	0.135
12389-PeCDF	NotFnd		1.0345						0.95		4939	0.135
123468-HxCDF	34.05	J	0.9610	0.9609	-0.2	1.18E+05	1.36	Y	1.11	0.397	3421	0.0925
124678/134678-HxCDF	34.26	J EMPC	0.9667	0.9667	0	2.64E+05	1.03	N	1.11	0.889	3421	0.0925
134679-HxCDF	NotFnd		0.9732						1.11		3421	0.0925
124679-HxCDF	NotFnd		0.9788						1.11		3421	0.0925
124689-HxCDF	34.91	J	0.9851	0.9850	-0.2	1.06E+05	1.15	Y	1.11	0.356	3421	0.0925
123467-HxCDF	35.33	J EMPC	0.9971	0.9970	-0.2	4.57E+04	0.87	N	1.11	0.154	3421	0.0925
123478-HxCDF	**35.45**	J EMPC	**1.0005**	**1.0003**	**-0.4**	**1.09E+05**	**1.45**	**N**	**1.20**	**0.364**	**3421**	**0.0919**
123678-HxCDF	**35.59**	J EMPC	**1.0004**	**1.0003**	**-0.2**	**6.37E+04**	**0.98**	**N**	**1.07**	**0.201**	**3421**	**0.0858**
123479-HxCDF	NotFnd		1.0050						1.11		3421	0.0925
123469-HxCDF	NotFnd		1.0091						1.11		3421	0.0925
123679-HxCDF	NotFnd		0.9943						1.11		3421	0.0925
234678-HxCDF	**36.25**	J	**1.0004**	**1.0005**	**+0.2**	**7.88E+04**	**1.27**	**Y**	**1.10**	**0.267**	**3421**	**0.0883**
234678/123689-HxCDF	NotFnd		0.0000						1.10			
123689-HxCDF	NotFnd		1.0054						1.11		3421	0.0925
123789-HxCDF	**NotFnd**		**1.0004**						**1.09**		**3421**	**0.106**
123789/123489-HxCDF	NotFnd		0.0000						1.09			
123489-HxCDF	NotFnd		1.0008						1.11		3421	0.0925
1234678-HpCDF	**38.80**	**J**	**1.0003**	**1.0002**	**-0.2**	**4.51E+05**	**1.01**	**Y**	**1.28**	**1.56**	**3225**	**0.0744**
1234679-HpCDF	NotFnd		1.0075						1.27		3225	0.073
1234689-HpCDF	39.22	**J**	1.0111	1.0112	+0.2	4.54E+05	1.07	Y	1.27	1.67	3225	0.073
1234789-HpCDF	**NotFnd**		**1.0003**						**1.27**		**3225**	**0.0714**
OCDF	**42.29**	**J**	**1.0003**	**1.0002**	**-0.3**	**3.45E+05**	**0.98**	**Y**	**1.01**	**2.46**	**3940**	**0.186**
OCDF-a	NotFnd		1.0002						0.06		4232	3.2

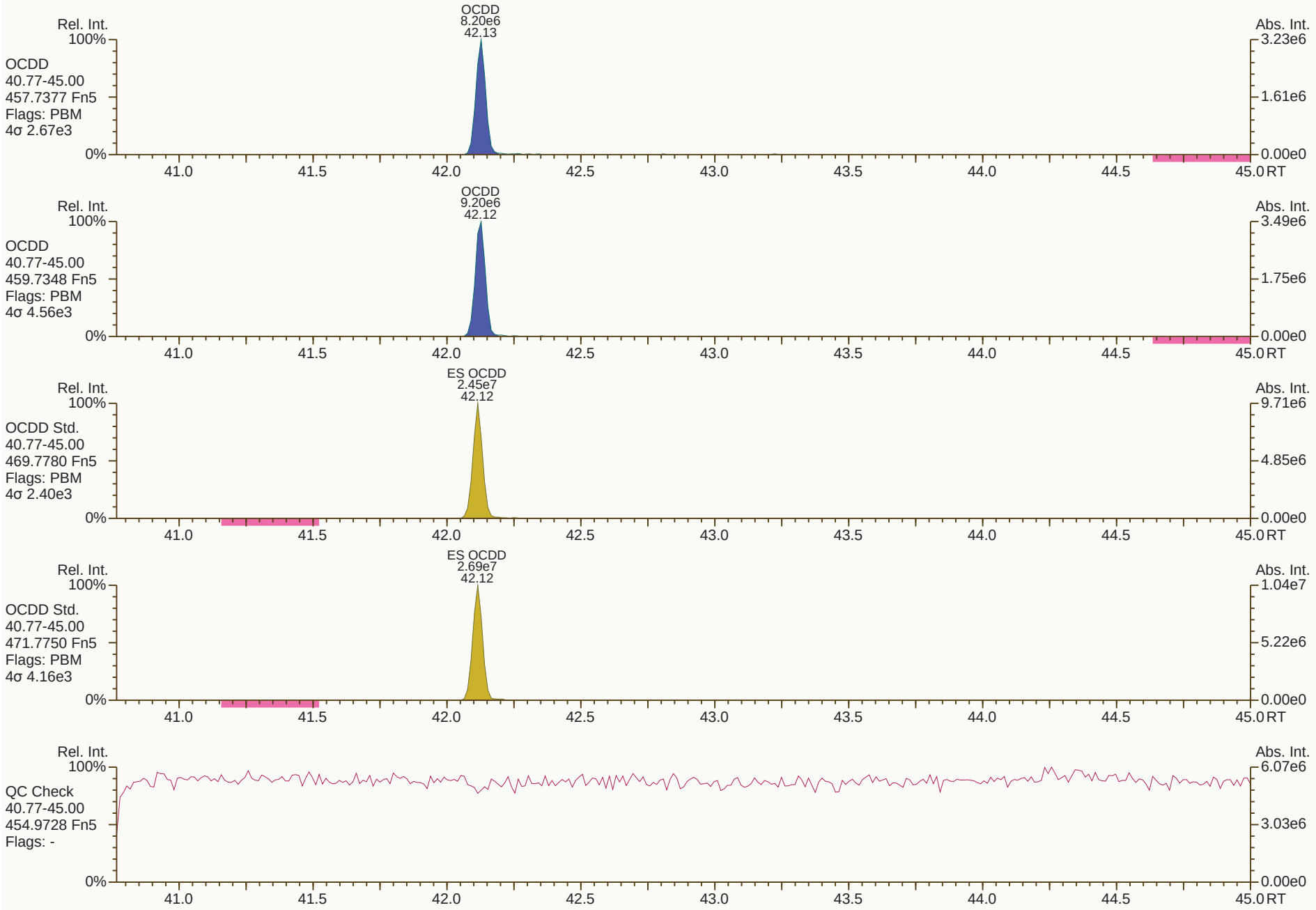

Rel. Int.
100%
QC Check
20.04-29.00
316.9824 Fn1
Flags: -
0%
Abs. Int.
3.63e6
1.82e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT
Rel. Int.
100%
QC Check
29.01-33.75
366.9792 Fn2
Flags: -
0%
Abs. Int.
2.95e6
1.47e6
0.00e0
29.5
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
RT
Rel. Int.
100%
QC Check
33.76-38.01
380.9760 Fn3
Flags: -
0%
Abs. Int.
1.08e7
5.38e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0 RT
Rel. Int.
100%
QC Check
38.02-40.75
430.9728 Fn4
Flags: -
0%
Abs. Int.
6.76e6
3.38e6
0.00e0
38.5
39.0
39.5
40.0
40.5
RT
Rel. Int.
100%
QC Check
40.77-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
6.07e6
3.03e6
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT


Rel. Int.
100%
TCDD
20.04-29.00
319.8965 Fn1
Flags: PBM
4σ 1.91e3
1368D
1.88e5
22.81
1379D
9.11e4
23.22
Abs. Int.
4.17e4
2.08e4
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT
Rel. Int.
100%
TCDD
20.04-29.00
321.8936 Fn1
Flags: PBM
4σ 1.93e3
1368D
2.14e5
22.81
1379D
1.30e5
23.22
Abs. Int.
5.22e4
2.61e4
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT
Rel. Int.
100%
37Cl-TCDD
20.04-29.00
327.8850 Fn1
Flags: PBM
4σ 1.81e3
CS 37Cl-2378D
2.82e7
26.84
Abs. Int.
6.22e6
3.11e6
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT
Rel. Int.
100%
TCDD Std.
20.04-29.00
331.9368 Fn1
Flags: PBM
4σ 4.78e3
JS 1234D
3.12e7
26.12
ES 2378D
2.68e7
26.82
Abs. Int.
6.75e6
3.37e6
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT
Rel. Int.
100%
TCDD Std.
20.04-29.00
333.9339 Fn1
Flags: PBM
4σ 3.08e3
JS 1234D
4.10e7
26.12
ES 2378D
3.55e7
26.82
Abs. Int.
8.29e6
4.15e6
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT


Rel. Int.
100%
PeCDD
29.01-33.75
355.8546 Fn2
Flags: PBM
4σ 3.98e3
12479/12468D
1.85e5
29.90
12368D
1.74e5
31.03
12379D
1.29e5
31.33
12346/12347D
9.44e4
31.97
Abs. Int.
4.97e4
2.49e4
0.00e0
0%
29.5
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
RT
Rel. Int.
100%
PeCDD
29.01-33.75
357.8517 Fn2
Flags: PBM
4σ 1.68e3
12479/12468D
1.39e5
29.90
12368D
9.27e4
31.03
12379D
1.06e5
31.33
12346/12347D
5.10e4
31.97
Abs. Int.
3.31e4
1.65e4
0.00e0
0%
29.5
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
RT
Rel. Int.
100%
PeCDD Std.
29.01-33.75
367.8949 Fn2
Flags: PBM
4σ 2.83e3
CS 12347D
3.36e7
31.95
ES 12378D
3.43e7
32.46
Abs. Int.
9.74e6
4.87e6
0.00e0
0%
29.5
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
RT
Rel. Int.
100%
PeCDD Std.
29.01-33.75
369.8919 Fn2
Flags: PBM
4σ 1.90e3
CS 12347D
2.00e7
31.95
ES 12378D
2.09e7
32.47
Abs. Int.
6.06e6
3.03e6
0.00e0
0%
29.5
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
RT
Rel. Int.
100%
QC Check
29.01-33.75
366.9792 Fn2
Flags: -
Abs. Int.
2.95e6
1.47e6
0.00e0
0%
29.5
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
RT

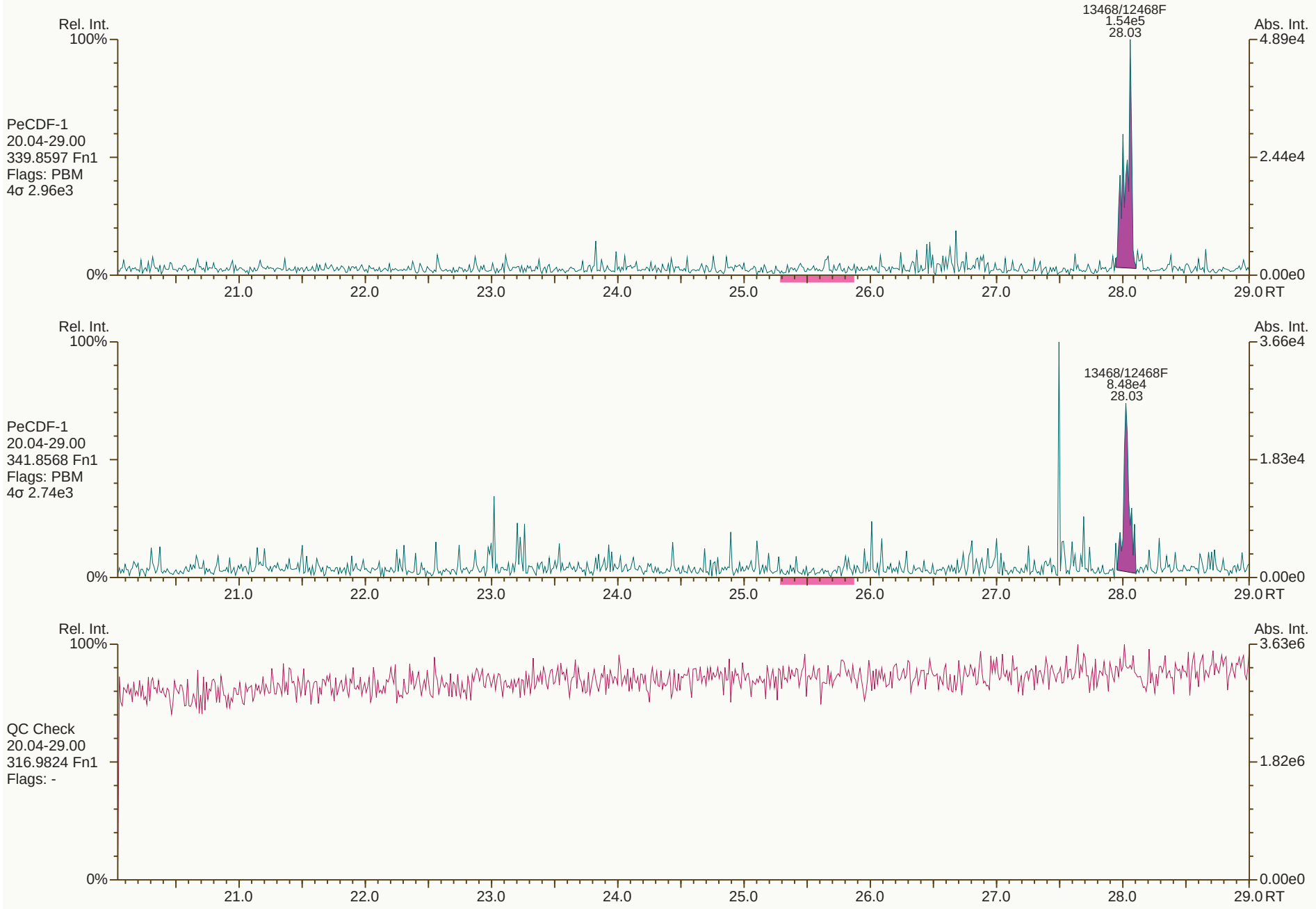

Rel. Int.
100%
HxCDD
33.76-38.01
389.8156 Fn3
Flags: PBM
4σ 1.58e3
0%
124679/124689D
3.30e5
34.72
123468D
3.28e5
35.39
123679/123689D
2.69e5
35.67
123469D
7.58e4
35.80
123478D
4.91e4
36.43
123678D
5.12e4
36.54
123467D
3.46e4
36.74
123789D
6.93e4
36.83
Abs. Int.
1.27e5
6.35e4
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0 RT
Rel. Int.
100%
HxCDD
33.76-38.01
391.8127 Fn3
Flags: PBM
4σ 2.87e3
0%
124679/124689D
2.32e5
34.72
123468D
2.91e5
35.38
123679/123689D
1.93e5
35.67
123469D
3.75e4
35.80
123478D
2.57e4
36.43
123678D
3.46e4
36.54
123467D
3.83e4
36.73
123789D
5.56e4
36.83
Abs. Int.
7.97e4
3.99e4
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0 RT
Rel. Int.
100%
HxCDD Std.
33.76-38.01
401.8559 Fn3
Flags: PBM
4σ 5.50e3
0%
ES 123678D
2.66e7
36.53
ES 123478D
2.71e7
36.42
ES 123789D
3.19e7
36.82
JS 123467D
1.77e7
36.72
Abs. Int.
9.23e6
4.62e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0 RT
Rel. Int.
100%
HxCDD Std.
33.76-38.01
403.8530 Fn3
Flags: PBM
4σ 2.66e3
0%
ES 123678D
2.10e7
36.53
ES 123478D
2.12e7
36.42
ES 123789D
2.38e7
36.82
JS 123467D
1.37e7
36.72
Abs. Int.
7.11e6
3.55e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0 RT
Rel. Int.
100%
QC Check
33.76-38.01
380.9760 Fn3
Flags: -
0%
Abs. Int.
1.08e7
5.38e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0 RT

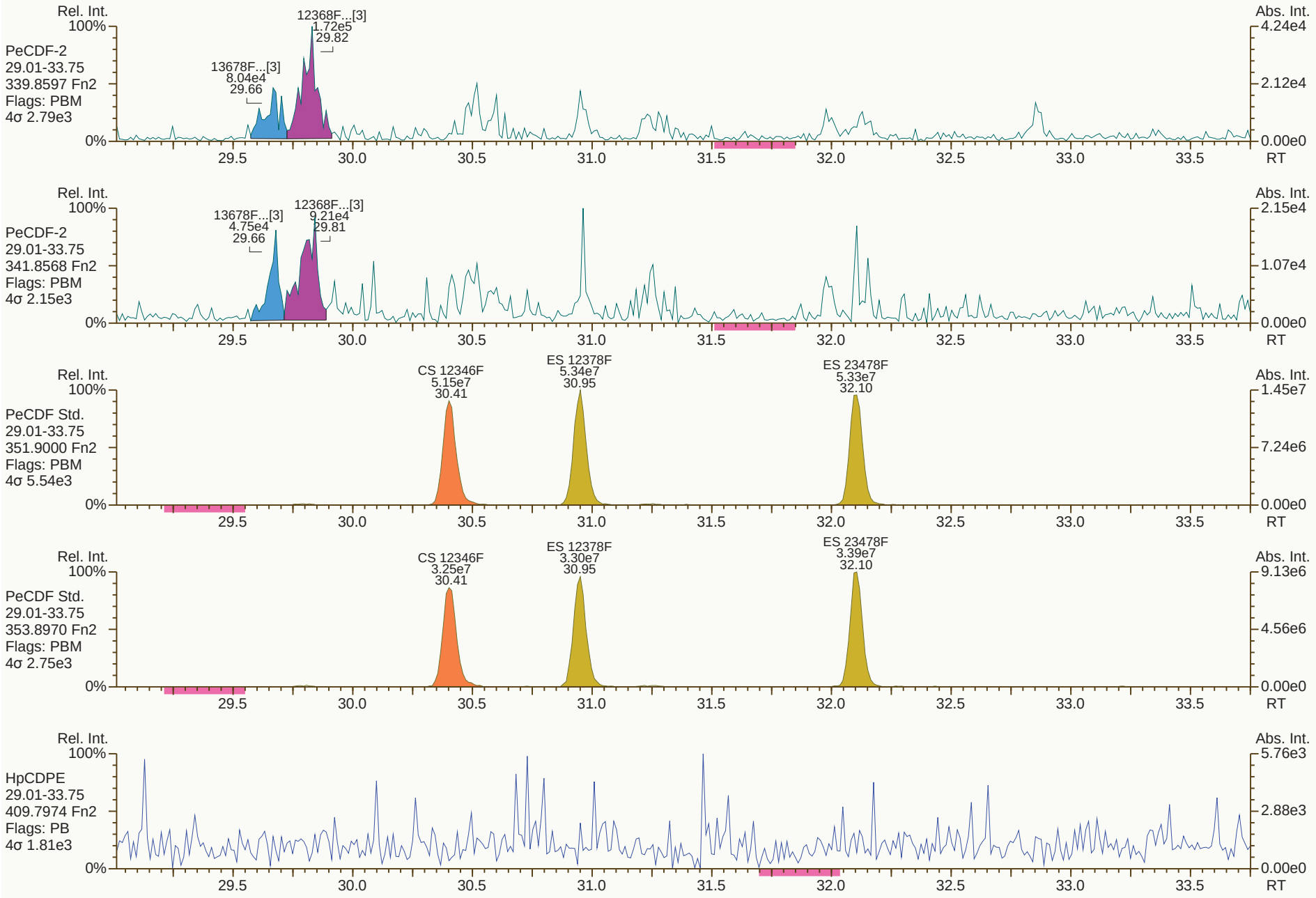

Rel. Int.
100%
HpCDD
38.02-40.75
423.7767 Fn4
Flags: PBM
4σ 1.64e3
0%
1234679D
2.56e6
39.08
1234678D
1.35e6
39.74
Abs. Int.
9.71e5
4.85e5
0.00e0
38.5
39.0
39.5
40.0
40.5
RT
Rel. Int.
100%
HpCDD
38.02-40.75
425.7737 Fn4
Flags: PBM
4σ 2.18e3
0%
1234679D
2.51e6
39.08
1234678D
1.18e6
39.74
Abs. Int.
9.36e5
4.68e5
0.00e0
38.5
39.0
39.5
40.0
40.5
RT
Rel. Int.
100%
HpCDD Std.
38.02-40.75
435.8169 Fn4
Flags: PBM
4σ 2.82e3
0%
ES 1234678D
2.51e7
39.73
Abs. Int.
1.11e7
5.55e6
0.00e0
38.5
39.0
39.5
40.0
40.5
RT
Rel. Int.
100%
HpCDD Std.
38.02-40.75
437.8140 Fn4
Flags: PBM
4σ 2.61e3
0%
ES 1234678D
2.32e7
39.73
Abs. Int.
9.98e6
4.99e6
0.00e0
38.5
39.0
39.5
40.0
40.5
RT
Rel. Int.
100%
QC Check
38.02-40.75
430.9728 Fn4
Flags: -
0%
Abs. Int.
6.76e6
3.38e6
0.00e0
38.5
39.0
39.5
40.0
40.5
RT


OCDD
8.20e6
42.13
Rel. Int.
100%
OCDD
40.77-45.00
457.7377 Fn5
Flags: PBM
4σ 2.67e3
0%
Abs. Int.
3.23e6
1.61e6
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDD
9.20e6
42.12
Rel. Int.
100%
OCDD
40.77-45.00
459.7348 Fn5
Flags: PBM
4σ 4.56e3
0%
Abs. Int.
3.49e6
1.75e6
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
2.45e7
42.12
Rel. Int.
100%
OCDD Std.
40.77-45.00
469.7780 Fn5
Flags: PBM
4σ 2.40e3
0%
Abs. Int.
9.71e6
4.85e6
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
2.69e7
42.12
Rel. Int.
100%
OCDD Std.
40.77-45.00
471.7750 Fn5
Flags: PBM
4σ 4.16e3
0%
Abs. Int.
1.04e7
5.22e6
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
QC Check
40.77-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
6.07e6
3.03e6
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

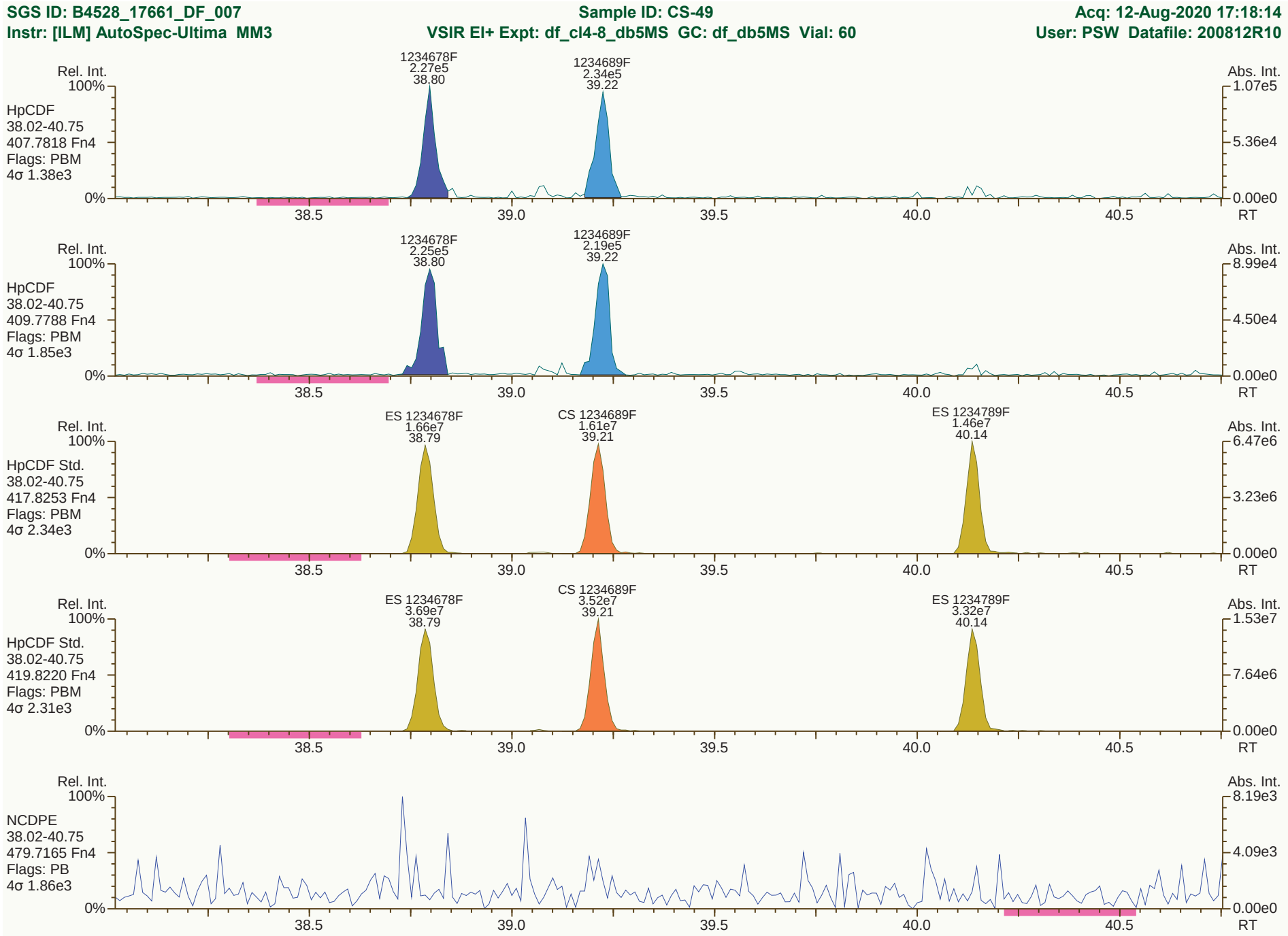


Results: P:\B4500_B4599\B4528\B4528_17661 DF\Resources\B4528_17661_DF_007.utp_res, saved 13-Aug-2020 08:31 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 9683, 6519, 4289 scc: 033-721
Revised: 13-Aug-2020 08:27 (DTF) Printed: 13-Aug-2020 08:43 Page 7 of 12


Rel. Int.
100%
0%
Abs. Int.
4.89e4
2.44e4
0.00e0
PeCDF-1
20.04-29.00
339.8597 Fn1
Flags: PBM
4σ 2.96e3
13468/12468F
1.54e5
28.03
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT
Rel. Int.
100%
0%
Abs. Int.
3.66e4
1.83e4
0.00e0
PeCDF-1
20.04-29.00
341.8568 Fn1
Flags: PBM
4σ 2.74e3
13468/12468F
8.48e4
28.03
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT
Rel. Int.
100%
0%
Abs. Int.
3.63e6
1.82e6
0.00e0
QC Check
20.04-29.00
316.9824 Fn1
Flags: -
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT


Rel. Int.
100%
PeCDF-2
29.01-33.75
339.8597 Fn2
Flags: PBM
4σ 2.79e3
13678F...[3]
8.04e4
29.66
12368F...[3]
1.72e5
29.82
0%
Abs. Int.
4.24e4
2.12e4
0.00e0
29.5
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
RT
Rel. Int.
100%
PeCDF-2
29.01-33.75
341.8568 Fn2
Flags: PBM
4σ 2.15e3
13678F...[3]
4.75e4
29.66
12368F...[3]
9.21e4
29.81
0%
Abs. Int.
2.15e4
1.07e4
0.00e0
RT
Rel. Int.
100%
PeCDF Std.
29.01-33.75
351.9000 Fn2
Flags: PBM
4σ 5.54e3
CS 12346F
5.15e7
30.41
ES 12378F
5.34e7
30.95
ES 23478F
5.33e7
32.10
0%
Abs. Int.
1.45e7
7.24e6
0.00e0
RT
Rel. Int.
100%
PeCDF Std.
29.01-33.75
353.8970 Fn2
Flags: PBM
4σ 2.75e3
CS 12346F
3.25e7
30.41
ES 12378F
3.30e7
30.95
ES 23478F
3.39e7
32.10
0%
Abs. Int.
9.13e6
4.56e6
0.00e0
RT
Rel. Int.
100%
HpCDPE
29.01-33.75
409.7974 Fn2
Flags: PB
4σ 1.81e3
0%
Abs. Int.
5.76e3
2.88e3
0.00e0
RT


Rel. Int.
100%
HxCDF
33.76-38.01
373.8207 Fn3
Flags: PBM
4σ 1.96e3
123468F 6.80e4 34.05
124678/134678F 1.46e5 34.26
124689F 5.66e4 34.91
123467F 2.53e4 35.33
123478F 7.06e4 35.45
123678F 3.53e4 35.59
234678F 4.40e4 36.25
Abs. Int.
4.29e4
2.15e4
0.00e0
0%
34.0 34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 RT
Rel. Int.
100%
HxCDF
33.76-38.01
375.8178 Fn3
Flags: PBM
4σ 1.46e3
123468F 4.99e4 34.05
124678/134678F 1.42e5 34.26
124689F 4.93e4 34.90
123467F 2.90e4 35.34
123478F 4.87e4 35.46
123678F 3.61e4 35.59
234678F 3.47e4 36.25
Abs. Int.
5.23e4
2.61e4
0.00e0
0%
34.0 34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 RT
Rel. Int.
100%
HxCDF Std.
33.76-38.01
383.8639 Fn3
Flags: PBM
4σ 1.55e4
ES 123678F 2.39e7 35.58
ES 123478F 2.06e7 35.44
CS 123469F 2.15e7 35.89
ES 234678F 2.20e7 36.23
ES 123789F 2.04e7 37.18
Abs. Int.
7.51e6
3.76e6
0.00e0
0%
34.0 34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 RT
Rel. Int.
100%
HxCDF Std.
33.76-38.01
385.8610 Fn3
Flags: PBM
4σ 9.06e3
ES 123678F 4.66e7 35.58
ES 123478F 3.89e7 35.44
CS 123469F 4.05e7 35.89
ES 234678F 4.20e7 36.23
ES 123789F 3.92e7 37.18
Abs. Int.
1.37e7
6.86e6
0.00e0
0%
34.0 34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 RT
Rel. Int.
100%
OCDPE
33.76-38.01
445.7555 Fn3
Flags: PB
4σ 1.70e3
Abs. Int.
1.51e4
7.55e3
0.00e0
0%
34.0 34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 RT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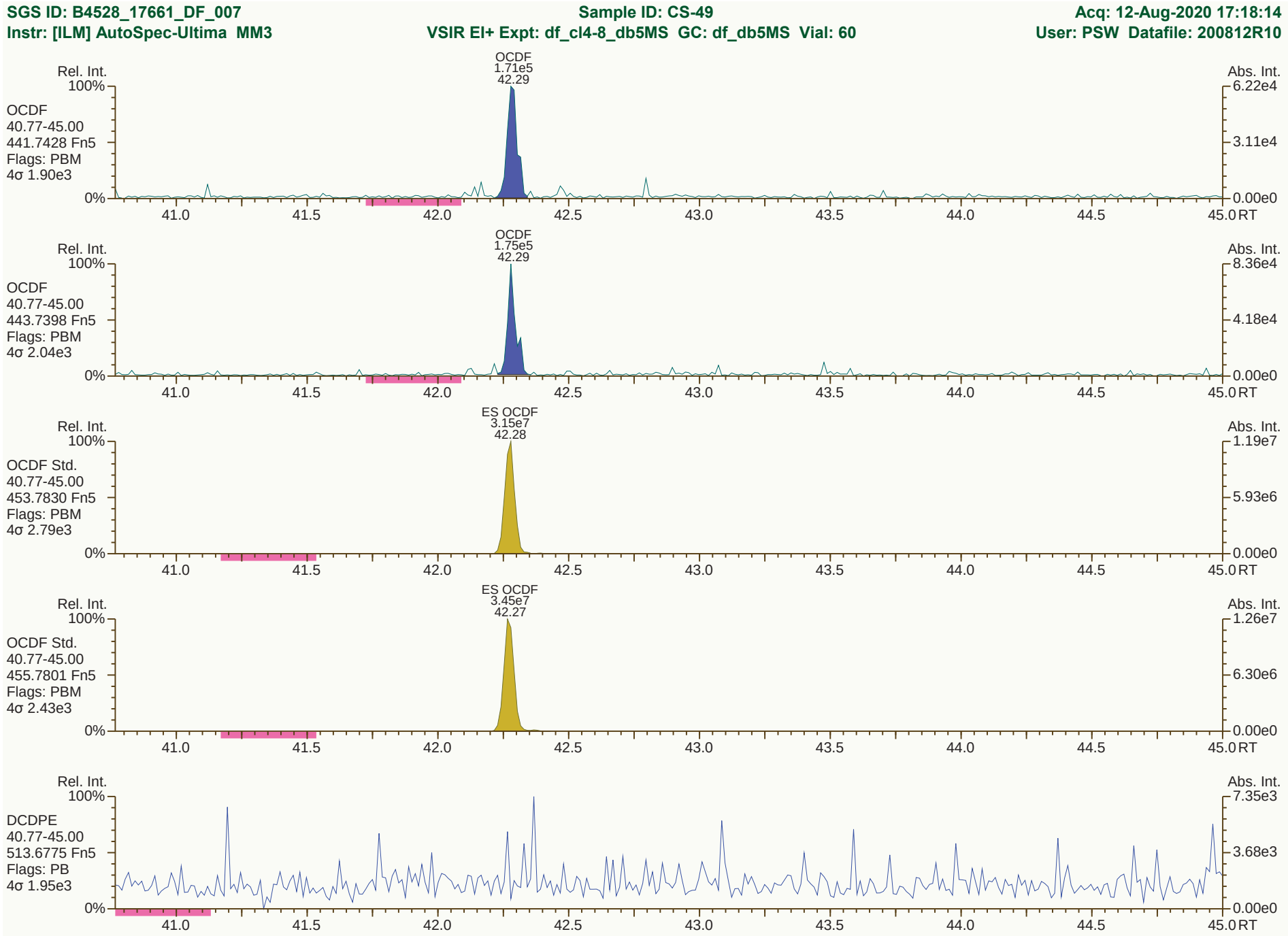
Sample ID: CS-49
Acq: 12-Aug-2020 17:18:14
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 60
User: PSW Datafile: 200812R10
Rel. Int.
Abs. Int.
HpCDF
38.02-40.75
407.7818 Fn4
Flags: PBM
4σ 1.38e3
1234678F
2.27e5
38.80
1234689F
2.34e5
39.22
1.07e5
5.36e4
0.00e0
HpCDF
38.02-40.75
409.7788 Fn4
Flags: PBM
4σ 1.85e3
1234678F
2.25e5
38.80
1234689F
2.19e5
39.22
8.99e4
4.50e4
0.00e0
HpCDF Std.
38.02-40.75
417.8253 Fn4
Flags: PBM
4σ 2.34e3
ES 1234678F
1.66e7
38.79
CS 1234689F
1.61e7
39.21
ES 1234789F
1.46e7
40.14
6.47e6
3.23e6
0.00e0
HpCDF Std.
38.02-40.75
419.8220 Fn4
Flags: PBM
4σ 2.31e3
ES 1234678F
3.69e7
38.79
CS 1234689F
3.52e7
39.21
ES 1234789F
3.32e7
40.14
1.53e7
7.64e6
0.00e0
NCDPE
38.02-40.75
479.7165 Fn4
Flags: PB
4σ 1.86e3
8.19e3
4.09e3
0.00e0
100%
0%
38.5
39.0
39.5
40.0
40.5
RT
Results: P:\B4500_B4599\B4528\B4528_17661 DF\Resources\B4528_17661_DF_007.utp_res, saved 13-Aug-2020 08:31 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 1011, 3519, 5122 scc: 033-721
Revised: 13-Aug-2020 08:29 (DTF) Printed: 13-Aug-2020 08:43 Page 11 of 12

SGS ID: B4528_17661_DF_007 | Sample ID: CS-49 | Acq: 12-Aug-2020 17:18:14
Instr: [ILM] AutoSpec-Ultima MM3 | VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 60 | User: PSW Datafile: 200812R10



Results: P:\B4500_B4599\B4528\B4528_17661 DF\Resources\B4528_17661_DF_007.utp_res, saved 13-Aug-2020 08:31 (DTF) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 4427, 5764, 7644 scc: 033-721 *Revised: 13-Aug-2020 08:29 (DTF) Printed: 13-Aug-2020 08:43 Page 12 of 12*

Instrument: MM3 (AutoSpec-Ultima) MS Experiment: df_cl4-8_db5MS GC Program: df_db5MS

#	Datafile	Vial#	Lab ID	Wt/Vol	Client/Sample ID	Analyst(s)	Checkcode	Acq Date	Acq Time
15	200811R15	3	CS3_200811_DF_RB	1.00	SIL 20-449-3	PSW, DTF	477-642	12-Aug-2020	00:22:05
16	200811R16	50	OPR1_17661_DF	1.00	0_17661_OPR001	PSW, DTF	728-067	12-Aug-2020	01:08:48
17	200811R17	2	SBS_200811_DF_RB	1.00	SIL 20-61-1	PSW	928-044	12-Aug-2020	01:56:18
18	200811R18	49	MB1_17661_DF_SDS	10.00	Method Blank	PSW, DTF	154-981	12-Aug-2020	02:43:51
22	200811R22	54	B4528_17661_DF_001	8.62	CS-55	PSW, DTF	830-980	12-Aug-2020	05:53:54
23	200811R23	3	CS3_200811_DF_RC	1.00	SIL 20-449-3	PSW, DTF	207-132	12-Aug-2020	08:09:16
2	200812R02	3	CS3_200812_DF_RA	1.00	SIL 20-449-3	PSW, DTF	500-345	12-Aug-2020	10:55:51
3	200812R03	50	OPR1_17661_DF-RJ CPSM only	1.00	0_17661_OPR001	PSW, DTF	373-223	12-Aug-2020	11:44:55
4	200812R04	2	SBS_200812_DF_RA	1.00	SIL 20-61-1	PSW	435-906	12-Aug-2020	12:31:37
5	200812R05	55	B4528_17661_DF_002	9.58	CS-50	PSW, DTF	713-211	12-Aug-2020	13:19:10
6	200812R06	56	B4528_17661_DF_003	4.72	CS-51	PSW, DTF	604-577	12-Aug-2020	14:06:43
7	200812R07	57	B4528_17661_DF_004	7.86	CS-48	PSW, DTF	652-437	12-Aug-2020	14:54:11
8	200812R08	58	B4528_17661_DF_005	8.83	CS-52	PSW, DTF	292-335	12-Aug-2020	15:44:02
9	200812R09	59	B4528_17661_DF_006	8.24	DUP-03	PSW, DTF	975-622	12-Aug-2020	16:30:46
10	200812R10	60	B4528_17661_DF_007	8.42	CS-49	PSW, DTF	033-721	12-Aug-2020	17:18:14
11	200812R11	3	CS3_200812_DF_RB	1.00	SIL 20-449-3	PSW, DTF	878-506	12-Aug-2020	18:05:42

REVIEWED
Amber_Kornegay , 09:47:48, 08/13/2020

REVIEWED
By Tyler_Fritz at 8:51 am, Aug 13, 2020

Dioxin/Furan QC Summary		Acq'd: 12 Aug 2020 00:22 PSW				ICAL: MM3_DF_10012020_12JUN2020	
Lab ID: CS3_200811_DF_RB		UTP: 13-Aug-2020 08:31:18 DTF				Checkcode: 477-642-JTD	
Sample ID: SIL 20-449-3		Report: 13 Aug 2020 08:32 TF				Datafile: 200811R15	
Name	**RT**	**Response**	**RA**	**OK**	**Ref. RRFs**	**Calc. RRFs**	**Dev'n**
2378-TCDD	27.28	1.08E+07	0.82	Y	1.18	1.29	10%
12378-PeCDD	32.82	4.48E+07	1.59	Y	1.14	1.14	0%
123478-HxCDD	36.73	4.07E+07	1.26	Y	1.09	1.11	2%
123678-HxCDD	36.84	4.12E+07	1.25	Y	1.13	1.18	5%
123789-HxCDD	37.14	4.48E+07	1.26	Y	1.05	1.08	3%
1234678-HpCDD	39.96	3.46E+07	1.04	Y	0.98	1.04	6%
OCDD	42.38	4.19E+07	0.90	Y	1.08	1.09	1%
2378-TCDF	26.36	1.55E+07	0.78	Y	0.98	1.04	6%
12378-PeCDF	31.33	6.82E+07	1.56	Y	0.95	1.01	6%
23478-PeCDF	32.46	6.46E+07	1.54	Y	0.95	0.99	4%
123478-HxCDF	35.76	6.17E+07	1.26	Y	1.20	1.25	5%
123678-HxCDF	35.90	6.21E+07	1.25	Y	1.07	1.13	6%
234678-HxCDF	36.55	5.80E+07	1.26	Y	1.10	1.15	5%
123789-HxCDF	37.52	4.85E+07	1.30	Y	1.09	1.18	8%
1234678-HpCDF	39.05	5.27E+07	1.04	Y	1.28	1.37	7%
1234789-HpCDF	40.37	3.84E+07	1.02	Y	1.27	1.27	0%
OCDF	42.54	4.85E+07	0.92	Y	1.01	1.06	5%
ES 2378-TCDD	27.26	8.33E+07	0.78	Y	1.01	0.97	-4%
ES 12378-PeCDD	32.8	7.88E+07	1.64	Y	0.87	0.92	5%
ES 123478-HxCDD	36.72	7.32E+07	1.29	Y	1.10	0.97	-11%
ES 123678-HxCDD	36.83	6.95E+07	1.29	Y	1.06	0.92	-13%
ES 123789-HxCDD	37.13	8.28E+07	1.28	Y	1.22	1.10	-10%
ES 1234678-HpCDD	39.95	6.63E+07	1.07	Y	0.99	0.88	-11%
ES OCDD	42.37	7.70E+07	0.93	Y	0.67	0.51	-24%
ES 2378-TCDF	26.33	1.49E+08	0.80	Y	1.01	1.01	-1%
ES 12378-PeCDF	31.31	1.35E+08	1.60	Y	0.90	0.92	2%
ES 23478-PeCDF	32.45	1.31E+08	1.57	Y	0.89	0.89	0%
ES 123478-HxCDF	35.75	9.85E+07	0.52	Y	1.43	1.31	-9%
ES 123678-HxCDF	35.89	1.10E+08	0.53	Y	1.63	1.46	-11%
ES 234678-HxCDF	36.53	1.00E+08	0.53	Y	1.48	1.33	-10%
ES 123789-HxCDF	37.5	8.25E+07	0.54	Y	1.29	1.09	-15%
ES 1234678-HpCDF	39.04	7.67E+07	0.46	Y	1.15	1.02	-11%
ES 1234789-HpCDF	40.36	6.04E+07	0.47	Y	0.91	0.80	-12%
ES OCDF	42.54	9.10E+07	0.91	Y	0.83	0.60	-27%

Dioxin/Furan QC Summary	Acq'd: 12 Aug 2020 00:22 PSW	ICAL: MM3_DF_10012020_12JUN2020
Lab ID: CS3_200811_DF_RB	UTP: 13-Aug-2020 08:31:18 DTF	Checkcode: 477-642-JTD
Sample ID: SIL 20-449-3	Report: 13 Aug 2020 08:32 TF	Datafile: 200811R15

Name	RT	Response	RA	OK	Ref. RRFs	Calc. RRFs	Dev'n
JS 1234-TCDD	26.57	8.61E+07	0.77	Y	-	-	-
JS 1234-TCDF	24.90	1.47E+08	0.79	Y	-	-	-
JS 123467-HxCDD	37.03	3.77E+07	1.33	Y	-	-	-
CS 37Cl-2378-TCDD	27.28	8.66E+06	n/a	-	1.04	1.01	-3%
CS 12347-PeCDD	32.29	6.86E+07	1.62	Y	0.74	0.80	8%
CS 12346-PeCDF	30.77	1.39E+08	1.56	Y	0.86	0.94	10%
CS 123469-HxCDF	36.19	9.54E+07	0.54	Y	1.36	1.26	-7%
CS 1234689-HpCDF	39.45	7.37E+07	0.46	Y	1.05	0.98	-7%
~~SS 37Cl-2378-TCDD~~	~~27.28~~	~~8.66E+06~~	~~n/a~~	~~-~~	~~1.04~~	~~1.04~~	~~0%~~
~~SS 12347-PeCDD~~	~~32.29~~	~~6.86E+07~~	~~1.62~~	~~Y~~	~~0.86~~	~~0.87~~	~~2%~~
~~SS 12346-PeCDF~~	~~30.77~~	~~1.39E+08~~	~~1.56~~	~~Y~~	~~0.96~~	~~1.03~~	~~7%~~
~~SS 123469-HxCDF~~	~~36.19~~	~~9.54E+07~~	~~0.54~~	~~Y~~	~~0.83~~	~~0.87~~	~~4%~~
~~SS 1234689-HpCDF~~	~~39.45~~	~~7.37E+07~~	~~0.46~~	~~Y~~	~~0.92~~	~~0.96~~	~~4%~~
~~OCDD-a~~	~~42.38~~	~~2.55E+06~~	~~2.46~~	~~Y~~	~~0.07~~	~~0.07~~	~~0%~~
~~OCDF-a~~	~~42.54~~	~~2.86E+06~~	~~2.80~~	~~Y~~	~~0.06~~	~~0.06~~	~~-1%~~

METHOD 8290A **PCDD/F CALIBRATION VERIFICATION** **FORM 4A**

Lab Name: SGS North America

Initial Calibration: ICAL: MM3_DF_10012020_12JUN2020

Instrument ID: MM3 GC Column ID: ZB-5ms

VER Data Filename: 200811R15 Analysis Date: 12-AUG-2020 00:22:05

NATIVE ANALYTES	M/Z's FORMING RATIO	ION ABUND. RATIO	QC LIMITS			OK	CONC. FOUND	RANGE (ng/mL)			OK
2,3,7,8-TCDD	M/M+2	0.82	0.65	-	0.89	Y	11	8	-	12	Y
1,2,3,7,8-PeCDD	M+2/M+4	1.59	1.32	-	1.78	Y	50.1	40	-	60	Y
1,2,3,4,7,8-HxCDD	M+2/M+4	1.26	1.05	-	1.43	Y	51	40	-	60	Y
1,2,3,6,7,8-HxCDD	M+2/M+4	1.25	1.05	-	1.43	Y	52.5	40	-	60	Y
1,2,3,7,8,9-HxCDD	M+2/M+4	1.26	1.05	-	1.43	Y	51.6	40	-	60	Y
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	0.88	-	1.20	Y	53	40	-	60	Y
OCDD	M+2/M+4	0.90	0.76	-	1.02	Y	101	80	-	120	Y
2,3,7,8-TCDF	M/M+2	0.78	0.65	-	0.89	Y	10.6	8	-	12	Y
1,2,3,7,8-PeCDF	M+2/M+4	1.56	1.32	-	1.78	Y	53.2	40	-	60	Y
2,3,4,7,8-PeCDF	M+2/M+4	1.54	1.32	-	1.78	Y	52.1	40	-	60	Y
1,2,3,4,7,8-HxCDF	M+2/M+4	1.26	1.05	-	1.43	Y	52.4	40	-	60	Y
1,2,3,6,7,8-HxCDF	M+2/M+4	1.25	1.05	-	1.43	Y	52.8	40	-	60	Y
2,3,4,6,7,8-HxCDF	M+2/M+4	1.26	1.05	-	1.43	Y	52.6	40	-	60	Y
1,2,3,7,8,9-HxCDF	M+2/M+4	1.30	1.05	-	1.43	Y	53.9	40	-	60	Y
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.04	0.88	-	1.20	Y	53.7	40	-	60	Y
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.02	0.88	-	1.20	Y	50.1	40	-	60	Y
OCDF	M+2/M+4	0.92	0.76	-	1.02	Y	105	80	-	120	Y

Processed: 13 Aug 2020 08:39 Analyst: TF

METHOD 8290A **PCDD/F CALIBRATION VERIFICATION** **FORM 4B**

Lab Name: SGS North America

Initial Calibration: ICAL: MM3_DF_10012020_12JUN2020

Instrument ID: MM3 GC Column ID: ZB-5ms

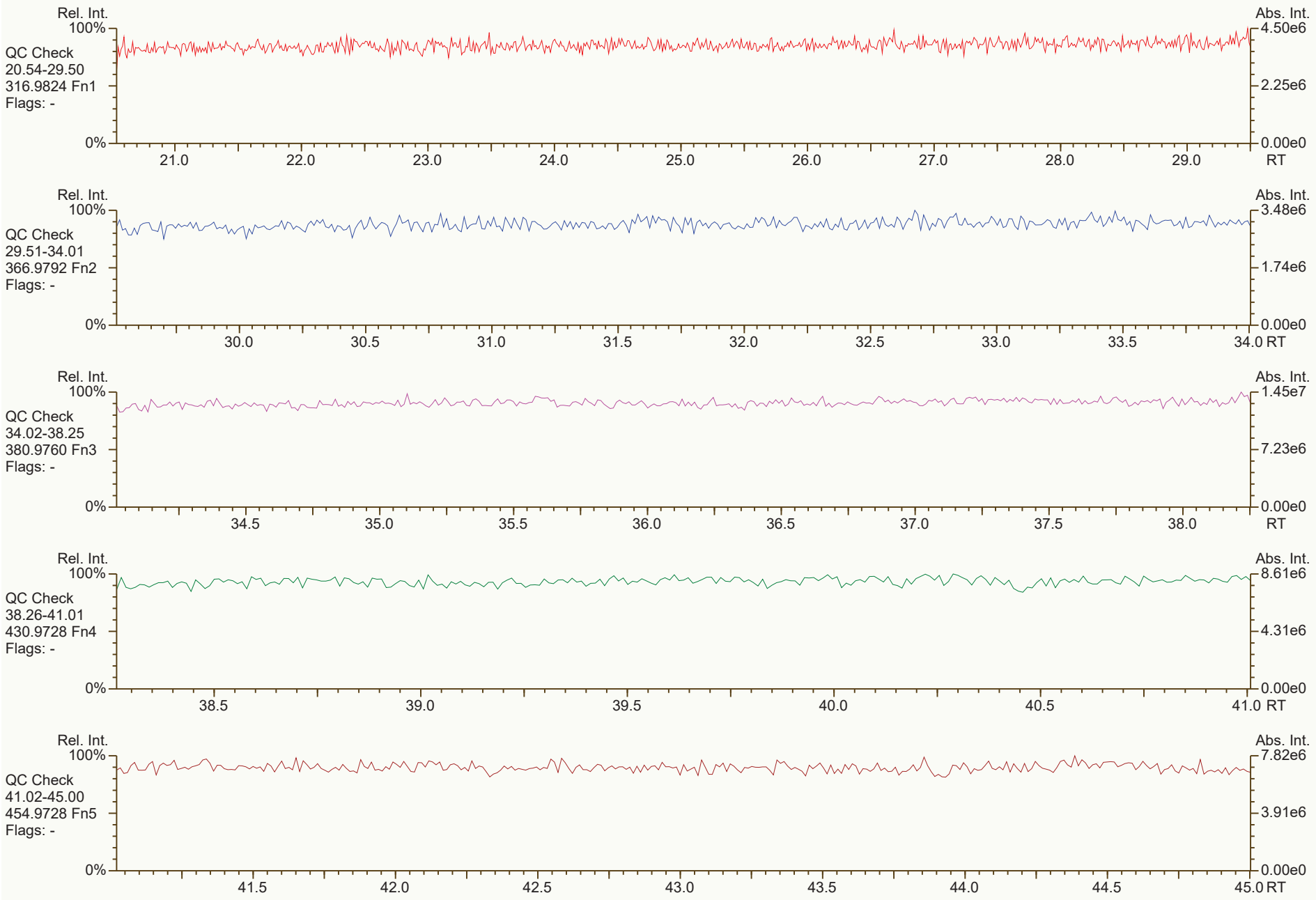
VER Data Filename: 200811R15 Analysis Date: 12-AUG-2020 00:22:05

LABELED ANALYTES	M/Z's FORMING RATIO	ION ABUND. RATIO	QC LIMITS			OK	CONC. FOUND	RANGE (ng/mL)			OK
13C-2,3,7,8-TCDD	M/M+2	0.78	0.65	-	0.89	Y	96.1	70	-	130	Y
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.64	1.32	-	1.78	Y	105	70	-	130	Y
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.29	1.05	-	1.43	Y	88.6	70	-	130	Y
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.29	1.05	-	1.43	Y	87	70	-	130	Y
13C-1,2,3,7,8,9-HxCDD	M+2/M+4	1.28	1.05	-	1.43	Y	90.2	70	-	130	Y
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.07	0.88	-	1.20	Y	88.6	70	-	130	Y
13C-OCDD	M+2/M+4	0.93	0.76	-	1.02	Y	153	140	-	260	Y
13C-2,3,7,8-TCDF	M/M+2	0.80	0.65	-	0.89	Y	99.4	70	-	130	Y
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.60	1.32	-	1.78	Y	102	70	-	130	Y
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.57	1.32	-	1.78	Y	99.8	70	-	130	Y
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	91.4	70	-	130	Y
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.53	0.43	-	0.59	Y	89.3	70	-	130	Y
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.53	0.43	-	0.59	Y	90.2	70	-	130	Y
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.54	0.43	-	0.59	Y	84.7	70	-	130	Y
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.46	0.37	-	0.51	Y	88.8	70	-	130	Y
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.47	0.37	-	0.51	Y	88.4	70	-	130	Y
13C-OCDF	M+2/M+4	0.91	0.76	-	1.02	Y	146	140	-	260	Y
CLEANUP STANDARDS											
37Cl-2,3,7,8-TCDD	n/a						9.7	7.9	-	12.7	Y
13C-1,2,3,4,7-PeCDD	M+2/M+4	1.62	1.32	-	1.78	Y	108	70	-	130	Y
13C-1,2,3,4,6-PeCDF	M+2/M+4	1.56	1.32	-	1.78	Y	110	70	-	130	Y
13C-1,2,3,4,6,9-HxCDF	M/M+2	0.54	0.43	-	0.59	Y	93.2	70	-	130	Y
13C-1,2,3,4,6,8,9-HpCDF	M/M+2	0.46	0.37	-	0.51	Y	92.8	70	-	130	Y

Processed: 13 Aug 2020 08:39 Analyst: TF

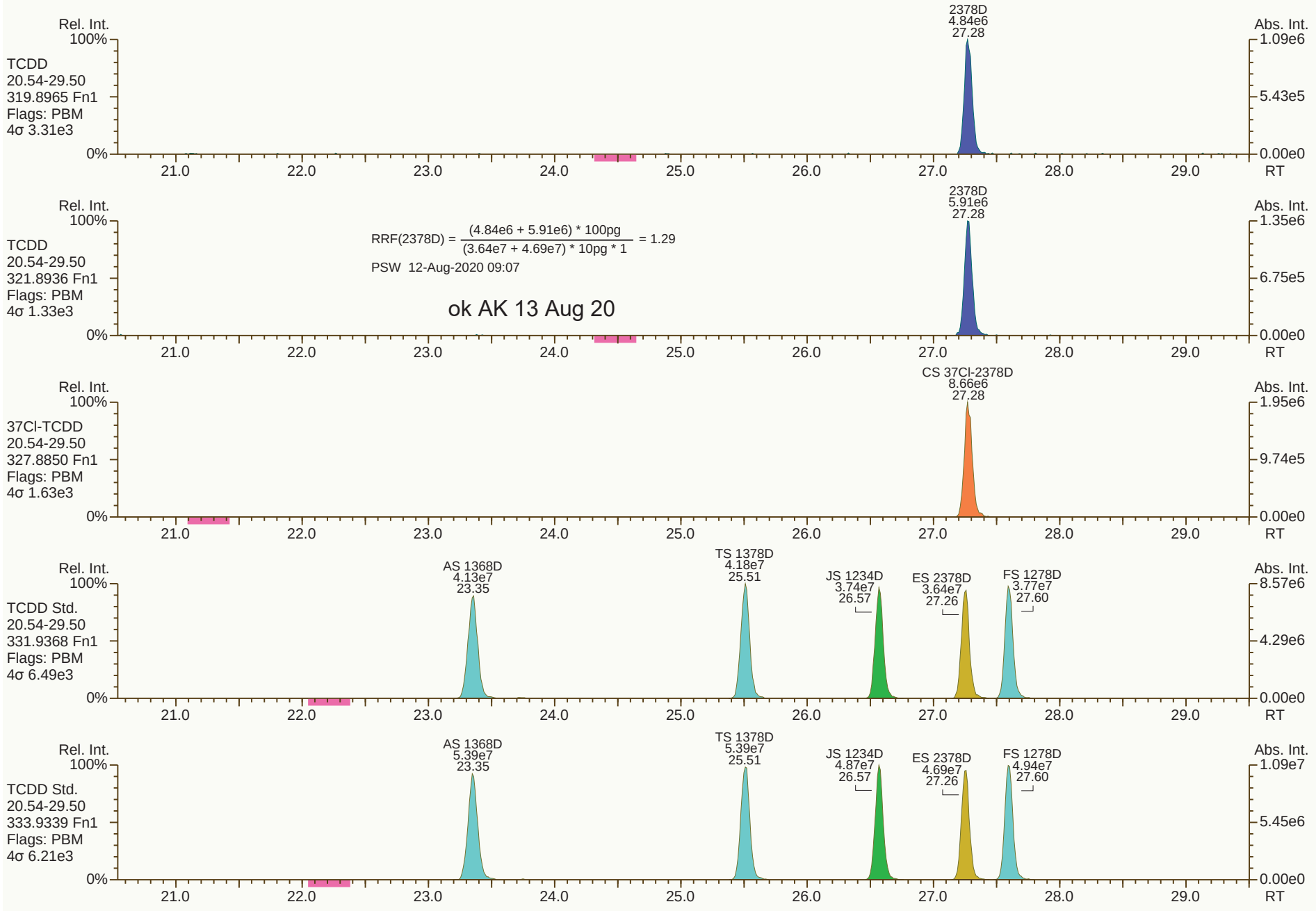
SGS ID: CS3_200811_DF_RB | **Sample ID: SIL 20-449-3** | **Acq: 12-Aug-2020 00:22:05**

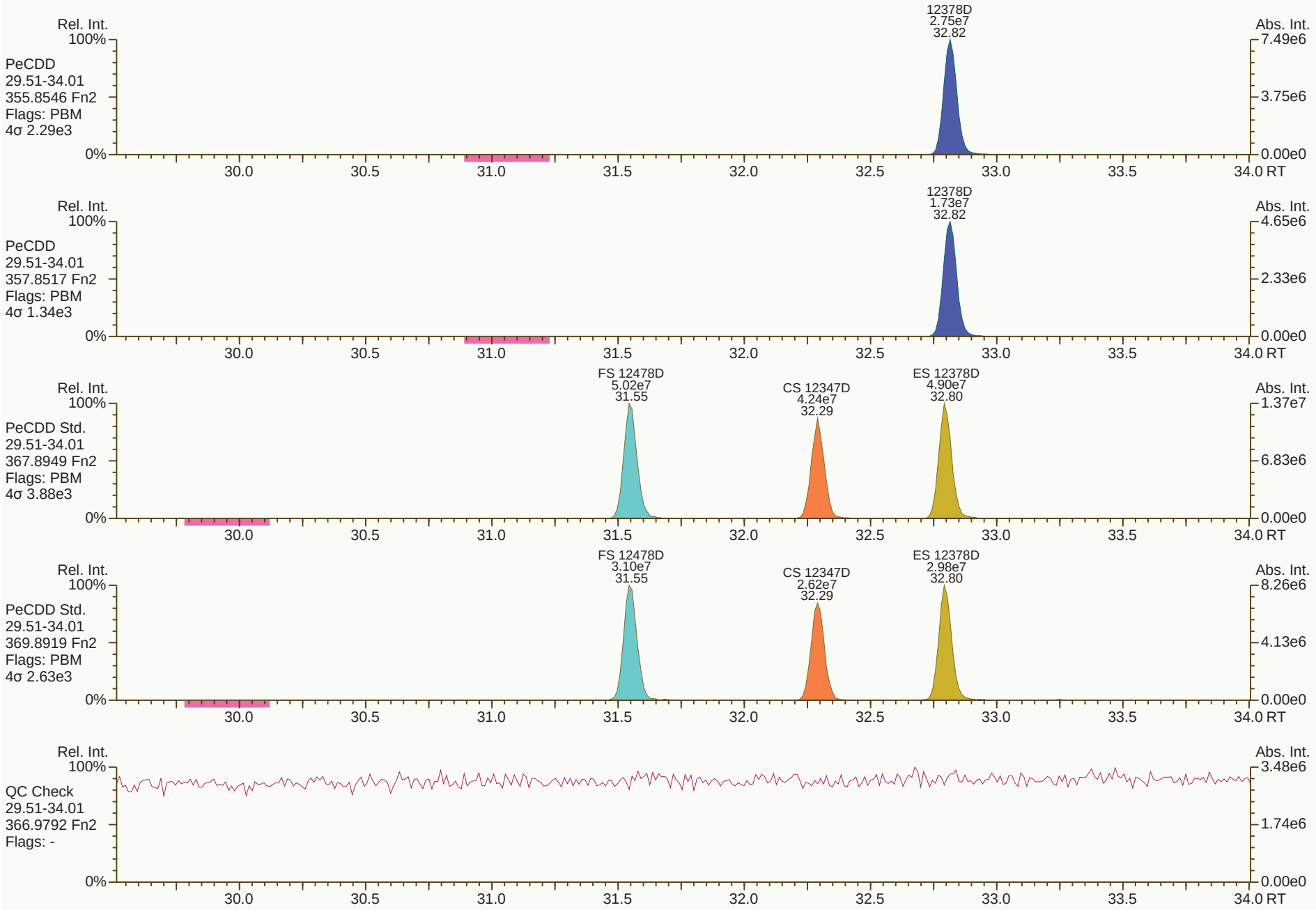
Instr: [ILM] AutoSpec-Ultima MM3 | **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 3** | **User: PSW Datafile: 200811R15**

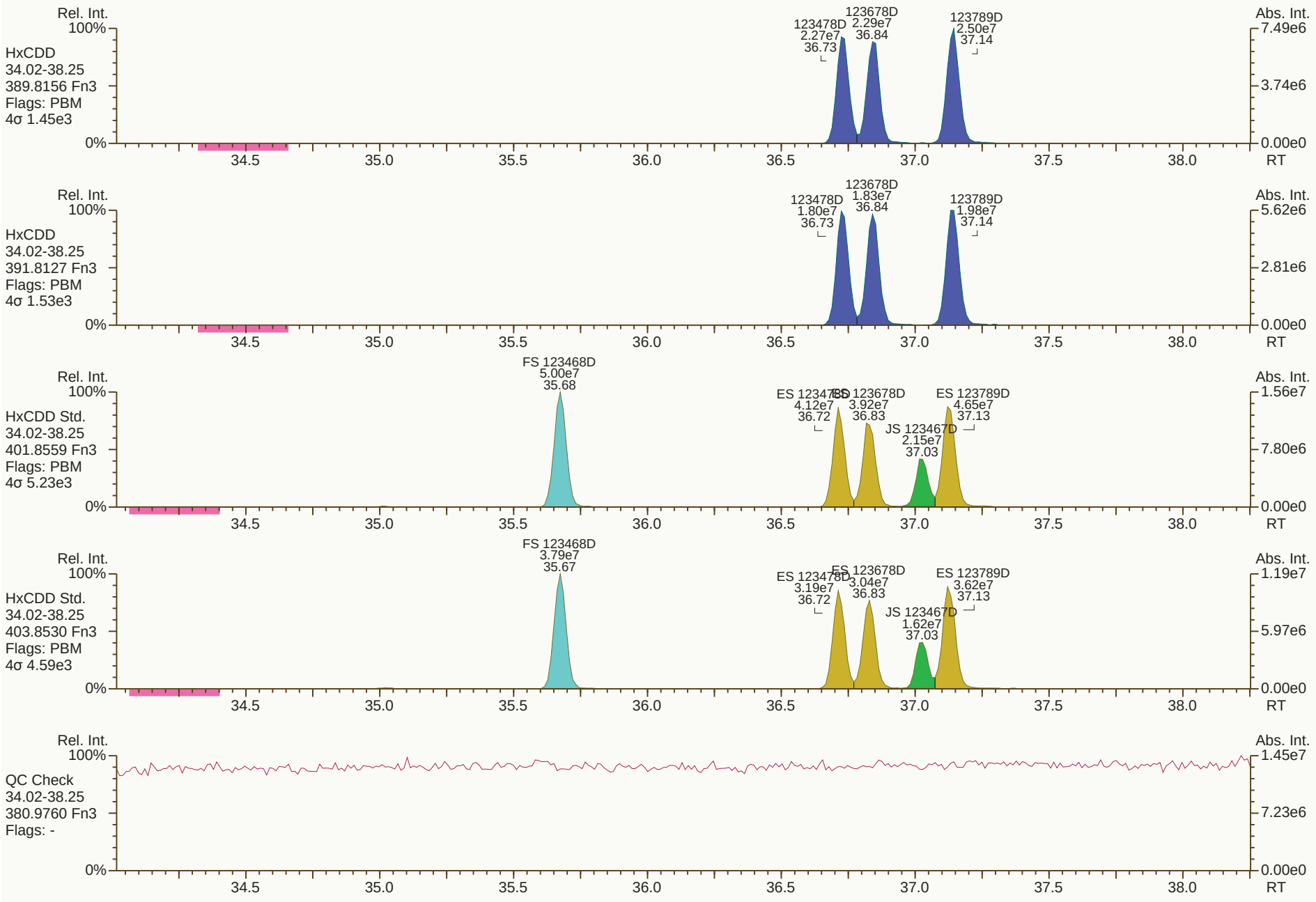


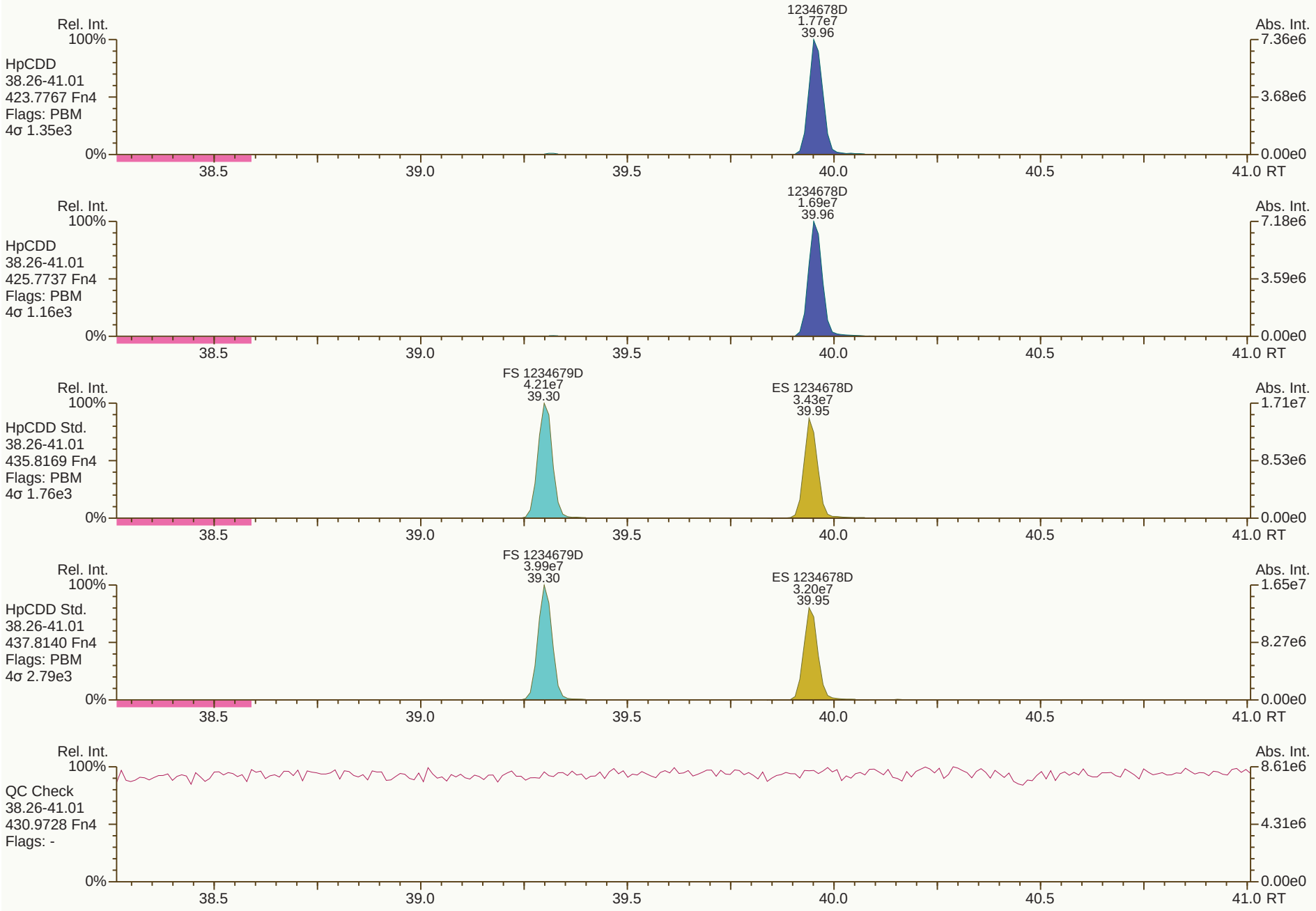
Results: P:\B4500_B4599\B4528\B4528_17661 DF\Resources\CS3_200811_DF_RB.utp_res, saved 13-Aug-2020 08:31 (DTF) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 scc: 477-642 *PKD: n/a Printed: 13-Aug-2020 08:39 Page 1 of 12*


Rel. Int.
100%
TCDD
20.54-29.50
319.8965 Fn1
Flags: PBM
4σ 3.31e3
0%
2378D
4.84e6
27.28
Abs. Int.
1.09e6
5.43e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD
20.54-29.50
321.8936 Fn1
Flags: PBM
4σ 1.33e3
0%
RRF(2378D) = (4.84e6 + 5.91e6) * 100pg / (3.64e7 + 4.69e7) * 10pg * 1 = 1.29
PSW 12-Aug-2020 09:07
ok AK 13 Aug 20
2378D
5.91e6
27.28
Abs. Int.
1.35e6
6.75e5
0.00e0
Rel. Int.
100%
37Cl-TCDD
20.54-29.50
327.8850 Fn1
Flags: PBM
4σ 1.63e3
0%
CS 37Cl-2378D
8.66e6
27.28
Abs. Int.
1.95e6
9.74e5
0.00e0
Rel. Int.
100%
TCDD Std.
20.54-29.50
331.9368 Fn1
Flags: PBM
4σ 6.49e3
0%
AS 1368D
4.13e7
23.35
TS 1378D
4.18e7
25.51
JS 1234D
3.74e7
26.57
ES 2378D
3.64e7
27.26
FS 1278D
3.77e7
27.60
Abs. Int.
8.57e6
4.29e6
0.00e0
Rel. Int.
100%
TCDD Std.
20.54-29.50
333.9339 Fn1
Flags: PBM
4σ 6.21e3
0%
AS 1368D
5.39e7
23.35
TS 1378D
5.39e7
25.51
JS 1234D
4.87e7
26.57
ES 2378D
4.69e7
27.26
FS 1278D
4.94e7
27.60
Abs. Int.
1.09e7
5.45e6
0.00e0


Rel. Int.
100%
PeCDD
29.51-34.01
355.8546 Fn2
Flags: PBM
4σ 2.29e3
0%
12378D
2.75e7
32.82
Abs. Int.
7.49e6
3.75e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD
29.51-34.01
357.8517 Fn2
Flags: PBM
4σ 1.34e3
0%
12378D
1.73e7
32.82
Abs. Int.
4.65e6
2.33e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
367.8949 Fn2
Flags: PBM
4σ 3.88e3
0%
FS 12478D
5.02e7
31.55
CS 12347D
4.24e7
32.29
ES 12378D
4.90e7
32.80
Abs. Int.
1.37e7
6.83e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
369.8919 Fn2
Flags: PBM
4σ 2.63e3
0%
FS 12478D
3.10e7
31.55
CS 12347D
2.62e7
32.29
ES 12378D
2.98e7
32.80
Abs. Int.
8.26e6
4.13e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
QC Check
29.51-34.01
366.9792 Fn2
Flags: -
0%
Abs. Int.
3.48e6
1.74e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT

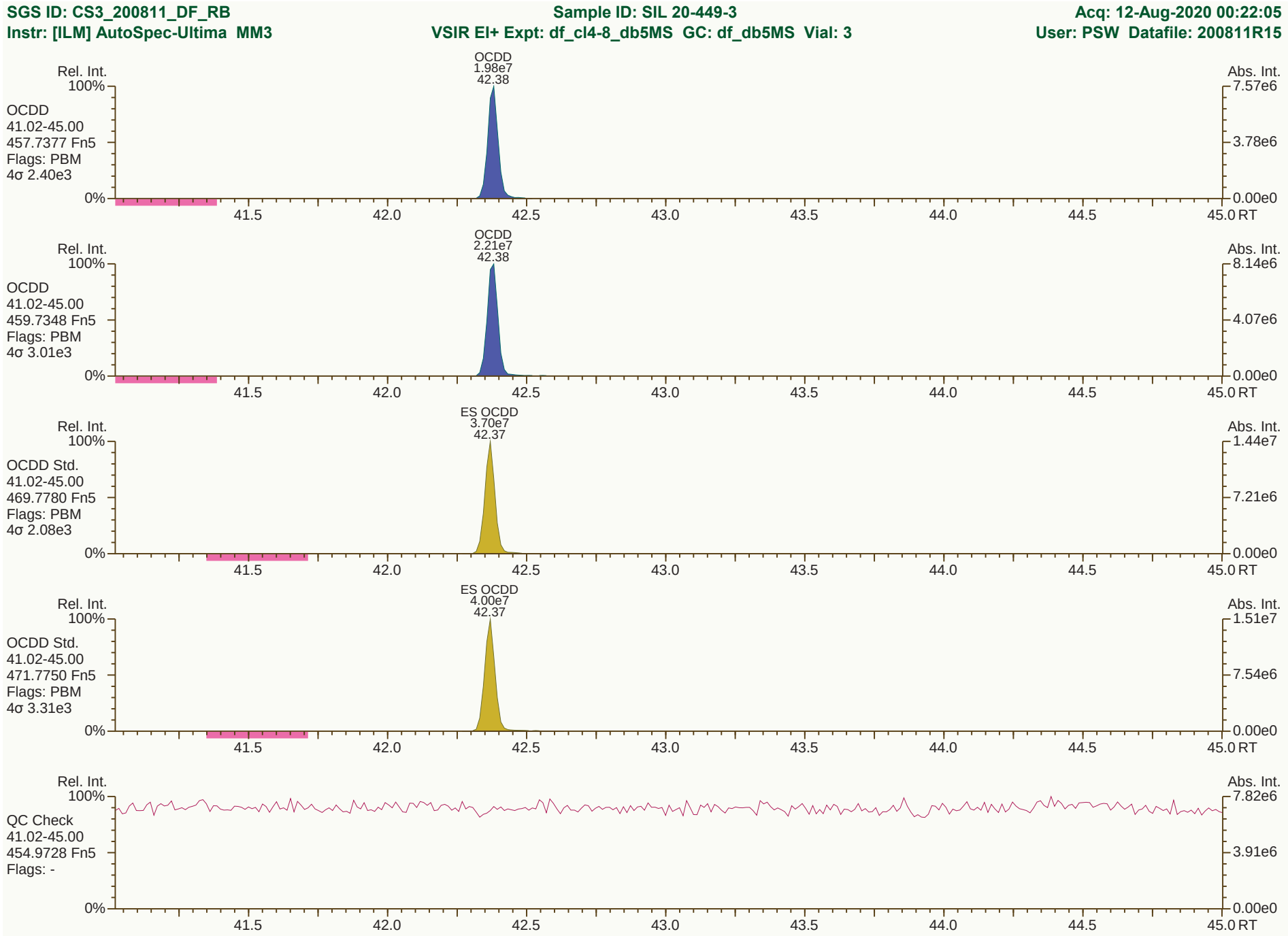

Rel. Int.
100%
HxCDD
34.02-38.25
389.8156 Fn3
Flags: PBM
4σ 1.45e3
123478D
2.27e7
36.73
123678D
2.29e7
36.84
123789D
2.50e7
37.14
Abs. Int.
7.49e6
3.74e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD
34.02-38.25
391.8127 Fn3
Flags: PBM
4σ 1.53e3
123478D
1.80e7
36.73
123678D
1.83e7
36.84
123789D
1.98e7
37.14
Abs. Int.
5.62e6
2.81e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
401.8559 Fn3
Flags: PBM
4σ 5.23e3
FS 123468D
5.00e7
35.68
ES 123478D
4.12e7
36.72
ES 123678D
3.92e7
36.83
ES 123789D
4.65e7
37.13
JS 123467D
2.15e7
37.03
Abs. Int.
1.56e7
7.80e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
403.8530 Fn3
Flags: PBM
4σ 4.59e3
FS 123468D
3.79e7
35.67
ES 123478D
3.19e7
36.72
ES 123678D
3.04e7
36.83
ES 123789D
3.62e7
37.13
JS 123467D
1.62e7
37.03
Abs. Int.
1.19e7
5.97e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
Abs. Int.
1.45e7
7.23e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT


Rel. Int.
100%
HpCDD
38.26-41.01
423.7767 Fn4
Flags: PBM
4σ 1.35e3
0%
1234678D
1.77e7
39.96
Abs. Int.
7.36e6
3.68e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.26-41.01
425.7737 Fn4
Flags: PBM
4σ 1.16e3
0%
1234678D
1.69e7
39.96
Abs. Int.
7.18e6
3.59e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
435.8169 Fn4
Flags: PBM
4σ 1.76e3
0%
FS 1234679D
4.21e7
39.30
ES 1234678D
3.43e7
39.95
Abs. Int.
1.71e7
8.53e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
437.8140 Fn4
Flags: PBM
4σ 2.79e3
0%
FS 1234679D
3.99e7
39.30
ES 1234678D
3.20e7
39.95
Abs. Int.
1.65e7
8.27e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.26-41.01
430.9728 Fn4
Flags: -
0%
Abs. Int.
8.61e6
4.31e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT

SGS ID: CS3_200811_DF_RB
Instr: [ILM] AutoSpec-Ultima MM3

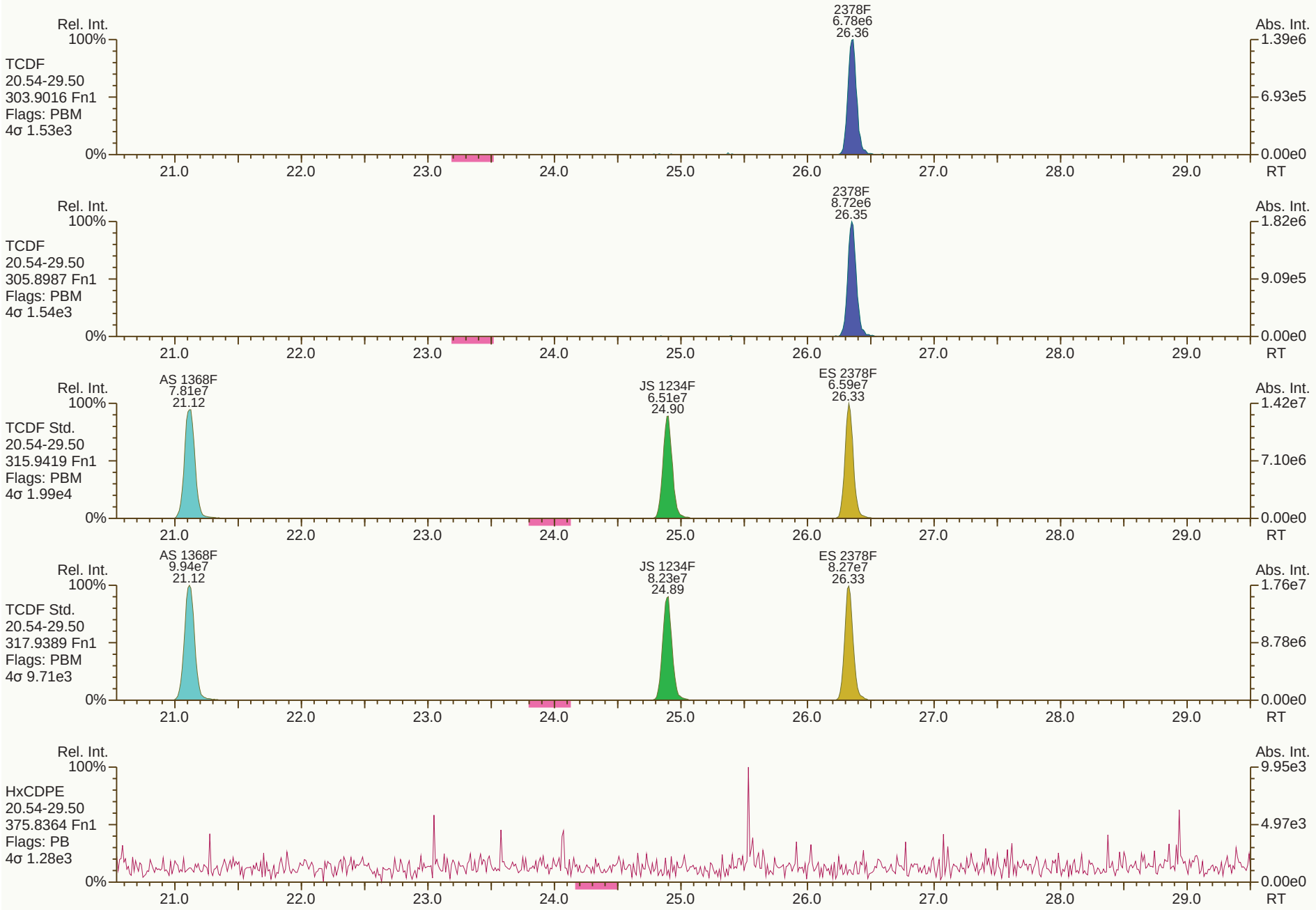
Sample ID: SIL 20-449-3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 3

Acq: 12-Aug-2020 00:22:05
User: PSW Datafile: 200811R15

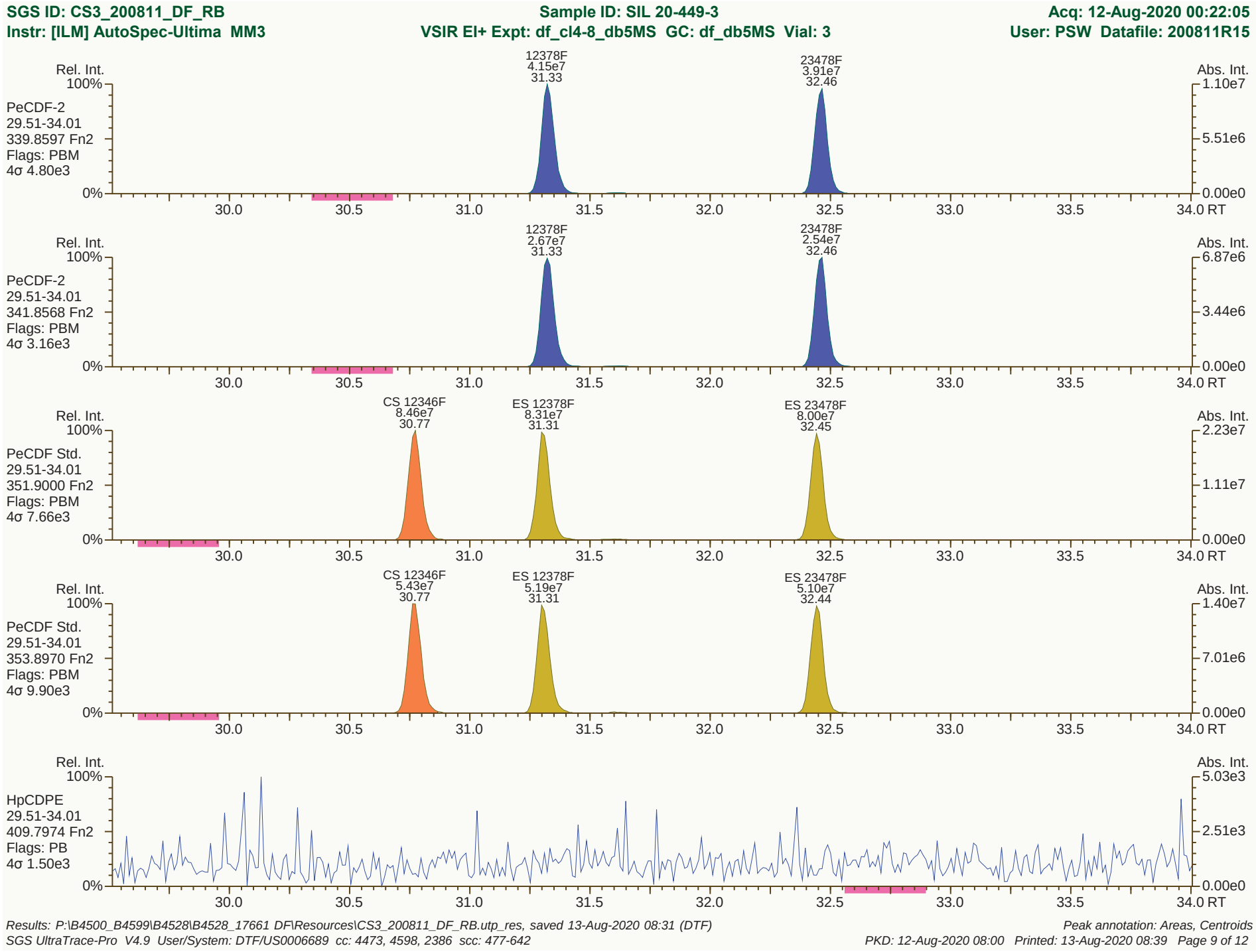


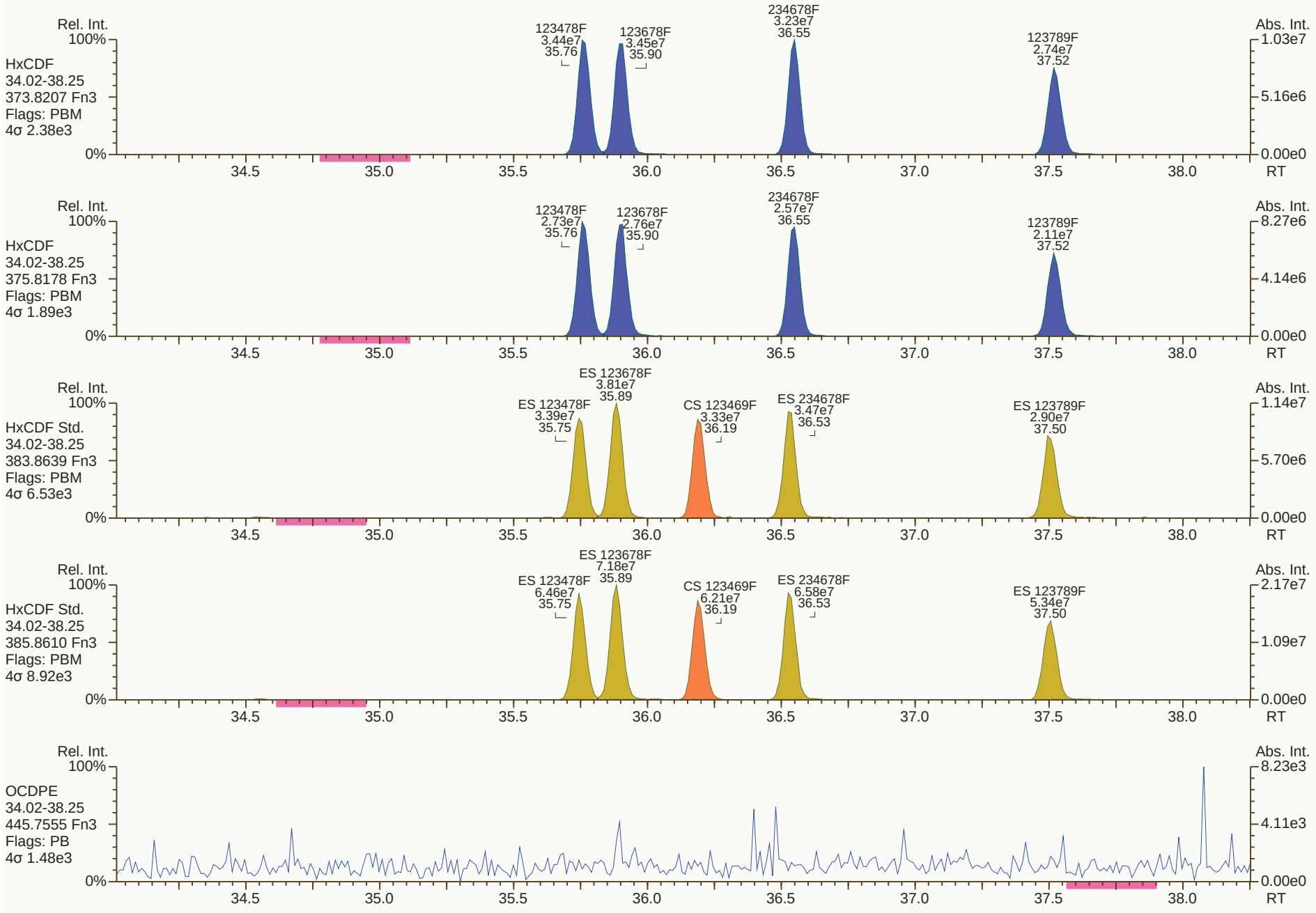
Results: P:\B4500_B4599\B4528\B4528_17661 DF\Resources\CS3_200811_DF_RB.utp_res, saved 13-Aug-2020 08:31 (DTF)
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 1336, 2698 scc: 477-642

Peak annotation: Areas, Centroids
Revised: 12-Aug-2020 08:11 (PSW) Printed: 13-Aug-2020 08:39 Page 6 of 12


Rel. Int.
100%
TCDF
20.54-29.50
303.9016 Fn1
Flags: PBM
4σ 1.53e3
0%
2378F
6.78e6
26.36
Abs. Int.
1.39e6
6.93e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF
20.54-29.50
305.8987 Fn1
Flags: PBM
4σ 1.54e3
0%
2378F
8.72e6
26.35
Abs. Int.
1.82e6
9.09e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
315.9419 Fn1
Flags: PBM
4σ 1.99e4
0%
AS 1368F
7.81e7
21.12
JS 1234F
6.51e7
24.90
ES 2378F
6.59e7
26.33
Abs. Int.
1.42e7
7.10e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
317.9389 Fn1
Flags: PBM
4σ 9.71e3
0%
AS 1368F
9.94e7
21.12
JS 1234F
8.23e7
24.89
ES 2378F
8.27e7
26.33
Abs. Int.
1.76e7
8.78e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
HxCDPE
20.54-29.50
375.8364 Fn1
Flags: PB
4σ 1.28e3
0%
Abs. Int.
9.95e3
4.97e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT

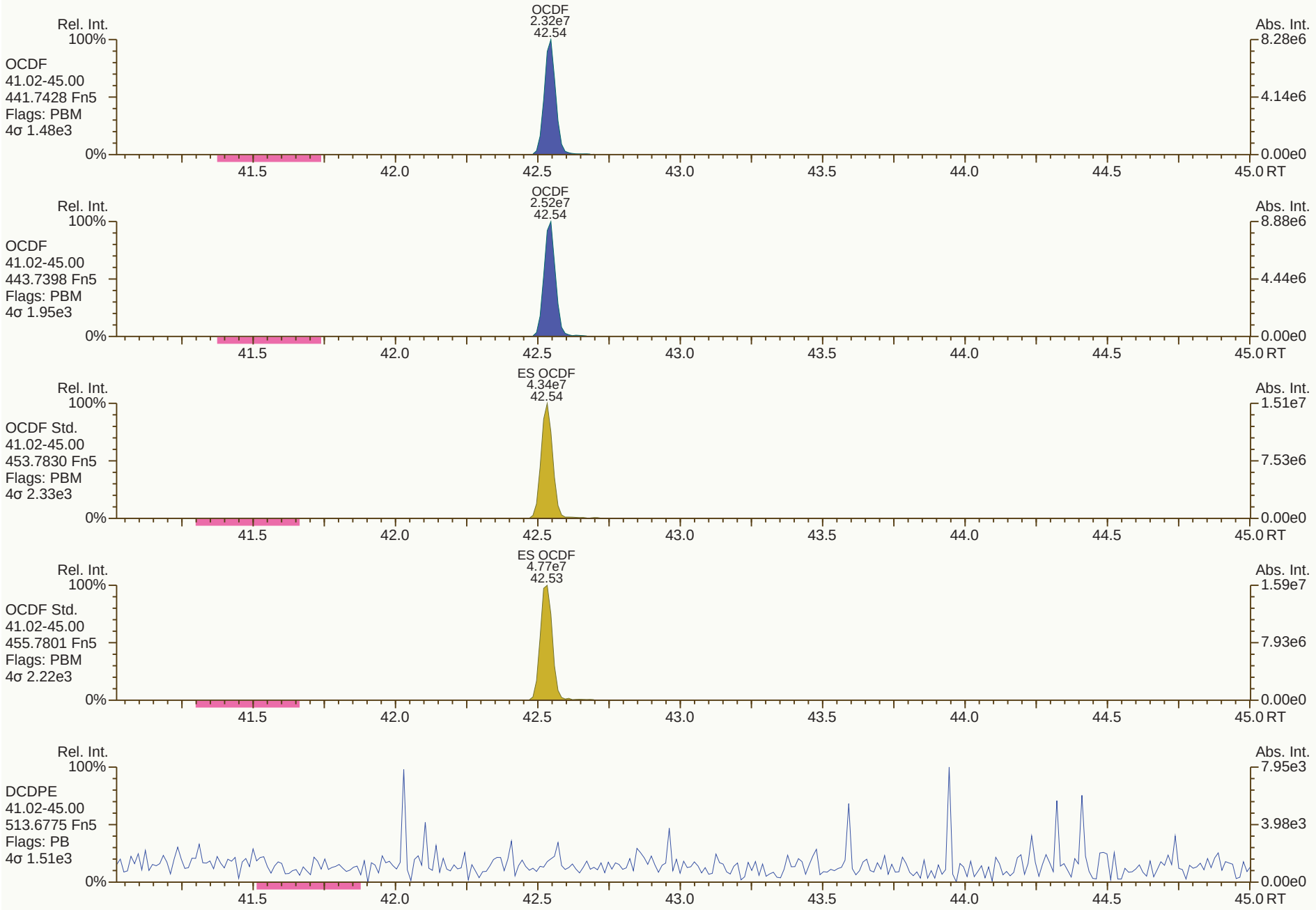

Rel. Int.
100%
0%
Abs. Int.
9.23e3
4.61e3
0.00e0
RT
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
PeCDF-1
20.54-29.50
339.8597 Fn1
Flags: PB
4σ 1.54e3
PeCDF-1
20.54-29.50
341.8568 Fn1
Flags: PB
4σ 2.03e3
1.34e4
6.70e3
QC Check
20.54-29.50
316.9824 Fn1
Flags: -
4.50e6
2.25e6


SGS ID: CS3_200811_DF_RB
Sample ID: SIL 20-449-3
Acq: 12-Aug-2020 00:22:05
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 3
User: PSW Datafile: 200811R15
Rel. Int.
Abs. Int.
PeCDF-2
29.51-34.01
339.8597 Fn2
Flags: PBM
4σ 4.80e3
12378F
4.15e7
31.33
23478F
3.91e7
32.46
1.10e7
5.51e6
0.00e0
PeCDF-2
29.51-34.01
341.8568 Fn2
Flags: PBM
4σ 3.16e3
12378F
2.67e7
31.33
23478F
2.54e7
32.46
6.87e6
3.44e6
0.00e0
PeCDF Std.
29.51-34.01
351.9000 Fn2
Flags: PBM
4σ 7.66e3
CS 12346F
8.46e7
30.77
ES 12378F
8.31e7
31.31
ES 23478F
8.00e7
32.45
2.23e7
1.11e7
0.00e0
PeCDF Std.
29.51-34.01
353.8970 Fn2
Flags: PBM
4σ 9.90e3
CS 12346F
5.43e7
30.77
ES 12378F
5.19e7
31.31
ES 23478F
5.10e7
32.44
1.40e7
7.01e6
0.00e0
HpCDPE
29.51-34.01
409.7974 Fn2
Flags: PB
4σ 1.50e3
5.03e3
2.51e3
0.00e0
100%
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Results: P:\B4500_B4599\B4528\B4528_17661 DF\Resources\CS3_200811_DF_RB.utp_res, saved 13-Aug-2020 08:31 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 4473, 4598, 2386 scc: 477-642
PKD: 12-Aug-2020 08:00 Printed: 13-Aug-2020 08:39 Page 9 of 12


Rel. Int.
100%
HxCDF
34.02-38.25
373.8207 Fn3
Flags: PBM
4σ 2.38e3
0%
123478F
3.44e7
35.76
123678F
3.45e7
35.90
234678F
3.23e7
36.55
123789F
2.74e7
37.52
Abs. Int.
1.03e7
5.16e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDF
34.02-38.25
375.8178 Fn3
Flags: PBM
4σ 1.89e3
0%
123478F
2.73e7
35.76
123678F
2.76e7
35.90
234678F
2.57e7
36.55
123789F
2.11e7
37.52
Abs. Int.
8.27e6
4.14e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDF Std.
34.02-38.25
383.8639 Fn3
Flags: PBM
4σ 6.53e3
0%
ES 123678F
3.81e7
35.89
ES 123478F
3.39e7
35.75
CS 123469F
3.33e7
36.19
ES 234678F
3.47e7
36.53
ES 123789F
2.90e7
37.50
Abs. Int.
1.14e7
5.70e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDF Std.
34.02-38.25
385.8610 Fn3
Flags: PBM
4σ 8.92e3
0%
ES 123678F
7.18e7
35.89
ES 123478F
6.46e7
35.75
CS 123469F
6.21e7
36.19
ES 234678F
6.58e7
36.53
ES 123789F
5.34e7
37.50
Abs. Int.
2.17e7
1.09e7
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
OCDPE
34.02-38.25
445.7555 Fn3
Flags: PB
4σ 1.48e3
0%
Abs. Int.
8.23e3
4.11e3
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT



Results: P:\B4500_B4599\B4528\B4528_17661 DF\Resources\CS3_200811_DF_RB.utp_res, saved 13-Aug-2020 08:31 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 8174, 9869, 6507 scc: 477-642
PKD: 12-Aug-2020 08:00 Printed: 13-Aug-2020 08:39 Page 11 of 12


Rel. Int.
100%
OCDF
41.02-45.00
441.7428 Fn5
Flags: PBM
4σ 1.48e3
0%
OCDF
2.32e7
42.54
Abs. Int.
8.28e6
4.14e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF
41.02-45.00
443.7398 Fn5
Flags: PBM
4σ 1.95e3
0%
OCDF
2.52e7
42.54
Abs. Int.
8.88e6
4.44e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF Std.
41.02-45.00
453.7830 Fn5
Flags: PBM
4σ 2.33e3
0%
ES OCDF
4.34e7
42.54
Abs. Int.
1.51e7
7.53e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF Std.
41.02-45.00
455.7801 Fn5
Flags: PBM
4σ 2.22e3
0%
ES OCDF
4.77e7
42.53
Abs. Int.
1.59e7
7.93e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
DCDPE
41.02-45.00
513.6775 Fn5
Flags: PB
4σ 1.51e3
0%
Abs. Int.
7.95e3
3.98e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

Dioxin/Furan QC Summary		Acq'd: 12 Aug 2020 08:09 PSW				ICAL: MM3_DF_10012020_12JUN2020	
Lab ID: CS3_200811_DF_RC		UTP: 13-Aug-2020 08:31:22 DTF				Checkcode: 207-132-DJS	
Sample ID: SIL 20-449-3		Report: 13 Aug 2020 08:32 TF				Datafile: 200811R23	
Name	**RT**	**Response**	**RA**	**OK**	**Ref. RRFs**	**Calc. RRFs**	**Dev'n**
2378-TCDD	27.27	1.15E+07	0.81	Y	1.18	1.28	8%
12378-PeCDD	32.81	4.32E+07	1.57	Y	1.14	1.15	1%
123478-HxCDD	36.72	4.15E+07	1.26	Y	1.09	1.11	2%
123678-HxCDD	36.84	4.03E+07	1.23	Y	1.13	1.13	0%
123789-HxCDD	37.13	4.52E+07	1.25	Y	1.05	1.08	3%
1234678-HpCDD	39.95	3.44E+07	1.04	Y	0.98	1.05	7%
OCDD	42.37	4.13E+07	0.90	Y	1.08	1.10	2%
2378-TCDF	26.35	1.55E+07	0.78	Y	0.98	1.04	6%
12378-PeCDF	31.32	6.64E+07	1.58	Y	0.95	1.02	7%
23478-PeCDF	32.45	6.43E+07	1.55	Y	0.95	0.99	5%
123478-HxCDF	35.75	6.14E+07	1.25	Y	1.20	1.26	5%
123678-HxCDF	35.89	6.31E+07	1.26	Y	1.07	1.14	6%
234678-HxCDF	36.54	5.92E+07	1.26	Y	1.10	1.15	5%
123789-HxCDF	37.51	4.83E+07	1.25	Y	1.09	1.14	5%
1234678-HpCDF	39.04	5.38E+07	1.04	Y	1.28	1.37	7%
1234789-HpCDF	40.37	4.22E+07	1.05	Y	1.27	1.35	6%
OCDF	42.53	4.88E+07	0.89	Y	1.01	1.06	5%
ES 2378-TCDD	27.24	9.00E+07	0.78	Y	1.01	1.03	3%
ES 12378-PeCDD	32.79	7.51E+07	1.64	Y	0.87	0.86	-1%
ES 123478-HxCDD	36.71	7.46E+07	1.34	Y	1.10	1.03	-6%
ES 123678-HxCDD	36.82	7.16E+07	1.29	Y	1.06	0.99	-6%
ES 123789-HxCDD	37.12	8.38E+07	1.29	Y	1.22	1.16	-5%
ES 1234678-HpCDD	39.94	6.55E+07	1.07	Y	0.99	0.91	-9%
ES OCDD	42.36	7.52E+07	0.89	Y	0.67	0.52	-22%
ES 2378-TCDF	26.32	1.49E+08	0.80	Y	1.01	1.01	0%
ES 12378-PeCDF	31.3	1.31E+08	1.55	Y	0.90	0.89	-1%
ES 23478-PeCDF	32.43	1.30E+08	1.60	Y	0.89	0.88	-1%
ES 123478-HxCDF	35.74	9.76E+07	0.52	Y	1.43	1.35	-5%
ES 123678-HxCDF	35.88	1.11E+08	0.53	Y	1.63	1.53	-6%
ES 234678-HxCDF	36.52	1.03E+08	0.54	Y	1.48	1.43	-3%
ES 123789-HxCDF	37.5	8.46E+07	0.52	Y	1.29	1.17	-9%
ES 1234678-HpCDF	39.03	7.88E+07	0.46	Y	1.15	1.09	-5%
ES 1234789-HpCDF	40.36	6.28E+07	0.45	Y	0.91	0.87	-4%
ES OCDF	42.52	9.23E+07	0.90	Y	0.83	0.64	-23%

Dioxin/Furan QC Summary	Acq'd: 12 Aug 2020 08:09 PSW	ICAL: MM3_DF_10012020_12JUN2020
Lab ID: CS3_200811_DF_RC	UTP: 13-Aug-2020 08:31:22 DTF	Checkcode: 207-132-DJS
Sample ID: SIL 20-449-3	Report: 13 Aug 2020 08:32 TF	Datafile: 200811R23

Name	RT	Response	RA	OK	Ref. RRFs	Calc. RRFs	Dev'n
JS 1234-TCDD	26.56	8.71E+07	0.78	Y	-	-	-
JS 1234-TCDF	24.89	1.47E+08	0.79	Y	-	-	-
JS 123467-HxCDD	37.02	3.61E+07	1.31	Y	-	-	-
CS 37Cl-2378-TCDD	27.27	9.89E+06	n/a	-	1.04	1.14	10%
CS 12347-PeCDD	32.28	6.64E+07	1.67	Y	0.74	0.76	3%
CS 12346-PeCDF	30.76	1.37E+08	1.59	Y	0.86	0.93	9%
CS 123469-HxCDF	36.18	9.82E+07	0.53	Y	1.36	1.36	0%
CS 1234689-HpCDF	39.44	7.47E+07	0.44	Y	1.05	1.04	-2%
~~SS 37Cl-2378-TCDD~~	~~27.27~~	~~9.89E+06~~	~~n/a~~	~~-~~	~~1.04~~	~~1.10~~	~~6%~~
~~SS 12347-PeCDD~~	~~32.28~~	~~6.64E+07~~	~~1.67~~	~~Y~~	~~0.86~~	~~0.88~~	~~3%~~
~~SS 12346-PeCDF~~	~~30.76~~	~~1.37E+08~~	~~1.59~~	~~Y~~	~~0.96~~	~~1.05~~	~~9%~~
~~SS 123469-HxCDF~~	~~36.18~~	~~9.82E+07~~	~~0.53~~	~~Y~~	~~0.83~~	~~0.89~~	~~6%~~
~~SS 1234689-HpCDF~~	~~39.44~~	~~7.47E+07~~	~~0.44~~	~~Y~~	~~0.92~~	~~0.95~~	~~3%~~
~~OCDD-a~~	~~42.37~~	~~2.46E+06~~	~~2.63~~	~~Y~~	~~0.07~~	~~0.07~~	~~-1%~~
~~OCDF-a~~	~~42.53~~	~~2.83E+06~~	~~2.54~~	~~Y~~	~~0.06~~	~~0.06~~	~~-3%~~

METHOD 8290A **PCDD/F CALIBRATION VERIFICATION** **FORM 4A**

Lab Name: SGS North America

Initial Calibration: ICAL: MM3_DF_10012020_12JUN2020

Instrument ID: MM3 GC Column ID: ZB-5ms

VER Data Filename: 200811R23 Analysis Date: 12-AUG-2020 08:09:16

NATIVE ANALYTES	M/Z's FORMING RATIO	ION ABUND. RATIO	QC LIMITS			OK	CONC. FOUND	RANGE (ng/mL)			OK
2,3,7,8-TCDD	M/M+2	0.81	0.65	-	0.89	Y	10.8	8	-	12	Y
1,2,3,7,8-PeCDD	M+2/M+4	1.57	1.32	-	1.78	Y	50.7	40	-	60	Y
1,2,3,4,7,8-HxCDD	M+2/M+4	1.26	1.05	-	1.43	Y	50.9	40	-	60	Y
1,2,3,6,7,8-HxCDD	M+2/M+4	1.23	1.05	-	1.43	Y	50	40	-	60	Y
1,2,3,7,8,9-HxCDD	M+2/M+4	1.25	1.05	-	1.43	Y	51.5	40	-	60	Y
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	0.88	-	1.20	Y	53.4	40	-	60	Y
OCDD	M+2/M+4	0.90	0.76	-	1.02	Y	102	80	-	120	Y
2,3,7,8-TCDF	M/M+2	0.78	0.65	-	0.89	Y	10.6	8	-	12	Y
1,2,3,7,8-PeCDF	M+2/M+4	1.58	1.32	-	1.78	Y	53.5	40	-	60	Y
2,3,4,7,8-PeCDF	M+2/M+4	1.55	1.32	-	1.78	Y	52.4	40	-	60	Y
1,2,3,4,7,8-HxCDF	M+2/M+4	1.25	1.05	-	1.43	Y	52.6	40	-	60	Y
1,2,3,6,7,8-HxCDF	M+2/M+4	1.26	1.05	-	1.43	Y	53.2	40	-	60	Y
2,3,4,6,7,8-HxCDF	M+2/M+4	1.26	1.05	-	1.43	Y	52.3	40	-	60	Y
1,2,3,7,8,9-HxCDF	M+2/M+4	1.25	1.05	-	1.43	Y	52.3	40	-	60	Y
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.04	0.88	-	1.20	Y	53.3	40	-	60	Y
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.05	0.88	-	1.20	Y	53	40	-	60	Y
OCDF	M+2/M+4	0.89	0.76	-	1.02	Y	105	80	-	120	Y

Processed: 13 Aug 2020 08:39 Analyst: TF

METHOD 8290A **PCDD/F CALIBRATION VERIFICATION** **FORM 4B**

Lab Name: SGS North America

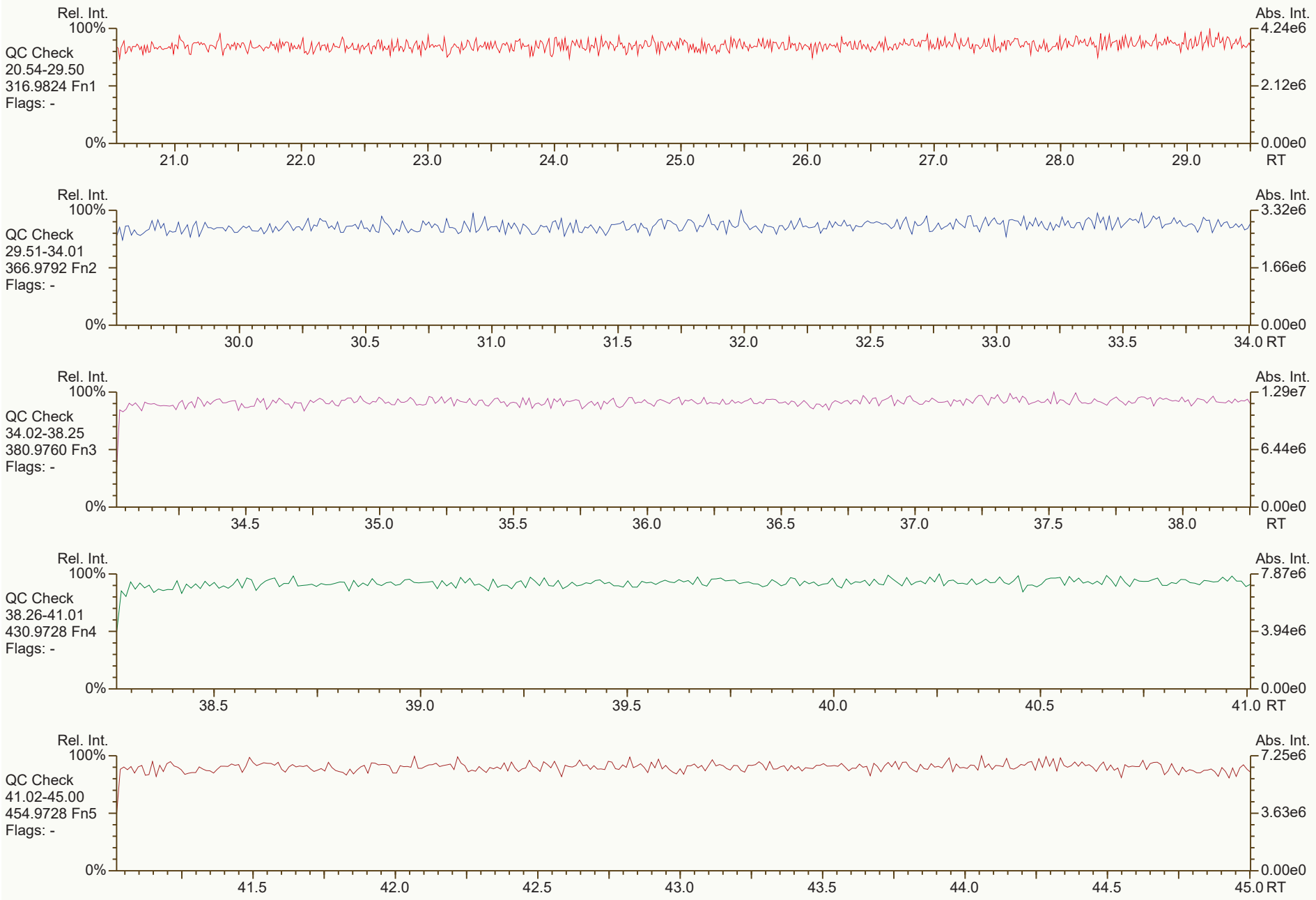
Initial Calibration: ICAL: MM3_DF_10012020_12JUN2020

Instrument ID: MM3 GC Column ID: ZB-5ms

VER Data Filename: 200811R23 Analysis Date: 12-AUG-2020 08:09:16

LABELED ANALYTES	M/Z's FORMING RATIO	ION ABUND. RATIO	QC LIMITS			OK	CONC. FOUND	RANGE (ng/mL)			OK
13C-2,3,7,8-TCDD	M/M+2	0.78	0.65	-	0.89	Y	103	70	-	130	Y
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.64	1.32	-	1.78	Y	99	70	-	130	Y
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.34	1.05	-	1.43	Y	94.4	70	-	130	Y
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.29	1.05	-	1.43	Y	93.5	70	-	130	Y
13C-1,2,3,7,8,9-HxCDD	M+2/M+4	1.29	1.05	-	1.43	Y	95.4	70	-	130	Y
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.07	0.88	-	1.20	Y	91.5	70	-	130	Y
13C-OCDD	M+2/M+4	0.89	0.76	-	1.02	Y	156	140	-	260	Y
13C-2,3,7,8-TCDF	M/M+2	0.80	0.65	-	0.89	Y	99.8	70	-	130	Y
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.55	1.32	-	1.78	Y	98.8	70	-	130	Y
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.60	1.32	-	1.78	Y	99.2	70	-	130	Y
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	94.6	70	-	130	Y
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.53	0.43	-	0.59	Y	94	70	-	130	Y
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.54	0.43	-	0.59	Y	96.7	70	-	130	Y
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	90.9	70	-	130	Y
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.46	0.37	-	0.51	Y	95.3	70	-	130	Y
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.45	0.37	-	0.51	Y	96	70	-	130	Y
13C-OCDF	M+2/M+4	0.90	0.76	-	1.02	Y	154	140	-	260	Y
CLEANUP STANDARDS											
37Cl-2,3,7,8-TCDD	n/a						11	7.9	-	12.7	Y
13C-1,2,3,4,7-PeCDD	M+2/M+4	1.67	1.32	-	1.78	Y	103	70	-	130	Y
13C-1,2,3,4,6-PeCDF	M+2/M+4	1.59	1.32	-	1.78	Y	109	70	-	130	Y
13C-1,2,3,4,6,9-HxCDF	M/M+2	0.53	0.43	-	0.59	Y	100	70	-	130	Y
13C-1,2,3,4,6,8,9-HpCDF	M/M+2	0.44	0.37	-	0.51	Y	98.2	70	-	130	Y

Processed: 13 Aug 2020 08:39 Analyst: TF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QC Check
20.54-29.50
316.9824 Fn1
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0%
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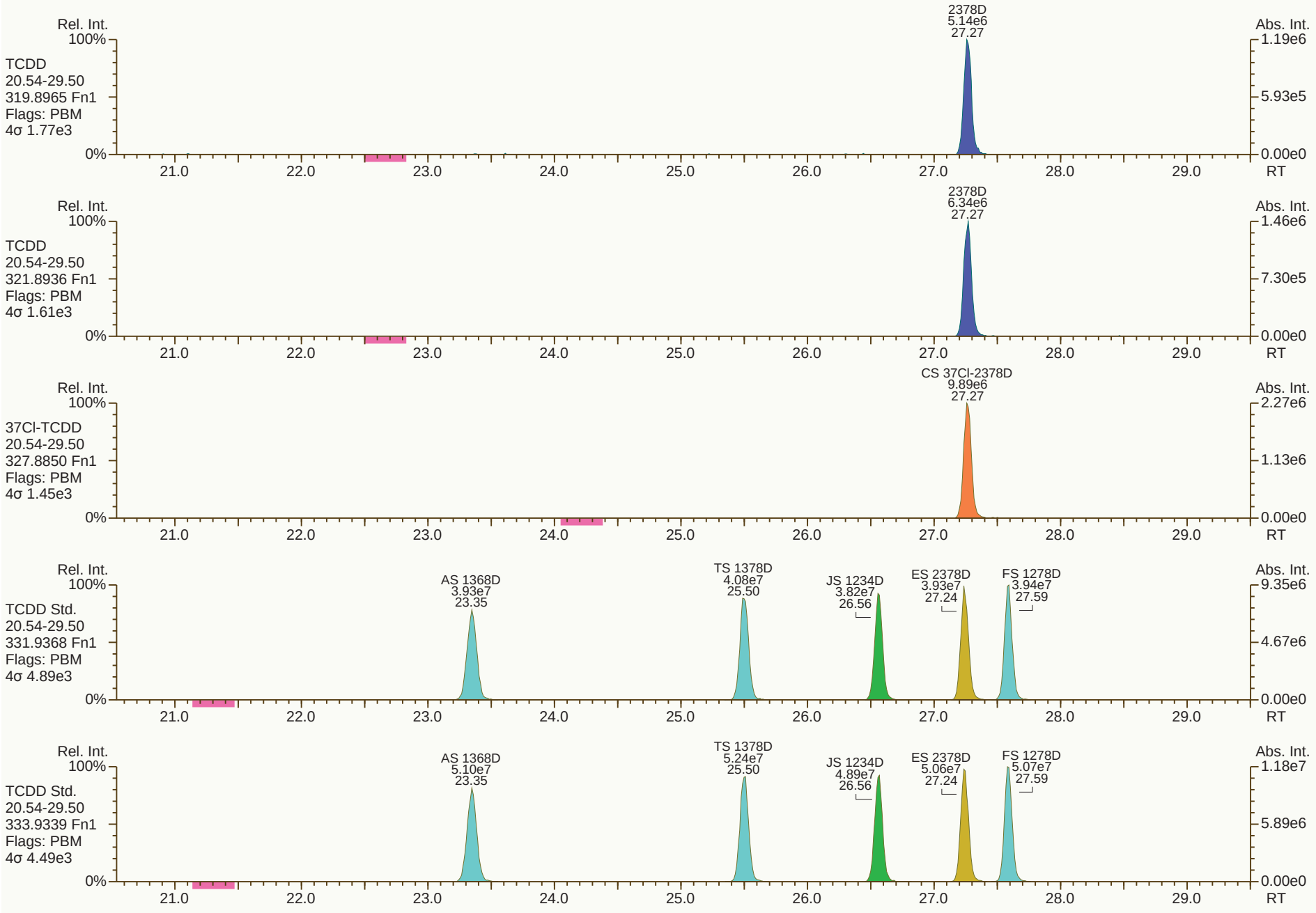
2.12e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
QC Check
29.51-34.01
366.9792 Fn2
Flags: -
0%
Abs. Int.
3.32e6
1.66e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
0%
Abs. Int.
1.29e7
6.44e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
QC Check
38.26-41.01
430.9728 Fn4
Flags: -
0%
Abs. Int.
7.87e6
3.94e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
7.25e6
3.63e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT


Rel. Int.
100%
TCDD
20.54-29.50
319.8965 Fn1
Flags: PBM
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0%
2378D
5.14e6
27.27
Abs. Int.
1.19e6
5.93e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD
20.54-29.50
321.8936 Fn1
Flags: PBM
4σ 1.61e3
0%
2378D
6.34e6
27.27
Abs. Int.
1.46e6
7.30e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
37Cl-TCDD
20.54-29.50
327.8850 Fn1
Flags: PBM
4σ 1.45e3
0%
CS 37Cl-2378D
9.89e6
27.27
Abs. Int.
2.27e6
1.13e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
331.9368 Fn1
Flags: PBM
4σ 4.89e3
0%
AS 1368D
3.93e7
23.35
TS 1378D
4.08e7
25.50
JS 1234D
3.82e7
26.56
ES 2378D
3.93e7
27.24
FS 1278D
3.94e7
27.59
Abs. Int.
9.35e6
4.67e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
333.9339 Fn1
Flags: PBM
4σ 4.49e3
0%
AS 1368D
5.10e7
23.35
TS 1378D
5.24e7
25.50
JS 1234D
4.89e7
26.56
ES 2378D
5.06e7
27.24
FS 1278D
5.07e7
27.59
Abs. Int.
1.18e7
5.89e6
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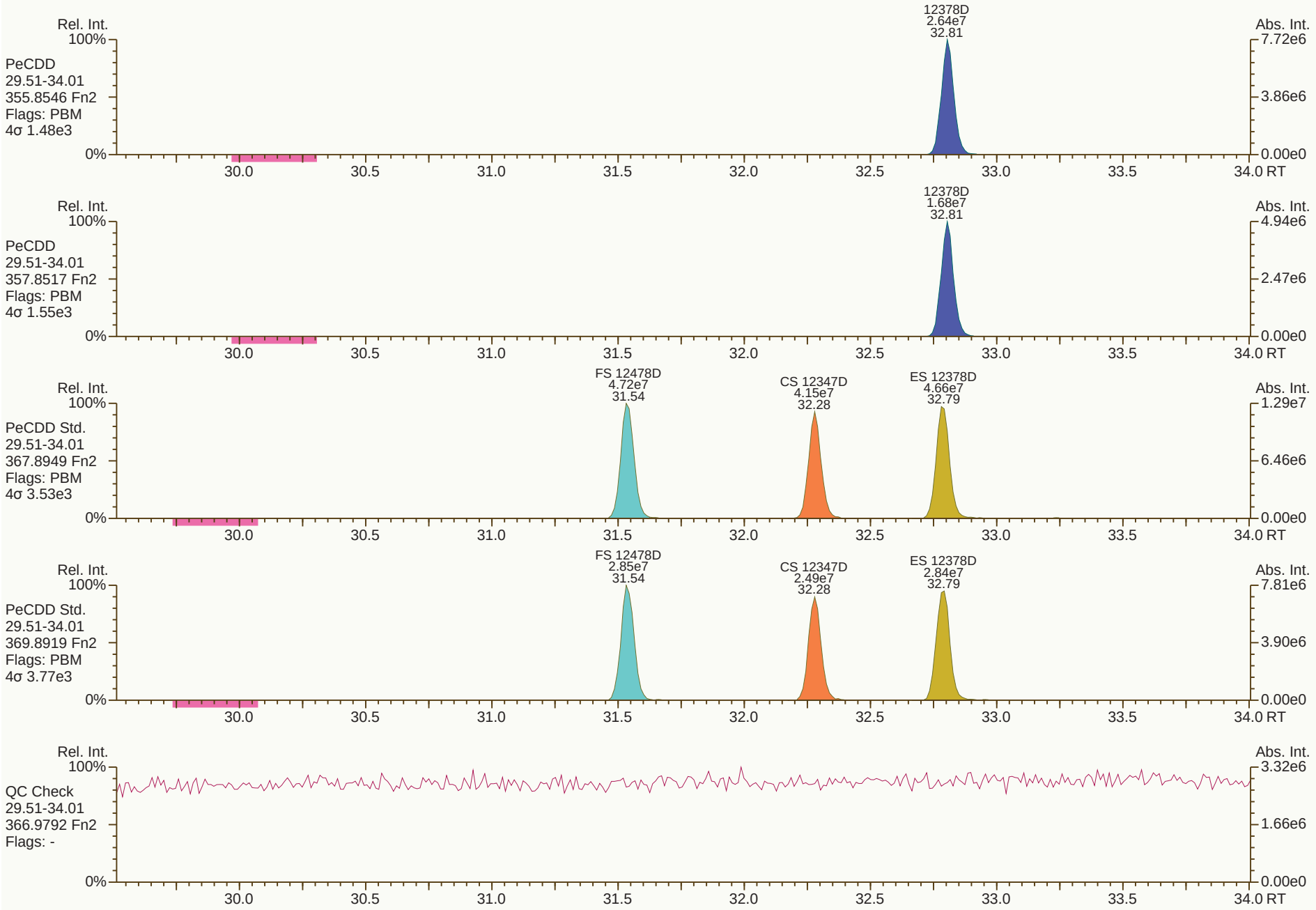
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
PeCDD
29.51-34.01
355.8546 Fn2
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0%
12378D
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32.81
Abs. Int.
7.72e6
3.86e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD
29.51-34.01
357.8517 Fn2
Flags: PBM
4σ 1.55e3
0%
12378D
1.68e7
32.81
Abs. Int.
4.94e6
2.47e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
367.8949 Fn2
Flags: PBM
4σ 3.53e3
0%
FS 12478D
4.72e7
31.54
CS 12347D
4.15e7
32.28
ES 12378D
4.66e7
32.79
Abs. Int.
1.29e7
6.46e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
369.8919 Fn2
Flags: PBM
4σ 3.77e3
0%
FS 12478D
2.85e7
31.54
CS 12347D
2.49e7
32.28
ES 12378D
2.84e7
32.79
Abs. Int.
7.81e6
3.90e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
QC Check
29.51-34.01
366.9792 Fn2
Flags: -
0%
Abs. Int.
3.32e6
1.66e6
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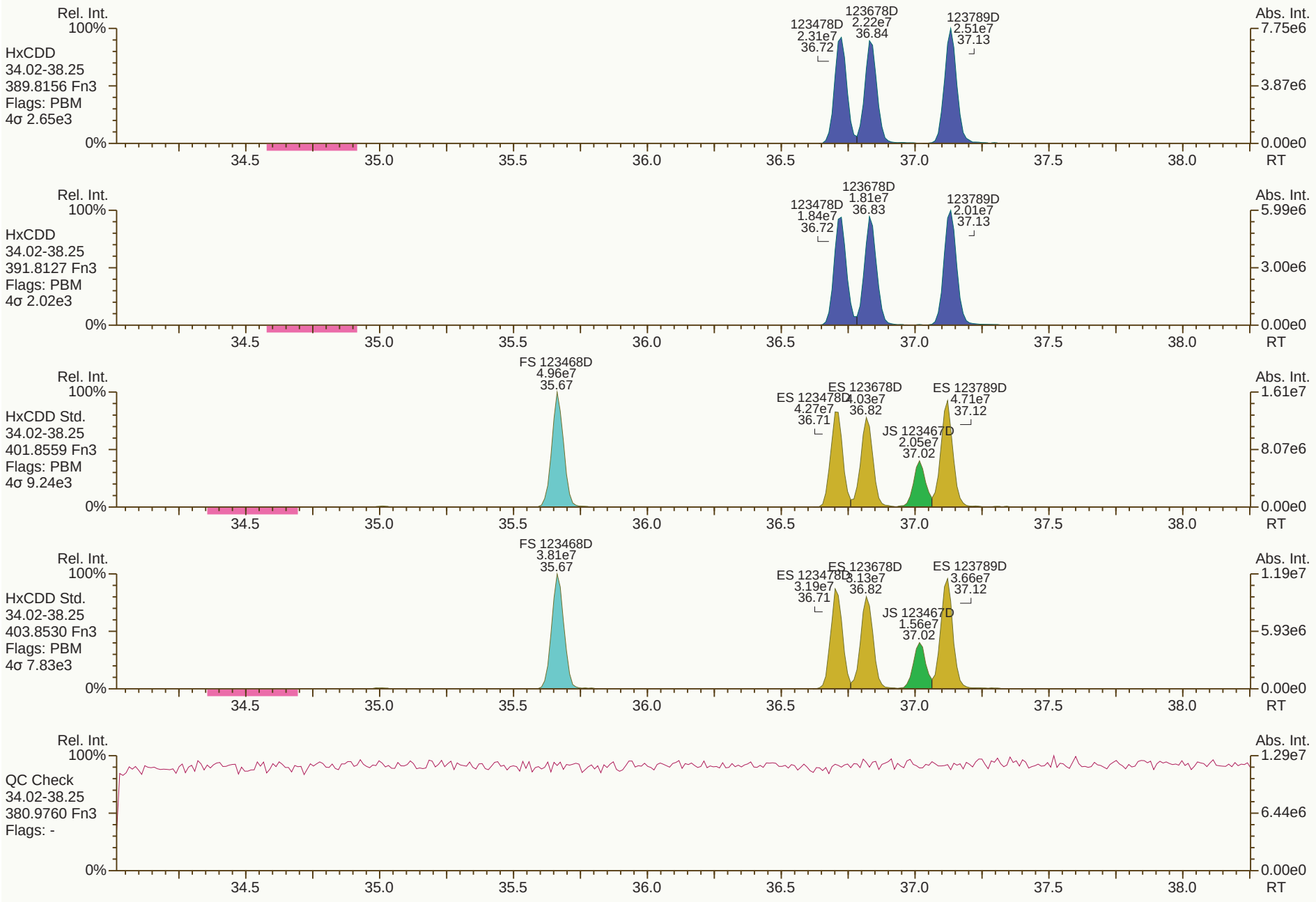
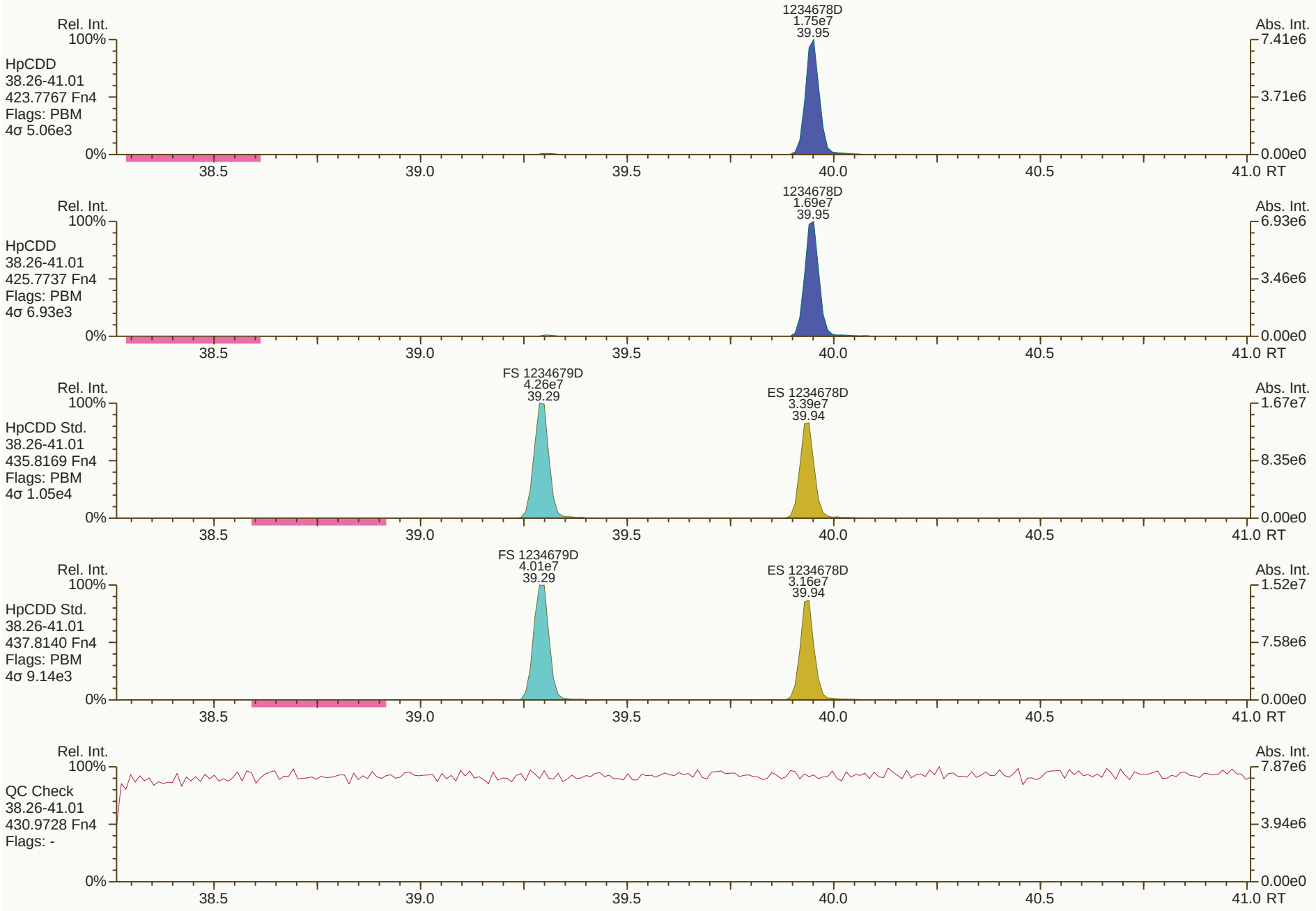
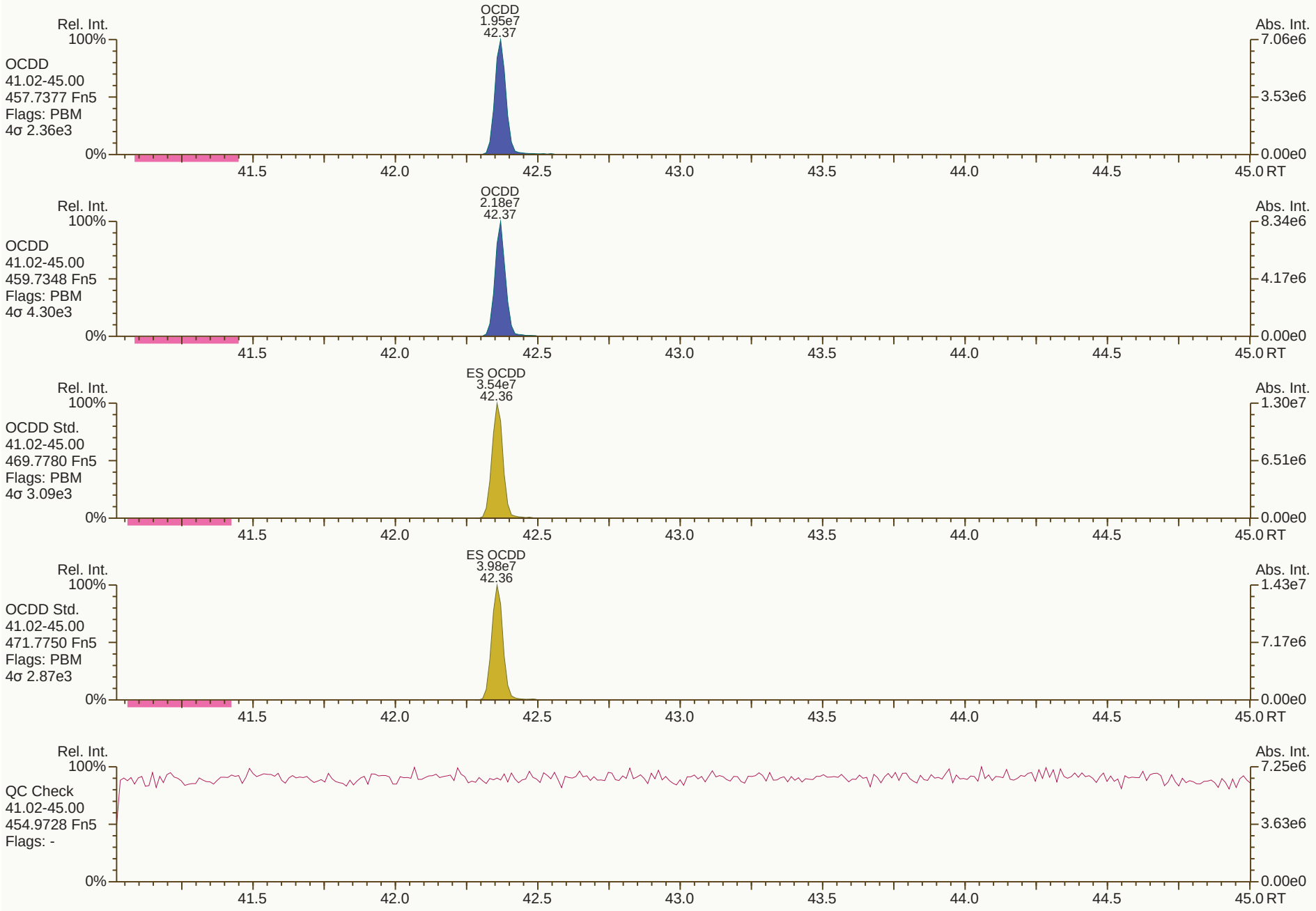
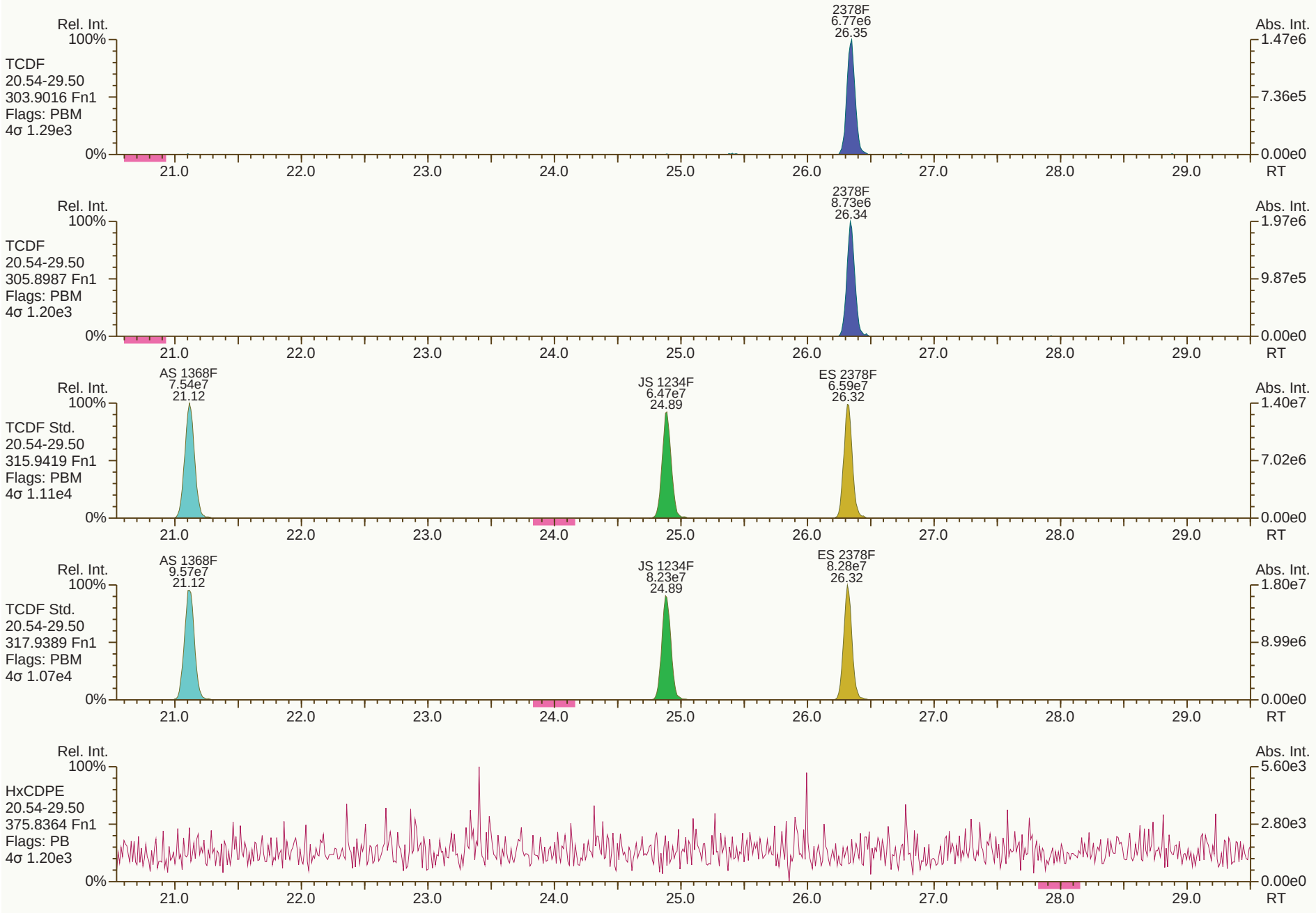
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT


Rel. Int.
100%
HxCDD
34.02-38.25
389.8156 Fn3
Flags: PBM
4σ 2.65e3
123478D
2.31e7
36.72
123678D
2.22e7
36.84
123789D
2.51e7
37.13
Abs. Int.
7.75e6
3.87e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD
34.02-38.25
391.8127 Fn3
Flags: PBM
4σ 2.02e3
123478D
1.84e7
36.72
123678D
1.81e7
36.83
123789D
2.01e7
37.13
Abs. Int.
5.99e6
3.00e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
401.8559 Fn3
Flags: PBM
4σ 9.24e3
FS 123468D
4.96e7
35.67
ES 123478D
4.27e7
36.71
ES 123678D
4.03e7
36.82
JS 123467D
2.05e7
37.02
ES 123789D
4.71e7
37.12
Abs. Int.
1.61e7
8.07e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
403.8530 Fn3
Flags: PBM
4σ 7.83e3
FS 123468D
3.81e7
35.67
ES 123478D
3.19e7
36.71
ES 123678D
3.13e7
36.82
JS 123467D
1.56e7
37.02
ES 123789D
3.66e7
37.12
Abs. Int.
1.19e7
5.93e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
Abs. Int.
1.29e7
6.44e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT


Rel. Int.
100%
HpCDD
38.26-41.01
423.7767 Fn4
Flags: PBM
4σ 5.06e3
0%
1234678D
1.75e7
39.95
Abs. Int.
7.41e6
3.71e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.26-41.01
425.7737 Fn4
Flags: PBM
4σ 6.93e3
0%
1234678D
1.69e7
39.95
Abs. Int.
6.93e6
3.46e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
435.8169 Fn4
Flags: PBM
4σ 1.05e4
0%
FS 1234679D
4.26e7
39.29
ES 1234678D
3.39e7
39.94
Abs. Int.
1.67e7
8.35e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
437.8140 Fn4
Flags: PBM
4σ 9.14e3
0%
FS 1234679D
4.01e7
39.29
ES 1234678D
3.16e7
39.94
Abs. Int.
1.52e7
7.58e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.26-41.01
430.9728 Fn4
Flags: -
0%
Abs. Int.
7.87e6
3.94e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT


OCDD
1.95e7
42.37
Rel. Int.
100%
OCDD
41.02-45.00
457.7377 Fn5
Flags: PBM
4σ 2.36e3
0%
Abs. Int.
7.06e6
3.53e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDD
2.18e7
42.37
Rel. Int.
100%
OCDD
41.02-45.00
459.7348 Fn5
Flags: PBM
4σ 4.30e3
0%
Abs. Int.
8.34e6
4.17e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
3.54e7
42.36
Rel. Int.
100%
OCDD Std.
41.02-45.00
469.7780 Fn5
Flags: PBM
4σ 3.09e3
0%
Abs. Int.
1.30e7
6.51e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
3.98e7
42.36
Rel. Int.
100%
OCDD Std.
41.02-45.00
471.7750 Fn5
Flags: PBM
4σ 2.87e3
0%
Abs. Int.
1.43e7
7.17e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
7.25e6
3.63e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

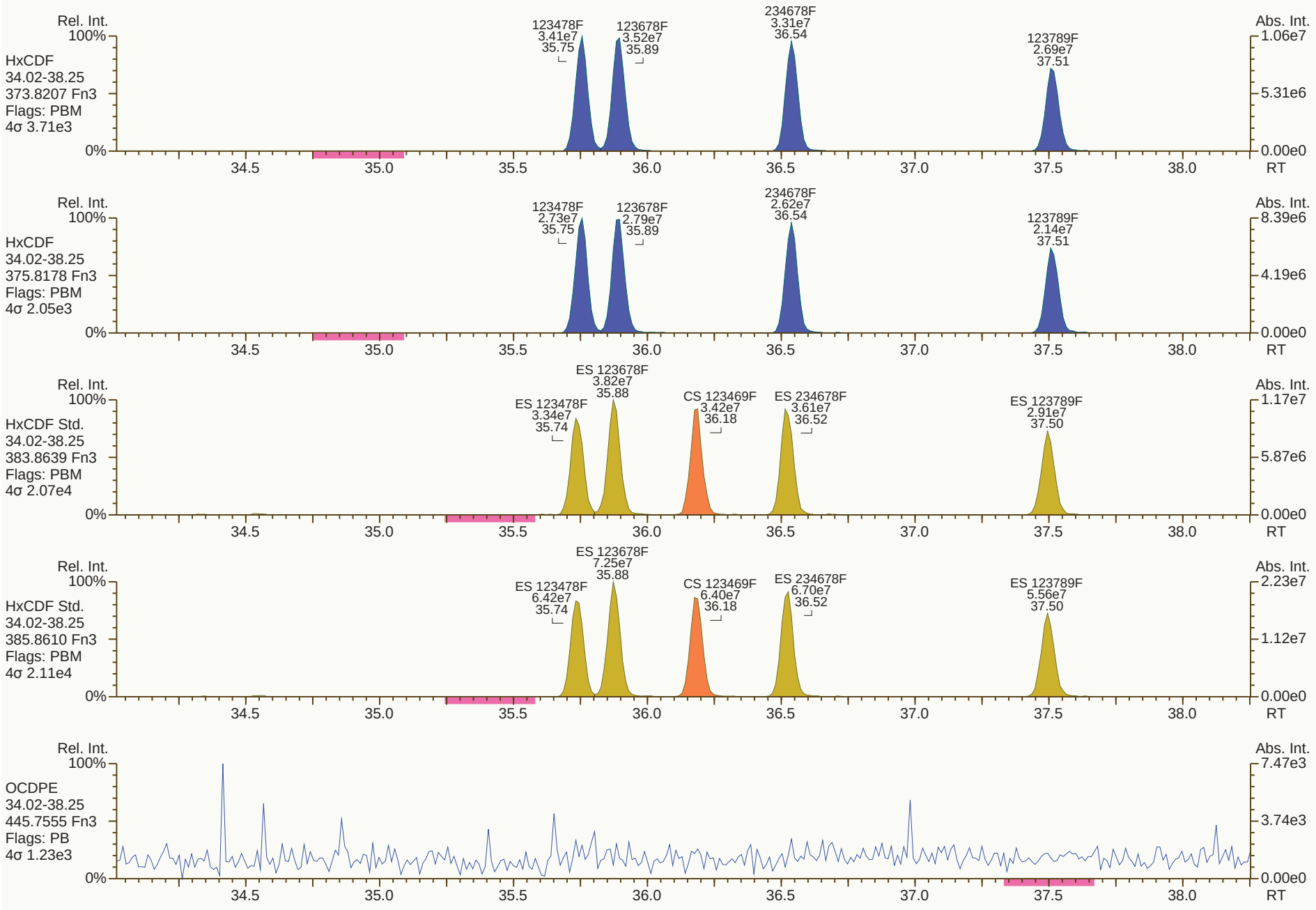

Rel. Int.
100%
TCDF
20.54-29.50
303.9016 Fn1
Flags: PBM
4σ 1.29e3
0%
2378F
6.77e6
26.35
Abs. Int.
1.47e6
7.36e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF
20.54-29.50
305.8987 Fn1
Flags: PBM
4σ 1.20e3
0%
2378F
8.73e6
26.34
Abs. Int.
1.97e6
9.87e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
315.9419 Fn1
Flags: PBM
4σ 1.11e4
0%
AS 1368F
7.54e7
21.12
JS 1234F
6.47e7
24.89
ES 2378F
6.59e7
26.32
Abs. Int.
1.40e7
7.02e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
317.9389 Fn1
Flags: PBM
4σ 1.07e4
0%
AS 1368F
9.57e7
21.12
JS 1234F
8.23e7
24.89
ES 2378F
8.28e7
26.32
Abs. Int.
1.80e7
8.99e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
HxCDPE
20.54-29.50
375.8364 Fn1
Flags: PB
4σ 1.20e3
0%
Abs. Int.
5.60e3
2.80e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
0%
Abs. Int.
1.67e4
8.33e3
0.00e0
RT
PeCDF-1
20.54-29.50
339.8597 Fn1
Flags: PB
4σ 1.79e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
Rel. Int.
100%
0%
Abs. Int.
1.76e4
8.80e3
0.00e0
RT
PeCDF-1
20.54-29.50
341.8568 Fn1
Flags: PB
4σ 1.79e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
Rel. Int.
100%
0%
Abs. Int.
4.24e6
2.12e6
0.00e0
RT
QC Check
20.54-29.50
316.9824 Fn1
Flags: -
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0

SGS ID: CS3_200811_DF_RC
Sample ID: SIL 20-449-3
Acq: 12-Aug-2020 08:09:16
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 3
User: PSW Datafile: 200811R23



Results: P:\B4500_B4599\B4528\B4528_17661 DF\Resources\CS3_200811_DF_RC.utp_res, saved 13-Aug-2020 08:31 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 2238, 5419, 3953 scc: 207-132
PKD: 12-Aug-2020 08:57 Printed: 13-Aug-2020 08:41 Page 9 of 12


Rel. Int.
100%
HxCDF
34.02-38.25
373.8207 Fn3
Flags: PBM
4σ 3.71e3
123478F
3.41e7
35.75
123678F
3.52e7
35.89
234678F
3.31e7
36.54
123789F
2.69e7
37.51
Abs. Int.
1.06e7
5.31e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDF
34.02-38.25
375.8178 Fn3
Flags: PBM
4σ 2.05e3
123478F
2.73e7
35.75
123678F
2.79e7
35.89
234678F
2.62e7
36.54
123789F
2.14e7
37.51
Abs. Int.
8.39e6
4.19e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDF Std.
34.02-38.25
383.8639 Fn3
Flags: PBM
4σ 2.07e4
ES 123678F
3.82e7
35.88
ES 123478F
3.34e7
35.74
CS 123469F
3.42e7
36.18
ES 234678F
3.61e7
36.52
ES 123789F
2.91e7
37.50
Abs. Int.
1.17e7
5.87e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDF Std.
34.02-38.25
385.8610 Fn3
Flags: PBM
4σ 2.11e4
ES 123678F
7.25e7
35.88
ES 123478F
6.42e7
35.74
CS 123469F
6.40e7
36.18
ES 234678F
6.70e7
36.52
ES 123789F
5.56e7
37.50
Abs. Int.
2.23e7
1.12e7
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
OCDPE
34.02-38.25
445.7555 Fn3
Flags: PB
4σ 1.23e3
Abs. Int.
7.47e3
3.74e3
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT


Rel. Int.
100%
HpCDF
38.26-41.01
407.7818 Fn4
Flags: PBM
4σ 2.78e3
0%
1234678F
2.74e7
39.04
1234789F
2.17e7
40.37
Abs. Int.
1.07e7
5.33e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF
38.26-41.01
409.7788 Fn4
Flags: PBM
4σ 2.04e3
0%
1234678F
2.64e7
39.04
1234789F
2.06e7
40.36
Abs. Int.
9.84e6
4.92e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.26-41.01
417.8253 Fn4
Flags: PBM
4σ 1.07e4
0%
ES 1234678F
2.48e7
39.03
CS 1234689F
2.30e7
39.44
ES 1234789F
1.94e7
40.36
Abs. Int.
9.78e6
4.89e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.26-41.01
419.8220 Fn4
Flags: PBM
4σ 1.23e4
0%
ES 1234678F
5.40e7
39.03
CS 1234689F
5.18e7
39.44
ES 1234789F
4.33e7
40.35
Abs. Int.
2.16e7
1.08e7
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
NCDPE
38.26-41.01
479.7165 Fn4
Flags: PB
4σ 1.60e3
0%
Abs. Int.
8.45e3
4.23e3
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT


OCDF
2.30e7
42.53
Rel. Int.
100%
OCDF
41.02-45.00
441.7428 Fn5
Flags: PBM
4σ 1.45e3
0%
Abs. Int.
8.65e6
4.32e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDF
2.58e7
42.53
Rel. Int.
100%
OCDF
41.02-45.00
443.7398 Fn5
Flags: PBM
4σ 3.28e3
0%
Abs. Int.
9.76e6
4.88e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDF
4.37e7
42.52
Rel. Int.
100%
OCDF Std.
41.02-45.00
453.7830 Fn5
Flags: PBM
4σ 2.08e3
0%
Abs. Int.
1.61e7
8.07e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDF
4.86e7
42.52
Rel. Int.
100%
OCDF Std.
41.02-45.00
455.7801 Fn5
Flags: PBM
4σ 4.45e3
0%
Abs. Int.
1.89e7
9.46e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
DCDPE
41.02-45.00
513.6775 Fn5
Flags: PB
4σ 1.33e3
0%
Abs. Int.
5.81e3
2.91e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

Dioxin/Furan QC Summary		Acq'd: 12 Aug 2020 10:55 PSW				ICAL: MM3_DF_10012020_12JUN2020	
Lab ID: CS3_200812_DF_RA		UTP: 13-Aug-2020 08:31:22 DTF				Checkcode: 500-345-TJF	
Sample ID: SIL 20-449-3		Report: 13 Aug 2020 08:32 TF				Datafile: 200812R02	
Name	**RT**	**Response**	**RA**	**OK**	**Ref. RRFs**	**Calc. RRFs**	**Dev'n**
2378-TCDD	26.86	1.21E+07	0.84	Y	1.18	1.23	5%
12378-PeCDD	32.50	4.99E+07	1.57	Y	1.14	1.09	-4%
123478-HxCDD	36.44	4.89E+07	1.26	Y	1.09	1.06	-3%
123678-HxCDD	36.55	4.93E+07	1.26	Y	1.13	1.13	0%
123789-HxCDD	36.84	5.36E+07	1.24	Y	1.05	1.04	-1%
1234678-HpCDD	39.75	4.56E+07	1.03	Y	0.98	1.00	2%
OCDD	42.13	7.25E+07	0.89	Y	1.08	1.13	5%
2378-TCDF	25.91	1.60E+07	0.76	Y	0.98	0.98	0%
12378-PeCDF	30.98	7.37E+07	1.56	Y	0.95	0.95	0%
23478-PeCDF	32.13	7.08E+07	1.53	Y	0.95	0.95	1%
123478-HxCDF	35.47	6.95E+07	1.27	Y	1.20	1.20	0%
123678-HxCDF	35.61	7.17E+07	1.25	Y	1.07	1.09	1%
234678-HxCDF	36.26	6.84E+07	1.26	Y	1.10	1.12	2%
123789-HxCDF	37.21	6.19E+07	1.28	Y	1.09	1.12	2%
1234678-HpCDF	38.81	6.43E+07	1.04	Y	1.28	1.36	6%
1234789-HpCDF	40.16	5.82E+07	1.04	Y	1.27	1.29	2%
OCDF	42.29	8.49E+07	0.92	Y	1.01	1.04	3%
ES 2378-TCDD	26.83	9.81E+07	0.76	Y	1.01	1.00	-1%
ES 12378-PeCDD	32.48	9.12E+07	1.61	Y	0.87	0.92	6%
ES 123478-HxCDD	36.43	9.20E+07	1.30	Y	1.10	1.01	-8%
ES 123678-HxCDD	36.54	8.72E+07	1.29	Y	1.06	0.96	-10%
ES 123789-HxCDD	36.83	1.03E+08	1.27	Y	1.22	1.13	-7%
ES 1234678-HpCDD	39.74	9.13E+07	1.08	Y	0.99	1.00	1%
ES OCDD	42.12	1.28E+08	0.94	Y	0.67	0.71	5%
ES 2378-TCDF	25.88	1.63E+08	0.80	Y	1.01	1.03	1%
ES 12378-PeCDF	30.96	1.55E+08	1.57	Y	0.90	0.97	8%
ES 23478-PeCDF	32.12	1.49E+08	1.55	Y	0.89	0.93	5%
ES 123478-HxCDF	35.45	1.16E+08	0.53	Y	1.43	1.28	-11%
ES 123678-HxCDF	35.59	1.32E+08	0.53	Y	1.63	1.45	-11%
ES 234678-HxCDF	36.24	1.22E+08	0.52	Y	1.48	1.34	-9%
ES 123789-HxCDF	37.2	1.11E+08	0.51	Y	1.29	1.22	-6%
ES 1234678-HpCDF	38.8	9.44E+07	0.45	Y	1.15	1.04	-9%
ES 1234789-HpCDF	40.15	8.99E+07	0.45	Y	0.91	0.99	9%
ES OCDF	42.28	1.64E+08	0.89	Y	0.83	0.90	9%

Dioxin/Furan QC Summary	Acq'd: 12 Aug 2020 10:55 PSW	ICAL: MM3_DF_10012020_12JUN2020
Lab ID: CS3_200812_DF_RA	UTP: 13-Aug-2020 08:31:22 DTF	Checkcode: 500-345-TJF
Sample ID: SIL 20-449-3	Report: 13 Aug 2020 08:32 TF	Datafile: 200812R02

Name	RT	Response	RA	OK	Ref. RRFs	Calc. RRFs	Dev'n
JS 1234-TCDD	26.14	9.86E+07	0.78	Y	-	-	-
JS 1234-TCDF	24.40	1.59E+08	0.80	Y	-	-	-
JS 123467-HxCDD	36.73	4.55E+07	1.26	Y	-	-	-
CS 37Cl-2378-TCDD	26.86	1.05E+07	n/a	-	1.04	1.07	3%
CS 12347-PeCDD	31.97	7.86E+07	1.71	Y	0.74	0.80	8%
CS 12346-PeCDF	30.42	1.51E+08	1.56	Y	0.86	0.95	11%
CS 123469-HxCDF	35.90	1.11E+08	0.52	Y	1.36	1.22	-10%
CS 1234689-HpCDF	39.22	9.62E+07	0.45	Y	1.05	1.06	0%
~~SS 37Cl-2378-TCDD~~	~~26.86~~	~~1.05E+07~~	~~n/a~~	~~-~~	~~1.04~~	~~1.07~~	~~3%~~
~~SS 12347-PeCDD~~	~~31.97~~	~~7.86E+07~~	~~1.71~~	~~Y~~	~~0.86~~	~~0.86~~	~~1%~~
~~SS 12346-PeCDF~~	~~30.42~~	~~1.51E+08~~	~~1.56~~	~~Y~~	~~0.96~~	~~0.98~~	~~2%~~
~~SS 123469-HxCDF~~	~~35.90~~	~~1.11E+08~~	~~0.52~~	~~Y~~	~~0.83~~	~~0.84~~	~~1%~~
~~SS 1234689-HpCDF~~	~~39.22~~	~~9.62E+07~~	~~0.45~~	~~Y~~	~~0.92~~	~~1.02~~	~~10%~~
~~OCDD-a~~	~~42.13~~	~~4.40E+06~~	~~2.81~~	~~Y~~	~~0.07~~	~~0.07~~	~~4%~~
~~OCDF-a~~	~~42.29~~	~~5.02E+06~~	~~2.45~~	~~Y~~	~~0.06~~	~~0.06~~	~~-3%~~

METHOD 8290A **PCDD/F CALIBRATION VERIFICATION** **FORM 4A**

Lab Name: SGS North America

Initial Calibration: ICAL: MM3_DF_10012020_12JUN2020

Instrument ID: MM3 GC Column ID: ZB-5ms

VER Data Filename: 200812R02 Analysis Date: 12-AUG-2020 10:55:51

NATIVE ANALYTES	M/Z's FORMING RATIO	ION ABUND. RATIO	QC LIMITS			OK	CONC. FOUND	RANGE (ng/mL)			OK
2,3,7,8-TCDD	M/M+2	0.84	0.65	-	0.89	Y	10.5	8	-	12	Y
1,2,3,7,8-PeCDD	M+2/M+4	1.57	1.32	-	1.78	Y	48.2	40	-	60	Y
1,2,3,4,7,8-HxCDD	M+2/M+4	1.26	1.05	-	1.43	Y	48.6	40	-	60	Y
1,2,3,6,7,8-HxCDD	M+2/M+4	1.26	1.05	-	1.43	Y	50.2	40	-	60	Y
1,2,3,7,8,9-HxCDD	M+2/M+4	1.24	1.05	-	1.43	Y	49.7	40	-	60	Y
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.03	0.88	-	1.20	Y	50.8	40	-	60	Y
OCDD	M+2/M+4	0.89	0.76	-	1.02	Y	105	80	-	120	Y
2,3,7,8-TCDF	M/M+2	0.76	0.65	-	0.89	Y	10	8	-	12	Y
1,2,3,7,8-PeCDF	M+2/M+4	1.56	1.32	-	1.78	Y	50.2	40	-	60	Y
2,3,4,7,8-PeCDF	M+2/M+4	1.53	1.32	-	1.78	Y	50.4	40	-	60	Y
1,2,3,4,7,8-HxCDF	M+2/M+4	1.27	1.05	-	1.43	Y	50.1	40	-	60	Y
1,2,3,6,7,8-HxCDF	M+2/M+4	1.25	1.05	-	1.43	Y	50.7	40	-	60	Y
2,3,4,6,7,8-HxCDF	M+2/M+4	1.26	1.05	-	1.43	Y	51.1	40	-	60	Y
1,2,3,7,8,9-HxCDF	M+2/M+4	1.28	1.05	-	1.43	Y	51.2	40	-	60	Y
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.04	0.88	-	1.20	Y	53.2	40	-	60	Y
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.04	0.88	-	1.20	Y	51	40	-	60	Y
OCDF	M+2/M+4	0.92	0.76	-	1.02	Y	103	80	-	120	Y

Processed: 13 Aug 2020 08:39 Analyst: TF

METHOD 8290A **PCDD/F CALIBRATION VERIFICATION** **FORM 4B**

Lab Name: SGS North America

Initial Calibration: ICAL: MM3_DF_10012020_12JUN2020

Instrument ID: MM3 GC Column ID: ZB-5ms

VER Data Filename: 200812R02 Analysis Date: 12-AUG-2020 10:55:51

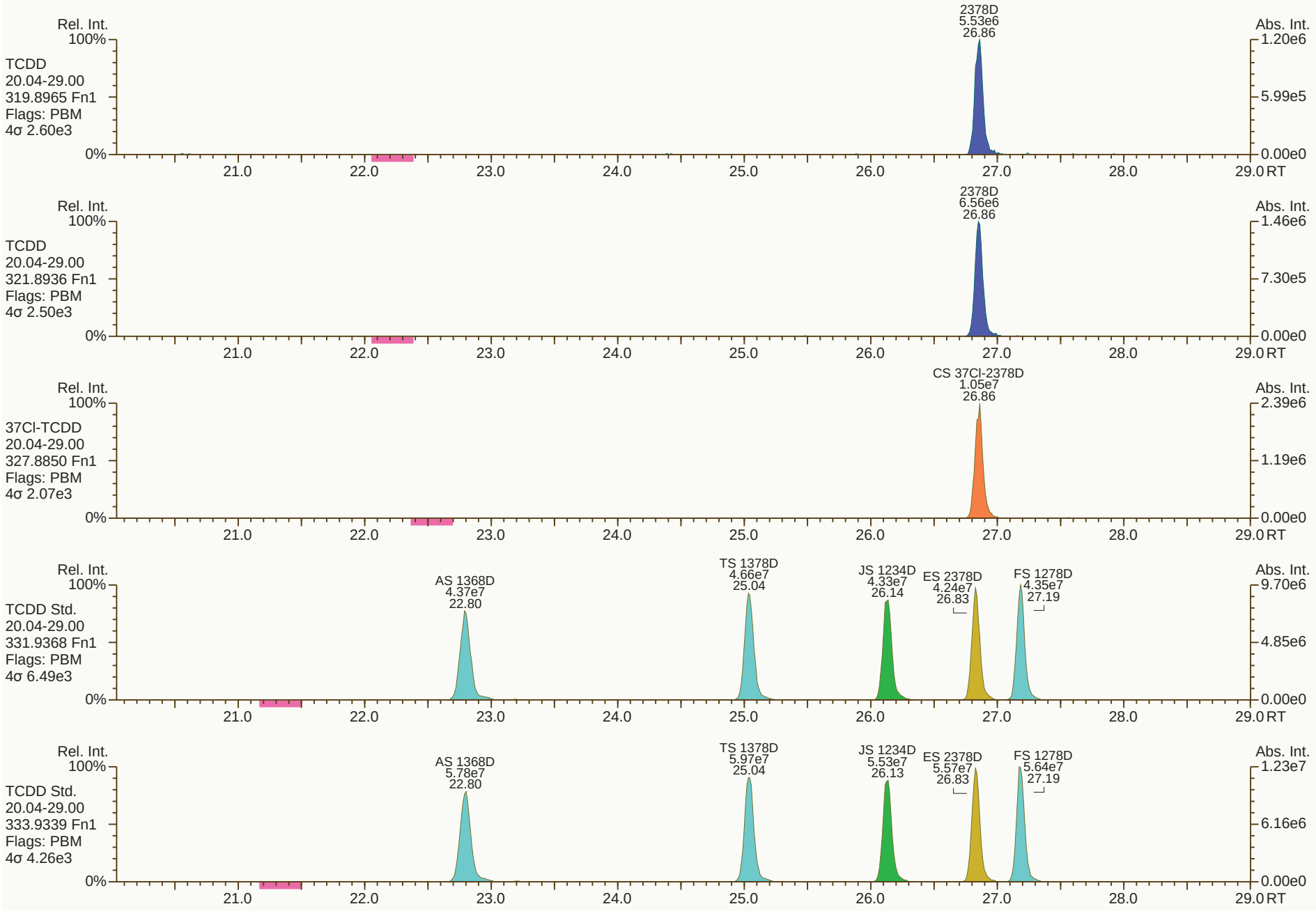
LABELED ANALYTES	M/Z's FORMING RATIO	ION ABUND. RATIO	QC LIMITS			OK	CONC. FOUND	RANGE (ng/mL)			OK
13C-2,3,7,8-TCDD	M/M+2	0.76	0.65	-	0.89	Y	98.9	70	-	130	Y
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.61	1.32	-	1.78	Y	106	70	-	130	Y
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.30	1.05	-	1.43	Y	92.4	70	-	130	Y
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.29	1.05	-	1.43	Y	90.4	70	-	130	Y
13C-1,2,3,7,8,9-HxCDD	M+2/M+4	1.27	1.05	-	1.43	Y	93	70	-	130	Y
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.08	0.88	-	1.20	Y	101	70	-	130	Y
13C-OCDD	M+2/M+4	0.94	0.76	-	1.02	Y	211	140	-	260	Y
13C-2,3,7,8-TCDF	M/M+2	0.80	0.65	-	0.89	Y	101	70	-	130	Y
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.57	1.32	-	1.78	Y	108	70	-	130	Y
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.55	1.32	-	1.78	Y	105	70	-	130	Y
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.53	0.43	-	0.59	Y	89.2	70	-	130	Y
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.53	0.43	-	0.59	Y	88.9	70	-	130	Y
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	90.8	70	-	130	Y
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.51	0.43	-	0.59	Y	94.4	70	-	130	Y
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.45	0.37	-	0.51	Y	90.6	70	-	130	Y
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.45	0.37	-	0.51	Y	109	70	-	130	Y
13C-OCDF	M+2/M+4	0.89	0.76	-	1.02	Y	217	140	-	260	Y
CLEANUP STANDARDS											
37Cl-2,3,7,8-TCDD	n/a						10.3	7.9	-	12.7	Y
13C-1,2,3,4,7-PeCDD	M+2/M+4	1.71	1.32	-	1.78	Y	108	70	-	130	Y
13C-1,2,3,4,6-PeCDF	M+2/M+4	1.56	1.32	-	1.78	Y	111	70	-	130	Y
13C-1,2,3,4,6,9-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	89.8	70	-	130	Y
13C-1,2,3,4,6,8,9-HpCDF	M/M+2	0.45	0.37	-	0.51	Y	100	70	-	130	Y

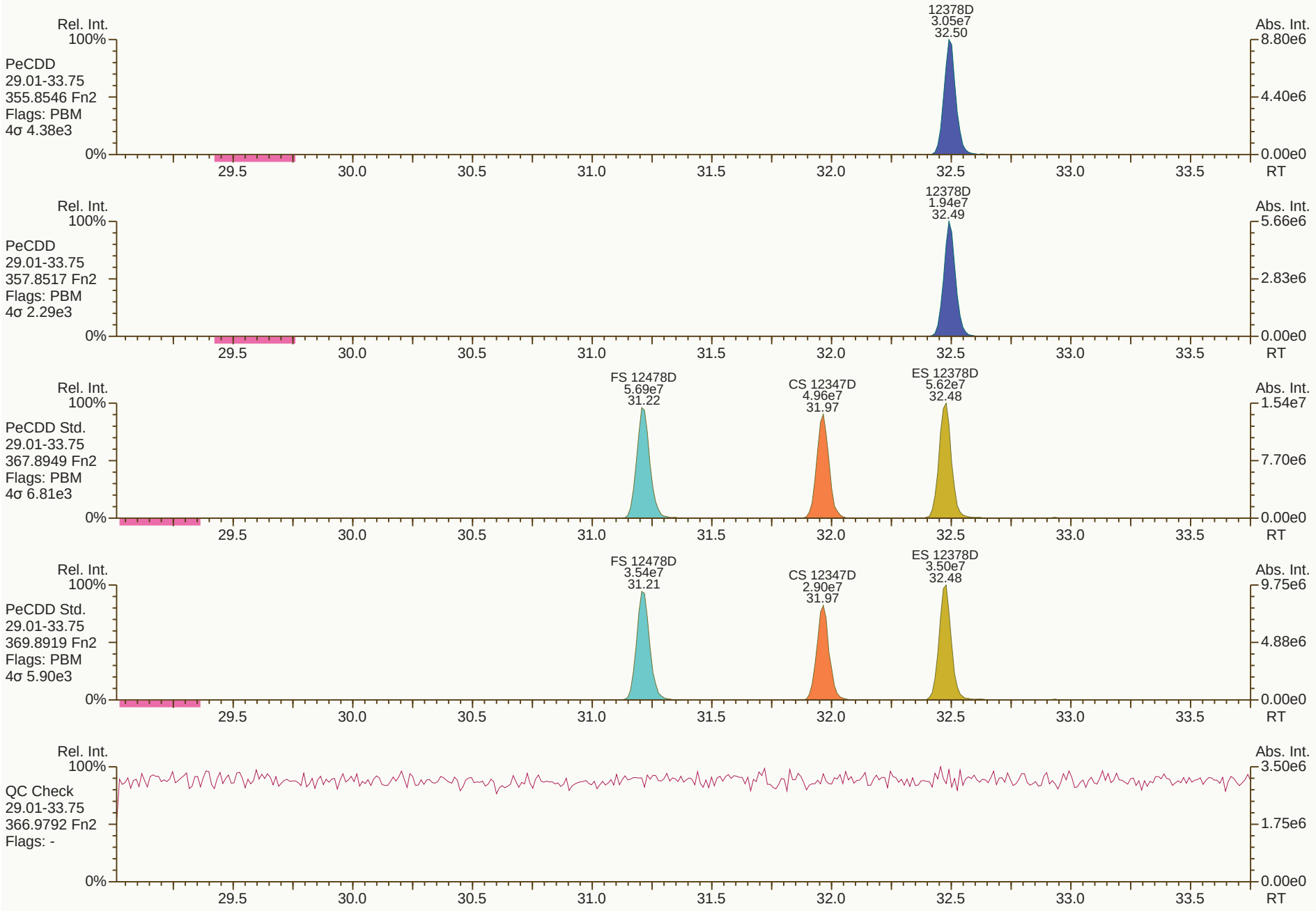
Processed: 13 Aug 2020 08:39 Analyst: TF

SGS ID: CS3_200812_DF_RA **Sample ID: SIL 20-449-3** **Acq: 12-Aug-2020 10:55:51**
Instr: [ILM] AutoSpec-Ultima MM3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 3** **User: PSW Datafile: 200812R02**



Results: P:\B4500_B4599\B4528\B4528_17661 DF\Resources\CS3_200812_DF_RA.utp_res, saved 13-Aug-2020 08:31 (DTF) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 scc: 500-345 *PKD: n/a Printed: 13-Aug-2020 08:41 Page 1 of 12*


Rel. Int.
100%
TCDD
20.04-29.00
319.8965 Fn1
Flags: PBM
4σ 2.60e3
0%
2378D
5.53e6
26.86
Abs. Int.
1.20e6
5.99e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT
Rel. Int.
100%
TCDD
20.04-29.00
321.8936 Fn1
Flags: PBM
4σ 2.50e3
0%
2378D
6.56e6
26.86
Abs. Int.
1.46e6
7.30e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT
Rel. Int.
100%
37Cl-TCDD
20.04-29.00
327.8850 Fn1
Flags: PBM
4σ 2.07e3
0%
CS 37Cl-2378D
1.05e7
26.86
Abs. Int.
2.39e6
1.19e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT
Rel. Int.
100%
TCDD Std.
20.04-29.00
331.9368 Fn1
Flags: PBM
4σ 6.49e3
0%
AS 1368D
4.37e7
22.80
TS 1378D
4.66e7
25.04
JS 1234D
4.33e7
26.14
ES 2378D
4.24e7
26.83
FS 1278D
4.35e7
27.19
Abs. Int.
9.70e6
4.85e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT
Rel. Int.
100%
TCDD Std.
20.04-29.00
333.9339 Fn1
Flags: PBM
4σ 4.26e3
0%
AS 1368D
5.78e7
22.80
TS 1378D
5.97e7
25.04
JS 1234D
5.53e7
26.13
ES 2378D
5.57e7
26.83
FS 1278D
5.64e7
27.19
Abs. Int.
1.23e7
6.16e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT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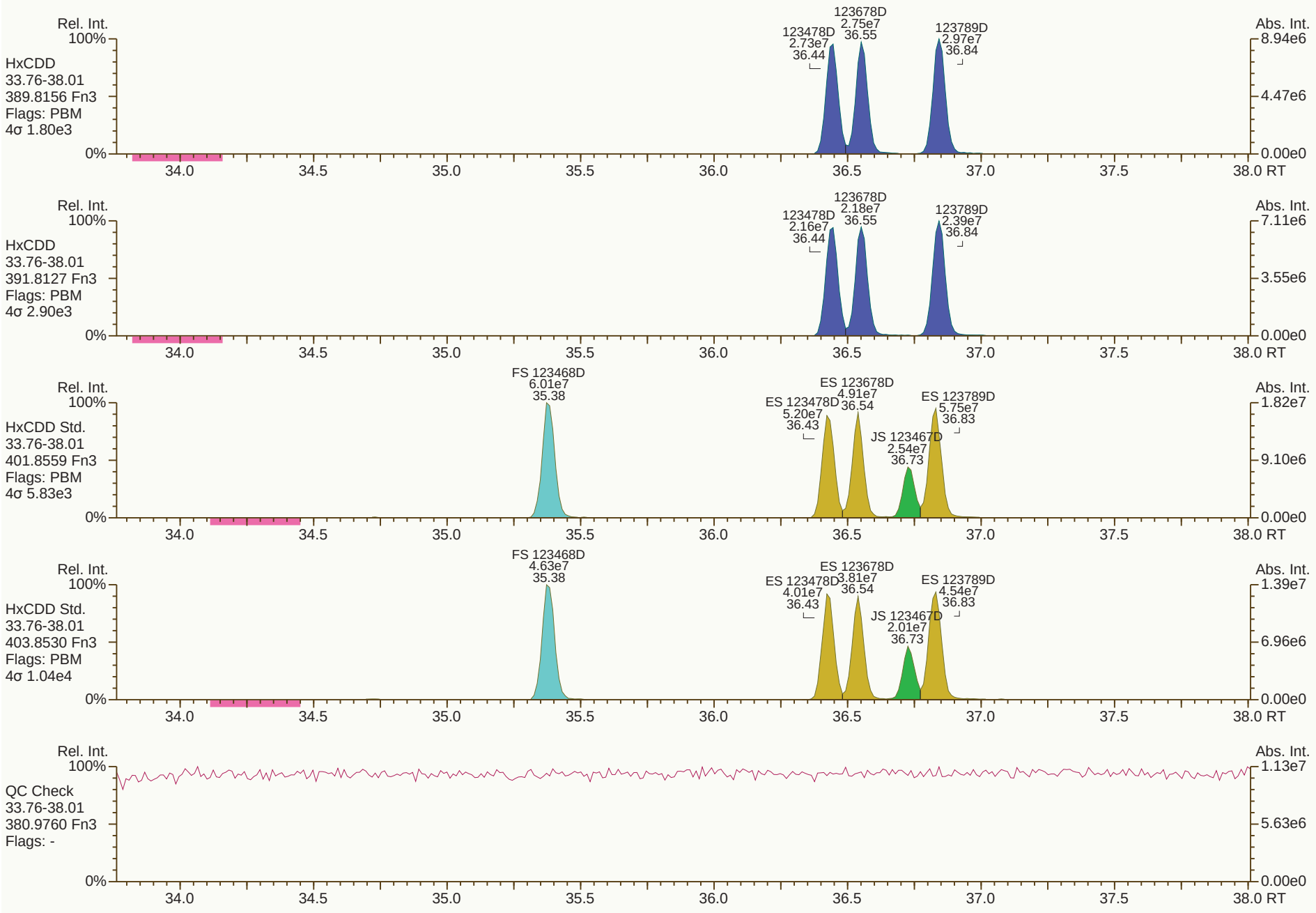
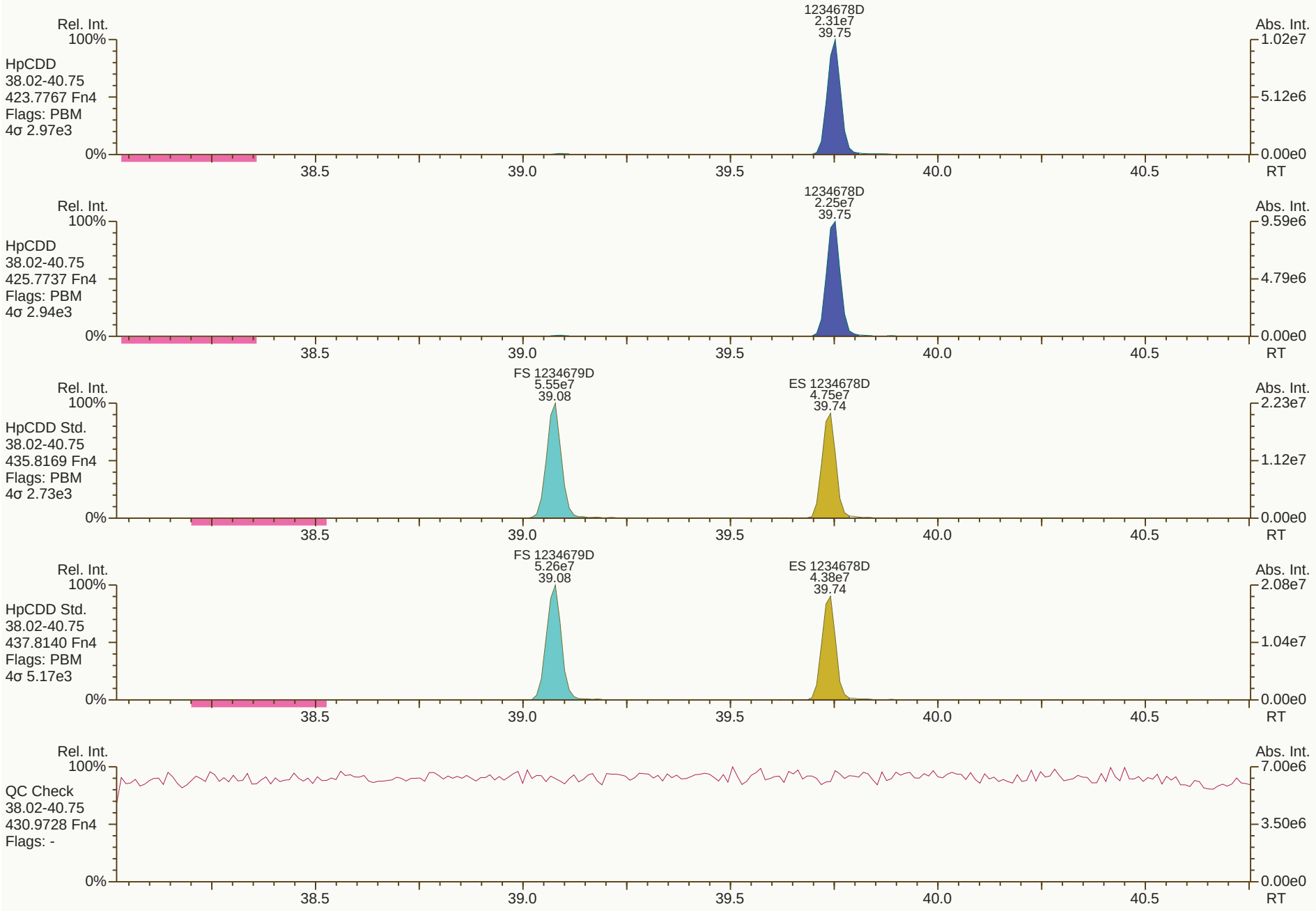
100%
PeCDD
29.01-33.75
355.8546 Fn2
Flags: PBM
4σ 4.38e3
0%
12378D
3.05e7
32.50
Abs. Int.
8.80e6
4.40e6
0.00e0
29.5
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
RT
Rel. Int.
100%
PeCDD
29.01-33.75
357.8517 Fn2
Flags: PBM
4σ 2.29e3
0%
12378D
1.94e7
32.49
Abs. Int.
5.66e6
2.83e6
0.00e0
29.5
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
RT
Rel. Int.
100%
PeCDD Std.
29.01-33.75
367.8949 Fn2
Flags: PBM
4σ 6.81e3
0%
FS 12478D
5.69e7
31.22
CS 12347D
4.96e7
31.97
ES 12378D
5.62e7
32.48
Abs. Int.
1.54e7
7.70e6
0.00e0
29.5
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
RT
Rel. Int.
100%
PeCDD Std.
29.01-33.75
369.8919 Fn2
Flags: PBM
4σ 5.90e3
0%
FS 12478D
3.54e7
31.21
CS 12347D
2.90e7
31.97
ES 12378D
3.50e7
32.48
Abs. Int.
9.75e6
4.88e6
0.00e0
29.5
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
RT
Rel. Int.
100%
QC Check
29.01-33.75
366.9792 Fn2
Flags: -
0%
Abs. Int.
3.50e6
1.75e6
0.00e0
29.5
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
RT

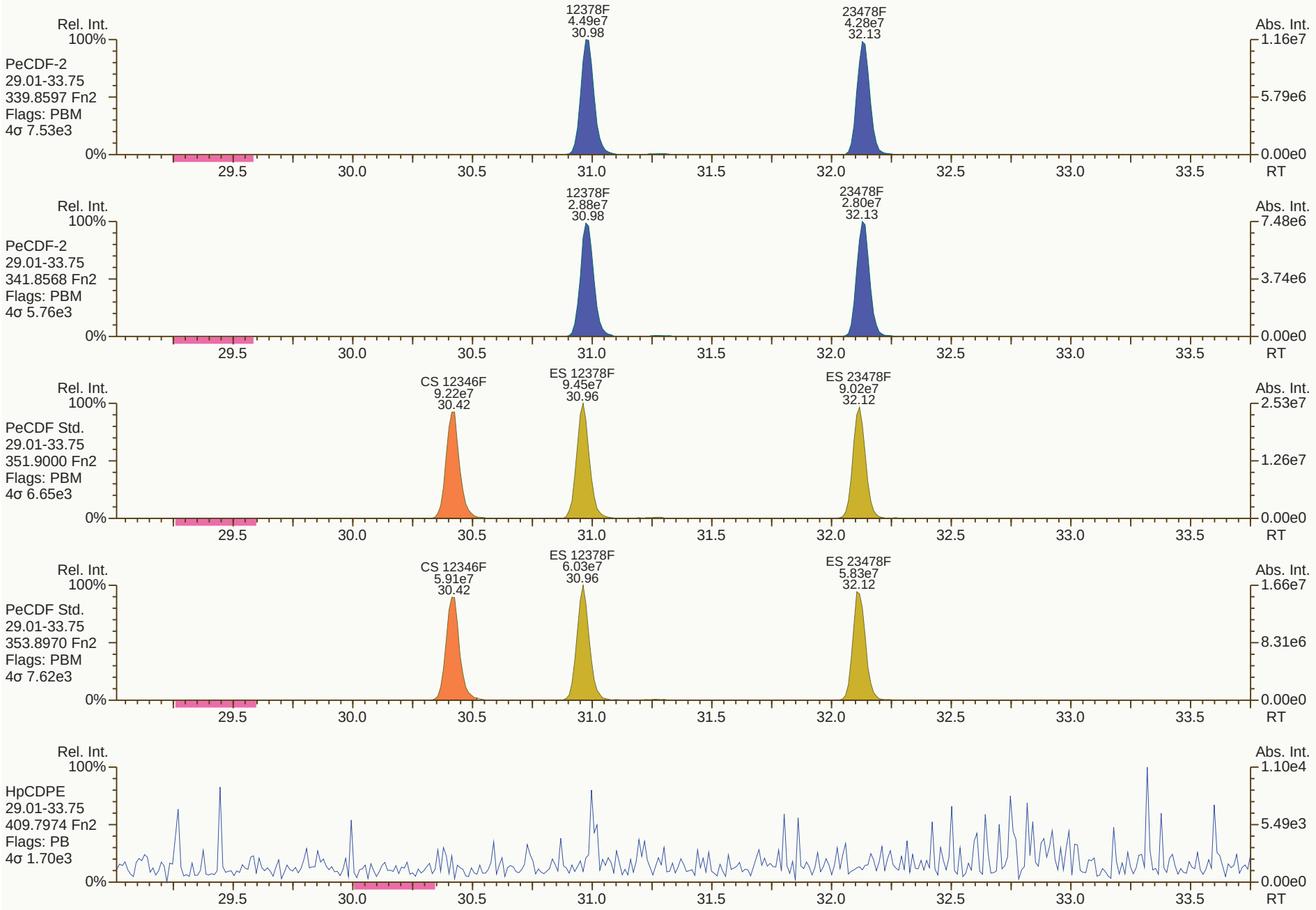

Rel. Int.
100%
HxCDD
33.76-38.01
389.8156 Fn3
Flags: PBM
4σ 1.80e3
123478D
2.73e7
36.44
123678D
2.75e7
36.55
123789D
2.97e7
36.84
Abs. Int.
8.94e6
4.47e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0 RT
Rel. Int.
100%
HxCDD
33.76-38.01
391.8127 Fn3
Flags: PBM
4σ 2.90e3
123478D
2.16e7
36.44
123678D
2.18e7
36.55
123789D
2.39e7
36.84
Abs. Int.
7.11e6
3.55e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0 RT
Rel. Int.
100%
HxCDD Std.
33.76-38.01
401.8559 Fn3
Flags: PBM
4σ 5.83e3
FS 123468D
6.01e7
35.38
ES 123478D
5.20e7
36.43
ES 123678D
4.91e7
36.54
JS 123467D
2.54e7
36.73
ES 123789D
5.75e7
36.83
Abs. Int.
1.82e7
9.10e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0 RT
Rel. Int.
100%
HxCDD Std.
33.76-38.01
403.8530 Fn3
Flags: PBM
4σ 1.04e4
FS 123468D
4.63e7
35.38
ES 123478D
4.01e7
36.43
ES 123678D
3.81e7
36.54
JS 123467D
2.01e7
36.73
ES 123789D
4.54e7
36.83
Abs. Int.
1.39e7
6.96e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0 RT
Rel. Int.
100%
QC Check
33.76-38.01
380.9760 Fn3
Flags: -
Abs. Int.
1.13e7
5.63e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0 RT


Rel. Int.
100%
HpCDD
38.02-40.75
423.7767 Fn4
Flags: PBM
4σ 2.97e3
0%
1234678D
2.31e7
39.75
Abs. Int.
1.02e7
5.12e6
0.00e0
38.5
39.0
39.5
40.0
40.5
RT
Rel. Int.
100%
HpCDD
38.02-40.75
425.7737 Fn4
Flags: PBM
4σ 2.94e3
0%
1234678D
2.25e7
39.75
Abs. Int.
9.59e6
4.79e6
0.00e0
38.5
39.0
39.5
40.0
40.5
RT
Rel. Int.
100%
HpCDD Std.
38.02-40.75
435.8169 Fn4
Flags: PBM
4σ 2.73e3
0%
FS 1234679D
5.55e7
39.08
ES 1234678D
4.75e7
39.74
Abs. Int.
2.23e7
1.12e7
0.00e0
38.5
39.0
39.5
40.0
40.5
RT
Rel. Int.
100%
HpCDD Std.
38.02-40.75
437.8140 Fn4
Flags: PBM
4σ 5.17e3
0%
FS 1234679D
5.26e7
39.08
ES 1234678D
4.38e7
39.74
Abs. Int.
2.08e7
1.04e7
0.00e0
38.5
39.0
39.5
40.0
40.5
RT
Rel. Int.
100%
QC Check
38.02-40.75
430.9728 Fn4
Flags: -
0%
Abs. Int.
7.00e6
3.50e6
0.00e0
38.5
39.0
39.5
40.0
40.5
RT


OCDD
3.42e7
42.13
Rel. Int.
100%
OCDD
40.77-45.01
457.7377 Fn5
Flags: PBM
4σ 1.39e3
0%
Abs. Int.
1.29e7
6.46e6
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDD
3.83e7
42.13
Rel. Int.
100%
OCDD
40.77-45.01
459.7348 Fn5
Flags: PBM
4σ 5.58e3
0%
Abs. Int.
1.43e7
7.15e6
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
6.21e7
42.12
Rel. Int.
100%
OCDD Std.
40.77-45.01
469.7780 Fn5
Flags: PBM
4σ 7.42e3
0%
Abs. Int.
2.29e7
1.14e7
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
6.63e7
42.12
Rel. Int.
100%
OCDD Std.
40.77-45.01
471.7750 Fn5
Flags: PBM
4σ 5.72e3
0%
Abs. Int.
2.54e7
1.27e7
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
QC Check
40.77-45.01
454.9728 Fn5
Flags: -
0%
Abs. Int.
6.54e6
3.27e6
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT


Rel. Int.
100%
TCDF
20.04-29.00
303.9016 Fn1
Flags: PBM
4σ 2.51e3
0%
2378F
6.93e6
25.91
Abs. Int.
1.43e6
7.14e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT
Rel. Int.
100%
TCDF
20.04-29.00
305.8987 Fn1
Flags: PBM
4σ 3.55e3
0%
2378F
9.11e6
25.91
Abs. Int.
1.77e6
8.85e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT
Rel. Int.
100%
TCDF Std.
20.04-29.00
315.9419 Fn1
Flags: PBM
4σ 1.70e4
0%
AS 1368F
7.98e7
20.58
JS 1234F
7.07e7
24.40
ES 2378F
7.26e7
25.88
Abs. Int.
1.49e7
7.45e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT
Rel. Int.
100%
TCDF Std.
20.04-29.00
317.9389 Fn1
Flags: PBM
4σ 7.68e3
0%
AS 1368F
9.86e7
20.58
JS 1234F
8.85e7
24.40
ES 2378F
9.08e7
25.88
Abs. Int.
1.81e7
9.07e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT
Rel. Int.
100%
HxCDPE
20.04-29.00
375.8364 Fn1
Flags: PB
4σ 1.87e3
0%
Abs. Int.
7.59e3
3.80e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT


Rel. Int.
100%
0%
Abs. Int.
2.08e4
1.04e4
0.00e0
PeCDF-1
20.04-29.00
339.8597 Fn1
Flags: PB
4σ 3.19e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT
Rel. Int.
100%
0%
Abs. Int.
1.57e4
7.84e3
0.00e0
PeCDF-1
20.04-29.00
341.8568 Fn1
Flags: PB
4σ 2.92e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT
Rel. Int.
100%
0%
Abs. Int.
4.48e6
2.24e6
0.00e0
QC Check
20.04-29.00
316.9824 Fn1
Flags: -
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT


Rel. Int.
100%
PeCDF-2
29.01-33.75
339.8597 Fn2
Flags: PBM
4σ 7.53e3
0%
12378F
4.49e7
30.98
23478F
4.28e7
32.13
Abs. Int.
1.16e7
5.79e6
0.00e0
29.5
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
RT
Rel. Int.
100%
PeCDF-2
29.01-33.75
341.8568 Fn2
Flags: PBM
4σ 5.76e3
0%
12378F
2.88e7
30.98
23478F
2.80e7
32.13
Abs. Int.
7.48e6
3.74e6
0.00e0
29.5
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
RT
Rel. Int.
100%
PeCDF Std.
29.01-33.75
351.9000 Fn2
Flags: PBM
4σ 6.65e3
0%
CS 12346F
9.22e7
30.42
ES 12378F
9.45e7
30.96
ES 23478F
9.02e7
32.12
Abs. Int.
2.53e7
1.26e7
0.00e0
29.5
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
RT
Rel. Int.
100%
PeCDF Std.
29.01-33.75
353.8970 Fn2
Flags: PBM
4σ 7.62e3
0%
CS 12346F
5.91e7
30.42
ES 12378F
6.03e7
30.96
ES 23478F
5.83e7
32.12
Abs. Int.
1.66e7
8.31e6
0.00e0
29.5
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
RT
Rel. Int.
100%
HpCDPE
29.01-33.75
409.7974 Fn2
Flags: PB
4σ 1.70e3
0%
Abs. Int.
1.10e4
5.49e3
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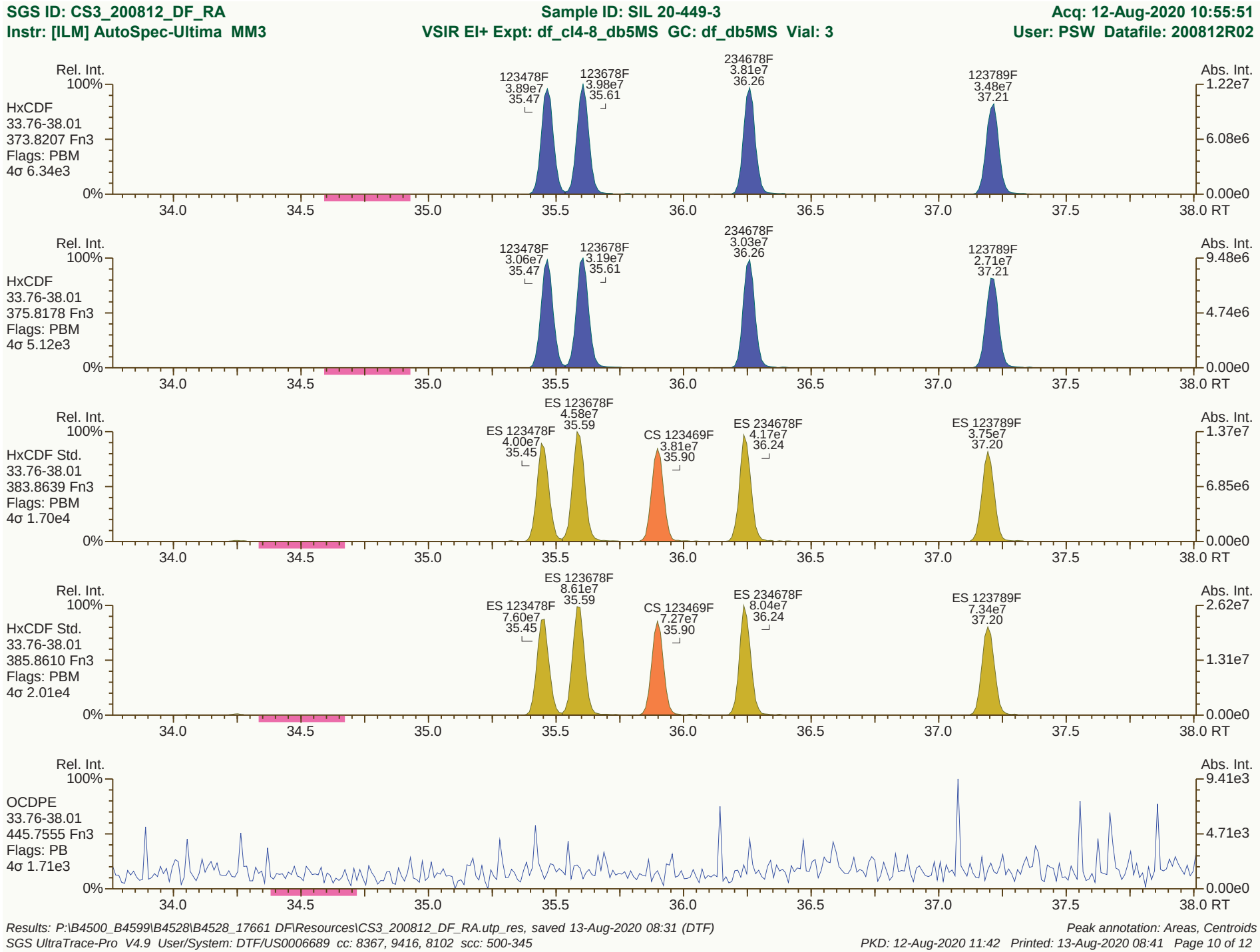
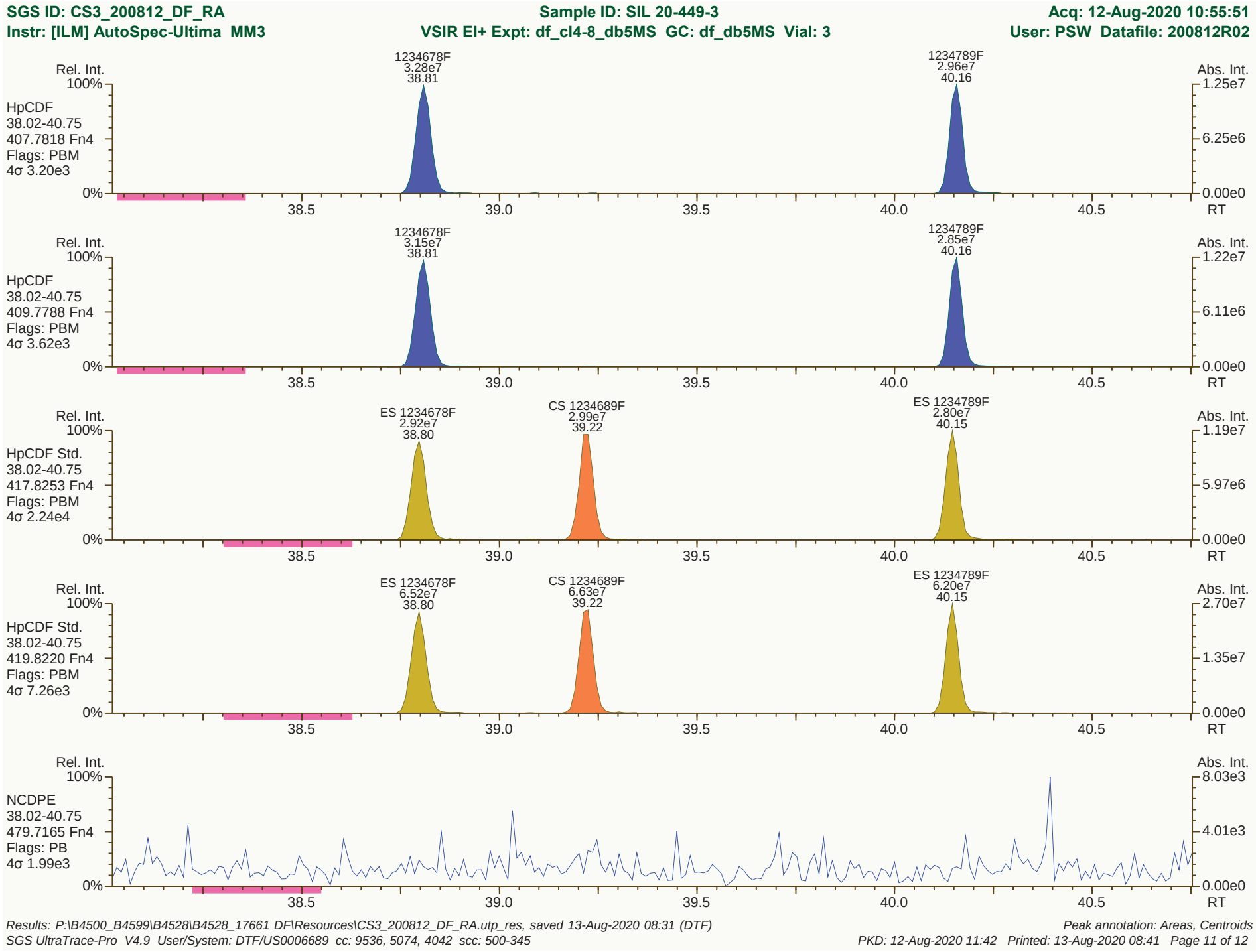
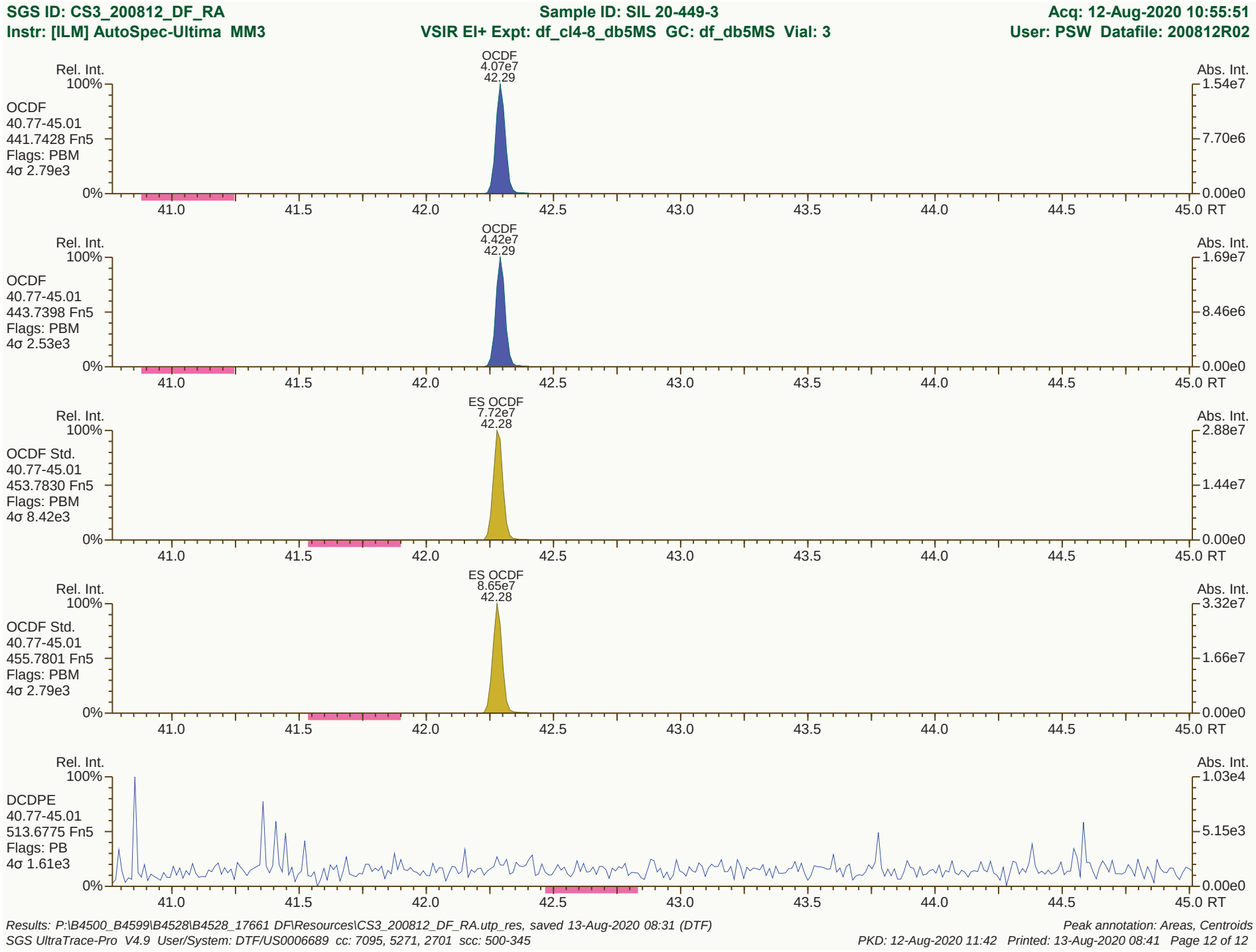
30.5
31.0
31.5
32.0
32.5
33.0
33.5
RT



Results: P:\B4500_B4599\B4528\B4528_17661 DF\Resources\CS3_200812_DF_RA.utp_res, saved 13-Aug-2020 08:31 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 8367, 9416, 8102 scc: 500-345
PKD: 12-Aug-2020 11:42 Printed: 13-Aug-2020 08:41 Page 10 of 12



Results: P:\B4500_B4599\B4528\B4528_17661 DF\Resources\CS3_200812_DF_RA.utp_res, saved 13-Aug-2020 08:31 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 9536, 5074, 4042 scc: 500-345
PKD: 12-Aug-2020 11:42 Printed: 13-Aug-2020 08:41 Page 11 of 12


SGS ID: CS3_200812_DF_RA
Sample ID: SIL 20-449-3
Acq: 12-Aug-2020 10:55:51
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 3
User: PSW Datafile: 200812R02
OCDF
4.07e7
42.29
Rel. Int.
Abs. Int.
OCDF
40.77-45.01
441.7428 Fn5
Flags: PBM
4σ 2.79e3
OCDF
4.42e7
42.29
OCDF
40.77-45.01
443.7398 Fn5
Flags: PBM
4σ 2.53e3
ES OCDF
7.72e7
42.28
OCDF Std.
40.77-45.01
453.7830 Fn5
Flags: PBM
4σ 8.42e3
ES OCDF
8.65e7
42.28
OCDF Std.
40.77-45.01
455.7801 Fn5
Flags: PBM
4σ 2.79e3
DCDPE
40.77-45.01
513.6775 Fn5
Flags: PB
4σ 1.61e3
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Results: P:\B4500_B4599\B4528\B4528_17661 DF\Resources\CS3_200812_DF_RA.utp_res, saved 13-Aug-2020 08:31 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 7095, 5271, 2701 scc: 500-345
PKD: 12-Aug-2020 11:42 Printed: 13-Aug-2020 08:41 Page 12 of 12

Dioxin/Furan QC Summary		Acq'd: 12 Aug 2020 18:05 PSW				ICAL: MM3_DF_10012020_12JUN2020	
Lab ID: CS3_200812_DF_RB		UTP: 13-Aug-2020 08:31:29 DTF				Checkcode: 878-506-QBQ	
Sample ID: SIL 20-449-3		Report: 13 Aug 2020 08:33 TF				Datafile: 200812R11	
Name	**RT**	**Response**	**RA**	**OK**	**Ref. RRFs**	**Calc. RRFs**	**Dev'n**
2378-TCDD	26.85	1.08E+07	0.78	Y	1.18	1.21	3%
12378-PeCDD	32.49	4.32E+07	1.59	Y	1.14	1.10	-3%
123478-HxCDD	36.44	3.97E+07	1.27	Y	1.09	1.09	0%
123678-HxCDD	36.55	3.97E+07	1.23	Y	1.13	1.13	1%
123789-HxCDD	36.84	4.42E+07	1.26	Y	1.05	1.06	1%
1234678-HpCDD	39.75	3.79E+07	1.05	Y	0.98	0.98	0%
OCDD	42.13	5.82E+07	0.88	Y	1.08	1.11	3%
2378-TCDF	25.90	1.41E+07	0.77	Y	0.98	0.99	1%
12378-PeCDF	30.97	5.89E+07	1.55	Y	0.95	0.96	1%
23478-PeCDF	32.13	6.14E+07	1.57	Y	0.95	0.97	2%
123478-HxCDF	35.46	5.68E+07	1.26	Y	1.20	1.21	1%
123678-HxCDF	35.60	5.96E+07	1.24	Y	1.07	1.12	5%
234678-HxCDF	36.25	5.59E+07	1.24	Y	1.10	1.12	2%
123789-HxCDF	37.21	5.21E+07	1.25	Y	1.09	1.12	3%
1234678-HpCDF	38.81	5.21E+07	1.05	Y	1.28	1.34	4%
1234789-HpCDF	40.15	5.25E+07	1.06	Y	1.27	1.30	3%
OCDF	42.29	6.83E+07	0.91	Y	1.01	1.04	3%
ES 2378-TCDD	26.82	8.91E+07	0.76	Y	1.01	1.04	4%
ES 12378-PeCDD	32.47	7.84E+07	1.65	Y	0.87	0.92	5%
ES 123478-HxCDD	36.42	7.26E+07	1.30	Y	1.10	0.96	-13%
ES 123678-HxCDD	36.53	7.00E+07	1.28	Y	1.06	0.92	-13%
ES 123789-HxCDD	36.82	8.36E+07	1.27	Y	1.22	1.10	-10%
ES 1234678-HpCDD	39.74	7.71E+07	1.08	Y	0.99	1.01	2%
ES OCDD	42.12	1.05E+08	0.91	Y	0.67	0.69	3%
ES 2378-TCDF	25.87	1.42E+08	0.81	Y	1.01	1.03	2%
ES 12378-PeCDF	30.96	1.23E+08	1.59	Y	0.90	0.89	-1%
ES 23478-PeCDF	32.11	1.27E+08	1.59	Y	0.89	0.92	3%
ES 123478-HxCDF	35.44	9.40E+07	0.51	Y	1.43	1.24	-14%
ES 123678-HxCDF	35.58	1.06E+08	0.53	Y	1.63	1.40	-14%
ES 234678-HxCDF	36.24	1.00E+08	0.52	Y	1.48	1.32	-11%
ES 123789-HxCDF	37.19	9.27E+07	0.52	Y	1.29	1.22	-6%
ES 1234678-HpCDF	38.79	7.80E+07	0.45	Y	1.15	1.03	-10%
ES 1234789-HpCDF	40.14	8.05E+07	0.45	Y	0.91	1.06	17%
ES OCDF	42.28	1.32E+08	0.91	Y	0.83	0.87	5%

Dioxin/Furan QC Summary	Acq'd: 12 Aug 2020 18:05 PSW	ICAL: MM3_DF_10012020_12JUN2020
Lab ID: CS3_200812_DF_RB	UTP: 13-Aug-2020 08:31:29 DTF	Checkcode: 878-506-QBQ
Sample ID: SIL 20-449-3	Report: 13 Aug 2020 08:33 TF	Datafile: 200812R11

Name	RT	Response	RA	OK	Ref. RRFs	Calc. RRFs	Dev'n
JS 1234-TCDD	26.12	8.54E+07	0.78	Y	-	-	-
JS 1234-TCDF	24.39	1.38E+08	0.79	Y	-	-	-
JS 123467-HxCDD	36.72	3.80E+07	1.25	Y	-	-	-
CS 37Cl-2378-TCDD	26.85	9.54E+06	n/a	-	1.04	1.12	8%
CS 12347-PeCDD	31.96	6.87E+07	1.66	Y	0.74	0.80	9%
CS 12346-PeCDF	30.41	1.20E+08	1.58	Y	0.86	0.87	1%
CS 123469-HxCDF	35.89	9.17E+07	0.52	Y	1.36	1.21	-11%
CS 1234689-HpCDF	39.22	7.72E+07	0.44	Y	1.05	1.02	-4%
~~SS 37Cl-2378-TCDD~~	~~26.85~~	~~9.54E+06~~	~~n/a~~	~~-~~	~~1.04~~	~~1.07~~	~~3%~~
~~SS 12347-PeCDD~~	~~31.96~~	~~6.87E+07~~	~~1.66~~	~~Y~~	~~0.86~~	~~0.88~~	~~2%~~
~~SS 12346-PeCDF~~	~~30.41~~	~~1.20E+08~~	~~1.58~~	~~Y~~	~~0.96~~	~~0.98~~	~~2%~~
~~SS 123469-HxCDF~~	~~35.89~~	~~9.17E+07~~	~~0.52~~	~~Y~~	~~0.83~~	~~0.86~~	~~3%~~
~~SS 1234689-HpCDF~~	~~39.22~~	~~7.72E+07~~	~~0.44~~	~~Y~~	~~0.92~~	~~0.99~~	~~7%~~
~~OCDD-a~~	~~42.13~~	~~3.43E+06~~	~~2.17~~	~~Y~~	~~0.07~~	~~0.07~~	~~-1%~~
~~OCDF-a~~	~~42.29~~	~~3.78E+06~~	~~2.34~~	~~Y~~	~~0.06~~	~~0.06~~	~~-9%~~

METHOD 8290A **PCDD/F CALIBRATION VERIFICATION** **FORM 4A**

Lab Name: SGS North America

Initial Calibration: ICAL: MM3_DF_10012020_12JUN2020

Instrument ID: MM3 GC Column ID: ZB-5ms

VER Data Filename: 200812R11 Analysis Date: 12-AUG-2020 18:05:42

NATIVE ANALYTES	M/Z's FORMING RATIO	ION ABUND. RATIO	QC LIMITS			OK	CONC. FOUND	RANGE (ng/mL)			OK
2,3,7,8-TCDD	M/M+2	0.78	0.65	-	0.89	Y	10.3	8	-	12	Y
1,2,3,7,8-PeCDD	M+2/M+4	1.59	1.32	-	1.78	Y	48.5	40	-	60	Y
1,2,3,4,7,8-HxCDD	M+2/M+4	1.27	1.05	-	1.43	Y	50	40	-	60	Y
1,2,3,6,7,8-HxCDD	M+2/M+4	1.23	1.05	-	1.43	Y	50.3	40	-	60	Y
1,2,3,7,8,9-HxCDD	M+2/M+4	1.26	1.05	-	1.43	Y	50.4	40	-	60	Y
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.05	0.88	-	1.20	Y	49.9	40	-	60	Y
OCDD	M+2/M+4	0.88	0.76	-	1.02	Y	103	80	-	120	Y
2,3,7,8-TCDF	M/M+2	0.77	0.65	-	0.89	Y	10.1	8	-	12	Y
1,2,3,7,8-PeCDF	M+2/M+4	1.55	1.32	-	1.78	Y	50.4	40	-	60	Y
2,3,4,7,8-PeCDF	M+2/M+4	1.57	1.32	-	1.78	Y	51	40	-	60	Y
1,2,3,4,7,8-HxCDF	M+2/M+4	1.26	1.05	-	1.43	Y	50.6	40	-	60	Y
1,2,3,6,7,8-HxCDF	M+2/M+4	1.24	1.05	-	1.43	Y	52.3	40	-	60	Y
2,3,4,6,7,8-HxCDF	M+2/M+4	1.24	1.05	-	1.43	Y	50.9	40	-	60	Y
1,2,3,7,8,9-HxCDF	M+2/M+4	1.25	1.05	-	1.43	Y	51.5	40	-	60	Y
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.05	0.88	-	1.20	Y	52.1	40	-	60	Y
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.06	0.88	-	1.20	Y	51.4	40	-	60	Y
OCDF	M+2/M+4	0.91	0.76	-	1.02	Y	103	80	-	120	Y

Processed: 13 Aug 2020 08:39 Analyst: TF

METHOD 8290A **PCDD/F CALIBRATION VERIFICATION** **FORM 4B**

Lab Name: SGS North America

Initial Calibration: ICAL: MM3_DF_10012020_12JUN2020

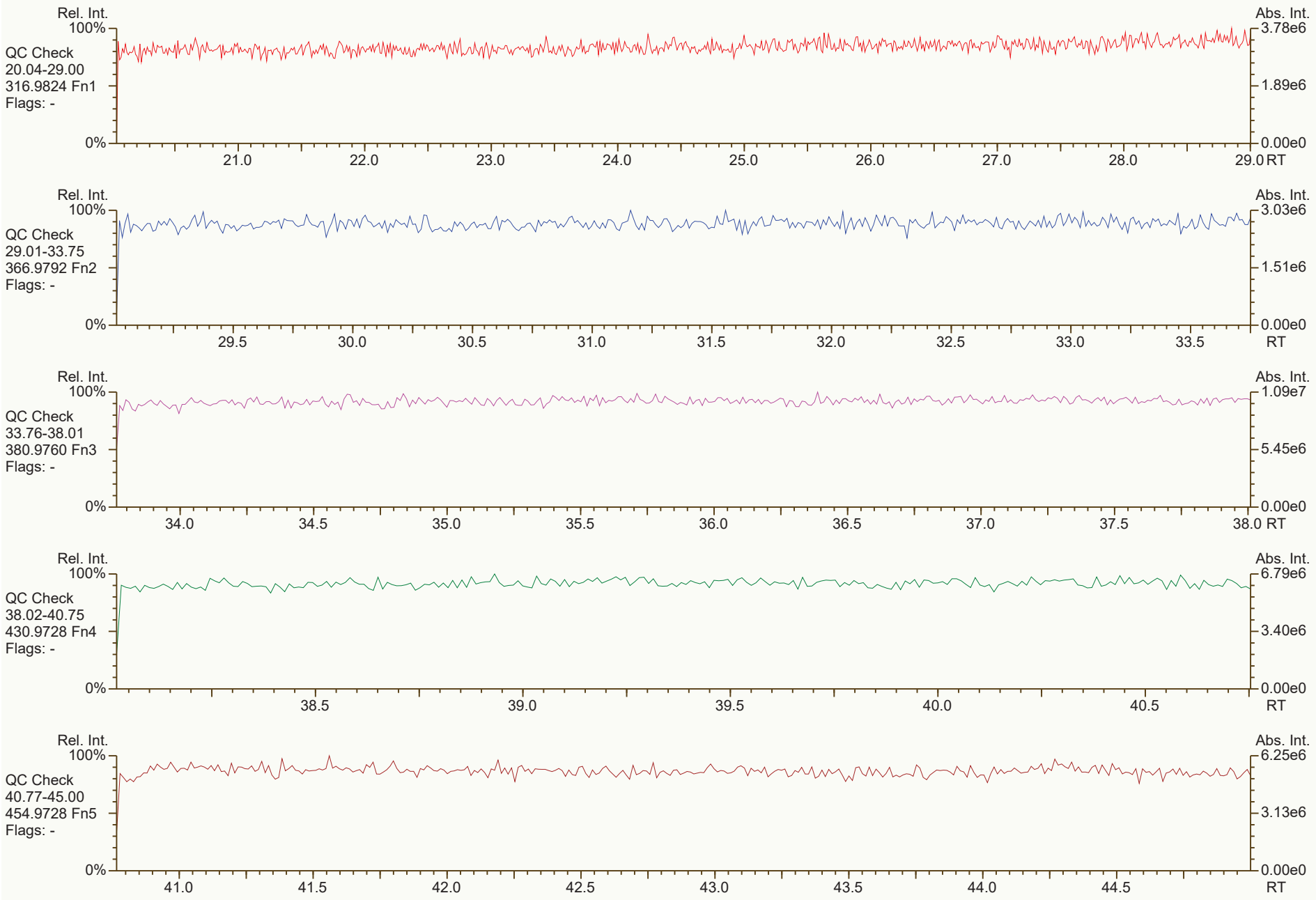
Instrument ID: MM3 GC Column ID: ZB-5ms

VER Data Filename: 200812R11 Analysis Date: 12-AUG-2020 18:05:42

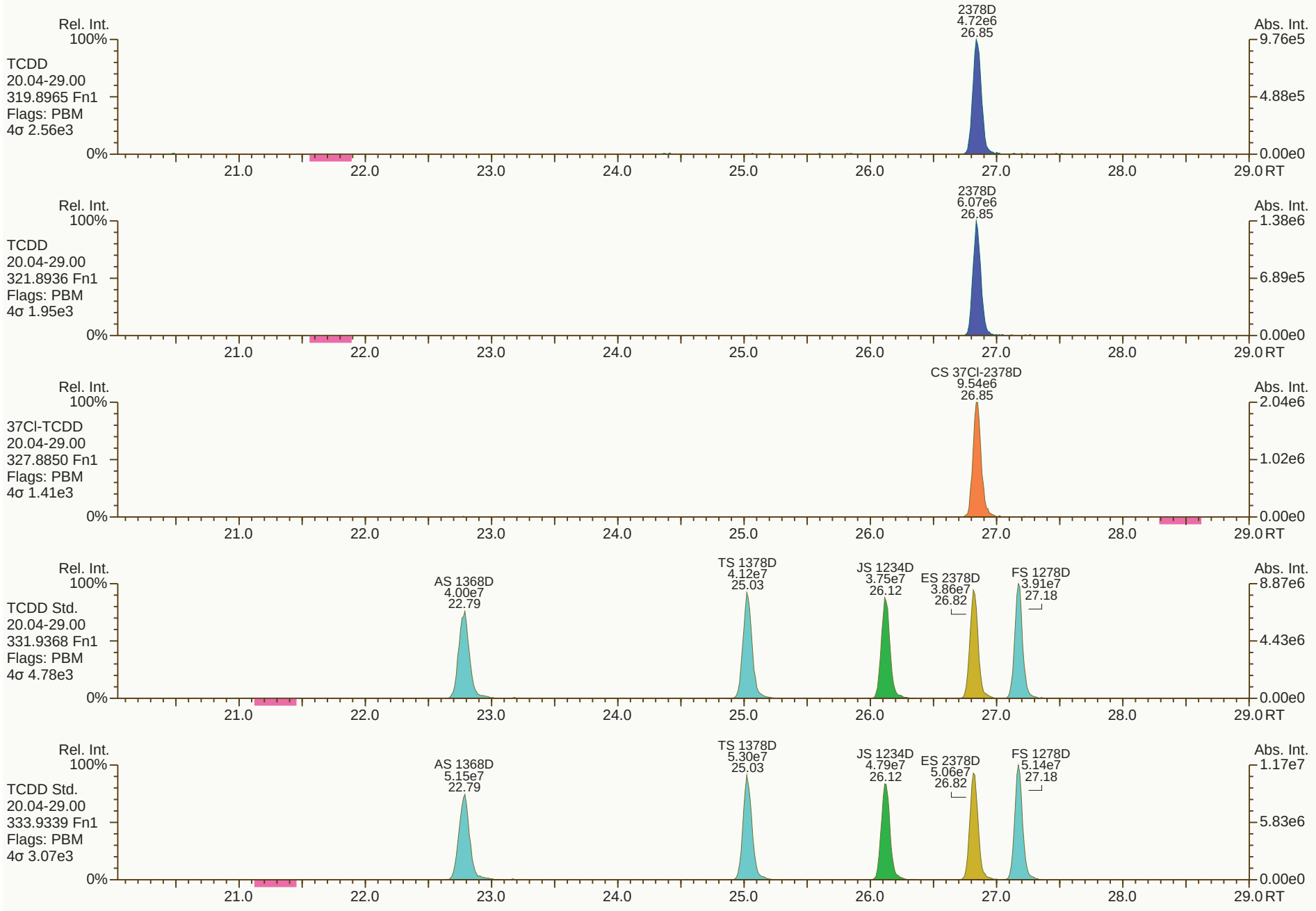
LABELED ANALYTES	M/Z's FORMING RATIO	ION ABUND. RATIO	QC LIMITS	OK	CONC. FOUND	RANGE (ng/mL)	OK
13C-2,3,7,8-TCDD	M/M+2	0.76	0.65 - 0.89	Y	104	70 - 130	Y
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.65	1.32 - 1.78	Y	105	70 - 130	Y
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.30	1.05 - 1.43	Y	87.2	70 - 130	Y
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.28	1.05 - 1.43	Y	86.9	70 - 130	Y
13C-1,2,3,7,8,9-HxCDD	M+2/M+4	1.27	1.05 - 1.43	Y	90.4	70 - 130	Y
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.08	0.88 - 1.20	Y	102	70 - 130	Y
13C-OCDD	M+2/M+4	0.91	0.76 - 1.02	Y	206	140 - 260	Y
13C-2,3,7,8-TCDF	M/M+2	0.81	0.65 - 0.89	Y	102	70 - 130	Y
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.59	1.32 - 1.78	Y	98.9	70 - 130	Y
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.59	1.32 - 1.78	Y	103	70 - 130	Y
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.51	0.43 - 0.59	Y	86.4	70 - 130	Y
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.53	0.43 - 0.59	Y	85.8	70 - 130	Y
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.52	0.43 - 0.59	Y	89.2	70 - 130	Y
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.52	0.43 - 0.59	Y	94.4	70 - 130	Y
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.45	0.37 - 0.51	Y	89.6	70 - 130	Y
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.45	0.37 - 0.51	Y	117	70 - 130	Y
13C-OCDF	M+2/M+4	0.91	0.76 - 1.02	Y	209	140 - 260	Y
CLEANUP STANDARDS							
37Cl-2,3,7,8-TCDD	n/a				10.8	7.9 - 12.7	Y
13C-1,2,3,4,7-PeCDD	M+2/M+4	1.66	1.32 - 1.78	Y	109	70 - 130	Y
13C-1,2,3,4,6-PeCDF	M+2/M+4	1.58	1.32 - 1.78	Y	101	70 - 130	Y
13C-1,2,3,4,6,9-HxCDF	M/M+2	0.52	0.43 - 0.59	Y	88.9	70 - 130	Y
13C-1,2,3,4,6,8,9-HpCDF	M/M+2	0.44	0.37 - 0.51	Y	96.3	70 - 130	Y

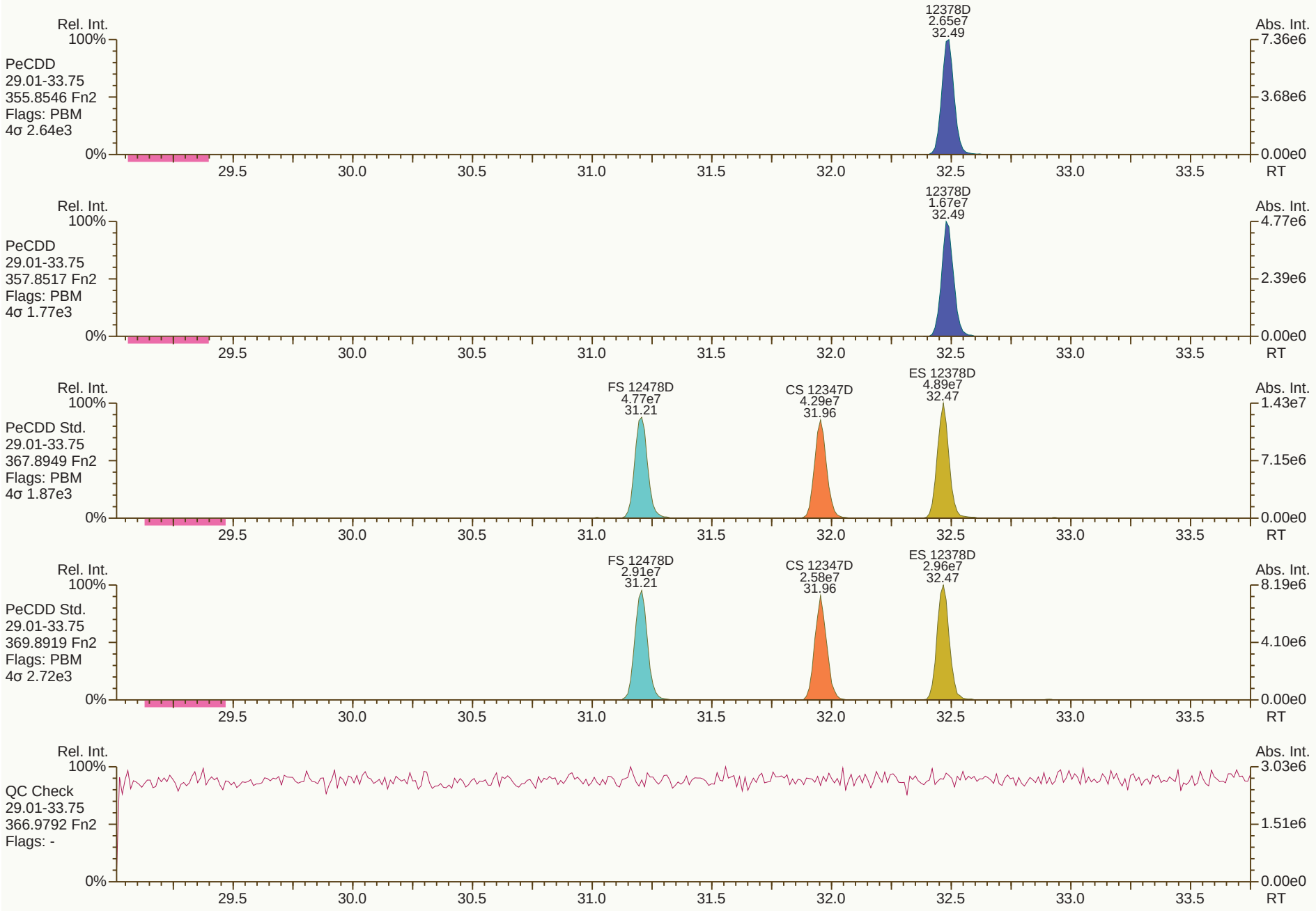
Processed: 13 Aug 2020 08:39 Analyst: TF

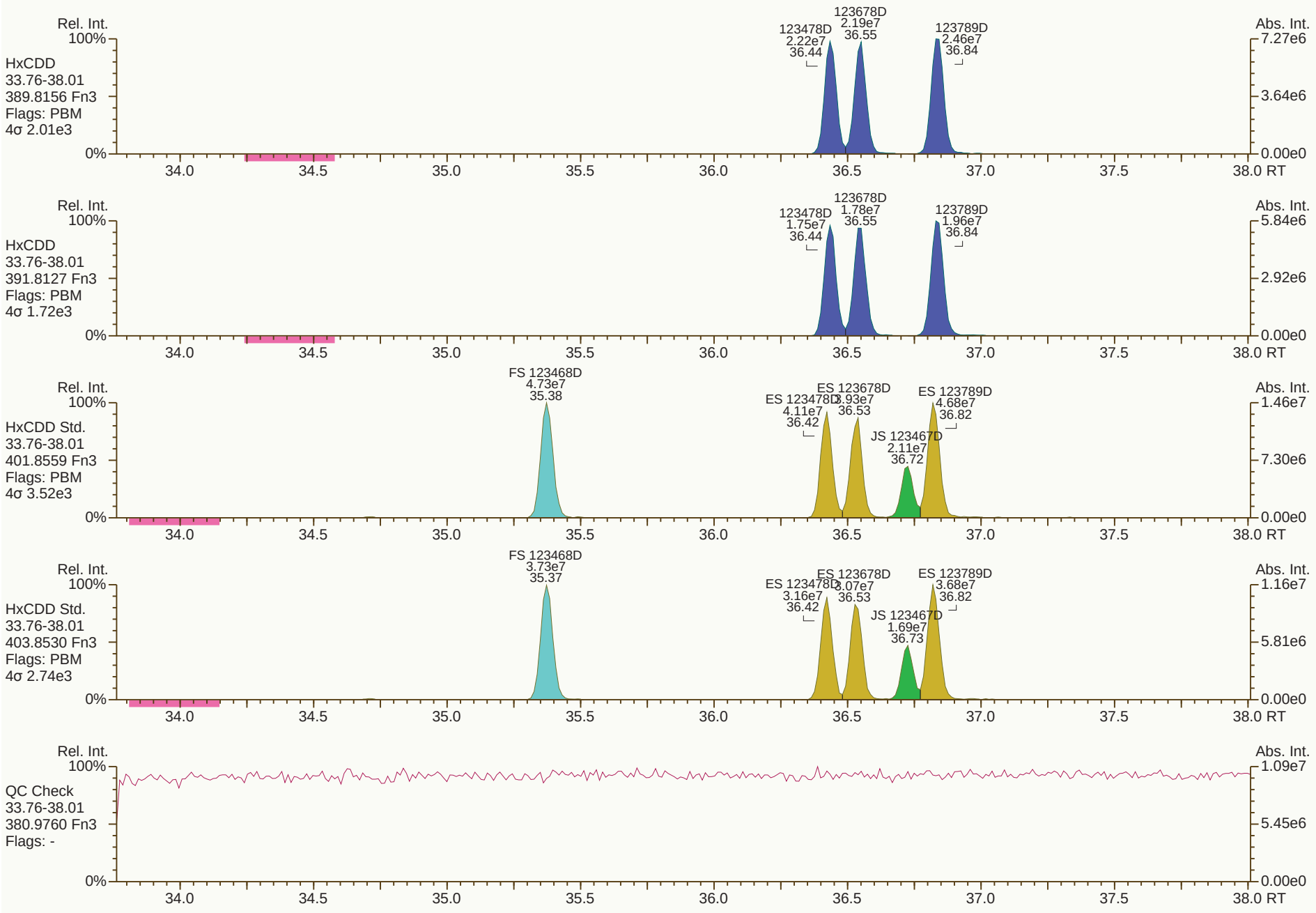
SGS ID: CS3_200812_DF_RB **Sample ID: SIL 20-449-3** **Acq: 12-Aug-2020 18:05:42**
Instr: [ILM] AutoSpec-Ultima MM3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 3** **User: PSW Datafile: 200812R11**

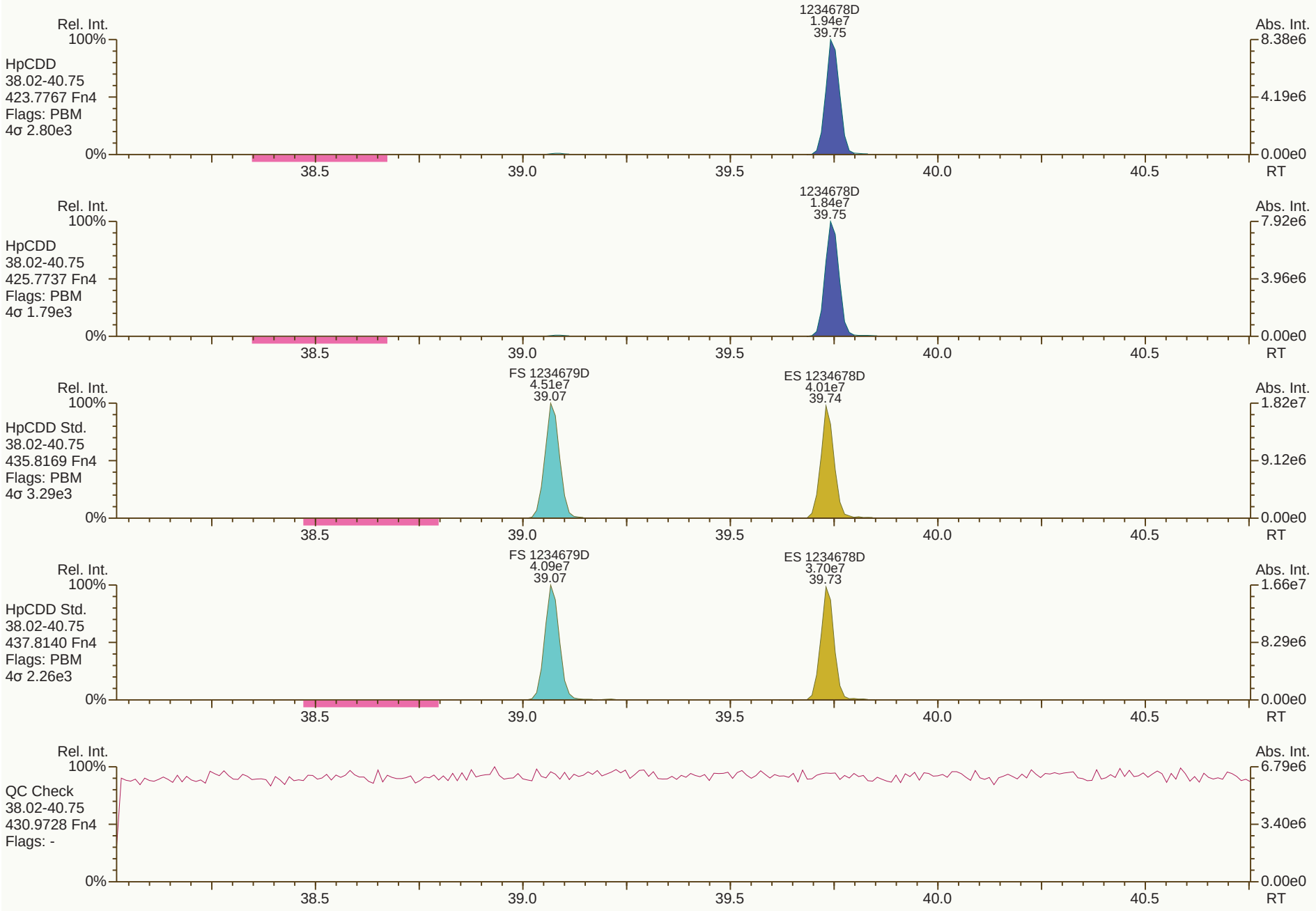


Results: P:\B4500_B4599\B4528\B4528_17661 DF\Resources\CS3_200812_DF_RB.utp_res, saved 13-Aug-2020 08:31 (DTF) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 scc: 878-506 *PKD: n/a Printed: 13-Aug-2020 08:44 Page 1 of 12*


Rel. Int.
100%
TCDD
20.04-29.00
319.8965 Fn1
Flags: PBM
4σ 2.56e3
0%
2378D
4.72e6
26.85
Abs. Int.
9.76e5
4.88e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT
Rel. Int.
100%
TCDD
20.04-29.00
321.8936 Fn1
Flags: PBM
4σ 1.95e3
0%
2378D
6.07e6
26.85
Abs. Int.
1.38e6
6.89e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT
Rel. Int.
100%
37Cl-TCDD
20.04-29.00
327.8850 Fn1
Flags: PBM
4σ 1.41e3
0%
CS 37Cl-2378D
9.54e6
26.85
Abs. Int.
2.04e6
1.02e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT
Rel. Int.
100%
TCDD Std.
20.04-29.00
331.9368 Fn1
Flags: PBM
4σ 4.78e3
0%
AS 1368D
4.00e7
22.79
TS 1378D
4.12e7
25.03
JS 1234D
3.75e7
26.12
ES 2378D
3.86e7
26.82
FS 1278D
3.91e7
27.18
Abs. Int.
8.87e6
4.43e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT
Rel. Int.
100%
TCDD Std.
20.04-29.00
333.9339 Fn1
Flags: PBM
4σ 3.07e3
0%
AS 1368D
5.15e7
22.79
TS 1378D
5.30e7
25.03
JS 1234D
4.79e7
26.12
ES 2378D
5.06e7
26.82
FS 1278D
5.14e7
27.18
Abs. Int.
1.17e7
5.83e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT


Rel. Int.
100%
0%
Abs. Int.
PeCDD
29.01-33.75
355.8546 Fn2
Flags: PBM
4σ 2.64e3
12378D
2.65e7
32.49
7.36e6
3.68e6
0.00e0
PeCDD
29.01-33.75
357.8517 Fn2
Flags: PBM
4σ 1.77e3
12378D
1.67e7
32.49
4.77e6
2.39e6
PeCDD Std.
29.01-33.75
367.8949 Fn2
Flags: PBM
4σ 1.87e3
FS 12478D
4.77e7
31.21
CS 12347D
4.29e7
31.96
ES 12378D
4.89e7
32.47
1.43e7
7.15e6
PeCDD Std.
29.01-33.75
369.8919 Fn2
Flags: PBM
4σ 2.72e3
FS 12478D
2.91e7
31.21
CS 12347D
2.58e7
31.96
ES 12378D
2.96e7
32.47
8.19e6
4.10e6
QC Check
29.01-33.75
366.9792 Fn2
Flags: -
3.03e6
1.51e6
29.5
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
RT

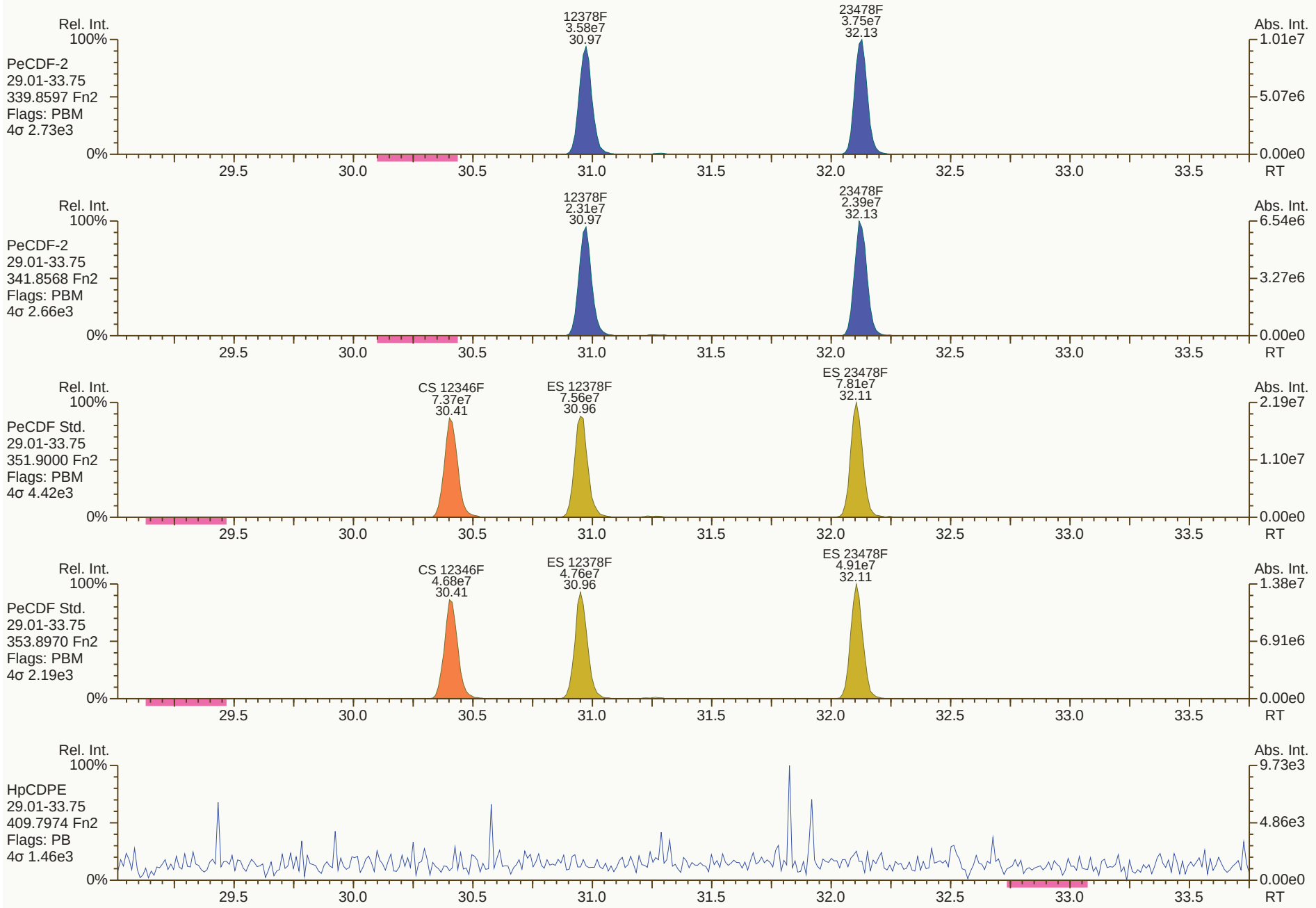

Rel. Int.
100%
HxCDD
33.76-38.01
389.8156 Fn3
Flags: PBM
4σ 2.01e3
0%
123478D
2.22e7
36.44
123678D
2.19e7
36.55
123789D
2.46e7
36.84
Abs. Int.
7.27e6
3.64e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0 RT
Rel. Int.
100%
HxCDD
33.76-38.01
391.8127 Fn3
Flags: PBM
4σ 1.72e3
0%
123478D
1.75e7
36.44
123678D
1.78e7
36.55
123789D
1.96e7
36.84
Abs. Int.
5.84e6
2.92e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0 RT
Rel. Int.
100%
HxCDD Std.
33.76-38.01
401.8559 Fn3
Flags: PBM
4σ 3.52e3
0%
FS 123468D
4.73e7
35.38
ES 123478D
4.11e7
36.42
ES 123678D
3.93e7
36.53
JS 123467D
2.11e7
36.72
ES 123789D
4.68e7
36.82
Abs. Int.
1.46e7
7.30e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0 RT
Rel. Int.
100%
HxCDD Std.
33.76-38.01
403.8530 Fn3
Flags: PBM
4σ 2.74e3
0%
FS 123468D
3.73e7
35.37
ES 123478D
3.16e7
36.42
ES 123678D
3.07e7
36.53
JS 123467D
1.69e7
36.73
ES 123789D
3.68e7
36.82
Abs. Int.
1.16e7
5.81e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0 RT
Rel. Int.
100%
QC Check
33.76-38.01
380.9760 Fn3
Flags: -
0%
Abs. Int.
1.09e7
5.45e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0 RT

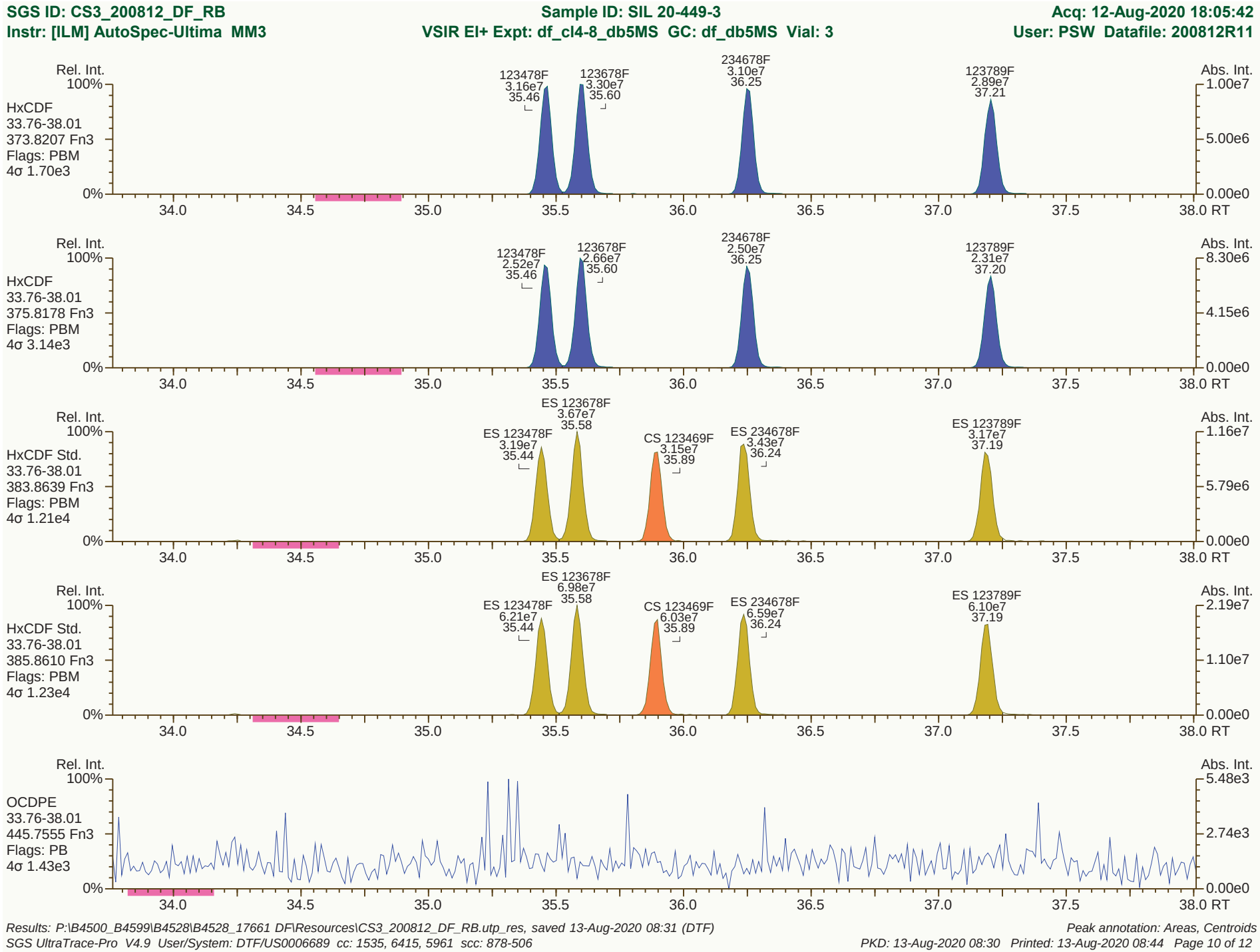

Rel. Int.
100%
HpCDD
38.02-40.75
423.7767 Fn4
Flags: PBM
4σ 2.80e3
0%
1234678D
1.94e7
39.75
Abs. Int.
8.38e6
4.19e6
0.00e0
38.5
39.0
39.5
40.0
40.5
RT
Rel. Int.
100%
HpCDD
38.02-40.75
425.7737 Fn4
Flags: PBM
4σ 1.79e3
0%
1234678D
1.84e7
39.75
Abs. Int.
7.92e6
3.96e6
0.00e0
38.5
39.0
39.5
40.0
40.5
RT
Rel. Int.
100%
HpCDD Std.
38.02-40.75
435.8169 Fn4
Flags: PBM
4σ 3.29e3
0%
FS 1234679D
4.51e7
39.07
ES 1234678D
4.01e7
39.74
Abs. Int.
1.82e7
9.12e6
0.00e0
38.5
39.0
39.5
40.0
40.5
RT
Rel. Int.
100%
HpCDD Std.
38.02-40.75
437.8140 Fn4
Flags: PBM
4σ 2.26e3
0%
FS 1234679D
4.09e7
39.07
ES 1234678D
3.70e7
39.73
Abs. Int.
1.66e7
8.29e6
0.00e0
38.5
39.0
39.5
40.0
40.5
RT
Rel. Int.
100%
QC Check
38.02-40.75
430.9728 Fn4
Flags: -
0%
Abs. Int.
6.79e6
3.40e6
0.00e0
38.5
39.0
39.5
40.0
40.5
RT


OCDD
2.72e7
42.13
Rel. Int.
100%
OCDD
40.77-45.00
457.7377 Fn5
Flags: PBM
4σ 1.96e3
0%
Abs. Int.
1.06e7
5.32e6
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
OCDD
3.10e7
42.13
Rel. Int.
100%
OCDD
40.77-45.00
459.7348 Fn5
Flags: PBM
4σ 3.47e3
0%
Abs. Int.
1.22e7
6.12e6
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDD
5.01e7
42.12
Rel. Int.
100%
OCDD Std.
40.77-45.00
469.7780 Fn5
Flags: PBM
4σ 2.19e3
0%
Abs. Int.
1.85e7
9.23e6
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDD
5.50e7
42.12
Rel. Int.
100%
OCDD Std.
40.77-45.00
471.7750 Fn5
Flags: PBM
4σ 3.00e3
0%
Abs. Int.
2.02e7
1.01e7
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
QC Check
40.77-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
6.25e6
3.13e6
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT


Rel. Int.
100%
TCDF
20.04-29.00
303.9016 Fn1
Flags: PBM
4σ 1.77e3
0%
2378F
6.15e6
25.90
Abs. Int.
1.27e6
6.35e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT
Rel. Int.
100%
TCDF
20.04-29.00
305.8987 Fn1
Flags: PBM
4σ 1.67e3
0%
2378F
7.96e6
25.90
Abs. Int.
1.70e6
8.48e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT
Rel. Int.
100%
TCDF Std.
20.04-29.00
315.9419 Fn1
Flags: PBM
4σ 1.83e4
0%
AS 1368F
7.27e7
20.57
JS 1234F
6.09e7
24.39
ES 2378F
6.36e7
25.87
Abs. Int.
1.35e7
6.75e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT
Rel. Int.
100%
TCDF Std.
20.04-29.00
317.9389 Fn1
Flags: PBM
4σ 1.19e4
0%
AS 1368F
9.11e7
20.57
JS 1234F
7.74e7
24.39
ES 2378F
7.89e7
25.87
Abs. Int.
1.71e7
8.55e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT
Rel. Int.
100%
HxCDPE
20.04-29.00
375.8364 Fn1
Flags: PB
4σ 1.60e3
0%
Abs. Int.
8.94e3
4.47e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT


Rel. Int.
100%
0%
Abs. Int.
6.87e3
3.44e3
0.00e0
PeCDF-1
20.04-29.00
339.8597 Fn1
Flags: PB
4σ 2.08e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT
Rel. Int.
100%
0%
Abs. Int.
1.44e4
7.18e3
0.00e0
PeCDF-1
20.04-29.00
341.8568 Fn1
Flags: PB
4σ 2.00e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT
Rel. Int.
100%
0%
Abs. Int.
3.78e6
1.89e6
0.00e0
QC Check
20.04-29.00
316.9824 Fn1
Flags: -
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT


Rel. Int.
100%
PeCDF-2
29.01-33.75
339.8597 Fn2
Flags: PBM
4σ 2.73e3
0%
12378F
3.58e7
30.97
23478F
3.75e7
32.13
Abs. Int.
1.01e7
5.07e6
0.00e0
29.5
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
RT
Rel. Int.
100%
PeCDF-2
29.01-33.75
341.8568 Fn2
Flags: PBM
4σ 2.66e3
0%
12378F
2.31e7
30.97
23478F
2.39e7
32.13
Abs. Int.
6.54e6
3.27e6
0.00e0
RT
Rel. Int.
100%
PeCDF Std.
29.01-33.75
351.9000 Fn2
Flags: PBM
4σ 4.42e3
0%
CS 12346F
7.37e7
30.41
ES 12378F
7.56e7
30.96
ES 23478F
7.81e7
32.11
Abs. Int.
2.19e7
1.10e7
0.00e0
RT
Rel. Int.
100%
PeCDF Std.
29.01-33.75
353.8970 Fn2
Flags: PBM
4σ 2.19e3
0%
CS 12346F
4.68e7
30.41
ES 12378F
4.76e7
30.96
ES 23478F
4.91e7
32.11
Abs. Int.
1.38e7
6.91e6
0.00e0
RT
Rel. Int.
100%
HpCDPE
29.01-33.75
409.7974 Fn2
Flags: PB
4σ 1.46e3
0%
Abs. Int.
9.73e3
4.86e3
0.00e0
RT

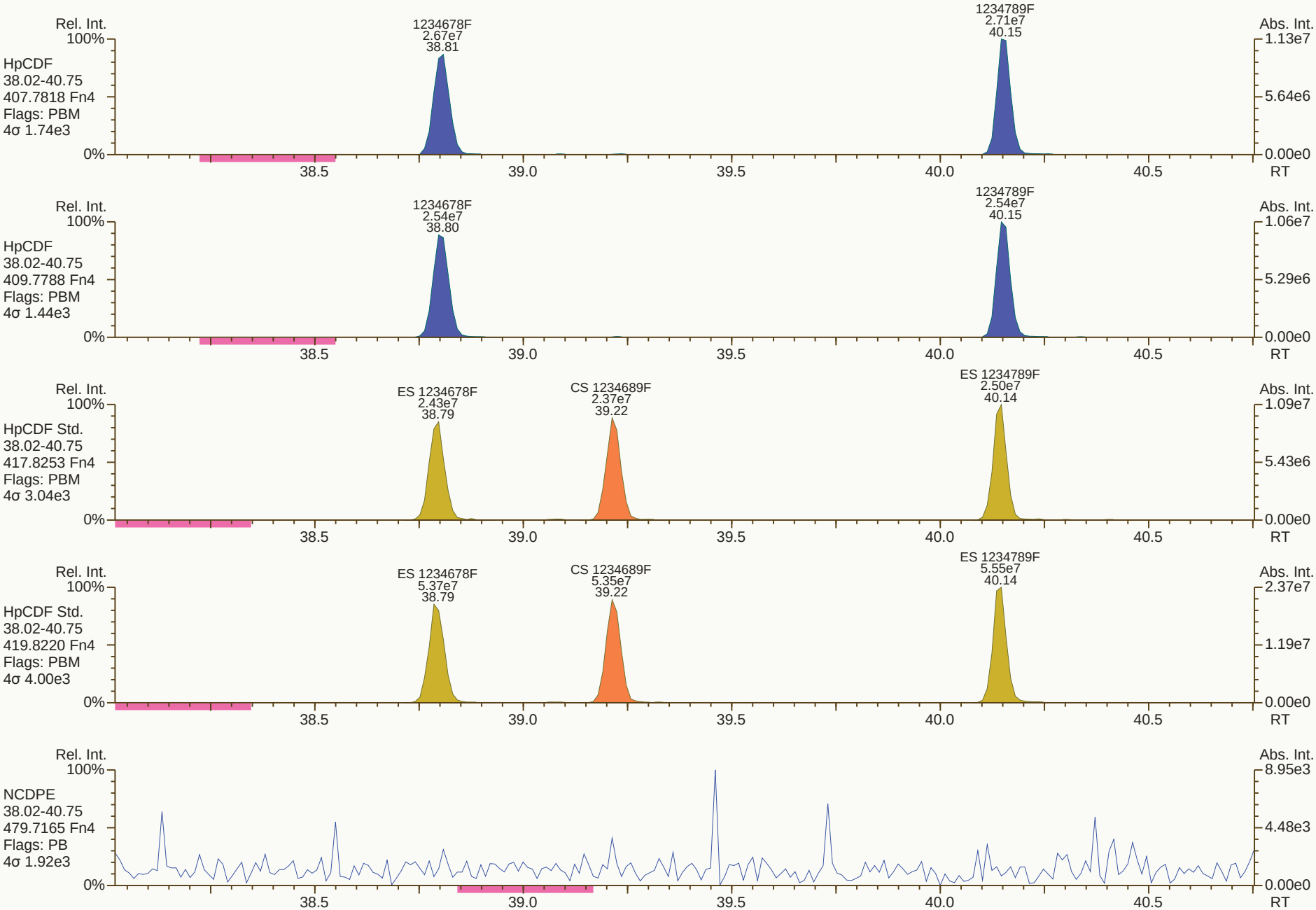


Results: P:\B4500_B4599\B4528\B4528_17661 DF\Resources\CS3_200812_DF_RB.utp_res, saved 13-Aug-2020 08:31 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 1535, 6415, 5961 scc: 878-506
PKD: 13-Aug-2020 08:30 Printed: 13-Aug-2020 08:44 Page 10 of 12

SGS ID: CS3_200812_DF_RB
Instr: [ILM] AutoSpec-Ultima MM3

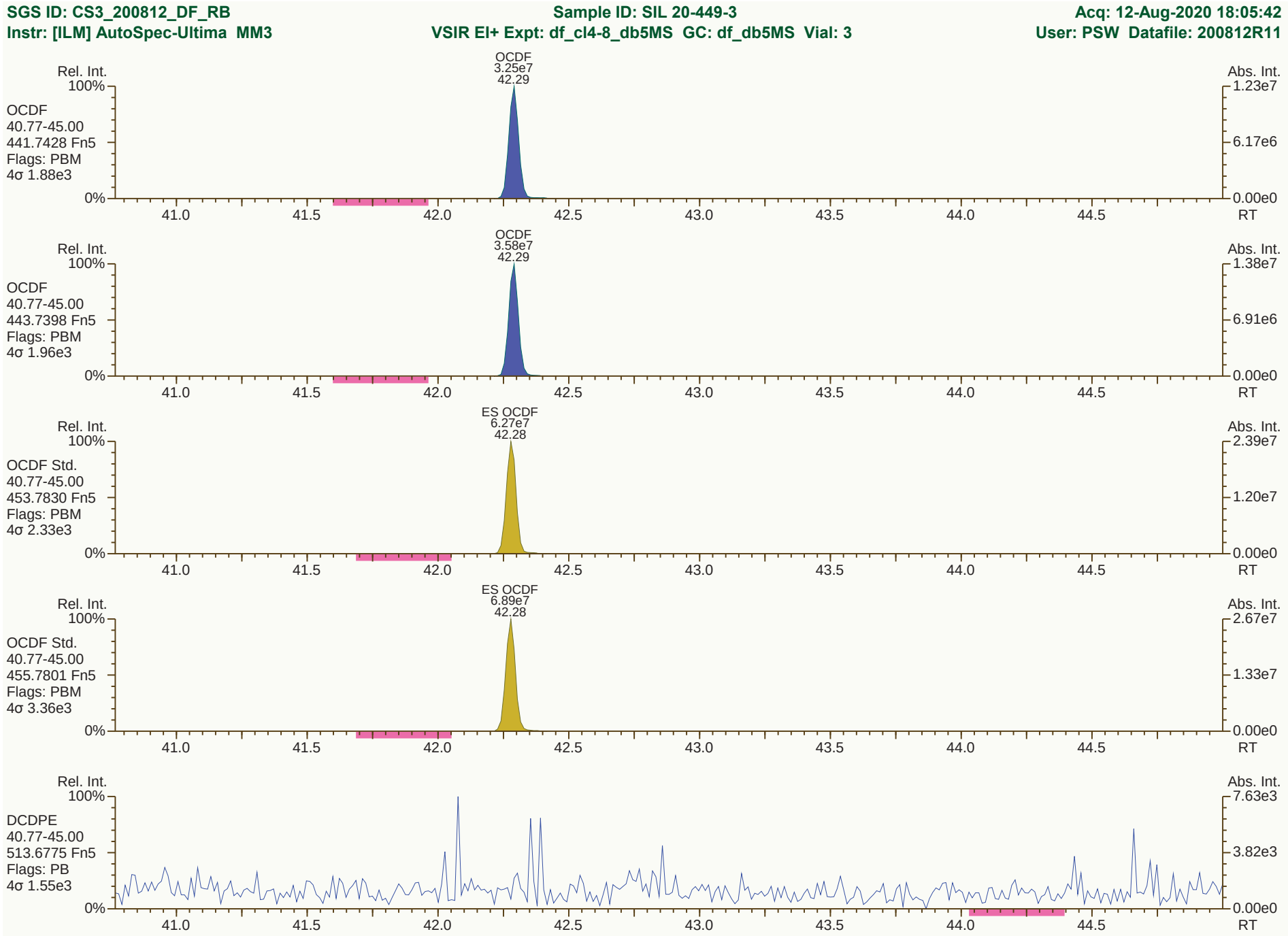
Sample ID: SIL 20-449-3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 3

Acq: 12-Aug-2020 18:05:42
User: PSW Datafile: 200812R11



Results: P:\B4500_B4599\B4528\B4528_17661 DF\Resources\CS3_200812_DF_RB.utp_res, saved 13-Aug-2020 08:31 (DTF)
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 2166, 0314, 3897 scc: 878-506

Peak annotation: Areas, Centroids
PKD: 13-Aug-2020 08:29 Printed: 13-Aug-2020 08:44 Page 11 of 12


SGS ID: CS3_200812_DF_RB
Sample ID: SIL 20-449-3
Acq: 12-Aug-2020 18:05:42
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 3
User: PSW Datafile: 200812R11
OCDF
3.25e7
42.29
Rel. Int.
100%
OCDF
40.77-45.00
441.7428 Fn5
Flags: PBM
4σ 1.88e3
0%
Abs. Int.
1.23e7
6.17e6
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
OCDF
3.58e7
42.29
Rel. Int.
100%
OCDF
40.77-45.00
443.7398 Fn5
Flags: PBM
4σ 1.96e3
0%
Abs. Int.
1.38e7
6.91e6
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDF
6.27e7
42.28
Rel. Int.
100%
OCDF Std.
40.77-45.00
453.7830 Fn5
Flags: PBM
4σ 2.33e3
0%
Abs. Int.
2.39e7
1.20e7
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDF
6.89e7
42.28
Rel. Int.
100%
OCDF Std.
40.77-45.00
455.7801 Fn5
Flags: PBM
4σ 3.36e3
0%
Abs. Int.
2.67e7
1.33e7
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
DCDPE
40.77-45.00
513.6775 Fn5
Flags: PB
4σ 1.55e3
0%
Abs. Int.
7.63e3
3.82e3
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Results: P:\B4500_B4599\B4528\B4528_17661 DF\Resources\CS3_200812_DF_RB.utp_res, saved 13-Aug-2020 08:31 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 9390, 5853, 3825 scc: 878-506
PKD: 13-Aug-2020 08:29 Printed: 13-Aug-2020 08:44 Page 12 of 12

SGS ID: SBS_200811_DF_RB | **Sample ID: SIL 20-61-1** | **Acq: 12-Aug-2020 01:56:18**

Instr: [ILM] AutoSpec-Ultima MM3 | **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 2** | **User: PSW Datafile: 200811R17**



Results: P:\B4500_B4599\B4528\B4528_17661 DF\Resources\SBS_200811_DF_RB.utp_res, saved 12-Aug-2020 08:22 (PSW)

Peak annotation: Areas, Centroids

SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 scc: 928-044

PKD: n/a Printed: 13-Aug-2020 08:39 Page 1 of 12


Rel. Int.
100%
TCDD
20.54-29.50
319.8965 Fn1
Flags: PB
4σ 2.80e3
0%
Abs. Int.
8.01e3
4.00e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD
20.54-29.50
321.8936 Fn1
Flags: PB
4σ 1.39e3
0%
Abs. Int.
8.28e3
4.14e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
37Cl-TCDD
20.54-29.50
327.8850 Fn1
Flags: PB
4σ 1.62e3
0%
Abs. Int.
1.26e4
6.29e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
331.9368 Fn1
Flags: PB
4σ 5.44e3
0%
Abs. Int.
2.38e4
1.19e4
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
333.9339 Fn1
Flags: PB
4σ 2.22e3
0%
Abs. Int.
2.84e4
1.42e4
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
PeCDD
29.51-34.01
355.8546 Fn2
Flags: PB
4σ 2.57e3
0%
Abs. Int.
1.09e4
5.44e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD
29.51-34.01
357.8517 Fn2
Flags: PB
4σ 1.98e3
0%
Abs. Int.
9.46e3
4.73e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
367.8949 Fn2
Flags: PB
4σ 3.91e3
0%
Abs. Int.
2.46e4
1.23e4
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
369.8919 Fn2
Flags: PB
4σ 1.56e3
0%
Abs. Int.
1.91e4
9.54e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
QC Check
29.51-34.01
366.9792 Fn2
Flags: -
0%
Abs. Int.
3.47e6
1.73e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT


Rel. Int.
100%
HxCDD
34.02-38.25
389.8156 Fn3
Flags: PB
4σ 1.39e3
0%
Abs. Int.
2.67e4
1.34e4
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD
34.02-38.25
391.8127 Fn3
Flags: PB
4σ 1.13e3
0%
Abs. Int.
1.54e4
7.70e3
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
401.8559 Fn3
Flags: PB
4σ 2.31e3
0%
Abs. Int.
5.98e4
2.99e4
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
403.8530 Fn3
Flags: PB
4σ 3.41e3
0%
Abs. Int.
3.78e4
1.89e4
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
0%
Abs. Int.
1.37e7
6.85e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT


Rel. Int.
100%
HpCDD
38.26-41.01
423.7767 Fn4
Flags: PB
4σ 1.62e3
0%
Abs. Int.
1.98e4
9.92e3
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.26-41.01
425.7737 Fn4
Flags: PB
4σ 1.29e3
0%
Abs. Int.
2.14e4
1.07e4
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
435.8169 Fn4
Flags: PB
4σ 2.14e3
0%
Abs. Int.
6.70e4
3.35e4
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
437.8140 Fn4
Flags: PB
4σ 2.12e3
0%
Abs. Int.
6.42e4
3.21e4
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.26-41.01
430.9728 Fn4
Flags: -
0%
Abs. Int.
8.65e6
4.33e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT


Rel. Int.
100%
OCDD
41.02-45.00
457.7377 Fn5
Flags: PB
4σ 1.55e3
0%
Abs. Int.
2.43e4
1.21e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDD
41.02-45.00
459.7348 Fn5
Flags: PB
4σ 1.76e3
0%
Abs. Int.
3.07e4
1.54e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDD Std.
41.02-45.00
469.7780 Fn5
Flags: PB
4σ 1.90e3
0%
Abs. Int.
5.57e4
2.79e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDD Std.
41.02-45.00
471.7750 Fn5
Flags: PB
4σ 1.98e3
0%
Abs. Int.
6.78e4
3.39e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
7.52e6
3.76e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

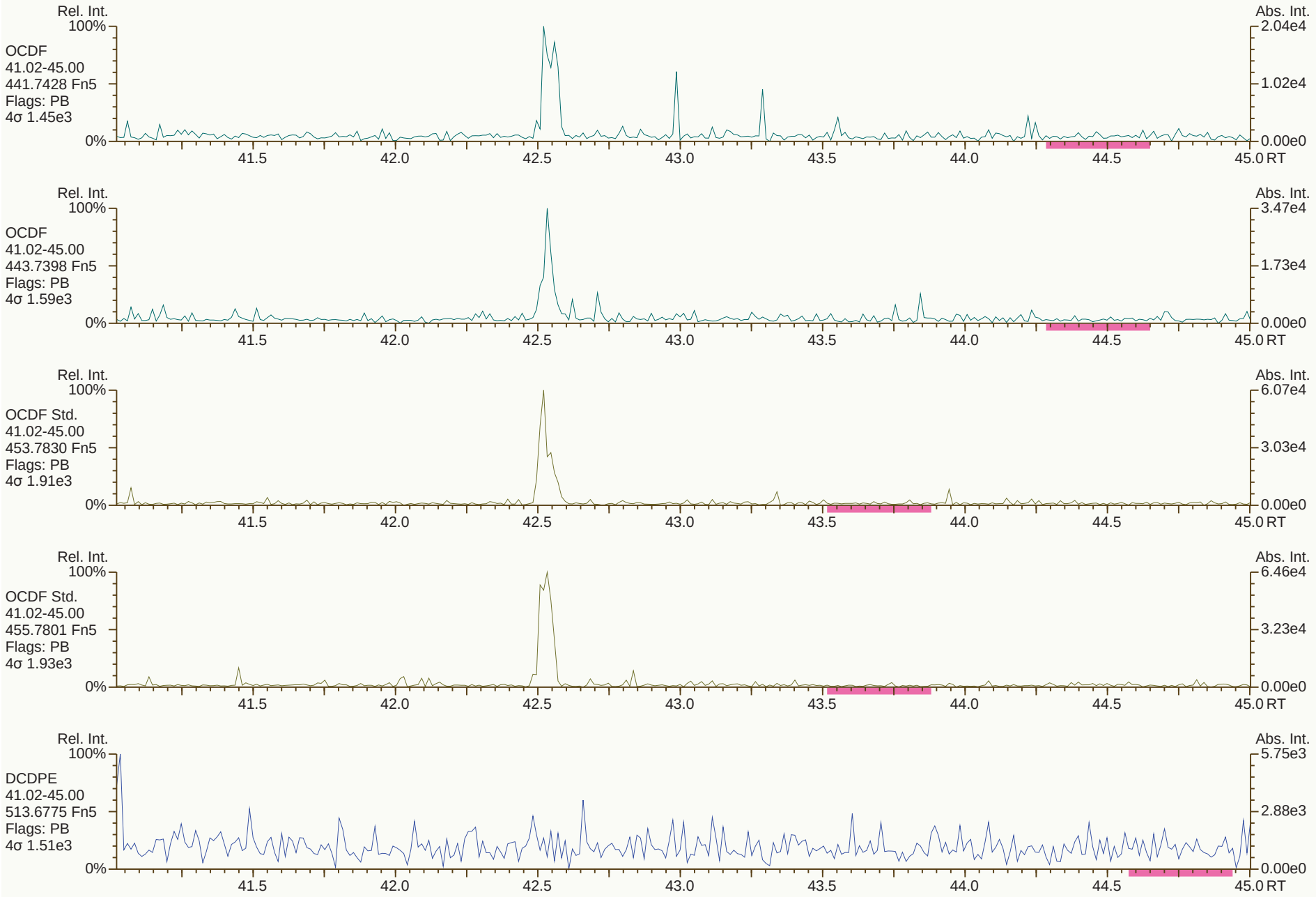

SGS ID: SBS_200811_DF_RB
Sample ID: SIL 20-61-1
Acq: 12-Aug-2020 01:56:18
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 2
User: PSW Datafile: 200811R17
2468F; SPIKED
9.22e5
22.36
Rel. Int.
Abs. Int.
100%
1.73e5
TCDF
20.54-29.50
303.9016 Fn1
Flags: PBM
4σ 1.01e3
8.67e4
0%
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
2468F
1.21e6
22.36
2.37e5
TCDF
20.54-29.50
305.8987 Fn1
Flags: PBM
4σ 2.07e3
1.19e5
TCDF Std.
20.54-29.50
315.9419 Fn1
Flags: PB
4σ 1.52e4
4.00e4
2.00e4
TCDF Std.
20.54-29.50
317.9389 Fn1
Flags: PB
4σ 5.84e3
2.63e4
1.31e4
HxCDPE
20.54-29.50
375.8364 Fn1
Flags: PB
4σ 1.57e3
6.25e3
3.12e3
Results: P:\B4500_B4599\B4528\B4528_17661 DF\Resources\SBS_200811_DF_RB.utp_res, saved 12-Aug-2020 08:22 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 3019, 3967, 6276 scc: 928-044
PKD: 12-Aug-2020 08:22 Printed: 13-Aug-2020 08:40 Page 7 of 12

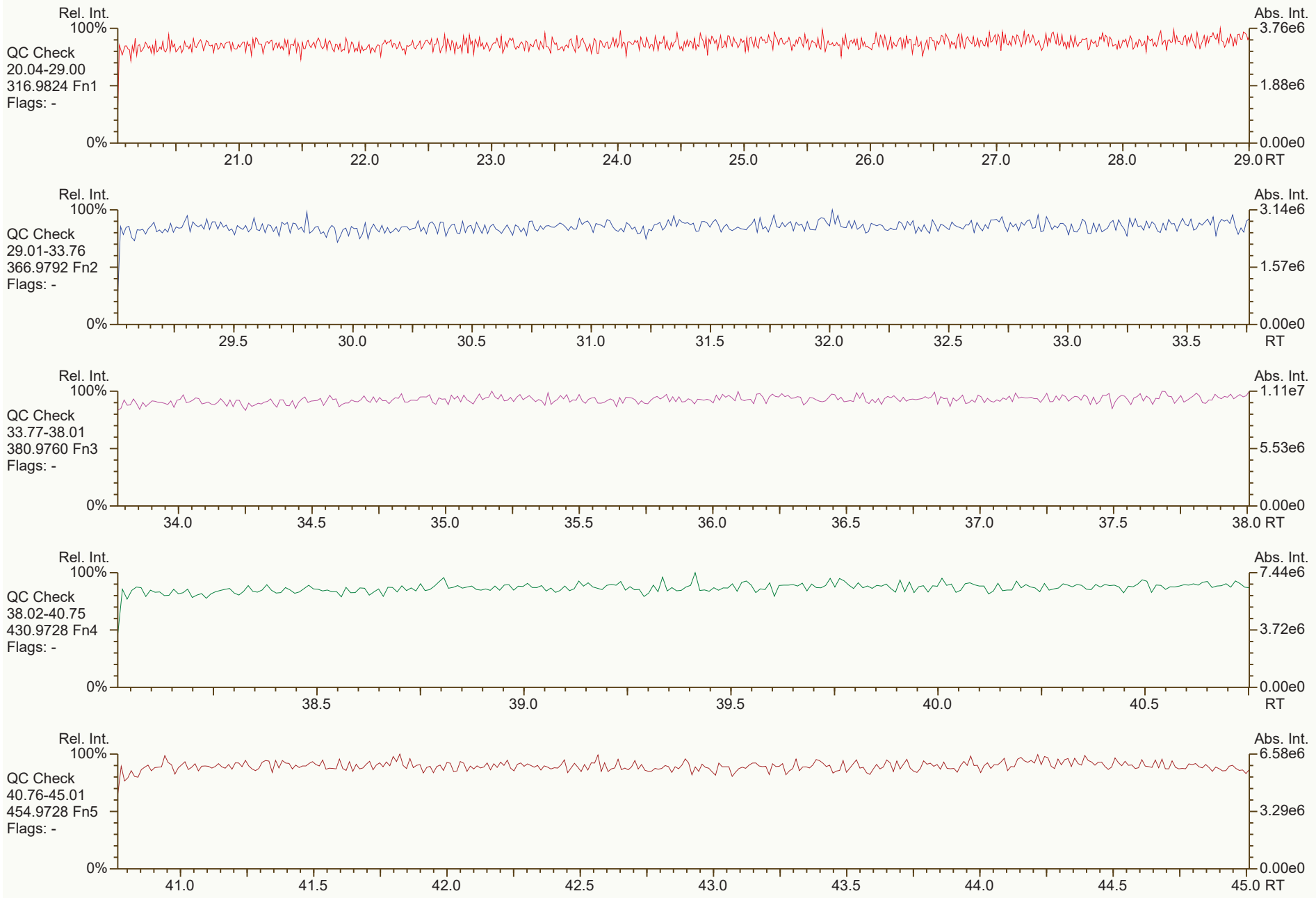

Rel. Int.
100%
0%
Abs. Int.
3.09e4
1.55e4
0.00e0
RT
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
PeCDF-1
20.54-29.50
339.8597 Fn1
Flags: PB
4σ 1.66e3
PeCDF-1
20.54-29.50
341.8568 Fn1
Flags: PB
4σ 2.22e3
9.86e3
4.93e3
QC Check
20.54-29.50
316.9824 Fn1
Flags: -
4.23e6
2.12e6


Rel. Int.
100%
PeCDF-2
29.51-34.01
339.8597 Fn2
Flags: PB
4σ 2.12e3
0%
Abs. Int.
2.37e4
1.18e4
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF-2
29.51-34.01
341.8568 Fn2
Flags: PB
4σ 1.65e3
0%
Abs. Int.
1.40e4
6.98e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
351.9000 Fn2
Flags: PB
4σ 2.33e3
0%
Abs. Int.
5.11e4
2.55e4
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
353.8970 Fn2
Flags: PB
4σ 3.29e3
0%
Abs. Int.
3.03e4
1.51e4
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
HpCDPE
29.51-34.01
409.7974 Fn2
Flags: PB
4σ 1.72e3
0%
Abs. Int.
6.42e3
3.21e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT


Rel. Int.
100%
HxCDF
34.02-38.25
373.8207 Fn3
Flags: PB
4σ 1.47e3
0%
Abs. Int.
3.14e4
1.57e4
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDF
34.02-38.25
375.8178 Fn3
Flags: PB
4σ 1.52e3
0%
Abs. Int.
2.15e4
1.07e4
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDF Std.
34.02-38.25
383.8639 Fn3
Flags: PB
4σ 2.75e3
0%
Abs. Int.
3.75e4
1.88e4
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDF Std.
34.02-38.25
385.8610 Fn3
Flags: PB
4σ 3.70e3
0%
Abs. Int.
5.56e4
2.78e4
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
OCDPE
34.02-38.25
445.7555 Fn3
Flags: PB
4σ 1.36e3
0%
Abs. Int.
4.90e3
2.45e3
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT


Rel. Int.
100%
HpCDF
38.26-41.01
407.7818 Fn4
Flags: PB
4σ 1.14e3
0%
Abs. Int.
3.21e4
1.61e4
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF
38.26-41.01
409.7788 Fn4
Flags: PB
4σ 1.43e3
0%
Abs. Int.
2.55e4
1.27e4
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.26-41.01
417.8253 Fn4
Flags: PB
4σ 3.25e3
0%
Abs. Int.
3.96e4
1.98e4
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.26-41.01
419.8220 Fn4
Flags: PB
4σ 2.69e3
0%
Abs. Int.
6.49e4
3.24e4
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
NCDPE
38.26-41.01
479.7165 Fn4
Flags: PB
4σ 1.47e3
0%
Abs. Int.
5.69e3
2.85e3
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT

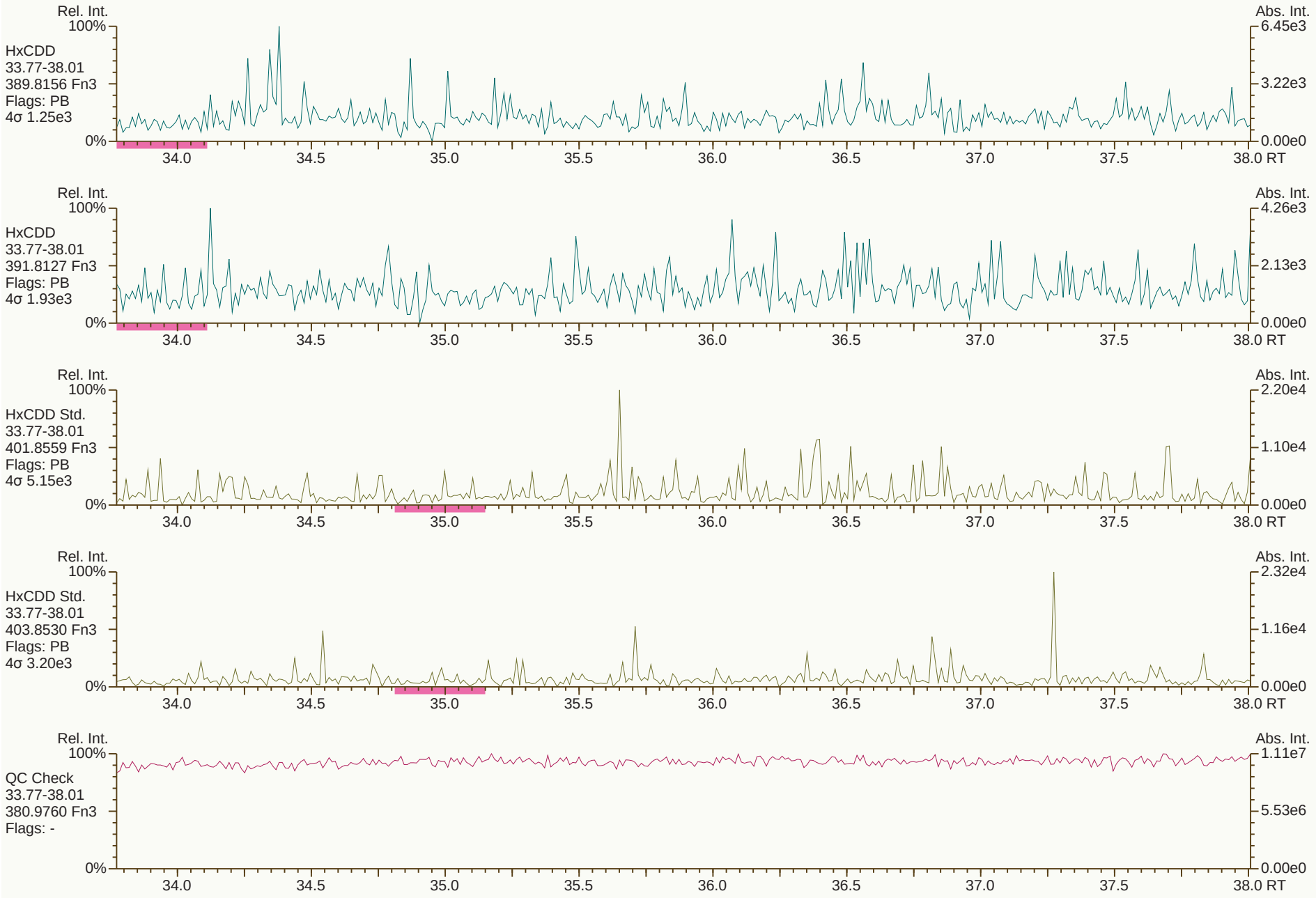

Rel. Int.
100%
OCDF
41.02-45.00
441.7428 Fn5
Flags: PB
4σ 1.45e3
0%
Abs. Int.
2.04e4
1.02e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF
41.02-45.00
443.7398 Fn5
Flags: PB
4σ 1.59e3
0%
Abs. Int.
3.47e4
1.73e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF Std.
41.02-45.00
453.7830 Fn5
Flags: PB
4σ 1.91e3
0%
Abs. Int.
6.07e4
3.03e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF Std.
41.02-45.00
455.7801 Fn5
Flags: PB
4σ 1.93e3
0%
Abs. Int.
6.46e4
3.23e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
DCDPE
41.02-45.00
513.6775 Fn5
Flags: PB
4σ 1.51e3
0%
Abs. Int.
5.75e3
2.88e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT



Results: P:\B4500_B4599\B4528\B4528_17661 DF\Resources\SBS_200812_DF_RA.utp_res, saved 12-Aug-2020 13:56 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 scc: 435-906
PKD: n/a Printed: 13-Aug-2020 08:41 Page 1 of 12

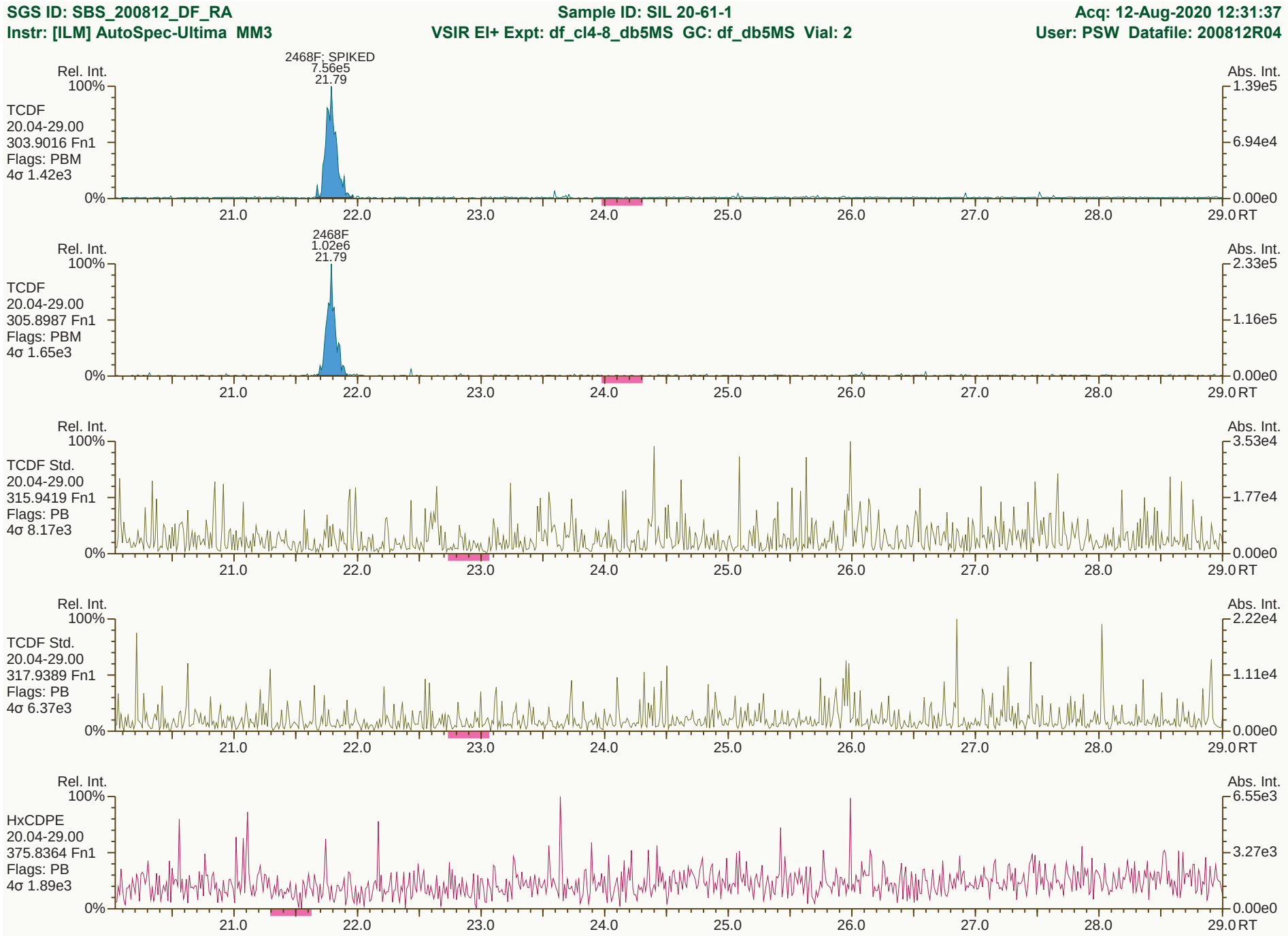

Rel. Int.
100%
TCDD
20.04-29.00
319.8965 Fn1
Flags: PB
4σ 2.01e3
0%
Abs. Int.
7.25e3
3.62e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT
Rel. Int.
100%
TCDD
20.04-29.00
321.8936 Fn1
Flags: PB
4σ 1.78e3
0%
Abs. Int.
6.04e3
3.02e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT
Rel. Int.
100%
37Cl-TCDD
20.04-29.00
327.8850 Fn1
Flags: PB
4σ 1.42e3
0%
Abs. Int.
9.70e3
4.85e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT
Rel. Int.
100%
TCDD Std.
20.04-29.00
331.9368 Fn1
Flags: PB
4σ 4.54e3
0%
Abs. Int.
2.09e4
1.04e4
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT
Rel. Int.
100%
TCDD Std.
20.04-29.00
333.9339 Fn1
Flags: PB
4σ 2.12e3
0%
Abs. Int.
2.46e4
1.23e4
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT


Rel. Int.
100%
PeCDD
29.01-33.76
355.8546 Fn2
Flags: PB
4σ 1.45e3
0%
Abs. Int.
7.68e3
3.84e3
0.00e0
29.5
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
RT
Rel. Int.
100%
PeCDD
29.01-33.76
357.8517 Fn2
Flags: PB
4σ 1.65e3
0%
Abs. Int.
7.54e3
3.77e3
0.00e0
29.5
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
RT
Rel. Int.
100%
PeCDD Std.
29.01-33.76
367.8949 Fn2
Flags: PB
4σ 2.40e3
0%
Abs. Int.
2.42e4
1.21e4
0.00e0
29.5
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
RT
Rel. Int.
100%
PeCDD Std.
29.01-33.76
369.8919 Fn2
Flags: PB
4σ 2.38e3
0%
Abs. Int.
7.32e3
3.66e3
0.00e0
29.5
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
RT
Rel. Int.
100%
QC Check
29.01-33.76
366.9792 Fn2
Flags: -
0%
Abs. Int.
3.14e6
1.57e6
0.00e0
29.5
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
RT


Rel. Int.
100%
HxCDD
33.77-38.01
389.8156 Fn3
Flags: PB
4σ 1.25e3
0%
Abs. Int.
6.45e3
3.22e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0 RT
Rel. Int.
100%
HxCDD
33.77-38.01
391.8127 Fn3
Flags: PB
4σ 1.93e3
0%
Abs. Int.
4.26e3
2.13e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0 RT
Rel. Int.
100%
HxCDD Std.
33.77-38.01
401.8559 Fn3
Flags: PB
4σ 5.15e3
0%
Abs. Int.
2.20e4
1.10e4
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0 RT
Rel. Int.
100%
HxCDD Std.
33.77-38.01
403.8530 Fn3
Flags: PB
4σ 3.20e3
0%
Abs. Int.
2.32e4
1.16e4
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0 RT
Rel. Int.
100%
QC Check
33.77-38.01
380.9760 Fn3
Flags: -
0%
Abs. Int.
1.11e7
5.53e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0 RT

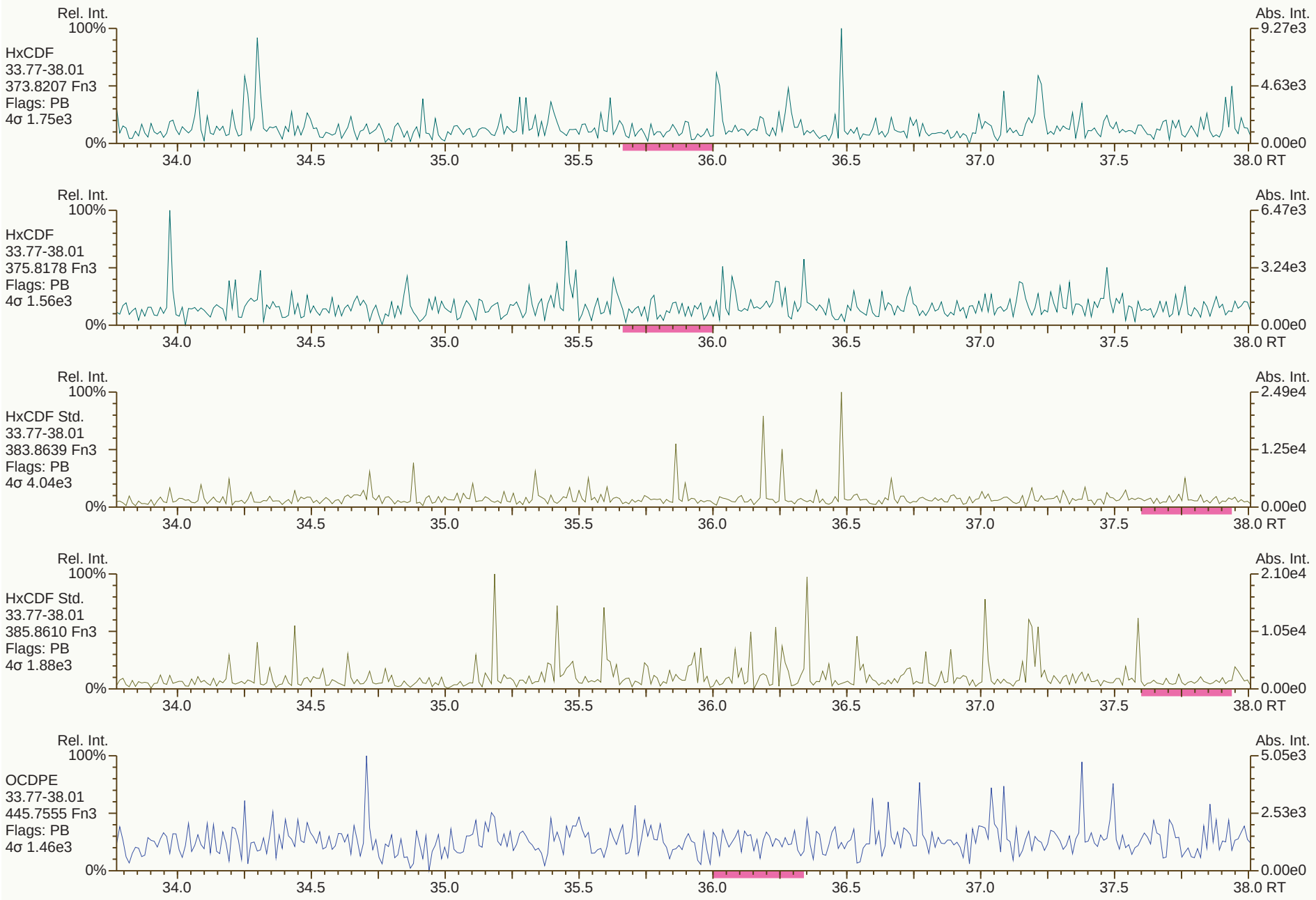

Rel. Int.
100%
HpCDD
38.02-40.75
423.7767 Fn4
Flags: PB
4σ 1.57e3
0%
Abs. Int.
5.24e3
2.62e3
0.00e0
38.5
39.0
39.5
40.0
40.5
RT
Rel. Int.
100%
HpCDD
38.02-40.75
425.7737 Fn4
Flags: PB
4σ 1.39e3
0%
Abs. Int.
5.46e3
2.73e3
0.00e0
38.5
39.0
39.5
40.0
40.5
RT
Rel. Int.
100%
HpCDD Std.
38.02-40.75
435.8169 Fn4
Flags: PB
4σ 2.16e3
0%
Abs. Int.
1.29e4
6.44e3
0.00e0
38.5
39.0
39.5
40.0
40.5
RT
Rel. Int.
100%
HpCDD Std.
38.02-40.75
437.8140 Fn4
Flags: PB
4σ 2.75e3
0%
Abs. Int.
1.32e4
6.61e3
0.00e0
38.5
39.0
39.5
40.0
40.5
RT
Rel. Int.
100%
QC Check
38.02-40.75
430.9728 Fn4
Flags: -
0%
Abs. Int.
7.44e6
3.72e6
0.00e0
38.5
39.0
39.5
40.0
40.5
RT


Rel. Int.
100%
OCDD
40.76-45.01
457.7377 Fn5
Flags: PB
4σ 1.79e3
0%
Abs. Int.
8.59e3
4.29e3
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDD
40.76-45.01
459.7348 Fn5
Flags: PB
4σ 1.64e3
0%
Abs. Int.
1.56e4
7.79e3
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDD Std.
40.76-45.01
469.7780 Fn5
Flags: PB
4σ 2.65e3
0%
Abs. Int.
8.43e3
4.22e3
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDD Std.
40.76-45.01
471.7750 Fn5
Flags: PB
4σ 1.59e3
0%
Abs. Int.
2.31e4
1.16e4
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
QC Check
40.76-45.01
454.9728 Fn5
Flags: -
0%
Abs. Int.
6.58e6
3.29e6
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT


SGS ID: SBS_200812_DF_RA
Sample ID: SIL 20-61-1
Acq: 12-Aug-2020 12:31:37
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 2
User: PSW Datafile: 200812R04
2468F: SPIKED
7.56e5
21.79
Rel. Int.
Abs. Int.
100%
0%
TCDF
20.04-29.00
303.9016 Fn1
Flags: PBM
4σ 1.42e3
1.39e5
6.94e4
0.00e0
2468F
1.02e6
21.79
TCDF
20.04-29.00
305.8987 Fn1
Flags: PBM
4σ 1.65e3
2.33e5
1.16e5
0.00e0
TCDF Std.
20.04-29.00
315.9419 Fn1
Flags: PB
4σ 8.17e3
3.53e4
1.77e4
0.00e0
TCDF Std.
20.04-29.00
317.9389 Fn1
Flags: PB
4σ 6.37e3
2.22e4
1.11e4
0.00e0
HxCDPE
20.04-29.00
375.8364 Fn1
Flags: PB
4σ 1.89e3
6.55e3
3.27e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Results: P:\B4500_B4599\B4528\B4528_17661 DF\Resources\SBS_200812_DF_RA.utp_res, saved 12-Aug-2020 13:56 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 2379, 6392, 8935 scc: 435-906
PKD: 12-Aug-2020 13:56 Printed: 13-Aug-2020 08:42 Page 7 of 12


Rel. Int.
100%
0%
Abs. Int.
6.50e3
3.25e3
0.00e0
PeCDF-1
20.04-29.00
339.8597 Fn1
Flags: PB
4σ 1.88e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT
Rel. Int.
100%
0%
Abs. Int.
9.88e3
4.94e3
0.00e0
PeCDF-1
20.04-29.00
341.8568 Fn1
Flags: PB
4σ 2.14e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT
Rel. Int.
100%
0%
Abs. Int.
3.76e6
1.88e6
0.00e0
QC Check
20.04-29.00
316.9824 Fn1
Flags: -
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT


Rel. Int.
100%
PeCDF-2
29.01-33.76
339.8597 Fn2
Flags: PB
4σ 2.16e3
0%
Abs. Int.
1.09e4
5.44e3
0.00e0
29.5
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
RT
Rel. Int.
100%
PeCDF-2
29.01-33.76
341.8568 Fn2
Flags: PB
4σ 2.02e3
0%
Abs. Int.
1.15e4
5.75e3
0.00e0
29.5
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
RT
Rel. Int.
100%
PeCDF Std.
29.01-33.76
351.9000 Fn2
Flags: PB
4σ 2.07e3
0%
Abs. Int.
3.28e4
1.64e4
0.00e0
29.5
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
RT
Rel. Int.
100%
PeCDF Std.
29.01-33.76
353.8970 Fn2
Flags: PB
4σ 3.11e3
0%
Abs. Int.
2.22e4
1.11e4
0.00e0
29.5
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
RT
Rel. Int.
100%
HpCDPE
29.01-33.76
409.7974 Fn2
Flags: PB
4σ 1.70e3
0%
Abs. Int.
5.71e3
2.85e3
0.00e0
29.5
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
RT


Rel. Int.
100%
HxCDF
33.77-38.01
373.8207 Fn3
Flags: PB
4σ 1.75e3
0%
Abs. Int.
9.27e3
4.63e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0 RT
Rel. Int.
100%
HxCDF
33.77-38.01
375.8178 Fn3
Flags: PB
4σ 1.56e3
0%
Abs. Int.
6.47e3
3.24e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0 RT
Rel. Int.
100%
HxCDF Std.
33.77-38.01
383.8639 Fn3
Flags: PB
4σ 4.04e3
0%
Abs. Int.
2.49e4
1.25e4
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0 RT
Rel. Int.
100%
HxCDF Std.
33.77-38.01
385.8610 Fn3
Flags: PB
4σ 1.88e3
0%
Abs. Int.
2.10e4
1.05e4
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0 RT
Rel. Int.
100%
OCDPE
33.77-38.01
445.7555 Fn3
Flags: PB
4σ 1.46e3
0%
Abs. Int.
5.05e3
2.53e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0 RT


Rel. Int.
100%
HpCDF
38.02-40.75
407.7818 Fn4
Flags: PB
4σ 1.39e3
0%
Abs. Int.
7.12e3
3.56e3
0.00e0
38.5
39.0
39.5
40.0
40.5
RT
Rel. Int.
100%
HpCDF
38.02-40.75
409.7788 Fn4
Flags: PB
4σ 1.36e3
0%
Abs. Int.
1.43e4
7.14e3
0.00e0
38.5
39.0
39.5
40.0
40.5
RT
Rel. Int.
100%
HpCDF Std.
38.02-40.75
417.8253 Fn4
Flags: PB
4σ 2.87e3
0%
Abs. Int.
1.07e4
5.33e3
0.00e0
38.5
39.0
39.5
40.0
40.5
RT
Rel. Int.
100%
HpCDF Std.
38.02-40.75
419.8220 Fn4
Flags: PB
4σ 3.79e3
0%
Abs. Int.
1.73e4
8.66e3
0.00e0
38.5
39.0
39.5
40.0
40.5
RT
Rel. Int.
100%
NCDPE
38.02-40.75
479.7165 Fn4
Flags: PB
4σ 1.93e3
0%
Abs. Int.
6.03e3
3.01e3
0.00e0
38.5
39.0
39.5
40.0
40.5
RT


Rel. Int.
100%
OCDF
40.76-45.01
441.7428 Fn5
Flags: PB
4σ 1.92e3
0%
Abs. Int.
8.02e3
4.01e3
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF
40.76-45.01
443.7398 Fn5
Flags: PB
4σ 1.34e3
0%
Abs. Int.
1.34e4
6.70e3
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF Std.
40.76-45.01
453.7830 Fn5
Flags: PB
4σ 2.33e3
0%
Abs. Int.
5.86e3
2.93e3
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF Std.
40.76-45.01
455.7801 Fn5
Flags: PB
4σ 2.19e3
0%
Abs. Int.
1.02e4
5.08e3
0.00e0
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
DCDPE
40.76-45.01
513.6775 Fn5
Flags: PB
4σ 1.75e3
0%
Abs. Int.
6.98e3
3.49e3
0.00e0
41.0
41.5
42.0
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43.5
44.0
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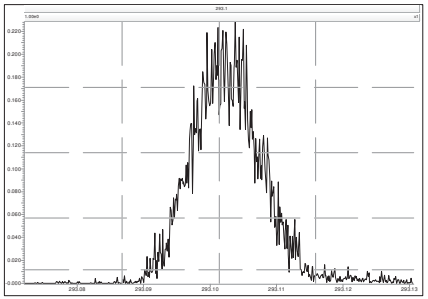
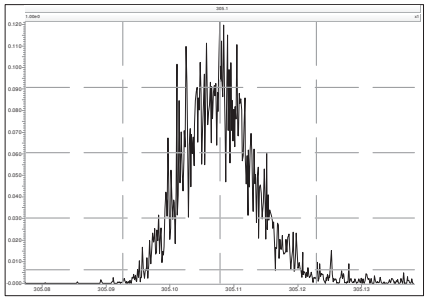
45.0 RT

Printed: Wednesday, August 12, 2020 00:22:01 Eastern Daylight Time

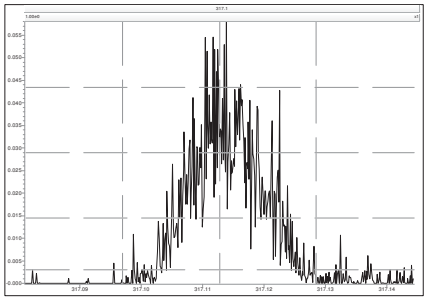
M 292.9824 R 13233



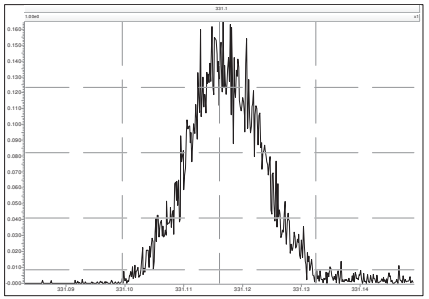
M 304.9824 R 13447



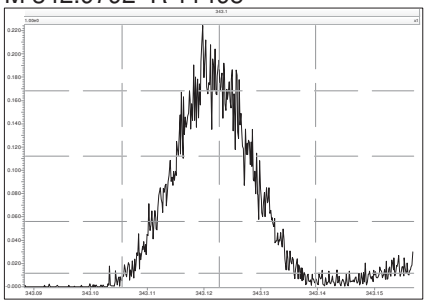
M 316.9824 R 14672



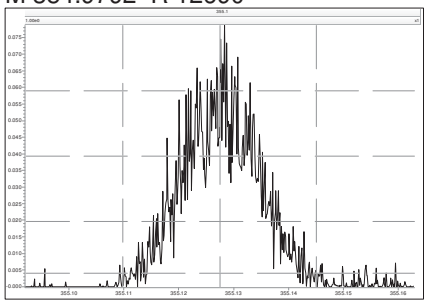
M 330.9792 R 11560



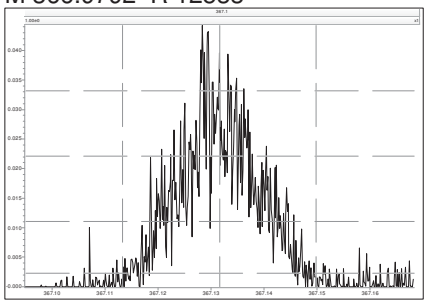
M 342.9792 R 11495



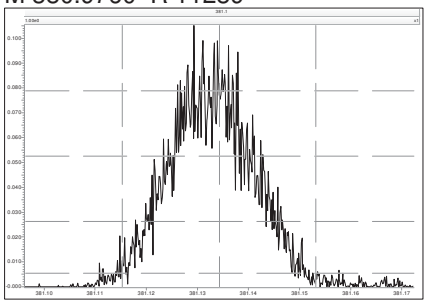
M 354.9792 R 12690



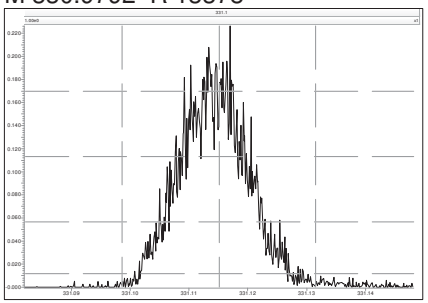
M 366.9792 R 12533



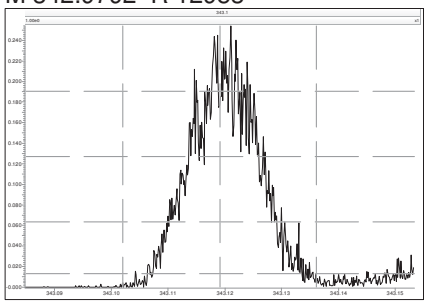
M 380.9760 R 11289



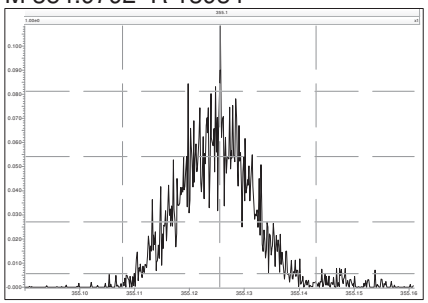
M 330.9792 R 13378



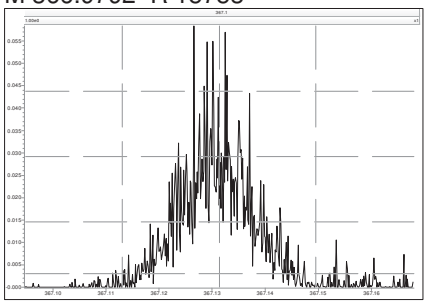
M 342.9792 R 12953



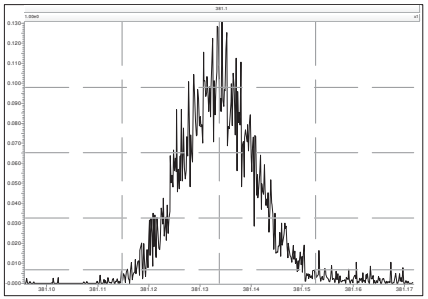
M 354.9792 R 13934



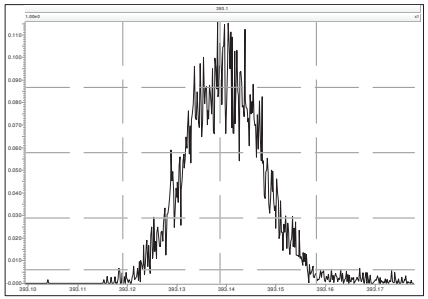
M 366.9792 R 15753



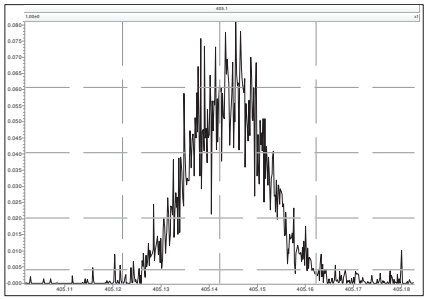
M 380.9760 R 13269



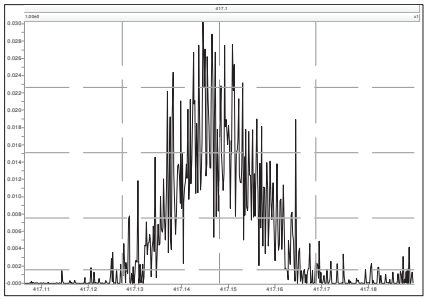
M 392.9760 R 12112



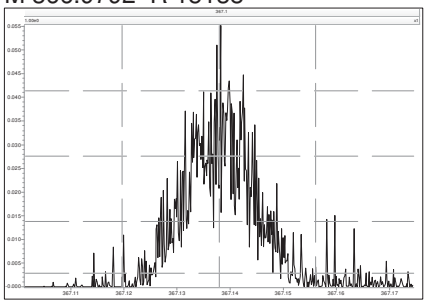
M 404.9760 R 12698



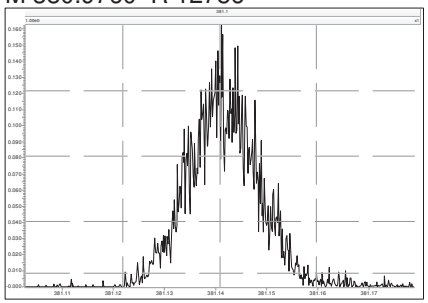
M 416.9760 R 14304



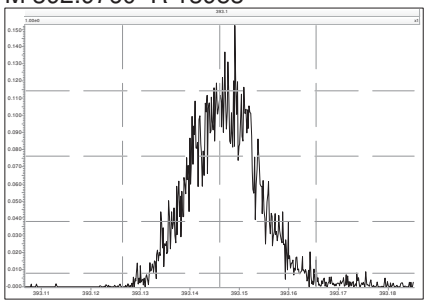
M 366.9792 R 15138



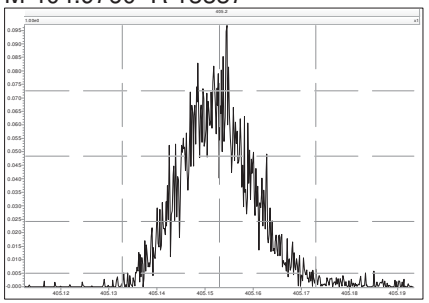
M 380.9760 R 12756



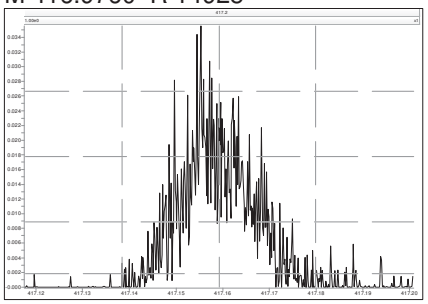
M 392.9760 R 13953



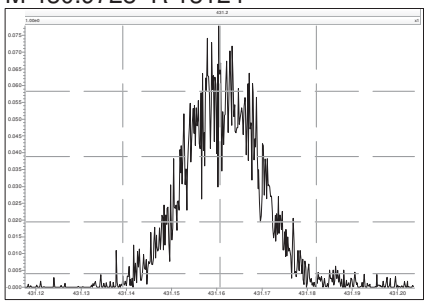
M 404.9760 R 13337



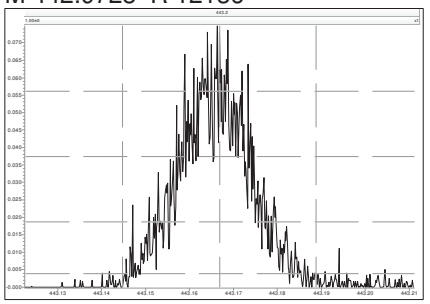
M 416.9760 R 14925



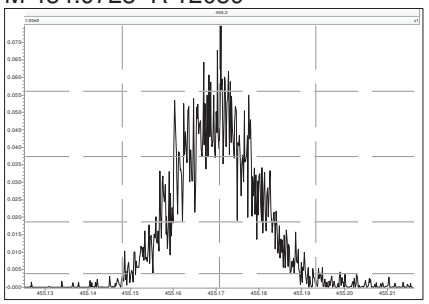
M 430.9728 R 13124



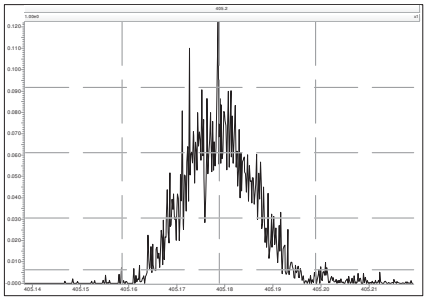
M 442.9728 R 12136



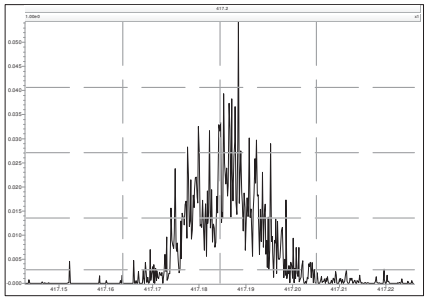
M 454.9728 R 12059



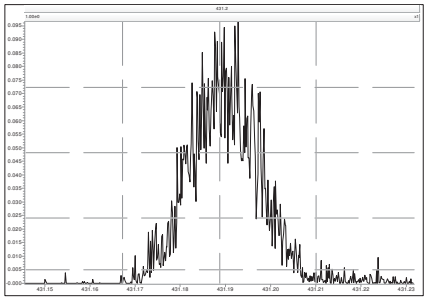
M 404.9760 R 14805



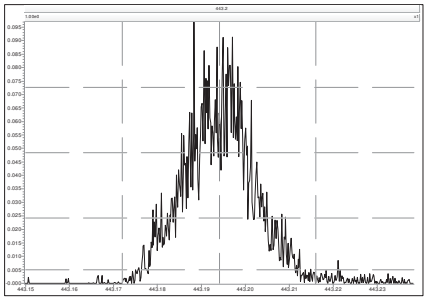
M 416.9760 R 17340



M 430.9728 R 13815



M 442.9728 R 13229



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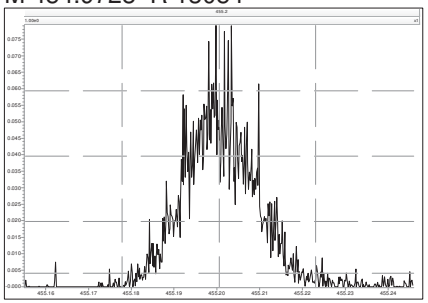

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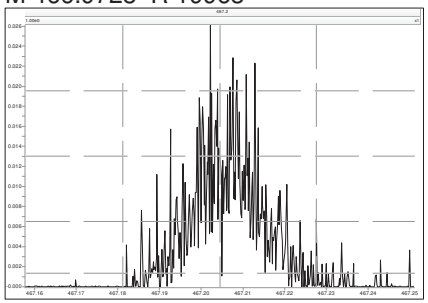

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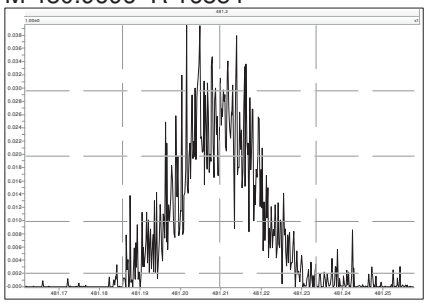

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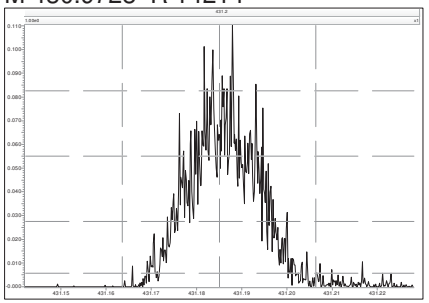

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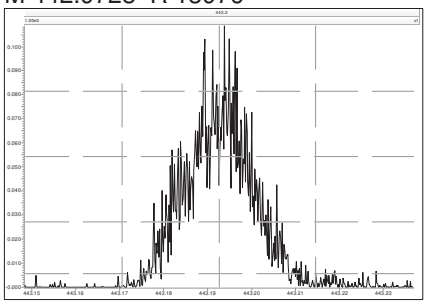

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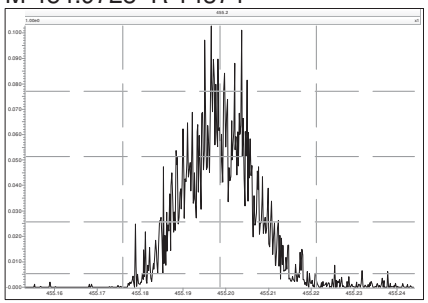

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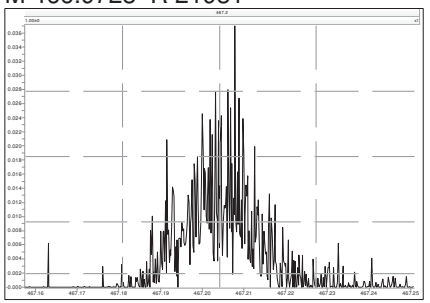

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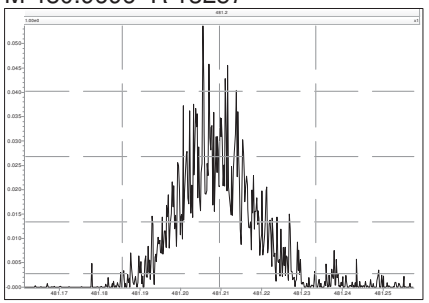

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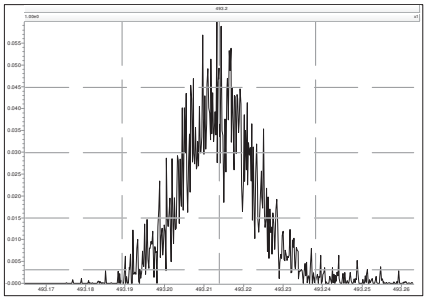

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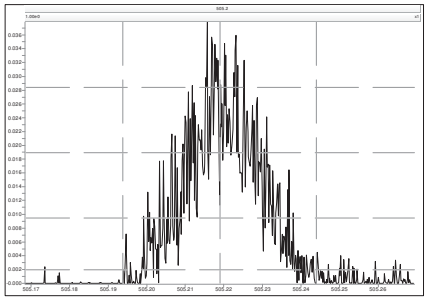

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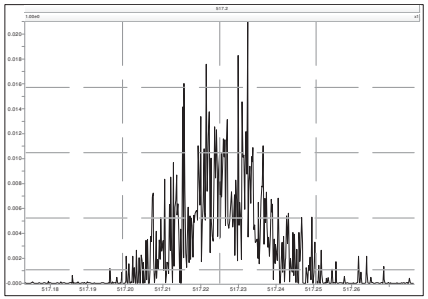

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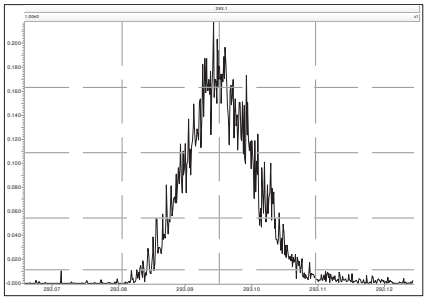

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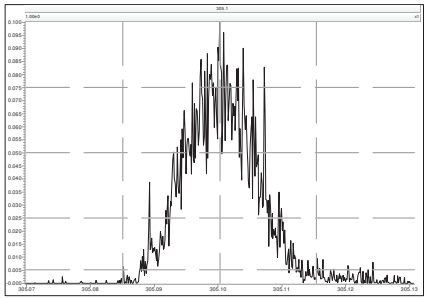

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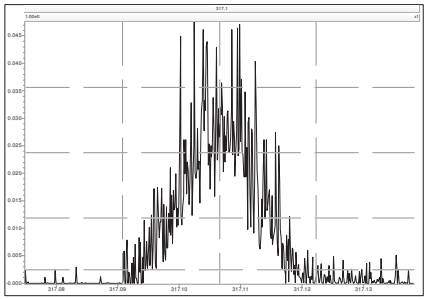
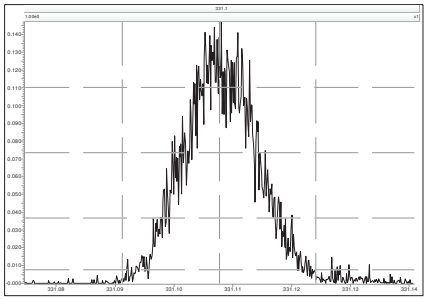


M 330.9792 R 11968



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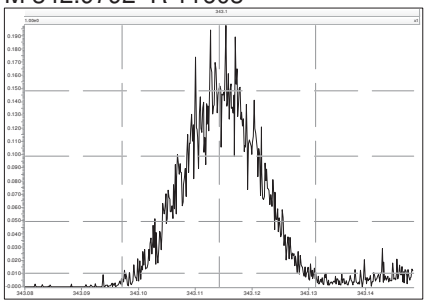

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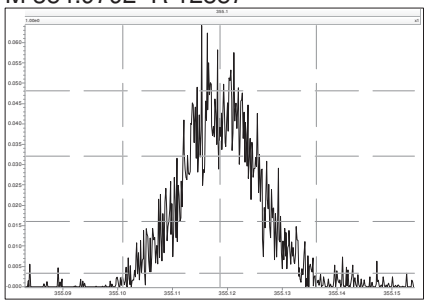

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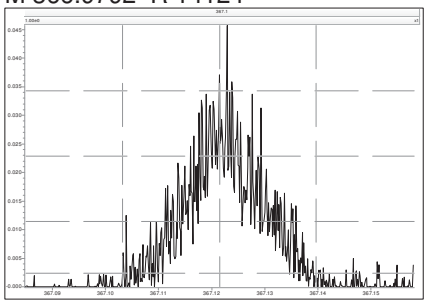

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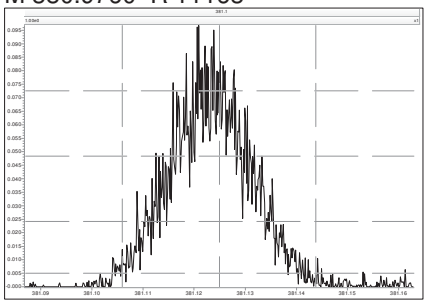

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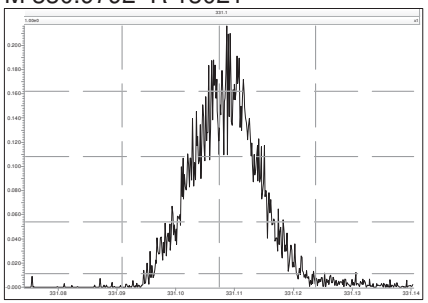

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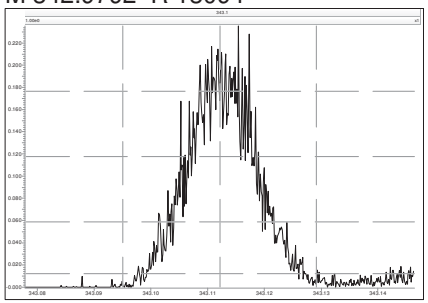

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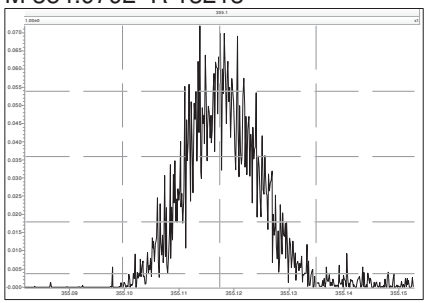

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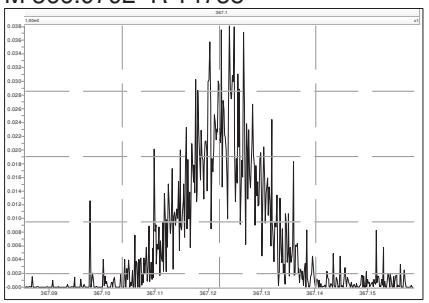

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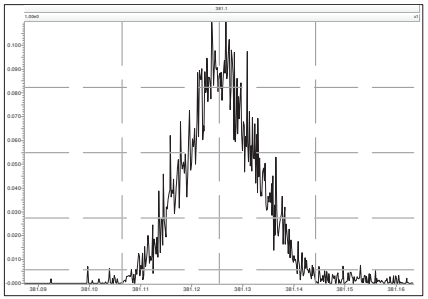

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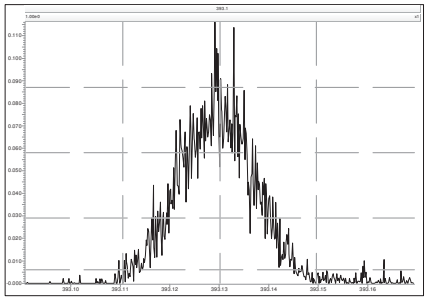

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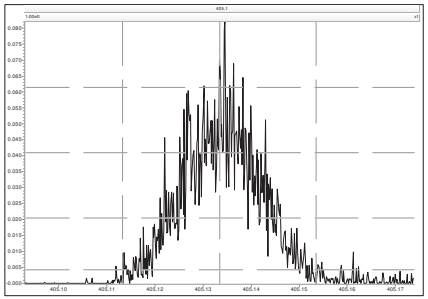

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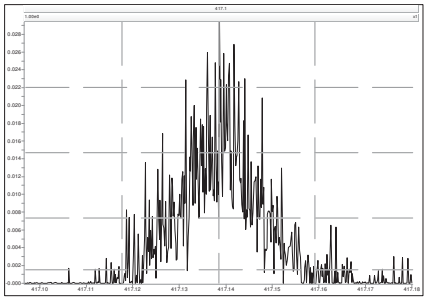

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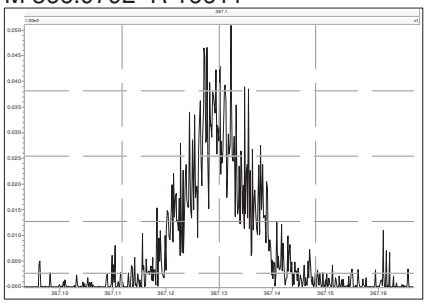

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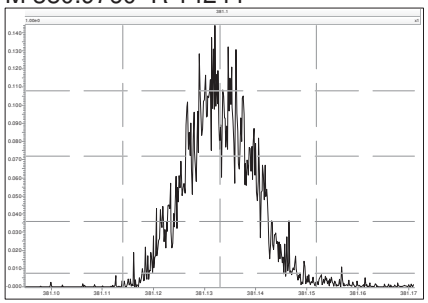

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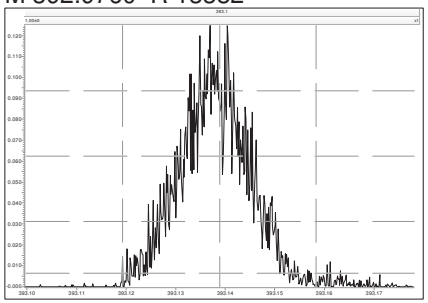

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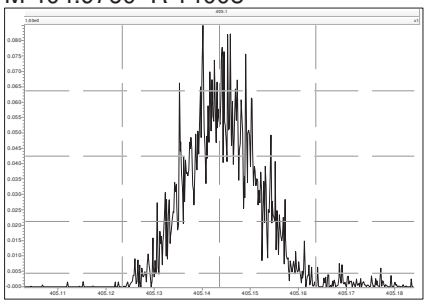

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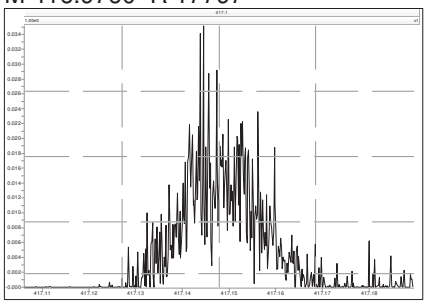

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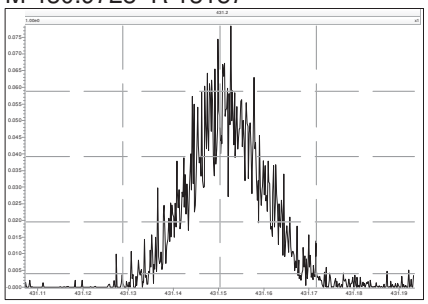

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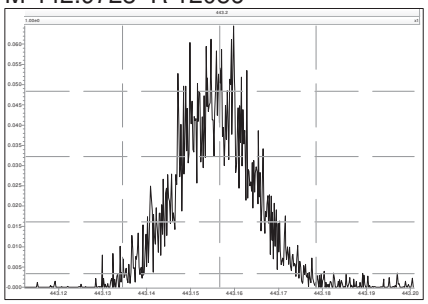

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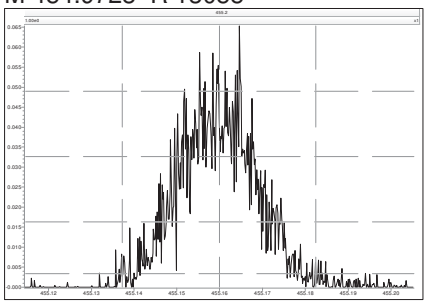

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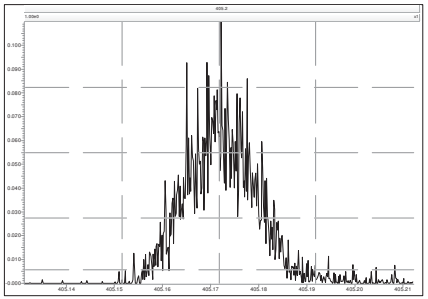

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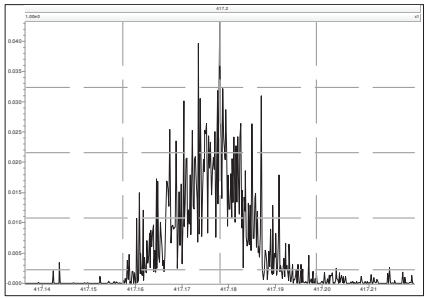

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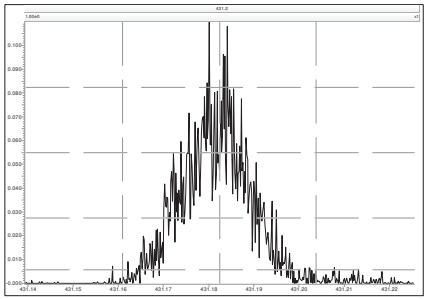

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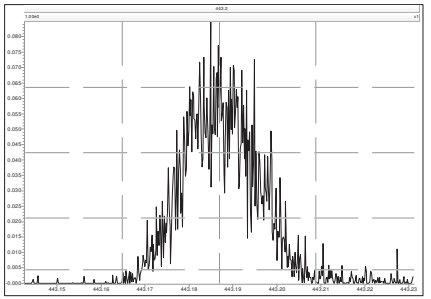

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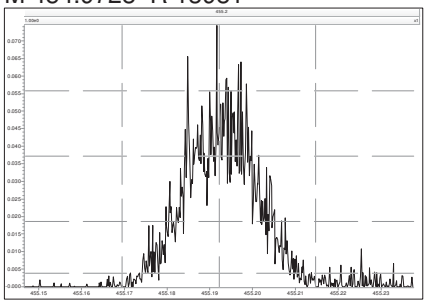

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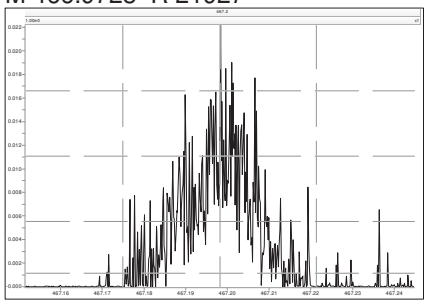

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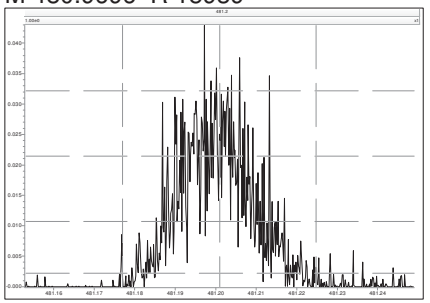

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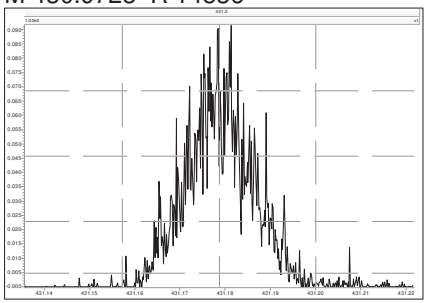

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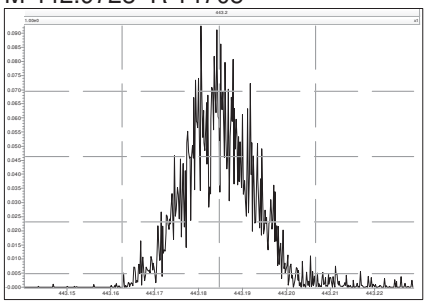

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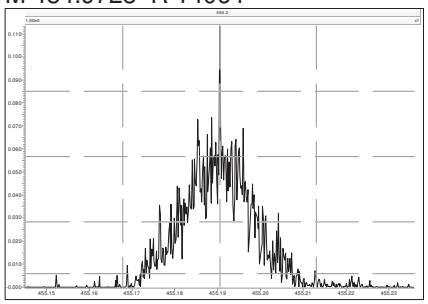

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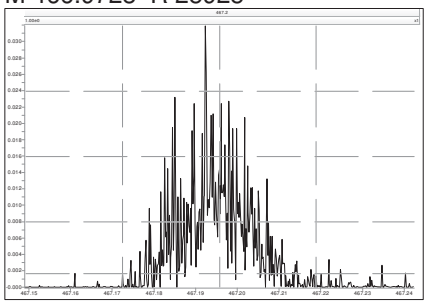

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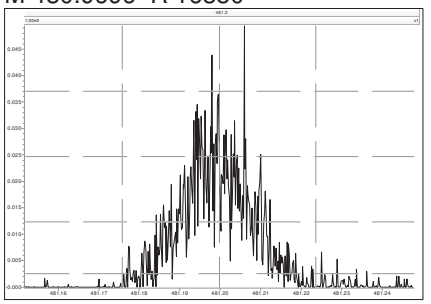
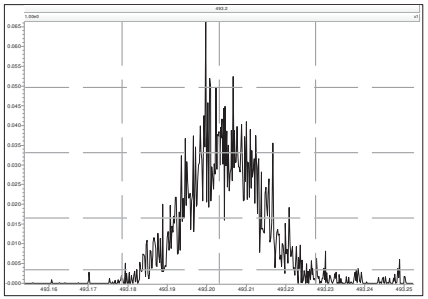


M 492.9696 R 12825



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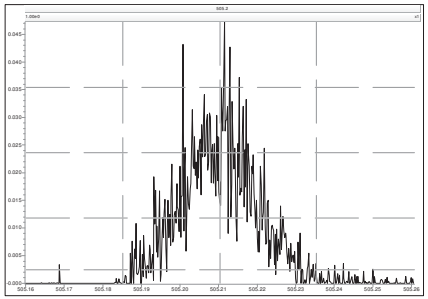

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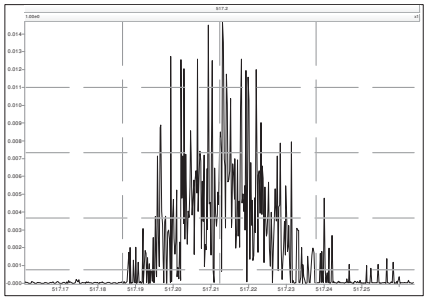

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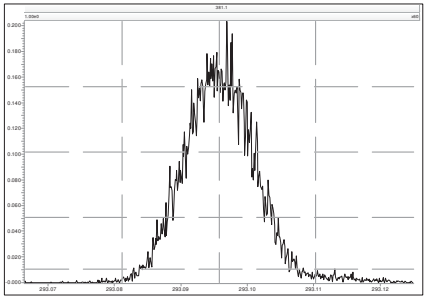

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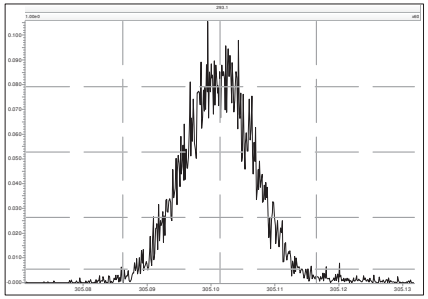

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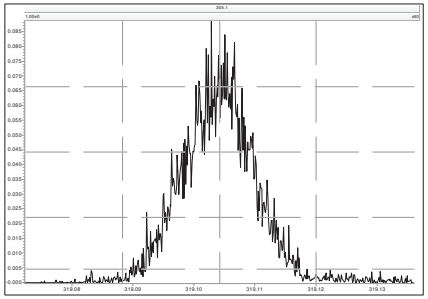
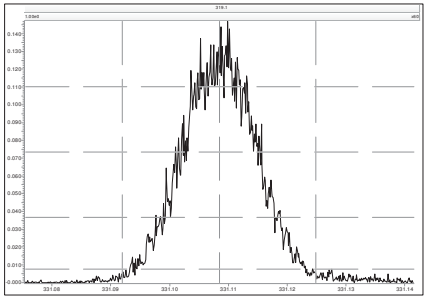
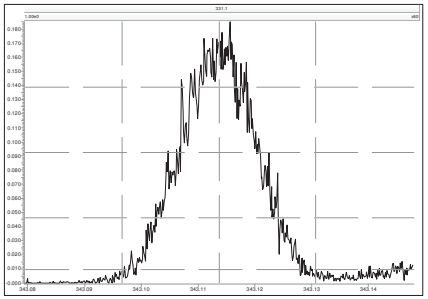


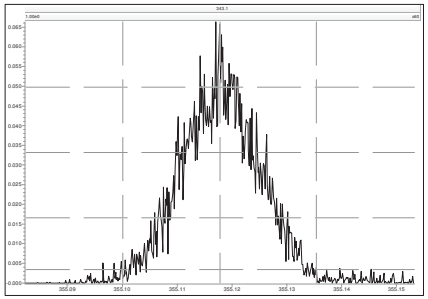
M 330.9792 R 11415



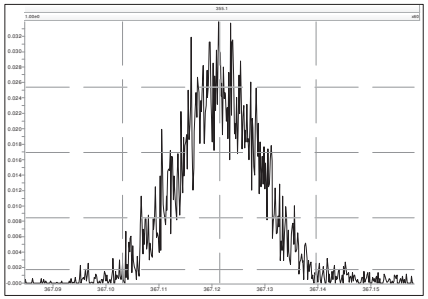
M 342.9792 R 11908



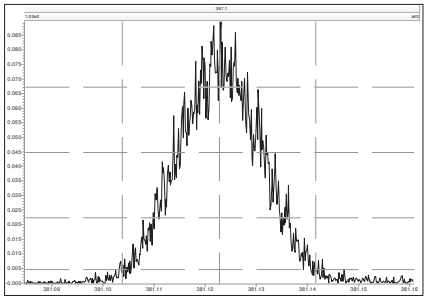
M 354.9792 R 12377



M 366.9792 R 12194



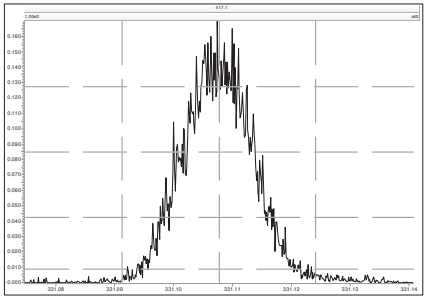
M 380.9760 R 10825



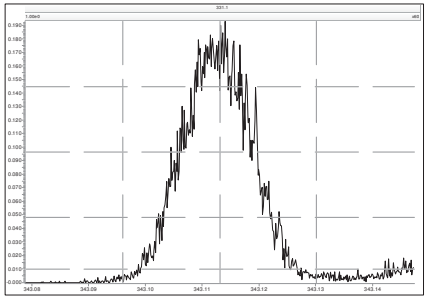
File: Experiment: df_cl4-8_db5MS.exp Reference: pfk.ref Function: 2 @ 200 (ppm)

Printed: Wednesday, August 12, 2020 10:54:12 Eastern Daylight Time

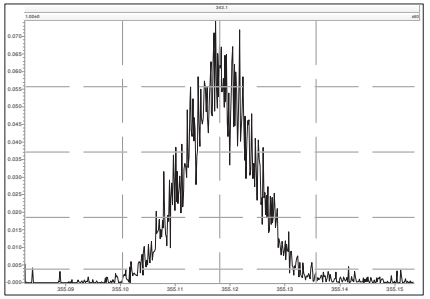
M 330.9792 R 12314



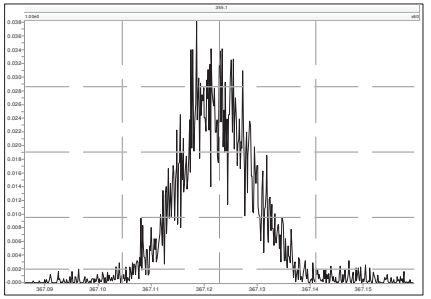
M 342.9792 R 12374



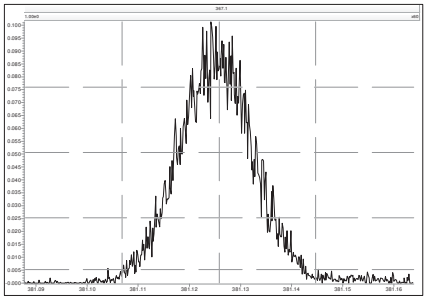
M 354.9792 R 13299



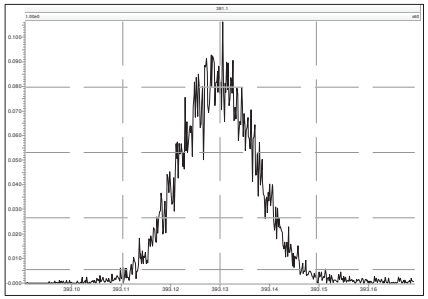
M 366.9792 R 13440



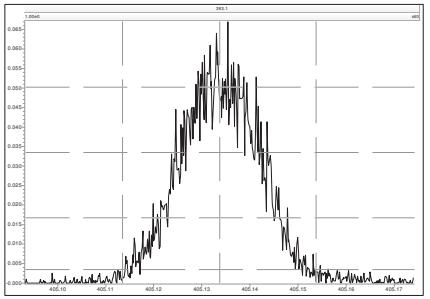
M 380.9760 R 11681



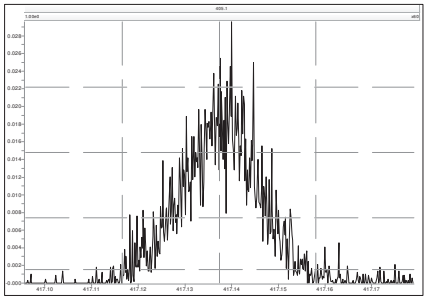
M 392.9760 R 11902



M 404.9760 R 12019



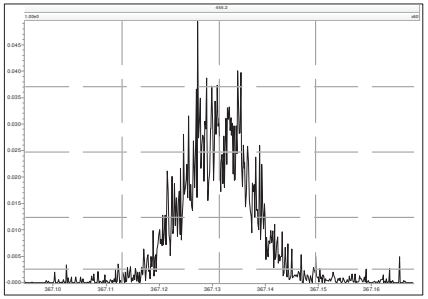
M 416.9760 R 12625



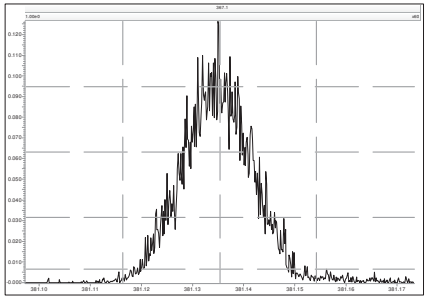
File: Experiment: df_cl4-8_db5MS.exp Reference: pfk.ref Function: 3 @ 200 (ppm)

Printed: Wednesday, August 12, 2020 10:54:33 Eastern Daylight Time

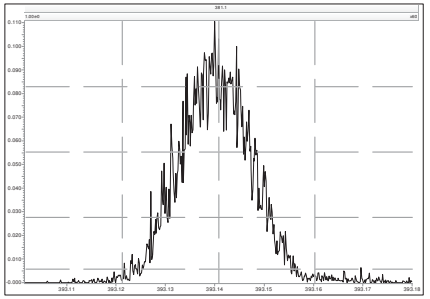
M 366.9792 R 15151



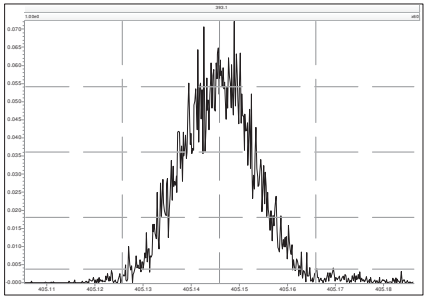
M 380.9760 R 12319



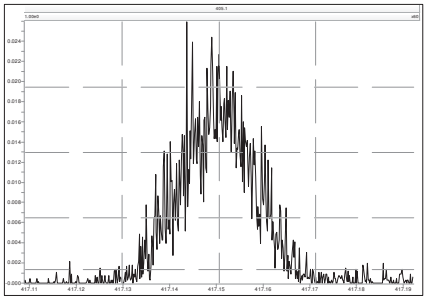
M 392.9760 R 13018



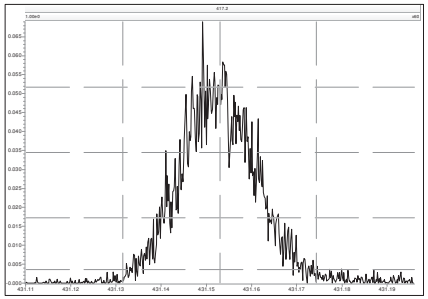
M 404.9760 R 11793



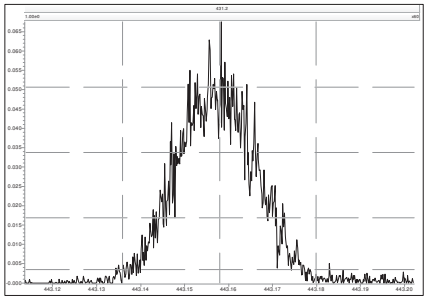
M 416.9760 R 14128



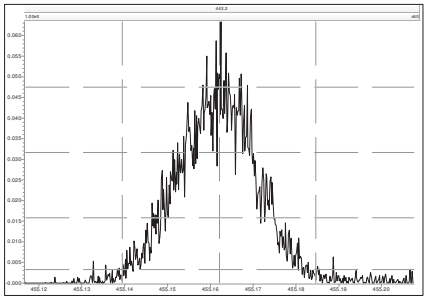
M 430.9728 R 12565



M 442.9728 R 11575



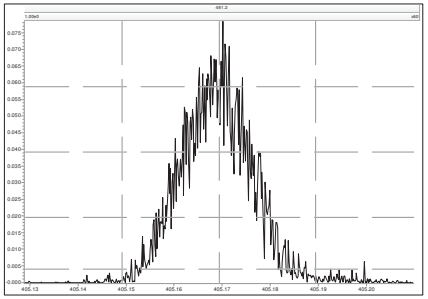
M 454.9728 R 10683



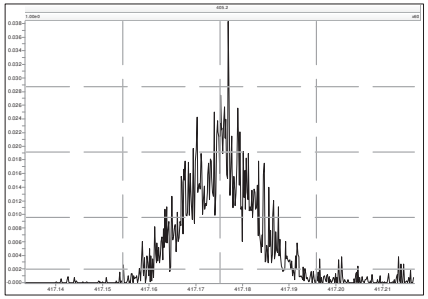
File: Experiment: df_cl4-8_db5MS.exp Reference: pfk.ref Function: 4 @ 200 (ppm)

Printed: Wednesday, August 12, 2020 10:54:52 Eastern Daylight Time

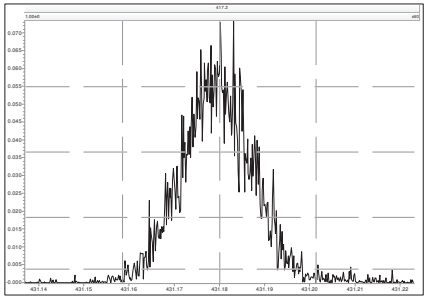
M 404.9760 R 13890



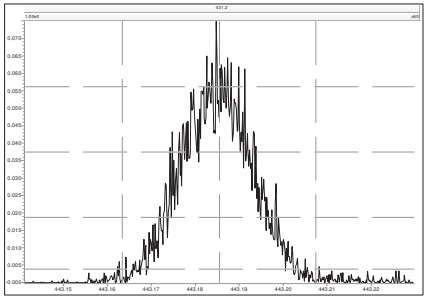
M 416.9760 R 14044



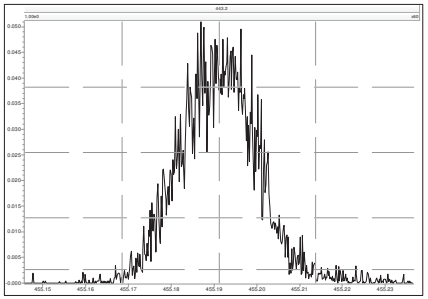
M 430.9728 R 12952



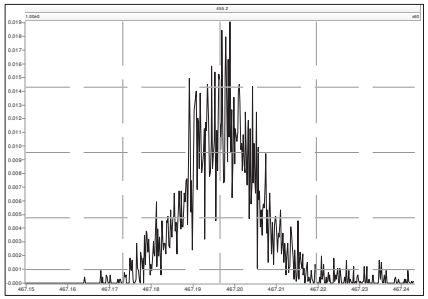
M 442.9728 R 14047



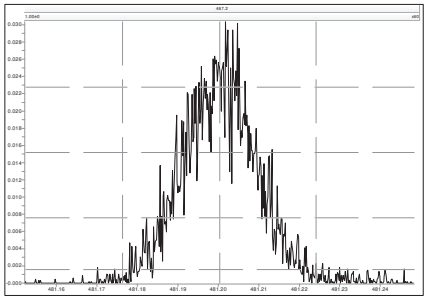
M 454.9728 R 13298



M 466.9728 R 15624



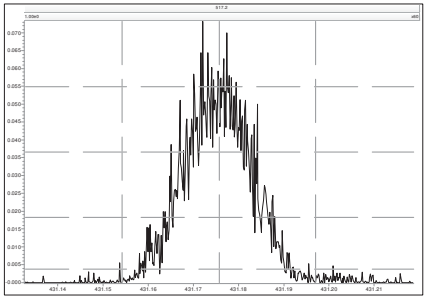
M 480.9696 R 13087



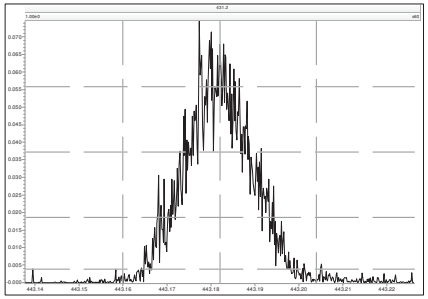
File: Experiment: df_cl4-8_db5MS.exp Reference: pfk.ref Function: 5 @ 200 (ppm)

Printed: Wednesday, August 12, 2020 10:55:21 Eastern Daylight Time

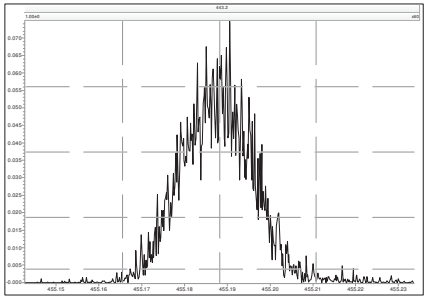
M 430.9728 R 13296



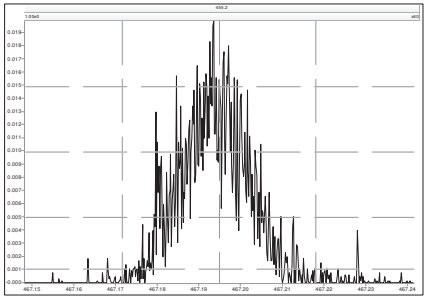
M 442.9728 R 12950



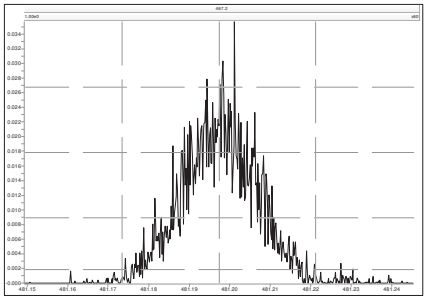
M 454.9728 R 14124



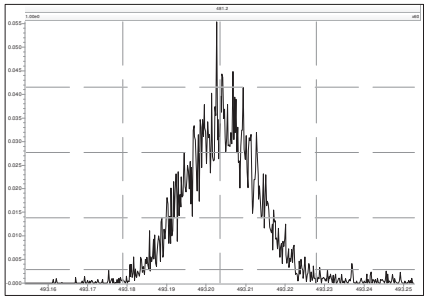
M 466.9728 R 14884



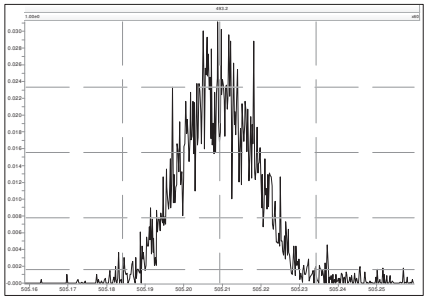
M 480.9696 R 12502



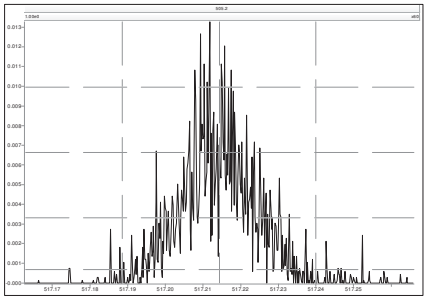
M 492.9696 R 12136



M 504.9696 R 13024



M 516.9697 R 16337



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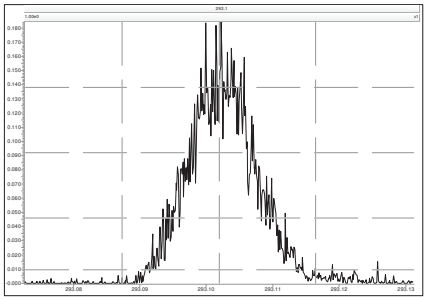
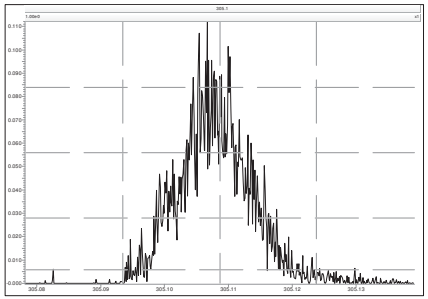
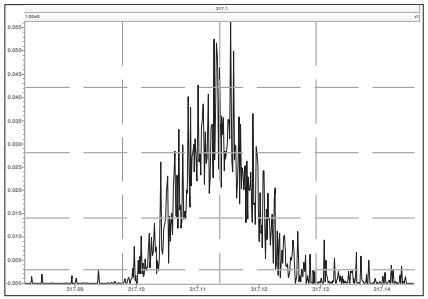
M 292.9824 R 12470



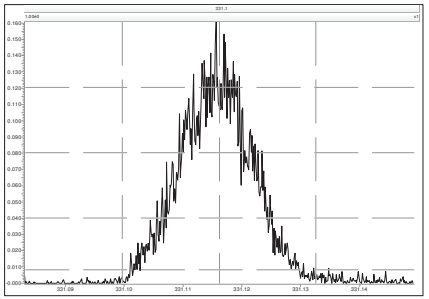
M 304.9824 R 13371



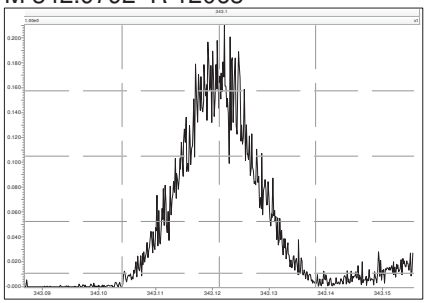
M 316.9824 R 15289



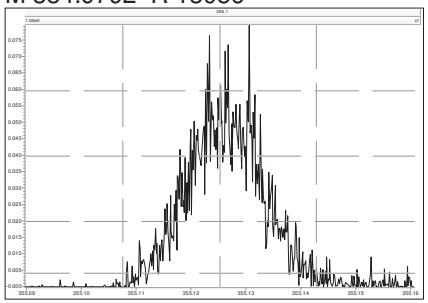
M 330.9792 R 12345



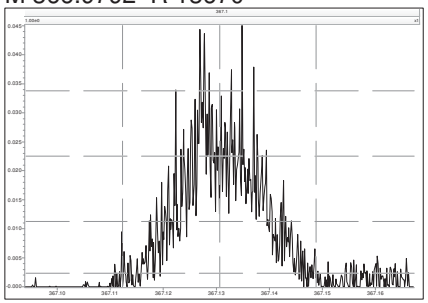
M 342.9792 R 12063



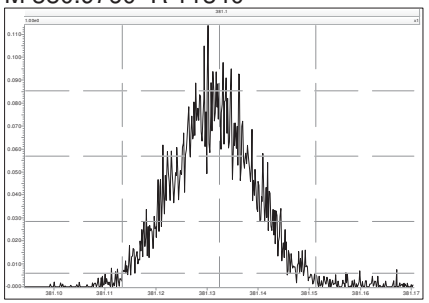
M 354.9792 R 13056



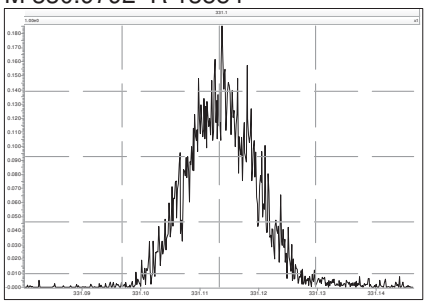
M 366.9792 R 13670



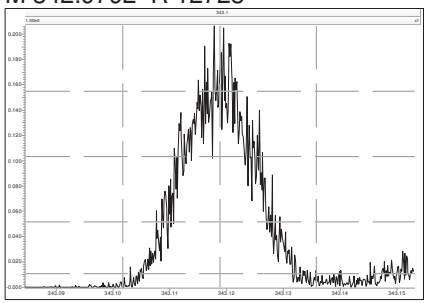
M 380.9760 R 11340



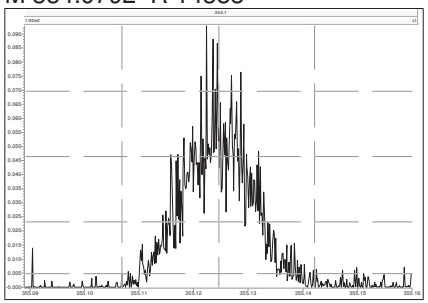
M 330.9792 R 13554



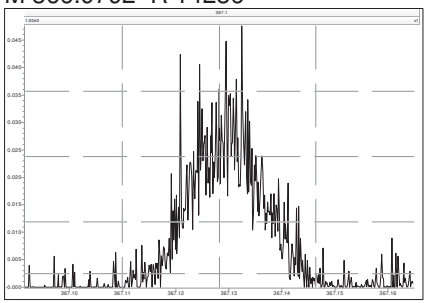
M 342.9792 R 12728



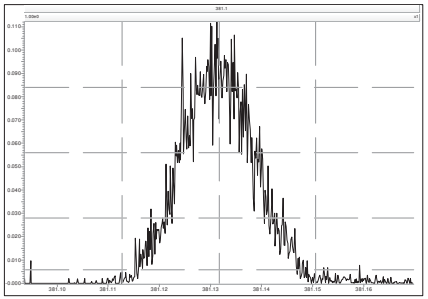
M 354.9792 R 14388



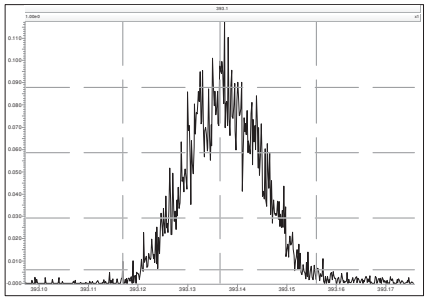
M 366.9792 R 14286



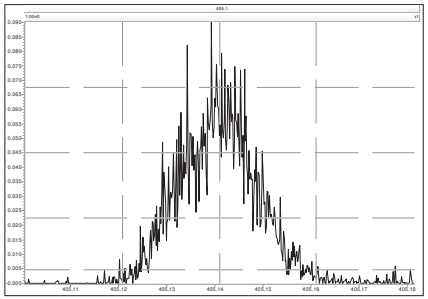
M 380.9760 R 12472



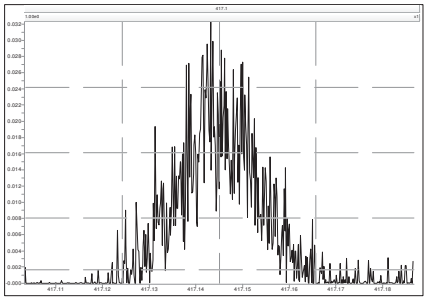
M 392.9760 R 12322



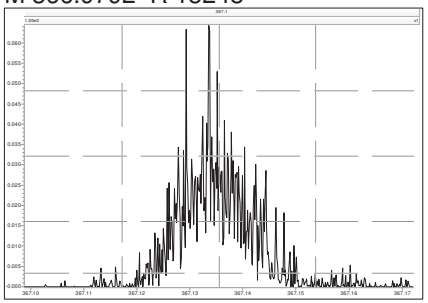
M 404.9760 R 13042



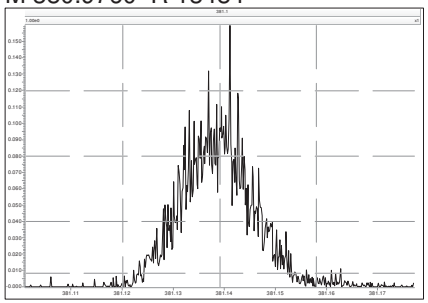
M 416.9760 R 14668



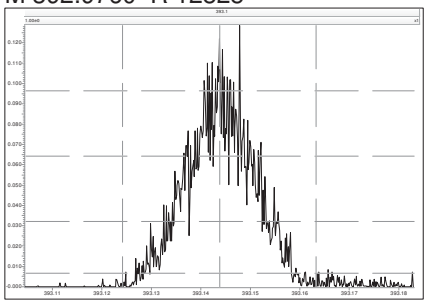
M 366.9792 R 15248



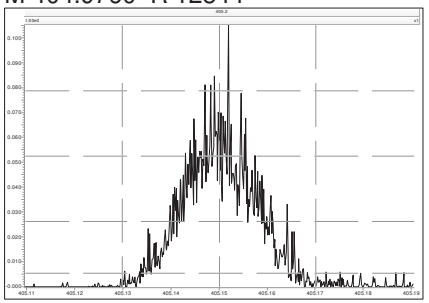
M 380.9760 R 13484



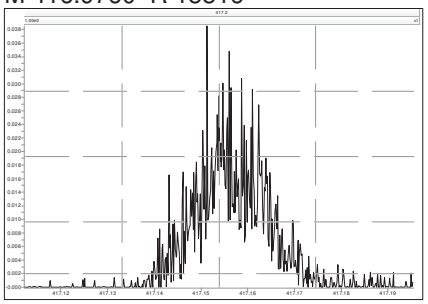
M 392.9760 R 12825



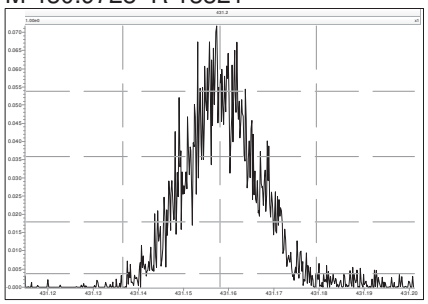
M 404.9760 R 12544



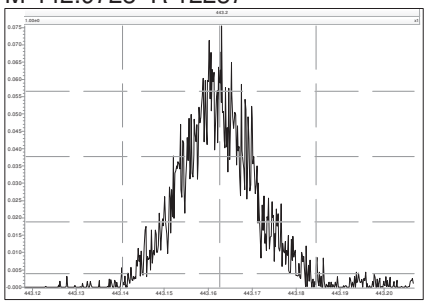
M 416.9760 R 15516



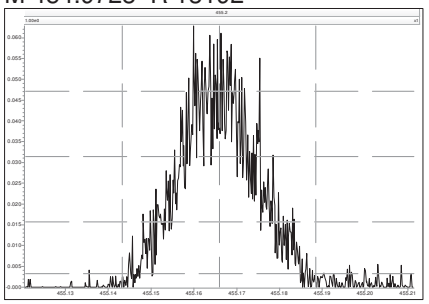
M 430.9728 R 13321



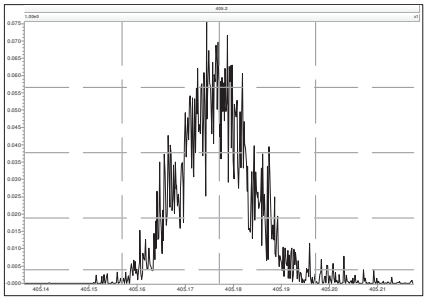
M 442.9728 R 12237



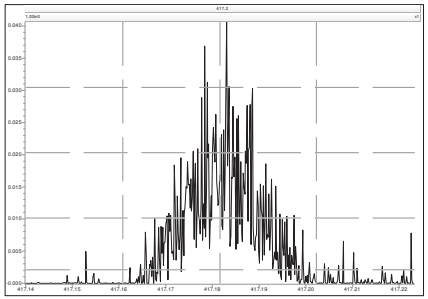
M 454.9728 R 13192



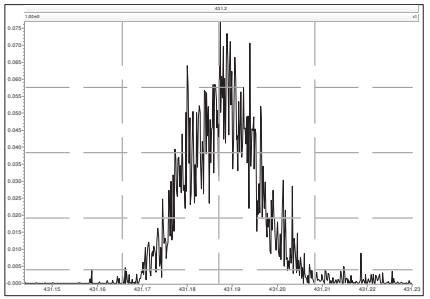
M 404.9760 R 14391



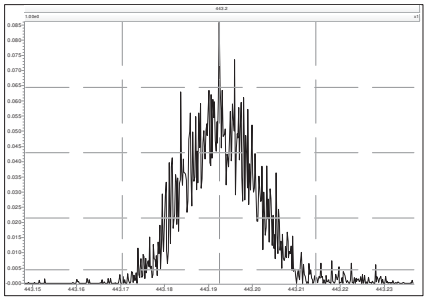
M 416.9760 R 15723



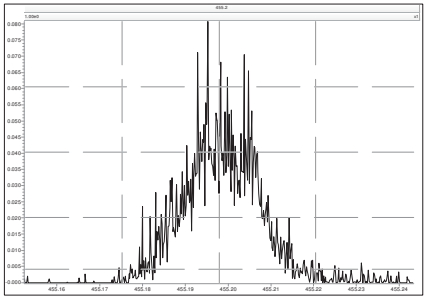
M 430.9728 R 13818



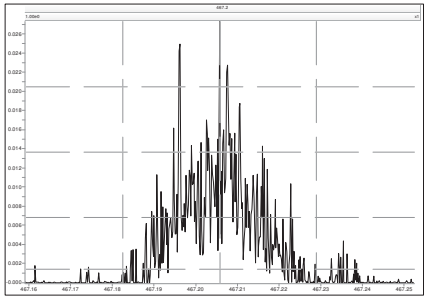
M 442.9728 R 14045



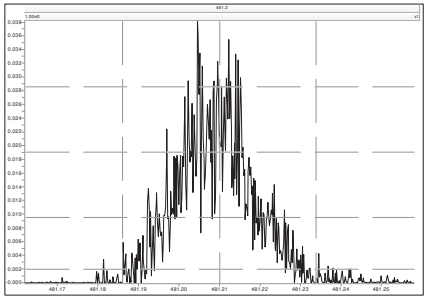
M 454.9728 R 13862



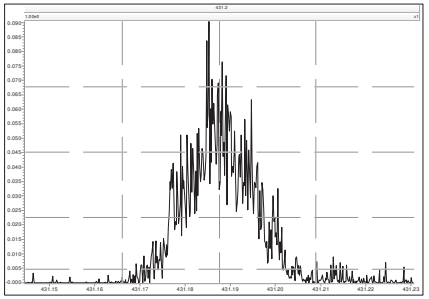
M 466.9728 R 16416



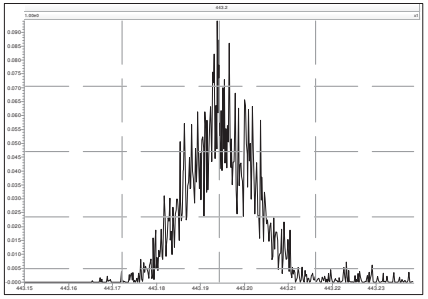
M 480.9696 R 12787



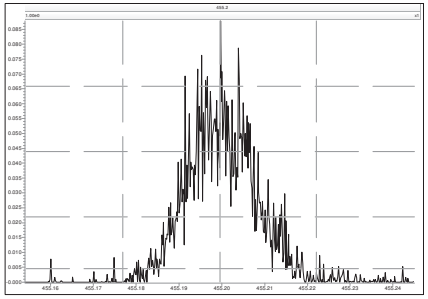
M 430.9728 R 15434



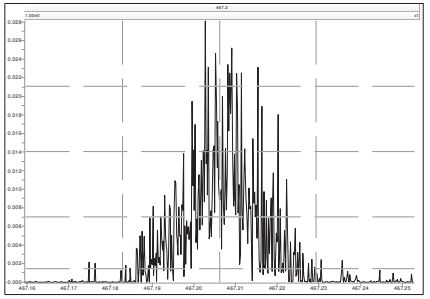
M 442.9728 R 13858



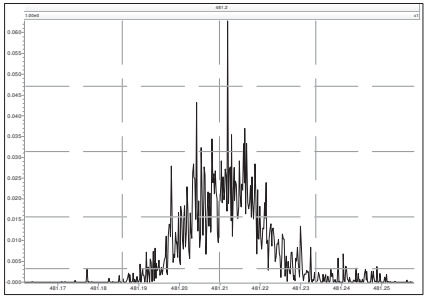
M 454.9728 R 13822



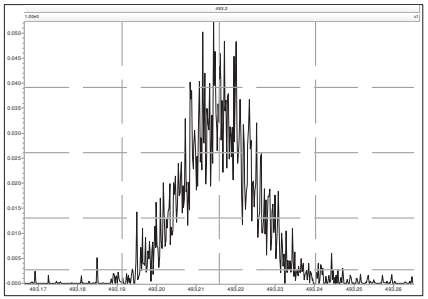
M 466.9728 R 27808



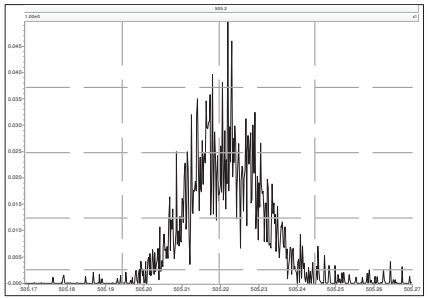
M 480.9696 R 15301



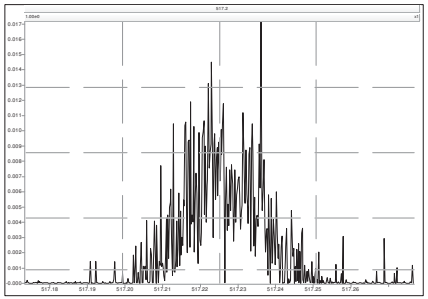
M 492.9696 R 13993



M 504.9696 R 14672



M 516.9697 R 29674



Dioxin/Furan ICAL Summary — SGS North America — Processed: 15 Jun 2020 11:54

ICAL: MM3_DF_10012020_12JUN2020
Data Acquired: 12-Jun-2020

Name	Mean	% RSD	200612R03 0.25 pg/uL CS0	200612R04 0.5 pg/uL CS1	200612R05 2 pg/uL CS2	200612R06 10 pg/uL CS3	200612R07 40 pg/uL CS4	200612R08 200 pg/uL CS5	200612R11 500 pg/uL CS6
2378-TCDD	1.18	5.9%	1.06	1.13	1.16	1.17	1.21	1.24	1.27
12378-PeCDD	1.14	4.7%	1.07	1.09	1.09	1.15	1.17	1.19	1.20
123478-HxCDD	1.09	3.7%	1.08	1.04	1.05	1.08	1.09	1.14	1.15
123678-HxCDD	1.13	5.2%	1.06	1.08	1.07	1.16	1.13	1.20	1.19
123789-HxCDD	1.05	3.9%	1.00	1.00	1.03	1.06	1.06	1.09	1.10
1234678-HpCDD	0.98	6.4%	0.91	0.91	0.94	1.02	1.02	1.04	1.05
OCDD	1.08	5.1%	1.00	1.01	1.05	1.09	1.10	1.14	1.13
2378-TCDF	0.98	6.4%	0.98	0.88	0.92	0.99	1.01	1.05	1.04
12378-PeCDF	0.95	4.9%	0.88	0.91	0.92	0.96	0.97	1.00	1.00
23478-PeCDF	0.95	4.7%	0.91	0.88	0.92	0.96	0.96	1.00	0.99
123478-HxCDF	1.20	3.8%	1.14	1.15	1.17	1.19	1.21	1.25	1.25
123678-HxCDF	1.07	5.4%	0.98	1.03	1.04	1.10	1.10	1.13	1.13
234678-HxCDF	1.10	4.2%	1.06	1.02	1.08	1.13	1.11	1.13	1.15
123789-HxCDF	1.09	5.1%	1.01	1.06	1.04	1.11	1.13	1.16	1.14
1234678-HpCDF	1.28	4.5%	1.21	1.21	1.25	1.31	1.30	1.34	1.35
1234789-HpCDF	1.27	4.3%	1.20	1.25	1.20	1.28	1.29	1.31	1.34
OCDF	1.01	6.4%	0.93	0.96	0.95	1.00	1.05	1.08	1.09
ES 2378-TCDD	1.01	4.0%	0.98	0.98	0.99	0.97	0.99	1.06	1.07
ES 12378-PeCDD	0.87	9.5%	0.82	0.82	0.83	0.81	0.85	0.95	1.02
ES 123478-HxCDD	1.10	4.9%	1.04	1.05	1.08	1.07	1.10	1.13	1.20
ES 123678-HxCDD	1.06	6.4%	1.00	1.01	1.04	1.01	1.08	1.10	1.19
ES 123789-HxCDD	1.22	6.1%	1.11	1.18	1.20	1.20	1.21	1.26	1.35
ES 1234678-HpCDD	0.99	11.2%	0.83	0.97	0.97	0.94	0.97	1.07	1.19
ES OCDD	0.67	18.7%	0.46	0.66	0.69	0.64	0.64	0.74	0.87
ES 2378-TCDF	1.01	2.9%	0.99	0.99	1.00	0.99	1.02	1.03	1.07
ES 12378-PeCDF	0.90	8.3%	0.85	0.84	0.87	0.85	0.90	0.97	1.04
ES 23478-PeCDF	0.89	8.2%	0.83	0.84	0.85	0.84	0.89	0.95	1.02
ES 123478-HxCDF	1.43	5.0%	1.38	1.41	1.42	1.37	1.40	1.45	1.58
ES 123678-HxCDF	1.63	6.3%	1.56	1.57	1.62	1.55	1.59	1.69	1.84
ES 234678-HxCDF	1.48	6.0%	1.38	1.44	1.46	1.41	1.47	1.54	1.64
ES 123789-HxCDF	1.29	9.8%	1.15	1.22	1.29	1.23	1.25	1.35	1.54
ES 1234678-HpCDF	1.15	8.6%	1.02	1.12	1.13	1.07	1.14	1.22	1.32
ES 1234789-HpCDF	0.91	13.3%	0.72	0.86	0.91	0.86	0.89	0.98	1.11
ES OCDF	0.83	19.8%	0.56	0.82	0.85	0.77	0.77	0.93	1.10

APPROVED
Carla_Lyon , 11:39:55, 06/17/2020

Dioxin/Furan ICAL Summary — SGS North America — Processed: 17 Jun 2020 08:13

ICAL: MM3_DF_10012020_12JUN2020
Data Acquired: 12-Jun-2020

Name	Mean	% RSD	200612R03 **0.25 pg/uL CS0**	200612R04 **0.5 pg/uL CS1**	200612R05 **2 pg/uL CS2**	200612R06 **10 pg/uL CS3**	200612R07 **40 pg/uL CS4**	200612R08 **200 pg/uL CS5**	200612R11 **500 pg/uL CS6**
CS 37Cl-2378-TCDD	1.04	7.5%	-	1.02	0.96	0.99	1.06	1.16	-
CS 12347-PeCDD	0.74	1.9%	0.72	0.74	0.75	0.72	0.74	0.76	0.75
CS 12346-PeCDF	0.86	1.3%	0.86	0.85	0.88	0.85	0.87	0.85	0.87
CS 123469-HxCDF	1.36	3.4%	1.39	1.40	1.42	1.32	1.33	1.30	1.33
CS 1234689-HpCDF	1.05	4.0%	0.98	1.09	1.10	1.02	1.04	1.06	1.09
SS 37Cl-2378-TCDD	1.04	4.9%	-	1.04	0.96	1.02	1.06	1.10	-
SS 12347-PeCDD	0.86	7.7%	0.88	0.91	0.90	0.89	0.87	0.80	0.73
SS 12346-PeCDF	0.96	7.4%	1.01	1.01	1.01	1.00	0.97	0.88	0.84
SS 123469-HxCDF	0.83	7.7%	0.90	0.89	0.88	0.85	0.84	0.77	0.73
SS 1234689-HpCDF	0.92	6.1%	0.97	0.97	0.97	0.95	0.91	0.87	0.83
AS 1368-TCDD	1.08	1.1%	1.05	1.09	1.08	1.09	1.07	1.08	1.07
AS 1368-TCDF	1.18	0.9%	1.17	1.18	1.18	1.20	1.18	1.17	1.18
OCDD-a	0.07	5.4%	-	-	0.06	0.06	0.07	0.07	0.07
OCDF-a	0.06	3.1%	-	-	0.06	0.06	0.06	0.06	0.07
Totals									
Total TCDD	1.18	5.9%	1.06	1.13	1.16	1.17	1.21	1.24	1.27
Total PeCDD	1.14	4.7%	1.07	1.09	1.09	1.15	1.17	1.19	1.20
Total HxCDD	1.09	4.1%	1.05	1.04	1.05	1.10	1.09	1.14	1.15
Total HpCDD	0.98	6.4%	0.91	0.91	0.94	1.02	1.02	1.04	1.05
Total TCDF	0.98	6.4%	0.98	0.88	0.92	0.99	1.01	1.05	1.04
Total PeCDF	0.95	4.7%	0.90	0.89	0.92	0.96	0.97	1.00	1.00
Total HxCDF	1.11	4.4%	1.05	1.06	1.08	1.13	1.14	1.17	1.17
Total HpCDF	1.27	4.2%	1.21	1.23	1.22	1.30	1.30	1.32	1.35
FS 1278-TCDD	1.00	2.9%	1.03	1.01	1.00	1.01	1.00	0.97	0.95
FS 12478-PeCDD	1.00	7.8%	1.02	1.05	1.05	1.03	1.04	0.92	0.85
FS 123468-HxCDD	1.11	7.4%	1.20	1.18	1.15	1.15	1.08	1.03	0.98
FS 1234679-HpCDD	1.19	9.4%	1.32	1.24	1.25	1.25	1.20	1.06	1.01
TS 1378-TCDD	1.06	4.3%	1.07	1.08	1.06	1.12	1.06	1.01	0.98

Instrument: MM3 (AutoSpec-Ultima) MS Experiment: df_cl4-8_db5MS GC Program: df_db5MS

#	Datafile	Vial#	Lab ID	Wt/Vol	Client/Sample ID	Analyst(s)	Checkcode	Acq Date	Acq Time
2	200612R02	2	SBS_200612_DF_RA	1.00	SIL 20-61-1	PSW	041-322	12-Jun-2020	13:34:23
3	200612R03	5	CS0_200612_DF_RA	1.00	SIL 20-282-3	PSW	545-220	12-Jun-2020	14:21:06
4	200612R04	6	CS1_200612_DF_RA	1.00	SIL 20-282-2	PSW	407-197	12-Jun-2020	15:11:28
5	200612R05	7	CS2_200612_DF_RA	1.00	SIL 20-282-1	PSW	434-640	12-Jun-2020	16:02:35
6	200612R06	8	CS3_200612_DF_RB	1.00	SIL 20-449-3	PSW	726-607	12-Jun-2020	16:49:17
7	200612R07	9	CS4_200612_DF_RA	1.00	SIL 20-281-2	PSW	711-420	12-Jun-2020	17:36:49
8	200612R08	10	CS5_200612_DF_RA	1.00	SIL 20-281-1	PSW	104-974	12-Jun-2020	18:24:22
11	200612R11	11	CS6_200612_DF_RA	1.00	SIL 20-280-4	PSW	630-787	12-Jun-2020	20:46:44

REVIEWED
By Paul Walton at 8:47 am, Jun 17, 2020

Dioxin/Furan ICAL Concentrations	SGS Environmental Services							
	Concentration							
Individual Native Standards	CS0 pg/uL	CS1 pg/uL	CS2 pg/uL	CS3 pg/uL	CS4 pg/uL	CS5 pg/uL	CS6 pg/uL	Working Standards pg/uL
2378-TCDD	0.25	0.5	2	10	40	200	500	1
12378-PeCDD	1.25	2.5	10	50	200	1000	2500	1
123478-HxCDD	1.25	2.5	10	50	200	200	2500	1
123678-HxCDD	1.25	2.5	10	50	200	200	2500	1
123789-HxCDD	1.25	2.5	10	50	200	200	2500	1
1234678-HpCDD	1.25	2.5	10	50	200	200	2500	1
OCDD	2.5	5	20	100	400	2000	5000	1
2378-TCDF	0.25	0.5	2	10	40	200	500	1
12378-PeCDF	1.25	2.5	10	50	200	1000	2500	1
23478-PeCDF	1.25	2.5	10	50	200	200	2500	1
123478-HxCDF	1.25	2.5	10	50	200	200	2500	1
123678-HxCDF	1.25	2.5	10	50	200	200	2500	1
234678-HxCDF	1.25	2.5	10	50	200	200	2500	1
123789-HxCDF	1.25	2.5	10	50	200	200	2500	1
1234678-HpCDF	1.25	2.5	10	50	200	200	2500	1
1234789-HpCDF	1.25	2.5	10	50	200	200	2500	1
OCDF	2.5	5	20	100	400	2000	5000	1
Extraction Standards								
ES 2378-TCDD	100	100	100	100	100	100	100	10
ES 12378-PeCDD	100	100	100	100	100	100	100	10
ES 123478-HxCDD	100	100	100	100	100	100	100	10
ES 123678-HxCDD	100	100	100	100	100	100	100	10
ES 123789-HxCDD	100	100	100	100	100	100	100	10
ES 1234678-HpCDD	100	100	100	100	100	100	100	10
ES OCDD	200	200	200	200	200	200	200	10
ES 2378-TCDF	100	100	100	100	100	100	100	10
ES 12378-PeCDF	100	100	100	100	100	100	100	10
ES 23478-PeCDF	100	100	100	100	100	100	100	10
ES 123478-HxCDF	100	100	100	100	100	100	100	10
ES 123678-HxCDF	100	100	100	100	100	100	100	10
ES 234678-HxCDF	100	100	100	100	100	100	100	10
ES 123789-HxCDF	100	100	100	100	100	100	100	10
ES 1234678-HpCDF	100	100	100	100	100	100	100	10
ES 1234789-HpCDF	100	100	100	100	100	100	100	10
ES OCDF	200	200	200	200	200	200	200	10
Cleanup/Sampling Standards								
CS 37Cl-2378-TCDD	-	0.5	2	10	40	200	-	4
CS 12347-PeCDD	100	100	100	100	100	100	100	10
CS 12346-PeCDF	100	100	100	100	100	100	100	10
CS 123469-HxCDF	100	100	100	100	100	100	100	10
CS 1234689-HpCDF	100	100	100	100	100	100	100	10
Alternate Standards								
AS 1368-TCDD	100	100	100	100	100	100	100	10
AS 1368-TCDF	100	100	100	100	100	100	100	10
Shipping Standards								
FS 1278-TCDD	100	100	100	100	100	100	100	100
FS 12478-PeCDD	100	100	100	100	100	100	100	100
FS 123468-HxCDD	100	100	100	100	100	100	100	100
FS 1234679-HpCDD	100	100	100	100	100	100	100	100
TS 1378-TCDD	100	100	100	100	100	100	100	100
Injection Standards								
1234 TCDD 13C12	100	100	100	100	100	100	100	10
1234 TCDF 13C12	100	100	100	100	100	100	100	10
123467 HxCDD 13C12	50	50	50	50	50	50	50	5

Dioxin/Furan STD Association	SGS Environmental Services

Individual Native Standards

2378-TCDD	ES 2378-TCDD
12378-PeCDD	ES 12378-PeCDD
123478-HxCDD	ES 123478-HxCDD
123678-HxCDD	ES 123678-HxCDD
123789-HxCDD	ES 123789-HxCDD
1234678-HpCDD	ES 1234678-HpCDD
OCDD	ES OCDD
2378-TCDF	ES 2378-TCDF
12378-PeCDF	ES 12378-PeCDF
23478-PeCDF	ES 23478-PeCDF
123478-HxCDF	ES 123478-HxCDF
123678-HxCDF	ES 123678-HxCDF
234678-HxCDF	ES 234678-HxCDF
123789-HxCDF	ES 123789-HxCDF
1234678-HpCDF	ES 1234678-HpCDF
1234789-HpCDF	ES 1234789-HpCDF
OCDF	ES OCDF

Cleanup/Sampling Standards

CS 37Cl-2378-TCDD	1234 TCDD 13C12
CS 12347-PeCDD	1234 TCDD 13C12
CS 12346-PeCDF	1234 TCDF 13C12
CS 123469-HxCDF	123467 HxCDD 13C12
CS 1234689-HpCDF	123467 HxCDD 13C12

Alternate Standards

AS 1368-TCDD	1234 TCDD 13C12
AS 1368-TCDF	1234 TCDF 13C12

Shipping Standards

FS 1278-TCDD	ES 2378-TCDD
FS 12478-PeCDD	ES 12378-PeCDD
FS 123468-HxCDD	ES 123478-HxCDD
FS 1234679-HpCDD	ES 1234678-HpCDD
TS 1378-TCDD	ES 2378-TCDD

Extraction Standards

ES 2378-TCDD	1234 TCDD 13C12
ES 12378-PeCDD	1234 TCDD 13C12
ES 123478-HxCDD	123467 HxCDD 13C12
ES 123678-HxCDD	123467 HxCDD 13C12
ES 123789-HxCDD	123467 HxCDD 13C12
ES 1234678-HpCDD	123467 HxCDD 13C12
ES OCDD	123467 HxCDD 13C12
ES 2378-TCDF	1234 TCDF 13C12
ES 12378-PeCDF	1234 TCDF 13C12
ES 23478-PeCDF	1234 TCDF 13C12
ES 123478-HxCDF	123467 HxCDD 13C12
ES 123678-HxCDF	123467 HxCDD 13C12
ES 234678-HxCDF	123467 HxCDD 13C12
ES 123789-HxCDF	123467 HxCDD 13C12
ES 1234678-HpCDF	123467 HxCDD 13C12
ES 1234789-HpCDF	123467 HxCDD 13C12
ES OCDF	123467 HxCDD 13C12

Injection Standards

1234 TCDD 13C12
1234 TCDF 13C12
123467 HxCDD 13C12

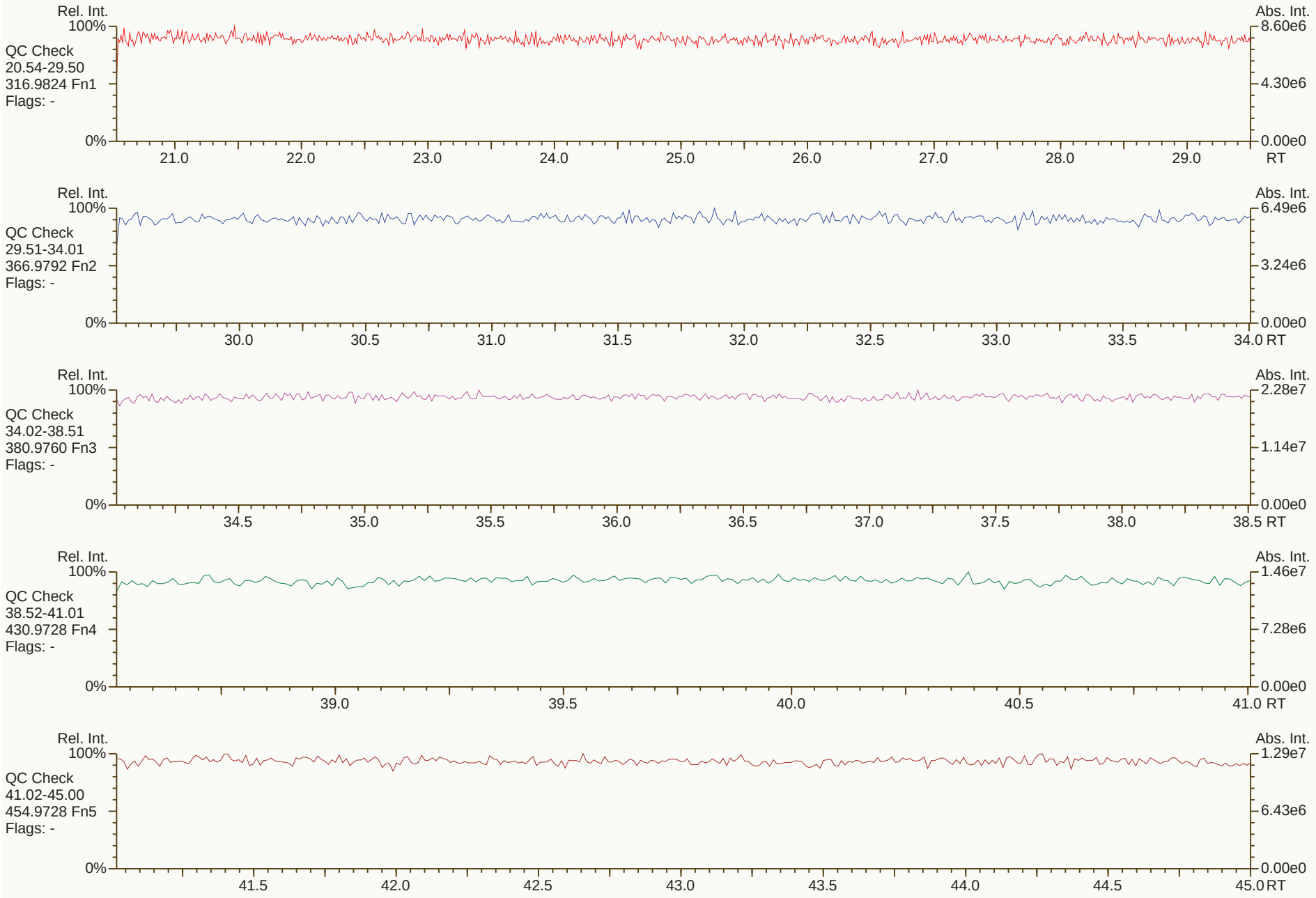
Dioxin/Furan QC Summary		Acq'd: 12 Jun 2020 14:21 PSW				ICAL: MM3_DF_10012020_12JUN2020	
Lab ID: CS0_200612_DF_RA		UTP: 17-Jun-2020 08:02:40 PSW				Checkcode: 545-220-ZXZ	
Sample ID: SIL 20-282-3		Report: 17 Jun 2020 08:13 pw				Datafile: 200612R03	
Name	**RT**	**Response**	**RA**	**OK**	**Ref. RRFs**	**Calc. RRFs**	**Dev'n**
2378-TCDD	27.57	3.69E+05	0.84	Y	1.18	1.06	-10%
12378-PeCDD	33.04	1.55E+06	1.62	Y	1.14	1.07	-6%
123478-HxCDD	36.94	1.53E+06	1.25	Y	1.09	1.08	-1%
123678-HxCDD	37.06	1.43E+06	1.24	Y	1.13	1.06	-6%
123789-HxCDD	37.36	1.52E+06	1.22	Y	1.05	1.00	-4%
1234678-HpCDD	40.12	1.03E+06	1.08	Y	0.98	0.91	-8%
OCDD	42.57	1.25E+06	0.82	Y	1.08	1.00	-7%
2378-TCDF	26.67	5.62E+05	0.67	Y	0.98	0.98	-1%
12378-PeCDF	31.57	2.18E+06	1.62	Y	0.95	0.88	-7%
23478-PeCDF	32.69	2.19E+06	1.48	Y	0.95	0.91	-4%
123478-HxCDF	35.97	2.12E+06	1.30	Y	1.20	1.14	-5%
123678-HxCDF	36.11	2.06E+06	1.30	Y	1.07	0.98	-9%
234678-HxCDF	36.76	2.00E+06	1.26	Y	1.10	1.06	-3%
123789-HxCDF	37.74	1.58E+06	1.29	Y	1.09	1.01	-7%
1234678-HpCDF	39.22	1.67E+06	1.03	Y	1.28	1.21	-6%
1234789-HpCDF	40.54	1.18E+06	1.03	Y	1.27	1.20	-5%
OCDF	42.74	1.41E+06	0.83	Y	1.01	0.93	-8%
ES 2378-TCDD	27.55	1.39E+08	0.75	Y	1.01	0.98	-3%
ES 12378-PeCDD	33.03	1.16E+08	1.65	Y	0.87	0.82	-6%
ES 123478-HxCDD	36.93	1.13E+08	1.30	Y	1.10	1.04	-5%
ES 123678-HxCDD	37.04	1.08E+08	1.27	Y	1.06	1.00	-6%
ES 123789-HxCDD	37.35	1.21E+08	1.28	Y	1.22	1.11	-8%
ES 1234678-HpCDD	40.11	9.07E+07	1.07	Y	0.99	0.83	-16%
ES OCDD	42.56	9.93E+07	0.87	Y	0.67	0.46	-32%
ES 2378-TCDF	26.64	2.30E+08	0.79	Y	1.01	0.99	-2%
ES 12378-PeCDF	31.55	1.98E+08	1.57	Y	0.90	0.85	-5%
ES 23478-PeCDF	32.67	1.93E+08	1.60	Y	0.89	0.83	-7%
ES 123478-HxCDF	35.96	1.50E+08	0.52	Y	1.43	1.38	-4%
ES 123678-HxCDF	36.1	1.69E+08	0.52	Y	1.63	1.56	-5%
ES 234678-HxCDF	36.74	1.50E+08	0.54	Y	1.48	1.38	-7%
ES 123789-HxCDF	37.73	1.25E+08	0.51	Y	1.29	1.15	-11%
ES 1234678-HpCDF	39.21	1.10E+08	0.45	Y	1.15	1.02	-11%
ES 1234789-HpCDF	40.53	7.87E+07	0.46	Y	0.91	0.72	-20%
ES OCDF	42.73	1.21E+08	0.90	Y	0.83	0.56	-33%

Dioxin/Furan QC Summary	Acq'd: 12 Jun 2020 14:21 PSW	ICAL: MM3_DF_10012020_12JUN2020
Lab ID: CS0_200612_DF_RA	UTP: 17-Jun-2020 08:02:40 PSW	Checkcode: 545-220-ZXZ
Sample ID: SIL 20-282-3	Report: 17 Jun 2020 08:13 pw	Datafile: 200612R03

Name	RT	Response	RA	OK	Ref. RRFs	Calc. RRFs	Dev'n
JS 1234-TCDD	26.87	1.42E+08	0.79	Y	-	-	-
JS 1234-TCDF	25.24	2.32E+08	0.77	Y	-	-	-
JS 123467-HxCDD	37.24	5.44E+07	1.29	Y	-	-	-
CS 37Cl-2378-TCDD	NotFnd		n/a	-	1.04		
CS 12347-PeCDD	32.52	1.02E+08	1.67	Y	0.74	0.72	-3%
CS 12346-PeCDF	31.01	1.99E+08	1.55	Y	0.86	0.86	0%
CS 123469-HxCDF	36.40	1.52E+08	0.53	Y	1.36	1.39	3%
CS 1234689-HpCDF	39.61	1.07E+08	0.45	Y	1.05	0.98	-7%
SS 37Cl-2378-TCDD	NotFnd		n/a	-	1.04		
SS 12347-PeCDD	32.52	1.02E+08	1.67	Y	0.86	0.88	3%
SS 12346-PeCDF	31.01	1.99E+08	1.55	Y	0.96	1.01	5%
SS 123469-HxCDF	36.40	1.52E+08	0.53	Y	0.83	0.90	7%
SS 1234689-HpCDF	39.61	1.07E+08	0.45	Y	0.92	0.97	5%
AS 1368-TCDD	23.73	1.50E+08	0.76	Y	1.08	1.05	-2%
AS 1368-TCDF	21.52	2.72E+08	0.79	Y	1.18	1.17	-1%
FS 1278-TCDD	27.89	1.44E+08	0.77	Y	1.00	1.03	4%
FS 12478-PeCDD	31.78	1.19E+08	1.60	Y	1.00	1.02	3%
FS 123468-HxCDD	35.88	1.36E+08	1.27	Y	1.11	1.20	8%
FS 1234679-HpCDD	39.47	1.20E+08	1.08	Y	1.19	1.32	11%
TS 1378-TCDD	25.83	1.49E+08	0.76	Y	1.06	1.07	1%
~~OCDD-a~~	~~NotFnd~~				~~0.07~~		
~~OCDF-a~~	~~NotFnd~~				~~0.06~~		

SGS ID: CS0_200612_DF_RA **Sample ID: SIL 20-282-3** **Acq: 12-Jun-2020 14:21:06**

Instr: [ILM] AutoSpec-Ultima MM3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 5** **User: PSW Datafile: 200612R03**

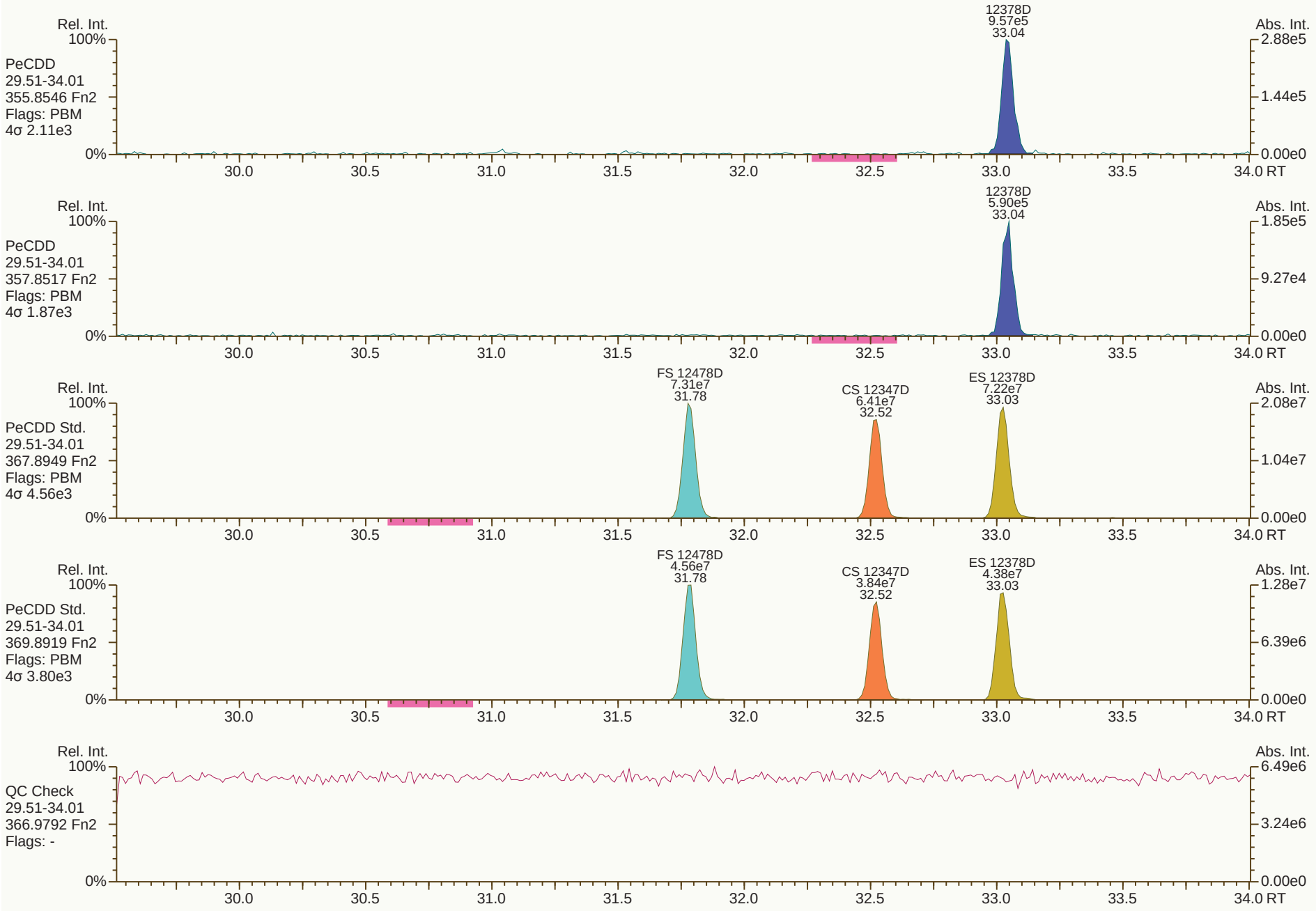


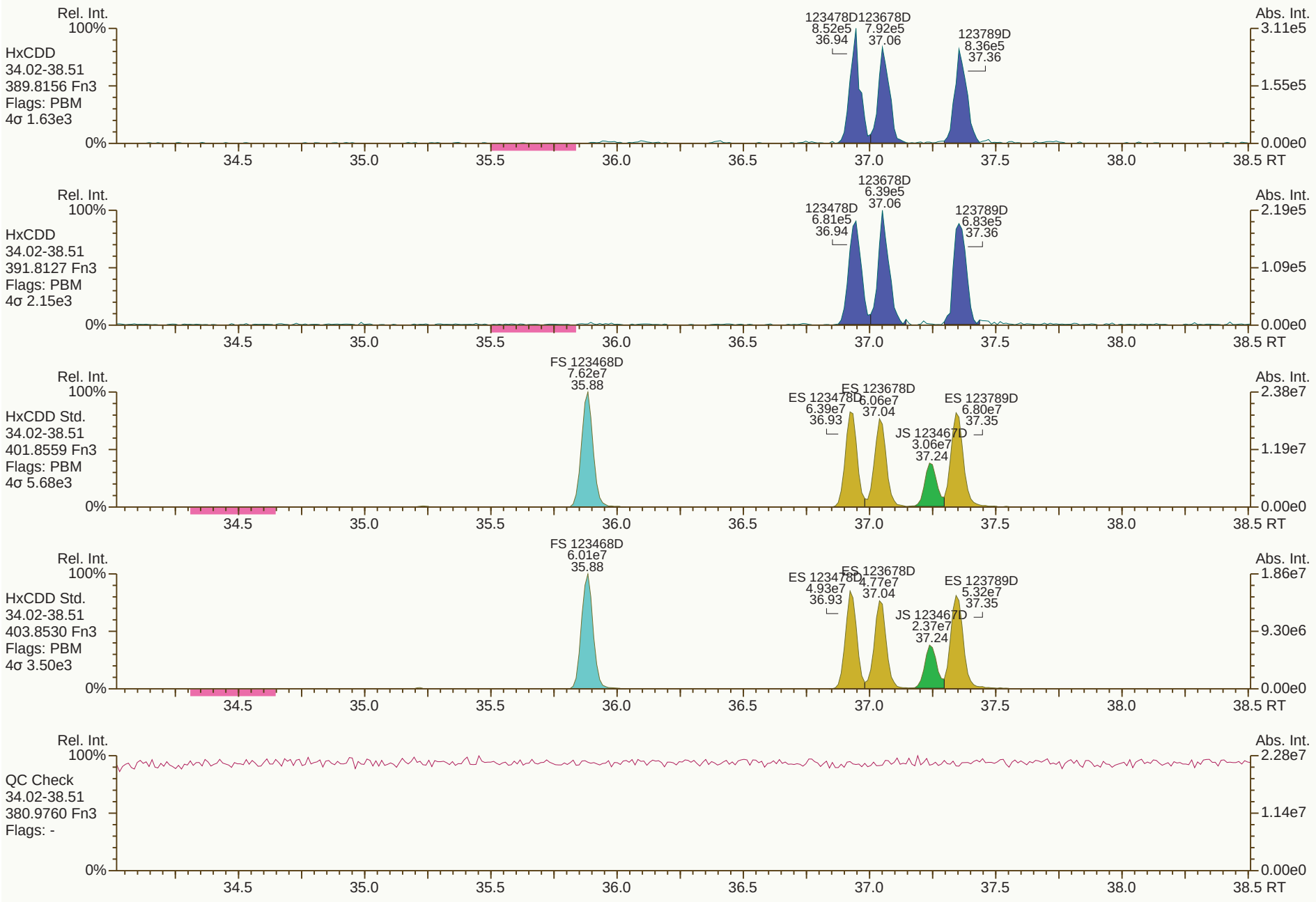
Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS0_200612_DF_RA.utp_res, saved 17-Jun-2020 08:02 (PSW) *Peak annotation: Areas, Centroids*

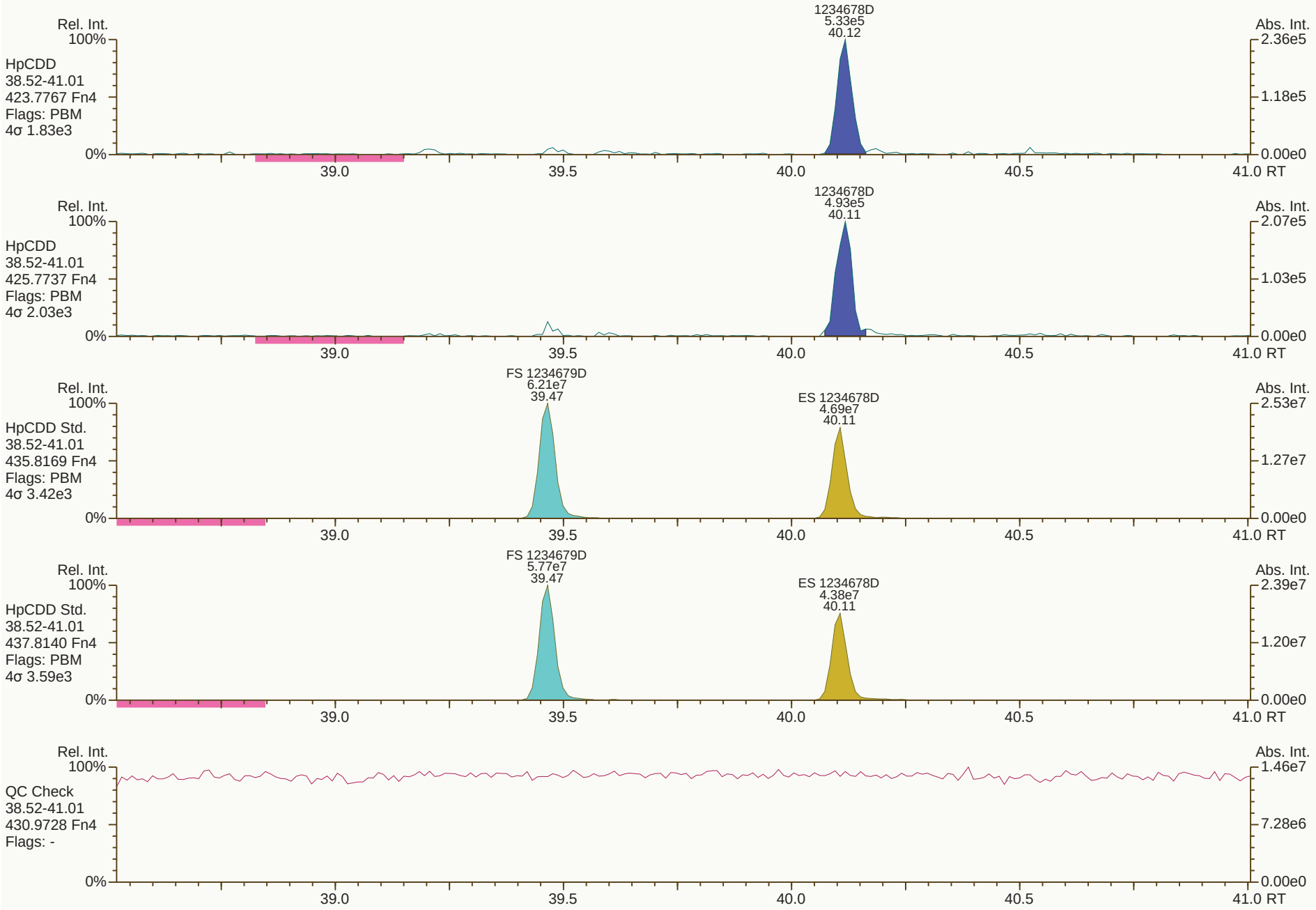
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 scc: 545-220 *PKD: n/a Printed: 17-Jun-2020 08:17 Page 1 of 12*

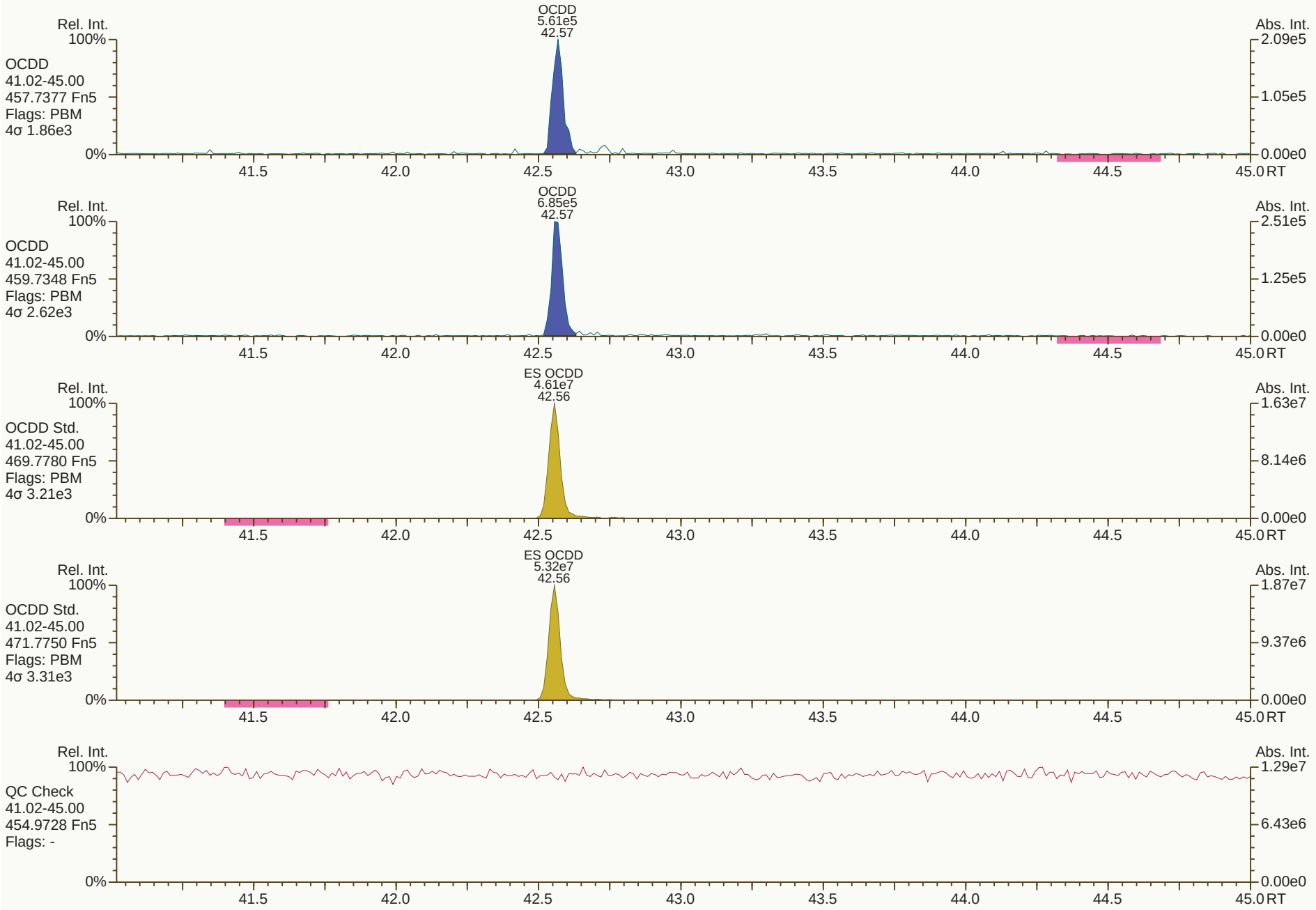


Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS0_200612_DF_RA.utp_res, saved 17-Jun-2020 08:02 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 9342, 6376, 0204 scc: 545-220
PKD: 12-Jun-2020 15:10 Printed: 17-Jun-2020 08:17 Page 2 of 12


Rel. Int.
100%
PeCDD
29.51-34.01
355.8546 Fn2
Flags: PBM
4σ 2.11e3
12378D
9.57e5
33.04
Abs. Int.
2.88e5
1.44e5
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD
29.51-34.01
357.8517 Fn2
Flags: PBM
4σ 1.87e3
12378D
5.90e5
33.04
Abs. Int.
1.85e5
9.27e4
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
367.8949 Fn2
Flags: PBM
4σ 4.56e3
FS 12478D
7.31e7
31.78
CS 12347D
6.41e7
32.52
ES 12378D
7.22e7
33.03
Abs. Int.
2.08e7
1.04e7
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
369.8919 Fn2
Flags: PBM
4σ 3.80e3
FS 12478D
4.56e7
31.78
CS 12347D
3.84e7
32.52
ES 12378D
4.38e7
33.03
Abs. Int.
1.28e7
6.39e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
QC Check
29.51-34.01
366.9792 Fn2
Flags: -
Abs. Int.
6.49e6
3.24e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT


Rel. Int.
100%
HxCDD
34.02-38.51
389.8156 Fn3
Flags: PBM
4σ 1.63e3
123478D 8.52e5 36.94
123678D 7.92e5 37.06
123789D 8.36e5 37.36
Abs. Int.
3.11e5
1.55e5
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 RT
Rel. Int.
100%
HxCDD
34.02-38.51
391.8127 Fn3
Flags: PBM
4σ 2.15e3
123678D 6.39e5 37.06
123478D 6.81e5 36.94
123789D 6.83e5 37.36
Abs. Int.
2.19e5
1.09e5
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 RT
Rel. Int.
100%
HxCDD Std.
34.02-38.51
401.8559 Fn3
Flags: PBM
4σ 5.68e3
FS 123468D 7.62e7 35.88
ES 123478D 6.39e7 36.93
ES 123678D 6.06e7 37.04
JS 123467D 3.06e7 37.24
ES 123789D 6.80e7 37.35
Abs. Int.
2.38e7
1.19e7
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 RT
Rel. Int.
100%
HxCDD Std.
34.02-38.51
403.8530 Fn3
Flags: PBM
4σ 3.50e3
FS 123468D 6.01e7 35.88
ES 123478D 4.93e7 36.93
ES 123678D 4.77e7 37.04
JS 123467D 2.37e7 37.24
ES 123789D 5.32e7 37.35
Abs. Int.
1.86e7
9.30e6
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 RT
Rel. Int.
100%
QC Check
34.02-38.51
380.9760 Fn3
Flags: -
Abs. Int.
2.28e7
1.14e7
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 RT


Rel. Int.
100%
HpCDD
38.52-41.01
423.7767 Fn4
Flags: PBM
4σ 1.83e3
1234678D
5.33e5
40.12
Abs. Int.
2.36e5
1.18e5
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.52-41.01
425.7737 Fn4
Flags: PBM
4σ 2.03e3
1234678D
4.93e5
40.11
Abs. Int.
2.07e5
1.03e5
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.52-41.01
435.8169 Fn4
Flags: PBM
4σ 3.42e3
FS 1234679D
6.21e7
39.47
ES 1234678D
4.69e7
40.11
Abs. Int.
2.53e7
1.27e7
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.52-41.01
437.8140 Fn4
Flags: PBM
4σ 3.59e3
FS 1234679D
5.77e7
39.47
ES 1234678D
4.38e7
40.11
Abs. Int.
2.39e7
1.20e7
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.52-41.01
430.9728 Fn4
Flags: -
Abs. Int.
1.46e7
7.28e6
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT


OCDD
5.61e5
42.57
Rel. Int.
Abs. Int.
OCDD
41.02-45.00
457.7377 Fn5
Flags: PBM
4σ 1.86e3
OCDD
6.85e5
42.57
OCDD
41.02-45.00
459.7348 Fn5
Flags: PBM
4σ 2.62e3
ES OCDD
4.61e7
42.56
OCDD Std.
41.02-45.00
469.7780 Fn5
Flags: PBM
4σ 3.21e3
ES OCDD
5.32e7
42.56
OCDD Std.
41.02-45.00
471.7750 Fn5
Flags: PBM
4σ 3.31e3
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
RT


SGS ID: CS0_200612_DF_RA
Sample ID: SIL 20-282-3
Acq: 12-Jun-2020 14:21:06
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 5
User: PSW Datafile: 200612R03
Rel. Int.
Abs. Int.
OCDD
41.02-45.00
462.7352 Fn5
Flags: B
4σ 2.99e3
4.25e4
2.13e4
0.00e0
OCDD
41.02-45.00
464.7322 Fn5
Flags: B
4σ 2.57e3
1.46e4
7.32e3
ES OCDD
4.61e7
42.56
OCDD std
41.02-45.00
469.7780 Fn5
Flags: PBM
4σ 3.21e3
1.63e7
8.14e6
ES OCDD
5.32e7
42.56
OCDD std
41.02-45.00
471.7750 Fn5
Flags: PBM
4σ 3.31e3
1.87e7
9.37e6
100%
0%
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0
RT
Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS0_200612_DF_RA.utp_res, saved 17-Jun-2020 08:02 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 4634, 9599
Revised: 17-Jun-2020 08:02 (PSW) Printed: 17-Jun-2020 08:27



Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS0_200612_DF_RA.utp_res, saved 17-Jun-2020 08:02 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 7947, 7308, 0238 scc: 545-220
PKD: 12-Jun-2020 15:10 Printed: 17-Jun-2020 08:17 Page 7 of 12

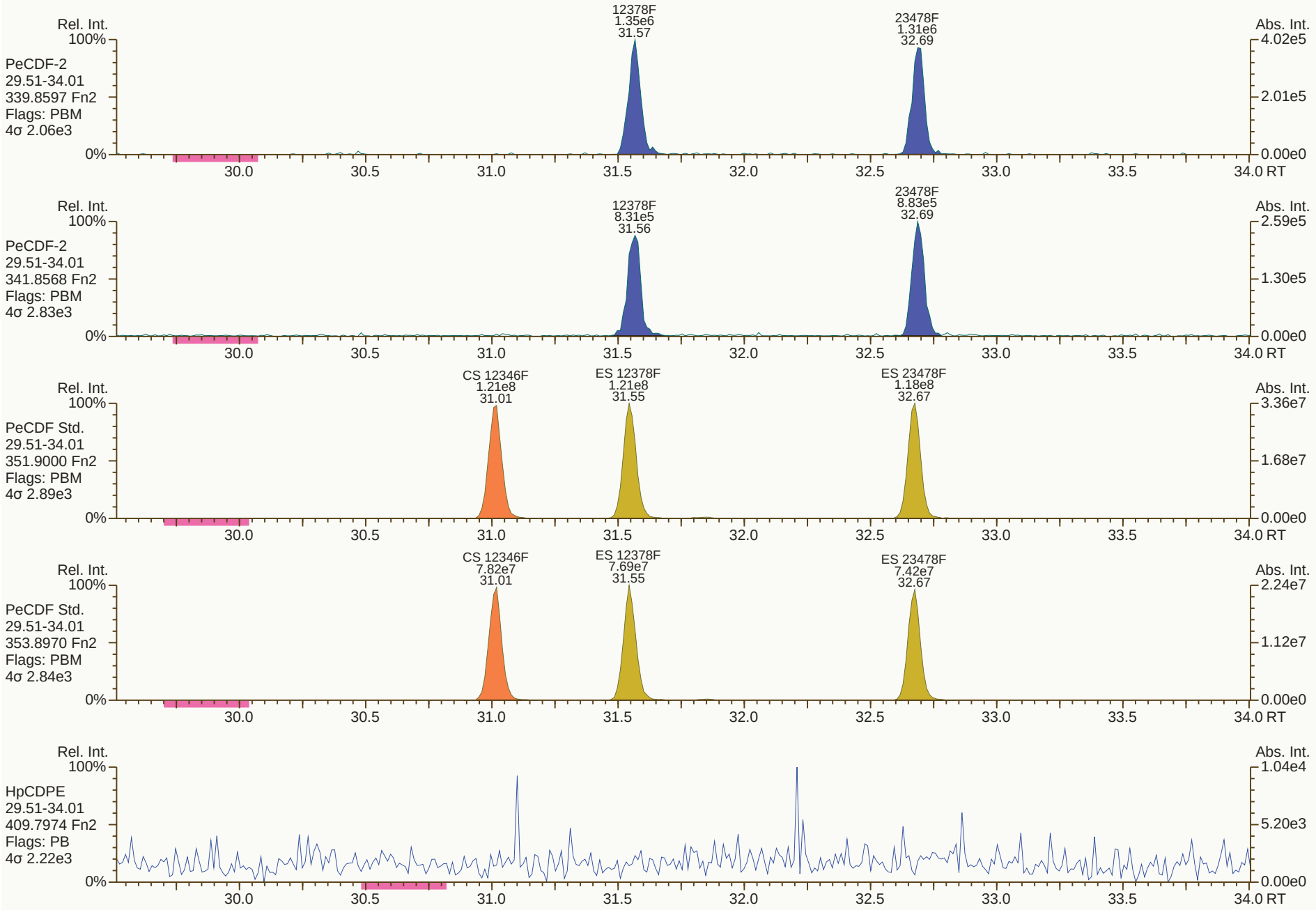
SGS ID: CS0_200612_DF_RA | **Sample ID: SIL 20-282-3** | **Acq: 12-Jun-2020 14:21:06**

Instr: [ILM] AutoSpec-Ultima MM3 | **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 5** | **User: PSW Datafile: 200612R03**



Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS0_200612_DF_RA.utp_res, saved 17-Jun-2020 08:02 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 5638 scc: 545-220 *PKD: 12-Jun-2020 15:10 Printed: 17-Jun-2020 08:17 Page 8 of 12*

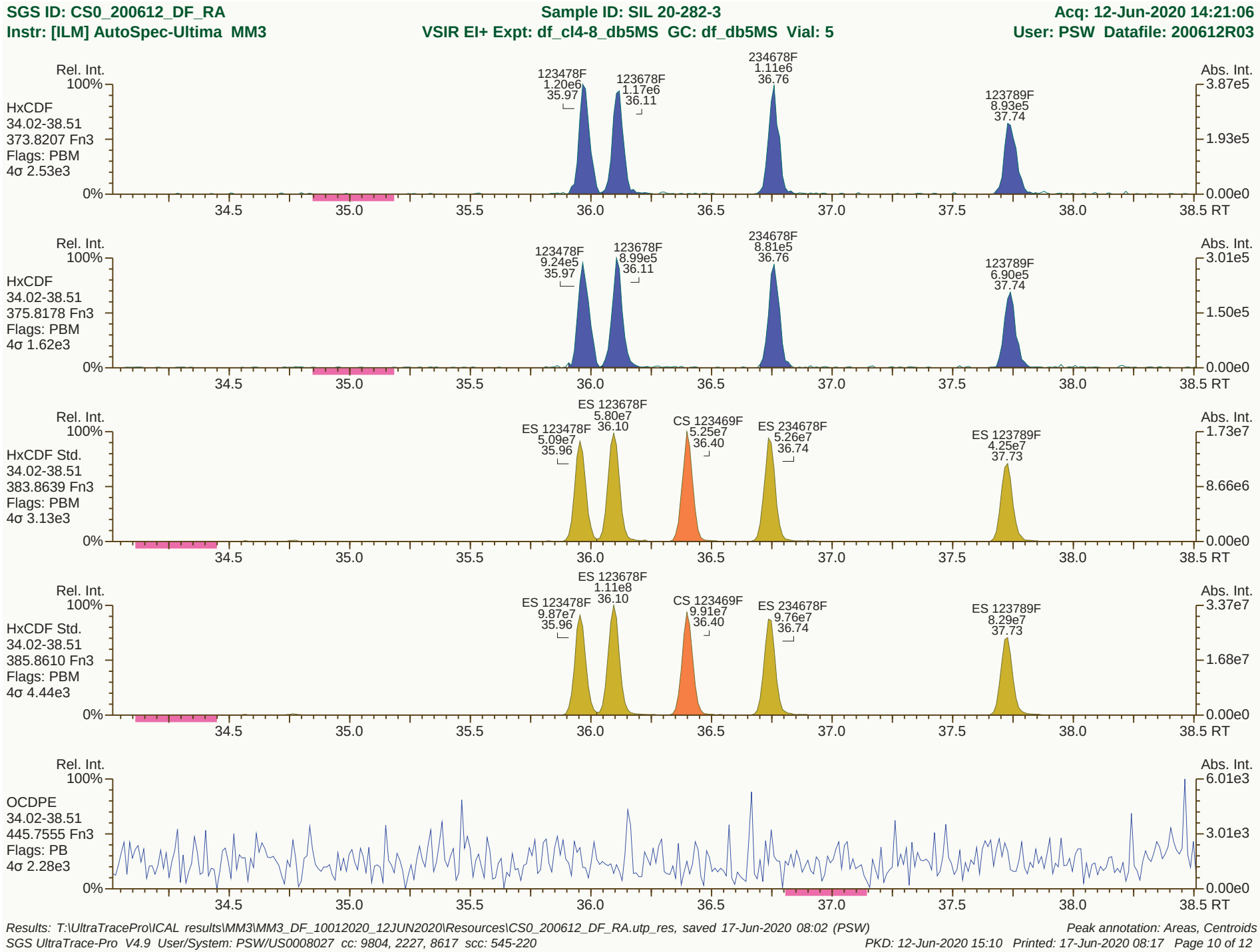


Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS0_200612_DF_RA.utp_res, saved 17-Jun-2020 08:02 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 0335, 1799, 0888 scc: 545-220
PKD: 12-Jun-2020 15:10 Printed: 17-Jun-2020 08:17 Page 9 of 12

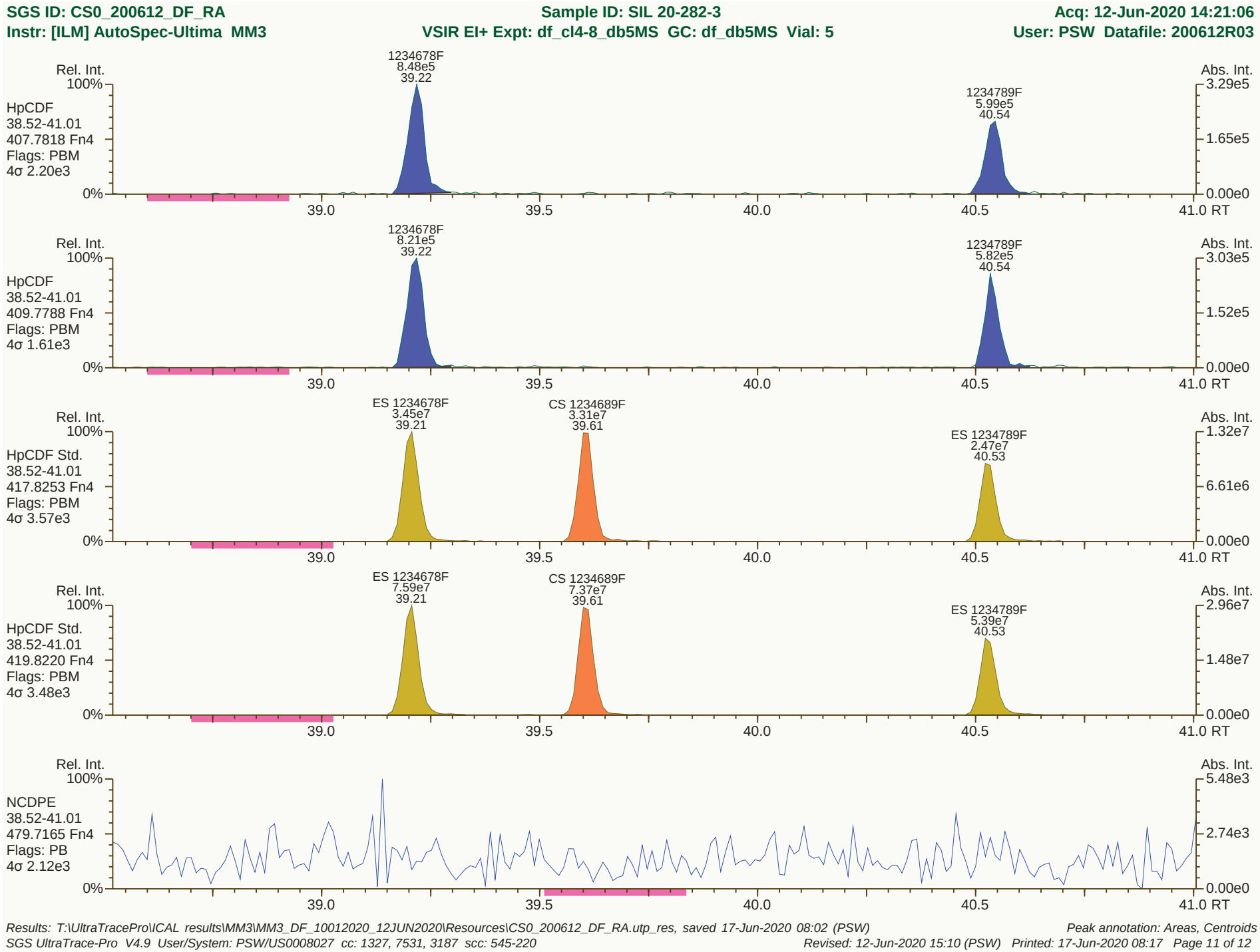
SGS ID: CS0_200612_DF_RA
Instr: [ILM] AutoSpec-Ultima MM3

Sample ID: SIL 20-282-3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 5

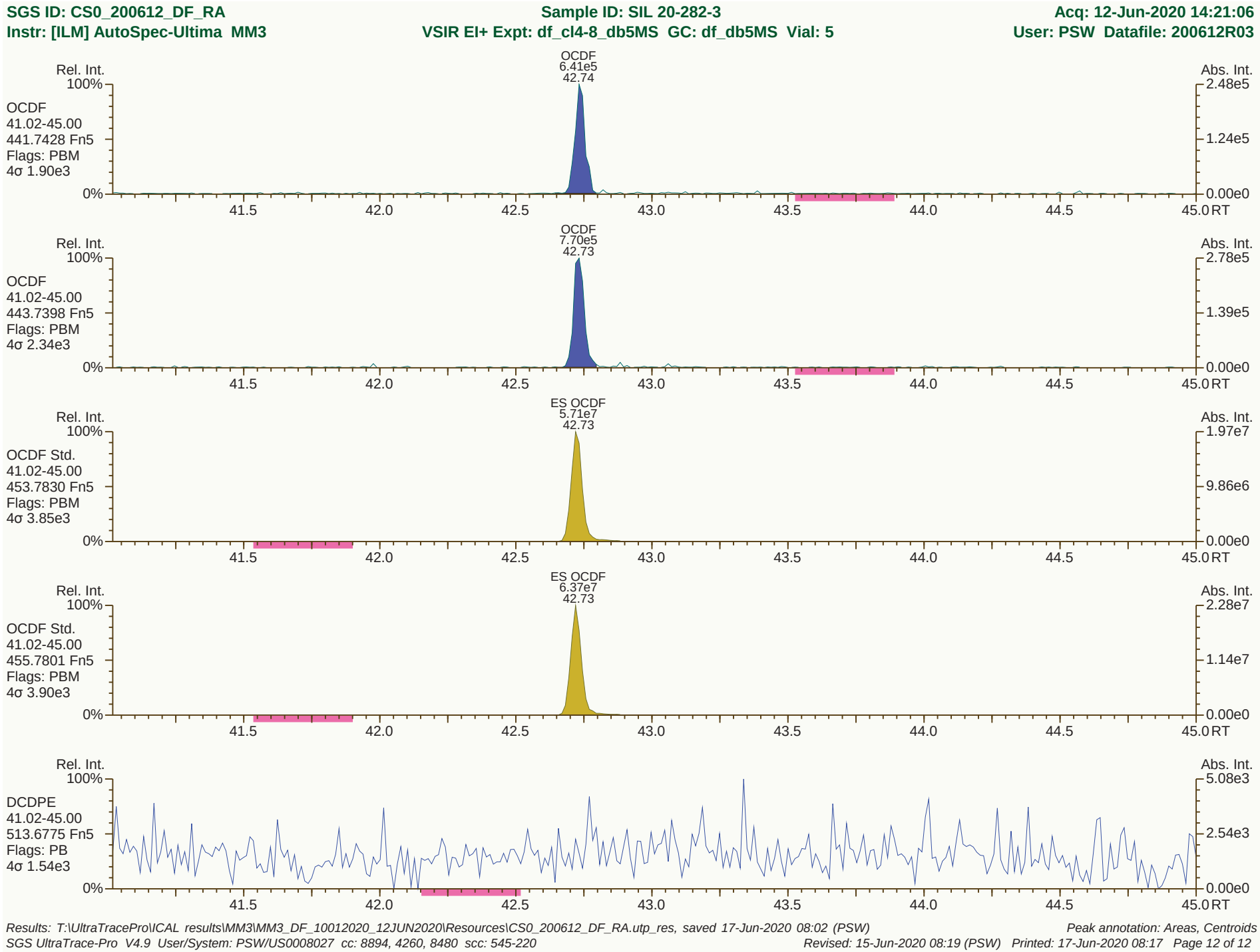
Acq: 12-Jun-2020 14:21:06
User: PSW Datafile: 200612R03



Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS0_200612_DF_RA.utp_res, saved 17-Jun-2020 08:02 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 9804, 2227, 8617 scc: 545-220
PKD: 12-Jun-2020 15:10 Printed: 17-Jun-2020 08:17 Page 10 of 12


SGS ID: CS0_200612_DF_RA
Sample ID: SIL 20-282-3
Acq: 12-Jun-2020 14:21:06
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 5
User: PSW Datafile: 200612R03
Rel. Int.
Abs. Int.
HpCDF
38.52-41.01
407.7818 Fn4
Flags: PBM
4σ 2.20e3
1234678F
8.48e5
39.22
1234789F
5.99e5
40.54
3.29e5
1.65e5
0.00e0
HpCDF
38.52-41.01
409.7788 Fn4
Flags: PBM
4σ 1.61e3
1234678F
8.21e5
39.22
1234789F
5.82e5
40.54
3.03e5
1.52e5
HpCDF Std.
38.52-41.01
417.8253 Fn4
Flags: PBM
4σ 3.57e3
ES 1234678F
3.45e7
39.21
CS 1234689F
3.31e7
39.61
ES 1234789F
2.47e7
40.53
1.32e7
6.61e6
HpCDF Std.
38.52-41.01
419.8220 Fn4
Flags: PBM
4σ 3.48e3
ES 1234678F
7.59e7
39.21
CS 1234689F
7.37e7
39.61
ES 1234789F
5.39e7
40.53
2.96e7
1.48e7
NCDPE
38.52-41.01
479.7165 Fn4
Flags: PB
4σ 2.12e3
5.48e3
2.74e3
100%
0%
39.0
39.5
40.0
40.5
41.0 RT
Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS0_200612_DF_RA.utp_res, saved 17-Jun-2020 08:02 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 1327, 7531, 3187 scc: 545-220
Revised: 12-Jun-2020 15:10 (PSW) Printed: 17-Jun-2020 08:17 Page 11 of 12

SGS ID: CS0_200612_DF_RA
Instr: [ILM] AutoSpec-Ultima MM3
Sample ID: SIL 20-282-3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 5
Acq: 12-Jun-2020 14:21:06
User: PSW Datafile: 200612R03



SGS ID: CS0_200612_DF_RA
Instr: [ILM] AutoSpec-Ultima MM3

Sample ID: SIL 20-282-3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 5

Acq: 12-Jun-2020 14:21:06
User: PSW Datafile: 200612R03



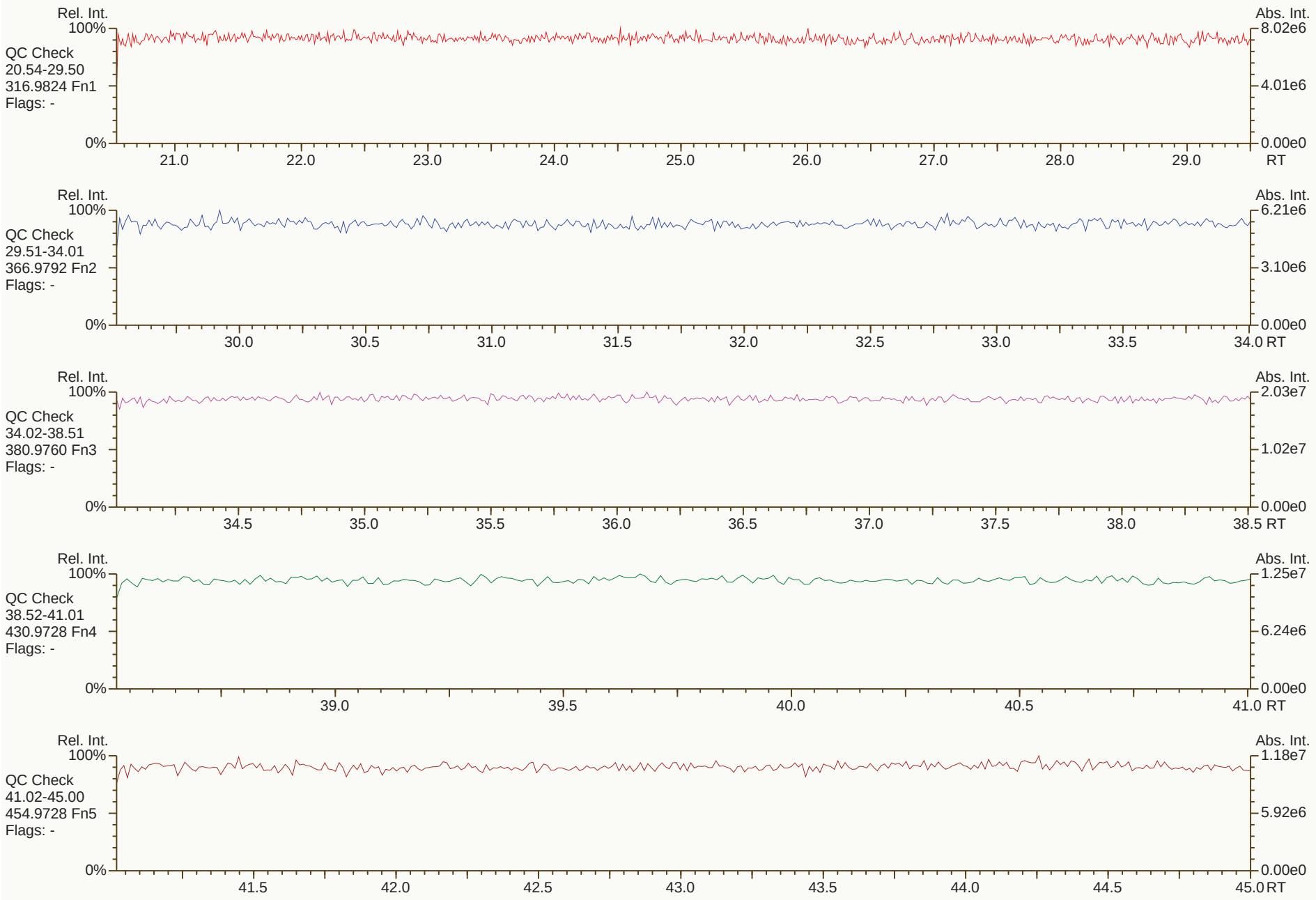
Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS0_200612_DF_RA.utp_res, saved 17-Jun-2020 08:02 (PSW)
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 5618, 4260

Peak annotation: Areas, Centroids
Revised: 17-Jun-2020 08:02 (PSW) Printed: 17-Jun-2020 08:27

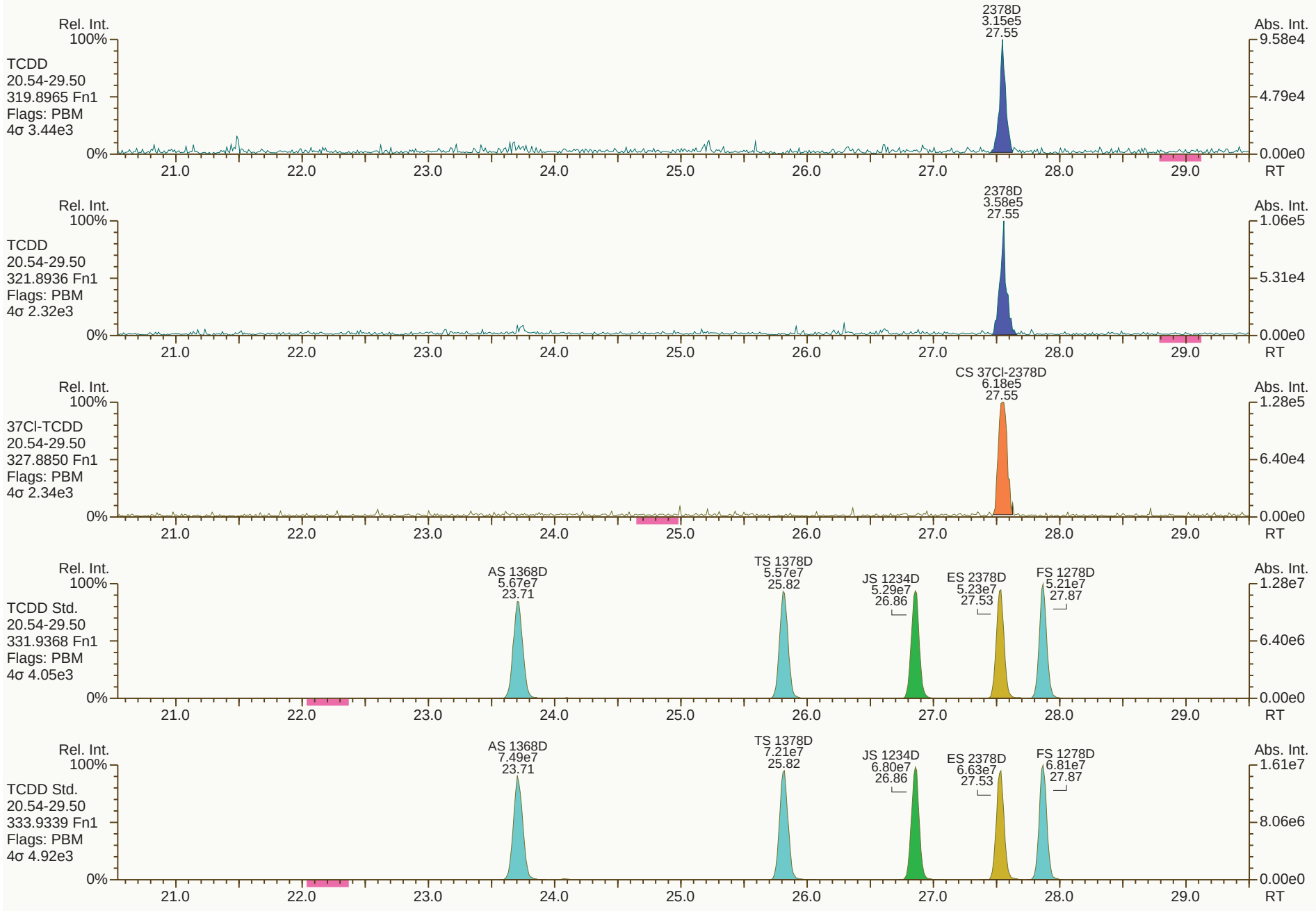
Dioxin/Furan QC Summary		Acq'd: 12 Jun 2020 15:11 PSW				ICAL: MM3_DF_10012020_12JUN2020	
Lab ID: CS1_200612_DF_RA		UTP: 17-Jun-2020 08:05:59 PSW				Checkcode: 407-197-HVF	
Sample ID: SIL 20-282-2		Report: 17 Jun 2020 08:13 pw				Datafile: 200612R04	
Name	**RT**	**Response**	**RA**	**OK**	**Ref. RRFs**	**Calc. RRFs**	**Dev'n**
2378-TCDD	27.55	6.73E+05	0.88	Y	1.18	1.13	-4%
12378-PeCDD	33.03	2.70E+06	1.68	Y	1.14	1.09	-4%
123478-HxCDD	36.93	2.50E+06	1.31	Y	1.09	1.04	-4%
123678-HxCDD	37.04	2.49E+06	1.29	Y	1.13	1.08	-4%
123789-HxCDD	37.35	2.68E+06	1.24	Y	1.05	1.00	-5%
1234678-HpCDD	40.10	2.02E+06	1.07	Y	0.98	0.91	-7%
OCDD	42.56	3.01E+06	0.88	Y	1.08	1.01	-6%
2378-TCDF	26.64	8.94E+05	0.82	Y	0.98	0.88	-10%
12378-PeCDF	31.55	3.87E+06	1.53	Y	0.95	0.91	-5%
23478-PeCDF	32.68	3.78E+06	1.61	Y	0.95	0.88	-7%
123478-HxCDF	35.96	3.69E+06	1.19	Y	1.20	1.15	-4%
123678-HxCDF	36.10	3.70E+06	1.27	Y	1.07	1.03	-4%
234678-HxCDF	36.74	3.33E+06	1.35	Y	1.10	1.02	-7%
123789-HxCDF	37.73	2.92E+06	1.17	Y	1.09	1.06	-3%
1234678-HpCDF	39.20	3.10E+06	1.06	Y	1.28	1.21	-5%
1234789-HpCDF	40.53	2.46E+06	1.05	Y	1.27	1.25	-1%
OCDF	42.72	3.58E+06	0.95	Y	1.01	0.96	-5%
ES 2378-TCDD	27.53	1.19E+08	0.79	Y	1.01	0.98	-3%
ES 12378-PeCDD	33.01	9.89E+07	1.61	Y	0.87	0.82	-6%
ES 123478-HxCDD	36.91	9.57E+07	1.29	Y	1.10	1.05	-4%
ES 123678-HxCDD	37.03	9.19E+07	1.28	Y	1.06	1.01	-5%
ES 123789-HxCDD	37.33	1.07E+08	1.29	Y	1.22	1.18	-3%
ES 1234678-HpCDD	40.09	8.86E+07	1.09	Y	0.99	0.97	-2%
ES OCDD	42.55	1.20E+08	0.92	Y	0.67	0.66	-2%
ES 2378-TCDF	26.62	2.04E+08	0.80	Y	1.01	0.99	-2%
ES 12378-PeCDF	31.53	1.71E+08	1.60	Y	0.90	0.84	-7%
ES 23478-PeCDF	32.66	1.72E+08	1.59	Y	0.89	0.84	-6%
ES 123478-HxCDF	35.94	1.28E+08	0.52	Y	1.43	1.41	-2%
ES 123678-HxCDF	36.08	1.43E+08	0.51	Y	1.63	1.57	-3%
ES 234678-HxCDF	36.73	1.31E+08	0.52	Y	1.48	1.44	-3%
ES 123789-HxCDF	37.71	1.11E+08	0.52	Y	1.29	1.22	-6%
ES 1234678-HpCDF	39.19	1.02E+08	0.45	Y	1.15	1.12	-2%
ES 1234789-HpCDF	40.52	7.85E+07	0.44	Y	0.91	0.86	-5%
ES OCDF	42.72	1.50E+08	0.91	Y	0.83	0.82	-1%

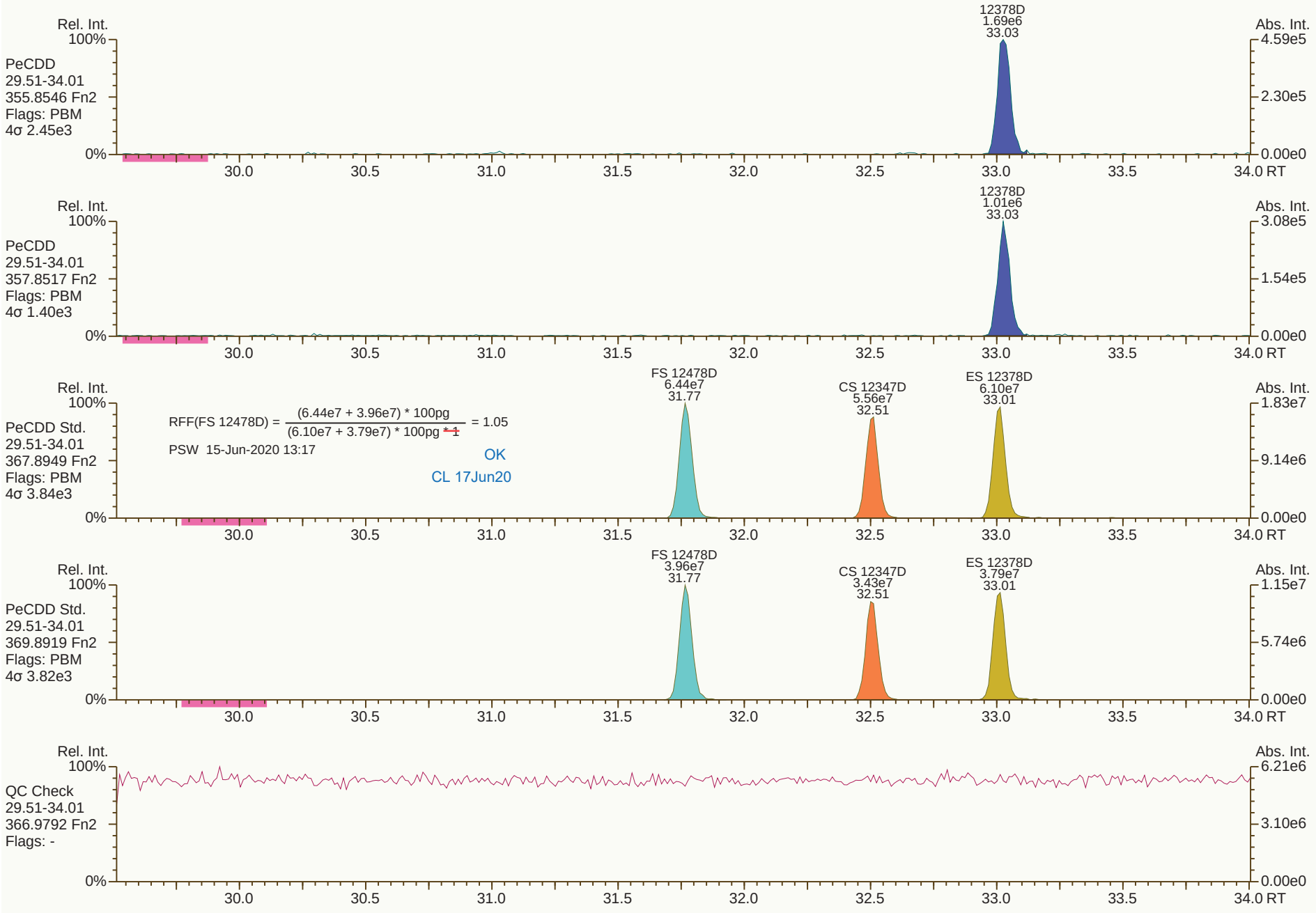
Dioxin/Furan QC Summary	Acq'd: 12 Jun 2020 15:11 PSW	ICAL: MM3_DF_10012020_12JUN2020
Lab ID: CS1_200612_DF_RA	UTP: 17-Jun-2020 08:05:59 PSW	Checkcode: 407-197-HVF
Sample ID: SIL 20-282-2	Report: 17 Jun 2020 08:13 pw	Datafile: 200612R04

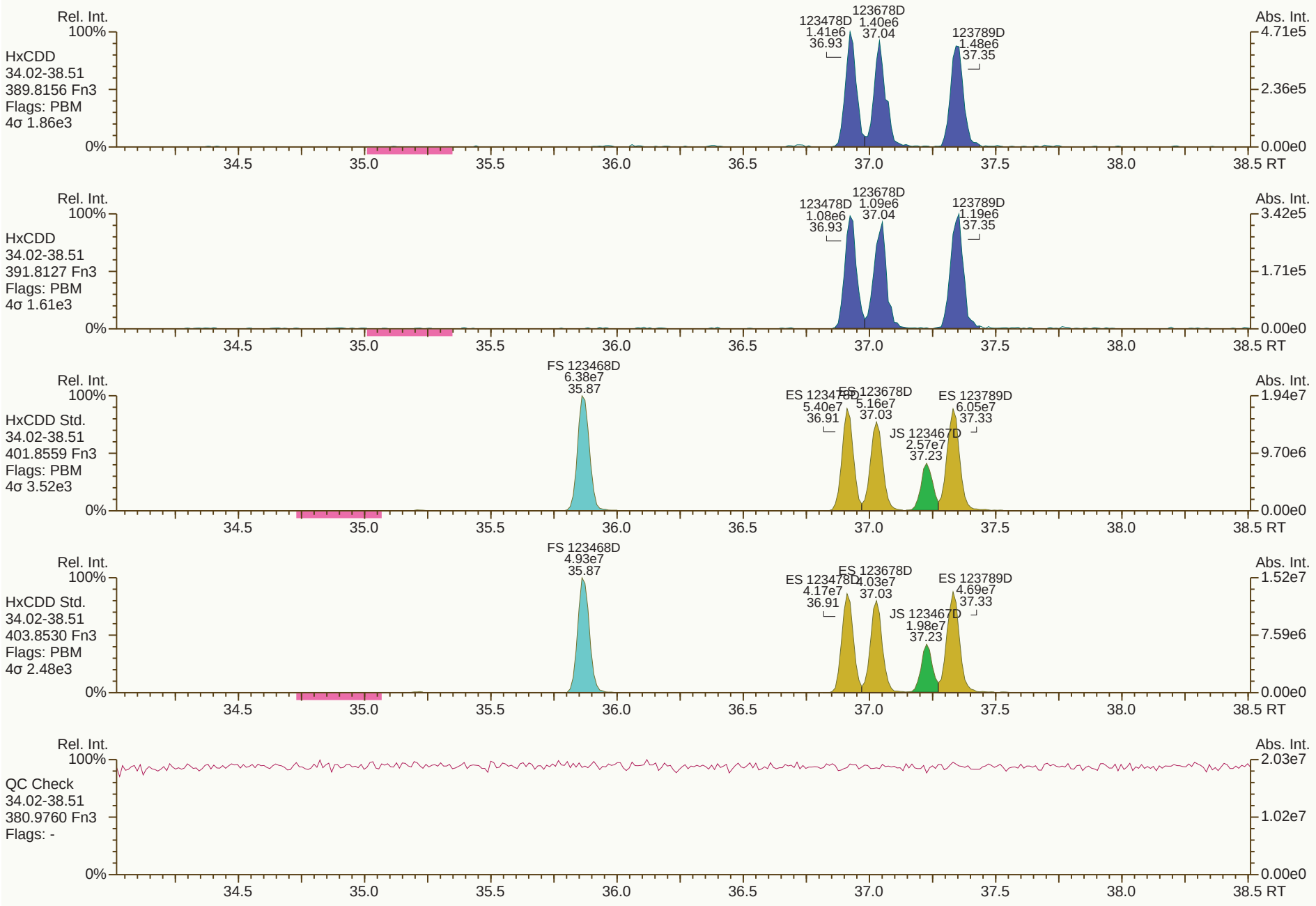
Name	RT	Response	RA	OK	Ref. RRFs	Calc. RRFs	Dev'n
JS 1234-TCDD	26.86	1.21E+08	0.78	Y	-	-	-
JS 1234-TCDF	25.22	2.05E+08	0.78	Y	-	-	-
JS 123467-HxCDD	37.23	4.56E+07	1.30	Y	-	-	-
CS 37Cl-2378-TCDD	27.55	6.18E+05	n/a	-	1.04	1.02	-1%
CS 12347-PeCDD	32.51	8.99E+07	1.62	Y	0.74	0.74	1%
CS 12346-PeCDF	31.00	1.73E+08	1.57	Y	0.86	0.85	-2%
CS 123469-HxCDF	36.39	1.28E+08	0.52	Y	1.36	1.40	3%
CS 1234689-HpCDF	39.59	9.91E+07	0.45	Y	1.05	1.09	3%
SS 37Cl-2378-TCDD	27.55	6.18E+05	n/a	-	1.04	1.04	0%
SS 12347-PeCDD	32.51	8.99E+07	1.62	Y	0.86	0.91	6%
SS 12346-PeCDF	31.00	1.73E+08	1.57	Y	0.96	1.01	5%
SS 123469-HxCDF	36.39	1.28E+08	0.52	Y	0.83	0.89	7%
SS 1234689-HpCDF	39.59	9.91E+07	0.45	Y	0.92	0.97	5%
AS 1368-TCDD	23.71	1.32E+08	0.76	Y	1.08	1.09	1%
AS 1368-TCDF	21.49	2.41E+08	0.80	Y	1.18	1.18	0%
FS 1278-TCDD	27.87	1.20E+08	0.76	Y	1.00	1.01	2%
FS 12478-PeCDD	31.77	1.04E+08	1.63	Y	1.00	1.05	6%
FS 123468-HxCDD	35.87	1.13E+08	1.29	Y	1.11	1.18	6%
FS 1234679-HpCDD	39.45	1.10E+08	1.09	Y	1.19	1.24	4%
TS 1378-TCDD	25.82	1.28E+08	0.77	Y	1.06	1.08	2%
~~OCDD-a~~	~~NotFnd~~				~~0.07~~		
~~OCDF-a~~	~~NotFnd~~				~~0.06~~		

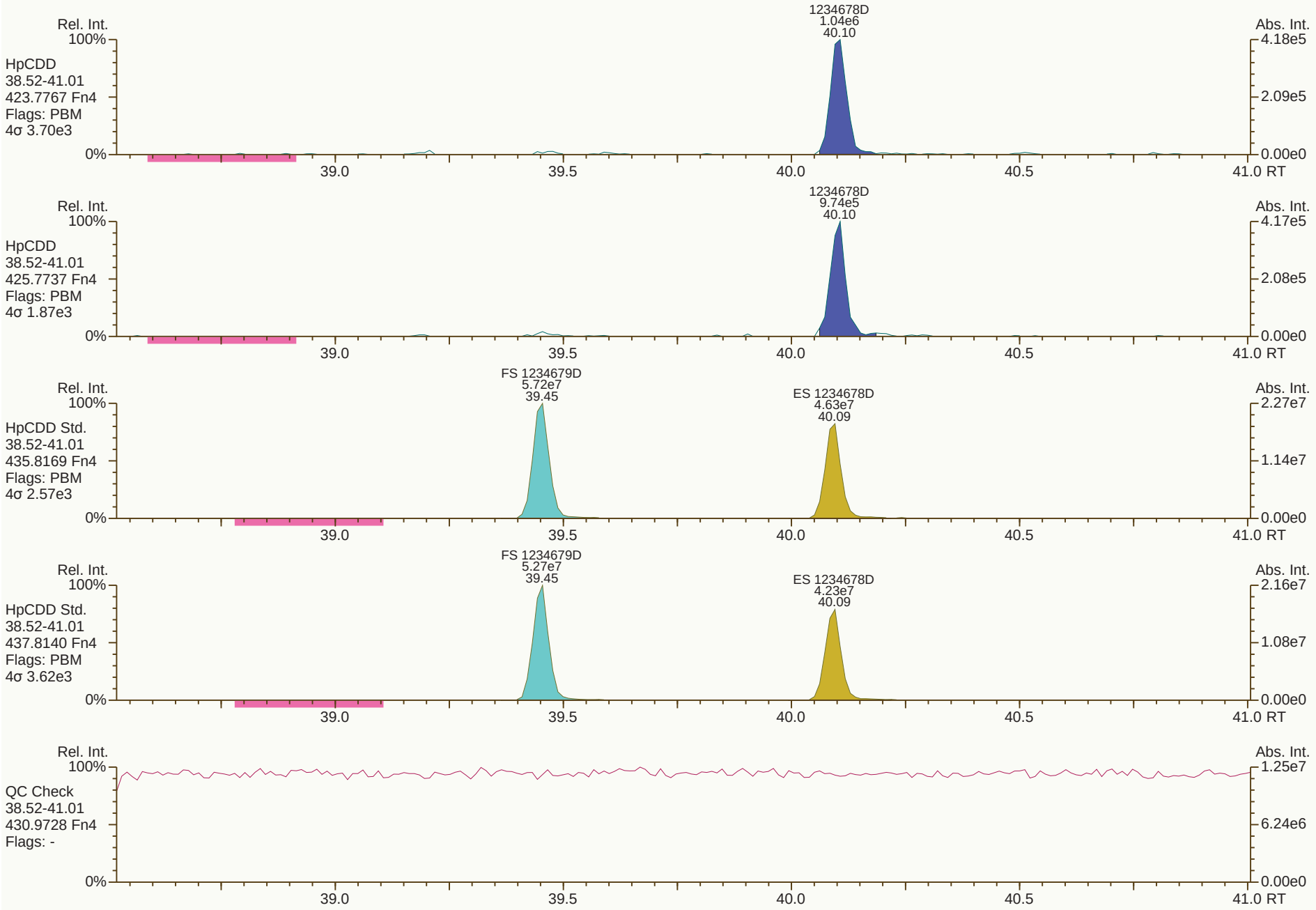


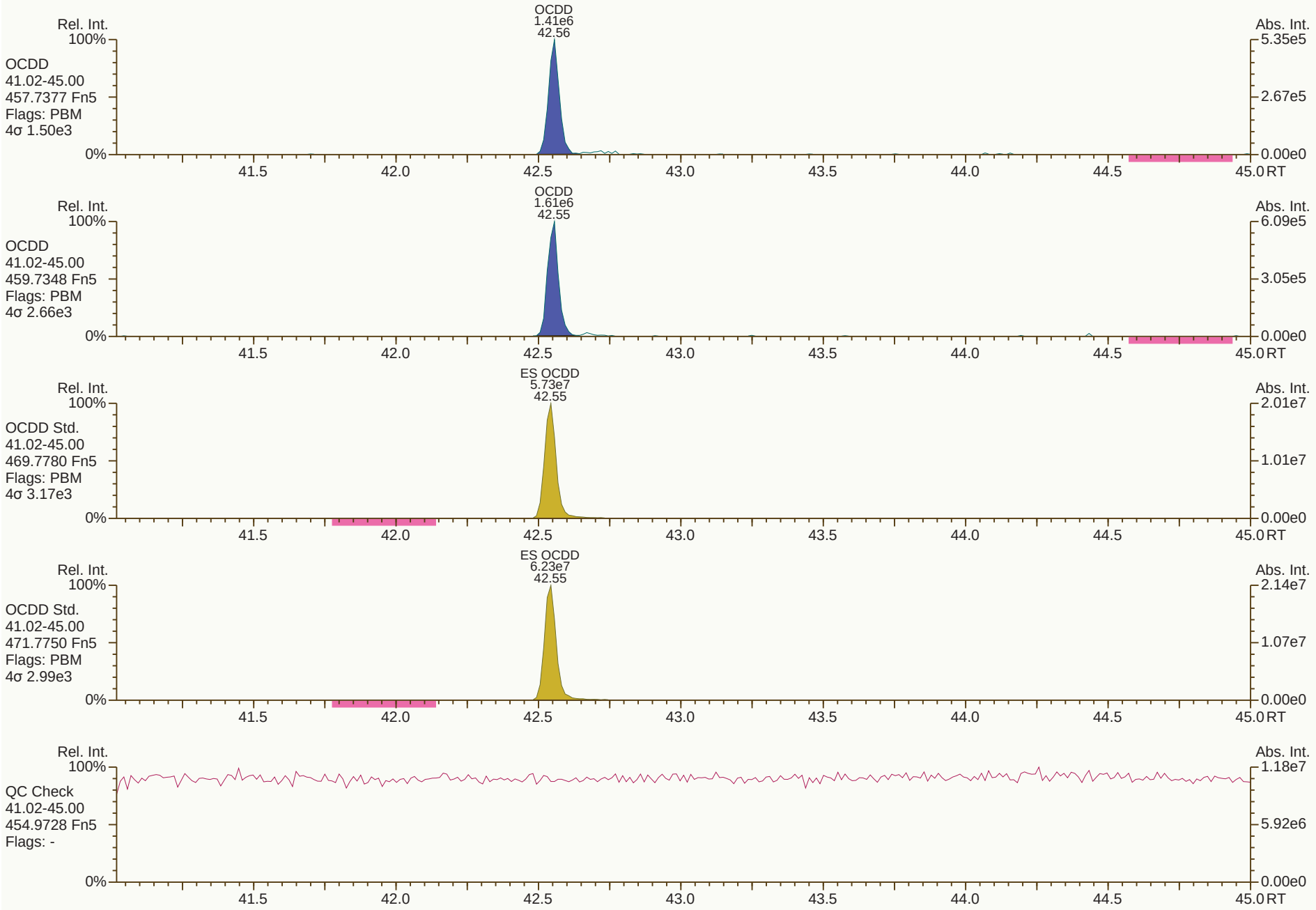
Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS1_200612_DF_RA.utp_res, saved 17-Jun-2020 08:06 (PSW) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 scc: 407-197 *PKD: n/a Printed: 17-Jun-2020 08:18 Page 1 of 12*

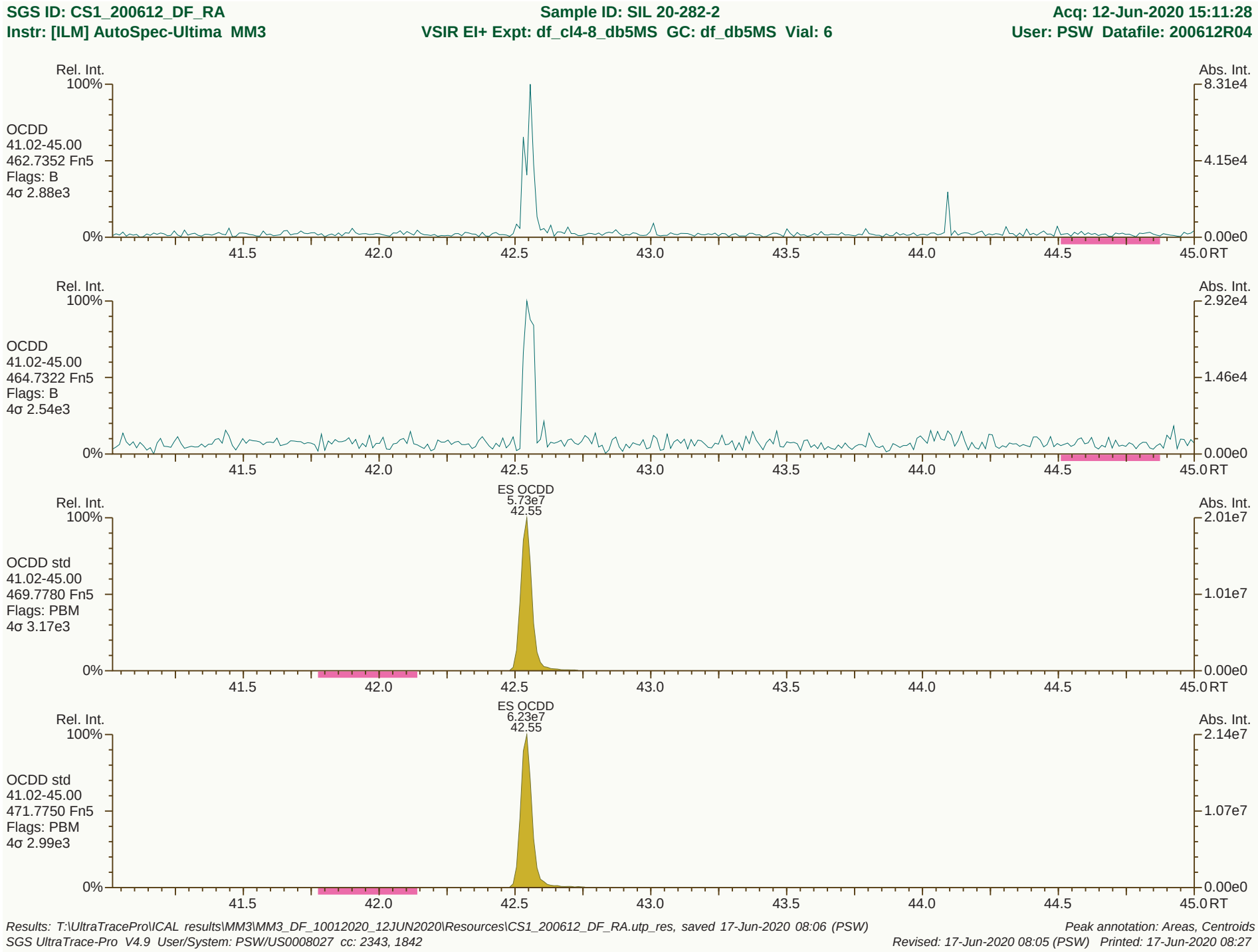

Rel. Int.
100%
TCDD
20.54-29.50
319.8965 Fn1
Flags: PBM
4σ 3.44e3
0%
2378D
3.15e5
27.55
Abs. Int.
9.58e4
4.79e4
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD
20.54-29.50
321.8936 Fn1
Flags: PBM
4σ 2.32e3
0%
2378D
3.58e5
27.55
Abs. Int.
1.06e5
5.31e4
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
37Cl-TCDD
20.54-29.50
327.8850 Fn1
Flags: PBM
4σ 2.34e3
0%
CS 37Cl-2378D
6.18e5
27.55
Abs. Int.
1.28e5
6.40e4
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
331.9368 Fn1
Flags: PBM
4σ 4.05e3
0%
AS 1368D
5.67e7
23.71
TS 1378D
5.57e7
25.82
JS 1234D
5.29e7
26.86
ES 2378D
5.23e7
27.53
FS 1278D
5.21e7
27.87
Abs. Int.
1.28e7
6.40e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
333.9339 Fn1
Flags: PBM
4σ 4.92e3
0%
AS 1368D
7.49e7
23.71
TS 1378D
7.21e7
25.82
JS 1234D
6.80e7
26.86
ES 2378D
6.63e7
27.53
FS 1278D
6.81e7
27.87
Abs. Int.
1.61e7
8.06e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
PeCDD
29.51-34.01
355.8546 Fn2
Flags: PBM
4σ 2.45e3
0%
12378D
1.69e6
33.03
Abs. Int.
4.59e5
2.30e5
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
PeCDD
29.51-34.01
357.8517 Fn2
Flags: PBM
4σ 1.40e3
12378D
1.01e6
33.03
3.08e5
1.54e5
PeCDD Std.
29.51-34.01
367.8949 Fn2
Flags: PBM
4σ 3.84e3
RFF(FS 12478D) = (6.44e7 + 3.96e7) * 100pg / (6.10e7 + 3.79e7) * 100pg * 1 = 1.05
PSW 15-Jun-2020 13:17
OK
CL 17Jun20
FS 12478D
6.44e7
31.77
CS 12347D
5.56e7
32.51
ES 12378D
6.10e7
33.01
1.83e7
9.14e6
PeCDD Std.
29.51-34.01
369.8919 Fn2
Flags: PBM
4σ 3.82e3
FS 12478D
3.96e7
31.77
CS 12347D
3.43e7
32.51
ES 12378D
3.79e7
33.01
1.15e7
5.74e6
QC Check
29.51-34.01
366.9792 Fn2
Flags: -
6.21e6
3.10e6


Rel. Int.
100%
HxCDD
34.02-38.51
389.8156 Fn3
Flags: PBM
4σ 1.86e3
123478D 1.41e6 36.93
123678D 1.40e6 37.04
123789D 1.48e6 37.35
Abs. Int.
4.71e5
2.36e5
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 RT
HxCDD
34.02-38.51
391.8127 Fn3
Flags: PBM
4σ 1.61e3
123478D 1.08e6 36.93
123678D 1.09e6 37.04
123789D 1.19e6 37.35
3.42e5
1.71e5
HxCDD Std.
34.02-38.51
401.8559 Fn3
Flags: PBM
4σ 3.52e3
FS 123468D 6.38e7 35.87
ES 123478D 5.40e7 36.91
ES 123678D 5.16e7 37.03
ES 123789D 6.05e7 37.33
JS 123467D 2.57e7 37.23
1.94e7
9.70e6
HxCDD Std.
34.02-38.51
403.8530 Fn3
Flags: PBM
4σ 2.48e3
FS 123468D 4.93e7 35.87
ES 123478D 4.17e7 36.91
ES 123678D 4.03e7 37.03
ES 123789D 4.69e7 37.33
JS 123467D 1.98e7 37.23
1.52e7
7.59e6
QC Check
34.02-38.51
380.9760 Fn3
Flags: -
2.03e7
1.02e7


Rel. Int.
100%
HpCDD
38.52-41.01
423.7767 Fn4
Flags: PBM
4σ 3.70e3
1234678D
1.04e6
40.10
Abs. Int.
4.18e5
2.09e5
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.52-41.01
425.7737 Fn4
Flags: PBM
4σ 1.87e3
1234678D
9.74e5
40.10
Abs. Int.
4.17e5
2.08e5
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.52-41.01
435.8169 Fn4
Flags: PBM
4σ 2.57e3
FS 1234679D
5.72e7
39.45
ES 1234678D
4.63e7
40.09
Abs. Int.
2.27e7
1.14e7
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.52-41.01
437.8140 Fn4
Flags: PBM
4σ 3.62e3
FS 1234679D
5.27e7
39.45
ES 1234678D
4.23e7
40.09
Abs. Int.
2.16e7
1.08e7
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.52-41.01
430.9728 Fn4
Flags: -
Abs. Int.
1.25e7
6.24e6
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT


OCDD
1.41e6
42.56
Rel. Int.
100%
OCDD
41.02-45.00
457.7377 Fn5
Flags: PBM
4σ 1.50e3
0%
Abs. Int.
5.35e5
2.67e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDD
1.61e6
42.55
Rel. Int.
100%
OCDD
41.02-45.00
459.7348 Fn5
Flags: PBM
4σ 2.66e3
0%
Abs. Int.
6.09e5
3.05e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
5.73e7
42.55
Rel. Int.
100%
OCDD Std.
41.02-45.00
469.7780 Fn5
Flags: PBM
4σ 3.17e3
0%
Abs. Int.
2.01e7
1.01e7
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
6.23e7
42.55
Rel. Int.
100%
OCDD Std.
41.02-45.00
471.7750 Fn5
Flags: PBM
4σ 2.99e3
0%
Abs. Int.
2.14e7
1.07e7
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
1.18e7
5.92e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT


SGS ID: CS1_200612_DF_RA
Sample ID: SIL 20-282-2
Acq: 12-Jun-2020 15:11:28
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 6
User: PSW Datafile: 200612R04
Rel. Int.
Abs. Int.
OCDD
41.02-45.00
462.7352 Fn5
Flags: B
4σ 2.88e3
8.31e4
4.15e4
0.00e0
OCDD
41.02-45.00
464.7322 Fn5
Flags: B
4σ 2.54e3
2.92e4
1.46e4
ES OCDD
5.73e7
42.55
OCDD std
41.02-45.00
469.7780 Fn5
Flags: PBM
4σ 3.17e3
2.01e7
1.01e7
ES OCDD
6.23e7
42.55
OCDD std
41.02-45.00
471.7750 Fn5
Flags: PBM
4σ 2.99e3
2.14e7
1.07e7
100%
0%
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0
RT
Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS1_200612_DF_RA.utp_res, saved 17-Jun-2020 08:06 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 2343, 1842
Revised: 17-Jun-2020 08:05 (PSW) Printed: 17-Jun-2020 08:27


Rel. Int.
100%
TCDF
20.54-29.50
303.9016 Fn1
Flags: PBM
4σ 1.87e3
0%
2378F
4.02e5
26.64
Abs. Int.
1.08e5
5.41e4
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF
20.54-29.50
305.8987 Fn1
Flags: PBM
4σ 1.77e3
0%
2378F
4.92e5
26.64
Abs. Int.
1.11e5
5.55e4
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
315.9419 Fn1
Flags: PBM
4σ 2.42e4
0%
AS 1368F
1.07e8
21.49
JS 1234F
9.00e7
25.22
ES 2378F
9.04e7
26.62
Abs. Int.
2.09e7
1.05e7
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
317.9389 Fn1
Flags: PBM
4σ 1.21e4
0%
AS 1368F
1.34e8
21.49
JS 1234F
1.15e8
25.21
ES 2378F
1.13e8
26.62
Abs. Int.
2.54e7
1.27e7
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
HxCDPE
20.54-29.50
375.8364 Fn1
Flags: PB
4σ 2.31e3
0%
Abs. Int.
7.58e3
3.79e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT

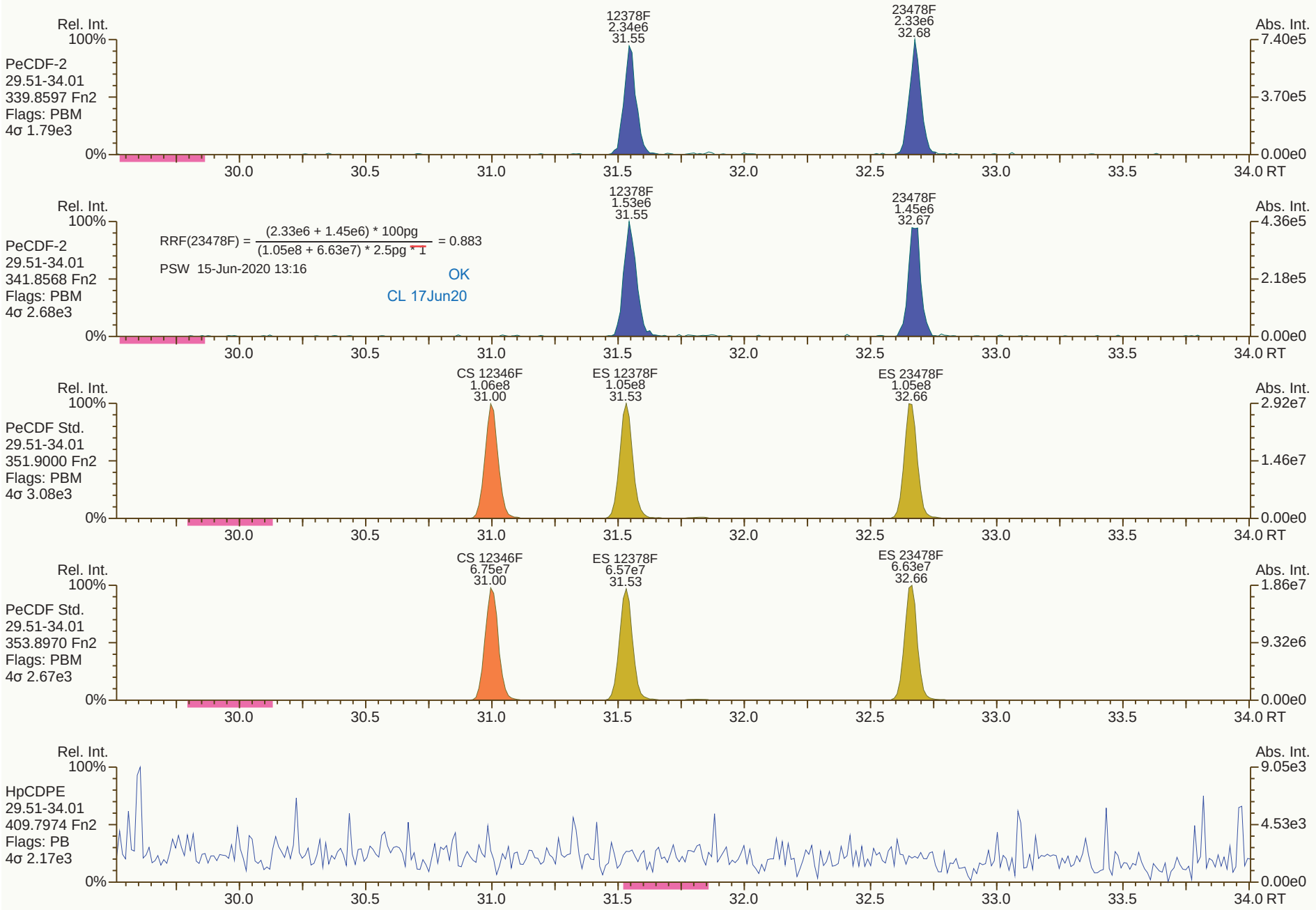
SGS ID: CS1_200612_DF_RA | **Sample ID: SIL 20-282-2** | **Acq: 12-Jun-2020 15:11:28**

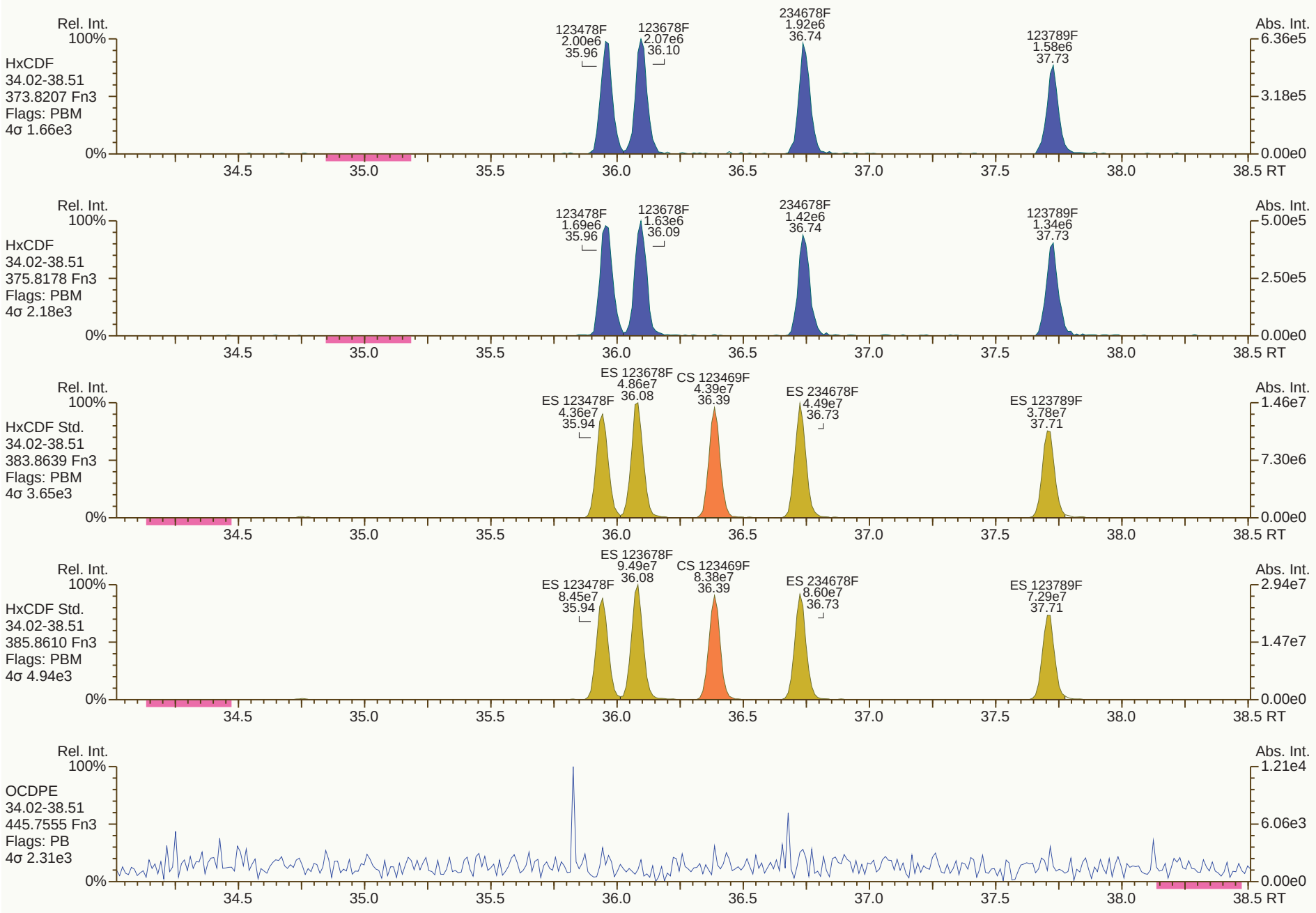
Instr: [ILM] AutoSpec-Ultima MM3 | **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 6** | **User: PSW Datafile: 200612R04**

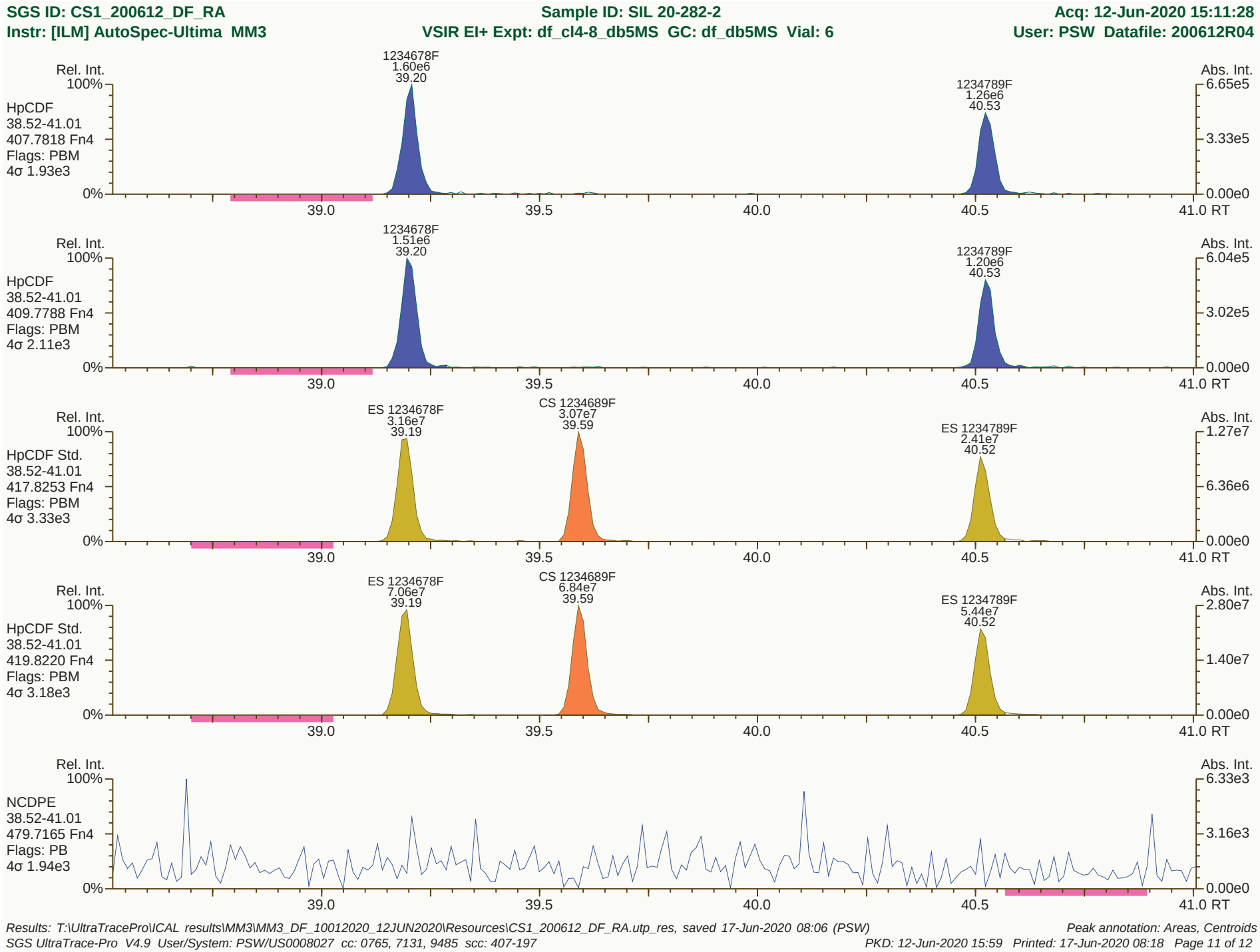


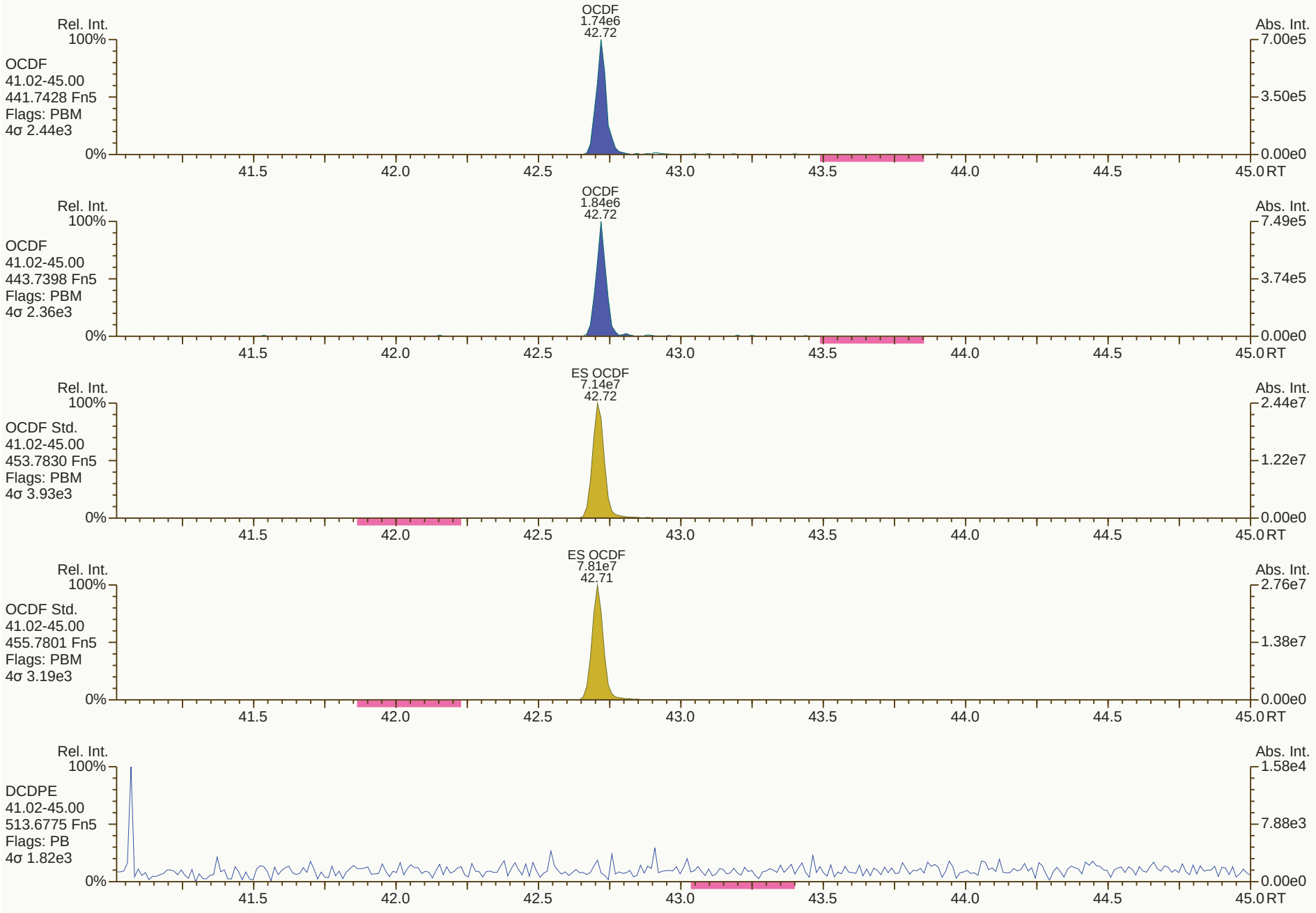
Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS1_200612_DF_RA.utp_res, saved 17-Jun-2020 08:06 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 9812 scc: 407-197 *PKD: 12-Jun-2020 15:59 Printed: 17-Jun-2020 08:18 Page 8 of 12*


Rel. Int.
100%
PeCDF-2
29.51-34.01
339.8597 Fn2
Flags: PBM
4σ 1.79e3
0%
12378F
2.34e6
31.55
23478F
2.33e6
32.68
Abs. Int.
7.40e5
3.70e5
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF-2
29.51-34.01
341.8568 Fn2
Flags: PBM
4σ 2.68e3
0%
RRF(23478F) = (2.33e6 + 1.45e6) * 100pg / (1.05e8 + 6.63e7) * 2.5pg * 1 = 0.883
PSW 15-Jun-2020 13:16
OK
CL 17Jun20
12378F
1.53e6
31.55
23478F
1.45e6
32.67
Abs. Int.
4.36e5
2.18e5
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
351.9000 Fn2
Flags: PBM
4σ 3.08e3
0%
CS 12346F
1.06e8
31.00
ES 12378F
1.05e8
31.53
ES 23478F
1.05e8
32.66
Abs. Int.
2.92e7
1.46e7
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
353.8970 Fn2
Flags: PBM
4σ 2.67e3
0%
CS 12346F
6.75e7
31.00
ES 12378F
6.57e7
31.53
ES 23478F
6.63e7
32.66
Abs. Int.
1.86e7
9.32e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
HpCDPE
29.51-34.01
409.7974 Fn2
Flags: PB
4σ 2.17e3
0%
Abs. Int.
9.05e3
4.53e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT


Rel. Int.
100%
HxCDF
34.02-38.51
373.8207 Fn3
Flags: PBM
4σ 1.66e3
123478F 2.00e6 35.96
123678F 2.07e6 36.10
234678F 1.92e6 36.74
123789F 1.58e6 37.73
Abs. Int.
6.36e5
3.18e5
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 RT
Rel. Int.
100%
HxCDF
34.02-38.51
375.8178 Fn3
Flags: PBM
4σ 2.18e3
123478F 1.69e6 35.96
123678F 1.63e6 36.09
234678F 1.42e6 36.74
123789F 1.34e6 37.73
Abs. Int.
5.00e5
2.50e5
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 RT
Rel. Int.
100%
HxCDF Std.
34.02-38.51
383.8639 Fn3
Flags: PBM
4σ 3.65e3
ES 123478F 4.36e7 35.94
ES 123678F 4.86e7 36.08
CS 123469F 4.39e7 36.39
ES 234678F 4.49e7 36.73
ES 123789F 3.78e7 37.71
Abs. Int.
1.46e7
7.30e6
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 RT
Rel. Int.
100%
HxCDF Std.
34.02-38.51
385.8610 Fn3
Flags: PBM
4σ 4.94e3
ES 123478F 8.45e7 35.94
ES 123678F 9.49e7 36.08
CS 123469F 8.38e7 36.39
ES 234678F 8.60e7 36.73
ES 123789F 7.29e7 37.71
Abs. Int.
2.94e7
1.47e7
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 RT
Rel. Int.
100%
OCDPE
34.02-38.51
445.7555 Fn3
Flags: PB
4σ 2.31e3
Abs. Int.
1.21e4
6.06e3
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 RT


SGS ID: CS1_200612_DF_RA
Sample ID: SIL 20-282-2
Acq: 12-Jun-2020 15:11:28
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 6
User: PSW Datafile: 200612R04
Rel. Int.
Abs. Int.
HpCDF
38.52-41.01
407.7818 Fn4
Flags: PBM
4σ 1.93e3
1234678F
1.60e6
39.20
1234789F
1.26e6
40.53
6.65e5
3.33e5
0.00e0
HpCDF
38.52-41.01
409.7788 Fn4
Flags: PBM
4σ 2.11e3
1234678F
1.51e6
39.20
1234789F
1.20e6
40.53
6.04e5
3.02e5
0.00e0
HpCDF Std.
38.52-41.01
417.8253 Fn4
Flags: PBM
4σ 3.33e3
ES 1234678F
3.16e7
39.19
CS 1234689F
3.07e7
39.59
ES 1234789F
2.41e7
40.52
1.27e7
6.36e6
0.00e0
HpCDF Std.
38.52-41.01
419.8220 Fn4
Flags: PBM
4σ 3.18e3
ES 1234678F
7.06e7
39.19
CS 1234689F
6.84e7
39.59
ES 1234789F
5.44e7
40.52
2.80e7
1.40e7
0.00e0
NCDPE
38.52-41.01
479.7165 Fn4
Flags: PB
4σ 1.94e3
6.33e3
3.16e3
0.00e0
100%
0%
39.0
39.5
40.0
40.5
41.0 RT
Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS1_200612_DF_RA.utp_res, saved 17-Jun-2020 08:06 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 0765, 7131, 9485 scc: 407-197
PKD: 12-Jun-2020 15:59 Printed: 17-Jun-2020 08:18 Page 11 of 12


OCDF
1.74e6
42.72
Rel. Int.
100%
OCDF
41.02-45.00
441.7428 Fn5
Flags: PBM
4σ 2.44e3
0%
Abs. Int.
7.00e5
3.50e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDF
1.84e6
42.72
Rel. Int.
100%
OCDF
41.02-45.00
443.7398 Fn5
Flags: PBM
4σ 2.36e3
0%
Abs. Int.
7.49e5
3.74e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDF
7.14e7
42.72
Rel. Int.
100%
OCDF Std.
41.02-45.00
453.7830 Fn5
Flags: PBM
4σ 3.93e3
0%
Abs. Int.
2.44e7
1.22e7
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDF
7.81e7
42.71
Rel. Int.
100%
OCDF Std.
41.02-45.00
455.7801 Fn5
Flags: PBM
4σ 3.19e3
0%
Abs. Int.
2.76e7
1.38e7
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
DCDPE
41.02-45.00
513.6775 Fn5
Flags: PB
4σ 1.82e3
0%
Abs. Int.
1.58e4
7.88e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

SGS ID: CS1_200612_DF_RA
Instr: [ILM] AutoSpec-Ultima MM3

Sample ID: SIL 20-282-2
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 6

Acq: 12-Jun-2020 15:11:28
User: PSW Datafile: 200612R04



Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS1_200612_DF_RA.utp_res, saved 17-Jun-2020 08:06 (PSW)
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 8083, 8647

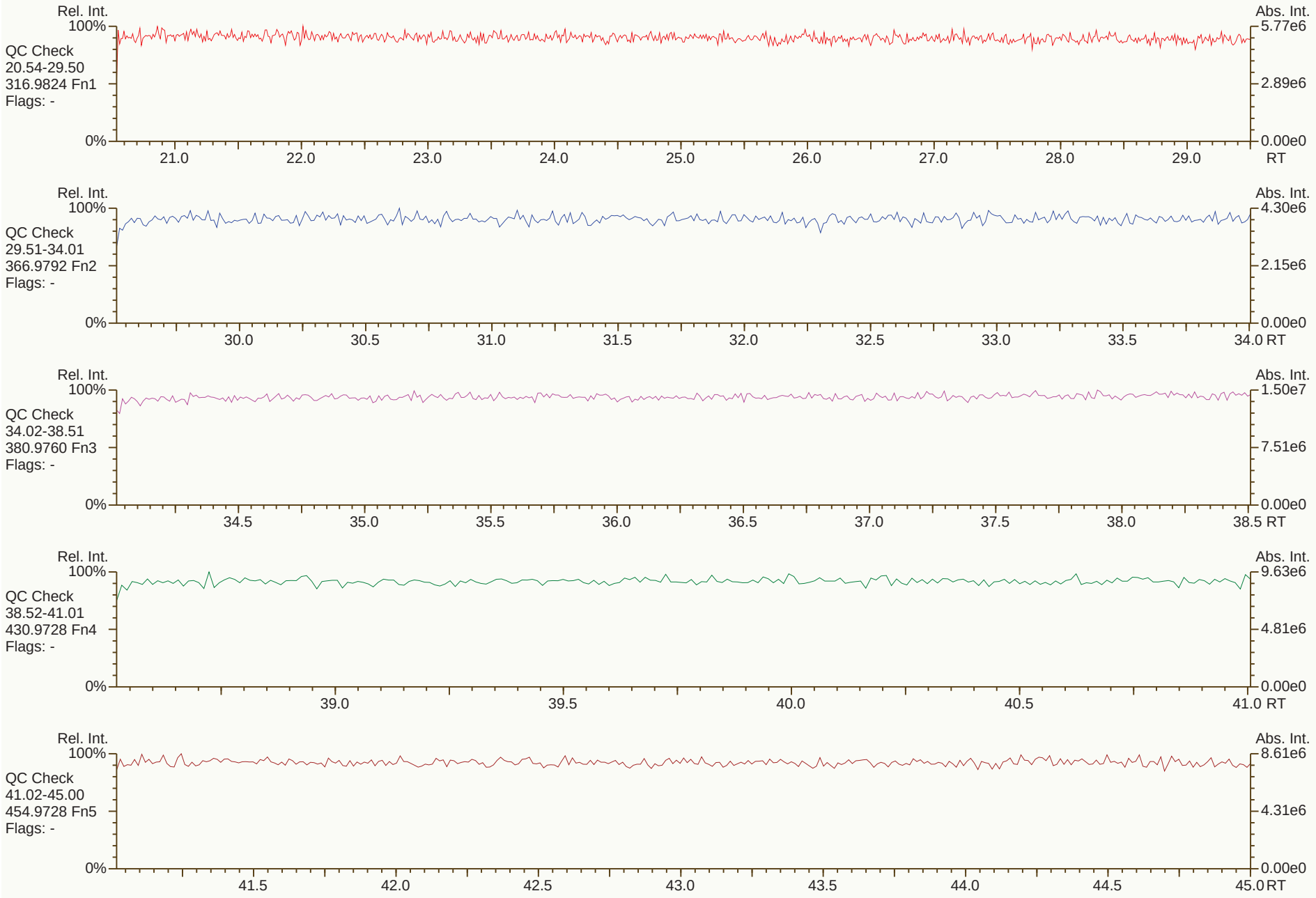
Peak annotation: Areas, Centroids
Revised: 17-Jun-2020 08:03 (PSW) Printed: 17-Jun-2020 08:27

Dioxin/Furan QC Summary		Acq'd: 12 Jun 2020 16:02 PSW				ICAL: MM3_DF_10012020_12JUN2020	
Lab ID: CS2_200612_DF_RA		UTP: 15-Jun-2020 11:50:00 PSW				Checkcode: 434-640-RQY	
Sample ID: SIL 20-282-1		Report: 15 Jun 2020 11:54 pw				Datafile: 200612R05	
Name	**RT**	**Response**	**RA**	**OK**	**Ref. RRFs**	**Calc. RRFs**	**Dev'n**
2378-TCDD	27.56	2.06E+06	0.78	Y	1.18	1.16	-2%
12378-PeCDD	33.03	8.11E+06	1.59	Y	1.14	1.09	-4%
123478-HxCDD	36.93	7.68E+06	1.27	Y	1.09	1.05	-4%
123678-HxCDD	37.05	7.51E+06	1.25	Y	1.13	1.07	-5%
123789-HxCDD	37.35	8.32E+06	1.29	Y	1.05	1.03	-2%
1234678-HpCDD	40.11	6.15E+06	1.08	Y	0.98	0.94	-5%
OCDD	42.56	9.73E+06	0.90	Y	1.08	1.05	-2%
2378-TCDF	26.65	2.78E+06	0.75	Y	0.98	0.92	-6%
12378-PeCDF	31.55	1.20E+07	1.48	Y	0.95	0.92	-3%
23478-PeCDF	32.68	1.18E+07	1.60	Y	0.95	0.92	-3%
123478-HxCDF	35.96	1.12E+07	1.27	Y	1.20	1.17	-2%
123678-HxCDF	36.10	1.13E+07	1.28	Y	1.07	1.04	-3%
234678-HxCDF	36.75	1.06E+07	1.19	Y	1.10	1.08	-2%
123789-HxCDF	37.73	9.06E+06	1.26	Y	1.09	1.04	-4%
1234678-HpCDF	39.21	9.50E+06	1.05	Y	1.28	1.25	-3%
1234789-HpCDF	40.53	7.36E+06	1.02	Y	1.27	1.20	-6%
OCDF	42.73	1.09E+07	0.88	Y	1.01	0.95	-6%
ES 2378-TCDD	27.53	8.93E+07	0.77	Y	1.01	0.99	-1%
ES 12378-PeCDD	33.01	7.47E+07	1.58	Y	0.87	0.83	-5%
ES 123478-HxCDD	36.92	7.29E+07	1.31	Y	1.10	1.08	-1%
ES 123678-HxCDD	37.03	7.03E+07	1.27	Y	1.06	1.04	-1%
ES 123789-HxCDD	37.34	8.09E+07	1.30	Y	1.22	1.20	-1%
ES 1234678-HpCDD	40.1	6.55E+07	1.07	Y	0.99	0.97	-2%
ES OCDD	42.55	9.24E+07	0.92	Y	0.67	0.69	3%
ES 2378-TCDF	26.63	1.51E+08	0.78	Y	1.01	1.00	-1%
ES 12378-PeCDF	31.54	1.30E+08	1.60	Y	0.90	0.87	-4%
ES 23478-PeCDF	32.66	1.28E+08	1.59	Y	0.89	0.85	-5%
ES 123478-HxCDF	35.95	9.56E+07	0.52	Y	1.43	1.42	-1%
ES 123678-HxCDF	36.08	1.09E+08	0.53	Y	1.63	1.62	-1%
ES 234678-HxCDF	36.73	9.85E+07	0.53	Y	1.48	1.46	-1%
ES 123789-HxCDF	37.71	8.68E+07	0.52	Y	1.29	1.29	0%
ES 1234678-HpCDF	39.2	7.63E+07	0.44	Y	1.15	1.13	-1%
ES 1234789-HpCDF	40.52	6.14E+07	0.45	Y	0.91	0.91	1%
ES OCDF	42.72	1.14E+08	0.88	Y	0.83	0.85	3%

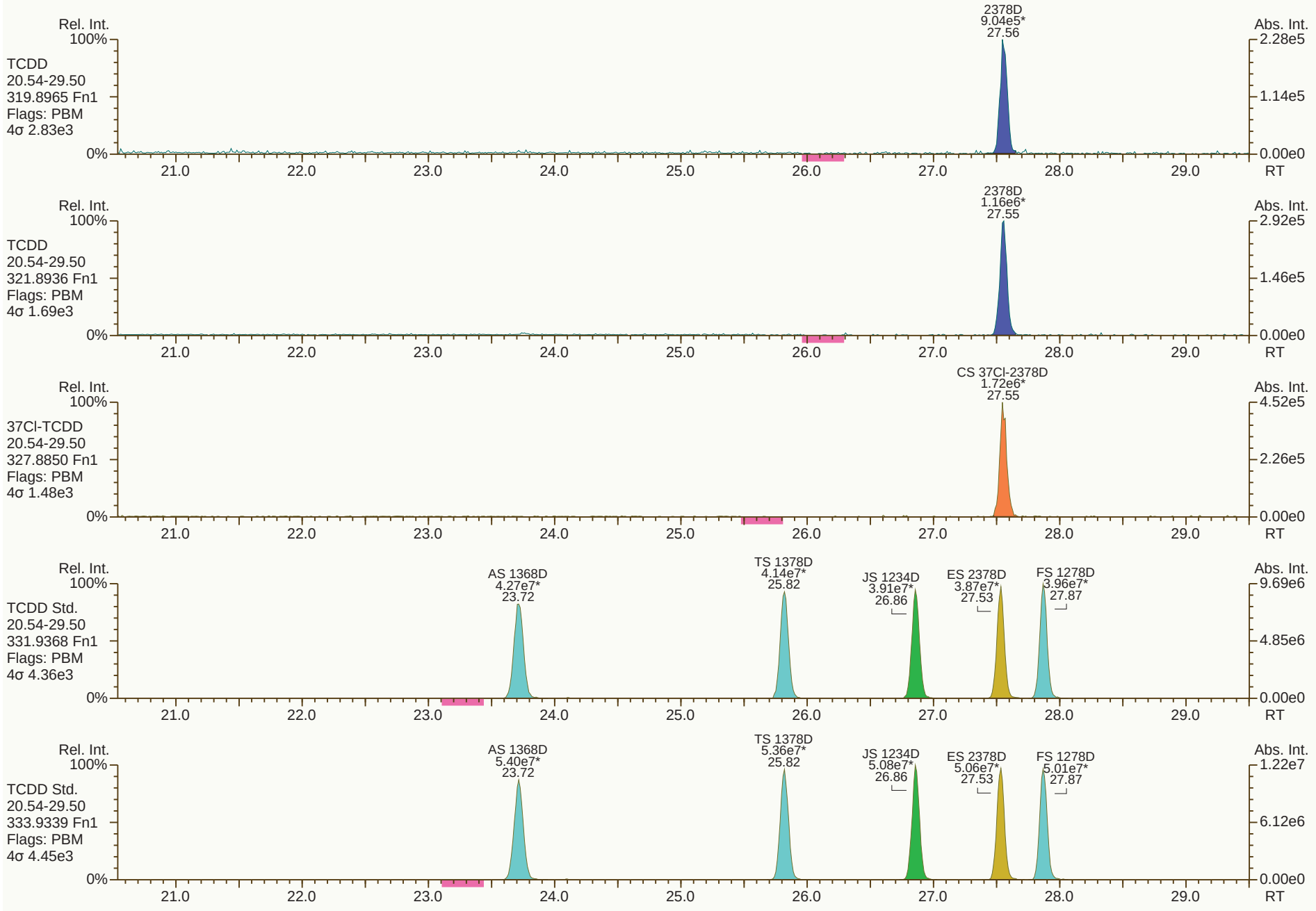
Dioxin/Furan QC Summary	Acq'd: 12 Jun 2020 16:02 PSW	ICAL: MM3_DF_10012020_12JUN2020
Lab ID: CS2_200612_DF_RA	UTP: 15-Jun-2020 11:50:00 PSW	Checkcode: 434-640-RQY
Sample ID: SIL 20-282-1	Report: 15 Jun 2020 11:54 pw	Datafile: 200612R05

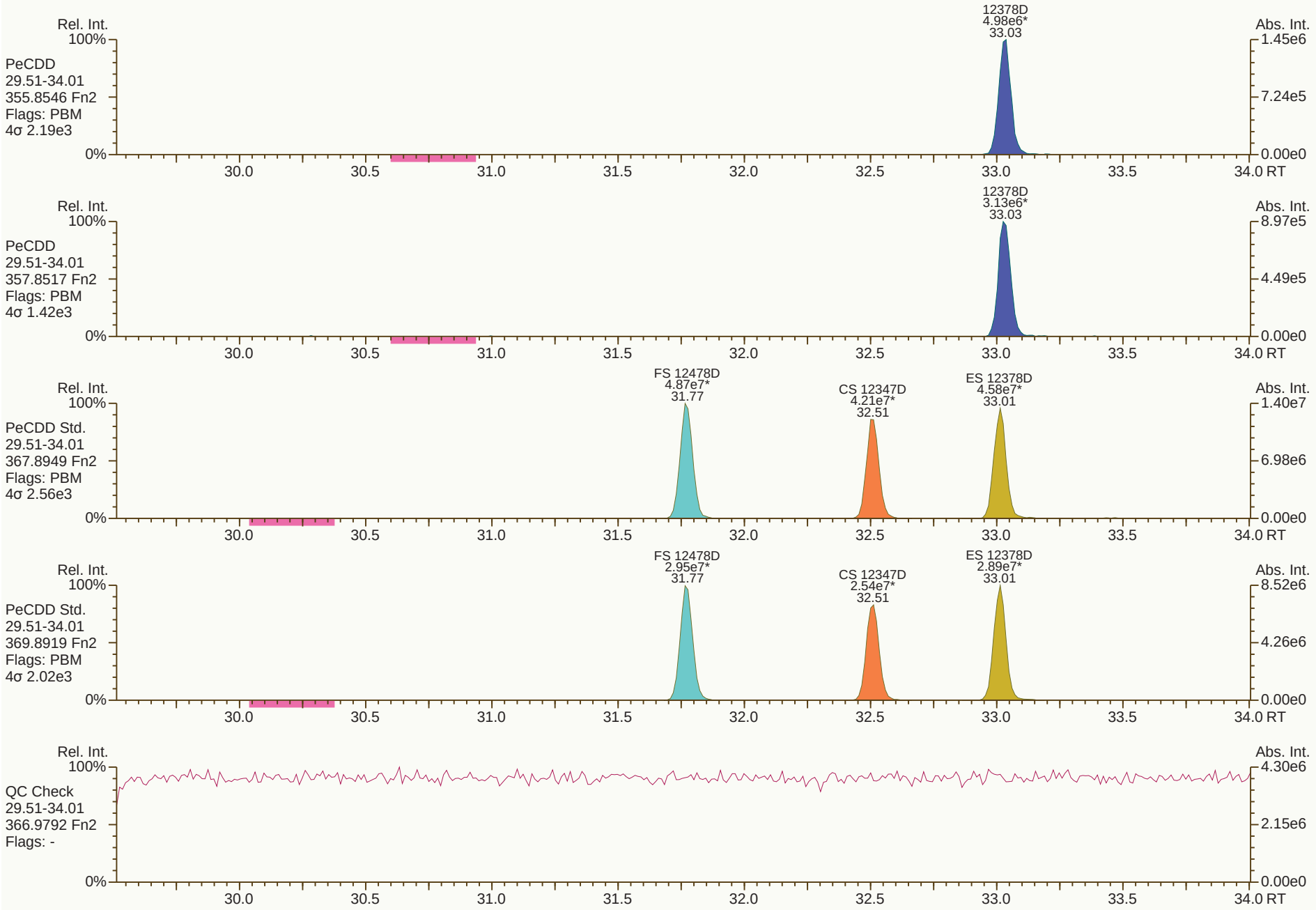
Name	RT	Response	RA	OK	Ref. RRFs	Calc. RRFs	Dev'n
JS 1234-TCDD	26.86	8.99E+07	0.77	Y	-	-	-
JS 1234-TCDF	25.22	1.50E+08	0.80	Y	-	-	-
JS 123467-HxCDD	37.23	3.37E+07	1.27	Y	-	-	-
CS 37Cl-2378-TCDD	27.55	1.72E+06	n/a	-	1.04	0.96	-8%
CS 12347-PeCDD	32.51	6.75E+07	1.66	Y	0.74	0.75	1%
CS 12346-PeCDF	31.00	1.32E+08	1.54	Y	0.86	0.88	2%
CS 123469-HxCDF	36.39	9.55E+07	0.52	Y	1.36	1.42	5%
CS 1234689-HpCDF	39.60	7.38E+07	0.45	Y	1.05	1.10	4%
SS 37Cl-2378-TCDD	27.55	1.72E+06	n/a	-	1.04	0.96	-7%
SS 12347-PeCDD	32.51	6.75E+07	1.66	Y	0.86	0.90	6%
SS 12346-PeCDF	31.00	1.32E+08	1.54	Y	0.96	1.01	6%
SS 123469-HxCDF	36.39	9.55E+07	0.52	Y	0.83	0.88	5%
SS 1234689-HpCDF	39.60	7.38E+07	0.45	Y	0.92	0.97	5%
AS 1368-TCDD	23.72	9.67E+07	0.79	Y	1.08	1.08	0%
AS 1368-TCDF	21.50	1.78E+08	0.79	Y	1.18	1.18	0%
FS 1278-TCDD	27.87	8.97E+07	0.79	Y	1.00	1.00	1%
FS 12478-PeCDD	31.77	7.82E+07	1.65	Y	1.00	1.05	5%
FS 123468-HxCDD	35.87	8.35E+07	1.28	Y	1.11	1.15	3%
FS 1234679-HpCDD	39.46	8.16E+07	1.03	Y	1.19	1.25	5%
TS 1378-TCDD	25.82	9.50E+07	0.77	Y	1.06	1.06	1%
OCDD-a	42.55	5.74E+05	2.47	Y	0.07	0.06	-12%
OCDF-a	42.72	7.29E+05	2.64	Y	0.06	0.06	8%

SGS ID: CS2_200612_DF_RA **Sample ID: SIL 20-282-1** **Acq: 12-Jun-2020 16:02:35**
Instr: [ILM] AutoSpec-Ultima MM3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 7** **User: PSW Datafile: 200612R05**



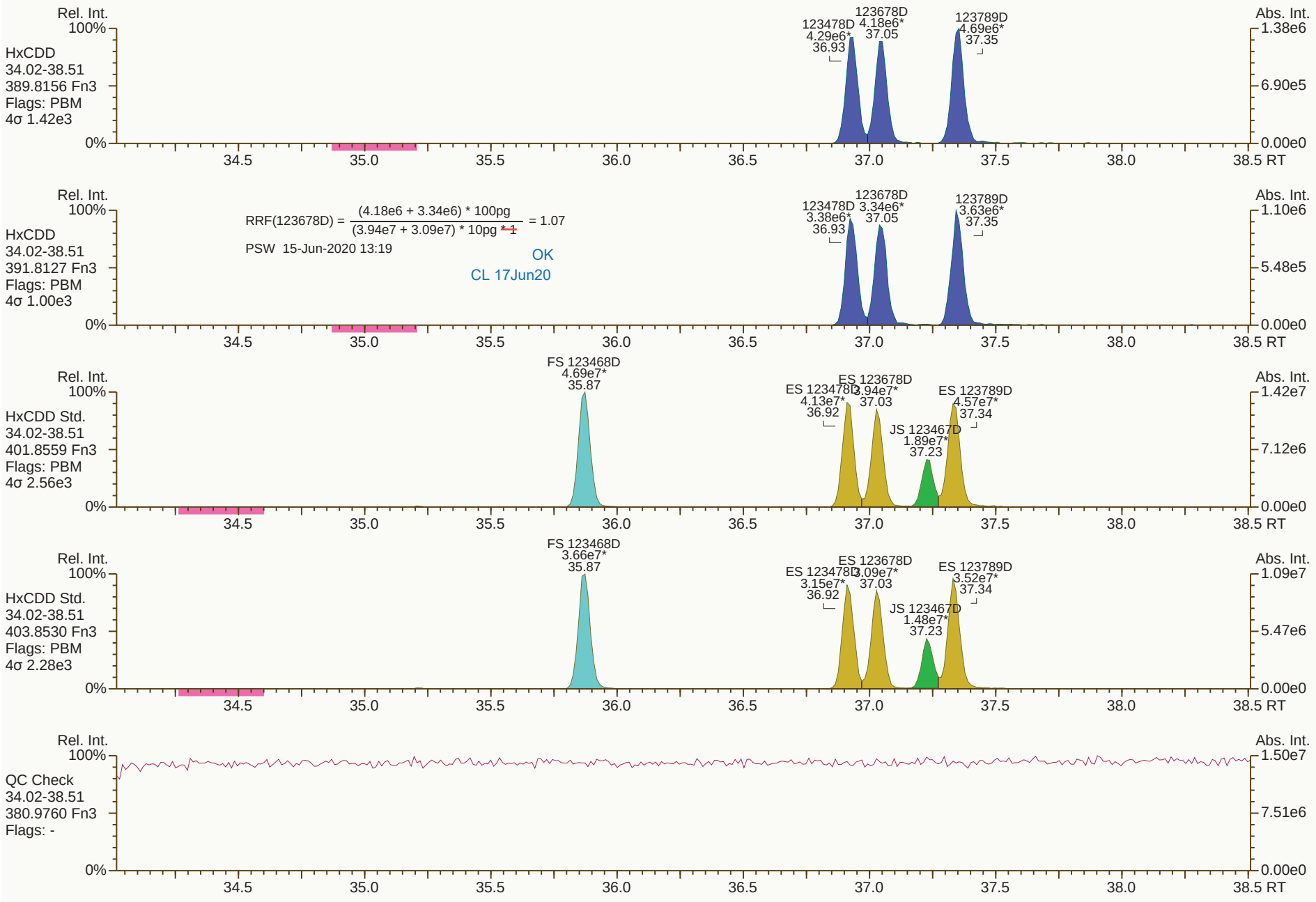
Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS2_200612_DF_RA.utp_res, saved 15-Jun-2020 13:21 (PSW) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 scc: 434-640 *PKD: n/a Printed: 15-Jun-2020 13:39 Page 1 of 12*

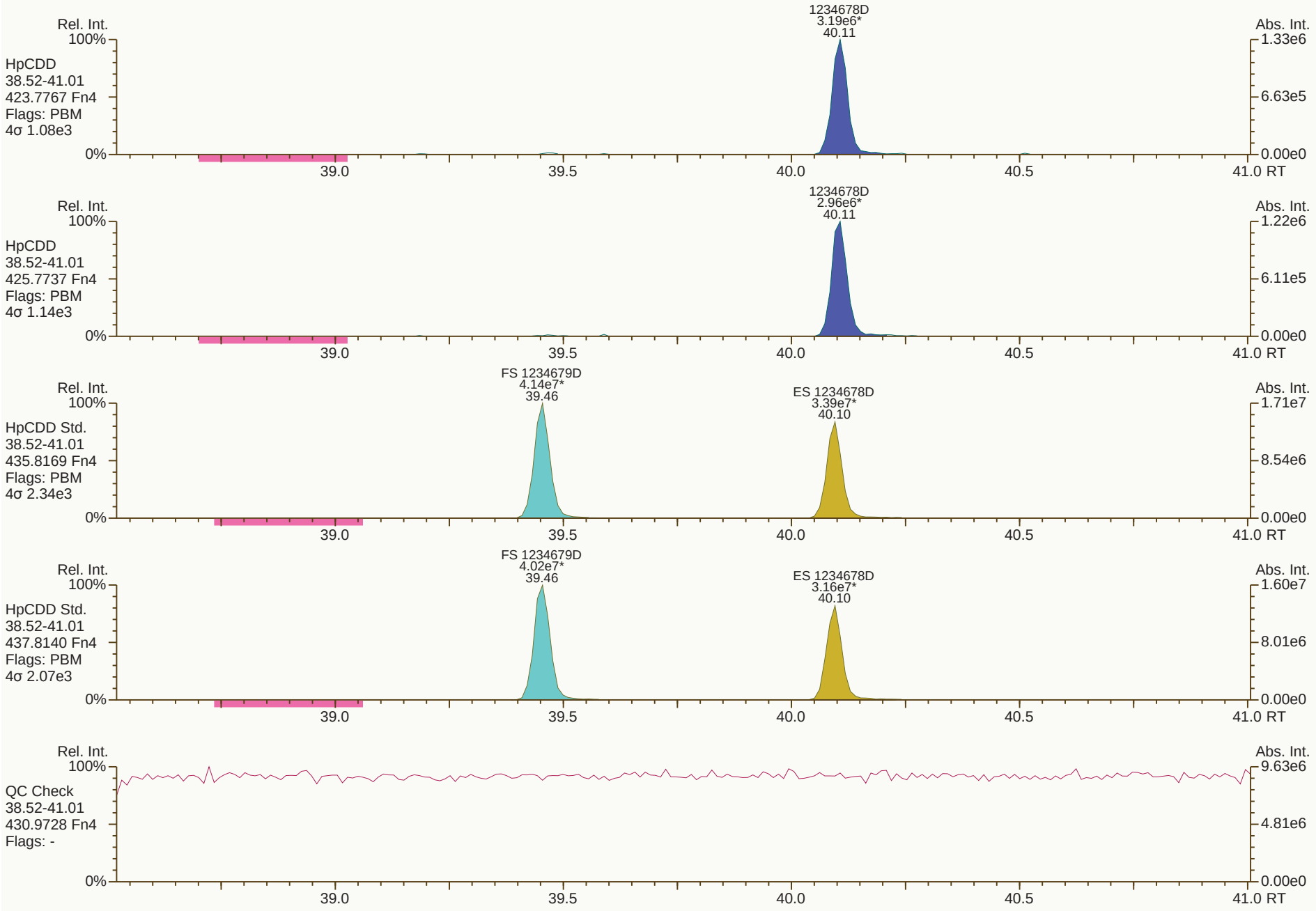

Rel. Int.
100%
TCDD
20.54-29.50
319.8965 Fn1
Flags: PBM
4σ 2.83e3
2378D
9.04e5*
27.56
Abs. Int.
2.28e5
1.14e5
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD
20.54-29.50
321.8936 Fn1
Flags: PBM
4σ 1.69e3
2378D
1.16e6*
27.55
Abs. Int.
2.92e5
1.46e5
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
37Cl-TCDD
20.54-29.50
327.8850 Fn1
Flags: PBM
4σ 1.48e3
CS 37Cl-2378D
1.72e6*
27.55
Abs. Int.
4.52e5
2.26e5
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
331.9368 Fn1
Flags: PBM
4σ 4.36e3
AS 1368D
4.27e7*
23.72
TS 1378D
4.14e7*
25.82
JS 1234D
3.91e7*
26.86
ES 2378D
3.87e7*
27.53
FS 1278D
3.96e7*
27.87
Abs. Int.
9.69e6
4.85e6
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
333.9339 Fn1
Flags: PBM
4σ 4.45e3
AS 1368D
5.40e7*
23.72
TS 1378D
5.36e7*
25.82
JS 1234D
5.08e7*
26.86
ES 2378D
5.06e7*
27.53
FS 1278D
5.01e7*
27.87
Abs. Int.
1.22e7
6.12e6
0.00e0
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT

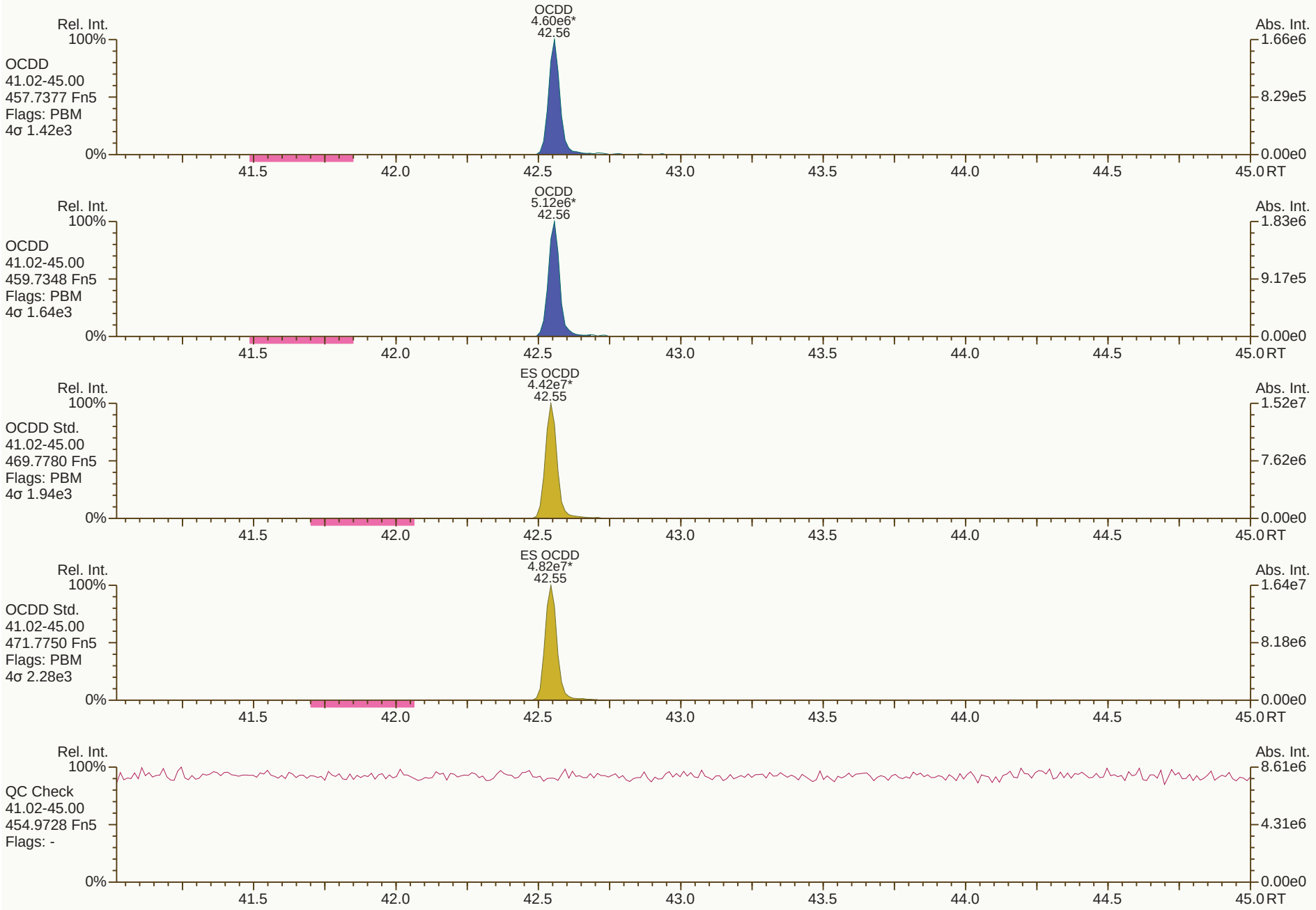


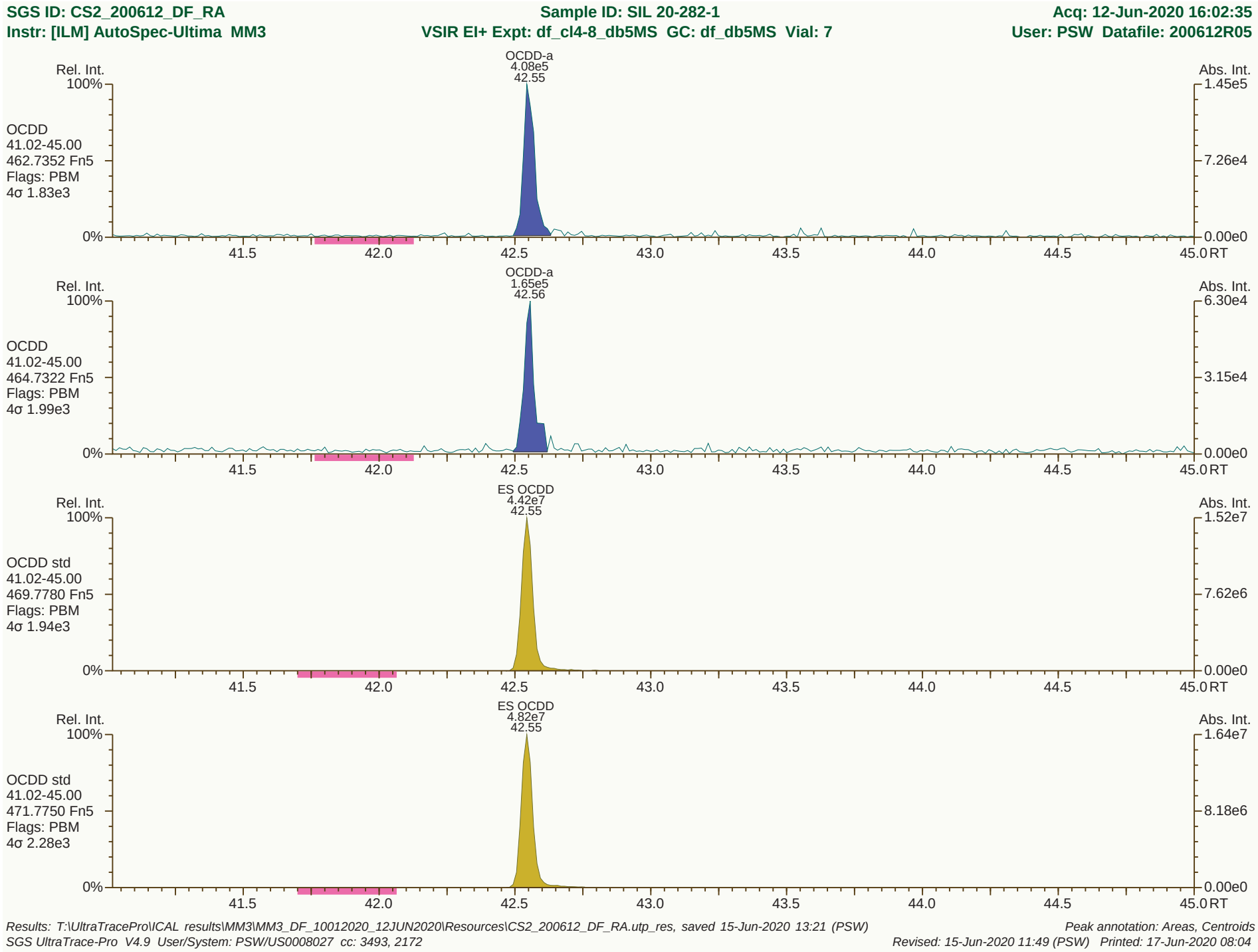
Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS2_200612_DF_RA.utp_res, saved 15-Jun-2020 13:21 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 6518, 3044 scc: 434-640 *PKD: 15-Jun-2020 08:09 Printed: 15-Jun-2020 13:39 Page 3 of 12*


Rel. Int.
100%
HxCDD
34.02-38.51
389.8156 Fn3
Flags: PBM
4σ 1.42e3
123478D 4.29e6* 36.93
123678D 4.18e6* 37.05
123789D 4.69e6* 37.35
Abs. Int.
1.38e6
6.90e5
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 RT
HxCDD
34.02-38.51
391.8127 Fn3
Flags: PBM
4σ 1.00e3
RRF(123678D) = (4.18e6 + 3.34e6) * 100pg / (3.94e7 + 3.09e7) * 10pg * 1 = 1.07
PSW 15-Jun-2020 13:19
OK
CL 17Jun20
123478D 3.38e6* 36.93
123678D 3.34e6* 37.05
123789D 3.63e6* 37.35
1.10e6
5.48e5
HxCDD Std.
34.02-38.51
401.8559 Fn3
Flags: PBM
4σ 2.56e3
FS 123468D 4.69e7* 35.87
ES 123478D 4.13e7* 36.92
ES 123678D 3.94e7* 37.03
JS 123467D 1.89e7* 37.23
ES 123789D 4.57e7* 37.34
1.42e7
7.12e6
HxCDD Std.
34.02-38.51
403.8530 Fn3
Flags: PBM
4σ 2.28e3
FS 123468D 3.66e7* 35.87
ES 123478D 3.15e7* 36.92
ES 123678D 3.09e7* 37.03
JS 123467D 1.48e7* 37.23
ES 123789D 3.52e7* 37.34
1.09e7
5.47e6
QC Check
34.02-38.51
380.9760 Fn3
Flags: -
1.50e7
7.51e6
0.00e0


Rel. Int.
100%
HpCDD
38.52-41.01
423.7767 Fn4
Flags: PBM
4σ 1.08e3
1234678D
3.19e6*
40.11
Abs. Int.
1.33e6
6.63e5
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.52-41.01
425.7737 Fn4
Flags: PBM
4σ 1.14e3
1234678D
2.96e6*
40.11
Abs. Int.
1.22e6
6.11e5
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.52-41.01
435.8169 Fn4
Flags: PBM
4σ 2.34e3
FS 1234679D
4.14e7*
39.46
ES 1234678D
3.39e7*
40.10
Abs. Int.
1.71e7
8.54e6
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.52-41.01
437.8140 Fn4
Flags: PBM
4σ 2.07e3
FS 1234679D
4.02e7*
39.46
ES 1234678D
3.16e7*
40.10
Abs. Int.
1.60e7
8.01e6
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.52-41.01
430.9728 Fn4
Flags: -
Abs. Int.
9.63e6
4.81e6
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT

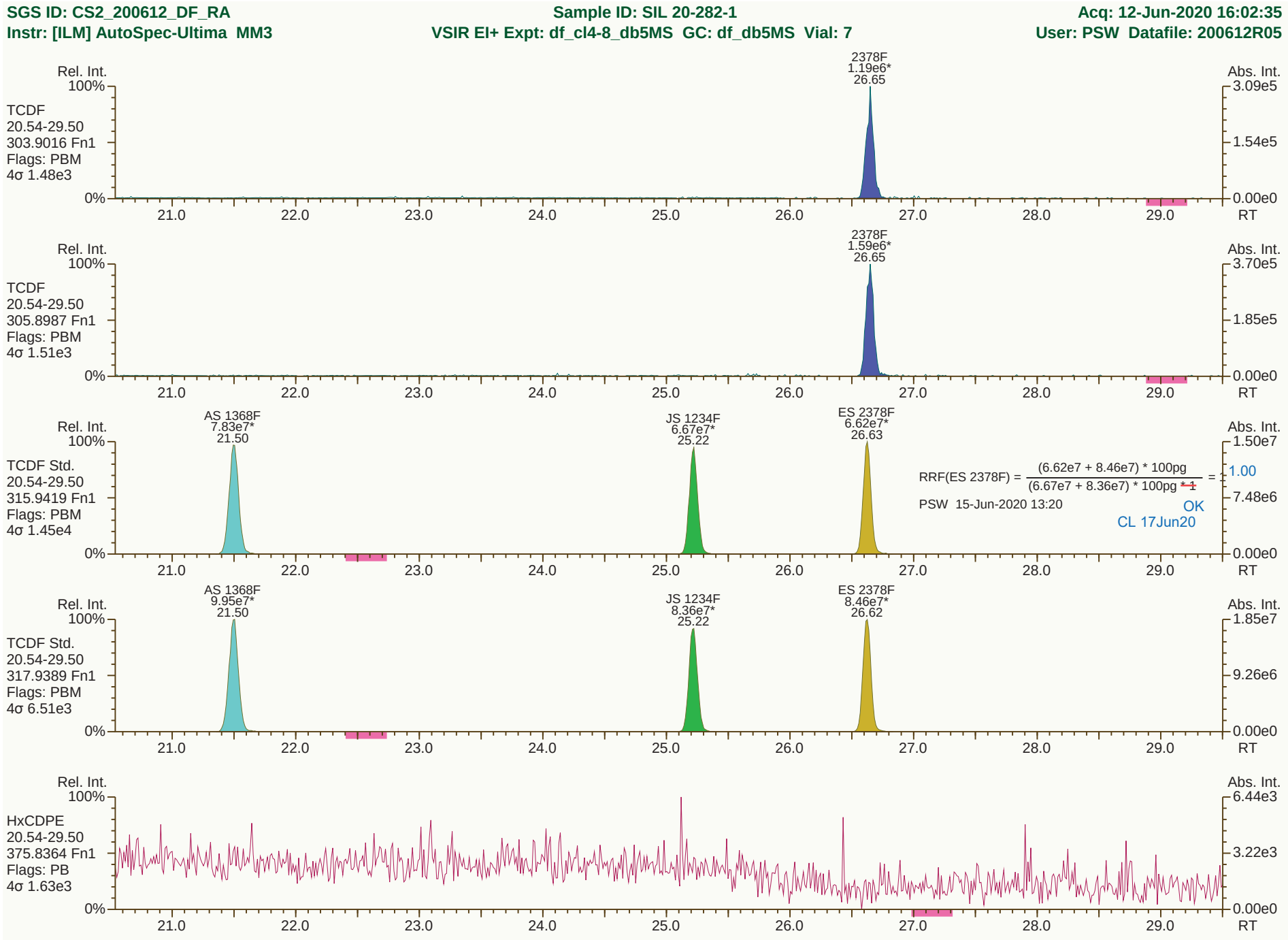

OCDD
4.60e6*
42.56
Rel. Int.
100%
OCDD
41.02-45.00
457.7377 Fn5
Flags: PBM
4σ 1.42e3
0%
Abs. Int.
1.66e6
8.29e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDD
5.12e6*
42.56
Rel. Int.
100%
OCDD
41.02-45.00
459.7348 Fn5
Flags: PBM
4σ 1.64e3
0%
Abs. Int.
1.83e6
9.17e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
4.42e7*
42.55
Rel. Int.
100%
OCDD Std.
41.02-45.00
469.7780 Fn5
Flags: PBM
4σ 1.94e3
0%
Abs. Int.
1.52e7
7.62e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
4.82e7*
42.55
Rel. Int.
100%
OCDD Std.
41.02-45.00
471.7750 Fn5
Flags: PBM
4σ 2.28e3
0%
Abs. Int.
1.64e7
8.18e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
8.61e6
4.31e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT


SGS ID: CS2_200612_DF_RA
Sample ID: SIL 20-282-1
Acq: 12-Jun-2020 16:02:35
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 7
User: PSW Datafile: 200612R05
OCDD-a
4.08e5
42.55
Rel. Int.
100%
Abs. Int.
1.45e5
7.26e4
0.00e0
OCDD
41.02-45.00
462.7352 Fn5
Flags: PBM
4σ 1.83e3
0%
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDD-a
1.65e5
42.56
Rel. Int.
100%
Abs. Int.
6.30e4
3.15e4
0.00e0
OCDD
41.02-45.00
464.7322 Fn5
Flags: PBM
4σ 1.99e3
0%
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
4.42e7
42.55
Rel. Int.
100%
Abs. Int.
1.52e7
7.62e6
0.00e0
OCDD std
41.02-45.00
469.7780 Fn5
Flags: PBM
4σ 1.94e3
0%
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
4.82e7
42.55
Rel. Int.
100%
Abs. Int.
1.64e7
8.18e6
0.00e0
OCDD std
41.02-45.00
471.7750 Fn5
Flags: PBM
4σ 2.28e3
0%
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS2_200612_DF_RA.utp_res, saved 15-Jun-2020 13:21 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 3493, 2172
Revised: 15-Jun-2020 11:49 (PSW) Printed: 17-Jun-2020 08:04

SGS ID: CS2_200612_DF_RA
Instr: [ILM] AutoSpec-Ultima MM3

Sample ID: SIL 20-282-1
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 7

Acq: 12-Jun-2020 16:02:35
User: PSW Datafile: 200612R05



Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS2_200612_DF_RA.utp_res, saved 15-Jun-2020 13:21 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 9959, 9617, 0658 scc: 434-640
PKD: 15-Jun-2020 08:09 Printed: 15-Jun-2020 13:39 Page 7 of 12

SGS ID: CS2_200612_DF_RA | **Sample ID: SIL 20-282-1** | **Acq: 12-Jun-2020 16:02:35**

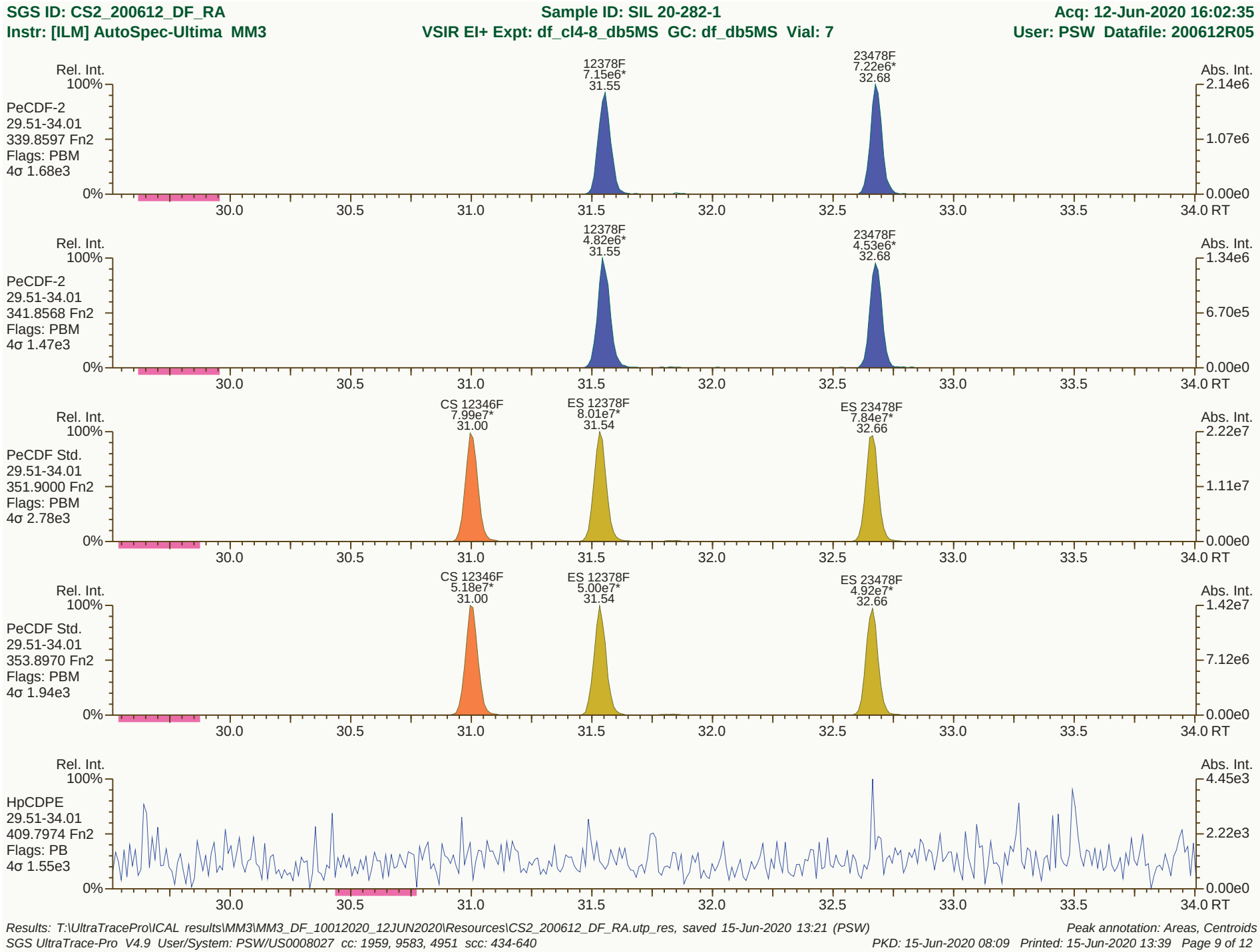
Instr: [ILM] AutoSpec-Ultima MM3 | **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 7** | **User: PSW Datafile: 200612R05**

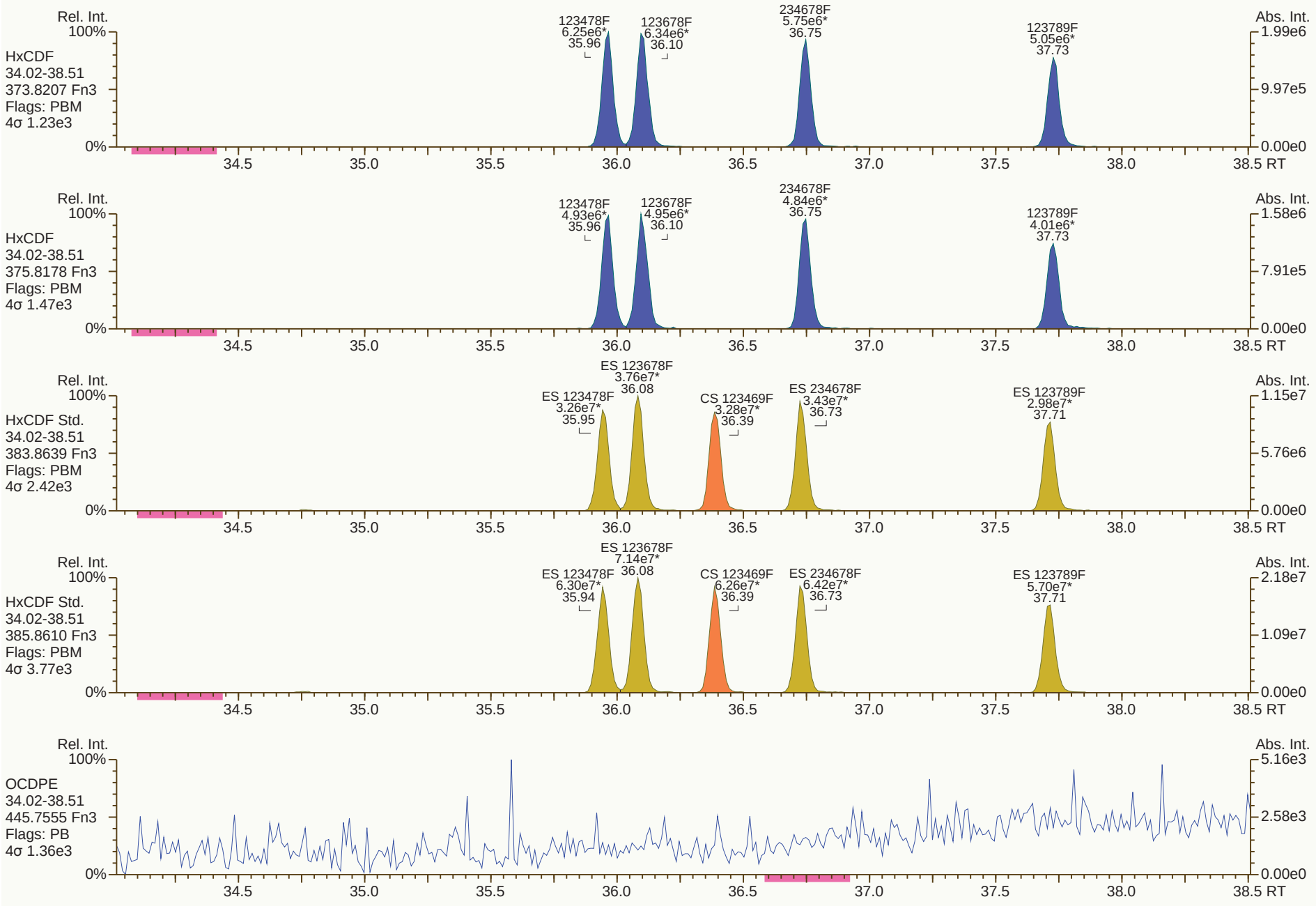


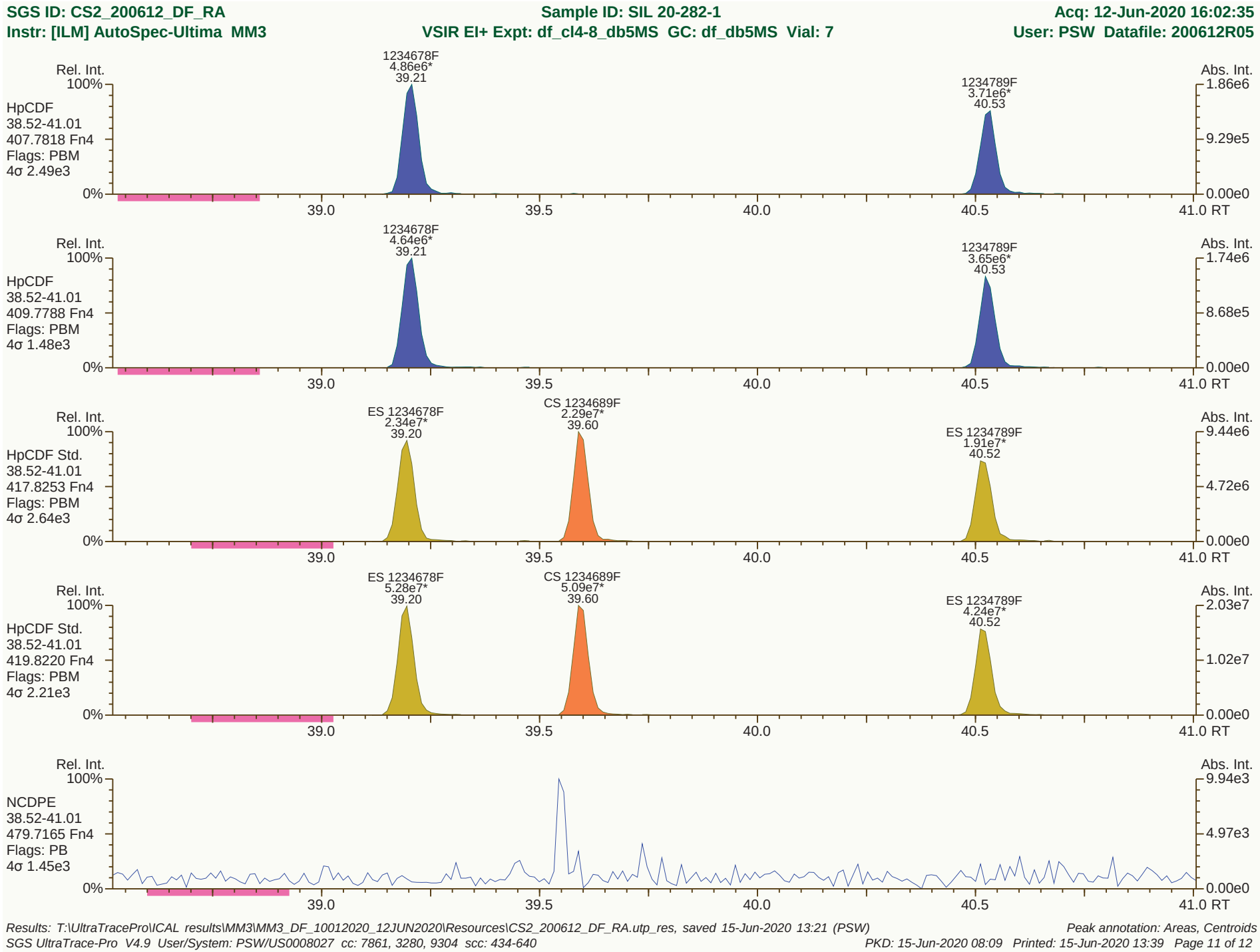
Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS2_200612_DF_RA.utp_res, saved 15-Jun-2020 13:21 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 0511 scc: 434-640 *PKD: 15-Jun-2020 08:09 Printed: 15-Jun-2020 13:39 Page 8 of 12*

SGS ID: CS2_200612_DF_RA
Instr: [ILM] AutoSpec-Ultima MM3
Sample ID: SIL 20-282-1
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 7
Acq: 12-Jun-2020 16:02:35
User: PSW Datafile: 200612R05




Rel. Int.
100%
HxCDF
34.02-38.51
373.8207 Fn3
Flags: PBM
4σ 1.23e3
0%
123478F
6.25e6*
35.96
123678F
6.34e6*
36.10
234678F
5.75e6*
36.75
123789F
5.05e6*
37.73
Abs. Int.
1.99e6
9.97e5
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDF
34.02-38.51
375.8178 Fn3
Flags: PBM
4σ 1.47e3
0%
123478F
4.93e6*
35.96
123678F
4.95e6*
36.10
234678F
4.84e6*
36.75
123789F
4.01e6*
37.73
Abs. Int.
1.58e6
7.91e5
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDF Std.
34.02-38.51
383.8639 Fn3
Flags: PBM
4σ 2.42e3
0%
ES 123678F
3.76e7*
36.08
ES 123478F
3.26e7*
35.95
CS 123469F
3.28e7*
36.39
ES 234678F
3.43e7*
36.73
ES 123789F
2.98e7*
37.71
Abs. Int.
1.15e7
5.76e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDF Std.
34.02-38.51
385.8610 Fn3
Flags: PBM
4σ 3.77e3
0%
ES 123678F
7.14e7*
36.08
ES 123478F
6.30e7*
35.94
CS 123469F
6.26e7*
36.39
ES 234678F
6.42e7*
36.73
ES 123789F
5.70e7*
37.71
Abs. Int.
2.18e7
1.09e7
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
OCDPE
34.02-38.51
445.7555 Fn3
Flags: PB
4σ 1.36e3
0%
Abs. Int.
5.16e3
2.58e3
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT



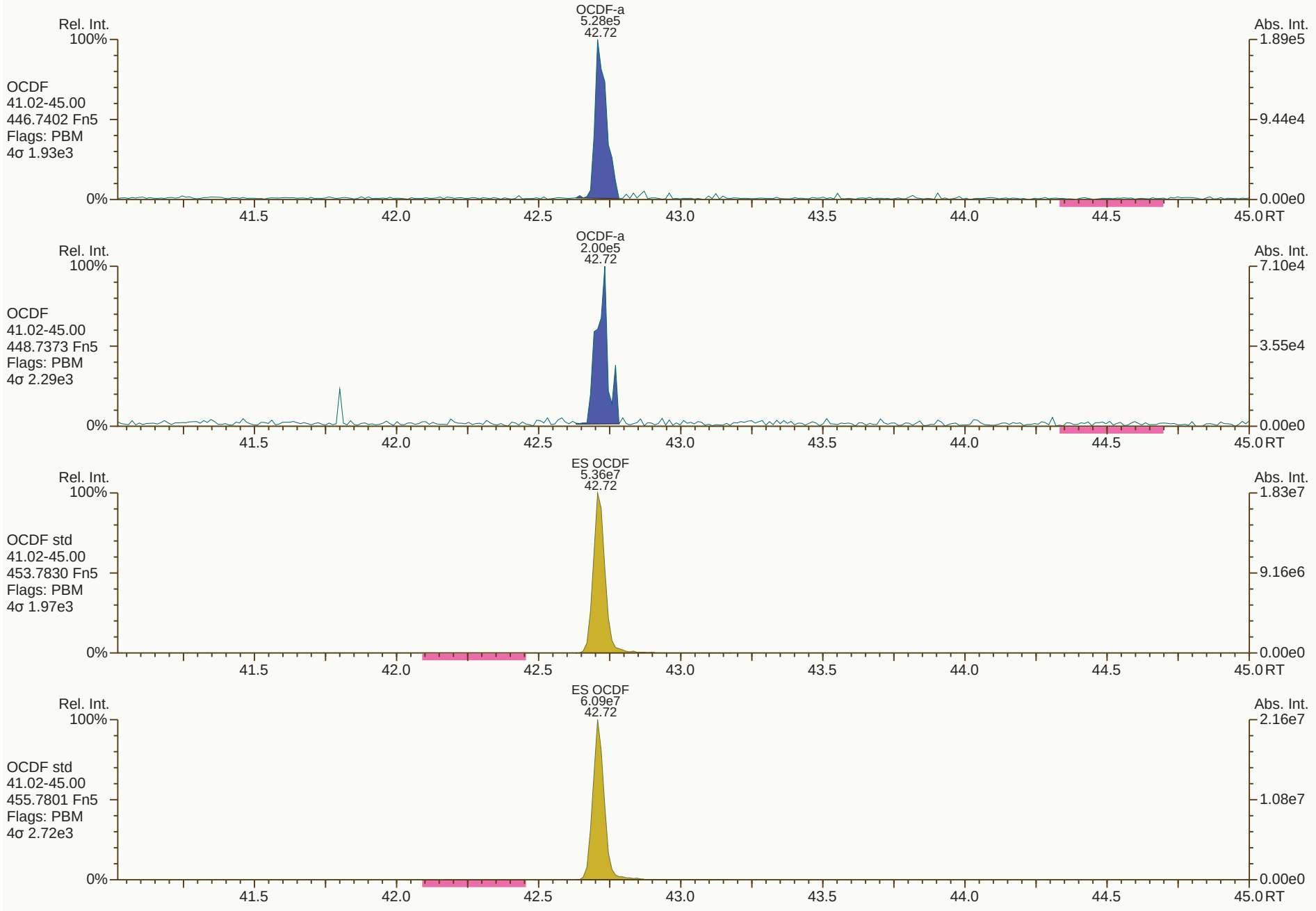
Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS2_200612_DF_RA.utp_res, saved 15-Jun-2020 13:21 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 7861, 3280, 9304 scc: 434-640 *PKD: 15-Jun-2020 08:09 Printed: 15-Jun-2020 13:39 Page 11 of 12*


OCDF
5.12e6*
42.73
Rel. Int.
100%
OCDF
41.02-45.00
441.7428 Fn5
Flags: PBM
4σ 1.30e3
0%
Abs. Int.
1.84e6
9.20e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDF
5.80e6*
42.73
Rel. Int.
100%
OCDF
41.02-45.00
443.7398 Fn5
Flags: PBM
4σ 1.51e3
0%
Abs. Int.
2.09e6
1.04e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDF
5.36e7*
42.72
Rel. Int.
100%
OCDF Std.
41.02-45.00
453.7830 Fn5
Flags: PBM
4σ 1.97e3
0%
Abs. Int.
1.83e7
9.16e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDF
6.09e7*
42.72
Rel. Int.
100%
OCDF Std.
41.02-45.00
455.7801 Fn5
Flags: PBM
4σ 2.72e3
0%
Abs. Int.
2.16e7
1.08e7
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
DCDPE
41.02-45.00
513.6775 Fn5
Flags: PB
4σ 1.27e3
0%
Abs. Int.
3.46e3
1.73e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

SGS ID: CS2_200612_DF_RA | Sample ID: SIL 20-282-1 | Acq: 12-Jun-2020 16:02:35

Instr: [ILM] AutoSpec-Ultima MM3 | VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 7 | User: PSW Datafile: 200612R05



Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS2_200612_DF_RA.utp_res, saved 15-Jun-2020 13:21 (PSW)

Peak annotation: Areas, Centroids

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 1474, 4551

Revised: 15-Jun-2020 11:49 (PSW) Printed: 17-Jun-2020 08:04

Dioxin/Furan QC Summary	Acq'd: 12 Jun 2020 16:49 PSW	ICAL: MM3_DF_10012020_12JUN2020
Lab ID: CS3_200612_DF_RB	UTP: 15-Jun-2020 11:50:28 PSW	Checkcode: 726-607-FQH
Sample ID: SIL 20-449-3	Report: 15 Jun 2020 11:54 pw	Datafile: 200612R06

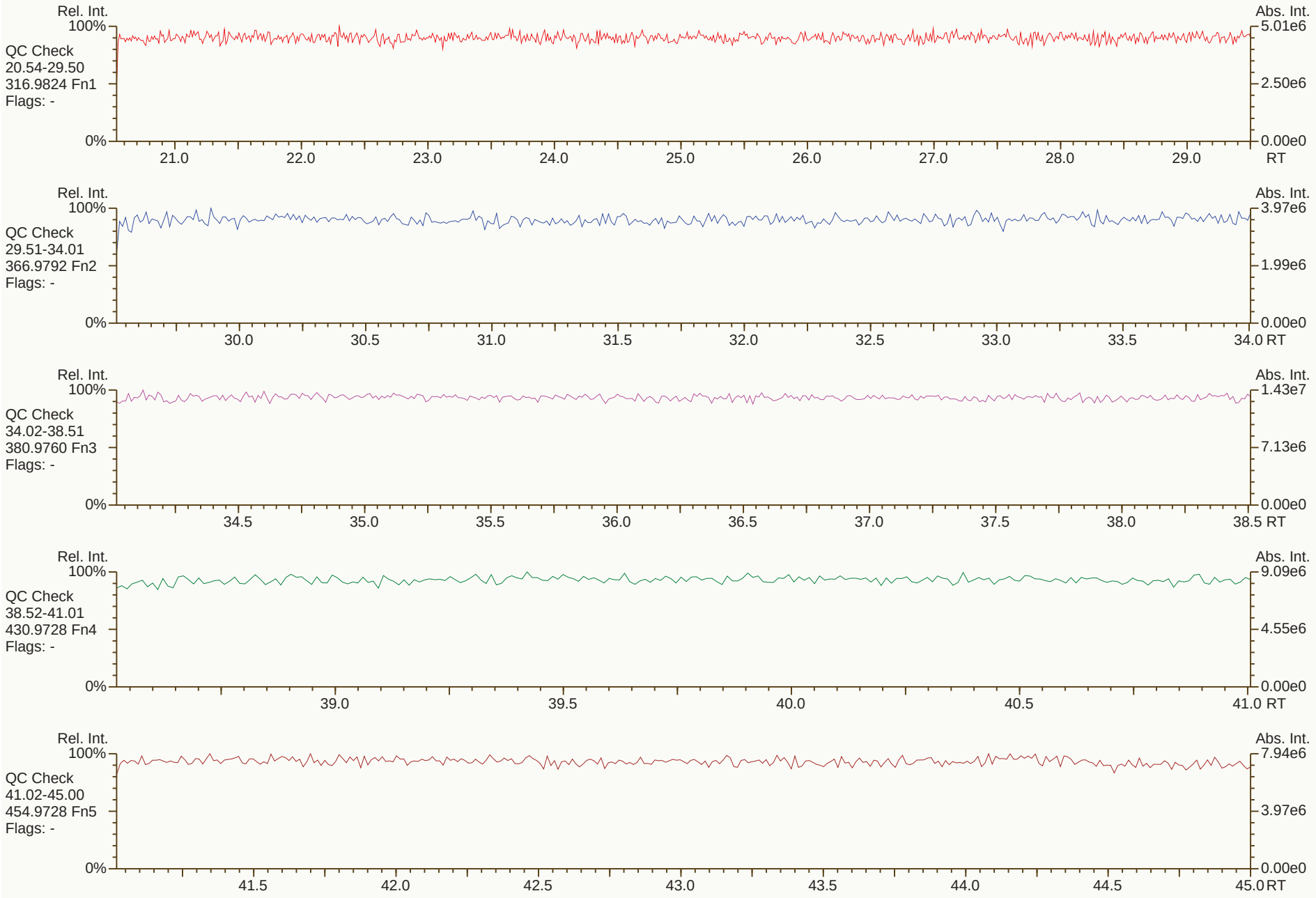
Name	RT	Response	RA	OK	Ref. RRFs	Calc. RRFs	Dev'n
2378-TCDD	27.56	1.07E+07	0.84	Y	1.18	1.17	-1%
12378-PeCDD	33.04	4.34E+07	1.59	Y	1.14	1.15	1%
123478-HxCDD	36.94	4.07E+07	1.25	Y	1.09	1.08	-1%
123678-HxCDD	37.05	4.14E+07	1.24	Y	1.13	1.16	3%
123789-HxCDD	37.36	4.45E+07	1.24	Y	1.05	1.06	1%
1234678-HpCDD	40.12	3.37E+07	1.05	Y	0.98	1.02	4%
OCDD	42.57	4.86E+07	0.89	Y	1.08	1.09	1%
2378-TCDF	26.65	1.47E+07	0.76	Y	0.98	0.99	1%
12378-PeCDF	31.56	6.16E+07	1.56	Y	0.95	0.96	1%
23478-PeCDF	32.69	6.09E+07	1.54	Y	0.95	0.96	1%
123478-HxCDF	35.97	5.76E+07	1.23	Y	1.20	1.19	0%
123678-HxCDF	36.11	5.99E+07	1.25	Y	1.07	1.10	3%
234678-HxCDF	36.76	5.60E+07	1.22	Y	1.10	1.13	3%
123789-HxCDF	37.74	4.77E+07	1.26	Y	1.09	1.11	1%
1234678-HpCDF	39.21	4.94E+07	1.04	Y	1.28	1.31	2%
1234789-HpCDF	40.54	3.88E+07	1.02	Y	1.27	1.28	1%
OCDF	42.73	5.47E+07	0.92	Y	1.01	1.00	-1%
ES 2378-TCDD	27.54	9.10E+07	0.77	Y	1.01	0.97	-3%
ES 12378-PeCDD	33.02	7.56E+07	1.64	Y	0.87	0.81	-7%
ES 123478-HxCDD	36.92	7.51E+07	1.29	Y	1.10	1.07	-2%
ES 123678-HxCDD	37.04	7.11E+07	1.29	Y	1.06	1.01	-5%
ES 123789-HxCDD	37.34	8.42E+07	1.32	Y	1.22	1.20	-1%
ES 1234678-HpCDD	40.1	6.61E+07	1.08	Y	0.99	0.94	-5%
ES OCDD	42.56	8.93E+07	0.90	Y	0.67	0.64	-5%
ES 2378-TCDF	26.63	1.49E+08	0.79	Y	1.01	0.99	-2%
ES 12378-PeCDF	31.54	1.28E+08	1.59	Y	0.90	0.85	-6%
ES 23478-PeCDF	32.67	1.27E+08	1.55	Y	0.89	0.84	-5%
ES 123478-HxCDF	35.95	9.65E+07	0.52	Y	1.43	1.37	-4%
ES 123678-HxCDF	36.09	1.09E+08	0.53	Y	1.63	1.55	-5%
ES 234678-HxCDF	36.74	9.91E+07	0.53	Y	1.48	1.41	-5%
ES 123789-HxCDF	37.72	8.63E+07	0.52	Y	1.29	1.23	-5%
ES 1234678-HpCDF	39.2	7.54E+07	0.46	Y	1.15	1.07	-6%
ES 1234789-HpCDF	40.53	6.06E+07	0.44	Y	0.91	0.86	-5%
ES OCDF	42.73	1.09E+08	0.88	Y	0.83	0.77	-6%

Dioxin/Furan QC Summary	Acq'd: 12 Jun 2020 16:49 PSW	ICAL: MM3_DF_10012020_12JUN2020
Lab ID: CS3_200612_DF_RB	UTP: 15-Jun-2020 11:50:28 PSW	Checkcode: 726-607-FQH
Sample ID: SIL 20-449-3	Report: 15 Jun 2020 11:54 pw	Datafile: 200612R06

Name	RT	Response	RA	OK	Ref. RRFs	Calc. RRFs	Dev'n
JS 1234-TCDD	26.87	9.36E+07	0.77	Y	-	-	-
JS 1234-TCDF	25.22	1.51E+08	0.79	Y	-	-	-
JS 123467-HxCDD	37.24	3.51E+07	1.26	Y	-	-	-
CS 37Cl-2378-TCDD	27.56	9.25E+06	n/a	-	1.04	0.99	-5%
CS 12347-PeCDD	32.52	6.77E+07	1.65	Y	0.74	0.72	-2%
CS 12346-PeCDF	31.01	1.28E+08	1.59	Y	0.86	0.85	-1%
CS 123469-HxCDF	36.40	9.30E+07	0.51	Y	1.36	1.32	-2%
CS 1234689-HpCDF	39.61	7.18E+07	0.45	Y	1.05	1.02	-3%
SS 37Cl-2378-TCDD	27.56	9.25E+06	n/a	-	1.04	1.02	-2%
SS 12347-PeCDD	32.52	6.77E+07	1.65	Y	0.86	0.89	5%
SS 12346-PeCDF	31.01	1.28E+08	1.59	Y	0.96	1.00	4%
SS 123469-HxCDF	36.40	9.30E+07	0.51	Y	0.83	0.85	2%
SS 1234689-HpCDF	39.61	7.18E+07	0.45	Y	0.92	0.95	3%
AS 1368-TCDD	23.72	1.02E+08	0.76	Y	1.08	1.09	1%
AS 1368-TCDF	21.50	1.81E+08	0.79	Y	1.18	1.20	2%
FS 1278-TCDD	27.88	9.15E+07	0.78	Y	1.00	1.01	1%
FS 12478-PeCDD	31.78	7.82E+07	1.64	Y	1.00	1.03	4%
FS 123468-HxCDD	35.88	8.61E+07	1.28	Y	1.11	1.15	3%
FS 1234679-HpCDD	39.46	8.24E+07	1.04	Y	1.19	1.25	5%
TS 1378-TCDD	25.82	1.02E+08	0.76	Y	1.06	1.12	6%
OCDD-a	42.56	2.79E+06	2.64	Y	0.07	0.06	-11%
OCDF-a	42.73	3.35E+06	2.46	Y	0.06	0.06	5%

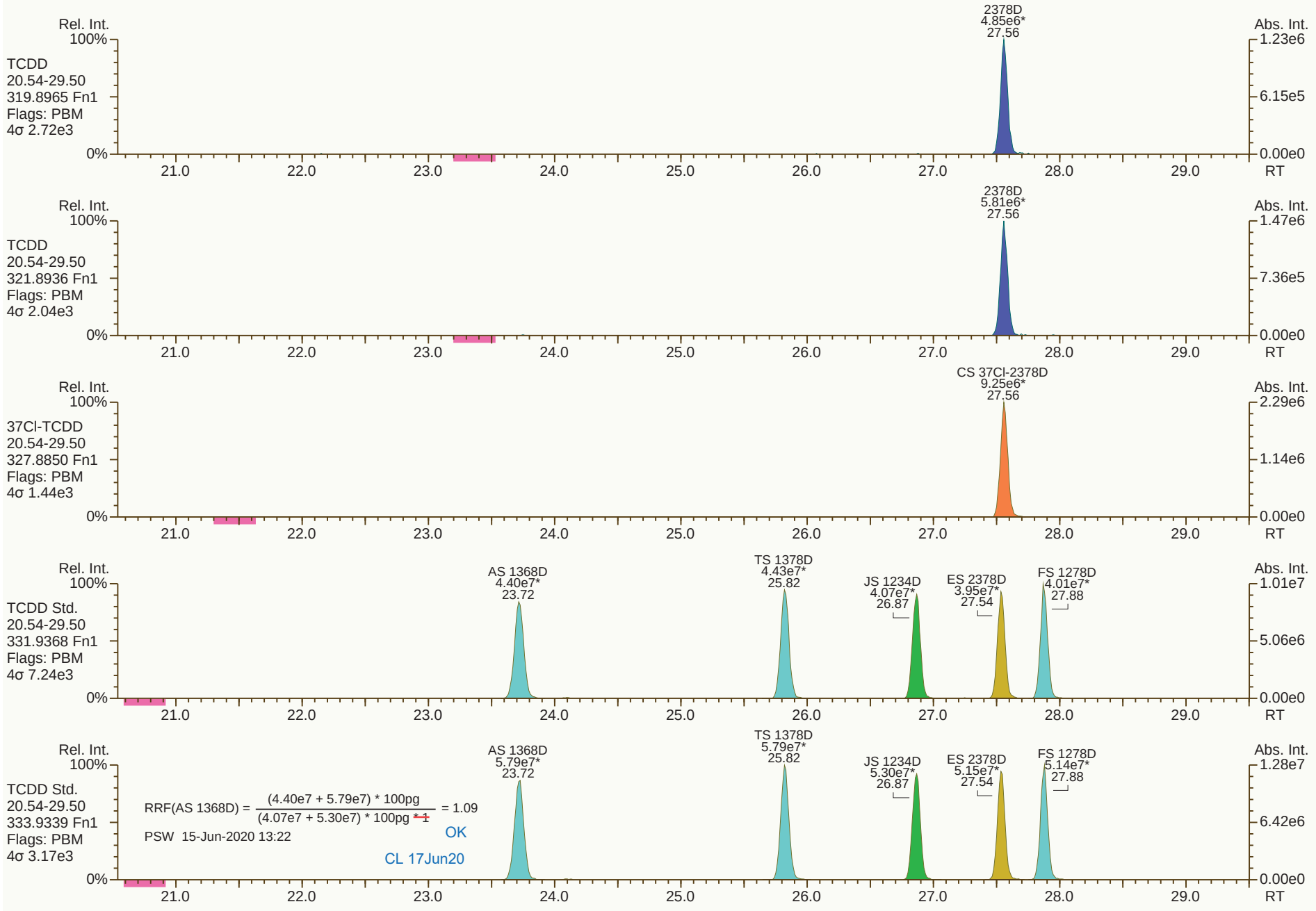
SGS ID: CS3_200612_DF_RB **Sample ID: SIL 20-449-3** **Acq: 12-Jun-2020 16:49:17**

Instr: [ILM] AutoSpec-Ultima MM3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 8** **User: PSW Datafile: 200612R06**

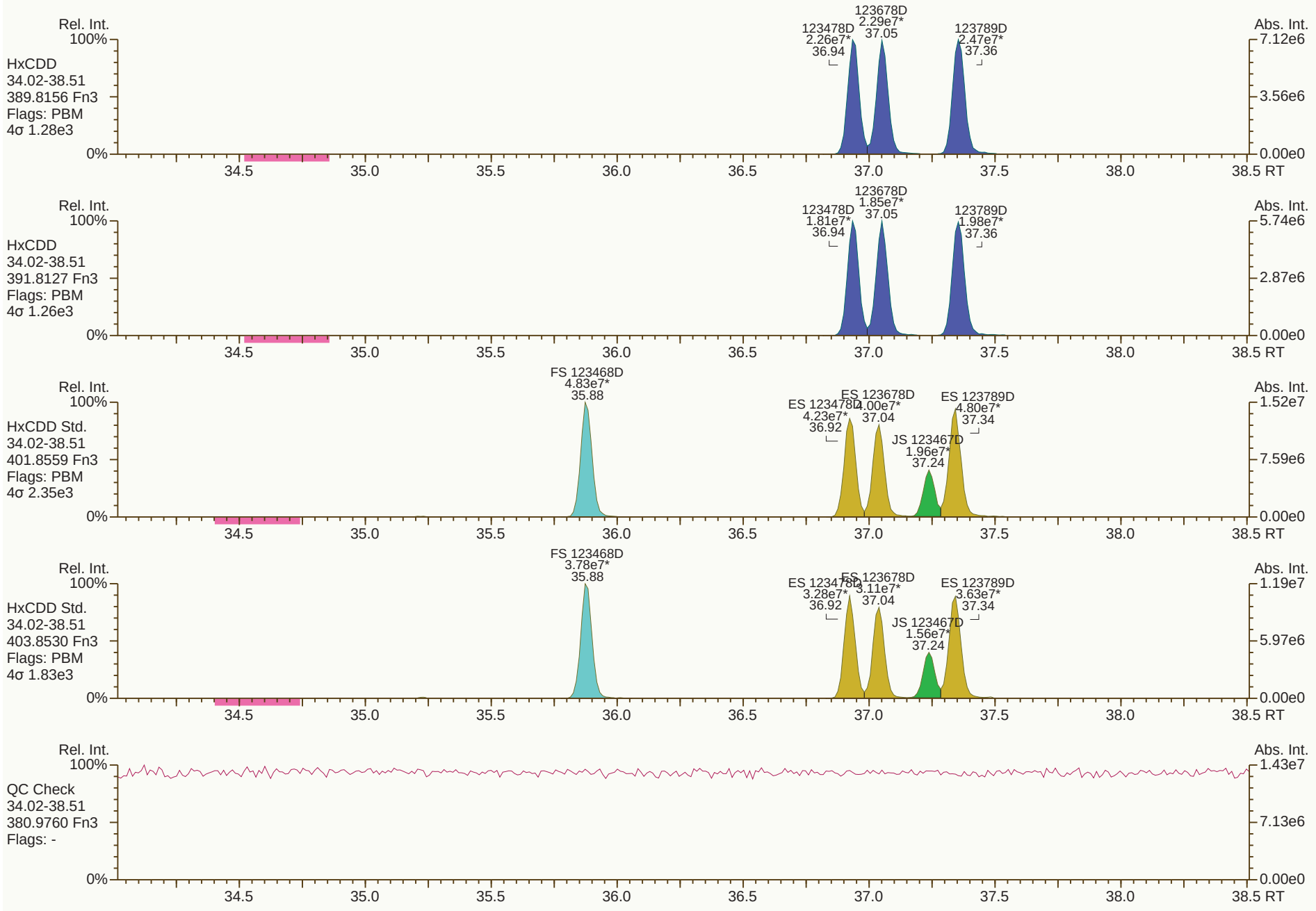


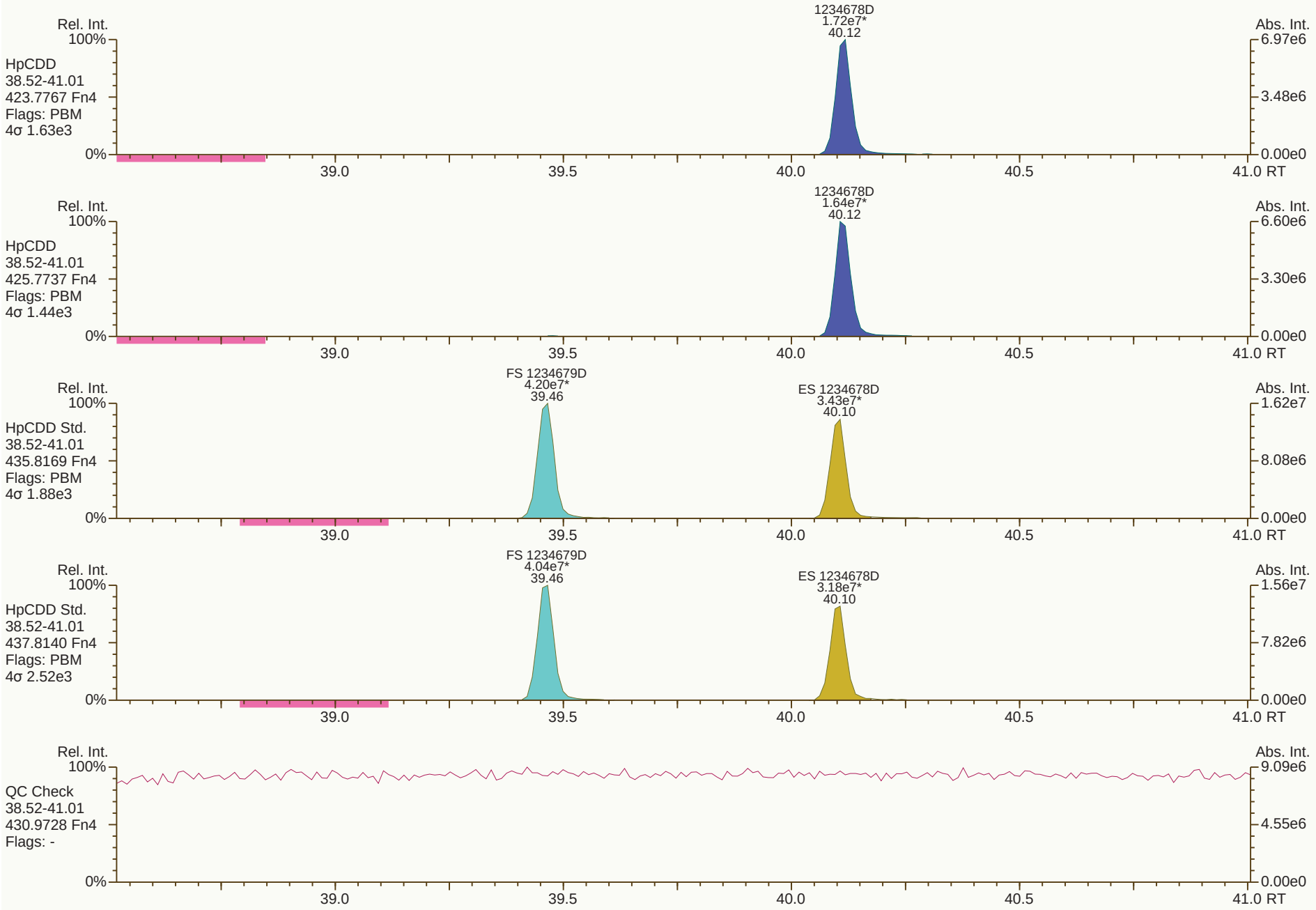
Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS3_200612_DF_RB.utp_res, saved 15-Jun-2020 13:24 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 scc: 726-607 *PKD: n/a Printed: 15-Jun-2020 13:39 Page 1 of 12*


Rel. Int.
100%
TCDD
20.54-29.50
319.8965 Fn1
Flags: PBM
4σ 2.72e3
0%
2378D
4.85e6*
27.56
Abs. Int.
1.23e6
6.15e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD
20.54-29.50
321.8936 Fn1
Flags: PBM
4σ 2.04e3
0%
2378D
5.81e6*
27.56
Abs. Int.
1.47e6
7.36e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
37Cl-TCDD
20.54-29.50
327.8850 Fn1
Flags: PBM
4σ 1.44e3
0%
CS 37Cl-2378D
9.25e6*
27.56
Abs. Int.
2.29e6
1.14e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
331.9368 Fn1
Flags: PBM
4σ 7.24e3
0%
AS 1368D
4.40e7*
23.72
TS 1378D
4.43e7*
25.82
JS 1234D
4.07e7*
26.87
ES 2378D
3.95e7*
27.54
FS 1278D
4.01e7*
27.88
Abs. Int.
1.01e7
5.06e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
333.9339 Fn1
Flags: PBM
4σ 3.17e3
0%
AS 1368D
5.79e7*
23.72
TS 1378D
5.79e7*
25.82
JS 1234D
5.30e7*
26.87
ES 2378D
5.15e7*
27.54
FS 1278D
5.14e7*
27.88
RRF(AS 1368D) = (4.40e7 + 5.79e7) * 100pg / (4.07e7 + 5.30e7) * 100pg * 1 = 1.09
PSW 15-Jun-2020 13:22
OK
CL 17Jun20
Abs. Int.
1.28e7
6.42e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
PeCDD
29.51-34.01
355.8546 Fn2
Flags: PBM
4σ 2.04e3
0%
12378D
2.67e7*
33.04
Abs. Int.
7.86e6
3.93e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD
29.51-34.01
357.8517 Fn2
Flags: PBM
4σ 1.08e3
0%
12378D
1.67e7*
33.04
Abs. Int.
5.04e6
2.52e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
367.8949 Fn2
Flags: PBM
4σ 3.18e3
0%
FS 12478D
4.86e7*
31.78
CS 12347D
4.21e7*
32.52
ES 12378D
4.70e7*
33.02
Abs. Int.
1.46e7
7.29e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
369.8919 Fn2
Flags: PBM
4σ 2.19e3
0%
FS 12478D
2.96e7*
31.78
CS 12347D
2.55e7*
32.52
ES 12378D
2.86e7*
33.02
Abs. Int.
8.69e6
4.34e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
QC Check
29.51-34.01
366.9792 Fn2
Flags: -
0%
Abs. Int.
3.97e6
1.99e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT

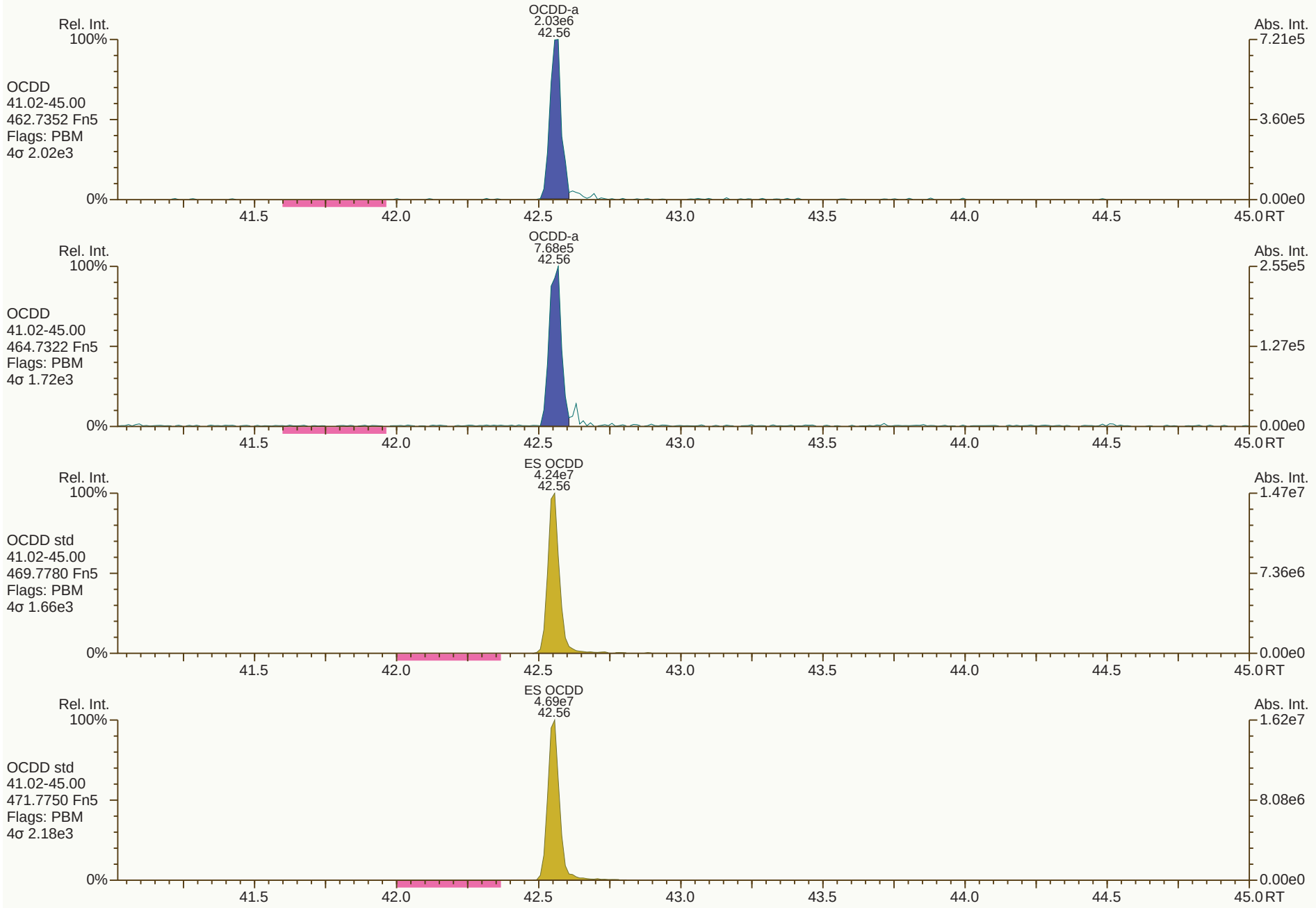

Rel. Int.
100%
HxCDD
34.02-38.51
389.8156 Fn3
Flags: PBM
4σ 1.28e3
123478D
2.26e7*
36.94
123678D
2.29e7*
37.05
123789D
2.47e7*
37.36
Abs. Int.
7.12e6
3.56e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDD
34.02-38.51
391.8127 Fn3
Flags: PBM
4σ 1.26e3
123478D
1.81e7*
36.94
123678D
1.85e7*
37.05
123789D
1.98e7*
37.36
Abs. Int.
5.74e6
2.87e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDD Std.
34.02-38.51
401.8559 Fn3
Flags: PBM
4σ 2.35e3
FS 123468D
4.83e7*
35.88
ES 123478D
4.23e7*
36.92
ES 123678D
4.00e7*
37.04
JS 123467D
1.96e7*
37.24
ES 123789D
4.80e7*
37.34
Abs. Int.
1.52e7
7.59e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDD Std.
34.02-38.51
403.8530 Fn3
Flags: PBM
4σ 1.83e3
FS 123468D
3.78e7*
35.88
ES 123478D
3.28e7*
36.92
ES 123678D
3.11e7*
37.04
JS 123467D
1.56e7*
37.24
ES 123789D
3.63e7*
37.34
Abs. Int.
1.19e7
5.97e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
QC Check
34.02-38.51
380.9760 Fn3
Flags: -
Abs. Int.
1.43e7
7.13e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT


Rel. Int.
100%
HpCDD
38.52-41.01
423.7767 Fn4
Flags: PBM
4σ 1.63e3
0%
1234678D
1.72e7*
40.12
Abs. Int.
6.97e6
3.48e6
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.52-41.01
425.7737 Fn4
Flags: PBM
4σ 1.44e3
0%
1234678D
1.64e7*
40.12
Abs. Int.
6.60e6
3.30e6
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.52-41.01
435.8169 Fn4
Flags: PBM
4σ 1.88e3
0%
FS 1234679D
4.20e7*
39.46
ES 1234678D
3.43e7*
40.10
Abs. Int.
1.62e7
8.08e6
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.52-41.01
437.8140 Fn4
Flags: PBM
4σ 2.52e3
0%
FS 1234679D
4.04e7*
39.46
ES 1234678D
3.18e7*
40.10
Abs. Int.
1.56e7
7.82e6
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.52-41.01
430.9728 Fn4
Flags: -
0%
Abs. Int.
9.09e6
4.55e6
0.00e0
39.0
39.5
40.0
40.5
41.0 RT


OCDD
2.29e7*
42.57
Rel. Int.
100%
OCDD
41.02-45.00
457.7377 Fn5
Flags: PBM
4σ 1.40e3
0%
Abs. Int.
7.73e6
3.87e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDD
2.56e7*
42.57
Rel. Int.
100%
OCDD
41.02-45.00
459.7348 Fn5
Flags: PBM
4σ 1.67e3
0%
Abs. Int.
8.90e6
4.45e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
4.24e7*
42.56
Rel. Int.
100%
OCDD Std.
41.02-45.00
469.7780 Fn5
Flags: PBM
4σ 1.66e3
0%
Abs. Int.
1.47e7
7.36e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
4.69e7*
42.56
Rel. Int.
100%
OCDD Std.
41.02-45.00
471.7750 Fn5
Flags: PBM
4σ 2.18e3
0%
Abs. Int.
1.62e7
8.08e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
7.94e6
3.97e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

SGS ID: CS3_200612_DF_RB **Sample ID: SIL 20-449-3** **Acq: 12-Jun-2020 16:49:17**

Instr: [ILM] AutoSpec-Ultima MM3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 8** **User: PSW Datafile: 200612R06**



Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS3_200612_DF_RB.utp_res, saved 15-Jun-2020 13:24 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 7102, 8891 *Revised: 15-Jun-2020 11:50 (PSW) Printed: 17-Jun-2020 08:04*


Rel. Int.
100%
TCDF
20.54-29.50
303.9016 Fn1
Flags: PBM
4σ 1.27e3
0%
2378F
6.37e6*
26.65
Abs. Int.
1.42e6
7.10e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF
20.54-29.50
305.8987 Fn1
Flags: PBM
4σ 1.48e3
0%
2378F
8.34e6*
26.65
Abs. Int.
1.82e6
9.11e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
315.9419 Fn1
Flags: PBM
4σ 1.46e4
0%
AS 1368F
8.00e7*
21.50
JS 1234F
6.65e7*
25.22
ES 2378F
6.57e7*
26.63
Abs. Int.
1.52e7
7.59e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
317.9389 Fn1
Flags: PBM
4σ 6.98e3
0%
AS 1368F
1.01e8*
21.50
JS 1234F
8.40e7*
25.22
ES 2378F
8.33e7*
26.63
Abs. Int.
1.93e7
9.64e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
HxCDPE
20.54-29.50
375.8364 Fn1
Flags: PB
4σ 1.68e3
0%
Abs. Int.
1.01e4
5.03e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT

SGS ID: CS3_200612_DF_RB | **Sample ID: SIL 20-449-3** | **Acq: 12-Jun-2020 16:49:17**

Instr: [ILM] AutoSpec-Ultima MM3 | **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 8** | **User: PSW Datafile: 200612R06**

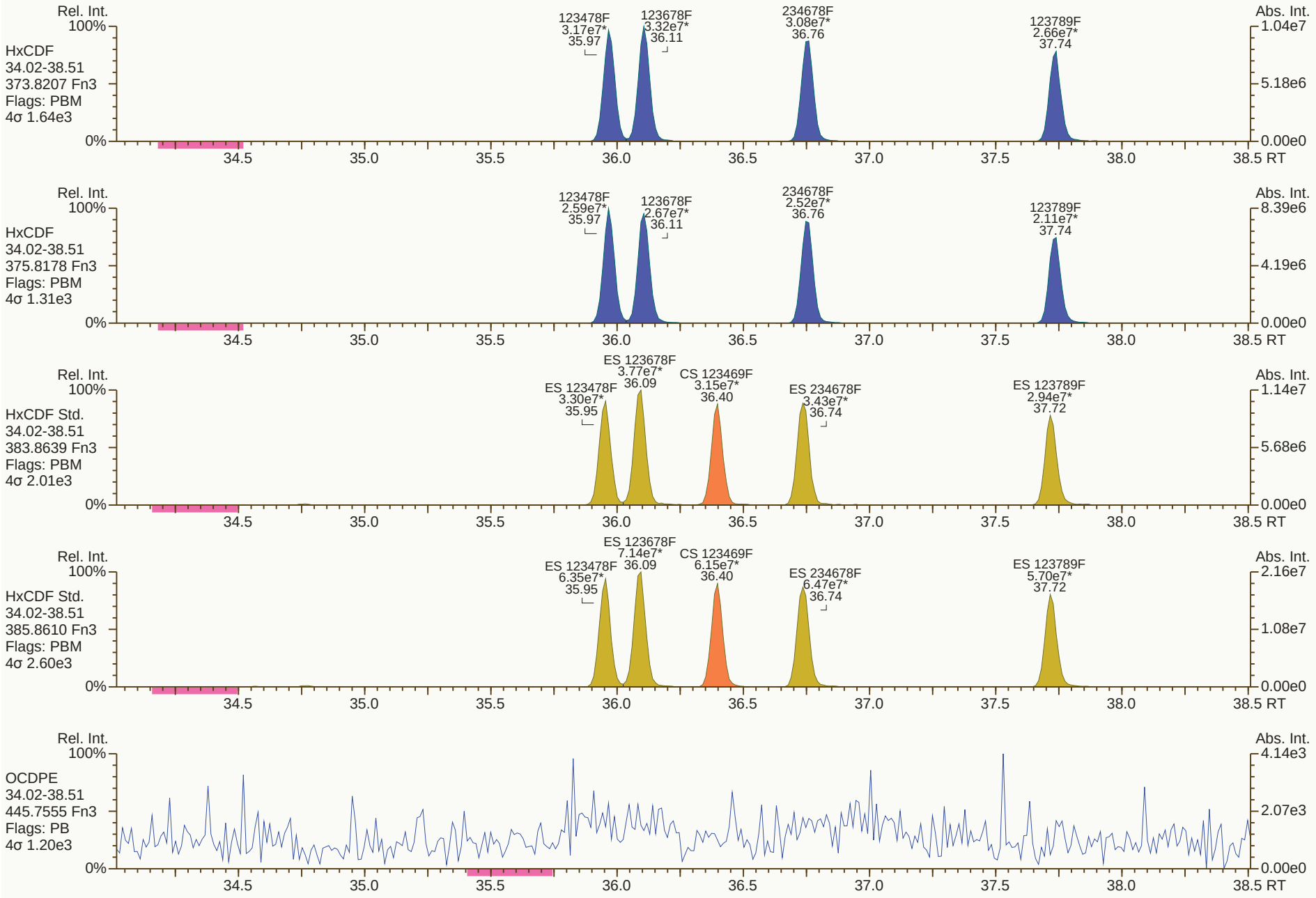


Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS3_200612_DF_RB.utp_res, saved 15-Jun-2020 13:24 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 5332 scc: 726-607 *PKD: 15-Jun-2020 08:10 Printed: 15-Jun-2020 13:39 Page 8 of 12*

SGS ID: CS3_200612_DF_RB
Instr: [ILM] AutoSpec-Ultima MM3
Sample ID: SIL 20-449-3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 8
Acq: 12-Jun-2020 16:49:17
User: PSW Datafile: 200612R06




Rel. Int.
100%
HxCDF
34.02-38.51
373.8207 Fn3
Flags: PBM
4σ 1.64e3
0%
123478F
3.17e7*
35.97
123678F
3.32e7*
36.11
234678F
3.08e7*
36.76
123789F
2.66e7*
37.74
Abs. Int.
1.04e7
5.18e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDF
34.02-38.51
375.8178 Fn3
Flags: PBM
4σ 1.31e3
0%
123478F
2.59e7*
35.97
123678F
2.67e7*
36.11
234678F
2.52e7*
36.76
123789F
2.11e7*
37.74
Abs. Int.
8.39e6
4.19e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDF Std.
34.02-38.51
383.8639 Fn3
Flags: PBM
4σ 2.01e3
0%
ES 123478F
3.30e7*
35.95
ES 123678F
3.77e7*
36.09
CS 123469F
3.15e7*
36.40
ES 234678F
3.43e7*
36.74
ES 123789F
2.94e7*
37.72
Abs. Int.
1.14e7
5.68e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDF Std.
34.02-38.51
385.8610 Fn3
Flags: PBM
4σ 2.60e3
0%
ES 123478F
6.35e7*
35.95
ES 123678F
7.14e7*
36.09
CS 123469F
6.15e7*
36.40
ES 234678F
6.47e7*
36.74
ES 123789F
5.70e7*
37.72
Abs. Int.
2.16e7
1.08e7
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
OCDPE
34.02-38.51
445.7555 Fn3
Flags: PB
4σ 1.20e3
0%
Abs. Int.
4.14e3
2.07e3
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT



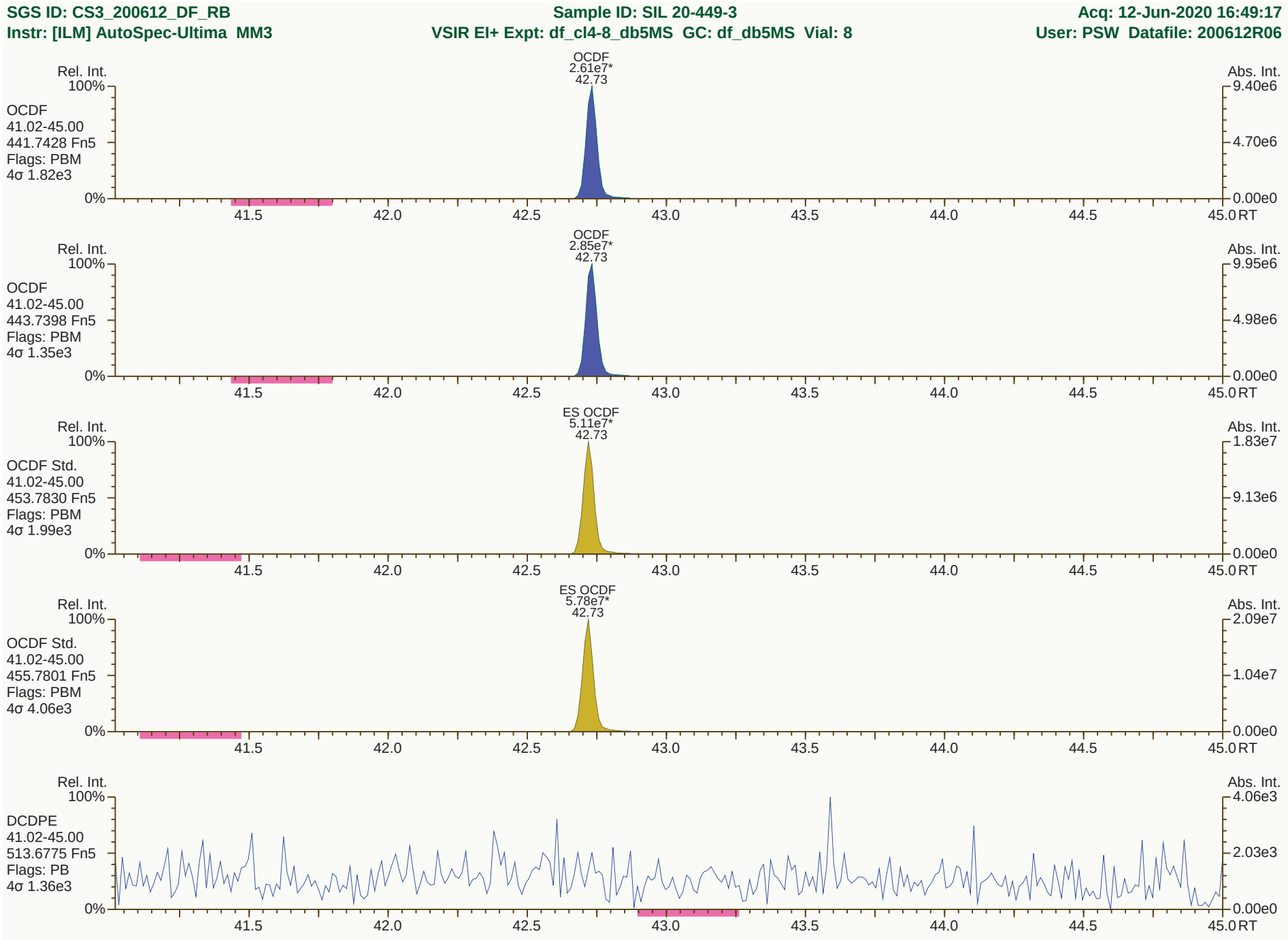
Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS3_200612_DF_RB.utp_res, saved 15-Jun-2020 13:24 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 3706, 2088, 7667 scc: 726-607 *PKD: 15-Jun-2020 08:10 Printed: 15-Jun-2020 13:39 Page 11 of 12*

SGS ID: CS3_200612_DF_RB
Instr: [ILM] AutoSpec-Ultima MM3

Sample ID: SIL 20-449-3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 8

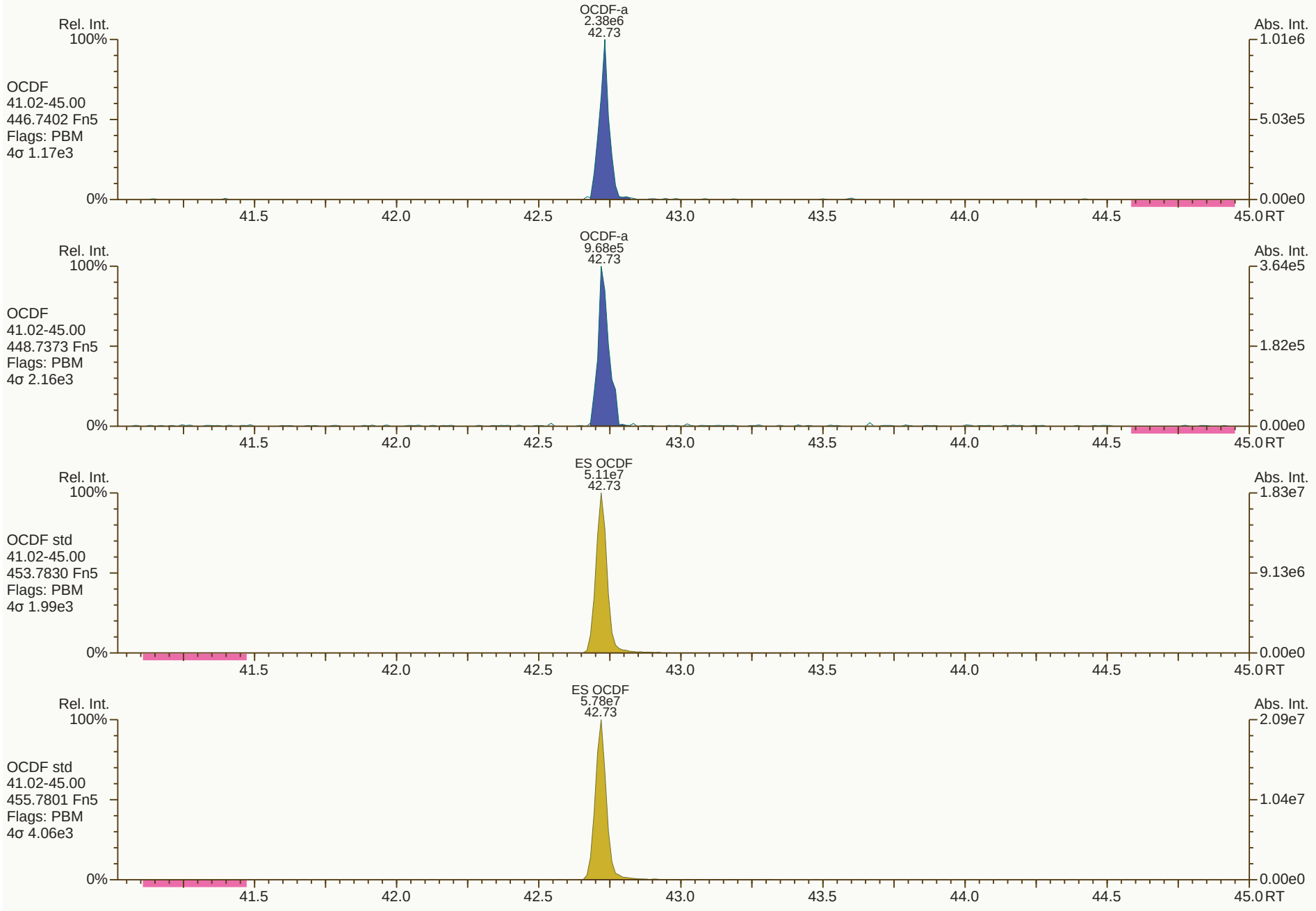
Acq: 12-Jun-2020 16:49:17
User: PSW Datafile: 200612R06



Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS3_200612_DF_RB.utp_res, saved 15-Jun-2020 13:24 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 8422, 6240, 0445 scc: 726-607
Revised: 15-Jun-2020 08:21 (PSW) Printed: 15-Jun-2020 13:39 Page 12 of 12

SGS ID: CS3_200612_DF_RB | Sample ID: SIL 20-449-3 | Acq: 12-Jun-2020 16:49:17

Instr: [ILM] AutoSpec-Ultima MM3 | VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 8 | User: PSW Datafile: 200612R06



Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS3_200612_DF_RB.utp_res, saved 15-Jun-2020 13:24 (PSW)

Peak annotation: Areas, Centroids

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 2514, 6240

Revised: 15-Jun-2020 08:21 (PSW) Printed: 17-Jun-2020 08:04

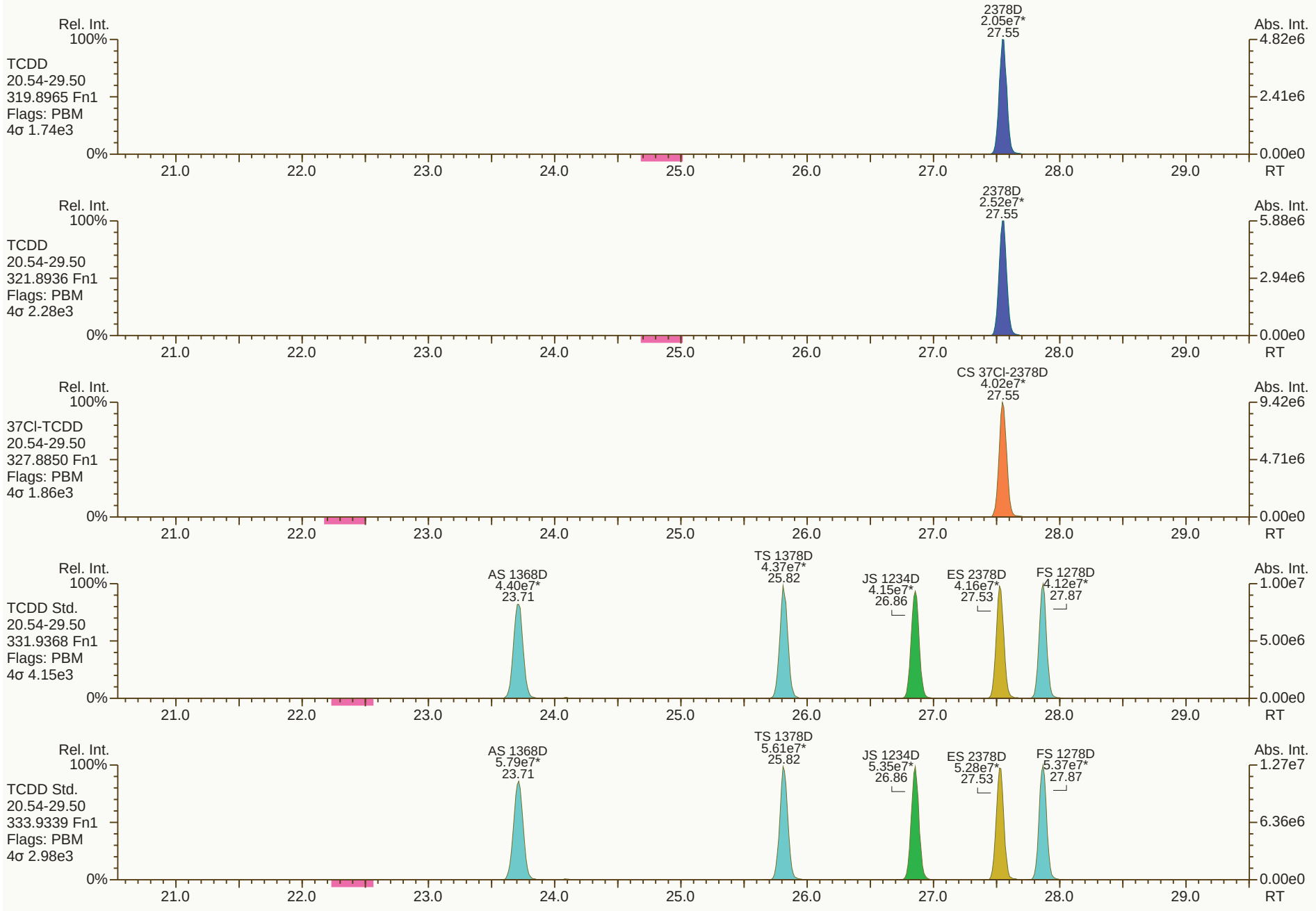
Dioxin/Furan QC Summary		Acq'd: 12 Jun 2020 17:36 PSW				ICAL: MM3_DF_10012020_12JUN2020	
Lab ID: CS4_200612_DF_RA		UTP: 15-Jun-2020 11:50:46 PSW				Checkcode: 711-420-WZT	
Sample ID: SIL 20-281-2		Report: 15 Jun 2020 11:54 pw				Datafile: 200612R07	
Name	**RT**	**Response**	**RA**	**OK**	**Ref. RRFs**	**Calc. RRFs**	**Dev'n**
2378-TCDD	27.55	4.57E+07	0.81	Y	1.18	1.21	3%
12378-PeCDD	33.03	1.89E+08	1.60	Y	1.14	1.17	3%
123478-HxCDD	36.93	1.77E+08	1.27	Y	1.09	1.09	0%
123678-HxCDD	37.04	1.79E+08	1.25	Y	1.13	1.13	0%
123789-HxCDD	37.35	1.91E+08	1.25	Y	1.05	1.06	1%
1234678-HpCDD	40.11	1.46E+08	1.05	Y	0.98	1.02	4%
OCDD	42.56	2.09E+08	0.89	Y	1.08	1.10	3%
2378-TCDF	26.64	6.34E+07	0.76	Y	0.98	1.01	3%
12378-PeCDF	31.55	2.69E+08	1.55	Y	0.95	0.97	3%
23478-PeCDF	32.68	2.64E+08	1.54	Y	0.95	0.96	1%
123478-HxCDF	35.96	2.51E+08	1.23	Y	1.20	1.21	1%
123678-HxCDF	36.10	2.58E+08	1.24	Y	1.07	1.10	3%
234678-HxCDF	36.74	2.42E+08	1.22	Y	1.10	1.11	2%
123789-HxCDF	37.73	2.09E+08	1.25	Y	1.09	1.13	3%
1234678-HpCDF	39.20	2.19E+08	1.04	Y	1.28	1.30	2%
1234789-HpCDF	40.53	1.70E+08	1.03	Y	1.27	1.29	2%
OCDF	42.72	2.40E+08	0.90	Y	1.01	1.05	4%
ES 2378-TCDD	27.53	9.44E+07	0.79	Y	1.01	0.99	-1%
ES 12378-PeCDD	33.01	8.06E+07	1.65	Y	0.87	0.85	-2%
ES 123478-HxCDD	36.91	8.16E+07	1.33	Y	1.10	1.10	1%
ES 123678-HxCDD	37.03	7.97E+07	1.30	Y	1.06	1.08	2%
ES 123789-HxCDD	37.33	8.98E+07	1.27	Y	1.22	1.21	0%
ES 1234678-HpCDD	40.09	7.16E+07	1.05	Y	0.99	0.97	-3%
ES OCDD	42.54	9.48E+07	0.92	Y	0.67	0.64	-4%
ES 2378-TCDF	26.62	1.57E+08	0.81	Y	1.01	1.02	0%
ES 12378-PeCDF	31.53	1.38E+08	1.56	Y	0.90	0.90	-1%
ES 23478-PeCDF	32.66	1.38E+08	1.56	Y	0.89	0.89	0%
ES 123478-HxCDF	35.94	1.04E+08	0.53	Y	1.43	1.40	-2%
ES 123678-HxCDF	36.08	1.17E+08	0.53	Y	1.63	1.59	-3%
ES 234678-HxCDF	36.73	1.09E+08	0.53	Y	1.48	1.47	-1%
ES 123789-HxCDF	37.71	9.28E+07	0.52	Y	1.29	1.25	-3%
ES 1234678-HpCDF	39.19	8.43E+07	0.45	Y	1.15	1.14	-1%
ES 1234789-HpCDF	40.52	6.56E+07	0.44	Y	0.91	0.89	-2%
ES OCDF	42.71	1.14E+08	0.90	Y	0.83	0.77	-7%

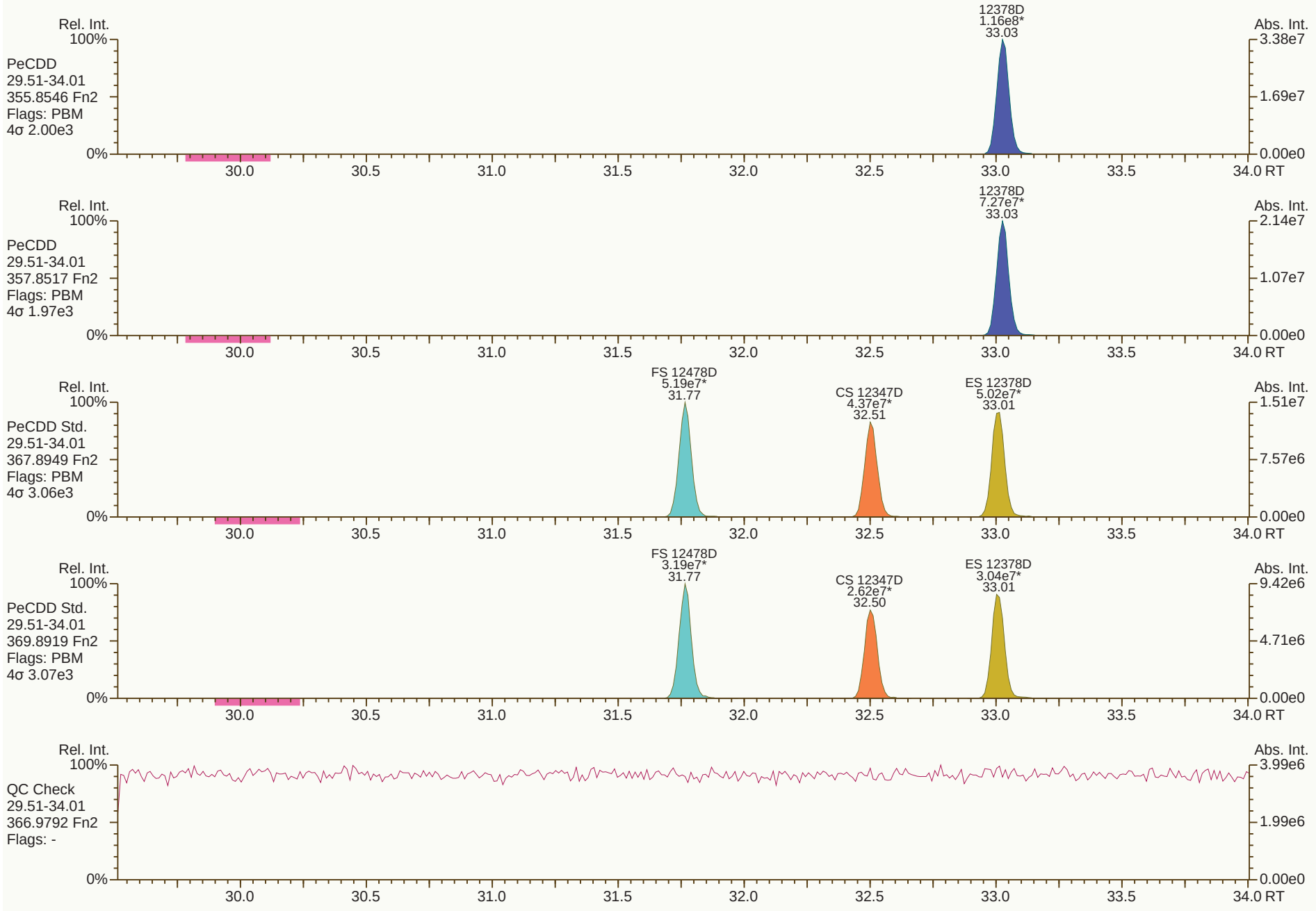
Dioxin/Furan QC Summary	Acq'd: 12 Jun 2020 17:36 PSW	ICAL: MM3_DF_10012020_12JUN2020
Lab ID: CS4_200612_DF_RA	UTP: 15-Jun-2020 11:50:46 PSW	Checkcode: 711-420-WZT
Sample ID: SIL 20-281-2	Report: 15 Jun 2020 11:54 pw	Datafile: 200612R07

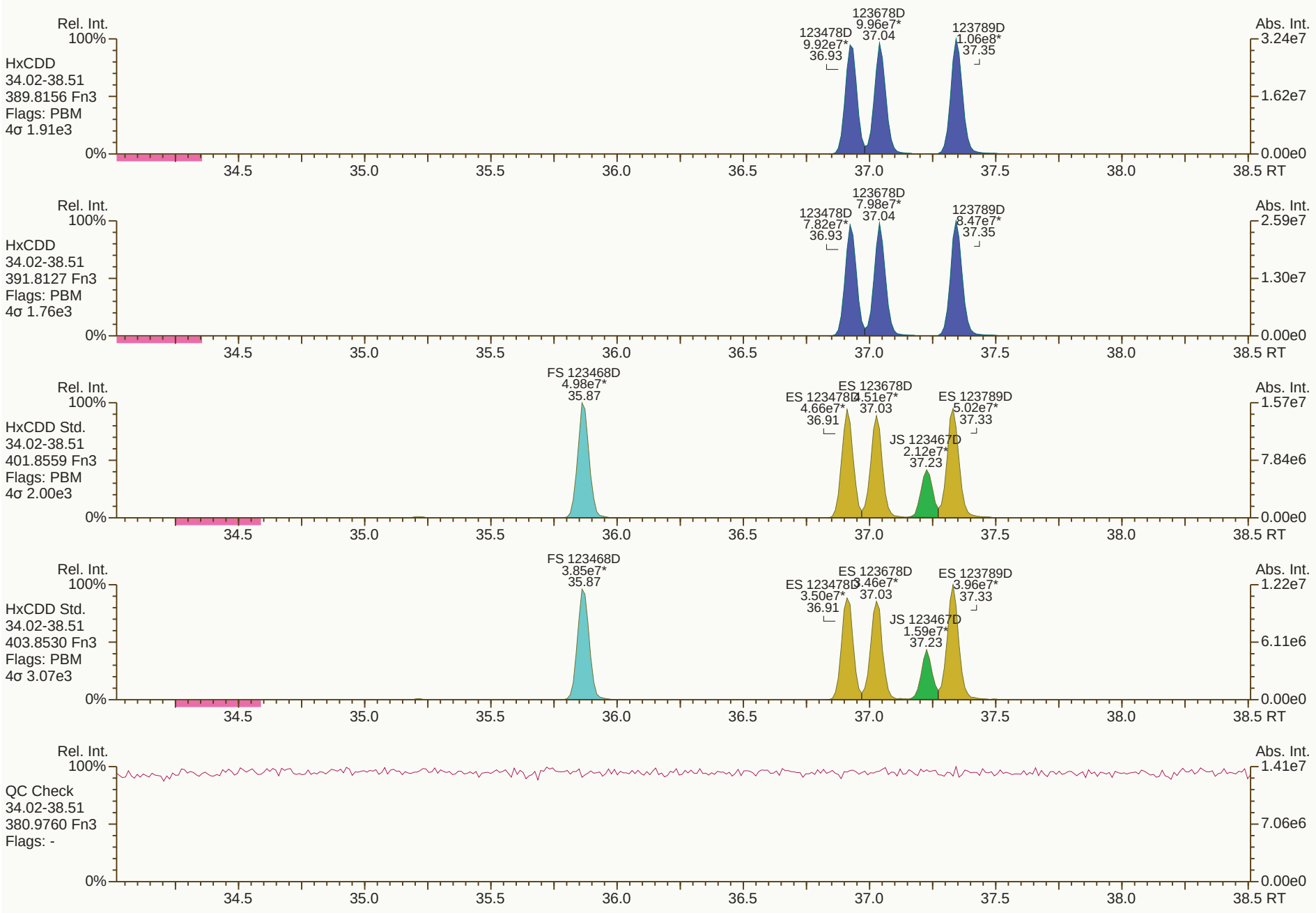
Name	RT	Response	RA	OK	Ref. RRFs	Calc. RRFs	Dev'n
JS 1234-TCDD	26.86	9.50E+07	0.78	Y	-	-	-
JS 1234-TCDF	25.22	1.54E+08	0.79	Y	-	-	-
JS 123467-HxCDD	37.23	3.70E+07	1.34	Y	-	-	-
CS 37Cl-2378-TCDD	27.55	4.02E+07	n/a	-	1.04	1.06	2%
CS 12347-PeCDD	32.51	6.98E+07	1.67	Y	0.74	0.74	-1%
CS 12346-PeCDF	31.00	1.34E+08	1.56	Y	0.86	0.87	1%
CS 123469-HxCDF	36.39	9.83E+07	0.52	Y	1.36	1.33	-2%
CS 1234689-HpCDF	39.59	7.71E+07	0.44	Y	1.05	1.04	-1%
SS 37Cl-2378-TCDD	27.55	4.02E+07	n/a	-	1.04	1.06	3%
SS 12347-PeCDD	32.51	6.98E+07	1.67	Y	0.86	0.87	1%
SS 12346-PeCDF	31.00	1.34E+08	1.56	Y	0.96	0.97	1%
SS 123469-HxCDF	36.39	9.83E+07	0.52	Y	0.83	0.84	0%
SS 1234689-HpCDF	39.59	7.71E+07	0.44	Y	0.92	0.91	-1%
AS 1368-TCDD	23.71	1.02E+08	0.76	Y	1.08	1.07	0%
AS 1368-TCDF	21.50	1.82E+08	0.80	Y	1.18	1.18	0%
FS 1278-TCDD	27.87	9.49E+07	0.77	Y	1.00	1.00	1%
FS 12478-PeCDD	31.77	8.39E+07	1.63	Y	1.00	1.04	4%
FS 123468-HxCDD	35.87	8.84E+07	1.29	Y	1.11	1.08	-2%
FS 1234679-HpCDD	39.45	8.59E+07	1.06	Y	1.19	1.20	1%
TS 1378-TCDD	25.82	9.98E+07	0.78	Y	1.06	1.06	0%
OCDD-a	42.55	1.29E+07	2.43	Y	0.07	0.07	-3%
OCDF-a	42.72	1.39E+07	2.38	Y	0.06	0.06	4%

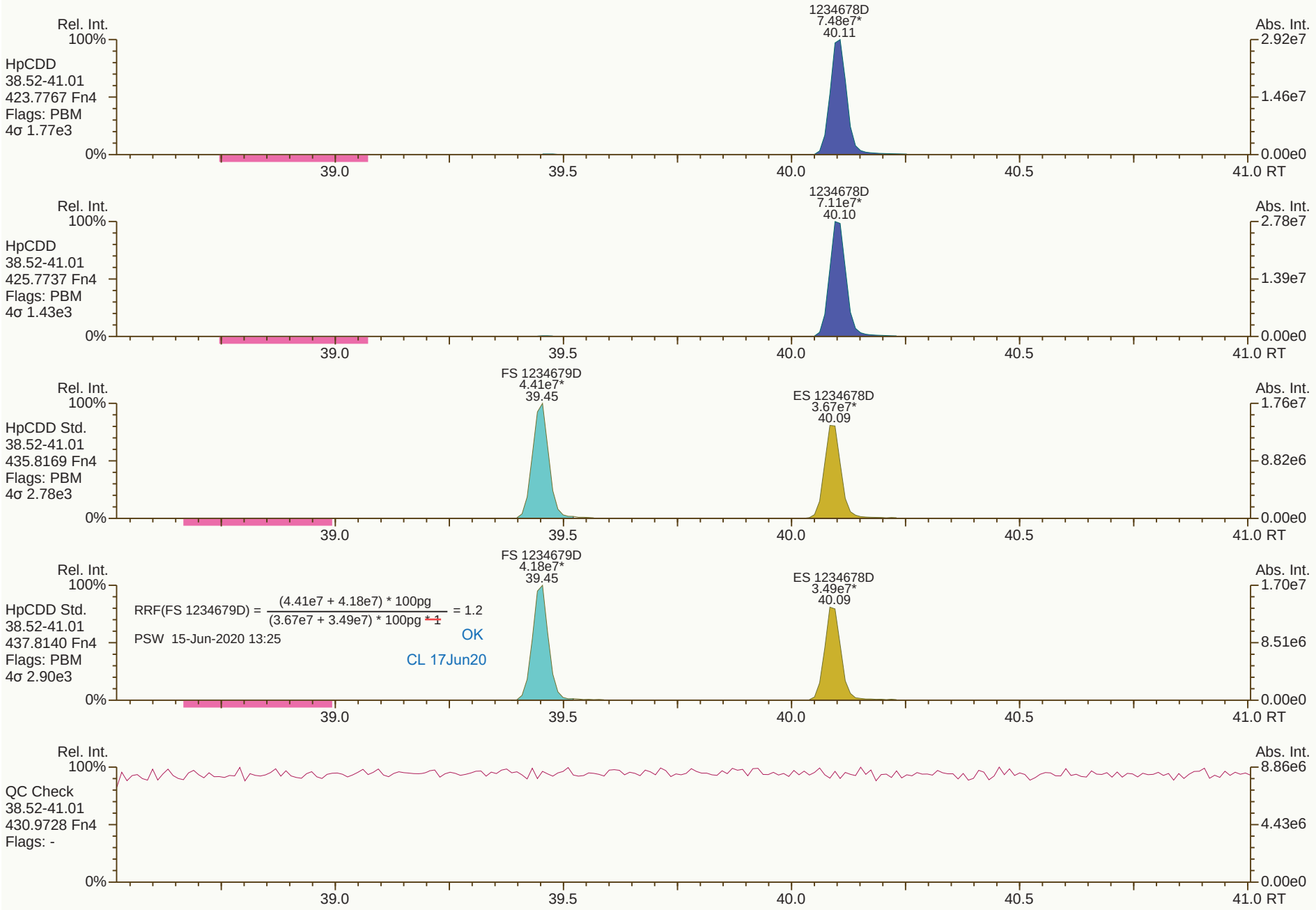


Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS4_200612_DF_RA.utp_res, saved 15-Jun-2020 13:27 (PSW) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 scc: 711-420 *PKD: n/a Printed: 15-Jun-2020 13:39 Page 1 of 12*


Rel. Int.
100%
TCDD
20.54-29.50
319.8965 Fn1
Flags: PBM
4σ 1.74e3
0%
2378D
2.05e7*
27.55
Abs. Int.
4.82e6
2.41e6
0.00e0
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
TCDD
20.54-29.50
321.8936 Fn1
Flags: PBM
4σ 2.28e3
0%
2378D
2.52e7*
27.55
Abs. Int.
5.88e6
2.94e6
0.00e0
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
37Cl-TCDD
20.54-29.50
327.8850 Fn1
Flags: PBM
4σ 1.86e3
0%
CS 37Cl-2378D
4.02e7*
27.55
Abs. Int.
9.42e6
4.71e6
0.00e0
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
331.9368 Fn1
Flags: PBM
4σ 4.15e3
0%
AS 1368D
4.40e7*
23.71
TS 1378D
4.37e7*
25.82
JS 1234D
4.15e7*
26.86
ES 2378D
4.16e7*
27.53
FS 1278D
4.12e7*
27.87
Abs. Int.
1.00e7
5.00e6
0.00e0
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
333.9339 Fn1
Flags: PBM
4σ 2.98e3
0%
AS 1368D
5.79e7*
23.71
TS 1378D
5.61e7*
25.82
JS 1234D
5.35e7*
26.86
ES 2378D
5.28e7*
27.53
FS 1278D
5.37e7*
27.87
Abs. Int.
1.27e7
6.36e6
0.00e0
21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 29.0
RT


Rel. Int.
100%
PeCDD
29.51-34.01
355.8546 Fn2
Flags: PBM
4σ 2.00e3
0%
12378D
1.16e8*
33.03
Abs. Int.
3.38e7
1.69e7
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD
29.51-34.01
357.8517 Fn2
Flags: PBM
4σ 1.97e3
0%
12378D
7.27e7*
33.03
Abs. Int.
2.14e7
1.07e7
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
367.8949 Fn2
Flags: PBM
4σ 3.06e3
0%
FS 12478D
5.19e7*
31.77
CS 12347D
4.37e7*
32.51
ES 12378D
5.02e7*
33.01
Abs. Int.
1.51e7
7.57e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
369.8919 Fn2
Flags: PBM
4σ 3.07e3
0%
FS 12478D
3.19e7*
31.77
CS 12347D
2.62e7*
32.50
ES 12378D
3.04e7*
33.01
Abs. Int.
9.42e6
4.71e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
QC Check
29.51-34.01
366.9792 Fn2
Flags: -
0%
Abs. Int.
3.99e6
1.99e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT

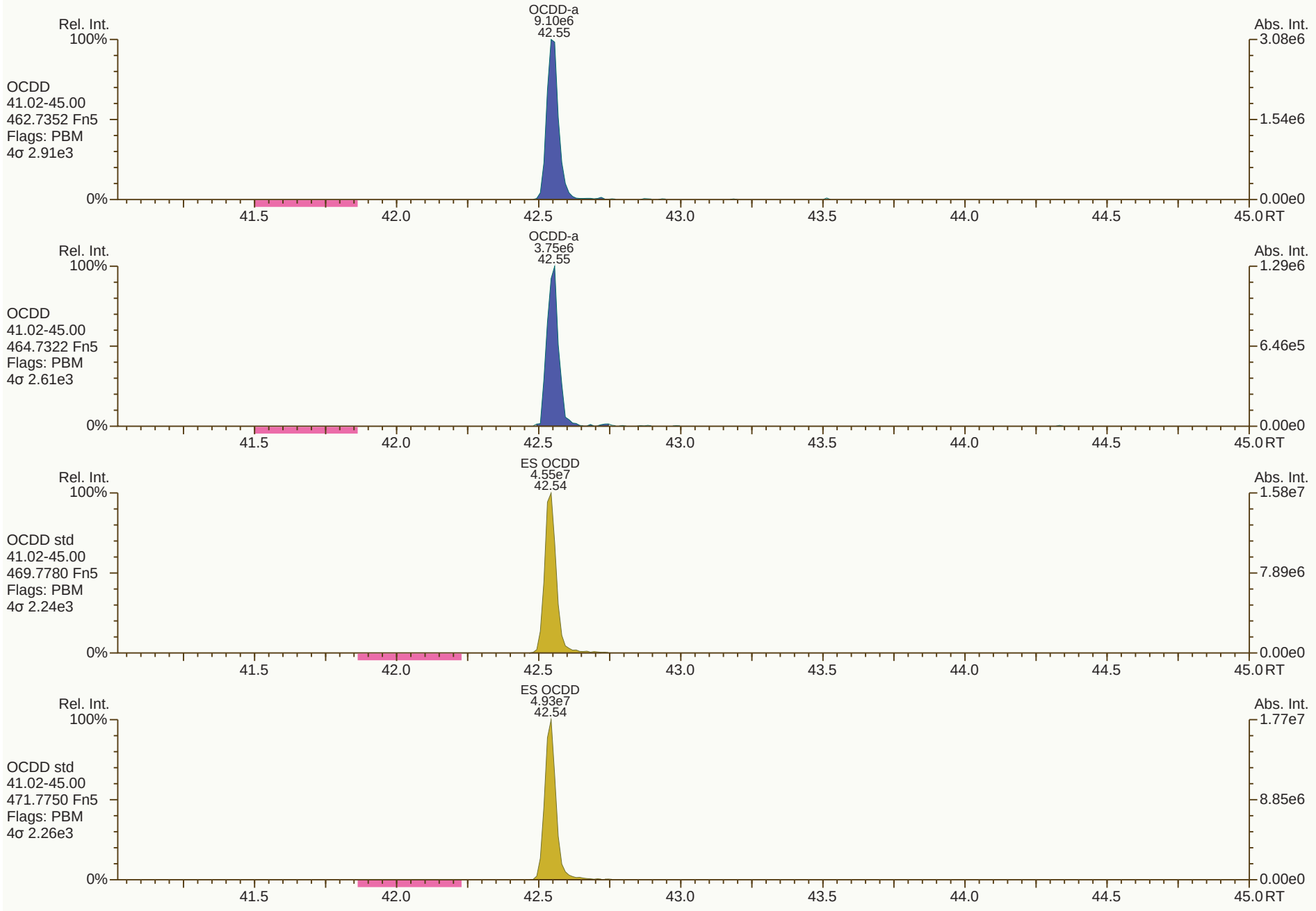

Rel. Int.
100%
HxCDD
34.02-38.51
389.8156 Fn3
Flags: PBM
4σ 1.91e3
123678D
9.96e7*
37.04
123478D
9.92e7*
36.93
123789D
1.06e8*
37.35
Abs. Int.
3.24e7
1.62e7
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDD
34.02-38.51
391.8127 Fn3
Flags: PBM
4σ 1.76e3
123678D
7.98e7*
37.04
123478D
7.82e7*
36.93
123789D
8.47e7*
37.35
Abs. Int.
2.59e7
1.30e7
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDD Std.
34.02-38.51
401.8559 Fn3
Flags: PBM
4σ 2.00e3
FS 123468D
4.98e7*
35.87
ES 123678D
4.51e7*
37.03
ES 123478D
4.66e7*
36.91
ES 123789D
5.02e7*
37.33
JS 123467D
2.12e7*
37.23
Abs. Int.
1.57e7
7.84e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDD Std.
34.02-38.51
403.8530 Fn3
Flags: PBM
4σ 3.07e3
FS 123468D
3.85e7*
35.87
ES 123678D
3.46e7*
37.03
ES 123478D
3.50e7*
36.91
ES 123789D
3.96e7*
37.33
JS 123467D
1.59e7*
37.23
Abs. Int.
1.22e7
6.11e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
QC Check
34.02-38.51
380.9760 Fn3
Flags: -
Abs. Int.
1.41e7
7.06e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT


Rel. Int.
100%
HpCDD
38.52-41.01
423.7767 Fn4
Flags: PBM
4σ 1.77e3
0%
1234678D
7.48e7*
40.11
Abs. Int.
2.92e7
1.46e7
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.52-41.01
425.7737 Fn4
Flags: PBM
4σ 1.43e3
0%
1234678D
7.11e7*
40.10
Abs. Int.
2.78e7
1.39e7
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.52-41.01
435.8169 Fn4
Flags: PBM
4σ 2.78e3
0%
FS 1234679D
4.41e7*
39.45
ES 1234678D
3.67e7*
40.09
Abs. Int.
1.76e7
8.82e6
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.52-41.01
437.8140 Fn4
Flags: PBM
4σ 2.90e3
0%
RRF(FS 1234679D) = (4.41e7 + 4.18e7) * 100pg / (3.67e7 + 3.49e7) * 100pg ~~* 1~~ = 1.2
PSW 15-Jun-2020 13:25
OK
CL 17Jun20
FS 1234679D
4.18e7*
39.45
ES 1234678D
3.49e7*
40.09
Abs. Int.
1.70e7
8.51e6
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.52-41.01
430.9728 Fn4
Flags: -
0%
Abs. Int.
8.86e6
4.43e6
0.00e0
39.0
39.5
40.0
40.5
41.0 RT


OCDD
9.83e7*
42.56
Rel. Int.
100%
OCDD
41.02-45.00
457.7377 Fn5
Flags: PBM
4σ 1.89e3
0%
Abs. Int.
3.51e7
1.75e7
0.00e0
RRF(OCDD) = (9.83e7 + 1.11e8) * 200pg / (4.55e7 + 4.93e7) * 400pg * 1 = 1.1
PSW 15-Jun-2020 13:26
OK
CL 17Jun20
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDD
1.11e8*
42.55
Rel. Int.
100%
OCDD
41.02-45.00
459.7348 Fn5
Flags: PBM
4σ 1.52e3
0%
Abs. Int.
3.84e7
1.92e7
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
4.55e7*
42.54
Rel. Int.
100%
OCDD Std.
41.02-45.00
469.7780 Fn5
Flags: PBM
4σ 2.24e3
0%
Abs. Int.
1.58e7
7.89e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
4.93e7*
42.54
Rel. Int.
100%
OCDD Std.
41.02-45.00
471.7750 Fn5
Flags: PBM
4σ 2.26e3
0%
Abs. Int.
1.77e7
8.85e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
8.14e6
4.07e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

SGS ID: CS4_200612_DF_RA | Sample ID: SIL 20-281-2 | Acq: 12-Jun-2020 17:36:49

Instr: [ILM] AutoSpec-Ultima MM3 | VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 9 | User: PSW Datafile: 200612R07



Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS4_200612_DF_RA.utp_res, saved 15-Jun-2020 13:27 (PSW)

Peak annotation: Areas, Centroids

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 4156, 1579

PKD: 15-Jun-2020 08:11 Printed: 17-Jun-2020 08:04


Rel. Int.
100%
TCDF
20.54-29.50
303.9016 Fn1
Flags: PBM
4σ 1.86e3
0%
2378F
2.75e7*
26.64
Abs. Int.
6.26e6
3.13e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF
20.54-29.50
305.8987 Fn1
Flags: PBM
4σ 1.09e3
0%
2378F
3.59e7*
26.64
Abs. Int.
8.11e6
4.05e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
315.9419 Fn1
Flags: PBM
4σ 1.31e4
0%
AS 1368F
8.09e7*
21.50
JS 1234F
6.82e7*
25.22
ES 2378F
7.02e7*
26.62
Abs. Int.
1.62e7
8.09e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
317.9389 Fn1
Flags: PBM
4σ 1.46e4
0%
AS 1368F
1.01e8*
21.49
JS 1234F
8.61e7*
25.21
ES 2378F
8.69e7*
26.62
Abs. Int.
2.06e7
1.03e7
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
HxCDPE
20.54-29.50
375.8364 Fn1
Flags: PB
4σ 1.71e3
0%
Abs. Int.
4.98e3
2.49e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT

SGS ID: CS4_200612_DF_RA **Sample ID: SIL 20-281-2** **Acq: 12-Jun-2020 17:36:49**

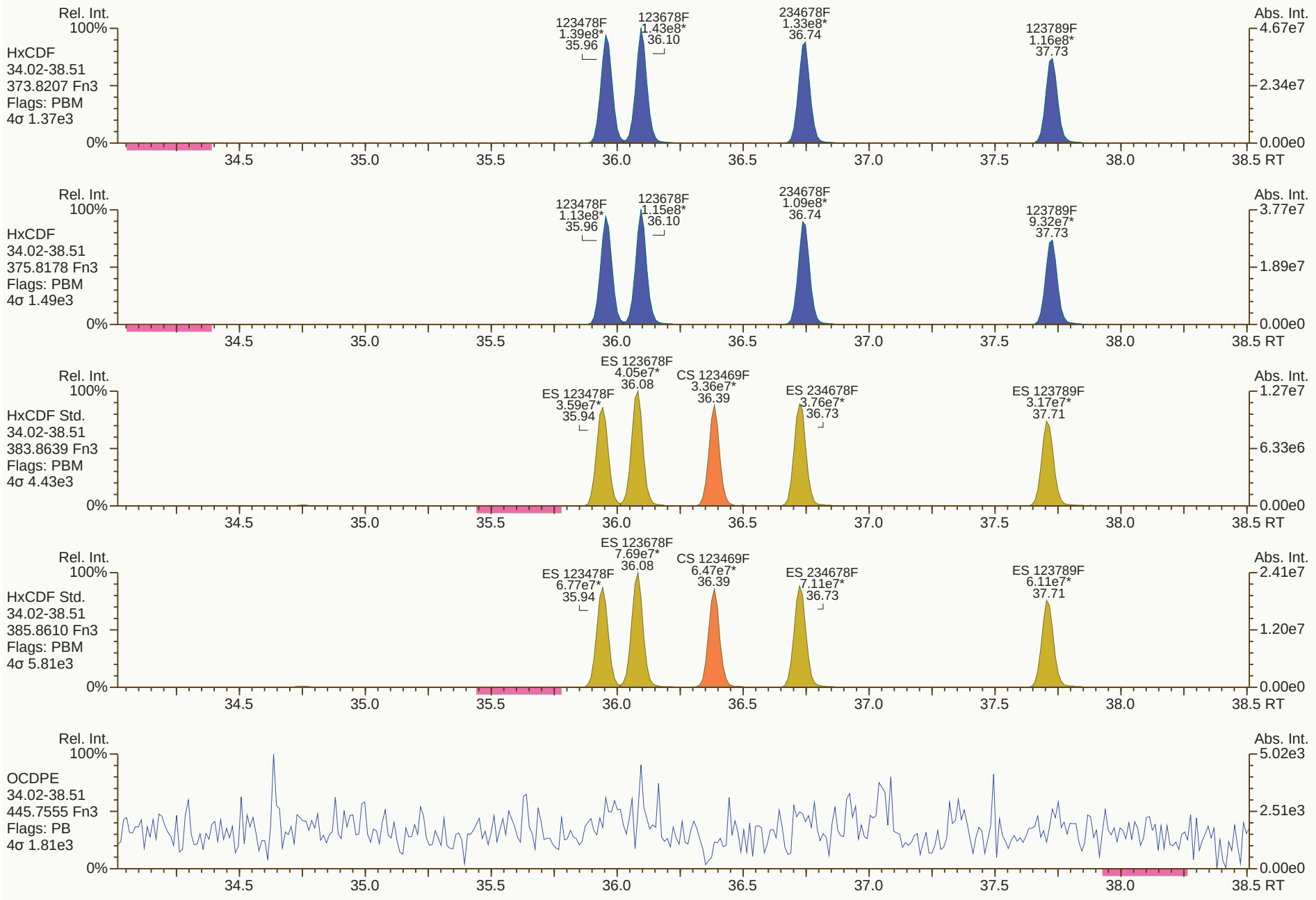
Instr: [ILM] AutoSpec-Ultima MM3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 9** **User: PSW Datafile: 200612R07**

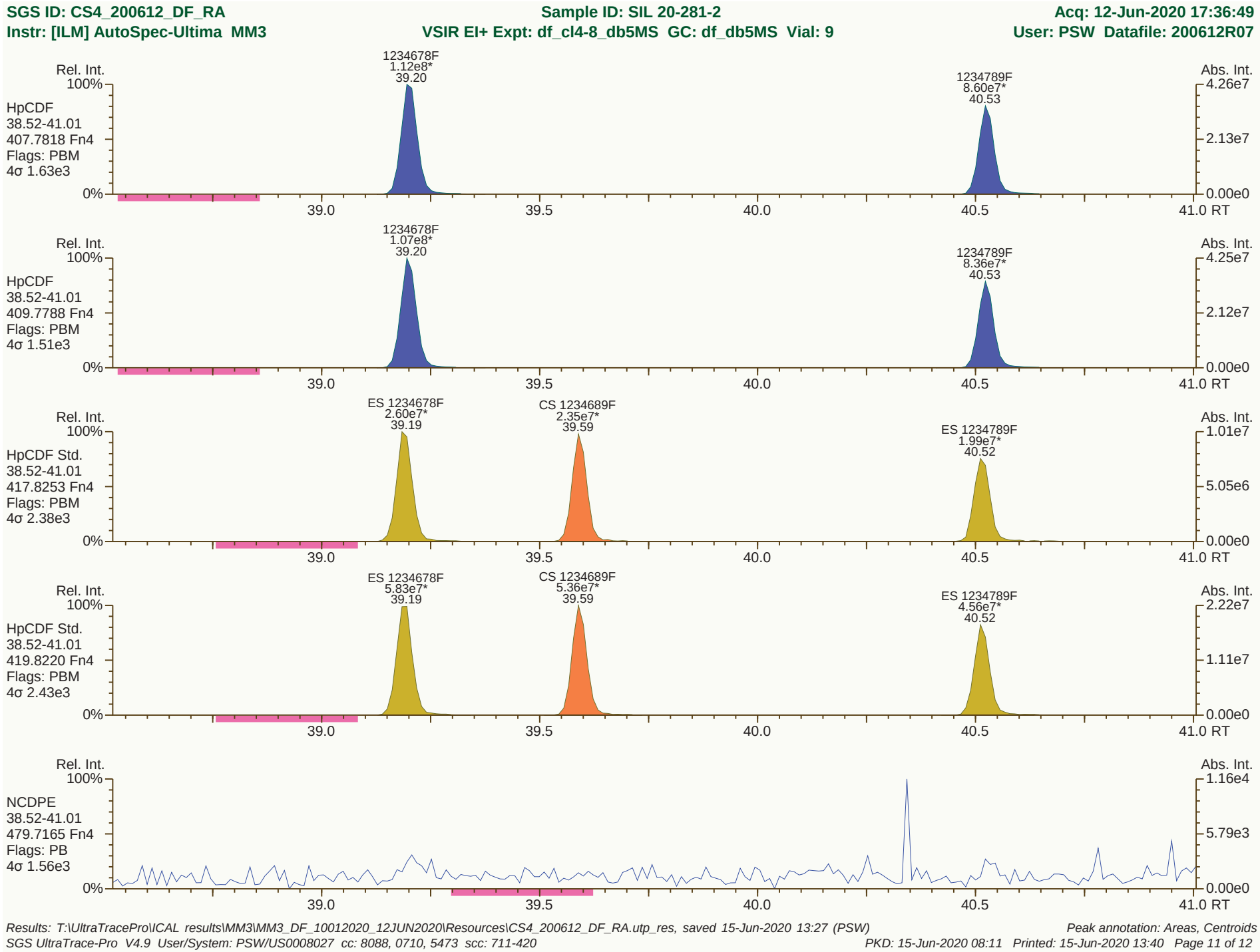


Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS4_200612_DF_RA.utp_res, saved 15-Jun-2020 13:27 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 5267 scc: 711-420 *PKD: 15-Jun-2020 08:11 Printed: 15-Jun-2020 13:40 Page 8 of 12*


Rel. Int.
100%
PeCDF-2
29.51-34.01
339.8597 Fn2
Flags: PBM
4σ 1.62e3
0%
12378F
1.64e8*
31.55
23478F
1.60e8*
32.68
Abs. Int.
4.65e7
2.32e7
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF-2
29.51-34.01
341.8568 Fn2
Flags: PBM
4σ 1.93e3
0%
12378F
1.06e8*
31.55
23478F
1.04e8*
32.67
Abs. Int.
3.04e7
1.52e7
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
351.9000 Fn2
Flags: PBM
4σ 4.66e3
0%
CS 12346F
8.16e7*
31.00
ES 12378F
8.43e7*
31.53
ES 23478F
8.41e7*
32.66
Abs. Int.
2.38e7
1.19e7
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
353.8970 Fn2
Flags: PBM
4σ 3.28e3
0%
CS 12346F
5.23e7*
31.00
ES 12378F
5.40e7*
31.53
ES 23478F
5.38e7*
32.66
Abs. Int.
1.57e7
7.84e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
HpCDPE
29.51-34.01
409.7974 Fn2
Flags: PB
4σ 2.04e3
0%
Abs. Int.
6.95e3
3.48e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT

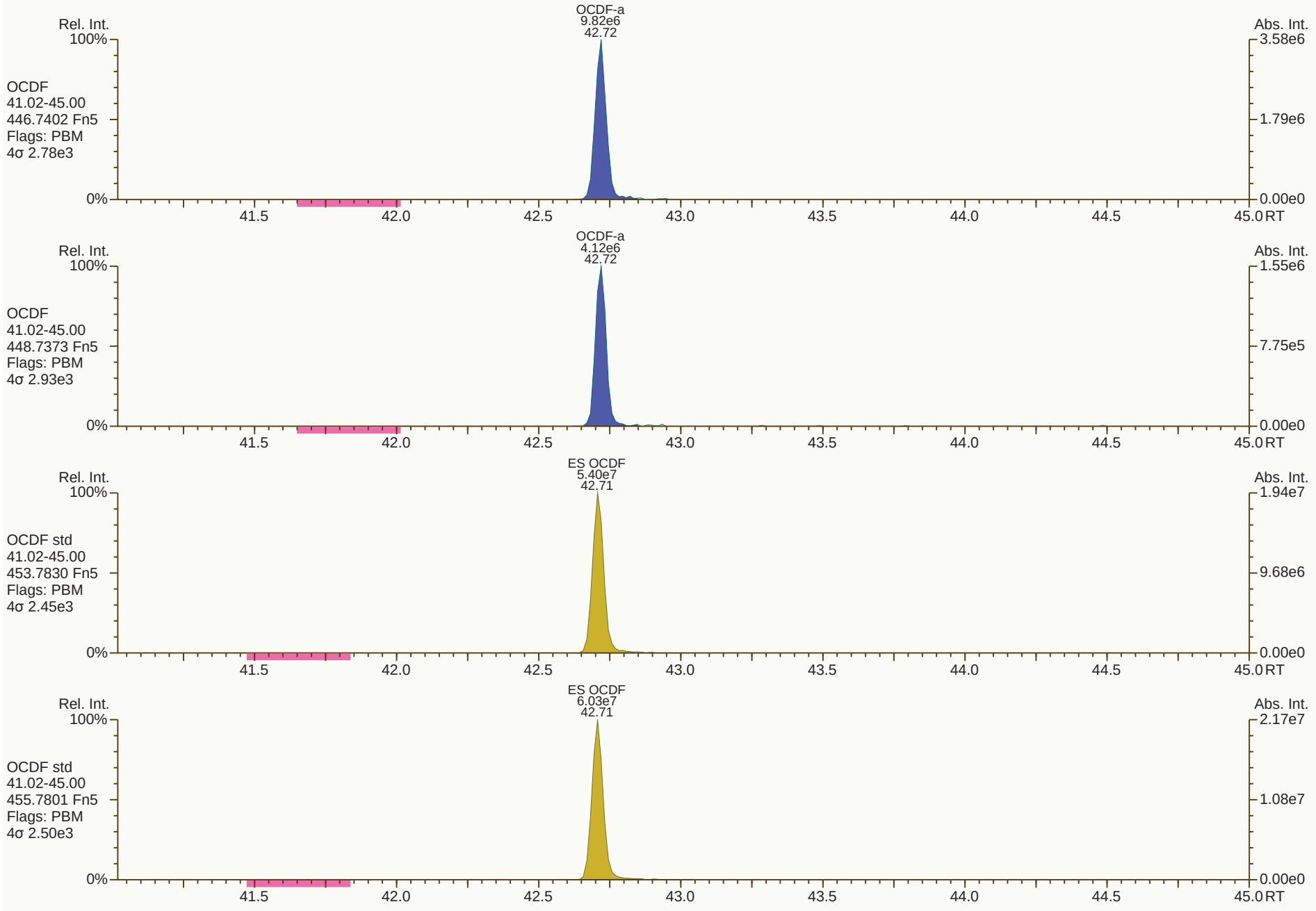

Rel. Int.
100%
HxCDF
34.02-38.51
373.8207 Fn3
Flags: PBM
4σ 1.37e3
0%
123478F
1.39e8*
35.96
123678F
1.43e8*
36.10
234678F
1.33e8*
36.74
123789F
1.16e8*
37.73
Abs. Int.
4.67e7
2.34e7
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDF
34.02-38.51
375.8178 Fn3
Flags: PBM
4σ 1.49e3
0%
123478F
1.13e8*
35.96
123678F
1.15e8*
36.10
234678F
1.09e8*
36.74
123789F
9.32e7*
37.73
Abs. Int.
3.77e7
1.89e7
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDF Std.
34.02-38.51
383.8639 Fn3
Flags: PBM
4σ 4.43e3
0%
ES 123478F
3.59e7*
35.94
ES 123678F
4.05e7*
36.08
CS 123469F
3.36e7*
36.39
ES 234678F
3.76e7*
36.73
ES 123789F
3.17e7*
37.71
Abs. Int.
1.27e7
6.33e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDF Std.
34.02-38.51
385.8610 Fn3
Flags: PBM
4σ 5.81e3
0%
ES 123478F
6.77e7*
35.94
ES 123678F
7.69e7*
36.08
CS 123469F
6.47e7*
36.39
ES 234678F
7.11e7*
36.73
ES 123789F
6.11e7*
37.71
Abs. Int.
2.41e7
1.20e7
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
OCDPE
34.02-38.51
445.7555 Fn3
Flags: PB
4σ 1.81e3
0%
Abs. Int.
5.02e3
2.51e3
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT


SGS ID: CS4_200612_DF_RA
Sample ID: SIL 20-281-2
Acq: 12-Jun-2020 17:36:49
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 9
User: PSW Datafile: 200612R07
Rel. Int.
Abs. Int.
HpCDF
38.52-41.01
407.7818 Fn4
Flags: PBM
4σ 1.63e3
1234678F
1.12e8*
39.20
1234789F
8.60e7*
40.53
4.26e7
2.13e7
0.00e0
HpCDF
38.52-41.01
409.7788 Fn4
Flags: PBM
4σ 1.51e3
1234678F
1.07e8*
39.20
1234789F
8.36e7*
40.53
4.25e7
2.12e7
0.00e0
HpCDF Std.
38.52-41.01
417.8253 Fn4
Flags: PBM
4σ 2.38e3
ES 1234678F
2.60e7*
39.19
CS 1234689F
2.35e7*
39.59
ES 1234789F
1.99e7*
40.52
1.01e7
5.05e6
0.00e0
HpCDF Std.
38.52-41.01
419.8220 Fn4
Flags: PBM
4σ 2.43e3
ES 1234678F
5.83e7*
39.19
CS 1234689F
5.36e7*
39.59
ES 1234789F
4.56e7*
40.52
2.22e7
1.11e7
0.00e0
NCDPE
38.52-41.01
479.7165 Fn4
Flags: PB
4σ 1.56e3
1.16e4
5.79e3
0.00e0
100%
0%
39.0
39.5
40.0
40.5
41.0 RT
Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS4_200612_DF_RA.utp_res, saved 15-Jun-2020 13:27 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 8088, 0710, 5473 scc: 711-420
PKD: 15-Jun-2020 08:11 Printed: 15-Jun-2020 13:40 Page 11 of 12


OCDF
1.13e8*
42.72
Rel. Int.
100%
OCDF
41.02-45.00
441.7428 Fn5
Flags: PBM
4σ 2.42e3
0%
Abs. Int.
4.11e7
2.05e7
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDF
1.27e8*
42.72
OCDF
41.02-45.00
443.7398 Fn5
Flags: PBM
4σ 1.38e3
4.58e7
2.29e7
ES OCDF
5.40e7*
42.71
OCDF Std.
41.02-45.00
453.7830 Fn5
Flags: PBM
4σ 2.45e3
1.94e7
9.68e6
ES OCDF
6.03e7*
42.71
OCDF Std.
41.02-45.00
455.7801 Fn5
Flags: PBM
4σ 2.50e3
2.17e7
1.08e7
DCDPE
41.02-45.00
513.6775 Fn5
Flags: PB
4σ 1.56e3
4.07e3
2.03e3

SGS ID: CS4_200612_DF_RA | Sample ID: SIL 20-281-2 | Acq: 12-Jun-2020 17:36:49

Instr: [ILM] AutoSpec-Ultima MM3 | VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 9 | User: PSW Datafile: 200612R07



Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS4_200612_DF_RA.utp_res, saved 15-Jun-2020 13:27 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 8790, 9665 *Revised: 15-Jun-2020 08:21 (PSW) Printed: 17-Jun-2020 08:05*

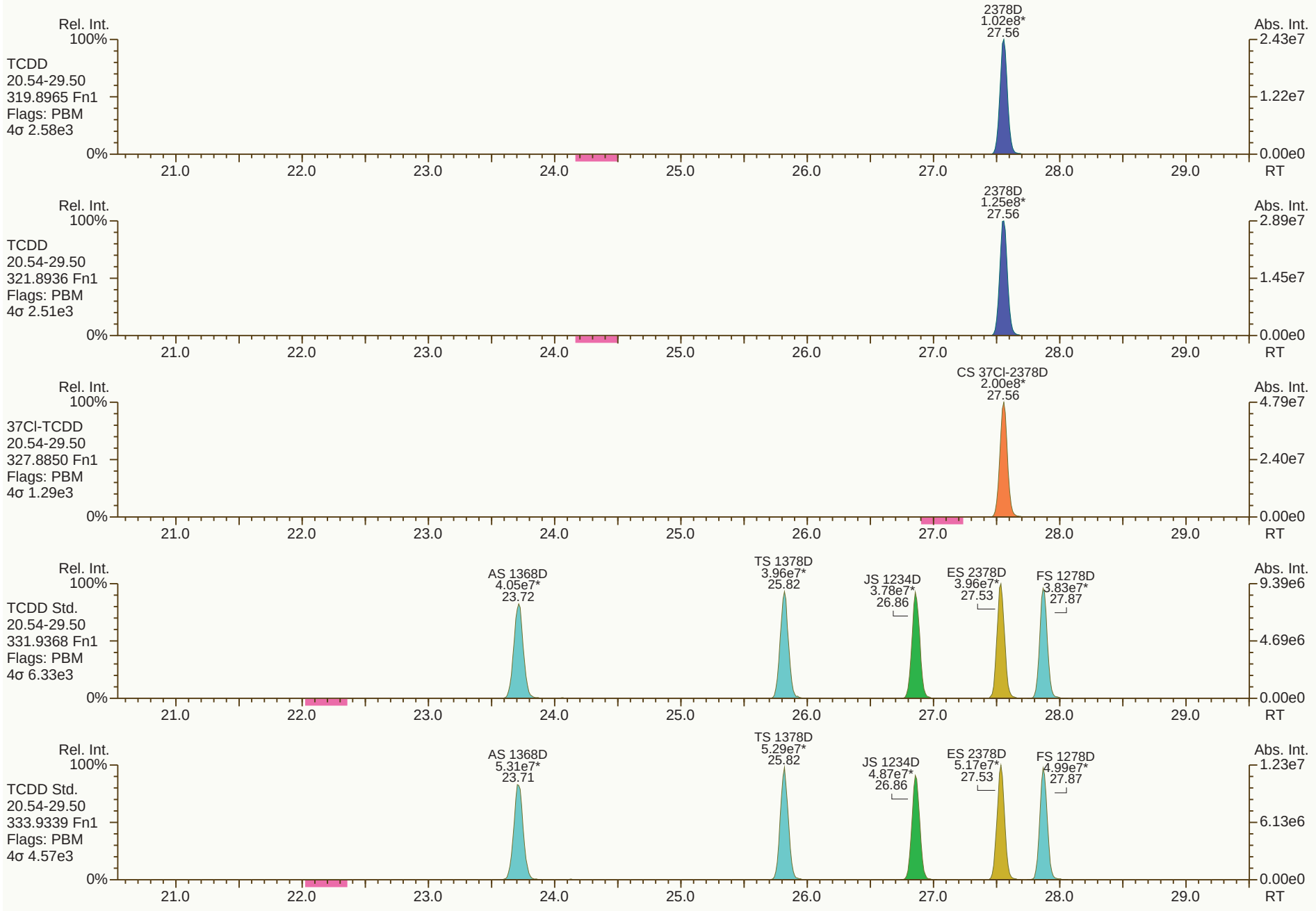
Dioxin/Furan QC Summary	Acq'd: 12 Jun 2020 18:24 PSW	ICAL: MM3_DF_10012020_12JUN2020
Lab ID: CS5_200612_DF_RA	UTP: 15-Jun-2020 11:51:19 PSW	Checkcode: 104-974-GYN
Sample ID: SIL 20-281-1	Report: 15 Jun 2020 11:54 pw	Datafile: 200612R08

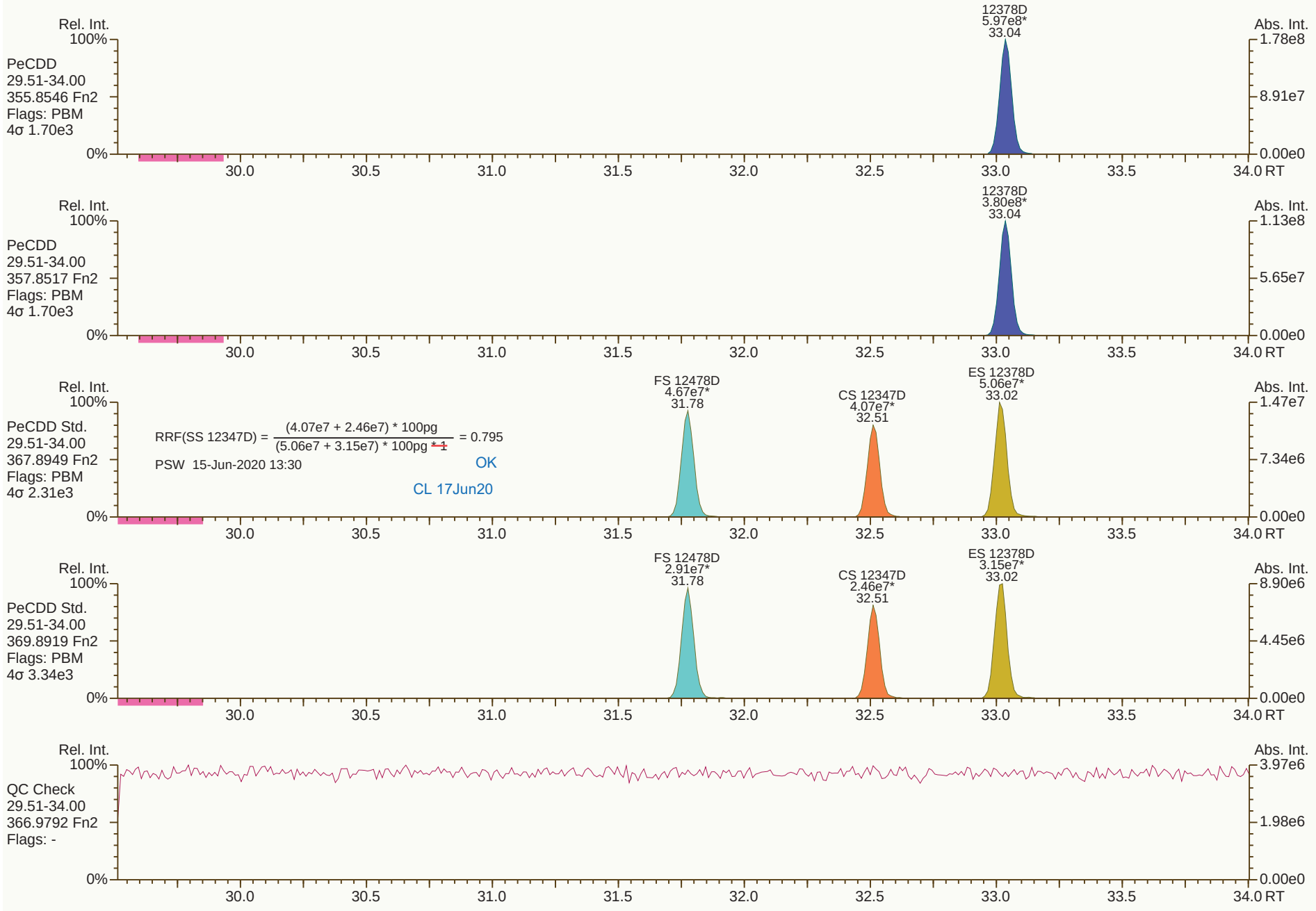
Name	RT	Response	RA	OK	Ref. RRFs	Calc. RRFs	Dev'n
2378-TCDD	27.56	2.27E+08	0.81	Y	1.18	1.24	6%
12378-PeCDD	33.04	9.77E+08	1.57	Y	1.14	1.19	5%
123478-HxCDD	36.94	9.26E+08	1.26	Y	1.09	1.14	5%
123678-HxCDD	37.05	9.44E+08	1.25	Y	1.13	1.20	6%
123789-HxCDD	37.36	9.89E+08	1.24	Y	1.05	1.09	4%
1234678-HpCDD	40.11	7.97E+08	1.04	Y	0.98	1.04	5%
OCDD	42.56	1.21E+09	0.89	Y	1.08	1.14	6%
2378-TCDF	26.65	3.13E+08	0.77	Y	0.98	1.05	7%
12378-PeCDF	31.56	1.40E+09	1.55	Y	0.95	1.00	5%
23478-PeCDF	32.69	1.38E+09	1.55	Y	0.95	1.00	6%
123478-HxCDF	35.97	1.31E+09	1.25	Y	1.20	1.25	5%
123678-HxCDF	36.11	1.37E+09	1.25	Y	1.07	1.13	5%
234678-HxCDF	36.75	1.25E+09	1.24	Y	1.10	1.13	3%
123789-HxCDF	37.74	1.13E+09	1.24	Y	1.09	1.16	6%
1234678-HpCDF	39.21	1.17E+09	1.04	Y	1.28	1.34	4%
1234789-HpCDF	40.53	9.23E+08	1.03	Y	1.27	1.31	3%
OCDF	42.73	1.44E+09	0.90	Y	1.01	1.08	7%
ES 2378-TCDD	27.53	9.13E+07	0.77	Y	1.01	1.06	5%
ES 12378-PeCDD	33.02	8.20E+07	1.61	Y	0.87	0.95	9%
ES 123478-HxCDD	36.92	8.10E+07	1.30	Y	1.10	1.13	3%
ES 123678-HxCDD	37.04	7.89E+07	1.29	Y	1.06	1.10	3%
ES 123789-HxCDD	37.34	9.05E+07	1.28	Y	1.22	1.26	3%
ES 1234678-HpCDD	40.1	7.68E+07	1.09	Y	0.99	1.07	8%
ES OCDD	42.55	1.06E+08	0.92	Y	0.67	0.74	10%
ES 2378-TCDF	26.63	1.49E+08	0.79	Y	1.01	1.03	1%
ES 12378-PeCDF	31.54	1.40E+08	1.56	Y	0.90	0.97	7%
ES 23478-PeCDF	32.67	1.38E+08	1.56	Y	0.89	0.95	7%
ES 123478-HxCDF	35.95	1.05E+08	0.53	Y	1.43	1.45	2%
ES 123678-HxCDF	36.09	1.22E+08	0.51	Y	1.63	1.69	4%
ES 234678-HxCDF	36.74	1.11E+08	0.52	Y	1.48	1.54	4%
ES 123789-HxCDF	37.72	9.75E+07	0.53	Y	1.29	1.35	5%
ES 1234678-HpCDF	39.2	8.77E+07	0.44	Y	1.15	1.22	6%
ES 1234789-HpCDF	40.53	7.06E+07	0.44	Y	0.91	0.98	8%
ES OCDF	42.72	1.33E+08	0.90	Y	0.83	0.93	12%

Dioxin/Furan QC Summary	Acq'd: 12 Jun 2020 18:24 PSW	ICAL: MM3_DF_10012020_12JUN2020
Lab ID: CS5_200612_DF_RA	UTP: 15-Jun-2020 11:51:19 PSW	Checkcode: 104-974-GYN
Sample ID: SIL 20-281-1	Report: 15 Jun 2020 11:54 pw	Datafile: 200612R08

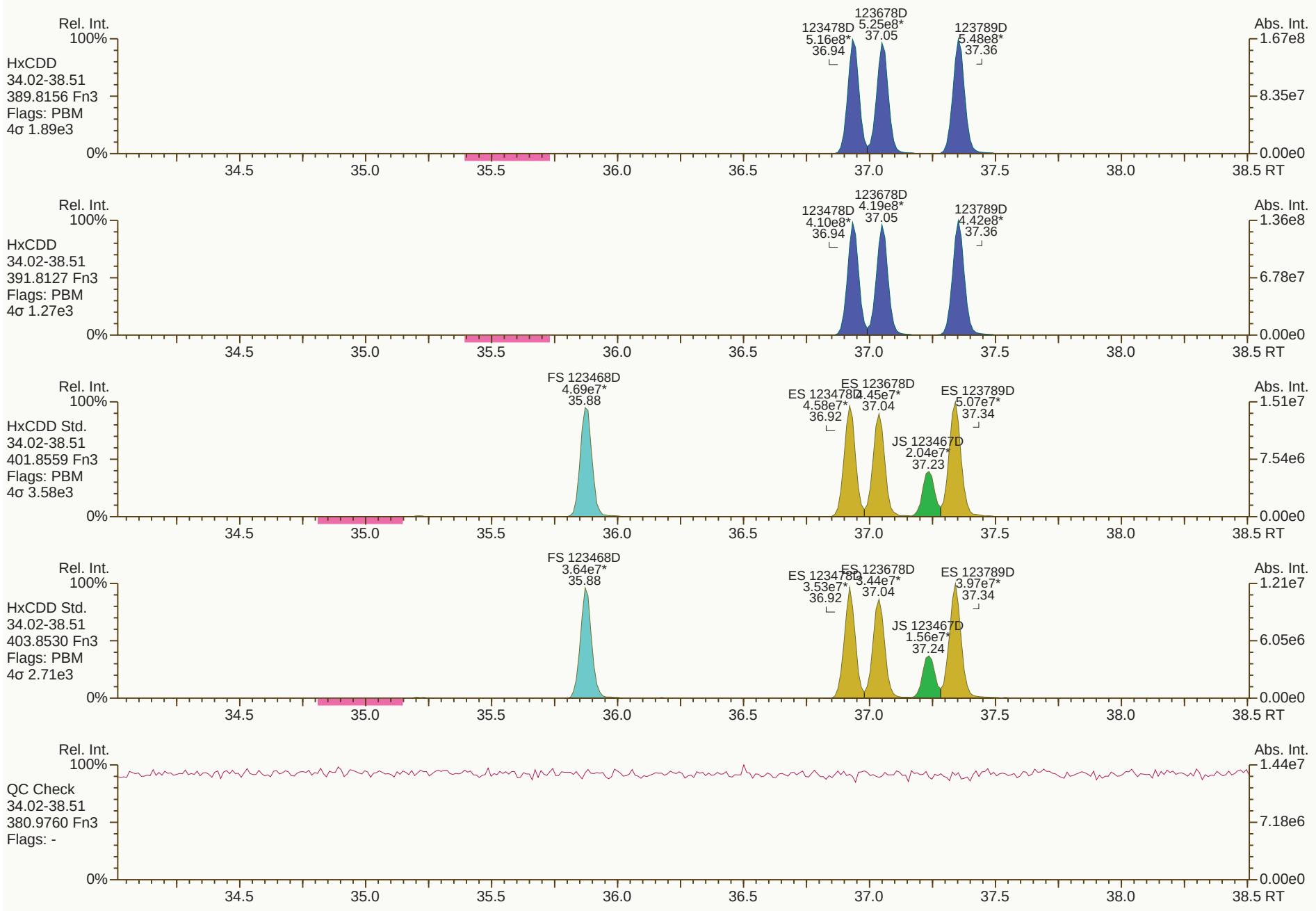
Name	RT	Response	RA	OK	Ref. RRFs	Calc. RRFs	Dev'n
JS 1234-TCDD	26.86	8.64E+07	0.78	Y	-	-	-
JS 1234-TCDF	25.22	1.45E+08	0.79	Y	-	-	-
JS 123467-HxCDD	37.23	3.60E+07	1.31	Y	-	-	-
CS 37Cl-2378-TCDD	27.56	2.00E+08	n/a	-	1.04	1.16	12%
CS 12347-PeCDD	32.51	6.53E+07	1.65	Y	0.74	0.76	2%
CS 12346-PeCDF	31.01	1.24E+08	1.58	Y	0.86	0.85	-1%
CS 123469-HxCDF	36.39	9.37E+07	0.52	Y	1.36	1.30	-4%
CS 1234689-HpCDF	39.60	7.63E+07	0.45	Y	1.05	1.06	1%
SS 37Cl-2378-TCDD	27.56	2.00E+08	n/a	-	1.04	1.10	6%
SS 12347-PeCDD	32.51	6.53E+07	1.65	Y	0.86	0.80	-7%
SS 12346-PeCDF	31.01	1.24E+08	1.58	Y	0.96	0.88	-8%
SS 123469-HxCDF	36.39	9.37E+07	0.52	Y	0.83	0.77	-8%
SS 1234689-HpCDF	39.60	7.63E+07	0.45	Y	0.92	0.87	-6%
AS 1368-TCDD	23.72	9.37E+07	0.76	Y	1.08	1.08	1%
AS 1368-TCDF	21.50	1.70E+08	0.78	Y	1.18	1.17	-1%
FS 1278-TCDD	27.87	8.82E+07	0.77	Y	1.00	0.97	-3%
FS 12478-PeCDD	31.78	7.59E+07	1.61	Y	1.00	0.92	-7%
FS 123468-HxCDD	35.88	8.33E+07	1.29	Y	1.11	1.03	-7%
FS 1234679-HpCDD	39.46	8.18E+07	1.06	Y	1.19	1.06	-11%
TS 1378-TCDD	25.82	9.25E+07	0.75	Y	1.06	1.01	-4%
OCDD-a	42.56	7.36E+07	2.50	Y	0.07	0.07	-1%
OCDF-a	42.73	8.63E+07	2.50	Y	0.06	0.06	10%

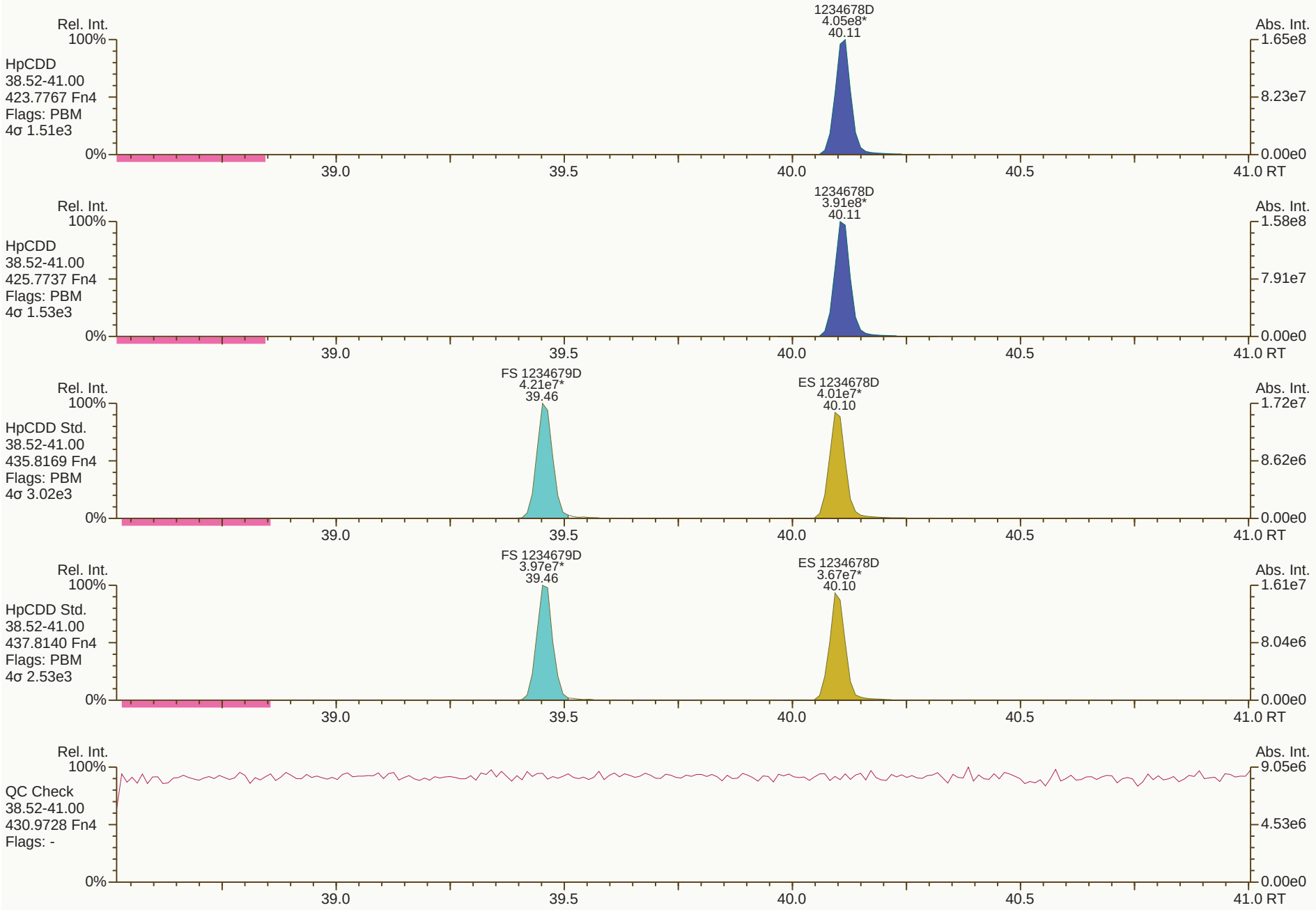

Rel. Int.
100%
QC Check
20.54-29.50
316.9824 Fn1
Flags: -
0%
Abs. Int.
5.33e6
2.67e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
QC Check
29.51-34.00
366.9792 Fn2
Flags: -
0%
Abs. Int.
3.97e6
1.98e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
QC Check
34.02-38.51
380.9760 Fn3
Flags: -
0%
Abs. Int.
1.44e7
7.18e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
QC Check
38.52-41.00
430.9728 Fn4
Flags: -
0%
Abs. Int.
9.05e6
4.53e6
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
41.02-45.01
454.9728 Fn5
Flags: -
0%
Abs. Int.
8.06e6
4.03e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

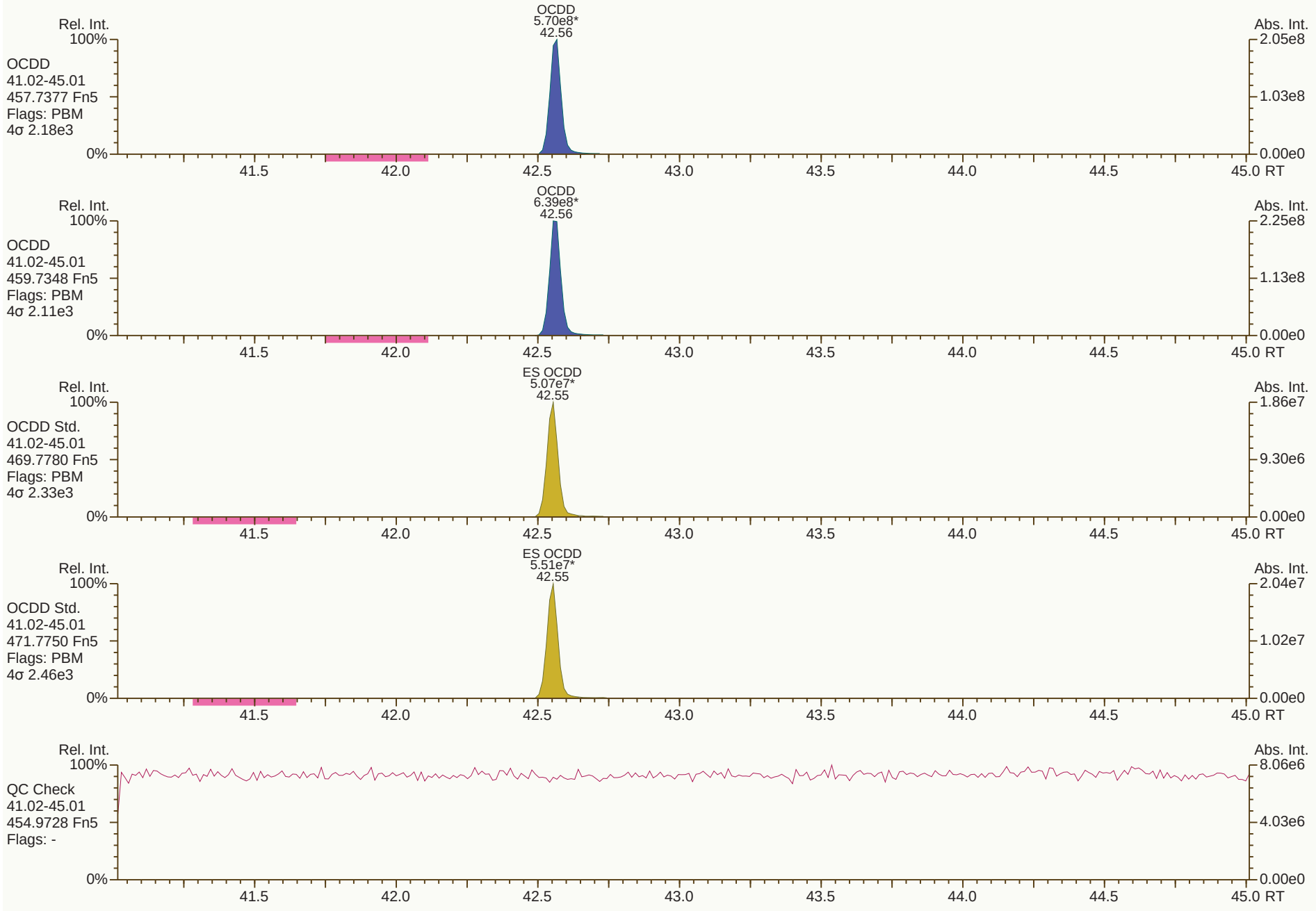

Rel. Int.
100%
TCDD
20.54-29.50
319.8965 Fn1
Flags: PBM
4σ 2.58e3
0%
2378D
1.02e8*
27.56
Abs. Int.
2.43e7
1.22e7
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD
20.54-29.50
321.8936 Fn1
Flags: PBM
4σ 2.51e3
0%
2378D
1.25e8*
27.56
Abs. Int.
2.89e7
1.45e7
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
37Cl-TCDD
20.54-29.50
327.8850 Fn1
Flags: PBM
4σ 1.29e3
0%
CS 37Cl-2378D
2.00e8*
27.56
Abs. Int.
4.79e7
2.40e7
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
331.9368 Fn1
Flags: PBM
4σ 6.33e3
0%
AS 1368D
4.05e7*
23.72
TS 1378D
3.96e7*
25.82
JS 1234D
3.78e7*
26.86
ES 2378D
3.96e7*
27.53
FS 1278D
3.83e7*
27.87
Abs. Int.
9.39e6
4.69e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
333.9339 Fn1
Flags: PBM
4σ 4.57e3
0%
AS 1368D
5.31e7*
23.71
TS 1378D
5.29e7*
25.82
JS 1234D
4.87e7*
26.86
ES 2378D
5.17e7*
27.53
FS 1278D
4.99e7*
27.87
Abs. Int.
1.23e7
6.13e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT

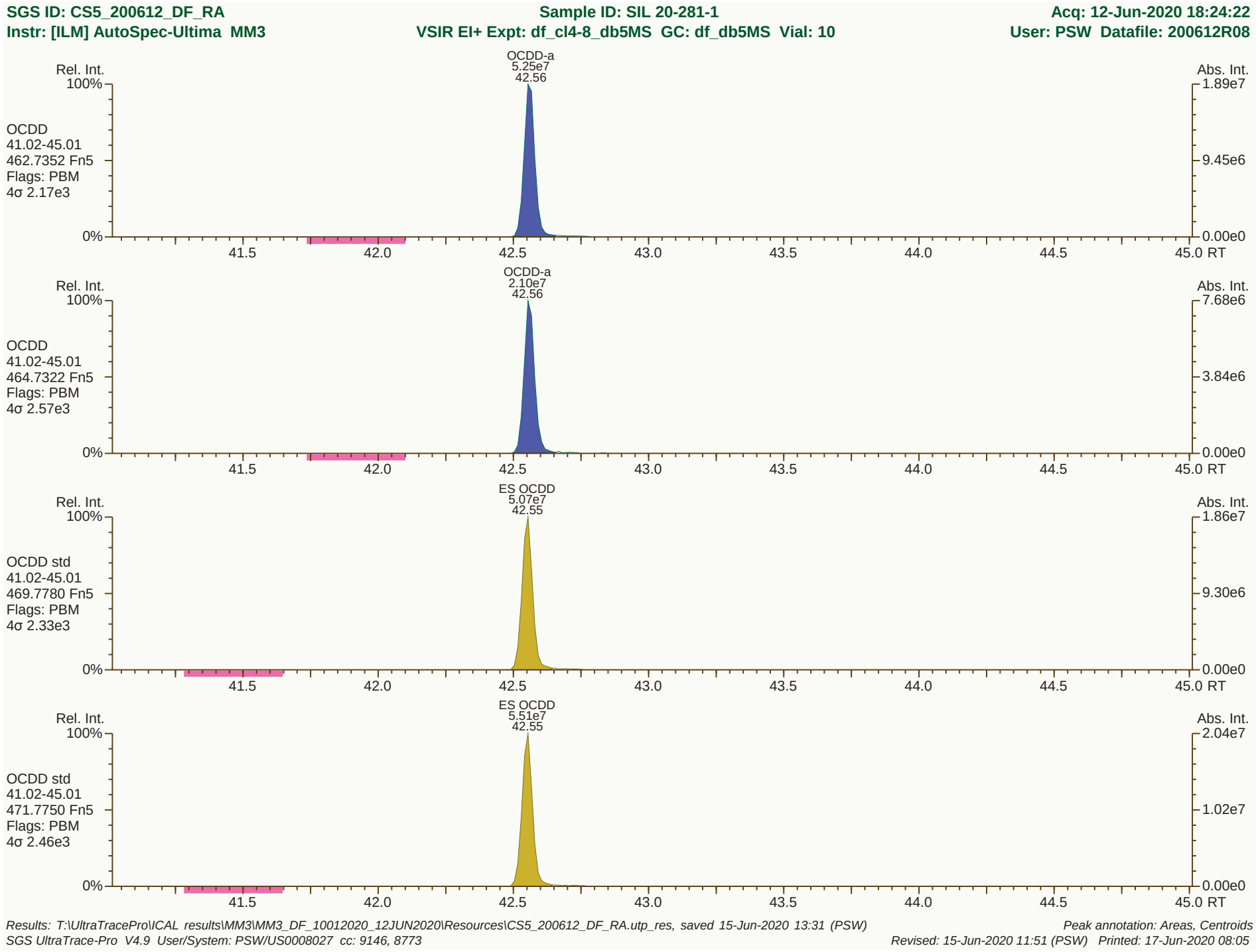


Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS5_200612_DF_RA.utp_res, saved 15-Jun-2020 13:31 (PSW) *Peak annotation: Areas, Centroids*


Rel. Int.
100%
HxCDD
34.02-38.51
389.8156 Fn3
Flags: PBM
4σ 1.89e3
123478D
5.16e8*
36.94
123678D
5.25e8*
37.05
123789D
5.48e8*
37.36
Abs. Int.
1.67e8
8.35e7
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDD
34.02-38.51
391.8127 Fn3
Flags: PBM
4σ 1.27e3
123478D
4.10e8*
36.94
123678D
4.19e8*
37.05
123789D
4.42e8*
37.36
Abs. Int.
1.36e8
6.78e7
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDD Std.
34.02-38.51
401.8559 Fn3
Flags: PBM
4σ 3.58e3
FS 123468D
4.69e7*
35.88
ES 123478D
4.58e7*
36.92
ES 123678D
4.45e7*
37.04
JS 123467D
2.04e7*
37.23
ES 123789D
5.07e7*
37.34
Abs. Int.
1.51e7
7.54e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDD Std.
34.02-38.51
403.8530 Fn3
Flags: PBM
4σ 2.71e3
FS 123468D
3.64e7*
35.88
ES 123478D
3.53e7*
36.92
ES 123678D
3.44e7*
37.04
JS 123467D
1.56e7*
37.24
ES 123789D
3.97e7*
37.34
Abs. Int.
1.21e7
6.05e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
QC Check
34.02-38.51
380.9760 Fn3
Flags: -
Abs. Int.
1.44e7
7.18e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT


Rel. Int.
100%
HpCDD
38.52-41.00
423.7767 Fn4
Flags: PBM
4σ 1.51e3
0%
1234678D
4.05e8*
40.11
Abs. Int.
1.65e8
8.23e7
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.52-41.00
425.7737 Fn4
Flags: PBM
4σ 1.53e3
0%
1234678D
3.91e8*
40.11
Abs. Int.
1.58e8
7.91e7
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.52-41.00
435.8169 Fn4
Flags: PBM
4σ 3.02e3
0%
FS 1234679D
4.21e7*
39.46
ES 1234678D
4.01e7*
40.10
Abs. Int.
1.72e7
8.62e6
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.52-41.00
437.8140 Fn4
Flags: PBM
4σ 2.53e3
0%
FS 1234679D
3.97e7*
39.46
ES 1234678D
3.67e7*
40.10
Abs. Int.
1.61e7
8.04e6
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.52-41.00
430.9728 Fn4
Flags: -
0%
Abs. Int.
9.05e6
4.53e6
0.00e0
39.0
39.5
40.0
40.5
41.0 RT

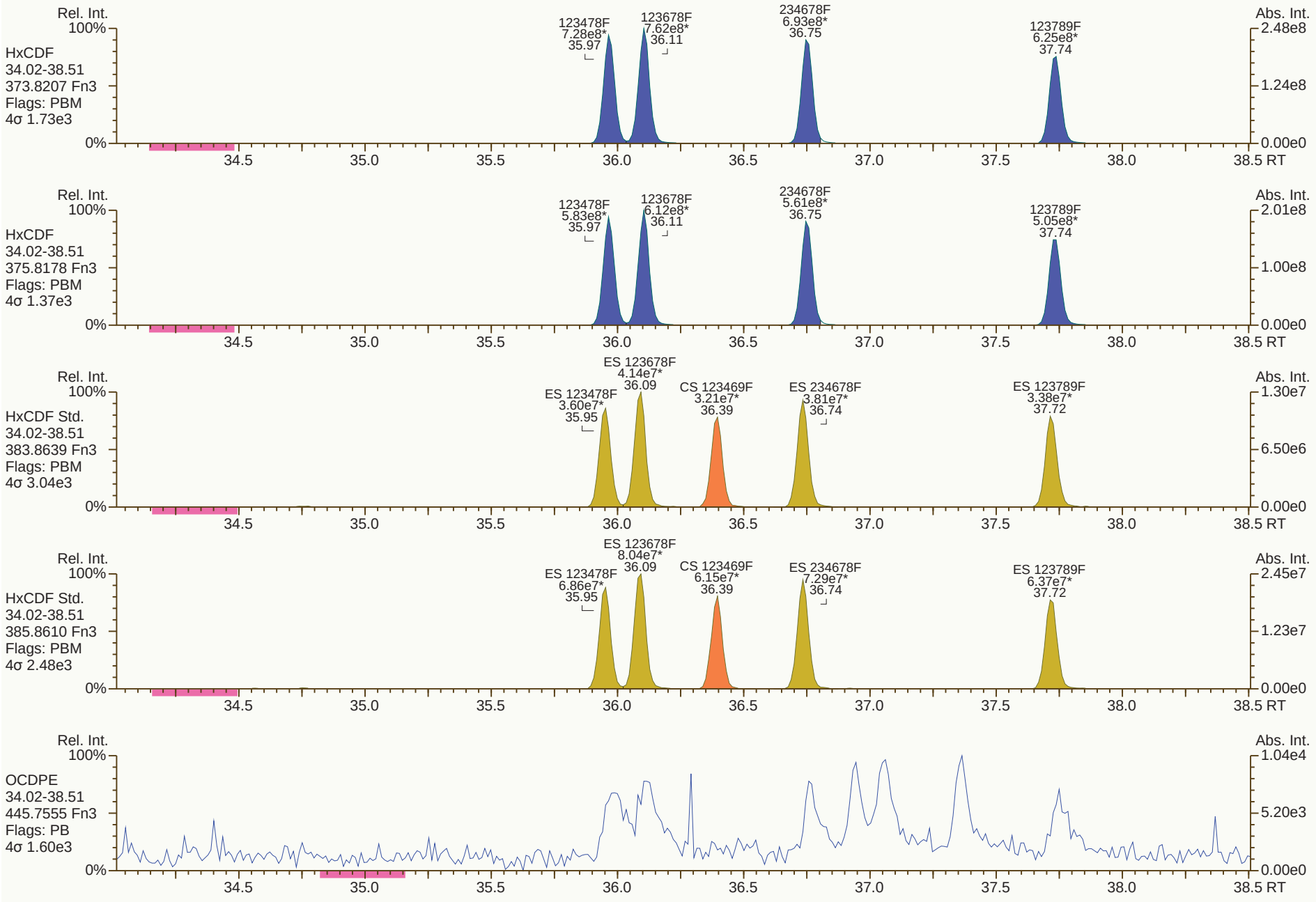

OCDD
5.70e8*
42.56
Rel. Int.
100%
OCDD
41.02-45.01
457.7377 Fn5
Flags: PBM
4σ 2.18e3
0%
Abs. Int.
2.05e8
1.03e8
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDD
6.39e8*
42.56
Rel. Int.
100%
OCDD
41.02-45.01
459.7348 Fn5
Flags: PBM
4σ 2.11e3
0%
Abs. Int.
2.25e8
1.13e8
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
5.07e7*
42.55
Rel. Int.
100%
OCDD Std.
41.02-45.01
469.7780 Fn5
Flags: PBM
4σ 2.33e3
0%
Abs. Int.
1.86e7
9.30e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
5.51e7*
42.55
Rel. Int.
100%
OCDD Std.
41.02-45.01
471.7750 Fn5
Flags: PBM
4σ 2.46e3
0%
Abs. Int.
2.04e7
1.02e7
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
QC Check
41.02-45.01
454.9728 Fn5
Flags: -
0%
Abs. Int.
8.06e6
4.03e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

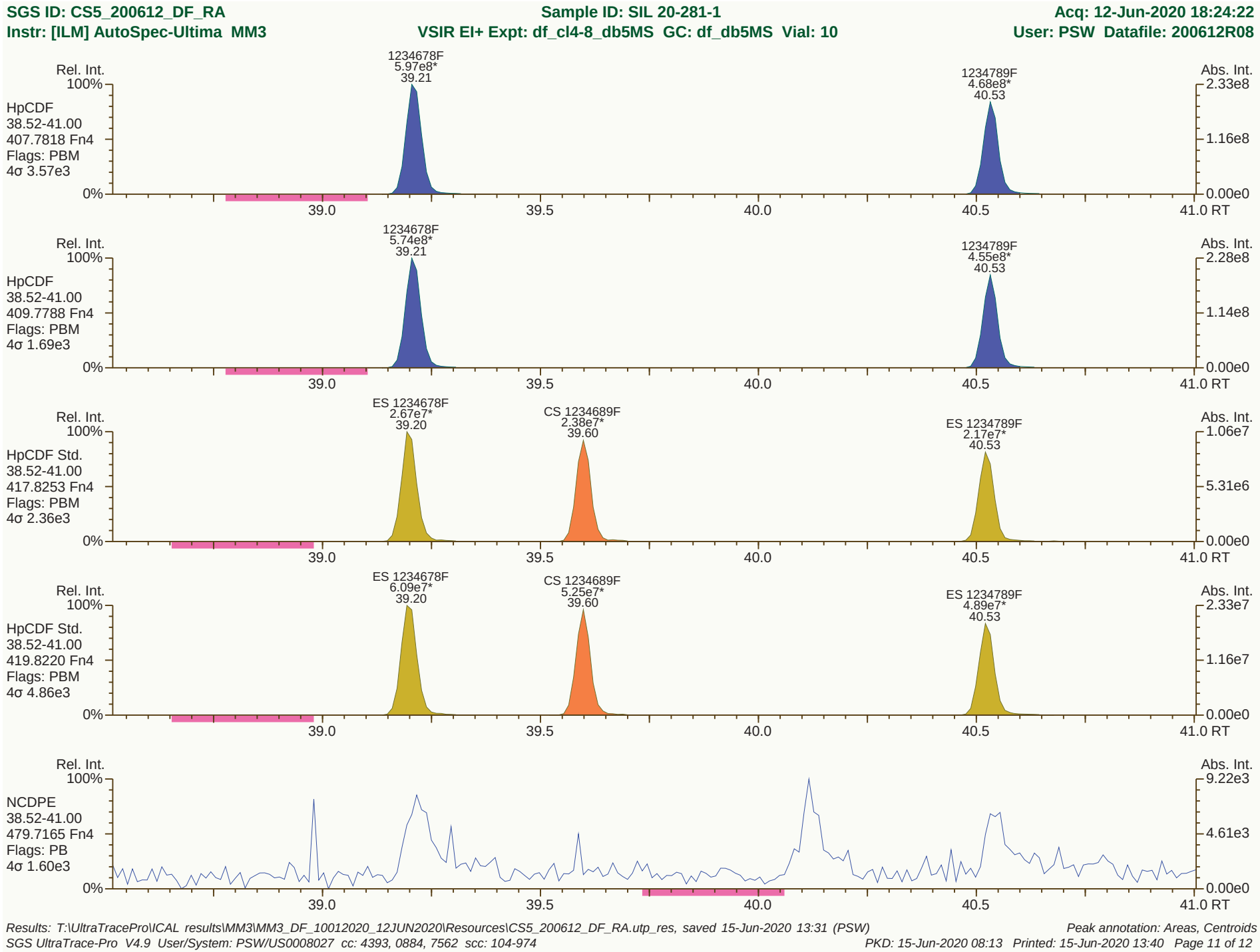

SGS ID: CS5_200612_DF_RA
Sample ID: SIL 20-281-1
Acq: 12-Jun-2020 18:24:22
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 10
User: PSW Datafile: 200612R08
Rel. Int.
Abs. Int.
OCDD-a
5.25e7
42.56
OCDD
41.02-45.01
462.7352 Fn5
Flags: PBM
4σ 2.17e3
1.89e7
9.45e6
0.00e0
OCDD-a
2.10e7
42.56
OCDD
41.02-45.01
464.7322 Fn5
Flags: PBM
4σ 2.57e3
7.68e6
3.84e6
ES OCDD
5.07e7
42.55
OCDD std
41.02-45.01
469.7780 Fn5
Flags: PBM
4σ 2.33e3
1.86e7
9.30e6
ES OCDD
5.51e7
42.55
OCDD std
41.02-45.01
471.7750 Fn5
Flags: PBM
4σ 2.46e3
2.04e7
1.02e7
100%
0%
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS5_200612_DF_RA.utp_res, saved 15-Jun-2020 13:31 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 9146, 8773
Revised: 15-Jun-2020 11:51 (PSW) Printed: 17-Jun-2020 08:05


Rel. Int.
100%
TCDF
20.54-29.50
303.9016 Fn1
Flags: PBM
4σ 2.41e3
0%
2378F
1.36e8*
26.65
Abs. Int.
3.06e7
1.53e7
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF
20.54-29.50
305.8987 Fn1
Flags: PBM
4σ 2.01e3
0%
2378F
1.76e8*
26.65
Abs. Int.
3.98e7
1.99e7
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
315.9419 Fn1
Flags: PBM
4σ 1.57e4
0%
AS 1368F
7.46e7*
21.50
JS 1234F
6.40e7*
25.22
ES 2378F
6.55e7*
26.63
Abs. Int.
1.50e7
7.49e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
317.9389 Fn1
Flags: PBM
4σ 8.67e3
0%
AS 1368F
9.50e7*
21.50
JS 1234F
8.10e7*
25.22
ES 2378F
8.33e7*
26.62
Abs. Int.
1.83e7
9.15e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
HxCDPE
20.54-29.50
375.8364 Fn1
Flags: PB
4σ 1.48e3
0%
Abs. Int.
8.16e3
4.08e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
0%
Abs. Int.
9.49e3
4.75e3
0.00e0
PeCDF-1
20.54-29.50
339.8597 Fn1
Flags: PB
4σ 2.09e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
0%
Abs. Int.
2.15e4
1.08e4
0.00e0
PeCDF-1
20.54-29.50
341.8568 Fn1
Flags: PB
4σ 2.44e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
0%
Abs. Int.
5.33e6
2.67e6
0.00e0
QC Check
20.54-29.50
316.9824 Fn1
Flags: -
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
PeCDF-2
29.51-34.00
339.8597 Fn2
Flags: PBM
4σ 2.25e3
0%
12378F
8.50e8*
31.56
23478F
8.37e8*
32.69
Abs. Int.
2.51e8
1.25e8
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF-2
29.51-34.00
341.8568 Fn2
Flags: PBM
4σ 1.72e3
0%
12378F
5.49e8*
31.56
23478F
5.41e8*
32.68
Abs. Int.
1.62e8
8.09e7
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.00
351.9000 Fn2
Flags: PBM
4σ 2.76e3
0%
CS 12346F
7.57e7*
31.01
ES 12378F
8.53e7*
31.54
ES 23478F
8.38e7*
32.67
Abs. Int.
2.42e7
1.21e7
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.00
353.8970 Fn2
Flags: PBM
4σ 4.14e3
0%
CS 12346F
4.79e7*
31.01
ES 12378F
5.48e7*
31.54
ES 23478F
5.38e7*
32.67
Abs. Int.
1.54e7
7.70e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
HpCDPE
29.51-34.00
409.7974 Fn2
Flags: PB
4σ 1.56e3
0%
Abs. Int.
1.55e4
7.77e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT


Rel. Int.
100%
HxCDF
34.02-38.51
373.8207 Fn3
Flags: PBM
4σ 1.73e3
0%
123478F
7.28e8*
35.97
123678F
7.62e8*
36.11
234678F
6.93e8*
36.75
123789F
6.25e8*
37.74
Abs. Int.
2.48e8
1.24e8
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDF
34.02-38.51
375.8178 Fn3
Flags: PBM
4σ 1.37e3
0%
123478F
5.83e8*
35.97
123678F
6.12e8*
36.11
234678F
5.61e8*
36.75
123789F
5.05e8*
37.74
Abs. Int.
2.01e8
1.00e8
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDF Std.
34.02-38.51
383.8639 Fn3
Flags: PBM
4σ 3.04e3
0%
ES 123678F
4.14e7*
36.09
ES 123478F
3.60e7*
35.95
CS 123469F
3.21e7*
36.39
ES 234678F
3.81e7*
36.74
ES 123789F
3.38e7*
37.72
Abs. Int.
1.30e7
6.50e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDF Std.
34.02-38.51
385.8610 Fn3
Flags: PBM
4σ 2.48e3
0%
ES 123678F
8.04e7*
36.09
ES 123478F
6.86e7*
35.95
CS 123469F
6.15e7*
36.39
ES 234678F
7.29e7*
36.74
ES 123789F
6.37e7*
37.72
Abs. Int.
2.45e7
1.23e7
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
OCDPE
34.02-38.51
445.7555 Fn3
Flags: PB
4σ 1.60e3
0%
Abs. Int.
1.04e4
5.20e3
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT



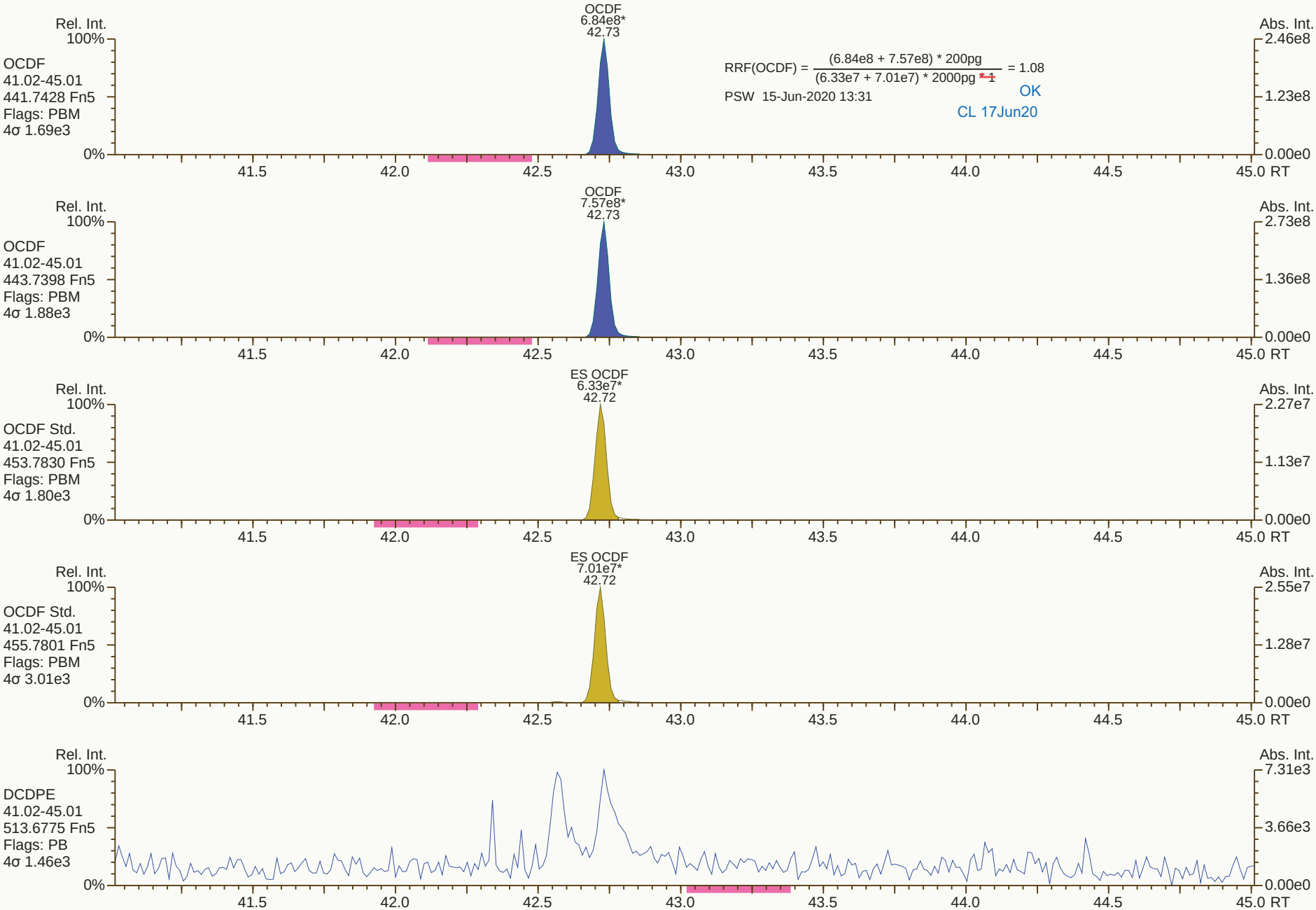
Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS5_200612_DF_RA.utp_res, saved 15-Jun-2020 13:31 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 4393, 0884, 7562 scc: 104-974 *PKD: 15-Jun-2020 08:13 Printed: 15-Jun-2020 13:40 Page 11 of 12*

SGS ID: CS5_200612_DF_RA
Instr: [ILM] AutoSpec-Ultima MM3

Sample ID: SIL 20-281-1
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 10

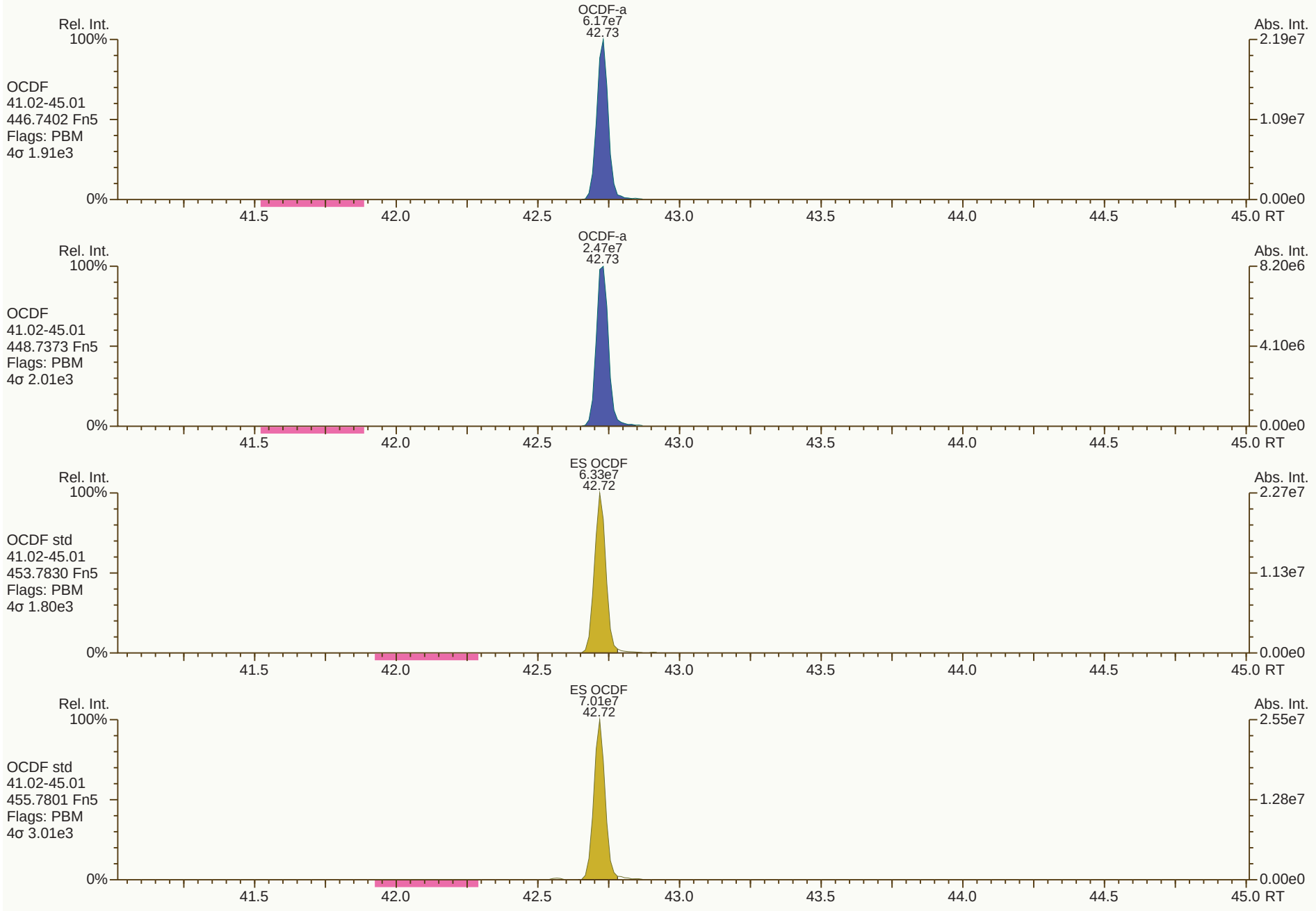
Acq: 12-Jun-2020 18:24:22
User: PSW Datafile: 200612R08



Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS5_200612_DF_RA.utp_res, saved 15-Jun-2020 13:31 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 2999, 4904, 9707 scc: 104-974
PKD: 15-Jun-2020 08:22 Printed: 15-Jun-2020 13:40 Page 12 of 12

SGS ID: CS5_200612_DF_RA | Sample ID: SIL 20-281-1 | Acq: 12-Jun-2020 18:24:22

Instr: [ILM] AutoSpec-Ultima MM3 | VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 10 | User: PSW Datafile: 200612R08



Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS5_200612_DF_RA.utp_res, saved 15-Jun-2020 13:31 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 7188, 4904 *Revised: 15-Jun-2020 11:51 (PSW) Printed: 17-Jun-2020 08:05*

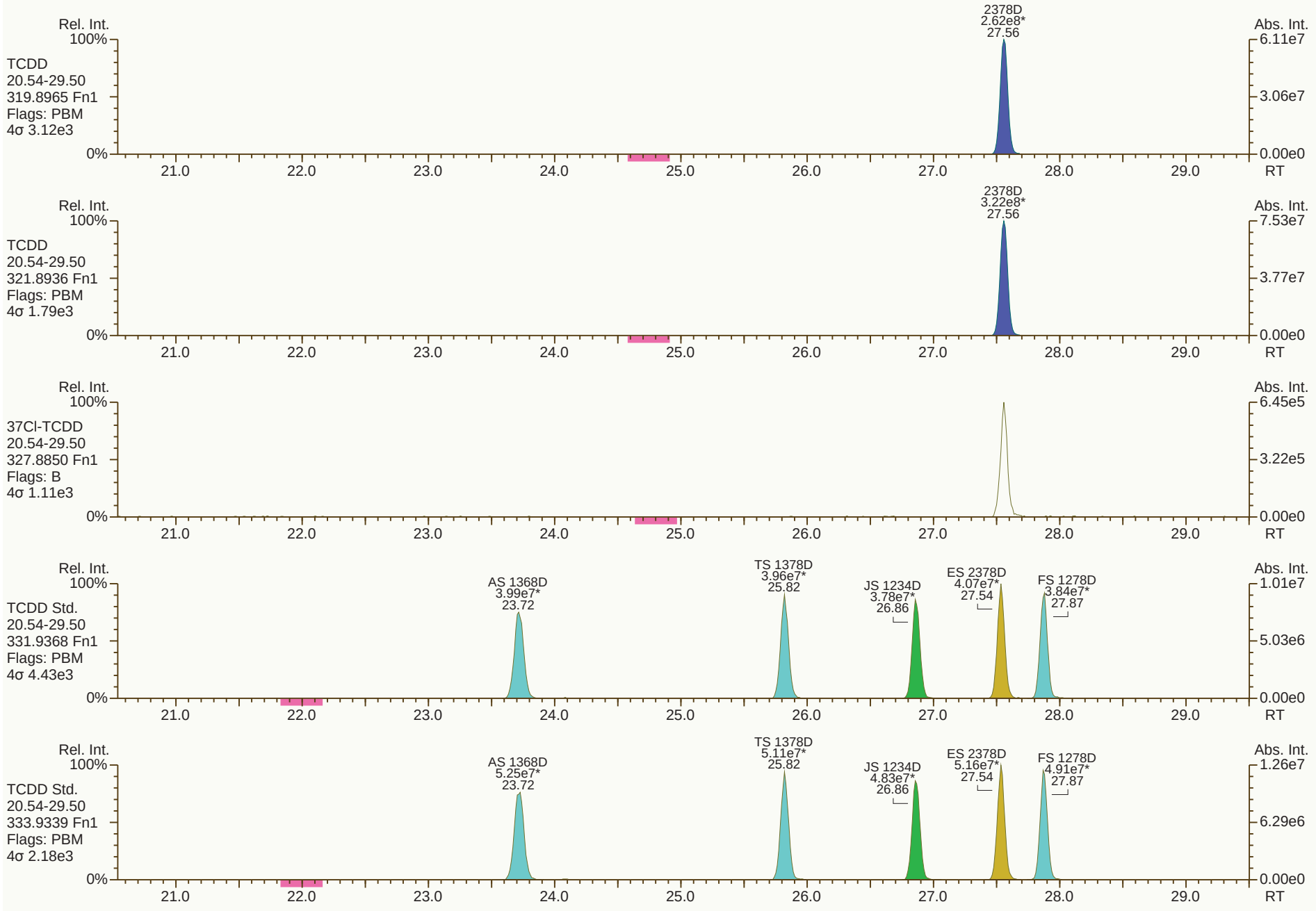
Dioxin/Furan QC Summary	Acq'd: 12 Jun 2020 20:46 PSW	ICAL: MM3_DF_10012020_12JUN2020
Lab ID: CS6_200612_DF_RA	UTP: 15-Jun-2020 11:51:53 PSW	Checkcode: 630-787-MDT
Sample ID: SIL 20-280-4	Report: 15 Jun 2020 11:54 pw	Datafile: 200612R11

Name	RT	Response	RA	OK	Ref. RRFs	Calc. RRFs	Dev'n
2378-TCDD	27.56	5.84E+08	0.81	Y	1.18	1.27	7%
12378-PeCDD	33.04	2.64E+09	1.57	Y	1.14	1.20	5%
123478-HxCDD	36.94	2.47E+09	1.26	Y	1.09	1.15	5%
123678-HxCDD	37.05	2.55E+09	1.26	Y	1.13	1.19	6%
123789-HxCDD	37.36	2.67E+09	1.26	Y	1.05	1.10	5%
1234678-HpCDD	40.12	2.26E+09	1.04	Y	0.98	1.05	7%
OCDD	42.57	3.54E+09	0.90	Y	1.08	1.13	5%
2378-TCDF	26.65	8.06E+08	0.77	Y	0.98	1.04	6%
12378-PeCDF	31.56	3.74E+09	1.55	Y	0.95	1.00	5%
23478-PeCDF	32.69	3.66E+09	1.54	Y	0.95	0.99	5%
123478-HxCDF	35.97	3.55E+09	1.25	Y	1.20	1.25	4%
123678-HxCDF	36.11	3.73E+09	1.24	Y	1.07	1.13	5%
234678-HxCDF	36.75	3.40E+09	1.24	Y	1.10	1.15	5%
123789-HxCDF	37.74	3.15E+09	1.24	Y	1.09	1.14	4%
1234678-HpCDF	39.21	3.20E+09	1.04	Y	1.28	1.35	5%
1234789-HpCDF	40.54	2.69E+09	1.04	Y	1.27	1.34	6%
OCDF	42.74	4.30E+09	0.90	Y	1.01	1.09	8%
ES 2378-TCDD	27.54	9.23E+07	0.79	Y	1.01	1.07	6%
ES 12378-PeCDD	33.02	8.81E+07	1.68	Y	0.87	1.02	17%
ES 123478-HxCDD	36.92	8.62E+07	1.32	Y	1.10	1.20	9%
ES 123678-HxCDD	37.04	8.56E+07	1.27	Y	1.06	1.19	12%
ES 123789-HxCDD	37.34	9.73E+07	1.35	Y	1.22	1.35	11%
ES 1234678-HpCDD	40.1	8.57E+07	1.08	Y	0.99	1.19	20%
ES OCDD	42.56	1.26E+08	0.92	Y	0.67	0.87	31%
ES 2378-TCDF	26.63	1.55E+08	0.81	Y	1.01	1.07	6%
ES 12378-PeCDF	31.54	1.50E+08	1.54	Y	0.90	1.04	15%
ES 23478-PeCDF	32.67	1.48E+08	1.56	Y	0.89	1.02	15%
ES 123478-HxCDF	35.95	1.14E+08	0.52	Y	1.43	1.58	11%
ES 123678-HxCDF	36.09	1.32E+08	0.53	Y	1.63	1.84	13%
ES 234678-HxCDF	36.74	1.18E+08	0.55	Y	1.48	1.64	11%
ES 123789-HxCDF	37.72	1.11E+08	0.54	Y	1.29	1.54	19%
ES 1234678-HpCDF	39.2	9.49E+07	0.46	Y	1.15	1.32	15%
ES 1234789-HpCDF	40.53	8.02E+07	0.44	Y	0.91	1.11	23%
ES OCDF	42.73	1.58E+08	0.90	Y	0.83	1.10	32%

Dioxin/Furan QC Summary	Acq'd: 12 Jun 2020 20:46 PSW	ICAL: MM3_DF_10012020_12JUN2020
Lab ID: CS6_200612_DF_RA	UTP: 15-Jun-2020 11:51:53 PSW	Checkcode: 630-787-MDT
Sample ID: SIL 20-280-4	Report: 15 Jun 2020 11:54 pw	Datafile: 200612R11

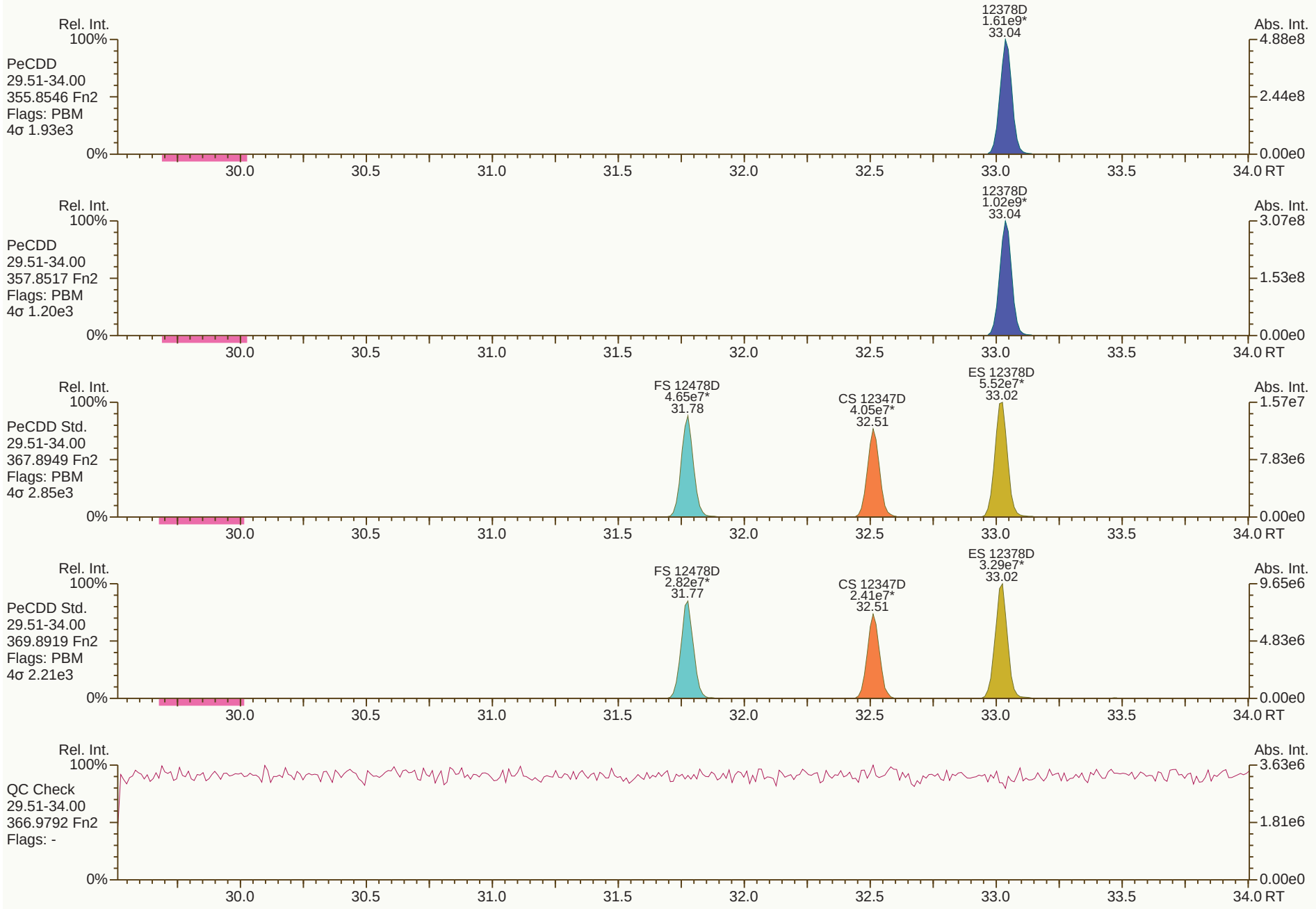
Name	RT	Response	RA	OK	Ref. RRFs	Calc. RRFs	Dev'n
JS 1234-TCDD	26.86	8.61E+07	0.78	Y	-	-	-
JS 1234-TCDF	25.22	1.44E+08	0.79	Y	-	-	-
JS 123467-HxCDD	37.24	3.60E+07	1.33	Y	-	-	-
CS 37Cl-2378-TCDD	NotFnd		n/a	-	1.04		
CS 12347-PeCDD	32.51	6.46E+07	1.68	Y	0.74	0.75	1%
CS 12346-PeCDF	31.01	1.25E+08	1.60	Y	0.86	0.87	1%
CS 123469-HxCDF	36.39	9.59E+07	0.53	Y	1.36	1.33	-2%
CS 1234689-HpCDF	39.60	7.85E+07	0.45	Y	1.05	1.09	4%
SS 37Cl-2378-TCDD	NotFnd		n/a	-	1.04		
SS 12347-PeCDD	32.51	6.46E+07	1.68	Y	0.86	0.73	-14%
SS 12346-PeCDF	31.01	1.25E+08	1.60	Y	0.96	0.84	-13%
SS 123469-HxCDF	36.39	9.59E+07	0.53	Y	0.83	0.73	-13%
SS 1234689-HpCDF	39.60	7.85E+07	0.45	Y	0.92	0.83	-10%
AS 1368-TCDD	23.72	9.24E+07	0.76	Y	1.08	1.07	0%
AS 1368-TCDF	21.50	1.70E+08	0.78	Y	1.18	1.18	0%
FS 1278-TCDD	27.87	8.75E+07	0.78	Y	1.00	0.95	-5%
FS 12478-PeCDD	31.78	7.48E+07	1.65	Y	1.00	0.85	-15%
FS 123468-HxCDD	35.88	8.47E+07	1.31	Y	1.11	0.98	-12%
FS 1234679-HpCDD	39.46	8.66E+07	1.05	Y	1.19	1.01	-15%
TS 1378-TCDD	25.82	9.07E+07	0.78	Y	1.06	0.98	-7%
OCDD-a	42.57	2.17E+08	2.55	Y	0.07	0.07	-2%
OCDF-a	42.74	2.58E+08	2.55	Y	0.06	0.07	12%

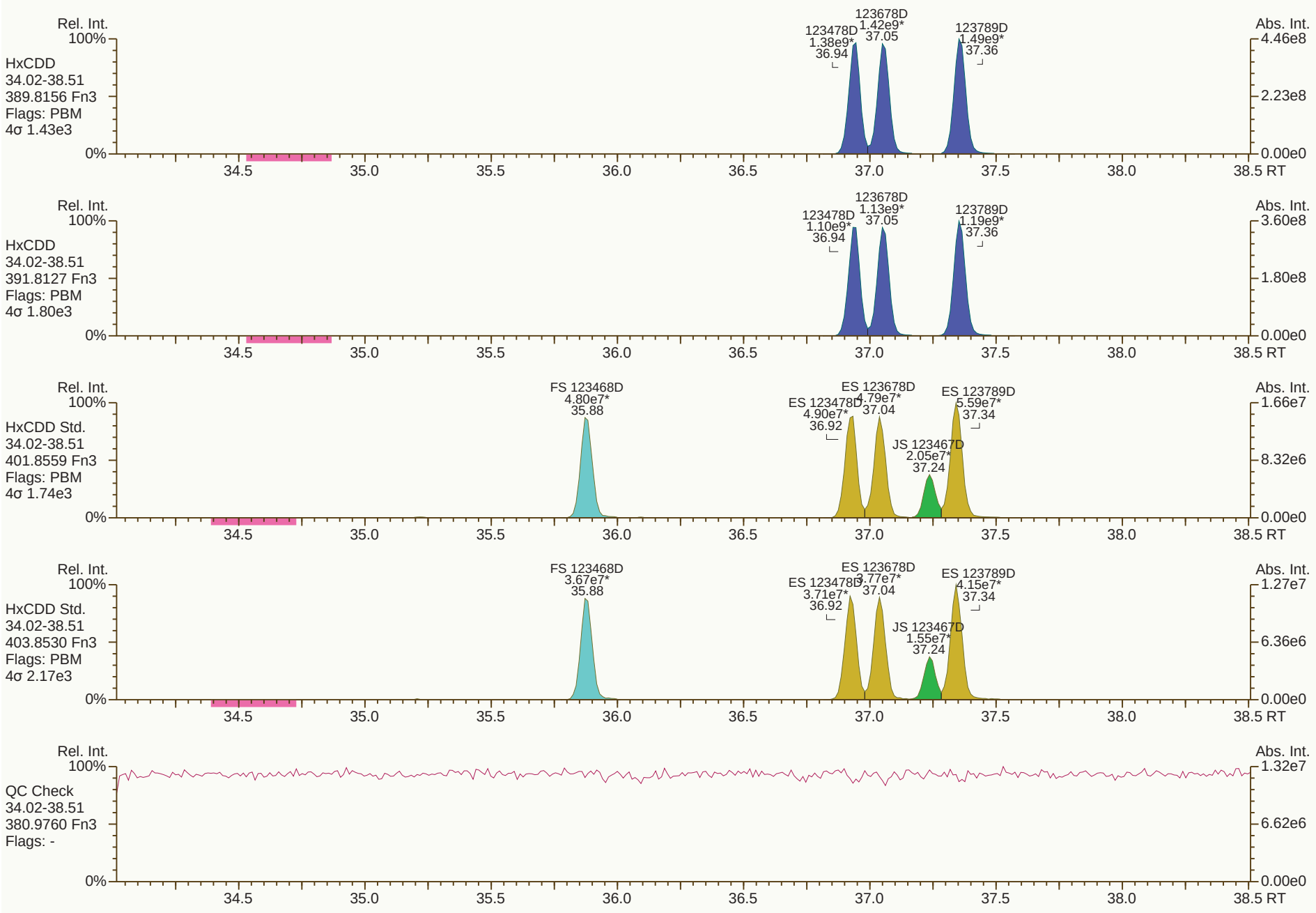

Rel. Int.
100%
QC Check
20.54-29.50
316.9824 Fn1
Flags: -
0%
Abs. Int.
4.88e6
2.44e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
QC Check
29.51-34.00
366.9792 Fn2
Flags: -
0%
Abs. Int.
3.63e6
1.81e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
QC Check
34.02-38.51
380.9760 Fn3
Flags: -
0%
Abs. Int.
1.32e7
6.62e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
QC Check
38.52-41.00
430.9728 Fn4
Flags: -
0%
Abs. Int.
8.40e6
4.20e6
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
41.02-45.01
454.9728 Fn5
Flags: -
0%
Abs. Int.
7.85e6
3.92e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT



Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS6_200612_DF_RA.utp_res, saved 15-Jun-2020 13:33 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 4085, 4972, 6846 scc: 630-787 *Revised: 15-Jun-2020 08:29 (PSW) Printed: 15-Jun-2020 13:40 Page 2 of 12*


Rel. Int.
100%
PeCDD
29.51-34.00
355.8546 Fn2
Flags: PBM
4σ 1.93e3
12378D
1.61e9*
33.04
Abs. Int.
4.88e8
2.44e8
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD
29.51-34.00
357.8517 Fn2
Flags: PBM
4σ 1.20e3
12378D
1.02e9*
33.04
Abs. Int.
3.07e8
1.53e8
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.00
367.8949 Fn2
Flags: PBM
4σ 2.85e3
FS 12478D
4.65e7*
31.78
CS 12347D
4.05e7*
32.51
ES 12378D
5.52e7*
33.02
Abs. Int.
1.57e7
7.83e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.00
369.8919 Fn2
Flags: PBM
4σ 2.21e3
FS 12478D
2.82e7*
31.77
CS 12347D
2.41e7*
32.51
ES 12378D
3.29e7*
33.02
Abs. Int.
9.65e6
4.83e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
QC Check
29.51-34.00
366.9792 Fn2
Flags: -
Abs. Int.
3.63e6
1.81e6
0.00e0
0%
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT


Rel. Int.
100%
HxCDD
34.02-38.51
389.8156 Fn3
Flags: PBM
4σ 1.43e3
0%
123678D
1.42e9*
37.05
123478D
1.38e9*
36.94
123789D
1.49e9*
37.36
Abs. Int.
4.46e8
2.23e8
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDD
34.02-38.51
391.8127 Fn3
Flags: PBM
4σ 1.80e3
0%
123678D
1.13e9*
37.05
123478D
1.10e9*
36.94
123789D
1.19e9*
37.36
Abs. Int.
3.60e8
1.80e8
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDD Std.
34.02-38.51
401.8559 Fn3
Flags: PBM
4σ 1.74e3
0%
FS 123468D
4.80e7*
35.88
ES 123678D
4.79e7*
37.04
ES 123478D
4.90e7*
36.92
ES 123789D
5.59e7*
37.34
JS 123467D
2.05e7*
37.24
Abs. Int.
1.66e7
8.32e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDD Std.
34.02-38.51
403.8530 Fn3
Flags: PBM
4σ 2.17e3
0%
FS 123468D
3.67e7*
35.88
ES 123678D
3.77e7*
37.04
ES 123478D
3.71e7*
36.92
ES 123789D
4.15e7*
37.34
JS 123467D
1.55e7*
37.24
Abs. Int.
1.27e7
6.36e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
QC Check
34.02-38.51
380.9760 Fn3
Flags: -
0%
Abs. Int.
1.32e7
6.62e6
0.00e0
34.5
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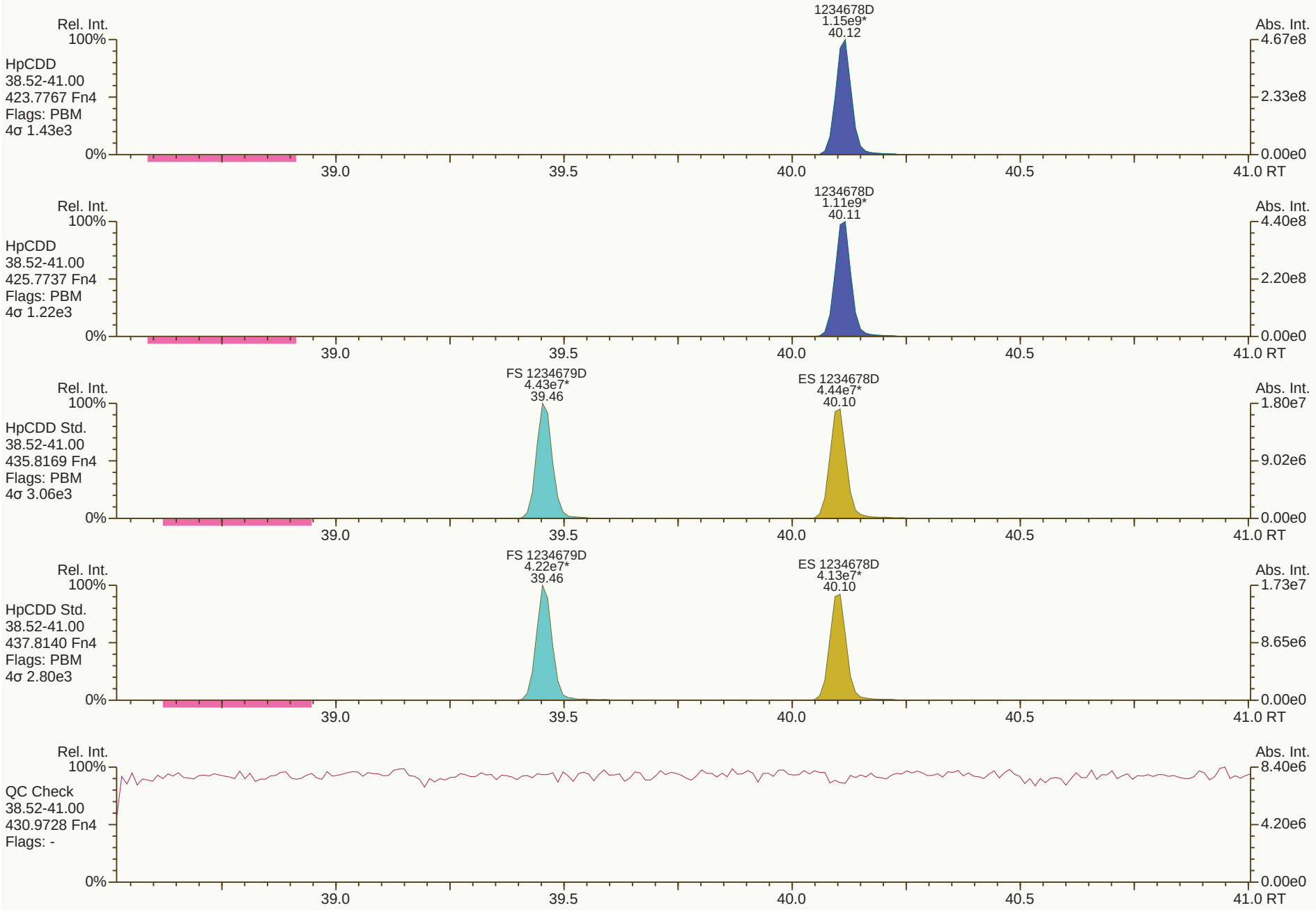
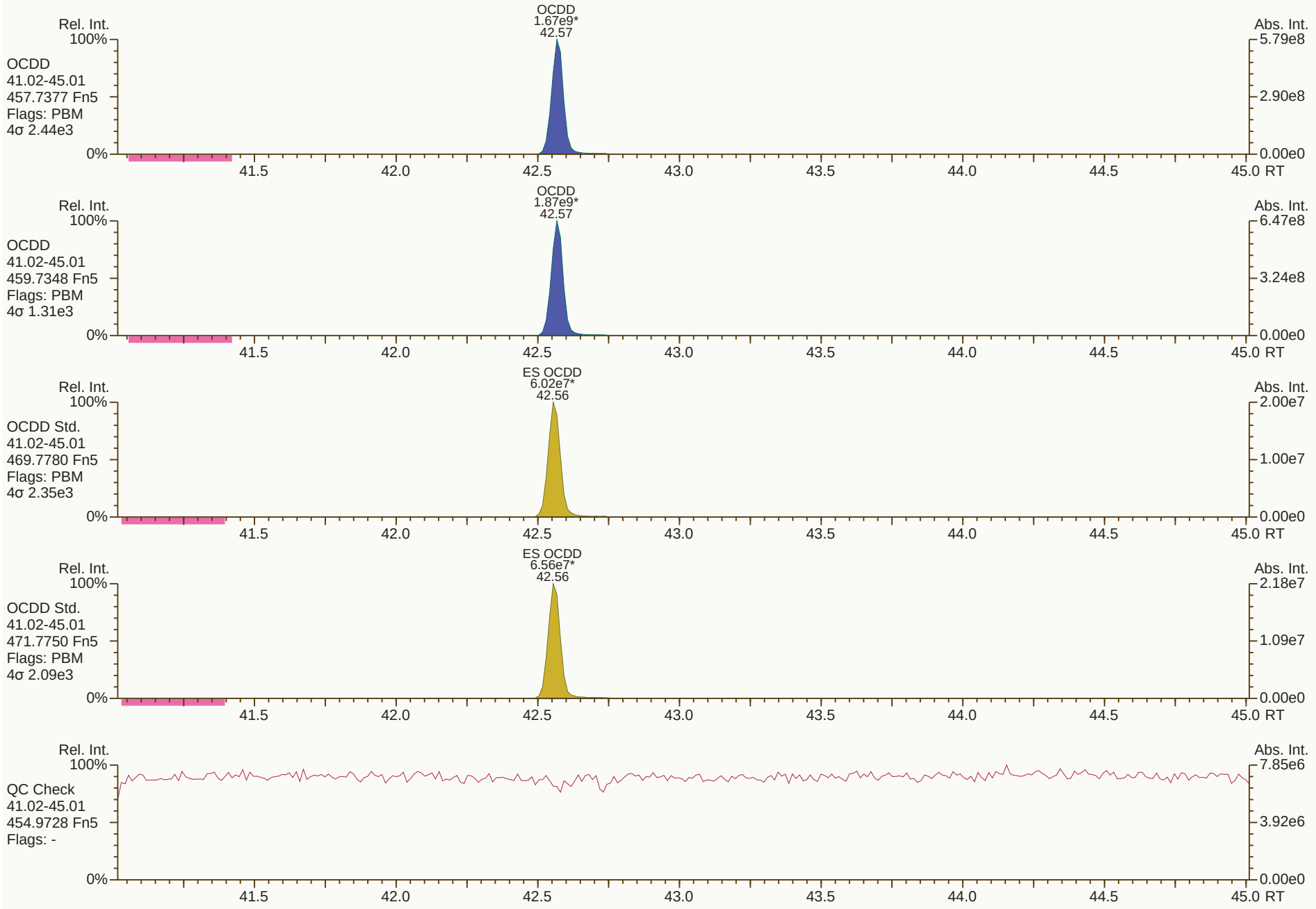
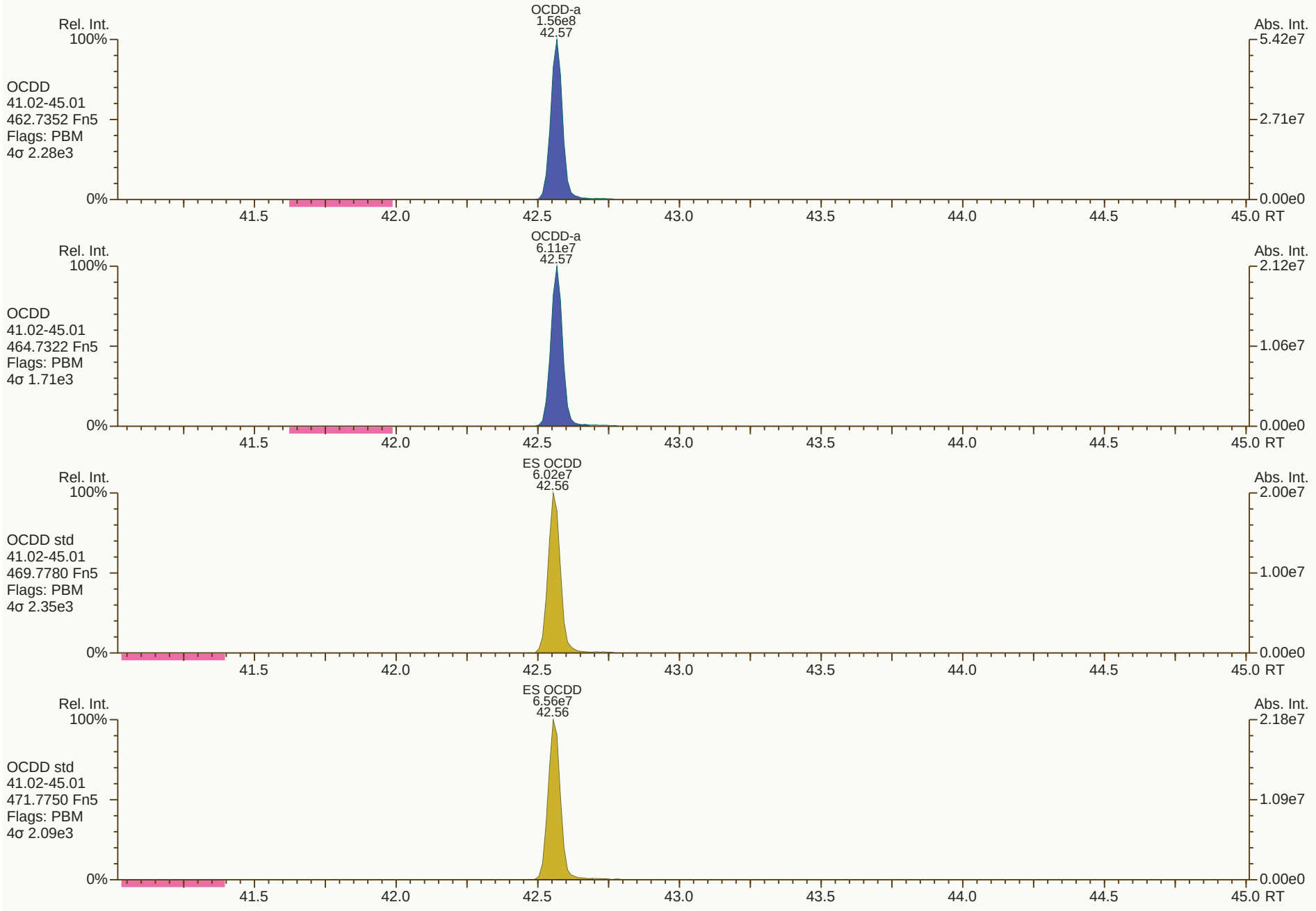
37.0
37.5
38.0
38.5 RT


Rel. Int.
100%
HpCDD
38.52-41.00
423.7767 Fn4
Flags: PBM
4σ 1.43e3
1234678D
1.15e9*
40.12
Abs. Int.
4.67e8
2.33e8
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.52-41.00
425.7737 Fn4
Flags: PBM
4σ 1.22e3
1234678D
1.11e9*
40.11
Abs. Int.
4.40e8
2.20e8
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.52-41.00
435.8169 Fn4
Flags: PBM
4σ 3.06e3
FS 1234679D
4.43e7*
39.46
ES 1234678D
4.44e7*
40.10
Abs. Int.
1.80e7
9.02e6
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.52-41.00
437.8140 Fn4
Flags: PBM
4σ 2.80e3
FS 1234679D
4.22e7*
39.46
ES 1234678D
4.13e7*
40.10
Abs. Int.
1.73e7
8.65e6
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.52-41.00
430.9728 Fn4
Flags: -
Abs. Int.
8.40e6
4.20e6
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT


Rel. Int.
100%
OCDD
41.02-45.01
457.7377 Fn5
Flags: PBM
4σ 2.44e3
0%
OCDD
1.67e9*
42.57
Abs. Int.
5.79e8
2.90e8
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDD
41.02-45.01
459.7348 Fn5
Flags: PBM
4σ 1.31e3
0%
OCDD
1.87e9*
42.57
Abs. Int.
6.47e8
3.24e8
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDD Std.
41.02-45.01
469.7780 Fn5
Flags: PBM
4σ 2.35e3
0%
ES OCDD
6.02e7*
42.56
Abs. Int.
2.00e7
1.00e7
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDD Std.
41.02-45.01
471.7750 Fn5
Flags: PBM
4σ 2.09e3
0%
ES OCDD
6.56e7*
42.56
Abs. Int.
2.18e7
1.09e7
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
QC Check
41.02-45.01
454.9728 Fn5
Flags: -
0%
Abs. Int.
7.85e6
3.92e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

SGS ID: CS6_200612_DF_RA
Sample ID: SIL 20-280-4
Acq: 12-Jun-2020 20:46:44
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 11
User: PSW Datafile: 200612R11



Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS6_200612_DF_RA.utp_res, saved 15-Jun-2020 13:33 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 5708, 6109
Revised: 15-Jun-2020 11:51 (PSW) Printed: 17-Jun-2020 08:05

SGS ID: CS6_200612_DF_RA
Instr: [ILM] AutoSpec-Ultima MM3
Sample ID: SIL 20-280-4
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 11
Acq: 12-Jun-2020 20:46:44
User: PSW Datafile: 200612R11

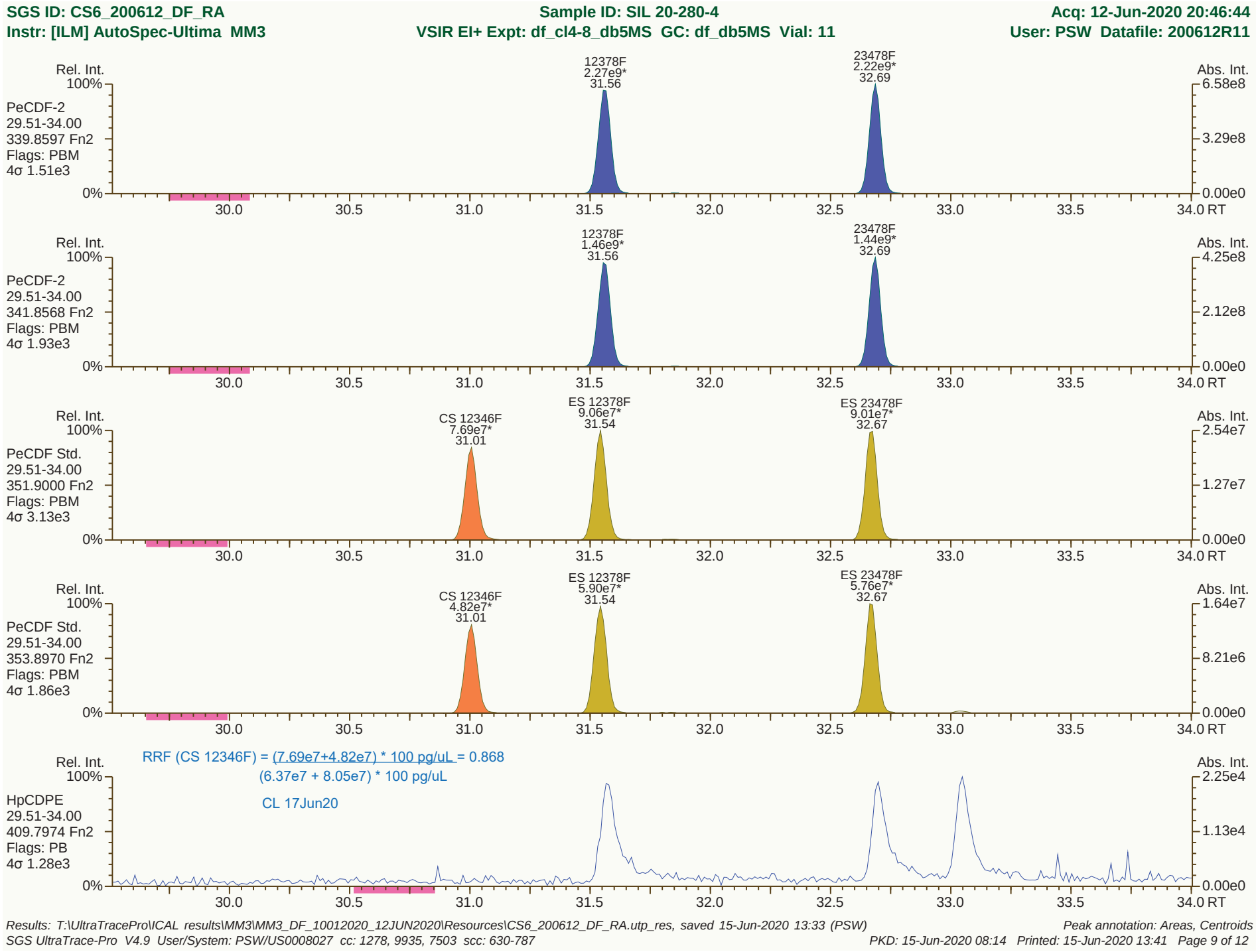


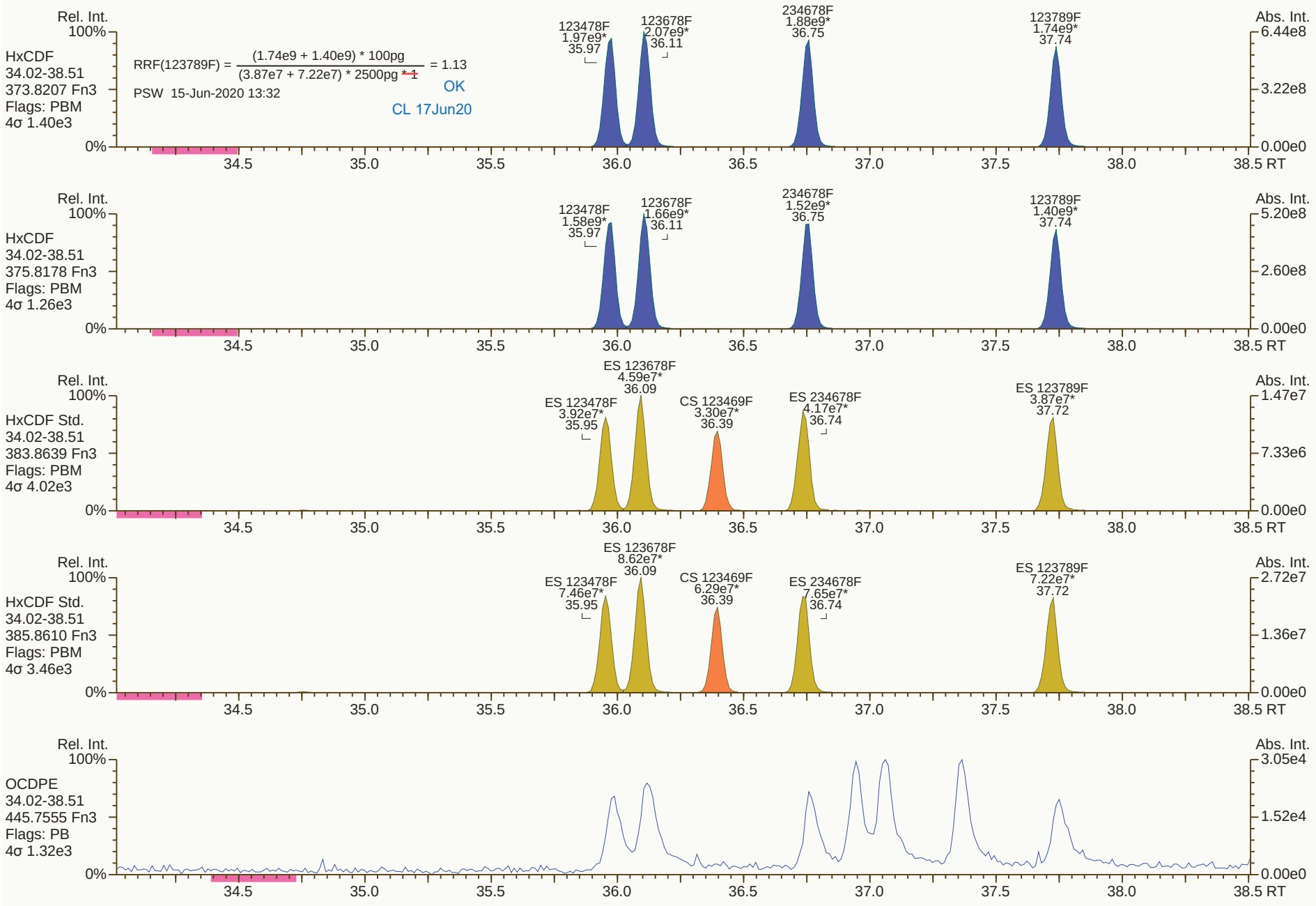
SGS ID: CS6_200612_DF_RA **Sample ID: SIL 20-280-4** **Acq: 12-Jun-2020 20:46:44**
Instr: [ILM] AutoSpec-Ultima MM3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 11** **User: PSW Datafile: 200612R11**

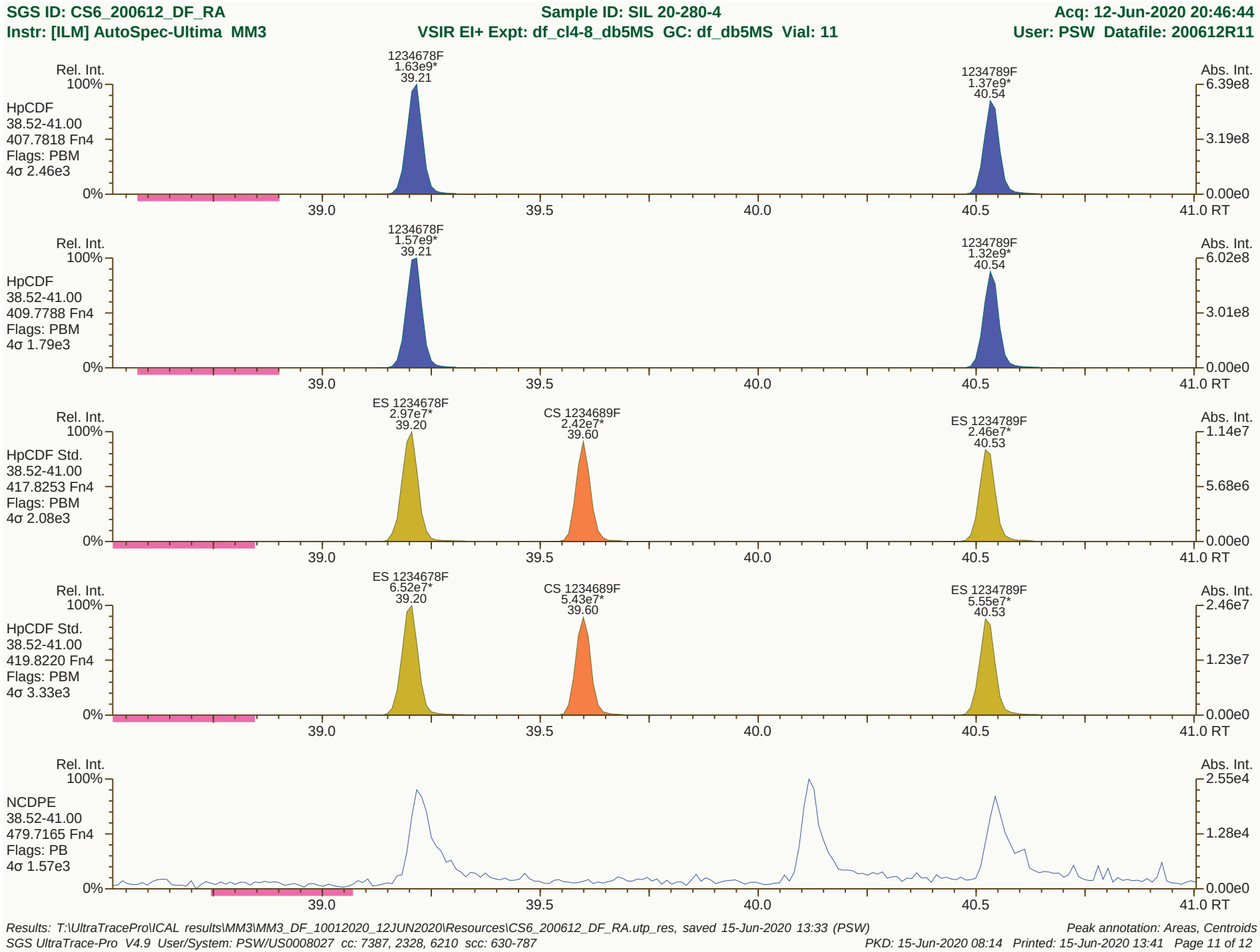


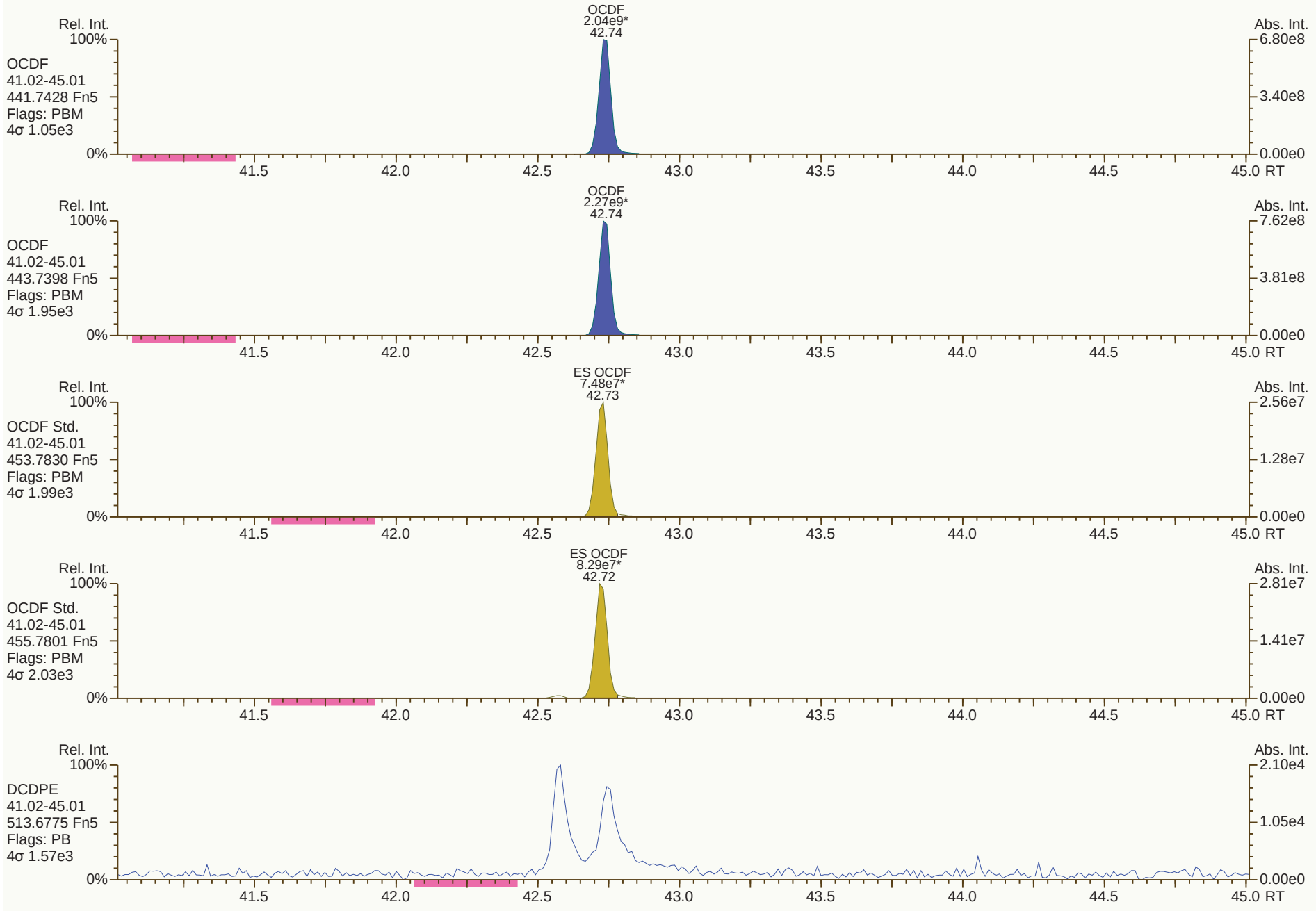
Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS6_200612_DF_RA.utp_res, saved 15-Jun-2020 13:33 (PSW) *Peak annotation: Areas, Centroids*

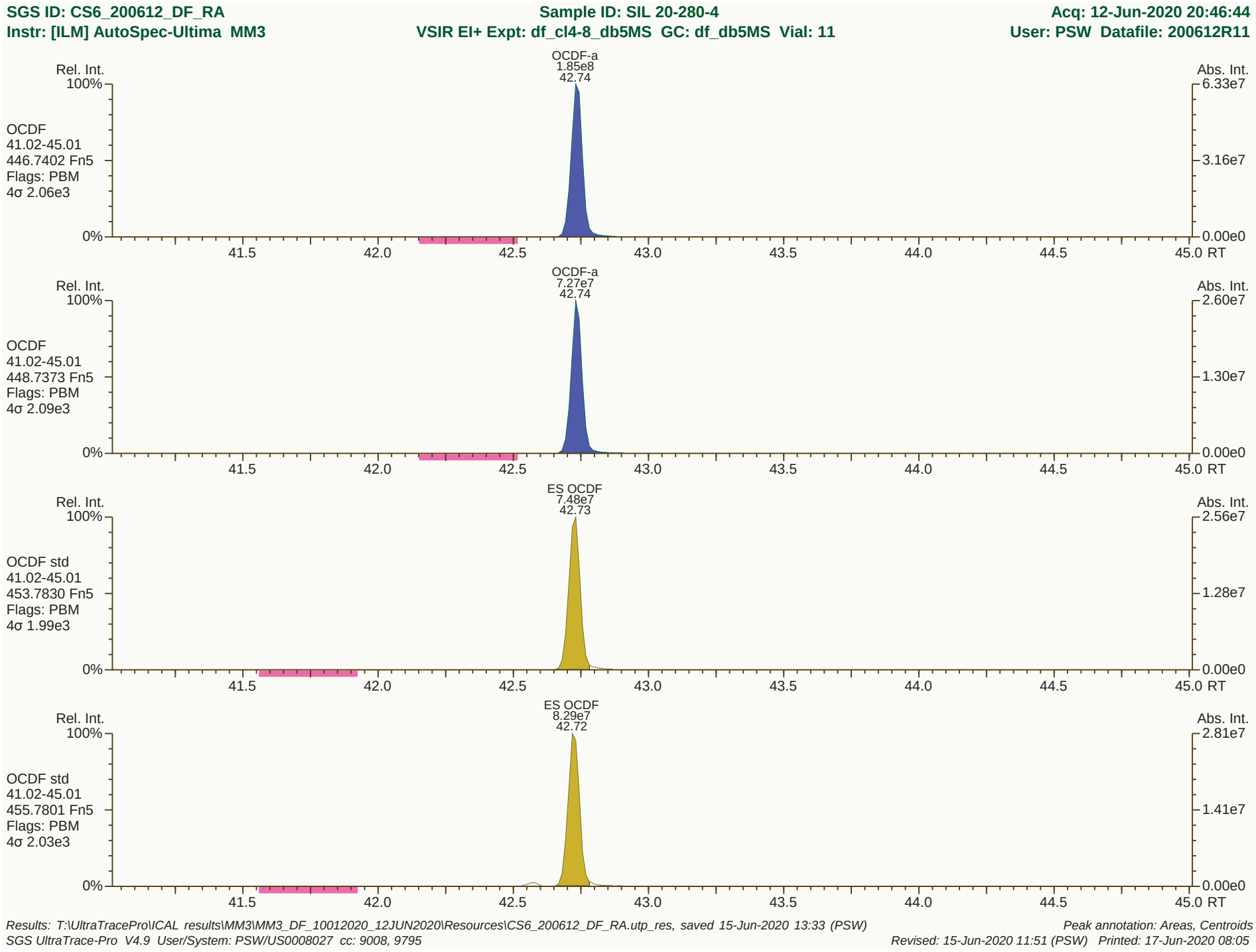
SGS ID: CS6_200612_DF_RA
Instr: [ILM] AutoSpec-Ultima MM3
Sample ID: SIL 20-280-4
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 11
Acq: 12-Jun-2020 20:46:44
User: PSW Datafile: 200612R11




Rel. Int.
100%
HxCDF
34.02-38.51
373.8207 Fn3
Flags: PBM
4σ 1.40e3
RRF(123789F) = (1.74e9 + 1.40e9) * 100pg / (3.87e7 + 7.22e7) * 2500pg * 1 = 1.13
PSW 15-Jun-2020 13:32
OK
CL 17Jun20
123478F 1.97e9* 35.97
123678F 2.07e9* 36.11
234678F 1.88e9* 36.75
123789F 1.74e9* 37.74
Abs. Int.
6.44e8
3.22e8
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 RT
Rel. Int.
100%
HxCDF
34.02-38.51
375.8178 Fn3
Flags: PBM
4σ 1.26e3
123478F 1.58e9* 35.97
123678F 1.66e9* 36.11
234678F 1.52e9* 36.75
123789F 1.40e9* 37.74
Abs. Int.
5.20e8
2.60e8
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 RT
Rel. Int.
100%
HxCDF Std.
34.02-38.51
383.8639 Fn3
Flags: PBM
4σ 4.02e3
ES 123678F 4.59e7* 36.09
ES 123478F 3.92e7* 35.95
CS 123469F 3.30e7* 36.39
ES 234678F 4.17e7* 36.74
ES 123789F 3.87e7* 37.72
Abs. Int.
1.47e7
7.33e6
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 RT
Rel. Int.
100%
HxCDF Std.
34.02-38.51
385.8610 Fn3
Flags: PBM
4σ 3.46e3
ES 123678F 8.62e7* 36.09
ES 123478F 7.46e7* 35.95
CS 123469F 6.29e7* 36.39
ES 234678F 7.65e7* 36.74
ES 123789F 7.22e7* 37.72
Abs. Int.
2.72e7
1.36e7
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 RT
Rel. Int.
100%
OCDPE
34.02-38.51
445.7555 Fn3
Flags: PB
4σ 1.32e3
Abs. Int.
3.05e4
1.52e4
0.00e0
0%
34.5 35.0 35.5 36.0 36.5 37.0 37.5 38.0 38.5 RT


SGS ID: CS6_200612_DF_RA
Sample ID: SIL 20-280-4
Acq: 12-Jun-2020 20:46:44
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 11
User: PSW Datafile: 200612R11
Rel. Int.
Abs. Int.
HpCDF
38.52-41.00
407.7818 Fn4
Flags: PBM
4σ 2.46e3
1234678F
1.63e9*
39.21
1234789F
1.37e9*
40.54
6.39e8
3.19e8
0.00e0
HpCDF
38.52-41.00
409.7788 Fn4
Flags: PBM
4σ 1.79e3
1234678F
1.57e9*
39.21
1234789F
1.32e9*
40.54
6.02e8
3.01e8
0.00e0
HpCDF Std.
38.52-41.00
417.8253 Fn4
Flags: PBM
4σ 2.08e3
ES 1234678F
2.97e7*
39.20
CS 1234689F
2.42e7*
39.60
ES 1234789F
2.46e7*
40.53
1.14e7
5.68e6
0.00e0
HpCDF Std.
38.52-41.00
419.8220 Fn4
Flags: PBM
4σ 3.33e3
ES 1234678F
6.52e7*
39.20
CS 1234689F
5.43e7*
39.60
ES 1234789F
5.55e7*
40.53
2.46e7
1.23e7
0.00e0
NCDPE
38.52-41.00
479.7165 Fn4
Flags: PB
4σ 1.57e3
2.55e4
1.28e4
0.00e0
100%
0%
39.0
39.5
40.0
40.5
41.0 RT
Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS6_200612_DF_RA.utp_res, saved 15-Jun-2020 13:33 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 7387, 2328, 6210 scc: 630-787
PKD: 15-Jun-2020 08:14 Printed: 15-Jun-2020 13:41 Page 11 of 12


Rel. Int.
100%
OCDF
41.02-45.01
441.7428 Fn5
Flags: PBM
4σ 1.05e3
0%
OCDF
2.04e9*
42.74
Abs. Int.
6.80e8
3.40e8
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF
41.02-45.01
443.7398 Fn5
Flags: PBM
4σ 1.95e3
0%
OCDF
2.27e9*
42.74
Abs. Int.
7.62e8
3.81e8
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF Std.
41.02-45.01
453.7830 Fn5
Flags: PBM
4σ 1.99e3
0%
ES OCDF
7.48e7*
42.73
Abs. Int.
2.56e7
1.28e7
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF Std.
41.02-45.01
455.7801 Fn5
Flags: PBM
4σ 2.03e3
0%
ES OCDF
8.29e7*
42.72
Abs. Int.
2.81e7
1.41e7
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
DCDPE
41.02-45.01
513.6775 Fn5
Flags: PB
4σ 1.57e3
0%
Abs. Int.
2.10e4
1.05e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT


SGS ID: CS6_200612_DF_RA
Sample ID: SIL 20-280-4
Acq: 12-Jun-2020 20:46:44
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 11
User: PSW Datafile: 200612R11
OCDF-a
1.85e8
42.74
Rel. Int.
Abs. Int.
OCDF
41.02-45.01
446.7402 Fn5
Flags: PBM
4σ 2.06e3
OCDF-a
7.27e7
42.74
OCDF
41.02-45.01
448.7373 Fn5
Flags: PBM
4σ 2.09e3
ES OCDF
7.48e7
42.73
OCDF std
41.02-45.01
453.7830 Fn5
Flags: PBM
4σ 1.99e3
ES OCDF
8.29e7
42.72
OCDF std
41.02-45.01
455.7801 Fn5
Flags: PBM
4σ 2.03e3
RT
Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS6_200612_DF_RA.utp_res, saved 15-Jun-2020 13:33 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 9008, 9795
Revised: 15-Jun-2020 11:51 (PSW) Printed: 17-Jun-2020 08:05



Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\SBS_200612_DF_RA.utp_res, saved 12-Jun-2020 14:33 (PSW) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 scc: 041-322 *PKD: n/a Printed: 15-Jun-2020 13:37 Page 1 of 12*


Rel. Int.
100%
TCDD
20.54-29.50
319.8965 Fn1
Flags: PB
4σ 3.23e3
0%
Abs. Int.
1.00e4
5.00e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD
20.54-29.50
321.8936 Fn1
Flags: PB
4σ 3.90e3
0%
Abs. Int.
1.53e4
7.65e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
37Cl-TCDD
20.54-29.50
327.8850 Fn1
Flags: PB
4σ 2.19e3
0%
Abs. Int.
1.06e4
5.29e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
331.9368 Fn1
Flags: PB
4σ 9.11e3
0%
Abs. Int.
2.23e4
1.11e4
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
333.9339 Fn1
Flags: PB
4σ 5.44e3
0%
Abs. Int.
2.39e4
1.20e4
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
PeCDD
29.51-34.01
355.8546 Fn2
Flags: PB
4σ 2.84e3
0%
Abs. Int.
9.71e3
4.85e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD
29.51-34.01
357.8517 Fn2
Flags: PB
4σ 1.59e3
0%
Abs. Int.
4.98e3
2.49e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
367.8949 Fn2
Flags: PB
4σ 8.83e3
0%
Abs. Int.
2.09e4
1.05e4
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDD Std.
29.51-34.01
369.8919 Fn2
Flags: PB
4σ 3.20e3
0%
Abs. Int.
1.78e4
8.92e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
QC Check
29.51-34.01
366.9792 Fn2
Flags: -
0%
Abs. Int.
7.15e6
3.58e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT

SGS ID: SBS_200612_DF_RA **Sample ID: SIL 20-61-1** **Acq: 12-Jun-2020 13:34:23**

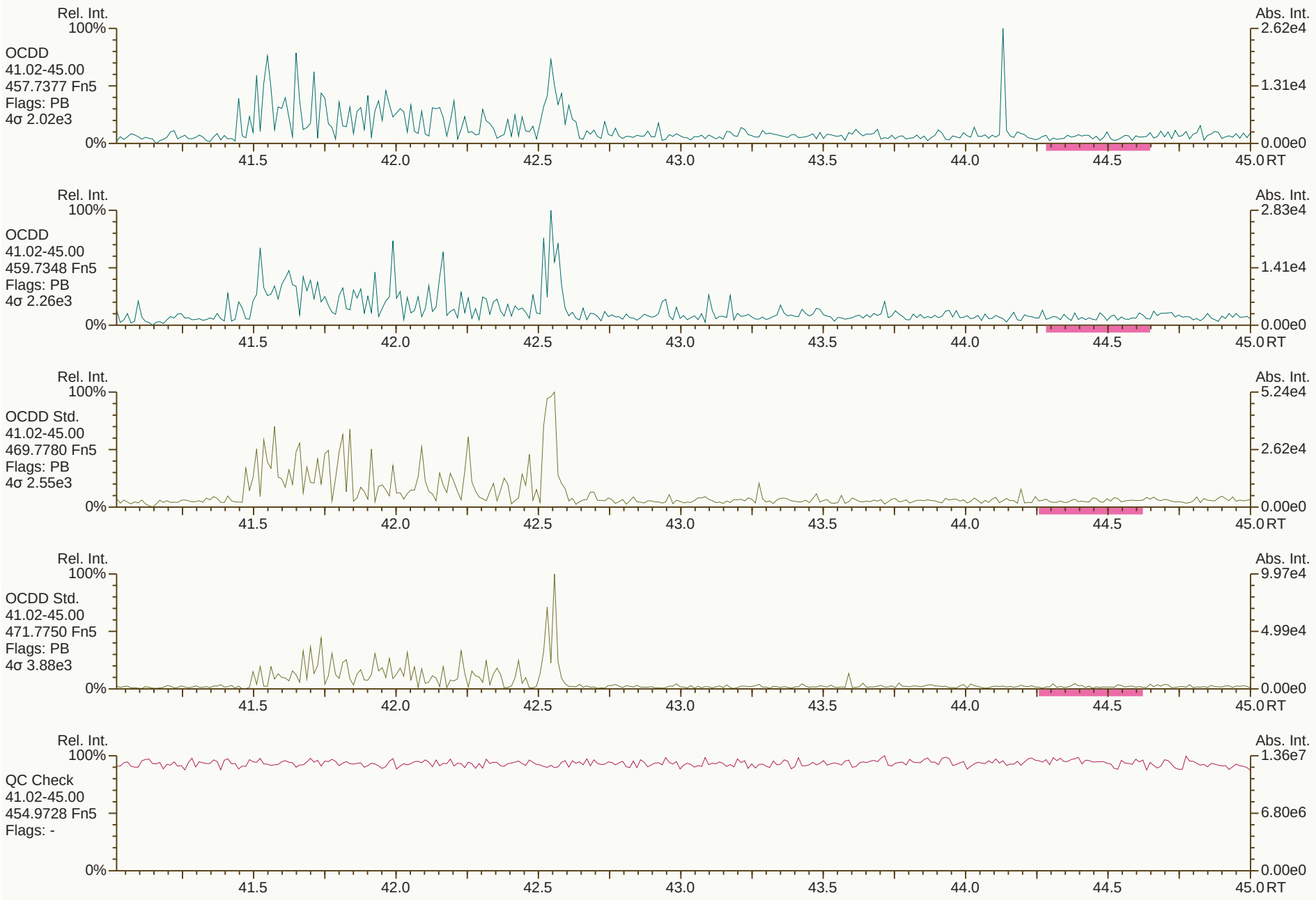
Instr: [ILM] AutoSpec-Ultima MM3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 2** **User: PSW Datafile: 200612R02**



Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\SBS_200612_DF_RA.utp_res, saved 12-Jun-2020 14:33 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 5571, 9888 scc: 041-322 *PKD: 12-Jun-2020 14:32 Printed: 15-Jun-2020 13:37 Page 4 of 12*


Rel. Int.
100%
HpCDD
38.52-41.01
423.7767 Fn4
Flags: PB
4σ 2.59e3
0%
Abs. Int.
1.14e4
5.68e3
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.52-41.01
425.7737 Fn4
Flags: PB
4σ 2.19e3
0%
Abs. Int.
1.51e4
7.55e3
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.52-41.01
435.8169 Fn4
Flags: PB
4σ 3.17e3
0%
Abs. Int.
3.39e4
1.70e4
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.52-41.01
437.8140 Fn4
Flags: PB
4σ 7.18e3
0%
Abs. Int.
4.62e4
2.31e4
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.52-41.01
430.9728 Fn4
Flags: -
0%
Abs. Int.
1.48e7
7.39e6
0.00e0
39.0
39.5
40.0
40.5
41.0 RT


Rel. Int.
100%
OCDD
41.02-45.00
457.7377 Fn5
Flags: PB
4σ 2.02e3
0%
Abs. Int.
2.62e4
1.31e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDD
41.02-45.00
459.7348 Fn5
Flags: PB
4σ 2.26e3
0%
Abs. Int.
2.83e4
1.41e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDD Std.
41.02-45.00
469.7780 Fn5
Flags: PB
4σ 2.55e3
0%
Abs. Int.
5.24e4
2.62e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDD Std.
41.02-45.00
471.7750 Fn5
Flags: PB
4σ 3.88e3
0%
Abs. Int.
9.97e4
4.99e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
1.36e7
6.80e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT


2468F: SPIKED
1.60e6*
22.78
Rel. Int.
100%
TCDF
20.54-29.50
303.9016 Fn1
Flags: PBM
4σ 2.19e3
0%
Abs. Int.
2.88e5
1.44e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
2468F
1.98e6*
22.78
TCDF
20.54-29.50
305.8987 Fn1
Flags: PBM
4σ 2.71e3
4.00e5
2.00e5
TCDF Std.
20.54-29.50
315.9419 Fn1
Flags: PB
4σ 1.67e4
4.78e4
2.39e4
TCDF Std.
20.54-29.50
317.9389 Fn1
Flags: PB
4σ 1.11e4
5.02e4
2.51e4
HxCDPE
20.54-29.50
375.8364 Fn1
Flags: PB
4σ 2.44e3
1.20e4
6.00e3


Rel. Int.
100%
0%
Abs. Int.
9.00e3
4.50e3
0.00e0
PeCDF-1
20.54-29.50
339.8597 Fn1
Flags: PB
4σ 2.50e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
0%
Abs. Int.
1.76e4
8.81e3
0.00e0
PeCDF-1
20.54-29.50
341.8568 Fn1
Flags: PB
4σ 3.10e3
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
0%
Abs. Int.
1.01e7
5.05e6
0.00e0
QC Check
20.54-29.50
316.9824 Fn1
Flags: -
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
PeCDF-2
29.51-34.01
339.8597 Fn2
Flags: PB
4σ 1.97e3
0%
Abs. Int.
1.93e4
9.66e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF-2
29.51-34.01
341.8568 Fn2
Flags: PB
4σ 2.98e3
0%
Abs. Int.
1.18e4
5.88e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
351.9000 Fn2
Flags: PB
4σ 5.91e3
0%
Abs. Int.
4.44e4
2.22e4
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
353.8970 Fn2
Flags: PB
4σ 3.85e3
0%
Abs. Int.
2.67e4
1.34e4
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
HpCDPE
29.51-34.01
409.7974 Fn2
Flags: PB
4σ 1.84e3
0%
Abs. Int.
6.79e3
3.40e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT


Rel. Int.
100%
HxCDF
34.02-38.51
373.8207 Fn3
Flags: PB
4σ 1.94e3
0%
Abs. Int.
1.58e4
7.91e3
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDF
34.02-38.51
375.8178 Fn3
Flags: PB
4σ 3.92e3
0%
Abs. Int.
1.54e4
7.69e3
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDF Std.
34.02-38.51
383.8639 Fn3
Flags: PB
4σ 3.44e3
0%
Abs. Int.
3.56e4
1.78e4
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDF Std.
34.02-38.51
385.8610 Fn3
Flags: PB
4σ 5.38e3
0%
Abs. Int.
6.98e4
3.49e4
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
OCDPE
34.02-38.51
445.7555 Fn3
Flags: PB
4σ 2.14e3
0%
Abs. Int.
6.58e3
3.29e3
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT

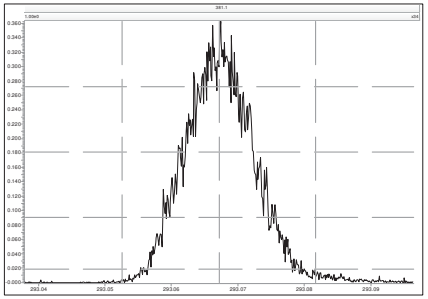

Rel. Int.
100%
HpCDF
38.52-41.01
407.7818 Fn4
Flags: PB
4σ 2.99e3
0%
Abs. Int.
3.18e4
1.59e4
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF
38.52-41.01
409.7788 Fn4
Flags: PB
4σ 2.83e3
0%
Abs. Int.
2.04e4
1.02e4
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.52-41.01
417.8253 Fn4
Flags: PB
4σ 3.04e3
0%
Abs. Int.
4.57e4
2.29e4
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDF Std.
38.52-41.01
419.8220 Fn4
Flags: PB
4σ 7.57e3
0%
Abs. Int.
5.34e4
2.67e4
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
NCDPE
38.52-41.01
479.7165 Fn4
Flags: PB
4σ 2.61e3
0%
Abs. Int.
7.35e3
3.68e3
0.00e0
39.0
39.5
40.0
40.5
41.0 RT


Rel. Int.
100%
OCDF
41.02-45.00
441.7428 Fn5
Flags: PB
4σ 2.29e3
0%
Abs. Int.
1.99e4
9.97e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF
41.02-45.00
443.7398 Fn5
Flags: PB
4σ 1.92e3
0%
Abs. Int.
2.80e4
1.40e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF Std.
41.02-45.00
453.7830 Fn5
Flags: PB
4σ 3.07e3
0%
Abs. Int.
8.16e4
4.08e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDF Std.
41.02-45.00
455.7801 Fn5
Flags: PB
4σ 2.50e3
0%
Abs. Int.
6.16e4
3.08e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
DCDPE
41.02-45.00
513.6775 Fn5
Flags: PB
4σ 1.70e3
0%
Abs. Int.
9.01e3
4.51e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT

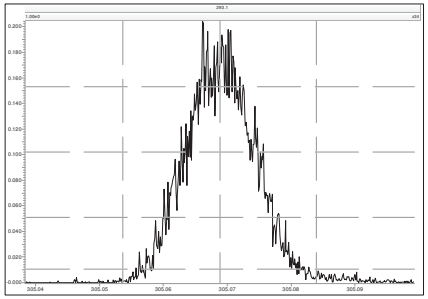
File: Experiment: df_cl4-8_db5MS.exp Reference: pfk.ref Function: 1 @ 200 (ppm)

Printed: Friday, June 12, 2020 13:32:38 Eastern Daylight Time

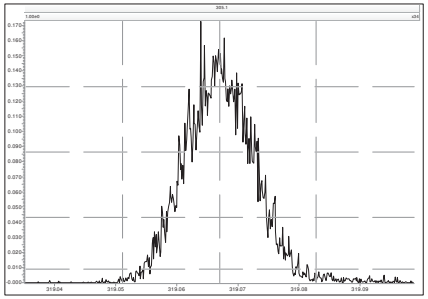
M 292.9824 R 13438



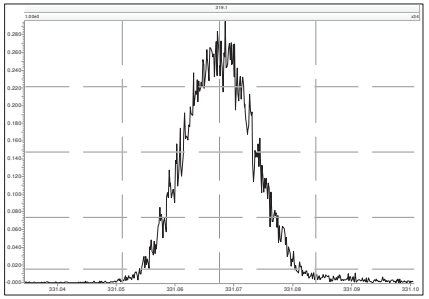
M 304.9824 R 12888



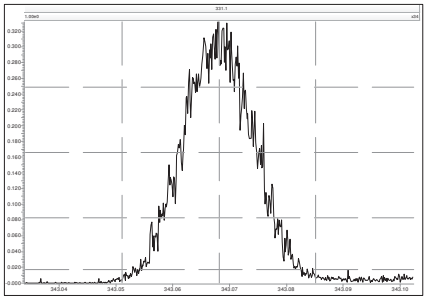
M 318.9792 R 13661



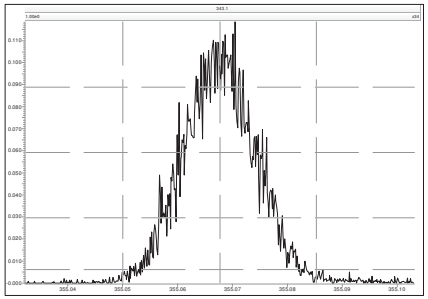
M 330.9792 R 12498



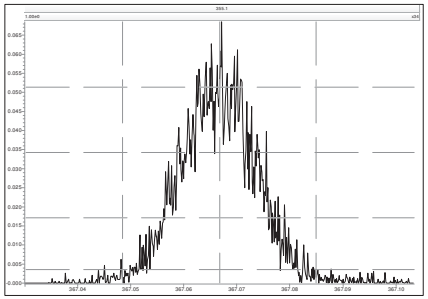
M 342.9792 R 11963



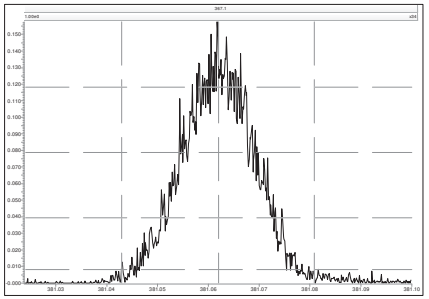
M 354.9792 R 12505



M 366.9792 R 12133



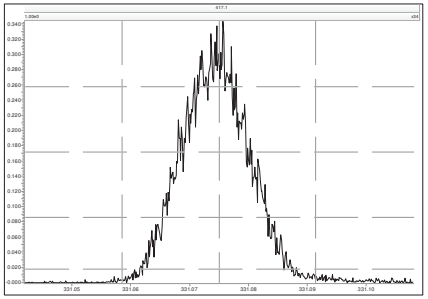
M 380.9760 R 12132



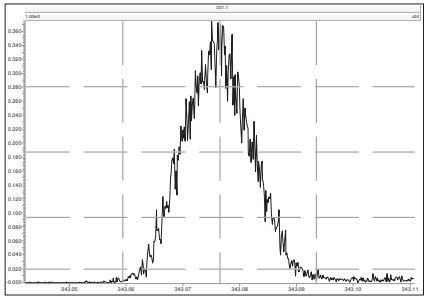
File: Experiment: df_cl4-8_db5MS.exp Reference: pfk.ref Function: 2 @ 200 (ppm)

Printed: Friday, June 12, 2020 13:32:59 Eastern Daylight Time

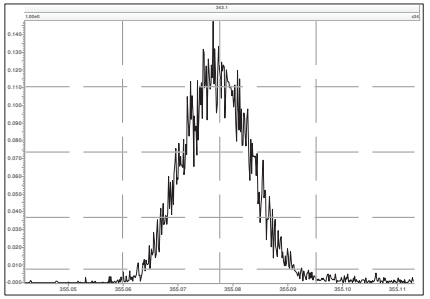
M 330.9792 R 12885



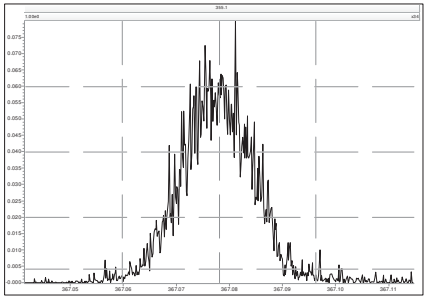
M 342.9792 R 13085



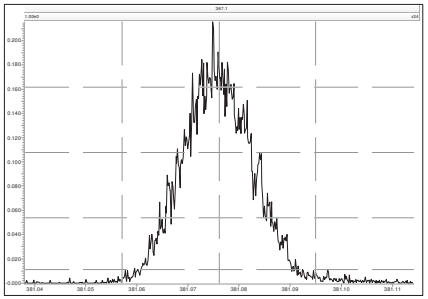
M 354.9792 R 12500



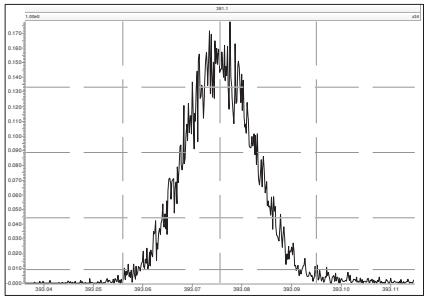
M 366.9792 R 13367



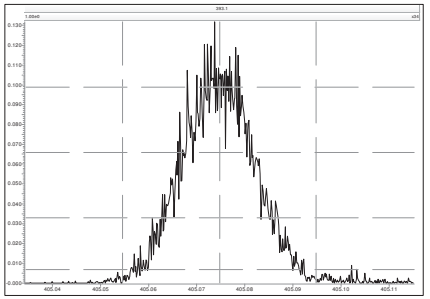
M 380.9760 R 12439



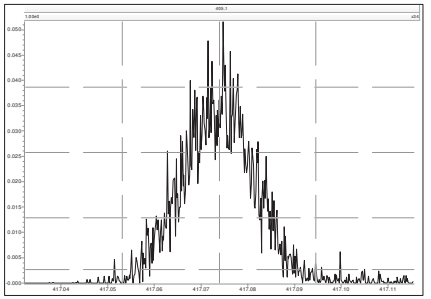
M 392.9760 R 12136



M 404.9760 R 12139



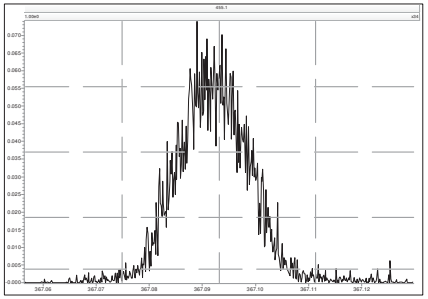
M 416.9760 R 14621



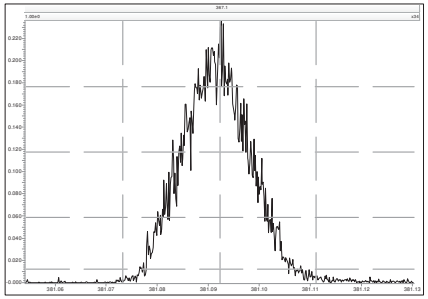
File: Experiment: df_cl4-8_db5MS.exp Reference: pfk.ref Function: 3 @ 200 (ppm)

Printed: Friday, June 12, 2020 13:33:16 Eastern Daylight Time

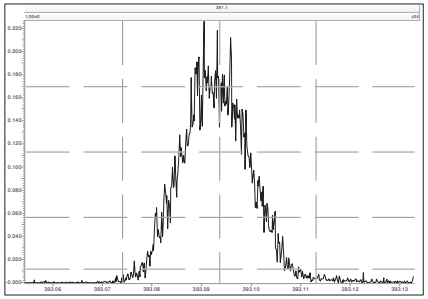
M 366.9792 R 13226



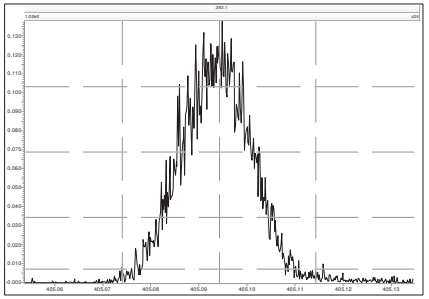
M 380.9760 R 13584



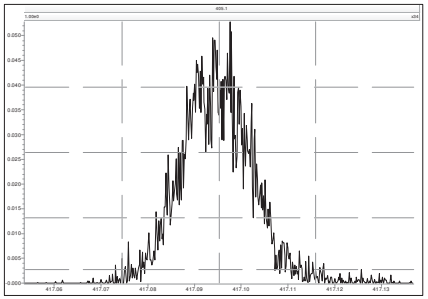
M 392.9760 R 13089



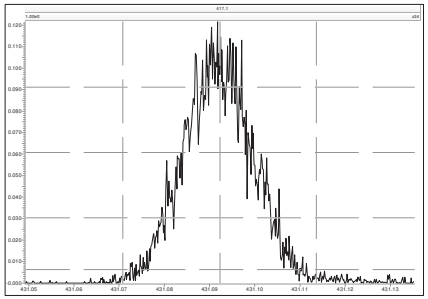
M 404.9760 R 13439



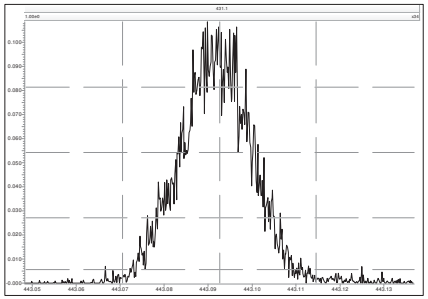
M 416.9760 R 14453



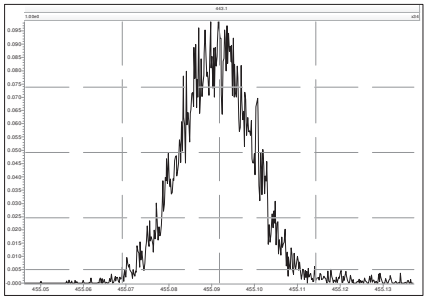
M 430.9728 R 13228



M 442.9728 R 12754



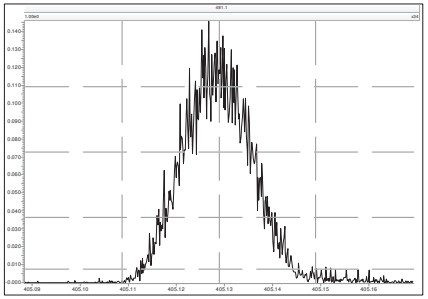
M 454.9728 R 12752



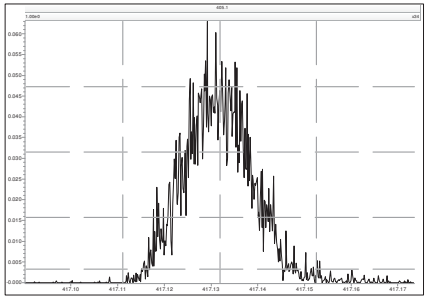
File: Experiment: df_cl4-8_db5MS.exp Reference: pfk.ref Function: 4 @ 200 (ppm)

Printed: Friday, June 12, 2020 13:33:35 Eastern Daylight Time

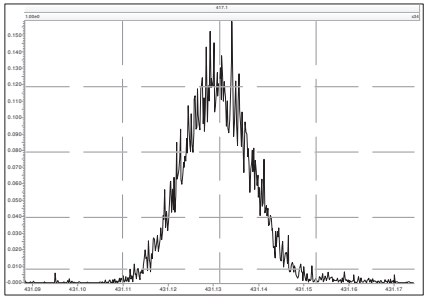
M 404.9760 R 13021



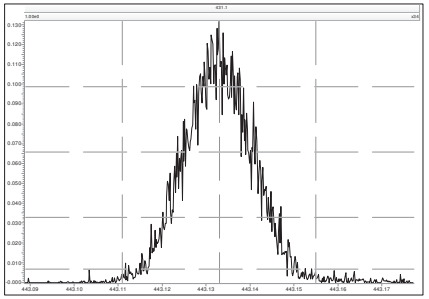
M 416.9760 R 14449



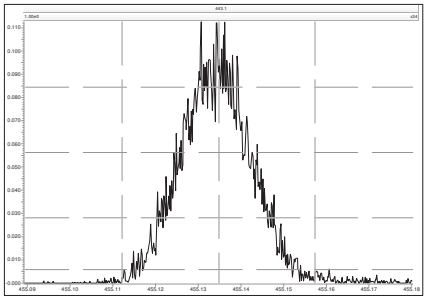
M 430.9728 R 12757



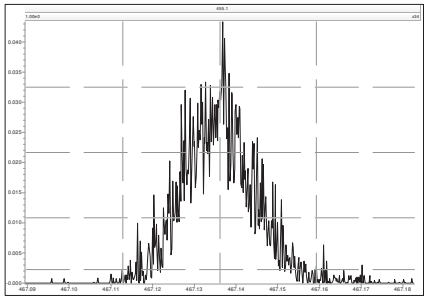
M 442.9728 R 13967



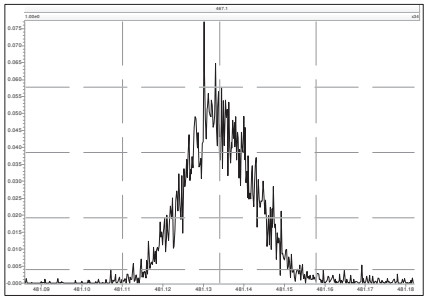
M 454.9728 R 12754



M 466.9728 R 13515



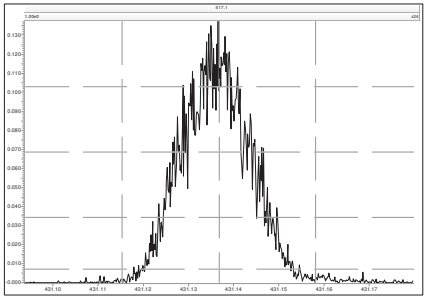
M 480.9696 R 14706



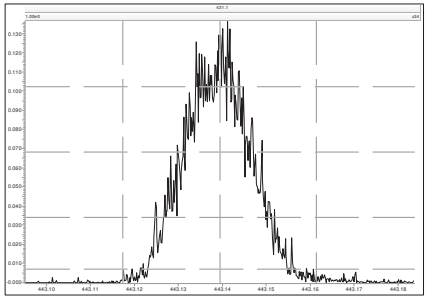
File: Experiment: df_cl4-8_db5MS.exp Reference: pfk.ref Function: 5 @ 200 (ppm)

Printed: Friday, June 12, 2020 13:33:55 Eastern Daylight Time

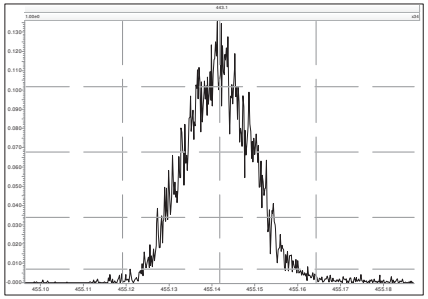
M 430.9728 R 12692



M 442.9728 R 13889



M 454.9728 R 12693



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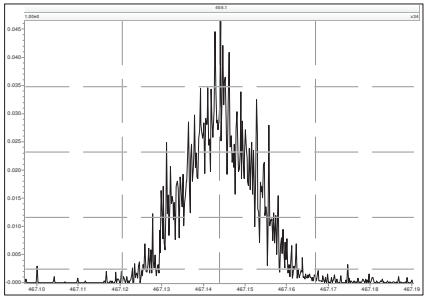

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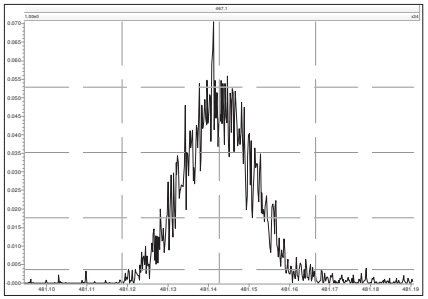

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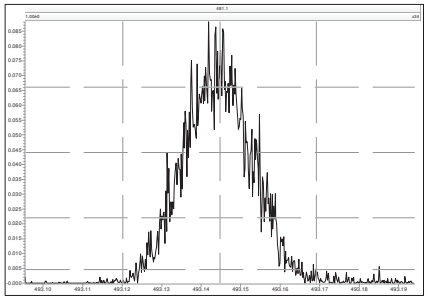

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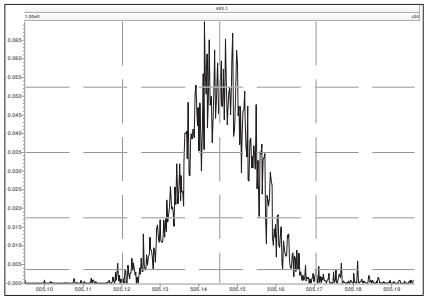

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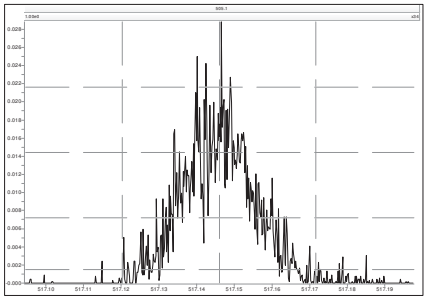

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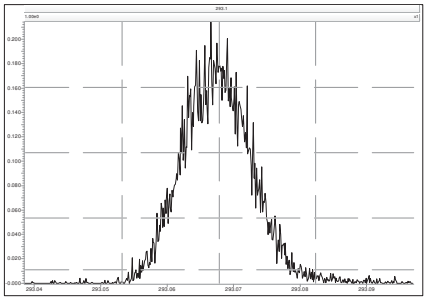

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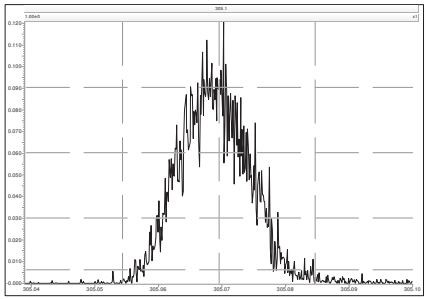

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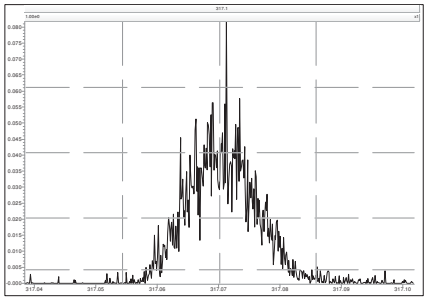

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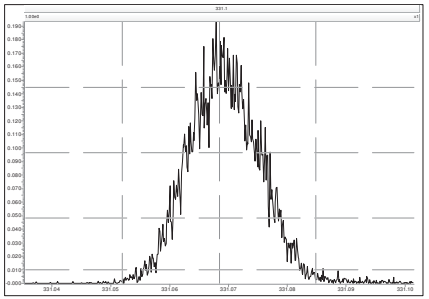

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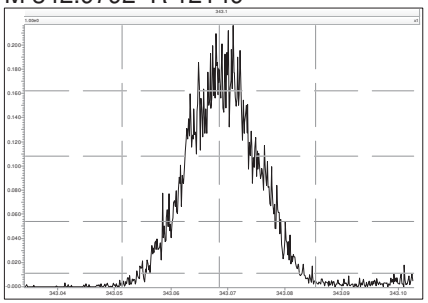

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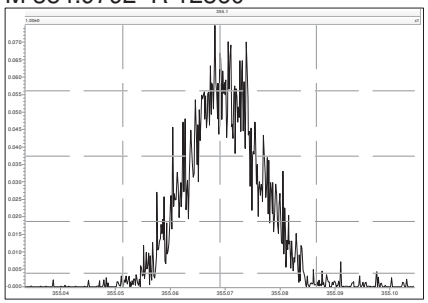

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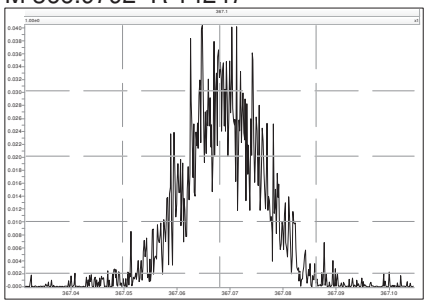

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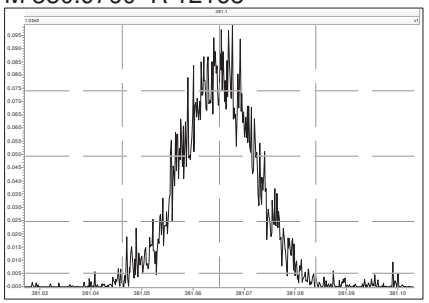

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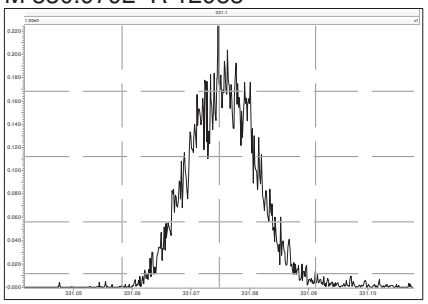

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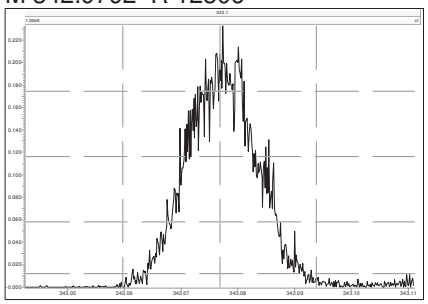

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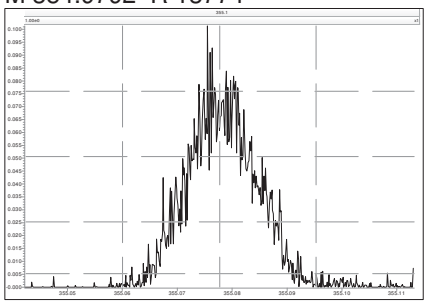

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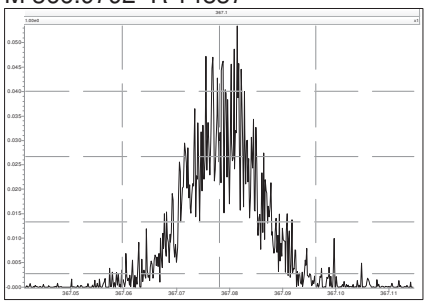

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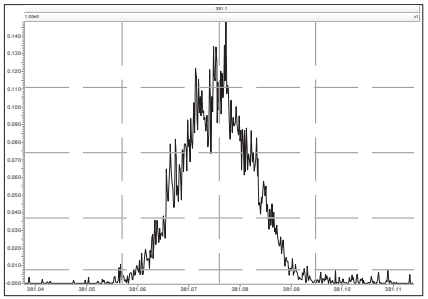

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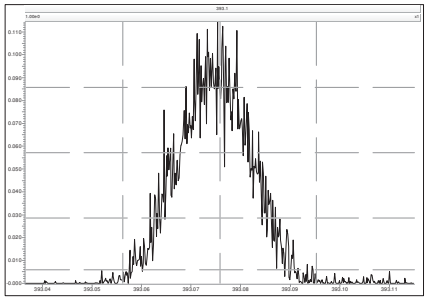

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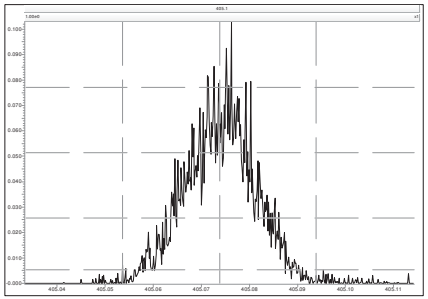

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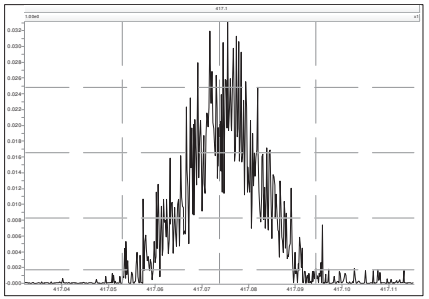

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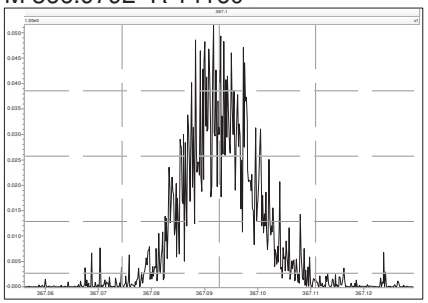

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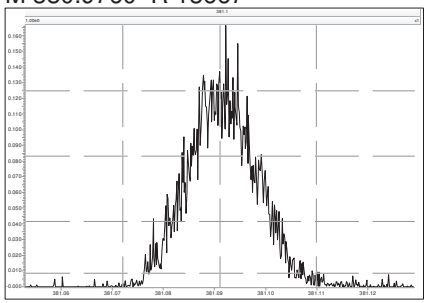

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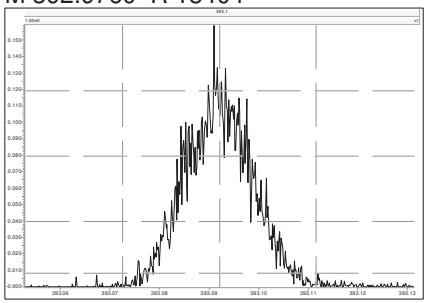

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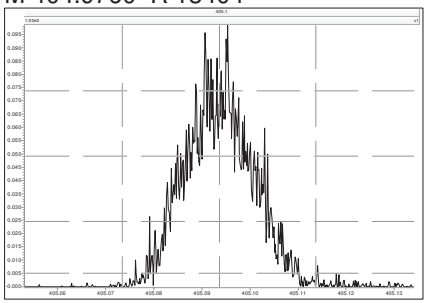

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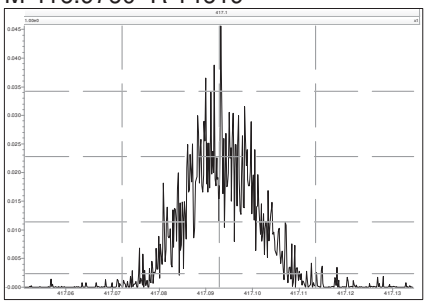

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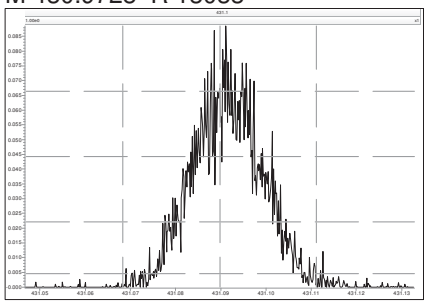

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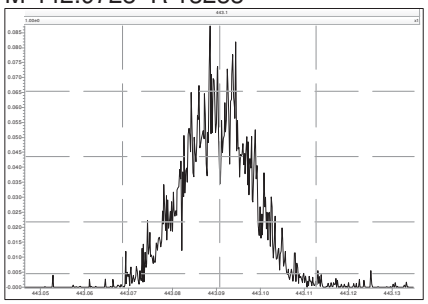

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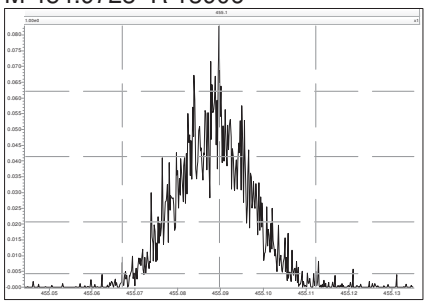

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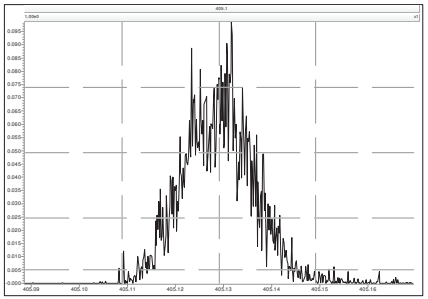

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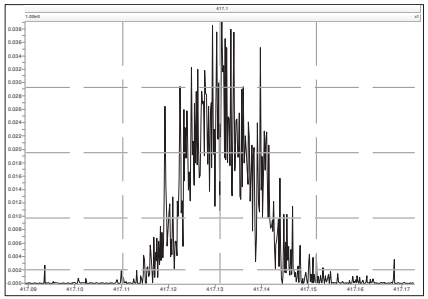

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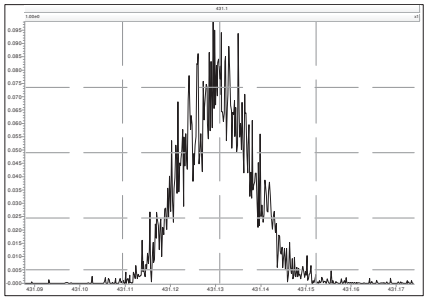

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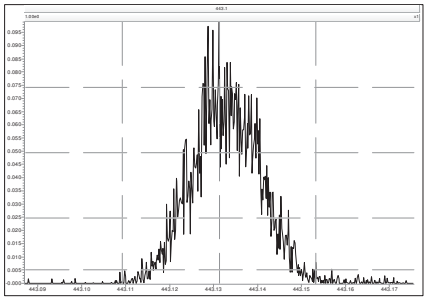

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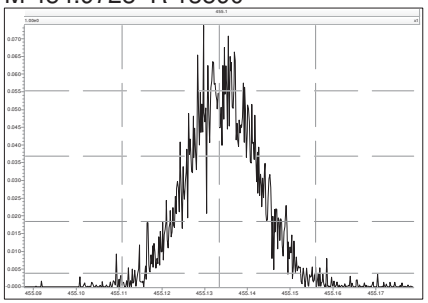

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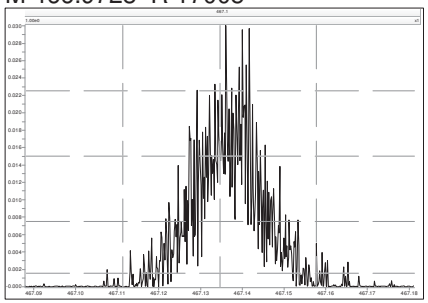

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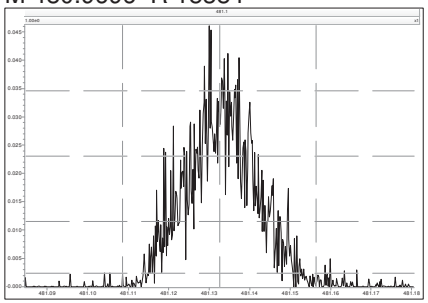

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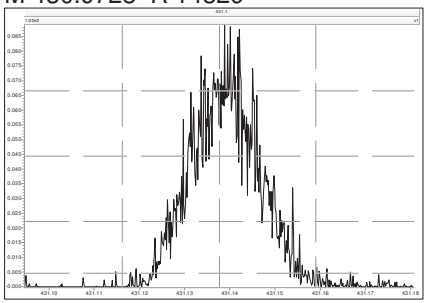

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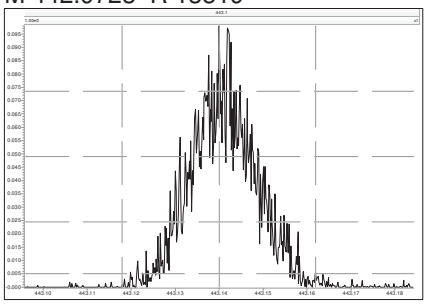

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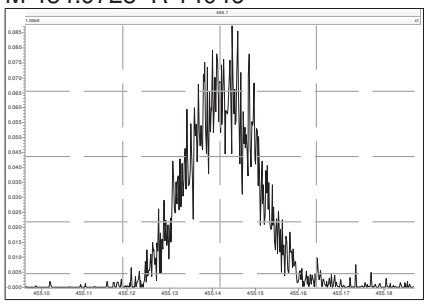

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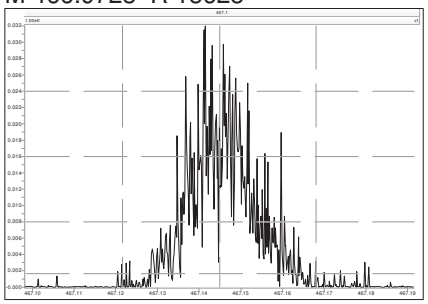

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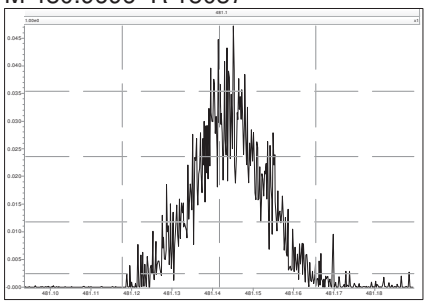

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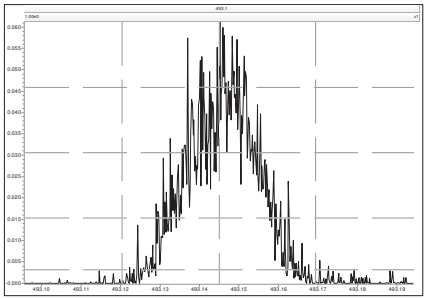

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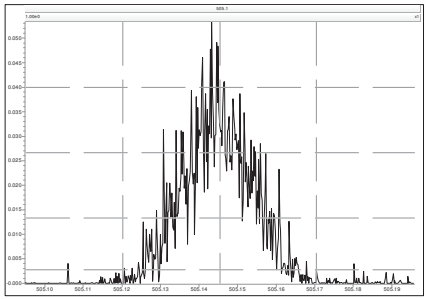

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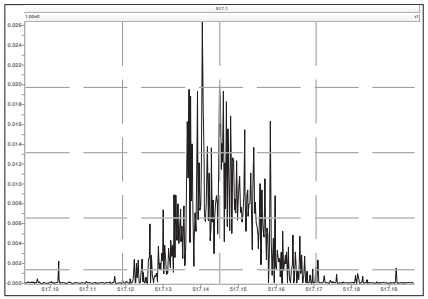


Instrument: MM3 (AutoSpec-Ultima) MS Experiment: df_cl4-8_db5MS GC Program: df_db5MS

#	Datafile	Vial#	Lab ID	Wt/Vol	Client/Sample ID	Analyst(s)	Checkcode	Acq Date	Acq Time
2	200615R02	3	CS3_200615_DF_RA	1.00	SIL 20-449-3	PSW	411-513	15-Jun-2020	09:27:48
3	200615R03	13	CS3_200615_DF_RB	1.00	ICV SIL 23-12-15	PSW	776-449	15-Jun-2020	10:28:16

REVIEWED
By Paul Walton at 8:47 am, Jun 17, 2020

APPROVED
Carla_Lyon , 11:40:07, 06/17/2020

Dioxin/Furan QC Summary	Acq'd: 15 Jun 2020 09:27 PSW	ICAL: MM3_DF_10012020_12JUN2020
Lab ID: CS3_200615_DF_RA	UTP: 15-Jun-2020 10:22:45 PSW	Checkcode: 411-513-RYV
Sample ID: SIL 20-449-3	Report: 17 Jun 2020 08:16 pw	Datafile: 200615R02

Name	RT	Response	RA	OK	Ref. RRFs	Calc. RRFs	Dev'n
2378-TCDD	27.55	1.02E+07	0.84	Y	1.18	1.24	5%
12378-PeCDD	33.02	4.07E+07	1.58	Y	1.14	1.14	1%
123478-HxCDD	36.92	3.72E+07	1.25	Y	1.09	1.11	1%
123678-HxCDD	37.04	3.77E+07	1.26	Y	1.13	1.17	4%
123789-HxCDD	37.34	3.87E+07	1.25	Y	1.05	1.07	2%
1234678-HpCDD	40.10	2.88E+07	1.04	Y	0.98	0.99	1%
OCDD	42.55	3.71E+07	0.88	Y	1.08	1.11	3%
2378-TCDF	26.64	1.50E+07	0.76	Y	0.98	1.01	3%
12378-PeCDF	31.54	6.19E+07	1.52	Y	0.95	0.97	3%
23478-PeCDF	32.67	6.02E+07	1.55	Y	0.95	0.96	1%
123478-HxCDF	35.95	5.68E+07	1.26	Y	1.20	1.21	1%
123678-HxCDF	36.09	5.97E+07	1.26	Y	1.07	1.12	5%
234678-HxCDF	36.74	5.28E+07	1.23	Y	1.10	1.12	2%
123789-HxCDF	37.72	4.40E+07	1.23	Y	1.09	1.14	4%
1234678-HpCDF	39.20	4.69E+07	1.02	Y	1.28	1.34	4%
1234789-HpCDF	40.53	3.45E+07	1.02	Y	1.27	1.29	2%
OCDF	42.72	4.46E+07	0.92	Y	1.01	1.02	1%
ES 2378-TCDD	27.52	8.29E+07	0.78	Y	1.01	0.98	-3%
ES 12378-PeCDD	33.01	7.13E+07	1.64	Y	0.87	0.84	-4%
ES 123478-HxCDD	36.91	6.72E+07	1.29	Y	1.10	0.99	-9%
ES 123678-HxCDD	37.02	6.45E+07	1.30	Y	1.06	0.95	-10%
ES 123789-HxCDD	37.33	7.20E+07	1.30	Y	1.22	1.07	-12%
ES 1234678-HpCDD	40.09	5.80E+07	1.10	Y	0.99	0.86	-14%
ES OCDD	42.55	6.69E+07	0.89	Y	0.67	0.49	-26%
ES 2378-TCDF	26.62	1.48E+08	0.79	Y	1.01	0.98	-4%
ES 12378-PeCDF	31.53	1.27E+08	1.57	Y	0.90	0.84	-7%
ES 23478-PeCDF	32.65	1.26E+08	1.62	Y	0.89	0.83	-7%
ES 123478-HxCDF	35.94	9.37E+07	0.52	Y	1.43	1.39	-3%
ES 123678-HxCDF	36.08	1.07E+08	0.52	Y	1.63	1.58	-3%
ES 234678-HxCDF	36.72	9.40E+07	0.52	Y	1.48	1.39	-6%
ES 123789-HxCDF	37.71	7.73E+07	0.53	Y	1.29	1.14	-11%
ES 1234678-HpCDF	39.19	7.01E+07	0.45	Y	1.15	1.04	-9%
ES 1234789-HpCDF	40.52	5.34E+07	0.44	Y	0.91	0.79	-13%
ES OCDF	42.71	8.73E+07	0.90	Y	0.83	0.65	-22%

Dioxin/Furan QC Summary	Acq'd: 15 Jun 2020 09:27 PSW	ICAL: MM3_DF_10012020_12JUN2020
Lab ID: CS3_200615_DF_RA	UTP: 15-Jun-2020 10:22:45 PSW	Checkcode: 411-513-RYV
Sample ID: SIL 20-449-3	Report: 17 Jun 2020 08:16 pw	Datafile: 200615R02

Name	RT	Response	RA	OK	Ref. RRFs	Calc. RRFs	Dev'n
JS 1234-TCDD	26.85	8.50E+07	0.79	Y	-	-	-
JS 1234-TCDF	25.21	1.51E+08	0.79	Y	-	-	-
JS 123467-HxCDD	37.22	3.38E+07	1.28	Y	-	-	-
CS 37Cl-2378-TCDD	27.55	8.47E+06	n/a	-	1.04	1.00	-4%
CS 12347-PeCDD	32.50	6.22E+07	1.66	Y	0.74	0.73	-1%
CS 12346-PeCDF	30.99	1.28E+08	1.57	Y	0.86	0.85	-1%
CS 123469-HxCDF	36.38	9.16E+07	0.52	Y	1.36	1.36	0%
CS 1234689-HpCDF	39.59	6.58E+07	0.45	Y	1.05	0.97	-8%
SS 37Cl-2378-TCDD	27.55	8.47E+06	n/a	-	1.04	1.02	-1%
SS 12347-PeCDD	32.50	6.22E+07	1.66	Y	0.86	0.87	2%
SS 12346-PeCDF	30.99	1.28E+08	1.57	Y	0.96	1.01	5%
SS 123469-HxCDF	36.38	9.16E+07	0.52	Y	0.83	0.86	3%
SS 1234689-HpCDF	39.59	6.58E+07	0.45	Y	0.92	0.94	2%
OCDD-a	42.55	2.36E+06	2.36	Y	0.07	0.07	7%
OCDF-a	42.71	2.56E+06	2.47	Y	0.06	0.06	-7%

METHOD 1613B **PCDD/F CALIBRATION VERIFICATION** **FORM 4A**

Lab Name: SGS North America

Initial Calibration: ICAL: MM3_DF_10012020_12JUN2020

Instrument ID: MM3 GC Column ID: ZB-5ms

VER Data Filename: 200615R02 Analysis Date: 15-JUN-2020 09:27:48

NATIVE ANALYTES	M/Z's FORMING RATIO	ION ABUND. RATIO	QC LIMITS	OK	CONC. FOUND	RANGE (ng/mL)	OK
2,3,7,8-TCDD	M/M+2	0.84	0.65 - 0.89	Y	10.5	7.8 - 12.9	Y
1,2,3,7,8-PeCDD	M+2/M+4	1.58	1.32 - 1.78	Y	50.3	39 - 65	Y
1,2,3,4,7,8-HxCDD	M+2/M+4	1.25	1.05 - 1.43	Y	50.7	39 - 64	Y
1,2,3,6,7,8-HxCDD	M+2/M+4	1.26	1.05 - 1.43	Y	51.8	39 - 64	Y
1,2,3,7,8,9-HxCDD	M+2/M+4	1.25	1.05 - 1.43	Y	51.2	41 - 61	Y
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	0.88 - 1.20	Y	50.6	43 - 58	Y
OCDD	M+2/M+4	0.88	0.76 - 1.02	Y	103	79 - 126	Y
2,3,7,8-TCDF	M/M+2	0.76	0.65 - 0.89	Y	10.3	8.4 - 12	Y
1,2,3,7,8-PeCDF	M+2/M+4	1.52	1.32 - 1.78	Y	51.3	41 - 60	Y
2,3,4,7,8-PeCDF	M+2/M+4	1.55	1.32 - 1.78	Y	50.6	41 - 61	Y
1,2,3,4,7,8-HxCDF	M+2/M+4	1.26	1.05 - 1.43	Y	50.7	45 - 56	Y
1,2,3,6,7,8-HxCDF	M+2/M+4	1.26	1.05 - 1.43	Y	52.3	44 - 57	Y
2,3,4,6,7,8-HxCDF	M+2/M+4	1.23	1.05 - 1.43	Y	51.2	44 - 57	Y
1,2,3,7,8,9-HxCDF	M+2/M+4	1.23	1.05 - 1.43	Y	52.1	45 - 56	Y
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.02	0.88 - 1.20	Y	52.2	45 - 55	Y
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.02	0.88 - 1.20	Y	50.9	43 - 58	Y
OCDF	M+2/M+4	0.92	0.76 - 1.02	Y	101	63 - 159	Y

See Table 9, Method 1613, for m/z specifications.

Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

Contract-required concentration range as specified in Table 6, Method 1613.

Processed: 17 Jun 2020 08:16 Analyst: pw

METHOD 1613B **PCDD/F CALIBRATION VERIFICATION** **FORM 4B**

Lab Name: SGS North America

Initial Calibration: ICAL: MM3_DF_10012020_12JUN2020

Instrument ID: MM3 GC Column ID: ZB-5ms

VER Data Filename: 200615R02 Analysis Date: 15-JUN-2020 09:27:48

LABELED ANALYTES	M/Z's FORMING RATIO	ION ABUND. RATIO	QC LIMITS			OK	CONC. FOUND	RANGE (ng/mL)			OK
13C-2,3,7,8-TCDD	M/M+2	0.78	0.65	-	0.89	Y	96.9	82	-	121	Y
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.64	1.32	-	1.78	Y	96.3	62	-	160	Y
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.29	1.05	-	1.43	Y	90.8	85	-	117	Y
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.30	1.05	-	1.43	Y	90.1	85	-	118	Y
13C-1,2,3,7,8,9-HxCDD	M+2/M+4	1.30	1.05	-	1.43	Y	87.6	85	-	118	Y
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.10	0.88	-	1.20	Y	86.5	72	-	138	Y
13C-OCDD	M+2/M+4	0.89	0.76	-	1.02	Y	148	96	-	415	Y
13C-2,3,7,8-TCDF	M/M+2	0.79	0.65	-	0.89	Y	96.3	71	-	140	Y
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.57	1.32	-	1.78	Y	93.3	76	-	130	Y
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.62	1.32	-	1.78	Y	93.3	77	-	130	Y
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	97	76	-	131	Y
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	96.8	70	-	143	Y
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	94.1	73	-	137	Y
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.53	0.43	-	0.59	Y	88.6	74	-	135	Y
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.45	0.37	-	0.51	Y	90.5	78	-	129	Y
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.44	0.37	-	0.51	Y	87.3	77	-	129	Y
13C-OCDF	M+2/M+4	0.90	0.76	-	1.02	Y	156	96	-	415	Y
CLEANUP STANDARDS											
37Cl-2,3,7,8-TCDD	n/a						9.62	7.9	-	12.7	Y
13C-1,2,3,4,7-PeCDD	M+2/M+4	1.66	1.32	-	1.78	Y	98.9	70	-	130	Y
13C-1,2,3,4,6-PeCDF	M+2/M+4	1.57	1.32	-	1.78	Y	98.6	70	-	130	Y
13C-1,2,3,4,6,9-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	99.9	70	-	130	Y
13C-1,2,3,4,6,8,9-HpCDF	M/M+2	0.45	0.37	-	0.51	Y	92.4	70	-	130	Y

Processed: 17 Jun 2020 08:16 Analyst: pw

METHOD 8290A **PCDD/F CALIBRATION VERIFICATION** **FORM 4A**

Lab Name: SGS North America

Initial Calibration: ICAL: MM3_DF_10012020_12JUN2020

Instrument ID: MM3 GC Column ID: ZB-5ms

VER Data Filename: 200615R02 Analysis Date: 15-JUN-2020 09:27:48

NATIVE ANALYTES	M/Z's FORMING RATIO	ION ABUND. RATIO	QC LIMITS			OK	CONC. FOUND	RANGE (ng/mL)			OK
2,3,7,8-TCDD	M/M+2	0.84	0.65	-	0.89	Y	10.5	8	-	12	Y
1,2,3,7,8-PeCDD	M+2/M+4	1.58	1.32	-	1.78	Y	50.3	40	-	60	Y
1,2,3,4,7,8-HxCDD	M+2/M+4	1.25	1.05	-	1.43	Y	50.7	40	-	60	Y
1,2,3,6,7,8-HxCDD	M+2/M+4	1.26	1.05	-	1.43	Y	51.8	40	-	60	Y
1,2,3,7,8,9-HxCDD	M+2/M+4	1.25	1.05	-	1.43	Y	51.2	40	-	60	Y
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	0.88	-	1.20	Y	50.6	40	-	60	Y
OCDD	M+2/M+4	0.88	0.76	-	1.02	Y	103	80	-	120	Y
2,3,7,8-TCDF	M/M+2	0.76	0.65	-	0.89	Y	10.3	8	-	12	Y
1,2,3,7,8-PeCDF	M+2/M+4	1.52	1.32	-	1.78	Y	51.3	40	-	60	Y
2,3,4,7,8-PeCDF	M+2/M+4	1.55	1.32	-	1.78	Y	50.6	40	-	60	Y
1,2,3,4,7,8-HxCDF	M+2/M+4	1.26	1.05	-	1.43	Y	50.7	40	-	60	Y
1,2,3,6,7,8-HxCDF	M+2/M+4	1.26	1.05	-	1.43	Y	52.3	40	-	60	Y
2,3,4,6,7,8-HxCDF	M+2/M+4	1.23	1.05	-	1.43	Y	51.2	40	-	60	Y
1,2,3,7,8,9-HxCDF	M+2/M+4	1.23	1.05	-	1.43	Y	52.1	40	-	60	Y
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.02	0.88	-	1.20	Y	52.2	40	-	60	Y
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.02	0.88	-	1.20	Y	50.9	40	-	60	Y
OCDF	M+2/M+4	0.92	0.76	-	1.02	Y	101	80	-	120	Y

Processed: 17 Jun 2020 08:15 Analyst: pw

METHOD 8290A **PCDD/F CALIBRATION VERIFICATION** **FORM 4B**

Lab Name: SGS North America

Initial Calibration: ICAL: MM3_DF_10012020_12JUN2020

Instrument ID: MM3 GC Column ID: ZB-5ms

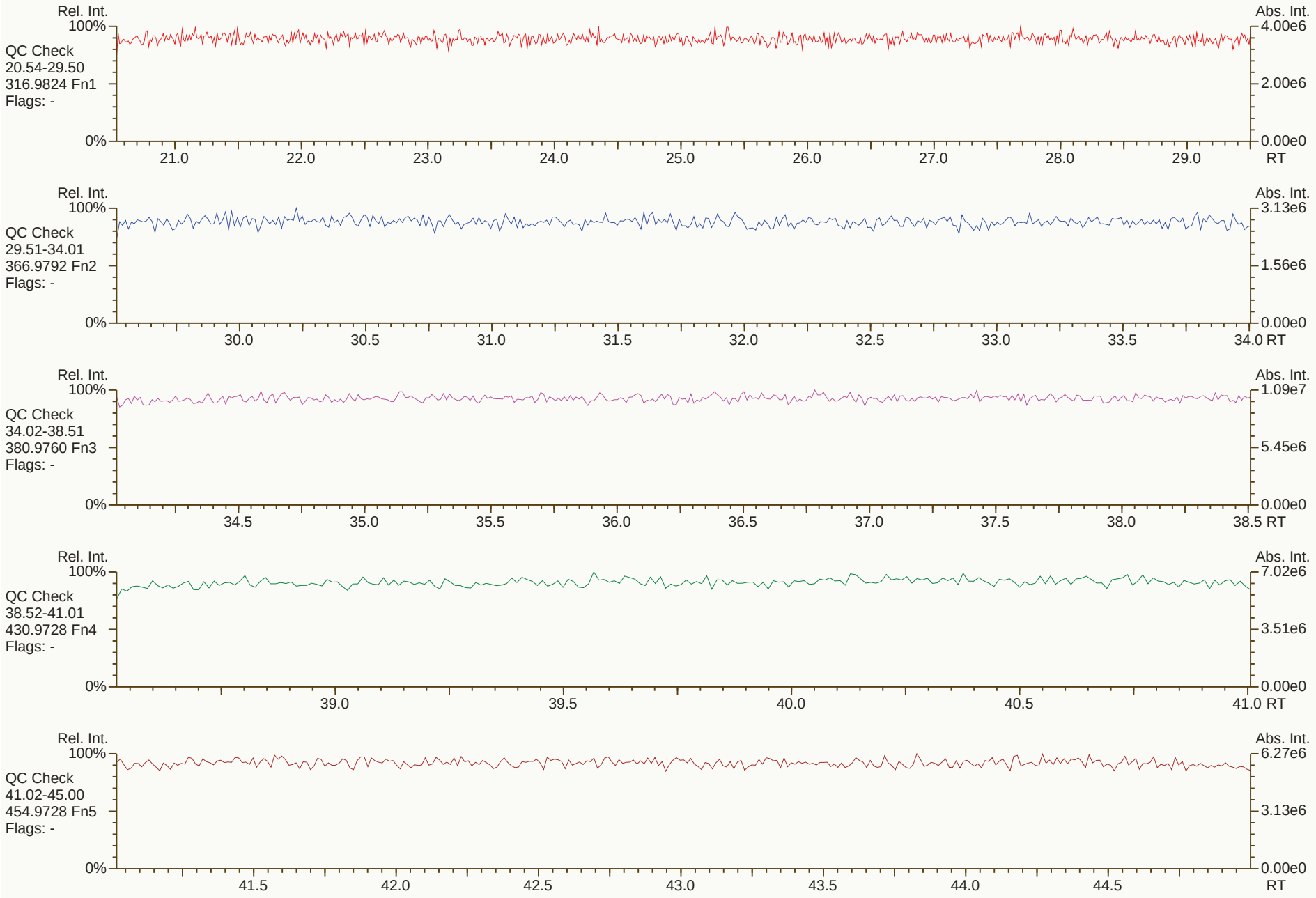
VER Data Filename: 200615R02 Analysis Date: 15-JUN-2020 09:27:48

LABELED ANALYTES	M/Z's FORMING RATIO	ION ABUND. RATIO	QC LIMITS			OK	CONC. FOUND	RANGE (ng/mL)			OK
13C-2,3,7,8-TCDD	M/M+2	0.78	0.65	-	0.89	Y	96.9	70	-	130	Y
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.64	1.32	-	1.78	Y	96.3	70	-	130	Y
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.29	1.05	-	1.43	Y	90.8	70	-	130	Y
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.30	1.05	-	1.43	Y	90.1	70	-	130	Y
13C-1,2,3,7,8,9-HxCDD	M+2/M+4	1.30	1.05	-	1.43	Y	87.6	70	-	130	Y
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.10	0.88	-	1.20	Y	86.5	70	-	130	Y
13C-OCDD	M+2/M+4	0.89	0.76	-	1.02	Y	148	140	-	260	Y
13C-2,3,7,8-TCDF	M/M+2	0.79	0.65	-	0.89	Y	96.3	70	-	130	Y
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.57	1.32	-	1.78	Y	93.3	70	-	130	Y
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.62	1.32	-	1.78	Y	93.3	70	-	130	Y
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	97	70	-	130	Y
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	96.8	70	-	130	Y
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	94.1	70	-	130	Y
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.53	0.43	-	0.59	Y	88.6	70	-	130	Y
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.45	0.37	-	0.51	Y	90.5	70	-	130	Y
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.44	0.37	-	0.51	Y	87.3	70	-	130	Y
13C-OCDF	M+2/M+4	0.90	0.76	-	1.02	Y	156	140	-	260	Y
CLEANUP STANDARDS											
37Cl-2,3,7,8-TCDD	n/a						9.62	7.9	-	12.7	Y
13C-1,2,3,4,7-PeCDD	M+2/M+4	1.66	1.32	-	1.78	Y	98.9	70	-	130	Y
13C-1,2,3,4,6-PeCDF	M+2/M+4	1.57	1.32	-	1.78	Y	98.6	70	-	130	Y
13C-1,2,3,4,6,9-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	99.9	70	-	130	Y
13C-1,2,3,4,6,8,9-HpCDF	M/M+2	0.45	0.37	-	0.51	Y	92.4	70	-	130	Y

Processed: 17 Jun 2020 08:15 Analyst: pw

SGS ID: CS3_200615_DF_RA **Sample ID: SIL 20-449-3** **Acq: 15-Jun-2020 09:27:48**

Instr: [ILM] AutoSpec-Ultima MM3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 3** **User: PSW Datafile: 200615R02**



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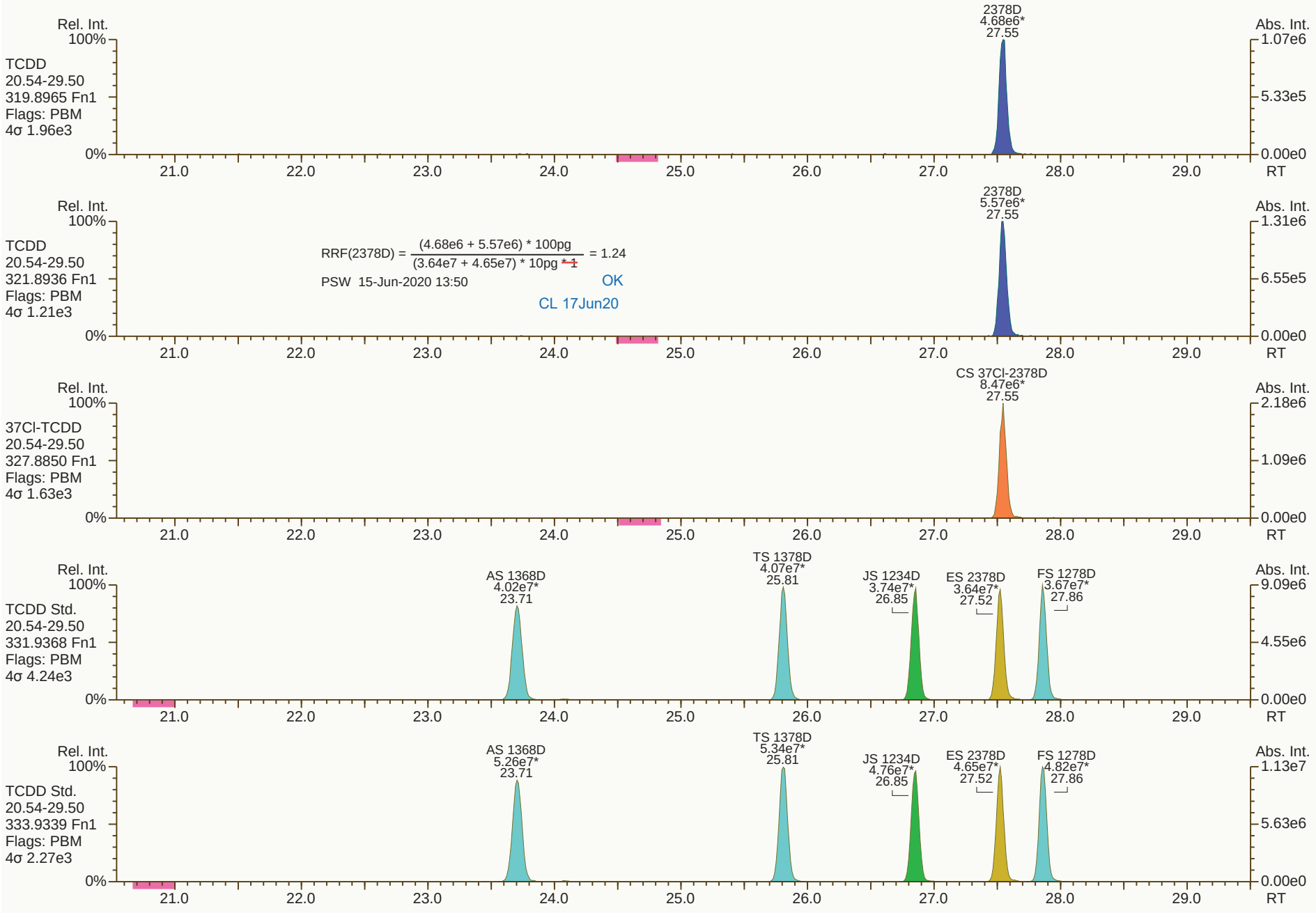
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 scc: 411-513 *PKD: n/a Printed: 15-Jun-2020 13:51 Page 1 of 12*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20.54-29.50
319.8965 Fn1
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4σ 1.96e3
0%
2378D
4.68e6*
27.55
Abs. Int.
1.07e6
5.33e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD
20.54-29.50
321.8936 Fn1
Flags: PBM
4σ 1.21e3
0%
RRF(2378D) = (4.68e6 + 5.57e6) * 100pg / (3.64e7 + 4.65e7) * 10pg * 1 = 1.24
PSW 15-Jun-2020 13:50
OK
CL 17Jun20
2378D
5.57e6*
27.55
Abs. Int.
1.31e6
6.55e5
0.00e0
Rel. Int.
100%
37Cl-TCDD
20.54-29.50
327.8850 Fn1
Flags: PBM
4σ 1.63e3
0%
CS 37Cl-2378D
8.47e6*
27.55
Abs. Int.
2.18e6
1.09e6
0.00e0
Rel. Int.
100%
TCDD Std.
20.54-29.50
331.9368 Fn1
Flags: PBM
4σ 4.24e3
0%
AS 1368D
4.02e7*
23.71
TS 1378D
4.07e7*
25.81
JS 1234D
3.74e7*
26.85
ES 2378D
3.64e7*
27.52
FS 1278D
3.67e7*
27.86
Abs. Int.
9.09e6
4.55e6
0.00e0
Rel. Int.
100%
TCDD Std.
20.54-29.50
333.9339 Fn1
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4σ 2.27e3
0%
AS 1368D
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23.71
TS 1378D
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25.81
JS 1234D
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26.85
ES 2378D
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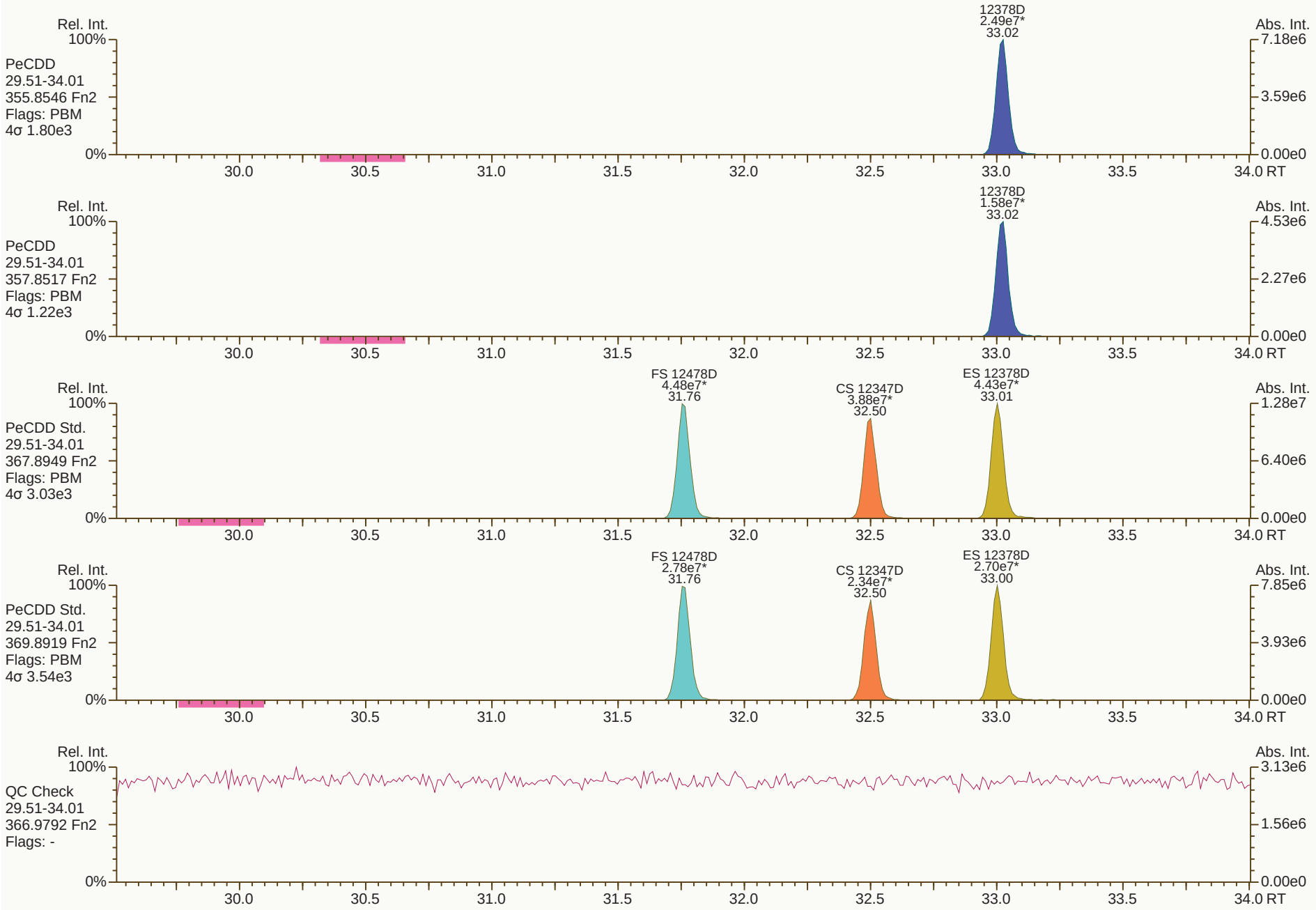

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Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 4915, 2937 scc: 411-513
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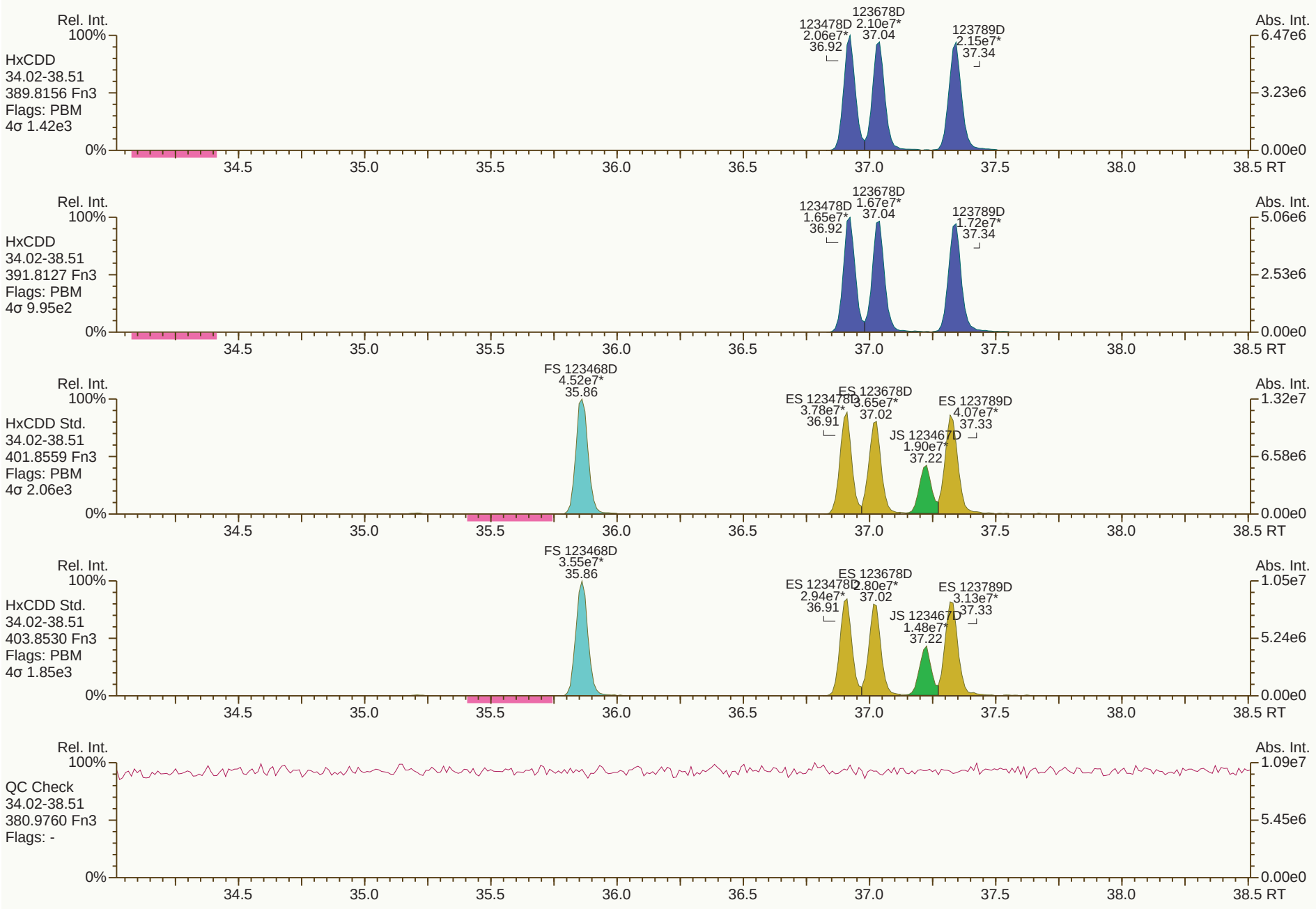
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Abs. Int.
HxCDD
34.02-38.51
389.8156 Fn3
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123678D 2.10e7* 37.04
123478D 2.06e7* 36.92
123789D 2.15e7* 37.34
6.47e6
3.23e6
0.00e0
HxCDD
34.02-38.51
391.8127 Fn3
Flags: PBM
4σ 9.95e2
123678D 1.67e7* 37.04
123478D 1.65e7* 36.92
123789D 1.72e7* 37.34
5.06e6
2.53e6
0.00e0
HxCDD Std.
34.02-38.51
401.8559 Fn3
Flags: PBM
4σ 2.06e3
FS 123468D 4.52e7* 35.86
ES 123678D 3.65e7* 37.02
ES 123478D 3.78e7* 36.91
ES 123789D 4.07e7* 37.33
JS 123467D 1.90e7* 37.22
1.32e7
6.58e6
0.00e0
HxCDD Std.
34.02-38.51
403.8530 Fn3
Flags: PBM
4σ 1.85e3
FS 123468D 3.55e7* 35.86
ES 123678D 2.80e7* 37.02
ES 123478D 2.94e7* 36.91
ES 123789D 3.13e7* 37.33
JS 123467D 1.48e7* 37.22
1.05e7
5.24e6
0.00e0
QC Check
34.02-38.51
380.9760 Fn3
Flags: -
1.09e7
5.45e6
0.00e0
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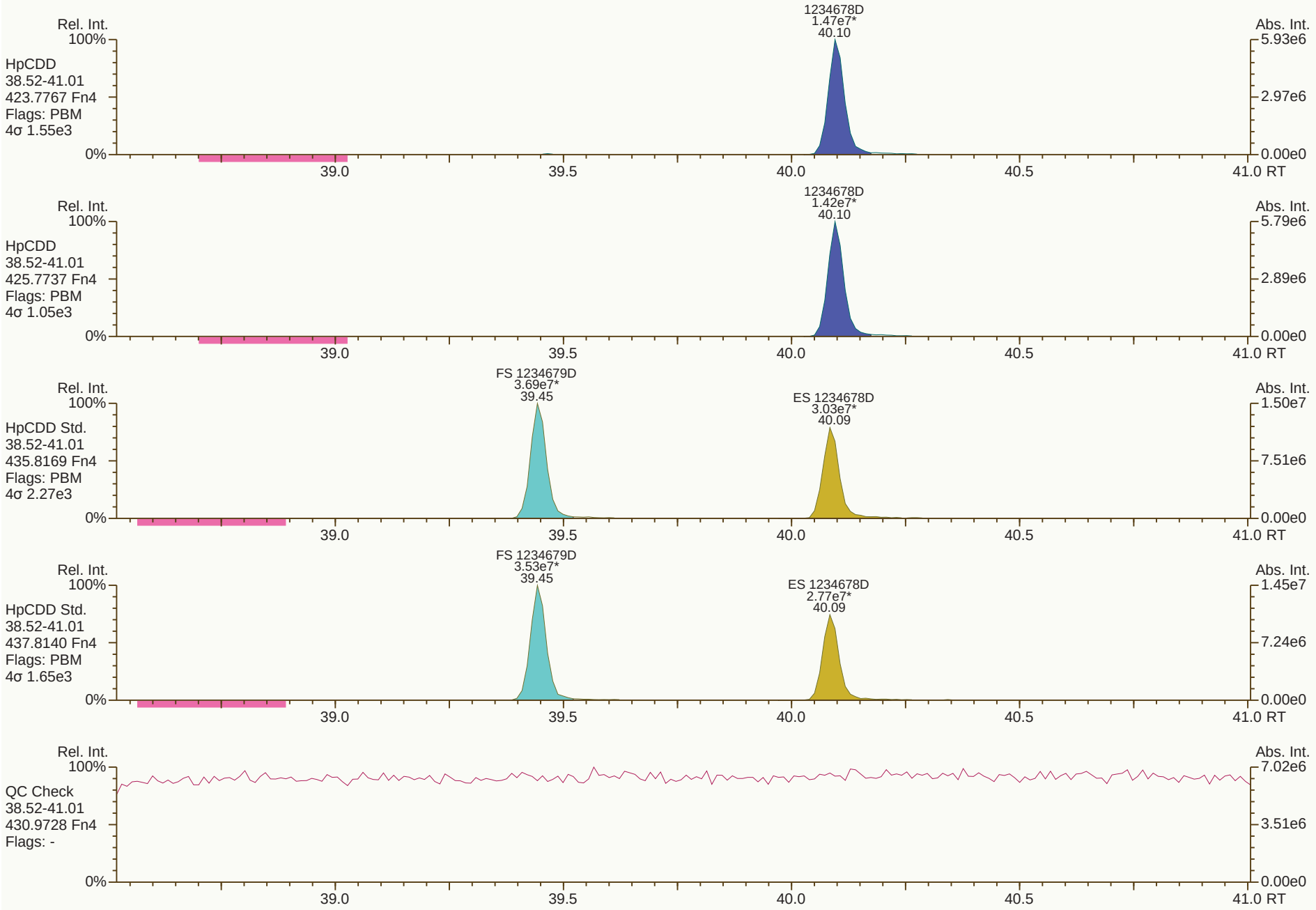
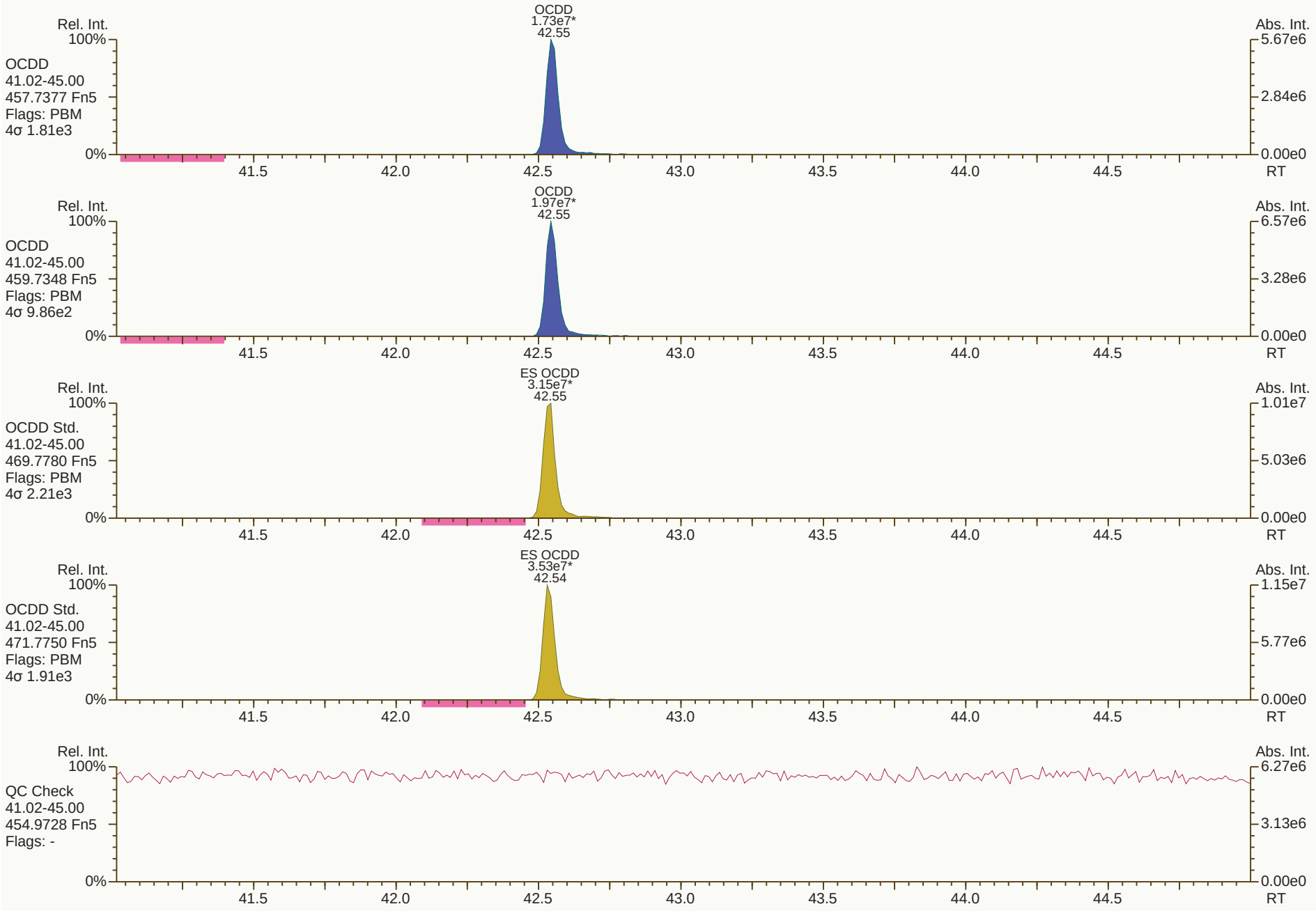
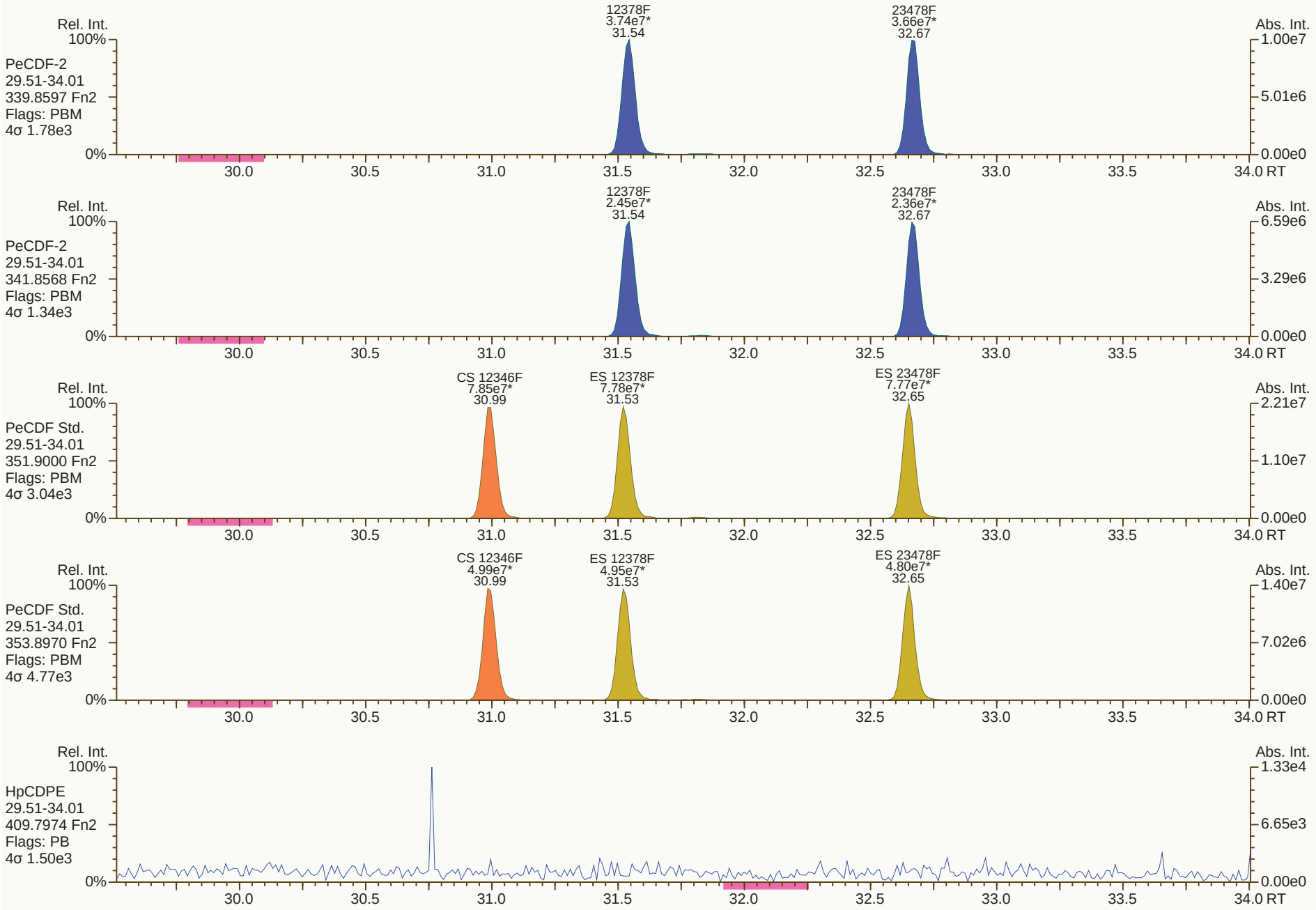
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT

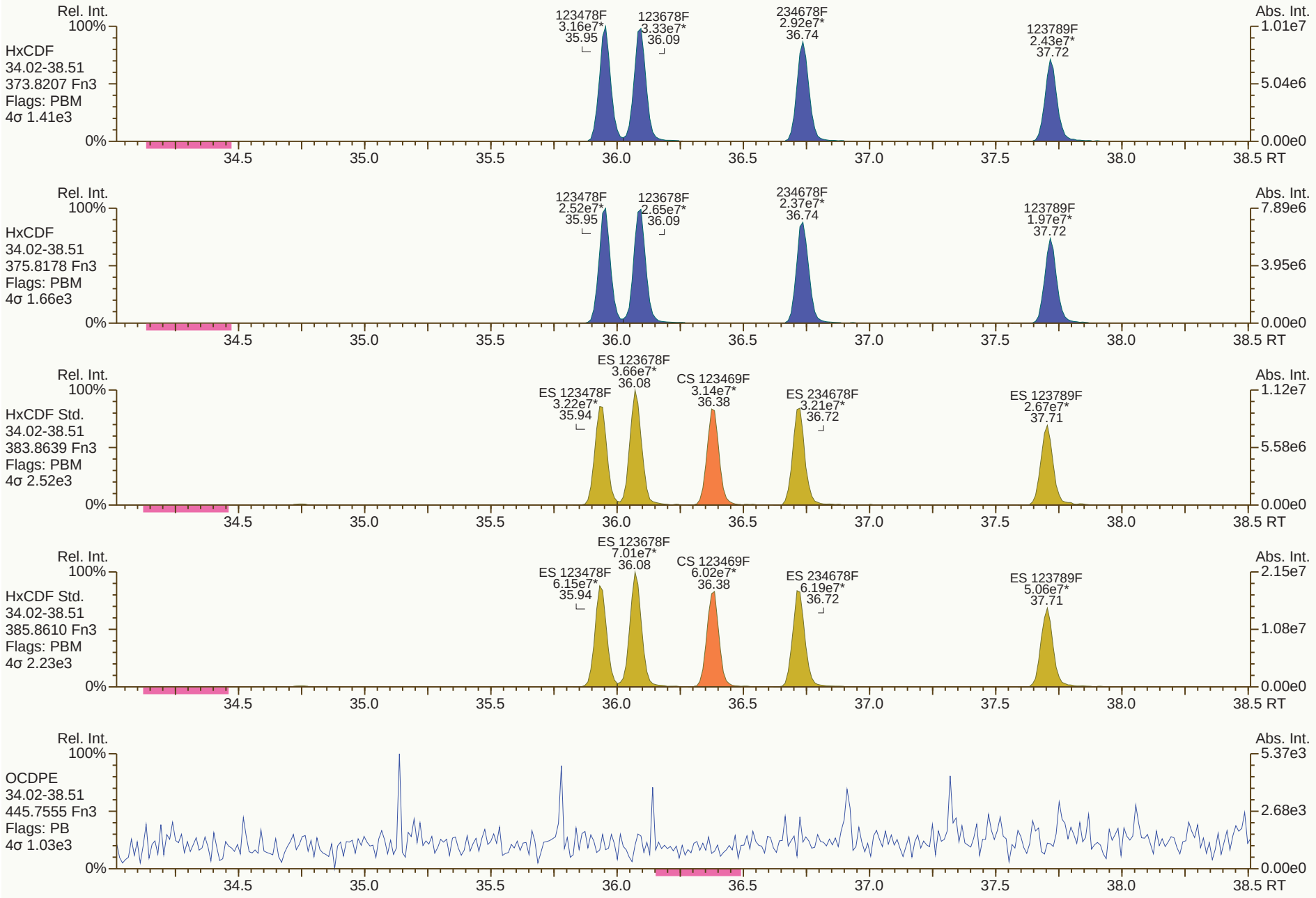

Rel. Int.
100%
HpCDD
38.52-41.01
423.7767 Fn4
Flags: PBM
4σ 1.55e3
1234678D
1.47e7*
40.10
Abs. Int.
5.93e6
2.97e6
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.52-41.01
425.7737 Fn4
Flags: PBM
4σ 1.05e3
1234678D
1.42e7*
40.10
Abs. Int.
5.79e6
2.89e6
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.52-41.01
435.8169 Fn4
Flags: PBM
4σ 2.27e3
FS 1234679D
3.69e7*
39.45
ES 1234678D
3.03e7*
40.09
Abs. Int.
1.50e7
7.51e6
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.52-41.01
437.8140 Fn4
Flags: PBM
4σ 1.65e3
FS 1234679D
3.53e7*
39.45
ES 1234678D
2.77e7*
40.09
Abs. Int.
1.45e7
7.24e6
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.52-41.01
430.9728 Fn4
Flags: -
Abs. Int.
7.02e6
3.51e6
0.00e0
0%
39.0
39.5
40.0
40.5
41.0 RT

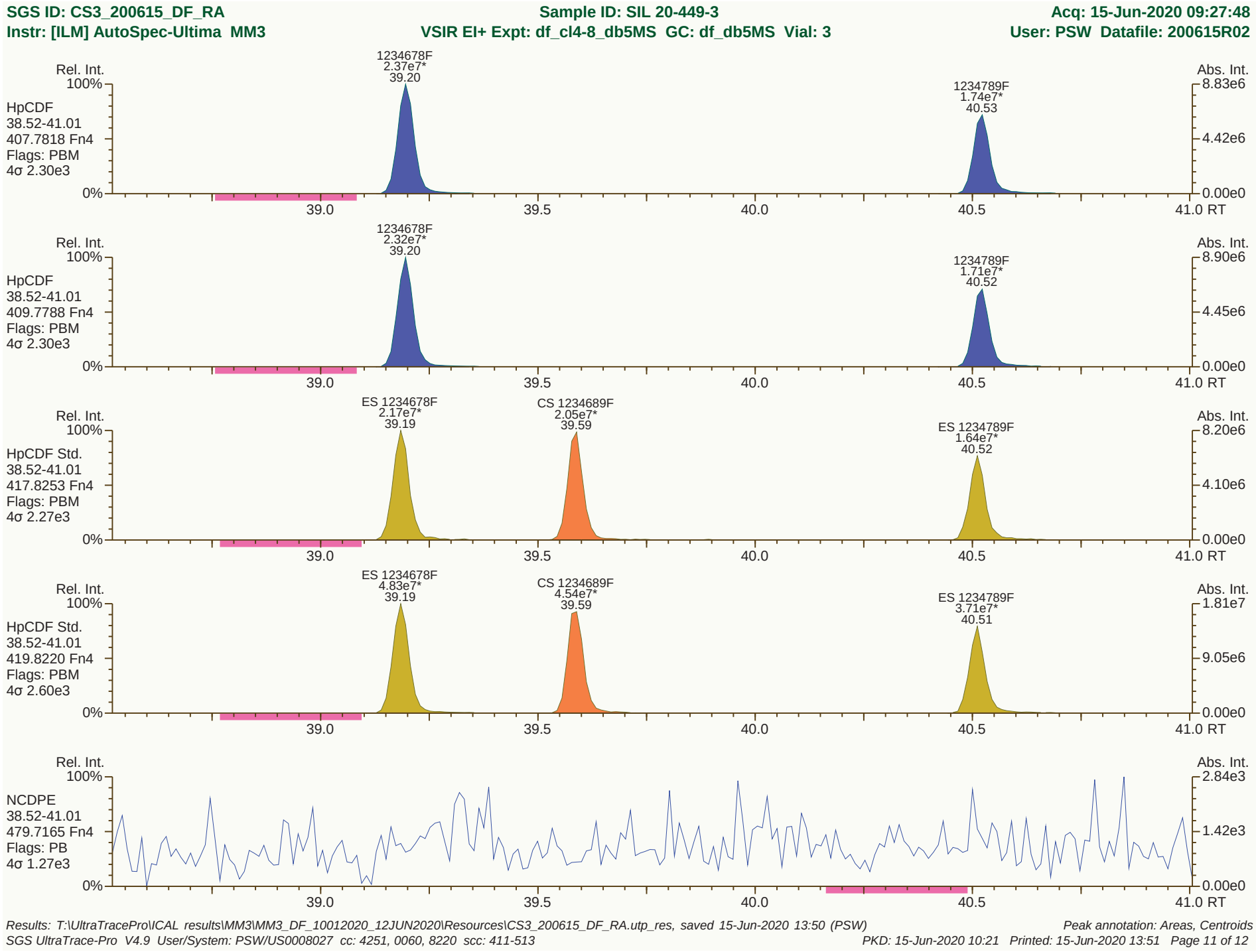

OCDD
1.73e7*
42.55
Rel. Int.
100%
OCDD
41.02-45.00
457.7377 Fn5
Flags: PBM
4σ 1.81e3
0%
Abs. Int.
5.67e6
2.84e6
0.00e0
RT
41.5
42.0
42.5
43.0
43.5
44.0
44.5
OCDD
1.97e7*
42.55
Rel. Int.
100%
OCDD
41.02-45.00
459.7348 Fn5
Flags: PBM
4σ 9.86e2
0%
Abs. Int.
6.57e6
3.28e6
0.00e0
RT
ES OCDD
3.15e7*
42.55
Rel. Int.
100%
OCDD Std.
41.02-45.00
469.7780 Fn5
Flags: PBM
4σ 2.21e3
0%
Abs. Int.
1.01e7
5.03e6
0.00e0
RT
ES OCDD
3.53e7*
42.54
Rel. Int.
100%
OCDD Std.
41.02-45.00
471.7750 Fn5
Flags: PBM
4σ 1.91e3
0%
Abs. Int.
1.15e7
5.77e6
0.00e0
RT
Rel. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
6.27e6
3.13e6
0.00e0
RT


Rel. Int.
100%
TCDF
20.54-29.50
303.9016 Fn1
Flags: PBM
4σ 1.55e3
0%
2378F
6.46e6*
26.64
Abs. Int.
1.50e6
7.49e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF
20.54-29.50
305.8987 Fn1
Flags: PBM
4σ 1.34e3
0%
2378F
8.54e6*
26.64
Abs. Int.
1.91e6
9.54e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
315.9419 Fn1
Flags: PBM
4σ 1.05e4
0%
AS 1368F
7.92e7*
21.49
JS 1234F
6.66e7*
25.21
ES 2378F
6.54e7*
26.62
Abs. Int.
1.52e7
7.61e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDF Std.
20.54-29.50
317.9389 Fn1
Flags: PBM
4σ 3.69e3
0%
AS 1368F
1.02e8*
21.49
JS 1234F
8.48e7*
25.21
ES 2378F
8.26e7*
26.61
Abs. Int.
1.92e7
9.59e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
HxCDPE
20.54-29.50
375.8364 Fn1
Flags: PB
4σ 1.61e3
0%
Abs. Int.
3.74e3
1.87e3
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT


Rel. Int.
100%
0%
Abs. Int.
5.04e3
2.52e3
0.00e0
RT
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
PeCDF-1
20.54-29.50
339.8597 Fn1
Flags: PB
4σ 1.36e3
PeCDF-1
20.54-29.50
341.8568 Fn1
Flags: PB
4σ 1.90e3
9.41e3
4.71e3
QC Check
20.54-29.50
316.9824 Fn1
Flags: -
4.00e6
2.00e6


Rel. Int.
100%
PeCDF-2
29.51-34.01
339.8597 Fn2
Flags: PBM
4σ 1.78e3
0%
12378F
3.74e7*
31.54
23478F
3.66e7*
32.67
Abs. Int.
1.00e7
5.01e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF-2
29.51-34.01
341.8568 Fn2
Flags: PBM
4σ 1.34e3
0%
12378F
2.45e7*
31.54
23478F
2.36e7*
32.67
Abs. Int.
6.59e6
3.29e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
351.9000 Fn2
Flags: PBM
4σ 3.04e3
0%
CS 12346F
7.85e7*
30.99
ES 12378F
7.78e7*
31.53
ES 23478F
7.77e7*
32.65
Abs. Int.
2.21e7
1.10e7
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
353.8970 Fn2
Flags: PBM
4σ 4.77e3
0%
CS 12346F
4.99e7*
30.99
ES 12378F
4.95e7*
31.53
ES 23478F
4.80e7*
32.65
Abs. Int.
1.40e7
7.02e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
HpCDPE
29.51-34.01
409.7974 Fn2
Flags: PB
4σ 1.50e3
0%
Abs. Int.
1.33e4
6.65e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT

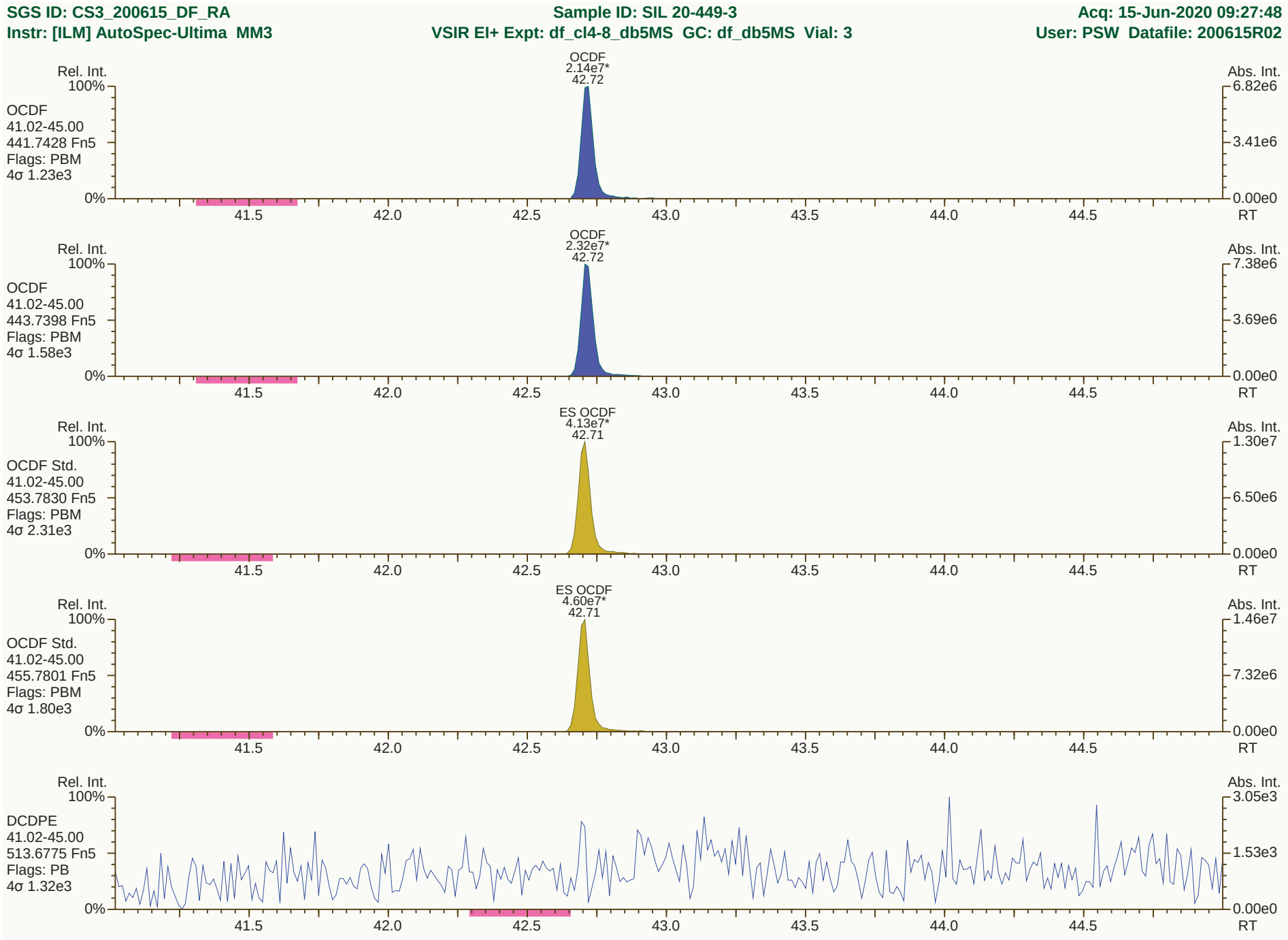

Rel. Int.
100%
HxCDF
34.02-38.51
373.8207 Fn3
Flags: PBM
4σ 1.41e3
123478F
3.16e7*
35.95
123678F
3.33e7*
36.09
234678F
2.92e7*
36.74
123789F
2.43e7*
37.72
Abs. Int.
1.01e7
5.04e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDF
34.02-38.51
375.8178 Fn3
Flags: PBM
4σ 1.66e3
123478F
2.52e7*
35.95
123678F
2.65e7*
36.09
234678F
2.37e7*
36.74
123789F
1.97e7*
37.72
Abs. Int.
7.89e6
3.95e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDF Std.
34.02-38.51
383.8639 Fn3
Flags: PBM
4σ 2.52e3
ES 123678F
3.66e7*
36.08
ES 123478F
3.22e7*
35.94
CS 123469F
3.14e7*
36.38
ES 234678F
3.21e7*
36.72
ES 123789F
2.67e7*
37.71
Abs. Int.
1.12e7
5.58e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDF Std.
34.02-38.51
385.8610 Fn3
Flags: PBM
4σ 2.23e3
ES 123678F
7.01e7*
36.08
ES 123478F
6.15e7*
35.94
CS 123469F
6.02e7*
36.38
ES 234678F
6.19e7*
36.72
ES 123789F
5.06e7*
37.71
Abs. Int.
2.15e7
1.08e7
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
OCDPE
34.02-38.51
445.7555 Fn3
Flags: PB
4σ 1.03e3
Abs. Int.
5.37e3
2.68e3
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT


SGS ID: CS3_200615_DF_RA
Sample ID: SIL 20-449-3
Acq: 15-Jun-2020 09:27:48
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 3
User: PSW Datafile: 200615R02
Rel. Int.
Abs. Int.
HpCDF
38.52-41.01
407.7818 Fn4
Flags: PBM
4σ 2.30e3
1234678F
2.37e7*
39.20
1234789F
1.74e7*
40.53
HpCDF
38.52-41.01
409.7788 Fn4
Flags: PBM
4σ 2.30e3
1234678F
2.32e7*
39.20
1234789F
1.71e7*
40.52
HpCDF Std.
38.52-41.01
417.8253 Fn4
Flags: PBM
4σ 2.27e3
ES 1234678F
2.17e7*
39.19
CS 1234689F
2.05e7*
39.59
ES 1234789F
1.64e7*
40.52
HpCDF Std.
38.52-41.01
419.8220 Fn4
Flags: PBM
4σ 2.60e3
ES 1234678F
4.83e7*
39.19
CS 1234689F
4.54e7*
39.59
ES 1234789F
3.71e7*
40.51
NCDPE
38.52-41.01
479.7165 Fn4
Flags: PB
4σ 1.27e3
100%
0%
39.0
39.5
40.0
40.5
41.0 RT
Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS3_200615_DF_RA.utp_res, saved 15-Jun-2020 13:50 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 4251, 0060, 8220 scc: 411-513
PKD: 15-Jun-2020 10:21 Printed: 15-Jun-2020 13:51 Page 11 of 12

SGS ID: CS3_200615_DF_RA
Instr: [ILM] AutoSpec-Ultima MM3

Sample ID: SIL 20-449-3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 3

Acq: 15-Jun-2020 09:27:48
User: PSW Datafile: 200615R02



Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS3_200615_DF_RA.utp_res, saved 15-Jun-2020 13:50 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 4744, 2781, 9928 scc: 411-513
Revised: 15-Jun-2020 10:22 (PSW) Printed: 15-Jun-2020 13:51 Page 12 of 12

Dioxin/Furan QC Summary		Acq'd: 15 Jun 2020 10:28 PSW				ICAL: MM3_DF_10012020_12JUN2020	
Lab ID: CS3_200615_DF_RB		UTP: 15-Jun-2020 11:31:34 PSW				Checkcode: 776-449-FTJ	
Sample ID: ICV SIL 23-12-15		Report: 17 Jun 2020 08:16 pw				Datafile: 200615R03	
Name	**RT**	**Response**	**RA**	**OK**	**Ref. RRFs**	**Calc. RRFs**	**Dev'n**
2378-TCDD	27.56	9.27E+06	0.83	Y	1.18	1.20	2%
12378-PeCDD	33.03	3.83E+07	1.59	Y	1.14	1.14	0%
123478-HxCDD	36.93	3.81E+07	1.26	Y	1.09	1.20	10%
123678-HxCDD	37.05	3.92E+07	1.25	Y	1.13	1.23	9%
123789-HxCDD	37.35	4.77E+07	1.24	Y	1.05	1.10	5%
1234678-HpCDD	40.11	3.10E+07	1.04	Y	0.98	1.07	9%
OCDD	42.56	4.89E+07	0.92	Y	1.08	1.22	13%
2378-TCDF	26.65	1.43E+07	0.77	Y	0.98	1.07	9%
12378-PeCDF	31.55	6.03E+07	1.57	Y	0.95	0.97	3%
23478-PeCDF	32.68	6.65E+07	1.55	Y	0.95	1.11	17%
123478-HxCDF	35.96	5.68E+07	1.23	Y	1.20	1.28	7%
123678-HxCDF	36.10	5.89E+07	1.24	Y	1.07	1.16	9%
234678-HxCDF	36.75	5.48E+07	1.24	Y	1.10	1.22	11%
123789-HxCDF	37.73	4.60E+07	1.24	Y	1.09	1.14	4%
1234678-HpCDF	39.21	5.06E+07	1.03	Y	1.28	1.40	9%
1234789-HpCDF	40.53	3.82E+07	1.02	Y	1.27	1.32	4%
OCDF	42.73	5.27E+07	0.89	Y	1.01	1.04	3%
ES 2378-TCDD	27.54	7.71E+07	0.77	Y	1.01	1.06	5%
ES 12378-PeCDD	33.01	6.73E+07	1.67	Y	0.87	0.93	6%
ES 123478-HxCDD	36.92	6.35E+07	1.32	Y	1.10	1.02	-7%
ES 123678-HxCDD	37.03	6.38E+07	1.27	Y	1.06	1.02	-4%
ES 123789-HxCDD	37.34	8.67E+07	1.29	Y	1.22	1.39	14%
ES 1234678-HpCDD	40.1	5.78E+07	1.06	Y	0.99	0.92	-7%
ES OCDD	42.55	8.04E+07	0.91	Y	0.67	0.64	-4%
ES 2378-TCDF	26.63	1.34E+08	0.80	Y	1.01	1.09	8%
ES 12378-PeCDF	31.54	1.24E+08	1.54	Y	0.90	1.01	12%
ES 23478-PeCDF	32.66	1.20E+08	1.56	Y	0.89	0.98	10%
ES 123478-HxCDF	35.95	8.88E+07	0.51	Y	1.43	1.42	-1%
ES 123678-HxCDF	36.08	1.01E+08	0.52	Y	1.63	1.62	-1%
ES 234678-HxCDF	36.73	8.98E+07	0.52	Y	1.48	1.44	-3%
ES 123789-HxCDF	37.72	8.11E+07	0.52	Y	1.29	1.30	0%
ES 1234678-HpCDF	39.2	7.25E+07	0.45	Y	1.15	1.16	1%
ES 1234789-HpCDF	40.52	5.78E+07	0.46	Y	0.91	0.92	2%
ES OCDF	42.72	1.01E+08	0.89	Y	0.83	0.81	-3%

Dioxin/Furan QC Summary	Acq'd: 15 Jun 2020 10:28 PSW	ICAL: MM3_DF_10012020_12JUN2020
Lab ID: CS3_200615_DF_RB	UTP: 15-Jun-2020 11:31:34 PSW	Checkcode: 776-449-FTJ
Sample ID: ICV SIL 23-12-15	Report: 17 Jun 2020 08:16 pw	Datafile: 200615R03

Name	RT	Response	RA	OK	Ref. RRFs	Calc. RRFs	Dev'n	
JS 1234-TCDD	26.86	7.27E+07	0.77	Y	-	-	-	
JS 1234-TCDF	25.22	1.23E+08	0.79	Y	-	-	-	
JS 123467-HxCDD	37.23	3.13E+07	1.30	Y	-	-	-	
								OK
CS 37Cl-2378-TCDD	27.56	3.32E+07	n/a	-	1.04	4.56 /4	340%	spike level 40 pg/uL
CS 12347-PeCDD	32.51	6.36E+07	1.69	Y	0.74	0.88	18%	
CS 12346-PeCDF	31.00	1.15E+08	1.57	Y	0.86	0.94	9%	
CS 123469-HxCDF	36.39	8.60E+07	0.52	Y	1.36	1.37	1%	CL 17Jun20
CS 1234689-HpCDF	39.60	6.99E+07	0.44	Y	1.05	1.12	6%	
SS 37Cl-2378-TCDD	27.56	3.32E+07	n/a	-	1.04	4.30/4	315%	
SS 12347-PeCDD	32.51	6.36E+07	1.69	Y	0.86	0.95	11%	
SS 12346-PeCDF	31.00	1.15E+08	1.57	Y	0.96	0.93	-3%	
SS 123469-HxCDF	36.39	8.60E+07	0.52	Y	0.83	0.85	2%	
SS 1234689-HpCDF	39.60	6.99E+07	0.44	Y	0.92	0.97	4%	

n/a CL 17Jun20

~~OCDD-a~~	~~42.56~~	~~2.45E+06~~	~~3.00~~	~~N~~	~~0.07~~	~~0.06~~	~~-8%~~
~~OCDF-a~~	~~42.72~~	~~3.32E+06~~	~~2.37~~	~~Y~~	~~0.06~~	~~0.07~~	~~4%~~

METHOD 1613B **PCDD/F CALIBRATION VERIFICATION** **FORM 4A**

Lab Name: SGS North America

Initial Calibration: ICAL: MM3_DF_10012020_12JUN2020

Instrument ID: MM3 GC Column ID: ZB-5ms

VER Data Filename: 200615R03 Analysis Date: 15-JUN-2020 10:28:16

NATIVE ANALYTES	M/Z's FORMING RATIO	ION ABUND. RATIO	QC LIMITS	OK	CONC. FOUND	RANGE (ng/mL)	OK
2,3,7,8-TCDD	M/M+2	0.83	0.65 - 0.89	Y	10.2	7.8 - 12.9	Y
1,2,3,7,8-PeCDD	M+2/M+4	1.59	1.32 - 1.78	Y	50.1	39 - 65	Y
1,2,3,4,7,8-HxCDD	M+2/M+4	1.26	1.05 - 1.43	Y	54.9	39 - 64	Y
1,2,3,6,7,8-HxCDD	M+2/M+4	1.25	1.05 - 1.43	Y	54.5	39 - 64	Y
1,2,3,7,8,9-HxCDD	M+2/M+4	1.24	1.05 - 1.43	Y	52.4	41 - 61	Y
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	0.88 - 1.20	Y	54.5	43 - 58	Y
OCDD	M+2/M+4	0.92	0.76 - 1.02	Y	113	79 - 126	Y
2,3,7,8-TCDF	M/M+2	0.77	0.65 - 0.89	Y	10.9	8.4 - 12	Y
1,2,3,7,8-PeCDF	M+2/M+4	1.57	1.32 - 1.78	Y	51.3	41 - 60	Y
2,3,4,7,8-PeCDF	M+2/M+4	1.55	1.32 - 1.78	Y	58.6	41 - 61	Y
1,2,3,4,7,8-HxCDF	M+2/M+4	1.23	1.05 - 1.43	Y	53.5	45 - 56	Y
1,2,3,6,7,8-HxCDF	M+2/M+4	1.24	1.05 - 1.43	Y	54.3	44 - 57	Y
2,3,4,6,7,8-HxCDF	M+2/M+4	1.24	1.05 - 1.43	Y	55.6	44 - 57	Y
1,2,3,7,8,9-HxCDF	M+2/M+4	1.24	1.05 - 1.43	Y	52	45 - 56	Y
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.03	0.88 - 1.20	Y	54.5	45 - 55	Y
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.02	0.88 - 1.20	Y	52.1	43 - 58	Y
OCDF	M+2/M+4	0.89	0.76 - 1.02	Y	103	63 - 159	Y

See Table 9, Method 1613, for m/z specifications.

Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

Contract-required concentration range as specified in Table 6, Method 1613.

Processed: 17 Jun 2020 08:16 Analyst: pw

METHOD 1613B **PCDD/F CALIBRATION VERIFICATION** **FORM 4B**

Lab Name: SGS North America

Initial Calibration: ICAL: MM3_DF_10012020_12JUN2020

Instrument ID: MM3 GC Column ID: ZB-5ms

VER Data Filename: 200615R03 Analysis Date: 15-JUN-2020 10:28:16

LABELED ANALYTES	M/Z's FORMING RATIO	ION ABUND. RATIO	QC LIMITS			OK	CONC. FOUND	RANGE (ng/mL)			OK	
13C-2,3,7,8-TCDD	M/M+2	0.77	0.65	-	0.89	Y	105	82	-	121	Y	
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.67	1.32	-	1.78	Y	106	62	-	160	Y	
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.32	1.05	-	1.43	Y	92.7	85	-	117	Y	
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.27	1.05	-	1.43	Y	96.2	85	-	118	Y	
13C-1,2,3,7,8,9-HxCDD	M+2/M+4	1.29	1.05	-	1.43	Y	114	85	-	118	Y	
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.06	0.88	-	1.20	Y	93.1	72	-	138	Y	
13C-OCDD	M+2/M+4	0.91	0.76	-	1.02	Y	192	96	-	415	Y	
13C-2,3,7,8-TCDF	M/M+2	0.80	0.65	-	0.89	Y	108	71	-	140	Y	
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.54	1.32	-	1.78	Y	112	76	-	130	Y	
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.56	1.32	-	1.78	Y	110	77	-	130	Y	
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.51	0.43	-	0.59	Y	99.3	76	-	131	Y	
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	99.3	70	-	143	Y	
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	97.2	73	-	137	Y	
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	100	74	-	135	Y	
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.45	0.37	-	0.51	Y	101	78	-	129	Y	
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.46	0.37	-	0.51	Y	102	77	-	129	Y	
13C-OCDF	M+2/M+4	0.89	0.76	-	1.02	Y	195	96	-	415	Y	
CLEANUP STANDARDS												
								31.6	-	50.8	Y	
37Cl-2,3,7,8-TCDD	n/a						44	~~7.9~~	~~-~~	~~12.7~~	~~N~~	spike level 40 CL 17Jun20
13C-1,2,3,4,7-PeCDD	M+2/M+4	1.69	1.32	-	1.78	Y	118	70	-	130	Y	
13C-1,2,3,4,6-PeCDF	M+2/M+4	1.57	1.32	-	1.78	Y	109	70	-	130	Y	
13C-1,2,3,4,6,9-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	101	70	-	130	Y	
13C-1,2,3,4,6,8,9-HpCDF	M/M+2	0.44	0.37	-	0.51	Y	106	70	-	130	Y	

Processed: 17 Jun 2020 08:16 Analyst: pw

METHOD 8290A **PCDD/F CALIBRATION VERIFICATION** **FORM 4A**

Lab Name: SGS North America

Initial Calibration: ICAL: MM3_DF_10012020_12JUN2020

Instrument ID: MM3 GC Column ID: ZB-5ms

VER Data Filename: 200615R03 Analysis Date: 15-JUN-2020 10:28:16

NATIVE ANALYTES	M/Z's FORMING RATIO	ION ABUND. RATIO	QC LIMITS			OK	CONC. FOUND	RANGE (ng/mL)			OK
2,3,7,8-TCDD	M/M+2	0.83	0.65	-	0.89	Y	10.2	8	-	12	Y
1,2,3,7,8-PeCDD	M+2/M+4	1.59	1.32	-	1.78	Y	50.1	40	-	60	Y
1,2,3,4,7,8-HxCDD	M+2/M+4	1.26	1.05	-	1.43	Y	54.9	40	-	60	Y
1,2,3,6,7,8-HxCDD	M+2/M+4	1.25	1.05	-	1.43	Y	54.5	40	-	60	Y
1,2,3,7,8,9-HxCDD	M+2/M+4	1.24	1.05	-	1.43	Y	52.4	40	-	60	Y
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	0.88	-	1.20	Y	54.5	40	-	60	Y
OCDD	M+2/M+4	0.92	0.76	-	1.02	Y	113	80	-	120	Y
2,3,7,8-TCDF	M/M+2	0.77	0.65	-	0.89	Y	10.9	8	-	12	Y
1,2,3,7,8-PeCDF	M+2/M+4	1.57	1.32	-	1.78	Y	51.3	40	-	60	Y
2,3,4,7,8-PeCDF	M+2/M+4	1.55	1.32	-	1.78	Y	58.6	40	-	60	Y
1,2,3,4,7,8-HxCDF	M+2/M+4	1.23	1.05	-	1.43	Y	53.5	40	-	60	Y
1,2,3,6,7,8-HxCDF	M+2/M+4	1.24	1.05	-	1.43	Y	54.3	40	-	60	Y
2,3,4,6,7,8-HxCDF	M+2/M+4	1.24	1.05	-	1.43	Y	55.6	40	-	60	Y
1,2,3,7,8,9-HxCDF	M+2/M+4	1.24	1.05	-	1.43	Y	52	40	-	60	Y
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.03	0.88	-	1.20	Y	54.5	40	-	60	Y
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.02	0.88	-	1.20	Y	52.1	40	-	60	Y
OCDF	M+2/M+4	0.89	0.76	-	1.02	Y	103	80	-	120	Y

Processed: 17 Jun 2020 08:15 Analyst: pw

METHOD 8290A **PCDD/F CALIBRATION VERIFICATION** **FORM 4B**

Lab Name: SGS North America

Initial Calibration: ICAL: MM3_DF_10012020_12JUN2020

Instrument ID: MM3 GC Column ID: ZB-5ms

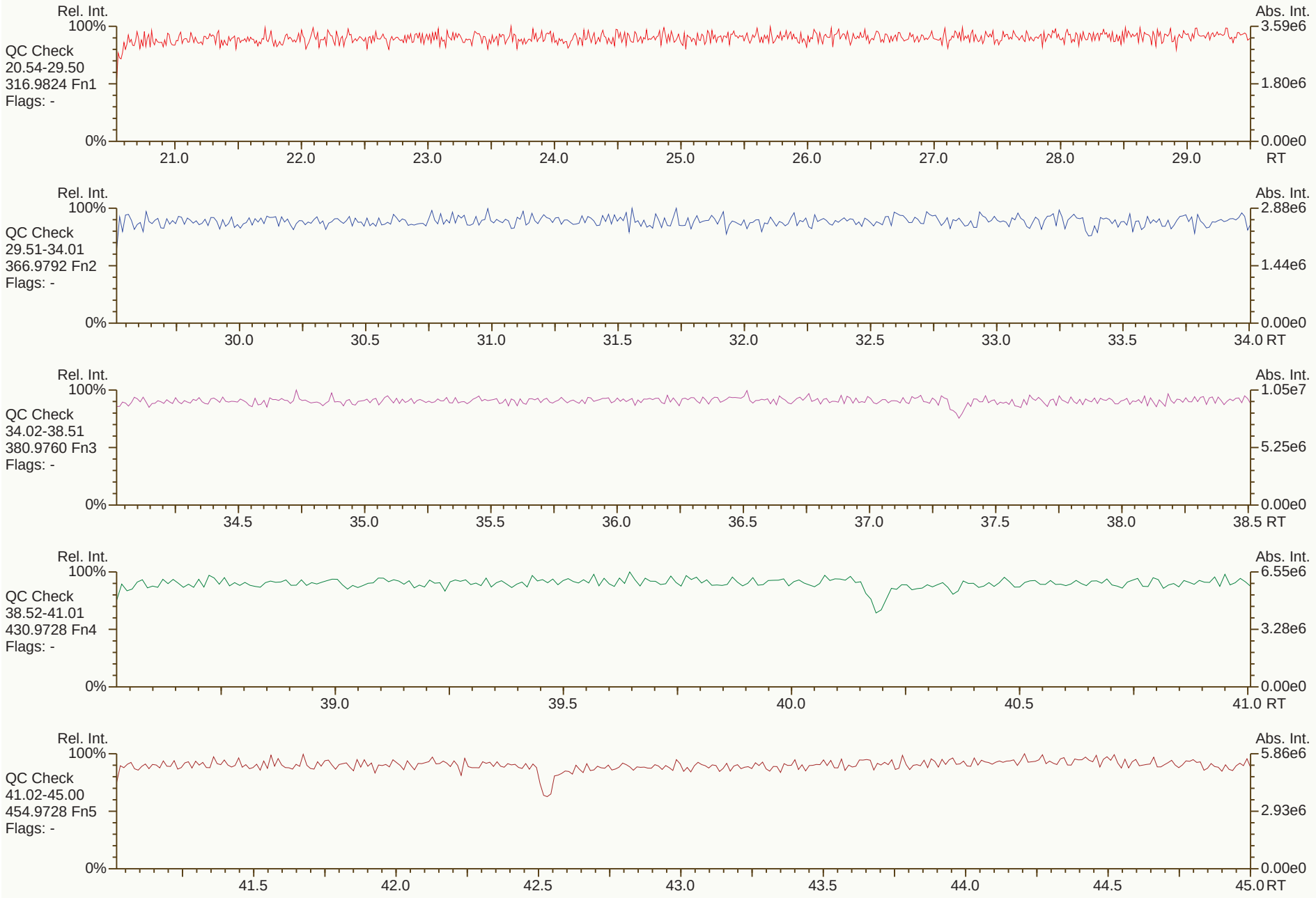
VER Data Filename: 200615R03 Analysis Date: 15-JUN-2020 10:28:16

LABELED ANALYTES	M/Z's FORMING RATIO	ION ABUND. RATIO	QC LIMITS			OK	CONC. FOUND	RANGE (ng/mL)			OK	
13C-2,3,7,8-TCDD	M/M+2	0.77	0.65	-	0.89	Y	105	70	-	130	Y	
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.67	1.32	-	1.78	Y	106	70	-	130	Y	
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.32	1.05	-	1.43	Y	92.7	70	-	130	Y	
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.27	1.05	-	1.43	Y	96.2	70	-	130	Y	
13C-1,2,3,7,8,9-HxCDD	M+2/M+4	1.29	1.05	-	1.43	Y	114	70	-	130	Y	
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.06	0.88	-	1.20	Y	93.1	70	-	130	Y	
13C-OCDD	M+2/M+4	0.91	0.76	-	1.02	Y	192	140	-	260	Y	
13C-2,3,7,8-TCDF	M/M+2	0.80	0.65	-	0.89	Y	108	70	-	130	Y	
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.54	1.32	-	1.78	Y	112	70	-	130	Y	
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.56	1.32	-	1.78	Y	110	70	-	130	Y	
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.51	0.43	-	0.59	Y	99.3	70	-	130	Y	
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	99.3	70	-	130	Y	
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	97.2	70	-	130	Y	
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	100	70	-	130	Y	
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.45	0.37	-	0.51	Y	101	70	-	130	Y	
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.46	0.37	-	0.51	Y	102	70	-	130	Y	
13C-OCDF	M+2/M+4	0.89	0.76	-	1.02	Y	195	140	-	260	Y	
CLEANUP STANDARDS												
								31.6	-	50.8	Y	
37Cl-2,3,7,8-TCDD	n/a						44	~~7.9~~	~~-~~	~~12.7~~	~~N~~	spike level 40
13C-1,2,3,4,7-PeCDD	M+2/M+4	1.69	1.32	-	1.78	Y	118	70	-	130	Y	CL 17Jun20
13C-1,2,3,4,6-PeCDF	M+2/M+4	1.57	1.32	-	1.78	Y	109	70	-	130	Y	
13C-1,2,3,4,6,9-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	101	70	-	130	Y	
13C-1,2,3,4,6,8,9-HpCDF	M/M+2	0.44	0.37	-	0.51	Y	106	70	-	130	Y	

Processed: 17 Jun 2020 08:15 Analyst: pw

SGS ID: CS3_200615_DF_RB **Sample ID: ICV SIL 23-12-15** **Acq: 15-Jun-2020 10:28:16**

Instr: [ILM] AutoSpec-Ultima MM3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 13** **User: PSW Datafile: 200615R03**



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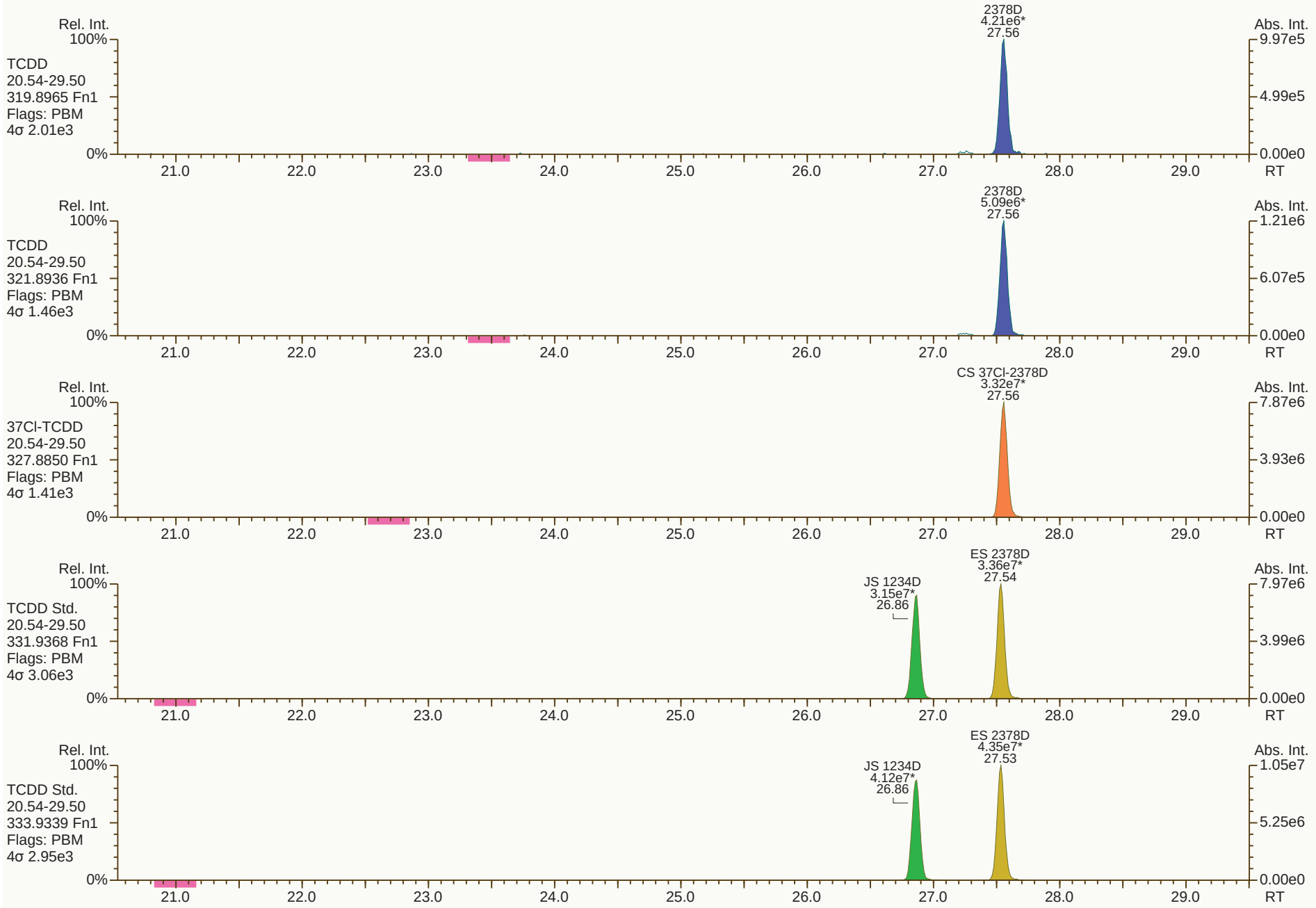
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 scc: 776-449 *PKD: n/a Printed: 15-Jun-2020 13:51 Page 1 of 12*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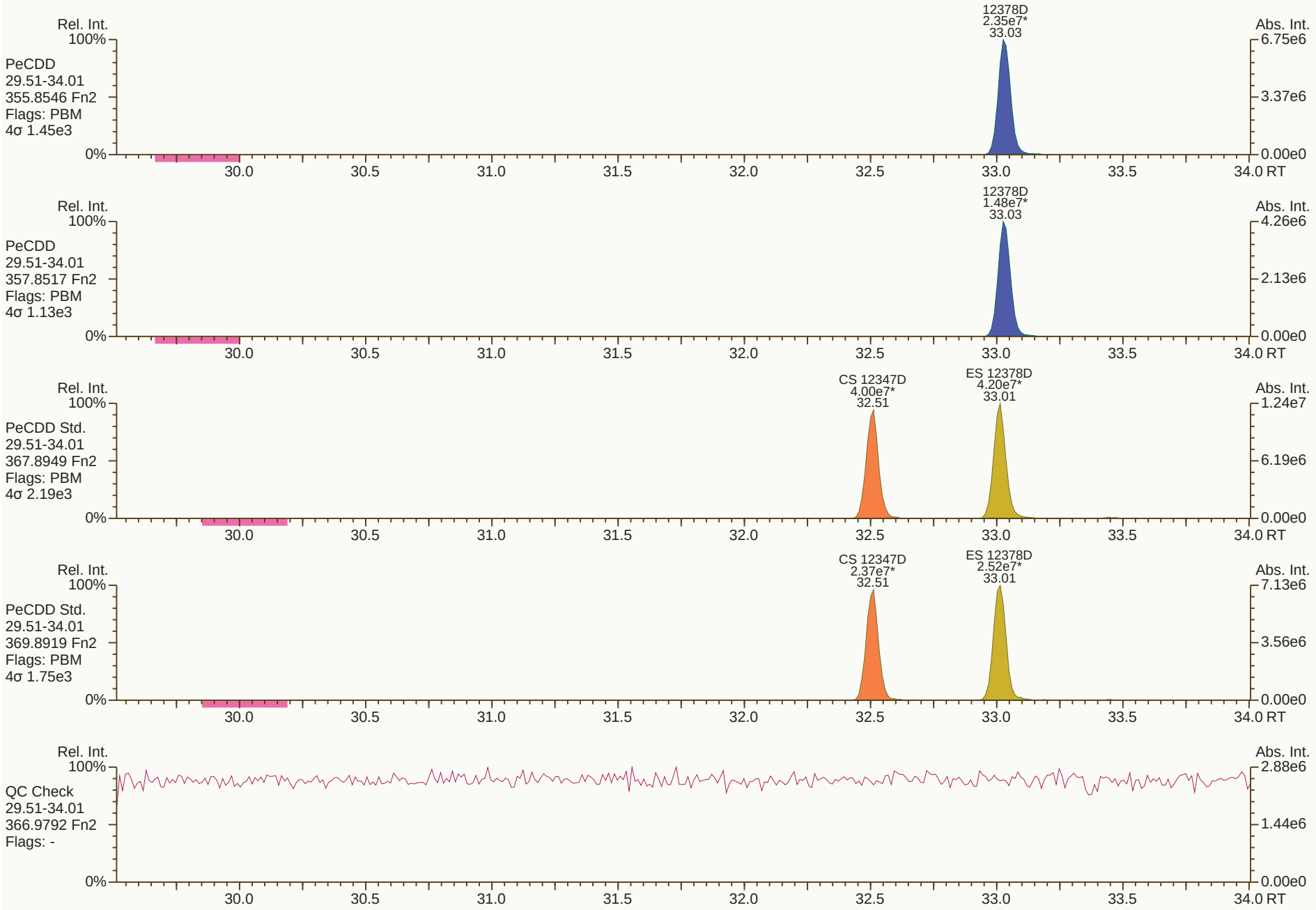
100%
TCDD
20.54-29.50
319.8965 Fn1
Flags: PBM
4σ 2.01e3
0%
2378D
4.21e6*
27.56
Abs. Int.
9.97e5
4.99e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD
20.54-29.50
321.8936 Fn1
Flags: PBM
4σ 1.46e3
0%
2378D
5.09e6*
27.56
Abs. Int.
1.21e6
6.07e5
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
37Cl-TCDD
20.54-29.50
327.8850 Fn1
Flags: PBM
4σ 1.41e3
0%
CS 37Cl-2378D
3.32e7*
27.56
Abs. Int.
7.87e6
3.93e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
331.9368 Fn1
Flags: PBM
4σ 3.06e3
0%
JS 1234D
3.15e7*
26.86
ES 2378D
3.36e7*
27.54
Abs. Int.
7.97e6
3.99e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Rel. Int.
100%
TCDD Std.
20.54-29.50
333.9339 Fn1
Flags: PBM
4σ 2.95e3
0%
JS 1234D
4.12e7*
26.86
ES 2378D
4.35e7*
27.53
Abs. Int.
1.05e7
5.25e6
0.00e0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT



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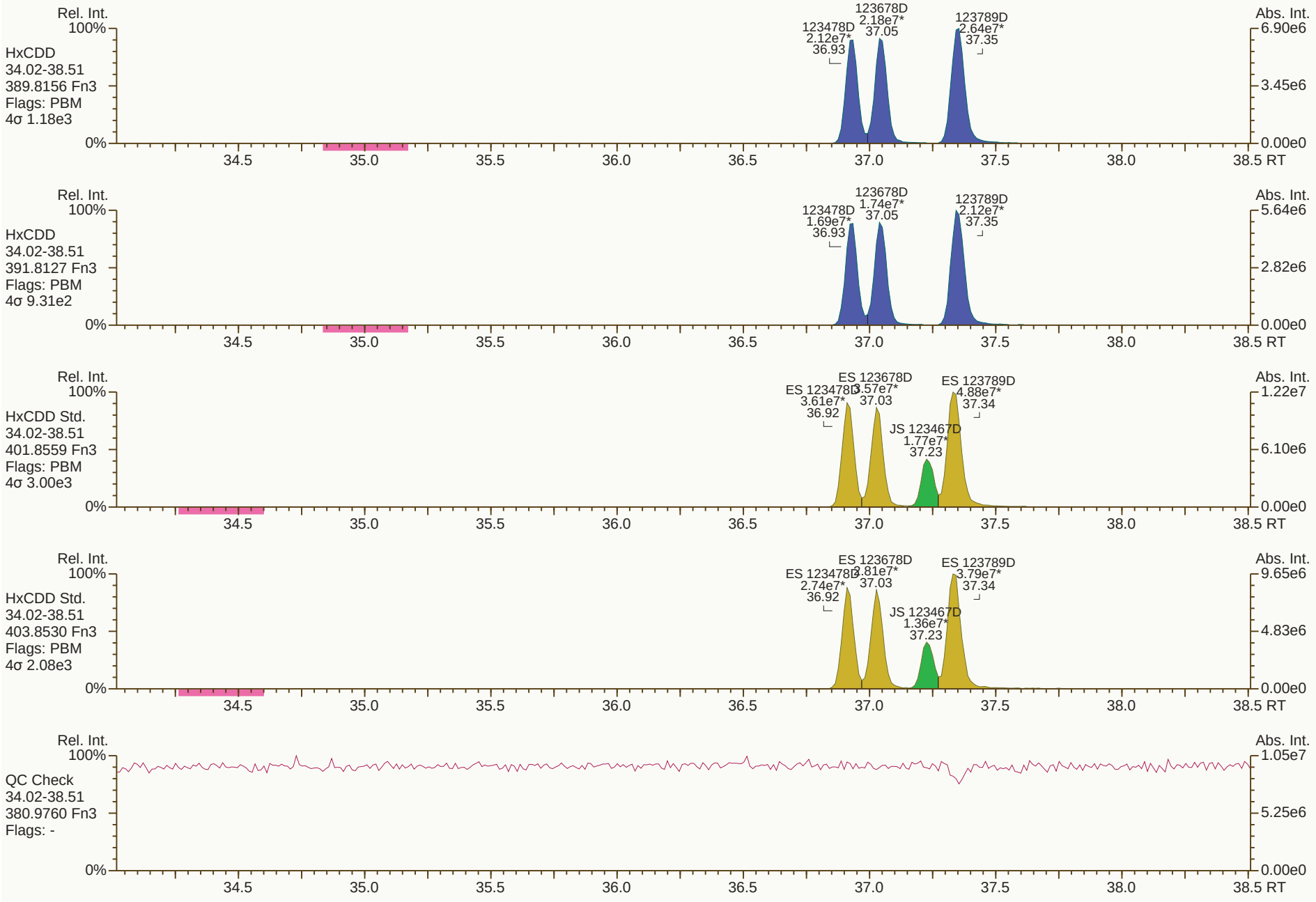
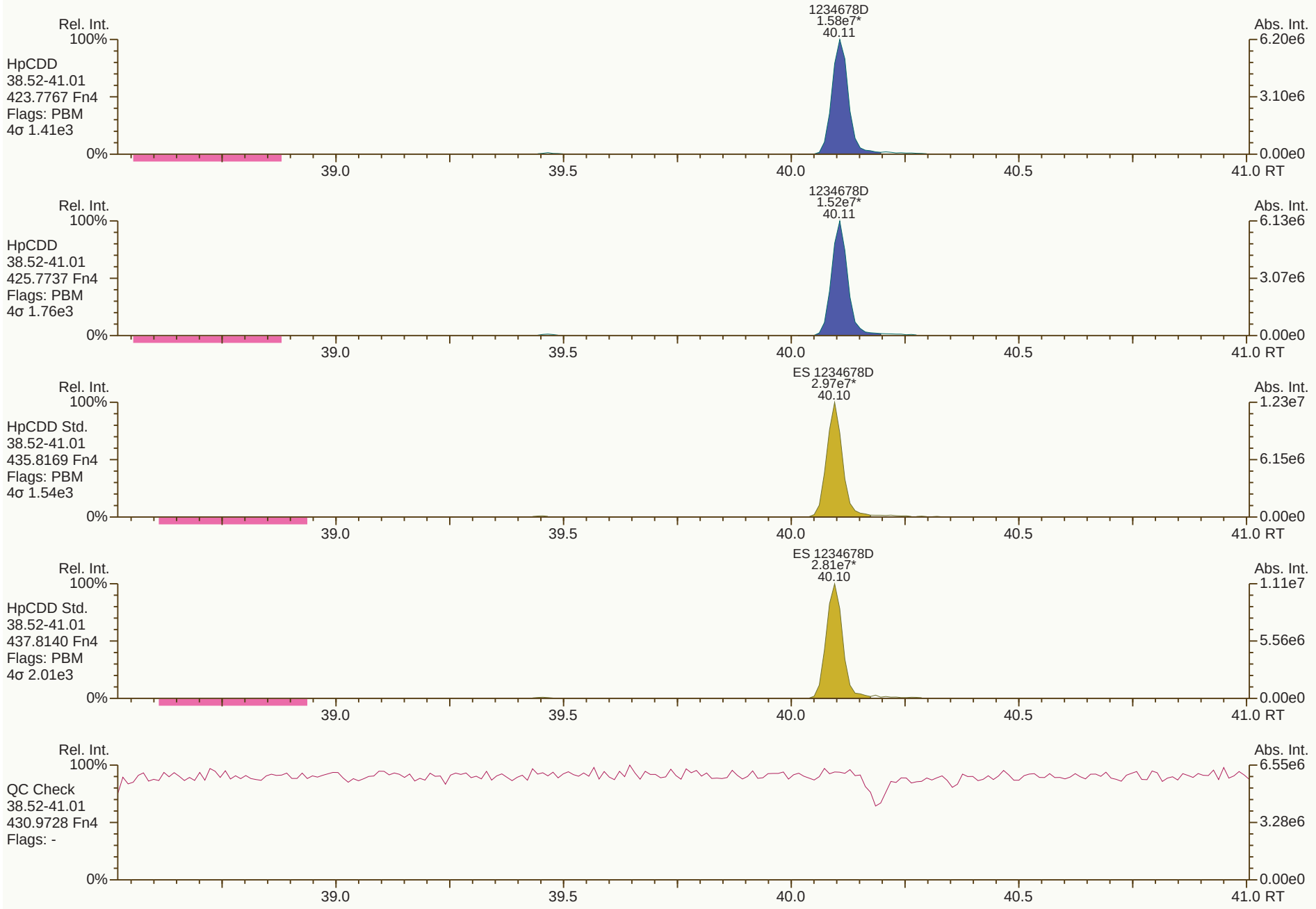
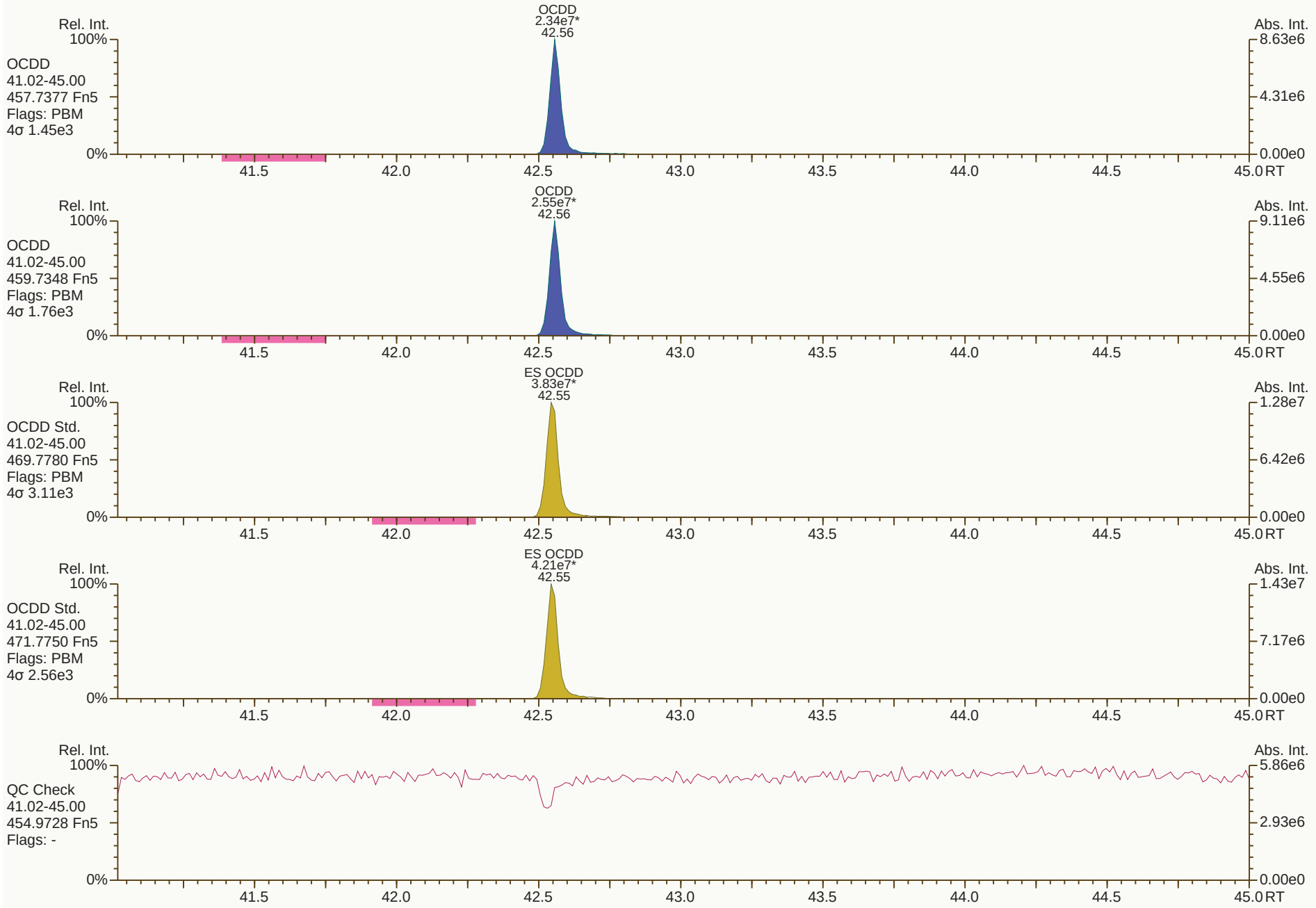
Peak annotation: Areas, Centroids


Rel. Int.
100%
HxCDD
34.02-38.51
389.8156 Fn3
Flags: PBM
4σ 1.18e3
123478D
2.12e7*
36.93
123678D
2.18e7*
37.05
123789D
2.64e7*
37.35
Abs. Int.
6.90e6
3.45e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDD
34.02-38.51
391.8127 Fn3
Flags: PBM
4σ 9.31e2
123478D
1.69e7*
36.93
123678D
1.74e7*
37.05
123789D
2.12e7*
37.35
Abs. Int.
5.64e6
2.82e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDD Std.
34.02-38.51
401.8559 Fn3
Flags: PBM
4σ 3.00e3
ES 123478D
3.61e7*
36.92
ES 123678D
3.57e7*
37.03
JS 123467D
1.77e7*
37.23
ES 123789D
4.88e7*
37.34
Abs. Int.
1.22e7
6.10e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDD Std.
34.02-38.51
403.8530 Fn3
Flags: PBM
4σ 2.08e3
ES 123478D
2.74e7*
36.92
ES 123678D
2.81e7*
37.03
JS 123467D
1.36e7*
37.23
ES 123789D
3.79e7*
37.34
Abs. Int.
9.65e6
4.83e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
QC Check
34.02-38.51
380.9760 Fn3
Flags: -
Abs. Int.
1.05e7
5.25e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT


Rel. Int.
100%
HpCDD
38.52-41.01
423.7767 Fn4
Flags: PBM
4σ 1.41e3
0%
1234678D
1.58e7*
40.11
Abs. Int.
6.20e6
3.10e6
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.52-41.01
425.7737 Fn4
Flags: PBM
4σ 1.76e3
0%
1234678D
1.52e7*
40.11
Abs. Int.
6.13e6
3.07e6
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.52-41.01
435.8169 Fn4
Flags: PBM
4σ 1.54e3
0%
ES 1234678D
2.97e7*
40.10
Abs. Int.
1.23e7
6.15e6
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.52-41.01
437.8140 Fn4
Flags: PBM
4σ 2.01e3
0%
ES 1234678D
2.81e7*
40.10
Abs. Int.
1.11e7
5.56e6
0.00e0
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.52-41.01
430.9728 Fn4
Flags: -
0%
Abs. Int.
6.55e6
3.28e6
0.00e0
39.0
39.5
40.0
40.5
41.0 RT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42.56
Rel. Int.
100%
OCDD
41.02-45.00
457.7377 Fn5
Flags: PBM
4σ 1.45e3
0%
Abs. Int.
8.63e6
4.31e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
OCDD
2.55e7*
42.56
Rel. Int.
100%
OCDD
41.02-45.00
459.7348 Fn5
Flags: PBM
4σ 1.76e3
0%
Abs. Int.
9.11e6
4.55e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
3.83e7*
42.55
Rel. Int.
100%
OCDD Std.
41.02-45.00
469.7780 Fn5
Flags: PBM
4σ 3.11e3
0%
Abs. Int.
1.28e7
6.42e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
ES OCDD
4.21e7*
42.55
Rel. Int.
100%
OCDD Std.
41.02-45.00
471.7750 Fn5
Flags: PBM
4σ 2.56e3
0%
Abs. Int.
1.43e7
7.17e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
5.86e6
2.93e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT


SGS ID: CS3_200615_DF_RB
Sample ID: ICV SIL 23-12-15
Acq: 15-Jun-2020 10:28:16
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 13
User: PSW Datafile: 200615R03
Rel. Int.
Abs. Int.
TCDF
20.54-29.50
303.9016 Fn1
Flags: PBM
4σ 1.07e3
2378F
6.26e6*
26.65
1.55e6
7.74e5
0.00e0
RT
TCDF
20.54-29.50
305.8987 Fn1
Flags: PBM
4σ 1.63e3
2378F
8.09e6*
26.65
1.91e6
9.56e5
RRF(2378F) = (6.26e6 + 8.09e6) * 100pg / (5.95e7 + 7.44e7) * 10pg * 1 = 1.07
PSW 15-Jun-2020 13:50
OK
CL 17Jun20
TCDF Std.
20.54-29.50
315.9419 Fn1
Flags: PBM
4σ 9.41e3
JS 1234F
5.43e7*
25.22
ES 2378F
5.95e7*
26.63
1.32e7
6.59e6
TCDF Std.
20.54-29.50
317.9389 Fn1
Flags: PBM
4σ 5.89e3
JS 1234F
6.85e7*
25.22
ES 2378F
7.44e7*
26.63
1.67e7
8.37e6
HxCDPE
20.54-29.50
375.8364 Fn1
Flags: PB
4σ 1.44e3
4.90e3
2.45e3
100%
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS3_200615_DF_RB.utp_res, saved 15-Jun-2020 13:50 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 9229, 6226, 5470 scc: 776-449
PKD: 15-Jun-2020 11:29 Printed: 15-Jun-2020 13:51 Page 7 of 12

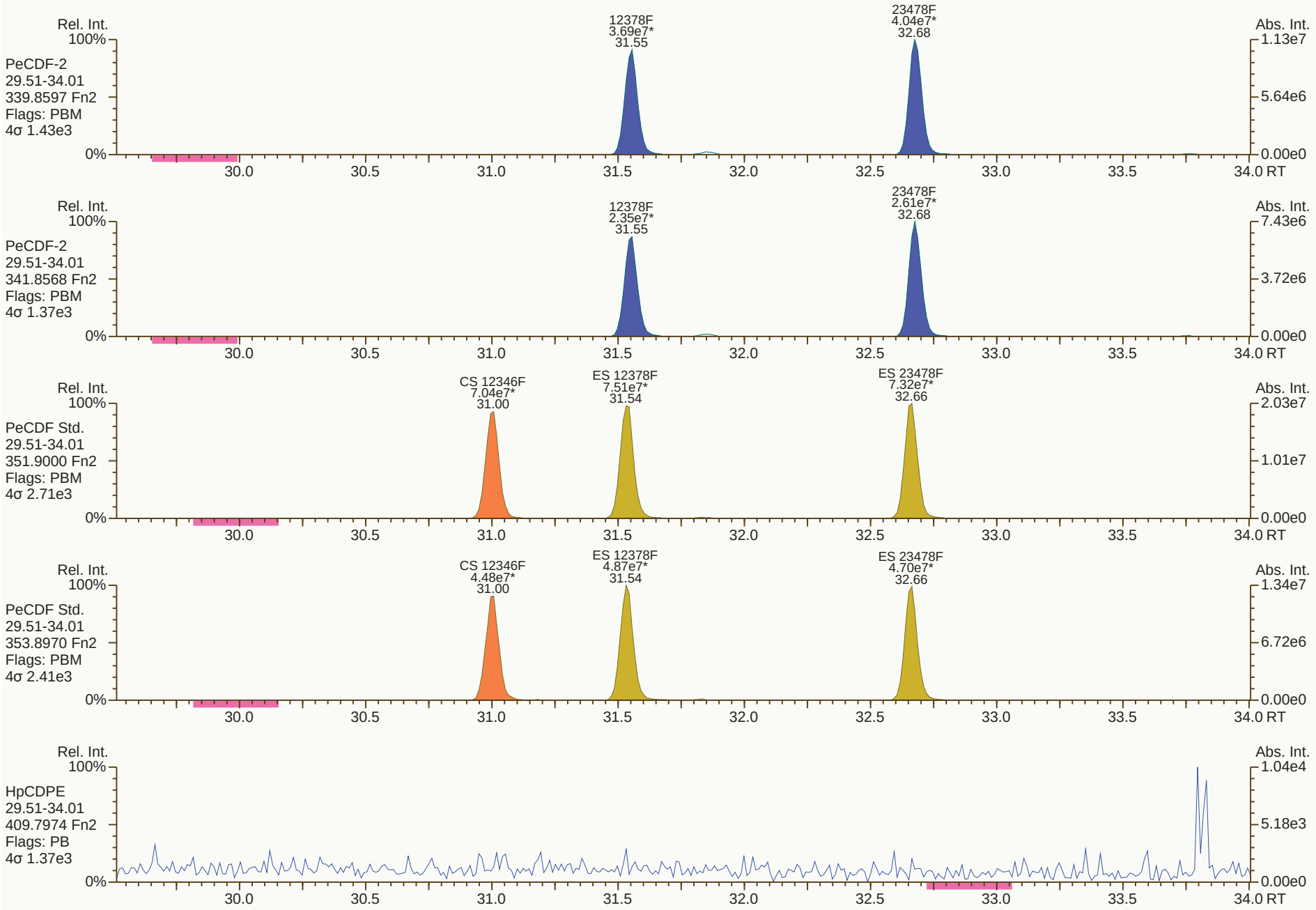
SGS ID: CS3_200615_DF_RB **Sample ID: ICV SIL 23-12-15** **Acq: 15-Jun-2020 10:28:16**

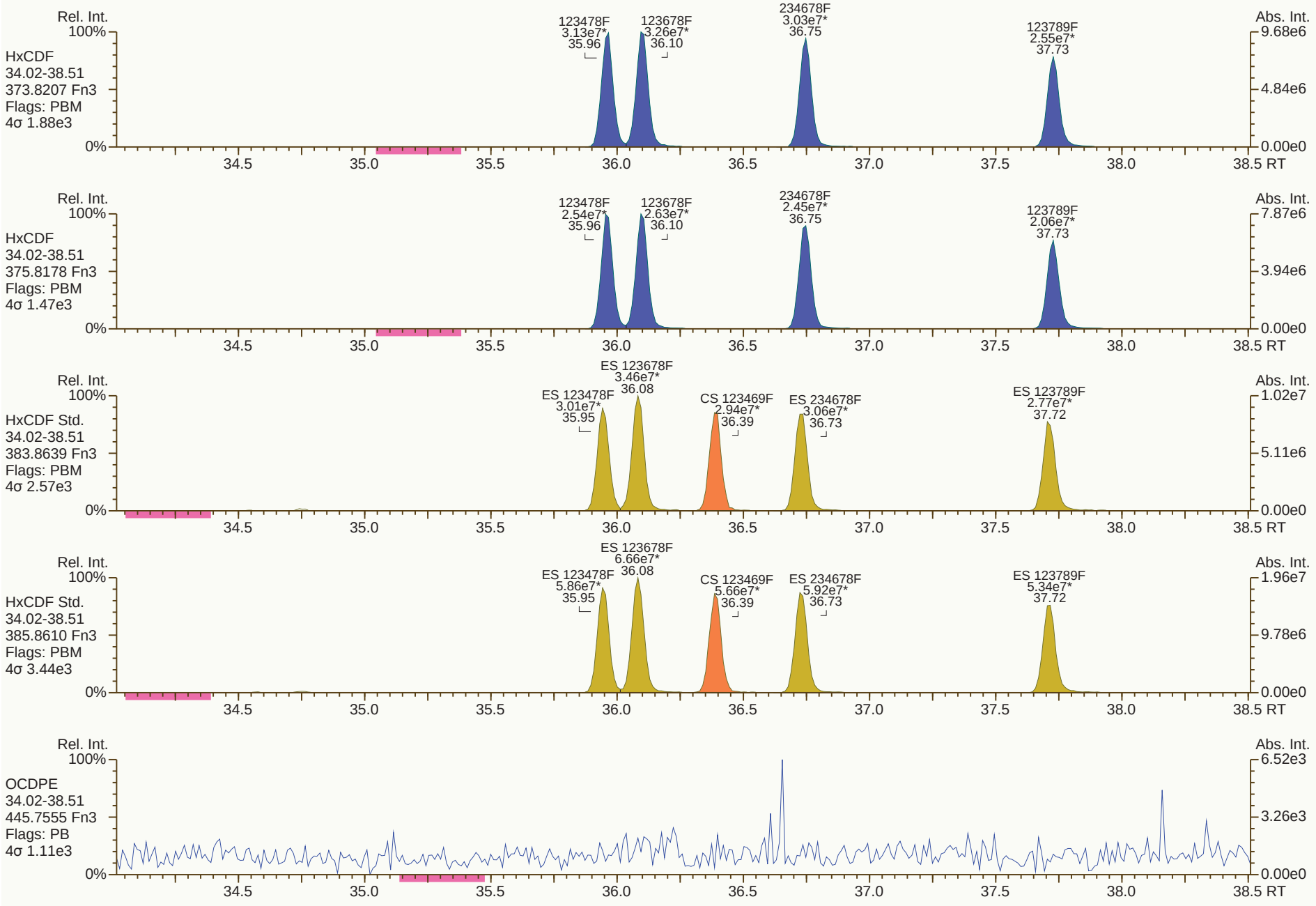
Instr: [ILM] AutoSpec-Ultima MM3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 13** **User: PSW Datafile: 200615R03**

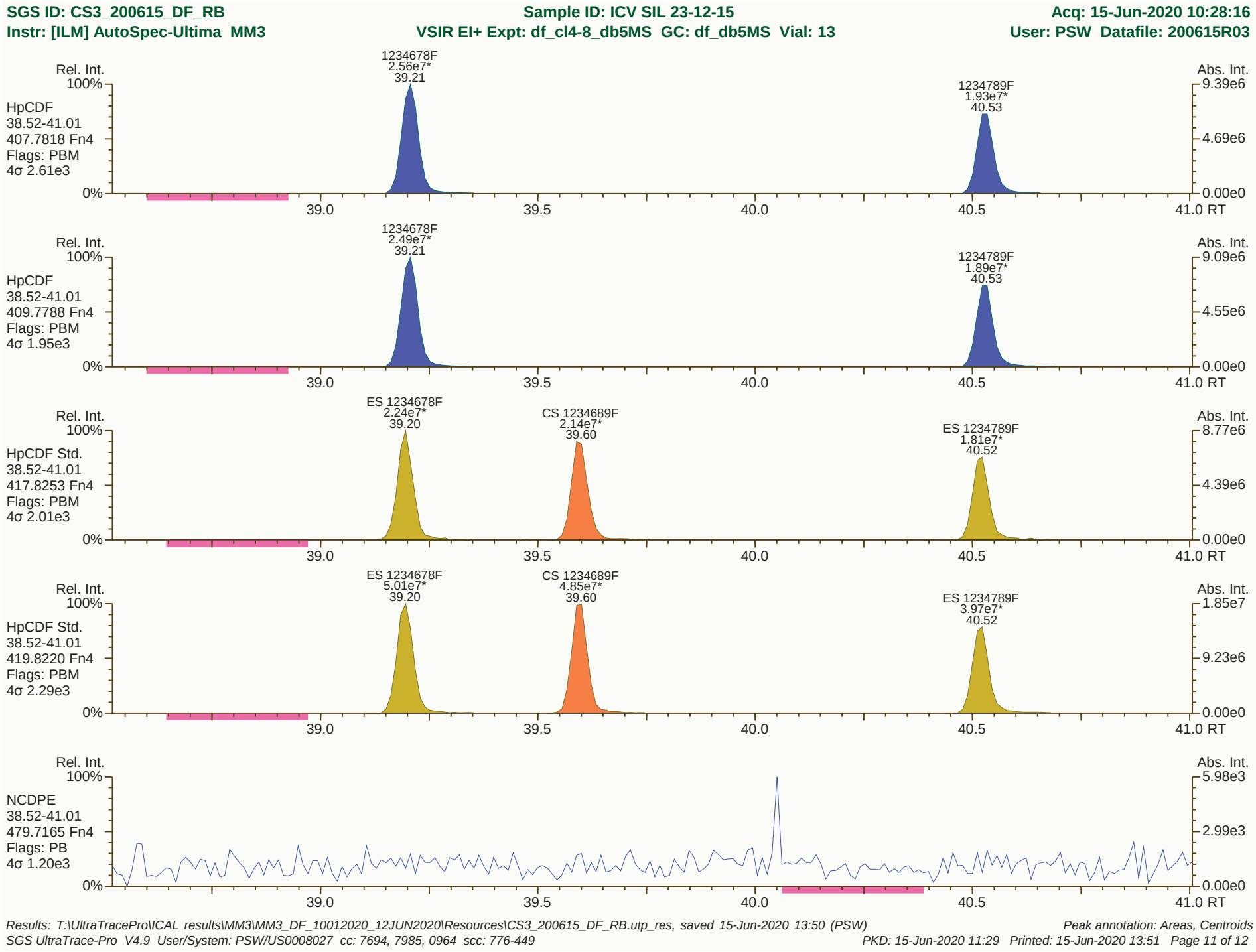


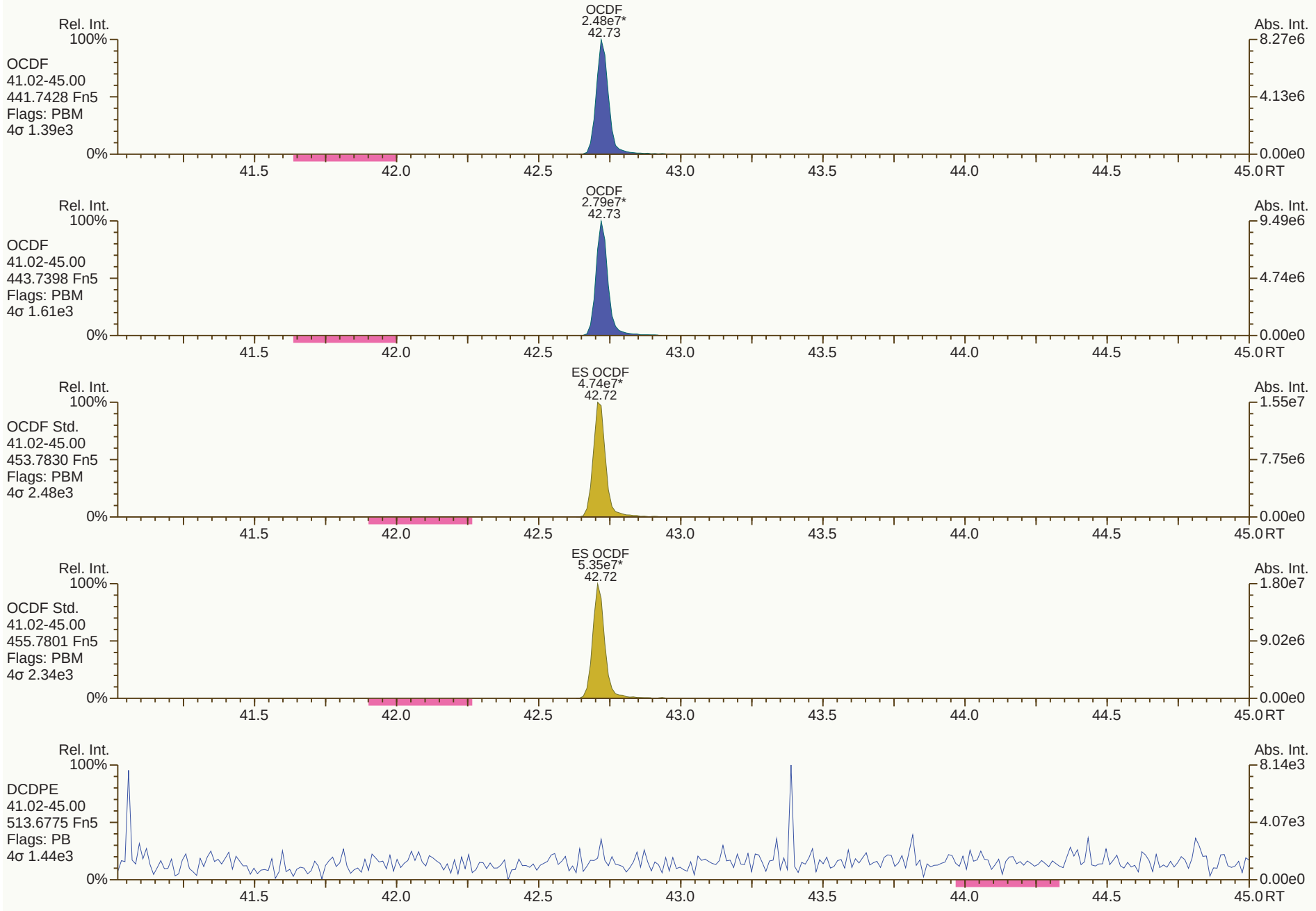
Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS3_200615_DF_RB.utp_res, saved 15-Jun-2020 13:50 (PSW) *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 5095 scc: 776-449 *Revised: 15-Jun-2020 11:28 (PSW) Printed: 15-Jun-2020 13:51 Page 8 of 12*


Rel. Int.
100%
PeCDF-2
29.51-34.01
339.8597 Fn2
Flags: PBM
4σ 1.43e3
0%
12378F
3.69e7*
31.55
23478F
4.04e7*
32.68
Abs. Int.
1.13e7
5.64e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF-2
29.51-34.01
341.8568 Fn2
Flags: PBM
4σ 1.37e3
0%
12378F
2.35e7*
31.55
23478F
2.61e7*
32.68
Abs. Int.
7.43e6
3.72e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
351.9000 Fn2
Flags: PBM
4σ 2.71e3
0%
CS 12346F
7.04e7*
31.00
ES 12378F
7.51e7*
31.54
ES 23478F
7.32e7*
32.66
Abs. Int.
2.03e7
1.01e7
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
PeCDF Std.
29.51-34.01
353.8970 Fn2
Flags: PBM
4σ 2.41e3
0%
CS 12346F
4.48e7*
31.00
ES 12378F
4.87e7*
31.54
ES 23478F
4.70e7*
32.66
Abs. Int.
1.34e7
6.72e6
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT
Rel. Int.
100%
HpCDPE
29.51-34.01
409.7974 Fn2
Flags: PB
4σ 1.37e3
0%
Abs. Int.
1.04e4
5.18e3
0.00e0
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT


Rel. Int.
100%
HxCDF
34.02-38.51
373.8207 Fn3
Flags: PBM
4σ 1.88e3
0%
123478F
3.13e7*
35.96
123678F
3.26e7*
36.10
234678F
3.03e7*
36.75
123789F
2.55e7*
37.73
Abs. Int.
9.68e6
4.84e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDF
34.02-38.51
375.8178 Fn3
Flags: PBM
4σ 1.47e3
0%
123478F
2.54e7*
35.96
123678F
2.63e7*
36.10
234678F
2.45e7*
36.75
123789F
2.06e7*
37.73
Abs. Int.
7.87e6
3.94e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDF Std.
34.02-38.51
383.8639 Fn3
Flags: PBM
4σ 2.57e3
0%
ES 123678F
3.46e7*
36.08
ES 123478F
3.01e7*
35.95
CS 123469F
2.94e7*
36.39
ES 234678F
3.06e7*
36.73
ES 123789F
2.77e7*
37.72
Abs. Int.
1.02e7
5.11e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
HxCDF Std.
34.02-38.51
385.8610 Fn3
Flags: PBM
4σ 3.44e3
0%
ES 123678F
6.66e7*
36.08
ES 123478F
5.86e7*
35.95
CS 123469F
5.66e7*
36.39
ES 234678F
5.92e7*
36.73
ES 123789F
5.34e7*
37.72
Abs. Int.
1.96e7
9.78e6
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT
Rel. Int.
100%
OCDPE
34.02-38.51
445.7555 Fn3
Flags: PB
4σ 1.11e3
0%
Abs. Int.
6.52e3
3.26e3
0.00e0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
38.5 RT


SGS ID: CS3_200615_DF_RB
Sample ID: ICV SIL 23-12-15
Acq: 15-Jun-2020 10:28:16
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 13
User: PSW Datafile: 200615R03
Rel. Int.
Abs. Int.
HpCDF
38.52-41.01
407.7818 Fn4
Flags: PBM
4σ 2.61e3
1234678F
2.56e7*
39.21
1234789F
1.93e7*
40.53
9.39e6
4.69e6
0.00e0
HpCDF
38.52-41.01
409.7788 Fn4
Flags: PBM
4σ 1.95e3
1234678F
2.49e7*
39.21
1234789F
1.89e7*
40.53
9.09e6
4.55e6
0.00e0
HpCDF Std.
38.52-41.01
417.8253 Fn4
Flags: PBM
4σ 2.01e3
ES 1234678F
2.24e7*
39.20
CS 1234689F
2.14e7*
39.60
ES 1234789F
1.81e7*
40.52
8.77e6
4.39e6
0.00e0
HpCDF Std.
38.52-41.01
419.8220 Fn4
Flags: PBM
4σ 2.29e3
ES 1234678F
5.01e7*
39.20
CS 1234689F
4.85e7*
39.60
ES 1234789F
3.97e7*
40.52
1.85e7
9.23e6
0.00e0
NCDPE
38.52-41.01
479.7165 Fn4
Flags: PB
4σ 1.20e3
5.98e3
2.99e3
0.00e0
100%
0%
39.0
39.5
40.0
40.5
41.0 RT
Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS3_200615_DF_RB.utp_res, saved 15-Jun-2020 13:50 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 7694, 7985, 0964 scc: 776-449
PKD: 15-Jun-2020 11:29 Printed: 15-Jun-2020 13:51 Page 11 of 12

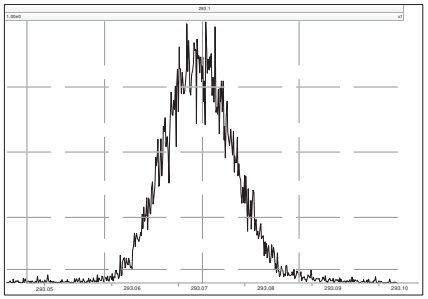


Results: T:\UltraTracePro\ICAL results\MM3\MM3_DF_10012020_12JUN2020\Resources\CS3_200615_DF_RB.utp_res, saved 15-Jun-2020 13:50 (PSW)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: PSW/US0008027 cc: 1201, 7893, 8879 scc: 776-449
PKD: 15-Jun-2020 11:29 Printed: 15-Jun-2020 13:51 Page 12 of 12

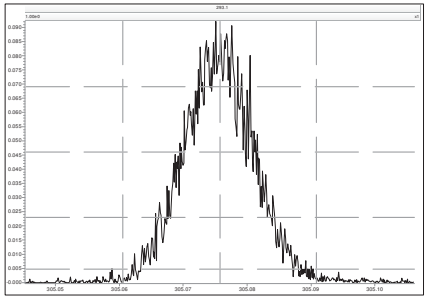
File: Experiment: df_cl4-8_db5MS.exp Reference: pfk.ref Function: 1 @ 200 (ppm)

Printed: Monday, June 15, 2020 08:39:26 Eastern Daylight Time

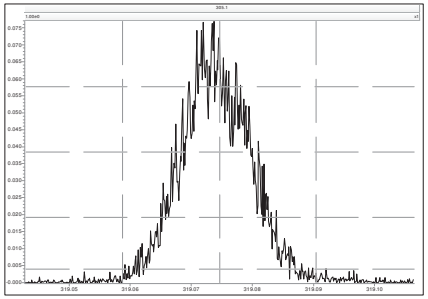
M 292.9824 R 12688



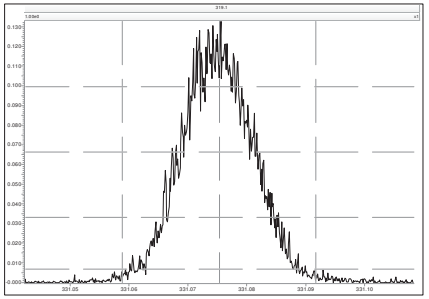
M 304.9824 R 12564



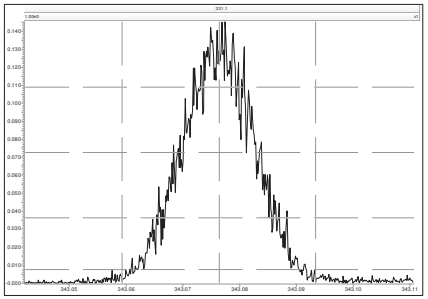
M 318.9792 R 13369



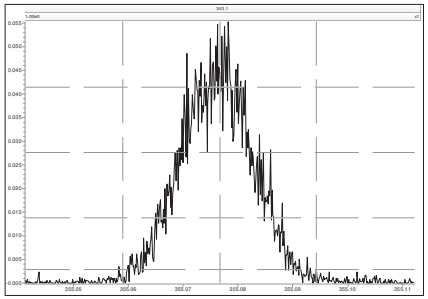
M 330.9792 R 12957



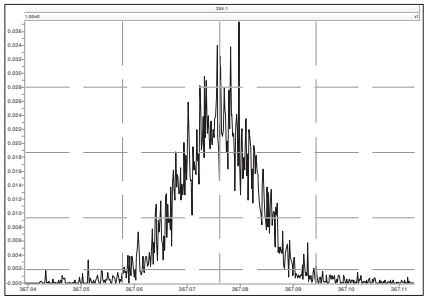
M 342.9792 R 11570



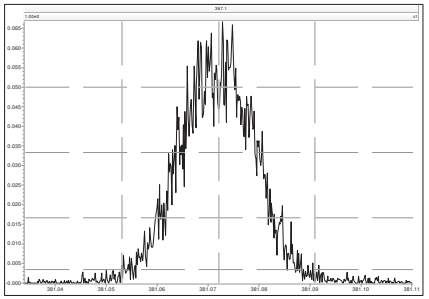
M 354.9792 R 12690



M 366.9792 R 12253



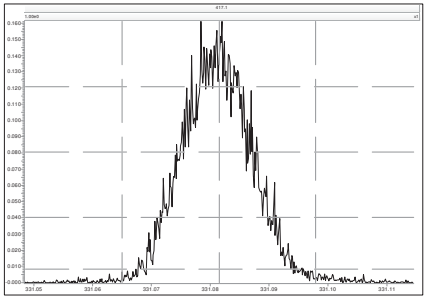
M 380.9760 R 11684



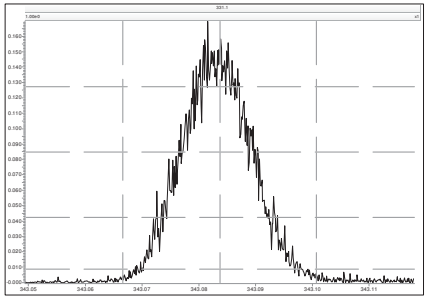
File: Experiment: df_cl4-8_db5MS.exp Reference: pfk.ref Function: 2 @ 200 (ppm)

Printed: Monday, June 15, 2020 08:39:47 Eastern Daylight Time

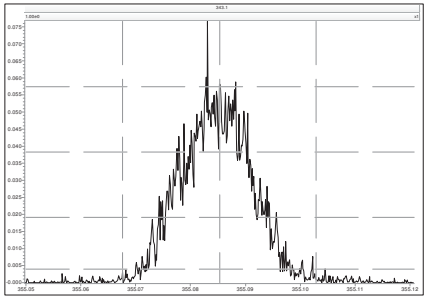
M 330.9792 R 13296



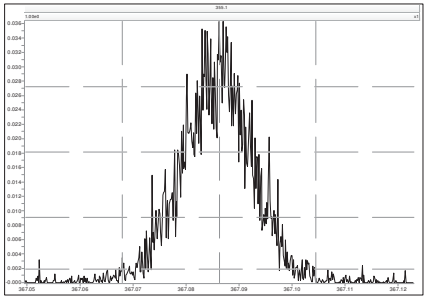
M 342.9792 R 12751



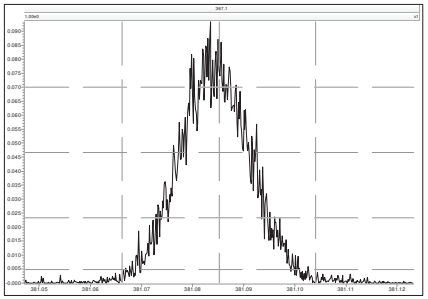
M 354.9792 R 13021



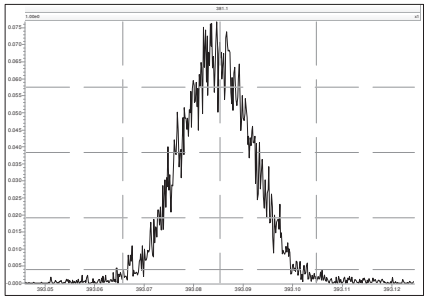
M 366.9792 R 13019



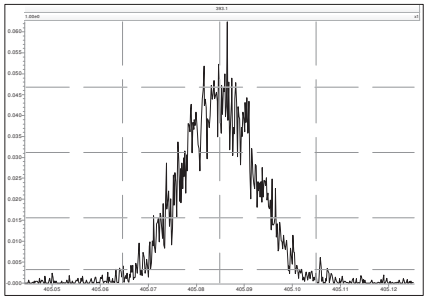
M 380.9760 R 12257



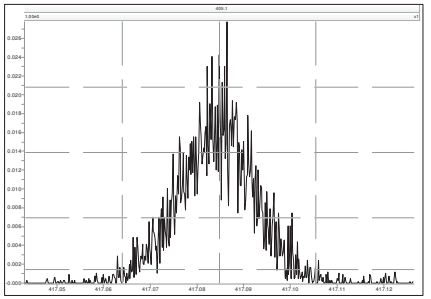
M 392.9760 R 13293



M 404.9760 R 13810



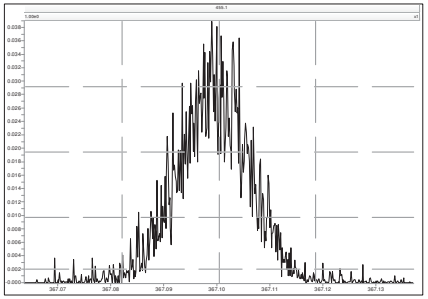
M 416.9760 R 12955



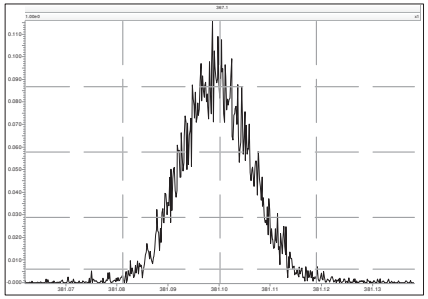
File: Experiment: df_cl4-8_db5MS.exp Reference: pfk.ref Function: 3 @ 200 (ppm)

Printed: Monday, June 15, 2020 08:40:03 Eastern Daylight Time

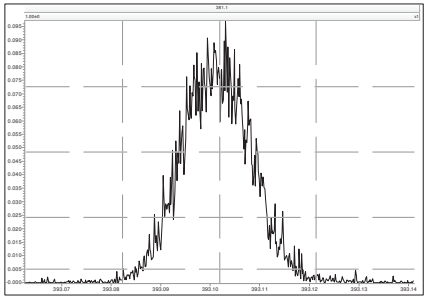
M 366.9792 R 13367



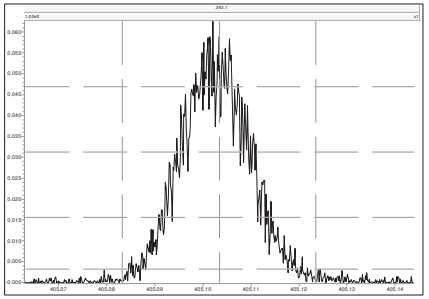
M 380.9760 R 13438



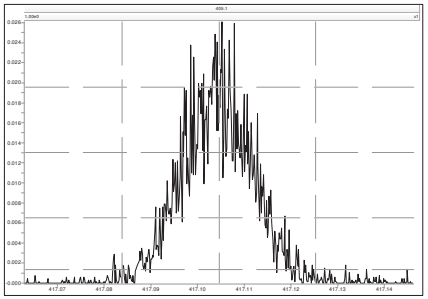
M 392.9760 R 12438



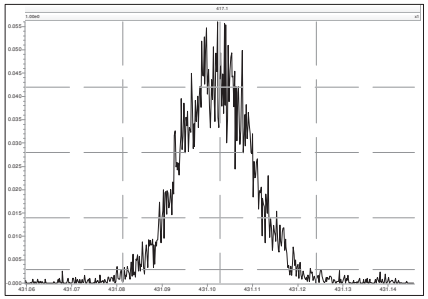
M 404.9760 R 13226



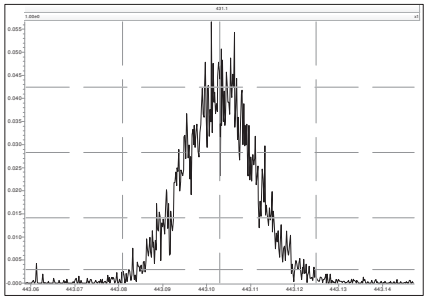
M 416.9760 R 12440



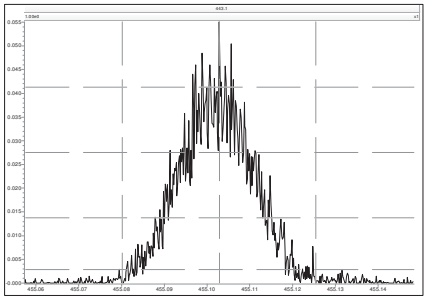
M 430.9728 R 12137



M 442.9728 R 12625



M 454.9728 R 12818



File: Experiment: df_cl4-8_db5MS.exp Reference: pfk.ref Function: 4 @ 200 (ppm)

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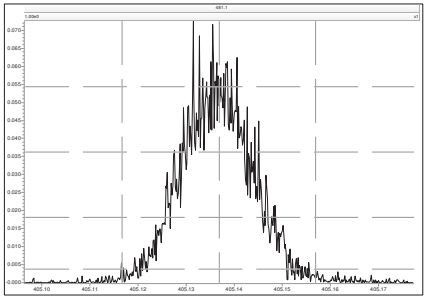
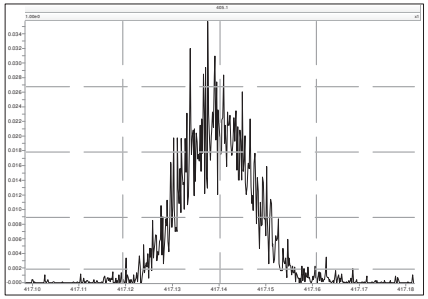
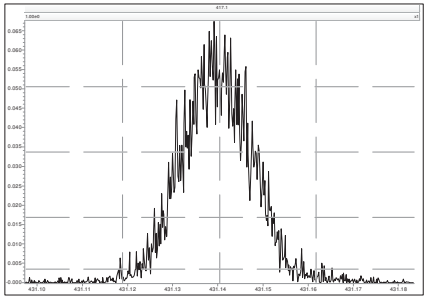
M 404.9760 R 13369



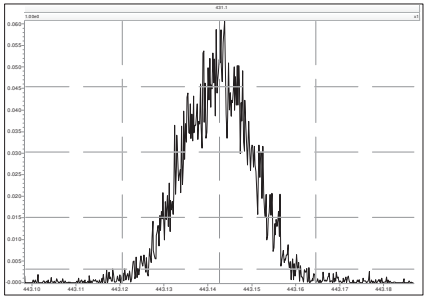
M 416.9760 R 14123



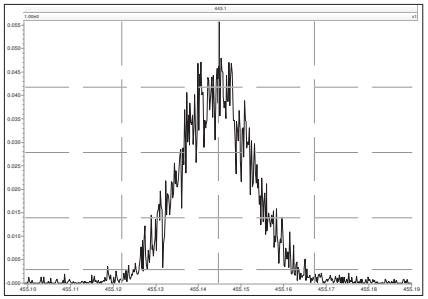
M 430.9728 R 15148



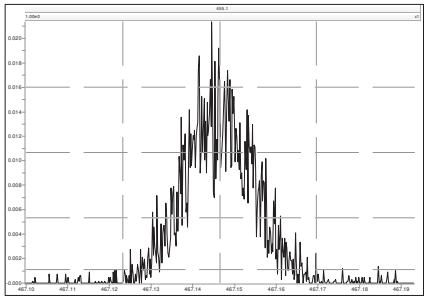
M 442.9728 R 13662



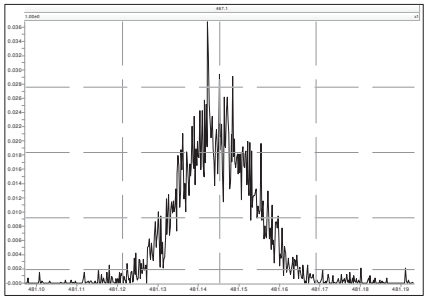
M 454.9728 R 11681



M 466.9728 R 16553



M 480.9696 R 13298



File: Experiment: df_cl4-8_db5MS.exp Reference: pfk.ref Function: 5 @ 200 (ppm)

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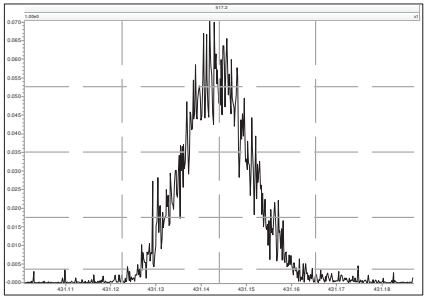
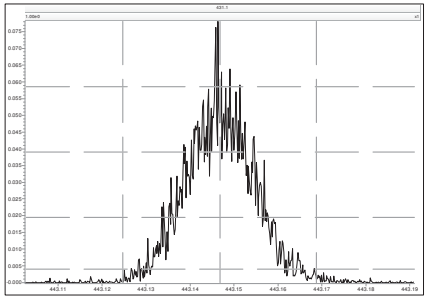
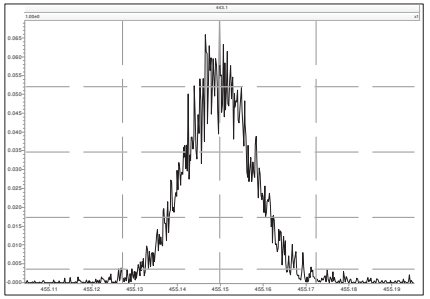
M 430.9728 R 13295



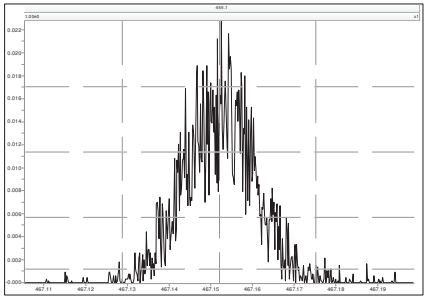
M 442.9728 R 14286



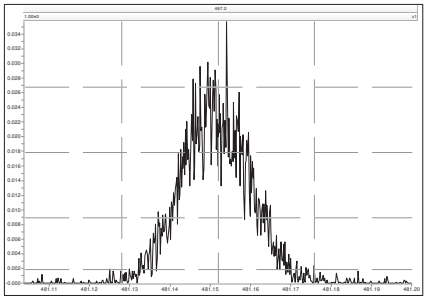
M 454.9728 R 12758



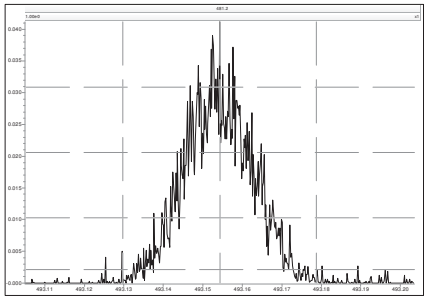
M 466.9728 R 14972



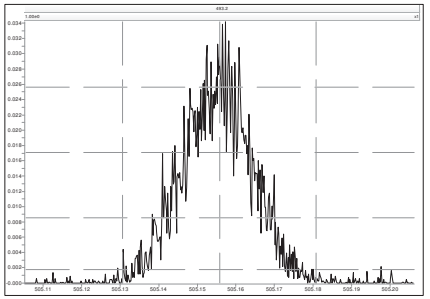
M 480.9696 R 14536



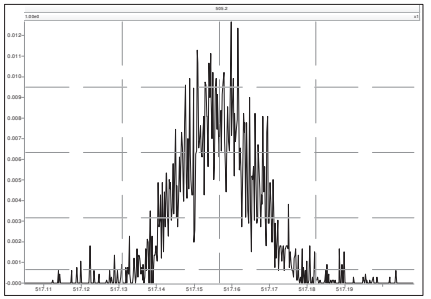
M 492.9696 R 13020



M 504.9696 R 13511



M 516.9697 R 13583



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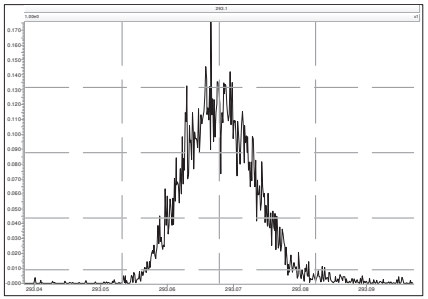
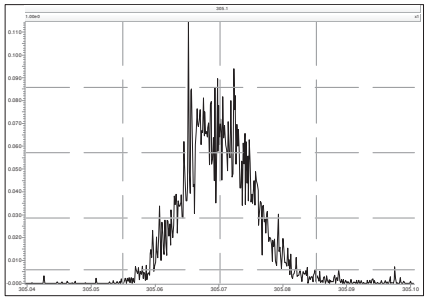
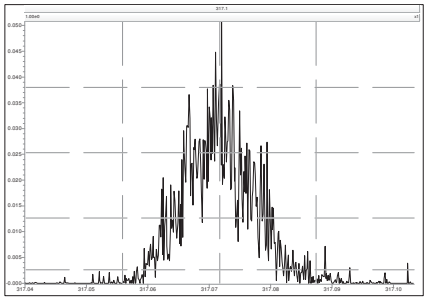
M 292.9824 R 13818



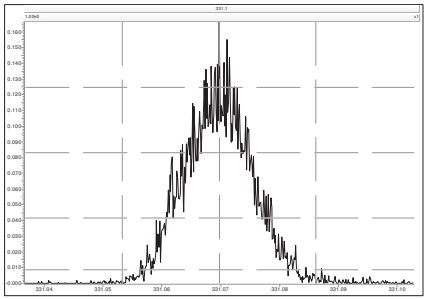
M 304.9824 R 14532



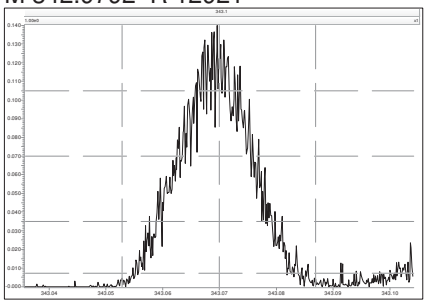
M 316.9824 R 15086



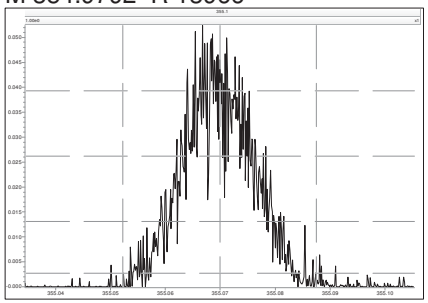
M 330.9792 R 13699



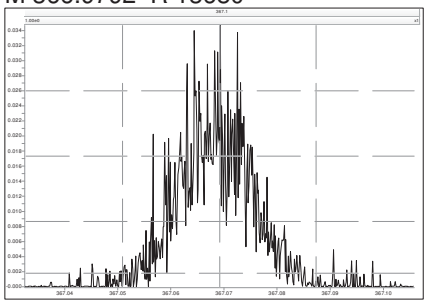
M 342.9792 R 12921



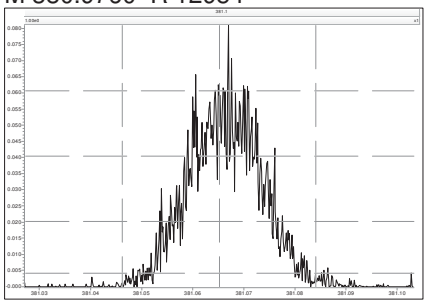
M 354.9792 R 13966



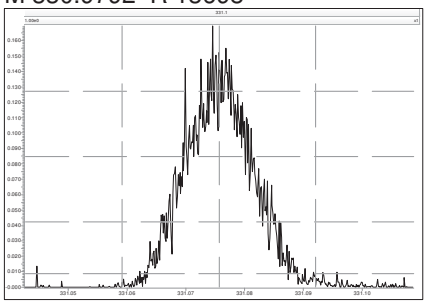
M 366.9792 R 13680



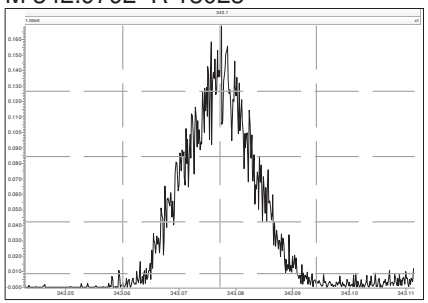
M 380.9760 R 12954



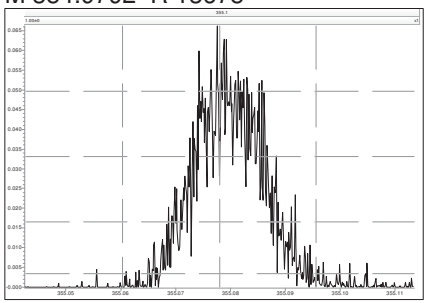
M 330.9792 R 13698



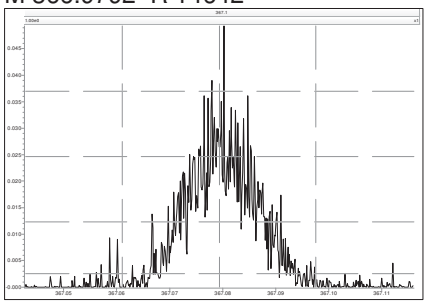
M 342.9792 R 13023



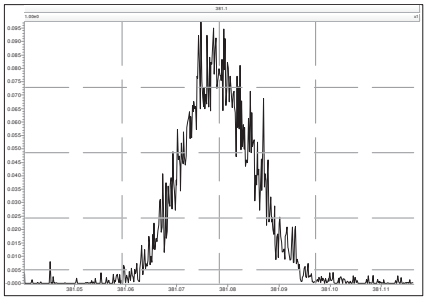
M 354.9792 R 13675



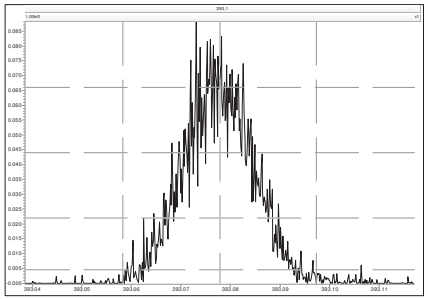
M 366.9792 R 14642



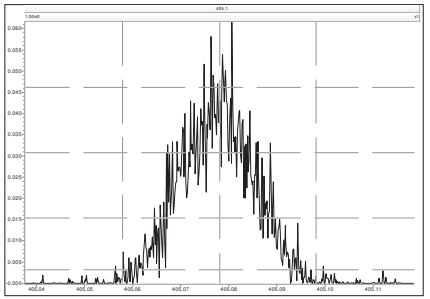
M 380.9760 R 13124



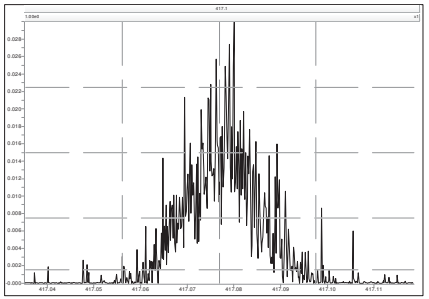
M 392.9760 R 13251



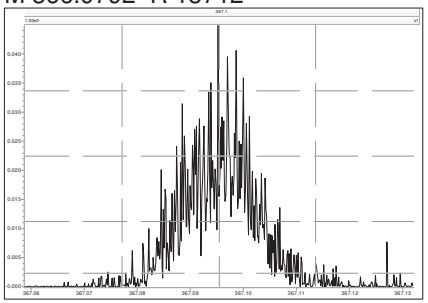
M 404.9760 R 13883



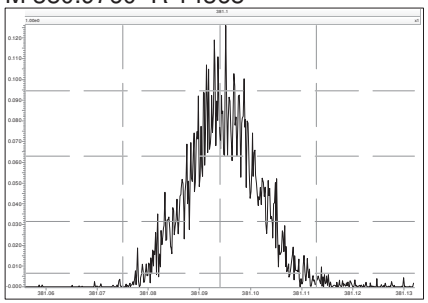
M 416.9760 R 16036



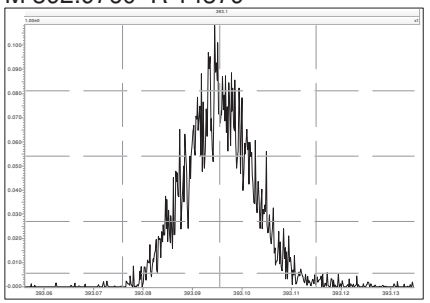
M 366.9792 R 15712



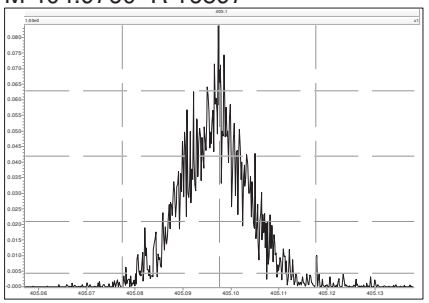
M 380.9760 R 14368



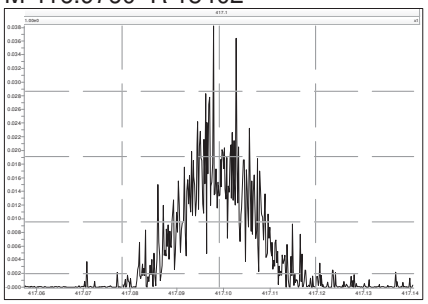
M 392.9760 R 14379



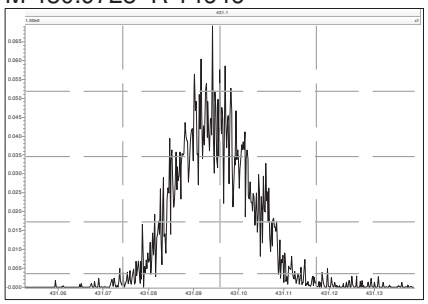
M 404.9760 R 16597



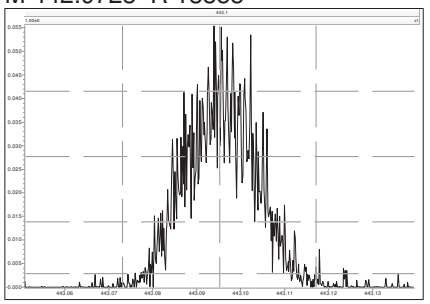
M 416.9760 R 15402



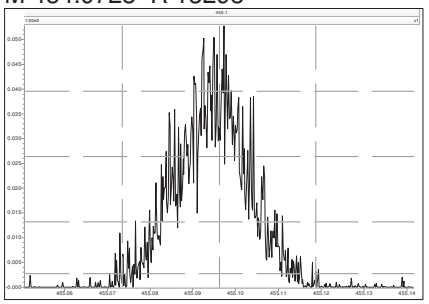
M 430.9728 R 14646



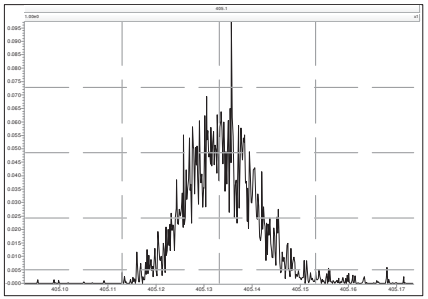
M 442.9728 R 13855



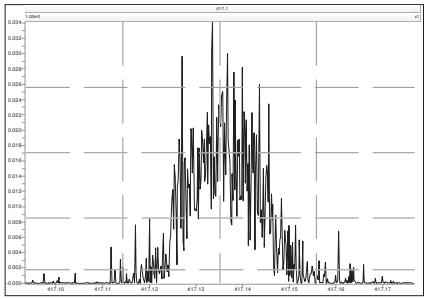
M 454.9728 R 13298



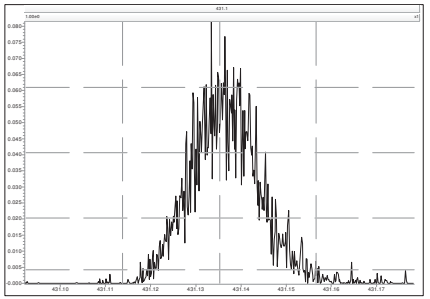
M 404.9760 R 14429



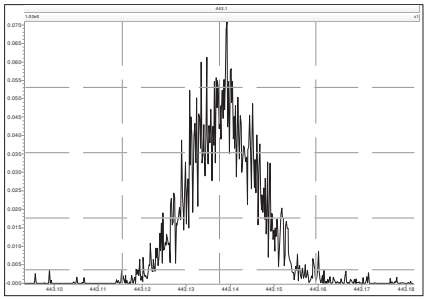
M 416.9760 R 16281



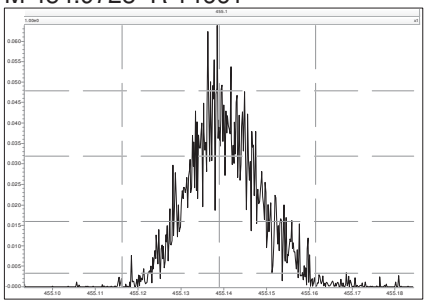
M 430.9728 R 13739



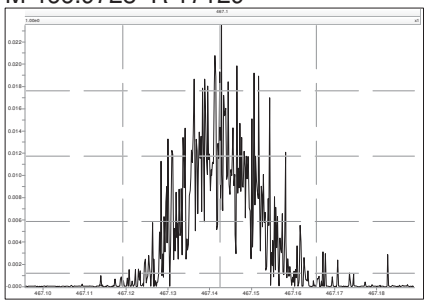
M 442.9728 R 13091



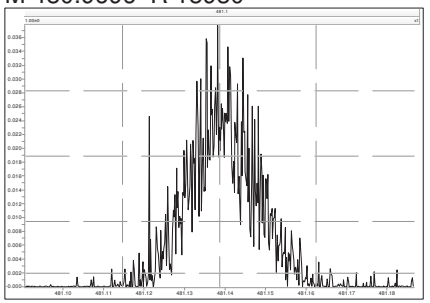
M 454.9728 R 14661



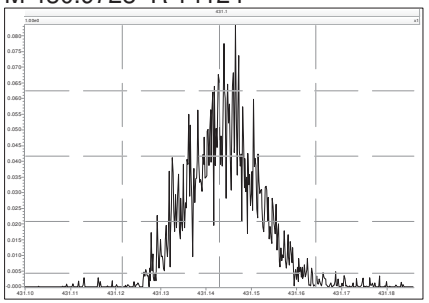
M 466.9728 R 17129



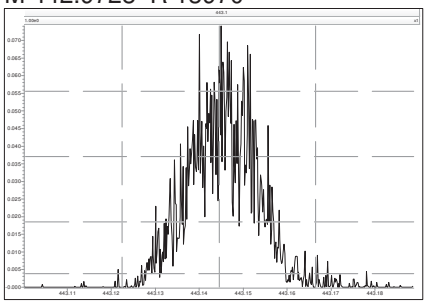
M 480.9696 R 15930



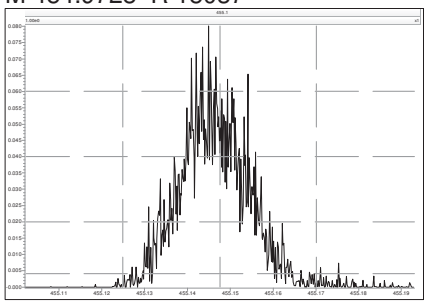
M 430.9728 R 14124



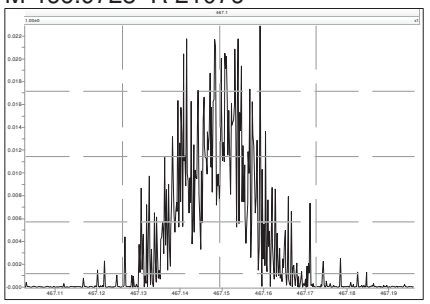
M 442.9728 R 13970



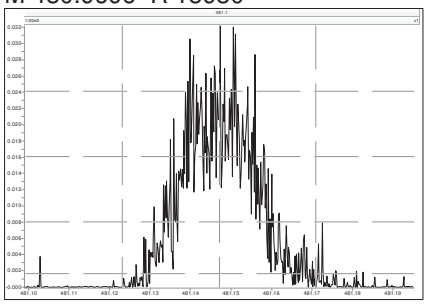
M 454.9728 R 15037



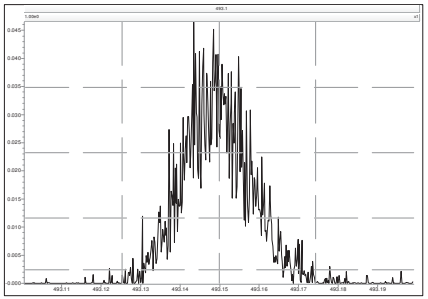
M 466.9728 R 21076



M 480.9696 R 15930



M 492.9696 R 14468



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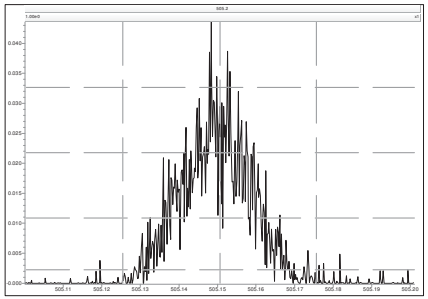

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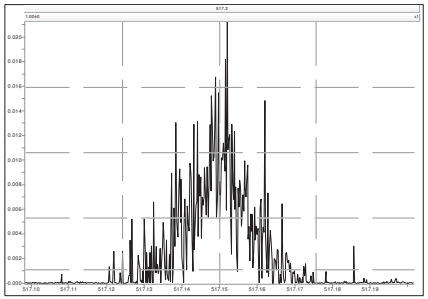


REVIEWED
Amber_Kornegay , 09:58:05, 08/13/2020

Lab ID: OPR1_17661_DF **Acq'd:** 12 Aug 2020 01:08 PSW **Wt/Vol:** 1 uL **ICAL:** MM3_DF_10012020_12JUN2020

Client ID: 0_17661_OPR001 **UTP:** 13-Aug-2020 08:31:19 DTF **J-level:** 0.25 pg/uL **Split:** 1 **Checkcode:** 728-067-LNF

Datafile: 200811R16 **Report:** 13 Aug 2020 08:33 TF **Stds (pg):** JS: 100 ES: 100 CS/SS: 100, 40 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	27.28		1.0009	1.0008	-0.2	9.52E+06	0.81	Y	1.18	10.7	4450	0.0544
12378-PeCDD	32.82		1.0006	1.0006	0	3.70E+07	1.59	Y	1.14	48.9	4456	0.0519
123478-HxCDD	36.74		1.0004	1.0004	0	3.62E+07	1.27	Y	1.09	53.2	2623	0.0324
123678-HxCDD	36.85		1.0035	1.0035	0	3.71E+07	1.27	Y	1.13	55.8	2623	0.0309
123789-HxCDD	37.15		1.0116	1.0116	0	3.94E+07	1.25	Y	1.05	51.2	2623	0.0286
1234678-HpCDD	39.96		1.0003	1.0003	0	2.94E+07	1.06	Y	0.98	55.4	3344	0.0378
OCDD	42.38		1.0003	1.0003	0	3.31E+07	0.92	Y	1.08	109	4638	0.101
2378-TCDF	26.35		1.0006	1.0009	+0.5	1.40E+07	0.76	Y	0.98	11.2	5199	0.0469
12378-PeCDF	31.33		1.0006	1.0006	0	5.72E+07	1.59	Y	0.95	52.4	6646	0.0589
23478-PeCDF	32.46		1.0005	1.0005	0	6.14E+07	1.56	Y	0.95	59.2	6646	0.0589
123478-HxCDF	35.77		1.0005	1.0005	0	5.17E+07	1.24	Y	1.20	52.9	10167	0.0853
123678-HxCDF	35.91		1.0004	1.0005	+0.2	5.50E+07	1.24	Y	1.07	55.1	10167	0.0855
234678-HxCDF	36.55		1.0005	1.0004	-0.2	5.03E+07	1.23	Y	1.10	54.7	10167	0.0967
123789-HxCDF	37.53		1.0004	1.0005	+0.2	3.94E+07	1.28	Y	1.09	53.8	10167	0.118
1234678-HpCDF	39.05		1.0003	1.0003	0	4.73E+07	1.04	Y	1.28	54.8	2539	0.0193
1234789-HpCDF	40.38		1.0002	1.0003	+0.2	3.22E+07	1.03	Y	1.27	54.4	2539	0.0266
OCDF	42.55		1.0003	1.0002	-0.3	3.70E+07	0.90	Y	1.01	107	4612	0.0916

Name	Act RT	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	27.25	1.0255	1.0257	+0.3	7.56E+07	0.77	Y	1.01	93.9
ES 12378-PeCDD	32.80	1.2330	1.2345	+3.0	6.65E+07	1.66	Y	0.87	95.6
ES 123478-HxCDD	36.72	0.9917	0.9917	0	6.23E+07	1.26	Y	1.10	81.7
ES 123678-HxCDD	36.83	0.9947	0.9947	0	5.90E+07	1.30	Y	1.06	79.8
ES 123789-HxCDD	37.13	1.0028	1.0028	0	7.34E+07	1.30	Y	1.22	86.7
ES 1234678-HpCDD	39.95	1.0785	1.0789	+1.0	5.40E+07	1.07	Y	0.99	78.1
ES OCDD	42.37	1.1439	1.1443	+1.0	5.63E+07	0.89	Y	0.67	60.4
ES 2378-TCDF	26.33	1.0572	1.0577	+0.8	1.27E+08	0.80	Y	1.01	93.8
ES 12378-PeCDF	31.31	1.2558	1.2578	+3.8	1.15E+08	1.55	Y	0.90	95.3
ES 23478-PeCDF	32.45	1.3012	1.3035	+4.5	1.10E+08	1.58	Y	0.89	92.1
ES 123478-HxCDF	35.75	0.9655	0.9655	0	8.19E+07	0.55	Y	1.43	82.2
ES 123678-HxCDF	35.89	0.9693	0.9692	-0.2	9.33E+07	0.53	Y	1.63	82.1
ES 234678-HxCDF	36.54	0.9867	0.9867	0	8.39E+07	0.52	Y	1.48	81.5
ES 123789-HxCDF	37.51	1.0130	1.0130	0	6.72E+07	0.53	Y	1.29	74.8
ES 1234678-HpCDF	39.04	1.0540	1.0543	+0.7	6.74E+07	0.46	Y	1.15	84.5
ES 1234789-HpCDF	40.37	1.0898	1.0902	+1.0	4.66E+07	0.44	Y	0.91	73.9
ES OCDF	42.54	1.1484	1.1488	+1.0	6.85E+07	0.87	Y	0.83	59.4

Lab ID: OPR1_17661_DF | Acq'd: 12 Aug 2020 01:08 PSW | Wt/Vol: 1 uL | ICAL: MM3_DF_10012020_12JUN2020

Client ID: 0_17661_OPR001 | UTP: 13-Aug-2020 08:31:19 DTF | J-level: 0.25 pg/uL | Split: 1 | Checkcode: 728-067-LNF

Datafile: 200811R16 | Report: 13 Aug 2020 08:33 TF | Stds (pg): JS: 100 ES: 100 CS/SS: 100, 40 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
JS 1234-TCDD	26.57		-	-	-	7.99E+07	0.76	Y	-	-
JS 1234-TCDF	24.89		-	-	-	1.34E+08	0.81	Y	-	-
JS 123467-HxCDD	37.03		-	-	-	3.48E+07	1.32	Y	-	-
CS 37Cl-2378-TCDD	27.28		1.0265	1.0266	+0.2	3.32E+07	n/a	-	1.04	100
CS 12347-PeCDD	32.29		1.2141	1.2154	+2.5	6.30E+07	1.67	Y	0.74	107
CS 12346-PeCDF	30.78		1.2343	1.2363	+3.7	1.10E+08	1.59	Y	0.86	95.5
CS 123469-HxCDF	36.20		0.9776	0.9775	-0.2	7.90E+07	0.52	Y	1.36	83.6
CS 1234689-HpCDF	39.45		1.0650	1.0654	+0.9	6.21E+07	0.44	Y	1.05	84.5
~~SS 37Cl-2378-TCDD~~	~~27.28~~		~~1.0265~~	~~1.0266~~	~~+0.2~~	~~3.32E+07~~	~~n/a~~		~~1.04~~	~~106~~
~~SS 12347-PeCDD~~	~~32.29~~		~~1.2141~~	~~1.2154~~	~~+2.5~~	~~6.30E+07~~	~~1.67~~	~~Y~~	~~0.86~~	~~111~~
~~SS 12346-PeCDF~~	~~30.78~~		~~1.2343~~	~~1.2363~~	~~+3.7~~	~~1.10E+08~~	~~1.59~~	~~Y~~	~~0.96~~	~~99.7~~
~~SS 123469-HxCDF~~	~~36.20~~		~~0.9776~~	~~0.9775~~	~~-0.2~~	~~7.90E+07~~	~~0.52~~	~~Y~~	~~0.83~~	~~101~~
~~SS 1234689-HpCDF~~	~~39.45~~		~~1.0650~~	~~1.0654~~	~~+0.9~~	~~6.21E+07~~	~~0.44~~	~~Y~~	~~0.92~~	~~99.6~~

Totals	Conc	EMPC
Total TCDD	48.6	48.6
Total PeCDD	72.1	72.1
Total HxCDD	174	174
Total HpCDD	69.2	69.2
Total Tetra-Octa Dioxins	473	473
Total TCDF	58.1	58.1
Total PeCDF	132	132
Total HxCDF	229	229
Total HpCDF	109	109
Total Tetra-Octa Furans	635	635
Total Tetra-Octa Dioxins & Furans	1110	1110

* 37Cl correction has been applied to 2378-TCDD

	Original Values	Corrected Values
Ratio	0.81	0.81
Response	9.54E+06	9.52E+06

METHOD 8290A **PCDD/F ONGOING PRECISION AND RECOVERY (OPR)** **FORM 8A**

Lab Name:	SGS North America		
Initial Calibration:	ICAL: MM3_DF_10012020_12JUN2020		
Instrument ID:	MM3	GC Column ID:	ZB-5ms
VER Data Filename:	200811R16	Analysis Date:	12-AUG-2020 01:08:48
Lab ID:	OPR1_17661_DF		

NATIVE ANALYTES	SPIKE CONC.	CONC. FOUND	RANGE (ng/mL)			OK
2,3,7,8-TCDD	10	10.7	6.7	-	15.8	Y
1,2,3,7,8-PeCDD	50	48.9	35	-	71	Y
1,2,3,4,7,8-HxCDD	50	53.2	35	-	82	Y
1,2,3,6,7,8-HxCDD	50	55.8	38	-	67	Y
1,2,3,7,8,9-HxCDD	50	51.2	32	-	81	Y
1,2,3,4,6,7,8-HpCDD	50	55.4	35	-	70	Y
OCDD	100	109	78	-	144	Y
2,3,7,8-TCDF	10	11.2	7.5	-	15.8	Y
1,2,3,7,8-PeCDF	50	52.4	40	-	67	Y
2,3,4,7,8-PeCDF	50	59.2	34	-	80	Y
1,2,3,4,7,8-HxCDF	50	52.9	36	-	67	Y
1,2,3,6,7,8-HxCDF	50	55.1	42	-	65	Y
2,3,4,6,7,8-HxCDF	50	54.7	35	-	78	Y
1,2,3,7,8,9-HxCDF	50	53.8	39	-	65	Y
1,2,3,4,6,7,8-HpCDF	50	54.8	41	-	61	Y
1,2,3,4,7,8,9-HpCDF	50	54.4	39	-	69	Y
OCDF	100	107	63	-	170	Y

Contract-required concentration limits for OPR as specified in Table 6,
Method 1613. 10/94

Processed: 13 Aug 2020 08:33 Analyst: TF

METHOD 8290A **PCDD/F ONGOING PRECISION AND RECOVERY (OPR)** **FORM 8B**

Lab Name: SGS North America

Initial Calibration: ICAL: MM3_DF_10012020_12JUN2020

Instrument ID: MM3 GC Column ID: ZB-5ms

VER Data Filename: 200811R16 Analysis Date: 12-AUG-2020 01:08:48

Lab ID: OPR1_17661_DF

LABELED ANALYTES	SPIKE CONC.	CONC. FOUND	RANGE (ng/mL)			OK
13C-2,3,7,8-TCDD	100	93.9	20	-	175	Y
13C-1,2,3,7,8-PeCDD	100	95.6	21	-	227	Y
13C-1,2,3,4,7,8-HxCDD	100	81.7	21	-	193	Y
13C-1,2,3,6,7,8-HxCDD	100	79.8	25	-	163	Y
13C-1,2,3,7,8,9-HxCDD	100	86.7	26	-	166	Y
13C-1,2,3,4,6,7,8-HpCDD	100	78.1	26	-	166	Y
13C-OCDD	200	121	26	-	397	Y
13C-2,3,7,8-TCDF	100	93.8	22	-	152	Y
13C-1,2,3,7,8-PeCDF	100	95.3	21	-	192	Y
13C-2,3,4,7,8-PeCDF	100	92.1	13	-	328	Y
13C-1,2,3,4,7,8-HxCDF	100	82.2	19	-	202	Y
13C-1,2,3,6,7,8-HxCDF	100	82.1	21	-	159	Y
13C-2,3,4,6,7,8-HxCDF	100	81.5	22	-	176	Y
13C-1,2,3,7,8,9-HxCDF	100	74.8	17	-	205	Y
13C-1,2,3,4,6,7,8-HpCDF	100	84.5	21	-	158	Y
13C-1,2,3,4,7,8,9-HpCDF	100	73.9	20	-	186	Y
13C-OCDF	200	119	26	-	397	Y
CLEANUP STANDARD						
37Cl-2,3,7,8-TCDD	40	40.1	12.4	-	76.4	Y

Contract-required concentration limits for OPR as specified in Table 6, Method 1613. 10/94

Processed: 13 Aug 2020 08:33 Analyst: TF

METHOD 8290A **COLUMN PERFORMANCE AND RETENTION TIME WINDOWS** **FORM CPSM**

Lab Name:	SGS North America		
Initial Calibration:	ICAL: MM3_DF_10012020_12JUN2020		
Instrument ID:	MM3	GC Column ID:	ZB-5ms
CPSM Data Filename:	200811R16	Analysis Date:	12-AUG-2020 01:08:48
Lab ID:	OPR1_17661_DF		

Window Defining Standards Results

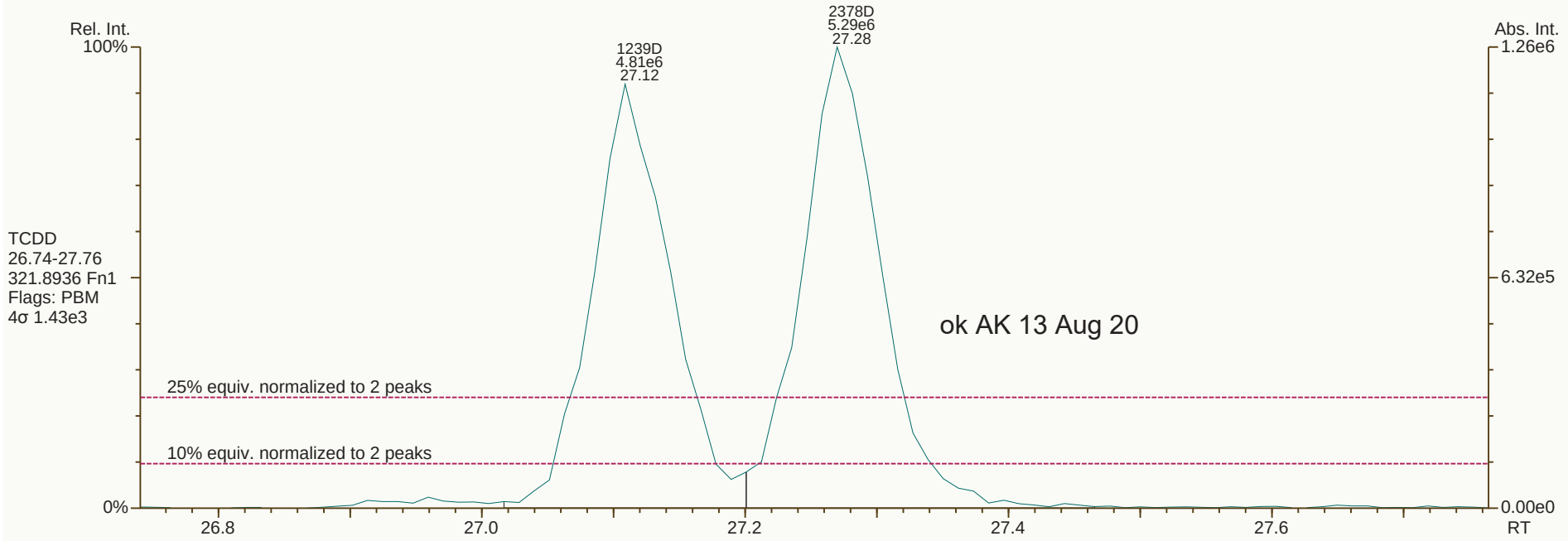
First Eluting Isomer	RT	Last Eluting Isomer	RT
1368-TCDD	23.38	1289-TCDD	28.30
12479/12468-PeCDD	30.27	12389-PeCDD	33.27
124679/124689-HxCDD	35.04	123789-HxCDD	37.15
1234679-HpCDD	39.32	1234678-HpCDD	39.96
1368-TCDF	21.14	1289-TCDF	28.46
13468/12468-PeCDF	28.42	12389-PeCDF	33.55
123468-HxCDF	34.38	123789-HxCDF	37.53
1234678-HpCDF	39.05	1234789-HpCDF	40.38

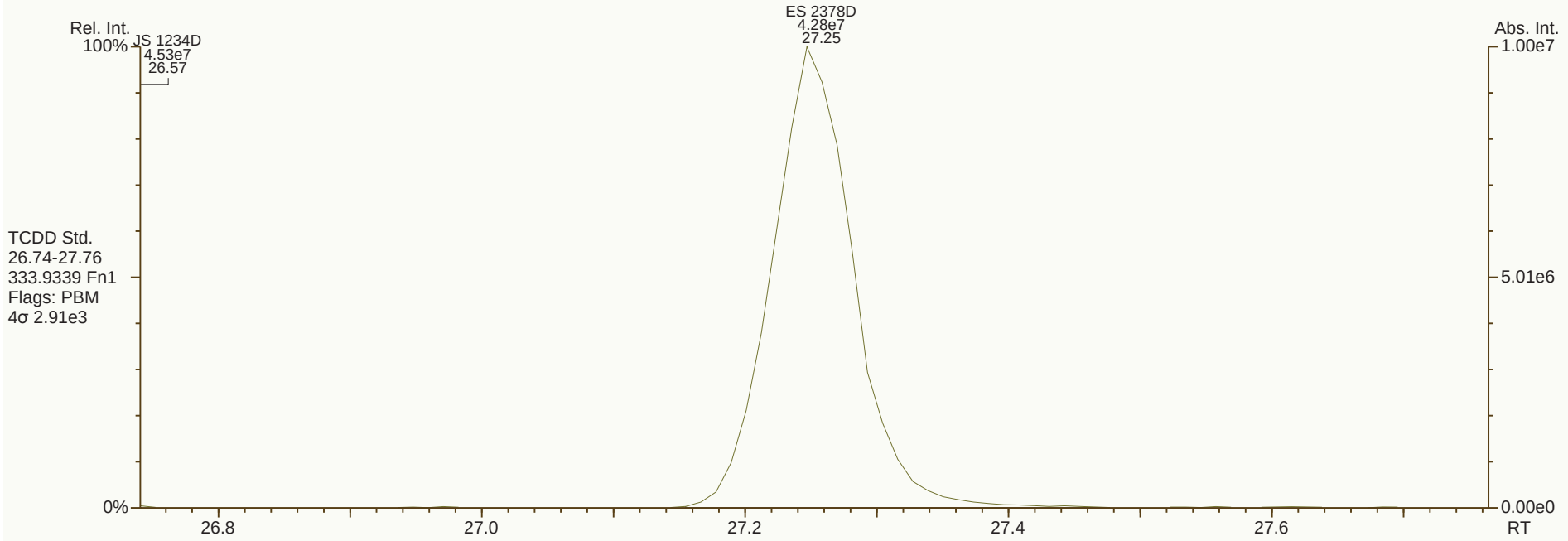
Isomer Specificity Test Standard Results

Closest Eluting Isomer	RT	2378 Specific Isomer	RT
1239-TCDD	27.12	2378-TCDD	27.28
2348-TCDF	26.24	2378-TCDF	26.35

Processed: 13 Aug 2020 08:33 Analyst: TF

SGS ID: OPR1_17661_DF
Sample ID: 0_17661_OPR001
Acq: 12-Aug-2020 01:08:48
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 50
User: PSW Datafile: 200811R16





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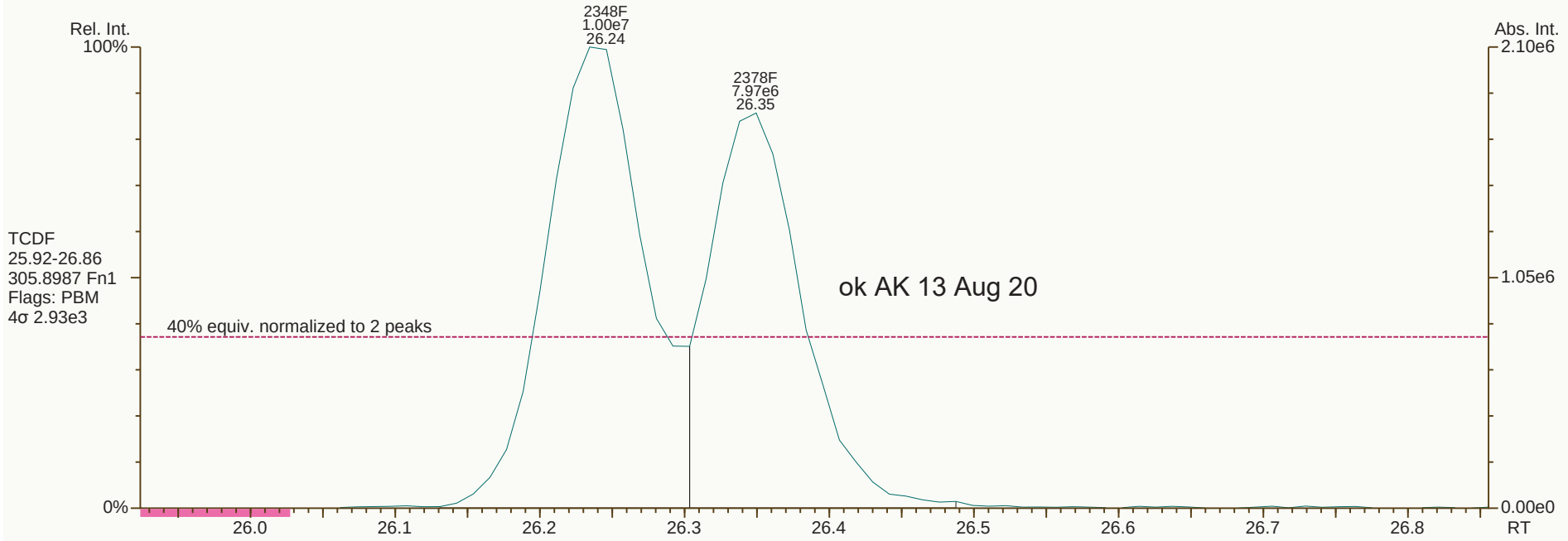
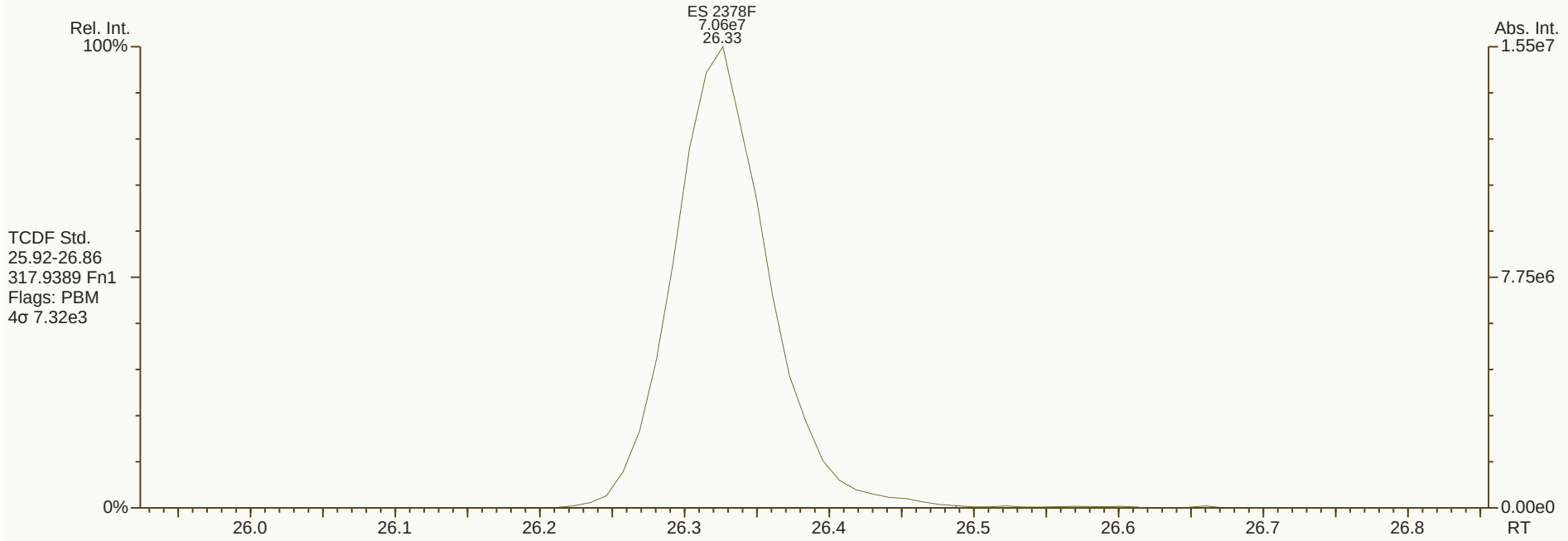
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689
PKD: 12-Aug-2020 08:21 Printed: 13-Aug-2020 08:36

SGS ID: OPR1_17661_DF
Sample ID: 0_17661_OPR001
Acq: 12-Aug-2020 01:08:48
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 50
User: PSW Datafile: 200811R16





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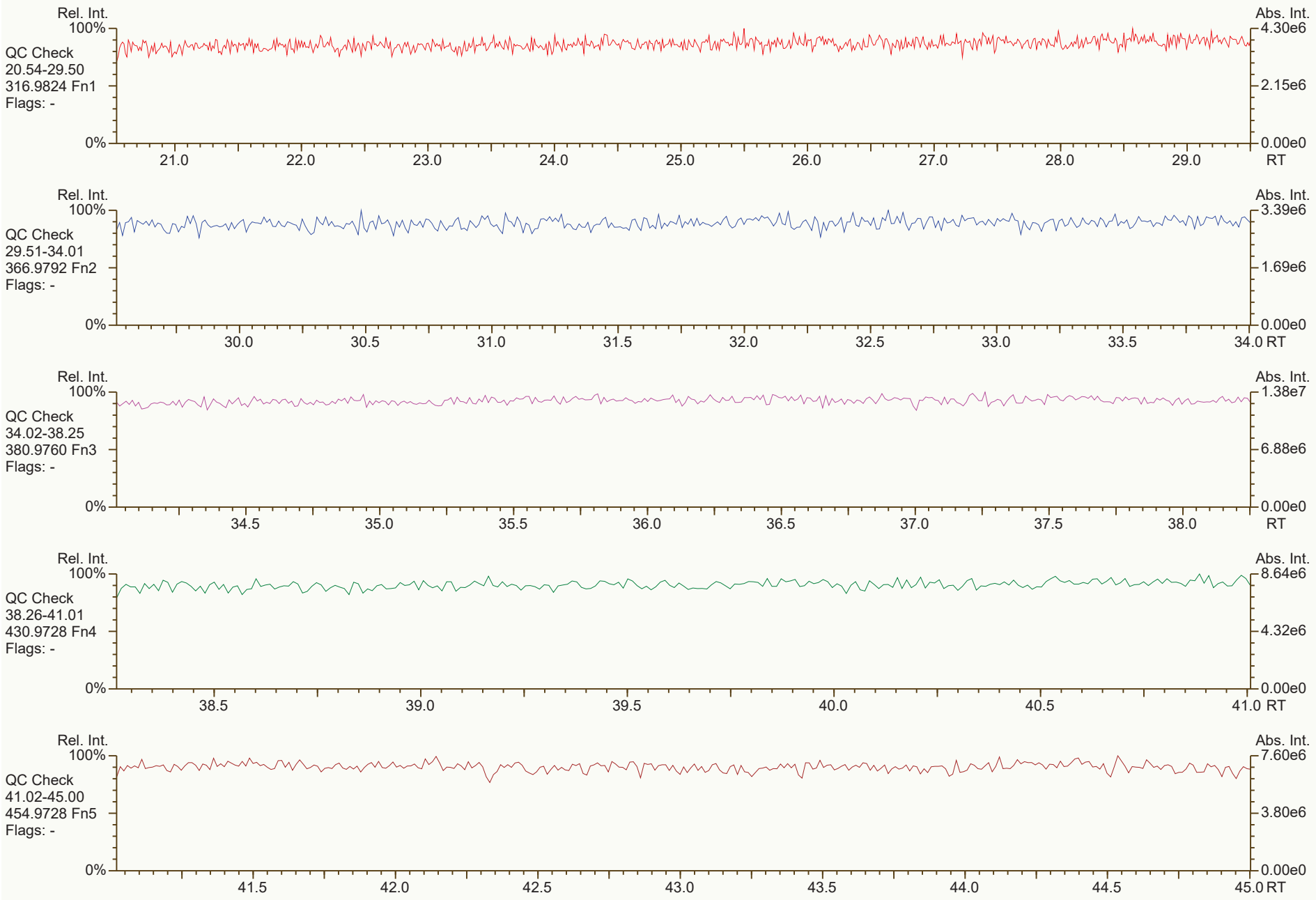
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689
PKD: 12-Aug-2020 08:21 Printed: 13-Aug-2020 08:37

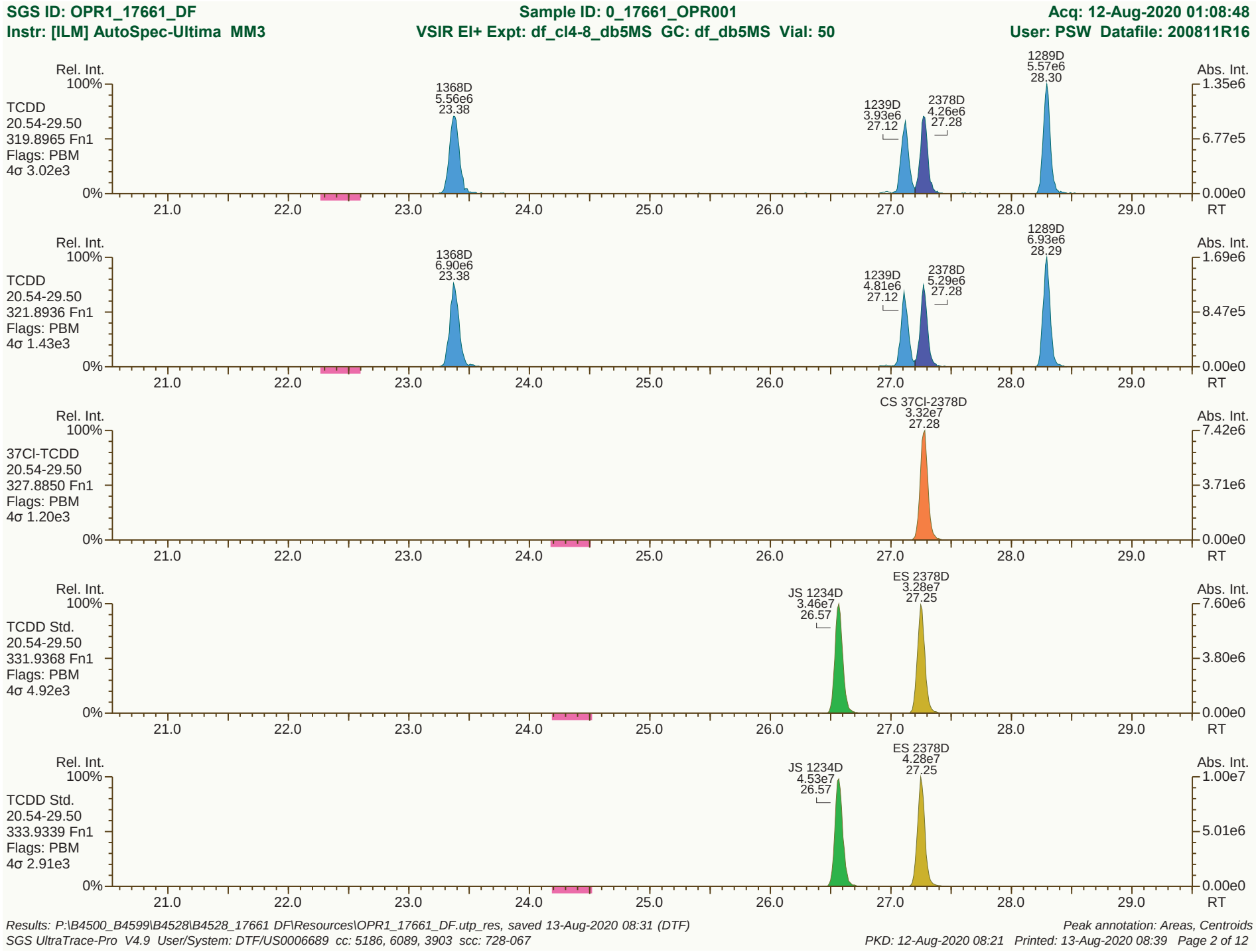
SGS ID: OPR1_17661_DF **Sample ID: 0_17661_OPR001** **Acq: 12-Aug-2020 01:08:48**

Instr: [ILM] AutoSpec-Ultima MM3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 50** **User: PSW Datafile: 200811R16**



Results: P:\B4500_B4599\B4528\B4528_17661 DF\Resources\OPR1_17661_DF.utp_res, saved 13-Aug-2020 08:31 (DTF) *Peak annotation: Areas, Centroids*

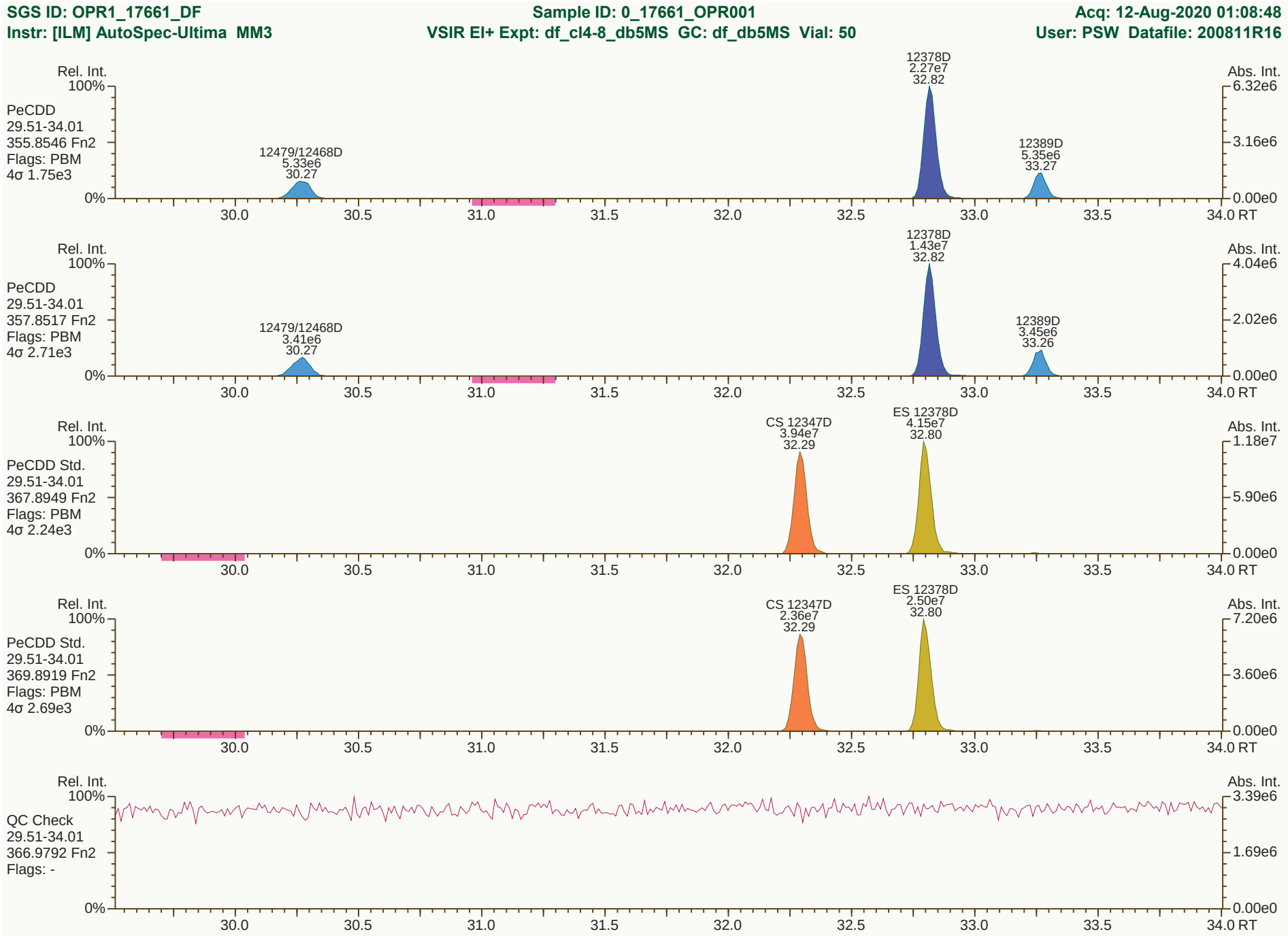
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 scc: 728-067 *PKD: n/a Printed: 13-Aug-2020 08:39 Page 1 of 12*


SGS ID: OPR1_17661_DF
Sample ID: 0_17661_OPR001
Acq: 12-Aug-2020 01:08:48
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 50
User: PSW Datafile: 200811R16
Rel. Int.
Abs. Int.
TCDD
20.54-29.50
319.8965 Fn1
Flags: PBM
4σ 3.02e3
1368D 5.56e6 23.38
1239D 3.93e6 27.12
2378D 4.26e6 27.28
1289D 5.57e6 28.30
1.35e6
6.77e5
0.00e0
TCDD
20.54-29.50
321.8936 Fn1
Flags: PBM
4σ 1.43e3
1368D 6.90e6 23.38
1239D 4.81e6 27.12
2378D 5.29e6 27.28
1289D 6.93e6 28.29
1.69e6
8.47e5
0.00e0
37Cl-TCDD
20.54-29.50
327.8850 Fn1
Flags: PBM
4σ 1.20e3
CS 37Cl-2378D 3.32e7 27.28
7.42e6
3.71e6
0.00e0
TCDD Std.
20.54-29.50
331.9368 Fn1
Flags: PBM
4σ 4.92e3
JS 1234D 3.46e7 26.57
ES 2378D 3.28e7 27.25
7.60e6
3.80e6
0.00e0
TCDD Std.
20.54-29.50
333.9339 Fn1
Flags: PBM
4σ 2.91e3
JS 1234D 4.53e7 26.57
ES 2378D 4.28e7 27.25
1.00e7
5.01e6
0.00e0
100%
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Results: P:\B4500_B4599\B4528\B4528_17661 DF\Resources\OPR1_17661_DF.utp_res, saved 13-Aug-2020 08:31 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 5186, 6089, 3903 scc: 728-067
PKD: 12-Aug-2020 08:21 Printed: 13-Aug-2020 08:39 Page 2 of 12

SGS ID: OPR1_17661_DF
Instr: [ILM] AutoSpec-Ultima MM3

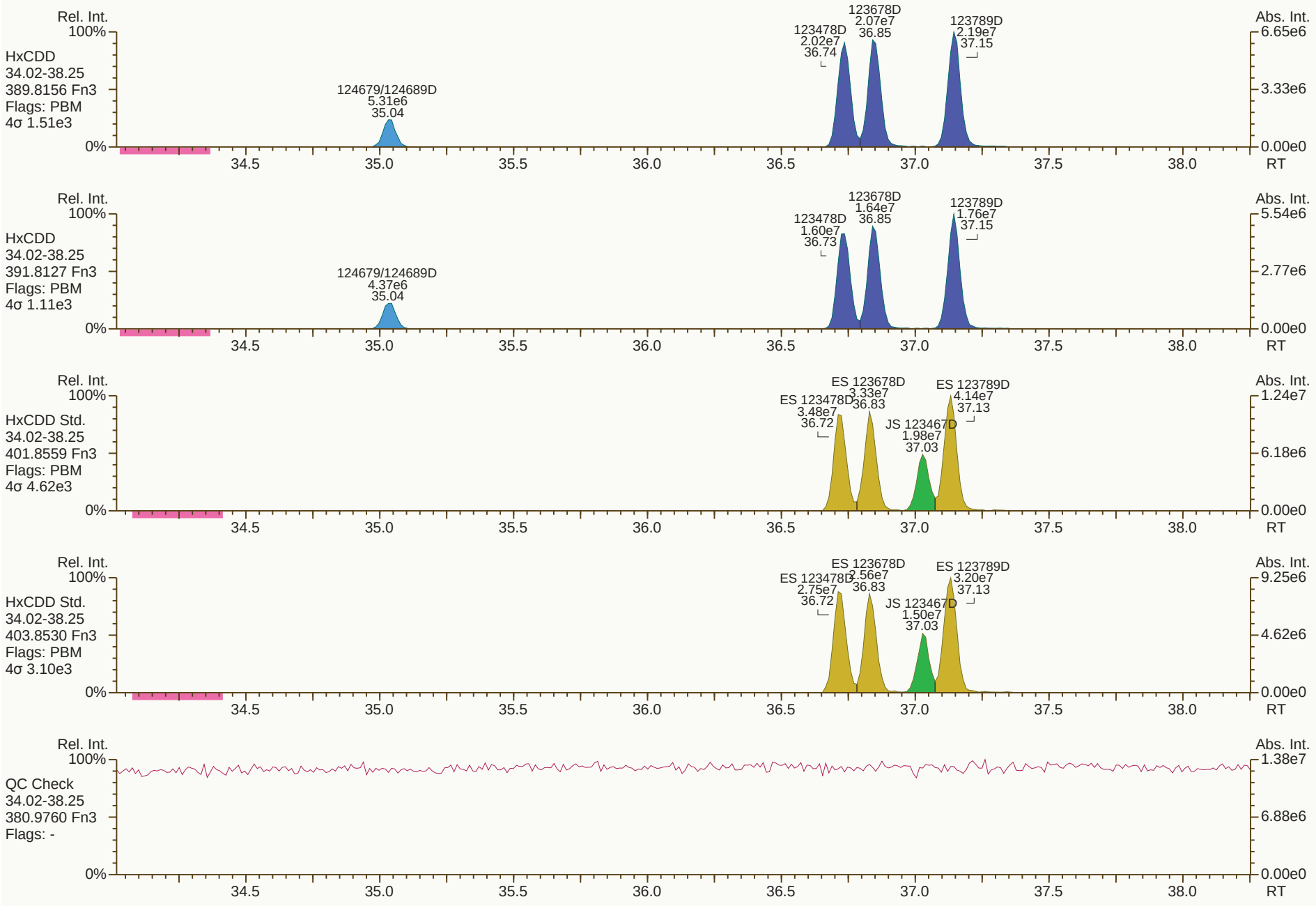
Sample ID: 0_17661_OPR001
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 50

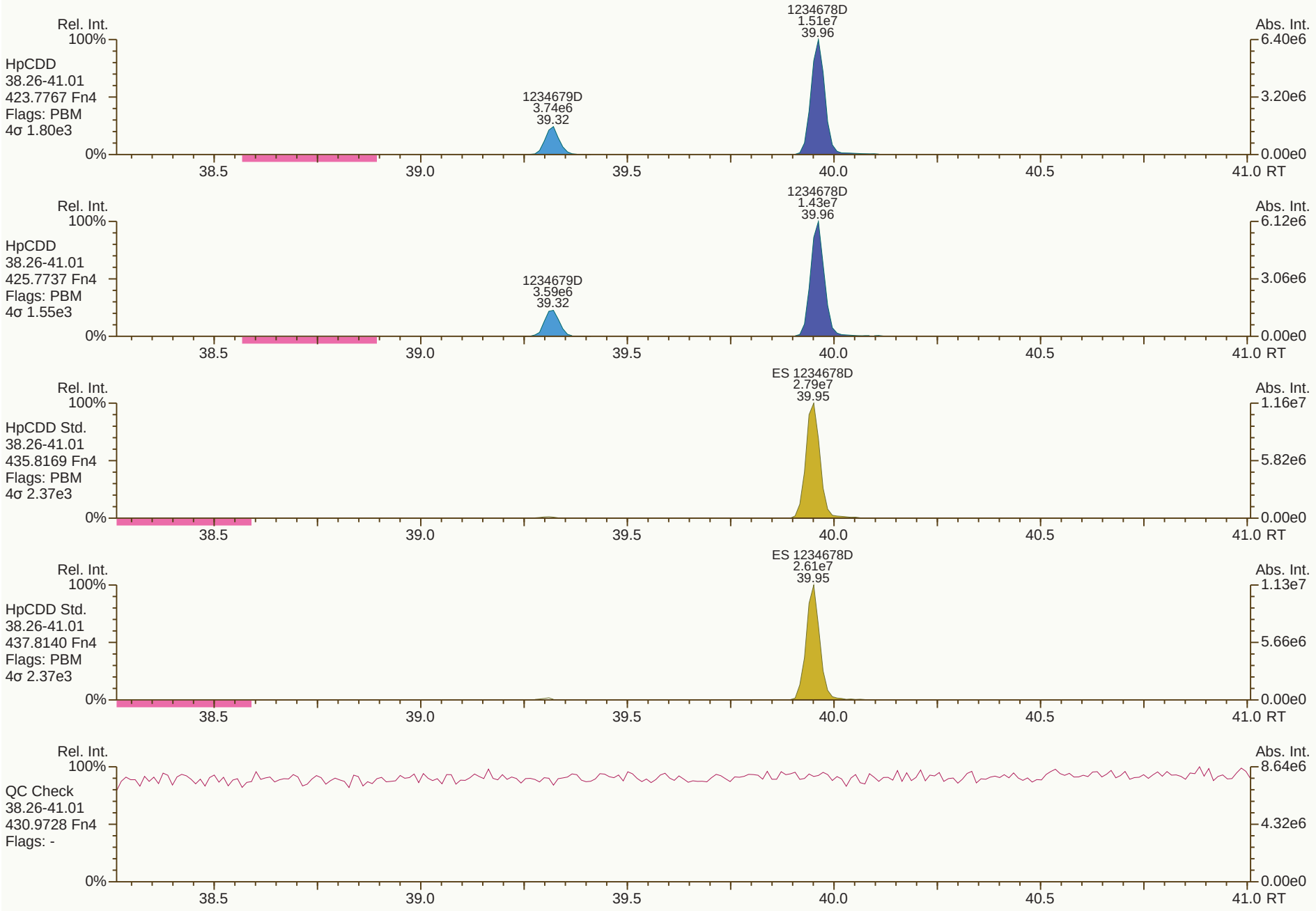
Acq: 12-Aug-2020 01:08:48
User: PSW Datafile: 200811R16



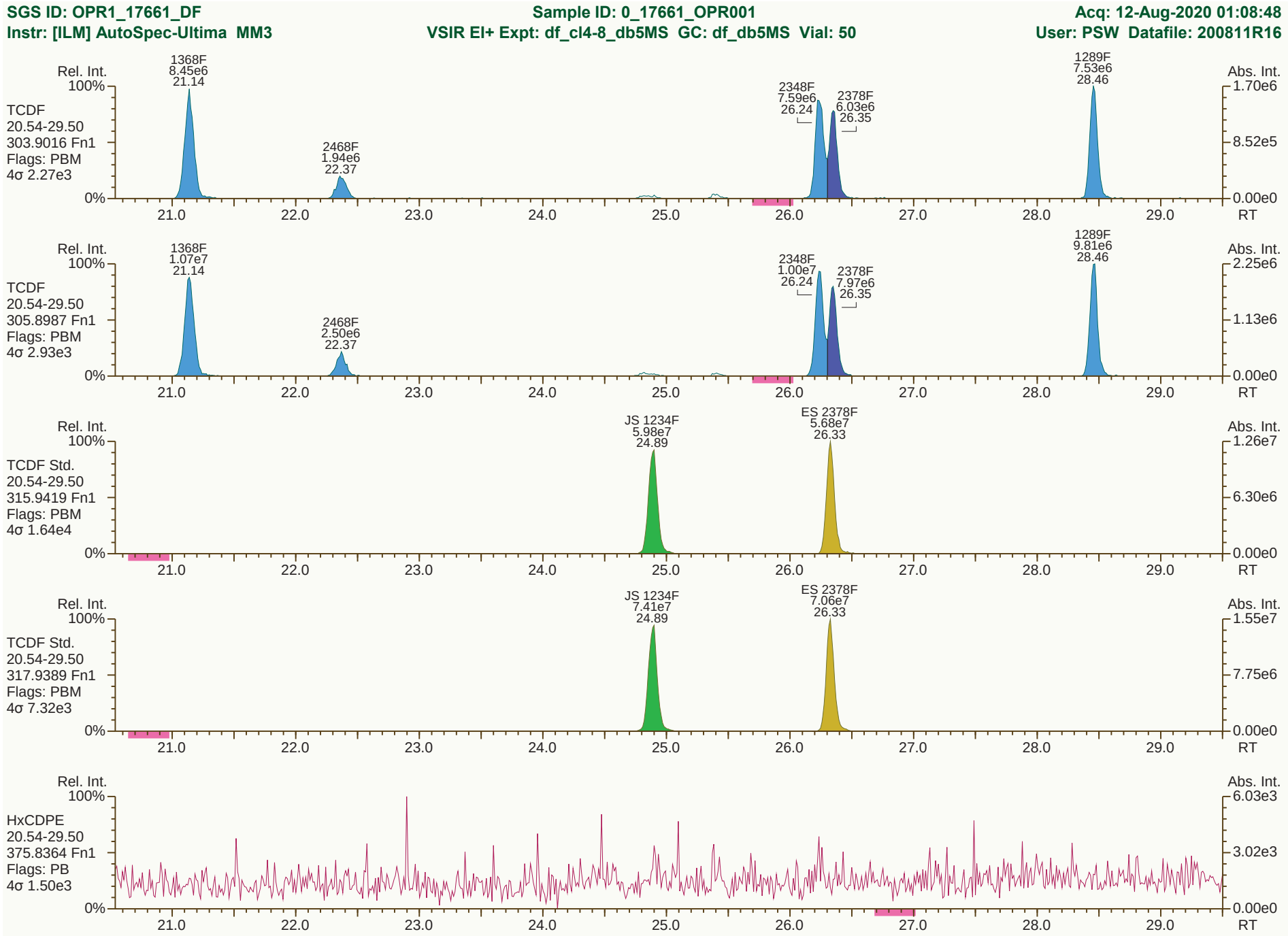
Results: P:\B4500_B4599\B4528\B4528_17661 DF\Resources\OPR1_17661_DF.utp_res, saved 13-Aug-2020 08:31 (DTF)
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 6958, 5066 scc: 728-067

Peak annotation: Areas, Centroids
PKD: 12-Aug-2020 08:21 Printed: 13-Aug-2020 08:39 Page 3 of 12


Rel. Int.
100%
HxCDD
34.02-38.25
389.8156 Fn3
Flags: PBM
4σ 1.51e3
124679/124689D
5.31e6
35.04
123478D
2.02e7
36.74
123678D
2.07e7
36.85
123789D
2.19e7
37.15
Abs. Int.
6.65e6
3.33e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD
34.02-38.25
391.8127 Fn3
Flags: PBM
4σ 1.11e3
124679/124689D
4.37e6
35.04
123478D
1.60e7
36.73
123678D
1.64e7
36.85
123789D
1.76e7
37.15
Abs. Int.
5.54e6
2.77e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
401.8559 Fn3
Flags: PBM
4σ 4.62e3
ES 123478D
3.48e7
36.72
ES 123678D
3.33e7
36.83
JS 123467D
1.98e7
37.03
ES 123789D
4.14e7
37.13
Abs. Int.
1.24e7
6.18e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
HxCDD Std.
34.02-38.25
403.8530 Fn3
Flags: PBM
4σ 3.10e3
ES 123478D
2.75e7
36.72
ES 123678D
2.56e7
36.83
JS 123467D
1.50e7
37.03
ES 123789D
3.20e7
37.13
Abs. Int.
9.25e6
4.62e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT
Rel. Int.
100%
QC Check
34.02-38.25
380.9760 Fn3
Flags: -
Abs. Int.
1.38e7
6.88e6
0.00e0
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT

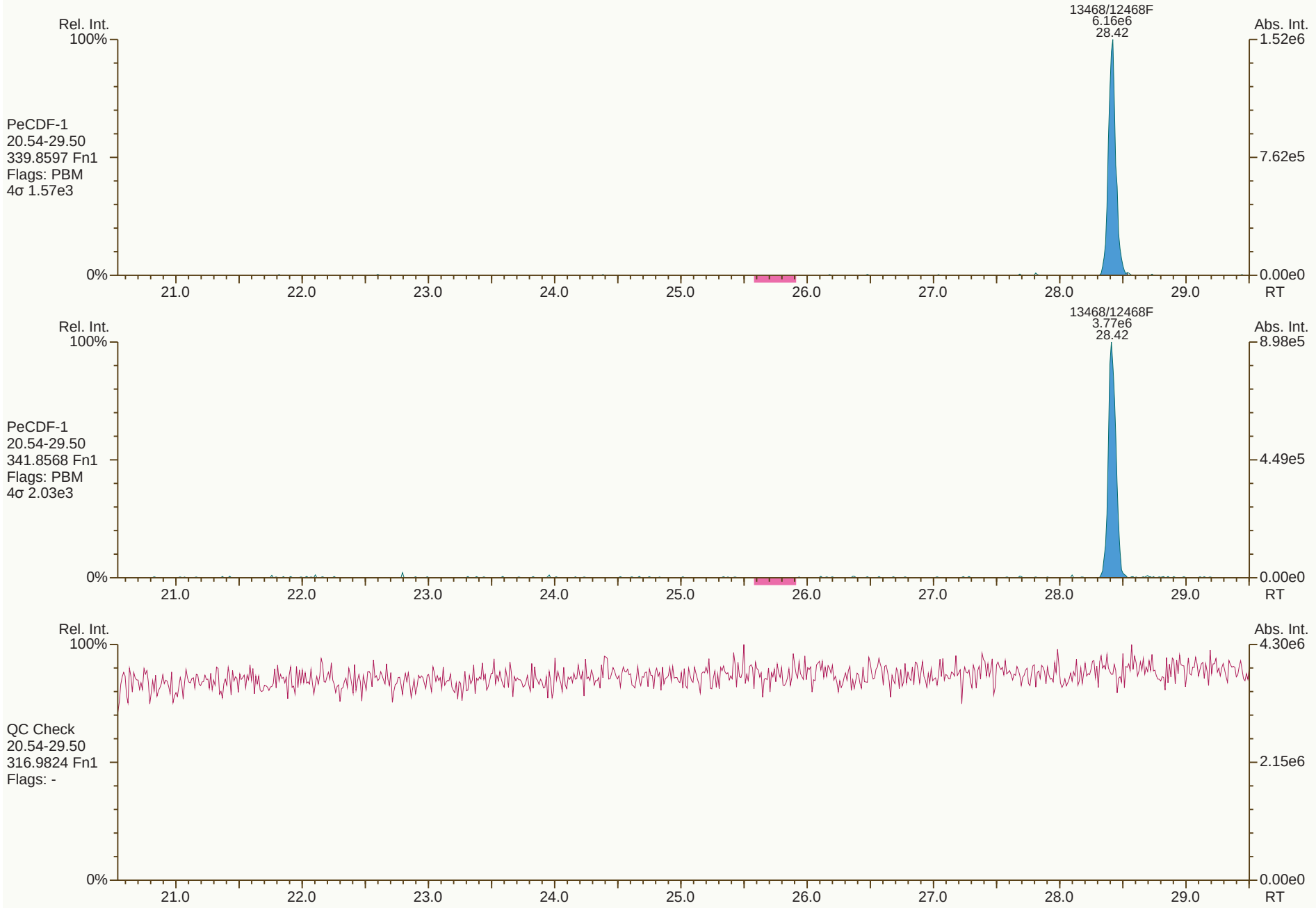

Rel. Int.
100%
HpCDD
38.26-41.01
423.7767 Fn4
Flags: PBM
4σ 1.80e3
0%
1234678D
1.51e7
39.96
1234679D
3.74e6
39.32
Abs. Int.
6.40e6
3.20e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD
38.26-41.01
425.7737 Fn4
Flags: PBM
4σ 1.55e3
0%
1234678D
1.43e7
39.96
1234679D
3.59e6
39.32
Abs. Int.
6.12e6
3.06e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
435.8169 Fn4
Flags: PBM
4σ 2.37e3
0%
ES 1234678D
2.79e7
39.95
Abs. Int.
1.16e7
5.82e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
HpCDD Std.
38.26-41.01
437.8140 Fn4
Flags: PBM
4σ 2.37e3
0%
ES 1234678D
2.61e7
39.95
Abs. Int.
1.13e7
5.66e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT
Rel. Int.
100%
QC Check
38.26-41.01
430.9728 Fn4
Flags: -
0%
Abs. Int.
8.64e6
4.32e6
0.00e0
38.5
39.0
39.5
40.0
40.5
41.0 RT


Rel. Int.
100%
OCDD
41.02-45.00
457.7377 Fn5
Flags: PBM
4σ 2.25e3
0%
OCDD
1.59e7
42.38
Abs. Int.
6.28e6
3.14e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDD
41.02-45.00
459.7348 Fn5
Flags: PBM
4σ 2.39e3
0%
OCDD
1.72e7
42.38
Abs. Int.
6.45e6
3.23e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDD Std.
41.02-45.00
469.7780 Fn5
Flags: PBM
4σ 2.59e3
0%
ES OCDD
2.65e7
42.37
Abs. Int.
1.01e7
5.04e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
OCDD Std.
41.02-45.00
471.7750 Fn5
Flags: PBM
4σ 2.14e3
0%
ES OCDD
2.98e7
42.37
Abs. Int.
1.14e7
5.70e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Rel. Int.
100%
QC Check
41.02-45.00
454.9728 Fn5
Flags: -
0%
Abs. Int.
7.60e6
3.80e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT


SGS ID: OPR1_17661_DF
Sample ID: 0_17661_OPR001
Acq: 12-Aug-2020 01:08:48
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 50
User: PSW Datafile: 200811R16
Rel. Int.
Abs. Int.
TCDF
20.54-29.50
303.9016 Fn1
Flags: PBM
4σ 2.27e3
1368F
8.45e6
21.14
2468F
1.94e6
22.37
2348F
7.59e6
26.24
2378F
6.03e6
26.35
1289F
7.53e6
28.46
1.70e6
8.52e5
0.00e0
TCDF
20.54-29.50
305.8987 Fn1
Flags: PBM
4σ 2.93e3
1368F
1.07e7
21.14
2468F
2.50e6
22.37
2348F
1.00e7
26.24
2378F
7.97e6
26.35
1289F
9.81e6
28.46
2.25e6
1.13e6
0.00e0
TCDF Std.
20.54-29.50
315.9419 Fn1
Flags: PBM
4σ 1.64e4
JS 1234F
5.98e7
24.89
ES 2378F
5.68e7
26.33
1.26e7
6.30e6
0.00e0
TCDF Std.
20.54-29.50
317.9389 Fn1
Flags: PBM
4σ 7.32e3
JS 1234F
7.41e7
24.89
ES 2378F
7.06e7
26.33
1.55e7
7.75e6
0.00e0
HxCDPE
20.54-29.50
375.8364 Fn1
Flags: PB
4σ 1.50e3
6.03e3
3.02e3
0.00e0
100%
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0
RT
Results: P:\B4500_B4599\B4528\B4528_17661 DF\Resources\OPR1_17661_DF.utp_res, saved 13-Aug-2020 08:31 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 1914, 5339, 5872 scc: 728-067
PKD: 12-Aug-2020 08:21 Printed: 13-Aug-2020 08:39 Page 7 of 12

SGS ID: OPR1_17661_DF | Sample ID: 0_17661_OPR001 | Acq: 12-Aug-2020 01:08:48

Instr: [ILM] AutoSpec-Ultima MM3 | VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 50 | User: PSW Datafile: 200811R16

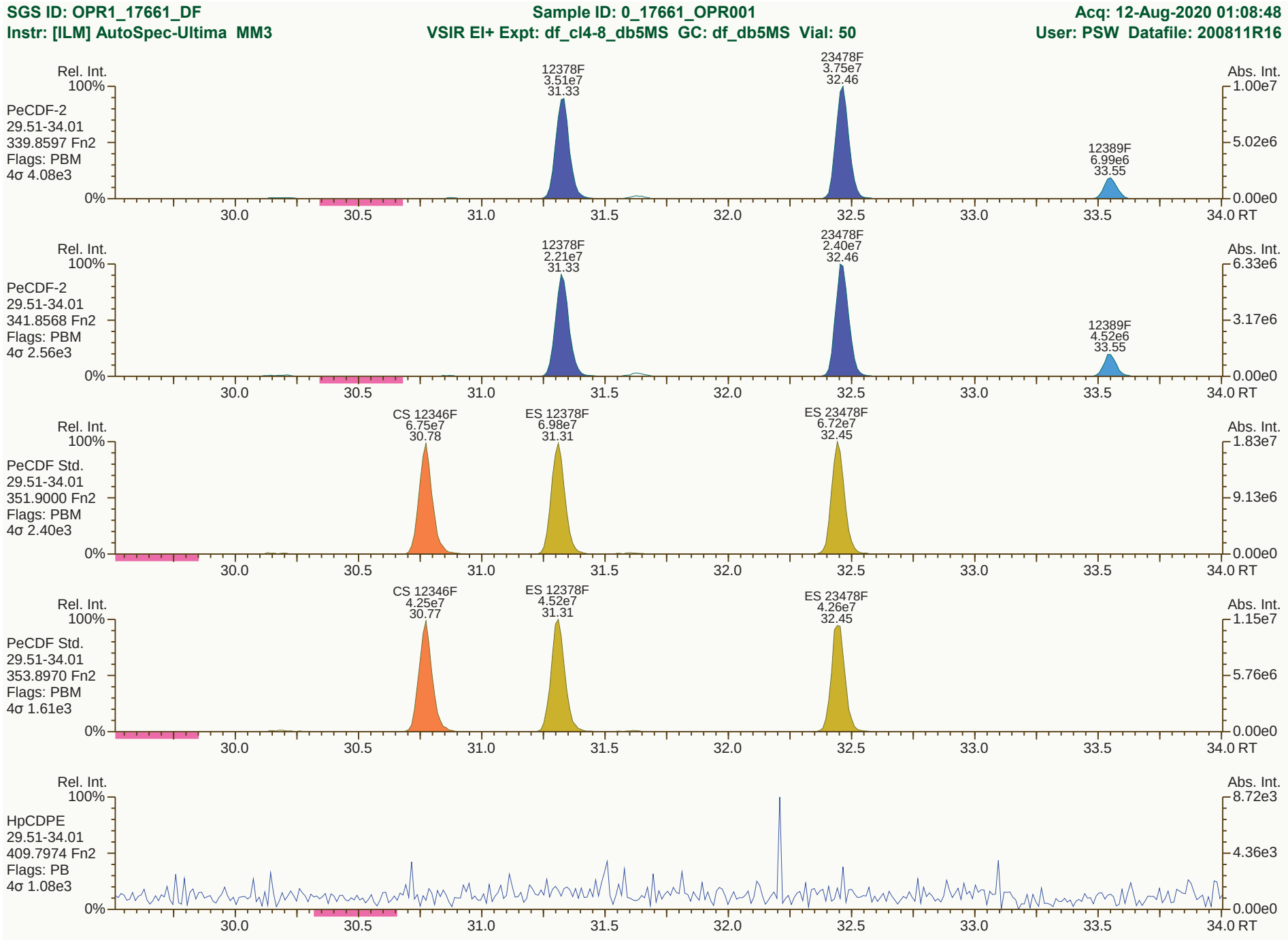


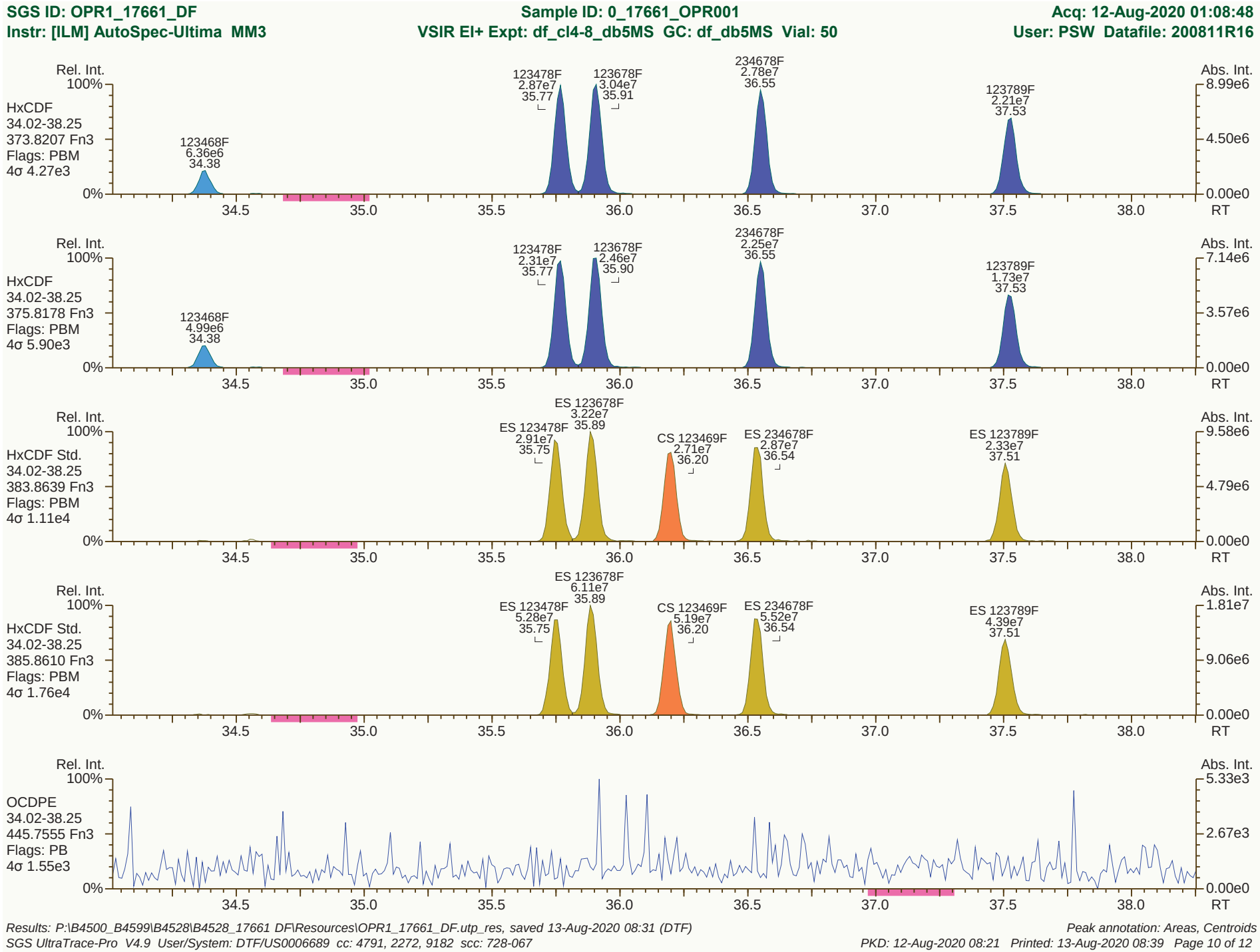
Results: P:\B4500_B4599\B4528\B4528_17661 DF\Resources\OPR1_17661_DF.utp_res, saved 13-Aug-2020 08:31 (DTF)

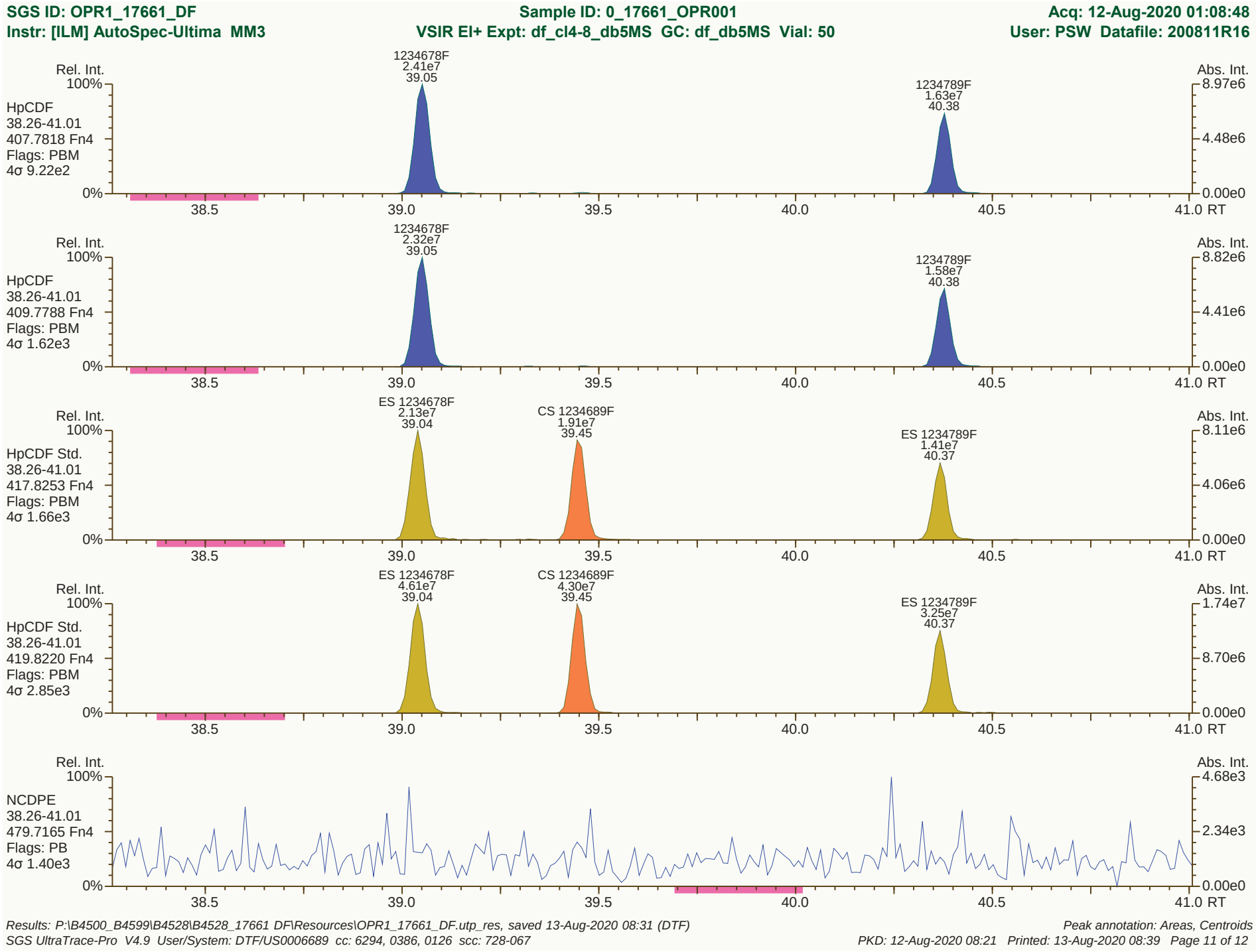
Peak annotation: Areas, Centroids

SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 4634 scc: 728-067

PKD: 12-Aug-2020 08:21 Printed: 13-Aug-2020 08:39 Page 8 of 12


SGS ID: OPR1_17661_DF
Sample ID: 0_17661_OPR001
Acq: 12-Aug-2020 01:08:48
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 50
User: PSW Datafile: 200811R16
Rel. Int.
Abs. Int.
PeCDF-2
29.51-34.01
339.8597 Fn2
Flags: PBM
4σ 4.08e3
12378F
3.51e7
31.33
23478F
3.75e7
32.46
12389F
6.99e6
33.55
PeCDF-2
29.51-34.01
341.8568 Fn2
Flags: PBM
4σ 2.56e3
12378F
2.21e7
31.33
23478F
2.40e7
32.46
12389F
4.52e6
33.55
PeCDF Std.
29.51-34.01
351.9000 Fn2
Flags: PBM
4σ 2.40e3
CS 12346F
6.75e7
30.78
ES 12378F
6.98e7
31.31
ES 23478F
6.72e7
32.45
PeCDF Std.
29.51-34.01
353.8970 Fn2
Flags: PBM
4σ 1.61e3
CS 12346F
4.25e7
30.77
ES 12378F
4.52e7
31.31
ES 23478F
4.26e7
32.45
HpCDPE
29.51-34.01
409.7974 Fn2
Flags: PB
4σ 1.08e3
30.0
30.5
31.0
31.5
32.0
32.5
33.0
33.5
34.0 RT


SGS ID: OPR1_17661_DF
Sample ID: 0_17661_OPR001
Acq: 12-Aug-2020 01:08:48
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 50
User: PSW Datafile: 200811R16
Rel. Int.
Abs. Int.
HxCDF
34.02-38.25
373.8207 Fn3
Flags: PBM
4σ 4.27e3
123468F 6.36e6 34.38
123478F 2.87e7 35.77
123678F 3.04e7 35.91
234678F 2.78e7 36.55
123789F 2.21e7 37.53
8.99e6
4.50e6
0.00e0
HxCDF
34.02-38.25
375.8178 Fn3
Flags: PBM
4σ 5.90e3
123468F 4.99e6 34.38
123478F 2.31e7 35.77
123678F 2.46e7 35.90
234678F 2.25e7 36.55
123789F 1.73e7 37.53
7.14e6
3.57e6
0.00e0
HxCDF Std.
34.02-38.25
383.8639 Fn3
Flags: PBM
4σ 1.11e4
ES 123478F 2.91e7 35.75
ES 123678F 3.22e7 35.89
CS 123469F 2.71e7 36.20
ES 234678F 2.87e7 36.54
ES 123789F 2.33e7 37.51
9.58e6
4.79e6
0.00e0
HxCDF Std.
34.02-38.25
385.8610 Fn3
Flags: PBM
4σ 1.76e4
ES 123478F 5.28e7 35.75
ES 123678F 6.11e7 35.89
CS 123469F 5.19e7 36.20
ES 234678F 5.52e7 36.54
ES 123789F 4.39e7 37.51
1.81e7
9.06e6
0.00e0
OCDPE
34.02-38.25
445.7555 Fn3
Flags: PB
4σ 1.55e3
5.33e3
2.67e3
0.00e0
100%
0%
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0
RT

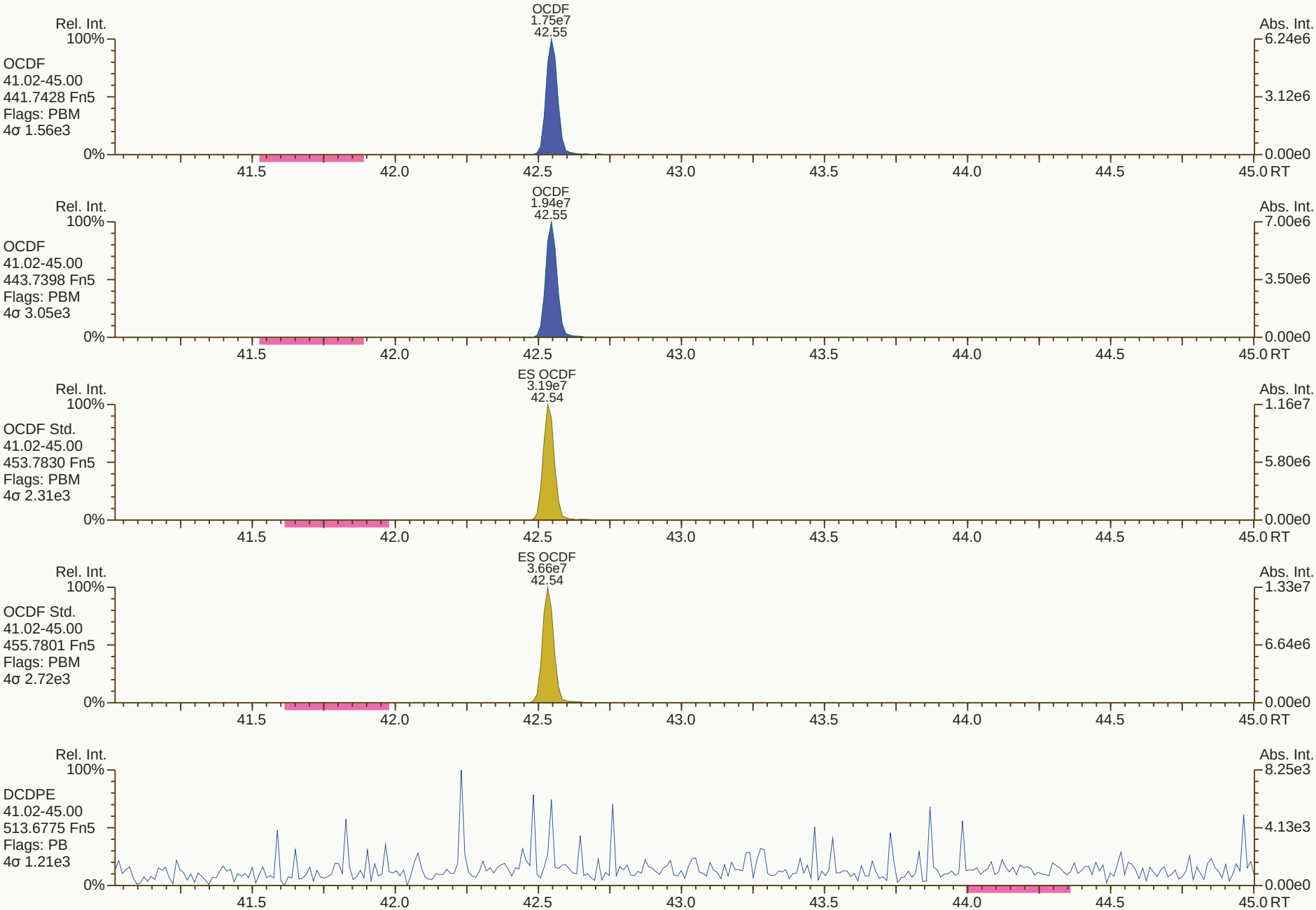


Results: P:\B4500_B4599\B4528\B4528_17661 DF\Resources\OPR1_17661_DF.utp_res, saved 13-Aug-2020 08:31 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 6294, 0386, 0126 scc: 728-067
PKD: 12-Aug-2020 08:21 Printed: 13-Aug-2020 08:39 Page 11 of 12

SGS ID: OPR1_17661_DF
Instr: [ILM] AutoSpec-Ultima MM3

Sample ID: 0_17661_OPR001
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 50

Acq: 12-Aug-2020 01:08:48
User: PSW Datafile: 200811R16



Results: P:\B4500_B4599\B4528\B4528_17661 DF\Resources\OPR1_17661_DF.utp_res, saved 13-Aug-2020 08:31 (DTF)
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 0062, 0597, 0960 scc: 728-067

Peak annotation: Areas, Centroids
PKD: 12-Aug-2020 08:21 Printed: 13-Aug-2020 08:39 Page 12 of 12

CPSM only

METHOD 8290A **COLUMN PERFORMANCE AND RETENTION TIME WINDOWS** **FORM CPSM**

Lab Name:	SGS North America		
Initial Calibration:	ICAL: MM3_DF_10012020_12JUN2020		
Instrument ID:	MM3	GC Column ID:	ZB-5ms
CPSM Data Filename:	200812R03	Analysis Date:	12-AUG-2020 11:44:55
Lab ID:	OPR1_17661_DF-RJ		

Window Defining Standards Results

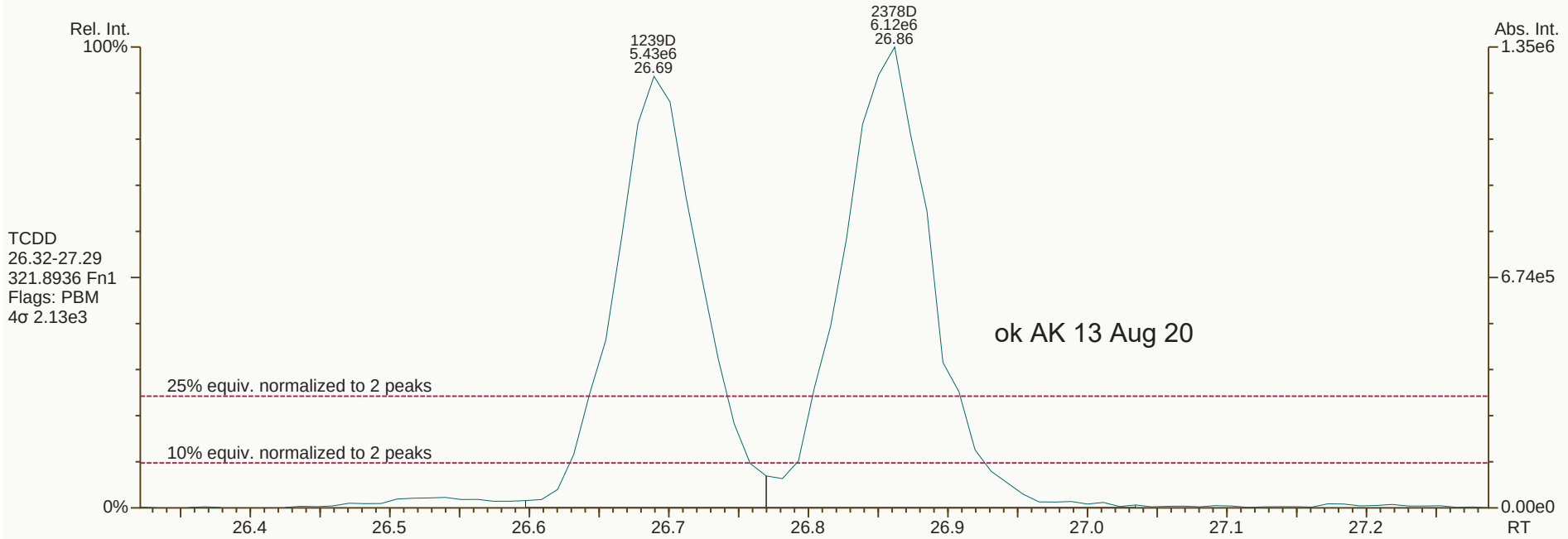
First Eluting Isomer	RT	Last Eluting Isomer	RT
1368-TCDD	22.83	1289-TCDD	27.90
12479/12468-PeCDD	29.91	12389-PeCDD	32.95
124679/124689-HxCDD	34.74	123789-HxCDD	36.85
1234679-HpCDD	39.09	1234678-HpCDD	39.76
1368-TCDF	20.61	1289-TCDF	28.06
13468/12468-PeCDF	28.03	12389-PeCDF	33.23
123468-HxCDF	34.07	123789-HxCDF	37.22
1234678-HpCDF	38.81	1234789-HpCDF	40.16

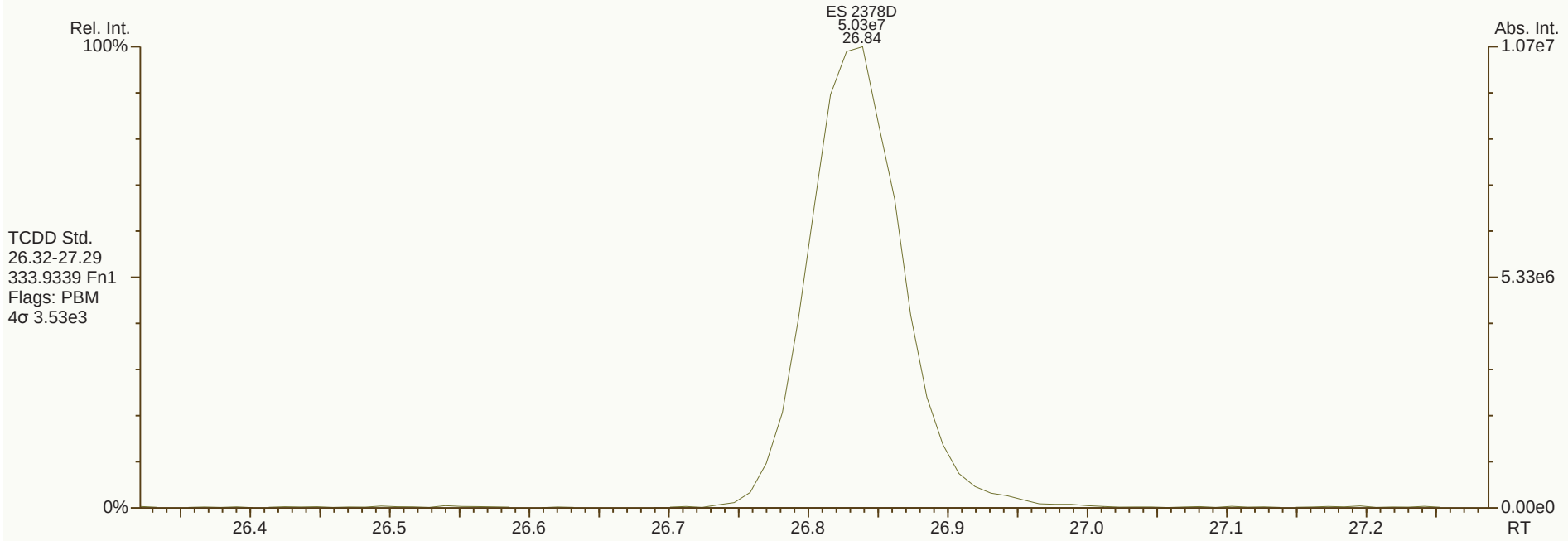
Isomer Specificity Test Standard Results

Closest Eluting Isomer	RT	2378 Specific Isomer	RT
1239-TCDD	26.69	2378-TCDD	26.86
2348-TCDF	25.79	2378-TCDF	25.91

Processed: 13 Aug 2020 08:34 Analyst: TF

SGS ID: OPR1_17661_DF-RJ | Sample ID: 0_17661_OPR001 | Acq: 12-Aug-2020 11:44:55
Instr: [ILM] AutoSpec-Ultima MM3 | VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 50 | User: PSW Datafile: 200812R03

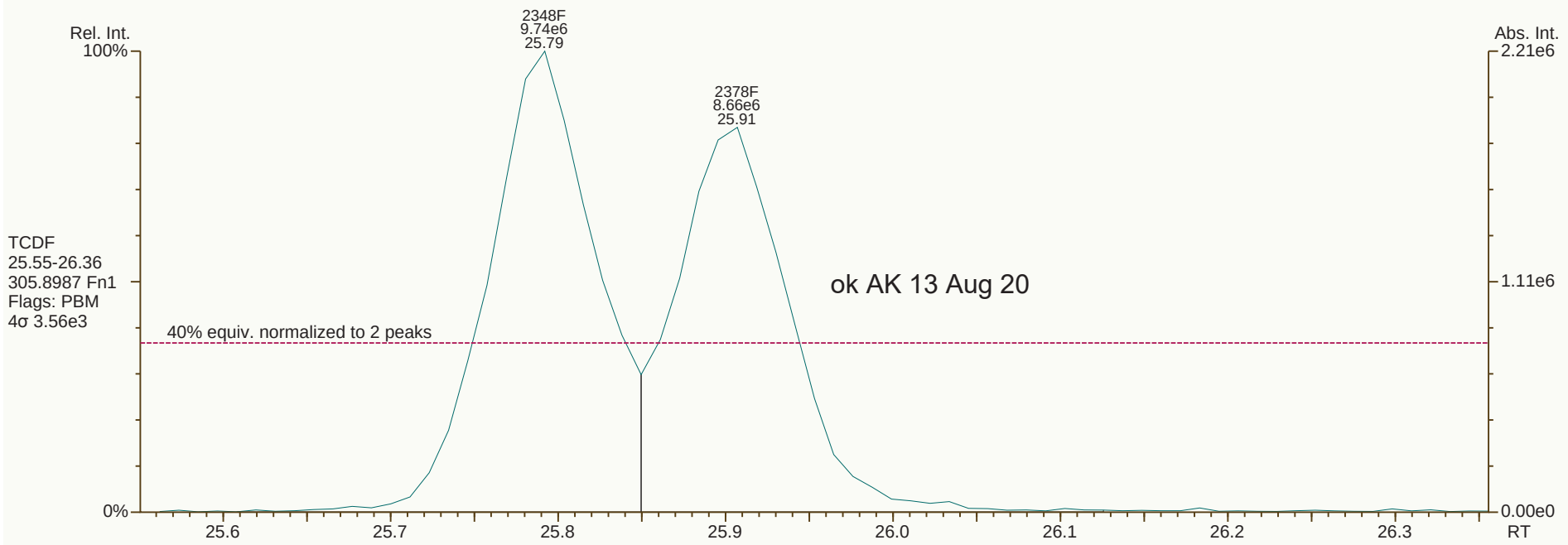


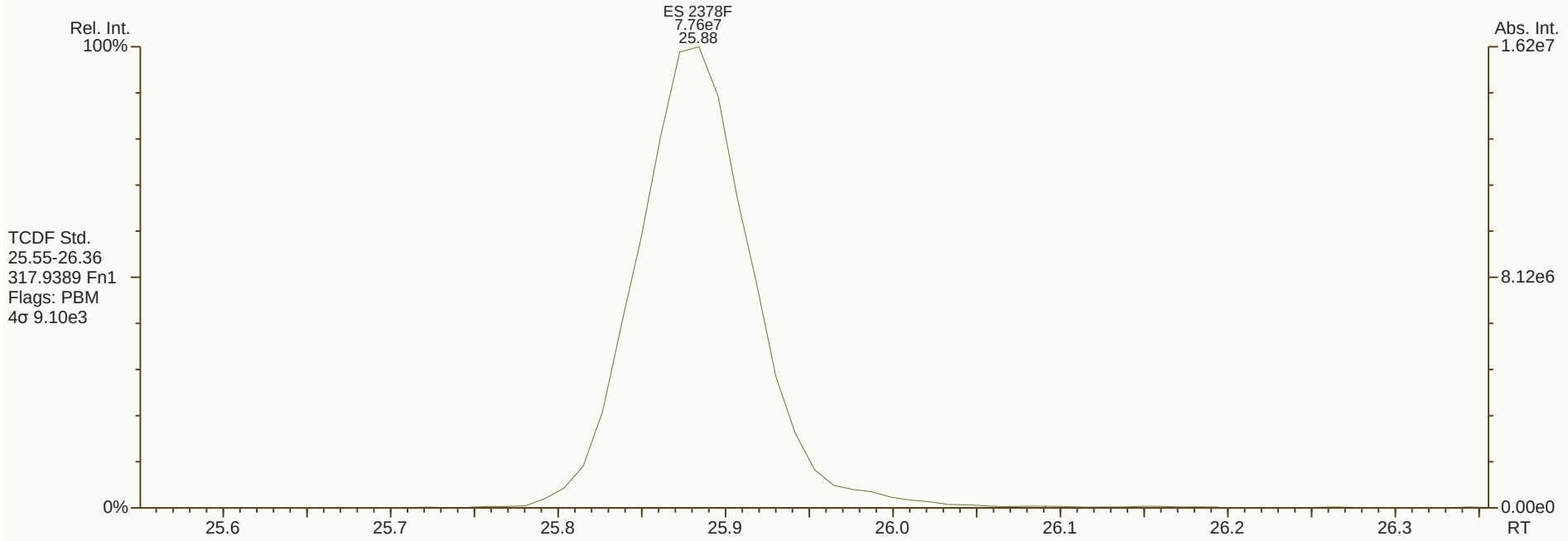


Results: P:\B4500_B4599\B4528\B4528_17661 DF\Resources\OPR1_17661_DF-RJ.utp_res, saved 13-Aug-2020 08:31 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689
PKD: 12-Aug-2020 12:32 Printed: 13-Aug-2020 08:37

SGS ID: OPR1_17661_DF-RJ | Sample ID: 0_17661_OPR001 | Acq: 12-Aug-2020 11:44:55

Instr: [ILM] AutoSpec-Ultima MM3 | VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 50 | User: PSW Datafile: 200812R03





Results: P:\B4500_B4599\B4528\B4528_17661 DF\Resources\OPR1_17661_DF-RJ.utp_res, saved 13-Aug-2020 08:31 (DTF)

Peak annotation: Areas, Centroids

SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689

PKD: 12-Aug-2020 12:32 Printed: 13-Aug-2020 08:37

SGS ID: OPR1_17661_DF-RJ | **Sample ID: 0_17661_OPR001** | **Acq: 12-Aug-2020 11:44:55**

Instr: [ILM] AutoSpec-Ultima MM3 | **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 50** | **User: PSW Datafile: 200812R03**

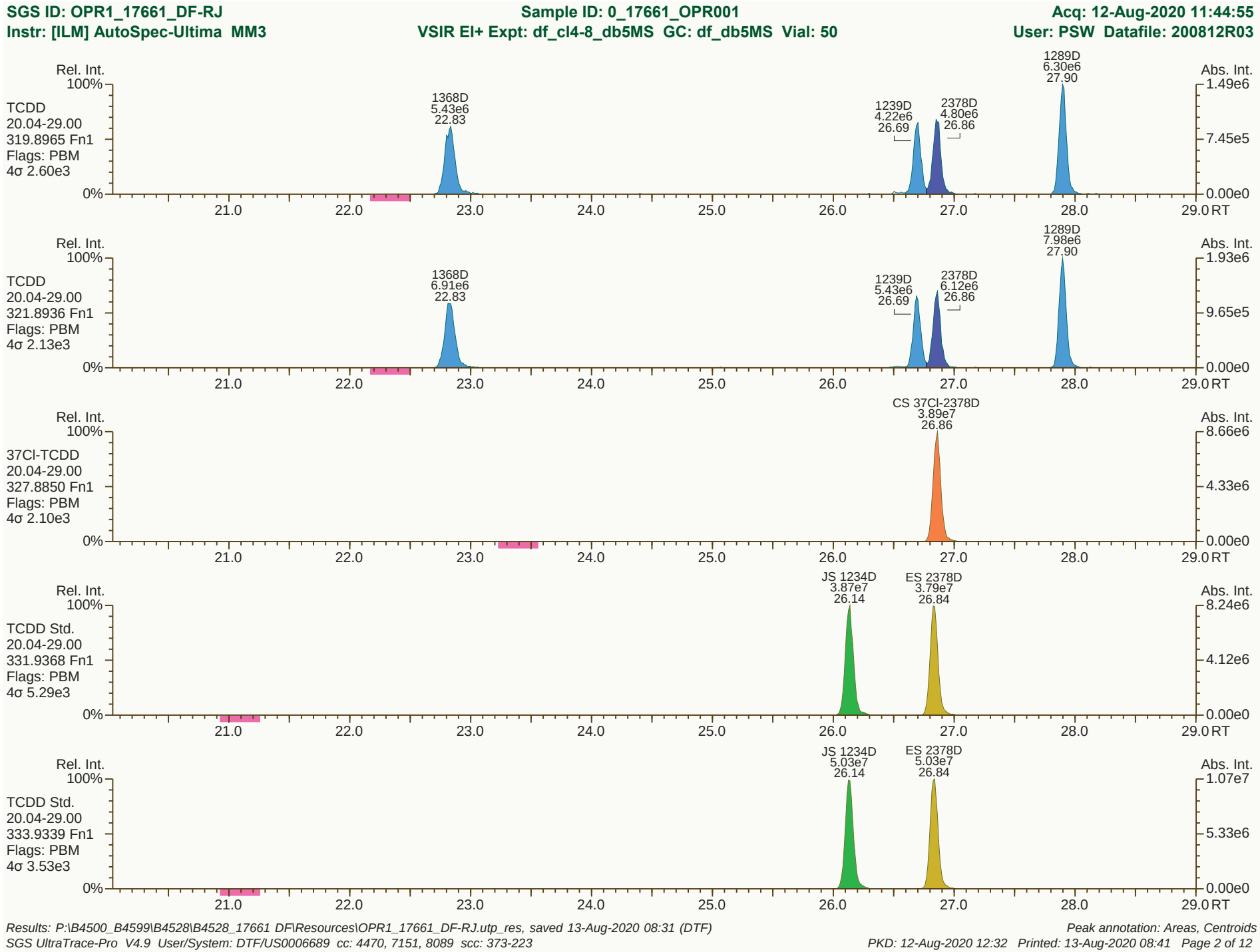


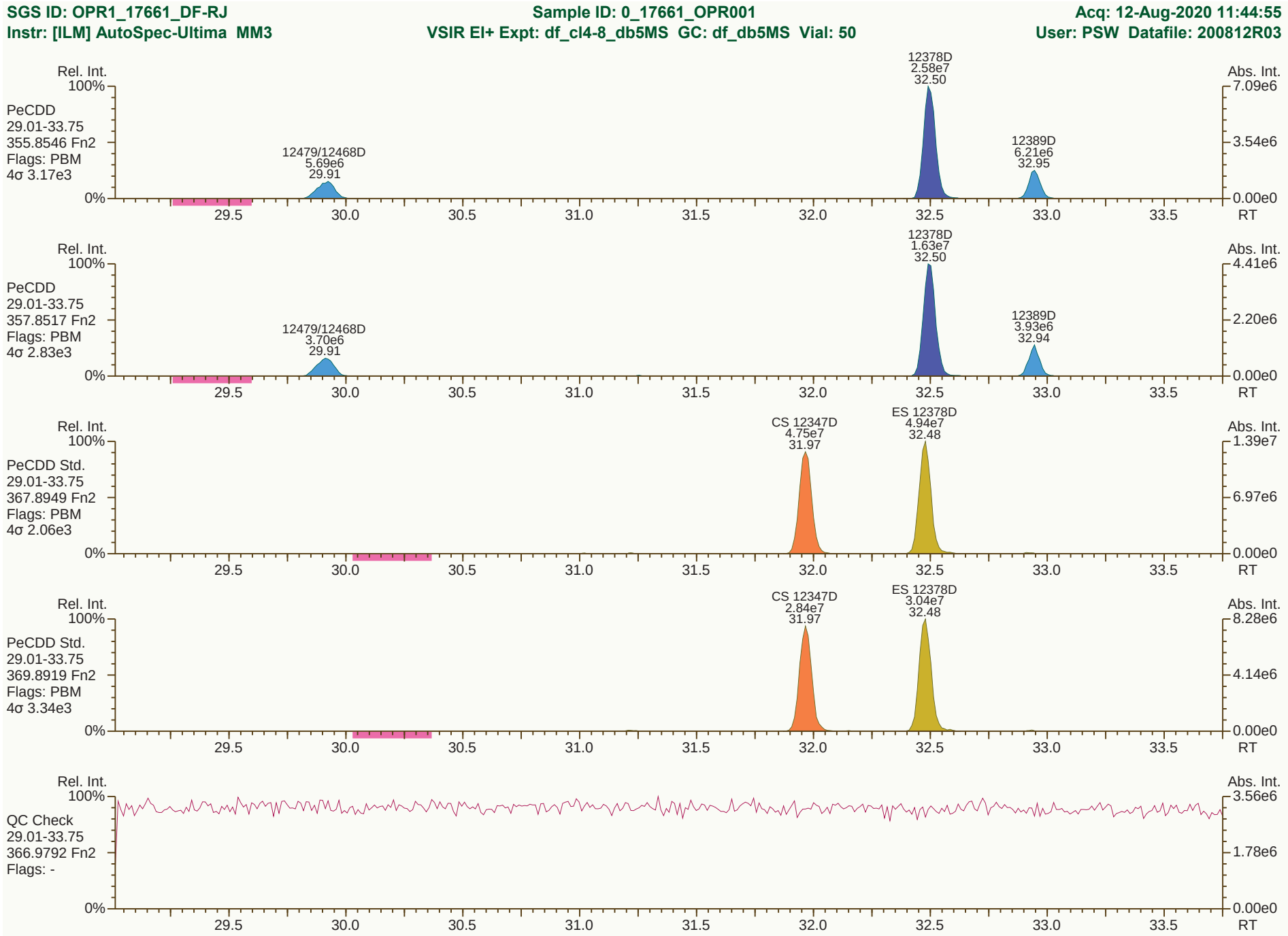
Results: P:\B4500_B4599\B4528\B4528_17661 DF\Resources\OPR1_17661_DF-RJ.utp_res, saved 13-Aug-2020 08:31 (DTF)

Peak annotation: Areas, Centroids

SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 scc: 373-223

PKD: n/a Printed: 13-Aug-2020 08:41 Page 1 of 12


SGS ID: OPR1_17661_DF-RJ
Sample ID: 0_17661_OPR001
Acq: 12-Aug-2020 11:44:55
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 50
User: PSW Datafile: 200812R03
Rel. Int.
Abs. Int.
TCDD
20.04-29.00
319.8965 Fn1
Flags: PBM
4σ 2.60e3
1368D 5.43e6 22.83
1239D 4.22e6 26.69
2378D 4.80e6 26.86
1289D 6.30e6 27.90
1.49e6
7.45e5
0.00e0
TCDD
20.04-29.00
321.8936 Fn1
Flags: PBM
4σ 2.13e3
1368D 6.91e6 22.83
1239D 5.43e6 26.69
2378D 6.12e6 26.86
1289D 7.98e6 27.90
1.93e6
9.65e5
0.00e0
37Cl-TCDD
20.04-29.00
327.8850 Fn1
Flags: PBM
4σ 2.10e3
CS 37Cl-2378D 3.89e7 26.86
8.66e6
4.33e6
0.00e0
TCDD Std.
20.04-29.00
331.9368 Fn1
Flags: PBM
4σ 5.29e3
JS 1234D 3.87e7 26.14
ES 2378D 3.79e7 26.84
8.24e6
4.12e6
0.00e0
TCDD Std.
20.04-29.00
333.9339 Fn1
Flags: PBM
4σ 3.53e3
JS 1234D 5.03e7 26.14
ES 2378D 5.03e7 26.84
1.07e7
5.33e6
0.00e0
100%
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT
Results: P:\B4500_B4599\B4528\B4528_17661 DF\Resources\OPR1_17661_DF-RJ.utp_res, saved 13-Aug-2020 08:31 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 4470, 7151, 8089 scc: 373-223
PKD: 12-Aug-2020 12:32 Printed: 13-Aug-2020 08:41 Page 2 of 12



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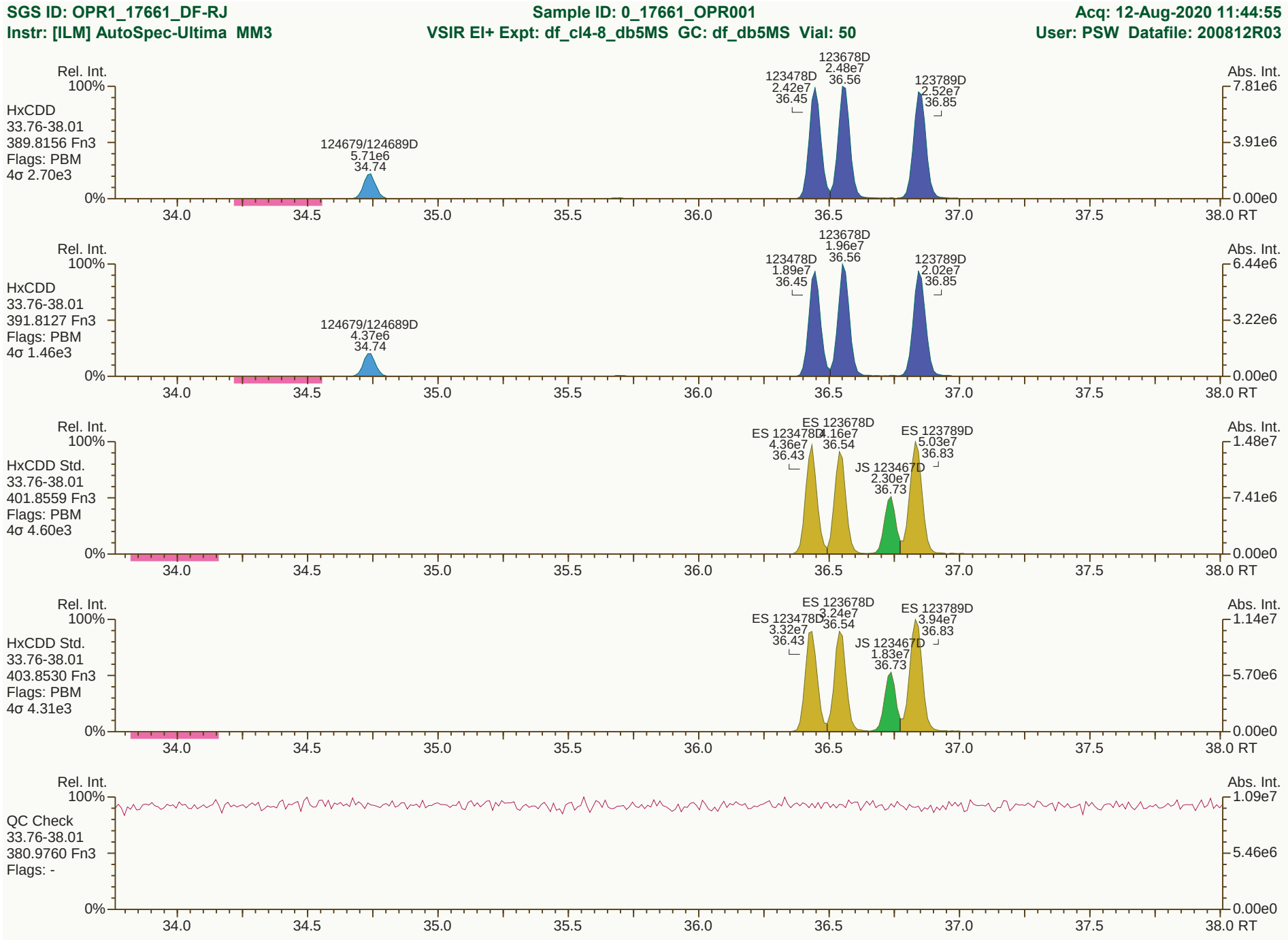
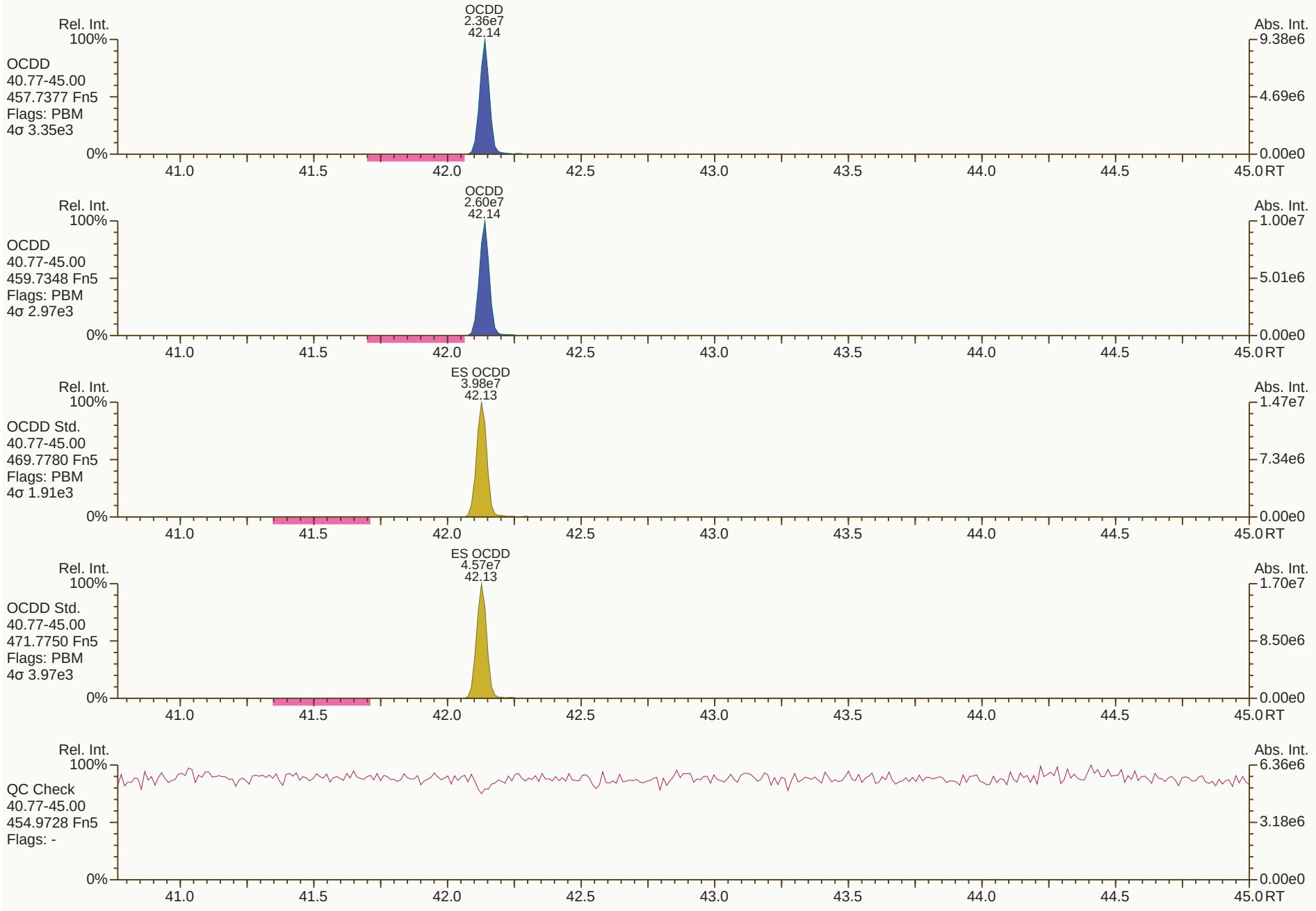
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 1118, 7222 scc: 373-223
PKD: 12-Aug-2020 12:32 Printed: 13-Aug-2020 08:41 Page 3 of 12



Results: P:\B4500_B4599\B4528\B4528_17661 DF\Resources\OPR1_17661_DF-RJ.utp_res, saved 13-Aug-2020 08:31 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 4760, 3055 scc: 373-223
PKD: 12-Aug-2020 12:32 Printed: 13-Aug-2020 08:41 Page 4 of 12


Rel. Int.
100%
HpCDD
38.02-40.75
423.7767 Fn4
Flags: PBM
4σ 1.74e3
0%
1234678D
1.90e7
39.76
1234679D
4.64e6
39.09
Abs. Int.
8.26e6
4.13e6
0.00e0
38.5
39.0
39.5
40.0
40.5
RT
Rel. Int.
100%
HpCDD
38.02-40.75
425.7737 Fn4
Flags: PBM
4σ 1.51e3
0%
1234678D
1.82e7
39.76
1234679D
4.45e6
39.09
Abs. Int.
7.97e6
3.98e6
0.00e0
38.5
39.0
39.5
40.0
40.5
RT
Rel. Int.
100%
HpCDD Std.
38.02-40.75
435.8169 Fn4
Flags: PBM
4σ 2.93e3
0%
ES 1234678D
3.75e7
39.74
Abs. Int.
1.62e7
8.09e6
0.00e0
38.5
39.0
39.5
40.0
40.5
RT
Rel. Int.
100%
HpCDD Std.
38.02-40.75
437.8140 Fn4
Flags: PBM
4σ 2.26e3
0%
ES 1234678D
3.57e7
39.74
Abs. Int.
1.54e7
7.70e6
0.00e0
38.5
39.0
39.5
40.0
40.5
RT
Rel. Int.
100%
QC Check
38.02-40.75
430.9728 Fn4
Flags: -
0%
Abs. Int.
6.79e6
3.40e6
0.00e0
38.5
39.0
39.5
40.0
40.5
RT

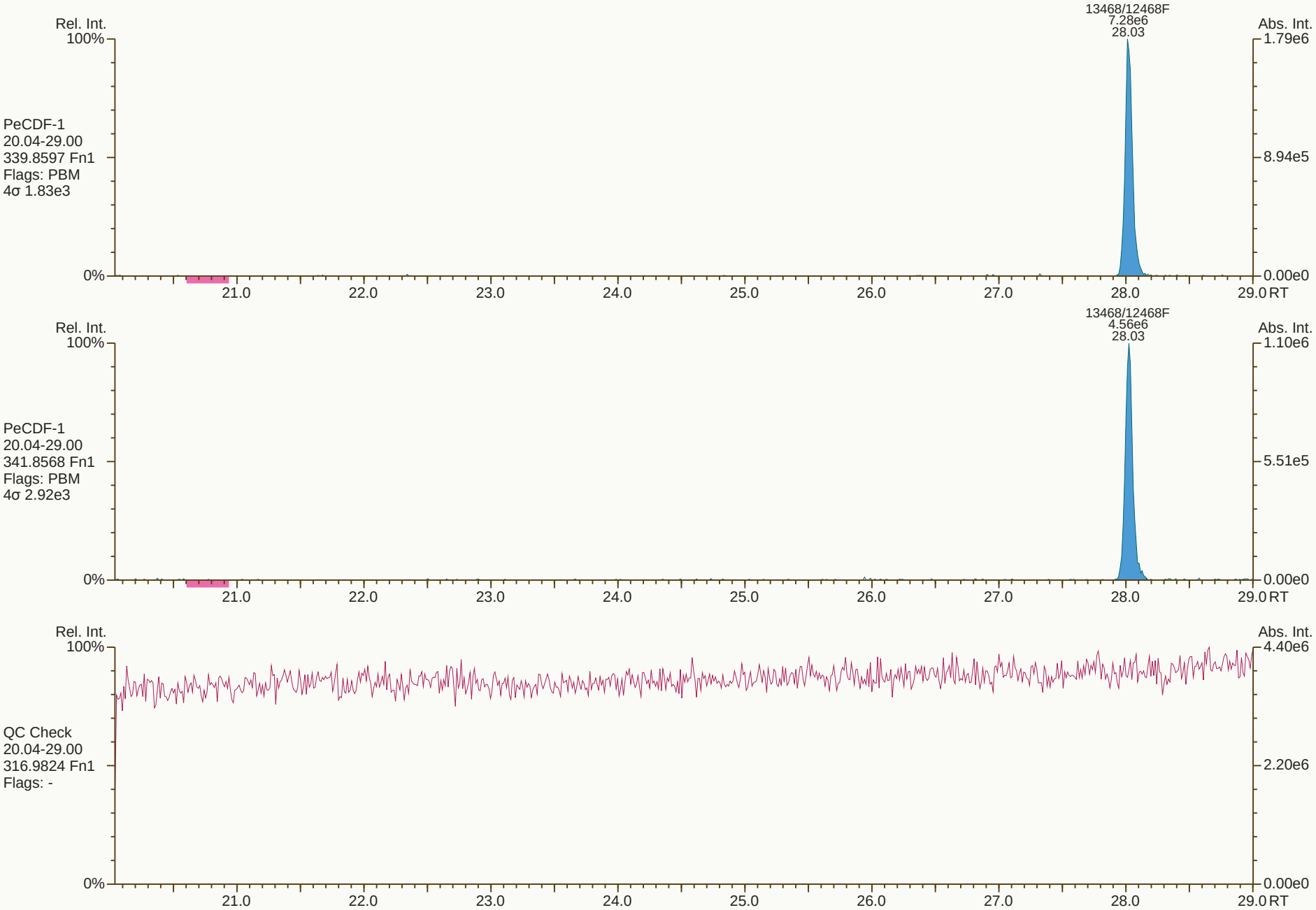

OCDD
2.36e7
42.14
Rel. Int.
Abs. Int.
OCDD
40.77-45.00
457.7377 Fn5
Flags: PBM
4σ 3.35e3
OCDD
2.60e7
42.14
OCDD
40.77-45.00
459.7348 Fn5
Flags: PBM
4σ 2.97e3
ES OCDD
3.98e7
42.13
OCDD Std.
40.77-45.00
469.7780 Fn5
Flags: PBM
4σ 1.91e3
ES OCDD
4.57e7
42.13
OCDD Std.
40.77-45.00
471.7750 Fn5
Flags: PBM
4σ 3.97e3
QC Check
40.77-45.00
454.9728 Fn5
Flags: -
RT


SGS ID: OPR1_17661_DF-RJ
Sample ID: 0_17661_OPR001
Acq: 12-Aug-2020 11:44:55
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 50
User: PSW Datafile: 200812R03
Rel. Int.
Abs. Int.
TCDF
20.04-29.00
303.9016 Fn1
Flags: PBM
4σ 1.72e3
1368F 8.15e6 20.61
2468F 1.97e6 21.80
2348F 7.33e6 25.79
2378F 6.37e6 25.91
1289F 8.06e6 28.06
TCDF
20.04-29.00
305.8987 Fn1
Flags: PBM
4σ 3.56e3
1368F 1.03e7 20.61
2468F 2.58e6 21.80
2348F 9.74e6 25.79
2378F 8.66e6 25.91
1289F 1.08e7 28.06
TCDF Std.
20.04-29.00
315.9419 Fn1
Flags: PBM
4σ 1.06e4
JS 1234F 6.23e7 24.40
ES 2378F 6.16e7 25.89
TCDF Std.
20.04-29.00
317.9389 Fn1
Flags: PBM
4σ 9.10e3
JS 1234F 7.86e7 24.40
ES 2378F 7.76e7 25.88
HxCDPE
20.04-29.00
375.8364 Fn1
Flags: PB
4σ 1.66e3
100%
0%
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
29.0 RT
1.86e6
9.32e5
0.00e0
2.48e6
1.24e6
1.32e7
6.62e6
1.62e7
8.12e6
7.35e3
3.67e3
Results: P:\B4500_B4599\B4528\B4528_17661 DF\Resources\OPR1_17661_DF-RJ.utp_res, saved 13-Aug-2020 08:31 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 4719, 2459, 5325 scc: 373-223
PKD: 12-Aug-2020 12:32 Printed: 13-Aug-2020 08:41 Page 7 of 12

SGS ID: OPR1_17661_DF-RJ
Instr: [ILM] AutoSpec-Ultima MM3

Sample ID: 0_17661_OPR001
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 50

Acq: 12-Aug-2020 11:44:55
User: PSW Datafile: 200812R03

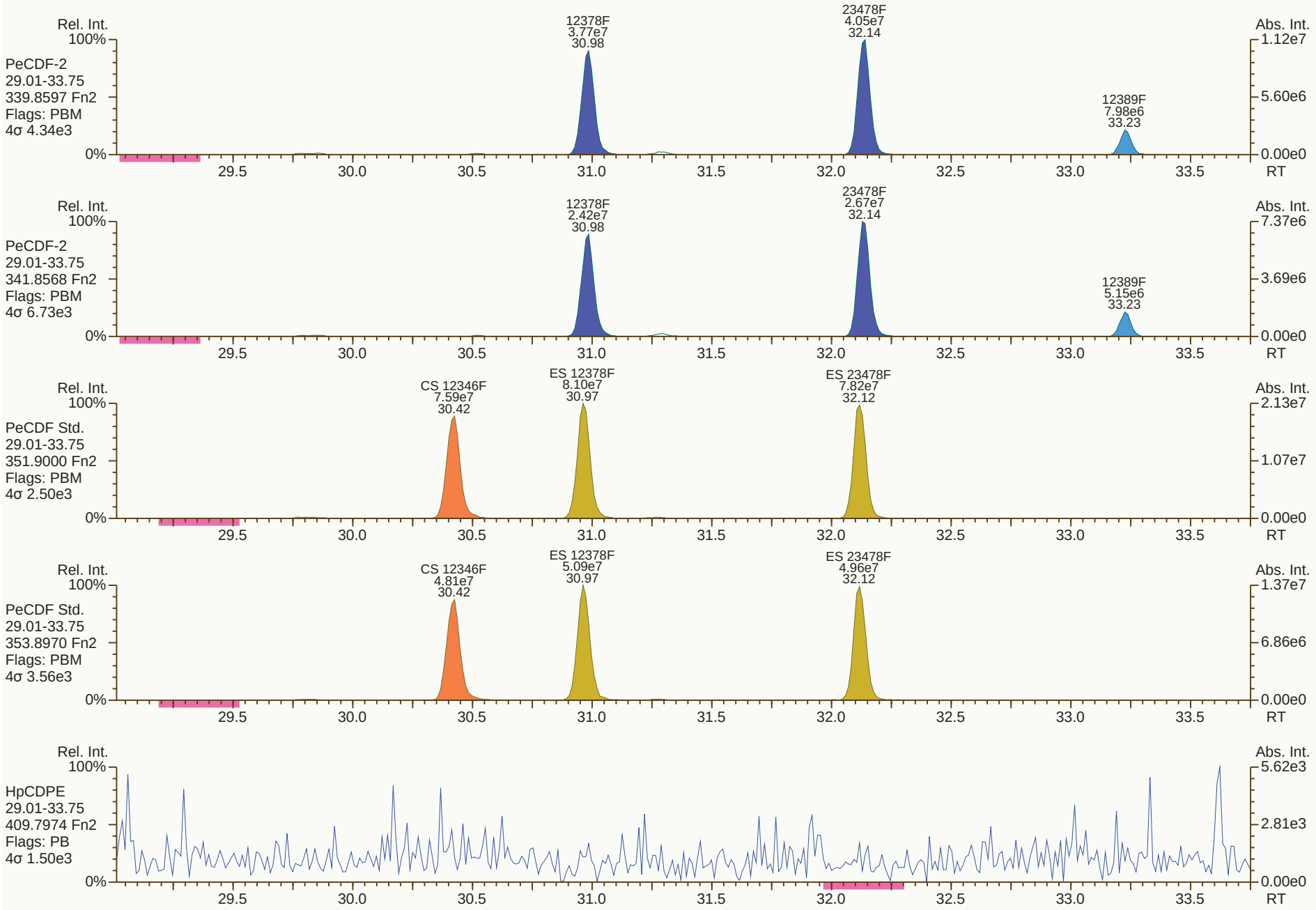


Results: P:\B4500_B4599\B4528\B4528_17661 DF\Resources\OPR1_17661_DF-RJ.utp_res, saved 13-Aug-2020 08:31 (DTF)
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 0983 scc: 373-223

Peak annotation: Areas, Centroids
PKD: 12-Aug-2020 12:32 Printed: 13-Aug-2020 08:41 Page 8 of 12

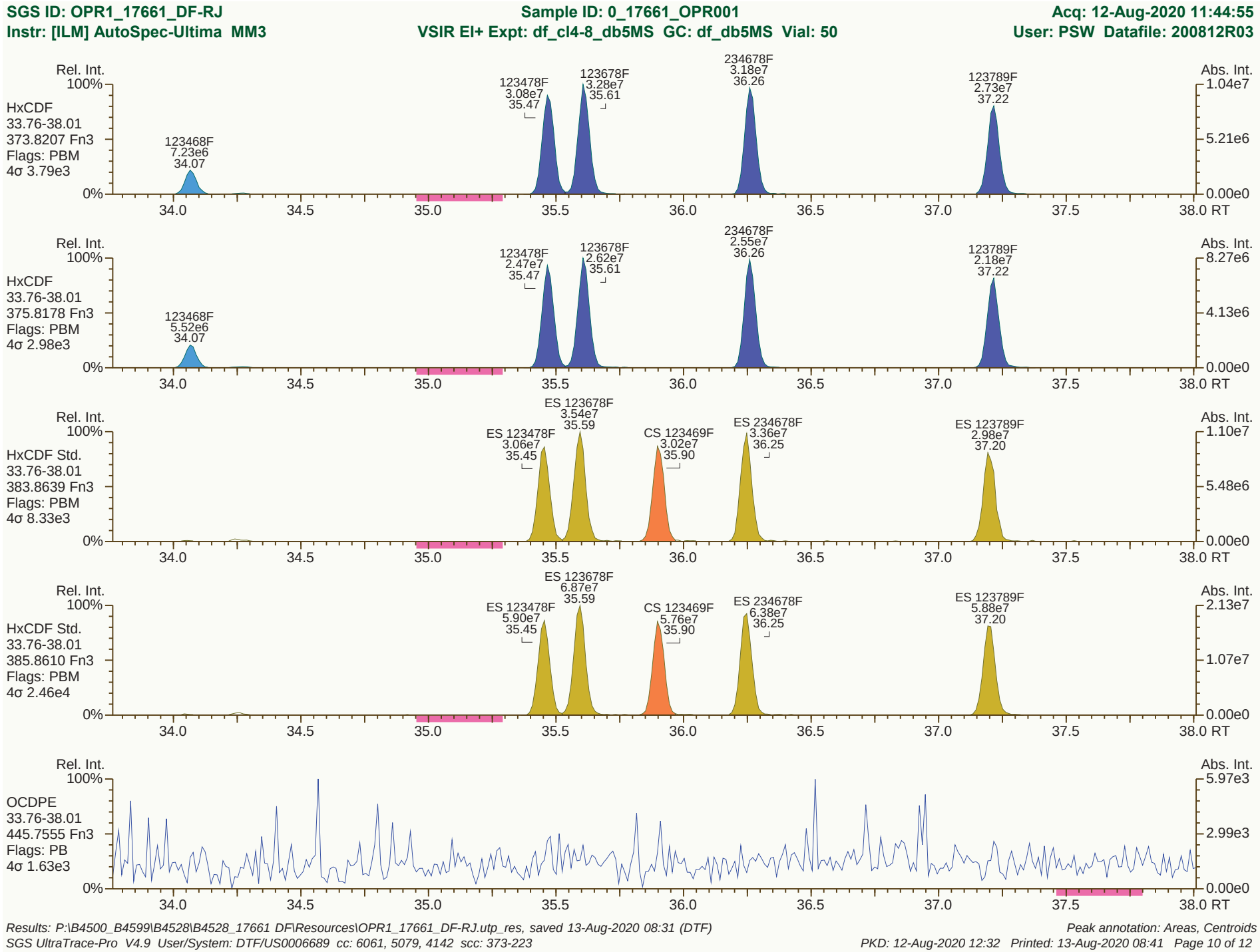
SGS ID: OPR1_17661_DF-RJ | Sample ID: 0_17661_OPR001 | Acq: 12-Aug-2020 11:44:55

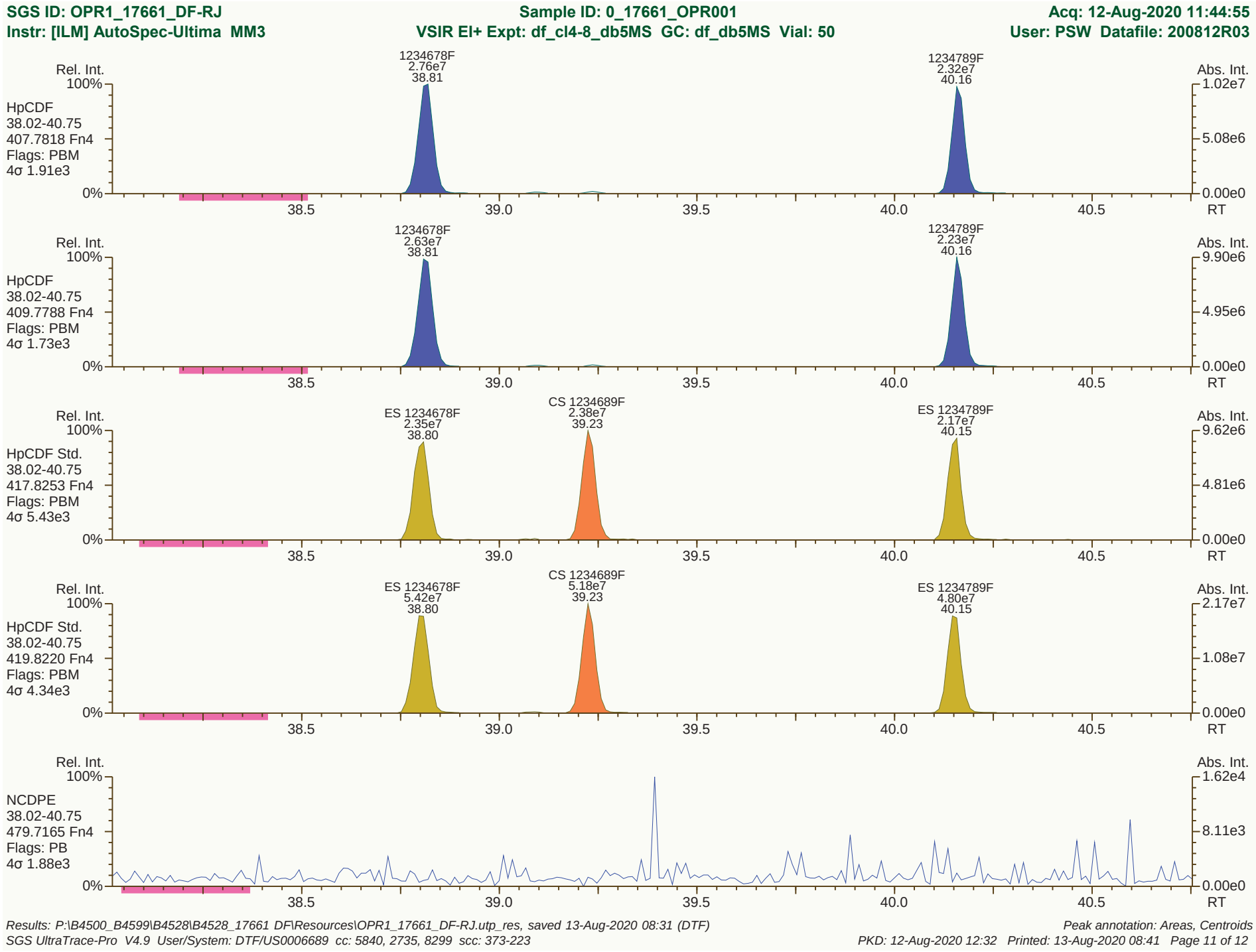
Instr: [ILM] AutoSpec-Ultima MM3 | VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 50 | User: PSW Datafile: 200812R03



Results: P:\B4500_B4599\B4528\B4528_17661 DF\Resources\OPR1_17661_DF-RJ.utp_res, saved 13-Aug-2020 08:31 (DTF) | *Peak annotation: Areas, Centroids*

SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 7084, 9565, 8130 scc: 373-223 | *PKD: 12-Aug-2020 12:32 Printed: 13-Aug-2020 08:41 Page 9 of 12*


SGS ID: OPR1_17661_DF-RJ
Sample ID: 0_17661_OPR001
Acq: 12-Aug-2020 11:44:55
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 50
User: PSW Datafile: 200812R03
Rel. Int.
Abs. Int.
HxCDF
33.76-38.01
373.8207 Fn3
Flags: PBM
4σ 3.79e3
123468F 7.23e6 34.07
123478F 3.08e7 35.47
123678F 3.28e7 35.61
234678F 3.18e7 36.26
123789F 2.73e7 37.22
HxCDF
33.76-38.01
375.8178 Fn3
Flags: PBM
4σ 2.98e3
123468F 5.52e6 34.07
123478F 2.47e7 35.47
123678F 2.62e7 35.61
234678F 2.55e7 36.26
123789F 2.18e7 37.22
HxCDF Std.
33.76-38.01
383.8639 Fn3
Flags: PBM
4σ 8.33e3
ES 123478F 3.06e7 35.45
ES 123678F 3.54e7 35.59
CS 123469F 3.02e7 35.90
ES 234678F 3.36e7 36.25
ES 123789F 2.98e7 37.20
HxCDF Std.
33.76-38.01
385.8610 Fn3
Flags: PBM
4σ 2.46e4
ES 123478F 5.90e7 35.45
ES 123678F 6.87e7 35.59
CS 123469F 5.76e7 35.90
ES 234678F 6.38e7 36.25
ES 123789F 5.88e7 37.20
OCDPE
33.76-38.01
445.7555 Fn3
Flags: PB
4σ 1.63e3
100%
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
38.0 RT
Results: P:\B4500_B4599\B4528\B4528_17661 DF\Resources\OPR1_17661_DF-RJ.utp_res, saved 13-Aug-2020 08:31 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 6061, 5079, 4142 scc: 373-223
PKD: 12-Aug-2020 12:32 Printed: 13-Aug-2020 08:41 Page 10 of 12


SGS ID: OPR1_17661_DF-RJ
Sample ID: 0_17661_OPR001
Acq: 12-Aug-2020 11:44:55
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 50
User: PSW Datafile: 200812R03
Rel. Int.
Abs. Int.
HpCDF
38.02-40.75
407.7818 Fn4
Flags: PBM
4σ 1.91e3
1234678F
2.76e7
38.81
1234789F
2.32e7
40.16
1.02e7
5.08e6
0.00e0
HpCDF
38.02-40.75
409.7788 Fn4
Flags: PBM
4σ 1.73e3
1234678F
2.63e7
38.81
1234789F
2.23e7
40.16
9.90e6
4.95e6
HpCDF Std.
38.02-40.75
417.8253 Fn4
Flags: PBM
4σ 5.43e3
ES 1234678F
2.35e7
38.80
CS 1234689F
2.38e7
39.23
ES 1234789F
2.17e7
40.15
9.62e6
4.81e6
HpCDF Std.
38.02-40.75
419.8220 Fn4
Flags: PBM
4σ 4.34e3
ES 1234678F
5.42e7
38.80
CS 1234689F
5.18e7
39.23
ES 1234789F
4.80e7
40.15
2.17e7
1.08e7
NCDPE
38.02-40.75
479.7165 Fn4
Flags: PB
4σ 1.88e3
1.62e4
8.11e3
100%
0%
38.5
39.0
39.5
40.0
40.5
RT
Results: P:\B4500_B4599\B4528\B4528_17661 DF\Resources\OPR1_17661_DF-RJ.utp_res, saved 13-Aug-2020 08:31 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 5840, 2735, 8299 scc: 373-223
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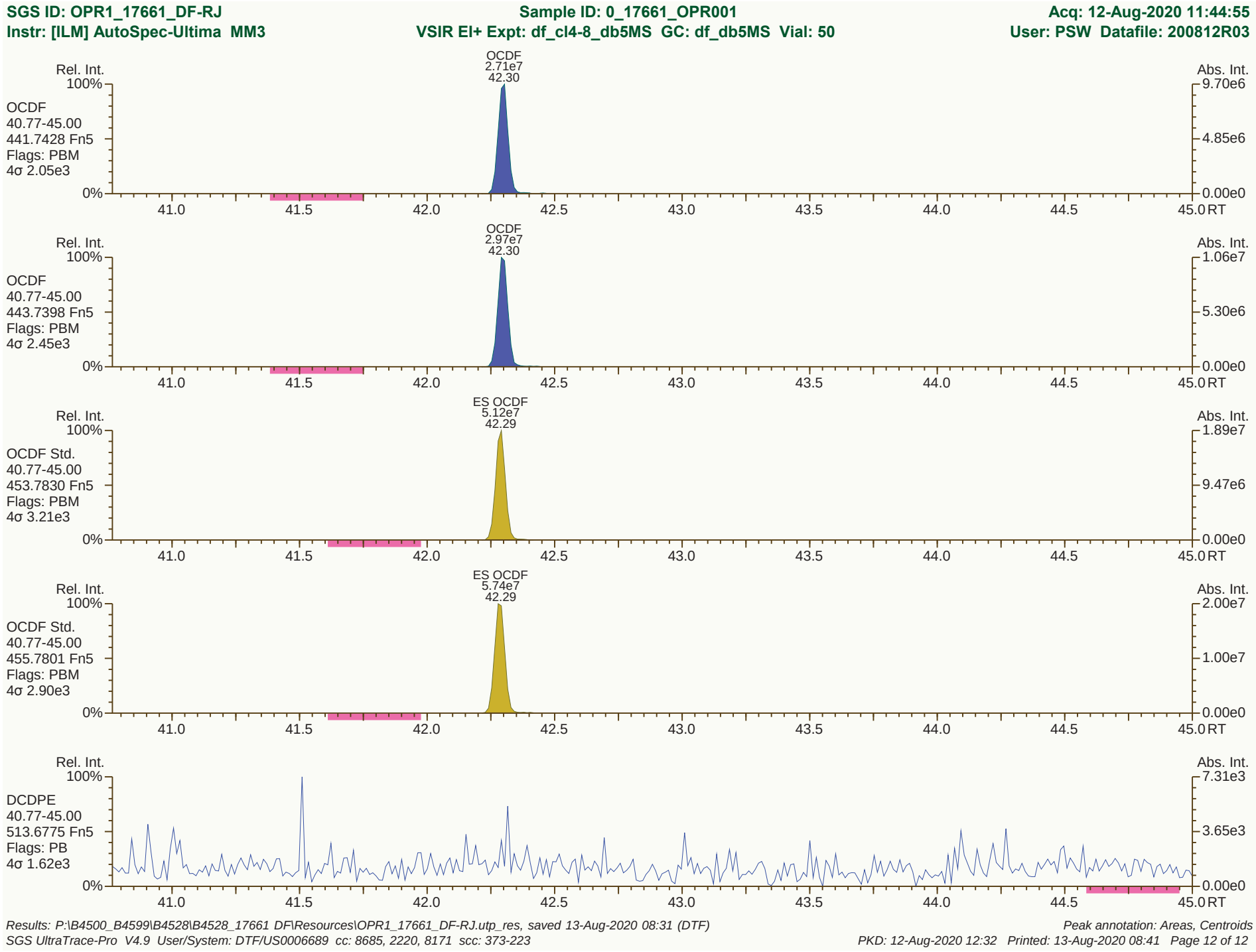
SGS ID: OPR1_17661_DF-RJ
Sample ID: 0_17661_OPR001
Acq: 12-Aug-2020 11:44:55
Instr: [ILM] AutoSpec-Ultima MM3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 50
User: PSW Datafile: 200812R03
OCDF
2.71e7
42.30
Rel. Int.
Abs. Int.
OCDF
40.77-45.00
441.7428 Fn5
Flags: PBM
4σ 2.05e3
OCDF
2.97e7
42.30
OCDF
40.77-45.00
443.7398 Fn5
Flags: PBM
4σ 2.45e3
ES OCDF
5.12e7
42.29
OCDF Std.
40.77-45.00
453.7830 Fn5
Flags: PBM
4σ 3.21e3
ES OCDF
5.74e7
42.29
OCDF Std.
40.77-45.00
455.7801 Fn5
Flags: PBM
4σ 2.90e3
DCDPE
40.77-45.00
513.6775 Fn5
Flags: PB
4σ 1.62e3
41.0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
45.0 RT
Results: P:\B4500_B4599\B4528\B4528_17661 DF\Resources\OPR1_17661_DF-RJ.utp_res, saved 13-Aug-2020 08:31 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 8685, 2220, 8171 scc: 373-223
PKD: 12-Aug-2020 12:32 Printed: 13-Aug-2020 08:41 Page 12 of 12



FINAL LAB REPORT

KMCC Navassa

B4585

28-Aug-2020

Prepared by

SGS NORTH AMERICA

Prepared for

EarthCon

Mary Brookshire

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Marietta, GA 30062
Phone: 404.317.7748
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This report is approved by

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CN=Tamara Burkamper,
E=tamara.morgan@sgs.com
I have reviewed this document
2020-08-28 14:48:51

Tamara Burkamper

Senior Project Manager

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Results reported relate only to the items tested.

PROJECT INFORMATION SUMMARY *(When applicable, see QC Annotations for details)*

Client Project	KMCC Navassa
SGS Project #	B4585
Analytical Protocol(s)	8290A
No. Samples Submitted	2
Additional QC Sample(s)	0
No. Laboratory Method Blanks	1
No. OPRs / Batch CS3	1
Date Received	26-Aug-20
Condition Received	Good
Temperature upon Receipt (ºC)	0.7
Extraction within Holding Time	Yes
Analysis within Holding Time	Yes

QC ANNOTATIONS:

1. Please see Appendices attached for data qualifier/attribute and lab identifier descriptions which may be contained in the project.

No difficulties were encountered during processing of the samples.

APPENDIX A: GENERAL DATA QUALIFIERS / DATA ATTRIBUTES

B	The analyte was found in the method blank, at a concentration that was at least 10% of the concentration in the sample.
C	Two or more congeners co-elute. In EDDs, C denotes the lowest IUPAC congener in a co-elution group and additional co-eluters for the group are shown with the number of the lowest IUPAC co-eluter.
E	The reported concentration exceeds the calibration range (upper point of the calibration curve) and is an estimated value.
EMPC	Represents an Estimated Maximum Possible Concentration. EMPCs arise in cases where the signal/noise ratio is not sufficient for peak identification (the determined ion-abundance ratio is outside the allowed theoretical range), or where there is a co-eluting interference.
H/h	If the standard recovery is below the method or SOP specified value “H” is assigned. If the obtained value is less than half the specified value “h” is assigned.
J	Indicates that an analyte has a concentration below the reporting limit (lowest point of the calibration curve) and is an estimated value.
ND	Indicates a non-detect.
NR or R	Indicates a value that is not reportable.
PR	Due to interference, the associated congener is poorly resolved.
QI	Indicates the presence of a quantitative interference.
SI	Denotes “Single Ion Mode” and is utilized for PCBs where the secondary ion trace has a significantly elevated noise level due to background PFK. Responses for such peaks are calculated using an EMPC approach based solely on the primary ion area(s) and may be considered estimates.
U	The analyte was not detected. The estimated detection limit (EDL) may be reported for this analyte.
V	The labeled standard recovery was found to be outside of the method control limits.

APPENDIX B: DRBC/TMDL SPECIFIC DATA QUALIFIERS / DATA ATTRIBUTES

J	The reported result is an estimate. The value is less than the minimum calibration level but greater than the estimated detection limit (EDL).
U	The analyte was not detected in the sample at the estimated detection limit (EDL).
E	The reported concentration is an estimate. The value exceeds the upper calibration range (upper point of the calibration curve).
D	Dilution Data. Result was obtained from the analysis of a dilution.
B	Analyte found in the sample and associated method blank.
C	Co-eluting congener
Cxx	Co-elutes with the indicated congener, data is reported under the lowest IUPAC congener. 'Xx' denotes the IUPAC number with the lowest numerical designated congener.
NR	Analyte is not reportable because of problems in sample preparation or analysis.
V	Labeled standard recovery is not within method control limits.
X	Results from re-injection/repeat/second-column analysis.
EMPC	Estimated maximum possible concentration. Indicates that a peak is identified but did not meet the method specified ion-abundance ratio.

APPENDIX C: LAB IDENTIFIERS

AR	Indicates use of the archived portion of the sample extract.
CU	Indicates a sample that required additional clean-up prior to MS injection/processing.
D	Indicates a dilution of the sample extract. The number that follows the "D" indicates the dilution factor.
DE	Indicates a dilution performed with the addition of ES (extraction standard) solution.
DUP	Designation for a duplicate sample.
MS	Designation for a matrix spike.
MSD	Designation for a matrix spike duplicate.
RJ	Indicates a reinjection of the sample extract.
S	Indicates a sample split. The number that follows the "S" indicates the split factor.

SGS CERTIFICATIONS

Alaska	17-012
Arkansas	88-0682
California (ELAP)	ELAP Cert #2914
CLIA	34D1013708
Connecticut	PH-0258
USDA Soil Permit	P330-20-00103
American Association for Laboratory Accreditation (A2LA)	2726.01 (ISO 17025:2005, 2009 TNI, DoD ELAP QSM 5.1)
Florida DOH	E87634
Louisiana DEQ	4115
Louisiana DOH	LA031
Maine	2018018
Massachusetts	M-NC919
Minnesota (Primary NELAP For Method 23)	037-999-459
Montana	0106
New Hampshire (Primary NELAP)	2085
New Hampshire (Secondary NELAP)	2083
New Jersey	NC100
New York	11685
North Carolina DEQ	481
North Dakota	R-197
Oregon	NC200002
Pennsylvania	68-03675
South Carolina	99029002
Texas	T104704260
US Coast Guard	16714/159.317/SGS
Vermont	VT-87634
Virginia	460214
Washington	C913

Rev. 13-Apr-2020

Sample ID: CS-TB-16A

Method 8290A

Client Data		Sample Data		Laboratory Data			
Name:	EarthCon	Matrix:	Soil	Lab Project ID:	B4585	Date Received:	26-Aug-2020
Project ID:	KMCC Navassa	Weight/Volume:	9.80 g	Lab Sample ID	B4585_17706_DF_001	Date Extracted:	26-Aug-2020
Date Collected:	25-Aug-2020	% Solid:	79.7 %	QC Batch No:	17706	Date Analyzed:	28-Aug-2020
		Split:	-	Dilution:	-	Time Analyzed:	8:37:13

Analyte	Conc. (pg/g)	DL (pg/g)	EMPC (pg/g)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	0.127			ES 2378-TCDD	86.8	
12378-PeCDD	ND	0.177			ES 12378-PeCDD	83.5	
123478-HxCDD	0.398			J	ES 123478-HxCDD	73.3	
123678-HxCDD	0.745			J	ES 123678-HxCDD	75.2	
123789-HxCDD	0.686			J	ES 123789-HxCDD	73.6	
1234678-HpCDD	23.8				ES 1234678-HpCDD	66.4	
OCDD	206				ES OCDD	52.3	
2378-TCDF	ND	0.154			ES 2378-TCDF	84.1	
12378-PeCDF	ND	0.106			ES 12378-PeCDF	91	
23478-PeCDF	0.251			J	ES 23478-PeCDF	85.7	
123478-HxCDF	0.392			J	ES 123478-HxCDF	74.1	
123678-HxCDF	0.29			J	ES 123678-HxCDF	74	
234678-HxCDF	0.222			J	ES 234678-HxCDF	72.5	
123789-HxCDF	ND	0.0951			ES 123789-HxCDF	80.3	
1234678-HpCDF	4.38				ES 1234678-HpCDF	68.8	
1234789-HpCDF	EMPC		0.249	J	ES 1234789-HpCDF	64.7	
OCDF	EMPC		6.67		ES OCDF	54.1	
Totals					**Standard**	**CS Recoveries**	
					CS 37Cl-2378-TCDD	87	
Total TCDD	1.71		1.71		CS 12347-PeCDD	97.1	
Total PeCDD	3.29		3.61		CS 12346-PeCDF	88	
Total HxCDD	12.7		13.7		CS 123469-HxCDF	77.5	
Total HpCDD	77.4		77.4		CS 1234689-HpCDF	68.6	
Total TCDF	2.74		3.48				
Total PeCDF	1.97		3.08				
Total HxCDF	4.56		4.71				
Total HpCDF	10.4		10.7				
Total PCDD/Fs	**321**		**331**				
ITEF TEQs							
TEQ: ND=0	0.886		0.896				
TEQ: ND=DL/2	1.01	0.192	1.02				
TEQ: ND=DL	1.13	0.384	1.14				

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Sample ID: CS-TB-16A — TEQ Summary — Method 8290A

Client Project Name:	EarthCon	Matrix:	Soil	Lab Sample ID:	B4585_17706_DF_001
Cliend Project ID:	KMCC Navassa	Weight/Volume:	9.80 g	QC Batch No.:	17706
Date Collected:	25-Aug-2020	Split:	-	Date Extracted:	26-Aug-2020
Date Received:	26-Aug-2020	Dilution:	-	Date Analyzed:	28-Aug-2020 08:37
Lab Project No:	B4585	Units	pg/g		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	(0.127)		0.127	(0.127)	(0.127)	(0.127)
12378-PeCDD	(0.177)		0.177	(0.0885)	(0.177)	(0.177)
123478-HxCDD	0.398	J	0.179	0.0398	0.0398	0.0398
123678-HxCDD	0.745	J	0.17	0.0745	0.0745	0.0745
123789-HxCDD	0.686	J	0.177	0.0686	0.0686	0.0686
1234678-HpCDD	23.8		0.161	0.238	0.238	0.238
OCDD	206		0.803	0.206	0.0206	0.0618
2378-TCDF	(0.154)		0.154	(0.0154)	(0.0154)	(0.0154)
12378-PeCDF	(0.106)		0.106	(0.00532)	(0.00532)	(0.00319)
23478-PeCDF	0.251	J	0.114	0.125	0.125	0.0752
123478-HxCDF	0.392	J	0.0793	0.0392	0.0392	0.0392
123678-HxCDF	0.29	J	0.0817	0.029	0.029	0.029
234678-HxCDF	0.222	J	0.084	0.0222	0.0222	0.0222
123789-HxCDF	(0.0951)		0.0951	(0.00951)	(0.00951)	(0.00951)
1234678-HpCDF	4.38		0.0798	0.0438	0.0438	0.0438
1234789-HpCDF	[0.249]	J	0.113	[0.00249]	[0.00249]	[0.00249]
OCDF	[6.67]		0.411	[0.00667]	[0.000667]	[0.002]

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TEQ Summaries			
EMPC = 0, ND = 0	0.886	0.701	0.692
EMPC = 0, ND = DL / 2	1.01	0.868	0.858
EMPC = 0, ND = DL	1.13	1.04	1.02
EMPC = 0, < J-level = 0	0.488	0.302	0.344
EMPC = EMPC, ND = 0	0.896	0.704	0.696
EMPC = EMPC, ND = DL / 2	1.02	0.871	0.863
EMPC = EMPC, ND = DL	1.14	1.04	1.03
EMPC = EMPC, < J-level = 0	0.495	0.303	0.346

Checkcode: 970-919-FKT

SGS North America - DF v0.7

Sample ID: CS-53

Method 8290A

Client Data		Sample Data		Laboratory Data			
Name:	EarthCon	Matrix:	Soil	Lab Project ID:	B4585	Date Received:	26-Aug-2020
Project ID:	KMCC Navassa	Weight/Volume:	10.90 g	Lab Sample ID	B4585_17706_DF_002	Date Extracted:	26-Aug-2020
Date Collected:	25-Aug-2020	% Solid:	86.2 %	QC Batch No:	17706	Date Analyzed:	28-Aug-2020
		Split:	-	Dilution:	-	Time Analyzed:	9:23:38

Analyte	Conc. (pg/g)	DL (pg/g)	EMPC (pg/g)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	0.137			ES 2378-TCDD	72.8	
12378-PeCDD	0.281			J	ES 12378-PeCDD	73.8	
123478-HxCDD	0.748			J	ES 123478-HxCDD	66.7	
123678-HxCDD	1.39			J	ES 123678-HxCDD	68.2	
123789-HxCDD	1.1			J	ES 123789-HxCDD	68.2	
1234678-HpCDD	37.3				ES 1234678-HpCDD	59.8	
OCDD	352				ES OCDD	49.8	
2378-TCDF	EMPC		0.669		ES 2378-TCDF	72.7	
12378-PeCDF	0.587			J	ES 12378-PeCDF	79.6	
23478-PeCDF	0.738			J	ES 23478-PeCDF	75.8	
123478-HxCDF	0.79			J	ES 123478-HxCDF	66.5	
123678-HxCDF	0.59			J	ES 123678-HxCDF	67.4	
234678-HxCDF	EMPC		0.461	J	ES 234678-HxCDF	67.1	
123789-HxCDF	ND	0.198			ES 123789-HxCDF	71.3	
1234678-HpCDF	4.28				ES 1234678-HpCDF	63.5	
1234789-HpCDF	0.388			J	ES 1234789-HpCDF	58.9	
OCDF	9.01				ES OCDF	50.6	

Totals					Standard	CS Recoveries	
					CS 37Cl-2378-TCDD	96.1	
Total TCDD	3.37		3.94		CS 12347-PeCDD	110	
Total PeCDD	6.61		7.54		CS 12346-PeCDF	101	
Total HxCDD	24.2		25.9		CS 123469-HxCDF	90.1	
Total HpCDD	126		126		CS 1234689-HpCDF	81.1	
Total TCDF	5.56		11				
Total PeCDF	7.71		8.34				
Total HxCDF	5.67		6.83				
Total HpCDF	10.4		10.7				
Total PCDD/Fs	**551**		**562**				
ITEF TEQs							
TEQ: ND=0	1.78		1.89				
TEQ: ND=DL/2	1.86	0.199	1.97				
TEQ: ND=DL	1.94	0.397	2.05				

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Sample ID: CS-53 — TEQ Summary — Method 8290A

Client Project Name:	EarthCon	Matrix:	Soil	Lab Sample ID:	B4585_17706_DF_002
Cliend Project ID:	KMCC Navassa	Weight/Volume:	10.90 g	QC Batch No.:	17706
Date Collected:	25-Aug-2020	Split:	-	Date Extracted:	26-Aug-2020
Date Received:	26-Aug-2020	Dilution:	-	Date Analyzed:	28-Aug-2020 09:23
Lab Project No:	B4585	Units	pg/g		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	(0.137)		0.137	(0.137)	(0.137)	(0.137)
12378-PeCDD	0.281	J	0.132	0.141	0.281	0.281
123478-HxCDD	0.748	J	0.149	0.0748	0.0748	0.0748
123678-HxCDD	1.39	J	0.152	0.139	0.139	0.139
123789-HxCDD	1.1	J	0.151	0.11	0.11	0.11
1234678-HpCDD	37.3		0.154	0.373	0.373	0.373
OCDD	352		0.703	0.352	0.0352	0.106
2378-TCDF	[0.669]		0.177	[0.0669]	[0.0669]	[0.0669]
12378-PeCDF	0.587	J	0.103	0.0293	0.0293	0.0176
23478-PeCDF	0.738	J	0.103	0.369	0.369	0.221
123478-HxCDF	0.79	J	0.163	0.079	0.079	0.079
123678-HxCDF	0.59	J	0.162	0.059	0.059	0.059
234678-HxCDF	[0.461]	J	0.174	[0.0461]	[0.0461]	[0.0461]
123789-HxCDF	(0.198)		0.198	(0.0198)	(0.0198)	(0.0198)
1234678-HpCDF	4.28		0.076	0.0428	0.0428	0.0428
1234789-HpCDF	0.388	J	0.106	0.00388	0.00388	0.00388
OCDF	9.01		0.375	0.00901	0.000901	0.0027

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TEQ Summaries			
EMPC = 0, ND = 0	1.78	1.6	1.51
EMPC = 0, ND = DL / 2	1.86	1.68	1.59
EMPC = 0, ND = DL	1.94	1.75	1.67
EMPC = 0, < J-level = 0	0.777	0.452	0.524
EMPC = EMPC, ND = 0	1.89	1.71	1.62
EMPC = EMPC, ND = DL / 2	1.97	1.79	1.7
EMPC = EMPC, ND = DL	2.05	1.87	1.78
EMPC = EMPC, < J-level = 0	0.844	0.519	0.591

Checkcode: 126-394-CMZ

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Sample ID: Method Blank B4585_17706 — Method 8290A

Client Data		Sample Data		Laboratory Data			
Name:	EarthCon	Matrix:	Soil	Lab Project ID:	B4585	Date Received:	n/a
Project ID:	KMCC Navassa	Weight/Volume:	10.00 g	Lab Sample ID	MB1_17706_DF_SDS	Date Extracted:	26-Aug-2020
Date Collected:	n/a	% Solid:	n/a	QC Batch No:	17706	Date Analyzed:	27-Aug-2020
		Split:	-	Dilution:	-	Time Analyzed:	18:33:16

Analyte	Conc. (pg/g)	DL (pg/g)	EMPC (pg/g)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	0.114			ES 2378-TCDD	99.4	
12378-PeCDD	ND	0.107			ES 12378-PeCDD	91.5	
123478-HxCDD	ND	0.129			ES 123478-HxCDD	84.2	
123678-HxCDD	ND	0.13			ES 123678-HxCDD	84.8	
123789-HxCDD	ND	0.128			ES 123789-HxCDD	84.4	
1234678-HpCDD	ND	0.0998			ES 1234678-HpCDD	79	
OCDD	ND	0.407			ES OCDD	68	
2378-TCDF	ND	0.0788			ES 2378-TCDF	96.3	
12378-PeCDF	ND	0.0816			ES 12378-PeCDF	101	
23478-PeCDF	ND	0.0829			ES 23478-PeCDF	93.7	
123478-HxCDF	ND	0.0792			ES 123478-HxCDF	80.2	
123678-HxCDF	ND	0.0733			ES 123678-HxCDF	82.8	
234678-HxCDF	ND	0.083			ES 234678-HxCDF	81.9	
123789-HxCDF	ND	0.0918			ES 123789-HxCDF	89.6	
1234678-HpCDF	ND	0.0553			ES 1234678-HpCDF	85.9	
1234789-HpCDF	ND	0.0857			ES 1234789-HpCDF	71.6	
OCDF	ND	0.318			ES OCDF	65.6	
Totals					**Standard**	**CS Recoveries**	
					CS 37Cl-2378-TCDD	95.9	
Total TCDD	ND	0.114	ND		CS 12347-PeCDD	104	
Total PeCDD	ND	0.107	ND		CS 12346-PeCDF	99.6	
Total HxCDD	ND	0.129	ND		CS 123469-HxCDF	86.5	
Total HpCDD	ND	0.0998	ND		CS 1234689-HpCDF	83	
Total TCDF	ND	0.0788	ND				
Total PeCDF	ND	0.0822	ND				
Total HxCDF	ND	0.0815	ND				
Total HpCDF	ND	0.0683	ND				
Total PCDD/Fs	**ND**		**ND**				
ITEF TEQs							
TEQ: ND=0	0		0				
TEQ: ND=DL/2	0.148	0.148	0.148				
TEQ: ND=DL	0.295	0.295	0.295				

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Sample ID: Method Blank B4585_17706 — TEQ Summary — Method 8290A

Client Project Name:	EarthCon	Matrix:	Soil	Lab Sample ID:	MB1_17706_DF_SDS
Cliend Project ID:	KMCC Navassa	Weight/Volume:	10.00 g	QC Batch No.:	17706
Date Collected:	n/a	Split:	-	Date Extracted:	26-Aug-2020
Date Received:	n/a	Dilution:	-	Date Analyzed:	27-Aug-2020 18:33
Lab Project No:	B4585	Units	pg/g		

Analyte	Result	Qualifiers	DLs	I-TEQ	WHO-1998	WHO-2005
2378-TCDD	(0.114)		0.114	(0.114)	(0.114)	(0.114)
12378-PeCDD	(0.107)		0.107	(0.0534)	(0.107)	(0.107)
123478-HxCDD	(0.129)		0.129	(0.0129)	(0.0129)	(0.0129)
123678-HxCDD	(0.13)		0.13	(0.013)	(0.013)	(0.013)
123789-HxCDD	(0.128)		0.128	(0.0128)	(0.0128)	(0.0128)
1234678-HpCDD	(0.0998)		0.0998	(0.000998)	(0.000998)	(0.000998)
OCDD	(0.407)		0.407	(0.000407)	(0.0000407)	(0.000122)
2378-TCDF	(0.0788)		0.0788	(0.00788)	(0.00788)	(0.00788)
12378-PeCDF	(0.0816)		0.0816	(0.00408)	(0.00408)	(0.00245)
23478-PeCDF	(0.0829)		0.0829	(0.0414)	(0.0414)	(0.0249)
123478-HxCDF	(0.0792)		0.0792	(0.00792)	(0.00792)	(0.00792)
123678-HxCDF	(0.0733)		0.0733	(0.00733)	(0.00733)	(0.00733)
234678-HxCDF	(0.083)		0.083	(0.0083)	(0.0083)	(0.0083)
123789-HxCDF	(0.0918)		0.0918	(0.00918)	(0.00918)	(0.00918)
1234678-HpCDF	(0.0553)		0.0553	(0.000553)	(0.000553)	(0.000553)
1234789-HpCDF	(0.0857)		0.0857	(0.000857)	(0.000857)	(0.000857)
OCDF	(0.318)		0.318	(0.000318)	(0.0000318)	(0.0000954)

TEQ Summaries			
EMPC = 0, ND = 0	0	0	0
EMPC = 0, ND = DL / 2	0.148	0.174	0.165
EMPC = 0, ND = DL	0.295	0.348	0.33
EMPC = 0, < J-level = 0	0	0	0
EMPC = EMPC, ND = 0	0	0	0
EMPC = EMPC, ND = DL / 2	0.148	0.174	0.165
EMPC = EMPC, ND = DL	0.295	0.348	0.33
EMPC = EMPC, < J-level = 0	0	0	0

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Checkcode: 744-342-SCV

METHOD 8290A **PCDD/F ONGOING PRECISION AND RECOVERY (OPR)** **FORM 8A**

Lab Name:	SGS North America		
Initial Calibration:	ICAL: HRMS3_DF_10122018_24AUG2020		
Instrument ID:	HRMS3	GC Column ID:	ZB-5ms
VER Data Filename:	200827C02	Analysis Date:	27-AUG-2020 17:00:48
Lab ID:	OPR1_17706_DF		

NATIVE ANALYTES	SPIKE CONC.	CONC. FOUND	RANGE (ng/mL)			OK
2,3,7,8-TCDD	10	10.3	6.7	-	15.8	Y
1,2,3,7,8-PeCDD	50	49.1	35	-	71	Y
1,2,3,4,7,8-HxCDD	50	52.8	35	-	82	Y
1,2,3,6,7,8-HxCDD	50	55.7	38	-	67	Y
1,2,3,7,8,9-HxCDD	50	51.4	32	-	81	Y
1,2,3,4,6,7,8-HpCDD	50	54.3	35	-	70	Y
OCDD	100	108	78	-	144	Y
2,3,7,8-TCDF	10	11.3	7.5	-	15.8	Y
1,2,3,7,8-PeCDF	50	50.7	40	-	67	Y
2,3,4,7,8-PeCDF	50	56.5	34	-	80	Y
1,2,3,4,7,8-HxCDF	50	53.3	36	-	67	Y
1,2,3,6,7,8-HxCDF	50	53.6	42	-	65	Y
2,3,4,6,7,8-HxCDF	50	53.4	35	-	78	Y
1,2,3,7,8,9-HxCDF	50	50.7	39	-	65	Y
1,2,3,4,6,7,8-HpCDF	50	52.4	41	-	61	Y
1,2,3,4,7,8,9-HpCDF	50	52.8	39	-	69	Y
OCDF	100	104	63	-	170	Y

Contract-required concentration limits for OPR as specified in Table 6,
Method 1613. 10/94

Processed: 28 Aug 2020 12:22 Analyst: TF

METHOD 8290A **PCDD/F ONGOING PRECISION AND RECOVERY (OPR)** **FORM 8B**

Lab Name: SGS North America

Initial Calibration: ICAL: HRMS3_DF_10122018_24AUG2020

Instrument ID: HRMS3 GC Column ID: ZB-5ms

VER Data Filename: 200827C02 Analysis Date: 27-AUG-2020 17:00:48

Lab ID: OPR1_17706_DF

LABELED ANALYTES	SPIKE CONC.	CONC. FOUND	RANGE (ng/mL)			OK
13C-2,3,7,8-TCDD	100	94.3	20	-	175	Y
13C-1,2,3,7,8-PeCDD	100	90	21	-	227	Y
13C-1,2,3,4,7,8-HxCDD	100	87	21	-	193	Y
13C-1,2,3,6,7,8-HxCDD	100	82.8	25	-	163	Y
13C-1,2,3,7,8,9-HxCDD	100	86	26	-	166	Y
13C-1,2,3,4,6,7,8-HpCDD	100	77.6	26	-	166	Y
13C-OCDD	200	138	26	-	397	Y
13C-2,3,7,8-TCDF	100	92.3	22	-	152	Y
13C-1,2,3,7,8-PeCDF	100	98.5	21	-	192	Y
13C-2,3,4,7,8-PeCDF	100	91.6	13	-	328	Y
13C-1,2,3,4,7,8-HxCDF	100	81.5	19	-	202	Y
13C-1,2,3,6,7,8-HxCDF	100	83.2	21	-	159	Y
13C-2,3,4,6,7,8-HxCDF	100	80.6	22	-	176	Y
13C-1,2,3,7,8,9-HxCDF	100	85.7	17	-	205	Y
13C-1,2,3,4,6,7,8-HpCDF	100	86.5	21	-	158	Y
13C-1,2,3,4,7,8,9-HpCDF	100	68.7	20	-	186	Y
13C-OCDF	200	129	26	-	397	Y
CLEANUP STANDARD						
37Cl-2,3,7,8-TCDD	40	38.3	12.4	-	76.4	Y

Contract-required concentration limits for OPR as specified in Table 6, Method 1613. 10/94

Processed: 28 Aug 2020 12:22 Analyst: TF

Sample Receipt Notification

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Toll Free: 866 846-8290
Fax: 910 794-3919

Project Manager:	*Tamara Burkamper*
Receipt Date & Time:	*26-Aug-20 at 09:24*
AP Project name:	*B4585*
Requested TAT:	*3 business days*
Projected due date:	*28-Aug-20*
Matrix:	*Soil*
Phone#:	*910-794-1613*
Email Address:	*Tamara.Morgan@sgs.com*

Company Contact:	*Mary Brookshire*
Company:	*EarthCon*
Project Name & Site:	*KMCC Navassa*
Project PO#:	*02.20200007.20*
QAAP/Contract #:	*file*
Requested Analysis:	*SW-846 M8290A*
Phone#:	*404-317-7748*
Email Address:	*mbrookshire@earthcon.com*

Client Smp ID	AP Smp ID	Sample Condition & Notes	Quantity	Size	Sampling Date	Sampling Time	Received Temp (°C)	Container #	Shipping #
CS-TB-16A	B4585_001	SO	1	4oz Amber	25-Aug-20	15:50	0.7	1	N/A
CS-53	B4585_002	SO	1	4oz Amber	25-Aug-20	16:30	0.7	1	N/A

Preservation Type: **Sample Seals:** No

Notes/Comments:

Samples received intact

Any un-extracted sample will be stored for 90 days from reporting date. Additional storage fees may apply for any samples stored longer than 90 days.

Received by: Ashley Owens *Logged in by: Ashley Owens* *QC'ed by:* TB 08/26/2020

All services are rendered in accordance with the applicable SGS General Conditions of Service accessible via: http://www.sgs.com/terms_and_conditions.htm

Composites
Rush - 3 day TAT ~~DUE~~

SGS North America Inc - Orlando

Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 FAX: 407-425-0707
www.sgs.com

SGS - ~~ORLANDO~~ JOB # : B45585 PAGE 1 OF 1

SGS - ORLANDO Quote # | SKIFF #

Client / Reporting Information

Company Name: EarthCon
Address: 1880 W. Oak Pkwy #106
City: Marietta State: GA Zip: 30062
Project Contact: M.Brookshire Email: mbrookshire@earthcon.com
Phone #: 404-317-7748
Sampler(s) Name(s) (Printed)
Sampler 1: T. Messier Sampler 2:

Project Information

Project Name: KMCC Navassa
Street: 120 Quality Drive
City: Navassa State: NC
Project #: 02.20200007.20
Fax #:
Client Purchase Order #:

Analytical Information

Dioxins/Furans (8290A)

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid

SGS ~~Orlando~~ Sample #	Field ID / Point of Collection	COLLECTION DATE	TIME	SAMPLED BY:	CONTAINER INFORMATION MATRIX	TOTAL # OF BOTTLES	OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NAOH+ZNAC	DI WATER	MEOH	Dioxins/Furans (8290A)	LAB USE ONLY
001	CS-TB-16A	8.25.20	1550	TM	SO	1		1								1	
008	CS-53	8.25.20	1630	TM	SO	1		1								1	

Turnaround Time (Business days)

10 Day (Business) Approved By: / Date:
7 Day
5 Day
3 Day *RUSH*
2 Day *RUSH*
1 Day *RUSH*
Other
Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- [ ] COMMERCIAL "A" (RESULTS ONLY)
- [ ] COMMERCIAL "B" (RESULTS PLUS QC)
- [ ] REDT1 (EPA LEVEL 3)
- [ ] FULLT1 (EPA LEVEL 4)
- [ ] EDD'S

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
1 Ricky Hefflefinger/EarthCon	8-26-20 0924	2	3		4
Relinquished by/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
5		6	7		8

Lab Use Only : Cooler Temperature (s) Celsius (corrected): 0.7°C

http://www.sgs.com/en/terms-and-conditions

SGS

Project Initiation Form

Project Number: B4585

Client Name: EarthCon

Analysis Method: 8290 PCDD/F

Initiation Date: 26-Aug-20

Sample Matrix: Soil

TAT: 3 days

Project Manager: Tamara

Special Instructions

M8290A w/OPR

10 g DWE extraction

Reporting Instructions

M8290A w/OPR

EQUIS4 file with headers and w/o VVL validation

EPA Region 4 Equis

PM Initials: tburkamper Date: 26-Aug-20

SGS

Methods: PCB PAH | PCDD/F WHO-2 | QUANTICS USV PEST | Extraction Type: SDS CLL | TALEX Carbon SPE | Solid | Final Volume: 20 uL

Batch# 17706 | Split: ~~1/2~~ ~~1/4~~ | Extract Initial/Date: JT 8/26/2020 | Clean-up Initial/Date: RBJ 8/27/2020 | Transfer Init/Date: RBJ 8/27/2020

Lab Sample ID	Extraction Position / Solvent: TOL	Extraction Weight/Volume g	mL	(Td)	ASECS #	Observations
B4583_17706_001	3	12.81				Dark, moist, sandy
B4583_17706_002	4	12.51				See 001
B4583_17706_003	5	12.54				See 001
B4583_17706_004	6	12.83				See 001
B4583_17706_005	7	12.43				See 001
B4583_17706_006	8	12.40				See 001
B4583_17706_007	9	12.32				See 001
B4583_17706_008	10	12.10				Brown, moist, sandy
B4583_17706_008MS	11	12.18				See 008
B4583_17706_008MSD	12	12.53				See 008
B4583_17706_009	13	12.46				Black, moist
B4583_17706_010	14	12.32				Black, moist, sandy
B4583_17706_011	15	12.04				Brown, moist, sandy
B4585_17706_001	16	12.30				Brown, moist, sandy
B4585_17706_002	17	12.64				Dark, moist, sandy
MB1_17706	1	10.00				Sodium Sulfate
OPR1_17706	2	10.00				Sodium Sulfate

JT 8/26/20

Supply IDs

Toluene	STL 13-10
MeCHL	STL13.16
Florisil	SPL4-289B
Hexane	STL13.7
Silica	SPL4.277B
S Nitrate	SPL4.297
Base Silica	SPL4.296
HydroMatrix	N/A
Tetradecane	SPL4-277A
H_2SO_4	N/A
A Silica	SPL4.295
Sodium Sulfate	SPL4-264A

Additional Cleanup

Acid Partition Date/Initial:	
Mini-Acid Date/Initial:	
Carbon Column Date/Initial:	TB 8/28/2020
GPC Date/Initial:	
Bond-Elute Date/Initial:	

Cycle Time

TOL	Start: 1515
	Stop: 0800
HEX	Start:
	Stop:
DCM	Start:
	Stop:

SGS

Methods: PCB PCDD/F QUANTICS PAH WHO-2 USV PEST

Solid

Batch# 17706

Inter-Department Communication Sheet

TB 8/28/2020

SGS

Wt. Volume Results

Batch #: 17706

Comments:

TB 8/28/2020

Lab Sample ID	Boat WT.	Sample Wt. + Boat Wt.	Dried Sample + Boat Wt.	% Solid	Average % Solid	RSD	Qtest Ratio (if Applicable)	Dry Wt. Equiv.	Extracted Wt.	Final Wt.
B4585_001	0.8	3.65	3.07	79.65%	79.65%			12.56	12.3	9.8
B4585_002	0.79	3.84	3.42	86.23%	86.23%			11.6	12.64	10.9

TB 8/28/2020

% Solid Determination WorkSheet

SGS

Batch: 17706

Lab Sample ID	Boat Wt.	Sample Wt. + Boat Wt.	Dried Sample + Boat Wt.	Comments
B4583_17706_001	0.80	3.59	3.31	
B4583_17706_002	0.79	3.51	3.14	
B4583_17706_003	0.79	3.53	3.28	
B4583_17706_004	0.80	3.85	3.49	
B4583_17706_005	0.81	4.08	3.80	
B4583_17706_006	0.80	3.55	3.25	
B4583_17706_007	0.79	3.73	3.44	
B4583_17706_008	0.80	3.33	3.02	
B4583_17706_008MS	—	—	3.02	
B4583_17706_008MSD	—	—	3.02	
B4583_17706_009	0.80	3.21	2.63	
B4583_17706_010	0.79	4.20	3.66	
B4583_17706_011	0.81	3.64	3.40	
B4585_17706_001	0.80	3.65	3.07	
B4585_17706_002	0.79	3.84	3.42	
Date/Initials:		8/26/20		

TBS 8/28/2020

SGS

Methods: PCB / PAH | PCDD/F / WHO-2 | QUANTICS / USV | PEST | Solid

Batch # 17706

Spiker Initials/Date:	JZ 8/26/2020	JZ 8/26/2020	JZ 8/26/2020	RPB 8/27/2020	RPB 8/27/2020		
Lab Sample ID	D/F Ax-A	D/F Ax-B	D/F ES	D/F CS	D/F JS		
	Amount: 20µL	Amount: 20µL	Amount: 20µL	Amount: 20µL	Amount: 20µL	Amount:	Amount:
	Observer Initials	Observer Initials	Observer Initials	Observer Initials	Observer Initials	Observer Initials	Observer Initials
B4583_17706_001	–	–	AM	JZ	JZ		
B4583_17706_002	–	–	AM	JZ	JZ		
B4583_17706_003	–	–	AM	JZ	JZ		
B4583_17706_004	–	–	AM	JZ	JZ		
B4583_17706_005	–	–	AM	JZ	JZ		
B4583_17706_006	–	–	AM	JZ	JZ		
B4583_17706_007	–	–	AM	JZ	JZ		
B4583_17706_008	–	–	AM	JZ	JZ		
B4583_17706_008MS	AM	AM	AM	JZ	JZ		
B4583_17706_008MSD	AM	AM	AM	JZ	JZ		
B4583_17706_009	–	–	AM	JZ	JZ		
B4583_17706_010	–	–	AM	JZ	JZ		
B4583_17706_011	–	–	AM	JZ	JZ		
B4585_17706_001	–	–	AM	JZ	JZ		
B4585_17706_002	–	–	AM	JZ	JZ		
MB1_17706	–	–	AM	JZ	JZ		
OPR1_17706	AM	AM	AM	JZ	JZ		
	8/26/20	8/26/20	8/26/20	8/27/20	8/27/20		

RPB 8/27/2020

Standard Information

Spike ID	DF Ax-A	DF Ax-B	DF ES	D/F CS	D/F JS		
SIL #	23-12-15	20638-2	24-2-1	23-441-1	23-441-2		
Concentration	10 ng/mL	10 pg/uL	100 pg/uL	100 pg/µL	100 pg/µL		
Expiration Date	4-7-25	6-17-21	8/2028	5/21/21	5/21/21		

Instrument: HRMS3 (AutoSpec-Ultima) MS Experiment: df_cl4-8_db5MS GC Program: df_db5MS

#	Datafile	Vial#		Lab ID	Wt/Vol	Client/Sample ID	Analyst(s)	Checkcode	Acq Date	Acq Time
1	200827C01	3		CS3_200827_DF_CA ✓	1.00	20-449-3	DTF	684-772	27-Aug-2020	14:21:55
2	200827C02	67		OPR1_17706_DF	1.00	0_17706_OPR001	DTF	756-866	27-Aug-2020	17:00:48
3	200827C03	2		SBS_200827_DF_CA	1.00	20-61-1	DTF	378-086	27-Aug-2020	17:46:49
4	200827C04	66		MB1_17706_DF_SDS	10.00	Method Blank	DTF	744-342	27-Aug-2020	18:33:16
11	200827C11	3		CS3_200827_DF_CB	1.00	20-449-3	DTF	822-905	27-Aug-2020	23:58:33
12	200827C12	67		OPR1_17706_DF-RJ CPSM only	1.00	0_17706_OPR001	DTF	645-327	28-Aug-2020	00:53:08
13	200827C13	2	*	SBS_200827_DF_CC	1.00	20-61-1	DTF	402-322	28-Aug-2020	01:39:16
22	200827C22	81		B4585_17706_DF_001 ✓	~~12.30~~	CS-TB-16A 9.8g	DTF	970-919	28-Aug-2020	08:37:13
23	200827C23	82		B4585_17706_DF_002	~~12.64~~	CS-53 10.9g	DTF	126-394	28-Aug-2020	09:23:38
24	200827C24	2	*	SBS_200827_DF_CD	1.00	20-61-1	DTF	941-194	28-Aug-2020	10:10:04
25	200827C25	3	*	CS3_200827_DF_CC	1.00	20-449-3	DTF	176-745	28-Aug-2020	10:56:29

*acquired on 08/28
28 Aug 20

REVIEWED
Amber_Kornegay , 8/28/2020, 2:12:42 PM

REVIEWED
By Tyler_Fritz at 12:36 pm, Aug 28, 2020

Lab ID: MB1_17706_DF_SDS **Acq'd:** 27 Aug 2020 18:33 DTF **Wt/Vol:** 10.00 g **ICAL:** HRMS3_DF_10122018_24AUG2020

Client ID: Method Blank B4585_17706 **UTP:** 28-Aug-2020 12:20:33 DTF **J-level:** 0.5 pg/g **Split:** 1 **Checkcode:** 744-342-SCV

Datafile: 200827C04 **Report:** 28 Aug 2020 12:22 TF **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	NotFnd		1.0009	-		-	-	-	1.19	-	4899	0.114
12378-PeCDD	NotFnd		1.0006	-		-	-	-	1.01	-	3761	0.107
123478-HxCDD	NotFnd		1.0004	-		-	-	-	1.05	-	4300	0.129
123678-HxCDD	NotFnd		1.0035	-		-	-	-	1.12	-	4300	0.13
123789-HxCDD	NotFnd		1.0117	-		-	-	-	1.02	-	4300	0.128
1234678-HpCDD	NotFnd		1.0003	-		-	-	-	1.00	-	2318	0.0998
OCDD	NotFnd		1.0001	-		-	-	-	1.08	-	3730	0.407
2378-TCDF	NotFnd		1.0009	-		-	-	-	1.06	-	3911	0.0788
12378-PeCDF	NotFnd		1.0006	-		-	-	-	0.98	-	3977	0.0816
23478-PeCDF	NotFnd		1.0006	-		-	-	-	0.97	-	3977	0.0829
123478-HxCDF	NotFnd		1.0005	-		-	-	-	1.22	-	3653	0.0792
123678-HxCDF	NotFnd		1.0004	-		-	-	-	1.11	-	3653	0.0733
234678-HxCDF	NotFnd		1.0004	-		-	-	-	1.15	-	3653	0.083
123789-HxCDF	NotFnd		1.0005	-		-	-	-	1.12	-	3653	0.0918
1234678-HpCDF	NotFnd		1.0003	-		-	-	-	1.29	-	2119	0.0553
1234789-HpCDF	NotFnd		1.0002	-		-	-	-	1.27	-	2119	0.0857
OCDF	NotFnd		1.0002	-		-	-	-	1.04	-	3591	0.318

Name	Act RT	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	26.66	1.0272	1.0274	+0.3	8.03E+07	0.82	Y	0.97	99.4
ES 12378-PeCDD	32.44	1.2489	1.2501	+2.3	6.43E+07	1.56	Y	0.84	91.5
ES 123478-HxCDD	36.52	0.9917	0.9916	-0.2	5.46E+07	1.27	Y	0.97	84.2
ES 123678-HxCDD	36.64	0.9948	0.9947	-0.2	5.44E+07	1.25	Y	0.96	84.8
ES 123789-HxCDD	36.94	1.0028	1.0028	0	6.21E+07	1.22	Y	1.10	84.4
ES 1234678-HpCDD	40.05	1.0871	1.0874	+0.7	4.89E+07	1.05	Y	0.93	79
ES OCDD	42.75	1.1607	1.1605	-0.5	5.71E+07	0.90	Y	0.63	68
ES 2378-TCDF	25.69	1.0623	1.0626	+0.5	1.16E+08	0.80	Y	0.97	96.3
ES 12378-PeCDF	30.89	1.2762	1.2777	+2.8	9.68E+07	1.53	Y	0.78	101
ES 23478-PeCDF	32.06	1.3247	1.3263	+3.1	9.32E+07	1.57	Y	0.80	93.7
ES 123478-HxCDF	35.50	0.9641	0.9639	-0.4	6.50E+07	0.53	Y	1.22	80.2
ES 123678-HxCDF	35.65	0.9680	0.9678	-0.4	7.80E+07	0.54	Y	1.41	82.8
ES 234678-HxCDF	36.33	0.9864	0.9863	-0.2	7.03E+07	0.53	Y	1.29	81.9
ES 123789-HxCDF	37.30	1.0127	1.0126	-0.2	7.01E+07	0.52	Y	1.17	89.6
ES 1234678-HpCDF	39.02	1.0591	1.0593	+0.5	5.58E+07	0.47	Y	0.97	85.9
ES 1234789-HpCDF	40.48	1.0986	1.0989	+0.7	4.20E+07	0.46	Y	0.88	71.6
ES OCDF	42.89	1.1644	1.1643	-0.3	7.05E+07	0.91	Y	0.81	65.6

Lab ID: MB1_17706_DF_SDS | Acq'd: 27 Aug 2020 18:33 DTF | Wt/Vol: 10.00 g | ICAL: HRMS3_DF_10122018_24AUG2020

Client ID: Method Blank B4585_17706 | UTP: 28-Aug-2020 12:20:33 DTF | J-level: 0.5 pg/g | Split: 1 | Checkcode: 744-342-SCV

Datafile: 200827C04 | Report: 28 Aug 2020 12:22 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
JS 1234-TCDD	25.95		-	-	-	8.33E+07	0.82	Y	-	-
JS 1234-TCDF	24.18		-	-	-	1.24E+08	0.79	Y	-	-
JS 123467-HxCDD	36.83		-	-	-	3.33E+07	1.26	Y	-	-
CS 37Cl-2378-TCDD	26.68		1.0281	1.0283	+0.3	3.65E+07	n/a	-	1.14	95.9
CS 12347-PeCDD	31.91		1.2288	1.2299	+2.1	6.26E+07	1.55	Y	0.72	104
CS 12346-PeCDF	30.33		1.2534	1.2547	+2.4	9.51E+07	1.57	Y	0.77	99.6
CS 123469-HxCDF	35.96		0.9765	0.9763	-0.4	6.81E+07	0.54	Y	1.18	86.5
CS 1234689-HpCDF	39.47		1.0712	1.0714	+0.5	5.29E+07	0.48	Y	0.96	83
~~SS 37Cl-2378-TCDD~~	~~26.68~~		~~1.0281~~	~~1.0283~~	~~+0.3~~	~~3.65E+07~~	~~n/a~~		~~1.19~~	~~95.1~~
~~SS 12347-PeCDD~~	~~31.91~~		~~1.2288~~	~~1.2299~~	~~+2.1~~	~~6.26E+07~~	~~1.55~~	~~Y~~	~~0.86~~	~~113~~
~~SS 12346-PeCDF~~	~~30.33~~		~~1.2534~~	~~1.2547~~	~~+2.4~~	~~9.51E+07~~	~~1.57~~	~~Y~~	~~1.00~~	~~98.7~~
~~SS 123469-HxCDF~~	~~35.96~~		~~0.9765~~	~~0.9763~~	~~-0.4~~	~~6.81E+07~~	~~0.54~~	~~Y~~	~~0.84~~	~~104~~
~~SS 1234689-HpCDF~~	~~39.47~~		~~1.0712~~	~~1.0714~~	~~+0.5~~	~~5.29E+07~~	~~0.48~~	~~Y~~	~~0.98~~	~~96.4~~

Totals	Conc	EMPC
Total TCDD	0	0
Total PeCDD	0	0
Total HxCDD	0	0
Total HpCDD	0	0
Total Tetra-Octa Dioxins	0	0
Total TCDF	0	0
Total PeCDF	0	0
Total HxCDF	0	0
Total HpCDF	0	0
Total Tetra-Octa Furans	0	0
Total Tetra-Octa Dioxins & Furans	0	0

Lab ID: MB1_17706_DF_SDS | **Acq'd:** 27 Aug 2020 18:33 DTF | **Wt/Vol:** 10.00 g | **ICAL:** HRMS3_DF_10122018_24AUG2020

Client ID: Method Blank B4585_17706 | **UTP:** 28-Aug-2020 12:20:33 DTF | **J-level:** 0.5 pg/g | **Split:** 1 | **Checkcode:** 744-342-SCV

Datafile: 200827C04 | **Report:** 28 Aug 2020 12:22 TF | **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1368-TCDD	NotFnd		0.8476						1.19		4899	0.114
1379-TCDD	NotFnd		0.8633						1.19		4899	0.114
1369-TCDD	NotFnd		0.8818						1.19		4899	0.114
1469-TCDD	NotFnd		0.9150						1.19		4899	0.114
1247/1246/1248/1249-TCDD	NotFnd		0.9249						1.19		4899	0.114
1378-TCDD	NotFnd		0.9328						1.19		4899	0.114
1268-TCDD	NotFnd		0.9411						1.19		4899	0.114
1478-TCDD	NotFnd		0.9512						1.19		4899	0.114
1279-TCDD	NotFnd		0.9584						1.19		4899	0.114
1234/1269-TCDD	NotFnd		0.9732						1.19		4899	0.114
1236-TCDD	NotFnd		0.9789						1.19		4899	0.114
1237/1238-TCDD	NotFnd		0.9892						1.19		4899	0.114
1239-TCDD	NotFnd		0.9950						1.19		4899	0.114
2378-TCDD	**NotFnd**		**1.0009**						**1.19**		**4899**	**0.114**
1278-TCDD	NotFnd		1.0144						1.19		4899	0.114
1267-TCDD	NotFnd		1.0200						1.19		4899	0.114
1289-TCDD	NotFnd		1.0408						1.19		4899	0.114
12479/12468-PeCDD	NotFnd		0.9195						1.01		3761	0.107
12469-PeCDD	NotFnd		0.9370						1.01		3761	0.107
12368-PeCDD	NotFnd		0.9548						1.01		3761	0.107
12478-PeCDD	NotFnd		0.9610						1.01		3761	0.107
12379-PeCDD	NotFnd		0.9642						1.01		3761	0.107
12369/12467/12489-PeCDD	NotFnd		0.9727						1.01		3761	0.107
12346/12347-PeCDD	NotFnd		0.9847						1.01		3761	0.107
12378-PeCDD	NotFnd		**1.0006**						**1.01**		**3761**	**0.107**
12367-PeCDD	NotFnd		1.0038						1.01		3761	0.107
12389-PeCDD	NotFnd		1.0148						1.01		3761	0.107
124679/124689-HxCDD	NotFnd		0.9523						1.06		4300	0.129
123468-HxCDD	NotFnd		0.9709						1.06		4300	0.129
123679/123689-HxCDD	NotFnd		0.9791						1.06		4300	0.129
123469-HxCDD	NotFnd		0.9829						1.06		4300	0.129
123478-HxCDD	NotFnd		**1.0004**						1.05		**4300**	**0.129**
123678-HxCDD	NotFnd		**1.0035**						1.12		**4300**	**0.13**
123467-HxCDD	NotFnd		1.0088						1.06		4300	0.129
123789-HxCDD	NotFnd		**1.0117**						1.02		**4300**	**0.128**

Lab ID: MB1_17706_DF_SDS | Acq'd: 27 Aug 2020 18:33 DTF | Wt/Vol: 10.00 g | ICAL: HRMS3_DF_10122018_24AUG2020

Client ID: Method Blank B4585_17706 | UTP: 28-Aug-2020 12:20:33 DTF | J-level: 0.5 pg/g | Split: 1 | Checkcode: 744-342-SCV

Datafile: 200827C04 | Report: 28 Aug 2020 12:22 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1234679-HpCDD	NotFnd		0.9823						1.00		2318	0.0998
1234678-HpCDD	**NotFnd**		**1.0003**						**1.00**		**2318**	**0.0998**
OCDD	**NotFnd**		**1.0001**						**1.08**		**3730**	**0.407**
OCDD-a	NotFnd		1.0002						0.07		4341	7.04
1368-TCDF	NotFnd		0.7944						1.06		3911	0.0788
1468-TCDF	NotFnd		0.8157						1.06		3911	0.0788
2468-TCDF	NotFnd		0.8401						1.06		3911	0.0788
1346/1246-TCDF	NotFnd		0.8544						1.06		3911	0.0788
1347/1378/1247-TCDF	NotFnd		0.8612						1.06		3911	0.0788
1348-TCDF	NotFnd		0.8733						1.06		3911	0.0788
1248/1367/1379-TCDF	NotFnd		0.8791						1.06		3911	0.0788
1268-TCDF	NotFnd		0.8963						1.06		3911	0.0788
1467-TCDF	NotFnd		0.9022						1.06		3911	0.0788
1478-TCDF	NotFnd		0.9097						1.06		3911	0.0788
1369/1237-TCDF	NotFnd		0.9261						1.06		3911	0.0788
2467-TCDF	NotFnd		0.9321						1.06		3911	0.0788
2368-TCDF	NotFnd		0.9380						1.06		3911	0.0788
1238/1234/1678/1469/1236-TCDF	NotFnd		0.9425						1.06		3911	0.0788
1278-TCDF	NotFnd		0.9625						1.06		3911	0.0788
1349-TCDF	NotFnd		0.9685						1.06		3911	0.0788
1267-TCDF	NotFnd		0.9741						1.06		3911	0.0788
2346/1249-TCDF	NotFnd		0.9825						1.06		3911	0.0788
2347/1279-TCDF	NotFnd		0.9917						1.06		3911	0.0788
2348-TCDF	NotFnd		0.9964						1.06		3911	0.0788
2378-TCDF	**NotFnd**		**1.0009**						**1.06**		**3911**	**0.0788**
2367/3467-TCDF	NotFnd		1.0169						1.06		3911	0.0788
1269-TCDF	NotFnd		1.0270						1.06		3911	0.0788
1239-TCDF	NotFnd		1.0384						1.06		3911	0.0788
1289-TCDF	NotFnd		1.0863						1.06		3911	0.0788
13468/12468-PeCDF	NotFnd		0.9040						0.98		3292	0.068
13678/13467/12467-PeCDF	NotFnd		0.9572						0.98		3977	0.0822
12368/13478/12478-PeCDF	NotFnd		0.9625						0.98		3977	0.0822
14678-PeCDF	NotFnd		0.9659						0.98		3977	0.0822
13479-PeCDF	NotFnd		0.9692						0.98		3977	0.0822
13469/12479-PeCDF	NotFnd		0.9776						0.98		3977	0.0822
12346-PeCDF	NotFnd		0.9823						0.98		3977	0.0822

Lab ID: MB1_17706_DF_SDS **Acq'd:** 27 Aug 2020 18:33 DTF **Wt/Vol:** 10.00 g **ICAL:** HRMS3_DF_10122018_24AUG2020

Client ID: Method Blank B4585_17706 **UTP:** 28-Aug-2020 12:20:33 DTF **J-level:** 0.5 pg/g **Split:** 1 **Checkcode:** 744-342-SCV

Datafile: 200827C04 **Report:** 28 Aug 2020 12:22 TF **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
23468/12469-PeCDF	NotFnd		0.9856						0.98		3977	0.0822
12347-PeCDF	NotFnd		0.9882						0.98		3977	0.0822
12348-PeCDF	NotFnd		0.9935						0.98		3977	0.0822
12378-PeCDF	**NotFnd**		**1.0006**						**0.98**		**3977**	**0.0816**
12678/12367-PeCDF	NotFnd		1.0099						0.98		3977	0.0822
12379-PeCDF	NotFnd		1.0155						0.98		3977	0.0822
12679-PeCDF	NotFnd		0.9921						0.98		3977	0.0822
23467/12369-PeCDF	NotFnd		0.9965						0.98		3977	0.0822
23478-PeCDF	**NotFnd**		**1.0006**						**0.97**		**3977**	**0.0829**
23478/12489-PeCDF	NotFnd		0.0000						0.97			
12489-PeCDF	NotFnd		1.0043						0.98		3977	0.0822
12349-PeCDF	NotFnd		1.0107						0.98		3977	0.0822
12389-PeCDF	NotFnd		1.0352						0.98		3977	0.0822
123468-HxCDF	NotFnd		0.9601						1.15		3653	0.0815
124678/134678-HxCDF	NotFnd		0.9660						1.15		3653	0.0815
134679-HxCDF	NotFnd		0.9725						1.15		3653	0.0815
124679-HxCDF	NotFnd		0.9783						1.15		3653	0.0815
124689-HxCDF	NotFnd		0.9848						1.15		3653	0.0815
123467-HxCDF	NotFnd		0.9970						1.15		3653	0.0815
123478-HxCDF	**NotFnd**		**1.0005**						**1.22**		**3653**	**0.0792**
123678-HxCDF	**NotFnd**		**1.0004**						**1.11**		**3653**	**0.0733**
123479-HxCDF	NotFnd		1.0049						1.15		3653	0.0815
123469-HxCDF	NotFnd		1.0091						1.15		3653	0.0815
123679-HxCDF	NotFnd		0.9939						1.15		3653	0.0815
234678-HxCDF	**NotFnd**		**1.0004**						**1.15**		**3653**	**0.083**
234678/123689-HxCDF	NotFnd		0.0000						1.15			
123689-HxCDF	NotFnd		1.0041						1.15		3653	0.0815
123789-HxCDF	**NotFnd**		**1.0005**						**1.12**		**3653**	**0.0918**
123789/123489-HxCDF	NotFnd		0.0000						1.12			
123489-HxCDF	NotFnd		1.0008						1.15		3653	0.0815
1234678-HpCDF	**NotFnd**		**1.0003**						**1.29**		**2119**	**0.0553**
1234679-HpCDF	NotFnd		1.0078						1.28		2119	0.0683
1234689-HpCDF	NotFnd		1.0117						1.28		2119	0.0683
1234789-HpCDF	**NotFnd**		**1.0002**						**1.27**		**2119**	**0.0857**
OCDF	**NotFnd**		**1.0002**						**1.04**		**3591**	**0.318**
OCDF-a	NotFnd		1.0001						0.06		2595	3.8


Rel. Int.
100%
QC Check
19.04-28.40
316.9824 Fn1
Flags: -
0%
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Abs. Int.
6.01e6
3.00e6
0.00e0
Rel. Int.
100%
QC Check
28.41-33.51
366.9792 Fn2
Flags: -
0%
29.0
30.0
31.0
32.0
33.0
RT
Abs. Int.
5.49e6
2.74e6
0.00e0
Rel. Int.
100%
QC Check
33.52-37.61
380.9760 Fn3
Flags: -
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Abs. Int.
1.21e7
6.04e6
0.00e0
Rel. Int.
100%
QC Check
37.91-41.21
430.9728 Fn4
Flags: -
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Abs. Int.
7.65e6
3.82e6
0.00e0
Rel. Int.
100%
QC Check
41.22-44.81
454.9728 Fn5
Flags: -
0%
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Abs. Int.
1.02e7
5.09e6
0.00e0


Rel. Int.
100%
TCDD
19.04-28.40
319.8965 Fn1
Flags: PB
4σ 3.39e3
0%
Abs. Int.
7.80e3
3.90e3
0.00e0
20.0 21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 RT
Rel. Int.
100%
TCDD
19.04-28.40
321.8936 Fn1
Flags: PB
4σ 1.51e3
0%
Abs. Int.
1.67e4
8.37e3
0.00e0
20.0 21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 RT
Rel. Int.
100%
37Cl-TCDD
19.04-28.40
327.8850 Fn1
Flags: PBM
4σ 1.44e3
0%
CS 37Cl-2378D
3.65e7
26.68
Abs. Int.
7.90e6
3.95e6
0.00e0
20.0 21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 RT
Rel. Int.
100%
TCDD Std.
19.04-28.40
331.9368 Fn1
Flags: PBM
4σ 4.63e3
0%
JS 1234D
3.75e7
25.95
ES 2378D
3.61e7
26.66
Abs. Int.
8.14e6
4.07e6
0.00e0
20.0 21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 RT
Rel. Int.
100%
TCDD Std.
19.04-28.40
333.9339 Fn1
Flags: PBM
4σ 1.43e3
0%
JS 1234D
4.57e7
25.95
ES 2378D
4.42e7
26.66
Abs. Int.
9.95e6
4.98e6
0.00e0
20.0 21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 RT


Rel. Int.
100%
PeCDD
28.41-33.51
355.8546 Fn2
Flags: PB
4σ 2.23e3
0%
Abs. Int.
1.13e4
5.65e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD
28.41-33.51
357.8517 Fn2
Flags: PB
4σ 1.53e3
0%
Abs. Int.
8.68e3
4.34e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.41-33.51
367.8949 Fn2
Flags: PBM
4σ 2.20e3
0%
CS 12347D
3.80e7
31.91
ES 12378D
3.92e7
32.44
Abs. Int.
1.06e7
5.30e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.41-33.51
369.8919 Fn2
Flags: PBM
4σ 2.15e3
0%
CS 12347D
2.45e7
31.91
ES 12378D
2.51e7
32.43
Abs. Int.
6.89e6
3.44e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
QC Check
28.41-33.51
366.9792 Fn2
Flags: -
0%
Abs. Int.
5.49e6
2.74e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT

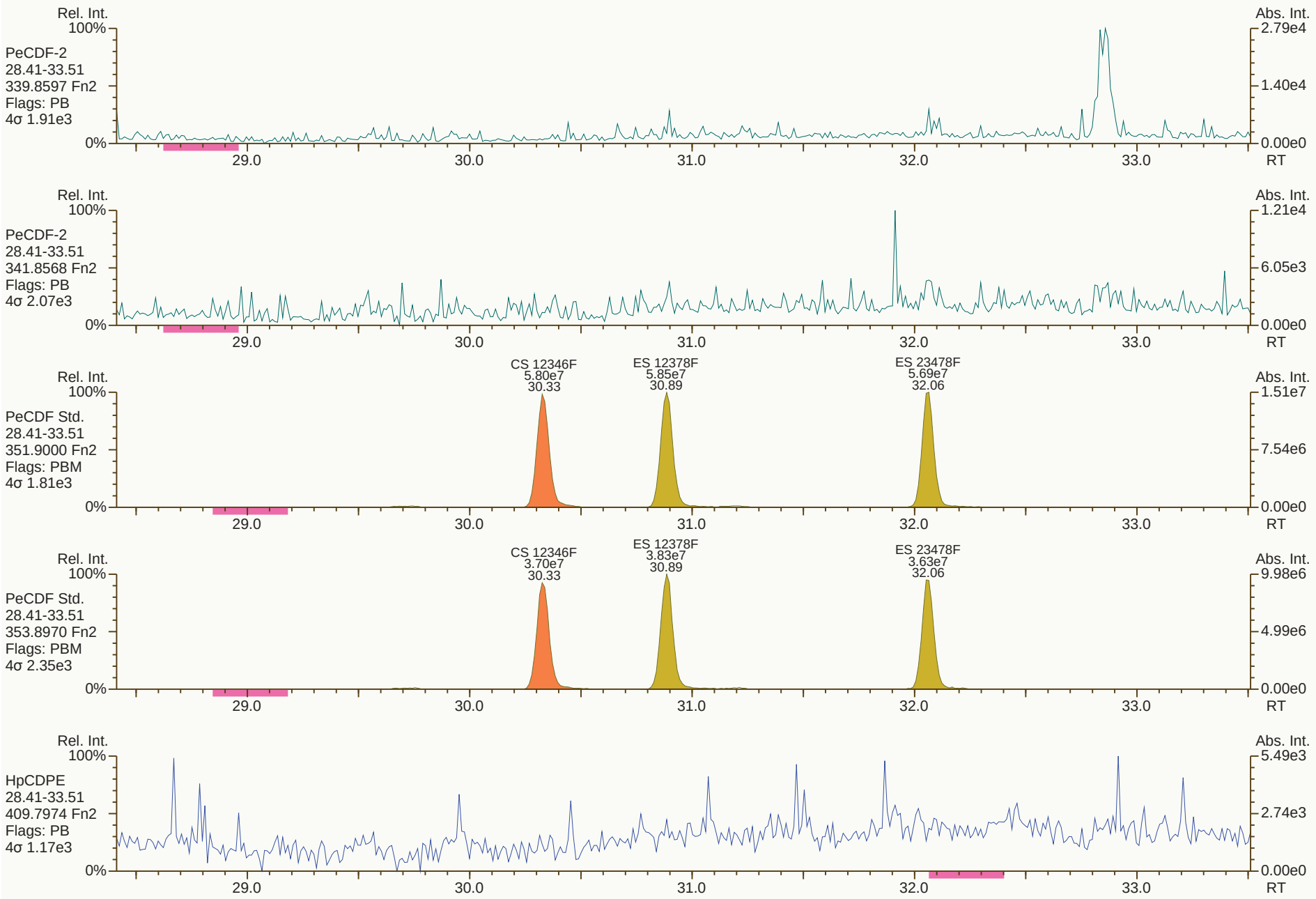

Rel. Int.
100%
HxCDD
33.52-37.61
389.8156 Fn3
Flags: B
4σ 1.27e3
0%
Abs. Int.
1.03e4
5.16e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD
33.52-37.61
391.8127 Fn3
Flags: B
4σ 3.03e3
0%
Abs. Int.
6.30e3
3.15e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.52-37.61
401.8559 Fn3
Flags: PBM
4σ 2.56e3
0%
ES 123678D
ES 123478D 3.02e7
3.05e7 36.64
36.52
JS 123467D
1.86e7
36.83
ES 123789D
3.42e7
36.94
Abs. Int.
9.04e6
4.52e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.52-37.61
403.8530 Fn3
Flags: PBM
4σ 1.89e3
0%
ES 123678D
ES 123478D 2.42e7
2.41e7 36.64
36.52
JS 123467D
1.47e7
36.83
ES 123789D
2.79e7
36.94
Abs. Int.
7.53e6
3.76e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
QC Check
33.52-37.61
380.9760 Fn3
Flags: -
0%
Abs. Int.
1.21e7
6.04e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT

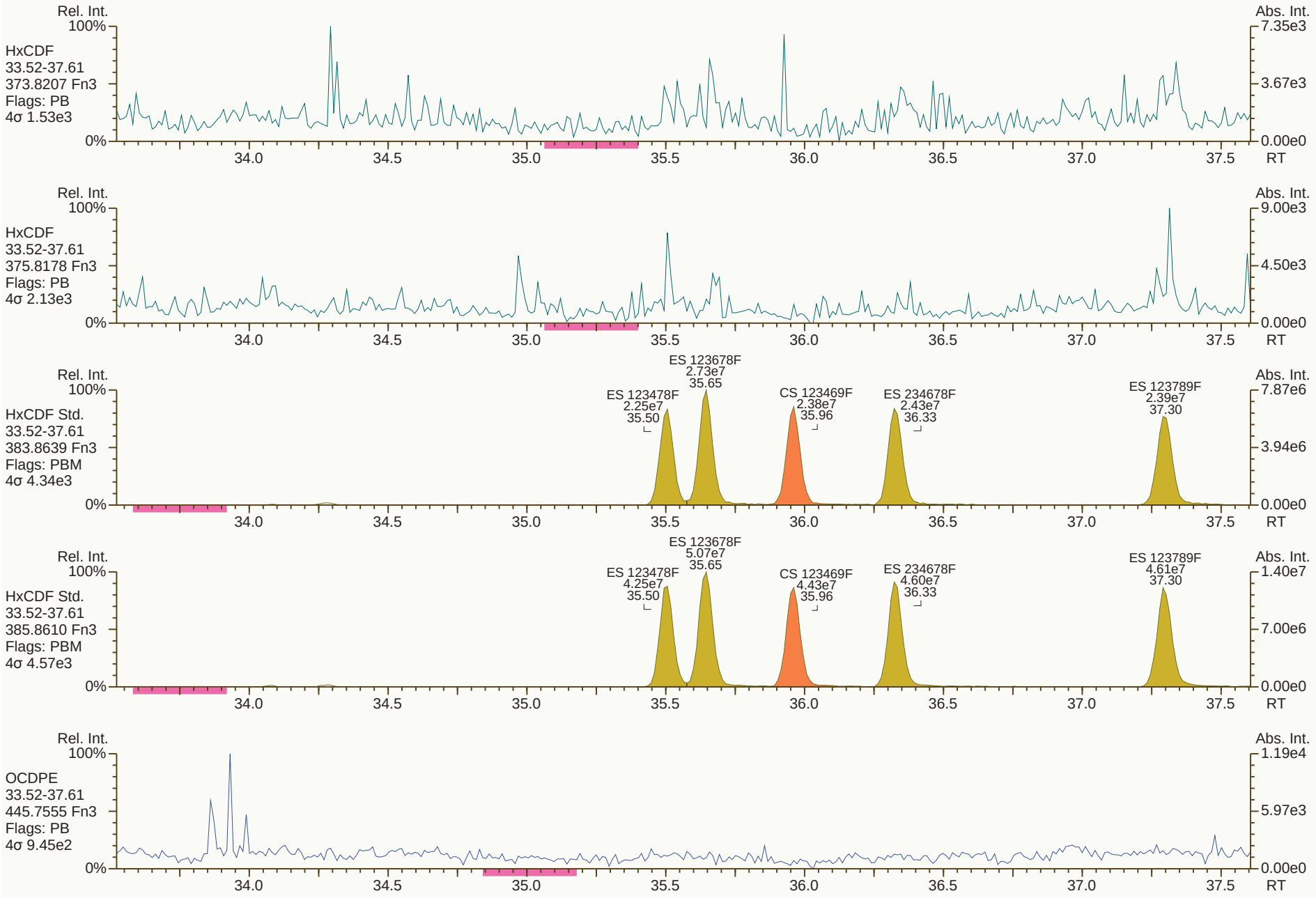

Rel. Int.
100%
HpCDD
37.91-41.21
423.7767 Fn4
Flags: PB
4σ 1.31e3
0%
Abs. Int.
7.69e3
3.85e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD
37.91-41.21
425.7737 Fn4
Flags: PB
4σ 1.01e3
0%
Abs. Int.
7.36e3
3.68e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
ES 1234678D
2.51e7
40.05
Rel. Int.
100%
HpCDD Std.
37.91-41.21
435.8169 Fn4
Flags: PBM
4σ 1.45e3
0%
Abs. Int.
5.94e6
2.97e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
ES 1234678D
2.38e7
40.05
Rel. Int.
100%
HpCDD Std.
37.91-41.21
437.8140 Fn4
Flags: PBM
4σ 1.83e3
0%
Abs. Int.
5.94e6
2.97e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
QC Check
37.91-41.21
430.9728 Fn4
Flags: -
0%
Abs. Int.
7.65e6
3.82e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT


Rel. Int.
100%
OCDD
41.22-44.81
457.7377 Fn5
Flags: PB
4σ 1.65e3
0%
Abs. Int.
5.92e3
2.96e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDD
41.22-44.81
459.7348 Fn5
Flags: PB
4σ 2.08e3
0%
Abs. Int.
6.40e3
3.20e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDD
2.71e7
42.75
Rel. Int.
100%
OCDD Std.
41.22-44.81
469.7780 Fn5
Flags: PBM
4σ 1.39e3
0%
Abs. Int.
4.03e6
2.01e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDD
3.00e7
42.75
Rel. Int.
100%
OCDD Std.
41.22-44.81
471.7750 Fn5
Flags: PBM
4σ 1.50e3
0%
Abs. Int.
4.52e6
2.26e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
QC Check
41.22-44.81
454.9728 Fn5
Flags: -
0%
Abs. Int.
1.02e7
5.09e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT


Rel. Int.
100%
TCDF
19.04-28.40
303.9016 Fn1
Flags: PB
4σ 2.08e3
0%
Abs. Int.
6.46e3
3.23e3
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDF
19.04-28.40
305.8987 Fn1
Flags: PB
4σ 1.83e3
0%
Abs. Int.
9.64e3
4.82e3
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDF Std.
19.04-28.40
315.9419 Fn1
Flags: PBM
4σ 1.12e4
JS 1234F
5.46e7
24.18
ES 2378F
5.16e7
25.69
0%
Abs. Int.
1.05e7
5.25e6
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDF Std.
19.04-28.40
317.9389 Fn1
Flags: PBM
4σ 6.32e3
JS 1234F
6.91e7
24.17
ES 2378F
6.42e7
25.69
0%
Abs. Int.
1.30e7
6.51e6
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
HxCDPE
19.04-28.40
375.8364 Fn1
Flags: PB
4σ 1.07e3
0%
Abs. Int.
6.97e3
3.48e3
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT


Rel. Int.
100%
0%
Abs. Int.
1.50e4
7.52e3
0.00e0
RT
PeCDF-1
19.04-28.40
339.8597 Fn1
Flags: PB
4σ 1.72e3
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
Rel. Int.
100%
0%
Abs. Int.
1.10e4
5.51e3
0.00e0
RT
PeCDF-1
19.04-28.40
341.8568 Fn1
Flags: PB
4σ 1.57e3
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
Rel. Int.
100%
0%
Abs. Int.
6.01e6
3.00e6
0.00e0
RT
QC Check
19.04-28.40
316.9824 Fn1
Flags: -
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0


Rel. Int.
100%
PeCDF-2
28.41-33.51
339.8597 Fn2
Flags: PB
4σ 1.91e3
0%
Abs. Int.
2.79e4
1.40e4
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF-2
28.41-33.51
341.8568 Fn2
Flags: PB
4σ 2.07e3
0%
Abs. Int.
1.21e4
6.05e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.41-33.51
351.9000 Fn2
Flags: PBM
4σ 1.81e3
0%
CS 12346F
5.80e7
30.33
ES 12378F
5.85e7
30.89
ES 23478F
5.69e7
32.06
Abs. Int.
1.51e7
7.54e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.41-33.51
353.8970 Fn2
Flags: PBM
4σ 2.35e3
0%
CS 12346F
3.70e7
30.33
ES 12378F
3.83e7
30.89
ES 23478F
3.63e7
32.06
Abs. Int.
9.98e6
4.99e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
HpCDPE
28.41-33.51
409.7974 Fn2
Flags: PB
4σ 1.17e3
0%
Abs. Int.
5.49e3
2.74e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT


Rel. Int.
100%
HxCDF
33.52-37.61
373.8207 Fn3
Flags: PB
4σ 1.53e3
0%
Abs. Int.
7.35e3
3.67e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF
33.52-37.61
375.8178 Fn3
Flags: PB
4σ 2.13e3
0%
Abs. Int.
9.00e3
4.50e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF Std.
33.52-37.61
383.8639 Fn3
Flags: PBM
4σ 4.34e3
0%
ES 123678F
2.73e7
35.65
ES 123478F
2.25e7
35.50
CS 123469F
2.38e7
35.96
ES 234678F
2.43e7
36.33
ES 123789F
2.39e7
37.30
Abs. Int.
7.87e6
3.94e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF Std.
33.52-37.61
385.8610 Fn3
Flags: PBM
4σ 4.57e3
0%
ES 123678F
5.07e7
35.65
ES 123478F
4.25e7
35.50
CS 123469F
4.43e7
35.96
ES 234678F
4.60e7
36.33
ES 123789F
4.61e7
37.30
Abs. Int.
1.40e7
7.00e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
OCDPE
33.52-37.61
445.7555 Fn3
Flags: PB
4σ 9.45e2
0%
Abs. Int.
1.19e4
5.97e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT


Rel. Int.
100%
HpCDF
37.91-41.21
407.7818 Fn4
Flags: PB
4σ 9.88e2
0%
Abs. Int.
5.28e3
2.64e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF
37.91-41.21
409.7788 Fn4
Flags: PB
4σ 1.13e3
0%
Abs. Int.
4.23e3
2.12e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.91-41.21
417.8253 Fn4
Flags: PBM
4σ 3.94e3
0%
ES 1234678F
1.78e7
39.02
CS 1234689F
1.71e7
39.47
ES 1234789F
1.32e7
40.48
Abs. Int.
4.74e6
2.37e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.91-41.21
419.8220 Fn4
Flags: PBM
4σ 2.89e3
0%
ES 1234678F
3.80e7
39.02
CS 1234689F
3.58e7
39.47
ES 1234789F
2.87e7
40.48
Abs. Int.
1.04e7
5.19e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
NCDPE
37.91-41.21
479.7165 Fn4
Flags: PB
4σ 1.05e3
0%
Abs. Int.
9.13e3
4.57e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT


Rel. Int.
100%
OCDF
41.22-44.81
441.7428 Fn5
Flags: PB
4σ 1.58e3
0%
Abs. Int.
6.18e3
3.09e3
0.00e0
RT
41.5
42.0
42.5
43.0
43.5
44.0
44.5
Rel. Int.
100%
OCDF
41.22-44.81
443.7398 Fn5
Flags: PB
4σ 2.01e3
0%
Abs. Int.
4.59e3
2.29e3
0.00e0
RT
ES OCDF
3.35e7
42.89
Rel. Int.
100%
OCDF Std.
41.22-44.81
453.7830 Fn5
Flags: PBM
4σ 1.69e3
0%
Abs. Int.
5.15e6
2.58e6
0.00e0
RT
ES OCDF
3.69e7
42.89
Rel. Int.
100%
OCDF Std.
41.22-44.81
455.7801 Fn5
Flags: PBM
4σ 1.75e3
0%
Abs. Int.
5.53e6
2.76e6
0.00e0
RT
Rel. Int.
100%
DCDPE
41.22-44.81
513.6775 Fn5
Flags: PB
4σ 1.07e3
0%
Abs. Int.
5.00e3
2.50e3
0.00e0
RT

Lab ID: B4585_17706_DF_001 | Acq'd: 28 Aug 2020 08:37 DTF | Wt/Vol: 9.80 g | ICAL: HRMS3_DF_10122018_24AUG2020

Client ID: CS-TB-16A | UTP: 28-Aug-2020 12:20:35 DTF | J-level: 0.51 pg/g | Split: 1 | Checkcode: 970-919-FKT

Datafile: 200827C22 | Report: 28 Aug 2020 13:52 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	NotFnd		1.0009	-		-	-	-	1.19	-	4292	0.127
12378-PeCDD	NotFnd		1.0006	-		-	-	-	1.01	-	5334	0.177
123478-HxCDD	36.52	J	1.0004	1.0006	+0.4	9.34E+04	1.20	Y	1.05	0.398	4782	0.179
123678-HxCDD	36.63	J	1.0035	1.0036	+0.2	1.88E+05	1.19	Y	1.12	0.745	4782	0.17
123789-HxCDD	36.93	J	1.0117	1.0118	+0.2	1.77E+05	1.33	Y	1.02	0.686	4782	0.177
1234678-HpCDD	40.06		1.0003	1.0003	0	4.59E+06	1.03	Y	1.00	23.8	2870	0.161
OCDD	42.77		1.0001	1.0003	+0.5	2.29E+07	0.88	Y	1.08	206	4981	0.803
2378-TCDF	NotFnd		1.0009	-		-	-	-	1.06	-	6326	0.154
12378-PeCDF	NotFnd		1.0006	-		-	-	-	0.98	-	4667	0.106
23478-PeCDF	32.07	J	1.0006	1.0008	+0.4	9.69E+04	1.36	Y	0.97	0.251	4667	0.114
123478-HxCDF	35.50	J	1.0005	1.0005	0	1.34E+05	1.22	Y	1.22	0.392	3167	0.0793
123678-HxCDF	35.64	J	1.0004	1.0005	+0.2	1.04E+05	1.10	Y	1.11	0.29	3167	0.0817
234678-HxCDF	36.32	J	1.0004	1.0004	0	7.43E+04	1.28	Y	1.15	0.222	3167	0.084
123789-HxCDF	NotFnd		1.0005	-		-	-	-	1.12	-	3167	0.0951
1234678-HpCDF	39.01		1.0003	1.0003	0	1.18E+06	0.99	Y	1.29	4.38	2332	0.0798
1234789-HpCDF	40.47	J EMPC	1.0002	1.0000	-0.5	5.60E+04	0.81	N	1.27	0.249	2332	0.113
OCDF	42.90	EMPC	1.0002	1.0001	-0.3	9.47E+05	0.74	N	1.04	6.67	3445	0.411

Name	Act RT		Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	26.63		1.0272	1.0274	+0.3	6.62E+07	0.80	Y	0.97	86.8
ES 12378-PeCDD	32.41		1.2489	1.2504	+2.9	5.55E+07	1.60	Y	0.84	83.5
ES 123478-HxCDD	36.50		0.9917	0.9916	-0.2	4.54E+07	1.28	Y	0.97	73.3
ES 123678-HxCDD	36.62		0.9948	0.9947	-0.2	4.60E+07	1.26	Y	0.96	75.2
ES 123789-HxCDD	36.92		1.0028	1.0029	+0.2	5.17E+07	1.25	Y	1.10	73.6
ES 1234678-HpCDD	40.04		1.0871	1.0878	+1.7	3.92E+07	1.06	Y	0.93	66.4
ES OCDD	42.76		1.1607	1.1616	+2.3	4.19E+07	0.92	Y	0.63	52.3
ES 2378-TCDF	25.67		1.0623	1.0627	+0.6	9.65E+07	0.80	Y	0.97	84.1
ES 12378-PeCDF	30.86		1.2762	1.2780	+3.3	8.35E+07	1.57	Y	0.78	91
ES 23478-PeCDF	32.04		1.3247	1.3267	+3.8	8.13E+07	1.55	Y	0.80	85.7
ES 123478-HxCDF	35.48		0.9641	0.9639	-0.4	5.74E+07	0.54	Y	1.22	74.1
ES 123678-HxCDF	35.63		0.9680	0.9678	-0.4	6.65E+07	0.53	Y	1.41	74
ES 234678-HxCDF	36.31		0.9864	0.9863	-0.2	5.94E+07	0.53	Y	1.29	72.5
ES 123789-HxCDF	37.28		1.0127	1.0127	0	5.99E+07	0.54	Y	1.17	80.3
ES 1234678-HpCDF	39.00		1.0591	1.0594	+0.7	4.26E+07	0.47	Y	0.97	68.8
ES 1234789-HpCDF	40.47		1.0986	1.0993	+1.7	3.62E+07	0.47	Y	0.88	64.7
ES OCDF	42.90		1.1644	1.1654	+2.6	5.55E+07	0.90	Y	0.81	54.1

Lab ID: B4585_17706_DF_001 | Acq'd: 28 Aug 2020 08:37 DTF | Wt/Vol: 9.80 g | ICAL: HRMS3_DF_10122018_24AUG2020

Client ID: CS-TB-16A | UTP: 28-Aug-2020 12:20:35 DTF | J-level: 0.51 pg/g | Split: 1 | Checkcode: 970-919-FKT

Datafile: 200827C22 | Report: 28 Aug 2020 13:52 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
JS 1234-TCDD	25.92		-	-	-	7.87E+07	0.80	Y	-	-
JS 1234-TCDF	24.15		-	-	-	1.18E+08	0.79	Y	-	-
JS 123467-HxCDD	36.81		-	-	-	3.18E+07	1.25	Y	-	-
CS 37Cl-2378-TCDD	26.66		1.0281	1.0284	+0.5	3.13E+07	n/a	-	1.14	87
CS 12347-PeCDD	31.89		1.2288	1.2303	+2.9	5.52E+07	1.59	Y	0.72	97.1
CS 12346-PeCDF	30.31		1.2534	1.2550	+2.9	8.01E+07	1.56	Y	0.77	88
CS 123469-HxCDF	35.94		0.9765	0.9763	-0.4	5.83E+07	0.53	Y	1.18	77.5
CS 1234689-HpCDF	39.45		1.0712	1.0717	+1.2	4.17E+07	0.46	Y	0.96	68.6
~~SS 37Cl-2378-TCDD~~	~~26.66~~		~~1.0281~~	~~1.0284~~	~~+0.5~~	~~3.13E+07~~	~~n/a~~		~~1.19~~	~~98.9~~
~~SS 12347-PeCDD~~	~~31.89~~		~~1.2288~~	~~1.2303~~	~~+2.9~~	~~5.52E+07~~	~~1.59~~	~~Y~~	~~0.86~~	~~116~~
~~SS 12346-PeCDF~~	~~30.31~~		~~1.2534~~	~~1.2550~~	~~+2.9~~	~~8.01E+07~~	~~1.56~~	~~Y~~	~~1.00~~	~~96.4~~
~~SS 123469-HxCDF~~	~~35.94~~		~~0.9765~~	~~0.9763~~	~~-0.4~~	~~5.83E+07~~	~~0.53~~	~~Y~~	~~0.84~~	~~104~~
~~SS 1234689-HpCDF~~	~~39.45~~		~~1.0712~~	~~1.0717~~	~~+1.2~~	~~4.17E+07~~	~~0.46~~	~~Y~~	~~0.98~~	~~99.6~~

Totals	Conc	EMPC
Total TCDD	1.71	1.71
Total PeCDD	3.29	3.61
Total HxCDD	12.7	13.7
Total HpCDD	77.4	77.4
Total Tetra-Octa Dioxins	301	302
Total TCDF	2.74	3.48
Total PeCDF	1.97	3.08
Total HxCDF	4.56	4.71
Total HpCDF	10.4	10.7
Total Tetra-Octa Furans	19.7	28.6
Total Tetra-Octa Dioxins & Furans	321	331

Lab ID: B4585_17706_DF_001 **Acq'd:** 28 Aug 2020 08:37 DTF **Wt/Vol:** 9.80 g **ICAL:** HRMS3_DF_10122018_24AUG2020

Client ID: CS-TB-16A **UTP:** 28-Aug-2020 12:20:35 DTF **J-level:** 0.51 pg/g **Split:** 1 **Checkcode:** 970-919-FKT

Datafile: 200827C22 **Report:** 28 Aug 2020 13:52 TF **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1368-TCDD	22.55		0.8476	0.8468	-1.1	3.59E+05	0.85	Y	1.19	0.933	4292	0.127
1379-TCDD	22.97	J	0.8633	0.8627	-0.8	1.77E+05	0.79	Y	1.19	0.461	4292	0.127
1369-TCDD	NotFnd		0.8818						1.19		4292	0.127
1469-TCDD	NotFnd		0.9150						1.19		4292	0.127
1247/1246/1248/1249-TCDD	24.62	J	0.9249	0.9243	-0.9	1.20E+05	0.66	Y	1.19	0.312	4292	0.127
1378-TCDD	NotFnd		0.9328						1.19		4292	0.127
1268-TCDD	NotFnd		0.9411						1.19		4292	0.127
1478-TCDD	NotFnd		0.9512						1.19		4292	0.127
1279-TCDD	NotFnd		0.9584						1.19		4292	0.127
1234/1269-TCDD	NotFnd		0.9732						1.19		4292	0.127
1236-TCDD	NotFnd		0.9789						1.19		4292	0.127
1237/1238-TCDD	NotFnd		0.9892						1.19		4292	0.127
1239-TCDD	NotFnd		0.9950						1.19		4292	0.127
2378-TCDD	**NotFnd**		**1.0009**						**1.19**		**4292**	**0.127**
1278-TCDD	NotFnd		1.0144						1.19		4292	0.127
1267-TCDD	NotFnd		1.0200						1.19		4292	0.127
1289-TCDD	NotFnd		1.0408						1.19		4292	0.127
12479/12468-PeCDD	29.80	J	0.9195	0.9194	-0.2	3.27E+05	1.62	Y	1.01	1.19	5334	0.177
12469-PeCDD	30.36	J	0.9370	0.9366	-0.7	1.15E+05	1.75	Y	1.01	0.416	5334	0.177
12368-PeCDD	30.94	J	0.9548	0.9547	-0.2	1.66E+05	1.67	Y	1.01	0.604	5334	0.177
12478-PeCDD	NotFnd		0.9610						1.01		5334	0.177
12379-PeCDD	31.26	J	0.9642	0.9644	+0.4	1.36E+05	1.56	Y	1.01	0.494	5334	0.177
12369/12467/12489-PeCDD	31.52	J EMPC	0.9727	0.9726	-0.2	8.84E+04	2.21	N	1.01	0.321	5334	0.177
12346/12347-PeCDD	31.91	J	0.9847	0.9846	-0.2	1.62E+05	1.77	Y	1.01	0.589	5334	0.177
12378-PeCDD	NotFnd		**1.0006**						**1.01**		**5334**	**0.177**
12367-PeCDD	NotFnd		1.0038						1.01		5334	0.177
12389-PeCDD	NotFnd		1.0148						1.01		5334	0.177
124679/124689-HxCDD	34.76		0.9523	0.9524	+0.2	1.20E+06	1.28	Y	1.06	4.83	4782	0.175
123468-HxCDD	35.43	J	0.9709	0.9708	-0.2	4.95E+05	1.20	Y	1.06	1.99	4782	0.175
123679/123689-HxCDD	35.74		0.9791	0.9791	0	8.76E+05	1.29	Y	1.06	3.52	4782	0.175
123469-HxCDD	35.87	J EMPC	0.9829	0.9827	-0.4	2.35E+05	0.99	N	1.06	0.944	4782	0.175
123478-HxCDD	36.52	J	**1.0004**	**1.0006**	**+0.4**	**9.34E+04**	**1.20**	**Y**	1.05	**0.398**	**4782**	**0.179**
123678-HxCDD	36.63	J	**1.0035**	**1.0036**	**+0.2**	**1.88E+05**	**1.19**	**Y**	1.12	**0.745**	**4782**	**0.17**
123467-HxCDD	36.83	J	1.0088	1.0090	+0.4	1.34E+05	1.17	Y	1.06	0.539	4782	0.175
123789-HxCDD	36.93	J	**1.0117**	**1.0118**	**+0.2**	**1.77E+05**	**1.33**	**Y**	1.02	**0.686**	**4782**	**0.177**

Lab ID: B4585_17706_DF_001 | Acq'd: 28 Aug 2020 08:37 DTF | Wt/Vol: 9.80 g | ICAL: HRMS3_DF_10122018_24AUG2020

Client ID: CS-TB-16A | UTP: 28-Aug-2020 12:20:35 DTF | J-level: 0.51 pg/g | Split: 1 | Checkcode: 970-919-FKT

Datafile: 200827C22 | Report: 28 Aug 2020 13:52 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

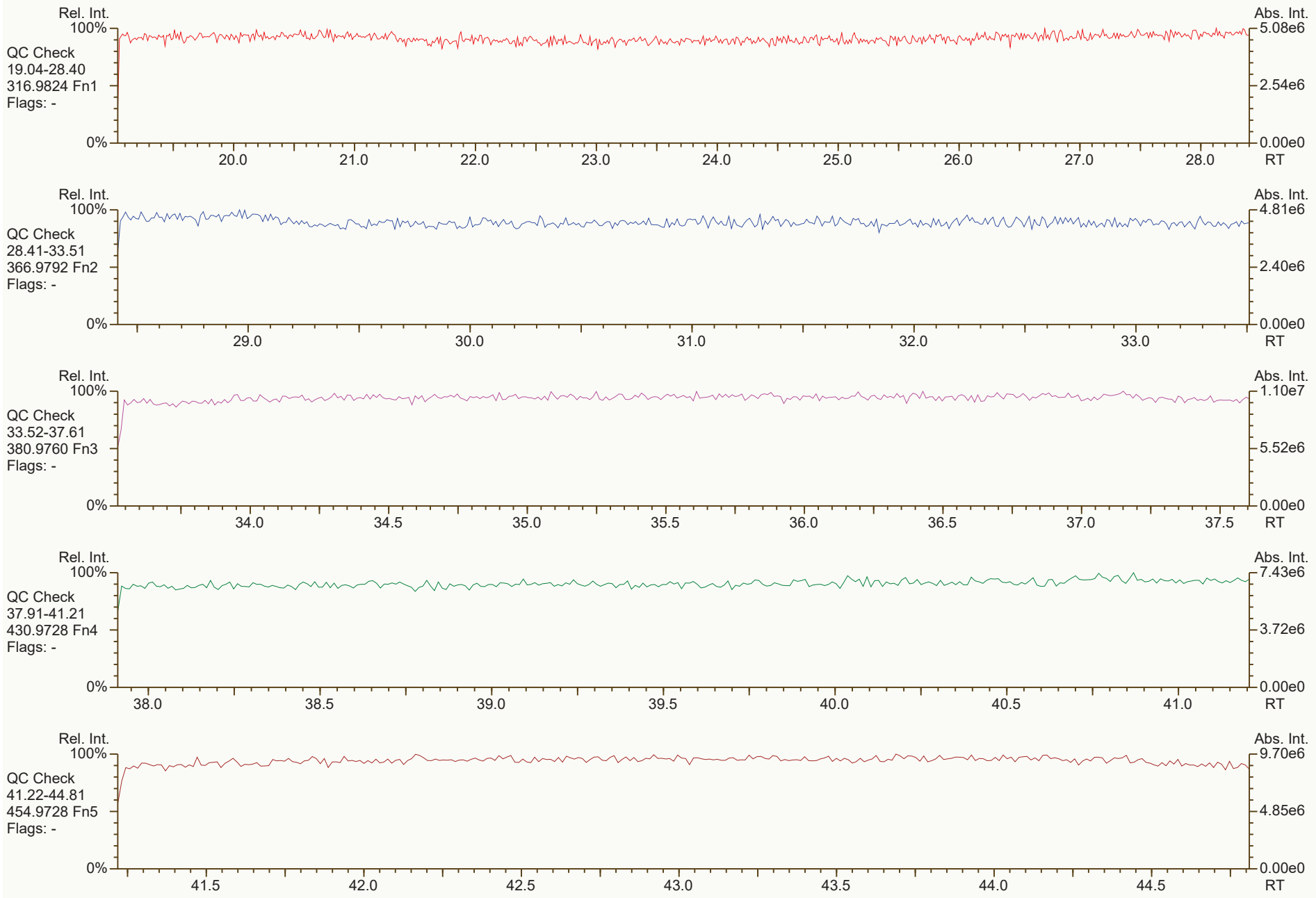
Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1234679-HpCDD	39.33		0.9823	0.9822	-0.2	1.03E+07	1.03	Y	1.00	53.6	2870	0.161
1234678-HpCDD	**40.06**		**1.0003**	**1.0003**	**0**	**4.59E+06**	**1.03**	**Y**	**1.00**	**23.8**	**2870**	**0.161**
OCDD	**42.77**		**1.0001**	**1.0003**	**+0.5**	**2.29E+07**	**0.88**	**Y**	**1.08**	**206**	**4981**	**0.803**
OCDD-a	42.79		1.0002	1.0006	+1.0	8.98E+05	2.29	Y	0.07	120	4983	11.9
1368-TCDF	20.37	J	0.7944	0.7938	-0.7	2.01E+05	0.86	Y	1.06	0.4	6326	0.154
1468-TCDF	20.91	J	0.8157	0.8148	-1.1	7.97E+04	0.86	Y	1.06	0.158	6326	0.154
2468-TCDF	21.55		0.8401	0.8397	-0.5	5.89E+05	0.69	Y	1.06	1.17	6326	0.154
1346/1246-TCDF	21.96	J EMPC	0.8544	0.8556	+1.6	6.30E+04	0.96	N	1.06	0.125	6326	0.154
1347/1378/1247-TCDF	22.10	J EMPC	0.8612	0.8612	0	1.87E+05	0.89	N	1.06	0.372	6326	0.154
1348-TCDF	NotFnd		0.8733						1.06		6326	0.154
1248/1367/1379-TCDF	22.53	J	0.8791	0.8780	-1.5	1.49E+05	0.74	Y	1.06	0.296	6326	0.154
1268-TCDF	22.99	J	0.8963	0.8958	-0.7	8.42E+04	0.78	Y	1.06	0.167	6326	0.154
1467-TCDF	NotFnd		0.9022						1.06		6326	0.154
1478-TCDF	NotFnd		0.9097						1.06		6326	0.154
1369/1237-TCDF	NotFnd		0.9261						1.06		6326	0.154
2467-TCDF	NotFnd		0.9321						1.06		6326	0.154
2368-TCDF	24.09	J	0.9380	0.9385	+0.7	1.55E+05	0.77	Y	1.06	0.308	6326	0.154
1238/1234/1678/1469/1236-TCDF	24.20	J EMPC	0.9425	0.9430	+0.7	1.24E+05	0.58	N	1.06	0.246	6326	0.154
1278-TCDF	NotFnd		0.9625						1.06		6326	0.154
1349-TCDF	NotFnd		0.9685						1.06		6326	0.154
1267-TCDF	NotFnd		0.9741						1.06		6326	0.154
2346/1249-TCDF	NotFnd		0.9825						1.06		6326	0.154
2347/1279-TCDF	NotFnd		0.9917						1.06		6326	0.154
2348-TCDF	NotFnd		0.9964						1.06		6326	0.154
2378-TCDF	**NotFnd**		**1.0009**						**1.06**		**6326**	**0.154**
2367/3467-TCDF	26.10	J	1.0169	1.0169	0	1.18E+05	0.72	Y	1.06	0.234	6326	0.154
1269-TCDF	NotFnd		1.0270						1.06		6326	0.154
1239-TCDF	NotFnd		1.0384						1.06		6326	0.154
1289-TCDF	NotFnd		1.0863						1.06		6326	0.154
13468/12468-PeCDF	27.91	J EMPC	0.9040	0.9042	+0.3	3.39E+05	1.79	N	0.98	0.86	4038	0.0951
13678/13467/12467-PeCDF	29.54	J	0.9572	0.9572	0	1.44E+05	1.48	Y	0.98	0.366	4667	0.11
12368/13478/12478-PeCDF	29.73	J	0.9625	0.9632	+1.2	3.30E+05	1.49	Y	0.98	0.839	4667	0.11
14678-PeCDF	NotFnd		0.9659						0.98		4667	0.11
13479-PeCDF	NotFnd		0.9692						0.98		4667	0.11
13469/12479-PeCDF	NotFnd		0.9776						0.98		4667	0.11
12346-PeCDF	NotFnd		0.9823						0.98		4667	0.11

Lab ID: B4585_17706_DF_001 | Acq'd: 28 Aug 2020 08:37 DTF | Wt/Vol: 9.80 g | ICAL: HRMS3_DF_10122018_24AUG2020

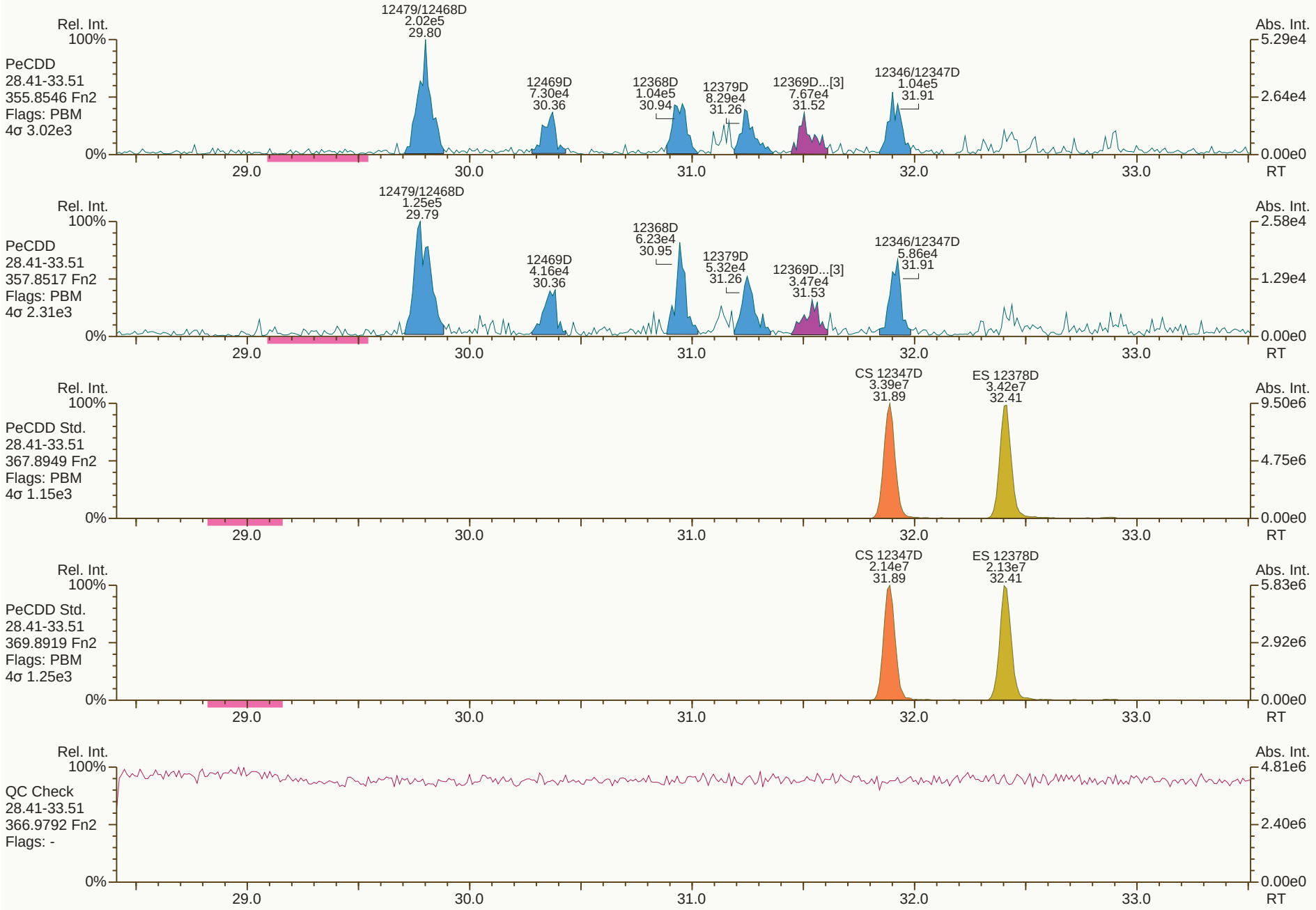
Client ID: CS-TB-16A | UTP: 28-Aug-2020 12:20:35 DTF | J-level: 0.51 pg/g | Split: 1 | Checkcode: 970-919-FKT

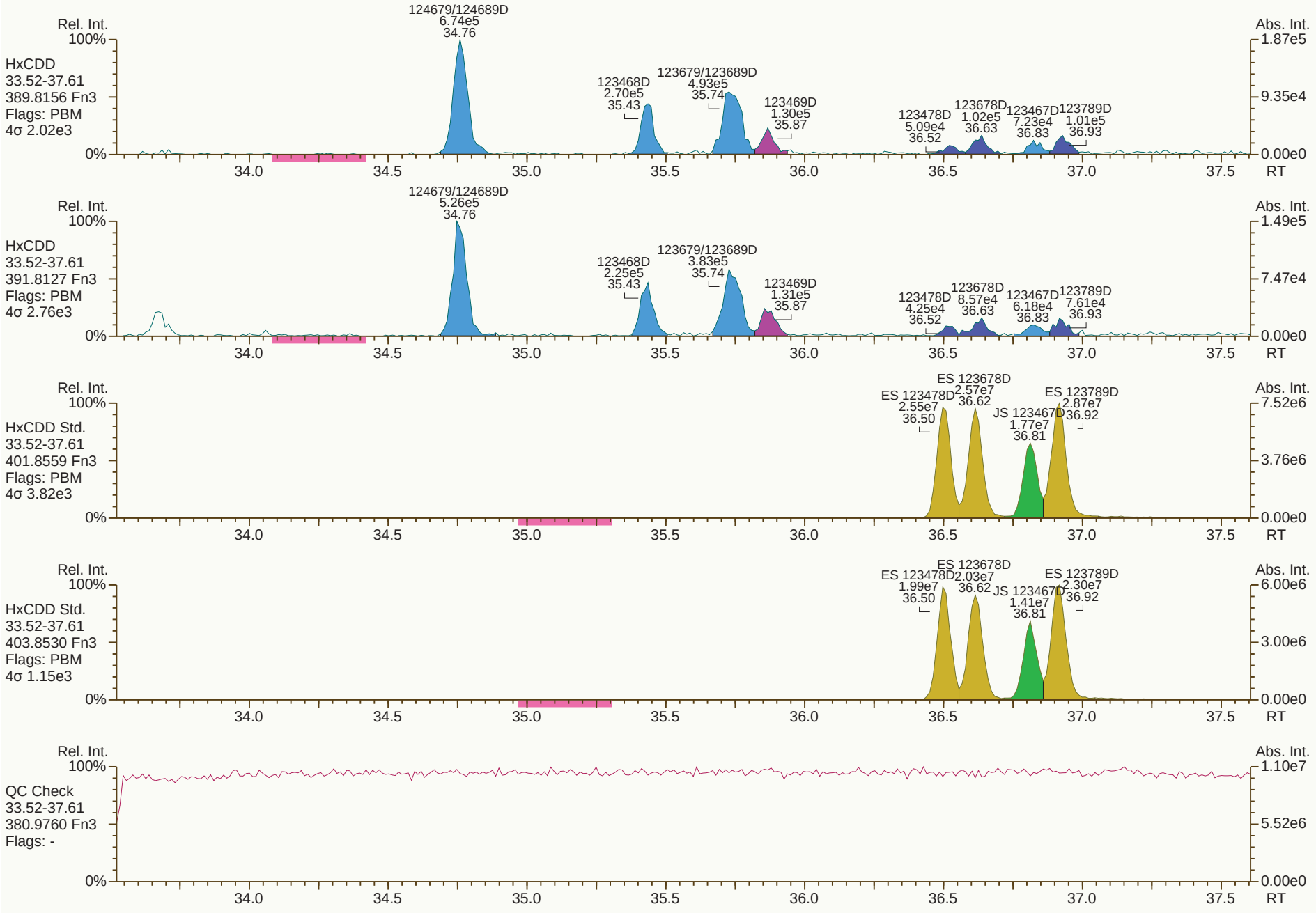
Datafile: 200827C22 | Report: 28 Aug 2020 13:52 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
23468/12469-PeCDF	30.44	J	0.9856	0.9862	+1.1	1.32E+05	1.62	Y	0.98	0.336	4667	0.11
12347-PeCDF	NotFnd		0.9882						0.98		4667	0.11
12348-PeCDF	NotFnd		0.9935						0.98		4667	0.11
12378-PeCDF	**NotFnd**		**1.0006**						**0.98**		**4667**	**0.106**
12678/12367-PeCDF	31.18	J EMPC	1.0099	1.0103	+0.7	9.57E+04	1.87	N	0.98	0.243	4667	0.11
12379-PeCDF	NotFnd		1.0155						0.98		4667	0.11
12679-PeCDF	NotFnd		0.9921						0.98		4667	0.11
23467/12369-PeCDF	31.93	J	0.9965	0.9966	+0.2	7.21E+04	1.63	Y	0.98	0.183	4667	0.11
23478-PeCDF	**32.07**	J	**1.0006**	**1.0008**	**+0.4**	**9.69E+04**	**1.36**	**Y**	**0.97**	**0.251**	**4667**	**0.114**
23478/12489-PeCDF	NotFnd		0.0000						0.97			
12489-PeCDF	NotFnd		1.0043						0.98		4667	0.11
12349-PeCDF	NotFnd		1.0107						0.98		4667	0.11
12389-PeCDF	NotFnd		1.0352						0.98		4667	0.11
123468-HxCDF	34.07	J	0.9601	0.9601	0	1.69E+05	1.20	Y	1.15	0.494	3167	0.0848
124678/134678-HxCDF	34.28	J	0.9660	0.9661	+0.2	5.16E+05	1.18	Y	1.15	1.51	3167	0.0848
134679-HxCDF	NotFnd		0.9725						1.15		3167	0.0848
124679-HxCDF	NotFnd		0.9783						1.15		3167	0.0848
124689-HxCDF	34.94	J	0.9848	0.9848	0	5.66E+05	1.10	Y	1.15	1.65	3167	0.0848
123467-HxCDF	35.38	J EMPC	0.9970	0.9971	+0.2	5.23E+04	0.93	N	1.15	0.153	3167	0.0848
123478-HxCDF	**35.50**	J	**1.0005**	**1.0005**	**0**	**1.34E+05**	**1.22**	**Y**	**1.22**	**0.392**	**3167**	**0.0793**
123678-HxCDF	**35.64**	J	**1.0004**	**1.0005**	**+0.2**	**1.04E+05**	**1.10**	**Y**	**1.11**	**0.29**	**3167**	**0.0817**
123479-HxCDF	NotFnd		1.0049						1.15		3167	0.0848
123469-HxCDF	NotFnd		1.0091						1.15		3167	0.0848
123679-HxCDF	NotFnd		0.9939						1.15		3167	0.0848
234678-HxCDF	**36.32**	J	**1.0004**	**1.0004**	**0**	**7.43E+04**	**1.28**	**Y**	**1.15**	**0.222**	**3167**	**0.084**
234678/123689-HxCDF	NotFnd		0.0000						1.15			
123689-HxCDF	NotFnd		1.0041						1.15		3167	0.0848
123789-HxCDF	**NotFnd**		**1.0005**						**1.12**		**3167**	**0.0951**
123789/123489-HxCDF	NotFnd		0.0000						1.12			
123489-HxCDF	NotFnd		1.0008						1.15		3167	0.0848
1234678-HpCDF	**39.01**		**1.0003**	**1.0003**	**0**	**1.18E+06**	**0.99**	**Y**	**1.29**	**4.38**	**2332**	**0.0798**
1234679-HpCDF	NotFnd		1.0078						1.28		2332	0.0951
1234689-HpCDF	39.46		1.0117	1.0119	+0.5	1.49E+06	0.99	Y	1.28	6.04	2332	0.0951
1234789-HpCDF	**40.47**	**J EMPC**	**1.0002**	**1.0000**	**-0.5**	**5.60E+04**	**0.81**	**N**	**1.27**	**0.249**	**2332**	**0.113**
OCDF	**42.90**	**EMPC**	**1.0002**	**1.0001**	**-0.3**	**9.47E+05**	**0.74**	**N**	**1.04**	**6.67**	**3445**	**0.411**
OCDF-a	NotFnd		1.0001						0.06		3035	5.99

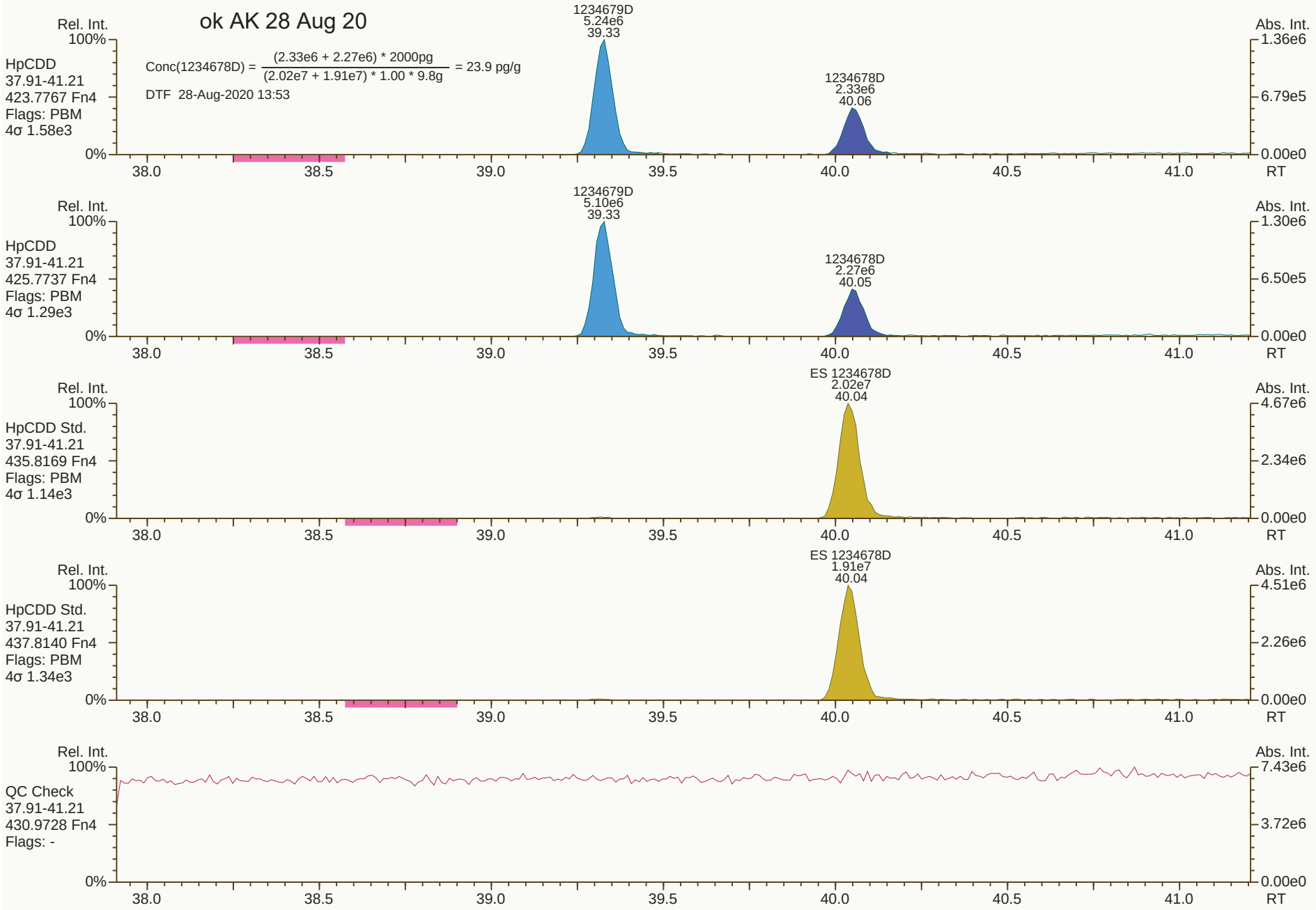

Rel. Int.
100%
QC Check
19.04-28.40
316.9824 Fn1
Flags: -
0%
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Abs. Int.
5.08e6
2.54e6
0.00e0
Rel. Int.
100%
QC Check
28.41-33.51
366.9792 Fn2
Flags: -
0%
29.0
30.0
31.0
32.0
33.0
RT
Abs. Int.
4.81e6
2.40e6
0.00e0
Rel. Int.
100%
QC Check
33.52-37.61
380.9760 Fn3
Flags: -
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Abs. Int.
1.10e7
5.52e6
0.00e0
Rel. Int.
100%
QC Check
37.91-41.21
430.9728 Fn4
Flags: -
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Abs. Int.
7.43e6
3.72e6
0.00e0
Rel. Int.
100%
QC Check
41.22-44.81
454.9728 Fn5
Flags: -
0%
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Abs. Int.
9.70e6
4.85e6
0.00e0


Rel. Int.
100%
TCDD
19.04-28.40
319.8965 Fn1
Flags: PBM
4σ 2.60e3
1368D
1.65e5
22.55
1379D
7.84e4
22.97
1247D...[4]
4.78e4
24.62
Abs. Int.
2.66e4
1.33e4
0.00e0
0%
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDD
19.04-28.40
321.8936 Fn1
Flags: PBM
4σ 1.69e3
1368D
1.94e5
22.55
1379D
9.89e4
22.97
1247D...[4]
7.21e4
24.62
Abs. Int.
3.08e4
1.54e4
0.00e0
0%
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
37Cl-TCDD
19.04-28.40
327.8850 Fn1
Flags: PBM
4σ 1.60e3
CS 37Cl-2378D
3.13e7
26.66
Abs. Int.
6.75e6
3.38e6
0.00e0
0%
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.40
331.9368 Fn1
Flags: PBM
4σ 5.67e3
JS 1234D
3.50e7
25.92
ES 2378D
2.95e7
26.63
Abs. Int.
7.51e6
3.75e6
0.00e0
0%
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.40
333.9339 Fn1
Flags: PBM
4σ 1.83e3
JS 1234D
4.36e7
25.92
ES 2378D
3.67e7
26.63
Abs. Int.
9.30e6
4.65e6
0.00e0
0%
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT


Rel. Int.
100%
PeCDD
28.41-33.51
355.8546 Fn2
Flags: PBM
4σ 3.02e3
12479/12468D
2.02e5
29.80
12469D
7.30e4
30.36
12368D
1.04e5
30.94
12379D
8.29e4
31.26
12369D...[3]
7.67e4
31.52
12346/12347D
1.04e5
31.91
Abs. Int.
5.29e4
2.64e4
0.00e0
0%
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD
28.41-33.51
357.8517 Fn2
Flags: PBM
4σ 2.31e3
12479/12468D
1.25e5
29.79
12469D
4.16e4
30.36
12368D
6.23e4
30.95
12379D
5.32e4
31.26
12369D...[3]
3.47e4
31.53
12346/12347D
5.86e4
31.91
Abs. Int.
2.58e4
1.29e4
0.00e0
0%
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.41-33.51
367.8949 Fn2
Flags: PBM
4σ 1.15e3
CS 12347D
3.39e7
31.89
ES 12378D
3.42e7
32.41
Abs. Int.
9.50e6
4.75e6
0.00e0
0%
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.41-33.51
369.8919 Fn2
Flags: PBM
4σ 1.25e3
CS 12347D
2.14e7
31.89
ES 12378D
2.13e7
32.41
Abs. Int.
5.83e6
2.92e6
0.00e0
0%
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
QC Check
28.41-33.51
366.9792 Fn2
Flags: -
Abs. Int.
4.81e6
2.40e6
0.00e0
0%
29.0
30.0
31.0
32.0
33.0
RT



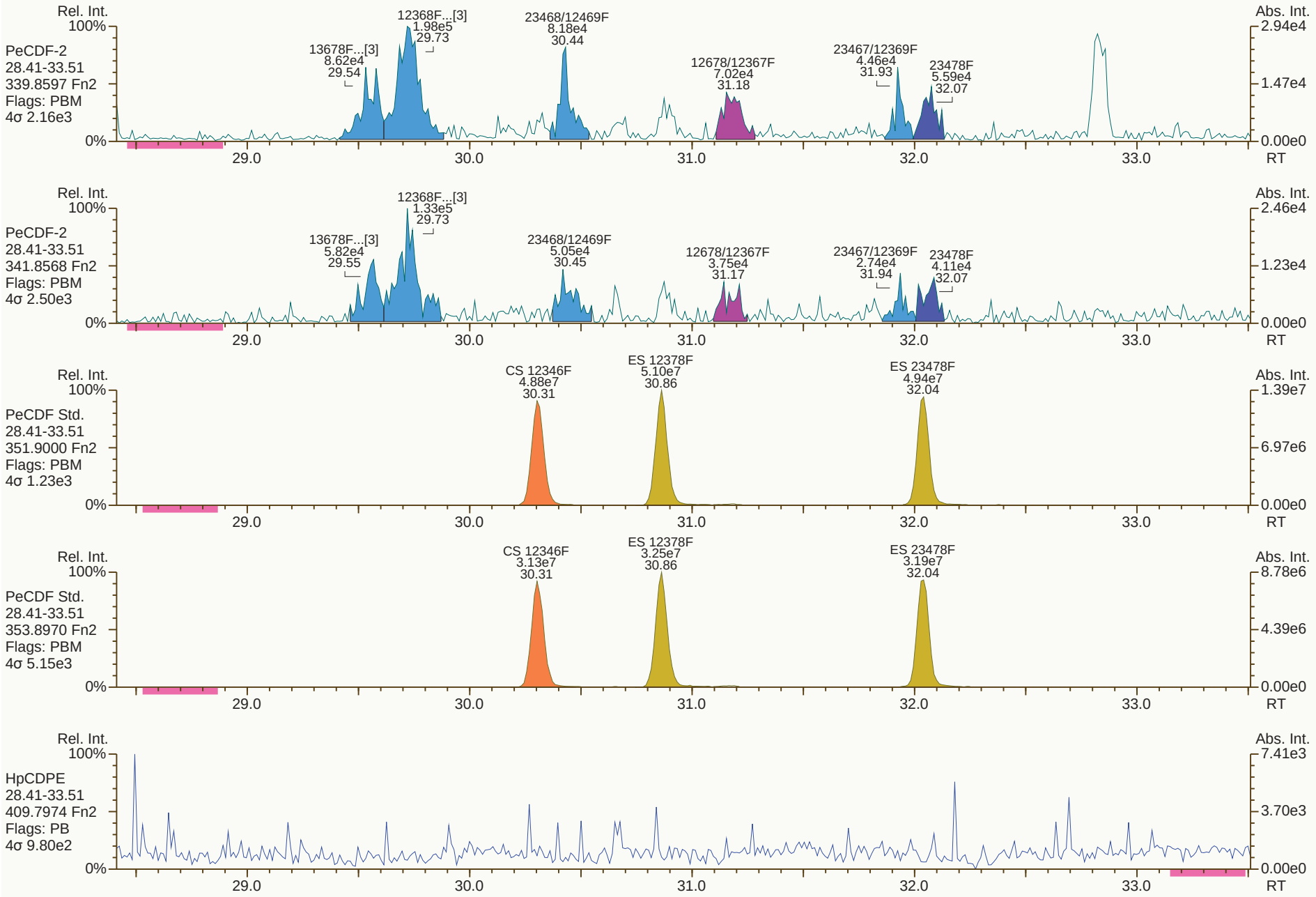
Results: P:\B4500_B4599\B4585\B4585_17706 DF\Resources\B4585_17706_DF_001.utp_res, saved 28-Aug-2020 13:54 (DTF) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 1462, 2591 scc: 970-919 *Revised: 28-Aug-2020 11:13 (DTF) Printed: 28-Aug-2020 13:59 Page 4 of 12*

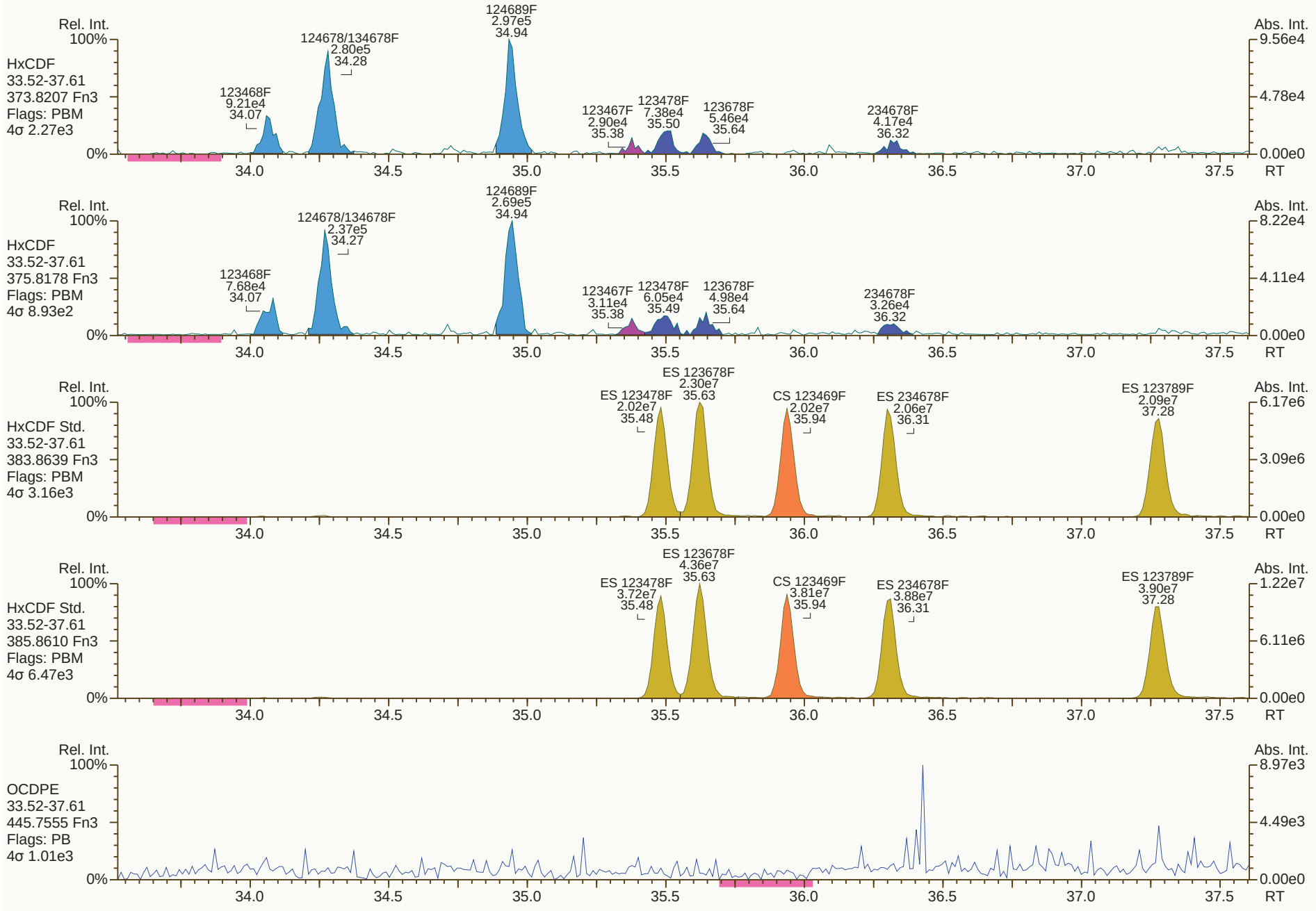

ok AK 28 Aug 20
Conc(1234678D) = (2.33e6 + 2.27e6) * 2000pg / (2.02e7 + 1.91e7) * 1.00 * 9.8g = 23.9 pg/g
DTF 28-Aug-2020 13:53
Rel. Int.
Abs. Int.
HpCDD
37.91-41.21
423.7767 Fn4
Flags: PBM
4σ 1.58e3
1234679D
5.24e6
39.33
1234678D
2.33e6
40.06
1.36e6
6.79e5
HpCDD
37.91-41.21
425.7737 Fn4
Flags: PBM
4σ 1.29e3
1234679D
5.10e6
39.33
1234678D
2.27e6
40.05
1.30e6
6.50e5
HpCDD Std.
37.91-41.21
435.8169 Fn4
Flags: PBM
4σ 1.14e3
ES 1234678D
2.02e7
40.04
4.67e6
2.34e6
HpCDD Std.
37.91-41.21
437.8140 Fn4
Flags: PBM
4σ 1.34e3
ES 1234678D
1.91e7
40.04
4.51e6
2.26e6
QC Check
37.91-41.21
430.9728 Fn4
Flags: -
7.43e6
3.72e6
100%
0%
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT


OCDD
1.07e7
42.77
Rel. Int.
100%
OCDD
41.22-44.81
457.7377 Fn5
Flags: PBM
4σ 2.03e3
0%
Abs. Int.
1.55e6
7.73e5
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
OCDD
1.22e7
42.77
OCDD
41.22-44.81
459.7348 Fn5
Flags: PBM
4σ 2.95e3
1.69e6
8.43e5
ES OCDD
2.00e7
42.76
OCDD Std.
41.22-44.81
469.7780 Fn5
Flags: PBM
4σ 1.11e3
2.80e6
1.40e6
ES OCDD
2.19e7
42.76
OCDD Std.
41.22-44.81
471.7750 Fn5
Flags: PBM
4σ 1.25e3
3.18e6
1.59e6
QC Check
41.22-44.81
454.9728 Fn5
Flags: -
9.70e6
4.85e6


Rel. Int.
100%
TCDF
19.04-28.40
303.9016 Fn1
Flags: PBM
4σ 2.77e3
1368F 9.29e4 20.37
1468F 3.68e4 20.91
2468F 2.41e5 21.55
1347F...[3] 9.43e4 22.10
1248F...[3] 6.35e4 22.53
1268F 3.70e4 22.99
2368F 6.74e4 24.09
1238F...[5] 5.38e4 24.20
2367/3467F 4.91e4 26.10
Abs. Int.
4.24e4
2.12e4
0.00e0
0%
20.0 21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0
RT
Rel. Int.
100%
TCDF
19.04-28.40
305.8987 Fn1
Flags: PBM
4σ 3.56e3
1368F 1.08e5 20.37
1468F 4.29e4 20.91
2468F 3.48e5 21.54
1347F...[3] 1.06e5 22.10
1346/1246F 3.56e4 21.95
1248F...[3] 8.56e4 22.54
1268F 4.73e4 22.99
2368F 8.76e4 24.09
1238F...[5] 9.26e4 24.19
2367/3467F 6.86e4 26.10
Abs. Int.
6.27e4
3.13e4
0.00e0
0%
20.0 21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0
RT
Rel. Int.
100%
TCDF Std.
19.04-28.40
315.9419 Fn1
Flags: PBM
4σ 1.28e4
JS 1234F 5.20e7 24.15
ES 2378F 4.30e7 25.67
Abs. Int.
9.73e6
4.87e6
0.00e0
0%
20.0 21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0
RT
Rel. Int.
100%
TCDF Std.
19.04-28.40
317.9389 Fn1
Flags: PBM
4σ 6.10e3
JS 1234F 6.60e7 24.15
ES 2378F 5.35e7 25.66
Abs. Int.
1.25e7
6.25e6
0.00e0
0%
20.0 21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0
RT
Rel. Int.
100%
HxCDPE
19.04-28.40
375.8364 Fn1
Flags: PB
4σ 9.30e2
Abs. Int.
1.30e4
6.50e3
0.00e0
0%
20.0 21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0
RT


Rel. Int.
100%
0%
PeCDF-1
19.04-28.40
339.8597 Fn1
Flags: PBM
4σ 2.07e3
13468/12468F
2.37e5
27.91
Abs. Int.
6.52e4
3.26e4
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
PeCDF-1
19.04-28.40
341.8568 Fn1
Flags: PBM
4σ 1.97e3
13468/12468F
1.33e5
27.90
5.32e4
2.66e4
QC Check
19.04-28.40
316.9824 Fn1
Flags: -
5.08e6
2.54e6


Rel. Int.
100%
PeCDF-2
28.41-33.51
339.8597 Fn2
Flags: PBM
4σ 2.16e3
0%
13678F...[3]
8.62e4
29.54
12368F...[3]
1.98e5
29.73
23468/12469F
8.18e4
30.44
12678/12367F
7.02e4
31.18
23467/12369F
4.46e4
31.93
23478F
5.59e4
32.07
Abs. Int.
2.94e4
1.47e4
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF-2
28.41-33.51
341.8568 Fn2
Flags: PBM
4σ 2.50e3
0%
13678F...[3]
5.82e4
29.55
12368F...[3]
1.33e5
29.73
23468/12469F
5.05e4
30.45
12678/12367F
3.75e4
31.17
23467/12369F
2.74e4
31.94
23478F
4.11e4
32.07
Abs. Int.
2.46e4
1.23e4
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.41-33.51
351.9000 Fn2
Flags: PBM
4σ 1.23e3
0%
CS 12346F
4.88e7
30.31
ES 12378F
5.10e7
30.86
ES 23478F
4.94e7
32.04
Abs. Int.
1.39e7
6.97e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.41-33.51
353.8970 Fn2
Flags: PBM
4σ 5.15e3
0%
CS 12346F
3.13e7
30.31
ES 12378F
3.25e7
30.86
ES 23478F
3.19e7
32.04
Abs. Int.
8.78e6
4.39e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
HpCDPE
28.41-33.51
409.7974 Fn2
Flags: PB
4σ 9.80e2
0%
Abs. Int.
7.41e3
3.70e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT


Rel. Int.
100%
HxCDF
33.52-37.61
373.8207 Fn3
Flags: PBM
4σ 2.27e3
123468F 9.21e4 34.07
124678/134678F 2.80e5 34.28
124689F 2.97e5 34.94
123467F 2.90e4 35.38
123478F 7.38e4 35.50
123678F 5.46e4 35.64
234678F 4.17e4 36.32
Abs. Int.
9.56e4
4.78e4
0.00e0
0%
34.0 34.5 35.0 35.5 36.0 36.5 37.0 37.5 RT
Rel. Int.
100%
HxCDF
33.52-37.61
375.8178 Fn3
Flags: PBM
4σ 8.93e2
123468F 7.68e4 34.07
124678/134678F 2.37e5 34.27
124689F 2.69e5 34.94
123467F 3.11e4 35.38
123478F 6.05e4 35.49
123678F 4.98e4 35.64
234678F 3.26e4 36.32
Abs. Int.
8.22e4
4.11e4
0.00e0
0%
34.0 34.5 35.0 35.5 36.0 36.5 37.0 37.5 RT
Rel. Int.
100%
HxCDF Std.
33.52-37.61
383.8639 Fn3
Flags: PBM
4σ 3.16e3
ES 123478F 2.02e7 35.48
ES 123678F 2.30e7 35.63
CS 123469F 2.02e7 35.94
ES 234678F 2.06e7 36.31
ES 123789F 2.09e7 37.28
Abs. Int.
6.17e6
3.09e6
0.00e0
0%
34.0 34.5 35.0 35.5 36.0 36.5 37.0 37.5 RT
Rel. Int.
100%
HxCDF Std.
33.52-37.61
385.8610 Fn3
Flags: PBM
4σ 6.47e3
ES 123478F 3.72e7 35.48
ES 123678F 4.36e7 35.63
CS 123469F 3.81e7 35.94
ES 234678F 3.88e7 36.31
ES 123789F 3.90e7 37.28
Abs. Int.
1.22e7
6.11e6
0.00e0
0%
34.0 34.5 35.0 35.5 36.0 36.5 37.0 37.5 RT
Rel. Int.
100%
OCDPE
33.52-37.61
445.7555 Fn3
Flags: PB
4σ 1.01e3
Abs. Int.
8.97e3
4.49e3
0.00e0
0%
34.0 34.5 35.0 35.5 36.0 36.5 37.0 37.5 RT


Rel. Int.
100%
HpCDF
37.91-41.21
407.7818 Fn4
Flags: PBM
4σ 1.64e3
0%
1234678F
5.88e5
39.01
1234689F
7.43e5
39.46
Abs. Int.
1.96e5
9.78e4
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF
37.91-41.21
409.7788 Fn4
Flags: PBM
4σ 6.93e2
0%
1234678F
5.95e5
39.01
1234689F
7.52e5
39.46
1234789F
3.53e4
40.46
Abs. Int.
2.01e5
1.01e5
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.91-41.21
417.8253 Fn4
Flags: PBM
4σ 2.71e3
0%
ES 1234678F
1.37e7
39.00
CS 1234689F
1.32e7
39.45
ES 1234789F
1.15e7
40.47
Abs. Int.
3.70e6
1.85e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.91-41.21
419.8220 Fn4
Flags: PBM
4σ 3.17e3
0%
ES 1234678F
2.89e7
39.00
CS 1234689F
2.85e7
39.45
ES 1234789F
2.47e7
40.47
Abs. Int.
7.51e6
3.76e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
NCDPE
37.91-41.21
479.7165 Fn4
Flags: PB
4σ 1.54e3
0%
Abs. Int.
2.49e4
1.25e4
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT


OCDF
4.46e5
42.90
Rel. Int.
100%
OCDF
41.22-44.81
441.7428 Fn5
Flags: PBM
4σ 1.51e3
0%
Abs. Int.
7.10e4
3.55e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
OCDF
6.03e5
42.90
Rel. Int.
100%
OCDF
41.22-44.81
443.7398 Fn5
Flags: PBM
4σ 1.94e3
0%
Abs. Int.
9.21e4
4.61e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDF
2.64e7
42.90
Rel. Int.
100%
OCDF Std.
41.22-44.81
453.7830 Fn5
Flags: PBM
4σ 1.05e3
0%
Abs. Int.
3.90e6
1.95e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDF
2.91e7
42.90
Rel. Int.
100%
OCDF Std.
41.22-44.81
455.7801 Fn5
Flags: PBM
4σ 2.44e3
0%
Abs. Int.
4.13e6
2.07e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
DCDPE
41.22-44.81
513.6775 Fn5
Flags: PB
4σ 7.96e2
0%
Abs. Int.
2.73e3
1.37e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT

Lab ID: B4585_17706_DF_002 **Acq'd:** 28 Aug 2020 09:23 DTF **Wt/Vol:** 10.90 g **ICAL:** HRMS3_DF_10122018_24AUG2020

Client ID: CS-53 **UTP:** 28-Aug-2020 12:20:36 DTF **J-level:** 0.459 pg/g **Split:** 1 **Checkcode:** 126-394-CMZ

Datafile: 200827C23 **Report:** 28 Aug 2020 13:53 TF **Stds (pg):** JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	NotFnd		1.0009	-		-	-	-	1.19	-	4360	0.137
12378-PeCDD	32.44	J	1.0006	1.0006	0	7.81E+04	1.52	Y	1.01	0.281	3820	0.132
123478-HxCDD	36.53	J	1.0004	1.0005	+0.2	1.82E+05	1.21	Y	1.05	0.748	4161	0.149
123678-HxCDD	36.64	J	1.0035	1.0036	+0.2	3.61E+05	1.38	Y	1.12	1.39	4161	0.152
123789-HxCDD	36.94	J	1.0117	1.0118	+0.2	3.00E+05	1.38	Y	1.02	1.1	4161	0.151
1234678-HpCDD	40.07		1.0003	1.0003	0	7.38E+06	1.01	Y	1.00	37.3	2961	0.154
OCDD	42.79		1.0001	1.0003	+0.5	4.24E+07	0.90	Y	1.08	352	4752	0.703
2378-TCDF	25.69	EMPC	1.0009	1.0008	-0.2	3.30E+05	0.93	N	1.06	0.669	7050	0.177
12378-PeCDF	30.89	J	1.0006	1.0006	0	2.34E+05	1.66	Y	0.98	0.587	4360	0.103
23478-PeCDF	32.07	J	1.0006	1.0008	+0.4	2.86E+05	1.67	Y	0.97	0.738	4360	0.103
123478-HxCDF	35.51	J	1.0005	1.0005	0	2.76E+05	1.26	Y	1.22	0.79	6470	0.163
123678-HxCDF	35.65	J	1.0004	1.0003	-0.2	2.20E+05	1.35	Y	1.11	0.59	6470	0.162
234678-HxCDF	36.33	J EMPC	1.0004	1.0004	0	1.62E+05	0.89	N	1.15	0.461	6470	0.174
123789-HxCDF	NotFnd		1.0005	-		-	-	-	1.12	-	6470	0.198
1234678-HpCDF	39.02		1.0003	1.0003	0	1.22E+06	0.96	Y	1.29	4.28	2184	0.076
1234789-HpCDF	40.49	J	1.0002	1.0001	-0.2	9.06E+04	1.11	Y	1.27	0.388	2184	0.106
OCDF	42.92		1.0002	1.0002	0	1.36E+06	0.88	Y	1.04	9.01	3258	0.375

Name	Act RT		Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	26.63		1.0272	1.0274	+0.3	5.69E+07	0.80	Y	0.97	72.8
ES 12378-PeCDD	32.42		1.2489	1.2505	+3.1	5.03E+07	1.58	Y	0.84	73.8
ES 123478-HxCDD	36.51		0.9917	0.9916	-0.2	4.22E+07	1.23	Y	0.97	66.7
ES 123678-HxCDD	36.63		0.9948	0.9947	-0.2	4.27E+07	1.23	Y	0.96	68.2
ES 123789-HxCDD	36.93		1.0028	1.0029	+0.2	4.91E+07	1.26	Y	1.10	68.2
ES 1234678-HpCDD	40.06		1.0871	1.0879	+1.9	3.62E+07	1.06	Y	0.93	59.8
ES OCDD	42.78		1.1607	1.1617	+2.6	4.08E+07	0.90	Y	0.63	49.8
ES 2378-TCDF	25.67		1.0623	1.0628	+0.8	8.51E+07	0.80	Y	0.97	72.7
ES 12378-PeCDF	30.87		1.2762	1.2784	+4.1	7.45E+07	1.56	Y	0.78	79.6
ES 23478-PeCDF	32.05		1.3247	1.3270	+4.4	7.34E+07	1.55	Y	0.80	75.8
ES 123478-HxCDF	35.49		0.9641	0.9638	-0.6	5.27E+07	0.53	Y	1.22	66.5
ES 123678-HxCDF	35.63		0.9680	0.9677	-0.6	6.20E+07	0.54	Y	1.41	67.4
ES 234678-HxCDF	36.32		0.9864	0.9863	-0.2	5.62E+07	0.53	Y	1.29	67.1
ES 123789-HxCDF	37.29		1.0127	1.0126	-0.2	5.44E+07	0.54	Y	1.17	71.3
ES 1234678-HpCDF	39.01		1.0591	1.0594	+0.7	4.02E+07	0.45	Y	0.97	63.5
ES 1234789-HpCDF	40.48		1.0986	1.0994	+1.9	3.37E+07	0.46	Y	0.88	58.9
ES OCDF	42.91		1.1644	1.1655	+2.8	5.31E+07	0.90	Y	0.81	50.6

Lab ID: B4585_17706_DF_002 | Acq'd: 28 Aug 2020 09:23 DTF | Wt/Vol: 10.90 g | ICAL: HRMS3_DF_10122018_24AUG2020

Client ID: CS-53 | UTP: 28-Aug-2020 12:20:36 DTF | J-level: 0.459 pg/g | Split: 1 | Checkcode: 126-394-CMZ

Datafile: 200827C23 | Report: 28 Aug 2020 13:53 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
JS 1234-TCDD	25.92		-	-	-	8.06E+07	0.82	Y	-	-
JS 1234-TCDF	24.15		-	-	-	1.20E+08	0.79	Y	-	-
JS 123467-HxCDD	36.82		-	-	-	3.25E+07	1.26	Y	-	-
CS 37Cl-2378-TCDD	26.66		1.0281	1.0284	+0.5	3.54E+07	n/a	-	1.14	96.1
CS 12347-PeCDD	31.89		1.2288	1.2303	+2.9	6.43E+07	1.61	Y	0.72	110
CS 12346-PeCDF	30.31		1.2534	1.2553	+3.5	9.41E+07	1.57	Y	0.77	101
CS 123469-HxCDF	35.95		0.9765	0.9763	-0.4	6.93E+07	0.53	Y	1.18	90.1
CS 1234689-HpCDF	39.46		1.0712	1.0717	+1.2	5.04E+07	0.46	Y	0.96	81.1
~~SS 37Cl-2378-TCDD~~	~~26.66~~		~~1.0281~~	~~1.0284~~	~~+0.5~~	~~3.54E+07~~	~~n/a~~		~~1.19~~	~~130~~
~~SS 12347-PeCDD~~	~~31.89~~	~~V~~	~~1.2288~~	~~1.2303~~	~~+2.9~~	~~6.43E+07~~	~~1.61~~	~~Y~~	~~0.86~~	~~149~~
~~SS 12346-PeCDF~~	~~30.31~~		~~1.2534~~	~~1.2553~~	~~+3.5~~	~~9.41E+07~~	~~1.57~~	~~Y~~	~~1.00~~	~~127~~
~~SS 123469-HxCDF~~	~~35.95~~	~~V~~	~~0.9765~~	~~0.9763~~	~~-0.4~~	~~6.93E+07~~	~~0.53~~	~~Y~~	~~0.84~~	~~133~~
~~SS 1234689-HpCDF~~	~~39.46~~		~~1.0712~~	~~1.0717~~	~~+1.2~~	~~5.04E+07~~	~~0.46~~	~~Y~~	~~0.98~~	~~127~~

Totals	Conc	EMPC
Total TCDD	3.37	3.94
Total PeCDD	6.61	7.54
Total HxCDD	24.2	25.9
Total HpCDD	126	126
Total Tetra-Octa Dioxins	512	516
Total TCDF	5.56	11
Total PeCDF	7.71	8.34
Total HxCDF	5.67	6.83
Total HpCDF	10.4	10.7
Total Tetra-Octa Furans	38.4	45.9
Total Tetra-Octa Dioxins & Furans	551	562

Lab ID: B4585_17706_DF_002 | Acq'd: 28 Aug 2020 09:23 DTF | Wt/Vol: 10.90 g | ICAL: HRMS3_DF_10122018_24AUG2020

Client ID: CS-53 | UTP: 28-Aug-2020 12:20:36 DTF | J-level: 0.459 pg/g | Split: 1 | Checkcode: 126-394-CMZ

Datafile: 200827C23 | Report: 28 Aug 2020 13:53 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1368-TCDD	22.55		0.8476	0.8465	-1.5	6.66E+05	0.73	Y	1.19	1.81	4360	0.137
1379-TCDD	22.98	EMPC	0.8633	0.8628	-0.7	2.13E+05	0.58	N	1.19	0.579	4360	0.137
1369-TCDD	NotFnd		0.8818						1.19		4360	0.137
1469-TCDD	24.36		0.9150	0.9146	-0.6	2.53E+05	0.85	Y	1.19	0.689	4360	0.137
1247/1246/1248/1249-TCDD	24.61		0.9249	0.9239	-1.5	1.84E+05	0.82	Y	1.19	0.501	4360	0.137
1378-TCDD	24.83	J	0.9328	0.9323	-0.7	1.34E+05	0.72	Y	1.19	0.364	4360	0.137
1268-TCDD	NotFnd		0.9411						1.19		4360	0.137
1478-TCDD	NotFnd		0.9512						1.19		4360	0.137
1279-TCDD	NotFnd		0.9584						1.19		4360	0.137
1234/1269-TCDD	NotFnd		0.9732						1.19		4360	0.137
1236-TCDD	NotFnd		0.9789						1.19		4360	0.137
1237/1238-TCDD	NotFnd		0.9892						1.19		4360	0.137
1239-TCDD	NotFnd		0.9950						1.19		4360	0.137
2378-TCDD	**NotFnd**		**1.0009**						**1.19**		**4360**	**0.137**
1278-TCDD	NotFnd		1.0144						1.19		4360	0.137
1267-TCDD	NotFnd		1.0200						1.19		4360	0.137
1289-TCDD	NotFnd		1.0408						1.19		4360	0.137
12479/12468-PeCDD	29.80		0.9195	0.9194	-0.2	6.70E+05	1.57	Y	1.01	2.41	3820	0.132
12469-PeCDD	30.37	J EMPC	0.9370	0.9367	-0.5	1.47E+05	2.07	N	1.01	0.53	3820	0.132
12368-PeCDD	30.96	J	0.9548	0.9549	+0.2	4.68E+05	1.57	Y	1.01	1.69	3820	0.132
12478-PeCDD	31.15	J	0.9610	0.9610	0	9.88E+04	1.76	Y	1.01	0.356	3820	0.132
12379-PeCDD	31.26	J	0.9642	0.9644	+0.4	2.97E+05	1.65	Y	1.01	1.07	3820	0.132
12369/12467/12489-PeCDD	31.53	J EMPC	0.9727	0.9728	+0.2	1.13E+05	1.18	N	1.01	0.406	3820	0.132
12346/12347-PeCDD	31.92	J	0.9847	0.9846	-0.2	2.22E+05	1.58	Y	1.01	0.802	3820	0.132
12378-PeCDD	32.44	J	**1.0006**	**1.0006**	**0**	**7.81E+04**	**1.52**	**Y**	**1.01**	**0.281**	**3820**	**0.132**
12367-PeCDD	NotFnd		1.0038						1.01		3820	0.132
12389-PeCDD	NotFnd		1.0148						1.01		3820	0.132
124679/124689-HxCDD	34.77		0.9523	0.9523	0	2.06E+06	1.26	Y	1.06	7.95	4161	0.15
123468-HxCDD	35.44		0.9709	0.9707	-0.4	1.34E+06	1.20	Y	1.06	5.18	4161	0.15
123679/123689-HxCDD	35.75		0.9791	0.9791	0	1.78E+06	1.21	Y	1.06	6.87	4161	0.15
123469-HxCDD	35.87	J EMPC	0.9829	0.9825	-0.9	4.39E+05	1.03	N	1.06	1.7	4161	0.15
123478-HxCDD	36.53	J	**1.0004**	**1.0005**	**+0.2**	**1.82E+05**	**1.21**	**Y**	1.05	**0.748**	**4161**	**0.149**
123678-HxCDD	36.64	J	**1.0035**	**1.0036**	**+0.2**	**3.61E+05**	**1.38**	**Y**	1.12	**1.39**	**4161**	**0.152**
123467-HxCDD	36.83	J	1.0088	1.0088	0	2.46E+05	1.33	Y	1.06	0.95	4161	0.15
123789-HxCDD	36.94	J	**1.0117**	**1.0118**	**+0.2**	**3.00E+05**	**1.38**	**Y**	1.02	**1.1**	**4161**	**0.151**

Lab ID: B4585_17706_DF_002 | Acq'd: 28 Aug 2020 09:23 DTF | Wt/Vol: 10.90 g | ICAL: HRMS3_DF_10122018_24AUG2020

Client ID: CS-53 | UTP: 28-Aug-2020 12:20:36 DTF | J-level: 0.459 pg/g | Split: 1 | Checkcode: 126-394-CMZ

Datafile: 200827C23 | Report: 28 Aug 2020 13:53 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
1234679-HpCDD	39.34		0.9823	0.9821	-0.5	1.75E+07	1.02	Y	1.00	88.6	2961	0.154
1234678-HpCDD	**40.07**		**1.0003**	**1.0003**	**0**	**7.38E+06**	**1.01**	**Y**	**1.00**	**37.3**	**2961**	**0.154**
OCDD	**42.79**		**1.0001**	**1.0003**	**+0.5**	**4.24E+07**	**0.90**	**Y**	**1.08**	**352**	**4752**	**0.703**
OCDD-a	42.78		1.0002	1.0000	-0.5	2.70E+06	2.50	Y	0.07	334	9934	21.9
1368-TCDF	20.36		0.7944	0.7934	-1.2	2.72E+05	0.80	Y	1.06	0.551	7050	0.177
1468-TCDF	20.90	J	0.8157	0.8143	-1.8	1.87E+05	0.72	Y	1.06	0.379	7050	0.177
2468-TCDF	21.55	EMPC	0.8401	0.8395	-0.8	4.96E+05	0.91	N	1.06	1.01	7050	0.177
1346/1246-TCDF	21.94	J EMPC	0.8544	0.8550	+0.8	1.01E+05	1.22	N	1.06	0.205	7050	0.177
1347/1378/1247-TCDF	22.10		0.8612	0.8611	-0.1	6.16E+05	0.71	Y	1.06	1.25	7050	0.177
1348-TCDF	22.40	J	0.8733	0.8726	-0.9	1.15E+05	0.76	Y	1.06	0.233	7050	0.177
1248/1367/1379-TCDF	22.55	EMPC	0.8791	0.8786	-0.7	2.69E+05	0.91	N	1.06	0.545	7050	0.177
1268-TCDF	22.98	J	0.8963	0.8954	-1.2	2.07E+05	0.73	Y	1.06	0.42	7050	0.177
1467-TCDF	23.14	J	0.9022	0.9014	-1.1	1.07E+05	0.85	Y	1.06	0.218	7050	0.177
1478-TCDF	23.33	J EMPC	0.9097	0.9090	-1.0	1.54E+05	0.90	N	1.06	0.311	7050	0.177
1369/1237-TCDF	23.76	J	0.9261	0.9258	-0.4	2.15E+05	0.78	Y	1.06	0.437	7050	0.177
2467-TCDF	23.92	J	0.9321	0.9318	-0.4	2.04E+05	0.73	Y	1.06	0.415	7050	0.177
2368-TCDF	24.08		0.9380	0.9382	+0.3	3.01E+05	0.76	Y	1.06	0.612	7050	0.177
1238/1234/1678/1469/1236-TCDF	24.19	EMPC	0.9425	0.9425	0	3.09E+05	0.89	N	1.06	0.626	7050	0.177
1278-TCDF	24.70		0.9625	0.9623	-0.3	3.62E+05	0.77	Y	1.06	0.734	7050	0.177
1349-TCDF	NotFnd		0.9685						1.06		7050	0.177
1267-TCDF	25.01	J EMPC	0.9741	0.9743	+0.3	1.54E+05	0.61	N	1.06	0.313	7050	0.177
2346/1249-TCDF	25.23	J	0.9825	0.9830	+0.8	1.56E+05	0.76	Y	1.06	0.317	7050	0.177
2347/1279-TCDF	25.45	J EMPC	0.9917	0.9914	-0.5	2.04E+05	0.65	N	1.06	0.413	7050	0.177
2348-TCDF	25.57	J EMPC	0.9964	0.9961	-0.5	1.07E+05	1.05	N	1.06	0.218	7050	0.177
2378-TCDF	**25.69**	EMPC	**1.0009**	**1.0008**	**-0.2**	**3.30E+05**	**0.93**	**N**	**1.06**	**0.669**	**7050**	**0.177**
2367/3467-TCDF	26.10	EMPC	1.0169	1.0170	+0.2	4.23E+05	0.89	N	1.06	0.858	7050	0.177
1269-TCDF	NotFnd		1.0270						1.06		7050	0.177
1239-TCDF	NotFnd		1.0384						1.06		7050	0.177
1289-TCDF	27.90	J EMPC	1.0863	1.0870	+1.2	1.14E+05	1.00	N	1.06	0.23	7050	0.177
13468/12468-PeCDF	27.91	J	0.9040	0.9041	+0.2	5.56E+05	1.40	Y	0.98	1.42	2815	0.0666
13678/13467/12467-PeCDF	29.56	J	0.9572	0.9575	+0.5	4.21E+05	1.54	Y	0.98	1.07	4360	0.103
12368/13478/12478-PeCDF	29.72	J	0.9625	0.9626	+0.2	5.23E+05	1.62	Y	0.98	1.33	4360	0.103
14678-PeCDF	29.80	J	0.9659	0.9654	-0.9	1.77E+05	1.52	Y	0.98	0.451	4360	0.103
13479-PeCDF	29.91	J	0.9692	0.9690	-0.4	4.44E+04	1.49	Y	0.98	0.113	4360	0.103
13469/12479-PeCDF	30.17	J	0.9776	0.9773	-0.5	7.17E+04	1.55	Y	0.98	0.182	4360	0.103
12346-PeCDF	30.33	J	0.9823	0.9825	+0.4	5.90E+04	1.52	Y	0.98	0.15	4360	0.103

Lab ID: B4585_17706_DF_002 | Acq'd: 28 Aug 2020 09:23 DTF | Wt/Vol: 10.90 g | ICAL: HRMS3_DF_10122018_24AUG2020

Client ID: CS-53 | UTP: 28-Aug-2020 12:20:36 DTF | J-level: 0.459 pg/g | Split: 1 | Checkcode: 126-394-CMZ

Datafile: 200827C23 | Report: 28 Aug 2020 13:53 TF | Stds (pg): JS: 2000 ES: 2000 CS/SS: 2000, 800 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
23468/12469-PeCDF	30.43	J EMPC	0.9856	0.9856	0	1.74E+05	1.18	N	0.98	0.442	4360	0.103
12347-PeCDF	30.50	J	0.9882	0.9880	-0.4	1.00E+05	1.43	Y	0.98	0.255	4360	0.103
12348-PeCDF	30.67	J EMPC	0.9935	0.9933	-0.4	7.41E+04	1.25	N	0.98	0.189	4360	0.103
12378-PeCDF	**30.89**	J	**1.0006**	**1.0006**	**0**	**2.34E+05**	**1.66**	**Y**	**0.98**	**0.587**	**4360**	**0.103**
12678/12367-PeCDF	31.19	J	1.0099	1.0102	+0.6	2.80E+05	1.71	Y	0.98	0.712	4360	0.103
12379-PeCDF	31.36	J	1.0155	1.0159	+0.8	5.07E+04	1.32	Y	0.98	0.129	4360	0.103
12679-PeCDF	NotFnd		0.9921						0.98		4360	0.103
23467/12369-PeCDF	31.94	J	0.9965	0.9968	+0.6	2.25E+05	1.48	Y	0.98	0.573	4360	0.103
23478-PeCDF	**32.07**	J	**1.0006**	**1.0008**	**+0.4**	**2.86E+05**	**1.67**	**Y**	**0.97**	**0.738**	**4360**	**0.103**
23478/12489-PeCDF	NotFnd		0.0000						0.97			
12489-PeCDF	NotFnd		1.0043						0.98		4360	0.103
12349-PeCDF	NotFnd		1.0107						0.98		4360	0.103
12389-PeCDF	NotFnd		1.0352						0.98		4360	0.103
123468-HxCDF	34.08	J EMPC	0.9601	0.9602	+0.2	2.44E+05	0.95	N	1.15	0.692	6470	0.173
124678/134678-HxCDF	34.28		0.9660	0.9659	-0.2	8.41E+05	1.20	Y	1.15	2.39	6470	0.173
134679-HxCDF	NotFnd		0.9725						1.15		6470	0.173
124679-HxCDF	NotFnd		0.9783						1.15		6470	0.173
124689-HxCDF	34.96	J	0.9848	0.9850	+0.4	5.12E+05	1.12	Y	1.15	1.45	6470	0.173
123467-HxCDF	35.38	J	0.9970	0.9970	0	1.61E+05	1.15	Y	1.15	0.457	6470	0.173
123478-HxCDF	**35.51**	J	**1.0005**	**1.0005**	**0**	**2.76E+05**	**1.26**	**Y**	**1.22**	**0.79**	**6470**	**0.163**
123678-HxCDF	**35.65**	J	**1.0004**	**1.0003**	**-0.2**	**2.20E+05**	**1.35**	**Y**	**1.11**	**0.59**	**6470**	**0.162**
123479-HxCDF	NotFnd		1.0049						1.15		6470	0.173
123469-HxCDF	NotFnd		1.0091						1.15		6470	0.173
123679-HxCDF	NotFnd		0.9939						1.15		6470	0.173
234678-HxCDF	**36.33**	J EMPC	**1.0004**	**1.0004**	**0**	**1.62E+05**	**0.89**	**N**	**1.15**	**0.461**	**6470**	**0.174**
234678/123689-HxCDF	NotFnd		0.0000						1.15			
123689-HxCDF	NotFnd		1.0041						1.15		6470	0.173
123789-HxCDF	**NotFnd**		**1.0005**						**1.12**		**6470**	**0.198**
123789/123489-HxCDF	NotFnd		0.0000						1.12			
123489-HxCDF	NotFnd		1.0008						1.15		6470	0.173
1234678-HpCDF	**39.02**		**1.0003**	**1.0003**	**0**	**1.22E+06**	**0.96**	**Y**	**1.29**	**4.28**	**2184**	**0.076**
1234679-HpCDF	39.32	**J EMPC**	1.0078	1.0080	+0.5	8.14E+04	0.77	N	1.28	0.315	2184	0.0898
1234689-HpCDF	39.47		1.0117	1.0119	+0.5	1.49E+06	1.02	Y	1.28	5.75	2184	0.0898
1234789-HpCDF	**40.49**	**J**	**1.0002**	**1.0001**	**-0.2**	**9.06E+04**	**1.11**	**Y**	**1.27**	**0.388**	**2184**	**0.106**
OCDF	**42.92**		**1.0002**	**1.0002**	**0**	**1.36E+06**	**0.88**	**Y**	**1.04**	**9.01**	**3258**	**0.375**
OCDF-a	NotFnd		1.0001						0.06		4305	8.21


Rel. Int.
100%
QC Check
19.04-28.40
316.9824 Fn1
Flags: -
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21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Abs. Int.
5.21e6
2.61e6
0.00e0
Rel. Int.
100%
QC Check
28.41-33.51
366.9792 Fn2
Flags: -
0%
29.0
30.0
31.0
32.0
33.0
RT
Abs. Int.
4.89e6
2.45e6
0.00e0
Rel. Int.
100%
QC Check
33.52-37.61
380.9760 Fn3
Flags: -
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Abs. Int.
1.16e7
5.78e6
0.00e0
Rel. Int.
100%
QC Check
37.91-41.21
430.9728 Fn4
Flags: -
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Abs. Int.
7.35e6
3.68e6
0.00e0
Rel. Int.
100%
QC Check
41.22-44.81
454.9728 Fn5
Flags: -
0%
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Abs. Int.
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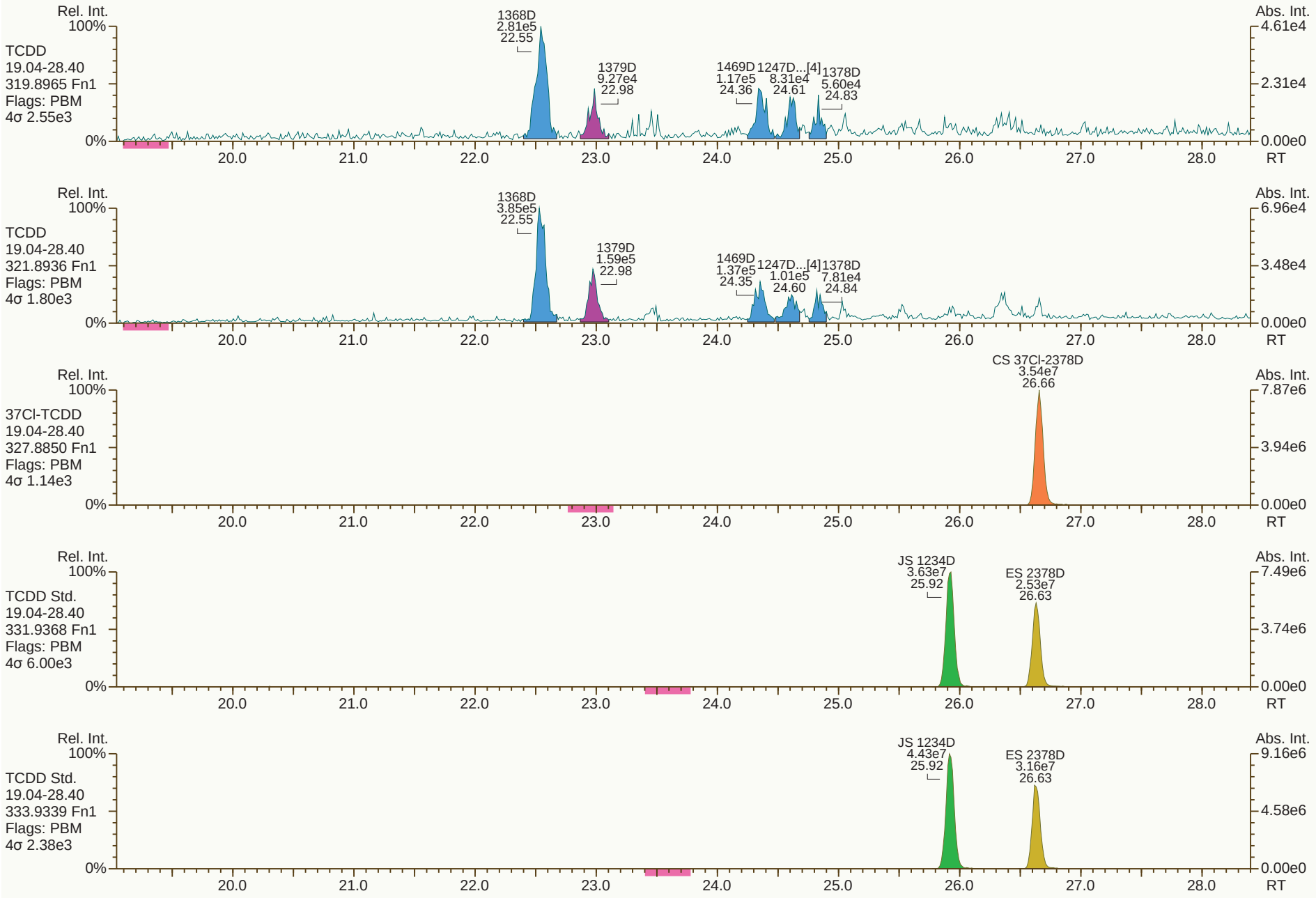
5.00e6
0.00e0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19.04-28.40
319.8965 Fn1
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2.81e5
22.55
1379D
9.27e4
22.98
1469D
1.17e5
24.36
1247D...[4]
8.31e4
24.61
1378D
5.60e4
24.83
Abs. Int.
4.61e4
2.31e4
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDD
19.04-28.40
321.8936 Fn1
Flags: PBM
4σ 1.80e3
0%
1368D
3.85e5
22.55
1379D
1.59e5
22.98
1469D
1.37e5
24.35
1247D...[4]
1.01e5
24.60
1378D
7.81e4
24.84
Abs. Int.
6.96e4
3.48e4
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
37Cl-TCDD
19.04-28.40
327.8850 Fn1
Flags: PBM
4σ 1.14e3
0%
CS 37Cl-2378D
3.54e7
26.66
Abs. Int.
7.87e6
3.94e6
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.40
331.9368 Fn1
Flags: PBM
4σ 6.00e3
0%
JS 1234D
3.63e7
25.92
ES 2378D
2.53e7
26.63
Abs. Int.
7.49e6
3.74e6
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.40
333.9339 Fn1
Flags: PBM
4σ 2.38e3
0%
JS 1234D
4.43e7
25.92
ES 2378D
3.16e7
26.63
Abs. Int.
9.16e6
4.58e6
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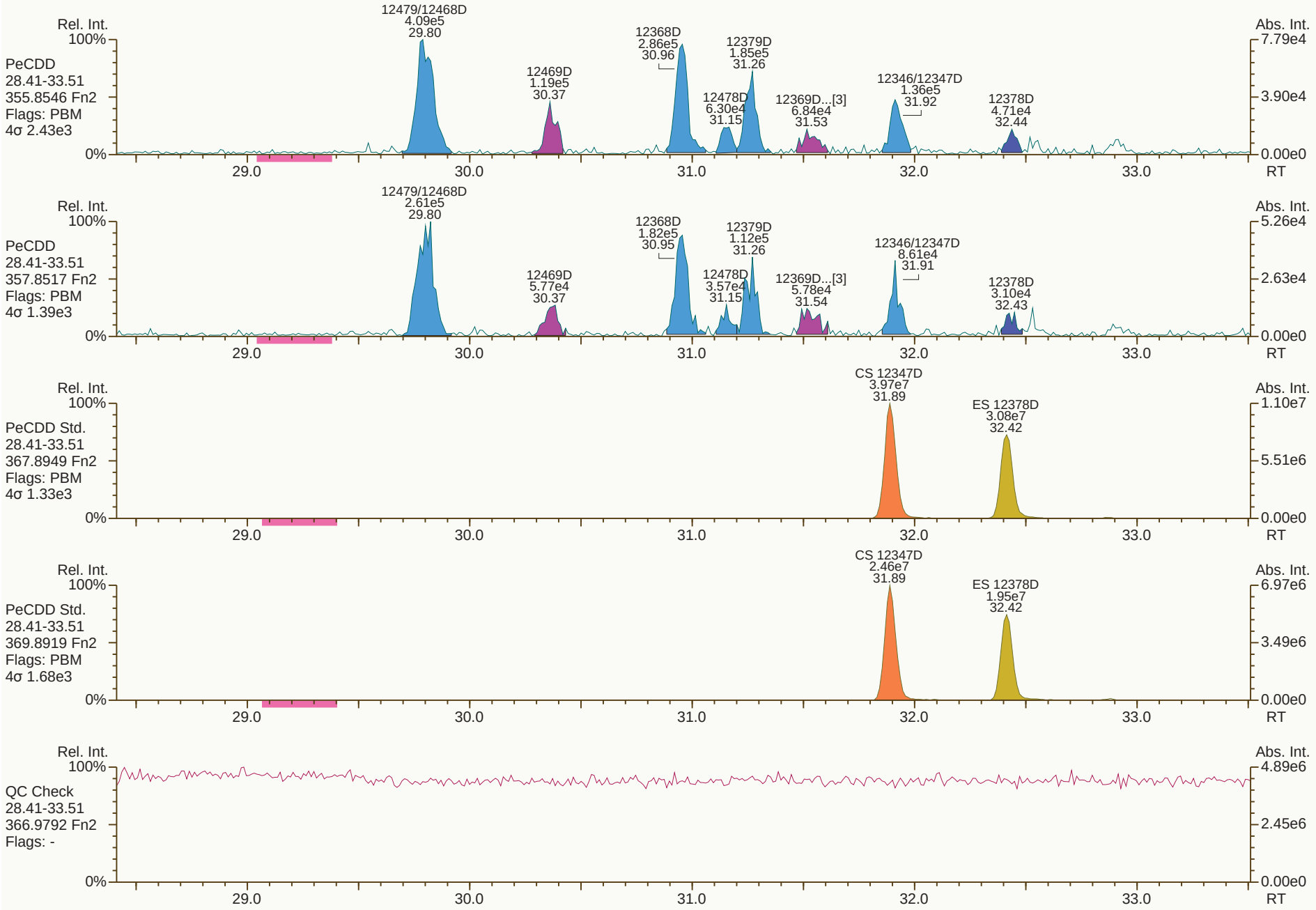
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT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100%
PeCDD
28.41-33.51
355.8546 Fn2
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12479/12468D
4.09e5
29.80
12469D
1.19e5
30.37
12368D
2.86e5
30.96
12478D
6.30e4
31.15
12379D
1.85e5
31.26
12369D...[3]
6.84e4
31.53
12346/12347D
1.36e5
31.92
12378D
4.71e4
32.44
Abs. Int.
7.79e4
3.90e4
0.00e0
0%
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD
28.41-33.51
357.8517 Fn2
Flags: PBM
4σ 1.39e3
12479/12468D
2.61e5
29.80
12469D
5.77e4
30.37
12368D
1.82e5
30.95
12478D
3.57e4
31.15
12379D
1.12e5
31.26
12369D...[3]
5.78e4
31.54
12346/12347D
8.61e4
31.91
12378D
3.10e4
32.43
Abs. Int.
5.26e4
2.63e4
0.00e0
0%
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.41-33.51
367.8949 Fn2
Flags: PBM
4σ 1.33e3
CS 12347D
3.97e7
31.89
ES 12378D
3.08e7
32.42
Abs. Int.
1.10e7
5.51e6
0.00e0
0%
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.41-33.51
369.8919 Fn2
Flags: PBM
4σ 1.68e3
CS 12347D
2.46e7
31.89
ES 12378D
1.95e7
32.42
Abs. Int.
6.97e6
3.49e6
0.00e0
0%
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
QC Check
28.41-33.51
366.9792 Fn2
Flags: -
Abs. Int.
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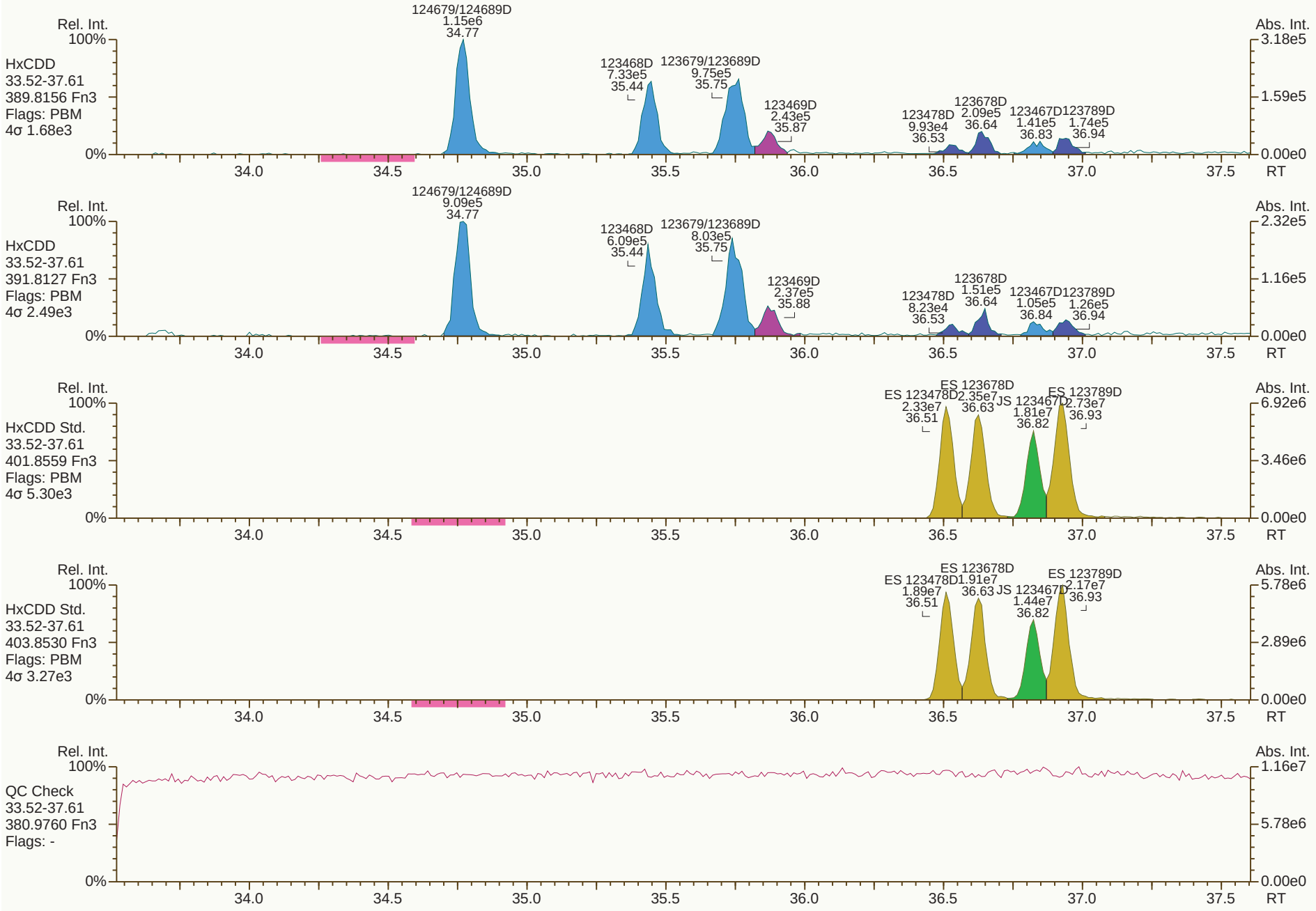
0.00e0
0%
29.0
30.0
31.0
32.0
33.0
RT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100%
HxCDD
33.52-37.61
389.8156 Fn3
Flags: PBM
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124679/124689D
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34.77
123468D
7.33e5
35.44
123679/123689D
9.75e5
35.75
123469D
2.43e5
35.87
123478D
9.93e4
36.53
123678D
2.09e5
36.64
123467D
1.41e5
36.83
123789D
1.74e5
36.94
Abs. Int.
3.18e5
1.59e5
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0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD
33.52-37.61
391.8127 Fn3
Flags: PBM
4σ 2.49e3
124679/124689D
9.09e5
34.77
123468D
6.09e5
35.44
123679/123689D
8.03e5
35.75
123469D
2.37e5
35.88
123478D
8.23e4
36.53
123678D
1.51e5
36.64
123467D
1.05e5
36.84
123789D
1.26e5
36.94
Abs. Int.
2.32e5
1.16e5
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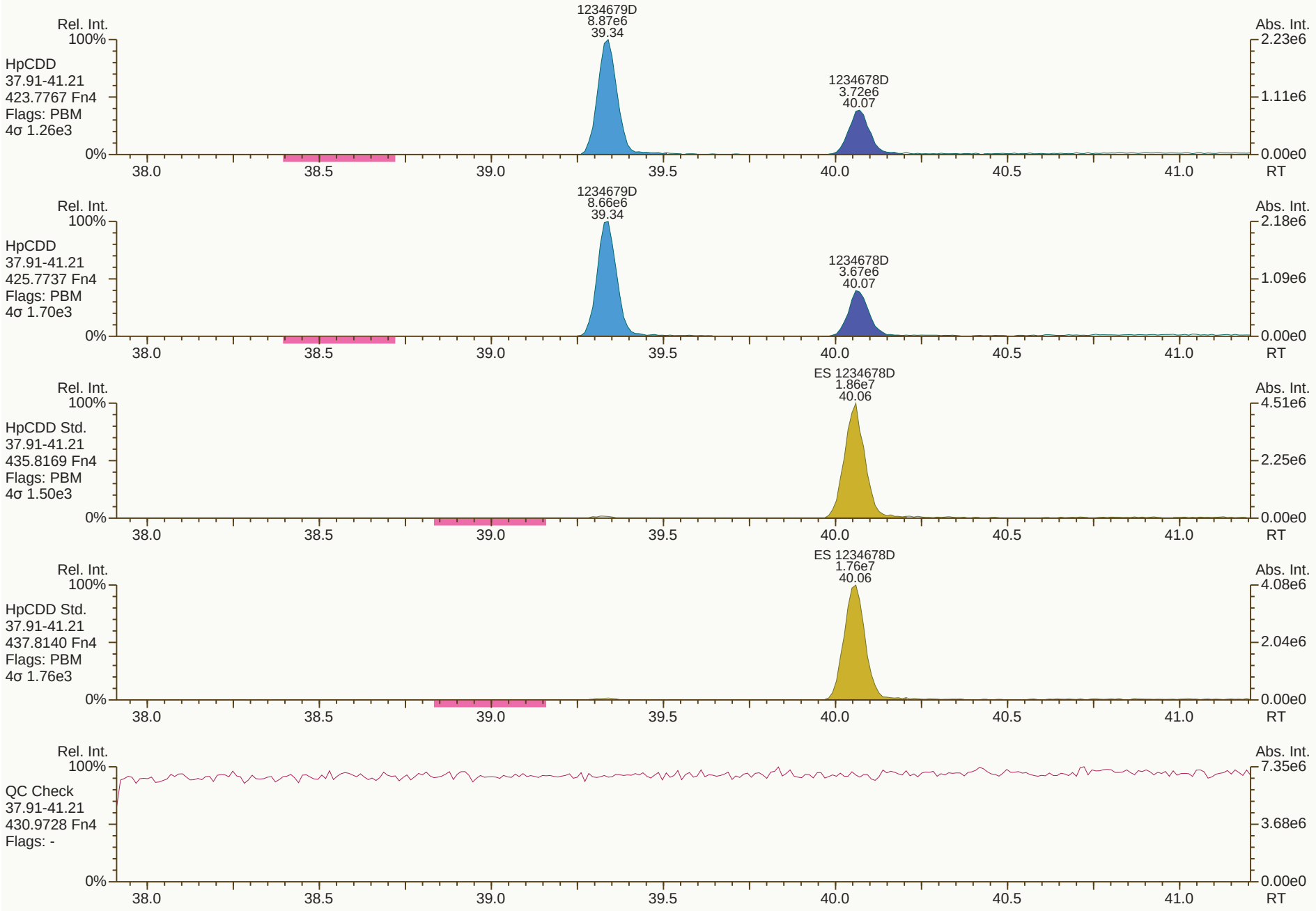
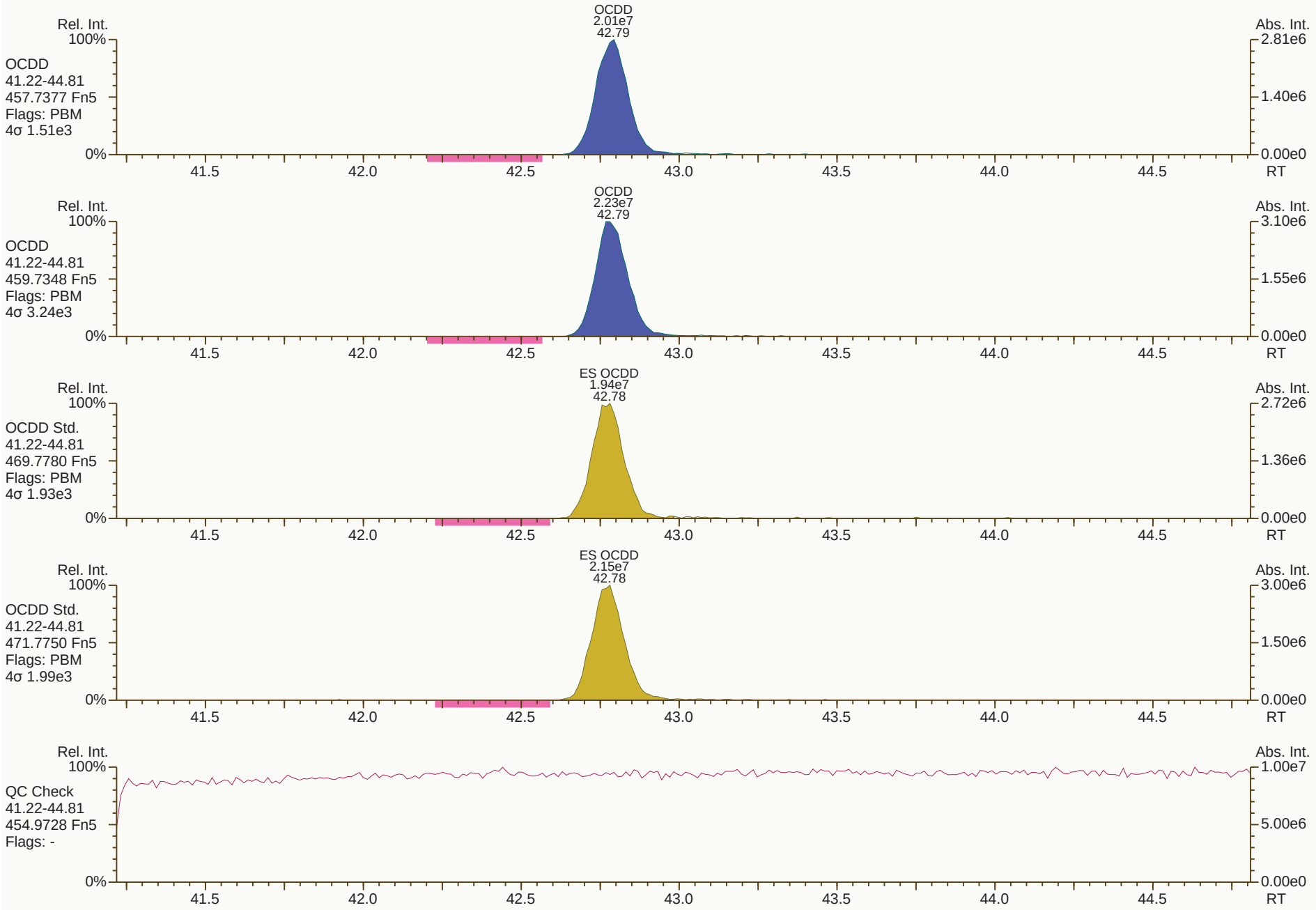
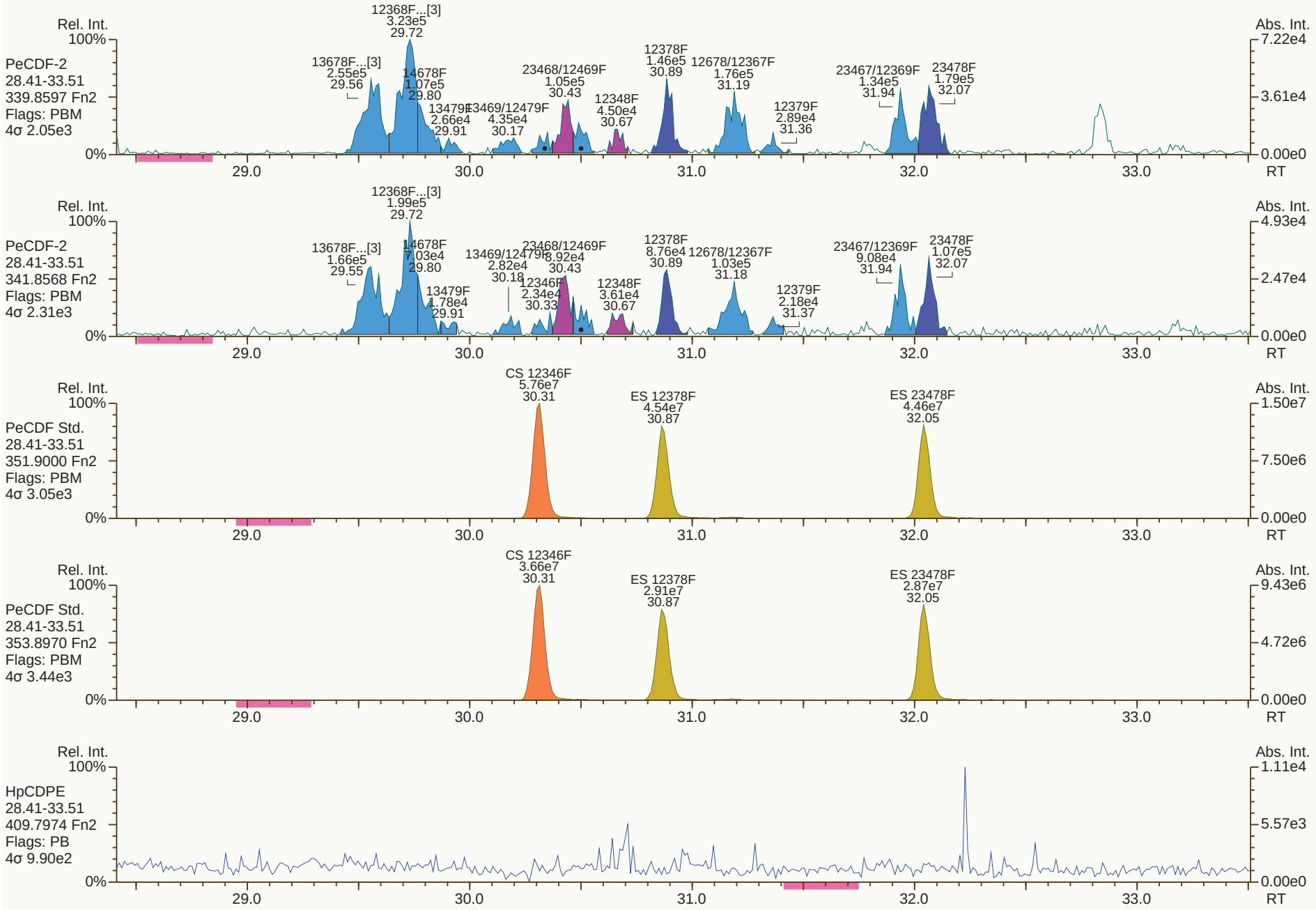
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.52-37.61
401.8559 Fn3
Flags: PBM
4σ 5.30e3
ES 123478D
2.33e7
36.51
ES 123678D
2.35e7
36.63
JS 123467D
1.81e7
36.82
ES 123789D
2.73e7
36.93
Abs. Int.
6.92e6
3.46e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.52-37.61
403.8530 Fn3
Flags: PBM
4σ 3.27e3
ES 123478D
1.89e7
36.51
ES 123678D
1.91e7
36.63
JS 123467D
1.44e7
36.82
ES 123789D
2.17e7
36.93
Abs. Int.
5.78e6
2.89e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
QC Check
33.52-37.61
380.9760 Fn3
Flags: -
Abs. Int.
1.16e7
5.78e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT

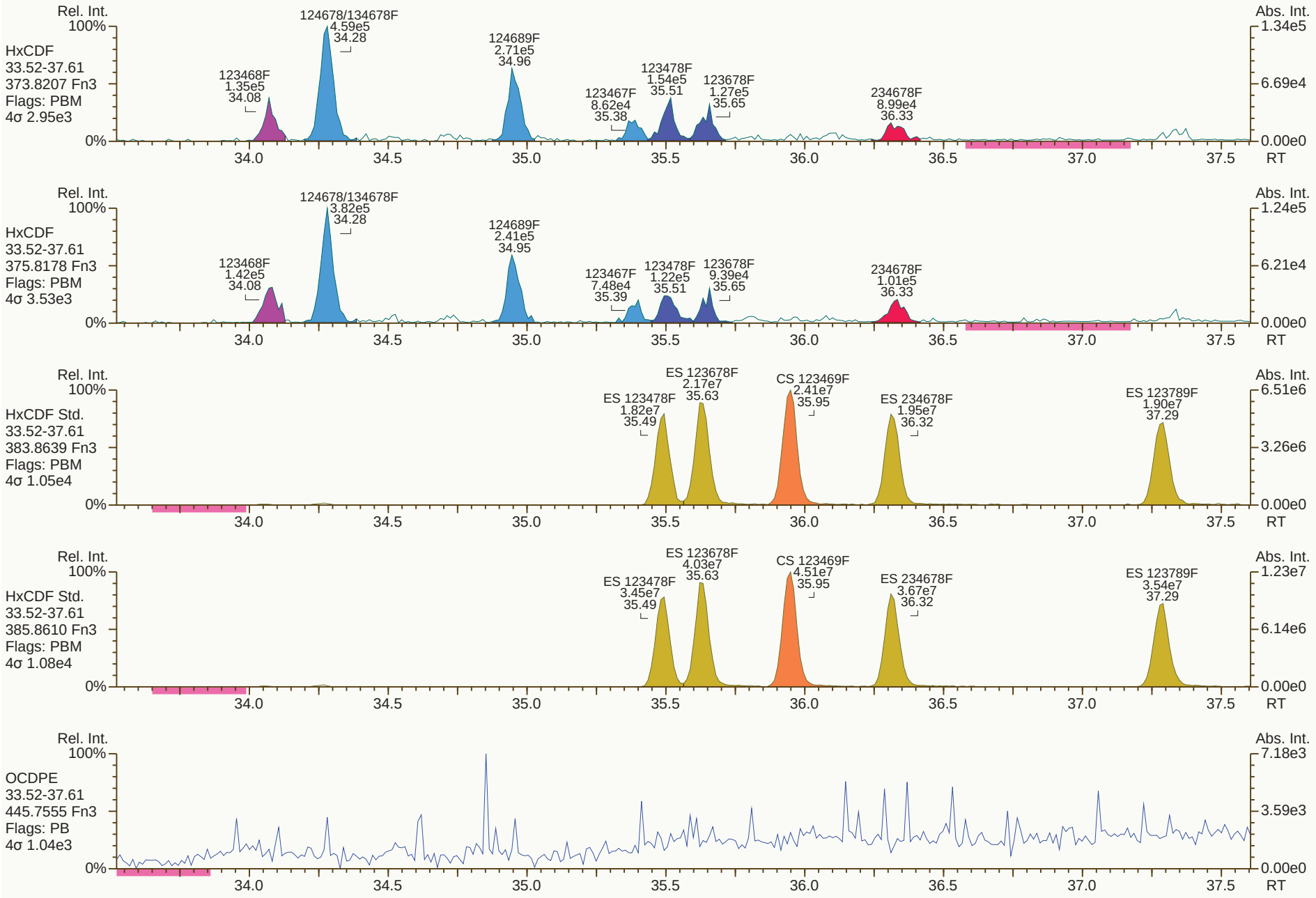

Rel. Int.
100%
HpCDD
37.91-41.21
423.7767 Fn4
Flags: PBM
4σ 1.26e3
0%
1234679D
8.87e6
39.34
1234678D
3.72e6
40.07
Abs. Int.
2.23e6
1.11e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD
37.91-41.21
425.7737 Fn4
Flags: PBM
4σ 1.70e3
0%
1234679D
8.66e6
39.34
1234678D
3.67e6
40.07
Abs. Int.
2.18e6
1.09e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.91-41.21
435.8169 Fn4
Flags: PBM
4σ 1.50e3
0%
ES 1234678D
1.86e7
40.06
Abs. Int.
4.51e6
2.25e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.91-41.21
437.8140 Fn4
Flags: PBM
4σ 1.76e3
0%
ES 1234678D
1.76e7
40.06
Abs. Int.
4.08e6
2.04e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
QC Check
37.91-41.21
430.9728 Fn4
Flags: -
0%
Abs. Int.
7.35e6
3.68e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT


Rel. Int.
100%
OCDD
41.22-44.81
457.7377 Fn5
Flags: PBM
4σ 1.51e3
0%
OCDD
2.01e7
42.79
Abs. Int.
2.81e6
1.40e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDD
41.22-44.81
459.7348 Fn5
Flags: PBM
4σ 3.24e3
0%
OCDD
2.23e7
42.79
Abs. Int.
3.10e6
1.55e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDD Std.
41.22-44.81
469.7780 Fn5
Flags: PBM
4σ 1.93e3
0%
ES OCDD
1.94e7
42.78
Abs. Int.
2.72e6
1.36e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDD Std.
41.22-44.81
471.7750 Fn5
Flags: PBM
4σ 1.99e3
0%
ES OCDD
2.15e7
42.78
Abs. Int.
3.00e6
1.50e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
QC Check
41.22-44.81
454.9728 Fn5
Flags: -
0%
Abs. Int.
1.00e7
5.00e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT

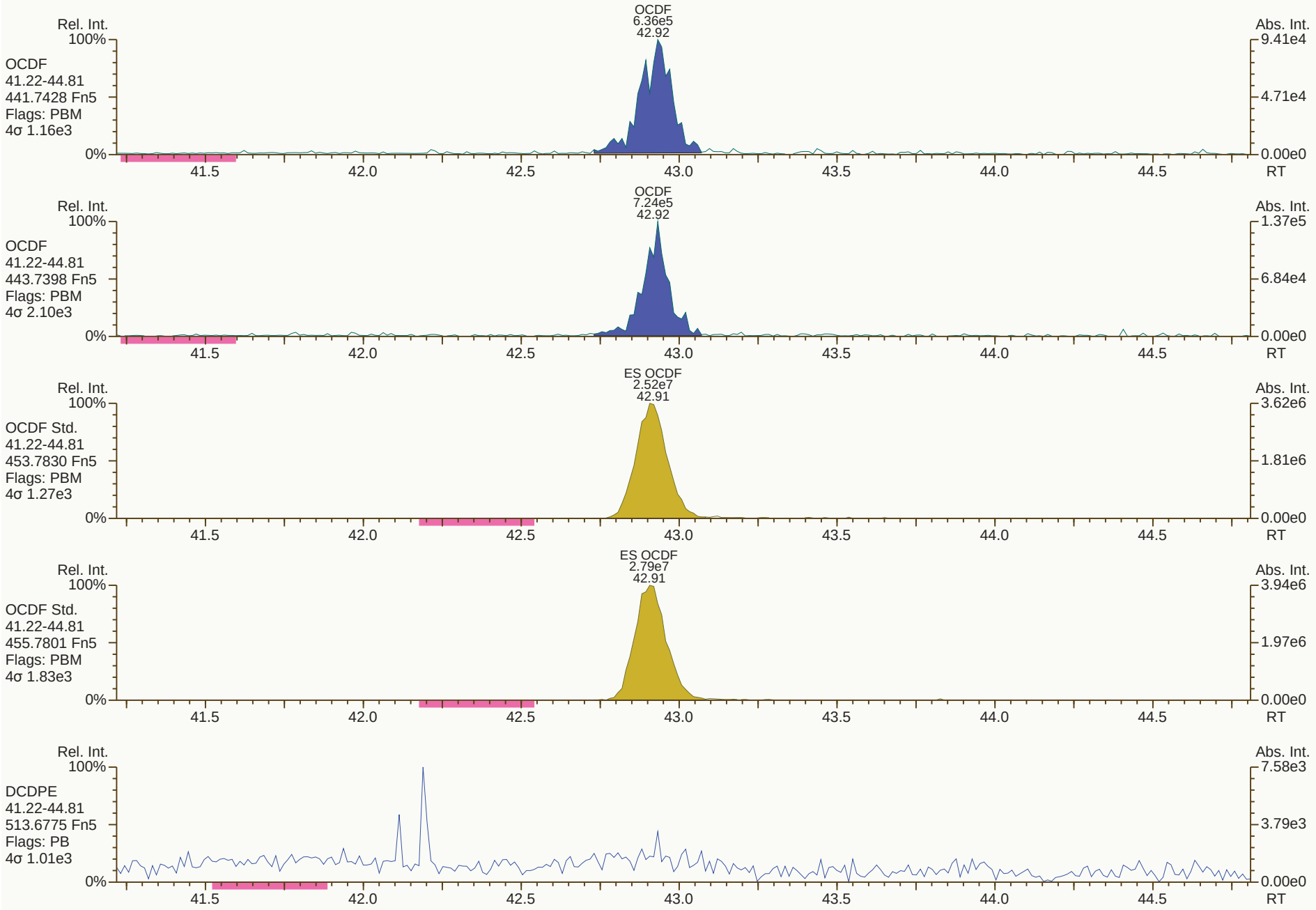

Rel. Int.
100%
TCDF
19.04-28.40
303.9016 Fn1
Flags: PBM
4σ 2.77e3
0%
Abs. Int.
5.30e4
2.65e4
0.00e0
1368F 1.21e5 20.36
1468F 7.81e4 20.90
2468F 2.55e5 21.55
1347F...[3] 2.55e5 22.10
1346/1246F 6.97e4 21.94
1248F...[3] 1.38e5 22.55
1268F 8.73e4 22.98
1478F 7.81e4 23.33
1369/1237F 9.46e4 23.76
2368F 1.30e5 24.08
1278F 1.57e5 24.70
2346/1249F 6.75e4 25.23
2378F 1.73e5 25.69
2367/3467F 2.12e5 26.10
1289F 6.44e4 27.90
20.0 21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 RT
Rel. Int.
100%
TCDF
19.04-28.40
305.8987 Fn1
Flags: PBM
4σ 4.28e3
0%
Abs. Int.
6.45e4
3.23e4
0.00e0
1368F 1.51e5 20.37
1468F 1.09e5 20.91
2468F 2.80e5 21.54
1347F...[3] 3.61e5 22.10
1346/1246F 5.71e4 21.95
1248F...[3] 1.52e5 22.55
1348F 6.52e4 22.40
1478F 8.67e4 23.33
1369/1237F 1.21e5 23.76
1238F...[5] 1.74e5 24.19
2368F 1.71e5 24.08
1278F 2.05e5 24.70
1267F 1.09e5 25.01
2348F 6.07e4 25.56
2378F 1.86e5 25.69
2367/3467F 2.39e5 26.10
1289F 6.41e4 27.90
20.0 21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 RT
Rel. Int.
100%
TCDF Std.
19.04-28.40
315.9419 Fn1
Flags: PBM
4σ 1.10e4
0%
Abs. Int.
9.99e6
5.00e6
0.00e0
JS 1234F 5.32e7 24.15
ES 2378F 3.79e7 25.67
20.0 21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 RT
Rel. Int.
100%
TCDF Std.
19.04-28.40
317.9389 Fn1
Flags: PBM
4σ 7.48e3
0%
Abs. Int.
1.25e7
6.27e6
0.00e0
JS 1234F 6.72e7 24.15
ES 2378F 4.72e7 25.66
20.0 21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 RT
Rel. Int.
100%
HxCDPE
19.04-28.40
375.8364 Fn1
Flags: PB
4σ 9.83e2
0%
Abs. Int.
7.17e3
3.58e3
0.00e0
20.0 21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 RT


Rel. Int.
100%
0%
PeCDF-1
19.04-28.40
339.8597 Fn1
Flags: PBM
4σ 1.57e3
13468/12468F
3.24e5
27.91
Abs. Int.
6.09e4
3.05e4
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
0%
PeCDF-1
19.04-28.40
341.8568 Fn1
Flags: PBM
4σ 1.24e3
13468/12468F
2.32e5
27.91
Abs. Int.
5.77e4
2.89e4
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
0%
QC Check
19.04-28.40
316.9824 Fn1
Flags: -
Abs. Int.
5.21e6
2.61e6
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT


Rel. Int.
100%
PeCDF-2
28.41-33.51
339.8597 Fn2
Flags: PBM
4σ 2.05e3
0%
12368F...[3] 3.23e5 29.72
13678F...[3] 2.55e5 29.56
14678F 1.07e5 29.80
13479F 2.66e4 29.91
13469/12479F 4.35e4 30.17
23468/12469F 1.05e5 30.43
12348F 4.50e4 30.67
12378F 1.46e5 30.89
12678/12367F 1.76e5 31.19
12379F 2.89e4 31.36
23467/12369F 1.34e5 31.94
23478F 1.79e5 32.07
Abs. Int.
7.22e4
3.61e4
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF-2
28.41-33.51
341.8568 Fn2
Flags: PBM
4σ 2.31e3
0%
12368F...[3] 1.99e5 29.72
13678F...[3] 1.66e5 29.55
14678F 7.03e4 29.80
13479F 1.78e4 29.91
13469/12479F 2.82e4 30.18
23468/12469F 8.92e4 30.43
12346F 2.34e4 30.33
12348F 3.61e4 30.67
12378F 8.76e4 30.89
12678/12367F 1.03e5 31.18
12379F 2.18e4 31.37
23467/12369F 9.08e4 31.94
23478F 1.07e5 32.07
Abs. Int.
4.93e4
2.47e4
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.41-33.51
351.9000 Fn2
Flags: PBM
4σ 3.05e3
0%
CS 12346F 5.76e7 30.31
ES 12378F 4.54e7 30.87
ES 23478F 4.46e7 32.05
Abs. Int.
1.50e7
7.50e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.41-33.51
353.8970 Fn2
Flags: PBM
4σ 3.44e3
0%
CS 12346F 3.66e7 30.31
ES 12378F 2.91e7 30.87
ES 23478F 2.87e7 32.05
Abs. Int.
9.43e6
4.72e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
HpCDPE
28.41-33.51
409.7974 Fn2
Flags: PB
4σ 9.90e2
0%
Abs. Int.
1.11e4
5.57e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT


Rel. Int.
100%
HxCDF
33.52-37.61
373.8207 Fn3
Flags: PBM
4σ 2.95e3
123468F 1.35e5 34.08
124678/134678F 4.59e5 34.28
124689F 2.71e5 34.96
123467F 8.62e4 35.38
123478F 1.54e5 35.51
123678F 1.27e5 35.65
234678F 8.99e4 36.33
Abs. Int.
1.34e5
6.69e4
0.00e0
0%
34.0 34.5 35.0 35.5 36.0 36.5 37.0 37.5 RT
Rel. Int.
100%
HxCDF
33.52-37.61
375.8178 Fn3
Flags: PBM
4σ 3.53e3
123468F 1.42e5 34.08
124678/134678F 3.82e5 34.28
124689F 2.41e5 34.95
123467F 7.48e4 35.39
123478F 1.22e5 35.51
123678F 9.39e4 35.65
234678F 1.01e5 36.33
Abs. Int.
1.24e5
6.21e4
0.00e0
0%
34.0 34.5 35.0 35.5 36.0 36.5 37.0 37.5 RT
Rel. Int.
100%
HxCDF Std.
33.52-37.61
383.8639 Fn3
Flags: PBM
4σ 1.05e4
ES 123478F 1.82e7 35.49
ES 123678F 2.17e7 35.63
CS 123469F 2.41e7 35.95
ES 234678F 1.95e7 36.32
ES 123789F 1.90e7 37.29
Abs. Int.
6.51e6
3.26e6
0.00e0
0%
34.0 34.5 35.0 35.5 36.0 36.5 37.0 37.5 RT
Rel. Int.
100%
HxCDF Std.
33.52-37.61
385.8610 Fn3
Flags: PBM
4σ 1.08e4
ES 123478F 3.45e7 35.49
ES 123678F 4.03e7 35.63
CS 123469F 4.51e7 35.95
ES 234678F 3.67e7 36.32
ES 123789F 3.54e7 37.29
Abs. Int.
1.23e7
6.14e6
0.00e0
0%
34.0 34.5 35.0 35.5 36.0 36.5 37.0 37.5 RT
Rel. Int.
100%
OCDPE
33.52-37.61
445.7555 Fn3
Flags: PB
4σ 1.04e3
Abs. Int.
7.18e3
3.59e3
0.00e0
0%
34.0 34.5 35.0 35.5 36.0 36.5 37.0 37.5 RT


Rel. Int.
100%
HpCDF
37.91-41.21
407.7818 Fn4
Flags: PBM
4σ 1.21e3
0%
1234678F
5.97e5
39.02
1234679F
4.15e4
39.32
1234689F
7.52e5
39.47
1234789F
4.77e4
40.49
Abs. Int.
1.98e5
9.91e4
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF
37.91-41.21
409.7788 Fn4
Flags: PBM
4σ 9.75e2
0%
1234678F
6.19e5
39.02
1234679F
5.41e4
39.33
1234689F
7.34e5
39.47
1234789F
4.29e4
40.49
Abs. Int.
1.95e5
9.76e4
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.91-41.21
417.8253 Fn4
Flags: PBM
4σ 3.45e3
0%
ES 1234678F
1.25e7
39.01
CS 1234689F
1.59e7
39.46
ES 1234789F
1.06e7
40.48
Abs. Int.
4.43e6
2.22e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.91-41.21
419.8220 Fn4
Flags: PBM
4σ 4.56e3
0%
ES 1234678F
2.78e7
39.01
CS 1234689F
3.45e7
39.46
ES 1234789F
2.31e7
40.48
Abs. Int.
9.11e6
4.55e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
NCDPE
37.91-41.21
479.7165 Fn4
Flags: PB
4σ 1.37e3
0%
Abs. Int.
6.33e3
3.16e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT


OCDF
6.36e5
42.92
Rel. Int.
100%
OCDF
41.22-44.81
441.7428 Fn5
Flags: PBM
4σ 1.16e3
0%
Abs. Int.
9.41e4
4.71e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
OCDF
7.24e5
42.92
Rel. Int.
100%
OCDF
41.22-44.81
443.7398 Fn5
Flags: PBM
4σ 2.10e3
0%
Abs. Int.
1.37e5
6.84e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDF
2.52e7
42.91
Rel. Int.
100%
OCDF Std.
41.22-44.81
453.7830 Fn5
Flags: PBM
4σ 1.27e3
0%
Abs. Int.
3.62e6
1.81e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDF
2.79e7
42.91
Rel. Int.
100%
OCDF Std.
41.22-44.81
455.7801 Fn5
Flags: PBM
4σ 1.83e3
0%
Abs. Int.
3.94e6
1.97e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
DCDPE
41.22-44.81
513.6775 Fn5
Flags: PB
4σ 1.01e3
0%
Abs. Int.
7.58e3
3.79e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT

Instrument: HRMS3 (AutoSpec-Ultima) MS Experiment: df_cl4-8_db5MS GC Program: df_db5MS

#	Datafile	Vial#		Lab ID	Wt/Vol	Client/Sample ID	Analyst(s)	Checkcode	Acq Date	Acq Time
1	200827C01	3		CS3_200827_DF_CA	1.00	20-449-3	DTF	684-772	27-Aug-2020	14:21:55
2	200827C02	67		OPR1_17706_DF	1.00	0_17706_OPR001	DTF	756-866	27-Aug-2020	17:00:48
3	200827C03	2		SBS_200827_DF_CA	1.00	20-61-1	DTF	378-086	27-Aug-2020	17:46:49
4	200827C04	66		MB1_17706_DF_SDS	10.00	Method Blank	DTF	744-342	27-Aug-2020	18:33:16
11	200827C11	3		CS3_200827_DF_CB	1.00	20-449-3	DTF	822-905	27-Aug-2020	23:58:33
12	200827C12	67		OPR1_17706_DF-RJ CPSM only	1.00	0_17706_OPR001	DTF	645-327	28-Aug-2020	00:53:08
13	200827C13	2	*	SBS_200827_DF_CC	1.00	20-61-1	DTF	402-322	28-Aug-2020	01:39:16
22	200827C22	81		B4585_17706_DF_001	~~12.30~~	CS-TB-16A 9.8g	DTF	970-919	28-Aug-2020	08:37:13
23	200827C23	82		B4585_17706_DF_002	~~12.64~~	CS-53 10.9g	DTF	126-394	28-Aug-2020	09:23:38
24	200827C24	2	*	SBS_200827_DF_CD	1.00	20-61-1	DTF	941-194	28-Aug-2020	10:10:04
25	200827C25	3	*	CS3_200827_DF_CC	1.00	20-449-3	DTF	176-745	28-Aug-2020	10:56:29

*acquired on 08/28
AK 28 Aug 20

REVIEWED
Amber_Kornegay , 8/28/2020, 1:21:15 PM

REVIEWED
By Tyler_Fritz at 12:36 pm, Aug 28, 2020

Dioxin/Furan QC Summary		Acq'd: 27 Aug 2020 14:21 DTF				ICAL: HRMS3_DF_10122018_24AUG2020	
Lab ID: CS3_200827_DF_CA		UTP: 28-Aug-2020 12:20:32 DTF				Checkcode: 684-772-SMF	
Sample ID: 20-449-3		Report: 28 Aug 2020 12:21 TF				Datafile: 200827C01	
Name	**RT**	**Response**	**RA**	**OK**	**Ref. RRFs**	**Calc. RRFs**	**Dev'n**
2378-TCDD	26.66	1.10E+07	0.80	Y	1.19	1.22	3%
12378-PeCDD	32.43	3.99E+07	1.56	Y	1.01	1.02	1%
123478-HxCDD	36.51	3.75E+07	1.26	Y	1.05	1.07	2%
123678-HxCDD	36.63	3.88E+07	1.25	Y	1.12	1.12	1%
123789-HxCDD	36.93	4.14E+07	1.24	Y	1.02	1.03	1%
1234678-HpCDD	40.06	3.23E+07	1.02	Y	1.00	1.02	2%
OCDD	42.76	4.98E+07	0.89	Y	1.08	1.13	4%
2378-TCDF	25.69	1.48E+07	0.78	Y	1.06	1.07	1%
12378-PeCDF	30.89	5.68E+07	1.53	Y	0.98	0.98	0%
23478-PeCDF	32.06	5.61E+07	1.52	Y	0.97	0.97	0%
123478-HxCDF	35.50	5.24E+07	1.21	Y	1.22	1.21	0%
123678-HxCDF	35.64	5.63E+07	1.22	Y	1.11	1.13	2%
234678-HxCDF	36.32	5.33E+07	1.22	Y	1.15	1.14	-1%
123789-HxCDF	37.29	4.75E+07	1.22	Y	1.12	1.09	-3%
1234678-HpCDF	39.02	4.39E+07	1.01	Y	1.29	1.31	1%
1234789-HpCDF	40.48	3.88E+07	1.03	Y	1.27	1.30	2%
OCDF	42.89	5.92E+07	0.90	Y	1.04	1.05	1%
ES 2378-TCDD	26.64	9.02E+07	0.81	Y	0.97	0.99	2%
ES 12378-PeCDD	32.41	7.82E+07	1.56	Y	0.84	0.86	1%
ES 123478-HxCDD	36.5	7.01E+07	1.25	Y	0.97	0.94	-4%
ES 123678-HxCDD	36.61	6.91E+07	1.28	Y	0.96	0.92	-4%
ES 123789-HxCDD	36.91	8.01E+07	1.26	Y	1.10	1.07	-3%
ES 1234678-HpCDD	40.04	6.34E+07	1.04	Y	0.93	0.85	-9%
ES OCDD	42.74	8.85E+07	0.92	Y	0.63	0.59	-6%
ES 2378-TCDF	25.67	1.38E+08	0.80	Y	0.97	0.98	1%
ES 12378-PeCDF	30.87	1.16E+08	1.58	Y	0.78	0.82	5%
ES 23478-PeCDF	32.04	1.16E+08	1.58	Y	0.80	0.82	2%
ES 123478-HxCDF	35.48	8.63E+07	0.52	Y	1.22	1.15	-5%
ES 123678-HxCDF	35.62	1.00E+08	0.53	Y	1.41	1.33	-5%
ES 234678-HxCDF	36.3	9.36E+07	0.52	Y	1.29	1.25	-3%
ES 123789-HxCDF	37.27	8.70E+07	0.53	Y	1.17	1.16	-1%
ES 1234678-HpCDF	39	6.72E+07	0.44	Y	0.97	0.90	-8%
ES 1234789-HpCDF	40.47	5.97E+07	0.46	Y	0.88	0.80	-9%
ES OCDF	42.88	1.12E+08	0.89	Y	0.81	0.75	-7%

Dioxin/Furan QC Summary	Acq'd: 27 Aug 2020 14:21 DTF	ICAL: HRMS3_DF_10122018_24AUG2020
Lab ID: CS3_200827_DF_CA	UTP: 28-Aug-2020 12:20:32 DTF	Checkcode: 684-772-SMF
Sample ID: 20-449-3	Report: 28 Aug 2020 12:21 TF	Datafile: 200827C01

Name	RT	Response	RA	OK	Ref. RRFs	Calc. RRFs	Dev'n
JS 1234-TCDD	25.92	9.15E+07	0.82	Y	-	-	-
JS 1234-TCDF	24.16	1.41E+08	0.78	Y	-	-	-
JS 123467-HxCDD	36.81	3.75E+07	1.27	Y	-	-	-
CS 37Cl-2378-TCDD	26.66	1.04E+07	n/a	-	1.14	1.14	0%
CS 12347-PeCDD	31.89	6.85E+07	1.58	Y	0.72	0.75	4%
CS 12346-PeCDF	30.31	1.21E+08	1.55	Y	0.77	0.86	11%
CS 123469-HxCDF	35.94	8.80E+07	0.53	Y	1.18	1.17	-1%
CS 1234689-HpCDF	39.46	6.63E+07	0.46	Y	0.96	0.88	-7%
~~SS 37Cl-2378-TCDD~~	~~26.66~~	~~1.04E+07~~	~~n/a~~	~~-~~	~~1.19~~	~~1.15~~	~~-3%~~
~~SS 12347-PeCDD~~	~~31.89~~	~~6.85E+07~~	~~1.58~~	~~Y~~	~~0.86~~	~~0.88~~	~~2%~~
~~SS 12346-PeCDF~~	~~30.31~~	~~1.21E+08~~	~~1.55~~	~~Y~~	~~1.00~~	~~1.04~~	~~5%~~
~~SS 123469-HxCDF~~	~~35.94~~	~~8.80E+07~~	~~0.53~~	~~Y~~	~~0.84~~	~~0.88~~	~~5%~~
~~SS 1234689-HpCDF~~	~~39.46~~	~~6.63E+07~~	~~0.46~~	~~Y~~	~~0.98~~	~~0.99~~	~~0%~~
~~OCDD-a~~	~~42.74~~	~~2.76E+06~~	~~2.71~~	~~Y~~	~~0.07~~	~~0.06~~	~~-14%~~
~~OCDF-a~~	~~42.92~~	~~2.14E+06~~	~~2.81~~	~~Y~~	~~0.06~~	~~0.04~~	~~-40%~~

METHOD 8290A **PCDD/F CALIBRATION VERIFICATION** **FORM 4A**

Lab Name: SGS North America

Initial Calibration: ICAL: HRMS3_DF_10122018_24AUG2020

Instrument ID: HRMS3 GC Column ID: ZB-5ms

VER Data Filename: 200827C01 Analysis Date: 27-AUG-2020 14:21:55

NATIVE ANALYTES	M/Z's FORMING RATIO	ION ABUND. RATIO	QC LIMITS			OK	CONC. FOUND	RANGE (ng/mL)			OK
2,3,7,8-TCDD	M/M+2	0.80	0.65	-	0.89	Y	10.3	8	-	12	Y
1,2,3,7,8-PeCDD	M+2/M+4	1.56	1.32	-	1.78	Y	50.3	40	-	60	Y
1,2,3,4,7,8-HxCDD	M+2/M+4	1.26	1.05	-	1.43	Y	50.8	40	-	60	Y
1,2,3,6,7,8-HxCDD	M+2/M+4	1.25	1.05	-	1.43	Y	50.3	40	-	60	Y
1,2,3,7,8,9-HxCDD	M+2/M+4	1.24	1.05	-	1.43	Y	50.7	40	-	60	Y
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.02	0.88	-	1.20	Y	50.8	40	-	60	Y
OCDD	M+2/M+4	0.89	0.76	-	1.02	Y	104	80	-	120	Y
2,3,7,8-TCDF	M/M+2	0.78	0.65	-	0.89	Y	10.1	8	-	12	Y
1,2,3,7,8-PeCDF	M+2/M+4	1.53	1.32	-	1.78	Y	49.9	40	-	60	Y
2,3,4,7,8-PeCDF	M+2/M+4	1.52	1.32	-	1.78	Y	49.9	40	-	60	Y
1,2,3,4,7,8-HxCDF	M+2/M+4	1.21	1.05	-	1.43	Y	49.8	40	-	60	Y
1,2,3,6,7,8-HxCDF	M+2/M+4	1.22	1.05	-	1.43	Y	50.9	40	-	60	Y
2,3,4,6,7,8-HxCDF	M+2/M+4	1.22	1.05	-	1.43	Y	49.6	40	-	60	Y
1,2,3,7,8,9-HxCDF	M+2/M+4	1.22	1.05	-	1.43	Y	48.6	40	-	60	Y
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.01	0.88	-	1.20	Y	50.5	40	-	60	Y
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.03	0.88	-	1.20	Y	51.2	40	-	60	Y
OCDF	M+2/M+4	0.90	0.76	-	1.02	Y	101	80	-	120	Y

Processed: 28 Aug 2020 12:21 Analyst: TF

METHOD 8290A **PCDD/F CALIBRATION VERIFICATION** **FORM 4B**

Lab Name: SGS North America

Initial Calibration: ICAL: HRMS3_DF_10122018_24AUG2020

Instrument ID: HRMS3 GC Column ID: ZB-5ms

VER Data Filename: 200827C01 Analysis Date: 27-AUG-2020 14:21:55

LABELED ANALYTES	M/Z's FORMING RATIO	ION ABUND. RATIO	QC LIMITS			OK	CONC. FOUND	RANGE (ng/mL)			OK
13C-2,3,7,8-TCDD	M/M+2	0.81	0.65	-	0.89	Y	102	70	-	130	Y
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.56	1.32	-	1.78	Y	101	70	-	130	Y
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.25	1.05	-	1.43	Y	96.1	70	-	130	Y
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.28	1.05	-	1.43	Y	95.8	70	-	130	Y
13C-1,2,3,7,8,9-HxCDD	M+2/M+4	1.26	1.05	-	1.43	Y	96.8	70	-	130	Y
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	0.88	-	1.20	Y	91	70	-	130	Y
13C-OCDD	M+2/M+4	0.92	0.76	-	1.02	Y	187	140	-	260	Y
13C-2,3,7,8-TCDF	M/M+2	0.80	0.65	-	0.89	Y	101	70	-	130	Y
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.58	1.32	-	1.78	Y	105	70	-	130	Y
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.58	1.32	-	1.78	Y	102	70	-	130	Y
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	94.6	70	-	130	Y
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.53	0.43	-	0.59	Y	94.5	70	-	130	Y
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	97	70	-	130	Y
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.53	0.43	-	0.59	Y	98.9	70	-	130	Y
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.44	0.37	-	0.51	Y	92	70	-	130	Y
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.46	0.37	-	0.51	Y	90.6	70	-	130	Y
13C-OCDF	M+2/M+4	0.89	0.76	-	1.02	Y	186	140	-	260	Y
CLEANUP STANDARDS											
37Cl-2,3,7,8-TCDD	n/a						9.96	7.9	-	12.7	Y
13C-1,2,3,4,7-PeCDD	M+2/M+4	1.58	1.32	-	1.78	Y	104	70	-	130	Y
13C-1,2,3,4,6-PeCDF	M+2/M+4	1.55	1.32	-	1.78	Y	111	70	-	130	Y
13C-1,2,3,4,6,9-HxCDF	M/M+2	0.53	0.43	-	0.59	Y	99.4	70	-	130	Y
13C-1,2,3,4,6,8,9-HpCDF	M/M+2	0.46	0.37	-	0.51	Y	92.6	70	-	130	Y

Processed: 28 Aug 2020 12:21 Analyst: TF


Rel. Int.
100%
QC Check
19.04-28.40
316.9824 Fn1
Flags: -
0%
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Abs. Int.
7.00e6
3.50e6
0.00e0
Rel. Int.
100%
QC Check
28.41-33.51
366.9792 Fn2
Flags: -
0%
29.0
30.0
31.0
32.0
33.0
RT
Abs. Int.
6.21e6
3.11e6
0.00e0
Rel. Int.
100%
QC Check
33.52-37.61
380.9760 Fn3
Flags: -
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Abs. Int.
1.26e7
6.30e6
0.00e0
Rel. Int.
100%
QC Check
37.91-41.21
430.9728 Fn4
Flags: -
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Abs. Int.
8.30e6
4.15e6
0.00e0
Rel. Int.
100%
QC Check
41.22-44.81
454.9728 Fn5
Flags: -
0%
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Abs. Int.
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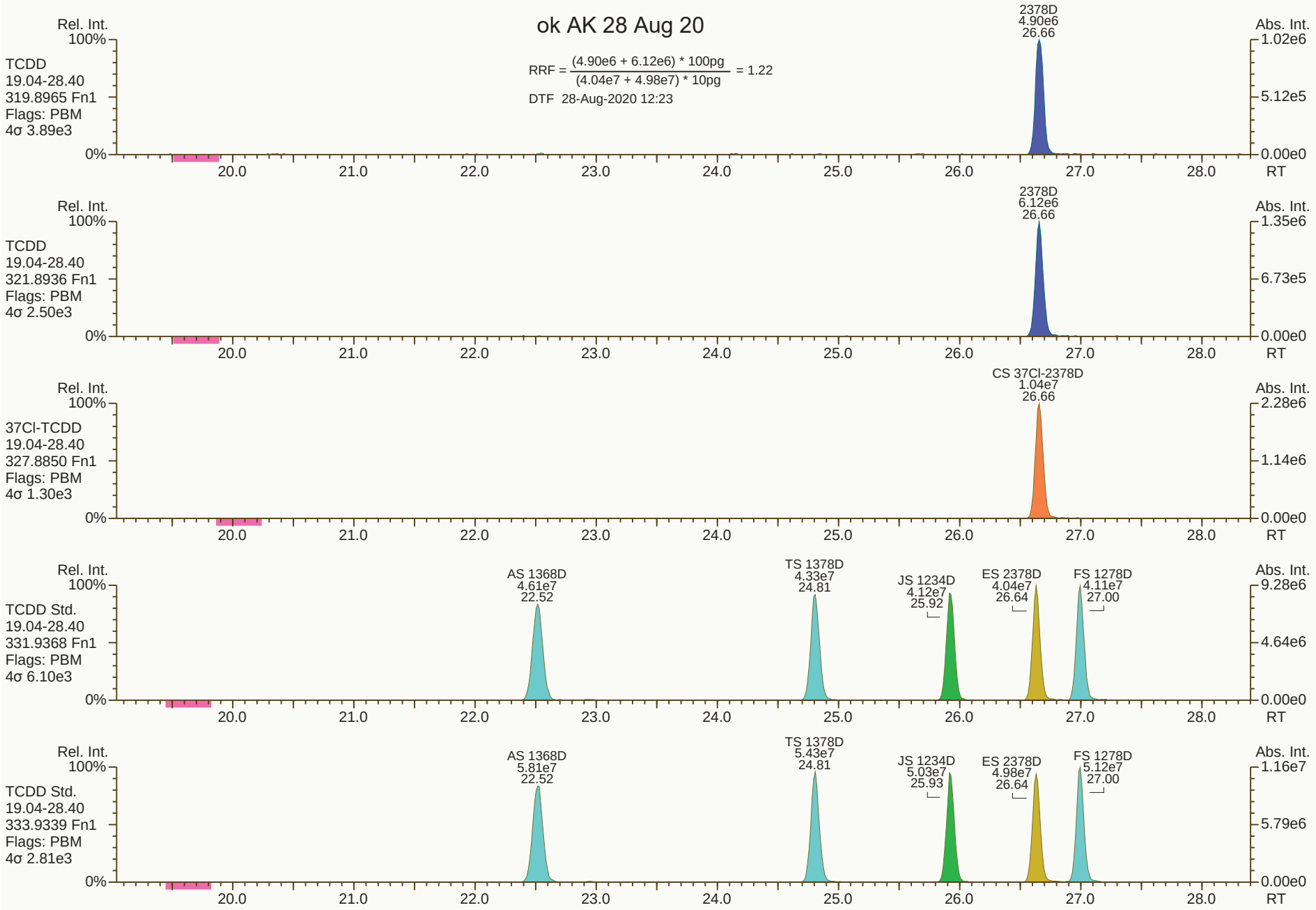
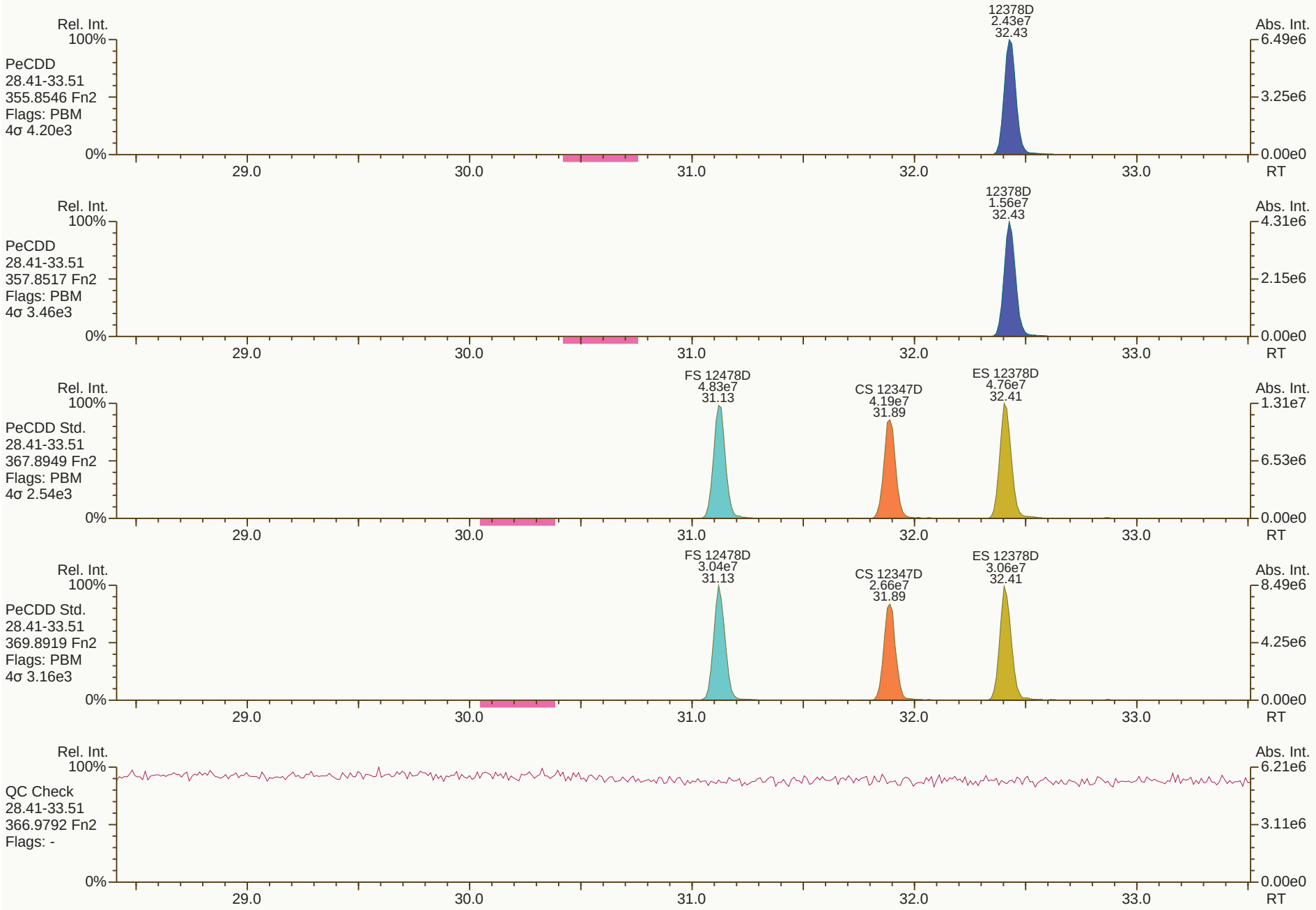
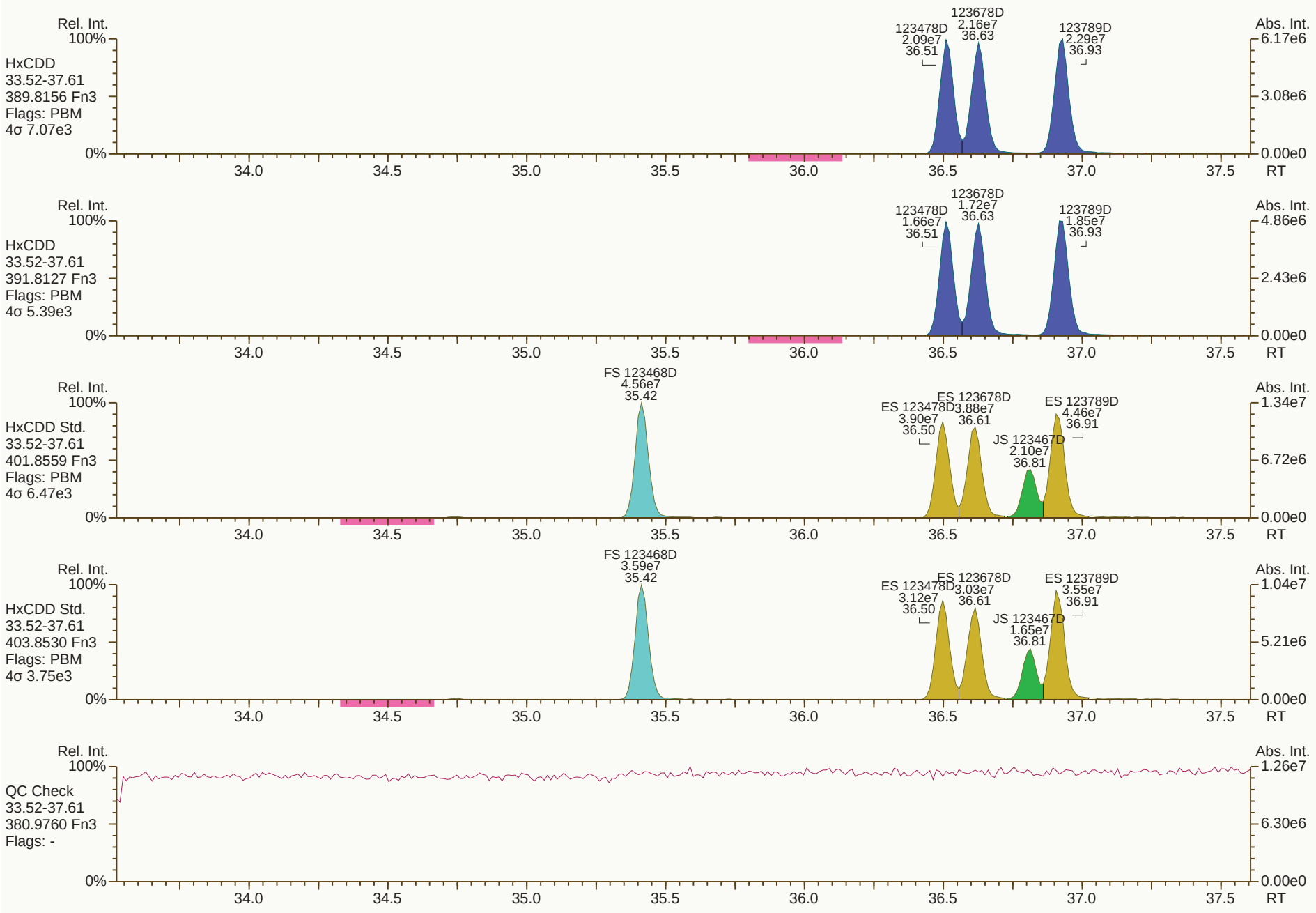
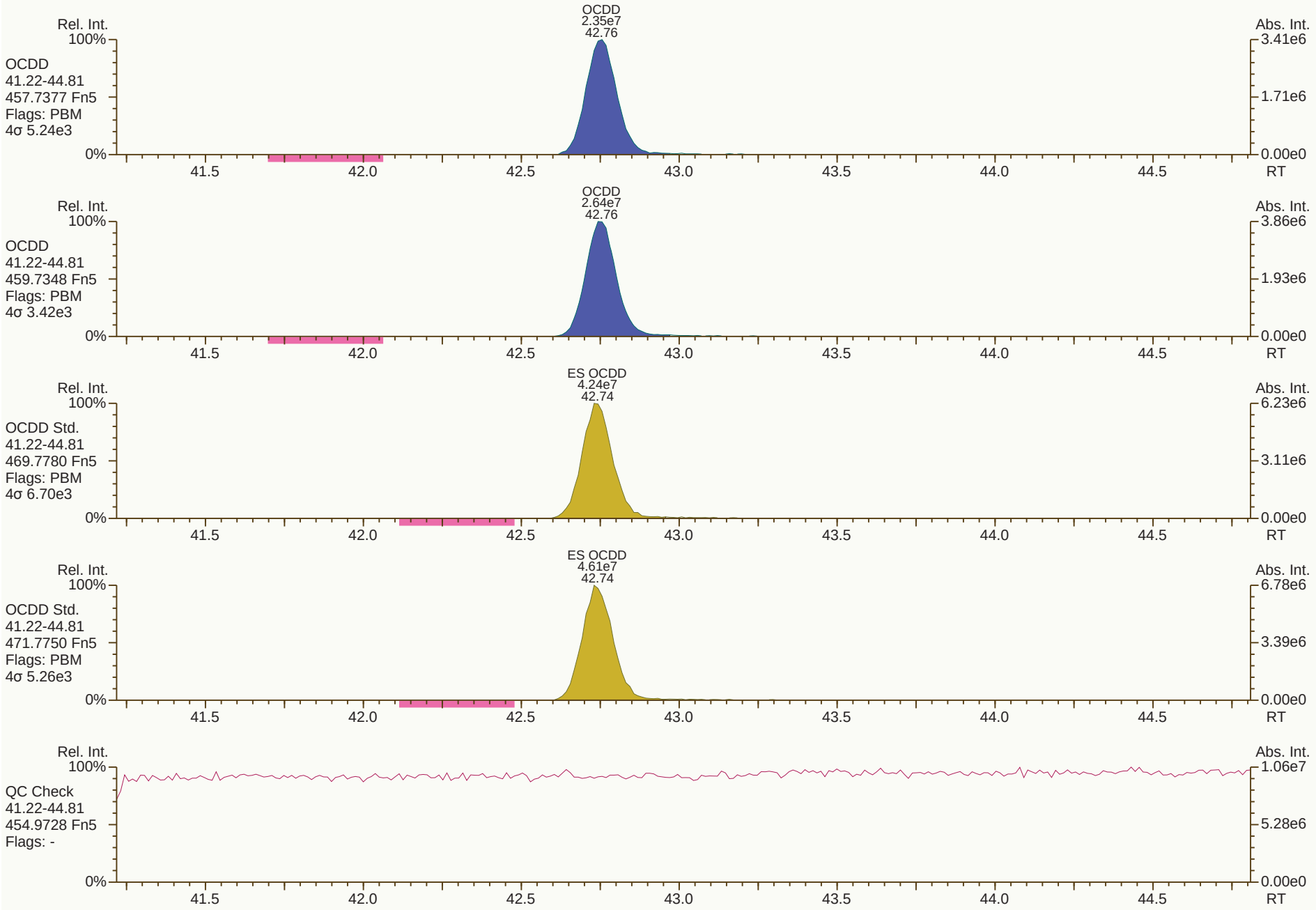
5.28e6
0.00e0

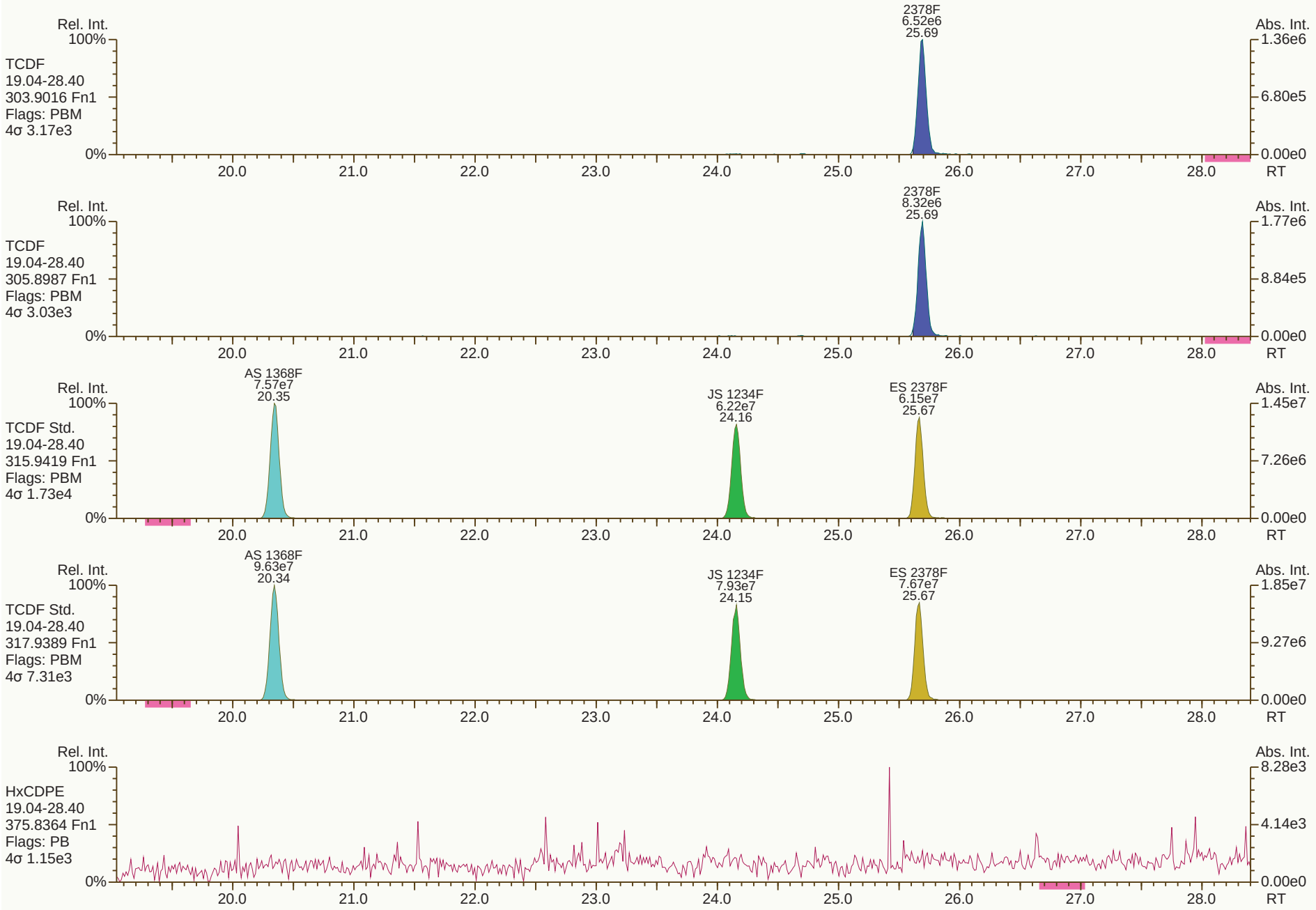

ok AK 28 Aug 20
RRF = (4.90e6 + 6.12e6) * 100pg / (4.04e7 + 4.98e7) * 10pg = 1.22
DTF 28-Aug-2020 12:23
Rel. Int.
Abs. Int.
TCDD
19.04-28.40
319.8965 Fn1
Flags: PBM
4σ 3.89e3
2378D
4.90e6
26.66
TCDD
19.04-28.40
321.8936 Fn1
Flags: PBM
4σ 2.50e3
2378D
6.12e6
26.66
37Cl-TCDD
19.04-28.40
327.8850 Fn1
Flags: PBM
4σ 1.30e3
CS 37Cl-2378D
1.04e7
26.66
TCDD Std.
19.04-28.40
331.9368 Fn1
Flags: PBM
4σ 6.10e3
AS 1368D
4.61e7
22.52
TS 1378D
4.33e7
24.81
JS 1234D
4.12e7
25.92
ES 2378D
4.04e7
26.64
FS 1278D
4.11e7
27.00
TCDD Std.
19.04-28.40
333.9339 Fn1
Flags: PBM
4σ 2.81e3
AS 1368D
5.81e7
22.52
TS 1378D
5.43e7
24.81
JS 1234D
5.03e7
25.93
ES 2378D
4.98e7
26.64
FS 1278D
5.12e7
27.00
RT


Rel. Int.
100%
PeCDD
28.41-33.51
355.8546 Fn2
Flags: PBM
4σ 4.20e3
0%
12378D
2.43e7
32.43
Abs. Int.
6.49e6
3.25e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD
28.41-33.51
357.8517 Fn2
Flags: PBM
4σ 3.46e3
0%
12378D
1.56e7
32.43
Abs. Int.
4.31e6
2.15e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.41-33.51
367.8949 Fn2
Flags: PBM
4σ 2.54e3
0%
FS 12478D
4.83e7
31.13
CS 12347D
4.19e7
31.89
ES 12378D
4.76e7
32.41
Abs. Int.
1.31e7
6.53e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.41-33.51
369.8919 Fn2
Flags: PBM
4σ 3.16e3
0%
FS 12478D
3.04e7
31.13
CS 12347D
2.66e7
31.89
ES 12378D
3.06e7
32.41
Abs. Int.
8.49e6
4.25e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
QC Check
28.41-33.51
366.9792 Fn2
Flags: -
0%
Abs. Int.
6.21e6
3.11e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT

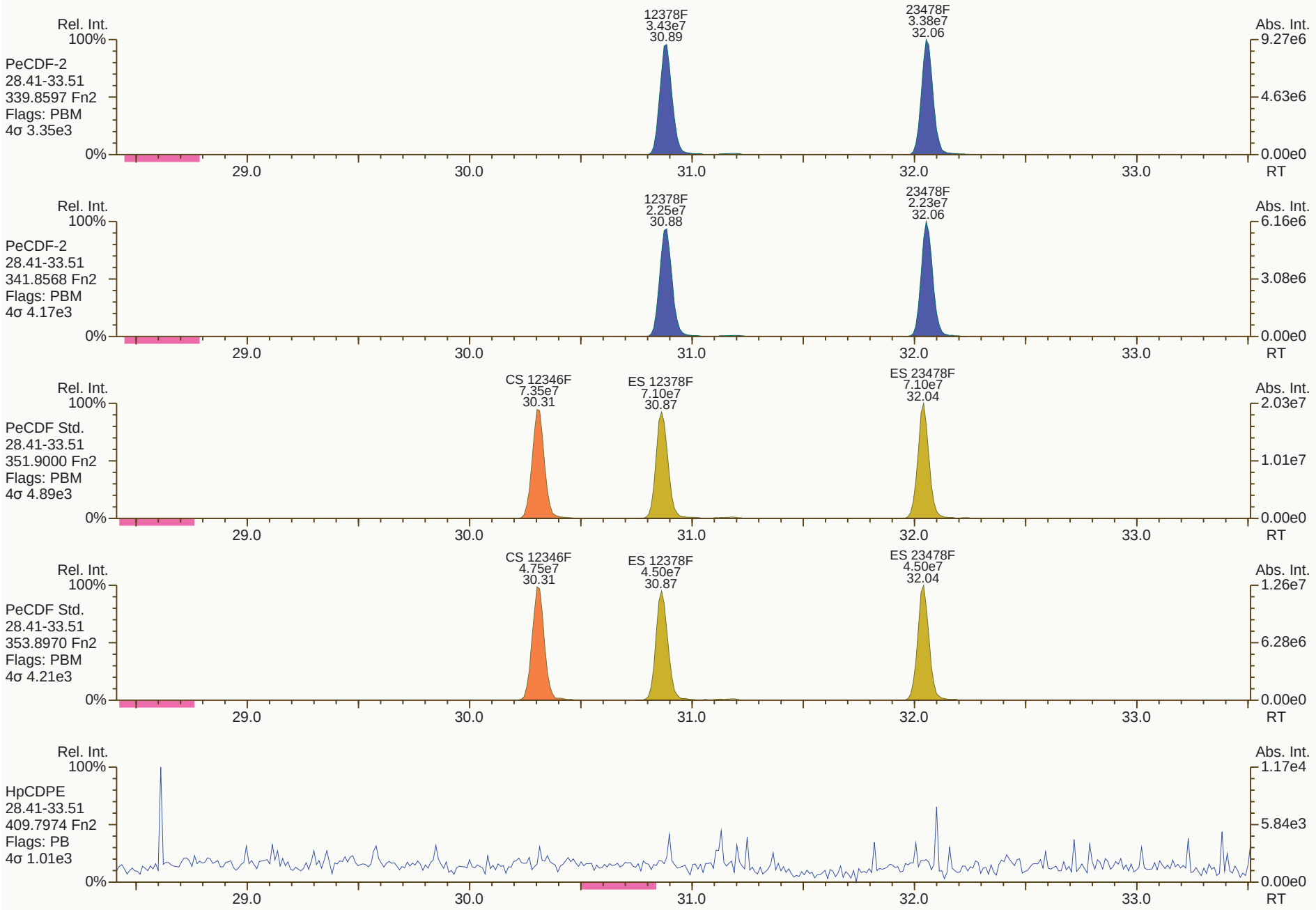

Rel. Int.
100%
HxCDD
33.52-37.61
389.8156 Fn3
Flags: PBM
4σ 7.07e3
123478D
2.09e7
36.51
123678D
2.16e7
36.63
123789D
2.29e7
36.93
Abs. Int.
6.17e6
3.08e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD
33.52-37.61
391.8127 Fn3
Flags: PBM
4σ 5.39e3
123478D
1.66e7
36.51
123678D
1.72e7
36.63
123789D
1.85e7
36.93
Abs. Int.
4.86e6
2.43e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.52-37.61
401.8559 Fn3
Flags: PBM
4σ 6.47e3
FS 123468D
4.56e7
35.42
ES 123478D
3.90e7
36.50
ES 123678D
3.88e7
36.61
JS 123467D
2.10e7
36.81
ES 123789D
4.46e7
36.91
Abs. Int.
1.34e7
6.72e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.52-37.61
403.8530 Fn3
Flags: PBM
4σ 3.75e3
FS 123468D
3.59e7
35.42
ES 123478D
3.12e7
36.50
ES 123678D
3.03e7
36.61
JS 123467D
1.65e7
36.81
ES 123789D
3.55e7
36.91
Abs. Int.
1.04e7
5.21e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
QC Check
33.52-37.61
380.9760 Fn3
Flags: -
Abs. Int.
1.26e7
6.30e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT

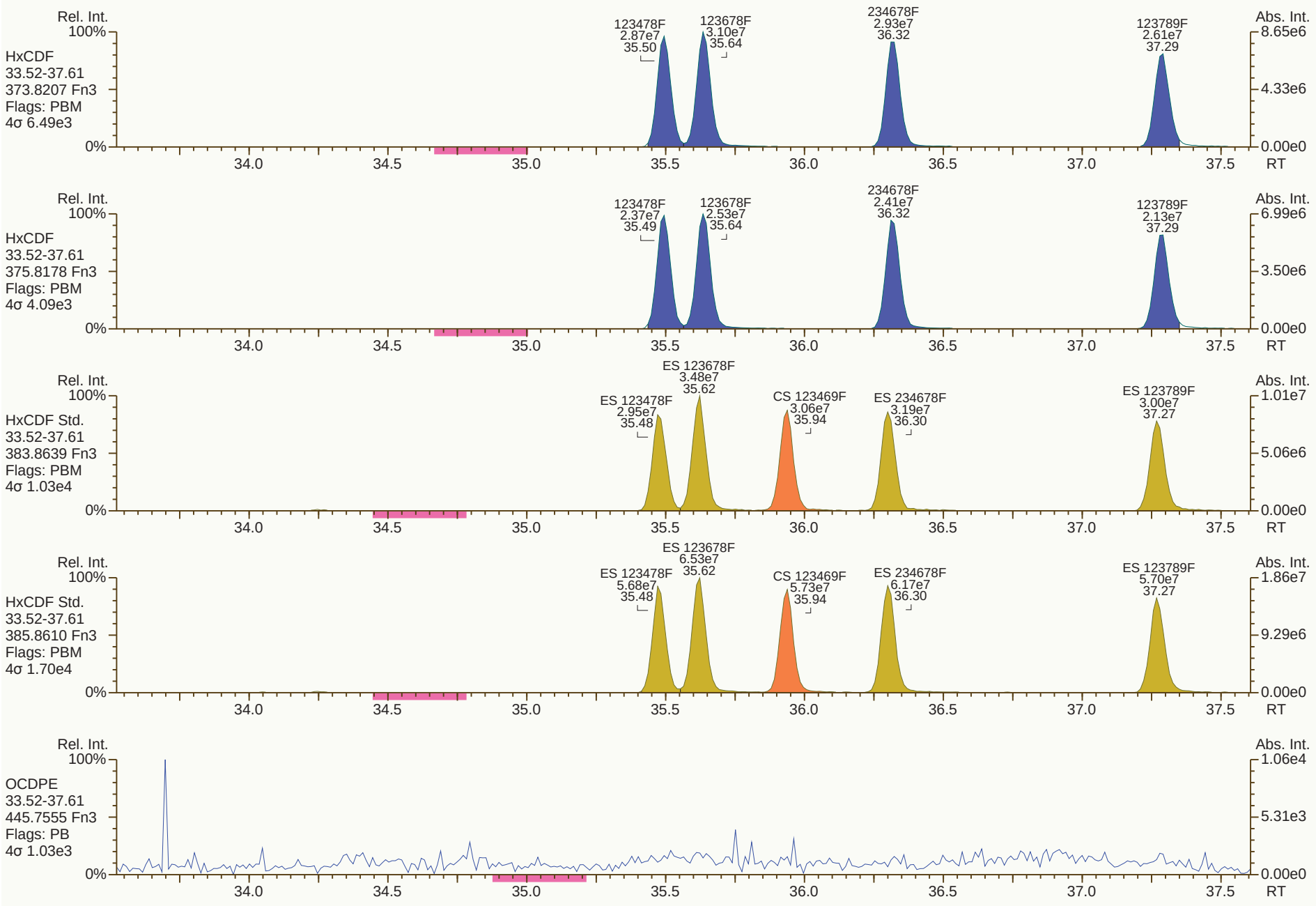

Rel. Int.
100%
HpCDD
37.91-41.21
423.7767 Fn4
Flags: PBM
4σ 5.08e3
1234678D
1.63e7
40.06
Abs. Int.
3.82e6
1.91e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD
37.91-41.21
425.7737 Fn4
Flags: PBM
4σ 4.78e3
1234678D
1.60e7
40.06
Abs. Int.
3.78e6
1.89e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.91-41.21
435.8169 Fn4
Flags: PBM
4σ 2.61e3
FS 1234679D
3.81e7
39.32
ES 1234678D
3.23e7
40.04
Abs. Int.
9.85e6
4.92e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.91-41.21
437.8140 Fn4
Flags: PBM
4σ 1.75e3
FS 1234679D
3.65e7
39.32
ES 1234678D
3.11e7
40.04
Abs. Int.
9.55e6
4.78e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
QC Check
37.91-41.21
430.9728 Fn4
Flags: -
Abs. Int.
8.30e6
4.15e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT

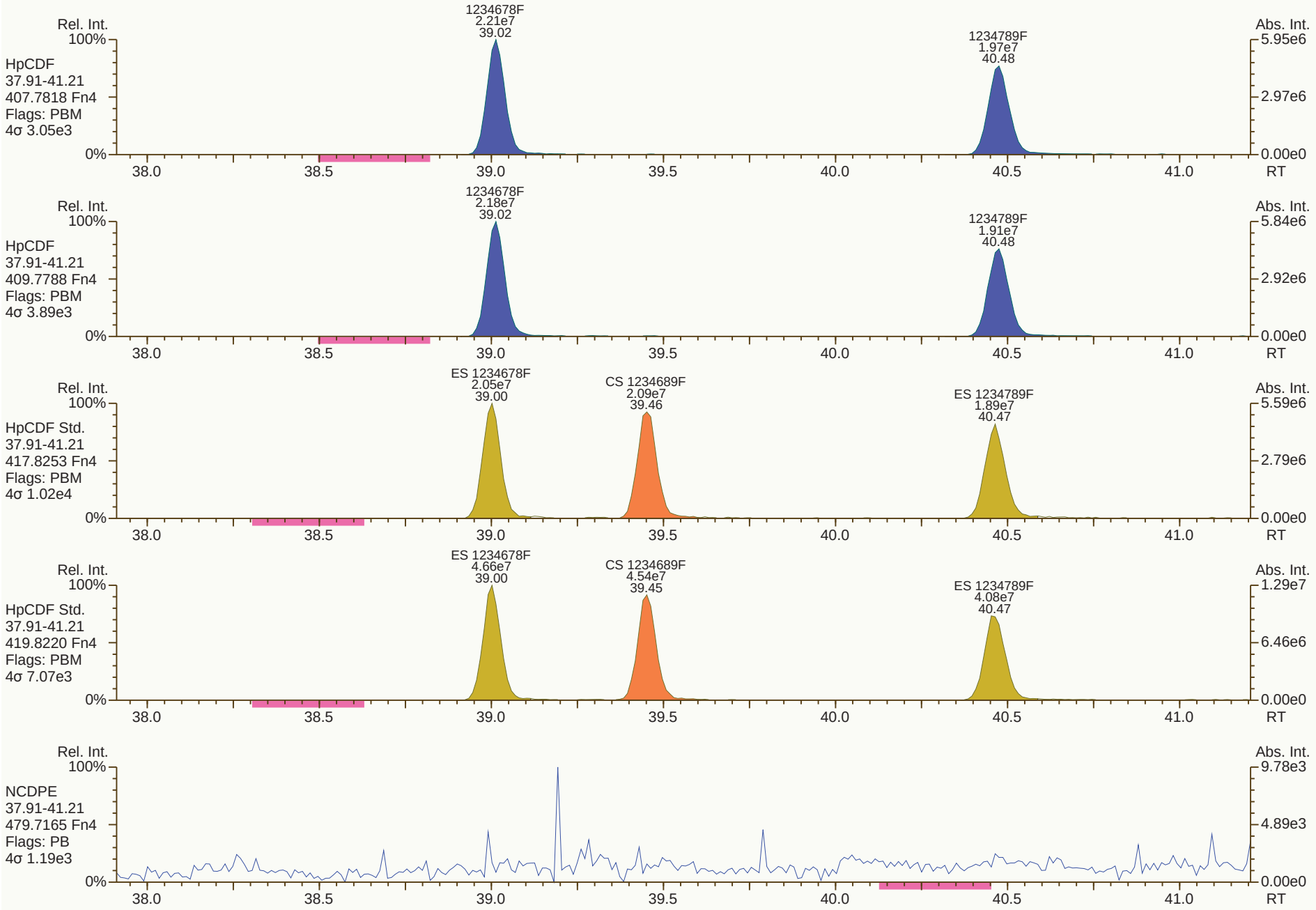

OCDD
2.35e7
42.76
Rel. Int.
100%
Abs. Int.
3.41e6
1.71e6
0.00e0
0%
RT
OCDD
41.22-44.81
457.7377 Fn5
Flags: PBM
4σ 5.24e3
OCDD
2.64e7
42.76
OCDD
41.22-44.81
459.7348 Fn5
Flags: PBM
4σ 3.42e3
ES OCDD
4.24e7
42.74
OCDD Std.
41.22-44.81
469.7780 Fn5
Flags: PBM
4σ 6.70e3
ES OCDD
4.61e7
42.74
OCDD Std.
41.22-44.81
471.7750 Fn5
Flags: PBM
4σ 5.26e3
QC Check
41.22-44.81
454.9728 Fn5
Flags: -
41.5
42.0
42.5
43.0
43.5
44.0
44.5


Rel. Int.
100%
TCDF
19.04-28.40
303.9016 Fn1
Flags: PBM
4σ 3.17e3
0%
2378F
6.52e6
25.69
Abs. Int.
1.36e6
6.80e5
0.00e0
RT
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
Rel. Int.
100%
TCDF
19.04-28.40
305.8987 Fn1
Flags: PBM
4σ 3.03e3
0%
2378F
8.32e6
25.69
Abs. Int.
1.77e6
8.84e5
0.00e0
RT
Rel. Int.
100%
TCDF Std.
19.04-28.40
315.9419 Fn1
Flags: PBM
4σ 1.73e4
0%
AS 1368F
7.57e7
20.35
JS 1234F
6.22e7
24.16
ES 2378F
6.15e7
25.67
Abs. Int.
1.45e7
7.26e6
0.00e0
RT
Rel. Int.
100%
TCDF Std.
19.04-28.40
317.9389 Fn1
Flags: PBM
4σ 7.31e3
0%
AS 1368F
9.63e7
20.34
JS 1234F
7.93e7
24.15
ES 2378F
7.67e7
25.67
Abs. Int.
1.85e7
9.27e6
0.00e0
RT
Rel. Int.
100%
HxCDPE
19.04-28.40
375.8364 Fn1
Flags: PB
4σ 1.15e3
0%
Abs. Int.
8.28e3
4.14e3
0.00e0
RT


Rel. Int.
100%
0%
Abs. Int.
1.46e4
7.32e3
0.00e0
PeCDF-1
19.04-28.40
339.8597 Fn1
Flags: PB
4σ 3.53e3
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
0%
Abs. Int.
1.04e4
5.21e3
0.00e0
PeCDF-1
19.04-28.40
341.8568 Fn1
Flags: PB
4σ 3.61e3
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
0%
Abs. Int.
7.00e6
3.50e6
0.00e0
QC Check
19.04-28.40
316.9824 Fn1
Flags: -
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT


Rel. Int.
100%
PeCDF-2
28.41-33.51
339.8597 Fn2
Flags: PBM
4σ 3.35e3
0%
12378F
3.43e7
30.89
23478F
3.38e7
32.06
Abs. Int.
9.27e6
4.63e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF-2
28.41-33.51
341.8568 Fn2
Flags: PBM
4σ 4.17e3
0%
12378F
2.25e7
30.88
23478F
2.23e7
32.06
Abs. Int.
6.16e6
3.08e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.41-33.51
351.9000 Fn2
Flags: PBM
4σ 4.89e3
0%
CS 12346F
7.35e7
30.31
ES 12378F
7.10e7
30.87
ES 23478F
7.10e7
32.04
Abs. Int.
2.03e7
1.01e7
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.41-33.51
353.8970 Fn2
Flags: PBM
4σ 4.21e3
0%
CS 12346F
4.75e7
30.31
ES 12378F
4.50e7
30.87
ES 23478F
4.50e7
32.04
Abs. Int.
1.26e7
6.28e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
HpCDPE
28.41-33.51
409.7974 Fn2
Flags: PB
4σ 1.01e3
0%
Abs. Int.
1.17e4
5.84e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT


Rel. Int.
100%
HxCDF
33.52-37.61
373.8207 Fn3
Flags: PBM
4σ 6.49e3
123478F
2.87e7
35.50
123678F
3.10e7
35.64
234678F
2.93e7
36.32
123789F
2.61e7
37.29
Abs. Int.
8.65e6
4.33e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF
33.52-37.61
375.8178 Fn3
Flags: PBM
4σ 4.09e3
123478F
2.37e7
35.49
123678F
2.53e7
35.64
234678F
2.41e7
36.32
123789F
2.13e7
37.29
Abs. Int.
6.99e6
3.50e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF Std.
33.52-37.61
383.8639 Fn3
Flags: PBM
4σ 1.03e4
ES 123678F
3.48e7
35.62
ES 123478F
2.95e7
35.48
CS 123469F
3.06e7
35.94
ES 234678F
3.19e7
36.30
ES 123789F
3.00e7
37.27
Abs. Int.
1.01e7
5.06e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF Std.
33.52-37.61
385.8610 Fn3
Flags: PBM
4σ 1.70e4
ES 123678F
6.53e7
35.62
ES 123478F
5.68e7
35.48
CS 123469F
5.73e7
35.94
ES 234678F
6.17e7
36.30
ES 123789F
5.70e7
37.27
Abs. Int.
1.86e7
9.29e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
OCDPE
33.52-37.61
445.7555 Fn3
Flags: PB
4σ 1.03e3
Abs. Int.
1.06e4
5.31e3
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT


Rel. Int.
100%
HpCDF
37.91-41.21
407.7818 Fn4
Flags: PBM
4σ 3.05e3
1234678F
2.21e7
39.02
1234789F
1.97e7
40.48
Abs. Int.
5.95e6
2.97e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF
37.91-41.21
409.7788 Fn4
Flags: PBM
4σ 3.89e3
1234678F
2.18e7
39.02
1234789F
1.91e7
40.48
Abs. Int.
5.84e6
2.92e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.91-41.21
417.8253 Fn4
Flags: PBM
4σ 1.02e4
ES 1234678F
2.05e7
39.00
CS 1234689F
2.09e7
39.46
ES 1234789F
1.89e7
40.47
Abs. Int.
5.59e6
2.79e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.91-41.21
419.8220 Fn4
Flags: PBM
4σ 7.07e3
ES 1234678F
4.66e7
39.00
CS 1234689F
4.54e7
39.45
ES 1234789F
4.08e7
40.47
Abs. Int.
1.29e7
6.46e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
NCDPE
37.91-41.21
479.7165 Fn4
Flags: PB
4σ 1.19e3
Abs. Int.
9.78e3
4.89e3
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT


OCDF
2.80e7
42.89
Rel. Int.
100%
OCDF
41.22-44.81
441.7428 Fn5
Flags: PBM
4σ 2.88e3
0%
Abs. Int.
4.10e6
2.05e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
OCDF
3.12e7
42.89
Rel. Int.
100%
OCDF
41.22-44.81
443.7398 Fn5
Flags: PBM
4σ 4.15e3
0%
Abs. Int.
4.62e6
2.31e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDF
5.30e7
42.88
Rel. Int.
100%
OCDF Std.
41.22-44.81
453.7830 Fn5
Flags: PBM
4σ 6.21e3
0%
Abs. Int.
8.03e6
4.01e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDF
5.94e7
42.88
Rel. Int.
100%
OCDF Std.
41.22-44.81
455.7801 Fn5
Flags: PBM
4σ 2.93e3
0%
Abs. Int.
9.27e6
4.64e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
DCDPE
41.22-44.81
513.6775 Fn5
Flags: PB
4σ 1.07e3
0%
Abs. Int.
4.15e3
2.07e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT

Dioxin/Furan QC Summary	Acq'd: 27 Aug 2020 23:58 DTF	ICAL: HRMS3_DF_10122018_24AUG2020
Lab ID: CS3_200827_DF_CB	UTP: 28-Aug-2020 12:20:34 DTF	Checkcode: 822-905-RDM
Sample ID: 20-449-3	Report: 28 Aug 2020 12:21 TF	Datafile: 200827C11

Name	RT	Response	RA	OK	Ref. RRFs	Calc. RRFs	Dev'n
2378-TCDD	26.67	1.23E+07	0.78	Y	1.19	1.26	6%
12378-PeCDD	32.44	4.37E+07	1.55	Y	1.01	1.05	3%
123478-HxCDD	36.52	3.83E+07	1.25	Y	1.05	1.08	2%
123678-HxCDD	36.63	4.10E+07	1.25	Y	1.12	1.16	4%
123789-HxCDD	36.93	4.44E+07	1.25	Y	1.02	1.06	4%
1234678-HpCDD	40.07	3.49E+07	1.06	Y	1.00	1.04	4%
OCDD	42.76	5.22E+07	0.89	Y	1.08	1.15	6%
2378-TCDF	25.70	1.66E+07	0.78	Y	1.06	1.11	4%
12378-PeCDF	30.89	6.53E+07	1.56	Y	0.98	1.01	3%
23478-PeCDF	32.07	6.20E+07	1.52	Y	0.97	1.00	3%
123478-HxCDF	35.50	5.65E+07	1.22	Y	1.22	1.25	3%
123678-HxCDF	35.65	5.92E+07	1.24	Y	1.11	1.13	2%
234678-HxCDF	36.33	5.59E+07	1.23	Y	1.15	1.17	1%
123789-HxCDF	37.30	5.36E+07	1.23	Y	1.12	1.15	3%
1234678-HpCDF	39.02	5.02E+07	1.03	Y	1.29	1.31	1%
1234789-HpCDF	40.49	4.11E+07	1.02	Y	1.27	1.29	2%
OCDF	42.90	6.28E+07	0.91	Y	1.04	1.06	2%
ES 2378-TCDD	26.65	9.73E+07	0.82	Y	0.97	1.00	3%
ES 12378-PeCDD	32.42	8.33E+07	1.55	Y	0.84	0.86	1%
ES 123478-HxCDD	36.5	7.10E+07	1.27	Y	0.97	0.90	-7%
ES 123678-HxCDD	36.62	7.07E+07	1.26	Y	0.96	0.90	-6%
ES 123789-HxCDD	36.92	8.36E+07	1.25	Y	1.10	1.06	-4%
ES 1234678-HpCDD	40.06	6.68E+07	1.07	Y	0.93	0.85	-8%
ES OCDD	42.75	9.11E+07	0.90	Y	0.63	0.58	-8%
ES 2378-TCDF	25.68	1.50E+08	0.79	Y	0.97	0.99	2%
ES 12378-PeCDF	30.87	1.30E+08	1.58	Y	0.78	0.86	10%
ES 23478-PeCDF	32.05	1.25E+08	1.58	Y	0.80	0.82	2%
ES 123478-HxCDF	35.48	9.00E+07	0.53	Y	1.22	1.14	-6%
ES 123678-HxCDF	35.63	1.05E+08	0.53	Y	1.41	1.34	-5%
ES 234678-HxCDF	36.31	9.59E+07	0.53	Y	1.29	1.22	-5%
ES 123789-HxCDF	37.28	9.30E+07	0.53	Y	1.17	1.18	1%
ES 1234678-HpCDF	39.01	7.67E+07	0.45	Y	0.97	0.98	0%
ES 1234789-HpCDF	40.48	6.37E+07	0.45	Y	0.88	0.81	-8%
ES OCDF	42.89	1.18E+08	0.89	Y	0.81	0.75	-7%

Dioxin/Furan QC Summary	Acq'd: 27 Aug 2020 23:58 DTF	ICAL: HRMS3_DF_10122018_24AUG2020
Lab ID: CS3_200827_DF_CB	UTP: 28-Aug-2020 12:20:34 DTF	Checkcode: 822-905-RDM
Sample ID: 20-449-3	Report: 28 Aug 2020 12:21 TF	Datafile: 200827C11

Name	RT	Response	RA	OK	Ref. RRFs	Calc. RRFs	Dev'n
JS 1234-TCDD	25.94	9.72E+07	0.81	Y	-	-	-
JS 1234-TCDF	24.17	1.52E+08	0.79	Y	-	-	-
JS 123467-HxCDD	36.81	3.93E+07	1.24	Y	-	-	-
CS 37Cl-2378-TCDD	26.67	1.13E+07	n/a	-	1.14	1.16	2%
CS 12347-PeCDD	31.90	7.54E+07	1.59	Y	0.72	0.78	7%
CS 12346-PeCDF	30.32	1.29E+08	1.58	Y	0.77	0.85	10%
CS 123469-HxCDF	35.94	9.11E+07	0.54	Y	1.18	1.16	-2%
CS 1234689-HpCDF	39.46	7.61E+07	0.46	Y	0.96	0.97	1%
~~SS 37Cl-2378-TCDD~~	~~26.67~~	~~1.13E+07~~	~~n/a~~	~~-~~	~~1.19~~	~~1.16~~	~~-3%~~
~~SS 12347-PeCDD~~	~~31.90~~	~~7.54E+07~~	~~1.59~~	~~Y~~	~~0.86~~	~~0.91~~	~~5%~~
~~SS 12346-PeCDF~~	~~30.32~~	~~1.29E+08~~	~~1.58~~	~~Y~~	~~1.00~~	~~1.00~~	~~0%~~
~~SS 123469-HxCDF~~	~~35.94~~	~~9.11E+07~~	~~0.54~~	~~Y~~	~~0.84~~	~~0.87~~	~~3%~~
~~SS 1234689-HpCDF~~	~~39.46~~	~~7.61E+07~~	~~0.46~~	~~Y~~	~~0.98~~	~~0.99~~	~~1%~~
~~OCDD-a~~	~~42.75~~	~~3.35E+06~~	~~2.64~~	~~Y~~	~~0.07~~	~~0.07~~	~~1%~~
~~OCDF-a~~	~~42.89~~	~~4.23E+06~~	~~2.47~~	~~Y~~	~~0.06~~	~~0.07~~	~~14%~~

METHOD 8290A **PCDD/F CALIBRATION VERIFICATION** **FORM 4A**

Lab Name: SGS North America

Initial Calibration: ICAL: HRMS3_DF_10122018_24AUG2020

Instrument ID: HRMS3 GC Column ID: ZB-5ms

VER Data Filename: 200827C11 Analysis Date: 27-AUG-2020 23:58:33

NATIVE ANALYTES	M/Z's FORMING RATIO	ION ABUND. RATIO	QC LIMITS			OK	CONC. FOUND	RANGE (ng/mL)			OK
2,3,7,8-TCDD	M/M+2	0.78	0.65	-	0.89	Y	10.6	8	-	12	Y
1,2,3,7,8-PeCDD	M+2/M+4	1.55	1.32	-	1.78	Y	51.7	40	-	60	Y
1,2,3,4,7,8-HxCDD	M+2/M+4	1.25	1.05	-	1.43	Y	51.2	40	-	60	Y
1,2,3,6,7,8-HxCDD	M+2/M+4	1.25	1.05	-	1.43	Y	52	40	-	60	Y
1,2,3,7,8,9-HxCDD	M+2/M+4	1.25	1.05	-	1.43	Y	52.1	40	-	60	Y
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.06	0.88	-	1.20	Y	52	40	-	60	Y
OCDD	M+2/M+4	0.89	0.76	-	1.02	Y	106	80	-	120	Y
2,3,7,8-TCDF	M/M+2	0.78	0.65	-	0.89	Y	10.4	8	-	12	Y
1,2,3,7,8-PeCDF	M+2/M+4	1.56	1.32	-	1.78	Y	51.4	40	-	60	Y
2,3,4,7,8-PeCDF	M+2/M+4	1.52	1.32	-	1.78	Y	51.3	40	-	60	Y
1,2,3,4,7,8-HxCDF	M+2/M+4	1.22	1.05	-	1.43	Y	51.5	40	-	60	Y
1,2,3,6,7,8-HxCDF	M+2/M+4	1.24	1.05	-	1.43	Y	50.9	40	-	60	Y
2,3,4,6,7,8-HxCDF	M+2/M+4	1.23	1.05	-	1.43	Y	50.7	40	-	60	Y
1,2,3,7,8,9-HxCDF	M+2/M+4	1.23	1.05	-	1.43	Y	51.3	40	-	60	Y
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.03	0.88	-	1.20	Y	50.6	40	-	60	Y
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.02	0.88	-	1.20	Y	50.8	40	-	60	Y
OCDF	M+2/M+4	0.91	0.76	-	1.02	Y	102	80	-	120	Y

Processed: 28 Aug 2020 12:21 Analyst: TF

METHOD 8290A **PCDD/F CALIBRATION VERIFICATION** **FORM 4B**

Lab Name: SGS North America

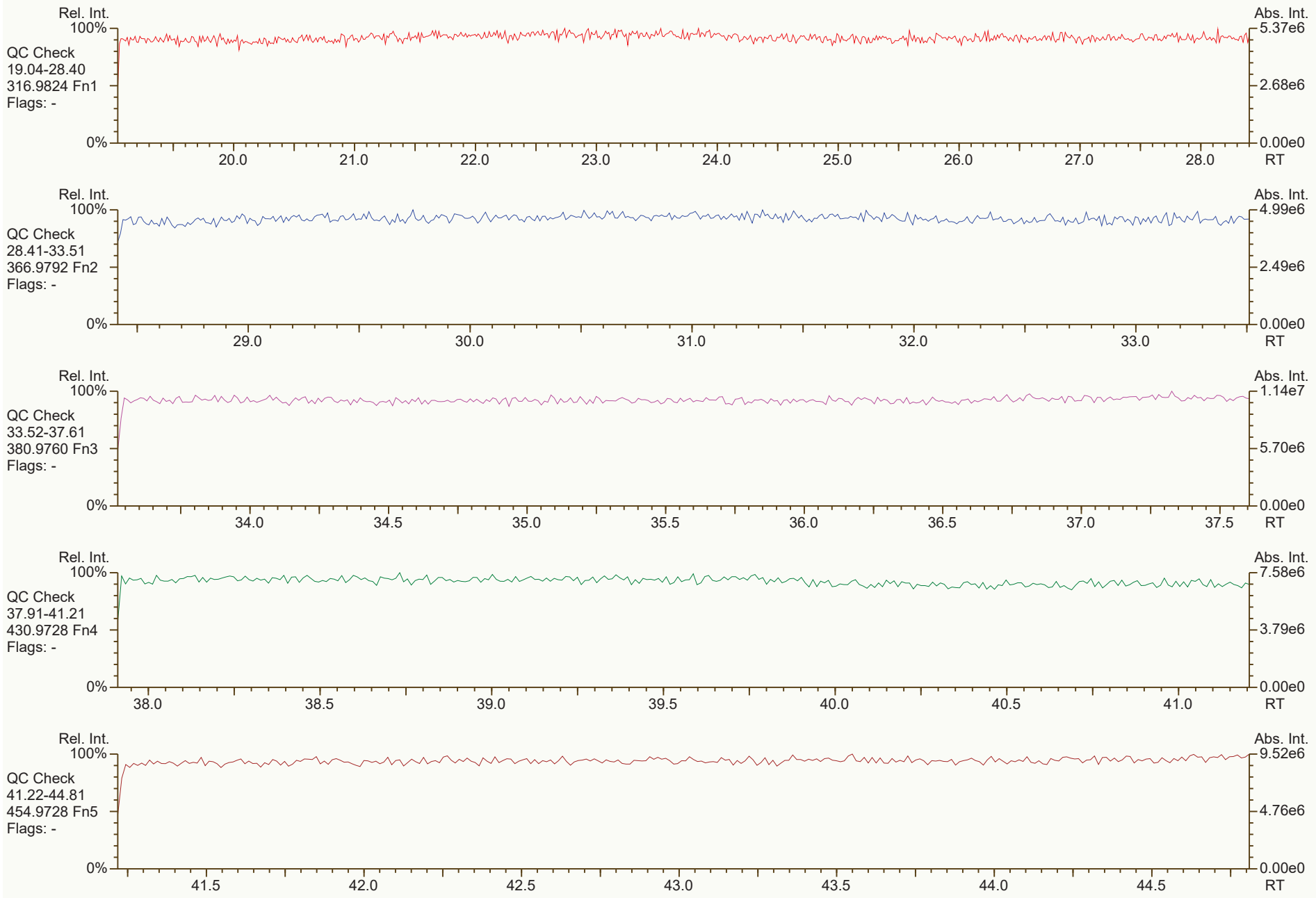
Initial Calibration: ICAL: HRMS3_DF_10122018_24AUG2020

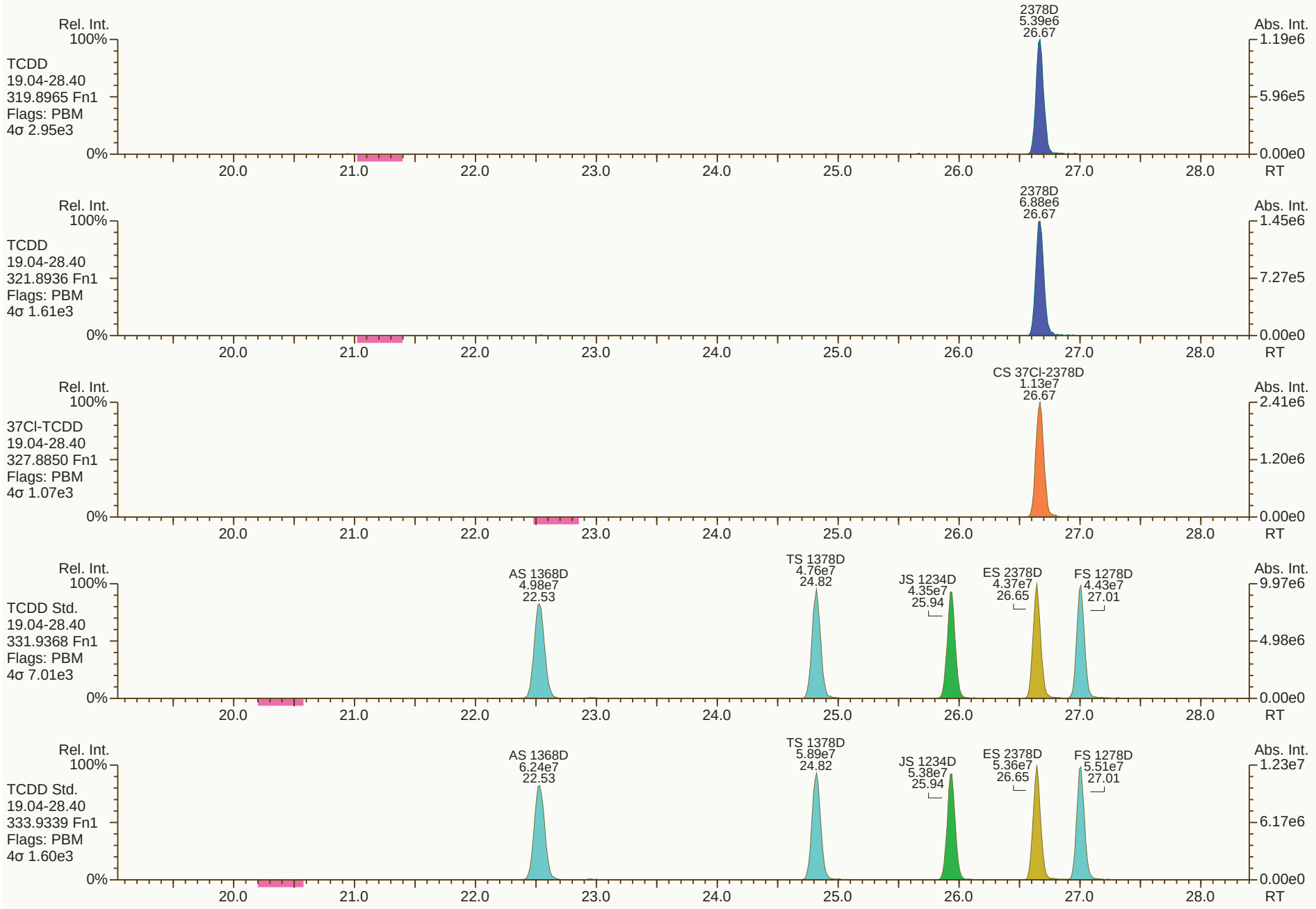
Instrument ID: HRMS3 GC Column ID: ZB-5ms

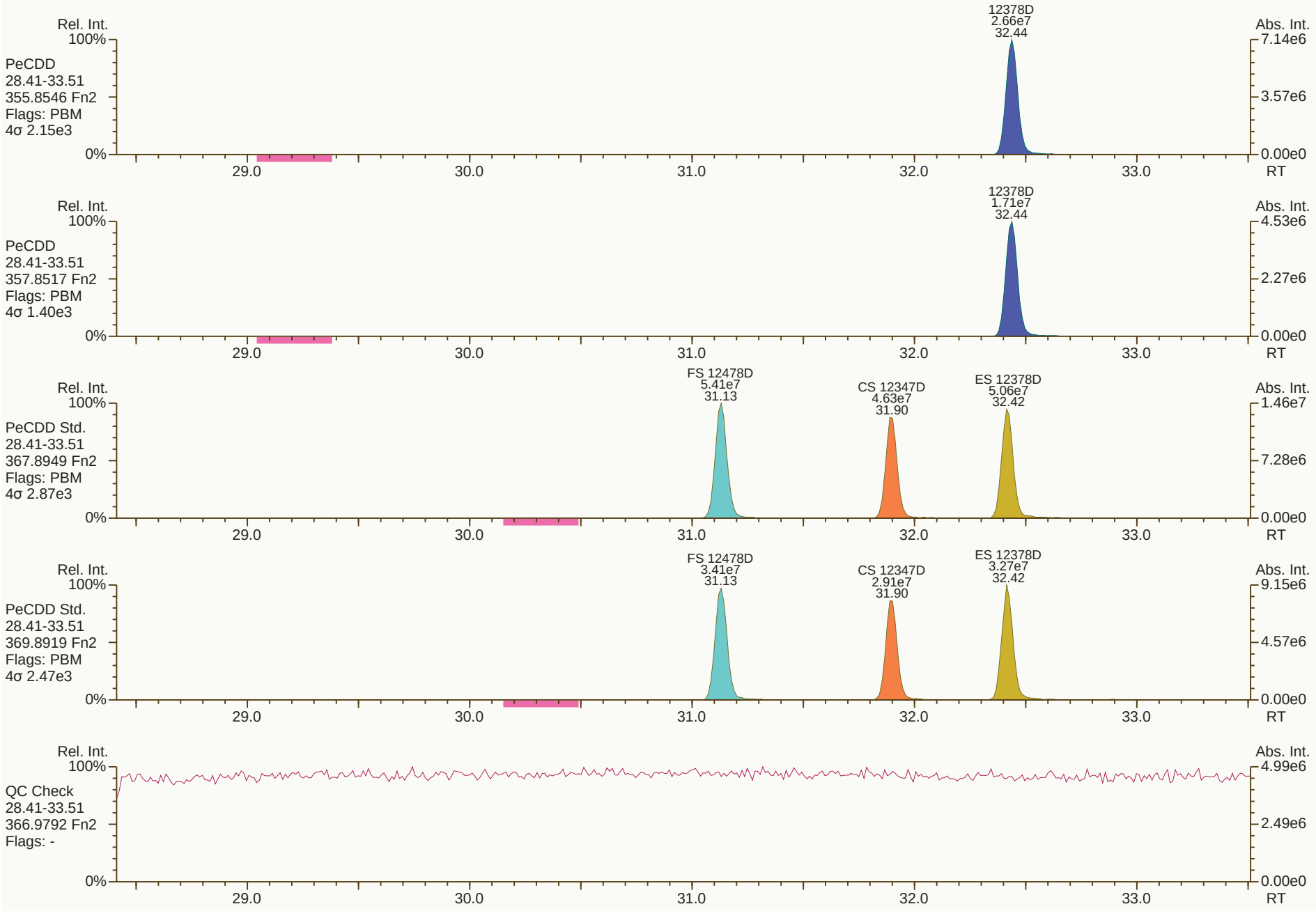
VER Data Filename: 200827C11 Analysis Date: 27-AUG-2020 23:58:33

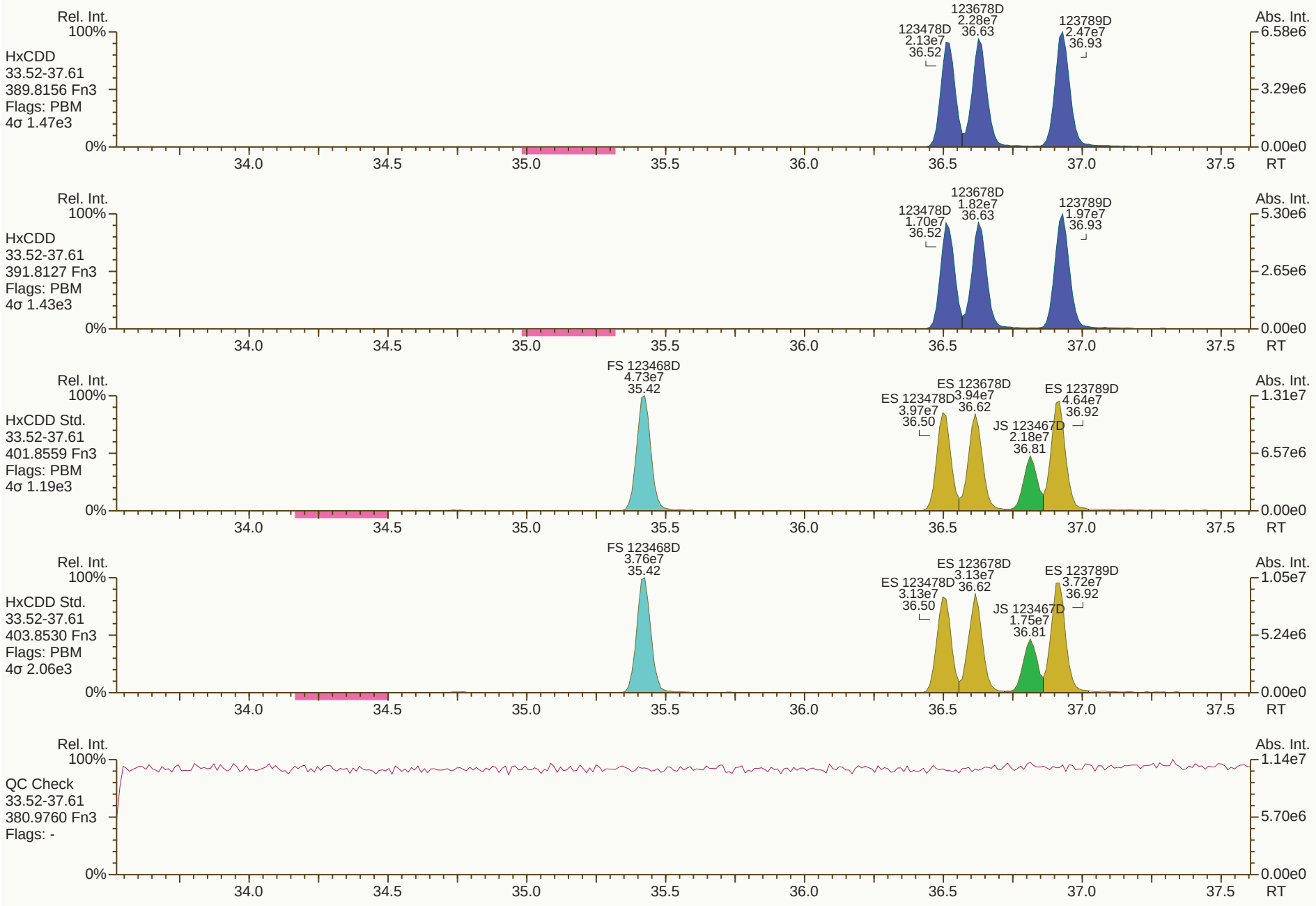
LABELED ANALYTES	M/Z's FORMING RATIO	ION ABUND. RATIO	QC LIMITS			OK	CONC. FOUND	RANGE (ng/mL)			OK
13C-2,3,7,8-TCDD	M/M+2	0.82	0.65	-	0.89	Y	103	70	-	130	Y
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.55	1.32	-	1.78	Y	101	70	-	130	Y
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.27	1.05	-	1.43	Y	92.8	70	-	130	Y
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.26	1.05	-	1.43	Y	93.5	70	-	130	Y
13C-1,2,3,7,8,9-HxCDD	M+2/M+4	1.25	1.05	-	1.43	Y	96.4	70	-	130	Y
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.07	0.88	-	1.20	Y	91.5	70	-	130	Y
13C-OCDD	M+2/M+4	0.90	0.76	-	1.02	Y	184	140	-	260	Y
13C-2,3,7,8-TCDF	M/M+2	0.79	0.65	-	0.89	Y	102	70	-	130	Y
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.58	1.32	-	1.78	Y	110	70	-	130	Y
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.58	1.32	-	1.78	Y	102	70	-	130	Y
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.53	0.43	-	0.59	Y	94.1	70	-	130	Y
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.53	0.43	-	0.59	Y	94.9	70	-	130	Y
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.53	0.43	-	0.59	Y	94.7	70	-	130	Y
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.53	0.43	-	0.59	Y	101	70	-	130	Y
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.45	0.37	-	0.51	Y	100	70	-	130	Y
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.45	0.37	-	0.51	Y	92.1	70	-	130	Y
13C-OCDF	M+2/M+4	0.89	0.76	-	1.02	Y	186	140	-	260	Y
CLEANUP STANDARDS											
37Cl-2,3,7,8-TCDD	n/a						10.2	7.9	-	12.7	Y
13C-1,2,3,4,7-PeCDD	M+2/M+4	1.59	1.32	-	1.78	Y	107	70	-	130	Y
13C-1,2,3,4,6-PeCDF	M+2/M+4	1.58	1.32	-	1.78	Y	110	70	-	130	Y
13C-1,2,3,4,6,9-HxCDF	M/M+2	0.54	0.43	-	0.59	Y	98.1	70	-	130	Y
13C-1,2,3,4,6,8,9-HpCDF	M/M+2	0.46	0.37	-	0.51	Y	101	70	-	130	Y

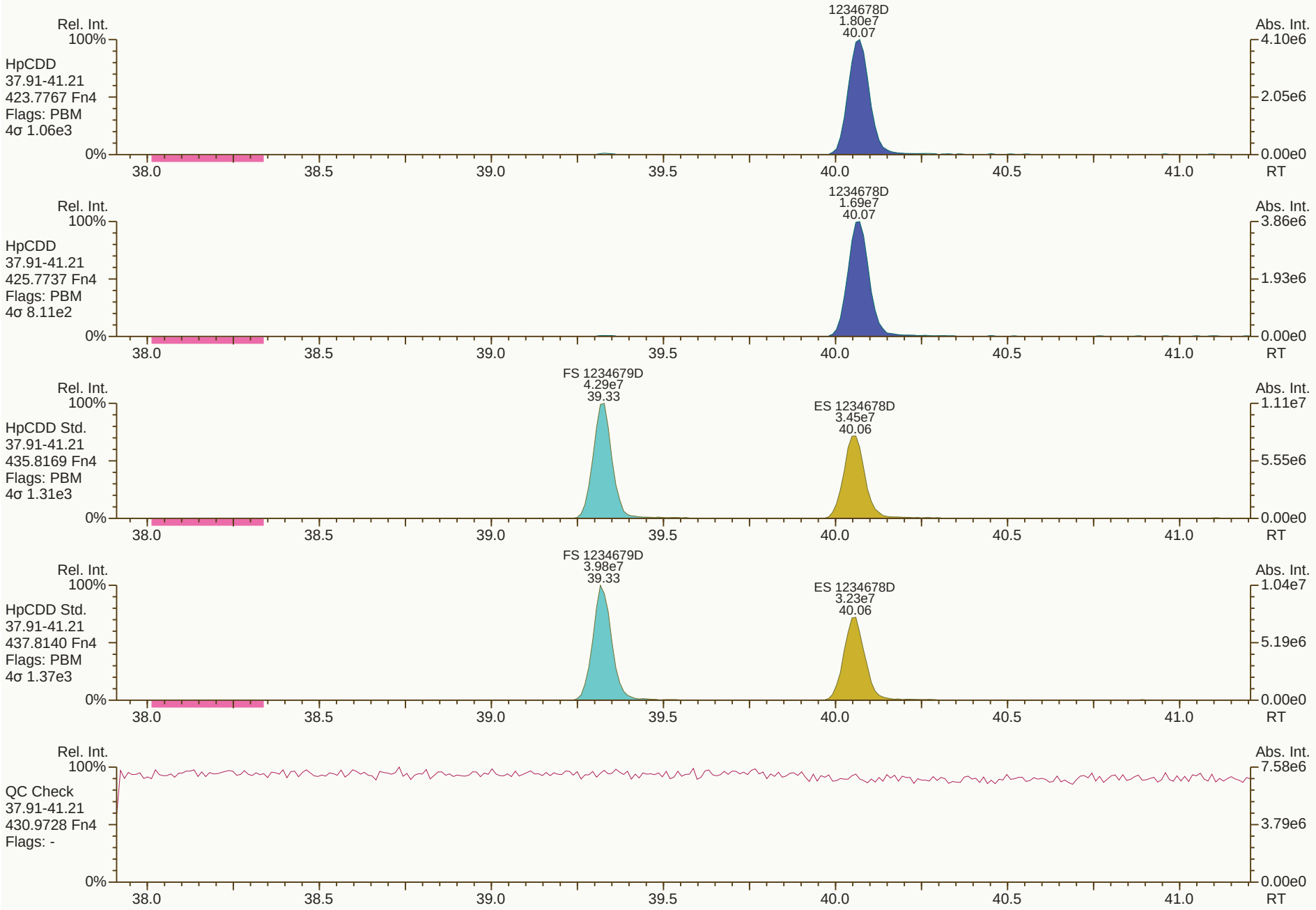
Processed: 28 Aug 2020 12:21 Analyst: TF

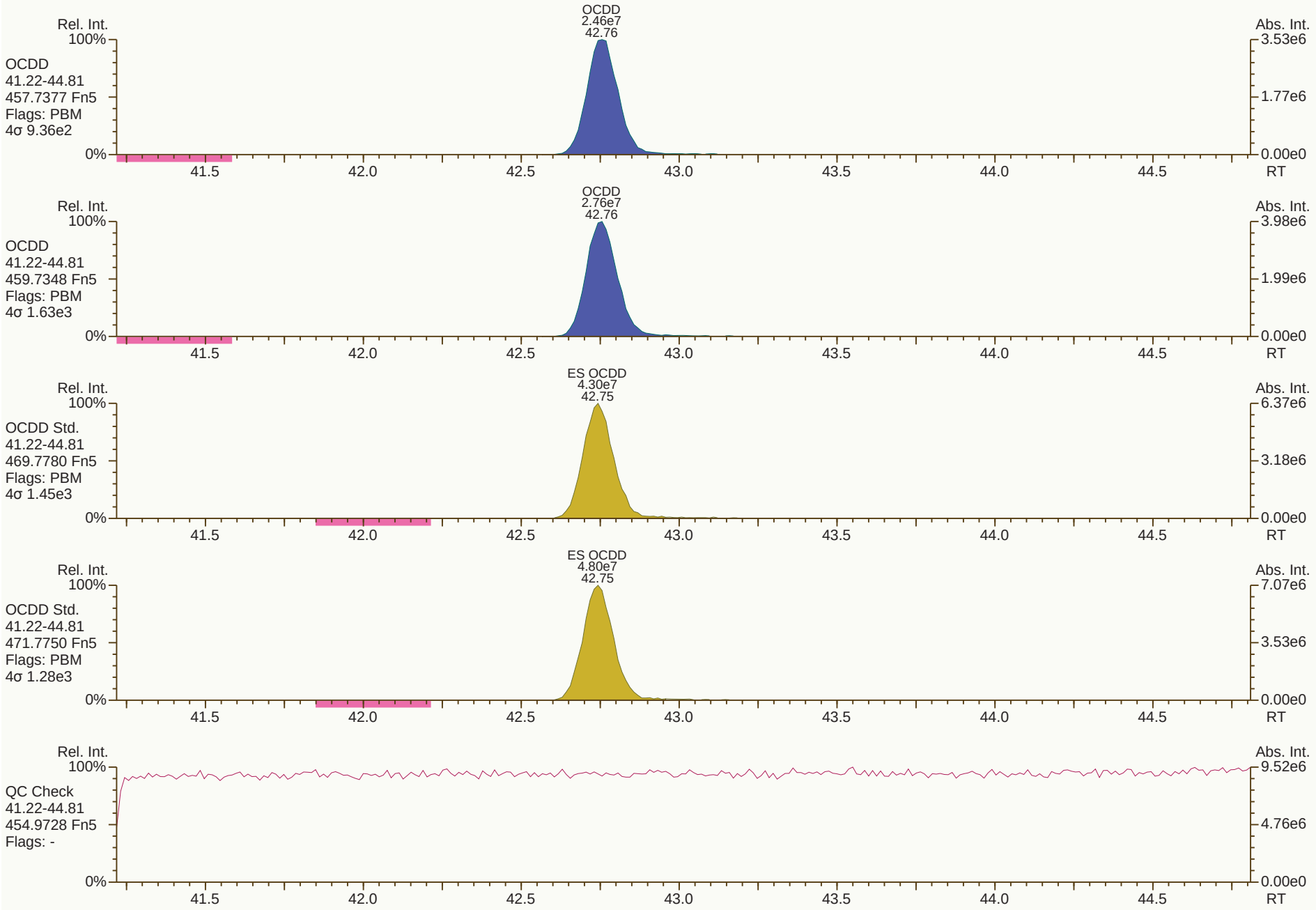

Rel. Int.
100%
0%
Abs. Int.
5.37e6
2.68e6
0.00e0
QC Check
19.04-28.40
316.9824 Fn1
Flags: -
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
0%
Abs. Int.
4.99e6
2.49e6
0.00e0
QC Check
28.41-33.51
366.9792 Fn2
Flags: -
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
0%
Abs. Int.
1.14e7
5.70e6
0.00e0
QC Check
33.52-37.61
380.9760 Fn3
Flags: -
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
0%
Abs. Int.
7.58e6
3.79e6
0.00e0
QC Check
37.91-41.21
430.9728 Fn4
Flags: -
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
0%
Abs. Int.
9.52e6
4.76e6
0.00e0
QC Check
41.22-44.81
454.9728 Fn5
Flags: -
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT


Rel. Int.
100%
TCDD
19.04-28.40
319.8965 Fn1
Flags: PBM
4σ 2.95e3
0%
2378D
5.39e6
26.67
Abs. Int.
1.19e6
5.96e5
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDD
19.04-28.40
321.8936 Fn1
Flags: PBM
4σ 1.61e3
0%
2378D
6.88e6
26.67
Abs. Int.
1.45e6
7.27e5
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
37Cl-TCDD
19.04-28.40
327.8850 Fn1
Flags: PBM
4σ 1.07e3
0%
CS 37Cl-2378D
1.13e7
26.67
Abs. Int.
2.41e6
1.20e6
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.40
331.9368 Fn1
Flags: PBM
4σ 7.01e3
0%
AS 1368D
4.98e7
22.53
TS 1378D
4.76e7
24.82
JS 1234D
4.35e7
25.94
ES 2378D
4.37e7
26.65
FS 1278D
4.43e7
27.01
Abs. Int.
9.97e6
4.98e6
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.40
333.9339 Fn1
Flags: PBM
4σ 1.60e3
0%
AS 1368D
6.24e7
22.53
TS 1378D
5.89e7
24.82
JS 1234D
5.38e7
25.94
ES 2378D
5.36e7
26.65
FS 1278D
5.51e7
27.01
Abs. Int.
1.23e7
6.17e6
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT


Rel. Int.
100%
PeCDD
28.41-33.51
355.8546 Fn2
Flags: PBM
4σ 2.15e3
0%
12378D
2.66e7
32.44
Abs. Int.
7.14e6
3.57e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD
28.41-33.51
357.8517 Fn2
Flags: PBM
4σ 1.40e3
0%
12378D
1.71e7
32.44
Abs. Int.
4.53e6
2.27e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.41-33.51
367.8949 Fn2
Flags: PBM
4σ 2.87e3
0%
FS 12478D
5.41e7
31.13
CS 12347D
4.63e7
31.90
ES 12378D
5.06e7
32.42
Abs. Int.
1.46e7
7.28e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.41-33.51
369.8919 Fn2
Flags: PBM
4σ 2.47e3
0%
FS 12478D
3.41e7
31.13
CS 12347D
2.91e7
31.90
ES 12378D
3.27e7
32.42
Abs. Int.
9.15e6
4.57e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
QC Check
28.41-33.51
366.9792 Fn2
Flags: -
0%
Abs. Int.
4.99e6
2.49e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT

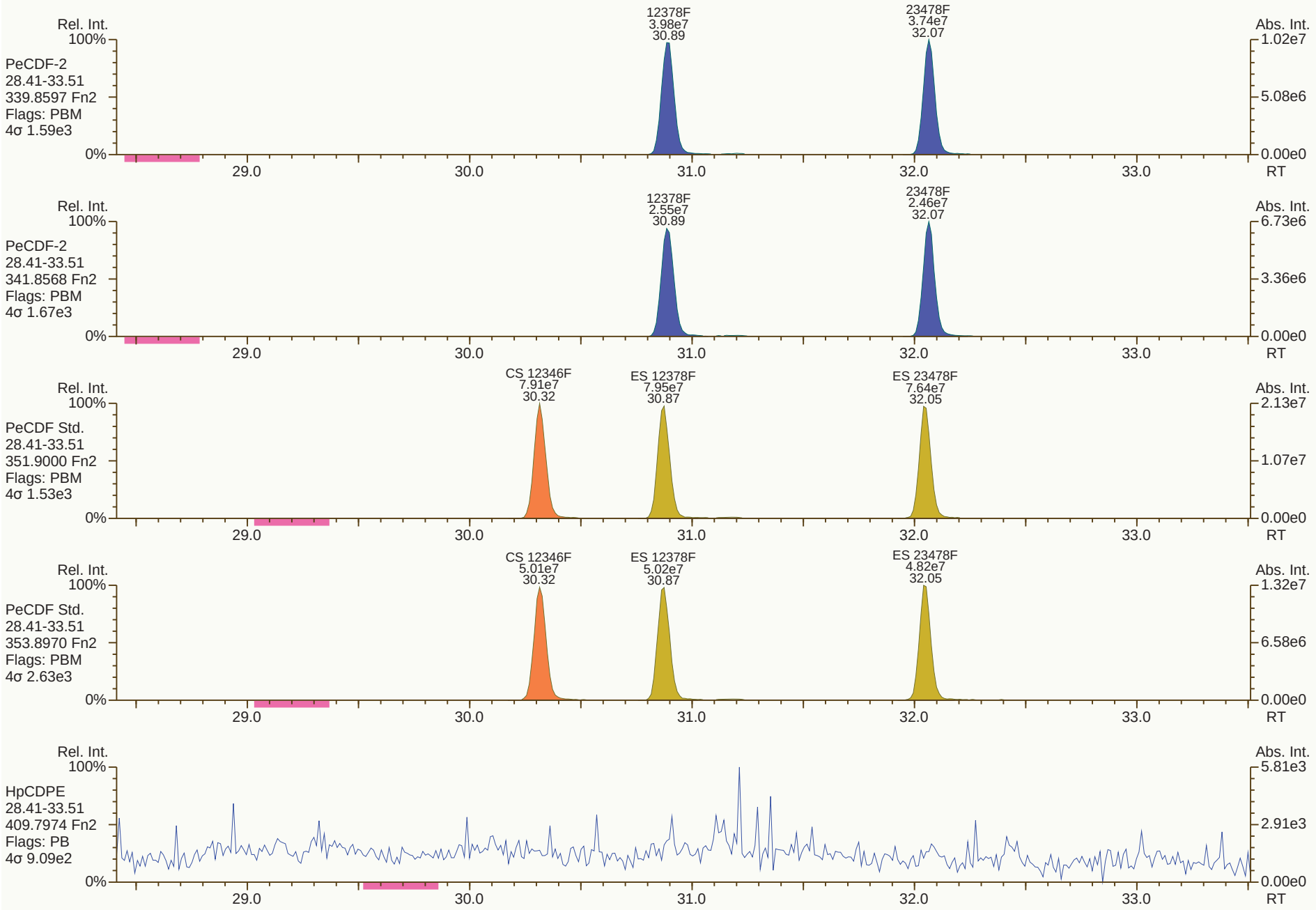

Rel. Int.
100%
HxCDD
33.52-37.61
389.8156 Fn3
Flags: PBM
4σ 1.47e3
123478D
2.13e7
36.52
123678D
2.28e7
36.63
123789D
2.47e7
36.93
Abs. Int.
6.58e6
3.29e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD
33.52-37.61
391.8127 Fn3
Flags: PBM
4σ 1.43e3
123478D
1.70e7
36.52
123678D
1.82e7
36.63
123789D
1.97e7
36.93
Abs. Int.
5.30e6
2.65e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.52-37.61
401.8559 Fn3
Flags: PBM
4σ 1.19e3
FS 123468D
4.73e7
35.42
ES 123478D
3.97e7
36.50
ES 123678D
3.94e7
36.62
JS 123467D
2.18e7
36.81
ES 123789D
4.64e7
36.92
Abs. Int.
1.31e7
6.57e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.52-37.61
403.8530 Fn3
Flags: PBM
4σ 2.06e3
FS 123468D
3.76e7
35.42
ES 123478D
3.13e7
36.50
ES 123678D
3.13e7
36.62
JS 123467D
1.75e7
36.81
ES 123789D
3.72e7
36.92
Abs. Int.
1.05e7
5.24e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
QC Check
33.52-37.61
380.9760 Fn3
Flags: -
Abs. Int.
1.14e7
5.70e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT

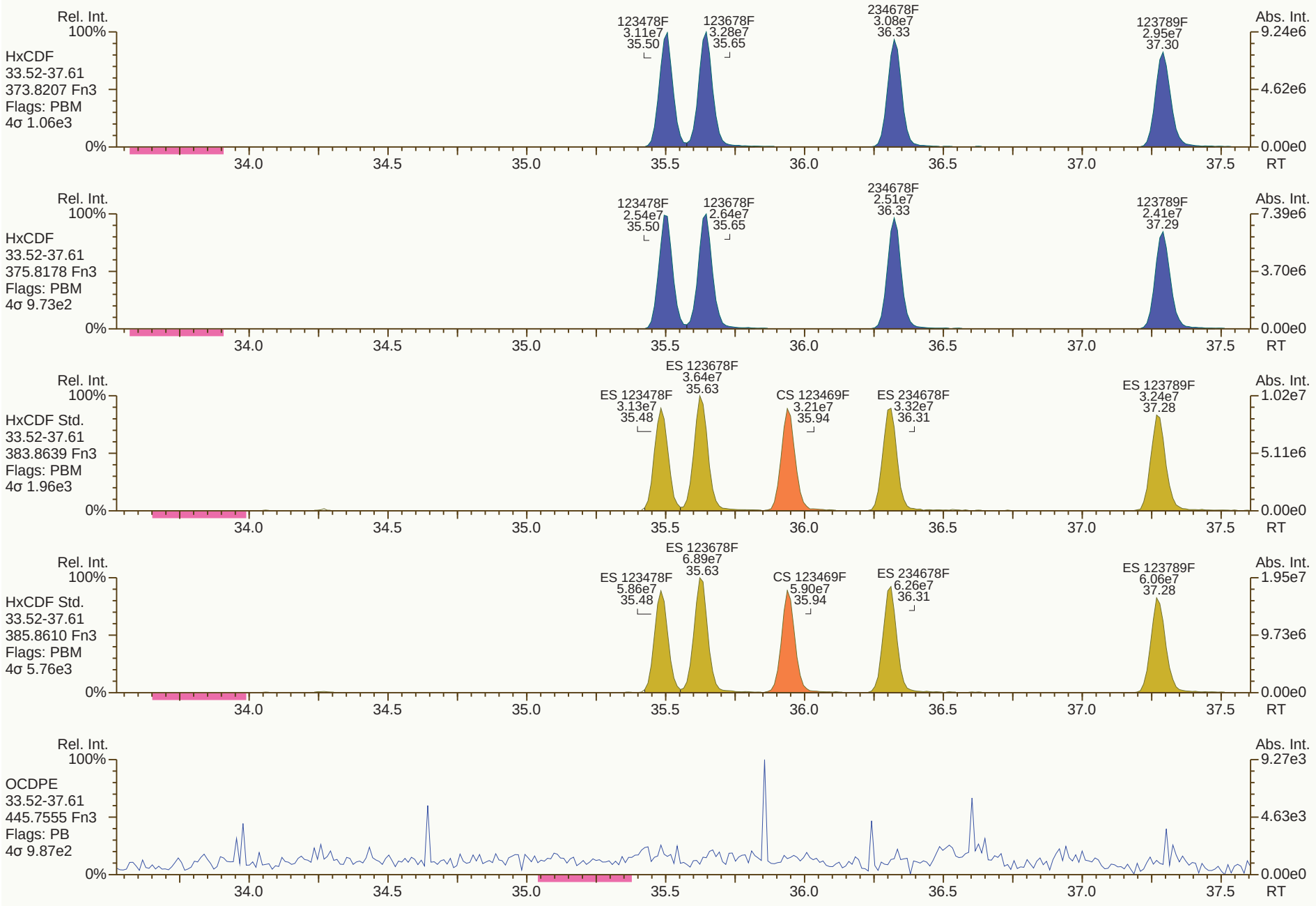

Rel. Int.
100%
HpCDD
37.91-41.21
423.7767 Fn4
Flags: PBM
4σ 1.06e3
1234678D
1.80e7
40.07
Abs. Int.
4.10e6
2.05e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD
37.91-41.21
425.7737 Fn4
Flags: PBM
4σ 8.11e2
1234678D
1.69e7
40.07
Abs. Int.
3.86e6
1.93e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.91-41.21
435.8169 Fn4
Flags: PBM
4σ 1.31e3
FS 1234679D
4.29e7
39.33
ES 1234678D
3.45e7
40.06
Abs. Int.
1.11e7
5.55e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.91-41.21
437.8140 Fn4
Flags: PBM
4σ 1.37e3
FS 1234679D
3.98e7
39.33
ES 1234678D
3.23e7
40.06
Abs. Int.
1.04e7
5.19e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
QC Check
37.91-41.21
430.9728 Fn4
Flags: -
Abs. Int.
7.58e6
3.79e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT


OCDD
2.46e7
42.76
Rel. Int.
100%
OCDD
41.22-44.81
457.7377 Fn5
Flags: PBM
4σ 9.36e2
0%
Abs. Int.
3.53e6
1.77e6
0.00e0
RT
41.5
42.0
42.5
43.0
43.5
44.0
44.5
OCDD
2.76e7
42.76
Rel. Int.
100%
OCDD
41.22-44.81
459.7348 Fn5
Flags: PBM
4σ 1.63e3
0%
Abs. Int.
3.98e6
1.99e6
0.00e0
RT
ES OCDD
4.30e7
42.75
Rel. Int.
100%
OCDD Std.
41.22-44.81
469.7780 Fn5
Flags: PBM
4σ 1.45e3
0%
Abs. Int.
6.37e6
3.18e6
0.00e0
RT
ES OCDD
4.80e7
42.75
Rel. Int.
100%
OCDD Std.
41.22-44.81
471.7750 Fn5
Flags: PBM
4σ 1.28e3
0%
Abs. Int.
7.07e6
3.53e6
0.00e0
RT
Rel. Int.
100%
QC Check
41.22-44.81
454.9728 Fn5
Flags: -
0%
Abs. Int.
9.52e6
4.76e6
0.00e0
RT


Rel. Int.
100%
TCDF
19.04-28.40
303.9016 Fn1
Flags: PBM
4σ 1.75e3
2378F
7.29e6
25.70
Abs. Int.
1.52e6
7.62e5
0.00e0
0%
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDF
19.04-28.40
305.8987 Fn1
Flags: PBM
4σ 1.87e3
2378F
9.35e6
25.70
Abs. Int.
1.86e6
9.31e5
0.00e0
0%
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDF Std.
19.04-28.40
315.9419 Fn1
Flags: PBM
4σ 1.22e4
AS 1368F
7.72e7
20.36
JS 1234F
6.68e7
24.17
ES 2378F
6.64e7
25.68
Abs. Int.
1.44e7
7.20e6
0.00e0
0%
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDF Std.
19.04-28.40
317.9389 Fn1
Flags: PBM
4σ 5.17e3
AS 1368F
9.70e7
20.36
JS 1234F
8.48e7
24.17
ES 2378F
8.35e7
25.68
Abs. Int.
1.84e7
9.19e6
0.00e0
0%
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
HxCDPE
19.04-28.40
375.8364 Fn1
Flags: PB
4σ 1.14e3
Abs. Int.
5.54e3
2.77e3
0.00e0
0%
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT


Rel. Int.
100%
0%
Abs. Int.
1.09e4
5.43e3
0.00e0
PeCDF-1
19.04-28.40
339.8597 Fn1
Flags: PB
4σ 1.41e3
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
0%
Abs. Int.
9.29e3
4.64e3
0.00e0
PeCDF-1
19.04-28.40
341.8568 Fn1
Flags: PB
4σ 1.87e3
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
0%
Abs. Int.
5.37e6
2.68e6
0.00e0
QC Check
19.04-28.40
316.9824 Fn1
Flags: -
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT


Rel. Int.
100%
PeCDF-2
28.41-33.51
339.8597 Fn2
Flags: PBM
4σ 1.59e3
0%
12378F
3.98e7
30.89
23478F
3.74e7
32.07
Abs. Int.
1.02e7
5.08e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF-2
28.41-33.51
341.8568 Fn2
Flags: PBM
4σ 1.67e3
0%
12378F
2.55e7
30.89
23478F
2.46e7
32.07
Abs. Int.
6.73e6
3.36e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.41-33.51
351.9000 Fn2
Flags: PBM
4σ 1.53e3
0%
CS 12346F
7.91e7
30.32
ES 12378F
7.95e7
30.87
ES 23478F
7.64e7
32.05
Abs. Int.
2.13e7
1.07e7
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.41-33.51
353.8970 Fn2
Flags: PBM
4σ 2.63e3
0%
CS 12346F
5.01e7
30.32
ES 12378F
5.02e7
30.87
ES 23478F
4.82e7
32.05
Abs. Int.
1.32e7
6.58e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
HpCDPE
28.41-33.51
409.7974 Fn2
Flags: PB
4σ 9.09e2
0%
Abs. Int.
5.81e3
2.91e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT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100%
HxCDF
33.52-37.61
373.8207 Fn3
Flags: PBM
4σ 1.06e3
123478F
3.11e7
35.50
123678F
3.28e7
35.65
234678F
3.08e7
36.33
123789F
2.95e7
37.30
Abs. Int.
9.24e6
4.62e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF
33.52-37.61
375.8178 Fn3
Flags: PBM
4σ 9.73e2
123478F
2.54e7
35.50
123678F
2.64e7
35.65
234678F
2.51e7
36.33
123789F
2.41e7
37.29
Abs. Int.
7.39e6
3.70e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF Std.
33.52-37.61
383.8639 Fn3
Flags: PBM
4σ 1.96e3
ES 123678F
3.64e7
35.63
ES 123478F
3.13e7
35.48
CS 123469F
3.21e7
35.94
ES 234678F
3.32e7
36.31
ES 123789F
3.24e7
37.28
Abs. Int.
1.02e7
5.11e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF Std.
33.52-37.61
385.8610 Fn3
Flags: PBM
4σ 5.76e3
ES 123678F
6.89e7
35.63
ES 123478F
5.86e7
35.48
CS 123469F
5.90e7
35.94
ES 234678F
6.26e7
36.31
ES 123789F
6.06e7
37.28
Abs. Int.
1.95e7
9.73e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
OCDPE
33.52-37.61
445.7555 Fn3
Flags: PB
4σ 9.87e2
Abs. Int.
9.27e3
4.63e3
0.00e0
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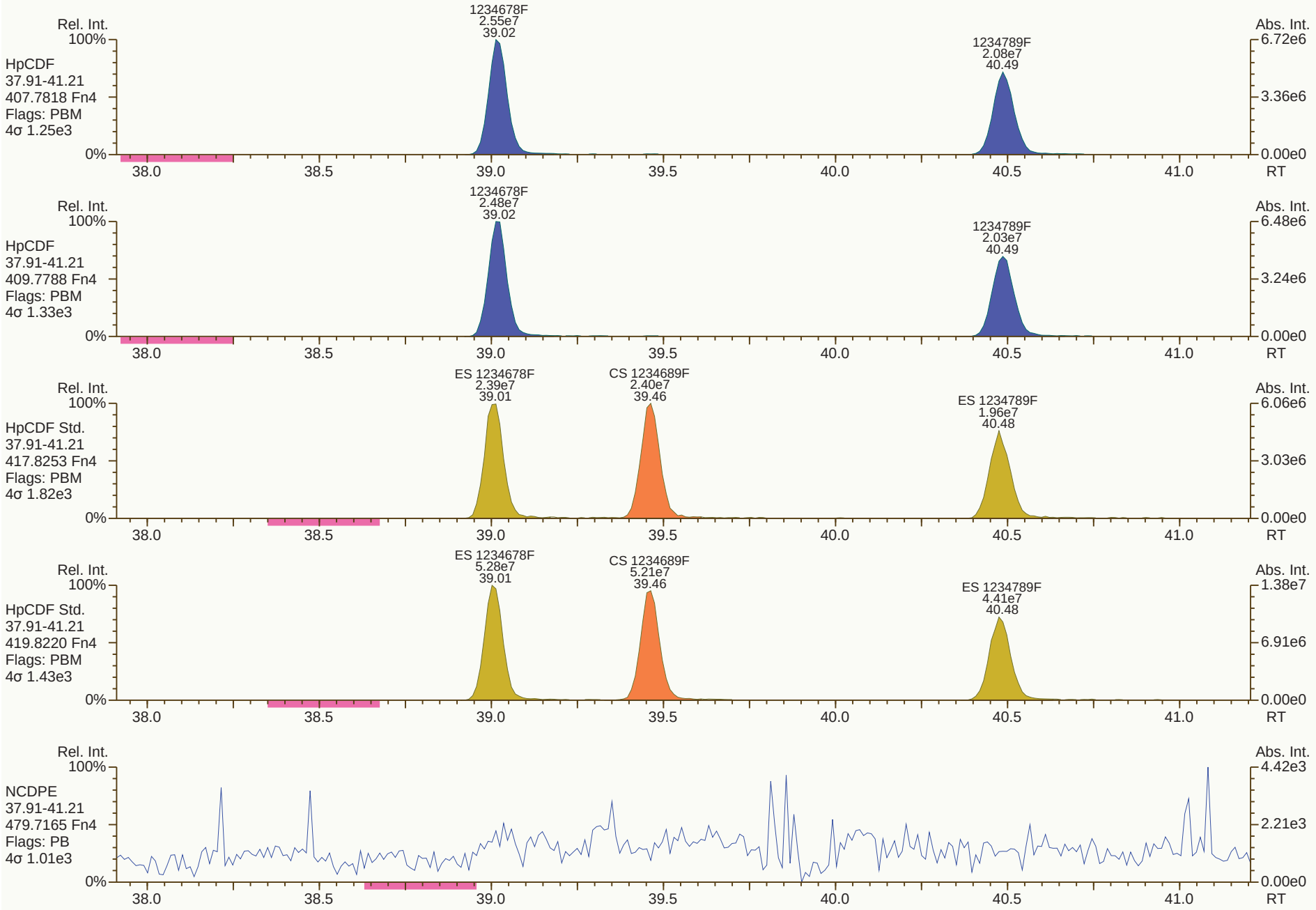
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT


Rel. Int.
100%
0%
Abs. Int.
RT
38.0
38.5
39.0
39.5
40.0
40.5
41.0
HpCDF
37.91-41.21
407.7818 Fn4
Flags: PBM
4σ 1.25e3
1234678F
2.55e7
39.02
1234789F
2.08e7
40.49
6.72e6
3.36e6
0.00e0
HpCDF
37.91-41.21
409.7788 Fn4
Flags: PBM
4σ 1.33e3
1234678F
2.48e7
39.02
1234789F
2.03e7
40.49
6.48e6
3.24e6
0.00e0
HpCDF Std.
37.91-41.21
417.8253 Fn4
Flags: PBM
4σ 1.82e3
ES 1234678F
2.39e7
39.01
CS 1234689F
2.40e7
39.46
ES 1234789F
1.96e7
40.48
6.06e6
3.03e6
0.00e0
HpCDF Std.
37.91-41.21
419.8220 Fn4
Flags: PBM
4σ 1.43e3
ES 1234678F
5.28e7
39.01
CS 1234689F
5.21e7
39.46
ES 1234789F
4.41e7
40.48
1.38e7
6.91e6
0.00e0
NCDPE
37.91-41.21
479.7165 Fn4
Flags: PB
4σ 1.01e3
4.42e3
2.21e3
0.00e0


OCDF
2.99e7
42.90
Rel. Int.
Abs. Int.
OCDF
41.22-44.81
441.7428 Fn5
Flags: PBM
4σ 1.37e3
OCDF
3.28e7
42.90
OCDF
41.22-44.81
443.7398 Fn5
Flags: PBM
4σ 2.70e3
ES OCDF
5.56e7
42.89
OCDF Std.
41.22-44.81
453.7830 Fn5
Flags: PBM
4σ 1.51e3
ES OCDF
6.23e7
42.88
OCDF Std.
41.22-44.81
455.7801 Fn5
Flags: PBM
4σ 2.41e3
DCDPE
41.22-44.81
513.6775 Fn5
Flags: PB
4σ 7.96e2
RT

Dioxin/Furan QC Summary		Acq'd: 28 Aug 2020 10:56 DTF				ICAL: HRMS3_DF_10122018_24AUG2020	
Lab ID: CS3_200827_DF_CC		UTP: 28-Aug-2020 12:20:36 DTF				Checkcode: 176-745-WXY	
Sample ID: 20-449-3		Report: 28 Aug 2020 12:21 TF				Datafile: 200827C25	
Name	**RT**	**Response**	**RA**	**OK**	**Ref. RRFs**	**Calc. RRFs**	**Dev'n**
2378-TCDD	26.66	1.27E+07	0.82	Y	1.19	1.26	6%
12378-PeCDD	32.43	4.52E+07	1.55	Y	1.01	1.03	2%
123478-HxCDD	36.51	4.06E+07	1.26	Y	1.05	1.08	2%
123678-HxCDD	36.63	4.27E+07	1.25	Y	1.12	1.16	4%
123789-HxCDD	36.93	4.53E+07	1.25	Y	1.02	1.07	4%
1234678-HpCDD	40.06	3.51E+07	1.06	Y	1.00	1.04	3%
OCDD	42.77	4.98E+07	0.90	Y	1.08	1.11	3%
2378-TCDF	25.69	1.69E+07	0.79	Y	1.06	1.11	4%
12378-PeCDF	30.88	6.60E+07	1.54	Y	0.98	0.99	1%
23478-PeCDF	32.06	6.39E+07	1.52	Y	0.97	1.00	3%
123478-HxCDF	35.49	5.72E+07	1.23	Y	1.22	1.23	1%
123678-HxCDF	35.64	6.05E+07	1.24	Y	1.11	1.14	3%
234678-HxCDF	36.32	5.71E+07	1.24	Y	1.15	1.14	-1%
123789-HxCDF	37.29	5.38E+07	1.23	Y	1.12	1.14	2%
1234678-HpCDF	39.02	4.75E+07	1.02	Y	1.29	1.30	1%
1234789-HpCDF	40.48	3.94E+07	1.01	Y	1.27	1.24	-2%
OCDF	42.90	6.01E+07	0.88	Y	1.04	1.05	1%
ES 2378-TCDD	26.63	1.01E+08	0.80	Y	0.97	1.02	5%
ES 12378-PeCDD	32.41	8.77E+07	1.57	Y	0.84	0.88	4%
ES 123478-HxCDD	36.5	7.52E+07	1.30	Y	0.97	0.94	-3%
ES 123678-HxCDD	36.61	7.37E+07	1.26	Y	0.96	0.92	-4%
ES 123789-HxCDD	36.91	8.50E+07	1.28	Y	1.10	1.06	-4%
ES 1234678-HpCDD	40.05	6.76E+07	1.04	Y	0.93	0.84	-9%
ES OCDD	42.76	8.95E+07	0.92	Y	0.63	0.56	-11%
ES 2378-TCDF	25.66	1.53E+08	0.79	Y	0.97	0.99	2%
ES 12378-PeCDF	30.86	1.33E+08	1.55	Y	0.78	0.86	11%
ES 23478-PeCDF	32.04	1.28E+08	1.56	Y	0.80	0.83	3%
ES 123478-HxCDF	35.48	9.31E+07	0.53	Y	1.22	1.16	-4%
ES 123678-HxCDF	35.62	1.06E+08	0.52	Y	1.41	1.33	-6%
ES 234678-HxCDF	36.3	1.00E+08	0.52	Y	1.29	1.25	-3%
ES 123789-HxCDF	37.27	9.42E+07	0.52	Y	1.17	1.18	0%
ES 1234678-HpCDF	39.01	7.28E+07	0.46	Y	0.97	0.91	-7%
ES 1234789-HpCDF	40.47	6.34E+07	0.47	Y	0.88	0.79	-10%
ES OCDF	42.89	1.14E+08	0.90	Y	0.81	0.72	-11%

Dioxin/Furan QC Summary	Acq'd: 28 Aug 2020 10:56 DTF	ICAL: HRMS3_DF_10122018_24AUG2020
Lab ID: CS3_200827_DF_CC	UTP: 28-Aug-2020 12:20:36 DTF	Checkcode: 176-745-WXY
Sample ID: 20-449-3	Report: 28 Aug 2020 12:21 TF	Datafile: 200827C25

Name	RT	Response	RA	OK	Ref. RRFs	Calc. RRFs	Dev'n
JS 1234-TCDD	25.92	9.94E+07	0.81	Y	-	-	-
JS 1234-TCDF	24.15	1.55E+08	0.79	Y	-	-	-
JS 123467-HxCDD	36.81	4.00E+07	1.24	Y	-	-	-
CS 37Cl-2378-TCDD	26.65	1.19E+07	n/a	-	1.14	1.20	5%
CS 12347-PeCDD	31.89	7.77E+07	1.60	Y	0.72	0.78	8%
CS 12346-PeCDF	30.31	1.33E+08	1.60	Y	0.77	0.86	12%
CS 123469-HxCDF	35.94	9.64E+07	0.52	Y	1.18	1.20	2%
CS 1234689-HpCDF	39.46	7.14E+07	0.46	Y	0.96	0.89	-7%
~~SS 37Cl-2378-TCDD~~	~~26.65~~	~~1.19E+07~~	~~n/a~~	~~-~~	~~1.19~~	~~1.18~~	~~-1%~~
~~SS 12347-PeCDD~~	~~31.89~~	~~7.77E+07~~	~~1.60~~	~~Y~~	~~0.86~~	~~0.89~~	~~3%~~
~~SS 12346-PeCDF~~	~~30.31~~	~~1.33E+08~~	~~1.60~~	~~Y~~	~~1.00~~	~~1.00~~	~~1%~~
~~SS 123469-HxCDF~~	~~35.94~~	~~9.64E+07~~	~~0.52~~	~~Y~~	~~0.84~~	~~0.91~~	~~8%~~
~~SS 1234689-HpCDF~~	~~39.46~~	~~7.14E+07~~	~~0.46~~	~~Y~~	~~0.98~~	~~0.98~~	~~0%~~
~~OCDD-a~~	~~42.79~~	~~2.19E+06~~	~~2.80~~	~~Y~~	~~0.07~~	~~0.05~~	~~-33%~~
~~OCDF-a~~	~~42.90~~	~~4.18E+06~~	~~2.38~~	~~Y~~	~~0.06~~	~~0.07~~	~~16%~~

METHOD 8290A **PCDD/F CALIBRATION VERIFICATION** **FORM 4A**

Lab Name: SGS North America

Initial Calibration: ICAL: HRMS3_DF_10122018_24AUG2020

Instrument ID: HRMS3 GC Column ID: ZB-5ms

VER Data Filename: 200827C25 Analysis Date: 28-AUG-2020 10:56:29

NATIVE ANALYTES	M/Z's FORMING RATIO	ION ABUND. RATIO	QC LIMITS			OK	CONC. FOUND	RANGE (ng/mL)			OK
2,3,7,8-TCDD	M/M+2	0.82	0.65	-	0.89	Y	10.6	8	-	12	Y
1,2,3,7,8-PeCDD	M+2/M+4	1.55	1.32	-	1.78	Y	50.9	40	-	60	Y
1,2,3,4,7,8-HxCDD	M+2/M+4	1.26	1.05	-	1.43	Y	51.2	40	-	60	Y
1,2,3,6,7,8-HxCDD	M+2/M+4	1.25	1.05	-	1.43	Y	51.9	40	-	60	Y
1,2,3,7,8,9-HxCDD	M+2/M+4	1.25	1.05	-	1.43	Y	52.2	40	-	60	Y
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.06	0.88	-	1.20	Y	51.7	40	-	60	Y
OCDD	M+2/M+4	0.90	0.76	-	1.02	Y	103	80	-	120	Y
2,3,7,8-TCDF	M/M+2	0.79	0.65	-	0.89	Y	10.4	8	-	12	Y
1,2,3,7,8-PeCDF	M+2/M+4	1.54	1.32	-	1.78	Y	50.6	40	-	60	Y
2,3,4,7,8-PeCDF	M+2/M+4	1.52	1.32	-	1.78	Y	51.5	40	-	60	Y
1,2,3,4,7,8-HxCDF	M+2/M+4	1.23	1.05	-	1.43	Y	50.4	40	-	60	Y
1,2,3,6,7,8-HxCDF	M+2/M+4	1.24	1.05	-	1.43	Y	51.4	40	-	60	Y
2,3,4,6,7,8-HxCDF	M+2/M+4	1.24	1.05	-	1.43	Y	49.5	40	-	60	Y
1,2,3,7,8,9-HxCDF	M+2/M+4	1.23	1.05	-	1.43	Y	50.8	40	-	60	Y
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.02	0.88	-	1.20	Y	50.4	40	-	60	Y
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.01	0.88	-	1.20	Y	49	40	-	60	Y
OCDF	M+2/M+4	0.88	0.76	-	1.02	Y	101	80	-	120	Y

Processed: 28 Aug 2020 12:21 Analyst: TF

METHOD 8290A **PCDD/F CALIBRATION VERIFICATION** **FORM 4B**

Lab Name: SGS North America

Initial Calibration: ICAL: HRMS3_DF_10122018_24AUG2020

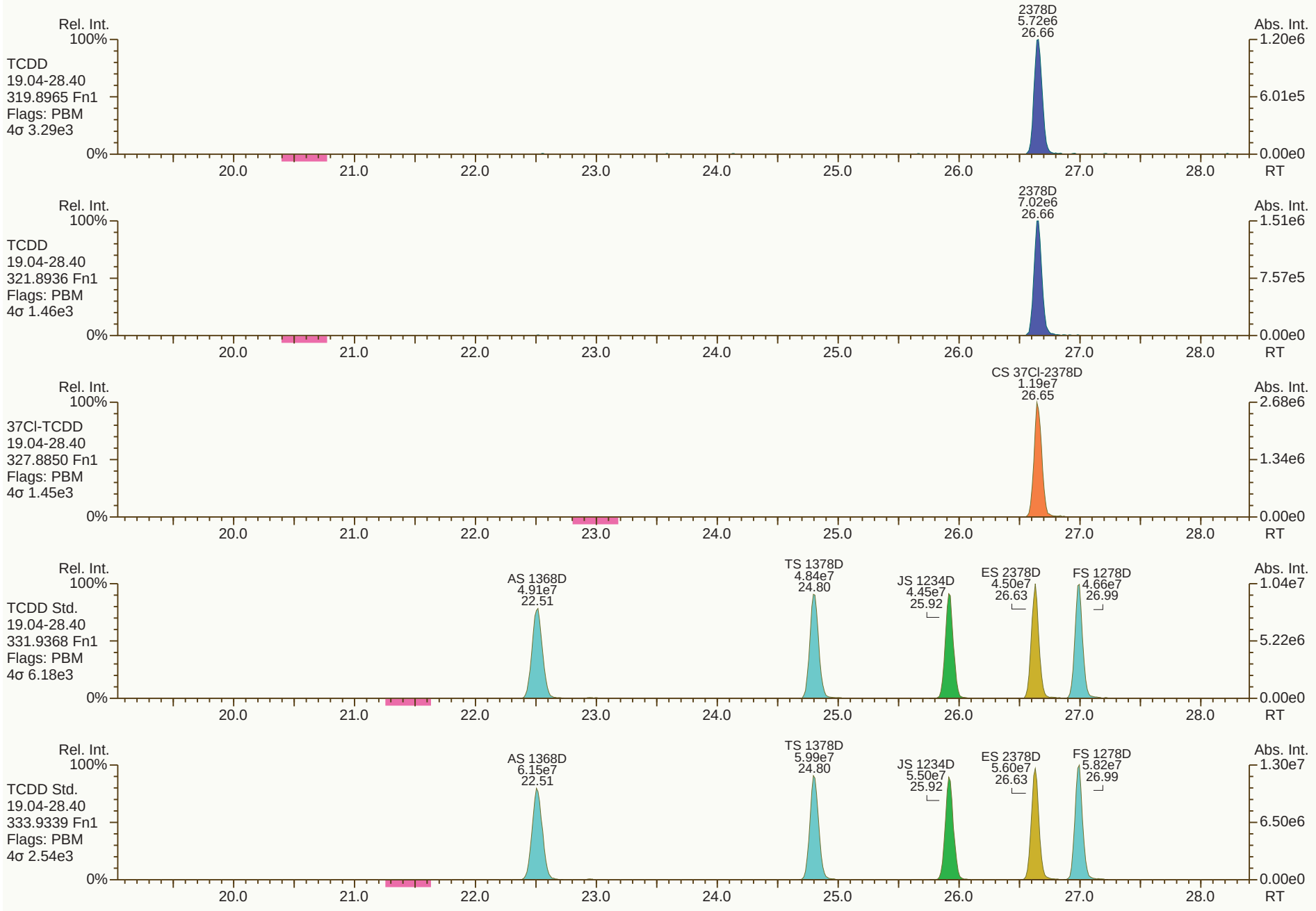
Instrument ID: HRMS3 GC Column ID: ZB-5ms

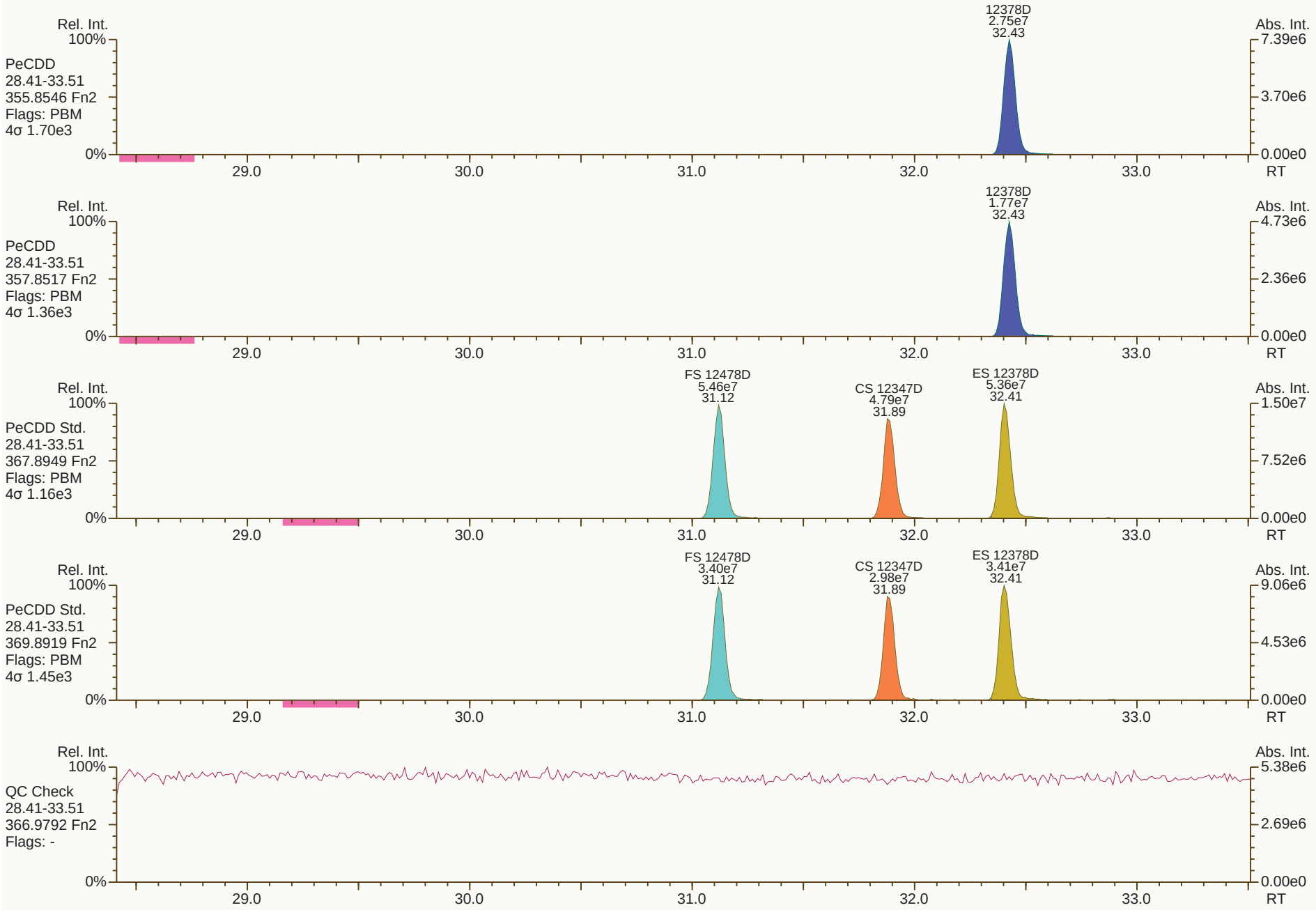
VER Data Filename: 200827C25 Analysis Date: 28-AUG-2020 10:56:29

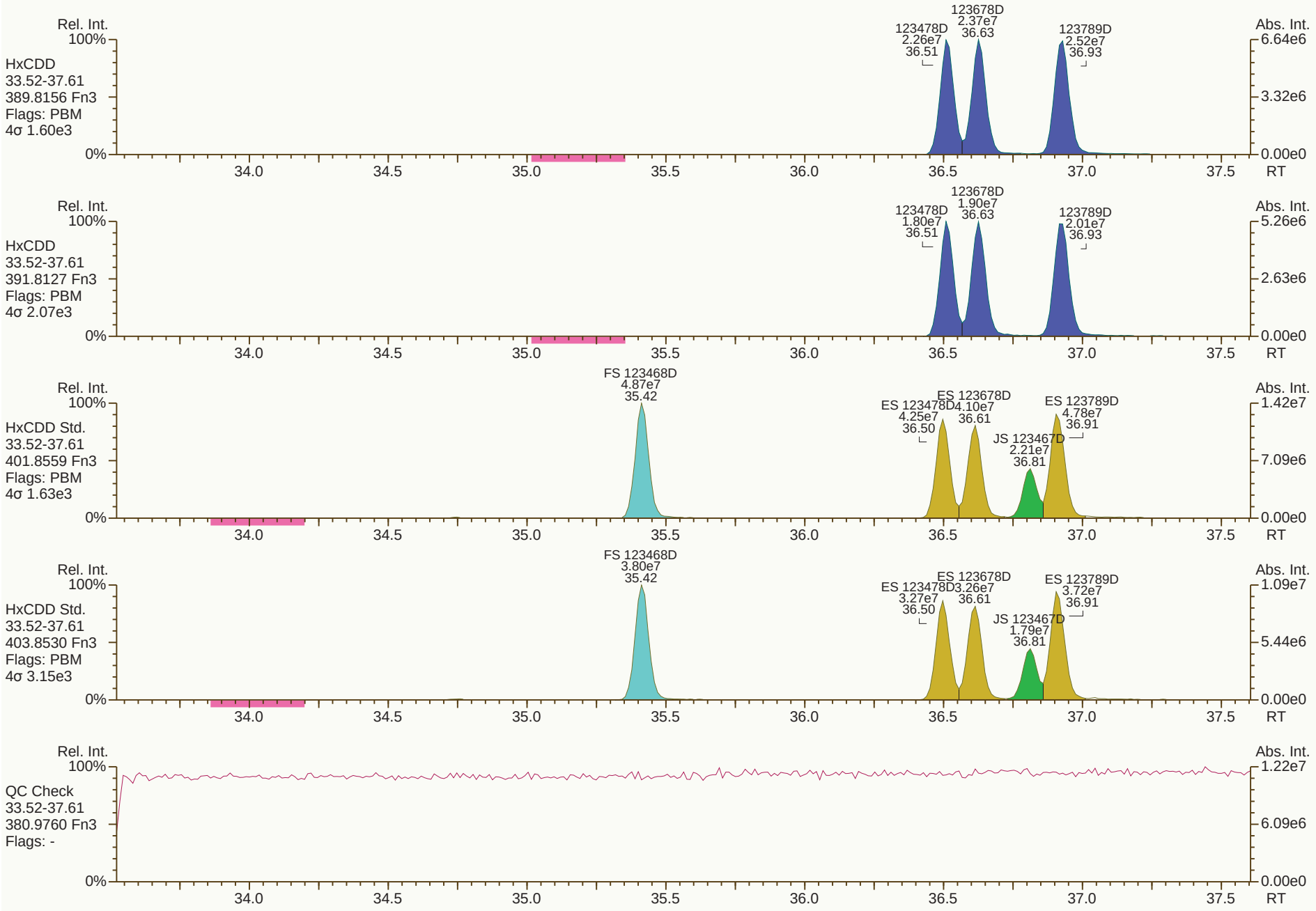
LABELED ANALYTES	M/Z's FORMING RATIO	ION ABUND. RATIO	QC LIMITS			OK	CONC. FOUND	RANGE (ng/mL)			OK
13C-2,3,7,8-TCDD	M/M+2	0.80	0.65	-	0.89	Y	105	70	-	130	Y
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.57	1.32	-	1.78	Y	104	70	-	130	Y
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.30	1.05	-	1.43	Y	96.6	70	-	130	Y
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.26	1.05	-	1.43	Y	95.7	70	-	130	Y
13C-1,2,3,7,8,9-HxCDD	M+2/M+4	1.28	1.05	-	1.43	Y	96.3	70	-	130	Y
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	0.88	-	1.20	Y	90.9	70	-	130	Y
13C-OCDD	M+2/M+4	0.92	0.76	-	1.02	Y	178	140	-	260	Y
13C-2,3,7,8-TCDF	M/M+2	0.79	0.65	-	0.89	Y	102	70	-	130	Y
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.55	1.32	-	1.78	Y	111	70	-	130	Y
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.56	1.32	-	1.78	Y	103	70	-	130	Y
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.53	0.43	-	0.59	Y	95.6	70	-	130	Y
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	94.2	70	-	130	Y
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	97.5	70	-	130	Y
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	100	70	-	130	Y
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.46	0.37	-	0.51	Y	93.5	70	-	130	Y
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.47	0.37	-	0.51	Y	90.2	70	-	130	Y
13C-OCDF	M+2/M+4	0.90	0.76	-	1.02	Y	177	140	-	260	Y
CLEANUP STANDARDS											
37Cl-2,3,7,8-TCDD	n/a						10.5	7.9	-	12.7	Y
13C-1,2,3,4,7-PeCDD	M+2/M+4	1.60	1.32	-	1.78	Y	108	70	-	130	Y
13C-1,2,3,4,6-PeCDF	M+2/M+4	1.60	1.32	-	1.78	Y	112	70	-	130	Y
13C-1,2,3,4,6,9-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	102	70	-	130	Y
13C-1,2,3,4,6,8,9-HpCDF	M/M+2	0.46	0.37	-	0.51	Y	93.4	70	-	130	Y

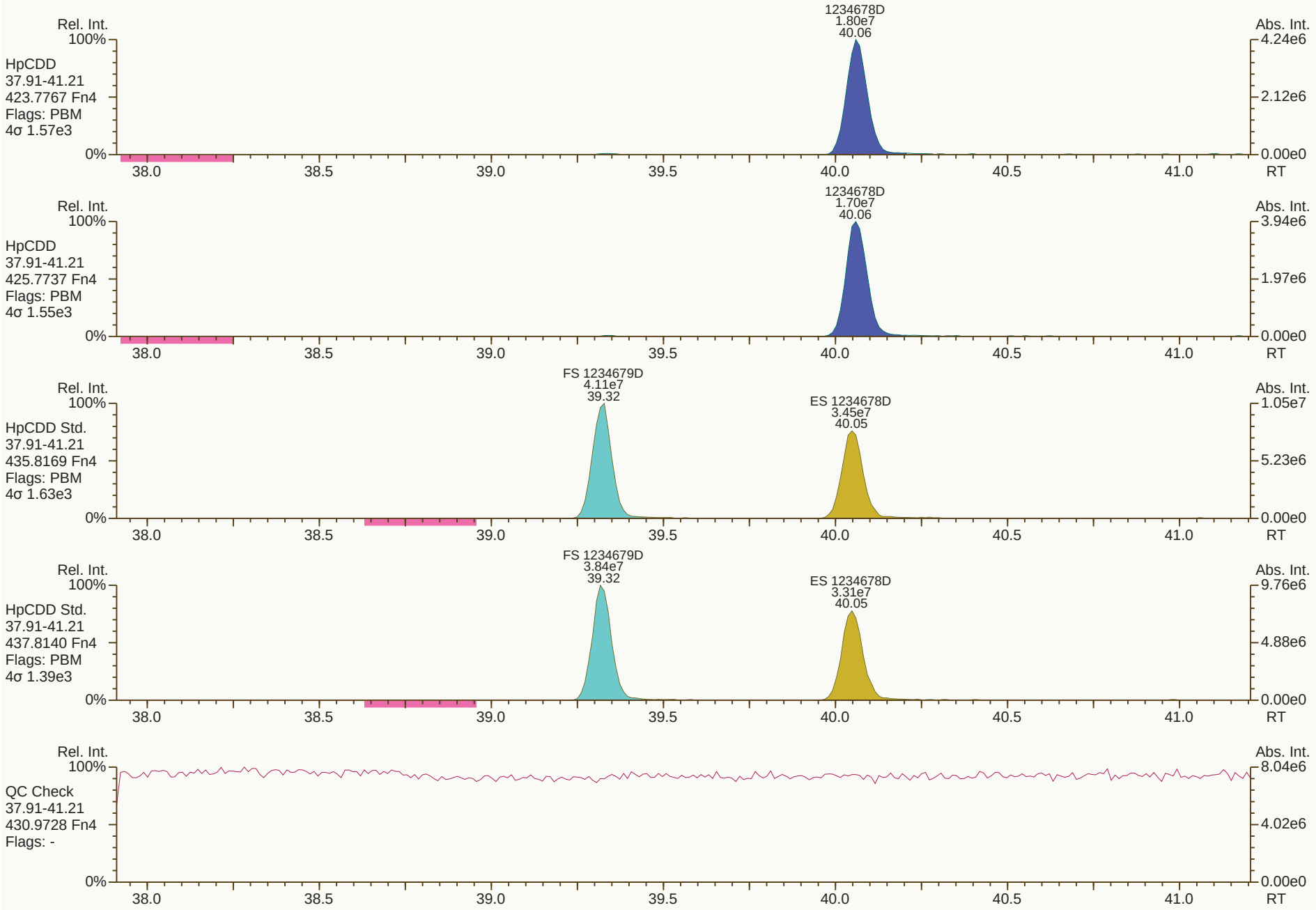
Processed: 28 Aug 2020 12:21 Analyst: TF


Rel. Int.
100%
0%
Abs. Int.
5.61e6
2.81e6
0.00e0
RT
QC Check
19.04-28.40
316.9824 Fn1
Flags: -
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
Rel. Int.
100%
0%
Abs. Int.
5.38e6
2.69e6
0.00e0
RT
QC Check
28.41-33.51
366.9792 Fn2
Flags: -
29.0
30.0
31.0
32.0
33.0
Rel. Int.
100%
0%
Abs. Int.
1.22e7
6.09e6
0.00e0
RT
QC Check
33.52-37.61
380.9760 Fn3
Flags: -
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
Rel. Int.
100%
0%
Abs. Int.
8.04e6
4.02e6
0.00e0
RT
QC Check
37.91-41.21
430.9728 Fn4
Flags: -
38.0
38.5
39.0
39.5
40.0
40.5
41.0
Rel. Int.
100%
0%
Abs. Int.
1.02e7
5.12e6
0.00e0
RT
QC Check
41.22-44.81
454.9728 Fn5
Flags: -
41.5
42.0
42.5
43.0
43.5
44.0
44.5


Rel. Int.
100%
TCDD
19.04-28.40
319.8965 Fn1
Flags: PBM
4σ 3.29e3
0%
2378D
5.72e6
26.66
Abs. Int.
1.20e6
6.01e5
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDD
19.04-28.40
321.8936 Fn1
Flags: PBM
4σ 1.46e3
0%
2378D
7.02e6
26.66
Abs. Int.
1.51e6
7.57e5
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
37Cl-TCDD
19.04-28.40
327.8850 Fn1
Flags: PBM
4σ 1.45e3
0%
CS 37Cl-2378D
1.19e7
26.65
Abs. Int.
2.68e6
1.34e6
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.40
331.9368 Fn1
Flags: PBM
4σ 6.18e3
0%
AS 1368D
4.91e7
22.51
TS 1378D
4.84e7
24.80
JS 1234D
4.45e7
25.92
ES 2378D
4.50e7
26.63
FS 1278D
4.66e7
26.99
Abs. Int.
1.04e7
5.22e6
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.40
333.9339 Fn1
Flags: PBM
4σ 2.54e3
0%
AS 1368D
6.15e7
22.51
TS 1378D
5.99e7
24.80
JS 1234D
5.50e7
25.92
ES 2378D
5.60e7
26.63
FS 1278D
5.82e7
26.99
Abs. Int.
1.30e7
6.50e6
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT


Rel. Int.
100%
PeCDD
28.41-33.51
355.8546 Fn2
Flags: PBM
4σ 1.70e3
0%
12378D
2.75e7
32.43
Abs. Int.
7.39e6
3.70e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD
28.41-33.51
357.8517 Fn2
Flags: PBM
4σ 1.36e3
0%
12378D
1.77e7
32.43
Abs. Int.
4.73e6
2.36e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.41-33.51
367.8949 Fn2
Flags: PBM
4σ 1.16e3
0%
FS 12478D
5.46e7
31.12
CS 12347D
4.79e7
31.89
ES 12378D
5.36e7
32.41
Abs. Int.
1.50e7
7.52e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.41-33.51
369.8919 Fn2
Flags: PBM
4σ 1.45e3
0%
FS 12478D
3.40e7
31.12
CS 12347D
2.98e7
31.89
ES 12378D
3.41e7
32.41
Abs. Int.
9.06e6
4.53e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
QC Check
28.41-33.51
366.9792 Fn2
Flags: -
0%
Abs. Int.
5.38e6
2.69e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT

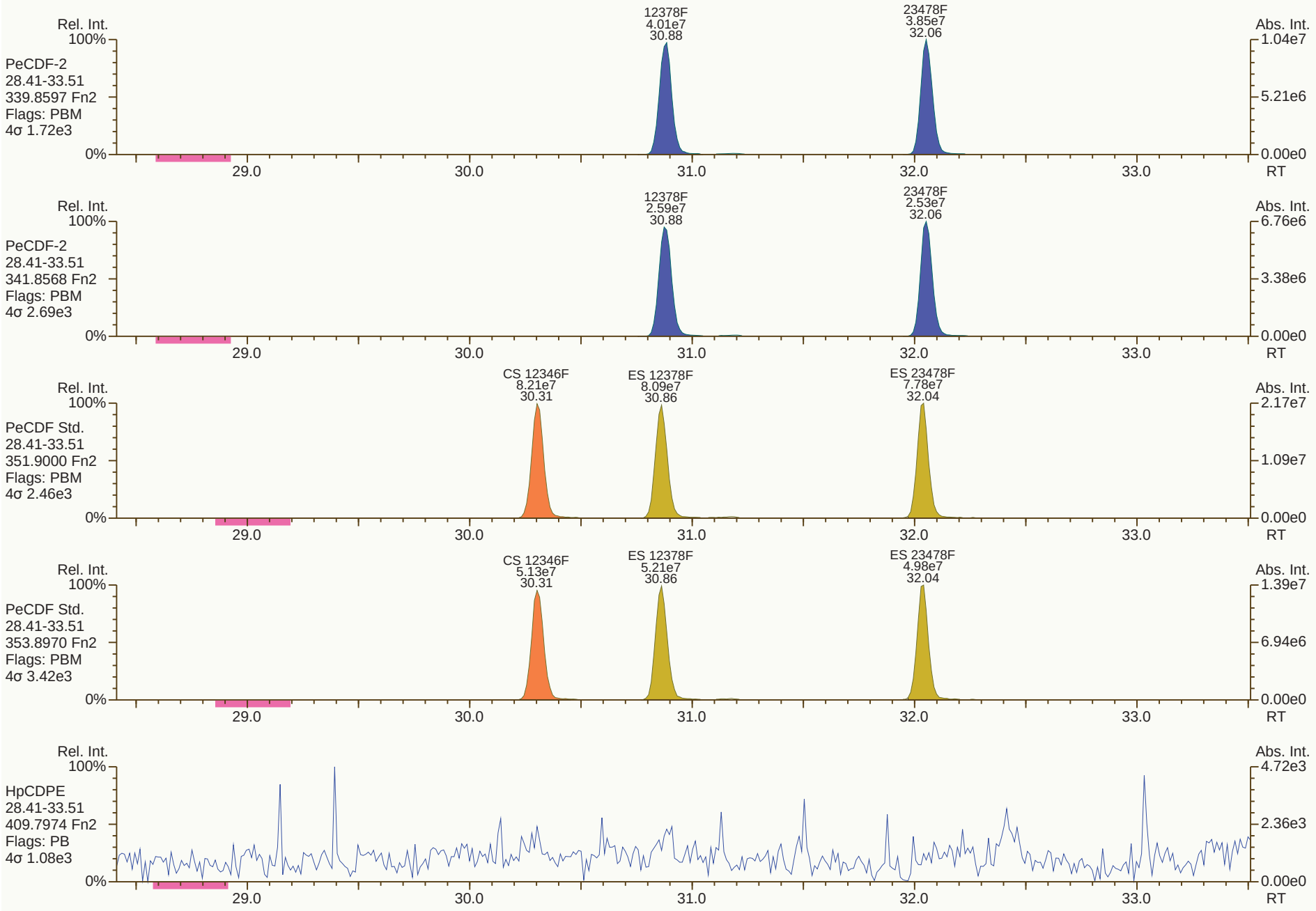

Rel. Int.
100%
HxCDD
33.52-37.61
389.8156 Fn3
Flags: PBM
4σ 1.60e3
123478D 2.26e7 36.51
123678D 2.37e7 36.63
123789D 2.52e7 36.93
Abs. Int.
6.64e6
3.32e6
0.00e0
0%
34.0 34.5 35.0 35.5 36.0 36.5 37.0 37.5 RT
Rel. Int.
100%
HxCDD
33.52-37.61
391.8127 Fn3
Flags: PBM
4σ 2.07e3
123478D 1.80e7 36.51
123678D 1.90e7 36.63
123789D 2.01e7 36.93
Abs. Int.
5.26e6
2.63e6
0.00e0
0%
34.0 34.5 35.0 35.5 36.0 36.5 37.0 37.5 RT
Rel. Int.
100%
HxCDD Std.
33.52-37.61
401.8559 Fn3
Flags: PBM
4σ 1.63e3
FS 123468D 4.87e7 35.42
ES 123478D 4.25e7 36.50
ES 123678D 4.10e7 36.61
JS 123467D 2.21e7 36.81
ES 123789D 4.78e7 36.91
Abs. Int.
1.42e7
7.09e6
0.00e0
0%
34.0 34.5 35.0 35.5 36.0 36.5 37.0 37.5 RT
Rel. Int.
100%
HxCDD Std.
33.52-37.61
403.8530 Fn3
Flags: PBM
4σ 3.15e3
FS 123468D 3.80e7 35.42
ES 123478D 3.27e7 36.50
ES 123678D 3.26e7 36.61
JS 123467D 1.79e7 36.81
ES 123789D 3.72e7 36.91
Abs. Int.
1.09e7
5.44e6
0.00e0
0%
34.0 34.5 35.0 35.5 36.0 36.5 37.0 37.5 RT
Rel. Int.
100%
QC Check
33.52-37.61
380.9760 Fn3
Flags: -
Abs. Int.
1.22e7
6.09e6
0.00e0
0%
34.0 34.5 35.0 35.5 36.0 36.5 37.0 37.5 RT

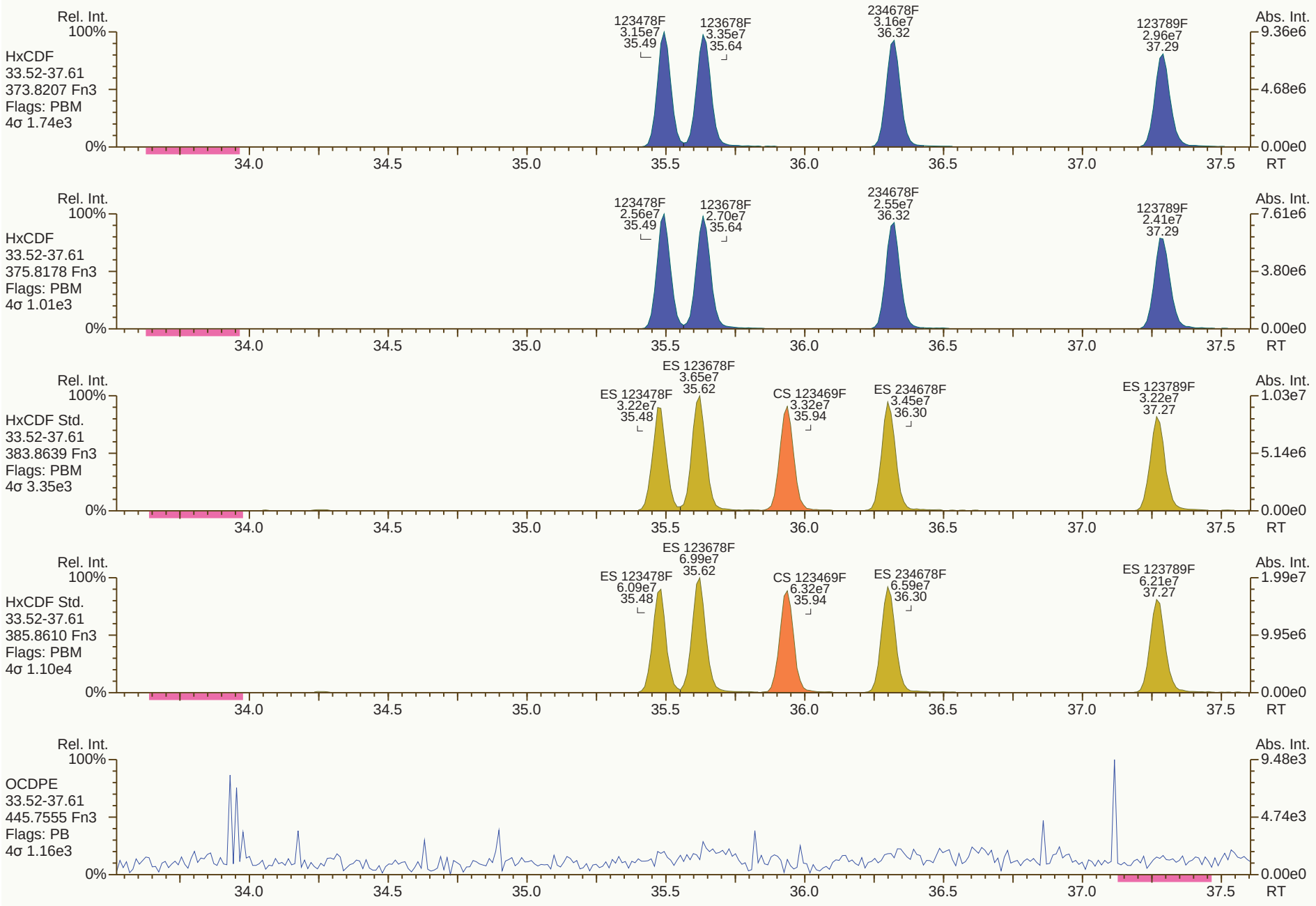

Rel. Int.
100%
HpCDD
37.91-41.21
423.7767 Fn4
Flags: PBM
4σ 1.57e3
0%
1234678D
1.80e7
40.06
Abs. Int.
4.24e6
2.12e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD
37.91-41.21
425.7737 Fn4
Flags: PBM
4σ 1.55e3
0%
1234678D
1.70e7
40.06
Abs. Int.
3.94e6
1.97e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.91-41.21
435.8169 Fn4
Flags: PBM
4σ 1.63e3
0%
FS 1234679D
4.11e7
39.32
ES 1234678D
3.45e7
40.05
Abs. Int.
1.05e7
5.23e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.91-41.21
437.8140 Fn4
Flags: PBM
4σ 1.39e3
0%
FS 1234679D
3.84e7
39.32
ES 1234678D
3.31e7
40.05
Abs. Int.
9.76e6
4.88e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
QC Check
37.91-41.21
430.9728 Fn4
Flags: -
0%
Abs. Int.
8.04e6
4.02e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT

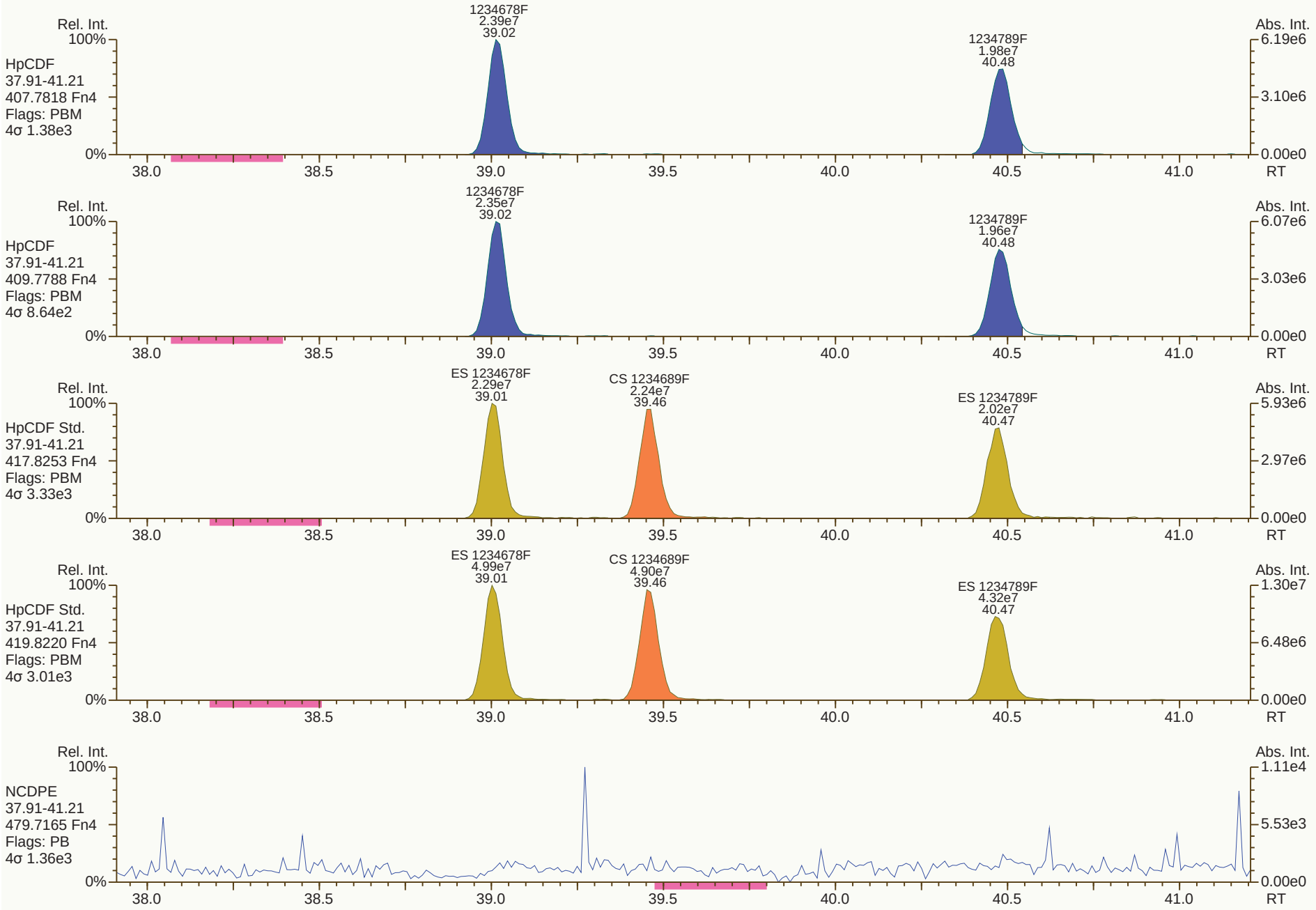

OCDD
2.36e7
42.77
Rel. Int.
100%
OCDD
41.22-44.81
457.7377 Fn5
Flags: PBM
4σ 1.37e3
0%
Abs. Int.
3.38e6
1.69e6
0.00e0
RT
41.5
42.0
42.5
43.0
43.5
44.0
44.5
OCDD
2.62e7
42.77
Rel. Int.
100%
OCDD
41.22-44.81
459.7348 Fn5
Flags: PBM
4σ 2.66e3
0%
Abs. Int.
3.68e6
1.84e6
0.00e0
RT
ES OCDD
4.28e7
42.76
Rel. Int.
100%
OCDD Std.
41.22-44.81
469.7780 Fn5
Flags: PBM
4σ 1.11e3
0%
Abs. Int.
6.31e6
3.15e6
0.00e0
RT
ES OCDD
4.67e7
42.76
Rel. Int.
100%
OCDD Std.
41.22-44.81
471.7750 Fn5
Flags: PBM
4σ 1.16e3
0%
Abs. Int.
6.83e6
3.41e6
0.00e0
RT
Rel. Int.
100%
QC Check
41.22-44.81
454.9728 Fn5
Flags: -
0%
Abs. Int.
1.02e7
5.12e6
0.00e0
RT


Rel. Int.
100%
TCDF
19.04-28.40
303.9016 Fn1
Flags: PBM
4σ 1.20e3
0%
2378F
7.45e6
25.69
Abs. Int.
1.51e6
7.56e5
0.00e0
RT
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
Rel. Int.
100%
TCDF
19.04-28.40
305.8987 Fn1
Flags: PBM
4σ 1.81e3
0%
2378F
9.42e6
25.69
Abs. Int.
1.96e6
9.82e5
0.00e0
RT
Rel. Int.
100%
TCDF Std.
19.04-28.40
315.9419 Fn1
Flags: PBM
4σ 1.44e4
0%
AS 1368F
8.06e7
20.34
JS 1234F
6.82e7
24.15
ES 2378F
6.75e7
25.66
Abs. Int.
1.53e7
7.63e6
0.00e0
RT
Rel. Int.
100%
TCDF Std.
19.04-28.40
317.9389 Fn1
Flags: PBM
4σ 8.13e3
0%
AS 1368F
1.02e8
20.34
JS 1234F
8.64e7
24.15
ES 2378F
8.50e7
25.66
Abs. Int.
1.91e7
9.55e6
0.00e0
RT
Rel. Int.
100%
HxCDPE
19.04-28.40
375.8364 Fn1
Flags: PB
4σ 1.11e3
0%
Abs. Int.
8.27e3
4.13e3
0.00e0
RT


Rel. Int.
100%
0%
Abs. Int.
6.25e3
3.13e3
0.00e0
RT
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
PeCDF-1
19.04-28.40
339.8597 Fn1
Flags: PB
4σ 2.06e3
PeCDF-1
19.04-28.40
341.8568 Fn1
Flags: PB
4σ 1.88e3
QC Check
19.04-28.40
316.9824 Fn1
Flags: -
1.19e4
5.93e3
5.61e6
2.81e6


Rel. Int.
100%
PeCDF-2
28.41-33.51
339.8597 Fn2
Flags: PBM
4σ 1.72e3
0%
12378F
4.01e7
30.88
23478F
3.85e7
32.06
Abs. Int.
1.04e7
5.21e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF-2
28.41-33.51
341.8568 Fn2
Flags: PBM
4σ 2.69e3
0%
12378F
2.59e7
30.88
23478F
2.53e7
32.06
Abs. Int.
6.76e6
3.38e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.41-33.51
351.9000 Fn2
Flags: PBM
4σ 2.46e3
0%
CS 12346F
8.21e7
30.31
ES 12378F
8.09e7
30.86
ES 23478F
7.78e7
32.04
Abs. Int.
2.17e7
1.09e7
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.41-33.51
353.8970 Fn2
Flags: PBM
4σ 3.42e3
0%
CS 12346F
5.13e7
30.31
ES 12378F
5.21e7
30.86
ES 23478F
4.98e7
32.04
Abs. Int.
1.39e7
6.94e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
HpCDPE
28.41-33.51
409.7974 Fn2
Flags: PB
4σ 1.08e3
0%
Abs. Int.
4.72e3
2.36e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT


Rel. Int.
100%
HxCDF
33.52-37.61
373.8207 Fn3
Flags: PBM
4σ 1.74e3
123478F
3.15e7
35.49
123678F
3.35e7
35.64
234678F
3.16e7
36.32
123789F
2.96e7
37.29
Abs. Int.
9.36e6
4.68e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF
33.52-37.61
375.8178 Fn3
Flags: PBM
4σ 1.01e3
123478F
2.56e7
35.49
123678F
2.70e7
35.64
234678F
2.55e7
36.32
123789F
2.41e7
37.29
Abs. Int.
7.61e6
3.80e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF Std.
33.52-37.61
383.8639 Fn3
Flags: PBM
4σ 3.35e3
ES 123678F
3.65e7
35.62
ES 123478F
3.22e7
35.48
CS 123469F
3.32e7
35.94
ES 234678F
3.45e7
36.30
ES 123789F
3.22e7
37.27
Abs. Int.
1.03e7
5.14e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF Std.
33.52-37.61
385.8610 Fn3
Flags: PBM
4σ 1.10e4
ES 123678F
6.99e7
35.62
ES 123478F
6.09e7
35.48
CS 123469F
6.32e7
35.94
ES 234678F
6.59e7
36.30
ES 123789F
6.21e7
37.27
Abs. Int.
1.99e7
9.95e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
OCDPE
33.52-37.61
445.7555 Fn3
Flags: PB
4σ 1.16e3
Abs. Int.
9.48e3
4.74e3
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT


Rel. Int.
100%
HpCDF
37.91-41.21
407.7818 Fn4
Flags: PBM
4σ 1.38e3
1234678F
2.39e7
39.02
1234789F
1.98e7
40.48
Abs. Int.
6.19e6
3.10e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF
37.91-41.21
409.7788 Fn4
Flags: PBM
4σ 8.64e2
1234678F
2.35e7
39.02
1234789F
1.96e7
40.48
Abs. Int.
6.07e6
3.03e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.91-41.21
417.8253 Fn4
Flags: PBM
4σ 3.33e3
ES 1234678F
2.29e7
39.01
CS 1234689F
2.24e7
39.46
ES 1234789F
2.02e7
40.47
Abs. Int.
5.93e6
2.97e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.91-41.21
419.8220 Fn4
Flags: PBM
4σ 3.01e3
ES 1234678F
4.99e7
39.01
CS 1234689F
4.90e7
39.46
ES 1234789F
4.32e7
40.47
Abs. Int.
1.30e7
6.48e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
NCDPE
37.91-41.21
479.7165 Fn4
Flags: PB
4σ 1.36e3
Abs. Int.
1.11e4
5.53e3
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT


Rel. Int.
100%
OCDF
41.22-44.81
441.7428 Fn5
Flags: PBM
4σ 1.89e3
0%
OCDF
2.81e7
42.90
Abs. Int.
4.19e6
2.09e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDF
41.22-44.81
443.7398 Fn5
Flags: PBM
4σ 2.14e3
0%
OCDF
3.19e7
42.90
Abs. Int.
4.49e6
2.25e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDF Std.
41.22-44.81
453.7830 Fn5
Flags: PBM
4σ 1.20e3
0%
ES OCDF
5.43e7
42.89
Abs. Int.
8.20e6
4.10e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDF Std.
41.22-44.81
455.7801 Fn5
Flags: PBM
4σ 1.43e3
0%
ES OCDF
6.01e7
42.89
Abs. Int.
8.89e6
4.45e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
DCDPE
41.22-44.81
513.6775 Fn5
Flags: PB
4σ 1.02e3
0%
Abs. Int.
5.01e3
2.50e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT


Rel. Int.
100%
QC Check
19.04-28.40
316.9824 Fn1
Flags: -
0%
Abs. Int.
6.18e6
3.09e6
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
QC Check
28.41-33.50
366.9792 Fn2
Flags: -
0%
Abs. Int.
5.57e6
2.79e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
QC Check
33.51-37.61
380.9760 Fn3
Flags: -
0%
Abs. Int.
1.19e7
5.96e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
QC Check
37.91-41.21
430.9728 Fn4
Flags: -
0%
Abs. Int.
7.64e6
3.82e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
QC Check
41.22-44.81
454.9728 Fn5
Flags: -
0%
Abs. Int.
1.03e7
5.14e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT


Rel. Int.
100%
TCDD
19.04-28.40
319.8965 Fn1
Flags: PB
4σ 2.75e3
0%
Abs. Int.
8.81e3
4.41e3
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDD
19.04-28.40
321.8936 Fn1
Flags: PB
4σ 1.90e3
0%
Abs. Int.
7.72e3
3.86e3
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
37Cl-TCDD
19.04-28.40
327.8850 Fn1
Flags: PB
4σ 1.13e3
0%
Abs. Int.
1.91e4
9.55e3
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.40
331.9368 Fn1
Flags: PB
4σ 5.58e3
0%
Abs. Int.
2.03e4
1.02e4
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.40
333.9339 Fn1
Flags: PB
4σ 1.49e3
0%
Abs. Int.
1.17e4
5.84e3
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT


Rel. Int.
100%
PeCDD
28.41-33.50
355.8546 Fn2
Flags: PB
4σ 2.43e3
0%
Abs. Int.
7.58e3
3.79e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD
28.41-33.50
357.8517 Fn2
Flags: PB
4σ 1.66e3
0%
Abs. Int.
5.53e3
2.77e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.41-33.50
367.8949 Fn2
Flags: PB
4σ 2.30e3
0%
Abs. Int.
2.44e4
1.22e4
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.41-33.50
369.8919 Fn2
Flags: PB
4σ 1.64e3
0%
Abs. Int.
1.52e4
7.62e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
QC Check
28.41-33.50
366.9792 Fn2
Flags: -
0%
Abs. Int.
5.57e6
2.79e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT


Rel. Int.
100%
HxCDD
33.51-37.61
389.8156 Fn3
Flags: PB
4σ 1.75e3
0%
Abs. Int.
5.68e3
2.84e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD
33.51-37.61
391.8127 Fn3
Flags: PB
4σ 2.38e3
0%
Abs. Int.
7.36e3
3.68e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.51-37.61
401.8559 Fn3
Flags: PB
4σ 4.10e3
0%
Abs. Int.
1.50e4
7.49e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.51-37.61
403.8530 Fn3
Flags: PB
4σ 2.09e3
0%
Abs. Int.
1.38e4
6.91e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
QC Check
33.51-37.61
380.9760 Fn3
Flags: -
0%
Abs. Int.
1.19e7
5.96e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT


Rel. Int.
100%
HpCDD
37.91-41.21
423.7767 Fn4
Flags: PB
4σ 1.24e3
0%
Abs. Int.
4.89e3
2.45e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD
37.91-41.21
425.7737 Fn4
Flags: PB
4σ 1.28e3
0%
Abs. Int.
5.26e3
2.63e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.91-41.21
435.8169 Fn4
Flags: PB
4σ 1.20e3
0%
Abs. Int.
1.66e4
8.32e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.91-41.21
437.8140 Fn4
Flags: PB
4σ 1.18e3
0%
Abs. Int.
1.19e4
5.93e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
QC Check
37.91-41.21
430.9728 Fn4
Flags: -
0%
Abs. Int.
7.64e6
3.82e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT


Rel. Int.
100%
OCDD
41.22-44.81
457.7377 Fn5
Flags: PB
4σ 1.00e3
0%
Abs. Int.
6.21e3
3.10e3
0.00e0
RT
41.5
42.0
42.5
43.0
43.5
44.0
44.5
Rel. Int.
100%
OCDD
41.22-44.81
459.7348 Fn5
Flags: PB
4σ 2.31e3
0%
Abs. Int.
8.18e3
4.09e3
0.00e0
RT
Rel. Int.
100%
OCDD Std.
41.22-44.81
469.7780 Fn5
Flags: PB
4σ 1.78e3
0%
Abs. Int.
7.91e3
3.96e3
0.00e0
RT
Rel. Int.
100%
OCDD Std.
41.22-44.81
471.7750 Fn5
Flags: PB
4σ 1.40e3
0%
Abs. Int.
1.16e4
5.82e3
0.00e0
RT
Rel. Int.
100%
QC Check
41.22-44.81
454.9728 Fn5
Flags: -
0%
Abs. Int.
1.03e7
5.14e6
0.00e0
RT


2468F
8.97e5
21.58
Rel. Int.
100%
TCDF
19.04-28.40
303.9016 Fn1
Flags: PBM
4σ 1.67e3
0%
Abs. Int.
1.53e5
7.67e4
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
2468F
1.22e6
21.57
Rel. Int.
100%
TCDF
19.04-28.40
305.8987 Fn1
Flags: PBM
4σ 1.80e3
0%
Abs. Int.
2.24e5
1.12e5
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDF Std.
19.04-28.40
315.9419 Fn1
Flags: PB
4σ 1.09e4
0%
Abs. Int.
4.18e4
2.09e4
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDF Std.
19.04-28.40
317.9389 Fn1
Flags: PB
4σ 5.41e3
0%
Abs. Int.
2.76e4
1.38e4
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
HxCDPE
19.04-28.40
375.8364 Fn1
Flags: PB
4σ 1.03e3
0%
Abs. Int.
5.98e3
2.99e3
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT


Rel. Int.
100%
0%
Abs. Int.
9.34e3
4.67e3
0.00e0
PeCDF-1
19.04-28.40
339.8597 Fn1
Flags: PB
4σ 1.79e3
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
0%
Abs. Int.
1.44e4
7.19e3
0.00e0
PeCDF-1
19.04-28.40
341.8568 Fn1
Flags: PB
4σ 1.77e3
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
0%
Abs. Int.
6.18e6
3.09e6
0.00e0
QC Check
19.04-28.40
316.9824 Fn1
Flags: -
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT

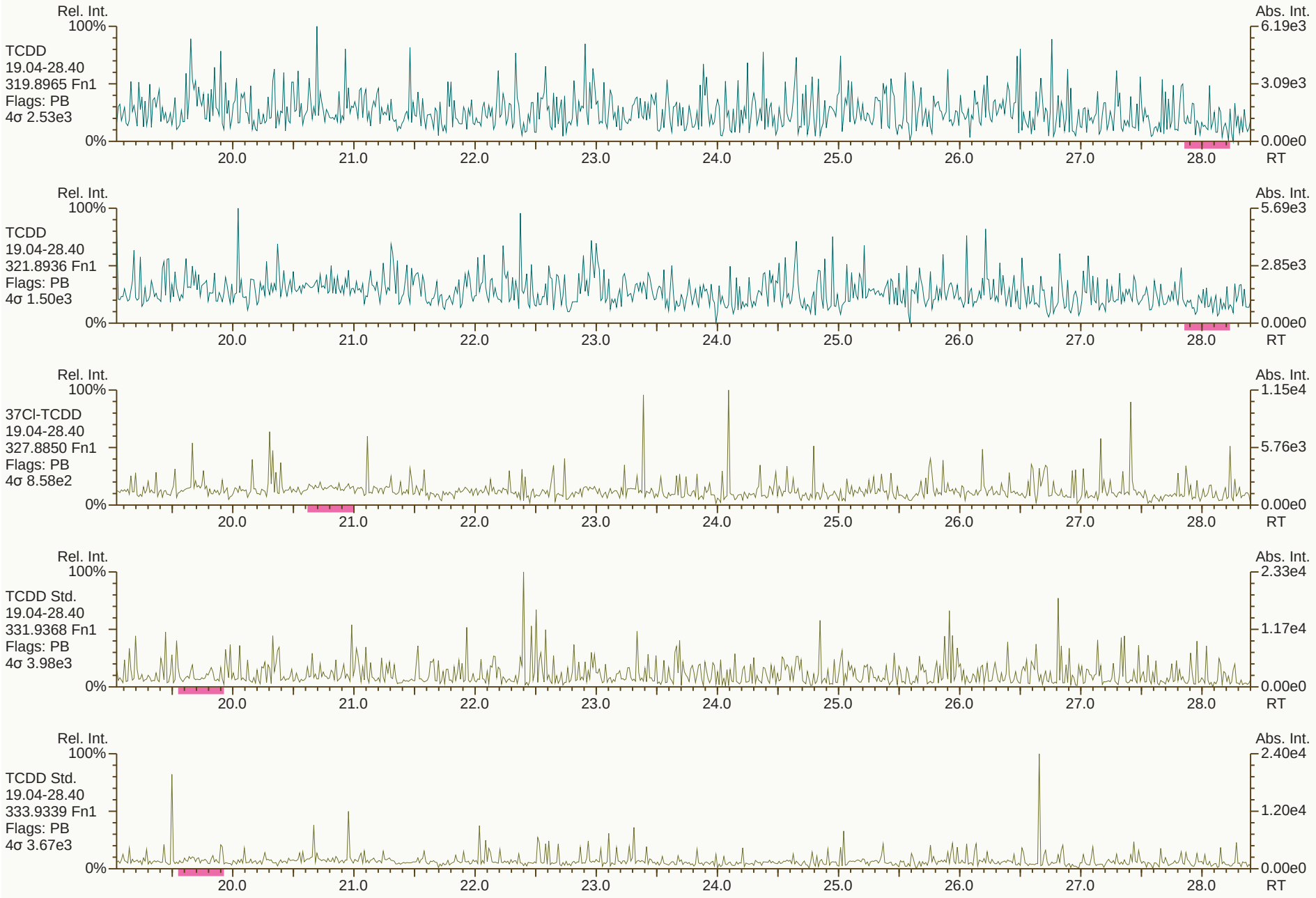

Rel. Int.
100%
PeCDF-2
28.41-33.50
339.8597 Fn2
Flags: PB
4σ 1.74e3
0%
Abs. Int.
7.99e3
4.00e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF-2
28.41-33.50
341.8568 Fn2
Flags: PB
4σ 1.82e3
0%
Abs. Int.
9.26e3
4.63e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.41-33.50
351.9000 Fn2
Flags: PB
4σ 3.24e3
0%
Abs. Int.
2.47e4
1.23e4
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.41-33.50
353.8970 Fn2
Flags: PB
4σ 1.81e3
0%
Abs. Int.
1.16e4
5.78e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
HpCDPE
28.41-33.50
409.7974 Fn2
Flags: PB
4σ 1.24e3
0%
Abs. Int.
1.07e4
5.37e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT


Rel. Int.
100%
HxCDF
33.51-37.61
373.8207 Fn3
Flags: PB
4σ 1.86e3
0%
Abs. Int.
1.14e4
5.71e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF
33.51-37.61
375.8178 Fn3
Flags: PB
4σ 1.58e3
0%
Abs. Int.
8.16e3
4.08e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF Std.
33.51-37.61
383.8639 Fn3
Flags: PB
4σ 2.33e3
0%
Abs. Int.
1.18e4
5.92e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF Std.
33.51-37.61
385.8610 Fn3
Flags: PB
4σ 4.12e3
0%
Abs. Int.
1.79e4
8.95e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
OCDPE
33.51-37.61
445.7555 Fn3
Flags: PB
4σ 9.23e2
0%
Abs. Int.
8.31e3
4.15e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT


Rel. Int.
100%
HpCDF
37.91-41.21
407.7818 Fn4
Flags: PB
4σ 1.21e3
0%
Abs. Int.
5.40e3
2.70e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF
37.91-41.21
409.7788 Fn4
Flags: PB
4σ 1.83e3
0%
Abs. Int.
4.35e3
2.18e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.91-41.21
417.8253 Fn4
Flags: PB
4σ 6.51e3
0%
Abs. Int.
2.66e4
1.33e4
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.91-41.21
419.8220 Fn4
Flags: PB
4σ 1.71e3
0%
Abs. Int.
1.86e4
9.32e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
NCDPE
37.91-41.21
479.7165 Fn4
Flags: PB
4σ 1.30e3
0%
Abs. Int.
9.92e3
4.96e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT


Rel. Int.
100%
OCDF
41.22-44.81
441.7428 Fn5
Flags: PB
4σ 1.43e3
0%
Abs. Int.
8.44e3
4.22e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDF
41.22-44.81
443.7398 Fn5
Flags: PB
4σ 1.44e3
0%
Abs. Int.
8.87e3
4.44e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDF Std.
41.22-44.81
453.7830 Fn5
Flags: PB
4σ 1.29e3
0%
Abs. Int.
1.81e4
9.03e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDF Std.
41.22-44.81
455.7801 Fn5
Flags: PB
4σ 2.73e3
0%
Abs. Int.
1.08e4
5.40e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
DCDPE
41.22-44.81
513.6775 Fn5
Flags: PB
4σ 7.27e2
0%
Abs. Int.
4.39e3
2.19e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT


Rel. Int.
100%
QC Check
19.04-28.40
316.9824 Fn1
Flags: -
0%
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Abs. Int.
5.52e6
2.76e6
0.00e0
Rel. Int.
100%
QC Check
28.41-33.51
366.9792 Fn2
Flags: -
0%
29.0
30.0
31.0
32.0
33.0
RT
Abs. Int.
5.03e6
2.51e6
0.00e0
Rel. Int.
100%
QC Check
33.52-37.61
380.9760 Fn3
Flags: -
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Abs. Int.
1.10e7
5.51e6
0.00e0
Rel. Int.
100%
QC Check
37.91-41.21
430.9728 Fn4
Flags: -
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Abs. Int.
7.71e6
3.85e6
0.00e0
Rel. Int.
100%
QC Check
41.22-44.81
454.9728 Fn5
Flags: -
0%
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Abs. Int.
9.76e6
4.88e6
0.00e0


Rel. Int.
100%
TCDD
19.04-28.40
319.8965 Fn1
Flags: PB
4σ 2.53e3
0%
Abs. Int.
6.19e3
3.09e3
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDD
19.04-28.40
321.8936 Fn1
Flags: PB
4σ 1.50e3
0%
Abs. Int.
5.69e3
2.85e3
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
37Cl-TCDD
19.04-28.40
327.8850 Fn1
Flags: PB
4σ 8.58e2
0%
Abs. Int.
1.15e4
5.76e3
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.40
331.9368 Fn1
Flags: PB
4σ 3.98e3
0%
Abs. Int.
2.33e4
1.17e4
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.40
333.9339 Fn1
Flags: PB
4σ 3.67e3
0%
Abs. Int.
2.40e4
1.20e4
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT


Rel. Int.
100%
PeCDD
28.41-33.51
355.8546 Fn2
Flags: PB
4σ 2.47e3
0%
Abs. Int.
1.05e4
5.27e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD
28.41-33.51
357.8517 Fn2
Flags: PB
4σ 1.79e3
0%
Abs. Int.
5.88e3
2.94e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.41-33.51
367.8949 Fn2
Flags: PB
4σ 1.81e3
0%
Abs. Int.
1.17e4
5.87e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.41-33.51
369.8919 Fn2
Flags: PB
4σ 1.28e3
0%
Abs. Int.
1.95e4
9.76e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
QC Check
28.41-33.51
366.9792 Fn2
Flags: -
0%
Abs. Int.
5.03e6
2.51e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT

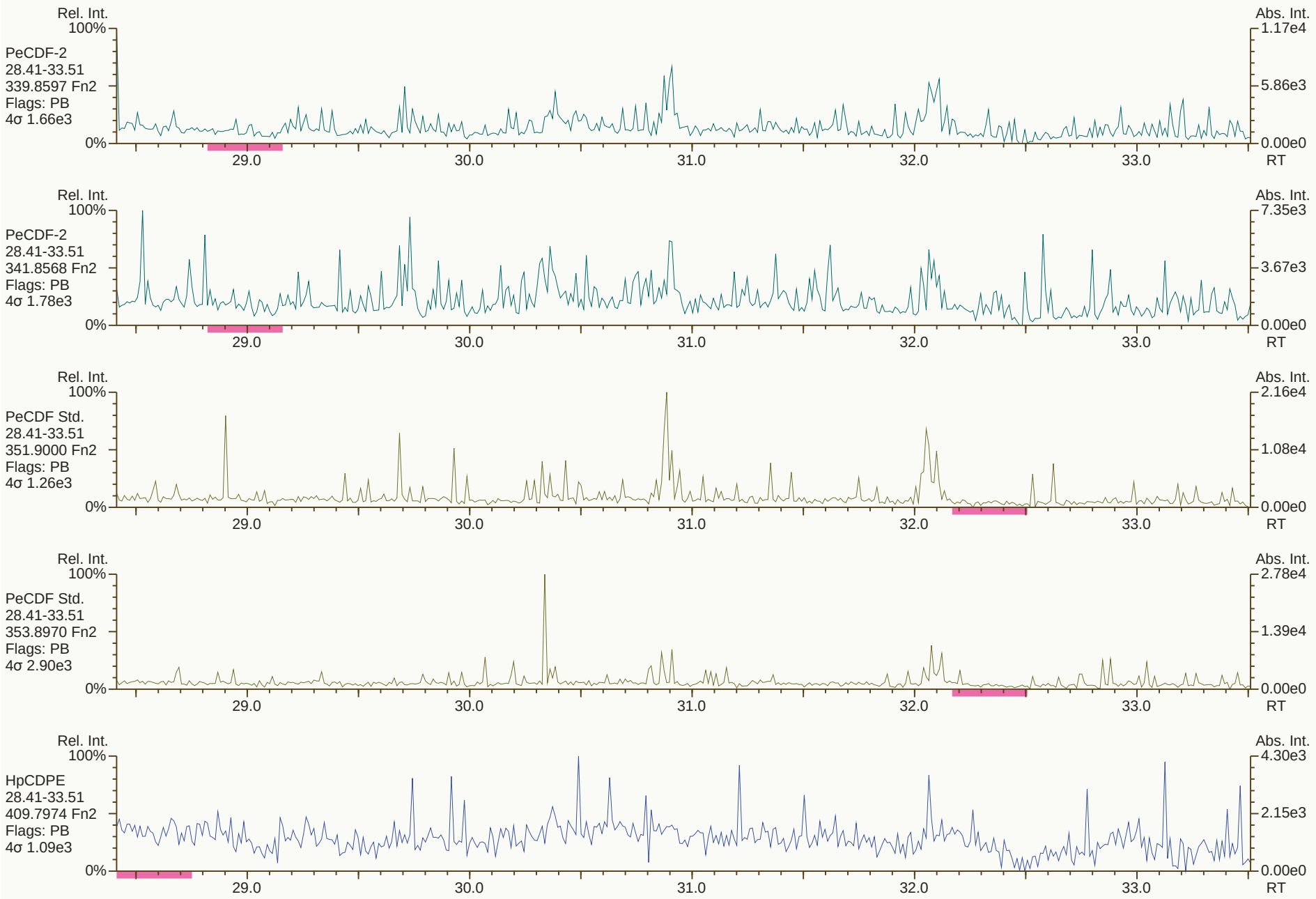

Rel. Int.
100%
HxCDD
33.52-37.61
389.8156 Fn3
Flags: PB
4σ 1.69e3
0%
Abs. Int.
5.68e3
2.84e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD
33.52-37.61
391.8127 Fn3
Flags: PB
4σ 1.62e3
0%
Abs. Int.
4.55e3
2.28e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.52-37.61
401.8559 Fn3
Flags: PB
4σ 2.33e3
0%
Abs. Int.
2.82e4
1.41e4
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.52-37.61
403.8530 Fn3
Flags: PB
4σ 2.85e3
0%
Abs. Int.
1.56e4
7.80e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
QC Check
33.52-37.61
380.9760 Fn3
Flags: -
0%
Abs. Int.
1.10e7
5.51e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT


Rel. Int.
100%
HpCDD
37.91-41.21
423.7767 Fn4
Flags: PB
4σ 1.00e3
0%
Abs. Int.
4.54e3
2.27e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD
37.91-41.21
425.7737 Fn4
Flags: PB
4σ 1.18e3
0%
Abs. Int.
4.74e3
2.37e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.91-41.21
435.8169 Fn4
Flags: PB
4σ 1.54e3
0%
Abs. Int.
1.88e4
9.42e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.91-41.21
437.8140 Fn4
Flags: PB
4σ 1.56e3
0%
Abs. Int.
1.18e4
5.90e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
QC Check
37.91-41.21
430.9728 Fn4
Flags: -
0%
Abs. Int.
7.71e6
3.85e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT


Rel. Int.
100%
OCDD
41.22-44.81
457.7377 Fn5
Flags: PB
4σ 1.49e3
0%
Abs. Int.
1.26e4
6.31e3
0.00e0
RT
41.5
42.0
42.5
43.0
43.5
44.0
44.5
Rel. Int.
100%
OCDD
41.22-44.81
459.7348 Fn5
Flags: PB
4σ 2.14e3
0%
Abs. Int.
4.53e3
2.26e3
0.00e0
RT
Rel. Int.
100%
OCDD Std.
41.22-44.81
469.7780 Fn5
Flags: PB
4σ 1.27e3
0%
Abs. Int.
9.76e3
4.88e3
0.00e0
RT
Rel. Int.
100%
OCDD Std.
41.22-44.81
471.7750 Fn5
Flags: PB
4σ 1.65e3
0%
Abs. Int.
1.45e4
7.27e3
0.00e0
RT
Rel. Int.
100%
QC Check
41.22-44.81
454.9728 Fn5
Flags: -
0%
Abs. Int.
9.76e6
4.88e6
0.00e0
RT

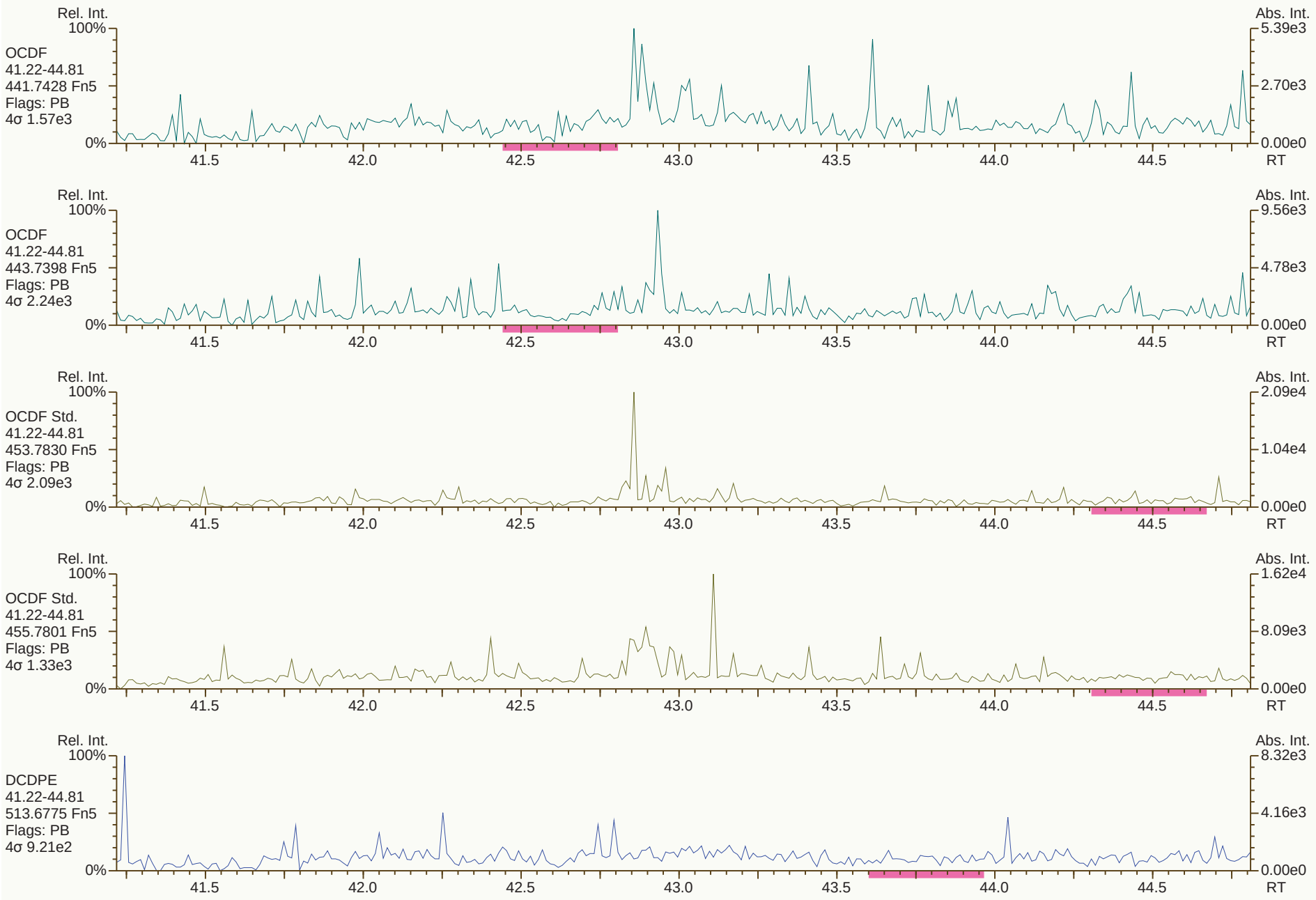

2468F
9.95e5
21.57
Rel. Int.
100%
TCDF
19.04-28.40
303.9016 Fn1
Flags: PBM
4σ 1.73e3
0%
Abs. Int.
1.74e5
8.72e4
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
2468F
1.21e6
21.56
Rel. Int.
100%
TCDF
19.04-28.40
305.8987 Fn1
Flags: PBM
4σ 1.82e3
0%
Abs. Int.
2.19e5
1.10e5
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDF Std.
19.04-28.40
315.9419 Fn1
Flags: PB
4σ 1.29e4
0%
Abs. Int.
2.26e4
1.13e4
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDF Std.
19.04-28.40
317.9389 Fn1
Flags: PB
4σ 3.54e3
0%
Abs. Int.
2.72e4
1.36e4
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
HxCDPE
19.04-28.40
375.8364 Fn1
Flags: PB
4σ 1.22e3
0%
Abs. Int.
9.83e3
4.92e3
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT


Rel. Int.
100%
0%
Abs. Int.
8.70e3
4.35e3
0.00e0
PeCDF-1
19.04-28.40
339.8597 Fn1
Flags: PB
4σ 2.05e3
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
0%
Abs. Int.
7.38e3
3.69e3
0.00e0
PeCDF-1
19.04-28.40
341.8568 Fn1
Flags: PB
4σ 1.60e3
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
0%
Abs. Int.
5.52e6
2.76e6
0.00e0
QC Check
19.04-28.40
316.9824 Fn1
Flags: -
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT


Rel. Int.
100%
PeCDF-2
28.41-33.51
339.8597 Fn2
Flags: PB
4σ 1.66e3
0%
Abs. Int.
1.17e4
5.86e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF-2
28.41-33.51
341.8568 Fn2
Flags: PB
4σ 1.78e3
0%
Abs. Int.
7.35e3
3.67e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.41-33.51
351.9000 Fn2
Flags: PB
4σ 1.26e3
0%
Abs. Int.
2.16e4
1.08e4
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.41-33.51
353.8970 Fn2
Flags: PB
4σ 2.90e3
0%
Abs. Int.
2.78e4
1.39e4
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
HpCDPE
28.41-33.51
409.7974 Fn2
Flags: PB
4σ 1.09e3
0%
Abs. Int.
4.30e3
2.15e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT


Rel. Int.
100%
HxCDF
33.52-37.61
373.8207 Fn3
Flags: PB
4σ 2.12e3
0%
Abs. Int.
9.70e3
4.85e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF
33.52-37.61
375.8178 Fn3
Flags: PB
4σ 1.37e3
0%
Abs. Int.
7.83e3
3.91e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF Std.
33.52-37.61
383.8639 Fn3
Flags: PB
4σ 1.57e3
0%
Abs. Int.
1.78e4
8.91e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF Std.
33.52-37.61
385.8610 Fn3
Flags: PB
4σ 4.44e3
0%
Abs. Int.
2.22e4
1.11e4
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
OCDPE
33.52-37.61
445.7555 Fn3
Flags: PB
4σ 9.16e2
0%
Abs. Int.
6.08e3
3.04e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT


Rel. Int.
100%
HpCDF
37.91-41.21
407.7818 Fn4
Flags: PB
4σ 1.33e3
0%
Abs. Int.
7.84e3
3.92e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF
37.91-41.21
409.7788 Fn4
Flags: PB
4σ 1.11e3
0%
Abs. Int.
7.03e3
3.51e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.91-41.21
417.8253 Fn4
Flags: PB
4σ 1.51e3
0%
Abs. Int.
1.76e4
8.80e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.91-41.21
419.8220 Fn4
Flags: PB
4σ 3.59e3
0%
Abs. Int.
1.45e4
7.23e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
NCDPE
37.91-41.21
479.7165 Fn4
Flags: PB
4σ 1.21e3
0%
Abs. Int.
4.83e3
2.41e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT


Rel. Int.
100%
OCDF
41.22-44.81
441.7428 Fn5
Flags: PB
4σ 1.57e3
0%
Abs. Int.
5.39e3
2.70e3
0.00e0
RT
41.5
42.0
42.5
43.0
43.5
44.0
44.5
Rel. Int.
100%
OCDF
41.22-44.81
443.7398 Fn5
Flags: PB
4σ 2.24e3
0%
Abs. Int.
9.56e3
4.78e3
0.00e0
RT
Rel. Int.
100%
OCDF Std.
41.22-44.81
453.7830 Fn5
Flags: PB
4σ 2.09e3
0%
Abs. Int.
2.09e4
1.04e4
0.00e0
RT
Rel. Int.
100%
OCDF Std.
41.22-44.81
455.7801 Fn5
Flags: PB
4σ 1.33e3
0%
Abs. Int.
1.62e4
8.09e3
0.00e0
RT
Rel. Int.
100%
DCDPE
41.22-44.81
513.6775 Fn5
Flags: PB
4σ 9.21e2
0%
Abs. Int.
8.32e3
4.16e3
0.00e0
RT


Rel. Int.
100%
QC Check
19.04-28.40
316.9824 Fn1
Flags: -
0%
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Abs. Int.
5.57e6
2.79e6
0.00e0
Rel. Int.
100%
QC Check
28.41-33.50
366.9792 Fn2
Flags: -
0%
29.0
30.0
31.0
32.0
33.0
RT
Abs. Int.
5.25e6
2.63e6
0.00e0
Rel. Int.
100%
QC Check
33.51-37.61
380.9760 Fn3
Flags: -
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Abs. Int.
1.23e7
6.13e6
0.00e0
Rel. Int.
100%
QC Check
37.91-41.21
430.9728 Fn4
Flags: -
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Abs. Int.
7.66e6
3.83e6
0.00e0
Rel. Int.
100%
QC Check
41.22-44.81
454.9728 Fn5
Flags: -
0%
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Abs. Int.
1.03e7
5.17e6
0.00e0


Rel. Int.
100%
0%
Abs. Int.
TCDD
19.04-28.40
319.8965 Fn1
Flags: PB
4σ 1.77e3
7.23e3
3.62e3
0.00e0
TCDD
19.04-28.40
321.8936 Fn1
Flags: PB
4σ 1.44e3
6.10e3
3.05e3
37Cl-TCDD
19.04-28.40
327.8850 Fn1
Flags: PB
4σ 1.12e3
1.12e4
5.62e3
TCDD Std.
19.04-28.40
331.9368 Fn1
Flags: PB
4σ 6.24e3
2.02e4
1.01e4
TCDD Std.
19.04-28.40
333.9339 Fn1
Flags: PB
4σ 2.06e3
1.73e4
8.67e3
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT


Rel. Int.
100%
PeCDD
28.41-33.50
355.8546 Fn2
Flags: PB
4σ 2.55e3
0%
Abs. Int.
1.27e4
6.37e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD
28.41-33.50
357.8517 Fn2
Flags: PB
4σ 1.42e3
0%
Abs. Int.
4.76e3
2.38e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.41-33.50
367.8949 Fn2
Flags: PB
4σ 1.70e3
0%
Abs. Int.
9.73e3
4.86e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.41-33.50
369.8919 Fn2
Flags: PB
4σ 1.16e3
0%
Abs. Int.
1.25e4
6.26e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
QC Check
28.41-33.50
366.9792 Fn2
Flags: -
0%
Abs. Int.
5.25e6
2.63e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT


Rel. Int.
100%
HxCDD
33.51-37.61
389.8156 Fn3
Flags: PB
4σ 1.52e3
0%
Abs. Int.
7.54e3
3.77e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD
33.51-37.61
391.8127 Fn3
Flags: PB
4σ 1.42e3
0%
Abs. Int.
5.19e3
2.59e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.51-37.61
401.8559 Fn3
Flags: PB
4σ 4.42e3
0%
Abs. Int.
1.67e4
8.36e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.51-37.61
403.8530 Fn3
Flags: PB
4σ 1.60e3
0%
Abs. Int.
1.31e4
6.56e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
QC Check
33.51-37.61
380.9760 Fn3
Flags: -
0%
Abs. Int.
1.23e7
6.13e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT


Rel. Int.
100%
HpCDD
37.91-41.21
423.7767 Fn4
Flags: PB
4σ 1.33e3
0%
Abs. Int.
3.70e3
1.85e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD
37.91-41.21
425.7737 Fn4
Flags: PB
4σ 1.35e3
0%
Abs. Int.
3.25e3
1.63e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.91-41.21
435.8169 Fn4
Flags: PB
4σ 1.62e3
0%
Abs. Int.
1.45e4
7.25e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.91-41.21
437.8140 Fn4
Flags: PB
4σ 1.62e3
0%
Abs. Int.
9.45e3
4.73e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
QC Check
37.91-41.21
430.9728 Fn4
Flags: -
0%
Abs. Int.
7.66e6
3.83e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT


Rel. Int.
100%
OCDD
41.22-44.81
457.7377 Fn5
Flags: PB
4σ 1.06e3
0%
Abs. Int.
5.02e3
2.51e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDD
41.22-44.81
459.7348 Fn5
Flags: PB
4σ 2.39e3
0%
Abs. Int.
5.96e3
2.98e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDD Std.
41.22-44.81
469.7780 Fn5
Flags: PB
4σ 1.75e3
0%
Abs. Int.
4.52e3
2.26e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDD Std.
41.22-44.81
471.7750 Fn5
Flags: PB
4σ 1.15e3
0%
Abs. Int.
2.44e4
1.22e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
QC Check
41.22-44.81
454.9728 Fn5
Flags: -
0%
Abs. Int.
1.03e7
5.17e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT


2468F
1.02e6
21.56
Rel. Int.
100%
TCDF
19.04-28.40
303.9016 Fn1
Flags: PBM
4σ 1.33e3
0%
Abs. Int.
1.94e5
9.71e4
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
2468F
1.28e6
21.56
Rel. Int.
100%
TCDF
19.04-28.40
305.8987 Fn1
Flags: PBM
4σ 1.79e3
0%
Abs. Int.
2.32e5
1.16e5
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDF Std.
19.04-28.40
315.9419 Fn1
Flags: PB
4σ 1.21e4
0%
Abs. Int.
2.55e4
1.27e4
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDF Std.
19.04-28.40
317.9389 Fn1
Flags: PB
4σ 6.26e3
0%
Abs. Int.
2.72e4
1.36e4
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
HxCDPE
19.04-28.40
375.8364 Fn1
Flags: PB
4σ 1.16e3
0%
Abs. Int.
1.02e4
5.11e3
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT


Rel. Int.
100%
0%
Abs. Int.
1.60e4
7.98e3
0.00e0
PeCDF-1
19.04-28.40
339.8597 Fn1
Flags: PB
4σ 1.31e3
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
0%
Abs. Int.
1.19e4
5.93e3
0.00e0
PeCDF-1
19.04-28.40
341.8568 Fn1
Flags: PB
4σ 1.77e3
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
0%
Abs. Int.
5.57e6
2.79e6
0.00e0
QC Check
19.04-28.40
316.9824 Fn1
Flags: -
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT


Rel. Int.
100%
PeCDF-2
28.41-33.50
339.8597 Fn2
Flags: PB
4σ 1.38e3
0%
Abs. Int.
6.41e3
3.21e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF-2
28.41-33.50
341.8568 Fn2
Flags: PB
4σ 1.97e3
0%
Abs. Int.
5.48e3
2.74e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.41-33.50
351.9000 Fn2
Flags: PB
4σ 2.85e3
0%
Abs. Int.
1.96e4
9.82e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.41-33.50
353.8970 Fn2
Flags: PB
4σ 1.95e3
0%
Abs. Int.
1.74e4
8.70e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
HpCDPE
28.41-33.50
409.7974 Fn2
Flags: PB
4σ 1.06e3
0%
Abs. Int.
1.21e4
6.06e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT


Rel. Int.
100%
HxCDF
33.51-37.61
373.8207 Fn3
Flags: PB
4σ 1.54e3
0%
Abs. Int.
4.25e3
2.13e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF
33.51-37.61
375.8178 Fn3
Flags: PB
4σ 9.60e2
0%
Abs. Int.
5.62e3
2.81e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF Std.
33.51-37.61
383.8639 Fn3
Flags: PB
4σ 3.01e3
0%
Abs. Int.
1.64e4
8.22e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF Std.
33.51-37.61
385.8610 Fn3
Flags: PB
4σ 4.51e3
0%
Abs. Int.
1.71e4
8.54e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
OCDPE
33.51-37.61
445.7555 Fn3
Flags: PB
4σ 1.03e3
0%
Abs. Int.
4.73e3
2.37e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT

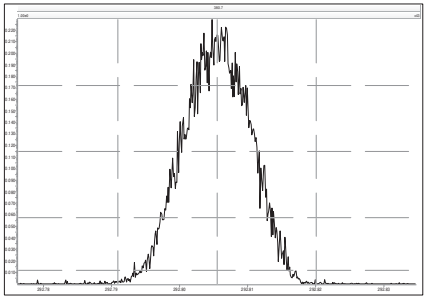

Rel. Int.
100%
HpCDF
37.91-41.21
407.7818 Fn4
Flags: PB
4σ 7.21e2
0%
Abs. Int.
2.92e3
1.46e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF
37.91-41.21
409.7788 Fn4
Flags: PB
4σ 1.05e3
0%
Abs. Int.
3.74e3
1.87e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.91-41.21
417.8253 Fn4
Flags: PB
4σ 3.51e3
0%
Abs. Int.
1.13e4
5.67e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.91-41.21
419.8220 Fn4
Flags: PB
4σ 3.22e3
0%
Abs. Int.
1.31e4
6.53e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
NCDPE
37.91-41.21
479.7165 Fn4
Flags: PB
4σ 1.40e3
0%
Abs. Int.
5.85e3
2.93e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT


Rel. Int.
100%
OCDF
41.22-44.81
441.7428 Fn5
Flags: PB
4σ 8.29e2
0%
Abs. Int.
1.10e4
5.48e3
0.00e0
RT
41.5
42.0
42.5
43.0
43.5
44.0
44.5
Rel. Int.
100%
OCDF
41.22-44.81
443.7398 Fn5
Flags: PB
4σ 2.76e3
0%
Abs. Int.
7.93e3
3.97e3
0.00e0
RT
Rel. Int.
100%
OCDF Std.
41.22-44.81
453.7830 Fn5
Flags: PB
4σ 1.29e3
0%
Abs. Int.
1.53e4
7.65e3
0.00e0
RT
Rel. Int.
100%
OCDF Std.
41.22-44.81
455.7801 Fn5
Flags: PB
4σ 2.04e3
0%
Abs. Int.
8.57e3
4.29e3
0.00e0
RT
Rel. Int.
100%
DCDPE
41.22-44.81
513.6775 Fn5
Flags: PB
4σ 1.08e3
0%
Abs. Int.
2.67e3
1.33e3
0.00e0
RT

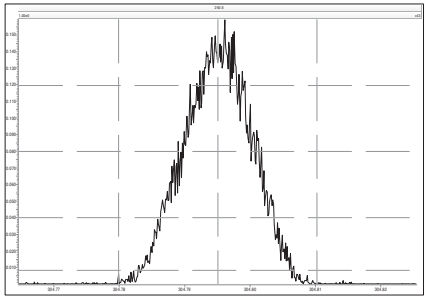
File: Experiment: df_cl4-8_db5MS.exp Reference: DF.ref Function: 1 @ 200 (ppm)

Printed: Thursday, August 27, 2020 14:20:29 Eastern Daylight Time

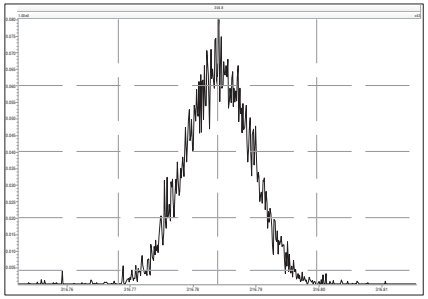
M 292.9824 R 13440



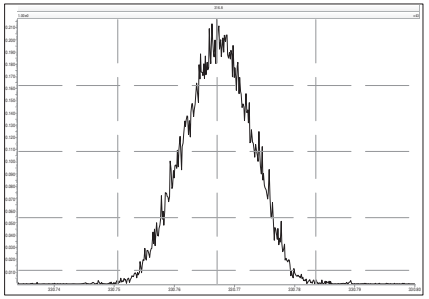
M 304.9824 R 12950



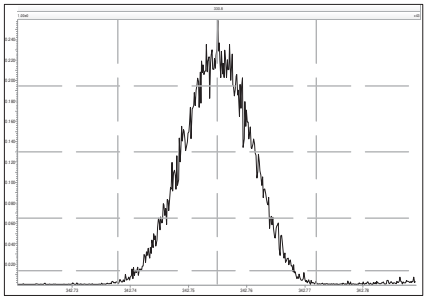
M 316.9824 R 14793



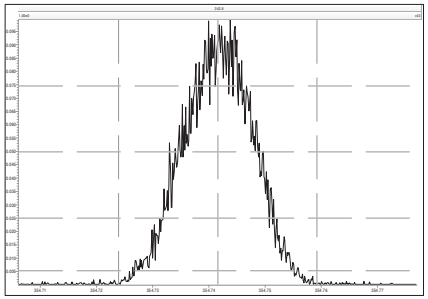
M 330.9792 R 13367



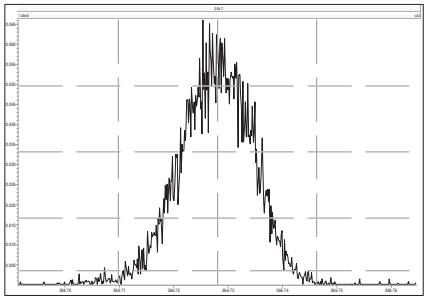
M 342.9792 R 12691



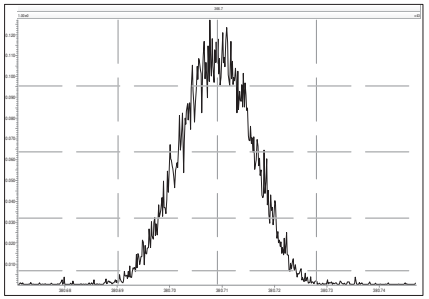
M 354.9792 R 12499



M 366.9792 R 13085



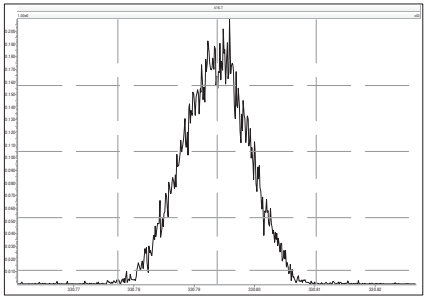
M 380.9760 R 12077



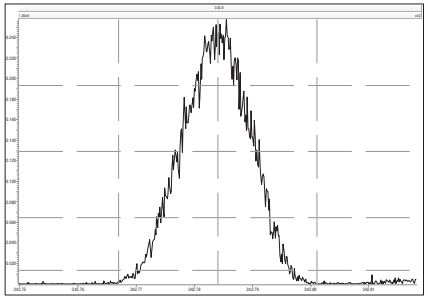
File: Experiment: df_cl4-8_db5MS.exp Reference: DF.ref Function: 2 @ 200 (ppm)

Printed: Thursday, August 27, 2020 14:20:46 Eastern Daylight Time

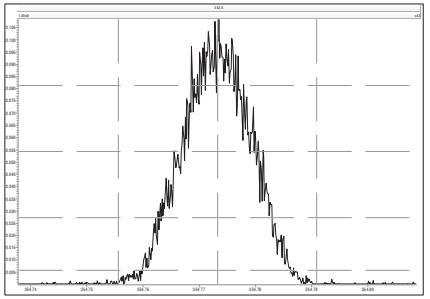
M 330.9792 R 13088



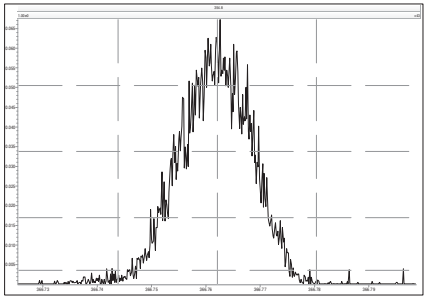
M 342.9792 R 13294



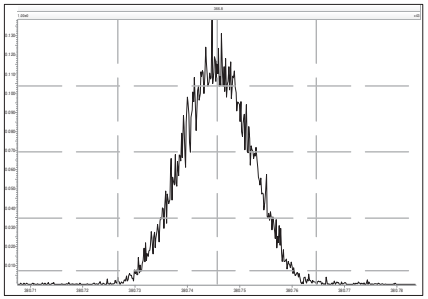
M 354.9792 R 13158



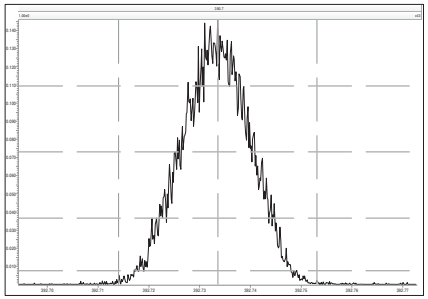
M 366.9792 R 13018



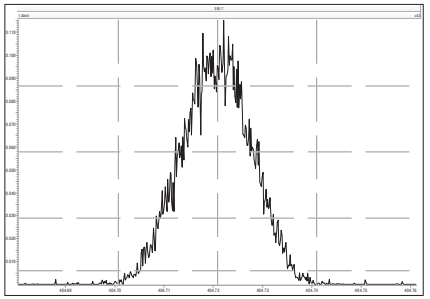
M 380.9760 R 12377



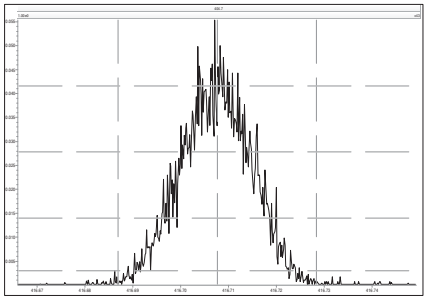
M 392.9760 R 12566



M 404.9760 R 12501



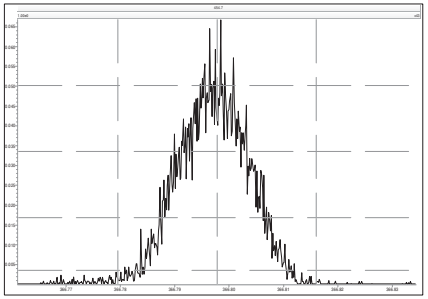
M 416.9760 R 12820



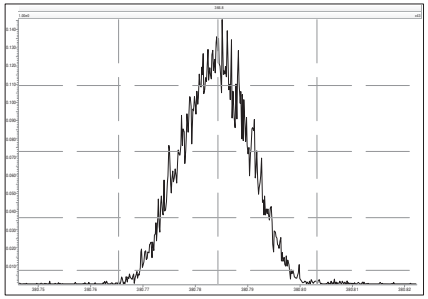
File: Experiment: df_cl4-8_db5MS.exp Reference: DF.ref Function: 3 @ 200 (ppm)

Printed: Thursday, August 27, 2020 14:21:02 Eastern Daylight Time

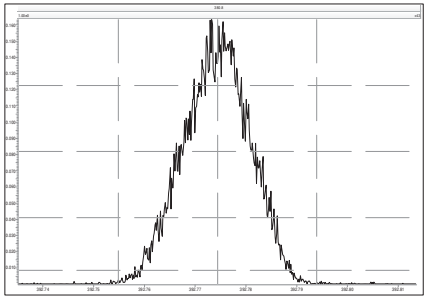
M 366.9792 R 13586



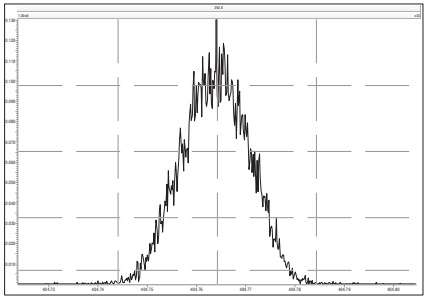
M 380.9760 R 13230



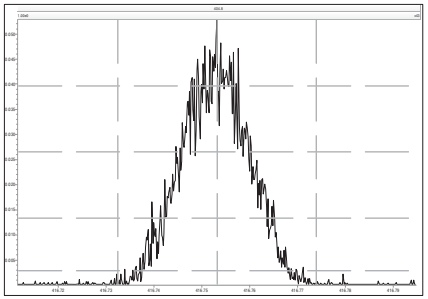
M 392.9760 R 13158



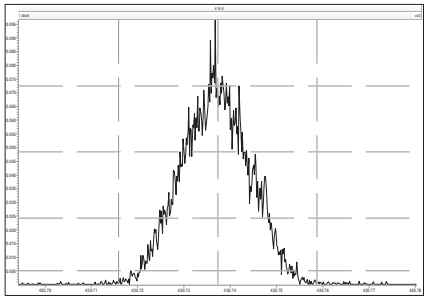
M 404.9760 R 13301



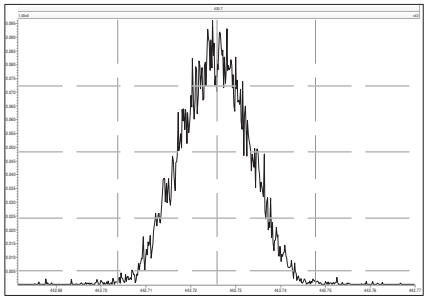
M 416.9760 R 13514



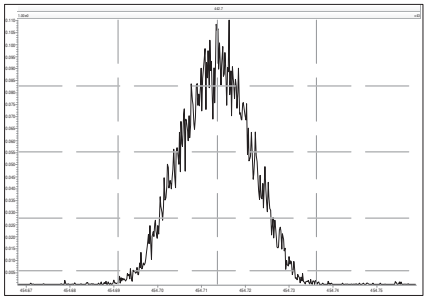
M 430.9728 R 14123



M 442.9728 R 12757



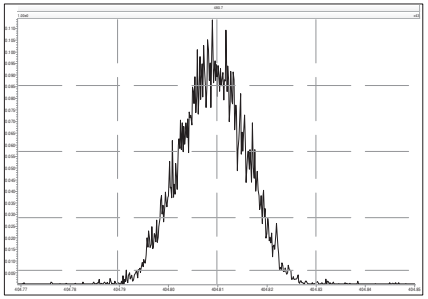
M 454.9728 R 13020



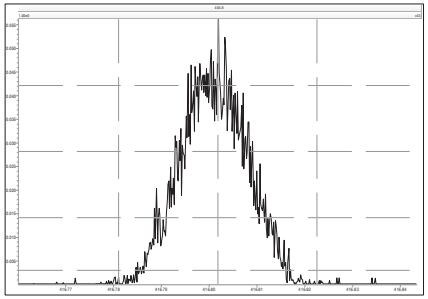
File: Experiment: df_cl4-8_db5MS.exp Reference: DF.ref Function: 4 @ 200 (ppm)

Printed: Thursday, August 27, 2020 14:21:18 Eastern Daylight Time

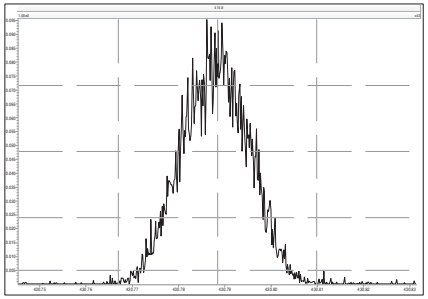
M 404.9760 R 12953



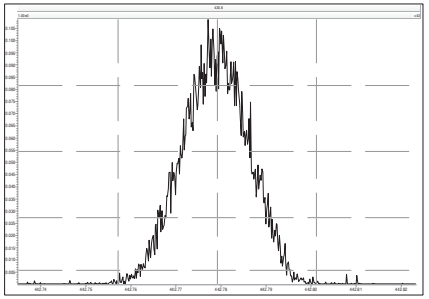
M 416.9760 R 13371



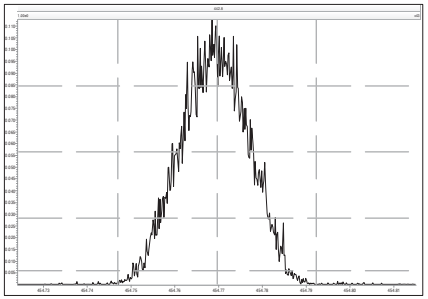
M 430.9728 R 13967



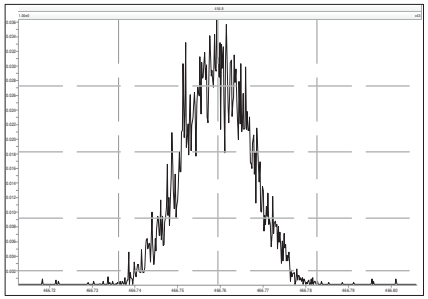
M 442.9728 R 13664



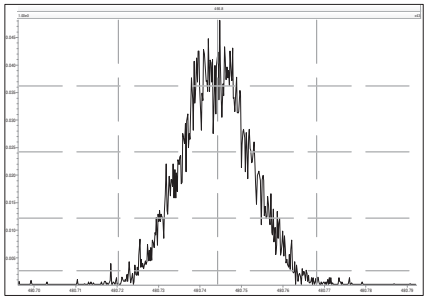
M 454.9728 R 13366



M 466.9728 R 12953



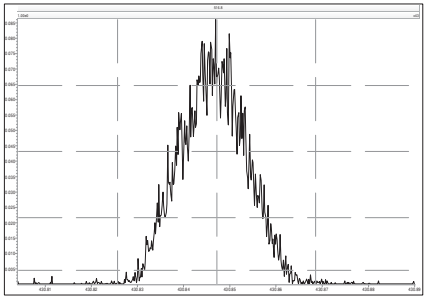
M 480.9696 R 12374



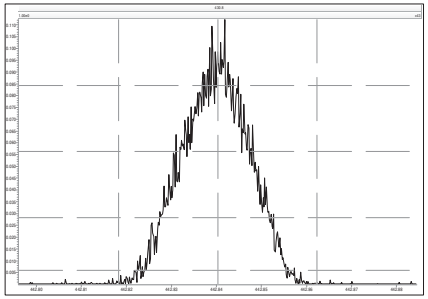
File: Experiment: df_cl4-8_db5MS.exp Reference: DF.ref Function: 5 @ 200 (ppm)

Printed: Thursday, August 27, 2020 14:21:34 Eastern Daylight Time

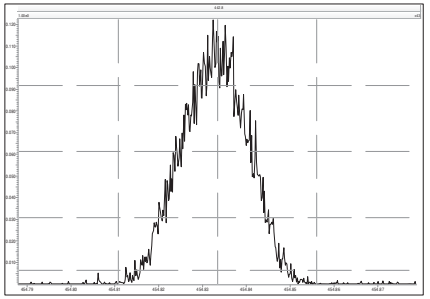
M 430.9728 R 14047



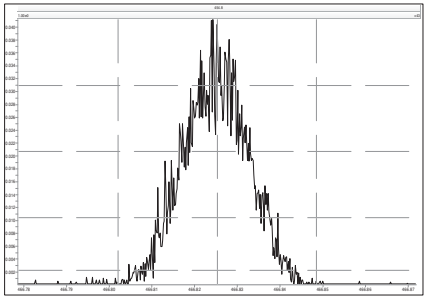
M 442.9728 R 13889



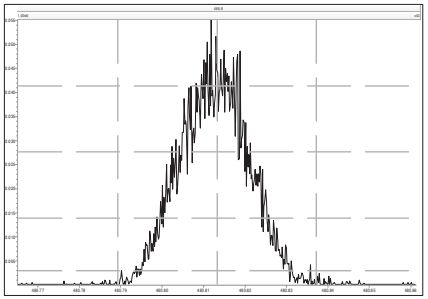
M 454.9728 R 13372



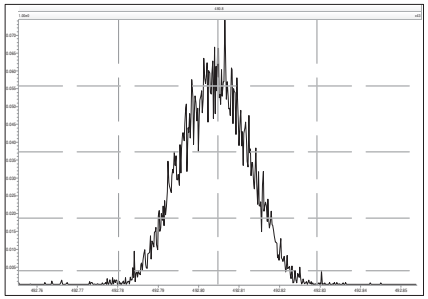
M 466.9728 R 14531



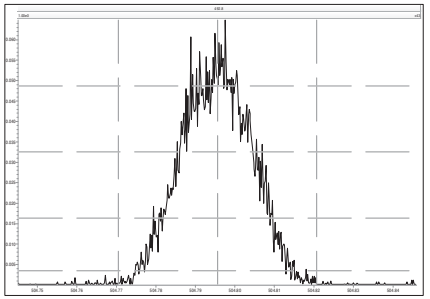
M 480.9696 R 13085



M 492.9696 R 13296



M 504.9696 R 12821



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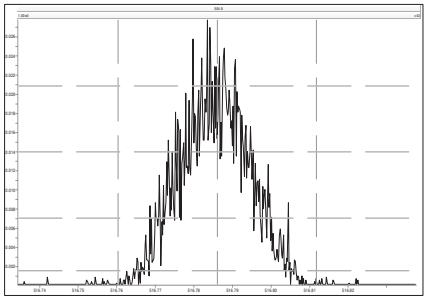

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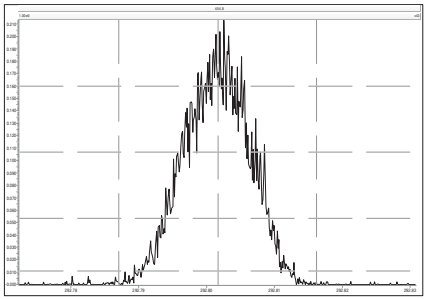
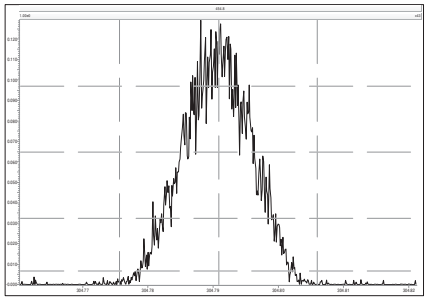
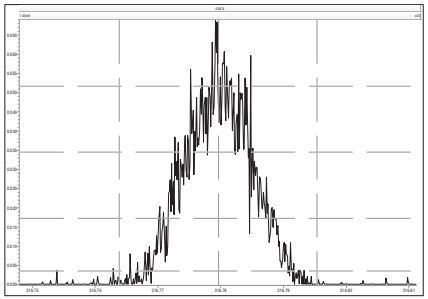


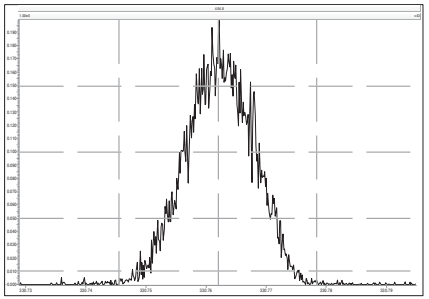
M 304.9824 R 13516



M 316.9824 R 14205



M 330.9792 R 13262



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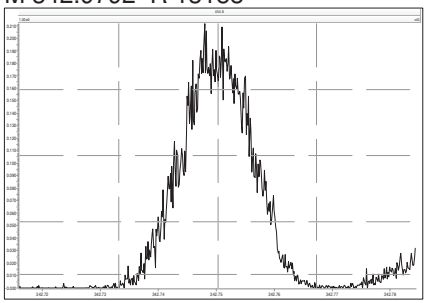
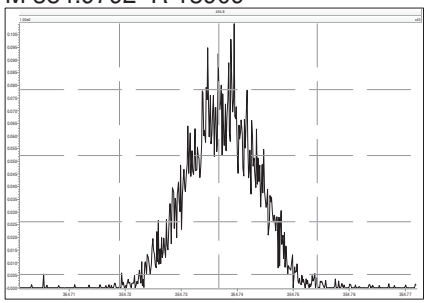


M 354.9792 R 13909



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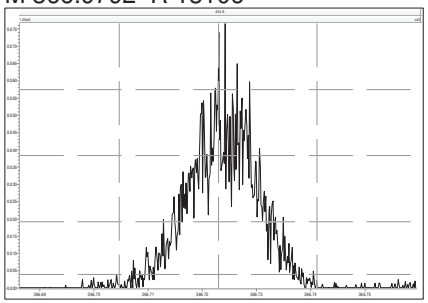
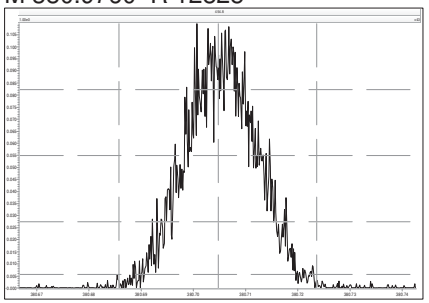
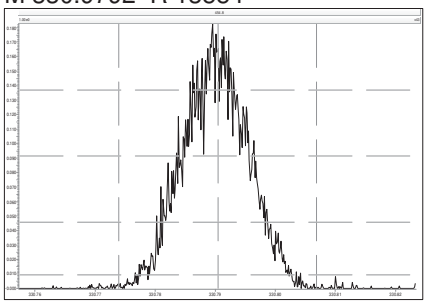


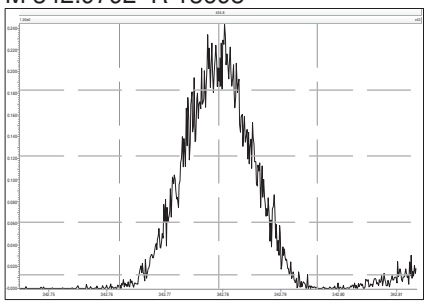
M 380.9760 R 12825



M 330.9792 R 13554



M 342.9792 R 13698



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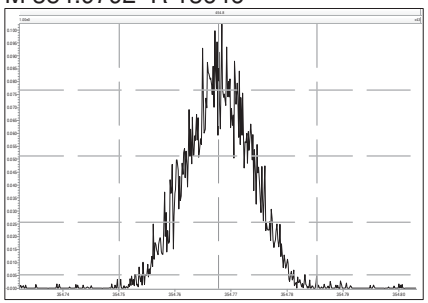

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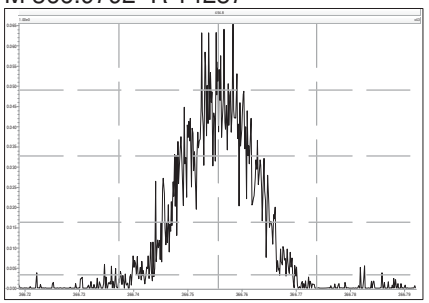
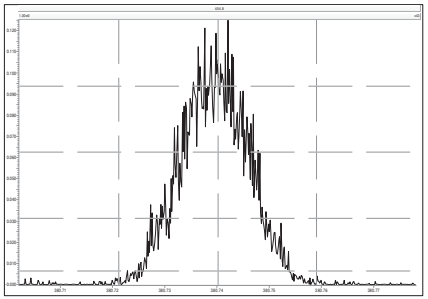


M 380.9760 R 13262



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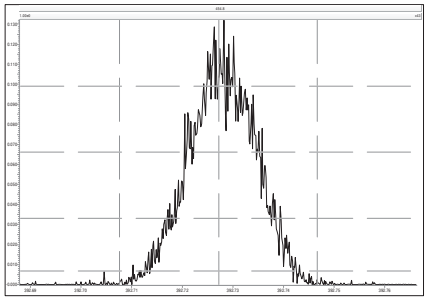

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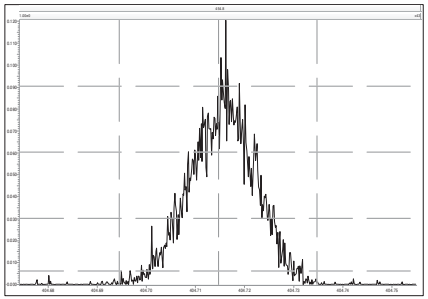

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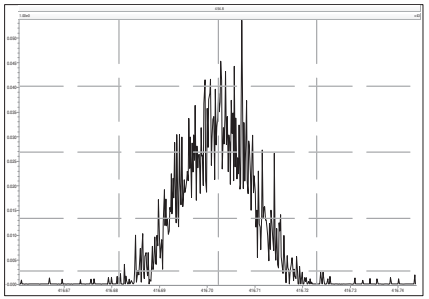

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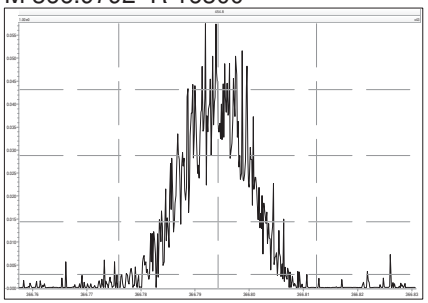

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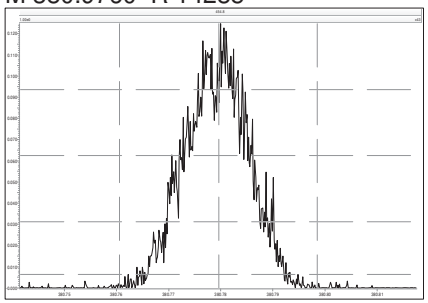

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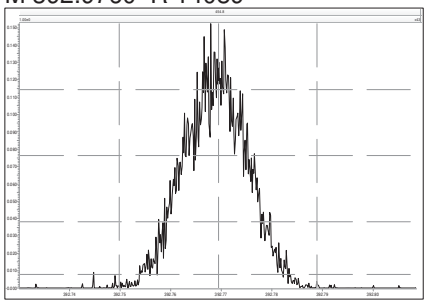

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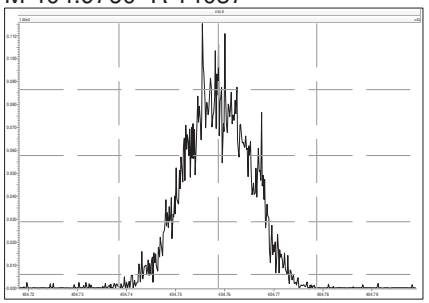
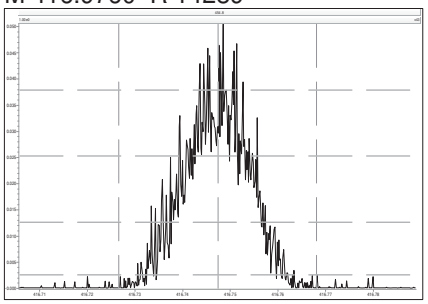


M 416.9760 R 14289



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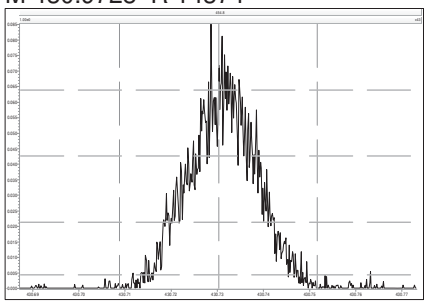
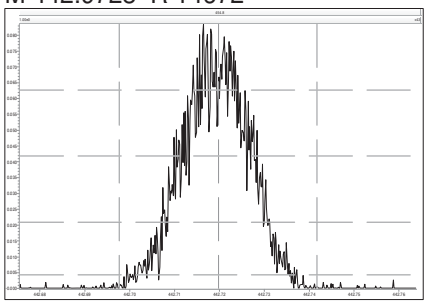


M 442.9728 R 14672



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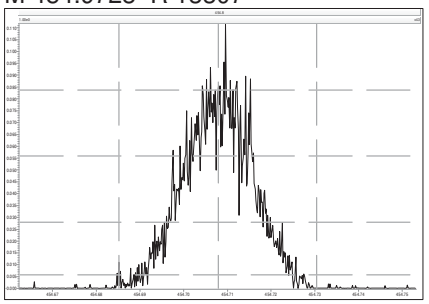

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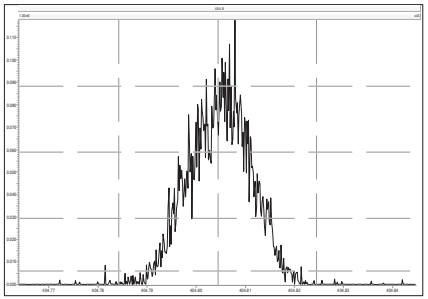

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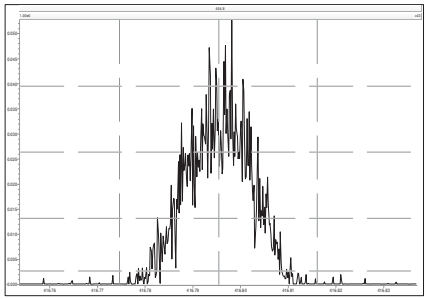

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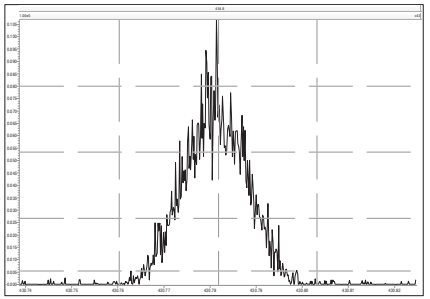

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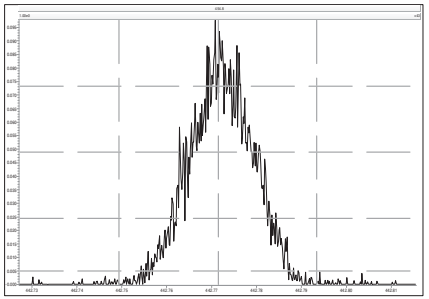

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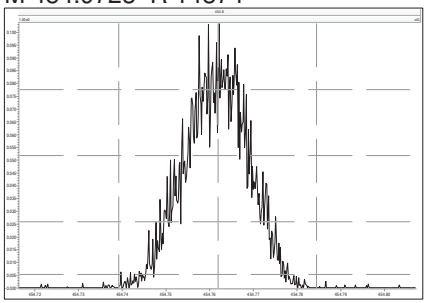
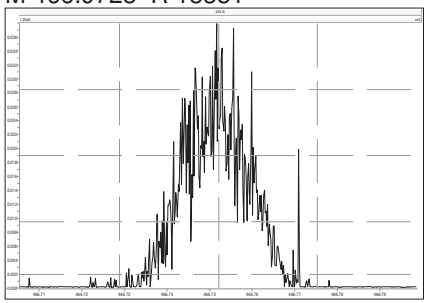


M 466.9728 R 15351



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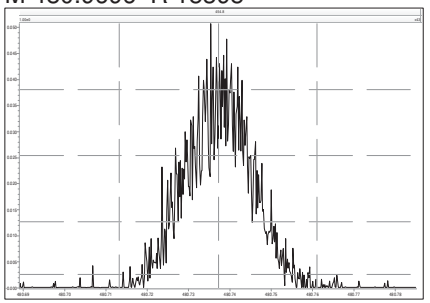

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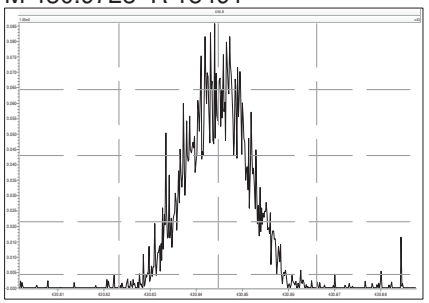

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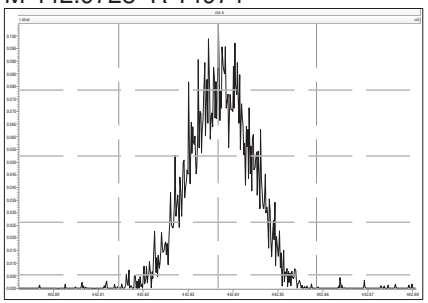

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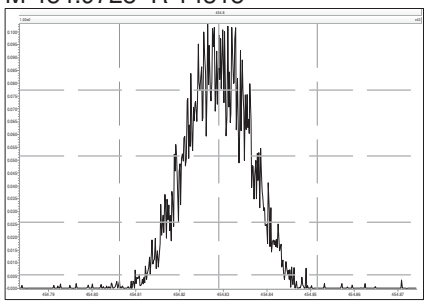

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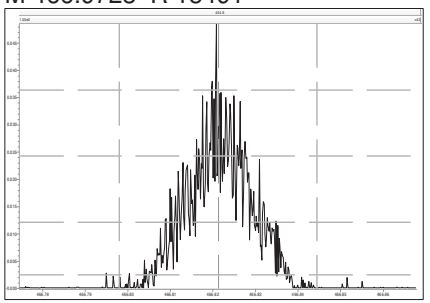

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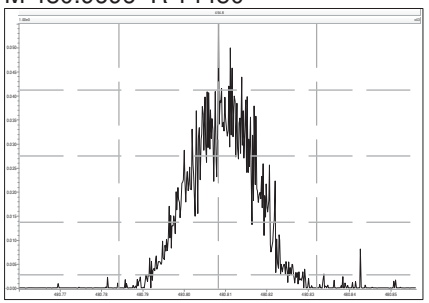

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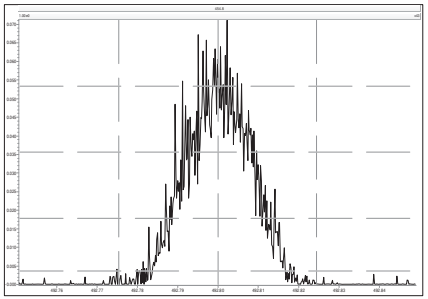

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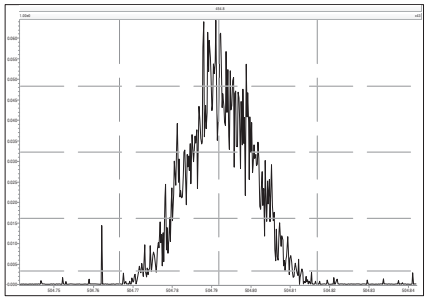

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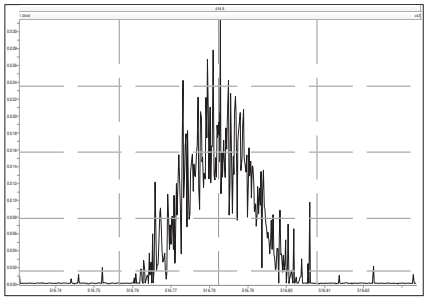

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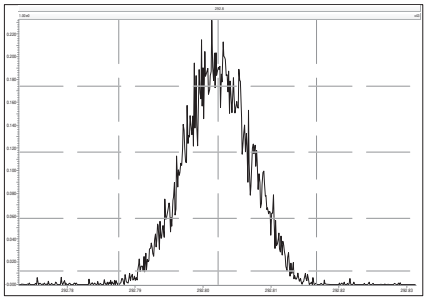
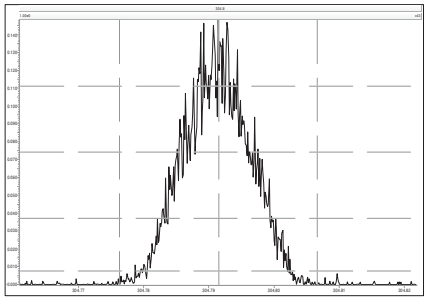
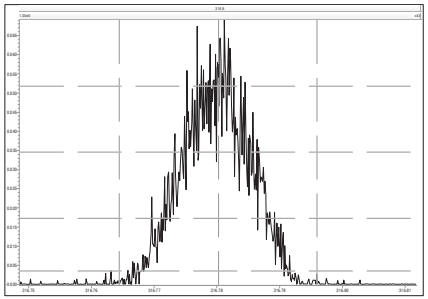


M 304.9824 R 13815



M 316.9824 R 13298



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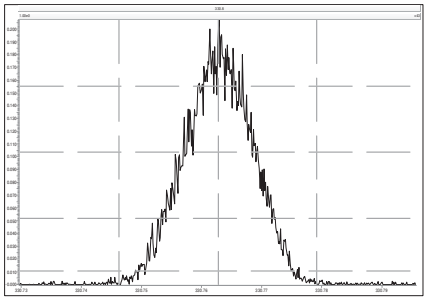

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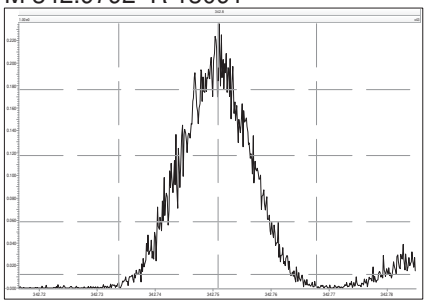

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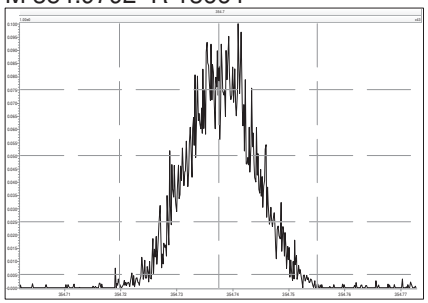
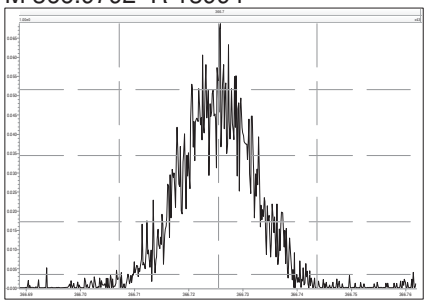
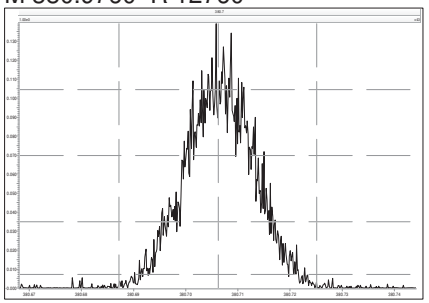


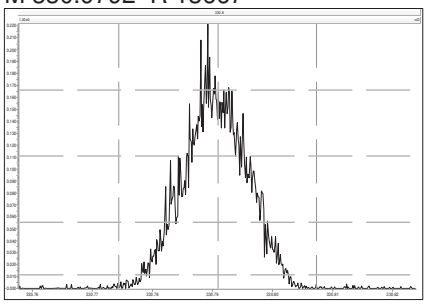
M 366.9792 R 13994



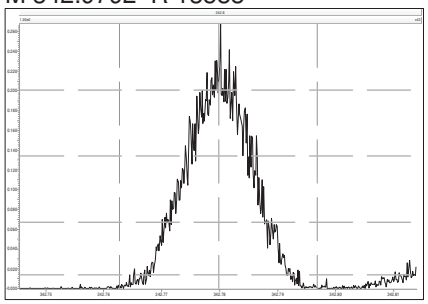
M 380.9760 R 12760



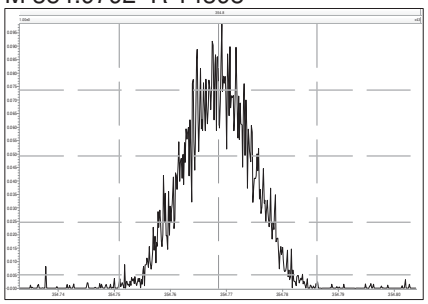
M 330.9792 R 13667



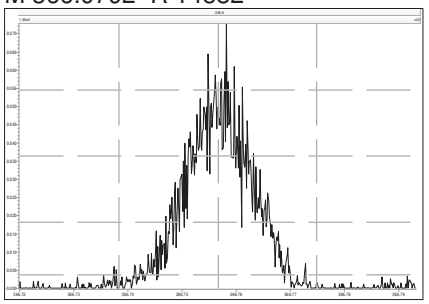
M 342.9792 R 13588



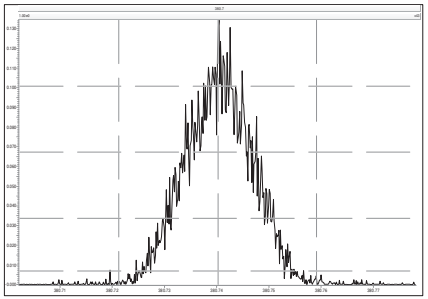
M 354.9792 R 14398



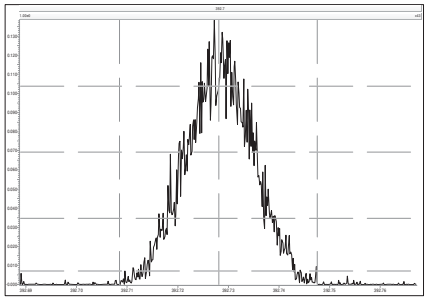
M 366.9792 R 14582



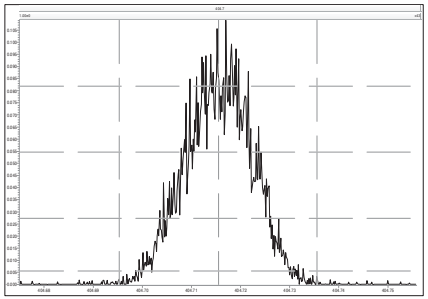
M 380.9760 R 14308



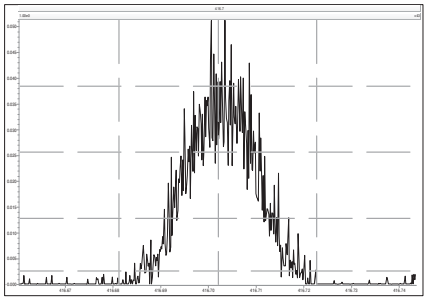
M 392.9760 R 13661



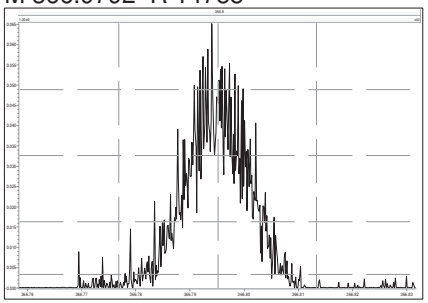
M 404.9760 R 13635



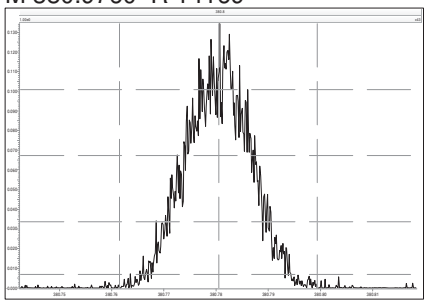
M 416.9760 R 15738



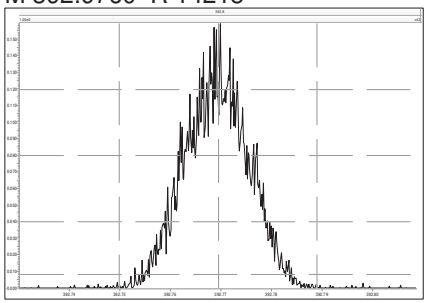
M 366.9792 R 14755



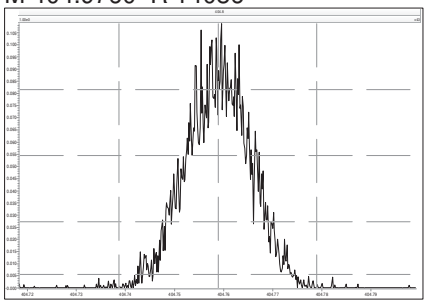
M 380.9760 R 14169



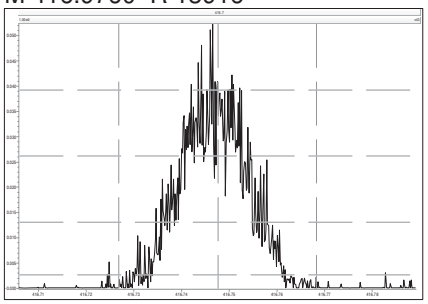
M 392.9760 R 14215



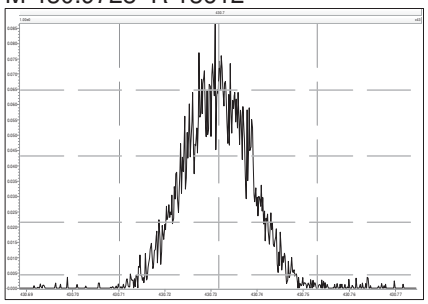
M 404.9760 R 14086



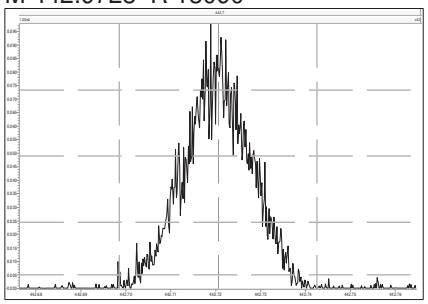
M 416.9760 R 13916



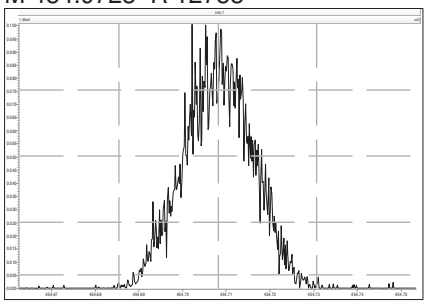
M 430.9728 R 13612



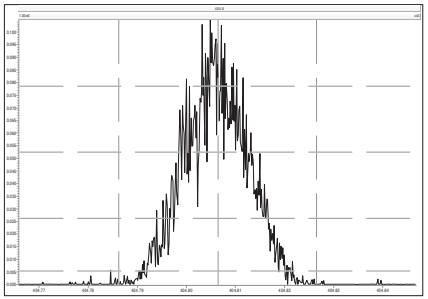
M 442.9728 R 13090



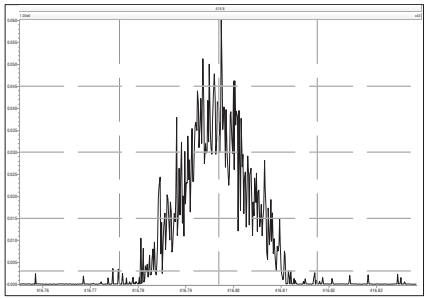
M 454.9728 R 12755



M 404.9760 R 14493



M 416.9760 R 15341



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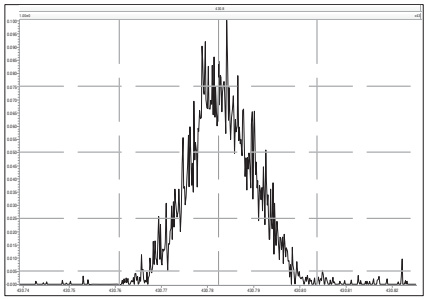
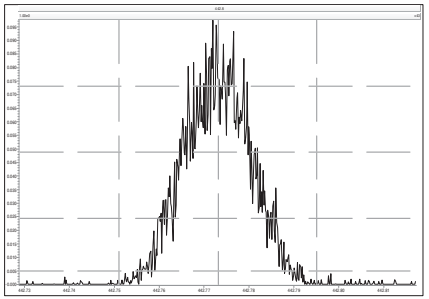
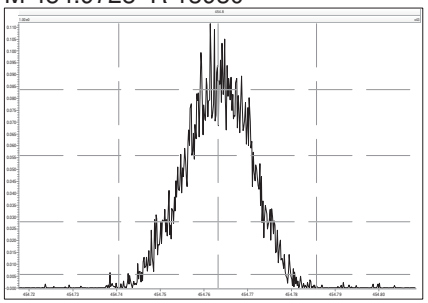


M 442.9728 R 15015



M 454.9728 R 13930



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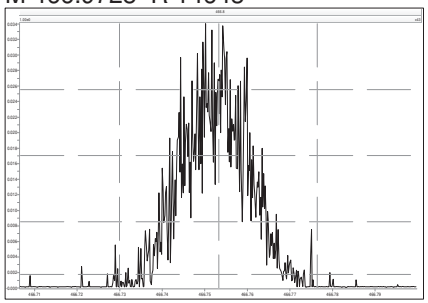

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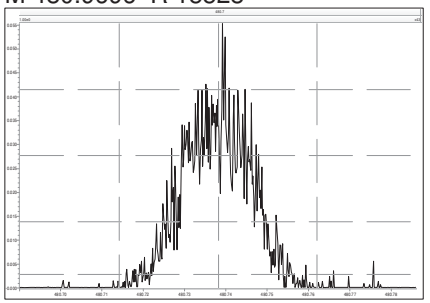
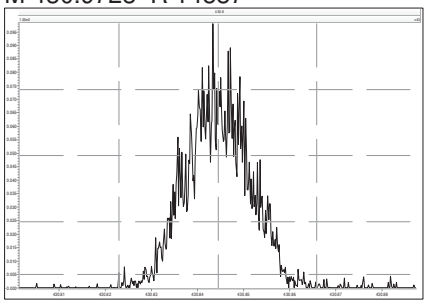
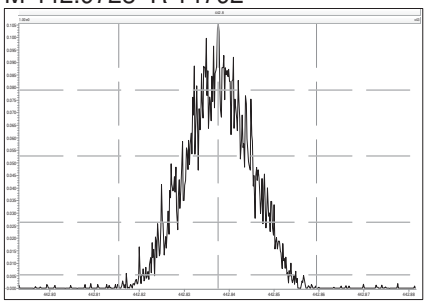


M 430.9728 R 14587



M 442.9728 R 14792



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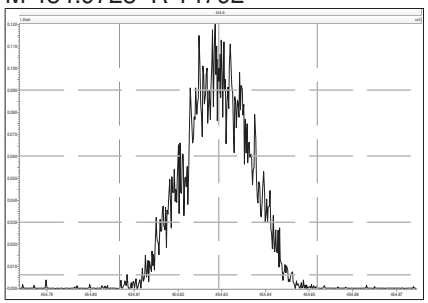

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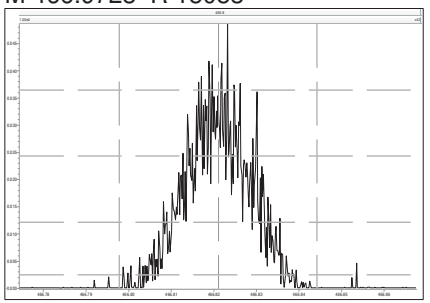
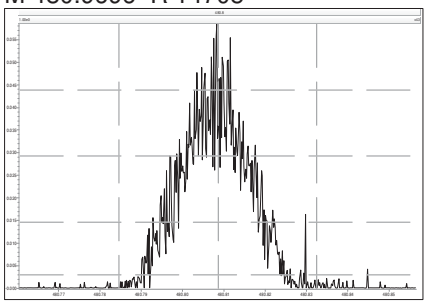


M 480.9696 R 14705



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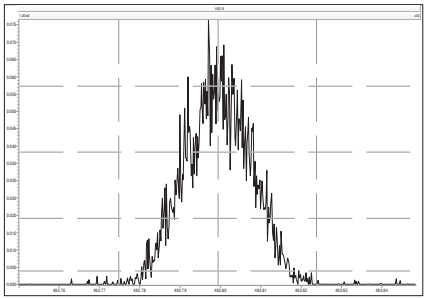

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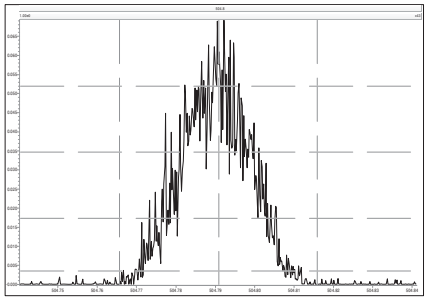

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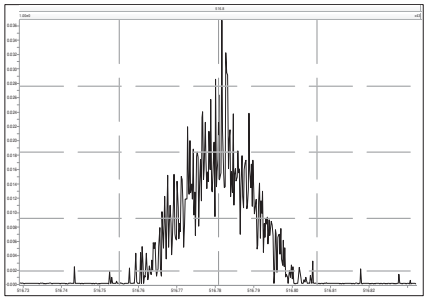


Dioxin/Furan ICAL Summary — SGS North America — Processed: 25 Aug 2020 09:54

ICAL: HRMS3_DF_10122018_24AUG2020

Data Acquired: 24-Aug-2020

APPROVED
Carla_Lyon , 8/25/2020, 5:53:35 PM

Name	Mean	% RSD	200824C02 0.25 pg/uL CS0	200824C03 0.5 pg/uL CS1	200824C04 2 pg/uL CS2	200824C05 10 pg/uL CS3	200824C06 40 pg/uL CS4	200824C07 200 pg/uL CS5	200824C08 500 pg/uL CS6
2378-TCDD	1.19	3.5%	1.22	1.22	1.20	1.23	1.15	1.14	1.14
12378-PeCDD	1.01	1.5%	1.03	1.03	1.01	1.00	0.99	1.02	1.02
123478-HxCDD	1.05	1.9%	1.06	1.05	1.09	1.06	1.03	1.04	1.05
123678-HxCDD	1.12	2.2%	1.16	1.10	1.12	1.14	1.10	1.09	1.10
123789-HxCDD	1.02	2.3%	1.04	1.07	1.02	1.00	1.01	1.01	1.01
1234678-HpCDD	1.00	1.7%	1.00	1.01	1.01	1.04	0.99	0.99	0.99
OCDD	1.08	2.3%	1.06	1.10	1.10	1.12	1.06	1.06	1.07
2378-TCDF	1.06	4.2%	1.14	1.10	1.04	1.09	1.03	1.02	1.03
12378-PeCDF	0.98	1.1%	0.99	0.96	0.99	0.98	0.97	0.99	0.98
23478-PeCDF	0.97	4.0%	0.89	0.98	1.00	1.00	0.96	0.99	0.98
123478-HxCDF	1.22	1.2%	1.22	1.22	1.24	1.23	1.19	1.21	1.21
123678-HxCDF	1.11	1.8%	1.11	1.07	1.11	1.12	1.08	1.13	1.11
234678-HxCDF	1.15	4.1%	1.25	1.15	1.13	1.15	1.12	1.13	1.12
123789-HxCDF	1.12	2.0%	1.10	1.11	1.16	1.14	1.10	1.12	1.13
1234678-HpCDF	1.29	2.7%	1.33	1.28	1.33	1.32	1.24	1.27	1.28
1234789-HpCDF	1.27	3.0%	1.25	1.34	1.28	1.29	1.23	1.27	1.23
OCDF	1.04	4.3%	1.13	1.02	1.05	1.06	1.00	1.02	1.02
ES 2378-TCDD	0.97	3.7%	0.96	0.92	0.95	0.97	0.98	0.97	1.04
ES 12378-PeCDD	0.84	6.0%	0.82	0.79	0.82	0.87	0.81	0.87	0.94
ES 123478-HxCDD	0.97	7.2%	0.94	0.93	0.94	0.96	0.91	1.07	1.08
ES 123678-HxCDD	0.96	7.5%	0.91	0.92	0.94	0.94	0.90	1.07	1.06
ES 123789-HxCDD	1.10	7.4%	1.05	1.04	1.08	1.11	1.01	1.21	1.22
ES 1234678-HpCDD	0.93	7.5%	0.84	0.93	0.93	0.90	0.87	1.03	1.01
ES OCDD	0.63	8.7%	0.57	0.62	0.64	0.60	0.58	0.71	0.69
ES 2378-TCDF	0.97	2.1%	0.94	0.95	0.97	0.98	0.97	0.98	1.01
ES 12378-PeCDF	0.78	6.4%	0.81	0.72	0.74	0.78	0.74	0.78	0.87
ES 23478-PeCDF	0.80	6.2%	0.78	0.74	0.78	0.82	0.78	0.83	0.90
ES 123478-HxCDF	1.22	6.2%	1.13	1.20	1.20	1.20	1.15	1.32	1.32
ES 123678-HxCDF	1.41	6.1%	1.36	1.36	1.38	1.39	1.32	1.54	1.53
ES 234678-HxCDF	1.29	5.6%	1.24	1.25	1.28	1.28	1.20	1.38	1.39
ES 123789-HxCDF	1.17	6.7%	1.13	1.11	1.13	1.18	1.10	1.26	1.30
ES 1234678-HpCDF	0.97	6.6%	0.87	0.98	0.99	0.93	0.95	1.08	1.02
ES 1234789-HpCDF	0.88	6.8%	0.79	0.88	0.88	0.86	0.84	0.97	0.94
ES OCDF	0.81	9.8%	0.71	0.77	0.81	0.77	0.76	0.92	0.91

ICAL: HRMS3_DF_10122018_24AUG2020
Data Acquired: 24-Aug-2020

Name	Mean	% RSD	200824C02 0.25 pg/uL CS0	200824C03 0.5 pg/uL CS1	200824C04 2 pg/uL CS2	200824C05 10 pg/uL CS3	200824C06 40 pg/uL CS4	200824C07 200 pg/uL CS5	200824C08 500 pg/uL CS6
CS 37Cl-2378-TCDD	1.14	6.4%	-	1.27	1.09	1.14	1.12	1.10	-
CS 12347-PeCDD	0.72	3.4%	0.73	0.69	0.72	0.77	0.71	0.71	0.74
CS 12346-PeCDF	0.77	4.3%	0.84	0.75	0.76	0.78	0.75	0.75	0.76
CS 123469-HxCDF	1.18	3.2%	1.15	1.20	1.21	1.19	1.14	1.24	1.14
CS 1234689-HpCDF	0.96	5.2%	0.88	0.98	1.01	0.96	0.91	1.01	0.93
SS 37Cl-2378-TCDD	1.19	9.0%	-	1.38	1.15	1.17	1.13	1.13	-
SS 12347-PeCDD	0.86	4.6%	0.89	0.87	0.88	0.88	0.88	0.82	0.78
SS 12346-PeCDF	1.00	5.7%	1.04	1.04	1.04	1.00	1.01	0.96	0.88
SS 123469-HxCDF	0.84	5.7%	0.84	0.88	0.88	0.86	0.86	0.81	0.75
SS 1234689-HpCDF	0.98	4.5%	1.01	1.00	1.02	1.03	0.96	0.94	0.91
AS 1368-TCDD	1.09	3.6%	1.18	1.08	1.06	1.05	1.10	1.09	1.09
AS 1368-TCDF	1.16	3.1%	1.23	1.15	1.12	1.13	1.17	1.17	1.18
OCDD-a	0.07	11.2%	-	-	0.09	0.07	0.07	0.07	0.07
OCDF-a	0.06	9.1%	-	-	0.05	0.07	0.07	0.06	0.06
Totals									
Total TCDD	1.19	3.5%	1.22	1.22	1.20	1.23	1.15	1.14	1.14
Total PeCDD	1.01	1.5%	1.03	1.03	1.01	1.00	0.99	1.02	1.02
Total HxCDD	1.06	1.4%	1.08	1.07	1.08	1.07	1.05	1.05	1.05
Total HpCDD	1.00	1.7%	1.00	1.01	1.01	1.04	0.99	0.99	0.99
Total TCDF	1.06	4.2%	1.14	1.10	1.04	1.09	1.03	1.02	1.03
Total PeCDF	0.98	2.1%	0.94	0.97	1.00	0.99	0.96	0.99	0.98
Total HxCDF	1.15	1.4%	1.17	1.14	1.16	1.16	1.13	1.15	1.14
Total HpCDF	1.28	2.2%	1.29	1.31	1.30	1.31	1.23	1.27	1.26
FS 1278-TCDD	0.99	2.8%	1.02	1.00	1.00	1.02	0.97	0.98	0.94
FS 12478-PeCDD	0.97	6.5%	1.04	1.03	0.99	0.96	1.00	0.94	0.86
FS 123468-HxCDD	1.13	6.6%	1.11	1.22	1.19	1.16	1.15	1.09	1.00
FS 1234679-HpCDD	1.12	6.3%	1.18	1.14	1.17	1.18	1.14	1.06	0.99
TS 1378-TCDD	1.10	3.3%	1.10	1.15	1.12	1.11	1.08	1.11	1.03

Instrument: HRMS3 (AutoSpec-Ultima) MS Experiment: df_cl4-8_db5MS GC Program: df_db5MS

#	Datafile	Vial#	Lab ID	Wt/Vol	Client/Sample ID	Analyst(s)	Checkcode	Acq Date	Acq Time
1	200824C01	2	SBS_200824_DF_CA	1.00	20-61-1	DTF	602-431	24-Aug-2020	09:29:12
2	200824C02	22	CS0_200824_DF_CA	1.00	20-282-3	DTF	692-786	24-Aug-2020	10:15:17
3	200824C03	23	CS1_200824_DF_CA	1.00	20-282-2	DTF	646-118	24-Aug-2020	11:22:15
4	200824C04	24	CS2_200824_DF_CA	1.00	20-282-1	DTF	848-202	24-Aug-2020	12:08:22
5	200824C05	3	CS3_200824_DF_CA	1.00	20-449-3	DTF	779-324	24-Aug-2020	12:54:52
6	200824C06	25	CS4_200824_DF_CA	1.00	20-281-2	DTF	133-581	24-Aug-2020	13:41:20
7	200824C07	26	CS5_200824_DF_CA	1.00	20-281-1	DTF	091-375	24-Aug-2020	14:27:49
8	200824C08	27	CS6_200824_DF_CA	1.00	20-280-4	DTF	064-573	24-Aug-2020	15:14:18

APPROVED
Carla_Lyon , 8/25/2020, 5:53:41 PM

REVIEWED
By Tyler_Fritz at 11:49 am, Aug 25, 2020

Dioxin/Furan ICAL Concentrations	SGS Environmental Services							
	Concentration							
Individual Native Standards	CS0 pg/uL	CS1 pg/uL	CS2 pg/uL	CS3 pg/uL	CS4 pg/uL	CS5 pg/uL	CS6 pg/uL	Working Standards pg/uL
2378-TCDD	0.25	0.5	2	10	40	200	500	1
12378-PeCDD	1.25	2.5	10	50	200	1000	2500	1
123478-HxCDD	1.25	2.5	10	50	200	1000	2500	1
123678-HxCDD	1.25	2.5	10	50	200	1000	2500	1
123789-HxCDD	1.25	2.5	10	50	200	1000	2500	1
1234678-HpCDD	1.25	2.5	10	50	200	1000	2500	1
OCDD	2.5	5	20	100	400	2000	5000	1
2378-TCDF	0.25	0.5	2	10	40	200	500	1
12378-PeCDF	1.25	2.5	10	50	200	1000	2500	1
23478-PeCDF	1.25	2.5	10	50	200	1000	2500	1
123478-HxCDF	1.25	2.5	10	50	200	1000	2500	1
123678-HxCDF	1.25	2.5	10	50	200	1000	2500	1
234678-HxCDF	1.25	2.5	10	50	200	1000	2500	1
123789-HxCDF	1.25	2.5	10	50	200	1000	2500	1
1234678-HpCDF	1.25	2.5	10	50	200	1000	2500	1
1234789-HpCDF	1.25	2.5	10	50	200	1000	2500	1
OCDF	2.5	5	20	100	400	2000	5000	1
Extraction Standards								
ES 2378-TCDD	100	100	100	100	100	100	100	10
ES 12378-PeCDD	100	100	100	100	100	100	100	10
ES 123478-HxCDD	100	100	100	100	100	100	100	10
ES 123678-HxCDD	100	100	100	100	100	100	100	10
ES 123789-HxCDD	100	100	100	100	100	100	100	10
ES 1234678-HpCDD	100	100	100	100	100	100	100	10
ES OCDD	200	200	200	200	200	200	200	10
ES 2378-TCDF	100	100	100	100	100	100	100	10
ES 12378-PeCDF	100	100	100	100	100	100	100	10
ES 23478-PeCDF	100	100	100	100	100	100	100	10
ES 123478-HxCDF	100	100	100	100	100	100	100	10
ES 123678-HxCDF	100	100	100	100	100	100	100	10
ES 234678-HxCDF	100	100	100	100	100	100	100	10
ES 123789-HxCDF	100	100	100	100	100	100	100	10
ES 1234678-HpCDF	100	100	100	100	100	100	100	10
ES 1234789-HpCDF	100	100	100	100	100	100	100	10
ES OCDF	200	200	200	200	200	200	200	10
Cleanup/Sampling Standards								
CS 37Cl-2378-TCDD	-	0.5	2	10	40	200	-	4
CS 12347-PeCDD	100	100	100	100	100	100	100	10
CS 12346-PeCDF	100	100	100	100	100	100	100	10
CS 123469-HxCDF	100	100	100	100	100	100	100	10
CS 1234689-HpCDF	100	100	100	100	100	100	100	10
Alternate Standards								
AS 1368-TCDD	100	100	100	100	100	100	100	10
AS 1368-TCDF	100	100	100	100	100	100	100	10
Shipping Standards								
FS 1278-TCDD	100	100	100	100	100	100	100	100
FS 12478-PeCDD	100	100	100	100	100	100	100	100
FS 123468-HxCDD	100	100	100	100	100	100	100	100
FS 1234679-HpCDD	100	100	100	100	100	100	100	100
TS 1378-TCDD	100	100	100	100	100	100	100	100
Injection Standards								
1234 TCDD 13C12	100	100	100	100	100	100	100	10
1234 TCDF 13C12	100	100	100	100	100	100	100	10
123467 HxCDD 13C12	50	50	50	50	50	50	50	5

Dioxin/Furan STD Association	SGS Environmental Services

Individual Native Standards

2378-TCDD	ES 2378-TCDD
12378-PeCDD	ES 12378-PeCDD
123478-HxCDD	ES 123478-HxCDD
123678-HxCDD	ES 123678-HxCDD
123789-HxCDD	ES 123789-HxCDD
1234678-HpCDD	ES 1234678-HpCDD
OCDD	ES OCDD
2378-TCDF	ES 2378-TCDF
12378-PeCDF	ES 12378-PeCDF
23478-PeCDF	ES 23478-PeCDF
123478-HxCDF	ES 123478-HxCDF
123678-HxCDF	ES 123678-HxCDF
234678-HxCDF	ES 234678-HxCDF
123789-HxCDF	ES 123789-HxCDF
1234678-HpCDF	ES 1234678-HpCDF
1234789-HpCDF	ES 1234789-HpCDF
OCDF	ES OCDF

Cleanup/Sampling Standards

CS 37Cl-2378-TCDD	1234 TCDD 13C12
CS 12347-PeCDD	1234 TCDD 13C12
CS 12346-PeCDF	1234 TCDF 13C12
CS 123469-HxCDF	123467 HxCDD 13C12
CS 1234689-HpCDF	123467 HxCDD 13C12

Alternate Standards

AS 1368-TCDD	1234 TCDD 13C12
AS 1368-TCDF	1234 TCDF 13C12

Shipping Standards

FS 1278-TCDD	ES 2378-TCDD
FS 12478-PeCDD	ES 12378-PeCDD
FS 123468-HxCDD	ES 123478-HxCDD
FS 1234679-HpCDD	ES 1234678-HpCDD
TS 1378-TCDD	ES 2378-TCDD

Extraction Standards

ES 2378-TCDD	1234 TCDD 13C12
ES 12378-PeCDD	1234 TCDD 13C12
ES 123478-HxCDD	123467 HxCDD 13C12
ES 123678-HxCDD	123467 HxCDD 13C12
ES 123789-HxCDD	123467 HxCDD 13C12
ES 1234678-HpCDD	123467 HxCDD 13C12
ES OCDD	123467 HxCDD 13C12
ES 2378-TCDF	1234 TCDF 13C12
ES 12378-PeCDF	1234 TCDF 13C12
ES 23478-PeCDF	1234 TCDF 13C12
ES 123478-HxCDF	123467 HxCDD 13C12
ES 123678-HxCDF	123467 HxCDD 13C12
ES 234678-HxCDF	123467 HxCDD 13C12
ES 123789-HxCDF	123467 HxCDD 13C12
ES 1234678-HpCDF	123467 HxCDD 13C12
ES 1234789-HpCDF	123467 HxCDD 13C12
ES OCDF	123467 HxCDD 13C12

Injection Standards

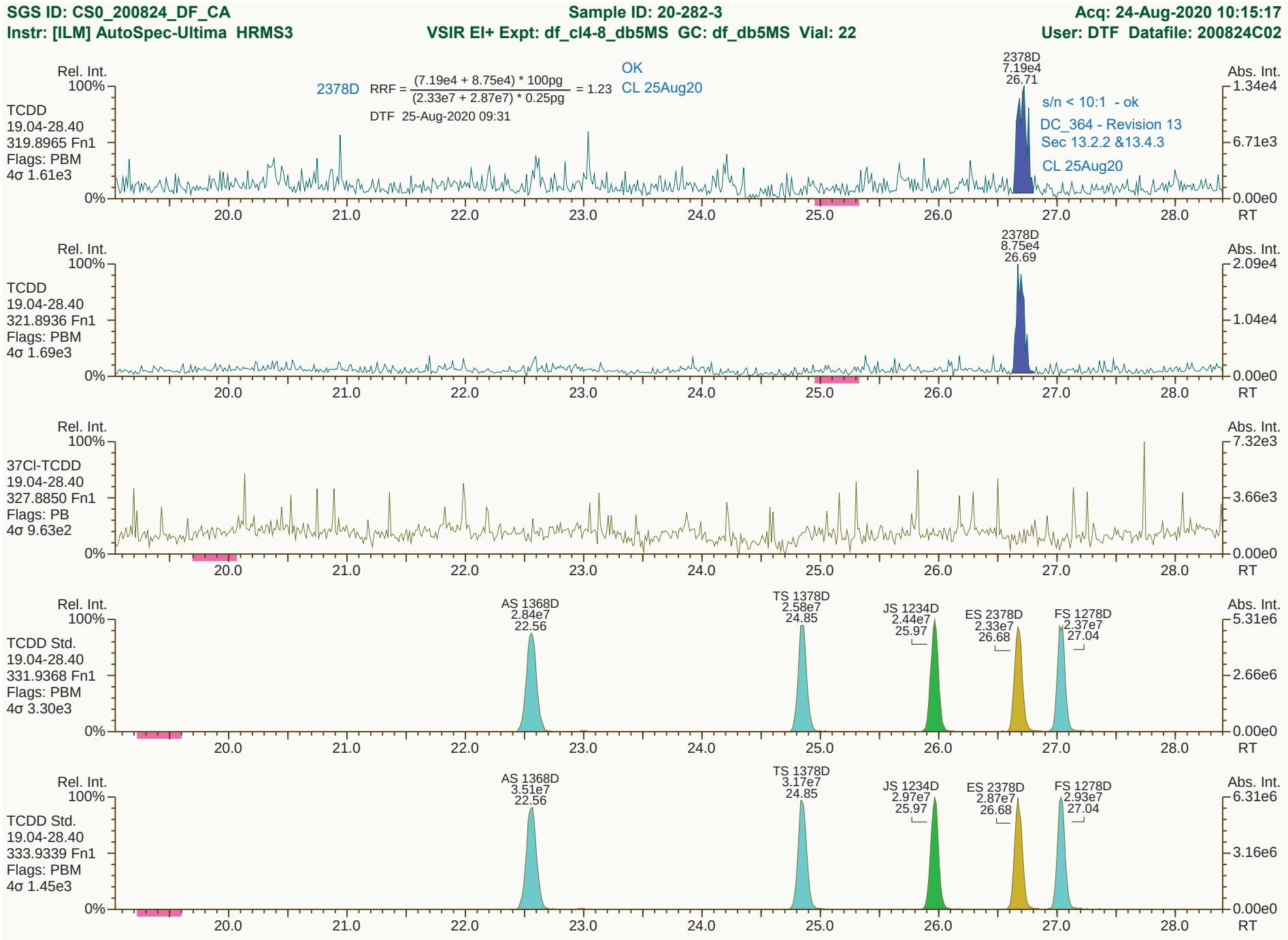
1234 TCDD 13C12
1234 TCDF 13C12
123467 HxCDD 13C12

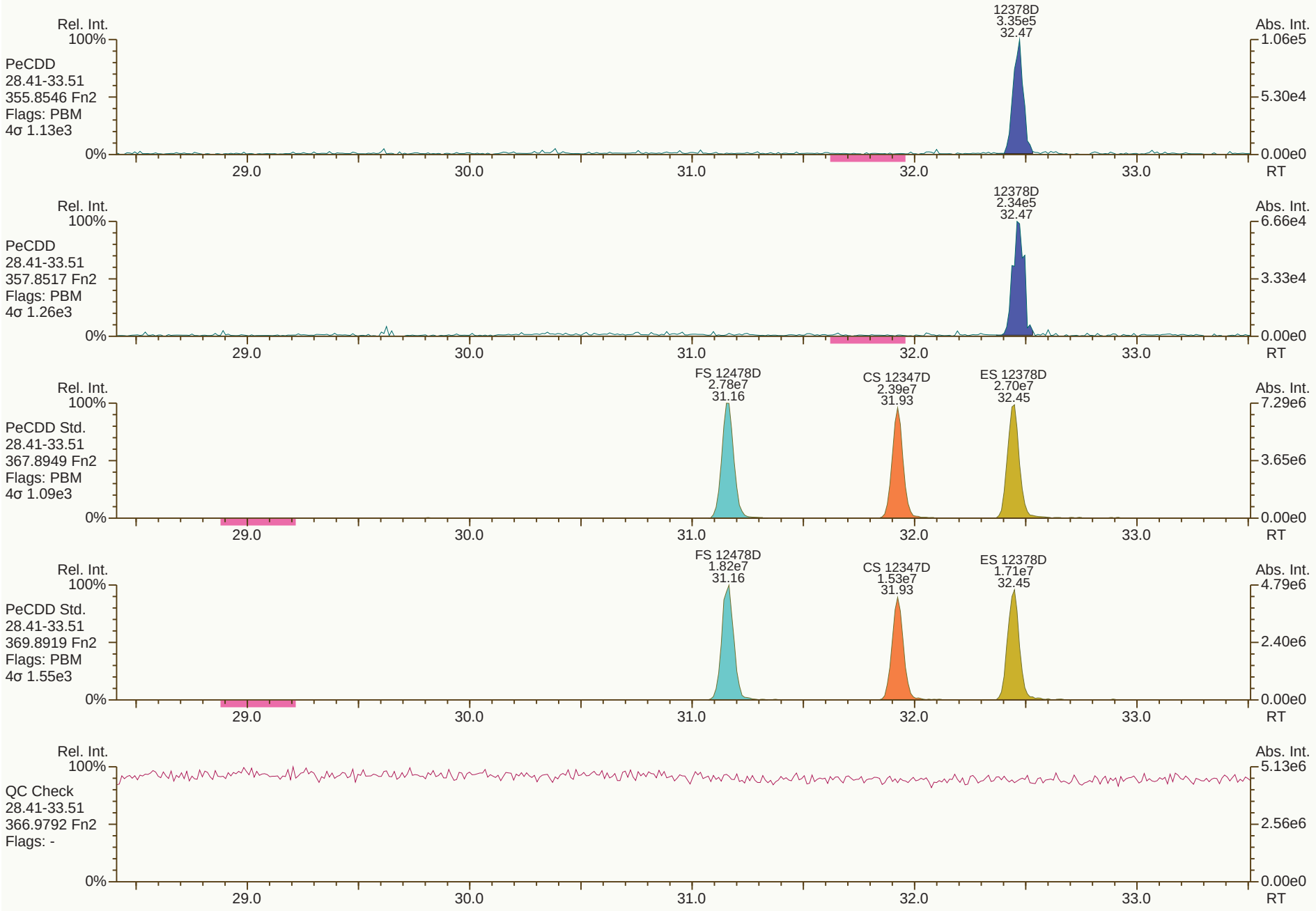
Dioxin/Furan QC Summary		Acq'd: 24 Aug 2020 10:15 DTF				ICAL: HRMS3_DF_10122018_24AUG2020	
Lab ID: CS0_200824_DF_CA		UTP: 25-Aug-2020 09:53:43 DTF				Checkcode: 692-786-FFP	
Sample ID: 20-282-3		Report: 25 Aug 2020 10:43 TF				Datafile: 200824C02	
Name	**RT**	**Response**	**RA**	**OK**	**Ref. RRFs**	**Calc. RRFs**	**Dev'n**
2378-TCDD	26.71	1.59E+05	0.82	Y	1.19	1.22	3%
12378-PeCDD	32.47	5.68E+05	1.43	Y	1.01	1.03	2%
123478-HxCDD	36.53	5.34E+05	1.29	Y	1.05	1.06	0%
123678-HxCDD	36.65	5.68E+05	1.39	Y	1.12	1.16	4%
123789-HxCDD	36.95	5.86E+05	1.42	Y	1.02	1.04	2%
1234678-HpCDD	40.06	4.50E+05	1.02	Y	1.00	1.00	0%
OCDD	42.74	6.43E+05	0.94	Y	1.08	1.06	-2%
2378-TCDF	25.73	2.26E+05	0.67	Y	1.06	1.14	7%
12378-PeCDF	30.92	8.43E+05	1.47	Y	0.98	0.99	1%
23478-PeCDF	32.09	7.29E+05	1.51	Y	0.97	0.89	-8%
123478-HxCDF	35.52	7.45E+05	1.31	Y	1.22	1.22	0%
123678-HxCDF	35.66	8.15E+05	1.18	Y	1.11	1.11	0%
234678-HxCDF	36.34	8.32E+05	1.23	Y	1.15	1.25	9%
123789-HxCDF	37.31	6.63E+05	1.22	Y	1.12	1.10	-2%
1234678-HpCDF	39.03	6.26E+05	1.04	Y	1.29	1.33	3%
1234789-HpCDF	40.47	5.32E+05	1.00	Y	1.27	1.25	-1%
OCDF	42.87	8.62E+05	0.99	Y	1.04	1.13	8%
ES 2378-TCDD	26.68	5.21E+07	0.81	Y	0.97	0.96	-1%
ES 12378-PeCDD	32.45	4.41E+07	1.58	Y	0.84	0.82	-3%
ES 123478-HxCDD	36.52	4.03E+07	1.27	Y	0.97	0.94	-4%
ES 123678-HxCDD	36.64	3.93E+07	1.25	Y	0.96	0.91	-5%
ES 123789-HxCDD	36.93	4.52E+07	1.21	Y	1.10	1.05	-5%
ES 1234678-HpCDD	40.05	3.60E+07	1.08	Y	0.93	0.84	-10%
ES OCDD	42.72	4.86E+07	0.89	Y	0.63	0.57	-10%
ES 2378-TCDF	25.71	7.96E+07	0.80	Y	0.97	0.94	-3%
ES 12378-PeCDF	30.91	6.84E+07	1.58	Y	0.78	0.81	4%
ES 23478-PeCDF	32.08	6.56E+07	1.57	Y	0.80	0.78	-3%
ES 123478-HxCDF	35.51	4.87E+07	0.53	Y	1.22	1.13	-7%
ES 123678-HxCDF	35.65	5.86E+07	0.54	Y	1.41	1.36	-3%
ES 234678-HxCDF	36.33	5.32E+07	0.53	Y	1.29	1.24	-4%
ES 123789-HxCDF	37.3	4.84E+07	0.53	Y	1.17	1.13	-4%
ES 1234678-HpCDF	39.02	3.75E+07	0.47	Y	0.97	0.87	-10%
ES 1234789-HpCDF	40.47	3.40E+07	0.48	Y	0.88	0.79	-10%
ES OCDF	42.86	6.09E+07	0.90	Y	0.81	0.71	-12%

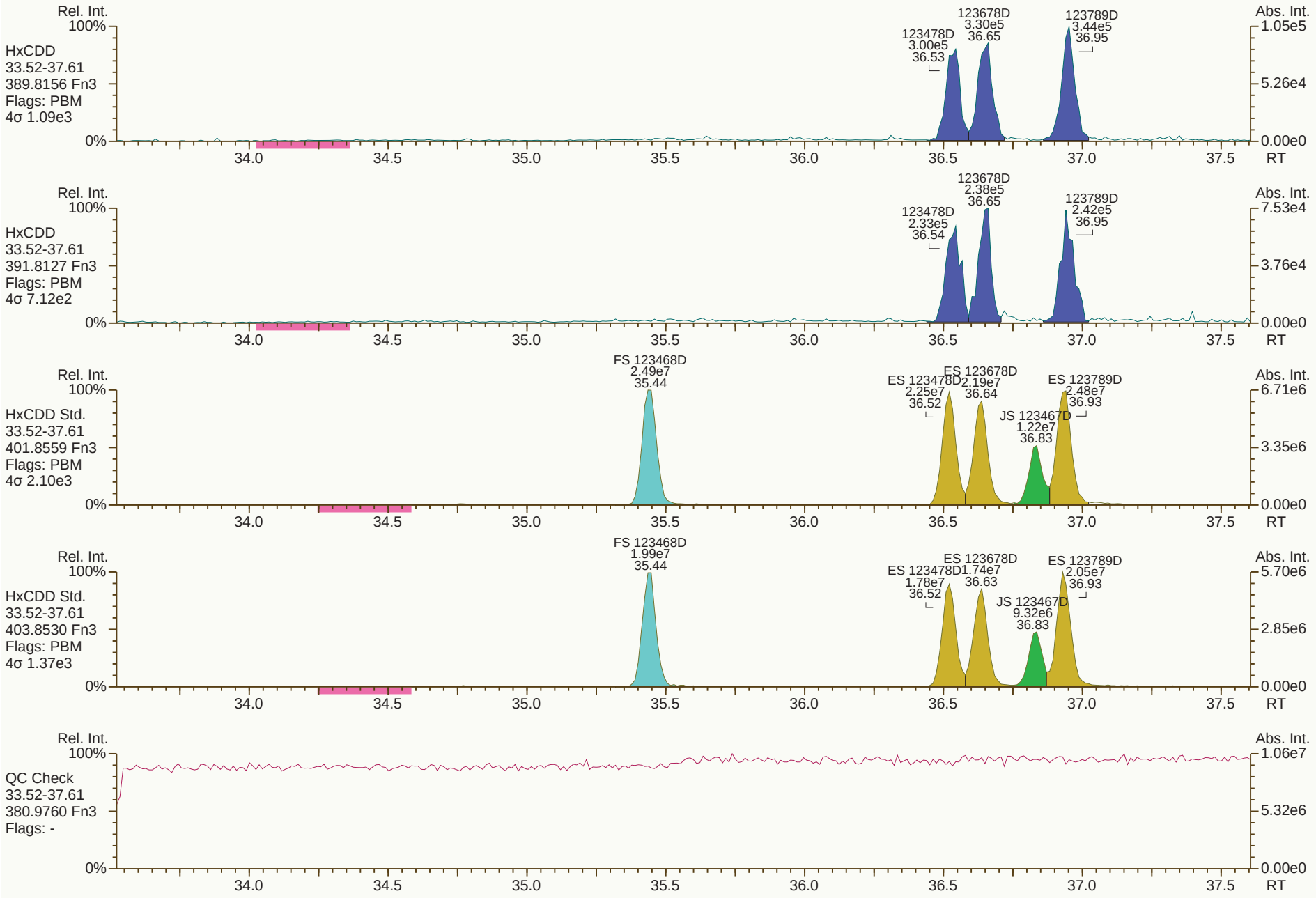
Dioxin/Furan QC Summary	Acq'd: 24 Aug 2020 10:15 DTF	ICAL: HRMS3_DF_10122018_24AUG2020
Lab ID: CS0_200824_DF_CA	UTP: 25-Aug-2020 09:53:43 DTF	Checkcode: 692-786-FFP
Sample ID: 20-282-3	Report: 25 Aug 2020 10:43 TF	Datafile: 200824C02

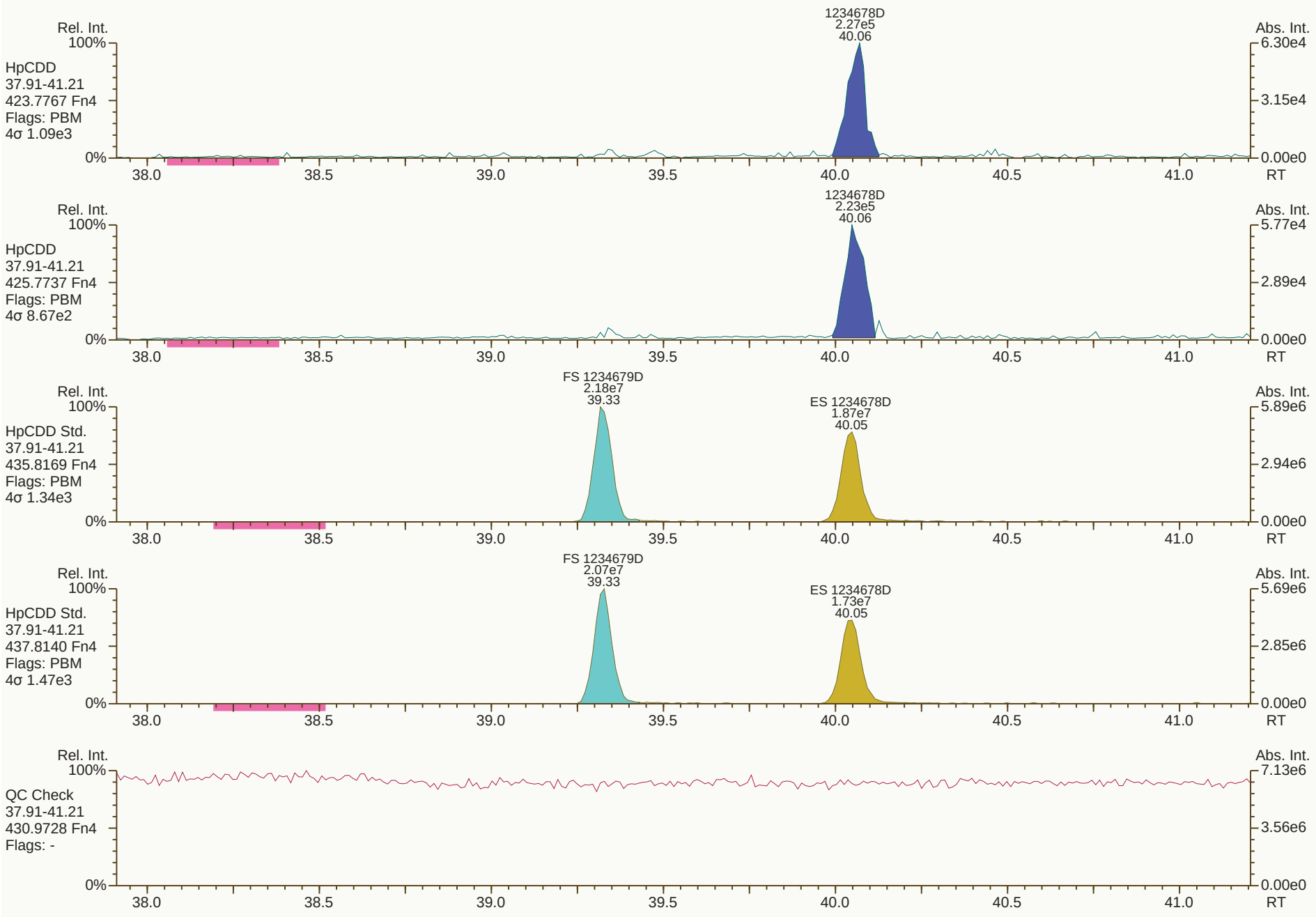
Name	RT	Response	RA	OK	Ref. RRFs	Calc. RRFs	Dev'n
JS 1234-TCDD	25.97	5.41E+07	0.82	Y	-	-	-
JS 1234-TCDF	24.20	8.44E+07	0.80	Y	-	-	-
JS 123467-HxCDD	36.83	2.15E+07	1.30	Y	-	-	-
CS 37Cl-2378-TCDD	NotFnd		n/a	-	1.14		
CS 12347-PeCDD	31.93	3.93E+07	1.56	Y	0.72	0.73	0%
CS 12346-PeCDF	30.35	7.10E+07	1.59	Y	0.77	0.84	9%
CS 123469-HxCDF	35.96	4.95E+07	0.53	Y	1.18	1.15	-2%
CS 1234689-HpCDF	39.46	3.79E+07	0.47	Y	0.96	0.88	-8%
SS 37Cl-2378-TCDD	NotFnd		n/a	-	1.19		
SS 12347-PeCDD	31.93	3.93E+07	1.56	Y	0.86	0.89	4%
SS 12346-PeCDF	30.35	7.10E+07	1.59	Y	1.00	1.04	4%
SS 123469-HxCDF	35.96	4.95E+07	0.53	Y	0.84	0.84	1%
SS 1234689-HpCDF	39.46	3.79E+07	0.47	Y	0.98	1.01	3%
AS 1368-TCDD	22.56	6.36E+07	0.81	Y	1.09	1.18	8%
AS 1368-TCDF	20.38	1.04E+08	0.80	Y	1.16	1.23	6%
FS 1278-TCDD	27.04	5.30E+07	0.81	Y	0.99	1.02	3%
FS 12478-PeCDD	31.16	4.60E+07	1.53	Y	0.97	1.04	7%
FS 123468-HxCDD	35.44	4.48E+07	1.25	Y	1.13	1.11	-2%
FS 1234679-HpCDD	39.33	4.25E+07	1.05	Y	1.12	1.18	5%
TS 1378-TCDD	24.85	5.75E+07	0.81	Y	1.10	1.10	0%
OCDD-a	NotFnd				0.07		
OCDF-a	NotFnd				0.06		

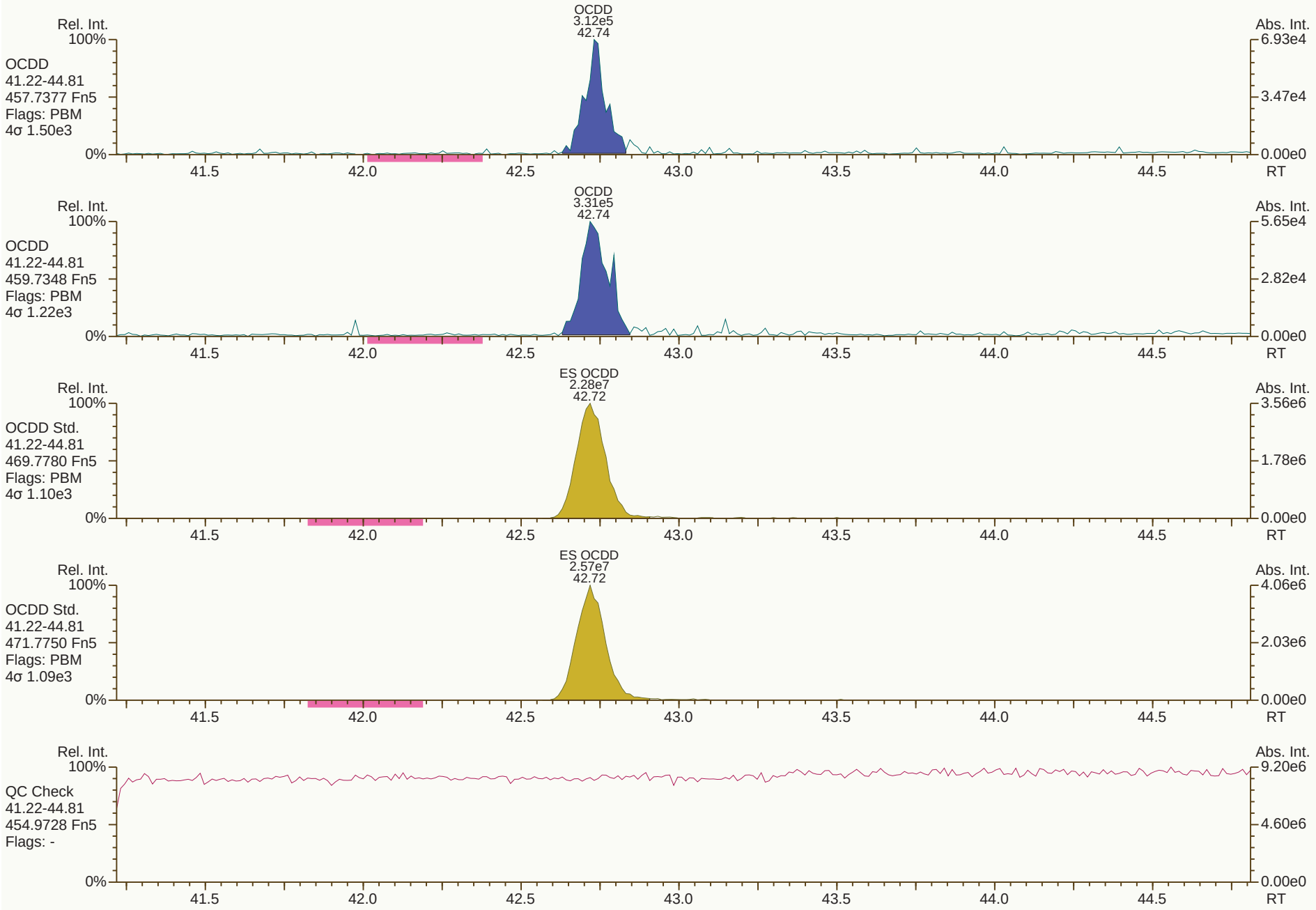

Rel. Int.
100%
QC Check
19.04-28.40
316.9824 Fn1
Flags: -
0%
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Abs. Int.
5.61e6
2.80e6
0.00e0
Rel. Int.
100%
QC Check
28.41-33.51
366.9792 Fn2
Flags: -
0%
29.0
30.0
31.0
32.0
33.0
RT
Abs. Int.
5.13e6
2.56e6
0.00e0
Rel. Int.
100%
QC Check
33.52-37.61
380.9760 Fn3
Flags: -
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Abs. Int.
1.06e7
5.32e6
0.00e0
Rel. Int.
100%
QC Check
37.91-41.21
430.9728 Fn4
Flags: -
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Abs. Int.
7.13e6
3.56e6
0.00e0
Rel. Int.
100%
QC Check
41.22-44.81
454.9728 Fn5
Flags: -
0%
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Abs. Int.
9.20e6
4.60e6
0.00e0


SGS ID: CS0_200824_DF_CA
Sample ID: 20-282-3
Acq: 24-Aug-2020 10:15:17
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 22
User: DTF Datafile: 200824C02
Rel. Int.
100%
TCDD
19.04-28.40
319.8965 Fn1
Flags: PBM
4σ 1.61e3
0%
2378D RRF = (7.19e4 + 8.75e4) * 100pg / (2.33e7 + 2.87e7) * 0.25pg = 1.23
OK
CL 25Aug20
DTF 25-Aug-2020 09:31
2378D
7.19e4
26.71
s/n < 10:1 - ok
DC_364 - Revision 13
Sec 13.2.2 &13.4.3
CL 25Aug20
Abs. Int.
1.34e4
6.71e3
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDD
19.04-28.40
321.8936 Fn1
Flags: PBM
4σ 1.69e3
0%
2378D
8.75e4
26.69
Abs. Int.
2.09e4
1.04e4
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
37Cl-TCDD
19.04-28.40
327.8850 Fn1
Flags: PB
4σ 9.63e2
0%
Abs. Int.
7.32e3
3.66e3
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.40
331.9368 Fn1
Flags: PBM
4σ 3.30e3
0%
AS 1368D
2.84e7
22.56
TS 1378D
2.58e7
24.85
JS 1234D
2.44e7
25.97
ES 2378D
2.33e7
26.68
FS 1278D
2.37e7
27.04
Abs. Int.
5.31e6
2.66e6
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.40
333.9339 Fn1
Flags: PBM
4σ 1.45e3
0%
AS 1368D
3.51e7
22.56
TS 1378D
3.17e7
24.85
JS 1234D
2.97e7
25.97
ES 2378D
2.87e7
26.68
FS 1278D
2.93e7
27.04
Abs. Int.
6.31e6
3.16e6
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Results: T:\UltraTracePro\ICAL results\HRMS3\HRMS3_DF_10122018_24AUG2020\Resources\CS0_200824_DF_CA.utp_res, saved 25-Aug-2020 09:53 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 5043, 5830, 2017 scc: 692-786
Revised: 24-Aug-2020 11:19 (DTF) Printed: 25-Aug-2020 10:45 Page 2 of 12


Rel. Int.
100%
PeCDD
28.41-33.51
355.8546 Fn2
Flags: PBM
4σ 1.13e3
0%
12378D
3.35e5
32.47
Abs. Int.
1.06e5
5.30e4
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD
28.41-33.51
357.8517 Fn2
Flags: PBM
4σ 1.26e3
0%
12378D
2.34e5
32.47
Abs. Int.
6.66e4
3.33e4
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.41-33.51
367.8949 Fn2
Flags: PBM
4σ 1.09e3
0%
FS 12478D
2.78e7
31.16
CS 12347D
2.39e7
31.93
ES 12378D
2.70e7
32.45
Abs. Int.
7.29e6
3.65e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.41-33.51
369.8919 Fn2
Flags: PBM
4σ 1.55e3
0%
FS 12478D
1.82e7
31.16
CS 12347D
1.53e7
31.93
ES 12378D
1.71e7
32.45
Abs. Int.
4.79e6
2.40e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
QC Check
28.41-33.51
366.9792 Fn2
Flags: -
0%
Abs. Int.
5.13e6
2.56e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT

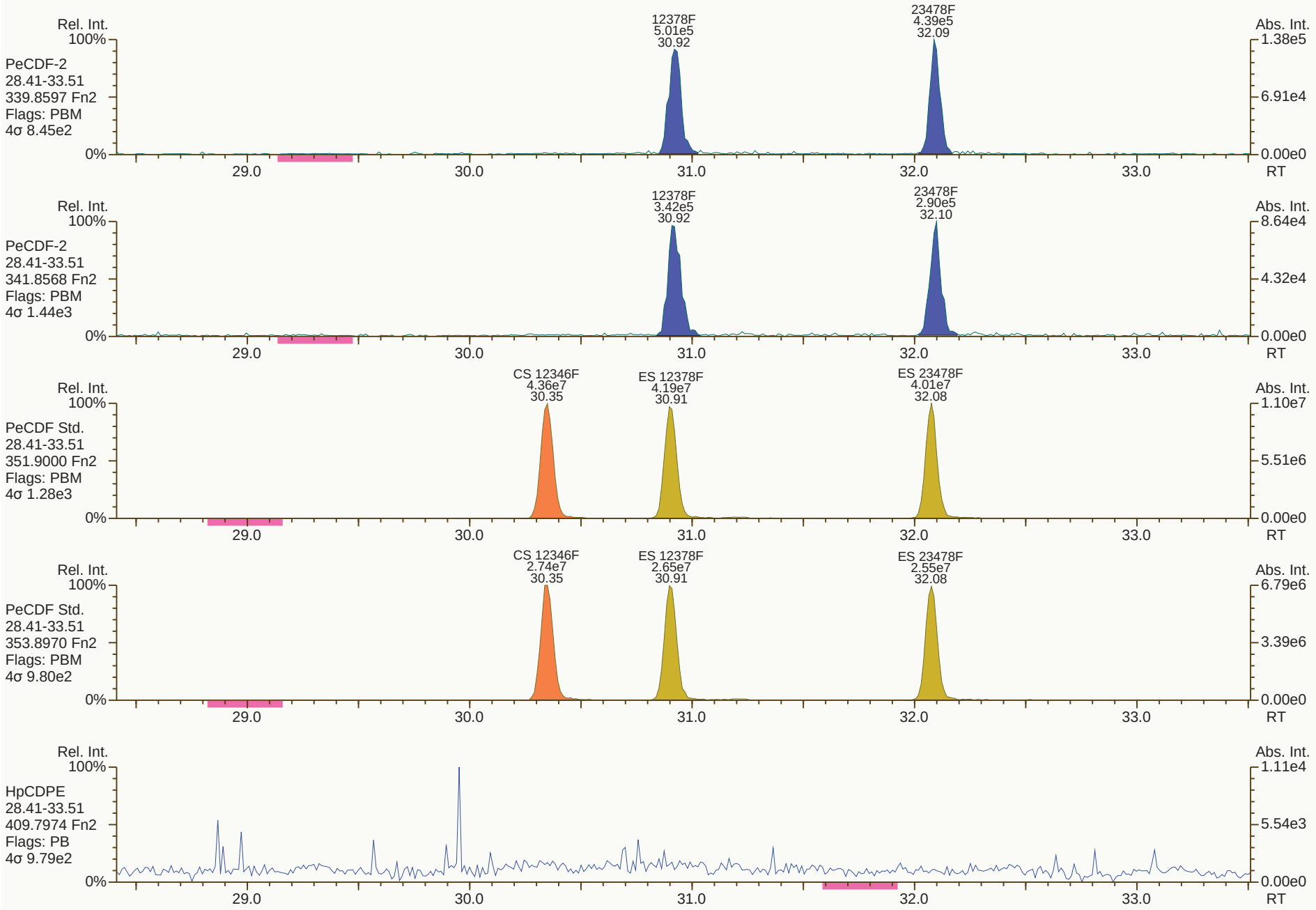

Rel. Int.
100%
HxCDD
33.52-37.61
389.8156 Fn3
Flags: PBM
4σ 1.09e3
123478D
3.00e5
36.53
123678D
3.30e5
36.65
123789D
3.44e5
36.95
Abs. Int.
1.05e5
5.26e4
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD
33.52-37.61
391.8127 Fn3
Flags: PBM
4σ 7.12e2
123478D
2.33e5
36.54
123678D
2.38e5
36.65
123789D
2.42e5
36.95
Abs. Int.
7.53e4
3.76e4
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.52-37.61
401.8559 Fn3
Flags: PBM
4σ 2.10e3
FS 123468D
2.49e7
35.44
ES 123478D
2.25e7
36.52
ES 123678D
2.19e7
36.64
JS 123467D
1.22e7
36.83
ES 123789D
2.48e7
36.93
Abs. Int.
6.71e6
3.35e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.52-37.61
403.8530 Fn3
Flags: PBM
4σ 1.37e3
FS 123468D
1.99e7
35.44
ES 123478D
1.78e7
36.52
ES 123678D
1.74e7
36.63
JS 123467D
9.32e6
36.83
ES 123789D
2.05e7
36.93
Abs. Int.
5.70e6
2.85e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
QC Check
33.52-37.61
380.9760 Fn3
Flags: -
Abs. Int.
1.06e7
5.32e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT

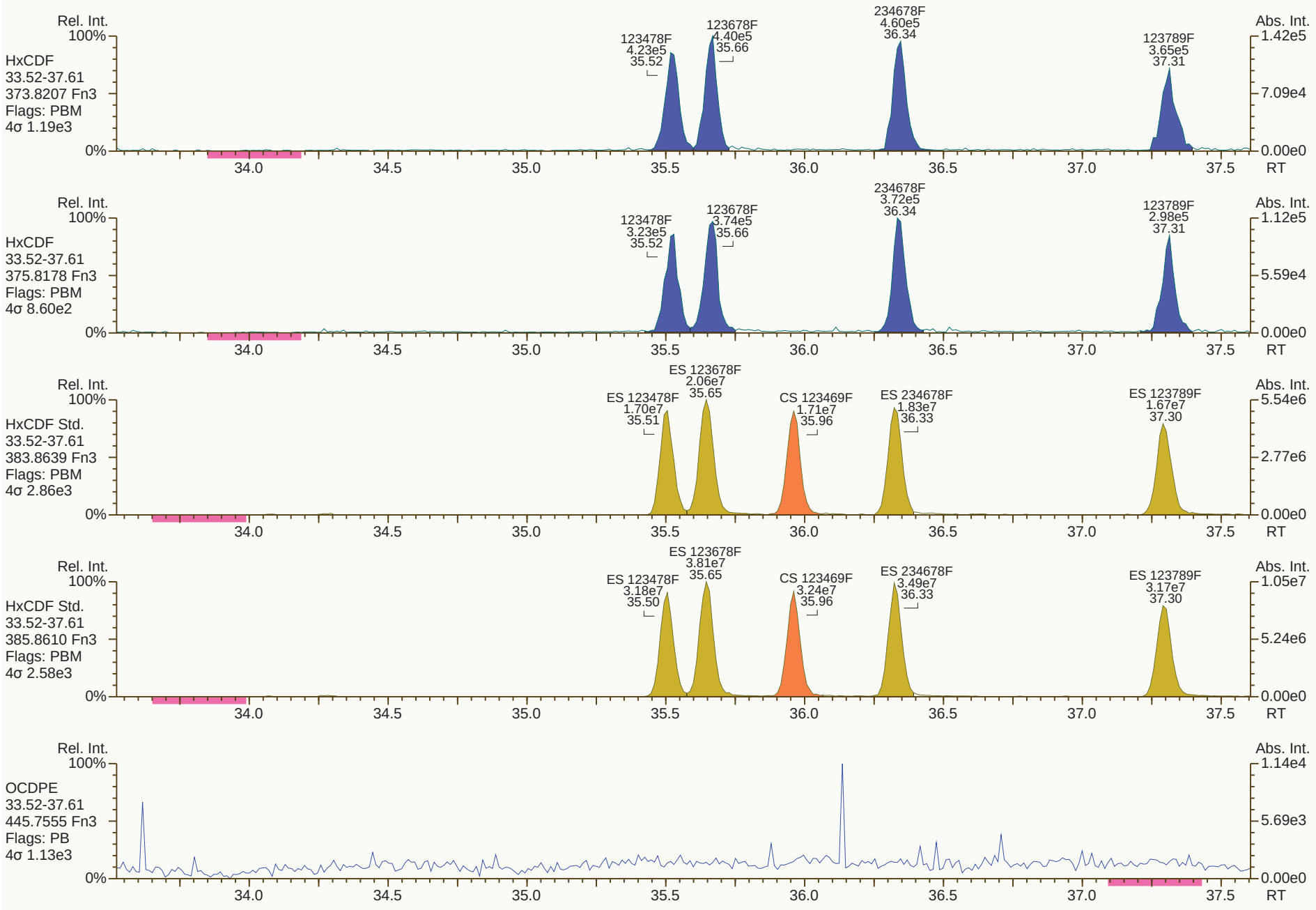

Rel. Int.
100%
HpCDD
37.91-41.21
423.7767 Fn4
Flags: PBM
4σ 1.09e3
1234678D
2.27e5
40.06
Abs. Int.
6.30e4
3.15e4
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD
37.91-41.21
425.7737 Fn4
Flags: PBM
4σ 8.67e2
1234678D
2.23e5
40.06
Abs. Int.
5.77e4
2.89e4
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.91-41.21
435.8169 Fn4
Flags: PBM
4σ 1.34e3
FS 1234679D
2.18e7
39.33
ES 1234678D
1.87e7
40.05
Abs. Int.
5.89e6
2.94e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.91-41.21
437.8140 Fn4
Flags: PBM
4σ 1.47e3
FS 1234679D
2.07e7
39.33
ES 1234678D
1.73e7
40.05
Abs. Int.
5.69e6
2.85e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
QC Check
37.91-41.21
430.9728 Fn4
Flags: -
Abs. Int.
7.13e6
3.56e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT

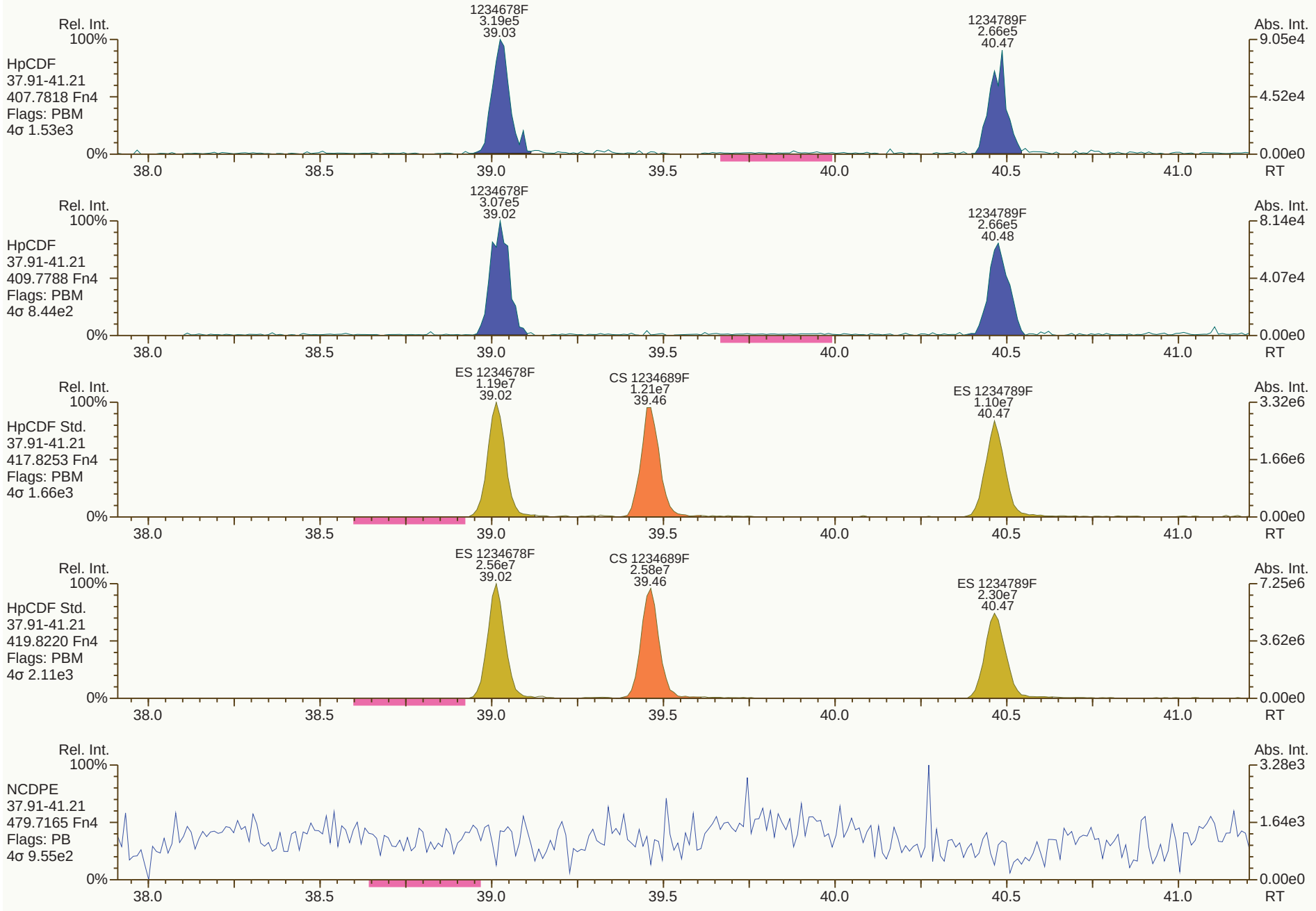

OCDD
3.12e5
42.74
Rel. Int.
100%
OCDD
41.22-44.81
457.7377 Fn5
Flags: PBM
4σ 1.50e3
0%
Abs. Int.
6.93e4
3.47e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
OCDD
3.31e5
42.74
OCDD
41.22-44.81
459.7348 Fn5
Flags: PBM
4σ 1.22e3
5.65e4
2.82e4
ES OCDD
2.28e7
42.72
OCDD Std.
41.22-44.81
469.7780 Fn5
Flags: PBM
4σ 1.10e3
3.56e6
1.78e6
ES OCDD
2.57e7
42.72
OCDD Std.
41.22-44.81
471.7750 Fn5
Flags: PBM
4σ 1.09e3
4.06e6
2.03e6
QC Check
41.22-44.81
454.9728 Fn5
Flags: -
9.20e6
4.60e6


Rel. Int.
100%
TCDF
19.04-28.40
303.9016 Fn1
Flags: PBM
4σ 7.38e2
0%
2378F
9.09e4
25.73
Abs. Int.
2.57e4
1.28e4
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDF
19.04-28.40
305.8987 Fn1
Flags: PBM
4σ 1.40e3
0%
2378F
1.35e5
25.73
Abs. Int.
3.60e4
1.80e4
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDF Std.
19.04-28.40
315.9419 Fn1
Flags: PBM
4σ 7.69e3
0%
AS 1368F
4.60e7
20.38
JS 1234F
3.74e7
24.20
ES 2378F
3.53e7
25.71
Abs. Int.
8.27e6
4.13e6
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDF Std.
19.04-28.40
317.9389 Fn1
Flags: PBM
4σ 5.75e3
0%
AS 1368F
5.77e7
20.38
JS 1234F
4.70e7
24.20
ES 2378F
4.42e7
25.71
Abs. Int.
1.09e7
5.45e6
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
HxCDPE
19.04-28.40
375.8364 Fn1
Flags: PB
4σ 1.04e3
0%
Abs. Int.
6.85e3
3.43e3
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT


Rel. Int.
100%
0%
Abs. Int.
9.36e3
4.68e3
0.00e0
PeCDF-1
19.04-28.40
339.8597 Fn1
Flags: PB
4σ 1.66e3
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
0%
Abs. Int.
7.09e3
3.54e3
0.00e0
PeCDF-1
19.04-28.40
341.8568 Fn1
Flags: PB
4σ 1.01e3
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
0%
Abs. Int.
5.61e6
2.80e6
0.00e0
QC Check
19.04-28.40
316.9824 Fn1
Flags: -
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT


Rel. Int.
100%
PeCDF-2
28.41-33.51
339.8597 Fn2
Flags: PBM
4σ 8.45e2
0%
12378F
5.01e5
30.92
23478F
4.39e5
32.09
Abs. Int.
1.38e5
6.91e4
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF-2
28.41-33.51
341.8568 Fn2
Flags: PBM
4σ 1.44e3
0%
12378F
3.42e5
30.92
23478F
2.90e5
32.10
Abs. Int.
8.64e4
4.32e4
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.41-33.51
351.9000 Fn2
Flags: PBM
4σ 1.28e3
0%
CS 12346F
4.36e7
30.35
ES 12378F
4.19e7
30.91
ES 23478F
4.01e7
32.08
Abs. Int.
1.10e7
5.51e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.41-33.51
353.8970 Fn2
Flags: PBM
4σ 9.80e2
0%
CS 12346F
2.74e7
30.35
ES 12378F
2.65e7
30.91
ES 23478F
2.55e7
32.08
Abs. Int.
6.79e6
3.39e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
HpCDPE
28.41-33.51
409.7974 Fn2
Flags: PB
4σ 9.79e2
0%
Abs. Int.
1.11e4
5.54e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT


Rel. Int.
100%
HxCDF
33.52-37.61
373.8207 Fn3
Flags: PBM
4σ 1.19e3
0%
123478F
4.23e5
35.52
123678F
4.40e5
35.66
234678F
4.60e5
36.34
123789F
3.65e5
37.31
Abs. Int.
1.42e5
7.09e4
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF
33.52-37.61
375.8178 Fn3
Flags: PBM
4σ 8.60e2
0%
123478F
3.23e5
35.52
123678F
3.74e5
35.66
234678F
3.72e5
36.34
123789F
2.98e5
37.31
Abs. Int.
1.12e5
5.59e4
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF Std.
33.52-37.61
383.8639 Fn3
Flags: PBM
4σ 2.86e3
0%
ES 123478F
1.70e7
35.51
ES 123678F
2.06e7
35.65
CS 123469F
1.71e7
35.96
ES 234678F
1.83e7
36.33
ES 123789F
1.67e7
37.30
Abs. Int.
5.54e6
2.77e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF Std.
33.52-37.61
385.8610 Fn3
Flags: PBM
4σ 2.58e3
0%
ES 123478F
3.18e7
35.50
ES 123678F
3.81e7
35.65
CS 123469F
3.24e7
35.96
ES 234678F
3.49e7
36.33
ES 123789F
3.17e7
37.30
Abs. Int.
1.05e7
5.24e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
OCDPE
33.52-37.61
445.7555 Fn3
Flags: PB
4σ 1.13e3
0%
Abs. Int.
1.14e4
5.69e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT


Rel. Int.
100%
HpCDF
37.91-41.21
407.7818 Fn4
Flags: PBM
4σ 1.53e3
1234678F
3.19e5
39.03
1234789F
2.66e5
40.47
Abs. Int.
9.05e4
4.52e4
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF
37.91-41.21
409.7788 Fn4
Flags: PBM
4σ 8.44e2
1234678F
3.07e5
39.02
1234789F
2.66e5
40.48
Abs. Int.
8.14e4
4.07e4
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.91-41.21
417.8253 Fn4
Flags: PBM
4σ 1.66e3
ES 1234678F
1.19e7
39.02
CS 1234689F
1.21e7
39.46
ES 1234789F
1.10e7
40.47
Abs. Int.
3.32e6
1.66e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.91-41.21
419.8220 Fn4
Flags: PBM
4σ 2.11e3
ES 1234678F
2.56e7
39.02
CS 1234689F
2.58e7
39.46
ES 1234789F
2.30e7
40.47
Abs. Int.
7.25e6
3.62e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
NCDPE
37.91-41.21
479.7165 Fn4
Flags: PB
4σ 9.55e2
Abs. Int.
3.28e3
1.64e3
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT


OCDF
4.29e5
42.87
Rel. Int.
100%
OCDF
41.22-44.81
441.7428 Fn5
Flags: PBM
4σ 1.61e3
0%
Abs. Int.
8.95e4
4.48e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
OCDF
4.33e5
42.87
Rel. Int.
100%
OCDF
41.22-44.81
443.7398 Fn5
Flags: PBM
4σ 1.21e3
0%
Abs. Int.
7.60e4
3.80e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDF
2.88e7
42.86
Rel. Int.
100%
OCDF Std.
41.22-44.81
453.7830 Fn5
Flags: PBM
4σ 1.32e3
0%
Abs. Int.
4.44e6
2.22e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
RRF (ES OCDF) = (2.88e7 + 3.21e7) * 50 pg/uL = 0.707
(1.22e7 + 9.32e6) * 200 pg/uL
CL 25Aug20
ES OCDF
3.21e7
42.86
Rel. Int.
100%
OCDF Std.
41.22-44.81
455.7801 Fn5
Flags: PBM
4σ 1.21e3
0%
Abs. Int.
4.91e6
2.45e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
DCDPE
41.22-44.81
513.6775 Fn5
Flags: PB
4σ 9.81e2
0%
Abs. Int.
4.72e3
2.36e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT

Dioxin/Furan QC Summary		Acq'd: 24 Aug 2020 11:22 DTF				ICAL: HRMS3_DF_10122018_24AUG2020	
Lab ID: CS1_200824_DF_CA		UTP: 25-Aug-2020 09:53:44 DTF				Checkcode: 646-118-XRC	
Sample ID: 20-282-2		Report: 25 Aug 2020 10:43 TF				Datafile: 200824C03	
Name	**RT**	**Response**	**RA**	**OK**	**Ref. RRFs**	**Calc. RRFs**	**Dev'n**
2378-TCDD	26.69	3.01E+05	0.76	Y	1.19	1.22	3%
12378-PeCDD	32.46	1.10E+06	1.72	Y	1.01	1.03	2%
123478-HxCDD	36.52	9.06E+05	1.15	Y	1.05	1.05	0%
123678-HxCDD	36.64	9.32E+05	1.25	Y	1.12	1.10	-2%
123789-HxCDD	36.94	1.03E+06	1.27	Y	1.02	1.07	5%
1234678-HpCDD	40.05	8.78E+05	0.99	Y	1.00	1.01	1%
OCDD	42.75	1.26E+06	0.93	Y	1.08	1.10	2%
2378-TCDF	25.72	4.41E+05	0.88	Y	1.06	1.10	3%
12378-PeCDF	30.91	1.47E+06	1.52	Y	0.98	0.96	-2%
23478-PeCDF	32.09	1.54E+06	1.44	Y	0.97	0.98	1%
123478-HxCDF	35.51	1.36E+06	1.20	Y	1.22	1.22	0%
123678-HxCDF	35.66	1.36E+06	1.41	Y	1.11	1.07	-3%
234678-HxCDF	36.34	1.33E+06	1.16	Y	1.15	1.15	0%
123789-HxCDF	37.30	1.14E+06	1.27	Y	1.12	1.11	-1%
1234678-HpCDF	39.01	1.16E+06	1.13	Y	1.29	1.28	-1%
1234789-HpCDF	40.47	1.10E+06	1.05	Y	1.27	1.34	6%
OCDF	42.88	1.45E+06	1.02	Y	1.04	1.02	-3%
ES 2378-TCDD	26.67	4.93E+07	0.78	Y	0.97	0.92	-5%
ES 12378-PeCDD	32.44	4.25E+07	1.59	Y	0.84	0.79	-6%
ES 123478-HxCDD	36.51	3.44E+07	1.26	Y	0.97	0.93	-5%
ES 123678-HxCDD	36.63	3.40E+07	1.27	Y	0.96	0.92	-5%
ES 123789-HxCDD	36.92	3.87E+07	1.19	Y	1.10	1.04	-6%
ES 1234678-HpCDD	40.04	3.47E+07	1.06	Y	0.93	0.93	1%
ES OCDD	42.73	4.60E+07	0.88	Y	0.63	0.62	-2%
ES 2378-TCDF	25.7	8.05E+07	0.80	Y	0.97	0.95	-2%
ES 12378-PeCDF	30.9	6.11E+07	1.61	Y	0.78	0.72	-7%
ES 23478-PeCDF	32.07	6.29E+07	1.59	Y	0.80	0.74	-8%
ES 123478-HxCDF	35.5	4.46E+07	0.52	Y	1.22	1.20	-1%
ES 123678-HxCDF	35.64	5.06E+07	0.54	Y	1.41	1.36	-3%
ES 234678-HxCDF	36.32	4.62E+07	0.53	Y	1.29	1.25	-3%
ES 123789-HxCDF	37.28	4.12E+07	0.52	Y	1.17	1.11	-5%
ES 1234678-HpCDF	39	3.64E+07	0.47	Y	0.97	0.98	1%
ES 1234789-HpCDF	40.46	3.28E+07	0.46	Y	0.88	0.88	0%
ES OCDF	42.87	5.72E+07	0.89	Y	0.81	0.77	-4%

Dioxin/Furan QC Summary		Acq'd: 24 Aug 2020 11:22 DTF				ICAL: HRMS3_DF_10122018_24AUG2020	
Lab ID: CS1_200824_DF_CA		UTP: 25-Aug-2020 09:53:44 DTF				Checkcode: 646-118-XRC	
Sample ID: 20-282-2		Report: 25 Aug 2020 10:43 TF				Datafile: 200824C03	
Name	**RT**	**Response**	**RA**	**OK**	**Ref. RRFs**	**Calc. RRFs**	**Dev'n**
JS 1234-TCDD	25.96	5.38E+07	0.83	Y	-	-	-
JS 1234-TCDF	24.18	8.47E+07	0.78	Y	-	-	-
JS 123467-HxCDD	36.82	1.86E+07	1.32	Y	-	-	-
CS 37Cl-2378-TCDD	26.69	3.42E+05	n/a	-	1.14	1.27	11%
CS 12347-PeCDD	31.92	3.69E+07	1.63	Y	0.72	0.69	-5%
CS 12346-PeCDF	30.34	6.34E+07	1.60	Y	0.77	0.75	-3%
CS 123469-HxCDF	35.95	4.44E+07	0.52	Y	1.18	1.20	1%
CS 1234689-HpCDF	39.45	3.65E+07	0.47	Y	0.96	0.98	3%
SS 37Cl-2378-TCDD	26.69	3.42E+05	n/a	-	1.19	1.38	16%
SS 12347-PeCDD	31.92	3.69E+07	1.63	Y	0.86	0.87	1%
SS 12346-PeCDF	30.34	6.34E+07	1.60	Y	1.00	1.04	4%
SS 123469-HxCDF	35.95	4.44E+07	0.52	Y	0.84	0.88	5%
SS 1234689-HpCDF	39.45	3.65E+07	0.47	Y	0.98	1.00	2%
AS 1368-TCDD	22.54	5.80E+07	0.81	Y	1.09	1.08	-1%
AS 1368-TCDF	20.36	9.75E+07	0.80	Y	1.16	1.15	-1%
FS 1278-TCDD	27.03	4.95E+07	0.80	Y	0.99	1.00	1%
FS 12478-PeCDD	31.15	4.37E+07	1.55	Y	0.97	1.03	6%
FS 123468-HxCDD	35.44	4.21E+07	1.25	Y	1.13	1.22	8%
FS 1234679-HpCDD	39.31	3.97E+07	1.04	Y	1.12	1.14	2%
TS 1378-TCDD	24.84	5.67E+07	0.80	Y	1.10	1.15	5%
OCDD-a	NotFnd				0.07		
OCDF-a	NotFnd				0.06		

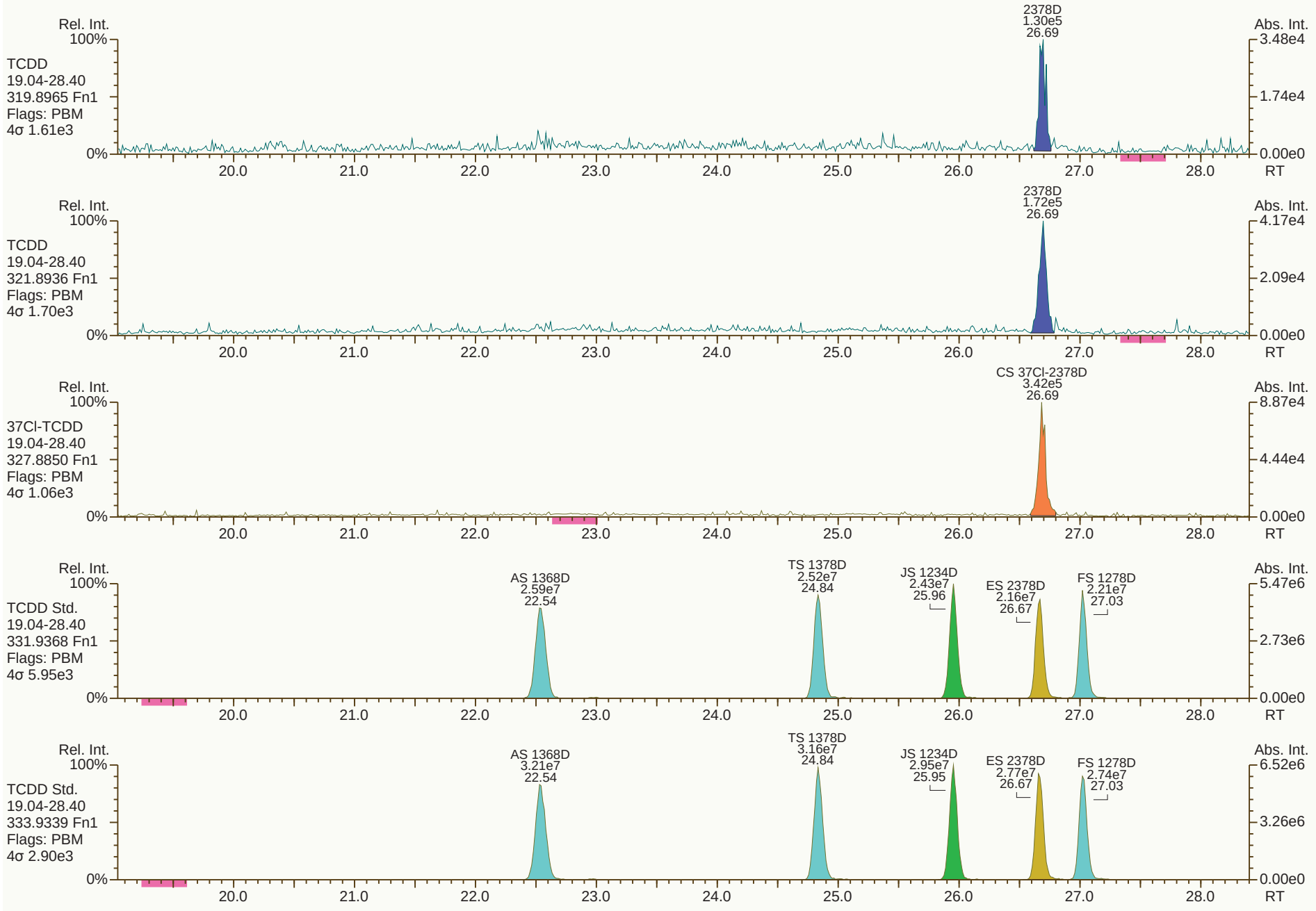
SGS ID: CS1_200824_DF_CA | **Sample ID: 20-282-2** | **Acq: 24-Aug-2020 11:22:15**

Instr: [ILM] AutoSpec-Ultima HRMS3 | **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 23** | **User: DTF Datafile: 200824C03**

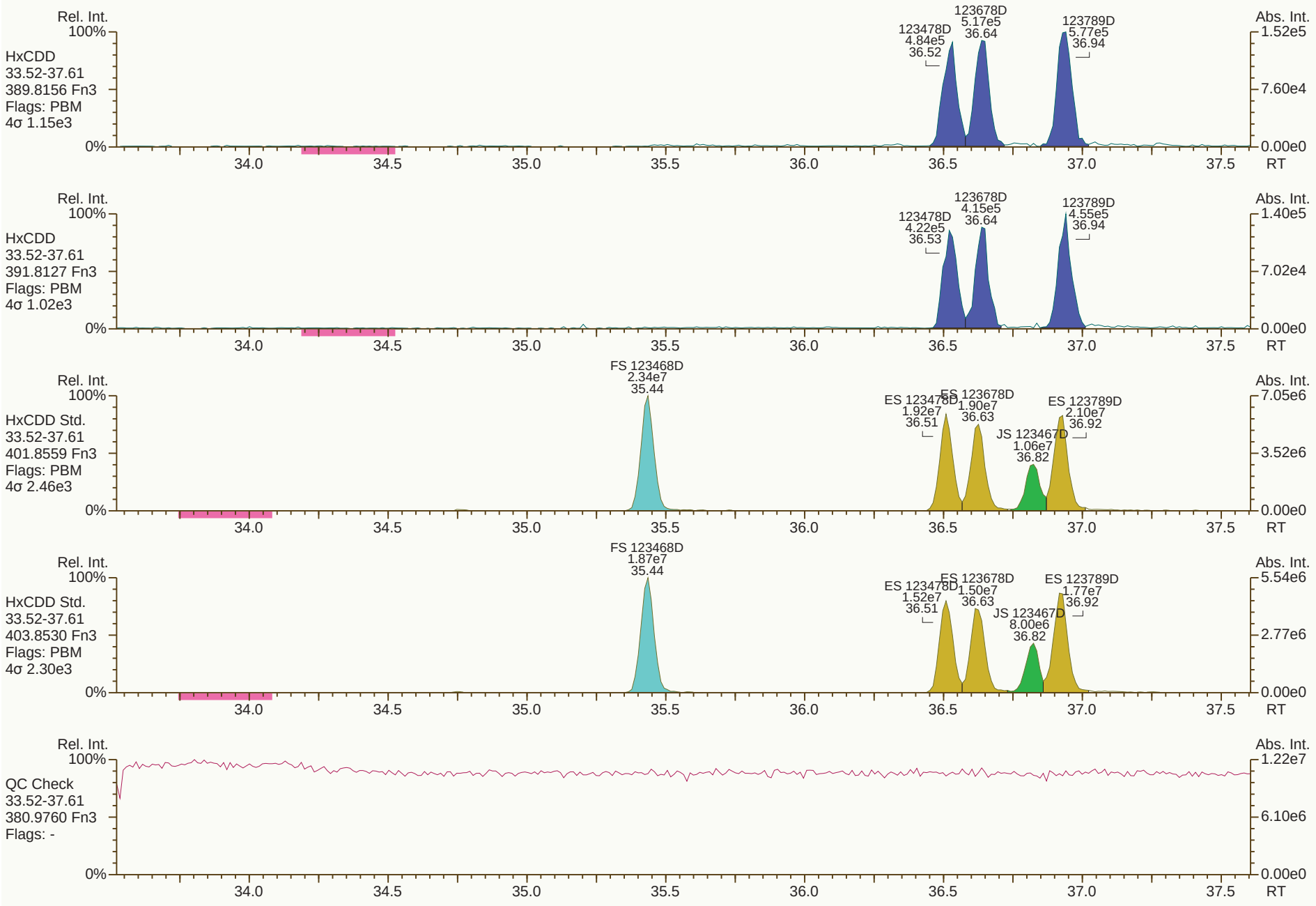


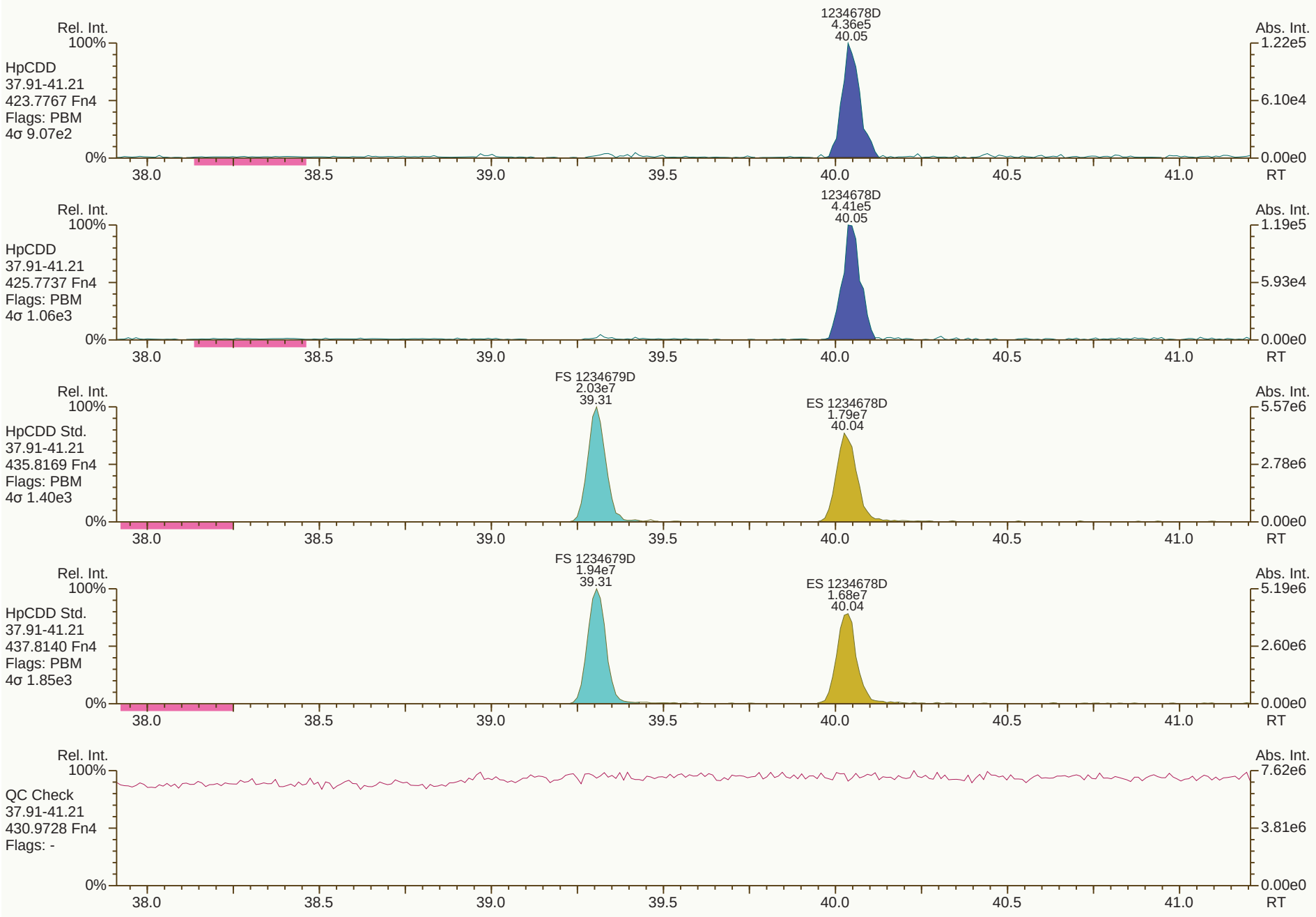
Results: T:\UltraTracePro\ICAL results\HRMS3\HRMS3_DF_10122018_24AUG2020\Resources\CS1_200824_DF_CA.utp_res, saved 25-Aug-2020 09:53 (DTF) *Peak annotation: Areas, Centroids*

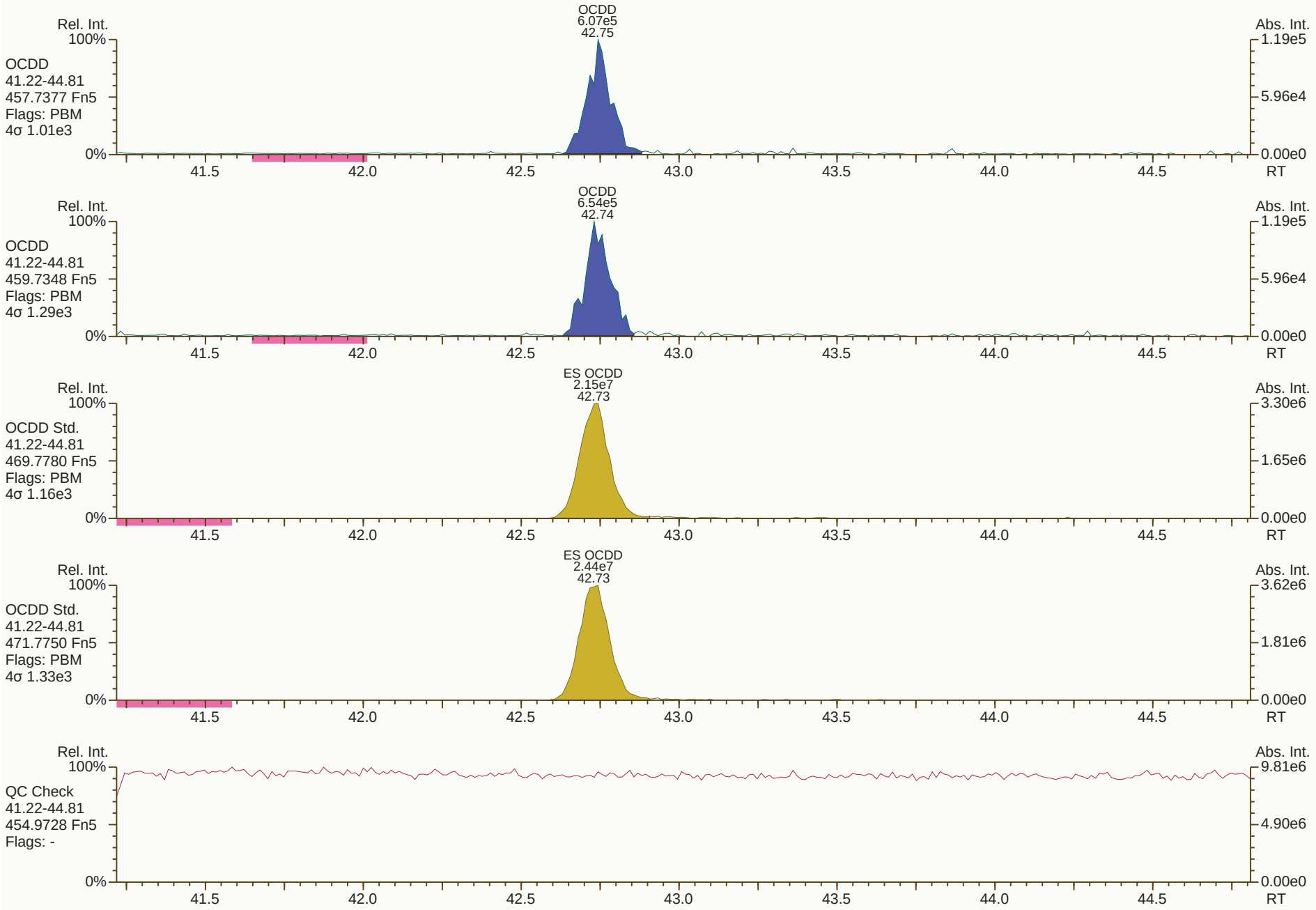
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 scc: 646-118 *PKD: n/a Printed: 25-Aug-2020 10:45 Page 1 of 12*

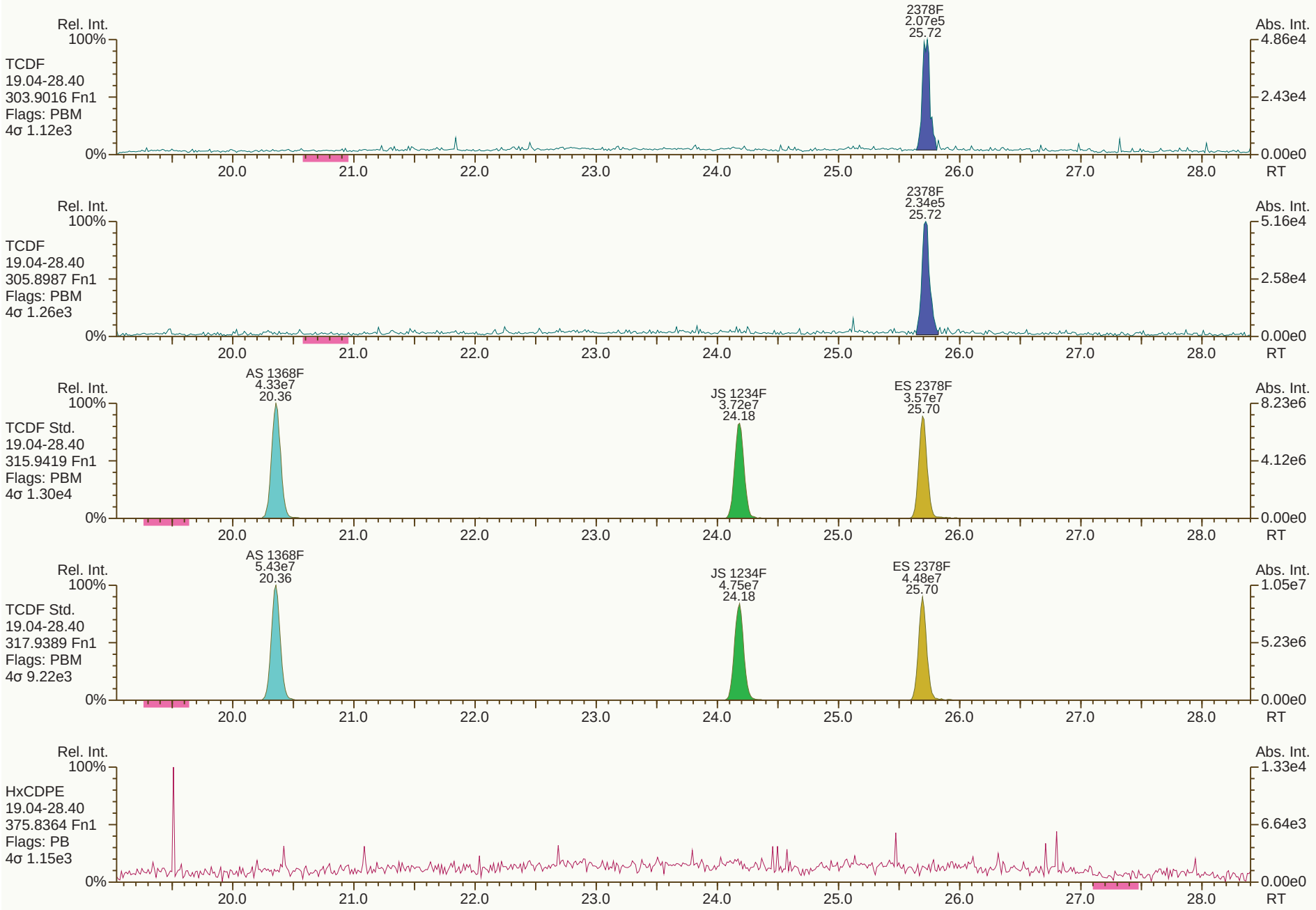

Rel. Int.
100%
TCDD
19.04-28.40
319.8965 Fn1
Flags: PBM
4σ 1.61e3
0%
2378D
1.30e5
26.69
Abs. Int.
3.48e4
1.74e4
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDD
19.04-28.40
321.8936 Fn1
Flags: PBM
4σ 1.70e3
0%
2378D
1.72e5
26.69
Abs. Int.
4.17e4
2.09e4
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
37Cl-TCDD
19.04-28.40
327.8850 Fn1
Flags: PBM
4σ 1.06e3
0%
CS 37Cl-2378D
3.42e5
26.69
Abs. Int.
8.87e4
4.44e4
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.40
331.9368 Fn1
Flags: PBM
4σ 5.95e3
0%
AS 1368D
2.59e7
22.54
TS 1378D
2.52e7
24.84
JS 1234D
2.43e7
25.96
ES 2378D
2.16e7
26.67
FS 1278D
2.21e7
27.03
Abs. Int.
5.47e6
2.73e6
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.40
333.9339 Fn1
Flags: PBM
4σ 2.90e3
0%
AS 1368D
3.21e7
22.54
TS 1378D
3.16e7
24.84
JS 1234D
2.95e7
25.95
ES 2378D
2.77e7
26.67
FS 1278D
2.74e7
27.03
Abs. Int.
6.52e6
3.26e6
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT


Rel. Int.
100%
PeCDD
28.41-33.51
355.8546 Fn2
Flags: PBM
4σ 1.43e3
0%
12378D
6.93e5
32.46
Abs. Int.
2.02e5
1.01e5
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
PeCDD
28.41-33.51
357.8517 Fn2
Flags: PBM
4σ 1.37e3
12378D
4.02e5
32.46
1.20e5
5.98e4
PeCDD Std.
28.41-33.51
367.8949 Fn2
Flags: PBM
4σ 1.98e3
RRF(ES12378D) = (2.61e7 + 1.64e7) * 100pg / (2.43e7 + 2.95e7) * 100pg = 0.79
DTF 25-Aug-2020 09:34
OK
CL 25Aug20
FS 12478D
2.66e7
31.15
CS 12347D
2.29e7
31.92
ES 12378D
2.61e7
32.44
7.40e6
3.70e6
PeCDD Std.
28.41-33.51
369.8919 Fn2
Flags: PBM
4σ 3.08e3
FS 12478D
1.71e7
31.15
CS 12347D
1.40e7
31.92
ES 12378D
1.64e7
32.44
4.61e6
2.31e6
QC Check
28.41-33.51
366.9792 Fn2
Flags: -
5.64e6
2.82e6


Rel. Int.
100%
HxCDD
33.52-37.61
389.8156 Fn3
Flags: PBM
4σ 1.15e3
123478D
4.84e5
36.52
123678D
5.17e5
36.64
123789D
5.77e5
36.94
Abs. Int.
1.52e5
7.60e4
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD
33.52-37.61
391.8127 Fn3
Flags: PBM
4σ 1.02e3
123478D
4.22e5
36.53
123678D
4.15e5
36.64
123789D
4.55e5
36.94
Abs. Int.
1.40e5
7.02e4
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.52-37.61
401.8559 Fn3
Flags: PBM
4σ 2.46e3
FS 123468D
2.34e7
35.44
ES 123478D
1.92e7
36.51
ES 123678D
1.90e7
36.63
JS 123467D
1.06e7
36.82
ES 123789D
2.10e7
36.92
Abs. Int.
7.05e6
3.52e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.52-37.61
403.8530 Fn3
Flags: PBM
4σ 2.30e3
FS 123468D
1.87e7
35.44
ES 123478D
1.52e7
36.51
ES 123678D
1.50e7
36.63
JS 123467D
8.00e6
36.82
ES 123789D
1.77e7
36.92
Abs. Int.
5.54e6
2.77e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
QC Check
33.52-37.61
380.9760 Fn3
Flags: -
Abs. Int.
1.22e7
6.10e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT

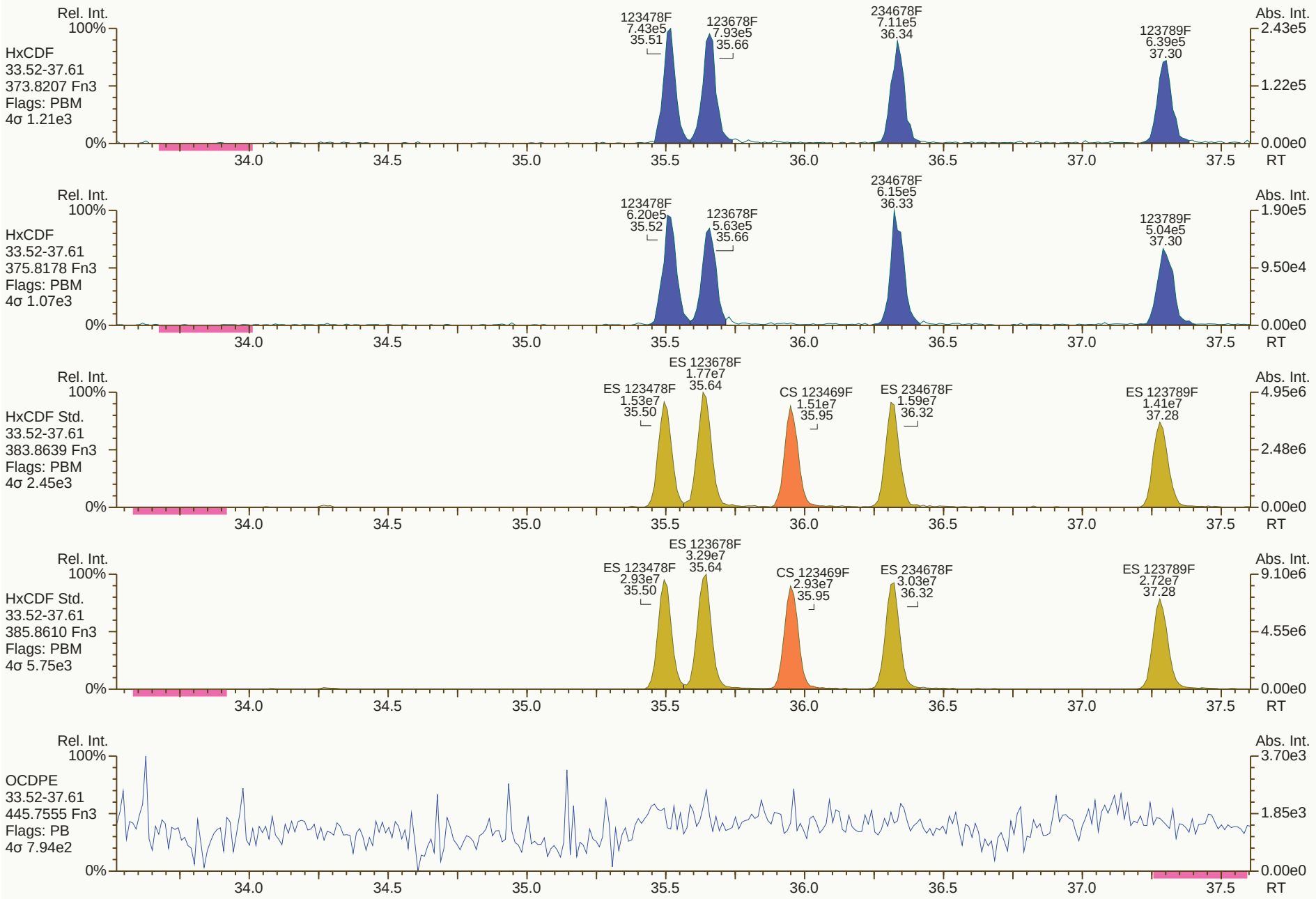

Rel. Int.
100%
HpCDD
37.91-41.21
423.7767 Fn4
Flags: PBM
4σ 9.07e2
0%
1234678D
4.36e5
40.05
Abs. Int.
1.22e5
6.10e4
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD
37.91-41.21
425.7737 Fn4
Flags: PBM
4σ 1.06e3
0%
1234678D
4.41e5
40.05
Abs. Int.
1.19e5
5.93e4
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.91-41.21
435.8169 Fn4
Flags: PBM
4σ 1.40e3
0%
FS 1234679D
2.03e7
39.31
ES 1234678D
1.79e7
40.04
Abs. Int.
5.57e6
2.78e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.91-41.21
437.8140 Fn4
Flags: PBM
4σ 1.85e3
0%
FS 1234679D
1.94e7
39.31
ES 1234678D
1.68e7
40.04
Abs. Int.
5.19e6
2.60e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
QC Check
37.91-41.21
430.9728 Fn4
Flags: -
0%
Abs. Int.
7.62e6
3.81e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT


OCDD
6.07e5
42.75
Rel. Int.
Abs. Int.
OCDD
41.22-44.81
457.7377 Fn5
Flags: PBM
4σ 1.01e3
OCDD
6.54e5
42.74
OCDD
41.22-44.81
459.7348 Fn5
Flags: PBM
4σ 1.29e3
ES OCDD
2.15e7
42.73
OCDD Std.
41.22-44.81
469.7780 Fn5
Flags: PBM
4σ 1.16e3
ES OCDD
2.44e7
42.73
OCDD Std.
41.22-44.81
471.7750 Fn5
Flags: PBM
4σ 1.33e3
QC Check
41.22-44.81
454.9728 Fn5
Flags: -
RT

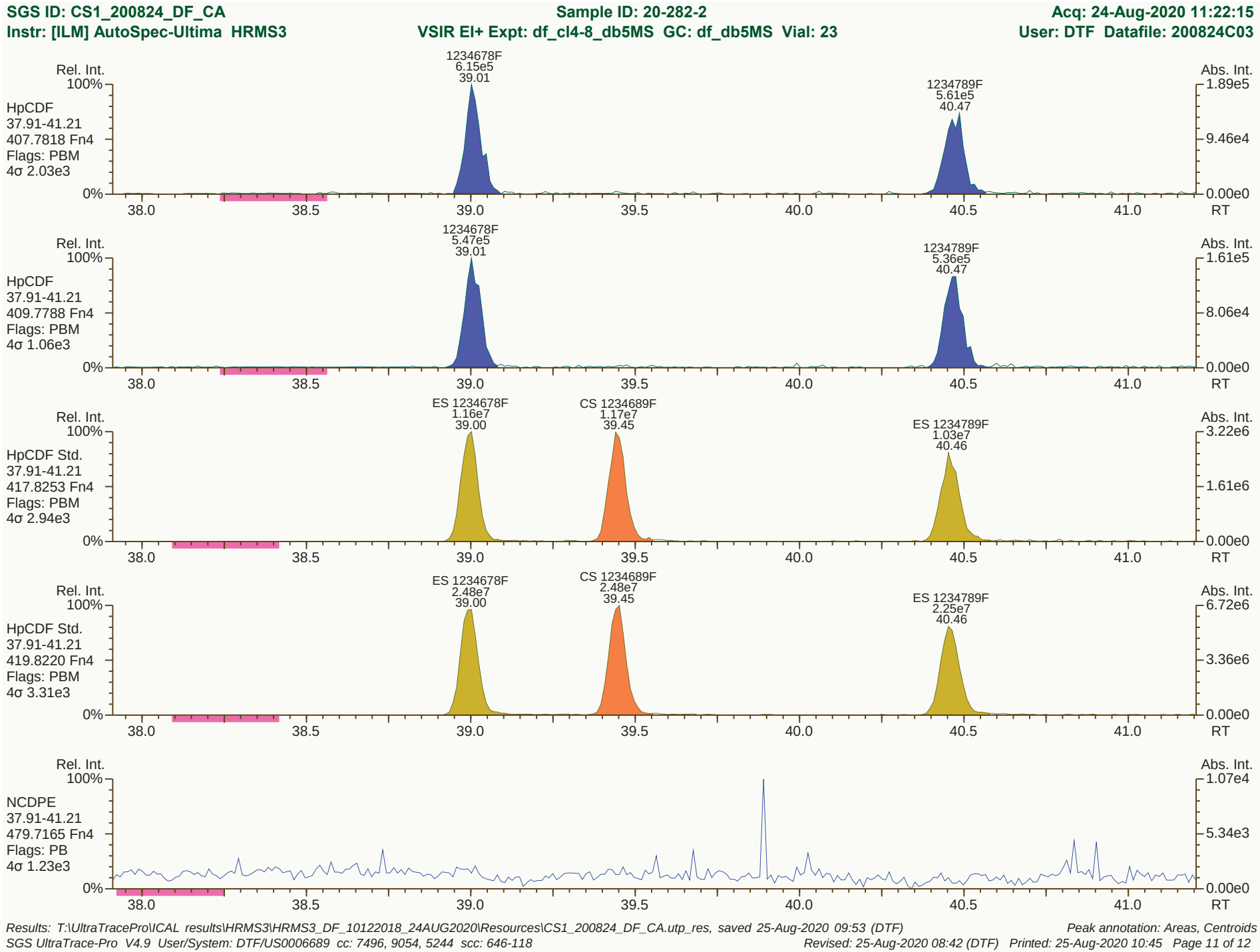

Rel. Int.
100%
TCDF
19.04-28.40
303.9016 Fn1
Flags: PBM
4σ 1.12e3
2378F
2.07e5
25.72
Abs. Int.
4.86e4
2.43e4
0.00e0
0%
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDF
19.04-28.40
305.8987 Fn1
Flags: PBM
4σ 1.26e3
2378F
2.34e5
25.72
Abs. Int.
5.16e4
2.58e4
0.00e0
0%
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDF Std.
19.04-28.40
315.9419 Fn1
Flags: PBM
4σ 1.30e4
AS 1368F
4.33e7
20.36
JS 1234F
3.72e7
24.18
ES 2378F
3.57e7
25.70
Abs. Int.
8.23e6
4.12e6
0.00e0
0%
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDF Std.
19.04-28.40
317.9389 Fn1
Flags: PBM
4σ 9.22e3
AS 1368F
5.43e7
20.36
JS 1234F
4.75e7
24.18
ES 2378F
4.48e7
25.70
Abs. Int.
1.05e7
5.23e6
0.00e0
0%
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
HxCDPE
19.04-28.40
375.8364 Fn1
Flags: PB
4σ 1.15e3
Abs. Int.
1.33e4
6.64e3
0.00e0
0%
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT


Rel. Int.
100%
0%
Abs. Int.
6.15e3
3.08e3
0.00e0
RT
PeCDF-1
19.04-28.40
339.8597 Fn1
Flags: PB
4σ 1.33e3
PeCDF-1
19.04-28.40
341.8568 Fn1
Flags: PB
4σ 8.79e2
8.10e3
4.05e3
QC Check
19.04-28.40
316.9824 Fn1
Flags: -
6.23e6
3.12e6
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0


Rel. Int.
100%
PeCDF-2
28.41-33.51
339.8597 Fn2
Flags: PBM
4σ 9.12e2
0%
RRF (12378F) = (8.89e5 + 5.86e5) * 100 pg/uL = 0.966
(3.77e7 + 2.34e7) * 2.5 pg/uL
CL 25Aug20
12378F
8.89e5
30.91
23478F
9.10e5
32.09
Abs. Int.
2.49e5
1.24e5
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF-2
28.41-33.51
341.8568 Fn2
Flags: PBM
4σ 1.72e3
0%
12378F
5.86e5
30.91
23478F
6.33e5
32.09
Abs. Int.
1.80e5
9.02e4
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.41-33.51
351.9000 Fn2
Flags: PBM
4σ 4.18e3
0%
CS 12346F
3.90e7
30.34
ES 12378F
3.77e7
30.90
ES 23478F
3.86e7
32.07
Abs. Int.
1.04e7
5.19e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.41-33.51
353.8970 Fn2
Flags: PBM
4σ 5.45e3
0%
CS 12346F
2.44e7
30.34
ES 12378F
2.34e7
30.90
ES 23478F
2.43e7
32.07
Abs. Int.
6.60e6
3.30e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
HpCDPE
28.41-33.51
409.7974 Fn2
Flags: PB
4σ 1.08e3
0%
Abs. Int.
4.58e3
2.29e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT


Rel. Int.
100%
HxCDF
33.52-37.61
373.8207 Fn3
Flags: PBM
4σ 1.21e3
123478F 7.43e5 35.51
123678F 7.93e5 35.66
234678F 7.11e5 36.34
123789F 6.39e5 37.30
Abs. Int.
2.43e5
1.22e5
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF
33.52-37.61
375.8178 Fn3
Flags: PBM
4σ 1.07e3
123478F 6.20e5 35.52
123678F 5.63e5 35.66
234678F 6.15e5 36.33
123789F 5.04e5 37.30
Abs. Int.
1.90e5
9.50e4
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF Std.
33.52-37.61
383.8639 Fn3
Flags: PBM
4σ 2.45e3
ES 123478F 1.53e7 35.50
ES 123678F 1.77e7 35.64
CS 123469F 1.51e7 35.95
ES 234678F 1.59e7 36.32
ES 123789F 1.41e7 37.28
Abs. Int.
4.95e6
2.48e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF Std.
33.52-37.61
385.8610 Fn3
Flags: PBM
4σ 5.75e3
ES 123478F 2.93e7 35.50
ES 123678F 3.29e7 35.64
CS 123469F 2.93e7 35.95
ES 234678F 3.03e7 36.32
ES 123789F 2.72e7 37.28
Abs. Int.
9.10e6
4.55e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
OCDPE
33.52-37.61
445.7555 Fn3
Flags: PB
4σ 7.94e2
Abs. Int.
3.70e3
1.85e3
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT

SGS ID: CS1_200824_DF_CA
Instr: [ILM] AutoSpec-Ultima HRMS3
Sample ID: 20-282-2
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 23
Acq: 24-Aug-2020 11:22:15
User: DTF Datafile: 200824C03




OCDF
7.34e5
42.88
Rel. Int.
100%
OCDF
41.22-44.81
441.7428 Fn5
Flags: PBM
4σ 1.00e3
0%
Abs. Int.
1.31e5
6.54e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
OCDF
7.19e5
42.88
Rel. Int.
100%
OCDF
41.22-44.81
443.7398 Fn5
Flags: PBM
4σ 2.03e3
0%
Abs. Int.
1.21e5
6.07e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDF
2.69e7
42.87
Rel. Int.
100%
OCDF Std.
41.22-44.81
453.7830 Fn5
Flags: PBM
4σ 1.99e3
0%
Abs. Int.
4.17e6
2.08e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDF
3.03e7
42.87
Rel. Int.
100%
OCDF Std.
41.22-44.81
455.7801 Fn5
Flags: PBM
4σ 1.43e3
0%
Abs. Int.
4.62e6
2.31e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
DCDPE
41.22-44.81
513.6775 Fn5
Flags: PB
4σ 1.01e3
0%
Abs. Int.
6.86e3
3.43e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT

Dioxin/Furan QC Summary	Acq'd: 24 Aug 2020 12:08 DTF	ICAL: HRMS3_DF_10122018_24AUG2020
Lab ID: CS2_200824_DF_CA	UTP: 25-Aug-2020 09:53:45 DTF	Checkcode: 848-202-MFH
Sample ID: 20-282-1	Report: 25 Aug 2020 10:43 TF	Datafile: 200824C04

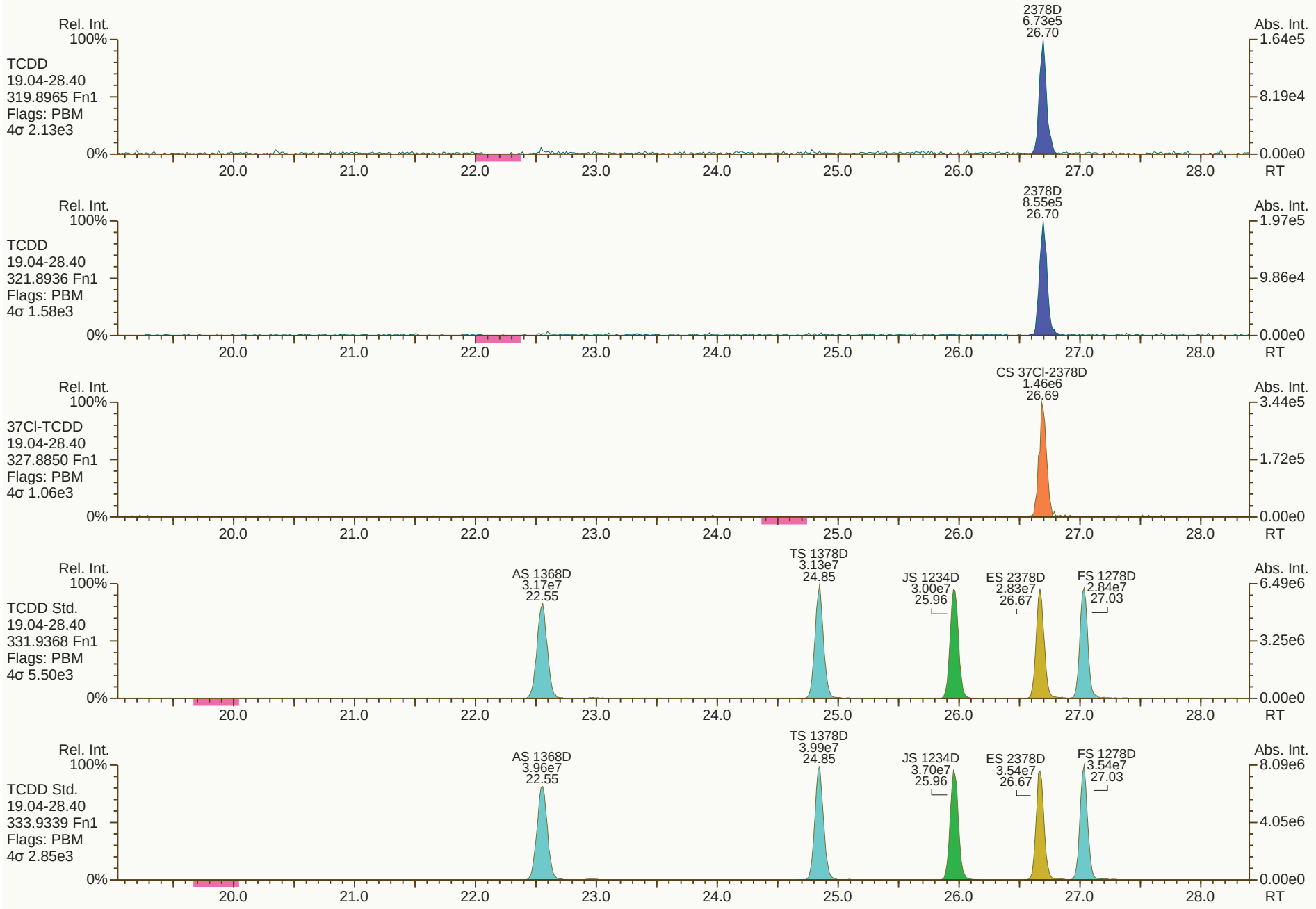
Name	RT	Response	RA	OK	Ref. RRFs	Calc. RRFs	Dev'n
2378-TCDD	26.70	1.53E+06	0.79	Y	1.19	1.20	1%
12378-PeCDD	32.46	5.51E+06	1.47	Y	1.01	1.01	-1%
123478-HxCDD	36.53	4.77E+06	1.28	Y	1.05	1.09	4%
123678-HxCDD	36.65	4.91E+06	1.23	Y	1.12	1.12	1%
123789-HxCDD	36.94	5.11E+06	1.25	Y	1.02	1.02	0%
1234678-HpCDD	40.05	4.39E+06	1.03	Y	1.00	1.01	1%
OCDD	42.75	6.60E+06	0.89	Y	1.08	1.10	2%
2378-TCDF	25.73	2.12E+06	0.71	Y	1.06	1.04	-2%
12378-PeCDF	30.92	7.70E+06	1.55	Y	0.98	0.99	1%
23478-PeCDF	32.09	8.21E+06	1.55	Y	0.97	1.00	3%
123478-HxCDF	35.52	6.89E+06	1.27	Y	1.22	1.24	1%
123678-HxCDF	35.66	7.14E+06	1.25	Y	1.11	1.11	1%
234678-HxCDF	36.34	6.75E+06	1.24	Y	1.15	1.13	-1%
123789-HxCDF	37.31	6.12E+06	1.26	Y	1.12	1.16	3%
1234678-HpCDF	39.01	6.12E+06	1.01	Y	1.29	1.33	3%
1234789-HpCDF	40.48	5.22E+06	1.02	Y	1.27	1.28	1%
OCDF	42.89	7.94E+06	0.91	Y	1.04	1.05	1%
ES 2378-TCDD	26.67	6.37E+07	0.80	Y	0.97	0.95	-2%
ES 12378-PeCDD	32.44	5.47E+07	1.56	Y	0.84	0.82	-3%
ES 123478-HxCDD	36.52	4.36E+07	1.28	Y	0.97	0.94	-4%
ES 123678-HxCDD	36.63	4.37E+07	1.26	Y	0.96	0.94	-3%
ES 123789-HxCDD	36.93	5.03E+07	1.23	Y	1.10	1.08	-2%
ES 1234678-HpCDD	40.04	4.34E+07	1.06	Y	0.93	0.93	0%
ES OCDD	42.74	6.00E+07	0.89	Y	0.63	0.64	2%
ES 2378-TCDF	25.71	1.02E+08	0.82	Y	0.97	0.97	0%
ES 12378-PeCDF	30.9	7.74E+07	1.55	Y	0.78	0.74	-5%
ES 23478-PeCDF	32.07	8.22E+07	1.56	Y	0.80	0.78	-3%
ES 123478-HxCDF	35.5	5.58E+07	0.52	Y	1.22	1.20	-2%
ES 123678-HxCDF	35.65	6.42E+07	0.55	Y	1.41	1.38	-2%
ES 234678-HxCDF	36.32	5.96E+07	0.52	Y	1.29	1.28	-1%
ES 123789-HxCDF	37.29	5.29E+07	0.55	Y	1.17	1.13	-3%
ES 1234678-HpCDF	39	4.61E+07	0.46	Y	0.97	0.99	2%
ES 1234789-HpCDF	40.47	4.09E+07	0.45	Y	0.88	0.88	0%
ES OCDF	42.88	7.54E+07	0.89	Y	0.81	0.81	0%

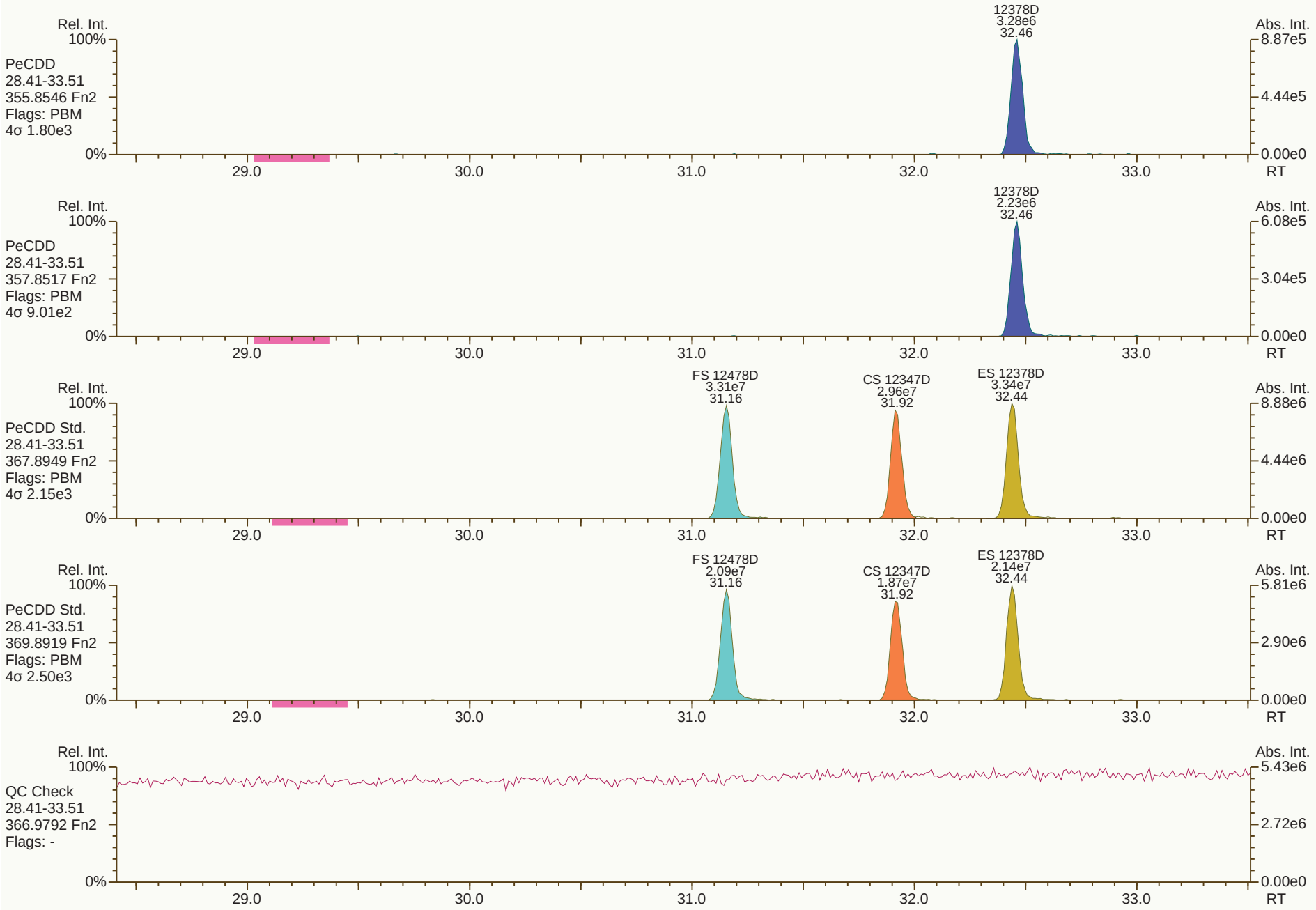
Dioxin/Furan QC Summary	Acq'd: 24 Aug 2020 12:08 DTF	ICAL: HRMS3_DF_10122018_24AUG2020
Lab ID: CS2_200824_DF_CA	UTP: 25-Aug-2020 09:53:45 DTF	Checkcode: 848-202-MFH
Sample ID: 20-282-1	Report: 25 Aug 2020 10:43 TF	Datafile: 200824C04

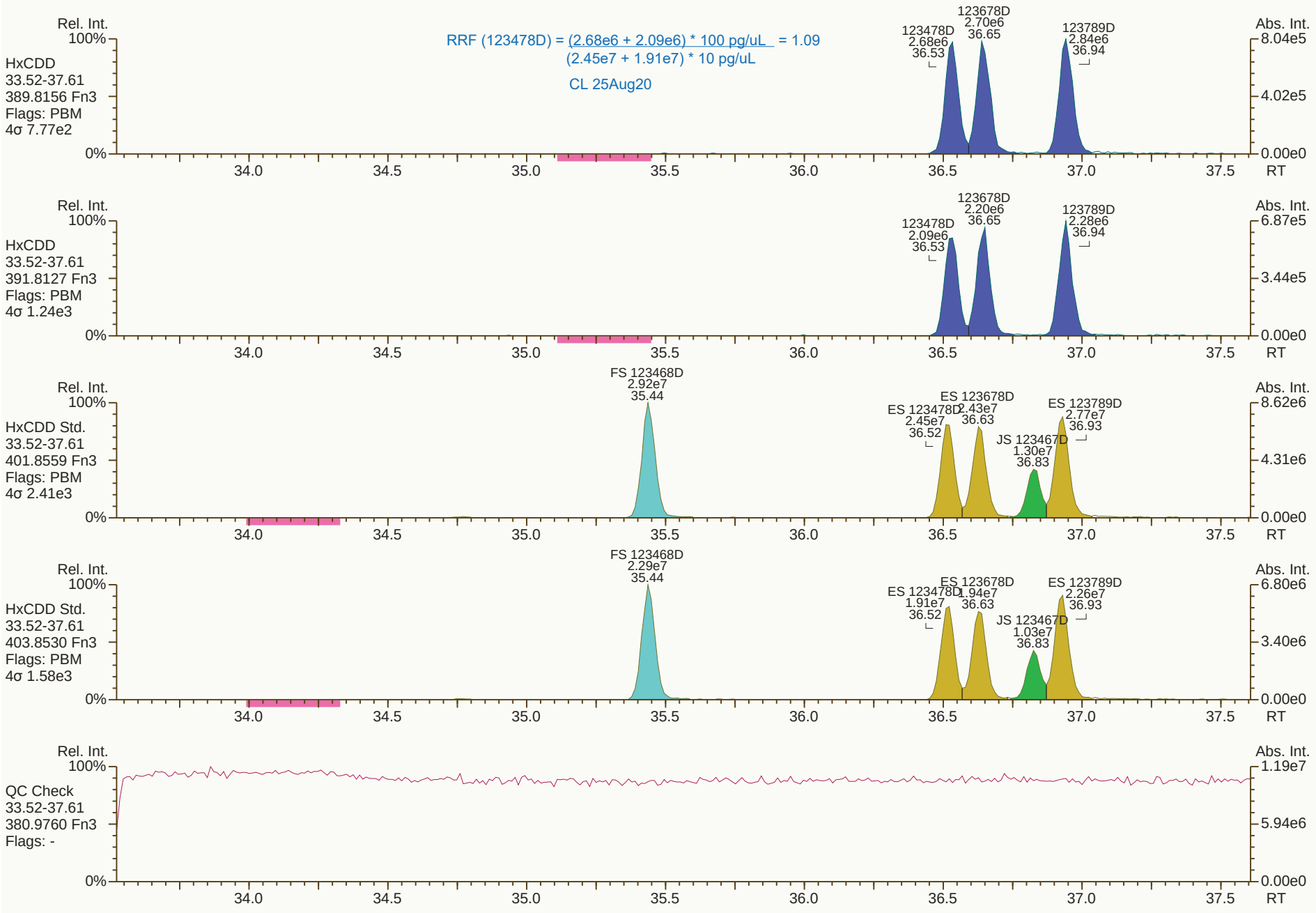
Name	RT	Response	RA	OK	Ref. RRFs	Calc. RRFs	Dev'n
JS 1234-TCDD	25.96	6.70E+07	0.81	Y	-	-	-
JS 1234-TCDF	24.19	1.05E+08	0.79	Y	-	-	-
JS 123467-HxCDD	36.83	2.33E+07	1.27	Y	-	-	-
CS 37Cl-2378-TCDD	26.69	1.46E+06	n/a	-	1.14	1.09	-4%
CS 12347-PeCDD	31.92	4.83E+07	1.59	Y	0.72	0.72	0%
CS 12346-PeCDF	30.34	8.01E+07	1.55	Y	0.77	0.76	-1%
CS 123469-HxCDF	35.96	5.64E+07	0.55	Y	1.18	1.21	3%
CS 1234689-HpCDF	39.45	4.69E+07	0.47	Y	0.96	1.01	5%
SS 37Cl-2378-TCDD	26.69	1.46E+06	n/a	-	1.19	1.15	-4%
SS 12347-PeCDD	31.92	4.83E+07	1.59	Y	0.86	0.88	3%
SS 12346-PeCDF	30.34	8.01E+07	1.55	Y	1.00	1.04	4%
SS 123469-HxCDF	35.96	5.64E+07	0.55	Y	0.84	0.88	5%
SS 1234689-HpCDF	39.45	4.69E+07	0.47	Y	0.98	1.02	4%
AS 1368-TCDD	22.55	7.13E+07	0.80	Y	1.09	1.06	-3%
AS 1368-TCDF	20.37	1.18E+08	0.79	Y	1.16	1.12	-4%
FS 1278-TCDD	27.03	6.38E+07	0.80	Y	0.99	1.00	1%
FS 12478-PeCDD	31.16	5.40E+07	1.58	Y	0.97	0.99	1%
FS 123468-HxCDD	35.44	5.21E+07	1.27	Y	1.13	1.19	5%
FS 1234679-HpCDD	39.32	5.07E+07	1.05	Y	1.12	1.17	4%
TS 1378-TCDD	24.85	7.12E+07	0.78	Y	1.10	1.12	2%
OCDD-a	42.75	5.19E+05	2.35	Y	0.07	0.09	19%
OCDF-a	42.88	4.10E+05	3.00	N	0.06	0.05	-14%

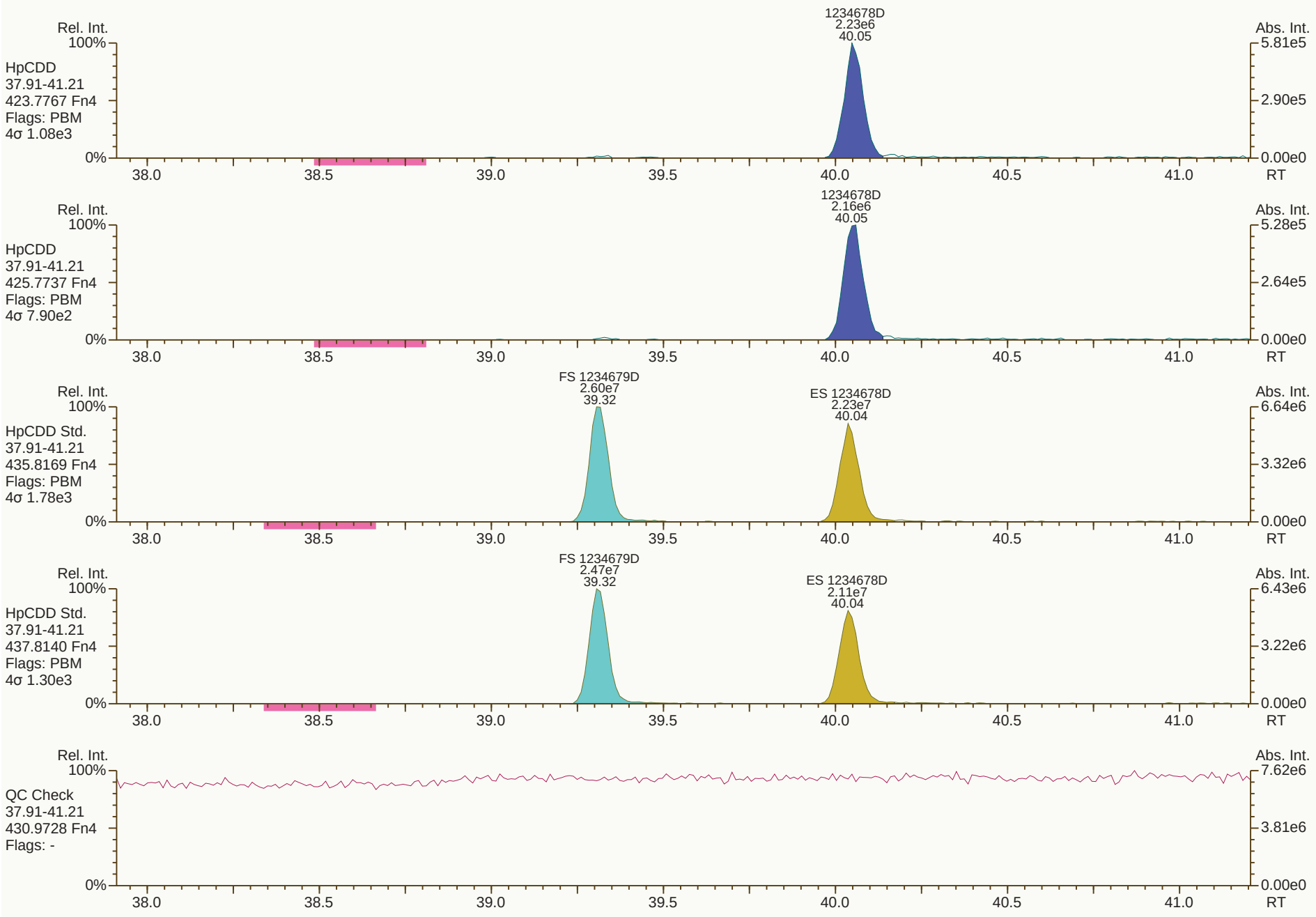
alternate mass not required in method
CL 25Aug20


Rel. Int.
100%
QC Check
19.04-28.40
316.9824 Fn1
Flags: -
0%
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Abs. Int.
5.94e6
2.97e6
0.00e0
Rel. Int.
100%
QC Check
28.41-33.51
366.9792 Fn2
Flags: -
0%
29.0
30.0
31.0
32.0
33.0
RT
Abs. Int.
5.43e6
2.72e6
0.00e0
Rel. Int.
100%
QC Check
33.52-37.61
380.9760 Fn3
Flags: -
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Abs. Int.
1.19e7
5.94e6
0.00e0
Rel. Int.
100%
QC Check
37.91-41.21
430.9728 Fn4
Flags: -
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Abs. Int.
7.62e6
3.81e6
0.00e0
Rel. Int.
100%
QC Check
41.22-44.81
454.9728 Fn5
Flags: -
0%
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Abs. Int.
9.76e6
4.88e6
0.00e0

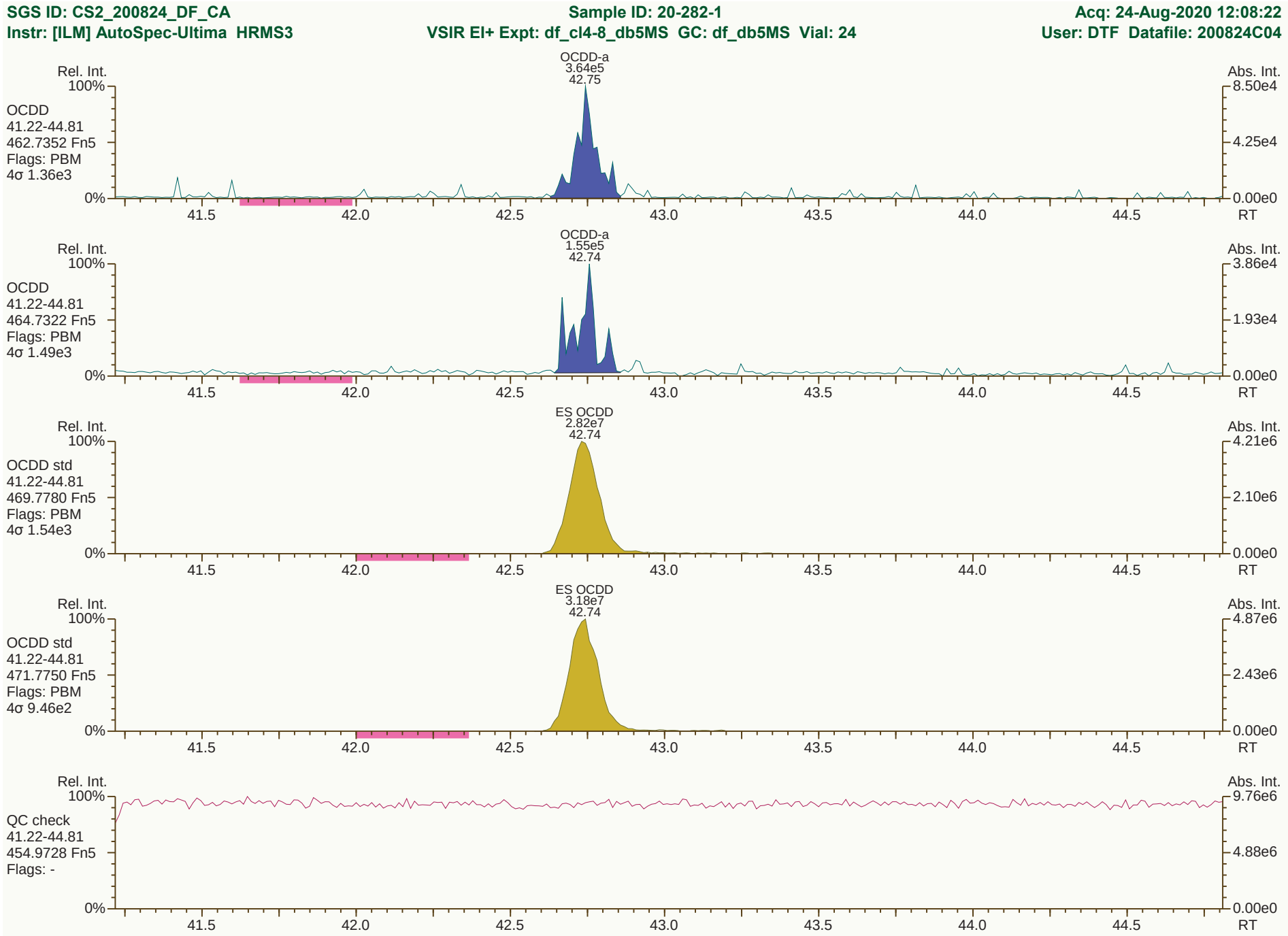

Rel. Int.
100%
TCDD
19.04-28.40
319.8965 Fn1
Flags: PBM
4σ 2.13e3
0%
2378D
6.73e5
26.70
Abs. Int.
1.64e5
8.19e4
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDD
19.04-28.40
321.8936 Fn1
Flags: PBM
4σ 1.58e3
0%
2378D
8.55e5
26.70
Abs. Int.
1.97e5
9.86e4
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
37Cl-TCDD
19.04-28.40
327.8850 Fn1
Flags: PBM
4σ 1.06e3
0%
CS 37Cl-2378D
1.46e6
26.69
Abs. Int.
3.44e5
1.72e5
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.40
331.9368 Fn1
Flags: PBM
4σ 5.50e3
0%
AS 1368D
3.17e7
22.55
TS 1378D
3.13e7
24.85
JS 1234D
3.00e7
25.96
ES 2378D
2.83e7
26.67
FS 1278D
2.84e7
27.03
Abs. Int.
6.49e6
3.25e6
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.40
333.9339 Fn1
Flags: PBM
4σ 2.85e3
0%
AS 1368D
3.96e7
22.55
TS 1378D
3.99e7
24.85
JS 1234D
3.70e7
25.96
ES 2378D
3.54e7
26.67
FS 1278D
3.54e7
27.03
Abs. Int.
8.09e6
4.05e6
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT


Rel. Int.
100%
PeCDD
28.41-33.51
355.8546 Fn2
Flags: PBM
4σ 1.80e3
0%
12378D
3.28e6
32.46
Abs. Int.
8.87e5
4.44e5
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD
28.41-33.51
357.8517 Fn2
Flags: PBM
4σ 9.01e2
0%
12378D
2.23e6
32.46
Abs. Int.
6.08e5
3.04e5
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.41-33.51
367.8949 Fn2
Flags: PBM
4σ 2.15e3
0%
FS 12478D
3.31e7
31.16
CS 12347D
2.96e7
31.92
ES 12378D
3.34e7
32.44
Abs. Int.
8.88e6
4.44e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.41-33.51
369.8919 Fn2
Flags: PBM
4σ 2.50e3
0%
FS 12478D
2.09e7
31.16
CS 12347D
1.87e7
31.92
ES 12378D
2.14e7
32.44
Abs. Int.
5.81e6
2.90e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
QC Check
28.41-33.51
366.9792 Fn2
Flags: -
0%
Abs. Int.
5.43e6
2.72e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT


Rel. Int.
100%
HxCDD
33.52-37.61
389.8156 Fn3
Flags: PBM
4σ 7.77e2
0%
RRF (123478D) = (2.68e6 + 2.09e6) * 100 pg/uL = 1.09
(2.45e7 + 1.91e7) * 10 pg/uL
CL 25Aug20
123478D
2.68e6
36.53
123678D
2.70e6
36.65
123789D
2.84e6
36.94
Abs. Int.
8.04e5
4.02e5
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD
33.52-37.61
391.8127 Fn3
Flags: PBM
4σ 1.24e3
0%
123478D
2.09e6
36.53
123678D
2.20e6
36.65
123789D
2.28e6
36.94
Abs. Int.
6.87e5
3.44e5
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.52-37.61
401.8559 Fn3
Flags: PBM
4σ 2.41e3
0%
FS 123468D
2.92e7
35.44
ES 123478D
2.45e7
36.52
ES 123678D
2.43e7
36.63
JS 123467D
1.30e7
36.83
ES 123789D
2.77e7
36.93
Abs. Int.
8.62e6
4.31e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.52-37.61
403.8530 Fn3
Flags: PBM
4σ 1.58e3
0%
FS 123468D
2.29e7
35.44
ES 123478D
1.91e7
36.52
ES 123678D
1.94e7
36.63
JS 123467D
1.03e7
36.83
ES 123789D
2.26e7
36.93
Abs. Int.
6.80e6
3.40e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
QC Check
33.52-37.61
380.9760 Fn3
Flags: -
0%
Abs. Int.
1.19e7
5.94e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT

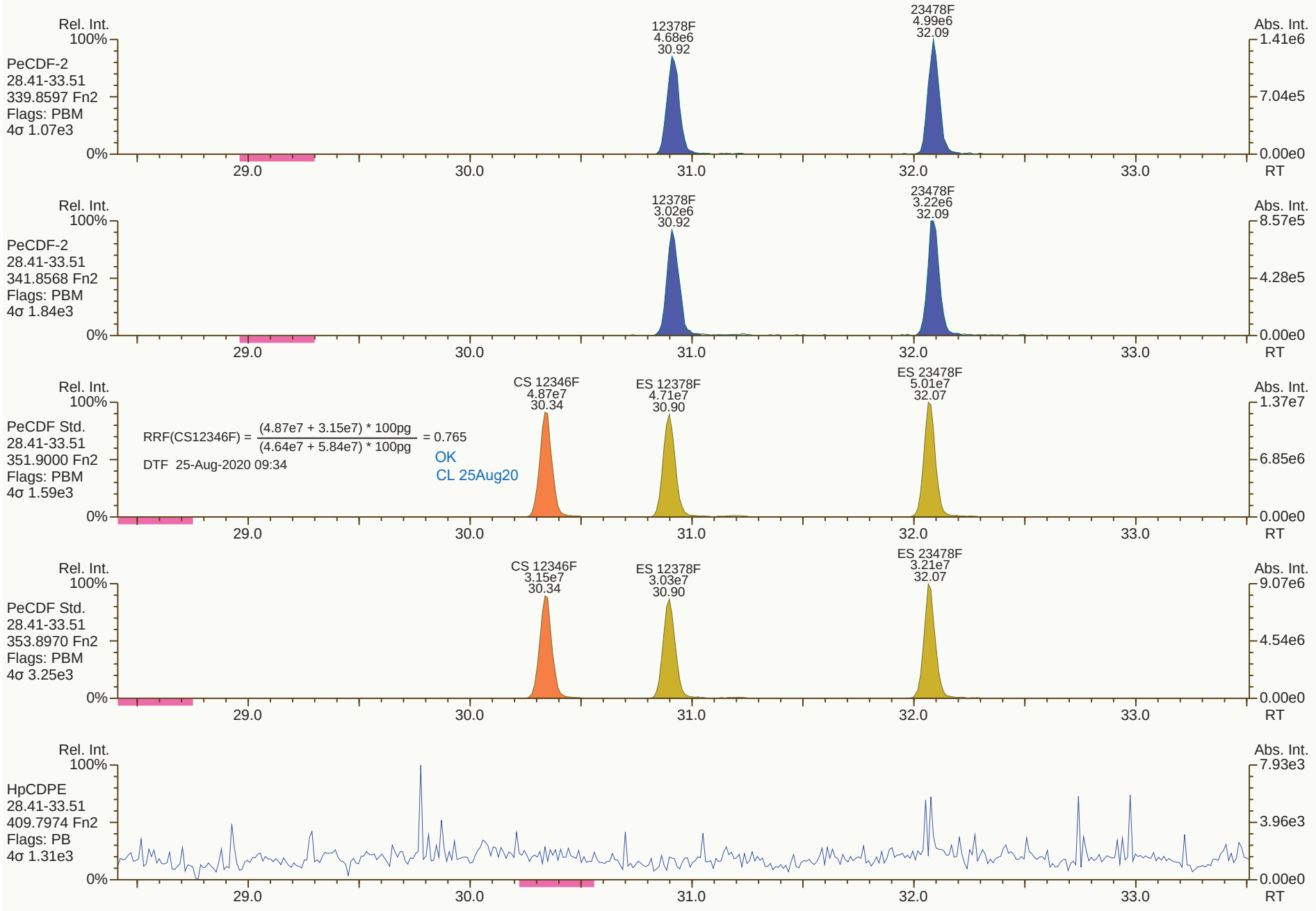

Rel. Int.
100%
HpCDD
37.91-41.21
423.7767 Fn4
Flags: PBM
4σ 1.08e3
1234678D
2.23e6
40.05
Abs. Int.
5.81e5
2.90e5
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD
37.91-41.21
425.7737 Fn4
Flags: PBM
4σ 7.90e2
1234678D
2.16e6
40.05
Abs. Int.
5.28e5
2.64e5
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.91-41.21
435.8169 Fn4
Flags: PBM
4σ 1.78e3
FS 1234679D
2.60e7
39.32
ES 1234678D
2.23e7
40.04
Abs. Int.
6.64e6
3.32e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.91-41.21
437.8140 Fn4
Flags: PBM
4σ 1.30e3
FS 1234679D
2.47e7
39.32
ES 1234678D
2.11e7
40.04
Abs. Int.
6.43e6
3.22e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
QC Check
37.91-41.21
430.9728 Fn4
Flags: -
Abs. Int.
7.62e6
3.81e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT

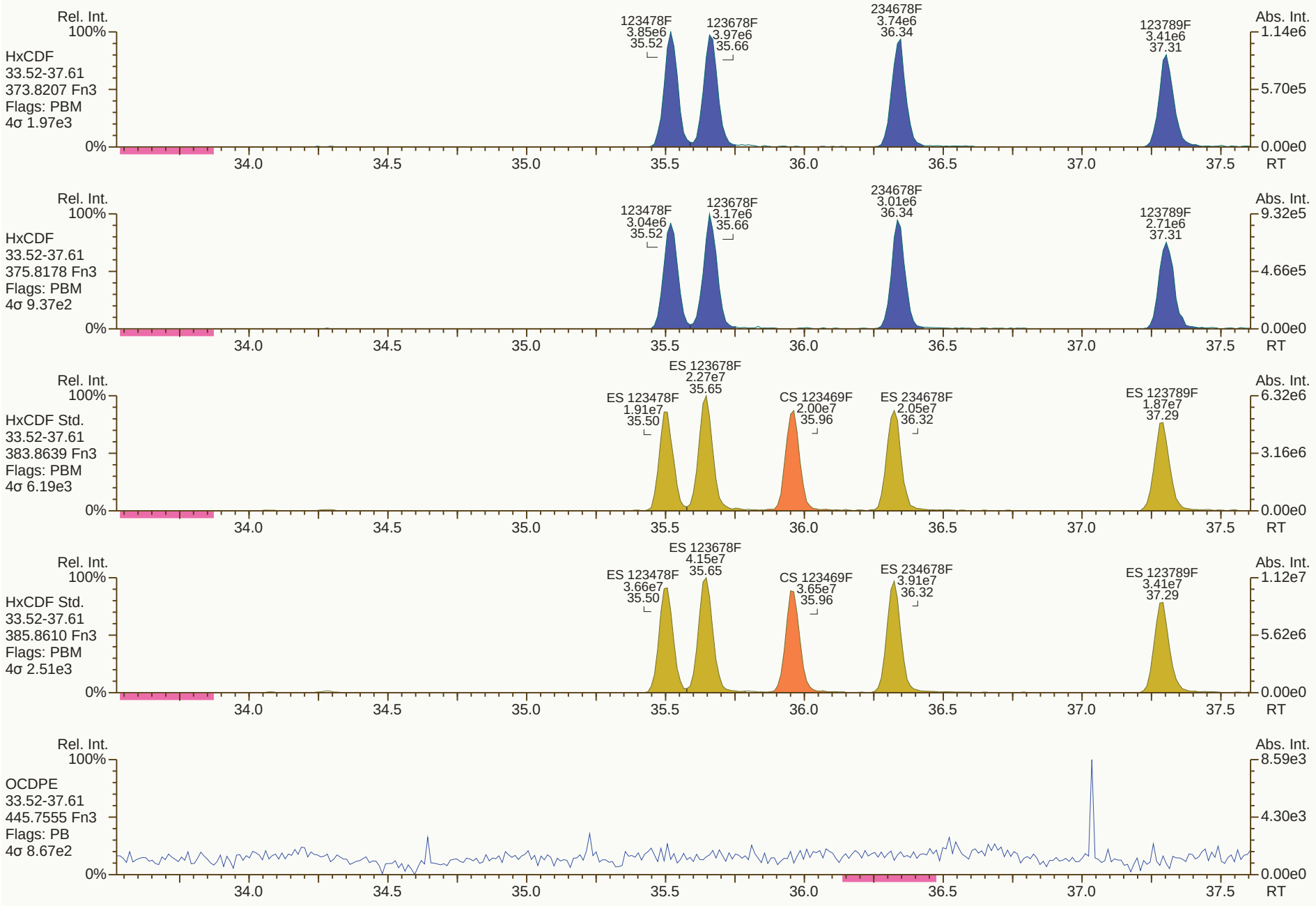

OCDD
3.10e6
42.75
Rel. Int.
Abs. Int.
OCDD
41.22-44.81
457.7377 Fn5
Flags: PBM
4σ 1.41e3
OCDD
3.49e6
42.75
OCDD
41.22-44.81
459.7348 Fn5
Flags: PBM
4σ 1.47e3
ES OCDD
2.82e7
42.74
OCDD Std.
41.22-44.81
469.7780 Fn5
Flags: PBM
4σ 1.54e3
ES OCDD
3.18e7
42.74
OCDD Std.
41.22-44.81
471.7750 Fn5
Flags: PBM
4σ 9.46e2
QC Check
41.22-44.81
454.9728 Fn5
Flags: -
RT

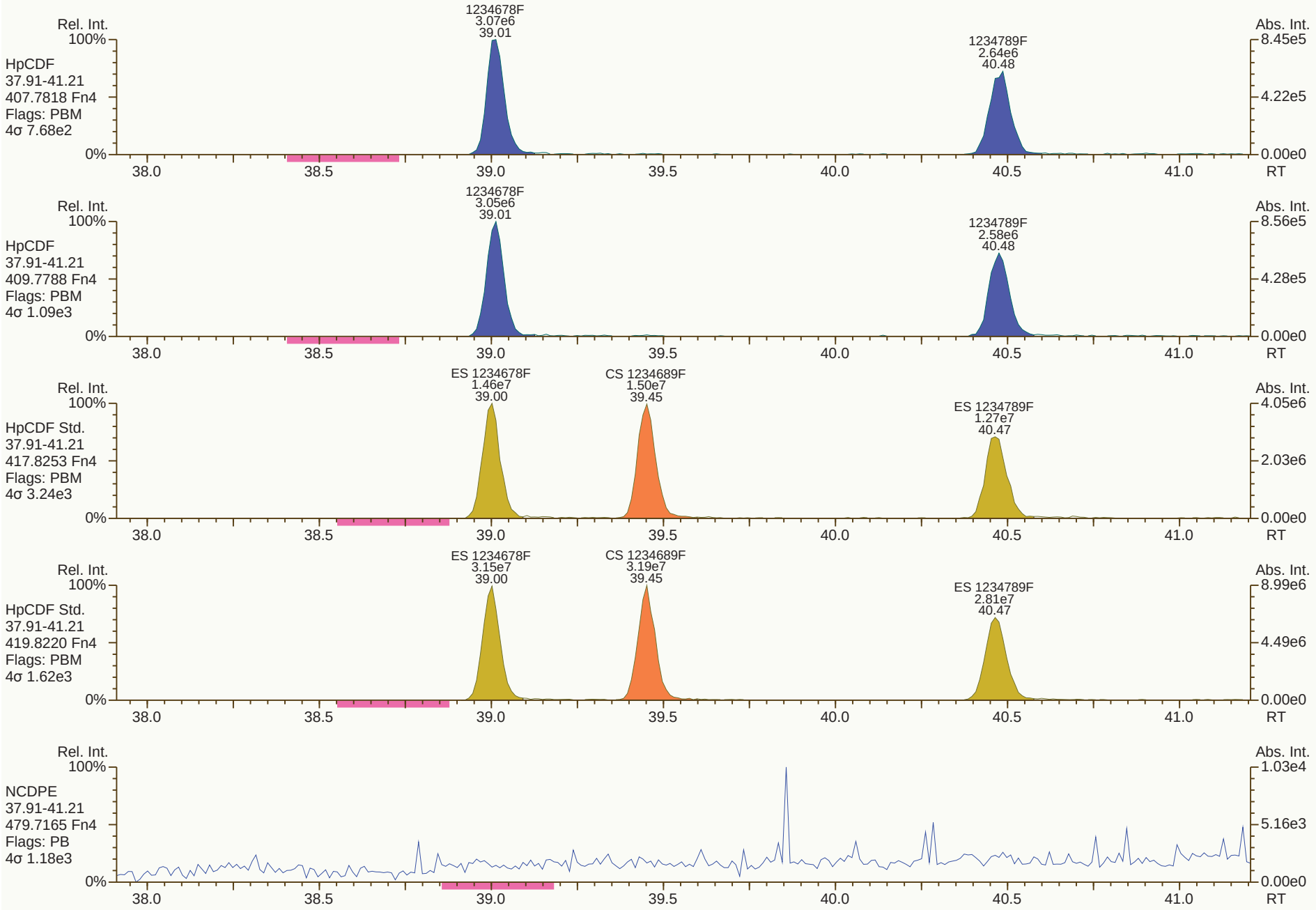

SGS ID: CS2_200824_DF_CA
Sample ID: 20-282-1
Acq: 24-Aug-2020 12:08:22
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 24
User: DTF Datafile: 200824C04
OCDD-a
3.64e5
42.75
Rel. Int.
Abs. Int.
OCDD
41.22-44.81
462.7352 Fn5
Flags: PBM
4σ 1.36e3
OCDD-a
1.55e5
42.74
OCDD
41.22-44.81
464.7322 Fn5
Flags: PBM
4σ 1.49e3
ES OCDD
2.82e7
42.74
OCDD std
41.22-44.81
469.7780 Fn5
Flags: PBM
4σ 1.54e3
ES OCDD
3.18e7
42.74
OCDD std
41.22-44.81
471.7750 Fn5
Flags: PBM
4σ 9.46e2
QC check
41.22-44.81
454.9728 Fn5
Flags: -
RT
Results: T:\UltraTracePro\ICAL results\HRMS3\HRMS3_DF_10122018_24AUG2020\Resources\CS2_200824_DF_CA.utp_res, saved 25-Aug-2020 09:53 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 0648, 9454
Revised: 25-Aug-2020 09:49 (DTF) Printed: 25-Aug-2020 13:51

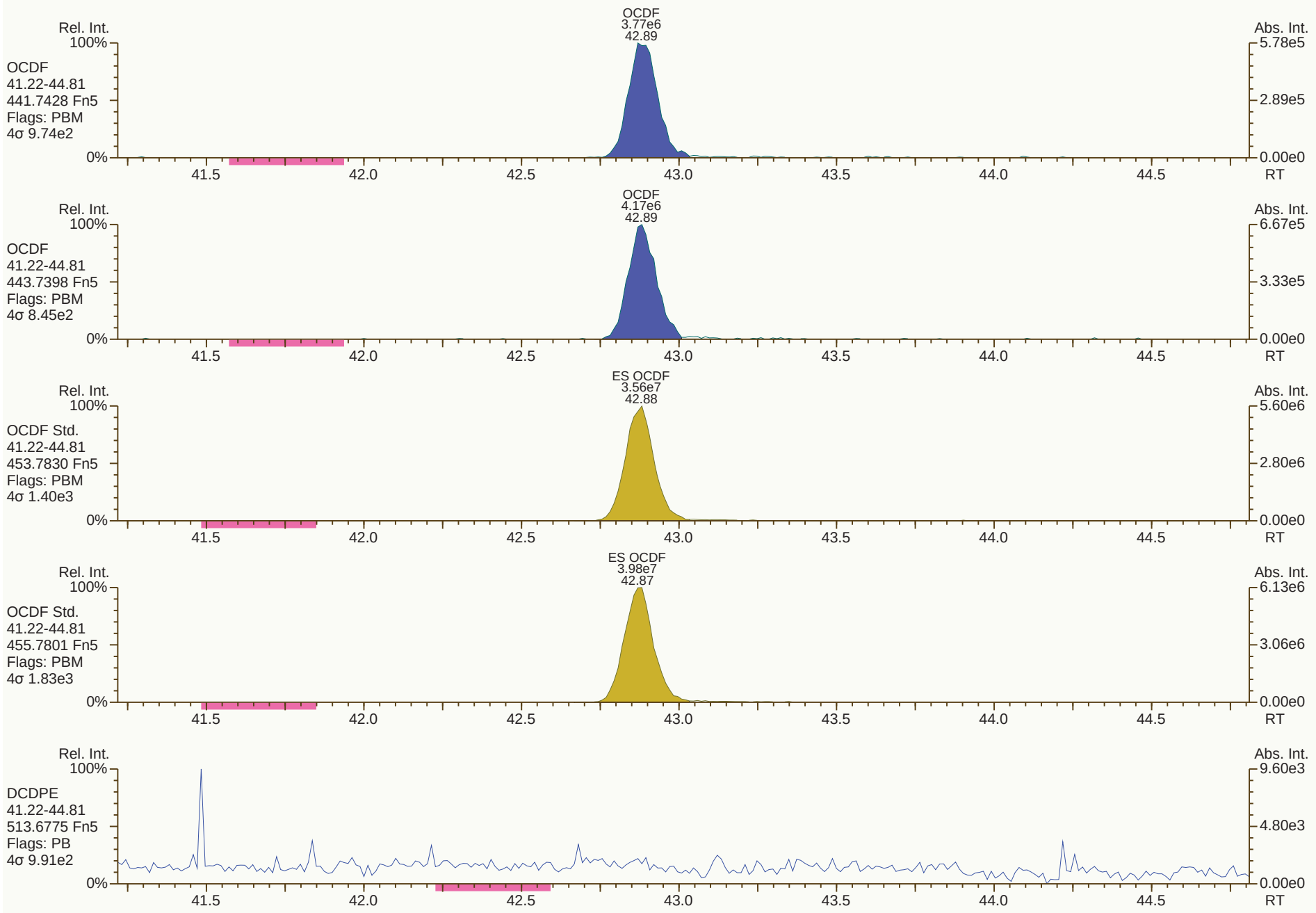

Rel. Int.
100%
TCDF
19.04-28.40
303.9016 Fn1
Flags: PBM
4σ 1.18e3
0%
2378F
8.79e5
25.73
Abs. Int.
1.70e5
8.49e4
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDF
19.04-28.40
305.8987 Fn1
Flags: PBM
4σ 1.03e3
0%
2378F
1.24e6
25.73
Abs. Int.
2.39e5
1.19e5
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDF Std.
19.04-28.40
315.9419 Fn1
Flags: PBM
4σ 1.10e4
0%
AS 1368F
5.21e7
20.37
JS 1234F
4.64e7
24.19
ES 2378F
4.60e7
25.71
Abs. Int.
9.67e6
4.84e6
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDF Std.
19.04-28.40
317.9389 Fn1
Flags: PBM
4σ 6.82e3
0%
AS 1368F
6.56e7
20.37
JS 1234F
5.84e7
24.19
ES 2378F
5.60e7
25.70
Abs. Int.
1.25e7
6.26e6
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
HxCDPE
19.04-28.40
375.8364 Fn1
Flags: PB
4σ 1.02e3
0%
Abs. Int.
5.60e3
2.80e3
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT


Rel. Int.
100%
0%
Abs. Int.
5.01e3
2.50e3
0.00e0
PeCDF-1
19.04-28.40
339.8597 Fn1
Flags: PB
4σ 1.24e3
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
0%
Abs. Int.
1.54e4
7.68e3
0.00e0
PeCDF-1
19.04-28.40
341.8568 Fn1
Flags: PB
4σ 9.51e2
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
0%
Abs. Int.
5.94e6
2.97e6
0.00e0
QC Check
19.04-28.40
316.9824 Fn1
Flags: -
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT


Rel. Int.
100%
PeCDF-2
28.41-33.51
339.8597 Fn2
Flags: PBM
4σ 1.07e3
0%
12378F
4.68e6
30.92
23478F
4.99e6
32.09
Abs. Int.
1.41e6
7.04e5
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF-2
28.41-33.51
341.8568 Fn2
Flags: PBM
4σ 1.84e3
0%
12378F
3.02e6
30.92
23478F
3.22e6
32.09
Abs. Int.
8.57e5
4.28e5
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.41-33.51
351.9000 Fn2
Flags: PBM
4σ 1.59e3
0%
RRF(CS12346F) = (4.87e7 + 3.15e7) * 100pg / (4.64e7 + 5.84e7) * 100pg = 0.765
DTF 25-Aug-2020 09:34
OK
CL 25Aug20
CS 12346F
4.87e7
30.34
ES 12378F
4.71e7
30.90
ES 23478F
5.01e7
32.07
Abs. Int.
1.37e7
6.85e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.41-33.51
353.8970 Fn2
Flags: PBM
4σ 3.25e3
0%
CS 12346F
3.15e7
30.34
ES 12378F
3.03e7
30.90
ES 23478F
3.21e7
32.07
Abs. Int.
9.07e6
4.54e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
HpCDPE
28.41-33.51
409.7974 Fn2
Flags: PB
4σ 1.31e3
0%
Abs. Int.
7.93e3
3.96e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT


Rel. Int.
100%
HxCDF
33.52-37.61
373.8207 Fn3
Flags: PBM
4σ 1.97e3
123478F
3.85e6
35.52
123678F
3.97e6
35.66
234678F
3.74e6
36.34
123789F
3.41e6
37.31
Abs. Int.
1.14e6
5.70e5
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF
33.52-37.61
375.8178 Fn3
Flags: PBM
4σ 9.37e2
123478F
3.04e6
35.52
123678F
3.17e6
35.66
234678F
3.01e6
36.34
123789F
2.71e6
37.31
Abs. Int.
9.32e5
4.66e5
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF Std.
33.52-37.61
383.8639 Fn3
Flags: PBM
4σ 6.19e3
ES 123678F
2.27e7
35.65
ES 123478F
1.91e7
35.50
CS 123469F
2.00e7
35.96
ES 234678F
2.05e7
36.32
ES 123789F
1.87e7
37.29
Abs. Int.
6.32e6
3.16e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF Std.
33.52-37.61
385.8610 Fn3
Flags: PBM
4σ 2.51e3
ES 123678F
4.15e7
35.65
ES 123478F
3.66e7
35.50
CS 123469F
3.65e7
35.96
ES 234678F
3.91e7
36.32
ES 123789F
3.41e7
37.29
Abs. Int.
1.12e7
5.62e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
OCDPE
33.52-37.61
445.7555 Fn3
Flags: PB
4σ 8.67e2
Abs. Int.
8.59e3
4.30e3
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT


Rel. Int.
100%
HpCDF
37.91-41.21
407.7818 Fn4
Flags: PBM
4σ 7.68e2
1234678F
3.07e6
39.01
1234789F
2.64e6
40.48
Abs. Int.
8.45e5
4.22e5
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF
37.91-41.21
409.7788 Fn4
Flags: PBM
4σ 1.09e3
1234678F
3.05e6
39.01
1234789F
2.58e6
40.48
Abs. Int.
8.56e5
4.28e5
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.91-41.21
417.8253 Fn4
Flags: PBM
4σ 3.24e3
ES 1234678F
1.46e7
39.00
CS 1234689F
1.50e7
39.45
ES 1234789F
1.27e7
40.47
Abs. Int.
4.05e6
2.03e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.91-41.21
419.8220 Fn4
Flags: PBM
4σ 1.62e3
ES 1234678F
3.15e7
39.00
CS 1234689F
3.19e7
39.45
ES 1234789F
2.81e7
40.47
Abs. Int.
8.99e6
4.49e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
NCDPE
37.91-41.21
479.7165 Fn4
Flags: PB
4σ 1.18e3
Abs. Int.
1.03e4
5.16e3
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT


OCDF
3.77e6
42.89
Rel. Int.
Abs. Int.
OCDF
41.22-44.81
441.7428 Fn5
Flags: PBM
4σ 9.74e2
OCDF
4.17e6
42.89
OCDF
41.22-44.81
443.7398 Fn5
Flags: PBM
4σ 8.45e2
ES OCDF
3.56e7
42.88
OCDF Std.
41.22-44.81
453.7830 Fn5
Flags: PBM
4σ 1.40e3
ES OCDF
3.98e7
42.87
OCDF Std.
41.22-44.81
455.7801 Fn5
Flags: PBM
4σ 1.83e3
DCDPE
41.22-44.81
513.6775 Fn5
Flags: PB
4σ 9.91e2
RT

SGS ID: CS2_200824_DF_CA
Instr: [ILM] AutoSpec-Ultima HRMS3

Sample ID: 20-282-1
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 24

Acq: 24-Aug-2020 12:08:22
User: DTF Datafile: 200824C04



Results: T:\UltraTracePro\ICAL results\HRMS3\HRMS3_DF_10122018_24AUG2020\Resources\CS2_200824_DF_CA.utp_res, saved 25-Aug-2020 09:53 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 1954, 0308
Revised: 25-Aug-2020 09:49 (DTF) Printed: 25-Aug-2020 13:51

Dioxin/Furan QC Summary		Acq'd: 24 Aug 2020 12:54 DTF				ICAL: HRMS3_DF_10122018_24AUG2020	
Lab ID: CS3_200824_DF_CA		UTP: 25-Aug-2020 09:53:45 DTF				Checkcode: 779-324-XWR	
Sample ID: 20-449-3		Report: 25 Aug 2020 10:43 TF				Datafile: 200824C05	
Name	**RT**	**Response**	**RA**	**OK**	**Ref. RRFs**	**Calc. RRFs**	**Dev'n**
2378-TCDD	26.71	1.20E+07	0.79	Y	1.19	1.23	3%
12378-PeCDD	32.47	4.40E+07	1.54	Y	1.01	1.00	-1%
123478-HxCDD	36.54	3.87E+07	1.26	Y	1.05	1.06	1%
123678-HxCDD	36.65	4.07E+07	1.26	Y	1.12	1.14	2%
123789-HxCDD	36.95	4.24E+07	1.25	Y	1.02	1.00	-2%
1234678-HpCDD	40.07	3.54E+07	1.04	Y	1.00	1.04	3%
OCDD	42.77	5.10E+07	0.91	Y	1.08	1.12	4%
2378-TCDF	25.75	1.66E+07	0.77	Y	1.06	1.09	2%
12378-PeCDF	30.93	5.98E+07	1.54	Y	0.98	0.98	0%
23478-PeCDF	32.10	6.37E+07	1.51	Y	0.97	1.00	3%
123478-HxCDF	35.52	5.62E+07	1.23	Y	1.22	1.23	1%
123678-HxCDF	35.67	5.93E+07	1.22	Y	1.11	1.12	1%
234678-HxCDF	36.35	5.60E+07	1.22	Y	1.15	1.15	0%
123789-HxCDF	37.31	5.16E+07	1.23	Y	1.12	1.14	2%
1234678-HpCDF	39.02	4.69E+07	1.02	Y	1.29	1.32	2%
1234789-HpCDF	40.49	4.23E+07	1.02	Y	1.27	1.29	2%
OCDF	42.90	6.19E+07	0.90	Y	1.04	1.06	2%
ES 2378-TCDD	26.69	9.75E+07	0.80	Y	0.97	0.97	0%
ES 12378-PeCDD	32.45	8.75E+07	1.58	Y	0.84	0.87	3%
ES 123478-HxCDD	36.52	7.28E+07	1.25	Y	0.97	0.96	-2%
ES 123678-HxCDD	36.64	7.14E+07	1.26	Y	0.96	0.94	-3%
ES 123789-HxCDD	36.94	8.47E+07	1.30	Y	1.10	1.11	1%
ES 1234678-HpCDD	40.05	6.84E+07	1.07	Y	0.93	0.90	-3%
ES OCDD	42.75	9.10E+07	0.90	Y	0.63	0.60	-5%
ES 2378-TCDF	25.72	1.52E+08	0.81	Y	0.97	0.98	1%
ES 12378-PeCDF	30.91	1.22E+08	1.58	Y	0.78	0.78	1%
ES 23478-PeCDF	32.08	1.27E+08	1.57	Y	0.80	0.82	2%
ES 123478-HxCDF	35.51	9.14E+07	0.53	Y	1.22	1.20	-2%
ES 123678-HxCDF	35.65	1.06E+08	0.54	Y	1.41	1.39	-2%
ES 234678-HxCDF	36.33	9.73E+07	0.52	Y	1.29	1.28	-1%
ES 123789-HxCDF	37.3	9.01E+07	0.53	Y	1.17	1.18	1%
ES 1234678-HpCDF	39.01	7.10E+07	0.47	Y	0.97	0.93	-4%
ES 1234789-HpCDF	40.48	6.55E+07	0.46	Y	0.88	0.86	-2%
ES OCDF	42.89	1.17E+08	0.90	Y	0.81	0.77	-5%

Dioxin/Furan QC Summary	Acq'd: 24 Aug 2020 12:54 DTF	ICAL: HRMS3_DF_10122018_24AUG2020
Lab ID: CS3_200824_DF_CA	UTP: 25-Aug-2020 09:53:45 DTF	Checkcode: 779-324-XWR
Sample ID: 20-449-3	Report: 25 Aug 2020 10:43 TF	Datafile: 200824C05

Name	RT	Response	RA	OK	Ref. RRFs	Calc. RRFs	Dev'n
JS 1234-TCDD	25.98	1.01E+08	0.82	Y	-	-	-
JS 1234-TCDF	24.22	1.55E+08	0.78	Y	-	-	-
JS 123467-HxCDD	36.83	3.81E+07	1.18	Y	-	-	-
CS 37Cl-2378-TCDD	26.71	1.14E+07	n/a	-	1.14	1.14	-1%
CS 12347-PeCDD	31.93	7.74E+07	1.60	Y	0.72	0.77	6%
CS 12346-PeCDF	30.35	1.22E+08	1.57	Y	0.77	0.78	1%
CS 123469-HxCDF	35.96	9.07E+07	0.53	Y	1.18	1.19	1%
CS 1234689-HpCDF	39.46	7.34E+07	0.46	Y	0.96	0.96	1%
SS 37Cl-2378-TCDD	26.71	1.14E+07	n/a	-	1.19	1.17	-2%
SS 12347-PeCDD	31.93	7.74E+07	1.60	Y	0.86	0.88	3%
SS 12346-PeCDF	30.35	1.22E+08	1.57	Y	1.00	1.00	0%
SS 123469-HxCDF	35.96	9.07E+07	0.53	Y	0.84	0.86	2%
SS 1234689-HpCDF	39.46	7.34E+07	0.46	Y	0.98	1.03	5%
AS 1368-TCDD	22.58	1.06E+08	0.81	Y	1.09	1.05	-4%
AS 1368-TCDF	20.41	1.75E+08	0.78	Y	1.16	1.13	-3%
FS 1278-TCDD	27.05	9.94E+07	0.79	Y	0.99	1.02	3%
FS 12478-PeCDD	31.16	8.37E+07	1.57	Y	0.97	0.96	-2%
FS 123468-HxCDD	35.44	8.46E+07	1.27	Y	1.13	1.16	3%
FS 1234679-HpCDD	39.32	8.05E+07	1.08	Y	1.12	1.18	5%
TS 1378-TCDD	24.86	1.08E+08	0.81	Y	1.10	1.11	1%
OCDD-a	42.76	3.35E+06	2.32	Y	0.07	0.07	1%
OCDF-a	42.90	4.08E+06	2.37	Y	0.06	0.07	11%

SGS ID: CS3_200824_DF_CA | **Sample ID: 20-449-3** | **Acq: 24-Aug-2020 12:54:52**

Instr: [ILM] AutoSpec-Ultima HRMS3 | **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 3** | **User: DTF Datafile: 200824C05**

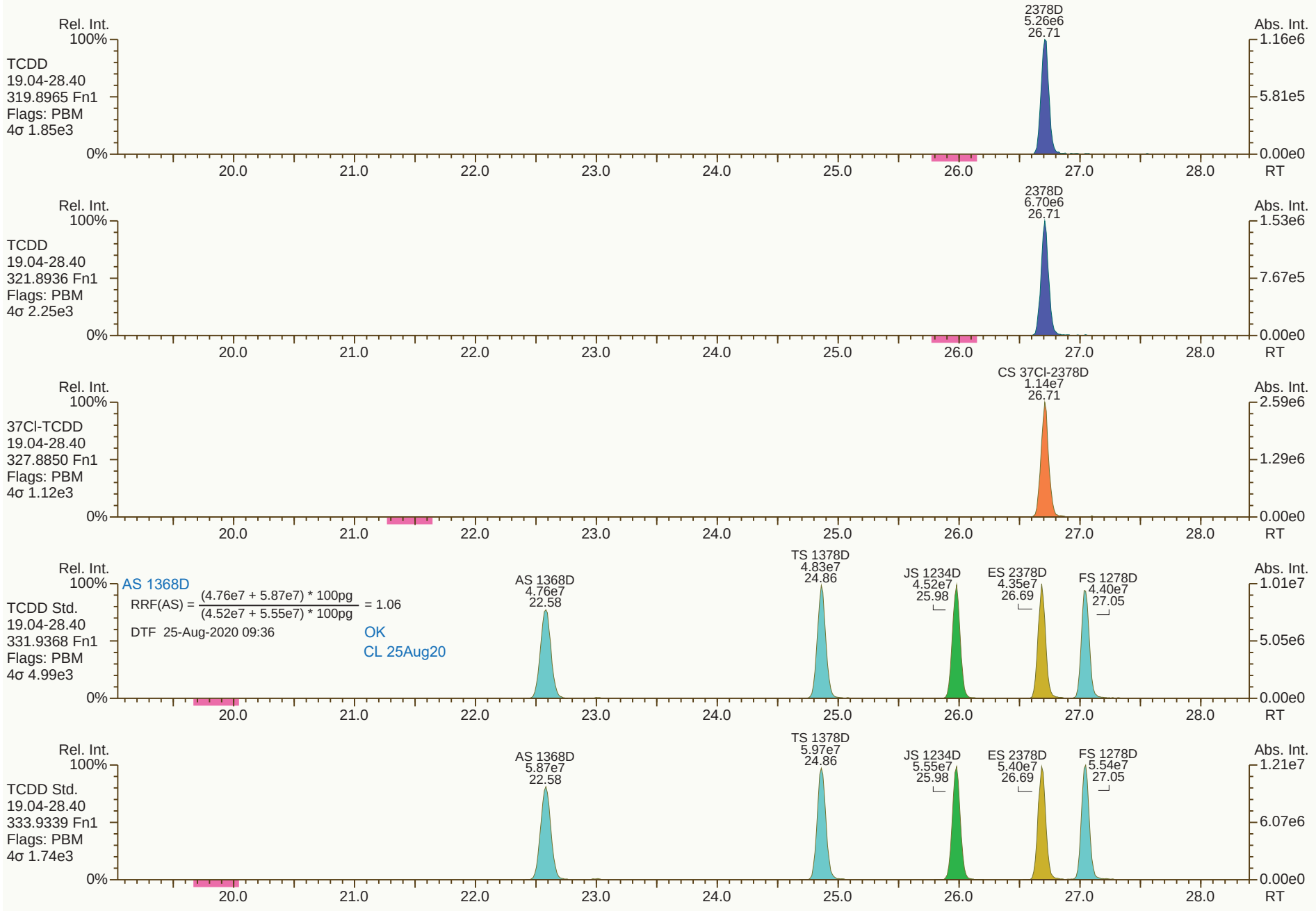


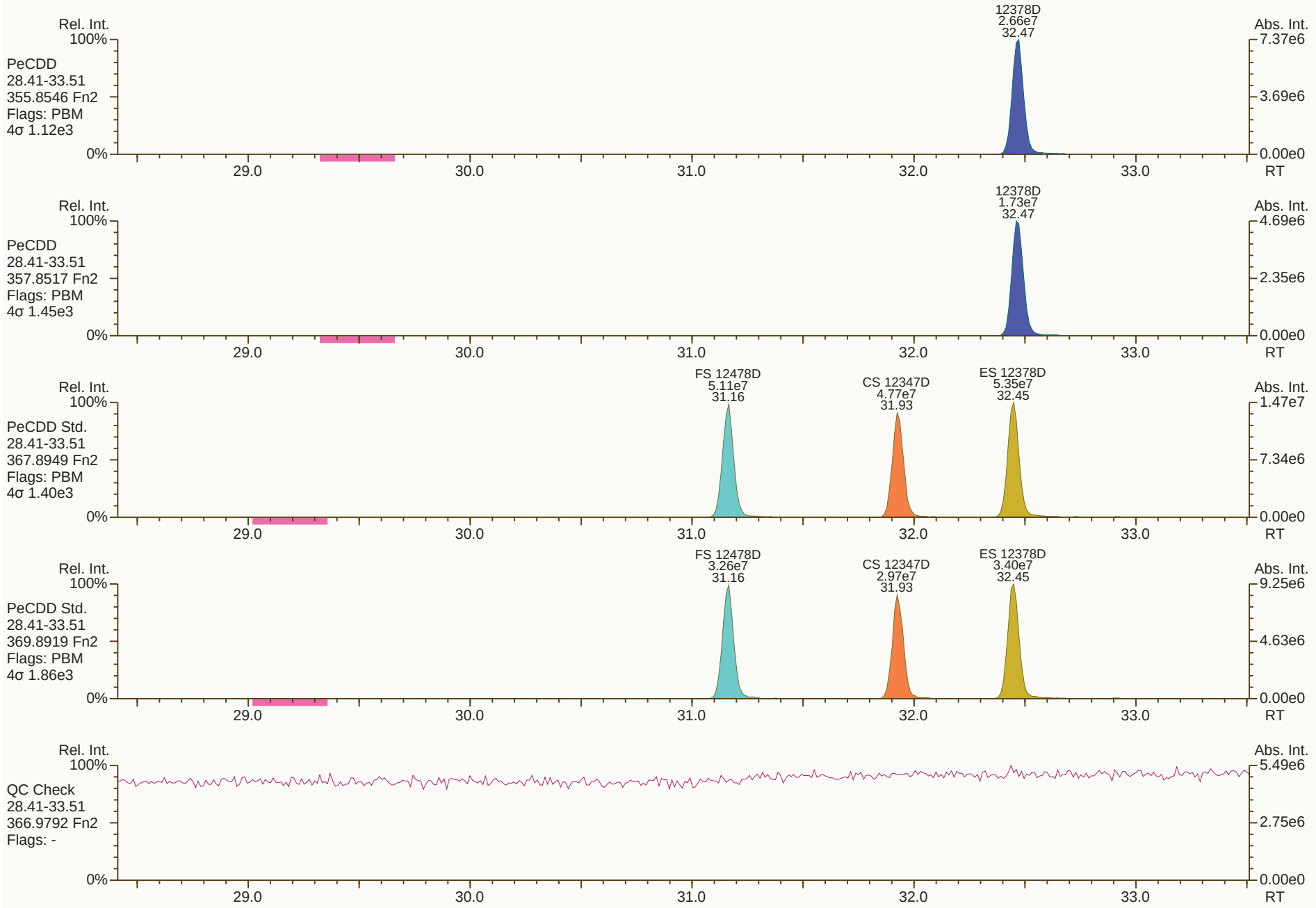
Results: T:\UltraTracePro\ICAL results\HRMS3\HRMS3_DF_10122018_24AUG2020\Resources\CS3_200824_DF_CA.utp_res, saved 25-Aug-2020 09:53 (DTF)

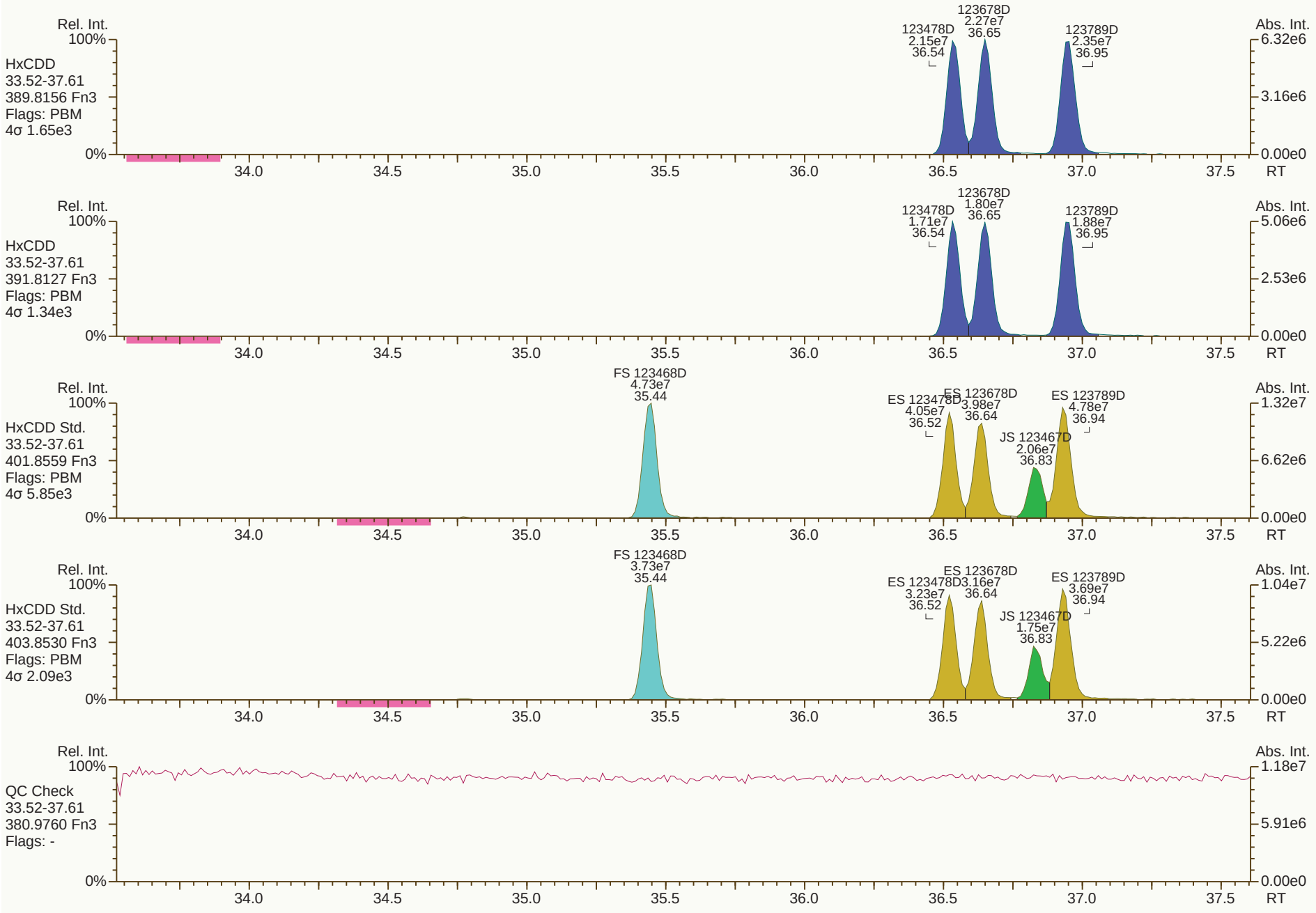
Peak annotation: Areas, Centroids

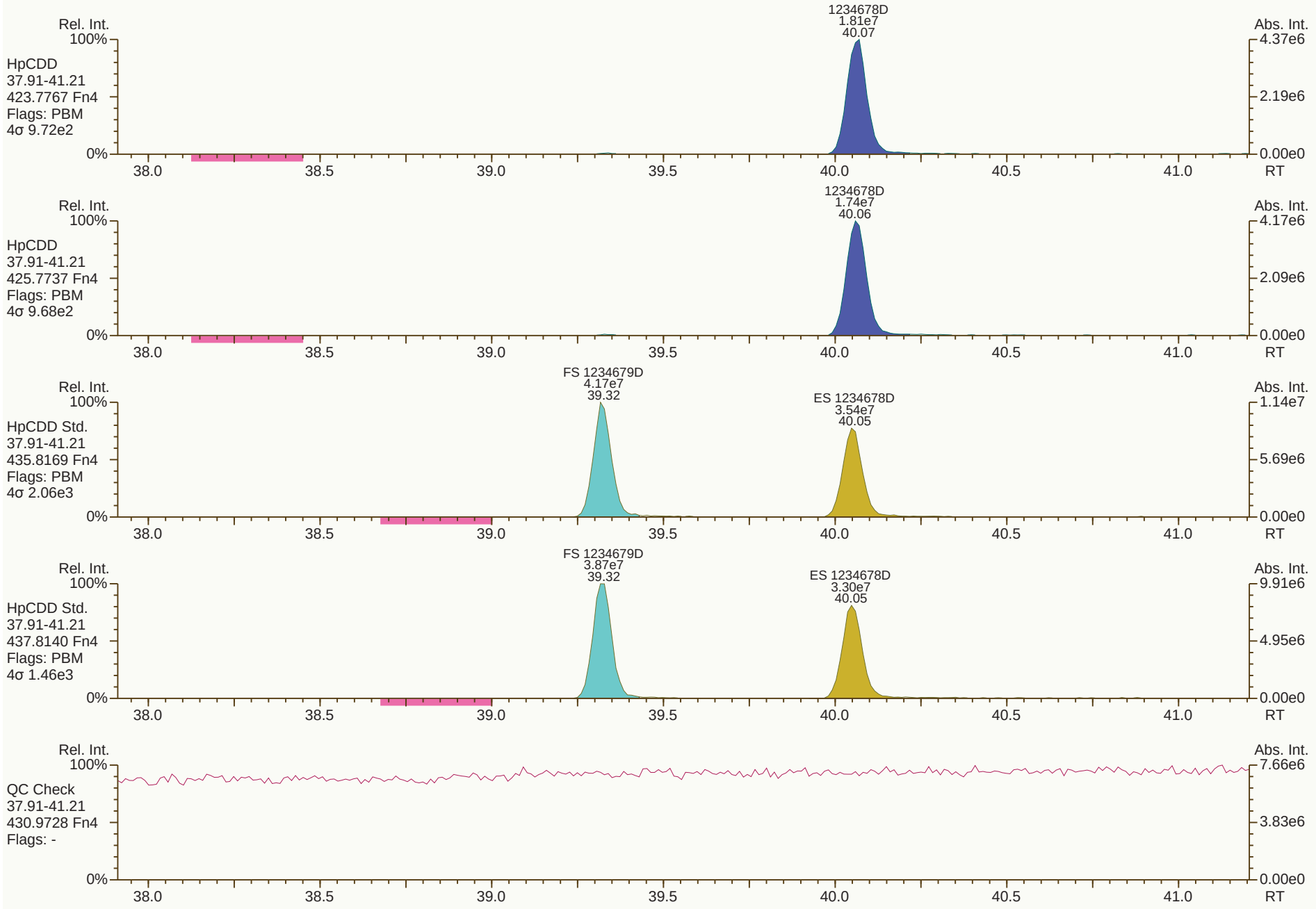
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 scc: 779-324

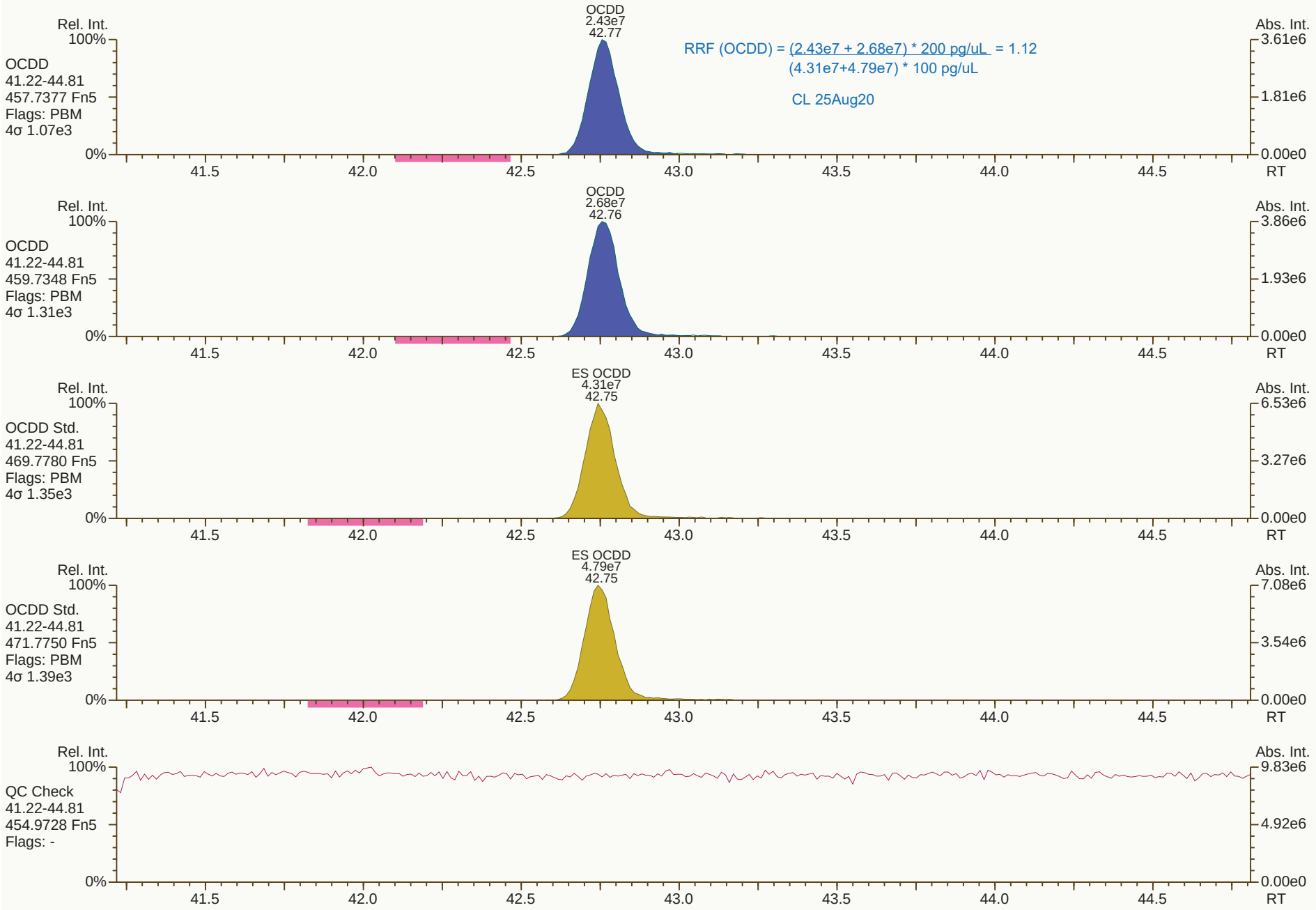
PKD: n/a Printed: 25-Aug-2020 10:46 Page 1 of 12


Rel. Int.
100%
TCDD
19.04-28.40
319.8965 Fn1
Flags: PBM
4σ 1.85e3
0%
2378D
5.26e6
26.71
Abs. Int.
1.16e6
5.81e5
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDD
19.04-28.40
321.8936 Fn1
Flags: PBM
4σ 2.25e3
0%
2378D
6.70e6
26.71
Abs. Int.
1.53e6
7.67e5
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
37Cl-TCDD
19.04-28.40
327.8850 Fn1
Flags: PBM
4σ 1.12e3
0%
CS 37Cl-2378D
1.14e7
26.71
Abs. Int.
2.59e6
1.29e6
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
AS 1368D
RRF(AS) = (4.76e7 + 5.87e7) * 100pg / (4.52e7 + 5.55e7) * 100pg = 1.06
DTF 25-Aug-2020 09:36
OK
CL 25Aug20
TCDD Std.
19.04-28.40
331.9368 Fn1
Flags: PBM
4σ 4.99e3
0%
AS 1368D
4.76e7
22.58
TS 1378D
4.83e7
24.86
JS 1234D
4.52e7
25.98
ES 2378D
4.35e7
26.69
FS 1278D
4.40e7
27.05
Abs. Int.
1.01e7
5.05e6
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.40
333.9339 Fn1
Flags: PBM
4σ 1.74e3
0%
AS 1368D
5.87e7
22.58
TS 1378D
5.97e7
24.86
JS 1234D
5.55e7
25.98
ES 2378D
5.40e7
26.69
FS 1278D
5.54e7
27.05
Abs. Int.
1.21e7
6.07e6
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT


Rel. Int.
100%
PeCDD
28.41-33.51
355.8546 Fn2
Flags: PBM
4σ 1.12e3
0%
12378D
2.66e7
32.47
Abs. Int.
7.37e6
3.69e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD
28.41-33.51
357.8517 Fn2
Flags: PBM
4σ 1.45e3
0%
12378D
1.73e7
32.47
Abs. Int.
4.69e6
2.35e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.41-33.51
367.8949 Fn2
Flags: PBM
4σ 1.40e3
0%
FS 12478D
5.11e7
31.16
CS 12347D
4.77e7
31.93
ES 12378D
5.35e7
32.45
Abs. Int.
1.47e7
7.34e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.41-33.51
369.8919 Fn2
Flags: PBM
4σ 1.86e3
0%
FS 12478D
3.26e7
31.16
CS 12347D
2.97e7
31.93
ES 12378D
3.40e7
32.45
Abs. Int.
9.25e6
4.63e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
QC Check
28.41-33.51
366.9792 Fn2
Flags: -
0%
Abs. Int.
5.49e6
2.75e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT


Rel. Int.
100%
HxCDD
33.52-37.61
389.8156 Fn3
Flags: PBM
4σ 1.65e3
123478D
2.15e7
36.54
123678D
2.27e7
36.65
123789D
2.35e7
36.95
Abs. Int.
6.32e6
3.16e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD
33.52-37.61
391.8127 Fn3
Flags: PBM
4σ 1.34e3
123478D
1.71e7
36.54
123678D
1.80e7
36.65
123789D
1.88e7
36.95
Abs. Int.
5.06e6
2.53e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.52-37.61
401.8559 Fn3
Flags: PBM
4σ 5.85e3
FS 123468D
4.73e7
35.44
ES 123478D
4.05e7
36.52
ES 123678D
3.98e7
36.64
JS 123467D
2.06e7
36.83
ES 123789D
4.78e7
36.94
Abs. Int.
1.32e7
6.62e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.52-37.61
403.8530 Fn3
Flags: PBM
4σ 2.09e3
FS 123468D
3.73e7
35.44
ES 123478D
3.23e7
36.52
ES 123678D
3.16e7
36.64
JS 123467D
1.75e7
36.83
ES 123789D
3.69e7
36.94
Abs. Int.
1.04e7
5.22e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
QC Check
33.52-37.61
380.9760 Fn3
Flags: -
Abs. Int.
1.18e7
5.91e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT

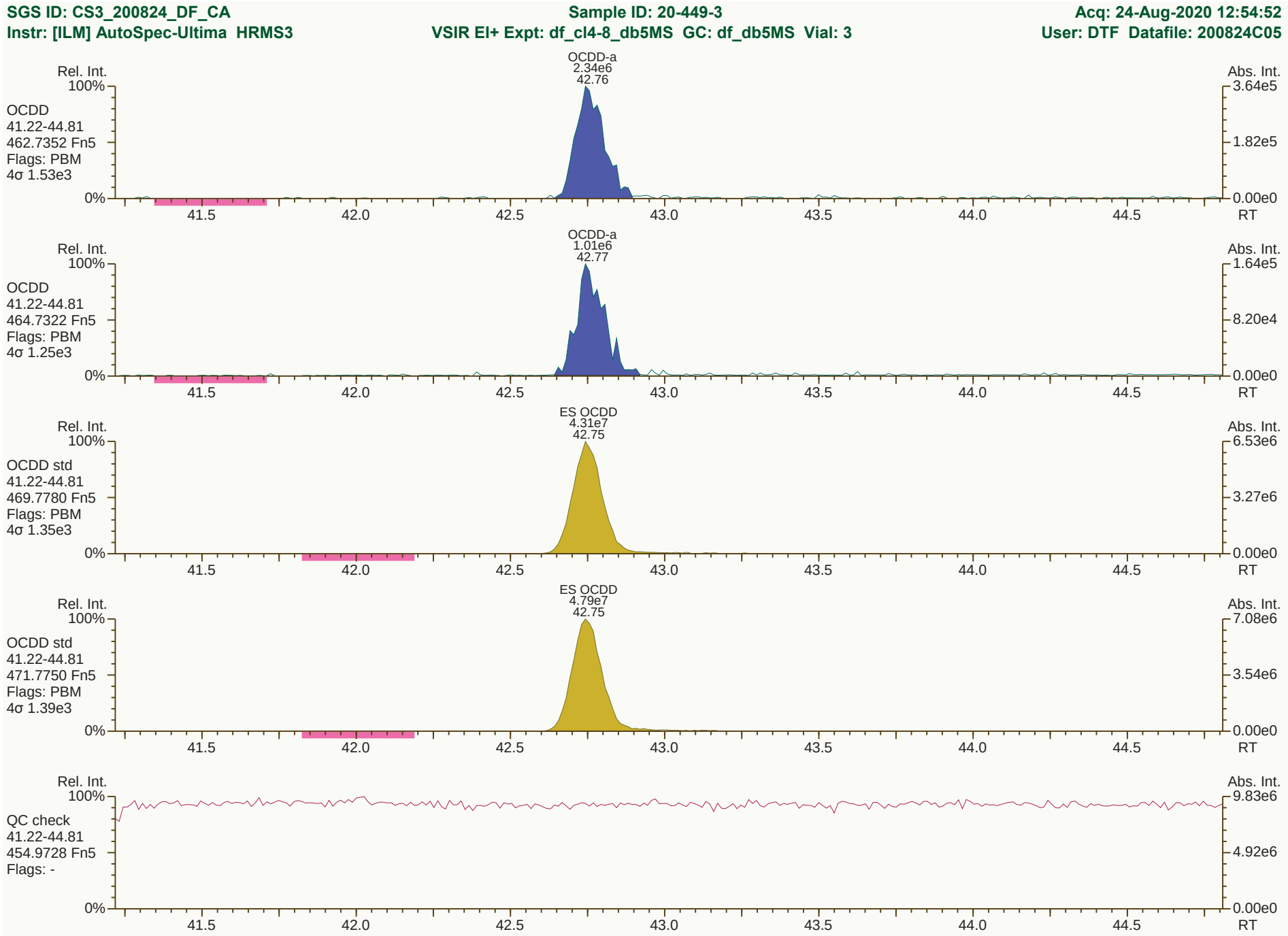

Rel. Int.
100%
HpCDD
37.91-41.21
423.7767 Fn4
Flags: PBM
4σ 9.72e2
0%
1234678D
1.81e7
40.07
Abs. Int.
4.37e6
2.19e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD
37.91-41.21
425.7737 Fn4
Flags: PBM
4σ 9.68e2
0%
1234678D
1.74e7
40.06
Abs. Int.
4.17e6
2.09e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.91-41.21
435.8169 Fn4
Flags: PBM
4σ 2.06e3
0%
FS 1234679D
4.17e7
39.32
ES 1234678D
3.54e7
40.05
Abs. Int.
1.14e7
5.69e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.91-41.21
437.8140 Fn4
Flags: PBM
4σ 1.46e3
0%
FS 1234679D
3.87e7
39.32
ES 1234678D
3.30e7
40.05
Abs. Int.
9.91e6
4.95e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
QC Check
37.91-41.21
430.9728 Fn4
Flags: -
0%
Abs. Int.
7.66e6
3.83e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT


OCDD
2.43e7
42.77
RRF (OCDD) = (2.43e7 + 2.68e7) * 200 pg/uL = 1.12
(4.31e7+4.79e7) * 100 pg/uL
CL 25Aug20
Rel. Int.
Abs. Int.
OCDD
41.22-44.81
457.7377 Fn5
Flags: PBM
4σ 1.07e3
OCDD
2.68e7
42.76
OCDD
41.22-44.81
459.7348 Fn5
Flags: PBM
4σ 1.31e3
ES OCDD
4.31e7
42.75
OCDD Std.
41.22-44.81
469.7780 Fn5
Flags: PBM
4σ 1.35e3
ES OCDD
4.79e7
42.75
OCDD Std.
41.22-44.81
471.7750 Fn5
Flags: PBM
4σ 1.39e3
QC Check
41.22-44.81
454.9728 Fn5
Flags: -
RT

SGS ID: CS3_200824_DF_CA
Instr: [ILM] AutoSpec-Ultima HRMS3

Sample ID: 20-449-3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 3

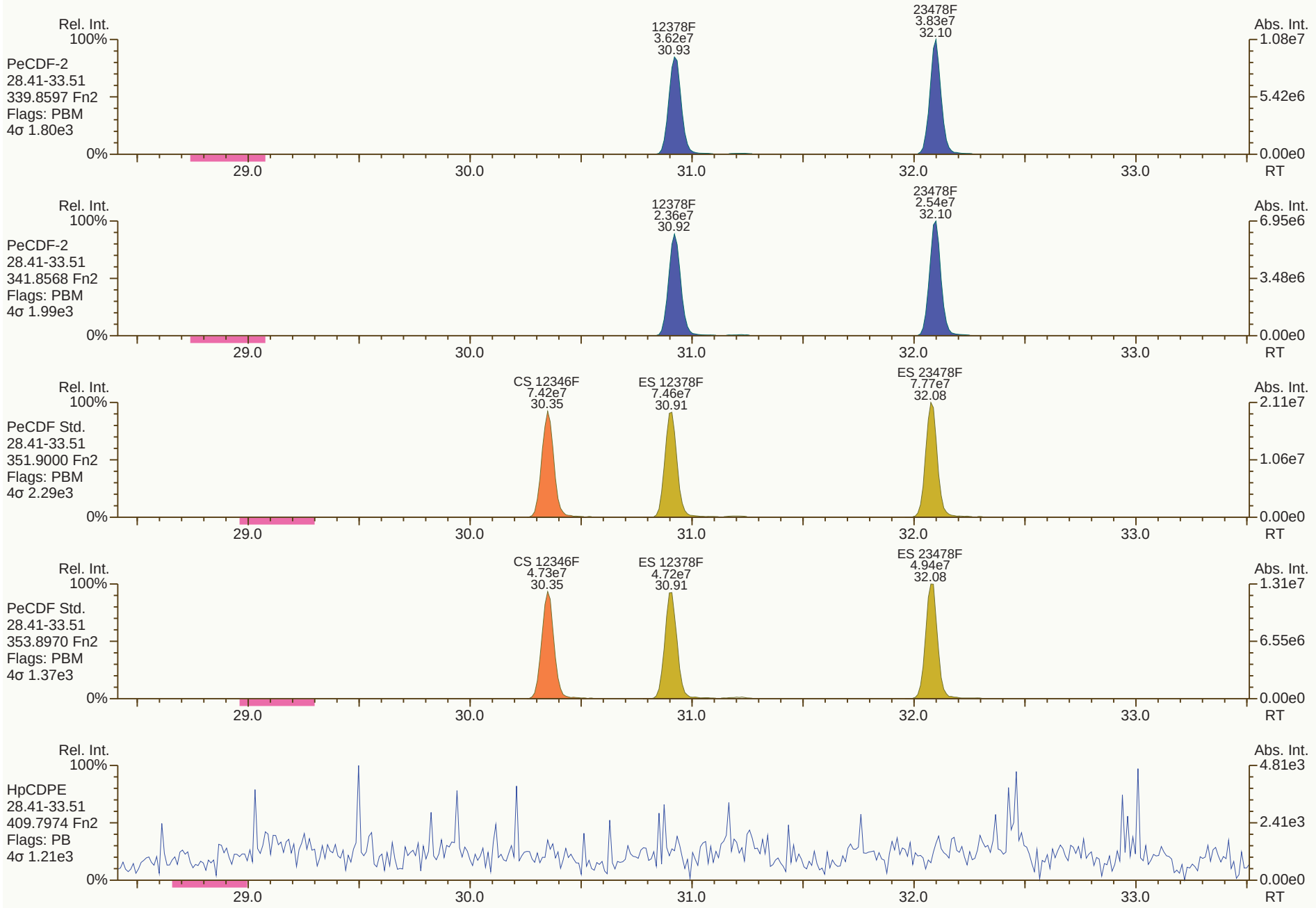
Acq: 24-Aug-2020 12:54:52
User: DTF Datafile: 200824C05

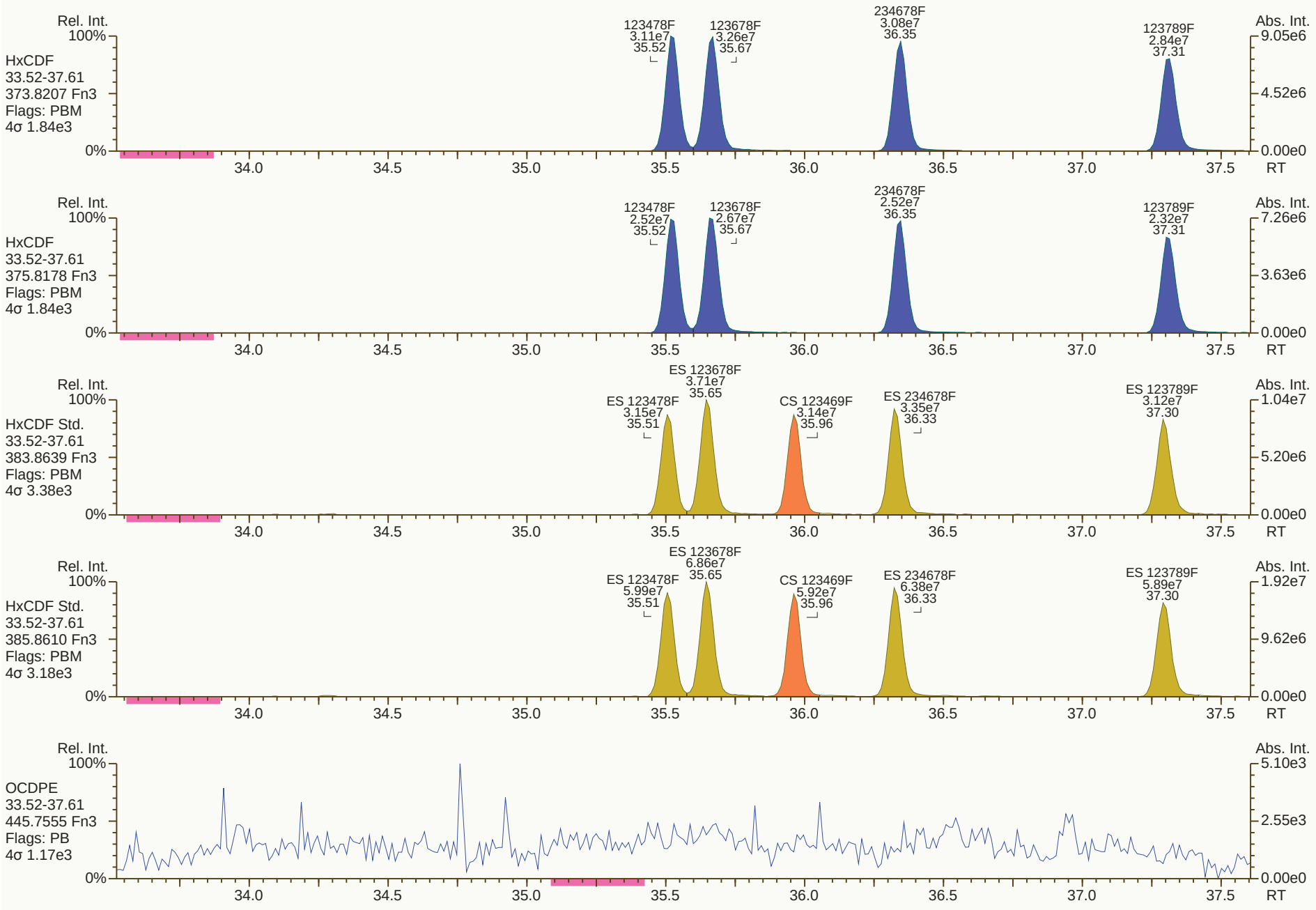


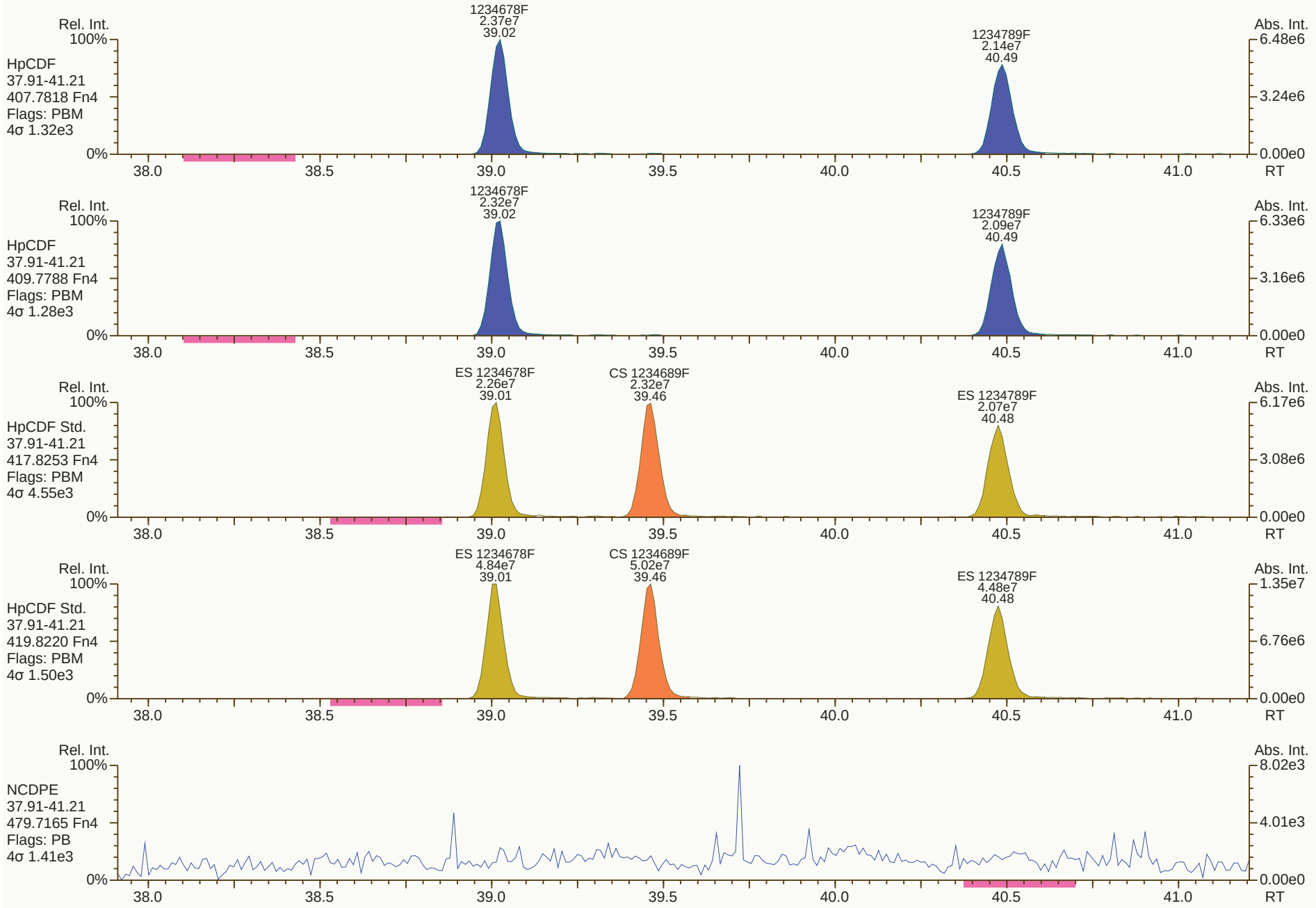
Results: T:\UltraTracePro\ICAL results\HRMS3\HRMS3_DF_10122018_24AUG2020\Resources\CS3_200824_DF_CA.utp_res, saved 25-Aug-2020 09:53 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 7024, 7014
Revised: 25-Aug-2020 09:49 (DTF) Printed: 25-Aug-2020 13:51

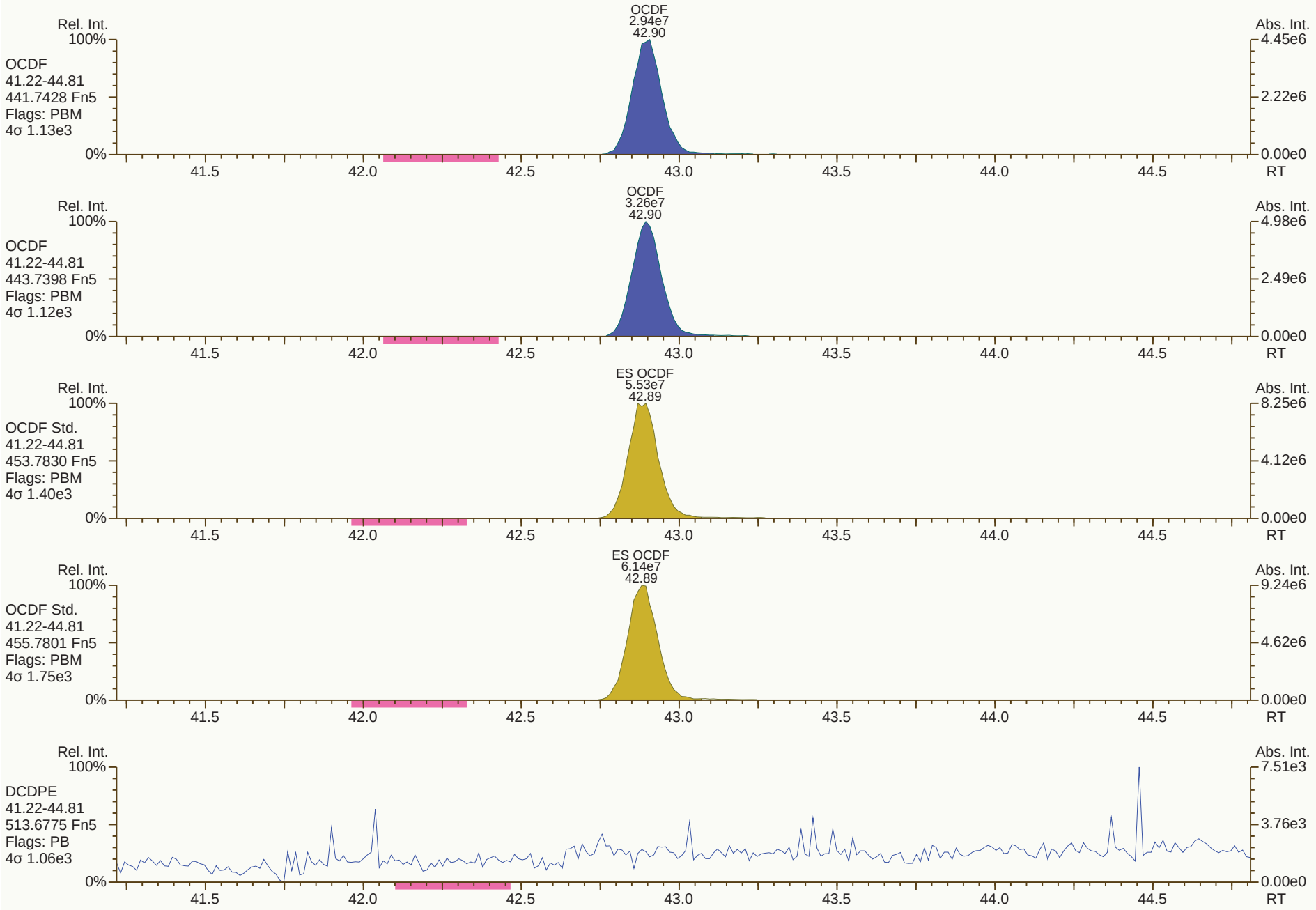

Rel. Int.
100%
TCDF
19.04-28.40
303.9016 Fn1
Flags: PBM
4σ 1.46e3
0%
2378F
7.22e6
25.75
Abs. Int.
1.58e6
7.92e5
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDF
19.04-28.40
305.8987 Fn1
Flags: PBM
4σ 6.96e2
0%
2378F
9.35e6
25.75
Abs. Int.
1.95e6
9.76e5
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDF Std.
19.04-28.40
315.9419 Fn1
Flags: PBM
4σ 1.36e4
0%
AS 1368F
7.69e7
20.41
JS 1234F
6.82e7
24.22
ES 2378F
6.82e7
25.72
Abs. Int.
1.46e7
7.29e6
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDF Std.
19.04-28.40
317.9389 Fn1
Flags: PBM
4σ 5.81e3
0%
AS 1368F
9.82e7
20.40
JS 1234F
8.70e7
24.21
ES 2378F
8.38e7
25.72
Abs. Int.
1.85e7
9.23e6
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
HxCDPE
19.04-28.40
375.8364 Fn1
Flags: PB
4σ 1.03e3
0%
Abs. Int.
5.17e3
2.58e3
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT


Rel. Int.
100%
0%
Abs. Int.
7.83e3
3.92e3
0.00e0
RT
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
PeCDF-1
19.04-28.40
339.8597 Fn1
Flags: PB
4σ 8.94e2
PeCDF-1
19.04-28.40
341.8568 Fn1
Flags: PB
4σ 1.13e3
1.11e4
5.55e3
QC Check
19.04-28.40
316.9824 Fn1
Flags: -
5.90e6
2.95e6


Rel. Int.
100%
PeCDF-2
28.41-33.51
339.8597 Fn2
Flags: PBM
4σ 1.80e3
0%
12378F
3.62e7
30.93
23478F
3.83e7
32.10
Abs. Int.
1.08e7
5.42e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF-2
28.41-33.51
341.8568 Fn2
Flags: PBM
4σ 1.99e3
0%
12378F
2.36e7
30.92
23478F
2.54e7
32.10
Abs. Int.
6.95e6
3.48e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.41-33.51
351.9000 Fn2
Flags: PBM
4σ 2.29e3
0%
CS 12346F
7.42e7
30.35
ES 12378F
7.46e7
30.91
ES 23478F
7.77e7
32.08
Abs. Int.
2.11e7
1.06e7
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.41-33.51
353.8970 Fn2
Flags: PBM
4σ 1.37e3
0%
CS 12346F
4.73e7
30.35
ES 12378F
4.72e7
30.91
ES 23478F
4.94e7
32.08
Abs. Int.
1.31e7
6.55e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
HpCDPE
28.41-33.51
409.7974 Fn2
Flags: PB
4σ 1.21e3
0%
Abs. Int.
4.81e3
2.41e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT


Rel. Int.
100%
HxCDF
33.52-37.61
373.8207 Fn3
Flags: PBM
4σ 1.84e3
0%
123478F
3.11e7
35.52
123678F
3.26e7
35.67
234678F
3.08e7
36.35
123789F
2.84e7
37.31
Abs. Int.
9.05e6
4.52e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
HxCDF
33.52-37.61
375.8178 Fn3
Flags: PBM
4σ 1.84e3
123478F
2.52e7
35.52
123678F
2.67e7
35.67
234678F
2.52e7
36.35
123789F
2.32e7
37.31
7.26e6
3.63e6
HxCDF Std.
33.52-37.61
383.8639 Fn3
Flags: PBM
4σ 3.38e3
ES 123478F
3.15e7
35.51
ES 123678F
3.71e7
35.65
CS 123469F
3.14e7
35.96
ES 234678F
3.35e7
36.33
ES 123789F
3.12e7
37.30
1.04e7
5.20e6
HxCDF Std.
33.52-37.61
385.8610 Fn3
Flags: PBM
4σ 3.18e3
ES 123478F
5.99e7
35.51
ES 123678F
6.86e7
35.65
CS 123469F
5.92e7
35.96
ES 234678F
6.38e7
36.33
ES 123789F
5.89e7
37.30
1.92e7
9.62e6
OCDPE
33.52-37.61
445.7555 Fn3
Flags: PB
4σ 1.17e3
5.10e3
2.55e3

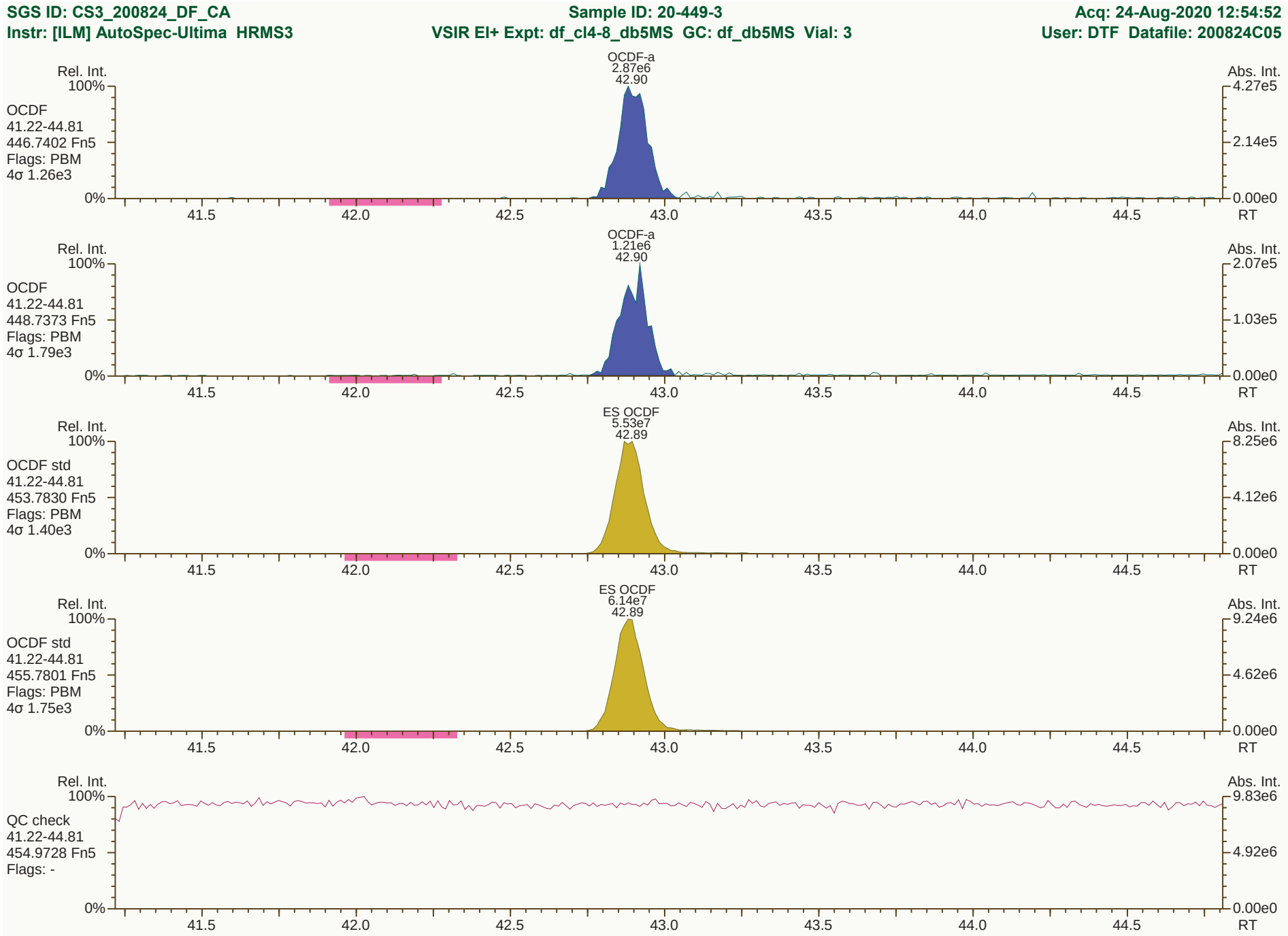

Rel. Int.
100%
HpCDF
37.91-41.21
407.7818 Fn4
Flags: PBM
4σ 1.32e3
1234678F
2.37e7
39.02
1234789F
2.14e7
40.49
Abs. Int.
6.48e6
3.24e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF
37.91-41.21
409.7788 Fn4
Flags: PBM
4σ 1.28e3
1234678F
2.32e7
39.02
1234789F
2.09e7
40.49
Abs. Int.
6.33e6
3.16e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.91-41.21
417.8253 Fn4
Flags: PBM
4σ 4.55e3
ES 1234678F
2.26e7
39.01
CS 1234689F
2.32e7
39.46
ES 1234789F
2.07e7
40.48
Abs. Int.
6.17e6
3.08e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.91-41.21
419.8220 Fn4
Flags: PBM
4σ 1.50e3
ES 1234678F
4.84e7
39.01
CS 1234689F
5.02e7
39.46
ES 1234789F
4.48e7
40.48
Abs. Int.
1.35e7
6.76e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
NCDPE
37.91-41.21
479.7165 Fn4
Flags: PB
4σ 1.41e3
Abs. Int.
8.02e3
4.01e3
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT


Rel. Int.
100%
OCDF
41.22-44.81
441.7428 Fn5
Flags: PBM
4σ 1.13e3
0%
OCDF
2.94e7
42.90
Abs. Int.
4.45e6
2.22e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDF
41.22-44.81
443.7398 Fn5
Flags: PBM
4σ 1.12e3
0%
OCDF
3.26e7
42.90
Abs. Int.
4.98e6
2.49e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDF Std.
41.22-44.81
453.7830 Fn5
Flags: PBM
4σ 1.40e3
0%
ES OCDF
5.53e7
42.89
Abs. Int.
8.25e6
4.12e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDF Std.
41.22-44.81
455.7801 Fn5
Flags: PBM
4σ 1.75e3
0%
ES OCDF
6.14e7
42.89
Abs. Int.
9.24e6
4.62e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
DCDPE
41.22-44.81
513.6775 Fn5
Flags: PB
4σ 1.06e3
0%
Abs. Int.
7.51e3
3.76e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT

SGS ID: CS3_200824_DF_CA
Instr: [ILM] AutoSpec-Ultima HRMS3

Sample ID: 20-449-3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 3

Acq: 24-Aug-2020 12:54:52
User: DTF Datafile: 200824C05



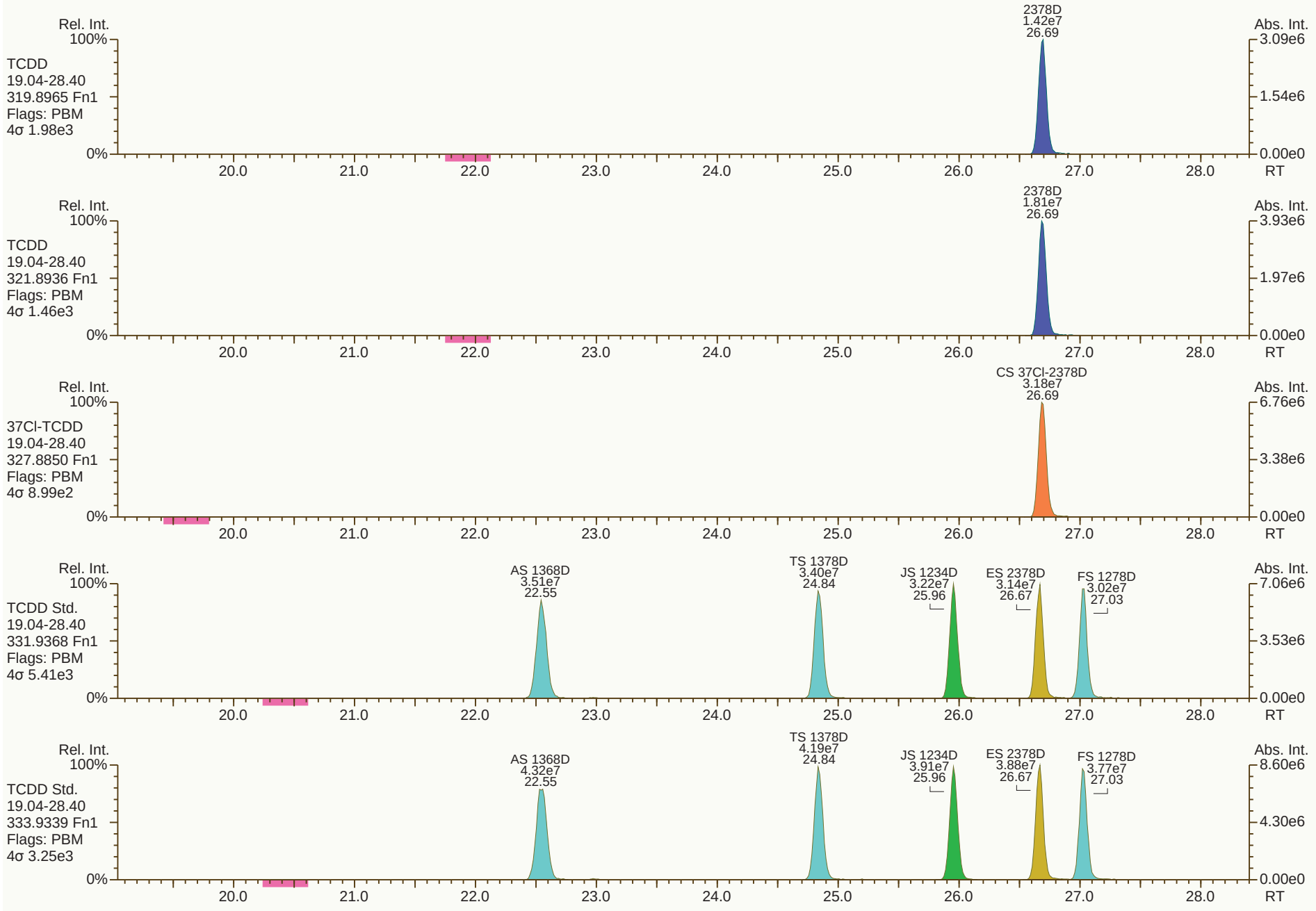
Results: T:\UltraTracePro\ICAL results\HRMS3\HRMS3_DF_10122018_24AUG2020\Resources\CS3_200824_DF_CA.utp_res, saved 25-Aug-2020 09:53 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 9767, 6535
Revised: 25-Aug-2020 09:50 (DTF) Printed: 25-Aug-2020 13:51

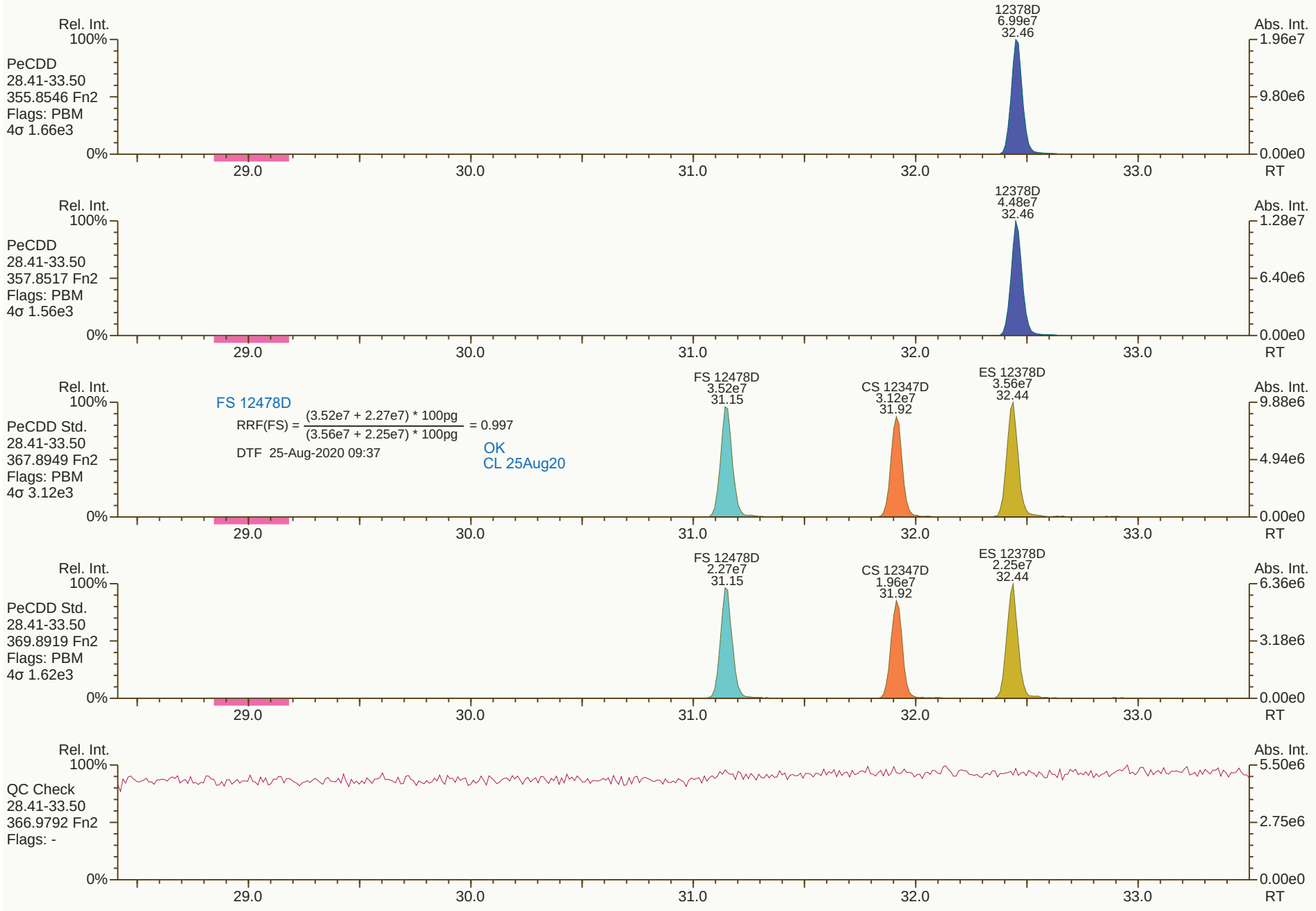
Dioxin/Furan QC Summary		Acq'd: 24 Aug 2020 13:41 DTF				ICAL: HRMS3_DF_10122018_24AUG2020	
Lab ID: CS4_200824_DF_CA		UTP: 25-Aug-2020 09:53:46 DTF				Checkcode: 133-581-JPS	
Sample ID: 20-281-2		Report: 25 Aug 2020 10:43 TF				Datafile: 200824C06	
Name	**RT**	**Response**	**RA**	**OK**	**Ref. RRFs**	**Calc. RRFs**	**Dev'n**
2378-TCDD	26.69	3.23E+07	0.78	Y	1.19	1.15	-3%
12378-PeCDD	32.46	1.15E+08	1.56	Y	1.01	0.99	-2%
123478-HxCDD	36.53	9.75E+07	1.26	Y	1.05	1.03	-3%
123678-HxCDD	36.64	1.03E+08	1.26	Y	1.12	1.10	-1%
123789-HxCDD	36.94	1.07E+08	1.24	Y	1.02	1.01	-1%
1234678-HpCDD	40.05	8.95E+07	1.04	Y	1.00	0.99	-2%
OCDD	42.75	1.29E+08	0.89	Y	1.08	1.06	-2%
2378-TCDF	25.73	4.39E+07	0.78	Y	1.06	1.03	-3%
12378-PeCDF	30.91	1.56E+08	1.54	Y	0.98	0.97	-1%
23478-PeCDF	32.08	1.63E+08	1.52	Y	0.97	0.96	-2%
123478-HxCDF	35.51	1.43E+08	1.23	Y	1.22	1.19	-2%
123678-HxCDF	35.66	1.50E+08	1.24	Y	1.11	1.08	-2%
234678-HxCDF	36.34	1.41E+08	1.22	Y	1.15	1.12	-2%
123789-HxCDF	37.30	1.26E+08	1.24	Y	1.12	1.10	-2%
1234678-HpCDF	39.01	1.23E+08	1.02	Y	1.29	1.24	-4%
1234789-HpCDF	40.48	1.07E+08	1.02	Y	1.27	1.23	-3%
OCDF	42.89	1.59E+08	0.91	Y	1.04	1.00	-4%
ES 2378-TCDD	26.67	7.02E+07	0.81	Y	0.97	0.98	1%
ES 12378-PeCDD	32.44	5.80E+07	1.58	Y	0.84	0.81	-4%
ES 123478-HxCDD	36.51	4.74E+07	1.30	Y	0.97	0.91	-7%
ES 123678-HxCDD	36.63	4.67E+07	1.23	Y	0.96	0.90	-7%
ES 123789-HxCDD	36.93	5.29E+07	1.28	Y	1.10	1.01	-8%
ES 1234678-HpCDD	40.04	4.53E+07	1.06	Y	0.93	0.87	-6%
ES OCDD	42.74	6.07E+07	0.92	Y	0.63	0.58	-8%
ES 2378-TCDF	25.7	1.06E+08	0.80	Y	0.97	0.97	0%
ES 12378-PeCDF	30.89	8.07E+07	1.53	Y	0.78	0.74	-5%
ES 23478-PeCDF	32.07	8.55E+07	1.57	Y	0.80	0.78	-3%
ES 123478-HxCDF	35.5	5.98E+07	0.54	Y	1.22	1.15	-6%
ES 123678-HxCDF	35.64	6.90E+07	0.54	Y	1.41	1.32	-6%
ES 234678-HxCDF	36.32	6.26E+07	0.53	Y	1.29	1.20	-7%
ES 123789-HxCDF	37.29	5.72E+07	0.54	Y	1.17	1.10	-7%
ES 1234678-HpCDF	39	4.95E+07	0.46	Y	0.97	0.95	-3%
ES 1234789-HpCDF	40.46	4.38E+07	0.46	Y	0.88	0.84	-5%
ES OCDF	42.88	7.96E+07	0.91	Y	0.81	0.76	-5%

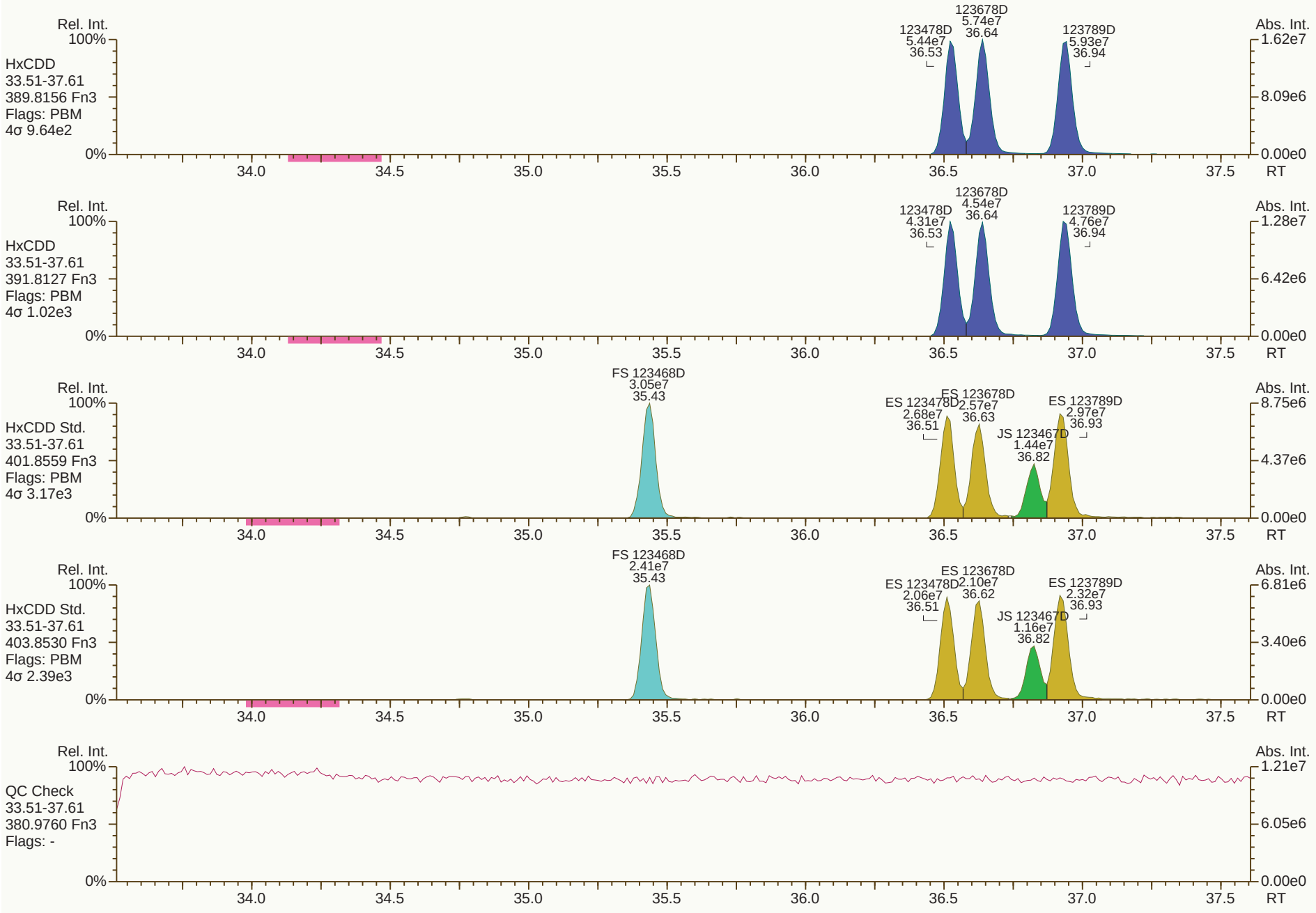
Dioxin/Furan QC Summary	Acq'd: 24 Aug 2020 13:41 DTF	ICAL: HRMS3_DF_10122018_24AUG2020
Lab ID: CS4_200824_DF_CA	UTP: 25-Aug-2020 09:53:46 DTF	Checkcode: 133-581-JPS
Sample ID: 20-281-2	Report: 25 Aug 2020 10:43 TF	Datafile: 200824C06

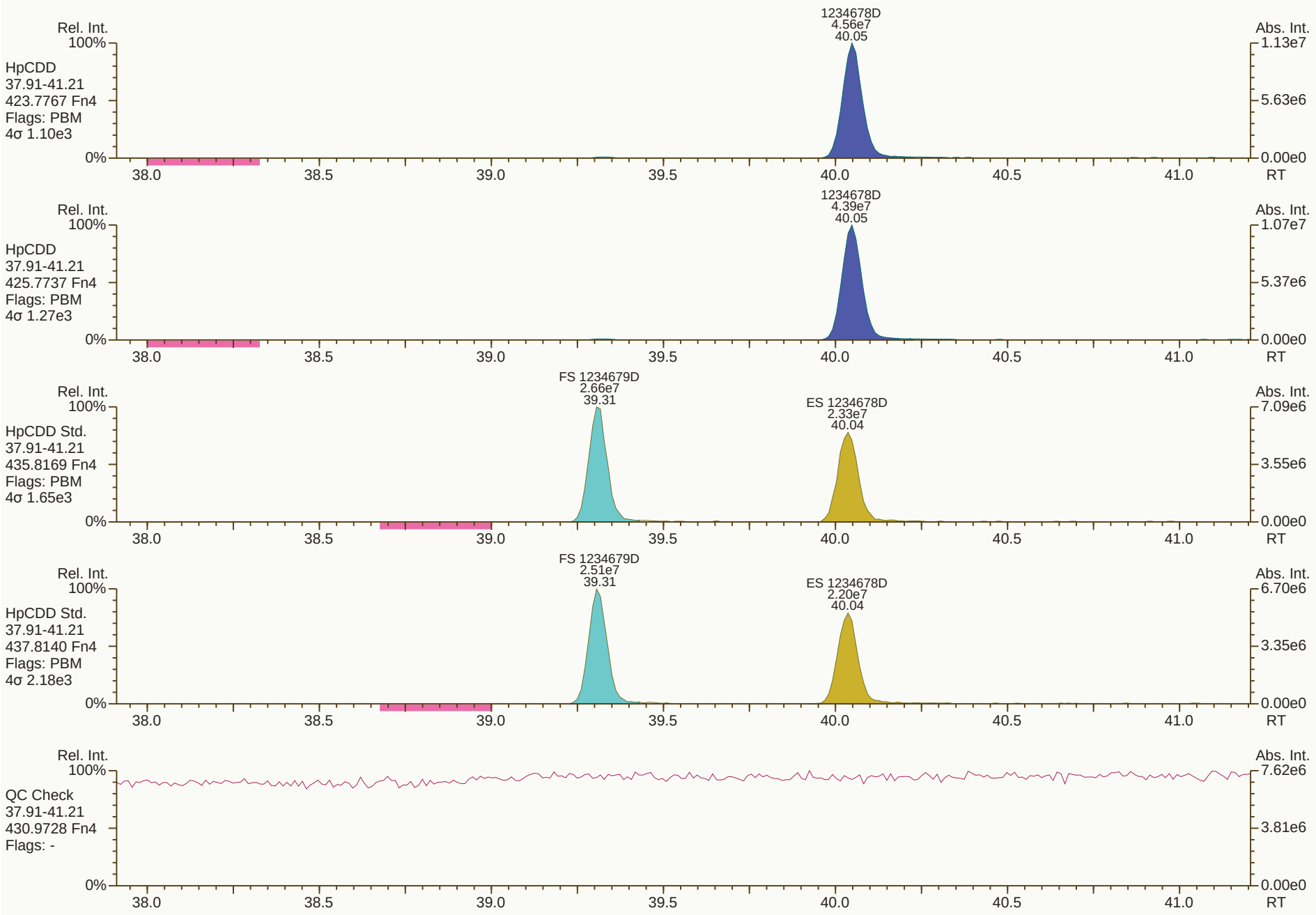
Name	RT	Response	RA	OK	Ref. RRFs	Calc. RRFs	Dev'n
JS 1234-TCDD	25.96	7.13E+07	0.82	Y	-	-	-
JS 1234-TCDF	24.19	1.09E+08	0.79	Y	-	-	-
JS 123467-HxCDD	36.82	2.61E+07	1.24	Y	-	-	-
CS 37Cl-2378-TCDD	26.69	3.18E+07	n/a	-	1.14	1.12	-2%
CS 12347-PeCDD	31.92	5.08E+07	1.59	Y	0.72	0.71	-1%
CS 12346-PeCDF	30.34	8.16E+07	1.54	Y	0.77	0.75	-3%
CS 123469-HxCDF	35.96	5.94E+07	0.54	Y	1.18	1.14	-4%
CS 1234689-HpCDF	39.45	4.76E+07	0.46	Y	0.96	0.91	-5%
SS 37Cl-2378-TCDD	26.69	3.18E+07	n/a	-	1.19	1.13	-5%
SS 12347-PeCDD	31.92	5.08E+07	1.59	Y	0.86	0.88	2%
SS 12346-PeCDF	30.34	8.16E+07	1.54	Y	1.00	1.01	2%
SS 123469-HxCDF	35.96	5.94E+07	0.54	Y	0.84	0.86	3%
SS 1234689-HpCDF	39.45	4.76E+07	0.46	Y	0.98	0.96	-2%
AS 1368-TCDD	22.55	7.83E+07	0.81	Y	1.09	1.10	0%
AS 1368-TCDF	20.37	1.28E+08	0.79	Y	1.16	1.17	1%
FS 1278-TCDD	27.03	6.79E+07	0.80	Y	0.99	0.97	-2%
FS 12478-PeCDD	31.15	5.78E+07	1.55	Y	0.97	1.00	3%
FS 123468-HxCDD	35.43	5.46E+07	1.26	Y	1.13	1.15	2%
FS 1234679-HpCDD	39.31	5.17E+07	1.06	Y	1.12	1.14	2%
TS 1378-TCDD	24.84	7.59E+07	0.81	Y	1.10	1.08	-2%
OCDD-a	42.75	8.40E+06	2.56	Y	0.07	0.07	-5%
OCDF-a	42.89	1.04E+07	2.59	Y	0.06	0.07	4%


Rel. Int.
100%
0%
Abs. Int.
QC Check
19.04-28.40
316.9824 Fn1
Flags: -
6.04e6
3.02e6
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
0%
Abs. Int.
QC Check
28.41-33.50
366.9792 Fn2
Flags: -
5.50e6
2.75e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
0%
Abs. Int.
QC Check
33.51-37.61
380.9760 Fn3
Flags: -
1.21e7
6.05e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
0%
Abs. Int.
QC Check
37.91-41.21
430.9728 Fn4
Flags: -
7.62e6
3.81e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
0%
Abs. Int.
QC Check
41.22-44.81
454.9728 Fn5
Flags: -
9.83e6
4.92e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT


Rel. Int.
100%
TCDD
19.04-28.40
319.8965 Fn1
Flags: PBM
4σ 1.98e3
0%
2378D
1.42e7
26.69
Abs. Int.
3.09e6
1.54e6
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDD
19.04-28.40
321.8936 Fn1
Flags: PBM
4σ 1.46e3
0%
2378D
1.81e7
26.69
Abs. Int.
3.93e6
1.97e6
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
37Cl-TCDD
19.04-28.40
327.8850 Fn1
Flags: PBM
4σ 8.99e2
0%
CS 37Cl-2378D
3.18e7
26.69
Abs. Int.
6.76e6
3.38e6
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.40
331.9368 Fn1
Flags: PBM
4σ 5.41e3
0%
AS 1368D
3.51e7
22.55
TS 1378D
3.40e7
24.84
JS 1234D
3.22e7
25.96
ES 2378D
3.14e7
26.67
FS 1278D
3.02e7
27.03
Abs. Int.
7.06e6
3.53e6
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.40
333.9339 Fn1
Flags: PBM
4σ 3.25e3
0%
AS 1368D
4.32e7
22.55
TS 1378D
4.19e7
24.84
JS 1234D
3.91e7
25.96
ES 2378D
3.88e7
26.67
FS 1278D
3.77e7
27.03
Abs. Int.
8.60e6
4.30e6
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT


Rel. Int.
100%
PeCDD
28.41-33.50
355.8546 Fn2
Flags: PBM
4σ 1.66e3
0%
12378D
6.99e7
32.46
Abs. Int.
1.96e7
9.80e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
PeCDD
28.41-33.50
357.8517 Fn2
Flags: PBM
4σ 1.56e3
12378D
4.48e7
32.46
Abs. Int.
1.28e7
6.40e6
PeCDD Std.
28.41-33.50
367.8949 Fn2
Flags: PBM
4σ 3.12e3
FS 12478D
RRF(FS) = (3.52e7 + 2.27e7) * 100pg / (3.56e7 + 2.25e7) * 100pg = 0.997
DTF 25-Aug-2020 09:37
OK
CL 25Aug20
FS 12478D
3.52e7
31.15
CS 12347D
3.12e7
31.92
ES 12378D
3.56e7
32.44
Abs. Int.
9.88e6
4.94e6
PeCDD Std.
28.41-33.50
369.8919 Fn2
Flags: PBM
4σ 1.62e3
FS 12478D
2.27e7
31.15
CS 12347D
1.96e7
31.92
ES 12378D
2.25e7
32.44
Abs. Int.
6.36e6
3.18e6
QC Check
28.41-33.50
366.9792 Fn2
Flags: -
Abs. Int.
5.50e6
2.75e6


Rel. Int.
100%
HxCDD
33.51-37.61
389.8156 Fn3
Flags: PBM
4σ 9.64e2
123478D
5.44e7
36.53
123678D
5.74e7
36.64
123789D
5.93e7
36.94
Abs. Int.
1.62e7
8.09e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD
33.51-37.61
391.8127 Fn3
Flags: PBM
4σ 1.02e3
123478D
4.31e7
36.53
123678D
4.54e7
36.64
123789D
4.76e7
36.94
Abs. Int.
1.28e7
6.42e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.51-37.61
401.8559 Fn3
Flags: PBM
4σ 3.17e3
FS 123468D
3.05e7
35.43
ES 123478D
2.68e7
36.51
ES 123678D
2.57e7
36.63
JS 123467D
1.44e7
36.82
ES 123789D
2.97e7
36.93
Abs. Int.
8.75e6
4.37e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.51-37.61
403.8530 Fn3
Flags: PBM
4σ 2.39e3
FS 123468D
2.41e7
35.43
ES 123478D
2.06e7
36.51
ES 123678D
2.10e7
36.62
JS 123467D
1.16e7
36.82
ES 123789D
2.32e7
36.93
Abs. Int.
6.81e6
3.40e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
QC Check
33.51-37.61
380.9760 Fn3
Flags: -
Abs. Int.
1.21e7
6.05e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT

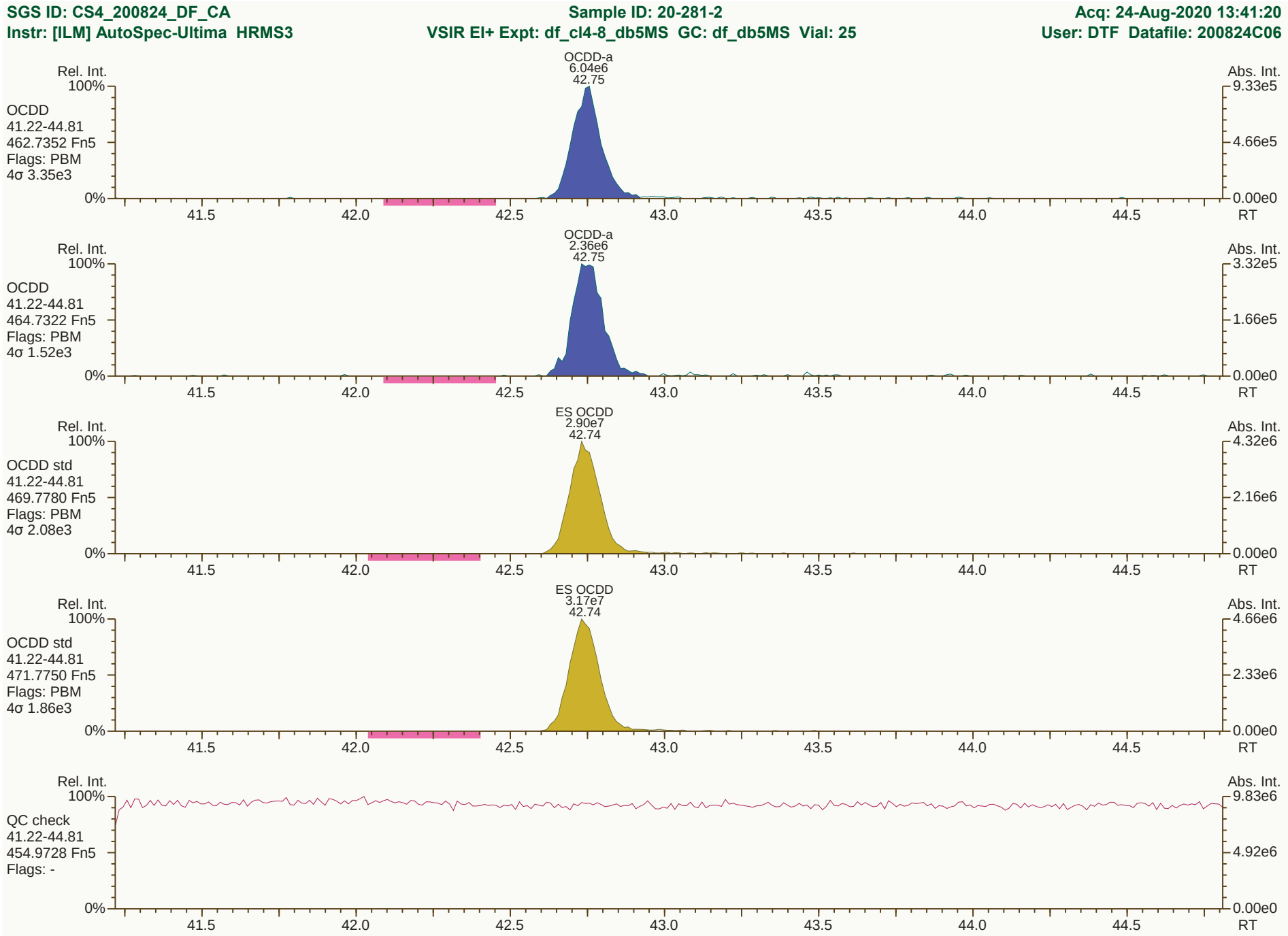

Rel. Int.
100%
HpCDD
37.91-41.21
423.7767 Fn4
Flags: PBM
4σ 1.10e3
0%
1234678D
4.56e7
40.05
Abs. Int.
1.13e7
5.63e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD
37.91-41.21
425.7737 Fn4
Flags: PBM
4σ 1.27e3
0%
1234678D
4.39e7
40.05
Abs. Int.
1.07e7
5.37e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.91-41.21
435.8169 Fn4
Flags: PBM
4σ 1.65e3
0%
FS 1234679D
2.66e7
39.31
ES 1234678D
2.33e7
40.04
Abs. Int.
7.09e6
3.55e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.91-41.21
437.8140 Fn4
Flags: PBM
4σ 2.18e3
0%
FS 1234679D
2.51e7
39.31
ES 1234678D
2.20e7
40.04
Abs. Int.
6.70e6
3.35e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
QC Check
37.91-41.21
430.9728 Fn4
Flags: -
0%
Abs. Int.
7.62e6
3.81e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT


OCDD
6.07e7
42.75
Rel. Int.
100%
OCDD
41.22-44.81
457.7377 Fn5
Flags: PBM
4σ 1.62e3
0%
Abs. Int.
8.87e6
4.44e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
OCDD
6.81e7
42.75
OCDD
41.22-44.81
459.7348 Fn5
Flags: PBM
4σ 1.60e3
9.87e6
4.94e6
ES OCDD
2.90e7
42.74
OCDD Std.
41.22-44.81
469.7780 Fn5
Flags: PBM
4σ 2.08e3
4.32e6
2.16e6
ES OCDD
3.17e7
42.74
OCDD Std.
41.22-44.81
471.7750 Fn5
Flags: PBM
4σ 1.86e3
4.66e6
2.33e6
QC Check
41.22-44.81
454.9728 Fn5
Flags: -
9.83e6
4.92e6

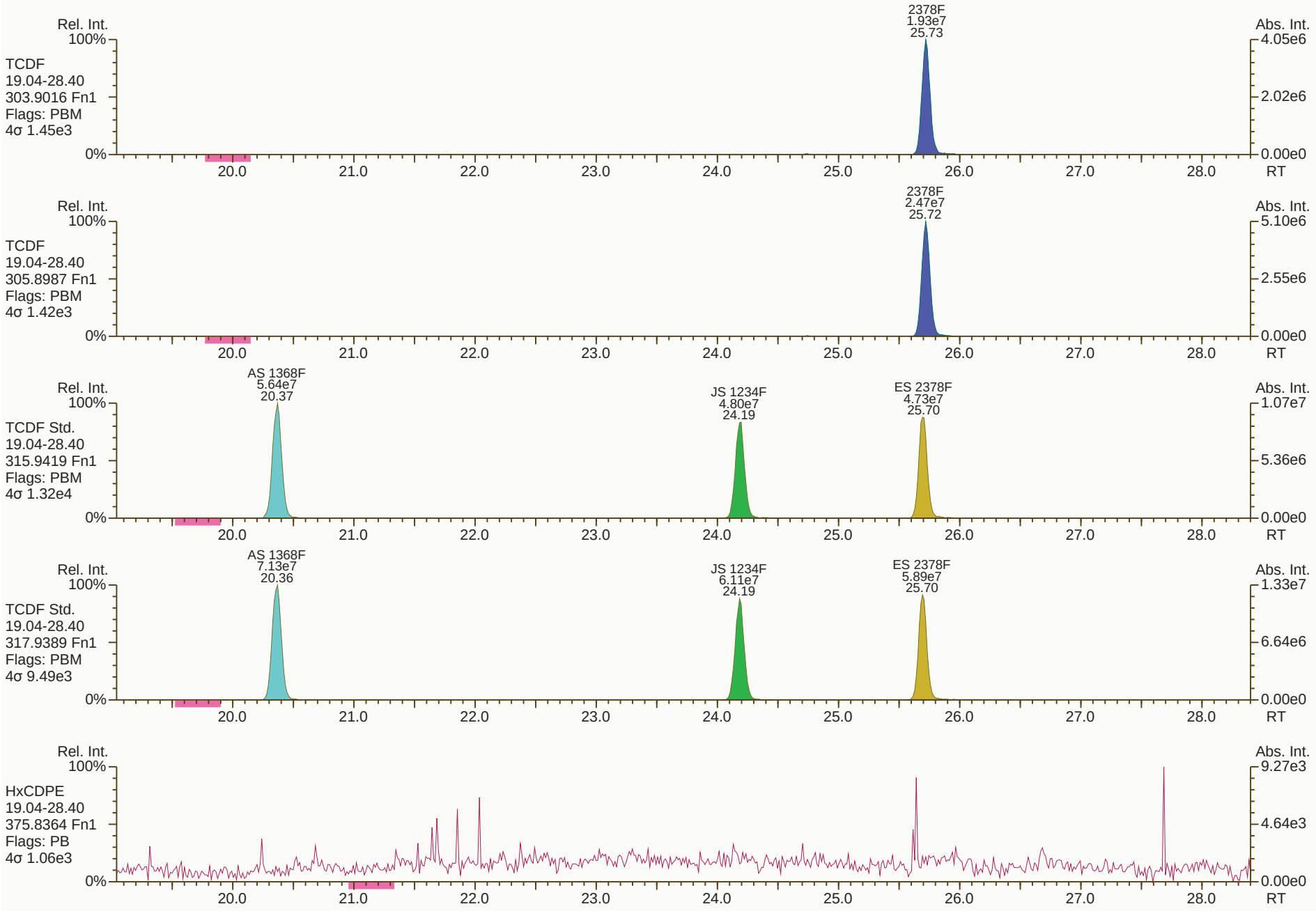
SGS ID: CS4_200824_DF_CA
Instr: [ILM] AutoSpec-Ultima HRMS3

Sample ID: 20-281-2
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 25

Acq: 24-Aug-2020 13:41:20
User: DTF Datafile: 200824C06

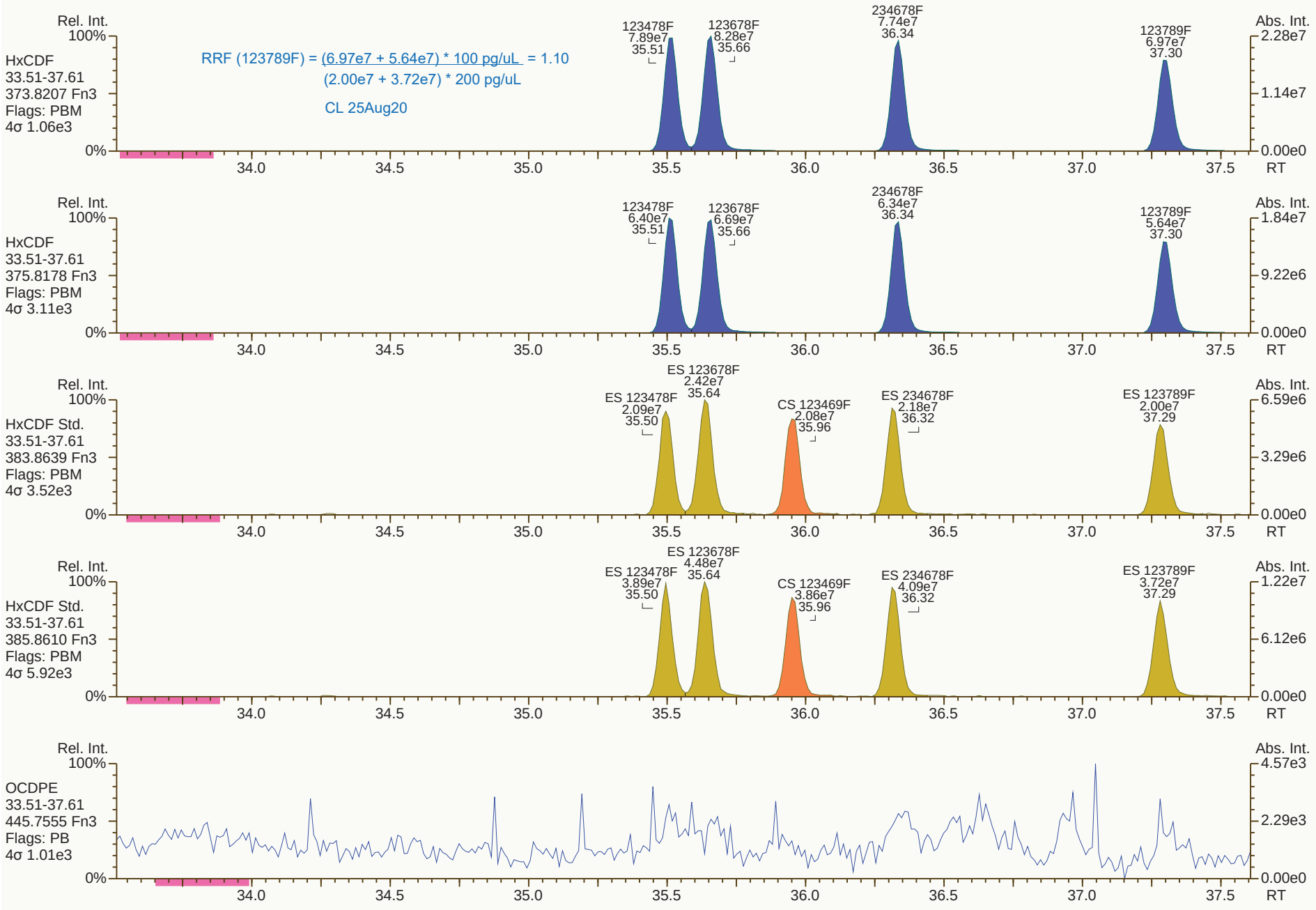


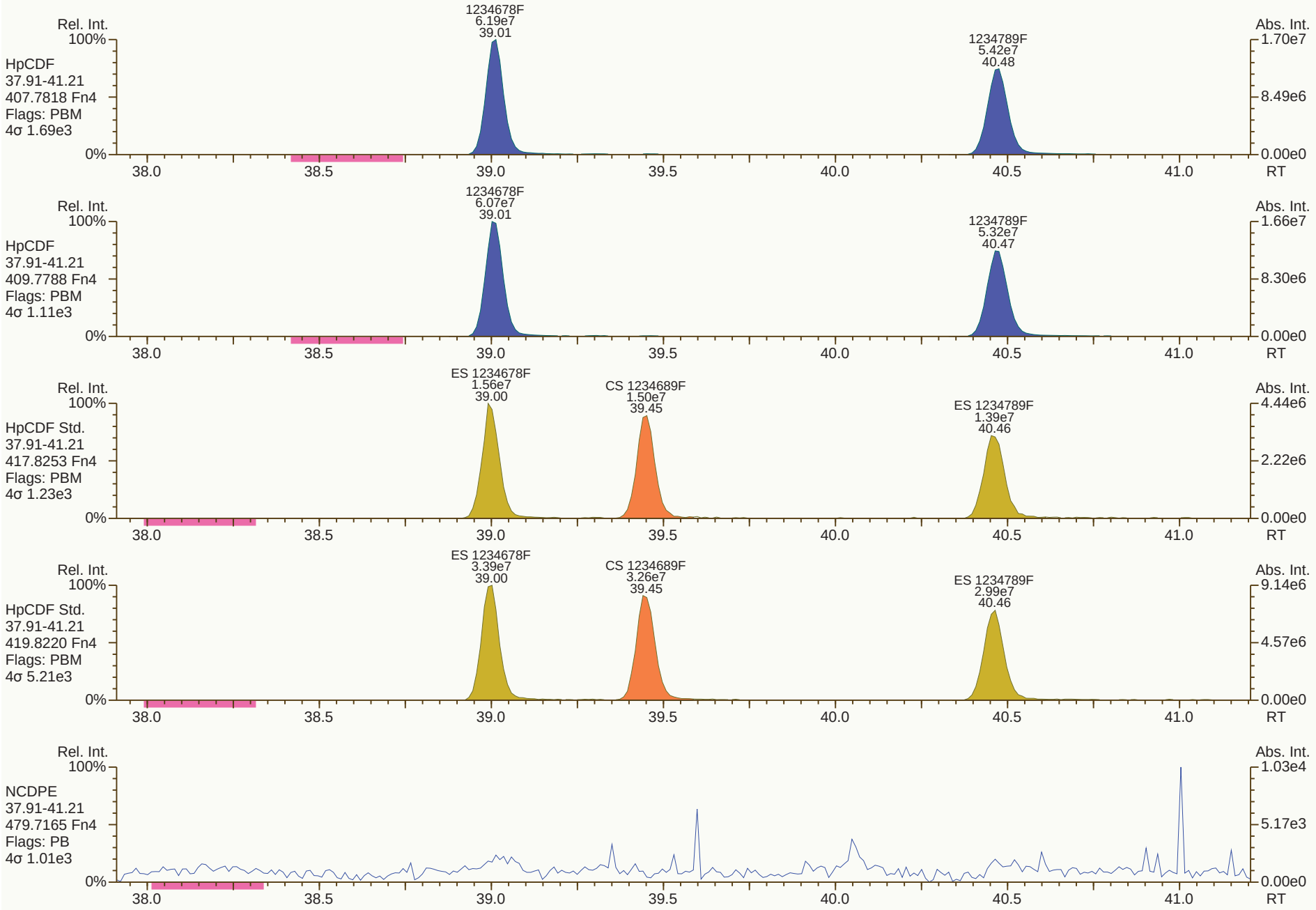
Results: T:\UltraTracePro\ICAL results\HRMS3\HRMS3_DF_10122018_24AUG2020\Resources\CS4_200824_DF_CA.utp_res, saved 25-Aug-2020 09:53 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 0891, 9086
Revised: 25-Aug-2020 09:50 (DTF) Printed: 25-Aug-2020 13:51


Rel. Int.
100%
TCDF
19.04-28.40
303.9016 Fn1
Flags: PBM
4σ 1.45e3
0%
2378F
1.93e7
25.73
Abs. Int.
4.05e6
2.02e6
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDF
19.04-28.40
305.8987 Fn1
Flags: PBM
4σ 1.42e3
0%
2378F
2.47e7
25.72
Abs. Int.
5.10e6
2.55e6
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDF Std.
19.04-28.40
315.9419 Fn1
Flags: PBM
4σ 1.32e4
0%
AS 1368F
5.64e7
20.37
JS 1234F
4.80e7
24.19
ES 2378F
4.73e7
25.70
Abs. Int.
1.07e7
5.36e6
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDF Std.
19.04-28.40
317.9389 Fn1
Flags: PBM
4σ 9.49e3
0%
AS 1368F
7.13e7
20.36
JS 1234F
6.11e7
24.19
ES 2378F
5.89e7
25.70
Abs. Int.
1.33e7
6.64e6
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
HxCDPE
19.04-28.40
375.8364 Fn1
Flags: PB
4σ 1.06e3
0%
Abs. Int.
9.27e3
4.64e3
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT

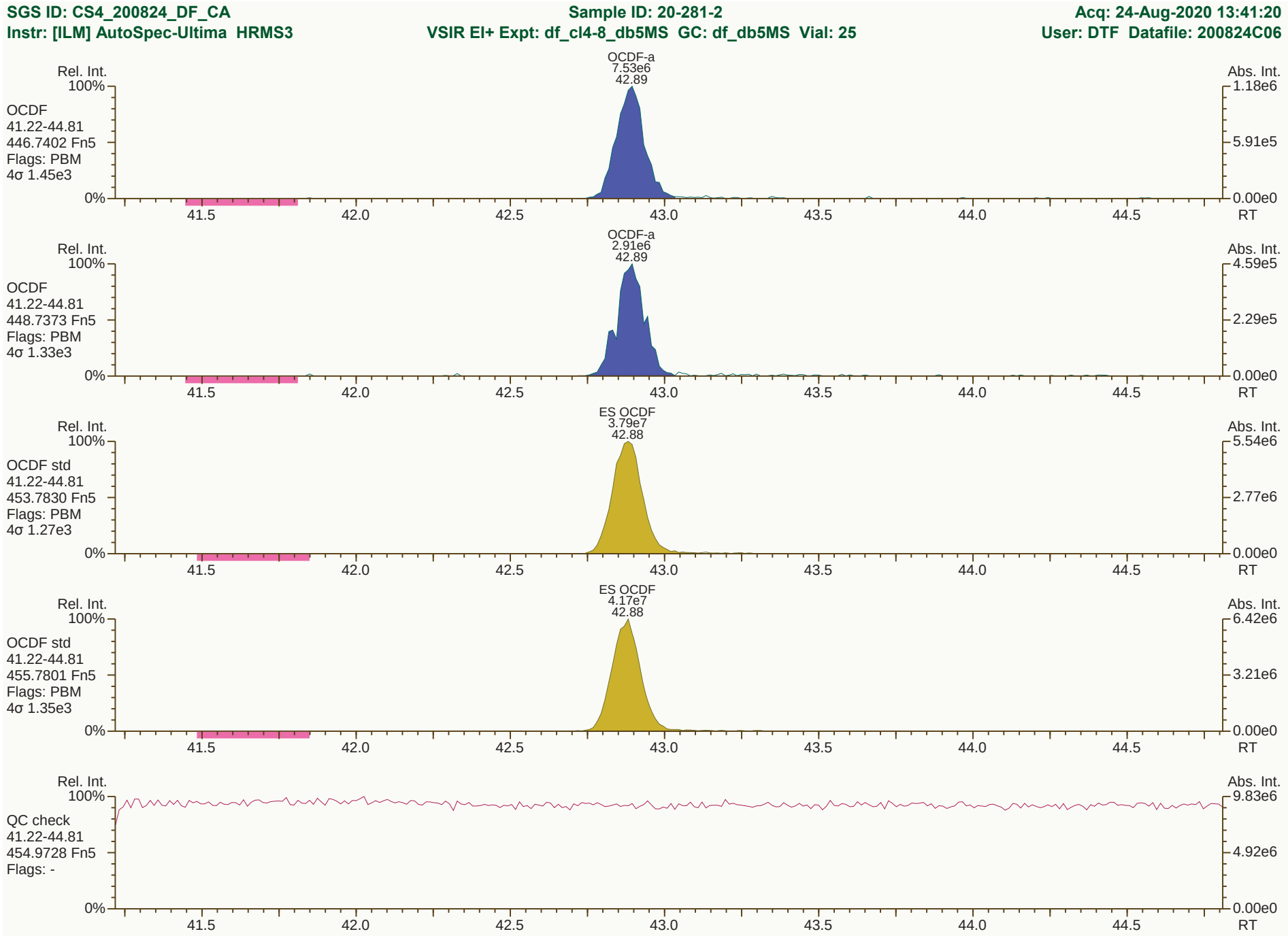

Rel. Int.
100%
0%
Abs. Int.
1.96e4
9.78e3
0.00e0
PeCDF-1
19.04-28.40
339.8597 Fn1
Flags: PB
4σ 1.39e3
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
0%
Abs. Int.
1.09e4
5.43e3
0.00e0
PeCDF-1
19.04-28.40
341.8568 Fn1
Flags: PB
4σ 1.35e3
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
0%
Abs. Int.
6.04e6
3.02e6
0.00e0
QC Check
19.04-28.40
316.9824 Fn1
Flags: -
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT


Rel. Int.
100%
PeCDF-2
28.41-33.50
339.8597 Fn2
Flags: PBM
4σ 9.57e2
0%
12378F
9.47e7
30.91
23478F
9.85e7
32.08
Abs. Int.
2.74e7
1.37e7
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF-2
28.41-33.50
341.8568 Fn2
Flags: PBM
4σ 1.56e3
0%
12378F
6.16e7
30.91
23478F
6.48e7
32.08
Abs. Int.
1.78e7
8.90e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.41-33.50
351.9000 Fn2
Flags: PBM
4σ 4.93e3
0%
CS 12346F
4.95e7
30.34
ES 12378F
4.88e7
30.89
ES 23478F
5.23e7
32.07
Abs. Int.
1.44e7
7.22e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.41-33.50
353.8970 Fn2
Flags: PBM
4σ 1.68e3
0%
CS 12346F
3.21e7
30.34
ES 12378F
3.20e7
30.89
ES 23478F
3.32e7
32.07
Abs. Int.
9.24e6
4.62e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
HpCDPE
28.41-33.50
409.7974 Fn2
Flags: PB
4σ 1.13e3
0%
Abs. Int.
8.59e3
4.29e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT


Rel. Int.
100%
HxCDF
33.51-37.61
373.8207 Fn3
Flags: PBM
4σ 1.06e3
0%
RRF (123789F) = (6.97e7 + 5.64e7) * 100 pg/uL = 1.10
(2.00e7 + 3.72e7) * 200 pg/uL
CL 25Aug20
123478F
7.89e7
35.51
123678F
8.28e7
35.66
234678F
7.74e7
36.34
123789F
6.97e7
37.30
Abs. Int.
2.28e7
1.14e7
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF
33.51-37.61
375.8178 Fn3
Flags: PBM
4σ 3.11e3
0%
123478F
6.40e7
35.51
123678F
6.69e7
35.66
234678F
6.34e7
36.34
123789F
5.64e7
37.30
Abs. Int.
1.84e7
9.22e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF Std.
33.51-37.61
383.8639 Fn3
Flags: PBM
4σ 3.52e3
0%
ES 123478F
2.09e7
35.50
ES 123678F
2.42e7
35.64
CS 123469F
2.08e7
35.96
ES 234678F
2.18e7
36.32
ES 123789F
2.00e7
37.29
Abs. Int.
6.59e6
3.29e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF Std.
33.51-37.61
385.8610 Fn3
Flags: PBM
4σ 5.92e3
0%
ES 123478F
3.89e7
35.50
ES 123678F
4.48e7
35.64
CS 123469F
3.86e7
35.96
ES 234678F
4.09e7
36.32
ES 123789F
3.72e7
37.29
Abs. Int.
1.22e7
6.12e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
OCDPE
33.51-37.61
445.7555 Fn3
Flags: PB
4σ 1.01e3
0%
Abs. Int.
4.57e3
2.29e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT


Rel. Int.
100%
HpCDF
37.91-41.21
407.7818 Fn4
Flags: PBM
4σ 1.69e3
1234678F
6.19e7
39.01
1234789F
5.42e7
40.48
Abs. Int.
1.70e7
8.49e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF
37.91-41.21
409.7788 Fn4
Flags: PBM
4σ 1.11e3
1234678F
6.07e7
39.01
1234789F
5.32e7
40.47
Abs. Int.
1.66e7
8.30e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.91-41.21
417.8253 Fn4
Flags: PBM
4σ 1.23e3
ES 1234678F
1.56e7
39.00
CS 1234689F
1.50e7
39.45
ES 1234789F
1.39e7
40.46
Abs. Int.
4.44e6
2.22e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.91-41.21
419.8220 Fn4
Flags: PBM
4σ 5.21e3
ES 1234678F
3.39e7
39.00
CS 1234689F
3.26e7
39.45
ES 1234789F
2.99e7
40.46
Abs. Int.
9.14e6
4.57e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
NCDPE
37.91-41.21
479.7165 Fn4
Flags: PB
4σ 1.01e3
Abs. Int.
1.03e4
5.17e3
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT


OCDF
7.58e7
42.89
Rel. Int.
100%
OCDF
41.22-44.81
441.7428 Fn5
Flags: PBM
4σ 1.65e3
0%
Abs. Int.
1.13e7
5.66e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
OCDF
8.30e7
42.89
Rel. Int.
100%
OCDF
41.22-44.81
443.7398 Fn5
Flags: PBM
4σ 1.36e3
0%
Abs. Int.
1.24e7
6.18e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDF
3.79e7
42.88
Rel. Int.
100%
OCDF Std.
41.22-44.81
453.7830 Fn5
Flags: PBM
4σ 1.27e3
0%
Abs. Int.
5.54e6
2.77e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDF
4.17e7
42.88
Rel. Int.
100%
OCDF Std.
41.22-44.81
455.7801 Fn5
Flags: PBM
4σ 1.35e3
0%
Abs. Int.
6.42e6
3.21e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
DCDPE
41.22-44.81
513.6775 Fn5
Flags: PB
4σ 1.13e3
0%
Abs. Int.
4.33e3
2.17e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT


SGS ID: CS4_200824_DF_CA
Sample ID: 20-281-2
Acq: 24-Aug-2020 13:41:20
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 25
User: DTF Datafile: 200824C06
OCDF-a
7.53e6
42.89
Rel. Int.
Abs. Int.
OCDF
41.22-44.81
446.7402 Fn5
Flags: PBM
4σ 1.45e3
OCDF-a
2.91e6
42.89
OCDF
41.22-44.81
448.7373 Fn5
Flags: PBM
4σ 1.33e3
ES OCDF
3.79e7
42.88
OCDF std
41.22-44.81
453.7830 Fn5
Flags: PBM
4σ 1.27e3
ES OCDF
4.17e7
42.88
OCDF std
41.22-44.81
455.7801 Fn5
Flags: PBM
4σ 1.35e3
QC check
41.22-44.81
454.9728 Fn5
Flags: -
RT
Results: T:\UltraTracePro\ICAL results\HRMS3\HRMS3_DF_10122018_24AUG2020\Resources\CS4_200824_DF_CA.utp_res, saved 25-Aug-2020 09:53 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 6865, 0507
PKD: 25-Aug-2020 08:53 Printed: 25-Aug-2020 13:51

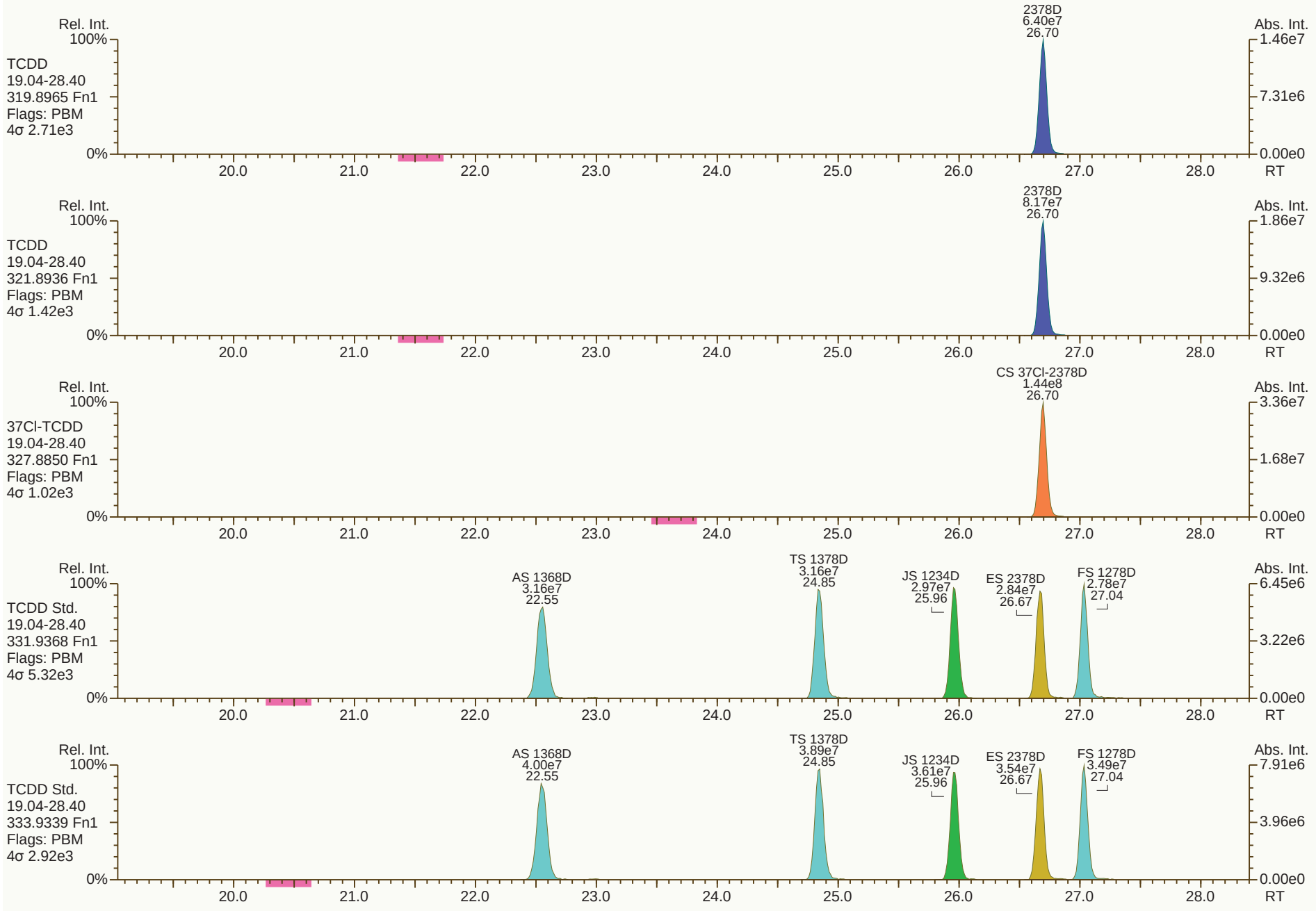
Dioxin/Furan QC Summary	Acq'd: 24 Aug 2020 14:27 DTF	ICAL: HRMS3_DF_10122018_24AUG2020
Lab ID: CS5_200824_DF_CA	UTP: 25-Aug-2020 09:53:47 DTF	Checkcode: 091-375-SJQ
Sample ID: 20-281-1	Report: 25 Aug 2020 10:43 TF	Datafile: 200824C07

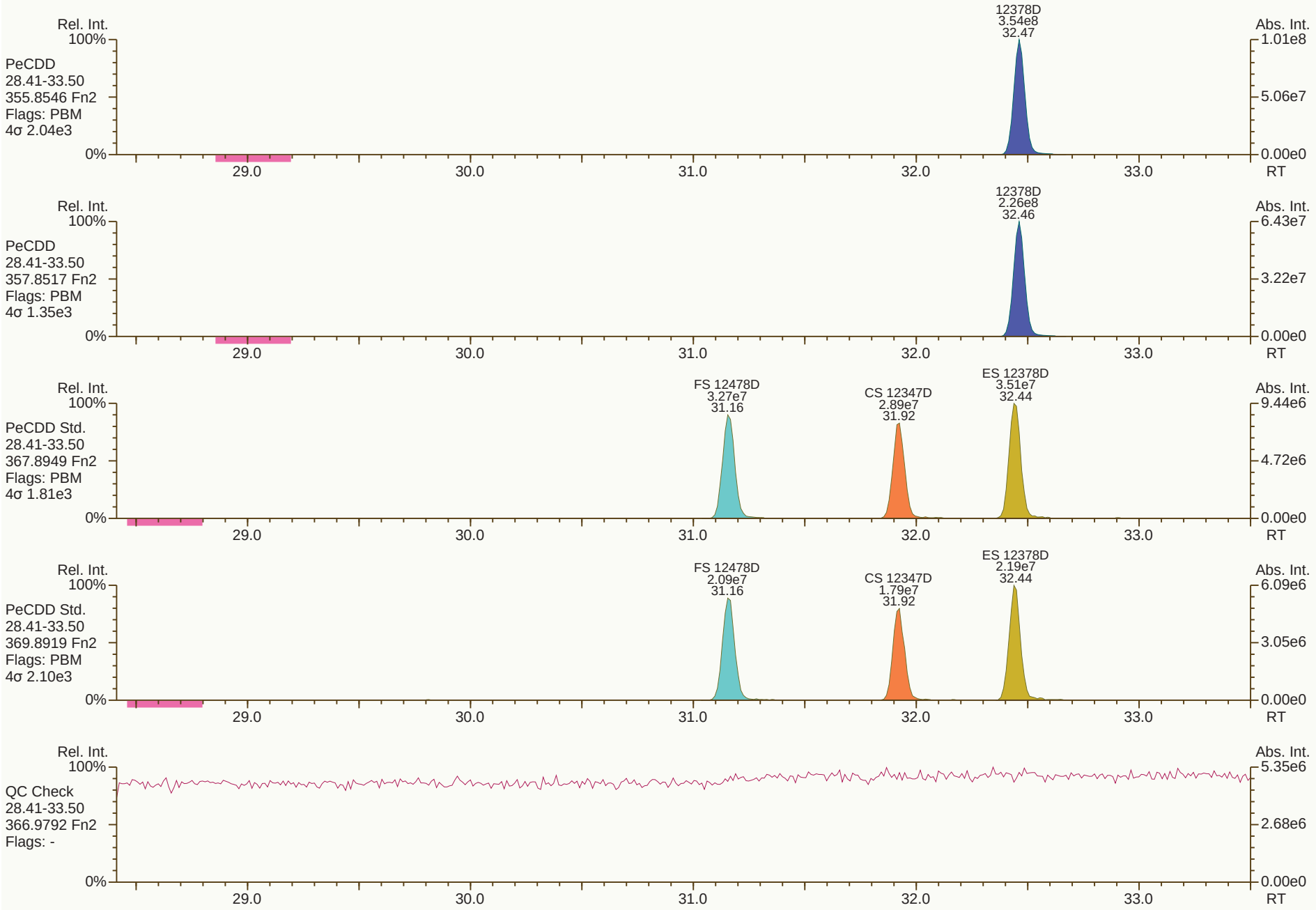
Name	RT	Response	RA	OK	Ref. RRFs	Calc. RRFs	Dev'n
2378-TCDD	26.70	1.46E+08	0.78	Y	1.19	1.14	-4%
12378-PeCDD	32.47	5.79E+08	1.57	Y	1.01	1.02	0%
123478-HxCDD	36.54	4.89E+08	1.26	Y	1.05	1.04	-1%
123678-HxCDD	36.65	5.16E+08	1.26	Y	1.12	1.09	-2%
123789-HxCDD	36.95	5.34E+08	1.25	Y	1.02	1.01	-1%
1234678-HpCDD	40.07	4.48E+08	1.04	Y	1.00	0.99	-1%
OCDD	42.79	6.59E+08	0.89	Y	1.08	1.06	-2%
2378-TCDF	25.73	2.01E+08	0.78	Y	1.06	1.02	-4%
12378-PeCDF	30.92	7.76E+08	1.54	Y	0.98	0.99	1%
23478-PeCDF	32.09	8.17E+08	1.54	Y	0.97	0.99	2%
123478-HxCDF	35.53	7.03E+08	1.23	Y	1.22	1.21	-1%
123678-HxCDF	35.67	7.60E+08	1.23	Y	1.11	1.13	2%
234678-HxCDF	36.35	6.83E+08	1.22	Y	1.15	1.13	-2%
123789-HxCDF	37.31	6.20E+08	1.23	Y	1.12	1.12	0%
1234678-HpCDF	39.03	6.01E+08	1.03	Y	1.29	1.27	-2%
1234789-HpCDF	40.49	5.40E+08	1.03	Y	1.27	1.27	0%
OCDF	42.93	8.24E+08	0.90	Y	1.04	1.02	-2%
ES 2378-TCDD	26.67	6.38E+07	0.80	Y	0.97	0.97	0%
ES 12378-PeCDD	32.44	5.70E+07	1.60	Y	0.84	0.87	3%
ES 123478-HxCDD	36.52	4.69E+07	1.32	Y	0.97	1.07	10%
ES 123678-HxCDD	36.64	4.71E+07	1.23	Y	0.96	1.07	12%
ES 123789-HxCDD	36.93	5.30E+07	1.29	Y	1.10	1.21	9%
ES 1234678-HpCDD	40.06	4.52E+07	1.07	Y	0.93	1.03	11%
ES OCDD	42.78	6.22E+07	0.93	Y	0.63	0.71	12%
ES 2378-TCDF	25.7	9.81E+07	0.80	Y	0.97	0.98	1%
ES 12378-PeCDF	30.9	7.84E+07	1.58	Y	0.78	0.78	1%
ES 23478-PeCDF	32.08	8.27E+07	1.55	Y	0.80	0.83	3%
ES 123478-HxCDF	35.51	5.80E+07	0.53	Y	1.22	1.32	9%
ES 123678-HxCDF	35.65	6.74E+07	0.54	Y	1.41	1.54	9%
ES 234678-HxCDF	36.33	6.07E+07	0.54	Y	1.29	1.38	7%
ES 123789-HxCDF	37.3	5.54E+07	0.55	Y	1.17	1.26	8%
ES 1234678-HpCDF	39.01	4.72E+07	0.45	Y	0.97	1.08	10%
ES 1234789-HpCDF	40.48	4.27E+07	0.48	Y	0.88	0.97	11%
ES OCDF	42.91	8.05E+07	0.88	Y	0.81	0.92	14%

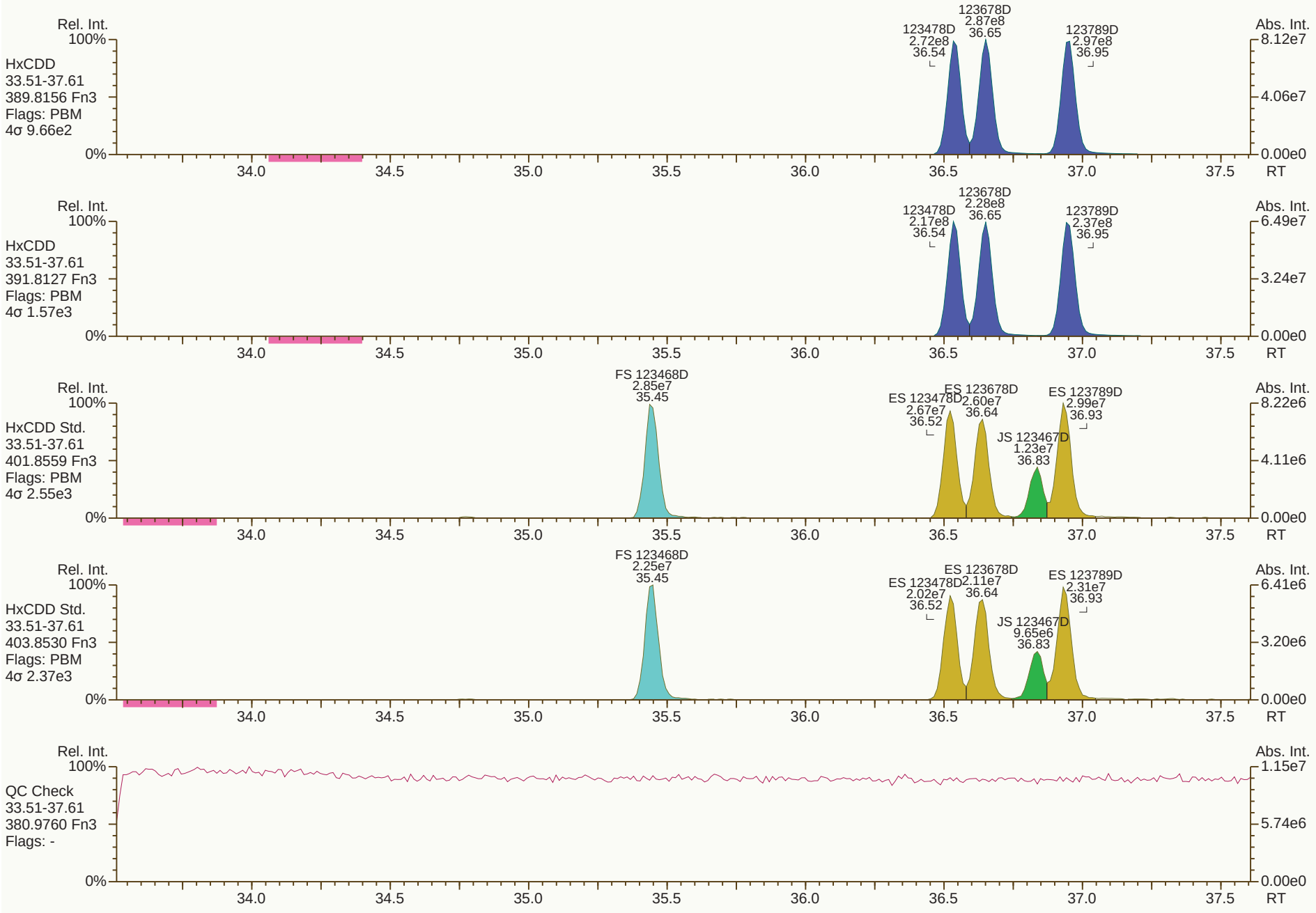
Dioxin/Furan QC Summary	Acq'd: 24 Aug 2020 14:27 DTF	ICAL: HRMS3_DF_10122018_24AUG2020
Lab ID: CS5_200824_DF_CA	UTP: 25-Aug-2020 09:53:47 DTF	Checkcode: 091-375-SJQ
Sample ID: 20-281-1	Report: 25 Aug 2020 10:43 TF	Datafile: 200824C07

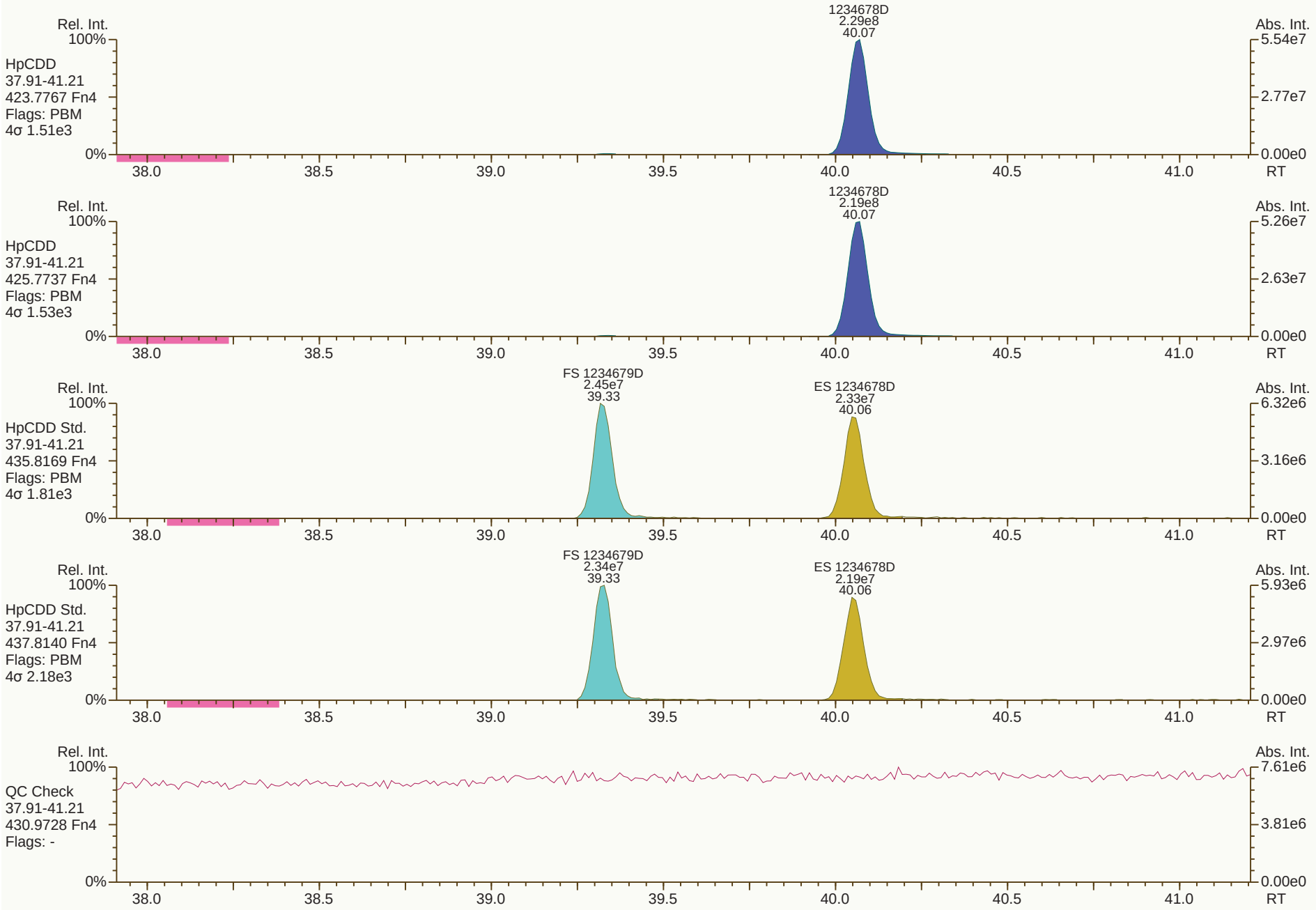
Name	RT	Response	RA	OK	Ref. RRFs	Calc. RRFs	Dev'n
JS 1234-TCDD	25.96	6.58E+07	0.82	Y	-	-	-
JS 1234-TCDF	24.19	1.00E+08	0.80	Y	-	-	-
JS 123467-HxCDD	36.83	2.19E+07	1.28	Y	-	-	-
CS 37Cl-2378-TCDD	26.70	1.44E+08	n/a	-	1.14	1.10	-4%
CS 12347-PeCDD	31.92	4.69E+07	1.62	Y	0.72	0.71	-2%
CS 12346-PeCDF	30.35	7.55E+07	1.55	Y	0.77	0.75	-2%
CS 123469-HxCDF	35.97	5.44E+07	0.54	Y	1.18	1.24	5%
CS 1234689-HpCDF	39.47	4.44E+07	0.46	Y	0.96	1.01	6%
SS 37Cl-2378-TCDD	26.70	1.44E+08	n/a	-	1.19	1.13	-5%
SS 12347-PeCDD	31.92	4.69E+07	1.62	Y	0.86	0.82	-4%
SS 12346-PeCDF	30.35	7.55E+07	1.55	Y	1.00	0.96	-3%
SS 123469-HxCDF	35.97	5.44E+07	0.54	Y	0.84	0.81	-4%
SS 1234689-HpCDF	39.47	4.44E+07	0.46	Y	0.98	0.94	-4%
AS 1368-TCDD	22.55	7.16E+07	0.79	Y	1.09	1.09	0%
AS 1368-TCDF	20.37	1.17E+08	0.79	Y	1.16	1.17	0%
FS 1278-TCDD	27.04	6.27E+07	0.80	Y	0.99	0.98	-1%
FS 12478-PeCDD	31.16	5.36E+07	1.56	Y	0.97	0.94	-3%
FS 123468-HxCDD	35.45	5.10E+07	1.27	Y	1.13	1.09	-4%
FS 1234679-HpCDD	39.33	4.79E+07	1.05	Y	1.12	1.06	-6%
TS 1378-TCDD	24.85	7.06E+07	0.81	Y	1.10	1.11	1%
OCDD-a	42.78	4.19E+07	2.39	Y	0.07	0.07	-7%
OCDF-a	42.92	5.06E+07	2.44	Y	0.06	0.06	0%

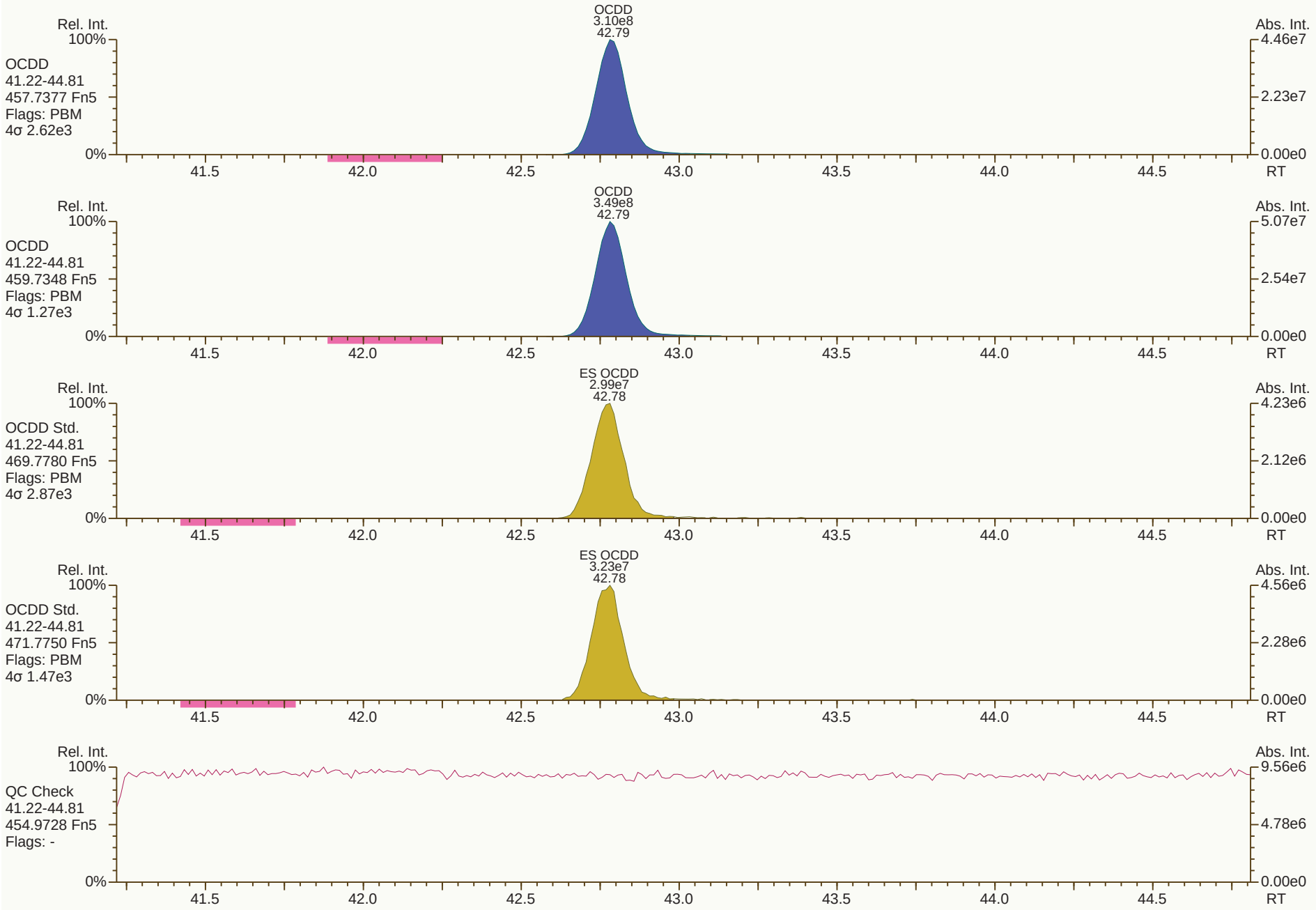

Rel. Int.
100%
QC Check
19.04-28.40
316.9824 Fn1
Flags: -
0%
Abs. Int.
5.86e6
2.93e6
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
QC Check
28.41-33.50
366.9792 Fn2
Flags: -
0%
Abs. Int.
5.35e6
2.68e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
QC Check
33.51-37.61
380.9760 Fn3
Flags: -
0%
Abs. Int.
1.15e7
5.74e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
QC Check
37.91-41.21
430.9728 Fn4
Flags: -
0%
Abs. Int.
7.61e6
3.81e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
QC Check
41.22-44.81
454.9728 Fn5
Flags: -
0%
Abs. Int.
9.56e6
4.78e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT


Rel. Int.
100%
TCDD
19.04-28.40
319.8965 Fn1
Flags: PBM
4σ 2.71e3
0%
2378D
6.40e7
26.70
Abs. Int.
1.46e7
7.31e6
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDD
19.04-28.40
321.8936 Fn1
Flags: PBM
4σ 1.42e3
0%
2378D
8.17e7
26.70
Abs. Int.
1.86e7
9.32e6
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
37Cl-TCDD
19.04-28.40
327.8850 Fn1
Flags: PBM
4σ 1.02e3
0%
CS 37Cl-2378D
1.44e8
26.70
Abs. Int.
3.36e7
1.68e7
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.40
331.9368 Fn1
Flags: PBM
4σ 5.32e3
0%
AS 1368D
3.16e7
22.55
TS 1378D
3.16e7
24.85
JS 1234D
2.97e7
25.96
ES 2378D
2.84e7
26.67
FS 1278D
2.78e7
27.04
Abs. Int.
6.45e6
3.22e6
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.40
333.9339 Fn1
Flags: PBM
4σ 2.92e3
0%
AS 1368D
4.00e7
22.55
TS 1378D
3.89e7
24.85
JS 1234D
3.61e7
25.96
ES 2378D
3.54e7
26.67
FS 1278D
3.49e7
27.04
Abs. Int.
7.91e6
3.96e6
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT


Rel. Int.
100%
PeCDD
28.41-33.50
355.8546 Fn2
Flags: PBM
4σ 2.04e3
0%
12378D
3.54e8
32.47
Abs. Int.
1.01e8
5.06e7
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD
28.41-33.50
357.8517 Fn2
Flags: PBM
4σ 1.35e3
0%
12378D
2.26e8
32.46
Abs. Int.
6.43e7
3.22e7
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.41-33.50
367.8949 Fn2
Flags: PBM
4σ 1.81e3
0%
FS 12478D
3.27e7
31.16
CS 12347D
2.89e7
31.92
ES 12378D
3.51e7
32.44
Abs. Int.
9.44e6
4.72e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.41-33.50
369.8919 Fn2
Flags: PBM
4σ 2.10e3
0%
FS 12478D
2.09e7
31.16
CS 12347D
1.79e7
31.92
ES 12378D
2.19e7
32.44
Abs. Int.
6.09e6
3.05e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
QC Check
28.41-33.50
366.9792 Fn2
Flags: -
0%
Abs. Int.
5.35e6
2.68e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT


Rel. Int.
100%
HxCDD
33.51-37.61
389.8156 Fn3
Flags: PBM
4σ 9.66e2
123478D
2.72e8
36.54
123678D
2.87e8
36.65
123789D
2.97e8
36.95
Abs. Int.
8.12e7
4.06e7
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD
33.51-37.61
391.8127 Fn3
Flags: PBM
4σ 1.57e3
123478D
2.17e8
36.54
123678D
2.28e8
36.65
123789D
2.37e8
36.95
Abs. Int.
6.49e7
3.24e7
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.51-37.61
401.8559 Fn3
Flags: PBM
4σ 2.55e3
FS 123468D
2.85e7
35.45
ES 123478D
2.67e7
36.52
ES 123678D
2.60e7
36.64
JS 123467D
1.23e7
36.83
ES 123789D
2.99e7
36.93
Abs. Int.
8.22e6
4.11e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.51-37.61
403.8530 Fn3
Flags: PBM
4σ 2.37e3
FS 123468D
2.25e7
35.45
ES 123478D
2.02e7
36.52
ES 123678D
2.11e7
36.64
JS 123467D
9.65e6
36.83
ES 123789D
2.31e7
36.93
Abs. Int.
6.41e6
3.20e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
QC Check
33.51-37.61
380.9760 Fn3
Flags: -
Abs. Int.
1.15e7
5.74e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT

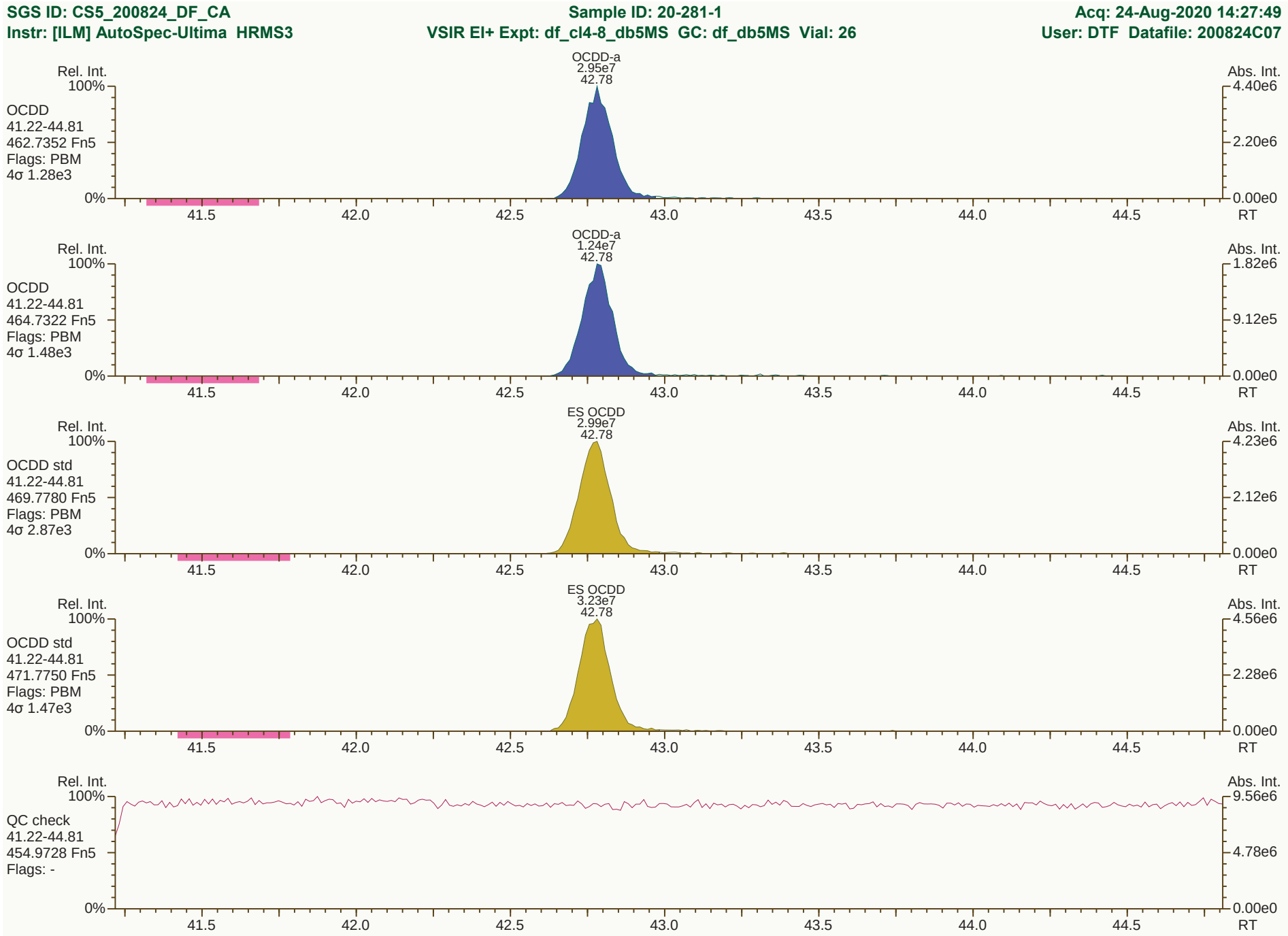

Rel. Int.
100%
HpCDD
37.91-41.21
423.7767 Fn4
Flags: PBM
4σ 1.51e3
1234678D
2.29e8
40.07
Abs. Int.
5.54e7
2.77e7
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD
37.91-41.21
425.7737 Fn4
Flags: PBM
4σ 1.53e3
1234678D
2.19e8
40.07
Abs. Int.
5.26e7
2.63e7
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.91-41.21
435.8169 Fn4
Flags: PBM
4σ 1.81e3
FS 1234679D
2.45e7
39.33
ES 1234678D
2.33e7
40.06
Abs. Int.
6.32e6
3.16e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.91-41.21
437.8140 Fn4
Flags: PBM
4σ 2.18e3
FS 1234679D
2.34e7
39.33
ES 1234678D
2.19e7
40.06
Abs. Int.
5.93e6
2.97e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
QC Check
37.91-41.21
430.9728 Fn4
Flags: -
Abs. Int.
7.61e6
3.81e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT


OCDD
3.10e8
42.79
Rel. Int.
100%
OCDD
41.22-44.81
457.7377 Fn5
Flags: PBM
4σ 2.62e3
0%
Abs. Int.
4.46e7
2.23e7
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
OCDD
3.49e8
42.79
Rel. Int.
100%
OCDD
41.22-44.81
459.7348 Fn5
Flags: PBM
4σ 1.27e3
0%
Abs. Int.
5.07e7
2.54e7
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDD
2.99e7
42.78
Rel. Int.
100%
OCDD Std.
41.22-44.81
469.7780 Fn5
Flags: PBM
4σ 2.87e3
0%
Abs. Int.
4.23e6
2.12e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDD
3.23e7
42.78
Rel. Int.
100%
OCDD Std.
41.22-44.81
471.7750 Fn5
Flags: PBM
4σ 1.47e3
0%
Abs. Int.
4.56e6
2.28e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
QC Check
41.22-44.81
454.9728 Fn5
Flags: -
0%
Abs. Int.
9.56e6
4.78e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT

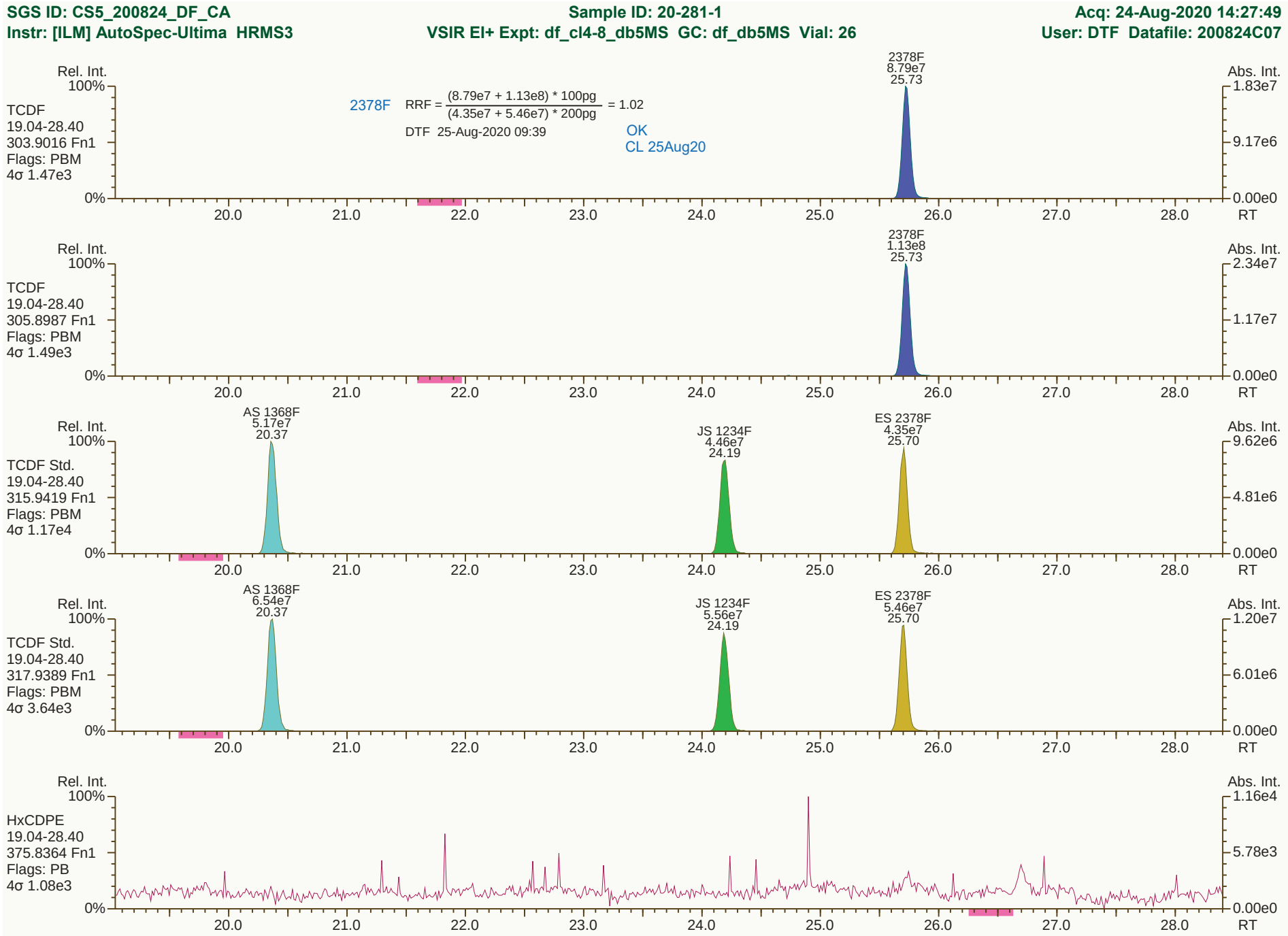
SGS ID: CS5_200824_DF_CA
Instr: [ILM] AutoSpec-Ultima HRMS3

Sample ID: 20-281-1
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 26

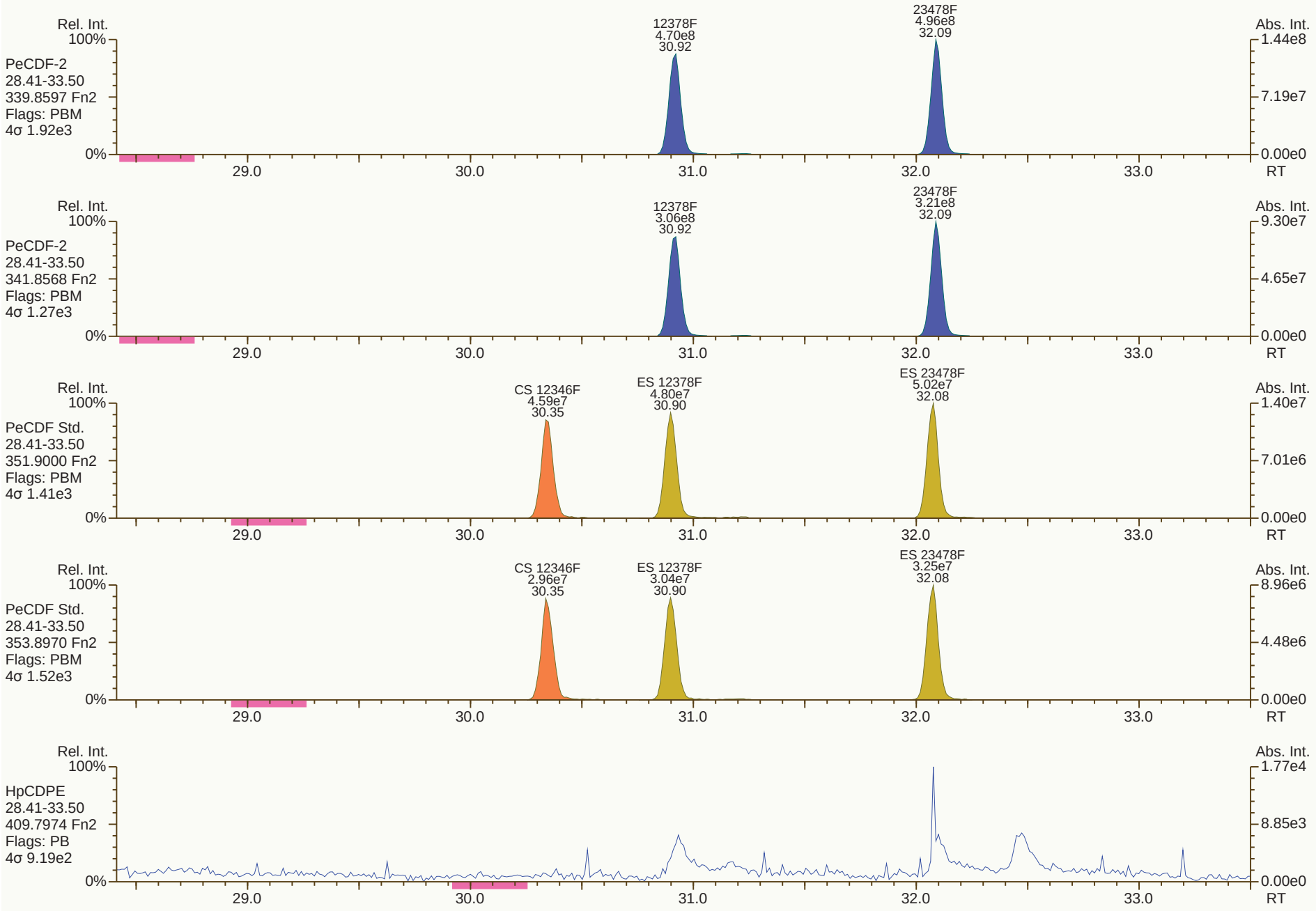
Acq: 24-Aug-2020 14:27:49
User: DTF Datafile: 200824C07

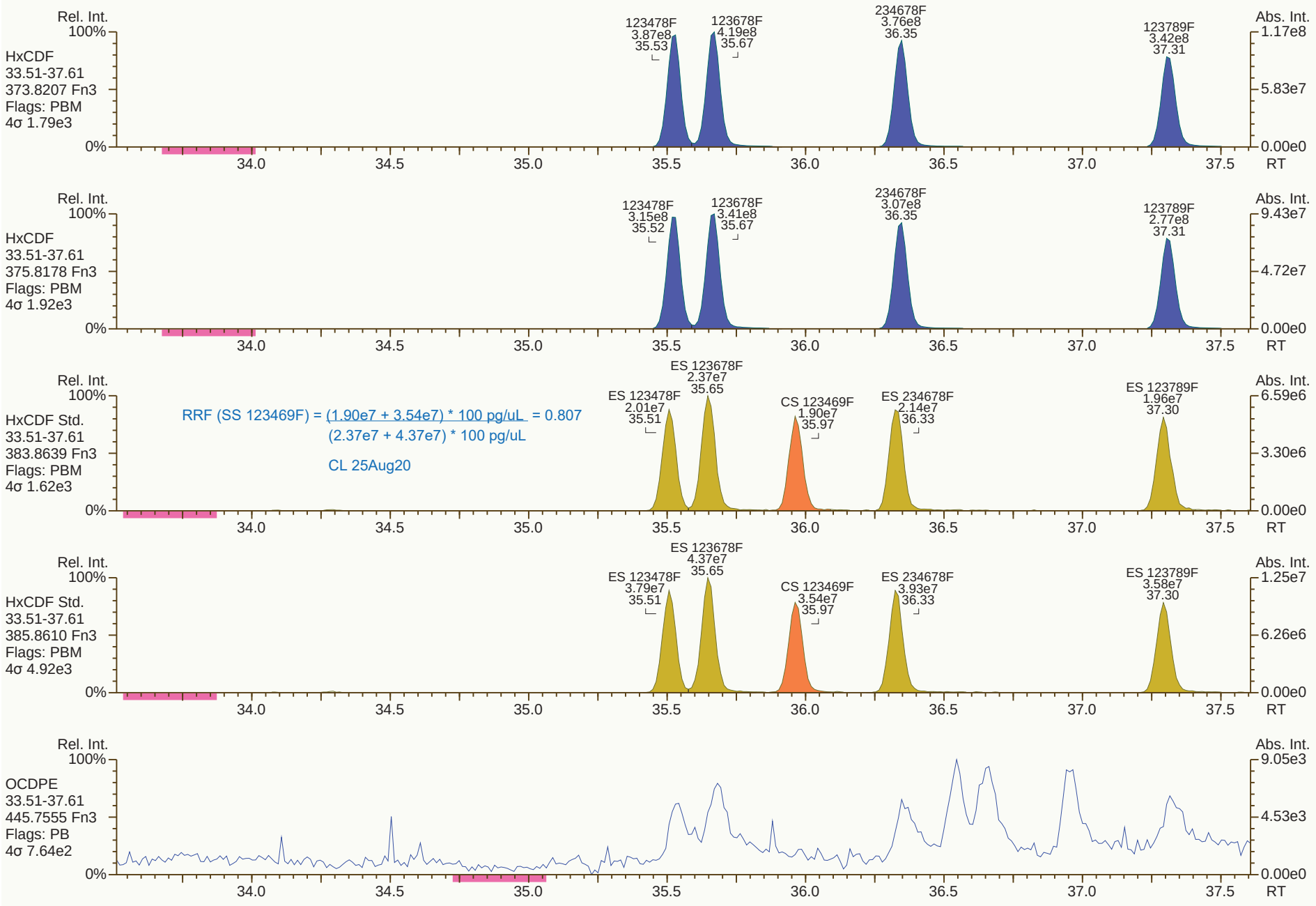


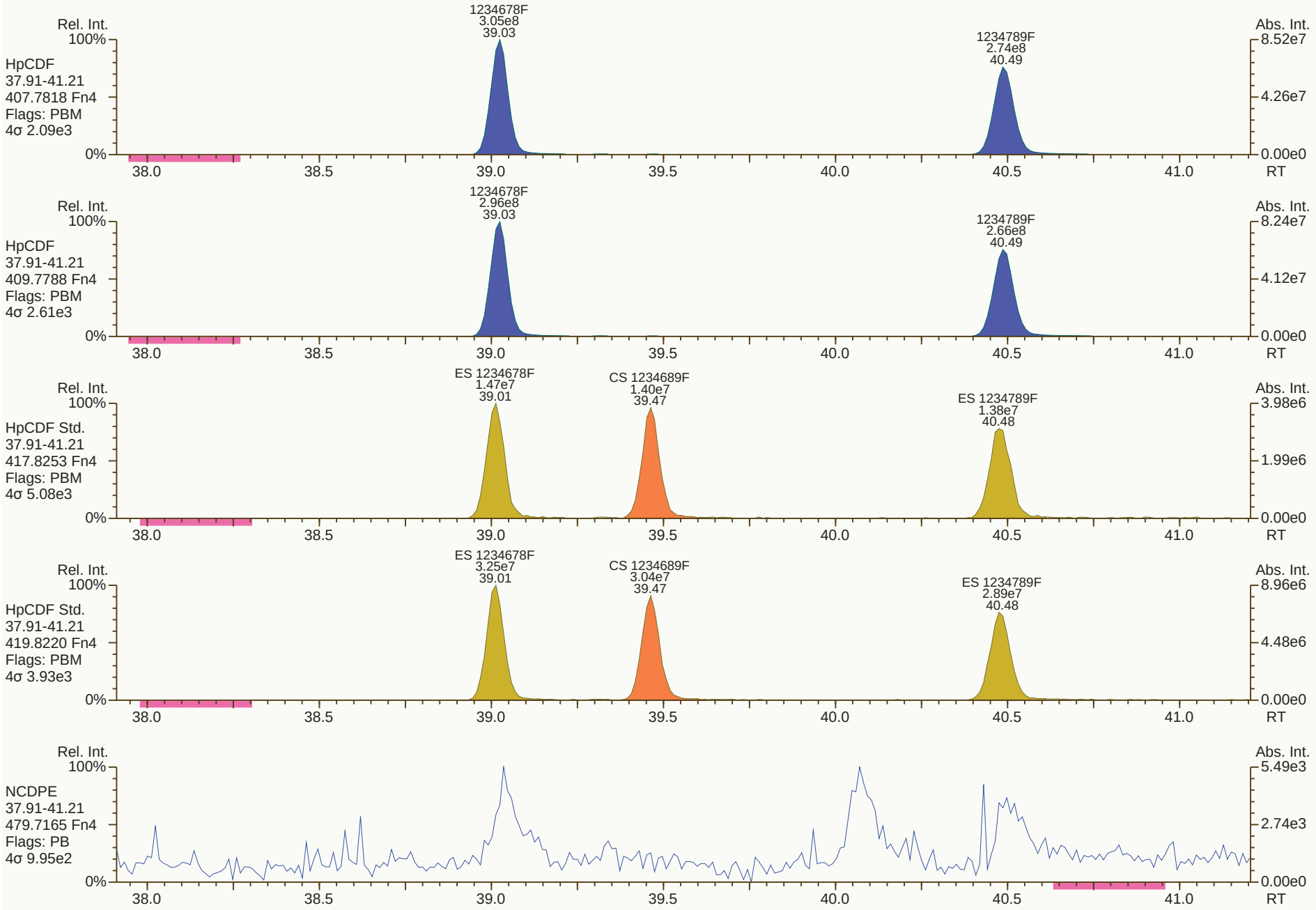
Results: T:\UltraTracePro\ICAL results\HRMS3\HRMS3_DF_10122018_24AUG2020\Resources\CS5_200824_DF_CA.utp_res, saved 25-Aug-2020 09:53 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 3790, 0971
Revised: 25-Aug-2020 09:50 (DTF) Printed: 25-Aug-2020 13:52


SGS ID: CS5_200824_DF_CA
Sample ID: 20-281-1
Acq: 24-Aug-2020 14:27:49
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 26
User: DTF Datafile: 200824C07
Rel. Int.
Abs. Int.
TCDF
19.04-28.40
303.9016 Fn1
Flags: PBM
4σ 1.47e3
2378F 8.79e7 25.73
2378F RRF = (8.79e7 + 1.13e8) * 100pg / (4.35e7 + 5.46e7) * 200pg = 1.02
DTF 25-Aug-2020 09:39
OK
CL 25Aug20
TCDF
19.04-28.40
305.8987 Fn1
Flags: PBM
4σ 1.49e3
2378F 1.13e8 25.73
TCDF Std.
19.04-28.40
315.9419 Fn1
Flags: PBM
4σ 1.17e4
AS 1368F 5.17e7 20.37
JS 1234F 4.46e7 24.19
ES 2378F 4.35e7 25.70
TCDF Std.
19.04-28.40
317.9389 Fn1
Flags: PBM
4σ 3.64e3
AS 1368F 6.54e7 20.37
JS 1234F 5.56e7 24.19
ES 2378F 5.46e7 25.70
HxCDPE
19.04-28.40
375.8364 Fn1
Flags: PB
4σ 1.08e3
20.0 21.0 22.0 23.0 24.0 25.0 26.0 27.0 28.0 RT


Rel. Int.
100%
0%
Abs. Int.
6.77e3
3.39e3
0.00e0
PeCDF-1
19.04-28.40
339.8597 Fn1
Flags: PB
4σ 1.23e3
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
0%
Abs. Int.
1.19e4
5.95e3
0.00e0
PeCDF-1
19.04-28.40
341.8568 Fn1
Flags: PB
4σ 1.82e3
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
0%
Abs. Int.
5.86e6
2.93e6
0.00e0
QC Check
19.04-28.40
316.9824 Fn1
Flags: -
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT


Rel. Int.
100%
PeCDF-2
28.41-33.50
339.8597 Fn2
Flags: PBM
4σ 1.92e3
0%
12378F
4.70e8
30.92
23478F
4.96e8
32.09
Abs. Int.
1.44e8
7.19e7
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF-2
28.41-33.50
341.8568 Fn2
Flags: PBM
4σ 1.27e3
0%
12378F
3.06e8
30.92
23478F
3.21e8
32.09
Abs. Int.
9.30e7
4.65e7
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.41-33.50
351.9000 Fn2
Flags: PBM
4σ 1.41e3
0%
CS 12346F
4.59e7
30.35
ES 12378F
4.80e7
30.90
ES 23478F
5.02e7
32.08
Abs. Int.
1.40e7
7.01e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.41-33.50
353.8970 Fn2
Flags: PBM
4σ 1.52e3
0%
CS 12346F
2.96e7
30.35
ES 12378F
3.04e7
30.90
ES 23478F
3.25e7
32.08
Abs. Int.
8.96e6
4.48e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
HpCDPE
28.41-33.50
409.7974 Fn2
Flags: PB
4σ 9.19e2
0%
Abs. Int.
1.77e4
8.85e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT


Rel. Int.
100%
HxCDF
33.51-37.61
373.8207 Fn3
Flags: PBM
4σ 1.79e3
0%
123478F
3.87e8
35.53
123678F
4.19e8
35.67
234678F
3.76e8
36.35
123789F
3.42e8
37.31
Abs. Int.
1.17e8
5.83e7
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
HxCDF
33.51-37.61
375.8178 Fn3
Flags: PBM
4σ 1.92e3
123478F
3.15e8
35.52
123678F
3.41e8
35.67
234678F
3.07e8
36.35
123789F
2.77e8
37.31
9.43e7
4.72e7
HxCDF Std.
33.51-37.61
383.8639 Fn3
Flags: PBM
4σ 1.62e3
RRF (SS 123469F) = (1.90e7 + 3.54e7) * 100 pg/uL = 0.807
(2.37e7 + 4.37e7) * 100 pg/uL
CL 25Aug20
ES 123678F
2.37e7
35.65
ES 123478F
2.01e7
35.51
CS 123469F
1.90e7
35.97
ES 234678F
2.14e7
36.33
ES 123789F
1.96e7
37.30
6.59e6
3.30e6
HxCDF Std.
33.51-37.61
385.8610 Fn3
Flags: PBM
4σ 4.92e3
ES 123678F
4.37e7
35.65
ES 123478F
3.79e7
35.51
CS 123469F
3.54e7
35.97
ES 234678F
3.93e7
36.33
ES 123789F
3.58e7
37.30
1.25e7
6.26e6
OCDPE
33.51-37.61
445.7555 Fn3
Flags: PB
4σ 7.64e2
9.05e3
4.53e3


Rel. Int.
100%
HpCDF
37.91-41.21
407.7818 Fn4
Flags: PBM
4σ 2.09e3
0%
1234678F
3.05e8
39.03
1234789F
2.74e8
40.49
Abs. Int.
8.52e7
4.26e7
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF
37.91-41.21
409.7788 Fn4
Flags: PBM
4σ 2.61e3
0%
1234678F
2.96e8
39.03
1234789F
2.66e8
40.49
Abs. Int.
8.24e7
4.12e7
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.91-41.21
417.8253 Fn4
Flags: PBM
4σ 5.08e3
0%
ES 1234678F
1.47e7
39.01
CS 1234689F
1.40e7
39.47
ES 1234789F
1.38e7
40.48
Abs. Int.
3.98e6
1.99e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.91-41.21
419.8220 Fn4
Flags: PBM
4σ 3.93e3
0%
ES 1234678F
3.25e7
39.01
CS 1234689F
3.04e7
39.47
ES 1234789F
2.89e7
40.48
Abs. Int.
8.96e6
4.48e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
NCDPE
37.91-41.21
479.7165 Fn4
Flags: PB
4σ 9.95e2
0%
Abs. Int.
5.49e3
2.74e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT

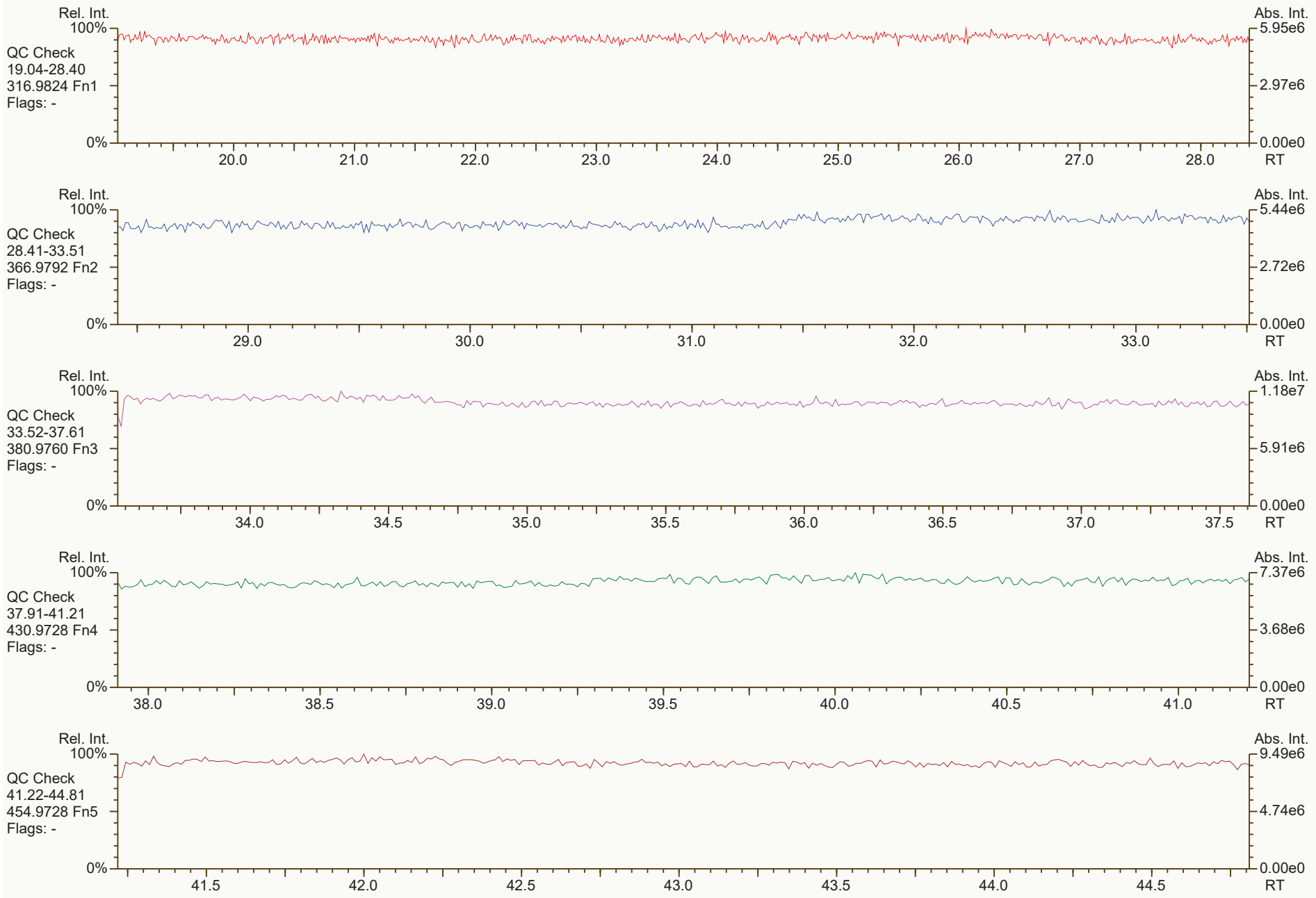

OCDF
3.91e8
42.93
Rel. Int.
100%
OCDF
41.22-44.81
441.7428 Fn5
Flags: PBM
4σ 1.22e3
0%
Abs. Int.
5.81e7
2.90e7
0.00e0
RT
41.5
42.0
42.5
43.0
43.5
44.0
44.5
OCDF
4.33e8
42.92
Rel. Int.
100%
OCDF
41.22-44.81
443.7398 Fn5
Flags: PBM
4σ 1.71e3
0%
Abs. Int.
6.32e7
3.16e7
0.00e0
RT
ES OCDF
3.76e7
42.91
Rel. Int.
100%
OCDF Std.
41.22-44.81
453.7830 Fn5
Flags: PBM
4σ 1.50e3
0%
Abs. Int.
5.52e6
2.76e6
0.00e0
RT
ES OCDF
4.29e7
42.91
Rel. Int.
100%
OCDF Std.
41.22-44.81
455.7801 Fn5
Flags: PBM
4σ 3.52e3
0%
Abs. Int.
6.39e6
3.20e6
0.00e0
RT
Rel. Int.
100%
DCDPE
41.22-44.81
513.6775 Fn5
Flags: PB
4σ 9.95e2
0%
Abs. Int.
5.09e3
2.55e3
0.00e0
RT

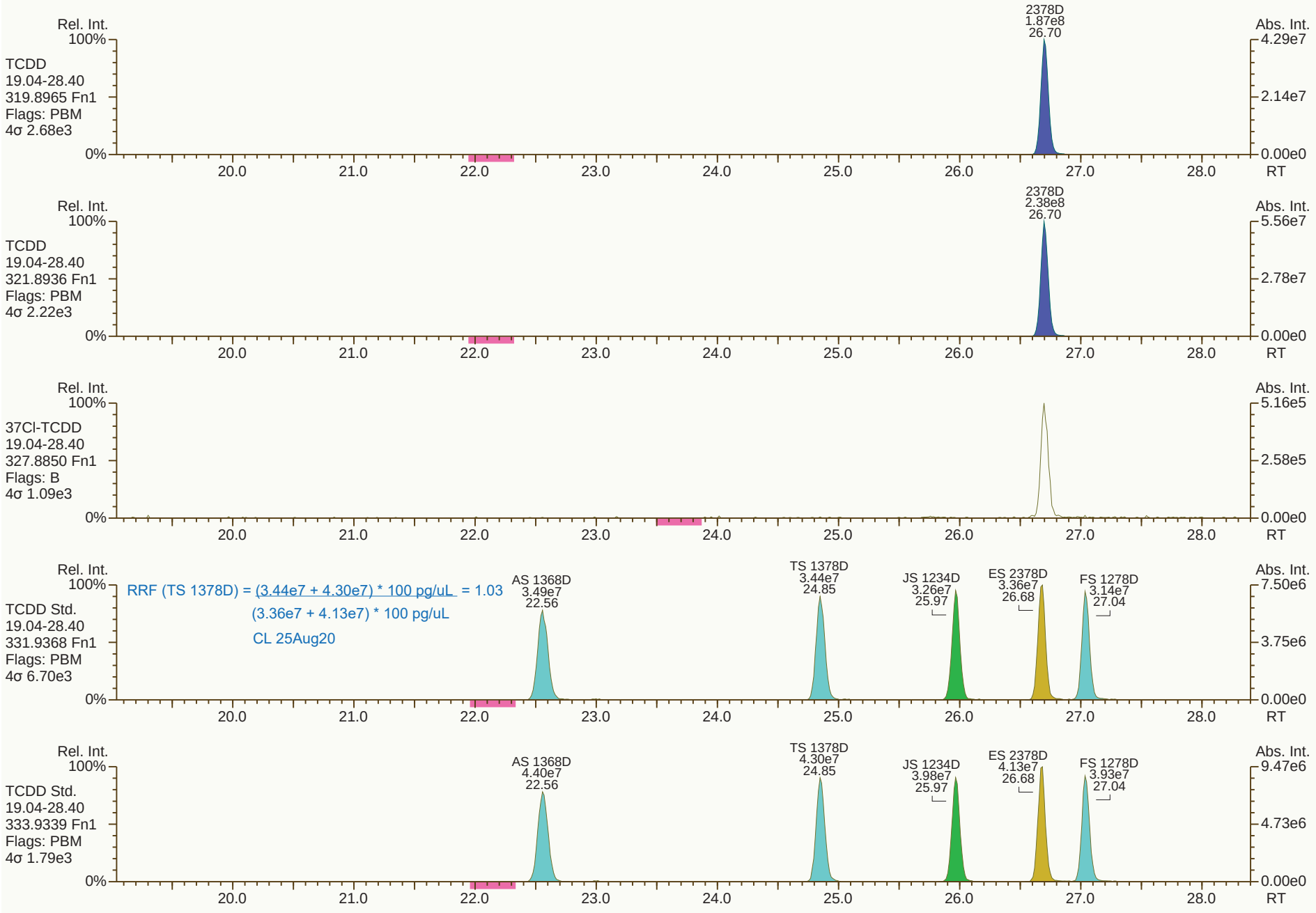

OCDF-a
3.59e7
42.92
Rel. Int.
Abs. Int.
100%
5.12e6
OCDF
41.22-44.81
446.7402 Fn5
Flags: PBM
4σ 1.28e3
2.56e6
0%
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
OCDF-a
1.47e7
42.92
Rel. Int.
Abs. Int.
100%
2.15e6
OCDF
41.22-44.81
448.7373 Fn5
Flags: PBM
4σ 1.73e3
1.08e6
0%
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDF
3.76e7
42.91
Rel. Int.
Abs. Int.
100%
5.52e6
OCDF std
41.22-44.81
453.7830 Fn5
Flags: PBM
4σ 1.50e3
2.76e6
0%
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDF
4.29e7
42.91
Rel. Int.
Abs. Int.
100%
6.39e6
OCDF std
41.22-44.81
455.7801 Fn5
Flags: PBM
4σ 3.52e3
3.20e6
0%
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
Abs. Int.
100%
9.56e6
QC check
41.22-44.81
454.9728 Fn5
Flags: -
4.78e6
0%
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT

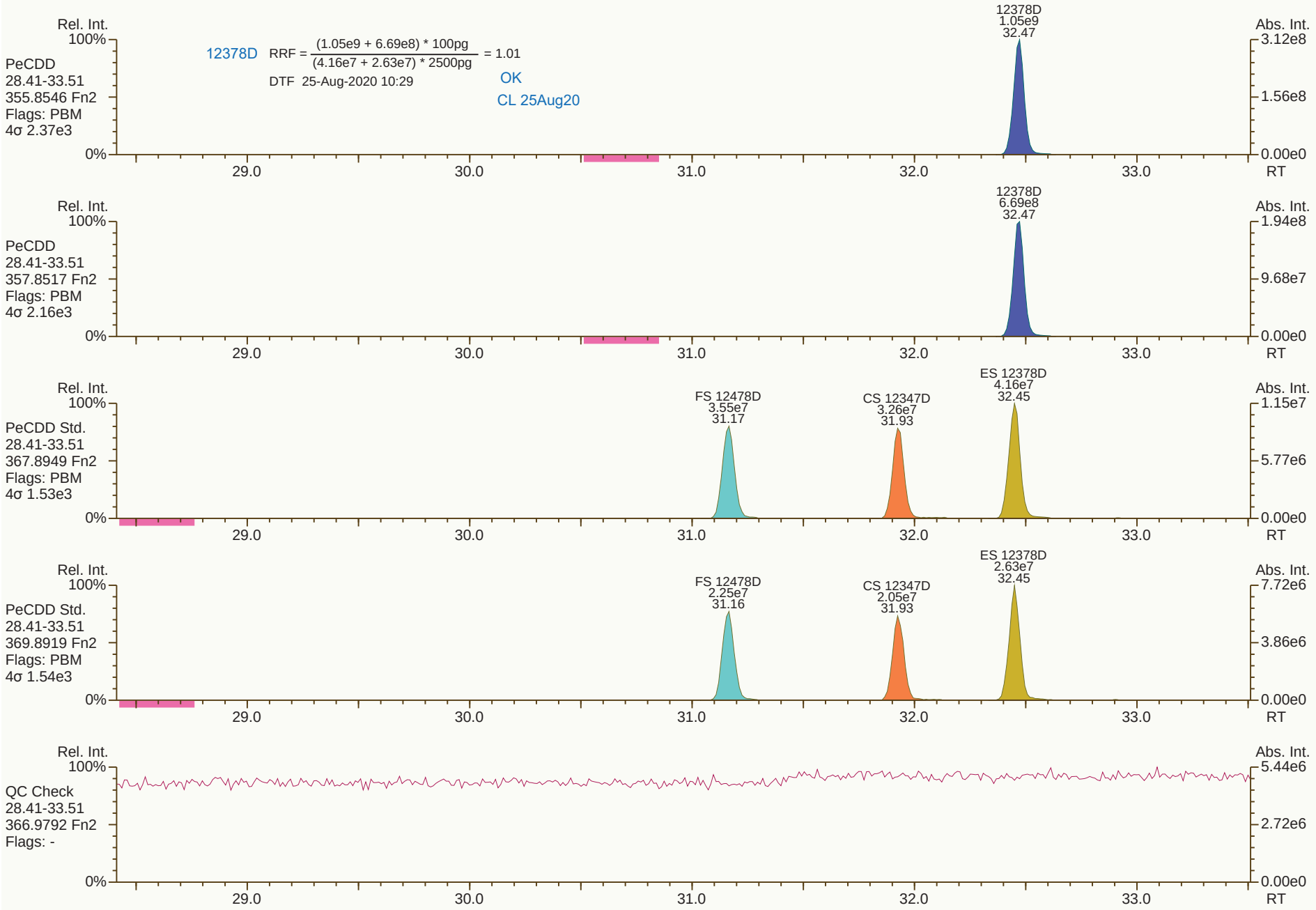
Dioxin/Furan QC Summary		Acq'd: 24 Aug 2020 15:14 DTF				ICAL: HRMS3_DF_10122018_24AUG2020	
Lab ID: CS6_200824_DF_CA		UTP: 25-Aug-2020 09:53:47 DTF				Checkcode: 064-573-BKD	
Sample ID: 20-280-4		Report: 25 Aug 2020 10:43 TF				Datafile: 200824C08	
Name	**RT**	**Response**	**RA**	**OK**	**Ref. RRFs**	**Calc. RRFs**	**Dev'n**
2378-TCDD	26.70	4.26E+08	0.79	Y	1.19	1.14	-4%
12378-PeCDD	32.47	1.72E+09	1.58	Y	1.01	1.02	0%
123478-HxCDD	36.54	1.50E+09	1.26	Y	1.05	1.05	-1%
123678-HxCDD	36.66	1.55E+09	1.26	Y	1.12	1.10	-1%
123789-HxCDD	36.96	1.63E+09	1.25	Y	1.02	1.01	-1%
1234678-HpCDD	40.07	1.33E+09	1.04	Y	1.00	0.99	-1%
OCDD	42.79	1.97E+09	0.90	Y	1.08	1.07	-1%
2378-TCDF	25.73	5.71E+08	0.78	Y	1.06	1.03	-3%
12378-PeCDF	30.92	2.34E+09	1.55	Y	0.98	0.98	0%
23478-PeCDF	32.10	2.44E+09	1.54	Y	0.97	0.98	1%
123478-HxCDF	35.53	2.11E+09	1.23	Y	1.22	1.21	-1%
123678-HxCDF	35.68	2.27E+09	1.23	Y	1.11	1.11	1%
234678-HxCDF	36.35	2.06E+09	1.23	Y	1.15	1.12	-3%
123789-HxCDF	37.32	1.95E+09	1.24	Y	1.12	1.13	1%
1234678-HpCDF	39.03	1.73E+09	1.03	Y	1.29	1.28	-1%
1234789-HpCDF	40.50	1.53E+09	1.02	Y	1.27	1.23	-3%
OCDF	42.93	2.47E+09	0.90	Y	1.04	1.02	-2%
ES 2378-TCDD	26.68	7.49E+07	0.81	Y	0.97	1.04	7%
ES 12378-PeCDD	32.45	6.78E+07	1.58	Y	0.84	0.94	11%
ES 123478-HxCDD	36.53	5.73E+07	1.26	Y	0.97	1.08	11%
ES 123678-HxCDD	36.64	5.62E+07	1.27	Y	0.96	1.06	10%
ES 123789-HxCDD	36.94	6.50E+07	1.27	Y	1.10	1.22	11%
ES 1234678-HpCDD	40.06	5.35E+07	1.04	Y	0.93	1.01	8%
ES OCDD	42.78	7.38E+07	0.92	Y	0.63	0.69	10%
ES 2378-TCDF	25.71	1.11E+08	0.79	Y	0.97	1.01	3%
ES 12378-PeCDF	30.91	9.58E+07	1.56	Y	0.78	0.87	11%
ES 23478-PeCDF	32.08	9.94E+07	1.57	Y	0.80	0.90	12%
ES 123478-HxCDF	35.52	7.00E+07	0.52	Y	1.22	1.32	8%
ES 123678-HxCDF	35.66	8.15E+07	0.54	Y	1.41	1.53	9%
ES 234678-HxCDF	36.34	7.39E+07	0.53	Y	1.29	1.39	8%
ES 123789-HxCDF	37.3	6.90E+07	0.52	Y	1.17	1.30	11%
ES 1234678-HpCDF	39.02	5.40E+07	0.47	Y	0.97	1.02	4%
ES 1234789-HpCDF	40.48	4.97E+07	0.47	Y	0.88	0.94	6%
ES OCDF	42.92	9.67E+07	0.89	Y	0.81	0.91	13%

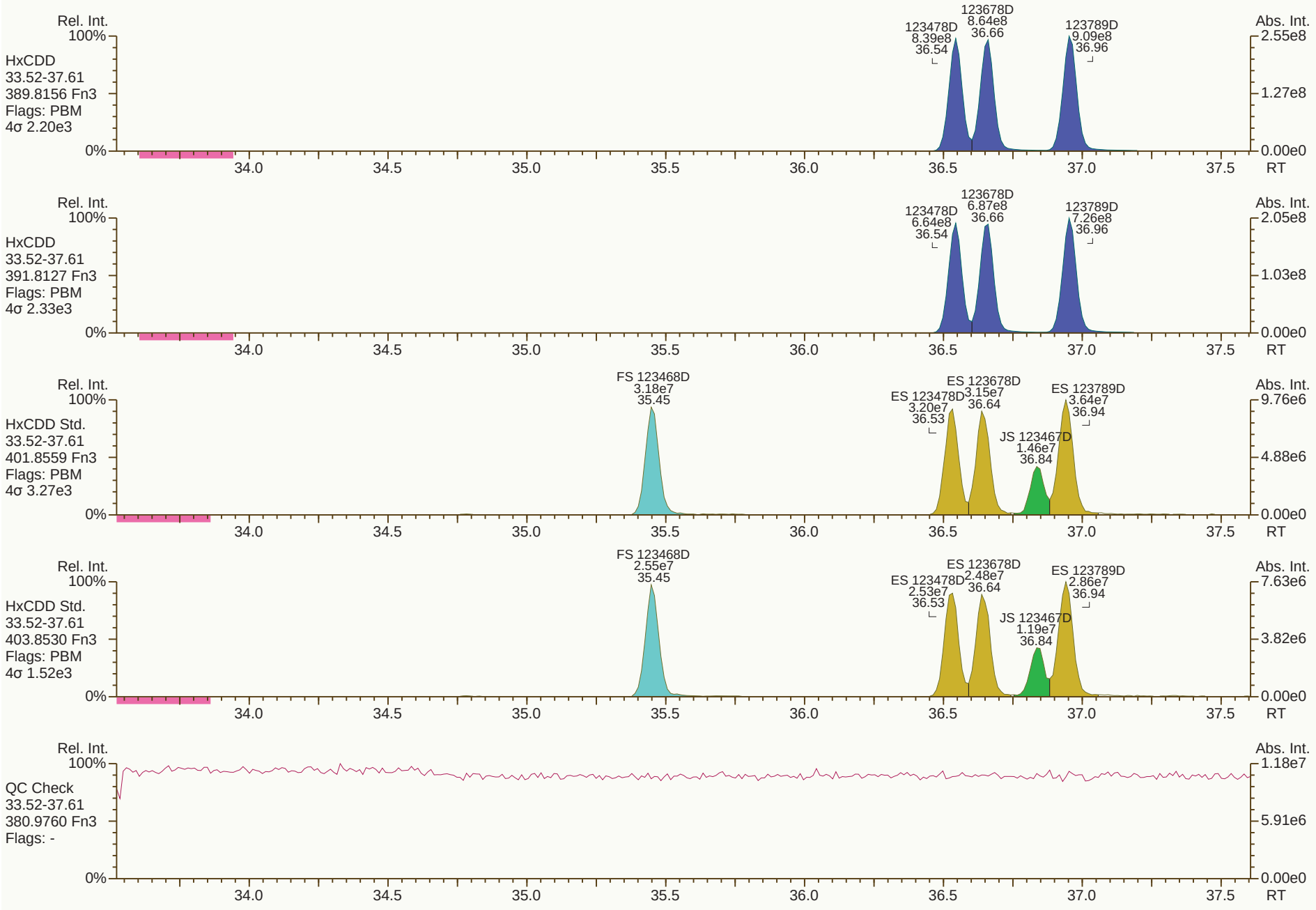
Dioxin/Furan QC Summary	Acq'd: 24 Aug 2020 15:14 DTF	ICAL: HRMS3_DF_10122018_24AUG2020
Lab ID: CS6_200824_DF_CA	UTP: 25-Aug-2020 09:53:47 DTF	Checkcode: 064-573-BKD
Sample ID: 20-280-4	Report: 25 Aug 2020 10:43 TF	Datafile: 200824C08

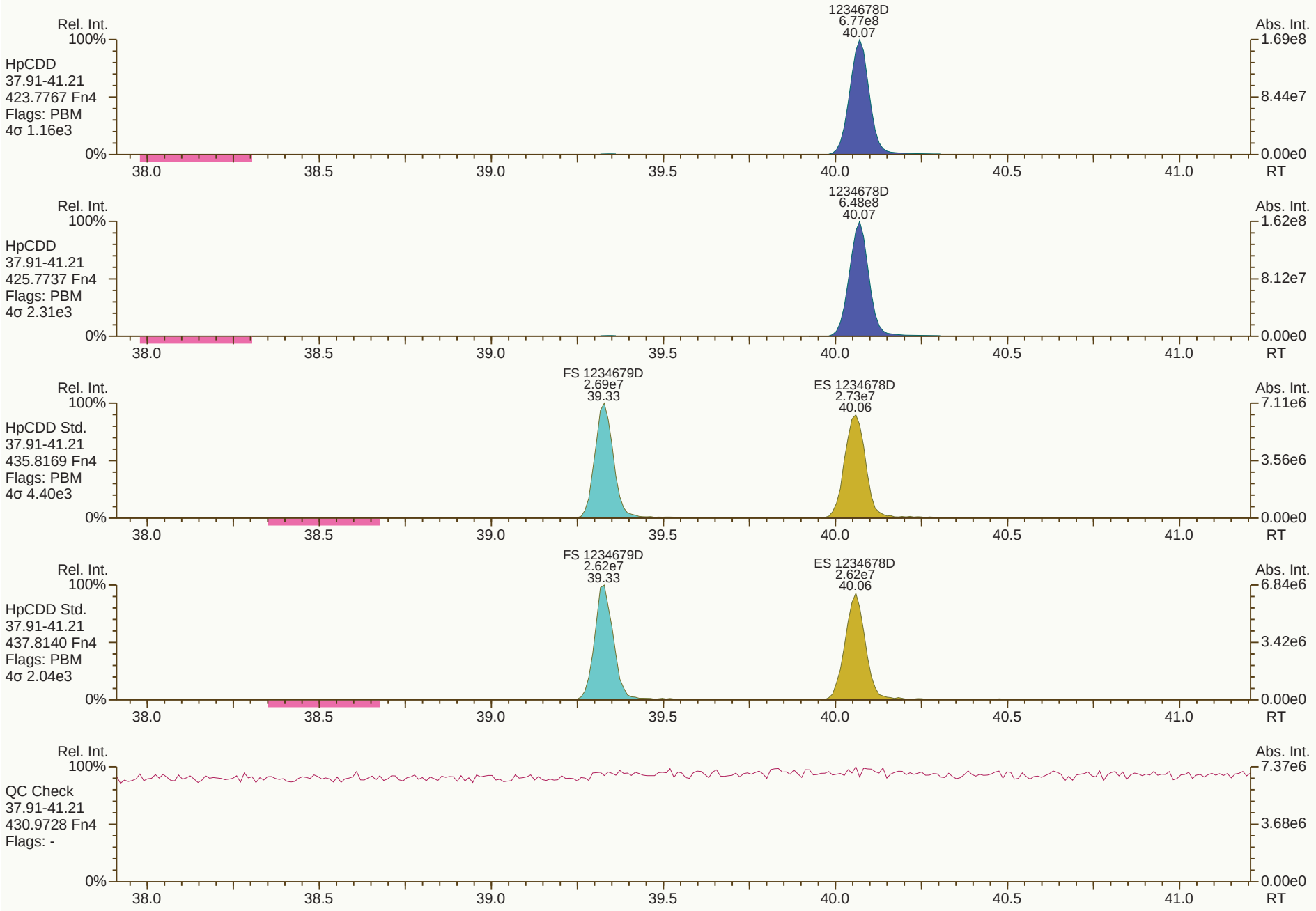
Name	RT	Response	RA	OK	Ref. RRFs	Calc. RRFs	Dev'n
JS 1234-TCDD	25.97	7.23E+07	0.82	Y	-	-	-
JS 1234-TCDF	24.20	1.11E+08	0.77	Y	-	-	-
JS 123467-HxCDD	36.84	2.66E+07	1.23	Y	-	-	-
CS 37Cl-2378-TCDD	NotFnd		n/a	-	1.14		
CS 12347-PeCDD	31.93	5.32E+07	1.59	Y	0.72	0.74	2%
CS 12346-PeCDF	30.35	8.45E+07	1.57	Y	0.77	0.76	-1%
CS 123469-HxCDF	35.97	6.07E+07	0.53	Y	1.18	1.14	-3%
CS 1234689-HpCDF	39.47	4.94E+07	0.47	Y	0.96	0.93	-3%
SS 37Cl-2378-TCDD	NotFnd		n/a	-	1.19		
SS 12347-PeCDD	31.93	5.32E+07	1.59	Y	0.86	0.78	-9%
SS 12346-PeCDF	30.35	8.45E+07	1.57	Y	1.00	0.88	-11%
SS 123469-HxCDF	35.97	6.07E+07	0.53	Y	0.84	0.75	-11%
SS 1234689-HpCDF	39.47	4.94E+07	0.47	Y	0.98	0.91	-7%
AS 1368-TCDD	22.56	7.89E+07	0.79	Y	1.09	1.09	0%
AS 1368-TCDF	20.38	1.30E+08	0.78	Y	1.16	1.18	1%
FS 1278-TCDD	27.04	7.07E+07	0.80	Y	0.99	0.94	-5%
FS 12478-PeCDD	31.17	5.80E+07	1.58	Y	0.97	0.86	-12%
FS 123468-HxCDD	35.45	5.73E+07	1.25	Y	1.13	1.00	-12%
FS 1234679-HpCDD	39.33	5.31E+07	1.03	Y	1.12	0.99	-12%
TS 1378-TCDD	24.85	7.74E+07	0.80	Y	1.10	1.03	-6%
OCDD-a	42.79	1.23E+08	2.51	Y	0.07	0.07	-8%
OCDF-a	42.93	1.51E+08	2.51	Y	0.06	0.06	-1%

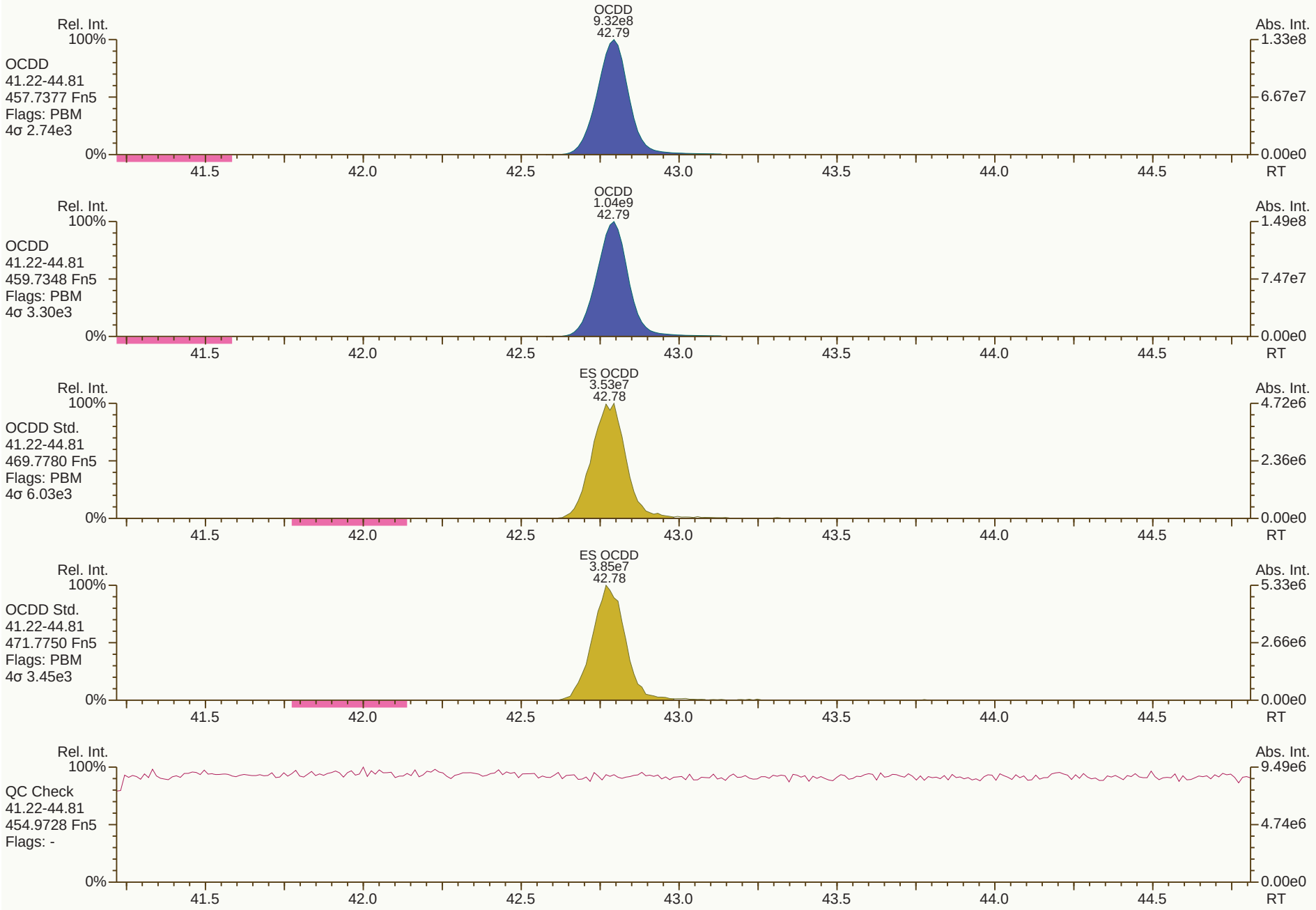

Rel. Int.
100%
QC Check
19.04-28.40
316.9824 Fn1
Flags: -
0%
Abs. Int.
5.95e6
2.97e6
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
QC Check
28.41-33.51
366.9792 Fn2
Flags: -
0%
Abs. Int.
5.44e6
2.72e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
QC Check
33.52-37.61
380.9760 Fn3
Flags: -
0%
Abs. Int.
1.18e7
5.91e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
QC Check
37.91-41.21
430.9728 Fn4
Flags: -
0%
Abs. Int.
7.37e6
3.68e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
QC Check
41.22-44.81
454.9728 Fn5
Flags: -
0%
Abs. Int.
9.49e6
4.74e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT

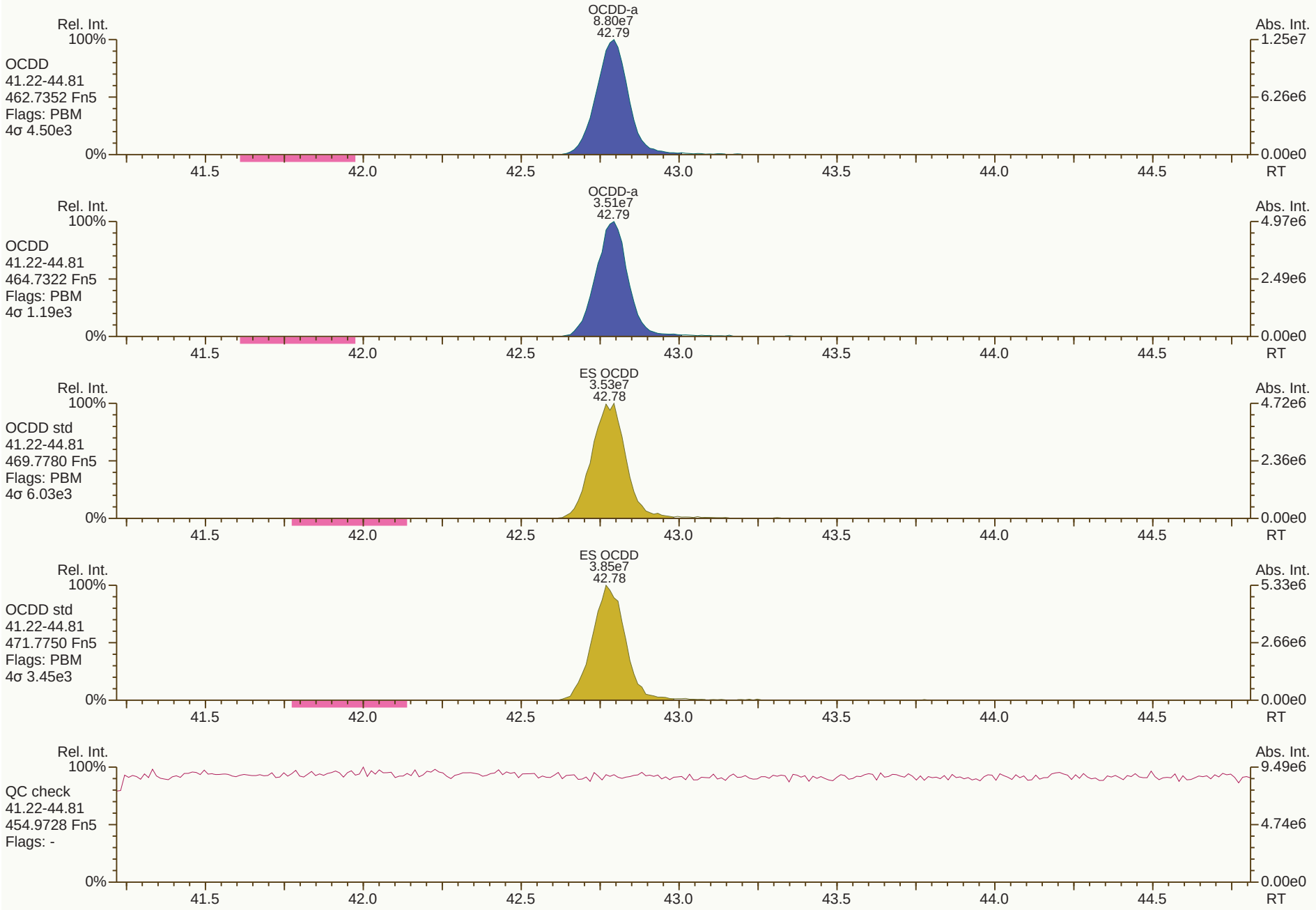

Rel. Int.
100%
TCDD
19.04-28.40
319.8965 Fn1
Flags: PBM
4σ 2.68e3
0%
2378D
1.87e8
26.70
Abs. Int.
4.29e7
2.14e7
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDD
19.04-28.40
321.8936 Fn1
Flags: PBM
4σ 2.22e3
0%
2378D
2.38e8
26.70
Abs. Int.
5.56e7
2.78e7
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
37Cl-TCDD
19.04-28.40
327.8850 Fn1
Flags: B
4σ 1.09e3
0%
Abs. Int.
5.16e5
2.58e5
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.40
331.9368 Fn1
Flags: PBM
4σ 6.70e3
0%
RRF (TS 1378D) = (3.44e7 + 4.30e7) * 100 pg/uL = 1.03
(3.36e7 + 4.13e7) * 100 pg/uL
CL 25Aug20
AS 1368D
3.49e7
22.56
TS 1378D
3.44e7
24.85
JS 1234D
3.26e7
25.97
ES 2378D
3.36e7
26.68
FS 1278D
3.14e7
27.04
Abs. Int.
7.50e6
3.75e6
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.40
333.9339 Fn1
Flags: PBM
4σ 1.79e3
0%
AS 1368D
4.40e7
22.56
TS 1378D
4.30e7
24.85
JS 1234D
3.98e7
25.97
ES 2378D
4.13e7
26.68
FS 1278D
3.93e7
27.04
Abs. Int.
9.47e6
4.73e6
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT


Rel. Int.
100%
PeCDD
28.41-33.51
355.8546 Fn2
Flags: PBM
4σ 2.37e3
0%
12378D RRF = (1.05e9 + 6.69e8) * 100pg / (4.16e7 + 2.63e7) * 2500pg = 1.01
DTF 25-Aug-2020 10:29
OK
CL 25Aug20
12378D
1.05e9
32.47
Abs. Int.
3.12e8
1.56e8
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
PeCDD
28.41-33.51
357.8517 Fn2
Flags: PBM
4σ 2.16e3
12378D
6.69e8
32.47
1.94e8
9.68e7
PeCDD Std.
28.41-33.51
367.8949 Fn2
Flags: PBM
4σ 1.53e3
FS 12478D
3.55e7
31.17
CS 12347D
3.26e7
31.93
ES 12378D
4.16e7
32.45
1.15e7
5.77e6
PeCDD Std.
28.41-33.51
369.8919 Fn2
Flags: PBM
4σ 1.54e3
FS 12478D
2.25e7
31.16
CS 12347D
2.05e7
31.93
ES 12378D
2.63e7
32.45
7.72e6
3.86e6
QC Check
28.41-33.51
366.9792 Fn2
Flags: -
5.44e6
2.72e6


Rel. Int.
100%
HxCDD
33.52-37.61
389.8156 Fn3
Flags: PBM
4σ 2.20e3
123478D
8.39e8
36.54
123678D
8.64e8
36.66
123789D
9.09e8
36.96
Abs. Int.
2.55e8
1.27e8
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD
33.52-37.61
391.8127 Fn3
Flags: PBM
4σ 2.33e3
123478D
6.64e8
36.54
123678D
6.87e8
36.66
123789D
7.26e8
36.96
Abs. Int.
2.05e8
1.03e8
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.52-37.61
401.8559 Fn3
Flags: PBM
4σ 3.27e3
FS 123468D
3.18e7
35.45
ES 123478D
3.20e7
36.53
ES 123678D
3.15e7
36.64
JS 123467D
1.46e7
36.84
ES 123789D
3.64e7
36.94
Abs. Int.
9.76e6
4.88e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.52-37.61
403.8530 Fn3
Flags: PBM
4σ 1.52e3
FS 123468D
2.55e7
35.45
ES 123478D
2.53e7
36.53
ES 123678D
2.48e7
36.64
JS 123467D
1.19e7
36.84
ES 123789D
2.86e7
36.94
Abs. Int.
7.63e6
3.82e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
QC Check
33.52-37.61
380.9760 Fn3
Flags: -
Abs. Int.
1.18e7
5.91e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT

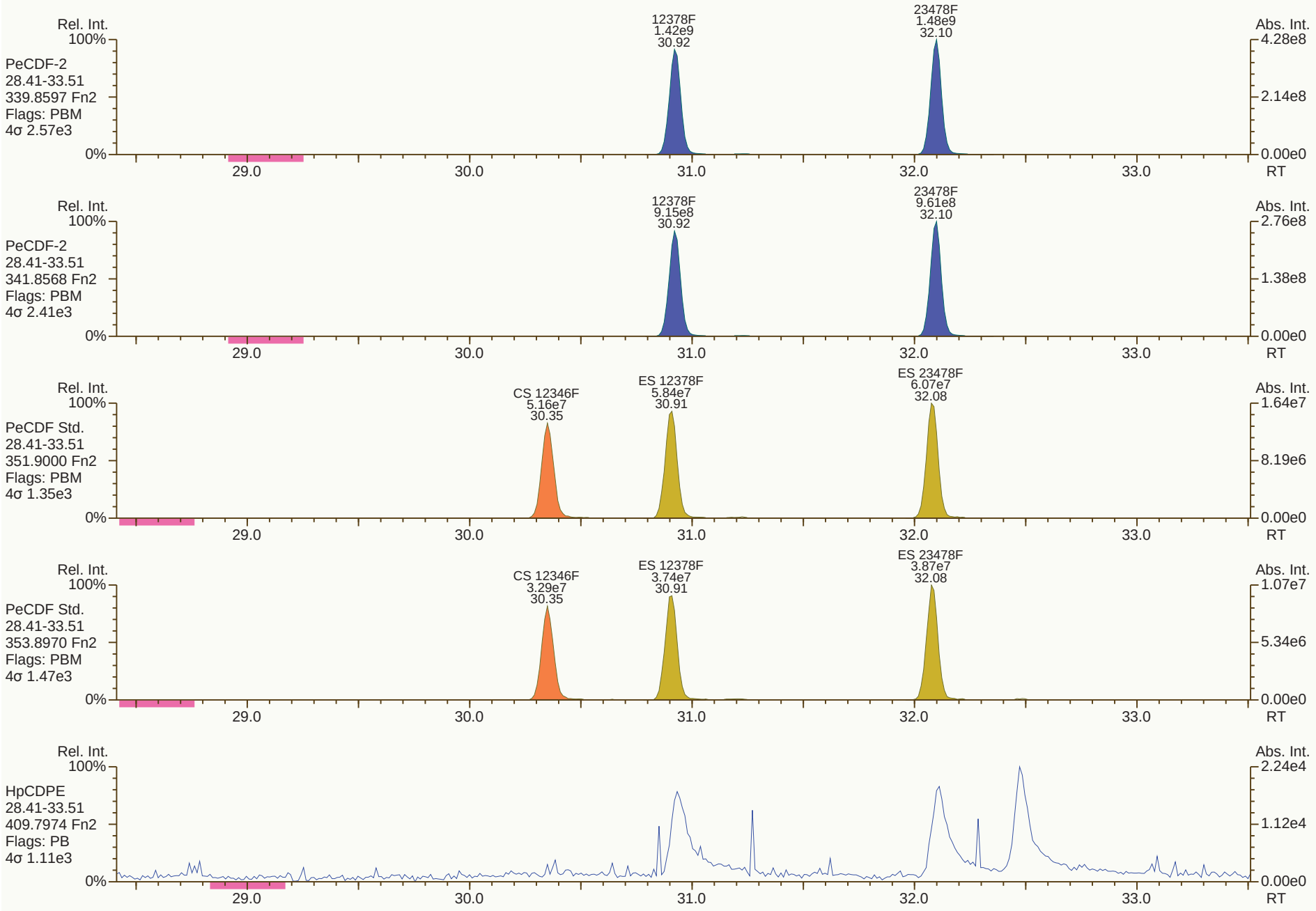

Rel. Int.
100%
HpCDD
37.91-41.21
423.7767 Fn4
Flags: PBM
4σ 1.16e3
0%
1234678D
6.77e8
40.07
Abs. Int.
1.69e8
8.44e7
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD
37.91-41.21
425.7737 Fn4
Flags: PBM
4σ 2.31e3
0%
1234678D
6.48e8
40.07
Abs. Int.
1.62e8
8.12e7
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.91-41.21
435.8169 Fn4
Flags: PBM
4σ 4.40e3
0%
FS 1234679D
2.69e7
39.33
ES 1234678D
2.73e7
40.06
Abs. Int.
7.11e6
3.56e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.91-41.21
437.8140 Fn4
Flags: PBM
4σ 2.04e3
0%
FS 1234679D
2.62e7
39.33
ES 1234678D
2.62e7
40.06
Abs. Int.
6.84e6
3.42e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
QC Check
37.91-41.21
430.9728 Fn4
Flags: -
0%
Abs. Int.
7.37e6
3.68e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT

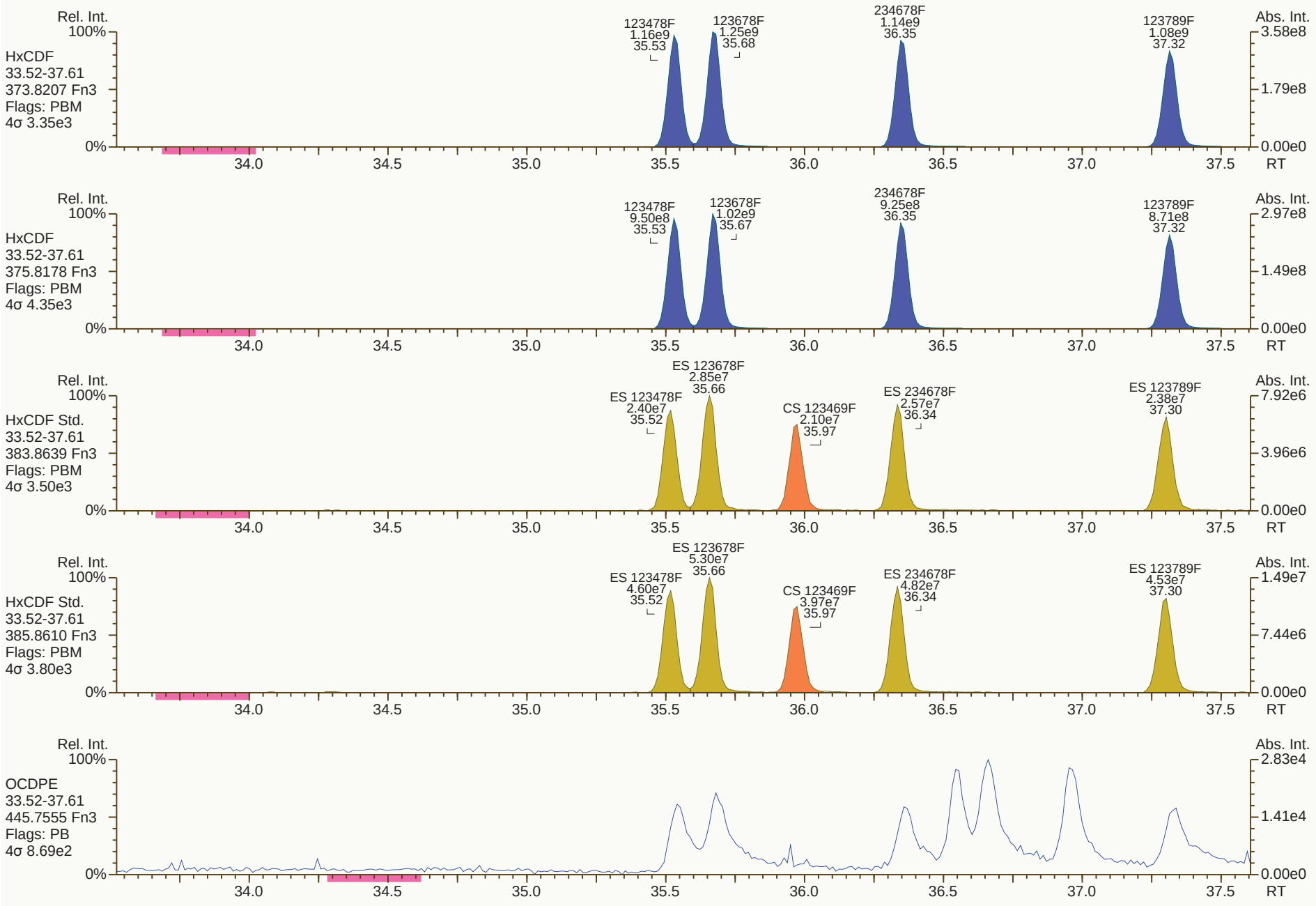

OCDD
9.32e8
42.79
Rel. Int.
Abs. Int.
100%
1.33e8
6.67e7
0.00e0
0%
OCDD
41.22-44.81
457.7377 Fn5
Flags: PBM
4σ 2.74e3
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
OCDD
1.04e9
42.79
OCDD
41.22-44.81
459.7348 Fn5
Flags: PBM
4σ 3.30e3
1.49e8
7.47e7
ES OCDD
3.53e7
42.78
OCDD Std.
41.22-44.81
469.7780 Fn5
Flags: PBM
4σ 6.03e3
4.72e6
2.36e6
ES OCDD
3.85e7
42.78
OCDD Std.
41.22-44.81
471.7750 Fn5
Flags: PBM
4σ 3.45e3
5.33e6
2.66e6
QC Check
41.22-44.81
454.9728 Fn5
Flags: -
9.49e6
4.74e6

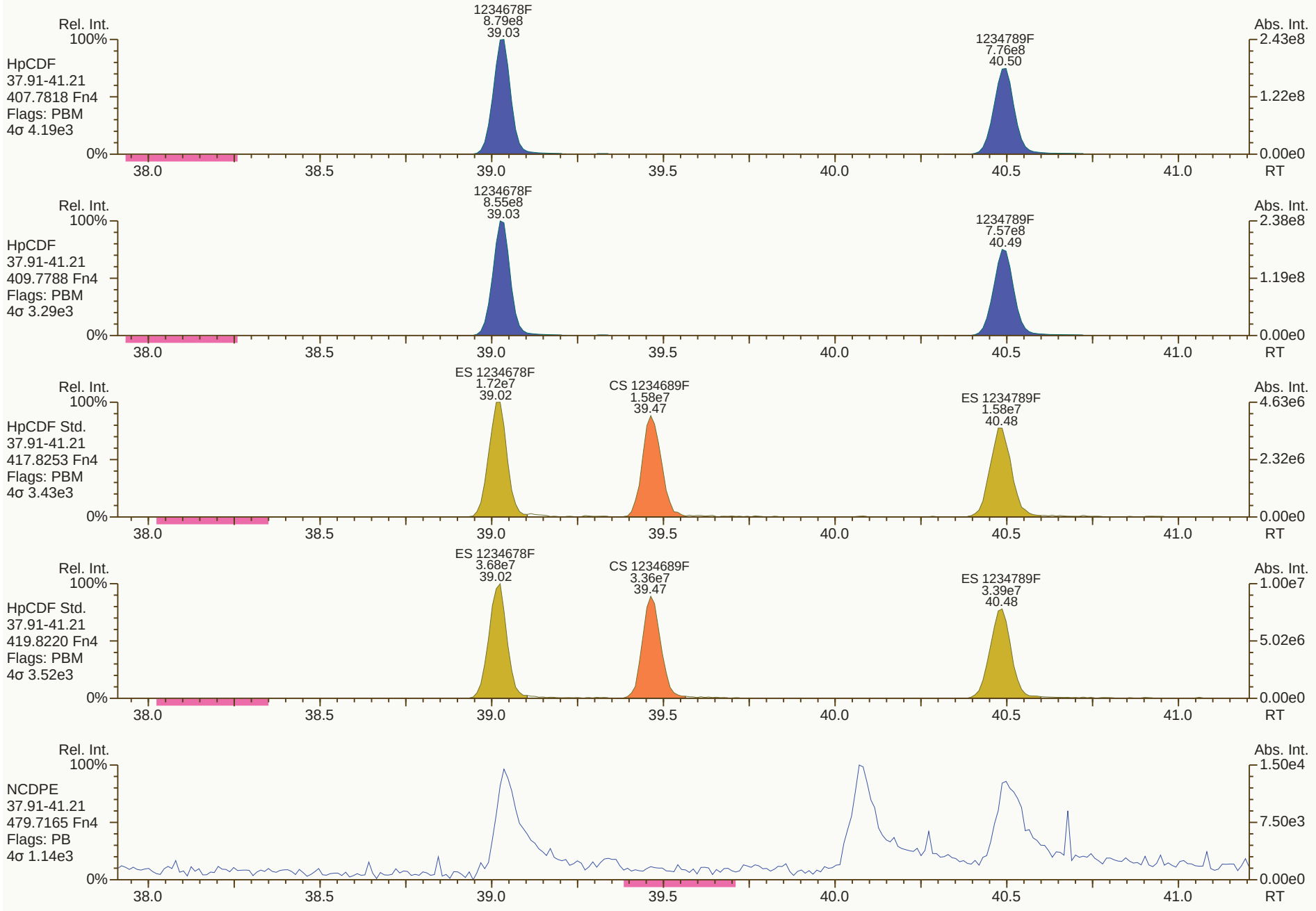

Rel. Int.
100%
OCDD
41.22-44.81
462.7352 Fn5
Flags: PBM
4σ 4.50e3
0%
OCDD-a
8.80e7
42.79
Abs. Int.
1.25e7
6.26e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDD
41.22-44.81
464.7322 Fn5
Flags: PBM
4σ 1.19e3
0%
OCDD-a
3.51e7
42.79
Abs. Int.
4.97e6
2.49e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDD std
41.22-44.81
469.7780 Fn5
Flags: PBM
4σ 6.03e3
0%
ES OCDD
3.53e7
42.78
Abs. Int.
4.72e6
2.36e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDD std
41.22-44.81
471.7750 Fn5
Flags: PBM
4σ 3.45e3
0%
ES OCDD
3.85e7
42.78
Abs. Int.
5.33e6
2.66e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
QC check
41.22-44.81
454.9728 Fn5
Flags: -
0%
Abs. Int.
9.49e6
4.74e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT

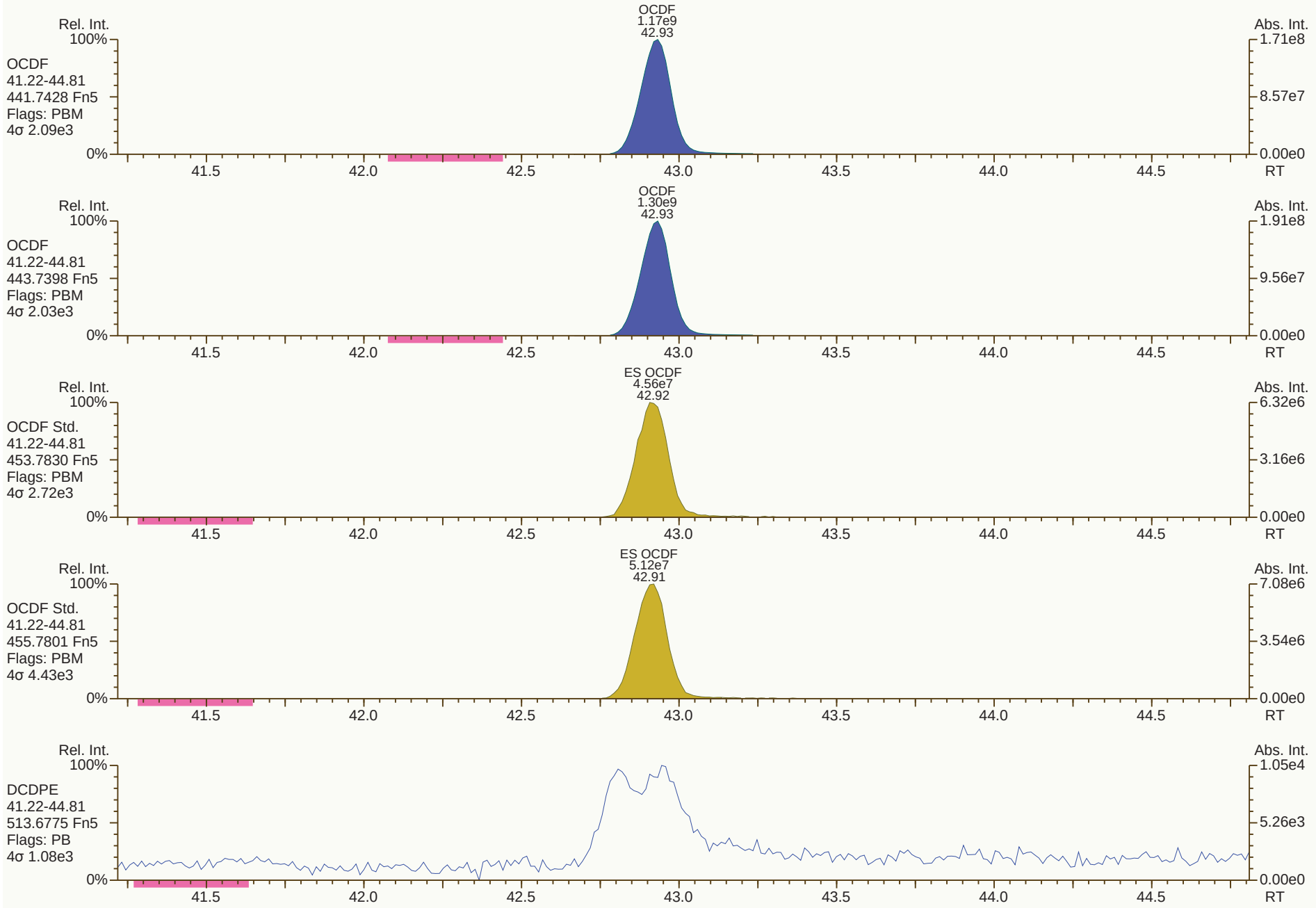

Rel. Int.
100%
TCDF
19.04-28.40
303.9016 Fn1
Flags: PBM
4σ 1.63e3
0%
2378F
2.50e8
25.73
Abs. Int.
5.20e7
2.60e7
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDF
19.04-28.40
305.8987 Fn1
Flags: PBM
4σ 2.30e3
0%
2378F
3.21e8
25.73
Abs. Int.
6.55e7
3.28e7
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDF Std.
19.04-28.40
315.9419 Fn1
Flags: PBM
4σ 1.62e4
0%
AS 1368F
5.70e7
20.38
JS 1234F
4.80e7
24.20
ES 2378F
4.91e7
25.71
Abs. Int.
1.06e7
5.31e6
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDF Std.
19.04-28.40
317.9389 Fn1
Flags: PBM
4σ 4.50e3
0%
AS 1368F
7.30e7
20.38
JS 1234F
6.26e7
24.20
ES 2378F
6.22e7
25.71
Abs. Int.
1.35e7
6.75e6
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
HxCDPE
19.04-28.40
375.8364 Fn1
Flags: PB
4σ 9.74e2
0%
Abs. Int.
6.93e3
3.46e3
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT


Rel. Int.
100%
0%
Abs. Int.
1.33e4
6.66e3
0.00e0
PeCDF-1
19.04-28.40
339.8597 Fn1
Flags: PB
4σ 1.72e3
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
0%
Abs. Int.
1.02e4
5.11e3
0.00e0
PeCDF-1
19.04-28.40
341.8568 Fn1
Flags: PB
4σ 3.79e3
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
0%
Abs. Int.
5.95e6
2.97e6
0.00e0
QC Check
19.04-28.40
316.9824 Fn1
Flags: -
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT


Rel. Int.
100%
PeCDF-2
28.41-33.51
339.8597 Fn2
Flags: PBM
4σ 2.57e3
0%
12378F
1.42e9
30.92
23478F
1.48e9
32.10
Abs. Int.
4.28e8
2.14e8
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF-2
28.41-33.51
341.8568 Fn2
Flags: PBM
4σ 2.41e3
0%
12378F
9.15e8
30.92
23478F
9.61e8
32.10
Abs. Int.
2.76e8
1.38e8
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.41-33.51
351.9000 Fn2
Flags: PBM
4σ 1.35e3
0%
CS 12346F
5.16e7
30.35
ES 12378F
5.84e7
30.91
ES 23478F
6.07e7
32.08
Abs. Int.
1.64e7
8.19e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.41-33.51
353.8970 Fn2
Flags: PBM
4σ 1.47e3
0%
CS 12346F
3.29e7
30.35
ES 12378F
3.74e7
30.91
ES 23478F
3.87e7
32.08
Abs. Int.
1.07e7
5.34e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
HpCDPE
28.41-33.51
409.7974 Fn2
Flags: PB
4σ 1.11e3
0%
Abs. Int.
2.24e4
1.12e4
0.00e0
29.0
30.0
31.0
32.0
33.0
RT


Rel. Int.
100%
HxCDF
33.52-37.61
373.8207 Fn3
Flags: PBM
4σ 3.35e3
123478F
1.16e9
35.53
123678F
1.25e9
35.68
234678F
1.14e9
36.35
123789F
1.08e9
37.32
Abs. Int.
3.58e8
1.79e8
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF
33.52-37.61
375.8178 Fn3
Flags: PBM
4σ 4.35e3
123478F
9.50e8
35.53
123678F
1.02e9
35.67
234678F
9.25e8
36.35
123789F
8.71e8
37.32
Abs. Int.
2.97e8
1.49e8
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF Std.
33.52-37.61
383.8639 Fn3
Flags: PBM
4σ 3.50e3
ES 123678F
2.85e7
35.66
ES 123478F
2.40e7
35.52
CS 123469F
2.10e7
35.97
ES 234678F
2.57e7
36.34
ES 123789F
2.38e7
37.30
Abs. Int.
7.92e6
3.96e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF Std.
33.52-37.61
385.8610 Fn3
Flags: PBM
4σ 3.80e3
ES 123678F
5.30e7
35.66
ES 123478F
4.60e7
35.52
CS 123469F
3.97e7
35.97
ES 234678F
4.82e7
36.34
ES 123789F
4.53e7
37.30
Abs. Int.
1.49e7
7.44e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
OCDPE
33.52-37.61
445.7555 Fn3
Flags: PB
4σ 8.69e2
Abs. Int.
2.83e4
1.41e4
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT

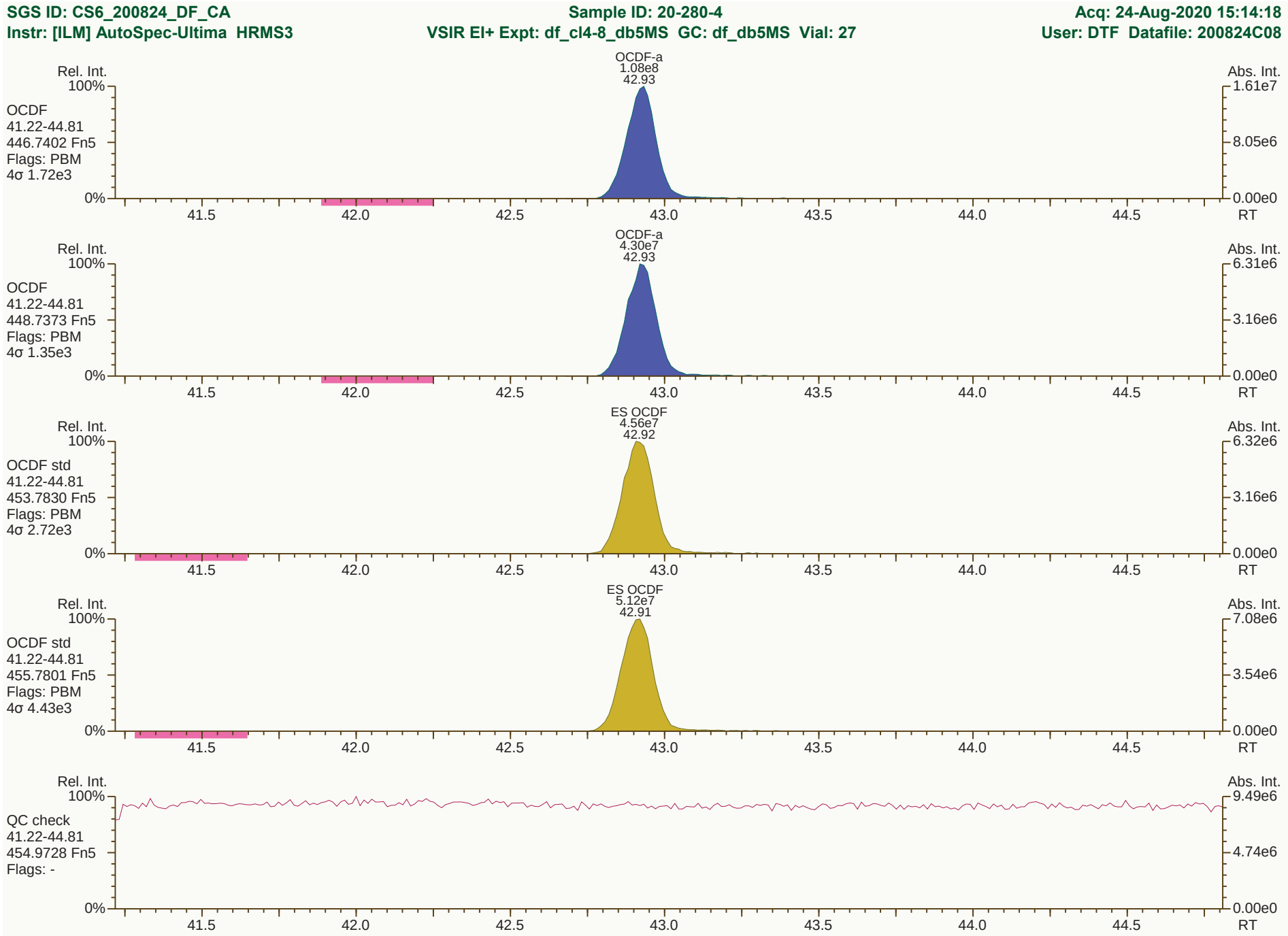

Rel. Int.
100%
HpCDF
37.91-41.21
407.7818 Fn4
Flags: PBM
4σ 4.19e3
0%
1234678F
8.79e8
39.03
1234789F
7.76e8
40.50
Abs. Int.
2.43e8
1.22e8
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF
37.91-41.21
409.7788 Fn4
Flags: PBM
4σ 3.29e3
0%
1234678F
8.55e8
39.03
1234789F
7.57e8
40.49
Abs. Int.
2.38e8
1.19e8
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.91-41.21
417.8253 Fn4
Flags: PBM
4σ 3.43e3
0%
ES 1234678F
1.72e7
39.02
CS 1234689F
1.58e7
39.47
ES 1234789F
1.58e7
40.48
Abs. Int.
4.63e6
2.32e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.91-41.21
419.8220 Fn4
Flags: PBM
4σ 3.52e3
0%
ES 1234678F
3.68e7
39.02
CS 1234689F
3.36e7
39.47
ES 1234789F
3.39e7
40.48
Abs. Int.
1.00e7
5.02e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
NCDPE
37.91-41.21
479.7165 Fn4
Flags: PB
4σ 1.14e3
0%
Abs. Int.
1.50e4
7.50e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT


OCDF
1.17e9
42.93
Rel. Int.
100%
OCDF
41.22-44.81
441.7428 Fn5
Flags: PBM
4σ 2.09e3
0%
Abs. Int.
1.71e8
8.57e7
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
OCDF
1.30e9
42.93
OCDF
41.22-44.81
443.7398 Fn5
Flags: PBM
4σ 2.03e3
1.91e8
9.56e7
ES OCDF
4.56e7
42.92
OCDF Std.
41.22-44.81
453.7830 Fn5
Flags: PBM
4σ 2.72e3
6.32e6
3.16e6
ES OCDF
5.12e7
42.91
OCDF Std.
41.22-44.81
455.7801 Fn5
Flags: PBM
4σ 4.43e3
7.08e6
3.54e6
DCDPE
41.22-44.81
513.6775 Fn5
Flags: PB
4σ 1.08e3
1.05e4
5.26e3

SGS ID: CS6_200824_DF_CA
Instr: [ILM] AutoSpec-Ultima HRMS3

Sample ID: 20-280-4
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 27

Acq: 24-Aug-2020 15:14:18
User: DTF Datafile: 200824C08



Results: T:\UltraTracePro\ICAL results\HRMS3\HRMS3_DF_10122018_24AUG2020\Resources\CS6_200824_DF_CA.utp_res, saved 25-Aug-2020 10:30 (DTF)
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 7394, 7482

Peak annotation: Areas, Centroids
PKD: 25-Aug-2020 09:03 Printed: 25-Aug-2020 13:52


Rel. Int.
100%
QC Check
19.04-28.40
316.9824 Fn1
Flags: -
0%
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Abs. Int.
5.38e6
2.69e6
0.00e0
Rel. Int.
100%
QC Check
28.41-33.51
366.9792 Fn2
Flags: -
0%
29.0
30.0
31.0
32.0
33.0
RT
Abs. Int.
4.90e6
2.45e6
0.00e0
Rel. Int.
100%
QC Check
33.52-37.61
380.9760 Fn3
Flags: -
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Abs. Int.
9.60e6
4.80e6
0.00e0
Rel. Int.
100%
QC Check
37.91-41.21
430.9728 Fn4
Flags: -
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Abs. Int.
6.48e6
3.24e6
0.00e0
Rel. Int.
100%
QC Check
41.22-44.81
454.9728 Fn5
Flags: -
0%
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Abs. Int.
8.27e6
4.13e6
0.00e0


Rel. Int.
100%
TCDD
19.04-28.40
319.8965 Fn1
Flags: PB
4σ 1.63e3
0%
Abs. Int.
6.62e3
3.31e3
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDD
19.04-28.40
321.8936 Fn1
Flags: PB
4σ 1.26e3
0%
Abs. Int.
5.27e3
2.64e3
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
37Cl-TCDD
19.04-28.40
327.8850 Fn1
Flags: PB
4σ 6.73e2
0%
Abs. Int.
1.26e4
6.29e3
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.40
331.9368 Fn1
Flags: PB
4σ 3.33e3
0%
Abs. Int.
1.59e4
7.96e3
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.40
333.9339 Fn1
Flags: PB
4σ 1.10e3
0%
Abs. Int.
1.65e4
8.27e3
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT


Rel. Int.
100%
PeCDD
28.41-33.51
355.8546 Fn2
Flags: PB
4σ 1.50e3
0%
Abs. Int.
5.08e3
2.54e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD
28.41-33.51
357.8517 Fn2
Flags: PB
4σ 8.87e2
0%
Abs. Int.
5.54e3
2.77e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.41-33.51
367.8949 Fn2
Flags: PB
4σ 1.15e3
0%
Abs. Int.
1.15e4
5.77e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.41-33.51
369.8919 Fn2
Flags: PB
4σ 1.32e3
0%
Abs. Int.
7.53e3
3.76e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
QC Check
28.41-33.51
366.9792 Fn2
Flags: -
0%
Abs. Int.
4.90e6
2.45e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT

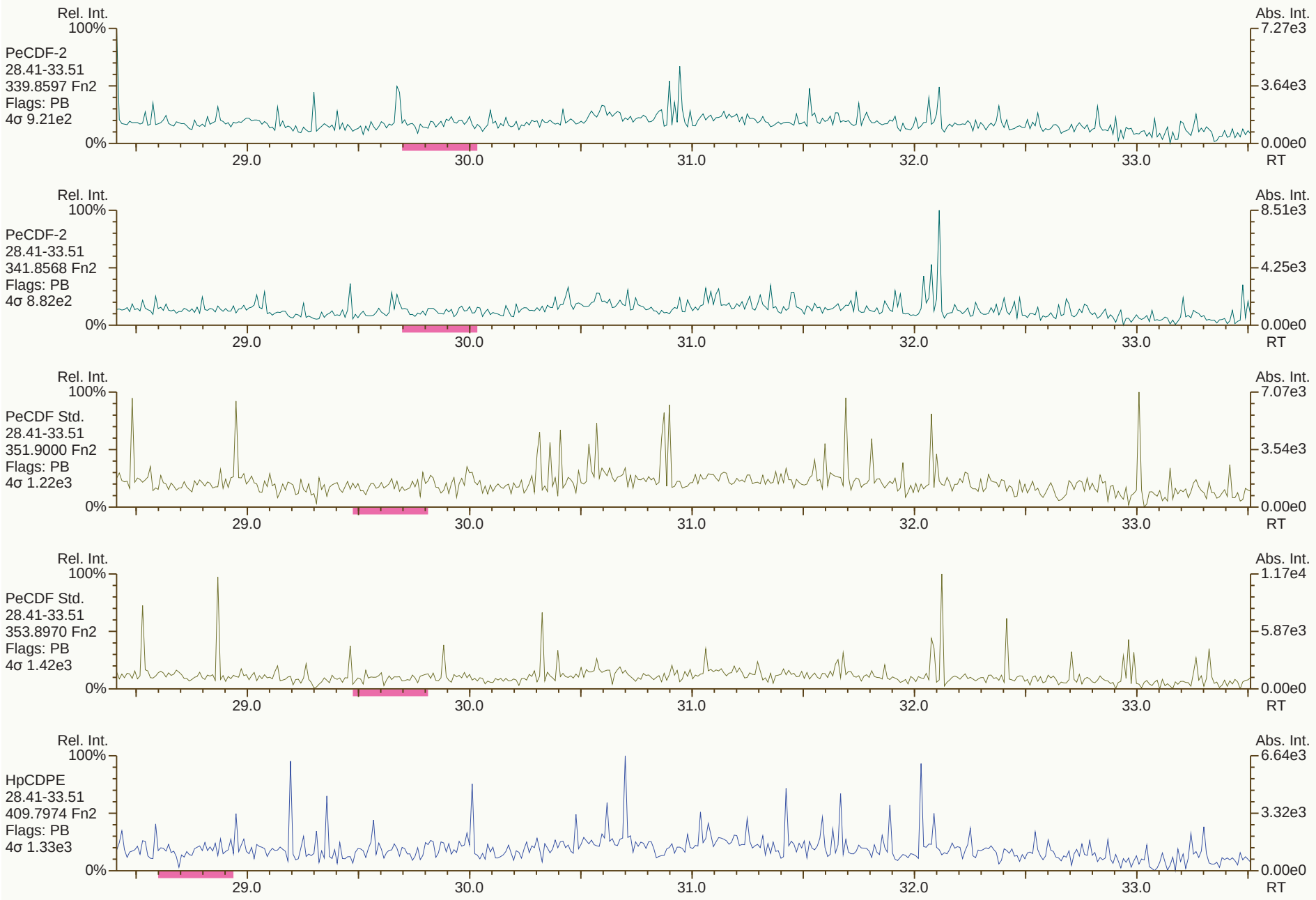

Rel. Int.
100%
HxCDD
33.52-37.61
389.8156 Fn3
Flags: PB
4σ 8.54e2
0%
Abs. Int.
2.60e3
1.30e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD
33.52-37.61
391.8127 Fn3
Flags: PB
4σ 9.98e2
0%
Abs. Int.
2.96e3
1.48e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.52-37.61
401.8559 Fn3
Flags: PB
4σ 1.62e3
0%
Abs. Int.
1.17e4
5.83e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.52-37.61
403.8530 Fn3
Flags: PB
4σ 1.47e3
0%
Abs. Int.
8.42e3
4.21e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
QC Check
33.52-37.61
380.9760 Fn3
Flags: -
0%
Abs. Int.
9.60e6
4.80e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT


Rel. Int.
100%
HpCDD
37.91-41.21
423.7767 Fn4
Flags: PB
4σ 1.11e3
0%
Abs. Int.
3.06e3
1.53e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD
37.91-41.21
425.7737 Fn4
Flags: PB
4σ 7.32e2
0%
Abs. Int.
5.27e3
2.63e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.91-41.21
435.8169 Fn4
Flags: PB
4σ 1.11e3
0%
Abs. Int.
6.12e3
3.06e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.91-41.21
437.8140 Fn4
Flags: PB
4σ 1.39e3
0%
Abs. Int.
9.74e3
4.87e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
QC Check
37.91-41.21
430.9728 Fn4
Flags: -
0%
Abs. Int.
6.48e6
3.24e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT


Rel. Int.
100%
OCDD
41.22-44.81
457.7377 Fn5
Flags: PB
4σ 1.26e3
0%
Abs. Int.
3.64e3
1.82e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDD
41.22-44.81
459.7348 Fn5
Flags: PB
4σ 7.14e2
0%
Abs. Int.
5.56e3
2.78e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDD Std.
41.22-44.81
469.7780 Fn5
Flags: PB
4σ 1.15e3
0%
Abs. Int.
1.15e4
5.77e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDD Std.
41.22-44.81
471.7750 Fn5
Flags: PB
4σ 1.28e3
0%
Abs. Int.
5.54e3
2.77e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
QC Check
41.22-44.81
454.9728 Fn5
Flags: -
0%
Abs. Int.
8.27e6
4.13e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT


Rel. Int.
100%
TCDF
19.04-28.40
303.9016 Fn1
Flags: PBM
4σ 1.01e3
2468F
5.25e5
21.58
SBS
Abs. Int.
9.48e4
4.74e4
0.00e0
0%
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDF
19.04-28.40
305.8987 Fn1
Flags: PBM
4σ 1.19e3
2468F
6.91e5
21.58
Abs. Int.
1.29e5
6.47e4
0.00e0
0%
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDF Std.
19.04-28.40
315.9419 Fn1
Flags: PB
4σ 9.74e3
Abs. Int.
3.66e4
1.83e4
0.00e0
0%
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDF Std.
19.04-28.40
317.9389 Fn1
Flags: PB
4σ 4.93e3
Abs. Int.
1.30e4
6.52e3
0.00e0
0%
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
HxCDPE
19.04-28.40
375.8364 Fn1
Flags: PB
4σ 1.04e3
Abs. Int.
6.01e3
3.00e3
0.00e0
0%
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT


Rel. Int.
100%
0%
Abs. Int.
1.56e4
7.81e3
0.00e0
PeCDF-1
19.04-28.40
339.8597 Fn1
Flags: PB
4σ 1.09e3
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
0%
Abs. Int.
9.43e3
4.72e3
0.00e0
PeCDF-1
19.04-28.40
341.8568 Fn1
Flags: PB
4σ 9.57e2
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
0%
Abs. Int.
5.38e6
2.69e6
0.00e0
QC Check
19.04-28.40
316.9824 Fn1
Flags: -
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT


Rel. Int.
100%
PeCDF-2
28.41-33.51
339.8597 Fn2
Flags: PB
4σ 9.21e2
0%
Abs. Int.
7.27e3
3.64e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF-2
28.41-33.51
341.8568 Fn2
Flags: PB
4σ 8.82e2
0%
Abs. Int.
8.51e3
4.25e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.41-33.51
351.9000 Fn2
Flags: PB
4σ 1.22e3
0%
Abs. Int.
7.07e3
3.54e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.41-33.51
353.8970 Fn2
Flags: PB
4σ 1.42e3
0%
Abs. Int.
1.17e4
5.87e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
HpCDPE
28.41-33.51
409.7974 Fn2
Flags: PB
4σ 1.33e3
0%
Abs. Int.
6.64e3
3.32e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT


Rel. Int.
100%
HxCDF
33.52-37.61
373.8207 Fn3
Flags: PB
4σ 8.99e2
0%
Abs. Int.
6.29e3
3.14e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF
33.52-37.61
375.8178 Fn3
Flags: PB
4σ 1.02e3
0%
Abs. Int.
6.84e3
3.42e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF Std.
33.52-37.61
383.8639 Fn3
Flags: PB
4σ 1.73e3
0%
Abs. Int.
1.26e4
6.28e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF Std.
33.52-37.61
385.8610 Fn3
Flags: PB
4σ 2.36e3
0%
Abs. Int.
1.48e4
7.41e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
OCDPE
33.52-37.61
445.7555 Fn3
Flags: PB
4σ 1.05e3
0%
Abs. Int.
9.19e3
4.60e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT

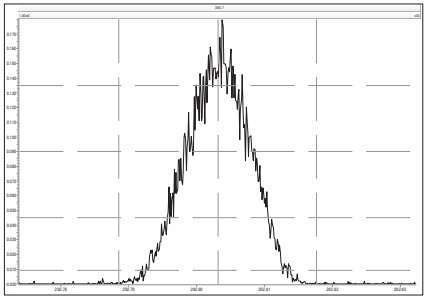

Rel. Int.
100%
HpCDF
37.91-41.21
407.7818 Fn4
Flags: PB
4σ 6.60e2
0%
Abs. Int.
3.24e3
1.62e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF
37.91-41.21
409.7788 Fn4
Flags: PB
4σ 9.86e2
0%
Abs. Int.
2.66e3
1.33e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.91-41.21
417.8253 Fn4
Flags: PB
4σ 1.83e3
0%
Abs. Int.
3.34e4
1.67e4
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.91-41.21
419.8220 Fn4
Flags: PB
4σ 1.32e3
0%
Abs. Int.
1.30e4
6.51e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
NCDPE
37.91-41.21
479.7165 Fn4
Flags: PB
4σ 9.25e2
0%
Abs. Int.
5.73e3
2.87e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT


Rel. Int.
100%
OCDF
41.22-44.81
441.7428 Fn5
Flags: PB
4σ 6.66e2
0%
Abs. Int.
2.77e3
1.39e3
0.00e0
RT
41.5
42.0
42.5
43.0
43.5
44.0
44.5
Rel. Int.
100%
OCDF
41.22-44.81
443.7398 Fn5
Flags: PB
4σ 1.11e3
0%
Abs. Int.
5.23e3
2.61e3
0.00e0
RT
Rel. Int.
100%
OCDF Std.
41.22-44.81
453.7830 Fn5
Flags: PB
4σ 1.53e3
0%
Abs. Int.
9.49e3
4.75e3
0.00e0
RT
Rel. Int.
100%
OCDF Std.
41.22-44.81
455.7801 Fn5
Flags: PB
4σ 1.82e3
0%
Abs. Int.
9.30e3
4.65e3
0.00e0
RT
Rel. Int.
100%
DCDPE
41.22-44.81
513.6775 Fn5
Flags: PB
4σ 8.24e2
0%
Abs. Int.
4.54e3
2.27e3
0.00e0
RT

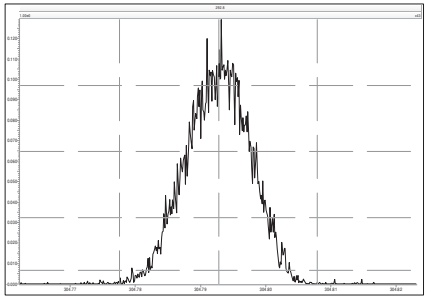
File: Experiment: df_cl4-8_db5MS.exp Reference: DF.ref Function: 1 @ 200 (ppm)

Printed: Monday, August 24, 2020 09:23:16 Eastern Daylight Time

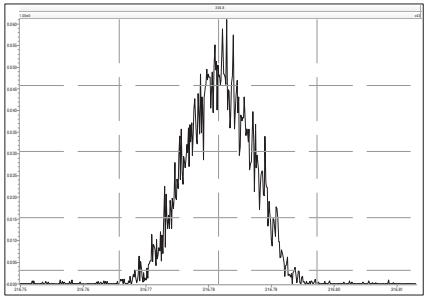
M 292.9824 R 13965



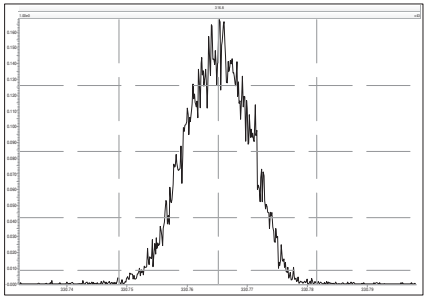
M 304.9824 R 13657



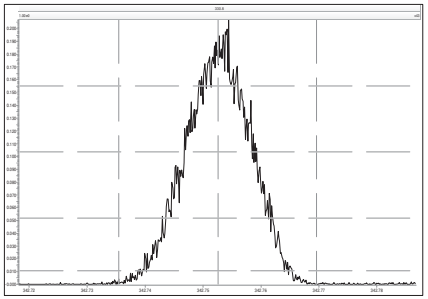
M 316.9824 R 14535



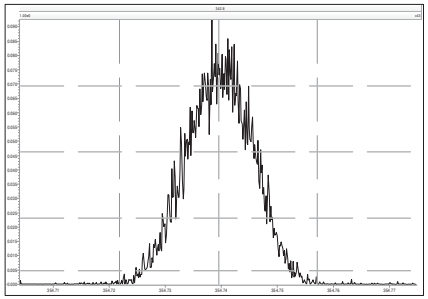
M 330.9792 R 13740



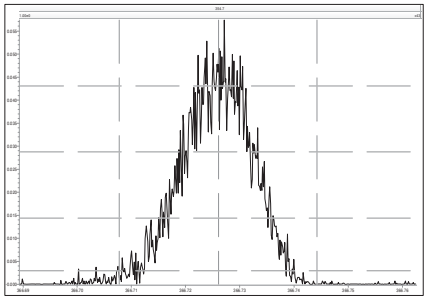
M 342.9792 R 14040



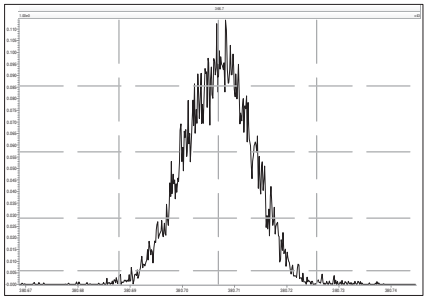
M 354.9792 R 13296



M 366.9792 R 13589



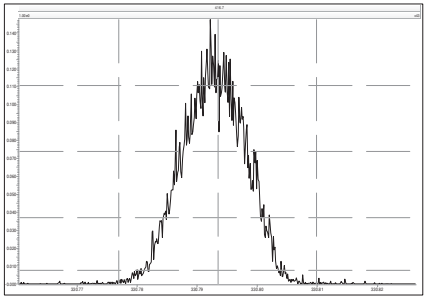
M 380.9760 R 12886



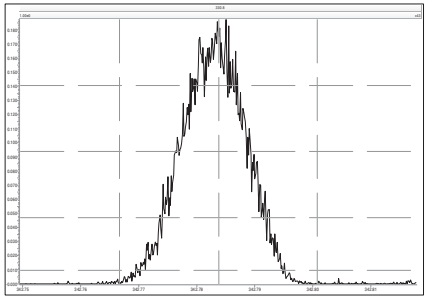
File: Experiment: df_cl4-8_db5MS.exp Reference: DF.ref Function: 2 @ 200 (ppm)

Printed: Monday, August 24, 2020 09:23:33 Eastern Daylight Time

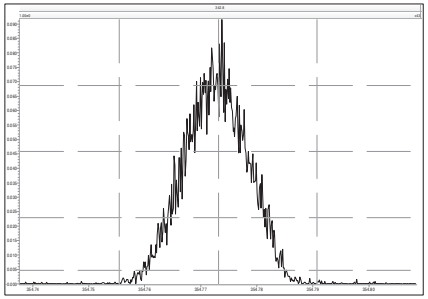
M 330.9792 R 14367



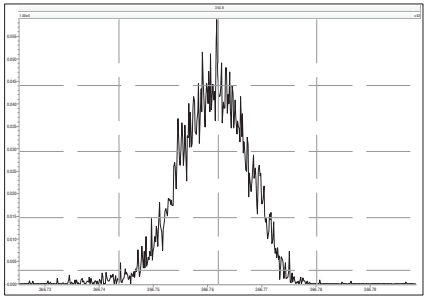
M 342.9792 R 13969



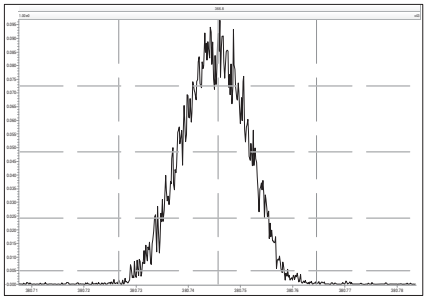
M 354.9792 R 14368



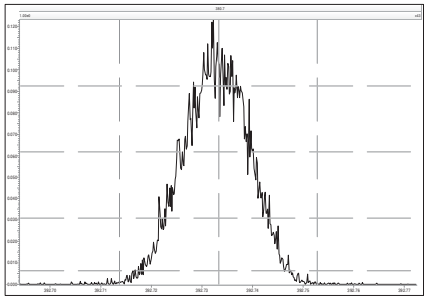
M 366.9792 R 14208



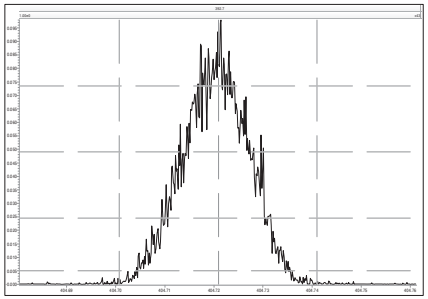
M 380.9760 R 13813



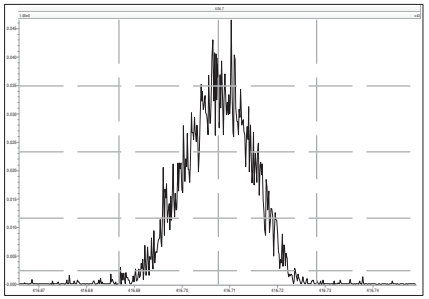
M 392.9760 R 13439



M 404.9760 R 12955



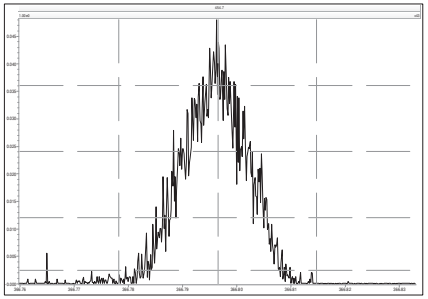
M 416.9760 R 13368



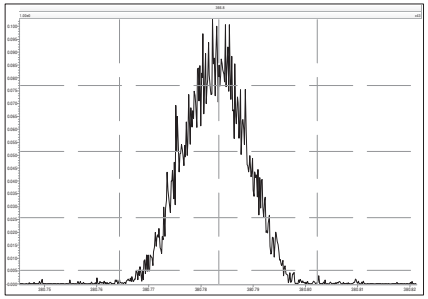
File: Experiment: df_cl4-8_db5MS.exp Reference: DF.ref Function: 3 @ 200 (ppm)

Printed: Monday, August 24, 2020 09:23:54 Eastern Daylight Time

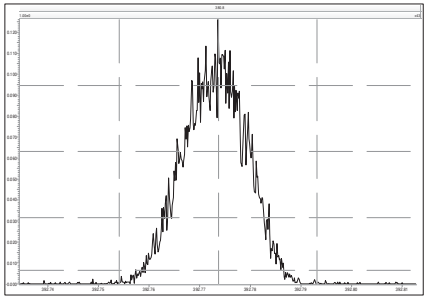
M 366.9792 R 15249



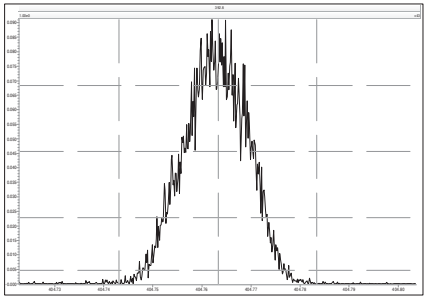
M 380.9760 R 14453



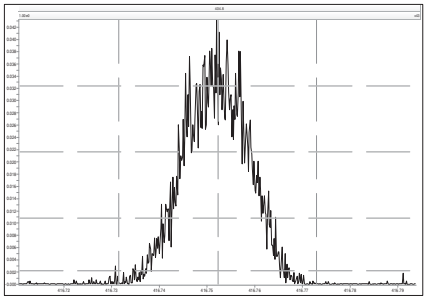
M 392.9760 R 13889



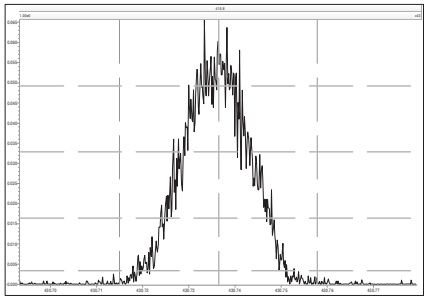
M 404.9760 R 14365



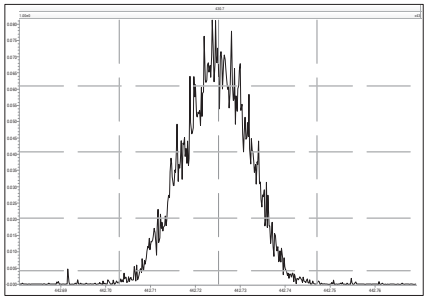
M 416.9760 R 14882



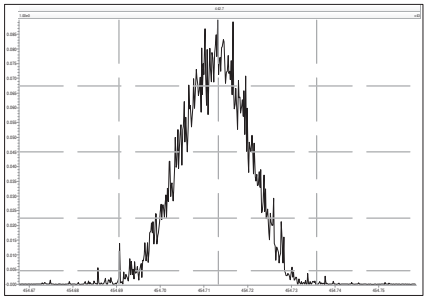
M 430.9728 R 13591



M 442.9728 R 13814



M 454.9728 R 13888



File: Experiment: df_cl4-8_db5MS.exp Reference: DF.ref Function: 4 @ 200 (ppm)

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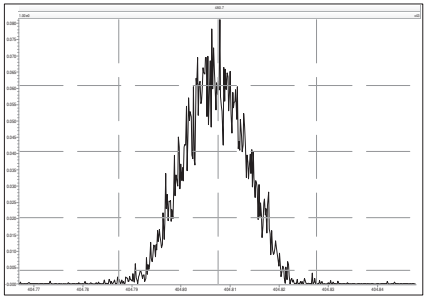
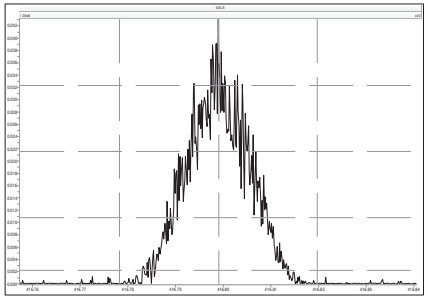
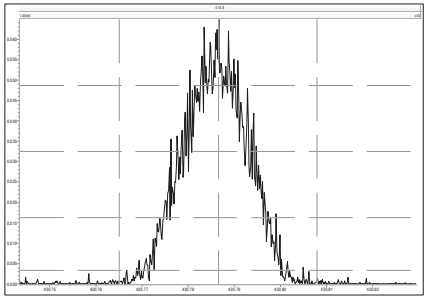
M 404.9760 R 14705



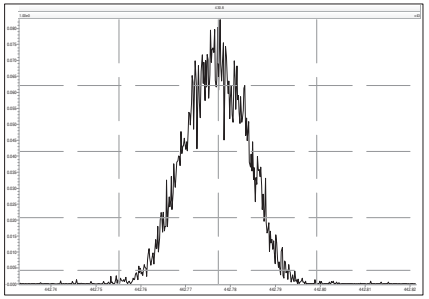
M 416.9760 R 14790



M 430.9728 R 15152



M 442.9728 R 14879



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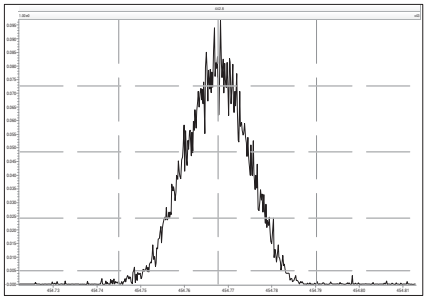
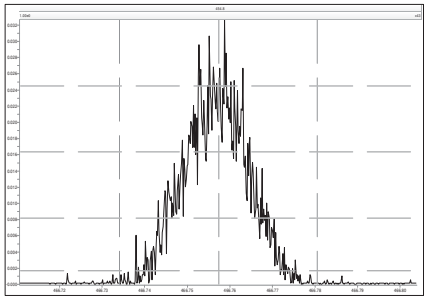
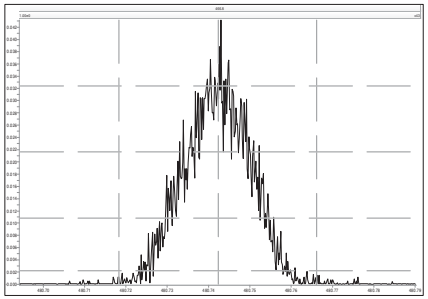


M 466.9728 R 14969



M 480.9696 R 14883



File: Experiment: df_cl4-8_db5MS.exp Reference: DF.ref Function: 5 @ 200 (ppm)

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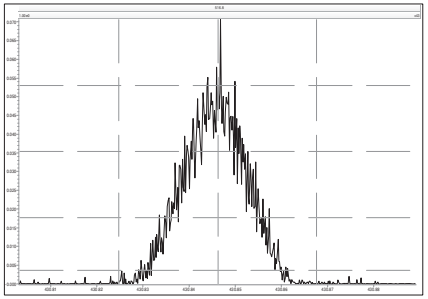
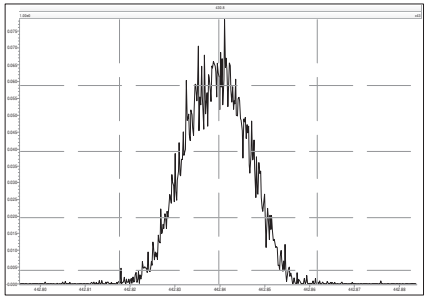
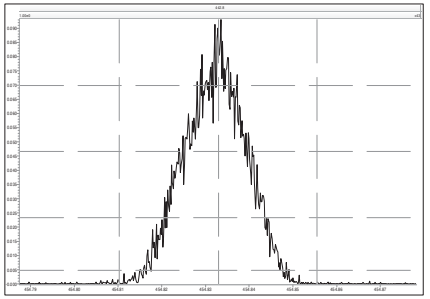
M 430.9728 R 14795



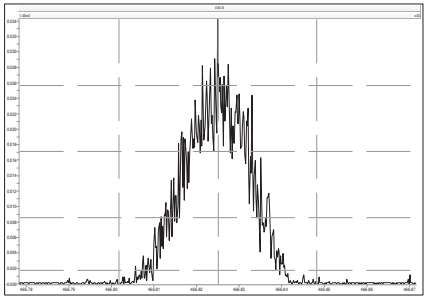
M 442.9728 R 13737



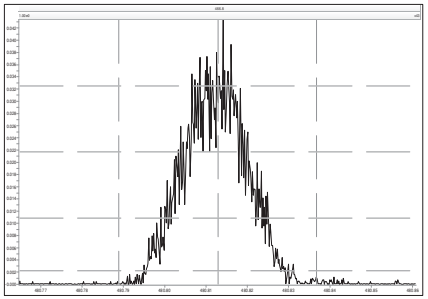
M 454.9728 R 14208



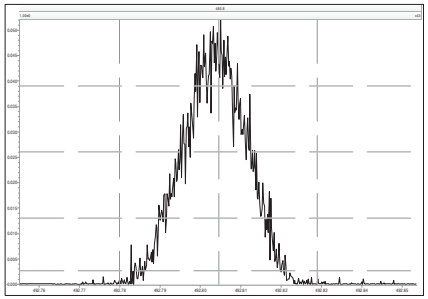
M 466.9728 R 14702



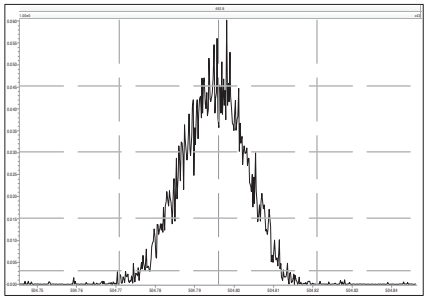
M 480.9696 R 13966



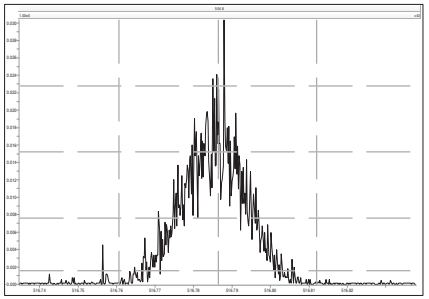
M 492.9696 R 14127



M 504.9696 R 13967



M 516.9697 R 15063



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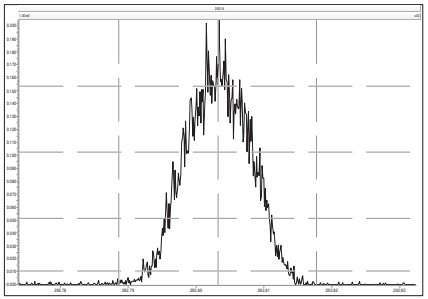
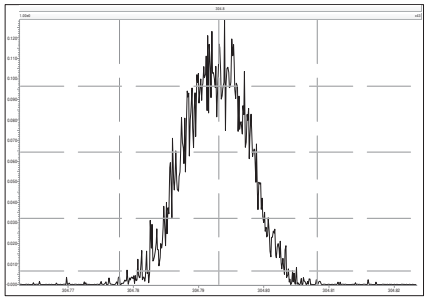
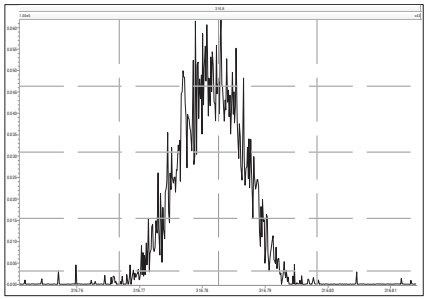
M 292.9824 R 14632



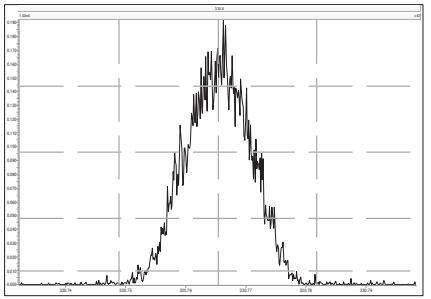
M 304.9824 R 14928



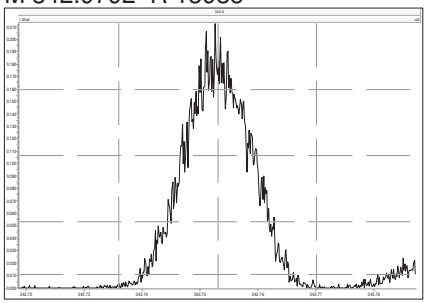
M 316.9824 R 14926



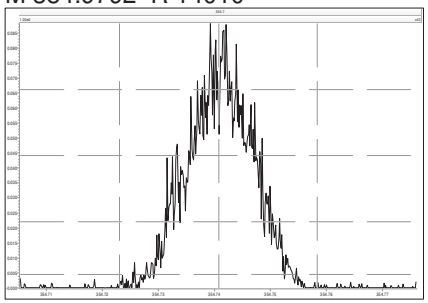
M 330.9792 R 14335



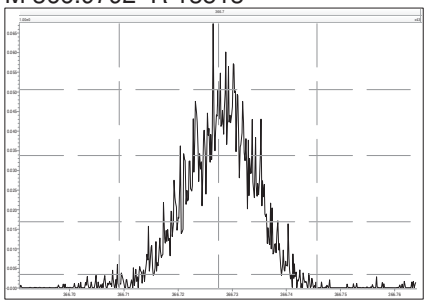
M 342.9792 R 13935



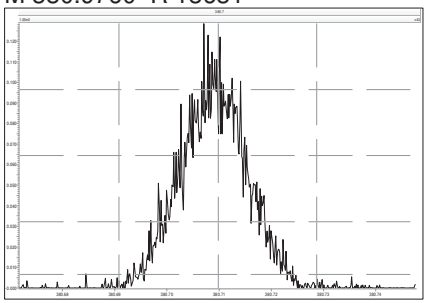
M 354.9792 R 14010



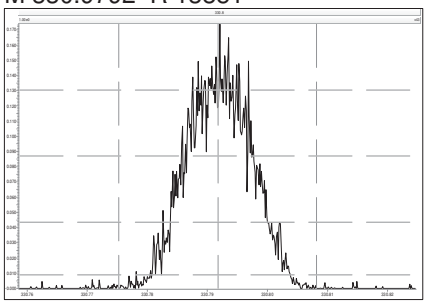
M 366.9792 R 13513



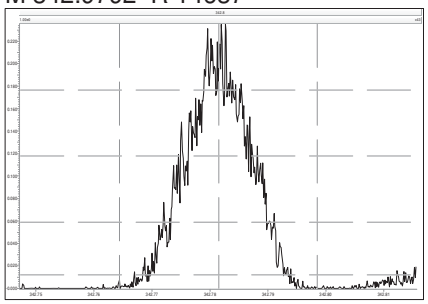
M 380.9760 R 13631



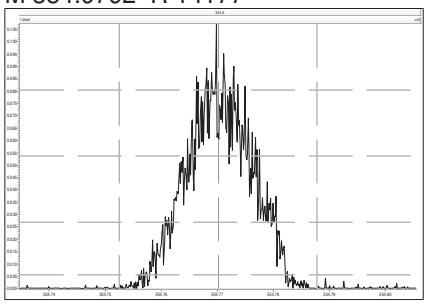
M 330.9792 R 13851



M 342.9792 R 14637



M 354.9792 R 14177



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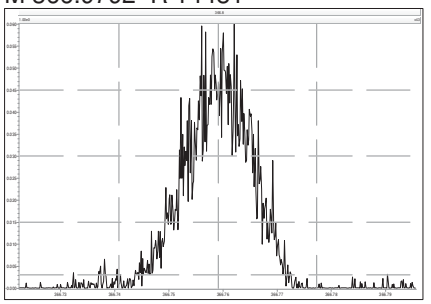
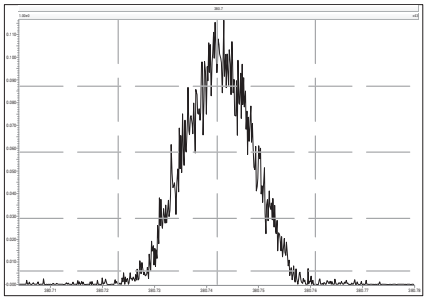
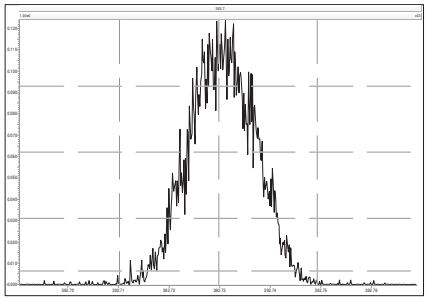


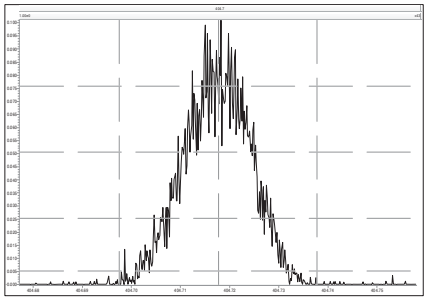
M 380.9760 R 14247



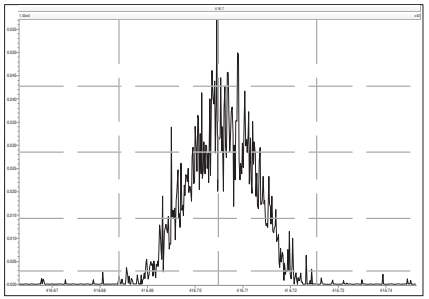
M 392.9760 R 13826



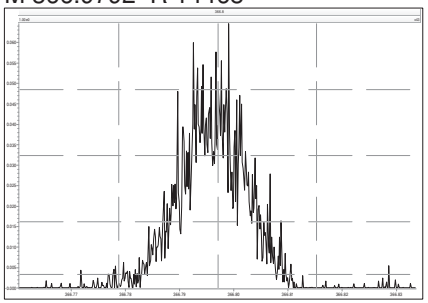
M 404.9760 R 14044



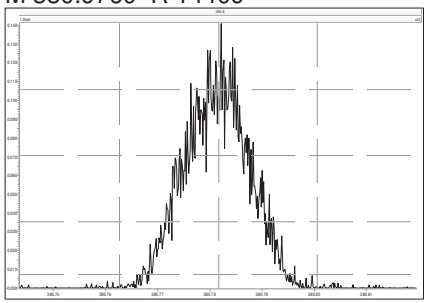
M 416.9760 R 15365



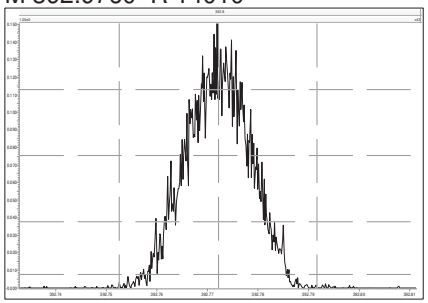
M 366.9792 R 14468



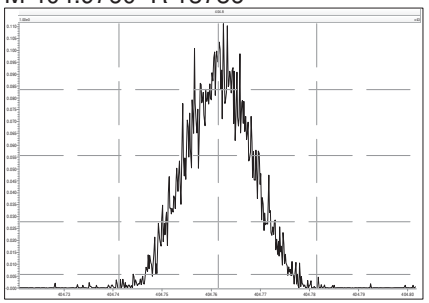
M 380.9760 R 14409



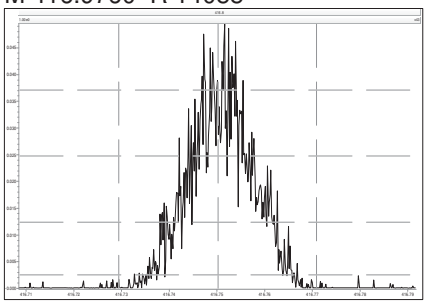
M 392.9760 R 14010



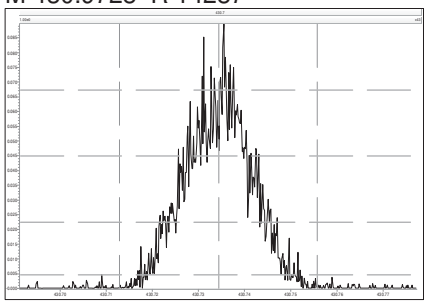
M 404.9760 R 13786



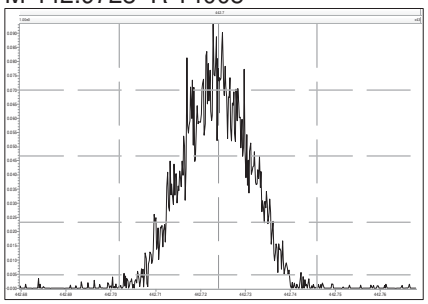
M 416.9760 R 14055



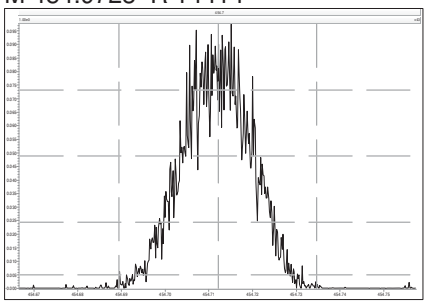
M 430.9728 R 14287



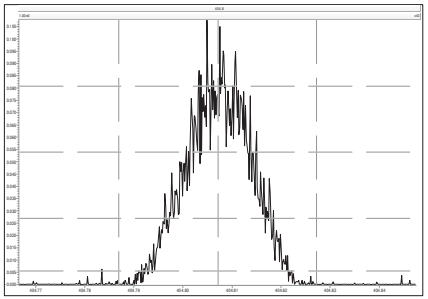
M 442.9728 R 14005



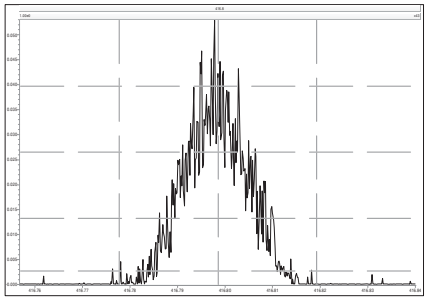
M 454.9728 R 14414



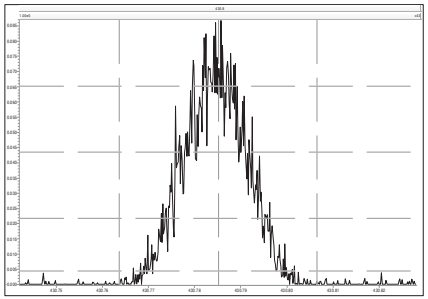
M 404.9760 R 13624



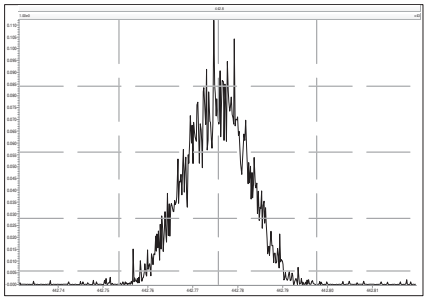
M 416.9760 R 15331



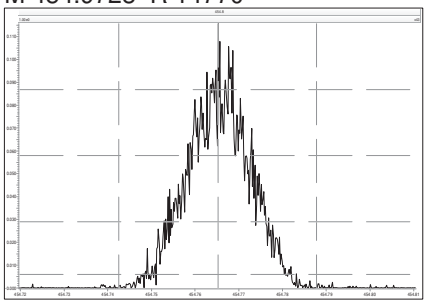
M 430.9728 R 14764



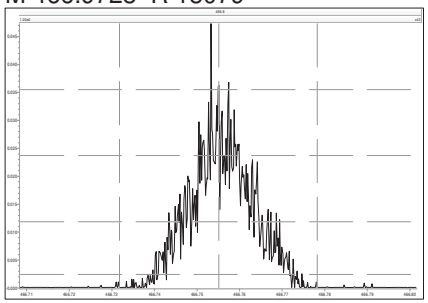
M 442.9728 R 15015



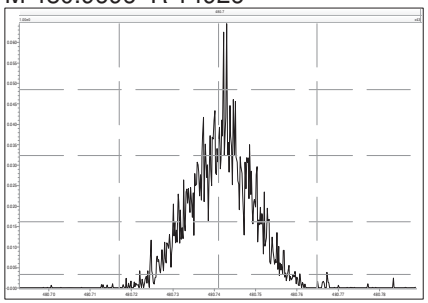
M 454.9728 R 14770



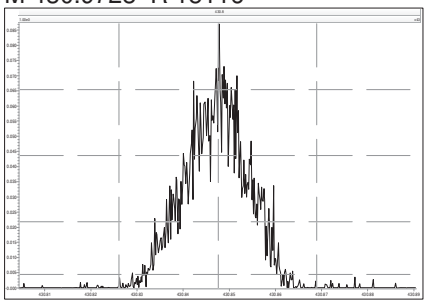
M 466.9728 R 15079



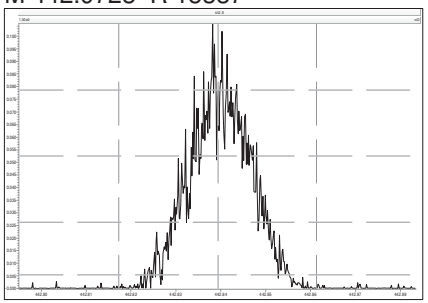
M 480.9696 R 14926



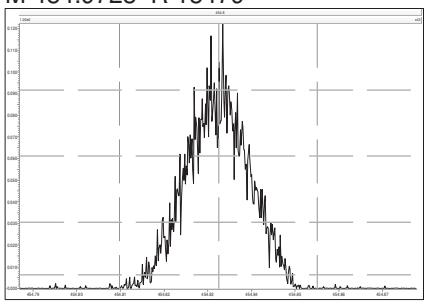
M 430.9728 R 15116



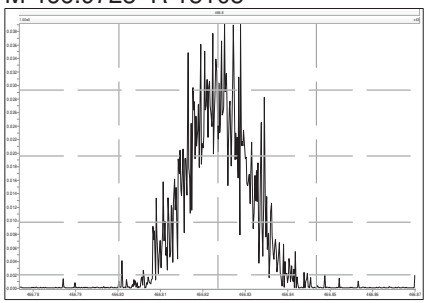
M 442.9728 R 15337



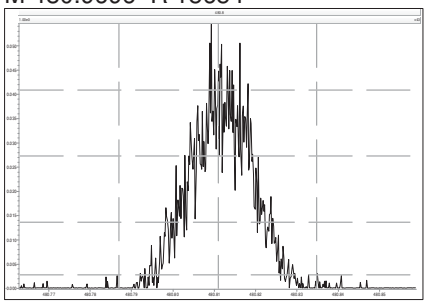
M 454.9728 R 15479



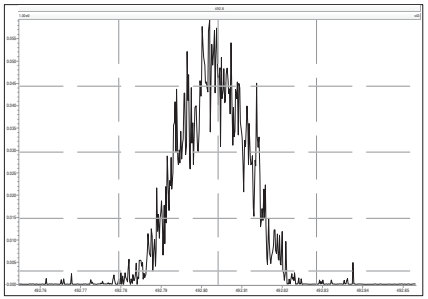
M 466.9728 R 15105



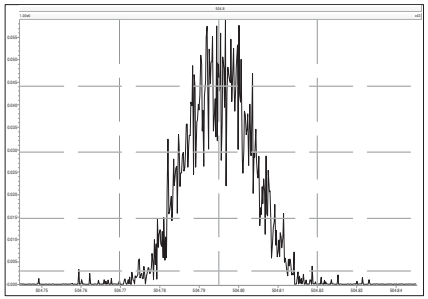
M 480.9696 R 15654



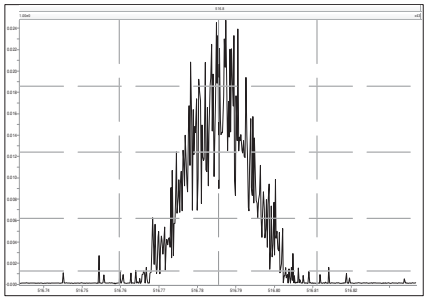
M 492.9696 R 14800



M 504.9696 R 15061



M 516.9697 R 15504



Instrument: HRMS3 (AutoSpec-Ultima) MS Experiment: df_cl4-8_db5MS GC Program: df_db5MS

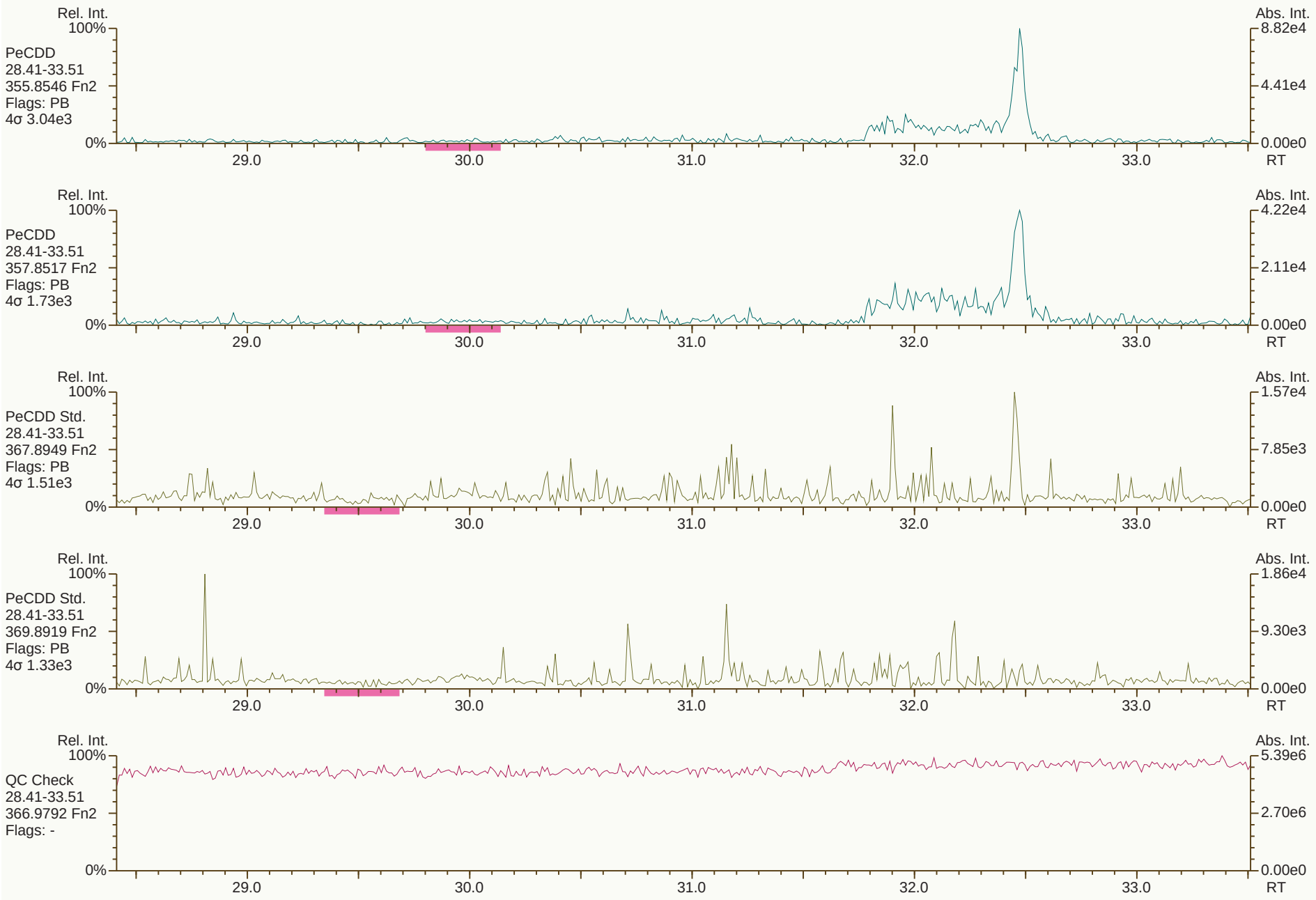
#	Datafile	Vial#	Lab ID	Wt/Vol	Client/Sample ID	Analyst(s)	Checkcode	Acq Date	Acq Time
9	200824C09	2	SBS_200824_DF_CB	1.00	20-61-1	DTF	223-952	24-Aug-2020	16:08:53
10	200824C10	28	CS3_200824_DF_CB	1.00	ICV 23-12-15	DTF	791-379	24-Aug-2020	16:55:01

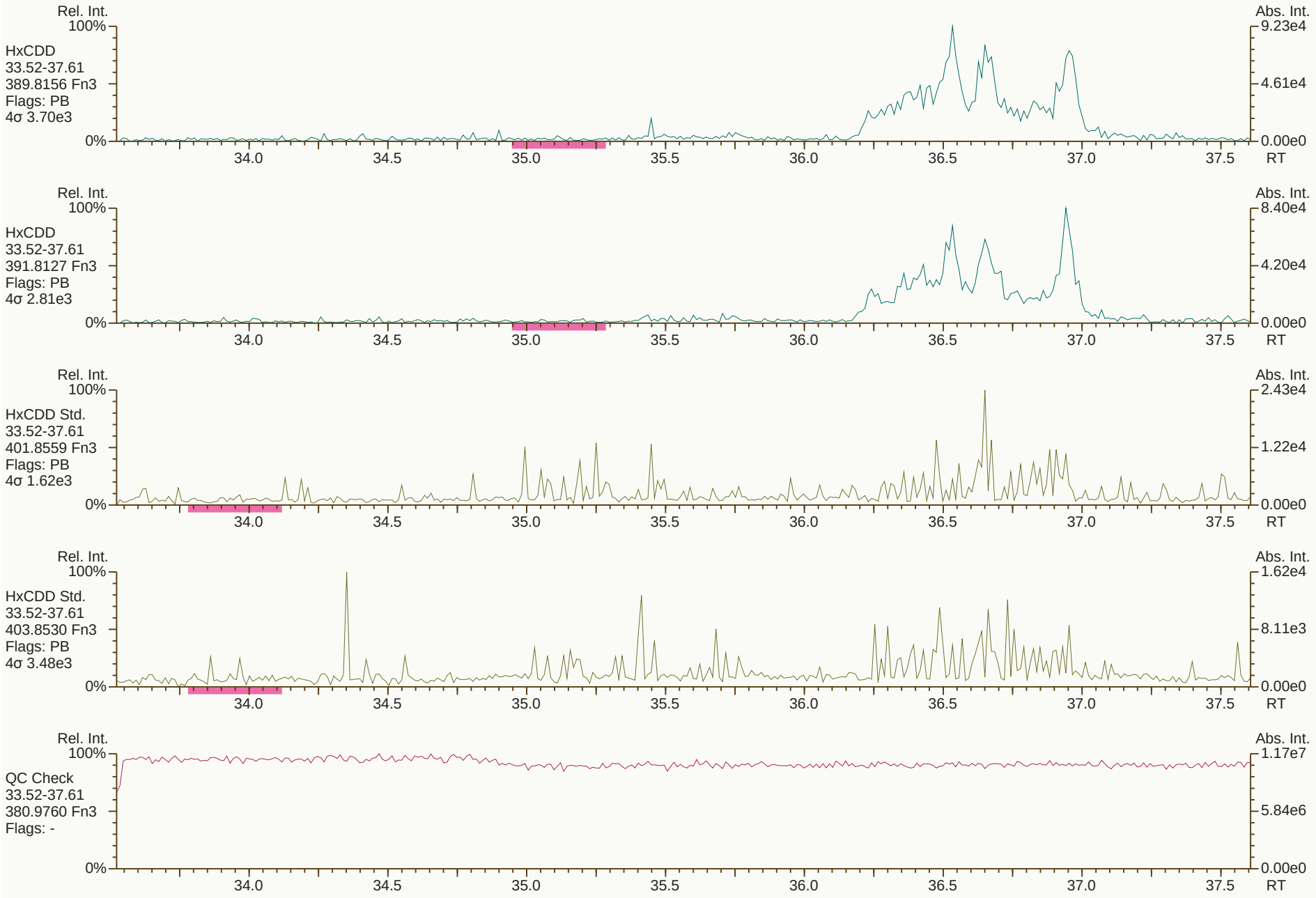
APPROVED
Carla_Lyon , 8/25/2020, 5:53:49 PM

REVIEWED
By Tyler_Fritz at 11:48 am, Aug 25, 2020


Rel. Int.
100%
QC Check
19.04-28.40
316.9824 Fn1
Flags: -
0%
Abs. Int.
5.91e6
2.95e6
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
QC Check
28.41-33.51
366.9792 Fn2
Flags: -
0%
Abs. Int.
5.39e6
2.70e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
QC Check
33.52-37.61
380.9760 Fn3
Flags: -
0%
Abs. Int.
1.17e7
5.84e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
QC Check
37.91-41.21
430.9728 Fn4
Flags: -
0%
Abs. Int.
7.59e6
3.80e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
QC Check
41.22-44.81
454.9728 Fn5
Flags: -
0%
Abs. Int.
9.78e6
4.89e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT

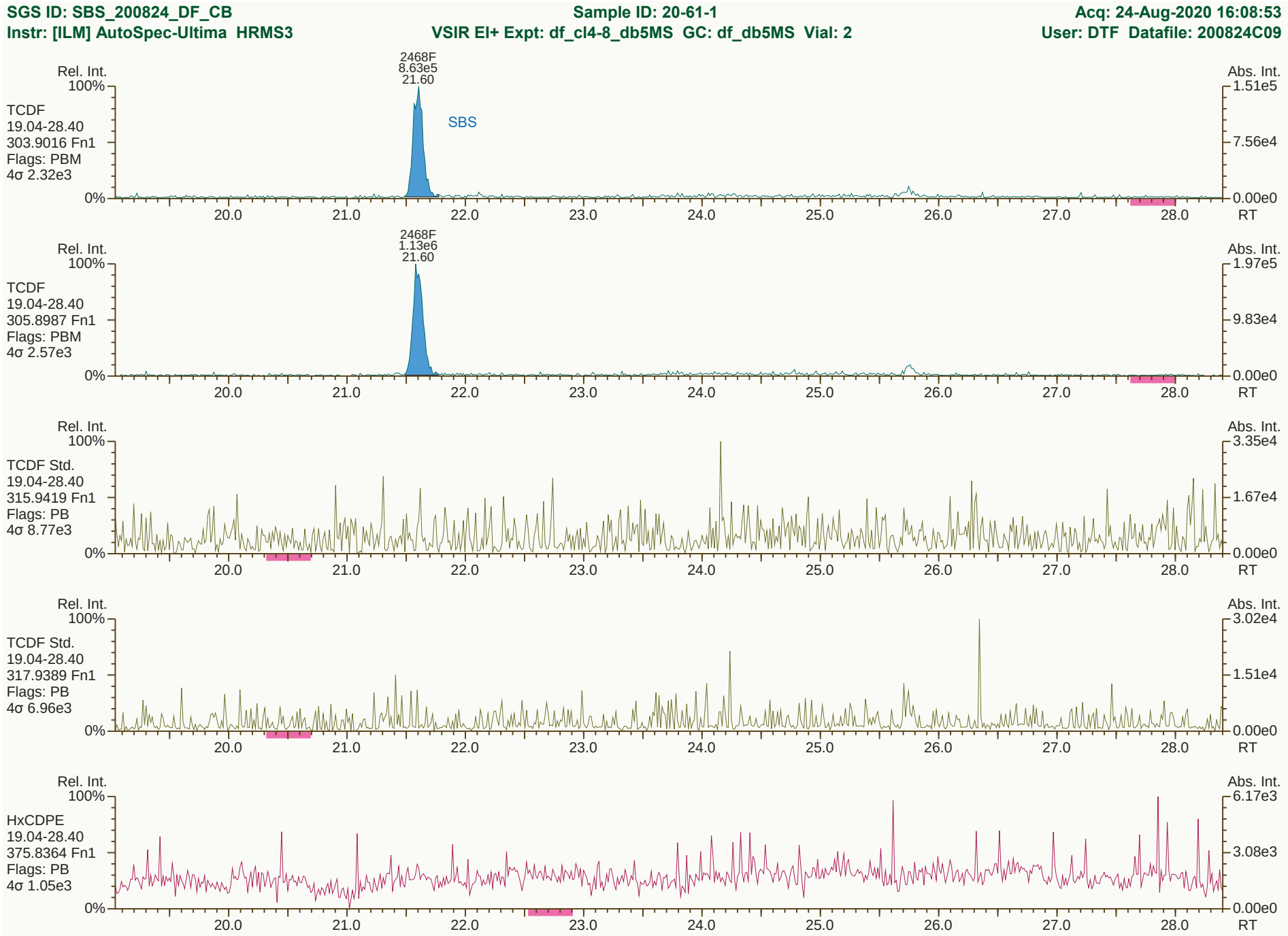

Rel. Int.
100%
TCDD
19.04-28.40
319.8965 Fn1
Flags: PB
4σ 2.81e3
0%
Abs. Int.
1.30e4
6.52e3
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDD
19.04-28.40
321.8936 Fn1
Flags: PB
4σ 2.14e3
0%
Abs. Int.
1.73e4
8.65e3
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
37Cl-TCDD
19.04-28.40
327.8850 Fn1
Flags: PB
4σ 9.98e2
0%
Abs. Int.
1.53e4
7.64e3
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.40
331.9368 Fn1
Flags: PB
4σ 6.06e3
0%
Abs. Int.
1.79e4
8.96e3
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.40
333.9339 Fn1
Flags: PB
4σ 2.41e3
0%
Abs. Int.
1.23e4
6.16e3
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT


Rel. Int.
100%
PeCDD
28.41-33.51
355.8546 Fn2
Flags: PB
4σ 3.04e3
0%
Abs. Int.
8.82e4
4.41e4
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD
28.41-33.51
357.8517 Fn2
Flags: PB
4σ 1.73e3
0%
Abs. Int.
4.22e4
2.11e4
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.41-33.51
367.8949 Fn2
Flags: PB
4σ 1.51e3
0%
Abs. Int.
1.57e4
7.85e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.41-33.51
369.8919 Fn2
Flags: PB
4σ 1.33e3
0%
Abs. Int.
1.86e4
9.30e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
QC Check
28.41-33.51
366.9792 Fn2
Flags: -
0%
Abs. Int.
5.39e6
2.70e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT


Rel. Int.
100%
HxCDD
33.52-37.61
389.8156 Fn3
Flags: PB
4σ 3.70e3
0%
Abs. Int.
9.23e4
4.61e4
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD
33.52-37.61
391.8127 Fn3
Flags: PB
4σ 2.81e3
0%
Abs. Int.
8.40e4
4.20e4
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.52-37.61
401.8559 Fn3
Flags: PB
4σ 1.62e3
0%
Abs. Int.
2.43e4
1.22e4
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.52-37.61
403.8530 Fn3
Flags: PB
4σ 3.48e3
0%
Abs. Int.
1.62e4
8.11e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
QC Check
33.52-37.61
380.9760 Fn3
Flags: -
0%
Abs. Int.
1.17e7
5.84e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT

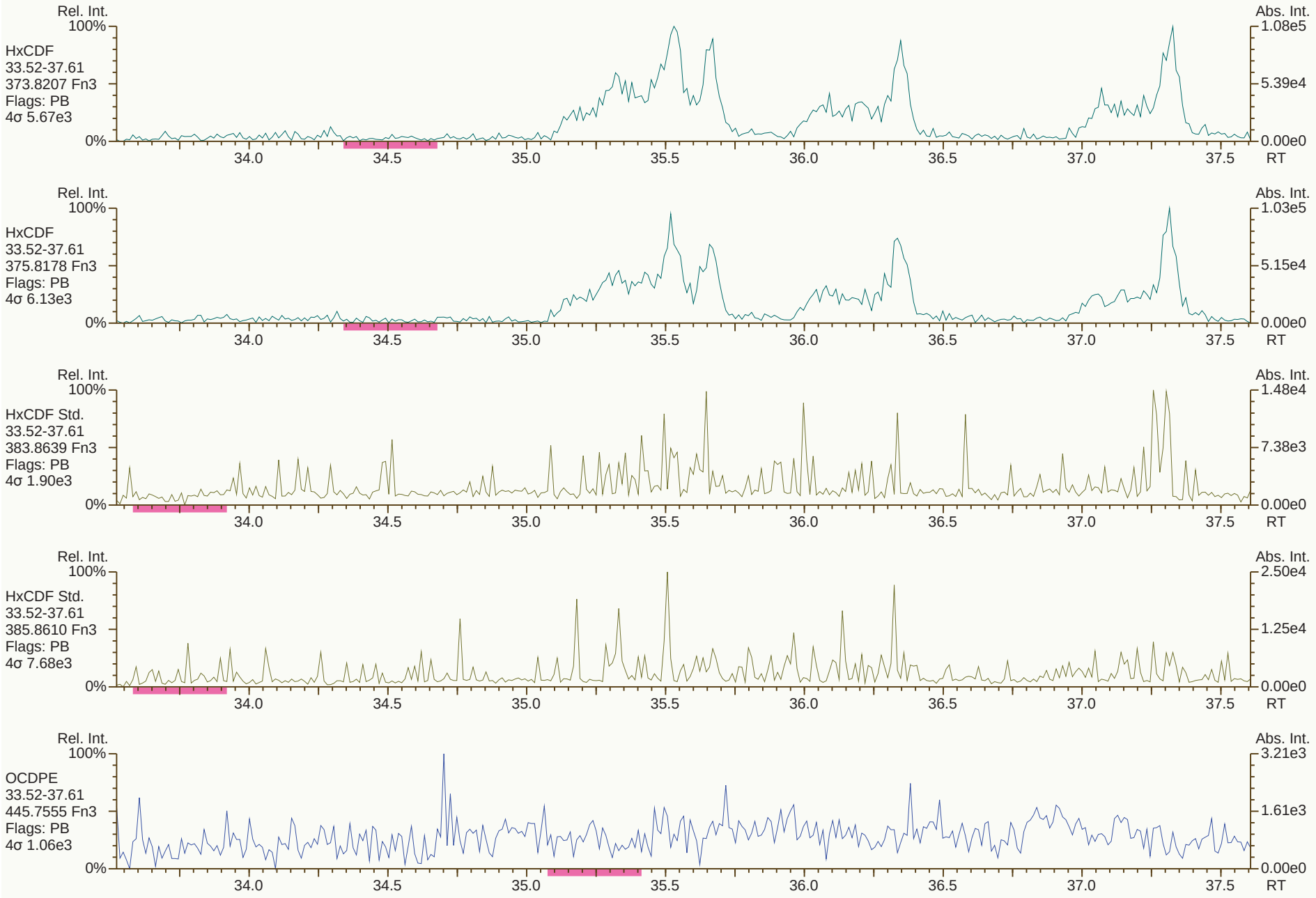

Rel. Int.
100%
HpCDD
37.91-41.21
423.7767 Fn4
Flags: PB
4σ 2.09e3
0%
Abs. Int.
8.15e4
4.07e4
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD
37.91-41.21
425.7737 Fn4
Flags: PB
4σ 2.38e3
0%
Abs. Int.
7.51e4
3.76e4
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.91-41.21
435.8169 Fn4
Flags: PB
4σ 1.68e3
0%
Abs. Int.
1.44e4
7.18e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.91-41.21
437.8140 Fn4
Flags: PB
4σ 1.46e3
0%
Abs. Int.
1.03e4
5.14e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
QC Check
37.91-41.21
430.9728 Fn4
Flags: -
0%
Abs. Int.
7.59e6
3.80e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT


Rel. Int.
100%
OCDD
41.22-44.81
457.7377 Fn5
Flags: PB
4σ 2.17e3
0%
Abs. Int.
1.16e5
5.82e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDD
41.22-44.81
459.7348 Fn5
Flags: PB
4σ 4.32e3
0%
Abs. Int.
1.07e5
5.37e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDD Std.
41.22-44.81
469.7780 Fn5
Flags: PB
4σ 1.25e3
0%
Abs. Int.
1.88e4
9.39e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDD Std.
41.22-44.81
471.7750 Fn5
Flags: PB
4σ 1.22e3
0%
Abs. Int.
1.06e4
5.29e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
QC Check
41.22-44.81
454.9728 Fn5
Flags: -
0%
Abs. Int.
9.78e6
4.89e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT

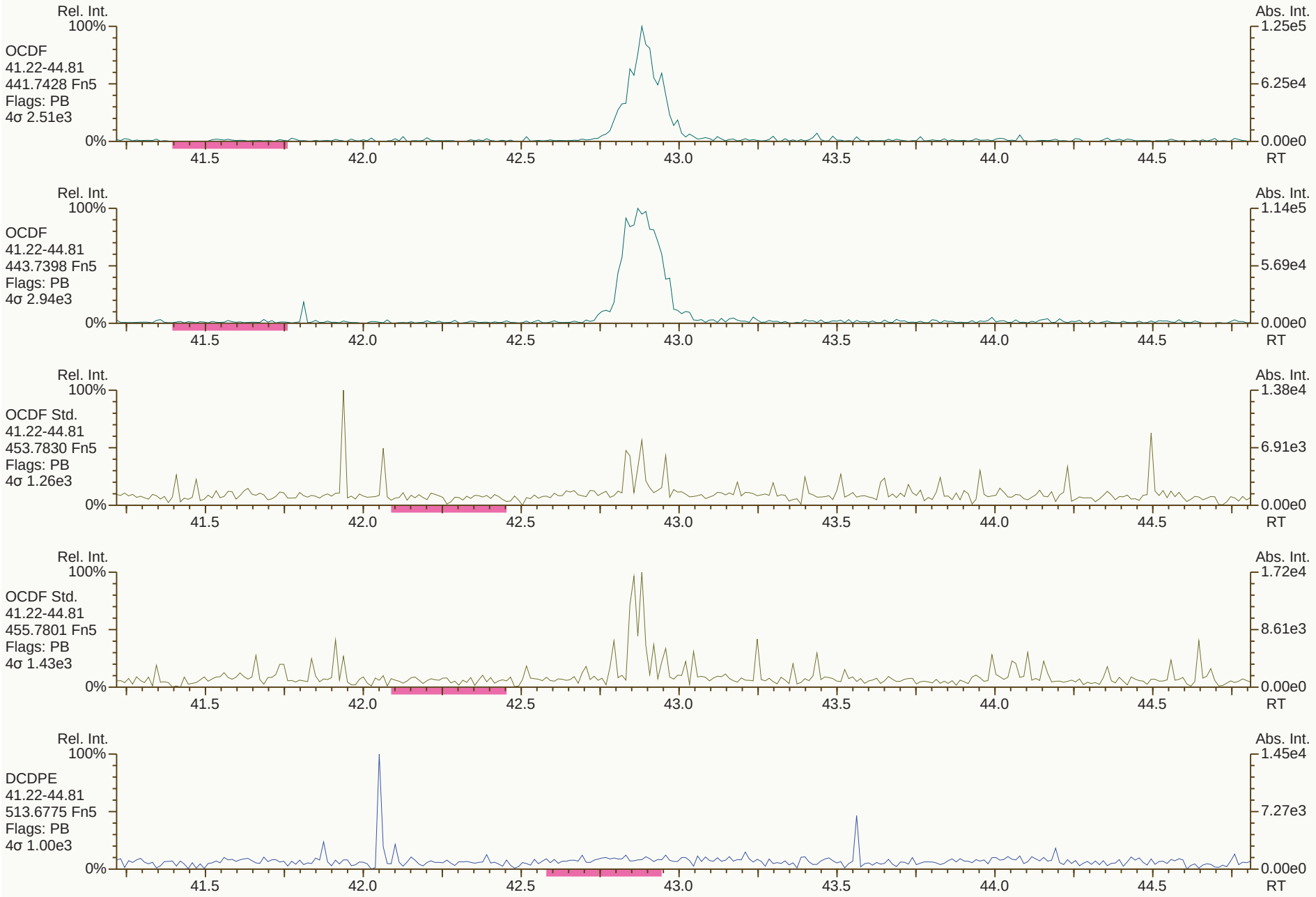

SGS ID: SBS_200824_DF_CB
Sample ID: 20-61-1
Acq: 24-Aug-2020 16:08:53
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 2
User: DTF Datafile: 200824C09
Rel. Int.
Abs. Int.
TCDF
19.04-28.40
303.9016 Fn1
Flags: PBM
4σ 2.32e3
2468F
8.63e5
21.60
SBS
1.51e5
7.56e4
0.00e0
TCDF
19.04-28.40
305.8987 Fn1
Flags: PBM
4σ 2.57e3
2468F
1.13e6
21.60
1.97e5
9.83e4
TCDF Std.
19.04-28.40
315.9419 Fn1
Flags: PB
4σ 8.77e3
3.35e4
1.67e4
TCDF Std.
19.04-28.40
317.9389 Fn1
Flags: PB
4σ 6.96e3
3.02e4
1.51e4
HxCDPE
19.04-28.40
375.8364 Fn1
Flags: PB
4σ 1.05e3
6.17e3
3.08e3
100%
0%
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Results: T:\UltraTracePro\ICAL results\HRMS3\HRMS3_DF_10122018_24AUG2020\ICV\SBS_200824_DF_CB.utp_res, saved 25-Aug-2020 09:10 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 3200, 5953, 9658 scc: 223-952
Revised: 25-Aug-2020 09:10 (DTF) Printed: 25-Aug-2020 11:29 Page 7 of 12


Rel. Int.
100%
0%
Abs. Int.
1.76e4
8.78e3
0.00e0
PeCDF-1
19.04-28.40
339.8597 Fn1
Flags: PB
4σ 4.53e3
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
0%
Abs. Int.
1.72e4
8.58e3
0.00e0
PeCDF-1
19.04-28.40
341.8568 Fn1
Flags: PB
4σ 4.47e3
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
0%
Abs. Int.
5.91e6
2.95e6
0.00e0
QC Check
19.04-28.40
316.9824 Fn1
Flags: -
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT


Rel. Int.
100%
PeCDF-2
28.41-33.51
339.8597 Fn2
Flags: PB
4σ 4.33e3
0%
Abs. Int.
1.06e5
5.29e4
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF-2
28.41-33.51
341.8568 Fn2
Flags: PB
4σ 4.66e3
0%
Abs. Int.
6.45e4
3.22e4
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.41-33.51
351.9000 Fn2
Flags: PB
4σ 9.13e2
0%
Abs. Int.
2.95e4
1.48e4
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.41-33.51
353.8970 Fn2
Flags: PB
4σ 2.43e3
0%
Abs. Int.
1.40e4
7.00e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
HpCDPE
28.41-33.51
409.7974 Fn2
Flags: PB
4σ 1.02e3
0%
Abs. Int.
8.11e3
4.05e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT


Rel. Int.
100%
HxCDF
33.52-37.61
373.8207 Fn3
Flags: PB
4σ 5.67e3
0%
Abs. Int.
1.08e5
5.39e4
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF
33.52-37.61
375.8178 Fn3
Flags: PB
4σ 6.13e3
0%
Abs. Int.
1.03e5
5.15e4
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF Std.
33.52-37.61
383.8639 Fn3
Flags: PB
4σ 1.90e3
0%
Abs. Int.
1.48e4
7.38e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF Std.
33.52-37.61
385.8610 Fn3
Flags: PB
4σ 7.68e3
0%
Abs. Int.
2.50e4
1.25e4
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
OCDPE
33.52-37.61
445.7555 Fn3
Flags: PB
4σ 1.06e3
0%
Abs. Int.
3.21e3
1.61e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT


Rel. Int.
100%
HpCDF
37.91-41.21
407.7818 Fn4
Flags: PB
4σ 7.97e3
0%
Abs. Int.
9.65e4
4.83e4
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF
37.91-41.21
409.7788 Fn4
Flags: PB
4σ 7.02e3
0%
Abs. Int.
8.76e4
4.38e4
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.91-41.21
417.8253 Fn4
Flags: PB
4σ 2.02e3
0%
Abs. Int.
1.41e4
7.03e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.91-41.21
419.8220 Fn4
Flags: PB
4σ 3.49e3
0%
Abs. Int.
2.82e4
1.41e4
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
NCDPE
37.91-41.21
479.7165 Fn4
Flags: PB
4σ 1.20e3
0%
Abs. Int.
1.65e4
8.26e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT


Rel. Int.
100%
OCDF
41.22-44.81
441.7428 Fn5
Flags: PB
4σ 2.51e3
0%
Abs. Int.
1.25e5
6.25e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDF
41.22-44.81
443.7398 Fn5
Flags: PB
4σ 2.94e3
0%
Abs. Int.
1.14e5
5.69e4
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDF Std.
41.22-44.81
453.7830 Fn5
Flags: PB
4σ 1.26e3
0%
Abs. Int.
1.38e4
6.91e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
OCDF Std.
41.22-44.81
455.7801 Fn5
Flags: PB
4σ 1.43e3
0%
Abs. Int.
1.72e4
8.61e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
DCDPE
41.22-44.81
513.6775 Fn5
Flags: PB
4σ 1.00e3
0%
Abs. Int.
1.45e4
7.27e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT

Dioxin/Furan QC Summary		Acq'd: 24 Aug 2020 16:55 DTF				ICAL: HRMS3_DF_10122018_24AUG2020	
Lab ID: CS3_200824_DF_CB		UTP: 25-Aug-2020 09:19:26 DTF				Checkcode: 791-379-HPH	
Sample ID: ICV 23-12-15		Report: 25 Aug 2020 11:22 TF				Datafile: 200824C10	
Name	**RT**	**Response**	**RA**	**OK**	**Ref. RRFs**	**Calc. RRFs**	**Dev'n**
2378-TCDD	26.71	8.14E+06	0.79	Y	1.19	1.18	-1%
12378-PeCDD	32.46	2.96E+07	1.53	Y	1.01	1.02	0%
123478-HxCDD	36.54	2.64E+07	1.25	Y	1.05	1.15	9%
123678-HxCDD	36.65	2.89E+07	1.25	Y	1.12	1.25	12%
123789-HxCDD	36.95	2.89E+07	1.24	Y	1.02	1.08	6%
1234678-HpCDD	40.07	2.46E+07	1.04	Y	1.00	1.11	11%
OCDD	42.78	3.64E+07	0.91	Y	1.08	1.20	11%
2378-TCDF	25.74	1.21E+07	0.78	Y	1.06	1.16	9%
12378-PeCDF	30.92	4.16E+07	1.51	Y	0.98	1.01	3%
23478-PeCDF	32.09	4.75E+07	1.53	Y	0.97	1.12	15%
123478-HxCDF	35.53	3.81E+07	1.22	Y	1.22	1.33	9%
123678-HxCDF	35.67	4.03E+07	1.24	Y	1.11	1.20	9%
234678-HxCDF	36.35	3.79E+07	1.22	Y	1.15	1.24	8%
123789-HxCDF	37.32	3.79E+07	1.22	Y	1.12	1.16	4%
1234678-HpCDF	39.03	3.15E+07	1.01	Y	1.29	1.41	9%
1234789-HpCDF	40.49	2.87E+07	1.02	Y	1.27	1.36	7%
OCDF	42.92	4.15E+07	0.91	Y	1.04	1.10	5%
ES 2378-TCDD	26.68	6.93E+07	0.80	Y	0.97	1.00	3%
ES 12378-PeCDD	32.44	5.81E+07	1.52	Y	0.84	0.83	-1%
ES 123478-HxCDD	36.52	4.60E+07	1.25	Y	0.97	0.83	-15%
ES 123678-HxCDD	36.64	4.62E+07	1.27	Y	0.96	0.83	-14%
ES 123789-HxCDD	36.94	5.34E+07	1.25	Y	1.10	0.96	-13%
ES 1234678-HpCDD	40.05	4.42E+07	1.07	Y	0.93	0.79	-14%
ES OCDD	42.77	6.04E+07	0.92	Y	0.63	0.54	-14%
ES 2378-TCDF	25.72	1.04E+08	0.80	Y	0.97	1.05	8%
ES 12378-PeCDF	30.9	8.24E+07	1.53	Y	0.78	0.83	7%
ES 23478-PeCDF	32.07	8.49E+07	1.57	Y	0.80	0.86	7%
ES 123478-HxCDF	35.51	5.72E+07	0.52	Y	1.22	1.03	-15%
ES 123678-HxCDF	35.65	6.69E+07	0.54	Y	1.41	1.20	-15%
ES 234678-HxCDF	36.33	6.09E+07	0.52	Y	1.29	1.09	-15%
ES 123789-HxCDF	37.3	6.52E+07	0.54	Y	1.17	1.17	0%
ES 1234678-HpCDF	39.02	4.47E+07	0.45	Y	0.97	0.80	-17%
ES 1234789-HpCDF	40.48	4.23E+07	0.46	Y	0.88	0.76	-14%
ES OCDF	42.91	7.56E+07	0.90	Y	0.81	0.68	-16%

Dioxin/Furan QC Summary		Acq'd: 24 Aug 2020 16:55 DTF					ICAL: HRMS3_DF_10122018_24AUG2020	
Lab ID: CS3_200824_DF_CB		UTP: 25-Aug-2020 09:19:26 DTF					Checkcode: 791-379-HPH	
Sample ID: ICV 23-12-15		Report: 25 Aug 2020 11:22 TF					Datafile: 200824C10	
Name		RT	Response	RA	OK	Ref. RRFs	Calc. RRFs	Dev'n
JS 1234-TCDD		25.97	6.96E+07	0.80	Y	-	-	-
JS 1234-TCDF		24.20	9.89E+07	0.80	Y	-	-	-
JS 123467-HxCDD		36.83	2.78E+07	1.24	Y	-	-	-
CS 37Cl 2378-TCDD	n/a - CL 25Aug20	0.00	0.00E+00	n/a	-	1.14	0.00	-100%
CS 12347-PeCDD		0.00	0.00E+00	0.00	0	0.72	0.00	-100%
CS 12346-PeCDF		0.00	0.00E+00	0.00	0	0.77	0.00	-100%
CS 123469-HxCDF		0.00	0.00E+00	0.00	0	1.18	0.00	-100%
CS 1234689-HpCDF		0.00	0.00E+00	0.00	0	0.96	0.00	-100%
SS 37Cl 2378-TCDD		0.00	0.00E+00	n/a	-	1.19	0.00	-100%
SS 12347-PeCDD		0.00	0.00E+00	0.00	0	0.86	0.00	-100%
SS 12346-PeCDF		0.00	0.00E+00	0.00	0	1.00	0.00	-100%
SS 123469-HxCDF		0.00	0.00E+00	0.00	0	0.84	0.00	-100%
SS 1234689-HpCDF		0.00	0.00E+00	0.00	0	0.98	0.00	-100%
OCDD-a		42.78	2.28E+06	2.42	Y	0.07	0.08	4%
OCDF-a		42.91	2.16E+06	2.33	Y	0.06	0.06	-9%

METHOD 1613B /8290A **PCDD/F CALIBRATION VERIFICATION** **FORM 4A**

Lab Name: SGS North America

Initial Calibration: ICAL: HRMS3_DF_10122018_24AUG2020

Instrument ID: HRMS3 GC Column ID: ZB-5ms

VER Data Filename: 200824C10 Analysis Date: 24-AUG-2020 16:55:01

NATIVE ANALYTES	M/Z's FORMING RATIO	ION ABUND. RATIO	QC LIMITS	OK	CONC. FOUND	RANGE (ng/mL)	OK
2,3,7,8-TCDD	M/M+2	0.79	0.65 - 0.89	Y	9.91	7.8 - 12.9	Y
1,2,3,7,8-PeCDD	M+2/M+4	1.53	1.32 - 1.78	Y	50.2	39 - 65	Y
1,2,3,4,7,8-HxCDD	M+2/M+4	1.25	1.05 - 1.43	Y	54.3	39 - 64	Y
1,2,3,6,7,8-HxCDD	M+2/M+4	1.25	1.05 - 1.43	Y	56	39 - 64	Y
1,2,3,7,8,9-HxCDD	M+2/M+4	1.24	1.05 - 1.43	Y	53.1	41 - 61	Y
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	0.88 - 1.20	Y	55.3	43 - 58	Y
OCDD	M+2/M+4	0.91	0.76 - 1.02	Y	111	79 - 126	Y
2,3,7,8-TCDF	M/M+2	0.78	0.65 - 0.89	Y	10.9	8.4 - 12	Y
1,2,3,7,8-PeCDF	M+2/M+4	1.51	1.32 - 1.78	Y	51.5	41 - 60	Y
2,3,4,7,8-PeCDF	M+2/M+4	1.53	1.32 - 1.78	Y	57.6	41 - 61	Y
1,2,3,4,7,8-HxCDF	M+2/M+4	1.22	1.05 - 1.43	Y	54.6	45 - 56	Y
1,2,3,6,7,8-HxCDF	M+2/M+4	1.24	1.05 - 1.43	Y	54.5	44 - 57	Y
2,3,4,6,7,8-HxCDF	M+2/M+4	1.22	1.05 - 1.43	Y	54.1	44 - 57	Y
1,2,3,7,8,9-HxCDF	M+2/M+4	1.22	1.05 - 1.43	Y	51.8	45 - 56	Y
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.01	0.88 - 1.20	Y	54.4	45 - 55	Y
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.02	0.88 - 1.20	Y	53.5	43 - 58	Y
OCDF	M+2/M+4	0.91	0.76 - 1.02	Y	105	63 - 159	Y

See Table 9, Method 1613, for m/z specifications.

Ion Abundance Ratio Control Limits as specified in Table 9, Method 1613.

Contract-required concentration range as specified in Table 6, Method 1613.

Processed: 25 Aug 2020 11:24 Analyst: TF

METHOD 1613B /8290A **PCDD/F CALIBRATION VERIFICATION** **FORM 4B**

Lab Name: SGS North America

Initial Calibration: ICAL: HRMS3_DF_10122018_24AUG2020

Instrument ID: HRMS3 GC Column ID: ZB-5ms

VER Data Filename: 200824C10 Analysis Date: 24-AUG-2020 16:55:01

LABELED ANALYTES	M/Z's FORMING RATIO	ION ABUND. RATIO	QC LIMITS			OK	CONC. FOUND	RANGE (ng/mL)			OK
13C-2,3,7,8-TCDD	M/M+2	0.80	0.65	-	0.89	Y	103	82	-	121	Y
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.52	1.32	-	1.78	Y	98.9	62	-	160	Y
13C-1,2,3,4,7,8-HxCDD	M+2/M+4	1.25	1.05	-	1.43	Y	85	85	-	117	Y
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.27	1.05	-	1.43	Y	86.4	85	-	118	Y
13C-1,2,3,7,8,9-HxCDD	M+2/M+4	1.25	1.05	-	1.43	Y	86.9	85	-	118	Y
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.07	0.88	-	1.20	Y	85.5	72	-	138	Y
13C-OCDD	M+2/M+4	0.92	0.76	-	1.02	Y	172	96	-	415	Y
13C-2,3,7,8-TCDF	M/M+2	0.80	0.65	-	0.89	Y	108	71	-	140	Y
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.53	1.32	-	1.78	Y	107	76	-	130	Y
13C-2,3,4,7,8-PeCDF	M+2/M+4	1.57	1.32	-	1.78	Y	107	77	-	130	Y
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	84.6	76	-	131	Y
13C-1,2,3,6,7,8-HxCDF	M/M+2	0.54	0.43	-	0.59	Y	85.1	70	-	143	Y
13C-2,3,4,6,7,8-HxCDF	M/M+2	0.52	0.43	-	0.59	Y	85	73	-	137	Y
13C-1,2,3,7,8,9-HxCDF	M/M+2	0.54	0.43	-	0.59	Y	100	74	-	135	Y
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.45	0.37	-	0.51	Y	82.6	78	-	129	Y
13C-1,2,3,4,7,8,9-HpCDF	M/M+2	0.46	0.37	-	0.51	Y	86.4	77	-	129	Y
13C-OCDF	M+2/M+4	0.90	0.76	-	1.02	Y	169	96	-	415	Y
~~CLEANUP STANDARDS~~	n/a - CL 25Aug20										
~~37Cl-2,3,7,8-TCDD~~	~~n/a~~						~~0~~	~~7.9~~	~~-~~	~~12.7~~	~~N~~
~~13C-1,2,3,4,7-PeCDD~~	~~M+2/M+4~~	~~0.00~~	~~1.32~~	~~-~~	~~1.78~~	~~N~~	~~0~~	~~70~~	~~-~~	~~130~~	~~N~~
~~13C-1,2,3,4,6-PeCDF~~	~~M+2/M+4~~	~~0.00~~	~~1.32~~	~~-~~	~~1.78~~	~~N~~	~~0~~	~~70~~	~~-~~	~~130~~	~~N~~
~~13C-1,2,3,4,6,9-HxCDF~~	~~M/M+2~~	~~0.00~~	~~0.43~~	~~-~~	~~0.59~~	~~N~~	~~0~~	~~70~~	~~-~~	~~130~~	~~N~~
~~13C-1,2,3,4,6,8,9-HpCDF~~	~~M/M+2~~	~~0.00~~	~~0.37~~	~~-~~	~~0.51~~	~~N~~	~~0~~	~~70~~	~~-~~	~~130~~	~~N~~

Processed: 25 Aug 2020 11:24 Analyst: TF

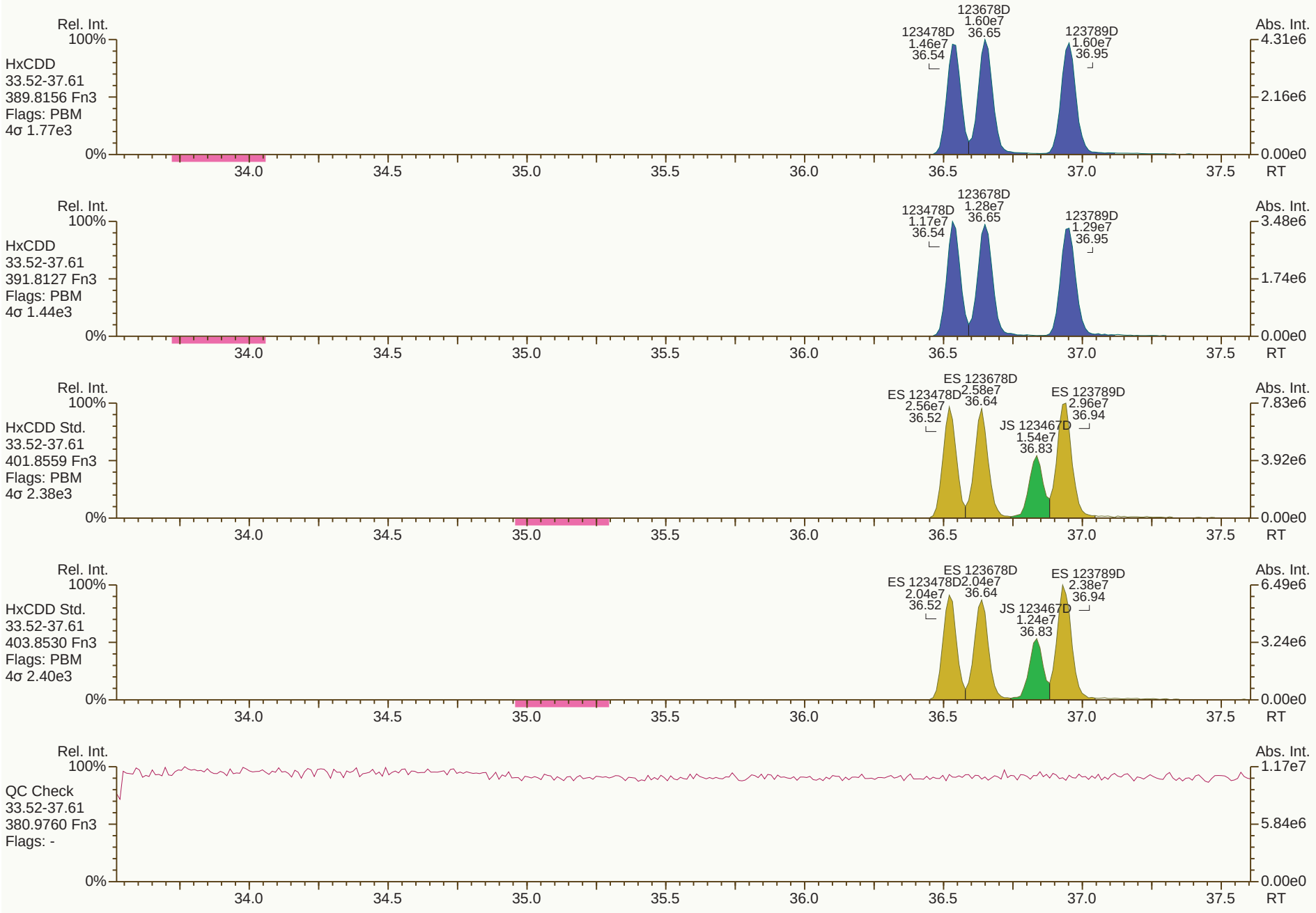
SGS ID: CS3_200824_DF_CB **Sample ID: ICV 23-12-15** **Acq: 24-Aug-2020 16:55:01**
Instr: [ILM] AutoSpec-Ultima HRMS3 **VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 28** **User: DTF Datafile: 200824C10**



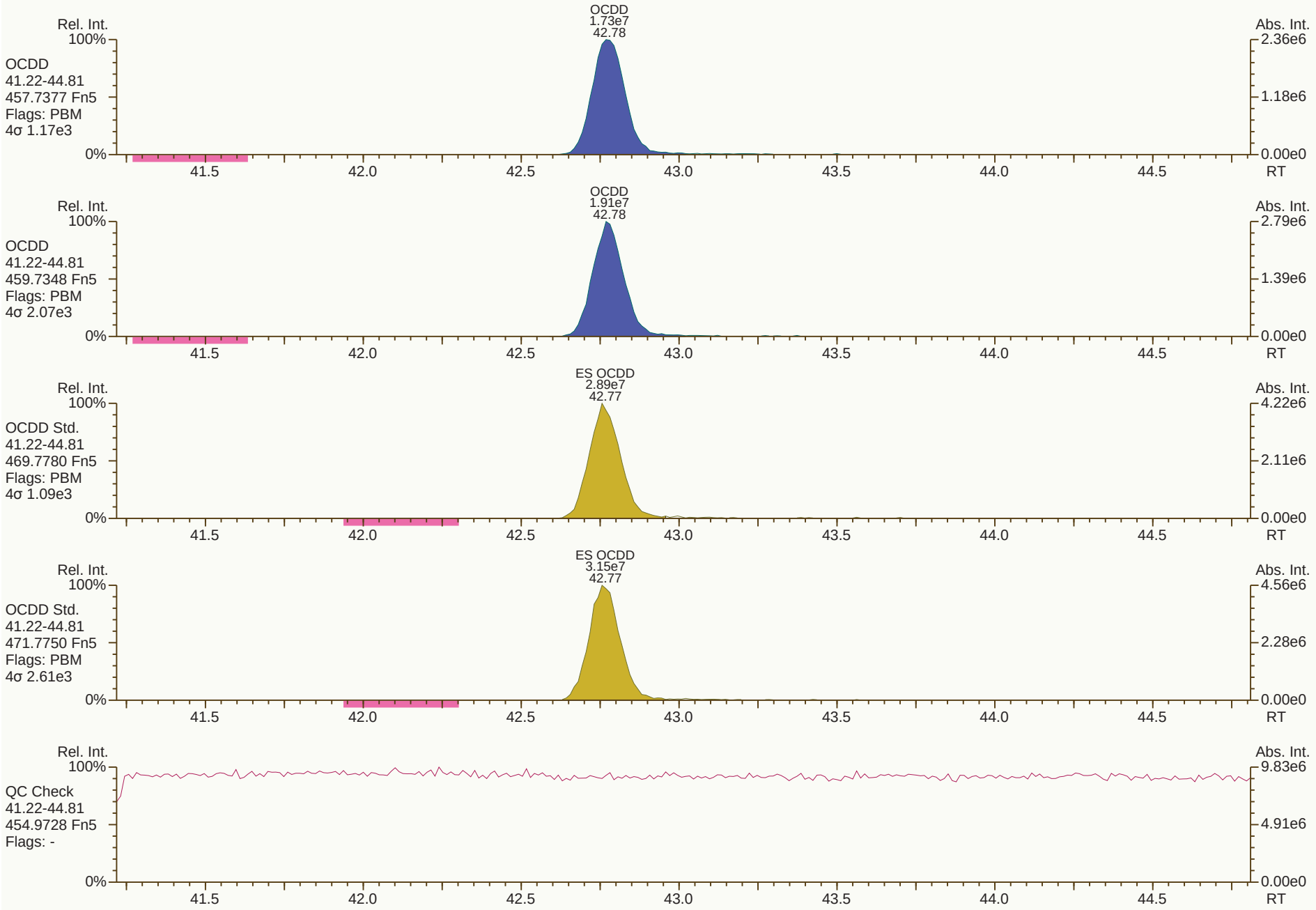
Results: T:\UltraTracePro\ICAL results\HRMS3\HRMS3_DF_10122018_24AUG2020\ICV\CS3_200824_DF_CB.utp_res, saved 25-Aug-2020 11:28 (DTF) *Peak annotation: Areas, Centroids*
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 scc: 791-379 *PKD: n/a Printed: 25-Aug-2020 11:29 Page 1 of 12*


Rel. Int.
100%
TCDD
19.04-28.40
319.8965 Fn1
Flags: PBM
4σ 2.64e3
0%
2378D RRF = (3.59e6 + 4.56e6) * 100pg / (3.08e7 + 3.85e7) * 10pg = 1.18
DTF 25-Aug-2020 11:28
OK
CL 25Aug20
2378D
3.59e6
26.71
Abs. Int.
7.90e5
3.95e5
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDD
19.04-28.40
321.8936 Fn1
Flags: PBM
4σ 1.96e3
0%
2378D
4.56e6
26.70
Abs. Int.
9.96e5
4.98e5
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
37Cl-TCDD
19.04-28.40
327.8850 Fn1
Flags: B
4σ 1.05e3
0%
Abs. Int.
1.46e4
7.32e3
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.40
331.9368 Fn1
Flags: PBM
4σ 6.41e3
0%
JS 1234D
3.10e7
25.97
ES 2378D
3.08e7
26.68
Abs. Int.
6.74e6
3.37e6
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.40
333.9339 Fn1
Flags: PBM
4σ 1.28e3
0%
JS 1234D
3.86e7
25.97
ES 2378D
3.85e7
26.68
Abs. Int.
8.43e6
4.22e6
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT


Rel. Int.
100%
PeCDD
28.41-33.51
355.8546 Fn2
Flags: PBM
4σ 2.51e3
0%
12378D
1.79e7
32.46
Abs. Int.
4.99e6
2.49e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD
28.41-33.51
357.8517 Fn2
Flags: PBM
4σ 1.79e3
0%
12378D
1.17e7
32.46
Abs. Int.
3.21e6
1.60e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.41-33.51
367.8949 Fn2
Flags: PBM
4σ 2.05e3
0%
ES 12378D
3.50e7
32.44
Abs. Int.
9.46e6
4.73e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.41-33.51
369.8919 Fn2
Flags: PBM
4σ 1.16e3
0%
ES 12378D
2.30e7
32.44
Abs. Int.
6.30e6
3.15e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
QC Check
28.41-33.51
366.9792 Fn2
Flags: -
0%
Abs. Int.
5.31e6
2.65e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT

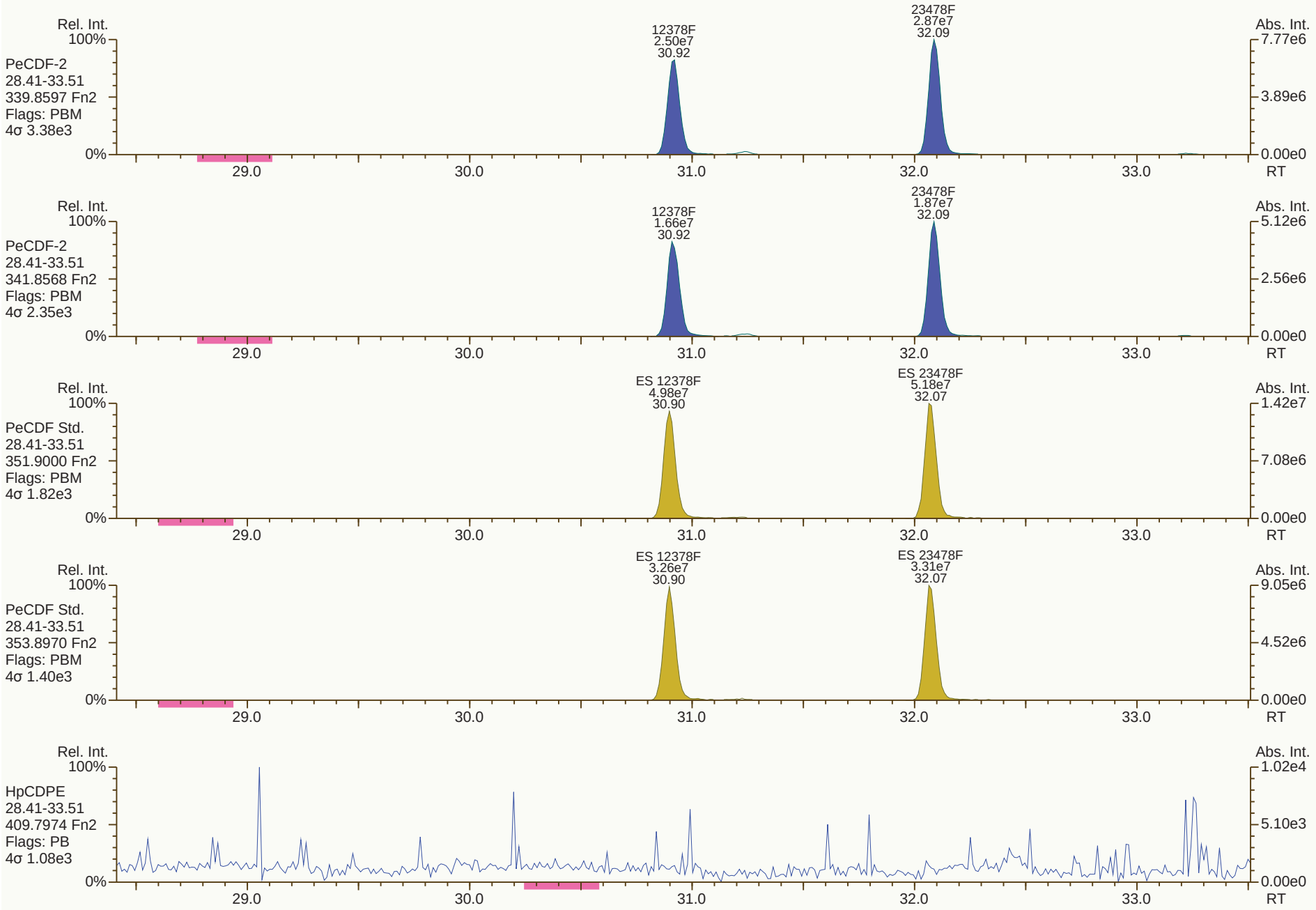

Rel. Int.
100%
HxCDD
33.52-37.61
389.8156 Fn3
Flags: PBM
4σ 1.77e3
123478D
1.46e7
36.54
123678D
1.60e7
36.65
123789D
1.60e7
36.95
Abs. Int.
4.31e6
2.16e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD
33.52-37.61
391.8127 Fn3
Flags: PBM
4σ 1.44e3
123478D
1.17e7
36.54
123678D
1.28e7
36.65
123789D
1.29e7
36.95
Abs. Int.
3.48e6
1.74e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.52-37.61
401.8559 Fn3
Flags: PBM
4σ 2.38e3
ES 123478D
2.56e7
36.52
ES 123678D
2.58e7
36.64
JS 123467D
1.54e7
36.83
ES 123789D
2.96e7
36.94
Abs. Int.
7.83e6
3.92e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.52-37.61
403.8530 Fn3
Flags: PBM
4σ 2.40e3
ES 123478D
2.04e7
36.52
ES 123678D
2.04e7
36.64
JS 123467D
1.24e7
36.83
ES 123789D
2.38e7
36.94
Abs. Int.
6.49e6
3.24e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
QC Check
33.52-37.61
380.9760 Fn3
Flags: -
Abs. Int.
1.17e7
5.84e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT

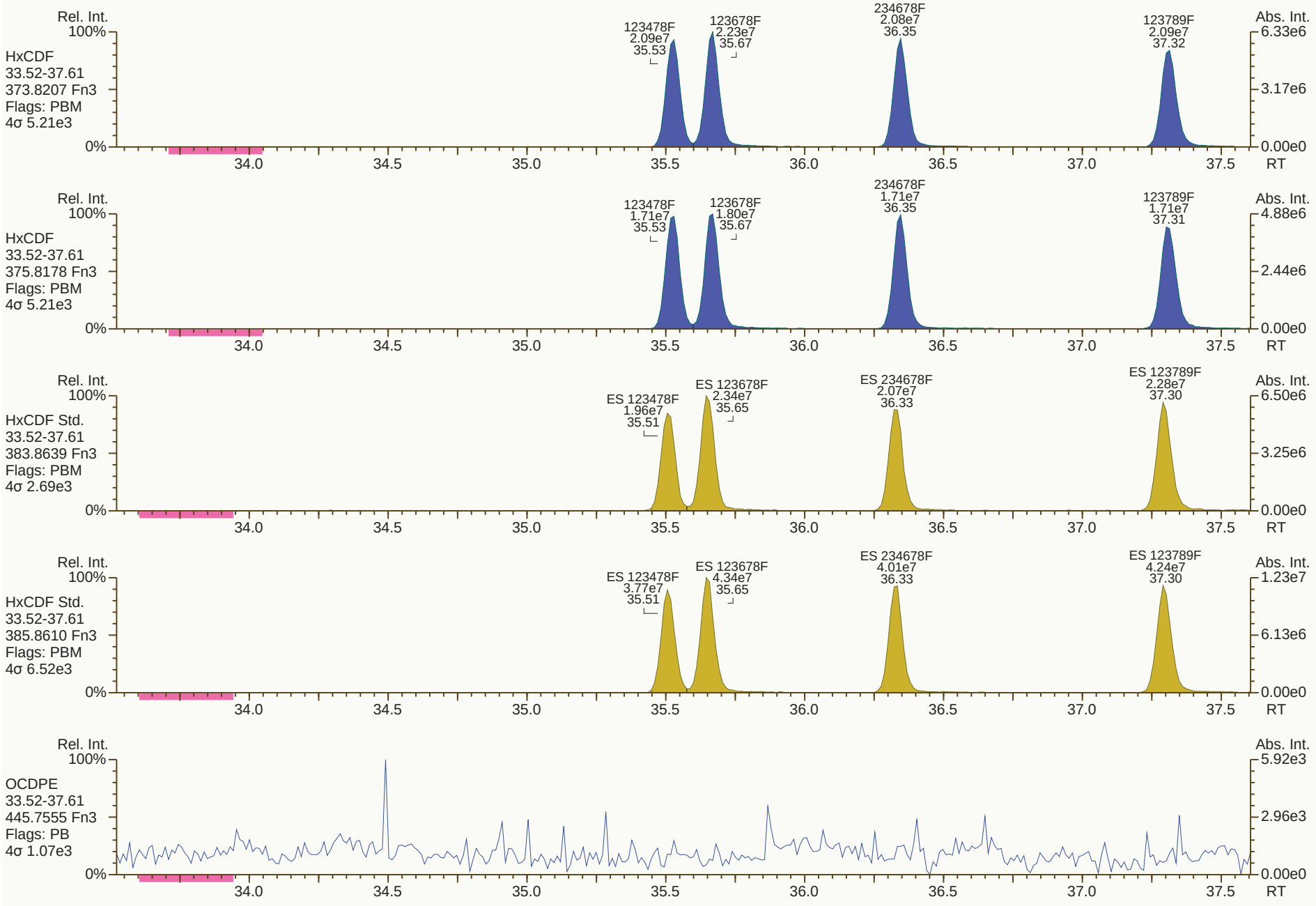

Rel. Int.
100%
HpCDD
37.91-41.21
423.7767 Fn4
Flags: PBM
4σ 1.77e3
0%
1234678D
1.25e7
40.07
Abs. Int.
2.97e6
1.48e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD
37.91-41.21
425.7737 Fn4
Flags: PBM
4σ 2.74e3
0%
1234678D
1.20e7
40.07
Abs. Int.
2.89e6
1.45e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.91-41.21
435.8169 Fn4
Flags: PBM
4σ 1.13e3
0%
ES 1234678D
2.28e7
40.05
Abs. Int.
5.53e6
2.77e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.91-41.21
437.8140 Fn4
Flags: PBM
4σ 1.53e3
0%
ES 1234678D
2.14e7
40.05
Abs. Int.
5.23e6
2.62e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
QC Check
37.91-41.21
430.9728 Fn4
Flags: -
0%
Abs. Int.
7.66e6
3.83e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT

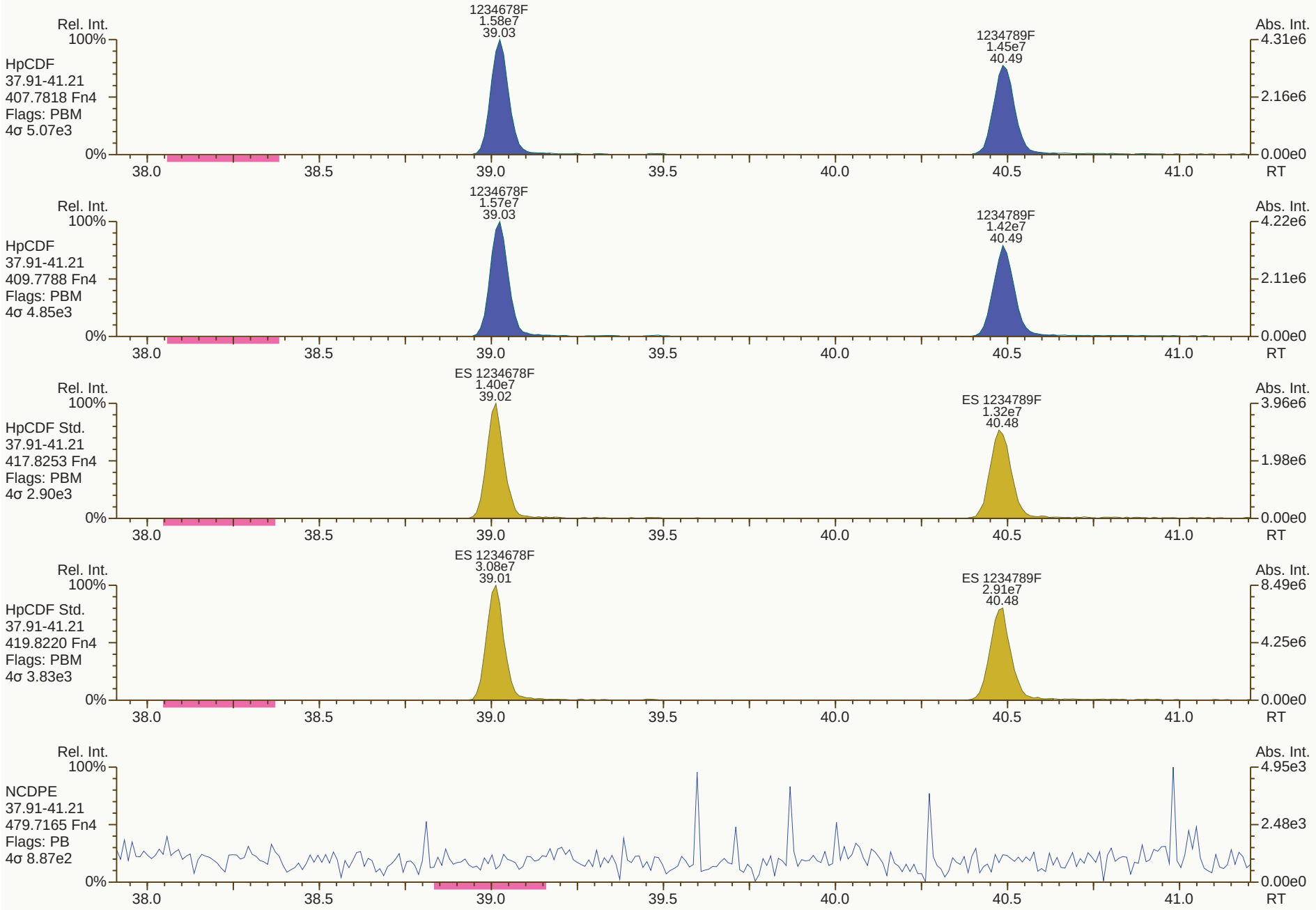

OCDD
1.73e7
42.78
Rel. Int.
Abs. Int.
OCDD
41.22-44.81
457.7377 Fn5
Flags: PBM
4σ 1.17e3
OCDD
1.91e7
42.78
OCDD
41.22-44.81
459.7348 Fn5
Flags: PBM
4σ 2.07e3
ES OCDD
2.89e7
42.77
OCDD Std.
41.22-44.81
469.7780 Fn5
Flags: PBM
4σ 1.09e3
ES OCDD
3.15e7
42.77
OCDD Std.
41.22-44.81
471.7750 Fn5
Flags: PBM
4σ 2.61e3
QC Check
41.22-44.81
454.9728 Fn5
Flags: -
RT

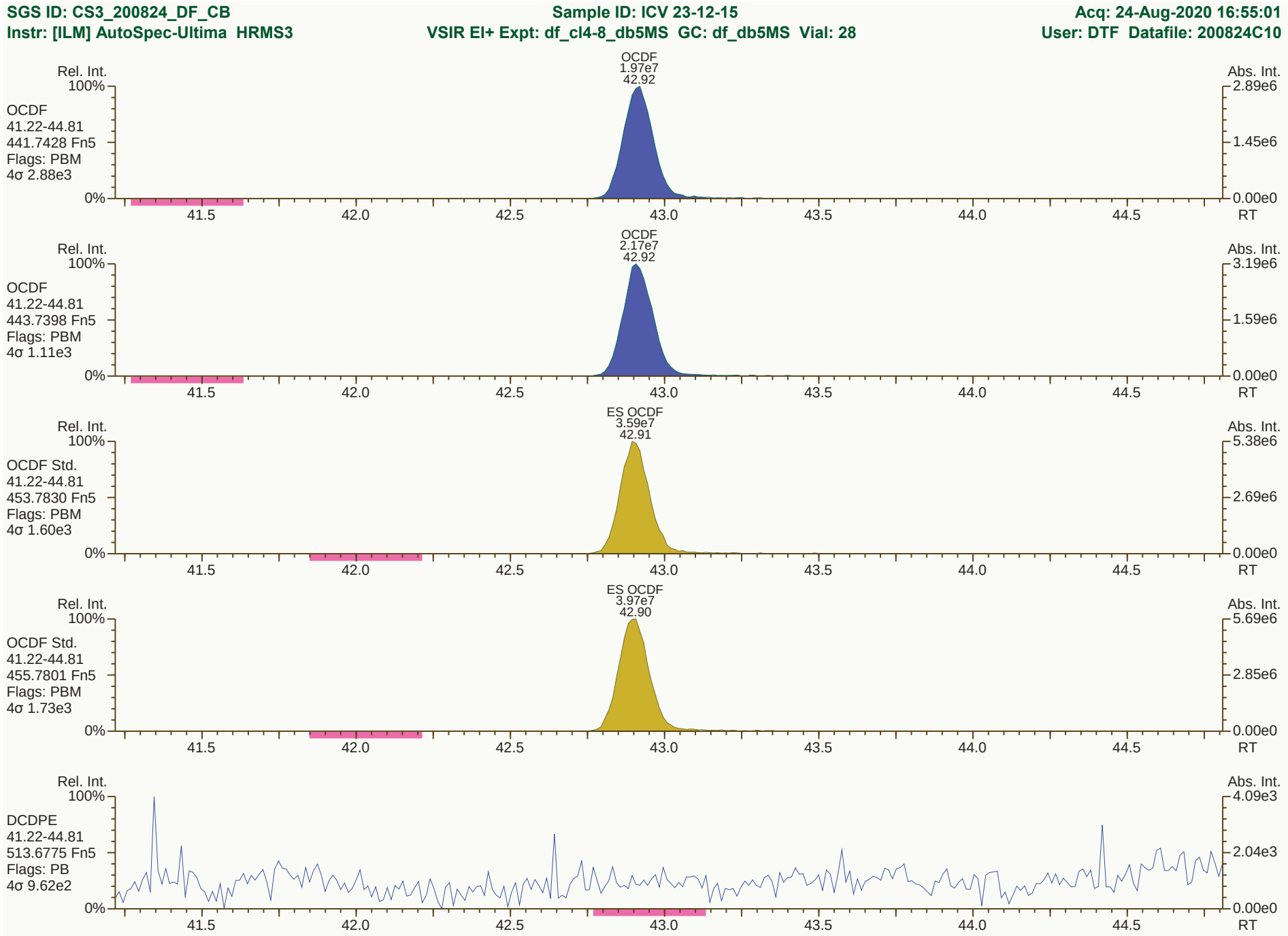

Rel. Int.
100%
TCDF
19.04-28.40
303.9016 Fn1
Flags: PBM
4σ 1.65e3
0%
2378F
5.29e6
25.74
Abs. Int.
1.11e6
5.56e5
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDF
19.04-28.40
305.8987 Fn1
Flags: PBM
4σ 2.17e3
0%
2378F
6.76e6
25.74
Abs. Int.
1.40e6
7.01e5
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDF Std.
19.04-28.40
315.9419 Fn1
Flags: PBM
4σ 9.50e3
0%
JS 1234F
4.39e7
24.20
ES 2378F
4.61e7
25.72
Abs. Int.
9.40e6
4.70e6
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDF Std.
19.04-28.40
317.9389 Fn1
Flags: PBM
4σ 8.16e3
0%
JS 1234F
5.50e7
24.20
ES 2378F
5.74e7
25.71
Abs. Int.
1.19e7
5.94e6
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
HxCDPE
19.04-28.40
375.8364 Fn1
Flags: PB
4σ 1.06e3
0%
Abs. Int.
5.85e3
2.92e3
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT


Rel. Int.
100%
0%
Abs. Int.
1.45e4
7.25e3
0.00e0
RT
PeCDF-1
19.04-28.40
339.8597 Fn1
Flags: PB
4σ 2.40e3
PeCDF-1
19.04-28.40
341.8568 Fn1
Flags: PB
4σ 1.83e3
8.70e3
4.35e3
QC Check
19.04-28.40
316.9824 Fn1
Flags: -
5.94e6
2.97e6
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0


Rel. Int.
100%
PeCDF-2
28.41-33.51
339.8597 Fn2
Flags: PBM
4σ 3.38e3
0%
12378F
2.50e7
30.92
23478F
2.87e7
32.09
Abs. Int.
7.77e6
3.89e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF-2
28.41-33.51
341.8568 Fn2
Flags: PBM
4σ 2.35e3
0%
12378F
1.66e7
30.92
23478F
1.87e7
32.09
Abs. Int.
5.12e6
2.56e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.41-33.51
351.9000 Fn2
Flags: PBM
4σ 1.82e3
0%
ES 12378F
4.98e7
30.90
ES 23478F
5.18e7
32.07
Abs. Int.
1.42e7
7.08e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.41-33.51
353.8970 Fn2
Flags: PBM
4σ 1.40e3
0%
ES 12378F
3.26e7
30.90
ES 23478F
3.31e7
32.07
Abs. Int.
9.05e6
4.52e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
HpCDPE
28.41-33.51
409.7974 Fn2
Flags: PB
4σ 1.08e3
0%
Abs. Int.
1.02e4
5.10e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT


Rel. Int.
100%
HxCDF
33.52-37.61
373.8207 Fn3
Flags: PBM
4σ 5.21e3
0%
123478F
2.09e7
35.53
123678F
2.23e7
35.67
234678F
2.08e7
36.35
123789F
2.09e7
37.32
Abs. Int.
6.33e6
3.17e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF
33.52-37.61
375.8178 Fn3
Flags: PBM
4σ 5.21e3
0%
123478F
1.71e7
35.53
123678F
1.80e7
35.67
234678F
1.71e7
36.35
123789F
1.71e7
37.31
Abs. Int.
4.88e6
2.44e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF Std.
33.52-37.61
383.8639 Fn3
Flags: PBM
4σ 2.69e3
0%
ES 123478F
1.96e7
35.51
ES 123678F
2.34e7
35.65
ES 234678F
2.07e7
36.33
ES 123789F
2.28e7
37.30
Abs. Int.
6.50e6
3.25e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF Std.
33.52-37.61
385.8610 Fn3
Flags: PBM
4σ 6.52e3
0%
ES 123478F
3.77e7
35.51
ES 123678F
4.34e7
35.65
ES 234678F
4.01e7
36.33
ES 123789F
4.24e7
37.30
Abs. Int.
1.23e7
6.13e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
OCDPE
33.52-37.61
445.7555 Fn3
Flags: PB
4σ 1.07e3
0%
Abs. Int.
5.92e3
2.96e3
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT


Rel. Int.
100%
HpCDF
37.91-41.21
407.7818 Fn4
Flags: PBM
4σ 5.07e3
0%
1234678F
1.58e7
39.03
1234789F
1.45e7
40.49
Abs. Int.
4.31e6
2.16e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF
37.91-41.21
409.7788 Fn4
Flags: PBM
4σ 4.85e3
0%
1234678F
1.57e7
39.03
1234789F
1.42e7
40.49
Abs. Int.
4.22e6
2.11e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.91-41.21
417.8253 Fn4
Flags: PBM
4σ 2.90e3
0%
ES 1234678F
1.40e7
39.02
ES 1234789F
1.32e7
40.48
Abs. Int.
3.96e6
1.98e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.91-41.21
419.8220 Fn4
Flags: PBM
4σ 3.83e3
0%
ES 1234678F
3.08e7
39.01
ES 1234789F
2.91e7
40.48
Abs. Int.
8.49e6
4.25e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
NCDPE
37.91-41.21
479.7165 Fn4
Flags: PB
4σ 8.87e2
0%
Abs. Int.
4.95e3
2.48e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT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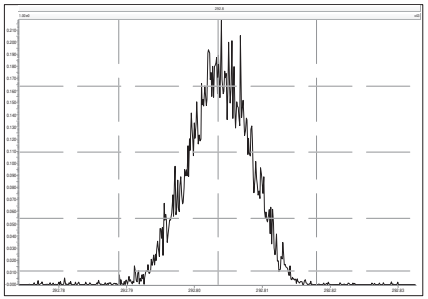
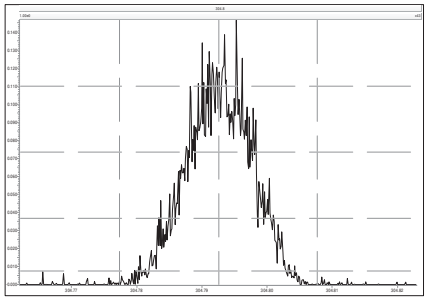
Sample ID: ICV 23-12-15
Acq: 24-Aug-2020 16:55:01
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 28
User: DTF Datafile: 200824C10
OCDF
1.97e7
42.92
Rel. Int.
Abs. Int.
OCDF
41.22-44.81
441.7428 Fn5
Flags: PBM
4σ 2.88e3
OCDF
2.17e7
42.92
OCDF
41.22-44.81
443.7398 Fn5
Flags: PBM
4σ 1.11e3
ES OCDF
3.59e7
42.91
OCDF Std.
41.22-44.81
453.7830 Fn5
Flags: PBM
4σ 1.60e3
ES OCDF
3.97e7
42.90
OCDF Std.
41.22-44.81
455.7801 Fn5
Flags: PBM
4σ 1.73e3
DCDPE
41.22-44.81
513.6775 Fn5
Flags: PB
4σ 9.62e2
RT
Results: T:\UltraTracePro\ICAL results\HRMS3\HRMS3_DF_10122018_24AUG2020\ICV\CS3_200824_DF_CB.utp_res, saved 25-Aug-2020 11:28 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 0363, 4571, 6214 scc: 791-379
PKD: 25-Aug-2020 09:11 Printed: 25-Aug-2020 11:29 Page 12 of 12

Printed: Monday, August 24, 2020 17:49:34 Eastern Daylight Time

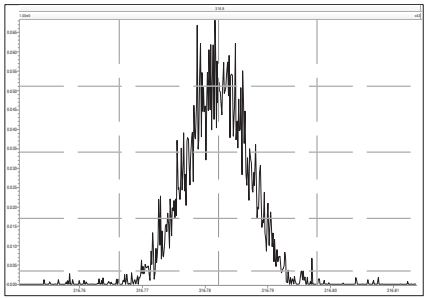
M 292.9824 R 13623



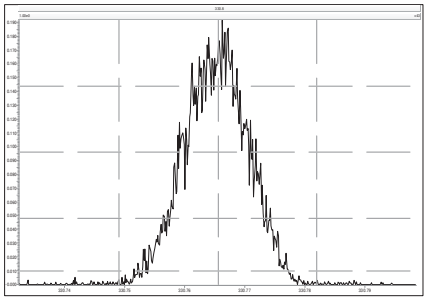
M 304.9824 R 13932



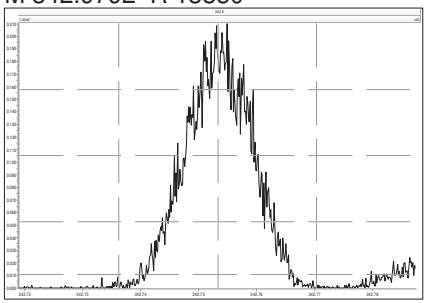
M 316.9824 R 15491



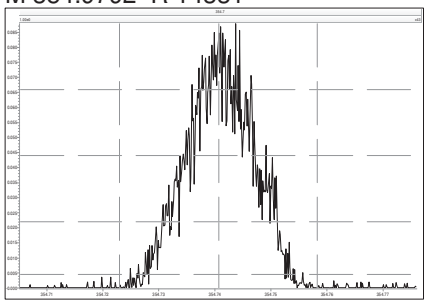
M 330.9792 R 13778



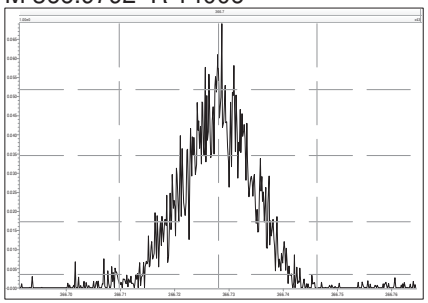
M 342.9792 R 13850



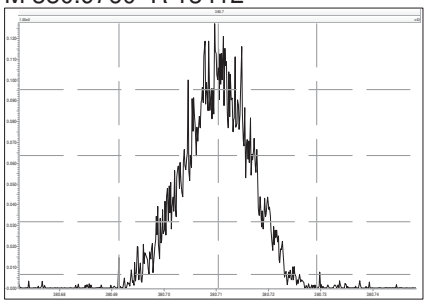
M 354.9792 R 14331



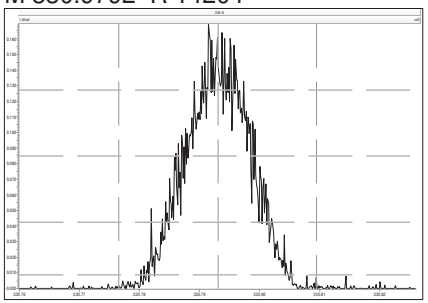
M 366.9792 R 14006



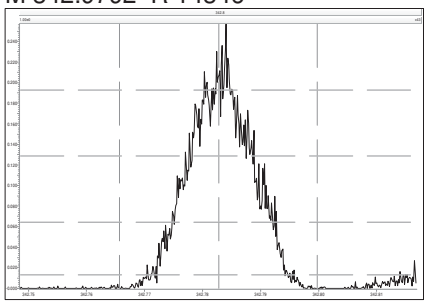
M 380.9760 R 13412



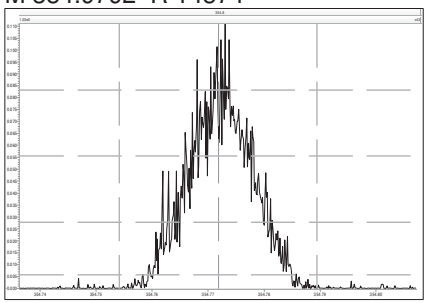
M 330.9792 R 14204



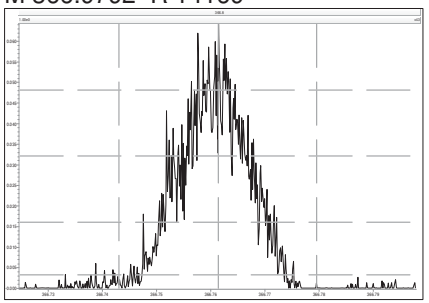
M 342.9792 R 14346



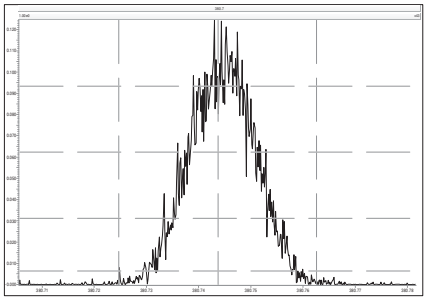
M 354.9792 R 14574



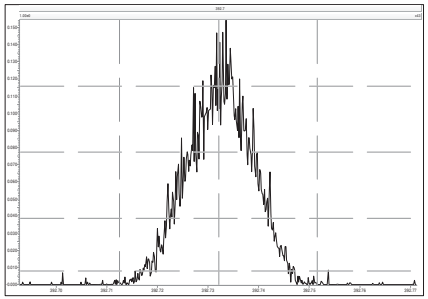
M 366.9792 R 14169



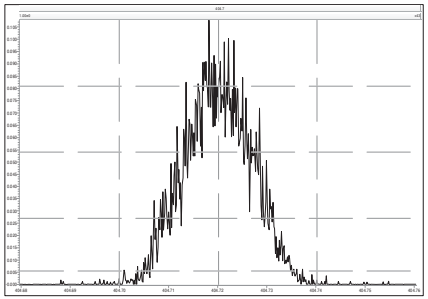
M 380.9760 R 13774



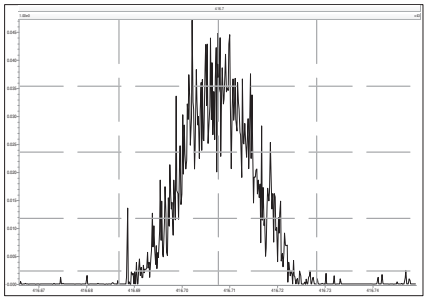
M 392.9760 R 13762



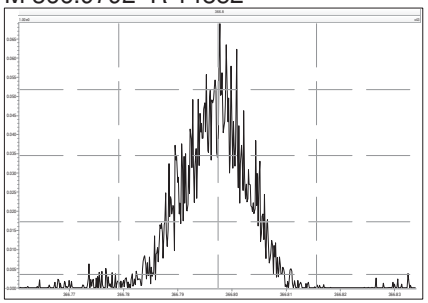
M 404.9760 R 14044



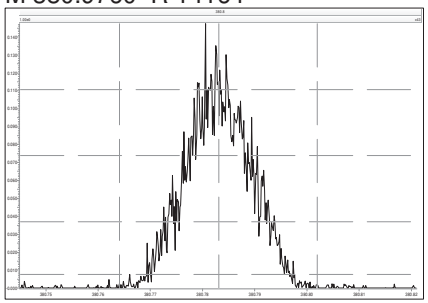
M 416.9760 R 14131



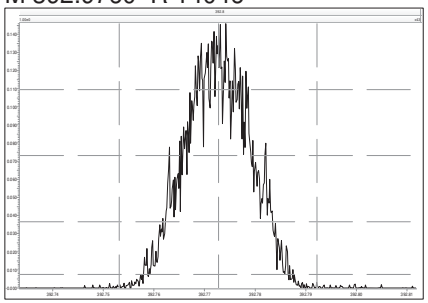
M 366.9792 R 14852



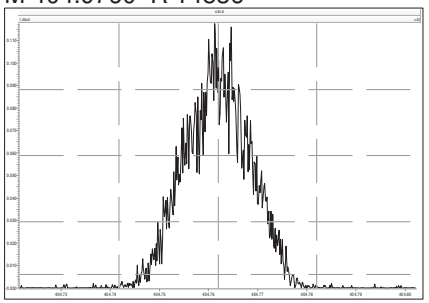
M 380.9760 R 14164



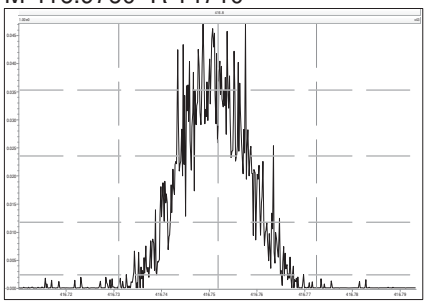
M 392.9760 R 14046



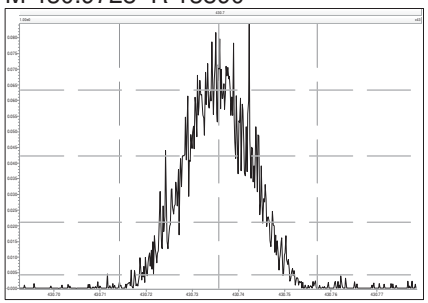
M 404.9760 R 14536



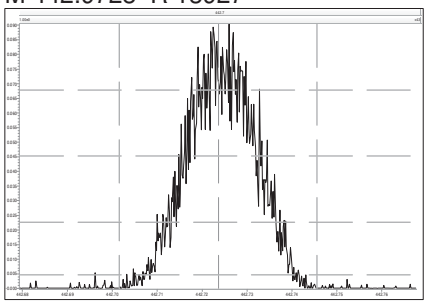
M 416.9760 R 14710



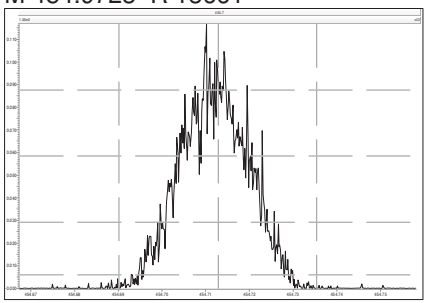
M 430.9728 R 13890



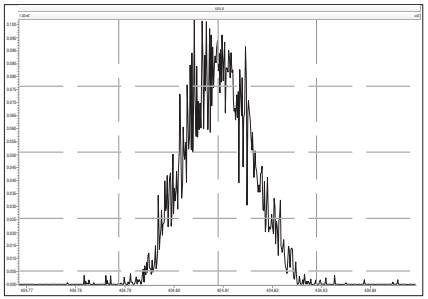
M 442.9728 R 13927



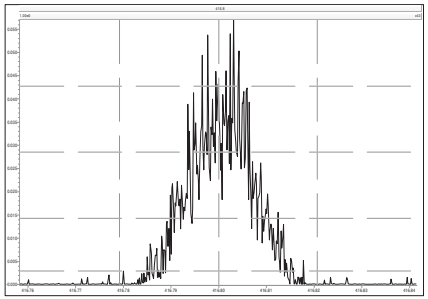
M 454.9728 R 13661



M 404.9760 R 14258



M 416.9760 R 14906



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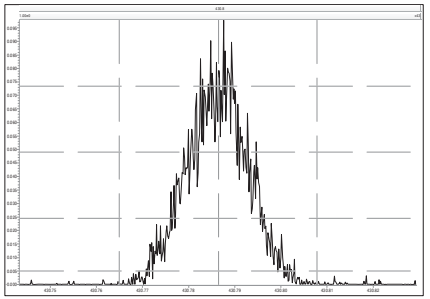

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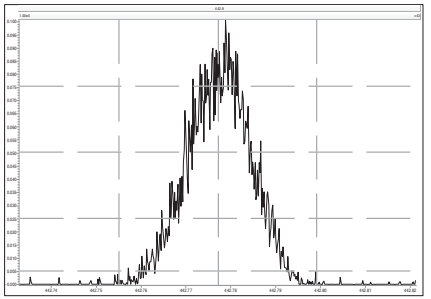

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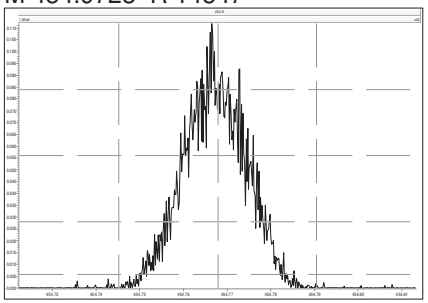
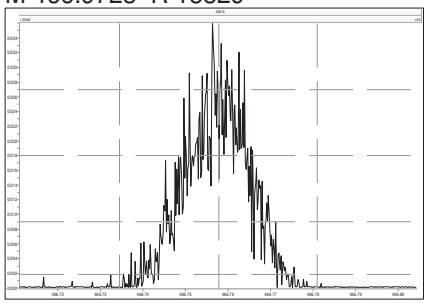


M 466.9728 R 15829



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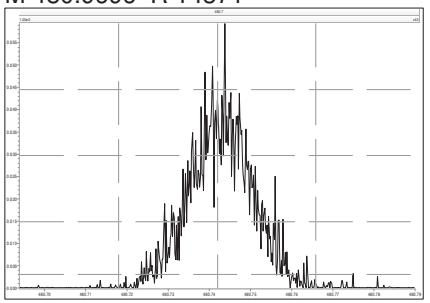

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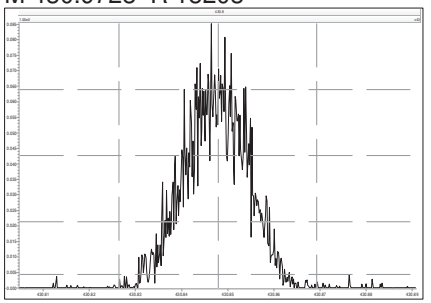

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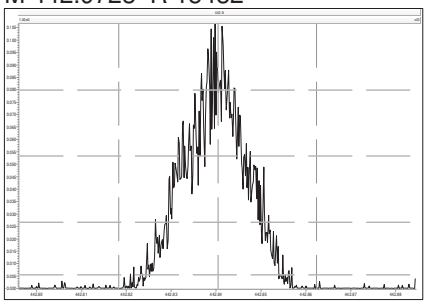

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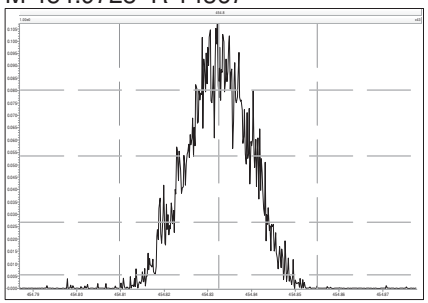

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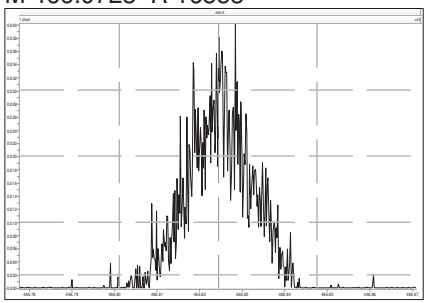

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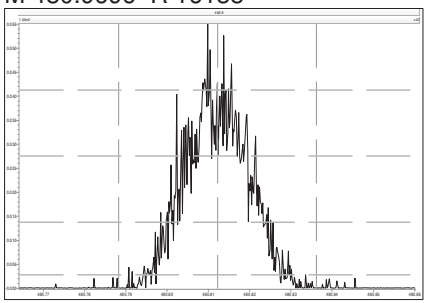

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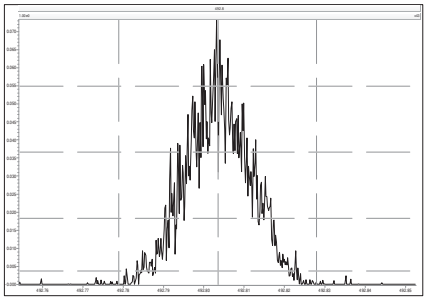

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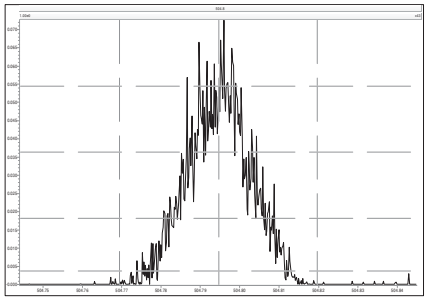

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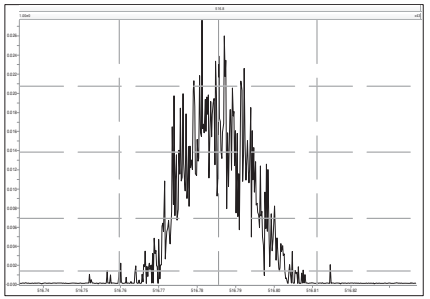


Lab ID: OPR1_17706_DF

REVIEWED
Amber_Kornegay , 8/28/2020, 1:31:30 PM

Acq'd: 27 Aug 2020 17:00 DTF

Wt/Vol: 1 uL

ICAL: HRMS3_DF_10122018_24AUG2020

Client ID: 0_17706_OPR001

UTP: 28-Aug-2020 12:20:32 DTF

J-level: 0.25 pg/uL Split: 1

Checkcode: 756-866-PCB

Datafile: 200827C02

Report: 28 Aug 2020 12:22 TF

Stds (pg): JS: 100 ES: 100 CS/SS: 100, 40 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Conc.	Noise	DL
2378-TCDD	26.66		1.0009	1.0009	0	8.11E+06	0.80	Y	1.19	10.3	6408	0.0928
12378-PeCDD	32.44		1.0006	1.0006	0	2.75E+07	1.53	Y	1.01	49.1	7447	0.127
123478-HxCDD	36.52		1.0004	1.0004	0	2.61E+07	1.27	Y	1.05	52.8	12534	0.228
123678-HxCDD	36.64		1.0035	1.0035	0	2.74E+07	1.24	Y	1.12	55.7	12534	0.226
123789-HxCDD	36.94		1.0117	1.0117	0	2.76E+07	1.23	Y	1.02	51.4	12534	0.216
1234678-HpCDD	40.06		1.0003	1.0003	0	2.18E+07	1.06	Y	1.00	54.3	7999	0.217
OCDD	42.78		1.0001	1.0003	+0.5	2.81E+07	0.89	Y	1.08	108	5046	0.321
2378-TCDF	25.69		1.0009	1.0009	0	1.17E+07	0.77	Y	1.06	11.3	7447	0.0851
12378-PeCDF	30.89		1.0006	1.0006	0	4.12E+07	1.50	Y	0.98	50.7	8400	0.0992
23478-PeCDF	32.07		1.0006	1.0005	-0.2	4.38E+07	1.50	Y	0.97	56.5	8400	0.0978
123478-HxCDF	35.51		1.0005	1.0005	0	3.57E+07	1.23	Y	1.22	53.3	10390	0.138
123678-HxCDF	35.65		1.0004	1.0005	+0.2	3.86E+07	1.22	Y	1.11	53.6	10390	0.134
234678-HxCDF	36.33		1.0004	1.0005	+0.2	3.53E+07	1.21	Y	1.15	53.4	10390	0.136
123789-HxCDF	37.30		1.0005	1.0005	0	3.17E+07	1.24	Y	1.12	50.7	10390	0.161
1234678-HpCDF	39.01		1.0003	1.0003	0	3.16E+07	1.03	Y	1.29	52.4	6710	0.107
1234789-HpCDF	40.48		1.0002	1.0003	+0.2	2.24E+07	1.01	Y	1.27	52.8	6710	0.173
OCDF	42.91		1.0002	1.0003	+0.3	3.10E+07	0.88	Y	1.04	104	3220	0.182

Name	Act RT	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
ES 2378-TCDD	26.64	1.0272	1.0275	+0.5	6.64E+07	0.80	Y	0.97	94.3
ES 12378-PeCDD	32.42	1.2489	1.2506	+3.3	5.52E+07	1.59	Y	0.84	90
ES 123478-HxCDD	36.51	0.9917	0.9917	0	4.69E+07	1.25	Y	0.97	87
ES 123678-HxCDD	36.62	0.9948	0.9947	-0.2	4.41E+07	1.25	Y	0.96	82.8
ES 123789-HxCDD	36.92	1.0028	1.0028	0	5.26E+07	1.26	Y	1.10	86
ES 1234678-HpCDD	40.05	1.0871	1.0877	+1.4	3.99E+07	1.03	Y	0.93	77.6
ES OCDD	42.76	1.1607	1.1615	+2.1	4.80E+07	0.89	Y	0.63	68.9
ES 2378-TCDF	25.67	1.0623	1.0629	+0.9	9.71E+07	0.80	Y	0.97	92.3
ES 12378-PeCDF	30.87	1.2762	1.2786	+4.4	8.30E+07	1.58	Y	0.78	98.5
ES 23478-PeCDF	32.05	1.3247	1.3272	+4.8	7.98E+07	1.55	Y	0.80	91.6
ES 123478-HxCDF	35.49	0.9641	0.9639	-0.4	5.49E+07	0.54	Y	1.22	81.5
ES 123678-HxCDF	35.63	0.9680	0.9678	-0.4	6.50E+07	0.52	Y	1.41	83.2
ES 234678-HxCDF	36.31	0.9864	0.9864	0	5.74E+07	0.54	Y	1.29	80.6
ES 123789-HxCDF	37.28	1.0127	1.0126	-0.2	5.57E+07	0.52	Y	1.17	85.7
ES 1234678-HpCDF	39.00	1.0591	1.0594	+0.7	4.66E+07	0.46	Y	0.97	86.5
ES 1234789-HpCDF	40.47	1.0986	1.0992	+1.5	3.35E+07	0.46	Y	0.88	68.7
ES OCDF	42.90	1.1644	1.1653	+2.3	5.74E+07	0.91	Y	0.81	64.3

Lab ID: OPR1_17706_DF | Acq'd: 27 Aug 2020 17:00 DTF | Wt/Vol: 1 uL | ICAL: HRMS3_DF_10122018_24AUG2020

Client ID: 0_17706_OPR001 | UTP: 28-Aug-2020 12:20:32 DTF | J-level: 0.25 pg/uL | Split: 1 | Checkcode: 756-866-PCB

Datafile: 200827C02 | Report: 28 Aug 2020 12:22 TF | Stds (pg): JS: 100 ES: 100 CS/SS: 100, 40 (37Cl)

Name	Act RT	QC	Pred. RRT	Act. RRT	ΔSecs	Response	Ra	OK	RRF	Rec. %
JS 1234-TCDD	25.92		-	-	-	7.26E+07	0.81	Y	-	-
JS 1234-TCDF	24.15		-	-	-	1.08E+08	0.78	Y	-	-
JS 123467-HxCDD	36.82		-	-	-	2.77E+07	1.20	Y	-	-
CS 37Cl-2378-TCDD	26.66		1.0281	1.0285	+0.6	3.17E+07	n/a	-	1.14	95.7
CS 12347-PeCDD	31.90		1.2288	1.2304	+3.1	5.85E+07	1.61	Y	0.72	111
CS 12346-PeCDF	30.32		1.2534	1.2555	+3.8	8.61E+07	1.55	Y	0.77	103
CS 123469-HxCDF	35.95		0.9765	0.9764	-0.2	6.19E+07	0.53	Y	1.18	94.6
CS 1234689-HpCDF	39.46		1.0712	1.0717	+1.2	4.49E+07	0.46	Y	0.96	84.9
~~SS 37Cl-2378-TCDD~~	~~26.66~~		~~1.0281~~	~~1.0285~~	~~+0.6~~	~~3.17E+07~~	~~n/a~~		~~1.19~~	~~100~~
~~SS 12347-PeCDD~~	~~31.90~~		~~1.2288~~	~~1.2304~~	~~+3.1~~	~~5.85E+07~~	~~1.61~~	~~Y~~	~~0.86~~	~~124~~
~~SS 12346-PeCDF~~	~~30.32~~		~~1.2534~~	~~1.2555~~	~~+3.8~~	~~8.61E+07~~	~~1.55~~	~~Y~~	~~1.00~~	~~104~~
~~SS 123469-HxCDF~~	~~35.95~~		~~0.9765~~	~~0.9764~~	~~-0.2~~	~~6.19E+07~~	~~0.53~~	~~Y~~	~~0.84~~	~~113~~
~~SS 1234689-HpCDF~~	~~39.46~~		~~1.0712~~	~~1.0717~~	~~+1.2~~	~~4.49E+07~~	~~0.46~~	~~Y~~	~~0.98~~	~~98~~

Totals	Conc	EMPC
Total TCDD	45.7	45.7
Total PeCDD	75.6	75.6
Total HxCDD	174	174
Total HpCDD	67.1	67.1
Total Tetra-Octa Dioxins	471	471
Total TCDF	56.4	56.4
Total PeCDF	130	130
Total HxCDF	225	225
Total HpCDF	105	105
Total Tetra-Octa Furans	620	620
Total Tetra-Octa Dioxins & Furans	1090	1090

* 37Cl correction has been applied to 2378-TCDD

	Original Values	Corrected Values
Ratio	0.8	0.80
Response	8.13E+06	8.11E+06

METHOD 8290A **PCDD/F ONGOING PRECISION AND RECOVERY (OPR)** **FORM 8A**

Lab Name:	SGS North America		
Initial Calibration:	ICAL: HRMS3_DF_10122018_24AUG2020		
Instrument ID:	HRMS3	GC Column ID:	ZB-5ms
VER Data Filename:	200827C02	Analysis Date:	27-AUG-2020 17:00:48
Lab ID:	OPR1_17706_DF		

NATIVE ANALYTES	SPIKE CONC.	CONC. FOUND	RANGE (ng/mL)			OK
2,3,7,8-TCDD	10	10.3	6.7	-	15.8	Y
1,2,3,7,8-PeCDD	50	49.1	35	-	71	Y
1,2,3,4,7,8-HxCDD	50	52.8	35	-	82	Y
1,2,3,6,7,8-HxCDD	50	55.7	38	-	67	Y
1,2,3,7,8,9-HxCDD	50	51.4	32	-	81	Y
1,2,3,4,6,7,8-HpCDD	50	54.3	35	-	70	Y
OCDD	100	108	78	-	144	Y
2,3,7,8-TCDF	10	11.3	7.5	-	15.8	Y
1,2,3,7,8-PeCDF	50	50.7	40	-	67	Y
2,3,4,7,8-PeCDF	50	56.5	34	-	80	Y
1,2,3,4,7,8-HxCDF	50	53.3	36	-	67	Y
1,2,3,6,7,8-HxCDF	50	53.6	42	-	65	Y
2,3,4,6,7,8-HxCDF	50	53.4	35	-	78	Y
1,2,3,7,8,9-HxCDF	50	50.7	39	-	65	Y
1,2,3,4,6,7,8-HpCDF	50	52.4	41	-	61	Y
1,2,3,4,7,8,9-HpCDF	50	52.8	39	-	69	Y
OCDF	100	104	63	-	170	Y

Contract-required concentration limits for OPR as specified in Table 6,
Method 1613. 10/94

Processed: 28 Aug 2020 12:22 Analyst: TF

METHOD 8290A **PCDD/F ONGOING PRECISION AND RECOVERY (OPR)** **FORM 8B**

Lab Name: SGS North America

Initial Calibration: ICAL: HRMS3_DF_10122018_24AUG2020

Instrument ID: HRMS3 GC Column ID: ZB-5ms

VER Data Filename: 200827C02 Analysis Date: 27-AUG-2020 17:00:48

Lab ID: OPR1_17706_DF

LABELED ANALYTES	SPIKE CONC.	CONC. FOUND	RANGE (ng/mL)			OK
13C-2,3,7,8-TCDD	100	94.3	20	-	175	Y
13C-1,2,3,7,8-PeCDD	100	90	21	-	227	Y
13C-1,2,3,4,7,8-HxCDD	100	87	21	-	193	Y
13C-1,2,3,6,7,8-HxCDD	100	82.8	25	-	163	Y
13C-1,2,3,7,8,9-HxCDD	100	86	26	-	166	Y
13C-1,2,3,4,6,7,8-HpCDD	100	77.6	26	-	166	Y
13C-OCDD	200	138	26	-	397	Y
13C-2,3,7,8-TCDF	100	92.3	22	-	152	Y
13C-1,2,3,7,8-PeCDF	100	98.5	21	-	192	Y
13C-2,3,4,7,8-PeCDF	100	91.6	13	-	328	Y
13C-1,2,3,4,7,8-HxCDF	100	81.5	19	-	202	Y
13C-1,2,3,6,7,8-HxCDF	100	83.2	21	-	159	Y
13C-2,3,4,6,7,8-HxCDF	100	80.6	22	-	176	Y
13C-1,2,3,7,8,9-HxCDF	100	85.7	17	-	205	Y
13C-1,2,3,4,6,7,8-HpCDF	100	86.5	21	-	158	Y
13C-1,2,3,4,7,8,9-HpCDF	100	68.7	20	-	186	Y
13C-OCDF	200	129	26	-	397	Y
CLEANUP STANDARD						
37Cl-2,3,7,8-TCDD	40	38.3	12.4	-	76.4	Y

Contract-required concentration limits for OPR as specified in Table 6, Method 1613. 10/94

Processed: 28 Aug 2020 12:22 Analyst: TF

METHOD 8290A **COLUMN PERFORMANCE AND RETENTION TIME WINDOWS** **FORM CPSM**

Lab Name:	SGS North America		
Initial Calibration:	ICAL: HRMS3_DF_10122018_24AUG2020		
Instrument ID:	HRMS3	GC Column ID:	ZB-5ms
CPSM Data Filename:	200827C02	Analysis Date:	27-AUG-2020 17:00:48
Lab ID:	OPR1_17706_DF		

Window Defining Standards Results

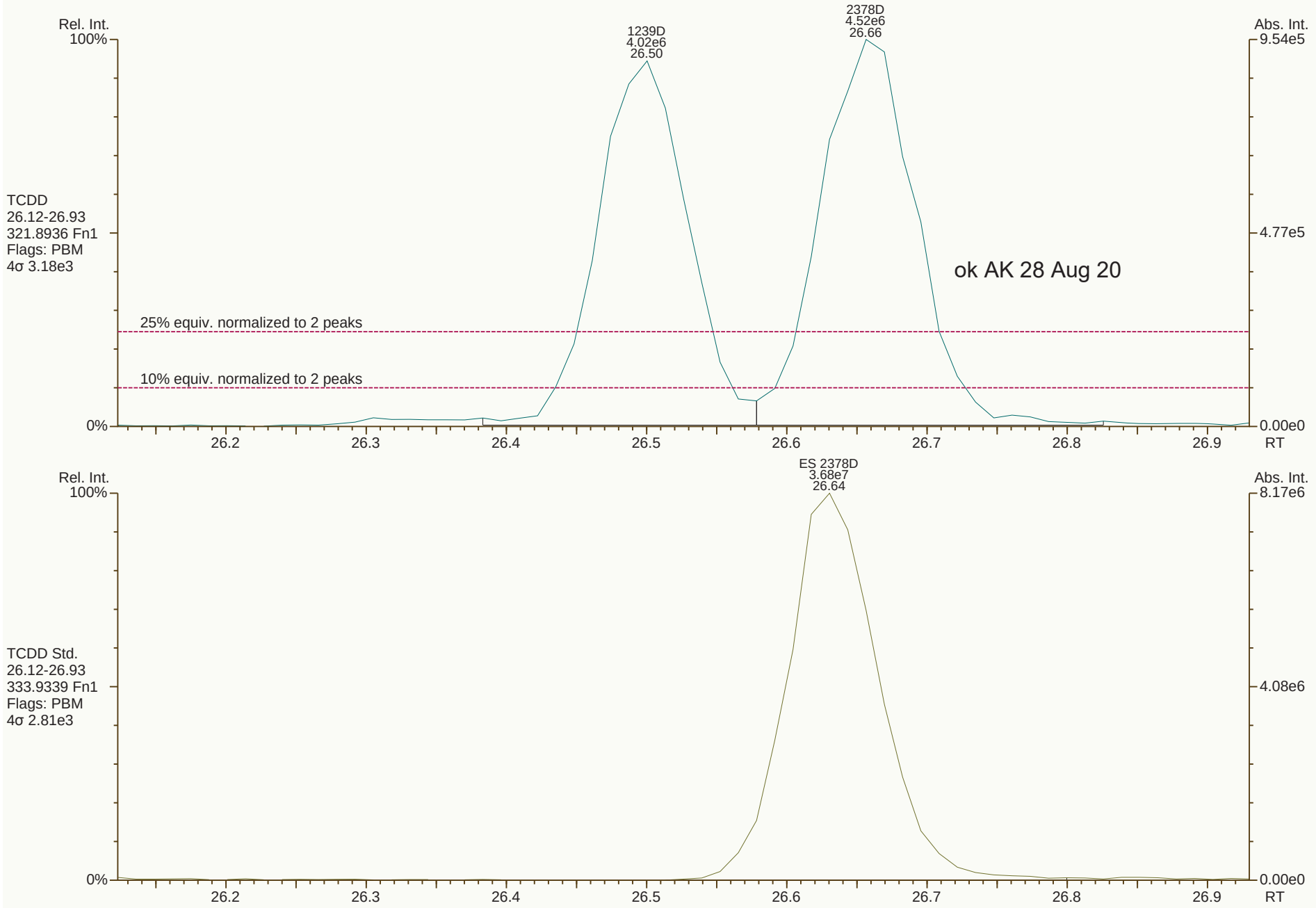
First Eluting Isomer	RT	Last Eluting Isomer	RT
1368-TCDD	22.54	1289-TCDD	27.73
12479/12468-PeCDD	29.81	12389-PeCDD	32.90
124679/124689-HxCDD	34.77	123789-HxCDD	36.94
1234679-HpCDD	39.33	1234678-HpCDD	40.06
1368-TCDF	20.36	1289-TCDF	27.89
13468/12468-PeCDF	27.88	12389-PeCDF	33.19
123468-HxCDF	34.07	123789-HxCDF	37.30
1234678-HpCDF	39.01	1234789-HpCDF	40.48

Isomer Specificity Test Standard Results

Closest Eluting Isomer	RT	2378 Specific Isomer	RT
1239-TCDD	26.50	2378-TCDD	26.66
2348-TCDF	25.57	2378-TCDF	25.69

Processed: 28 Aug 2020 12:22 Analyst: TF

SGS ID: OPR1_17706_DF
Sample ID: 0_17706_OPR001
Acq: 27-Aug-2020 17:00:48
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 67
User: DTF Datafile: 200827C02



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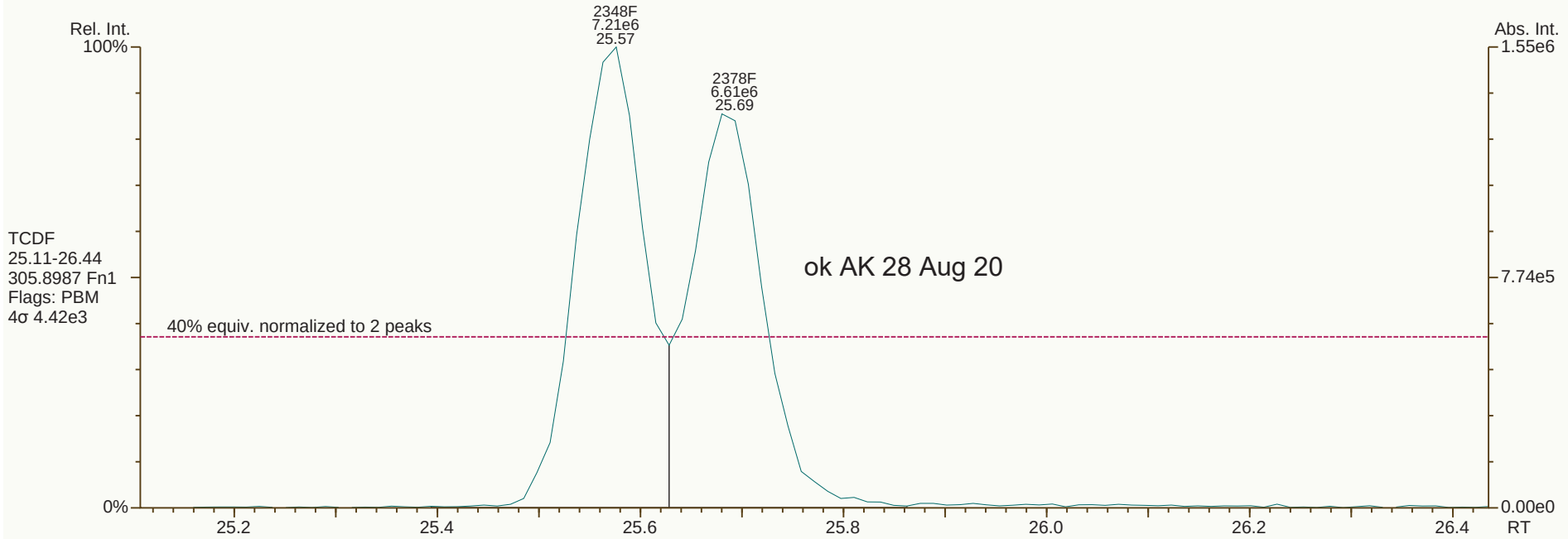
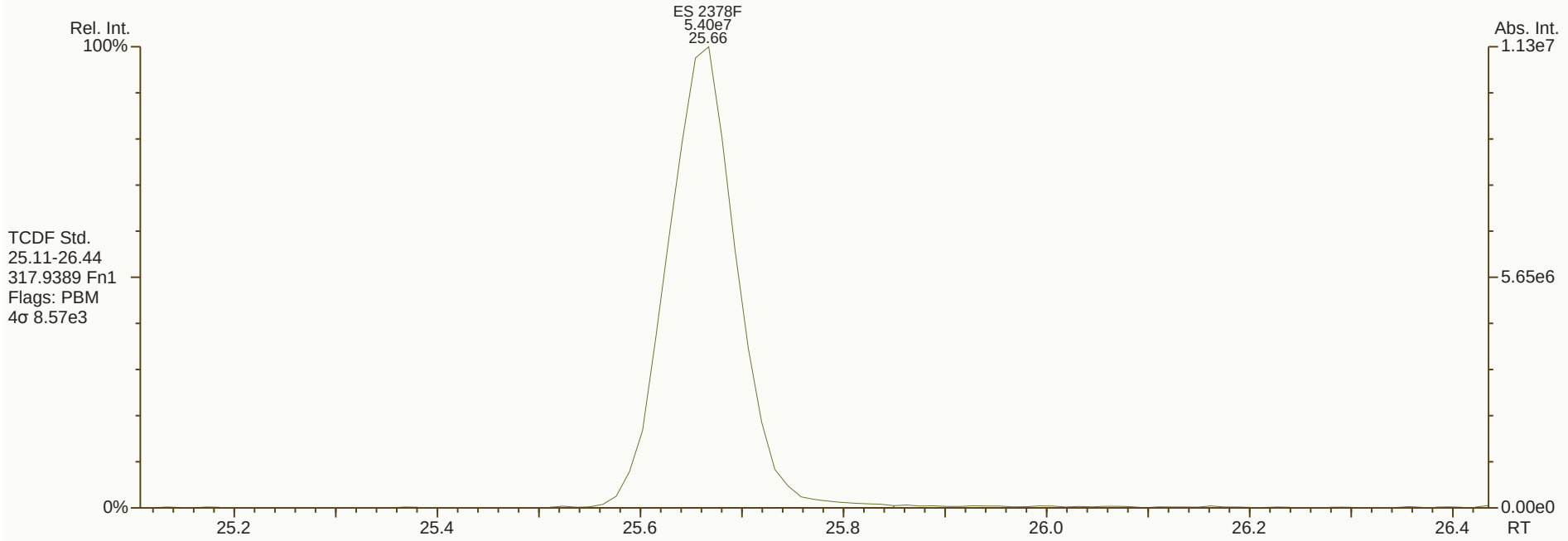
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689
Revised: 28-Aug-2020 07:49 (DTF) Printed: 28-Aug-2020 12:26

SGS ID: OPR1_17706_DF | Sample ID: 0_17706_OPR001 | Acq: 27-Aug-2020 17:00:48
Instr: [ILM] AutoSpec-Ultima HRMS3 | VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 67 | User: DTF Datafile: 200827C02

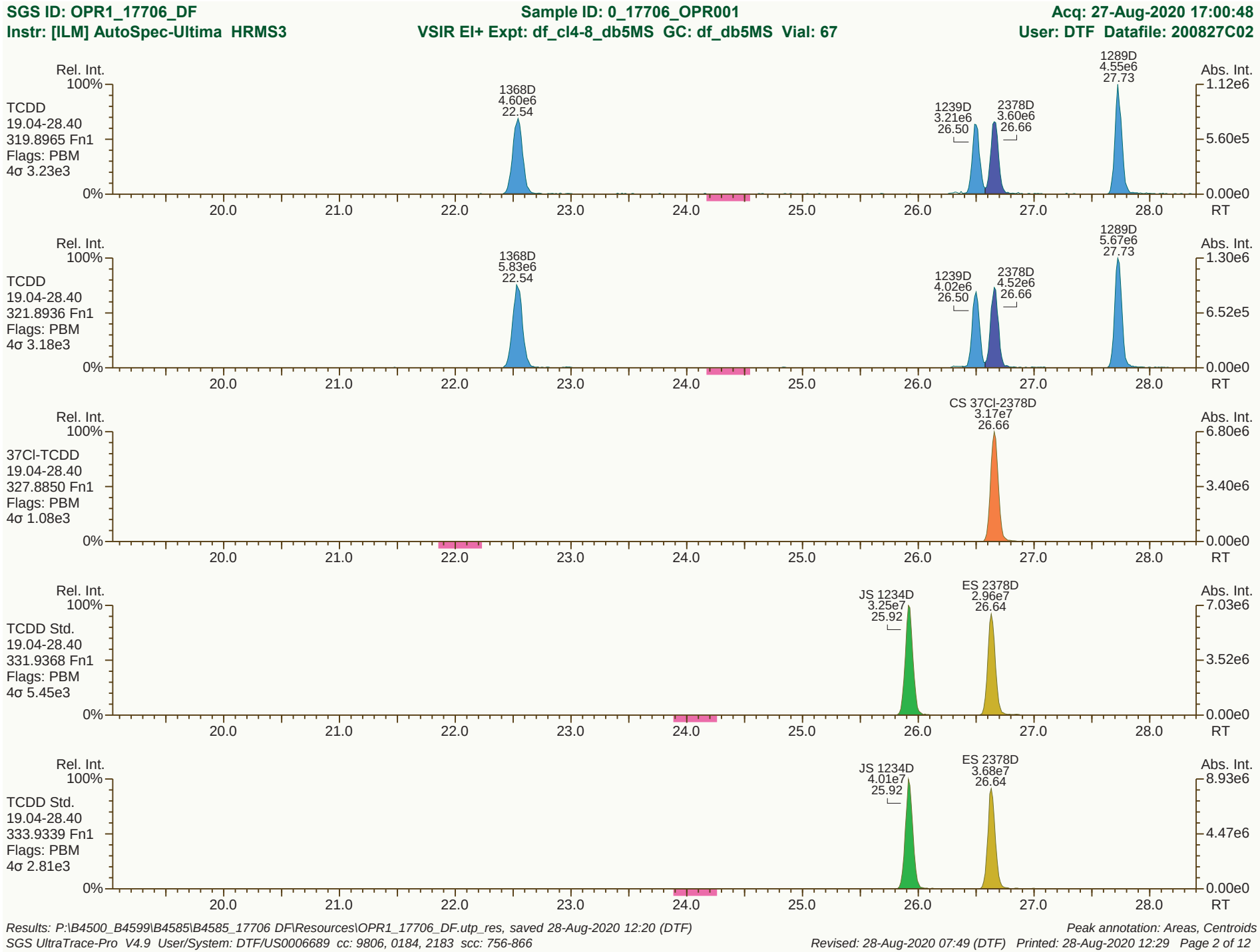




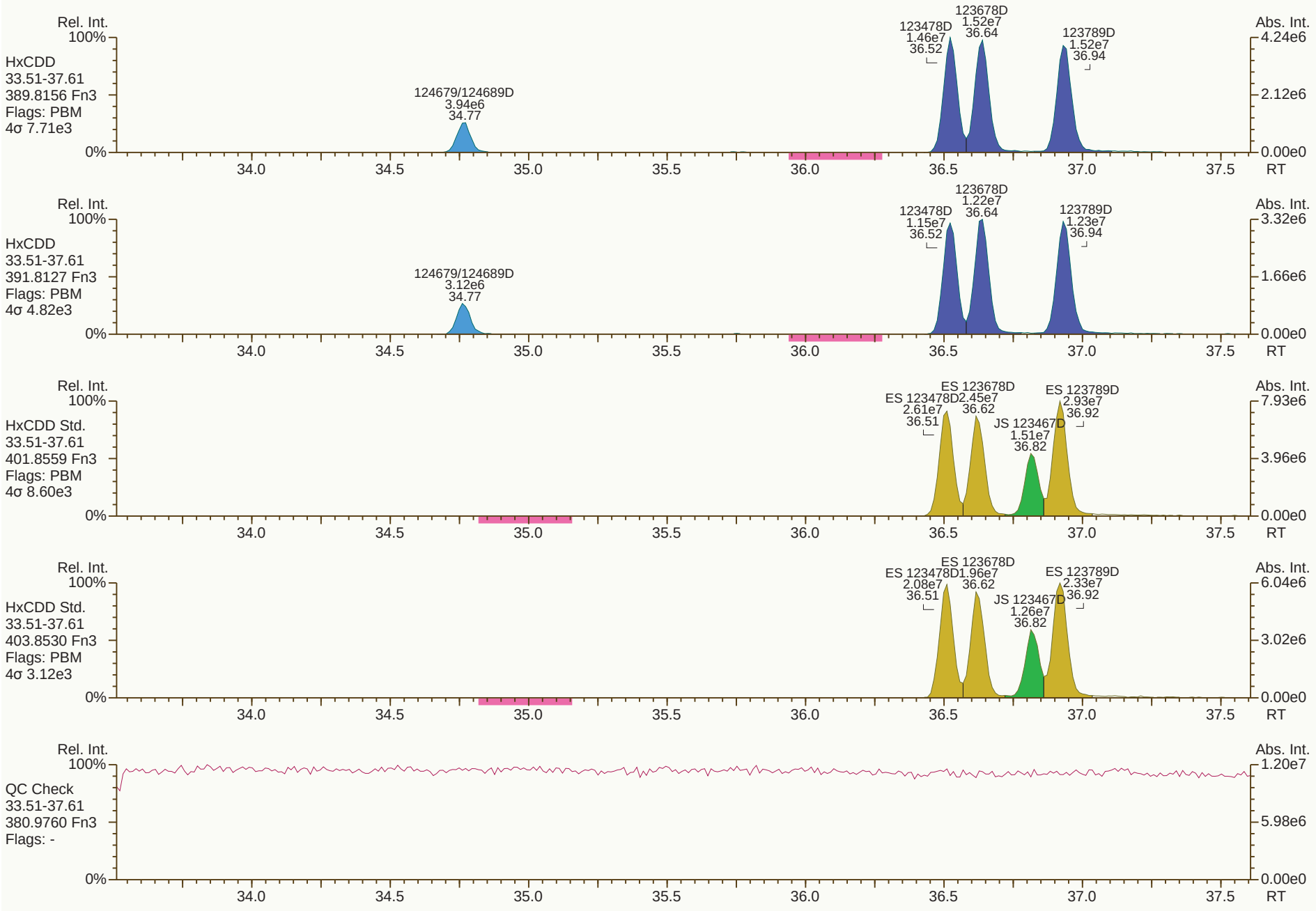
Results: P:\B4500_B4599\B4585\B4585_17706 DF\Resources\OPR1_17706_DF.utp_res, saved 28-Aug-2020 12:20 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689
PKD: 28-Aug-2020 07:49 Printed: 28-Aug-2020 12:26

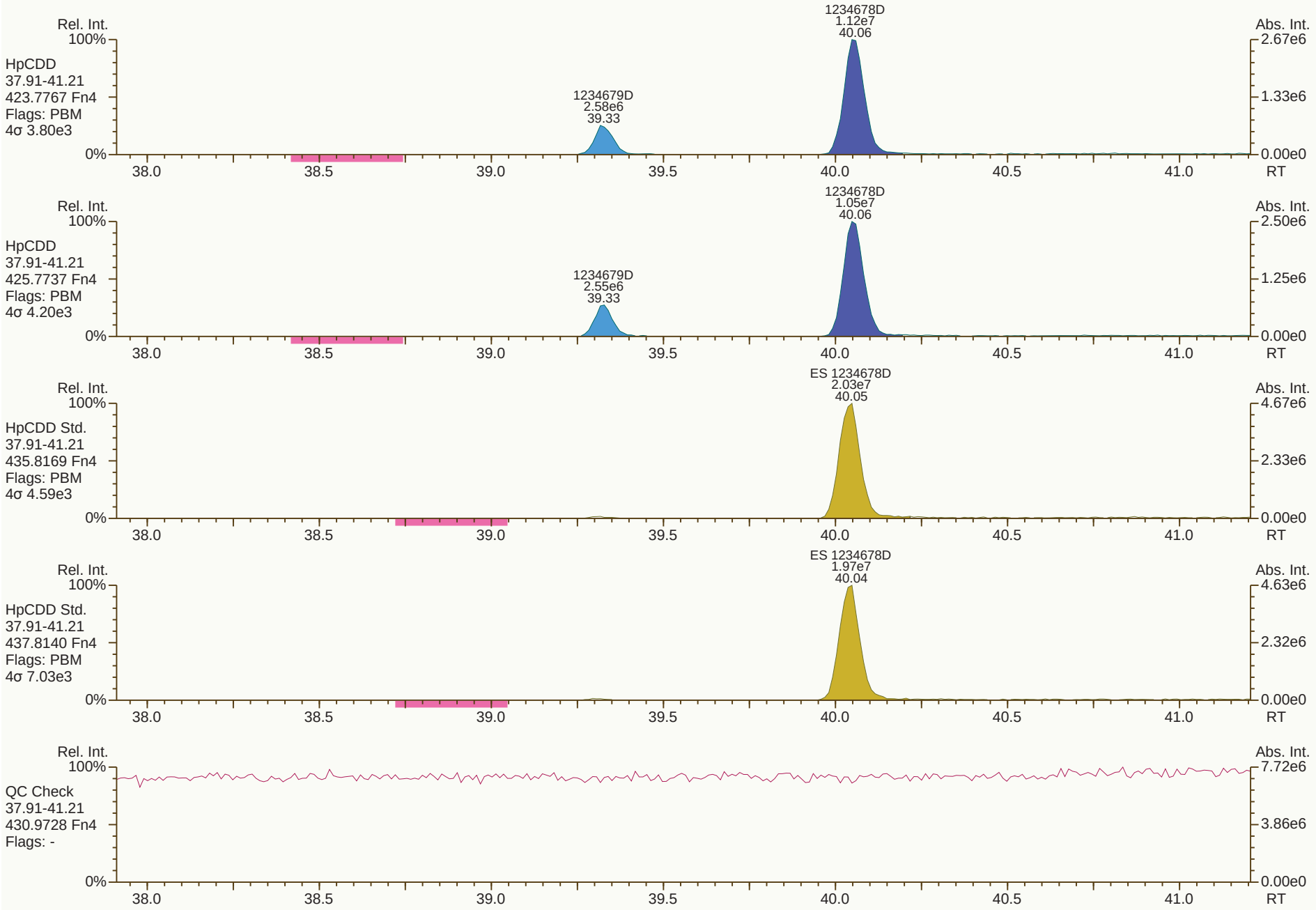

Rel. Int.
100%
QC Check
19.04-28.40
316.9824 Fn1
Flags: -
0%
Abs. Int.
6.37e6
3.18e6
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
QC Check
28.41-33.50
366.9792 Fn2
Flags: -
0%
Abs. Int.
5.58e6
2.79e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
QC Check
33.51-37.61
380.9760 Fn3
Flags: -
0%
Abs. Int.
1.20e7
5.98e6
0.00e0
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
QC Check
37.91-41.21
430.9728 Fn4
Flags: -
0%
Abs. Int.
7.72e6
3.86e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
QC Check
41.22-44.81
454.9728 Fn5
Flags: -
0%
Abs. Int.
1.02e7
5.09e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT

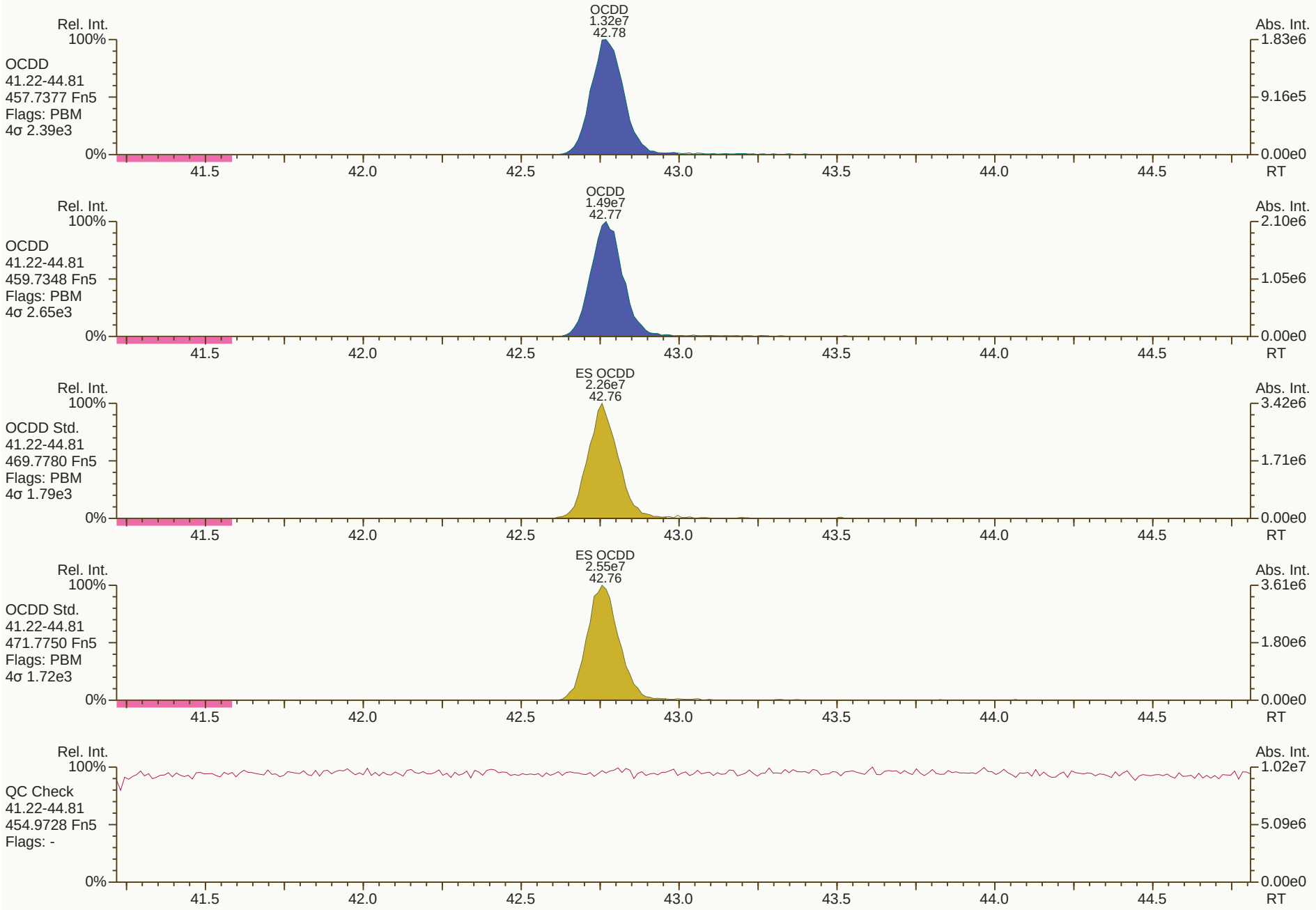
SGS ID: OPR1_17706_DF
Instr: [ILM] AutoSpec-Ultima HRMS3
Sample ID: 0_17706_OPR001
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 67
Acq: 27-Aug-2020 17:00:48
User: DTF Datafile: 200827C02

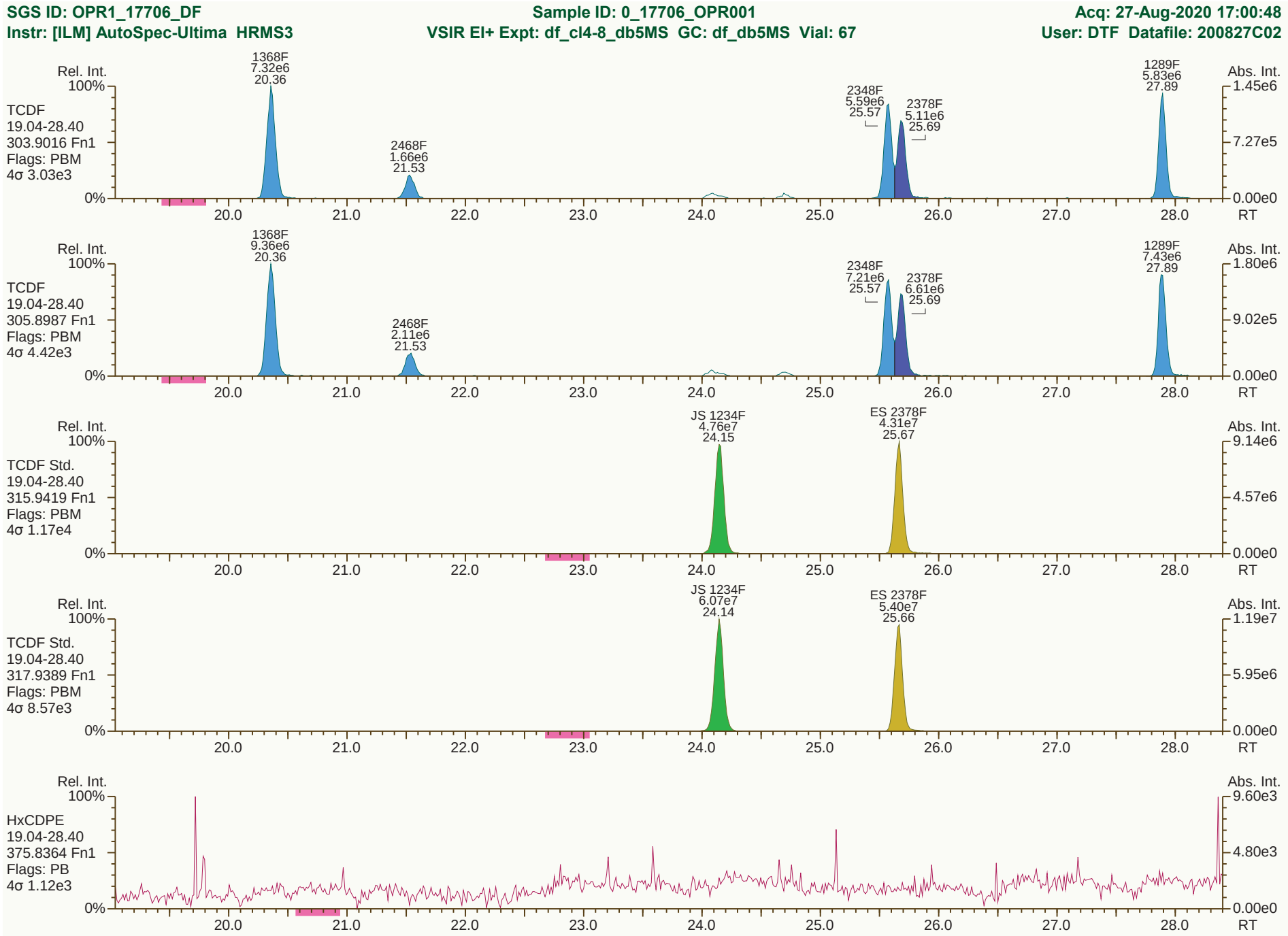



Rel. Int.
100%
PeCDD
28.41-33.50
355.8546 Fn2
Flags: PBM
4σ 3.86e3
12479/12468D
4.42e6
29.81
12378D
1.66e7
32.44
12389D
4.62e6
32.90
Abs. Int.
4.49e6
2.25e6
0.00e0
0%
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD
28.41-33.50
357.8517 Fn2
Flags: PBM
4σ 3.58e3
12479/12468D
2.81e6
29.80
12378D
1.08e7
32.44
12389D
2.97e6
32.90
Abs. Int.
2.80e6
1.40e6
0.00e0
0%
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.41-33.50
367.8949 Fn2
Flags: PBM
4σ 3.07e3
CS 12347D
3.61e7
31.90
ES 12378D
3.39e7
32.42
Abs. Int.
1.01e7
5.07e6
0.00e0
0%
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.41-33.50
369.8919 Fn2
Flags: PBM
4σ 1.72e3
CS 12347D
2.24e7
31.90
ES 12378D
2.13e7
32.42
Abs. Int.
6.07e6
3.04e6
0.00e0
0%
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
QC Check
28.41-33.50
366.9792 Fn2
Flags: -
Abs. Int.
5.58e6
2.79e6
0.00e0
0%
29.0
30.0
31.0
32.0
33.0
RT

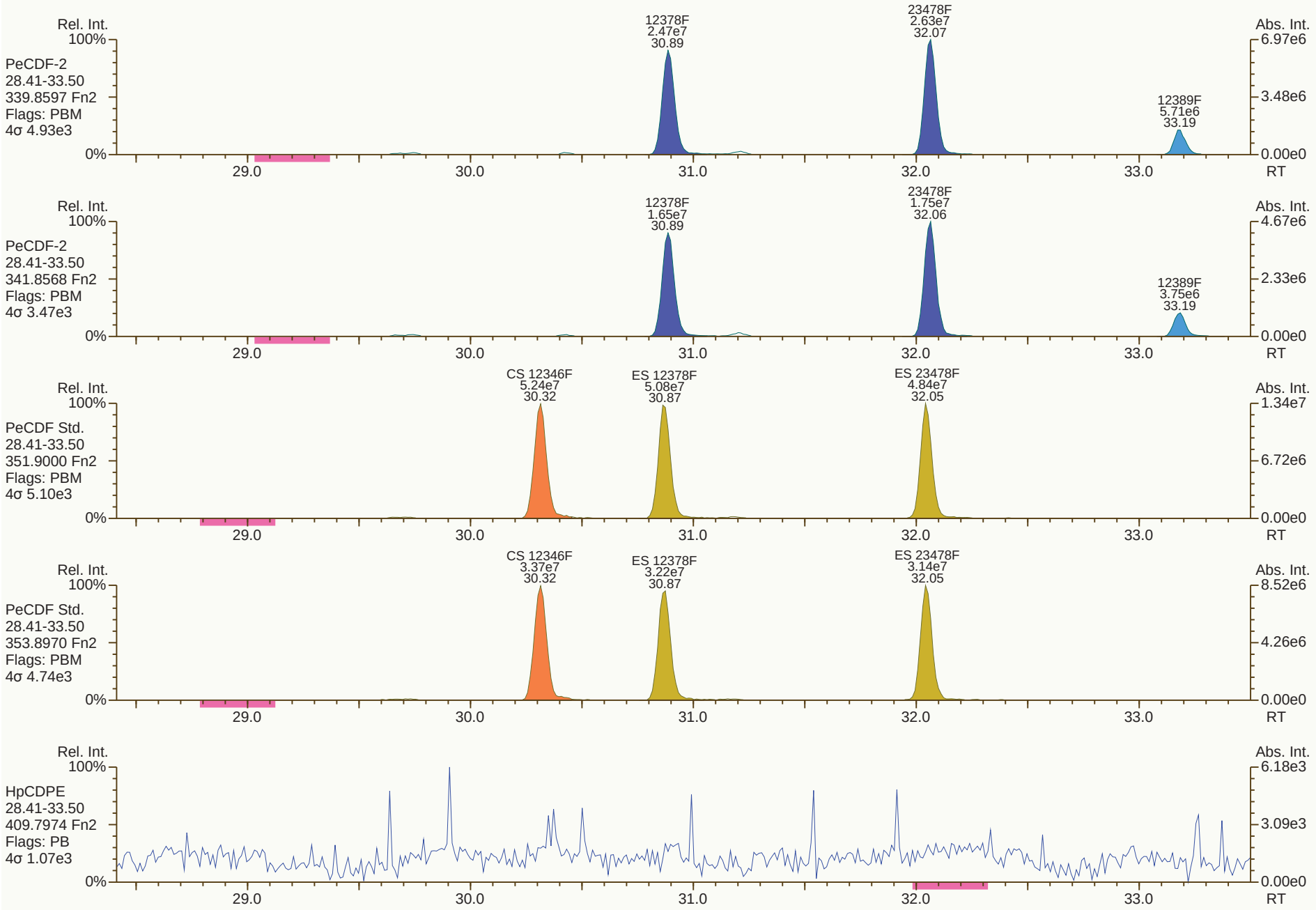

Rel. Int.
100%
HxCDD
33.51-37.61
389.8156 Fn3
Flags: PBM
4σ 7.71e3
124679/124689D
3.94e6
34.77
123478D
1.46e7
36.52
123678D
1.52e7
36.64
123789D
1.52e7
36.94
Abs. Int.
4.24e6
2.12e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD
33.51-37.61
391.8127 Fn3
Flags: PBM
4σ 4.82e3
124679/124689D
3.12e6
34.77
123478D
1.15e7
36.52
123678D
1.22e7
36.64
123789D
1.23e7
36.94
Abs. Int.
3.32e6
1.66e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.51-37.61
401.8559 Fn3
Flags: PBM
4σ 8.60e3
ES 123478D
2.61e7
36.51
ES 123678D
2.45e7
36.62
JS 123467D
1.51e7
36.82
ES 123789D
2.93e7
36.92
Abs. Int.
7.93e6
3.96e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDD Std.
33.51-37.61
403.8530 Fn3
Flags: PBM
4σ 3.12e3
ES 123478D
2.08e7
36.51
ES 123678D
1.96e7
36.62
JS 123467D
1.26e7
36.82
ES 123789D
2.33e7
36.92
Abs. Int.
6.04e6
3.02e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
QC Check
33.51-37.61
380.9760 Fn3
Flags: -
Abs. Int.
1.20e7
5.98e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT

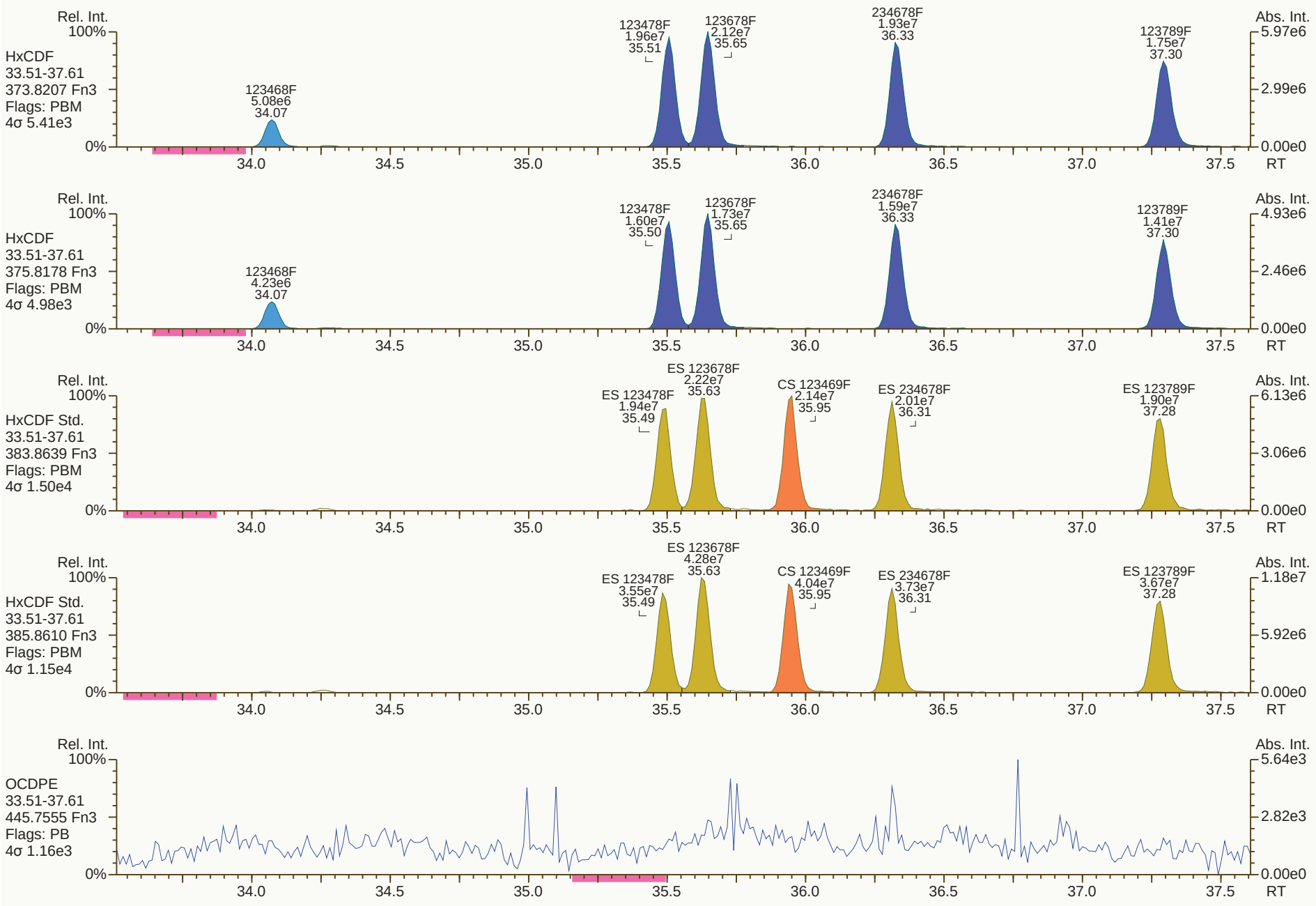

Rel. Int.
100%
HpCDD
37.91-41.21
423.7767 Fn4
Flags: PBM
4σ 3.80e3
0%
1234679D
2.58e6
39.33
1234678D
1.12e7
40.06
Abs. Int.
2.67e6
1.33e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD
37.91-41.21
425.7737 Fn4
Flags: PBM
4σ 4.20e3
0%
1234679D
2.55e6
39.33
1234678D
1.05e7
40.06
Abs. Int.
2.50e6
1.25e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.91-41.21
435.8169 Fn4
Flags: PBM
4σ 4.59e3
0%
ES 1234678D
2.03e7
40.05
Abs. Int.
4.67e6
2.33e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.91-41.21
437.8140 Fn4
Flags: PBM
4σ 7.03e3
0%
ES 1234678D
1.97e7
40.04
Abs. Int.
4.63e6
2.32e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
QC Check
37.91-41.21
430.9728 Fn4
Flags: -
0%
Abs. Int.
7.72e6
3.86e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT

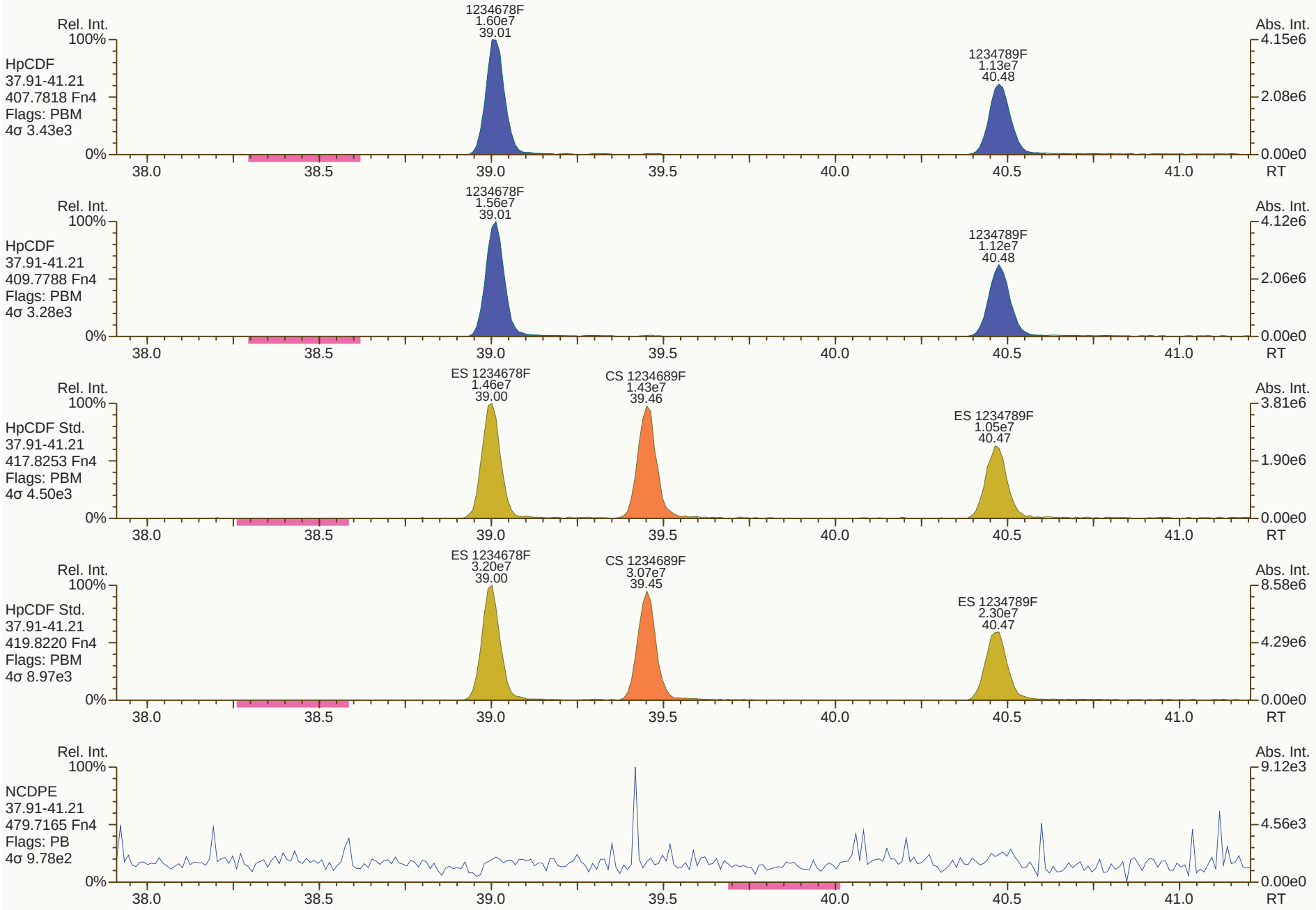

OCDD
1.32e7
42.78
Rel. Int.
Abs. Int.
100%
OCDD
41.22-44.81
457.7377 Fn5
Flags: PBM
4σ 2.39e3
1.83e6
9.16e5
0.00e0
0%
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
OCDD
1.49e7
42.77
OCDD
41.22-44.81
459.7348 Fn5
Flags: PBM
4σ 2.65e3
2.10e6
1.05e6
ES OCDD
2.26e7
42.76
OCDD Std.
41.22-44.81
469.7780 Fn5
Flags: PBM
4σ 1.79e3
3.42e6
1.71e6
ES OCDD
2.55e7
42.76
OCDD Std.
41.22-44.81
471.7750 Fn5
Flags: PBM
4σ 1.72e3
3.61e6
1.80e6
QC Check
41.22-44.81
454.9728 Fn5
Flags: -
1.02e7
5.09e6


SGS ID: OPR1_17706_DF
Sample ID: 0_17706_OPR001
Acq: 27-Aug-2020 17:00:48
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 67
User: DTF Datafile: 200827C02
Rel. Int.
Abs. Int.
TCDF
19.04-28.40
303.9016 Fn1
Flags: PBM
4σ 3.03e3
1368F 7.32e6 20.36
2468F 1.66e6 21.53
2348F 5.59e6 25.57
2378F 5.11e6 25.69
1289F 5.83e6 27.89
1.45e6
7.27e5
0.00e0
TCDF
19.04-28.40
305.8987 Fn1
Flags: PBM
4σ 4.42e3
1368F 9.36e6 20.36
2468F 2.11e6 21.53
2348F 7.21e6 25.57
2378F 6.61e6 25.69
1289F 7.43e6 27.89
1.80e6
9.02e5
0.00e0
TCDF Std.
19.04-28.40
315.9419 Fn1
Flags: PBM
4σ 1.17e4
JS 1234F 4.76e7 24.15
ES 2378F 4.31e7 25.67
9.14e6
4.57e6
0.00e0
TCDF Std.
19.04-28.40
317.9389 Fn1
Flags: PBM
4σ 8.57e3
JS 1234F 6.07e7 24.14
ES 2378F 5.40e7 25.66
1.19e7
5.95e6
0.00e0
HxCDPE
19.04-28.40
375.8364 Fn1
Flags: PB
4σ 1.12e3
9.60e3
4.80e3
0.00e0
100%
0%
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Results: P:\B4500_B4599\B4585\B4585_17706 DF\Resources\OPR1_17706_DF.utp_res, saved 28-Aug-2020 12:20 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 7777, 3086, 3153 scc: 756-866
PKD: 28-Aug-2020 07:49 Printed: 28-Aug-2020 12:29 Page 7 of 12


Rel. Int.
100%
0%
PeCDF-1
19.04-28.40
339.8597 Fn1
Flags: PBM
4σ 5.24e3
13468/12468F
5.29e6
27.88
Abs. Int.
1.19e6
5.96e5
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
0%
PeCDF-1
19.04-28.40
341.8568 Fn1
Flags: PBM
4σ 2.14e3
13468/12468F
3.33e6
27.88
Abs. Int.
7.23e5
3.61e5
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
0%
QC Check
19.04-28.40
316.9824 Fn1
Flags: -
Abs. Int.
6.37e6
3.18e6
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT


Rel. Int.
100%
PeCDF-2
28.41-33.50
339.8597 Fn2
Flags: PBM
4σ 4.93e3
0%
12378F
2.47e7
30.89
23478F
2.63e7
32.07
12389F
5.71e6
33.19
Abs. Int.
6.97e6
3.48e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF-2
28.41-33.50
341.8568 Fn2
Flags: PBM
4σ 3.47e3
0%
12378F
1.65e7
30.89
23478F
1.75e7
32.06
12389F
3.75e6
33.19
Abs. Int.
4.67e6
2.33e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.41-33.50
351.9000 Fn2
Flags: PBM
4σ 5.10e3
0%
CS 12346F
5.24e7
30.32
ES 12378F
5.08e7
30.87
ES 23478F
4.84e7
32.05
Abs. Int.
1.34e7
6.72e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.41-33.50
353.8970 Fn2
Flags: PBM
4σ 4.74e3
0%
CS 12346F
3.37e7
30.32
ES 12378F
3.22e7
30.87
ES 23478F
3.14e7
32.05
Abs. Int.
8.52e6
4.26e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
HpCDPE
28.41-33.50
409.7974 Fn2
Flags: PB
4σ 1.07e3
0%
Abs. Int.
6.18e3
3.09e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT


Rel. Int.
100%
HxCDF
33.51-37.61
373.8207 Fn3
Flags: PBM
4σ 5.41e3
123468F
5.08e6
34.07
123478F
1.96e7
35.51
123678F
2.12e7
35.65
234678F
1.93e7
36.33
123789F
1.75e7
37.30
Abs. Int.
5.97e6
2.99e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF
33.51-37.61
375.8178 Fn3
Flags: PBM
4σ 4.98e3
123468F
4.23e6
34.07
123478F
1.60e7
35.50
123678F
1.73e7
35.65
234678F
1.59e7
36.33
123789F
1.41e7
37.30
Abs. Int.
4.93e6
2.46e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF Std.
33.51-37.61
383.8639 Fn3
Flags: PBM
4σ 1.50e4
ES 123478F
1.94e7
35.49
ES 123678F
2.22e7
35.63
CS 123469F
2.14e7
35.95
ES 234678F
2.01e7
36.31
ES 123789F
1.90e7
37.28
Abs. Int.
6.13e6
3.06e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF Std.
33.51-37.61
385.8610 Fn3
Flags: PBM
4σ 1.15e4
ES 123478F
3.55e7
35.49
ES 123678F
4.28e7
35.63
CS 123469F
4.04e7
35.95
ES 234678F
3.73e7
36.31
ES 123789F
3.67e7
37.28
Abs. Int.
1.18e7
5.92e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
OCDPE
33.51-37.61
445.7555 Fn3
Flags: PB
4σ 1.16e3
Abs. Int.
5.64e3
2.82e3
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT


Rel. Int.
100%
HpCDF
37.91-41.21
407.7818 Fn4
Flags: PBM
4σ 3.43e3
0%
1234678F
1.60e7
39.01
1234789F
1.13e7
40.48
Abs. Int.
4.15e6
2.08e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF
37.91-41.21
409.7788 Fn4
Flags: PBM
4σ 3.28e3
0%
1234678F
1.56e7
39.01
1234789F
1.12e7
40.48
Abs. Int.
4.12e6
2.06e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.91-41.21
417.8253 Fn4
Flags: PBM
4σ 4.50e3
0%
ES 1234678F
1.46e7
39.00
CS 1234689F
1.43e7
39.46
ES 1234789F
1.05e7
40.47
Abs. Int.
3.81e6
1.90e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDF Std.
37.91-41.21
419.8220 Fn4
Flags: PBM
4σ 8.97e3
0%
ES 1234678F
3.20e7
39.00
CS 1234689F
3.07e7
39.45
ES 1234789F
2.30e7
40.47
Abs. Int.
8.58e6
4.29e6
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
NCDPE
37.91-41.21
479.7165 Fn4
Flags: PB
4σ 9.78e2
0%
Abs. Int.
9.12e3
4.56e3
0.00e0
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT


OCDF
1.45e7
42.91
Rel. Int.
100%
OCDF
41.22-44.81
441.7428 Fn5
Flags: PBM
4σ 1.53e3
0%
Abs. Int.
2.07e6
1.04e6
0.00e0
RT
41.5
42.0
42.5
43.0
43.5
44.0
44.5
OCDF
1.65e7
42.91
Rel. Int.
100%
OCDF
41.22-44.81
443.7398 Fn5
Flags: PBM
4σ 1.69e3
0%
Abs. Int.
2.30e6
1.15e6
0.00e0
RT
ES OCDF
2.74e7
42.90
Rel. Int.
100%
OCDF Std.
41.22-44.81
453.7830 Fn5
Flags: PBM
4σ 3.73e3
0%
Abs. Int.
4.04e6
2.02e6
0.00e0
RT
ES OCDF
3.00e7
42.90
Rel. Int.
100%
OCDF Std.
41.22-44.81
455.7801 Fn5
Flags: PBM
4σ 1.77e3
0%
Abs. Int.
4.46e6
2.23e6
0.00e0
RT
Rel. Int.
100%
DCDPE
41.22-44.81
513.6775 Fn5
Flags: PB
4σ 1.09e3
0%
Abs. Int.
1.81e4
9.05e3
0.00e0
RT

CPSM only

METHOD 8290A **COLUMN PERFORMANCE AND RETENTION TIME WINDOWS** **FORM CPSM**

Lab Name:	SGS North America		
Initial Calibration:	ICAL: HRMS3_DF_10122018_24AUG2020		
Instrument ID:	HRMS3	GC Column ID:	ZB-5ms
CPSM Data Filename:	200827C12	Analysis Date:	28-AUG-2020 00:53:08
Lab ID:	OPR1_17706_DF-RJ		

Window Defining Standards Results

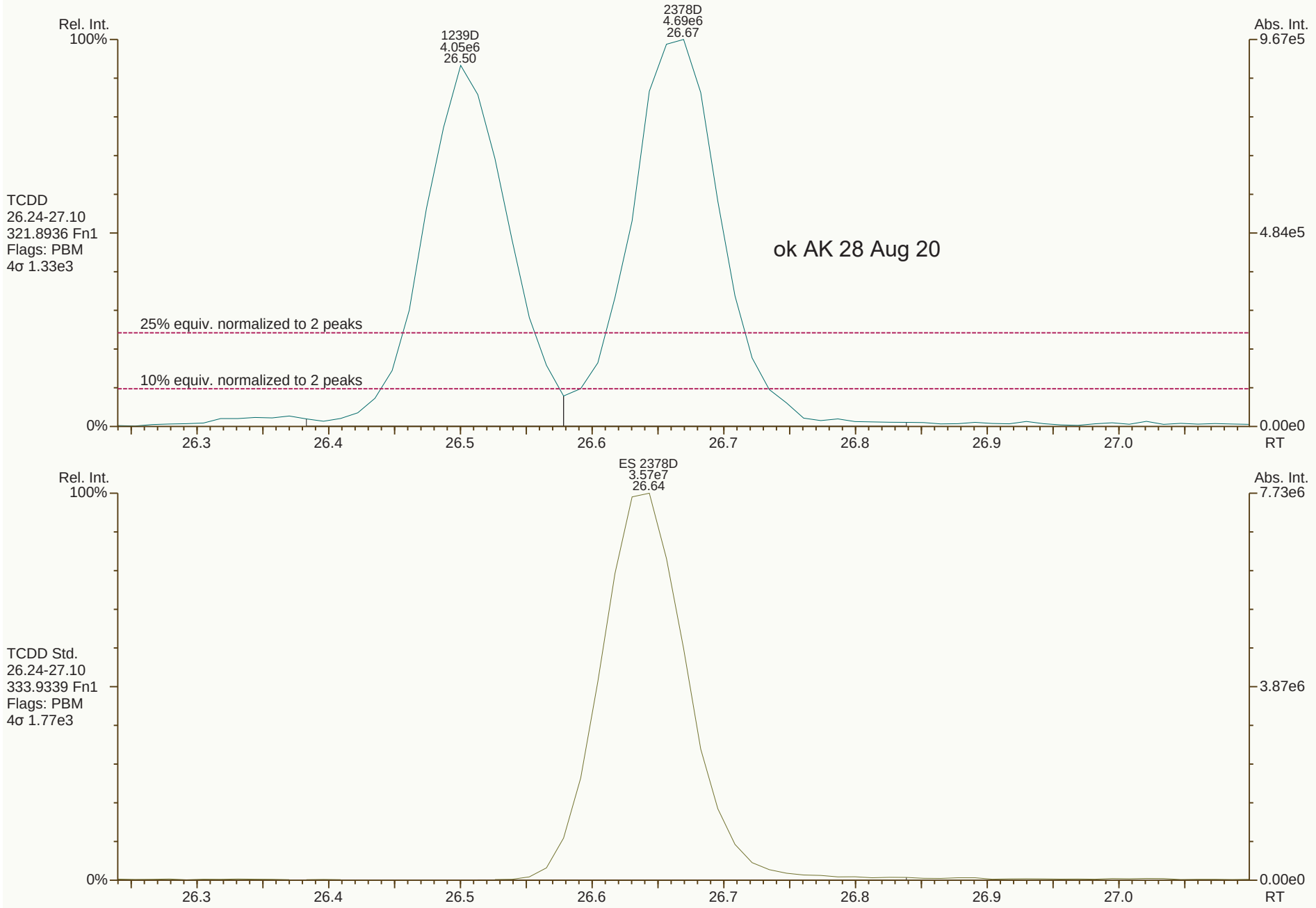
First Eluting Isomer	RT	Last Eluting Isomer	RT
1368-TCDD	22.55	1289-TCDD	27.74
12479/12468-PeCDD	29.81	12389-PeCDD	32.91
124679/124689-HxCDD	34.77	123789-HxCDD	36.94
1234679-HpCDD	39.34	1234678-HpCDD	40.07
1368-TCDF	20.37	1289-TCDF	27.90
13468/12468-PeCDF	27.89	12389-PeCDF	33.20
123468-HxCDF	34.08	123789-HxCDF	37.30
1234678-HpCDF	39.02	1234789-HpCDF	40.49

Isomer Specificity Test Standard Results

Closest Eluting Isomer	RT	2378 Specific Isomer	RT
1239-TCDD	26.51	2378-TCDD	26.67
2348-TCDF	25.58	2378-TCDF	25.70

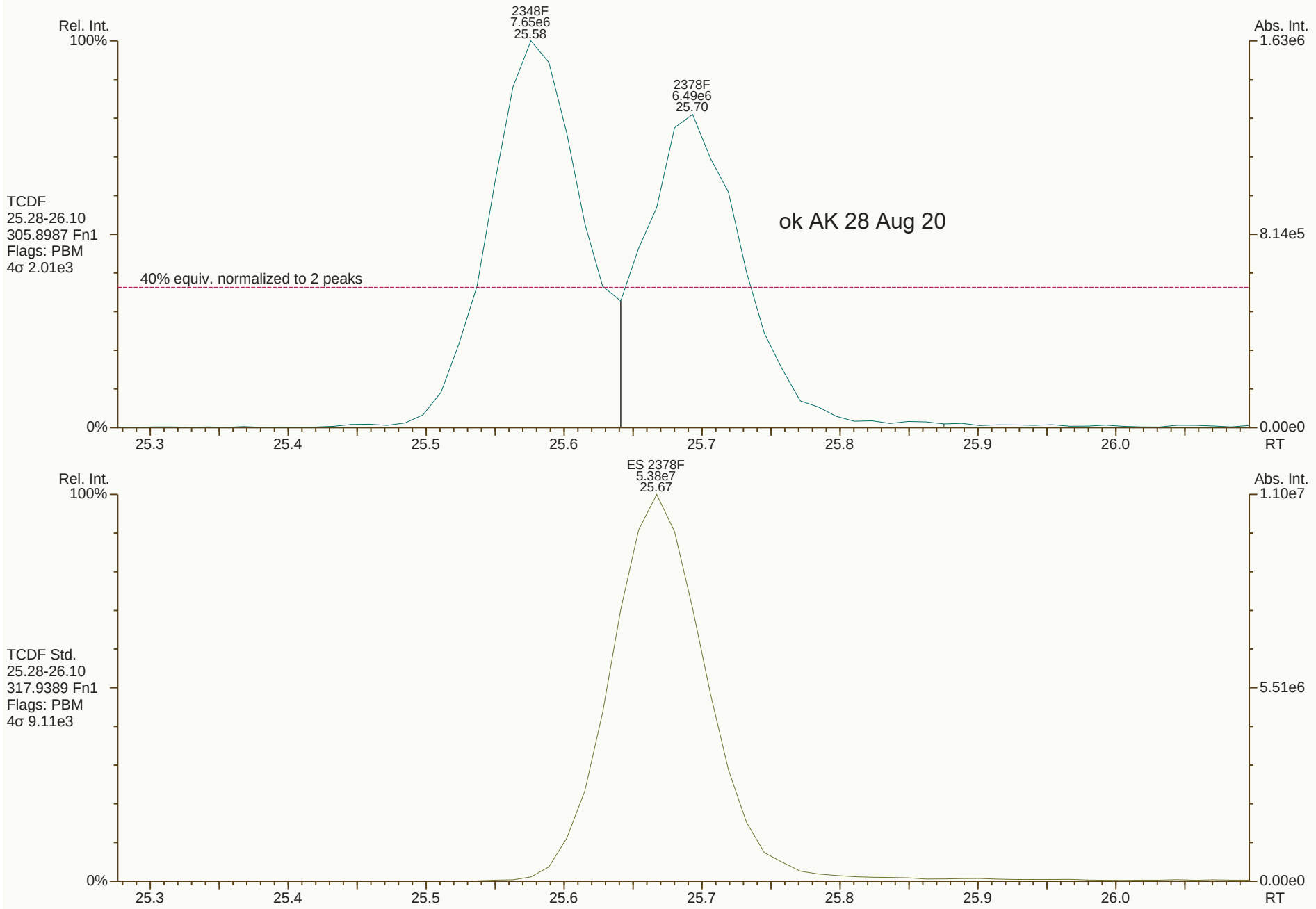
Processed: 28 Aug 2020 12:22 Analyst: TF

SGS ID: OPR1_17706_DF-RJ
Sample ID: 0_17706_OPR001
Acq: 28-Aug-2020 00:53:08
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 67
User: DTF Datafile: 200827C12

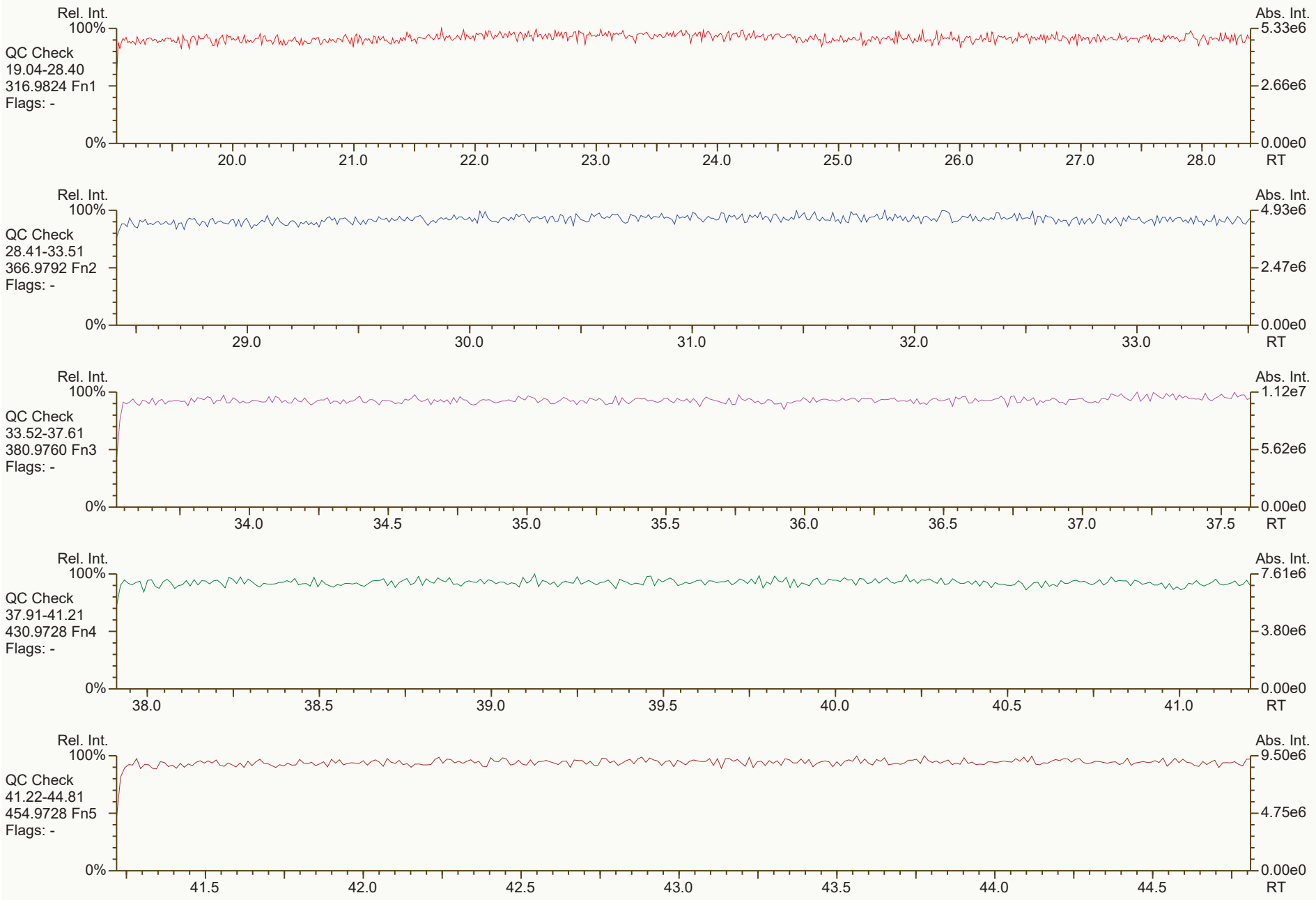


Results: P:\B4500_B4599\B4585\B4585_17706 DF\Resources\OPR1_17706_DF-RJ.utp_res, saved 28-Aug-2020 12:20 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689
Revised: 28-Aug-2020 07:45 (DTF) Printed: 28-Aug-2020 12:26

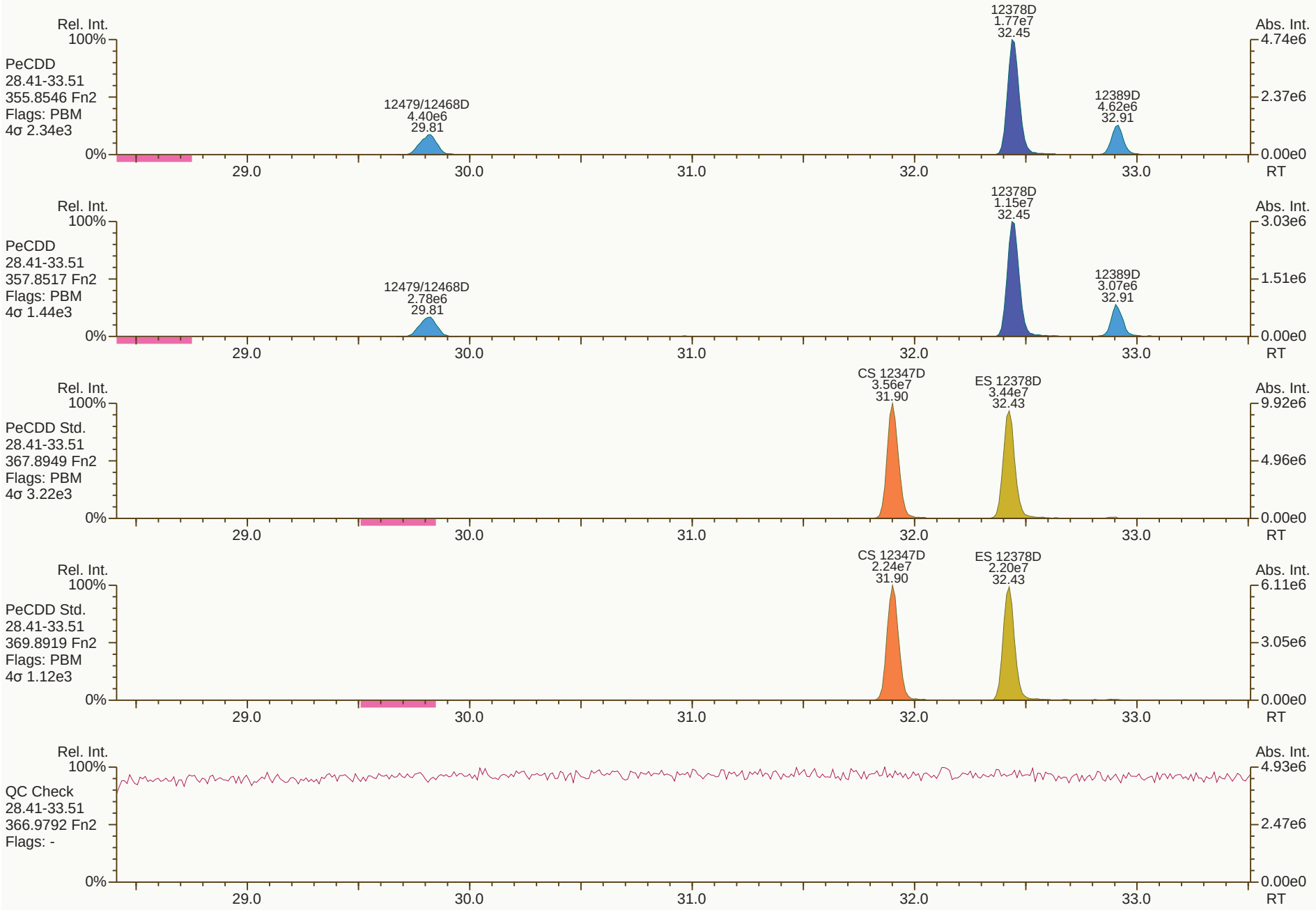
SGS ID: OPR1_17706_DF-RJ | Sample ID: 0_17706_OPR001 | Acq: 28-Aug-2020 00:53:08
Instr: [ILM] AutoSpec-Ultima HRMS3 | VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 67 | User: DTF Datafile: 200827C12



Results: P:\B4500_B4599\B4585\B4585_17706 DF\Resources\OPR1_17706_DF-RJ.utp_res, saved 28-Aug-2020 12:20 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689
PKD: 28-Aug-2020 07:46 Printed: 28-Aug-2020 12:27


Rel. Int.
100%
QC Check
19.04-28.40
316.9824 Fn1
Flags: -
0%
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Abs. Int.
5.33e6
2.66e6
0.00e0
Rel. Int.
100%
QC Check
28.41-33.51
366.9792 Fn2
Flags: -
0%
29.0
30.0
31.0
32.0
33.0
RT
Abs. Int.
4.93e6
2.47e6
0.00e0
Rel. Int.
100%
QC Check
33.52-37.61
380.9760 Fn3
Flags: -
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Abs. Int.
1.12e7
5.62e6
0.00e0
Rel. Int.
100%
QC Check
37.91-41.21
430.9728 Fn4
Flags: -
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Abs. Int.
7.61e6
3.80e6
0.00e0
Rel. Int.
100%
QC Check
41.22-44.81
454.9728 Fn5
Flags: -
0%
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Abs. Int.
9.50e6
4.75e6
0.00e0

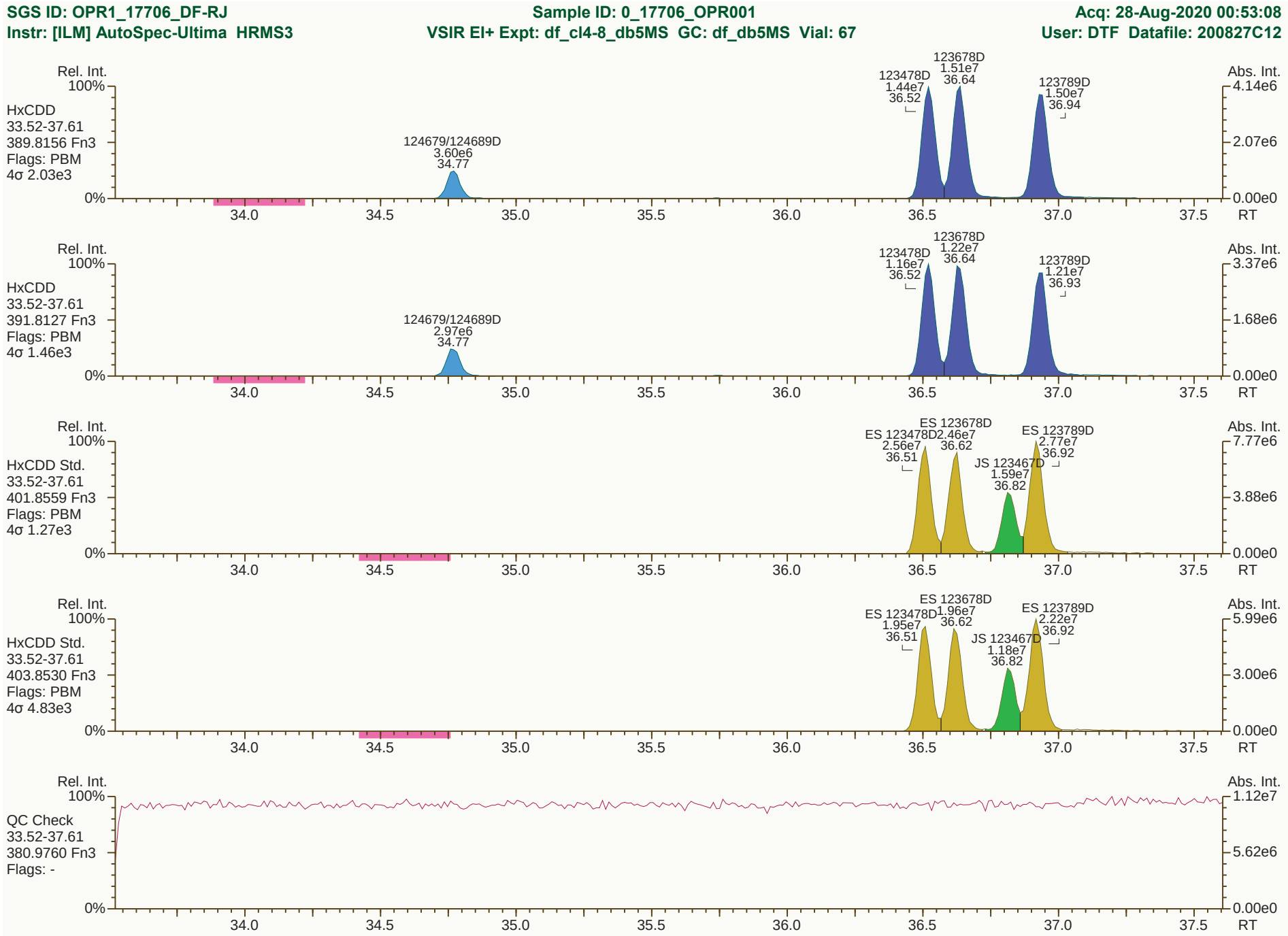

Rel. Int.
100%
TCDD
19.04-28.40
319.8965 Fn1
Flags: PBM
4σ 2.82e3
0%
1368D
4.86e6
22.55
1239D
3.19e6
26.51
2378D
3.60e6
26.67
1289D
4.60e6
27.74
Abs. Int.
1.06e6
5.32e5
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDD
19.04-28.40
321.8936 Fn1
Flags: PBM
4σ 1.33e3
0%
1368D
5.99e6
22.55
1239D
4.05e6
26.50
2378D
4.69e6
26.67
1289D
5.70e6
27.74
Abs. Int.
1.30e6
6.49e5
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
37Cl-TCDD
19.04-28.40
327.8850 Fn1
Flags: PBM
4σ 1.76e3
0%
CS 37Cl-2378D
3.08e7
26.67
Abs. Int.
6.33e6
3.16e6
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.40
331.9368 Fn1
Flags: PBM
4σ 5.88e3
0%
JS 1234D
3.13e7
25.93
ES 2378D
2.88e7
26.64
Abs. Int.
6.38e6
3.19e6
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
TCDD Std.
19.04-28.40
333.9339 Fn1
Flags: PBM
4σ 1.77e3
0%
JS 1234D
3.84e7
25.93
ES 2378D
3.57e7
26.64
Abs. Int.
8.09e6
4.05e6
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT


Rel. Int.
100%
PeCDD
28.41-33.51
355.8546 Fn2
Flags: PBM
4σ 2.34e3
0%
12479/12468D
4.40e6
29.81
12378D
1.77e7
32.45
12389D
4.62e6
32.91
Abs. Int.
4.74e6
2.37e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD
28.41-33.51
357.8517 Fn2
Flags: PBM
4σ 1.44e3
0%
12479/12468D
2.78e6
29.81
12378D
1.15e7
32.45
12389D
3.07e6
32.91
Abs. Int.
3.03e6
1.51e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.41-33.51
367.8949 Fn2
Flags: PBM
4σ 3.22e3
0%
CS 12347D
3.56e7
31.90
ES 12378D
3.44e7
32.43
Abs. Int.
9.92e6
4.96e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDD Std.
28.41-33.51
369.8919 Fn2
Flags: PBM
4σ 1.12e3
0%
CS 12347D
2.24e7
31.90
ES 12378D
2.20e7
32.43
Abs. Int.
6.11e6
3.05e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
QC Check
28.41-33.51
366.9792 Fn2
Flags: -
0%
Abs. Int.
4.93e6
2.47e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT

SGS ID: OPR1_17706_DF-RJ
Instr: [ILM] AutoSpec-Ultima HRMS3

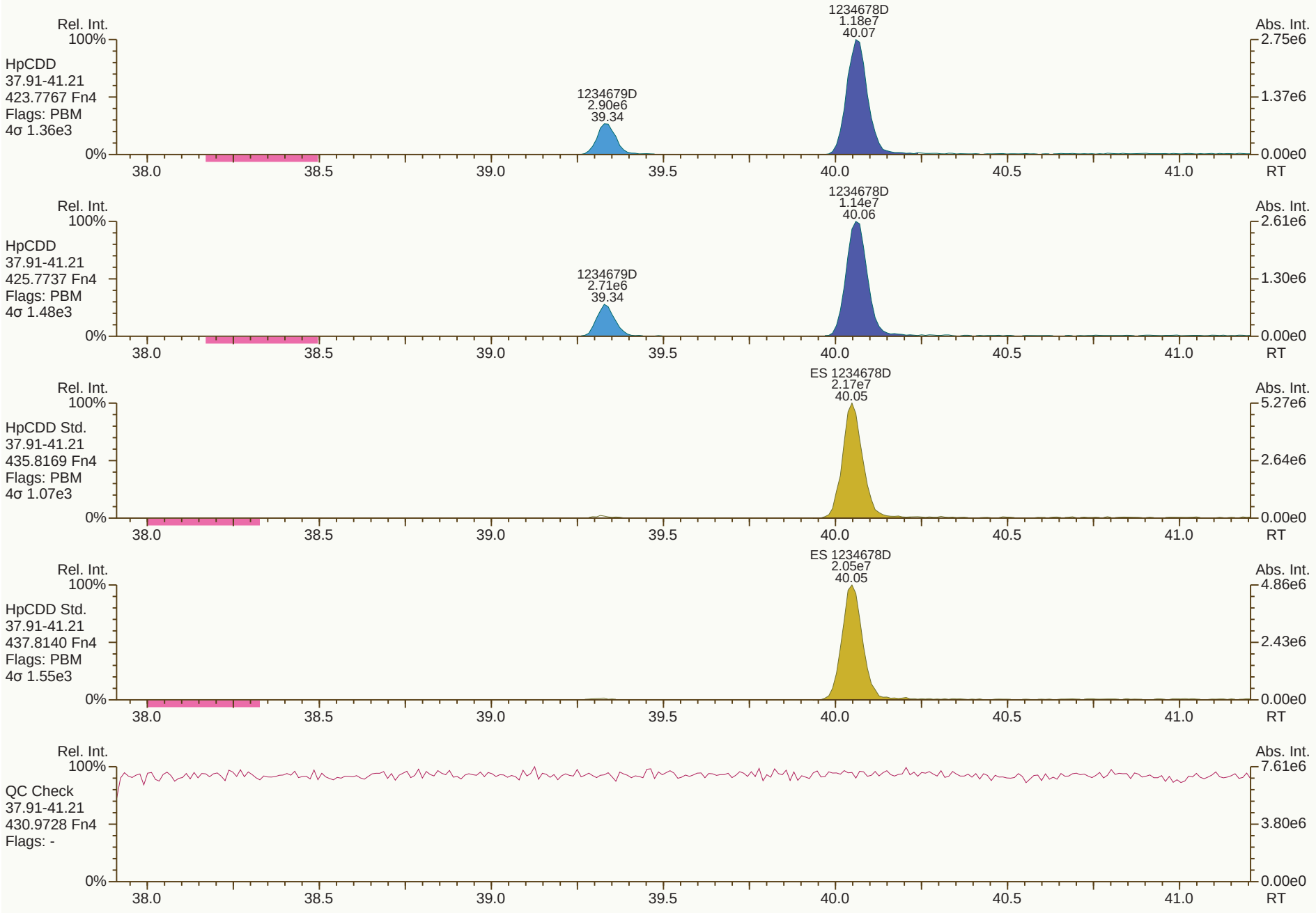
Sample ID: 0_17706_OPR001
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 67

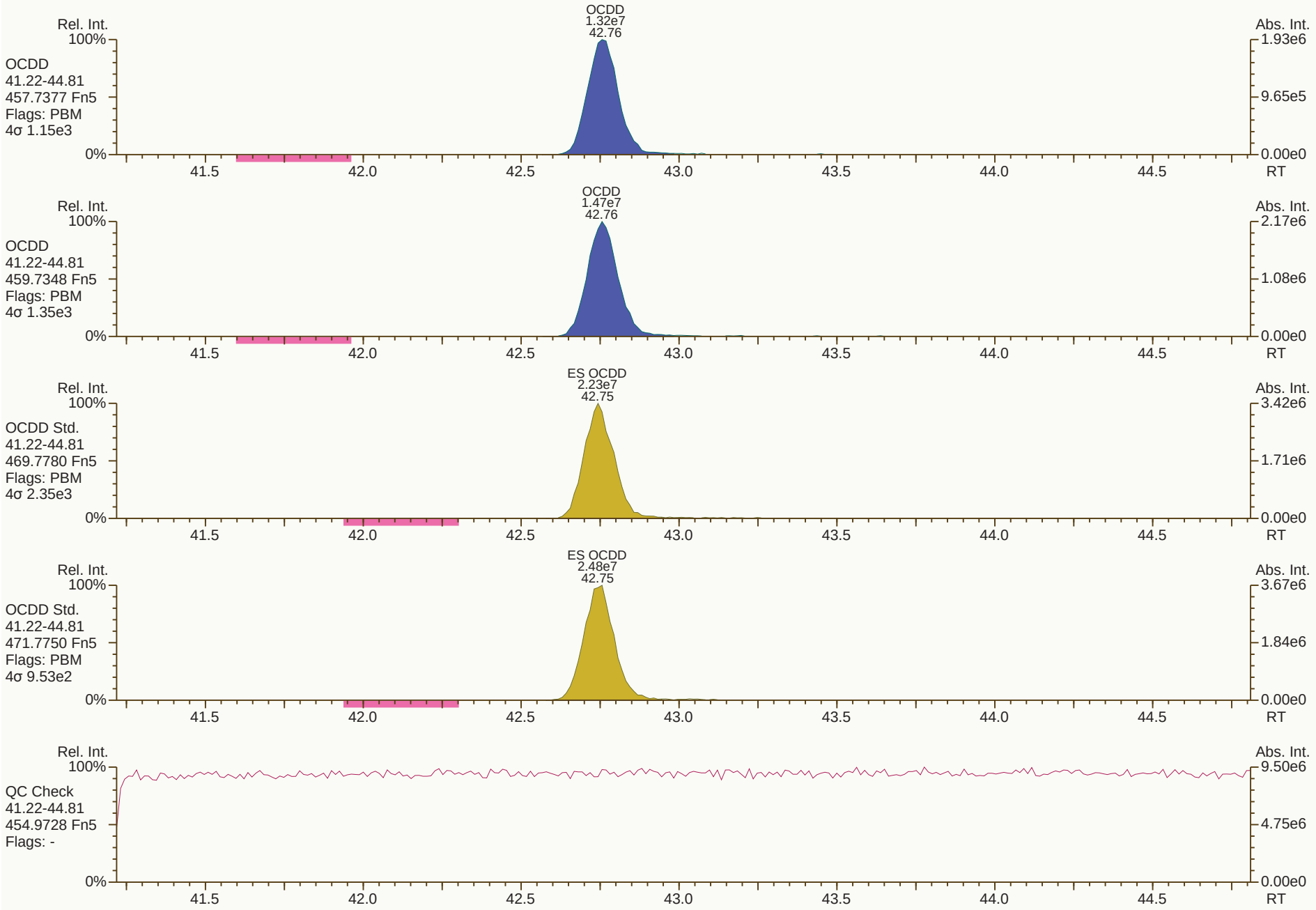
Acq: 28-Aug-2020 00:53:08
User: DTF Datafile: 200827C12

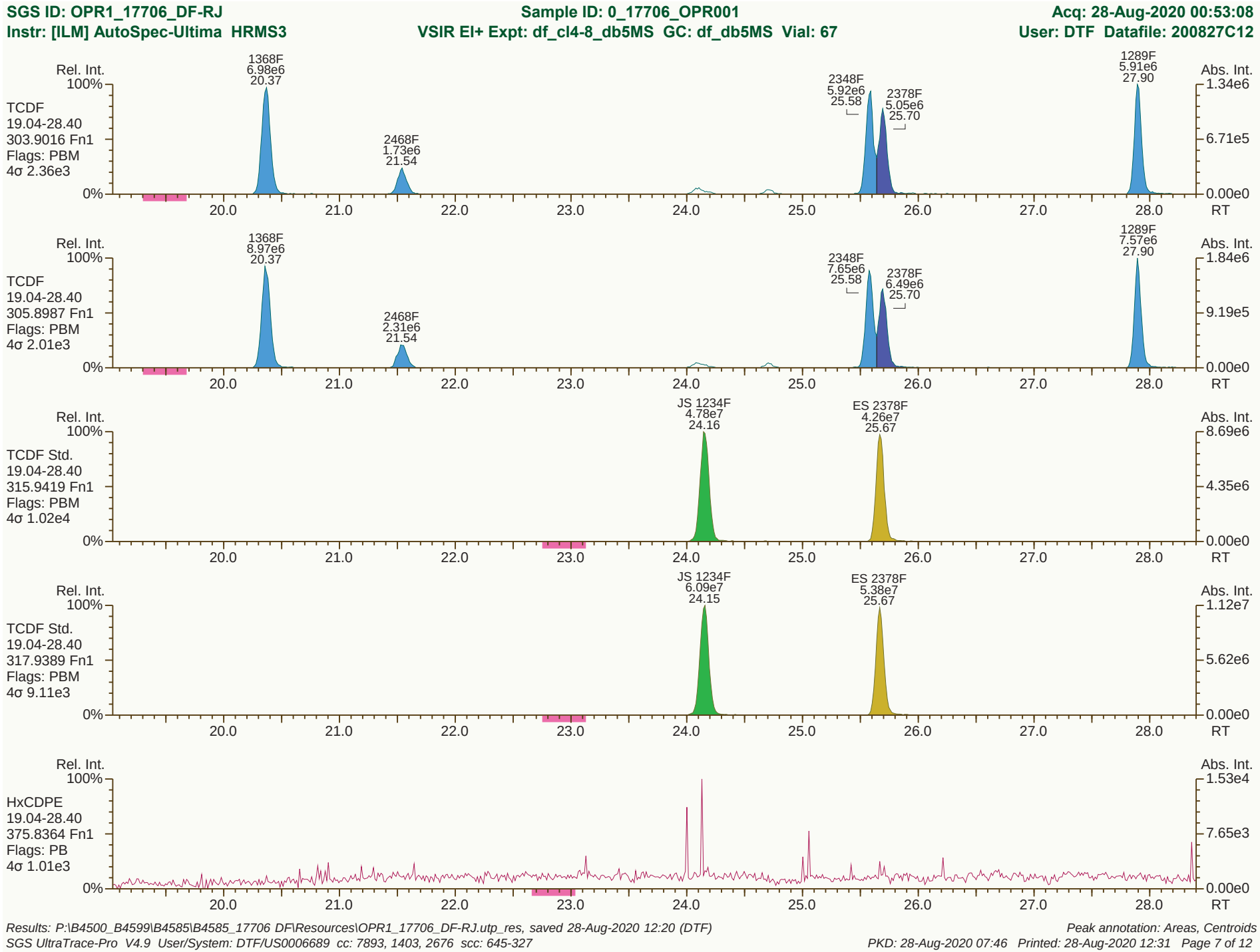


Results: P:\B4500_B4599\B4585\B4585_17706 DF\Resources\OPR1_17706_DF-RJ.utp_res, saved 28-Aug-2020 12:20 (DTF)
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 7393, 4450 scc: 645-327

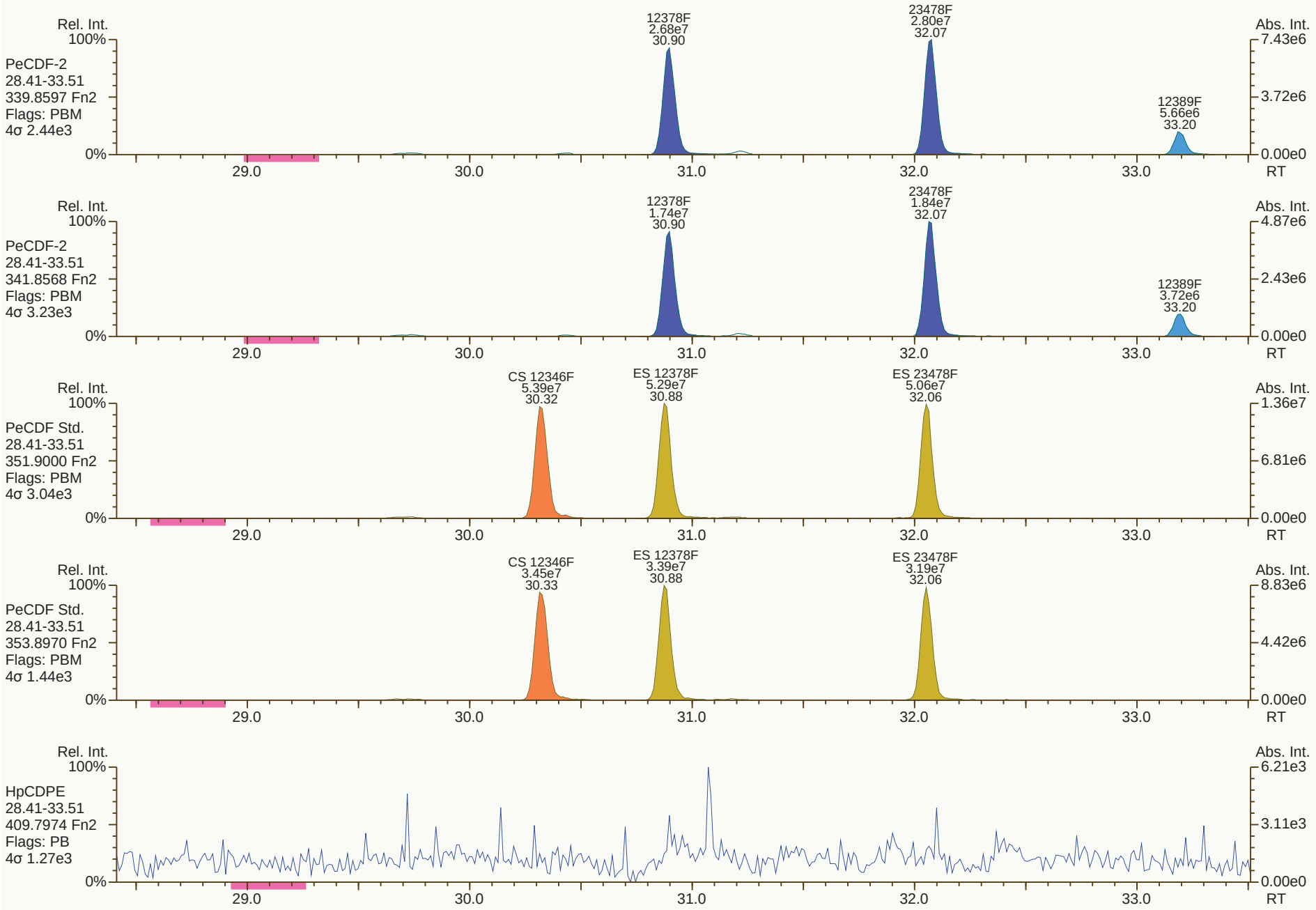
Peak annotation: Areas, Centroids
PKD: 28-Aug-2020 07:46 Printed: 28-Aug-2020 12:30 Page 4 of 12

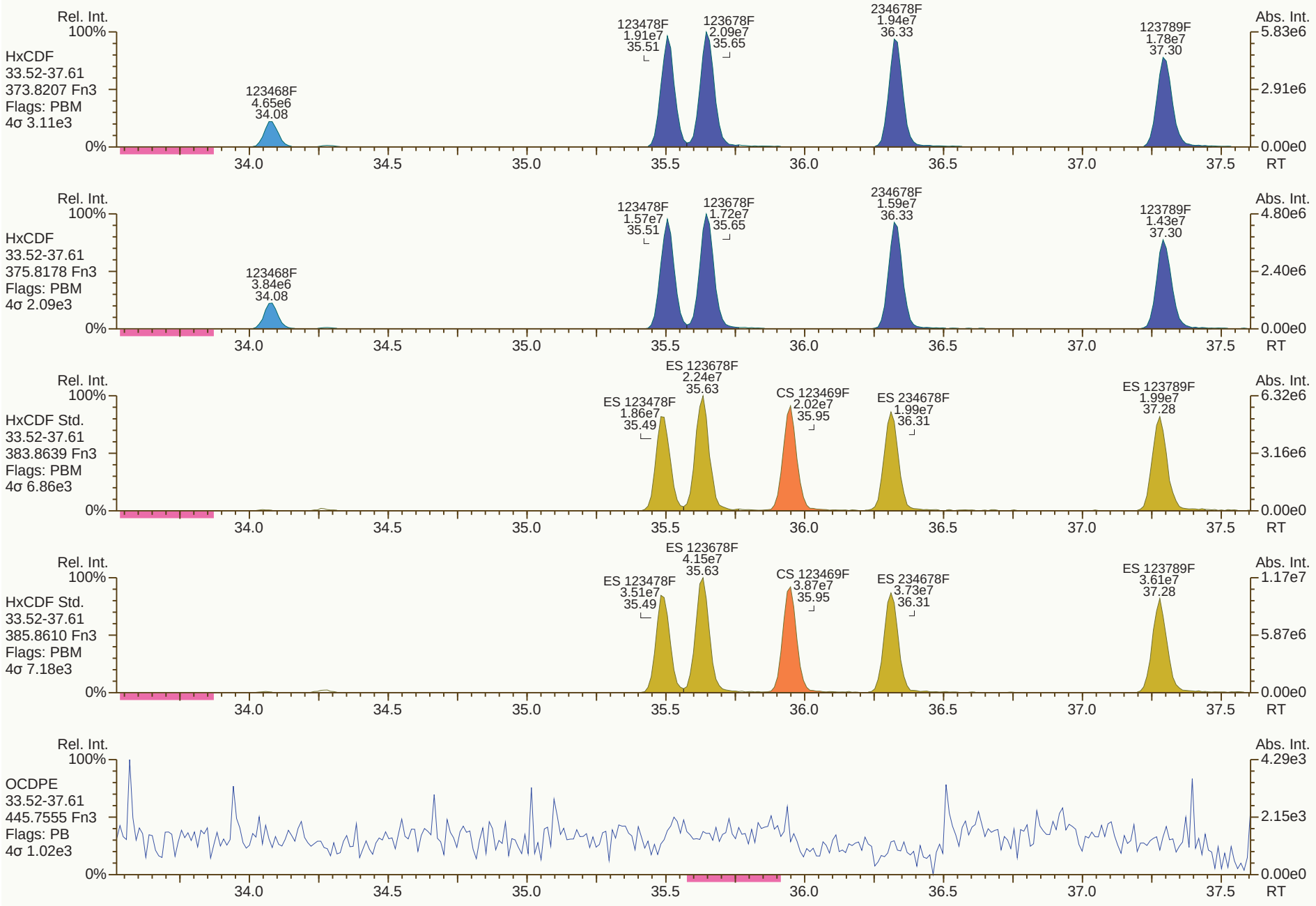

Rel. Int.
100%
HpCDD
37.91-41.21
423.7767 Fn4
Flags: PBM
4σ 1.36e3
1234678D
1.18e7
40.07
1234679D
2.90e6
39.34
Abs. Int.
2.75e6
1.37e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD
37.91-41.21
425.7737 Fn4
Flags: PBM
4σ 1.48e3
1234678D
1.14e7
40.06
1234679D
2.71e6
39.34
Abs. Int.
2.61e6
1.30e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.91-41.21
435.8169 Fn4
Flags: PBM
4σ 1.07e3
ES 1234678D
2.17e7
40.05
Abs. Int.
5.27e6
2.64e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
HpCDD Std.
37.91-41.21
437.8140 Fn4
Flags: PBM
4σ 1.55e3
ES 1234678D
2.05e7
40.05
Abs. Int.
4.86e6
2.43e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT
Rel. Int.
100%
QC Check
37.91-41.21
430.9728 Fn4
Flags: -
Abs. Int.
7.61e6
3.80e6
0.00e0
0%
38.0
38.5
39.0
39.5
40.0
40.5
41.0
RT


OCDD
1.32e7
42.76
Rel. Int.
Abs. Int.
OCDD
41.22-44.81
457.7377 Fn5
Flags: PBM
4σ 1.15e3
OCDD
1.47e7
42.76
OCDD
41.22-44.81
459.7348 Fn5
Flags: PBM
4σ 1.35e3
ES OCDD
2.23e7
42.75
OCDD Std.
41.22-44.81
469.7780 Fn5
Flags: PBM
4σ 2.35e3
ES OCDD
2.48e7
42.75
OCDD Std.
41.22-44.81
471.7750 Fn5
Flags: PBM
4σ 9.53e2
QC Check
41.22-44.81
454.9728 Fn5
Flags: -
RT


SGS ID: OPR1_17706_DF-RJ
Sample ID: 0_17706_OPR001
Acq: 28-Aug-2020 00:53:08
Instr: [ILM] AutoSpec-Ultima HRMS3
VSIR EI+ Expt: df_cl4-8_db5MS GC: df_db5MS Vial: 67
User: DTF Datafile: 200827C12
Rel. Int.
Abs. Int.
TCDF
19.04-28.40
303.9016 Fn1
Flags: PBM
4σ 2.36e3
1368F
6.98e6
20.37
2468F
1.73e6
21.54
2348F
5.92e6
25.58
2378F
5.05e6
25.70
1289F
5.91e6
27.90
1.34e6
6.71e5
0.00e0
RT
TCDF
19.04-28.40
305.8987 Fn1
Flags: PBM
4σ 2.01e3
1368F
8.97e6
20.37
2468F
2.31e6
21.54
2348F
7.65e6
25.58
2378F
6.49e6
25.70
1289F
7.57e6
27.90
1.84e6
9.19e5
0.00e0
TCDF Std.
19.04-28.40
315.9419 Fn1
Flags: PBM
4σ 1.02e4
JS 1234F
4.78e7
24.16
ES 2378F
4.26e7
25.67
8.69e6
4.35e6
0.00e0
TCDF Std.
19.04-28.40
317.9389 Fn1
Flags: PBM
4σ 9.11e3
JS 1234F
6.09e7
24.15
ES 2378F
5.38e7
25.67
1.12e7
5.62e6
0.00e0
HxCDPE
19.04-28.40
375.8364 Fn1
Flags: PB
4σ 1.01e3
1.53e4
7.65e3
0.00e0
100%
0%
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0


Rel. Int.
100%
0%
PeCDF-1
19.04-28.40
339.8597 Fn1
Flags: PBM
4σ 1.62e3
13468/12468F
4.91e6
27.89
Abs. Int.
1.22e6
6.09e5
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
0%
PeCDF-1
19.04-28.40
341.8568 Fn1
Flags: PBM
4σ 1.39e3
13468/12468F
3.08e6
27.89
Abs. Int.
7.29e5
3.64e5
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT
Rel. Int.
100%
0%
QC Check
19.04-28.40
316.9824 Fn1
Flags: -
Abs. Int.
5.33e6
2.66e6
0.00e0
20.0
21.0
22.0
23.0
24.0
25.0
26.0
27.0
28.0
RT


Rel. Int.
100%
PeCDF-2
28.41-33.51
339.8597 Fn2
Flags: PBM
4σ 2.44e3
0%
12378F
2.68e7
30.90
23478F
2.80e7
32.07
12389F
5.66e6
33.20
Abs. Int.
7.43e6
3.72e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF-2
28.41-33.51
341.8568 Fn2
Flags: PBM
4σ 3.23e3
0%
12378F
1.74e7
30.90
23478F
1.84e7
32.07
12389F
3.72e6
33.20
Abs. Int.
4.87e6
2.43e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.41-33.51
351.9000 Fn2
Flags: PBM
4σ 3.04e3
0%
CS 12346F
5.39e7
30.32
ES 12378F
5.29e7
30.88
ES 23478F
5.06e7
32.06
Abs. Int.
1.36e7
6.81e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
PeCDF Std.
28.41-33.51
353.8970 Fn2
Flags: PBM
4σ 1.44e3
0%
CS 12346F
3.45e7
30.33
ES 12378F
3.39e7
30.88
ES 23478F
3.19e7
32.06
Abs. Int.
8.83e6
4.42e6
0.00e0
29.0
30.0
31.0
32.0
33.0
RT
Rel. Int.
100%
HpCDPE
28.41-33.51
409.7974 Fn2
Flags: PB
4σ 1.27e3
0%
Abs. Int.
6.21e3
3.11e3
0.00e0
29.0
30.0
31.0
32.0
33.0
RT


Rel. Int.
100%
HxCDF
33.52-37.61
373.8207 Fn3
Flags: PBM
4σ 3.11e3
123468F
4.65e6
34.08
123478F
1.91e7
35.51
123678F
2.09e7
35.65
234678F
1.94e7
36.33
123789F
1.78e7
37.30
Abs. Int.
5.83e6
2.91e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF
33.52-37.61
375.8178 Fn3
Flags: PBM
4σ 2.09e3
123468F
3.84e6
34.08
123478F
1.57e7
35.51
123678F
1.72e7
35.65
234678F
1.59e7
36.33
123789F
1.43e7
37.30
Abs. Int.
4.80e6
2.40e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF Std.
33.52-37.61
383.8639 Fn3
Flags: PBM
4σ 6.86e3
ES 123678F
2.24e7
35.63
ES 123478F
1.86e7
35.49
CS 123469F
2.02e7
35.95
ES 234678F
1.99e7
36.31
ES 123789F
1.99e7
37.28
Abs. Int.
6.32e6
3.16e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
HxCDF Std.
33.52-37.61
385.8610 Fn3
Flags: PBM
4σ 7.18e3
ES 123678F
4.15e7
35.63
ES 123478F
3.51e7
35.49
CS 123469F
3.87e7
35.95
ES 234678F
3.73e7
36.31
ES 123789F
3.61e7
37.28
Abs. Int.
1.17e7
5.87e6
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT
Rel. Int.
100%
OCDPE
33.52-37.61
445.7555 Fn3
Flags: PB
4σ 1.02e3
Abs. Int.
4.29e3
2.15e3
0.00e0
0%
34.0
34.5
35.0
35.5
36.0
36.5
37.0
37.5
RT



Results: P:\B4500_B4599\B4585\B4585_17706 DF\Resources\OPR1_17706_DF-RJ.utp_res, saved 28-Aug-2020 12:20 (DTF)
Peak annotation: Areas, Centroids
SGS UltraTrace-Pro V4.9 User/System: DTF/US0006689 cc: 7732, 0209, 1070 scc: 645-327
Revised: 28-Aug-2020 07:46 (DTF) Printed: 28-Aug-2020 12:31 Page 11 of 12


OCDF
1.47e7
42.90
Rel. Int.
100%
OCDF
41.22-44.81
441.7428 Fn5
Flags: PBM
4σ 1.19e3
0%
Abs. Int.
2.16e6
1.08e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
OCDF
1.62e7
42.90
Rel. Int.
100%
OCDF
41.22-44.81
443.7398 Fn5
Flags: PBM
4σ 1.03e3
0%
Abs. Int.
2.39e6
1.20e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDF
2.69e7
42.89
Rel. Int.
100%
OCDF Std.
41.22-44.81
453.7830 Fn5
Flags: PBM
4σ 1.19e3
0%
Abs. Int.
4.10e6
2.05e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
ES OCDF
2.96e7
42.88
Rel. Int.
100%
OCDF Std.
41.22-44.81
455.7801 Fn5
Flags: PBM
4σ 1.39e3
0%
Abs. Int.
4.46e6
2.23e6
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT
Rel. Int.
100%
DCDPE
41.22-44.81
513.6775 Fn5
Flags: PB
4σ 1.12e3
0%
Abs. Int.
4.30e3
2.15e3
0.00e0
41.5
42.0
42.5
43.0
43.5
44.0
44.5
RT

APPENDIX D

DATA VALIDATION NARRATIVE

DATA VALIDATION REPORT

KERR-MCGEE CHEMICAL CORPORATION SITE
NAVASSA, NORTH CAROLINA
OU1 SOIL SAMPLING 2020

Prepared for:

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August 28, 2020

Approved for Release:



Christine Ransom
Senior Project Chemist
EcoChem, Inc.

PROJECT NARRATIVE

Basis for the Data Validation

This report summarizes the results of compliance (EPA Stage 2A) and full validation (EPA Stage 3/4) performed on soil and associated quality control sample data for the former Kerr-McGee Chemical Corporation Site, Navassa, North Carolina. A complete list of samples is provided in the Sample Index.

Analyses were performed by SGS North America, Orlando, FL, with the exception of Dioxins/Furans which were analyzed at the Wilmington, North Carolina lab. The analytical methods and EcoChem project chemists are listed in the following table:

ANALYSIS	METHOD	PRIMARY REVIEW	SECONDARY REVIEW
Dioxins/Furans	8290A	B. Frans	C. Ransom
Pentachlorophenol (PCP)	SW8270E	E. Clayton	
Polycyclic Aromatic Hydrocarbons (PAH)	SW8270E SIM		
Total Solids	SM2540G		

The data were reviewed using guidance and quality control criteria documented in the analytical methods; *Quality Assurance Project Plan, Kerr-McGee Chemical Corporation – Navassa Superfund Site, Navassa, North Carolina* (EarthCon, September 2015); National *Functional Guidelines for Organic Superfund Methods Data Review* (USEPA 2017); and *National Functional Guidelines for High Resolution Superfund Methods Data Review* (USEPA 2016).

EcoChem's goal in assigning data assessment qualifiers is to assist in proper data interpretation. If values are estimated (J or UJ), data may be used for site evaluation and risk assessment purposes but reasons for data qualification should be taken into consideration when interpreting sample concentrations. Data that have been rejected are flagged with (R). Rejected data should not be used for any purpose. If values have no data qualifier assigned, then the data meet the data quality objectives as stated in the documents and methods referenced above.

Validation criteria are included as Appendix A. The qualified data summary table (QDST) is included as Appendix B. Data Validation Worksheets and project associated communications will be kept on file at EcoChem, Inc. A qualified laboratory electronic data deliverable (EDD) is also submitted.

Sample Index
Kerr McGee Navassa Site - OU1 Soil Sampling 2020

SDG	Sample ID	Lab ID	SVOC	SIM PAH	Dioxins
FA77576	CS-TB-07	FA77576-1	✓	✓	
FA77576	CS-SS-106	FA77576-2	✓	✓	
FA77576	CS-27	FA77576-3	✓	✓	
FA77576	CS-35	FA77576-4	✓	✓	
FA77576	CS-37	FA77576-5	✓	✓	
FA77576	CS-SS-109	FA77576-6	✓	✓	
FA77576	DUP-02	FA77576-7	✓	✓	
FA77576	CS-36	FA77576-8	✓	✓	
FA77576	CS-39	FA77576-9	✓	✓	
FA77576	CS-32	FA77576-10	✓	✓	
FA77576	CS-28	FA77576-11	✓	✓	
FA77576	CS-34	FA77576-12	✓	✓	
FA77576	CS-38	FA77576-13	✓	✓	
FA77576	CS-33	FA77576-14	✓	✓	
FA77581	CS-SS-104	FA77581-1	✓	✓	
FA77581	CS-23	FA77581-2	✓	✓	
FA77581	CS-SS-101	FA77581-3	✓	✓	
FA77581	CS-22	FA77581-4	✓	✓	
FA77581	CS-24	FA77581-5	✓	✓	
FA77581	CS-R1SB-02	FA77581-6	✓	✓	
FA77581	SS-108-D	FA77581-7	✓	✓	
FA77581	CS-SB-125	FA77581-8	✓	✓	
FA77581	CS-25	FA77581-9	✓	✓	
FA77581	CS-26	FA77581-10	✓	✓	
FA77615	CS-29	FA77615-1	✓	✓	
FA77615	CS-30	FA77615-2	✓	✓	
FA77615	CS-31	FA77615-3	✓	✓	
FA77615	DUP-01	FA77615-4	✓	✓	
FA77615	CS-40	FA77615-5	✓	✓	
FA77615	CS-41	FA77615-6	✓	✓	
FA77615	CS-42	FA77615-7	✓	✓	
FA77615	CS-43	FA77615-8	✓	✓	
FA77615	CS-44	FA77615-9	✓	✓	
FA77615	CS-45	FA77615-10	✓	✓	
FA77615	CS-54	FA77615-11	✓	✓	
FA77615	CS-46	FA77615-12	✓	✓	
FA77615	CS-47	FA77615-13	✓	✓	
FA77689	CS-55	FA77689-1	✓	✓	
FA77689	CS-50	FA77689-2	✓	✓	
FA77689	CS-51	FA77689-3	✓	✓	

Sample Index
Kerr McGee Navassa Site - OU1 Soil Sampling 2020

SDG	Sample ID	Lab ID	SVOC	SIM PAH	Dioxins
FA77689	FB-02	FA77689-4	✓	✓	
FA77689	EB-02	FA77689-5	✓	✓	
FA77689	EB-03	FA77689-6	✓	✓	
FA77689	EB-04	FA77689-7	✓	✓	
FA77689	CS-48	FA77689-8	✓	✓	
FA77689	CS-52	FA77689-9	✓	✓	
FA77689	DUP-03	FA77689-10	✓	✓	
FA77689	CS-49	FA77689-11	✓	✓	
FA77689	EB-07	FA77689-12	✓	✓	
B4511	CS-22	B4511_17654_DF_005			✓
B4511	CS-23	B4511_17654_DF_004			✓
B4511	CS-26	B4511_17654_DF_006			✓
B4511	CS-SS-101	B4511_17654_DF_001			✓
B4511	CS-24	B4511_17654_DF_003			✓
B4511	CS-SB-125	B4511_17654_DF_002			✓
B4511	CS-SS-104	B4511_17654_DF_008			✓
B4511	CS-25	B4511_17654_DF_007			✓
B4511	CS-RISB02	B4511_17654_DF_010			✓
B4511	SS-108-D	B4511_17654_DF_009			✓
B4519	CS-38	B4519_17655_DF_006			✓
B4519	CS-34	B4519_17655_DF_005			✓
B4519	CS-35	B4519_17655_DF_008			✓
B4519	CS-39	B4519_17655_DF_007			✓
B4519	CS-28	B4519_17655_DF_002			✓
B4519	CS-27	B4519_17655_DF_001			✓
B4519	CS-33	B4519_17655_DF_004			✓
B4519	CS-32	B4519_17655_DF_003			✓
B4519	CS-SS-109	B4519_17655_DF_014			✓
B4519	CS-SS-106	B4519_17655_DF_013			✓
B4519	CS-37	B4519_17655_DF_010			✓
B4519	CS-36	B4519_17655_DF_009			✓
B4519	CS-TB-07	B4519_17655_DF_012			✓
B4519	DUP-02	B4519_17655_DF_011			✓
B4526	CS-41	B4526_17662_DF_006			✓
B4526	CS-42	B4526_17662_DF_007			✓
B4526	CS-30	B4526_17662_DF_002			✓
B4526	CS-29	B4526_17662_DF_001			✓
B4526	DUP-01	B4526_17662_DF_004			✓
B4526	CS-40	B4526_17662_DF_005			✓
B4526	CS-31	B4526_17662_DF_003			✓

Sample Index
Kerr McGee Navassa Site - OU1 Soil Sampling 2020

SDG	Sample ID	Lab ID	SVOC	SIM PAH	Dioxins
B4526	CS-47	B4526_17662_DF_013			✓
B4526	CS-46	B4526_17662_DF_012			✓
B4526	CS-44	B4526_17662_DF_009			✓
B4526	CS-43	B4526_17662_DF_008			✓
B4526	CS-54	B4526_17662_DF_011			✓
B4526	CS-45	B4526_17662_DF_010			✓
B4527	EB-02	B4527_17665_DF_004			✓
B4527	FB-02	B4527_17665_DF_003			✓
B4527	EB-03	B4527_17665_DF_005			✓
B4527	FB-01	B4527_17665_DF_001			✓
B4527	EB-01	B4527_17665_DF_002			✓
B4527	EB-04	B4527_17665_DF_006			✓
B4527	EB-07	B4527_17665_DF_007			✓
B4528	CS-48	B4528_17661_DF_004			✓
B4528	CS-51	B4528_17661_DF_003			✓
B4528	CS-52	B4528_17661_DF_005			✓
B4528	CS-55	B4528_17661_DF_001			✓
B4528	CS-50	B4528_17661_DF_002			✓
B4528	DUP-03	B4528_17661_DF_006			✓
B4528	CS-49	B4528_17661_DF_007			✓

DATA VALIDATION REPORT
Kerr McGee Navassa Site – OU1 Soil Sampling 2020
Semi-Volatile Organic Compounds by SW8720E, Pentachlorophenol by SW8270E SIM, and Total Solids by SM 2540

This report documents the review of analytical data from the analysis of soil samples and the associated laboratory and field quality control (QC) samples. Samples were analyzed by SGS North America, Orlando, Florida. Refer to the Sample Index for a complete list of samples.

SDG	NUMBER OF SAMPLES	VALIDATION LEVEL
FA77576	14 Soil	EPA Stage 2A
FA77581	10 Soil	EPA Stage 2A
FA77615	13 Soil	EPA Stage 2A
FA77689	7 Soil, 4 Equipment Blank, 1 Field Blank	EPA Stage 4 (2A for blanks)

DATA PACKAGE COMPLETENESS

The laboratory submitted all required deliverables. The laboratory followed adequate corrective action processes and all anomalies were discussed in the case narrative.

The duplicate sample summaries for the total solids analyses were missing from the laboratory report. The laboratory was contacted and submitted the missing documentation.

EDD TO HARDCOPY VERIFICATION

The electronic data deliverable (EDD) was verified against the laboratory portable document format (PDF) data package. No transcription errors were found.

TECHNICAL DATA VALIDATION

The QC requirements that were reviewed are listed below.

1	Sample Receipt, Preservation, and Holding Times	2	Matrix Spike/Matrix Spike Duplicates (MS/MSD)
✓	GC/MS Instrument Performance (Full DV only)	✓	Internal Standards (Full DV only)
✓	Initial Calibration (ICAL) (Full DV only)	2	Field Duplicates
✓	Continuing Calibration Verification (CCV) (Full DV only)	✓	Target Analyte List
✓	Laboratory Blanks	1	Reporting Limits
1	Field Blanks	✓	Reported Results
✓	Surrogate Compounds	✓	Compound Identification (Full DV only)
✓	Laboratory Control Samples (LCS)	1	Calculation Verification (Full DV only)

✓Stated method quality objectives (MQO) and QC criteria have been met. No outliers are noted or discussed
1 Quality control outliers are discussed below, but no data were qualified.
2 Quality control outliers that impact the reported data were noted. Data qualifiers were issued as discussed below.

Sample Receipt, Preservation, and Holding Times

SDGs FA77576, FA77581: Some sample coolers were received at temperatures less than the lower control limit between 0.1 to 1.4°C. Results were not adversely affected by the temperature outliers; no action was taken.

SDG FA77576: Sample CS-24 listed on the chain-of-custody (COC) was logged in as Sample CS-34 as per confirmation from the client.

Field Blanks

SDG FA77689: One field blank, FB-02, and four equipment blanks, EB-02, EB-03, EB-04, and EB-07 were submitted. No target analytes were detected in these blanks.

Matrix Spike/Matrix Spike Duplicates

Matrix spike/matrix spike duplicate (MS/MSD) samples were analyzed at the required frequency. Lab limits were used to evaluate the MS/MSD recoveries. No data were qualified if only one of the MS or MSD recoveries was outside of the control limits. Qualifiers for %R value outliers were only issued to the parent sample. The following outliers resulted in qualification of data:

SDG	Parent ID	Analyte	MS %R	MSD %R	RPD	Bias	Qualifier
FA77581	CS-24	Fluoranthene	171	155	--	High	J-8H
		Pyrene	159	153	--	High	J-8H
		Chrysene	135	114	--	High	J-8H
		Benzo(a)anthracene	126	132	--	High	J-8H

Field Duplicates

The relative percent difference (RPD) control limit is 50% for results greater than 5x the reporting limit (RL). For results < 5x the RL, the difference between the sample and duplicate must be less than 2x the RL.

SDG FA77576: Samples CS-55 & DUP-02 were identified as field duplicates. All acceptance criteria were met.

SDG FA77615: Samples CS-29 & DUP-01 were identified as field duplicates. All acceptance criteria were met.

SDG FA77689: Samples CS-48 & DUP-03 were identified as field duplicates. For fluoranthene, the difference between the two results was greater than 2x the RL. The fluoranthene results for these two samples were estimated (J-9).

Reporting Limits

Reporting limits specified in the QAPP were not met for several analytes due to required dilutions and possible matrix interferences.

Calculation Verification

SDG FA77689: Several results were verified by recalculation from the raw data. No calculation or transcription errors were found.

OVERALL ASSESSMENT

As determined by this evaluation, the laboratory followed the specified analytical method. With the exceptions noted above, accuracy was acceptable as demonstrated by the surrogate, laboratory control sample, and MS/MSD percent recovery values and precision was acceptable as demonstrated by the MS/MSD and field duplicate RPD values.

Results were estimated based on MS/MSD percent recovery outliers and a field duplicate precision outlier.

All data, as qualified, are acceptable for use.

DATA VALIDATION REPORT
Kerr McGee Navassa Site – OU1 Soil Sampling 2020
Dioxin/Furan Compounds by EPA Method 8290A

This report documents the review of analytical data from the analysis of soil samples and the associated laboratory and field quality control (QC) samples. Samples were analyzed by SGS North America, Wilmington, North Carolina. Refer to the Sample Index for a complete list of samples.

SDG	Number of Samples and Matrix	Validation Level
B4511	10 Soil	EPA Stage 2A
B4519	14 Soil	EPA Stage 2A
B4527	4 Equipment Blank & 1 Field Blank	EPA Stage 2A
B4528	7 Soil	EPA Stage 4

DATA PACKAGE COMPLETENESS

The laboratory submitted all required deliverables in the initial data packages. The laboratory was contacted and supplied the missing documentation. The laboratory followed adequate corrective action processes and all anomalies were discussed in the case narrative.

EDD TO HARDCOPY VERIFICATION

All sample IDs and results reported in the electronic data deliverable (EDD) were verified (100% verification) by comparing the EDD to the hardcopy laboratory data package. Ten percent (10%) of the laboratory QC results were also verified. The following discrepancies were noted:

The basis field in the EDD was not populated. The basis for QC samples that were not dry weight corrected were updated to "WET"; field samples were updated to "DRY".

The sample matrix for MS/MSD and field duplicate samples were reported in the EDD as SQ (soil QC); the sample matrix code was updated to SO.

SDG B4511. Although it agrees with the CoC, the ID for Sample CS-RISB02 is different than the ID of CS-R1SB-02 used in the SGS Orlando data.

SDGs B4511 and B4519: The sample matrix in the EDD was reported as SE (Sediment). The COC reported the matrix as SO (Soil). The EDD was updated with the correct matrix code.

TECHNICAL DATA VALIDATION

The quality control (QC) requirements that were reviewed are listed in the following table.

✓	Sample Receipt, Preservation, and Holding Times	✓	Ongoing Precision and Recovery (OPR)
✓	System Performance and Resolution Checks (Full DV only)	2	Field Duplicates
✓	Initial Calibration (ICAL) (Full DV only)	✓	Target Analyte List
✓	Calibration Verification (CCAL) (Full DV only)	✓	Reporting Limits
2	Laboratory Blanks	2	Compound Identification
1	Field Blanks	2	Compound Quantitation (Full DV only)
✓	Labeled Compound Recovery	1	Calculation Verification (Full DV only)
✓	Matrix Spike/Matrix Spike Duplicates (MS/MSD)		

✓Method quality objectives (MQO) and QC criteria have been met. No outliers are noted or discussed.
1 Quality control results are discussed below, but no data were qualified.
2 Quality control outliers that impact the reported data were noted. Data qualifiers were issued as discussed below.

Laboratory Blanks

To assess the impact of any blank contaminant on the reported sample results, an action level is established at five times (5x) the concentration reported in the blank. If a contaminant is reported in an associated field sample and the concentration is less than the action level, the result is qualified as not detected (U-7). No action is taken if the sample result is greater than the action level, or for non-detected results. The laboratory assigned EMPC-flags to values when a peak was detected but did not meet identification criteria. These values cannot be considered as positive identifications but are "estimated maximum possible concentrations". When these occurred in the method blank the results were considered as false positives. No action levels were established for these analytes. In addition, homolog groups are not evaluated for blanks.

SDG B4519. The compounds 1234678-HPCDD and OCCD were detected in the method blank. Results for these analytes in the associated samples were greater than the action levels; no data were qualified.

SDG B4527. The compounds 1234678-HPCDD and OCCD were detected in the method blank. Results for OCDD in samples FB-01 and EB-01 were less than the action level and were qualified as not-detected (U-7).

Field Blanks

SDG B4527: Two field blanks, FB-01 and FB-02, and five equipment blanks, EB-01, EB-02, EB-03, EB-04, and EB-07 were submitted and analyzed. After qualification based on method blank contamination and EMPCs, there were no positive results or the individual congeners. Total homolog groups are not evaluated. No qualification of data was necessary based on potential field contamination.

Field Duplicates

For sediment samples, the RPD control limit is 50% for results greater than 5x the reporting limit (RL). For results less than 5x the RL, the difference between the sample and duplicate must be less than 2x the RL. Field duplicates and any outliers are noted below:

SDG B4519: Samples CS-35 and DUP-02 were submitted as field duplicates. All field precision criteria were met.

SDG B4526: Samples CS-29 and DUP-01 were submitted as field duplicates. All field precision criteria were met.

SDG B4528: Samples CS-48 and DUP-03 were submitted as field duplicates. The RPD or difference values for results that greater than control limit for analytes 1234678-HpCDD, OCDD, Total HpCDD, Total HxCDD, Total TCDD, and Total TCDF greater than the control limits. Results for these analytes in these two samples were estimated (J-9).

Compound Identification

The method requires the confirmation of 2,3,7,8-TCDF detects using an alternate GC column when closely eluting TCDF isomers cannot be adequately separated on the primary column. The laboratory uses an RTX-Dioxin2 column, which has been proven to adequately resolve the TCDF isomers. Confirmation of hits for 2,3,7.8-TCDF was not necessary.

The laboratory reported "estimated maximum possible concentrations" values (EMPC) for one or more of the target analytes. An EMPC value is reported when a peak was detected but did not meet the ion ratio identification criteria specified in the method. These EMPC results are not considered to be positive identifications for the analytes. To indicate that the reported result for an individual analyte is in effect an elevated detection limit, the EMPC values were qualified as not detected (U-25) at the reported values. An EMPC flag was also added to the Total homolog group values if one or more of the individual congeners was reported as an EMPC. The results for totals with EMPC flags were estimated (J-25).

Compound Quantitation

SG B4519: The Total HpCDD result for Sample CS-37 was flagged with an "E" by the laboratory to indicate the result exceeded the calibration range. This result was estimated (J-20).

Calculation Verification

SDG B4528: Several results were verified by recalculation from the raw data. No calculation or transcription errors were found.

OVERALL ASSESSMENT

As determined by this evaluation, the laboratory performed the specified analytical method. With the exceptions noted above, accuracy was acceptable as demonstrated by the labeled compound, OPR (blank spike), and matrix spike/matrix spike duplicate (MS/MSD) recoveries and precision was acceptable as indicated by the MS/MSD and field duplicate RPD values.

Detection limits were elevated based on method blank contamination and ion ratio outliers (EMPC values). Total homolog groups with EMPC values were estimated. Data were also estimated based on field precision outliers. One total HpCDD result was estimated for exceeding the calibration range.

All data, as qualified, are acceptable for use.

ECOCHEM
Data Quality

APPENDIX A

DATA QUALIFIER DEFINITIONS
REASON CODES
AND CRITERIA TABLES

DATA VALIDATION QUALIFIER CODES
Based on National Functional Guidelines

The following definitions provide brief explanations of the qualifiers assigned to results in the data review process.

U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents the approximate concentration.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

The following is an EcoChem qualifier that may also be assigned during the data review process:

DNR	Do not report; a more appropriate result is reported from another analysis or dilution.

DATA QUALIFIER REASON CODES

Group	Code	Reason for Qualification
Sample Handling	1	Improper Sample Handling or Sample Preservation (i.e., headspace, cooler temperature, pH, summa canister pressure); Exceeded Holding Times
Instrument Performance	24	Instrument Performance (i.e., tune, resolution, retention time window, endrin breakdown, lock-mass)
	5A	Initial Calibration (RF, %RSD, r^2)
	5B	Calibration Verification (CCV, CCAL; RF, %D, %R) Use bias flags (H,L)[1] where appropriate
	5C	Initial Calibration Verification (ICV %D, %R) Use bias flags (H,L)[1] where appropriate
Blank Contamination	6	Field Blank Contamination (Equipment Rinsate, Trip Blank, etc.)
	7	Lab Blank Contamination (i.e., method blank, instrument blank, etc.) Use low bias flag (L)[1] for negative instrument blanks
Precision and Accuracy	8	Matrix Spike (MS and/or MSD) Recoveries Use bias flags (H,L)[1] where appropriate
	9	Precision (all replicates: LCS/LCSD, MS/MSD, Lab Replicate, Field Replicate)
	10	Laboratory Control Sample Recoveries (a.k.a. Blank Spikes) Use bias flags (H,L)[1] where appropriate
	12	Reference Material Use bias flags (H,L)[1] where appropriate
	13	Surrogate Spike Recoveries (a.k.a. labeled compounds, recovery standards) Use bias flags (H,L)[1] where appropriate
Interferences	16	ICP/ICP-MS Serial Dilution Percent Difference
	17	ICP/ICP-MS Interference Check Standard Recovery Use bias flags (H,L)[1] where appropriate
	19	Internal Standard Performance (i.e., area, retention time, recovery)
	22	Elevated Detection Limit due to Interference (i.e., chemical and/or matrix)
	23	Bias from Matrix Interference (i.e. diphenyl ether, PCB/pesticides)
Identification and Quantitation	2	Chromatographic pattern in sample does not match pattern of calibration standard
	3	2nd column confirmation (RPD or %D)
	4	Tentatively Identified Compound (TIC) (associated with NJ only)
	20	Calibration Range or Linear Range Exceeded
	25	Compound Identification (i.e., ion ratio, retention time, relative abundance, etc.)
Miscellaneous	11	A more appropriate result is reported (multiple reported analyses i.e., dilutions, re-extractions, etc. Associated with "R" and "DNR" only)
	14	Other (See DV report for details)
	26	Method QC information not provided

[1] H = high bias indicated
L = low bias indicated

Semivolatile Organic Compounds by Gas Chromatography-Mass Spectroscopy (GC-MS)
(Based on NFG 1999 & 2008 and SW-846 Method 8270D)

QC Element	Acceptance Criteria	Source of Criteria	Action for Non-Conformance	Reason Code	Discussion and Comments
Sample Handling					
Cooler/Storage Temperature Preservation	4°C±2°C sediment/tissues may require storage at -20°C	NFG (1) Method (3)	**If required by project:** J (pos)/UJ (ND) if greater than 6° C	1	Use **PJ** for temp outliers; see **TM20** Current SW846 criterion is ≤ 6° C (3)
Holding Time	**Extraction Aqueous:** 7 days from collection **Extraction Solid:** 14 days from collection **Analysis (all matrices)**: 40 days from extraction Holding time may be extended to 1 year for frozen sediments/tissues	NFG (1) Method (3)	J (pos)/UJ (ND) if HT exceeded J (pos)/R (ND) if gross exceedance (> 2x HT)	1	Gross exceedance = > 2x HT, as per 1999 NFG
Instrument Performance					
Tuning	DFTPP Beginning of each 12 hour period Use method or project acceptance criteria	NFG (1) Method (3)	R (pos/ND) all analytes in all samples associated with the tune	24	
Initial Calibration **Sensitivity**	RRF ≥ 0.05 except: RRF ≥ 0.01 poor responders *	NFG (1) Method (3)	Use **PJ** to qualify J (pos)/UJ (ND)	5A	**TM-06** EcoChem Policy for the Evaluation and Qualification of GCMS Instrument Performance **PJ** - no action if response is stable (ICAL RSD and CCAL %D acceptable)
Initial Calibration **Stability**	Minimum 5 standards %RSD ≤ 20.0% except: %RSD ≤ 40.0% poor responders * **or** co-efficient of determination (r^2) > 0.99	NFG (1) Method (3)	J (pos) if %RSD > limit **or** r^2 value <0.99	5A	
Initial Calibration Verification Check	Prepared from second source; analyze after each ICAL Percent recovery limits = 70-130%	Method (3)	J (pos) %R > UCL J (pos)/UJ (ND) %R < LCL	5A (H,L)[4]	QAPP may have overriding accuracy limits.

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Semivolatile Organic Compounds by Gas Chromatography-Mass Spectroscopy (GC-MS)
(Based on NFG 1999 & 2008 and SW-846 Method 8270D)

QC Element	Acceptance Criteria	Source of Criteria	Action for Non-Conformance	Reason Code	Discussion and Comments
Instrument Performance (continued)					
Continuing Calibration **Sensitivity**	RRF ≥ 0.05 except: RRF ≥ 0.01 poor responders *	NFG [1] Method [3]	Use **PJ** to qualify J (pos)/UJ (ND)	5B	see ICAL RRF guidance
Continuing Calibration **Stability**	Prior to sample analysis and every 12 hours %D ≤ 25% except: %D ≤ 40.0% poor responders *	NFG [1] Method [3]	J (pos) - %D > control limit (high bias) J (pos)/UJ (ND) - %D < -control limit (low bias)	5B (H,L)[4]	
Blank Contamination					
Method Blank (MB)	MB: One per matrix per batch of (of ≤ 20 samples) No detected compounds > MDL	NFG [2] Method [3]	U(pos) if result is < 5X or 10X action level	7	10X action level applies to phthalates only. 5X for all other target analytes **Hierarchy of blank review:** **#1 - Review MB, qualify as needed** **#2 - Review FB , qualify as needed** **Note: Actions as per 1999 NFG**
	No TICs present		R (pos) TICs using 10X rule	7	
Field Blank (FB)	No detected compounds > MDL	NFG [2] Method [3]	U (pos) if result is < 5X or 10X action level	6	
Precision and Accuracy					
LCS/LCSD (recovery)	One per matrix per batch (of ≤ 20 samples) LCSD not required by NFG or method Use method acceptance criteria/laboratory limits	Method [3]	J (pos) if %R > UCL J (pos)/UJ (ND) if %R < LCL J (pos)/R (ND)%R < 10%	10 (H,L)[4]	No action if only one spike %R is outside criteria when LCSD is analyzed, unless one recovery is <10%. QAPP may have overriding accuracy limits. Qualify all associated samples.
LCS/LCSD (RPD)	If LCSD analyzed RPD < lab limits	Method [3]	J (pos)	9	Qualify all associated samples. QAPP may have overriding precision limits.

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Semivolatile Organic Compounds by Gas Chromatography-Mass Spectroscopy (GC-MS)
(Based on NFG 1999 & 2008 and SW-846 Method 8270D)

QC Element	Acceptance Criteria	Source of Criteria	Action for Non-Conformance	Reason Code	Discussion and Comments
Precision and Accuracy (continued)					
Reference Material (RM, SRM, or CRM)	Result ±20% of the 95% confidence interval of the true value for analytes	EcoChem standard policy	J (pos)/UJ (ND) if < LCL J (pos) if > UCL	12 (H,L)[4]	QAPP may have overriding accuracy limits. Some manufacturers have different RM control limits
MS/MSD (recovery)	One per matrix per batch (of ≤ 20 samples) Use method acceptance criteria/laboratory limits	NFG (1) Method (3)	J (pos) %R > UCL J (pos)/UJ (ND) if both %R < LCL J (pos)/R (ND) if both %R < 10% J (pos)/UJ (ND) if one > UCL & one < LCL, with no bias	8 (H,L)[4]	No action if only one spike %R is outside criteria. No action if parent concentration is >4x the amount spiked. Qualify parent sample only.
MS/MSD (RPD)	One per matrix per batch (of ≤ 20 samples) Use method acceptance criteria/laboratory limits	NFG (1) Method (2)	J (pos) in parent sample if RPD > CL	9	Qualify parent sample only
Surrogates	Minimum of 3 acid & 3 base/neutral (B/N) compounds added to all samples Within method control limits	NFG (1) Method (3)	J (pos) if %R > UCL J (pos)/UJ (ND) if %R < LCL J (pos)/R (ND) if %R < 10%	13 (H,L)[4]	Qualify all compounds in associated fraction. Do not qualify if only 1 acid and/or 1 B/N surrogate is out, unless <10%. If 1 surrogate outlier < 10% then J (pos)/R (ND)
Internal Standards	Added to all samples Acceptable Range: IS area 50% to 200% of CCAL area RT within 30 seconds of CC RT	NFG (1) Method (3)	J (pos) if > 200% J (pos)/UJ (ND) if < 50% J (pos)/R (ND) if < 25% if RT >30 seconds use **PJ**	19	Qualify compounds quantified using particular internal standard
Field Duplicates	**Solids:** RPD < 50% OR difference < 2X RL (for results < 5X RL) **Aqueous:** RPD < 35% OR difference < 1X RL (for results < 5X RL)	EcoChem standard policy	J (pos)/UJ (ND) Qualify only parent and field duplicate samples	9	Use project limits if specified

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Semivolatile Organic Compounds by Gas Chromatography-Mass Spectroscopy (GC-MS)
(Based on NFG 1999 & 2008 and SW-846 Method 8270D)

QC Element	Acceptance Criteria	Source of Criteria	Action for Non-Conformance	Reason Code	Discussion and Comments
Compound Identification and Quantitation and Calculation					
Retention times and relative ion intensities	RRT within 0.06 of standard RRT Ion relative intensity within 20% of standard All ions in std. at > 10% intensity must be present in sample	NFG [(1)] Method [(3)]	U (pos) if identification criteria not met	25	
TICs	Major ions (>10%) in reference must be present in sample; intensities agree within 20%; check identification	NFG [(1)] Method [(3)]	NJ the TIC unless: R (pos) common laboratory contaminants	4	
Calibration Range	Results greater than highest calibration standard	EcoChem standard policy	Qualify J (pos)	20	If result from dilution analysis is not reported.
Dilutions, Re-extractions and/or Reanalyses	Report only one result per analyte	EcoChem standard policy	Use "DNR" to flag results that will not be reported.	11	**TM-04** EcoChem Policy for Rejection/Selection Process for Multiple Results

[1] National Functional Guidelines for Organic Data Review, June, 2008
[2] National Functional Guidelines for Organic Data Review, October, 1999
[3] Method SW846 8270D Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS), Revision 4, February 2007.
[4] NFG 2013 suggests using "+ / -" to indicate bias; EcoChem has chosen "H" = high bias indicated; "L" = low bias indicated.

(pos): Positive Result(s)
(ND): Non-detects

* "Poor responder" compounds: acetophenone, atrazine, benzaldehyde, 1,1'-biphenyl, bis(2-ethylhexyl)phthalate, butylbenzylphthalate, caprolactam, carbazole, 4-chloroaniline, diethylphthalate, di-n-butylphthalate, 3-3'-dichlorobenzidine, dimethylphthalate, 2,4-dinitrophenol, 4,6-dinitro-2-methylphenol, di-n-octylphthalate, hexachlorobutadiene, hexachlorocyclopentadiene, 2-nitroaniline, 3-nitroaniline, 4-nitroaniline, 4-nitrophenol, N-nitrosodiphenylamine, 2,2'-oxybis-(1-chloropropane), 1,2,4,5-tetrachlorobenzene use a 0.010 RRF criterion.

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Dioxin/Furan Analysis by HRMS
(Based on Dioxin NFG 2011 and Methods EPA 1613B and SW-846 8290)

QC Element	Acceptance Criteria	Source of Criteria	Action for Non-Conformance	Reason Code	Discussion and Comments
Sample Handling					
Cooler/Storage Temperature Preservation	Waters/Solids ≤ 6°C & in the dark Tissues <-10°C & in the dark **Preservation Aqueous:** If Cl_2 is present Thiosulfate must be added and if pH > 9 it must be adjusted to 7 - 9	NFG [1] Method[2]	J(pos)/R(ND) if thiosulfate not added if Cl_2 present; J(pos)/UJ(ND) if pH not adjusted J(pos)/UJ(ND) if temp > 20°C	1	**EcoChem PJ, see TM-05**
Holding Time	**If properly stored, 1 year or:** **Extraction (all matrices):** 30 days from collection **Analysis (all matrices)**: 45 days from extraction	NFG [1] Method[2]	If not properly stored or HT exceedance: J(pos)/UJ(ND)	1	**EcoChem PJ, see TM-05** Gross exceedance = > 1 year 2011 NFG **Note:** Under CWA, SDWA, and RCRA the HT for H2O is 7 days.
Instrument Performance					
Mass Resolution (Tuning)	PFK (Perfluorokerosene) ≥10,000 resolving power at m/z 304.9824. Exact mass of m/z 380.9760 w/in 5 ppm of theoretical value (380.97410 to 380.97790) . Analyzed prior to ICAL and at the start and end of each 12 hr. shift.	NFG [1] Method [2]	R(pos/ND) all analytes in all samples associated with the tune	24	Notify PM
Windows Defining Mix	Peaks for first and last eluters must be within established retention time windows for each selector group (chlorination level)	NFG [1] Method [2]	If peaks are not completely within windows (clipped): If natives are ok, J(pos)/UJ(ND) homologs (Totals) If natives are affected, R all results for that selector group	24	Notify PM
Column Performance Mix	Both mixes must be analyzed before ICAL and CCAL Valley < 25% (valley = (x/y)*100%) where x = ht. of TCDD (or TCDF) & y = baseline to bottom of valley For all isomers eluting near the 2378-TCDD (TCDF) peak (TCDD only for 8290)	NFG [1] Method [2]	J(pos) if valley > 25%	24	**EcoChem PJ, see TM-05, Rev. 2**; Note: TCDF is evaluated only if second column confirmation is performed
Initial Calibration **Sensitivity**	S/N ratio > 10 for all native and labeled compounds in CS1 std.	NFG [1] Method [2]	If <10, elevate Det. Limit or R(ND)	5A	
Initial Calibration **Selectivity**	Ion Abundance ratios within QC limits (Table 8 of method 8290) (Table 9 of method 1613B)	NFG [1] Method [2]	If 2 or more ion ratios are out for one compound in ICAL, J(pos)	5A	**EcoChem PJ, see TM-05, Rev. 2**

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Dioxin/Furan Analysis by HRMS
(Based on Dioxin NFG 2011 and Methods EPA 1613B and SW-846 8290)

QC Element	Acceptance Criteria	Source of Criteria	Action for Non-Conformance	Reason Code	Discussion and Comments
Instrument Performance (continued)					
Initial Calibration (Minimum 5 stds.) **Stability**	%RSD < 20% for native compounds %RSD <30% for labeled compounds (%RSD < 35% for labeled compounds under 1613b)	NFG [1] Method [2]	J(pos) natives if %RSD > 20%	5A	
	Absolute RT of $^{13}C_{12}$-1234-TCDD >25 min on DB5 & >15 min on DB-225	NFG [1] Method [2]	Narrate, no action		**EcoChem PJ, see TM-05, Rev. 2**
Continuing Calibration (Prior to each 12 hr. shift) **Sensitivity**	S/N ratio for CS3 standard > 10	NFG [1] Method [2]	If <10, elevate Det. Limit or R(ND)	5B	
Continuing Calibration (Prior to each 12 hr. shift) **Selectivity**	Ion Abundance ratios within QC limits (Table 8 of method 8290) (Table 9 of method 1613B)	NFG [1] Method [2]	For congener with ion ratio outlier, J(pos) natives in all samples associated with CCAL. No action for labeled congener ion ratio outliers.	25	**EcoChem PJ, see TM-05**
Continuing Calibration (Prior to each 12 hr. shift) **Stability**	%D+/-20% for native compounds %D +/-30% for labeled compounds **(Must meet limits in Table 6, Method 1613B)** If %D in the closing CCAL are within 25%/35%, the mean RF from the two CCAL may be used to calculate samples **(Section 8.3.2.4 of 8290)**.	NFG [1] Method [2]	**Labeled compounds:** Narrate, no action. **Native compounds:** 1613: J(pos)/UJ(ND)if %D is outside Table 6 limits J(pos)/R(ND) if %D is +/-75% of Table 6 limits 8290: J(pos)/UJ(ND) if %D = 20% - 75% J(pos)/R(ND) if %D > 75%	5B (H,L)[3]	
	Absolute RT of $^{13}C_{12}$-1234-TCDD and $^{13}C_{12}$-123789-HxCDD should be ± 15 seconds of ICAL RRT for all other compounds must meet criteria listed in Table 2 Method 1316.	NFG [1] Method [2]	Narrate, no action	5B	**EcoChem PJ, see TM-05**
Blank Contamination					
Method Blank (MB)	MB: One per matrix per batch of (of ≤ 20 samples) No detected compounds > RL	NFG [1] Method [2]	U(pos) if result is < 5X action level.	7	**Hierarchy of blank review:** **#1 - Review MB, qualify as needed** **#2 - Review FB , qualify as needed**
Field Blank (FB)	FB: frequency as per QAPP No detected compounds > RL		U(pos) if result is < 5X action level.	6	

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Dioxin/Furan Analysis by HRMS
(Based on Dioxin NFG 2011 and Methods EPA 1613B and SW-846 8290)

QC Element	Acceptance Criteria	Source of Criteria	Action for Non-Conformance	Reason Code	Discussion and Comments
Precision and Accuracy					
MS/MSD (recovery)	**MS/MSD not typically required for HRMS analyses.** If lab analyzes MS/MSD then one set per matrix per batch (of ≤ 20 samples) Use most current laboratory control limits	EcoChem standard policy	J(pos) if both %R > UCL - high bias J(pos)/UJ(ND) if both %R < LCL - low bias J(pos)/R(ND) if both %R < 10% - very low bias J(pos)/UJ(ND) if one > UCL & one < LCL, with no bias **PJ if only one %R outlier**	8 (H,L)[3]	No action if only one spike %R is outside criteria. No action if parent concentration is >4x the amount spiked. Qualify parent sample only unless other QC indicates systematic problems.
MS/MSD (RPD)	**MS/MSD not typically required for HRMS analyses.** If lab analyzes MS/MSD then one set per matrix per batch (of ≤ 20 samples) Use most current laboratory control limits	EcoChem standard policy	J(pos) in parent sample if RPD > CL	9	Qualify parent sample only.
LCS (or OPR)	One per lab batch (of ≤ 20 samples) Use most current laboratory control limits **or** Limits from Table 6 of 1613B	NFG [1] Method [2]	J(pos) if %R > UCL - high bias J(pos)/UJ(ND) if %R < LCL - low bias J(pos)/R(ND) if %R < 10% - very low bias	10 (H,L)[3]	No action if only one spike %R is outside criteria, when LCSD is analyzed. Qualify all associated samples.
LCS/LCSD (RPD)	**LCSD not typically required for HRMS analyses.** One set per matrix and batch of 20 samples RPD < 35%	Method [2] Ecochem standard policy	J(pos) assoc. compound in all samples if RPD > CL	9	Qualify all associated samples.
Lab Duplicate (RPD)	**Lab Dup not typically required for HRMS analyses.** One per lab batch (of ≤ 20 samples) Use most current laboratory control limits	EcoChem standard policy	J(pos)/UJ(ND) if RPD > CL	9	
Labeled Compounds (Internal Standards)	Added to all samples %R = 40% - 135% in all samples 8290 %R must meet limits in Table 7 Method 1613B	NFG [1] Method [2]	J(pos) if %R > UCL - high bias J(pos)/UJ(ND) if %R < LCL - low bias J(pos)/R(ND) if %R < 10% - very low bias	13 (H,L)[3]	
Field Duplicates	Solids: RPD <50% OR difference < 2X RL (for results < 5X RL) Aqueous: RPD <35% OR difference < 1X RL (for results < 5X RL)	EcoChem standard policy	Narrate and qualify if required by project	9	**Use professional judgment**

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Dioxin/Furan Analysis by HRMS
(Based on Dioxin NFG 2011 and Methods EPA 1613B and SW-846 8290)

QC Element	Acceptance Criteria	Source of Criteria	Action for Non-Conformance	Reason Code	Discussion and Comments
Compound ID and Calculation					
Quantitation/ Identification	All ions for each isomer must maximize within ± 2 seconds. S/N ratio >2.5 Ion ratios must meet criteria listed in Table 8 Method 8290, or Table 9 of 1613B; RRTs w/in limits in Table 2 of 1613B	NFG [1] Method [2]	Narrate in report; qualify if necessary NJ(pos) for retention time outliers. U(pos) for ion ratio outliers.	25	**EcoChem PJ, see TM-05**
EMPC (estimated maximum possible concentration)	If quantitation identification criteria are not met, laboratory should report an EMPC value.	NFG [1] Method [2]	If laboratory correctly reported an EMPC value, qualify the native compound U(pos) to indicate that the value is a detection limit and qualify total homolog groups J (pos)	25	**Use professional judgment See TM-18**
Interferences	Interferences from chlorodiphenyl ether compounds	NFG [1] Method [2]	J(pos)/UJ(ND) if present	23	**See TM-16**
	Lock masses must not deviate ± 20% from values in Table 8 of 1613B	Method [2]	J(pos)/UJ(ND) if present	24	**See TM-17**
Second Column Confirmation	All 2,3,7,8-TCDF hits must be confirmed on a DB-225 (or equiv) column. All QC criteria must also be met for the confirmation analysis.	NFG [1] Method [2]	Report the DB-225 value. If not performed use PJ.	3	DNR-11 DB5 result if both results from both columns are reported. **EcoChem PJ, see TM-05**
Calculation Check	Check 10% of field & QC sample results	EcoChem standard policy	Contact laboratory for resolution and/or corrective action	na	Full data validation only.
Electronic Data Deliverable (EDD)					
Verification of EDD to hardcopy data	EcoChem verify @ 10% unless problems noted; then increase level up to 100% for next several packages.		Depending on scope of problem, correct at EcoChem (minor issues) to resubmittal by laboratory (major issues).	na	EcoChem Project Manager and/or Database Administrator will work with lab to provide long-term corrective action.
Dilutions, Re-extractions and/or Reanalyses	Report only one result per analyte	Standard reporting policy	Use "DNR" to flag results that will not be reported.	11	

(pos) - positive (detected) results; (ND) - not detected results

[1] National Functional Guidelines for Chlorinated Dibenzo-p-Dioxins (CDDs) & Chlorinated Dibenzofurans (CDFs) Data Review, September 2011

[2] Polychlorinated Dibenzodioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) by High-Resolution Gas Chromatography/High-Resolution Mass Spectrometry (HRGC/HRMS), USEPA SW-846, Method 8290

[2] EPA Method 1613, Rev.B, Tetra-through Octa-Chlorinated Dioxins and Furans by Isotope Dilution HRGS/HRMS, October 1994

[3] NFG 2013 suggests using "+ / -" to indicate bias; EcoChem has chosen "H" = high bias indicated; "L" = low bias indicated.

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ECOCHEM
Data Quality

APPENDIX B

QUALIFIED DATA SUMMARY TABLE

Qualified Data Summary Table
Kerr McGee Navassa Site - OU1 Soil Sampling 2020

SDG	Sample ID	Lab ID	Method	Analyte	Result	Units	Lab Flag	DV Qual	DV Code
B4511	CS-SS-101	B4511_17654_DF_001	SW8290A	Total TCDD	1.62	pg/g	EMPC	J	25
B4511	CS-SS-101	B4511_17654_DF_001	SW8290A	Total PeCDD	5.06	pg/g	EMPC	J	25
B4511	CS-SS-101	B4511_17654_DF_001	SW8290A	234678-HxCDF	1.56	pg/g	J EMPC	U	25
B4511	CS-SS-101	B4511_17654_DF_001	SW8290A	Total HxCDF	40.1	pg/g	EMPC	J	25
B4511	CS-SS-101	B4511_17654_DF_001	SW8290A	Total PeCDF	8.99	pg/g	EMPC	J	25
B4511	CS-SS-101	B4511_17654_DF_001	SW8290A	Total TCDF	6.36	pg/g	EMPC	J	25
B4511	CS-SS-101	B4511_17654_DF_001	SW8290A	23478-PeCDF	0.686	pg/g	J EMPC	U	25
B4511	CS-SS-101	B4511_17654_DF_001	SW8290A	12378-PeCDF	0.32	pg/g	J EMPC	U	25
B4511	CS-SB-125	B4511_17654_DF_002	SW8290A	Total HxCDD	17.1	pg/g	EMPC	J	25
B4511	CS-SB-125	B4511_17654_DF_002	SW8290A	12378-PeCDD	0.187	pg/g	J EMPC	U	25
B4511	CS-SB-125	B4511_17654_DF_002	SW8290A	23478-PeCDF	0.189	pg/g	J EMPC	U	25
B4511	CS-SB-125	B4511_17654_DF_002	SW8290A	123478-HxCDD	0.562	pg/g	J EMPC	U	25
B4511	CS-SB-125	B4511_17654_DF_002	SW8290A	Total TCDD	0.264	pg/g	EMPC	J	25
B4511	CS-SB-125	B4511_17654_DF_002	SW8290A	Total HxCDF	18.2	pg/g	EMPC	J	25
B4511	CS-SB-125	B4511_17654_DF_002	SW8290A	Total PeCDF	2.46	pg/g	EMPC	J	25
B4511	CS-SB-125	B4511_17654_DF_002	SW8290A	Total TCDF	0.68	pg/g	EMPC	J	25
B4511	CS-SB-125	B4511_17654_DF_002	SW8290A	Total PeCDD	1.46	pg/g	EMPC	J	25
B4511	CS-24	B4511_17654_DF_003	SW8290A	Total PeCDF	11.3	pg/g	EMPC	J	25
B4511	CS-24	B4511_17654_DF_003	SW8290A	Total TCDF	5.45	pg/g	EMPC	J	25
B4511	CS-24	B4511_17654_DF_003	SW8290A	Total HxCDD	31.8	pg/g	EMPC	J	25
B4511	CS-24	B4511_17654_DF_003	SW8290A	Total PeCDD	3.86	pg/g	EMPC	J	25
B4511	CS-24	B4511_17654_DF_003	SW8290A	Total TCDD	0.885	pg/g	EMPC	J	25
B4511	CS-24	B4511_17654_DF_003	SW8290A	Total HxCDF	26.4	pg/g	EMPC	J	25
B4511	CS-24	B4511_17654_DF_003	SW8290A	12378-PeCDF	0.225	pg/g	J EMPC	U	25
B4511	CS-24	B4511_17654_DF_003	SW8290A	2378-TCDF	0.204	pg/g	J EMPC	U	25
B4511	CS-23	B4511_17654_DF_004	SW8290A	Total PeCDD	7.19	pg/g	EMPC	J	25
B4511	CS-23	B4511_17654_DF_004	SW8290A	12378-PeCDF	0.416	pg/g	J EMPC	U	25
B4511	CS-23	B4511_17654_DF_004	SW8290A	2378-TCDD	0.116	pg/g	J EMPC	U	25
B4511	CS-23	B4511_17654_DF_004	SW8290A	Total TCDD	3.05	pg/g	EMPC	J	25
B4511	CS-23	B4511_17654_DF_004	SW8290A	Total PeCDF	27.7	pg/g	EMPC	J	25

Qualified Data Summary Table
Kerr McGee Navassa Site - OU1 Soil Sampling 2020

SDG	Sample ID	Lab ID	Method	Analyte	Result	Units	Lab Flag	DV Qual	DV Code
B4511	CS-23	B4511_17654_DF_004	SW8290A	Total TCDF	11.2	pg/g	EMPC	J	25
B4511	CS-22	B4511_17654_DF_005	SW8290A	12378-PeCDF	0.621	pg/g	J EMPC	U	25
B4511	CS-22	B4511_17654_DF_005	SW8290A	2378-TCDF	0.523	pg/g	EMPC	U	25
B4511	CS-22	B4511_17654_DF_005	SW8290A	2378-TCDD	0.105	pg/g	J EMPC	U	25
B4511	CS-22	B4511_17654_DF_005	SW8290A	Total HxCDF	79.5	pg/g	EMPC	J	25
B4511	CS-22	B4511_17654_DF_005	SW8290A	Total TCDF	13.4	pg/g	EMPC	J	25
B4511	CS-22	B4511_17654_DF_005	SW8290A	Total PeCDD	10.8	pg/g	EMPC	J	25
B4511	CS-22	B4511_17654_DF_005	SW8290A	Total TCDD	4.11	pg/g	EMPC	J	25
B4511	CS-22	B4511_17654_DF_005	SW8290A	Total PeCDF	29.2	pg/g	EMPC	J	25
B4511	CS-26	B4511_17654_DF_006	SW8290A	123478-HxCDD	0.65	pg/g	J EMPC	U	25
B4511	CS-26	B4511_17654_DF_006	SW8290A	12378-PeCDD	0.175	pg/g	J EMPC	U	25
B4511	CS-26	B4511_17654_DF_006	SW8290A	Total HxCDF	8.91	pg/g	EMPC	J	25
B4511	CS-26	B4511_17654_DF_006	SW8290A	Total PeCDF	5.83	pg/g	EMPC	J	25
B4511	CS-26	B4511_17654_DF_006	SW8290A	Total TCDF	2.47	pg/g	EMPC	J	25
B4511	CS-26	B4511_17654_DF_006	SW8290A	Total HxCDD	49.9	pg/g	EMPC	J	25
B4511	CS-26	B4511_17654_DF_006	SW8290A	Total PeCDD	3.15	pg/g	EMPC	J	25
B4511	CS-26	B4511_17654_DF_006	SW8290A	Total TCDD	0.577	pg/g	EMPC	J	25
B4511	CS-26	B4511_17654_DF_006	SW8290A	123478-HxCDF	0.371	pg/g	J EMPC	U	25
B4511	CS-26	B4511_17654_DF_006	SW8290A	23478-PeCDF	0.399	pg/g	J EMPC	U	25
B4511	CS-26	B4511_17654_DF_006	SW8290A	12378-PeCDF	0.128	pg/g	J EMPC	U	25
B4511	CS-26	B4511_17654_DF_006	SW8290A	2378-TCDF	0.0762	pg/g	J EMPC	U	25
B4511	CS-25	B4511_17654_DF_007	SW8290A	Total TCDD	2.16	pg/g	EMPC	J	25
B4511	CS-25	B4511_17654_DF_007	SW8290A	1234789-HpCDF	0.729	pg/g	J EMPC	U	25
B4511	CS-25	B4511_17654_DF_007	SW8290A	234678-HxCDF	0.76	pg/g	J EMPC	U	25
B4511	CS-25	B4511_17654_DF_007	SW8290A	23478-PeCDF	0.528	pg/g	J EMPC	U	25
B4511	CS-25	B4511_17654_DF_007	SW8290A	2378-TCDF	0.19	pg/g	J EMPC	U	25
B4511	CS-25	B4511_17654_DF_007	SW8290A	123789-HxCDD	1.25	pg/g	J EMPC	U	25
B4511	CS-25	B4511_17654_DF_007	SW8290A	123478-HxCDD	0.802	pg/g	J EMPC	U	25
B4511	CS-25	B4511_17654_DF_007	SW8290A	12378-PeCDD	0.345	pg/g	J EMPC	U	25
B4511	CS-25	B4511_17654_DF_007	SW8290A	Total PeCDD	5.61	pg/g	EMPC	J	25

Qualified Data Summary Table
Kerr McGee Navassa Site - OU1 Soil Sampling 2020

SDG	Sample ID	Lab ID	Method	Analyte	Result	Units	Lab Flag	DV Qual	DV Code
B4511	CS-25	B4511_17654_DF_007	SW8290A	Total HxCDD	26.1	pg/g	EMPC	J	25
B4511	CS-25	B4511_17654_DF_007	SW8290A	Total HpCDF	23.5	pg/g	EMPC	J	25
B4511	CS-25	B4511_17654_DF_007	SW8290A	Total HxCDF	12.5	pg/g	EMPC	J	25
B4511	CS-25	B4511_17654_DF_007	SW8290A	Total PeCDF	7.08	pg/g	EMPC	J	25
B4511	CS-25	B4511_17654_DF_007	SW8290A	Total TCDF	6.18	pg/g	EMPC	J	25
B4511	CS-SS-104	B4511_17654_DF_008	SW8290A	2378-TCDF	0.144	pg/g	J EMPC	U	25
B4511	CS-SS-104	B4511_17654_DF_008	SW8290A	Total PeCDF	13	pg/g	EMPC	J	25
B4511	CS-SS-104	B4511_17654_DF_008	SW8290A	Total HxCDF	118	pg/g	EMPC	J	25
B4511	CS-SS-104	B4511_17654_DF_008	SW8290A	Total TCDF	7.29	pg/g	EMPC	J	25
B4511	CS-SS-104	B4511_17654_DF_008	SW8290A	Total PeCDD	4.46	pg/g	EMPC	J	25
B4511	CS-SS-104	B4511_17654_DF_008	SW8290A	Total TCDD	2.52	pg/g	EMPC	J	25
B4511	SS-108-D	B4511_17654_DF_009	SW8290A	123678-HxCDD	0.488	pg/g	J EMPC	U	25
B4511	SS-108-D	B4511_17654_DF_009	SW8290A	123478-HxCDD	0.243	pg/g	J EMPC	U	25
B4511	SS-108-D	B4511_17654_DF_009	SW8290A	12378-PeCDD	0.225	pg/g	J EMPC	U	25
B4511	SS-108-D	B4511_17654_DF_009	SW8290A	Total TCDD	6.93	pg/g	EMPC	J	25
B4511	SS-108-D	B4511_17654_DF_009	SW8290A	Total HpCDF	6.11	pg/g	EMPC	J	25
B4511	SS-108-D	B4511_17654_DF_009	SW8290A	Total HxCDF	4.44	pg/g	EMPC	J	25
B4511	SS-108-D	B4511_17654_DF_009	SW8290A	Total PeCDF	4.48	pg/g	EMPC	J	25
B4511	SS-108-D	B4511_17654_DF_009	SW8290A	Total TCDF	12.5	pg/g	EMPC	J	25
B4511	SS-108-D	B4511_17654_DF_009	SW8290A	Total PeCDD	5.54	pg/g	EMPC	J	25
B4511	SS-108-D	B4511_17654_DF_009	SW8290A	Total HxCDD	9.43	pg/g	EMPC	J	25
B4511	CS-RISB02	B4511_17654_DF_010	SW8290A	123678-HxCDF	0.347	pg/g	J EMPC	U	25
B4511	CS-RISB02	B4511_17654_DF_010	SW8290A	Total TCDD	0.276	pg/g	EMPC	J	25
B4511	CS-RISB02	B4511_17654_DF_010	SW8290A	234678-HxCDF	0.517	pg/g	J EMPC	U	25
B4511	CS-RISB02	B4511_17654_DF_010	SW8290A	Total TCDF	1.25	pg/g	EMPC	J	25
B4511	CS-RISB02	B4511_17654_DF_010	SW8290A	Total PeCDF	3.42	pg/g	EMPC	J	25
B4511	CS-RISB02	B4511_17654_DF_010	SW8290A	Total HxCDF	11.9	pg/g	EMPC	J	25
B4519	CS-27	B4519_17655_DF_001	SW8290A	234678-HxCDF	0.641	pg/g	J EMPC	U	25
B4519	CS-27	B4519_17655_DF_001	SW8290A	Total HxCDF	14.2	pg/g	EMPC	J	25
B4519	CS-27	B4519_17655_DF_001	SW8290A	Total PeCDF	5.44	pg/g	EMPC	J	25

Qualified Data Summary Table
Kerr McGee Navassa Site - OU1 Soil Sampling 2020

SDG	Sample ID	Lab ID	Method	Analyte	Result	Units	Lab Flag	DV Qual	DV Code
B4519	CS-27	B4519_17655_DF_001	SW8290A	Total TCDF	2.96	pg/g	EMPC	J	25
B4519	CS-27	B4519_17655_DF_001	SW8290A	Total HxCDD	23.2	pg/g	EMPC	J	25
B4519	CS-27	B4519_17655_DF_001	SW8290A	Total PeCDD	2.75	pg/g	EMPC	J	25
B4519	CS-27	B4519_17655_DF_001	SW8290A	Total TCDD	0.759	pg/g	EMPC	J	25
B4519	CS-27	B4519_17655_DF_001	SW8290A	1234789-HpCDF	0.555	pg/g	J EMPC	U	25
B4519	CS-27	B4519_17655_DF_001	SW8290A	123478-HxCDF	0.696	pg/g	J EMPC	U	25
B4519	CS-27	B4519_17655_DF_001	SW8290A	12378-PeCDF	0.165	pg/g	J EMPC	U	25
B4519	CS-27	B4519_17655_DF_001	SW8290A	Total HpCDF	30.9	pg/g	EMPC	J	25
B4519	CS-27	B4519_17655_DF_001	SW8290A	12378-PeCDD	0.17	pg/g	J EMPC	U	25
B4519	CS-28	B4519_17655_DF_002	SW8290A	12378-PeCDD	0.272	pg/g	J EMPC	U	25
B4519	CS-28	B4519_17655_DF_002	SW8290A	Total TCDF	5.19	pg/g	EMPC	J	25
B4519	CS-28	B4519_17655_DF_002	SW8290A	Total HxCDD	64.5	pg/g	EMPC	J	25
B4519	CS-28	B4519_17655_DF_002	SW8290A	Total PeCDD	5.83	pg/g	EMPC	J	25
B4519	CS-28	B4519_17655_DF_002	SW8290A	Total TCDD	1.5	pg/g	EMPC	J	25
B4519	CS-28	B4519_17655_DF_002	SW8290A	123678-HxCDF	0.429	pg/g	J EMPC	U	25
B4519	CS-28	B4519_17655_DF_002	SW8290A	23478-PeCDF	0.469	pg/g	J EMPC	U	25
B4519	CS-28	B4519_17655_DF_002	SW8290A	12378-PeCDF	0.142	pg/g	J EMPC	U	25
B4519	CS-28	B4519_17655_DF_002	SW8290A	234678-HxCDF	0.719	pg/g	J EMPC	U	25
B4519	CS-28	B4519_17655_DF_002	SW8290A	Total PeCDF	5.53	pg/g	EMPC	J	25
B4519	CS-28	B4519_17655_DF_002	SW8290A	Total HxCDF	15.2	pg/g	EMPC	J	25
B4519	CS-32	B4519_17655_DF_003	SW8290A	Total TCDF	6.76	pg/g	EMPC	J	25
B4519	CS-32	B4519_17655_DF_003	SW8290A	Total HxCDD	14.6	pg/g	EMPC	J	25
B4519	CS-32	B4519_17655_DF_003	SW8290A	Total PeCDD	2.73	pg/g	EMPC	J	25
B4519	CS-32	B4519_17655_DF_003	SW8290A	Total TCDD	0.539	pg/g	EMPC	J	25
B4519	CS-32	B4519_17655_DF_003	SW8290A	23478-PeCDF	0.308	pg/g	J EMPC	U	25
B4519	CS-32	B4519_17655_DF_003	SW8290A	12378-PeCDF	0.187	pg/g	J EMPC	U	25
B4519	CS-32	B4519_17655_DF_003	SW8290A	2378-TCDF	0.109	pg/g	J EMPC	U	25
B4519	CS-32	B4519_17655_DF_003	SW8290A	123678-HxCDD	0.849	pg/g	J EMPC	U	25
B4519	CS-32	B4519_17655_DF_003	SW8290A	123478-HxCDD	0.439	pg/g	J EMPC	U	25
B4519	CS-32	B4519_17655_DF_003	SW8290A	234678-HxCDF	0.43	pg/g	J EMPC	U	25

Qualified Data Summary Table
Kerr McGee Navassa Site - OU1 Soil Sampling 2020

SDG	Sample ID	Lab ID	Method	Analyte	Result	Units	Lab Flag	DV Qual	DV Code
B4519	CS-32	B4519_17655_DF_003	SW8290A	Total PeCDF	4.43	pg/g	EMPC	J	25
B4519	CS-32	B4519_17655_DF_003	SW8290A	Total HxCDF	7.61	pg/g	EMPC	J	25
B4519	CS-33	B4519_17655_DF_004	SW8290A	Total TCDF	3.45	pg/g	EMPC	J	25
B4519	CS-33	B4519_17655_DF_004	SW8290A	Total PeCDD	2.67	pg/g	EMPC	J	25
B4519	CS-33	B4519_17655_DF_004	SW8290A	23478-PeCDF	0.495	pg/g	J EMPC	U	25
B4519	CS-33	B4519_17655_DF_004	SW8290A	2378-TCDF	0.125	pg/g	J EMPC	U	25
B4519	CS-33	B4519_17655_DF_004	SW8290A	234678-HxCDF	1.05	pg/g	J EMPC	U	25
B4519	CS-33	B4519_17655_DF_004	SW8290A	Total PeCDF	6.28	pg/g	EMPC	J	25
B4519	CS-33	B4519_17655_DF_004	SW8290A	Total HxCDF	25.4	pg/g	EMPC	J	25
B4519	CS-34	B4519_17655_DF_005	SW8290A	12378-PeCDD	0.3	pg/g	J EMPC	U	25
B4519	CS-34	B4519_17655_DF_005	SW8290A	Total TCDF	3.03	pg/g	EMPC	J	25
B4519	CS-34	B4519_17655_DF_005	SW8290A	Total HxCDD	38.4	pg/g	EMPC	J	25
B4519	CS-34	B4519_17655_DF_005	SW8290A	Total PeCDD	3.27	pg/g	EMPC	J	25
B4519	CS-34	B4519_17655_DF_005	SW8290A	2378-TCDF	0.205	pg/g	J EMPC	U	25
B4519	CS-34	B4519_17655_DF_005	SW8290A	123789-HxCDD	1.58	pg/g	J EMPC	U	25
B4519	CS-34	B4519_17655_DF_005	SW8290A	123478-HxCDD	1.1	pg/g	J EMPC	U	25
B4519	CS-34	B4519_17655_DF_005	SW8290A	234678-HxCDF	0.837	pg/g	J EMPC	U	25
B4519	CS-34	B4519_17655_DF_005	SW8290A	Total PeCDF	5.2	pg/g	EMPC	J	25
B4519	CS-34	B4519_17655_DF_005	SW8290A	Total HxCDF	23	pg/g	EMPC	J	25
B4519	CS-38	B4519_17655_DF_006	SW8290A	Total TCDF	2.54	pg/g	EMPC	J	25
B4519	CS-38	B4519_17655_DF_006	SW8290A	Total HpCDD	18.9	pg/g	EMPC	J	25
B4519	CS-38	B4519_17655_DF_006	SW8290A	Total HxCDD	6.34	pg/g	EMPC	J	25
B4519	CS-38	B4519_17655_DF_006	SW8290A	Total PeCDD	1.83	pg/g	EMPC	J	25
B4519	CS-38	B4519_17655_DF_006	SW8290A	Total TCDD	0.909	pg/g	EMPC	J	25
B4519	CS-38	B4519_17655_DF_006	SW8290A	123678-HxCDF	0.181	pg/g	J EMPC	U	25
B4519	CS-38	B4519_17655_DF_006	SW8290A	Total HpCDF	4	pg/g	EMPC	J	25
B4519	CS-38	B4519_17655_DF_006	SW8290A	1234678-HpCDD	6.8	pg/g	EMPC	U	25
B4519	CS-38	B4519_17655_DF_006	SW8290A	123478-HxCDD	0.257	pg/g	J EMPC	U	25
B4519	CS-38	B4519_17655_DF_006	SW8290A	234678-HxCDF	0.397	pg/g	J EMPC	U	25
B4519	CS-38	B4519_17655_DF_006	SW8290A	Total PeCDF	2.29	pg/g	EMPC	J	25

Qualified Data Summary Table
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SDG	Sample ID	Lab ID	Method	Analyte	Result	Units	Lab Flag	DV Qual	DV Code
B4519	CS-38	B4519_17655_DF_006	SW8290A	Total HxCDF	3.05	pg/g	EMPC	J	25
B4519	CS-39	B4519_17655_DF_007	SW8290A	123478-HxCDF	0.276	pg/g	J EMPC	U	25
B4519	CS-39	B4519_17655_DF_007	SW8290A	Total TCDF	1.75	pg/g	EMPC	J	25
B4519	CS-39	B4519_17655_DF_007	SW8290A	Total HxCDD	7.88	pg/g	EMPC	J	25
B4519	CS-39	B4519_17655_DF_007	SW8290A	Total PeCDD	2.14	pg/g	EMPC	J	25
B4519	CS-39	B4519_17655_DF_007	SW8290A	OCDF	3.09	pg/g	J EMPC	U	25
B4519	CS-39	B4519_17655_DF_007	SW8290A	1234789-HpCDF	0.303	pg/g	J EMPC	U	25
B4519	CS-39	B4519_17655_DF_007	SW8290A	123678-HxCDF	0.358	pg/g	J EMPC	U	25
B4519	CS-39	B4519_17655_DF_007	SW8290A	Total HpCDF	4.66	pg/g	EMPC	J	25
B4519	CS-39	B4519_17655_DF_007	SW8290A	23478-PeCDF	0.285	pg/g	J EMPC	U	25
B4519	CS-39	B4519_17655_DF_007	SW8290A	123478-HxCDD	0.329	pg/g	J EMPC	U	25
B4519	CS-39	B4519_17655_DF_007	SW8290A	Total PeCDF	2.05	pg/g	EMPC	J	25
B4519	CS-39	B4519_17655_DF_007	SW8290A	Total HxCDF	3.51	pg/g	EMPC	J	25
B4519	CS-35	B4519_17655_DF_008	SW8290A	12378-PeCDD	0.407	pg/g	J EMPC	U	25
B4519	CS-35	B4519_17655_DF_008	SW8290A	Total TCDF	8.18	pg/g	EMPC	J	25
B4519	CS-35	B4519_17655_DF_008	SW8290A	Total HxCDD	54.9	pg/g	EMPC	J	25
B4519	CS-35	B4519_17655_DF_008	SW8290A	Total PeCDD	6.42	pg/g	EMPC	J	25
B4519	CS-35	B4519_17655_DF_008	SW8290A	Total TCDD	3.06	pg/g	EMPC	J	25
B4519	CS-35	B4519_17655_DF_008	SW8290A	2378-TCDF	0.254	pg/g	J EMPC	U	25
B4519	CS-35	B4519_17655_DF_008	SW8290A	Total PeCDF	10.4	pg/g	EMPC	J	25
B4519	CS-36	B4519_17655_DF_009	SW8290A	23478-PeCDF	0.635	pg/g	J EMPC	U	25
B4519	CS-36	B4519_17655_DF_009	SW8290A	12378-PeCDF	0.151	pg/g	J EMPC	U	25
B4519	CS-36	B4519_17655_DF_009	SW8290A	2378-TCDF	0.0626	pg/g	J EMPC	U	25
B4519	CS-36	B4519_17655_DF_009	SW8290A	Total PeCDF	10.6	pg/g	EMPC	J	25
B4519	CS-36	B4519_17655_DF_009	SW8290A	Total TCDF	3.48	pg/g	EMPC	J	25
B4519	CS-36	B4519_17655_DF_009	SW8290A	Total PeCDD	4.93	pg/g	EMPC	J	25
B4519	CS-36	B4519_17655_DF_009	SW8290A	Total TCDD	1.03	pg/g	EMPC	J	25
B4519	CS-37	B4519_17655_DF_010	SW8290A	12378-PeCDD	0.502	pg/g	J EMPC	U	25
B4519	CS-37	B4519_17655_DF_010	SW8290A	Total PeCDF	7.3	pg/g	EMPC	J	25
B4519	CS-37	B4519_17655_DF_010	SW8290A	Total TCDF	5.47	pg/g	EMPC	J	25

Qualified Data Summary Table
Kerr McGee Navassa Site - OU1 Soil Sampling 2020

SDG	Sample ID	Lab ID	Method	Analyte	Result	Units	Lab Flag	DV Qual	DV Code
B4519	CS-37	B4519_17655_DF_010	SW8290A	Total HpCDD	19500	pg/g	E	J	20
B4519	CS-37	B4519_17655_DF_010	SW8290A	Total PeCDD	55.6	pg/g	EMPC	J	25
B4519	CS-37	B4519_17655_DF_010	SW8290A	Total TCDD	1.85	pg/g	EMPC	J	25
B4519	CS-37	B4519_17655_DF_010	SW8290A	2378-TCDD	0.147	pg/g	J EMPC	U	25
B4519	CS-37	B4519_17655_DF_010	SW8290A	23478-PeCDF	0.549	pg/g	J EMPC	U	25
B4519	DUP-02	B4519_17655_DF_011	SW8290A	Total TCDF	9.8	pg/g	EMPC	J	25
B4519	DUP-02	B4519_17655_DF_011	SW8290A	Total HxCDD	45.4	pg/g	EMPC	J	25
B4519	DUP-02	B4519_17655_DF_011	SW8290A	Total PeCDD	5.88	pg/g	EMPC	J	25
B4519	DUP-02	B4519_17655_DF_011	SW8290A	Total TCDD	2.62	pg/g	EMPC	J	25
B4519	DUP-02	B4519_17655_DF_011	SW8290A	Total HpCDF	89.5	pg/g	EMPC	J	25
B4519	DUP-02	B4519_17655_DF_011	SW8290A	12378-PeCDF	0.283	pg/g	J EMPC	U	25
B4519	DUP-02	B4519_17655_DF_011	SW8290A	2378-TCDF	0.33	pg/g	J EMPC	U	25
B4519	DUP-02	B4519_17655_DF_011	SW8290A	123478-HxCDD	1.26	pg/g	J EMPC	U	25
B4519	DUP-02	B4519_17655_DF_011	SW8290A	12378-PeCDD	0.387	pg/g	J EMPC	U	25
B4519	DUP-02	B4519_17655_DF_011	SW8290A	Total PeCDF	11.8	pg/g	EMPC	J	25
B4519	DUP-02	B4519_17655_DF_011	SW8290A	Total HxCDF	33.8	pg/g	EMPC	J	25
B4519	CS-TB-07	B4519_17655_DF_012	SW8290A	Total TCDF	26	pg/g	EMPC	J	25
B4519	CS-TB-07	B4519_17655_DF_012	SW8290A	Total PeCDD	37.2	pg/g	EMPC	J	25
B4519	CS-TB-07	B4519_17655_DF_012	SW8290A	Total TCDD	33	pg/g	EMPC	J	25
B4519	CS-TB-07	B4519_17655_DF_012	SW8290A	23478-PeCDF	1.61	pg/g	J EMPC	U	25
B4519	CS-TB-07	B4519_17655_DF_012	SW8290A	12378-PeCDF	1.13	pg/g	J EMPC	U	25
B4519	CS-TB-07	B4519_17655_DF_012	SW8290A	Total PeCDF	22	pg/g	EMPC	J	25
B4519	CS-SS-106	B4519_17655_DF_013	SW8290A	12378-PeCDD	0.165	pg/g	J EMPC	U	25
B4519	CS-SS-106	B4519_17655_DF_013	SW8290A	123478-HxCDF	0.366	pg/g	J EMPC	U	25
B4519	CS-SS-106	B4519_17655_DF_013	SW8290A	Total TCDF	12.3	pg/g	EMPC	J	25
B4519	CS-SS-106	B4519_17655_DF_013	SW8290A	Total HxCDD	43.2	pg/g	EMPC	J	25
B4519	CS-SS-106	B4519_17655_DF_013	SW8290A	Total PeCDD	5.95	pg/g	EMPC	J	25
B4519	CS-SS-106	B4519_17655_DF_013	SW8290A	Total TCDD	5.84	pg/g	EMPC	J	25
B4519	CS-SS-106	B4519_17655_DF_013	SW8290A	Total HpCDF	17.1	pg/g	EMPC	J	25
B4519	CS-SS-106	B4519_17655_DF_013	SW8290A	2378-TCDF	0.174	pg/g	J EMPC	U	25

Qualified Data Summary Table
Kerr McGee Navassa Site - OU1 Soil Sampling 2020

SDG	Sample ID	Lab ID	Method	Analyte	Result	Units	Lab Flag	DV Qual	DV Code
B4519	CS-SS-106	B4519_17655_DF_013	SW8290A	123789-HxCDD	0.814	pg/g	J EMPC	U	25
B4519	CS-SS-106	B4519_17655_DF_013	SW8290A	123478-HxCDD	0.544	pg/g	J EMPC	U	25
B4519	CS-SS-106	B4519_17655_DF_013	SW8290A	234678-HxCDF	0.37	pg/g	J EMPC	U	25
B4519	CS-SS-106	B4519_17655_DF_013	SW8290A	Total PeCDF	3.51	pg/g	EMPC	J	25
B4519	CS-SS-106	B4519_17655_DF_013	SW8290A	Total HxCDF	6.21	pg/g	EMPC	J	25
B4519	CS-SS-109	B4519_17655_DF_014	SW8290A	Total TCDF	13.3	pg/g	EMPC	J	25
B4519	CS-SS-109	B4519_17655_DF_014	SW8290A	Total HxCDD	78	pg/g	EMPC	J	25
B4519	CS-SS-109	B4519_17655_DF_014	SW8290A	Total PeCDD	8	pg/g	EMPC	J	25
B4519	CS-SS-109	B4519_17655_DF_014	SW8290A	Total TCDD	4.72	pg/g	EMPC	J	25
B4519	CS-SS-109	B4519_17655_DF_014	SW8290A	12378-PeCDF	0.573	pg/g	J EMPC	U	25
B4519	CS-SS-109	B4519_17655_DF_014	SW8290A	2378-TCDF	0.174	pg/g	J EMPC	U	25
B4519	CS-SS-109	B4519_17655_DF_014	SW8290A	123678-HxCDD	2.37	pg/g	J EMPC	U	25
B4519	CS-SS-109	B4519_17655_DF_014	SW8290A	Total PeCDF	7.23	pg/g	EMPC	J	25
B4526	CS-29	B4526_17662_DF_001	SW8290A	Total TCDF	0.295	pg/g	EMPC	J	25
B4526	CS-29	B4526_17662_DF_001	SW8290A	1234678-HpCDF	0.421	pg/g	J EMPC	U	25
B4526	CS-29	B4526_17662_DF_001	SW8290A	Total HpCDF	0.421	pg/g	EMPC	J	25
B4526	CS-30	B4526_17662_DF_002	SW8290A	123789-HxCDD	0.762	pg/g	J EMPC	U	25
B4526	CS-30	B4526_17662_DF_002	SW8290A	Total HxCDF	4.7	pg/g	EMPC	J	25
B4526	CS-30	B4526_17662_DF_002	SW8290A	Total PeCDF	1.84	pg/g	EMPC	J	25
B4526	CS-30	B4526_17662_DF_002	SW8290A	Total TCDF	0.687	pg/g	EMPC	J	25
B4526	CS-30	B4526_17662_DF_002	SW8290A	Total HxCDD	10.9	pg/g	EMPC	J	25
B4526	CS-30	B4526_17662_DF_002	SW8290A	234678-HxCDF	0.416	pg/g	J EMPC	U	25
B4526	CS-30	B4526_17662_DF_002	SW8290A	123478-HxCDF	0.324	pg/g	J EMPC	U	25
B4526	CS-30	B4526_17662_DF_002	SW8290A	23478-PeCDF	0.208	pg/g	J EMPC	U	25
B4526	CS-31	B4526_17662_DF_003	SW8290A	123478-HxCDD	0.654	pg/g	J EMPC	U	25
B4526	CS-31	B4526_17662_DF_003	SW8290A	Total TCDF	4.44	pg/g	EMPC	J	25
B4526	CS-31	B4526_17662_DF_003	SW8290A	Total PeCDF	5.1	pg/g	EMPC	J	25
B4526	CS-31	B4526_17662_DF_003	SW8290A	Total HxCDD	17.4	pg/g	EMPC	J	25
B4526	CS-31	B4526_17662_DF_003	SW8290A	Total PeCDD	2.13	pg/g	EMPC	J	25
B4526	CS-31	B4526_17662_DF_003	SW8290A	Total TCDD	0.651	pg/g	EMPC	J	25

Qualified Data Summary Table
Kerr McGee Navassa Site - OU1 Soil Sampling 2020

SDG	Sample ID	Lab ID	Method	Analyte	Result	Units	Lab Flag	DV Qual	DV Code
B4526	CS-31	B4526_17662_DF_003	SW8290A	234678-HxCDF	0.371	pg/g	J EMPC	U	25
B4526	CS-31	B4526_17662_DF_003	SW8290A	123678-HxCDF	0.362	pg/g	J EMPC	U	25
B4526	CS-31	B4526_17662_DF_003	SW8290A	Total HxCDF	6.06	pg/g	EMPC	J	25
B4526	CS-31	B4526_17662_DF_003	SW8290A	23478-PeCDF	0.368	pg/g	J EMPC	U	25
B4526	DUP-01	B4526_17662_DF_004	SW8290A	123789-HxCDD	0.31	pg/g	J EMPC	U	25
B4526	DUP-01	B4526_17662_DF_004	SW8290A	Total TCDF	0.177	pg/g	EMPC	J	25
B4526	DUP-01	B4526_17662_DF_004	SW8290A	Total HxCDD	2.18	pg/g	EMPC	J	25
B4526	CS-40	B4526_17662_DF_005	SW8290A	Total TCDD	1.64	pg/g	EMPC	J	25
B4526	CS-40	B4526_17662_DF_005	SW8290A	234678-HxCDF	0.273	pg/g	J EMPC	U	25
B4526	CS-40	B4526_17662_DF_005	SW8290A	123678-HxCDF	0.221	pg/g	J EMPC	U	25
B4526	CS-40	B4526_17662_DF_005	SW8290A	23478-PeCDF	0.334	pg/g	J EMPC	U	25
B4526	CS-40	B4526_17662_DF_005	SW8290A	Total PeCDD	3.03	pg/g	EMPC	J	25
B4526	CS-40	B4526_17662_DF_005	SW8290A	Total HxCDF	4.61	pg/g	EMPC	J	25
B4526	CS-40	B4526_17662_DF_005	SW8290A	Total PeCDF	3.04	pg/g	EMPC	J	25
B4526	CS-40	B4526_17662_DF_005	SW8290A	Total TCDF	2.15	pg/g	EMPC	J	25
B4526	CS-40	B4526_17662_DF_005	SW8290A	Total HxCDD	7.13	pg/g	EMPC	J	25
B4526	CS-41	B4526_17662_DF_006	SW8290A	Total PeCDF	10.7	pg/g	EMPC	J	25
B4526	CS-41	B4526_17662_DF_006	SW8290A	Total HpCDF	20.3	pg/g	EMPC	J	25
B4526	CS-41	B4526_17662_DF_006	SW8290A	Total TCDF	13.7	pg/g	EMPC	J	25
B4526	CS-41	B4526_17662_DF_006	SW8290A	Total HxCDD	33.4	pg/g	EMPC	J	25
B4526	CS-41	B4526_17662_DF_006	SW8290A	Total TCDD	3.94	pg/g	EMPC	J	25
B4526	CS-41	B4526_17662_DF_006	SW8290A	1234789-HpCDF	0.729	pg/g	J EMPC	U	25
B4526	CS-41	B4526_17662_DF_006	SW8290A	Total HxCDF	13	pg/g	EMPC	J	25
B4526	CS-41	B4526_17662_DF_006	SW8290A	12378-PeCDF	0.708	pg/g	J EMPC	U	25
B4526	CS-41	B4526_17662_DF_006	SW8290A	123789-HxCDD	1.45	pg/g	J EMPC	U	25
B4526	CS-41	B4526_17662_DF_006	SW8290A	123478-HxCDD	1.12	pg/g	J EMPC	U	25
B4526	CS-42	B4526_17662_DF_007	SW8290A	123678-HxCDF	1.2	pg/g	J EMPC	U	25
B4526	CS-42	B4526_17662_DF_007	SW8290A	Total HpCDF	28.5	pg/g	EMPC	J	25
B4526	CS-42	B4526_17662_DF_007	SW8290A	Total HxCDF	17.6	pg/g	EMPC	J	25
B4526	CS-42	B4526_17662_DF_007	SW8290A	Total PeCDF	14	pg/g	EMPC	J	25

Qualified Data Summary Table
Kerr McGee Navassa Site - OU1 Soil Sampling 2020

SDG	Sample ID	Lab ID	Method	Analyte	Result	Units	Lab Flag	DV Qual	DV Code
B4526	CS-42	B4526_17662_DF_007	SW8290A	Total TCDF	16.9	pg/g	EMPC	J	25
B4526	CS-42	B4526_17662_DF_007	SW8290A	Total PeCDD	14.7	pg/g	EMPC	J	25
B4526	CS-42	B4526_17662_DF_007	SW8290A	Total TCDD	6.91	pg/g	EMPC	J	25
B4526	CS-42	B4526_17662_DF_007	SW8290A	1234789-HpCDF	1.22	pg/g	J EMPC	U	25
B4526	CS-43	B4526_17662_DF_008	SW8290A	Total PeCDF	14	pg/g	EMPC	J	25
B4526	CS-43	B4526_17662_DF_008	SW8290A	Total TCDF	11.7	pg/g	EMPC	J	25
B4526	CS-43	B4526_17662_DF_008	SW8290A	Total HxCDD	16.3	pg/g	EMPC	J	25
B4526	CS-43	B4526_17662_DF_008	SW8290A	123478-HxCDD	0.539	pg/g	J EMPC	U	25
B4526	CS-44	B4526_17662_DF_009	SW8290A	Total HxCDD	18.8	pg/g	EMPC	J	25
B4526	CS-44	B4526_17662_DF_009	SW8290A	Total PeCDD	5.98	pg/g	EMPC	J	25
B4526	CS-44	B4526_17662_DF_009	SW8290A	OCDF	5.31	pg/g	J EMPC	U	25
B4526	CS-44	B4526_17662_DF_009	SW8290A	123678-HxCDF	0.424	pg/g	J EMPC	U	25
B4526	CS-44	B4526_17662_DF_009	SW8290A	Total TCDF	13.9	pg/g	EMPC	J	25
B4526	CS-44	B4526_17662_DF_009	SW8290A	Total PeCDF	10	pg/g	EMPC	J	25
B4526	CS-44	B4526_17662_DF_009	SW8290A	123678-HxCDD	0.897	pg/g	J EMPC	U	25
B4526	CS-44	B4526_17662_DF_009	SW8290A	12378-PeCDD	0.326	pg/g	J EMPC	U	25
B4526	CS-44	B4526_17662_DF_009	SW8290A	123478-HxCDF	0.412	pg/g	J EMPC	U	25
B4526	CS-44	B4526_17662_DF_009	SW8290A	Total HxCDF	8.62	pg/g	EMPC	J	25
B4526	CS-45	B4526_17662_DF_010	SW8290A	12378-PeCDD	1.8	pg/g	J EMPC	U	25
B4526	CS-45	B4526_17662_DF_010	SW8290A	Total HxCDF	239	pg/g	EMPC	J	25
B4526	CS-45	B4526_17662_DF_010	SW8290A	Total TCDF	16.8	pg/g	EMPC	J	25
B4526	CS-45	B4526_17662_DF_010	SW8290A	Total PeCDD	13	pg/g	EMPC	J	25
B4526	CS-54	B4526_17662_DF_011	SW8290A	2378-TCDF	0.342	pg/g	J EMPC	U	25
B4526	CS-54	B4526_17662_DF_011	SW8290A	Total PeCDD	4.31	pg/g	EMPC	J	25
B4526	CS-54	B4526_17662_DF_011	SW8290A	Total HxCDF	5.24	pg/g	EMPC	J	25
B4526	CS-54	B4526_17662_DF_011	SW8290A	Total PeCDF	4.48	pg/g	EMPC	J	25
B4526	CS-54	B4526_17662_DF_011	SW8290A	Total TCDF	13.1	pg/g	EMPC	J	25
B4526	CS-54	B4526_17662_DF_011	SW8290A	234678-HxCDF	0.274	pg/g	J EMPC	U	25
B4526	CS-54	B4526_17662_DF_011	SW8290A	23478-PeCDF	0.319	pg/g	J EMPC	U	25
B4526	CS-54	B4526_17662_DF_011	SW8290A	12378-PeCDF	0.218	pg/g	J EMPC	U	25

Qualified Data Summary Table
Kerr McGee Navassa Site - OU1 Soil Sampling 2020

SDG	Sample ID	Lab ID	Method	Analyte	Result	Units	Lab Flag	DV Qual	DV Code
B4526	CS-46	B4526_17662_DF_012	SW8290A	12378-PeCDF	0.644	pg/g	J EMPC	U	25
B4526	CS-46	B4526_17662_DF_012	SW8290A	2378-TCDF	0.399	pg/g	J EMPC	U	25
B4526	CS-46	B4526_17662_DF_012	SW8290A	23478-PeCDF	1.4	pg/g	J EMPC	U	25
B4526	CS-46	B4526_17662_DF_012	SW8290A	Total PeCDF	25.7	pg/g	EMPC	J	25
B4526	CS-46	B4526_17662_DF_012	SW8290A	Total TCDF	16	pg/g	EMPC	J	25
B4526	CS-46	B4526_17662_DF_012	SW8290A	Total HxCDD	104	pg/g	EMPC	J	25
B4526	CS-46	B4526_17662_DF_012	SW8290A	Total PeCDD	10.3	pg/g	EMPC	J	25
B4526	CS-47	B4526_17662_DF_013	SW8290A	123478-HxCDF	0.568	pg/g	J EMPC	U	25
B4526	CS-47	B4526_17662_DF_013	SW8290A	2378-TCDF	0.34	pg/g	J EMPC	U	25
B4526	CS-47	B4526_17662_DF_013	SW8290A	Total HxCDF	10.2	pg/g	EMPC	J	25
B4526	CS-47	B4526_17662_DF_013	SW8290A	Total PeCDF	9.15	pg/g	EMPC	J	25
B4526	CS-47	B4526_17662_DF_013	SW8290A	Total TCDF	12.5	pg/g	EMPC	J	25
B4526	CS-47	B4526_17662_DF_013	SW8290A	Total HxCDD	21.1	pg/g	EMPC	J	25
B4526	CS-47	B4526_17662_DF_013	SW8290A	Total PeCDD	7.65	pg/g	EMPC	J	25
B4527	FB-01	B4527_17665_DF_001	SW8290A	1234678-HpCDD	4.96	pg/L	J B EMPC	U	25
B4527	FB-01	B4527_17665_DF_001	SW8290A	OCDD	24.7	pg/L	J B	U	7
B4527	FB-01	B4527_17665_DF_001	SW8290A	Total HpCDD	9.24	pg/L	EMPC	J	25
B4527	EB-01	B4527_17665_DF_002	SW8290A	OCDD	27.4	pg/L	J B	U	7
B4527	EB-02	B4527_17665_DF_004	SW8290A	OCDD	12.6	pg/L	J B EMPC	U	25
B4527	EB-03	B4527_17665_DF_005	SW8290A	Total HpCDD	3.33	pg/L	EMPC	J	25
B4528	CS-55	B4528_17661_DF_001	SW8290A	123678-HxCDD	0.616	pg/g	J EMPC	U	25
B4528	CS-55	B4528_17661_DF_001	SW8290A	123678-HxCDF	0.351	pg/g	J EMPC	U	25
B4528	CS-55	B4528_17661_DF_001	SW8290A	234678-HxCDF	0.578	pg/g	J EMPC	U	25
B4528	CS-55	B4528_17661_DF_001	SW8290A	OCDF	7.75	pg/g	EMPC	U	25
B4528	CS-55	B4528_17661_DF_001	SW8290A	Total TCDD	5.57	pg/g	EMPC	J	25
B4528	CS-55	B4528_17661_DF_001	SW8290A	Total PeCDD	6.01	pg/g	EMPC	J	25
B4528	CS-55	B4528_17661_DF_001	SW8290A	Total HxCDD	13.5	pg/g	EMPC	J	25
B4528	CS-55	B4528_17661_DF_001	SW8290A	Total TCDF	9.73	pg/g	EMPC	J	25
B4528	CS-55	B4528_17661_DF_001	SW8290A	Total PeCDF	7.65	pg/g	EMPC	J	25
B4528	CS-55	B4528_17661_DF_001	SW8290A	Total HxCDF	8.55	pg/g	EMPC	J	25

Qualified Data Summary Table
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SDG	Sample ID	Lab ID	Method	Analyte	Result	Units	Lab Flag	DV Qual	DV Code
B4528	CS-50	B4528_17661_DF_002	SW8290A	2378-TCDF	0.439	pg/g	J EMPC	U	25
B4528	CS-50	B4528_17661_DF_002	SW8290A	Total HxCDD	14.4	pg/g	EMPC	J	25
B4528	CS-50	B4528_17661_DF_002	SW8290A	123478-HxCDD	0.492	pg/g	J EMPC	U	25
B4528	CS-50	B4528_17661_DF_002	SW8290A	123789-HxCDD	0.739	pg/g	J EMPC	U	25
B4528	CS-50	B4528_17661_DF_002	SW8290A	Total TCDF	5.36	pg/g	EMPC	J	25
B4528	CS-50	B4528_17661_DF_002	SW8290A	Total TCDD	3.19	pg/g	EMPC	J	25
B4528	CS-50	B4528_17661_DF_002	SW8290A	Total PeCDD	6.35	pg/g	EMPC	J	25
B4528	CS-50	B4528_17661_DF_002	SW8290A	Total PeCDF	6.57	pg/g	EMPC	J	25
B4528	CS-50	B4528_17661_DF_002	SW8290A	Total HxCDF	6.21	pg/g	EMPC	J	25
B4528	CS-50	B4528_17661_DF_002	SW8290A	Total HpCDF	9.52	pg/g	EMPC	J	25
B4528	CS-51	B4528_17661_DF_003	SW8290A	234678-HxCDF	0.502	pg/g	J EMPC	U	25
B4528	CS-51	B4528_17661_DF_003	SW8290A	Total HxCDF	9.69	pg/g	EMPC	J	25
B4528	CS-51	B4528_17661_DF_003	SW8290A	12378-PeCDD	0.487	pg/g	J EMPC	U	25
B4528	CS-51	B4528_17661_DF_003	SW8290A	123678-HxCDD	1.47	pg/g	J EMPC	U	25
B4528	CS-51	B4528_17661_DF_003	SW8290A	123789-HxCDD	0.783	pg/g	J EMPC	U	25
B4528	CS-51	B4528_17661_DF_003	SW8290A	2378-TCDF	0.307	pg/g	J EMPC	U	25
B4528	CS-51	B4528_17661_DF_003	SW8290A	23478-PeCDF	0.721	pg/g	J EMPC	U	25
B4528	CS-51	B4528_17661_DF_003	SW8290A	Total PeCDD	10.4	pg/g	EMPC	J	25
B4528	CS-51	B4528_17661_DF_003	SW8290A	Total HxCDD	21	pg/g	EMPC	J	25
B4528	CS-51	B4528_17661_DF_003	SW8290A	Total TCDF	9.42	pg/g	EMPC	J	25
B4528	CS-51	B4528_17661_DF_003	SW8290A	Total PeCDF	10.6	pg/g	EMPC	J	25
B4528	CS-51	B4528_17661_DF_003	SW8290A	Total HpCDF	15.7	pg/g	EMPC	J	25
B4528	CS-48	B4528_17661_DF_004	SW8290A	Total HpCDD	208	pg/g		J	9
B4528	CS-48	B4528_17661_DF_004	SW8290A	Total PeCDD	2.36	pg/g	EMPC	J	25
B4528	CS-48	B4528_17661_DF_004	SW8290A	OCDD	280	pg/g		J	9
B4528	CS-48	B4528_17661_DF_004	SW8290A	123478-HxCDD	0.501	pg/g	J EMPC	U	25
B4528	CS-48	B4528_17661_DF_004	SW8290A	123678-HxCDD	0.849	pg/g	J EMPC	U	25
B4528	CS-48	B4528_17661_DF_004	SW8290A	1234678-HpCDD	42.8	pg/g		J	9
B4528	CS-48	B4528_17661_DF_004	SW8290A	Total TCDD	2.6	pg/g	EMPC	J	9,25
B4528	CS-48	B4528_17661_DF_004	SW8290A	123789-HxCDD	0.825	pg/g	J EMPC	U	25

Qualified Data Summary Table
Kerr McGee Navassa Site - OU1 Soil Sampling 2020

SDG	Sample ID	Lab ID	Method	Analyte	Result	Units	Lab Flag	DV Qual	DV Code
B4528	CS-48	B4528_17661_DF_004	SW8290A	Total TCDF	3.92	pg/g	EMPC	J	9,25
B4528	CS-48	B4528_17661_DF_004	SW8290A	Total PeCDF	2.04	pg/g	EMPC	J	25
B4528	CS-48	B4528_17661_DF_004	SW8290A	Total HxCDF	6.4	pg/g	EMPC	J	25
B4528	CS-48	B4528_17661_DF_004	SW8290A	Total HxCDD	28.1	pg/g	EMPC	J	9,25
B4528	CS-52	B4528_17661_DF_005	SW8290A	2378-TCDF	0.296	pg/g	J EMPC	U	25
B4528	CS-52	B4528_17661_DF_005	SW8290A	Total PeCDF	18.2	pg/g	EMPC	J	25
B4528	CS-52	B4528_17661_DF_005	SW8290A	Total TCDD	1.97	pg/g	EMPC	J	25
B4528	CS-52	B4528_17661_DF_005	SW8290A	Total PeCDD	10.9	pg/g	EMPC	J	25
B4528	CS-52	B4528_17661_DF_005	SW8290A	Total TCDF	5.7	pg/g	EMPC	J	25
B4528	DUP-03	B4528_17661_DF_006	SW8290A	123789-HxCDD	0.591	pg/g	J EMPC	U	25
B4528	DUP-03	B4528_17661_DF_006	SW8290A	1234678-HpCDD	23.9	pg/g		J	9
B4528	DUP-03	B4528_17661_DF_006	SW8290A	OCDD	164	pg/g		J	9
B4528	DUP-03	B4528_17661_DF_006	SW8290A	1234789-HpCDF	0.319	pg/g	J EMPC	U	25
B4528	DUP-03	B4528_17661_DF_006	SW8290A	Total TCDD	0.761	pg/g		J	9
B4528	DUP-03	B4528_17661_DF_006	SW8290A	Total PeCDD	0.864	pg/g	EMPC	J	25
B4528	DUP-03	B4528_17661_DF_006	SW8290A	Total HxCDD	13.6	pg/g	EMPC	J	9,25
B4528	DUP-03	B4528_17661_DF_006	SW8290A	Total HpCDD	100	pg/g		J	9
B4528	DUP-03	B4528_17661_DF_006	SW8290A	Total TCDF	1.52	pg/g	EMPC	J	9,25
B4528	DUP-03	B4528_17661_DF_006	SW8290A	Total HxCDF	2.99	pg/g	EMPC	J	25
B4528	DUP-03	B4528_17661_DF_006	SW8290A	Total HpCDF	10.8	pg/g	EMPC	J	25
B4528	DUP-03	B4528_17661_DF_006	SW8290A	123678-HxCDD	0.553	pg/g	J EMPC	U	25
B4528	DUP-03	B4528_17661_DF_006	SW8290A	123478-HxCDD	0.255	pg/g	J EMPC	U	25
B4528	CS-49	B4528_17661_DF_007	SW8290A	Total PeCDF	1.67	pg/g	EMPC	J	25
B4528	CS-49	B4528_17661_DF_007	SW8290A	123478-HxCDF	0.364	pg/g	J EMPC	U	25
B4528	CS-49	B4528_17661_DF_007	SW8290A	123678-HxCDF	0.201	pg/g	J EMPC	U	25
B4528	CS-49	B4528_17661_DF_007	SW8290A	Total PeCDD	3.42	pg/g	EMPC	J	25
B4528	CS-49	B4528_17661_DF_007	SW8290A	Total HxCDD	8.84	pg/g	EMPC	J	25
B4528	CS-49	B4528_17661_DF_007	SW8290A	Total TCDF	1.12	pg/g	EMPC	J	25
B4528	CS-49	B4528_17661_DF_007	SW8290A	Total HxCDF	2.63	pg/g	EMPC	J	25
B4528	CS-49	B4528_17661_DF_007	SW8290A	123478-HxCDD	0.259	pg/g	J EMPC	U	25

Qualified Data Summary Table
Kerr McGee Navassa Site - OU1 Soil Sampling 2020

SDG	Sample ID	Lab ID	Method	Analyte	Result	Units	Lab Flag	DV Qual	DV Code
B4528	CS-49	B4528_17661_DF_007	SW8290A	123678-HxCDD	0.344	pg/g	J EMPC	U	25
FA77581	CS-24	FA77581-5	SW8270	Pyrene	3120	ug/kg		J	8H
FA77581	CS-24	FA77581-5	SW8270	Fluoranthene	3000	ug/kg		J	8H
FA77581	CS-24	FA77581-5	SW8270	Chrysene	2380	ug/kg		J	8H
FA77581	CS-24	FA77581-5	SW8270	Benzo(a)anthracene	2060	ug/kg		J	8H
FA77689	DUP-03	FA77689-10	SW8270SIM	Fluoranthene	933	ug/kg		J	9
FA77689	CS-48	FA77689-8	SW8270SIM	Fluoranthene	1950	ug/kg		J	9

DATA VALIDATION REPORT ADDENDUM

KERR-MCGEE CHEMICAL CORPORATION SITE
NAVASSA, NORTH CAROLINA
OU1 SOIL SAMPLING 2020

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September 14, 2020

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PROJECT NARRATIVE

Basis for the Data Validation

This report summarizes the results of compliance (EPA Stage 2A) and full validation (EPA Stage 4) performed on soil and associated quality control sample data for the former Kerr-McGee Chemical Corporation Site, Navassa, North Carolina. A complete list of samples is provided in the Sample Index.

Analyses were performed by SGS Accutest, Orlando, FL, with the exception of Dioxins/Furans which were analyzed at the Wilmington, North Carolina lab. The analytical methods and EcoChem project chemists are listed in the following table:

ANALYSIS	METHOD	PRIMARY REVIEW	SECONDARY REVIEW
Dioxins/Furans	8290A	E. Clayton	C. Ransom
Pentachlorophenol (PCP)	SW8270E		
Polycyclic Aromatic Hydrocarbons (PAH)	SW8270E SIM		
Total Solids	SM2540G		

The data were reviewed using guidance and quality control criteria documented in the analytical methods; *Quality Assurance Project Plan, Kerr-McGee Chemical Corporation – Navassa Superfund Site, Navassa, North Carolina* (EarthCon, September 2015); National *Functional Guidelines for Organic Superfund Methods Data Review* (USEPA 2017); and *National Functional Guidelines for High Resolution Superfund Methods Data Review* (USEPA 2016).

EcoChem's goal in assigning data assessment qualifiers is to assist in proper data interpretation. If values are estimated (J or UJ), data may be used for site evaluation and risk assessment purposes but reasons for data qualification should be taken into consideration when interpreting sample concentrations. Data that have been rejected are flagged with (R). Rejected data should not be used for any purpose. If values have no data qualifier assigned, then the data meet the data quality objectives as stated in the documents and methods referenced above.

Validation criteria are included as Appendix A. The qualified data summary table (QDST) is included as Appendix B. Data Validation Worksheets and project associated communications will be kept on file at EcoChem, Inc. A qualified laboratory electronic data deliverable (EDD) is also submitted.

Sample Index
Kerr McGee Navassa Site - OU1 Soil Sampling Addendum

SDG	Sample ID	Lab ID	Dioxins	SVOC	SIM PAH	Total Solids
B4585	CS-53	B4585_17706_DF_002	✓			
B4585	CS-TB-16A	B4585_17706_DF_001	✓			
FA8194	CS-TB-16A	FA78194-1		✓	✓	✓
FA8194	CS-53	FA78194-2		✓	✓	✓

DATA VALIDATION REPORT - ADDENDUM
Kerr McGee Navassa Site – OU1 Soil Sampling 2020
Dioxin/Furan Compounds by EPA Method 8290A

This report documents the review of analytical data from the analysis of soil samples and the associated laboratory quality control (QC) samples. Samples were analyzed by SGS North America, Wilmington, North Carolina. Refer to the Sample Index for a complete list of samples.

SDG	Number of Samples and Matrix	Validation Level
B4585	2 Soil	EPA Stage 4

DATA PACKAGE COMPLETENESS

The laboratory submitted all required deliverables in the initial data packages. The laboratory was contacted and supplied the missing documentation. The laboratory followed adequate corrective action processes and all anomalies were discussed in the case narrative.

EDD TO HARDCOPY VERIFICATION

All sample IDs and results reported in the electronic data deliverable (EDD) were verified (100% verification) by comparing the EDD to the hardcopy laboratory data package. Ten percent (10%) of the laboratory QC results were also verified.

TECHNICAL DATA VALIDATION

The quality control (QC) requirements that were reviewed are listed in the following table.

1	Sample Receipt, Preservation, and Holding Times	✓	Ongoing Precision and Recovery (OPR)
✓	System Performance and Resolution Checks (Full DV only)	1	Field Duplicates
✓	Initial Calibration (ICAL) (Full DV only)	✓	Target Analyte List
✓	Calibration Verification (CCAL) (Full DV only)	✓	Reporting Limits
✓	Laboratory Blanks	2	Compound Identification
1	Field Blanks	✓	Compound Quantitation (Full DV only)
✓	Labeled Compound Recovery	1	Calculation Verification (Full DV only)
✓	Matrix Spike/Matrix Spike Duplicates (MS/MSD)		

✓Method quality objectives (MQO) and QC criteria have been met. No outliers are noted or discussed.
1 Quality control results are discussed below, but no data were qualified.
2 Quality control outliers that impact the reported data were noted. Data qualifiers were issued as discussed below.

Sample Receipt, Preservation, and Holding Times

The sample coolers were received at temperatures less than the lower control limit at 0.7°C. Results were not adversely affected by the temperature outliers; no action was taken.

Compound Identification

The method requires the confirmation of 2,3,7,8-TCDF detects using an alternate GC column when closely eluting TCDF isomers cannot be adequately separated on the primary column. The laboratory uses an ZB-5MS column, which has been proven to adequately resolve the TCDF isomers. Confirmation of hits for 2,3,7.8-TCDF was not necessary.

The laboratory reported "estimated maximum possible concentrations" values (EMPC) for one or more of the target analytes. An EMPC value is reported when a peak was detected but did not meet the ion ratio identification criteria specified in the method. These EMPC results are not considered to be positive identifications for the analytes. To indicate that the reported result for an individual analyte is in effect an elevated detection limit, the EMPC values were qualified as not detected (U-25) at the reported values. An EMPC flag was also added to the Total homolog group values if one or more of the individual congeners was reported as an EMPC. The results for totals with EMPC flags were estimated (J-25).

Calculation Verification

Several results were verified by recalculation from the raw data. No calculation or transcription errors were found.

OVERALL ASSESSMENT

As determined by this evaluation, the laboratory performed the specified analytical method. Accuracy was acceptable as demonstrated by the labeled compound, and OPR (blank spike), and matrix spike/matrix spike duplicate (MS/MSD) recoveries. Precision was acceptable as demonstrated by the MS/MSD RPD values.

Detection limits were elevated based on ion ratio outliers (EMPC values). Total homolog groups with EMPC values were estimated.

All data, as qualified, are acceptable for use.

DATA VALIDATION REPORT - ADDENDUM
Kerr McGee Navassa Site – OU1 Soil Sampling 2020
Semi-Volatile Organic Compounds by SW8720E, Pentachlorophenol by SW8270E SIM, and Total Solids by SM 2540

This report documents the review of analytical data from the analysis of soil samples and the associated laboratory quality control (QC) samples. Samples were analyzed by SGS Accutest Southeast, Orlando, Florida. Refer to the Sample Index for a complete list of samples.

SDG	NUMBER OF SAMPLES	VALIDATION LEVEL
FA78194	2 Soil	EPA Stage 4

DATA PACKAGE COMPLETENESS

The laboratory submitted all required deliverables. The laboratory followed adequate corrective action processes and all anomalies were discussed in the case narrative.

EDD TO HARDCOPY VERIFICATION

The electronic data deliverable (EDD) was verified against the laboratory portable document format (PDF) data package. No transcription errors were found.

TECHNICAL DATA VALIDATION

The QC requirements that were reviewed are listed below.

1	Sample Preservation and Holding Times	✓	Matrix Spikes/Matrix Spike Duplicates (MS/MSD)
✓	GC/MS Instrument Performance (Tune)	✓	Internal Standards
✓	Initial Calibration (ICAL)	2	Field Duplicates
✓	Continuing Calibration (CCAL)	✓	Target Analyte List
✓	Laboratory Blanks	✓	Reporting Limits
1	Field Blanks	✓	Reported Results
✓	Surrogate Compounds	✓	Compound Identification
✓	Laboratory Control Samples (LCS)	1	Calculation Verification

✓Stated method quality objectives (MQO) and QC criteria have been met. No outliers are noted or discussed
1 Quality control outliers are discussed below, but no data were qualified.
2 Quality control outliers that impact the reported data were noted. Data qualifiers were issued as discussed below.

Sample Receipt, Preservation, and Holding Times

The sample coolers were received at temperatures less than the lower control limit at 1.2°C. Results were not adversely affected by the temperature outliers; no action was taken.

Field Blanks

No field blanks were associated with this data set.

Field Duplicates

There were no field duplicates in this data set.

Calculation Verification

Several results were verified by recalculation from the raw data. No calculation or transcription errors were found.

OVERALL ASSESSMENT

As determined by this evaluation, the laboratory followed the specified analytical method. With the exceptions noted above, accuracy was acceptable as demonstrated by the surrogate, laboratory control sample, and matrix spike/matrix spike duplicate (MS/MSD) percent recovery values and precision was acceptable as demonstrated by the MS/MSD RPD values.

No data were qualified for any reason. All data, as reported, are acceptable for use.

ECOCHEM
Data Quality

APPENDIX A

DATA QUALIFIER DEFINITIONS
REASON CODES
AND CRITERIA TABLES

DATA VALIDATION QUALIFIER CODES
Based on National Functional Guidelines

The following definitions provide brief explanations of the qualifiers assigned to results in the data review process.

U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents the approximate concentration.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

The following is an EcoChem qualifier that may also be assigned during the data review process:

DNR	Do not report; a more appropriate result is reported from another analysis or dilution.

DATA QUALIFIER REASON CODES

Group	Code	Reason for Qualification
Sample Handling	1	Improper Sample Handling or Sample Preservation (i.e., headspace, cooler temperature, pH, summa canister pressure); Exceeded Holding Times
Instrument Performance	24	Instrument Performance (i.e., tune, resolution, retention time window, endrin breakdown, lock-mass)
	5A	Initial Calibration (RF, %RSD, r^2)
	5B	Calibration Verification (CCV, CCAL; RF, %D, %R) Use bias flags (H,L)[1] where appropriate
	5C	Initial Calibration Verification (ICV %D, %R) Use bias flags (H,L)[1] where appropriate
Blank Contamination	6	Field Blank Contamination (Equipment Rinsate, Trip Blank, etc.)
	7	Lab Blank Contamination (i.e., method blank, instrument blank, etc.) Use low bias flag (L)[1] for negative instrument blanks
Precision and Accuracy	8	Matrix Spike (MS and/or MSD) Recoveries Use bias flags (H,L)[1] where appropriate
	9	Precision (all replicates: LCS/LCSD, MS/MSD, Lab Replicate, Field Replicate)
	10	Laboratory Control Sample Recoveries (a.k.a. Blank Spikes) Use bias flags (H,L)[1] where appropriate
	12	Reference Material Use bias flags (H,L)[1] where appropriate
	13	Surrogate Spike Recoveries (a.k.a. labeled compounds, recovery standards) Use bias flags (H,L)[1] where appropriate
Interferences	16	ICP/ICP-MS Serial Dilution Percent Difference
	17	ICP/ICP-MS Interference Check Standard Recovery Use bias flags (H,L)[1] where appropriate
	19	Internal Standard Performance (i.e., area, retention time, recovery)
	22	Elevated Detection Limit due to Interference (i.e., chemical and/or matrix)
	23	Bias from Matrix Interference (i.e. diphenyl ether, PCB/pesticides)
Identification and Quantitation	2	Chromatographic pattern in sample does not match pattern of calibration standard
	3	2nd column confirmation (RPD or %D)
	4	Tentatively Identified Compound (TIC) (associated with NJ only)
	20	Calibration Range or Linear Range Exceeded
	25	Compound Identification (i.e., ion ratio, retention time, relative abundance, etc.)
Miscellaneous	11	A more appropriate result is reported (multiple reported analyses i.e., dilutions, re-extractions, etc. Associated with "R" and "DNR" only)
	14	Other (See DV report for details)
	26	Method QC information not provided

[1] H = high bias indicated
L = low bias indicated

Semivolatile Organic Compounds by Gas Chromatography-Mass Spectroscopy (GC-MS)
(Based on NFG 1999 & 2008 and SW-846 Method 8270D)

QC Element	Acceptance Criteria	Source of Criteria	Action for Non-Conformance	Reason Code	Discussion and Comments
Sample Handling					
Cooler/Storage Temperature Preservation	4°C±2°C sediment/tissues may require storage at -20°C	NFG (1) Method (3)	**If required by project:** J (pos)/UJ (ND) if greater than 6° C	1	Use **PJ** for temp outliers; see **TM20** Current SW846 criterion is ≤ 6° C (3)
Holding Time	**Extraction Aqueous:** 7 days from collection **Extraction Solid:** 14 days from collection **Analysis (all matrices)**: 40 days from extraction Holding time may be extended to 1 year for frozen sediments/tissues	NFG (1) Method (3)	J (pos)/UJ (ND) if HT exceeded J (pos)/R (ND) if gross exceedance (> 2x HT)	1	Gross exceedance = > 2x HT, as per 1999 NFG
Instrument Performance					
Tuning	DFTPP Beginning of each 12 hour period Use method or project acceptance criteria	NFG (1) Method (3)	R (pos/ND) all analytes in all samples associated with the tune	24	
Initial Calibration **Sensitivity**	RRF ≥ 0.05 except: RRF ≥ 0.01 poor responders *	NFG (1) Method (3)	Use **PJ** to qualify J (pos)/UJ (ND)	5A	**TM-06** EcoChem Policy for the Evaluation and Qualification of GCMS Instrument Performance **PJ** - no action if response is stable (ICAL RSD and CCAL %D acceptable)
Initial Calibration **Stability**	Minimum 5 standards %RSD ≤ 20.0% except: %RSD ≤ 40.0% poor responders * **or** co-efficient of determination (r^2) > 0.99	NFG (1) Method (3)	J (pos) if %RSD > limit **or** r^2 value <0.99	5A	
Initial Calibration Verification Check	Prepared from second source; analyze after each ICAL Percent recovery limits = 70-130%	Method (3)	J (pos) %R > UCL J (pos)/UJ (ND) %R < LCL	5A (H,L)[4]	QAPP may have overriding accuracy limits.

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Semivolatile Organic Compounds by Gas Chromatography-Mass Spectroscopy (GC-MS)
(Based on NFG 1999 & 2008 and SW-846 Method 8270D)

QC Element	Acceptance Criteria	Source of Criteria	Action for Non-Conformance	Reason Code	Discussion and Comments
Instrument Performance (continued)					
Continuing Calibration **Sensitivity**	RRF ≥ 0.05 except: RRF ≥ 0.01 poor responders *	NFG [1] Method [3]	Use **PJ** to qualify J (pos)/UJ (ND)	5B	see ICAL RRF guidance
Continuing Calibration **Stability**	Prior to sample analysis and every 12 hours %D ≤ 25% except: %D ≤ 40.0% poor responders *	NFG [1] Method [3]	J (pos) - %D > control limit (high bias) J (pos)/UJ (ND) - %D < -control limit (low bias)	5B (H,L)[4]	
Blank Contamination					
Method Blank (MB)	MB: One per matrix per batch of (of ≤ 20 samples) No detected compounds > MDL	NFG [2] Method [3]	U(pos) if result is < 5X or 10X action level	7	10X action level applies to phthalates only. 5X for all other target analytes **Hierarchy of blank review:** **#1 - Review MB, qualify as needed** **#2 - Review FB , qualify as needed** **Note: Actions as per 1999 NFG**
	No TICs present		R (pos) TICs using 10X rule	7	
Field Blank (FB)	No detected compounds > MDL	NFG [2] Method [3]	U (pos) if result is < 5X or 10X action level	6	
Precision and Accuracy					
LCS/LCSD (recovery)	One per matrix per batch (of ≤ 20 samples) LCSD not required by NFG or method Use method acceptance criteria/laboratory limits	Method [3]	J (pos) if %R > UCL J (pos)/UJ (ND) if %R < LCL J (pos)/R (ND)%R < 10%	10 (H,L)[4]	No action if only one spike %R is outside criteria when LCSD is analyzed, unless one recovery is <10%. QAPP may have overriding accuracy limits. Qualify all associated samples.
LCS/LCSD (RPD)	If LCSD analyzed RPD < lab limits	Method [3]	J (pos)	9	Qualify all associated samples. QAPP may have overriding precision limits.

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Semivolatile Organic Compounds by Gas Chromatography-Mass Spectroscopy (GC-MS)
(Based on NFG 1999 & 2008 and SW-846 Method 8270D)

QC Element	Acceptance Criteria	Source of Criteria	Action for Non-Conformance	Reason Code	Discussion and Comments
Precision and Accuracy (continued)					
Reference Material (RM, SRM, or CRM)	Result ±20% of the 95% confidence interval of the true value for analytes	EcoChem standard policy	J (pos)/UJ (ND) if < LCL J (pos) if > UCL	12 (H,L)[4]	QAPP may have overriding accuracy limits. Some manufacturers have different RM control limits
MS/MSD (recovery)	One per matrix per batch (of ≤ 20 samples) Use method acceptance criteria/laboratory limits	NFG (1) Method (3)	J (pos) %R > UCL J (pos)/UJ (ND) if both %R < LCL J (pos)/R (ND) if both %R < 10% J (pos)/UJ (ND) if one > UCL & one < LCL, with no bias	8 (H,L)[4]	No action if only one spike %R is outside criteria. No action if parent concentration is >4x the amount spiked. Qualify parent sample only.
MS/MSD (RPD)	One per matrix per batch (of ≤ 20 samples) Use method acceptance criteria/laboratory limits	NFG (1) Method (2)	J (pos) in parent sample if RPD > CL	9	Qualify parent sample only
Surrogates	Minimum of 3 acid & 3 base/neutral (B/N) compounds added to all samples Within method control limits	NFG (1) Method (3)	J (pos) if %R > UCL J (pos)/UJ (ND) if %R < LCL J (pos)/R (ND) if %R < 10%	13 (H,L)[4]	Qualify all compounds in associated fraction. Do not qualify if only 1 acid and/or 1 B/N surrogate is out, unless <10%. If 1 surrogate outlier < 10% then J (pos)/R (ND)
Internal Standards	Added to all samples Acceptable Range: IS area 50% to 200% of CCAL area RT within 30 seconds of CC RT	NFG (1) Method (3)	J (pos) if > 200% J (pos)/UJ (ND) if < 50% J (pos)/R (ND) if < 25% if RT >30 seconds use **PJ**	19	Qualify compounds quantified using particular internal standard
Field Duplicates	**Solids:** RPD < 50% OR difference < 2X RL (for results < 5X RL) **Aqueous:** RPD < 35% OR difference < 1X RL (for results < 5X RL)	EcoChem standard policy	J (pos)/UJ (ND) Qualify only parent and field duplicate samples	9	Use project limits if specified

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Semivolatile Organic Compounds by Gas Chromatography-Mass Spectroscopy (GC-MS)
(Based on NFG 1999 & 2008 and SW-846 Method 8270D)

QC Element	Acceptance Criteria	Source of Criteria	Action for Non-Conformance	Reason Code	Discussion and Comments
Compound Identification and Quantitation and Calculation					
Retention times and relative ion intensities	RRT within 0.06 of standard RRT Ion relative intensity within 20% of standard All ions in std. at > 10% intensity must be present in sample	NFG [(1)] Method [(3)]	U (pos) if identification criteria not met	25	
TICs	Major ions (>10%) in reference must be present in sample; intensities agree within 20%; check identification	NFG [(1)] Method [(3)]	NJ the TIC unless: R (pos) common laboratory contaminants	4	
Calibration Range	Results greater than highest calibration standard	EcoChem standard policy	Qualify J (pos)	20	If result from dilution analysis is not reported.
Dilutions, Re-extractions and/or Reanalyses	Report only one result per analyte	EcoChem standard policy	Use "DNR" to flag results that will not be reported.	11	**TM-04** EcoChem Policy for Rejection/Selection Process for Multiple Results

[1] National Functional Guidelines for Organic Data Review, June, 2008
[2] National Functional Guidelines for Organic Data Review, October, 1999
[3] Method SW846 8270D Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS), Revision 4, February 2007.
[4] NFG 2013 suggests using "+ / -" to indicate bias; EcoChem has chosen "H" = high bias indicated; "L" = low bias indicated.

(pos): Positive Result(s)
(ND): Non-detects

* "Poor responder" compounds: acetophenone, atrazine, benzaldehyde, 1,1'-biphenyl, bis(2-ethylhexyl)phthalate, butylbenzylphthalate, caprolactam, carbazole, 4-chloroaniline, diethylphthalate, di-n-butylphthalate, 3-3'-dichlorobenzidine, dimethylphthalate, 2,4-dinitrophenol, 4,6-dinitro-2-methylphenol, di-n-octylphthalate, hexachlorobutadiene, hexachlorocyclopentadiene, 2-nitroaniline, 3-nitroaniline, 4-nitroaniline, 4-nitrophenol, N-nitrosodiphenylamine, 2,2'-oxybis-(1-chloropropane), 1,2,4,5-tetrachlorobenzene use a 0.010 RRF criterion.

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Dioxin/Furan Analysis by HRMS
(Based on Dioxin NFG 2011 and Methods EPA 1613B and SW-846 8290)

QC Element	Acceptance Criteria	Source of Criteria	Action for Non-Conformance	Reason Code	Discussion and Comments
Sample Handling					
Cooler/Storage Temperature Preservation	Waters/Solids ≤ 6°C & in the dark Tissues <-10°C & in the dark **Preservation Aqueous:** If Cl_2 is present Thiosulfate must be added and if pH > 9 it must be adjusted to 7 - 9	NFG [1] Method[2]	J(pos)/R(ND) if thiosulfate not added if Cl_2 present; J(pos)/UJ(ND) if pH not adjusted J(pos)/UJ(ND) if temp > 20°C	1	**EcoChem PJ, see TM-05**
Holding Time	**If properly stored, 1 year or:** **Extraction (all matrices):** 30 days from collection **Analysis (all matrices)**: 45 days from extraction	NFG [1] Method[2]	If not properly stored or HT exceedance: J(pos)/UJ(ND)	1	**EcoChem PJ, see TM-05** Gross exceedance = > 1 year 2011 NFG **Note:** Under CWA, SDWA, and RCRA the HT for H2O is 7 days.
Instrument Performance					
Mass Resolution (Tuning)	PFK (Perfluorokerosene) ≥10,000 resolving power at m/z 304.9824. Exact mass of m/z 380.9760 w/in 5 ppm of theoretical value (380.97410 to 380.97790) . Analyzed prior to ICAL and at the start and end of each 12 hr. shift.	NFG [1] Method [2]	R(pos/ND) all analytes in all samples associated with the tune	24	Notify PM
Windows Defining Mix	Peaks for first and last eluters must be within established retention time windows for each selector group (chlorination level)	NFG [1] Method [2]	If peaks are not completely within windows (clipped): If natives are ok, J(pos)/UJ(ND) homologs (Totals) If natives are affected, R all results for that selector group	24	Notify PM
Column Performance Mix	Both mixes must be analyzed before ICAL and CCAL Valley < 25% (valley = (x/y)*100%) where x = ht. of TCDD (or TCDF) & y = baseline to bottom of valley For all isomers eluting near the 2378-TCDD (TCDF) peak (TCDD only for 8290)	NFG [1] Method [2]	J(pos) if valley > 25%	24	**EcoChem PJ, see TM-05, Rev. 2**; Note: TCDF is evaluated only if second column confirmation is performed
Initial Calibration **Sensitivity**	S/N ratio > 10 for all native and labeled compounds in CS1 std.	NFG [1] Method [2]	If <10, elevate Det. Limit or R(ND)	5A	
Initial Calibration **Selectivity**	Ion Abundance ratios within QC limits (Table 8 of method 8290) (Table 9 of method 1613B)	NFG [1] Method [2]	If 2 or more ion ratios are out for one compound in ICAL, J(pos)	5A	**EcoChem PJ, see TM-05, Rev. 2**

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Dioxin/Furan Analysis by HRMS
(Based on Dioxin NFG 2011 and Methods EPA 1613B and SW-846 8290)

QC Element	Acceptance Criteria	Source of Criteria	Action for Non-Conformance	Reason Code	Discussion and Comments
Instrument Performance (continued)					
Initial Calibration (Minimum 5 stds.) **Stability**	%RSD < 20% for native compounds %RSD <30% for labeled compounds (%RSD < 35% for labeled compounds under 1613b)	NFG [1] Method [2]	J(pos) natives if %RSD > 20%	5A	
	Absolute RT of $^{13}C_{12}$-1234-TCDD >25 min on DB5 & >15 min on DB-225	NFG [1] Method [2]	Narrate, no action		**EcoChem PJ, see TM-05, Rev. 2**
Continuing Calibration (Prior to each 12 hr. shift) **Sensitivity**	S/N ratio for CS3 standard > 10	NFG [1] Method [2]	If <10, elevate Det. Limit or R(ND)	5B	
Continuing Calibration (Prior to each 12 hr. shift) **Selectivity**	Ion Abundance ratios within QC limits (Table 8 of method 8290) (Table 9 of method 1613B)	NFG [1] Method [2]	For congener with ion ratio outlier, J(pos) natives in all samples associated with CCAL. No action for labeled congener ion ratio outliers.	25	**EcoChem PJ, see TM-05**
Continuing Calibration (Prior to each 12 hr. shift) **Stability**	%D+/-20% for native compounds %D +/-30% for labeled compounds **(Must meet limits in Table 6, Method 1613B)** If %D in the closing CCAL are within 25%/35%, the mean RF from the two CCAL may be used to calculate samples **(Section 8.3.2.4 of 8290)**.	NFG [1] Method [2]	**Labeled compounds:** Narrate, no action. **Native compounds:** 1613: J(pos)/UJ(ND)if %D is outside Table 6 limits J(pos)/R(ND) if %D is +/-75% of Table 6 limits 8290: J(pos)/UJ(ND) if %D = 20% - 75% J(pos)/R(ND) if %D > 75%	5B (H,L)[3]	
	Absolute RT of $^{13}C_{12}$-1234-TCDD and $^{13}C_{12}$-123789-HxCDD should be ± 15 seconds of ICAL RRT for all other compounds must meet criteria listed in Table 2 Method 1316.	NFG [1] Method [2]	Narrate, no action	5B	**EcoChem PJ, see TM-05**
Blank Contamination					
Method Blank (MB)	MB: One per matrix per batch of (of ≤ 20 samples) No detected compounds > RL	NFG [1] Method [2]	U(pos) if result is < 5X action level.	7	**Hierarchy of blank review:** **#1 - Review MB, qualify as needed** **#2 - Review FB , qualify as needed**
Field Blank (FB)	FB: frequency as per QAPP No detected compounds > RL		U(pos) if result is < 5X action level.	6	

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Dioxin/Furan Analysis by HRMS
(Based on Dioxin NFG 2011 and Methods EPA 1613B and SW-846 8290)

QC Element	Acceptance Criteria	Source of Criteria	Action for Non-Conformance	Reason Code	Discussion and Comments
Precision and Accuracy					
MS/MSD (recovery)	**MS/MSD not typically required for HRMS analyses.** If lab analyzes MS/MSD then one set per matrix per batch (of ≤ 20 samples) Use most current laboratory control limits	EcoChem standard policy	J(pos) if both %R > UCL - high bias J(pos)/UJ(ND) if both %R < LCL - low bias J(pos)/R(ND) if both %R < 10% - very low bias J(pos)/UJ(ND) if one > UCL & one < LCL, with no bias **PJ if only one %R outlier**	8 (H,L)[3]	No action if only one spike %R is outside criteria. No action if parent concentration is >4x the amount spiked. Qualify parent sample only unless other QC indicates systematic problems.
MS/MSD (RPD)	**MS/MSD not typically required for HRMS analyses.** If lab analyzes MS/MSD then one set per matrix per batch (of ≤ 20 samples) Use most current laboratory control limits	EcoChem standard policy	J(pos) in parent sample if RPD > CL	9	Qualify parent sample only.
LCS (or OPR)	One per lab batch (of ≤ 20 samples) Use most current laboratory control limits **or** Limits from Table 6 of 1613B	NFG [1] Method [2]	J(pos) if %R > UCL - high bias J(pos)/UJ(ND) if %R < LCL - low bias J(pos)/R(ND) if %R < 10% - very low bias	10 (H,L)[3]	No action if only one spike %R is outside criteria, when LCSD is analyzed. Qualify all associated samples.
LCS/LCSD (RPD)	**LCSD not typically required for HRMS analyses.** One set per matrix and batch of 20 samples RPD < 35%	Method [2] Ecochem standard policy	J(pos) assoc. compound in all samples if RPD > CL	9	Qualify all associated samples.
Lab Duplicate (RPD)	**Lab Dup not typically required for HRMS analyses.** One per lab batch (of ≤ 20 samples) Use most current laboratory control limits	EcoChem standard policy	J(pos)/UJ(ND) if RPD > CL	9	
Labeled Compounds (Internal Standards)	Added to all samples %R = 40% - 135% in all samples 8290 %R must meet limits in Table 7 Method 1613B	NFG [1] Method [2]	J(pos) if %R > UCL - high bias J(pos)/UJ(ND) if %R < LCL - low bias J(pos)/R(ND) if %R < 10% - very low bias	13 (H,L)[3]	
Field Duplicates	Solids: RPD <50% OR difference < 2X RL (for results < 5X RL) Aqueous: RPD <35% OR difference < 1X RL (for results < 5X RL)	EcoChem standard policy	Narrate and qualify if required by project	9	**Use professional judgment**

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Dioxin/Furan Analysis by HRMS
(Based on Dioxin NFG 2011 and Methods EPA 1613B and SW-846 8290)

QC Element	Acceptance Criteria	Source of Criteria	Action for Non-Conformance	Reason Code	Discussion and Comments
Compound ID and Calculation					
Quantitation/ Identification	All ions for each isomer must maximize within ± 2 seconds. S/N ratio >2.5 Ion ratios must meet criteria listed in Table 8 Method 8290, or Table 9 of 1613B; RRTs w/in limits in Table 2 of 1613B	NFG [1] Method [2]	Narrate in report; qualify if necessary NJ(pos) for retention time outliers. U(pos) for ion ratio outliers.	25	**EcoChem PJ, see TM-05**
EMPC (estimated maximum possible concentration)	If quantitation identification criteria are not met, laboratory should report an EMPC value.	NFG [1] Method [2]	If laboratory correctly reported an EMPC value, qualify the native compound U(pos) to indicate that the value is a detection limit and qualify total homolog groups J (pos)	25	**Use professional judgment See TM-18**
Interferences	Interferences from chlorodiphenyl ether compounds	NFG [1] Method [2]	J(pos)/UJ(ND) if present	23	**See TM-16**
	Lock masses must not deviate ± 20% from values in Table 8 of 1613B	Method [2]	J(pos)/UJ(ND) if present	24	**See TM-17**
Second Column Confirmation	All 2,3,7,8-TCDF hits must be confirmed on a DB-225 (or equiv) column. All QC criteria must also be met for the confirmation analysis.	NFG [1] Method [2]	Report the DB-225 value. If not performed use PJ.	3	DNR-11 DB5 result if both results from both columns are reported. **EcoChem PJ, see TM-05**
Calculation Check	Check 10% of field & QC sample results	EcoChem standard policy	Contact laboratory for resolution and/or corrective action	na	Full data validation only.
Electronic Data Deliverable (EDD)					
Verification of EDD to hardcopy data	EcoChem verify @ 10% unless problems noted; then increase level up to 100% for next several packages.		Depending on scope of problem, correct at EcoChem (minor issues) to resubmittal by laboratory (major issues).	na	EcoChem Project Manager and/or Database Administrator will work with lab to provide long-term corrective action.
Dilutions, Re-extractions and/or Reanalyses	Report only one result per analyte	Standard reporting policy	Use "DNR" to flag results that will not be reported.	11	

(pos) - positive (detected) results; (ND) - not detected results

[1] National Functional Guidelines for Chlorinated Dibenzo-p-Dioxins (CDDs) & Chlorinated Dibenzofurans (CDFs) Data Review, September 2011

[2] Polychlorinated Dibenzodioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) by High-Resolution Gas Chromatography/High-Resolution Mass Spectrometry (HRGC/HRMS), USEPA SW-846, Method 8290

[2] EPA Method 1613, Rev.B, Tetra-through Octa-Chlorinated Dioxins and Furans by Isotope Dilution HRGS/HRMS, October 1994

[3] NFG 2013 suggests using "+ / -" to indicate bias; EcoChem has chosen "H" = high bias indicated; "L" = low bias indicated.

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ECOCHEM
Data Quality

APPENDIX B

QUALIFIED DATA SUMMARY TABLE

Qualified Data Summary Table
Kerr McGee Navassa Site - OU1 Soil Sampling Addendum

SDG	Sample ID	Lab ID	Method	Analyte	Result	Units	Lab Flag	DV Qual	DV Code
B4585	CS-TB-16A	B4585_17706_DF_001	SW8290A	Total HpCDF	10.7	pg/g	EMPC	J	25
B4585	CS-TB-16A	B4585_17706_DF_001	SW8290A	Total HxCDF	4.71	pg/g	EMPC	J	25
B4585	CS-TB-16A	B4585_17706_DF_001	SW8290A	Total PeCDF	3.08	pg/g	EMPC	J	25
B4585	CS-TB-16A	B4585_17706_DF_001	SW8290A	Total TCDF	3.48	pg/g	EMPC	J	25
B4585	CS-TB-16A	B4585_17706_DF_001	SW8290A	Total HxCDD	13.7	pg/g	EMPC	J	25
B4585	CS-TB-16A	B4585_17706_DF_001	SW8290A	Total PeCDD	3.61	pg/g	EMPC	J	25
B4585	CS-TB-16A	B4585_17706_DF_001	SW8290A	1234789-HpCDF	0.249	pg/g	J EMPC	U	25
B4585	CS-TB-16A	B4585_17706_DF_001	SW8290A	OCDF	6.67	pg/g	EMPC	U	25
B4585	CS-53	B4585_17706_DF_002	SW8290A	2378-TCDF	0.669	pg/g	EMPC	U	25
B4585	CS-53	B4585_17706_DF_002	SW8290A	234678-HxCDF	0.461	pg/g	J EMPC	U	25
B4585	CS-53	B4585_17706_DF_002	SW8290A	Total HpCDF	10.7	pg/g	EMPC	J	25
B4585	CS-53	B4585_17706_DF_002	SW8290A	Total HxCDF	6.83	pg/g	EMPC	J	25
B4585	CS-53	B4585_17706_DF_002	SW8290A	Total PeCDF	8.34	pg/g	EMPC	J	25
B4585	CS-53	B4585_17706_DF_002	SW8290A	Total TCDF	11	pg/g	EMPC	J	25
B4585	CS-53	B4585_17706_DF_002	SW8290A	Total HxCDD	25.9	pg/g	EMPC	J	25
B4585	CS-53	B4585_17706_DF_002	SW8290A	Total PeCDD	7.54	pg/g	EMPC	J	25
B4585	CS-53	B4585_17706_DF_002	SW8290A	Total TCDD	3.94	pg/g	EMPC	J	25

APPENDIX E

SUMMARY OF FIELD QA/QC RESULTS

Table E-1: Duplicated Results and RPD

Analyte	8/6/2020 CS-29			8/6/2020 CS-35			8/8/2020 CS-48		
	CS-29	Dup	RPD	CS-35	Dup	RPD	CS-48	Dup	RPD
Conventionals									
Solids, Percent	92.2	77.7	17.07	90.7	82.7	9.23	65.4	64.6	1.23
Semi-volatile Organic Compounds (ug/kg)									
1-Methylnaphthalene	18 U	21 U	na	18.1 J	27 J	39.47	25 U	26 U	na
2-Methylnaphthalene	18 U	21 U	na	26.2 J	37.3 J	34.96	25 U	26 U	na
Acenaphthene	19 U	22 U	na	94.9 J	139 J	37.71	27.1 J	27 U	na
Acenaphthylene	41.7 J	70.9 J	51.87	1170	1800	42.42	217 J	232 J	6.68
Anthracene	62.2 J	73.1 J	16.11	2940	2740	7.04	346	403	15.22
Benzo(a)anthracene	51.8 J	39.9 J	25.95	2730	3940	36.28	644	491	26.96
Benzo(a)pyrene	43 J	36.1 J	17.45	2580	3430	28.29	470	473	0.64
Benzo(b)fluoranthene	137 J	119 J	14.06	8120	8920	9.39	1280	1310	2.32
Benzo(g,h,i)perylene	30.6 J	26.4 J	14.74	1700	2150	23.38	265	305	14.04
Benzo(k)fluoranthene	51.2 J	38.1 J	29.34	2060	2460	17.7	397	399	0.5
Chrysene	88.6 J	72.8 J	19.58	4160	4750	13.24	1060	828	24.58
Dibenzo(a,h)anthracene	22 U	27 U	na	689	939	30.71	81.1 J	87.7 J	7.82
Fluoranthene	91.5 J	86.3 J	5.85	6240	7130	13.31	1950 J	933 J	70.55
Fluorene	19 U	23 U	na	185	269	37	56.3 J	56.8 J	0.88
Indeno(1,2,3-cd)pyrene	48.5 J	41.8 J	14.84	2790	3450	21.15	363	414	13.13
Naphthalene	18 U	21 U	na	31.6 J	49 J	43.18	25 U	26 U	na
Phenanthrene	18 U	21 U	na	808	1040	25.11	157 J	123 J	24.29
Pyrene	152 J	143 J	6.1	6480	7620	16.17	2190	1320	49.57
Pentachlorophenol (SIM)	18 U	21 U	na	18 U	20 U	na	13 U	13 U	na
Dioxins and Furans (pg/g)									
2,3,7,8-Tetrachlorodibenzodioxin	0.191 U	0.181 U	na	0.115 J	0.145 U	na	0.222 U	0.142 U	na
1,2,3,7,8-Pentachlorodibenzodioxin	0.167 U	0.211 U	na	0.407 U	0.387 U	na	0.276 U	0.204 U	na
1,2,3,4,7,8-Hexachlorodibenzodioxin	0.401 U	0.177 U	na	1.8 J	1.26 U	na	0.501 U	0.255 U	na
1,2,3,6,7,8-Hexachlorodibenzodioxin	0.419 U	0.167 U	na	4.21	3.34	23.05	0.849 U	0.553 U	na
1,2,3,7,8,9-Hexachlorodibenzodioxin	0.437 U	0.31 U	na	3.11	2.19	34.72	0.825U	0.591 U	na
1,2,3,4,6,7,8-Heptachlorodibenzodioxin	5.78	4.51	24.68	158	123	0	42.8 J	23.9 J	56.67
Octachlorodibenzodioxin	292	193	40.82	1360	1040	26.67	280 J	164 J	52.25
2,3,7,8-Tetrachlorodibenzofuran	0.105 U	0.111 U	na	0.254 U	0.33 U	na	0.252 U	0.126 U	na
1,2,3,7,8-Pentachlorodibenzofuran	0.121 U	0.112 U	na	0.407 J	0.283 U	na	0.293 U	0.128 U	na
2,3,4,7,8-Pentachlorodibenzofuran	0.122 U	0.115 U	na	0.987 J	1.06	7.13	0.285 U	0.124 U	na
1,2,3,4,7,8-Hexachlorodibenzofuran	0.14 U	0.104 U	na	2.73	2.14	24.23	0.292 J	0.126 U	na
1,2,3,6,7,8-Hexachlorodibenzofuran	0.145 U	0.102 U	na	1.25 J	1.16	7.47	0.246 J	0.126 U	na
2,3,4,6,7,8-Hexachlorodibenzofuran	0.162 U	0.111 U	na	2.03 J	1.63	21.86	0.501 J	0.129 U	na
1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	0.171 U	0.145 U	na	0.3 U	0.243 U	na	0.247 U	0.155 U	na
1,2,3,4,6,7,8-Heptachlorodibenzofuran	0.421 U	0.847 J	na	34.7	28.6	19.27	5.58	3.65	41.82
1,2,3,4,7,8,9-Heptachlorodibenzofuran	0.154 U	0.12 U	na	3.46	1.91	57.73	0.543 J	0.319 U	na
Octachlorodibenzofuran	0.661 U	0.589 U	na	109	72.8	39.82	18	11.8	41.61

RPD - relative percent difference
DUP - duplicated
na - Not applicable to non-detect results
U - not detected above the method detection limit
J- estimated concentration
ug/kg - microgram per kilogram
pg/g - picogram per gram

Table E-2: Field and Equipment Blank Results

		Field ID	EB-02	EB-03	EB-04	EB-07	FB-02
		Sample date	08/08/20	08/08/20	08/08/20	08/08/20	08/08/20
Chem Group	Analyte name	Units					
Dioxin/furan	2,3,7,8-Tetrachlorodibenzodioxin	pg/L	<1.16	<1.43	<3.43	<1.35	<0.991
Dioxin/furan	1,2,3,7,8-Pentachlorodibenzodioxin	pg/L	<1.32	<1.42	<4.81	<1.29	<1.45
Dioxin/furan	1,2,3,4,7,8-Hexachlorodibenzodioxin	pg/L	<1.07	<1.27	<2.05	<0.772	<1.12
Dioxin/furan	1,2,3,6,7,8-Hexachlorodibenzodioxin	pg/L	<1.02	<1.25	<1.95	<0.77	<1.14
Dioxin/furan	1,2,3,7,8,9-Hexachlorodibenzodioxin	pg/L	<1.07	<1.3	<2.14	<0.797	<1.18
Dioxin/furan	1,2,3,4,6,7,8-Heptachlorodibenzodioxin	pg/L	<1.85	<3.16	<2.65	<3.77	<1.74
Dioxin/furan	Octachlorodibenzodioxin	pg/L	<12.6	<7.78	<7.73	<6.07	<7.33
Dioxin/furan	2,3,7,8-Tetrachlorodibenzofuran	pg/L	<0.535	<0.647	<1.24	<0.77	<0.609
Dioxin/furan	1,2,3,7,8-Pentachlorodibenzofuran	pg/L	<0.729	<0.999	<0.883	<0.758	<0.69
Dioxin/furan	2,3,4,7,8-Pentachlorodibenzofuran	pg/L	<0.71	<0.892	<0.905	<0.719	<0.671
Dioxin/furan	1,2,3,4,7,8-Hexachlorodibenzofuran	pg/L	<0.788	<0.855	<0.893	<0.712	<0.698
Dioxin/furan	1,2,3,6,7,8-Hexachlorodibenzofuran	pg/L	<0.765	<0.793	<0.882	<0.68	<0.712
Dioxin/furan	1,2,3,7,8,9-Hexachlorodibenzofuran	pg/L	<0.978	<1.07	<1.11	<1	<0.923
Dioxin/furan	2,3,4,6,7,8-Hexachlorodibenzofuran	pg/L	<0.809	<0.871	<0.918	<0.764	<0.788
Dioxin/furan	1,2,3,4,6,7,8-Heptachlorodibenzofuran	pg/L	<0.781	<0.92	<1.01	<0.747	<0.922
Dioxin/furan	1,2,3,4,7,8,9-Heptachlorodibenzofuran	pg/L	<1.26	<1.38	<1.63	<1.21	<1.53
Dioxin/furan	Octachlorodibenzofuran	pg/L	<4.39	<3.89	<3.66	<4.52	<4.21
SVOCs	1-Methylnaphthalene	ug/L	<2.1	<2.1	<2.1	<2.1	<2.1
SVOCs	2-Methylnaphthalene	ug/L	<2.4	<2.4	<2.4	<2.4	<2.4
SVOCs	Acenaphthene	ug/L	<2.5	<2.5	<2.5	<2.5	<2.5
SVOCs	Acenaphthylene	ug/L	<2.6	<2.6	<2.6	<2.6	<2.6
SVOCs	Anthracene	ug/L	<3.2	<3.2	<3.2	<3.2	<3.2
SVOCs	Benzo(a)anthracene	ug/L	<3.0	<3.0	<3.0	<3.0	<3.0
SVOCs	Benzo(a)pyrene	ug/L	<3.1	<3.1	<3.1	<3.1	<3.1
SVOCs	Benzo(b)fluoranthene	ug/L	<3.1	<3.1	<3.1	<3.1	<3.1
SVOCs	Benzo(g,h,i)perylene	ug/L	<3.3	<3.3	<3.3	<3.3	<3.3
SVOCs	Benzo(k)fluoranthene	ug/L	<3.4	<3.4	<3.4	<3.4	<3.4
SVOCs	Chrysene	ug/L	<3.4	<3.4	<3.4	<3.4	<3.4
SVOCs	Dibenzo(a,h)anthracene	ug/L	<3.2	<3.2	<3.2	<3.2	<3.2
SVOCs	Fluoranthene	ug/L	<2.2	<2.2	<2.2	<2.2	<2.2
SVOCs	Fluorene	ug/L	<2.8	<2.8	<2.8	<2.8	<2.8
SVOCs	Indeno (1,2,3-cd) pyrene	ug/L	<2.9	<2.9	<2.9	<2.9	<2.9
SVOCs	Naphthalene	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0
SVOCs	Phenanthrene	ug/L	<3.5	<3.5	<3.5	<3.5	<3.5
SVOCs	Pyrene	ug/L	<2.7	<2.7	<2.7	<2.7	<2.7
SVOCs	Pentachlorophenol (SIM)	ug/L	<0.20	<0.20	<0.20	<0.20	<0.20

FB-01 and EB-01 are associated with samples collected from OU2; therefore; their results are not provided in this table
< - non-detect at method detection limit shown
SVOC - semivolatile organic compound
EB - equipment blank
FB - field blank
pg/L - picogram per liter
ug/L - micrograms per liter
SIM - selective ion monitoring